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Atomic Emission Lines Below 2000 Angstroms

Hydrogen Through Argon

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ABSTRACT

A tabulation of observed spectral lines below 2000 Angstroms has been prepared from the published literature up to January 1967. It is intended principally as an aid to the astrophysicist and to the plasma spectroscopist who deals with the spectra of highly stripped atoms. This report includes the first 18 elements, hydrogen through argon. The tabulation is divided into two main sections: the emission lines by spectrum, and a finding list. The entries give the element and spectrum, vacuum wavelength, intensity, and classification. A reference list is included.

Problem Status

This is the first of several reports of this nature to be published on this problem. It covers the first 18 elements. Future reports will cover the remainder of the periodic table.

Authorization

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ATOMIC EMISSION LINES BELOW 2000 ANGSTROMS

Hydrogen through Argon

INTRODUCTION

The tabulation of spectral lines below 2000 angstroms presented in this report has been prepared from information in the literature published up to January 1967. It is intended principally as an aid to the astrophysicist and to the plasma spectroscopist who deals with the spectra of highly stripped atoms. This report includes the first 18 elements, hydrogen through argon. Future reports will cover the remainder of the periodic table.

ARRANGEMENT OF THE TABLES

The tabulation is divided into two main sections. Section I gives the lines by spectrum, and Section II is the finding list.

The entries in Section I are arranged by element, with subdivision into first spectrum, second spectrum, etc. Within each spectrum, the lines are arranged in order of increasing wavelength. This means, for example, that the several lines in a multiplet may not be listed consecutively.

Wavelengths

The vacuum wavelengths are given as reported in the references listed for each line. The accuracy of the wavelength varies somewhat, primarily with the date of publication, but it is not unreasonable to presume an uncertainty of 50 milliangstroms in most cases. In the case of a few quite recent publications in which wavelengths are given to a tenth of a milliangstrom, the uncertainty is probably not greater than 20 milliangstroms. Those lines proposed as wavelength standards by Commission 14 of the International Astronomical Union in 1962 (reference 308) are marked with the symbol ST.

The vacuum wave number has been omitted to conserve space, since it can be obtained by a simple inversion of the wavelength.

Intensity

Only a single intensity is given for each line, chosen from that source in which the particular spectrum was reported as most prominent. The intensities listed in the tables have been normalized to a maximum intensity of 1000 for convenience in comparing the different references. The normalization was usually a linear transformation of the intensities reported by the original authors, but a logarithmic calculation was applied in a few cases.

The overlapping of one reference with another presents a difficult problem. In the majority of the publications, the intensities are visual estimates of emulsion blackening. They are significant only over a limited range of wavelengths, because of the properties of the spectrographic equipment employed, and for a particular source operated in some particular way. For this reason, intensities given by two observers are seldom compatible. The intensity numbers have the following meaning: when two lines in a narrow wavelength region are reported with different intensities, the one with the larger number is generally the more intense.

There is a real need for a single intensity scale. The use of a maximum of 1000 in this report was adopted as an intermediate between the old scales with a maximum of 10 (or 35) and some later publications with a linear scale and a maximum of 100,000.

A few descriptive symbols are used with the intensity. These are given below with their meanings.

- b Blend of two lines
- d Diffuse
- f Forbidden
- h Hazy
- P Predicted wavelength
- r Reversed
- w Wide

Multiplet Numbers

The multiplet numbers which have been assigned by Charlotte Moore (Refs. 488 and 504) are given in a separate column following the wavelength. Some lines missing from the multiplet tables have been included, but overlapping lines with the same wavelength in a multiplet have not been listed twice.

Classification

The classifications of the transitions are given in the usual form, with the lower state first. They are divided into columns showing configuration, term, and J-value.

Configuration–The configurations are given in enough detail to be self-explanatory. In general, those parts of the configuration which are given represent electrons outside the next lower closed shell.

Term–The symbol *g* is used to denote the ground term. Otherwise, the term description is given in notation which follows that of Cowan and Andrew.* It is presented below in symbolic form for the two-electron case.

Type of Coupling	*Description*	*Notation*
LS	$[(\ell_1\ell_2)L,(s_1s_2)S]J$	$^{2S+1}L_J$
LK	$[\{(\ell_1\ell_2)L,s_1\}K,s_2]J$	$L[K]_J$
jK	$[\{(\ell_1s_1)j_1,\ell_2\}K,s_2]J$	$j_1[K]_J$
jj	$[(\ell_1s_1)j_1,(\ell_2s_2)j_2]J$	$(j_1,j_2)_J$

J-Value–The J-values are given in separate columns to avoid the use of subscripts.

*R. D. Cowan and K. L. Andrew, J. Opt. Soc. Am. 55, 502-516 (1965).

Classification Reference

In general, the primary reference for the notation and classification of the observed lines is AEL, Charlotte Moore's Atomic Energy Levels (Ref. 487). It has been superseded, however, by more recent publications in several cases. Wherever there are three references listed, the third is the one from which the classification was taken. In all cases, the transition was compared with the published energy levels to verify the classification. A few questionable transitions were retained; these are indicated by a question mark following the spectrum number.

We have departed from the notation in AEL in not using primes, double primes, etc., to indicate those configurations which have as parent terms excited states of the next higher ion. Instead, the parent terms are given where they are known.

References

Reference numbers, referring to the list of references at the end of the report are given with each spectral line to allow the reader to refer to the original publication. In every case, the first reference is the one from which the wavelength was taken. The second reference most commonly relates to the intensity, while the third relates to the classification.

The references in this volume are selected from a list which covers the entire periodic table. The complete list will appear in future NRL reports. The letters CL in a reference refer to the fact that it gives classified lines of the species in parentheses.

Ionization Potentials

Most of the ionization potentials listed have been taken from AEL (Ref. 487), corrected by using the more recent conversion factor 1.23981×10^{-4} ev/cm^{-1}. A few values were taken from the recent paper by Lotz.† Recently derived results for Ne II, O IV and O V were made available through the kindness of Prof. L. Minnhagen of the Lund Institute of Technology.

†W. Lotz, L. Opt. Soc. Am. 57, 873-8 (1967).

PREPARATION OF THE TABLES

The data were assembled from the literature and punched onto cards. Duplications were removed and disagreements were resolved by comparing the observed spectra with the spectra predicted from the atomic energy levels. In most cases, only those lines which have been observed are listed in the tables. Notable exceptions are the lines of the hydrogenic atoms, for which the spectra had not been reported for elements beyond oxygen. Further, even in the case of some observed lines, the wavelengths given are those predicted from a comprehensive analysis of the spectrum rather than the measured values (Ar II is an example). Some unobserved weak lines in multiplets have also been included for completeness. Such predicted values of wavelength are marked by the symbol P following the intensity.

The wavelengths and classifications retained were then read onto magnetic tape for convenience in handling. The tables were set in print by the Government Printing Office's Linofilm,* an automatic phototypesetting machine which produces photographic copy for making printing plates almost directly from magnetic tape.

The advantages of automatic phototypesetting are speed and accuracy. Once the input data are correct, the machine output should also be correct. In fact, however, machine-produced errors do exist. These occur as missing characters. It is hoped that all such errors have been found and corrected.

ACKNOWLEDGMENTS

Many spectroscopists have graciously contributed preprints of their work for inclusion in these tables. Among these are K. Bockasten, R. D. Cowan, R. C. Elton, B. C. Fawcett, U. Feldman, and V. Kaufman. All the programming for the calculations and the edit code for the Linofilm were written by Mr. Warren Rauscher, who was invaluable. It is a pleasure to acknowledge the support of Dr. A. C. Kolb and Dr. R. C. Elton of the Naval Research Laboratory.

This is a joint undertaking of the Naval Postgraduate School and the Naval Research Laboratory.

*The Linofilm system has been described by M. E. Stevens and J. L. Little in NBS Monograph 99, Automatic Typographic-Quality Typesetting Techniques: A State-of-the-Art Review (April 7, 1967).

PERIODIC CHART OF THE ELEMENTS

I A	II A	III B	IV B	V B	VI B	VII B	VIII			I B	II B	III B	IV A	V A	VI A	VII A	INERT GASES
H 1																	He 2
Li 3	Be 4											B 5	C 6	N 7	O 8	F 9	Ne 10
Na 11	Mg 12											Al 13	Si 14	P 15	S 16	Cl 17	Ar 18
K 19	Ca 20	Sc 21	Ti 22	V 23	Cr 24	Mn 25	Fe 26	Co 27	Ni 28	Cu 29	Zn 30	Ga 31	Ge 32	As 33	Se 34	Br 35	Kr 36
Rb 37	Sr 38	Y 39	Zr 40	Nb 41	Mo 42	Tc 43	Ru 44	Rh 45	Pd 46	Ag 47	Cd 48	In 49	Sn 50	Sb 51	Te 52	I 53	Xe 54
Cs 55	Ba 56	La 57	Hf 72	Ta 73	W 74	Re 75	Os 76	Ir 77	Pt 78	Au 79	Hg 80	Tl 81	Pb 82	Bi 83	Po 84	At 85	Rn 86
Fr 87	Ra 88	Ac 89															

Lanthanum Series	Ce 58	Pr 59	Nd 60	Pm 61	Sm 62	Eu 63	Gd 64	Tb 65	Dy 66	Ho 67	Er 68	Tm 69	Yb 70	Lu 71

Actinium Series	Th 90	Pa 91	U 92	Np 93	Pu 94	Am 95	Cm 96	Bk 97	Cf 98

SECTION I

Emission Lines by Spectrum

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B I 17
B II 18
B III 19
B IV 20
B V 21
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C VI 35
N I 36
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N III 43
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N V 48
N VI 50
N VII 51
O I 52
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O III 56
O IV 60
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Ne V 92
Ne VI 93
Ne VII 94
Ne VIII 95
Ne IX 96
Ne X 97
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Mg IV 123
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S Unclassified lines 211
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S III 216
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S VII 221
S VIII 222
S IX 223
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Ar I 246
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Ar IV 254
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Ar VI 256
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Ar XI 261
Ar XII 262
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Ground state 1s $^2S_{1/2}$

Ionization potential 109 678.764 cm^{-1}; 13.598 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
H I	914.576	2P	17	1s - 18p	g^2S - $^2P^o$	½-3½	309,488
H I	914.919	2P	16	1s - 17p	g^2S - $^2P^o$	½-3½	309,488
H I	915.329	2P	15	1s - 16p	g^2S - $^2P^o$	½-3½	309,488
H I	915.824	3P	14	1s - 15p	g^2S - $^2P^o$	½-3½	309,488
H I	916.429	3P	13	1s - 14p	g^2S - $^2P^o$	½-3½	309,488
H I	917.181	4P	12	1s - 13p	g^2S - $^2P^o$	½-3½	309,488
H I	918.129	5P	11	1s - 12p	g^2S - $^2P^o$	½-3½	309,488
H I	919.351	7P	10	1s - 11p	g^2S - $^2P^o$	½-3½	309,488
H I	920.963	9P	9	1s - 10p	g^2S - $^2P^o$	½-3½	309,488
H I	923.150	10P	8	1s - 9p	g^2S - $^2P^o$	½-3½	309,488
H I	926.226	20P	7	1s - 8p	g^2S - $^2P^o$	½-3½	309,488
H I	930.748	30P	6	1s - 7p	g^2S - $^2P^o$	½-3½	309,488
H I	937.803	40P	5	1s - 6p	g^2S - $^2P^o$	½-3½	309,488
H I	949.743	70P	4	1s - 5p	g^2S - $^2P^o$	½-3½	309,488
H I	972.537	130P	3	1s - 4p	g^2S - $^2P^o$	½-3½	309,488
H I	1025.722	300P	2	1s - 3p	g^2S - $^2P^o$	½-3½	309,488
H I	1215.668	670P	1	1s - 2p	g^2S - $^2P^o$	½-3½	309,488
H I	1215.674	330P	1	1s - 2p	g^2S - $^2P^o$	½-½	309,488

Ground state $1s\,^2S_{1/2}$

Ionization potential 109 708.608 cm^{-1}; 13.602 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
D I	925.974	P	7	1s - 8p	g^2S - $^2P^o$	½-3½	309
D I	930.495	P	6	1s - 7p	g^2S - $^2P^o$	½-3½	309
D I	937.548	40P	5	1s - 6p	g^2S - $^2P^o$	½-3½	309,487
D I	949.485	70P	4	1s - 5p	g^2S - $^2P^o$	½-3½	309,487
D I	972.272	140P	3	1s - 4p	g^2S - $^2P^o$	½-3½	309,487
D I	1025.443	320P	2	1s - 3p	g^2S - $^2P^o$	½-3½	309,487
D I	1215.339	1000P	1	1s - 2p	g^2S - $^2P^o$	½-3½	309,487

Ground state $1s^2\ ^1S_0$

Ionization potential 198 310.81 cm^{-1}; 24.587 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
He I	320.392	20		$1s2p - 2p^2$	$^3P^\circ - ^3P$		497
He I	505.5001	4		$1s^2 - 1s15p$	$g\,^1S - ^1P^\circ$	0-1	497
He I	505.6840	6		$1s^2 - 1s14p$	$g\,^1S - ^1P^\circ$	0-1	497
He I	505.9122	8		$1s^2 - 1s13p$	$g\,^1S - ^1P^\circ$	0-1	497
He I	506.2000	10		$1s^2 - 1s12p$	$g\,^1S - ^1P^\circ$	0-1	497
He I	506.5702	15		$1s^2 - 1s11p$	$g\,^1S - ^1P^\circ$	0-1	497
He I	507.0576	20	10	$1s^2 - 1s10p$	$g\,^1S - ^1P^\circ$	0-1	497,488
He I	507.7178	30	9	$1s^2 - 1s9p$	$g\,^1S - ^1P^\circ$	0-1	497,488
He I	508.6431	40	8	$1s^2 - 1s8p$	$g\,^1S - ^1P^\circ$	0-1	497,488
He I	509.9979	50	7	$1s^2 - 1s7p$	$g\,^1S - ^1P^\circ$	0-1	497,488
He I	510.2586	f		$1s^2 - 1s7s$	$g\,^1S - ^1S$	0-0	497
He I	512.0982	70	6	$1s^2 - 1s6p$	$g\,^1S - ^1P^\circ$	0-1	497,488
He I	512.5183	f		$1s^2 - 1s6s$	$g\,^1S - ^1S$	0-0	497
He I	515.6165	100	5	$1s^2 - 1s5p$	$g\,^1S - ^1P^\circ$	0-1	497,488
He I	516.3592	f		$1s^2 - 1s5s$	$g\,^1S - ^1S$	0-0	497
He I	522.2128	160	4	$1s^2 - 1s4p$	$g\,^1S - ^1P^\circ$	0-1	497,488
He I	523.7238	f		$1s^2 - 1s4s$	$g\,^1S - ^1S$	0-0	497
He I	537.0296	400	3	$1s^2 - 1s3p$	$g\,^1S - ^1P^\circ$	0-1	497,488
He I	537.3309	f		$1s^2 - 1s3d$	$g\,^1S - ^1D$	0-2	497
He I	538.8956	f		$1s^2 - 1s3p$	$g\,^1S - ^3P^\circ$	0-1	497
He I	540.9354	f		$1s^2 - 1s3s$	$g\,^1S - ^1S$	0-0	497
He I	584.3340	1000	2	$1s^2 - 1s2p$	$g\,^1S - ^1P^\circ$	0-1	497,488
He I	591.4117	40f	1	$1s^2 - 1s2p$	$g\,^1S - ^3P^\circ$	0-1	497,488
He I	601.4041	f		$1s^2 - 1s2s$	$g\,^1S - ^1S$	0-0	497

Ground state 1s $^2S_{1/2}$

Ionization potential He^4 438 908.854 cm^{-1}; 54.416 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
He II	229.431	P	11	1s - 12p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	229.736	P	10	1s - 11p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	230.139	P	9	1s - 10p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	230.686	P	8	1s - 9p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	231.454	P	7	1s - 8p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	232.584	30P	6	1s - 7p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	234.347	40P	5	1s - 6p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	237.331	70P	4	1s - 5p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	243.027	130P	3	1s - 4p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	256.317	320P	2	1s - 3p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	303.781	665	1	1s - 2p	$g^2S - {}^2P^\circ$	½-3½	309,488
He II	303.786	335	1	1s - 2p	$g^2S - {}^2P^\circ$	½-½	309,488
He II	949.301	9P	19	2p - 10d	${}^2P^\circ - {}^2D$	½-3½	309,488
He II	949.354	17P	19	2p - 10d	${}^2P^\circ - {}^2D$	3½-5½	309,488
He II	958.670	13P	18	2p - 9d	${}^2P^\circ - {}^2D$	½-3½	309,488
He II	958.724	22P	18	2p - 9d	${}^2P^\circ - {}^2D$	3½-5½	309,488
He II	972.083	18P	17	2p - 8d	${}^2P^\circ - {}^2D$	½-3½	309,488
He II	972.138	32P	17	2p - 8d	${}^2P^\circ - {}^2D$	3½-5½	309,488
He II	992.334	27P	16	2p - 7d	${}^2P^\circ - {}^2D$	½-3½	309,488
He II	992.391	48P	16	2p - 7d	${}^2P^\circ - {}^2D$	3½-5½	309,488
He II	1025.241	42P	15	2p - 6d	${}^2P^\circ - {}^2D$	½-3½	309,488
He II	1025.302	77P	15	2p - 6d	${}^2P^\circ - {}^2D$	3½-5½	309,488
He II	1084.908	73P	14	2p - 5d	${}^2P^\circ - {}^2D$	½-3½	309,488
He II	1084.975	132P	14	2p - 5d	${}^2P^\circ - {}^2D$	3½-5½	309,488
He II	1215.088	143P	13	2p - 4d	${}^2P^\circ - {}^2D$	½-3½	309,488
He II	1215.171	260P	13	2p - 4d	${}^2P^\circ - {}^2D$	3½-5½	309,488
He II	1215.175	30P	13	2p - 4d	${}^2P^\circ - {}^2D$	3½-3½	309,488
He II	1640.332	333P	12	2p - 3d	${}^2P^\circ - {}^2D$	½-3½	309,488
He II	1640.474	600P	12	2p - 3d	${}^2P^\circ - {}^2D$	3½-5½	309,488
He II	1640.490	70P	12	2p - 3d	${}^2P^\circ - {}^2D$	3½-3½	309,488

Ground state $1s^2\ ^1S_0$

Ionization potential 610 080 cm^{-1}; 75.638 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Li II	171.582	100	3	$1s^2$ - 1s4p	g^1S - $^1P^\circ$	0-1	168,488,596
Li II	178.015	100	2	$1s^2$ - 1s3p	g^1S - $^1P^\circ$	0-1	168,488,596
Li II	199.282	300	1	$1s^2$ - 1s2p	g^1S - $^1P^\circ$	0-1	168,488,596
Li II	1132.1	150		1s2p - 1s4d	$^3P^\circ$ - ^3D		788
Li II	1166.4	200		1s2p - 1s4s	$^3P^\circ$ - ^3S	-1	788
Li II	1198.092	10		1s2s - 1s3p	^3S - $^3P^\circ$	1-	307
Li II	1253.3	100		1s2p - 1s4s	$^1P^\circ$ - ^1S	1-0	788
Li II	1420.89	100		1s2s - 1s3p	^1S - $^1P^\circ$	0-1	775,788
Li II	1492.931	60		1s2p - 1s3d	$^3P^\circ$ - ^3D	1-	307
Li II	1492.973	100		1s2p - 1s3d	$^3P^\circ$ - ^3D	2-	307
Li II	1493.036	20		1s2p - 1s3d	$^3P^\circ$ - ^3D	0-	307
Li II	1653.076	60		1s2p - 1s3s	$^3P^\circ$ - ^3S	1-1	307
Li II	1653.132	100		1s2p - 1s3s	$^3P^\circ$ - ^3S	2-1	307
Li II	1653.212	20		1s2p - 1s3s	$^3P^\circ$ - ^3S	0-1	307
Li II	1681.660	10		1s2p - 1s3d	$^1P^\circ$ - ^1D	1-2	307
Li II	1755.331	10		1s2p - 1s3s	$^1P^\circ$ - ^1S	1-0	307

Ground state 1s $^2S_{1/2}$

Ionization potential Li^7 987 660.94 cm^{-1}; 122.451 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Li III	102.856	P		1s - 8p	g^2S - $^2P°$	½-3½	309,253
Li III	103.359	P		1s - 7p	g^2S - $^2P°$	½-3½	309,253
Li III	104.142	P		1s - 6p	g^2S - $^2P°$	½-3½	309
Li III	105.468	P		1s - 5p	g^2S - $^2P°$	½-3½	309,253
Li III	107.999	P		1s - 4p	g^2S - $^2P°$	½-3½	309,185
Li III	113.905	10P		1s - 3p	g^2S - $^2P°$	½-3½	309,185
Li III	134.998	200P		1s - 2p	g^2S - $^2P°$	½-3½	309,185
Li III	441.00	P		2 - 7			309
Li III	455.63	P		2 - 6			309
Li III	482.14	P		2 - 5			309
Li III	540.00	P		2 - 4			309
Li III	728.98	P		2 - 3			309
Li III	1060.41	P		3 - 8			309
Li III	1116.33	P		3 - 7			309
Li III	1215.05	P		3 - 6			309
Li III	1423.88	P		3 - 5			309

Ground state $1s^2 2s^2\ ^1S_0$

Ionization potential 75 192.29 cm^{-1}; 9.322 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Be I	1426.117	125		$2s^2 - 2s5p$	$g\,^1S - ^1P^\circ$	0-1	333
Be I	1491.765	250		$2s^2 - 2s4p$	$g\,^1S - ^1P^\circ$	0-1	197,333
Be I	1661.478	1000		$2s^2 - 2s3p$	$g\,^1S - ^1P^\circ$	0-1	197,333,541
Be I	1907.12	100		2s2p - 2s12d	$^3P^\circ - ^3D$		541
Be I	1912.49	100		2s2p - 2s11d	$^3P^\circ - ^3D$		541,658
Be I	1919.76	200		2s2p - 2s10d	$^3P^\circ - ^3D$		541,658
Be I	1929.67	300		2s2p - 2s9d	$^3P^\circ - ^3D$		541,658
Be I	1943.68	500		2s2p - 2s8d	$^3P^\circ - ^3D$		541,658
Be I	1956.63	100		2s2p - 2s8s	$^3P^\circ - ^3S$	-1	541,658
Be I	1964.59	900		2s2p - 2s7d	$^3P^\circ - ^3D$		541,658
Be I	1985.13	300		2s2p - 2s7s	$^3P^\circ - ^3S$	-1	541,658
Be I	1998.01	1000		2s2p - 2s6d	$^3P^\circ - ^3D$		541,658

292-307 O - 68 - 2

Ground state $1s^2 2s\ ^2S_{1/2}$

Ionization potential 146 881.7 cm^{-1}; 18.211 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Be II	725.71	100		$1s^22s - 1s^27p$	$g^2S - {}^2P^\circ$	½-3½	541
Be II	743.579	300		$1s^22s - 1s^26p$	$g^2S - {}^2P^\circ$	½-3½	541
Be II	775.362	400		$1s^22s - 1s^25p$	$g^2S - {}^2P^\circ$	½-	332,541
Be II	842.025	500	2	$1s^22s - 1s^24p$	$g^2S - {}^2P^\circ$	½-3½	332,541
Be II	842.031	250	2	$1s^22s - 1s^24p$	$g^2S - {}^2P^\circ$	½-½	332,541
Be II	925.246	100		$1s^22p - 1s^28d$	${}^2P^\circ - {}^2D$	3½-	541
Be II	943.481	30		$1s^22p - 1s^27d$	${}^2P^\circ - {}^2D$	½-	332,541
Be II	943.540	70		$1s^22p - 1s^27d$	${}^2P^\circ - {}^2D$	3½-	332,541
Be II	949.746	100		$1s^22p - 1s^27s$	${}^2P^\circ - {}^2S$	3½-½	541
Be II	973.213	150		$1s^22p - 1s^26d$	${}^2P^\circ - {}^2D$	½-	332,541
Be II	973.276	350		$1s^22p - 1s^26d$	${}^2P^\circ - {}^2D$	3½-	332,541
Be II	983.984	50		$1s^22p - 1s^26s$	${}^2P^\circ - {}^2S$	½-½	332,541
Be II	984.048	150		$1s^22p - 1s^26s$	${}^2P^\circ - {}^2S$	3½-½	332,541
Be II	1026.890	200		$1s^22p - 1s^25d$	${}^2P^\circ - {}^2D$	½-3½	332,541
Be II	1026.959	400		$1s^22p - 1s^25d$	${}^2P^\circ - {}^2D$	3½-5½	332,541
Be II	1036.299	550	1	$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-3½	197,332,541
Be II	1036.319	250	1	$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-½	197,332,541
Be II	1048.147	200		$1s^22p - 1s^25s$	${}^2P^\circ - {}^2S$	½-½	332,541
Be II	1048.220	400		$1s^22p - 1s^25s$	${}^2P^\circ - {}^2S$	3½-½	332,541
Be II	1142.956	250		$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	½-3½	332,541
Be II	1143.039	500		$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	3½-5½	332,541
Be II	1197.094	330	5	$1s^22p - 1s^24s$	${}^2P^\circ - {}^2S$	½-½	332,541
Be II	1197.188	670	5	$1s^22p - 1s^24s$	${}^2P^\circ - {}^2S$	3½-½	332,488
Be II	1512.269	555	4	$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	½-3½	197,332,488
Be II	1512.407	1000	4	$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	3½-5½	197,332,488
Be II	1512.419	110	4	$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	3½-3½	197,332,488
Be II	1776.100	500	3	$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	½-½	197,332,488
Be II	1776.307	1000	3	$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	3½-½	197,332,488

BERYLLIUM, Z = 4

Ground state $1s^2\ ^1S_0$

Ionization potential 1 241 225 cm^{-1}; 153.89 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Be III	81.891			$1s^2 - 1s7p$	$g^1S - {}^1P^o$	0-1	596
Be III	82.377			$1s^2 - 1s6p$	$g^1S - {}^1P^o$	0-1	596
Be III	83.202			$1s^2 - 1s5p$	$g^1S - {}^1P^o$	0-1	596
Be III	84.758	100		$1s^2 - 1s4p$	$g^1S - {}^1P^o$	0-1	197,596
Be III	88.314	330		$1s^2 - 1s3p$	$g^1S - {}^1P^o$	0-1	197,596
Be III	100.254	1000		$1s^2 - 1s2p$	$g^1S - {}^1P^o$	0-1	197,596

Ground state 1s $^2S_{1/2}$

Ionization potential 1 756 018.7 cm^{-1}; 217.713 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Be IV	58.574	P		1s - 6p	g^2S - $^2P°$	½-	309,595
Be IV	59.320	P		1s - 5p	g^2S - $^2P°$	½-	309,595
Be IV	60.743	P		1s - 4p	g^2S - $^2P°$	½-	309,595,765
Be IV	64.065	P		1s - 3p	g^2S - $^2P°$	½-	309,765
Be IV	75.928	1000P		1s - 2p	g^2S - $^2P°$	½-	309,197,765
Be IV	248.04	P		2 - 7			309
Be IV	256.27	P		2 - 6			309
Be IV	271.18	P		2 - 5			309
Be IV	303.72	P		2 - 4			309
Be IV	410.01	P		2 - 3			309
Be IV	596.44	P		3 - 8			309
Be IV	627.90	P		3 - 7			309
Be IV	683.42	P		3 - 6			309
Be IV	800.88	P		3 - 5			309
Be IV	1171.56	P		3 - 4			309

Ground state $1s^22s^22p\ ^2P^\circ_{1/2}$

Ionization potential 66 930 cm^{-1}; 8.298 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
B I	1378.43	300		$2s^22p - 2s2p^2$	$g^2P^\circ - {}^2P$	½-3½	134
B I	1378.69	500b		$2s^22p - 2s2p^2$	$g^2P^\circ - {}^2P$	3½-3½	134
B I	1378.95	300		$2s^22p - 2s2p^2$	$g^2P^\circ - {}^2P$	3½-½	134
B I	1465.59	100d		$2s2p^2 - 1s^22p^3$	${}^4P - {}^4S^\circ$	½-3½	134
B I	1465.69	200d		$2s2p^2 - 1s^22p^3$	${}^4P - {}^4S^\circ$	3½-3½	134
B I	1465.82	200d		$2s2p^2 - 1s^22p^3$	${}^4P - {}^4S^\circ$	5½-3½	134
B I	1525.50	1		$2s^22p - 2s^29s$	$g^2P^\circ - {}^2S$	½-½	134
B I	1525.84	1		$2s^22p - 2s^29s$	$g^2P^\circ - {}^2S$	3½-½	134
B I	1533.81	10d		$2s^22p - 2s^28d$	$g^2P^\circ - {}^2D$	½-	134
B I	1534.29	10d		$2s^22p - 2s^28d$	$g^2P^\circ - {}^2D$	3½-	134
B I	1546.44	100d		$2s^22p - 2s^27d$	$g^2P^\circ - {}^2D$	½-	134
B I	1546.85	200d		$2s^22p - 2s^27d$	$g^2P^\circ - {}^2D$	3½-	134
B I	1558.71	200		$2s^22p - 2s^27s$	$g^2P^\circ - {}^2S$	½-½	134,658
B I	1559.11	300		$2s^22p - 2s^27s$	$g^2P^\circ - {}^2S$	3½-½	134
B I	1566.32	200d		$2s^22p - 2s^26d$	$g^2P^\circ - {}^2D$	½-	134
B I	1566.70	300d		$2s^22p - 2s^26d$	$g^2P^\circ - {}^2D$	3½-	134,658
B I	1573.31	300		$2s^22p - 2s2p^2$	$g^2P^\circ - {}^2S$	½-½	134,658
B I	1573.67	500		$2s^22p - 2s2p^2$	$g^2P^\circ - {}^2S$	3½-½	134
B I	1600.41	500d		$2s^22p - 2s^25d$	$g^2P^\circ - {}^2D$	½-	134,658
B I	1600.83	800d		$2s^22p - 2s^25d$	$g^2P^\circ - {}^2D$	3½-	134,658
B I	1602.99	200d					134
B I	1610.40	10		$2s^22p - 2s^26s$	$g^2P^\circ - {}^2S$	½-½	134
B I	1610.72	10		$2s^22p - 2s^26s$	$g^2P^\circ - {}^2S$	3½-½	134
B I	1662.62	200		$2s^22p - 2s^25s$	$g^2P^\circ - {}^2S$	½-½	134,658
B I	1663.05	300		$2s^22p - 2s^25s$	$g^2P^\circ - {}^2S$	3½-½	134,658
B I	1664.25	200d					134
B I	1664.76	200d					134
B I	1666.87	800d		$2s^22p - 2s^24d$	$g^2P^\circ - {}^2D$	½-	134,658
B I	1667.30	1000d		$2s^22p - 2s^24d$	$g^2P^\circ - {}^2D$	3½-	134,658
B I	1817.849	400		$2s^22p - 2s^24s$	$g^2P^\circ - {}^2S$	½-½	197,134
B I	1818.349	500		$2s^22p - 2s^24s$	$g^2P^\circ - {}^2S$	3½-½	197,134
B I	1825.899	750d	3	$2s^22p - 2s^23d$	$g^2P^\circ - {}^2D$	½-3½	197,134,488
B I	1826.400	1000d	3	$2s^22p - 2s^23d$	$g^2P^\circ - {}^2D$	3½-5½	197,134,488

Ground state $1s^22s^2\ ^1S_0$

Ionization potential 202 895 cm^{-1}; 25.155 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
B II	693.952	200	2	$2s^2 - 2s3p$	$g^1S - {}^1P^\circ$	0-1	197,168,488
B II	731.357	100		$2s2p - 2s4d$	${}^3P^\circ - {}^3D$	1-	168
B II	731.442	100		$2s2p - 2s4d$	${}^3P^\circ - {}^3D$	2-	168,195
B II	864.08	10		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^1P^\circ - {}^1P$	1-1	168
B II	882.536	200		$2s2p - 2s3d$	${}^3P^\circ - {}^3D$	1-	168
B II	882.670	200		$2s2p - 2s$	${}^3P^\circ - {}^3D$	2-	168,195
B II	984.65	100		$1s^22p^2 - 1s^22p3d$	${}^3P - {}^3D^\circ$		168
B II	1048.67	10		$1s^22p^2 - 1s^22p3d$	${}^1D - {}^1D^\circ$	2-2	168
B II	1081.85	200		$2s2p - 2s3s$	${}^3P^\circ - {}^3S$	1-1	168,195
B II	1082.06	200		$2s2p - 2s3s$	${}^3P^\circ - {}^3S$	2-1	168,195
B II	1230.160	200		$2s(^2S)2p - 2s(^2S)3d$	${}^1P^\circ - {}^1D$	1-2	168
B II	1362.460	500	1	$2s^2 - 2s2p$	$g^1S - {}^1P^\circ$	0-1	197,168,488
B II	1623.57	400	3	$2s2p - 1s^22p^2$	${}^3P^\circ - {}^3P$	1-2	197,168,488
B II	1623.77	400	3	$2s2p - 1s^22p^2$	${}^3P^\circ - {}^3P$	0-1	197,168
B II	1623.99	500	3	$2s2p - 1s^22p^2$	${}^3P^\circ - {}^3P$	2-2	197,168,488
B II	1624.16	400	3	$2s2p - 1s^22p^2$	${}^3P^\circ - {}^3P$	1-0	197,168
B II	1624.37	400	3	$2s2p - 1s^22p^2$	${}^3P^\circ - {}^3P$	2-1	197,168,488
B II	1842.80	300		$2s2p - 1s^22p^2$	${}^1P^\circ - {}^1S$	1-0	168,658

Ground state $1s^22s\ ^2S_{1/2}$

Ionization potential 305 931.1 cm^{-1}; 37.930 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
B III	376.372	100		$1s^22s - 1s^25p$	$g^2S - {}^2P^\circ$	½-3½	195
B III	411.810	300		$1s^22s - 1s^24p$	$g^2S - {}^2P^\circ$	½-3½	168,195
B III	434.627	100		$1s^22p - 1s^26d$	${}^2P^\circ - {}^2D$	3½-5½	195
B III	458.700	100		$1s^22p - 1s^25d$	${}^2P^\circ - {}^2D$	3½-	195
B III	510.777	200		$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	½-3½	168
B III	510.865	300		$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	3½-5½	168,195
B III	518.244	460		$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-3½	197,168
B III	518.271	230		$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-½	197,168
B III	528.219	10		$1s^22p - 1s^24s$	${}^2P^\circ - {}^2S$	3½-½	195
B III	677.004	500		$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	½-3½	195,168
B III	677.147	600		$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	3½-5½	197,168
B III	758.476	100		$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	½-½	195,168
B III	758.673	200		$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	3½-½	195,168

Ground state $1s^2\ ^1S_0$

Ionization potential 2 091 960 cm^{-1}; 259.36 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
B IV	48.939			$1s^2$ - 1s6p	g^1S - $^1P^o$	0-1	764
B IV	49.456			$1s^2$ - 1s5p	g^1S - $^1P^o$	0-1	764,765
B IV	50.435	100		$1s^2$ - 1s4p	g^1S - $^1P^o$	0-1	197,764,765
B IV	52.682	330		$1s^2$ - 1s3p	g^1S - $^1P^o$	0-1	197,168,764
B IV	60.313	1000		$1s^2$ - 1s2p	g^1S - $^1P^o$	0-1	197,168,764
B IV	61.088			$1s^2$ - 1s2p	g^1S - $^3P^o$	0-1	764

Ground state 1s $^2S_{1/2}$

Ionization potential 2 744 107.6 cm^{-1}; 340.217 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
B V	37.483	P		1s - 6p	g^2S - $^2P^o$	½-	309
B V	37.960	P		1s - 5p	g^2S - $^2P^o$	½-	309
B V	38.871	P		1s - 4p	g^2S - $^2P^o$	½-	309,168
B V	40.996	P		1s - 3p	g^2S - $^2P^o$	½-	309,168
B V	48.587	1000P		1s - 2p	g^2S - $^2P^o$	½-	309,197
B V	158.73	P		2 - 7			309
B V	163.99	P		2 - 6			309
B V	173.54	P		2 - 5			309
B V	194.36	P		2 - 4			309
B V	262.37	P		2 - 3			309
B V	381.70	P		3 - 8			309
B V	401.83	P		3 - 7			309
B V	437.36	P		3 - 6			309
B V	512.53	P		3 - 5			309
B V	726.73	P		4 - 9			309
B V	749.74	P		3 - 4			309
B V	777.57	P		4 - 8			309
B V	865.93	P		4 - 7			309
B V	1049.72	P		4 - 6			309
B V	1214.99	P		5 - 10			309
B V	1318.05	P		5 - 9			309
B V	1495.38	P		5 - 8			309
B V	1619.92	P		4 - 5			309
B V	1860.46	P		5 - 7			309

Unclassified lines

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C?	289.048	300					170
C?	414.592	10					170
C?	1121.19	20					816
C?	1298.14	100					816
C?	1324.14	150					816
C?	1324.22	200					816
C?	1324.60	10					816
C?	1422.57	10					816
C?	1721.3	5					816
C?	1722.0	5					816
C?	1761.2	100					816
C?	1829.85	1					816
C?	1833.26	1					816
C?	1853.2	1					816
C?	1911.83	10					816
C?	1912.75	10					816
C?	1931.15	100					816
C?	1990.53	10					816
C?	1991.14	5					816

Ground state $1s^22s^22p^2\ ^3P_0$

Ionization potential 90 820.42 cm^{-1}; 11.260 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C I	945.191	20	31	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	0-1	821,168
C I	945.338	50	31	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	1-1	821,168
C I	945.579	75	31	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	2-1	821,168
C I	1112.058	10		$2s^22p^2 - 2s^22p(^2P^\circ)11d$	$g^3P - {}^3D^\circ$	2-3	821,168
C I	1114.457	50	30	$2s^22p^2 - 2s^22p(^2P^\circ)10d$	$g^3P - {}^3D^\circ$	2-3	821,168
C I	1117.581	20		$2s^22p^2 - 2s^22p(^2P^\circ)9d$	$g^3P - {}^3P^\circ$	2-2	821,816
C I	1117.724	50	29	$2s^22p^2 - 2s^22p(^2P^\circ)9d$	$g^3P - {}^3D^\circ$	2-3	821,816
C I	1118.180	50		$2s^22p^2 - 2s^22p(^2P^\circ)9d$	$g^3P - {}^3F^\circ$	1-2	821,168
C I	1122.098	20	28	$2s^22p^2 - 2s^22p(^2P^\circ)8d$	$g^3P - {}^3P^\circ$	2-2	821,168
C I	1122.260	50		$2s^22p^2 - 2s^22p(^2P^\circ)9s$	$g^3P - {}^1P^\circ$	2-1	821,816
C I	1122.328	100	27	$2s^22p^2 - 2s^22p(^2P^\circ)8d$	$g^3P - {}^3D^\circ$	2-3	821,816
C I	1122.447	20	27	$2s^22p^2 - 2s^22p(^2P^\circ)8d$	$g^3P - {}^3D^\circ$	0-1	821,816
C I	1122.725	50		$2s^22p^2 - 2s^22p(^2P^\circ)9s$	$g^3P - {}^3P^\circ$	1-1	821,816
C I	1122.794	20		$2s^22p^2 - 2s^22p(^2P^\circ)8d$	$g^3P - {}^3F^\circ$	1-2	821,168
C I	1123.107	20		$2s^22p^2 - 2s^22p(^2P^\circ)8d$	$g^3P - {}^3F^\circ$	2-3	821,816
C I	1128.252	50	26	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^3P^\circ$	1-0	821,816
C I	1128.686	20		$2s^22p^2 - 2s^22p(^2P^\circ)8s$	$g^3P - {}^1P^\circ$	1-1	821,816
C I	1128.752	100	26	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^3P^\circ$	2-2	821,816
C I	1128.903	20		$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^1F^\circ$	2-3	821,816
C I	1129.030	100		$2s^22p^2 - 2s^22p(^2P^\circ)8s$	$g^3P - {}^1P^\circ$	2-1	821,816
C I	1129.135	200	25	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^3D^\circ$	2-3	821,816
C I	1129.161	P	25	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^3D^\circ$	2-2	821
C I	1129.196	P	25	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^3D^\circ$	0-1	821
C I	1129.405	20	25	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^3D^\circ$	1-1	821,816
C I	1129.624	50	24	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^3F^\circ$	1-2	821,816
C I	1129.749	20	25	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^3D^\circ$	2-1	821,816
C I	1129.924	50	24	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^3F^\circ$	2-3	821,816
C I	1130.171	20		$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$g^3P - {}^1D^\circ$	1-2	821,816
C I	1138.383	20	23	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3P^\circ$	0-1	821,816
C I	1138.557	30	23	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3P^\circ$	1-0	821,816
C I	1138.595	20	23	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3P^\circ$	1-1	821,816
C I	1138.946	50	23	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3P^\circ$	2-1	821,816
C I	1139.093	100	23	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3P^\circ$	2-2	821,816
C I	1139.300	20		$2s^22p^2 - 2s^22p(^2P^\circ)7s$	$g^3P - {}^1P^\circ$	1-1	821,816
C I	1139.426	50		$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^1F^\circ$	2-3	821,816
C I	1139.514	20	22	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3D^\circ$	1-2	821,816
C I	1139.650	20		$2s^22p^2 - 2s^22p(^2P^\circ)7s$	$g^3P - {}^1P^\circ$	2-1	821,816
C I	1139.766	150		$2s^22p^2 - 2s^22p(^2P^\circ)7s$	$g^3P - {}^3P^\circ$	1-2	821,816
C I	1139.812	150	22	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3D^\circ$	2-3	821,816
C I	1139.865	50	22	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3D^\circ$	2-2	821,816
C I	1140.005	50	22	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3D^\circ$	1-1	821,816
C I	1140.223	20		$2s^22p^2 - 2s^22p(^2P^\circ)7s$	$g^3P - {}^3P^\circ$	1-1	821,816
C I	1140.357	100	21	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3F^\circ$	1-2	821,816
C I	1140.574	20		$2s^22p^2 - 2s^22p(^2P^\circ)7s$	$g^3P - {}^3P^\circ$	2-1	821,816
C I	1140.641	150	21	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^3F^\circ$	2-3	821,816
C I	1141.327	20	20	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^1D^\circ$	1-2	821,816
C I	1141.678	20	20	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - {}^1D^\circ$	2-2	821,816
C I	1155.809	50	19	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3P^\circ$	0-1	821,816
C I	1156.028	150	19	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3P^\circ$	1-1	821,816
C I	1156.199	20	19	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3P^\circ$	1-2	821,816
C I	1156.389	100	19	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3P^\circ$	2-1	821,816
C I	1156.560	200	19	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3P^\circ$	2-2	821,816
C I	1156.765	20		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^1P^\circ$	2-1	821,816
C I	1157.186	20	17	$2s^22p^2 - 2s^22p(^2P^\circ)6s$	$g^3P - {}^1P^\circ$	0-1	821,816
C I	1157.330	50	18	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^1F^\circ$	2-3	821,816

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C I	1157.405	150	17	$2s^22p^2 - 2s^22p(^2P^\circ)6s$	$g^3P - {}^1P^\circ$	1-1	821,816
C I	1157.770	350	16	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3D^\circ$	1-2	821,816
C I	1157.910	730	16	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3D^\circ$	0-1	821,816
C I	1158.019	750	16	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3D^\circ$	2-3	821,816
C I	1158.132	400	16	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3D^\circ$	2-2	821,816
C I	1158.324	100		$2s^22p^2 - 2s^22p(^2P^\circ)6s$	$g^3P - {}^3P^\circ$	0-1	821,816
C I	1158.397	100		$2s^22p^2 - 2s^22p(^2P^\circ)6s$	$g^3P - {}^3P^\circ$	2-2	821,816
C I	1158.492	20	16	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3D^\circ$	2-1	821,816
C I	1158.674	100		$2s^22p^2 - 2s^22p(^2P^\circ)6s$	$g^3P - {}^3P^\circ$	1-0	821,816
C I	1158.732	100	15	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3F^\circ$	1-2	821,816
C I	1158.907	50		$2s^22p^2 - 2s^22p(^2P^\circ)6s$	$g^3P - {}^3P^\circ$	2-1	821,816
C I	1158.967	200	15	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - {}^3F^\circ$	2-3	821,816
C I	1188.833	200	14	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3P^\circ$	0-1	821,816
C I	1188.992	500	14	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3P^\circ$	1-0	821,816
C I	1189.065	200	14	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3P^\circ$	1-1	821,816
C I	1189.249	250	14	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3P^\circ$	1-2	821,816
C I	1189.447	500	14	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3P^\circ$	2-1	821,816
C I	1189.631	700	14	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3P^\circ$	2-2	821,816
C I	1190.021	35		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^1P^\circ$	0-1	821,816
C I	1190.253	35		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^1P^\circ$	1-1	821,816
C I	1191.838	120	13	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^1F^\circ$	2-3	821,816
C I	1192.218	70	12	$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - {}^1P^\circ$	0-1	821,816
C I	1192.451	120	12	$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - {}^1P^\circ$	1-1	821,816
C I	1193.009	700	11	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3D^\circ$	1-2	821,816
C I	1193.031	300	11	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3D^\circ$	0-1	821,816
C I	1193.240	850	11	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3D^\circ$	2-3	821,816
C I	1193.264	150	11	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3D^\circ$	1-1	821,816
C I	1193.393	350	11	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3D^\circ$	2-2	821,816
C I	1193.679	500		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - {}^3P^\circ$	1-2	821,816
C I	1193.996	120		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - {}^3P^\circ$	0-1	821,816
C I	1194.064	350		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - {}^3P^\circ$	2-2	821,816
C I	1194.229	120		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - {}^3P^\circ$	1-1	821,816
C I	1194.301	120	10	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3F^\circ$	1-2	821,816
C I	1194.406	200		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - {}^3P^\circ$	1-0	821,816
C I	1194.488	350	10	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - {}^3F^\circ$	2-3	821,816
C I	1194.615	250		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - {}^3P^\circ$	2-1	821,816
C I	1253.467	50		$2s^22p^2 - 2s^22p(^2P^\circ)11d$	${}^1D - {}^1F^\circ$	2-3	821,168
C I	1253.541	100		$2s^22p^2 - 2s^22p(^2P^\circ)11d$	${}^1D - {}^3D^\circ$	2-2	821,168
C I	1256.498	200		$2s^22p^2 - 2s^22p(^2P^\circ)10d$	${}^1D - {}^1F^\circ$	2-3	821,168
C I	1260.613	200	59	$2s^22p^2 - 2s^22p(^2P^\circ)9d$	${}^1D - {}^1F^\circ$	2-3	821,168
C I	1260.736	250	9	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	0-1	821,816
C I	1260.927	200	9	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	1-0	821,816
C I	1260.996	150	9	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	1-1	821,816
C I	1261.122	250	9	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	1-2	821,816
C I	1261.426	250	9	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	2-1	821,816
C I	1261.552	500	9	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	2-2	821,816
C I	1266.270	20		$2s^22p^2 - 2s^22p(^2P^\circ)8d$	${}^1D - {}^1P^\circ$	2-1	821,816
C I	1266.419	100	58	$2s^22p^2 - 2s^22p(^2P^\circ)8d$	${}^1D - {}^1F^\circ$	2-3	821,816
C I	1267.596	50	57	$2s^22p^2 - 2s^22p(^2P^\circ)8d$	${}^1D - {}^3F^\circ$	2-3	821,816
C I	1274.109	50	8	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^1F^\circ$	2-3	821,816
C I	1274.756	20	56	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	${}^1D - {}^1P^\circ$	2-1	821,816
C I	1274.984	150	55	$2s^22p^2 - 2s^22p(^2P^\circ)7d$	${}^1D - {}^1F^\circ$	2-3	821,816
C I	1276.287	50		$2s^22p^2 - 2s^22p(^2P^\circ)7d$	${}^1D - {}^3F^\circ$	2-3	821,816
C I	1276.483	100		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - {}^1P^\circ$	0-1	821,816
C I	1276.750	200		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - {}^1P^\circ$	1-1	821,816
C I	1277.245	300	7	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	0-1	821,816
C I	1277.282	700	7	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	821,816
C I	1277.513	100	7	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	1-1	821,816
C I	1277.550	1000	7	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	821,816
C I	1277.723	250	7	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	2-2	821,816

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C I	1277.954	70	7	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	2-1	821,816
C I	1279.056	100	6	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3F^\circ$	1-2	821,816
C I	1279.229	150	6	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3F^\circ$	2-3	821,816
C I	1279.498	70	6	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - {}^3F^\circ$	2-2	821,816
C I	1279.890	250	5	$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	1-2	821,816
C I	1280.135	200	5	$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	0-1	821,816
C I	1280.333	700	5	$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	2-2	821,816
C I	1280.404	75	5	$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	1-1	821,816
C I	1280.597	200	5	$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	1-0	821,816
C I	1280.847	250	5	$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	2-1	821,816
C I	1288.037	200	54	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	${}^1D - {}^1P^\circ$	2-1	821,816
C I	1288.422	500	53	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	${}^1D - {}^1F^\circ$	2-3	821,816
C I	1288.710	100	52	$2s^22p^2 - 2s^22p(^2P^\circ)7s$	${}^1D - {}^1P^\circ$	2-1	821,816
C I	1288.917	100		$2s^22p^2 - 2s^22p(^2P^\circ)6d$	${}^1D - {}^3D^\circ$	2-3	821,816
C I	1289.891	50		$2s^22p^2 - 2s^22p(^2P^\circ)7s$	${}^1D - {}^3P^\circ$	2-1	821,816
C I	1289.977	300	51	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	${}^1D - {}^3F^\circ$	2-3	821,816
C I	1291.304	100	50	$2s^22p^2 - 2s^22p(^2P^\circ)6d$	${}^1D - {}^1D^\circ$	2-2	821,816
C I	1310.637	200	49	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	${}^1D - {}^1P^\circ$	2-1	821,816
C I	1311.363	1000	48	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	${}^1D - {}^1F^\circ$	2-3	821,816
C I	1311.924	200	47	$2s^22p^2 - 2s^22p(^2P^\circ)6s$	${}^1D - {}^1P^\circ$	2-1	821,816
C I	1312.247	100	46	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	${}^1D - {}^3D^\circ$	2-3	821,816
C I	1313.387	100		$2s^22p^2 - 2s^22p(^2P^\circ)6s$	${}^1D - {}^3P^\circ$	2-1	821,816
C I	1313.464	300	45	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	${}^1D - {}^3F^\circ$	2-3	821,816
C I	1315.918	200	44	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	${}^1D - {}^1D^\circ$	2-2	821,816
C I	1328.8332 ST	150	4	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	0-1	308,816,821
C I	1329.0863 ST	150	4	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	1-0	308,816,821
C I	1329.1001 ST	200	4	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	1-2	308,816,821
C I	1329.1230 ST	110	4	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	1-1	308,816,821
C I	1329.5775 ST	600	4	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	2-2	308,816,821
C I	1329.6005 ST	200	4	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	2-1	308,816,821
C I	1354.288	500	43	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	${}^1D - {}^1P^\circ$	2-1	821,816
C I	1355.844	750	42	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	${}^1D - {}^1F^\circ$	2-3	821,816
C I	1357.134	300	41	$2s^22p^2 - 2s^22p(^2P^\circ)5s$	${}^1D - {}^1P^\circ$	2-1	821,816
C I	1357.659	100		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	${}^1D - {}^3D^\circ$	2-3	821,816
C I	1359.275	200	40	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	${}^1D - {}^3F^\circ$	2-3	821,816
C I	1359.438	50		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	${}^1D - {}^3P^\circ$	2-1	821,816
C I	1364.164	600	39	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	${}^1D - {}^1D^\circ$	2-2	821,816
C I	1431.597	100	65	$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-3	821,816
C I	1432.105	75	65	$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-2	821,668
C I	1432.530	50	65	$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-1	821,668
C I	1459.0317	300	38	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	${}^1D - {}^1P^\circ$	2-1	371,816,821
C I	1463.3360	600	37	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	${}^1D - {}^1F^\circ$	2-3	371,816,821
C I	1467.402	350	36	$2s^22p^2 - 2s^22p(^2P^\circ)4s$	${}^1D - {}^1P^\circ$	2-1	821,816
C I	1467.877	30		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	${}^1D - {}^3D^\circ$	2-3	821,816
C I	1468.410	100		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	${}^1D - {}^3D^\circ$	2-1	821,816
C I	1470.094	100	35	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	${}^1D - {}^3F^\circ$	2-3	821,816
C I	1472.231	60		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	${}^1D - {}^3P^\circ$	2-1	821,816
C I	1481.7635	450	34	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	${}^1D - {}^1D^\circ$	2-2	371,816,821
C I	1492.738	60		$2s^22p^2 - 2s^22p(^2P^\circ)7$	${}^1S - {}^1P^\circ$	0-1	821,816
C I	1493.273	10		$2s^22p^2 - 2s^22p(^2P^\circ)8s$	${}^1S - {}^1P^\circ$	0-1	821,816
C I	1494.532	25		$2s^22p^2 - 2s^22p(^2P^\circ)7d$	${}^1S - {}^3D^\circ$	0-1	821,816
C I	1510.668	25		$2s^22p^2 - 2s^22p(^2P^\circ)6d$	${}^1S - {}^3P^\circ$	0-1	821,816
C I	1510.981	100		$2s^22p^2 - 2s^22p(^2P^\circ)6d$	${}^1S - {}^1P^\circ$	0-1	821,816
C I	1511.907	25		$2s^22p^2 - 2s^22p(^2P^\circ)7s$	${}^1S - {}^1P^\circ$	0-1	821,816
C I	1513.150	50		$2s^22p^2 - 2s^22p(^2P^\circ)6d$	${}^1S - {}^3D^\circ$	0-1	821,816
C I	1541.510	40		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	${}^1S - {}^3P^\circ$	0-1	821,816
C I	1542.1766	160	64	$2s^22p^2 - 2s^22p(^2P^\circ)5d$	${}^1S - {}^1P^\circ$	0-1	371,816,821
C I	1543.960	60		$2s^22p^2 - 2s^22p(^2P^\circ)6s$	${}^1S - {}^1P^\circ$	0-1	821,816
C I	1545.249	40		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	${}^1S - {}^3D^\circ$	0-1	821,816
C I	1560.3095	250	3	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	0-1	371,796,821

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C I	1560.6832	500	3	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	1-2	371,796,821
C I	1560.7079	200	3	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	1-1	371,796,821
C I	1561.3407	200	3	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	2-2	371,796,821
C I	1561.367	P	3	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	2-1	821
C I	1561.4382	1000	3	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	2-3	371,796,821
C I	1602.9715	200	63	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	${}^1S - {}^1P^\circ$	0-1	371,816,821
C I	1606.960	50		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	${}^1S - {}^1P^\circ$	0-1	821,816
C I	1608.438	70		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	${}^1S - {}^3D^\circ$	0-1	821,816
C I	1656.2665	350	2	$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	1-2	371,816,821
C I	1656.9282	300	2	$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	0-1	371,816,821
C I	1657.0078	1000	2	$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	2-2	371,816,821
C I	1657.3797	300	2	$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	1-1	371,816,821
C I	1657.9070	300	2	$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	1-0	371,816,821
C I	1658.1222	350	2	$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	2-1	371,816,821
C I	1751.8277	800	62	$2s^22p^2 - 2s^22p(^2P^\circ)3d$	${}^1S - {}^1P^\circ$	0-1	371,816,821
C I	1763.909	120		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	${}^1S - {}^1P^\circ$	0-1	816,821
C I	1765.366	50		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	${}^1S - {}^3D^\circ$	0-1	816,821
C I	1930.9054	1000	33	$2s^22p^2 - 2s^22p(^2P^\circ)3s$	${}^1D - {}^1P^\circ$	2-1	371,816,821
C I	1993.620	50	32	$2s^22p^2 - 2s^22p(^2P^\circ)3s$	${}^1D - {}^3P^\circ$	2-1	821,816

Ground state $1s^22s^22p\ ^2P^\circ_{1/2}$

Ionization potential 196 659.0 cm^{-1}; 24.382 eV

Element	Wavelength		Intensity	Multiplet	Configuration	Term	J - J	Reference
C II	425.326		10					168
C II	437.102		100d					168
C II	438.824		P		$2s^2(^1S)2p - 2s2p(^3P^\circ)5p$	$g\,^2P^\circ - ^2P$	3/2-1/2	287
C II	438.897		100P		$2s^2(^1S)2p - 2s2p(^3P^\circ)5p$	$g\,^2P^\circ - ^2P$	3/2-3/2	287,168
C II	461.120		100d		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g\,^2P^\circ - ^2D$	3/2-3/2	287,168
C II	466.352		10P		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g\,^2P^\circ - ^2P$	1/2-3/2	287,168
C II	466.407		100P		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g\,^2P^\circ - ^2P$	1/2-1/2	287,168
C II	466.491		200P		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g\,^2P^\circ - ^2P$	3/2-3/2	287,168
C II	466.547		10P		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g\,^2P^\circ - ^2P$	3/2-1/2	287,168
C II	516.652		10d		$2s2p^2 - 2s2p(^3P^\circ)6d$	$^4P - ^4P^\circ$	5/2-5/2	168,287
C II	517.069		100d		$2s2p^2 - 2s2p(^3P^\circ)6d$	$^4P - ^4D^\circ$	5/2-7/2	168,287
C II	530.274		300P		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g\,^2P^\circ - ^2D$	1/2-3/2	287,168
C II	530.359		400P		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g\,^2P^\circ - ^2D$	3/2-5/2	287,168
C II	530.454		P		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g\,^2P^\circ - ^2D$	3/2-3/2	287
C II	531.721		5P		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4P^\circ$	1/2-3/2	287,168
C II	531.742		5P		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4P^\circ$	3/2-1/2	287,168
C II	531.917		100d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4P^\circ$	5/2-5/2	287,168
C II	532.659		100P		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4D^\circ$	3/2-5/2	287,168
C II	532.705		200P		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4D^\circ$	5/2-7/2	287,168
C II?	533.935		100d					168
C II	543.257		200d		$2s^22p - 2s^26d$	$g\,^2P^\circ - ^2D$	1/2-3/2	287,168
C II	543.444		300d		$2s^22p - 2s^26d$	$g\,^2P^\circ - ^2D$	3/2-5/2	287,168
C II	543.446		30P		$2s^22p - 2s^26d$	$g\,^2P^\circ - ^2D$	3/2-3/2	287
C II	547.140		P		$2s2p^2 - 2s2p(^3P^\circ)5s$	$^4P - ^4P^\circ$	1/2-3/2	287
C II	547.153		10		$2s2p^2 - 2s2p(^3P^\circ)5s$	$^4P - ^4P^\circ$	5/2-5/2	287,168
C II	547.277		5		$2s2p^2 - 2s2p(^3P^\circ)5s$	$^4P - ^4P^\circ$	3/2-1/2	287,168
C II	547.291		5		$2s2p^2 - 2s2p(^3P^\circ)5s$	$^4P - ^4P^\circ$	5/2-3/2	287,168
C II	549.3195	ST	300		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g\,^2P^\circ - ^2P$	1/2-3/2	308,168,287
C II	549.3785	ST	400		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g\,^2P^\circ - ^2P$	1/2-1/2	308,168,287
C II	549.5110	ST	500		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g\,^2P^\circ - ^2P$	3/2-3/2	308,168,287
C II	549.5700	ST	300		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g\,^2P^\circ - ^2P$	3/2-1/2	308,168,287
C II	551.874		10		$2s^22p - 2s^26s$	$g\,^2P^\circ - ^2S$	3/2-1/2	287,168
C II	560.2394	ST	400		$2s^22p - 2s^25d$	$g\,^2P^\circ - ^2D$	1/2-3/2	308,168,287
C II	560.4367	ST	500		$2s^22p - 2s^25d$	$g\,^2P^\circ - ^2D$	3/2-5/2	308,306,287
C II	560.4386	ST	40		$2s^22p - 2s^25d$	$g\,^2P^\circ - ^2D$	3/2-3/2	308,287
C II	562.338		150		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	1/2-3/2	287,168
C II	562.367		150		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3/2-1/2	287,168
C II	562.473		150		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3/2-5/2	287,168
C II	562.497		150		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	5/2-3/2	287,168
C II	562.562		300		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	5/2-5/2	287,168
C II	564.565		40		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	1/2-3/2	287,168
C II	564.582		40		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	1/2-1/2	287,168
C II	564.608		100		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	3/2-5/2	287,168
C II	564.635		50		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	3/2-3/2	287,168
C II	564.663		200		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5/2-7/2	287,168
C II	564.698		40		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5/2-5/2	287,168
C II	576.8748		100		$2s^22p - 2s^25s$	$g\,^2P^\circ - ^2S$	1/2-1/2	306,168,287
C II	577.0859		200		$2s^22p - 2s^25s$	$g\,^2P^\circ - ^2S$	3/2-1/2	306,168,287
C II	594.8000	ST	600	6	$2s^22p - 2s^24d$	$g\,^2P^\circ - ^2D$	1/2-3/2	308,197,287
C II	595.0219	ST	700	6	$2s^22p - 2s^24d$	$g\,^2P^\circ - ^2D$	3/2-5/2	308,197,287
C II	595.0245	ST	70	6	$2s^22p - 2s^24d$	$g\,^2P^\circ - ^2D$	3/2-3/2	308,197,287
C II	600.251		100		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3/2-5/2	287,168
C II	600.337		100P		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	1/2-3/2	287
C II	600.353		300		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5/2-5/2	287,168
C II	600.503		100		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3/2-1/2	287,168

Element	Wavelength		Intensity	Multiplet	Configuration	Term	J - J	Reference
C II	600.518		100		$2s2p^2$ - $2s2p(^3P^\circ)4s$	^4P - $^4P^\circ$	5/2-3/2	287,168
C II	635.9945	ST	300		$2s^22p$ - $2s^24s$	g^2P° - ^2S	1/2-1/2	308,168,287
C II	636.2511	ST	400		$2s^22p$ - $2s^24s$	g^2P° - ^2S	3/2-1/2	308,168,287
C II	641.593		300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4P^\circ$	1/2-3/2	287,168
C II	641.627		300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4P^\circ$	3/2-1/2	287,168
C II	641.771		300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4P^\circ$	3/2-5/2	287,168
C II	641.800		300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4P^\circ$	5/2-3/2	287,168
C II	641.888		630		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4P^\circ$	5/2-5/2	287,168
C II	651.211		300	9	$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	1/2-3/2	287,168,488
C II	651.234		300	9	$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	1/2-1/2	287,168
C II	651.269		700	9	$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	3/2-5/2	287,168,488
C II	651.304		300P	9	$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	3/2-3/2	287
C II	651.345		800	9	$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	5/2-7/2	287,168,488
C II	651.389		300P	9	$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	5/2-5/2	287
C II	686.416		120		$2s2p^2$ - $2s2p(^3P^\circ)4d$	^2D - $^2D^\circ$	5/2-5/2	287,168
C II	686.488		80		$2s2p^2$ - $2s2p(^3P^\circ)4d$	^2D - $^2D^\circ$	3/2-3/2	287,168
C II	687.0526	ST	560	5	$2s^22p$ - $2s^23d$	g^2P° - ^2D	1/2-3/2	308,197,287
C II	687.3453	ST	1000	5	$2s^22p$ - $2s^23d$	g^2P° - ^2D	3/2-5/2	308,197,287
C II	687.3521	ST	110	5	$2s^22p$ - $2s^23d$	g^2P° - ^2D	3/2-3/2	308,197,287
C II	794.964		10		$2s2p^2$ - $2s2p(^3P^\circ)4d$	^2S - $^2P^\circ$	1/2-1/2	168
C II	795.134		100		$2s2p^2$ - $2s2p(^3P^\circ)4d$	^2S - $^2P^\circ$	1/2-3/2	168
C II	799.660		500		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2F^\circ$	5/2-7/2	287,168
C II	799.928		25P		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2F^\circ$	5/2-5/2	287
C II	799.944		350		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2F^\circ$	3/2-5/2	287,168
C II	806.384		500	8	$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	3/2-5/2	287,168,488
C II	806.533		200	8	$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	1/2-3/2	287,168,488
C II	806.568		500	8	$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	5/2-5/2	287,168
C II	806.676		250	8	$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	3/2-3/2	287,168,488
C II	806.686		150	8	$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	1/2-1/2	287,168
C II	806.830		300	8	$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	3/2-1/2	287,168,488
C II	806.860		300	8	$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	5/2-3/2	287,168,488
C II	809.677		400		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2D^\circ$	5/2-5/2	287,168
C II	809.693		30P		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - ^2D	3/2-5/2	287,168
C II	809.747		30P		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2D^\circ$	5/2-3/2	287,168
C II	809.764		300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2D^\circ$	3/2-3/2	287,168
C II	858.0918	ST	500	4	$2s^22p$ - $2s^23s$	g^2P° - ^2S	1/2-1/2	308,197,287
C II	858.5590	ST	900	4	$2s^22p$ - $2s^23s$	g^2P° - ^2S	3/2-1/2	308,197,287
C II	903.6235	ST	200	3	$2s^22p$ - $2s2p^2$	g^2P° - ^2P	1/2-3/2	308,197,287
C II	903.9616	ST	400	3	$2s^22p$ - $2s2p^2$	g^2P° - ^2P	1/2-1/2	308,197,287
C II	904.1416	ST	1000	3	$2s^22p$ - $2s2p^2$	g^2P° - ^2P	3/2-3/2	308,197,287
C II	904.4801	ST	200	3	$2s^22p$ - $2s2p^2$	g^2P° - ^2P	3/2-1/2	308,197,287
C II	945.977		100		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2S - $^2P^\circ$	1/2-1/2	287,168
C II	946.198		200		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2S - $^2P^\circ$	1/2-3/2	287,168
C II	1009.862		400	7	$2s2p^2$ - $1s^22p^3$	^4P - $^4S^\circ$	1/2-3/2	197,287,488
C II	1010.092		600	7	$2s2p^2$ - $1s^22p^3$	^4P - $^4S^\circ$	3/2-3/2	197,287,488
C II	1010.374		1000	7	$2s2p^2$ - $1s^22p^3$	^4P - $^4S^\circ$	5/2-3/2	197,287,488
C II	1036.3367	ST	500	2	$2s^22p$ - $2s2p^2$	g^2P° - ^2S	1/2-1/2	308,197,287
C II	1037.0182	ST	1000	2	$2s^22p$ - $2s2p^2$	g^2P° - ^2S	3/2-1/2	308,197,287
C II	1063.285		5		$2s2p^2$ - $2s^24f$	^2D - $^2F^\circ$	5/2-7/2	287,168
C II	1063.313		5		$2s2p^2$ - $2s^24f$	^2D - $^2F^\circ$	3/2-5/2	287,168
C II	1065.8913	ST	700	12	$2s2p^2$ - $1s^22p^3$	^2D - $^2P^\circ$	5/2-3/2	308,197,287
C II	1065.9199	ST	100	12	$2s2p^2$ - $1s^22p^3$	^2D - $^2P^\circ$	3/2-3/2	308,197,287
C II	1066.1332	ST	500	12	$2s2p^2$ - $1s^22p^3$	^2D - $^2P^\circ$	3/2-1/2	308,197,287
C II	1091.937		100		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2P^\circ$	1/2-1/2	287,168
C II	1092.232		10		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2P^\circ$	1/2-3/2	287,168
C II	1092.431		10		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2P^\circ$	3/2-1/2	287,168
C II	1092.726		200		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2P^\circ$	3/2-3/2	287,168
C II?	1134.08		50		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^4P^\circ$	3/2-5/2	816,375
C II?	1134.52		20		$2s^2(^1S)3d$ - $2s2p(^3P^\circ)6s$	^2D - $^4P^\circ$	5/2-3/2	816,375
C II	1138.9358	ST	200		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2D^\circ$	1/2-3/2	308,168,287

Element	Wavelength		Intensity	Multiplet	Configuration	Term	J - J	Reference
C II	1139.3317	ST	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2P - ^2D^\circ$	3/2-5/2	308,168,287
C II	1139.4730	ST	10		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2P - ^2D^\circ$	3/2-3/2	308,168,287
C II	1141.6246	ST	300		$2s2p^2 - 2s^24p$	$^2D - ^2P^\circ$	5/2-3/2	308,168,287
C II	1141.6574	ST	30P		$2s2p^2 - 2s^24p$	$^2D - ^2P^\circ$	3/2-3/2	308,287
C II	1141.7445	ST	200		$2s2p^2 - 2s^24p$	$^2D - ^2P^\circ$	3/2-1/2	308,168,287
C II	1323.8617	ST	30	11	$2s2p^2 - 1s^22p^3$	$^2D - ^2D^\circ$	5/2-3/2	308,287,197
C II	1323.9059	ST	300	11	$2s2p^2 - 1s^22p^3$	$^2D - ^2D^\circ$	3/2-3/2	308,287,197
C II	1323.9513	ST	450	11	$2s2p^2 - 1s^22p^3$	$^2D - ^2D^\circ$	5/2-5/2	308,287,197
C II	1323.9955	ST	30	11	$2s2p^2 - 1s^22p^3$	$^2D - ^2D^\circ$	3/2-5/2	308,287,197
C II	1334.5323	ST	600	1	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	1/2-3/2	308,488,287
C II	1335.6627	ST	100	1	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	3/2-3/2	308,488,287
C II	1335.7077	ST	1000	1	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	3/2-5/2	308,488,287
C II	1720.456		10		$2s2p^2 - 1s^22p^3$	$^2P - ^2P^\circ$	1/2-3/2	287,168
C II	1721.012		100		$2s2p^2 - 1s^22p^3$	$^2P - ^2P^\circ$	1/2-1/2	287,168
C II	1721.682		200		$2s2p^2 - 1s^22p^3$	$^2P - ^2P^\circ$	3/2-3/2	287,168
C II	1722.238		10		$2s2p^2 - 1s^22p^3$	$^2P - ^2P^\circ$	3/2-1/2	287,168
C II	1760.3954	ST	450	10	$2s2p^2 - 2s^23p$	$^2D - ^2P^\circ$	5/2-3/2	308,488,287
C II	1760.4735	ST	100	10	$2s2p^2 - 2s^23p$	$^2D - ^2P^\circ$	3/2-3/2	308,197,287
C II	1760.8191	ST	300	10	$2s2p^2 - 2s^23p$	$^2D - ^2P^\circ$	3/2-1/2	308,488,287
C II?	1928.30		10		$2s2p^2 - 2s^24p$	$^2P - ^2P^\circ$	3/2-3/2	816,375
C II	1987.33		40		$2s^2(^1S)3p - 2s2p(^3P^\circ)3p$	$^2P^\circ - ^2P$	1/2-3/2	287
C II	1987.76		120		$2s^2(^1S)3p - 2s2p(^3P^\circ)3p$	$^2P^\circ - ^2P$	3/2-3/2	287
C II	1988.09		80		$2s^2(^1S)3p - 2s2p(^3P^\circ)3p$	$^2P^\circ - ^2P$	1/2-1/2	287,168
C II	1988.51		40		$2s^2(^1S)3p - 2s2p(^3P^\circ)3p$	$^2P^\circ - ^2P$	3/2-1/2	287

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Ground state $1s^22s^2\ ^1S_0$

Ionization potential 386 213.9 cm^{-1}; 47.883 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C III	265.029	10d		$2s(^2S)2p - 1s^22p(^2P^\circ)7p$	$^3P^\circ - ^3P$	2-2	168,034
C III	265.287	10d		$2s(^2S)2p - 1s^22p(^2P^\circ)7p$	$^3P^\circ - ^3D$	2-3	168,034
C III	270.324	10d		$2s^2 - 2s8p$	$g\,^1S - ^1P^\circ$	0-1	168,034
C III	270.583	100d		$2s(^2S)2p - 1s^22p(^2P^\circ)6p$	$^3P^\circ - ^3P$	2-2	168,034
C III	271.014	100d		$2s(^2S)2p - 1s^22p(^2P^\circ)6p$	$^3P^\circ - ^3D$	2-3	168,034
C III	274.051	200d		$2s^2 - 2s7p$	$g\,^1S - ^1P^\circ$	0-1	168,034
C III	280.043	300		$2s^2 - 2s6p$	$g\,^1S - ^1P^\circ$	0-1	168,034
C III	280.522	200d		$2s(^2S)2p - 1s^22p(^2P^\circ)5p$	$^3P^\circ - ^3P$	2-2	168,034
C III	281.390	200		$2s(^2S)2p - 1s^22p(^2P^\circ)5p$	$^3P^\circ - ^3D$	2-3	168,034
C III	288.415	10		$2s^2 - 1s^22p(^2P^\circ)3d$	$g\,^1S - ^1P^\circ$	0-1	170,034
C III	291.3261	500		$2s^2 - 2s5p$	$g\,^1S - ^1P^\circ$	0-1	197,168,034
C III	301.206	200		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3P$	0-1	168,034
C III	301.243	300		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3P$	2-2	168,034
C III	301.279	100		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3P$	2-1	168,034
C III	303.432	400d		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-3	168,034
C III	303.468	100		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-2	168,034
C III	310.1697	700	3	$2s^2 - 2s4p$	$g\,^1S - ^1P^\circ$	0-1	197,168,034
C III	311.157	10d		$2s2p - 2s9d$	$^3P^\circ - ^3D$	2-	168,034
C III	314.395	100d		$2s2p - 2s8d$	$^3P^\circ - ^3D$		168,034
C III	319.266	300d		$2s2p - 2s7d$	$^3P^\circ - ^3D$		168,034
C III	321.372	10d		$2s2p - 2s7s$	$^3P^\circ - ^3S$	2-1	168,034
C III	322.5741	800		$2s^2 - 1s^22p(^2P^\circ)3s$	$g\,^1S - ^1P^\circ$	0-1	197,168,034
C III	325.570	100d		$2s(^2S)2p - 1s^22p(^2P^\circ)5p$	$^1P^\circ - ^1D$	1-2	168,034
C III	327.112	400d		$2s2p - 2s6d$	$^3P^\circ - ^3D$	1-2	168
C III	327.176	400d		$2s2p - 2s6d$	$^3P^\circ - ^3D$	2-3	168,034
C III	327.784	100		$2s(^2S)2p - 1s^22p(^2P^\circ)5p$	$^1P^\circ - ^1P$	1-1	168,034
C III	330.637	100		$2s2p - 2s6s$	$^3P^\circ - ^3S$	1-1	168,034
C III	330.687	100		$2s2p - 2s6s$	$^3P^\circ - ^3S$	2-1	168,034
C III?	339.773	100					168
C III	341.143	500		$2s2p - 2s5d$	$^3P^\circ - ^3D$	0-1	168,034
C III	341.179	600		$2s2p - 2s5d$	$^3P^\circ - ^3D$	1-2	168,034
C III	341.242	700		$2s2p - 2s5d$	$^3P^\circ - ^3D$	2-3	168,034
C III	347.777	300		$2s2p - 2s5s$	$^3P^\circ - ^3S$	1-1	168,034
C III	347.854	300		$2s2p - 2s5s$	$^3P^\circ - ^3S$	2-1	168,034
C III	350.132	10d		$1s^22p^2 - 1s^22p(^2P^\circ)6d$	$^3P - ^3P^\circ$	2-2	168,034
C III	350.330	200d		$1s^22p^2 - 1s^22p(^2P^\circ)6d$	$^3P - ^3D^\circ$	2-3	168,034
C III	353.000	300d		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^1P^\circ - ^1D$	1-2	168,034
C III	358.740	400		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^1P^\circ - ^1P$	1-1	168,034
C III	360.557	600		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	1-2	168,034
C III	360.623	700		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-2	168,034
C III	360.675	500		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-1	168,034
C III	363.7538	400		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	0-1	034,168
C III	363.7852	500		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	1-1	034,168
C III	363.8598	600		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	2-1	034,168
C III	365.778	100d		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^3P - ^3P^\circ$	2-2	168,034
C III	366.169	400d		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^3P - ^3D^\circ$	2-3	168,034
C III	369.415	500		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-3	168,034
C III	369.472	200		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-2	168,034
C III?	370.951	10d					168
C III	371.694	1000	7	$2s2p - 2s4d$	$^3P^\circ - ^3D$	1-2	168,034
C III	371.747	1000	7	$2s2p - 2s4d$	$^3P^\circ - ^3D$	2-3	168,034
C III	371.784	800	7	$2s2p - 2s4d$	$^3P^\circ - ^3D$	2-2	168,034
C III	379.065	100		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^1D - ^1D^\circ$	2-2	168,034
C III	379.254	10d		$2s2p - 2s7d$	$^1P^\circ - ^1D$	1-2	168,034
C III	386.2028	850	2	$2s^2 - 2s3p$	$g\,^1S - ^1P^\circ$	0-1	197,168,034

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C III	388.9687	500		2s2p - 2s4s	$^3P^\circ - ^3S$	0-1	197,168,034
C III	389.0045	600		2s2p - 2s4s	$^3P^\circ - ^3S$	1-1	197,168,034
C III	389.0898	700		2s2p - 2s4s	$^3P^\circ - ^3S$	2-1	197,168,034
C III	390.055	300		2s2p - 2s6d	$^1P^\circ - ^1D$	1-2	168,034
C III?	398.168	10					170
C III?	398.551	10					170
C III	399.637	600d		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^3P - ^3D^\circ$	1-2	168
C III	399.688	600d		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^3P - ^3D^\circ$	2-3	168,034
C III?	409.204	10					168
C III	409.325	600		2s2p - 2s5d	$^1P^\circ - ^1D$	1-2	168,034
C III	411.697	10		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	168,034
C III	411.9577	300		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1S$	1-0	034,168
C III	416.769	500		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^1D - ^1D^\circ$	2-2	168,034
C III	418.609	200d		$1s^22p^2 - 1s^22p(^2P^\circ)4s$	$^3P - ^3P^\circ$	2-2	168,034
C III	433.3391	800		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1D$	1-2	034,168
C III	450.7338	800		2s2p - 2s4d	$^1P^\circ - ^1D$	1-2	197,168,034
C III	459.462	900	6	2s2p - 2s3d	$^3P^\circ - ^3D$	0-1	197,168,034
C III	459.521	950	6	2s2p - 2s3d	$^3P^\circ - ^3D$	1-2	197,168,034
C III	459.633	1000	6	2s2p - 2s3d	$^3P^\circ - ^3D$	2-3	197,168,034
C III	460.0487	800		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1P$	1-1	197,168,034
C III	468.931	10		$1s^22p^2 - 2s(^2S)6f$	$^1D - ^1F^\circ$	2-3	168,034
C III	477.6246	300		2s2p - 2s4s	$^1P^\circ - ^1S$	1-0	034,168
C III	483.567	300		$1s^22p^2 - 2s(^2S)5p$	$^3P - ^3P^\circ$	0-1	168,034
C III	483.618	400		$1s^22p^2 - 2s(^2S)5p$	$^3P - ^3P^\circ$	1-2	168,034
C III	483.733	500		$1s^22p^2 - 2s(^2S)5p$	$^3P - ^3P^\circ$	2-2	168,034
C III	492.6500	700		$1s^22p^2 - 2s(^2S)5f$	$^1D - ^1F^\circ$	2-3	197,168,034
C III	493.341	500		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	0-1	168,034
C III	493.364	500		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-0	168,034
C III	493.396	500		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-1	168,034
C III	493.464	500		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-2	168,034
C III	493.519	500		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-1	168,034
C III	493.587	700		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-2	168,034
C III	497.910	100		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1P^\circ$	2-1	168,034
C III	499.425	700		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	0-1	168,034
C III	499.462	800		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-2	168,034
C III	499.530	900		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-3	168,034
C III	499.583	700		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-2	168,034
C III	506.658	10		$1s^22p^2 - 2s5p$	$^1D - ^1P^\circ$	2-1	168,034
C III	511.5225	1000		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	197,168,034
C III	535.2885	850		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	197,168,034
C III	538.0801	900	5	2s2p - 2s3s	$^3P^\circ - ^3S$	0-1	197,168,034
C III	538.1487	950	5	2s2p - 2s3s	$^3P^\circ - ^3S$	1-1	197,168,034
C III	538.3120	1000	5	2s2p - 2s3s	$^3P^\circ - ^3S$	2-1	197,168,034
C III	554.655	200		$1s^22p^2 - 2s4p$	$^3P - ^3P^\circ$	2-2	168,034
C III	565.5280	700		$1s^22p^2 - 2s4f$	$^1D - ^1F^\circ$	2-3	197,168,034
C III	566.490	400		$1s^22p^2 - 2s4p$	$^1D - ^1P^\circ$	2-1	168,034
C III	574.2809	1000	11	2s2p - 2s3d	$^1P^\circ - ^1D$	1-2	197,168,034
C III	585.261	600		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	1-2	168,034
C III	585.417	800		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	2-2	168,034
C III	585.496	500		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	1-1	168,034
C III	585.608	600		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	1-0	168,034
C III	585.666	600		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	2-1	168,034
C III	609.025	400		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1S - ^1P^\circ$	0-1	168,034
C III	609.275	600		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^1D - ^1P^\circ$	2-1	168,034
C III	622.144	200		$1s^22p^2 - 2s5p$	$^1S - ^1P^\circ$	0-1	168,034
C III	690.526	700	10	2s2p - 2s3s	$^1P^\circ - ^1S$	1-0	168,034
C III	714.879	100		$1s^22p^2 - 2s4p$	$^1S - ^1P^\circ$	0-1	168,034
C III	784.393	300		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	168,034
C III	884.516	800		$1s^22p^2 - 2s3p$	$^1D - ^1P^\circ$	2-1	168,034
C III	977.020	1000	1	$2s^2 - 2s2p$	$g^1S - ^1P^\circ$	0-1	197,168,034

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C III	1165.698	10P		2s3p - 2s5d	$^3P^\circ - ^3D$	1-2	168,034
C III	1165.870	100P		2s3p - 2s5d	$^3P^\circ - ^3D$	2-3	168,034
C III	1174.933	350	4	$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	1-2	197,034
C III	1175.263	300	4	$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	0-1	197,034
C III	1175.590	200	4	$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	1-1	197,034
C III	1175.711	1000	4	$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	2-2	197,034
C III	1175.987	300	4	$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	1-0	197,034
C III	1176.370	350	4	$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	2-1	197,034
C III	1247.383	800	9	$2s2p - 1s^22p^2$	$^1P^\circ - ^1S$	1-0	197,168,034
C III	1256.52	100d		2s3s - 2s4p	$^3S - ^3P^\circ$	1-	168,034
C III	1296.30	200d		2s3d - 2s5f	$^3D - ^3F^\circ$		168,034
C III	1308.73	200		$1s^22p^2 - 2s3p$	$^1S - ^1P^\circ$	0-1	168
C III	1426.16	10		$2s3d - 1s^22p(^2P^\circ)3d$	$^3D - ^3P^\circ$	-1	168
C III	1426.45	400		$2s(^2S)3s - 1s^22p(^2P^\circ)3s$	$^3S - ^3P^\circ$	1-2	168,034
C III	1426.78	100		$2s(^2S)3d - 1s^22p(^2P^\circ)3d$	$^3D - ^3P^\circ$	3-2	168,034
C III	1427.85	300		$2s(^2S)3s - 1s^22p(^2P^\circ)3s$	$^3S - ^3P^\circ$	1-1	168,034
C III	1428.17	200		$2s(^2S)3p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-2	168,034
C III	1428.53	200		$2s(^2S)3s - 1s^22p(^2P^\circ)3s$	$^3S - ^3P^\circ$	1-0	168,034
C III	1428.66	10		$2s(^2S)3p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	1-1	168,034
C III	1428.95	100		$2s(^2S)3p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-1	168,034
C III	1429.08	10		$2s(^2S)3p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	1-0	168,034
C III	1477.68	300		$2s(^2S)3d - 1s^22p(^2P^\circ)3d$	$^3D - ^3D^\circ$	3-3	168,034
C III	1478.05	200		$2s(^2S)3d - 1s^22p(^2P^\circ)3d$	$^3D - ^3D^\circ$	2-2	168,034
C III	1478.30	100		$2s(^2S)3d - 1s^22p(^2P^\circ)3d$	$^3D - ^3D^\circ$	1-1	168,034
C III	1531.85	200		2s3p - 2s4d	$^1P^\circ - ^1D$	1-2	168,034
C III	1576.49	300		$2s(^2S)3d - 1s^22p(^2P^\circ)3d$	$^3D - ^3F^\circ$	3-4	168,034
C III	1577.32	200		$2s(^2S)3d - 1s^22p(^2P^\circ)3d$	$^3D - ^3F^\circ$	-3	168,034
C III	1577.89	200		$2s(^2S)3d - 1s^22p(^2P^\circ)3d$	$^3D - ^3F^\circ$	-2	168,034
C III	1591.48	200		$2s(^2S)3s - 1s^22p(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	168,034
C III	1620.05	300		2s3p - 2s4d	$^3P^\circ - ^3D$	2-3	168,034
C III	1620.33	200		2s3p - 2s4d	$^3P^\circ - ^3D$	1-2	168,034
C III	1620.59	10		2s3p - 2s4d	$^3P^\circ - ^3D$	0-1	168,034
C III	1620.68	100		2s3p - 2s4d	$^3P^\circ - ^3D$	2-2	168,034
C III	1645.06	100		$2s(^2S)3p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1P$	1-1	168,034
C III	1779.12	10		$2s(^2S)3d - 1s^22p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	168,034
C III?	1894.49	200					168
C III	1922.93	300		2s3d - 2s4f	$^3D - ^3F^\circ$	3-4	034,168
C III	1923.14	200		2s3d - 2s4f	$^3D - ^3F^\circ$	2-3	034,168
C III	1923.31	200		2s3d - 2s4f	$^3D - ^3F^\circ$	1-2	034,168
C III	1979.16	100		$1s^22p(^2P^\circ)3d - 1s^22p(^2P^\circ)4f$	$^3D^\circ - ^3F$	3-4	034
C III	1979.62	50		$1s^22p(^2P^\circ)3d - 1s^22p(^2P^\circ)4f$	$^3D^\circ - ^3F$		034

Ground state $1s^22s^2\ ^2S_{1/2}$

Ionization potential 520 177.8 cm^{-1}; 64.492 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C IV	197.82	10		$1s^22s - 1s^211p$	$g^2S - {}^2P^\circ$	½-	168
C IV	199.04	10		$1s^22s - 1s^210p$	$g^2S - {}^2P^\circ$	½-	168
C IV	200.68	10d		$1s^22s - 1s^29p$	$g^2S - {}^2P^\circ$	½-	168
C IV	203.057	100d		$1s^22s - 1s^28p$	$g^2S - {}^2P^\circ$	½-	168
C IV	206.641	300d		$1s^22s - 1s^27p$	$g^2S - {}^2P^\circ$	½-	168
C IV	212.421	500	5	$1s^22s - 1s^26p$	$g^2S - {}^2P^\circ$	½-	168,488
C IV	222.791	700	4	$1s^22s - 1s^25p$	$g^2S - {}^2P^\circ$	½-	168,488
C IV	228.27	10d		$1s^22p - 1s^210d$	${}^2P^\circ - {}^2D$		168
C IV	230.43	100d		$1s^22p - 1s^29d$	${}^2P^\circ - {}^2D$		168
C IV	233.53	200d		$1s^22p - 1s^28d$	${}^2P^\circ - {}^2D$		168
C IV	238.200	200d		$1s^22p - 1s^27d$	${}^2P^\circ - {}^2D$	½-3½	168
C IV	238.250	300d		$1s^22p - 1s^27d$	${}^2P^\circ - {}^2D$	3½-5½	168
C IV	239.196	10		$1s^22p - 1s^27s$	${}^2P^\circ - {}^2S$	3½-½	168
C IV	244.907	1000	3	$1s^22s - 1s^24p$	$g^2S - {}^2P^\circ$	½-3½	168,488
C IV	245.775	400d	11	$1s^22p - 1s^26d$	${}^2P^\circ - {}^2D$	½-3½	168,488
C IV	245.830	500d	11	$1s^22p - 1s^26d$	${}^2P^\circ - {}^2D$	3½-5½	168,488
C IV	247.357	10		$1s^22p - 1s^26s$	${}^2P^\circ - {}^2S$	½-½	168
C IV	247.415	100		$1s^22p - 1s^26s$	${}^2P^\circ - {}^2S$	3½-½	168
C IV	259.471	600	10	$1s^22p - 1s^25d$	${}^2P^\circ - {}^2D$	½-3½	168,488
C IV	259.542	700	10	$1s^22p - 1s^25d$	${}^2P^\circ - {}^2D$	3½-5½	168,488
C IV	262.553	300		$1s^22p - 1s^25s$	${}^2P^\circ - {}^2S$	½-½	168
C IV	262.624	400		$1s^22p - 1s^25s$	${}^2P^\circ - {}^2S$	3½-½	168
C IV	289.143	900	9	$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	½-3½	168,488
C IV	289.230	1000	9	$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	3½-5½	168,488
C IV	296.857	600	8	$1s^22p - 1s^24s$	${}^2P^\circ - {}^2S$	½-½	168,488
C IV	296.951	700	8	$1s^22p - 1s^24s$	${}^2P^\circ - {}^2S$	3½-½	168,488
C IV	307.806	100f		$1s^22s - 1s^23d$	$g^2S - {}^2D$	½-3½	168
C IV	312.422	1000	2	$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-3½	197,168,488
C IV	312.453	950	2	$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-½	197,168,488
C IV	384.032	950	7	$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	½-3½	197,168,488
C IV	384.178	1000	7	$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	3½-5½	197,168,488
C IV	419.525	950	6	$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	½-½	197,168,488
C IV	419.714	1000	6	$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	3½-½	197,168,488
C IV	770.379	10d		$1s^23p - 1s^25d$	${}^2P^\circ - {}^2D$	3½-5½	168
C IV	948.098	200		$1s^23s - 1s^24p$	${}^2S - {}^2P^\circ$	½-3½	168
C IV	948.214	100		$1s^23s - 1s^24p$	${}^2S - {}^2P^\circ$	½-½	168
C IV	1107.600	300		$1s^23p - 1s^24d$	${}^2P^\circ - {}^2D$	½-3½	168
C IV	1107.933	400		$1s^23p - 1s^24d$	${}^2P^\circ - {}^2D$	3½-5½	168
C IV	1168.873	300		$1s^23d - 1s^24f$	${}^2D - {}^2F^\circ$	3½-5½	168
C IV	1168.990	400		$1s^23d - 1s^24f$	${}^2D - {}^2F^\circ$	5½-7½	168
C IV	1198.58	100d		$1s^23d - 1s^24p$	${}^2D - {}^2P^\circ$	5½-3½	168
C IV	1230.046	200		$1s^23p - 1s^24s$	${}^2P^\circ - {}^2S$	½-½	168
C IV	1230.511	300		$1s^23p - 1s^24s$	${}^2P^\circ - {}^2S$	3½-½	168
C IV	1548.195	1000	1	$1s^22s - 1s^22p$	$g^2S - {}^2P^\circ$	½-3½	168,488
C IV	1550.768	950	1	$1s^22s - 1s^22p$	$g^2S - {}^2P^\circ$	½-½	168,488

Ground state $1s^2\ ^1S_0$

Ionization potential 3 162 450 cm^{-1}; 392.08 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C V	32.064			$1s^2$ - 1s8p	g^1S - $^1P^\circ$	0-1	765
C V	32.188			$1s^2$ - 1s7p	g^1S - $^1P^\circ$	0-1	765
C V	32.400			$1s^2$ - 1s6p	g^1S - $^1P^\circ$	0-1	764,765
C V	32.754			$1s^2$ - 1s5p	g^1S - $^1P^\circ$	0-1	596,764,765
C V	33.426	30		$1s^2$ - 1s4p	g^1S - $^1P^\circ$	0-1	197,764,765
C V	34.973	100		$1s^2$ - 1s3p	g^1S - $^1P^\circ$	0-1	197,764,765
C V	40.270	300		$1s^2$ - 1s2p	g^1S - $^1P^\circ$	0-1	197,764
C V	40.731	15		$1s^2$ - 1s2p	g^1S - $^3P^\circ$	0-1	764
C V	138.2	P		1s2s - 1s10p	^3S - $^3P^\circ$		262
C V	139.5	P		1s2s - 1s9p	^3S - $^3P^\circ$		262
C V	141.27	P		1s2s - 1s8p	^3S - $^3P^\circ$		262
C V	143.94			1s2s - 1s7p	^3S - $^3P^\circ$		262
C V	147.1	P		1s2p - 1s10d	$^3P^\circ$ - ^3D		262
C V	148.35			1s2s - 1s6p	^3S - $^3P^\circ$		262
C V	148.5	P		1s2p - 1s9d	$^3P^\circ$ - ^3D		262
C V	150.51	P		1s2p - 1s8d	$^3P^\circ$ - ^3D		262
C V	153.53			1s2p - 1s7d	$^3P^\circ$ - ^3D		262
C V	156.23	b		1s2s - 1s5p	^3S - $^3P^\circ$		262
C V	157.2	P		1s2p - 1s8d	$^1P^\circ$ - ^1D		262
C V	158.47			1s2p - 1s6d	$^3P^\circ$ - ^3D		262
C V	160.53	P		1s2p - 1s7d	$^1P^\circ$ - ^1D		262
C V	165.91	P		1s2p - 1s6d	$^1P^\circ$ - ^1D		262
C V	167.39			1s2p - 1s5d	$^3P^\circ$ - ^3D		262
C V	173.27			1s2s - 1s4p	^3S - $^3P^\circ$		262
C V	175.67			1s2p - 1s5d	$^1P^\circ$ - ^1D		262
C V	186.72			1s2p - 1s4d	$^3P^\circ$ - ^3D		262
C V	197.02			1s2p - 1s4d	$^1P^\circ$ - ^1D		262
C V	227.22			1s2s - 1s3p	^3S - $^3P^\circ$		262
C V	248.668	10		1s2p - 1s3d	$^3P^\circ$ - ^3D		168,812
C V	248.744	10		1s2p - 1s3d	$^3P^\circ$ - ^3D		168,812
C V	267.26			1s2p - 1s3d	$^1P^\circ$ - ^1D		262

Ground state 1s $^2S_{1/2}$

Ionization potential 3 952 061 cm^{-1}; 489.98 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
C VI	26.026	P		1s - 6p	g^2S - $^2P^o$	½-	309
C VI	26.357	P		1s - 5p	g^2S - $^2P^o$	½-	309
C VI	26.990	P		1s - 4p	g^2S - $^2P^o$	½-	309,765
C VI	28.466	P		1s - 3p	g^2S - $^2P^o$	½-	309,765
C VI	33.736	1000P		1s - 2p	g^2S - $^2P^o$	½-	309,197,765
C VI	110.22	P		2 - 7			309
C VI	113.87	P		2 - 6			309
C VI	120.50	P		2 - 5			309
C VI	134.95	P		2 - 4			309
C VI	182.09	P		2p - 3d	$^2P^o$ - ^2D	½-3½	309
C VI	182.23	P		2p - 3d	$^2P^o$ - ^2D	3½-5½	309
C VI	265.05	P		3 - 8			309
C VI	279.02	P		3 - 7			309
C VI	303.70	P		3 - 6			309
C VI	355.89	P		3 - 5			309
C VI	504.65	P		4 - 9			309
C VI	520.6	P		3 - 4			309
C VI	539.95	P		4 - 8			309
C VI	601.31	P		4 - 7			309
C VI	728.93	P		4 - 6			309
C VI	843.72	P		5 - 10			309
C VI	915.30	P		5 - 9			309
C VI	1038.42	P		5 - 8			309
C VI	1124.9	P		4 - 5			309
C VI	1291.94	P		5 - 7			309

Ground state $1s^22s^22p^3\ ^4S^\circ_{3/2}$

Ionization potential 117 214 cm^{-1}; 14.53 eV

Element	Wavelength		Intensity	Multiplet	Configuration	Term	J - J	Reference
N I	875.092		65		$2s^22p^3 - 2s^22p^2(^3P)6d$	$g^4S^\circ - ^4P$	3/2-5/2	794,334,487
N I	888.019		35		$2s^22p^3 - 2s^22p^2(^3P)6s$	$g^4S^\circ - ^4P$	3/2-3/2	794,334,137
N I	888.363		35		$2s^22p^3 - 2s^22p^2(^3P)6s$	$g^4S^\circ - ^4P$	3/2-1/2	794,334,137
N I	905.829		150		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-5/2	794,334,137
N I	906.202		35		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-3/2	794,334,137
N I	906.426		35		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-1/2	794,334,137
N I	906.722		35		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4D$	3/2-5/2	794,334,487
N I	906.824		35P		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4D$	3/2-3/2	487,334
N I	907.268		35P		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4D$	3/2-1/2	487,334
N I	908.2332		3		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - ^2P$	3/2-3/2	376
N I	908.7958		1		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - ^2P$	3/2-1/2	376
N I	909.6976	ST	9		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-5/2	306,376
N I	910.2785	ST	6		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-3/2	306,376
N I	910.6456	ST	5		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-1/2	306,376
N I	951.0791		5		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^2D$	3/2-5/2	376
N I	951.2947		3		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^2D$	3/2-3/2	376
N I	952.3037	ST	18		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-5/2	306,376
N I	952.4151	ST	14		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-3/2	306,376
N I	952.5231	ST	10		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-1/2	306,376
N I	953.4150		25		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-1/2	376
N I	953.6548		27		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-3/2	376
N I	953.9698		30		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-5/2	376
N I	954.1040		30		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^2F$	3/2-5/2	376
N I	955.2647	ST	4		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4F$	3/2-5/2	306,334
N I	955.4376	ST	4		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4F$	3/2-3/2	306,334
N I	955.5292		3		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^2P$	3/2-1/2	376
N I	955.8814		5		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^2P$	3/2-3/2	376
N I	959.4936		5		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^2P$	3/2-3/2	376
N I	960.2017		P		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^2P$	3/2-1/2	197,487
N I	963.9904	ST	25	3	$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-5/2	308,376
N I	964.6258	ST	23	3	$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-3/2	308,376
N I	965.0415	ST	23	3	$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-1/2	308,376
N I?	1008.875		5					191
N I?	1032.958		10					191
N I?	1033.453		10					191,334
N I?	1043.092		65					191,334
N I?	1044.094		65					191,334
N I?	1044.724		35					191,334
N I?	1063.351		5					191
N I?	1066.126		5					191
N I?	1066.641		20					191,334
N I?	1067.399		35					191,334
N I	1067.607		5		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2D^\circ - ^4D$	5/2-7/2	794,191,487
N I	1068.476		20		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2D^\circ - ^4D$	3/2-5/2	794,191,487
N I	1069.198		10		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2D^\circ - ^4F$	3/2-5/2	191,487
N I	1069.984		15		$2s^22p^3 - 2s^22p^2(^3P)6s$	$^2D^\circ - ^4P$	5/2-5/2	794,191,334
N I	1070.821		1		$2s^22p^3 - 2s^22p^2(^3P)6s$	$^2D^\circ - ^4P$	5/2-3/2	794,191
N I?	1071.656		5					191
N I?	1093.275		1					191
N I?	1094.688		1					191
N I?	1095.279		40					191
N I	1095.940		40		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	5/2-5/2	794,191
N I	1096.322		10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	3/2-3/2	794,191
N I	1096.749		10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^4P$	5/2-5/2	794,191
N I?	1097.245		40					794,191

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N I	1097.990	15		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	3/2-5/2	794,487
N I	1098.103	20		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^4D$	5/2-5/2	794,191,487
N I	1098.264	20		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^4D$	5/2-3/2	794,191,487
N I	1099.153	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^4F$	3/2-5/2	794,191
N I	1100.3593	50		$2s^22p^3 - 2s^22p^2(^3P)5s$	$^2D^\circ - ^2P$	5/2-3/2	376
N I	1100.4649	15		$2s^22p^3 - 2s^22p^2(^3P)5s$	$^2D^\circ - ^2P$	3/2-3/2	376
N I	1101.2910	45		$2s^22p^3 - 2s^22p^2(^3P)5s$	$^2D^\circ - ^2P$	3/2-1/2	376
N I	1134.1651	560	2	$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-1/2	376
N I	1134.4147	550	2	$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-3/2	376
N I	1134.9801	780	2	$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-5/2	376
N I?	1139.818	5					191
N I?	1143.606	90					191
N I	1143.6458	15		$2s^22p^3 - 2s^22p^2(^1S)3s$	$^2P^\circ - ^2S$	1/2-1/2	376
N I	1143.6508	30		$2s^22p^3 - 2s^22p^2(^1S)3s$	$^2P^\circ - ^2S$	3/2-1/2	376
N I?	1152.139	20					191
N I?	1154.993	1					191
N I?	1156.593	1					191
N I?	1158.051	10					191
N I	1159.285	8		$2s^22p^3 - 2s^22p^2(^3P)7d$	$^2P^\circ - ^2D$	3/2-5/2	191,334
N I	1159.8172	P		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^2P$	3/2-3/2	197,487
N I	1159.858	5		$2s^22p^3 - 2s^22p^2(^3P)7d$	$^2P^\circ - ^2D$	1/2-3/2	191,334
N I?	1160.480	10		$2s^22p^3 - 2s^22p^2(^3P)7d$	$^2P^\circ - ^2P$	3/2-3/2	191,334,487
N I	1160.9370	P		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^2P$	3/2-1/2	197,487
N I	1163.8835	150	7	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	376
N I	1164.0016	30	7	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-5/2	376
N I	1164.2064	60	7	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-3/2	376
N I	1164.3246	95	7	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-3/2	376
N I	1165.5943	40		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4D$	5/2-7/2	376
N I	1165.8358	15		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4D$	3/2-5/2	376
N I?	1166.950	1					191
N I	1167.4484	350	6	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	376
N I	1168.2154	50		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4P$	5/2-5/2	376
N I	1168.3344	200		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4P$	3/2-5/2	376
N I	1168.4167	60	6	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-5/2	376
N I	1168.5358	300	6	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	376
N I	1169.6933	80		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4F$	5/2-7/2	376
N I	1170.1572	10		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4F$	5/2-5/2	376
N I	1170.2766	80		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4F$	3/2-5/2	376
N I	1170.4165	5		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4F$	5/2-3/2	376
N I	1170.6743	20		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-1/2	376
N I	1171.0834	60		$2s^22p^3 - 2s^22p^2(^3P)6d$	$^2P^\circ - ^2D$	1/2-3/2	376
N I	1176.5097	350		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	5/2-3/2	376
N I	1176.6304	180		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	3/2-3/2	376
N I	1177.6948	320		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	3/2-1/2	376
N I?	1180.428	1					191
N I?	1183.998	20					191
N I	1188.972	40		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2P^\circ - ^2D$	3/2-5/2	794,191
N I	1189.244	20		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2P^\circ - ^2D$	1/2-3/2	794,191
N I?	1189.628	90					794
N I	1199.5490 ST	1000	1	$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-5/2	308,376
N I	1200.2238 ST	950	1	$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-3/2	308,376
N I	1200.7113 ST	700	1	$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-1/2	308,376
N I	1225.028	40		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	3/2-5/2	794,191,334
N I	1225.372	40		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	1/2-3/2	794,191,334
N I	1226.831	5		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^4P$	3/2-3/2	191,334
N I	1227.226	5		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^4P$	1/2-1/2	191,334
N I	1227.788	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^4D$	3/2-5/2	191,334
N I	1228.410	40		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2P$	1/2-1/2	794,191,334
N I	1228.790	150		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2P$	3/2-3/2	794,191,334
N I?	1229.172	20					794,191,334

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N I	1230.288	1		$2s^22p^3$ - $2s^22p^2(^3P)5s$	$^2P^\circ$ - ^2P	3/2-3/2	191,334
N I	1231.588	5		$2s^22p^3$ - $2s^22p^2(^3P)5s$	$^2P^\circ$ - ^2P	1/2-1/2	191,334
N I	1243.1796	550	5	$2s^22p^3$ - $2s^22p^2(^1D)3s$	$^2D^\circ$ - ^2D	5/2-5/2	376
N I	1243.3066	400	5	$2s^22p^3$ - $2s^22p^2(^1D)3s$	$^2D^\circ$ - ^2D	3/2-3/2	376
N I?	1269.761	1					191
N I?	1279.223	1					191
N I?	1279.995	5					191
N I?	1280.362	5					191
N I?	1301.681	1					191
N I?	1310.057	5					191
N I	1310.5401	200	13	$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2D	3/2-5/2	376
N I	1310.9429	150	13	$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2D	1/2-3/2	376
N I	1310.9495	25	13	$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2D	3/2-3/2	376
N I?	1313.129	20					191,334
N I	1315.484	35		$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^4P	-3/2	191,334,487
N I	1316.2906	2		$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2F	3/2-5/2	376
N I	1318.8224	5		$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^4F	1/2-3/2	376
N I	1318.9981	150	12	$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2P	1/2-1/2	376
N I	1319.0048	80	12	$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2P	3/2-1/2	376
N I	1319.6693	50	12	$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2P	1/2-3/2	376
N I	1319.6760	250	12	$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2P	3/2-3/2	376
N I	1326.5639	10	11	$2s^22p^3$ - $2s^22p^2(^3P)4s$	$^2P^\circ$ - ^2P	1/2-3/2	376
N I	1326.5707	50	11	$2s^22p^3$ - $2s^22p^2(^3P)4s$	$^2P^\circ$ - ^2P	3/2-3/2	376
N I	1327.9170	25	11	$2s^22p^3$ - $2s^22p^2(^3P)4s$	$^2P^\circ$ - ^2P	1/2-1/2	376
N I	1327.9238	15	11	$2s^22p^3$ - $2s^22p^2(^3P)4s$	$^2P^\circ$ - ^2P	3/2-1/2	376
N I?	1355.887	150					191
N I?	1357.359	1					191
N I?	1360.566	1					191
N I?	1377.787	1					191
N I?	1379.003	1					191
N I?	1411.510	5					191
N I	1411.9318	150	10	$2s^22p^3$ - $2s^22p^2(^1D)3s$	$^2P^\circ$ - ^2D	1/2-3/2	376
N I	1411.9395	P	10	$2s^22p^3$ - $2s^22p^2(^1D)3s$	$^2P^\circ$ - ^2D	3/2-3/2	376
N I	1411.9494	300	10	$2s^22p^3$ - $2s^22p^2(^1D)3s$	$^2P^\circ$ - ^2D	3/2-5/2	376
N I?	1462.822	10					191
N I?	1466.723	1					794,191
N I?	1467.384	20					191
N I?	1481.750	40					191
N I	1492.6254	620	4	$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2D^\circ$ - ^2P	5/2-3/2	376
N I	1492.8195	100	4	$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2D^\circ$ - ^2P	3/2-3/2	376
N I	1494.6751	400	4	$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2D^\circ$ - ^2P	3/2-1/2	376
N I?	1496.707	1					191
N I?	1527.495	1					191
N I?	1542.499	5					191
N I?	1552.995	1					191
N I?	1558.834	1					191
N I?	1559.751	1					191
N I?	1572.976	1					191
N I?	1577.131	5					191
N I?	1592.867	20					191
N I?	1597.181	10					191
N I?	1599.202	1					191
N I?	1602.973	5					191
N I?	1627.366	5					191
N I?	1640.437	10					191
N I?	1647.493	20					191
N I?	1653.148	1					191
N I?	1669.598	1					191
N I?	1671.020	5					191
N I?	1677.906	40					191

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N I?	1721.014	1					191
N I?	1721.746	20					191
N I?	1728.170	20					191
N I?	1729.481	5					191
N I?	1730.734	5					191
N I?	1738.502	1					191
N I	1742.7189	50	9	$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2P^\circ$ - ^2P	½-3½	376
N I	1742.7306	350	9	$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2P^\circ$ - ^2P	3½-3½	376
N I	1745.2482	150	9	$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2P^\circ$ - ^2P	½-½	376
N I	1745.2600	50	9	$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2P^\circ$ - ^2P	3½-½	376
N I?	1750.079	10					191
N I?	1757.223	5					191
N I?	1759.789	1					191
N I?	1807.328	1					191
N I	1836.752	10	8	$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2P^\circ$ - ^4P	½-½	796,191,488
N I?	1844.042	90					191
N I?	1846.399	150					191
N I?	1873.217	5					191
N I?	1889.056	10					191

Ground state $1s^22s^2p^2\ ^3P_0$

Ionization potential 238 750.5 cm^{-1}; 29.600 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N II	453.257	20		$2s^22p^2 - 2s^22p5d$	$g^3P - {}^3D^\circ$	1-2	168,200
N II	453.340	100		$2s^22p^2 - 2s^22p5d$	$g^3P - {}^3D^\circ$	2-3	168,200
N II	474.493	10P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3P^\circ$	0-1	200,168
N II	474.546	10P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3P^\circ$	1-0	200,168
N II	474.602	10P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3P^\circ$	1-1	200,168
N II	474.706	20P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3P^\circ$	1-2	200,168
N II	474.787	20P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3P^\circ$	2-1	200,168
N II	474.891	200P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3P^\circ$	2-2	200,168
N II	475.647	100P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3D^\circ$	0-1	200,168
N II	475.698	200P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3D^\circ$	1-2	200,168
N II	475.757	P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3D^\circ$	1-1	200
N II	475.803	250P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3D^\circ$	2-3	200,168
N II	475.884	100P		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3D^\circ$	2-2	200,168
N II	485.849	10P		$2s^22p^2 - 2s^22p5d$	${}^1D - {}^1F^\circ$	2-3	200,168
N II	505.986	100P		$2s2p^3 - 2s2p^2(^4P)3d$	${}^5S^\circ - {}^5P$	2-1	200,168
N II	506.054	200P		$2s2p^3 - 2s2p^2(^4P)3d$	${}^5S^\circ - {}^5P$	2-2	200,168
N II	506.153	300P		$2s2p^3 - 2s2p^2(^4P)3d$	${}^5S^\circ - {}^5P$	2-3	200,168
N II	508.484	10P		$2s^22p^2 - 2s^22p4s$	$g^3P - {}^3P^\circ$	1-2	200,168
N II	508.668	P		$2s^22p^2 - 2s^22p4s$	$g^3P - {}^3P^\circ$	0-1	200
N II	508.697	150P		$2s^22p^2 - 2s^22p4s$	$g^3P - {}^3P^\circ$	2-2	200,168
N II	508.928	10P		$2s^22p^2 - 2s^22p4s$	$g^3P - {}^3P^\circ$	1-0	200,168
N II	509.006	15P		$2s^22p^2 - 2s^22p4s$	$g^3P - {}^3P^\circ$	2-1	200,168
N II	510.758	250P		$2s^22p^2 - 2s^22p4d$	${}^1D - {}^1F^\circ$	2-3	200,168
N II	513.849	P		$2s^22p^2 - 2s^22p4d$	${}^1D - {}^1D^\circ$	2-2	200,168
N II	529.355	250	6	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	0-1	197,168,488
N II	529.413	250	6	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	1-0	197,168,488
N II	529.491	250	6	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	1-1	197,168,488
N II	529.637	250	6	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	1-2	197,168,488
N II	529.722	250	6	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	2-1	197,168,488
N II	529.867	400	6	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	2-2	197,168,488
N II	533.511	350	5	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	0-1	197,168,488
N II	533.581	400	5	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	1-2	197,168,488
N II	533.650	350	5	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	1-1	197,168,488
N II	533.729	500	5	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	2-3	197,168,488
N II	533.815	350	5	$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	2-2	197,168,488
N II	547.818	10P		$2s^22p^2 - 2s^22p4s$	${}^1D - {}^1P^\circ$	2-1	200,168
N II	559.762	10P		$2s^22p^2 - 2s^22p4d$	${}^1S - {}^1P^\circ$	0-1	200,168
N II	572.069	P		$2s^22p^2 - 2s^22p3d$	${}^1D - {}^1P^\circ$	2-1	200
N II	574.650	500	11	$2s^22p^2 - 2s^22p3d$	${}^1D - {}^1F^\circ$	2-3	197,168,488
N II	582.156	400	10	$2s^22p^2 - 2s^22p3d$	${}^1D - {}^1D^\circ$	2-2	197,168,488
N II	629.167	300P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-3	200,168
N II	629.447	200P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-2	200,168
N II	629.670	P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-1	200
N II	635.197	400	13	$2s^22p^2 - 2s^22p3d$	${}^1S - {}^1P^\circ$	0-1	197,168,488
N II	644.634	650	4	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	0-1	197,168,488
N II	644.837	750	4	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	1-1	197,168,488
N II	645.178	850	4	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	2-1	197,168,488
N II?	657.327	50					170
N II?	659.538	10					170
N II	660.286	750	9	$2s^22p^2 - 2s2p^3$	${}^1D - {}^1P^\circ$	2-1	197,168,488
N II	670.296	220P		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^1P^\circ$	0-1	200,168
N II	670.515	120P		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^1P^\circ$	1-1	200,168
N II	670.884	100P		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^1P^\circ$	2-1	200,168
N II	671.016	500	3	$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	1-2	197,168,488
N II	671.386	500	3	$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	2-2	197,168,488

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N II	671.411	650	3	$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	0-1	197,168,488
N II	671.630	500	3	$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	1-1	197,168,488
N II	671.773	500	3	$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	1-0	197,168,488
N II	672.001	500	3	$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	2-1	197,168,488
N II	745.841	500	12	$2s^22p^2 - 2s2p^3$	${}^1S - {}^1P^\circ$	0-1	197,168,488
N II	746.984	650	8	$2s^22p^2 - 2s^22p3s$	${}^1D - {}^1P^\circ$	2-1	197,168,488
N II	748.369	P		$2s^22p^2 - 2s^22p3s$	${}^1D - {}^3P^\circ$	2-1	197,200
N II	775.965	1000	7	$2s^22p^2 - 2s2p^3$	${}^1D - {}^1D^\circ$	2-2	197,168,488
N II	836.187	P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3D^\circ - {}^3P$	3-2	200
N II	836.279	P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3D^\circ - {}^3P$	2-2	200
N II	836.289	P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3D^\circ - {}^3P$	1-2	200
N II	836.616	P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3D^\circ - {}^3P$	2-1	200
N II	836.627	P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3D^\circ - {}^3P$	1-1	200
N II	836.837	P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3D^\circ - {}^3P$	1-0	200
N II	858.376	100P		$2s^22p^2 - 2s^22p3s$	${}^1S - {}^1P^\circ$	0-1	200,168
N II	860.205	P		$2s^22p^2 - 2s^22p3s$	${}^1S - {}^3P^\circ$	0-1	200
N II	915.612	700	2	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	0-1	197,168,488
N II	915.962	700	2	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	1-0	197,168,488
N II	916.012	800	2	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	1-2	197,168,488
N II	916.020	600	2	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	1-1	197,168,488
N II	916.701	1000	2	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	2-2	197,168,488
N II	916.710	800	2	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	2-1	197,168,488
N II	1083.990	400	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	0-1	197,168,488
N II	1084.562	150	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	1-1	197,168,488
N II	1084.580	750	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	1-2	197,168,488
N II	1085.529	P	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	2-1	197,200
N II	1085.546	400	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	2-2	197,168,488
N II	1085.701	1000	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	2-3	197,168,488
N II	1275.038	300P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3P$	3-2	200,168
N II	1275.251	P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3P$	2-2	200
N II	1275.275	P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3P$	1-2	200
N II	1276.201	200P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3P$	2-1	200,168
N II	1276.225	P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3P$	1-1	200
N II	1276.800	100P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3P$	1-0	200,168
N II	1343.338	200P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3D$	3-3	200,168
N II	1343.574	P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3D$	2-3	200
N II	1345.076	P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3D$	3-2	200
N II	1345.313	100P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3D$	2-2	200,168
N II	1345.340	P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3D$	1-2	200
N II	1346.413	P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3D$	2-1	200
N II	1346.441	10P		$2s2p^3 - 2s^22p3p$	${}^3D^\circ - {}^3D$	1-1	200,168
N II	1627.349	P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3P$	1-2	200
N II	1627.376	100P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3P$	2-2	200,168
N II	1628.896	P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3P$	1-1	200
N II	1628.922	P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3P$	2-1	200
N II	1629.079	100P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3P$	0-1	200,168
N II	1629.832	10P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3P$	1-0	200,168
N II	1675.726	P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3S$	1-1	200
N II	1675.755	400P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3S$	2-1	200,168
N II	1675.920	100P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3S$	0-1	200,243
N II	1725.028	P		$2s^22p3s - 2s^22p4p$	${}^3P^\circ - {}^1S$	1-0	200
N II	1732.428	P		$2s^22p3s - 2s^22p4p$	${}^1P^\circ - {}^1S$	1-0	200
N II	1740.310	400P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3D$	2-3	200,168
N II	1743.197	200P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3D$	1-2	200,168
N II	1743.228	P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3D$	2-2	200
N II	1745.046	P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3D$	1-1	200
N II	1745.076	P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3D$	2-1	200
N II	1745.256	P		$2s2p^3 - 2s^22p3p$	${}^3P^\circ - {}^3D$	0-1	200
N II	1763.639	100P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3S^\circ - {}^3P$	1-2	200,243
N II	1765.140	50P		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3S^\circ - {}^3P$	1-1	200,243

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N II	1766.079	100P		$2s2p^3$ - $2s2p^2(^4P)3s$	$^3S^\circ$ - ^3P	1-0	200,243
N II	1772.735	P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^1D	1-2	200
N II	1780.551	P		$2s^22p3s$ - $2s^22p4p$	$^1P^\circ$ - ^1D	1-2	200
N II	1830.527	1P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3S	0-1	200,243
N II	1831.586	10P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3S	1-1	200,243
N II	1836.172	100P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3S	2-1	200,243
N II	1839.931	P		$2s^22p3s$ - $2s^22p4p$	$^1P^\circ$ - ^3S	1-1	200
N II	1840.983	100P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3P	1-2	200,247
N II	1842.284	10P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3P	0-1	200,247
N II	1843.357	10P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3P	1-1	200,247
N II	1844.259	10P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3P	1-0	200,247
N II	1845.616	100P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3P	2-2	200,247
N II	1848.002	10P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3P	2-1	200,247
N II	1849.414	100P		$2s^22p3s$ - $2s^22p4p$	$^1P^\circ$ - ^3P	1-2	200,168
N II	1851.810	P		$2s^22p3s$ - $2s^22p4p$	$^1P^\circ$ - ^3P	1-1	200
N II	1852.721	P		$2s^22p3s$ - $2s^22p4p$	$^1P^\circ$ - ^3P	1-0	200
N II	1857.870	300P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3D	1-2	200,243
N II	1858.545	200P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3D	0-1	200,243
N II	1859.260	500P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3D	2-3	200,243
N II	1859.636	P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3D	1-1	200
N II	1862.588	200P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3D	2-2	200,243
N II	1864.364	P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^3D	2-1	200
N II	1866.457	P		$2s^22p3s$ - $2s^22p4p$	$^1P^\circ$ - ^3D	1-2	200
N II	1868.240	10P		$2s^22p3s$ - $2s^22p4p$	$^1P^\circ$ - ^3D	1-1	200,168
N II	1878.624	200P		$2s^22p3s$ - $2s^22p4p$	$^3P^\circ$ - ^1P	1-1	200,168
N II	1887.404	350P	14	$2s^22p3s$ - $2s^22p4p$	$^1P^\circ$ - ^1P	1-1	200,168,488
N II	1991.301	10P		$2s^22p3p$ - $2s^22p5s$	^1P - $^1P^\circ$	1-1	200,168

Ground state $1s^22s^22p\ ^2P^o_{1/2}$

Ionization potential 382 625.5 cm^{-1}; 47.438 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N III	264.837	100		$2s^2(^1S)2p - 2s2p(^1P^o)3p$	$g^2P^o - ^2P$	½-½	168
N III	264.948	200		$2s^2(^1S)2p - 2s2p(^1P^o)3p$	$g^2P^o - ^2P$	3/2-3/2	168
N III	267.851	10		$2s^2(^1S)2p - 2s2p(^1P^o)3p$	$g^2P^o - ^2D$	½-3/2	168
N III	267.952	100		$2s^2(^1S)2p - 2s2p(^1P^o)3p$	$g^2P^o - ^2D$	3/2-5/2	168
N III	282.093	100d		$2s^22p - 2s^26d$	$g^2P^o - ^2D$	½-3/2	168
N III	282.213	200d		$2s^22p - 2s^26d$	$g^2P^o - ^2D$	3/2-5/2	168
N III	284.296	100		$2s2p^2 - 2s2p(^3P^o)5d$	$^4P - ^4D$	3/2-5/2	168
N III	284.346	200		$2s2p^2 - 2s2p(^3P^o)5d$	$^4P - ^4D$	5/2-7/2	168
N III	292.447	300		$2s^22p - 2s^25d$	$g^2P^o - ^2D$	½-3/2	168
N III	292.595	400		$2s^22p - 2s^25d$	$g^2P^o - ^2D$	3/2-5/2	168
N III	299.670	10		$2s^22p - 2s^25s$	$g^2P^o - ^2S$	½-½	168
N III	299.820	100		$2s^22p - 2s^25s$	$g^2P^o - ^2S$	3/2-½	168
N III	303.891	200		$2s2p^2 - 2s2p(^3P^o)4d$	$^4P - ^4P^o$		168
N III	303.981	200		$2s2p^2 - 2s2p(^3P^o)4d$	$^4P - ^4P^o$	3/2-5/2	168
N III	304.032	200		$2s2p^2 - 2s2p(^3P^o)4d$	$^4P - ^4P^o$	5/2-5/2	168
N III	304.818	400d		$2s2p^2 - 2s2p(^3P^o)4d$	$^4P - ^4D^o$	3/2-5/2	168
N III	304.874	400		$2s2p^2 - 2s2p(^3P^o)4d$	$^4P - ^4D^o$	5/2-7/2	168
N III	304.912	300		$2s2p^2 - 2s2p(^3P^o)4d$	$^4P - ^4D$	5/2-3/2	168
N III	305.918	100		$2s^2(^1S)2p - 2s2p(^3P^o)3p$	$g^2P^o - ^2S$	3/2-½	168
N III	311.539	200		$2s^2(^1S)2p - 2s2p(^3P^o)3p$	$g^2P^o - ^2D$	½-3/2	168
N III	311.628	300		$2s^2(^1S)2p - 2s2p(^3P^o)3p$	$g^2P^o - ^2D$	3/2-5/2	168
N III	314.715	800	7	$2s^22p - 2s^24d$	$g^2P^o - ^2D$	½-3/2	168,488
N III	314.850	900	7	$2s^22p - 2s^24d$	$g^2P^o - ^2D$	3/2-5/2	168,488
N III	314.877	600	7	$2s^22p - 2s^24d$	$g^2P^o - ^2D$	3/2-3/2	168,488
N III	321.071	100		$2s2p^2 - 2s2p(^3P^o)4s$	$^4P - ^4P^o$	3/2-5/2	168
N III	321.161	200		$2s2p^2 - 2s2p(^3P^o)4s$	$^4P - ^4P^o$	5/2-5/2	168
N III	321.270	100d		$2s2p^2 - 2s2p(^3P^o)4s$	$^4P - ^4P^o$	5/2-3/2	168
N III	323.431	400	6	$2s^2(^1S)2p - 2s2p(^3P^o)3p$	$g^2P^o - ^2P$	½-3/2	168,488
N III	323.488	500	6	$2s^2(^1S)2p - 2s2p(^3P^o)3p$	$g^2P^o - ^2P$	½-½	168,488
N III	323.615	600	6	$2s^2(^1S)2p - 2s2p(^3P^o)3p$	$g^2P^o - ^2P$	3/2-3/2	168,488
N III	323.671	400	6	$2s^2(^1S)2p - 2s2p(^3P^o)3p$	$g^2P^o - ^2P$	3/2-½	168,488
N III	332.133	200		$2s^22p - 2s^24s$	$g^2P^o - ^2S$	½-½	168
N III	332.327	300		$2s^22p - 2s^24s$	$g^2P^o - ^2S$	3/2-½	168
N III	338.345	200		$2s2p^2 - 2s2p(^1P^o)3d$	$^2D - ^2D^o$		168
N III	348.690	10d		$2s2p^2 - 2s2p(^3P^o)4d$	$^2D - ^2F^o$	5/2-7/2	168
N III	348.800	10d		$2s2p^2 - 2s2p(^3P^o)4d$	$^2D - ^2F^o$	3/2-5/2	168
N III	351.979	100		$2s2p^2 - 2s2p(^3P^o)4d$	$^2D - ^2D^o$	3/2-3/2	168
N III	358.278	250	11	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4P^o$	½-½	168,488
N III	358.327	400	11	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4P^o$	½-3/2	168,488
N III	358.356	400	11	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4P^o$	3/2-½	168,488
N III	358.401	250	11	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4P^o$	3/2-3/2	168,488
N III	358.469	400	11	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4P^o$	3/2-5/2	168,488
N III	358.509	400	11	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4P^o$	5/2-3/2	168,488
N III	358.578	500	11	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4P^o$	5/2-5/2	168,488
N III	362.833	600	10	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4D^o$	½-3/2	168,488
N III	362.881	650	10	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4D^o$	3/2-5/2	168,488
N III	362.946	650	10	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4D^o$	5/2-7/2	168,488
N III	362.985	500	10	$2s2p^2 - 2s2p(^3P^o)3d$	$^4P - ^4D^o$	5/2-5/2	168,488
N III	374.204	900	5	$2s^22p - 2s^23d$	$g^2P^o - ^2D$	½-3/2	197,168,488
N III	374.441	1000	5	$2s^22p - 2s^23d$	$g^2P^o - ^2D$	3/2-5/2	197,168,488
N III	398.885	250		$2s2p^2 - 2s2p(^1P^o)3d$	$^2P - ^2D^o$	½-3/2	168
N III	399.045	350		$2s2p^2 - 2s2p(^1P^o)3d$	$^2P - ^2D^o$	3/2-5/2	168
N III	399.084	100		$2s2p^2 - 2s2p(^1P^o)3d$	$^2P - ^2D^o$	3/2-3/2	168
N III	413.681	10		$2s2p^2 - 2s2p(^3P^o)3d$	$^2D - ^2P^o$	3/2-½	168
N III	413.797	10		$2s2p^2 - 2s2p(^3P^o)3d$	$^2D - ^2P^o$	5/2-3/2	168

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N III	418.705	600	16	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2F^\circ$	5/2-7/2	168,488
N III	418.910	500	16	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2F^\circ$	3/2-5/2	168,488
N III	428.180	500	15	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2D^\circ$	5/2-5/2	168,488
N III	428.244	400	15	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2D^\circ$	3/2-3/2	168,488
N III	433.911	500	9	$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-5/2	168,488
N III	434.014	500	9	$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	1/2-3/2	168,488
N III	434.066	600	9	$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	5/2-5/2	168,488
N III	434.129	450	9	$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-3/2	168,488
N III	434.246	500	9	$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-1/2	168,488
N III	434.280	500	9	$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	5/2-3/2	168,488
N III	451.869	850	4	$2s^22p - 2s^23s$	$g^2P^\circ - ^2S$	1/2-1/2	168,488
N III	452.226	900	4	$2s^22p - 2s^23s$	$g^2P^\circ - ^2S$	3/2-1/2	168,488
N III	456.078	100		$2s2p^2 - 2s^24f$	$^2D - ^2F^\circ$	5/2-7/2	168
N III	472.232	350	18	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2S - ^2P^\circ$	1/2-1/2	168,488
N III	472.392	400	18	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2S - ^2P^\circ$	1/2-3/2	168,488
N III	509.586	400	14	$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2D - ^2P^\circ$	5/2-3/2	168,488
N III	509.897	350	14	$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2D - ^2P^\circ$	3/2-1/2	168,488
N III	530.037	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2P - ^2D^\circ$	1/2-3/2	168
N III	530.268	250		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2P - ^2D^\circ$	3/2-5/2	168
N III	601.468	100		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2S - ^2P^\circ$	1/2-3/2	168
N III	601.878	10		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2S - ^2P^\circ$	1/2-1/2	168
N III	684.996	700	3	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	1/2-3/2	197,168,488
N III	685.513	750	3	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	1/2-1/2	197,168,488
N III	685.816	800	3	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	3/2-3/2	197,168,488
N III	686.335	700	3	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	3/2-1/2	197,168,488
N III	691.187	100		$2s2p^2 - 2s^23p$	$^2D - ^2P^\circ$	5/2-3/2	168
N III	691.388	50		$2s2p^2 - 2s^23p$	$^2D - ^2P^\circ$	3/2-1/2	168
N III	763.340	700	2	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2S$	1/2-1/2	197,168,488
N III	764.357	750	2	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2S$	3/2-1/2	197,168,488
N III	771.544	500	8	$2s2p^2 - 1s^22p^3$	$^4P - ^4S^\circ$	1/2-3/2	197,168,488
N III	771.901	550	8	$2s2p^2 - 1s^22p^3$	$^4P - ^4S^\circ$	3/2-3/2	197,168,488
N III	772.385	600	8	$2s2p^2 - 1s^22p^3$	$^4P - ^4S^\circ$	5/2-3/2	197,168,488
N III	772.891	450	13	$2s2p^2 - 1s^22p^3$	$^2D - ^2P^\circ$	5/2-3/2	168,488
N III	772.975	400	13	$2s2p^2 - 1s^22p^3$	$^2D - ^2P^\circ$	3/2-1/2	168,488
N III	871.850	10		$2s2p^2 - 2s^23p$	$^2S - ^2P^\circ$	1/2-3/2	168
N III	979.842	400	12	$2s2p^2 - 1s^22p^3$	$^2D - ^2D^\circ$	3/2-3/2	168,488
N III	979.919	450	12	$2s2p^2 - 1s^22p^3$	$^2D - ^2D^\circ$	5/2-5/2	168,488
N III	989.790	800	1	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	1/2-3/2	197,168,488
N III	991.514	600	1	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	3/2-3/2	197,168,488
N III	991.579	900	1	$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	3/2-5/2	197,168,488
N III	1006.015	300	17	$2s2p^2 - 1s^22p^3$	$^2S - ^2P^\circ$	1/2-	168,488
N III	1183.030	350	20	$2s2p^2 - 1s^22p^3$	$^2P - ^2P^\circ$	1/2-1/2	168,488
N III	1184.544	400	20	$2s2p^2 - 1s^22p^3$	$^2P - ^2P^\circ$	3/2-	168,488
N III	1324.40	150		$2s^23d - 2s^25f$	$^2D - ^2F^\circ$	5/2-7/2	246,487
N III	1345.69	200		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4d$	$^4D - ^4F^\circ$		246
N III	1346.27	200		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4d$	$^4D - ^4F^\circ$	7/2-9/2	246
N III	1347.56	10		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4d$	$^4D - ^4F^\circ$	7/2-7/2	246
N III	1387.31	200		$2s^23p - 2s^24d$	$^2P^\circ - ^2D$		168,246
N III	1470.68	10		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	1/2-3/2	246
N III	1471.02	50		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	3/2-5/2	246
N III	1471.69	100		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5/2-7/2	246
N III	1694.79	10		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4D - ^4P^\circ$	3/2-5/2	246
N III	1696.54	150		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4D - ^4P^\circ$	5/2-5/2	246
N III	1697.19	10		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4D - ^4P^\circ$	1/2-3/2	246
N III	1698.16	100		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4D - ^4P^\circ$	3/2-3/2	246
N III	1699.00	100		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4D - ^4P^\circ$	1/2-1/2	246
N III	1699.32	250		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4D - ^4P^\circ$	7/2-5/2	246
N III	1699.95	200		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4D - ^4P^\circ$		246
N III	1730.04	400		$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^4F^\circ - ^4G$		168
N III	1747.86	450	19	$2s2p^2 - 1s^22p^3$	$^2P - ^2D^\circ$	1/2-3/2	168,488

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N III	1751.24	300	19	$2s2p^2 - 1s^22p^3$	$^2P - ^2D^\circ$	3/2-3/2	168,488
N III	1751.75	500	19	$2s2p^2 - 1s^22p^3$	$^2P - ^2D^\circ$	3/2-5/2	168,488
N III	1804.3	300	22	$2s^23p - 2s^24s$	$^2P^\circ - ^2S$	1/2-1/2	168,488
N III	1805.5	350	22	$2s^23p - 2s^24s$	$^2P^\circ - ^2S$	3/2-1/2	168,488
N III	1835.578	150		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4S - ^4P^\circ$	3/2-5/2	191,246
N III	1839.59	100		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4S - ^4P^\circ$	3/2-3/2	246
N III	1841.68	50		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4S - ^4P^\circ$	3/2-1/2	246
N III	1845.64	250		$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^4D^\circ - ^4F$	7/2-9/2	168
N III	1845.80	200		$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^4D^\circ - ^4F$	5/2-7/2	168
N III	1885.25	500	24	$2s^23d - 2s^24f$	$^2D - ^2F^\circ$	5/2-7/2	168,488
N III	1906.22	100		$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^2D^\circ - ^4F$	3/2-5/2	177
N III	1906.89	100		$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^2D^\circ - ^4F$	5/2-7/2	177
N III	1907.28	400		$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^2D^\circ - ^4F$	5/2-5/2	177
N III	1907.99	300P	27	$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^2D^\circ - ^2F$	3/2-5/2	177,488
N III	1908.21	400P	27	$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^2D^\circ - ^2F$	5/2-7/2	177,488
N III	1908.96	100	27	$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^2D^\circ - ^2F$	5/2-5/2	177,246
N III	1918.69	10	29	$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^4P^\circ - ^4D$	3/2-1/2	177
N III	1919.06	10		$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^4P^\circ - ^2D$	3/2-5/2	177
N III	1919.44	50	29	$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^4P^\circ - ^4D$	5/2-5/2	177
N III	1919.71	100	29	$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^4P^\circ - ^4D$	3/2-3/2	177
N III	1919.99	100	29	$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^4P^\circ - ^4D$	1/2-1/2	177
N III	1920.86	400	29	$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^4P^\circ - ^4D$	5/2-7/2	177,488
N III	1921.49	200	29	$2s2p(^3P^\circ)3d - 2s2p(^3P^\circ)4f$	$^4P^\circ - ^4D$	3/2-5/2	177,488
N III?	1923.11	100					246
N III?	1923.86	100					246
N III	1946.99	250		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3/2-5/2	246
N III	1949.22	300		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5/2-5/2	246
N III	1949.81	200		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	1/2-3/2	246
N III	1951.43	100		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3/2-3/2	246
N III	1952.20	50		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	1/2-1/2	246
N III	1953.66	150		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5/2-3/2	246
N III	1953.80	150		$2s2p(^3P^\circ)3p - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3/2-1/2	246

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Ground state $1s^22s^2\ ^1S_0$

Ionization potential 624 864.7 cm^{-1}; 77.471 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N IV	181.746	100		$2s^2 - 2s5p$	$g^1S - {}^1P^\circ$	0-1	168
N IV	196.954	20d		$2s2p - 2s6d$	${}^3P^\circ - {}^3D$		168
N IV	197.007	100d		$2s2p - 2s6d$	${}^3P^\circ - {}^3D$	2-3	168
N IV	197.230	300		$2s^2 - 2s4p$	$g^1S - {}^1P^\circ$	0-1	168
N IV	205.960	200d		$2s2p - 2s5d$	${}^3P^\circ - {}^3D$		168
N IV	206.021	220d		$2s2p - 2s5d$	${}^3P^\circ - {}^3D$	2-3	168
N IV	211.396	10		$2s^2 - 1s^22p(^2P^\circ)3s$	$g^1S - {}^1P^\circ$	0-1	168
N IV	217.227	100		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	${}^1P^\circ - {}^1D$	1-2	168
N IV	218.085	100d		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	${}^3P - {}^3D^\circ$	2-3	168
N IV	225.098	300	6	$2s2p - 2s4d$	${}^3P^\circ - {}^3D$	0-1	168,488
N IV	225.136	400	6	$2s2p - 2s4d$	${}^3P^\circ - {}^3D$	1-2	168,488
N IV	225.205	500	6	$2s2p - 2s4d$	${}^3P^\circ - {}^3D$	2-3	168,488
N IV	234.124	300		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^3P^\circ - {}^3P$		168
N IV	234.195	400		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^3P^\circ - {}^3P$	2-2	168
N IV	234.249	200		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^3P^\circ - {}^3P$	2-1	168
N IV	237.860	100		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^3P^\circ - {}^3S$	0-1	168
N IV	237.903	200		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^3P^\circ - {}^3S$	1-1	168
N IV	237.983	300		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^3P^\circ - {}^3S$	2-1	168
N IV	239.161	120		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	${}^3P - {}^3D^\circ$	1-	168
N IV	239.210	200		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	${}^3P - {}^3D^\circ$	2-3	168
N IV	239.618	400		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^3P^\circ - {}^3D$		168
N IV	239.693	100		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^3P^\circ - {}^3D$	2-3	168
N IV	247.205	900	2	$2s^2 - 2s3p$	$g^1S - {}^1P^\circ$	0-1	197,168,488
N IV	260.455	200		$2s2p - 2s4d$	${}^1P^\circ - {}^1D$	1-2	168
N IV	270.995	600	12	$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^1P^\circ - {}^1D$	1-2	168,488
N IV	283.420	900	5	$2s2p - 2s3d$	${}^3P^\circ - {}^3D$	0-1	197,168,488
N IV	283.470	950	5	$2s2p - 2s3d$	${}^3P^\circ - {}^3D$	1-2	197,168,488
N IV	283.579	1000	5	$2s2p - 2s3d$	${}^3P^\circ - {}^3D$	2-3	197,168,488
N IV	285.563	500	11	$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	${}^1P^\circ - {}^1P$	1-1	168,488
N IV	297.595	250	15	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^3P - {}^3P^\circ$	0-1	168
N IV	297.644	350	15	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^3P - {}^3P^\circ$	1-1	168,488
N IV	297.712	250	15	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^3P - {}^3P^\circ$	1-2	168
N IV	297.768	250	15	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^3P - {}^3P^\circ$	2-1	168
N IV	297.815	400	15	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^3P - {}^3P^\circ$	2-2	168,488
N IV	300.316	300		$1s^22p^2 - 2s4f$	${}^1D - {}^1F^\circ$	2-3	168,824
N IV	303.009	350	14	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^3P - {}^3D^\circ$	0-1	168,824
N IV	303.048	400	14	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^3P - {}^3D^\circ$	1-2	168,824
N IV	303.079	350	14	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^3P - {}^3D^\circ$	1-1	168,824
N IV	303.123	500	14	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^3P - {}^3D^\circ$	2-3	168,824
N IV	303.163	350	14	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^3P - {}^3D^\circ$	2-2	168,824
N IV	315.053	800	18	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^1D - {}^1F^\circ$	2-3	168,824
N IV	322.503	600	4	$2s2p - 2s3s$	${}^3P^\circ - {}^3S$	0-1	168,824
N IV	322.570	650	4	$2s2p - 2s3s$	${}^3P^\circ - {}^3S$	1-1	168,824
N IV	322.724	750	4	$2s2p - 2s3s$	${}^3P^\circ - {}^3S$	2-1	168,824
N IV	323.175	700	17	$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^1D - {}^1D$	2-2	168,824
N IV	335.050	1000	10	$2s2p - 2s3d$	${}^1P^\circ - {}^1D$	1-2	197,168,824
N IV	344.915	250	13	$1s^22p^2 - 1s^22p(^2P^\circ)3s$	${}^3P - {}^3P^\circ$	1-2	168,824
N IV	345.023	250	13	$1s^22p^2 - 1s^22p(^2P^\circ)3s$	${}^3P - {}^3P^\circ$	0-1	168,824
N IV	345.063	400	13	$1s^22p^2 - 1s^22p(^2P^\circ)3s$	${}^3P - {}^3P^\circ$	2-2	168,824
N IV	345.107	250	13	$1s^22p^2 - 1s^22p(^2P^\circ)3s$	${}^3P - {}^3P^\circ$	1-1	168,824
N IV	345.201	250	13	$1s^22p^2 - 1s^22p(^2P^\circ)3s$	${}^3P - {}^3P^\circ$	1-0	168,824
N IV	351.931	500	16	$1s^22p^2 - 1s^22p(^2P^\circ)3s$	${}^1D - {}^1P^\circ$	2-1	168,824
N IV	352.058	400		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	${}^1S - {}^1P^\circ$	0-1	168,824
N IV	387.353	400	9	$2s2p - 2s3s$	${}^1P^\circ - {}^1S$	1-0	168,824
N IV	420.769	100		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	${}^1S - {}^1P^\circ$	0-1	824

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N IV	463.737	300		$1s^22p^2$ - 2s3p	^1D - $^1P°$	2-1	824
N IV	765.148	850	1	$2s^2$ - 2s2p	g^1S - $^1P°$	0-1	824
N IV	921.992	850	3	2s2p - $1s^22p^2$	$^3P°$ - ^3P	1-2	824
N IV	922.519	800	3	2s2p - $1s^22p^2$	$^3P°$ - ^3P	0-1	824
N IV	923.057	700	3	2s2p - $1s^22p^2$	$^3P°$ - ^3P	1-1	824
N IV	923.220	1000	3	2s2p - $1s^22p^2$	$^3P°$ - ^3P	2-2	824
N IV	923.675	800	3	2s2p - $1s^22p^2$	$^3P°$ - ^3P	1-0	824
N IV	924.283	850	3	2s2p - $1s^22p^2$	$^3P°$ - ^3P	2-1	824
N IV	948.155	100		2s3p - 2s4d	$^3P°$ - ^3D	0-1	824
N IV	948.244	200		2s3p - 2s4d	$^3P°$ - ^3D	1-2	824
N IV	948.540	250		2s3p - 2s4d	$^3P°$ - ^3D	2-3	824
N IV	955.335	1000	8	2s2p - $1s^22p^2$	$^1P°$ - ^1S	1-0	824
N IV	1036.16	400w		2s3d - 2s4f	^3D - $^3F°$		824
N IV	1078.708	300		2s3d - 2s4f	^1D - $^1F°$	2-3	824
N IV	1086.084	b		2s3p - 2s4s	$^3P°$ - ^3S	0-1	824
N IV	1086.269	50		2s3p - 2s4s	$^3P°$ - ^3S	1-1	824
N IV	1086.691	100		2s3p - 2s4s	$^3P°$ - ^3S	2-1	824
N IV	1133.117	200		2s3s - $1s^22p3s$	^3S - $^3P°$	1-2	824
N IV	1135.244	150		2s3s - $1s^22p3s$	^3S - $^3P°$	1-1	824
N IV	1136.241	100		2s3s - $1s^22p3s$	^3S - $^3P°$	1-0	824
N IV	1168.599	150		2s3d - $1s^22p3d$	^3D - $^3D°$	3-3	824
N IV	1169.063	100		2s3d - $1s^22p3d$	^3D - $^3D°$	2-2	824
N IV	1169.478	50		2s3d - $1s^22p3d$	^3D - $^3D°$	1-1	824
N IV	1188.006	300		2s3s - $1s^22p3s$	^1S - $^1P°$	0-1	824
N IV	1224.960	50		2s3p - $1s^22p3p$	$^3P°$ - ^3S	0-1	824
N IV	1225.192	150		2s3p - $1s^22p3p$	$^3P°$ - ^3S	1-1	824
N IV	1225.719	200		2s3p - $1s^22p3p$	$^3P°$ - ^3S	2-1	824
N IV	1243.73	b		$1s^22p3d$ - 2s6g	$^3F°$ - ^3G	2-	824
N IV	1244.92	50		$1s^22p3d$ - 2s6g	$^3F°$ - ^3G	3-	824
N IV	1246.51	100		$1s^22p3d$ - 2s6g	$^3F°$ - ^3G	4-	824
N IV	1270.280	250		2s3p - $1s^22p3p$	$^3P°$ - ^3D	2-3	824
N IV	1272.160	200		2s3p - $1s^22p3p$	$^3P°$ - ^3D	1-2	824
N IV	1272.74	100		2s3p - $1s^22p3p$	$^3P°$ - ^3D	2-2	824
N IV	1273.47	150		2s3p - $1s^22p3p$	$^3P°$ - ^3D	0-1	824
N IV	1273.716	100		2s3p - $1s^22p3p$	$^3P°$ - ^3D	1-1	824
N IV	1284.218	150		2s3d - 2s4p	^1D - $^1P°$	2-1	824
N IV	1296.600	250		2s3d - $1s^22p3d$	^1D - $^1F°$	2-3	824
N IV	1309.557	200		2s3p - $1s^22p3p$	$^1P°$ - ^1P	1-1	824
N IV	1323.98	100b		2s3d - $1s^22p3d$	^3D - $^3F°$	3-4	824
N IV	1325.685	50		2s3d - $1s^22p3d$	^3D - $^3F°$	2-3	824
N IV	1326.964	20		2s3d - $1s^22p3d$	^3D - $^3F°$	1-2	824
N IV	1438.37	150		$1s^22p3d$ - 2s6g	$^1F°$ - ^1G	3-4	824
N IV	1446.114	250		2s3d - $1s^22p3d$	^1D - $^1D°$	2-2	824
N IV	1486.496	100		$2s^2$ - 2s2p	g^1S - $^3P°$	0-1	824
N IV	1687.60	50		2s4f - 2s6g	$^3F°$ - ^3G	2-	824
N IV	1687.82	100		2s4f - 2s6g	$^3F°$ - ^3G	3-	824
N IV	1688.11	150		2s4f - 2s6g	$^3F°$ - ^3G	4-	824
N IV	1696.86	150		$1s^22p3d$ - 2s5g	$^3F°$ - ^3G	2-3	824
N IV	1699.03	200		$1s^22p3d$ - 2s5g	$^3F°$ - ^3G	3-4	824
N IV	1702.006	250		$1s^22p3d$ - 2s5g	$^3F°$ - ^3G	4-5	824
N IV	1718.551	1000	7	2s2p - $1s^22p^2$	$^1P°$ - ^1D	1-2	824

Ground state $1s^22s\ ^2S_{1/2}$

Ionization potential 789 537.2 cm^{-1}; 97.888 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N V	128.229	1		$1s^22s - 1s^217p$	$g^2S - ^2P^\circ$	½-3½	770
N V	128.430	1		$1s^22s - 1s^216p$	$g^2S - ^2P^\circ$	½-3½	770
N V	128.662	10		$1s^22s - 1s^215p$	$g^2S - ^2P^\circ$	½-3½	770
N V	128.954	10		$1s^22s - 1s^214p$	$g^2S - ^2P^\circ$	½-3½	770
N V	129.337	20		$1s^22s - 1s^213p$	$g^2S - ^2P^\circ$	½-3½	770
N V	129.811	30		$1s^22s - 1s^212p$	$g^2S - ^2P^\circ$	½-3½	770
N V	130.431	40		$1s^22s - 1s^211p$	$g^2S - ^2P^\circ$	½-3½	770
N V	131.254	50		$1s^22s - 1s^210p$	$g^2S - ^2P^\circ$	½-3½	770
N V	132.383	60		$1s^22s - 1s^29p$	$g^2S - ^2P^\circ$	½-3½	770
N V	133.994	70		$1s^22s - 1s^28p$	$g^2S - ^2P^\circ$	½-3½	770
N V	136.429	80		$1s^22s - 1s^27p$	$g^2S - ^2P^\circ$	½-3½	770
N V	140.356	160P		$1s^22s - 1s^26p$	$g^2S - ^2P^\circ$	½-3½	313,770
N V	140.358	P		$1s^22s - 1s^26p$	$g^2S - ^2P^\circ$	½-½	313
N V	142.797	1		$1s^22p - 1s^218d$	$^2P^\circ - ^2D$	3½-5½	770
N V	142.981	1		$1s^22p - 1s^217d$	$^2P^\circ - ^2D$	3½-5½	770
N V	143.241	10		$1s^22p - 1s^216d$	$^2P^\circ - ^2D$	3½-5½	770
N V	143.520	10		$1s^22p - 1s^215d$	$^2P^\circ - ^2D$	3½-5½	770
N V	143.914	20		$1s^22p - 1s^214d$	$^2P^\circ - ^2D$	3½-5½	770
N V	144.392	30		$1s^22p - 1s^213d$	$^2P^\circ - ^2D$	3½-5½	770
N V	144.978	40		$1s^22p - 1s^212d$	$^2P^\circ - ^2D$	3½-5½	770
N V	145.742	50		$1s^22p - 1s^211d$	$^2P^\circ - ^2D$	3½-5½	770
N V	146.716	30		$1s^22p - 1s^210d$	$^2P^\circ - ^2D$	½-3½	770
N V	146.767	60		$1s^22p - 1s^210d$	$^2P^\circ - ^2D$	3½-5½	770
N V	146.921	30		$1s^22p - 1s^210s$	$^2P^\circ - ^2S$	3½-½	770
N V	147.424	240P		$1s^22s - 1s^25p$	$g^2S - ^2P^\circ$	½-3½	313,770
N V	147.427	P		$1s^22s - 1s^25p$	$g^2S - ^2P^\circ$	½-½	313
N V	148.116	40		$1s^22p - 1s^29d$	$^2P^\circ - ^2D$	½-3½	770
N V	148.168	70		$1s^22p - 1s^29d$	$^2P^\circ - ^2D$	3½-5½	770
N V	148.328	10		$1s^22p - 1s^29s$	$^2P^\circ - ^2S$	½-½	770
N V	148.387	40		$1s^22p - 1s^29s$	$^2P^\circ - ^2S$	3½-½	770
N V	150.116	70		$1s^22p - 1s^28d$	$^2P^\circ - ^2D$	½-3½	770
N V	150.171	140		$1s^22p - 1s^28d$	$^2P^\circ - ^2D$	3½-5½	770
N V	150.429	20		$1s^22p - 1s^28s$	$^2P^\circ - ^2S$	½-½	770
N V	150.488	50		$1s^22p - 1s^28s$	$^2P^\circ - ^2S$	3½-½	770
N V	153.136	180		$1s^22p - 1s^27d$	$^2P^\circ - ^2D$	½-3½	770
N V	153.192	280		$1s^22p - 1s^27d$	$^2P^\circ - ^2D$	3½-5½	770
N V	153.624	30		$1s^22p - 1s^27s$	$^2P^\circ - ^2S$	½-½	770
N V	153.683	60		$1s^22p - 1s^27s$	$^2P^\circ - ^2S$	3½-½	770
N V	158.024	240P		$1s^22p - 1s^26d$	$^2P^\circ - ^2D$	½-3½	313,770
N V	158.088	360P		$1s^22p - 1s^26d$	$^2P^\circ - ^2D$	3½-5½	313,770
N V	158.862	40P		$1s^22p - 1s^26s$	$^2P^\circ - ^2S$	½-½	313,770
N V	158.928	70P		$1s^22p - 1s^26s$	$^2P^\circ - ^2S$	3½-½	313,770
N V	162.556	480P	3	$1s^22s - 1s^24p$	$g^2S - ^2P^\circ$	½-3½	313,770
N V	162.564	P	3	$1s^22s - 1s^24p$	$g^2S - ^2P^\circ$	½-½	313
N V	166.875	440P		$1s^22p - 1s^25d$	$^2P^\circ - ^2D$	½-3½	313,770
N V	166.946	520P		$1s^22p - 1s^25d$	$^2P^\circ - ^2D$	3½-5½	313,770
N V	168.514	50P		$1s^22p - 1s^25s$	$^2P^\circ - ^2S$	½-½	313,770
N V	168.587	120P		$1s^22p - 1s^25s$	$^2P^\circ - ^2S$	3½-½	313,770
N V	186.063	520P	6	$1s^22p - 1s^24d$	$^2P^\circ - ^2D$	½-3½	313,770
N V	186.149	620P	6	$1s^22p - 1s^24d$	$^2P^\circ - ^2D$	3½-5½	313,770
N V	190.155	200P		$1s^22p - 1s^24s$	$^2P^\circ - ^2S$	½-½	313,770
N V	190.249	320P		$1s^22p - 1s^24s$	$^2P^\circ - ^2S$	3½-½	313,770
N V	209.274	800P	2	$1s^22s - 1s^23p$	$g^2S - ^2P^\circ$	½-3½	313,770
N V	209.308	800P	2	$1s^22s - 1s^23p$	$g^2S - ^2P^\circ$	½-½	313,770
N V	247.561	85	5	$1s^22p - 1s^23d$	$^2P^\circ - ^2D$	½-3½	313

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N V	247.706	100	5	$1s^22p - 1s^23d$	$^2P^\circ - ^2D$	3/2-5/2	313
N V	266.196	120	4	$1s^22p - 1s^23s$	$^2P^\circ - ^2S$	1/2-1/2	313
N V	266.379	150	4	$1s^22p - 1s^23s$	$^2P^\circ - ^2S$	3/2-1/2	313
N V	424.61	35		$1s^23p - 1s^26d$	$^2P^\circ - ^2D$	1/2-3/2	313
N V	424.75	40		$1s^23p - 1s^26d$	$^2P^\circ - ^2D$	3/2-5/2	313
N V	436.85	60		$1s^23d - 1s^26f$	$^2D - ^2F^\circ$		313
N V	450.08	50		$1s^23s - 1s^25p$	$^2S - ^2P^\circ$	1/2-3/2	313
N V	511.834	70		$1s^23d - 1s^25f$	$^2D - ^2F^\circ$		313
N V	628.744	70		$1s^23s - 1s^24p$	$^2S - ^2P^\circ$	1/2-3/2	313
N V	628.874	50		$1s^23s - 1s^24p$	$^2S - ^2P^\circ$	1/2-1/2	313
N V	713.518	85		$1s^23p - 1s^24d$	$^2P^\circ - ^2D$	1/2-3/2	313
N V	713.860	120		$1s^23p - 1s^24d$	$^2P^\circ - ^2D$	3/2-5/2	313
N V	748.195	120		$1s^23d - 1s^24f$	$^2D - ^2F^\circ$	3/2-5/2	313
N V	748.291	150		$1s^23d - 1s^24f$	$^2D - ^2F^\circ$	5/2-7/2	313
N V	777.712	35		$1s^23p - 1s^24s$	$^2P^\circ - ^2S$	1/2-1/2	313
N V	778.172	40		$1s^23p - 1s^24s$	$^2P^\circ - ^2S$	3/2-1/2	313
N V	1048.20	40		$1s^24d - 1s^26f$	$^2D - ^2F^\circ$		313
N V	1049.65	50		$1s^24f - 1s^26g$	$^2F^\circ - ^2G$		313
N V	1238.821	1000	1	$1s^22s - 1s^22p$	$g^2S - ^2P^\circ$	1/2-3/2	313
N V	1242.804	800	1	$1s^22s - 1s^22p$	$g^2S - ^2P^\circ$	1/2-1/2	313
N V	1389.514	50		$1s^24s - 1s^25p$	$^2S - ^2P^\circ$	1/2-3/2	313
N V	1389.822	40		$1s^24s - 1s^25p$	$^2S - ^2P^\circ$	1/2-1/2	313
N V	1495.5	40		$1s^25g - 1s^28f$	$^2G - ^2F^\circ$		313
N V	1548.67	P		$1s^24p - 1s^25d$	$^2P^\circ - ^2D$	1/2-3/2	313
N V	1549.336	85		$1s^24p - 1s^25d$	$^2P^\circ - ^2D$	3/2-5/2	313
N V	1616.328	150		$1s^24d - 1s^25f$	$^2D - ^2F^\circ$		313
N V	1619.688	250		$1s^24f - 1s^25g$	$^2F^\circ - ^2G$		313
N V	1621.966	35		$1s^24f - 1s^25d$	$^2F^\circ - ^2D$		313
N V	1655.922	40		$1s^24d - 1s^25p$	$^2D - ^2P^\circ$	5/2-3/2	313
N V	1702.25	50P		$1s^24p - 1s^25s$	$^2P^\circ - ^2S$	1/2-1/2	313
N V	1703.218	60		$1s^24p - 1s^25s$	$^2P^\circ - ^2S$	3/2-1/2	313
N V	1811.08	30		$1s^25p - 1s^27d$	$^2P^\circ - ^2D$	1/2-	313
N V	1811.62	35		$1s^25p - 1s^27d$	$^2P^\circ - ^2D$	3/2-	313
N V	1857.69	50		$1s^25d - 1s^27f$	$^2D - ^2F^\circ$	3/2-	313
N V	1857.88	50		$1s^25d - 1s^27f$	$^2D - ^2F^\circ$	5/2-	313
N V	1860.37	85		$1s^25f - 1s^27g$	$^2F^\circ - ^2G$		313
N V	1882.36	30		$1s^25p - 1s^27s$	$^2P^\circ - ^2S$	1/2-1/2	313
N V	1882.92	35		$1s^25p - 1s^27s$	$^2P^\circ - ^2S$	3/2-1/2	313

Ground state $1s^2\ ^1S_0$

Ionization potential 4 452 800 cm^{-1}; 552.06 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N VI	23.771	10		$1s^2$ - 1s4p	$g\,^1S$ - $^1P^\circ$	0-1	197,764
N VI	24.898	30		$1s^2$ - 1s3p	$g\,^1S$ - $^1P^\circ$	0-1	197,764
N VI	28.787	100		$1s^2$ - 1s2p	$g\,^1S$ - $^1P^\circ$	0-1	764
N VI	29.084			$1s^2$ - 1s2p	$g\,^1S$ - $^3P^\circ$	0-1	764
N VI	97.4	P		1s2s - 1s10p	^3S - $^3P^\circ$		262
N VI	98.3	P		1s2s - 1s9p	^3S - $^3P^\circ$		262
N VI	99.5	P		1s2s - 1s8p	^3S - $^3P^\circ$		262
N VI	101.46	P		1s2s - 1s7p	^3S - $^3P^\circ$		262
N VI	102.6	P		1s2p - 1s10d	$^3P^\circ$ - ^3D		262
N VI	103.6	P		1s2p - 1s9d	$^3P^\circ$ - ^3D		262
N VI	104.58	P		1s2s - 1s6p	^3S - $^3P^\circ$		262
N VI	105.0	P		1s2p - 1s8d	$^3P^\circ$ - ^3D		262
N VI	107.15	P		1s2p - 1s7d	$^3P^\circ$ - ^3D		262
N VI	110.23			1s2s - 1s5p	^3S - $^3P^\circ$		262
N VI	110.59	P		1s2p - 1s6d	$^3P^\circ$ - ^3D		262
N VI	116.81			1s2p - 1s5d	$^3P^\circ$ - ^3D		262
N VI	122.44			1s2s - 1s4p	^3S - $^3P^\circ$		262
N VI	130.32			1s2p - 1s4d	$^3P^\circ$ - ^3D		262
N VI	161.22			1s2s - 1s3p	^3S - $^3P^\circ$		262
N VI	173.92			1s2p - 1s3d	$^3P^\circ$ - ^3D		262
N VI	1896.82	300		1s2s - 1s2p	^3S - $^3P^\circ$	1-2	072
N VI	1907.34	200		1s2s - 1s2p	^3S - $^3P^\circ$	1-1	072
N VI	1907.87	200		1s2s - 1s2p	^3S - $^3P^\circ$	1-0	072

Ground state 1s $^2S_{1/2}$

Ionization potential 5 380 089 cm^{-1}; 667.03 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
N VII	19.118	P		1s - 6p	$g^2S - {}^2P^\circ$	½-	309
N VII	19.361	P		1s - 5p	$g^2S - {}^2P^\circ$	½-	309
N VII	19.826	P		1s - 4p	$g^2S - {}^2P^\circ$	½-	309
N VII	20.910	P		1s - 3p	$g^2S - {}^2P^\circ$	½-	309
N VII	24.781	100P		1s - 2p	$g^2S - {}^2P^\circ$	½-	309,197,764
N VII	80.96	P		2 - 7			309
N VII	83.65	P		2 - 6			309
N VII	88.51	P		2 - 5			309
N VII	99.13	P		2 - 4			309
N VII	133.82	P		2 - 3			309
N VII	194.71	P		3 - 8			309
N VII	204.98	P		3 - 7			309
N VII	223.12	P		3 - 6			309
N VII	261.45	P		3 - 5			309
N VII	370.74	P		4 - 9			309
N VII	382.45	P		3 - 4			309
N VII	396.68	P		4 - 8			309
N VII	441.75	P		4 - 7			309
N VII	535.51	P		4 - 6			309
N VII	619.84	P		5 - 10			309
N VII	672.42	P		5 - 9			309
N VII	762.88	P		5 - 8			309
N VII	826.4	P		4 - 5			309
N VII	949.1	P		5 - 7			309
N VII	952.99	P		6 - 11			309
N VII	1046.02	P		6 - 10			309
N VII	1205.0	P		6 - 9			309
N VII	1521.4	P		5 - 6			309
N VII	1530.2	P		6 - 8			309

Ground state $1s^22s^22p^4\ ^3P_2$

Ionization potential 109 836.7 cm^{-1}; 13.618 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O I	748.4	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)6d$	$g^3P - ^3P^\circ$	2-	165,250
O I	749.3	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)6d$	$g^3P - ^3P^\circ$	1-	165,250
O I	755.8	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$g^3P - ^3P^\circ$	2-	165,250
O I	756.7	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$g^3P - ^3P^\circ$	1-	165,250
O I	769.355	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	2-1	165,250
O I	769.411	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	2-2	165,250
O I	770.264	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	1-0	165,250
O I	770.294	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	1-1	165,250
O I	770.350	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	1-2	165,250
O I	770.698	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	0-1	165,250
O I	791.514	50		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	2-1	197,250,165
O I	791.974	150		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	2-2	197,250,165
O I	792.233	50		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-0	197,250,165
O I	792.507	50		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-1	197,250,165
O I	792.938	150		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	0-1	197,250,165
O I	792.968	200		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-2	197,165
O I	810.667	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	2-1	165,250
O I	811.052	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	2-2	165,250
O I	811.501	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	1-0	165,250
O I	811.710	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	1-1	165,250
O I	812.096	75		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	1-2	165,250
O I	812.158	75		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	0-1	165,250
O I	850.74	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)7s$	$^1D - ^1D^\circ$	2-2	165,250
O I	861.63	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)6s$	$^1D - ^1D^\circ$	2-2	165,250
O I	877.802	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-1	197,250,165
O I	877.882	300		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-2	197,250,165
O I	878.976	75		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-0	197,165
O I	879.023	70		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-1	197,165
O I	879.104	80		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-2	197,165
O I	879.554	75		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	0-1	197,165
O I	882.88	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)5s$	$^1D - ^1D^\circ$	2-2	165,250
O I	922.011	P	8	$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1F^\circ$	2-3	165,488
O I	929.517	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)7d$	$g^3P - ^3D^\circ$	2-	165
O I	930.889	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)7d$	$g^3P - ^3D^\circ$	1-	165
O I	931.479	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)7d$	$g^3P - ^3D^\circ$	0-	165
O I	935.183	400		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$^1D - ^1D^\circ$	2-2	063,165
O I	936.630	150		$2s^22p^4 - 2s^22p^3(^4S^\circ)6d$	$g^3P - ^3D$	2-	165,335
O I	937.841	150		$2s^22p^4 - 2s^22p^3(^4S^\circ)7s$	$g^3P - ^3S^\circ$	2-1	165,335
O I	938.022	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)6d$	$g^3P - ^3D^\circ$	1-	165
O I	938.621	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)6d$	$g^3P - ^3D$	0-	165
O I	939.237	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)7s$	$g^3P - ^3S^\circ$	1-1	165
O I	939.837	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)7s$	$g^3P - ^3S^\circ$	0-1	165
O I	948.6867	250		$2s^22p^4 - 2s^22p^3(^4S^\circ)5d$	$g^3P - ^3D^\circ$	2-	197,335,165
O I	950.1134	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)5d$	$g^3P - ^3D^\circ$	1-	197,335,165
O I	950.7340	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)5d$	$g^3P - ^3D^\circ$	0-	197,165
O I	950.8845	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)6s$	$g^3P - ^3S^\circ$	2-1	197,335,165
O I	952.3179	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)6s$	$g^3P - ^3S^\circ$	1-1	197,335,165
O I	952.9414	80		$2s^22p^4 - 2s^22p^3(^4S^\circ)6s$	$g^3P - ^3S^\circ$	0-1	197,335,165
O I	971.7376	400		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	2-	197,335,165
O I	973.2346	250		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	1-	197,335,165
O I	973.8857	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	0-	197,335,165
O I	976.4480	250		$2s^22p^4 - 2s^22p^3(^4S^\circ)5s$	$g^3P - ^3S^\circ$	2-1	197,335,165
O I	977.9595	250		$2s^22p^4 - 2s^22p^3(^4S^\circ)5s$	$g^3P - ^3S^\circ$	1-1	197,335,165
O I	978.6170	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)5s$	$g^3P - ^3S^\circ$	0-1	197,335,165
O I	988.581	100	5	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - ^3D^\circ$	2-1	165,250

Element	Wavelength		Intensity	Multiplet	Configuration	Term	J - J	Reference
O I	988.6548		300	5	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	2-2	197,250,165
O I	988.7733		400	5	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	2-3	197,250,165
O I	990.1270		300	5	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	1-1	197,250,165
O I	990.2044		300	5	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	1-2	197,250,165
O I	990.8010		100	5	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	0-1	197,250,165
O I	999.493		200	7	$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1D - {}^1P^\circ$	2-1	165,488
O I	1025.7616		450	4	$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	2-	197,488
O I	1027.4309		400	4	$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	1-	197,488
O I	1028.1571		350	4	$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	0-1	197,488
O I	1039.2303		400	3	$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - {}^3S^\circ$	2-1	197,488
O I	1040.9427		400	3	$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - {}^3S^\circ$	1-1	197,488
O I	1041.6876		400	3	$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - {}^3S^\circ$	0-1	197,488
O I	1152.152		250	6	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$^1D - {}^1D^\circ$	2-2	197,488
O I	1217.643		100	9	$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1S - {}^1P^\circ$	0-1	197,488
O I	1302.1686	ST	500	2	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	2-1	308,488
O I	1304.8575	ST	500	2	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	1-1	308,488
O I	1306.0286	ST	450	2	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	0-1	308,488
O I	1355.5975		400	1	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^5S^\circ$	2-2	197,488
O I	1358.5125		250	1	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^5S^\circ$	1-2	197,488

Ground state $1s^22s^22p^3\ ^4S^\circ_{3/2}$

Ionization potential 283 244 cm^{-1}; 35.117 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O II	376.693	10		$2s^22p^3 - 2s^22p^2(^3P)5d$	$g^4S^\circ - ^4P$	3/2-3/2	168
O II	376.745	10		$2s^22p^3 - 2s^22p^2(^3P)5d$	$g^4S^\circ - ^4P$	3/2-5/2	168
O II	377.045	10		$2s^22p^3 - 2s^22p^2(^3P)5d$	$g^4S^\circ - ^4D$	3/2-	168
O II	391.912	50		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-1/2	168
O II	391.943	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-3/2	168
O II	392.002	150		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-5/2	168
O II	392.322	150		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4D$	3/2-	168
O II	403.035	10		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2D$	5/2-5/2	168
O II	403.087	10		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2D$	3/2-3/2	168
O II	403.273	10		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2F$	5/2-7/2	168
O II	403.372	10		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2F$	3/2-5/2	168
O II	418.598	50		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-5/2	168
O II	418.812	10		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2D^\circ - ^2F$	5/2-7/2	168
O II	424.577	10		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2S$	-1/2	168
O II	425.273	10		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2P$		168
O II	426.526	50d		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2D$		168
O II	429.557	100		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^2F$	3/2-5/2	168
O II	429.647	250		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-5/2	168
O II	429.716	200		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-1/2	168
O II	429.918	250	3	$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-1/2	168,488
O II	430.041	300	3	$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-3/2	168,488
O II	430.177	300	3	$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-5/2	168,488
O II	436.510	50		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	5/2-5/2	168
O II	436.649	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	3/2-3/2	168
O II	437.332	150		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-7/2	168
O II	437.683	150		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	3/2-5/2	168
O II	440.552	150		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	5/2-3/2	168
O II	440.598	100		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	3/2-1/2	168
O II	442.001	200		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	5/2-5/2	168
O II	442.048	200		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	3/2-3/2	168
O II	443.681	10		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2P^\circ - ^2D$	3/2-5/2	168
O II	445.601	200		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-7/2	168
O II	445.638	200		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	3/2-5/2	168
O II	456.997	50		$2s^22p^3 - 2s^22p^2(^1D)4s$	$^2P^\circ - ^2D$	3/2-	168
O II	458.422	10		$2s^22p^3 - 2s^22p^2(^3P)5s$	$^2P^\circ - ^2P$	3/2-3/2	168
O II	464.194	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	3/2-5/2	168
O II	464.310	50		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	1/2-3/2	168
O II	464.785	150		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2S$	-1/2	168
O II	465.529	50		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2P$	-1/2	168
O II	465.760	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2P$	-3/2	168
O II	467.926	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	5/2-3/2	168
O II	468.766	100		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$		168
O II	470.408	200		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$		168
O II	481.587	200b	10	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	168,488
O II	481.635	10	10	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-5/2	168
O II	481.704	50	10	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-3/2	168
O II	481.755	150	10	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-3/2	168,488
O II	483.752	200	9	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-1/2	168,488
O II	483.976	250	9	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	5/2-3/2	168,488
O II	484.025	100	9	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-3/2	168
O II	485.086	300	8	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	168,488
O II	485.465	10	8	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-5/2	168
O II	485.515	250	8	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	168,488
O II	485.572	50		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4D$	5/2-7/2	168
O II	485.631	200		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4D$	3/2-5/2	168

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O II	499.871	100		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2P^\circ - ^2P$	3/2-3/2	168
O II	500.343	50		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2P^\circ - ^2P$	-1/2	168
O II	515.498	250	17	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	3/2-5/2	168,488
O II	515.640	200	17	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	-3/2	168,488
O II	517.937	200	16	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	-1/2	168,488
O II	518.242	250	16	$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	-3/2	168,488
O II	537.830	450	7	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-1/2	168,488
O II	538.256	500	7	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	5/2-3/2	168,488
O II	538.318	350	7	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-3/2	168,488
O II	539.086	400	2	$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-5/2	168,488
O II	539.547	400	2	$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-3/2	168,488
O II	539.853	350	2	$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-1/2	168,488
O II	555.056	250	6	$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - ^2D$	5/2-5/2	168,488
O II	555.121	250	6	$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - ^2D$	3/2-3/2	168,488
O II	580.400	300	15	$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	-1/2	168,488
O II	580.967	350	15	$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	-3/2	168,488
O II	600.585	300	14	$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2P^\circ - ^2D$	3/2-5/2	168,488
O II	616.291	350	5	$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	5/2-3/2	168,488
O II	616.363	200	5	$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	3/2-3/2	168,488
O II	617.051	300	5	$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	3/2-1/2	168,488
O II	644.148	600	13	$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2S$	-1/2	197,168,488
O II	672.948	400	12	$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	3/2-3/2	168,488
O II	673.768	350	12	$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	-1/2	168,488
O II	718.484	850	4	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	5/2-5/2	197,168,488
O II	718.562	800	4	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	3/2-3/2	197,168,488
O II	739.949	100		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	5/2-3/2	175
O II	740.838	10		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	3/2-3/2	175
O II	741.293	1		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	1/2-3/2	175
O II	796.661	500	11	$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$		197,168,488
O II	832.762	700	1	$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-1/2	197,168,488
O II	833.332	750	1	$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-3/2	197,168,488
O II	834.467	750	1	$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-5/2	197,168,488
O II	1957.42	10		$2s^22p^2(^3P)3p - 2s^22p^2(^3P)5s$	$^4D^\circ - ^4P$	5/2-5/2	036,487
O II	1960.34	100		$2s^22p^2(^3P)3p - 2s^22p^2(^3P)5s$	$^4D^\circ - ^4P$	3/2-3/2	036,487
O II	1962.24	300		$2s^22p^2(^3P)3p - 2s^22p^2(^3P)5s$	$^4D^\circ - ^4P$	7/2-5/2	036,487
O II	1963.84	200		$2s^22p^2(^3P)3p - 2s^22p^2(^3P)5s$	$^4D^\circ - ^4P$	5/2-3/2	036,487
O II	1964.35	10		$2s^22p^2(^3P)3p - 2s^22p^2(^3P)5s$	$^4D^\circ - ^4P$	3/2-1/2	036,487

Ground state $1s^22s^22p^2\ ^3P_0$

Ionization potential 442 807 cm^{-1}; 54.900 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O III	226.038	50d		$2s^22p^2 - 2s2p^2(^4P)4p$	$g^3P - ^3D^\circ$	2-3	168,771
O III	228.893	10		$2s^22p^2 - 2s2p^2(^4P)4p$	$g^3P - ^3S^\circ$	1-1	168
O III	228.988	10		$2s^22p^2 - 2s2p^2(^4P)4p$	$g^3P - ^3S^\circ$	2-1	168
O III	236.710	50d		$2s^22p^2 - 2s2p^2(^4P)4p$	$^1D - ^3D^\circ$	2-3	168,487
O III	240.979	100d		$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - ^3D^\circ$	1-2	168
O III	241.037	100d		$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - ^3D^\circ$	2-3	168
O III	241.819	50		$2s2p^3 - 2s2p^2(^4P)5d$	$^5S^\circ - ^5P$	2-2	168
O III	241.875	50		$2s2p^3 - 2s2p^2(^4P)5d$	$^5S^\circ - ^5P$	2-3	168
O III	244.049	100d		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1P^\circ$	2-1	168
O III	246.265	150		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1D^\circ$	2-2	168
O III	247.080	50		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1F^\circ$	2-3	168
O III	248.320	50d		$2s^22p^2 - 2s^22p(^2P^\circ)7d$	$^1D - ^1F^\circ$	2-3	168
O III	248.538	50		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - ^3D^\circ$	0-1	168
O III	248.574	60		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - ^3D^\circ$	1-2	168
O III	248.618	100		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - ^3D^\circ$	2-3	168
O III	253.548	10		$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$^1D - ^1D^\circ$	2-2	168
O III	255.044	10		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - ^3P^\circ$	1-2	168
O III	255.158	50		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - ^3P^\circ$	2-2	168
O III	255.302	10		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$g^3P - ^3P^\circ$	2-1	168
O III	256.425	100		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-1	168
O III	256.460	150		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-2	168
O III	256.506	150		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-3	168
O III	261.027	200d		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$^1D - ^1F^\circ$	2-3	168
O III	262.113	100		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$^1D - ^1D^\circ$	2-2	168
O III	262.289	10		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$^1D - ^3F^\circ$	2-2	168
O III	262.729	10		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	1-2	168
O III	262.882	50		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	2-2	168
O III	263.692	150		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	0-1	168
O III	263.728	200		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	1-2	168
O III	263.768	150		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	1-1	168
O III	263.818	250		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-3	168
O III	263.861	150		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-2	168
O III	263.903	10		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-1	168
O III	264.257	200		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P^\circ$	0-1	168
O III	264.338	250d		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P^\circ$	1-1	168
O III	264.480	300		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P^\circ$	2-2	168
O III	266.967	250b		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	0-1	168
O III	266.985	350		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	1-2	168
O III	267.030	350		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	2-3	168
O III	267.050	150		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	1-1	168
O III	267.121	200		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	2-2	168
O III	268.451	50d		$2s^22p^2 - 2s^22p(^2P^\circ)5s$	$^1D - ^1P^\circ$	2-1	168
O III	271.403	50		$2s2p^3 - 2s2p^2(^4P)4s$	$^5S^\circ - ^5P$	2-3	168
O III	271.523	50		$2s2p^3 - 2s2p^2(^4P)4s$	$^5S^\circ - ^5P$	2-2	168
O III	271.611	10		$2s2p^3 - 2s2p^2(^4P)4s$	$^5S^\circ - ^5P$	2-1	168
O III	275.281	100		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S^\circ$	0-1	168
O III	275.366	150		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S^\circ$	1-1	168
O III	275.513	200		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S^\circ$	2-1	168
O III	277.385	350	12	$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	168,488
O III	277.514	50		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$^1S - ^1P^\circ$	0-1	168
O III	279.787	150		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$^1D - ^1D^\circ$	2-2	168
O III	280.030	100		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$^1D - ^3F^\circ$	2-2	168
O III	280.116	50		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - ^3P^\circ$	1-2	168
O III	280.234	50		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - ^3P^\circ$	0-1	168
O III	280.265	150		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - ^3P^\circ$	2-2	168

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O III	280.328	50		$2s^22p^2$ - $2s^22p(^2P^\circ)4s$	g^3P - $^3P^\circ$	1-1	168
O III	280.412	50		$2s^22p^2$ - $2s^22p(^2P^\circ)4s$	g^3P - $^3P^\circ$	1-0	168
O III	280.483	50		$2s^22p^2$ - $2s^22p(^2P^\circ)4s$	g^3P - $^3P^\circ$	2-1	168
O III	286.038	10		$2s^22p^2$ - $2s^22p(^2P^\circ)5s$	^1S - $^1P^\circ$	0-1	168
O III	295.511	150		$2s^22p^2$ - $2s^22p(^2P^\circ)4s$	^1D - $^1P^\circ$	2-1	168
O III	295.619	250		$2s2p^3$ - $2s2p^2(^4P)3d$	$^5S^\circ$ - ^5P	2-1	168
O III	295.657	300		$2s2p^3$ - $2s2p^2(^4P)3d$	$^5S^\circ$ - ^5P	2-2	168
O III	295.716	300		$2s2p^3$ - $2s2p^2(^4P)3d$	$^5S^\circ$ - ^5P	2-3	168
O III	295.944	150		$2s^22p^2$ - $2s^22p(^2P^\circ)4d$	^1S - $^1P^\circ$	0-1	168
O III	296.012	200		$2s2p^3$ - $2s2p^2(^4P)3d$	$^5S^\circ$ - ^5D	2-3	168
O III	296.270	50d		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3D^\circ$ - ^3P		168
O III	299.275	100d		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3D^\circ$ - ^3D		168
O III	300.455	150d		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3D^\circ$ - ^3F		168
O III	303.411	350	6	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3P^\circ$	0-1	168,488
O III	303.460	350	6	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3P^\circ$	1-0	168,488
O III	303.515	350	6	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3P^\circ$	1-1	168,488
O III	303.621	350	6	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3P^\circ$	1-2	168,488
O III	303.693	350	6	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3P^\circ$	2-1	168,488
O III	303.799	450	6	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3P^\circ$	2-2	168,488
O III	305.596	400	5	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3D^\circ$	0-1	168,488
O III	305.656	450	5	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3D^\circ$	1-2	168,488
O III	305.703	400	5	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3D^\circ$	1-1	168,488
O III	305.769	500	5	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3D^\circ$	2-3	168,488
O III	305.836	400	5	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3D^\circ$	2-2	168,488
O III	305.879	200	5	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3D^\circ$	2-1	168,488
O III	308.051	50		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^1D^\circ$	1-2	168
O III	308.306	100		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3F^\circ$	2-3	168
O III	316.967	150		$2s^22p^2$ - $2s^22p(^2P^\circ)4s$	^1S - $^1P^\circ$	0-1	168
O III	317.265	50d		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3P^\circ$ - ^3P		168
O III	319.996	150		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1D - $^1P^\circ$	2-1	168
O III	320.720	100d		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3P^\circ$ - ^3D		168
O III	320.979	600	11	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1D - $^1F^\circ$	2-3	197,168,488
O III	328.448	500	10	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1D - $^1D^\circ$	2-2	168,488
O III	328.742	450		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1D - $^3F^\circ$	2-2	168
O III	345.309	500	15	$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1S - $^1P^\circ$	0-1	168,488
O III	349.825	150		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3D	3-3	168
O III	349.918	100		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3D	2-2	168
O III	349.961	50		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3D	1-1	168
O III	355.137	300		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3F	3-4	168
O III	355.293	150		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3F	3-3	168
O III	355.333	250		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3F	2-3	168
O III	355.469	250		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3F	1-2	168
O III	356.558	10		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3P	1-0	168
O III	356.625	50		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3P	2-1	168
O III	356.725	100		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3P	3-2	168
O III	356.768	10		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3P	2-2	168
O III	359.016	400		$2s2p^3$ - $2s2p^2(^4P)3s$	$^5S^\circ$ - ^5P	2-3	168
O III	359.223	400		$2s2p^3$ - $2s2p^2(^4P)3s$	$^5S^\circ$ - ^5P	2-2	168
O III	359.384	350		$2s2p^3$ - $2s2p^2(^4P)3s$	$^5S^\circ$ - ^5P	2-1	168
O III	364.739	150		$2s2p^3$ - $2s2p^2(^2D)3s$	$^3D^\circ$ - ^3D	3-3	168
O III	364.867	100		$2s2p^3$ - $2s2p^2(^2D)3s$	$^3D^\circ$ - ^3D	2-2	168
O III	364.940	50		$2s2p^3$ - $2s2p^2(^2D)3s$	$^3D^\circ$ - ^3D	1-1	168
O III	373.805	400	4	$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	1-2	168,488
O III	374.005	400	4	$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	0-1	168,488
O III	374.075	500	4	$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	2-2	168,488
O III	374.165	400	4	$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	1-1	168,488
O III	374.331	400	4	$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	1-0	168,488
O III	374.436	400	4	$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	2-1	168,488
O III	379.505	200		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3P^\circ$ - ^3D	2-3	168
O III	379.575	150		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3P^\circ$ - ^3D	-2	168

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O III	379.631	100		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3D$	-1	168
O III	382.214	50d					168
O III	382.903	50d					168
O III	387.398	100		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	1-0	168
O III	387.482	150		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	-1	168
O III	387.639	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	2-2	168
O III	395.558	600	9	$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$^1D - ^1P^\circ$	2-1	197,168,488
O III	397.120	100		$2s2p^3 - 2s2p^2(^2D)3s$	$^3P^\circ - ^3D$	2-3	168
O III	397.231	50		$2s2p^3 - 2s2p^2(^2D)3s$	$^3P^\circ - ^3D$	1-2	168
O III	397.310	10		$2s2p^3 - 2s2p^2(^2D)3s$	$^3P^\circ - ^3D$	0-1	168
O III	434.256	200		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	3-2	168
O III	434.646	150		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	2-1	168
O III	434.840	100		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	1-0	168
O III	434.975	500	14	$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	168,488
O III	480.955	200		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	2-2	168
O III	481.354	150		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	-1	168
O III	481.381	100		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	0-1	168
O III	481.587	200b		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	1-0	168
O III	491.714	10		$2s2p^3 - 2s2p^2(^4P)3d$	$^3S^\circ - ^3P$	1-1	168
O III	491.980	50		$2s2p^3 - 2s2p^2(^4P)3d$	$^3S^\circ - ^3P$	1-2	168
O III	507.391	800	3	$2s^22p^2 - 2s2p^3$	$g^3P - ^3S^\circ$	0-1	197,168,488
O III	507.683	850	3	$2s^22p^2 - 2s2p^3$	$g^3P - ^3S^\circ$	1-1	197,168,488
O III	508.182	900	3	$2s^22p^2 - 2s2p^3$	$g^3P - ^3S^\circ$	2-1	197,168,488
O III	525.795	900	8	$2s^22p^2 - 2s2p^3$	$^1D - ^1P^\circ$	2-1	197,168,488
O III	554.275	10		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3D^\circ - ^3P$	3-2	175
O III	574.065	1		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3D^\circ - ^3D$	3-3	175
O III	597.818	750	13	$2s^22p^2 - 2s2p^3$	$^1S - ^1P^\circ$	0-1	197,168,488
O III	599.598	900	7	$2s^22p^2 - 2s2p^3$	$^1D - ^1D^\circ$	2-2	197,168,488
O III	609.705	300	16	$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	1-0	168,488
O III	610.043	350	16	$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	2-1	168,488
O III	610.746	400	16	$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	3-2	168,488
O III	610.850	300	16	$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	2-2	168,488
O III	658.578	50		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-3	175
O III	659.538	10		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	1-2	175
O III	702.332	800	2	$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	0-1	197,168,488
O III	702.822	800	2	$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	1-0	197,168,488
O III	702.899	850	2	$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	1-	197,168,488
O III	703.850	900	2	$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	2-	197,168,488
O III	705.762	100		$2s2p^3 - 1s^22p^4$	$^3P^\circ - ^3P$	1-0	168
O III	706.224	150		$2s2p^3 - 1s^22p^4$	$^3P^\circ - ^3P$	-1	168
O III	706.298	100		$2s2p^3 - 1s^22p^4$	$^3P^\circ - ^3P$	0-1	168
O III	707.315	200		$2s2p^3 - 1s^22p^4$	$^3P^\circ - ^3P$	-2	168
O III	752.762	200		$2s2p^3 - 1s^22p^4$	$^1P^\circ - ^1S$	1-0	168
O III	832.927	700	1	$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	0-1	197,168,488
O III	833.742	800	1	$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	1-2	197,168,488
O III	835.096	700	1	$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	2-2	197,168,488
O III	835.292	800	1	$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	2-3	197,168,488
O III	898.957	400	17	$2s2p^3 - 1s^22p^4$	$^1D^\circ - ^1D$	2-2	168,488
O III	1138.545	100		$2s2p^3 - 1s^22p^4$	$^1P^\circ - ^1D$	1-2	168
O III	1149.603	50		$2s2p^3 - 1s^22p^4$	$^3S^\circ - ^3P$	1-0	168
O III	1150.882	100		$2s2p^3 - 1s^22p^4$	$^3S^\circ - ^3P$	1-1	168
O III	1153.773	150		$2s2p^3 - 1s^22p^4$	$^3S^\circ - ^3P$	1-2	168
O III	1476.89	600		$2s^22p3p - 2s^22p4s$	$^1P - ^1P^\circ$	1-1	072
O III	1584.45	400		$2s^22p3p - 2s^22p4s$	$^3D - ^3P^\circ$	2-2	072
O III	1587.87	400		$2s^22p3p - 2s^22p4s$	$^3D - ^3P^\circ$	1-1	072
O III	1590.01	800		$2s^22p3p - 2s^22p4s$	$^3D - ^3P^\circ$	3-2	072
O III	1590.61	400		$2s^22p3p - 2s^22p4s$	$^3D - ^3P^\circ$	1-0	072
O III	1591.33	600		$2s^22p3p - 2s^22p4s$	$^3D - ^3P^\circ$	2-1	072
O III	1679.06	400		$2s^22p3p - 2s^22p4s$	$^3S - ^3P^\circ$	1-2	072
O III	1760.12	700		$2s^22p3d - 2s^22p4f$	$^3F^\circ - G[9/2]$	3-4	072

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O III	1760.42	500		$2s^22p3p$ - $2s^22p4s$	^3P - $^3P^\circ$	1-2	072
O III	1763.22	700		$2s^22p3d$ - $2s^22p4f$	$^3F^\circ$ - G[7/2]	2-3	072
O III	1764.48	700		$2s^22p3p$ - $2s^22p4s$	^3P - $^3P^\circ$	2-2	072
O III	1766.34	400		$2s^22p3p$ - $2s^22p4s$	^3P - $^3P^\circ$	0-1	072
O III	1767.78	1000		$2s^22p3d$ - $2s^22p4f$	$^3F^\circ$ - G[9/2]	4-5	072
O III	1768.24	900		$2s^22p3d$ - $2s^22p4f$	$^3F^\circ$ - G[7/2]	3-4	072
O III	1769.32	400		$2s^22p3d$ - $2s^22p4f$	$^3F^\circ$ - G[7/2]	3-3	072
O III	1771.67	900		$2s^22p3d$ - $2s^22p4f$	$^1D^\circ$ - G[7/2]	2-3	072
O III	1772.31	400		$2s^22p3p$ - $2s^22p4s$	^3P - $^3P^\circ$	1-0	072
O III	1773.00	500		$2s^22p3p$ - $2s^22p4s$	^3P - $^3P^\circ$	2-1	072
O III	1773.85	500		$2s^22p3d$ - $2s^22p4f$	$^3F^\circ$ - G[7/2]	4-4	072
O III	1779.16	700		$2s^22p3d$ - $2s^22p4f$	$^3F^\circ$ - F[7/2]	2-3	072
O III	1781.03	600		$2s^22p3d$ - $2s^22p4f$	$^3F^\circ$ - F[5/2]	2-3	072
O III	1784.85	600		$2s^22p3d$ - $2s^22p4f$	$^3F^\circ$ - F[7/2]	3-4	072
O III	1789.66	700		$2s^22p3d$ - $2s^22p4f$	$^1D^\circ$ - F[5/2]	2-3	072
O III	1848.26	500		$2s^22p3d$ - $2s^22p4f$	$^3D^\circ$ - D[5/2]	3-3	072
O III	1856.62	500		$2s^22p3d$ - $2s^22p4f$	$^3D^\circ$ - G[7/2]	3-4	072
O III	1872.78	800		$2s^22p3d$ - $2s^22p4f$	$^3D^\circ$ - F[7/2]	2-3	072
O III	1872.87	800		$2s^22p3d$ - $2s^22p4f$	$^3D^\circ$ - F[5/2]	1-2	072
O III	1874.94	800		$2s^22p3d$ - $2s^22p4f$	$^3D^\circ$ - F[7/2]	3-4	072
O III	1920.04	600		$2s^22p3p$ - $2s^22p4s$	^1D - $^1P^\circ$	2-1	072
O III	1920.75	500		$2s^22p3d$ - $2s^22p4f$	$^3P^\circ$ - D[3/2]	1-2	072
O III	1921.52	500		$2s^22p3d$ - $2s^22p4f$	$^3P^\circ$ - D[3/2]	1-1	072
O III	1923.49	700		$2s^22p3d$ - $2s^22p4f$	$^3P^\circ$ - D[5/2]	2-3	072
O III	1923.82	500		$2s^22p3d$ - $2s^22p4f$	$^3P^\circ$ - D[3/2]	0-1	072
O III	1926.94	500		$2s^22p3d$ - $2s^22p4f$	$^3P^\circ$ - D[5/2]	1-2	072

Ground state $1s^22s^22p\ ^2P^\circ_{1/2}$

Ionization potential 624 383.8 cm^{-1}; 77.412 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O IV	152.264	10		$2s^22p - 2s2p(^1P^\circ)4p$	$g^2P^\circ - ^2D$	½-3½	168
O IV	152.355	10		$2s^2(^1S)2p - 2s2p(^1P^\circ)4p$	$g^2P^\circ - ^2D$	3½-5½	168
O IV	153.162	10		$2s^2(^1S)2p - 1s^22p^2(^1D)3d$	$g^2P^\circ - ^2P$	3½-3½	170,487
O IV	158.553	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)5p$	$g^2P^\circ - ^2D$	½-3½	168
O IV	158.606	50		$2s^2(^1S)2p - 2s2p(^3P^\circ)5p$	$g^2P^\circ - ^2D$	3½-5½	168
O IV?	160.141	10					168
O IV	167.145	10d		$2s2p^2 - 2s2p(^3P^\circ)7d$	$^4P - ^4D^\circ$	5½-7½	168
O IV	170.940	10		$2s2p^2 - 2s2p(^3P^\circ)6d$	$^4P - ^4D^\circ$	3½-5½	168
O IV	170.988	10		$2s2p^2 - 2s2p(^3P^\circ)6d$	$^4P - ^4D^\circ$	5½-7½	168
O IV	171.071	100		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	½-3½	168
O IV	171.121	100		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	3½-5½	168
O IV	171.191	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	3½-3½	168
O IV	173.803	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2P$	½-3½	168
O IV	173.851	50		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2P$	½-½	168
O IV	173.917	100		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2P$	3½-3½	168
O IV	173.968	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2P$	3½-½	168
O IV	174.105	100		$2s^22p - 2s^26d$	$g^2P^\circ - ^2D$	½-3½	168
O IV	174.220	150		$2s^22p - 2s^26d$	$g^2P^\circ - ^2D$	3½-5½	168
O IV	177.598	10		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4P^\circ$		168
O IV	177.659	10		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4P^\circ$	3½-5½	168
O IV	177.698	50		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4P^\circ$	5½-5½	168
O IV	177.761	100		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4D^\circ$	3½-5½	168
O IV	177.808	100		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4D^\circ$	5½-7½	168
O IV	180.351	50		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2S$	½-½	168
O IV	180.481	100		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2S$	3½-½	168
O IV	181.150	200		$2s^22p - 2s^25d$	$g^2P^\circ - ^2D$	½-3½	168
O IV	181.275	250		$2s^22p - 2s^25d$	$g^2P^\circ - ^2D$	3½-5½	168
O IV	181.876	150		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	½-½	168
O IV	181.995	200		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	3½-3½	168
O IV	182.711	150		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2D$	½-3½	168
O IV	182.832	200		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2D$	3½-5½	168
O IV?	183.139	10					168
O IV	183.353	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	½-3½	168
O IV	183.395	50		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	3½-3½	168
O IV	183.454	50		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	5½-3½	168
O IV	185.384	10		$2s^22p - 2s^25s$	$g^2P^\circ - ^2S$	-½	168,487
O IV	186.872	50		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	3½-5½	168
O IV	186.936	100		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	5½-5½	168
O IV	186.982	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	5½-3½	168
O IV	188.152	100		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4D$	5½-7½	168
O IV	188.190	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4D^\circ$	5½-5½	168
O IV	191.609	100d		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3½-½	168
O IV	191.640	10		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3½-3½	168
O IV	191.695	100		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	5½-3½	168
O IV	191.752	150		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	5½-5½	168
O IV	192.139	200		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	½-3½	168
O IV	192.169	200		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	3½-5½	168
O IV	192.206	250		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5½-7½	168
O IV	192.244	150		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5½-5½	168
O IV	195.863	350		$2s^22p - 2s^24d$	$g^2P^\circ - ^2D$	½-3½	168
O IV	196.009	400		$2s^22p - 2s^24d$	$g^2P^\circ - ^2D$	3½-5½	168
O IV	196.348	10d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^2D - ^2F^\circ$	5½-7½	168
O IV	196.435	10d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^2D - ^2F^\circ$	3½-5½	168
O IV	200.827	50		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2D - ^2F^\circ$		170,175
O IV	200.915	50		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3½-5½	168

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O IV	200.966	50		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	½-3½	168
O IV	200.995	100		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5½-5½	168
O IV	201.022	10		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3½-3½	168
O IV	201.073	50		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3½-½	168
O IV	201.098	50		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5½-3½	168
O IV	202.891	200		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	½-½	168,487
O IV	203.048	250		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	3½-½	168,487
O IV	204.708	10d		$2s2p^2 - 1s^22p^2(^3P)3p$	$^2D - ^2D^\circ$		168
O IV	204.905	10		$2s2p^2 - 2s2p(^1P^\circ)4d$	$^2P - ^2D^\circ$	½-3½	168
O IV	204.996	10		$2s2p^2 - 2s2p(^1P^\circ)4d$	$^2P - ^2D^\circ$	3½-5½	168
O IV	205.842	10		$2s^22p - 2s^24s$	$g^2P^\circ - ^2S$	½-½	168
O IV	206.002	50		$2s^22p - 2s^24s$	$g^2P^\circ - ^2S$	3½-½	168
O IV	207.183	300		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	½-3½	168
O IV	207.239	350		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	3½-5½	168
O IV	207.348	200		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	3½-3½	168
O IV	211.808	10d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^2S - ^2P^\circ$	½-3½	168
O IV	212.578	100d		$2s2p^2 - 2s^2(^1S)8f$	$^2D - ^2F^\circ$		168
O IV	212.974	150d		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2F^\circ$	5½-7½	168
O IV	213.061	150d		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2F^\circ$	3½-5½	168
O IV	213.978	200		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	½-3½	168
O IV	214.032	250		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	½-½	168
O IV	214.155	300		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3½-3½	168
O IV	214.209	200		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3½-½	168
O IV	214.249	50		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2D^\circ$	5½-5½	168
O IV	214.290	50		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2D^\circ$	3½-3½	168
O IV	216.960	10		$2s2p^2 - 2s^2(^1S)7f$	$^2D - ^2F^\circ$		168
O IV	221.515	10					168
O IV	221.648	200					168
O IV	222.763	250		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2D^\circ$	5½-5½	168
O IV	222.777	200		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2D^\circ$	3½-3½	168
O IV	223.728	10		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^2D - ^2P^\circ$	5½-3½	168
O IV	223.841	10		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^2D - ^2P^\circ$	3½-½	168
O IV	225.299	250		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2F^\circ$	5½-7½	168
O IV	229.896	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^2P - ^2D^\circ$	½-3½	168
O IV	230.040	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^2P - ^2D^\circ$	3½-5½	168
O IV	230.682	50		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2S - ^2P^\circ$	½-½	168
O IV	230.755	100		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2S - ^2P^\circ$	½-3½	168
O IV	231.031	150		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	½-½	168
O IV	231.070	500b		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	½-3½	168
O IV	231.101	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3½-½	168
O IV	231.144	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3½-3½	168
O IV	231.200	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3½-5½	168
O IV	231.240	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5½-3½	168
O IV	231.302	350		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5½-5½	168
O IV	233.457	350	7	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	½-3½	168,488
O IV	233.495	350	7	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3½-5½	168,488
O IV	233.521	300	7	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3½-3½	168,488
O IV	233.561	400	7	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5½-7½	168,488
O IV	233.596	300	7	$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D$	5½-5½	168,488
O IV	234.988	150		$2s2p^2 - 2s^25f$	$^2D - ^2F^\circ$		168
O IV	236.071	50d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4F^\circ$		168
O IV	238.361	700	5	$2s^22p - 2s^23d$	$g^2P^\circ - ^2D$	½-3½	197,168,488
O IV	238.573	750	5	$2s^22p - 2s^23d$	$g^2P^\circ - ^2D$	3½-5½	197,168,488
O IV	239.592	150		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2S - ^2P^\circ$	½-3½	168
O IV	239.935	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^2P - ^2S^\circ$	½-½	168
O IV	240.079	50		$2s2p^2 - 1s^22p^2(^3P)3p$	$^2P - ^2S^\circ$	3½-½	168
O IV	242.045	100		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2P - ^2D^\circ$	½-3½	168
O IV	242.140	150		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2P - ^2D^\circ$	3½-5½	168
O IV	242.183	10		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2P - ^2D^\circ$	3½-3½	168
O IV	245.720	50d					168

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Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O IV	246.465	100		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^4S^\circ$ - ^4P	3/2-1/2	168
O IV	246.503	150		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^4S^\circ$ - ^4P	3/2-3/2	168
O IV	246.563	200		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^4S^\circ$ - ^4P	3/2-5/2	168
O IV	249.223	150		$2s2p^2$ - $2s2p(^1P^\circ)3d$	^2P - $^2P^\circ$	1/2-1/2	168
O IV	249.365	200		$2s2p^2$ - $2s2p(^1P^\circ)3d$	^2P - $^2P^\circ$	3/2-3/2	168
O IV	251.114	50		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2D^\circ$ - ^2P	3/2-1/2	170,175
O IV	251.148	50		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2D^\circ$ - ^2P	5/2-3/2	170,175
O IV	252.564	300d		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2D^\circ$ - ^2F		168,175
O IV	252.948	300		$2s2p^2$ - $2s2p(^1P^\circ)3d$	^2P - $^2D^\circ$	1/2-3/2	168
O IV	253.082	350		$2s2p^2$ - $2s2p(^1P^\circ)3d$	^2P - $^2D^\circ$	3/2-5/2	168
O IV	255.252	250		$2s2p^2$ - $2s2p(^1P^\circ)3s$	^2D - $^2P^\circ$	-3/2	168
O IV	255.302	10		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2D^\circ$ - ^2D		175
O IV	258.116	100		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2P^\circ$	3/2-1/2	168
O IV	258.207	150		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2P^\circ$	5/2-3/2	168
O IV	260.389	550	9	$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2F^\circ$	5/2-7/2	168,488
O IV	260.556	500	9	$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2F^\circ$	3/2-5/2	168,488
O IV	265.062	10		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^2D^\circ$ - ^2D	5/2-5/2	168
O IV	266.690	10		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^2D^\circ$ - ^2F	5/2-7/2	168
O IV?	266.729	10		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^2D^\circ$ - ^2F	3/2-5/2	168
O IV	266.932	300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2D^\circ$	5/2-5/2	168
O IV	266.967	250b		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2D^\circ$	3/2-3/2	168
O IV	269.559	50d		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2P^\circ$ - ^2S	3/2-1/2	168,175
O IV	271.989	300		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	3/2-5/2	168
O IV	272.076	300		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	1/2-3/2	168
O IV	272.125	350		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	5/2-5/2	168
O IV	272.174	250		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	3/2-3/2	168
O IV	272.270	300		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	3/2-1/2	168
O IV	272.311	300		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	5/2-3/2	168
O IV	279.456	100		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2P^\circ$ - ^2D		170,175
O IV	279.633	500	4	$2s^22p$ - $2s^23s$	g^2P° - ^2S	1/2-1/2	168,488
O IV	279.937	550	4	$2s^22p$ - $2s^23s$	g^2P° - ^2S	3/2-1/2	168,488
O IV	282.213	50		$2s2p^2$ - $2s2p(^1P)3s$	^2S - $^2P^\circ$	1/2-3/2	168
O IV	285.714	300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2S - $^2P^\circ$	1/2-1/2	168
O IV	285.838	350		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2S - $^2P^\circ$	1/2-3/2	168
O IV	289.292	150		$1s^22p^3$ - $1s^22p^2(^3P)3s$	$^4S^\circ$ - ^4P	3/2-5/2	168
O IV	289.469	100		$1s^22p^3$ - $1s^22p^2(^3P)3s$	$^4S^\circ$ - ^4P	3/2-3/2	168
O IV	289.590	50		$1s^22p^3$ - $1s^22p^2(^3P)3s$	$^4S^\circ$ - ^4P	3/2-1/2	168
O IV	289.898	100		$1s^22p^3$ - $1s^22p^2(^1D)3s$	$^2D^\circ$ - ^2D	5/2-5/2	168
O IV	289.933	50		$1s^22p^3$ - $1s^22p^2(^1D)3s$	$^2D^\circ$ - ^2D	3/2-3/2	168
O IV	291.054	50		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^2P^\circ$ - ^2D	1/2-3/2	168
O IV	291.203	50		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^2P^\circ$ - ^2D	3/2-5/2	168
O IV	294.650	50		$1s^22p^3$ - $2s2p(^3P^\circ)4f$	$^2D^\circ$ - ^2D	5/2-5/2	168
O IV	294.853	50		$1s^22p^3$ - $2s2p(^3P^\circ)4f$	$^2D^\circ$ - ^2D	3/2-3/2	168
O IV	295.051	50		$1s^22p^3$ - $2s2p(^3P^\circ)4f$	$^2D^\circ$ - ^2F	5/2-7/2	168
O IV	295.140	50		$1s^22p^3$ - $2s2p(^3P^\circ)4f$	$^2D^\circ$ - ^2F	3/2-5/2	168
O IV	295.874	100		$2s2p^2$ - $2s2p(^1P^\circ)3s$	^2P - $^2P^\circ$	3/2-3/2	168
O IV	299.495	150		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2P^\circ$	1/2-1/2	168
O IV	299.620	100		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2P^\circ$	1/2-3/2	168
O IV	299.710	100		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2P^\circ$	3/2-1/2	168
O IV	299.850	200		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2P^\circ$	3/2-3/2	168
O IV	306.621	400		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^2D - $^2P^\circ$	5/2-3/2	168
O IV	306.882	350		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^2D - $^2P^\circ$	3/2-1/2	168
O IV	311.490	250		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2D^\circ$	1/2-3/2	168
O IV	311.679	300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2D^\circ$	3/2-5/2	168
O IV	311.726	150		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2D^\circ$	3/2-3/2	168
O IV	321.457	50		$1s^22p^3$ - $1s^22p^2(^1D)3s$	$^2P^\circ$ - ^2D	3/2-5/2	168
O IV	327.320	50		$1s^22p^3$ - $2s2p(^3P^\circ)4f$	$^2P^\circ$ - ^2D	3/2-5/2	168
O IV	327.519	10		$1s^22p^3$ - $2s2p(^3P^\circ)4f$	$^2P^\circ$ - ^2D	1/2-3/2	168
O IV	339.330	50		$1s^22p^3$ - $2s2p(^1P^\circ)3p$	$^2D^\circ$ - ^2P	5/2-3/2	168
O IV	339.436	10		$1s^22p^3$ - $2s2p(^1P^\circ)3p$	$^2D^\circ$ - ^2P	3/2-1/2	168

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O IV	346.372	200		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^2S - $^2P^\circ$	½-3½	168
O IV	346.688	150		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^2S - $^2P^\circ$	½-½	168
O IV	367.192	100		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^2P - $^2P^\circ$		168
O IV	379.775	200		$2s2p^2$ - $2s^23p$	^2D - $^2P^\circ$	5½-3½	168
O IV	379.919	150		$2s2p^2$ - $2s^23p$	^2D - $^2P^\circ$	3½-½	168
O IV	442.705	50		$2s2p^2$ - $2s^23p$	^2S - $^2P^\circ$	½-3½	168
O IV	442.873	10		$2s2p^2$ - $2s^23p$	^2S - $^2P^\circ$	½-½	168
O IV	471.273	50		$1s^22p^3$ - $2s2p(^3P^\circ)3p$	$^2D^\circ$ - ^2P	5½-3½	168
O IV	471.603	10		$1s^22p^3$ - $2s2p(^3P^\circ)3p$	$^2D^\circ$ - ^2P	3½-½	168
O IV	553.328	800	3	$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2P	½-3½	197,168,488
O IV	554.074	850	3	$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2P	½-½	197,168,488
O IV	554.514	900	3	$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2P	3½-3½	197,168,488
O IV	555.262	800	3	$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2P	3½-½	197,168,488
O IV	608.395	700	2	$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2S	½-½	197,168,488
O IV	609.829	750	2	$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2S	3½-½	197,168,488
O IV	616.933	400		$2s2p^2$ - $1s^22p^3$	^2D - $^2P^\circ$	5½-3½	168
O IV	617.033	350		$2s2p^2$ - $1s^22p^3$	^2D - $^2P^\circ$	3½-½	168
O IV	624.617	650	6	$2s2p^2$ - $1s^22p^3$	^4P - $^4S^\circ$	½-3½	197,168,488
O IV	625.130	700	6	$2s2p^2$ - $1s^22p^3$	^4P - $^4S^\circ$	3½-3½	197,168,488
O IV	625.852	700	6	$2s2p^2$ - $1s^22p^3$	^4P - $^4S^\circ$	5½-3½	197,168,488
O IV	779.821	450	8	$2s2p^2$ - $1s^22p^3$	^2D - $^2D^\circ$	3½-3½	168,488
O IV	779.905	500	8	$2s2p^2$ - $1s^22p^3$	^2D - $^2D^\circ$	5½-5½	168,488
O IV	787.710	750	1	$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2D	½-3½	197,168,488
O IV	790.103	650	1	$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2D	3½-3½	197,168,488
O IV	790.203	800	1	$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2D	3½-5½	197,168,488
O IV	802.198	300		$2s2p^2$ - $1s^22p^3$	^2S - $^2P^\circ$	½-3½	168
O IV	802.250	250		$2s2p^2$ - $1s^22p^3$	^2S - $^2P^\circ$	½-½	168
O IV	921.301	200		$2s2p^2$ - $1s^22p^3$	^2P - $^2P^\circ$	½-3½	168
O IV	921.364	250		$2s2p^2$ - $1s^22p^3$	^2P - $^2P^\circ$	½-½	168
O IV	923.353	300		$2s2p^2$ - $1s^22p^3$	^2P - $^2P^\circ$	3½-3½	168
O IV	1338.603	300		$2s2p^2$ - $1s^22p^3$	^2P - $^2D^\circ$	½-3½	168
O IV	1342.995	200		$2s2p^2$ - $1s^22p^3$	^2P - $^2D^\circ$	3½-3½	168
O IV	1343.507	350		$2s2p^2$ - $1s^22p^3$	^2P - $^2D^\circ$	3½-5½	168

Ground state $1s^22s^2\ ^1S_0$

Ionization potential 918 657 cm^{-1}; 113.896 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O V	122.128	10		$2s(^2S)2p - 1s^22p(^2P^\circ)5p$	$^3P^\circ - ^3P$	2-2	168
O V	122.372	10		$2s(^2S)2p - 1s^22p(^2P^\circ)5p$	$^3P^\circ - ^3D$	2-3	168
O V	124.598	250		$2s^2 - 2s5p$	$g^1S - ^1P^\circ$	0-1	168
O V	128.235	10		$2s2p - 2s7d$	$^3P^\circ - ^3D$	1-2	168
O V	128.297	10		$2s2p - 2s7d$	$^3P^\circ - ^3D$	2-3	168
O V	131.750	100		$2s2p - 2s6d$	$^3P^\circ - ^3D$		168
O V	131.807	100		$2s2p - 2s6d$	$^3P^\circ - ^3D$	2-3	168
O V	132.800	100		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3P$		168
O V	132.851	200		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3P$	2-2	168
O V	132.885	10		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3P$	2-1	168
O V	133.328	10		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3S$	1-1	168
O V	133.395	10		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3S$	2-1	168
O V	133.521	300		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-3	168
O V	135.523	350		$2s^2 - 2s4p$	$g^1S - ^1P^\circ$	0-1	168
O V	138.030	200		$2s2p - 2s$	$^3P^\circ - ^3D$	0-1	168
O V	138.054	300		$2s2p - 2s5d$	$^3P^\circ - ^3D$	1-2	168
O V	138.108	400		$2s2p - 2s5d$	$^3P^\circ - ^3D$	2-3	168
O V	139.025	350		$2s^2 - 1s^22p(^2P^\circ)3d$	$g^1S - ^1P^\circ$	0-1	168
O V	140.045	10		$2s2p - 2s5s$	$^3P^\circ - ^3S$	1-1	168
O V	140.109	10		$2s2p - 2s5s$	$^3P^\circ - ^3S$	2-1	168
O V?	142.119	10					129
O V	144.802	100		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^3P - ^3D^\circ$	1-2	168
O V	144.837	100		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^3P - ^3D^\circ$	2-3	168
O V	146.345	100		$2s2p - 2s6d$	$^1P^\circ - ^1D$	1-2	168
O V	147.261	250		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^1P^\circ - ^1D$	1-2	168
O V	149.034	10		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^1D - ^1D^\circ$	2-2	168
O V	149.078	200		$2s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^1P^\circ - ^1P$	1-1	168
O V	151.449	400		$2s2p - 2s4d$	$^3P^\circ - ^3D$	0-1	168
O V	151.481	500		$2s2p - 2s4d$	$^3P^\circ - ^3D$	1-2	168,362
O V	151.548	600		$2s2p - 2s4d$	$^3P^\circ - ^3D$	2-3	168,362
O V	153.948	250		$2s2p - 2s5d$	$^1P^\circ - ^1D$	1-2	168
O V	156.126	100		$2s2p - 2s4s$	$^3P^\circ - ^3S$	0-1	168
O V	156.158	200		$2s2p - 2s4s$	$^3P^\circ - ^3S$	1-1	168
O V	156.225	300		$2s2p - 2s4s$	$^3P^\circ - ^3S$	2-1	168
O V	158.813	100d		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^3P - ^3P^\circ$		168
O V	158.926	200		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^3P - ^3P^\circ$	2-2	168
O V	159.343	400		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^3P - ^3D$	1-2	168
O V	159.380	400		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^3P - ^3D^\circ$	2-3	168
O V	162.494	300		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	168,487
O V	164.178	200		$1s^22p^2 - 2s6f$	$^1D - ^1F^\circ$	2-3	168,487
O V	164.578	500		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$		168
O V	164.628	400		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	1-1	168
O V	164.656	600		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-2	168
O V	164.710	400		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-1	168
O V	164.986	200		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^1D - ^1D^\circ$	2-2	168
O V	166.113	300		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	0-1	168
O V	166.152	400		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	1-1	168
O V	166.234	500		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	2-1	168
O V	167.991	800	6	$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-3	168,488
O V	168.042	400	6	$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	1-1	168,488
O V	168.077	400	6	$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-2	168,488
O V	169.478	10		$1s^22p^2 - 2s5p$	$^3P - ^3P^\circ$	1-	168
O V	169.586	10		$1s^22p^2 - 2s5p$	$^3P - ^3P^\circ$	2-	168
O V	170.218	400		$2s2p - 2s4d$	$^1P^\circ - ^1D$	1-2	168
O V	172.169	800	2	$2s^2 - 2s3p$	$g^1S - ^1P^\circ$	0-1	197,168,488

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O V	174.558	200		2s2p - 2s4s	$^1P^\circ$ - ^1S	1-0	168
O V	178.713	200		$1s^22p^2$ - $1s^22p(^2P^\circ)4d$	^1S - $^1P^\circ$	0-1	168
O V	182.205	200		$2s(^2S)2p$ - $1s^22p(^2P^\circ)3p$	$^1P^\circ$ - ^1S	1-0	168
O V?	185.455	200					168
O V	185.747	600	12	$2s(^2S)2p$ - $1s^22p(^2P^\circ)3p$	$^1P^\circ$ - ^1D	1-2	168,488
O V	191.397	10		$1s^22p^2$ - 2s4p	^3P - $^3P^\circ$	0-1	168
O V	191.458	100		$1s^22p^2$ - 2s4p	^3P - $^3P^\circ$	1-1	168
O V	191.556	200		$1s^22p^2$ - 2s4p	^3P - $^3P^\circ$	2-2	168
O V	192.751	850	5	2s2p - 2s3d	$^3P^\circ$ - ^3D	0-1	197,168,488
O V	192.799	900	5	2s2p - 2s3d	$^3P^\circ$ - ^3D	1-2	197,168,488
O V	192.906	950	5	2s2p - 2s3d	$^3P^\circ$ - ^3D	2-3	197,168,488
O V	194.593	530	11	$2s(^2S)2p$ - $1s^22p(^2P^\circ)3p$	$^1P^\circ$ - ^1P	1-1	168,488
O V?	198.031	250					168
O V	202.158	350	14	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3P^\circ$	0-1	168
O V	202.191	350	14	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3P^\circ$	1-0	168
O V	202.226	350	14	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3P^\circ$	1-1	168,488
O V	202.282	350	14	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3P^\circ$	1-2	168,488
O V	202.335	350	14	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3P^\circ$	2-1	168,488
O V	202.393	450	14	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3P^\circ$	2-2	168,488
O V	203.783	400	13	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3D^\circ$	0-1	168,488
O V	203.821	500	13	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3D^\circ$	1-2	168,488
O V	203.851	400	13	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3D^\circ$	1-1	168
O V	203.890	550	13	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3D^\circ$	2-3	168,488
O V	203.935	400	13	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^3P - $^3D^\circ$	2-2	168
O V	205.102	250		$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^1D - $^1P^\circ$	2-1	168
O V	207.794	670	16	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^1D - $^1F^\circ$	2-3	168,488
O V	215.034	500	4	2s2p - 2s3s	$^3P^\circ$ - ^3S	0-1	168,488
O V	215.104	550	4	2s2p - 2s3s	$^3P^\circ$ - ^3S	1-1	168,488
O V	215.245	600	4	2s2p - 2s3s	$^3P^\circ$ - ^3S	2-1	168,488
O V	216.018	530	15	$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^1D - $^1D^\circ$	2-2	168,488
O V	220.352	870	10	2s2p - 2s3d	$^1P^\circ$ - ^1D	1-2	197,168,488
O V	222.235	250		$1s^22p^2$ - 2s4p	^1S - $^1P^\circ$	0-1	168
O V	227.374	350		$1s^22p^2$ - $1s^22p(^2P^\circ)3s$	^3P - $^3P^\circ$	1-2	168
O V	227.468	350		$1s^22p^2$ - $1s^22p(^2P^\circ)3s$	^3P - $^3P^\circ$	0-1	168
O V	227.510	500		$1s^22p^2$ - $1s^22p(^2P^\circ)3s$	^3P - $^3P^\circ$	2-2	168
O V	227.549	350		$1s^22p^2$ - $1s^22p(^2P^\circ)3s$	^3P - $^3P^\circ$	1-1	168
O V	227.636	350		$1s^22p^2$ - $1s^22p(^2P^\circ)3s$	^3P - $^3P^\circ$	1-0	168
O V	227.688	350		$1s^22p^2$ - $1s^22p(^2P^\circ)3s$	^3P - $^3P^\circ$	2-1	168
O V	231.070	500b		$1s^22p^2$ - $1s^22p(^2P^\circ)3s$	^1D - $^1P^\circ$	2-1	168
O V	231.823	500		$1s^22p^2$ - $1s^22p(^2P^\circ)3d$	^1S - $^1P^\circ$	0-1	168
O V	248.459	400	9	2s2p - 2s3s	$^1P^\circ$ - ^1S	1-0	168,488
O V	265.550	300		$1s^22p^2$ - $1s^22p(^2P^\circ)3s$	^1S - $^1P^\circ$	0-1	168
O V	270.982	10		$1s^22p^2$ - 2s3p	^3P - $^3P^\circ$	2-2	168
O V	286.448	400		$1s^22p^2$ - 2s3p	^1D - $^1P^\circ$	2-1	168
O V	341.391	10		$1s^22p^2$ - 2s3p	^1S - $^1P^\circ$	0-1	168
O V	481.12	700		2s3d - 2s5f	^3D - $^3F^\circ$		072
O V	529.20	500		2s3s - 2s4p	^3S - $^3P^\circ$	1-	072
O V	604.41	500		2s3p - 2s4d	$^1P^\circ$ - ^1D	1-2	072
O V	627.36	500		2s3p - 2s4d	$^3P^\circ$ - ^3D	1-2	072
O V	627.63	700		2s3p - 2s4d	$^3P^\circ$ - ^3D	2-3	072
O V	629.732	1000	1	$2s^2$ - 2s2p	g^1S - $^1P^\circ$	0-1	197,168,488
O V	681.28	800		2s3d - 2s4f	^3D - $^3F^\circ$		072
O V	716.55	500		2s3p - 2s4s	$^3P^\circ$ - ^3S	2-1	072
O V	728.74	700		2s3d - 2s4f	^1D - $^1F^\circ$	2-3	072
O V	758.677	700	3	2s2p - $1s^22p^2$	$^3P^\circ$ - ^3P	1-2	197,168,488
O V	759.440	700	3	2s2p - $1s^22p^2$	$^3P^\circ$ - ^3P	0-1	197,168,488
O V	760.229	700	3	2s2p - $1s^22p^2$	$^3P^\circ$ - ^3P	1-1	197,168,488
O V	760.445	800	3	2s2p - $1s^22p^2$	$^3P^\circ$ - ^3P	2-2	197,168,488
O V	761.130	700	3	2s2p - $1s^22p^2$	$^3P^\circ$ - ^3P	1-0	197,168,488
O V	762.001	700	3	2s2p - $1s^22p^2$	$^3P^\circ$ - ^3P	2-1	197,168,488

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O V	774.522	500	8	$2s2p - 1s^22p^2$	$^1P^\circ - ^1S$	1-0	168.488
O V	1371.287	670	7	$2s2p - 1s^22p^2$	$^1P^\circ - ^1D$	1-2	168.488
O V	1418.41	500		2s4p - 2s5d	$^3P^\circ - ^3D$	2-3	072
O V	1506.71	800		2s4d - 2s5f	$^3D - ^3F^\circ$		072
O V	1596.37	500		2s4d - 2s5f	$^1D - ^1F^\circ$	2-3	072
O V	1643.66	1000		2s4f - 2s5g	$^3F^\circ - ^3G$		072
O V	1708.01	700		2s4f - 2s5g	$^1F^\circ - ^1G$	3-4	072

Ground state $1s^22s\ ^2S_{1/2}$

Ionization potential 1 113 999.5 cm^{-1}; 138.115 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O VI	93.03	100		$1s^22s - 1s^210p$	$g^2S - {}^2P^\circ$	½-	555
O VI	93.84	150		$1s^22s - 1s^29p$	$g^2S - {}^2P^\circ$	½-	555
O VI	95.02	200		$1s^22s - 1s^28p$	$g^2S - {}^2P^\circ$	½-	555
O VI	96.78	250		$1s^22s - 1s^27p$	$g^2S - {}^2P^\circ$	½-	555
O VI	99.68	250		$1s^22s - 1s^26p$	$g^2S - {}^2P^\circ$	½-	555
O VI	101.57	100		$1s^22p - 1s^211d$	${}^2P^\circ - {}^2D$	3/2-5/2	555
O VI	102.30	150		$1s^22p - 1s^210d$	${}^2P^\circ - {}^2D$	3/2-5/2	555
O VI	103.26	200		$1s^22p - 1s^29d$	${}^2P^\circ - {}^2D$	3/2-5/2	555
O VI	104.67	250		$1s^22p - 1s^28d$	${}^2P^\circ - {}^2D$	3/2-5/2	555
O VI	104.811	350		$1s^22s - 1s^25p$	$g^2S - {}^2P^\circ$	½-	168,555
O VI	106.79	300		$1s^22p - 1s^27d$	${}^2P^\circ - {}^2D$	3/2-5/2	555
O VI	110.148	120		$1s^22p - 1s^26d$	${}^2P^\circ - {}^2D$	½-3/2	168,555
O VI	110.220	250		$1s^22p - 1s^26d$	${}^2P^\circ - {}^2D$	3/2-5/2	168,555
O VI	110.69	150		$1s^22p - 1s^26s$	${}^2P^\circ - {}^2S$	3/2-½	555
O VI	115.824	350		$1s^22s - 1s^24p$	$g^2S - {}^2P^\circ$	½-	168,555
O VI	116.347	120		$1s^22p - 1s^25d$	${}^2P^\circ - {}^2D$	½-3/2	168,555
O VI	116.419	250		$1s^22p - 1s^25d$	${}^2P^\circ - {}^2D$	3/2-5/2	168,555
O VI	117.40	300		$1s^22p - 1s^25s$	${}^2P^\circ - {}^2S$	3/2-½	555
O VI	129.786	150	5	$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	½-3/2	168,555,488
O VI	129.872	250	5	$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	3/2-5/2	168,555,488
O VI	132.219	100		$1s^22p - 1s^24s$	${}^2P^\circ - {}^2S$	½-½	168,555
O VI	132.312	200		$1s^22p - 1s^24s$	${}^2P^\circ - {}^2S$	3/2-½	168,555
O VI	150.089	500	2	$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-3/2	197,555,168
O VI	150.124	250	2	$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-½	197,555,168
O VI	172.935	950	4	$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	½-3/2	197,168,488
O VI	173.082	1000	4	$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	3/2-5/2	197,168,488
O VI	183.937	650	3	$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	½-½	197,168,488
O VI	184.117	850	3	$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	3/2-½	197,168,488
O VI	447.712	10		$1s^23s - 1s^24p$	${}^2S - {}^2P^\circ$	½-3/2	168
O VI	447.840	10		$1s^23s - 1s^24p$	${}^2S - {}^2P^\circ$	½-½	168
O VI	498.090	10d		$1s^23p - 1s^24d$	${}^2P^\circ - {}^2D$	½-3/2	168
O VI	498.431	100d		$1s^23p - 1s^24d$	${}^2P^\circ - {}^2D$	3/2-5/2	168
O VI	519.610	200d		$1s^23d - 1s^24f$	${}^2D - {}^2F^\circ$	3/2-5/2	168
O VI	519.723	200d		$1s^23d - 1s^24f$	${}^2D - {}^2F^\circ$	5/2-7/2	168
O VI	1031.912	850	1	$1s^22s - 1s^22p$	$g^2S - {}^2P^\circ$	½-3/2	168,488
O VI	1037.613	750	1	$1s^22s - 1s^22p$	$g^2S - {}^2P^\circ$	½-½	168,488

Ground state $1s^2\ ^1S_0$

Ionization potential 5 963 000 cm^{-1}; 739.30 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O VII	17.200	50		$1s^2$ - 1s6p	$g\,^1S$ - $^1P^\circ$	0-1	764
O VII	17.396	100		$1s^2$ - 1s5p	$g\,^1S$ - $^1P^\circ$	0-1	764
O VII	17.768	200		$1s^2$ - 1s4p	$g\,^1S$ - $^1P^\circ$	0-1	197,764
O VII	18.627	500		$1s^2$ - 1s3p	$g\,^1S$ - $^1P^\circ$	0-1	197,764
O VII	21.602	1000		$1s^2$ - 1s2p	$g\,^1S$ - $^1P^\circ$	0-1	197,764
O VII	21.804	300		$1s^2$ - 1s2p	$g\,^1S$ - $^3P^\circ$	0-1	764
O VII	72.3	P		1s2s - 1s10p	^3S - $^3P^\circ$		262
O VII	73.0	P		1s2s - 1s9p	^3S - $^3P^\circ$		262
O VII	73.9	P		1s2s - 1s8p	^3S - $^3P^\circ$		262
O VII	75.35	P		1s2s - 1s7p	^3S - $^3P^\circ$		262
O VII	75.5	P		1s2p - 1s10d	$^3P^\circ$ - ^3D		262
O VII	76.3	P		1s2p - 1s9d	$^3P^\circ$ - ^3D		262
O VII	77.31	P		1s2p - 1s8d	$^3P^\circ$ - ^3D		262
O VII	77.68	P		1s2s - 1s6p	^3S - $^3P^\circ$		262
O VII	78.94	50		1s2p - 1s7d	$^3P^\circ$ - ^3D	2-3	555
O VII	81.50	100		1s2p - 1s6d	$^3P^\circ$ - ^3D	2-3	555
O VII	81.89	150		1s2s - 1s5p	^3S - $^3P^\circ$	1-	555
O VII	86.07	200		1s2p - 1s5d	$^3P^\circ$ - ^3D	2-3	555
O VII	91.02	250		1s2s - 1s4p	^3S - $^3P^\circ$	1-	555
O VII	96.12	300		1s2p - 1s4d	$^3P^\circ$ - ^3D	2-3	555
O VII	120.331	350		1s2s - 1s3p	^3S - $^3P^\circ$	1-	164,555
O VII	128.412	150		1s2p - 1s3d	$^3P^\circ$ - ^3D	1-	164,555
O VII	128.500	200		1s2p - 1s3d	$^3P^\circ$ - ^3D	2-3	164,555
O VII	133.31	250		1s2p - 1s3s	$^3P^\circ$ - ^3S	2-1	555
O VII	1623.29			1s2s - 1s2p	^3S - $^3P^\circ$	1-2	202
O VII	1637.96			1s2s - 1s2p	^3S - $^3P^\circ$	1-1	202
O VII	1639.58			1s2s - 1s2p	^3S - $^3P^\circ$	1-0	202

Ground state 1s $^2S_{1/2}$

Ionization potential 7 028 394 cm^{-1}; 871.39 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
O VIII	14.453	2		1s - 8p	g^2S - $^2P^o$	½-	309,817
O VIII	14.524	3		1s - 7p	g^2S - $^2P^o$	½-	309,817
O VIII	14.634	8		1s - 6p	g^2S - $^2P^o$	½-	309,817
O VIII	14.821	25		1s - 5p	g^2S - $^2P^o$	½-	309,817
O VIII	15.176	80		1s - 4p	g^2S - $^2P^o$	½-	309,817
O VIII	16.006	308		1s - 3p	g^2S - $^2P^o$	½-	309,817
O VIII	18.969	1000		1s - 2p	g^2S - $^2P^o$	½-	309,817
O VIII	61.977	P		2 - 7			309
O VIII	64.03	P		2 - 6			309
O VIII	67.76	P		2 - 5			309
O VIII	75.89	P		2 - 4			309
O VIII	102.43	P		2 - 3			309
O VIII	149.06	P		3 - 8			309
O VIII	156.92	P		3 - 7			309
O VIII	170.80	P		3 - 6			309
O VIII	200.15	P		3 - 5			309
O VIII	283.83	P		4 - 9			309
O VIII	292.8	P		3 - 4			309
O VIII	303.69	P		4 - 8			309
O VIII	338.19	P		4 - 7			309
O VIII	409.97	P		4 - 6			309
O VIII	474.54	P		5 - 10			309
O VIII	514.80	P		5 - 9			309
O VIII	584.05	P		5 - 8			309
O VIII	632.7	P		4 - 5			309
O VIII	726.6	P		5 - 7			309
O VIII	729.61	P		6 - 11			309
O VIII	800.8	P		6 - 10			309
O VIII	922.6	P		6 - 9			309
O VIII	1164.8	P		5 - 6			309
O VIII	1171.5	P		6 - 8			309
O VIII	1931.8	P		6 - 7			309

Unclassified lines

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F	132.389	10d					176
F	154.968	10					176
F	194.655	10					176
F	197.298	100d					176
F	206.548	10					176
F	213.684	10d					176
F	225.114	10d					176
F	225.627	10d					176

Ground state $1s^22s^22p^5\ ^2P^\circ_{3/2}$

Ionization potential 140 524.5 cm^{-1}; 17.422 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F I	680.709	2		$2s^22p^5 - 2s^22p^4(^1D)4s$	$g^2P^\circ - ^2D$	3/2-5/2	420
F I	682.581	2		$2s^22p^5 - 2s^22p^4(^1D)4s$	$g^2P^\circ - ^2D$	1/2-3/2	420
F I	732.960	1		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^\circ - ^4P$	3/2-3/2	420
F I	734.642	1		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^\circ - ^4P$	3/2-1/2	420
F I	734.795	1		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^\circ - ^2D$	3/2-5/2	420
F I	735.154	1		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^\circ - ^4P$	1/2-3/2	420
F I	735.469	1		$2s^22p^5 - 2s^22p^4(^3P)6s$	$g^2P^\circ - ^2P$	3/2-3/2	420
F I	736.987	2		$2s^22p^5 - 2s^22p^4(^3P)6s$	$g^2P^\circ - ^4P$	3/2-3/2	420
F I	745.767	2		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2P$	3/2-3/2	420
F I	746.400	1		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4F$	3/2-3/2	420
F I	746.627	3		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4F$	3/2-5/2	420
F I	747.999	2		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2P$	1/2-3/2	420
F I	748.134	1		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4P$	3/2-1/2	420
F I	748.338	2		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2D$	3/2-3/2	420
F I	748.580	4		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2D$	3/2-5/2	420
F I	748.709	2		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4F$	1/2-3/2	420
F I	748.946	3		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4P$	1/2-3/2	420
F I	750.418	1		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4P$	1/2-1/2	420
F I	750.610	3		$2s^22p^5 - 2s^22p^4(^3P)5s$	$g^2P^\circ - ^2P$	3/2-1/2	420
F I	750.885	1		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4D$	1/2-3/2	420
F I	751.861	4		$2s^22p^5 - 2s^22p^4(^3P)5s$	$g^2P^\circ - ^2P$	3/2-3/2	420
F I	752.884	4		$2s^22p^5 - 2s^22p^4(^3P)5s$	$g^2P^\circ - ^2P$	1/2-1/2	420
F I	753.303	4		$2s^22p^5 - 2s^22p^4(^3P)5s$	$g^2P^\circ - ^4P$	3/2-3/2	420
F I	754.148	2		$2s^22p^5 - 2s^22p^4(^3P)5s$	$g^2P^\circ - ^4P$	3/2-5/2	420
F I	755.603	2		$2s^22p^5 - 2s^22p^4(^3P)5s$	$g^2P^\circ - ^4P$	1/2-3/2	420
F I	776.926	4		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2P$	3/2-3/2	420
F I	777.010	5		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2F$	3/2-5/2	420
F I	777.531	4		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^4F$	3/2-3/2	420
F I	778.059	6		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^4P$	3/2-3/2	420
F I	779.192	2		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^4P$	3/2-1/2	420
F I	779.365	6		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2P$	1/2-3/2	420
F I	779.910	5		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2D$	3/2-3/2	420
F I	779.972	2		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^4F$	1/2-3/2	420
F I	780.134	1		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^4D$	3/2-1/2	420
F I	780.390	15		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2D$	3/2-5/2	420
F I	780.519	10		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^4P$	1/2-3/2	420
F I	780.713	5		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^4D$	3/2-5/2	420
F I	781.654	3		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^4P$	1/2-1/2	420
F I	782.378	10		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2D$	1/2-3/2	420
F I	782.575	2		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^4D$	1/2-1/2	420
F I	782.976	5		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^4D$	1/2-3/2	420
F I	790.006	7		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^2P$	3/2-1/2	420
F I	791.875	12		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^2P$	3/2-3/2	420
F I	792.536	10		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^2P$	1/2-1/2	420
F I	793.237	1		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^4P$	3/2-1/2	420
F I	794.417	10		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^4P$	3/2-3/2	420
F I	795.774	2		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^4P$	1/2-1/2	420
F I	796.982	3		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^4P$	1/2-3/2	420
F I	806.964	150	2	$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^\circ - ^2D$	3/2-5/2	420,488
F I	809.599	125	2	$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^\circ - ^2D$	1/2-3/2	420,488
F I	951.871	500	1	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	3/2-1/2	420,488
F I	954.825	1000	1	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	3/2-3/2	420,488
F I	955.545	750	1	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	1/2-1/2	420,488
F I	958.524	500	1	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	1/2-3/2	420,488
F I	972.401	20		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^4P$	3/2-1/2	420

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F I	973.895	350		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - {}^4P$	3/2-3/2	420
F I	976.217	100		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - {}^4P$	1/2-1/2	420
F I	976.505	40		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - {}^4P$	3/2-5/2	420
F I	977.745	100		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - {}^4P$	1/2-3/2	420

Ground state $1s^22s^22p^4\ ^3P_2$

Ionization potential 282 056.6 cm^{-1}; 34.970 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F II	348.800	10					176
F II	353.421	15		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-2	176,042
F II	375.300	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	2-2	176,042
F II	375.434	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3S^\circ$	2-1	176,042
F II	375.718	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	1-1	176,042
F II	375.793	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	1-2	176,042
F II	375.928	100d		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	0-1	176,042
F II	376.686	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3D^\circ$	2-3	176,042
F II	377.140	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3D^\circ$	1-2	176,042
F II	380.903	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	176,487
F II	393.676	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	2-3	176,042
F II	394.204	10		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	1-	176,042
F II	400.575	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$^1D - ^1D^\circ$	2-2	176,042
F II	405.640	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1P^\circ$	2-1	176,487
F II	407.046	400		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1F^\circ$	2-3	176,487
F II	407.505	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1D^\circ$	2-2	176,042
F II	417.874	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$^1S - ^1P^\circ$	0-1	176,042
F II	422.012	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	2-1	176,042
F II	422.618	650		$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	1-1	176,042
F II	430.909	250		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	2-3	176,042
F II	431.545	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	1-2	176,042
F II	431.826	150		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	0-1	176,042
F II	435.634	300		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-	176,042
F II	436.279	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-	176,042
F II	436.563	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	0-1	176,042
F II	457.177	500		$2s^22p^4 - 2s2p^5$	$^1D - ^1P^\circ$	2-1	176,042
F II	471.949	200					176
F II	471.990	400	3	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - ^3D^\circ$	2-3	176,488
F II	472.710	350	3	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - ^3D^\circ$	1-2	176,488
F II	473.016	300	3	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - ^3D^\circ$	0-1	176,488
F II	484.600	550		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1D - ^1P^\circ$	2-1	176,042
F II	513.649	400		$2s^22p^4 - 2s2p^5$	$^1S - ^1P^\circ$	0-1	176,042
F II	514.945	600		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$^1D - ^1D^\circ$	2-2	176,042
F II	546.851	1000	2	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - ^3S^\circ$	2-1	176,488
F II	547.875	400	2	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - ^3S^\circ$	1-1	176,488
F II	548.322	300	2	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - ^3S^\circ$	0-1	176,488
F II	548.517	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	176,042
F II	605.668	700	1	$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	2-1	176,488
F II	606.284	600	1	$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-0	176,488
F II	606.805	800	1	$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	2-2	176,488
F II	606.925	500	1	$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-1	176,488
F II	607.472	600	1	$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	0-1	176,488
F II	608.065	700	1	$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-2	176,488
F II	1702.16	10		$2s^22p^3(^4S^\circ)3p - 2s^22p^3(^2D^\circ)3d$	$^3P - ^3P^\circ$	2-2	157
F II	1704.90	100		$2s^22p^3(^4S^\circ)3p - 2s^22p^3(^2D^\circ)3d$	$^3P - ^3S^\circ$	2-1	157
F II	1744.86	100		$2s^22p^3(^4S^\circ)3s - 2s^22p^3(^2D^\circ)3p$	$^3S^\circ - ^3P$	1-0	157
F II	1745.57	200		$2s^22p^3(^4S^\circ)3s - 2s^22p^3(^2D^\circ)3p$	$^3S^\circ - ^3P$	1-1	157
F II	1747.40	300		$2s^22p^3(^4S^\circ)3s - 2s^22p^3(^2D^\circ)3p$	$^3S^\circ - ^3P$	1-2	157

Ground state $1s^22s^22p^3\ ^4S^\circ_{3/2}$

Ionization potential 505 410 cm^{-1}; 62.66 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F III	214.804	100d		$2s^22p^3 - 2s^22p^2(^3P)5d$	$g^4S^\circ - ^4P$	3/2-3/2	174,176
F III	214.865	100		$2s^22p^3 - 2s^22p^2(^3P)5d$	$g^4S^\circ - ^4P$	3/2-5/2	174,176
F III	219.277	10d		$2s^22p^3 - 2s^22p^2(^1D)5d$	$^2D^\circ - ^2D$		174,176
F III	219.588	1d		$2s^22p^3 - 2s^22p^2(^1D)5d$	$^2D^\circ - ^2F$		174,176
F III	226.051	200		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-1/2	174,176
F III	226.091	300		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-3/2	174,176
F III	226.166	400		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-5/2	174,176
F III	230.117	500		$2s^22p^3 - 2s2p^3(^5S^\circ)3p$	$g^4S^\circ - ^4P$	3/2-	174,176
F III	230.573	10		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2P$		174,176
F III	231.015	200		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2D$		174,176
F III	231.100	300		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2F$		174,176
F III	231.371	10		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2D^\circ - ^2D$		174,176
F III	240.233	50		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2P$		174,176
F III	240.550	100		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-5/2	174,176
F III	240.730	200d		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2D$		174,176
F III	240.855	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-1/2	174,176
F III	241.118	10d		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2P^\circ - ^2D$		174,176
F III	243.364	100d		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	-5/2	174,176
F III	244.698	200		$2s^22p^3 - 2s^22p^2(^1S)3d$	$^2D^\circ - ^2D$	5/2-5/2	174,176
F III	244.768	400		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-7/2	174,176
F III	245.002	300		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	3/2-5/2	174,176
F III	245.860	100d		$2s^22p^3 - 2s^22p^2(^1D)4s$	$^2D^\circ - ^2D$		174,176
F III	254.162	400		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	-5/2	174,176
F III	254.193	300		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	-3/2	174,176
F III	255.624	100		$2s^22p^3 - 2s^22p^2(^1S)3d$	$^2P^\circ - ^2D$		174,176
F III	255.725	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-1/2	174,176
F III	255.772	600		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-3/2	174,176
F III	255.865	700		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-5/2	174,176
F III	256.360	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-5/2	174,176
F III	256.525	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2P$	-1/2	174,176
F III	256.673	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2P$	-3/2	174,176
F III	256.723	10		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^2P$	3/2-3/2	174,176
F III	256.890	200		$2s^22p^3 - 2s^22p^2(^1D)4s$	$^2P^\circ - ^2D$		174,176
F III	260.313	400		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	5/2-3/2	174,176
F III	260.375	300		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	3/2-1/2	174,176
F III	260.498	300		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	5/2-3/2	174,176
F III	260.782	100		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	3/2-1/2	174,176
F III	261.716	700		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	5/2-5/2	174,176
F III	261.751	600		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	3/2-3/2	174,176
F III	263.807	800		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$		174,176
F III	270.675	400		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2S$	-1/2	174,176
F III	272.710	400		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	-3/2	174,176
F III	272.758	300		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	-1/2	174,176
F III	272.915	300		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2P^\circ - ^2P$	-3/2	174,176
F III	273.207	200		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2P^\circ - ^2P$	-1/2	174,176
F III	274.260	600		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$		174,176
F III	276.786	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	174,176
F III	276.895	400		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-3/2	174,176
F III	279.692	700		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	174,176
F III	280.010	600		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	174,176
F III	280.811	10		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4D$	5/2-7/2	174,176
F III	280.905	100		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^4D$	5/2-5/2	174,176
F III	281.207	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-1/2	174,176
F III	281.350	400		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	5/2-3/2	174,176
F III	290.848	600		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	-5/2	174,176

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F III	290.947	500		$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2D	-3/2	174,176
F III	295.365	200		$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^4D	-1/2	174,176
F III	295.405	100		$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^4D	-3/2	174,176
F III	295.710	500		$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2P	-1/2	174,176
F III	295.886	600		$2s^22p^3$ - $2s^22p^2(^3P)3d$	$^2P^\circ$ - ^2P	-3/2	174,176
F III	311.415	400		$2s^22p^3$ - $2s^22p^2(^1S)3s$	$^2P^\circ$ - ^2S	-1/2	174,176
F III	315.221	800		$2s^22p^3$ - $2s^22p^2(^3P)3s$	g^4S° - ^4P	3/2-5/2	174,176
F III	315.539	700		$2s^22p^3$ - $2s^22p^2(^3P)3s$	g^4S° - ^4P	3/2-3/2	174,176
F III	315.748	600		$2s^22p^3$ - $2s^22p^2(^3P)3s$	g^4S° - ^4P	3/2-1/2	174,176
F III	316.488	400		$2s2p^4$ - $2s2p^3(^5S^\circ)3d$	^4P - $^4D^\circ$	5/2-7/2	174,176
F III	316.823	300		$2s2p^4$ - $2s2p^3(^5S^\circ)3d$	^4P - $^4D^\circ$	3/2-5/2	174,176
F III	316.998	200		$2s2p^4$ - $2s2p^3(^5S^\circ)3d$	^4P - $^4D^\circ$	1/2-3/2	174,176
F III	322.650	800		$2s^22p^3$ - $2s^22p^2(^1D)3s$	$^2D^\circ$ - ^2D	5/2-5/2	174,176
F III	322.685	700		$2s^22p^3$ - $2s^22p^2(^1D)3s$	$^2D^\circ$ - ^2D	3/2-3/2	174,176
F III	341.924	700		$2s^22p^3$ - $2s^22p^2(^1D)3s$	$^2P^\circ$ - ^2D		174,176
F III	343.892	700		$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2D^\circ$ - ^2P	5/2-3/2	174,176
F III	343.931	400		$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2D^\circ$ - ^2P	3/2-3/2	174,176
F III	344.388	600		$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2D^\circ$ - ^2P	3/2-1/2	174,176
F III	365.874	700		$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2P^\circ$ - ^2P	-3/2	174,176
F III	366.391	600		$2s^22p^3$ - $2s^22p^2(^3P)3s$	$^2P^\circ$ - ^2P	-1/2	174,176
F III	378.563	100		$2s2p^4$ - $2s2p^3(^3D^\circ)3s$	^2D - $^2D^\circ$	3/2-3/2	174,176
F III	378.603	200		$2s2p^4$ - $2s2p^3(^3D^\circ)3s$	^2D - $^2D^\circ$	5/2-5/2	174,176
F III	395.442	300		$2s2p^4$ - $2s2p^3(^5S^\circ)3s$	^4P - $^4S^\circ$	5/2-3/2	174,176
F III	395.968	200		$2s2p^4$ - $2s2p^3(^5S^\circ)3s$	^4P - $^4S^\circ$	3/2-3/2	174,176
F III	396.247	100		$2s2p^4$ - $2s2p^3(^5S^\circ)3s$	^4P - $^4S^\circ$	1/2-3/2	174,176
F III	429.511	650		$2s^22p^3$ - $2s2p^4$	$^2D^\circ$ - ^2P	3/2-1/2	174,176
F III	430.154	700		$2s^22p^3$ - $2s2p^4$	$^2D^\circ$ - ^2P	5/2-3/2	174,176
F III	430.218	500		$2s^22p^3$ - $2s2p^4$	$^2D^\circ$ - ^2P	3/2-3/2	174,176
F III	464.284	600		$2s^22p^3$ - $2s2p^4$	$^2P^\circ$ - ^2P	-1/2	174,176
F III	465.113	650		$2s^22p^3$ - $2s2p^4$	$^2P^\circ$ - ^2P	-3/2	174,176
F III	508.384	900		$2s^22p^3$ - $2s2p^4$	$^2P^\circ$ - ^2S	-1/2	174,176
F III	522.288	300		$2s2p^4$ - $1s^22p^5$	^2D - $^2P^\circ$	3/2-1/2	174,176
F III	523.661	400		$2s2p^4$ - $1s^22p^5$	^2D - $^2P^\circ$	5/2-3/2	174,176
F III	567.629	500		$2s^22p^3$ - $2s2p^4$	$^2D^\circ$ - ^2D	5/2-3/2	174,176
F III	567.676	700		$2s^22p^3$ - $2s2p^4$	$^2D^\circ$ - ^2D	5/2-5/2	174,176
F III	567.737	650		$2s^22p^3$ - $2s2p^4$	$^2D^\circ$ - ^2D	3/2-3/2	174,176
F III	567.794	500		$2s^22p^3$ - $2s2p^4$	$^2D^\circ$ - ^2D	3/2-5/2	174,176
F III	630.131	600		$2s^22p^3$ - $2s2p^4$	$^2P^\circ$ - ^2D	-3/2	174,176
F III	630.194	700		$2s^22p^3$ - $2s2p^4$	$^2P^\circ$ - ^2D	-5/2	174,176
F III	656.125	700		$2s^22p^3$ - $2s2p^4$	g^4S° - ^4P	3/2-1/2	174,176
F III	656.878	750		$2s^22p^3$ - $2s2p^4$	g^4S° - ^4P	3/2-3/2	174,176
F III	658.337	800		$2s^22p^3$ - $2s2p^4$	g^4S° - ^4P	3/2-5/2	174,176
F III	742.69	100		$2s2p^4$ - $1s^22p^5$	^2P - $^2P^\circ$	3/2-3/2	174,176
F III	1071.66	10		$2s^22p^2(^3P)3p$ - $2s^22p^2(^3P)4d$	$^4D^\circ$ - ^4P	5/2-3/2	042
F III	1099.10	10		$2s^22p^2(^3P)3p$ - $2s^22p^2(^3P)4d$	$^4P^\circ$ - ^4P	3/2-3/2	042
F III	1101.55	10		$2s^22p^2(^3P)3p$ - $2s^22p^2(^3P)4d$	$^4P^\circ$ - ^4P	5/2-3/2	042
F III	1103.64	10		$2s^22p^2(^3P)3p$ - $2s^22p^2(^3P)4d$	$^4P^\circ$ - ^4P	5/2-5/2	042

Ground state $1s^22s^22p^2\ ^3P_0$

Ionization potential 703 020 cm^{-1}; 87.16 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F IV	140.781	1		$2s^22p^2 - 2s2p^2(^4P)5p$	$g^3P - ^3D°$		173,176
F IV	140.816	1		$2s^22p^2 - 2s2p^2(^4P)5p$	$g^3P - ^3D°$	2-3	173,176
F IV	150.335	10		$2s^22p^2 - 2s2p^2(^4P)4p$	$g^3P - ^3P°$		173,176
F IV	150.422	10		$2s^22p^2 - 2s2p^2(^4P)4p$	$g^3P - ^3P°$	2-2	173,176
F IV	150.977	100		$2s^22p^2 - 2s2p^2(^4P)4p$	$g^3P - ^3D°$		173,176
F IV	151.005	100		$2s^22p^2 - 2s2p^2(^4P)4p$	$g^3P - ^3D°$	2-3	173,176
F IV	151.079	1		$2s^22p^2 - 2s2p^2(^4P)4p$	$g^3P - ^3D°$	2-2	173,176
F IV	152.997	1		$2s^22p^2 - 2s^22p(^2P°)6d$	$g^3P - ^3P°$	1-	173,176
F IV	153.102	10		$2s^22p^2 - 2s^22p(^2P°)6d$	$g^3P - ^3P°$	2-2	173,176
F IV	153.141	10		$2s^22p^2 - 2s^22p(^2P°)6d$	$g^3P - ^3D°$	2-3	173,176
F IV	155.624	10		$2s2p^3 - 2s2p^2(^4P)5d$	$^5S° - ^5P$	2-	173,176
F IV	155.673	10		$2s2p^3 - 2s2p^2(^4P)5d$	$^5S° - ^5P$	2-3	173,176
F IV	158.398	10		$2s^22p^2 - 2s^22p(^2P°)5d$	$g^3P - ^3P°$	1-	173,176
F IV	158.601	100		$2s^22p^2 - 2s^22p(^2P°)5d$	$g^3P - ^3D°$	2-3	173,176
F IV	158.925	100		$2s^22p^2 - 2s^22p(^2P°)6d$	$^1D - ^1F°$	2-3	173,176
F IV	164.612	200		$2s^22p^2 - 2s^22p(^2P°)5d$	$^1D - ^1F°$	2-3	173,176
F IV	165.350	10		$2s^22p^2 - 2s^22p(^2P°)5d$	$^1D - ^1D°$	2-2	173,176
F IV	165.479	1		$2s^22p^2 - 2s^22p(^2P°)5d$	$^1D - ^3F°$	2-2	173,176
F IV	166.444	200		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S° - ^5P$	2-2	173,176
F IV	166.499	200		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S° - ^5P$	2-3	173,176
F IV	168.450	200		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1P°$	2-1	173,176
F IV	169.166	200		$2s2p^3 - 2s2p^2(^2D)4d$	$^3D° - ^3F$		173,176
F IV	169.481	100		$2s^22p^2 - 2s^22p(^2P°)4d$	$g^3P - ^3P°$	1-0	173,176
F IV	169.502	100		$2s^22p^2 - 2s^22p(^2P°)4d$	$g^3P - ^3P°$	1-1	173,176
F IV	169.610	100		$2s^22p^2 - 2s^22p(^2P°)4d$	$g^3P - ^3P°$	2-1	173,176
F IV	169.661	200		$2s^22p^2 - 2s^22p(^2P°)4d$	$g^3P - ^3P°$	2-2	173,176
F IV	169.748	200		$2s^22p^2 - 2s^22p(^2P°)4d$	$g^3P - ^3D°$	0-1	173,176
F IV	169.790	300		$2s^22p^2 - 2s^22p(^2P°)4d$	$g^3P - ^3D°$	1-2	173,176
F IV	169.839	300		$2s^22p^2 - 2s^22p(^2P°)4d$	$g^3P - ^3D°$	2-3	173,176
F IV	170.187	200		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1D°$	2-2	173,176
F IV	171.066	300		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1F°$	2-3	173,176
F IV	172.653	10		$2s^22p^2 - 2s^22p(^2P°)5d$	$^1S - ^1P°$	0-1	173,176
F IV	175.033	10		$2s2p^3 - 2s2p^2(^4P)4s$	$^5S° - ^5P$	2-3	173,176
F IV	175.132	1		$2s2p^3 - 2s2p^2(^4P)4s$	$^5S° - ^5P$	2-2	173,176
F IV	176.110	10					173,176
F IV	176.367	400		$2s^22p^2 - 2s^22p(^2P°)4d$	$^1D - ^1F°$	2-3	173,176
F IV	177.971	200		$2s^22p^2 - 2s^22p(^2P°)4d$	$^1D - ^1D°$	2-2	173,176
F IV	178.126	100		$2s^22p^2 - 2s^22p(^2P°)4d$	$^1D - ^3F°$	2-2	173,176
F IV	178.540	100		$2s^22p^2 - 2s^22p(^2P°)4s$	$g^3P - ^3P°$	1-2	173,176
F IV	178.670	300		$2s^22p^2 - 2s^22p(^2P°)4s$	$g^3P - ^3P°$	2-2	173,176
F IV	178.724	100		$2s^22p^2 - 2s^22p(^2P°)4s$	$g^3P - ^3P°$	1-0	173,176
F IV	178.805	100		$2s^22p^2 - 2s^22p(^2P°)4s$	$g^3P - ^3P°$	2-1	173,176
F IV	179.827	100		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P°$	1-2	173,176
F IV	179.907	1		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P°$	1-1	173,176
F IV	179.943	200		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P°$	2-2	173,176
F IV	180.029	10		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P°$	2-1	173,176
F IV	181.521	400		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D°$	1-2	173,176
F IV	181.571	400		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D°$	2-3	173,176
F IV	181.655	200		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D°$	2-2	173,176
F IV	185.484	300		$2s^22p^2 - 2s^22p(^2P°)4d$	$^1S - ^1P°$	0-1	173,176
F IV	186.558	100		$2s^22p^2 - 2s^22p(^2P°)4s$	$^1D - ^1P°$	2-1	173,176
F IV	187.105	200		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S°$	1-1	173,176
F IV	187.240	300		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S°$	2-1	173,176
F IV	187.916	100		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D° - ^3D$	3-3	173,176
F IV	188.004	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D° - ^3D$		173,176

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F IV	188.656	200		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	3-4	173,176
F IV	188.758	100		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	2-3	173,176
F IV	188.834	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	1-2	173,176
F IV	196.351	400		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-1	173,176
F IV	196.390	500		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-2	173,176
F IV	196.448	600		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-3	173,176
F IV	196.968	100		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$^1S - ^1P^\circ$	0-1	173,176
F IV	197.108	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5D$	2-3	173,176
F IV	199.004	300		$2s2p^3 - 2s2p^2(^2D)3d$	$^3D^\circ - ^3D$	3-3	173,176
F IV	199.086	300		$2s2p^3 - 2s2p^2(^2D)3d$	$^3D^\circ - ^3D$		173,176
F IV	199.607	100		$2s2p^3 - 2s2p^2(^2D)3d$	$^3D^\circ - ^3P$	3-2	173,176
F IV	199.761	500		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	0-1	173,176
F IV	199.804	500		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-0	173,176
F IV	199.849	500		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-1	173,176
F IV	199.934	500		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-2	173,176
F IV	200.001	500		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-1	173,176
F IV	200.089	700		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-2	173,176
F IV	201.011	600		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	0-1	173,176
F IV	201.063	700		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-2	173,176
F IV	201.101	600		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-1	173,176
F IV	201.160	800		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-3	173,176
F IV	201.222	600		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-2	173,176
F IV	201.465	400		$2s2p^3 - 2s2p^2(^2D)3d$	$^3D^\circ - ^3F$		173,176
F IV	202.989	10		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^1D^\circ$	1-2	173,176
F IV	203.152	100		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3F^\circ$	2-3	173,176
F IV	208.254	900		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	173,176
F IV	208.549	200		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3S$	-1	173,176
F IV	210.480	100		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3D$	2-3	173,176
F IV	210.545	100		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3D$		173,176
F IV	211.152	10		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3P$	2-2	173,176
F IV	213.848	700		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	173,176
F IV	214.062	700		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^3F^\circ$	2-2	173,176
F IV	220.765	700		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1S - ^1P^\circ$	0-1	173,176
F IV	223.394	300		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3D$	3-3	173,176
F IV	223.456	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3D$	2-2	173,176
F IV	223.497	100		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3D$	-1	173,176
F IV	226.944	600		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3F$	3-4	173,176
F IV	227.079	300		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3F$	3-3	173,176
F IV	227.101	500		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3F$	2-3	173,176
F IV	227.211	400		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3F$	1-2	173,176
F IV	228.496	1		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3P$	1-0	173,176
F IV	228.552	10		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3P$	2-1	173,176
F IV	228.645	100		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3P$	3-2	173,176
F IV	229.261	200					173,176
F IV	233.159	200		$2s2p^3 - 2s2p^2(^2D)3d$	$^1D^\circ - ^1D$	2-2	173,176
F IV	233.222	600		$2s2p^3 - 2s2p^2(^4P)3s$	$^5S^\circ - ^5P$	2-3	173,176
F IV	233.297	200		$2s2p^3 - 2s2p^2(^2D)3d$	$^1D^\circ - ^1F$	2-3	173,176
F IV	233.393	500		$2s2p^3 - 2s^2p^2(^4P)3s$	$^5S^\circ - ^5P$	2-2	173,176
F IV	233.526	400		$2s2p^3 - 2s2p^2(^4P)3s$	$^5S^\circ - ^5P$	2-1	173,176
F IV	237.913	300		$2s2p^3 - 2s2p^2(^2D)3s$	$^3D^\circ - ^3D$	3-3	173,176
F IV	237.955	400		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3D$	2-3	173,176
F IV	238.012	300		$2s2p^3 - 2s2p^2(^2D)3s$	$^3D^\circ - ^3D$	-2	173,176
F IV	238.042	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3D$	-1	173,176
F IV	238.099	100		$2s2p^3 - 2s2p^2(^2D)3s$	$^3D^\circ - ^3D$	-1	173,176
F IV	239.856	700		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-2	173,176
F IV	240.017	700		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	0-1	173,176
F IV	240.079	900		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-2	173,176
F IV	240.146	700		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-1	173,176
F IV	240.275	700		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-0	173,176
F IV	240.371	700		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-1	173,176

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Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F IV	243.736	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	1-0	173,176
F IV	243.796	300		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	1-1	173,176
F IV	243.922	400		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	2-2	173,176
F IV	249.228	100		$2s2p^3 - 2s2p^2(^2D)3d$	$^1P^\circ - ^1P$	1-1	173,176
F IV	249.744	10		$2s2p^3 - 2s2p^2(^2D)3d$	$^1P^\circ - ^1D$	1-2	173,176
F IV	251.026	1000		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$^1D - ^1P^\circ$	2-1	173,176
F IV	254.491	200		$2s2p^3 - 2s2p^2(^2D)3s$	$^3P^\circ - ^3D$	2-3	173,176
F IV	254.595	100		$2s2p^3 - 2s2p^2(^2D)3s$	$^3P^\circ - ^3D$	1-2	173,176
F IV	254.681	10		$2s2p^3 - 2s2p^2(^2D)3s$	$^3P^\circ - ^3D$	0-1	173,176
F IV	268.785	400		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	3-2	173,176
F IV	268.817	100		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	2-2	173,176
F IV	269.076	300		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	2-1	173,176
F IV	269.225	200		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	1-0	173,176
F IV	270.225	600		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	173,176
F IV	279.834	300		$2s2p^3 - 2s2p^2(^2D)3s$	$^1D^\circ - ^1D$	2-2	173,176
F IV	287.994	1		$2s2p^3 - 2s2p^2(^4P)3d$	$^3S^\circ - ^3P$	1-0	173,176
F IV	288.078	10		$2s2p^3 - 2s2p^2(^4P)3d$	$^3S^\circ - ^3P$	1-1	173,176
F IV	288.267	100		$2s2p^3 - 2s2p^2(^4P)3d$	$^3S^\circ - ^3P$	1-2	173,176
F IV	290.147	400		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	2-2	173,176
F IV	290.440	300		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	-1	173,176
F IV	290.461	200		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	0-1	173,176
F IV	290.608	200		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	1-0	173,176
F IV	319.695	300		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3D^\circ - ^3P$	3-2	173,176
F IV	319.740	10		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3D^\circ - ^3P$	2-2	173,176
F IV	320.004	200		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3D^\circ - ^3P$	-1	173,176
F IV	320.192	100		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3D^\circ - ^3P$	1-0	173,176
F IV	328.213	10		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3D^\circ - ^3D$	3-3	173,176
F IV	355.045	200		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	2-1	173,176
F IV	360.635	100		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-3	173,176
F IV	361.208	10		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	1-2	173,176
F IV	419.644	900		$2s^22p^2 - 2s2p^3$	$g^3P - ^3S^\circ$	0-1	173,176
F IV	420.041	950		$2s^22p^2 - 2s2p^3$	$g^3P - ^3S^\circ$	1-1	173,176
F IV	420.727	1000		$2s^22p^2 - 2s2p^3$	$g^3P - ^3S^\circ$	2-1	173,176
F IV	430.758	950		$2s^22p^2 - 2s2p^3$	$^1D - ^1P^\circ$	2-1	173,176
F IV	490.566	800		$2s^22p^2 - 2s2p^3$	$^1S - ^1P^\circ$	0-1	173,176
F IV	490.997	1000		$2s^22p^2 - 2s2p^3$	$^1D - ^1D^\circ$	2-2	173,176
F IV	497.363	500		$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	1-0	173,176
F IV	497.802	600		$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	2-1	173,176
F IV	497.842	400		$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	1-1	173,176
F IV	498.790	700		$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	3-2	173,176
F IV	498.911	400		$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	2-2	173,176
F IV	570.636	900		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	0-1	173,176
F IV	571.302	900		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	1-0	173,176
F IV	571.384	950		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	1-	173,176
F IV	572.657	1000		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	2-2	173,176
F IV	575.633	200		$2s2p^3 - 1s^22p^4$	$^3P^\circ - ^3P$	1-0	173,176
F IV	576.266	300		$2s2p^3 - 1s^22p^4$	$^3P^\circ - ^3P$	-1	173,176
F IV	576.349	200		$2s2p^3 - 1s^22p^4$	$^3P^\circ - ^3P$	0-1	173,176
F IV	577.737	400		$2s2p^3 - 1s^22p^4$	$^3P^\circ - ^3P$	2-2	173,176
F IV	676.130	850		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	0-1	173,176
F IV	677.154	800		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	1-1	173,176
F IV	677.224	950		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	1-2	173,176
F IV	679.003	800		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	2-2	173,176
F IV	679.217	1000		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	2-3	173,176

Ground state $1s^22s^22p\ ^2P^\circ_{1/2}$

Ionization potential 921 450 cm^{-1}; 114.24 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F V	119.986	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	½-3½	172,176
F V	120.032	15		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	3½-5½	172,176
F V	122.042	10		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4D^\circ$	5½-7½	176
F V	123.665	10		$2s^2(^1S)2p - 2s^2(^1S)5d$	$g^2P^\circ - ^2D$	½-3½	172,176
F V	123.774	100		$2s^2(^1S)2p - 2s^2(^1S)5d$	$g^2P^\circ - ^2D$	3½-5½	172,176
F V	131.516	10		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2S$	½-½	172,176
F V	131.638	10		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2S$	3½-½	172,176
F V	132.207	10		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3½-5½	172,176
F V	132.310	100		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	5½-5½	172,176
F V	132.453	200		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	½-	172,176
F V	132.484	300		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	3½-5½	172,176
F V	132.511	300		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5½-7½	172,176
F V	132.699	100d		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	½-3½	172,176
F V	132.819	200		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	3½-3½	172,176
F V	133.082	10		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2D$	½-3½	172,176
F V	133.208	100		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2D$	3½-5½	172,176
F V	133.599	110		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	3½-3½	172,176
F V	133.662	100		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	5½-3½	172,176
F V	134.407	400		$2s^22p - 2s^24d$	$g^2P^\circ - ^2D$	½-3½	172,176
F V	134.539	500		$2s^22p - 2s^24d$	$g^2P^\circ - ^2D$	3½-5½	172,176
F V	135.621	1		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4P^\circ$		172,176
F V	135.692	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	5½-5½	172,176
F V	136.902	300		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4D^\circ$	5½-7½	172,176
F V	136.955	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4D$	5½-5½	172,176
F V	138.181	100d		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5½-5½	176
F V	138.256	10d		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$		176
F V	140.266	10		$2s^22p - 2s^24s$	$g^2P^\circ - ^2S$	½-½	172,176
F V	140.414	100		$2s^22p - 2s^24s$	$g^2P^\circ - ^2S$	3½-½	172,176
F V?	142.422	100					176
F V?	143.794	10					176
F V	143.897	100		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2F^\circ$	5½-7½	172,176
F V	143.965	15		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2F^\circ$	3½-5½	172,176
F V?	144.445	10					176
F V?	144.478	1					176
F V	144.637	100		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2D - ^2F^\circ$	5½-7½	176
F V	144.673	90		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2D - ^2F^\circ$	3½-5½	176
F V	145.177	100d		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2D^\circ$	5½-5½	172,176
F V	145.392	200		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	½-½	172,176
F V	145.547	300		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	3½-½	172,176
F V	147.946	400		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	½-3½	172,176
F V	148.002	500		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	3½-5½	172,176
F V	148.108	100		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	3½-3½	172,176
F V	152.339	200		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	½-3½	172,176
F V	152.391	300		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	½-½	172,176
F V	152.511	400		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3½-3½	172,176
F V	152.563	200		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3½-½	172,176
F V	157.515	100d		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2D^\circ$		172,176
F V	158.537	400		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2F^\circ$		172,176
F V	159.558	1		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2P - ^2D^\circ$	½-3½	172,176
F V	159.658	10		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2P - ^2D^\circ$	3½-5½	172,176
F V	162.013	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	½-½	172,176
F V	162.053	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	½-3½	172,176
F V	162.082	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3½-½	172,176
F V	162.121	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3½-3½	172,176
F V	162.172	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3½-5½	172,176

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F V	162.215	300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4P^\circ$	5/2-3/2	172,176
F V	162.270	400		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4P^\circ$	5/2-5/2	172,176
F V	163.456	300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	1/2-3/2	172,176
F V	163.501	400		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	3/2-5/2	172,176
F V	163.558	500		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	5/2-7/2	172,176
F V	163.596	200		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - ^4D	5/2-5/2	172,176
F V	165.983	900		$2s^22p$ - $2s^23d$	g^2P° - ^2D	1/2-3/2	172,176
F V	166.177	1000		$2s^22p$ - $2s^23d$	g^2P° - ^2D	3/2-5/2	172,176
F V	167.858	100		$2s2p^2$ - $2s2p(^1P^\circ)3d$	^2S - $^2P^\circ$	1/2-	172,176
F V	171.214	10		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^4S^\circ$ - ^4P	3/2-1/2	172,176
F V	171.241	100		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^4S^\circ$ - ^4P	3/2-3/2	172,176
F V	171.302	200		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^4S^\circ$ - ^4P	3/2-5/2	172,176
F V	173.020	100		$2s2p^2$ - $2s2p(^1P^\circ)3d$	^2P - $^2P^\circ$	3/2-	172,176
F V	173.656	10		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2D^\circ$ - ^2P	5/2-3/2	176
F V	173.714	10		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2D^\circ$ - ^2P	3/2-1/2	176
F V	174.490	300		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2D^\circ$ - ^2F	5/2-	172,176
F V	174.513	300		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2D^\circ$ - ^2F	3/2-	172,176
F V	174.568	300		$2s2p^2$ - $2s2p(^1P^\circ)3d$	^2P - $^2D^\circ$	1/2-3/2	172,176
F V	174.698	400		$2s2p^2$ - $2s2p(^1P^\circ)3d$	^2P - $^2D^\circ$	3/2-5/2	172,176
F V	176.472	10		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2D^\circ$ - ^2D		172,176
F V	178.434	500		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2F^\circ$	5/2-7/2	172,176
F V	178.590	400		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2F^\circ$	3/2-5/2	172,176
F V	178.612	300		$2s2p^2$ - $2s2p(^1P^\circ)3s$	^2D - $^2P^\circ$		172,176
F V	182.979	400		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2D^\circ$	5/2-5/2	172,176
F V	183.016	300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2D^\circ$	3/2-3/2	172,176
F V	183.208	10		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^2D^\circ$ - ^2P	5/2-3/2	172,176
F V?	184.232	10					176
F V?	184.282	1					176
F V	186.715	400		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	3/2-5/2	172,176
F V	186.788	400		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	1/2-3/2	172,176
F V	186.842	500		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	5/2-5/2	172,176
F V	186.879	300		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	3/2-3/2	172,176
F V	186.968	400		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	3/2-1/2	172,176
F V	187.008	400		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^4P - $^4P^\circ$	5/2-3/2	172,176
F V	189.943	200		$1s^22p^3$ - $1s^22p^2(^1D)3d$	$^2P^\circ$ - ^2D		172,176
F V	190.571	600		$2s^22p$ - $2s^23s$	g^2P° - ^2S	1/2-1/2	172,176
F V	190.839	700		$2s^22p$ - $2s^23s$	g^2P° - ^2S	3/2-1/2	172,176
F V	191.892	300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2S - $^2P^\circ$	1/2-1/2	172,176
F V	191.973	400		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2S - $^2P^\circ$	1/2-3/2	172,176
F V	194.108	300		$2s2p^2$ - $2s2p(^1P^\circ)3s$	^2S - $^2P^\circ$	1/2-	172,176
F V	196.713	200		$1s^22p^3$ - $1s^22p^2(^3P)3s$	$^4S^\circ$ - ^4P	3/2-5/2	176
F V	196.870	100		$1s^22p^3$ - $1s^22p^2(^3P)3s$	$^4S^\circ$ - ^4P	3/2-3/2	176
F V	197.615	1		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^2P^\circ$ - ^2P	-1/2	172,176,487
F V	197.780	10		$1s^22p^3$ - $1s^22p^2(^3P)3d$	$^2P^\circ$ - ^2P	3/2-3/2	172,176,487
F V	198.476	100		$1s^22p^3$ - $1s^22p^2(^1D)3s$	$^2D^\circ$ - ^2D		172,176
F V	198.765	1		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2P^\circ$	3/2-3/2	172,176
F V?	200.335	10					172,176
F V	200.861	100		$2s2p^2$ - $2s2p(^1P^\circ)3s$	^2P - $^2P^\circ$	1/2-	172,176
F V	205.552	400		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^2D - $^2P^\circ$	5/2-3/2	172,176
F V	205.778	300		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^2D - $^2P^\circ$	3/2-1/2	172,176
F V	206.430	200		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - $^2D^\circ$	1/2-3/2	172,176
F V	206.594	300		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2P - ^2D	3/2-5/2	172,176
F V	215.676	10		$1s^22p^3$ - $1s^22p^2(^1D)3s$	$^2P^\circ$ - ^2D		172,176
F V?	217.893	10					172,176
F V?	218.052	1					172,176
F V	223.999	1		$1s^22p^3$ - $2s2p(^1P^\circ)3p$	$^2D^\circ$ - ^2P	5/2-3/2	172,176
F V	226.341	200		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^2S - $^2P^\circ$	1/2-3/2	172,176
F V	226.608	90		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^2S - $^2P^\circ$	1/2-1/2	172,176
F V	235.840	100		$2s2p^2$ - $2s2p(^3P^\circ)3s$	^2P - $^2P^\circ$	3/2-3/2	172,176
F V	242.324	300		$2s2p^2$ - $2s^2(^1S)3p$	^2D - $^2P^\circ$	5/2-3/2	172,176

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F V	242.439	200		$2s2p^2 - 2s^2(^1S)3p$	$^2D - ^2P^\circ$	3/2-1/2	172,176
F V	464.370	650		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	1/2-3/2	172,176
F V	465.374	700		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	1/2-1/2	172,176
F V	465.978	750		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	3/2-3/2	172,176
F V	466.995	650		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	3/2-1/2	172,176
F V	506.163	850		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2S$	1/2-1/2	172,176
F V	508.079	900		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2S$	3/2-1/2	172,176
F V	513.975	700		$2s2p^2 - 1s^22p^3$	$^2D - ^2P^\circ$	5/2-3/2	172,176
F V	514.087	600		$2s2p^2 - 1s^22p^3$	$^2D - ^2P^\circ$	3/2-1/2	172,176
F V	524.597	600		$2s2p^2 - 1s^22p^3$	$^4P - ^4S^\circ$	1/2-3/2	172,176
F V	525.292	650		$2s2p^2 - 1s^22p^3$	$^4P - ^4S^\circ$	3/2-3/2	172,176
F V	526.298	700		$2s2p^2 - 1s^22p^3$	$^4P - ^4S^\circ$	5/2-3/2	172,176
F V	647.771	500		$2s2p^2 - 1s^22p^3$	$^2D - ^2D^\circ$	3/2-3/2	172,176
F V	647.879	600		$2s2p^2 - 1s^22p^3$	$^2D - ^2D^\circ$	5/2-5/2	172,176
F V	654.034	600		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	1/2-3/2	172,176
F V	657.220	200		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	3/2-3/2	172,176
F V	657.335	400		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	3/2-5/2	172,176
F V	667.23	300		$2s2p^2 - 1s^22p^3$	$^2S - ^2P^\circ$	1/2-3/2	172,176
F V	757.08	400		$2s2p^2 - 1s^22p^3$	$^2P - ^2P^\circ$	3/2-3/2	172,176
F V	1088.41	100		$2s2p^2 - 1s^22p^3$	$^2P - ^2D^\circ$	3/2-5/2	172,176

Ground state $1s^22s^2\ ^1S_0$

Ionization potential 1 267 581 cm^{-1}; 157.156 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F VI	99.044	10		2s2p - 2s5d	$^3P^\circ - ^3D$		171,176
F VI	99.105	15		2s2p - 2s5d	$^3P^\circ - ^3D$	2-3	171,176
F VI	99.203	10		$2s^2$ - 2s4p	$g^1S - ^1P^\circ$	0-1	171,176
F VI	108.975	100		2s2p - 2s4d	$^3P^\circ - ^3D$		171,176
F VI	109.040	150		2s2p - 2s4d	$^3P^\circ - ^3D$	2-3	171,176
F VI	113.840	10d		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^3P - ^3D^\circ$	2-3	171,176
F VI	116.094	10		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	171,176
F VI	120.116	100		2s2p - 2s4d	$^1P^\circ - ^1D$	1-2	171,176
F VI	122.122	100		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$		171,176
F VI	122.169	10		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	1-1	171,176
F VI	122.200	200		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-2	171,176
F VI	122.251	15		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-1	171,176
F VI	123.051	10		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	0-1	171,176
F VI	123.090	10		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	1-1	171,176
F VI	123.175	100		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	2-1	171,176
F VI	124.387	300d		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$		171,176
F VI	124.440	10		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	1-1	171,176
F VI	124.474	10		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-2	171,176
F VI	126.923	500		$2s^2$ - 2s3p	$g^1S - ^1P^\circ$	0-1	171,176
F VI	135.397	300		$2s(^2S)2p - 2p(^2P^\circ)3p$	$^1P^\circ - ^1D$	1-2	171,176
F VI	139.758	500		2s2p - 2s3d	$^3P^\circ - ^3D$	0-1	171,176
F VI	139.800	600		2s2p - 2s3d	$^3P^\circ - ^3D$	1-2	171,176
F VI	139.900	700		2s2p - 2s3d	$^3P^\circ - ^3D$	2-3	171,176
F VI	141.154	200		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1P$	1-1	171,176
F VI	145.462	100		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	0-1	171,176
F VI	145.489	100		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-0	171,176
F VI	145.585	100		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-2	171,176
F VI	145.630	100		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-1	171,176
F VI	145.691	300		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-2	171,176
F VI	146.576	200		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	0-1	171,176
F VI	146.613	300		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-2	171,176
F VI	146.676	400		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-3	171,176
F VI	146.718	200		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-2	171,176
F VI	148.653	400		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	171,176
F VI	153.678	200		2s2p - 2s3s	$^3P^\circ - ^3S$	0-1	171,176
F VI	153.741	300		2s2p - 2s3s	$^3P^\circ - ^3S$	1-1	171,176
F VI	153.880	400		2s2p - 2s3s	$^3P^\circ - ^3S$	2-1	171,176
F VI	154.506	300		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	171,176
F VI	156.247	600		2s2p - 2s3d	$^1P^\circ - ^1D$	1-2	171,176
F VI	161.174	120		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	1-2	171,176
F VI	161.257	100		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	0-1	171,176
F VI	161.308	300		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	2-2	171,176
F VI	161.341	90		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	1-1	171,176
F VI	161.414	100		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	1-0	171,176
F VI	161.477	120		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	2-1	171,176
F VI	163.138	200					171,176
F VI	164.015	100		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^1D - ^1P^\circ$	2-1	171,176
F VI	173.145	100		2s2p - 2s3s	$^1P^\circ - ^1S$	1-0	171,176
F VI	194.840	100		$1s^22p^2$ - 2s3p	$^1D - ^1P^\circ$	2-1	171,176
F VI	535.204	1000		$2s^2$ - 2s2p	$g^1S - ^1P^\circ$	0-1	171,176
F VI	643.98	700		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	1-2	171,176
F VI	645.02	600		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	0-1	171,176
F VI	646.10	500		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	1-1	171,176
F VI	646.36	800		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	2-2	171,176
F VI	647.31	600		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	1-0	171,176
F VI	648.50	700		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	2-1	171,176
F VI	1139.60	200		$2s2p - 1s^22p^2$	$^1P^\circ - ^1D$	1-2	171,176

Ground state $1s^22s\ ^2S_{1/2}$

Ionization potential 1 493 656 cm^{-1}; 185.185 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F VII	86.728	10		$1s^22s - 1s^24p$	$g^2S - {}^2P^\circ$	½-	171,176
F VII	95.697	10		$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	½-3/2	171,176
F VII	95.775	100		$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	3/2-5/2	171,176
F VII	112.935	400		$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-3/2	171,176
F VII	112.976	300		$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-½	171,176
F VII	127.653	400		$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	½-3/2	171,176
F VII	127.796	500		$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	3/2-5/2	171,176
F VII	134.703	100		$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	½-½	171,176
F VII	134.882	200		$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	3/2-½	171,176
F VII	883.097			$1s^22s - 1s^22p$	$g^2S - {}^2P^\circ$	½-3/2	071
F VII	890.762			$1s^22s - 1s^22p$	$g^2S - {}^2P^\circ$	½-½	071

Ground state $1s^2\ ^1S_0$

Ionization potential 7 693 400 cm^{-1}; 953.84 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F VIII	13.780			$1s^2$ - 1s4p	$g\,^1S$ - $^1P^\circ$	0-1	236
F VIII	14.458			$1s^2$ - 1s3p	$g\,^1S$ - $^1P^\circ$	0-1	236,764
F VIII	16.807			$1s^2$ - 1s2p	$g\,^1S$ - $^1P^\circ$	0-1	236,764
F VIII	16.951			$1s^2$ - 1s2p	$g\,^1S$ - $^3P^\circ$	0-1	764
F VIII	98.707	10		1s2p - 1s3d	$^3P^\circ$ - ^3D		164
F VIII	98.799	10		1s2p - 1s3d	$^3P^\circ$ - ^3D	2-3	164

Ground state 1s $^2S_{1/2}$

Ionization potential 8 897 241 cm^{-1}; 1103.09 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
F IX	11.560	P		1s - 6p	$g^2S - {}^2P^\circ$	½-	309
F IX	11.707	P		1s - 5p	$g^2S - {}^2P^\circ$	½-	309
F IX	11.988	P		1s - 4p	$g^2S - {}^2P^\circ$	½-	309
F IX	12.644	P		1s - 3p	$g^2S - {}^2P^\circ$	½-	309
F IX	14.984	P		1s - 2p	$g^2S - {}^2P^\circ$	½-	309
F IX	48.96	P		2 - 7			309
F IX	50.58	P		2 - 6			309
F IX	53.53	P		2 - 5			309
F IX	59.95	P		2 - 4			309
F IX	80.91	P		2 - 3			309
F IX	123.97	P		3 - 7			309
F IX	134.94	P		3 - 6			309
F IX	158.12	P		3 - 5			309
F IX	231.3	P		3 - 4			309
F IX	267.19	P		4 - 7			309
F IX	323.9	P		4 - 6			309
F IX	499.8	P		4 - 5			309
F IX	574.1	P		5 - 7			309
F IX	920.3	P		5 - 6			309
F IX	1526.3	P		6 - 7			309

Ground state $1s^2 2s^2 2p^6\ ^1S_0$

Ionization potential 173 931.7 cm^{-1}; 21.564 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne I	578.82			$2p^6 - 2p^5(^2P^o)11s$	$g^1S - 3/2[3/2]^o$	0-1	703,487
Ne I	579.75			$2p^6 - 2p^5(^2P^o)10s$	$g^1S - 3/2[3/2]^o$	0-1	703,487
Ne I	580.50			$2p^6 - 2p^5(^2P^o)8s$	$g^1S - 1/2[1/2]^o$	0-1	703,487
Ne I	581.14			$2p^6 - 2p^5(^2P^o)9s$	$g^1S - 3/2[3/2]^o$	0-1	703,487
Ne I	582.46			$2p^6 - 2p^5(^2P^o)7d$	$g^1S - 3/2[3/2]^o$	0-1	703,487
Ne I	585.25			$2p^6 - 2p^5(^2P^o)6d$	$g^1S - 3/2[3/2]^o$	0-1	703,487
Ne I	586.30			$2p^6 - 2p^5(^2P^o)7s$	$g^1S - 3/2[3/2]^o$	0-1	703,487
Ne I	587.20	35		$2p^6 - 2p^5(^2P^o)5d$	$g^1S - 1/2[3/2]^o$	0-1	057,487
Ne I	589.16	35		$2p^6 - 2p^5(^2P^o)6s$	$g^1S - 1/2[1/2]^o$	0-1	057,487
Ne I	589.92	35b		$2p^6 - 2p^5(^2P^o)5d$	$g^1S - 3/2[3/2]^o$	0-1	057,487
Ne I	591.82	70		$2p^6 - 2p^5(^2P^o)6s$	$g^1S - 3/2[3/2]^o$	0-1	057,487
Ne I	595.919	100		$2p^6 - 2p^5(^2P^o)4d$	$g^1S - 1/2[3/2]^o$	0-1	197,057,487
Ne I	598.705	75		$2p^6 - 2p^5(^2P^o)4d$	$g^1S - 3/2[3/2]^o$	0-1	197,057,487
Ne I	598.890	35b		$2p^6 - 2p^5(^2P^o)4d$	$g^1S - 3/2[1/2]^o$	0-1	197,057,487
Ne I	600.036	70		$2p^6 - 2p^5(^2P^o)5s$	$g^1S - 1/2[1/2]^o$	0-1	197,057,487
Ne I	602.725	170		$2p^6 - 2p^5(^2P^o)5s$	$g^1S - 3/2[3/2]^o$	0-1	197,057,487
Ne I	615.627	170	7	$2p^6 - 2p^5(^2P^o)3d$	$g^1S - 1/2[3/2]^o$	0-1	197,057,488
Ne I	618.671	170	6	$2p^6 - 2p^5(^2P^o)3d$	$g^1S - 3/2[3/2]^o$	0-1	197,057,488
Ne I	619.101	120	5	$2p^6 - 2p^5(^2P^o)3d$	$g^1S - 3/2[1/2]^o$	0-1	197,057,488
Ne I	626.822	200	4	$2p^6 - 2p^5(^2P^o)4s$	$g^1S - 1/2[1/2]^o$	0-1	197,057,488
Ne I	629.738	200	3	$2p^6 - 2p^5(^2P^o)4s$	$g^1S - 3/2[3/2]^o$	0-1	197,057,488
Ne I	735.895	1000	2	$2p^6 - 2p^5(^2P^o)3s$	$g^1S - 1/2[1/2]^o$	0-1	197,057,488
Ne I	743.718	400	1	$2p^6 - 2p^5(^2P^o)3s$	$g^1S - 3/2[3/2]^o$	0-1	197,057,488

Ground state $1s^22s^22p^5\ ^2P^o_{3/2}$

Ionization potential 330 391.0 cm^{-1}; 40.962 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne II	324.56	120		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2F$	3/2-5/2	057
Ne II	326.54	350		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2D$	3/2-3/2	057
Ne II	326.77	200		$2s^22p^5 - 2s^22p^4(^1D)4s$	$g^2P^o - ^2D$	3/2-	057
Ne II	327.25	120		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	3/2-	057
Ne II	327.33	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2D$	1/2-3/2	057
Ne II	327.63	120		$2s^22p^5 - 2s^22p^4(^1D)4s$	$g^2P^o - ^2D$	1/2-	057
Ne II	328.08	120		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	1/2-1/2	057
Ne II	330.20	120		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2P$	3/2-3/2	057
Ne II	330.62	120		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2D$	3/2-3/2	057
Ne II	330.77	200		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2D$	3/2-5/2	057
Ne II	331.06	65		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2P$	1/2-	057
Ne II	331.50	120		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2D$	1/2-3/2	057
Ne II	352.237	120		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	3/2-1/2	057
Ne II	352.946	250		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	3/2-3/2	057
Ne II	353.206	200		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	1/2-1/2	057
Ne II	353.922	120		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	1/2-3/2	057
Ne II	354.954	250		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2P$	3/2-3/2	057
Ne II	355.450	120		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2P$	3/2-1/2	057
Ne II	355.647	200		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^4P$	3/2-5/2	057
Ne II	355.848	65		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^4F$	3/2-5/2	057
Ne II	355.946	120		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2P$	1/2-3/2	057
Ne II	356.131	250		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2F$	3/2-5/2	057
Ne II	356.436	120		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2P$	1/2-1/2	057
Ne II	356.534	200	6	$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2D$	3/2-3/2	488,074
Ne II	356.795	350d	6	$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2D$	3/2-5/2	488,074
Ne II	357.534	350	6	$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2D$	1/2-3/2	488,074
Ne II	361.427	350	5	$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^o - ^2S$	3/2-1/2	057,488,074
Ne II	362.456	250	5	$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^o - ^2S$	1/2-1/2	057,488,074
Ne II	405.852	600	4	$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^o - ^2D$	3/2-	197,488,074
Ne II	407.136	550	4	$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^o - ^2D$	1/2-3/2	197,488,074
Ne II	445.032	450	3	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^2P$	3/2-1/2	197,488,074
Ne II	446.252	550	3	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^2P$	3/2-3/2	197,488,074
Ne II	446.591	450	3	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^2P$	1/2-1/2	197,488,074
Ne II	447.813	550	3	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^2P$	1/2-3/2	197,488,074
Ne II	454.648	350	2	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^4P$	3/2-1/2	488,074
Ne II	455.270	450	2	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^4P$	3/2-3/2	197,488,074
Ne II	456.344	250	2	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^4P$	3/2-5/2	488,074
Ne II	456.895	350	2	$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^4P$	1/2-3/2	488,074
Ne II	460.725	1000	1	$2s^22p^5 - 2s2p^6$	$g^2P^o - ^2S$	3/2-1/2	197,488,074
Ne II	462.388	930	1	$2s^22p^5 - 2s2p^6$	$g^2P^o - ^2S$	1/2-1/2	197,488,074
Ne II	1681.683	200	7	$2s2p^6 - 2s^22p^4(^1D)3p$	$^2S - ^2P^o$	1/2-1/2	796,057,488
Ne II	1688.356	250	7	$2s2p^6 - 2s^22p^4(^1D)3p$	$^2S - ^2P^o$	1/2-3/2	796,057,488
Ne II?	1732.69	200					251
Ne II?	1853.22	65					251
Ne II?	1854.11	65					251
Ne II?	1880.21	200					251
Ne II?	1883.82	65					251
Ne II?	1888.15	65					251
Ne II?	1889.77	65					251
Ne II	1907.49	350	9	$2s^22p^4(^3P)3s - 2s^22p^4(^1D)3p$	$^2P - ^2P^o$	3/2-1/2	057,488
Ne II	1916.09	550	9	$2s^22p^4(^3P)3s - 2s^22p^4(^1D)3p$	$^2P - ^2P^o$	3/2-3/2	057,488
Ne II	1930.02	450	9	$2s^22p^4(^3P)3s - 2s^22p^4(^1D)3p$	$^2P - ^2P^o$	1/2-1/2	057,488
Ne II	1938.82	350	9	$2s^22p^4(^3P)3s - 2s^22p^4(^1D)3p$	$^2P - ^2P^o$	1/2-3/2	057,488

Ground state $1s^2 2s^2 2p^4\ ^3P_2$

Ionization potential 514 148 cm^{-1}; 63.74 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne III	251.145	200b	5	$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	2-	338,488
Ne III	251.558	200	5	$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	1-	338,488
Ne III	251.726	200	5	$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	0-1	338,488
Ne III	267.059	300b	4	$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	2-2	338,488
Ne III	267.516	300b	4	$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	1-	338,488
Ne III	267.709	200	4	$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	0-1	338,488
Ne III	282.50	10	8	$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1D - {}^1P^\circ$	2-1	057,488
Ne III	283.178	300b	3	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	2-2	338,488
Ne III	283.206	600	3	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	2-3	338,488
Ne III	283.690	500b	3	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	1-2	338,488
Ne III	283.894	300	3	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	0-1	338,488
Ne III	301.124	400	7	$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$^1D - {}^1D^\circ$	2-2	057,488
Ne III	308.559	100	10	$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1S - {}^1P^\circ$	0-1	057,488
Ne III	313.048	400	2	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	2-1	057,488
Ne III	313.677	300	2	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	1-1	057,488
Ne III	313.92	100	2	$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	0-1	057,488
Ne III	379.308	700	6	$2s^22p^4 - 2s2p^5$	$^1D - {}^1P^\circ$	2-1	197,488
Ne III	427.840	300	9	$2s^22p^4 - 2s2p^5$	$^1S - {}^1P^\circ$	0-1	057,488
Ne III	488.103	800	1	$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-1	197,488,074
Ne III	488.868	700	1	$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-0	197,488,074
Ne III	489.501	1000	1	$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-2	197,488,074
Ne III	489.641	400	1	$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-1	197,488,074
Ne III	490.310	700	1	$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	0-1	197,488,074
Ne III	491.050	900	1	$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-2	197,488,074
Ne III	1255.026	200	13	$2s^22p^3(^4S^\circ)3s - 2s^22p^3(^2D^\circ)3p$	$^3S^\circ - {}^3P$	1-0	057,488
Ne III	1255.685	500	13	$2s^22p^3(^4S^\circ)3s - 2s^22p^3(^2D^\circ)3p$	$^3S^\circ - {}^3P$	1-1	057,488
Ne III	1257.190	600	13	$2s^22p^3(^4S^\circ)3s - 2s^22p^3(^2D^\circ)3p$	$^3S^\circ - {}^3P$	1-2	057,488

Ground state $1s^22s^22p^3\ ^4S^\circ_{3/2}$

Ionization potential 782 768 cm^{-1}; 97.05 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne IV	140.127	15		$2s^22p^3 - 2s^22p^2(^1D)6s$	$^2D^\circ - ^2D$		544
Ne IV	142.929	15		$2s^22p^3 - 2s^22p^2(^1D)5d$	$^2D^\circ - ^2F$	5/2-	544
Ne IV	144.019	10		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-5/2	544
Ne IV	144.151	10		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-3/2	544
Ne IV	144.288	5		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-1/2	544
Ne IV	146.262	10		$2s^22p^3 - 2s^22p^2(^1D)5s$	$^2D^\circ - ^2D$		544
Ne IV	148.660	5		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-1/2	544
Ne IV	148.787	15b		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-3/2	544
Ne IV	148.942	20		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-5/2	544
Ne IV	149.589	10		$2s^22p^3 - 2s^22p^2(^1S)4d$	$^2D^\circ - ^2D$		544
Ne IV	150.931	5		$2s^22p^3 - 2s^22p^2(^1D)5s$	$^2P^\circ - ^2D$		544
Ne IV	151.456	P		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2P$		544
Ne IV	151.817	75		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2D$		544
Ne IV	152.231	75		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2F$		544
Ne IV	154.488	25		$2s^22p^3 - 2s^22p^2(^1S)4d$	$^2P^\circ - ^2D$		544
Ne IV	156.480	25d		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2P$		544
Ne IV	156.873	15		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2D$		544
Ne IV	157.626	25		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-5/2	544
Ne IV	157.781	15		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-3/2	544
Ne IV	157.862	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-1/2	544
Ne IV	158.063	25		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	-5/2	544
Ne IV	158.105	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	-3/2	544
Ne IV	158.646	75		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-7/2	544
Ne IV	158.822	75		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	-5/2	544
Ne IV	160.471	50		$2s^22p^3 - 2s^22p^2(^1D)4s$	$^2D^\circ - ^2D$		544
Ne IV	163.562	60		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	3/2-5/2	544
Ne IV	163.602	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	-3/2	544
Ne IV	166.113	P		$2s^22p^3 - 2s^22p^2(^1D)4s$	$^2P^\circ - ^2D$		544
Ne IV	167.921	25b		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	-3/2	544
Ne IV	168.101	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	3/2-1/2	544
Ne IV	172.492	200	3	$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-1/2	488,544
Ne IV	172.525	250	3	$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-3/2	488,544
Ne IV	172.620	400	3	$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-5/2	488,544
Ne IV	174.120	P		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2P^\circ - ^2P$	-3/2	544,487
Ne IV	174.303	15		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2P^\circ - ^2P$	-1/2	544
Ne IV	174.880	50		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	-3/2	544
Ne IV	174.920	40		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	3/2-1/2	544
Ne IV	176.007	250		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$		544
Ne IV	177.161	400		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$		544
Ne IV	180.402	75		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2S$	-1/2	544
Ne IV	181.614	100		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	-3/2	544
Ne IV	181.691	100		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	-1/2	544
Ne IV	182.829	P		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$		544
Ne IV	183.165	75		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	-5/2	544
Ne IV	183.247	60		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	-3/2	544
Ne IV	185.479	100		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	544
Ne IV	186.575	750	7	$2s^22p^3 - 2s^22p^2(^1S)3d$	$^2D^\circ - ^2D$		488,544
Ne IV	186.787	25		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-1/2	544
Ne IV	186.915	75		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	-3/2	544
Ne IV	190.565	125		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	3/2-5/2	544
Ne IV	190.645	75		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	-3/2	544
Ne IV	194.276	500	11	$2s^22p^3 - 2s^22p^2(^1S)3d$	$^2P^\circ - ^2D$		488,544
Ne IV	194.477	200		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	-1/2	544
Ne IV	194.623	250b		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	-3/2	544
Ne IV	204.270	75		$2s^22p^3 - 2s^22p^2(^1S)3s$	$^2P^\circ - ^2S$	-1/2	544

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne IV	204.531	125		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	5/2-	544
Ne IV	204.786	75		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	3/2-	544
Ne IV	204.908	25		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D$	1/2-	544
Ne IV	208.485	500	2	$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-5/2	488,544
Ne IV	208.734	500	2	$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-3/2	488,544
Ne IV	208.899	400	2	$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-1/2	488,544
Ne IV	212.556	750	6	$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - ^2D$	5/2-	488,544
Ne IV	215.396	25		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4S^\circ$	5/2-3/2	544
Ne IV	215.711	15		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4S^\circ$	3/2-3/2	544
Ne IV	215.843	75		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4S^\circ$	1/2-3/2	544
Ne IV	217.337	75		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4P^\circ$	5/2-5/2	544
Ne IV	217.640	75		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4P^\circ$	3/2-5/2	544
Ne IV	217.777	75		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4P^\circ$	3/2-3/2	544
Ne IV	217.830	125		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4D^\circ$	5/2-7/2	544
Ne IV	218.131	100		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4P^\circ$	1/2-1/2	544
Ne IV	218.184	50		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4D^\circ$	5/2-3/2	544
Ne IV	218.343	75		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4D^\circ$	3/2-5/2	544
Ne IV	218.483	100d		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4D^\circ$	3/2-3/2	544
Ne IV	218.643	125		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4D^\circ$	1/2-3/2	544
Ne IV	218.766	250		$2s2p^4 - 2s^22p^2(^3P)4p$	$^4P - ^4D^\circ$	1/2-1/2	544
Ne IV	222.600	200		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2P^\circ - ^2D$		544
Ne IV	223.235	125		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	5/2-3/2	773,544
Ne IV	223.601	125		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	3/2-1/2	773,544
Ne IV	234.319	125		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	-3/2	773,544
Ne IV	234.704	125		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	-1/2	773,544
Ne IV	247.422	50		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	5/2-3/2	544
Ne IV	247.807	40		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	3/2-3/2	544
Ne IV	248.004	40		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	1/2-3/2	544
Ne IV	286.448	75		$2s2p^4 - 2s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	5/2-3/2	544
Ne IV	286.934	75		$2s2p^4 - 2s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	3/2-3/2	544
Ne IV	287.206	50		$2s2p^4 - 2s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	1/2-3/2	544
Ne IV	293.123	75		$2s2p^4 - 2s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	5/2-5/2	544
Ne IV	293.429	50		$2s2p^4 - 2s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	5/2-3/2	544
Ne IV	293.649	25		$2s2p^4 - 2s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	3/2-5/2	544
Ne IV	293.947	5		$2s2p^4 - 2s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	3/2-3/2	544
Ne IV	294.100	15		$2s2p^4 - 2s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	3/2-1/2	544
Ne IV	294.390	15		$2s2p^4 - 2s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	1/2-1/2	544
Ne IV	357.831	250	5	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-1/2	197,544,488
Ne IV	358.721	1000d	5	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	-3/2	488,544
Ne IV	387.141	700	10	$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	-1/2	197,544,488
Ne IV	388.218	500	10	$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	-3/2	197,544,488
Ne IV	421.609	750	9	$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2S$	-1/2	197,544,488
Ne IV	431.472	125		$2s2p^4 - 1s^22p^5$	$^2D - ^2P^\circ$	3/2-1/2	544
Ne IV	433.237	250		$2s2p^4 - 1s^22p^5$	$^2D - ^2P^\circ$	-3/2	544
Ne IV	469.773	700	4	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	5/2-3/2	773,488
Ne IV	469.820	1000	4	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	5/2-5/2	773,488
Ne IV	469.866	900	4	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	3/2-3/2	773,488
Ne IV	469.921	700	4	$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	3/2-5/2	773,488
Ne IV	521.741	125	8	$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	1/2-3/2	773,544,488
Ne IV	521.820	125	8	$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	3/2-5/2	773,544,488
Ne IV	536.965	5		$2s2p^4 - 1s^22p^5$	$^2S - ^2P^\circ$	1/2-1/2	544
Ne IV	539.731	15		$2s2p^4 - 1s^22p^5$	$^2S - ^2P^\circ$	1/2-3/2	544
Ne IV	541.127	400	1	$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-1/2	197,544,488
Ne IV	542.073	500	1	$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-3/2	197,544,488
Ne IV	543.891	750	1	$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-5/2	197,544,488
Ne IV	602.999	10		$2s2p^4 - 1s^22p^5$	$^2P - ^2P^\circ$	3/2-1/2	544
Ne IV	605.595	10		$2s2p^4 - 1s^22p^5$	$^2P - ^2P^\circ$	1/2-1/2	544
Ne IV	606.527	25		$2s2p^4 - 1s^22p^5$	$^2P - ^2P^\circ$	3/2-3/2	544
Ne IV	609.168	5		$2s2p^4 - 1s^22p^5$	$^2P - ^2P^\circ$	1/2-3/2	544
Ne IV	758.317	15d		$1s^22p^5 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2S$	3/2-1/2	544

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne IV	763.959	P		$1s^22p^5 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2S$	½-½	544
Ne IV	780.250	15d		$1s^22p^5 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	3/2-3/2	544
Ne IV	786.141	5		$1s^22p^5 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	½-3/2	544

Ground state $1s^22s^22p^2\ ^3P_0$

Ionization potential 1 018 634 cm^{-1}; 126.29 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne V	118.715	50		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3P^\circ$		544
Ne V	118.841	10		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3D^\circ$		544
Ne V	122.520	200b		$2s^22p^2 - 2s^22p4d$	${}^1D - {}^1F^\circ$	2-3	544
Ne V	123.712	30		$2s^22p^2 - 2s^22p4d$	${}^1D - {}^1D^\circ$	2-2	544
Ne V	125.830	20		$2s^22p^2 - 2s^22p4s$	$g^3P - {}^3P^\circ$	1-	544
Ne V	128 793	10		$2s2p^3 - 2s2p^2(^4P)4d$	${}^5S^\circ - {}^5P$	2-	544
Ne V	129.034	50		$2s^22p^2 - 2s^22p4s$	${}^1D - {}^1P^\circ$	2-1	544
Ne V	136 215	20		$2s2p^3 - 2s2p^2(^4P)4s$	${}^5S^\circ - {}^5P$	2-	544
Ne V	140.716	50		$2s2p^3 - 2s2p^2(^4P)3d$	${}^5S^\circ - {}^5P$	2-1	544
Ne V	140.757	150		$2s2p^3 - 2s2p^2(^4P)3d$	${}^5S^\circ - {}^5P$	2-2	544
Ne V	140.791	150		$2s2p^3 - 2s2p^2(^4P)3d$	${}^5S^\circ - {}^5P$	2-3	544
Ne V	142 441	100		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	1-0	544
Ne V	142 503	100		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	1-1	544
Ne V	142.661	40		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	2-1	544
Ne V	142.724	150		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	2-2	544
Ne V	143 219	50		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	0-1	544
Ne V	143.273	100		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	1-2	544
Ne V	143 344	150		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	2-3	544
Ne V	147.132	150		$2s^22p^2 - 2s^22p3d$	${}^1D - {}^1F^\circ$	2-3	544
Ne V	148.787	15b		$2s^22p^2 - 2s^22p3d$	${}^1D - {}^1P^\circ$	2-1	544
Ne V	151.424	120		$2s^22p^2 - 2s^22p3d$	${}^1D - {}^1D^\circ$	2-2	544
Ne V	156 610	20		$2s^22p^2 - 2s^22p3d$	${}^1S - {}^1P^\circ$	0-1	544
Ne V	164.023	100		$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-3	544
Ne V	164 145	100		$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-2	544
Ne V	164.294	80		$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-1	544
Ne V	167 483	150		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	1-2	544
Ne V	167.610	30		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	0-1	544
Ne V	167.670	250		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	2-2	544
Ne V	167.837	25		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	1-0	544
Ne V	167.921	25b		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	2-1	544
Ne V	173.932	500	6	$2s^22p^2 - 2s^22p3s$	${}^1D - {}^1P^\circ$	2-1	488,544
Ne V	184 730	100		$2s^22p^2 - 2s^22p3s$	${}^1S - {}^1P^\circ$	0-1	544
Ne V	195 368	50		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3P^\circ - {}^3P$	-2	544
Ne V	195 553	30		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3P^\circ - {}^3P$	-1	544
Ne V	195.621	20		$2s2p^3 - 2s2p^2(^4P)3s$	${}^3P^\circ - {}^3P$	1-0	544
Ne V	357 955	400	3	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	0-1	197,544,488
Ne V	358 472	500	3	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	1-1	197,544,488
Ne V	359.385	500	3	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	2-1	197,544,488
Ne V	365 594	1000	5	$2s^22p^2 - 2s2p^3$	${}^1D - {}^1P^\circ$	2-1	197,488
Ne V	416.198	800	4	$2s^22p^2 - 2s2p^3$	${}^1D - {}^1D^\circ$	2-2	197,544,488
Ne V	416.834	250		$2s^22p^2 - 2s2p^3$	${}^1S - {}^1P^\circ$	0-1	544
Ne V	420.386	100		$2s2p^3 - 1s^22p^4$	${}^3D^\circ - {}^3P$	1-0	544
Ne V	420.951	150		$2s2p^3 - 1s^22p^4$	${}^3D^\circ - {}^3P$	2-1	544
Ne V	422.214	150		$2s2p^3 - 1s^22p^4$	${}^3D^\circ - {}^3P$	3-2	544
Ne V	422.347	50		$2s2p^3 - 1s^22p^4$	${}^3D^\circ - {}^3P$	2-2	544
Ne V	480.406	250	2	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	0-1	197,544,488
Ne V	481 281	150	2	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	1-0	197,544,488
Ne V	481.361	250	2	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	1-1	197,544,488
Ne V	482 987	500	2	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	2-2	197,544,488
Ne V	487 070	30d		$2s2p^3 - 1s^22p^4$	${}^3P^\circ - {}^3P$	2-1	544
Ne V	488.940	P		$2s2p^3 - 1s^22p^4$	${}^3P^\circ - {}^3P$	2-2	544
Ne V	568.418	400	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	0-1	197,544,488
Ne V	569.759	250	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	1-1	197,544,488
Ne V	569.830	500	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	1-2	197,544,488
Ne V	572.106	250	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	2-2	197,544,488
Ne V	572.336	800	1	$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	2-3	197,544,488

Ground state $1s^22s^22p\ ^2P^\circ_{1/2}$

Ionization potential 1 274 000 cm^{-1}; 157.9 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne VI	110.410	20		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$		544
Ne VI	111.142	10		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	-½	544
Ne VI	113.870	10		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$		544
Ne VI	121.140	50d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$		544
Ne VI	122.520	200b		$2s^22p - 2s^23d$	$g^2P^\circ - ^2D$	½-	544
Ne VI	122.686	100		$2s^22p - 2s^23d$	$g^2P^\circ - ^2D$	3/2-	544
Ne VI	136.089	40		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$		544
Ne VI	138.397	30		$2s^22p - 2s^23s$	$g^2P^\circ - ^2S$	½-½	544
Ne VI	138.630	30		$2s^22p - 2s^23s$	$g^2P^\circ - ^2S$	3/2-½	544
Ne VI?	171.114	50					544
Ne VI?	171.212	20					544
Ne VI?	188.424	30					544
Ne VI?	194.839	20					544
Ne VI?	194.936	20					544
Ne VI	399.820	50		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	½-3/2	197,544,074
Ne VI	401.138	150		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	½-½	197,544,074
Ne VI	401.939	250		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	3/2-3/2	197,544,074
Ne VI	403.262	100		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	3/2-½	197,544,074
Ne VI?	432.393	50					544
Ne VI	433.176	400		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2S$	½-½	197,071
Ne VI	435.649	400		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2S$	3/2-½	197,071
Ne VI	440.404	100		$2s2p^2 - 1s^22p^3$	$^2D - ^2P^\circ$	5/2-3/2	071
Ne VI	440.60	10		$2s2p^2 - 1s^22p^3$	$^2D - ^2P^\circ$	3/2-½	071
Ne VI	451.843	200		$2s2p^2 - 1s^22p^3$	$^4P - ^4S^\circ$	½-3/2	197,071
Ne VI	452.745	300		$2s2p^2 - 1s^22p^3$	$^4P - ^4S^\circ$	3/2-3/2	197,071
Ne VI	454.072	300		$2s2p^2 - 1s^22p^3$	$^4P - ^4S^\circ$	5/2-3/2	197,071
Ne VI	558.595	50		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	½-3/2	197,544,074
Ne VI	562.735	10		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	3/2-3/2	197,544,074
Ne VI	562.805	150		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	3/2-5/2	197,544,074

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Ground state $1s^22s^2\ ^1S_0$

Ionization potential 207.3 eV?

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne VII	74.97	300		2s2p - 2p4p	$^3P^\circ - ^3D$	2-3	255
Ne VII	75.78	300		$2s^2$ - 2s4p	$g^1S - ^1P^\circ$	0-1	255,316
Ne VII	76.58	200		2s2p - 2s6d	$^1P^\circ - ^1D$	1-2	255
Ne VII	80.62	300		2s2p - 2s5d	$^1P^\circ - ^1D$	1-2	255
Ne VII	82.26	600		2s2p - 2s4d	$^3P^\circ - ^3D$	2-3	255,316
Ne VII	84.34	200		2s2p - 2s4s	$^3P^\circ - ^3S$	2-1	255
Ne VII	89.41	400		2s2p - 2s4d	$^1P^\circ - ^1D$	1-2	255,316
Ne VII	94.33	600		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-2	255
Ne VII	94.99	400		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	2-1	255
Ne VII	95.86	700		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-3	255
Ne VII	97.54	700		$2s^2$ - 2s3p	$g^1S - ^1P^\circ$	0-1	255,316
Ne VII	106.07	900		2s2p - 2s3d	$^3P^\circ - ^3D$	1-2	255,316
Ne VII	106.19	900		2s2p - 2s3d	$^3P^\circ - ^3D$	2-3	255,316
Ne VII	107.07	400		$2s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1P$	1-1	255
Ne VII	110.60	700		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-3	255
Ne VII	111.78	600		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	255
Ne VII	115.36	700		2s2p - 2s3s	$^3P^\circ - ^3S$	-1	255,316
Ne VII	115.52	700		2s2p - 2s3s	$^3P^\circ - ^3S$	2-1	255,316
Ne VII	115.97	600		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	255
Ne VII	116.66	700		2s2p - 2s3d	$^1P^\circ - ^1D$	1-2	255,316
Ne VII	120.32	500		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	2-2	255
Ne VII	121.68	700		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1S - ^1P^\circ$	0-1	255
Ne VII	127.65	500		2s2p - 2s3s	$^1P^\circ - ^1S$	1-0	255,316
Ne VII	134.82	200		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	255
Ne VII	465.221	700		$2s^2$ - 2s2p	$g^1S - ^1P^\circ$	0-1	197,071,074
Ne VII	558.61	400b		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	1-2	197,071
Ne VII	559.947	300		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	0-1	197,071
Ne VII	561.378	200		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	1-1	197,071
Ne VII	561.728	400		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	2-2	197,071
Ne VII	562.992	200		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	1-0	197,071
Ne VII	564.529	200		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	2-1	197,071,252
Ne VII	1981.974	600		2s3s - 2s3p	$^3S - ^3P^\circ$	1-2	071
Ne VII	1992.060	300		2s3s - 2s3p	$^3S - ^3P^\circ$	1-1	071
Ne VII	1997.345	100		2s3s - 2s3p	$^3S - ^3P^\circ$	1-0	071

Ground state $1s^22s\ ^2S_{1/2}$

Ionization potential 239.1 eV?

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne VIII	56.10	100		$1s^22s - 1s^27p$	$g^2S - {}^2P^\circ$	½-	255
Ne VIII	57.79	100		$1s^22s - 1s^26p$	$g^2S - {}^2P^\circ$	½-	255
Ne VIII	60.45	100		$1s^22p - 1s^27d$	${}^2P^\circ - {}^2D$		255,316
Ne VIII	60.81	200		$1s^22s - 1s^25p$	$g^2S - {}^2P^\circ$	½-	255,316
Ne VIII	62.36	100		$1s^22p - 1s^26d$	${}^2P^\circ - {}^2D$		255,316
Ne VIII	65.89	200		$1s^22p - 1s^25d$	${}^2P^\circ - {}^2D$		255,316
Ne VIII	67.39	300		$1s^22s - 1s^24p$	$g^2S - {}^2P^\circ$	½-	255,316
Ne VIII	73.55	400		$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$		255,316
Ne VIII	74.64	300		$1s^22p - 1s^24s$	${}^2P^\circ - {}^2S$	3/2-½	255,316
Ne VIII	88.11	700		$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-	255,316
Ne VIII	98.11	700		$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	½-3/2	255,316
Ne VIII	98.27	700		$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	3/2-5/2	255,316
Ne VIII	102.89	500		$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	½-½	255,316
Ne VIII	103.10	600		$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	3/2-½	255,316
Ne VIII	770.409	1000		$1s^22s - 1s^22p$	$g^2S - {}^2P^\circ$	½-3/2	071,197
Ne VIII	780.324	500		$1s^22s - 1s^22p$	$g^2S - {}^2P^\circ$	½-½	071,197

Ground state $1s^2\ ^1S_0$

Ionization potential 9 644 900 cm^{-1}?; 1 196 eV?

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne IX	13.44			$1s^2$ - 1s2p	$g\,^1S$ - $^1P^\circ$	0-1	255,164
Ne IX	13.55			$1s^2$ - 1s2p	$g\,^1S$ - $^3P^\circ$	0-	255,164
Ne IX	46.3	P		1s2s - 1s7p	^3S - $^3P^\circ$		262
Ne IX	47.7	P		1s2s - 1s6p	^3S - $^3P^\circ$		262
Ne IX	48.0	P		1s2p - 1s7d	$^3P^\circ$ - ^3D		262
Ne IX	49.5	P		1s2p - 1s6d	$^3P^\circ$ - ^3D		262
Ne IX	50.3	P		1s2s - 1s5p	^3S - $^3P^\circ$		262
Ne IX	52.4	P		1s2p - 1s5d	$^3P^\circ$ - ^3D		262
Ne IX	56.1	P		1s2s - 1s4p	^3S - $^3P^\circ$		262
Ne IX	58.5	P		1s2p - 1s4d	$^3P^\circ$ - ^3D		262
Ne IX	74.4	P		1s2s - 1s3p	^3S - $^3P^\circ$		262
Ne IX	78.38			1s2p - 1s3d	$^3P^\circ$ - ^3D		262

Ground state 1s $^2S_{1/2}$

Ionization potential 10 986 875 cm^{-1}; 1362.16 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ne X	9.362	P		1s - 6p	g^2S - $^2P^o$	½-	309
Ne X	9.481	P		1s - 5p	g^2S - $^2P^o$	½-	309
Ne X	9.708	P		1s - 4p	g^2S - $^2P^o$	½-	309
Ne X	10.239	P		1s - 3p	g^2S - $^2P^o$	½-	309
Ne X	12.134	P		1s - 2p	g^2S - $^2P^o$	½-	309
Ne X	39.65	P		2 - 7			309
Ne X	40.96	P		2 - 6			309
Ne X	43.35	P		2 - 5			309
Ne X	48.55	P		2 - 4			309
Ne X	65.52	P		2 - 3			309
Ne X	100.41	P		3 - 7			309
Ne X	109.28	P		3 - 6			309
Ne X	128.06	P		3 - 5			309
Ne X	187.3	P		3 - 4			309
Ne X	216.41	P		4 - 7			309
Ne X	262.3	P		4 - 6			309
Ne X	404.8	P		4 - 5			309
Ne X	465.0	P		5 - 7			309
Ne X	745.4	P		5 - 6			309
Ne X	1236.3	P		6 - 7			309

Unclassified lines

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na	67.027	100					692
Na	67.461	100d					692
Na	70.320	10					692
Na	71.386	10					692
Na	73.128	10					692
Na	77.076	10					692
Na	77.558	10					692
Na	78.023	10					692
Na	79.620	100					692
Na	82.516	10					692
Na	83.180	100					692
Na	86.890	10					692
Na	87.524	200					692
Na	88.583	100					692
Na	92.608	10d					692
Na	93.070	10					692
Na	95.551	200					692
Na	95.796	10					692
Na	96.018	100					692
Na	96.572	10					692
Na	98.271	10d					692
Na	100.337	100					692
Na	101.201	10					692
Na	101.348	10					692
Na	104.314	10					692
Na	104.440	10					692
Na	106.345	200					692
Na	106.703	10d					692
Na	108.159	10					692
Na	110.085	200					692
Na	110.474	10					692
Na	110.577	100					692
Na	112.526	10					692
Na	112.641	10					692
Na	113.061	100					692
Na	113.952	10					692
Na	120.040	100					692
Na	120.220	100					692
Na	120.298	100					692
Na	120.355	10					692
Na	120.430	10					692
Na	122.330	10					692
Na	127.953	100					692
Na	128.112	300					692
Na	138.628	200					692
Na	191.205	10					693
Na	193.807	10					693
Na	215.870	100					693
Na	217.385	10					693
Na	425.245	10					693
Na	425.493	100					693
Na	436.946	10					693
Na	515.952	100					693

Ground state $1s^2 2s^2 2p^6\ ^1S_0$

Ionization potential 381 528 cm^{-1}; 47.302 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na II	282.827	10		$2p^6 - 2p^5(^2P^\circ)4d$	$g\,^1S - 3/2[3/2]^\circ$	0-1	693,487
Na II	300.151	100	4	$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - 1/2[3/2]^\circ$	0-1	488,693
Na II	301.311	10		$2p^6 - 2p^5(^2P^\circ)4s$	$g\,^1S - 3/2[3/2]^\circ$	0-1	693,487
Na II	301.432	100	3	$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - 3/2[3/2]^\circ$	0-1	488,693
Na II	372.069	600	2	$2p^6 - 2p^5(^2P^\circ)3s$	$g\,^1S - 1/2[1/2]^\circ$	0-1	197,693,488
Na II	376.375	300	1	$2p^6 - 2p^5(^2P^\circ)3s$	$g\,^1S - 3/2[3/2]^\circ$	0-1	197,693,488

Ground state $1s^22s^22p^5\ ^2P^\circ_{3/2}$

Ionization potential 578 033 cm^{-1}; 71.665 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na III	183.575	10		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^\circ - ^2D$	3/2-5/2	693
Na III	183.747	100		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^\circ - ^2P$	3/2-	693
Na III	184.218	10		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^\circ - ^2P$	1/2-	693
Na III	188.870	200		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^\circ - ^2D$	3/2-5/2	693
Na III	189.346	100		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^\circ - ^2D$	1/2-3/2	693
Na III	194.032	100		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2P$	3/2-3/2	693
Na III	194.166	10		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2P$	3/2-1/2	693
Na III	194.306	100d		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2D$	3/2-5/2	693
Na III	195.538	10		$2s^22p^5 - 2s^22p^4(^1D)4s$	$g^2P^\circ - ^2D$	3/2-5/2	693
Na III	202.184	400		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2D$	3/2-5/2	693
Na III	202.490	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2D$	3/2-3/2	693
Na III	202.720	300		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2P$	3/2-3/2	693
Na III	202.760	300		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2P$	3/2-1/2	693
Na III	203.050	300		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2D$	1/2-3/2	693
Na III	203.282	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2P$	1/2-3/2	693
Na III	203.324	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2P$	1/2-1/2	693
Na III	206.871	10					693
Na III	207.355	10					693
Na III	207.458	10					693
Na III	214.235	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2P$	3/2-3/2	693
Na III	214.596	200		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2P$	3/2-1/2	693
Na III	214.868	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2P$	1/2-3/2	693
Na III	215.042	200		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2D$	3/2-3/2	693
Na III	215.230	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2P$	1/2-1/2	693
Na III	215.340	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2D$	3/2-5/2	693
Na III	215.498	10					693
Na III	215.671	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2D$	1/2-3/2	693
Na III	216.120	100					693
Na III	229.868	300		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^\circ - ^2S$	3/2-1/2	693
Na III	230.593	200		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^\circ - ^2S$	1/2-1/2	693
Na III	250.515	800		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^\circ - ^2D$	3/2-5/2	693
Na III	251.371	600		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^\circ - ^2D$	1/2-3/2	693
Na III	266.893	500		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	3/2-1/2	693
Na III	267.642	800		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	3/2-3/2	693
Na III	267.868	600		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	1/2-1/2	693
Na III	268.623	500		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	1/2-3/2	693
Na III	272.441	10d		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^4P$	3/2-3/2	693
Na III	378.143	1000		$2s^22p^5 - 2s2p^6$	$g^2P^\circ - ^2S$	3/2-1/2	197,693
Na III	380.107	800		$2s^22p^5 - 2s2p^6$	$g^2P^\circ - ^2S$	1/2-1/2	197,693
Na III	1100.49	100		$2s^22p^4(^3P)3p - 2s^22p^4(^1D)3d$	$^4P^\circ - ^2S$	1/2-1/2	758
Na III	1122.30	10		$2s^22p^4(^3P)3p - 2s^22p^4(^1D)3d$	$^4P^\circ - ^2F$	3/2-5/2	758
Na III	1153.04	40		$2s^22p^4(^3P)3p - 2s^22p^4(^1D)3d$	$^4P^\circ - ^2P$	3/2-3/2	758
Na III	1180.40	160		$2s^22p^4(^1D)3p - 2s^22p^4(^1S)3d$	$^2D^\circ - ^2D$	3/2-3/2	758
Na III	1221.12	100		$2s^22p^4(^3P)3p - 2s^22p^4(^1D)3d$	$^4D^\circ - ^2D$	3/2-3/2	758
Na III	1223.44	80d		$2s^22p^4(^3P)3p - 2s^22p^4(^1D)3d$	$^4D^\circ - ^2P$	5/2-3/2	758
Na III	1224.73	80		$2s^22p^4(^3P)3p - 2s^22p^4(^1D)3d$	$^4D^\circ - ^2D$	1/2-3/2	758
Na III	1235.40	80d		$2s^22p^4(^3P)3p - 2s^22p^4(^1D)3d$	$^4D^\circ - ^2G$	7/2-7/2	758
Na III	1256.68	20		$2s^22p^4(^3P)3p - 2s^22p^4(^1D)3d$	$^2D^\circ - ^2D$	5/2-3/2	758
Na III	1265.66	40		$2s^22p^4(^3P)3p - 2s^22p^4(^1D)3d$	$^2D^\circ - ^2P$	5/2-3/2	758
Na III	1337.39	120d		$2s^22p^4(^3P)3p - 2s^22p^4(^1D)3d$	$^2P^\circ - ^2P$	3/2-1/2	758
Na III	1427.27	10		$2s^22p^4(^3P)3s - 2s^22p^4(^1D)3p$	$^2P - ^2D^\circ$	1/2-3/2	758
Na III	1436.21	240		$2s^22p^4(^3P)3s - 2s^22p^4(^1D)3p$	$^2P - ^2P^\circ$	3/2-1/2	758
Na III	1458.15	60		$2s^22p^4(^3P)3s - 2s^22p^4(^1D)3p$	$^2P - ^2P^\circ$	1/2-1/2	758
Na III	1529.67	20		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4P^\circ - ^2P$	1/2-1/2	758
Na III	1541.19	20		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4P^\circ - ^2P$	3/2-3/2	758

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na III	1548.68	160		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4P^\circ - ^2P$	½-3½	758
Na III	1602.91	100		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4P^\circ - ^4P$	3½-½	758
Na III	1604.47	120		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4P^\circ - ^4P$	5½-3½	758
Na III	1610.97	80		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4P^\circ - ^4P$	½-½	758
Na III	1613.77	160		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4P^\circ - ^4P$	3½-3½	758
Na III	1621.94	100		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4P^\circ - ^4P$	½-3½	758
Na III	1624.07	240		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4P^\circ - ^4P$	5½-5½	758
Na III	1633.64	80		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4P^\circ - ^4P$	3½-5½	758
Na III	1650.91	20		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^2P$	5½-3½	758
Na III	1658.71	40		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4D^\circ - ^2P$	3½-½	758
Na III	1669.52	60d		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4D^\circ - ^2P$	5½-3½	758
Na III	1669.52	60d		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^2P$	½-3½	758
Na III	1678.74	20		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^2F$	5½-5½	758
Na III	1691.70	20		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^2P$	½-½	758
Na III	1718.48	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^2D$	5½-5½	758
Na III	1719.60	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^2D$	½-3½	758
Na III	1731.08	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^2F$	5½-7½	758
Na III	1741.33	20		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4F$	5½-5½	758
Na III	1746.39	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4F$	5½-3½	758
Na III	1752.06	20		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^2D^\circ - ^2P$	3½-½	758
Na III	1752.65	60		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4P$	5½-5½	758
Na III	1754.97	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4D^\circ - ^4P$	5½-3½	758
Na III	1761.05	20		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4D^\circ - ^4P$	7½-5½	758
Na III	1762.13	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4D^\circ - ^4P$	½-½	758
Na III	1763.84	60		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4P$	3½-5½	758
Na III	1767.21	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4F$	½-3½	758
Na III	1773.00	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4P$	3½-3½	758
Na III	1775.32	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4D^\circ - ^4P$	½-3½	758
Na III	1782.92	240		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4P$	½-3½	758
Na III	1791.23	200		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4P$	3½-½	758
Na III	1791.80	160		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4D^\circ - ^4P$	3½-5½	758
Na III	1801.27	140		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4P$	½-½	758
Na III	1810.74	80		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^2P$	5½-3½	758
Na III	1811.70	100		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2F^\circ - ^2F$	5½-5½	758
Na III	1814.35	60		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2F^\circ - ^2F$	7½-5½	758
Na III	1816.83	40		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2P^\circ - ^2S$	3½-½	758
Na III	1819.01	40		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2F^\circ - ^2F$	5½-7½	758
Na III	1821.68	240		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2F^\circ - ^2F$	7½-7½	758
Na III	1824.52	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^2P$	3½-3½	758
Na III	1825.44	200		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^2F$	7½-5½	758
Na III	1835.22	300		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2P^\circ - ^2S$	½-½	758
Na III	1838.11	120		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4D$	5½-3½	758
Na III	1843.43	40		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^2D^\circ - ^4P$	5½-3½	758
Na III	1844.36	400		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4D$	5½-5½	758
Na III	1845.10	240		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4D$	3½-½	758
Na III	1847.54	200		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2F^\circ - ^2D$	5½-5½	758
Na III	1849.58	700		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4D$	5½-7½	758
Na III	1850.24	400		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2F^\circ - ^2D$	7½-5½	758
Na III	1850.39	360		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4D$	3½-3½	758
Na III	1855.91	300		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4D$	½-½	758
Na III	1856.73	400		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4D$	3½-5½	758
Na III	1857.57	100		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^2P^\circ - ^2P$	3½-½	758
Na III	1859.20	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^2P$	½-½	758
Na III	1859.61	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^2D^\circ - ^4P$	3½-½	758
Na III	1861.19	300		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4P^\circ - ^4D$	½-3½	758
Na III	1862.40	120		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^2P^\circ - ^2P$	½-½	758
Na III	1869.43	20		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^2D^\circ - ^4P$	5½-5½	758
Na III	1872.45	20		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^2D$	7½-5½	758
Na III	1873.32	80		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2F^\circ - ^2D$	5½-3½	758
Na III	1874.22	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^2D^\circ - ^4P$	3½-3½	758

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na III	1885.75	80		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^2P^\circ - ^2P$	3/2-3/2	758
Na III	1887.48	300		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^2F$	7/2-7/2	758
Na III	1890.75	240		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^2P^\circ - ^2P$	1/2-3/2	758
Na III	1899.70	60		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4F$	7/2-5/2	758
Na III	1913.17	160		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4P$	7/2-5/2	758
Na III	1918.46	120		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4F$	7/2-7/2	758
Na III	1920.12	120		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4F$	5/2-5/2	758
Na III	1926.27	900		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4F$	5/2-3/2	758
Na III	1927.21	300		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2P^\circ - ^2D$	3/2-5/2	758
Na III	1933.87	600		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4P$	5/2-5/2	758
Na III	1935.54	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4F$	3/2-5/2	758
Na III	1939.32	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4F$	5/2-7/2	758
Na III	1941.61	10		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	$^4P - ^2P^\circ$	3/2-1/2	758
Na III	1941.77	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4F$	3/2-3/2	758
Na III	1942.19	120		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^2D^\circ - ^2F$	5/2-5/2	758
Na III	1943.40	120		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2F^\circ - ^2G$	5/2-7/2	758
Na III	1944.99	60d		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4P$	5/2-3/2	758
Na III	1946.43	400d		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2F^\circ - ^2G$	7/2-7/2	758
Na III	1946.70	10		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	$^4P - ^2P^\circ$	3/2-3/2	758
Na III	1950.79	300		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4F$	1/2-3/2	758
Na III	1951.21	800		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	$^4P - ^4S^\circ$	5/2-3/2	758
Na III	1955.31	160		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2P^\circ - ^2D$	3/2-3/2	758
Na III	1956.48	10		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)4s$	$^4S^\circ - ^4P$	3/2-3/2	758
Na III	1960.76	400		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4P$	3/2-3/2	758
Na III	1965.04	360		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^4D^\circ - ^4F$	7/2-9/2	758
Na III	1975.58	10		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2D^\circ - ^2F$	5/2-7/2	758
Na III	1976.62	20		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2P^\circ - ^2D$	1/2-3/2	758
Na III	1977.14	20		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2P^\circ - ^2P$	3/2-3/2	758
Na III	1980.95	10		$2s^22p^4(^1D)3p - 2s^22p^4(^1D)3d$	$^2P^\circ - ^2P$	3/2-1/2	758
Na III	1985.58	600		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	$^4P - ^4S^\circ$	3/2-3/2	758
Na III	1995.62	60		$2s^22p^4(^3P)3p - 2s^22p^4(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	758

Ground state $1s^2 2s^2 2p^4\ ^3P_2$

Ionization potential 797 741 cm^{-1}; 98.905 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na IV	129.464	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$g^3P - ^3D^\circ$	2-	693
Na IV	132.211	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-	692,693
Na IV	132.465	10d		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3D^\circ$	0-	692,693
Na IV	132.740	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)5s$	$g^3P - ^3D^\circ$	2-	692,693
Na IV	136.435	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3S^\circ$	2-1	692,693
Na IV	136.550	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	2-	692,693
Na IV	136.645	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3S^\circ$	1-1	692,693
Na IV	136.748	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	1-	692,693
Na IV	136.854	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3D^\circ$	2-	692,693
Na IV	137.062	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3D^\circ$	1-	692,693
Na IV	137.144	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3D^\circ$	0-	693
Na IV	137.714	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	692,693
Na IV	137.945	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$^1D - ^1D^\circ$	2-2	692,693
Na IV	139.867	200b		$2s^22p^4 - 2s^22p^3(^2P^\circ)4s$	$g^3P - ^3P^\circ$	2-	692,693
Na IV	142.232	200b		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1F^\circ$	2-3	693
Na IV	142.363	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1D^\circ$	2-2	692,693
Na IV	142.688	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1P^\circ$	2-1	692,693
Na IV	144.979	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	2-	692,693
Na IV	145.846	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)4s$	$^1D - ^1P^\circ$	2-1	692,693
Na IV	146.060	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	2-	692,693
Na IV	146.298	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	1-	692,693
Na IV	146.398	10		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	0-	692,693
Na IV	150.297	400		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-	693
Na IV	150.545	300		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-	693
Na IV	150.647	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	0-	693
Na IV	150.695	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-	693
Na IV	150.968	200b		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-	693
Na IV	151.048	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	0-	693
Na IV	151.303	100b		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$^1D - ^1D^\circ$	2-2	693
Na IV	155.090	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	2-1	693
Na IV	155.248	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3S^\circ$	2-1	693
Na IV	155.354	10		$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	1-1	693
Na IV	155.445	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	2-1	693
Na IV	155.515	400		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	2-2	693
Na IV	155.622	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3S^\circ$	0-1	693
Na IV	155.693	200d		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	1-0	693
Na IV	155.781	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	1-2	693
Na IV	155.832	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	0-1	693
Na IV	156.536	800		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3D^\circ$	2-3	693
Na IV	156.780	500		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3D^\circ$	1-	693
Na IV	156.887	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3D^\circ$	0-1	693
Na IV	157.090	400		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	693
Na IV	157.599	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$^1D - ^1P^\circ$	2-1	693
Na IV	157.782	300		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$^1D - ^1D$	2-2	693
Na IV	162.445	800		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1F^\circ$	2-3	693
Na IV	163.187	600		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1D^\circ$	2-2	693
Na IV	163.840	400		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1P^\circ$	2-1	693
Na IV?	164.841	400					693
Na IV	168.084	1000		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	2-	693
Na IV	168.409	800		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	1-	693
Na IV	168.544	500		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	0-1	693
Na IV	174.008	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1S - ^1P^\circ$	0-1	693
Na IV	181.758	800		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-	693
Na IV	182.128	600		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-	693
Na IV	182.282	400		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	0-	693

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na IV	190.126	600		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1D - ^1P^\circ$	2-1	693
Na IV	190.440	1000		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - ^3D^\circ$	2-	693
Na IV	190.835	800		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - ^3D^\circ$	1-	693
Na IV	191.000	600		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - ^3D^\circ$	0-	693
Na IV	199.769	600		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$^1D - ^1D^\circ$	2-2	693
Na IV	203.959	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	693
Na IV	205.487	600		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - ^3S^\circ$	2-1	693
Na IV	205.956	400		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - ^3S^\circ$	1-1	693
Na IV	206.155	300		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - ^3S^\circ$	0-1	693
Na IV	319.638	1000		$2s^22p^4 - 2s2p^5$	$^1D - ^1P^\circ$	2-1	197,693
Na IV	360.761	600		$2s^22p^4 - 2s2p^5$	$^1S - ^1P^\circ$	0-1	693
Na IV	408.682	800		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	2-1	197,693
Na IV	409.615	800		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-0	197,693
Na IV	410.371	1000		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	2-2	197,693
Na IV	410.540	600		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-1	197,693
Na IV	411.333	700		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	0-1	197,693
Na IV	412.240	800		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-2	197,693

Ground state $1s^2 2s^2 2p^3\ ^4S^\circ_{3/2}$

Ionization potential 1 116 312 cm^{-1}; 138.40 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na V	100.851	10		$2s^22p^3 - 2s^22p^2(^1D)5d$	$^2D^\circ - ^2D$		692
Na V	100.945	10		$2s^22p^3 - 2s^22p^2(^1D)5d$	$^2D^\circ - ^2F$		692
Na V	103.482	10		$2s^22p^3 - 2s^22p^2(^1D)5d$	$^2P^\circ - ^2D$		692
Na V	106.278	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-3/2	692
Na V	106.302	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-5/2	692
Na V	106.399	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4D$	3/2-1/2	692
Na V	106.490	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4D$	3/2-3/2	692
Na V	107.934	200b		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2D$		692
Na V	108.017	200		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2F$		692
Na V	110.817	200b		$2s^22p^3 - 2s2p^3(^3D^\circ)3p$	$^2D^\circ - ^2F$	3/2-5/2	692
Na V	110.878	200		$2s^22p^3 - 2s2p^3(^3D^\circ)3p$	$^2D^\circ - ^2F$	5/2-7/2	692
Na V	110.921	10		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2D$		692
Na V	111.512	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	5/2-5/2	692
Na V	111.552	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	3/2-3/2	692
Na V	111.879	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-7/2	692
Na V	112.009	300b		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-5/2	692
Na V	112.077	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-1/2	692
Na V	112.186	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^4D$		692
Na V	112.347	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2P$	5/2-3/2	692
Na V	113.574	10		$2s^22p^3 - 2s^22p^2(^1D)4s$	$^2D^\circ - ^2D$		692
Na V	114.700	100d		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	3/2-5/2	692
Na V	114.738	100		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	1/2-3/2	692
Na V	117.703	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	5/2-3/2	693
Na V	117.876	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	3/2-1/2	693
Na V	117.990	400		$2s^22p^3 - 2s2p^3(^5S^\circ)3p$	$g^4S^\circ - ^4P$	3/2-	692
Na V	121.263	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2P^\circ - ^2P$	3/2-3/2	692
Na V	125.178	400		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-1/2	692
Na V	125.216	400		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-3/2	692
Na V	125.286	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-5/2	692
Na V	125.428	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-1/2	692
Na V	125.461	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-	692
Na V	125.899	200		$2s^22p^3 - 2s^22p^2(^1S)3d$	$^2P^\circ - ^2D$		692
Na V	126.090	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4S^\circ$	5/2-3/2	692
Na V	126.210	100		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4D^\circ$	5/2-	692
Na V	126.368	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4D^\circ$	3/2-	692
Na V	126.458	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4D^\circ$	1/2-	692
Na V	126.557	200		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	5/2-3/2	692
Na V	126.608	100		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	3/2-1/2	692
Na V	126.779	10b		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	5/2-3/2	692
Na V	126.814	100b		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	5/2-5/2	692
Na V	126.920	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	3/2-1/2	692
Na V	126.985	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	3/2-5/2	692
Na V	127.036	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	1/2-3/2	692
Na V	127.444	400		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	5/2-5/2	692
Na V	127.473	400		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	3/2-3/2	692
Na V	128.025	400		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	3/2-5/2	692
Na V	128.051	400		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-7/2	692
Na V	129.942	100		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2S$	3/2-1/2	692
Na V	130.680	200		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	-3/2	692
Na V	130.723	100		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	-1/2	692
Na V	131.345	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	692
Na V	131.413	200		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-3/2	692
Na V	131.635	300d		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$		692
Na V	133.162	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	692
Na V	133.388	400		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	692

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na V	134.183	10		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-1/2	692
Na V	134.272	200		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	5/2-3/2	692
Na V	135.791	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	3/2-5/2	692
Na V	135.854	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	1/2-3/2	692
Na V	138.812	200		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	-1/2	692,693
Na V	138.917	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	-3/2	692
Na V	140.171	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^2D - ^2F^\circ$	3/2-5/2	692
Na V	140.258	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^2D - ^2F^\circ$	5/2-7/2	692
Na V	142.232	200b		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^4P - ^4P^\circ$	5/2-	692,693
Na V	142.415	10		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-	692
Na V	144.330	200		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	5/2-7/2	692
Na V	144.546	200		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	3/2-5/2	692
Na V	144.661	100		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	1/2-3/2	692,693
Na V	147.897	200		$2s^22p^3 - 2s^22p^2(^1S)3s$	$^2P^\circ - ^2S$	-1/2	692
Na V	148.642	400		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-5/2	692
Na V	148.856	300		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-3/2	692
Na V	149.001	200		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-1/2	692
Na V	150.968	200b		$2s2p^4 - 2s2p^3(^3D^\circ)3s$	$^4P - ^4D^\circ$	5/2-	692
Na V	151.127	400		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - ^2D$		692
Na V	151.188	100		$2s2p^4 - 2s2p^3(^3D^\circ)3s$	$^4P - ^4D^\circ$	3/2-	692
Na V	151.303	100b		$2s2p^4 - 2s2p^3(^3D^\circ)3s$	$^4P - ^4D^\circ$	1/2-	692
Na V	157.036	200		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2P^\circ - ^2D$		692
Na V	157.209	300		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	-3/2	692
Na V	157.511	200		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	3/2-1/2	692
Na V	163.616	300		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	3/2-3/2	692
Na V	163.930	200		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	-1/2	692
Na V	167.510	100		$2s2p^4 - 2s2p^3(^3D^\circ)3s$	$^2D - ^2D^\circ$		692
Na V	170.631	100		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	5/2-3/2	692
Na V	170.923	100		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	3/2-3/2	692
Na V	171.076	100d		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	1/2-3/2	692
Na V	307.152	800		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-1/2	197,692
Na V	308.264	1000		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	5/2-3/2	197,692
Na V	330.718	10		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2S$	3/2-1/2	692
Na V	332.550	800		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	1/2-1/2	692
Na V	333.910	900		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	3/2-3/2	692
Na V	360.319	800		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2S$	1/2-1/2	692
Na V	360.367	800		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2S$	3/2-1/2	692
Na V	367.557	200		$2s2p^4 - 1s^22p^5$	$^2D - ^2P^\circ$	3/2-1/2	692
Na V	369.743	300		$2s2p^4 - 1s^22p^5$	$^2D - ^2P^\circ$	5/2-3/2	692
Na V	400.722	1000		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$		197,692
Na V	445.046	500		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	1/2-3/2	692
Na V	445.190	600		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	3/2-5/2	692
Na V	459.897	600		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-1/2	197,692
Na V	461.051	850		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-3/2	197,692
Na V	463.263	1000		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-5/2	197,692
Na V	510.102	10		$2s2p^4 - 1s^22p^5$	$^2P - ^2P^\circ$	1/2-1/2	692
Na V	511.193	100		$2s2p^4 - 1s^22p^5$	$^2P - ^2P^\circ$	3/2-3/2	692
Na V	514.350	10		$2s2p^4 - 1s^22p^5$	$^2P - ^2P^\circ$	1/2-3/2	692

Ground state $1s^22s^22p^2\ ^3P_0$

Ionization potential 1 388 419 cm^{-1}; 172.14 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na VI	80.345	10		$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$^1D - ^1F^\circ$	2-3	692
Na VI	80.645	10d		$2s2p^3 - 2s2p^2(^4P)5d$	$^5S^\circ - ^5P$	2-3	692
Na VI	81.498	200b		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - ^3P^\circ$	2-2	692
Na VI	81.543	100d		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - ^3D^\circ$	2-3	692
Na VI	81.584	100d		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - ^3D^\circ$	2-2	692
Na VI	83.639	100		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$^1D - ^1F^\circ$	2-3	692
Na VI	87.141	100b		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-2	692
Na VI	87.211	700b		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-3	692
Na VI	88.038	100		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	1-2	692
Na VI	88.143	200d		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	2-2	692
Na VI	88.223	100		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	0-1	692
Na VI	88.246	200		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	1-2	692
Na VI	88.270	300d		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-3	692
Na VI	88.340	100d		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-2	692
Na VI	88.387	10		$2s2p^3 - 2s2p^2(^2D)4d$	$^3D^\circ - ^3P$		692
Na VI	88.460	100		$2s2p^3 - 2s2p^2(^2D)4d$	$^3D^\circ - ^3F$		692
Na VI	90.468	300		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	692
Na VI	90.746	10		$2s2p^3 - 2s2p^2(^4P)4s$	$^5S^\circ - ^5P$	2-3	692
Na VI	91.268	100		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$^1D - ^1D^\circ$	2-2	692
Na VI	91.414	10d		$2s2p^3 - 2s2p^2(^2D)4d$	$^3P^\circ - ^3P$		692
Na VI	91.475	10		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$^1D - ^3F^\circ$	2-2	692
Na VI	91.737	10		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - ^3P^\circ$	1-2	692
Na VI	91.836	10		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - ^3P^\circ$	2-2	692
Na VI	94.208	100		$2s2p^3 - 1s^22p^3(^4S^\circ)3p$	$^3D^\circ - ^3P$	3-	692
Na VI	94.827	10d		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3D$		692
Na VI	95.182	100		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	3-4	692
Na VI	95.263	100		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	2-3	692
Na VI	95.319	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	1-2	692
Na VI	95.933	300		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1D^\circ$	2-2	692
Na VI	96.124	10		$2s^22p^2 - 2s2p^2(^2D)3p$	$g^3P - ^3D^\circ$	0-	692
Na VI	96.196	100		$2s^22p^2 - 2s2p^2(^2D)3p$	$g^3P - ^3D^\circ$	1-	692
Na VI	96.307	100		$2s^22p^2 - 2s2p^2(^2D)3p$	$g^3P - ^3D^\circ$	2-	692
Na VI	96.475	300		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1F^\circ$	2-3	692
Na VI	97.636	10		$2s2p^3 - 1s^22p^3(^4S^\circ)3p$	$^3P^\circ - ^3P$		692
Na VI	98.309	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^3P^\circ - ^3D$	2-	692
Na VI	99.004	10		$2s2p^3 - 2s2p^2(^4P)4s$	$^3D^\circ - ^3P$	3-2	692
Na VI	99.500	10		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P^\circ$	1-2	692
Na VI	99.617	100		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P^\circ$	2-2	692
Na VI	99.680	100b		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P^\circ$	2-1	692
Na VI	100.469	200		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	1-2	692
Na VI	100.519	300		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	2-3	692
Na VI	100.590	100		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	2-2	672
Na VI	103.002	10		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S^\circ$	0-1	692
Na VI	103.078	100		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S^\circ$	1-1	692
Na VI	103.210	200		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S^\circ$	2-1	692
Na VI	106.040	300		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-1	692
Na VI	106.077	300		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-2	692
Na VI	106.125	400		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-3	692
Na VI	106.580	10		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5D$	2-3	692
Na VI	107.014	200		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	0-1	692
Na VI	107.061	300b		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-0	692
Na VI	107.093	300b		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-1	692
Na VI	107.158	100b		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-2	692
Na VI	107.227	300		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-1	692
Na VI	107.288	400		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-2	692

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na VI	107.535	300		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3D^\circ$ - ^3D	-	692
Na VI	107.553	300		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3D^\circ$	0-1	692
Na VI	107.608	400		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3D^\circ$	1-2	692
Na VI	107.683	500		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3D^\circ$	2-3	692
Na VI	107.742	200		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^3D^\circ$	2-2	692
Na VI	107.934	200b		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3D^\circ$ - ^3P	-	692
Na VI	108.555	400		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3D^\circ$ - ^3F	-	692
Na VI	108.678	10		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	g^3P - $^1D^\circ$	1-2	692
Na VI	109.763	10		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1D - $^1P^\circ$	2-1	692
Na VI	109.896	500		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1D - $^1F^\circ$	2-3	692
Na VI	110.750	200		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3P^\circ$ - ^3S	-1	692
Na VI	111.725	100		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1D - $^3D^\circ$	2-3	692
Na VI	111.793	100		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1D - $^3D^\circ$	2-2	692
Na VI	112.009	300b		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3P^\circ$ - ^3D	2-3	692
Na VI	112.448	300d		$2s2p^3$ - $2s2p^2(^2D)3d$	$^3P^\circ$ - ^3P	-	692
Na VI	112.950	400		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1D - $^1D^\circ$	2-2	692
Na VI	113.125	400		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1D - $^3F^\circ$	2-2	692
Na VI	114.666	400		$2s^22p^2$ - $2s^22p(^2P^\circ)3d$	^1S - $^1P^\circ$	0-1	692
Na VI	115.729	200		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3D	3-3	692
Na VI	115.780	10d		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3D	2-2	692
Na VI	117.491	400		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3F	3-4	692
Na VI	117.609	300		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3F	2-3	692
Na VI	117.699	300		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3F	1-2	692
Na VI	118.500	10		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3P	2-1	692
Na VI	118.585	10		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3D^\circ$ - ^3P	3-2	692
Na VI	119.204	10b		$2s2p^3$ - $2s2p^2(^2D)3d$	$^1D^\circ$ - ^1P	2-1	692
Na VI	119.684	300		$2s2p^3$ - $2s2p^2(^2D)3d$	$^1D^\circ$ - ^1D	2-2	692
Na VI	120.931	300		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3P^\circ$ - ^3D	2-3	692
Na VI	120.973	200		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3P^\circ$ - ^3D	1-2	692
Na VI	121.004	100		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3P^\circ$ - ^3D	0-1	692
Na VI	121.773	400		$2s2p^3$ - $2s2p^2(^4P)3s$	$^5S^\circ$ - ^5P	2-3	692
Na VI	121.913	320		$2s2p^3$ - $2s2p^2(^4P)3s$	$^5S^\circ$ - ^5P	2-2	692
Na VI	122.018	300b		$2s2p^3$ - $2s2p^2(^4P)3s$	$^5S^\circ$ - ^5P	2-1	692
Na VI	123.134	400		$2s2p^3$ - $2s2p^2(^2D)3s$	$^3D^\circ$ - ^3D	-	692
Na VI	123.744	400		$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	1-2	692
Na VI	123.868	300		$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	0-1	692
Na VI	123.929	500		$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	2-2	692
Na VI	123.970	200		$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	1-1	692
Na VI	124.059	400		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3P^\circ$ - ^3P	2-2	692,487
Na VI	124.153	400		$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	g^3P - $^3P^\circ$	2-1	692
Na VI	124.850	10		$2s2p^3$ - $2s2p^2(^2D)3d$	$^1P^\circ$ - ^1P	1-1	692
Na VI	125.383	10		$2s2p^3$ - $2s2p^2(^2D)3d$	$^1P^\circ$ - ^1D	1-2	692
Na VI	127.837	400		$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	^1D - $^1P^\circ$	2-1	692
Na VI	129.040	200		$2s2p^3$ - $2s2p^2(^2D)3s$	$^3P^\circ$ - ^3D	-	692
Na VI	133.825	200		$2s2p^3$ - $2s2p^2(^4P)3s$	$^3D^\circ$ - ^3P	3-2	692
Na VI	134.021	100d		$2s2p^3$ - $2s2p^2(^4P)3s$	$^3D^\circ$ - ^3P	2-1	692
Na VI	134.135	10		$2s2p^3$ - $2s2p^2(^4P)3s$	$^3D^\circ$ - ^3P	1-0	692
Na VI	134.532	300		$2s^22p^2$ - $2s^22p(^2P^\circ)3s$	^1S - $^1P^\circ$	0-1	692
Na VI	137.589	10		$2s2p^3$ - $2s2p^2(^4P)3d$	$^3S^\circ$ - ^3P	1-2	692
Na VI	138.693	200		$2s2p^3$ - $2s2p^2(^2D)3s$	$^1D^\circ$ - ^1D	2-2	692
Na VI	140.833	200		$2s2p^3$ - $2s2p^2(^4P)3s$	$^3P^\circ$ - ^3P	-2	692
Na VI	141.040	10		$2s2p^3$ - $2s2p^2(^4P)3s$	$^3P^\circ$ - ^3P	-1	692
Na VI	146.398	10		$2s2p^3$ - $2s2p^2(^2D)3s$	$^1P^\circ$ - ^1D	1-2	692
Na VI	149.442	10		$2s2p^3$ - $2s^22p(^2P^\circ)3p$	$^3D^\circ$ - ^3P	3-2	692
Na VI	149.621	10		$2s2p^3$ - $2s^22p(^2P^\circ)3p$	$^3D^\circ$ - ^3P	2-1	692
Na VI	311.921	400		$2s^22p^2$ - $2s2p^3$	g^3P - $^3S^\circ$	0-1	692
Na VI	312.608	300		$2s^22p^2$ - $2s2p^3$	g^3P - $^3S^\circ$	1-1	692
Na VI	313.748	500		$2s^22p^2$ - $2s2p^3$	g^3P - $^3S^\circ$	2-1	692
Na VI	317.641	600		$2s^22p^2$ - $2s2p^3$	^1D - $^1P^\circ$	2-1	197,692
Na VI	361.250	800d		$2s^22p^2$ - $2s2p^3$	^1D - $^1D^\circ$	2-2	197,692

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na VI	362.444	400		$2s^22p^2 - 2s2p^3$	$^1S - ^1P^\circ$	0-1	692
Na VI	363.774	200		$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	1-0	692
Na VI	364.477	300		$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	2-1	692
Na VI	366.110	400		$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	3-2	692
Na VI	366.240	10		$2s2p^3 - 1s^22p^4$	$^3D^\circ - ^3P$	2-2	692
Na VI	414.370	200		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	0-	692
Na VI	415.505	400		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	1-	692
Na VI	417.595	600		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	2-	692
Na VI	421.465	100		$2s2p^3 - 1s^22p^4$	$^3P^\circ - ^3P$	-1	692
Na VI	423.821	200		$2s2p^3 - 1s^22p^4$	$^3P^\circ - ^3P$	-2	692
Na VI	440.266	300		$2s2p^3 - 1s^22p^4$	$^1D^\circ - ^1D$	2-2	692
Na VI	489.580	500		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	0-1	197,692
Na VI	491.240	300		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	1-1	197,692
Na VI	491.340	600		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	1-2	197,692
Na VI	494.160	300		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	2-2	197,692
Na VI	494.382	700		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	2-3	197,692
Na VI	528.730	10		$2s2p^3 - 1s^22p^4$	$^1P^\circ - ^1D$	1-2	692
Na VI	632.90	10		$2s2p^3 - 1s^22p^4$	$^3S^\circ - ^3P$	1-1	692
Na VI	638.21	10		$2s2p^3 - 1s^22p^4$	$^3S^\circ - ^3P$	1-2	692

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Ground state $1s^2 2s^2 2p\ ^2P^\circ_{1/2}$

Ionization potential 1 681 679 cm^{-1}; 208.50 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na VII	62.725	10d		$2s^2(^1S)2p - 2s^2(^1S)8d$	$g^2P^\circ - ^2D$	3/2-5/2	691
Na VII	63.185	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)5p$	$g^2P^\circ - ^2D$	1/2-3/2	692,691
Na VII	63.227	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)5p$	$g^2P^\circ - ^2D$	3/2-5/2	691
Na VII	63.361	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)5p$	$g^2P^\circ - ^2P$	1/2-	691
Na VII	63.442	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)5p$	$g^2P^\circ - ^2P$	3/2-	691
Na VII	63.778	10		$2s^2(^1S)2p - 2s^2(^1S)7d$	$g^2P^\circ - ^2D$	3/2-5/2	691
Na VII	64.113	10		$2s^2(^1S)2p - 2s2p(^1P^\circ)4p$	$g^2P^\circ - ^2D$	3/2-	691
Na VII	64.904	10		$2s2p^2 - 2s2p(^3P^\circ)6d$	$^4P - ^4D^\circ$	5/2-	691
Na VII	65.388	100		$2s^2(^1S)2p - 2s^2(^1S)6d$	$g^2P^\circ - ^2D$	1/2-3/2	691
Na VII	65.474	100		$2s^2(^1S)2p - 2s^2(^1S)6d$	$g^2P^\circ - ^2D$	3/2-5/2	691
Na VII	67.826	100d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4P^\circ$	3/2-	691
Na VII	67.877	100d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4P^\circ$	5/2-	691
Na VII	67.912	200d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4D^\circ$	5/2-	691
Na VII	68.422	10d		$2s^2(^1S)2p - 2s^2(^1S)5d$	$g^2P^\circ - ^2D$	1/2-3/2	691
Na VII	68.519	100d		$2s^2(^1S)2p - 2s^2(^1S)5d$	$g^2P^\circ - ^2D$	3/2-5/2	691
Na VII	68.866	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	1/2-3/2	691
Na VII	68.908	100		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	3/2-5/2	691
Na VII	69.314	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2P$	1/2-1/2	691
Na VII	69.395	10d		$2s^2(^1S)2p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2P$	3/2-3/2	691
Na VII	72.020	100		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^2D - ^2F^\circ$	5/2-7/2	691
Na VII	72.079	100		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^2D - ^2F^\circ$	3/2-5/2	691
Na VII	72.865	200		$2s2p^2 - 2s2p(^1P^\circ)4d$	$^2D - ^2F^\circ$		691
Na VII	74.097	100		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3/2-5/2	691
Na VII	74.180	200		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	5/2-5/2	691
Na VII	74.217	200		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	1/2-3/2	691
Na VII	74.255	300		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	3/2-5/2	691
Na VII	74.268	300		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5/2-7/2	691
Na VII	74.861	300		$2s^2(^1S)2p - 2s^2(^1S)4d$	$g^2P^\circ - ^2D$	1/2-3/2	691
Na VII	74.980	300b		$2s^2(^1S)2p - 2s^2(^1S)4d$	$g^2P^\circ - ^2D$	3/2-5/2	691
Na VII	76.501	10		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3/2-5/2	691
Na VII	76.565	10		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5/2-5/2	691
Na VII	76.626	10d		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5/2-3/2	691
Na VII	76.827	10		$1s^22p^3 - 1s^22p^2(^3P)4d$	$^4S^\circ - ^4P$	3/2-3/2	691
Na VII	76.862	10		$1s^22p^3 - 1s^22p^2(^3P)4d$	$^4S^\circ - ^4P$	3/2-5/2	691
Na VII	77.353	100		$2s^2(^1S)2p - 2s^2(^1S)4s$	$g^2P^\circ - ^2S$	3/2-1/2	691
Na VII	78.459	10		$2s2p^2 - 2s2p(^1P^\circ)4s$	$^2S - ^2P^\circ$	1/2-3/2	691
Na VII	78.771	10		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2P^\circ$		691
Na VII	78.907	300		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2F^\circ$	5/2-7/2	691
Na VII	78.982	200		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2F^\circ$	3/2-5/2	691
Na VII	79.477	200		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2S$	1/2-1/2	691
Na VII	79.571	100		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2S$	3/2-1/2	691
Na VII	79.761	10		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	1/2-3/2	691
Na VII	79.786	10		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	1/2-1/2	691
Na VII	79.893	300d		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	3/2-3/2	691
Na VII	80.008	300		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2D$	3/2-5/2	691
Na VII	80.133	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	1/2-3/2	691
Na VII	80.174	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	3/2-3/2	691
Na VII	80.245	100		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	5/2-3/2	691
Na VII	81.430	100		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	5/2-5/2	691
Na VII	81.498	200b		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^2D - ^2P^\circ$	5/2-3/2	691
Na VII	81.855	400		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4D^\circ$	5/2-7/2	691
Na VII	82.636	10		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2S - ^2P^\circ$	1/2-1/2	691
Na VII	82.685	10		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2S - ^2P^\circ$	1/2-3/2	691
Na VII	84.221	400		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2D - ^2D^\circ$		691
Na VII	84.832	10		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2P - ^2D^\circ$		691

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na VII	85.260	300		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2D - ^2F^\circ$	5/2-7/2	691
Na VII	85.297	300		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	1/2-1/2	691
Na VII	85.458	400		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	3/2-1/2	691
Na VII	86.596	400		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	1/2-3/2	691
Na VII	86.652	500		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	3/2-5/2	691
Na VII	86.758	300b		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	3/2-3/2	691
Na VII	87.141	100b		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^2P - ^2P^\circ$	3/2-3/2	691
Na VII	87.471	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^2D - ^2D^\circ$		691
Na VII	88.698	200		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	1/2-3/2	691
Na VII	88.747	300		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	1/2-1/2	691
Na VII	88.865	400		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3/2-3/2	691
Na VII	88.914	200		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3/2-1/2	691
Na VII	90.173	100		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2P - ^2D^\circ$	1/2-	691
Na VII	90.252	400b		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2P - ^2D^\circ$	3/2-	691
Na VII	90.830	10		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2P^\circ$		691
Na VII	91.064	200		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2D^\circ$		691
Na VII	92.003	500		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2F^\circ$		691
Na VII	92.774	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	1/2-3/2	691
Na VII	92.809	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3/2-1/2	691
Na VII	92.843	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3/2-3/2	691
Na VII	92.883	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3/2-5/2	691
Na VII	92.930	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5/2-3/2	691
Na VII	92.976	400		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5/2-5/2	691
Na VII	93.393	400		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	1/2-3/2	691
Na VII	93.434	400		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3/2-5/2	691
Na VII	93.486	500		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5/2-7/2	691
Na VII	93.528	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5/2-5/2	691
Na VII	94.020	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^2P - ^2D^\circ$		691
Na VII	94.288	600		$2s^2(^1S)2p - 2s^2(^1S)3d$	$g^2P^\circ - ^2D$	1/2-3/2	691
Na VII	94.468	700		$2s^2(^1S)2p - 2s^2(^1S)3d$	$g^2P^\circ - ^2D$	3/2-5/2	691
Na VII	96.845	100		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3/2-1/2	691
Na VII	96.872	200		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3/2-3/2	691
Na VII	96.922	300		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3/2-5/2	691
Na VII	97.790	100		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2P^\circ$	1/2-	691
Na VII	97.907	200		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2P^\circ$	3/2-	691
Na VII	98.016	100		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	-3/2	691
Na VII	98.080	300b		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2D^\circ$	1/2-3/2	691
Na VII	98.188	300		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2D^\circ$	3/2-5/2	691
Na VII	98.378	300		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-7/2	691
Na VII	98.394	300		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	3/2-5/2	691
Na VII	99.421	400		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2F^\circ$	5/2-7/2	691
Na VII	99.556	400		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2F^\circ$	3/2-5/2	691
Na VII	99.680	100b		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2D^\circ - ^2D$		691
Na VII	100.718	200		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2D - ^2P^\circ$		691
Na VII	101.785	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2D^\circ$	5/2-5/2	691
Na VII	101.816	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2D^\circ$	3/2-3/2	691
Na VII	102.226	100		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^2D^\circ - ^2D$		691
Na VII	102.390	100		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	691
Na VII	102.448	10		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	691
Na VII	103.354	100		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	-3/2	691
Na VII	103.400	10		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	-1/2	691
Na VII	103.779	300		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-5/2	691
Na VII	103.842	200		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	1/2-3/2	691
Na VII	103.891	400d		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	5/2-5/2	691
Na VII	104.000	200		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-1/2	691
Na VII	104.036	220		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	5/2-3/2	691
Na VII	104.871	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2S - ^2P^\circ$	1/2-1/2	691
Na VII	104.955	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2S - ^2P^\circ$	1/2-3/2	691
Na VII	105.111	300		$2s^2(^1S)2p - 2s^2(^1S)3s$	$g^2P^\circ - ^2S$	1/2-1/2	691
Na VII	105.205	200		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2P^\circ - ^2D$		691

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na VII	105.354	400		$2s^2(^1S)2p - 2s^2(^1S)3s$	$g^2P^\circ - {}^2S$	3/2-1/2	691
Na VII	107.061	300b		$2s2p^2 - 2s2p(^3P^\circ)3d$	${}^2P - {}^2P^\circ$	1/2-1/2	691
Na VII	107.093	300b		$2s2p^2 - 2s2p(^1P^\circ)3s$	${}^2S - {}^2P^\circ$	1/2-	691
Na VII	108.079	10		$1s^22p^3 - 1s^22p^2(^3P)3d$	${}^2P^\circ - {}^2D$	3/2-5/2	691
Na VII	108.193	200		$1s^22p^3 - 1s^22p^2(^3P)3s$	${}^4S^\circ - {}^4P$	3/2-5/2	691
Na VII	108.373	100		$1s^22p^3 - 1s^22p^2(^3P)3s$	${}^4S^\circ - {}^4P$	3/2-3/2	691
Na VII	108.733	200		$1s^22p^3 - 1s^22p^2(^1D)3s$	${}^2D^\circ - {}^2D$	5/2-5/2	691
Na VII	108.829	100		$1s^22p^3 - 1s^22p^2(^1D)3s$	${}^2D^\circ - {}^2D$	3/2-3/2	691
Na VII	109.362	100		$2s2p^2 - 2s2p(^1P^\circ)3s$	${}^2P - {}^2P^\circ$	1/2-	691
Na VII	109.519	200		$2s2p^2 - 2s2p(^1P^\circ)3s$	${}^2P - {}^2P^\circ$	3/2-	691
Na VII	110.647	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	${}^2P - {}^2D^\circ$	1/2-3/2	691
Na VII	110.778	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	${}^2P - {}^2D^\circ$	3/2-5/2	691
Na VII	110.817	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	${}^2P - {}^2D^\circ$	3/2-3/2	691
Na VII	111.211	300		$2s2p^2 - 2s2p(^3P^\circ)3s$	${}^2D - {}^2P^\circ$	5/2-3/2	691
Na VII	111.390	200		$2s2p^2 - 2s2p(^3P^\circ)3s$	${}^2D - {}^2P^\circ$	3/2-1/2	691
Na VII	115.361	10		$1s^22p^3 - 1s^22p^2(^1D)3s$	${}^2P^\circ - {}^2D$	3/2-5/2	691
Na VII	115.475	10		$1s^22p^3 - 1s^22p^2(^1D)3s$	${}^2P^\circ - {}^2D$	1/2-3/2	691
Na VII	118.840	10		$1s^22p^3 - 2s2p(^1P^\circ)3p$	${}^2D^\circ - {}^2P$	-3/2	691
Na VII	118.902	10		$1s^22p^3 - 2s2p(^1P^\circ)3p$	${}^2D^\circ - {}^2P$	-1/2	691
Na VII	119.014	100		$2s2p^2 - 2s2p(^3P^\circ)3s$	${}^2S - {}^2P^\circ$	1/2-3/2	691
Na VII	119.100	10		$1s^22p^3 - 2s2p(^1P^\circ)3p$	${}^2D^\circ - {}^2D$		691
Na VII	119.204	10b		$2s2p^2 - 2s2p(^3P^\circ)3s$	${}^2S - {}^2P^\circ$	1/2-1/2	691
Na VII	122.018	300b		$2s2p^2 - 2s2p(^3P^\circ)3s$	${}^2P - {}^2P^\circ$	3/2-3/2	691
Na VII	122.252	100		$2s2p^2 - 2s2p(^3P^\circ)3s$	${}^2P - {}^2P^\circ$	3/2-1/2	691
Na VII	124.532	10		$2s2p^2 - 2s^2(^1S)3p$	${}^2D - {}^2P^\circ$	5/2-3/2	691
Na VII	126.779	10		$1s^22p^3 - 2s2p(^1P^\circ)3p$	${}^2P^\circ - {}^2P$	1/2-3/2	691
Na VII	126.814	100		$1s^22p^3 - 2s2p(^1P^\circ)3p$	${}^2P^\circ - {}^2P$	3/2-3/2	691
Na VII	139.867	200b		$1s^22p^3 - 2s2p(^3P^\circ)3p$	${}^2D^\circ - {}^2P$		691,692,693
Na VII	350.645	500		$2s^2(^1S)2p - 2s2p^2$	$g^2P^\circ - {}^2P$	1/2-3/2	197,691
Na VII	352.275	600		$2s^2(^1S)2p - 2s2p^2$	$g^2P^\circ - {}^2P$	1/2-1/2	197,691
Na VII	353.294	800		$2s^2(^1S)2p - 2s2p^2$	$g^2P^\circ - {}^2P$	3/2-3/2	197,691
Na VII	354.950	400		$2s^2(^1S)2p - 2s2p^2$	$g^2P^\circ - {}^2P$	3/2-1/2	197,691
Na VII	381.300	300		$2s^2(^1S)2p - 2s2p^2$	$g^2P^\circ - {}^2S$	3/2-1/2	691
Na VII	385.061	10		$2s2p^2 - 1s^22p^3$	${}^2D - {}^2P^\circ$	5/2-3/2	691
Na VII	385.254	10		$2s2p^2 - 1s^22p^3$	${}^2D - {}^2P^\circ$	3/2-1/2	691
Na VII	396.335	200		$2s2p^2 - 1s^22p^3$	${}^4P - {}^4S^\circ$	1/2-3/2	691
Na VII	397.490	300		$2s2p^2 - 1s^22p^3$	${}^4P - {}^4S^\circ$	3/2-3/2	691
Na VII	399.182	400		$2s2p^2 - 1s^22p^3$	${}^4P - {}^4S^\circ$	5/2-3/2	691
Na VII	483.216	200		$2s2p^2 - 1s^22p^3$	${}^2D - {}^2D^\circ$	3/2-3/2	691
Na VII	483.328	300		$2s2p^2 - 1s^22p^3$	${}^2D - {}^2D^\circ$	5/2-5/2	691
Na VII	486.740	400		$2s^2(^1S)2p - 2s2p^2$	$g^2P^\circ - {}^2D$	1/2-3/2	197,691
Na VII	491.950	400d		$2s^2(^1S)2p - 2s2p^2$	$g^2P^\circ - {}^2D$	3/2-5/2	197,691

Ground state $1s^22s^2\ ^1S_0$

Ionization potential 2 131 139 cm^{-1}; 264.22 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na VIII	51.316	10		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)6p$	$^3P^\circ - ^3D$	2-	691
Na VIII	51.789	10		$1s^22s^2 - 1s^22s(^2S)6p$	$g^1S - ^1P^\circ$	0-1	691
Na VIII	53.750	10		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)5p$	$^3P^\circ - ^3P$	2-2	691
Na VIII	54.380	100		$1s^22s^2 - 1s^22s(^2S)5p$	$g^1S - ^1P^\circ$	0-1	691
Na VIII	55.345	10		$1s^22s(^2S)2p - 1s^22s(^2S)6d$	$^3P^\circ - ^3D$	1-2	691
Na VIII	55.396	100		$1s^22s(^2S)2p - 1s^22s(^2S)6d$	$^3P^\circ - ^3D$	2-3	691
Na VIII	57.096	10		$1s^22p^2 - 1s^22p(^2P^\circ)6d$	$^3P - ^3P^\circ$	2-2	691
Na VIII	57.119	10		$1s^22p^2 - 1s^22p(^2P^\circ)6d$	$^3P - ^3D^\circ$	2-3	691
Na VIII	57.230	10d		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)5p$	$^1P^\circ - ^1D$	1-2	691
Na VIII	58.070	10		$1s^22s(^2S)2p - 1s^22s(^2S)5d$	$^3P^\circ - ^3D$	1-2	691
Na VIII	58.201	500b		$1s^22s(^2S)2p - 1s^22s(^2S)5d$	$^3P^\circ - ^3D$	2-3	691
Na VIII	59.009	100		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3P$	2-2	691
Na VIII	59.101	10		$1s^22s(^2S)2p - 1s^22s(^2S)6d$	$^1P^\circ - ^1D$	1-2	691
Na VIII	59.204	300		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-3	691
Na VIII	59.249	10		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-2	691
Na VIII	59.759	200		$1s^22s^2 - 1s^22s(^2S)4p$	$g^1S - ^1P^\circ$	0-1	691
Na VIII	59.992	10		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^3P - ^3P^\circ$	1-1	691
Na VIII	60.053	100		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^3P - ^3P^\circ$	2-2	691
Na VIII	60.073	100		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^3P - ^3D^\circ$	2-3	691
Na VIII	61.088	200		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^1D - ^1F^\circ$	2-3	691
Na VIII	61.347	1		$1s^22p^2 - 1s^22p(^2P^\circ)5d$	$^1D - ^1D$	2-2	691
Na VIII	62.276	100		$1s^22s(^2S)2p - 1s^22s(^2S)5d$	$^1P^\circ - ^1D$	1-2	691
Na VIII	63.114	100		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^1P^\circ - ^1D$	1-2	691
Na VIII	63.695	10		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)4p$	$^1P^\circ - ^1P$	1-1	691
Na VIII	64.205	200		$1s^22s(^2S)2p - 1s^22s(^2S)4d$	$^3P^\circ - ^3D$	0-1	691
Na VIII	64.237	400		$1s^22s(^2S)2p - 1s^22s(^2S)4d$	$^3P^\circ - ^3D$	1-2	691
Na VIII	64.302	500		$1s^22s(^2S)2p - 1s^22s(^2S)4d$	$^3P^\circ - ^3D$	2-3	691
Na VIII	65.672	10		$1s^22s(^2S)2p - 1s^22s(^2S)4s$	$^3P^\circ - ^3S$	1-1	691
Na VIII	65.730	10		$1s^22s(^2S)2p - 1s^22s(^2S)4s$	$^3P^\circ - ^3S$	2-1	691
Na VIII	66.059	200		$1s^22s^2 - 1s^22p(^2P^\circ)3d$	$g^1S - ^1P^\circ$	0-1	691
Na VIII	66.358	10		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^3P - ^3P^\circ$	1-1	691
Na VIII	66.433	200d		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^3P - ^3P^\circ$	2-2	691
Na VIII	66.498	400		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^3P - ^3D^\circ$	2-3	691
Na VIII	67.478	100		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^1D - ^1P^\circ$	2-1	691
Na VIII	67.672	400		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	691
Na VIII	68.193	100		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^1D - ^1D^\circ$	2-2	691
Na VIII	69.120	300		$1s^22s(^2S)2p - 1s^22s(^2S)4d$	$^1P^\circ - ^1D$	1-2	691
Na VIII	70.741	10		$1s^22s(^2S)2p - 1s^22s(^2S)4s$	$^1P^\circ - ^1S$	1-0	691
Na VIII	74.956	300		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	1-2	691
Na VIII	74.980	300b		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	1-1	691
Na VIII	75.043	400		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-2	691
Na VIII	75.096	300		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-1	691
Na VIII	75.385	100		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	0-1	691
Na VIII	75.428	200		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	1-1	691
Na VIII	75.518	300		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	2-1	691
Na VIII	76.123	500		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-3	691
Na VIII	76.173	100		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	1-1	691
Na VIII	76.217	200		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-2	691
Na VIII	77.267	600		$1s^22s^2 - 1s^22s(^2S)3p$	$g^1S - ^1P^\circ$	0-1	691
Na VIII	80.756	10		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1S$	1-0	691
Na VIII	81.210	500		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1D$	1-2	691
Na VIII	83.240	700		$1s^22s(^2S)2p - 1s^22s(^2S)3d$	$^3P^\circ - ^3D$	0-1	691
Na VIII	83.288	800		$1s^22s(^2S)2p - 1s^22s(^2S)3d$	$^3P^\circ - ^3D$	1-2	691
Na VIII	83.391	900		$1s^22s(^2S)2p - 1s^22s(^2S)3d$	$^3P^\circ - ^3D$	2-3	691
Na VIII	84.050	500		$1s^22s(^2S)2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1P$	1-1	691

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na VIII	85.826	200		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	0-1	691
Na VIII	85.861	300		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-0	691
Na VIII	85.887	300		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-1	691
Na VIII	85.936	100		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-2	691
Na VIII	85.992	300		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-1	691
Na VIII	86.039	500		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-2	691
Na VIII	86.381	400		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	0-1	691
Na VIII	86.417	500		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-2	691
Na VIII	86.479	600		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-3	691
Na VIII	86.530	100		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-2	691
Na VIII	86.758	300b		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1P^\circ$	2-1	691
Na VIII	87.211	700b		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	691
Na VIII	89.759	200		$1s^22s(^2S)2p - 1s^22s(^2S)3s$	$^3P^\circ - ^3S$	0-1	691
Na VIII	89.818	300		$1s^22s(^2S)2p - 1s^22s(^2S)3s$	$^3P^\circ - ^3S$	1-1	691
Na VIII	89.948	400		$1s^22s(^2S)2p - 1s^22s(^2S)3s$	$^3P^\circ - ^3S$	2-1	691
Na VIII	90.252	400b		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	691
Na VIII	90.536	500		$1s^22s(^2S)2p - 1s^22s(^2S)3d$	$^1P^\circ - ^1D$	1-2	691
Na VIII	93.120	100		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	1-2	691
Na VIII	93.197	10		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	0-1	691
Na VIII	93.242	200		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	2-2	691
Na VIII	93.339	10		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	1-0	691
Na VIII	93.670	400		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1S - ^1P^\circ$	0-1	691
Na VIII	93.898	200		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^1D - ^1P^\circ$	2-1	691
Na VIII	98.080	300b		$1s^22s(^2S)2p - 1s^23s(^2S)3s$	$^1P^\circ - ^1S$	1-0	691
Na VIII	102.043	10		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	691
Na VIII	107.158	100b		$1s^22p^2 - 1s^22s(^2S)3p$	$^1D - ^1P^\circ$	2-1	691
Na VIII	117.909	10		$1s^22p^2 - 1s^22s(^2S)3p$	$^1S - ^1P^\circ$	0-1	691
Na VIII	411.145	100		$1s^22s^2 - 1s^22s(^2S)2p$	$g^1S - ^1P^\circ$	0-1	691
Na VIII	492.329	10		$1s^22s(^2S)2p - 1s^22p^2$	$^3P^\circ - ^3P$	1-2	691
Na VIII	496.249	100		$1s^22s(^2S)2p - 1s^22p^2$	$^3P^\circ - ^3P$	2-2	691

Ground state $1s^22s\ ^2S_{1/2}$

Ionization potential 2 418 520 cm^{-1}; 299.85 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na IX	44.723	10		$1s^22s - 1s^27p$	$g^2S - {}^2P^\circ$	½-	691
Na IX	46.090	100		$1s^22s - 1s^26p$	$g^2S - {}^2P^\circ$	½-	691
Na IX	47.776	10		$1s^22p - 1s^27d$	${}^2P^\circ - {}^2D$	½-3½	691
Na IX	47.836	100		$1s^22p - 1s^27d$	${}^2P^\circ - {}^2D$	3½-5½	691
Na IX	48.553	200		$1s^22s - 1s^25p$	$g^2S - {}^2P^\circ$	½-	691
Na IX	49.326	100		$1s^22p - 1s^26d$	${}^2P^\circ - {}^2D$	½-3½	691
Na IX	49.386	200		$1s^22p - 1s^26d$	${}^2P^\circ - {}^2D$	3½-5½	691
Na IX	52.116	100		$1s^22p - 1s^25d$	${}^2P^\circ - {}^2D$	½-3½	691
Na IX	52.186	200		$1s^22p - 1s^25d$	${}^2P^\circ - {}^2D$	3½-5½	691
Na IX	52.487	1		$1s^22p - 1s^25s$	${}^2P^\circ - {}^2S$	3½-½	691
Na IX	53.860	300		$1s^22s - 1s^24p$	$g^2S - {}^2P^\circ$	½-	691
Na IX	58.201	500b		$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	½-3½	691
Na IX	58.279	600		$1s^22p - 1s^24d$	${}^2P^\circ - {}^2D$	3½-5½	691
Na IX	58.954	100		$1s^22p - 1s^24s$	${}^2P^\circ - {}^2S$	½-½	691
Na IX	59.042	200		$1s^22p - 1s^24s$	${}^2P^\circ - {}^2S$	3½-½	691
Na IX	70.615	700		$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-3½	691
Na IX	70.653	600		$1s^22s - 1s^23p$	$g^2S - {}^2P^\circ$	½-½	691
Na IX	77.764	700		$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	½-3½	691
Na IX	77.911	800		$1s^22p - 1s^23d$	${}^2P^\circ - {}^2D$	3½-5½	691
Na IX	81.175	500		$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	½-½	691
Na IX	81.350	500		$1s^22p - 1s^23s$	${}^2P^\circ - {}^2S$	3½-½	691
Na IX	681.72	10		$1s^22s - 1s^22p$	$g^2S - {}^2P^\circ$	½-3½	487,691
Na IX	694.26	P		$1s^22s - 1s^22p$	$g^2S - {}^2P^\circ$	½-½	487

Ground state 1s $^2S_{1/2}$

Ionization potential 13 297 676 cm^{-1}; 1648.66 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Na XI	7.735	P		1s - 6p	g^2S - $^2P^\circ$	½-	309
Na XI	7.833	P		1s - 5p	g^2S - $^2P^\circ$	½-	309
Na XI	8.021	P		1s - 4p	g^2S - $^2P^\circ$	½-	309
Na XI	8.459	P		1s - 3p	g^2S - $^2P^\circ$	½-	309
Na XI	10.025	P		1s - 2p	g^2S - $^2P^\circ$	½-	309
Na XI	32.76	P		2 - 7			309
Na XI	33.85	P		2 - 6			309
Na XI	35.82	P		2 - 5			309
Na XI	40.11	P		2 - 4			309
Na XI	54.14	P		2 - 3			309
Na XI	82.97	P		3 - 7			309
Na XI	90.31	P		3 - 6			309
Na XI	105.82	P		3 - 5			309
Na XI	154.8	P		3 - 4			309
Na XI	178.83	P		4 - 7			309
Na XI	216.8	P		4 - 6			309
Na XI	334.5	P		4 - 5			309
Na XI	384.3	P		5 - 7			309
Na XI	616.0	P		5 - 6			309
Na XI	1021.6	P		6 - 7			309

Unclassified lines

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg	54.131	10					692
Mg	62.615	10					692
Mg	69.327	10					692
Mg	70.512	10					692
Mg	70.563	10					692
Mg	70.762	100d					692
Mg	70.787	100d					692
Mg	70.878	10d					692
Mg	71.454	100					692
Mg	71.621	10d					692
Mg	71.724	10d					692
Mg	73.112	10					692
Mg	73.710	10					692
Mg	73.773	10					692
Mg	74.676	100					692
Mg	75.112	100					692
Mg	75.528	10d					692
Mg	75.666	300					692
Mg	76.169	100					692
Mg	76.459	100					692
Mg	77.301	10					692
Mg	78.376	10					692
Mg	78.643	100d					692
Mg	78.668	100d					692
Mg	79.880	200					692
Mg	80.563	100					692
Mg	82.111	10					692
Mg	85.091	10					692
Mg	86.147	10					692
Mg	86.417	200d					692
Mg	86.440	200d					692
Mg	86.762	100					692
Mg	87.660	10					692
Mg	88.016	200					692
Mg	89.256	100					692
Mg	89.556	10					692
Mg	90.165	10					692
Mg	90.338	100					692
Mg	90.463	10					692
Mg	91.013	10					692
Mg	91.129	10d					692
Mg	91.302	10d					692
Mg	92.503	10					692
Mg	92.685	10					692
Mg	93.650	200d					692
Mg	93.720	100d					692
Mg	93.972	10					692
Mg	94.721	100					692
Mg	99.535	100					692
Mg	99.610	200					692
Mg	100.196	100					692
Mg	100.374	100					692
Mg	100.421	100					692
Mg	100.519	10					692
Mg	100.545	200					692

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg	100.597	200					692
Mg	101.322	100					692
Mg	101.398	10					692
Mg	101.845	100					692
Mg	102.053	10					692
Mg	102.906	300					692
Mg	104.342	300					692
Mg	105.066	500					692
Mg	105.778	100					692
Mg	105.830	100					692
Mg	106.453	200					692
Mg	109.420	100					692
Mg	113.279	10					692
Mg	114.498	10					692
Mg	117.880	10					692
Mg	126.961	10					692
Mg	127.013	10					692
Mg	137.509	10					692
Mg	139.705	10					692
Mg	151.808	10					693
Mg	152.153	100					693
Mg	251.600	100					693
Mg	269.295	10					693
Mg	295.393	10					693
Mg	341.790	10					693
Mg	376.665	100					693
Mg	430.767	10					693
Mg	465.972	10					693
Mg	491.045	10					693
Mg	880.16	200					692
Mg	1579.05	10d					693
Mg	1607.13	10					693
Mg	1699.75	10					693
Mg	1800.28	100					693
Mg	1844.18	100					693
Mg	1865.64	10					693
Mg	1900.04	100					693
Mg	1924.48	10					693
Mg	1928.43	10					693
Mg	1974.75	10					693

MAGNESIUM, Z = 12

Ground state $1s^2 2s^2 2p^6 3s^2\ ^1S_0$

Ionization potential 61 669.14 cm^{-1}; 7.646 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg I	1827.94	P		$3s^2 - 3s5p$	$g\,^1S - ^1P^o$	0-1	708

Ground state $1s^2 2s^2 2p^6 3s\ ^2S_{1/2}$

Ionization potential 121 267.41 cm^{-1}; 15.035 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg II	884.6967	P		$2p^63s - 2p^68p$	$g^2S - {}^2P^\circ$	½-3½	592
Mg II	884.7189	P		$2p^63s - 2p^68p$	$g^2S - {}^2P^\circ$	½-½	592
Mg II	907.3752	P		$2p^63s - 2p^67p$	$g^2S - {}^2P^\circ$	½-3½	592
Mg II	907.4115	P		$2p^63s - 2p^67p$	$g^2S - {}^2P^\circ$	½-½	592
Mg II	946.7032	P		$2p^63s - 2p^66p$	$g^2S - {}^2P^\circ$	½-3½	592
Mg II	946.7694	P		$2p^63s - 2p^66p$	$g^2S - {}^2P^\circ$	½-½	592
Mg II	1025.9681	P		$2p^63s - 2p^65p$	$g^2S - {}^2P^\circ$	½-3½	592
Mg II	1026.1133	P		$2p^63s - 2p^65p$	$g^2S - {}^2P^\circ$	½-½	592
Mg II	1239.9252	P		$2p^63s - 2p^64p$	$g^2S - {}^2P^\circ$	½-3½	592
Mg II	1240.3947	P		$2p^63s - 2p^64p$	$g^2S - {}^2P^\circ$	½-½	592
Mg II	1271.2388	P		$2p^63p - 2p^68d$	${}^2P^\circ - {}^2D$	½-3½	592
Mg II	1271.9402	P		$2p^63p - 2p^69s$	${}^2P^\circ - {}^2S$	½-½	592
Mg II	1272.7202	P		$2p^63p - 2p^68d$	${}^2P^\circ - {}^2D$	3½-3½	592
Mg II	1272.7212	P		$2p^63p - 2p^68d$	${}^2P^\circ - {}^2D$	3½-5½	592
Mg II	1273.4232	P		$2p^63p - 2p^69s$	${}^2P^\circ - {}^2S$	3½-½	592
Mg II	1306.7139	P		$2p^63p - 2p^67d$	${}^2P^\circ - {}^2D$	½-3½	592
Mg II	1307.8754	P		$2p^63p - 2p^68s$	${}^2P^\circ - {}^2S$	½-½	592
Mg II	1308.2792	P		$2p^63p - 2p^67d$	${}^2P^\circ - {}^2D$	3½-3½	592
Mg II	1308.2809	P		$2p^63p - 2p^67d$	${}^2P^\circ - {}^2D$	3½-5½	592
Mg II	1309.4434	P		$2p^63p - 2p^68s$	${}^2P^\circ - {}^2S$	3½-½	592
Mg II	1365.5442	P		$2p^63p - 2p^66d$	${}^2P^\circ - {}^2D$	½-3½	592
Mg II	1367.2537	P		$2p^63p - 2p^66d$	${}^2P^\circ - {}^2D$	3½-3½	592
Mg II	1367.2568	P		$2p^63p - 2p^66d$	${}^2P^\circ - {}^2D$	3½-5½	592
Mg II	1367.7082	P		$2p^63p - 2p^67s$	${}^2P^\circ - {}^2S$	½-½	592
Mg II	1369.4231	P		$2p^63p - 2p^67s$	${}^2P^\circ - {}^2S$	3½-½	592
Mg II	1475.9998	P		$2p^63p - 2p^65d$	${}^2P^\circ - {}^2D$	½-3½	592
Mg II	1477.9972	P		$2p^63p - 2p^65d$	${}^2P^\circ - {}^2D$	3½-3½	592
Mg II	1478.0037	P		$2p^63p - 2p^65d$	${}^2P^\circ - {}^2D$	3½-5½	592
Mg II	1480.8797	P		$2p^63p - 2p^66s$	${}^2P^\circ - {}^2S$	½-½	592
Mg II	1482.8903	P		$2p^63p - 2p^66s$	${}^2P^\circ - {}^2S$	3½-½	592
Mg II	1734.8523	P		$2p^63p - 2p^64d$	${}^2P^\circ - {}^2D$	½-3½	592
Mg II	1737.6124	P		$2p^63p - 2p^64d$	${}^2P^\circ - {}^2D$	3½-3½	592
Mg II	1737.6283	P		$2p^63p - 2p^64d$	${}^2P^\circ - {}^2D$	3½-5½	592
Mg II	1750.6637	P		$2p^63p - 2p^65s$	${}^2P^\circ - {}^2S$	½-½	592
Mg II	1753.4744	P		$2p^63p - 2p^65s$	${}^2P^\circ - {}^2S$	3½-½	592

Ground state $1s^2 2s^2 2p^6\ ^1S_0$

Ionization potential 646 364 cm^{-1}; 80.137 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg III	158.530	10d		$2p^6 - 2p^5(^2P^o)8d$	$g^1S - 3/2[3/2]^o$	0-1	693,487
Mg III	159.209	10d		$2p^6 - 2p^5(^2P^o)7d$	$g^1S - 1/2[3/2]^o$	0-1	693,487
Mg III	159.755	10d		$2p^6 - 2p^5(^2P^o)7d$	$g^1S - 3/2[3/2]^o$	0-1	693,487
Mg III	161.135	10		$2p^6 - 2p^5(^2P^o)6d$	$g^1S - 1/2[3/2]^o$	0-1	693,487
Mg III	161.686	10d		$2p^6 - 2p^5(^2P^o)6d$	$g^1S - 3/2[3/2]^o$	0-1	693,487
Mg III	163.586	10		$2p^6 - 2p^5(^2P^o)6s$	$g^1S - 1/2[1/2]^o$	0-1	693,487
Mg III	164.159	10		$2p^6 - 2p^5(^2P^o)6s$	$g^1S - 3/2[3/2]^o$	0-1	693,487
Mg III	164.384	200		$2p^6 - 2p^5(^2P^o)5d$	$g^1S - 1/2[3/2]^o$	0-1	693,487
Mg III	164.954	200		$2p^6 - 2p^5(^2P^o)5d$	$g^1S - 3/2[3/2]^o$	0-1	693,487
Mg III	165.195	10		$2p^6 - 2p^5(^2P^o)5d$	$g^1S - 3/2[1/2]^o$	0-1	693,487
Mg III	169.150	100		$2p^6 - 2p^5(^2P^o)5s$	$g^1S - 1/2[1/2]^o$	0-1	693,487
Mg III	169.746	100		$2p^6 - 2p^5(^2P^o)5s$	$g^1S - 3/2[3/2]^o$	0-1	693,487
Mg III	170.802	500		$2p^6 - 2p^5(^2P^o)4d$	$g^1S - 1/2[3/2]^o$	0-1	693,487
Mg III	171.395	400		$2p^6 - 2p^5(^2P^o)4d$	$g^1S - 3/2[3/2]^o$	0-1	693,487
Mg III	171.896	10		$2p^6 - 2p^5(^2P^o)4d$	$g^1S - 3/2[1/2]^o$	0-1	693,487
Mg III	182.240	300		$2p^6 - 2p^5(^2P^o)4s$	$g^1S - 1/2[1/2]^o$	0-1	693,487
Mg III	182.973	200		$2p^6 - 2p^5(^2P^o)4s$	$g^1S - 3/2[3/2]^o$	0-1	693,487
Mg III	186.510	900	4	$2p^6 - 2p^5(^2P^o)3d$	$g^1S - 1/2[3/2]^o$	0-1	693,487
Mg III	187.194	800	3	$2p^6 - 2p^5(^2P^o)3d$	$g^1S - 3/2[3/2]^o$	0-1	693,487
Mg III	188.526	300		$2p^6 - 2p^5(^2P^o)3d$	$g^1S - 3/2[1/2]^o$	0-1	693,487
Mg III	231.730	1000	2	$2p^6 - 2p^5(^2P^o)3s$	$g^1S - 1/2[1/2]^o$	0-1	693,487
Mg III	234.258	850	1	$2p^6 - 2p^5(^2P^o)3s$	$g^1S - 3/2[3/2]^o$	0-1	693,487
Mg III	1572.72	400		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[1/2] - 3/2[3/2]^o$	1-2	693,487
Mg III	1586.26	300		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[1/2] - 3/2[1/2]^o$	1-1	693,487
Mg III	1592.39	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[1/2] - 3/2[1/2]^o$	1-0	693;487
Mg III	1642.86	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[5/2] - 1/2[5/2]^o$	3-3	693,487
Mg III	1648.88	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 1/2[3/2]^o$	1-1	693,487
Mg III	1652.26	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[5/2] - 1/2[3/2]^o$	2-2	693,487
Mg III	1659.28	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[5/2] - 1/2[5/2]^o$	2-3	693,487
Mg III	1675.76	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 1/2[3/2]^o$	1-2	693,487
Mg III	1679.56	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[5/2] - 3/2[3/2]^o$	2-1	693,487
Mg III	1697.32	200		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[5/2] - 3/2[5/2]^o$	3-3	693,487
Mg III	1703.43	10d		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 1/2[3/2]^o$	2-1	693,487
Mg III	1703.78	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 3/2[3/2]^o$	1-1	693,487
Mg III	1714.85	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[5/2] - 3/2[5/2]^o$	2-3	693,487
Mg III	1722.10	200		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[5/2] - 3/2[5/2]^o$	2-2	693,487
Mg III	1730.81	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[5/2] - 3/2[7/2]^o$	3-3	693,487
Mg III	1731.88	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 1/2[3/2]^o$	2-2	693,487
Mg III	1738.91	600		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[5/2] - 3/2[7/2]^o$	3-4	693,487
Mg III	1739.56	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 1/2[5/2]^o$	2-3	693,487
Mg III	1744.08	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 1/2[5/2]^o$	2-2	693,487
Mg III	1747.64	400		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 3/2[5/2]^o$	1-2	693,487
Mg III	1749.02	500		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[5/2] - 3/2[7/2]^o$	2-3	693,487
Mg III	1758.01	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[1/2] - 1/2[3/2]^o$	0-1	693,487
Mg III	1763.93	200		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$1/2[1/2] - 1/2[3/2]^o$	1-1	693,487
Mg III	1773.09	300		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$1/2[3/2] - 1/2[5/2]^o$	1-2	693,487
Mg III	1783.36	400		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$1/2[3/2] - 1/2[5/2]^o$	2-3	693,487
Mg III	1788.05	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$1/2[3/2] - 1/2[5/2]^o$	2-2	693,487
Mg III	1791.50	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$1/2[3/2] - 3/2[3/2]^o$	1-1	693,487
Mg III	1794.68	300		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$1/2[1/2] - 1/2[3/2]^o$	1-2	693,487
Mg III	1800.75	400		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 3/2[5/2]^o$	2-3	693,487
Mg III	1820.47	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[1/2] - 3/2[3/2]^o$	0-1	693,487.
Mg III	1838.32	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 3/2[7/2]^o$	2-3	693,487
Mg III	1858.19	200d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$3/2[3/2]^o - 1/2[1/2]$	2-1	693,487
Mg III	1868.23	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	$3/2[3/2] - 3/2[3/2]^o$	2-2	693,487

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg III	1879.46	400d		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{3}{2}[\frac{3}{2}]^\circ - \frac{1}{2}[\frac{3}{2}]$	2-2	693,487
Mg III	1887.31	10		$2p^5(^2P^\circ)3p - 2p^5(^2P^\circ)3d$	$\frac{3}{2}[\frac{3}{2}] - \frac{3}{2}[\frac{1}{2}]^\circ$	2-1	693,487
Mg III	1890.35	200		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{1}{2}[\frac{1}{2}]^\circ - \frac{1}{2}[\frac{1}{2}]$	1-0	693,487
Mg III	1896.26	10		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{3}{2}[\frac{3}{2}]^\circ - \frac{1}{2}[\frac{3}{2}]$	2-1	693,487
Mg III	1901.55	100		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{3}{2}[\frac{3}{2}]^\circ - \frac{1}{2}[\frac{1}{2}]$	1-1	693,487
Mg III	1908.46	300		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{3}{2}[\frac{3}{2}]^\circ - \frac{3}{2}[\frac{1}{2}]$	1-0	693,487
Mg III	1918.76	100		$2p^5(^2P^\circ)3p - 2p^5(^2P^\circ)3d$	$\frac{1}{2}[\frac{3}{2}] - \frac{3}{2}[\frac{3}{2}]^\circ$	2-2	693,487
Mg III	1923.87	300		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{3}{2}[\frac{3}{2}]^\circ - \frac{1}{2}[\frac{3}{2}]$	1-2	693,487
Mg III	1930.64	300		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{3}{2}[\frac{3}{2}]^\circ - \frac{3}{2}[\frac{3}{2}]$	2-2	693,487
Mg III	1933.59	10		$2p^5(^2P^\circ)3p - 2p^5(^2P^\circ)3d$	$\frac{1}{2}[\frac{1}{2}] - \frac{1}{2}[\frac{3}{2}]^\circ$	0-1	693,487
Mg III	1937.80	200		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{1}{2}[\frac{1}{2}]^\circ - \frac{1}{2}[\frac{1}{2}]$	0-1	693,487
Mg III	1938.95	10		$2p^5(^2P^\circ)3p - 2p^5(^2P^\circ)3d$	$\frac{1}{2}[\frac{3}{2}] - \frac{3}{2}[\frac{1}{2}]^\circ$	2-1	693,487
Mg III	1941.50	10		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{3}{2}[\frac{3}{2}]^\circ - \frac{1}{2}[\frac{3}{2}]$	1-1	693,487
Mg III	1954.87	10		$2p^5(^2P^\circ)3p - 2p^5(^2P^\circ)3d$	$\frac{3}{2}[\frac{1}{2}] - \frac{3}{2}[\frac{1}{2}]^\circ$	0-1	693,487
Mg III	1962.18	10		$2p^5(^2P^\circ)3p - 2p^5(^2P^\circ)3d$	$\frac{1}{2}[\frac{1}{2}] - \frac{3}{2}[\frac{1}{2}]^\circ$	1-1	693,487
Mg III	1971.57	10		$2p^5(^2P^\circ)3p - 2p^5(^2P^\circ)3d$	$\frac{1}{2}[\frac{1}{2}] - \frac{3}{2}[\frac{1}{2}]^\circ$	1-0	693,487
Mg III	1977.56	100		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{3}{2}[\frac{3}{2}]^\circ - \frac{3}{2}[\frac{3}{2}]$	1-2	693,487
Mg III	1979.31	100		$2p^5(^2P^\circ)3s - 2p^5(^2P^\circ)3p$	$\frac{1}{2}[\frac{1}{2}]^\circ - \frac{1}{2}[\frac{3}{2}]$	0-1	693,487

Ground state $1s^22s^22p^5\ ^2P^o_{3/2}$

Ionization potential 881 759 cm^{-1}; 109.32 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg IV?	112.914	10					692
Mg IV?	118.158	10d					692
Mg IV?	118.420	10					692
Mg IV?	118.603	100					692
Mg IV?	118.740	10					692
Mg IV?	118.914	10					692
Mg IV?	119.978	10					692
Mg IV?	120.086	10d					692
Mg IV?	120.283	100d					692
Mg IV?	120.415	10d					692
Mg IV?	121.543	10					692
Mg IV?	123.184	10					692
Mg IV	123.273	200		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^o - ^2D$	3/2-3/2	692,693
Mg IV	123.377	100d		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^o - ^2P$	3/2-	692,693
Mg IV?	123.418	10					692
Mg IV	123.500	10		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^o - ^2D$	3/2-5/2	693
Mg IV	123.590	10		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^o - ^2D$	1/2-3/2	693
Mg IV	123.722	10d		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^o - ^2P$	1/2-	692,693
Mg IV	123.770	10					692
Mg IV	124.414	200		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2S$	3/2-1/2	692,693
Mg IV	124.538	200		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2D$	3/2-5/2	692,693
Mg IV	124.649	100		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2P$	3/2-3/2	693
Mg IV	124.759	200		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2S$	1/2-1/2	692,693
Mg IV	124.870	200		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2D$	1/2-3/2	692,693
Mg IV	124.990	200		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2P$	1/2-3/2	692,693
Mg IV	125.459	300b		$2s^22p^5 - 2s^22p^4(^1S)4s$	$g^2P^o - ^2S$	3/2-1/2	693
Mg IV	125.811	100		$2s^22p^5 - 2s^22p^4(^1S)4s$	$g^2P^o - ^2S$	1/2-1/2	692,693
Mg IV	129.730	200		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2D$	3/2-3/2	692,487
Mg IV	129.855	400		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2P$	3/2-3/2	693,487
Mg IV	129.969	300		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2P$	3/2-1/2	693,487
Mg IV	130.085	200		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^4P$	3/2-5/2	692,487
Mg IV	130.118	200		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2D$	1/2-3/2	692,487
Mg IV	130.243	100		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^4P$	3/2-3/2	692,487
Mg IV	130.294	200b		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2D$	3/2-5/2	692,487
Mg IV	130.352	100		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2P$	1/2-1/2	693,487
Mg IV?	130.541	10					692
Mg IV	130.630	100b		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^4P$	1/2-3/2	693,487
Mg IV	132.815	500		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^o - ^2D$	3/2-5/2	693
Mg IV	133.202	600		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^o - ^2D$	1/2-3/2	693
Mg IV	137.966	100		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	3/2-1/2	692,693
Mg IV	138.262	300		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	3/2-3/2	692,693
Mg IV	138.394	200		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	1/2-1/2	692,693
Mg IV	138.693	100		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	1/2-3/2	692,693
Mg IV	139.995	100		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2S$	3/2-1/2	692,487
Mg IV	140.120	400		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2F$	3/2-5/2	693,487
Mg IV	140.176	400		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2D$	3/2-5/2	693
Mg IV	140.425	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2D$	3/2-3/2	693
Mg IV	140.475	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	3/2-3/2	693
Mg IV	140.523	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	3/2-1/2	693
Mg IV?	140.564	200					693
Mg IV	140.867	400		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2D$	1/2-3/2	693
Mg IV	140.918	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	1/2-3/2	693
Mg IV	140.966	400		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	1/2-1/2	693
Mg IV	146.526	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2P$	3/2-3/2	693
Mg IV	146.836	300		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2P$	3/2-1/2	693

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg IV	146.949	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^2F$	3/2-5/2	693,487
Mg IV	147.006	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^2P$	1/2-3/2	693
Mg IV	147.052	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^2D$	3/2-3/2	693
Mg IV?	147.252	300					693
Mg IV	147.321	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^2P$	1/2-1/2	693
Mg IV	147.405	500		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^2D$	3/2-5/2	693
Mg IV	147.535	500		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^2D$	1/2-3/2	693
Mg IV	147.632	10		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^4F$	3/2-3/2	693,487
Mg IV	147.746	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^4P$	3/2-5/2	693,487
Mg IV?	147.887	100					693
Mg IV	148.121	200		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^4F$	1/2-3/2	693,487
Mg IV	160.230	600		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^\circ - {}^2S$	3/2-1/2	693
Mg IV	160.804	400		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^\circ - {}^2S$	1/2-1/2	693
Mg IV	171.653	800		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^\circ - {}^2D$	3/2-5/2	693
Mg IV	172.306	700		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^\circ - {}^2D$	1/2-3/2	693
Mg IV	180.070	800		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^2P$	3/2-1/2	693
Mg IV	180.617	1000		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^2P$	3/2-3/2	693
Mg IV	180.796	900		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^2P$	1/2-1/2	693
Mg IV	181.345	800		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^2P$	1/2-3/2	693
Mg IV	183.439	400		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^4P$	3/2-3/2	693
Mg IV	183.915	100		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^4P$	3/2-5/2	693
Mg IV	184.189	10		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^4P$	1/2-3/2	693
Mg IV	320.999	1000		$2s^22p^5 - 2s2p^6$	$g^2P^\circ - {}^2S$	3/2-1/2	693
Mg IV	323.310	900		$2s^22p^5 - 2s2p^6$	$g^2P^\circ - {}^2S$	1/2-1/2	693
Mg IV	1459.52	100		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4S^\circ$	5/2-3/2	693
Mg IV	1490.41	10		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4S^\circ$	3/2-3/2	693
Mg IV	1508.82	10		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4S^\circ$	1/2-3/2	693
Mg IV	1658.92	10		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4D^\circ$	5/2-5/2	693
Mg IV	1680.02	10		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4D^\circ$	3/2-3/2	693
Mg IV	1683.04	300		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4D^\circ$	5/2-7/2	693
Mg IV	1698.83	200d		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4D^\circ$	3/2-5/2	693
Mg IV	1874.59	10d		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4P^\circ$	5/2-3/2	693
Mg IV	1893.87	100		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4P^\circ$	5/2-5/2	693
Mg IV	1906.71	10		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4P^\circ$	3/2-1/2	693
Mg IV	1925.99	10		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4P^\circ$	3/2-3/2	693
Mg IV	1946.20	10		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4P^\circ$	3/2-5/2	693
Mg IV	1956.58	10		$2s^22p^4(^3P)3s - 2s^22p^4(^3P)3p$	${}^4P - {}^4P^\circ$	1/2-3/2	693

Ground state $1s^2 2s^2 2p^4\ ^3P_2$

Ionization potential 1 139 421 cm^{-1}; 141.27 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg V	92.409	10d		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$g^3P - ^3P^\circ$	2-1	692
Mg V	92.428	10d		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$g^3P - ^3P^\circ$	2-2	692
Mg V	92.534	10					692
Mg V	92.588	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$g^3P - ^3P^\circ$	1-2	692
Mg V	92.641	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$g^3P - ^3D^\circ$	2-	692
Mg V	93.109	100b		$2s^22p^4 - 2s^22p^3(^2P^\circ)5d$	$^1D - ^1D^\circ$	2-2	692
Mg V	94.793	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)5s$	$g^3P - ^3D^\circ$	2-	692
Mg V	95.556	100b		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$^1D - ^1F^\circ$	2-3	692
Mg V	95.592	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$^1D - ^1D^\circ$	2-2	692
Mg V	95.803	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-	692
Mg V	95.909	100d		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3P^\circ$	2-2	692
Mg V	95.965	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3D^\circ$	1-	692
Mg V	96.019	200b		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3D^\circ$	0-	692
Mg V	96.085	100b		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3P^\circ$	1-1	692
Mg V	96.159	10b		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3P^\circ$	0-1	692
Mg V	97.391	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)5d$	$g^3P - ^3D^\circ$	2-	692
Mg V	97.439	200		$2s^22p^4 - 2s2p^4(^4P)3p$	$g^3P - ^3D^\circ$	2-	692
Mg V	97.563	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)5d$	$g^3P - ^3D^\circ$	1-	692
Mg V	97.606	200b		$2s^22p^4 - 2s2p^4(^4P)3p$	$g^3P - ^3D^\circ$	1-	692
Mg V	97.686	100b		$2s^22p^4 - 2s2p^4(^4P)3p$	$g^3P - ^3D^\circ$	0-	692
Mg V	98.235	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	2-1	692
Mg V	98.271	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	2-2	692
Mg V	98.406	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	1-1	692
Mg V	98.444	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	1-2	692
Mg V	98.636	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3D$	2-	692
Mg V	98.805	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3D^\circ$	1-	692
Mg V	98.872	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3D^\circ$	0-	692
Mg V	98.983	400b		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	692
Mg V	99.025	200b		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$^1D - ^1P^\circ$	2-1	692
Mg V	99.067	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$^1D - ^1D$	2-2	692
Mg V	99.149	10					692
Mg V	99.205	1					692
Mg V	99.788	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)5s$	$g^3P - ^3S^\circ$	2-1	692
Mg V	100.949	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)4s$	$g^3P - ^3P^\circ$	2-	692
Mg V	101.671	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1F^\circ$	2-3	692
Mg V	101.782	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1D^\circ$	2-2	692
Mg V	102.079	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1P^\circ$	2-1	692
Mg V	103.333	10		$2s2p^5 - 2s2p^4(^4P)5s$	$^3P^\circ - ^3P$	2-2	692
Mg V	103.904	400		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	2-3	692
Mg V	103.947	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	2-	692
Mg V	104.100	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	1-2	692
Mg V	104.140	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	1-	692
Mg V	104.182	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	0-1	692
Mg V	104.214	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	0-	692
Mg V	104.432	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)4s$	$^1D - ^1P^\circ$	2-1	692
Mg V	107.661	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$^1D - ^1D^\circ$	2-2	692
Mg V	109.174	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)4s$	$^1S - ^1P^\circ$	0-1	692
Mg V	109.812	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	2-1	692
Mg V	110.029	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	1-1	692
Mg V	110.121	10b		$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	0-1	692
Mg V	110.809	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-2	692
Mg V	110.859	400		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-3	692
Mg V	110.939	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^1P^\circ$	1-1	692
Mg V	111.031	300		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-2	692
Mg V	111.091	300		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	0-1	692

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Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg V	111.199	400b		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	2-2	692
Mg V	111.247	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	2-1	692
Mg V	111.419	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	1-2	692
Mg V	111.467	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	1-1	692
Mg V	111.496	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	1-0	692
Mg V	113.217	200		$2s2p^5 - 2s2p^4(^2D)3d$	${}^3P^\circ - {}^3D$	2-3	692
Mg V	113.414	200		$2s2p^5 - 2s2p^4(^2D)3d$	${}^3P^\circ - {}^3D$	1-2	692
Mg V	113.518	100		$2s2p^5 - 2s2p^4(^2D)3d$	${}^3P^\circ - {}^3D$	0-1	692
Mg V	113.703	400		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3S^\circ$	2-1	692
Mg V	113.823	100		$2s2p^5 - 2s2p^4(^4P)4s$	${}^3P^\circ - {}^3P$	2-2	692
Mg V	113.934	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3S^\circ$	1-1	692
Mg V	113.990	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	2-1	692
Mg V	114.029	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3S^\circ$	0-1	692
Mg V	114.059	400		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	2-2	692
Mg V	114.199	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	1-0	692
Mg V	114.226	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	1-1	692
Mg V	114.285	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	1-2	692
Mg V	114.324	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	0-1	692
Mg V	114.785	600d		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	2-	692
Mg V	115.013	600d		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	1-	692
Mg V	115.093	400		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	${}^1D - {}^1F^\circ$	2-3	692
Mg V	115.399	400		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	${}^1D - {}^1P^\circ$	2-1	692
Mg V	115.537	400		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	${}^1D - {}^1D^\circ$	2-2	692
Mg V	118.083	500		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	${}^1D - {}^1F^\circ$	2-3	692
Mg V	118.810	500		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	${}^1D - {}^1D^\circ$	2-2	692
Mg V	119.401	400		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	${}^1D - {}^1P^\circ$	2-1	692
Mg V	119.447	400					692
Mg V	121.644	600		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	692
Mg V	121.922	500		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	692
Mg V	122.034	400		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	0-1	692
Mg V	125.600	400b		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	${}^1S - {}^1P^\circ$	0-1	692
Mg V	126.280	400		$2s2p^5 - 2s2p^4(^4P)3d$	${}^3P^\circ - {}^3D$	2-	692
Mg V	126.544	200		$2s2p^5 - 2s2p^4(^4P)3d$	${}^3P^\circ - {}^3D$	1-	692
Mg V	126.677	10b		$2s2p^5 - 2s2p^4(^4P)3d$	${}^3P^\circ - {}^3D$	0-	692
Mg V	132.171	600		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	2-	692
Mg V	132.485	500		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	1-	692
Mg V	132.623	300		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	0-1	692
Mg V	135.638	200		$2s2p^5 - 2s2p^4(^2D)3s$	${}^3P^\circ - {}^3D$	2-3	692
Mg V	135.953	100		$2s2p^5 - 2s2p^4(^2D)3s$	${}^3P^\circ - {}^3D$	1-2	692
Mg V	136.128	10		$2s2p^5 - 2s2p^4(^2D)3s$	${}^3P^\circ - {}^3D$	0-1	692
Mg V	137.234	600		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	${}^1D - {}^1P^\circ$	2-1	692
Mg V	137.414	800		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	2-3	692
Mg V	137.748	700		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	1-2	692
Mg V	137.880	600		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	0-1	692
Mg V	142.933	600		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	${}^1D - {}^1D^\circ$	2-2	692
Mg V	145.485	500		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	${}^1S - {}^1P^\circ$	0-1	692
Mg V	146.083	600		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	2-1	692
Mg V	146.464	500		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	1-1	692
Mg V	146.621	400		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	0-1	692
Mg V	152.019	10		$2s2p^5 - 2s2p^4(^4P)3s$	${}^3P^\circ - {}^3P$	2-1	692
Mg V	152.149	300		$2s2p^5 - 2s2p^4(^4P)3s$	${}^3P^\circ - {}^3P$	2-2	692
Mg V	152.384	100		$2s2p^5 - 2s2p^4(^4P)3s$	${}^3P^\circ - {}^3P$	1-1	692
Mg V	152.527	100		$2s2p^5 - 2s2p^4(^4P)3s$	${}^3P^\circ - {}^3P$	1-2	692
Mg V	152.591	10d		$2s2p^5 - 2s2p^4(^4P)3s$	${}^3P^\circ - {}^3P$	0-1	692
Mg V	276.581	1000		$2s^22p^4 - 2s2p^5$	${}^1D - {}^1P^\circ$	2-1	692
Mg V	312.311	1000		$2s^22p^4 - 2s2p^5$	${}^1S - {}^1P^\circ$	0-1	692
Mg V	351.089	850		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-1	692
Mg V	352.202	700		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-0	692
Mg V	353.094	1000		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-2	692
Mg V	353.300	650		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-1	692

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg V	354.223	700		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^o$	0-1	692
Mg V	355.326	850		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^o$	1-2	692

Ground state $1s^2\ 2s^22p^3\ {}^4S^\circ_{3/2}$

Ionization potential 1 504 581 cm^{-1}; 186.54 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg VI	72.430	100		$2s^22p^3 - 2s^22p^2(^3P)6s$	$g^4S^\circ - {}^4P$	3/2-5/2	692
Mg VI	74.319	300b		$2s^22p^3 - 2s^22p^2(^3P)5d$	$g^4S^\circ - {}^4P$	3/2-5/2	692
Mg VI	74.461	10b		$2s^22p^3 - 2s^22p^2(^3P)5d$	$g^4S^\circ - {}^4D$	3/2-5/2	692
Mg VI	74.574	200		$2s^22p^3 - 2s2p^3(^5S^\circ)4p$	$g^4S^\circ - {}^4P$	3/2-	692
Mg VI	75.248	100		$2s^22p^3 - 2s^22p^2(^1D)5d$	$^2D^\circ - {}^2D$		692
Mg VI	75.334	100d		$2s^22p^3 - 2s^22p^2(^1D)5d$	$^2D^\circ - {}^2F$		692
Mg VI	75.834	200		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - {}^4P$	3/2-5/2	692
Mg VI	75.890	10		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - {}^4P$	3/2-3/2	692
Mg VI	76.908	1		$2s^22p^3 - 2s^22p^2(^1D)5d$	$^2P^\circ - {}^2D$		692
Mg VI	77.405	200b		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2D^\circ - {}^2F$	5/2-7/2	692
Mg VI	77.511	100b		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2D^\circ - {}^2F$	3/2-5/2	692
Mg VI	77.639	10					692
Mg VI	78.239	10		$2s^22p^3 - 2s^22p^2(^1S)4d$	$^2D^\circ - {}^2D$		692
Mg VI	79.059	10d					692
Mg VI	79.817	200		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - {}^4P$	3/2-1/2	692
Mg VI	79.830	400		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - {}^4P$	3/2-3/2	692
Mg VI	79.857	400		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - {}^4P$	3/2-5/2	692
Mg VI	80.032	200		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - {}^4D$	3/2-1/2	692
Mg VI	80.075	200		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - {}^4D$	3/2-5/2	692
Mg VI	80.724	10		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - {}^2P$		692
Mg VI	80.930	200		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - {}^2D$		692
Mg VI	81.106	300		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - {}^2F$		692
Mg VI	82.238	200b		$2s2p^4 - 2s2p^3(^5S^\circ)5d$	$^4P - {}^4D^\circ$	5/2-7/2	692
Mg VI	82.475	100		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - {}^2S$	-1/2	692
Mg VI	82.853	100		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - {}^2D$		692
Mg VI	83.403	400b		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - {}^2F$	5/2-7/2	692
Mg VI	83.519	300b		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - {}^2F$	3/2-5/2	692
Mg VI	83.560	200b		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - {}^4P$	3/2-5/2	692
Mg VI	84.745	200d		$2s^22p^3 - 2s^22p^2(^1D)4s$	$^2D^\circ - {}^2D$		692
Mg VI	85.153	10b		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - {}^2D$	3/2-5/2	692
Mg VI	85.577	200		$2s^22p^3 - 2s2p^3(^3D^\circ)3p$	$^2D^\circ - {}^2F$	3/2-5/2	692
Mg VI	85.622	300		$2s^22p^3 - 2s2p^3(^3D^\circ)3p$	$^2D^\circ - {}^2F$	5/2-7/2	692
Mg VI	86.807	200		$2s^22p^3 - 2s^22p^2(^1D)4s$	$^2P^\circ - {}^2D$		692
Mg VI	87.406	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - {}^2P$	5/2-3/2	692
Mg VI	88.827	200		$2s2p^4 - 2s2p^3(^5S^\circ)4d$	$^4P - {}^4D^\circ$	5/2-7/2	692
Mg VI	88.952	200		$2s2p^4 - 2s2p^3(^5S^\circ)4d$	$^4P - {}^4D^\circ$	3/2-5/2	692
Mg VI	89.021	10		$2s2p^4 - 2s2p^3(^5S^\circ)4d$	$^4P - {}^4D^\circ$	1/2-3/2	692
Mg VI	89.649	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2P^\circ - {}^2P$	3/2-3/2	692
Mg VI	90.897	600b		$2s^22p^3 - 2s2p^3(^5S^\circ)3p$	$g^4S^\circ - {}^4P$	3/2-	692
Mg VI	92.964	100b		$2s2p^4 - 2s2p^3(^5S^\circ)4s$	$^4P - {}^4S^\circ$	5/2-3/2	692
Mg VI	93.109	100b		$2s2p^4 - 2s2p^3(^5S^\circ)4s$	$^4P - {}^4S^\circ$	3/2-3/2	692
Mg VI	93.493	300		$2s^22p^3 - 2s^22p^2(^1S)3d$	$^2D^\circ - {}^2D$		692
Mg VI	95.385	400b		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - {}^4P$	3/2-1/2	692
Mg VI	95.421	400b		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - {}^4P$	3/2-3/2	692
Mg VI	95.483	500b		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - {}^4P$	3/2-5/2	692
Mg VI	95.637	300b		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - {}^4D$	3/2-1/2	692
Mg VI	95.675	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - {}^4D$	3/2-	692
Mg VI	95.803	200		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - {}^2S$	3/2-1/2	692
Mg VI	96.085	100b		$2s^22p^3 - 2s^22p^2(^1S)3d$	$^2P^\circ - {}^2D$		692
Mg VI	96.159	100		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - {}^4S^\circ$	5/2-3/2	692
Mg VI	96.240	100		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - {}^4D^\circ$	5/2-	692
Mg VI	96.256	200		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - {}^2P$	5/2-3/2	692
Mg VI	96.303	200		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - {}^2P$	3/2-1/2	692
Mg VI	96.388	100		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - {}^4D^\circ$	3/2-	692
Mg VI	96.467	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - {}^4D^\circ$	1/2-	692

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg VI	96.670	200		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	5/2-3/2	692
Mg VI	96.704	200		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	5/2-5/2	692
Mg VI	96.797	100		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	3/2-1/2	692
Mg VI	96.857	100		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	3/2-5/2	692
Mg VI	96.903	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	1/2-3/2	692
Mg VI	96.939	400		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	5/2-5/2	692
Mg VI	96.973	400		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	3/2-3/2	692
Mg VI	97.251	500		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	3/2-5/2	692
Mg VI	97.278	500		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-7/2	692
Mg VI	98.508	300		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2S$	3/2-1/2	692
Mg VI	98.983	400b		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	-3/2	692
Mg VI	99.025	200b		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	-1/2	692
Mg VI	99.279	400		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	692
Mg VI	99.333	400		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-3/2	692
Mg VI	99.713	300		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$	3/2-5/2	692
Mg VI	99.738	300		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$	1/2-3/2	692
Mg VI	100.702	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	692
Mg VI	100.904	400		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	692
Mg VI	101.508	200d		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-1/2	692
Mg VI	101.556	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	-3/2	692
Mg VI	102.189	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	3/2-5/2	692
Mg VI	102.239	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	1/2-3/2	692
Mg VI	104.519	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	-1/2	692
Mg VI	104.597	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	-3/2	692
Mg VI	105.410	200		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^2D - ^2F^\circ$	3/2-5/2	692
Mg VI	105.502	300		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^2D - ^2F^\circ$	5/2-7/2	692
Mg VI	107.820	400		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D$	5/2-7/2	692
Mg VI	108.015	300		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	3/2-5/2	692
Mg VI	108.114	200		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	1/2-3/2	692
Mg VI	108.148	100		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^4P - ^4P^\circ$	5/2-	692
Mg VI	108.338	100		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-	692
Mg VI	108.441	10		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^4P - ^4P^\circ$	1/2-	692
Mg VI	111.160	300		$2s^22p^3 - 2s^22p^2(^1S)3s$	$^2P^\circ - ^2S$	1/2-1/2	692
Mg VI	111.199	400b		$2s^22p^3 - 2s^22p^2(^1S)3s$	$^2P^\circ - ^2S$	3/2-1/2	692
Mg VI	111.552	500		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-5/2	692
Mg VI	111.746	400		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-3/2	692
Mg VI	111.864	400		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-1/2	692
Mg VI	113.189	500		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - ^2D$		692
Mg VI	114.412	10		$2s2p^4 - 2s2p^3(^3D^\circ)3s$	$^4P - ^4D^\circ$	5/2-	692
Mg VI	114.624	10		$2s2p^4 - 2s2p^3(^3D^\circ)3s$	$^4P - ^4D^\circ$	3/2-	692
Mg VI	114.725	10		$2s2p^4 - 2s2p^3(^3D^\circ)3s$	$^4P - ^4D^\circ$	1/2-	692
Mg VI	116.968	500		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2P^\circ - ^2D$		692
Mg VI	116.968	500		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	5/2-3/2	692
Mg VI	117.226	300		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	3/2-1/2	692
Mg VI	117.527	100		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^2D - ^2P^\circ$	5/2-3/2	692
Mg VI	121.025	500		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	-3/2	692
Mg VI	121.290	300		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	-1/2	692
Mg VI	123.590	100d		$2s2p^4 - 2s2p^3(^3D^\circ)3s$	$^2D - ^2D^\circ$		692
Mg VI	125.206	300		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	5/2-3/2	692
Mg VI	125.459	300b		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	3/2-3/2	692
Mg VI	125.600	400b		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	1/2-3/2	692
Mg VI	126.450	100		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^2S - ^2P^\circ$	1/2-3/2	692
Mg VI	126.488	100		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^2S - ^2P^\circ$	1/2-1/2	692
Mg VI	130.294	200b		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^2P - ^2P^\circ$	3/2-3/2	692
Mg VI	130.630	100b		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^2P - ^2P^\circ$	1/2-3/2	692
Mg VI	130.701	10		$2s2p^4 - 2s2p^3(^3P^\circ)3s$	$^2P - ^2P^\circ$	1/2-1/2	692
Mg VI	137.814	10		$2s2p^4 - 2s2p^3(^3D^\circ)3s$	$^2P - ^2D^\circ$		692
Mg VI	268.986	650		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-1/2	692
Mg VI	270.394	750		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	5/2-3/2	692
Mg VI	288.652	10		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2S$	3/2-1/2	692

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg VI	291.348	300		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	½-½	692
Mg VI	291.458	200		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	3/2-½	692
Mg VI	293.026	200		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	½-3/2	692
Mg VI	293.124	400d		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	3/2-3/2	692
Mg VI	314.554	300		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2S$	½-½	692
Mg VI	314.676	400		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2S$	3/2-½	692
Mg VI	349.155	700d		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$		692
Mg VI	387.787	200d		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	½-3/2	692
Mg VI	388.020	300d		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	3/2-5/2	692
Mg VI	399.289	600		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-½	692
Mg VI	400.676	700		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-3/2	692
Mg VI	403.315	800		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-5/2	692

Ground state $1s^22s^22p^2\ ^3P_0$

Ionization potential 1 814 430 cm^{-1}; 224.95 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg VII	58.316	10		$2s^22p^2 - 2s2p^2(^4P)5p$	$g^3P - ^3D^\circ$	2-3	692
Mg VII	59.640	1		$2s2p^3 - 2s2p^2(^4P)6d$	$^5S^\circ - ^5P$	2-3	692
Mg VII	60.138	10		$2s^22p^2 - 2s^22p(^2P^\circ)6d$	$g^3P - ^3P^\circ$		692
Mg VII	62.166	10d		$2s2p^3 - 2s2p^2(^4P)5d$	$^5S^\circ - ^5P$	2-3	692
Mg VII	62.696	100		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$g^3P - ^3P^\circ$	2-2	692
Mg VII	63.396	100d		$2s^22p^2 - 2s2p^2(^4P)4p$	$g^3P - ^3D^\circ$	2-3	692
Mg VII	64.122	200		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$^1D - ^1F^\circ$	2-3	692
Mg VII	64.377	100b		$2s^22p^2 - 2s^22p(^2P^\circ)5d$	$^1D - ^1D^\circ$	2-2	692
Mg VII	66.788	10		$2s2p^3 - 2s2p^2(^4P)5d$	$^3D^\circ - ^3F$	3-4	692
Mg VII	67.453	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-1	692
Mg VII	67.470	100d		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-2	692
Mg VII	67.497	200		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-3	692
Mg VII	67.993	100d		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	1-2	692
Mg VII	68.064	200		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	2-2	692
Mg VII	68.100	200		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	1-2	692
Mg VII	68.144	300d		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-3	692
Mg VII	68.352	200		$2s2p^3 - 2s2p^2(^2D)4d$	$^3D^\circ - ^3F$		692
Mg VII	69.615	300b		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	692
Mg VII	69.900	10		$2s2p^3 - 2s2p^2(^4P)4s$	$^5S^\circ - ^5P$	2-3	692
Mg VII	70.193	100		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$^1D - ^1D^\circ$	2-2	692
Mg VII	71.786	100		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$^1S - ^1P^\circ$	0-1	692
Mg VII	72.546	10b		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3D$		692
Mg VII	72.787	100		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	3-4	692
Mg VII	72.852	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	2-3	692
Mg VII	72.896	1d		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	1-2	692
Mg VII	75.975	400		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1D^\circ$	2-2	692
Mg VII	76.392	300		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1F^\circ$	2-3	692
Mg VII	77.033	100		$2s^22p^2 - 2s2p^2(^2D)3p$	$g^3P - ^3D^\circ$	1-	692
Mg VII	77.144	200		$2s^22p^2 - 2s2p^2(^2D)3p$	$g^3P - ^3D^\circ$	2-	692
Mg VII	78.405	10		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P^\circ$	1-2	692
Mg VII	78.521	200		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3P^\circ$	2-2	692
Mg VII	79.131	500		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	1-2	692
Mg VII	79.168	500		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	2-3	692
Mg VII	79.248	100		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	2-2	692
Mg VII	81.024	100		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S^\circ$	1-1	692
Mg VII	81.133	300		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S^\circ$	2-1	692
Mg VII	82.940	400		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-1	692
Mg VII	82.969	400		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-2	692
Mg VII	83.015	500d		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-3	692
Mg VII	83.403	400b		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5D$	2-	692
Mg VII	83.519	300b		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	0-1	692
Mg VII	83.560	200b		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-0	692
Mg VII	83.587	200		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-1	692
Mg VII	83.635	10		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-2	692
Mg VII	83.716	300		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-1	692
Mg VII	83.766	500		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-2	692
Mg VII	83.910	300		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	0-1	692
Mg VII	83.959	400d		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-2	692
Mg VII	84.025	500		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-3	692
Mg VII	84.087	300b		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-2	692
Mg VII	84.189	10		$2s2p^3 - 2s2p^2(^2D)3d$	$^3D^\circ - ^3P$		692
Mg VII	84.642	500		$2s2p^3 - 2s2p^2(^2D)3d$	$^3D^\circ - ^3F$		692
Mg VII	85.336	10		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^1P^\circ$	2-1	692
Mg VII	85.407	700		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	692
Mg VII	86.032	200d		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3S$	-1	692

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg VII	87.131	500d		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3D$	2-3	692
Mg VII	87.175	400d		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3D$	1-2	692
Mg VII	87.722	600		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	692
Mg VII	87.767	400		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3F$		692
Mg VII	87.889	500		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^3F^\circ$	2-2	692
Mg VII	88.680	600		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1S - ^1P^\circ$	0-1	692
Mg VII	89.407	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3D$	3-3	692
Mg VII	89.448	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3D$	2-2	692
Mg VII	89.476	10		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3D$	1-1	692
Mg VII	90.706	400		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3F$	3-4	692
Mg VII	90.815	300		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3F$	2-3	692
Mg VII	90.897	600b		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3F$	1-2	692
Mg VII	91.460	10d		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3P$	2-1	692
Mg VII	91.573	100		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3P$	3-2	692
Mg VII	92.256	300		$2s2p^3 - 2s2p^2(^2D)3d$	$^1D^\circ - ^1F$	2-3	692
Mg VII	92.898	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3D$	2-3	692
Mg VII	92.934	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3D$	1-2	692
Mg VII	92.964	100b		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3D$	0-1	692
Mg VII	94.043	400b		$2s2p^3 - 2s2p^2(^4P)3s$	$^5S^\circ - ^5P$	2-3	692
Mg VII	94.174	300		$2s2p^3 - 2s2p^2(^4P)3s$	$^5S^\circ - ^5P$	2-2	692
Mg VII	94.276	200b		$2s2p^3 - 2s2p^2(^4P)3s$	$^5S^\circ - ^5P$	2-1	692
Mg VII	95.027	400		$2s2p^3 - 2s2p^2(^2D)3s$	$^3D^\circ - ^3D$		692
Mg VII	95.089	10		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	-0	692
Mg VII	95.139	100		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	-1	692
Mg VII	95.233	100		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	-2	692
Mg VII	95.259	200		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-2	692
Mg VII	95.385	400b		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	0-1	692
Mg VII	95.421	400b		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-2	692
Mg VII	95.483	500b		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-1	692
Mg VII	95.556	100b		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-0	692
Mg VII	95.637	300b		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-1	692
Mg VII	96.019	200b		$2s2p^3 - 2s2p^2(^2D)3d$	$^1P^\circ - ^1D$	1-2	692
Mg VII	98.322	300		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$^1D - ^1P^\circ$	2-1	692
Mg VII	98.983	400b		$2s2p^3 - 2s2p^2(^2D)3s$	$^3P^\circ - ^3D$		692
Mg VII	101.956	200		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	3-2	692
Mg VII	102.138	100		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	2-1	692
Mg VII	102.471	300		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	692
Mg VII	103.743	10		$2s2p^3 - 2s2p^2(^4P)3d$	$^3S^\circ - ^3P$	1-1	692
Mg VII	103.859	10		$2s2p^3 - 2s2p^2(^4P)3d$	$^3S^\circ - ^3P$	1-2	692
Mg VII	105.159	100		$2s2p^3 - 2s2p^2(^2D)3s$	$^1D^\circ - ^1D$	2-2	692
Mg VII	106.524	200d		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	-2	692
Mg VII	106.707	100		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	-1	692
Mg VII	106.809	10		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	1-0	692
Mg VII	110.121	10b		$2s2p^3 - 2s2p^2(^2D)3s$	$^1P^\circ - ^1D$	1-2	692
Mg VII	111.984	10d		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3D^\circ - ^3P$	-2	692
Mg VII	112.135	10		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3D^\circ - ^3P$	-1	692
Mg VII	112.269	1		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3D^\circ - ^3P$	-0	692
Mg VII	276.145	200		$2s^22p^2 - 2s2p^3$	$g^3P - ^3S^\circ$	0-1	692
Mg VII	277.007	300		$2s^22p^2 - 2s2p^3$	$g^3P - ^3S^\circ$	1-1	692
Mg VII	278.406	400		$2s^22p^2 - 2s2p^3$	$g^3P - ^3S^\circ$	2-1	692
Mg VII	280.744	300		$2s^22p^2 - 2s2p^3$	$^1D - ^1P^\circ$	2-1	692
Mg VII	319.016	400d		$2s^22p^2 - 2s2p^3$	$^1D - ^1D^\circ$	2-2	692
Mg VII	363.770	10		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	0-1	692
Mg VII	365.230	200d		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	1-	692
Mg VII	367.679	400d		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	2-	692
Mg VII	429.134	100d		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	0-1	692
Mg VII	431.318	200d		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	1-2	692
Mg VII	434.710	10d		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	2-2	692
Mg VII	434.923	200d		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	2-3	692

Ground state $1s^2 2s^2 2p\ ^2P^\circ_{1/2}$

Ionization potential 2 145 679 cm^{-1}; 266.02 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg VIII	52.395	10		$2s2p^2 - 1s^22p^2(^3P)4p$	$^4P - ^4D^\circ$	5/2-7/2	691
Mg VIII	53.484	10d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4D^\circ$	3/2-5/2	691
Mg VIII	53.512	100d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^4P - ^4D^\circ$	5/2-7/2	691
Mg VIII	53.812	10		$2s^22p - 2s^25d$	$g^2P^\circ - ^2D$	1/2-3/2	691
Mg VIII	53.905	100		$2s^22p - 2s^25d$	$g^2P^\circ - ^2D$	3/2-5/2	691
Mg VIII	54.886	100		$2s^22p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	3/2-5/2	691
Mg VIII	55.222	10d		$2s^22p - 2s2p(^3P^\circ)4p$	$g^2P^\circ - ^2P$	3/2-3/2	691
Mg VIII	56.358	10d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^2D - ^2F^\circ$	5/2-7/2	691
Mg VIII	56.403	10d		$2s2p^2 - 2s2p(^3P^\circ)5d$	$^2D - ^2F^\circ$	3/2-5/2	691
Mg VIII	57.590	10		$2s2p^2 - 2s2p(^1P^\circ)4d$	$^2D - ^2D^\circ$		691
Mg VIII	57.736	100		$2s2p^2 - 2s2p(^1P^\circ)4d$	$^2D - ^2F^\circ$		691
Mg VIII	58.537	10d		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3/2-	691
Mg VIII	58.614	200d		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	3/2-5/2	691
Mg VIII	58.667	300d		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5/2-7/2	691
Mg VIII	59.038	200		$2s^22p - 2s^24d$	$g^2P^\circ - ^2D$	1/2-3/2	691
Mg VIII	59.153	300		$2s^22p - 2s^24d$	$g^2P^\circ - ^2D$	3/2-5/2	691
Mg VIII	60.384	10		$2s2p^2 - 2s2p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5/2-5/2	691
Mg VIII	60.806	10		$2s^22p - 2s^24s$	$g^2P^\circ - ^2S$	3/2-1/2	691
Mg VIII	61.891	200		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2F^\circ$	5/2-7/2	691
Mg VIII	61.964	100b		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2F^\circ$	3/2-5/2	691
Mg VIII	62.291	10		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2D^\circ$		691
Mg VIII	64.246	10		$2s^22p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2S$	1/2-1/2	691
Mg VIII	64.377	100b		$2s^22p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2S$	3/2-1/2	691
Mg VIII	64.488	100d		$2s^22p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	1/2-3/2	691
Mg VIII	64.518	100d		$2s^22p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	1/2-1/2	691
Mg VIII	64.635	200		$2s^22p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2D$	1/2-3/2	691
Mg VIII	64.635	200		$2s^22p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	3/2-3/2	691
Mg VIII	64.702	200		$2s^22p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2D$	3/2-5/2	691
Mg VIII	64.811	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	3/2-3/2	691
Mg VIII	64.878	100		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	5/2-3/2	691
Mg VIII	65.735	100		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	3/2-5/2	691
Mg VIII	65.806	200		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	5/2-5/2	691
Mg VIII	66.069	300		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4D^\circ$		691
Mg VIII	67.731	400b		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2D - ^2D^\circ$		691
Mg VIII	68.450	100		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	1/2-1/2	691
Mg VIII	68.550	100		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2D - ^2F^\circ$	5/2-7/2	691
Mg VIII	68.580	10		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2D - ^2F^\circ$	3/2-5/2	691
Mg VIII	68.606	200		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	3/2-1/2	691
Mg VIII	69.413	400b		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	1/2-3/2	691
Mg VIII	69.467	500b		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	3/2-5/2	691
Mg VIII	69.577	100		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	3/2-3/2	691
Mg VIII	70.953	100		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	1/2-3/2	691
Mg VIII	71.007	200d		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	1/2-1/2	691
Mg VIII	71.118	300		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3/2-3/2	691
Mg VIII	71.168	100		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3/2-1/2	691
Mg VIII	72.027	300b		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2P - ^2D^\circ$	3/2-	691
Mg VIII	72.546	10b		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2P^\circ$		692,691
Mg VIII	72.684	100d		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2D^\circ$		691
Mg VIII	73.250	400		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2F^\circ$		691
Mg VIII	73.825	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	1/2-3/2	691
Mg VIII	73.862	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3/2-1/2	691
Mg VIII	73.890	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3/2-3/2	691
Mg VIII	73.927	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3/2-5/2	691
Mg VIII	73.981	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5/2-3/2	691
Mg VIII	74.021	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5/2-5/2	691

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg VIII	74.274	200b		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	½-3½	691
Mg VIII	74.319	300b		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3½-5½	692,691
Mg VIII	74.366	400b		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5½-7½	691
Mg VIII	74.411	100b		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5½-5½	691
Mg VIII	74.858	600		$2s^22p - 2s^23d$	$g^2P^\circ - ^2D$	½-3½	691
Mg VIII	75.034	700		$2s^22p - 2s^23d$	$g^2P^\circ - ^2D$	3½-5½	691
Mg VIII	76.199	100		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2S - ^2P^\circ$	½-	691
Mg VIII	76.714	100		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3½-½	691
Mg VIII	76.740	200		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3½-3½	691
Mg VIII	76.788	300		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3½-5½	691
Mg VIII	77.405	200b		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2P^\circ$	½-	691
Mg VIII	77.511	100b		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2D^\circ - ^2P$		691
Mg VIII	77.572	500		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2D^\circ$	½-3½	691
Mg VIII	77.671	500		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2D^\circ$	3½-5½	691
Mg VIII	77.737	600b		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2D^\circ - ^2F$		691
Mg VIII	78.446	600d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2F^\circ$	5½-7½	691
Mg VIII	78.574	600d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2F^\circ$	3½-5½	691
Mg VIII	79.695	200		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2D - ^2P^\circ$		691
Mg VIII	80.229	400d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2D$	5½-5½	691
Mg VIII	80.255	400d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2D^\circ$	3½-3½	691
Mg VIII	80.806	10d		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5½-5½	691
Mg VIII	80.889	100		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5½-7½	691
Mg VIII?	81.304	100		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2P^\circ - ^2P$		691
Mg VIII?	81.368	10		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2P^\circ - ^2P$		691
Mg VIII	81.732	300		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3½-5½	691
Mg VIII	81.790	200		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	½-3½	691
Mg VIII	81.844	400		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	5½-5½	691
Mg VIII	81.943	200		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3½-½	691
Mg VIII	81.979	200		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	5½-3½	691
Mg VIII	82.238	200b		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2S - ^2P^\circ$	½-½	691
Mg VIII	82.317	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2S - ^2P^\circ$	½-3½	691
Mg VIII	82.598	200		$2s^22p - 2s^23s$	$g^2P^\circ - ^2S$	½-½	691
Mg VIII	82.709	200		$1s^22p^3 - 1s^22p^2(^1D)3d$	$^2P^\circ - ^2D$		691
Mg VIII	82.822	300		$2s^22p - 2s^23s$	$g^2P^\circ - ^2S$	3½-½	691
Mg VIII	84.087	300b		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2S - ^2P^\circ$	½-	691
Mg VIII	84.827	10d		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	3½-5½	691
Mg VIII	84.919	100		$1s^22p^3 - 1s^22p^2(^3P)3s$	$^4S^\circ - ^4P$	3½-5½	691
Mg VIII	85.064	10		$1s^22p^3 - 1s^22p^2(^3P)3s$	$^4S^\circ - ^4P$	3½-3½	691
Mg VIII	85.153	10b		$1s^22p^3 - 1s^22p^2(^3P)3s$	$^4S^\circ - ^4P$	3½-½	691
Mg VIII	85.248	200		$1s^22p^3 - 1s^22p^2(^1D)3s$	$^2D^\circ - ^2D$		691
Mg VIII	85.599	300		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2P - ^2P^\circ$	½-	691
Mg VIII	85.749	400		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2P - ^2P^\circ$	3½-	691
Mg VIII	86.234	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2P - ^2D^\circ$	½-3½	691
Mg VIII	86.359	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2P - ^2D^\circ$	3½-5½	691
Mg VIII	86.847	200		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2D - ^2P^\circ$	5½-3½	691
Mg VIII	87.017	100		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2D - ^2P^\circ$	3½-½	691
Mg VIII	92.123	100d		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2S - ^2P^\circ$	½-3½	691
Mg VIII	92.324	10		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2S - ^2P^\circ$	½-½	691
Mg VIII	93.911	10		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2P - ^2P^\circ$	½-3½	691
Mg VIII	94.043	400b		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2P - ^2P^\circ$	3½-3½	691
Mg VIII	94.276	200b		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2P - ^2P^\circ$	3½-½	691
Mg VIII	97.465	200		$1s^22p^3 - 2s2p(^1P^\circ)3p$	$^2P^\circ - ^2P$	3½-3½	691
Mg VIII	97.525	10		$1s^22p^3 - 2s2p(^1P^\circ)3p$	$^2P^\circ - ^2P$	-½	691
Mg VIII	97.606	200b		$1s^22p^3 - 2s2p(^1P^\circ)3p$	$^2P^\circ - ^2D$	3½-5½	691
Mg VIII	97.686	100b		$1s^22p^3 - 2s2p(^1P^\circ)3p$	$^2P^\circ - ^2D$	½-3½	691
Mg VIII	311.806	10d		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	½-3½	691
Mg VIII	313.743	100d		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	½-½	691
Mg VIII	315.022	200d		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	3½-3½	691
Mg VIII	317.029	100d		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	3½-½	691
Mg VIII	335.230	10d		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2S$	½-½	691

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg VIII	339.007	100d		$2s^22p - 2s2p^2$	$g^2P^\circ - {}^2S$	3/2-1/2	691
Mg VIII	356.000	10		$2s2p^2 - 1s^22p^3$	${}^4P - {}^4S^\circ$	5/2-3/2	691
Mg VIII	430.467	10d		$2s^22p - 2s2p^2$	$g^2P^\circ - {}^2D$	1/2-3/2	691
Mg VIII	436.726	100d		$2s^22p - 2s2p^2$	$g^2P^\circ - {}^2D$	3/2-5/2	691

Ground state $1s^22s^2\ ^1S_0$

Ionization potential 2 645 444 cm^{-1}; 327.98 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J-J	Reference
Mg IX	46.711	10		2s2p - 2s5d	$^3P^o$ - ^3D	2-3	691
Mg IX	47.818	10d		2s2p - $1s^22p(^2P^o)4p$	$^3P^o$ - ^3P	2-2	691
Mg IX	47.947	100d		2s2p - $1s^22p(^2P^o)4p$	$^3P^o$ - ^3D		691
Mg IX	48.024	10d		$1s^22p^2$ - $1s^22p(^2P^o)5d$	^3P - $^3P^o$	2-	691
Mg IX	48.340	100		$2s^2$ - 2s4p	g^1S - $^1P^o$	0-1	691
Mg IX	48.794	10		$1s^22p^2$ - $1s^22p(^2P^o)5d$	^1D - $^1F^o$	2-3	691
Mg IX	49.586	1		2s2p - 2s5d	$^1P^o$ - ^1D	1-2	691
Mg IX	50.777	10		2s2p - $1s^22p(^2P^o)4p$	$^1P^o$ - ^1D	1-2	691
Mg IX	51.560	10		2s2p - 2s4d	$^3P^o$ - ^3D	0-1	691
Mg IX	51.591	300		2s2p - 2s4d	$^3P^o$ - ^3D	1-2	691
Mg IX	51.654	400		2s2p - 2s4d	$^3P^o$ - ^3D	2-3	691
Mg IX	53.112	10		$1s^22p^2$ - $1s^22p(^2P^o)4d$	^3P - $^3P^o$		691
Mg IX	53.188	200d		$1s^22p^2$ - $1s^22p(^2P^o)4d$	^3P - $^3P^o$	2-2	691
Mg IX	53.222	200d		$1s^22p^2$ - $1s^22p(^2P^o)4d$	^3P - $^3D^o$	2-3	691
Mg IX	54.011	200		$1s^22p^2$ - $1s^22p(^2P^o)4d$	^1D - $^1F^o$	2-3	691
Mg IX	54.463	10		$1s^22p^2$ - $1s^22p(^2P^o)4d$	^1D - $^1D^o$	2-2	691
Mg IX	55.060	200		2s2p - 2s4d	$^1P^o$ - ^1D	1-2	691
Mg IX	56.861	10		$1s^22p^2$ - $1s^22p(^2P^o)4d$	^1S - $^1P^o$	0-1	691
Mg IX	61.038	200		2s2p - $1s^22p(^2P^o)3p$	$^3P^o$ - ^3P	1-2	691
Mg IX	61.088	100		2s2p - $1s^22p(^2P^o)3p$	$^3P^o$ - ^3P	1-1	691
Mg IX	61.127	300		2s2p - $1s^22p(^2P^o)3p$	$^3P^o$ - ^3P	2-2	691
Mg IX	61.175	200		2s2p - $1s^22p(^2P^o)3p$	$^3P^o$ - ^3P	2-1	691
Mg IX	61.359	10		2s2p - $1s^22p(^2P^o)3p$	$^3P^o$ - ^3S	0-1	691
Mg IX	61.393	100		2s2p - $1s^22p(^2P^o)3p$	$^3P^o$ - ^3S	1-1	691
Mg IX	61.489	200		2s2p - $1s^22p(^2P^o)3p$	$^3P^o$ - ^3S	2-1	691
Mg IX	61.924	400		2s2p - $1s^22p(^2P^o)3p$	$^3P^o$ - ^3D		691
Mg IX	61.964	100b		2s2p - $1s^22p(^2P^o)3p$	$^3P^o$ - ^3D	1-1	691
Mg IX	62.020	10		2s2p - $1s^22p(^2P^o)3p$	$^3P^o$ - ^3D	2-2	691
Mg IX	62.751	500		$2s^2$ - 2s3p	g^1S - $^1P^o$	0-1	691
Mg IX	65.609	400		2s2p - $1s^22p(^2P^o)3p$	$^1P^o$ - ^1D	1-2	691
Mg IX	67.090	500		2s2p - 2s3d	$^3P^o$ - ^3D	0-1	691
Mg IX	67.135	600		2s2p - 2s3d	$^3P^o$ - ^3D	1-2	691
Mg IX	67.239	700		2s2p - 2s3d	$^3P^o$ - ^3D	2-3	691
Mg IX	67.731	400b		2s2p - $1s^22p(^2P^o)3p$	$^1P^o$ - ^1P	1-1	691
Mg IX	68.949	10		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^3P - $^3P^o$	0-1	691
Mg IX	68.986	100		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^3P - $^3P^o$	1-0	691
Mg IX	69.009	100		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^3P - $^3P^o$	1-1	691
Mg IX	69.058	10		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^3P - $^3P^o$	1-2	691
Mg IX	69.116	100		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^3P - $^3P^o$	2-1	691
Mg IX	69.161	300		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^3P - $^3P^o$	2-2	691
Mg IX	69.374	200		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^3P - $^3D^o$	0-1	691
Mg IX	69.413	400b		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^3P - $^3D^o$	1-2	691
Mg IX	69.467	500b		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^3P - $^3D^o$	2-3	691
Mg IX	69.513	100		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^3P - ^3D	2-2	691
Mg IX	69.615	300b		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^1D - $^1P^o$	2-1	691
Mg IX	69.950	600		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^1D - $^1F^o$	2-3	691
Mg IX	71.841	100		2s2p - 2s3s	$^3P^o$ - ^3S	0-1	691
Mg IX	71.901	200		2s2p - 2s3s	$^3P^o$ - ^3S	1-1	691
Mg IX	72.027	300b		2s2p - 2s3s	$^3P^o$ - ^3S	2-1	691
Mg IX	72.226	300		$1s^22p^2$ - $1s^22p(^2P^o)3d$	^1D - $^1D^o$	2-2	691
Mg IX	72.312	400		2s2p - $2s(^2S)3d$	$^1P^o$ - ^1D	1-2	691
Mg IX	74.274	200b		$1s^22p^2$ - $1s^22p(^2P^o)3s$	^3P - $^3P^o$	1-2	691
Mg IX	74.319	300b		$1s^22p^2$ - $1s^22p(^2P^o)3s$	^3P - $^3P^o$	0-1	691
Mg IX	74.366	400b		$1s^22p^2$ - $1s^22p(^2P^o)3s$	^3P - $^3P^o$	2-2	691
Mg IX	74.411	100b		$1s^22p^2$ - $1s^22p(^2P^o)3s$	^3P - $^3P^o$	1-1	691

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg IX	74.461	10b		$1s^22p^2 - 1s^22p(^2P^o)3s$	$^3P - ^3P^o$	1-0	691
Mg IX	74.520	100		$1s^22p^2 - 1s^22p(^2P^o)3s$	$^3P - ^3P^o$	2-1	691
Mg IX	74.738	100		$1s^22p^2 - 1s^22p(^2P^o)3s$	$^1D - ^1P^o$	2-1	691
Mg IX	77.737	600b		$2s2p - 2s3s$	$^1P^o - ^1S$	1-0	691
Mg IX	80.428	100		$1s^22p^2 - 1s^22p(^2P^o)3s$	$^1S - ^1P^o$	0-1	691
Mg IX	91.385	10d		$1s^22p^2 - 2s3p$	$^1S - ^1P^o$	0-1	691
Mg IX	368.071	100d		$2s^2 - 2s2p$	$g^1S - ^1P^o$	0-1	691
Mg IX	439.180	10		$2s2p - 1s^22p^2$	$^3P^o - ^3P$	1-2	691
Mg IX	443.981	10d		$2s2p - 1s^22p^2$	$^3P^o - ^3P$	2-2	691

Ground state $1s^2 2s\ ^2S_{1/2}$

Ionization potential 2 963 810 cm^{-1}; 367.46 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg X	44.050	100		2s - 4p	$g^2S - {}^2P^\circ$	½-3½	691
Mg X	47.231	300		2p - 4d	${}^2P^\circ - {}^2D$	½-3½	691
Mg X	47.310	500		2p - 4d	${}^2P^\circ - {}^2D$	3½-5½	691
Mg X	57.876	600		2s - 3p	$g^2S - {}^2P^\circ$	½-3½	691
Mg X	57.920	400		2s - 3p	$g^2S - {}^2P^\circ$	½-½	691
Mg X	63.152	700		2p - 3d	${}^2P^\circ - {}^2D$	½-3½	691
Mg X	63.295	900		2p - 3d	${}^2P^\circ - {}^2D$	3½-5½	691
Mg X	65.672	200		2p - 3s	${}^2P^\circ - {}^2S$	½-½	691
Mg X	65.847	300		2p - 3s	${}^2P^\circ - {}^2S$	3½-½	691
Mg X	170.21	P		3s - 4p	${}^2S - {}^2P^\circ$	½-	487
Mg X	609.85	P		2s - 2p	$g^2S - {}^2P^\circ$	½-3½	487
Mg X	625.28	P		2s - 2p	$g^2S - {}^2P^\circ$	½-½	487

Ground state $1s^2\ ^1S_0$

Ionization potential 14 209 200 cm^{-1}; 1761.67 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg XI	7.310			$1s^2$ - 1s5p	$g\,^1S$ - $^1P^o$	0-1	236
Mg XI	7.473			$1s^2$ - 1s4p	$g\,^1S$ - $^1P^o$	0-1	236
Mg XI	7.850			$1s^2$ - 1s3p	$g\,^1S$ - $^1P^o$	0-1	236
Mg XI	9.168			$1s^2$ - 1s2p	$g\,^1S$ - $^1P^o$	0-1	236

Ground state 1s $^2S_{1/2}$

Ionization potential 15 829 946 cm^{-1}; 1962.61 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Mg XII	6.497	P		1s - 6p	g^2S - $^2P°$	½-	309
Mg XII	6.580	P		1s - 5p	g^2S - $^2P°$	½-	309
Mg XII	6.738	P		1s - 4p	g^2S - $^2P°$	½-	309
Mg XII	7.106	P		1s - 3p	g^2S - $^2P°$	½-	309
Mg XII	8.421	P		1s - 2p	g^2S - $^2P°$	½-	309
Mg XII	27.52	P		2 - 7			309
Mg XII	28.43	P		2 - 6			309
Mg XII	30.09	P		2 - 5			309
Mg XII	33.70	P		2 - 4			309
Mg XII	45.47	P		2 - 3			309
Mg XII	69.71	P		3 - 7			309
Mg XII	75.87	P		3 - 6			309
Mg XII	88.91	P		3 - 5			309
Mg XII	130.0	P		3 - 4			309
Mg XII	150.26	P		4 - 7			309
Mg XII	182.1	P		4 - 6			309
Mg XII	281.1	P		4 - 5			309
Mg XII	322.9	P		5 - 7			309
Mg XII	517.5	P		5 - 6			309
Mg XII	858.4	P		6 - 7			309

Unclassified lines

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al	46.896	10					233
Al	53.412	10					233
Al	53.598	10					233
Al	55.143	10					233
Al	55.622	1					233
Al	56.274	30					233
Al	56.545	10					233
Al	57.116	50					233
Al	57.244	50					233
Al	57.271	50					233
Al	57.663	10					233
Al	58.144	50					233
Al	58.441	10					233
Al	58.512	10					233
Al	59.298	10					233
Al	59.481	10d					233
Al	60.052	50					233
Al	60.788	50					233
Al	60.809	50					233
Al	61.262	10					233
Al	61.373	50					233
Al	61.472	100					233
Al	61.900	10					233
Al	61.933	50					233
Al	62.070	50					233
Al	63.560	10					233
Al	64.269	10					233
Al	64.418	10					233
Al	65.632	50					233
Al	65.821	50					233
Al	66.996	10d					233
Al	67.873	10					233
Al	68.000	10					233
Al	68.439	50					233
Al	68.458	50					233
Al	68.783	10					233
Al	68.904	10					233
Al	69.165	200					233
Al	69.379	50					233
Al	69.631	200					233
Al	70.040	50					233
Al	70.090	100					233
Al	70.802	50					233
Al	71.077	10					233
Al	71.139	50					233
Al	71.277	50					233
Al	71.590	70					233
Al	71.625	70					233
Al	71.774	10d					233
Al	71.867	10d					233
Al	71.987	10					233
Al	72.674	300					233
Al	73.278	100					233
Al	74.016	120					233
Al	74.259	10					233

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Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al	74.321	50					233
Al	75.164	100					233
Al	75.226	100d					233
Al	76.794	200					233
Al	76.853	200					233
Al	76.984	100					233
Al	77.052	50					233
Al	77.315	10					233
Al	78.149	100					233
Al	78.256	70					233
Al	78.421	10					233
Al	78.508	150					233
Al	78.573	70					233
Al	78.836	100					233
Al	78.938	300					233
Al	79.557	10					233
Al	79.783	50					233
Al	80.014	10					233
Al	80.403	10					233
Al	81.560	100					233
Al	81.667	100					233
Al	82.105	70					233
Al	82.128	70					233
Al	82.423	50					233
Al	82.582	50					233
Al	82.908	50d					233
Al	83.102	10					233
Al	83.335	10					233
Al	84.479	10					233
Al	85.046	1					233
Al	85.189	10					693
Al	86.282	50					233
Al	86.360	100					233
Al	86.393	100					233
Al	86.427	100					233
Al	86.540	10					233
Al	86.975	10					233
Al	87.932	100					233
Al	88.108	100					233
Al	88.241	10					233
Al	91.023	500					233
Al	94.970	150					233
Al	95.405	10					233
Al	95.624	100					233
Al	95.720	200					233
Al	95.859	10					233
Al	96.939	10					233
Al	104.227	10					233
Al	104.960	10					233
Al	106.471	10					233
Al	113.140	50					233
Al	135.231	10					693
Al	135.620	50					693
Al	190.560	50					693
Al	221.543	10					693
Al	228.911	10					693
Al	1150.27	10					693
Al	1165.38	10d					693
Al	1183.62	10					693
Al	1220.57	10					693

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al?	1271.27	10					816
Al	1271.38	10					816
Al	1291.81	10					693
Al	1294.86	40					816
Al	1320.71	10					693
Al	1332.57	20					816
Al	1333.99	20					816
Al	1336.86	40					816
Al	1337.86	50					693
Al	1364.10	10					816
Al	1365.54	10					816
Al	1367.02	10					816
Al	1367.07	20					816
Al	1368.51	10					816
Al	1369.20	10d					693
Al	1370.00	10					816
Al	1414.24	40					816
Al	1416.49	40					816
Al	1417.14	10					816
Al	1420.45	10					816
Al	1422.17	10					693
Al	1429.57	10					693
Al	1437.40	20					816
Al	1438.32	10					816
Al	1439.96	20					816
Al	1443.28	40					816
Al	1443.66	10					816
Al	1457.92	50d					693
Al	1541.71	10					816
Al	1542.66	20					816
Al	1673.28	10					816
Al	1675.75	20					816
Al	1699.78	10					816
Al	1701.05	10					816
Al	1727.11	20					816
Al	1730.56	20					816
Al	1749.99	80					816
Al	1772.78	40					816
Al	1773.18	40					816
Al	1773.99	60					816
Al	1774.76	40					816
Al	1776.97	80					816
Al	1777.82	60					816
Al	1778.25	20					816
Al	1778.59	20					816
Al	1781.07	40					816
Al	1782.65	20					816
Al	1783.55	40					816
Al	1785.29	20					816
Al	1786.78	20					816
Al	1786.93	20					816
Al	1787.41	40					816
Al	1788.15	60					816
Al	1791.21	20					816
Al	1792.04	60					816
Al	1793.54	40					816
Al?	1793.92	10					816
Al	1797.18	20					816
Al	1797.45	60					816
Al	1798.45	20					816

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al	1799.89	10					816
Al	1801.90	20					816
Al	1802.00	20					816
Al	1805.94	40					816
Al	1807.58	20					816
Al	1807.64	20					816,653
Al	1811.09	10					816
Al	1813.15	20					816
Al	1817.15	20					816
Al	1817.35	20					816
Al	1818.37	100					816
Al	1819.28	80					816
Al	1820.11	60					816
Al	1822.32	10					816
Al	1823.63	10					816
Al	1823.71	10					816
Al	1827.56	20					816
Al	1829.28	40					816
Al	1831.62	40					816
Al	1833.26	20					816
Al	1834.13	60					816
Al	1839.39	10					816
Al	1840.62	10					816
Al	1844.29	20					816
Al	1846.42	40					816
Al	1848.69	40					816
Al	1849.15	40					816
Al	1850.56	40					816
Al	1856.10	20					816
Al	1856.27	40					816
Al	1869.56	20					816
Al	1870.75	10					816
Al	1871.74	60					816
Al	1875.63	20					816
Al	1875.98	40					816
Al	1895.51	20					816
Al	1904.69	10					816
Al	1921.94	20					816
Al	1922.16	20					816
Al	1922.26	10					816
Al	1927.09	40					816
Al	1927.13	10					816
Al	1959.10	10					816
Al	1964.99	60					816,653
Al	1966.38	10					816
Al	1980.82	20					816
Al	1996.30	20					816

Ground state $1s^22s^22p^63s^23p\ ^2P^\circ_{1/2}$

Ionization potential 48 278.37 cm^{-1}; 5.986 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al I	1762.892	100		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	½-3/2	197,198
Al I	1765.632	200		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	½-½	197,198
Al I	1766.381	200		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	3/2-3/2	197,198
Al I	1769.133	200		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	3/2-½	197,198

Ground state $1s^22s^22p^63s^2\ ^1S_0$

Ionization potential 151 860 cm^{-1}; 18.828 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al II	933.08	10		$3s(^2S)3p - 3s(^2S)8d$	$^3P^\circ - ^3D$	1-	653,487
Al II	933.95	10		$3s(^2S)3p - 3s(^2S)8d$	$^3P^\circ - ^3D$	2-	653,487
Al II	935.20	50		$3s^2 - 3s(^2S)4p$	$g^1S - ^1P^\circ$	0-1	653,487
Al II	952.43	1		$3s(^2S)3p - 3s(^2S)7d$	$^3P^\circ - ^3D$	0-	653,487
Al II	953.18	10		$3s(^2S)3p - 3s(^2S)7d$	$^3P^\circ - ^3D$	1-	653,487
Al II	954.35	20		$3s(^2S)3p - 3s(^2S)7d$	$^3P^\circ - ^3D$	2-	653,487
Al II	954.87	10		$3s(^2S)3p - 3s(^2S)8s$	$^3P^\circ - ^3S$	1-1	653,487
Al II	955.99	50		$3s(^2S)3p - 3s(^2S)8s$	$^3P^\circ - ^3S$	2-1	653,487
Al II	986.55	10		$3s(^2S)3p - 3s(^2S)6d$	$^3P^\circ - ^3D$	1-	653,487
Al II	987.80	10		$3s(^2S)3p - 3s(^2S)6d$	$^3P^\circ - ^3D$	2-	653,487
Al II	989.70	10		$3s(^2S)3p - 3s(^2S)7s$	$^3P^\circ - ^3S$	1-1	653,487
Al II	990.88	50		$3s(^2S)3p - 3s(^2S)7s$	$^3P^\circ - ^3S$	2-1	653,487
Al II	1047.82	10		$3s(^2S)3p - 3s(^2S)5d$	$^3P^\circ - ^3D$	0-	653,487
Al II	1048.53	50		$3s(^2S)3p - 3s(^2S)5d$	$^3P^\circ - ^3D$	1-	653,487
Al II	1049.93	100		$3s(^2S)3p - 3s(^2S)5d$	$^3P^\circ - ^3D$	2-	653,487
Al II	1055.28	20		$3s(^2S)3p - 3s(^2S)6s$	$^3P^\circ - ^3S$	1-1	653,487
Al II	1056.68	1		$3s(^2S)3p - 3s(^2S)6s$	$^3P^\circ - ^3S$	2-1	653,487
Al II	1142.97	100		$3s(^2S)3p - 3s(^2S)10d$	$^1P^\circ - ^1D$	1-2	653,487
Al II?	1152.14	200					653
Al II	1157.10	10		$3s(^2S)3p - 3s(^2S)9d$	$^1P^\circ - ^1D$	1-2	816,653,487
Al II	1158.14	50		$3s(^2S)3p - 3s(^2S)10s$	$^1P^\circ - ^1S$	1-0	653,487
Al II	1177.43	40		$3s(^2S)3p - 3s(^2S)8d$	$^1P^\circ - ^1D$	1-2	816,653,487
Al II	1179.34	10		$3s(^2S)3p - 3s(^2S)9s$	$^1P^\circ - ^1S$	1-0	816,653,487
Al II	1189.18	60		$3s(^2S)3p - 3s(^2S)4d$	$^3P^\circ - ^3D$	0-1	816,653,487
Al II	1190.05	80		$3s(^2S)3p - 3s(^2S)4d$	$^3P^\circ - ^3D$	1-2	816,653,487
Al II	1191.82	100		$3s(^2S)3p - 3s(^2S)4d$	$^3P^\circ - ^3D$	2-	816,653,487
Al II	1208.35	60		$3s(^2S)3p - 3s(^2S)7d$	$^1P^\circ - ^1D$	1-2	816,653,487
Al II	1209.19	40		$3s(^2S)3p - 3s(^2S)5s$	$^3P^\circ - ^3S$	0-1	816,653,487
Al II	1210.09	80		$3s(^2S)3p - 3s(^2S)5s$	$^3P^\circ - ^3S$	1-1	816,653,487
Al II	1211.90	100		$3s(^2S)3p - 3s(^2S)5s$	$^3P^\circ - ^3S$	2-1	816,487
Al II	1258.86	60		$3s(^2S)3p - 3s(^2S)6d$	$^1P^\circ - ^1D$	1-2	816,653,487
Al II	1266.66	20		$3s(^2S)3p - 3s(^2S)7s$	$^1P^\circ - ^1S$	1-0	816,653,487
Al II	1350.18	300		$3s(^2S)3p - 3s(^2S)5d$	$^1P^\circ - ^1D$	1-2	816,653,487
Al II	1371.24	60		$3s(^2S)3p - 3s(^2S)6s$	$^1P^\circ - ^1S$	1-0	816,487
Al II	1539.84	300	10	$3s(^2S)3p - 3s(^2S)4d$	$^1P^\circ - ^1D$	1-2	816,488
Al II	1555.93	20		$2p^63p^2 - 3s(^2S)15p$	$^1D - ^1P^\circ$	2-1	816,653,487
Al II	1560.35	50		$2p^63p^2 - 3s(^2S)14f$	$^1D - ^1F^\circ$	2-3	653,487
Al II	1563.58	20		$2p^63p^2 - 3s(^2S)14p$	$^1D - ^1P^\circ$	2-1	816,653,487
Al II	1569.37	20		$2p^63p^2 - 3s(^2S)13f$	$^1D - ^1F^\circ$	2-3	816,653,487
Al II	1573.01	20		$2p^63p^2 - 3s(^2S)13p$	$^1D - ^1P^\circ$	2-1	816,653,487
Al II	1580.90	20		$2p^63p^2 - 3s(^2S)12f$	$^1D - ^1F^\circ$	2-3	816,653,487
Al II	1584.72	40		$2p^63p^2 - 3s(^2S)12p$	$^1D - ^1P^\circ$	2-1	816,487
Al II	1596.07	80		$2p^63p^2 - 3s(^2S)11f$	$^1D - ^1F^\circ$	2-3	816,653,487
Al II	1599.44	40		$2p^63p^2 - 2p^63p(^2P^\circ)4s$	$^1D - ^1P^\circ$	2-1	816,653,487
Al II	1616.43	120		$2p^63p^2 - 3s(^2S)10f$	$^1D - ^1F^\circ$	2-3	816,653,487
Al II	1618.40	80		$2p^63p^2 - 3s(^2S)11p$	$^1D - ^1P^\circ$	2-1	816,653,487
Al II	1625.62	120	9	$3s(^2S)3p - 3s(^2S)5s$	$^1P^\circ - ^1S$	1-0	816,488
Al II	1644.22	80		$2p^63p^2 - 3s(^2S)10p$	$^1D - ^1P^\circ$	2-1	816,653,487
Al II	1644.80	100		$2p^63p^2 - 3s(^2S)9f$	$^1D - ^1F^\circ$	2-3	816,653,487
Al II	1670.786	600	2	$2p^63s^2 - 3s(^2S)3p$	$g^1S - ^1P^\circ$	0-1	197,816,488
Al II	1681.81	60		$2p^63p^2 - 3s(^2S)9p$	$^1D - ^1P^\circ$	2-1	816,653,487
Al II	1686.25	100		$2p^63p^2 - 3s(^2S)8f$	$^1D - ^1F^\circ$	2-3	816,653,487
Al II	1719.43	300	6	$3s(^2S)3p - 3s(^2S)3d$	$^3P^\circ - ^3D$	0-1	816,488
Al II	1721.26	500	6	$3s(^2S)3p - 3s(^2S)3d$	$^3P^\circ - ^3D$	1-1	816,488
Al II	1724.97	600	6	$3s(^2S)3p - 3s(^2S)3d$	$^3P^\circ - ^3D$	2-1	816,488

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al II	1739.75	40		$2p^63p^2$ - $3s(^2S)8p$	^1D - $^1P^o$	2-1	816,653,487
Al II	1750.52	120		$2p^63p^2$ - $3s(^2S)7f$	^1D - $^1F^o$	2-3	816,653,487
Al II	1760.103	160	5	$3s(^2S)3p$ - $2p^63p^2$	$^3P^o$ - ^3P	1-2	197,816,487
Al II	1761.979	140	5	$3s(^2S)3p$ - $2p^63p^2$	$^3P^o$ - ^3P	0-1	197,816,487
Al II	1763.874	60	5	$3s(^2S)3p$ - $2p^63p^2$	$^3P^o$ - ^3P	1-1	197,816,488
Al II	1763.947	200	5	$3s(^2S)3p$ - $2p^63p^2$	$^3P^o$ - ^3P	2-2	197,816,488
Al II	1765.811	100	5	$3s(^2S)3p$ - $2p^63p^2$	$^3P^o$ - ^3P	1-0	197,816,487
Al II	1767.735	160	5	$3s(^2S)3p$ - $2p^63p^2$	$^3P^o$ - ^3P	2-1	197,816,488
Al II	1776.19	20		$3s(^2S)4s$ - $3s(^2S)11p$	^3S - $^3P^o$	1-	816,653,487
Al II?	1807.42	60					816
Al II	1828.59	500		$3s(^2S)4s$ - $2p^63p(^2P^o)4s$	^3S - $^3P^o$	1-2	816,536,487
Al II	1832.85	400		$3s(^2S)4s$ - $2p^63p(^2P^o)4s$	^3S - $^3P^o$	1-1	816,536,487
Al II	1834.82	200		$3s(^2S)4s$ - $2p^63p(^2P^o)4s$	^3S - $^3P^o$	1-0	816,536,487
Al II	1836.97	80		$2p^63p^2$ - $3s(^2S)7p$	^1D - $^1P^o$	2-1	816,653,487
Al II	1838.21	40		$3s(^2S)4s$ - $3s(^2S)15p$	^1S - $^1P^o$	0-1	816,653,487
Al II?	1839.53	20					816,653,487
Al II?	1839.78	60					816,653,487
Al II	1848.90	40		$3s(^2S)4s$ - $3s(^2S)14p$	^1S - $^1P^o$	0-1	816,653,487
Al II	1855.928	400	4	$3s(^2S)3p$ - $3s(^2S)4s$	$^3P^o$ - ^3S	0-1	197,816,488
Al II	1858.031	800	4	$3s(^2S)3p$ - $3s(^2S)4s$	$^3P^o$ - ^3S	1-1	197,816,488
Al II	1859.99	240		$2p^63p^2$ - $3s(^2S)6f$	^1D - $^1F^o$	2-3	816,653,487
Al II	1862.318	800	4	$3s(^2S)3p$ - $3s(^2S)4s$	$^3P^o$ - ^3S	2-1	197,816,488
Al II	1877.04	100		$3s(^2S)3d$ - $3s(^2S)12f$	^3D - $^3F^o$		816,653,487
Al II	1878.50	60		$3s(^2S)4s$ - $3s(^2S)12p$	^1S - $^1P^o$	0-1	816,653,487
Al II	1897.44	120		$3s(^2S)3d$ - $3s(^2S)11f$	^3D - $^3F^o$		816,653,487
Al II	1899.19	80		$3s(^2S)4s$ - $2p^63p(^2P^o)4s$	^1S - $^1P^o$	0-1	816,653,487
Al II	1904.32	40		$2p^63p^2$ - $2p^63p(^2P^o)3d$	^3P - $^3P^o$	0-1	816,487
Al II	1906.40	60		$2p^63p^2$ - $2p^63p(^2P^o)3d$	^3P - $^3P^o$	1-2	816,487
Al II	1906.60	40		$2p^63p^2$ - $2p^63p(^2P^o)3d$	^3P - $^3P^o$	1-1	816,487
Al II	1906.67	40		$2p^63p^2$ - $2p^63p(^2P^o)3d$	^3P - $^3P^o$	1-0	816,487
Al II	1910.83	40		$2p^63p^2$ - $2p^63p(^2P^o)3d$	^3P - $^3P^o$	2-2	816,487
Al II	1911.01	40		$2p^63p^2$ - $2p^63p(^2P^o)3d$	^3P - $^3P^o$	2-1	816,487
Al II	1924.83	200		$3s(^2S)3d$ - $3s(^2S)10f$	^3D - $^3F^o$		816,653,487
Al II	1926.05	80		$3s(^2S)4s$ - $3s(^2S)11p$	^1S - $^1P^o$	0-1	816,653,487
Al II?	1926.96	60		$3s(^2S)4s$ - $3s(^2S)8p$	^3S - $^3P^o$	1-	816,653,487
Al II	1929.99	240		$2p^63p^2$ - $2p^63p(^2P^o)4s$	^3P - $^3P^o$	1-2	816,653,487
Al II?	1931.06	200					816
Al II	1932.39	240		$2p^63p^2$ - $2p^63p(^2P^o)4s$	^3P - $^3P^o$	0-1	816,653,487
Al II	1934.52	400		$2p^63p^2$ - $2p^63p(^2P^o)4s$	^3P - $^3P^o$	2-2	816,653,487
Al II	1934.73	300		$2p^63p^2$ - $2p^63p(^2P^o)4s$	^3P - $^3P^o$	1-1	816,653,487
Al II	1936.93	300		$2p^63p^2$ - $2p^63p(^2P^o)4s$	^3P - $^3P^o$	1-0	816,653,487
Al II	1939.27	300		$2p^63p^2$ - $2p^63p(^2P^o)4s$	^3P - $^3P^o$	2-1	816,653,487
Al II	1958.25	40		$2p^63p^2$ - $2p^63p(^2P^o)3d$	^3P - $^3D^o$	0-1	816,487
Al II	1958.77	20		$3s(^2S)3d$ - $2p^63p(^2P^o)3d$	^3D - $^3P^o$	3-2	816,487
Al II	1959.00	10		$3s(^2S)3d$ - $2p^63p(^2P^o)3d$	^3D - $^3P^o$		816,487
Al II?	1960.32	40					816
Al II?	1960.64	40					816
Al II?	1960.84	40		$2p^63p^2$ - $2p^63p(^2P^o)3d$	^3P - $^3D^o$	1-2	816,487
Al II	1962.59	100		$3s(^2S)3d$ - $3s(^2S)9f$	^3D - $^3F^o$	3-4	816,653,487
Al II	1962.72	120		$3s(^2S)4s$ - $3s(^2S)10p$	^1S - $^1P^o$	0-1	816,653,487
Al II	1965.31	40		$2p^63p^2$ - $2p^63p(^2P^o)3d$	^3P - $^3D^o$	2-3	816,487
Al II	1983.65	60		$3s(^2S)3d$ - $2p^63p(^2P^o)4s$	^3D - $^3P^o$	3-2	816,487
Al II	1988.71	40		$3s(^2S)3d$ - $2p^63p(^2P^o)4s$	^3D - $^3P^o$	2-1	816,487
Al II	1990.530	800	8	$3s(^2S)3p$ - $3s(^2S)3d$	$^1P^o$ - ^1D	1-2	197,816,488
Al II	1991.05	20		$3s(^2S)3d$ - $2p^63p(^2P^o)4s$	^3D - $^3P^o$	1-0	816,487

Ground state $1s^22s^22p^63s\ ^2S_{1/2}$

Ionization potential 229 453.99 cm^{-1}; 28.448 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al III	486.95	100		$2p^63s - 2p^67p$	$g^2S - {}^2P^\circ$	½-3½	190
Al III	511.215	400		$2p^63s - 2p^66p$	$g^2S - {}^2P^\circ$	½-	190
Al III	560.390	700	3	$2p^63s - 2p^65p$	$g^2S - {}^2P^\circ$	½-3½	190,488
Al III	670.144	100		$2p^63p - 2p^67s$	${}^2P^\circ - {}^2S$	½-½	190
Al III	671.198	200		$2p^63p - 2p^67s$	${}^2P^\circ - {}^2S$	3½-½	190
Al III	695.817	500	2	$2p^63s - 2p^64p$	$g^2S - {}^2P^\circ$	½-3½	197,190,488
Al III	696.212	400	2	$2p^63s - 2p^64p$	$g^2S - {}^2P^\circ$	½-½	197,190,488
Al III	725.716	200		$2p^63p - 2p^66s$	${}^2P^\circ - {}^2S$	½-½	190
Al III	726.948	300		$2p^63p - 2p^66s$	${}^2P^\circ - {}^2S$	3½-½	190
Al III	855.040	400		$2p^63p - 2p^65s$	${}^2P^\circ - {}^2S$	½-½	190
Al III	856.768	500		$2p^63p - 2p^65s$	${}^2P^\circ - {}^2S$	3½-½	190
Al III	892.056	400		$2p^63p - 2p^64d$	${}^2P^\circ - {}^2D$	½-3½	190
Al III	893.905	500		$2p^63p - 2p^64d$	${}^2P^\circ - {}^2D$	3½-5½	190
Al III	1162.66	10		$2p^63d - 2p^66f$	${}^2D - {}^2F^\circ$		190
Al III	1352.83	200		$2p^63d - 2p^65f$	${}^2D - {}^2F^\circ$		816,190
Al III	1379.670	600		$2p^63p - 2p^64s$	${}^2P^\circ - {}^2S$	½-½	190
Al III	1384.144	800		$2p^63p - 2p^64s$	${}^2P^\circ - {}^2S$	3½-½	190
Al III	1605.75	700		$2p^63p - 2p^63d$	${}^2P^\circ - {}^2D$	½-3½	197,190
Al III	1611.85	900		$2p^63p - 2p^63d$	${}^2P^\circ - {}^2D$	3½-5½	197,190
Al III	1854.720	1000	1	$2p^63s - 2p^63p$	$g^2S - {}^2P^\circ$	½-3½	197,816,488
Al III	1862.795	600	1	$2p^63s - 2p^63p$	$g^2S - {}^2P^\circ$	½-½	197,816,488
Al III	1935.88	60		$2p^63d - 2p^64f$	${}^2D - {}^2F^\circ$		197,816,190

Ground state $1s^22s^22p^6\ ^1S_0$

Ionization potential 967 783 cm^{-1}; 119.99 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al IV	108.535	50		$2p^6 - 2p^5(^2P^o)6d$	$g\,^1S$ - ½[3/2]°	0-1	693,487
Al IV	108.913	50d		$2p^6 - 2p^5(^2P^o)6d$	$g\,^1S$ - 3/2[3/2]°	0-1	233,487
Al IV	111.196	100		$2p^6 - 2p^5(^2P^o)5d$	$g\,^1S$ - ½[3/2]°	0-1	233,487
Al IV	111.589	150		$2p^6 - 2p^5(^2P^o)5d$	$g\,^1S$ - 3/2[3/2]°	0-1	233,487
Al IV	111.781	50		$2p^6 - 2p^5(^2P^o)5d$	$g\,^1S$ - 3/2[½]°	0-1	233,487
Al IV	114.313	10		$2p^6 - 2p^5(^2P^o)5s$	$g\,^1S$ - ½[½]°	0-1	233,487
Al IV	114.737	50		$2p^6 - 2p^5(^2P^o)5s$	$g\,^1S$ - 3/2[3/2]°	0-1	233,487
Al IV	116.464	250		$2p^6 - 2p^5(^2P^o)4d$	$g\,^1S$ - ½[3/2]°	0-1	233,487
Al IV	116.921	150		$2p^6 - 2p^5(^2P^o)4d$	$g\,^1S$ - 3/2[3/2]°	0-1	233,487
Al IV	117.410	10		$2p^6 - 2p^5(^2P^o)4d$	$g\,^1S$ - 3/2[½]°	0-1	233,487
Al IV	124.034	400		$2p^6 - 2p^5(^2P^o)4s$	$g\,^1S$ - ½[½]°	0-1	693,487
Al IV	124.543	300		$2p^6 - 2p^5(^2P^o)4s$	$g\,^1S$ - 3/2[3/2]°	0-1	693,487
Al IV	129.729	700		$2p^6 - 2p^5(^2P^o)3d$	$g\,^1S$ - ½[3/2]°	0-1	693,487
Al IV	131.652	150		$2p^6 - 2p^5(^2P^o)3d$	$g\,^1S$ - 3/2[½]°	0-1	693,487
Al IV	160.073	800		$2p^6 - 2p^5(^2P^o)3s$	$g\,^1S$ - ½[½]°	0-1	197,693,487
Al IV	161.686	700		$2p^6 - 2p^5(^2P^o)3s$	$g\,^1S$ - 3/2[3/2]°	0-1	197,693,487
Al IV	1118.80	200d		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[½] - 3/2[3/2]°	1-2	693,487
Al IV	1136.80	150		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[½] - 3/2[½]°	1-1	693,487
Al IV	1142.03	50d		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[½] - 3/2[½]°	1-0	693,487
Al IV	1150.85	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[5/2] - ½[3/2]°	3-2	693,487
Al IV	1156.21	50		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[5/2] - ½[5/2]°	3-3	693,487
Al IV	1161.85	10d		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[5/2] - ½[3/2]°	2-2	693,487
Al IV	1167.35	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[5/2] - ½[5/2]°	2-3	693,487
Al IV	1198.47	50		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[5/2] - 3/2[5/2]°	3-3	693,487
Al IV	1211.80	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[½] - ½[3/2]°	0-1	693,487
Al IV	1216.78	50		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[½] - ½[3/2]°	1-1	693,487
Al IV	1219.19	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[3/2] - ½[3/2]°	2-2	693,487
Al IV	1228.30	50		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[5/2] - 3/2[7/2]°	3-3	693,487
Al IV	1229.94	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[3/2] - 3/2[3/2]°	2-1	693,487
Al IV	1237.14	200		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[5/2] - 3/2[7/2]°	3-4	693,487
Al IV	1240.18	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[3/2] - 3/2[5/2]°	1-2	693,487
Al IV	1240.83	150		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[½] - ½[3/2]°	0-1	693,487
Al IV	1248.76	100d		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[3/2] - ½[5/2]°	1-2	693,487
Al IV	1251.35	50		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[3/2] - ½[3/2]°	2-2	693,487
Al IV	1257.58	150		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[3/2] - ½[5/2]°	2-3	693,487
Al IV	1262.51	50		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[3/2] - 3/2[3/2]°	2-1	693,487
Al IV	1264.14	150d		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[½] - ½[3/2]°	1-2	693,487
Al IV	1272.70	150d		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[3/2] - 3/2[5/2]°	2-3	693,487
Al IV	1283.48	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[5/2] - 3/2[½]°	2-1	693,487
Al IV	1302.13	100		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[½] - 3/2[3/2]°	0-1	693,487
Al IV	1353.73	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	3/2[3/2] - 3/2[½]°	2-1	693,487
Al IV	1359.49	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[3/2] - 3/2[3/2]°	1-2	693,487
Al IV	1388.77	100		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	3/2[3/2]° - ½[½]	2-1	693,487
Al IV	1404.72	100d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	3/2[3/2]° - ½[3/2]	2-2	693,487
Al IV	1409.52	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[½] - 3/2[½]°	1-1	693,487
Al IV	1412.24	10		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	3/2[3/2]° - ½[3/2]	2-1	693,487
Al IV	1417.58	10		$2p^5(^2P^o)3p - 2p^5(^2P^o)3d$	½[½] - 3/2[½]°	1-0	693,487
Al IV	1425.00	10		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	3/2[3/2]° - ½[½]	1-1	693,487
Al IV	1431.93	100		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	3/2[3/2]° - 3/2[½]	1-0	693,487
Al IV	1441.81	50d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	3/2[3/2]° - ½[3/2]	1-2	693,487
Al IV	1447.47	100d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	3/2[3/2]° - 3/2[3/2]	2-2	693,487
Al IV	1449.70	10		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	3/2[3/2]° - ½[3/2]	1-1	693,487
Al IV	1481.46	10		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	½[½]° - ½[3/2]	0-1	693,487
Al IV	1486.87	50d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	3/2[3/2]° - 3/2[3/2]	1-2	693,487
Al IV	1526.15	50d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	½[½]° - ½[½]	1-0	693,487

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al IV	1537.52	100		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$3/2[3/2]^o - 3/2[5/2]$	2-2	693,487
Al IV	1553.00	50d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$3/2[3/2]^o - 3/2[3/2]$	1-1	693,487
Al IV	1557.24	250d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$3/2[3/2]^o - 3/2[5/2]$	2-3	693,487
Al IV	1564.14	50d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$1/2[1/2]^o - 1/2[1/2]$	1-1	693,487
Al IV	1582.04	150d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$3/2[3/2]^o - 3/2[5/2]$	1-2	693,487
Al IV	1584.45	100d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$1/2[1/2]^o - 1/2[3/2]$	1-2	693,487
Al IV	1589.27	50d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$1/2[1/2]^o - 3/2[3/2]$	0-1	693,487
Al IV	1639.00	100		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$1/2[1/2]^o - 3/2[3/2]$	1-2	693,487
Al IV	1818.55	50d		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$3/2[3/2]^o - 3/2[1/2]$	2-1	693,487
Al IV	1881.19	50		$2p^5(^2P^o)3s - 2p^5(^2P^o)3p$	$3/2[3/2]^o - 3/2[1/2]$	1-1	693,487

Ground state $1s^2 2s^2 2p^5\ ^2P^\circ_{3/2}$

Ionization potential 1 240 600 cm^{-1}; 153.8 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al V	85.662	50		$2s^22p^5 - 2s^22p^4(^1D)5d$	$g^2P^\circ - ^2S$	3/2-1/2	233
Al V	85.804	350		$2s^22p^5 - 2s^22p^4(^3P)6d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al V	85.865	100b		$2s^22p^5 - 2s^22p^4(^1D)5d$	$g^2P^\circ - ^2P$	1/2-3/2	233
Al V	85.922	10b		$2s^22p^5 - 2s^22p^4(^3P)6d$	$g^2P^\circ - ^2D$	3/2-3/2	233
Al V	87.020	100		$2s^22p^5 - 2s^22p^4(^1S)4d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al V	87.279	50d		$2s^22p^5 - 2s^22p^4(^1S)4d$	$g^2P^\circ - ^2D$	1/2-3/2	233
Al V	88.425	100		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al V	88.539	400b		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^\circ - ^2D$	3/2-3/2	233
Al V	88.636	100b		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^\circ - ^2P$	1/2-3/2	233
Al V	88.688	200b		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^\circ - ^4D$	3/2-5/2	233
Al V	88.817	50		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^\circ - ^2D$	1/2-3/2	233
Al V	88.945	1		$2s^22p^5 - 2s^22p^4(^3P)5d$	$g^2P^\circ - ^4D$	1/2-3/2	233
Al V	90.630	250b		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^\circ - ^2P$	3/2-3/2	233
Al V	90.646	100		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al V	90.701	200		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^\circ - ^2S$	3/2-1/2	233
Al V	90.914	200		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^\circ - ^2P$	1/2-3/2	233
Al V	90.982	50d		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^\circ - ^2S$	1/2-1/2	233
Al V	91.078	10		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^\circ - ^2P$	1/2-1/2	233
Al V	91.750	50		$2s^22p^5 - 2s^22p^4(^1S)4s$	$g^2P^\circ - ^2S$	3/2-1/2	233
Al V	92.039	10		$2s^22p^5 - 2s^22p^4(^1S)4s$	$g^2P^\circ - ^2S$	1/2-1/2	233
Al V	93.654	20		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2P$	3/2-3/2	233
Al V	93.755	350		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al V	93.855	200		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2D$	3/2-3/2	233
Al V	93.880	70		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2P$	3/2-1/2	233
Al V	93.955	300		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2P$	1/2-3/2	233
Al V	93.981	100		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4P$	3/2-5/2	233
Al V	94.089	70		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4D$	3/2-3/2	233
Al V	94.117	120		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4D$	3/2-5/2	233
Al V	94.160	100		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2D$	1/2-3/2	233
Al V	94.187	100		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^2P$	1/2-1/2	233
Al V	94.321	10		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4P$	1/2-3/2	233
Al V	94.394	10		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^\circ - ^4D$	1/2-3/2	233
Al V	95.835	100		$2s^22p^5 - 2s^22p^4(^1D)4s$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al V	96.150	50		$2s^22p^5 - 2s^22p^4(^1D)4s$	$g^2P^\circ - ^2D$	1/2-3/2	233
Al V	99.200	50		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^2P$	3/2-1/2	233
Al V	99.290	500		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al V	99.427	200		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^2P$	3/2-3/2	233
Al V	99.544	100		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^2P$	1/2-1/2	233
Al V	99.616	350		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^\circ - ^2D$	1/2-3/2	233
Al V	99.769	20		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^\circ - ^2P$	1/2-3/2	233
Al V	103.805	500		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2D$	3/2-3/2	233
Al V	103.881	700		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al V	103.990	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2P$	3/2-3/2	233
Al V	104.073	500		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2S$	3/2-1/2	233
Al V	104.121	600		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2P$	3/2-1/2	233
Al V	104.180	700		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2D$	1/2-3/2	233
Al V	104.363	500		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2P$	1/2-3/2	233
Al V	104.447	500		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2S$	1/2-1/2	233
Al V	104.495	400		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^\circ - ^2P$	1/2-1/2	233
Al V	107.711	300		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2P$	3/2-3/2	233
Al V	107.945	1000		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al V	108.004	250		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2P$	3/2-1/2	233
Al V	108.057	600		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2D$	3/2-3/2	233
Al V	108.112	600		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2P$	1/2-3/2	233
Al V	108.315	200		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - ^2F$	3/2-5/2	233

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al V	108.385	500		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^4P$	3/2-5/2	233
Al V	108.404	250		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^2P$	1/2-1/2	233
Al V	108.446	150		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^4P$	3/2-3/2	233
Al V	108.462	500		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^2D$	1/2-3/2	233
Al V	108.526	20		$2s^22p^5 - 2s^22p^4\ {}^3P)3d$	$g^2P^\circ - {}^4P$	3/2-1/2	233
Al V	108.616	50		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^4D$	3/2-3/2	233
Al V	108.707	300		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^4D$	3/2-5/2	233
Al V	108.851	50		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^4P$	1/2-3/2	233
Al V	109.021	150		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^\circ - {}^4D$	1/2-3/2	233
Al V	118.500	500		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^\circ - {}^2S$	3/2-1/2	233
Al V	118.984	300		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^\circ - {}^2S$	1/2-1/2	233
Al V	125.525	750		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^\circ - {}^2D$	3/2-5/2	233
Al V	126.065	750		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^\circ - {}^2D$	1/2-3/2	233
Al V	130.413	1000		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^2P$	3/2-1/2	233
Al V	130.848	1000		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^2P$	3/2-3/2	233
Al V	131.003	1000		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^2P$	1/2-1/2	233
Al V	131.441	1000		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^2P$	1/2-3/2	233
Al V	132.630	500		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^4P$	3/2-3/2	233
Al V	133.013	200		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^4P$	3/2-5/2	233
Al V	133.242	100		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - {}^4P$	1/2-3/2	233
Al V	136.249	50		$2s2p^6 - 2s2p^5(^3P^\circ)3s$	${}^2S - {}^2P^\circ$	1/2-1/2	233
Al V	136.668	100		$2s2p^6 - 2s2p^5(^3P^\circ)3s$	${}^2S - {}^2P^\circ$	1/2-3/2	233
Al V	278.699	800		$2s^22p^5 - 2s2p^6$	$g^2P^\circ - {}^2S$	3/2-1/2	197,693
Al V	281.397	700		$2s^22p^5 - 2s2p^6$	$g^2P^\circ - {}^2S$	1/2-1/2	197,693

Ground state $1s^2 2s^2 2p^4\ ^3P_2$

Ionization potential 1 536 300 cm^{-1}; 190.5 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al VI	68.167	50d		$2s^22p^4 - 2s^22p^3(^2P^\circ)5d$	$g^3P - ^3D^\circ$	2-3	233
Al VI	68.223	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)5d$	$g^3P - ^3P^\circ$	2-2	233
Al VI	68.289	1		$2s^22p^4 - 2s^22p^3(^2P^\circ)5d$	$g^3P - ^3D^\circ$	1-2	233
Al VI	72.714	1		$2s^22p^4 - 2s^22p^3(^4S^\circ)5d$	$g^3P - ^3D^\circ$	2-3	233
Al VI	72.810	250		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-3	233
Al VI	72.865	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3D^\circ$	1-2	233
Al VI	72.926	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3P^\circ$	2-2	233
Al VI	73.076	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3P^\circ$	1-2	233
Al VI	73.334	1		$2s^22p^4 - 2s^22p^3(^2D^\circ)5s$	$^1D - ^1D^\circ$	2-2	233
Al VI	74.346	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3S^\circ$	2-1	233
Al VI	74.444	300		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	2-2	233
Al VI	74.504	50d		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3S^\circ$	1-1	233
Al VI	74.592	150		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	1-2	233
Al VI	74.656	250		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3D^\circ$	2-3	233
Al VI	74.813	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3D^\circ$	1-2	233
Al VI	74.892	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	233
Al VI	76.618	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1F^\circ$	2-3	233
Al VI	76.697	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1D^\circ$	2-2	233
Al VI	76.953	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1P^\circ$	2-1	233
Al VI	77.945	500b		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	2-3	233
Al VI	78.112	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	1-2	233
Al VI	78.178	50		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	0-1	233
Al VI	78.459	70		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	2-3	233
Al VI	78.628	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	1-2	233
Al VI	78.712	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)4s$	$^1D - ^1P^\circ$	2-1	233
Al VI	80.770	70		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$^1D - ^1D^\circ$	2-2	233
Al VI?	81.176	50					233
Al VI?	81.339	10					233
Al VI	81.738	50b		$2s^22p^4 - 2s^22p^3(^2P^\circ)4s$	$^1S - ^1P^\circ$	0-1	233
Al VI	82.082	70		$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	2-1	233
Al VI	82.267	50		$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	1-1	233
Al VI	82.338	10		$2s^22p^4 - 2s^22p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	0-1	233
Al VI?	84.650	100					233
Al VI?	84.801	20					233
Al VI?	84.828	70					233
Al VI?	84.928	10					233
Al VI	85.423	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-2	233
Al VI	85.515	1000		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-3	233
Al VI	85.569	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3F^\circ$	2-2	233
Al VI	85.622	300		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-2	233
Al VI	85.724	300		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3F^\circ$	2-3	233
Al VI	85.764	400		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3F^\circ$	1-2	233
Al VI	85.817	350		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-2	233
Al VI	85.865	100b		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-1	233
Al VI?	85.970	10					233
Al VI	86.020	150		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-2	233
Al VI	86.070	150		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-1	233
Al VI	86.097	150		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-0	233
Al VI	86.147	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	0-1	233
Al VI	87.334	400		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3S^\circ$	2-1	233
Al VI	87.544	350		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3S^\circ$	1-1	233
Al VI	87.592	500		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	2-1	233
Al VI	87.629	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3S^\circ$	0-1	233
Al VI	87.655	650		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	2-2	233
Al VI	87.783	250		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	1-0	233

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al VI	87.802	250		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	1-1	233
Al VI	87.866	350		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	1-2	233
Al VI	87.887	250		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	0-1	233
Al VI	88.170	1000		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	233
Al VI	88.273	750		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	${}^1D - {}^1F^\circ$	2-3	233
Al VI	88.325	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3F^\circ$	2-3	233
Al VI	88.376	750		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	233
Al VI	88.469	250		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3D$	0-1	233
Al VI	88.539	400b		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	${}^1D - {}^1P^\circ$	2-1	233
Al VI	88.688	100b		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	${}^1D - {}^1D^\circ$	2-2	233
Al VI	90.200	1000		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	${}^1D - {}^1F^\circ$	2-3	233
Al VI	90.858	600		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	${}^1D - {}^1D^\circ$	2-2	233
Al VI	91.332	500		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	${}^1D - {}^1P^\circ$	2-1	233
Al VI	92.626	750		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	233
Al VI	92.636	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	2-2	233
Al VI	92.875	500		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	233
Al VI	92.970	250		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	0-1	233
Al VI	95.436	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	${}^1S - {}^1P^\circ$	0-1	233
Al VI?	96.071	10					233
Al VI	96.442	10		$2s2p^5 - 2s2p^4(^2S)3s$	${}^3P^\circ - {}^3S$	2-1	233
Al VI	96.673	50d		$2s2p^5 - 2s2p^4(^2S)3s$	${}^3P^\circ - {}^3S$	1-1	233
Al VI?	98.684	10					233
Al VI	100.616	600		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	2-2	233
Al VI	100.639	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	2-1	233
Al VI	100.894	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	1-2	233
Al VI	100.919	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	1-1	233
Al VI	101.027	150		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	0-1	233
Al VI	103.062	10		$2s2p^5 - 2s2p^4(^2D)3s$	${}^3P^\circ - {}^3D$	2-3	233
Al VI	103.940	300		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	${}^1D - {}^1P^\circ$	2-1	233
Al VI	104.047	1000		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	2-3	233
Al VI	104.344	800		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	1-2	233
Al VI	104.466	400		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	0-1	233
Al VI	107.620	700		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	${}^1D - {}^1D^\circ$	2-2	233
Al VI	109.284	350		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	${}^1S - {}^1P^\circ$	0-1	233
Al VI	109.514	1000		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	2-1	233
Al VI	109.843	600		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	1-1	233
Al VI	109.974	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	0-1	233
Al VI	113.314	50		$2s2p^5 - 2s2p^4(^4P)3s$	${}^3P^\circ - {}^3P$	2-1	233
Al VI	113.437	150		$2s2p^5 - 2s2p^4(^4P)3s$	${}^3P^\circ - {}^3P$	2-2	233
Al VI	113.623	50d		$2s2p^5 - 2s2p^4(^4P)3s$	${}^3P^\circ - {}^3P$	1-1	233
Al VI	113.756	50		$2s2p^5 - 2s2p^4(^4P)3s$	${}^3P^\circ - {}^3P$	1-2	233
Al VI	243.760	600d		$2s^22p^4 - 2s2p^5$	${}^1D - {}^1P^\circ$	2-1	197,693
Al VI	275.350	300d		$2s^22p^4 - 2s2p^5$	${}^1S - {}^1P^\circ$	0-1	693
Al VI	307.248	350d		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-1	197,693
Al VI	308.560	300d		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-0	197,693
Al VI	309.596	400d		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-2	197,693
Al VI	309.852	300d		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-1	197,693
Al VI	310.908	300d		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	0-1	197,693
Al VI	312.241	300d		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-2	197,693

Ground state $1s^22s^22p^3\ ^4S^\circ_{3/2}$

Ionization potential 1 947 390 cm^{-1}; 241.4 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al VII	58.384	10		$2s^22p^3 - 2s^22p^2(^1D)5d$	$^2D^\circ - ^2F$	5/2-7/2	233
Al VII	58.752	1		$2s^22p^3 - 2s^22p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-5/2	233
Al VII	59.821	10		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2D^\circ - ^2F$	5/2-7/2	233
Al VII	59.911	10		$2s^22p^3 - 2s^22p^2(^3P)5d$	$^2D^\circ - ^2F$	3/2-5/2	233
Al VII	62.296	200b		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-5/2	233
Al VII	62.432	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4D$	3/2-1/2	233
Al VII	62.474	100b		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4D$	3/2-5/2	233
Al VII	63.025	500b		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2F$	5/2-7/2	233
Al VII	64.066	10		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2S$	3/2-1/2	233
Al VII	64.325	50		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2D$	3/2-5/2	233
Al VII	64.358	50		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2P^\circ - ^2D$	1/2-3/2	233
Al VII	64.481	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	5/2-5/2	233
Al VII	64.513	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2D$	3/2-3/2	233
Al VII	64.704	150		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-7/2	233
Al VII	64.815	120		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-5/2	233
Al VII	64.904	100b		$2s^22p^3 - 2s^22p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-3/2	233
Al VII	65.014	10d		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2P$	5/2-3/2	233
Al VII	65.865	50		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	3/2-5/2	233
Al VII	65.882	50		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	1/2-3/2	233
Al VII	67.565	150b		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	5/2-3/2	233
Al VII	68.531	100b		$2s2p^4 - 2s2p^3(^5S^\circ)4d$	$^4P - ^4D^\circ$	5/2-7/2	233
Al VII	68.637	50b		$2s2p^4 - 2s2p^3(^5S^\circ)4d$	$^4P - ^4D^\circ$	3/2-5/2	233
Al VII	68.681	10b		$2s2p^4 - 2s2p^3(^5S^\circ)4d$	$^4P - ^4D^\circ$	1/2-3/2	233
Al VII	72.270	500d		$2s^22p^3 - 2s2p^3(^5S^\circ)3p$	$g^4S^\circ - ^4P$	3/2-5/2	233
Al VII	74.095	100d		$2s^22p^3 - 2s^22p^2(^1S)3d$	$^2D^\circ - ^2D$	5/2-5/2	233
Al VII	75.270	250		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-1/2	233
Al VII	75.302	350		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-3/2	233
Al VII	75.360	600		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-5/2	233
Al VII	75.488	200b		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-1/2	233
Al VII	75.532	200		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-5/2	233
Al VII	75.809	100		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4S^\circ$	5/2-3/2	233
Al VII	75.850	100b		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	5/2-3/2	233
Al VII	75.894	100b		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	3/2-1/2	233
Al VII	76.010	50		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4D^\circ$	3/2-	233
Al VII	76.086	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4D$	1/2-	233
Al VII	76.221	50		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	5/2-3/2	233
Al VII	76.257	100		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	5/2-5/2	233
Al VII	76.342	10		$2s2p^4 - 2s2p^3(^3D^\circ)3d$	$^4P - ^4P^\circ$	3/2-1/2	233
Al VII	76.383	500		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	5/2-5/2	233
Al VII	76.422	500		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	3/2-3/2	233
Al VII	76.543	1000		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	3/2-5/2	233
Al VII	76.572	1000		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-7/2	233
Al VII	77.448	150b		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2S$	3/2-1/2	233
Al VII	77.770	300		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	3/2-3/2	233
Al VII	77.806	70		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	1/2-1/2	233
Al VII	77.896	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	233
Al VII	77.945	500b		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-3/2	233
Al VII	78.327	1000		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$	3/2-5/2	233
Al VII	78.351	1000b		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$	1/2-3/2	233
Al VII	79.012	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	233
Al VII	79.197	500		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	233
Al VII	79.635	10		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-1/2	233
Al VII	79.690	150		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	5/2-3/2	233
Al VII	79.919	300		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	3/2-5/2	233
Al VII	79.952	250		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	1/2-3/2	233

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al VII	81.234	50		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^4D$	½-3½	233
Al VII	81.738	50b		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	½-½	233
Al VII	81.806	200d		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	3½-3½	233
Al VII	83.831	350		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	5½-7½	233
Al VII	84.007	200		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	3½-5½	233
Al VII	84.098	100		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	½-3½	233
Al VII	86.671	10		$2s^22p^3 - 2s^22p^2(^1S)3s$	$^2P^\circ - ^2S$	½-½	233
Al VII	86.689	50		$2s^22p^3 - 2s^22p^2(^1S)3s$	$^2P^\circ - ^2S$	3½-½	233
Al VII	86.887	750		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3½-5½	233
Al VII	87.060	600		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3½-3½	233
Al VII	87.176	300		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3½-½	233
Al VII	88.033	900		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - ^2D$	5½-5½	233
Al VII	90.550	300		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	5½-3½	233
Al VII	90.630	250b		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2P^\circ - ^2D$	3½-5½	233
Al VII	90.772	200		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	3½-½	233
Al VII	93.269	10		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	½-3½	233
Al VII	93.295	120		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	3½-3½	233
Al VII	93.516	100		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	½-½	233
Al VII	93.542	1		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	3½-½	233
Al VII	95.965	200d		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	5½-3½	233
Al VII	96.198	50		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	3½-3½	233
Al VII	96.319	10		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	½-3½	233
Al VII	239.030	100d		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3½-½	693
Al VII	240.770	200d		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	5½-3½	693
Al VII	259.035	10		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	½-½	693
Al VII	259.219	10		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	3½-½	693
Al VII	261.053	10		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	½-3½	693
Al VII	261.219	10		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	3½-3½	693
Al VII	279.256	10		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2S$	3½-½	693
Al VII	309.012	100d		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	3½-3½	693
Al VII	309.122	100d		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	5½-5½	693
Al VII	343.290	10		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	½-3½	693
Al VII	343.650	10d		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	3½-5½	693
Al VII	352.160	100d		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3½-½	197,693
Al VII	353.776	200d		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3½-3½	197,693
Al VII	356.885	250d		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3½-5½	197,693

Ground state $1s^22s^22p^2\ ^3P_0$

Ionization potential 2 295 500 cm^{-1}; 284.6 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al VIII	53.785	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-1	233
Al VIII	53.800	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-2	233
Al VIII	53.823	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^5S^\circ - ^5P$	2-3	233
Al VIII	54.217	200b		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	1-2	233
Al VIII	54.258	200		$2s^22p^2 - 2s^22p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-3	233
Al VIII	56.150	50b		$2s^22p^2 - 2s^22p(^2P^\circ)4s$	$g^3P - ^3P^\circ$	2-2	233
Al VIII	57.553	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	3-4	233
Al VIII	57.624	10		$2s2p^3 - 2s2p^2(^4P)4d$	$^3D^\circ - ^3F$	2-3	233
Al VIII	61.694	150		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1D^\circ$	2-2	233
Al VIII	62.016	100		$2s^22p^2 - 2s2p^2(^2D)3p$	$^1D - ^1F^\circ$	2-3	233
Al VIII	63.203	10		$2s2p^3 - 2s2p^2(^2P)3d$	$^3D^\circ - ^3P$	3-2	233
Al VIII	63.714	100		$2s2p^3 - 2s2p^2(^2P)3d$	$^3D^\circ - ^3F$	3-4	233
Al VIII	63.933	10		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	0-1	233
Al VIII	63.965	150d		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	1-2	233
Al VIII	64.004	200		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	2-3	233
Al VIII	64.086	10		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3D^\circ$	2-2	233
Al VIII	65.128	10d		$2s2p^3 - 2s2p^2(^2P)3d$	$^3P^\circ - ^3P$	2-2	233
Al VIII	65.298	10		$2s2p^3 - 2s2p^2(^2P)3d$	$^3P^\circ - ^3D$	2-3	233
Al VIII	65.381	50		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S^\circ$	1-1	233
Al VIII	65.494	50		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - ^3S^\circ$	2-1	233
Al VIII	66.321	60b		$2s2p^3 - 2s2p^2(^2S)3d$	$^3P^\circ - ^3D$	2-3	233
Al VIII	66.363	10		$2s2p^3 - 2s2p^2(^2S)3d$	$^3P^\circ - ^3D$	1-2	233
Al VIII	66.704	150		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-1	233
Al VIII	66.731	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-2	233
Al VIII	66.771	350		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-3	233
Al VIII	67.044	10		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	0-1	233
Al VIII	67.096	100		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-0	233
Al VIII	67.121	100		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-1	233
Al VIII	67.166	10		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-2	233
Al VIII	67.244	150		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-1	233
Al VIII	67.288	500		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-2	233
Al VIII	67.360	250		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	0-1	233
Al VIII	67.408	500		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-2	233
Al VIII	67.437	50		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-1	233
Al VIII	67.464	600		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-3	233
Al VIII	67.529	10		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-2	233
Al VIII	67.565	150b		$2s2p^3 - 2s2p^2(^2D)3d$	$^3D^\circ - ^3D$	3-3	233
Al VIII	67.946	500		$2s2p^3 - 2s2p^2(^2D)3d$	$^3D^\circ - ^3F$	3-4	233
Al VIII	68.375	750		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	233
Al VIII	68.825	50b		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3S$	2-1	233
Al VIII	69.420	50		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3P$	1-0	233
Al VIII	69.502	100		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3P$	0-1	233
Al VIII	69.611	200		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3P$	2-2	233
Al VIII	69.773	150		$2s2p^3 - 2s2p^2(^2D)3d$	$^3P^\circ - ^3D$	2-3	233
Al VIII	70.161	300		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^1D$	2-2	233
Al VIII	70.323	200		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^3F^\circ$	2-2	233
Al VIII?	70.402	1					233
Al VIII	70.727	250		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1S - ^1P^\circ$	0-1	233
Al VIII	72.223	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3F$	3-4	233
Al VIII	72.324	200		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3F$	2-3	233
Al VIII	72.401	150		$2s2p^3 - 2s2p^2(^4P)3d$	$^3D^\circ - ^3F$	1-2	233
Al VIII	73.703	150		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3D$	2-3	233
Al VIII	73.733	100		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3D$	1-2	233
Al VIII	73.760	10		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3D$	0-1	233
Al VIII	73.879	200		$2s2p^3 - 2s2p^2(^2S)3s$	$^3P^\circ - ^3S$	2-1	233

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Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al VIII	74.841	200		$2s2p^3 - 2s2p^2(^4P)3s$	$^5S^\circ - ^5P$	2-3	233
Al VIII	74.965	150		$2s2p^3 - 2s2p^2(^4P)3s$	$^5S^\circ - ^5P$	2-2	233
Al VIII	75.058	50		$2s2p^3 - 2s2p^2(^4P)3s$	$^5S^\circ - ^5P$	2-1	233
Al VIII	75.397	70		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	2-1	233
Al VIII	75.488	200b		$2s2p^3 - 2s2p^2(^4P)3d$	$^3P^\circ - ^3P$	2-2	233
Al VIII	75.577	150		$2s2p^3 - 2s2p^2(^2D)3s$	$^3D^\circ - ^3D$	3-3	233
Al VIII	75.623	100		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-2	233
Al VIII	75.734	50		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	0-1	233
Al VIII	75.778	250		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-2	233
Al VIII	75.850	100b		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-1	233
Al VIII	75.894	100b		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-0	233
Al VIII	75.985	50		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-1	233
Al VIII	77.605	300		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$^1D - ^1P^\circ$	2-1	233
Al VIII?	78.225	1					233
Al VIII	78.351	1000b		$2s2p^3 - 2s2p^2(^2D)3s$	$^3P^\circ - ^3D$	2-3	233
Al VIII	79.455	120		$2s2p^3 - 2s2p^2(^2S)3s$	$^3S^\circ - ^3S$	1-1	233
Al VIII	80.320	10		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	3-2	233
Al VIII	80.483	10d		$2s2p^3 - 2s2p^2(^4P)3s$	$^3D^\circ - ^3P$	2-1	233
Al VIII	80.704	100		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	233
Al VIII	82.543	150		$2s2p^3 - 2s2p^2(^2D)3s$	$^1D^\circ - ^1D$	2-2	233
Al VIII	83.465	50		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	2-2	233
Al VIII	83.635	10		$2s2p^3 - 2s2p^2(^4P)3s$	$^3P^\circ - ^3P$	-1	233
Al VIII	85.922	10b		$2s2p^3 - 2s2p^2(^2D)3s$	$^1P^\circ - ^1D$	1-2	233
Al VIII	91.487	50		$2s2p^3 - 2s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	2-1	233
Al VIII	250.139	10		$2s^22p^2 - 2s2p^3$	$g^3P - ^3S^\circ$	2-1	693
Al VIII	251.347	10		$2s^22p^2 - 2s2p^3$	$^1D - ^1P^\circ$	2-1	693
Al VIII	285.467	50d		$2s^22p^2 - 2s2p^3$	$^1D - ^1D^\circ$	2-2	693
Al VIII	328.200	10d		$2s^22p^2 - 2s2p^3$	$g^3P - ^3P^\circ$	2-2	693
Al VIII?	381.689	10		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	0-1	693
Al VIII	383.785	50		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	1-2	693
Al VIII	387.970	100		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	2-3	693

Ground state $1s^22s^22p\ ^2P^\circ_{1/2}$

Ionization potential 2 663 340 cm^{-1}; 330.2 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al IX	43.549	10		$2s^2(^1S)2p - 2s^2(^1S)5d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al IX	47.417	1		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3/2-5/2	233
Al IX	47.489	50		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4P^\circ$	5/2-5/2	233
Al IX	47.534	100		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5/2-7/2	233
Al IX	47.755	10		$2s^2(^1S)2p - 2s^2(^1S)4d$	$g^2P^\circ - ^2D$	1/2-3/2	233
Al IX	47.856	50		$2s^2(^1S)2p - 2s^2(^1S)4d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al IX	49.094	1		$2s2p^2 - 2s2p(^1P^\circ)4d$	$^2P - ^2D^\circ$	3/2-5/2	233
Al IX	49.854	100		$2s2p^2 - 2s2p(^3P^\circ)4d$	$^2D - ^2F^\circ$	5/2-7/2	233
Al IX	53.376	10		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2P$	3/2-3/2	233
Al IX	53.424	10		$2s^2(^1S)2p - 2s2p(^1P^\circ)3p$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al IX	53.488	1		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	3/2-3/2	233
Al IX	53.554	10		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4S^\circ$	5/2-3/2	233
Al IX	54.312	10d		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4P^\circ$	5/2-5/2	233
Al IX	54.457	200		$2s2p^2 - 1s^22p^2(^3P)3p$	$^4P - ^4D^\circ$	5/2-7/2	233
Al IX	55.667	10		$2s2p^2 - 1s^22p^2(^1D)3p$	$^2D - ^2D^\circ$	5/2-5/2	233
Al IX	56.150	50b		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	1/2-1/2	233
Al IX	56.304	70		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2S$	3/2-1/2	233
Al IX	56.899	100b		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	1/2-3/2	233
Al IX	56.945	250		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al IX	58.060	10		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	1/2-3/2	233
Al IX	58.112	50		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	1/2-1/2	233
Al IX	58.222	100		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3/2-3/2	233
Al IX	58.276	1		$2s^2(^1S)2p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3/2-1/2	233
Al IX	59.381	10d		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2D^\circ$	5/2-5/2	233
Al IX	59.761	300		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2F^\circ$	5/2-7/2	233
Al IX	60.162	10d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	1/2-3/2	233
Al IX	60.197	50		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3/2-1/2	233
Al IX	60.222	10		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3/2-3/2	233
Al IX	60.262	10		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3/2-5/2	233
Al IX	60.312	50		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5/2-3/2	233
Al IX	60.347	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5/2-5/2	233
Al IX	60.504	150		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	1/2-3/2	233
Al IX	60.549	200		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3/2-5/2	233
Al IX	60.588	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5/2-7/2	233
Al IX	60.645	10		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5/2-5/2	233
Al IX	60.896	300		$2s^2(^1S)2p - 2s^2(^1S)3d$	$g^2P^\circ - ^2D$	1/2-3/2	233
Al IX	61.069	600		$2s^2(^1S)2p - 2s^2(^1S)3d$	$g^2P^\circ - ^2D$	3/2-5/2	233
Al IX	61.647	10		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2S - ^2P^\circ$	1/2-3/2	233
Al IX	62.296	200b		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3/2-1/2	233
Al IX	62.327	250		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3/2-3/2	233
Al IX	62.369	150		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3/2-5/2	233
Al IX	62.474	100b		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2P^\circ$	1/2-3/2	233
Al IX	62.587	100		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2P^\circ$	3/2-3/2	233
Al IX	62.916	150		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2D^\circ$	1/2-3/2	233
Al IX	63.025	500b		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2D^\circ$	3/2-5/2	233
Al IX	63.509	500d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2F^\circ$	5/2-7/2	233
Al IX	63.632	300		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2F^\circ$	3/2-5/2	233
Al IX	64.625	50		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2D - ^2P^\circ$	5/2-3/2	233
Al IX	64.885	150		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2D^\circ$	5/2-5/2	233
Al IX	64.904	100b		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2D^\circ$	3/2-3/2	233
Al IX	66.038	50		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-5/2	233
Al IX	66.092	50		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	1/2-3/2	233
Al IX	66.142	120		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	5/2-5/2	233
Al IX	66.239	60		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-1/2	233
Al IX	66.275	50		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	5/2-3/2	233

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al IX	66.321	60b		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2S - ^2P^\circ$	½-3½	233
Al IX	66.624	10		$2s^2(^1S)2p - 2s^2(^1S)3s$	$g^2P^\circ - ^2S$	½-½	233
Al IX	66.836	100d		$2s^2(^1S)2p - 2s^2(^1S)3s$	$g^2P^\circ - ^2S$	3½-½	233
Al IX	67.828	10		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2S - ^2P^\circ$	½-3½	233
Al IX	68.531	100b		$1s^22p^3 - 1s^22p^2(^3P)3s$	$^4S^\circ - ^4P$	3½-5½	233
Al IX	68.637	50b		$1s^22p^3 - 1s^22p^2(^3P)3s$	$^4S^\circ - ^4P$	3½-3½	233
Al IX	68.681	10b		$1s^22p^3 - 1s^22p^2(^3P)3s$	$^4S^\circ - ^4P$	3½-½	233
Al IX	68.825	50b		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2P - ^2P^\circ$	½-½	233
Al IX	68.958	50		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2P - ^2P^\circ$	3½-3½	233
Al IX	69.258	50d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2P - ^2D^\circ$	3½-5½	233
Al IX	69.716	100		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2D - ^2P^\circ$	5½-3½	233
Al IX	69.850	50d		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2D - ^2P^\circ$	3½-½	233
Al IX	73.451	1		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2S - ^2P^\circ$	½-3½	233
Al IX	73.625	1		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2S - ^2P^\circ$	½-½	233
Al IX	74.785	50		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2P - ^2P^\circ$	3½-3½	233
Al IX	77.381	150		$1s^22p^3 - 2s2p(^1P^\circ)3p$	$^2P^\circ - ^2D$	3½-5½	233
Al IX	77.448	150b		$1s^22p^3 - 2s2p(^1P^\circ)3p$	$^2P^\circ - ^2D$	½-3½	233
Al IX	284.042	10d		$2s^2(^1S)2p - 2s2p^2$	$g^2P^\circ - ^2P$	3½-3½	693
Al IX	385.030	10P		$2s^2(^1S)2p - 2s2p^2$	$g^2P^\circ - ^2D$	½-3½	693
Al IX	392.418	10P		$2s^2(^1S)2p - 2s2p^2$	$g^2P^\circ - ^2D$	3½-5½	693

Ground state $1s^2 2s^2\ ^1S_0$

Ionization potential 3 215 340 cm^{-1}; 398.6 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al X	44.136	10		$1s^22p^2 - 1s^22p(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	233
Al X	44.902	10		$2s2p - 2s4d$	$^1P^\circ - ^1D$	1-2	233
Al X	50.670	50		$2s2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	1-2	233
Al X	50.762	250		$2s2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-2	233
Al X	50.802	50		$2s2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3P$	2-1	233
Al X	50.946	10		$2s2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	1-1	233
Al X	51.039	10		$2s2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3S$	2-1	233
Al X	51.362	350		$2s2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-3	233
Al X	51.400	1		$2s2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	1-1	233
Al X	51.454	1		$2s2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-2	233
Al X	51.979	300		$2s^2 - 2s3p$	$g^1S - ^1P^\circ$	0-1	233
Al X	54.115	220		$2s2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1D$	1-2	233
Al X	55.227	150		$2s2p - 2s(^2S)3d$	$^3P^\circ - ^3D$	0-1	233
Al X	55.272	500		$2s2p - 2s(^2S)3d$	$^3P^\circ - ^3D$	1-2	233
Al X	55.376	750		$2s2p - 2s(^2S)3d$	$^3P^\circ - ^3D$	2-3	233
Al X	55.731	50		$2s2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1P$	1-1	233
Al X	56.650	10d		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-1	233
Al X	56.762	10		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-1	233
Al X	56.802	200		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-2	233
Al X	56.964	150		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-2	233
Al X	57.024	250		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-3	233
Al X	57.072	10		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-2	233
Al X	57.368	350		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	233
Al X	58.808	1		$2s2p - 2s3s$	$^3P^\circ - ^3S$	0-1	233
Al X	58.858	100		$2s2p - 2s3s$	$^3P^\circ - ^3S$	1-1	233
Al X	58.987	150		$2s2p - 2s3s$	$^3P^\circ - ^3S$	2-1	233
Al X	59.107	400		$2s2p - 2s3d$	$^1P^\circ - ^1D$	1-2	233
Al X	60.700	10		$1s^22p^2 - 1s^22p(^2P^\circ)3s$	$^3P - ^3P^\circ$	2-2	233
Al X	63.134	200		$2s2p - 2s3s$	$^1P^\circ - ^1S$	1-0	233
Al X	332.891	10		$2s^2 - 2s2p$	$g^1S - ^1P^\circ$	0-1	693
Al X	401.183	10		$2s2p - 1s^22p^2$	$^3P^\circ - ^3P$	2-2	693

Ground state $1s^22s\ ^2S_{1/2}$

Ionization potential 3 564 900 cm^{-1}; 442.0 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al XI	39.180	1		$1s^22p - 1s^24d$	$^2P^\circ - ^2D$	3/2-5/2	233
Al XI	48.297	250		$1s^22s - 1s^23p$	$g^2S - ^2P^\circ$	1/2-3/2	233
Al XI	48.338	150		$1s^22s - 1s^23p$	$g^2S - ^2P^\circ$	1/2-1/2	233
Al XI	52.299	500		$1s^22p - 1s^23d$	$^2P^\circ - ^2D$	1/2-3/2	233
Al XI	52.446	600		$1s^22p - 1s^23d$	$^2P^\circ - ^2D$	3/2-5/2	233
Al XI	54.217	200b		$1s^22p - 1s^23s$	$^2P^\circ - ^2S$	1/2-1/2	233
Al XI	54.388	70		$1s^22p - 1s^23s$	$^2P^\circ - ^2S$	3/2-1/2	233

Ground state $1s^2\ ^1S_0$

Ionization potential 16 825 000 cm^{-1}; 2086.0 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al XII	6.314			$1s^2 - 1s4p$	$g^1S - {}^1P^\circ$	0-1	236
Al XII	6.635			$1s^2 - 1s3p$	$g^1S - {}^1P^\circ$	0-1	236
Al XII	7.757			$1s^2 - 1s2p$	$g^1S - {}^1P^\circ$	0-1	236

Ground state 1s $^2S_{1/2}$

Ionization potential 18 584 139 cm^{-1}; 2304.08 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Al XIII	5.534	P		1s - 6p	g^2S - $^2P°$	½-3½	309
Al XIII	5.605	P		1s - 5p	g^2S - $^2P°$	½-3½	309
Al XIII	5.739	P		1s - 4p	g^2S - $^2P°$	½-3½	309
Al XIII	6.053	P		1s - 3p	g^2S - $^2P°$	½-3½	309
Al XIII	7.173	P		1s - 2p	g^2S - $^2P°$	½-3½	309
Al XIII	23.44	P		2 - 7			309
Al XIII	24.22	P		2 - 6			309
Al XIII	25.63	P		2 - 5			309
Al XIII	28.70	P		2 - 4			309
Al XIII	38.73	P		2 - 3			309
Al XIII	59.39	P		3 - 7			309
Al XIII	64.64	P		3 - 6			309
Al XIII	75.74	P		3 - 5			309
Al XIII	110.8	P		3 - 4			309
Al XIII	128.02	P		4 - 7			309
Al XIII	155.2	P		4 - 6			309
Al XIII	239.5	P		4 - 5			309
Al XIII	275.1	P		5 - 7			309
Al XIII	440.9	P		5 - 6			309
Al XIII	731.4	P		6 - 7			309

Unclassified lines

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si	53.025	20					231
Si	53.063	20					231
Si	54.403	50d					231
Si	56.145	50					231
Si	56.645	50d					231
Si	58.150	50					231
Si	60.151	20					231
Si	60.421	20					231
Si	60.459	20					231
Si	60.673	100					231
Si	62.154	50					231
Si	62.251	100					231
Si	62.386	50d					231
Si	62.454	20					231
Si	63.183	50d					231
Si	63.478	20					231
Si	63.879	50					231
Si	64.772	50d					231
Si	65.711	50					231
Si	66.726	100					231
Si	66.912	100					231
Si	66.977	20d					231
Si	67.574	50d					231
Si	68.270	50d					231
Si	68.340	50					231
Si	68.497	50d					231
Si	68.522	50d					231
Si	68.786	100					231
Si	68.833	20					231
Si	68.853	100					231
Si	70.594	100					231
Si	70.771	100d					231
Si	71.900	200					231
Si	81.449	50					231
Si	82.622	50d					231
Si	85.614	20					231
Si	92.957	50d					231
Si	110.957	100					231
Si?	1943.42	0					816
Si?	1949.17	0					816
Si?	1952.96	0					816
Si?	1956.75	0					816
Si?	1960.17	0					816

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si I	1689.2898	60		$3s^23p^2$ - $3s^23p6s$	g^3P - (½,½)°	1-1	370
Si I?	1689.921	1					370
Si I	1690.7882	60		$3s^23p^2$ - $3s^23p6s$	g^3P - (½,½)°	1-0	370
Si I	1693.2926	125	18	$3s^23p^2$ - $3s^23p4d$	g^3P - $^3D°$	0-1	370
Si I	1693.4676	60		$3s^23p^2$ - $3s^23p6s$	g^3P - (½,½)°	2-1	370
Si I	1695.5074	90	18	$3s^23p^2$ - $3s^23p4d$	g^3P - $^3D°$	1-1	370
Si I	1696.2065	200	18	$3s^23p^2$ - $3s^23p4d$	g^3P - $^3D°$	1-2	370
Si I	1697.9409	250	18	$3s^23p^2$ - $3s^23p4d$	g^3P - $^3D°$	2-3	370
Si I	1699.7169	10	18	$3s^23p^2$ - $3s^23p4d$	g^3P - $^3D°$	2-1	370
Si I	1700.4193	90	18	$3s^23p^2$ - $3s^23p4d$	g^3P - $^3D°$	2-2	370
Si I	1700.6354	80	16	$3s^23p^2$ - $3s^23p4d$	g^3P - $^1P°$	0-1	370
Si I?	1702.6978	1					370
Si I	1702.8685	70	16	$3s^23p^2$ - $3s^23p4d$	g^3P - $^1P°$	1-1	370
Si I	1704.4416	100	17	$3s^23p^2$ - $3s^23p4d$	g^3P - $^1F°$	2-3	370
Si I	1707.1148	8	16	$3s^23p^2$ - $3s^23p4d$	g^3P - $^1P°$	2-1	370
Si I?	1710.744	1					370
Si I	1722.562	4		$3s^23p^2$ - $3s^23p10s$	^1D - (3/2,½)°	2-1	370
Si I	1724.242	6		$3s^23p^2$ - $3s^23p8d$	^1D - $^3D°$	2-3	370
Si I	1727.444	2		$3s^23p^2$ - $3s^23p8d$	^1D - $^1F°$	2-3	370
Si I	1733.346	1		$3s^23p^2$ - $3s^23p8d$	^1D - $^3F°$	2-2	370
Si I	1734.718	8		$3s^23p^2$ - $3s^23p8d$	^1D - $^3F°$	2-3	370
Si I	1736.538	3		$3s^23p^2$ - $3s^23p9s$	^1D - (3/2,½)°	2-1	370
Si I	1740.2988	20	80	$3s^23p^2$ - $3s^23p7d$	^1D - $^3D°$	2-3	370
Si I	1743.8941	20	79	$3s^23p^2$ - $3s^23p7d$	^1D - $^1F°$	2-3	370
Si I	1745.3475	25	15	$3s^23p^2$ - $3s^23p4d$	g^3P - $^3F°$	1-2	370
Si I	1745.647	1		$3s^23p^2$ - $3s^23p9s$	^1D - (½,½)°	2-1	370
Si I	1747.4144	40	15	$3s^23p^2$ - $3s^23p4d$	g^3P - $^3F°$	2-3	370
Si I	1749.808	3	15	$3s^23p^2$ - $3s^23p4d$	g^3P - $^3F°$	2-2	370
Si I	1752.634	3	78	$3s^23p^2$ - $3s^23p7d$	^1D - $^3F°$	2-2	370
Si I	1753.101	15	78	$3s^23p^2$ - $3s^23p7d$	^1D - $^3F°$	2-3	370
Si I	1757.283	3		$3s^23p^2$ - $3s^23p7d$	^1D - $^1D°$	2-2	370
Si I	1759.5831	10		$3s^23p^2$ - $3s^23p8s$	^1D - (3/2,½)°	2-1	370
Si I	1763.6612	80		$3s^23p^2$ - $3s3p^3$	g^3P - $^3P°$	0-1	370
Si I	1765.0296	90		$3s^23p^2$ - $3s3p^3$	g^3P - $^3P°$	1-0	370
Si I	1765.6215	50	76	$3s^23p^2$ - $3s^23p6d$	^1D - $^3D°$	2-3	370
Si I	1765.9452	8	76	$3s^23p^2$ - $3s^23p6d$	^1D - $^3D°$	2-1	370
Si I	1766.0634	100		$3s^23p^2$ - $3s3p^3$	g^3P - $^3P°$	1-1	370
Si I	1766.3538	50		$3s^23p^2$ - $3s3p^3$	g^3P - $^3P°$	1-2	370
Si I	1769.4609	2		$3s^23p^2$ - $3s^23p8s$	^1D - (½,½)°	2-1	370
Si I	1769.7852	70		$3s^23p^2$ - $3s^23p6d$	^1D - $^1F°$	2-3	370
Si I	1770.6298	125		$3s^23p^2$ - $3s3p^3$	g^3P - $^3P°$	2-1	370
Si I	1770.9216	300		$3s^23p^2$ - $3s3p^3$	g^3P - $^3P°$	2-2	370
Si I	1772.2263	12	13	$3s^23p^2$ - $3s^23p4d$	g^3P - $^1D°$	1-2	370
Si I	1776.8245	150	13	$3s^23p^2$ - $3s^23p4d$	g^3P - $^1D°$	2-2	370
Si I	1783.2318	25	73	$3s^23p^2$ - $3s^23p6d$	^1D - $^3F°$	2-3	370
Si I	1784.0884	8	73	$3s^23p^2$ - $3s^23p6d$	^1D - $^3F°$	2-2	370
Si I	1790.2544	25	72	$3s^23p^2$ - $3s^23p6d$	^1D - $^1D°$	2-2	370
Si I	1797.3565	6	70	$3s^23p^2$ - $3s^23p5d$	^1D - $^3P°$	2-1	370
Si I	1799.1177	30		$3s^23p^2$ - $3s^23p7s$	^1D - (3/2,½)°	2-1	370
Si I	1800.404	1	70	$3s^23p^2$ - $3s^23p5d$	^1D - $^3P°$	2-2	370
Si I	1808.4293	20	69	$3s^23p^2$ - $3s^23p7s$	^1D - (½,½)°	2-1	370
Si I	1809.1042	100	67	$3s^23p^2$ - $3s^23p5d$	^1D - $^3D°$	2-3	370
Si I	1814.0789	250	68	$3s^23p^2$ - $3s^23p5d$	^1D - $^1F°$	2-3	370
Si I	1817.9562	10	66	$3s^23p^2$ - $3s^23p5d$	^1D - $^1P°$	2-1	370
Si I	1822.4549	30	12	$3s^23p^2$ - $3s^23p5s$	g^3P - $^1P°$	0-1	370
Si I	1825.021	1	12	$3s^23p^2$ - $3s^23p5s$	g^3P - $^1P°$	1-1	370
Si I	1829.8971	10	12	$3s^23p^2$ - $3s^23p5s$	g^3P - $^1P°$	2-1	370
Si I	1836.5090	200	11	$3s^23p^2$ - $3s^23p5s$	g^3P - $^3P°$	1-2	370
Si I	1838.0113	40	65	$3s^23p^2$ - $3s^23p5d$	^1D - $^3F°$	2-3	370
Si I	1840.0415	8	65	$3s^23p^2$ - $3s^23p5d$	^1D - $^3F°$	2-2	370

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si I	1841.1515	125	11	$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	0-1	370
Si I	1841.4486	400	11	$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	2-2	370
Si I	1843.7695	200	11	$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	1-1	370
Si I	1845.5203	200	10	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	0-1	370
Si I	1846.1115	200	11	$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	1-0	370
Si I	1847.4733	300	10	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	1-2	370
Si I	1848.1503	200	10	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	1-1	370
Si I	1848.7478	250	11	$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	2-1	370
Si I	1850.6717	400	10	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-3	370
Si I	1851.7823	70	64	$3s^23p^2 - 3s^23p5d$	${}^1D - {}^1D^\circ$	2-2	370
Si I	1852.4715	250	10	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-2	370
Si I	1853.1517	35	10	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-1	370
Si I	1861.7949	2	63	$3s^23p^2 - 3s^23p4d$	${}^1D - {}^3P^\circ$	2-1	370
Si I	1865.0278	2	63	$3s^23p^2 - 3s^23p4d$	${}^1D - {}^3P^\circ$	2-2	370
Si I	1873.1043	25	9	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^1P^\circ$	0-1	370
Si I	1874.8424	175		$3s^23p^2 - 3s^23p6s$	${}^1D - (3\frac{1}{2},4\frac{1}{2})^\circ$	2-1	370
Si I	1875.8129	30	9	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^1P^\circ$	1-1	370
Si I	1880.9684	5	9	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^1P^\circ$	2-1	370
Si I	1881.8538	30	8	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^1F^\circ$	2-3	370
Si I	1887.6929	45	61	$3s^23p^2 - 3s^23p6s$	${}^1D - (\frac{1}{2},\frac{3}{2})^\circ$	2-1	370
Si I	1893.252	175	58	$3s^23p^2 - 3s^23p4d$	${}^1D - {}^3D^\circ$	2-3	370
Si I	1895.461	1	58	$3s^23p^2 - 3s^23p4d$	${}^1D - {}^3D^\circ$	2-1	370
Si I	1896.339	1	58	$3s^23p^2 - 3s^23p4d$	${}^1D - {}^3D^\circ$	2-2	370
Si I	1901.3370	400	57	$3s^23p^2 - 3s^23p4d$	${}^1D - {}^1F^\circ$	2-3	370
Si I	1904.6660	40	56	$3s^23p^2 - 3s^23p4d$	${}^1D - {}^1P^\circ$	2-1	370
Si I	1954.9664	50	55	$3s^23p^2 - 3s^23p4d$	${}^1D - {}^3F^\circ$	2-3	370
Si I	1957.965	1	55	$3s^23p^2 - 3s^23p4d$	${}^1D - {}^3F^\circ$	2-2	370
Si I	1977.597	400	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	0-1	370
Si I	1979.206	400	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-0	370
Si I	1980.617	300	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-1	370
Si I	1983.232	300	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-2	370
Si I	1984.0688	3		$3s^23p^2 - 3s3p^3$	${}^1D - {}^3P^\circ$	2-1	370
Si I	1984.4393	20		$3s^23p^2 - 3s3p^3$	${}^1D - {}^3P^\circ$	2-2	370
Si I	1986.363	500	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	2-1	370
Si I	1988.993	1000	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	2-2	370
Si I	1991.8522	50		$3s^23p^2 - 3s^23p4d$	${}^1D - {}^1D^\circ$	2-2	370

Ground state $1s^22s^22p^63s^23p\ ^2P^\circ_{1/2}$

Ionization potential 131 838.40 cm^{-1}; 16.346 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si II	711.34	0h	6.09	$3s^23p - 3s3p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	½-3½	504,678
Si II	711.83	1h	6.09	$3s^23p - 3s3p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	3½-5½	504,678
Si II	755.362	2	6.08	$3s^23p - 3s3p(^3P^\circ)4p$	$g^2P^\circ - ^2D$	3½-3½	504,678
Si II	803.234	3h	6.07	$3s^23p - 3s^28d$	$g^2P^\circ - ^2D$	½-3½	504,678
Si II	805.101	10h	6.07	$3s^23p - 3s^28d$	$g^2P^\circ - ^2D$	3½-	504,678
Si II	818.590	2h	6.06	$3s^23p - 3s^27d$	$g^2P^\circ - ^2D$	½-3½	504,678
Si II	819.49	0h	8.08	$3s3p^2 - 3s3p(^3P^\circ)5d$	$^4P - ^4P^\circ$	3½-5½	504,678
Si II	820.516	20h	6.06	$3s^23p - 3s^27d$	$g^2P^\circ - ^2D$	3½-5½	504,678
Si II	820.63	3h	8.08	$3s3p^2 - 3s3p(^3P^\circ)5d$	$^4P - ^4P^\circ$	5½-5½	504,678
Si II	820.9210	3h	6.05	$3s^23p - 3s^28s$	$g^2P^\circ - ^2S$	½-½	371,678,504
Si II	821.450	2h	8.07	$3s3p^2 - 3s3p(^3P^\circ)5d$	$^4P - ^4D^\circ$	5½-7½	504,678
Si II	822.8613	5h	6.05	$3s^23p - 3s^28s$	$g^2P^\circ - ^2S$	3½-½	371,678,504
Si II	826.42	1h	8.06	$3s3p^2 - 3s3p(^3P^\circ)6s$	$^4P - ^4P^\circ$	5½-5½	504,678
Si II	843.7192	20h	6.04	$3s^23p - 3s^26d$	$g^2P^\circ - ^2D$	½-3½	371,678,504
Si II	845.7684	40h	6.04	$3s^23p - 3s^26d$	$g^2P^\circ - ^2D$	3½-5½	371,678,504
Si II	848.0700	5	6.03	$3s^23p - 3s^27s$	$g^2P^\circ - ^2S$	½-½	371,678,504
Si II	850.1409	10	6.03	$3s^23p - 3s^27s$	$g^2P^\circ - ^2S$	3½-½	371,678,504
Si II	889.7228	100	6.02	$3s^23p - 3s^25d$	$g^2P^\circ - ^2D$	½-3½	371,678,504
Si II	892.0007	200	6.02	$3s^23p - 3s^25d$	$g^2P^\circ - ^2D$	3½-5½	371,678,504
Si II	899.4063	10	6.01	$3s^23p - 3s^26s$	$g^2P^\circ - ^2S$	½-½	371,678,504
Si II	901.7359	20	6.01	$3s^23p - 3s^26s$	$g^2P^\circ - ^2S$	3½-½	371,678,504
Si II	905.71	0	8.05	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4P^\circ$	½-½	504,678
Si II	906.126	0	8.05	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4P^\circ$	½-3½	504,678
Si II	906.586	1	8.05	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3½-½	504,678
Si II	907.033	0	8.05	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3½-3½	504,678
Si II	907.762	0	8.05	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4P^\circ$	3½-5½	504,678
Si II	908.461	1	8.05	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4P^\circ$	5½-3½	504,678
Si II	909.209	3	8.05	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4P^\circ$	5½-5½	504,678
Si II	912.375	5	8.04	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4D^\circ$	½-3½	504,678
Si II	912.459	5	8.04	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4D^\circ$	½-½	504,678
Si II	913.012	10	8.03	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4D^\circ$	3½-5½	504,678
Si II	913.264	3	8.04	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4D^\circ$	3½-3½	504,678
Si II	913.853	20	8.04	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5½-7½	504,678
Si II	914.476	2	8.04	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^4P - ^4D^\circ$	5½-5½	504,678
Si II	928.297	5	8.03	$3s3p^2 - 3s3p(^3P^\circ)5s$	$^4P - ^4P^\circ$	3½-5½	504,678
Si II	929.206	1	8.03	$3s3p^2 - 3s3p(^3P^\circ)5s$	$^4P - ^4P^\circ$	½-3½	504,678
Si II	929.810	20	8.03	$3s3p^2 - 3s3p(^3P^\circ)5s$	$^4P - ^4P^\circ$	5½-5½	504,678
Si II	930.242	0	8.03	$3s3p^2 - 3s3p(^3P^\circ)5s$	$^4P - ^4P^\circ$	½-½	504,678
Si II	931.200	5	8.03	$3s3p^2 - 3s3p(^3P^\circ)5s$	$^4P - ^4P^\circ$	3½-½	504,678
Si II	931.667	5	8.03	$3s3p^2 - 3s3p(^3P^\circ)5s$	$^4P - ^4P^\circ$	5½-3½	504,678
Si II	989.8730	100	6	$3s^23p - 3s^24d$	$g^2P^\circ - ^2D$	½-3½	371,678,504
Si II	992.6826	200	6	$3s^23p - 3s^24d$	$g^2P^\circ - ^2D$	3½-5½	371,678,504
Si II	1020.6988	25	5.01	$3s^23p - 3s^25s$	$g^2P^\circ - ^2S$	½-½	371,678,504
Si II	1023.7002	50	5.01	$3s^23p - 3s^25s$	$g^2P^\circ - ^2S$	3½-½	371,678,504
Si II	1034.967	0	13.08	$3s3p^2 - 3s3p(^3P^\circ)5s$	$^2D - ^2P^\circ$	5½-3½	504,678
Si II	1056.899	2	13.07	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^2D - ^2D^\circ$	3½-5½	504,678
Si II	1057.050	30	13.07	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^2D - ^2D^\circ$	5½-5½	504,678
Si II	1057.503	15	13.07	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^2D - ^2D^\circ$	3½-3½	504,678
Si II	1057.690	2	13.07	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^2D - ^2D^\circ$	5½-3½	504,678
Si II?	1082.400	2					504,678
Si II?	1084.144	3					504,678
Si II	1127.442	20h	13.06	$3s3p^2 - 2p^63p^3$	$^2D - ^2P^\circ$	3½-½	504,678
Si II	1127.907	40h	13.06	$3s3p^2 - 2p^63p^3$	$^2D - ^2P^\circ$	5½-3½	504,678
Si II	1190.4157	100	5	$3s^23p - 3s3p^2$	$g^2P^\circ - ^2P$	½-3½	371,678,504
Si II	1193.2894	200	5	$3s^23p - 3s3p^2$	$g^2P^\circ - ^2P$	½-½	371,678,504

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si II	1194.5001	250	5	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	3/2-3/2	371,678,504
Si II	1197.3936	100	5	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	3/2-1/2	371,678,504
Si II?	1216.117	10h					504,678
Si II	1222.288	0	8.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	1/2-1/2	504,678
Si II	1222.635	5	8.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	1/2-3/2	504,678
Si II	1223.907	20	8.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	3/2-1/2	504,678
Si II	1224.252	20	8.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	3/2-3/2	504,678
Si II	1224.972	10	8.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	3/2-5/2	504,678
Si II	1226.814	50	8.01	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	1/2-1/2	504,678
Si II	1226.887	20	8.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	5/2-3/2	504,678
Si II	1226.986	40	8.01	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D$	1/2-3/2	504,678
Si II	1227.604	100	8.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	5/2-5/2	504,678
Si II	1228.437	10	8.01	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	3/2-1/2	504,678
Si II	1228.617	25	8.01	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	3/2-3/2	504,678
Si II	1228.746	150	8.01	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	3/2-5/2	504,678
Si II	1229.388	200	8.01	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	5/2-7/2	504,678
Si II	1231.406	5	8.01	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	5/2-5/2	504,678
Si II?	1233.354	5h					504,678
Si II?	1235.920	10					504,678
Si II?	1237.36	3h					504,678
Si II	1246.738	100	8	$3s3p^2 - 2p^63p^3$	$^4P - {}^4S^\circ$	1/2-3/2	504,678
Si II	1248.426	150	8	$3s3p^2 - 2p^63p^3$	$^4P - {}^4S^\circ$	3/2-3/2	504,678
Si II	1250.089	100	13.05	$3s3p^2 - 2p^63p^3$	$^2D - {}^2D^\circ$	3/2-3/2	504,678
Si II	1250.433	150	13.05	$3s3p^2 - 2p^63p^3$	$^2D - {}^2D^\circ$	5/2-5/2	504,678
Si II	1251.164	200	8	$3s3p^2 - 2p^63p^3$	$^4P - {}^4S^\circ$	5/2-3/2	504,678
Si II	1260.4212	500	4	$3s^23p - 3s^23d$	$g^2P^\circ - {}^2D$	1/2-3/2	371,678,504
Si II	1264.7374	1000	4	$3s^23p - 3s^23d$	$g^2P^\circ - {}^2D$	3/2-5/2	371,678,504
Si II	1265.0010	100	4	$3s^23p - 3s^23d$	$g^2P^\circ - {}^2D$	3/2-3/2	371,678,504
Si II	1274.300	3h					504,678
Si II	1275.662	5h					504,678
Si II	1304.3720	100	3	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2S$	1/2-1/2	371,504,678
Si II	1305.590	50h	13.04	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - {}^2F^\circ$	5/2-7/2	504,678
Si II	1309.2769	200	3	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2S$	3/2-1/2	371,504,678
Si II	1309.458	20h	13.04	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - {}^2F^\circ$	3/2-5/2	504,678
Si II	1309.77	2h	13.04	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - {}^2F^\circ$	5/2-5/2	504,678
Si II	1311.265	2h					504,678
Si II	1346.873	100	7	$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	3/2-5/2	504,678
Si II	1348.543	100	7	$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	1/2-3/2	504,678
Si II	1350.057	150	7	$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	5/2-5/2	504,678
Si II	1350.520	20	7	$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	3/2-3/2	504,678
Si II	1350.658	20	7	$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	1/2-1/2	504,678
Si II	1352.635	100	7	$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	3/2-1/2	504,678
Si II	1353.718	100	7	$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	5/2-3/2	504,678
Si II	1403.783	5h	13.03	$3s3p^2 - 3s^210p$	$^2D - {}^2P^\circ$	3/2-1/2	504,678
Si II	1404.170	1h	13.03	$3s3p^2 - 3s^210p$	$^2D - {}^2P^\circ$	3/2-3/2	504,678
Si II	1404.478	6h	13.03	$3s3p^2 - 3s^210p$	$^2D - {}^2P^\circ$	5/2-3/2	504,678
Si II	1409.073	10h	13.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - {}^2P^\circ$	3/2-1/2	504,678
Si II	1409.90	2h	13.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - {}^2P^\circ$	3/2-3/2	504,678
Si II	1410.219	20h	13.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - {}^2P^\circ$	5/2-3/2	504,678
Si II	1416.972	10h	18.06	$3s^2(^1S)3d - 3s3p(^3P^\circ)4d$	$^2D - {}^2D^\circ$	5/2-5/2	504,678
Si II	1417.781	5	18.06	$3s^2(^1S)3d - 3s3p(^3P^\circ)4d$	$^2D - {}^2D^\circ$	3/2-3/2	504,678
Si II	1418.110	0	18.06	$3s^2(^1S)3d - 3s3p(^3P^\circ)4d$	$^2D - {}^2D^\circ$	5/2-3/2	504,678
Si II	1434.400	1h	13.01	$3s3p^2 - 3s^29p$	$^2D - {}^2P^\circ$	3/2-1/2	504,678
Si II	1434.542	2h	13.01	$3s3p^2 - 3s^29p$	$^2D - {}^2P^\circ$	5/2-3/2	504,678
Si II	1438.576	2h	13	$3s3p^2 - 3s^28f$	$^2D - {}^2F^\circ$	3/2-5/2	504,678
Si II	1438.931	4h	13	$3s3p^2 - 3s^28f$	$^2D - {}^2F^\circ$	5/2-7/2	504,678
Si II	1471.775	2	30	$3s3p^2 - 3s3p(^3P^\circ)5s$	$^2P - {}^2P^\circ$	3/2-3/2	504,678
Si II	1474.304	1h	12.02	$3s3p^2 - 3s^28p$	$^2D - {}^2P^\circ$	3/2-3/2	504,678
Si II	1474.649	15h	12.02	$3s3p^2 - 3s^28p$	$^2D - {}^2P^\circ$	5/2-3/2	504,678
Si II	1475.188	5h	12.02	$3s3p^2 - 3s^28p$	$^2D - {}^2P^\circ$	3/2-1/2	504,678

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si II	1476.928	1	12.01	$3s3p^2 - 2p^63p^3$	$^2D - ^4S^\circ$	5/2-3/2	504,678
Si II	1484.873	15	12	$3s3p^2 - 3s^27f$	$^2D - ^2F^\circ$	3/2-5/2	504,678
Si II	1485.024	90h	15.04	$3s3p^2 - 2p^63p^3$	$^2S - ^2P^\circ$	1/2-1/2	504,678
Si II	1485.224	30	12	$3s3p^2 - 3s^27f$	$^2D - ^2F^\circ$	5/2-7/2	504,678
Si II	1485.513	100h	15.04	$3s3p^2 - 2p^63p^3$	$^2S - ^2P^\circ$	1/2-3/2	504,678
Si II	1508.741	3h	11.01	$3s3p^2 - 3s3p(^3P^\circ)4s$	$^2D - ^2P^\circ$	3/2-3/2	504,678
Si II	1509.101	100h	11.01	$3s3p^2 - 3s3p(^3P^\circ)4s$	$^2D - ^2P^\circ$	5/2-3/2	504,678
Si II	1512.072	50h	11.01	$3s3p^2 - 3s3p(^3P^\circ)4s$	$^2D - ^2P^\circ$	3/2-1/2	504,678
Si II	1513.570	30	29	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^2P - ^2D^\circ$	1/2-3/2	504,678
Si II	1516.910	60	29	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^2P - ^2D^\circ$	3/2-5/2	504,678
Si II	1518.221	5	29	$3s3p^2 - 3s3p(^3P^\circ)4d$	$^2P - ^2D^\circ$	3/2-3/2	504,678
Si II	1526.7076	500	2	$3s^23p - 3s^24s$	$g^2P^\circ - ^2S$	1/2-1/2	371,504,678
Si II	1533.4320	1000	2	$3s^23p - 3s^24s$	$g^2P^\circ - ^2S$	3/2-1/2	371,504,678
Si II	1562.451	10	11	$3s3p^2 - 3s^26f$	$^2D - ^2F^\circ$	3/2-5/2	504,678
Si II	1562.845	15	11	$3s3p^2 - 3s^26f$	$^2D - ^2F^\circ$	5/2-7/2	504,678
Si II	1563.765	10	10.02	$3s3p^2 - 3s^27p$	$^2D - ^2P^\circ$	5/2-3/2	504,678
Si II	1564.066	5	10.02	$3s3p^2 - 3s^27p$	$^2D - ^2P^\circ$	3/2-1/2	504,678
Si II	1661.059	3h	28	$3s3p^2 - 2p^63p^3$	$^2P - ^2P^\circ$	1/2-1/2	504,678
Si II	1661.633	1h	28	$3s3p^2 - 2p^63p^3$	$^2P - ^2P^\circ$	1/2-3/2	504,678
Si II	1667.267	0	28	$3s3p^2 - 2p^63p^3$	$^2P - ^2P^\circ$	3/2-3/2	504,678
Si II	1704.967	2h	10.01	$3s3p^2 - 3s^26p$	$^2D - ^2P^\circ$		504,678
Si II	1710.826	10h	10	$3s3p^2 - 3s^25f$	$^2D - ^2F^\circ$	3/2-5/2	504,678
Si II	1711.296	20h	10	$3s3p^2 - 3s^25f$	$^2D - ^2F^\circ$	5/2-7/2	504,678
Si II	1786.817	4	18.05	$3s^23d - 2p^63p^3$	$^2D - ^2D^\circ$	3/2-3/2	504,678
Si II	1787.538	8	18.05	$3s^23d - 2p^63p^3$	$^2D - ^2D^\circ$	5/2-5/2	504,678
Si II	1808.0117	150	1	$3s^23p - 3s3p^2$	$g^2P^\circ - ^2D$	1/2-3/2	370,504,678
Si II	1816.9278	200	1	$3s^23p - 3s3p^2$	$g^2P^\circ - ^2D$	3/2-5/2	370,504,678
Si II	1817.4511	10	1	$3s^23p - 3s3p^2$	$g^2P^\circ - ^2D$	3/2-3/2	370,504,678
Si II	1868.765	1	9.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - ^2D^\circ$	3/2-5/2	504,678
Si II	1869.317	20	9.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - ^2D^\circ$	5/2-5/2	504,678
Si II	1870.227	15	9.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - ^2D^\circ$	3/2-3/2	504,678
Si II	1870.782	3	9.02	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - ^2D^\circ$	5/2-3/2	504,678
Si II	1902.459	100h	18.04	$3s^2(^1S)3d - 3s3p(^3P^\circ)3d$	$^2D - ^2F^\circ$	5/2-7/2	504,678
Si II	1904.326	5h	31	$3s^2(^1S)4d - 3s3p(^3P^\circ)4d$	$^2D - ^2P^\circ$	5/2-3/2	504,678
Si II	1905.878	3h	31	$3s^2(^1S)4d - 3s3p(^3P^\circ)4d$	$^2D - ^2P^\circ$	3/2-1/2	504,678
Si II	1910.621	50h	18.04	$3s^2(^1S)3d - 3s3p(^3P^\circ)3d$	$^2D - ^2F^\circ$	3/2-5/2	504,678
Si II	1911.265	0h	18.04	$3s^2(^1S)3d - 3s3p(^3P^\circ)3d$	$^2D - ^2F^\circ$	5/2-5/2	504,678
Si II	1941.667	50	27	$3s3p^2 - 2p^63p^3$	$^2P - ^2D^\circ$	1/2-3/2	504,678
Si II	1944.586	15	23	$3s^2(^1S)4p - 3s3p(^3P^\circ)4p$	$^2P^\circ - ^2P$	3/2-3/2	504,678
Si II	1945.504	3	23	$3s^2(^1S)4p - 3s3p(^3P^\circ)4p$	$^2P^\circ - ^2P$	1/2-1/2	504,678
Si II	1947.769	1	23	$3s^2(^1S)4p - 3s3p(^3P^\circ)4p$	$^2P^\circ - ^2P$	3/2-1/2	504,678
Si II	1949.331	10	27	$3s3p^2 - 2p^63p^3$	$^2P - ^2D^\circ$	3/2-3/2	504,678
Si II	1949.564	100	27	$3s3p^2 - 2p^63p^3$	$^2P - ^2D^\circ$	3/2-5/2	504,678

Ground state $1s^2 2s^2 2p^6 3s^2\ ^1S_0$

Ionization potential 270 139.3 cm^{-1}; 33.492 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si III	423.817	P	3.04	$3s^2 - 3p(^2P^\circ)4s$	$g\,^1S - ^1P^\circ$	0-1	504,768
Si III	426.644	P	3.03	$3s^2 - 3s(^2S)6p$	$g\,^1S - ^1P^\circ$	0-1	504,768
Si III	437.255	P	3.02	$3s^2 - 3p(^2P^\circ)3d$	$g\,^1S - ^1P^\circ$	0-1	504,768
Si III	466.129	80	3.01	$3s^2 - 3s(^2S)5p$	$g\,^1S - ^1P^\circ$	0-1	197,504,768
Si III	510.079	P	6.08	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3S$	0-1	504,768
Si III	510.414	P	6.08	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3S$	1-1	504,768
Si III	511.096	P	6.08	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3S$	2-1	504,768
Si III	511.994	P	6.07	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	1-2	504,768
Si III	512.219	P	6.07	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	0-1	504,768
Si III	512.557	P	6.07	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	1-1	504,768
Si III	512.681	P	6.07	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	2-2	504,768
Si III	512.772	P	6.07	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	1-0	504,768
Si III	513.245	P	6.07	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	2-1	504,768
Si III	520.79	10	6.06	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	1-2	504,768
Si III	520.92	20	6.06	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-3	504,768
Si III	521.149	P	6.06	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	1-1	504,768
Si III	521.510	P	6.06	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-2	504,768
Si III	521.861	P	6.06	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-1	504,768
Si III	533.226	P	6.05	3s3p - 3s6d	$^3P^\circ - ^3D$	0-1	504,768
Si III	533.530	P	6.05	3s3p - 3s6d	$^3P^\circ - ^3D$	1-2	504,768
Si III	533.592	P	6.05	3s3p - 3s6d	$^3P^\circ - ^3D$	1-1	504,768
Si III	534.189	P	6.05	3s3p - 3s6d	$^3P^\circ - ^3D$	2-3	504,768
Si III	534.276	P	6.05	3s3p - 3s6d	$^3P^\circ - ^3D$	2-2	504,768
Si III	534.339	P	6.05	3s3p - 3s6d	$^3P^\circ - ^3D$	2-1	504,768
Si III	565.289	20	6.04	3s3p - 3s6s	$^3P^\circ - ^3S$	0-1	504,768
Si III	565.698	40	6.04	3s3p - 3s6s	$^3P^\circ - ^3S$	1-1	504,768
Si III	566.546	P	6.04	3s3p - 3s6s	$^3P^\circ - ^3S$	2-1	504,768
Si III	566.613	160	3	$3s^2 - 3s4p$	$g\,^1S - ^1P^\circ$	0-1	197,504,768
Si III	567.878	P	19	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^1P^\circ - ^1S$	1-0	504,768
Si III	573.538	P	6.03	3s3p - 3s5d	$^3P^\circ - ^3D$	0-1	504,768
Si III	573.951	P	6.03	3s3p - 3s5d	$^3P^\circ - ^3D$	1-2	504,768
Si III	573.961	P	6.03	3s3p - 3s5d	$^3P^\circ - ^3D$	1-1	504,768
Si III	574.799	P	6.03	3s3p - 3s5d	$^3P^\circ - ^3D$	2-3	504,768
Si III	574.814	P	6.03	3s3p - 3s5d	$^3P^\circ - ^3D$	2-2	504,768
Si III	574.824	P	6.03	3s3p - 3s5d	$^3P^\circ - ^3D$	2-1	504,768
Si III	605.873	P	18	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^1P^\circ - ^1D$	1-2	504,768
Si III	624.997	P	17	$3s(^2S)3p - 3p(^2P^\circ)4p$	$^1P^\circ - ^1P$	1-1	504,768
Si III	634.255	P	16	3s3p - 3s6d	$^1P^\circ - ^1D$	1-2	504,768
Si III	651.668	80	6.02	3s3p - 3s5s	$^3P^\circ - ^3S$	0-1	197,504,768
Si III	652.223	120	6.02	3s3p - 3s5s	$^3P^\circ - ^3S$	1-1	197,504,768
Si III	653.332	160	6.02	3s3p - 3s5s	$^3P^\circ - ^3S$	2-1	197,504,768
Si III	671.718	40	6.01	3s3p - 3s4d	$^3P^\circ - ^3D$	0-1	504,768
Si III	672.293	80	6.01	3s3p - 3s4d	$^3P^\circ - ^3D$	1-2	504,768
Si III	673.477	100	6.01	3s3p - 3s4d	$^3P^\circ - ^3D$	2-3	504,768
Si III	678.055	40	15	3s3p - 3s6s	$^1P^\circ - ^1S$	1-0	504,768
Si III	690.689	40	14	3s3p - 3s5d	$^1P^\circ - ^1D$	1-2	504,768
Si III	800.066	100	13	3s3p - 3s5s	$^1P^\circ - ^1S$	1-0	504,768
Si III	822.004	P	29	$2p^6 3p^2 - 2p^6 3s6f$	$^1D - ^1F^\circ$	2-3	504,768
Si III	823.408	180	12	3s3p - 3s4d	$^1P^\circ - ^1D$	1-2	197,504,768
Si III	879.233	10	28	$2p^6 3p^2 - 2p^6 3p(^2P^\circ)4s$	$^1D - ^1P^\circ$	2-1	504,768
Si III	883.398	100	27	$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	504,768
Si III	891.479	P	26	$2p^6 3p^2 - 3s6p$	$^1D - ^1P^\circ$	2-1	504,768
Si III	936.056	25	44	3s3d - 3s7f	$^3D - ^3F^\circ$	3-4	504,768
Si III	936.058	2	44	3s3d - 3s7f	$^3D - ^3F^\circ$	3-3	504,768
Si III	936.060	1	44	3s3d - 3s7f	$^3D - ^3F^\circ$	3-2	504,768

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Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si III	936.077	18	44	3s3d - 3s7f	$^3D - ^3F^\circ$	2-3	504,768
Si III	936.079	2	44	3s3d - 3s7f	$^3D - ^3F^\circ$	2-2	504,768
Si III	936.100	12	44	3s3d - 3s7f	$^3D - ^3F^\circ$	1-2	504,768
Si III	939.093	140	25	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^1D - ^1P^\circ$	2-1	197,504,768
Si III	967.946	180	24	$2p^63p^2 - 3s5f$	$^1D - ^1F^\circ$	2-3	197,504,768
Si III	993.519	200	6	3s3p - 3s4s	$^3P^\circ - ^3S$	0-1	197,504,768
Si III	994.787	260	6	3s3p - 3s4s	$^3P^\circ - ^3S$	1-1	197,504,768
Si III	997.389	320	6	3s3p - 3s4s	$^3P^\circ - ^3S$	2-1	197,504,768
Si III	1005.349	60	43	3s3d - 3s6f	$^3D - ^3F^\circ$	3-4	504,768
Si III	1005.353	5	43	3s3d - 3s6f	$^3D - ^3F^\circ$	3-3	504,768
Si III	1005.357	1	43	3s3d - 3s6f	$^3D - ^3F^\circ$	3-2	504,768
Si III	1005.374	40	43	3s3d - 3s6f	$^3D - ^3F^\circ$	2-3	504,768
Si III	1005.378	5	43	3s3d - 3s6f	$^3D - ^3F^\circ$	2-2	504,768
Si III	1005.403	30	43	3s3d - 3s6f	$^3D - ^3F^\circ$	1-2	504,768
Si III	1031.169	140	33	$2p^63p^2 - 2p^63p(^2P^\circ)4s$	$^3P - ^3P^\circ$	1-2	504,768
Si III	1032.851	60	33	$2p^63p^2 - 2p^63p(^2P^\circ)4s$	$^3P - ^3P^\circ$	0-1	504,768
Si III	1033.920	160	33	$2p^63p^2 - 2p^63p(^2P^\circ)4s$	$^3P - ^3P^\circ$	2-2	504,768
Si III	1034.287	80	33	$2p^63p^2 - 2p^63p(^2P^\circ)4s$	$^3P - ^3P^\circ$	1-1	504,768
Si III	1035.657	60	33	$2p^63p^2 - 2p^63p(^2P^\circ)4s$	$^3P - ^3P^\circ$	1-0	504,768
Si III	1037.053	140	33	$2p^63p^2 - 2p^63p(^2P^\circ)4s$	$^3P - ^3P^\circ$	2-1	504,768
Si III	1083.210	120	23	$2p^63p^2 - 3s5p$	$^1D - ^1P^\circ$	2-1	504,768
Si III	1092.915	P	42	3s3d - 3s6p	$^3D - ^3P^\circ$	3-2	504,768
Si III	1092.940	P	42	3s3d - 3s6p	$^3D - ^3P^\circ$	2-2	504,768
Si III	1092.969	P	42	3s3d - 3s6p	$^3D - ^3P^\circ$	1-2	504,768
Si III	1093.105	P	42	3s3d - 3s6p	$^3D - ^3P^\circ$	2-1	504,768
Si III	1093.133	P	42	3s3d - 3s6p	$^3D - ^3P^\circ$	1-1	504,768
Si III	1093.293	P	42	3s3d - 3s6p	$^3D - ^3P^\circ$	1-0	504,768
Si III	1108.368	280	5	3s3p - 3s3d	$^3P^\circ - ^3D$	0-1	197,504,768
Si III	1109.965	320	5	3s3p - 3s3d	$^3P^\circ - ^3D$	1-2	197,504,768
Si III	1113.228	360	5	3s3p - 3s3d	$^3P^\circ - ^3D$	2-3	197,504,768
Si III	1140.545	120	32	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	0-1	504,768
Si III	1141.580	140	32	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-2	504,768
Si III	1142.282	120	32	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-1	504,768
Si III	1144.306	160	32	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-3	504,768
Si III	1144.959	120	32	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-2	504,768
Si III	1145.122	150	41	3s3d - 3s5f	$^3D - ^3F^\circ$	3-4	504,768
Si III	1145.149	13	41	3s3d - 3s5f	$^3D - ^3F^\circ$	3-3	504,768
Si III	1145.16	1	41	3s3d - 3s5f	$^3D - ^3F^\circ$	3-2	504,768
Si III	1145.177	80	41	3s3d - 3s5f	$^3D - ^3F^\circ$	2-3	504,768
Si III	1145.19	10	41	3s3d - 3s5f	$^3D - ^3F^\circ$	2-2	504,768
Si III	1145.22	50	41	3s3d - 3s5f	$^3D - ^3F^\circ$	1-2	504,768
Si III	1145.669	P	32	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-1	504,768
Si III	1154.998	120	31	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	0-1	504,768
Si III	1155.957	120	31	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-0	504,768
Si III	1156.782	80	31	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-1	504,768
Si III	1158.102	140	31	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-2	504,768
Si III	1160.255	120	31	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-1	504,768
Si III	1161.579	160	31	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-2	504,768
Si III	1172.529	80	30	$2p^63p^2 - 3s5p$	$^3P - ^3P^\circ$	0-1	504,768
Si III	1174.369	100	30	$2p^63p^2 - 3s5p$	$^3P - ^3P^\circ$	1-1	504,768
Si III	1174.432	120	30	$2p^63p^2 - 3s5p$	$^3P - ^3P^\circ$	1-2	504,768
Si III	1178.004	160	30	$2p^63p^2 - 3s5p$	$^3P - ^3P^\circ$	2-2	504,768
Si III	1182.018	60	64	3s3d - 3s7f	$^1D - ^1F^\circ$	2-3	504,768
Si III	1192.228	P	40	$3s(^2S)3d - 3p(^2P^\circ)4s$	$^3D - ^3P^\circ$	3-2	504,768
Si III	1192.258	P	40	$3s(^2S)3d - 3p(^2P^\circ)4s$	$^3D - ^3P^\circ$	2-2	504,768
Si III	1192.293	P	40	$3s(^2S)3d - 3p(^2P^\circ)4s$	$^3D - ^3P^\circ$	1-2	504,768
Si III	1196.436	P	40	$3s(^2S)3d - 3p(^2P^\circ)4s$	$^3D - ^3P^\circ$	2-1	504,768
Si III	1196.470	P	40	$3s(^2S)3d - 3p(^2P^\circ)4s$	$^3D - ^3P^\circ$	1-1	504,768
Si III	1198.297	P	40	$3s(^2S)3d - 3p(^2P^\circ)4s$	$^3D - ^3P^\circ$	1-0	504,768
Si III	1206.510	600	2	$3s^2 - 3s3p$	$g^1S - ^1P^\circ$	0-1	504,768

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si III	1206.533	600	11	3s3p - 3s3d	$^1P^\circ - ^1D$	1-2	504,768
Si III	1207.517	180	22	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	504,768
Si III	1210.456	200	21	$2p^63p^2 - 3s4f$	$^1D - ^1F^\circ$	2-3	504,768
Si III	1212.011	40	50	$2p^63p^2 - 2p^63p(^2P^\circ)4s$	$^1S - ^1P^\circ$	0-1	504,768
Si III	1212.247	P	74	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^1P^\circ - ^1S$	1-0	504,768
Si III	1235.431	140	49	$2p^63p^2 - 3s6p$	$^1S - ^1P^\circ$	0-1	504,768
Si III	1280.354	120	63	3s3d - 3s6f	$^1D - ^1F^\circ$	2-3	504,768
Si III	1294.543	340	4	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	1-2	197,504,768
Si III	1296.726	280	4	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	0-1	197,504,768
Si III	1298.891	300	4	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	1-1	197,504,768
Si III	1298.960	360	4	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	2-2	504,768
Si III	1300.703	P	54	$3s4s - 3p(^2P^\circ)4s$	$^1S - ^1P^\circ$	0-1	504,768
Si III	1301.146	280	4	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	1-0	197,504,768
Si III	1303.320	320	4	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	2-1	197,504,768
Si III	1312.590	260	10	3s3p - 3s4s	$^1P^\circ - ^1S$	1-0	197,504,768
Si III	1327.703	P	53	3s4s - 3s6p	$^1S - ^1P^\circ$	0-1	504,768
Si III	1328.806	P	48	$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^1S - ^1P^\circ$	0-1	504,768
Si III	1341.465	160	39	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3D^\circ$	3-3	504,768
Si III	1341.496	P	39	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3D^\circ$	2-3	504,768
Si III	1342.351	P	39	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3D^\circ$	3-2	504,768
Si III	1342.392	140	39	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3D^\circ$	2-2	504,768
Si III	1342.432	P	39	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3D^\circ$	1-2	504,768
Si III	1343.388	120	39	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3D^\circ$	-1	504,768
Si III	1359.751	P	68	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3S$	0-1	504,768
Si III	1360.360	20	68	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3S$	1-1	504,768
Si III	1361.597	160	46	$3s(^2S)4s - 3p(^2P^\circ)4s$	$^3S - ^3P^\circ$	1-2	197,504,768
Si III	1361.719	P	68	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3S$	2-1	504,768
Si III	1362.366	100	38	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3P^\circ$	1-0	504,768
Si III	1363.459	140	38	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3P^\circ$	2-1	504,768
Si III	1363.504	P	38	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3P^\circ$	1-1	504,768
Si III	1365.253	160	38	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3P^\circ$	3-2	504,768
Si III	1365.292	P	38	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3P^\circ$	2-2	504,768
Si III	1365.337	P	38	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3P^\circ$	1-2	504,768
Si III	1367.049	140	46	$3s(^2S)4s - 3p(^2P^\circ)4s$	$^3S - ^3P^\circ$	1-1	197,504,768
Si III	1369.437	100	46	$3s(^2S)4s - 3p(^2P^\circ)4s$	$^3S - ^3P^\circ$	1-0	504,768
Si III	1371.652	60	67	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	1-2	504,768
Si III	1373.030	100	67	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	2-2	504,768
Si III	1375.083	40	67	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	0-1	504,768
Si III	1375.688	40	67	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	1-1	504,768
Si III	1377.082	60	67	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	2-1	504,768
Si III	1377.238	40	67	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3P$	1-0	504,768
Si III	1387.948	25	37	3s3d - 3s5p	$^3D - ^3P^\circ$	2-1	504,768
Si III	1387.979	10	37	3s3d - 3s5p	$^3D - ^3P^\circ$	1-0	504,768
Si III	1387.994	8	37	3s3d - 3s5p	$^3D - ^3P^\circ$	1-1	504,768
Si III	1388.011	50	37	3s3d - 3s5p	$^3D - ^3P^\circ$	3-2	504,768
Si III	1388.052	8	37	3s3d - 3s5p	$^3D - ^3P^\circ$	2-2	504,768
Si III	1388.098	1	37	3s3d - 3s5p	$^3D - ^3P^\circ$	1-2	504,768
Si III	1399.615	P	73	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^1P^\circ - ^1D$	1-2	504,768
Si III	1417.237	260	9	$3s3p - 2p^63p^2$	$^1P^\circ - ^1S$	1-0	197,504,768
Si III	1424.775	40	62	$3s(^2S)3d - 3p(^2P^\circ)4s$	$^1D - ^1P^\circ$	2-1	504,768
Si III	1433.690	120	66	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-3	504,768
Si III	1435.776	160	61	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	197,504,768
Si III	1436.166	140	52	$3s(^2S)4s - 3p(^2P^\circ)3d$	$^1S - ^1P^\circ$	0-1	197,504,768
Si III	1436.724	80	66	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	1-2	504,768
Si III	1438.228	40	66	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-2	504,768
Si III	1438.702	40	66	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	0-1	504,768
Si III	1439.391	40	66	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	1-1	504,768
Si III	1440.908	P	66	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^3P^\circ - ^3D$	2-1	504,768
Si III	1441.732	100	3.05	$3s3p - 2p^63p^2$	$^3P^\circ - ^1D$	1-2	504,768
Si III	1447.196	120	3.05	$3s3p - 2p^63p^2$	$^3P^\circ - ^1D$	2-2	504,768

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si III	1457.253	100	60	3s3d - 3s6p	$^1D - ^1P^\circ$	2-1	504,768
Si III	1500.241	240	36	3s3d - 3s4f	$^3D - ^3F^\circ$	3-4	197,504,768
Si III	1501.150	P	36	3s3d - 3s4f	$^3D - ^3F^\circ$	3-3	197,504,768
Si III	1501.191	200	36	3s3d - 3s4f	$^3D - ^3F^\circ$	2-3	197,504,768
Si III	1501.780	P	36	3s3d - 3s4f	$^3D - ^3F^\circ$	3-2	504,768
Si III	1501.827	P	36	3s3d - 3s4f	$^3D - ^3F^\circ$	2-2	197,504,768
Si III	1501.870	180	36	3s3d - 3s4f	$^3D - ^3F^\circ$	1-2	504,768
Si III	1506.060	120	72	$3s(^2S)4p - 3p(^2P^\circ)4p$	$^1P^\circ - ^1P$	1-1	504,768
Si III	1513.533	40	94	$2p^63p(^2P^\circ)3d - 2p^63p(^2P^\circ)5f$	$^1F^\circ$ - F[7/2]	3-3	504,768
Si III	1560.974	P	71	3s4p - 3s6d	$^1P^\circ - ^1D$	1-2	504,768
Si III	1588.950	40	59	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^1D - ^1P^\circ$	2-1	504,768
Si III	1622.892	P	45	3s4s - 3s5p	$^3S - ^3P^\circ$	1-0	504,768
Si III	1622.913	P	45	3s4s - 3s5p	$^3S - ^3P^\circ$	1-1	504,768
Si III	1623.055	P	45	3s4s - 3s5p	$^3S - ^3P^\circ$	1-2	504,768
Si III	1636.990	20	47	$2p^63p^2 - 3s5p$	$^1S - ^1P^\circ$	0-1	504,768
Si III	1673.315	140	58	3s3d - 3s5f	$^1D - ^1F^\circ$	2-3	504,768
Si III	1778.715	P	35	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3F^\circ$	3-4	504,768
Si III	1783.079	P	35	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3F^\circ$	3-3	504,768
Si III	1783.146	P	35	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3F^\circ$	2-3	504,768
Si III	1786.371	P	35	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3F^\circ$	3-2	504
Si III	1786.438	P	35	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3F^\circ$	2-2	504,768
Si III	1786.515	P	35	$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3F^\circ$	1-2	504,768
Si III	1803.023	60	51	3s4s - 3s5p	$^1S - ^1P^\circ$	0-1	504,768
Si III	1838.466	P	65	3s4p - 3s6s	$^3P^\circ - ^3S$	0-1	504,768
Si III	1839.585	P	65	3s4p - 3s6s	$^3P^\circ - ^3S$	1-1	504,768
Si III	1842.064	P	65	3s4p - 3s6s	$^3P^\circ - ^3S$	2-1	504,768
Si III	1842.547	180	20	$2p^63p^2 - 3s4p$	$^1D - ^1P^\circ$	2-1	504,768
Si III	1856.062	20	70	3s4p - 3s6s	$^1P^\circ - ^1S$	1-0	504,768
Si III	1892.030	60	1	$3s^2 - 3s3p$	$g^1S - ^3P^\circ$	0-1	504,768
Si III	1953.968	P	69	3s4p - 3s5d	$^1P^\circ - ^1D$	1-2	504,768
Si III	1979.233	P	83	3s4d - 3s8f	$^1D - ^1F^\circ$	2-3	504,768

Ground state $1s^2 2s^2 2p^6 3s\ ^2S_{1/2}$

Ionization potential 364 093.1 cm^{-1}; 45.141 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si IV	327.137	P	2.02	3s - 6p	g^2S - $^2P°$	½-3½	504,767
Si IV	327.181	P	2.02	3s - 6p	g^2S - $^2P°$	½-½	504,767
Si IV	361.560	P	2.01	3s - 5p	g^2S - $^2P°$	½-3½	197,504,767
Si IV	361.659	P	2.01	3s - 5p	g^2S - $^2P°$	½-½	197,504,767
Si IV	412.155	P	9	3p - 6d	$^2P°$ - ^2D	½-3½	504,767
Si IV	412.939	P	9	3p - 6d	$^2P°$ - ^2D	3½-	504,767
Si IV	437.849	P	8	3p - 6s	$^2P°$ - ^2S	½-½	504,767
Si IV	438.734	P	8	3p - 6s	$^2P°$ - ^2S	3½-½	504,767
Si IV	454.112	P	7	3p - 5d	$^2P°$ - ^2D	½-3½	197,504,767
Si IV	455.065	P	7	3p - 5d	$^2P°$ - ^2D	3½-	197,504,767
Si IV	457.818	250	2	3s - 4p	g^2S - $^2P°$	½-3½	197,504,767
Si IV	458.155	200	2	3s - 4p	g^2S - $^2P°$	½-½	197,504,767
Si IV	515.118	150	6	3p - 5s	$^2P°$ - ^2S	½-½	197,504,767
Si IV	516.348	200	6	3p - 5s	$^2P°$ - ^2S	3½-½	197,504,767
Si IV	559.533	2	5	3p - 4d	$^2P°$ - ^2D	½-3½	197,677,504
Si IV	560.980	5	5	3p - 4d	$^2P°$ - ^2D	3½-	197,677,504
Si IV	645.759	150	15	3d - 6f	^2D - $^2F°$		504,767
Si IV	688.194	1	14	3d - 6p	^2D - $^2P°$	5½-3½	504,677,767
Si IV	688.200	P	14	3d - 6p	^2D - $^2P°$	3½-3½	504
Si IV	688.395	P	14	3d - 6p	^2D - $^2P°$	3½-½	504
Si IV	749.941	300	13	3d - 5f	^2D - $^2F°$		197,504,767
Si IV	815.049	500	4	3p - 4s	$^2P°$ - ^2S	½-½	197,504,767
Si IV	818.129	550	4	3p - 4s	$^2P°$ - ^2S	3½-½	197,504,767
Si IV	860.551	P	12	3d - 5p	^2D - $^2P°$	5½-3½	504,767
Si IV	860.560	20	12	3d - 5p	^2D - $^2P°$	3½-3½	504,677,767
Si IV	861.118	5	12	3d - 5p	^2D - $^2P°$	3½-½	504,677,767
Si IV	895.228	P	17	4s - 6p	^2S - $^2P°$	½-3½	504,767
Si IV	895.558	P	17	4s - 6p	^2S - $^2P°$	½-½	504,767
Si IV	1045.500	P	21	4p - 6d	$^2P°$ - ^2D	½-3½	504,767
Si IV	1047.271	P	21	4p - 6d	$^2P°$ - ^2D		504,767
Si IV	1066.629	550	11	3d - 4f	^2D - $^2F°$		197,504,767
Si IV	1122.486	550	3	3p - 3d	$^2P°$ - ^2D	½-3½	197,504,767
Si IV	1128.325	P	3	3p - 3d	$^2P°$ - ^2D	3½-3½	197,504,767
Si IV	1128.340	650	3	3p - 3d	$^2P°$ - ^2D	3½-5½	197,504,767
Si IV	1210.652	P	16	4s - 5p	^2S - $^2P°$	½-3½	504,767
Si IV	1211.757	P	16	4s - 5p	^2S - $^2P°$	½-½	504,767
Si IV	1228.349	P	20	4p - 6s	$^2P°$ - ^2S	½-½	504,767
Si IV	1230.795	P	20	4p - 6s	$^2P°$ - ^2S	3½-½	504,767
Si IV	1365.549	P	19	4p - 5d	$^2P°$ - ^2D	½-3½	504,767
Si IV	1368.571	P	19	4p - 5d	$^2P°$ - ^2D	3½-5½	504,767
Si IV	1368.573	P	19	4p - 5d	$^2P°$ - ^2D	3½-3½	504,767
Si IV	1393.755	1000	1	3s - 3p	g^2S - $^2P°$	½-3½	197,504,767
Si IV	1402.770	800	1	3s - 3p	g^2S - $^2P°$	½-½	197,504,767
Si IV	1533.220	P	24	4d - 6f	^2D - $^2F°$		504,767
Si IV	1634.607	70	28	4f - 6g	$^2F°$ - ^2G		504,767
Si IV	1672.612	P	27	4f - 6d	$^2F°$ - ^2D		504,767
Si IV	1722.534	400	10	3d - 4p	^2D - $^2P°$	5½-3½	504,767
Si IV	1727.377	300	10	3d - 4p	^2D - $^2P°$	3½-½	504,767
Si IV	1796.162	P	23	4d - 6p	^2D - $^2P°$	5½-3½	504,767
Si IV	1796.166	P	23	4d - 6p	^2D - $^2P°$	3½-3½	504,767
Si IV	1797.496	P	23	4d - 6p	^2D - $^2P°$	3½-½	504,767

Ground state $1s^2 2s^2 2p^6\ ^1S_0$

Ionization potential 1 345 100 cm^{-1}; 166.77 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si V?	77.360	10					231
Si V	78.611	50		$2p^6 - 2p^5(^2P^o)6d$	$g\,^1S - \frac{1}{2}[\frac{3}{2}]^o$	0-1	231
Si V	78.903	50		$2p^6 - 2p^5(^2P^o)6d$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^o$	0-1	231
Si V	80.807	100		$2p^6 - 2p^5(^2P^o)5d$	$g\,^1S - \frac{1}{2}[\frac{3}{2}]^o$	0-1	231
Si V	81.113	100		$2p^6 - 2p^5(^2P^o)5d$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^o$	0-1	231
Si V	85.175	500		$2p^6 - 2p^5(^2P^o)4d$	$g\,^1S - \frac{1}{2}[\frac{3}{2}]^o$	0-1	231
Si V	85.579	300		$2p^6 - 2p^5(^2P^o)4d$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^o$	0-1	231
Si V	90.453	200		$2p^6 - 2p^5(^2P^o)4s$	$g\,^1S - \frac{1}{2}[\frac{1}{2}]^o$	0-1	231
Si V	90.852	200		$2p^6 - 2p^5(^2P^o)4s$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^o$	0-1	231
Si V	96.439	750		$2p^6 - 2p^5(^2P^o)3d$	$g\,^1S - \frac{1}{2}[\frac{3}{2}]^o$	0-1	231
Si V	97.143	500		$2p^6 - 2p^5(^2P^o)3d$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^o$	0-1	231
Si V	98.209	100		$2p^6 - 2p^5(^2P^o)3d$	$g\,^1S - \frac{3}{2}[\frac{1}{2}]^o$	0-1	231
Si V	117.860	1000		$2p^6 - 2p^5(^2P^o)3s$	$g\,^1S - \frac{1}{2}[\frac{1}{2}]^o$	0-1	197,231
Si V	118.968	1000		$2p^6 - 2p^5(^2P^o)3s$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^o$	0-1	197,231

Ground state $1s^22s^22p^5\ ^2P^\circ_{3/2}$

Ionization potential 1 654 800 cm^{-1}; 205.16 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si VI	65.004	20d		$2p^5 - 2p^4(^1D)5d$	$g^2P^\circ - {}^2S$	3/2-1/2	231
Si VI	65.211	10		$2p^5 - 2p^4(^1D)5d$	$g^2P^\circ - {}^2P$	1/2-3/2	231
Si VI	66.772	20		$2p^5 - 2p^4(^3P)5d$	$g^2P^\circ - {}^2D$	3/2-5/2	231
Si VI	66.796	10		$2p^5 - 2p^4(^1S)4d$	$g^2P^\circ - {}^2D$	3/2-5/2	231
Si VI	69.204	50d		$2p^5 - 2p^4(^1D)4d$	$g^2P^\circ - {}^2D$	3/2-5/2	231
Si VI	69.236	250		$2p^5 - 2p^4(^1D)4d$	$g^2P^\circ - {}^2S$	3/2-1/2	231
Si VI	69.421	50		$2p^5 - 2p^4(^1D)4d$	$g^2P^\circ - {}^2D$	1/2-3/2	231
Si VI	69.448	100d		$2p^5 - 2p^4(^1D)4d$	$g^2P^\circ - {}^2P$	1/2-3/2	231
Si VI	71.181	250		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^2D$	3/2-5/2	231
Si VI	71.273	100		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^2D$	3/2-3/2	231
Si VI	71.304	10		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^2P$	3/2-1/2	231
Si VI	71.340	50		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^4P$	3/2-5/2	231
Si VI	71.366	150		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^2P$	1/2-3/2	231
Si VI	71.384	200b		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^4P$	3/2-3/2	231
Si VI	71.474	50		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^4F$	3/2-5/2	231
Si VI	71.534	50		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^2D$	1/2-3/2	231
Si VI	71.561	50		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^2P$	1/2-1/2	231
Si VI	71.644	10		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^4P$	1/2-3/2	231
Si VI	71.718	10		$2p^5 - 2p^4(^3P)4d$	$g^2P^\circ - {}^4F$	1/2-3/2	231
Si VI	72.896	50		$2p^5 - 2p^4(^1D)4s$	$g^2P^\circ - {}^2D$	3/2-5/2	231
Si VI	75.193	200b		$2p^5 - 2p^4(^3P)4s$	$g^2P^\circ - {}^2P$	3/2-3/2	231
Si VI?	75.398	150					231
Si VI	75.486	50		$2p^5 - 2p^4(^3P)4s$	$g^2P^\circ - {}^2P$	1/2-3/2	231
Si VI	75.587	50		$2p^5 - 2p^4(^3P)4s$	$g^2P^\circ - {}^4P$	3/2-3/2	231
Si VI	77.429	500		$2p^5 - 2p^4(^1S)3d$	$g^2P^\circ - {}^2D$	3/2-5/2	231
Si VI	77.718	300		$2p^5 - 2p^4(^1S)3d$	$g^2P^\circ - {}^2D$	1/2-3/2	231
Si VI	80.395	250		$2p^5 - 2p^4(^1D)3d$	$g^2P^\circ - {}^2D$	3/2-3/2	231
Si VI	80.449	500		$2p^5 - 2p^4(^1D)3d$	$g^2P^\circ - {}^2F$	3/2-5/2	231
Si VI	80.491	250		$2p^5 - 2p^4(^1D)3d$	$g^2P^\circ - {}^2P$	3/2-3/2	231
Si VI	80.501	500		$2p^5 - 2p^4(^1D)3d$	$g^2P^\circ - {}^2D$	3/2-5/2	231
Si VI	80.577	600		$2p^5 - 2p^4(^1D)3d$	$g^2P^\circ - {}^2S$	3/2-1/2	231
Si VI	80.698	500		$2p^5 - 2p^4(^1D)3d$	$g^2P^\circ - {}^2P$	3/2-1/2	231
Si VI	80.725	500		$2p^5 - 2p^4(^1D)3d$	$g^2P^\circ - {}^2D$	1/2-3/2	231
Si VI	80.821	400		$2p^5 - 2p^4(^1D)3d$	$g^2P^\circ - {}^2P$	1/2-3/2	231
Si VI	80.908	400		$2p^5 - 2p^4(^1D)3d$	$g^2P^\circ - {}^2S$	1/2-1/2	231
Si VI	81.030	350		$2p^5 - 2p^4(^1D)3d$	$g^2P^\circ - {}^2P$	1/2-1/2	231
Si VI	83.006	200		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^2P$	3/2-3/2	231
Si VI	83.128	750		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^2D$	3/2-5/2	231
Si VI	83.258	250		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^2D$	3/2-3/2	231
Si VI	83.283	50		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^2P$	3/2-1/2	231
Si VI	83.358	400		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^2P$	1/2-3/2	231
Si VI	83.526	400		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^4P$	3/2-5/2	231
Si VI	83.611	400		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^2D$	1/2-3/2	231
Si VI	83.639	150		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^2P$	1/2-1/2	231
Si VI	83.684	50		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^4P$	3/2-1/2	231
Si VI	83.729	50		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^4F$	3/2-3/2	231
Si VI	83.802	300		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^4F$	3/2-5/2	231
Si VI	83.965	10		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^4P$	1/2-3/2	231
Si VI	84.082	600b		$2p^5 - 2p^4(^3P)3d$	$g^2P^\circ - {}^4F$	1/2-3/2	231
Si VI	91.369	200		$2p^5 - 2p^4(^1S)3s$	$g^2P^\circ - {}^2S$	3/2-1/2	231
Si VI	91.798	200		$2p^5 - 2p^4(^1S)3s$	$g^2P^\circ - {}^2S$	1/2-1/2	231
Si VI	96.020	500		$2p^5 - 2p^4(^1D)3s$	$g^2P^\circ - {}^2D$	3/2-5/2	231
Si VI	96.488	500		$2p^5 - 2p^4(^1D)3s$	$g^2P^\circ - {}^2D$	1/2-3/2	231
Si VI	99.095	500		$2p^5 - 2p^4(^3P)3s$	$g^2P^\circ - {}^2P$	3/2-1/2	231
Si VI	99.460	750		$2p^5 - 2p^4(^3P)3s$	$g^2P^\circ - {}^2P$	3/2-3/2	231

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si VI	99.598	500		$2p^5 - 2p^4(^3P)3s$	$g^2P^\circ - {}^2P$	½-½	231
Si VI	99.966	500		$2p^5 - 2p^4(^3P)3s$	$g^2P^\circ - {}^2P$	½-3½	231
Si VI	100.640	500d		$2p^5 - 2p^4(^3P)3s$	$g^2P^\circ - {}^4P$	3½-3½	231
Si VI	100.963	50		$2p^5 - 2p^4(^3P)3s$	$g^2P^\circ - {}^4P$	3½-5½	231
Si VI	101.160	10		$2p^5 - 2p^4(^3P)3s$	$g^2P^\circ - {}^4P$	½-3½	231
Si VI	102.846	50		$2s2p^6 - 2s2p^5(^3P^\circ)3s$	$^2S - {}^2P^\circ$	½-½	231
Si VI	103.163	100		$2s2p^6 - 2s2p^5(^3P^\circ)3s$	$^2S - {}^2P^\circ$	½-3½	231
Si VI	246.001	400		$2s^22p^5 - 2s2p^6$	$g^2P^\circ - {}^2S$	3½-½	197,231
Si VI	249.125	400		$2s^22p^5 - 2s2p^6$	$g^2P^\circ - {}^2S$	½-½	197,231

Ground state $1s^22s^22p^4\ ^3P_2$

Ionization potential 1 988 000 cm^{-1}; 246.5 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si VII	54.462	50b		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$g^3P - ^3P^\circ$	2-2	231
Si VII	54.522	50d		$2s^22p^4 - 2s^22p^3(^2D^\circ)5d$	$g^3P - ^3D^\circ$	2-3	233,231
Si VII	56.528	50		$2s^22p^4 - 2s^22p^3(^4S^\circ)5d$	$g^3P - ^3D^\circ$	2-3	231
Si VII	57.325	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-3	231
Si VII	57.434	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3P^\circ$	2-2	231
Si VII	57.589	50b		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$g^3P - ^3P^\circ$	1-2	231,487
Si VII	58.388	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3S^\circ$	2-1	231
Si VII	58.445	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3P^\circ$	2-2	231
Si VII	58.526	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3S^\circ$	1-1	231
Si VII	58.580	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3D^\circ$	2-3	231
Si VII	58.719	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$g^3P - ^3D^\circ$	1-2	231
Si VII	58.782	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	231
Si VII	59.884	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)4s$	$g^3P - ^3P^\circ$	2-2	231
Si VII	59.966	100b		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1F^\circ$	2-3	233
Si VII	60.221	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)4d$	$^1D - ^1P^\circ$	2-1	231
Si VII	60.837	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	2-3	231
Si VII	60.989	100b		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	1-1	231
Si VII	61.306	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	2-3	231
Si VII	62.940	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)4s$	$^1D - ^1D^\circ$	2-2	231
Si VII?	63.586	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)4s$	$^1S - ^1P^\circ$	0-1	231
Si VII	65.595	50		$2s2p^5 - 2s2p^4(^4P)4s$	$^3P^\circ - ^3P$	2-2	231,233
Si VII	68.026	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-2	231
Si VII	68.148	250		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-3	231
Si VII	68.190	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^1P^\circ$	1-1	231
Si VII	68.212	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-2	231
Si VII	68.408	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-2	231
Si VII	68.456	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-1	231
Si VII	68.593	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-2	231
Si VII	68.642	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-1	231
Si VII	68.669	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-0	231
Si VII	68.715	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	0-1	231
Si VII	69.385	150		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3S^\circ$	2-1	231
Si VII	69.580	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3S^\circ$	1-1	231
Si VII	69.602	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	2-1	231
Si VII	69.663	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	2-2	231
Si VII	69.790	200b		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	1-1	231
Si VII	69.861	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	1-2	231
Si VII	69.872	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3P^\circ$	0-1	231
Si VII	70.027	250		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3D^\circ$	2-3	231
Si VII	70.072	250		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	231
Si VII	70.123	20		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3F^\circ$	2-3	231
Si VII	70.222	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3D^\circ$	1-2	231
Si VII	70.250	200		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$^1D - ^1P^\circ$	2-1	231
Si VII	70.323	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3F^\circ$	1-2	231
Si VII	70.427	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	231
Si VII	70.730	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$^1D - ^3P^\circ$	2-1	231
Si VII	71.384	200b		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1F^\circ$	2-3	231
Si VII	71.955	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1D^\circ$	2-2	231,233,487
Si VII	72.324	300b		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1P^\circ$	2-1	231
Si VII	73.123	500		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	2-3	231
Si VII	73.350	250		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	1-2	231
Si VII	73.433	200		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	0-1	231
Si VII	75.193	200b		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1S - ^1P^\circ$	0-1	231,233
Si VII	79.236	250		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-2	231
Si VII	79.262	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-1	231

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si VII	79.491	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	1-2	231
Si VII	79.523	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	1-1	231
Si VII	79.615	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - {}^3P^\circ$	0-1	231
Si VII	81.449	50		$2s2p^5 - 2s2p^4(^2D)3s$	${}^3P^\circ - {}^3D$	2-3	233
Si VII	81.558	250		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	${}^1D - {}^1P^\circ$	2-1	231
Si VII	81.620	600		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	2-3	231
Si VII	81.895	500		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	1-2	231
Si VII	81.998	150		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	0-1	231
Si VII	84.082	600b		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	${}^1D - {}^1D^\circ$	2-2	231
Si VII	85.219	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	${}^1S - {}^1P^\circ$	0-1	231
Si VII	85.289	500		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	2-1	231
Si VII	85.584	500		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	1-1	231
Si VII	85.698	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	0-1	231
Si VII	88.008	150		$2s2p^5 - 2s2p^4(^4P)3s$	${}^3P^\circ - {}^3P$	2-2	231,233
Si VII	217.826	350		$2s^22p^4 - 2s2p^5$	${}^1D - {}^1P^\circ$	2-1	197,231
Si VII	272.641	200		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-1	197,231
Si VII	274.175	200		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-0	197,231
Si VII	275.352	250		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-2	197,231
Si VII	275.665	200		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-1	197,231
Si VII	276.839	200b		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	0-1	197,231
Si VII	278.445	200		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-2	197,231

Ground state $1s^22s^22p^3\ ^4S^\circ_{3/2}$

Ionization potential 2 445 110 cm^{-1}; 303.15 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si VIII	49.987	10		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-3/2	231
Si VIII	50.019	50d		$2s^22p^3 - 2s^22p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-5/2	231
Si VIII	50.524	50b		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2D$	5/2-5/2	231
Si VIII	51.718	20		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-7/2	231
Si VIII	51.819	20		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2D^\circ - ^2F$	3/2-5/2	231
Si VIII	52.554	20		$2s^22p^3 - 2s^22p^2(^3P)4d$	$^2P^\circ - ^2D$	3/2-5/2	231
Si VIII	53.770	10		$2s^22p^3 - 2s^22p^2(^3P)4s$	$^2D^\circ - ^2P$	5/2-3/2	231
Si VIII	58.885	150d		$2s^22p^3 - 2s2p^3(^5S^\circ)3p$	$g^4S^\circ - ^4P$	3/2-	231
Si VIII	60.989	100b		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-1/2	231
Si VIII	61.019	100		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-3/2	231
Si VIII	61.070	200		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-5/2	231
Si VIII	61.175	50d		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-1/2	231
Si VIII	61.223	100		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-5/2	231
Si VIII	61.395	50		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	5/2-3/2	231
Si VIII	61.446	100d		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2P$	3/2-1/2	231
Si VIII	61.798	100		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	5/2-5/2	231
Si VIII	61.852	100b		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	3/2-3/2	231,233
Si VIII	61.895	150d		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	3/2-5/2	231
Si VIII	61.914	150d		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-7/2	231
Si VIII	62.586	50d		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2S$	3/2-1/2	231
Si VIII	62.808	100		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2P$	3/2-3/2	231
Si VIII	62.849	150d		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	231
Si VIII	62.884	50		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-3/2	231
Si VIII	63.229	150		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$	3/2-5/2	231
Si VIII	63.266	50		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$	1/2-3/2	231
Si VIII	63.732	150		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	231
Si VIII	63.903	150		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	231
Si VIII	64.281	100		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2P$	5/2-3/2	231
Si VIII	64.327	150		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	3/2-5/2	231
Si VIII	64.355	50		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	1/2-3/2	231
Si VIII	65.833	50		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2P$	3/2-3/2	231
Si VIII	67.157	150		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	5/2-	231
Si VIII	67.318	100		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	3/2-	231
Si VIII	67.408	150		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	1/2-	231
Si VIII	69.632	150		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-5/2	231
Si VIII	69.790	200b		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-3/2	231
Si VIII	69.905	50		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-1/2	231
Si VIII	70.458	100		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - ^2D$	5/2-5/2	231
Si VIII	70.473	100		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - ^2D$	3/2-3/2	231
Si VIII	72.228	200		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	5/2-3/2	231
Si VIII	72.324	300b		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2P^\circ - ^2D$	3/2-5/2	231
Si VIII	72.420	200d		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2D^\circ - ^2P$	3/2-1/2	231
Si VIII	74.186	100		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	3/2-3/2	231
Si VIII	74.371	20		$2s^22p^3 - 2s^22p^2(^3P)3s$	$^2P^\circ - ^2P$	1/2-1/2	231
Si VIII	75.986	50		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	5/2-3/2	231
Si VIII	76.198	20		$2s2p^4 - 2s2p^3(^5S^\circ)3s$	$^4P - ^4S^\circ$	3/2-3/2	231
Si VIII	214.756	100		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-1/2	231
Si VIII	216.800	20d		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-3/2	231
Si VIII	216.918	100		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	5/2-3/2	231
Si VIII	232.864	10		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	1/2-1/2	231
Si VIII	233.159	10		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	3/2-1/2	231
Si VIII	235.221	10		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	1/2-3/2	231
Si VIII	235.563	20		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	3/2-3/2	231
Si VIII	276.839	200b		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	3/2-3/2	231
Si VIII	277.054	200		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	5/2-5/2	231

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si VIII	307.65	20P		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	½-3½	693,487
Si VIII	308.26	20P		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	3½-5½	693,487
Si VIII	314.31	50		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3½-½	774
Si VIII	316.202	100		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3½-3½	231
Si VIII	319.829	100d		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3½-5½	231

Ground state $1s^22s^22p^2\ ^3P_0$

Ionization potential 2 831 470 cm^{-1}; 351.05 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si IX	44.215	10		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3D^\circ$	1-2	231
Si IX	44.249	10		$2s^22p^2 - 2s^22p4d$	$g^3P - {}^3D^\circ$	2-3	231
Si IX	51.113	50		$2s^22p^2 - 2s2p^2(^2D)3p$	${}^1D - {}^1D^\circ$	2-2	231
Si IX	51.362	100		$2s^22p^2 - 2s2p^2(^2D)3p$	${}^1D - {}^1F^\circ$	2-3	231
Si IX	52.671	10		$2s2p^3 - 2s2p^2(^2P)3d$	${}^3D^\circ - {}^3F$		233
Si IX	52.810	20		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - {}^3D$	1-2	231
Si IX	52.838	50		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - {}^3D^\circ$	2-3	231
Si IX	53.992	10		$2s^22p^2 - 2s2p^2(^4P)3p$	$g^3P - {}^3S^\circ$	2-1	231
Si IX	54.841	100		$2s2p^3 - 2s2p^2(^4P)3d$	${}^5S^\circ - {}^5P$	2-1	231
Si IX	54.870	100		$2s2p^3 - 2s2p^2(^4P)3d$	${}^5S^\circ - {}^5P$	2-2	231
Si IX	54.907	100		$2s2p^3 - 2s2p^2(^4P)3d$	${}^5S^\circ - {}^5P$	2-3	231
Si IX	55.094	50		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	1-0	231
Si IX	55.116	50		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	1-1	231
Si IX	55.234	50		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	2-1	231
Si IX	55.272	150		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3P^\circ$	2-2	231
Si IX	55.305	50		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	0-1	231
Si IX	55.356	100		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	1-2	231
Si IX	55.401	100		$2s^22p^2 - 2s^22p3d$	$g^3P - {}^3D^\circ$	2-3	231
Si IX	55.511	50		$2s2p^3 - 2s2p^2(^2D)3d$	${}^3D^\circ - {}^3D$	3-3	231,233
Si IX	55.781	150		$2s2p^3 - 2s2p^2(^2D)3d$	${}^3D^\circ - {}^3F$	3-4	231,233
Si IX	56.027	150		$2s^22p^2 - 2s^22p3d$	${}^1D - {}^1F^\circ$	2-3	231
Si IX	57.157	50		$2s2p^3 - 2s2p^2(^2D)3d$	${}^3P^\circ - {}^3D$	2-3	231,233
Si IX	57.434	50		$2s^22p^2 - 2s^22p3d$	${}^1D - {}^1D^\circ$	2-2	231
Si IX	57.589	50b		$2s^22p^2 - 2s^22p3d$	${}^1D - {}^3F^\circ$	2-2	233
Si IX	57.778	100		$2s^22p^2 - 2s^22p3d$	${}^1S - {}^1P^\circ$	0-1	231
Si IX	58.906	50d		$2s2p^3 - 2s2p^2(^4P)3d$	${}^3D^\circ - {}^3F$	3-4	231
Si IX	59.004	100		$2s2p^3 - 2s2p^2(^4P)3d$	${}^3D^\circ - {}^3F$	2-3	231
Si IX	59.077	50		$2s2p^3 - 2s2p^2(^4P)3d$	${}^3D^\circ - {}^3F$	1-2	231
Si IX	59.966	100b		$2s2p^3 - 2s2p^2(^4P)3d$	${}^3P^\circ - {}^3D$		231,233
Si IX	60.989	100b		$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-3	231
Si IX	61.109	50		$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-2	231
Si IX	61.190	50d		$2s2p^3 - 2s2p^2(^4P)3s$	${}^5S^\circ - {}^5P$	2-1	231
Si IX	61.355	50		$2s2p^3 - 2s2p^2(^4P)3d$	${}^3P^\circ - {}^3P$	-2	231
Si IX	61.502	50		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	1-2	231
Si IX	61.546	100		$2s2p^3 - 2s2p^2(^2D)3s$	${}^3D^\circ - {}^3D$		231,233
Si IX	61.600	50		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	0-1	231
Si IX	61.649	100		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	2-2	231
Si IX	61.852	100b		$2s^22p^2 - 2s^22p3s$	$g^3P - {}^3P^\circ$	2-1	233
Si IX	62.974	50		$2s^22p^2 - 2s^22p3s$	${}^1D - {}^1P^\circ$	2-1	231
Si IX	65.236	10		$2s^22p^2 - 2s^22p3s$	${}^1S - {}^1P^\circ$	0-1	231
Si IX	223.72	5P		$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	0-1	487,812
Si IX	225.033	20		$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	1-1	231,812
Si IX	227.007	20		$2s^22p^2 - 2s2p^3$	$g^3P - {}^3S^\circ$	2-1	231,812
Si IX	258.10	P		$2s^22p^2 - 2s2p^3$	${}^1D - {}^1D^\circ$	2-2	487,812
Si IX	290.63	130P		$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	0-	487,812
Si IX	292.83	270P		$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	1-	487,812
Si IX	296.19	420P		$2s^22p^2 - 2s2p^3$	$g^3P - {}^3P^\circ$	2-	487,812
Si IX	345.10	30		$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	1-2	774
Si IX	349.96	40		$2s^22p^2 - 2s2p^3$	$g^3P - {}^3D^\circ$	2-3	774

Ground state $1s^22s^22p\ ^2P^\circ_{1/2}$

Ionization potential 3 237 400 cm^{-1}; 401.38 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si X	47.545	50		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2D$	3/2-5/2	231,233
Si X	48.553	10		$2s^22p - 2s2p(^3P^\circ)3p$	$g^2P^\circ - ^2P$	3/2-3/2	231,233
Si X	49.701	100		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2D - ^2F^\circ$		231,233
Si X	50.154	50		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5/2-5/2	231
Si X	50.254	50d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$		231,233
Si X	50.305	50		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3/2-5/2	231
Si X	50.333	50		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5/2-7/2	231
Si X	50.524	50b		$2s^22p - 2s^23d$	$g^2P^\circ - ^2D$	1/2-3/2	231,233
Si X	50.691	100		$2s^22p - 2s^23d$	$g^2P^\circ - ^2D$	3/2-5/2	231,233
Si X	51.635	10		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3/2-3/2	233
Si X	51.676	20		$1s^22p^3 - 1s^22p^2(^3P)3d$	$^4S^\circ - ^4P$	3/2-5/2	231,233
Si X	52.070	50		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2D^\circ$	1/2-3/2	231,233
Si X	52.155	100d		$2s2p^2 - 2s2p(^1P^\circ)3d$	$^2P - ^2D^\circ$	3/2-5/2	231,233
Si X	52.485	100		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2F^\circ$	5/2-7/2	231,233
Si X	52.611	50		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2F^\circ$	3/2-5/2	231,233
Si X	53.463	10		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2D - ^2P^\circ$	5/2-3/2	233
Si X	53.573	50d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2D^\circ$	5/2-5/2	231,233
Si X	53.595	50d		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2D - ^2D^\circ$	3/2-3/2	231,233
Si X	54.462	50b		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-5/2	231
Si X	54.522	50d		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	1/2-3/2	231,233
Si X	54.571	50		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	5/2-5/2	231
Si X	54.599	50d		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-3/2	231,233
Si X	54.664	10		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	3/2-1/2	231
Si X	54.702	10		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^4P - ^4P^\circ$	5/2-3/2	231
Si X	56.680	50d		$2s2p^2 - 2s2p(^1P^\circ)3s$	$^2P - ^2P^\circ$	3/2-3/2	231,233
Si X	56.804	50		$2s2p^2 - 2s2p(^3P^\circ)3d$	$^2P - ^2D^\circ$	3/2-5/2	231,233
Si X	57.209	20		$2s2p^2 - 2s2p(^3P^\circ)3s$	$^2D - ^2P^\circ$	5/2-3/2	231,233
Si X	253.81	200P		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	1/2-3/2	487,812
Si X	256.58	P		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	1/2-1/2	487
Si X	258.39	500P		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	3/2-3/2	487,812
Si X	261.27	200P		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2P$	3/2-1/2	487,812
Si X	272.00	280P		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2S$	1/2-1/2	487,812
Si X	277.27	310P		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2S$	3/2-1/2	487,812
Si X	347.43	40		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	1/2-3/2	774
Si X	356.07	40		$2s^22p - 2s2p^2$	$g^2P^\circ - ^2D$	3/2-5/2	774

Ground state $1s^22s^2\ ^1S_0$

Ionization potential 3 840 470 cm^{-1}; 476.15 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si XI	43.290	10		$2s2p - 1s^22p(^2P^\circ)3p$	$^3P^\circ - ^3D$	2-3	231
Si XI	43.763	10		$2s^2 - 2s3p$	$g\,^1S - ^1P^\circ$	0-1	231
Si XI	45.398	10		$2s2p - 1s^22p(^2P^\circ)3p$	$^1P^\circ - ^1D$	1-2	231
Si XI	46.264	10		$2s2p - 2s3d$	$^3P^\circ - ^3D$	0-1	231
Si XI	46.300	50		$2s2p - 2s3d$	$^3P^\circ - ^3D$	1-2	231
Si XI	46.401	100		$2s2p - 2s3d$	$^3P^\circ - ^3D$	2-3	231
Si XI	47.489	50		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-2	231
Si XI	47.607	50		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-2	231
Si XI	47.653	50		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-3	231
Si XI	47.899	50		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	231
Si XI	49.222	50		$2s2p - 2s3d$	$^1P^\circ - ^1D$	1-2	231
Si XI	49.265	10		$1s^22p^2 - 1s^22p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	231
Si XI	52.30	100		$2s2p - 2s3s$	$^1P^\circ - ^1S$	1-0	774
Si XI	303.41	50P		$2s^2 - 2s2p$	$g\,^1S - ^1P^\circ$	0-1	774

Ground state $1s^2 2s\ ^2S_{1/2}$

Ionization potential 4 221 460 cm^{-1}; 523.38 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si XII	40.91	100P		2s - 3p	$g^2S - {}^2P^\circ$	½-3½	774
Si XII	40.95	50P		2s - 3p	$g^2S - {}^2P^\circ$	½-½	774
Si XII	44.021	50		2p - 3d	${}^2P^\circ - {}^2D$	½-3½	231
Si XII	44.165	100		2p - 3d	${}^2P^\circ - {}^2D$	3½-5½	231
Si XII	45.656	10		2p - 3s	${}^2P^\circ - {}^2S$	3½-½	231
Si XII	499.27	P		2s - 2p	$g^2S - {}^2P^\circ$	½-3½	487
Si XII	521.10	P		2s - 2p	$g^2S - {}^2P^\circ$	½-½	487

Ground state 1s $^2S_{1/2}$

Ionization potential 21 560 628 cm^{-1}; 2673.1 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Si XIV	4.770	P		1s - 6p	$g^2S - {}^2P^\circ$	½-	309
Si XIV	4.831	P		1s - 5p	$g^2S - {}^2P^\circ$	½-	309
Si XIV	4.947	P		1s - 4p	$g^2S - {}^2P^\circ$	½-	309
Si XIV	5.217	P		1s - 3p	$g^2S - {}^2P^\circ$	½-	309
Si XIV	6.182	P		1s - 2p	$g^2S - {}^2P^\circ$	½-	309
Si XIV	20.21	P		2 - 7			309
Si XIV	20.88	P		2 - 6			309
Si XIV	22.09	P		2 - 5			309
Si XIV	24.74	P		2 - 4			309
Si XIV	33.39	P		2 - 3			309
Si XIV	51.20	P		3 - 7			309
Si XIV	55.72	P		3 - 6			309
Si XIV	65.30	P		3 - 5			309
Si XIV	95.5	P		3 - 4			309
Si XIV	110.37	P		4 - 7			309
Si XIV	133.8	P		4 - 6			309
Si XIV	206.4	P		4 - 5			309
Si XIV	237.2	P		5 - 7			309
Si XIV	380.2	P		5 - 6			309
Si XIV	630.6	P		6 - 7			309

292-307 O - 68 - 13

Ground state $1s^22s^22p^63s^23p^3\ ^4S^\circ_{3/2}$

Ionization potential 84 580 cm^{-1}; 10.486 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P I	1241.49	1		$3s^23p^3 - 3s^23p^2(^3P)5d$	$g^4S^\circ - ^2D$	3/2-5/2	496
P I	1242.02	3		$3s^23p^3 - 3s^23p^2(^3P)7s$	$g^4S^\circ - ^4P$	3/2-5/2	496
P I	1243.37	3		$3s^23p^3 - 3s^23p^2(^3P)5d$	$g^4S^\circ - ^4P$	3/2-3/2	496
P I	1245.19	6		$3s^23p^3 - 3s^23p^2(^3P)5d$	$g^4S^\circ - ^4P$	3/2-5/2	496
P I	1247.31	2		$3s^23p^3 - 3s^23p^2(^3P)5d$	$g^4S^\circ - ^4P$	3/2-1/2	496
P I	1248.20	1		$3s^23p^3 - 3s^23p^2(^3P)7s$	$g^4S^\circ - ^4P$	3/2-3/2	496
P I	1248.61	1		$3s^23p^3 - 3s^23p^2(^3P)7s$	$g^4S^\circ - ^4P$	3/2-1/2	496
P I	1253.74	6		$3s^23p^3 - 3s^23p^2(^3P)5d$	$g^4S^\circ - ^4D$	3/2-5/2	496
P I	1278.57	3		$3s^23p^3 - 3s^23p^2(^3P)6s$	$g^4S^\circ - ^4P$	3/2-5/2	496
P I	1282.61	6					496
P I	1282.96	6w		$3s^23p^3 - 3s^23p^2(^3P)6s$	$g^4S^\circ - ^4P$	3/2-3/2	496
P I	1283.89	6		$3s^23p^3 - 3s^23p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-3/2	496
P I	1284.80	3		$3s^23p^3 - 3s^23p^2(^3P)4d$	$g^4S^\circ - ^2D$	3/2-3/2	496
P I	1285.84	2		$3s^23p^3 - 3s^23p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-1/2	496
P I	1286.44	9		$3s^23p^3 - 3s^23p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-5/2	496
P I	1372.03	9		$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - ^2D$	3/2-5/2	496
P I	1373.49	60		$3s^23p^3 - 3s^23p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-5/2	496
P I	1374.73	6		$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - ^2D$	3/2-3/2	496
P I	1377.06	60		$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-1/2	496
P I	1377.93	60		$3s^23p^3 - 3s^23p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-3/2	496
P I	1379.40	75		$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-3/2	496
P I	1381.47	75		$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-5/2	496
P I	1381.65	45		$3s^23p^3 - 3s^23p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-1/2	496
P I	1411.31	24		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2D$	5/2-5/2	496
P I	1411.75	2		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2D$	3/2-3/2	496
P I	1420.08	30		$3s^23p^3 - 3s^23p^2(^3P)6d$	$^2D^\circ - ^2F$	5/2-7/2	496
P I	1425.29	30		$3s^23p^3 - 3s^23p^2(^3P)6d$	$^2D^\circ - ^2F$	3/2-5/2	496
P I	1427.77	1		$3s^23p^3 - 3s^23p^2(^3P)8s$	$^2D^\circ - ^4P$	5/2-3/2	496
P I	1428.05	1		$3s^23p^3 - 3s^23p^2(^3P)6d$	$^2D^\circ - ^4D$	5/2-5/2	496
P I	1429.77	12		$3s^23p^3 - 3s^23p^2(^3P)6d$	$^2D^\circ - ^4D$	3/2-3/2	496
P I	1430.13	150d		$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-5/2	496
P I	1430.73	30		$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - ^4D$	3/2-3/2	496
P I	1431.50	1		$3s^23p^3 - 3s^23p^2(^3P)6d$	$^2D^\circ - ^4F$	5/2-7/2	496
P I	1440.24	15		$3s^23p^3 - 3s^23p^2(^3P)7s$	$^2D^\circ - ^2P$	5/2-3/2	496
P I	1442.76	15		$3s^23p^3 - 3s^23p^2(^3P)7s$	$^2D^\circ - ^2P$	3/2-1/2	496
P I	1445.66	3		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2D^\circ - ^2D$	5/2-5/2	496
P I	1446.01	12		$3s^23p^3 - 3s^23p^2(^3P)7s$	$^2D^\circ - ^4P$	3/2-5/2	496
P I	1446.33	3		$3s^23p^3 - 3s^23p^2(^3P)7s$	$^2D^\circ - ^4P$	5/2-5/2	496
P I	1447.50	60		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2D^\circ - ^2F$	5/2-7/2	496
P I	1450.38	9		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2D^\circ - ^4P$	3/2-5/2	496
P I	1453.01	45		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2D^\circ - ^2F$	3/2-5/2	496
P I	1467.39	3					496
P I	1467.58	9		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2D^\circ - ^4F$	5/2-7/2	496
P I	1469.71	3		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2D^\circ - ^4F$	3/2-5/2	496
P I	1473.65	6		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2D^\circ - ^2P$	3/2-1/2	496
P I	1476.11	9		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2D^\circ - ^2P$	5/2-3/2	496
P I	1488.01	60		$3s^23p^3 - 3s^23p^2(^3P)6s$	$^2D^\circ - ^2P$	5/2-3/2	496
P I	1491.36	150		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-7/2	496
P I	1492.99	120		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2F$	3/2-5/2	496
P I	1493.34	45		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-5/2	496
P I	1499.51	24		$3s^23p^3 - 3s^23p^2(^3P)6s$	$^2D^\circ - ^2P$	3/2-1/2	496
P I	1501.81	60		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2D$	3/2-5/2	496
P I	1502.17	24		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2D$	5/2-5/2	496
P I	1503.12	3		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^4P$	3/2-3/2	496
P I	1503.48	3		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^4P$	5/2-3/2	496

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P I	1504.37	36		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2D$	3/2-3/2	496
P I	1504.72	6b		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2D$	5/2-3/2	496
P I	1505.84	2		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^4P$	3/2-1/2	496
P I	1506.63	21		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^4P$	3/2-5/2	496
P I	1506.98	18		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^4P$	5/2-5/2	496
P I?	1508.74	9w		$3s^23p^3 - 3s^23p^2(^3P)6s$	$^2D^\circ - ^4P$	5/2-1/2	496
P I	1515.10	6w					496
P I	1522.59	2					496
P I	1530.58	12		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^4D$	5/2-7/2	496
P I	1534.73	15		$3s^23p^3 - 3s^23p^2(^1D)4s$	$g^4S^\circ - ^2D$	3/2-5/2	496
P I	1541.69	30					496
P I	1543.26	45		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^4F$	5/2-7/2	496
P I	1545.95	45		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^4F$	3/2-5/2	496
P I	1546.32	9		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^4F$	5/2-5/2	496
P I	1548.43	180		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-7/2	496
P I	1551.04	105		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2F$	3/2-5/2	496
P I	1551.42	45		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-5/2	496
P I	1554.84	3		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2P$	3/2-3/2	496
P I	1555.25	6		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D - ^2P$	5/2-3/2	496
P I	1556.18	2					496
P I	1575.18	9		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2P^\circ - ^2D$	3/2-5/2	496
P I	1575.47	3		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2P^\circ - ^2D$	1/2-3/2	496
P I	1583.73	24		$3s^23p^3 - 3s^23p^2(^3P)6d$	$^2P^\circ - ^2D$	3/2-5/2	496
P I	1586.25	3		$3s^23p^3 - 3s^23p^2(^3P)6d$	$^2P^\circ - ^2D$	1/2-3/2	496
P I	1586.88	2		$3s^23p^3 - 3s^23p^2(^3P)6d$	$^2P^\circ - ^2D$	3/2-3/2	496
P I	1595.08	6		$3s^23p^3 - 3s^23p^2(^3P)8s$	$^2P^\circ - ^4P$	1/2-3/2	496
P I	1595.72	1		$3s^23p^3 - 3s^23p^2(^3P)8s$	$^2P^\circ - ^4P$	3/2-3/2	496
P I	1596.06	3		$3s^23p^3 - 3s^23p^2(^3P)6d$	$^2P^\circ - ^4D$	3/2-5/2	496
P I	1597.97	3		$3s^23p^3 - 3s^23p^2(^3P)6d$	$^2P^\circ - ^4D$	1/2-3/2	496
P I	1598.76	3					496
P I	1599.25	15		$3s^23p^3 - 3s^23p^2(^3P)8s$	$^2P^\circ - ^4P$	1/2-1/2	496
P I	1611.29	30		$3s^23p^3 - 3s^23p^2(^3P)7s$	$^2P^\circ - ^2P$	3/2-3/2	496
P I	1614.19	30		$3s^23p^3 - 3s^23p^2(^3P)7s$	$^2P^\circ - ^2P$	1/2-1/2	496
P I	1614.67	3					496
P I	1614.87	9		$3s^23p^3 - 3s^23p^2(^3P)7s$	$^2P^\circ - ^2P$	3/2-1/2	496
P I	1615.79	36		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2D^\circ - ^2P$	3/2-3/2	496
P I	1616.20	120		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2D^\circ - ^2P$	5/2-3/2	496
P I	1618.11	45		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2P^\circ - ^2D$	3/2-5/2	496
P I	1618.93	36		$3s^23p^3 - 3s^23p^2(^3P)7s$	$^2P^\circ - ^4P$	3/2-5/2	496
P I	1621.33	9		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2P^\circ - ^4P$	3/2-3/2	496
P I?	1622.08	3					496
P I	1623.83	75		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2D^\circ - ^2P$	3/2-1/2	496
P I	1623.99	30		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2P^\circ - ^2D$	1/2-3/2	496
P I	1624.43	2		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2P^\circ - ^4P$	3/2-5/2	496
P I	1624.67	3		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2P^\circ - ^2D$	3/2-3/2	496
P I	1625.40	30		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-5/2	496
P I	1625.80	75		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	496
P I	1627.86	9		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2D^\circ - ^4P$	5/2-5/2	496
P I	1629.17	60		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-3/2	496
P I	1629.59	15		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-3/2	496
P I	1633.69	2		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2D^\circ - ^4P$	3/2-3/2	496
P I	1634.10	21		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2D^\circ - ^4P$	5/2-3/2	496
P I	1635.79	9		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4P$	3/2-3/2	496
P I	1636.20	9		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4P$	5/2-3/2	496
P I	1638.68	3		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4P$	3/2-5/2	496
P I	1638.89	15		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2D^\circ - ^4P$	3/2-1/2	496
P I	1639.09	24		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4P$	5/2-5/2	496
P I	1652.97	30		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2P^\circ - ^2P$	1/2-1/2	496
P I	1653.68	24		$3s^23p^3 - 3s^23p^2(^3P)5d$	$^2P^\circ - ^2P$	3/2-1/2	496
P I	1671.07	210		$3s^23p^3 - 3s3p^4$	$^2D^\circ - ^2D$	3/2-3/2	496

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P I	1671.49	105		$3s^23p^3 - 3s3p^4$	$^2D^\circ - ^2D$	5/2-3/2	496
P I	1671.68	540	2	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - ^4P$	3/2-1/2	488,496
P I	1672.05	105		$3s^23p^3 - 3s3p^4$	$^2D^\circ - ^2D$	3/2-5/2	496
P I	1672.48	270		$3s^23p^3 - 3s3p^4$	$^2D^\circ - ^2D$	5/2-5/2	496
P I	1673.94	3					496
P I	1674.61	690	2	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - ^4P$	3/2-3/2	488,496
P I	1679.71	900	2	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - ^4P$	3/2-5/2	488,496
P I	1685.99	360	6	$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	488,496
P I	1688.64	9		$3s^23p^3 - 3s^23p^2(^3P)6s$	$^2P^\circ - ^4P$	1/2-3/2	496
P I	1689.25	105		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^2D$	3/2-5/2	496
P I	1690.17	30		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^4P$	1/2-3/2	496
P I	1690.90	9		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^4P$	3/2-3/2	496
P I	1691.75	60		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^2D$	1/2-3/2	496
P I	1692.48	15		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^2D$	3/2-3/2	496
P I	1694.06	300	6	$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	488,496
P I	1694.50	120	6	$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-5/2	488,496
P I	1695.35	45		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^4P$	3/2-5/2	496
P I	1706.41	180		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4D$	5/2-7/2	496
P I	1707.57	120		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4D$	3/2-5/2	496
P I	1708.03	3		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4D$	5/2-5/2	496
P I	1708.45	12		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4D$	3/2-3/2	496
P I	1708.90	3		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4D$	5/2-3/2	496
P I	1718.55	60		$3s^23p^3 - 3s^23p^2(^1S)4s$	$^2P^\circ - ^2S$	1/2-1/2	496
P I	1719.00	30		$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^2P$	3/2-3/2	496
P I	1719.31	90		$3s^23p^3 - 3s^23p^2(^1S)4s$	$^2P^\circ - ^2S$	3/2-1/2	496
P I	1727.85	15		$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^2P$	3/2-1/2	496
P I	1754.40	90		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4F$	5/2-7/2	496
P I	1755.86	9		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^2P$	1/2-3/2	496
P I	1756.65	9		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^2P$	3/2-3/2	496
P I	1757.47	60		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-1/2	496
P I	1757.95	60		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4F$	3/2-5/2	496
P I	1759.91	30		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-3/2	496
P I	1760.40	45		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2P$	5/2-3/2	496
P I	1761.67	30		$3s^23p^3 - 3s3p^4$	$^2D^\circ - ^2P$	3/2-1/2	496
P I	1768.45	60		$3s^23p^3 - 3s3p^4$	$^2D^\circ - ^2P$	3/2-3/2	496
P I	1768.94	45		$3s^23p^3 - 3s3p^4$	$^2D^\circ - ^2P$	5/2-3/2	496
P I	1774.99	750	1	$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-5/2	488,496
P I	1782.87	600	1	$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-3/2	488,496
P I	1787.68	540	1	$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-1/2	488,496
P I	1833.98	30		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2P^\circ - ^2P$	1/2-3/2	496
P I	1834.83	60		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2P^\circ - ^2P$	3/2-3/2	496
P I	1844.33	60		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2P^\circ - ^2P$	1/2-1/2	496
P I	1845.19	30		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2P^\circ - ^2P$	3/2-1/2	496
P I	1847.19	300		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^2D$	3/2-5/2	496
P I	1849.05	3					496
P I	1849.52	9					496
P I	1849.84	105		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2P^\circ - ^4P$	3/2-5/2	496
P I	1851.22	240		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^2D$	1/2-3/2	496
P I	1852.09	120		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^2D$	3/2-3/2	496
P I	1855.48	1		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^4P$	1/2-1/2	496
P I	1857.04	45		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2P^\circ - ^4P$	1/2-3/2	496
P I	1858.91	450	5	$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2D^\circ - ^2D$	3/2-	488,496
P I	1859.43	450	5	$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2D^\circ - ^2D$	5/2-	488,496
P I	1860.63	45		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^4P$	3/2-3/2	496
P I	1863.78	3		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2P^\circ - ^4P$	1/2-1/2	496
P I	1864.37	105		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^4P$	3/2-5/2	496
P I	1864.64	3		$3s^23p^3 - 3s^23p^2(^3P)5s$	$^2P^\circ - ^4P$	3/2-1/2	496
P I	1905.48	90		$3s^23p^3 - 3s3p^4$	$^2P^\circ - ^2D$	1/2-3/2	496
P I	1906.40	60		$3s^23p^3 - 3s3p^4$	$^2P^\circ - ^2D$	3/2-3/2	496
P I	1907.66	120		$3s^23p^3 - 3s3p^4$	$^2P^\circ - ^2D$	3/2-5/2	496

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P I	1954.01	12		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^4D$	3/2-5/2	496
P I	1954.20	21		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^4D$	1/2-3/2	496
P I	1955.16	21		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^4D$	3/2-3/2	496
P I	1955.79	21		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^4D$	1/2-1/2	496

Ground state $1s^22s^22p^63s^23p^2\ ^3P_0$

Ionization potential 159 100 cm^{-1}; 19.73 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P II	782.59	5		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	1-2	496
P II	782.72	1		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	1-1	496
P II	782.90	1		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	1-0	496
P II	783.71	5		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	0-1	496
P II	784.46	1		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	2-2	496
P II	784.81	5		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	2-3	496
P II	786.18	5		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$g^3P - ^3D^\circ$	1-2	496
P II	786.52	5		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$g^3P - ^3P^\circ$	2-1	496
P II	801.35	1		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$g^3P - ^3F^\circ$	1-2	496
P II	802.20	1		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$g^3P - ^3F^\circ$	2-3	496
P II	808.25	50		$3s^23p^2 - 3s^23p(^2P^\circ)5s$	$g^3P - ^3P^\circ$	1-2	496
P II	810.00	30		$3s^23p^2 - 3s^23p(^2P^\circ)5s$	$g^3P - ^3P^\circ$	0-1	496
P II	810.24	100		$3s^23p^2 - 3s^23p(^2P^\circ)5s$	$g^3P - ^3P^\circ$	2-2	496
P II	811.10	20		$3s^23p^2 - 3s^23p(^2P^\circ)5s$	$g^3P - ^3P^\circ$	1-1	496
P II	811.85	30		$3s^23p^2 - 3s^23p(^2P^\circ)5s$	$g^3P - ^3P^\circ$	1-0	496
P II	813.10	40		$3s^23p^2 - 3s^23p(^2P^\circ)5s$	$g^3P - ^3P^\circ$	2-1	496
P II	813.768	5		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$^1D - ^1P^\circ$	2-1	496,594
P II	824.66	30		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$^1D - ^1F^\circ$	2-3	496
P II	840.04	1		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$^1D - ^3D^\circ$	2-1	496
P II	841.21	20		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$^1D - ^1D^\circ$	2-2	496
P II	844.01	20		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$^1D - ^3D^\circ$	2-2	496
P II	861.61	10		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$^1D - ^3F^\circ$	2-2	496
P II	865.44	100		$3s^23p^2 - 3s^23p(^2P^\circ)5s$	$^1D - ^1P^\circ$	2-1	496
P II	872.84	5		$3s^23p^2 - 3s^23p(^2P^\circ)5s$	$^1D - ^3P^\circ$	2-1	496
P II?	906.89	5					496
P II	906.987	10		$3s^23p^2 - 3s3p^3$	$g^3P - ^3S^\circ$	0-1	496,594
P II	907.56	40		$3s^23p^2 - 3s^23p(^2P^\circ)4d$	$^1S - ^1P^\circ$	0-1	496
P II	908.38	1		$3s^23p^2 - 3s3p^3$	$g^3P - ^3S^\circ$	1-1	496
P II	910.88	5		$3s^23p^2 - 3s3p^3$	$g^3P - ^3S^\circ$	2-1	496
P II	913.59	10		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$^1D - ^1P^\circ$	2-1	496
P II	927.771	10		$3s3p^3 - 3s3p^2(^4P)3d$	$^5S^\circ - ^5P$	2-1	496,594
P II	928.550	10		$3s3p^3 - 3s3p^2(^4P)3d$	$^5S^\circ - ^5P$	2-2	496,594
P II	929.642	10		$3s3p^3 - 3s3p^2(^4P)3d$	$^5S^\circ - ^5P$	2-3	496,594
P II	961.04	1		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	0-1	496
P II	962.13	5		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-2	496
P II	962.57	5		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-1	496
P II	963.59	1		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-0	496
P II	963.81	5		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	0-1	496
P II	964.09	10		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	496
P II	964.95	10		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-2	496
P II	965.43	20		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-3	496
P II	966.52	10		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-2	496
P II	968.17	1		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-1	496
P II	969.38	5		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-2	496
P II	972.24	5		$3s^23p^2 - 3s^23p(^2P^\circ)5s$	$^1S - ^1P^\circ$	0-1	496
P II	972.807	30		$3s^23p^2 - 3s3p^3$	$g^3P - ^1P^\circ$	0-1	496,594
P II	974.36	5		$3s^23p^2 - 3s3p^3$	$g^3P - ^1P^\circ$	1-1	496
P II	977.258	1		$3s^23p^2 - 3s3p^3$	$g^3P - ^1P^\circ$	2-1	496,594
P II	1015.47	100		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	496
P II	1033.41	100		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$^1S - ^1P^\circ$	0-1	496
P II	1064.80	150		$3s^23p^2 - 3s3p^3$	$^1D - ^1P^\circ$	2-1	496
P II	1124.945	10		$3s^23p^2 - 3s^23p(^2P^\circ)4s$	$g^3P - ^1P^\circ$	0-1	496,594
P II	1130.925	10		$3s^23p^2 - 3s^23p(^2P^\circ)4s$	$g^3P - ^1P^\circ$	2-1	496,594
P II	1141.00	5		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3F^\circ$	1-2	496
P II	1142.88	20		$3s^23p^2 - 3s^23p(^2P^\circ)3d$	$g^3P - ^3F^\circ$	2-3	496

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P II?	1143.71	1					496
P II	1145.01	1		$3s^23p^2 - 3s^23p(^2P^o)3d$	$g^3P - {}^3F^o$	2-2	496
P II	1149.96	70	3	$3s^23p^2 - 3s^23p(^2P^o)4s$	$g^3P - {}^3P^o$	1-2	488,496
P II	1152.81	50	3	$3s^23p^2 - 3s^23p(^2P^o)4s$	$g^3P - {}^3P^o$	0-1	488,496
P II	1153.99	120	3	$3s^23p^2 - 3s^23p(^2P^o)4s$	$g^3P - {}^3P^o$	2-2	488,496
P II	1155.00	40	3	$3s^23p^2 - 3s^23p(^2P^o)4s$	$g^3P - {}^3P^o$	1-1	488,496
P II	1156.96	50	3	$3s^23p^2 - 3s^23p(^2P^o)4s$	$g^3P - {}^3P^o$	1-0	488,496
P II	1159.08	80	3	$3s^23p^2 - 3s^23p(^2P^o)4s$	$g^3P - {}^3P^o$	2-1	488,496
P II	1231.18	50		$3s^23p^2 - 3s3p^3$	${}^1S - {}^1P^o$	0-1	496
P II	1249.82	200		$3s^23p^2 - 3s^23p(^2P^o)4s$	${}^1D - {}^1P^o$	2-1	496
P II	1264.47	30		$3s^23p^2 - 3s^23p(^2P^o)3d$	${}^1D - {}^3F^o$	2-3	496
P II	1267.06	5		$3s^23p^2 - 3s^23p(^2P^o)3d$	${}^1D - {}^3F^o$	2-2	496
P II	1278.094	5		$3s^23p^2 - 3s^23p(^2P^o)4s$	${}^1D - {}^3P^o$	2-2	496,594
P II	1284.31	5		$3s^23p^2 - 3s^23p(^2P^o)4s$	${}^1D - {}^3P^o$	2-1	496
P II	1289.57	30		$3s^23p^2 - 3s3p^3$	$g^3P - {}^1D^o$	1-2	496
P II	1294.64	150		$3s^23p^2 - 3s3p^3$	$g^3P - {}^1D$	2-2	496
P II	1301.87	200	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^o$	0-1	488,496
P II	1304.47	200	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^o$	1-0	488,496
P II	1304.68	150	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^o$	1-1	488,496
P II	1305.48	350	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^o$	1-2	488,496
P II	1309.87	250	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^o$	2-1	488,496
P II	1310.70	600	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^o$	2-2	488,496
P II	1452.89	300		$3s^23p^2 - 3s3p^3$	${}^1D - {}^1D^o$	2-2	496
P II	1473.129	10		$3s^23p^2 - 3s3p^3$	${}^1D - {}^3P^o$	2-2	496,594
P II	1485.49	250		$3s^23p^2 - 3s^23p(^2P^o)4s$	${}^1S - {}^1P^o$	0-1	496
P II	1489.834	10		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3D^o - {}^3D$	1-1	496,594
P II	1494.990	10		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3D^o - {}^3D$	2-2	496,594
P II	1496.44	5		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3D^o - {}^3D$	3-3	496
P II	1506.44	30		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3D^o - {}^3G$	3-4	496
P II	1506.975	10		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3D^o - {}^3G$	2-3	496,594
P II	1512.87	5h		$3s3p^3 - 3s^23p(^2P^o)5p$	${}^3D^o - {}^1D$	1-2	496
P II	1521.62	300w		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3D^o - {}^3F$	3-4	496
P II	1522.11	4		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3D^o - {}^3F$	1-2	496
P II	1522.392	10		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3D^o - {}^3F$	3-3	496,594
P II	1522.59	5		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3D^o - {}^3F$	2-2	496
P II	1523.44	10		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3D^o - {}^1F$	2-3	496
P II	1525.58	1		$3s3p^3 - 3s^23p(^2P^o)5p$	${}^3D^o - {}^3S$	1-1	496
P II	1532.51	700w	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^o$	0-1	488,496
P II	1535.90	1000w	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^o$	1-2	488,496
P II	1536.39	700w	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^o$	1-1	488,496
P II	1542.29	1000w	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^o$	2-3	488,496
P II	1543.09	400	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^o$	2-2	488,496
P II	1543.61	150	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^o$	2-1	488,496
P II	1552.51	5h		$3s3p^3 - 3s^23p(^2P^o)5p$	${}^3D^o - {}^3D$	1-2	496
P II	1552.94	1		$3s3p^3 - 3s^23p(^2P^o)5p$	${}^3D^o - {}^3D$	2-2	496
P II	1553.392	1		$3s3p^3 - 3s^23p(^2P^o)5p$	${}^3D^o - {}^3P$	1-1	496,594
P II	1553.82	10		$3s3p^3 - 3s^23p(^2P^o)5p$	${}^3D^o - {}^3D$	3-2	496
P II	1734.88	1		$3s3p^3 - 3s^23p(^2P^o)4p$	${}^5S^o - {}^3D$	2-2	496
P II	1772.30	30		$3s^23p^2 - 3s3p^3$	${}^1D - {}^3D^o$	2-3	496
P II	1797.54	10		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3P^o - {}^1D$	2-2	496
P II	1798.37	5		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3P^o - {}^3D$	2-1	496
P II	1799.10	50		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3P^o - {}^1D$	1-2	496
P II	1799.91	20		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3P^o - {}^3D$	1-1	496
P II	1800.27	20		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3P^o - {}^3D$	0-1	496
P II	1805.11	30		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3P^o - {}^3D$	2-2	496
P II	1806.12	150		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3P^o - {}^3D$	2-3	496
P II	1806.67	50		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^3P^o - {}^3D$	1-2	496
P II	1828.63	30		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^1D^o - {}^1D$	2-2	496
P II	1836.47	10		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^1D^o - {}^3D$	2-2	496
P II	1837.51	20		$3s3p^3 - 3s^23p(^2P^o)4f$	${}^1D^o - {}^3D$	2-3	496

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P II	1844.06	5		$3s3p^3 - 3s^23p(^2P^\circ)4f$	$^3P^\circ - ^3F$	2-3	496
P II	1846.78	20		$3s3p^3 - 3s^23p(^2P^\circ)4f$	$^3P^\circ - ^1F$	2-3	496
P II	1850.61	20		$3s3p^3 - 3s^23p(^2P^\circ)5p$	$^3P^\circ - ^3S$	2-1	496
P II	1852.27	20		$3s3p^3 - 3s^23p(^2P^\circ)5p$	$^3P^\circ - ^3S$	1-1	496
P II	1852.65	10		$3s3p^3 - 3s^23p(^2P^\circ)5p$	$^3P^\circ - ^3S$	0-1	496
P II	1854.59	150		$3s3p^3 - 3s^23p(^2P^\circ)4f$	$^1D^\circ - ^3G$	2-3	496
P II	1864.22	150		$3s3p^3 - 3s^23p(^2P^\circ)5p$	$^1D^\circ - ^1D$	2-2	496
P II	1872.36	1		$3s3p^3 - 3s^23p(^2P^\circ)5p$	$^3P^\circ - ^3P$	2-2	496
P II	1876.79	100		$3s3p^3 - 3s^23p(^2P^\circ)4f$	$^1D^\circ - ^3F$	2-3	496
P II	1879.62	250		$3s3p^3 - 3s^23p(^2P^\circ)4f$	$^1D^\circ - ^1F$	2-3	496
P II	1928.30	5		$3s3p^3 - 3s^23p(^2P^\circ)5p$	$^1D^\circ - ^3D$	2-1	496
P II	1945.54	50		$3s3p^3 - 3s^23p(^2P^\circ)5p$	$^1D^\circ - ^1P$	2-1	496

Ground state $1s^22s^22p^63s^23p\ ^2P^\circ_{1/2}$

Ionization potential 243 290 cm^{-1}; 30.163 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P III?	497.17	1		$3s^23p - 3s^26s$	$g^2P^\circ - {}^2S$	3/2-1/2	597
P III	568.09	10		$3s^23p - 3s^25s$	$g^2P^\circ - {}^2S$	1/2-1/2	597
P III	569.90	200h		$3s^23p - 3s^25s$	$g^2P^\circ - {}^2S$	3/2-1/2	597
P III	579.98	1h		$3s^23p - 3s^24d$	$g^2P^\circ - {}^2D$	1/2-3/2	597
P III	581.898	1h		$3s^23p - 3s^24d$	$g^2P^\circ - {}^2D$	3/2-	597
P III	781.726	100		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	3/2-5/2	597
P III	782.977	100		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	1/2-3/2	597
P III	783.752	100		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	5/2-5/2	597
P III	785.392	100		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	3/2-1/2	597
P III	786.244	100		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	5/2-3/2	597
P III	844.635	100	5	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	1/2-3/2	488,597
P III	845.047	100	5	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	1/2-1/2	597
P III	845.656	100	5	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	3/2-5/2	488,597
P III	846.125	100b	5	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	3/2-3/2	597
P III	846.494	10b	5	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	3/2-1/2	597
P III	847.658	300b	5	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	5/2-7/2	488,597
P III	848.023	200d	5	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	5/2-5/2	597
P III	848.445	100	5	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	5/2-3/2	597
P III	848.636	300d		$3s^23p - 3s^24s$	$g^2P^\circ - {}^2S$	1/2-1/2	597
P III	852.679	500		$3s^23p - 3s^24s$	$g^2P^\circ - {}^2S$	3/2-1/2	597
P III	853.346	10		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	1/2-1/2	597
P III	854.223	100		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	1/2-3/2	597
P III	854.855	100		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	3/2-1/2	597
P III	855.618	500	4	$3s^23p - 3s^23d$	$g^2P^\circ - {}^2D$	1/2-3/2	488,597
P III	856.963	200		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	3/2-5/2	597
P III	858.139	100		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	5/2-3/2	597
P III	859.411	10		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	5/2-5/2	597
P III	859.667	800	4	$3s^23p - 3s^23d$	$g^2P^\circ - {}^2D$	3/2-5/2	488,597
P III	909.846	100		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2D - {}^2P^\circ$	5/2-3/2	597
P III	913.989	500	3	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	1/2-3/2	488,597
P III	917.130	400	3	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	1/2-1/2	488,597
P III	918.706	500	3	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	3/2-3/2	488,597
P III	921.863	500	3	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	3/2-1/2	488,597
P III	963.993	100b		$3s3p^2 - 3s^24f$	$^2D - {}^2F^\circ$	3/2-	597
P III	964.251	100		$3s3p^2 - 3s^24f$	$^2D - {}^2F^\circ$	5/2-	597
P III	972.807	300		$3s3p^2 - 2p^63p^3$	$^4P - {}^4S^\circ$	1/2-3/2	597
P III	974.776	300		$3s3p^2 - 2p^63p^3$	$^4P - {}^4S^\circ$	3/2-3/2	597
P III	977.888	400		$3s3p^2 - 2p^63p^3$	$^4P - {}^4S^\circ$	5/2-3/2	597
P III	998.000	800	2	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2S$	1/2-1/2	488,597
P III	1003.592	1000	2	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2S$	3/2-1/2	488,597
P III	1049.824	400		$3s3p^2 - 2p^63p^3$	$^2D - {}^2P^\circ$	3/2-1/2	597
P III	1050.518	100		$3s3p^2 - 2p^63p^3$	$^2D - {}^2P^\circ$	3/2-3/2	597
P III	1050.817	400		$3s3p^2 - 2p^63p^3$	$^2D - {}^2P^\circ$	5/2-3/2	597
P III	1093.627	200		$3s3p^2 - 3s^25p$	$^2S - {}^2P^\circ$	1/2-3/2	597
P III	1210.600	100		$3s3p^2 - 3s^25p$	$^2P - {}^2P^\circ$	1/2-3/2	597
P III	1283.949	10		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^2P - {}^2P^\circ$	1/2-3/2	597
P III	1290.134	1		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^2P - {}^2P^\circ$	3/2-3/2	597
P III	1318.91	10		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2P - {}^2P^\circ$	1/2-3/2	597
P III	1325.509	70		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^2P - {}^2P^\circ$	3/2-3/2	597
P III	1334.866	650	1	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2D$	1/2-3/2	488,597
P III	1337.498	70		$3s^23d - 3s^25p$	$^2D - {}^2P^\circ$	3/2-3/2	597
P III	1337.710	150		$3s^23d - 3s^25p$	$^2D - {}^2P^\circ$	5/2-3/2	597
P III	1343.687	70		$3s3p(^3P^\circ)3d - 3s3p(^3P^\circ)4f$	$^4P^\circ - {}^4D$	5/2-3/2	597
P III	1344.343	1000	1	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2D$	3/2-5/2	488,597
P III	1344.900	650	1	$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2D$	3/2-3/2	488,597

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P III	1346.998	200		$3s3p(^3P^\circ)3d - 3s3p(^3P^\circ)4f$	$^4P^\circ - ^4D$	3/2-3/2	597
P III	1347.508	10		$3s3p(^3P^\circ)3d - 3s3p(^3P^\circ)4f$	$^4P^\circ - ^4D$	3/2-5/2	597
P III	1348.449	10		$3s3p(^3P^\circ)3d - 3s3p(^3P^\circ)4f$	$^4P^\circ - ^4D$	1/2-1/2	597
P III	1349.110	200		$3s3p(^3P^\circ)3d - 3s3p(^3P^\circ)4f$	$^4P^\circ - ^4D$	1/2-3/2	597
P III	1354.957	10		$3s^24s - 3s^25p$	$^2S - ^2P^\circ$	1/2-3/2	597
P III	1370.39	10		$3s3p(^3P^\circ)3d - 3s3p(^3P^\circ)4f$	$^4D^\circ - ^4D$	1/2-3/2	597
P III	1372.01	100		$3s3p(^3P^\circ)3d - 3s3p(^3P^\circ)4f$	$^4D^\circ - ^4D$	3/2-5/2	597
P III	1372.711	300		$3s3p(^3P^\circ)3d - 3s3p(^3P^\circ)4f$	$^4D^\circ - ^4D$	5/2-3/2	597
P III	1374.780	100		$3s3p(^3P^\circ)3d - 3s3p(^3P^\circ)4f$	$^4D^\circ - ^4D$	7/2-7/2	597
P III	1379.873	500	7	$3s3p^2 - 2p^63p^3$	$^2D - ^2D^\circ$	3/2-5/2	488,597
P III	1380.464	1000	7	$3s3p^2 - 2p^63p^3$	$^2D - ^2D^\circ$	5/2-5/2	488,597
P III	1381.111	1000	7	$3s3p^2 - 2p^63p^3$	$^2D - ^2D^\circ$	3/2-3/2	488,597
P III	1381.633	800	7	$3s3p^2 - 2p^63p^3$	$^2D - ^2D^\circ$	5/2-3/2	488,597
P III	1429.242	100		$3s3p^2 - 2p^63p^3$	$^2S - ^2P^\circ$	1/2-1/2	597
P III	1430.409	200		$3s3p^2 - 2p^63p^3$	$^2S - ^2P^\circ$	1/2-3/2	597
P III	1447.512	200		$3s^2(^1S)4s - 3s3p(^3P^\circ)4s$	$^2S - ^2P^\circ$	1/2-3/2	597
P III?	1471.218	10					597
P III?	1492.031	500					597
P III	1501.551	700	6	$3s3p^2 - 3s^24p$	$^2D - ^2P^\circ$	3/2-3/2	488,597
P III	1502.273	1000	6	$3s3p^2 - 3s^24p$	$^2D - ^2P^\circ$	5/2-3/2	488,597
P III	1504.719	900b	6	$3s3p^2 - 3s^24p$	$^2D - ^2P^\circ$	3/2-1/2	597
P III	1618.665	600		$3s^23d - 3s^24f$	$^2D - ^2F^\circ$	3/2-	597
P III	1618.944	600		$3s^23d - 3s^24f$	$^2D - ^2F^\circ$	5/2-	597
P III	1635.799	200		$3s3p^2 - 2p^63p^3$	$^2P - ^2P^\circ$	1/2-1/2	597
P III	1637.377	100		$3s3p^2 - 2p^63p^3$	$^2P - ^2P^\circ$	1/2-3/2	597
P III	1645.914	200		$3s3p^2 - 2p^63p^3$	$^2P - ^2P^\circ$	3/2-1/2	597
P III	1647.546	300		$3s3p^2 - 2p^63p^3$	$^2P - ^2P^\circ$	3/2-3/2	597
P III	1674.26	1		$3s^24p - 3s^26s$	$^2P^\circ - ^2S$	1/2-1/2	597
P III	1678.12	10		$3s^24p - 3s^26s$	$^2P^\circ - ^2S$	3/2-1/2	597
P III	1693.03	100		$3s^24p - 3s^25d$	$^2P^\circ - ^2D$	1/2-	597
P III	1696.92	100		$3s^24p - 3s^25d$	$^2P^\circ - ^2D$	3/2-	597
P III	1756.82	10		$3s^23p - 3s3p^2$	$g^2P^\circ - ^4P$	1/2-1/2	597
P III	1757.68	100		$3s^23p - 3s3p^2$	$g^2P^\circ - ^4P$	3/2-5/2	597

Ground state $1s^22s^22p^63s^2\ ^1S_0$

Ionization potential 414 312.4 cm^{-1}; 51.367 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P IV	283.99	20h		$3s^2$ - 3s6p	g^1S - $^1P°$	0-1	597
P IV	312.443	160		$3s^2$ - 3s5p	g^1S - $^1P°$	0-1	597
P IV	359.628	20		3s3p - 3s6s	$^3P°$ - ^3S	2-1	597
P IV	388.315	240		$3s^2$ - 3s4p	g^1S - $^1P°$	0-1	597
P IV?	412.90	10h		3s3p - 3s5s	$^3P°$ - ^3S	0-1	597
P IV	415.022	20		3s3p - 3s5s	$^3P°$ - ^3S	1-1	597
P IV	415.815	40		3s3p - 3s5s	$^3P°$ - ^3S	2-1	597
P IV	444.249	20		3s3p - 3s4d	$^3P°$ - ^3D	1-	597
P IV	445.194	20		3s3p - 3s4d	$^3P°$ - ^3D	2-	597
P IV	472.957	80		3s3p - 3s5s	$^1P°$ - ^1S	1-0	597
P IV	522.02	10h		3s3p - 3s4d	$^1P°$ - ^1D	1-2	597
P IV	629.023	120	4	3s3p - 3s4s	$^3P°$ - ^3S	0-1	488,597
P IV	629.920	160	4	3s3p - 3s4s	$^3P°$ - ^3S	1-1	488,597
P IV	631.790	400	4	3s3p - 3s4s	$^3P°$ - ^3S	2-1	488,597
P IV	648.507	80		3s3d - 3s5f	^3D - $^3F°$	-4	597
P IV	649.69	20		3s3d - 3s5f	^3D - $^3F°$	-3	597
P IV	652.79	80		$2p^63p^2$ - $2p^63p(^2P°)4s$	^3P - $^3P°$	1-2	597
P IV	653.51	80		$2p^63p^2$ - $2p^63p(^2P°)4s$	^3P - $^3P°$	0-1	597
P IV	654.54	40		$2p^63p^2$ - $2p^63p(^2P°)4s$	^3P - $^3P°$	1-1	597
P IV	654.86	120		$2p^63p^2$ - $2p^63p(^2P°)4s$	^3P - $^3P°$	2-2	597
P IV	655.78	80		$2p^63p^2$ - $2p^63p(^2P°)4s$	^3P - $^3P°$	1-0	597
P IV	656.55	80		$2p^63p^2$ - $2p^63p(^2P°)4s$	^3P - $^3P°$	2-1	597
P IV	680.570	20		$2p^63p^2$ - $2p^63p(^2P°)4s$	^1D - $^1P°$	2-1	597
P IV	756.510	240		$2p^63p^2$ - $2p^63p(^2P°)3d$	^1D - $^1P°$	2-1	597
P IV	765.28	10		3s3d - 3s5p	^3D - $^1P°$	-1	597,487
P IV	776.366	120		3s3p - 3s4s	$^1P°$ - ^1S	1-0	597
P IV	823.181	800	3	3s3p - 3s3d	$^3P°$ - ^3D	0-1	488,597
P IV	824.726	800	3	3s3p - 3s3d	$^3P°$ - ^3D	1-	488,597
P IV	827.932	1000	3	3s3p - 3s3d	$^3P°$ - ^3D	2-	488,597
P IV	843.984	40		$2p^63p^2$ - $2p^63p(^2P°)4s$	^1S - $^1P°$	0-1	597
P IV	845.995	80		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3D°$	0-1	597
P IV	846.125	80b		3s3d - $2p^63p(^2P°)3d$	^1D - $^1D°$	2-2	597
P IV	846.494	40b		3s3d - $2p^63p(^2P°)3d$	^1D - $^1F°$	2-3	597
P IV	846.999	200		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3D°$	1-2	597
P IV	847.658	240b		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3D°$	1-1	597
P IV	849.764	160		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3D°$	2-3	597
P IV	850.390	120		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3D°$	2-2	597
P IV	851.09	10		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3D°$	2-1	597
P IV	860.449	80		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3P°$	1-0	597
P IV	861.552	40		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3P°$	1-1	597
P IV	863.325	120		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3P°$	1-2	597
P IV	865.04	120		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3P°$	2-1	597
P IV	866.84	20		$2p^63p^2$ - $2p^63p(^2P°)3d$	^3P - $^3P°$	2-2	597
P IV	875.132	440		3s3d - 3s4f	^3D - $^3F°$	-4	597
P IV	877.493	440		3s3d - 3s4f	^3D - $^3F°$	-3	597
P IV	879.310	80		3s3d - 3s4f	^3D - $^3F°$	-2	597
P IV	907.590	80		$2p^63p^2$ - $2p^63p(^2P°)3d$	^1D - $^1D°$	2-2	597
P IV	908.050	160		$2p^63p^2$ - $2p^63p(^2P°)3d$	^1D - $^1F°$	2-3	597
P IV	950.662	1000	1	$3s^2$ - 3s3p	g^1S - $^1P°$	0-1	488,597
P IV	963.993	100b		$2p^63p^2$ - $2p^63p(^2P°)3d$	^1S - $^1P°$	0-1	597
P IV	1006.218	40		3s3d - 3s4p	^1D - $^1P°$	2-1	597
P IV	1025.564	160	2	3s3p - $2p^63p^2$	$^3P°$ - ^3P	1-2	488,597
P IV	1028.093	40	2	3s3p - $2p^63p^2$	$^3P°$ - ^3P	0-1	488,597
P IV	1030.511	400	2	3s3p - $2p^63p^2$	$^3P°$ - ^3P	2-2	488,597
P IV	1033.099	320	2	3s3p - $2p^63p^2$	$^3P°$ - ^3P	1-0	488,597

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P IV	1035.505	320	2	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	2-1	488,597
P IV	1064.60	120		$3s3d - 2p^63p(^2P^\circ)3d$	$^3D - ^3D^\circ$	-3	597
P IV	1065.554	120		$3s3d - 2p^63p(^2P^\circ)3d$	$^3D - ^3D^\circ$	-2	597
P IV	1066.640	80		$3s3d - 2p^63p(^2P^\circ)3d$	$^3D - ^3D^\circ$	-1	597
P IV?	1072.528	120					597
P IV?	1073.373	120					597
P IV	1086.943	80		$3s3d - 2p^63p(^2P^\circ)3d$	$^3D - ^3P^\circ$	-0	597
P IV	1088.608	120		$3s3d - 2p^63p(^2P^\circ)3d$	$^3D - ^3P^\circ$	-1	597
P IV	1091.442	160		$3s3d - 2p^63p(^2P^\circ)3d$	$^3D - ^3P^\circ$	-2	597
P IV	1093.318	80		$3s4s - 2p^63p(^2P^\circ)4s$	$^3S - ^3P^\circ$	1-2	597
P IV	1098.183	80		$3s4s - 2p^63p(^2P^\circ)4s$	$^3S - ^3P^\circ$	1-1	597
P IV	1101.65	40		$3s4s - 2p^63p(^2P^\circ)4s$	$^3S - ^3P^\circ$	1-0	597
P IV	1111.127	40		$3s3p - 3s3d$	$^3P^\circ - ^1D$	1-2	597
P IV	1116.915	20		$3s3p - 3s3d$	$^3P^\circ - ^1D$	2-2	597
P IV	1118.586	160		$3s3p - 2p^63p^2$	$^1P^\circ - ^1S$	1-0	597
P IV	1161.783	40		$3s4s - 3s5p$	$^1S - ^1P^\circ$	0-1	597
P IV	1197.822	40		$3s4p - 3s5d$	$^1P^\circ - ^1D$	1-2	597
P IV	1203.410	40		$3s4p - 3s5d$	$^3P^\circ - ^3D$	0-1	597
P IV	1204.302	40		$3s4p - 3s5d$	$^3P^\circ - ^3D$	1-2	597
P IV	1206.513	40d		$3s4p - 3s5d$	$^3P^\circ - ^3D$	2-3	597
P IV	1264.481	40		$3s4s - 2p^63p(^2P^\circ)4s$	$^1S - ^1P^\circ$	0-1	597
P IV	1467.424	40		$3s^2 - 3s3p$	$g^1S - ^3P^\circ$	0-1	597
P IV	1484.506	240		$3s3d - 3s4p$	$^3D - ^3P^\circ$	-2	597
P IV	1487.796	160		$3s3d - 3s4p$	$^3D - ^3P^\circ$	-1	597
P IV	1489.101	160		$3s3d - 3s4p$	$^3D - ^3P^\circ$	-0	597
P IV?	1614.85	80		$2p^63p^2 - 3s4p$	$^1S - ^1P^\circ$	0-1	597
P IV	1640.476	120		$3s3p - 2p^63p^2$	$^1P^\circ - ^1D$	1-2	597
P IV	1673.759	20		$3s3p - 2p^63p^2$	$^1P^\circ - ^3P$	1-0	597
P IV	1691.807	40		$3s4p - 3s5s$	$^1P^\circ - ^1S$	1-0	597
P IV	1888.652	400	5	$3s3p - 3s3d$	$^1P^\circ - ^1D$	1-2	488,597
P IV	1902.62	40		$3s4p - 3s5s$	$^3P^\circ - ^3S$	0-1	597
P IV	1904.80	40		$3s4p - 3s5s$	$^3P^\circ - ^3S$	1-1	597
P IV	1910.18	40		$3s4p - 3s5s$	$^3P^\circ - ^3S$	2-1	597

Ground state $1s^22s^22p^63s\ ^2S_{1/2}$

Ionization potential 524 463 cm^{-1}; 65.023 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P V	210.004	10		3s - 8p	$g^2S - ^2P^\circ$	½-	597
P V	217.220	20		3s - 7p	$g^2S - ^2P^\circ$	½-	597
P V	229.832	200		3s - 6p	$g^2S - ^2P^\circ$	½-3/2	597
P V	255.596	500		3s - 5p	$g^2S - ^2P^\circ$	½-3/2	597
P V	255.688	500		3s - 5p	$g^2S - ^2P^\circ$	½-½	597
P V	264.938	300		3p - 7d	$^2P^\circ - ^2D$	3/2-	597
P V	273.13	10		3p - 7s	$^2P^\circ - ^2S$	3/2-½	597
P V	280.609	150		3p - 6d	$^2P^\circ - ^2D$	3/2-	597
P V	296.112	70		3p - 6s	$^2P^\circ - ^2S$	3/2-½	597
P V	310.579	200		3p - 5d	$^2P^\circ - ^2D$	½-	597
P V	311.347	250		3p - 5d	$^2P^\circ - ^2D$	3/2-	597
P V	328.455	300		3s - 4p	$g^2S - ^2P^\circ$	½-3/2	597
P V	328.768	300		3s - 4p	$g^2S - ^2P^\circ$	½-½	597
P V	347.237	150		3p - 5s	$^2P^\circ - ^2S$	½-½	597
P V	348.194	250		3p - 5s	$^2P^\circ - ^2S$	3/2-½	597
P V	389.500	200		3p - 4d	$^2P^\circ - ^2D$	½-3/2	597
P V	390.700	550		3p - 4d	$^2P^\circ - ^2D$	3/2-5/2	597
P V	410.073	150h		3d - 6f	$^2D - ^2F^\circ$		597
P V	475.610	550h		3d - 5f	$^2D - ^2F^\circ$		597
P V	542.567	500		3p - 4s	$^2P^\circ - ^2S$	½-½	597
P V	544.914	550		3p - 4s	$^2P^\circ - ^2S$	3/2-½	597
P V	673.888	650		3d - 4f	$^2D - ^2F^\circ$		597
P V	865.435	1000		3p - 3d	$^2P^\circ - ^2D$	½-3/2	597
P V	871.396	1000d		3p - 3d	$^2P^\circ - ^2D$	3/2-5/2	597
P V	997.641	200		3d - 4p	$^2D - ^2P^\circ$	5/2-3/2	597
P V	1000.360	200		3d - 4p	$^2D - ^2P^\circ$	3/2-½	597
P V	1117.979	1000		3s - 3p	$g^2S - ^2P^\circ$	½-3/2	597
P V	1128.006	650		3s - 3p	$g^2S - ^2P^\circ$	½-½	597
P V	1385.11	20		4p - 5s	$^2P^\circ - ^2S$	3/2-½	597
P V	1447.92	150		4d - 5f	$^2D - ^2F^\circ$	3/2-	597
P V	1610.54	20		4f - 5g	$^2F^\circ - ^2G$		597

Ground state $1s^2 2s^2 2p^6\ ^1S_0$

Ionization potential 1 778 250 cm^{-1}; 220.47 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P VI	57.932	P		$2p^6 - 2p^5(^2P^\circ)9d$	$g\,^1S - 3\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	58.294	P		$2p^6 - 2p^5(^2P^\circ)8d$	$g\,^1S - 3\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	58.727	P		$2p^6 - 2p^5(^2P^\circ)7d$	$g\,^1S - 1\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	58.956	P		$2p^6 - 2p^5(^2P^\circ)7d$	$g\,^1S - 3\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	59.775	P		$2p^6 - 2p^5(^2P^\circ)6d$	$g\,^1S - 1\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	60.016	P		$2p^6 - 2p^5(^2P^\circ)6d$	$g\,^1S - 3\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	60.572	P		$2p^6 - 2p^5(^2P^\circ)6s$	$g\,^1S - 1\frac{1}{2}[1\frac{1}{2}]^\circ$	0-1	487
P VI	61.622	P		$2p^6 - 2p^5(^2P^\circ)5d$	$g\,^1S - 1\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	61.869	P		$2p^6 - 2p^5(^2P^\circ)5d$	$g\,^1S - 3\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	61.970	P		$2p^6 - 2p^5(^2P^\circ)5d$	$g\,^1S - 3\frac{1}{2}[1\frac{1}{2}]^\circ$	0-1	487
P VI	63.177	P		$2p^6 - 2p^5(^2P^\circ)5s$	$g\,^1S - 1\frac{1}{2}[1\frac{1}{2}]^\circ$	0-1	487
P VI	63.450	P		$2p^6 - 2p^5(^2P^\circ)5s$	$g\,^1S - 3\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	65.308	P		$2p^6 - 2p^5(^2P^\circ)4d$	$g\,^1S - 1\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	65.640	P		$2p^6 - 2p^5(^2P^\circ)4d$	$g\,^1S - 3\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	65.940	P		$2p^6 - 2p^5(^2P^\circ)4d$	$g\,^1S - 3\frac{1}{2}[1\frac{1}{2}]^\circ$	0-1	487
P VI	69.121	P		$2p^6 - 2p^5(^2P^\circ)4s$	$g\,^1S - 1\frac{1}{2}[1\frac{1}{2}]^\circ$	0-1	487
P VI	69.452	P		$2p^6 - 2p^5(^2P^\circ)4s$	$g\,^1S - 3\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	74.951	P		$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - 1\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	75.648	P		$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - 3\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487
P VI	76.534	P		$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - 3\frac{1}{2}[1\frac{1}{2}]^\circ$	0-1	487
P VI	90.647	P		$2p^6 - 2p^5(^2P^\circ)3s$	$g\,^1S - 1\frac{1}{2}[1\frac{1}{2}]^\circ$	0-1	487
P VI	91.471	P		$2p^6 - 2p^5(^2P^\circ)3s$	$g\,^1S - 3\frac{1}{2}[3\frac{1}{2}]^\circ$	0-1	487

Ground state $1s^22s^22p^5\ ^2P^o_{3/2}$

Ionization potential 2 124 300 cm^{-1}; 263.37 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P VII	54.708	P		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2P$	3/2-3/2	487
P VII	54.887	P		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2P$	1/2-1/2	487
P VII	56.174	P		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2P$	3/2-1/2	487
P VII	56.282	P		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2D$	1/2-3/2	487
P VII	56.322	P		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2D$	3/2-5/2	487
P VII	56.338	P		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2P$	1/2-3/2	487
P VII	58.972	P		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	3/2-3/2	487
P VII	59.028	P		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	1/2-1/2	487
P VII	62.245	P		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^o - ^2D$	3/2-5/2	487
P VII	62.515	P		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^o - ^2D$	1/2-3/2	487
P VII	64.286	P		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2S$	3/2-1/2	487
P VII	64.361	P		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2D$	3/2-5/2	487
P VII	64.579	P		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	3/2-1/2	487
P VII	64.587	P		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2S$	1/2-1/2	487
P VII	64.635	P		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2D$	1/2-3/2	487
P VII	64.729	P		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	1/2-3/2	487
P VII	66.432	P		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2P$	3/2-1/2	487
P VII	66.488	P		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2P$	1/2-3/2	487
P VII	66.576	P		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2D$	3/2-5/2	487
P VII	66.691	P		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2D$	1/2-3/2	487
P VII	66.805	P		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^4P$	3/2-5/2	487
P VII	66.989	P		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^4P$	1/2-3/2	487
P VII	72.684	P		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^o - ^2S$	3/2-1/2	487
P VII	73.070	P		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^o - ^2S$	1/2-1/2	487
P VII	75.924	P		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^o - ^2D$	3/2-5/2	487
P VII	78.285	P		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^2P$	3/2-3/2	487
P VII	78.414	P		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^2P$	1/2-1/2	487
P VII	79.382	P		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^4P$	3/2-5/2	487
P VII	79.561	P		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^4P$	1/2-3/2	487
P VII	80.507	P		$2s2p^6 - 2s2p^5(^3P^o)3s$	$^2S - ^2P^o$	1/2-1/2	487
P VII	80.813	P		$2s2p^6 - 2s2p^5(^3P)3s$	$^2S - ^2P^o$	1/2-3/2	487
P VII	219.910	P		$2s^22p^5 - 2s2p^6$	$g^2P^o - ^2S$	3/2-1/2	487
P VII	223.482	P		$2s^22p^5 - 2s2p^6$	$g^2P^o - ^2S$	1/2-1/2	487

Ground state $1s^22s^22p^4\ ^3P_2$

Ionization potential 2 495 000 cm^{-1}; 309.3 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P VIII	48.859	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	2-3	487
P VIII	55.672	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-3	487
P VIII	55.710	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-2	487
P VIII	55.876	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-2	487
P VIII	55.926	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-1	487
P VIII	56.056	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-2	487
P VIII	56.106	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-1	487
P VIII	56.138	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-0	487
P VIII	56.171	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - ^3P^\circ$	0-1	487
P VIII	57.042	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3D^\circ$	2-	487
P VIII	57.230	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - ^3D^\circ$	1-	487
P VIII	58.018	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1F^\circ$	2-3	487
P VIII	58.506	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1D^\circ$	2-2	487
P VIII	58.776	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - ^1P^\circ$	2-1	487
P VIII	59.302	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	2-3	487
P VIII	59.516	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	1-	487
P VIII	64.051	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-2	487
P VIII	64.100	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-1	487
P VIII	64.288	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-2	487
P VIII	64.337	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-1	487
P VIII	64.361	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-0	487
P VIII	64.423	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$g^3P - ^3P^\circ$	0-1	487
P VIII	65.788	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - ^3D^\circ$	2-3	487
P VIII	66.051	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - ^3D^\circ$	1-	487
P VIII	67.587	P		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$^1D - ^1D^\circ$	2-2	487
P VIII	68.384	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - ^3S^\circ$	2-1	487
P VIII	68.385	P		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1S - ^1P^\circ$	0-1	487
P VIII	68.654	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - ^3S^\circ$	1-1	487
P VIII	68.751	P		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - ^3S^\circ$	0-1	487
P VIII	196.761	P		$2s^22p^4 - 2s2p^5$	$^1D - ^1P^\circ$	2-1	487
P VIII	222.366	P		$2s^22p^4 - 2s2p^5$	$^1S - ^1P^\circ$	0-1	487
P VIII	244.551	P		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	2-1	487
P VIII	246.318	P		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-0	487
P VIII	247.644	P		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	2-2	487
P VIII	248.043	P		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-1	487
P VIII	249.322	P		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	0-1	487
P VIII	251.225	P		$2s^22p^4 - 2s2p^5$	$g^3P - ^3P^\circ$	1-2	487

Ground state $1s^22s^22p^3\ ^4S^\circ_{3/2}$

Ionization potential 2 997 600 cm^{-1}; 371.6 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P IX	41.556	P		$2s^22p^3 - 2s^22p^2(^1D)4d$	$^2D^\circ - ^2F$	5/2-7/2	487
P IX	48.925	P		$2s^22p^3 - 2s2p^3(^5S^\circ)3p$	$g^4S^\circ - ^4P$	3/2-	487
P IX	50.483	P		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-1/2	487
P IX	50.511	P		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-3/2	487
P IX	50.560	P		$2s^22p^3 - 2s^22p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-5/2	487
P IX	51.076	P		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2D$	5/2-5/2	487
P IX	51.156	P		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-7/2	487
P IX	51.861	P		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	487
P IX	51.889	P		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-3/2	487
P IX	52.160	P		$2s^22p^3 - 2s^22p^2(^1D)3d$	$^2P^\circ - ^2D$	3/2-5/2	487
P IX	52.552	P		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	487
P IX	52.709	P		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	487
P IX	55.066	P		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	5/2-	487
P IX	55.220	P		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	3/2-	487
P IX	55.299	P		$2s2p^4 - 2s2p^3(^5S^\circ)3d$	$^4P - ^4D^\circ$	1/2-	487
P IX	57.083	P		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-5/2	487
P IX	57.266	P		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-3/2	487
P IX	57.339	P		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - ^4P$	3/2-1/2	487
P IX	57.683	P		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - ^2D$	5/2-5/2	487
P IX	57.711	P		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - ^2D$	3/2-3/2	487
P IX	194.612	P		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-1/2	487
P IX	197.246	P		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	5/2-3/2	487
P IX	283.246	P		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-1/2	487
P IX	285.356	P		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-3/2	487
P IX	289.528	P		$2s^22p^3 - 2s2p^4$	$g^4S^\circ - ^4P$	3/2-5/2	487
P IX	308.652	P		$2s2p^4 - 2p^5$	$^2P - ^2P^\circ$	3/2-1/2	487
P IX	314.772	P		$2s2p^4 - 2p^5$	$^2P - ^2P^\circ$	1/2-1/2	487
P IX	314.951	P		$2s2p^4 - 2p^5$	$^2P - ^2P^\circ$	3/2-3/2	487
P IX	321.326	P		$2s2p^4 - 2p^5$	$^2P - ^2P^\circ$	1/2-3/2	487

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Ground state $1s^22s^22p^2\ ^3P_0$

Ionization potential 3 423 000 cm^{-1}; 424.4 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P X	45.905	P		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-1	487
P X	45.931	P		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-2	487
P X	45.963	P		$2s2p^3 - 2s2p^2(^4P)3d$	$^5S^\circ - ^5P$	2-3	487
P X	46.018	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	0-1	487
P X	46.070	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-0	487
P X	46.090	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-1	487
P X	46.120	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	1-2	487
P X	46.201	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-1	487
P X	46.231	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3P^\circ$	2-2	487
P X	46.245	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	0-1	487
P X	46.294	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	1-2	487
P X	46.334	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$g^3P - ^3D^\circ$	2-3	487
P X	46.636	P		$2s2p^3 - 2s2p^2(^2D)3d$	$^3D^\circ - ^3F$		487
P X	46.769	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^1F^\circ$	2-3	487
P X	47.896	P		$2s^22p^2 - 2s^22p(^2P^\circ)3d$	$^1D - ^1D^\circ$	2-2	487
P X	51.019	P		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-2	487
P X	51.125	P		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	0-1	487
P X	51.155	P		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-2	487
P X	51.214	P		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-1	487
P X	51.262	P		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	1-0	487
P X	51.351	P		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$g^3P - ^3P^\circ$	2-1	487
P X	52.158	P		$2s^22p^2 - 2s^22p(^2P^\circ)3s$	$^1D - ^1P^\circ$	2-1	487
P X	52.594	P		$2s2p^3 - 2s2p^2(^2D)3s$	$^3P^\circ - ^3D$	2-	487
P X	309.444	P		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	0-1	487
P X	312.872	P		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	1-2	487
P X	318.258	P		$2s^22p^2 - 2s2p^3$	$g^3P - ^3D^\circ$	2-3	487

Ground state $1s^22s^22p\ ^2P^\circ_{1/2}$

Ionization potential 3 867 500 cm^{-1}; 479.5 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P XI	42.006	P		$2s2p^2$ - $2s2p(^1P^\circ)3d$	^2D - $^2F^\circ$	5/2-7/2	487
P XI	42.468	P		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	3/2-5/2	487
P XI	42.479	P		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^4P - $^4D^\circ$	5/2-7/2	487
P XI	42.599	P		$2s^22p$ - $2s^23d$	$g\,^2P^\circ$ - ^2D	1/2-3/2	487
P XI	42.764	P		$2s^22p$ - $2s^23d$	$g\,^2P^\circ$ - ^2D	3/2-5/2	487
P XI	43.488	P		$1s^22p^3$ - $2p^2(^3P)3d$	$^4S^\circ$ - ^4P	3/2-3/2	487
P XI	43.529	P		$1s^22p^3$ - $2p^2(^3P)3d$	$^4S^\circ$ - ^4P	3/2-5/2	487
P XI	44.115	P		$2s2p^2$ - $2s2p(^3P^\circ)3d$	^2D - $^2F^\circ$	5/2-7/2	487
P XI	45.997	P		$2s^22p$ - $2s^23s$	$g\,^2P^\circ$ - ^2S	1/2-1/2	487
P XI	46.203	P		$2s^22p$ - $2s^23s$	$g\,^2P^\circ$ - ^2S	3/2-1/2	487
P XI	231.669	P		$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2P	1/2-3/2	487
P XI	234.841	P		$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2P	1/2-1/2	487
P XI	236.995	P		$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2P	3/2-3/2	487
P XI	240.315	P		$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2P	3/2-1/2	487
P XI	325.214	P		$2s^22p$ - $2s2p^2$	$g\,^2P^\circ$ - ^2D	3/2-	487

Ground state $1s^22s^2\ ^1S_0$

Ionization potential 4 520 500 cm^{-1}; 560.5 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P XII	36.978	P		2s2p - 2p3p	$^3P^\circ - ^3D$	2-3	487
P XII	37.345	P		$2s^2$ - 2s3p	$g^1S - ^1P^\circ$	0-1	487
P XII	39.316	P		2s2p - 2s3d	$^3P^\circ - ^3D$	0-1	487
P XII	39.358	P		2s2p - 2s3d	$^3P^\circ - ^3D$	1-2	487
P XII	39.450	P		2s2p - 2s3d	$^3P^\circ - ^3D$	2-3	487
P XII	40.431	P		$1s^22p^2$ - $1s^22p3d$	$^3P - ^3D^\circ$	2-3	487
P XII	41.638	P		2s2p - 2s3d	$^1P^\circ - ^1D$	1-2	487
P XII	278.676	P		$2s^2$ - 2s2p	$g^1S - ^1P^\circ$	0-1	487

Ground state $1s^22s\ ^2S_{1/2}$

Ionization potential 4 933 060 cm^{-1}; 611.6 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P XIII	35.086	P		2s - 3p	$g^2S - {}^2P^\circ$	½-3½	487
P XIII	35.157	P		2s - 3p	$g^2S - {}^2P^\circ$	½-½	487
P XIII	38.652	P		2p - 3s	${}^2P^\circ - {}^2S$	½-½	487
P XIII	38.825	P		2p - 3s	${}^2P^\circ - {}^2S$	3½-½	487
P XIII	110.969	P		3d - 4f	${}^2D - {}^2F^\circ$	5½-7½	487
P XIII	456.100	P		2s - 2p	$g^2S - {}^2P^\circ$	½-3½	487
P XIII	481.417	P		2s - 2p	$g^2S - {}^2P^\circ$	½-½	487

Ground state 1s $^2S_{1/2}$

Ionization potential 24 759 943 cm^{-1}; 3069.76 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
P XV	4.154	P		1s - 6p	g^2S - $^2P^\circ$	½-	309
P XV	4.207	P		1s - 5p	g^2S - $^2P^\circ$	½-	309
P XV	4.308	P		1s - 4p	g^2S - $^2P^\circ$	½-	309
P XV	4.543	P		1s - 3p	g^2S - $^2P^\circ$	½-	309
P XV	5.383	P		1s - 2p	g^2S - $^2P^\circ$	½-	309
P XV	17.60	P		2 - 7			309
P XV	18.18	P		2 - 6			309
P XV	19.24	P		2 - 5			309
P XV	21.54	P		2 - 4			309
P XV	29.07	P		2 - 3			309
P XV	44.59	P		3 - 7			309
P XV	48.53	P		3 - 6			309
P XV	56.87	P		3 - 5			309
P XV	83.2	P		3 - 4			309
P XV	96.13	P		4 - 7			309
P XV	116.5	P		4 - 6			309
P XV	179.8	P		4 - 5			309
P XV	206.6	P		5 - 7			309
P XV	331.1	P		5 - 6			309
P XV	549.3	P		6 - 7			309

Unclassified lines

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S	46.713	50					233
S	46.765	50					233
S	48.362	20					233
S	49.990	120					233

Ground state $1s^22s^22p^63s^23p^4\ ^3P_2$

Ionization potential 83 559.3 cm^{-1}; 10.360 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S I	1241.9	65		$3s^23p^4 - 3s^23p^3(^4S^\circ)8s$	$g^3P - ^3S^\circ$	2-1	599,769
S I	1247.17	65		$3s^23p^4 - 3s^23p^3(^4S^\circ)6d$	$g^3P - ^3D^\circ$	2-3	599,769
S I	1262.83	65		$3s^23p^4 - 3s^23p^3(^4S^\circ)7s$	$g^3P - ^3S^\circ$	2-1	599
S I	1269.20	65		$3s^23p^4 - 3s^23p^3(^4S^\circ)7s$	$g^3P - ^3S^\circ$	1-1	599
S I	1270.78	130		$3s^23p^4 - 3s^23p^3(^4S^\circ)5d$	$g^3P - ^3D^\circ$	2-	599
S I	1272.07	35		$3s^23p^4 - 3s^23p^3(^4S^\circ)7s$	$g^3P - ^3S^\circ$	0-1	599
S I	1277.24	170d		$3s^23p^4 - 3s^23p^3(^4S^\circ)5d$	$g^3P - ^3D^\circ$	1-2	599
S I	1280.13	130		$3s^23p^4 - 3s^23p^3(^4S^\circ)5d$	$g^3P - ^3D^\circ$	0-1	599
S I?	1283.11	15					599
S I	1295.661	500	9	$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - ^3P^\circ$	2-2	488,599,769
S I	1296.174	400	9	$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - ^3P^\circ$	2-1	488,599,769
S I	1302.344	500	9	$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - ^3P^\circ$	1-2	488,599,769
S I	1302.865	400	9	$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - ^3P^\circ$	1-1	488,599,769
S I	1303.114	400	9	$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - ^3P^\circ$	1-0	488,599,769
S I	1303.42	130		$3s^23p^4 - 3s^23p^3(^4S^\circ)6s$	$g^3P - ^3S^\circ$	2-1	599
S I	1305.885	400	9	$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - ^3P^\circ$	0-1	488,599,769
S I	1310.21	170		$3s^23p^4 - 3s^23p^3(^4S^\circ)6s$	$g^3P - ^3S^\circ$	1-1	599
S I	1313.25	130		$3s^23p^4 - 3s^23p^3(^4S^\circ)6s$	$g^3P - ^3S^\circ$	0-1	599
S I	1316.57	330	8	$3s^23p^4 - 3s^23p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	2-3	488,599,769
S I?	1318.97	130					599
S I	1323.521	230	8	$3s^23p^4 - 3s^23p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	1-2	488,599,769
S I	1326.635	170	8	$3s^23p^4 - 3s^23p^3(^4S^\circ)4d$	$g^3P - ^3D^\circ$	0-1	488,599,769
S I?	1353.47	35					599
S I?	1363.04	100					599
S I	1381.571	330	7	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	2-1	488,599,769
S I	1385.524	230	7	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	1-0	488,599,769
S I	1388.463	400	7	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	2-2	488,599,769
S I	1389.160	230	7	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	1-1	488,599,769
S I	1392.607	330	7	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	0-1	488,599,769
S I	1396.147	400	7	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	1-2	488,599,769
S I	1401.541	330	6	$3s^23p^4 - 3s^23p^3(^4S^\circ)5s$	$g^3P - ^3S^\circ$	2-1	488,599,769
S I	1409.368	330	6	$3s^23p^4 - 3s^23p^3(^4S^\circ)5s$	$g^3P - ^3S^\circ$	1-1	488,599,769
S I	1412.899	230	6	$3s^23p^4 - 3s^23p^3(^4S^\circ)5s$	$g^3P - ^3S^\circ$	0-1	488,599,769
S I	1425.065	500	5	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	2-3	488,599,769
S I	1425.229	400	5	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	2-2	488,599,769
S I	1433.328	500	5	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	1-	488,599,769
S I	1437.005	400	5	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - ^3D^\circ$	0-1	488,599,769
S I	1444.317	330		$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - ^1D^\circ$	2-2	599,769
S I	1448.254	500	12	$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$^1D - ^1P^\circ$	2-1	488,599,769
S I	1471.82	130		$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$^1D - ^3P^\circ$	2-2	599
S I	1472.993	670	4	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - ^5D^\circ$	2-3	488,599,769
S I	1474.005	730	3	$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	2-3	488,599,769
S I	1474.390	500	3	$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	2-2	488,599,769
S I	1474.569	330	3	$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	2-1	488,599,769
S I	1481.680	500	4	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - ^5D^\circ$	1-2	488,599,769
S I	1483.036	670	3	$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	1-2	488,599,769
S I	1483.232	500	3	$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	1-1	488,599,769
S I	1485.613	230	4	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - ^5D^\circ$	0-1	488,599,769
S I	1487.149	500	3	$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - ^3D^\circ$	0-1	488,599,769
S I	1592.72	65		$3s^23p^4 - 3s3p^5$	$^1D - ^3P^\circ$	2-2	599
S I	1641.30	200		$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$^1D - ^3D^\circ$	2-2	599
S I	1666.691	730	11	$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$^1D - ^1D^\circ$	2-2	488,599,769
S I	1687.49	330		$3s^23p^4 - 3s3p^5$	$^1S - ^1P^\circ$	0-1	599,769
S I	1704.99	170		$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$^1D - ^5D^\circ$	2-	599
S I	1706.38	270	10	$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$^1D - ^3D^\circ$	2-3	488,599

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S I	1707.13	270	10	$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$^1D - ^3D^\circ$	2-1	488,599
S I?	1713.54	35					599
S I	1782.258	500	13	$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$^1S - ^1P^\circ$	0-1	488,599,769
S I	1807.341	950	2	$3s^23p^4 - 3s^23p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	2-1	488,599,769
S I	1820.361	850	2	$3s^23p^4 - 3s^23p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	1-1	488,599,769
S I	1826.261	850	2	$3s^23p^4 - 3s^23p^3(^4S^\circ)4s$	$g^3P - ^3S^\circ$	0-1	488,599,769
S I	1900.27	670	1	$3s^23p^4 - 3s^23p^3(^4S^\circ)4s$	$g^3P - ^5S^\circ$	2-2	488,599
S I	1914.68	500	1	$3s^23p^4 - 3s^23p^3(^4S^\circ)4s$	$g^3P - ^5S^\circ$	1-2	488,599

Ground state $1s^22s^22p^63s^23p^3\ ^4S^\circ_{3/2}$

Ionization potential 188 824.5 cm^{-1}; 23.411 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S II	640.41	50		$3s^23p^3 - 3s^23p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-1/2	322
S II	640.93	50		$3s^23p^3 - 3s^23p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-3/2	322
S II	641.81	100		$3s^23p^3 - 3s^23p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-5/2	322
S II	694.71	50		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2D$	5/2-5/2	322
S II	705.62	50		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-7/2	322
S II	707.86	50		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2F$	3/2-5/2	322
S II	798.92	50		$3s^23p^3$ - ?	$^2D^\circ - ^2P$	3/2-3/2	322
S II	799.14	50		$3s^23p^3$ - ?	$^2D^\circ - ^2P$	5/2-3/2	322
S II	800.04	50		$3s^23p^3$ - ?	$^2D^\circ - ^2P$	3/2-1/2	322
S II	843.82	200		$3s^23p^3$ - ?	$^2D^\circ$ - 1	3/2-1/2	322
S II	865.87	50		$3s^23p^3$ - ?	$^2P^\circ - ^2P$	1/2-3/2	322
S II	866.23	100		$3s^23p^3$ - ?	$^2P^\circ - ^2P$	3/2-3/2	322
S II	867.15	100		$3s^23p^3$ - ?	$^2P^\circ - ^2P$	1/2-1/2	322
S II	867.50	100		$3s^23p^3$ - ?	$^2P^\circ - ^2P$	3/2-1/2	322
S II	906.87	300	2	$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-5/2	322,488
S II	910.49	300	2	$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-3/2	322,488
S II	912.74	300	2	$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-1/2	322,488
S II	918.82	300		$3s^23p^3$ - ?	$^2P^\circ$ - 1	1/2-1/2	322
S II	919.24	100		$3s^23p^3$ - ?	$^2P^\circ$ - 1	3/2-1/2	322
S II	937.41	300	6	$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2D^\circ - ^2D$	3/2-5/2	322,488
S II	937.69	300	6	$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2D^\circ - ^2D$	5/2-5/2	322,488
S II	957.88	100		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2D$		322
S II	968.37	50		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2P$	5/2-3/2	322
S II	996.00	200	5	$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-7/2	322,488
S II	1000.48	200	5	$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2F$	3/2-5/2	322,488
S II	1000.75	65	5	$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2F$	5/2-5/2	599,487
S II?	1006.15	270					599
S II?	1006.95	35					599
S II	1014.09	50	4	$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2D^\circ - ^2P$	3/2-3/2	322
S II	1014.42	200	4	$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2D^\circ - ^2P$	5/2-3/2	322,488
S II	1019.53	200	4	$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2D^\circ - ^2P$	3/2-1/2	322,488
S II	1030.87	100	9	$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2P^\circ - ^2D$	1/2-3/2	322,488
S II	1031.34	100	9	$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2P^\circ - ^2D$	3/2-5/2	322,488
S II?	1036.41	15					599
S II	1045.74	65		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4F$	5/2-7/2	599,487
S II	1047.56	35		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4F$	3/2-5/2	599,487
S II	1047.86	35		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4F$	5/2-5/2	599,487
S II?	1048.43	35					599
S II	1049.06	35		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4F$	3/2-3/2	599,487
S II?	1049.77	35					599
S II?	1052.25	65					599
S II?	1052.60	35					599
S II?	1053.21	35					599
S II?	1055.15	35					599
S II?	1056.79	65d					599
S II	1096.57	200	3	$3s^23p^3 - 3s3p^4$	$^2D^\circ - ^2P$	3/2-1/2	322,488
S II	1102.32	300	3	$3s^23p^3 - 3s3p^4$	$^2D^\circ - ^2P$	5/2-3/2	322,488
S II	1124.39	100	8	$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2P^\circ - ^2P$	1/2-3/2	322,488
S II	1125.00	100	8	$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2P^\circ - ^2P$	3/2-3/2	322,488
S II	1131.05	200	8	$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2P^\circ - ^2P$	1/2-1/2	322,488
S II	1131.65	200	8	$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2P^\circ - ^2P$	3/2-1/2	322,488
S II?	1152.11	65					599
S II?	1157.37	35					599
S II?	1171.91	65					599
S II?	1190.11	65					599

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S II?	1191.80	65					599
S II?	1204.30	500					599,769
S II	1226.70	100	7	$3s^23p^3 - 3s3p^4$	$^2P^\circ - ^2P$	½-½	322,488
S II	1227.45	100	7	$3s^23p^3 - 3s3p^4$	$^2P^\circ - ^2P$	3/2-½	322,488
S II	1233.36	50	7	$3s^23p^3 - 3s3p^4$	$^2P^\circ - ^2P$	½-3/2	322,488
S II	1234.14	300	7	$3s^23p^3 - 3s3p^4$	$^2P^\circ - ^2P$	3/2-3/2	322,488
S II	1250.50	300	1	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - ^4P$	3/2-½	322,488
S II	1253.79	500	1	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - ^4P$	3/2-3/2	322,488
S II	1259.53	500	1	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - ^4P$	3/2-5/2	322,488
S II	1936.84	300		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4S^\circ$	5/2-3/2	285
S II	1950.53	300		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4S^\circ$	3/2-3/2	285
S II	1958.38	300		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4S^\circ$	½-3/2	285
S II	1970.99	400		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4P^\circ$	5/2-5/2	285
S II	1981.80	200		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4P^\circ$	5/2-3/2	285
S II	1985.17	200		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4P^\circ$	3/2-5/2	285
S II	1998.92	200		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4P^\circ$	3/2-½	285

Ground state $1s^22s^22p^63s^23p^2\ ^3P_0$

Ionization potential 282 750 cm^{-1}; 35.06 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S III	484.58	50		$3s^23p^2 - 3s^23p4d$	$g^3P - {}^3D^\circ$	1-2	323
S III	485.22	50		$3s^23p^2 - 3s^23p4d$	$g^3P - {}^3D^\circ$	2-3	323
S III	499.983	300		$3s^23p^2 - 3s^23p5s$	${}^1D - {}^1P^\circ$	2-1	598
S III	543.031	200		$3s^23p^2 - 3s^23p5s$	${}^1S - {}^1P^\circ$	0-1	598
S III	677.75	200	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	0-1	323,488
S III	678.46	200	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	1-2	323,488
S III	679.11	200	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	1-1	323,488
S III	680.69	200	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-3	323,488
S III	680.95	200b	7	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-2	323,488
S III	681.50	100b	6	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	0-1	323,488
S III	683.07	50	6	$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	1-0	323,488
S III	683.47	100	6	$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	2-2	323,488
S III	685.35	50	6	$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	2-1	323,488
S III	698.73	200	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	0-1	323,488
S III	700.15	300	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-2	323,488
S III	700.29	300	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-0	323,488
S III	702.78	P	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	2-2	488
S III	702.82	P	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	2-1	488
S III	724.29	300	4	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3S^\circ$	0-1	323,488
S III	725.86	3	4	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3S^\circ$	1-1	323,488
S III	728.69	300	4	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3S^\circ$	2-1	323,488
S III	729.529	400	12	$3s^23p^2 - 3s^23p4s$	${}^1D - {}^1P^\circ$	2-1	488,598
S III	730.783	300	3	$3s^23p^2 - 3s3p^3$	$g^3P - {}^1P^\circ$	0-1	488,598
S III	732.376	500	3	$3s^23p^2 - 3s3p^3$	$g^3P - {}^1P^\circ$	1-1	488,598
S III	732.98	50		$3s^23p^2 - 3s^23p3d$	${}^1D - {}^3D^\circ$	2-3	598
S III	733.34	50		$3s^23p^2 - 3s^23p3d$	${}^1D - {}^3D^\circ$	2-2	598
S III	733.92	100		$3s^23p^2 - 3s^23p3d$	${}^1D - {}^3D^\circ$	2-1	598
S III	735.251	400	3	$3s^23p^2 - 3s3p^3$	$g^3P - {}^1P^\circ$	2-1	488,598
S III	736.25	200	11	$3s^23p^2 - 3s^23p4s$	${}^1D - {}^3P^\circ$	2-2	598
S III	738.474	400	11	$3s^23p^2 - 3s^23p4s$	${}^1D - {}^3P^\circ$	2-1	488,598
S III	788.984	400	10	$3s^23p^2 - 3s3p^3$	${}^1D - {}^3S^\circ$	2-1	488,598
S III	796.692	400	9	$3s^23p^2 - 3s3p^3$	${}^1D - {}^1P^\circ$	2-1	488,598
S III	824.887	400	14	$3s^23p^2 - 3s^23p4s$	${}^1S - {}^1P^\circ$	0-1	488,598
S III	836.315	400	13	$3s^23p^2 - 3s^23p4s$	${}^1S - {}^3P^\circ$	0-1	488,598
S III	911.77	20		$3s^23p^2 - 3s3p^3$	${}^1S - {}^1P^\circ$	0-1	598
S III	1012.49	300	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	0-1	323,488
S III	1015.51	200	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	1-1	323,488
S III	1015.76	100	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	1-2	323,488
S III	1021.10	100	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	2-1	323,488
S III	1021.32	200	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	2-2	323,488
S III	1077.135	800	8	$3s^23p^2 - 3s3p^3$	${}^1D - {}^1D^\circ$	2-2	488,598
S III	1122.42	200		$3s3p^3 - 3s^23p4p$	${}^3D^\circ - {}^3P$	3-2	323
S III	1126.48	50		$3s3p^3 - 3s^23p4p$	${}^3D^\circ - {}^3P$	1-1	323
S III	1126.85	100		$3s3p^3 - 3s^23p4p$	${}^3D^\circ - {}^3P$	2-1	323
S III	1155.34	200		$3s3p^3 - 3s^23p4p$	${}^3D^\circ - {}^3D$	3-3	323
S III	1162.52	100		$3s3p^3 - 3s^23p4p$	${}^3D^\circ - {}^3D$	2-2	323
S III	1166.13	50		$3s3p^3 - 3s^23p4p$	${}^3D^\circ - {}^3D$	1-1	323
S III	1190.17	200	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	0-1	323,488
S III	1194.02	400	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	1-2	323,488
S III	1194.40	300	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	1-1	323,488
S III	1200.97	400	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	2-3	323,488
S III	1201.71	200	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	2-2	323,488
S III	1202.10	50	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	2-1	323,488
S III	1328.12	50		$3s3p^3 - 3s^23p4p$	${}^3P^\circ - {}^3S$	2-1	323
S III	1328.52	50		$3s3p^3 - 3s^23p4p$	${}^3P^\circ - {}^3S$	1-1	323

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S III	1343.25	50		$3s3p^3 - 3s^23p4p$	$^3P^o - ^3P$	2-2	323
S III	1343.53	50		$3s3p^3 - 3s^23p4p$	$^3P^o - ^3P$	1-2	323
S III	1390.67	50		$3s3p^3 - 3s^23p4p$	$^3P^o - ^3D$	2-3	323

Ground state $1s^22s^22p^63s^23p\ ^2P^\circ_{1/2}$

Ionization potential 381 541.4 cm^{-1}; 47.304 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S IV	519.30	200		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3/2-5/2	041
S IV	520.11	200		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	1/2-3/2	041
S IV	520.83	300		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5/2-5/2	041
S IV	521.13	100		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3/2-3/2	041
S IV	521.99	200		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3/2-1/2	041
S IV	522.54	200		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5/2-3/2	041
S IV	551.17	200	5	$3s^23p - 3s^24s$	$g\,^2P^\circ - ^2S$	1/2-1/2	487,488
S IV	554.17	P	5	$3s^23p - 3s^24s$	$g\,^2P^\circ - ^2S$	3/2-1/2	487
S IV	652.523	300	8	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	1/2-3/2	041,488
S IV	653.000	300	8	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	1/2-1/2	041
S IV	653.560	400	8	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3/2-5/2	041,488
S IV	653.988	300	8	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3/2-3/2	041
S IV	654.37	100	8	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3/2-1/2	041
S IV	655.553	400	8	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5/2-7/2	041,488
S IV	655.887	200	8	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5/2-5/2	041
S IV	656.30	100	8	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5/2-3/2	041
S IV	657.34	500	4	$3s^23p - 3s^23d$	$g\,^2P^\circ - ^2D$	1/2-3/2	485,488
S IV	660.945	300	7	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4P^\circ$	1/2-3/2	041,488
S IV	661.42	600	4	$3s^23p - 3s^23d$	$g\,^2P^\circ - ^2D$	3/2-5/2	485,488
S IV	663.707	300	7	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3/2-5/2	041,488
S IV	664.822	300	7	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5/2-3/2	041,488
S IV	666.114	400	7	$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5/2-5/2	041,488
S IV	744.92	500	3	$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2P$	1/2-3/2	485,488
S IV	748.40	500	3	$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2P$	1/2-1/2	485,488
S IV	750.23	500	3	$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2P$	3/2-3/2	485,488
S IV	753.76	500	3	$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2P$	3/2-1/2	485,488
S IV	798.277	300	6	$3s3p^2 - 2p^63p^3$	$^4P - ^4S^\circ$	1/2-3/2	041,488
S IV	800.477	400	6	$3s3p^2 - 2p^63p^3$	$^4P - ^4S^\circ$	3/2-3/2	041,488
S IV	803.996	400	6	$3s3p^2 - 2p^63p^3$	$^4P - ^4S^\circ$	5/2-3/2	041,488
S IV	809.69	400	2	$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2S$	1/2-1/2	485,488
S IV	815.97	500	2	$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2S$	3/2-1/2	485,488
S IV	836.286	400		$3s3p^2 - 3s^24p$	$^2D - ^2P^\circ$	5/2-3/2	038
S IV	837.447	400		$3s3p^2 - 3s^24p$	$^2D - ^2P^\circ$	3/2-1/2	038
S IV	852.716	300		$3s3p^2 - 2p^63p^3$	$^2D - ^2P^\circ$	3/2-	038
S IV	853.135	300		$3s3p^2 - 2p^63p^3$	$^2D - ^2P^\circ$	5/2-	038
S IV	1062.672	600	1	$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2D$	1/2-3/2	038,488
S IV	1072.992	600	1	$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2D$	3/2-5/2	038,488
S IV	1073.522	400	1	$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2D$	3/2-3/2	038,488
S IV	1108.36	200		$3s3p^2 - 3s^24p$	$^2S - ^2P^\circ$	1/2-3/2	485
S IV	1110.90	200		$3s3p^2 - 3s^24p$	$^2S - ^2P^\circ$	1/2-1/2	485
S IV	1138.227	100		$3s3p^2 - 2p^63p^3$	$^2S - ^2P^\circ$	1/2-	038
S IV	1286.063	100		$3s3p^2 - 2p^63p^3$	$^2P - ^2P^\circ$	1/2-	038
S IV	1296.640	200		$3s3p^2 - 2p^63p^3$	$^2P - ^2P^\circ$	3/2-	038
S IV	1623.62	50		$3s^23d - 3s^24p$	$^2D - ^2P^\circ$	3/2-3/2	485
S IV	1624.00	200		$3s^23d - 3s^24p$	$^2D - ^2P^\circ$	5/2-3/2	485
S IV	1629.20	200		$3s^23d - 3s^24p$	$^2D - ^2P^\circ$	3/2-1/2	485
S IV	1739.03	50		$3s^24p - 3s^25s$	$^2P^\circ - ^2S$	1/2-1/2	485
S IV	1745.42	100		$3s^24p - 3s^25s$	$^2P^\circ - ^2S$	3/2-1/2	485

Ground state $1s^2 2s^2 2p^6 3s^2\ ^1S_0$

Ionization potential 584 700 cm^{-1}; 72.49 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S V	437.37	100	4	3s3p - 3s4s	$^3P^\circ - ^3S$	0-1	041,488
S V	438.19	100	4	3s3p - 3s4s	$^3P^\circ - ^3S$	1-1	041,488
S V	439.65	100	4	3s3p - 3s4s	$^3P^\circ - ^3S$	2-1	041,488
S V	658.262	300	3	3s3p - 3s3d	$^3P^\circ - ^3D$	0-1	041,488
S V	659.853	400	3	3s3p - 3s3d	$^3P^\circ - ^3D$	1-2	041,488
S V	663.155	500	3	3s3p - 3s3d	$^3P^\circ - ^3D$	2-3	041,488
S V	676.21	100		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	0-1	041
S V	677.342	100		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-2	041
S V	678.08	200		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-1	041
S V	680.326	300		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-3	041
S V	680.940	500b		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-2	041
S V	681.565	300b		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-1	041
S V	686.150	100		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	0-1	041
S V	686.93	100		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-0	041
S V	688.04	50		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-1	041
S V	689.838	100		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-2	041
S V	691.74	100		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-1	041
S V	693.522	200		$2p^63p^2 - 2p^63p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-2	041
S V	786.476	800	1	$3s^2 - 3s3p$	$g^1S - ^1P^\circ$	0-1	041,488
S V	849.241	600	2	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	1-2	041,488
S V	852.185	500	2	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	0-1	041,488
S V	854.792	700	2	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	2-2	041,488
S V	857.872	500	2	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	1-0	041,488
S V	860.462	500	2	$3s3p - 2p^63p^2$	$^3P^\circ - ^3P$	2-1	041,488
S V	883.59	200		$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3D^\circ$	-3	041
S V	884.46	200		$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3D^\circ$	-2	041
S V	885.77	100		$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3D^\circ$	-1	041
S V	900.93	200		$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3P^\circ$	1-0	041
S V	902.80	100		$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3P^\circ$	-1	041
S V	905.92	200		$3s(^2S)3d - 3p(^2P^\circ)3d$	$^3D - ^3P^\circ$	-2	041

Ground state $1s^22s^22p^63s\ ^2S_{1/2}$

Ionization potential 710 194 cm^{-1}; 88.051 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S VI	171.327	20		3s - 6p	$g^2S - {}^2P^\circ$	½-3½	598
S VI	191.480	20		3s - 5p	$g^2S - {}^2P^\circ$	½-3½	598
S VI	191.560	50		3s - 5p	$g^2S - {}^2P^\circ$	½-½	598
S VI	192.273	20		3p - 7d	${}^2P^\circ - {}^2D$	3½-	598
S VI	204.190	50		3p - 6d	${}^2P^\circ - {}^2D$	3½-	598
S VI	214.277	20		3p - 6s	${}^2P^\circ - {}^2S$	3½-½	598
S VI	227.197	200		3p - 5d	${}^2P^\circ - {}^2D$	½-3½	598
S VI	227.845	200		3p - 5d	${}^2P^\circ - {}^2D$	3½-5½	598
S VI	248.985	400	2	3s - 4p	$g^2S - {}^2P^\circ$	½-3½	488,598
S VI	249.271	400	2	3s - 4p	$g^2S - {}^2P^\circ$	½-½	488,598
S VI	251.905	200		3p - 5s	${}^2P^\circ - {}^2S$	3½-½	598
S VI	261.810	50		3d - 7f	${}^2D - {}^2F^\circ$		598
S VI	283.502	300		3d - 6f	${}^2D - {}^2F^\circ$		598
S VI	289.092	200		3p - 4d	${}^2P^\circ - {}^2D$	½-3½	598
S VI	290.132	300		3p - 4d	${}^2P^\circ - {}^2D$	3½-5½	598
S VI	328.505	600		3d - 5f	${}^2D - {}^2F^\circ$	5½-	598
S VI	388.940	600	4	3p - 4s	${}^2P^\circ - {}^2S$	½-½	488,598
S VI	390.859	800	4	3p - 4s	${}^2P^\circ - {}^2S$	3½-½	488,598
S VI	464.654	1000	5	3d - 4f	${}^2D - {}^2F^\circ$		488,598
S VI	648.628	100		3d - 4p	${}^2D - {}^2P^\circ$	5½-3½	598
S VI	650.430	100		3d - 4p	${}^2D - {}^2P^\circ$	3½-½	598
S VI	706.480	600	3	3p - 3d	${}^2P^\circ - {}^2D$	½-3½	488,598
S VI	712.682	400	3	3p - 3d	${}^2P^\circ - {}^2D$	3½-5½	488,598
S VI	712.844	300	3	3p - 3d	${}^2P^\circ - {}^2D$	3½-3½	488,598
S VI	933.382	400	1	3s - 3p	$g^2S - {}^2P^\circ$	½-3½	488,598
S VI	944.517	500	1	3s - 3p	$g^2S - {}^2P^\circ$	½-½	488,598
S VI	1117.91	0		4f - 5g	${}^2F^\circ - {}^2G$		052,487

Ground state $1s^22s^22p^6\ ^1S_0$

Ionization potential 2 266 990 cm^{-1}; 281.06 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S VII	46.212	10		$2p^6 - 2p^5(^2P^\circ)7d$	$g\,^1S - \frac{1}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	47.098	50		$2p^6 - 2p^5(^2P^\circ)6d$	$g\,^1S - \frac{1}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	47.307	50		$2p^6 - 2p^5(^2P^\circ)6d$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	48.647	150		$2p^6 - 2p^5(^2P^\circ)5d$	$g\,^1S - \frac{1}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	48.874	100		$2p^6 - 2p^5(^2P^\circ)5d$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	50.027	70		$2p^6 - 2p^5(^2P^\circ)5s$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	51.807	350		$2p^6 - 2p^5(^2P^\circ)4d$	$g\,^1S - \frac{1}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	52.097	200		$2p^6 - 2p^5(^2P^\circ)4d$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	54.652	100		$2p^6 - 2p^5(^2P^\circ)4s$	$g\,^1S - \frac{1}{2}[\frac{1}{2}]^\circ$	0-1	233,487
S VII	54.938	100		$2p^6 - 2p^5(^2P^\circ)4s$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	60.161	1000		$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - \frac{1}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	60.804	750		$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^\circ$	0-1	233,487
S VII	61.547	200		$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - \frac{3}{2}[\frac{1}{2}]^\circ$	0-1	233,487
S VII	72.029	1000		$2p^6 - 2p^5(^2P^\circ)3s$	$g\,^1S - \frac{1}{2}[\frac{1}{2}]^\circ$	0-1	233,487
S VII	72.663	1000		$2p^6 - 2p^5(^2P^\circ)3s$	$g\,^1S - \frac{3}{2}[\frac{3}{2}]^\circ$	0-1	233,487

292-307 O - 68 - 15

Ground state $1s^22s^22p^5\ ^2P^o_{3/2}$

Ionization potential 2 652 720 cm^{-1}; 328.89 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S VIII	44.350	20		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2F$	3/2-5/2	233
S VIII	44.374	100b		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2S$	3/2-1/2	233
S VIII	44.547	50		$2s^22p^5 - 2s^22p^4(^1D)4d$	$g^2P^o - ^2S$	1/2-1/2	233,487
S VIII	45.279	50		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2D$	3/2-5/2	233
S VIII	45.290	50		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2P$	3/2-3/2	233
S VIII	45.370	20		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2D$	3/2-3/2	233
S VIII	45.458	20		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^4P$	3/2-5/2	233
S VIII	45.508	20		$2s^22p^5 - 2s^22p^4(^3P)4d$	$g^2P^o - ^2P$	1/2-3/2	233
S VIII	47.566	10		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	3/2-3/2	233
S VIII	47.594	10		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	1/2-1/2	233
S VIII	47.793	10b		$2s^22p^5 - 2s^22p^4(^3P)4s$	$g^2P^o - ^2P$	1/2-3/2	233
S VIII	51.227	100		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^o - ^2D$	3/2-5/2	233
S VIII	51.470	70		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^o - ^2D$	1/2-3/2	233
S VIII	52.681	20		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2D$	3/2-3/2	233
S VIII	52.702	20		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	3/2-3/2	233
S VIII	52.756	300		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2F$	3/2-5/2	233
S VIII	52.789	300		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2S$	3/2-1/2	233
S VIII	52.854	100		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2D$	3/2-5/2	233
S VIII	52.958	350		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	3/2-1/2	233
S VIII	52.985	70		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	1/2-3/2	233
S VIII	53.073	50		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2S$	1/2-1/2	233
S VIII	53.239	30		$2s^22p^5 - 2s^22p^4(^1D)3d$	$g^2P^o - ^2P$	1/2-1/2	233
S VIII	54.118	500		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2D$	3/2-5/2	233
S VIII	54.266	100		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2D$	3/2-3/2	233
S VIII	54.370	20		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2P$	3/2-1/2	233
S VIII	54.385	100		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^4P$	3/2-5/2	233
S VIII	54.424	150		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2P$	1/2-3/2	233
S VIII	54.501	20		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^4P$	3/2-3/2	233
S VIII	54.566	50		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^2D$	1/2-3/2	233
S VIII	54.604	50		$2s^22p^5 - 2s^22p^4(^3P)3d$	$g^2P^o - ^4D$	3/2-5/2	233
S VIII	59.236	70		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^o - ^2S$	3/2-1/2	233
S VIII	59.593	20		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^o - ^2S$	1/2-1/2	233
S VIII	61.600	500		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^o - ^2D$	3/2-5/2	233
S VIII	61.978	250		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^o - ^2D$	1/2-3/2	233
S VIII	63.026	50		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^2P$	3/2-1/2	233
S VIII	63.304	500		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^2P$	3/2-3/2	233
S VIII	63.431	100		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^2P$	1/2-1/2	233
S VIII	63.711	50		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^2P$	1/2-3/2	233
S VIII	63.886	250		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^4P$	3/2-3/2	233
S VIII	64.120	50		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^4P$	3/2-5/2	233
S VIII	64.137	100		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^4P$	1/2-1/2	233
S VIII	64.305	20		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^o - ^4P$	1/2-3/2	233
S VIII	64.874	20		$2s2p^6 - 2s2p^5(^3P^o)3s$	$^2S - ^2P^o$	1/2-1/2	233
S VIII	65.149	50		$2s2p^6 - 2s2p^5(^3P^o)3s$	$^2S - ^2P^o$	1/2-3/2	233
S VIII	198.550	50		$2s^22p^5 - 2s2p^6$	$g^2P^o - ^2S$	3/2-1/2	598
S VIII	202.605	50		$2s^22p^5 - 2s2p^6$	$g^2P^o - ^2S$	1/2-1/2	598

Ground state $1s^22s^22p^4\ ^3P_2$

Ionization potential 3 057 300 cm^{-1}; 379.05 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S IX	46.373	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	233
S IX	46.413	50		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - {}^3F^\circ$	2-2	233
S IX	46.585	10d		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - {}^3F^\circ$	1-2	233
S IX	46.624	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	2-1	233
S IX	47.052	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3S^\circ$	2-1	233
S IX	47.188	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	2-1	233
S IX	47.249	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	2-2	233
S IX	47.433	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	1-2	233
S IX	47.518	30		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$^1D - {}^1P^\circ$	2-1	233
S IX	47.616	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	1-	233
S IX	48.160	100b		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - {}^1F^\circ$	2-3	233
S IX	48.564	20		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - {}^1D^\circ$	2-2	233
S IX	49.119	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	233
S IX	49.328	50		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	1-	233
S IX	54.178	100		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1D - {}^1P^\circ$	2-1	233
S IX	54.178	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	2-3	233
S IX	54.396	50		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	1-2	233
S IX	55.540	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$^1D - {}^1D^\circ$	2-2	233
S IX	56.081	50		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	2-1	233
S IX	56.125	20		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1S - {}^1P^\circ$	0-1	233
S IX	56.332	20d		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	1-1	233
S IX	179.32	450		$2s^22p^4 - 2s2p^5$	$^1D - {}^1P^\circ$	2-1	160,372
S IX	198.55	250b		$2s^22p^4 - 2s2p^5$	$^1S - {}^1P^\circ$	0-1	160,372
S IX	221.26	100		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-1	160,372
S IX	223.27	100		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-0	160,372
S IX	224.75	450		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-2	160,372
S IX	225.23	50		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-1	160,372
S IX	226.59	100		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	0-1	160,372
S IX	228.84	100		$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-2	160,372

Ground state $1s^22s^22p^3\ ^4S^\circ_{3/2}$

Ionization potential 3 606 000 cm^{-1}?; 447.1 eV?

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S X	42.51	15P		$2s^22p^3 - 2s^22p^23d$	$g\,^4S^\circ - ^4P$	3/2-1/2	774
S X	42.54	35P		$2s^22p^3 - 2s^22p^23d$	$g\,^4S^\circ - ^4P$	3/2-3/2	774
S X	42.58	50P		$2s^22p^3 - 2s^22p^23d$	$g\,^4S^\circ - ^4P$	3/2-5/2	774
S X	44.374	100b		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	3/2-5/2	233
S X	44.387	20		$2s^22p^3 - 2s^22p^2(^3P)3d$	$^2P^\circ - ^2D$	1/2-3/2	233
S X	47.654	20		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g\,^4S^\circ - ^4P$	3/2-5/2	233
S X	47.793	10b		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g\,^4S^\circ - ^4P$	3/2-3/2	233
S X?	48.160	100b					233
S X	177.59	250		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-1/2	160,372
S X	180.41	100		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-3/2	160,372
S X	180.79	450		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	5/2-3/2	160,372
S X	196.82	50		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2P$	3/2-3/2	372
S X	228.21	250		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	3/2-3/2	372
S X	228.75	350		$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2D$	5/2-5/2	372
S X	255.1	20		$2s^22p^3 - 2s2p^4$	$^2P^\circ - ^2D$	3/2-5/2	372
S X	256.59	20		$2s^22p^3 - 2s2p^4$	$g\,^4S^\circ - ^4P$	3/2-1/2	160,372
S X	258.98	20		$2s^22p^3 - 2s2p^4$	$g\,^4S^\circ - ^4P$	3/2-3/2	160,372
S X	263.74	50		$2s^22p^3 - 2s2p^4$	$g\,^4S^\circ - ^4P$	3/2-5/2	160,372

Ground state 1s $^2S_{1/2}$

Ionization potential 28 182 535 cm^{-1}; 3494.10 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
S XVI	3.649	P		1s - 6p	g^2S - $^2P^o$	½-	309
S XVI	3.696	P		1s - 5p	g^2S - $^2P^o$	½-	309
S XVI	3.784	P		1s - 4p	g^2S - $^2P^o$	½-	309
S XVI	3.991	P		1s - 3p	g^2S - $^2P^o$	½-	309
S XVI	4.729	P		1s - 2p	g^2S - $^2P^o$	½-	309
S XVI	15.46	P		2 - 7			309
S XVI	15.97	P		2 - 6			309
S XVI	16.90	P		2 - 5			309
S XVI	18.93	P		2 - 4			309
S XVI	25.54	P		2 - 3			309
S XVI	39.18	P		3 - 7			309
S XVI	42.65	P		3 - 6			309
S XVI	49.97	P		3 - 5			309
S XVI	73.1	P		3 - 4			309
S XVI	84.48	P		4 - 7			309
S XVI	102.4	P		4 - 6			309
S XVI	158.0	P		4 - 5			309
S XVI	181.5	P		5 - 7			309
S XVI	291.0	P		5 - 6			309
S XVI	482.7	P		6 - 7			309

Unclassified lines

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl	39.528	1					179
Cl	39.559	1					179
Cl	39.634	1					179
Cl	47.990	10					179

Ground state $1s^22s^22p^63s^23p^5\ ^2P^\circ_{3/2}$

Ionization potential 104 591 cm^{-1}; 12.967 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl I	1188.768	1000		$3s^23p^5 - 3s^23p^4(^1D)4s$	$g^2P^\circ - {}^2D$	3/2-	006
Cl I	1201.358	900		$3s^23p^5 - 3s^23p^4(^1D)4s$	$g^2P^\circ - {}^2D$	1/2-3/2	006
Cl I	1335.723	750	2	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^2P$	3/2-1/2	006,415,488
Cl I	1347.238	1000	2	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^2P$	3/2-3/2	006,415,488
Cl I	1351.657	850	2	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^2P$	1/2-1/2	006,415,488
Cl I	1363.449	850	2	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^2P$	1/2-3/2	006,415,488
Cl I	1373.118	350	1	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^4P$	3/2-1/2	006
Cl I	1379.529	900	1	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^4P$	3/2-3/2	006,415,488
Cl I	1389.688	500	1	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^4P$	3/2-5/2	006
Cl I	1389.961	500	1	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^4P$	1/2-1/2	006,415,488
Cl I	1396.527	650	1	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^4P$	1/2-3/2	006,415,488

Ground state $1s^22s^22p^63s^23p^4\ ^3P_2$

Ionization potential 192 000 cm^{-1}; 23.8 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl II	558.14	100		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	$g^3P - {}^1P^\circ$	1-1	345
Cl II	562.28	300		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	$g^3P - {}^1D^\circ$	1-2	345,487
Cl II	562.54	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	$g^3P - {}^3P^\circ$	2-1	345
Cl II	563.58	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	$g^3P - {}^3S^\circ$	2-1	345
Cl II	565.75	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	$g^3P - {}^3P^\circ$	0-1	345
Cl II	566.77	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	$g^3P - {}^3S^\circ$	0-1	345
Cl II	571.95	100		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	$g^3P - {}^3D^\circ$	2-3	345
Cl II	574.37	300		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	$g^3P - {}^3D^\circ$	1-2	345
Cl II	575.30	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	$g^3P - {}^3D^\circ$	0-1	345
Cl II	584.10	100		$3s^23p^4 - 3s^23p^3(^2D^\circ)5s$	$g^3P - {}^1D^\circ$	2-2	345
Cl II	586.25	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)5s$	$g^3P - {}^3D^\circ$	2-3	345
Cl II	588.77	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)5s$	$g^3P - {}^3D^\circ$	1-2	345
Cl II	589.82	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)5s$	$g^3P - {}^3D^\circ$	0-1	345
Cl II	594.49	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	${}^1D - {}^1P^\circ$	2-1	345
Cl II	599.19	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	${}^1D - {}^1D^\circ$	2-2	345
Cl II	612.73	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)4d$	${}^1D - {}^3D^\circ$	2-3	345
Cl II	617.27	10		$3s^23p^4 - 3s^23p^3(^4S^\circ)4d$	$g^3P - {}^3D^\circ$	2-1	345
Cl II	617.61	100		$3s^23p^4 - 3s^23p^3(^4S^\circ)4d$	$g^3P - {}^3D^\circ$	2-2	345
Cl II	618.02	200		$3s^23p^4 - 3s^23p^3(^4S^\circ)4d$	$g^3P - {}^3D^\circ$	2-3	345
Cl II	619.95	10		$3s^23p^4 - 3s^23p^3(^4S^\circ)4d$	$g^3P - {}^3D^\circ$	1-1	345
Cl II	620.28	100		$3s^23p^4 - 3s^23p^3(^4S^\circ)4d$	$g^3P - {}^3D^\circ$	1-2	345
Cl II	621.12	400		$3s^23p^4 - 3s^23p^3(^4S^\circ)4d$	$g^3P - {}^3D^\circ$	0-1	345
Cl II	626.70	100		$3s^23p^4 - 3s^23p^3(^2D^\circ)5s$	${}^1D - {}^1D^\circ$	2-2	345
Cl II	634.24	100		$3s^23p^4 - 2p^63p^5(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	2-1	345
Cl II	635.87	200		$3s^23p^4 - 2p^63p^5(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	1-0	345
Cl II	636.62	200		$3s^23p^4 - 2p^63p^5(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	2-2	345
Cl II	637.06	100		$3s^23p^4 - 2p^63p^5(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	1-1	345
Cl II	638.23	200		$3s^23p^4 - 2p^63p^5(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	0-1	345
Cl II	639.42	200		$3s^23p^4 - 2p^63p^5(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	1-2	345
Cl II	650.88	100		$3s^23p^4 - 3s^23p^3(^4S^\circ)5s$	$g^3P - {}^3S^\circ$	2-1	345
Cl II	651.13	100		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3S^\circ$	2-1	345
Cl II	653.80	100		$3s^23p^4 - 3s^23p^3(^4S^\circ)5s$	$g^3P - {}^3S^\circ$	1-1	345
Cl II	655.09	100		$3s^23p^4 - 3s^23p^3(^4S^\circ)5s$	$g^3P - {}^3S^\circ$	0-1	345
Cl II	661.62	10		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	2-1	345
Cl II	661.82	200		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	345
Cl II	662.15	100		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	2-2	345
Cl II	663.08	200		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	2-1	345
Cl II	663.67	200		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	2-2	345
Cl II	664.67	200		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	1-1	345
Cl II	665.21	100		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	345
Cl II	666.08	300		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	0-1	345
Cl II	666.17	200		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	1-1	345
Cl II	667.49	100		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	0-1	345
Cl II	684.83	10		$3s^23p^4 - 2p^63p^5(^2P^\circ)4s$	${}^1D - {}^3P^\circ$	2-1	345
Cl II	687.55	100		$3s^23p^4 - 2p^63p^5(^2P^\circ)4s$	${}^1D - {}^3P^\circ$	2-2	345
Cl II	693.55	10		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3F^\circ$	2-3	345
Cl II	696.11	10		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3F^\circ$	1-2	345
Cl II	707.43	400		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	345
Cl II	709.16	200		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	2-2	345
Cl II	710.53	10		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	2-1	345
Cl II	712.66	300		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	345
Cl II	714.03	200		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	1-1	345
Cl II	715.58	300		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	0-1	345
Cl II	717.15	200		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	${}^1D - {}^3D^\circ$	2-3	345
Cl II	719.26	100		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	${}^1D - {}^3P^\circ$	2-2	345

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl II	725.27	300		$3s^23p^4 - 3s^23p^3(^2P^o)4s$	$g^3P - {}^3P^o$	2-2	345
Cl II	725.64	200		$3s^23p^4 - 3s^23p^3(^2P^o)4s$	$g^3P - {}^3P^o$	2-1	345
Cl II	728.94	300		$3s^23p^4 - 3s^23p^3(^2P^o)4s$	$g^3P - {}^3P^o$	1-2	345
Cl II	729.39	300		$3s^23p^4 - 3s^23p^3(^2P^o)4s$	$g^3P - {}^3P^o$	1-1	345
Cl II	729.52	200		$3s^23p^4 - 3s^23p^3(^2P^o)4s$	$g^3P - {}^3P^o$	1-0	345
Cl II	730.92	300		$3s^23p^4 - 3s^23p^3(^2P^o)4s$	$g^3P - {}^3P^o$	0-1	345
Cl II	753.66	10		$3s^23p^4 - 3s^23p^3(^2P^o)3d$	${}^1D - {}^3F^o$	2-2	345
Cl II	754.55	10		$3s^23p^4 - 3s^23p^3(^2P^o)3d$	${}^1D - {}^3F^o$	2-3	345
Cl II	771.00	10		$3s^23p^4 - 3s^23p^3(^2P^o)3d$	${}^1D - {}^3D^o$	2-3	345
Cl II	774.76	10		$3s^23p^4 - 3s^23p^3(^2P^o)3d$	${}^1D - {}^3D^o$	2-1	345
Cl II	777.55	300		$3s^23p^4 - 3s^23p^3(^2P^o)3d$	${}^1D - {}^1D^o$	2-2	345
Cl II	787.15	100		$3s^23p^4 - 3s^23p^3(^2D^o)3d$	$g^3P - {}^1P^o$	1-1	345
Cl II	787.62	300		$3s^23p^4 - 3s^23p^3(^2P^o)4s$	${}^1D - {}^1P^o$	2-1	345
Cl II	788.75	400	5	$3s^23p^4 - 3s^23p^3(^2D^o)4s$	$g^3P - {}^3D^o$	2-3	345,488
Cl II	789.01	700	5	$3s^23p^4 - 3s^23p^3(^2D^o)4s$	$g^3P - {}^3D^o$	2-2	345,488
Cl II	792.19	200		$3s^23p^4 - 3s^23p^3(^2P^o)4s$	${}^1D - {}^3P^o$	2-2	345
Cl II	793.34	300	5	$3s^23p^4 - 3s^23p^3(^2D^o)4s$	$g^3P - {}^3D^o$	1-2	345,488
Cl II	793.47	300	5	$3s^23p^4 - 3s^23p^3(^2D^o)4s$	$g^3P - {}^3D^o$	1-1	345,488
Cl II	795.36	200	5	$3s^23p^4 - 3s^23p^3(^2D^o)4s$	$g^3P - {}^3D^o$	0-1	345,488
Cl II	797.81	10		$3s^23p^4 - 3s^23p^3(^2D^o)3d$	$g^3P - {}^3F^o$	1-2	345
Cl II	827.85	100		$3s^23p^4 - 3s^23p^3(^2D^o)3d$	$g^3P - {}^1D^o$	1-2	345
Cl II	834.67	1000	4	$3s^23p^4 - 3s^23p^3(^4S^o)3d$	$g^3P - {}^3D^o$	2-3	345,488
Cl II	839.30	200	4	$3s^23p^4 - 3s^23p^3(^4S^o)3d$	$g^3P - {}^3D^o$	1-1	345
Cl II	839.63	200	4	$3s^23p^4 - 3s^23p^3(^4S^o)3d$	$g^3P - {}^3D^o$	1-2	345,488
Cl II	841.41	400	4	$3s^23p^4 - 3s^23p^3(^4S^o)3d$	$g^3P - {}^3D^o$	0-1	345,488
Cl II	851.70	700		$3s^23p^4 - 3s^23p^3(^2D^o)4s$	${}^1D - {}^1D^o$	2-2	345
Cl II	864.67	500	3	$3s^23p^4 - 3s3p^5$	$g^3P - {}^1P^o$	2-1	345,488
Cl II	872.00	10	3	$3s^23p^4 - 3s3p^5$	$g^3P - {}^1P^o$	0-1	345,488
Cl II	888.07	400	2	$3s^23p^4 - 3s^23p^3(^4S^o)4s$	$g^3P - {}^3S^o$	2-1	345,488
Cl II	893.56	300	2	$3s^23p^4 - 3s^23p^3(^4S^o)4s$	$g^3P - {}^3S^o$	1-1	345,488
Cl II	895.95	300	2	$3s^23p^4 - 3s^23p^3(^4S^o)4s$	$g^3P - {}^3S^o$	0-1	345,488
Cl II	906.60	10		$3s^23p^4 - 3s^23p^3(^4S^o)3d$	$g^3P - {}^5D^o$	2-	345
Cl II	910.25	10		$3s^23p^4 - 3s^23p^3(^2D^o)3d$	${}^1D - {}^1D^o$	2-2	345
Cl II	912.34	10		$3s^23p^4 - 3s^23p^3(^4S^o)3d$	$g^3P - {}^5D^o$	1-	345
Cl II	914.90	100		$3s^23p^4 - 3s^23p^3(^4S^o)3d$	$g^3P - {}^5D^o$	0-1	345
Cl II	926.96	10		$3s^23p^4 - 3s^23p^3(^4S^o)4s$	$g^3P - {}^5S^o$	2-2	345
Cl II	961.49	500		$3s^23p^4 - 3s3p^5$	${}^1D - {}^1P^o$	2-1	169,345
Cl II	1063.83	500	1	$3s^23p^4 - 3s3p^5$	$g^3P - {}^3P^o$	2-1	345,488
Cl II	1067.94	200	1	$3s^23p^4 - 3s3p^5$	$g^3P - {}^3P^o$	1-0	038,345
Cl II	1071.05	1000	1	$3s^23p^4 - 3s3p^5$	$g^3P - {}^3P^o$	2-2	038,345,488
Cl II	1071.76	500	1	$3s^23p^4 - 3s3p^5$	$g^3P - {}^3P^o$	1-1	038,345,488
Cl II	1075.24	350	1	$3s^23p^4 - 3s3p^5$	$g^3P - {}^3P^o$	0-1	038,345
Cl II	1079.08	750	1	$3s^23p^4 - 3s3p^5$	$g^3P - {}^3P^o$	1-2	038,345,488
Cl II	1223.71	100		$3s^23p^4 - 3s3p^5$	${}^1D - {}^3P^o$	2-2	345
Cl II	1401.16	10		$3s3p^5 - 3s^23p^3(^2P^o)4p$	${}^3P^o - {}^1S$	1-0	345
Cl II	1471.06	200		$3s3p^5 - 3s^23p^3(^2P^o)4p$	${}^3P^o - {}^1P$	2-1	345
Cl II	1484.66	10		$3s3p^5 - 3s^23p^3(^2P^o)4p$	${}^3P^o - {}^1P$	1-1	345
Cl II	1528.91	100		$3s3p^5 - 3s^23p^3(^2P^o)4p$	${}^3P^o - {}^3D$	2-2	345
Cl II	1542.94	10		$3s3p^5 - 3s^23p^3(^2P^o)4p$	${}^3P^o - {}^3S$	2-1	345
Cl II	1558.05	100		$3s3p^5 - 3s^23p^3(^2P^o)4p$	${}^3P^o - {}^3S$	1-1	345
Cl II	1767.24	100		$3s3p^5 - 3s^23p^3(^2D^o)4p$	${}^3P^o - {}^3P$	2-1	345
Cl II	1772.01	300		$3s3p^5 - 3s^23p^3(^2D^o)4p$	${}^3P^o - {}^3P$	2-2	345
Cl II	1785.06	100		$3s3p^5 - 3s^23p^3(^2D^o)4p$	${}^3P^o - {}^3P$	1-0	345
Cl II	1787.10	300		$3s3p^5 - 3s^23p^3(^2D^o)4p$	${}^3P^o - {}^3P$	1-1	345
Cl II	1791.91	400		$3s3p^5 - 3s^23p^3(^2D^o)4p$	${}^3P^o - {}^3P$	1-2	345
Cl II	1797.91	10		$3s3p^5 - 3s^23p^3(^2D^o)4p$	${}^3P^o - {}^3P$	0-1	345
Cl II	1813.75	10		$3s^23p^3(^4S^o)4p - 3s^23p^3(^2D^o)6s$	${}^3P - {}^3D^o$	2-3	345
Cl II	1814.43	10		$3s^23p^3(^4S^o)4p - 3s^23p^3(^2D^o)6s$	${}^3P - {}^3D^o$	1-2	345
Cl II	1815.16	10		$3s^23p^3(^4S^o)4p - 3s^23p^3(^2D^o)6s$	${}^3P - {}^3D^o$	1-1	345
Cl II	1815.61	10		$3s^23p^3(^4S^o)4p - 3s^23p^3(^2D^o)6s$	${}^3P - {}^3D^o$	0-1	345

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl II	1883.14	300		$3s3p^5 - 3s^23p^3(^2D^\circ)4p$	$^3P^\circ - ^3D$	2-3	345
Cl II	1887.90	10		$3s3p^5 - 3s^23p^3(^2D^\circ)4p$	$^3P^\circ - ^3D$	2-2	345
Cl II	1910.76	10		$3s3p^5 - 3s^23p^3(^2D^\circ)4p$	$^3P^\circ - ^3D$	1-2	345
Cl II	1923.35	400		$3s3p^5 - 3s^23p^3(^2D^\circ)4p$	$^3P^\circ - ^3D$	0-1	345

Ground state $1s^22s^22p^63s^23p^3\ ^4S^\circ_{3/2}$

Ionization potential 321 936 cm^{-1}; 39.914 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl III	406.274	100		$3s^23p^3 - 3s^23p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-5/2	043
Cl III	407.513	10		$3s^23p^3 - 3s^23p^2(^3P)5s$	$g^4S^\circ - ^4P$	3/2-3/2	043
Cl III	411.163	300		$3s^23p^3 - 3s^23p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-1/2	043
Cl III	411.373	400		$3s^23p^3 - 3s^23p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-3/2	043
Cl III	411.812	400		$3s^23p^3 - 3s^23p^2(^3P)4d$	$g^4S^\circ - ^4P$	3/2-5/2	043
Cl III	415.196	100		$3s^23p^3 - 3s^23p^2(^1D)5s$	$^2D^\circ - ^2D$	3/2-3/2	043
Cl III	415.333	100		$3s^23p^3 - 3s^23p^2(^1D)5s$	$^2D^\circ - ^2D$	5/2-5/2	043
Cl III	421.771	300		$3s^23p^3 - 3s^23p^2(^1D)4d$	$^2D^\circ - ^2F$	3/2-5/2	043
Cl III	421.990	300		$3s^23p^3 - 3s^23p^2(^1D)4d$	$^2D^\circ - ^2F$	5/2-7/2	043
Cl III	422.713	100		$3s^23p^3 - 3s^23p^2(^1D)4d$	$^2D^\circ - ^2D$	5/2-5/2	043
Cl III	433.664	10		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2D$	3/2-5/2	043
Cl III	433.774	10		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2D$	5/2-5/2	043
Cl III	441.398	300		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2F$	5/2-7/2	043
Cl III	442.947	200		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2D^\circ - ^2F$	3/2-5/2	043
Cl III	457.169	300		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^2D$	3/2-5/2	043
Cl III	457.245	200		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^2D$	1/2-3/2	043
Cl III	457.444	10		$3s^23p^3 - 3s^23p^2(^3P)4d$	$^2P^\circ - ^2D$	3/2-3/2	043
Cl III	552.908	200b		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2P$	5/2-3/2	043
Cl III	556.232	600	3	$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-1/2	043,488
Cl III	556.605	700	3	$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-3/2	043,488
Cl III	557.118	700	3	$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - ^4P$	3/2-5/2	043,488
Cl III	558.385	100		$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^2P$	3/2-3/2	043
Cl III	560.636	100		$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^2P$	3/2-1/2	043
Cl III	561.530	700	5	$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2F$	3/2-5/2	043,488
Cl III	561.680	700	5	$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-7/2	043,488
Cl III	561.738	700	5	$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2F$	5/2-5/2	043,488
Cl III	564.287	400		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2D$	3/2-3/2	043
Cl III	564.514	200		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2D$	5/2-3/2	043
Cl III	565.272	300		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2D$	3/2-5/2	043
Cl III	565.480	400b		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - ^2D$	5/2-3/2	043
Cl III	572.693	400	2	$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-5/2	038,488
Cl III	574.408	300	2	$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-3/2	038,488
Cl III	575.582	300	2	$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - ^4P$	3/2-1/2	038,488
Cl III	586.874	400		$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2D^\circ - ^2D$	3/2-3/2	043
Cl III	587.078	300		$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2D^\circ - ^2D$		043
Cl III	587.295	400		$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2D^\circ - ^2D$	5/2-5/2	043
Cl III	591.118	300	6	$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2P^\circ - ^2P$	1/2-3/2	043
Cl III	591.428	400	6	$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2P^\circ - ^2P$	3/2-3/2	043,488
Cl III	591.646	400	6	$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2P^\circ - ^2P$	1/2-1/2	043,488
Cl III	591.962	200	6	$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2P^\circ - ^2P$	3/2-1/2	043
Cl III	594.636	400		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-1/2	043
Cl III	595.990	300		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2P$	3/2-3/2	043
Cl III	596.240	400		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2P$	5/2-3/2	043
Cl III	605.855	100		$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2P^\circ - ^2D$	3/2-5/2	043
Cl III	606.100	200	4	$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-5/2	043
Cl III	606.345	500	4	$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-5/2	043,488
Cl III	609.673	400	4	$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2D$	3/2-3/2	043,488
Cl III	609.901	10	4	$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^2D$	5/2-3/2	043
Cl III?	613.643	10					038
Cl III?	613.874	100					038
Cl III?	617.630	200					038
Cl III	619.025	100		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4P$	5/2-3/2	043
Cl III	621.027	300		$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2D^\circ - ^2P$	3/2-3/2	043
Cl III	621.280	400		$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2D^\circ - ^2P$	5/2-3/2	043
Cl III	623.768	300		$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2D^\circ - ^2P$	3/2-1/2	043

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl III	630.380	100		$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2P^\circ - ^2D$	½-3½	043
Cl III	630.746	100		$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2P^\circ - ^2D$	3½-3½	043
Cl III	631.006	100		$3s^23p^3 - 3s^23p^2(^1D)4s$	$^2P^\circ - ^2D$	3½-5½	043
Cl III	639.757	100		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^2P$	3½-½	043
Cl III	640.928	100		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^2P$	½-3½	043
Cl III	641.304	100		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^2P$	3½-3½	043
Cl III	653.013	200		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^2D$	3½-5½	043
Cl III	656.772	200		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^2D$	½-3½	043
Cl III	657.320	200		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2P^\circ - ^2D$	3½-3½	043
Cl III?	661.414	200					038
Cl III?	661.836	200					038
Cl III?	666.040	300					038
Cl III?	666.500	100					038
Cl III	669.949	200		$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2P^\circ - ^2P$	½-3½	043
Cl III	670.383	300		$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2P^\circ - ^2P$	3½-3½	043
Cl III	673.127	300		$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2P^\circ - ^2P$	½-½	043
Cl III	673.598	100		$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2P^\circ - ^2P$	3½-½	043
Cl III	746.864	100		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4D$	3½-½	043
Cl III	747.415	100		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4D$	3½-5½	043
Cl III	747.553	100		$3s^23p^3 - 3s^23p^2(^3P)3d$	$^2D^\circ - ^4D$	5½-3½	043
Cl III	930.94	100		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4S^\circ$	5½-3½	038
Cl III	936.28	100		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4S^\circ$	3½-3½	038
Cl III	939.31	10		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4S^\circ$	½-3½	038
Cl III	943.22	100		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4P^\circ$	5½-5½	038
Cl III	946.97	100		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4P^\circ$	5½-3½	038
Cl III	948.72	100		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4P^\circ$	3½-5½	038
Cl III	953.40	200		$3s3p^4 - 3s^23p^2(^3P)4p$	$^4P - ^4P^\circ$	3½-½	038
Cl III	1005.280	500	1	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - ^4P$	3½-½	038,488
Cl III	1008.777	600	1	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - ^4P$	3½-3½	038,488
Cl III	1015.023	700	1	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - ^4P$	3½-5½	038,488
Cl III	1683.18	10		$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4S^\circ$	3½-3½	043
Cl III	1689.50	100		$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4S^\circ$	5½-3½	043
Cl III	1797.98	200	7	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4D^\circ$	5½-7½	043
Cl III	1808.51	400	7	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4D^\circ$	7½-7½	043,488
Cl III	1810.26	100	7	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4D^\circ$	3½-5½	043
Cl III	1817.73	400	7	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4D^\circ$	5½-5½	043,488
Cl III	1822.50	600	7	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4D^\circ$	9½-7½	043,488
Cl III	1824.59	300	7	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4D^\circ$	3½-3½	043
Cl III	1828.40	500	7	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4D^\circ$	7½-5½	043,488
Cl III	1832.08	400	7	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4D^\circ$	5½-3½	043,488
Cl III	1833.31	400	7	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4F - ^4D^\circ$	3½-½	043,488
Cl III	1848.74	10		$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^4S^\circ$	5½-3½	043
Cl III	1849.64	10		$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^2D^\circ$	3½-5½	043,487
Cl III	1852.11	200		$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^2D^\circ$	7½-5½	043,487
Cl III	1880.10	300		$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^2D^\circ$	5½-3½	043
Cl III	1889.06	10		$3s^23p^2(^3P)4p - 3s^23p^2(^1D)5s$	$^2D^\circ - ^2D$	5½-5½	043
Cl III	1897.85	300	8	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^4P^\circ$	5½-5½	043
Cl III	1901.61	500	8	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^4P^\circ$	7½-5½	043,488
Cl III	1912.90	400	8	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^4P^\circ$	5½-3½	043,488
Cl III	1914.09	300	8	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^4P^\circ$	3½-3½	043
Cl III	1916.53	400	8	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^4P^\circ$	½-3½	043
Cl III	1917.87	400	8	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^4P^\circ$	3½-½	043,488
Cl III	1920.32	400	8	$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^4P^\circ$	½-½	043
Cl III	1979.46	300		$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^4D^\circ$	5½-7½	043
Cl III	1983.61	500		$3s^23p^2(^3P)3d - 3s^23p^2(^3P)4p$	$^4D - ^4D^\circ$	7½-7½	043

Ground state $1s^22s^22p^63s^23p^2\ ^3P_0$

Ionization potential 431 226 cm^{-1}; 53.464 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl IV	318.750	100		$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	1-2	043
Cl IV	319.513	100		$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	0-1	043
Cl IV	319.616	300		$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	2-2	043
Cl IV	319.993	10		$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	1-1	043
Cl IV	320.250	100		$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	1-0	043
Cl IV	320.881	100		$3s^23p^2 - 3s^23p5s$	$g^3P - {}^3P^\circ$	2-1	043
Cl IV	331.835	200		$3s^23p^2 - 3s^23p5s$	${}^1D - {}^1P^\circ$	2-1	044
Cl IV	437.825	400		$3s3p^3 - 3s3p^2(^4P)4s$	${}^5S^\circ - {}^5P$	2-3	043
Cl IV	439.255	300		$3s3p^3 - 3s3p^2(^4P)4s$	${}^5S^\circ - {}^5P$	2-2	043
Cl IV	440.245	200		$3s3p^3 - 3s3p^2(^4P)4s$	${}^5S^\circ - {}^5P$	2-1	043
Cl IV	463.011	300		$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	1-2	038
Cl IV	464.292	300		$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	0-1	038
Cl IV	464.861	400		$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	2-2	038
Cl IV	465.350	300		$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	1-1	038
Cl IV	466.132	300		$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	1-0	038
Cl IV	467.194	300		$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	2-1	038
Cl IV	486.172	800		$3s^23p^2 - 3s^23p4s$	${}^1D - {}^1P^\circ$	2-1	044
Cl IV	534.727	800		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	0-1	043
Cl IV	535.039	400		$3s^23p^2 - 3s^23p4s$	${}^1S - {}^1P^\circ$	0-1	044
Cl IV	535.666	700		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	1-2	043
Cl IV	536.150	600		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	1-1	043
Cl IV	537.606	900		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-3	043
Cl IV	538.119	600		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-2	043
Cl IV	538.595	400		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-1	043
Cl IV	549.219	500		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	0-1	043
Cl IV	550.020	400		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-0	043
Cl IV	550.706	300		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-1	043
Cl IV	552.017	700		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-2	043
Cl IV	553.297	600		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	2-1	043
Cl IV	554.619	700		$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	2-2	043
Cl IV	599.733	200		$3s^23p^2 - 3s3p^3$	$g^3P - {}^1P^\circ$	0-1	044
Cl IV	601.499	500		$3s^23p^2 - 3s3p^3$	$g^3P - {}^1P^\circ$	1-1	044
Cl IV	604.590	500		$3s^23p^2 - 3s3p^3$	$g^3P - {}^1P^\circ$	2-1	044
Cl IV	607.088	300		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3S^\circ$	0-1	038
Cl IV	608.903	400		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3S^\circ$	1-1	038
Cl IV	612.070	400		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3S^\circ$	2-1	038
Cl IV	653.696	400		$3s^23p^2 - 3s3p^3$	${}^1D - {}^1P^\circ$	2-1	044
Cl IV	662.454	300		$3s^23p^2 - 3s3p^3$	${}^1D - {}^3S^\circ$	2-1	044
Cl IV	668.770	200		$3s3p^3 - 3s^23p4p$	${}^3D^\circ - {}^3P$	3-2	043
Cl IV	672.428	10		$3s3p^3 - 3s^23p4p$	${}^3D^\circ - {}^3P$	1-0	043
Cl IV	684.490	10		$3s3p^3 - 3s^23p4p$	${}^3D^\circ - {}^3D$	3-3	043
Cl IV	745.205	400		$3s^23p^2 - 3s3p^3$	${}^1S - {}^1P^\circ$	0-1	044
Cl IV	756.563	100		$3s^23p^2 - 3s3p^3$	${}^1S - {}^3S^\circ$	0-1	044
Cl IV	776.91	10		$3s3p^3 - 3s^23p4p$	${}^3P^\circ - {}^3D$	2-3	043
Cl IV	831.431	400		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	0-1	038
Cl IV	834.659	300		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	1-0	038
Cl IV	834.840	500		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	1-1	038
Cl IV	834.967	500		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	1-2	038
Cl IV	840.808	400		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	2-1	038
Cl IV	840.933	600		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	2-2	038
Cl IV	973.212	500		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	0-1	038
Cl IV	977.560	600		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	1-2	038
Cl IV	977.901	400		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	1-1	038
Cl IV	984.952	700		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	2-3	038
Cl IV	985.749	400		$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	2-2	038

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl IV	1413.39	100		$3s^23p3d - 3s^23p4p$	$^3P^\circ - ^3P$	2-2	043
Cl IV	1421.97	100		$3s^23p3d - 3s^23p4p$	$^3P^\circ - ^3P$	1-2	043
Cl IV	1426.89	100		$3s^23p3d - 3s^23p4p$	$^3P^\circ - ^3P$	2-1	043
Cl IV	1440.95	10		$3s^23p3d - 3s^23p4p$	$^3P^\circ - ^3P$	1-0	043
Cl IV	1529.28	10		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3P$	1-2	043
Cl IV	1532.19	100		$3s^23p4p - 3s^23p5s$	$^3D - ^3P^\circ$	3-2	043
Cl IV	1533.25	100		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3P$	2-2	043
Cl IV	1537.21	300		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3P$	3-2	043
Cl IV	1539.30	200		$3s^23p4p - 3s^23p5s$	$^3D - ^3P^\circ$	2-1	043
Cl IV	1545.19	200		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3P$	1-1	043
Cl IV	1549.15	200		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3P$	2-1	043
Cl IV	1551.27	100		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3P$	1-0	043
Cl IV	1617.43	100		$3s^23p4p - 3s^23p5s$	$^3P - ^3P^\circ$	2-2	043
Cl IV	1622.86	200		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3D$	3-3	043
Cl IV	1638.95	10		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3D$	1-2	043
Cl IV	1643.40	100		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3D$	2-2	043
Cl IV	1648.04	10		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3D$	3-2	043
Cl IV	1651.21	100		$3s^23p3d - 3s^23p4p$	$^3D^\circ - ^3D$	1-1	043

Ground state $1s^22s^22p^63s^23p\ ^2P^\circ_{1/2}$

Ionization potential 547 000 cm^{-1}; 67.8 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl V	236.435	100		$3s^23p - 3s^25d$	$g^2P^\circ - {}^2D$	½-3/2	549
Cl V	237.231	200		$3s^23p - 3s^25d$	$g^2P^\circ - {}^2D$	3/2-5/2	549
Cl V	286.127	200		$3s^23p - 3s^24d$	$g^2P^\circ - {}^2D$	½-	043
Cl V	287.327	300		$3s^23p - 3s^24d$	$g^2P^\circ - {}^2D$	3/2-	043
Cl V	372.589	200		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	3/2-5/2	043
Cl V	373.165	200		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	½-3/2	043
Cl V	373.776	300		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	5/2-5/2	043
Cl V	373.911	10		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	3/2-3/2	043
Cl V	374.662	100		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	3/2-½	043
Cl V	375.103	200		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - {}^4P^\circ$	5/2-3/2	043
Cl V	390.148	400		$3s^23p - 3s^24s$	$g^2P^\circ - {}^2S$	½-½	043
Cl V	392.433	500		$3s^23p - 3s^24s$	$g^2P^\circ - {}^2S$	3/2-½	043
Cl V	535.455	200		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	½-3/2	043
Cl V	535.916	200		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	½-½	043
Cl V	536.532	300		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	3/2-5/2	043
Cl V	537.006	400		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	3/2-3/2	043
Cl V	537.461	300		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	3/2-½	549
Cl V	538.032	500		$3s^23p - 3s^23d$	$g^2P^\circ - {}^2D$	½-3/2	038
Cl V	538.681	400		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	5/2-7/2	043
Cl V	538.977	300		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	5/2-5/2	043
Cl V	539.441	10		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4D^\circ$	5/2-3/2	043
Cl V	541.284	300		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	½-½	549
Cl V	542.229	800		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	½-3/2	549
Cl V	542.297	600		$3s^23p - 3s^23d$	$g^2P^\circ - {}^2D$	3/2-5/2	038
Cl V	542.395	300		$3s^23p - 3s^23d$	$g^2P^\circ - {}^2D$	3/2-3/2	038
Cl V	542.868	400		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	3/2-½	549
Cl V	543.818	100		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	3/2-3/2	549
Cl V	545.114	1000		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	3/2-5/2	549
Cl V	546.329	600		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	5/2-3/2	549
Cl V	547.630	1000		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - {}^4P^\circ$	5/2-5/2	549
Cl V?	551.117	200					043
Cl V?	551.643	100					043
Cl V?	552.908	200b					043
Cl V?	554.210	100					043
Cl V?	555.485	1000b					043
Cl V	629.354	300		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	½-3/2	038
Cl V	633.186	400		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	½-½	038
Cl V	635.323	400		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	3/2-3/2	038
Cl V	639.226	300		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2P$	3/2-½	038
Cl V	676.785	300		$3s3p^2 - 2p^63p^3$	$^4P - {}^4S^\circ$	½-3/2	038
Cl V	679.257	300		$3s3p^2 - 2p^63p^3$	$^4P - {}^4S^\circ$	3/2-3/2	038
Cl V	681.924	400		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2S$	½-½	038
Cl V	683.171	400		$3s3p^2 - 2p^63p^3$	$^4P - {}^4S^\circ$	5/2-3/2	038
Cl V	688.933	400		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2S$	3/2-½	038
Cl V	883.127	400		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2D$	½-3/2	038
Cl V	894.340	400		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2D$	3/2-5/2	038
Cl V	894.910	100		$3s^23p - 3s3p^2$	$g^2P^\circ - {}^2D$	3/2-3/2	038

Ground state $1s^2 2s^2 2p^6 3s^2\ ^1S_0$

Ionization potential 780 000 cm^{-1}?; 97 eV?

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl VI	194.796	100		3s3p - 3s5d	$^3P^\circ - ^3D$	1-2	535
Cl VI	195.227	150		3s3p - 3s5d	$^3P^\circ - ^3D$	2-3	535
Cl VI	242.885	250		3s3p - 3s4d	$^3P^\circ - ^3D$	0-1	535
Cl VI	243.194	400		3s3p - 3s4d	$^3P^\circ - ^3D$	1-2	535
Cl VI	243.208	100		3s3p - 3s4d	$^3P^\circ - ^3D$	1-1	535
Cl VI	243.854	600		3s3p - 3s4d	$^3P^\circ - ^3D$	2-3	535
Cl VI	243.883	150		3s3p - 3s4d	$^3P^\circ - ^3D$	2-2	535
Cl VI	323.356	600		3s3p - 3s4s	$^3P^\circ - ^3S$	0-1	535
Cl VI	323.936	800		3s3p - 3s4s	$^3P^\circ - ^3S$	1-1	535
Cl VI	325.161	1000		3s3p - 3s4s	$^3P^\circ - ^3S$	2-1	535
Cl VI	399.938	250		3s3d - 3s4f	$^3D - ^3F^\circ$	1-2	535
Cl VI	399.957	350		3s3d - 3s4f	$^3D - ^3F^\circ$	2-3	535
Cl VI	399.995	400		3s3d - 3s4f	$^3D - ^3F^\circ$	3-4	535
Cl VI	550.355	250		3s3p - 3s3d	$^3P^\circ - ^3D$	0-1	535
Cl VI	551.992	500		3s3p - 3s3d	$^3P^\circ - ^3D$	1-2	535
Cl VI	552.053	100		3s3p - 3s3d	$^3P^\circ - ^3D$	1-1	535
Cl VI	555.485	1000b		3s3p - 3s3d	$^3P^\circ - ^3D$	2-3	535
Cl VI	555.580	150		3s3p - 3s3d	$^3P^\circ - ^3D$	2-2	535
Cl VI	565.480	400b		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3D^\circ$	0-1	549
Cl VI	566.630	200		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-2	549
Cl VI	567.479	100		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3D^\circ$	1-1	549
Cl VI	570.025	400		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-3	549
Cl VI	570.529	200		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-2	549
Cl VI	570.881	10		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-0	549
Cl VI	571.376	100		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3P^\circ$	0-1	549
Cl VI	571.435	10		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3D^\circ$	2-1	549
Cl VI	576.419	200		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3P^\circ$	1-2	549
Cl VI	577.444	100		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-1	549
Cl VI	580.444	200		$2p^6 3p^2 - 2p^6 3p(^2P^\circ)3d$	$^3P - ^3P^\circ$	2-2	549
Cl VI	671.37	400		$3s^2 - 3s3p$	$g^1S - ^1P^\circ$	0-1	051
Cl VI	724.129	150		$3s3p - 2p^6 3p^2$	$^3P^\circ - ^3P$	1-2	535
Cl VI	727.537	150		$3s3p - 2p^6 3p^2$	$^3P^\circ - ^3P$	0-1	535
Cl VI	730.311	200		$3s3p - 2p^6 3p^2$	$^3P^\circ - ^3P$	2-2	535
Cl VI	733.891	150		$3s3p - 2p^6 3p^2$	$^3P^\circ - ^3P$	1-0	535
Cl VI	736.762	150		$3s3p - 2p^6 3p^2$	$^3P^\circ - ^3P$	2-1	535

CHLORINE, Z = 17

Ground state $1s^22s^22p^63s\ ^2S_{1/2}$

Ionization potential 921 902 cm^{-1}; 114.30 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl VII	133.11			3s - 6p	$g^2S - {}^2P^\circ$		160
Cl VII	149.37			3s - 5p	$g^2S - {}^2P^\circ$	½-3½	160
Cl VII	149.43			3s - 5p	$g^2S - {}^2P^\circ$	½-½	160
Cl VII	155.32			3p - 6d	${}^2P^\circ - {}^2D$	½-3½	160
Cl VII	155.78			3p - 6d	${}^2P^\circ - {}^2D$	3½-5½	160
Cl VII	174.035	150		3p - 5d	${}^2P^\circ - {}^2D$	½-3½	546
Cl VII	174.603	200		3p - 5d	${}^2P^\circ - {}^2D$	3½-5½	546
Cl VII	190.594	100		3p - 5s	${}^2P^\circ - {}^2S$	½-½	546
Cl VII	191.283	200		3p - 5s	${}^2P^\circ - {}^2S$	3½-½	546
Cl VII	196.123	500		3s - 4p	$g^2S - {}^2P^\circ$	½-3½	546
Cl VII	196.388	400		3s - 4p	$g^2S - {}^2P^\circ$	½-½	546
Cl VII	207.757	200d		3d - 6f	${}^2D - {}^2F^\circ$		546
Cl VII	224.144	300		3p - 4d	${}^2P^\circ - {}^2D$	½-3½	546
Cl VII	225.078	500		3p - 4d	${}^2P^\circ - {}^2D$	3½-5½	546
Cl VII	240.829	300		3d - 5f	${}^2D - {}^2F^\circ$	3½-5½	546
Cl VII	240.865	200		3d - 5f	${}^2D - {}^2F^\circ$	5½-7½	546
Cl VII	293.253	400		3p - 4s	${}^2P^\circ - {}^2S$	½-½	546
Cl VII	294.889	500		3p - 4s	${}^2P^\circ - {}^2S$	3½-½	546
Cl VII	340.229	750		3d - 4f	${}^2D - {}^2F^\circ$	3½-5½	546
Cl VII	340.298	900		3d - 4f	${}^2D - {}^2F^\circ$	5½-7½	546
Cl VII	455.273	100		3d - 4p	${}^2D - {}^2P^\circ$	5½-3½	546
Cl VII	456.556	50		3d - 4p	${}^2D - {}^2P^\circ$	3½-½	546
Cl VII	598.211	600		3p - 3d	${}^2P^\circ - {}^2D$	½-3½	546
Cl VII	604.785	1000		3p - 3d	${}^2P^\circ - {}^2D$	3½-5½	546
Cl VII	605.052	50		3p - 3d	${}^2P^\circ - {}^2D$	3½-3½	546
Cl VII	800.698	150		3s - 3p	$g^2S - {}^2P^\circ$	½-3½	052,546
Cl VII	813.002	100		3s - 3p	$g^2S - {}^2P^\circ$	½-½	052,546

292-307 O - 68 - 16

Ground state $1s^22s^22p^6\ ^1S_0$

Ionization potential 2 810 000 cm^{-1}; 348.4 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl VIII	39.462	100		$2s^22p^6 - 2s^22p^5(^2P^\circ)5d$	$g\,^1S - ½[3/2]^\circ$	0-1	179,487
Cl VIII	39.655	10		$2s^22p^6 - 2s^22p^5(^2P^\circ)5d$	$g\,^1S - 3/2[3/2]^\circ$	0-1	179,487
Cl VIII	41.636	1		$2s^22p^6 - 2s2p^6(^2S)3p$	$g\,^1S - ^1P^\circ$	0-1	179,487
Cl VIII	42.166	10		$2s^22p^6 - 2s2p^6(^2S)3p$	$g\,^1S - ^3P^\circ$	0-1	179,487
Cl VIII	42.220	200		$2s^22p^6 - 2s^22p^5(^2P^\circ)4d$	$g\,^1S - ½[3/2]^\circ$	0-1	179,487
Cl VIII	42.430	100		$2s^22p^6 - 2s^22p^5(^2P^\circ)4d$	$g\,^1S - 3/2[3/2]^\circ$	0-1	179,487
Cl VIII	44.361	200b		$2s^22p^6 - 2s^22p^5(^2P^\circ)4s$	$g\,^1S - ½[½]^\circ$	0-1	179,487
Cl VIII	44.603	200		$2s^22p^6 - 2s^22p^5(^2P^\circ)4s$	$g\,^1S - 3/2[3/2]^\circ$	0-1	179,487
Cl VIII	49.487	700		$2s^22p^6 - 2s^22p^5(^2P^\circ)3d$	$g\,^1S - ½[3/2]^\circ$	0-1	179,487
Cl VIII	50.074	500		$2s^22p^6 - 2s^22p^5(^2P^\circ)3d$	$g\,^1S - 3/2[3/2]^\circ$	0-1	179,487
Cl VIII	50.700	200		$2s^22p^6 - 2s^22p^5(^2P^\circ)3d$	$g\,^1S - 3/2[½]^\circ$	0-1	179,487
Cl VIII	58.673	1000		$2s^22p^6 - 2s^22p^5(^2P^\circ)3s$	$g\,^1S - ½[½]^\circ$	0-1	179,487
Cl VIII	59.191	900		$2s^22p^6 - 2s^22p^5(^2P^\circ)3s$	$g\,^1S - 3/2[3/2]^\circ$	0-1	179,487

Ground state $1s^22s^22p^5\ ^2P^\circ_{3/2}$

Ionization potential 3 233 000 cm^{-1}; 400.8 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl IX	42.940	100		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^\circ - ^2D$	3/2-5/2	179
Cl IX	43.168	120		$2s^22p^5 - 2s^22p^4(^1S)3d$	$g^2P^\circ - ^2D$	1/2-3/2	179
Cl IX	44.003	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	g^2P° - X1	3/2-	179
Cl IX	44.088	400		$2s^22p^5 - 2s^22p^4(^1D)3d$	g^2P° - X2	3/2-	179
Cl IX	44.183	200		$2s^22p^5 - 2s^22p^4(^1D)3d$	g^2P° - X4	3/2-	179
Cl IX	44.267	300b		$2s^22p^5 - 2s^22p^4(^1D)3d$	g^2P° - X5		179
Cl IX	44.361	200b		$2s^22p^5 - 2s^22p^4(^1D)3d$	g^2P° - X2	1/2-	179
Cl IX	44.530	100		$2s^22p^5 - 2s^22p^4(^1D)3d$	g^2P° - X5	1/2-	179
Cl IX	45.112	400		$2s^22p^5 - 2s^22p^4(^3P)3d$	g^2P° - X1	3/2-	179
Cl IX	45.261	200		$2s^22p^5 - 2s^22p^4(^3P)3d$	g^2P° - X2	3/2-	179
Cl IX	45.332	100		$2s^22p^5 - 2s^22p^4(^3P)3d$	g^2P° - X3	3/2-	179
Cl IX	45.378	300		$2s^22p^5 - 2s^22p^4(^3P)3d$	g^2P° - X4	3/2-	179
Cl IX	45.396	300b		$2s^22p^5 - 2s^22p^4(^3P)3d$	g^2P° - X1	1/2-	179
Cl IX	45.465	10		$2s^22p^5 - 2s^22p^4(^3P)3d$	g^2P° - X5	3/2-	179
Cl IX	45.519	200		$2s^22p^5 - 2s^22p^4(^3P)3d$	g^2P° - X6	3/2-	179
Cl IX	45.539	200		$2s^22p^5 - 2s^22p^4(^3P)3d$	g^2P° - X2	1/2-	179
Cl IX	45.657	100		$2s^22p^5 - 2s^22p^4(^3P)3d$	g^2P° - X4	1/2-	179
Cl IX	45.745	10		$2s^22p^5 - 2s^22p^4(^3P)3d$	g^2P° - X5	1/2-	179
Cl IX	46.098	100		$2s2p^6 - 2s2p^5(^3P^\circ)3d$	$^2S - ^2P^\circ$	1/2-3/2	179
Cl IX	46.242	10		$2s2p^6 - 2s2p^5(^3P^\circ)3d$	$^2S - ^2P^\circ$	1/2-1/2	179
Cl IX	49.234	100		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^\circ - ^2S$	3/2-1/2	179
Cl IX	49.568	100		$2s^22p^5 - 2s^22p^4(^1S)3s$	$g^2P^\circ - ^2S$	1/2-1/2	179
Cl IX	51.026	400		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^\circ - ^2D$	3/2-5/2	179
Cl IX	51.378	300		$2s^22p^5 - 2s^22p^4(^1D)3s$	$g^2P^\circ - ^2D$	1/2-3/2	179
Cl IX	52.055	200		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	3/2-1/2	179
Cl IX	52.303	400		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	3/2-3/2	179
Cl IX	52.426	300		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	1/2-1/2	179
Cl IX	52.677	200		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^2P$	1/2-3/2	179
Cl IX	52.726	300		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^4P$	3/2-3/2	179
Cl IX	52.939	10		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^4P$	3/2-5/2	179
Cl IX	52.959	1		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^4P$	1/2-1/2	179
Cl IX	53.108	1		$2s^22p^5 - 2s^22p^4(^3P)3s$	$g^2P^\circ - ^4P$	1/2-3/2	179
Cl IX	53.448	10		$2s2p^6 - 2s2p^5(^3P^\circ)3s$	$^2S - ^2P^\circ$	1/2-1/2	179
Cl IX	53.696	100		$2s2p^6 - 2s2p^5(^3P^\circ)3s$	$^2S - ^2P^\circ$	1/2-3/2	179
Cl IX	180.71			$2s^22p^5 - 2s2p^6$	$g^2P^\circ - ^2S$	3/2-1/2	160
Cl IX	185.26			$2s^22p^5 - 2s2p^6$	$g^2P^\circ - ^2S$	1/2-1/2	160

Ground state $1s^22s^22p^4\ ^3P_2$

Ionization potential 3 673 000 cm^{-1}; 455.4 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl X	39.253	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	2-	179
Cl X	39.956	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	2-	179
Cl X	40.085	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	2-	179
Cl X	40.136	1		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	1-	179
Cl X	40.660	100		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - {}^1F^\circ$	2-3	179
Cl X	40.994	10		$2s^22p^4 - 2s^22p^3(^2D^\circ)3d$	$^1D - {}^1D^\circ$	2-2	179
Cl X	41.390	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	179
Cl X	41.589	10		$2s^22p^4 - 2s^22p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	179
Cl X	45.396	300b		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	2-	179
Cl X	45.431	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1D - {}^1P^\circ$	2-1	179
Cl X	45.626	15		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$g^3P - {}^3D^\circ$	1-	179
Cl X	46.476	200		$2s^22p^4 - 2s^22p^3(^2D^\circ)3s$	$^1D - {}^1D$	2-2	179
Cl X	46.845	100		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	2-1	179
Cl X	46.908	10		$2s^22p^4 - 2s^22p^3(^2P^\circ)3s$	$^1S - {}^1P^\circ$	0-1	179
Cl X	47.085	15		$2s^22p^4 - 2s^22p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	1-1	179
Cl X	164.5			$2s^22p^4 - 2s2p^5$	$^1D - {}^1P^\circ$	2-1	160
Cl X	180.71			$2s^22p^4 - 2s2p^5$	$^1S - {}^1P^\circ$	0-1	160
Cl X	201.50			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-1	160
Cl X	203.80			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-0	160
Cl X	205.40			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-2	160
Cl X	206.02			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-1	160
Cl X	207.41			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	0-1	160
Cl X	210.08			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-2	160

Ground state $1s^22s^22p^3\ ^4S^\circ_{3/2}$

Ionization potential 529.3 eV?

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl XI	40.392	10		$2s^22p^3 - 2s^22p^2(^3P)3s$	$g^4S^\circ - {}^4P$	3/2-5/2	179,487
Cl XI	40.787	10		$2s^22p^3 - 2s^22p^2(^1D)3s$	$^2D^\circ - {}^2D$		179,487
Cl XI	162.84			$2s^22p^3 - 2s2p^4$	$^2D^\circ - {}^2P$	3/2-1/2	160
Cl XI	166.08			$2s^22p^3 - 2s2p^4$	$^2D^\circ - {}^2P$	3/2-3/2	160
Cl XI	166.64			$2s^22p^3 - 2s2p^4$	$^2D^\circ - {}^2P$	5/2-3/2	160
Cl XI	234.92			$2s^22p^3 - 2s2p^4$	$g^4S^\circ - {}^4P$	3/2-1/2	160
Cl XI	237.38			$2s^22p^3 - 2s2p^4$	$g^4S^\circ - {}^4P$	3/2-3/2	160
Cl XI	242.80			$2s^22p^3 - 2s2p^4$	$g^4S^\circ - {}^4P$	3/2-5/2	160

Ground state 1s $^2S_{1/2}$

Ionization potential 31 829 006 cm^{-1}; 3946.19 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Cl XVII	3.231	P		1s - 6p	g^2S - $^2P°$	½-	309
Cl XVII	3.272	P		1s - 5p	g^2S - $^2P°$	½-	309
Cl XVII	3.351	P		1s - 4p	g^2S - $^2P°$	½-	309
Cl XVII	3.534	P		1s - 3p	g^2S - $^2P°$	½-	309
Cl XVII	4.187	P		1s - 2p	g^2S - $^2P°$	½-	309
Cl XVII	13.69	P		2 - 7			309
Cl XVII	14.15	P		2 - 6			309
Cl XVII	14.97	P		2 - 5			309
Cl XVII	16.76	P		2 - 4			309
Cl XVII	22.61	P		2 - 3			309
Cl XVII	34.70	P		3 - 7			309
Cl XVII	37.77	P		3 - 6			309
Cl XVII	44.26	P		3 - 5			309
Cl XVII	64.72	P		3 - 4			309
Cl XVII	74.82	P		4 - 7			309
Cl XVII	90.7	P		4 - 6			309
Cl XVII	140.0	P		4 - 5			309
Cl XVII	160.8	P		5 - 7			309
Cl XVII	257.8	P		5 - 6			309
Cl XVII	427.6	P		6 - 7			309

Unclassified lines

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar	25.25	400					255
Ar	25.59	400					255
Ar	25.71	400					255
Ar	26.04	300					255
Ar	26.23	200					255
Ar	26.36	400					255
Ar	27.40	400					255
Ar	27.54	400					255
Ar	27.80	400					255
Ar	27.94	400					255
Ar	29.38	500					255
Ar	29.57	500					255
Ar	29.88	300					255
Ar	30.06	200					255
Ar	30.26	300					255
Ar	30.59	300					255
Ar	31.36	700					255
Ar	31.46	600					255
Ar	31.82	400					255
Ar	31.97	500					255
Ar	32.28	500					255
Ar	32.46	500					255
Ar	37.81	400					255
Ar	38.04	300					255
Ar	38.88	500					255
Ar	39.34	300					255
Ar	405.42	20					707
Ar	409.12	20					707
Ar	410.10	20					707
Ar	415.86	20					707
Ar	417.12	10					707
Ar	429.80	10					707
Ar	436.67	120					707
Ar	438.64	10					707
Ar	439.96	40					707
Ar	440.91	30					707
Ar	441.83	30					707
Ar	443.42	80					707
Ar	450.44	80					707
Ar	451.55	60					707
Ar	452.92	80					707
Ar	454.76	20					707
Ar	465.02	150					707
Ar	466.82	60					707
Ar	468.38	80					707
Ar	470.57	80					707
Ar	471.09	60					707
Ar	471.97	60					707
Ar	483.86	20					707
Ar	485.79	60					707
Ar	486.60	300					707
Ar	492.64	50					707
Ar	495.55	80					707
Ar	496.91	40					707
Ar	501.01	120					707

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar	502.42	40					707
Ar	505.45	60					707
Ar	509.02	200					707
Ar	515.62	20					707
Ar	517.17	80					707
Ar	538.41	40					707
Ar	539.19	30					707
Ar	539.79	50					707
Ar	554.50	120					707
Ar	557.04	40					707
Ar	559.48	40					707
Ar	561.06	20					707
Ar	562.18	30					707
Ar	565.31	20					707
Ar	570.61	80					707
Ar	613.40	20					707
Ar	614.69	10					707
Ar	618.63	200					707
Ar	619.04	200					707
Ar	620.05	20					707
Ar	621.05	20					707
Ar	631.68	60					707
Ar	649.03	50					707
Ar	651.04	10					707
Ar	663.93	10					707
Ar	664.93	50					707
Ar	670.39	20					707
Ar	675.28	20					707
Ar	680.60	20					707
Ar	681.15	10					707
Ar	684.81	100					707
Ar	694.85	100					707
Ar	698.08	20					707
Ar	701.11	150					707
Ar	716.42	10					707
Ar	720.94	10					707
Ar	725.11	100					707
Ar	727.58	1					707
Ar	783.14	250					707
Ar	783.65	120					707
Ar	784.38	30					707
Ar	792.08	10					707
Ar	794.53	10					707
Ar	795.37	20					707
Ar	796.62	10					707
Ar	798.92	20					707
Ar	803.59	20					707
Ar	804.59	60					707
Ar	807.46	30					707
Ar	815.14	30					707
Ar	820.56	20					707
Ar	820.98	50					707
Ar	828.86	20					707
Ar	845.68	150					707
Ar	855.71	10					707
Ar	868.20	10					707
Ar	869.24	10					707
Ar	892.07	10					707
Ar	892.74	10					707
Ar	893.50	50					707

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar	894.97	10					707
Ar	904.89	80					707
Ar	912.91	10					707
Ar	913.80	10					707
Ar	917.72	10					707
Ar	934.84	20					707

Ground state $1s^2 2s^2 2p^6 3s^2 3p^6\ ^1S_0$

Ionization potential 127 109.9 cm^{-1}; 15.759 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar I	806.875	80		$3p^6 - 3p^5(^2P^\circ)8s$	$g^1S - 3/2[3/2]^\circ$	0-1	059,487
Ar I	807.220	80		$3p^6 - 3p^5(^2P^\circ)7s$	$g^1S - 1/2[1/2]^\circ$	0-1	059,487
Ar I	807.702	80		$3p^6 - 3p^5(^2P^\circ)6d$	$g^1S - 3/2[3/2]^\circ$	0-1	059,487
Ar I	809.933	80		$3p^6 - 3p^5(^2P^\circ)6d$	$g^1S - 3/2[1/2]^\circ$	0-1	059,487
Ar I	816.233	160		$3p^6 - 3p^5(^2P^\circ)5d$	$g^1S - 3/2[3/2]^\circ$	0-1	059,487
Ar I	816.466	160		$3p^6 - 3p^5(^2P^\circ)7s$	$g^1S - 3/2[3/2]^\circ$	0-1	059,487
Ar I	820.129	10		$3p^6 - 3p^5(^2P^\circ)5d$	$g^1S - 3/2[1/2]^\circ$	0-1	059,487
Ar I	825.346	40		$3p^6 - 3p^5(^2P^\circ)6s$	$g^1S - 1/2[1/2]^\circ$	0-1	197,059,487
Ar I	826.364	80		$3p^6 - 3p^5(^2P^\circ)4d$	$g^1S - 1/2[3/2]^\circ$	0-1	197,059,487
Ar I	834.392	240		$3p^6 - 3p^5(^2P^\circ)4d$	$g^1S - 3/2[3/2]^\circ$	0-1	197,059,487
Ar I	835.003	240		$3p^6 - 3p^5(^2P^\circ)6s$	$g^1S - 3/2[3/2]^\circ$	0-1	059,487
Ar I	842.808	80		$3p^6 - 3p^5(^2P^\circ)4d$	$g^1S - 3/2[1/2]^\circ$	0-1	059,487
Ar I	866.805	200		$3p^6 - 3p^5(^2P^\circ)3d$	$g^1S - 1/2[3/2]^\circ$	0-1	059,487
Ar I	869.754	100		$3p^6 - 3p^5(^2P^\circ)5s$	$g^1S - 1/2[1/2]^\circ$	0-1	059,487
Ar I	876.063	200	4	$3p^6 - 3p^5(^2P^\circ)3d$	$g^1S - 3/2[3/2]^\circ$	0-1	059,488
Ar I	879.949	120		$3p^6 - 3p^5(^2P^\circ)5s$	$g^1S - 3/2[3/2]^\circ$	0-1	059,487
Ar I	894.310	200	3	$3p^6 - 3p^5(^2P^\circ)3d$	$g^1S - 3/2[1/2]^\circ$	0-1	059,488
Ar I	1048.218	1000	2	$3p^6 - 3p^5(^2P^\circ)4s$	$g^1S - 1/2[1/2]^\circ$	0-1	059,488
Ar I	1066.660	750	1	$3p^6 - 3p^5(^2P^\circ)4s$	$g^1S - 3/2[3/2]^\circ$	0-1	059,488

Ground state $1s^22s^22p^63s^23p^5\ ^2P^o_{3/2}$

Ionization potential 222 848.2 cm^{-1}; 27.629 eV

Element	Wavelength		Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar II	487.2274	ST	20		$3s^23p^5 - 3s^23p^4(^1D)4d$	$g^2P^o - ^2S$	3/2-1/2	308,501
Ar II	488.7928	ST	50		$3s^23p^5 - 3s^23p^4(^3P)5d$	$g^2P^o - ^2D$	3/2-5/2	308,501
Ar II	488.9616	ST	20		$3s^23p^5 - 3s^23p^4(^3P)5d$	$g^2P^o - ^2P$	3/2-1/2	308,501
Ar II	489.1955	ST	100		$3s^23p^5 - 3s^23p^4(^3P)5d$	$g^2P^o - ^2P$	3/2-3/2	308,501
Ar II	490.7010	ST	50		$3s^23p^5 - 3s^23p^4(^3P)5d$	$g^2P^o - ^2D$	1/2-3/2	308,501
Ar II	492.4080	ST	20		$3s^23p^5 - 3s^23p^4(^3P)5d$	$g^2P^o - ^2P$	1/2-1/2	308,501
Ar II	494.6678	ST	50		$3s^23p^5 - 3s^23p^4(^3P)5d$	$g^2P^o - ^2F$	3/2-5/2	308,501
Ar II	496.6438	ST	25		$3s^23p^5 - 3s^23p^4(^3P)5d$	$g^2P^o - ^4P$	3/2-3/2	308,501
Ar II	496.6594	ST	25		$3s^23p^5 - 3s^23p^4(^3P)5d$	$g^2P^o - ^4F$	3/2-5/2	308,501
Ar II	500.8019	ST	50		$3s^23p^5 - 3s^23p^4(^1D)4d$	$g^2P^o - ^2D$	3/2-5/2	308,501
Ar II	501.1899	ST	50		$3s^23p^5 - 3s^23p^4(^1D)4d$	$g^2P^o - ^2D$	3/2-3/2	308,501
Ar II	502.027		20		$3s^23p^5 - 3s^23p^4(^3P)6s$	$g^2P^o - ^2P$	1/2-1/2	501
Ar II	502.1632	ST	100		$3s^23p^5 - 3s^23p^4(^3P)6s$	$g^2P^o - ^4P$	3/2-3/2	308,501
Ar II	503.6501	ST	50		$3s^23p^5 - 3s^23p^4(^1D)4d$	$g^2P^o - ^2P$	1/2-3/2	308,501
Ar II	504.811		50		$3s^23p^5 - 3s^23p^4(^1D)4d$	$g^2P^o - ^2D$	1/2-3/2	487,059
Ar II	505.0119	ST	50		$3s^23p^5 - 3s^23p^4(^1D)4d$	$g^2P^o - ^2P$	1/2-1/2	308,501
Ar II	510.5511	ST	40		$3s^23p^5 - 3s^23p^4(^1D)5s$	$g^2P^o - ^2D$	3/2-3/2	308,501
Ar II	510.5566	ST	60		$3s^23p^5 - 3s^23p^4(^1D)5s$	$g^2P^o - ^2D$	3/2-5/2	308,501
Ar II	514.3097	ST	100		$3s^23p^5 - 3s^23p^4(^1D)5s$	$g^2P^o - ^2D$	1/2-3/2	308,501
Ar II	518.9090	ST	100	12	$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^2D$	3/2-3/2	308,501
Ar II	519.3271	ST	100	12	$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^2D$	3/2-5/2	308,501
Ar II	522.7921	ST	100	12	$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^2D$	1/2-3/2	308,501
Ar II	524.6805	ST	100		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^2P$	3/2-3/2	308,501
Ar II	526.4971	ST	100		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^2P$	3/2-1/2	308,501
Ar II	528.6508	ST	50		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^2P$	1/2-3/2	308,501
Ar II	530.4951	ST	100		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^2P$	1/2-1/2	308,501
Ar II	533.0796	ST	100		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^2F$	3/2-5/2	308,501
Ar II	535.0713	ST	50		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^4P$	3/2-5/2	308,501
Ar II	537.1398	ST	100		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^4P$	3/2-1/2	308,501
Ar II	537.4195	ST	50		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^4F$	3/2-5/2	308,501
Ar II	540.8063	ST	50		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^4F$	1/2-3/2	308,501
Ar II	541.3017	ST	50		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^4P$	1/2-1/2	308,501
Ar II	542.9125	ST	200		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^4D$	3/2-1/2	308,501
Ar II	543.2035	ST	200		$3s^23p^5 - 3s^23p^4(^1D)3d$	$g^2P^o - ^2S$	3/2-1/2	308,501
Ar II	543.508		20		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^4D$	3/2-3/2	501
Ar II	543.7307	ST	200		$3s^23p^5 - 3s^23p^4(^3P)5s$	$g^2P^o - ^2P$	3/2-1/2	308,501
Ar II	546.1770	ST	200		$3s^23p^5 - 3s^23p^4(^3P)5s$	$g^2P^o - ^2P$	3/2-3/2	308,501
Ar II	547.1647	ST	200		$3s^23p^5 - 3s^23p^4(^3P)4d$	$g^2P^o - ^4D$	1/2-1/2	308,501
Ar II	547.4602	ST	200		$3s^23p^5 - 3s^23p^4(^1D)3d$	$g^2P^o - ^2S$	1/2-1/2	308,501
Ar II	547.9958	ST	50		$3s^23p^5 - 3s^23p^4(^3P)5s$	$g^2P^o - ^2P$	1/2-1/2	308,501
Ar II	548.7810	ST	200		$3s^23p^5 - 3s^23p^4(^3P)5s$	$g^2P^o - ^4P$	3/2-3/2	308,501
Ar II	550.4807	ST	100		$3s^23p^5 - 3s^23p^4(^3P)5s$	$g^2P^o - ^2P$	1/2-3/2	308,501
Ar II	550.9042	ST	100		$3s^23p^5 - 3s^23p^4(^3P)5s$	$g^2P^o - ^4P$	1/2-1/2	308,501
Ar II	553.1260	ST	100		$3s^23p^5 - 3s^23p^4(^3P)5s$	$g^2P^o - ^4P$	1/2-3/2	308,501
Ar II	555.7662	ST	100		$3s^23p^5 - 3s^23p^4(^1S)3d$	$g^2P^o - ^2D$	3/2-3/2	308,501
Ar II	556.8172	ST	200		$3s^23p^5 - 3s^23p^4(^1S)3d$	$g^2P^o - ^2D$	3/2-5/2	308,501
Ar II	560.2229	ST	200		$3s^23p^5 - 3s^23p^4(^1S)3d$	$g^2P^o - ^2D$	1/2-3/2	308,501
Ar II	572.0139	ST	200	11	$3s^23p^5 - 3s^23p^4(^1D)3d$	$g^2P^o - ^2P$	3/2-1/2	308,501,488
Ar II	573.3622	ST	200	11	$3s^23p^5 - 3s^23p^4(^1D)3d$	$g^2P^o - ^2P$	3/2-3/2	308,501,488
Ar II	576.7361	ST	200	11	$3s^23p^5 - 3s^23p^4(^1D)3d$	$g^2P^o - ^2P$	1/2-1/2	308,501,488
Ar II	578.1068	ST	200	11	$3s^23p^5 - 3s^23p^4(^1D)3d$	$g^2P^o - ^2P$	1/2-3/2	308,501,488
Ar II	578.6046	ST	200	10	$3s^23p^5 - 3s^23p^4(^1D)3d$	$g^2P^o - ^2D$	3/2-3/2	308,501,488
Ar II	580.2634	ST	300	10	$3s^23p^5 - 3s^23p^4(^1D)3d$	$g^2P^o - ^2D$	3/2-5/2	308,501,488
Ar II	583.4368	ST	200	10	$3s^23p^5 - 3s^23p^4(^1D)3d$	$g^2P^o - ^2D$	1/2-3/2	308,501,488
Ar II	597.7003	ST	200	9	$3s^23p^5 - 3s^23p^4(^1S)4s$	$g^2P^o - ^2S$	3/2-1/2	308,501,488

Element	Wavelength		Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar II?	597.76		20		$3s^23p^5 - 3s^23p^4(^1S)4s$	$g^2P^\circ - {}^2S$	3/2-1/2	707,375
Ar II	602.8581	ST	200	9	$3s^23p^5 - 3s^23p^4(^1S)4s$	$g^2P^\circ - {}^2S$	1/2-1/2	308,501,488
Ar II?	603.26		20		$3s^23p^5 - 3s^23p^4(^1S)4s$	$g^2P^\circ - {}^2S$	1/2-1/2	707,375
Ar II	612.3719	ST	500		$3s^23p^5 - 3s^23p^4(^1D)3d$	$g^2P^\circ - {}^2F$	3/2-5/2	308,501
Ar II	661.8692	ST	500	8	$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^2D$	3/2-5/2	308,501,488
Ar II	664.5626	ST	400	8	$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^2D$	3/2-3/2	308,501,488
Ar II	666.0112	ST	600	7	$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^2F$	3/2-5/2	308,501,488
Ar II	670.9450	ST	500	8	$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^2D$	1/2-3/2	308,501,488
Ar II	671.8516	ST	600	6	$3s^23p^5 - 3s^23p^4(^1D)4s$	$g^2P^\circ - {}^2D$	3/2-5/2	308,501,488
Ar II	672.8565	ST	200	6	$3s^23p^5 - 3s^23p^4(^1D)4s$	$g^2P^\circ - {}^2D$	3/2-3/2	308,501,488
Ar II	676.2428	ST	600		$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^4P$	3/2-5/2	308,501
Ar II	677.9521	ST	500		$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^4P$	3/2-3/2	308,501
Ar II	679.2187	ST	300		$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^4P$	3/2-1/2	308,501
Ar II	679.4001	ST	600	6	$3s^23p^5 - 3s^23p^4(^1D)4s$	$g^2P^\circ - {}^2D$	1/2-3/2	308,501,488
Ar II	686.4888	ST	200		$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^2P$	3/2-3/2	308,501
Ar II	691.0377	ST	100		$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^2P$	3/2-1/2	308,501
Ar II	693.3015	ST	200		$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^2P$	1/2-3/2	308,501
Ar II	697.4893	ST	200	5	$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^4F$	3/2-3/2	308,501
Ar II	697.9414	ST	200		$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^2P$	1/2-1/2	308,501
Ar II	698.7748	ST	400	5	$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^4F$	3/2-5/2	308,501,488
Ar II	704.5233	ST	400	5	$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^4F$	1/2-3/2	308,501,488
Ar II	718.0903	ST	400	4	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^2P$	3/2-1/2	308,501,488
Ar II	723.3611	ST	500	4	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^2P$	3/2-3/2	308,501,488
Ar II	725.5481	ST	400	4	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^2P$	1/2-1/2	308,501,488
Ar II	730.9293	ST	500	4	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^2P$	1/2-3/2	308,501,488
Ar II	737.4541	ST	100	3	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^4P$	3/2-1/2	308,501
Ar II	740.2695	ST	1000	3	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^4P$	3/2-3/2	308,501,488
Ar II	744.9252	ST	800	3	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^4P$	3/2-5/2	308,501,488
Ar II	745.3217	ST	700	3	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^4P$	1/2-1/2	308,501,488
Ar II	748.1977	ST	400	3	$3s^23p^5 - 3s^23p^4(^3P)4s$	$g^2P^\circ - {}^4P$	1/2-3/2	308,501,488
Ar II	754.8243	ST	300	2	$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^4D$	3/2-5/2	308,501,488
Ar II	762.1995	ST	300	2	$3s^23p^5 - 3s^23p^4(^3P)3d$	$g^2P^\circ - {}^4D$	1/2-3/2	308,501,488
Ar II	919.7815	ST	1000	1	$3s^23p^5 - 3s3p^6$	$g^2P^\circ - {}^2S$	3/2-1/2	308,501,488
Ar II	932.0528	ST	1000	1	$3s^23p^5 - 3s3p^6$	$g^2P^\circ - {}^2S$	1/2-1/2	308,501,488
Ar II	1268.483		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4D - 1[2]^\circ$	1/2-3/2	501,502
Ar II	1280.225		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4D - 2[4]^\circ$	7/2-9/2	501,502
Ar II	1282.620		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4D - 2[4]^\circ$	5/2-7/2	501,502
Ar II	1284.793		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4D - 2[3]^\circ$	3/2-5/2	501,502
Ar II	1348.751		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 0[3]^\circ$	5/2-7/2	501,502
Ar II	1351.333		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 0[3]^\circ$	3/2-5/2	501,502
Ar II	1354.915		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 1[4]^\circ$	7/2-9/2	501,502
Ar II	1357.435		20		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 1[4]^\circ$	5/2-7/2	501,502
Ar II	1360.735		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 1[2]^\circ$	3/2-5/2	501,502
Ar II	1363.032		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 1[2]^\circ$	1/2-3/2	501,502
Ar II	1376.106		50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 2[3]^\circ$	7/2-7/2	501,502
Ar II	1376.956		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 2[4]^\circ$	7/2-7/2	501,502
Ar II	1377.211		400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 2[4]^\circ$	7/2-9/2	501,502
Ar II	1377.442		20		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 2[2]^\circ$	5/2-5/2	501,502
Ar II	1379.378		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 2[3]^\circ$	5/2-5/2	501,502
Ar II	1379.884		300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 2[4]^\circ$	5/2-7/2	501,502
Ar II	1380.728		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 2[2]^\circ$	3/2-3/2	501,502
Ar II	1382.228		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 2[3]^\circ$	3/2-5/2	501,502
Ar II	1382.770		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4D - 2[2]^\circ$	1/2-3/2	501,502
Ar II	1396.231		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)7f$	$^4F - 2[5]^\circ$	9/2-11/2	501,502
Ar II	1451.879		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4F - 1[4]^\circ$	7/2-9/2	501,502
Ar II	1455.484		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4F - 0[3]^\circ$	3/2-5/2	501,502
Ar II	1459.878		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4F - 1[4]^\circ$	5/2-7/2	501,502
Ar II	1463.155		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4F - 2[5]^\circ$	9/2-11/2	501,502
Ar II	1464.176		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4F - 1[3]^\circ$	3/2-5/2	501,502
Ar II	1465.153		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4F - 2[4]^\circ$	9/2-9/2	501,502

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar II	1474.537	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^4F - 2[5]^\circ$	7/2-9/2	501,502
Ar II	1544.177	200		$3s^23p^4(^1D)3d - 3s^23p^4(^1D)5f$	$^2G - 2[5]^\circ$	9/2-11/2	501,502
Ar II	1544.711	200		$3s^23p^4(^1D)3d - 3s^23p^4(^1D)5f$	$^2G - 2[5]^\circ$	7/2-9/2	501,502
Ar II	1547.356	100		$3s3p^6 - 3s^23p^4(^1D)4p$	$^2S - ^2D^\circ$	1/2-3/2	501
Ar II	1557.305	100		$3s^23p^4(^3P)3d - 3s^23p^4(^1D)4f$	$^2P - 2[2]^\circ$	1/2-3/2	501,502
Ar II	1559.072	300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 0[3]^\circ$	5/2-7/2	501,502
Ar II	1560.191	400	14	$3s3p^6 - 3s^23p^4(^1D)4p$	$^2S - ^2P^\circ$	1/2-1/2	501,488
Ar II	1562.442	200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 0[3]^\circ$	3/2-5/2	501,502
Ar II	1563.043	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 1[3]^\circ$	7/2-7/2	501,502
Ar II	1565.377	100		$3s^23p^4(^3P)3d - 3s^23p^4(^1D)4f$	$^2P - 2[1]^\circ$	1/2-3/2	501,502
Ar II	1566.811	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 1[3]^\circ$	5/2-7/2	501,502
Ar II	1567.987	400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 1[4]^\circ$	7/2-9/2	501,502
Ar II	1571.391	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 1[4]^\circ$	5/2-7/2	501,502
Ar II	1574.401	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 0[3]^\circ$	5/2-7/2	501,502
Ar II	1574.993	600	14	$3s3p^6 - 3s^23p^4(^1D)4p$	$^2S - ^2P^\circ$	1/2-3/2	501,488
Ar II	1575.815	300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 1[2]^\circ$	3/2-5/2	501,502
Ar II	1576.898	300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 1[4]^\circ$	7/2-9/2	501,502
Ar II	1578.812	300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 1[2]^\circ$	1/2-3/2	501,502
Ar II	1580.770	200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 0[3]^\circ$	3/2-5/2	501,502
Ar II	1580.960	100		$3s^23p^4(^3P)3d - 3s^23p^4(^1D)4f$	$^2P - 2[2]^\circ$	3/2-	501,502
Ar II	1583.833	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 1[3]^\circ$	5/2-7/2	501,502
Ar II	1586.261	200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 1[4]^\circ$	5/2-7/2	501,502
Ar II	1589.465	500		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 2[5]^\circ$	9/2-11/2	501,502
Ar II	1590.233	200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 1[3]^\circ$	3/2-5/2	501,502
Ar II	1591.939	1		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[1]^\circ$	5/2-3/2	501,502
Ar II	1593.587	200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 2[4]^\circ$	9/2-9/2	501,502
Ar II	1594.799	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[2]^\circ$	7/2-5/2	501,502
Ar II	1595.737	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[1]^\circ$	3/2-3/2	501,502
Ar II	1596.151	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[1]^\circ$	3/2-1/2	501,502
Ar II	1598.575	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[3]^\circ$	7/2-7/2	501,502
Ar II	1598.722	200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[2]^\circ$	5/2-5/2	501,502
Ar II	1598.880	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[1]^\circ$	1/2-1/2	501,502
Ar II	1599.130	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[3]^\circ$	7/2-5/2	501,502
Ar II	1599.607	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[2]^\circ$	5/2-3/2	501,502
Ar II	1600.133	400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[4]^\circ$	7/2-7/2	501,502
Ar II	1600.694	600		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[4]^\circ$	7/2-9/2	501,502
Ar II	1602.554	200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[2]^\circ$	5/2-7/2	501,502
Ar II	1602.891	200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 2[5]^\circ$	7/2-9/2	501,502
Ar II	1603.075	400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[3]^\circ$	5/2-5/2	501,502
Ar II	1603.442	400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[2]^\circ$	3/2-3/2	501,502
Ar II	1604.082	500		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[4]^\circ$	5/2-7/2	501,502
Ar II	1606.197	300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[2]^\circ$	1/2-3/2	501,502
Ar II	1606.926	400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4D - 2[3]^\circ$	3/2-5/2	501,502
Ar II	1607.180	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 2[4]^\circ$	7/2-9/2	501,502
Ar II	1615.807	50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 2[3]^\circ$	5/2-7/2	501,502
Ar II	1616.972	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4F - 2[4]^\circ$	5/2-7/2	501,502
Ar II	1627.085	20		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^2F - 1[4]^\circ$	5/2-7/2	501,502
Ar II	1628.825	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2P - 1[2]^\circ$	1/2-3/2	501,502
Ar II	1629.834	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^2F - 2[5]^\circ$	7/2-9/2	501,502
Ar II	1640.343	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2P - 0[3]^\circ$	3/2-5/2	501,502
Ar II	1650.535	100		$3s^23p^4(^3P)4p - 3s^33p^4(^1D)5g$	$^2D^\circ - 2[4]$	5/2-7/2	501,502
Ar II	1653.322	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)6f$	$^2D - 1[2]^\circ$	5/2-3/2	501,502
Ar II	1662.253	100		$3s^23p^4(^3P)3d - 3s^23p^4(^1D)4f$	$^2F - 2[4]^\circ$	7/2-9/2	501,502
Ar II	1686.076	50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2P - 2[3]^\circ$	3/2-5/2	501,502
Ar II	1689.470	50		$3s^23p^4(^3P)3d - 3s^23p^4(^1D)4f$	$^2F - 2[4]^\circ$	5/2-7/2	501,502
Ar II	1701.358	100		$3s^23p^4(^3P)3d - 3s^23p^4(^1D)4f$	$^2D - 2[3]^\circ$	3/2-5/2	501,502
Ar II	1702.188	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4P - 0[3]^\circ$	5/2-7/2	501,502
Ar II	1705.980	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4P - 1[2]^\circ$	3/2-5/2	501,502
Ar II	1710.909	50		$3s^23p^4(^3P)3d - 3s^23p^4(^1D)4f$	$^2D - 2[2]^\circ$	3/2-3/2	501,502
Ar II	1713.218	200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4P - 1[3]^\circ$	5/2-7/2	501,502

Element	Wavelength		Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar II	1718.680		100		$3s^23p^4(^3P)4p - 3s^23p^4(^3P)7g$	$^4P^\circ - 2[2]$	½-3½	501,502
Ar II	1719.346		200		$3s^23p^4(^3P)3d - 3s^23p^4(^1D)4f$	$^2D - 2[3]^\circ$	5½-7½	501,502
Ar II	1725.147		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4P - 2[1]^\circ$	½-3½	501,502
Ar II	1725.549		50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4P - 2[1]^\circ$	½-½	501,502
Ar II	1729.075		100		$3s^23p^4(^3P)3d - 3s^23p^4(^1D)4f$	$^2D - 2[2]^\circ$	5½-	501,502
Ar II	1729.259		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4P - 2[2]^\circ$	½-3½	501,502
Ar II	1733.372		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4P - 2[1]^\circ$	3½-3½	501,502
Ar II	1735.378		50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5p$	$^4D - ^4D^\circ$	5½-3½	501
Ar II	1736.834		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4P - 2[2]^\circ$	3½-5½	501,502
Ar II	1750.694		50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^4P - 2[3]^\circ$	5½-7½	501,502
Ar II	1751.679		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5p$	$^4D - ^4D^\circ$	7½-7½	501
Ar II	1755.819		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2F - 1[4]^\circ$	7½-9½	501,502
Ar II	1763.669		50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5p$	$^4D - ^4P^\circ$	½-½	501
Ar II	1768.043		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5p$	$^4D - ^4P^\circ$	5½-3½	501
Ar II	1770.658		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2F - 0[3]^\circ$	5½-7½	501,502
Ar II	1771.829		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5p$	$^4D - ^4P^\circ$	7½-5½	501
Ar II	1776.672		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5p$	$^4D - ^4P^\circ$	5½-5½	501
Ar II	1782.596		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2F - 1[3]^\circ$	5½-7½	501,502
Ar II	1785.672		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2F - 1[4]^\circ$	5½-7½	501,502
Ar II	1788.104		300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2F - 2[5]^\circ$	7½-9½	501,502
Ar II	1791.561		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2F - 2[3]^\circ$	7½-7½	501,502
Ar II	1793.435		50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2F - 2[4]^\circ$	7½-9½	501,502
Ar II	1812.475		50		$3s^23p^4(^3P)4s - 3s^23p^4(^3P)5p$	$^4P - ^4D^\circ$	5½-7½	501
Ar II	1813.014		100		$3s^23p^4(^1D)3d - 3s^23p^4(^1D)4f$	$^2G - 2[4]^\circ$	9½-9½	501,502
Ar II	1813.766		100		$3s^23p^4(^1D)3d - 3s^23p^4(^1D)4f$	$^2G - 2[4]^\circ$	7½-7½	501,502
Ar II	1816.14		50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2D - 1[4]^\circ$	5½-7½	501,502
Ar II	1823.205		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2F - 2[3]^\circ$	5½-7½	501,502
Ar II	1824.842		50		$3s^23p^4(^3P)4s - 3s^23p^4(^3P)5p$	$^4P - ^4P^\circ$	5½-3½	501
Ar II	1830.770		500		$3s^23p^4(^1D)3d - 3s^23p^4(^1D)4f$	$^2G - 2[5]^\circ$	9½-11½	501,502
Ar II	1831.527		500		$3s^23p^4(^1D)3d - 3s^23p^4(^1D)4f$	$^2G - 2[5]^\circ$	7½-9½	501,502
Ar II	1834.038		200		$3s^23p^4(^3P)4s - 3s^23p^4(^3P)5p$	$^4P - ^4P^\circ$	5½-5½	501
Ar II	1854.986		50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)5f$	$^2D - 2[3]^\circ$	5½-7½	501,502
Ar II	1866.089		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 1[3]^\circ$	7½-7½	501,502
Ar II	1868.660		300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 0[3]^\circ$	5½-7½	501,502
Ar II	1872.589		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 1[4]^\circ$	7½-7½	501,502
Ar II	1873.140		600		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 1[4]^\circ$	7½-9½	501,502
Ar II	1877.523		400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 0[3]^\circ$	3½-5½	501,502
Ar II	1879.420		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 1[3]^\circ$	5½-5½	501,502
Ar II	1879.790		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 1[3]^\circ$	5½-7½	501,502
Ar II	1886.386		400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 1[4]^\circ$	5½-7½	501,502
Ar II	1888.782		400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 1[3]^\circ$	3½-5½	501,502
Ar II	1889.029		600		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 2[5]^\circ$	9½-11½	501,502
Ar II	1897.352		50		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 1[2]^\circ$	3½-3½	501,502
Ar II?	1899.287		100		$3s^23p^4(^3P)4p - 3s^23p^4(^3P)6d$	$^4P^\circ - ^4D$	5½-7½	501
Ar II	1899.847		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 2[4]^\circ$	9½-7½	501,502
Ar II	1900.638		400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 2[4]^\circ$	9½-9½	501,502
Ar II	1907.988		400		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 2[5]^\circ$	7½-9½	501,502
Ar II	1909.5689	ST	50		$3s3p^6 - 3s^23p^4(^3P)4p$	$^2S - ^2S^\circ$	½-½	308,501
Ar II	1911.053		50		$3s3p^6 - 3s^23p^4(^3P)4p$	$^2S - ^4S^\circ$	½-3½	501
Ar II	1919.199		300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 2[4]^\circ$	7½-7½	501,502
Ar II	1920.007		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 2[4]^\circ$	7½-9½	501,502
Ar II	1931.419		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 2[3]^\circ$	5½-7½	501,502
Ar II	1932.230		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 2[3]^\circ$	5½-5½	501,502
Ar II	1933.694		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 2[4]^\circ$	5½-7½	501,502
Ar II	1937.041		100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^4F - 2[2]^\circ$	3½-3½	501,502
Ar II	1941.0724	ST	300	13	$3s3p^6 - 3s^23p^4(^3P)4p$	$^2S - ^2P^\circ$	½-3½	308,501,488
Ar II	1946.795		200		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^2P - 1[2]^\circ$	½-3½	501,502
Ar II	1961.3610	ST	400	13	$3s3p^6 - 3s^23p^4(^3P)4p$	$^2S - ^2P^\circ$	½-½	308,501,488
Ar II	1962.161		300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^2P - 0[3]^\circ$	3½-5½	501,502
Ar II?	1966.953		100		$3s^23p^4(^3P)4p - 3s^23p^4(^3P)6d$	$^2D^\circ - ^2F$	5½-7½	501

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar II?	1972.274	200		$3s^23p^4(^3P)4p - 3s^23p^4(^3P)6d$	$^4D^\circ - ^4F$	7/2-9/2	501
Ar II	1973.4837 ST	200		$3s3p^6 - 3s^23p^4(^3P)4p$	$^2S - ^2D^\circ$	1/2-3/2	308,501
Ar II	1974.462	300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^2P - 1[3]^\circ$	3/2-5/2	501,502
Ar II	1976.765	300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^2P - 2[1]^\circ$	1/2-3/2	501,502
Ar II?	1977.200	20		$3s^23p^4(^3P)4p - 3s^23p^4(^3P)7s$	$^4D^\circ - ^2P$	5/2-3/2	501
Ar II?	1981.74	100		$3s^23p^4(^3P)4p - 3s^23p^4(^3P)6d$	$^4D^\circ - ^4D$	7/2-7/2	501
Ar II	1983.299	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^2P - 1[2]^\circ$	3/2-5/2	501,502
Ar II	1983.829	100		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^2P - 1[2]^\circ$	3/2-3/2	501,502
Ar II	1988.620	300		$3s^23p^4(^3P)3d - 3s^23p^4(^3P)4f$	$^2P - 2[2]^\circ$	1/2-3/2	501,502
Ar II?	1993.555	20		$3s^23p^4(^3P)4p - 3s^23p^4(^3P)7s$	$^4D^\circ - ^4P$	3/2-1/2	501

Ground state $1s^22s^22p^63s^23p^4\ ^3P_2$

Ionization potential 329 965.8 cm^{-1}; 40.909 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar III	395.92	50		$3s^23p^4 - 3s^23p^3(^4S^\circ)5s$	$g^3P - {}^3S^\circ$	2-1	059
Ar III	396.38	200		$3s^23p^4 - 3s^23p^3(^4S^\circ)4d$	$g^3P - {}^3D^\circ$	2-3	059
Ar III	397.67	50		$3s^23p^4 - 3s^23p^3(^4S^\circ)5s$	$g^3P - {}^3S^\circ$	1-1	059
Ar III	398.86	50		$3s^23p^4 - 3s^23p^3(^4S^\circ)5s$	$g^3P - {}^5S^\circ$	2-2	059
Ar III	466.530	250		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	2-1	059
Ar III	467.390	300		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	2-2	059
Ar III	468.467	200		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	1-0	059
Ar III	468.956	150		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	1-1	059
Ar III	469.831	200		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	1-2	059
Ar III	469.968	200		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3P^\circ$	0-1	059
Ar III?	473.025	300					059
Ar III	473.918	300		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	2-2	059,487
Ar III	476.432	350		$3s^23p^4 - 3s^23p^3(^2P^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	059,487
Ar III	481.848	300		$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	2-1	059,487
Ar III	482.548	400		$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	2-2	059,487
Ar III	484.116	250		$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	1-0	059,487
Ar III	484.445	250		$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	1-1	059,487
Ar III	485.150	300		$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	1-2	059,487
Ar III	485.515	200		$3s^23p^4 - 3s^23p^3(^2P^\circ)4s$	$g^3P - {}^3P^\circ$	0-1	059,487
Ar III?	487.025	350					059
Ar III?	487.988	350					059
Ar III	488.452	350		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3S^\circ$	2-1	059,487
Ar III?	490.68	150					059
Ar III	491.121	200		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3S^\circ$	1-1	059,487
Ar III	492.228	150		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3S^\circ$	0-1	059,487
Ar III	508.441	450		$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - {}^3D^\circ$	2-3	487,337
Ar III	508.611	300		$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - {}^3D^\circ$	2-2	487,337
Ar III	508.675	180		$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - {}^3D^\circ$	2-1	487,337
Ar III	511.505	300		$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - {}^3D^\circ$	1-2	487,337
Ar III	511.570	180		$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - {}^3D^\circ$	1-1	487,337
Ar III	512.770	180		$3s^23p^4 - 3s^23p^3(^2D^\circ)4s$	$g^3P - {}^3D^\circ$	0-1	487,337
Ar III	529.900	450		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	059
Ar III	532.413	350		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	2-2	059
Ar III	534.26	50		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	2-1	059
Ar III	535.580	350		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	059
Ar III?	536.745	400					059
Ar III	537.459	300		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	1-1	059
Ar III	538.788	300		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	0-1	059
Ar III	553.470	450	4	$3s^23p^4 - 3s^23p^3(^4S^\circ)4s$	$g^3P - {}^3S^\circ$	2-1	059,488
Ar III	556.893	300	4	$3s^23p^4 - 3s^23p^3(^4S^\circ)4s$	$g^3P - {}^3S^\circ$	1-1	059,488
Ar III	558.321	250	4	$3s^23p^4 - 3s^23p^3(^4S^\circ)4s$	$g^3P - {}^3S^\circ$	0-1	059,488
Ar III	573.468	200		$3s^23p^4 - 3s^23p^3(^4S^\circ)4s$	$g^3P - {}^5S^\circ$	2-2	059
Ar III	577.153	150		$3s^23p^4 - 3s^23p^3(^4S^\circ)4s$	$g^3P - {}^5S^\circ$	1-2	059
Ar III	578.386	200		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$^1D - {}^3F^\circ$	2-2	060
Ar III	579.212	150		$3s^23p^4 - 3s^23p^3(^2D^\circ)3d$	$^1D - {}^3F^\circ$	2-3	060
Ar III?	604.152	500					059
Ar III?	623.767	250					060
Ar III	636.818	150	3	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	2-1	059,488
Ar III	637.282	1000	3	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	059,488
Ar III	641.364	250	3	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	1-1	059,488
Ar III	641.808	600	3	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	059,488
Ar III	643.256	450	3	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	0-1	059,488
Ar III	690.170	400d	2	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - {}^5D^\circ$	2-3	059,488
Ar III	695.537	300	2	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - {}^5D^\circ$	1-2	059,488
Ar III	697.74	100	2	$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$g^3P - {}^5D^\circ$	0-1	059

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar III	699.72	50		$3s^23p^4 - 3s^23p^3(^4S^\circ)3d$	$^1D - ^3D^\circ$	2-	060
Ar III	769.152	600	5	$3s^23p^4 - 3s3p^5$	$^1D - ^1P^\circ$	2-1	059,169,488
Ar III	871.099	500	1	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	2-1	059,488
Ar III	875.534	450	1	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	1-0	059,488
Ar III	878.728	600	1	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	2-2	059,488
Ar III	879.622	400	1	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	1-1	059,488
Ar III	883.179	450	1	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	0-1	059,488,252
Ar III	887.404	500	1	$3s^23p^4 - 3s3p^5$	$g^3P - ^3P^\circ$	1-2	059,488
Ar III	1002.095	150		$3s^23p^4 - 3s3p^5$	$^1D - ^3P^\circ$	2-2	060
Ar III?	1205.95	50					060
Ar III	1460.077	200		$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^2D^\circ)4p$	$^3D^\circ - ^3D$	3-3	059
Ar III	1460.234	100		$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^2D^\circ)4p$	$^3D^\circ - ^3D$	2-3	059
Ar III	1465.532	100		$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^2D^\circ)4p$	$^3D^\circ - ^3D$		059
Ar III	1465.712	150		$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^2D^\circ)4p$	$^3D^\circ - ^3D$	2-2	059
Ar III	1467.841	150		$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^2D^\circ)4p$	$^3D^\circ - ^3D$	1-1	059
Ar III	1468.006	100		$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^2D^\circ)4p$	$^3D^\circ - ^3D$	1-2	059
Ar III	1669.10	50	6	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^5D^\circ - ^5P$	2-3	059
Ar III	1669.304	250	6	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^5D^\circ - ^5P$	3-3	059
Ar III	1669.671	350	6	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^5D^\circ - ^5P$	4-3	059,488
Ar III	1673.14	50	6	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^5D^\circ - ^5P$	1-2	059
Ar III	1673.241	150	6	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^5D^\circ - ^5P$	2-2	059
Ar III	1673.425	350	6	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^5D^\circ - ^5P$	3-2	059,488
Ar III	1675.484	350	6	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^5D^\circ - ^5P$	1-1	059
Ar III	1675.637	200	6	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^5D^\circ - ^5P$	2-1	059,488
Ar III	1914.398	450	7	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^3D^\circ - ^3P$	3-2	059,488
Ar III	1914.653	150	7	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^3D^\circ - ^3P$	2-2	059
Ar III	1915.564	350	7	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^3D^\circ - ^3P$	2-1	059,488
Ar III	1918.06	50	7	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^3D^\circ - ^3P$	1-0	059
Ar III	1918.667	200	7	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^3D^\circ - ^3P$	1-2	059
Ar III	1919.515	200	7	$3s^23p^3(^4S^\circ)3d - 3s^23p^3(^4S^\circ)4p$	$^3D^\circ - ^3P$	1-1	059
Ar III	1957.83	50		$3s^23p^3(^4S^\circ)4s - 3s^23p^3(^2D^\circ)4p$	$^3S^\circ - ^3P$	1-0	059
Ar III	1962.74	100		$3s^23p^3(^4S^\circ)4s - 3s^23p^3(^2D^\circ)4p$	$^3S^\circ - ^3P$	1-1	059
Ar III	1973.780	200		$3s^23p^3(^4S^\circ)4s - 3s^23p^3(^2D^\circ)4p$	$^3S^\circ - ^3P$	1-2	059

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Ground state $1s^22s^22p^63s^23p^3\ ^4S^\circ_{3/2}$

Ionization potential 482 400 cm^{-1}; 59.81 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar IV	396.869	160		$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - {}^4P$	3/2-5/2	059
Ar IV	398.546	160		$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - {}^4P$	3/2-3/2	059
Ar IV	399.634	120		$3s^23p^3 - 3s^23p^2(^3P)4s$	$g^4S^\circ - {}^4P$	3/2-1/2	059
Ar IV?	423.58	10		$3s^23p^3 - 3s^23p^2(^3P)4s$	$^2D^\circ - {}^2P$	5/2-3/2	707,375
Ar IV	443.40			$3s^23p^3 - 3s^23p^2(^1D)3d$	$^2D^\circ - {}^2F$	5/2-7/2	295
Ar IV	451.20			$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - {}^4P$	3/2-1/2	267
Ar IV	451.87			$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - {}^4P$	3/2-3/2	267
Ar IV	452.91			$3s^23p^3 - 3s^23p^2(^3P)3d$	$g^4S^\circ - {}^4P$	3/2-5/2	267
Ar IV	683.278	400	3	$3s^23p^3 - 3s3p^4$	$^2D^\circ - {}^2P$	3/2-1/2	059,488
Ar IV	688.392	300	3	$3s^23p^3 - 3s3p^4$	$^2D^\circ - {}^2P$	3/2-3/2	059
Ar IV	689.007	500	3	$3s^23p^3 - 3s3p^4$	$^2D^\circ - {}^2P$	5/2-3/2	059,488
Ar IV	699.408	240		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^2S$	1/2-1/2	059
Ar IV	700.277	320		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^2S$	3/2-1/2	059
Ar IV	754.205	160		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^2P$	1/2-1/2	059
Ar IV	755.212	120		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^2P$	3/2-1/2	059
Ar IV	760.439	120		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^2P$	1/2-3/2	059
Ar IV	761.470	200		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^2P$	3/2-3/2	059
Ar IV?	772.41	10		$3s3p^4 - 3s^23p^2(^3P)4p$	$^2P - {}^2P^\circ$	3/2-3/2	707,375
Ar IV	800.573	200	2	$3s^23p^3 - 3s3p^4$	$^2D^\circ - {}^2D$	3/2-5/2	059
Ar IV	801.086	400	2	$3s^23p^3 - 3s3p^4$	$^2D^\circ - {}^2D$	3/2-3/2	059,488
Ar IV	801.409	400	2	$3s^23p^3 - 3s3p^4$	$^2D^\circ - {}^2D$	5/2-5/2	059,488
Ar IV	801.913	200	2	$3s^23p^3 - 3s3p^4$	$^2D^\circ - {}^2D$	5/2-3/2	059
Ar IV	840.029	600	1	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - {}^4P$	3/2-1/2	059,488
Ar IV	843.772	800	1	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - {}^4P$	3/2-3/2	059,488
Ar IV	850.602	1000	1	$3s^23p^3 - 3s3p^4$	$g^4S^\circ - {}^4P$	3/2-5/2	059,488
Ar IV	900.362	200		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^2D$	1/2-3/2	059
Ar IV	901.168	400		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^2D$	3/2-5/2	059
Ar IV	901.804	80		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^2D$	3/2-3/2	059
Ar IV	1037.931	40		$3s^23p^3 - 3s3p^4$	$^2D^\circ - {}^4P$	5/2-5/2	059
Ar IV	1187.80	40		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^4P$	1/2-1/2	059
Ar IV	1190.354	80		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^4P$	3/2-1/2	059
Ar IV	1197.84	40		$3s^23p^3 - 3s3p^4$	$^2P^\circ - {}^4P$	3/2-3/2	059

Ground state $1s^22s^22p^63s^23p^2\ ^3P_0$

Ionization potential 605 100 cm^{-1}; 75.02 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar V	336.555	150	6	$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	1-2	549
Ar V	337.555	150	6	$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	0-1	549
Ar V	337.998	300	6	$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	2-2	488,549
Ar V	338.426	100	6	$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	1-1	549
Ar V	339.009	150	6	$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	1-0	549
Ar V	339.886	150	6	$3s^23p^2 - 3s^23p4s$	$g^3P - {}^3P^\circ$	2-1	549
Ar V	350.878	150	8	$3s^23p^2 - 3s^23p4s$	${}^1D - {}^1P^\circ$	2-1	488,549
Ar V	436.60			$3s^23p^2 - 3s^23p3d$	${}^1D - {}^1F^\circ$	3-4	267
Ar V	445.997	250	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	0-1	197,549
Ar V	446.949	400	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	1-2	197,549
Ar V	447.527	200	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	1-1	549
Ar V	449.065	900	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-3	197,549
Ar V	449.493	200	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-2	549
Ar V	450.079	50	5	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3D^\circ$	2-1	549
Ar V	458.121	150	4	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	0-1	549
Ar V	458.975	100	4	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-0	549
Ar V	459.728	50	4	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-1	488,549
Ar V	461.227	300b	4	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	1-2	488,549
Ar V	462.415	150	4	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	2-1	549
Ar V	463.938	350	4	$3s^23p^2 - 3s^23p3d$	$g^3P - {}^3P^\circ$	2-2	197,549
Ar V	511.886	25		$3s^23p^2 - 3s3p^3$	$g^3P - {}^1P^\circ$	0-1	549
Ar V	513.914	50		$3s^23p^2 - 3s3p^3$	$g^3P - {}^1P^\circ$	1-1	549
Ar V	517.250	25		$3s^23p^2 - 3s3p^3$	$g^3P - {}^1P^\circ$	2-1	549
Ar V	522.090	150	3	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3S^\circ$	0-1	549,488
Ar V	524.189	250	3	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3S^\circ$	1-1	549,488
Ar V	527.693	300	3	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3S^\circ$	2-1	549,488
Ar V	558.481	250	7	$3s^23p^2 - 3s3p^3$	${}^1D - {}^1P^\circ$	2-1	549,488
Ar V?	635.12	150		$3s3p^3 - 3s^23p^2$	${}^1P^\circ - {}^1S$	1-0	707,375
Ar V	705.353	150	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	0-1	549,488
Ar V	709.195	250	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	1-	549,488
Ar V	715.599	200	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	2-1	549,488
Ar V	715.645	150	2	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3P^\circ$	2-2	549,488
Ar V	822.161	200	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	0-1	197,549,488
Ar V	827.052	250	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	1-2	197,549,488
Ar V	827.349	150	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	1-1	059,549
Ar V	834.878	200	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	2-3	549,488
Ar V	835.792	50	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	2-2	549
Ar V	836.126	100	1	$3s^23p^2 - 3s3p^3$	$g^3P - {}^3D^\circ$	2-1	549

Ground state $1s^22s^22p^63s^23p\ ^2P^\circ_{1/2}$

Ionization potential 736 600 cm^{-1}; 91.32 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar VI	180.074	80		$3s^23p - 3s^25d$	$g\,^2P^\circ - ^2D$	½-3½	549
Ar VI	180.719	120		$3s^23p - 3s^25d$	$g\,^2P^\circ - ^2D$	3½-5½	549
Ar VI	219.896	120		$3s^23p - 3s^24d$	$g\,^2P^\circ - ^2D$	½-3½	549
Ar VI	220.946	200		$3s^23p - 3s^24d$	$g\,^2P^\circ - ^2D$	3½-5½	549
Ar VI	281.433	120		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3½-5½	549
Ar VI	281.915	160		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	½-3½	549
Ar VI	282.423	240		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	5½-5½	549
Ar VI	282.556	40		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3½-3½	549
Ar VI	283.164	120		$3s3p^2 - 3s3p(^3P^\circ)4s$	$^4P - ^4P^\circ$	3½-½	549
Ar VI	292.154	200		$3s^23p - 3s^24s$	$g\,^2P^\circ - ^2S$	½-½	549
Ar VI	294.052	240		$3s^23p - 3s^24s$	$g\,^2P^\circ - ^2S$	3½-½	549
Ar VI	455.813	80		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	½-3½	549
Ar VI	456.375	120		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	½-½	549
Ar VI	457.007	200		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3½-5½	549
Ar VI	457.475	800b		$3s^23p - 3s^23d$	$g\,^2P^\circ - ^2D$	½-3½	549
Ar VI	457.475	800b		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3½-3½	549
Ar VI	458.039	40		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	3½-½	549
Ar VI	459.320	400		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5½-7½	549
Ar VI	459.603	100		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5½-5½	549
Ar VI	460.058	40		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4D^\circ$	5½-3½	549
Ar VI	460.202	40		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4P^\circ$	½-½	549
Ar VI	461.227	300b		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4P^\circ$	½-3½	549
Ar VI	461.898	40		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3½-½	549
Ar VI	462.007	1000d		$3s^23p - 3s^23d$	$g\,^2P^\circ - ^2D$	3½-5½	197,549
Ar VI	462.146	160		$3s^23p - 3s^23d$	$g\,^2P^\circ - ^2D$	3½-3½	549
Ar VI	464.257	160		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4P^\circ$	3½-5½	549
Ar VI	465.586	80		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5½-3½	549
Ar VI	466.932	160		$3s3p^2 - 3s3p(^3P^\circ)3d$	$^4P - ^4P^\circ$	5½-5½	549
Ar VI	544.731	160		$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2P$	½-3½	549
Ar VI	548.905	200		$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2P$	½-½	549
Ar VI	551.371	320		$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2P$	3½-3½	549
Ar VI	555.639	160		$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2P$	3½-½	549
Ar VI	587.006	40		$3s3p^2 - 2p^63p^3$	$^4P - ^4S^\circ$	½-3½	549
Ar VI	588.921	200		$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2S$	½-½	549
Ar VI	589.783	80		$3s3p^2 - 2p^63p^3$	$^4P - ^4S^\circ$	3½-3½	549
Ar VI	594.096	100		$3s3p^2 - 2p^63p^3$	$^4P - ^4S^\circ$	5½-3½	549
Ar VI	596.694	160		$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2S$	3½-½	549,252
Ar VI	754.93	100		$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2D$	½-3½	252
Ar VI	767.06	200		$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2D$	3½-5½	252
Ar VI	767.71	100		$3s^23p - 3s3p^2$	$g\,^2P^\circ - ^2D$	3½-3½	252

Ground state $1s^2 2s^2 2p^6 3s^2\ ^1S_0$

Ionization potential 1 000 400 cm^{-1}; 124.03 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar VII	151.698	50		3s3p - 3s5d	$^3P^\circ - ^3D$	0-1	549
Ar VII	151.876	100		3s3p - 3s5d	$^3P^\circ - ^3D$	1-2	549
Ar VII	152.259	150		3s3p - 3s5d	$^3P^\circ - ^3D$	2-3	549
Ar VII	176.566	500		$3s^2$ - 3s4p	$g^1S - ^1P^\circ$	0-1	549
Ar VII	191.759	150		3s3p - 3s4d	$^3P^\circ - ^3D$	0-1	549
Ar VII	192.041	250		3s3p - 3s4d	$^3P^\circ - ^3D$	1-2	549
Ar VII	192.635	350		3s3p - 3s4d	$^3P^\circ - ^3D$	2-3	549
Ar VII	249.384	100		3s3p - 3s4s	$^3P^\circ - ^3S$	0-1	549
Ar VII	249.886	250		3s3p - 3s4s	$^3P^\circ - ^3S$	1-1	197,549
Ar VII	250.940	350		3s3p - 3s4s	$^3P^\circ - ^3S$	2-1	197,549
Ar VII	297.621	150		3s3d - 3s4f	$^3D - ^3F^\circ$	1-2	549
Ar VII	297.658	200		3s3d - 3s4f	$^3D - ^3F^\circ$	2-3	549
Ar VII	297.701	300		3s3d - 3s4f	$^3D - ^3F^\circ$	3-4	549
Ar VII	473.938	200		3s3p - 3s3d	$^3P^\circ - ^3D$	0-1	197,549
Ar VII	475.656	400		3s3p - 3s3d	$^3P^\circ - ^3D$	1-2	197,549
Ar VII	475.733	100		3s3p - 3s3d	$^3P^\circ - ^3D$	1-1	549
Ar VII	479.379	600		3s3p - 3s3d	$^3P^\circ - ^3D$	2-3	197,549
Ar VII	479.485	100		3s3p - 3s3d	$^3P^\circ - ^3D$	2-2	549
Ar VII	585.754	750		$3s^2$ - 3s3p	$g^1S - ^1P^\circ$	0-1	549,252
Ar VII	630.306	100		3s3p - $2p^6 3p^2$	$^3P^\circ - ^3P$	1-2	549
Ar VII	634.208	100		3s3p - $2p^6 3p^2$	$^3P^\circ - ^3P$	0-1	549
Ar VII	637.052	200		3s3p - $2p^6 3p^2$	$^3P^\circ - ^3P$	2-2	549
Ar VII	637.466	50		3s3p - $2p^6 3p^2$	$^3P^\circ - ^3P$	1-1	549
Ar VII	641.318	100		3s3p - $2p^6 3p^2$	$^3P^\circ - ^3P$	1-0	549
Ar VII	644.388	100		3s3p - $2p^6 3p^2$	$^3P^\circ - ^3P$	2-1	549

Ground state $1s^2 2s^2 2p^6 3s\ ^2S_{1/2}$

Ionization potential 1 157 400 cm^{-1}; 143.50 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar VIII	120.093	100		3s - 5p	g^2S - $^2P°$	½-3/2	549
Ar VIII	120.157	50		3s - 5p	g^2S - $^2P°$	½-½	549
Ar VIII	122.624	10		3p - 6d	$^2P°$ - ^2D	½-3/2	549
Ar VIII	123.033	50		3p - 6d	$^2P°$ - ^2D	3/2-5/2	549
Ar VIII	137.926	150		3p - 5d	$^2P°$ - ^2D	½-3/2	549
Ar VIII	138.440	250		3p - 5d	$^2P°$ - ^2D	3/2-5/2	549
Ar VIII	148.725	100		3p - 5s	$^2P°$ - ^2S	½-½	549
Ar VIII	149.333	150		3p - 5s	$^2P°$ - ^2S	3/2-½	549
Ar VIII	158.923	400		3s - 4p	g^2S - $^2P°$	½-3/2	549
Ar VIII	159.175	250		3s - 4p	g^2S - $^2P°$	½-½	549
Ar VIII	179.400	500		3p - 4d	$^2P°$ - ^2D	½-3/2	549
Ar VIII	180.254	750		3p - 4d	$^2P°$ - ^2D	3/2-5/2	549
Ar VIII	184.273	150		3d - 5f	^2D - $^2F°$	3/2-5/2	549
Ar VIII	184.315	250		3d - 5f	^2D - $^2F°$	5/2-7/2	549
Ar VIII	229.437	250		3p - 4s	$^2P°$ - ^2S	½-½	549
Ar VIII	230.875	350		3p - 4s	$^2P°$ - ^2S	3/2-½	549
Ar VIII	260.253	200		3d - 4f	^2D - $^2F°$	3/2-5/2	549
Ar VIII	260.332	300		3d - 4f	^2D - $^2F°$	5/2-7/2	549
Ar VIII	337.257	100d		3d - 4p	^2D - $^2P°$	5/2-3/2	549
Ar VIII	338.222	10d		3d - 4p	^2D - $^2P°$	3/2-½	549
Ar VIII	519.429	150		3p - 3d	$^2P°$ - ^2D	½-3/2	549
Ar VIII	526.457	250		3p - 3d	$^2P°$ - ^2D	3/2-5/2	549
Ar VIII	526.870	50		3p - 3d	$^2P°$ - ^2D	3/2-3/2	549
Ar VIII	700.398	1000P		3s - 3p	g^2S - $^2P°$	½-3/2	549,252
Ar VIII	713.990	500P		3s - 3p	g^2S - $^2P°$	½-½	549,252

Ground state $1s^22s^22p^6\ ^1S_0$

Ionization potential 422.8 eV?

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar IX?	30.95	500					255
Ar IX	31.52	600		$2p^6 - 2p^5(^2P^\circ)6d$	$g\,^1S - ½[3/2]^\circ$	0-1	255
Ar IX	31.66	700		$2p^6 - 2p^5(^2P^\circ)6d$	$g\,^1S - 3/2[3/2]^\circ$	0-1	255
Ar IX?	32.54	500					255
Ar IX	32.64	400		$2p^6 - 2p^5(^2P^\circ)5d$	$g\,^1S - ½[3/2]^\circ$	0-1	255
Ar IX	35.02	700		$2p^6 - 2p^5(^2P^\circ)4d$	$g\,^1S - ½[3/2]^\circ$	0-1	255
Ar IX	35.28	300		$2p^6 - 2p^5(^2P^\circ)4d$	$g\,^1S - 3/2[3/2]^\circ$	0-1	255
Ar IX	35.82	500		$2s^22p^6 - 2s2p^6(^2S)3p$	$g\,^1S - ^1P^\circ$	0-1	259
Ar IX?	36.55	400					255
Ar IX?	36.67	500					255
Ar IX?	36.78	500					255
Ar IX?	36.98	400					255
Ar IX	41.48	600		$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - ½[3/2]^\circ$	0-1	255
Ar IX	42.02	200		$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - 3/2[3/2]^\circ$	0-1	255
Ar IX	42.56	200		$2p^6 - 2p^5(^2P^\circ)3d$	$g\,^1S - 3/2[1/2]^\circ$	0-1	255
Ar IX	48.730	500		$2p^6 - 2p^5(^2P^\circ)3s$	$g\,^1S - ½[1/2]^\circ$	0-1	549,254,487
Ar IX	49.180	500		$2p^6 - 2p^5(^2P^\circ)3s$	$g\,^1S - 3/2[3/2]^\circ$	0-1	549,254,487

Ground state $1s^2 2s^2 2p^5\ ^2P^\circ_{3/2}$

Ionization potential 479.1 eV?

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar X	37.42	700		$2p^5 - 2p^4(^1D)3d$	$g\,^2P^\circ - ^2D$	3/2-5/2	255,259
Ar X	37.59	700		$2p^5 - 2p^4(^1D)3d$	$g\,^2P^\circ$ - ?		255,259
Ar X	38.22	600		$2p^5 - 2p^4(^3P)3d$	$g\,^2P^\circ - ^2D$	3/2-5/2	255,259
Ar X?	38.40	500					255
Ar X?	38.64	700					255
Ar X	41.56	400		$2p^5 - 2p^4(^1S)3s$	$g\,^2P^\circ - ^2S$	3/2-1/2	255
Ar X	41.89	200		$2p^5 - 2p^4(^1S)3s$	$g\,^2P^\circ - ^2S$	1/2-1/2	255
Ar X	42.96	500		$2p^5 - 2p^4(^1D)3s$	$g\,^2P^\circ - ^2D$	3/2-5/2	255,254
Ar X	43.29	800		$2p^5 - 2p^4(^1D)3s$	$g\,^2P^\circ - ^2D$	1/2-3/2	255,254
Ar X	43.72	700		$2p^5 - 2p^4(^3P)3s$	$g\,^2P^\circ - ^2P$	3/2-1/2	255
Ar X	43.93	900		$2p^5 - 2p^4(^3P)3s$	$g\,^2P^\circ - ^2P$	3/2-3/2	255
Ar X	44.07	700		$2p^5 - 2p^4(^3P)3s$	$g\,^2P^\circ - ^2P$	1/2-1/2	255,254
Ar X	44.26	900		$2p^5 - 2p^4(^3P)3s$	$g\,^2P^\circ - ^4P$	3/2-3/2	255,254
Ar X	44.49	900		$2p^5 - 2p^4(^3P)3s$	$g\,^2P^\circ - ^4P$	3/2-5/2	255,254
Ar X	44.67	800		$2p^5 - 2p^4(^3P)3s$	$g\,^2P^\circ - ^4P$	1/2-3/2	255
Ar X	44.85	600		$2s2p^6 - 2s2p^5(^3P^\circ)3s$	$^2S - ^2P^\circ$	1/2-1/2	255
Ar X	45.05	700		$2s2p^6 - 2s2p^5(^3P^\circ)3s$	$^2S - ^2P^\circ$	1/2-3/2	255
Ar X	165.53	400		$2s^2 2p^5 - 2s2p^6$	$g\,^2P^\circ - ^2S$	3/2-1/2	160,255
Ar X	170.63	200		$2s^2 2p^5 - 2s2p^6$	$g\,^2P^\circ - ^2S$	1/2-1/2	160,255

Ground state $1s^22s^22p^4\ ^3P_2$

Ionization potential 539.0 eV?

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar XI	34.24	700		$2p^4 - 2p^3(^2D^\circ)3d$	$g^3P - {}^3P^\circ$	2-2	255
Ar XI	34.35	800		$2p^4 - 2p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	255
Ar XI	34.52	700		$2p^4 - 2p^3(^2D^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	255
Ar XI	35.39	700		$2p^4 - 2p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	2-3	255
Ar XI	35.58	600		$2p^4 - 2p^3(^4S^\circ)3d$	$g^3P - {}^3D^\circ$	1-2	255
Ar XI	39.50	600		$2p^4 - 2p^3(^2D^\circ)3s$	$^1D - {}^1D^\circ$	2-2	255
Ar XI	39.74	500		$2p^4 - 2p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	2-1	255
Ar XI?	39.82	500					255
Ar XI	39.95	300		$2p^4 - 2p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	1-1	255
Ar XI	40.02	200		$2p^4 - 2p^3(^4S^\circ)3s$	$g^3P - {}^3S^\circ$	0-1	255
Ar XI	151.86			$2s^22p^4 - 2s2p^5$	$^1D - {}^1P^\circ$	2-1	160,257
Ar XI	184.51			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-1	160,257
Ar XI	187.08			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-0	160,257
Ar XI	188.82			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	2-2	160,257
Ar XI	189.57			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-1	160,257
Ar XI	190.96			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	0-1	160,257
Ar XI	194.09			$2s^22p^4 - 2s2p^5$	$g^3P - {}^3P^\circ$	1-2	160,257

Ground state $1s^22s^22p^3\ ^4S^\circ_{3/2}$

Ionization potential 618.5 eV?

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar XII	34.68	700		$2p^3 - 2p^2(^3P)3s$	$g\,^4S^\circ - ^4P$	3/2-5/2	255
Ar XII	34.79	600		$2p^3 - 2p^2(^3P)3s$	$g\,^4S^\circ - ^4P$	3/2-3/2	255
Ar XII	34.88	500		$2p^3 - 2p^2(^3P)3s$	$g\,^4S^\circ - ^4P$	3/2-1/2	255
Ar XII	45.41	400		$2p^3 - 2p^2(^1D)3s$	$^2D^\circ - ^2D$		255
Ar XII	46.71	500		$2p^3 - 2p^2(^1D)3s$	$^2P^\circ - ^2D$	3/2-5/2	255
Ar XII	149.93			$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-1/2	160,257
Ar XII	153.63			$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	3/2-3/2	160,257
Ar XII	154.44			$2s^22p^3 - 2s2p^4$	$^2D^\circ - ^2P$	5/2-3/2	160,257
Ar XII	215.49			$2s^22p^3 - 2s2p^4$	$g\,^4S^\circ - ^4P$	3/2-1/2	160,257
Ar XII	218.28			$2s^22p^3 - 2s2p^4$	$g\,^4S^\circ - ^4P$	3/2-3/2	160,257
Ar XII	224.23			$2s^22p^3 - 2s2p^4$	$g\,^4S^\circ - ^4P$	3/2-5/2	160,257

Ground state 1s $^2S_{1/2}$

Ionization potential 35 699 937 cm^{-1}; 4426.11 eV

Element	Wavelength	Intensity	Multiplet	Configuration	Term	J - J	Reference
Ar XVIII	2.881	P		1s - 6p	g^2S - $^2P^o$	½-3½	309
Ar XVIII	2.918	P		1s - 5p	g^2S - $^2P^o$	½-3½	309
Ar XVIII	2.987	P		1s - 4p	g^2S - $^2P^o$	½-3½	309
Ar XVIII	3.151	P		1s - 3p	g^2S - $^2P^o$	½-3½	309
Ar XVIII	3.733	P		1s - 2p	g^2S - $^2P^o$	½-3½	309
Ar XVIII	12.21	P		2 - 7			309
Ar XVIII	12.61	P		2 - 6			309
Ar XVIII	13.35	P		2 - 5			309
Ar XVIII	14.94	P		2 - 4			309
Ar XVIII	20.16	P		2 - 3			309
Ar XVIII	30.94	P		3 - 7			309
Ar XVIII	33.68	P		3 - 6			309
Ar XVIII	39.47	P		3 - 5			309
Ar XVIII	57.7	P		3 - 4			309
Ar XVIII	66.7	P		4 - 7			309
Ar XVIII	80.9	P		4 - 6			309
Ar XVIII	124.8	P		4 - 5			309
Ar XVIII	143.4	P		5 - 7			309
Ar XVIII	229.9	P		5 - 6			309
Ar XVIII	381.4	P		6 - 7			309

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SECTION II

Finding List

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Element	Wavelength	Intensity	Multiplet
Ar XVIII	2.881	P	
Ar XVIII	2.918	P	
Ar XVIII	2.987	P	
Ar XVIII	3.151	P	
Cl XVII	3.231	P	
Cl XVII	3.272	P	
Cl XVII	3.351	P	
Cl XVII	3.534	P	
S XVI	3.649	P	
S XVI	3.696	P	
Ar XVIII	3.733	P	
S XVI	3.784	P	
S XVI	3.991	P	
P XV	4.154	P	
Cl XVII	4.187	P	
P XV	4.207	P	
P XV	4.308	P	
P XV	4.543	P	
S XVI	4.729	P	
Si XIV	4.770	P	
Si XIV	4.831	P	
Si XIV	4.947	P	
Si XIV	5.217	P	
P XV	5.383	P	
Al XIII	5.534	P	
Al XIII	5.605	P	
Al XIII	5.739	P	
Al XIII	6.053	P	
Si XIV	6.182	P	
Al XII	6.314		
Mg XII	6.497	P	
Mg XII	6.580	P	
Al XII	6.635		
Mg XII	6.738	P	
Mg XII	7.106	P	
Al XIII	7.173	P	
Mg XI	7.310		
Mg XI	7.473		
Na XI	7.735	P	
Al XII	7.757		
Na XI	7.833	P	
Mg XI	7.850		
Na XI	8.021	P	
Mg XII	8.421	P	
Na XI	8.459	P	
Mg XI	9.168		
Ne X	9.362	P	
Ne X	9.481	P	
Ne X	9.708	P	
Na XI	10.025	P	
Ne X	10.239	P	
F IX	11.560	P	
F IX	11.707	P	
F IX	11.988	P	
Ne X	12.134	P	
Ar XVIII	12.21	P	
Ar XVIII	12.61	P	
F IX	12.644	P	
Ar XVIII	13.35	P	
Ne IX	13.44		
Ne IX	13.55		
Cl XVII	13.69	P	
F VIII	13.780		
Cl XVII	14.15	P	
O VIII	14.453	2	
F VIII	14.458		
O VIII	14.524	3	
O VIII	14.634	8	
O VIII	14.821	25	
Ar XVIII	14.94	P	
Cl XVII	14.97	P	
F IX	14.984	P	
O VIII	15.176	80	
S XVI	15.46	P	
S XVI	15.97	P	
O VIII	16.006	308	
Cl XVII	16.76	P	
F VIII	16.807		
S XVI	16.90	P	
F VIII	16.951		
O VII	17.200	50	
O VII	17.396	100	
P XV	17.60	P	
O VII	17.768	200	
P XV	18.18	P	
O VII	18.627	500	
S XVI	18.93	P	
O VIII	18.969	1000	
N VII	19.118	P	
P XV	19.24	P	
N VII	19.361	P	
N VII	19.826	P	
Ar XVIII	20.16	P	
Si XIV	20.21	P	
Si XIV	20.88	P	
N VII	20.910	P	
P XV	21.54	P	
O VII	21.602	1000	
O VII	21.804	300	
Si XIV	22.09	P	
Cl XVII	22.61	P	
Al XIII	23.44	P	
N VI	23.771	10	
Al XIII	24.22	P	
Si XIV	24.74	P	
N VII	24.781	100P	
N VI	24.898	30	
Ar	25.25	400	
S XVI	25.54	P	
Ar	25.59	400	
Al XIII	25.63	P	
Ar	25.71	400	
C VI	26.026	P	
Ar	26.04	300	
Ar	26.23	200	
C VI	26.357	P	
Ar	26.36	400	
C VI	26.990	P	
Ar	27.40	400	
Mg XII	27.52	P	

Element	Wavelength	Intensity	Multiplet
Ar	27.54	400	
Ar	27.80	400	
Ar	27.94	400	
Mg XII	28.43	P	
C VI	28.466	P	
Al XIII	28.70	P	
N VI	28.787	100	
P XV	29.07	P	
N VI	29.084		
Ar	29.38	500	
Ar	29.57	500	
Ar	29.88	300	
Ar	30.06	200	
Mg XII	30.09	P	
Ar	30.26	300	
Ar	30.59	300	
Ar XVIII	30.94	P	
Ar IX?	30.95	500	
Ar	31.36	700	
Ar	31.46	600	
Ar IX	31.52	600	
Ar IX	31.66	700	
Ar	31.82	400	
Ar	31.97	500	
C V	32.064		
C V	32.188		
Ar	32.28	500	
C V	32.400		
Ar	32.46	500	
Ar IX?	32.54	500	
Ar IX	32.64	400	
C V	32.754		
Na XI	32.76	P	
Si XIV	33.39	P	
C V	33.426	30	
Ar XVIII	33.68	P	
Mg XII	33.70	P	
C VI	33.736	1000P	
Na XI	33.85	P	
Ar XI	34.24	700	
Ar XI	34.35	800	
Ar XI	34.52	700	
Ar XII	34.68	700	
Cl XVII	34.70	P	
Ar XII	34.79	600	
Ar XII	34.88	500	
C V	34.973	100	
Ar IX	35.02	700	
P XIII	35.086	P	
P XIII	35.157	P	
Ar IX	35.28	300	
Ar XI	35.39	700	
Ar XI	35.58	600	
Na XI	35.82	P	
Ar IX	35.82	500	
Ar IX?	36.55	400	
Ar IX?	36.67	500	
Ar IX?	36.78	500	
P XII	36.978	P	
Ar IX?	36.98	400	
P XII	37.345	P	
Ar X	37.42	700	
B V	37.483	P	
Ar X	37.59	700	
Cl XVII	37.77	P	
Ar	37.81	400	
B V	37.960	P	
Ar	38.04	300	
Ar X	38.22	600	
Ar X?	38.40	500	
Ar X?	38.64	700	
P XIII	38.652	P	
Al XIII	38.73	P	
P XIII	38.825	P	
B V	38.871	P	
Ar	38.88	500	
S XVI	39.18	P	
Al XI	39.180	1	
Cl X	39.253	10	
P XII	39.316	P	
Ar	39.34	300	
P XII	39.358	P	
P XII	39.450	P	
Cl VIII	39.462	100	
Ar XVIII	39.47	P	
Ar XI	39.50	600	
Cl	39.528	1	
Cl	39.559	1	
Cl	39.634	1	
Ne X	39.65	P	
Cl VIII	39.655	10	
Ar XI	39.74	500	
Ar XI?	39.82	500	
Ar XI	39.95	300	
Cl X	39.956	100	
Ar XI	40.02	200	
Cl X	40.085	200	
Na XI	40.11	P	
Cl X	40.136	1	
C V	40.270	300	
Cl XI	40.392	10	
P XII	40.431	P	
Cl X	40.660	100	
C V	40.731	15	
Cl XI	40.787	10	
Si XII	40.91	100P	
Si XII	40.95	50P	
Ne X	40.96	P	
Cl X	40.994	10	
B V	40.996	P	
Cl X	41.390	100	
Ar IX	41.48	600	
P IX	41.556	P	
Ar X	41.56	400	
Cl X	41.589	10	
Cl VIII	41.636	1	
P XII	41.638	P	
Ar X	41.89	200	
P XI	42.006	P	
Ar IX	42.02	200	

Element	Wavelength	Intensity	Multiplet
Cl VIII	42.166	10	
Cl VIII	42.220	200	
Cl VIII	42.430	100	
P XI	42.468	P	
P XI	42.479	P	
S X	42.51	15P	
S X	42.54	35P	
Ar IX	42.56	200	
S X	42.58	50P	
P XI	42.599	P	
S XVI	42.65	P	
P XI	42.764	P	
Cl IX	42.940	100	
Ar X	42.96	500	
Cl IX	43.168	120	
Ar X	43.29	800	
Si XI	43.290	10	
Ne X	43.35	P	
P XI	43.488	P	
P XI	43.529	P	
Al IX	43.549	10	
Ar X	43.72	700	
Si XI	43.763	10	
Ar X	43.93	900	
Cl IX	44.003	200	
Si XII	44.021	50	
Mg X	44.050	100	
Ar X	44.07	700	
Cl IX	44.088	400	
P XI	44.115	P	
Al X	44.136	10	
Si XII	44.165	100	
Cl IX	44.183	200	
Si IX	44.215	10	
Si IX	44.249	10	
Cl XVII	44.26	P	
Ar X	44.26	900	
Cl IX	44.267	300b	
S VIII	44.350	20	
Cl VIII	44.361	200b	
Cl IX	44.361	200b	
S VIII	44.374	100b	
S X	44.374	100b	
S X	44.387	20	
Ar X	44.49	900	
Cl IX	44.530	100	
S VIII	44.547	50	
P XV	44.59	P	
Cl VIII	44.603	200	
Ar X	44.67	800	
Na IX	44.723	10	
Ar X	44.85	600	
Al X	44.902	10	
Ar X	45.05	700	
Cl IX	45.112	400	
Cl IX	45.261	200	
S VIII	45.279	50	
S VIII	45.290	50	
Cl IX	45.332	100	
S VIII	45.370	20	
Cl IX	45.378	300	
Cl IX	45.396	300b	
Cl X	45.396	300b	
Si XI	45.398	10	
Ar XII	45.41	400	
Cl X	45.431	10	
S VIII	45.458	20	
Cl IX	45.465	10	
Mg XII	45.47	P	
S VIII	45.508	20	
Cl IX	45.519	200	
Cl IX	45.539	200	
Cl X	45.626	15	
Si XII	45.656	10	
Cl IX	45.657	100	
Cl IX	45.745	10	
P X	45.905	P	
P X	45.931	P	
P X	45.963	P	
P XI	45.997	P	
P X	46.018	P	
P X	46.070	P	
Na IX	46.090	100	
P X	46.090	P	
Cl IX	46.098	100	
P X	46.120	P	
P X	46.201	P	
P XI	46.203	P	
S VII	46.212	10	
P X	46.231	P	
Cl IX	46.242	10	
P X	46.245	P	
Si XI	46.264	10	
P X	46.294	P	
Ne IX	46.3	P	
Si XI	46.300	50	
P X	46.334	P	
S IX	46.373	50	
Si XI	46.401	100	
S IX	46.413	50	
Cl X	46.476	200	
S IX	46.585	10d	
S IX	46.624	10	
P X	46.636	P	
Ar XII	46.71	500	
Mg IX	46.711	10	
S	46.713	50	
S	46.765	50	
P X	46.769	P	
Cl X	46.845	100	
Al	46.896	10	
Cl X	46.908	10	
S IX	47.052	50	
Cl X	47.085	15	
S VII	47.098	50	
S IX	47.188	10	
Mg X	47.231	300	
S IX	47.249	50	
S VII	47.307	50	
Mg X	47.310	500	

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Element	Wavelength	Intensity	Multiplet
Al IX	47.417	1	
S IX	47.433	200	
Al IX	47.489	50	
Si XI	47.489	50	
S IX	47.518	30	
Al IX	47.534	100	
Si X	47.545	50	
S VIII	47.566	10	
S VIII	47.594	10	
Si XI	47.607	50	
S IX	47.616	10	
Si XI	47.653	50	
S X	47.654	20	
Ne IX	47.7	P	
Al IX	47.755	10	
Na IX	47.776	10	
S VIII	47.793	10b	
S X	47.793	10b	
Mg IX	47.818	10d	
Na IX	47.836	100	
Al IX	47.856	50	
P X	47.896	P	
Si XI	47.899	50	
Mg IX	47.947	100d	
Cl	47.990	10	
Ne IX	48.0	P	
Mg IX	48.024	10d	
S IX	48.160	100b	
S X?	48.160	100b	
Al XI	48.297	250	
Al XI	48.338	150	
Mg IX	48.340	100	
S	48.362	20	
P XV	48.53	P	
Ne X	48.55	P	
Na IX	48.553	200	
Si X	48.553	10	
S IX	48.564	20	
B V	48.587	1000P	
S VII	48.647	150	
Ar IX	48.730	500	
Mg IX	48.794	10	
P VIII	48.859	P	
S VII	48.874	100	
P IX	48.925	P	
B IV	48.939		
F IX	48.96	P	
Al IX	49.094	1	
S IX	49.119	100	
Ar IX	49.180	500	
Si XI	49.222	50	
Cl IX	49.234	100	
Si XI	49.265	10	
Na IX	49.326	100	
S IX	49.328	50	
Na IX	49.386	200	
B IV	49.456		
Cl VIII	49.487	700	
Ne IX	49.5	P	
Cl IX	49.568	100	
Mg IX	49.586	1	
Si X	49.701	100	
Al IX	49.854	100	
S XVI	49.97	P	
Si VIII	49.987	10	
S	49.990	120	
Si VIII	50.019	50d	
S VII	50.027	70	
Cl VIII	50.074	500	
Si X	50.154	50	
Si X	50.254	50d	
Ne IX	50.3	P	
Si X	50.305	50	
Si X	50.333	50	
B IV	50.435	100	
P IX	50.483	P	
P IX	50.511	P	
Si VIII	50.524	50b	
Si X	50.524	50b	
P IX	50.560	P	
F IX	50.58	P	
Al X	50.67	50	
Si X	50.691	100	
Cl VIII	50.700	200	
Al X	50.762	250	
Mg IX	50.777	10	
Al X	50.802	50	
Al X	50.946	10	
P X	51.019	P	
Cl IX	51.026	400	
Al X	51.039	10	
P IX	51.076	P	
Si IX	51.113	50	
P X	51.125	P	
P X	51.155	P	
P IX	51.156	P	
Si XIV	51.20	P	
P X	51.214	P	
S VIII	51.227	100	
P X	51.262	P	
Na VIII	51.316	10	
P X	51.351	P	
Al X	51.362	350	
Si IX	51.362	100	
Cl IX	51.378	300	
Al X	51.400	1	
Al X	51.454	1	
S VIII	51.470	70	
Mg IX	51.560	10	
Mg IX	51.591	300	
Si X	51.635	10	
Mg IX	51.654	400	
Si X	51.676	20	
Si VIII	51.718	20	
Na VIII	51.789	10	
S VII	51.807	350	
Si VIII	51.819	20	
P IX	51.861	P	
P IX	51.889	P	
Al X	51.979	300	

Element	Wavelength	Intensity	Multiplet
Cl IX	52.055	200	
Si X	52.070	50	
S VII	52.097	200	
Na IX	52.116	100	
Si X	52.155	100d	
P X	52.158	P	
P IX	52.160	P	
Na IX	52.186	200	
Al XI	52.299	500	
Si XI	52.30	100	
Cl IX	52.303	400	
Mg VIII	52.395	10	
Ne IX	52.4	P	
Cl IX	52.426	300	
Al XI	52.446	600	
Si X	52.485	100	
Na IX	52.487	1	
P IX	52.552	P	
Si VIII	52.554	20	
P X	52.594	P	
Si X	52.611	50	
Si IX	52.671	10	
Cl IX	52.677	200	
S VIII	52.681	20	
B IV	52.682	330	
S VIII	52.702	20	
P IX	52.709	P	
Cl IX	52.726	300	
S VIII	52.756	300	
S VIII	52.789	300	
Si IX	52.810	20	
Si IX	52.838	50	
S VIII	52.854	100	
Cl IX	52.939	10	
S VIII	52.958	350	
Cl IX	52.959	1	
S VIII	52.985	70	
Si	53.025	20	
Si	53.063	20	
S VIII	53.073	50	
Cl IX	53.108	1	
Mg IX	53.112	10	
Mg IX	53.188	200d	
Mg IX	53.222	200d	
S VIII	53.239	30	
Al IX	53.376	10	
Al	53.412	10	
Al IX	53.424	10	
Cl IX	53.448	10	
Si X	53.463	10	
Mg VIII	53.484	10d	
Al IX	53.488	1	
Mg VIII	53.512	100d	
F IX	53.53	P	
Al IX	53.554	10	
Si X	53.573	50d	
Si X	53.595	50d	
Al	53.598	10	
Cl IX	53.696	100	
Na VIII	53.750	10	
Si VIII	53.770	10	
Al VIII	53.785	10	
Al VIII	53.800	10	
Mg VIII	53.812	10	
Al VIII	53.823	10	
Na IX	53.860	300	
Mg VIII	53.905	100	
Si IX	53.992	10	
Mg IX	54.011	200	
Al X	54.115	220	
S VIII	54.118	500	
Mg	54.131	10	
Na XI	54.14	P	
S IX	54.178	100	
S IX	54.178	100	
Al VIII	54.217	200b	
Al XI	54.217	200b	
Al VIII	54.258	200	
S VIII	54.266	100	
Al IX	54.312	10d	
S VIII	54.370	20	
Na VIII	54.380	100	
S VIII	54.385	100	
Al XI	54.388	70	
S IX	54.396	50	
Si	54.403	50d	
S VIII	54.424	150	
Al IX	54.457	200	
Si VII	54.462	50b	
Si X	54.462	50b	
Mg IX	54.463	10	
S VIII	54.501	20	
Si VII	54.522	50d	
Si X	54.522	50d	
S VIII	54.566	50	
Si X	54.571	50	
Si X	54.599	50d	
S VIII	54.604	50	
S VII	54.652	100	
Si X	54.664	10	
Si X	54.702	10	
P VII	54.708	P	
Si IX	54.841	100	
Si IX	54.870	100	
Mg VIII	54.886	100	
P VII	54.887	P	
Si IX	54.907	100	
S VII	54.938	100	
Mg IX	55.060	200	
P IX	55.066	P	
Si IX	55.094	50	
Si IX	55.116	50	
Al	55.143	10	
P IX	55.220	P	
Mg VIII	55.222	10d	
Al X	55.227	150	
Si IX	55.234	50	
Al X	55.272	500	
Si IX	55.272	150	
P IX	55.299	P	

Element	Wavelength	Intensity	Multiplet
Si IX	55.305	50	
Na VIII	55.345	10	
Si IX	55.356	100	
Al X	55.376	750	
Na VIII	55.396	100	
Si IX	55.401	100	
Si IX	55.511	50	
S IX	55.540	100	
Al	55.622	1	
Al IX	55.667	10	
P VIII	55.672	P	
P VIII	55.710	P	
Si XIV	55.72	P	
Al X	55.731	50	
Si IX	55.781	150	
P VIII	55.876	P	
P VIII	55.926	P	
Si IX	56.027	150	
P VIII	56.056	P	
S IX	56.081	50	
Ne IX	56.1	P	
Ne VIII	56.10	100	
P VIII	56.106	P	
S IX	56.125	20	
P VIII	56.138	P	
Si	56.145	50	
Al VIII	56.150	50b	
Al IX	56.150	50b	
P VIII	56.171	P	
P VII	56.174	P	
Al	56.274	30	
P VII	56.282	P	
Al IX	56.304	70	
P VII	56.322	P	
S IX	56.332	20d	
P VII	56.338	P	
Mg VIII	56.358	10d	
Mg VIII	56.403	10d	
Si VII	56.528	50	
Al	56.545	10	
Si	56.645	50d	
Al X	56.650	10d	
Si X	56.680	50d	
Al X	56.762	10	
Al X	56.802	200	
Si X	56.804	50	
Mg IX	56.861	10	
P XV	56.87	P	
Al IX	56.899	100b	
Al IX	56.945	250	
Al X	56.964	150	
Al X	57.024	250	
P VIII	57.042	P	
Al X	57.072	10	
P IX	57.083	P	
Na VIII	57.096	10	
Al	57.116	50	
Na VIII	57.119	10	
Si IX	57.157	50	
Si X	57.209	20	
Na VIII	57.230	10d	
P VIII	57.230	P	
Al	57.244	50	
P IX	57.266	P	
Al	57.271	50	
Si VII	57.325	50	
P IX	57.339	P	
Al X	57.368	350	
Si VII	57.434	50	
Si IX	57.434	50	
Al VIII	57.553	10	
Si VII	57.589	50b	
Si IX	57.589	50b	
Mg VIII	57.590	10	
Al VIII	57.624	10	
Al	57.663	10	
P IX	57.683	P	
Ar XVIII	57.7	P	
P IX	57.711	P	
Mg VIII	57.736	100	
Si IX	57.778	100	
Ne VIII	57.79	100	
Mg X	57.876	600	
Mg X	57.920	400	
P VI	57.932	P	
P VIII	58.018	P	
Al IX	58.060	10	
Na VIII	58.070	10	
Al IX	58.112	50	
Al	58.144	50	
Si	58.150	50	
Na VIII	58.201	500b	
Na IX	58.201	500b	
Al IX	58.222	100	
Al IX	58.276	1	
Na IX	58.279	600	
P VI	58.294	P	
Mg VII	58.316	10	
Al VII	58.384	10	
Si VII	58.388	50	
Al	58.441	10	
Si VII	58.445	100	
Ne IX	58.5	P	
P VIII	58.506	P	
Al	58.512	10	
Si VII	58.526	10	
Mg VIII	58.537	10d	
Be IV	58.574	P	
Si VII	58.580	100	
Mg VIII	58.614	200d	
Mg VIII	58.667	300d	
Cl VIII	58.673	1000	
Si VII	58.719	50	
P VI	58.727	P	
Al VII	58.752	1	
P VIII	58.776	P	
Si VII	58.782	50	
Al X	58.808	1	
Al X	58.858	100	
Si VIII	58.885	150d	

Element	Wavelength	Intensity	Multiplet
Si IX	58.906	50d	
Na IX	58.954	100	
P VI	58.956	P	
P VII	58.972	P	
Al X	58.987	150	
Si IX	59.004	100	
Na VIII	59.009	100	
P VII	59.028	P	
Mg VIII	59.038	200	
Na IX	59.042	200	
Si IX	59.077	50	
Na VIII	59.101	10	
Al X	59.107	400	
Mg VIII	59.153	300	
Cl VIII	59.191	900	
Na VIII	59.204	300	
S VIII	59.236	70	
Na VIII	59.249	10	
Al	59.298	10	
P VIII	59.302	P	
Be IV	59.320	P	
Al IX	59.381	10d	
Al XIII	59.39	P	
Al	59.481	10d	
P VIII	59.516	P	
S VIII	59.593	20	
Mg VII	59.640	1	
Na VIII	59.759	200	
Al IX	59.761	300	
P VI	59.775	P	
Al VII	59.821	10	
Si VII	59.884	50	
Al VII	59.911	10	
F IX	59.95	P	
Si VII	59.966	100b	
Si IX	59.966	100b	
Na VIII	59.992	10	
P VI	60.016	P	
Al	60.052	50	
Na VIII	60.053	100	
Na VIII	60.073	100	
Mg VII	60.138	10	
Si	60.151	20	
S VII	60.161	1000	
Al IX	60.162	10d	
Al IX	60.197	50	
Si VII	60.221	100	
Al IX	60.222	10	
Al IX	60.262	10	
Al IX	60.312	50	
B IV	60.313	1000	
Al IX	60.347	100	
Mg VIII	60.384	10	
Si	60.421	20	
Ne VIII	60.45	100	
Si	60.459	20	
Al IX	60.504	150	
Al IX	60.549	200	
P VI	60.572	P	
Al IX	60.588	300	
Al IX	60.645	10	
Si	60.673	100	
Al X	60.700	10	
Be IV	60.743	P	
Al	60.788	50	
S VII	60.804	750	
Mg VIII	60.806	10	
Al	60.809	50	
Ne VIII	60.81	200	
Si VII	60.837	100	
Al IX	60.896	300	
Si VII	60.989	100b	
Si VIII	60.989	100b	
Si IX	60.989	100b	
Si VIII	61.019	100	
Mg IX	61.038	200	
Al IX	61.069	600	
Si VIII	61.070	200	
B IV	61.088		
Na VIII	61.088	200	
Mg IX	61.088	100	
Si IX	61.109	50	
Mg IX	61.127	300	
Mg IX	61.175	200	
Si VIII	61.175	50d	
Si IX	61.190	50d	
Si VIII	61.223	100	
Al	61.262	10	
Si VII	61.306	50	
Na VIII	61.347	1	
Si IX	61.355	50	
Mg IX	61.359	10	
Al	61.373	50	
Mg IX	61.393	100	
Si VIII	61.395	50	
Si VIII	61.446	100d	
Al	61.472	100	
Mg IX	61.489	200	
Si IX	61.502	50	
Si IX	61.546	100	
S VII	61.547	200	
Si IX	61.600	50	
S VIII	61.600	500	
P VI	61.622	P	
Al IX	61.647	10	
Si IX	61.649	100	
Al VIII	61.694	150	
Si VIII	61.798	100	
Si VIII	61.852	100b	
Si IX	61.852	100b	
P VI	61.869	P	
Mg VIII	61.891	200	
Si VIII	61.895	150d	
Al	61.900	10	
Si VIII	61.914	150d	
Mg IX	61.924	400	
Al	61.933	50	
Mg VIII	61.964	100b	
Mg IX	61.964	100b	
P VI	61.970	P	

Element	Wavelength	Intensity	Multiplet
O VIII	61.977	P	
S VIII	61.978	250	
Al VIII	62.016	100	
Mg IX	62.020	10	
Al	62.070	50	
Si	62.154	50	
Mg VII	62.166	10d	
P VII	62.245	P	
Si	62.251	100	
Na VIII	62.276	100	
Mg VIII	62.291	10	
Al VII	62.296	200b	
Al IX	62.296	200b	
Al IX	62.327	250	
Ne VIII	62.36	100	
Al IX	62.369	150	
Si	62.386	50d	
Al VII	62.432	10	
Si	62.454	20	
Al VII	62.474	100b	
Al IX	62.474	100b	
P VII	62.515	P	
Si VIII	62.586	50d	
Al IX	62.587	100	
Mg	62.615	10	
Mg VII	62.696	100	
Na VII	62.725	10d	
Mg IX	62.751	500	
Si VIII	62.808	100	
Si VIII	62.849	150d	
Si VIII	62.884	50	
Al IX	62.916	150	
Si VII	62.940	50	
Si IX	62.974	50	
Al VII	63.025	500b	
Al IX	63.025	500b	
S VIII	63.026	50	
Na VIII	63.114	100	
Al X	63.134	200	
Mg X	63.152	700	
P VI	63.177	P	
Si	63.183	50d	
Na VII	63.185	10	
Al VIII	63.203	10	
Na VII	63.227	10	
Si VIII	63.229	150	
Si VIII	63.266	50	
Mg X	63.295	900	
S VIII	63.304	500	
Na VII	63.361	10	
Mg VII	63.396	100d	
S VIII	63.431	100	
Na VII	63.442	10	
P VI	63.450	P	
Si	63.478	20	
Al IX	63.509	500d	
Al	63.560	10	
Si VII?	63.586	100	
Al IX	63.632	300	
Na VIII	63.695	10	
S VIII	63.711	50	
Al VIII	63.714	100	
Si VIII	63.732	150	
Na VII	63.778	10	
Si	63.879	50	
S VIII	63.886	250	
Si VIII	63.903	150	
Al VIII	63.933	10	
Al VIII	63.965	150d	
Al VIII	64.004	200	
O VIII	64.03	P	
P VIII	64.051	P	
Be IV	64.065	P	
Al VII	64.066	10	
Al VIII	64.086	10	
P VIII	64.100	P	
Na VII	64.113	10	
S VIII	64.120	50	
Mg VII	64.122	200	
S VIII	64.137	100	
Na VIII	64.205	200	
Na VIII	64.237	400	
Mg VIII	64.246	10	
Al	64.269	10	
Si VIII	64.281	100	
P VII	64.286	P	
P VIII	64.288	P	
Na VIII	64.302	500	
S VIII	64.305	20	
Al VII	64.325	50	
Si VIII	64.327	150	
P VIII	64.337	P	
Si VIII	64.355	50	
Al VII	64.358	50	
P VII	64.361	P	
P VIII	64.361	P	
Mg VII	64.377	100b	
Mg VIII	64.377	100b	
Al	64.418	10	
P VIII	64.423	P	
Al VII	64.481	10	
Mg VIII	64.488	100d	
Al VII	64.513	10	
Mg VIII	64.518	100d	
P VII	64.579	P	
P VII	64.587	P	
Al IX	64.625	50	
Mg VIII	64.635	200	
Mg VIII	64.635	200	
P VII	64.635	P	
Al XIII	64.64	P	
Mg VIII	64.702	200	
Al VII	64.704	150	
Cl XVII	64.72	P	
P VII	64.729	P	
Si	64.772	50d	
Mg VIII	64.811	10	
Al VII	64.815	120	
S VIII	64.874	20	
Mg VIII	64.878	100	

Element	Wavelength	Intensity	Multiplet
Al IX	64.885	150	
Na VII	64.904	10	
Al VII	64.904	100b	
Al IX	64.904	100b	
Si VI	65.004	20d	
Al VII	65.014	10d	
Al VIII	65.128	10d	
S VIII	65.149	50	
Si VI	65.211	10	
Si IX	65.236	10	
Al VIII	65.298	10	
Si XIV	65.30	P	
P VI	65.308	P	
Al VIII	65.381	50	
Na VII	65.388	100	
Na VII	65.474	100	
Al VIII	65.494	50	
Ne X	65.52	P	
Si VII	65.595	50	
Mg IX	65.609	400	
Al	65.632	50	
P VI	65.640	P	
Na VIII	65.672	10	
Mg X	65.672	200	
Si	65.711	50	
Na VIII	65.730	10	
Mg VIII	65.735	100	
P VIII	65.788	P	
Mg VIII	65.806	200	
Al	65.821	50	
Si VIII	65.833	50	
Mg X	65.847	300	
Al VII	65.865	50	
Al VII	65.882	50	
Ne VIII	65.89	200	
P VI	65.940	P	
Al IX	66.038	50	
P VIII	66.051	P	
Na VIII	66.059	200	
Mg VIII	66.069	300	
Al IX	66.092	50	
Al IX	66.142	120	
Al IX	66.239	60	
Al IX	66.275	50	
Al VIII	66.321	60b	
Al IX	66.321	60b	
Na VIII	66.358	10	
Al VIII	66.363	10	
P VII	66.432	P	
Na VIII	66.433	200d	
P VII	66.488	P	
Na VIII	66.498	400	
P VII	66.576	P	
Al IX	66.624	10	
P VII	66.691	P	
Al VIII	66.704	150	
Si	66.726	100	
Ar XVIII	66.73	P	
Al VIII	66.731	200	
Al VIII	66.771	350	
Si VI	66.772	20	
Mg VII	66.788	10	
Si VI	66.796	10	
P VII	66.805	P	
Al IX	66.836	100d	
Si	66.912	100	
Si	66.977	20d	
P VII	66.989	P	
Al	66.996	10d	
Na	67.027	100	
Al VIII	67.044	10	
Mg IX	67.090	500	
Al VIII	67.096	100	
Al VIII	67.121	100	
Mg IX	67.135	600	
Si VIII	67.157	150	
Al VIII	67.166	10	
Mg IX	67.239	700	
Al VIII	67.244	150	
Al VIII	67.288	500	
Si VIII	67.318	100	
Al VIII	67.360	250	
Ne VIII	67.39	300	
Al VIII	67.408	500	
Si VIII	67.408	150	
Al VIII	67.437	50	
Mg VII	67.453	10	
Na	67.461	100d	
Al VIII	67.464	600	
Mg VII	67.470	100d	
Na VIII	67.478	100	
Mg VII	67.497	200	
Al VIII	67.529	10	
Al VII	67.565	150b	
Al VIII	67.565	150b	
Si	67.574	50d	
P VIII	67.587	P	
Na VIII	67.672	400	
Mg VIII	67.731	400b	
Mg IX	67.731	400b	
O VIII	67.76	P	
Na VII	67.826	100d	
Al IX	67.828	10	
Al	67.873	10	
Na VII	67.877	100d	
Na VII	67.912	200d	
Al VIII	67.946	500	
Mg VII	67.993	100d	
Al	68.000	10	
Si VII	68.026	10	
Mg VII	68.064	200	
Mg VII	68.100	200	
Mg VII	68.144	300d	
Si VII	68.148	250	
Al VI	68.167	50d	
Si VII	68.190	50	
Na VIII	68.193	100	
Si VII	68.212	50	
Al VI	68.223	10	
Si	68.270	50d	

Element	Wavelength	Intensity	Multiplet
Al VI	68.289	1	
Si	68.340	50	
Mg VII	68.352	200	
Al VIII	68.375	750	
P VIII	68.384	P	
P VIII	68.385	P	
Si VII	68.408	100	
Na VII	68.422	10d	
Al	68.439	50	
Mg VIII	68.450	100	
Si VII	68.456	10	
Al	68.458	50	
Si	68.497	50d	
Na VII	68.519	100d	
Si	68.522	50d	
Al VII	68.531	100b	
Al IX	68.531	100b	
Mg VIII	68.550	100	
Mg VIII	68.580	10	
Si VII	68.593	50	
Mg VIII	68.606	200	
Al VII	68.637	50b	
Al IX	68.637	50b	
Si VII	68.642	50	
P VIII	68.654	P	
Si VII	68.669	50	
Al VII	68.681	10b	
Al IX	68.681	10b	
Si VII	68.715	100	
P VIII	68.751	P	
Al	68.783	10	
Si	68.786	100	
Al VIII	68.825	50b	
Al IX	68.825	50b	
Si	68.833	20	
Si	68.853	100	
Na VII	68.866	10	
Al	68.904	10	
Na VII	68.908	100	
Mg IX	68.949	10	
Al IX	68.958	50	
Mg IX	68.986	100	
Mg IX	69.009	100	
Mg IX	69.058	10	
Mg IX	69.116	100	
Na VIII	69.120	300	
P VI	69.121	P	
Mg IX	69.161	300	
Al	69.165	200	
Si VI	69.204	50d	
Si VI	69.236	250	
Al IX	69.258	50d	
Na VII	69.314	10	
Mg	69.327	10	
Mg IX	69.374	200	
Al	69.379	50	
Si VII	69.385	150	
Na VII	69.395	10d	
Mg VIII	69.413	400b	
Mg IX	69.413	400b	
Al VIII	69.420	50	
Si VI	69.421	50	
Si VI	69.448	100d	
P VI	69.452	P	
Mg VIII	69.467	500b	
Mg IX	69.467	500b	
Al VIII	69.502	100	
Mg IX	69.513	100	
Mg VIII	69.577	100	
Si VII	69.580	100	
Si VII	69.602	100	
Al VIII	69.611	200	
Mg VII	69.615	300b	
Mg IX	69.615	300b	
Al	69.631	200	
Si VIII	69.632	150	
Si VII	69.663	200	
Mg XII	69.71	P	
Al IX	69.716	100	
Al VIII	69.773	150	
Si VII	69.790	200b	
Si VIII	69.790	200b	
Al IX	69.850	50d	
Si VII	69.861	100	
Si VII	69.872	100	
Mg VII	69.900	10	
Si VIII	69.905	50	
Mg IX	69.950	600	
Si VII	70.027	250	
Al	70.040	50	
Si VII	70.072	250	
Al	70.090	100	
Si VII	70.123	20	
Al VIII	70.161	300	
Mg VII	70.193	100	
Si VII	70.222	200	
Si VII	70.250	200	
Na	70.320	10	
Al VIII	70.323	200	
Si VII	70.323	50	
Al VIII?	70.402	1	
Si VII	70.427	50	
Si VIII	70.458	100	
Si VIII	70.473	100	
Mg	70.512	10	
Mg	70.563	10	
Si	70.594	100	
Na IX	70.615	700	
Na IX	70.653	600	
Al VIII	70.727	250	
Si VII	70.730	50	
Na VIII	70.741	10	
Mg	70.762	100d	
Si	70.771	100d	
Mg	70.787	100d	
Al	70.802	50	
Mg	70.878	10d	
Mg VIII	70.953	100	
Mg VIII	71.007	200d	
Al	71.077	10	

Element	Wavelength	Intensity	Multiplet
Mg VIII	71.118	300	
Al	71.139	50	
Mg VIII	71.168	100	
Si VI	71.181	250	
Si VI	71.273	100	
Al	71.277	50	
Si VI	71.304	10	
Si VI	71.340	50	
Si VI	71.366	150	
Si VI	71.384	200b	
Si VII	71.384	200b	
Na	71.386	10	
Mg	71.454	100	
Si VI	71.474	50	
Si VI	71.534	50	
Si VI	71.561	50	
Al	71.590	70	
Mg	71.621	10d	
Al	71.625	70	
Si VI	71.644	10	
Si VI	71.718	10	
Mg	71.724	10d	
Al	71.774	10d	
Mg VII	71.786	100	
Mg IX	71.841	100	
Al	71.867	10d	
Si	71.900	200	
Mg IX	71.901	200	
Si VII	71.955	200	
Al	71.987	10	
Na VII	72.020	100	
Mg VIII	72.027	300b	
Mg IX	72.027	300b	
S VII	72.029	1000	
Na VII	72.079	100	
Al VIII	72.223	200	
Mg IX	72.226	300	
Si VIII	72.228	200	
Al VII	72.270	500d	
O VII	72.3	P	
Mg IX	72.312	400	
Al VIII	72.324	200	
Si VII	72.324	300b	
Si VIII	72.324	300b	
Al VIII	72.401	150	
Si VIII	72.420	200d	
Mg VI	72.430	100	
Mg VII	72.546	10b	
Mg VIII	72.546	10b	
S VII	72.663	1000	
Al	72.674	300	
Mg VIII	72.684	100d	
P VII	72.684	P	
Al VI	72.714	1	
Mg VII	72.787	100	
Al VI	72.810	250	
Mg VII	72.852	10	
Na VII	72.865	200	
Al VI	72.865	50	
Mg VII	72.896	1d	
Si VI	72.896	50	
Al VI	72.926	100	
O VII	73.0	P	
P VII	73.070	P	
Al VI	73.076	100	
S XVI	73.1	P	
Mg	73.112	10	
Si VII	73.123	500	
Na	73.128	10	
Mg VIII	73.250	400	
Al	73.278	100	
Al VI	73.334	1	
Si VII	73.350	250	
Si VII	73.433	200	
Al IX	73.451	1	
Ne VIII	73.55	400	
Al IX	73.625	1	
Al VIII	73.703	150	
Mg	73.710	10	
Al VIII	73.733	100	
Al VIII	73.760	10	
Mg	73.773	10	
Mg VIII	73.825	100	
Mg VIII	73.862	200	
Al VIII	73.879	200	
Mg VIII	73.890	100	
O VII	73.9	P	
Mg VIII	73.927	100	
Mg VIII	73.981	200	
Al	74.016	120	
Mg VIII	74.021	300	
Al VII	74.095	100d	
Na VII	74.097	100	
Na VII	74.180	200	
Si VIII	74.186	100	
Na VII	74.217	200	
Na VII	74.255	300	
Al	74.259	10	
Na VII	74.268	300	
Mg VIII	74.274	200b	
Mg IX	74.274	200b	
Mg VI	74.319	300b	
Mg VIII	74.319	300b	
Mg IX	74.319	300b	
Al	74.321	50	
Al VI	74.346	50	
Mg VIII	74.366	400b	
Mg IX	74.366	400b	
Si VIII	74.371	20	
Ne IX	74.4	P	
Mg VIII	74.411	100b	
Mg IX	74.411	100b	
Al VI	74.444	300	
Mg VI	74.461	10b	
Mg IX	74.461	10b	
Al VI	74.504	50d	
Mg IX	74.520	100	
Mg VI	74.574	200	
Al VI	74.592	150	
Ne VIII	74.64	300	

Element	Wavelength	Intensity	Multiplet
Al VI	74.656	250	
Mg	74.676	100	
Mg IX	74.738	100	
Al IX	74.785	50	
Al VI	74.813	50	
Cl XVII	74.82	P	
Al VIII	74.841	200	
Mg VIII	74.858	600	
Na VII	74.861	300	
Al VI	74.892	100	
P VI	74.951	P	
Na VIII	74.956	300	
Al VIII	74.965	150	
Ne VII	74.97	300	
Na VII	74.980	300b	
Na VIII	74.980	300b	
Mg VIII	75.034	700	
Na VIII	75.043	400	
Al VIII	75.058	50	
Na VIII	75.096	300	
Mg	75.112	100	
Al	75.164	100	
Si VI	75.193	200b	
Si VII	75.193	200b	
Al	75.226	100d	
Mg VI	75.248	100	
Al VII	75.270	250	
Al VII	75.302	350	
Mg VI	75.334	100d	
O VII	75.35	P	
Al VII	75.360	600	
Na VIII	75.385	100	
Al VIII	75.397	70	
Si VI?	75.398	150	
Na VIII	75.428	200	
Si VI	75.486	50	
Al VII	75.488	200b	
Al VIII	75.488	200b	
O VII	75.5	P	
Na VIII	75.518	300	
Mg	75.528	10d	
Al VII	75.532	200	
Al VIII	75.577	150	
Si VI	75.587	50	
Al VIII	75.623	100	
P VI	75.648	P	
Mg	75.666	300	
Al VIII	75.734	50	
Al XIII	75.74	P	
Al VIII	75.778	250	
Ne VII	75.78	300	
Al VII	75.809	100	
Mg VI	75.834	200	
Al VII	75.850	100b	
Al VIII	75.850	100b	
Mg XII	75.87	P	
O VIII	75.89	P	
Mg VI	75.890	10	
Al VII	75.894	100b	
Al VIII	75.894	100b	
P VII	75.924	P	
Be IV	75.928	1000P	
Mg VII	75.975	400	
Al VIII	75.985	50	
Si VIII	75.986	50	
Al VII	76.010	50	
Al VII	76.086	10	
Na VIII	76.123	500	
Mg	76.169	100	
Na VIII	76.173	100	
Si VIII	76.198	20	
Mg VIII	76.199	100	
Na VIII	76.217	200	
Al VII	76.221	50	
Al VII	76.257	100	
O VII	76.3	P	
Al VII	76.342	10	
Al VII	76.383	500	
Mg VII	76.392	300	
Al VII	76.422	500	
Mg	76.459	100	
Na VII	76.501	10	
P VI	76.534	P	
Al VII	76.543	1000	
Na VII	76.565	10	
Al VII	76.572	1000	
Ne VII	76.58	200	
Al VI	76.618	200	
Na VII	76.626	10d	
Al VI	76.697	200	
Mg VIII	76.714	100	
Mg VIII	76.740	200	
Mg VIII	76.788	300	
Al	76.794	200	
Na VII	76.827	10	
Al	76.853	200	
Na VII	76.862	10	
Mg VI	76.908	1	
Al VI	76.953	50	
Al	76.984	100	
Mg VII	77.033	100	
Al	77.052	50	
Na	77.076	10	
Mg VII	77.144	200	
Na VIII	77.267	600	
Mg	77.301	10	
O VII	77.31	P	
Al	77.315	10	
Na VII	77.353	100	
Si V?	77.360	10	
Al IX	77.381	150	
Mg VI	77.405	200b	
Mg VIII	77.405	200b	
Si VI	77.429	500	
Al VII	77.448	150b	
Al IX	77.448	150b	
Mg VI	77.511	100b	
Mg VIII	77.511	100b	
Na	77.558	10	
Mg VIII	77.572	500	

Element	Wavelength	Intensity	Multiplet
Al VIII	77.605	300	
Mg VI	77.639	10	
Mg VIII	77.671	500	
O VII	77.68	P	
Si VI	77.718	300	
Mg VIII	77.737	600b	
Mg IX	77.737	600b	
Na IX	77.764	700	
Al VII	77.770	300	
Al VII	77.806	70	
Al VII	77.896	500	
Na IX	77.911	800	
Al VI	77.945	500b	
Al VII	77.945	500b	
Na	78.023	10	
Al VI	78.112	100	
Al	78.149	100	
Al VI	78.178	50	
Al VIII?	78.225	1	
Mg VI	78.239	10	
Al	78.256	70	
P VII	78.285	P	
Al VII	78.327	1000	
Al VII	78.351	1000b	
Al VIII	78.351	1000b	
Mg	78.376	10	
Ne IX	78.38		
Mg VII	78.405	10	
P VII	78.414	P	
Al	78.421	10	
Mg VIII	78.446	600d	
Na VII	78.459	10	
Al VI	78.459	70	
Al	78.508	150	
Mg VII	78.521	200	
Al	78.573	70	
Mg VIII	78.574	600d	
Si V	78.611	50	
Al VI	78.628	10	
Mg	78.643	100d	
Mg	78.668	100d	
Al VI	78.712	10	
Na VII	78.771	10	
Al	78.836	100	
Si V	78.903	50	
Na VII	78.907	300	
Al	78.938	300	
O VII	78.94	50	
Na VII	78.982	200	
Al VII	79.012	500	
Mg VI	79.059	10d	
Mg VII	79.131	500	
Mg VII	79.168	500	
Al VII	79.197	500	
Si VII	79.236	250	
Mg VII	79.248	100	
Si VII	79.262	50	
P VII	79.382	P	
Al VIII	79.455	120	
Na VII	79.477	200	
Si VII	79.491	100	
Si VII	79.523	100	
Al	79.557	10	
P VII	79.561	P	
Na VII	79.571	100	
Si VII	79.615	100	
Na	79.620	100	
Al VII	79.635	10	
Al VII	79.690	150	
Mg VIII	79.695	200	
Na VII	79.761	10	
Al	79.783	50	
Na VII	79.786	10	
Mg VI	79.817	200	
Mg VI	79.830	400	
Mg VI	79.857	400	
Mg	79.880	200	
Na VII	79.893	300d	
Al VII	79.919	300	
Al VII	79.952	250	
Na VII	80.008	300	
Al	80.014	10	
Mg VI	80.032	200	
Mg VI	80.075	200	
Na VII	80.133	10	
Na VII	80.174	10	
Mg VIII	80.229	400d	
Na VII	80.245	100	
Mg VIII	80.255	400d	
Al VIII	80.320	10	
Na VI	80.345	10	
Si VI	80.395	250	
Al	80.403	10	
Mg IX	80.428	100	
Si VI	80.449	500	
Al VIII	80.483	10d	
Si VI	80.491	250	
Si VI	80.501	500	
P VII	80.507	P	
Mg	80.563	100	
Si VI	80.577	600	
Ne VII	80.62	300	
Na VI	80.645	10d	
Si VI	80.698	500	
Al VIII	80.704	100	
Mg VI	80.724	10	
Si VI	80.725	500	
Na VIII	80.756	10	
Al VI	80.770	70	
Mg VIII	80.806	10d	
Si V	80.807	100	
P VII	80.813	P	
Si VI	80.821	400	
Mg VIII	80.889	100	
Ar XVIII	80.9	P	
Si VI	80.908	400	
F IX	80.91	P	
Mg VI	80.930	200	
N VII	80.96	P	
Mg VII	81.024	100	

Element	Wavelength	Intensity	Multiplet
Si VI	81.030	350	
Mg VI	81.106	300	
Si V	81.113	100	
Mg VII	81.133	300	
Na IX	81.175	500	
Al VI?	81.176	50	
Na VIII	81.210	500	
Al VII	81.234	50	
Mg VIII?	81.304	100	
Al VI?	81.339	10	
Na IX	81.350	500	
Mg VIII?	81.368	10	
Na VII	81.430	100	
Si	81.449	50	
Si VII	81.449	50	
Na VI	81.498	200b	
Na VII	81.498	200b	
O VII	81.50	100	
Na VI	81.543	100d	
Si VII	81.558	250	
Al	81.560	100	
Na VI	81.584	100d	
Si VII	81.620	600	
Al	81.667	100	
Mg VIII	81.732	300	
Al VI	81.738	50b	
Al VII	81.738	50b	
Mg VIII	81.790	200	
Al VII	81.806	200d	
Mg VIII	81.844	400	
Na VII	81.855	400	
O VII	81.89	150	
Be III	81.891		
Si VII	81.895	500	
Mg VIII	81.943	200	
Mg VIII	81.979	200	
Si VII	81.998	150	
Al VI	82.082	70	
Al	82.105	70	
Mg	82.111	10	
Al	82.128	70	
Mg VI	82.238	200b	
Mg VIII	82.238	200b	
Ne VII	82.26	600	
Al VI	82.267	50	
Mg VIII	82.317	300	
Al VI	82.338	10	
Be III	82.377		
Al	82.423	50	
Mg VI	82.475	100	
Na	82.516	10	
Al VIII	82.543	150	
Al	82.582	50	
Mg VIII	82.598	200	
Si	82.622	50d	
Na VII	82.636	10	
Na VII	82.685	10	
Mg VIII	82.709	200	
Mg VIII	82.822	300	
Mg VI	82.853	100	
Al	82.908	50d	
Mg VII	82.940	400	
Mg VII	82.969	400	
Na XI	82.97	P	
Si VI	83.006	200	
Mg VII	83.015	500d	
Al	83.102	10	
Si VI	83.128	750	
Na	83.180	100	
P XV	83.2	P	
Be III	83.202		
Na VIII	83.240	700	
Si VI	83.258	250	
Si VI	83.283	50	
Na VIII	83.288	800	
Al	83.335	10	
Si VI	83.358	400	
Na VIII	83.391	900	
Mg VI	83.403	400b	
Mg VII	83.403	400b	
Al VIII	83.465	50	
Mg VI	83.519	300b	
Mg VII	83.519	300b	
Si VI	83.526	400	
Mg VI	83.560	200b	
Mg VII	83.560	200b	
Mg VII	83.587	200	
Si VI	83.611	400	
Mg VII	83.635	10	
Al VIII	83.635	10	
Na VI	83.639	100	
Si VI	83.639	150	
N VII	83.65	P	
Si VI	83.684	50	
Mg VII	83.716	300	
Si VI	83.729	50	
Mg VII	83.766	500	
Si VI	83.802	300	
Al VII	83.831	350	
Mg VII	83.910	300	
Mg VII	83.959	400d	
Si VI	83.965	10	
Al VII	84.007	200	
Mg VII	84.025	500	
Na VIII	84.050	500	
Si VI	84.082	600b	
Si VII	84.082	600b	
Mg VII	84.087	300b	
Mg VIII	84.087	300b	
Al VII	84.098	100	
Mg VII	84.189	10	
Na VII	84.221	400	
Ne VII	84.34	200	
Al	84.479	10	
S XVI	84.48	P	
Mg VII	84.642	500	
Al VI?	84.650	100	
Mg VI	84.745	200d	
Be III	84.758	100	
Al VI?	84.801	20	

Element	Wavelength	Intensity	Multiplet
Mg VIII	84.827	10d	
Al VI?	84.828	70	
Na VII	84.832	10	
Mg VIII	84.919	100	
Al VI?	84.928	10	
Al	85.046	1	
Mg VIII	85.064	10	
Mg	85.091	10	
Mg VI	85.153	10b	
Mg VIII	85.153	10b	
Si V	85.175	500	
Al	85.189	10	
Si VII	85.219	100	
Mg VIII	85.248	200	
Na VII	85.260	300	
Si VII	85.289	500	
Na VII	85.297	300	
Mg VII	85.336	10	
Mg VII	85.407	700	
Al VI	85.423	100	
Na VII	85.458	400	
Al VI	85.515	1000	
Al VI	85.569	200	
Mg VI	85.577	200	
Si V	85.579	300	
Si VII	85.584	500	
Mg VIII	85.599	300	
Si	85.614	20	
Mg VI	85.622	300	
Al VI	85.622	300	
Al V	85.662	50	
Si VII	85.698	100	
Al VI	85.724	300	
Mg VIII	85.749	400	
Al VI	85.764	400	
Al V	85.804	350	
Al VI	85.817	350	
Na VIII	85.826	200	
Na VIII	85.861	300	
Al V	85.865	100b	
Al VI	85.865	100b	
Na VIII	85.887	300	
Al V	85.922	10b	
Al VIII	85.922	10b	
Na VIII	85.936	100	
Al VI?	85.970	10	
Na VIII	85.992	300	
Al VI	86.020	150	
Mg VII	86.032	200d	
Na VIII	86.039	500	
O VII	86.07	200	
Al VI	86.070	150	
Al VI	86.097	150	
Mg	86.147	10	
Al VI	86.147	200	
Mg VIII	86.234	100	
Al	86.282	50	
Mg VIII	86.359	100	
Al	86.360	100	
Na VIII	86.381	400	
Al	86.393	100	
Na VIII	86.417	500	
Mg	86.417	200d	
Al	86.427	100	
Mg	86.440	200d	
Na VIII	86.479	600	
Na VIII	86.530	100	
Al	86.540	10	
Na VII	86.596	400	
Na VII	86.652	500	
Al VII	86.671	10	
Al VII	86.689	50	
F VII	86.728	10	
Na VII	86.758	300b	
Na VIII	86.758	300b	
Mg	86.762	100	
Mg VI	86.807	200	
Mg VIII	86.847	200	
Al VII	86.887	750	
Na	86.890	10	
Al	86.975	10	
Mg VIII	87.017	100	
Al V	87.020	100	
Al VII	87.060	600	
Mg VII	87.131	500d	
Na VI	87.141	100b	
Na VII	87.141	100b	
Mg VII	87.175	400d	
Al VII	87.176	300	
Na VI	87.211	700b	
Na VIII	87.211	700b	
Al V	87.279	50d	
Al VI	87.334	400	
Mg VI	87.406	10	
Na VII	87.471	10	
Na	87.524	200	
Al VI	87.544	350	
Al VI	87.592	500	
Al VI	87.629	100	
Al VI	87.655	650	
Mg	87.660	10	
Mg VII	87.722	600	
Mg VII	87.767	400	
Al VI	87.783	250	
Al VI	87.802	250	
Al VI	87.866	350	
Al VI	87.887	250	
Mg VII	87.889	500	
Al	87.932	100	
Si VII	88.008	150	
Mg	88.016	200	
Al VII	88.033	900	
Na VI	88.038	100	
Al	88.108	100	
Ne VIII	88.11	700	
Na VI	88.143	200d	
Al VI	88.170	1000	
Na VI	88.223	100	
Al	88.241	10	
Na VI	88.246	200	

Element	Wavelength	Intensity	Multiplet
Na VI	88.270	300d	
Al VI	88.273	750	
Be III	88.314	330	
Al VI	88.325	100	
Na VI	88.340	100d	
Al VI	88.376	750	
Na VI	88.387	10	
Al V	88.425	100	
Na VI	88.460	100	
Al VI	88.469	250	
N VII	88.51	P	
Al V	88.539	400b	
Al VI	88.539	400b	
Na	88.583	100	
Al V	88.636	100b	
Mg VII	88.680	600	
Al V	88.688	200b	
Al VI	88.688	100b	
Na VII	88.698	200	
Na VII	88.747	300	
Al V	88.817	50	
Mg VI	88.827	200	
Na VII	88.865	400	
Mg XII	88.91	P	
Na VII	88.914	200	
Al V	88.945	1	
Mg VI	88.952	200	
Mg VI	89.021	10	
Mg	89.256	100	
Mg VII	89.407	200	
Ne VII	89.41	400	
Mg VII	89.448	200	
Mg VII	89.476	10	
Mg	89.556	10	
Mg VI	89.649	10	
Na VIII	89.759	200	
Na VIII	89.818	300	
Na VIII	89.948	400	
Mg	90.165	10	
Na VII	90.173	100	
Al VI	90.200	1000	
Na VII	90.252	400b	
Na VIII	90.252	400b	
Na XI	90.31	P	
Mg	90.338	100	
Si V	90.453	200	
Mg	90.463	10	
Na VI	90.468	300	
Na VIII	90.536	500	
Al VII	90.550	300	
Al V	90.630	250b	
Al VII	90.630	250b	
Al V	90.646	100	
P VI	90.647	P	
Cl XVII	90.7	P	
Al V	90.701	200	
Mg VII	90.706	400	
Na VI	90.746	10	
Al VII	90.772	200	
Mg VII	90.815	300	
Na VII	90.830	10	
Si V	90.852	200	
Al VI	90.858	600	
Mg VI	90.897	600b	
Mg VII	90.897	600b	
Al V	90.914	200	
Al V	90.982	50d	
Mg	91.013	10	
O VII	91.02	250	
Al	91.023	500	
Na VII	91.064	200	
Al V	91.078	10	
Mg	91.129	10d	
Na VI	91.268	100	
Mg	91.302	10d	
Al VI	91.332	500	
Si VI	91.369	200	
Mg IX	91.385	10d	
Na VI	91.414	10d	
Mg VII	91.460	10d	
P VI	91.471	P	
Na VI	91.475	10	
Al VIII	91.487	50	
Mg VII	91.573	100	
Na VI	91.737	10	
Al V	91.750	50	
Si VI	91.798	200	
Na VI	91.836	10	
Na VII	92.003	500	
Al V	92.039	10	
Mg VIII	92.123	100d	
Mg VII	92.256	300	
Mg VIII	92.324	10	
Mg V	92.409	10d	
Mg V	92.428	10d	
Mg	92.503	10	
Mg V	92.534	10	
Mg V	92.588	10	
Na	92.608	10d	
Al VI	92.626	750	
Al VI	92.636	200	
Mg V	92.641	10	
Mg	92.685	10	
Na VII	92.774	200	
Na VII	92.809	100	
Na VII	92.843	100	
Al VI	92.875	500	
Na VII	92.883	100	
Mg VII	92.898	200	
Na VII	92.930	200	
Mg VII	92.934	200	
Si	92.957	50d	
Mg VI	92.964	100b	
Mg VII	92.964	100b	
Al VI	92.970	250	
Na VII	92.976	400	
O VI	93.03	100	
Na	93.070	10	
Mg V	93.109	100b	
Mg VI	93.109	100b	

Element	Wavelength	Intensity	Multiplet
Na VIII	93.120	100	
Na VIII	93.197	10	
Na VIII	93.242	200	
Al VII	93.269	10	
Al VII	93.295	120	
Na VIII	93.339	10	
Na VII	93.393	400	
Na VII	93.434	400	
Na VII	93.486	500	
Mg VI	93.493	300	
Al VII	93.516	100	
Na VII	93.528	100	
Al VII	93.542	1	
Mg	93.650	200d	
Al V	93.654	20	
Na VIII	93.670	400	
Mg	93.720	100d	
Al V	93.755	350	
O VI	93.84	150	
Al V	93.855	200	
Al V	93.880	70	
Na VIII	93.898	200	
Mg VIII	93.911	10	
Al V	93.955	300	
Mg	93.972	10	
Al V	93.981	100	
Na VII	94.020	10	
Mg VII	94.043	400b	
Mg VIII	94.043	400b	
Al V	94.089	70	
Al V	94.117	120	
Al V	94.160	100	
Mg VII	94.174	300	
Al V	94.187	100	
Na VI	94.208	100	
Mg VII	94.276	200b	
Mg VIII	94.276	200b	
Na VII	94.288	600	
Al V	94.321	10	
Ne VII	94.33	600	
Al V	94.394	10	
Na VII	94.468	700	
Mg	94.721	100	
Mg V	94.793	10	
Na VI	94.827	10d	
Al	94.970	150	
Ne VII	94.99	400	
O VI	95.02	200	
Mg VII	95.027	400	
Mg VII	95.089	10	
Mg VII	95.139	100	
Na VI	95.182	100	
Mg VII	95.233	100	
Mg VII	95.259	200	
Na VI	95.263	100	
Na VI	95.319	10	
Mg VI	95.385	400b	
Mg VII	95.385	400b	
Al	95.405	10	
Mg VI	95.421	400b	
Mg VII	95.421	400b	
Al VI	95.436	100	
Mg VI	95.483	500b	
Mg VII	95.483	500b	
Si XIV	95.5	P	
Na	95.551	200	
Mg V	95.556	100b	
Mg VII	95.556	100b	
Mg V	95.592	10	
Al	95.624	100	
Mg VI	95.637	300b	
Mg VII	95.637	300b	
Mg VI	95.675	300	
F VII	95.697	10	
Al	95.720	200	
F VII	95.775	100	
Na	95.796	10	
Mg V	95.803	200b	
Mg VI	95.803	200b	
Al V	95.835	100	
Al	95.859	10	
Ne VII	95.86	700	
Mg V	95.909	100d	
Na VI	95.933	300	
Mg V	95.965	100	
Al VII	95.965	200d	
Na	96.018	100	
Mg V	96.019	200b	
Mg VII	96.019	200b	
Si VI	96.020	500	
Al VI?	96.071	10	
Mg V	96.085	100b	
Mg VI	96.085	100b	
O VII	96.12	300	
Na VI	96.124	10	
P XV	96.13	P	
Al V	96.150	50	
Mg V	96.159	10b	
Mg VI	96.159	100b	
Na VI	96.196	100	
Al VII	96.198	50	
Mg VI	96.240	100	
Mg VI	96.256	200	
Mg VI	96.303	200	
Na VI	96.307	100	
Al VII	96.319	10	
Mg VI	96.388	100	
Si V	96.439	750	
Al VI	96.442	10	
Mg VI	96.467	10	
Na VI	96.475	300	
Si VI	96.488	500	
Na	96.572	10	
Mg VI	96.670	200	
Al VI	96.673	50d	
Mg VI	96.704	200	
O VI	96.78	250	
Mg VI	96.797	100	
Na VII	96.845	100	
Mg VI	96.857	100	

Element	Wavelength	Intensity	Multiplet
Na VII	96.872	200	
Mg VI	96.903	10	
Na VII	96.922	300	
Mg VI	96.939	400	
Al	96.939	10	
Mg VI	96.973	400	
Si V	97.143	500	
Mg VI	97.251	500	
Mg VI	97.278	500	
Mg V	97.391	100	
N VI	97.4	P	
Mg V	97.439	200	
Mg VIII	97.465	200	
Mg VIII	97.525	10	
Ne VII	97.54	700	
Mg V	97.563	100	
Mg V	97.606	200b	
Mg VIII	97.606	200b	
Na VI	97.636	10	
Mg V	97.686	100b	
Mg VIII	97.686	100b	
Na VII	97.790	100	
Na VII	97.907	200	
Na VII	98.016	100	
Mg VII	98.032	300	
Na VII	98.080	300b	
Na VIII	98.080	300b	
Ne VIII	98.11	700	
Na VII	98.188	300	
Si V	98.209	100	
Mg V	98.235	100	
Ne VIII	98.27	700	
Na	98.271	10d	
Mg V	98.271	200	
N VI	98.3	P	
Na VI	98.309	10	
Na VII	98.378	300	
Na VII	98.394	300	
Mg V	98.406	100	
Mg V	98.444	100	
Mg VI	98.508	300	
Mg V	98.636	200	
Al VI?	98.684	10	
F VIII	98.707	10	
F VIII	98.799	10	
Mg V	98.805	200	
Mg V	98.872	100	
Mg V	98.983	400b	
Mg VI	98.983	400b	
Mg VII	98.983	400b	
Na VI	99.004	10	
Mg V	99.025	200b	
Mg VI	99.025	200b	
F VI	99.044	10	
Mg V	99.067	200	
Si VI	99.095	500	
F VI	99.105	15	
N VII	99.13	P	
Mg V	99.149	10	
Al V	99.200	50	
F VI	99.203	10	
Mg V	99.205	1	
Mg VI	99.279	400	
Al V	99.290	500	
Mg VI	99.333	400	
Na VII	99.421	400	
Al V	99.427	200	
Si VI	99.460	750	
N VI	99.5	P	
Na VI	99.500	10	
Mg	99.535	100	
Al V	99.544	100	
Na VII	99.556	400	
Si VI	99.598	500	
Mg	99.610	200	
Al V	99.616	350	
Na VI	99.617	100	
O VI	99.68	250	
Na VI	99.680	100b	
Na VII	99.680	100b	
Mg VI	99.713	300	
Mg VI	99.738	300	
Al V	99.769	20	
Mg V	99.788	100	
Si VI	99.966	500	
Mg	100.196	100	
Be III	100.254	1000	
Na	100.337	100	
Mg	100.374	100	
Ne X	100.41	P	
Mg	100.421	100	
Na VI	100.469	200	
Na VI	100.519	300	
Mg	100.519	10	
Mg	100.545	200	
Na VI	100.590	100	
Mg	100.597	200	
Al VI	100.616	600	
Al VI	100.639	100	
Si VI	100.640	500d	
Mg VI	100.702	500	
Na VII	100.718	200	
Na V	100.851	10	
Al VI	100.894	200	
Mg VI	100.904	400	
Al VI	100.919	200	
Na V	100.945	10	
Mg V	100.949	10	
Si VI	100.963	50	
Al VI	101.027	150	
Si VI	101.160	10	
Na	101.201	10	
Mg	101.322	100	
Na	101.348	10	
Mg	101.398	10	
N VI	101.46	P	
Mg VI	101.508	200d	
Mg VI	101.556	300	
O VI	101.57	100	
Mg V	101.671	300	

Element	Wavelength	Intensity	Multiplet
Mg V	101.782	300	
Na VII	101.785	300	
Na VII	101.816	300	
Mg	101.845	100	
Mg VII	101.956	200	
Na VIII	102.043	10	
Mg	102.053	10	
Mg V	102.079	200	
Mg VII	102.138	100	
Mg VI	102.189	500	
Na VII	102.226	100	
Mg VI	102.239	500	
O VI	102.30	150	
Na VII	102.390	100	
S XVI	102.4	P	
O VIII	102.43	P	
Na VII	102.448	10	
Mg VII	102.471	300	
N VI	102.6	P	
Si VI	102.846	50	
Li III	102.856	P	
Ne VIII	102.89	500	
Mg	102.906	300	
Na VI	103.002	10	
Al VI	103.062	10	
Na VI	103.078	100	
Ne VIII	103.10	600	
Si VI	103.163	100	
Na VI	103.210	200	
O VI	103.26	200	
Mg V	103.333	10	
Na VII	103.354	100	
Li III	103.359	P	
Na VII	103.400	10	
Na V	103.482	10	
N VI	103.6	P	
Mg VII	103.743	10	
Na VII	103.779	300	
Al V	103.805	500	
Na VII	103.842	200	
Mg VII	103.859	10	
Al V	103.881	700	
Na VII	103.891	400d	
Mg V	103.904	400	
Al VI	103.940	300	
Mg V	103.947	300	
Al V	103.990	200	
Na VII	104.000	200	
Na VII	104.036	220	
Al VI	104.047	1000	
Al V	104.073	500	
Mg V	104.100	200	
Al V	104.121	600	
Mg V	104.140	200	
Li III	104.142	P	
Al V	104.180	700	
Mg V	104.182	100	
Mg V	104.214	100	
Al	104.227	10	
Na	104.314	10	
Mg	104.342	300	
Al VI	104.344	800	
Al V	104.363	500	
Mg V	104.432	200	
Na	104.440	10	
Al V	104.447	500	
Al VI	104.466	400	
Al V	104.495	400	
Mg VI	104.519	300	
N VI	104.58	P	
Mg VI	104.597	500	
O VI	104.67	250	
O VI	104.811	350	
Na VII	104.871	200	
Na VII	104.955	300	
Al	104.960	10	
N VI	105.0	P	
Mg	105.066	500	
Na VII	105.111	300	
Mg VII	105.159	100	
Na VII	105.205	200	
Na VII	105.354	400	
Mg VI	105.410	200	
Li III	105.468	P	
Mg VI	105.502	300	
Mg	105.778	100	
Na XI	105.82	P	
Mg	105.830	100	
Na VI	106.040	300	
Ne VII	106.07	900	
Na VI	106.077	300	
Na VI	106.125	400	
Ne VII	106.19	900	
Na V	106.278	100	
Na V	106.302	100	
Na	106.345	200	
Na V	106.399	100	
Mg	106.453	200	
Al	106.471	10	
Na V	106.490	100	
Mg VII	106.524	200d	
Na VI	106.580	10	
Na	106.703	10d	
Mg VII	106.707	100	
O VI	106.79	300	
Mg VII	106.809	10	
Na VI	107.014	200	
Na VI	107.061	300b	
Na VII	107.061	300b	
Ne VII	107.07	400	
Na VI	107.093	300b	
Na VII	107.093	300b	
N VI	107.15	P	
Na VI	107.158	100b	
Na VIII	107.158	100b	
Na VI	107.227	300	
Na VI	107.288	400	
Na VI	107.535	300	
Na VI	107.553	300	
Na VI	107.608	400	

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Element	Wavelength	Intensity	Multiplet
Al VI	107.620	700	
Mg V	107.661	200	
Na VI	107.683	500	
Al V	107.711	300	
Na VI	107.742	200	
Mg VI	107.820	400	
Na V	107.934	200b	
Na VI	107.934	200b	
Al V	107.945	1000	
Li III	107.999	P	
Al V	108.004	250	
Mg VI	108.015	300	
Na V	108.017	200	
Al V	108.057	600	
Na VII	108.079	10	
Al V	108.112	600	
Mg VI	108.114	200	
Mg VI	108.148	100	
Na	108.159	10	
Na VII	108.193	200	
Al V	108.315	200	
Mg VI	108.338	100	
Na VII	108.373	100	
Al V	108.385	500	
Al V	108.404	250	
Mg VI	108.441	10	
Al V	108.446	150	
Al V	108.462	500	
Al V	108.526	20	
Al IV	108.535	50	
Na VI	108.555	400	
Al V	108.616	50	
Na VI	108.678	10	
Al V	108.707	300	
Na VII	108.733	200	
Na VII	108.829	100	
Al V	108.851	50	
Al IV	108.913	50d	
F VI	108.975	100	
Al V	109.021	150	
F VI	109.040	150	
Mg V	109.174	10	
Ne X	109.28	P	
Al VI	109.284	350	
Na VII	109.362	100	
Mg	109.420	100	
Al VI	109.514	1000	
Na VII	109.519	200	
Na VI	109.763	10	
Mg V	109.812	200	
Al VI	109.843	600	
Na VI	109.896	500	
Al VI	109.974	200	
Mg V	110.029	100	
Na	110.085	200	
Mg V	110.121	10b	
Mg VII	110.121	10b	
O VI	110.148	120	
C VI	110.22	P	
O VI	110.220	250	
N VI	110.23		
Si XIV	110.37	P	
Ne VI	110.410	20	
Na	110.474	10	
Na	110.577	100	
N VI	110.59	P	
Ne VII	110.60	700	
Na VII	110.647	200	
O VI	110.69	150	
Na VI	110.750	200	
Na VII	110.778	300	
Al XIII	110.8	P	
Mg V	110.809	200	
Na V	110.817	200b	
Na VII	110.817	200b	
Mg V	110.859	400	
Na V	110.878	200	
Na V	110.921	10	
Mg V	110.939	200	
Si	110.957	100	
P XIII	110.969	P	
Mg V	111.031	300	
Mg V	111.091	300	
Ne VI	111.142	10	
Mg VI	111.160	300	
Al IV	111.196	100	
Mg V	111.199	400b	
Mg VI	111.199	400b	
Na VII	111.211	300	
Mg V	111.247	200	
Na VII	111.390	200	
Mg V	111.419	200	
Mg V	111.467	200	
Mg V	111.496	200	
Na V	111.512	100	
Na V	111.552	10	
Mg VI	111.552	500	
Al IV	111.589	150	
Na VI	111.725	100	
Mg VI	111.746	400	
Ne VII	111.78	600	
Al IV	111.781	50	
Na VI	111.793	100	
Mg VI	111.864	400	
Na V	111.879	10	
Mg VII	111.984	10d	
Na V	112.009	300b	
Na VI	112.009	300b	
Na V	112.077	10	
Mg VII	112.135	10	
Na V	112.186	10	
Mg VII	112.269	1	
Na V	112.347	10	
Na VI	112.448	300d	
Na	112.526	10	
Na	112.641	10	
Mg IV?	112.914	10	
F VII	112.935	400	
Na VI	112.950	400	
F VII	112.976	300	

Element	Wavelength	Intensity	Multiplet
Na	113.061	100	
Na VI	113.125	400	
Al	113.140	50	
Mg VI	113.189	500	
Mg V	113.217	200	
Mg	113.279	10	
Al VI	113.314	50	
Mg V	113.414	200	
Al VI	113.437	150	
Mg V	113.518	100	
Na V	113.574	10	
Al VI	113.623	50d	
Mg V	113.703	400	
Al VI	113.756	50	
Mg V	113.823	100	
F VI	113.840	10d	
C VI	113.87	P	
Ne VI	113.870	10	
Li III	113.905	10P	
Mg V	113.934	300	
Na	113.952	10	
Mg V	113.990	300	
Mg V	114.029	200	
Mg V	114.059	400	
Mg V	114.199	300	
Mg V	114.226	300	
Mg V	114.285	300	
Al IV	114.313	10	
Mg V	114.324	300	
Mg VI	114.412	10	
Mg	114.498	10	
Mg VI	114.624	10	
Na VI	114.666	400	
Na V	114.700	100d	
Mg VI	114.725	10	
Al IV	114.737	50	
Na V	114.738	100	
Mg V	114.785	600d	
Mg V	115.013	600d	
Mg V	115.093	400	
Ne VII	115.36	700	
Na VII	115.361	10	
Mg V	115.399	400	
Na VII	115.475	10	
Ne VII	115.52	700	
Mg V	115.537	400	
Na VI	115.729	200	
Na VI	115.780	10d	
O VI	115.824	350	
Ne VII	115.97	600	
F VI	116.094	10	
O VI	116.347	120	
O VI	116.419	250	
Al IV	116.464	250	
P XV	116.5	P	
Ne VII	116.66	700	
N VI	116.81		
Al IV	116.921	150	
Mg VI	116.968	500	
Mg VI	117.226	300	
O VI	117.40	300	
Al IV	117.410	10	
Na VI	117.491	400	
Mg VI	117.527	100	
Na VI	117.609	300	
Na VI	117.699	300	
Na V	117.703	10	
Si V	117.860	1000	
Na V	117.876	10	
Mg	117.880	10	
Na VIII	117.909	10	
Na V	117.990	400	
Mg V	118.083	500	
Mg IV?	118.158	10d	
Mg IV?	118.420	10	
Na VI	118.500	10	
Al V	118.500	500	
Na VI	118.585	10	
Mg IV?	118.603	100	
Ne V	118.715	50	
Mg IV?	118.740	10	
Mg V	118.810	500	
Na VII	118.840	10	
Ne V	118.841	10	
Na VII	118.902	10	
Mg IV?	118.914	10	
Si V	118.968	1000	
Al V	118.984	300	
Na VII	119.014	100	
Na VII	119.100	10	
Na VI	119.204	10b	
Na VII	119.204	10b	
Mg V	119.401	400	
Mg V	119.447	400	
Na VI	119.684	300	
Mg IV?	119.978	10	
F V	119.986	10	
F V	120.032	15	
Na	120.040	100	
Mg IV?	120.086	10d	
Ar VIII	120.093	100	
F VI	120.116	100	
Ar VIII	120.157	50	
Na	120.220	100	
Mg IV?	120.283	100d	
Na	120.298	100	
Ne VII	120.32	500	
O VII	120.331	350	
Na	120.355	10	
Mg IV?	120.415	10d	
Na	120.430	10	
C VI	120.50	P	
Na VI	120.931	300	
Na VI	120.973	200	
Na VI	121.004	100	
Mg VI	121.025	500	
Ne VI	121.140	50d	
Na V	121.263	10	
Mg VI	121.290	300	

Element	Wavelength	Intensity	Multiplet
Mg IV?	121.543	10	
Mg V	121.644	600	
Ne VII	121.68	700	
Na VI	121.773	400	
Na VI	121.913	320	
Mg V	121.922	500	
Na VI	122.018	300b	
Na VII	122.018	300b	
Mg V	122.034	400	
F V	122.042	10	
F VI	122.122	100	
O V	122.128	10	
F VI	122.169	10	
F VI	122.200	200	
F VI	122.251	15	
Na VII	122.252	100	
Na	122.330	10	
O V	122.372	10	
N VI	122.44		
Ne V	122.520	200b	
Ne VI	122.520	200b	
Ar VIII	122.624	10	
Ne VI	122.686	100	
Ar VIII	123.033	50	
F VI	123.051	10	
F VI	123.090	10	
Na VI	123.134	400	
F VI	123.175	100	
Mg IV?	123.184	10	
Mg IV	123.273	200	
Mg IV	123.377	100d	
Mg IV?	123.418	10	
Mg IV	123.500	10	
Mg IV	123.590	10	
Mg VI	123.590	100d	
F V	123.665	10	
Ne V	123.712	30	
Mg IV	123.722	10d	
Na VI	123.744	400	
Mg IV	123.770	10	
F V	123.774	100	
Na VI	123.868	300	
Na VI	123.929	500	
F IX	123.97	P	
Na VI	123.970	200	
Al IV	124.034	400	
Na VI	124.059	400	
Na VI	124.153	400	
F VI	124.387	300d	
Mg IV	124.414	200	
F VI	124.440	10	
F VI	124.474	10	
Na VII	124.532	10	
Mg IV	124.538	200	
Al IV	124.543	300	
O V	124.598	250	
Mg IV	124.649	100	
Mg IV	124.759	200	
Ar XVIII	124.8	P	
Na VI	124.850	10	
Mg IV	124.870	200	
Mg IV	124.990	200	
Na V	125.178	400	
Mg VI	125.206	300	
Na V	125.216	400	
Na V	125.286	500	
Na VI	125.383	10	
Na V	125.428	300	
Mg IV	125.459	300b	
Mg VI	125.459	300b	
Na V	125.461	300	
Al V	125.525	750	
Mg V	125.600	400b	
Mg VI	125.600	400b	
Mg IV	125.811	100	
Ne V	125.830	20	
Na V	125.899	200	
Al V	126.065	750	
Na V	126.090	10	
Na V	126.210	100	
Mg V	126.280	400	
Na V	126.368	10	
Mg VI	126.450	100	
Na V	126.458	10	
Mg VI	126.488	100	
Mg V	126.544	200	
Na V	126.557	200	
Na V	126.608	100	
Mg V	126.677	10b	
Na V	126.779	10b	
Na VII	126.779	10b	
Na V	126.814	100b	
Na VII	126.814	100	
Na V	126.920	10	
F VI	126.923	500	
Mg	126.961	10	
Na V	126.985	10	
Mg	127.013	10	
Na V	127.036	10	
Na V	127.444	400	
Na V	127.473	400	
Ne VII	127.65	500	
F VII	127.653	400	
F VII	127.796	500	
Na VI	127.837	400	
Na	127.953	100	
Al XIII	128.02	P	
Na V	128.025	400	
Na V	128.051	400	
Ne X	128.06	P	
Na	128.112	300	
N V	128.229	1	
O V	128.235	10	
O V	128.297	10	
O VII	128.412	150	
N V	128.430	1	
O VII	128.500	200	
N V	128.662	10	
Ne V	128.793	10	

Element	Wavelength	Intensity	Multiplet
N V	128.954	10	
Ne V	129.034	50	
Na VI	129.040	200	
N V	129.337	20	
Na IV	129.464	10	
Al IV	129.729	700	
Mg IV	129.730	200	
O VI	129.786	150	5
N V	129.811	30	
Mg IV	129.855	400	
O VI	129.872	250	5
Na V	129.942	100	
Mg IV	129.969	300	
Mg XII	130.0	P	
Mg IV	130.085	200	
Mg IV	130.118	200	
Mg IV	130.243	100	
Mg IV	130.294	200b	
Mg VI	130.294	200b	
N VI	130.32		
Mg IV	130.352	100	
Al V	130.413	1000	
N V	130.431	40	
Mg IV?	130.541	10	
Mg IV	130.630	100b	
Mg VI	130.630	100b	
Na V	130.680	200	
Mg VI	130.701	10	
Na V	130.723	100	
Al V	130.848	1000	
Al V	131.003	1000	
N V	131.254	50	
Na V	131.345	300	
Na V	131.413	200	
Al V	131.441	1000	
F V	131.516	10	
Na V	131.635	300d	
F V	131.638	10	
Al IV	131.652	150	
O V	131.750	100	
O V	131.807	100	
Mg V	132.171	600	
F V	132.207	10	
Na IV	132.211	100	
O VI	132.219	100	
F V	132.310	100	
O VI	132.312	200	
N V	132.383	60	
F	132.389	10d	
F V	132.453	200	
Na IV	132.465	10d	
F V	132.484	300	
Mg V	132.485	500	
F V	132.511	300	
Mg V	132.623	300	
Al V	132.630	500	
F V	132.699	100d	
Na IV	132.740	10	
O V	132.800	100	
Mg IV	132.815	500	
F V	132.819	200	
O V	132.851	200	
O V	132.885	10	
Al V	133.013	200	
F V	133.082	10	
Cl VII	133.11		
Na V	133.162	500	
Mg IV	133.202	600	
F V	133.208	100	
Al V	133.242	100	
O VII	133.31	250	
O V	133.328	10	
Na V	133.388	400	
O V	133.395	10	
O V	133.521	300	
F V	133.599	110	
F V	133.662	100	
Si XIV	133.8	P	
N VII	133.82	P	
Na VI	133.825	200	
N V	133.994	70	
Na VI	134.021	100d	
Na VI	134.135	10	
Na V	134.183	10	
Na V	134.272	200	
F V	134.407	400	
Na VI	134.532	300	
F V	134.539	500	
F VII	134.703	100	
Ne VII	134.82	200	
F VII	134.882	200	
F IX	134.94	P	
C VI	134.95	P	
Li III	134.998	200P	
Al	135.231	10	
F VI	135.397	300	
O V	135.523	350	
Al	135.620	50	
F V	135.621	1	
Mg V	135.638	200	
F V	135.692	10	
Na V	135.791	300	
Na V	135.854	300	
Mg V	135.953	100	
Ne VI	136.089	40	
Mg V	136.128	10	
Ne V	136.215	20	
Al V	136.249	50	
N V	136.429	80	
Na IV	136.435	10	
Na IV	136.550	100	
Na IV	136.645	10	
Al V	136.668	100	
Na IV	136.748	10	
Na IV	136.854	100	
F V	136.902	300	
F V	136.955	10	
Na IV	137.062	10	
Na IV	137.144	10	
Mg V	137.234	600	

Element	Wavelength	Intensity	Multiplet
Mg V	137.414	800	
Mg	137.509	10	
Na VI	137.589	10	
Na IV	137.714	10	
Mg V	137.748	700	
Mg VI	137.814	10	
Mg V	137.880	600	
Ar VIII	137.926	150	
Na IV	137.945	10	
Mg IV	137.966	100	
O V	138.030	200	
O V	138.054	300	
O V	138.108	400	
F V	138.181	100d	
C V	138.2	P	
F V	138.256	10d	
Mg IV	138.262	300	
Mg IV	138.394	200	
Ne VI	138.397	30	
Ar VIII	138.440	250	
Na	138.628	200	
Ne VI	138.630	30	
Na VI	138.693	200	
Mg IV	138.693	100	
Na V	138.812	200	
Na V	138.917	300	
O V	139.025	350	
C V	139.5	P	
Mg	139.705	10	
F VI	139.758	500	
F VI	139.800	600	
Na IV	139.867	200b	
Na VII	139.867	200b	
F VI	139.900	700	
Mg IV	139.995	100	
Cl XVII	140.0	P	
O V	140.045	10	
O V	140.109	10	
Mg IV	140.120	400	
Ne IV	140.127	15	
Na V	140.171	10	
Mg IV	140.176	400	
Na V	140.258	10	
F V	140.266	10	
N V	140.356	160P	
N V	140.358	P	
F V	140.414	100	
Mg IV	140.425	200	
Mg IV	140.475	200	
Mg IV	140.523	200	
Mg IV?	140.564	200	
Ne V	140.716	50	
Ne V	140.757	150	
F IV	140.781	1	
Ne V	140.791	150	
F IV	140.816	1	
Na VI	140.833	200	
Mg IV	140.867	400	
Mg IV	140.918	200	
Mg IV	140.966	400	
Na VI	141.040	10	
F VI	141.154	200	
C V	141.27	P	
O V?	142.119	10	
Na IV	142.232	200b	
Na V	142.232	200b	
Na IV	142.363	10	
Na V	142.415	10	
F V?	142.422	100	
Ne V	142.441	100	
Ne V	142.503	100	
Ne V	142.661	40	
Na IV	142.688	10	
Ne V	142.724	150	
N V	142.797	1	
Ne IV	142.929	15	
Mg V	142.933	600	
N V	142.981	1	
Ne V	143.219	50	
N V	143.241	10	
Ne V	143.273	100	
Ne V	143.344	150	
Ar XVIII	143.4	P	
N V	143.520	10	
F V?	143.794	10	
F V	143.897	100	
N V	143.914	20	
C V	143.94		
F V	143.965	15	
Ne IV	144.019	10	
Ne IV	144.151	10	
Ne IV	144.288	5	
Na V	144.330	200	
N V	144.392	30	
F V?	144.445	10	
F V?	144.478	1	
Na V	144.546	200	
F V	144.637	100	
Na V	144.661	100	
F V	144.673	90	
O V	144.802	100	
O V	144.837	100	
N V	144.978	40	
Na IV	144.979	10	
F V	145.177	100d	
F V	145.392	200	
F VI	145.462	100	
Mg V	145.485	500	
F VI	145.489	100	
F V	145.547	300	
F VI	145.585	100	
F VI	145.630	100	
F VI	145.691	300	
N V	145.742	50	
Na IV	145.846	10	
Na IV	146.060	200	
Mg V	146.083	600	
Ne IV	146.262	10	
Na IV	146.298	100	
O V	146.345	100	

Element	Wavelength	Intensity	Multiplet
Na IV	146.398	10b	
Na VI	146.398	10b	
Mg V	146.464	500	
Mg IV	146.526	400	
F VI	146.576	200	
F VI	146.613	300	
Mg V	146.621	400	
F VI	146.676	400	
N V	146.716	30	
F VI	146.718	200	
N V	146.767	60	
Mg IV	146.836	300	
N V	146.921	30	
Mg IV	146.949	400	
Mg IV	147.006	400	
Mg IV	147.052	400	
C V	147.1	P	
Ne V	147.132	150	
Mg IV?	147.252	300	
O V	147.261	250	
Mg IV	147.321	400	
Mg IV	147.405	500	
N V	147.424	240P	
N V	147.427	P	
Mg IV	147.535	500	
Mg IV	147.632	10	
Mg IV	147.746	400	
Mg IV?	147.887	100	
Na V	147.897	200	
F V	147.946	400	
F V	148.002	500	
F V	148.108	100	
N V	148.116	40	
Mg IV	148.121	200	
N V	148.168	70	
N V	148.328	10	
C V	148.35		
N V	148.387	40	
C V	148.5	P	
Na V	148.642	400	
F VI	148.653	400	
Ne IV	148.660	5	
Ar VIII	148.725	100	
Ne IV	148.787	15b	
Ne V	148.787	15b	
Na V	148.856	300	
Ne IV	148.942	20	
Na V	149.001	200	
O V	149.034	10	
O VIII	149.06	P	
O V	149.078	200	
Ar VIII	149.333	150	
Cl VII	149.37		
Cl VII	149.43		
Na VI	149.442	10	
Ne IV	149.589	10	
Na VI	149.621	10	
Ar XII	149.93		
O VI	150.089	500	2
N V	150.116	70	
O VI	150.124	250	2
N V	150.171	140	
Mg XII	150.26	P	
Na IV	150.297	400	
F IV	150.335	10	
F IV	150.422	10	
N V	150.429	20	
N V	150.488	50	
C V	150.51	P	
Na IV	150.545	300	
Na IV	150.647	200	
Na IV	150.695	200	
Ne IV	150.931	5	
Na IV	150.968	200b	
Na V	150.968	200b	
F IV	150.977	100	
F IV	151.005	100	
Na IV	151.048	10	
F IV	151.079	1	
Na V	151.127	400	
Na V	151.188	100	
Na IV	151.303	100b	
Na V	151.303	100b	
Ne V	151.424	120	
O V	151.449	400	
Ne IV	151.456	P	
O V	151.481	500	
O V	151.548	600	
Ar VII	151.698	50	
Mg	151.808	10	
Ne IV	151.817	75	
Ar XI	151.86		
Ar VII	151.876	100	
Mg V	152.019	10	
Mg V	152.149	300	
Mg	152.153	100	
Ne IV	152.231	75	
Ar VII	152.259	150	
O IV	152.264	10	
F V	152.339	200	
O IV	152.355	10	
Mg V	152.384	100	
F V	152.391	300	
F V	152.511	400	
Mg V	152.527	100	
F V	152.563	200	
Mg V	152.591	10d	
F IV	152.997	1	
F IV	153.102	10	
N V	153.136	180	
F IV	153.141	10	
O IV	153.162	10	
N V	153.192	280	
C V	153.53		
N V	153.624	30	
Ar XII	153.63		
F VI	153.678	200	
N V	153.683	60	
F VI	153.741	300	
F VI	153.880	400	

Element	Wavelength	Intensity	Multiplet
O V	153.948	250	
Ar XII	154.44		
Ne IV	154.488	25	
F VI	154.506	300	
Na XI	154.8	P	
F	154.968	10	
Na IV	155.090	100	
Al XIII	155.2	P	
Na IV	155.248	200	
Cl VII	155.32		
Na IV	155.354	10	
Na IV	155.445	300	
Na IV	155.515	400	
Na IV	155.622	10	
F IV	155.624	10	
F IV	155.673	10	
Na IV	155.693	200d	
Cl VII	155.78		
Na IV	155.781	100	
Na IV	155.832	10	
O V	156.126	100	
O V	156.158	200	
O V	156.225	300	
C V	156.23	b	
F VI	156.247	600	
Ne IV	156.480	25d	
Na IV	156.536	800	
Ne V	156.610	20	
Na IV	156.780	500	
Ne IV	156.87	15	
Na IV	156.887	300	
O VIII	156.92	P	
Na V	157.036	200	
Na IV	157.090	400	
C V	157.2	P	
Na V	157.209	300	
Na V	157.511	200	
F V	157.515	100d	
Na IV	157.599	100	
Ne IV	157.626	25	
Ne IV	157.781	15	
Na IV	157.782	300	
Ne IV	157.862	10	
S XVI	158.0	P	
N V	158.024	240P	
Ne IV	158.063	25	
N V	158.088	360P	
Ne IV	158.105	10	
F IX	158.12	P	
F IV	158.398	10	
C V	158.47		
Mg III	158.530	10d	
F V	158.537	400	
O IV	158.553	10	
F IV	158.601	100	
O IV	158.606	50	
Ne IV	158.646	75	
B V	158.7	P	
O V	158.813	100d	
Ne IV	158.822	75	
N V	158.862	40P	
Ar VIII	158.923	400	
F IV	158.925	100	
O V	158.926	200	
N V	158.928	70P	
Ar VIII	159.175	250	
Mg III	159.209	10d	
O V	159.343	400	
O V	159.380	400	
F V	159.558	1	
F V	159.658	10	
Mg III	159.755	10d	
Al IV	160.073	800	
O IV?	160.141	10	
Mg IV	160.230	600	
Ne IV	160.471	50	
C V	160.53	P	
Cl XVII	160.8	P	
Mg IV	160.804	400	
Mg III	161.135	10	
F VI	161.174	120	
N VI	161.22		
F VI	161.257	100	
F VI	161.308	300	
F VI	161.341	90	
F VI	161.414	100	
F VI	161.477	120	
Mg III	161.686	10d	
Al IV	161.686	700	
F V	162.013	200	
F V	162.053	300	
F V	162.082	300	
F V	162.121	200	
F V	162.172	300	
F V	162.215	300	
F V	162.270	400	
Na IV	162.445	800	
O V	162.494	300	
N V	162.556	480P	3
N V	162.564	P	3
Cl XI	162.84		
F VI	163.138	200	
Na IV	163.187	600	
F V	163.456	300	
F V	163.501	400	
F V	163.558	500	
Ne IV	163.562	60	
Mg III	163.586	10	
F V	163.596	200	
Ne IV	163.602	10	
Na V	163.616	300	
Na IV	163.840	400	
Na V	163.930	200	
B V	163.99	P	
F VI	164.015	100	
Ne V	164.023	100	
Ne V	164.145	100	
Mg III	164.159	10	
O V	164.178	200	
Ne V	164.294	80	

Element	Wavelength	Intensity	Multiplet
Mg III	164.384	200	
Cl X	164.5		
O V	164.578	500	
F IV	164.612	200	
O V	164.628	400	
O V	164.656	600	
O V	164.710	400	
Na IV?	164.841	400	
Mg III	164.954	200	
O V	164.986	200	
Mg III	165.195	10	
F IV	165.350	10	
F IV	165.479	1	
Ar X	165.53	400	
C V	165.91	P	
F V	165.983	900	
Cl XI	166.08		
O V	166.113	300	
Ne IV	166.113	P	
O V	166.152	400	
F V	166.177	1000	
O V	166.234	500	
F IV	166.444	200	
F IV	166.499	200	
Cl XI	166.64		
N V	166.875	440P	
N V	166.946	520P	
O IV	167.145	10d	
C V	167.39		
Ne V	167.483	150	
Na V	167.510	100	
Ne V	167.610	30	
Ne V	167.670	250	
Ne V	167.837	25	
F V	167.858	100	
Ne IV	167.921	25b	
Ne V	167.921	25b	
O V	167.991	800	6
O V	168.042	400	6
O V	168.077	400	6
Na IV	168.084	1000	
Ne IV	168.101	10	
Na IV	168.409	800	
F IV	168.450	200	
N V	168.514	50P	
Na IV	168.544	500	
N V	168.587	120P	
Mg III	169.150	100	
F IV	169.166	200	
O V	169.478	10	
F IV	169.481	100	
F IV	169.502	100	
O V	169.586	10	
F IV	169.610	100	
F IV	169.661	200	
Mg III	169.746	100	
F IV	169.748	200	
F IV	169.79	300	
F IV	169.839	300	
F IV	170.187	200	
Mg X	170.21	P	
O V	170.218	400	
Ar X	170.63	200	
Na V	170.631	100	
O VIII	170.80	P	
Mg III	170.802	500	
Na V	170.923	100	
O IV	170.940	10	
O IV	170.988	10	
F IV	171.066	300	
O IV	171.071	100	
Na V	171.076	100d	
Ne VI?	171.114	50	
O IV	171.121	100	
O IV	171.191	10	
Ne VI?	171.212	20	
F V	171.214	10	
F V	171.241	100	
F V	171.302	200	
S VI	171.327	20	
Mg III	171.395	400	
Li II	171.582	100	3
Mg IV	171.653	800	
Mg III	171.896	10	
O V	172.169	800	2
Mg IV	172.306	700	
Ne IV	172.492	200	3
Ne IV	172.525	250	3
Ne IV	172.620	400	3
F IV	172.653	10	
O VI	172.935	950	4
F V	173.020	100	
O VI	173.082	1000	4
F VI	173.145	100	
C V	173.27		
B V	173.54	P	
F V	173.656	10	
F V	173.714	10	
O IV	173.803	10	
O IV	173.851	50	
O IV	173.917	100	
N VI	173.92		
Ne V	173.932	500	6
O IV	173.968	10	
Na IV	174.008	10	
Cl VII	174.035	150	
O IV	174.105	100	
Ne IV	174.120	P	
O IV	174.220	150	
Ne IV	174.303	15	
F V	174.490	300	
F V	174.513	300	
O V	174.558	200	
F V	174.568	300	
Cl VII	174.603	200	
F V	174.698	400	
Ne IV	174.880	50	
Ne IV	174.920	40	
F IV	175.033	10	
F IV	175.132	1	

Element	Wavelength	Intensity	Multiplet
C V	175.67		
Ne IV	176.007	250	
F IV	176.110	10	
F IV	176.367	400	
F V	176.472	10	
Ar VII	176.566	500	
Ne IV	177.161	400	
S X	177.59	250	
O IV	177.598	10	
O IV	177.659	10	
O IV	177.698	50	
O IV	177.761	100	
O IV	177.808	100	
F IV	177.971	200	
Li II	178.015	100	2
F IV	178.126	100	
F V	178.434	500	
F IV	178.540	100	
F V	178.599	400	
F V	178.612	300	
F IV	178.670	300	
O V	178.713	200	
F IV	178.724	100	
F IV	178.805	100	
Na XI	178.83	P	
S IX	179.32	450	
Ar VIII	179.400	500	
P XV	179.8	P	
F IV	179.827	100	
F IV	179.907	1	
F IV	179.943	200	
F IV	180.029	10	
Mg IV	180.070	800	
Ar VI	180.074	80	
Ar VIII	180.254	750	
O IV	180.351	50	
Ne IV	180.402	75	
S X	180.41	100	
O IV	180.481	100	
Mg IV	180.617	1000	
Cl IX	180.71		
Cl X	180.71		
Ar VI	180.719	120	
S X	180.79	450	
Mg IV	180.796	900	
O IV	181.150	200	
O IV	181.275	250	
Mg IV	181.345	800	
S XVI	181.5	P	
F IV	181.521	400	
F IV	181.571	400	
Ne IV	181.614	100	
F IV	181.655	200	
Ne IV	181.691	100	
N IV	181.746	100	
Na IV	181.758	800	
O IV	181.876	150	
O IV	181.995	200	
C VI	182.09	P	
Mg XII	182.1	P	
Na IV	182.128	600	
O V	182.205	200	
C VI	182.23	P	
Mg III	182.240	300	
Na IV	182.282	400	
O IV	182.711	150	
Ne IV	182.829	P	
O IV	182.832	200	
Mg III	182.973	200	
F V	182.979	400	
F V	183.016	300	
O IV?	183.139	10	
Ne IV	183.165	75	
F V	183.208	10	
Ne IV	183.247	60	
O IV	183.353	10	
O IV	183.395	50	
Mg IV	183.439	400	
O IV	183.454	50	
Na III	183.575	10	
Na III	183.747	100	
Mg IV	183.915	100	
O VI	183.937	650	3
O VI	184.117	850	3
Mg IV	184.189	10	
Na III	184.218	10	
F V?	184.232	10	
Ar VIII	184.273	150	
F V?	184.282	1	
Ar VIII	184.315	250	
Ar XI	184.51		
Ne V	184.730	100	
Cl IX	185.26		
O IV	185.384	10	
O V?	185.455	200	
Ne IV	185.479	100	
F IV	185.484	300	
O V	185.747	600	12
N V	186.063	520P	6
N V	186.149	620P	6
Mg III	186.510	900	4
F IV	186.558	100	
Ne IV	186.575	750	7
F V	186.715	400	
C V	186.72		
Ne IV	186.787	25	
F V	186.788	400	
F V	186.842	500	
O IV	186.872	50	
F V	186.879	300	
Ne IV	186.915	75	
O IV	186.936	100	
F V	186.968	400	
O IV	186.982	10	
F V	187.008	400	
Ar XI	187.08		
F IV	187.105	200	
Mg III	187.194	800	3
F IV	187.240	300	
Ne X	187.3	P	

Element	Wavelength	Intensity	Multiplet
F IV	187.916	100	
F IV	188.004	10	
O IV	188.152	100	
O IV	188.190	10	
Ne VI?	188.424	30	
Mg III	188.526	300	
F IV	188.656	200	
F IV	188.758	100	
Ar XI	188.82		
F IV	188.834	10	
Na III	188.870	200	
Na III	189.346	100	
Ar XI	189.57		
F V	189.943	200	
Na IV	190.126	600	
N V	190.155	200P	
N V	190.249	320P	
Na IV	190.440	1000	
Al	190.560	50	
Ne IV	190.565	125	
F V	190.571	600	
Cl VII	190.594	100	
Ne IV	190.645	75	
Na IV	190.835	800	
F V	190.839	700	
Ar XI	190.96		
Na IV	191.000	600	
Na	191.205	10	
Cl VII	191.283	200	
O V	191.397	10	
O V	191.458	100	
S VI	191.480	20	
O V	191.556	200	
S VI	191.560	50	
O IV	191.609	100d	
O IV	191.640	10	
O IV	191.695	100	
O IV	191.752	150	
Ar VII	191.759	150	
F V	191.892	300	
F V	191.973	400	
Ar VII	192.041	250	
O IV	192.139	200	
O IV	192.169	200	
O IV	192.206	250	
O IV	192.244	150	
S VI	192.273	20	
Ar VII	192.635	350	
O V	192.751	850	5
O V	192.799	900	5
O V	192.906	950	5
Na	193.807	10	
Na III	194.032	100	
Ar XI	194.09		
F V	194.108	300	
Na III	194.166	10	
Ne IV	194.276	500	11
Na III	194.306	100d	
B V	194.36	P	
Ne IV	194.477	200	
O V	194.593	530	11
P IX	194.612	P	
Ne IV	194.623	250b	
F	194.655	10	
N VII	194.71	P	
Cl VI	194.796	100	
Ne VI?	194.839	20	
F VI	194.840	100	
Ne VI?	194.936	20	
Cl VI	195.227	150	
Ne V	195.368	50	
Na III	195.538	10	
Ne V	195.553	30	
Ne V	195.621	20	
O IV	195.863	350	
O IV	196.009	400	
Cl VII	196.123	500	
O IV	196.348	10d	
F IV	196.351	400	
Cl VII	196.388	400	
F IV	196.390	500	
O IV	196.435	10d	
F IV	196.448	600	
F V	196.713	200	
P VIII	196.761	P	
S X	196.82	50	
F V	196.870	100	
N IV	196.954	20d	
F IV	196.968	100	
N IV	197.007	100d	
C V	197.02		
F IV	197.108	200	
N IV	197.230	300	
P IX	197.246	P	
F	197.298	100d	
F V	197.615	1	
F V	197.780	10	
C IV	197.82	10	
O V?	198.031	250	
F V	198.476	100	
S IX	198.55	250b	
S VIII	198.550	50	
F V	198.765	1	
F IV	199.004	300	
C IV	199.04	10	
F IV	199.086	300	
Li II	199.282	300	1
F IV	199.607	100	
F IV	199.761	500	
Na IV	199.769	600	
F IV	199.804	500	
F IV	199.849	500	
F IV	199.934	500	
F IV	200.001	500	
F IV	200.089	700	
O VIII	200.15	P	
F V?	200.335	10	
C IV	200.68	10d	
O IV	200.827	50	
F V	200.861	100	

Element	Wavelength	Intensity	Multiplet
O IV	200.915	50	
O IV	200.966	50	
O IV	200.995	100	
F IV	201.011	600	
O IV	201.022	10	
F IV	201.063	700	
O IV	201.073	50	
O IV	201.098	50	
F IV	201.101	600	
F IV	201.160	800	
F IV	201.222	600	
F IV	201.465	400	
Cl X	201.50		
O V	202.158	350	14
Na III	202.184	400	
O V	202.191	350	14
O V	202.226	350	14
O V	202.282	350	14
O V	202.335	350	14
O V	202.393	450	14
Na III	202.490	200	
S VIII	202.605	50	
Na III	202.720	300	
Na III	202.760	300	
O IV	202.891	200	
F IV	202.989	10	
O IV	203.048	250	
Na III	203.050	300	
C IV	203.057	100d	
F IV	203.152	100	
Na III	203.282	200	
Na III	203.324	200	
O V	203.783	400	13
Cl X	203.80		
O V	203.821	500	13
O V	203.851	400	13
O V	203.890	550	13
O V	203.935	400	13
Na IV	203.959	200	
S VI	204.190	50	
Ne IV	204.270	75	
Ne IV	204.531	125	
O IV	204.708	10d	
Ne IV	204.786	75	
O IV	204.905	10	
Ne IV	204.908	25	
N VII	204.98	P	
O IV	204.996	10	
O V	205.102	250	
Cl X	205.40		
Na IV	205.487	600	
F V	205.552	400	
F V	205.778	300	
O IV	205.842	10	
Na IV	205.956	400	
N IV	205.960	200d	
O IV	206.002	50	
Cl X	206.02		
N IV	206.021	220d	
Na IV	206.155	300	
Si XIV	206.4	P	
F V	206.430	200	
F	206.548	10	
F V	206.594	300	
P XV	206.6	P	
C IV	206.641	300d	
Na III	206.871	10	
O IV	207.183	300	
O IV	207.239	350	
O IV	207.348	200	
Na III	207.355	10	
Cl X	207.41		
Na III	207.458	10	
Cl VII	207.757	200d	
O V	207.794	670	16
F IV	208.254	900	
Ne IV	208.485	500	2
F IV	208.549	200	
Ne IV	208.734	500	2
Ne IV	208.899	400	2
N V	209.274	800P	2
N V	209.308	800P	2
P V	210.004	10	
Cl X	210.08		
F IV	210.480	100	
F IV	210.545	100	
F IV	211.152	10	
N IV	211.396	10	
O IV	211.808	10d	
C IV	212.421	500	5
Ne IV	212.556	750	6
O IV	212.578	100d	
O IV	212.974	150d	
O IV	213.061	150d	
F	213.684	10d	
F IV	213.848	700	
O IV	213.978	200	
O IV	214.032	250	
F IV	214.062	700	
O IV	214.155	300	
O IV	214.209	200	
Na III	214.235	400	
O IV	214.249	50	
S VI	214.277	20	
O IV	214.290	50	
Na III	214.596	200	
Si VIII	214.756	100	
F III	214.804	100d	
F III	214.865	100	
Na III	214.868	400	
O V	215.034	500	4
Na III	215.042	200	
O V	215.104	550	4
Na III	215.230	400	
O V	215.245	600	4
Na III	215.340	400	
Ne IV	215.396	25	
Ar XII	215.49		
Na III	215.498	10	
Na III	215.671	400	

Element	Wavelength	Intensity	Multiplet
F V	215.676	10	
Ne IV	215.711	15	
Ne IV	215.843	75	
Na	215.870	100	
O V	216.018	530	15
Na III	216.120	100	
Ne X	216.41	P	
Na XI	216.8	P	
Si VIII	216.800	20d	
Si VIII	216.918	100	
O IV	216.960	10	
P V	217.220	20	
N IV	217.227	100	
Ne IV	217.337	75	
Na	217.385	10	
Ne IV	217.640	75	
Ne IV	217.777	75	
Si VII	217.826	350	
Ne IV	217.830	125	
F V?	217.893	10	
F V?	218.052	1	
N IV	218.085	100d	
Ne IV	218.131	100	
Ne IV	218.184	50	
Ar XII	218.28		
Ne IV	218.343	75	
Ne IV	218.483	100d	
Ne IV	218.643	125	
Ne IV	218.766	250	
F III	219.277	10d	
F III	219.588	1d	
Ar VI	219.896	120	
P VII	219.910	P	
O V	220.352	870	10
F IV	220.765	700	
Ar VI	220.946	200	
S IX	221.26	100	
O IV	221.515	10	
Al	221.543	10	
O IV	221.648	200	
O V	222.235	250	
P VIII	222.366	P	
Ne IV	222.600	200	
O IV	222.763	250	
O IV	222.777	200	
C IV	222.791	700	4
N VII	223.12	P	
Ne IV	223.235	125	
S IX	223.27	100	
F IV	223.394	300	
F IV	223.456	200	
P VII	223.482	P	
F IV	223.497	100	
Ne IV	223.601	125	
Si IX	223.72	5P	
O IV	223.728	10	
O IV	223.841	10	
F V	223.999	1	
Cl VII	224.144	300	
Ar XII	224.23		
S IX	224.75	450	
Si IX	225.033	20	
Cl VII	225.078	500	
N IV	225.098	300	6
F	225.114	10d	
N IV	225.136	400	6
N IV	225.205	500	6
S IX	225.23	50	
O IV	225.299	250	
F	225.627	10d	
O III	226.038	50d	
F III	226.051	200	
F III	226.091	300	
F III	226.166	400	
F V	226.341	200	
S IX	226.59	100	
F V	226.608	90	
F IV	226.944	600	
Si IX	227.007	20	
F IV	227.079	300	
F IV	227.101	500	
S VI	227.197	200	
F IV	227.211	400	
C V	227.22		
O V	227.374	350	
O V	227.468	350	
O V	227.510	500	
O V	227.549	350	
O V	227.636	350	
O V	227.688	350	
S VI	227.845	200	
S X	228.21	250	
C IV	228.27	10d	
F IV	228.496	1	
F IV	228.552	10	
F IV	228.645	100	
S X	228.75	350	
S IX	228.84	100	
O III	228.893	10	
Al	228.911	10	
O III	228.988	10	
F IV	229.261	200	
He II	229.431	P	11
Ar VIII	229.437	250	
He II	229.736	P	10
P V	229.832	200	
Na III	229.868	300	
O IV	229.896	10	
Ar XVIII	229.9	P	
O IV	230.040	10	
F III	230.117	500	
He II	230.139	P	9
C IV	230.43	100d	
F III	230.573	10	
Na III	230.593	200	
O IV	230.682	50	
He II	230.686	P	8
O IV	230.755	100	
Ar VIII	230.875	350	
F III	231.015	200	

Element	Wavelength	Intensity	Multiplet
O IV	231.031	150	
O IV	231.070	500b	
O V	231.070	500b	
F III	231.100	300	
O IV	231.101	300	
O IV	231.144	200	
O IV	231.200	300	
O IV	231.240	300	
F IX	231.3	P	
O IV	231.302	350	
F III	231.371	10	
He II	231.454	P	7
P XI	231.669	P	
Mg III	231.730	1000	2
O V	231.823	500	
He II	232.584	30P	6
Si VIII	232.864	10	
F IV	233.159	200	
Si VIII	233.159	10	
F IV	233.222	600	
F IV	233.297	200	
F IV	233.393	500	
O IV	233.457	350	7
O IV	233.495	350	7
O IV	233.521	300	7
F IV	233.526	400	
C IV	233.53	200d	
O IV	233.561	400	7
O IV	233.596	300	7
N IV	234.124	300	
N IV	234.195	400	
N IV	234.249	200	
Mg III	234.258	850	1
Ne IV	234.319	125	
He II	234.347	40P	5
Ne IV	234.704	125	
P XI	234.841	P	
Cl XI	234.92		
O IV	234.988	150	
Si VIII	235.221	10	
Si VIII	235.563	20	
F V	235.840	100	
O IV	236.071	50d	
Cl V	236.435	100	
O III	236.710	50d	
P XI	236.995	P	
Si XIV	237.2	P	
Cl V	237.231	200	
He II	237.331	70P	4
Cl XI	237.38		
N IV	237.860	100	
N IV	237.903	200	
F IV	237.913	300	
F IV	237.955	400	
N IV	237.983	300	
F IV	238.012	300	
F IV	238.042	200	
F IV	238.099	100	
C IV	238.200	200d	
C IV	238.250	300d	
O IV	238.361	700	5
O IV	238.573	750	5
Al VII	239.030	100d	
N IV	239.161	120	
C IV	239.196	10	
N IV	239.210	200	
Al XIII	239.5	P	
O IV	239.592	150	
N IV	239.618	400	
N IV	239.693	100	
F IV	239.856	700	
O IV	239.935	10	
F IV	240.017	700	
O IV	240.079	50	
F IV	240.079	900	
F IV	240.146	700	
F III	240.233	50	
F IV	240.275	700	
P XI	240.315	P	
F IV	240.371	700	
F III	240.550	100	
F III	240.730	200d	
Al VII	240.770	200d	
Cl VII	240.829	300	
F III	240.855	10	
Cl VII	240.865	200	
O III	240.979	100d	
O III	241.037	100d	
F III	241.118	10d	
O III	241.819	50	
O III	241.875	50	
O IV	242.045	100	
O IV	242.140	150	
O IV	242.183	10	
F V	242.324	300	
F V	242.439	200	
Cl XI	242.80		
Cl VI	242.885	250	
He II	243.027	130P	3
Cl VI	243.194	400	
Cl VI	243.208	100	
F III	243.364	100d	
F IV	243.736	200	
Al VI	243.760	600d	
F IV	243.796	300	
Cl VI	243.854	600	
Cl VI	243.883	150	
F IV	243.922	400	
O III	244.049	100d	
P VIII	244.551	P	
F III	244.698	200	
F III	244.768	400	
C IV	244.907	1000	3
F III	245.002	300	
O IV	245.720	50d	
C IV	245.775	400d	11
C IV	245.830	500d	11
F III	245.860	100d	
Si VI	246.001	400	
O III	246.265	150	

Element	Wavelength	Intensity	Multiplet
P VIII	246.318	P	
O IV	246.465	100	
O IV	246.503	150	
O IV	246.563	200	
O III	247.080	50	
N IV	247.205	900	2
C IV	247.357	10	
C IV	247.415	100	
Ne IV	247.422	50	
N V	247.561	85	5
P VIII	247.644	P	
N V	247.706	100	5
Ne IV	247.807	40	
Ne IV	248.004	40	
Be IV	248.04	P	
P VIII	248.043	P	
O III	248.320	50d	
O V	248.459	400	9
O III	248.538	50	
O III	248.574	60	
O III	248.618	100	
C V	248.668	10	
C V	248.744	10	
S VI	248.985	400	2
Si VI	249.125	400	
O IV	249.223	150	
F IV	249.228	100	
S VI	249.271	400	2
P VIII	249.322	P	
O IV	249.365	200	
Ar VII	249.384	100	
F IV	249.744	10	
Ar VII	249.886	250	
Al VIII	250.139	10	
Na III	250.515	800	
Ar VII	250.940	350	
F IV	251.026	1000	
O IV	251.114	50	
Ne III	251.145	200b	5
O IV	251.148	50	
P VIII	251.225	P	
Al VIII	251.347	10	
Na III	251.371	600	
Ne III	251.558	200	5
Mg	251.600	100	
Ne III	251.726	200	5
S VI	251.905	200	
O IV	252.564	300d	
O IV	252.948	300	
O IV	253.082	350	
O III	253.548	10	
Si X	253.81	200P	
F III	254.162	400	
F III	254.193	300	
F IV	254.491	200	
F IV	254.595	100	
F IV	254.681	10	
O III	255.044	10	
S X	255.1	20	
O III	255.158	50	
O IV	255.252	250	
O III	255.302	10	
O IV	255.302	10	
P V	255.596	500	
F III	255.624	100	
P V	255.688	500	
F III	255.725	500	
F III	255.772	600	
F III	255.865	700	
Be IV	256.27	P	
He II	256.317	320P	2
F III	256.360	500	
O III	256.425	100	
O III	256.460	150	
O III	256.506	150	
F III	256.525	100	
Si X	256.58	P	
S X	256.59	20	
F III	256.673	100	
F III	256.723	10	
F III	256.890	200	
Cl XVII	257.8	P	
Si IX	258.10	P	
O IV	258.116	100	
O IV	258.207	150	
Si X	258.39	500P	
S X	258.98	20	
Al VII	259.035	10	
Al VII	259.219	10	
C IV	259.471	600	10
C IV	259.542	700	10
Ar VIII	260.253	200	
F III	260.313	400	
Ar VIII	260.332	300	
F III	260.375	300	
O IV	260.389	550	9
N IV	260.455	200	
F III	260.498	300	
O IV	260.556	500	9
F III	260.782	100	
O III	261.027	200d	
Al VII	261.053	10	
Al VII	261.219	10	
Si X	261.27	200P	
N VII	261.45	P	
F III	261.716	700	
F III	261.751	600	
S VI	261.810	50	
O III	262.113	100	
O III	262.289	10	
Ne X	262.3	P	
B V	262.37	P	
C IV	262.553	300	
C IV	262.624	400	
O III	262.729	10	
O III	262.882	50	
O III	263.692	150	
O III	263.728	200	
S X	263.74	50	
O III	263.768	150	

Element	Wavelength	Intensity	Multiplet
F III	263.807	800	
O III	263.818	250	
O III	263.861	150	
O III	263.903	10	
O III	264.257	200	
O III	264.338	250d	
O III	264.480	300	
N III	264.837	100	
P V	264.938	300	
N III	264.948	200	
C III	265.029	10d	
C VI	265.05	P	
O IV	265.062	10	
C III	265.287	10d	
O V	265.550	300	
N V	266.196	120	4
N V	266.379	150	4
O IV	266.690	10	
O IV?	266.729	10	
Na III	266.893	500	
O IV	266.932	300	
O III	266.967	250b	
O IV	266.967	250b	
O III	266.985	350	
O III	267.030	350	
O III	267.050	150	
Ne III	267.059	300b	4
O III	267.121	200	
F IX	267.19	P	
C V	267.26		
Ne III	267.516	300b	4
Na III	267.642	800	
Ne III	267.709	200	4
N III	267.851	10	
Na III	267.868	600	
N III	267.952	100	
O III	268.451	50d	
Na III	268.623	500	
F IV	268.785	400	
F IV	268.817	100	
Mg VI	268.986	650	
F IV	269.076	300	
F IV	269.225	200	
Mg	269.295	10	
O IV	269.559	50d	
F IV	270.225	600	
C III	270.324	10d	
Mg VI	270.394	750	
C III	270.583	100d	
F III	270.675	400	
O V	270.982	10	
N IV	270.995	600	12
C III	271.014	100d	
Be IV	271.18	P	
O III	271.403	50	
O III	271.523	50	
O III	271.611	10	
O IV	271.989	300	
Si X	272.00	280P	
O IV	272.076	300	
O IV	272.125	350	
O IV	272.174	250	
O IV	272.270	300	
O IV	272.311	300	
Na III	272.441	10d	
Si VII	272.641	200	
F III	272.710	400	
F III	272.758	300	
F III	272.915	300	
P V	273.13	10	
F III	273.207	200	
C III	274.051	200d	
Si VII	274.175	200	
F III	274.260	600	
Al XIII	275.1	P	
O III	275.281	100	
Al VI	275.350	300d	
Si VII	275.352	250	
O III	275.366	150	
O III	275.513	200	
Si VII	275.665	200	
Mg VII	276.145	200	
Mg V	276.581	1000	
F III	276.786	500	
Si VII	276.839	200b	
Si VIII	276.839	200b	
F III	276.895	400	
Mg VII	277.007	300	
Si VIII	277.054	200	
Si X	277.27	310P	
O III	277.385	350	12
O III	277.514	50	
Mg VII	278.406	400	
Si VII	278.445	200	
P XII	278.676	P	
Al V	278.699	800	
C VI	279.02	P	
Al VII	279.256	10	
O IV	279.456	100	
O IV	279.633	500	4
F III	279.692	700	
O III	279.787	150	
F IV	279.834	300	
O IV	279.937	550	4
F III	280.010	600	
O III	280.030	100	
C III	280.043	300	
O III	280.116	50	
O III	280.234	50	
O III	280.265	150	
O III	280.328	50	
O III	280.412	50	
O III	280.483	50	
C III	280.522	200d	
P V	280.609	150	
Mg VII	280.744	300	
F III	280.811	10	
F III	280.905	100	
Mg XII	281.1	P	
F III	281.207	300	

Element	Wavelength	Intensity	Multiplet
F III	281.350	400	
C III	281.390	200	
Al V	281.397	700	
Ar VI	281.433	120	
Ar VI	281.915	160	
N III	282.093	100d	
N III	282.213	200d	
O IV	282.213	50	
Ar VI	282.423	240	
Ne III	282.50	10	8
Ar VI	282.556	40	
Na II	282.827	10	
Ar VI	283.164	120	
Ne III	283.178	300b	3
Ne III	283.206	600	3
P IX	283.246	P	
N IV	283.420	900	5
N IV	283.470	950	5
S VI	283.502	300	
N IV	283.579	1000	5
Ne III	283.690	500b	3
O VIII	283.83	P	
Ne III	283.894	300	3
P IV	283.99	20h	
Al IX	284.042	10d	
N III	284.296	100	
N III	284.346	200	
P IX	285.356	P	
Al VIII	285.467	50d	
N IV	285.563	500	11
O IV	285.714	300	
O IV	285.838	350	
O III	286.038	10	
Cl V	286.127	200	
O V	286.448	400	
Ne IV	286.448	75	
Ne IV	286.934	75	
Ne IV	287.206	50	
Cl V	287.327	300	
F IV	287.994	1	
F IV	288.078	10	
F IV	288.267	100	
C III	288.415	10	
Mg VI	288.652	10	
C?	289.048	300	
S VI	289.092	200	
C IV	289.143	900	9
C IV	289.230	1000	9
O IV	289.292	150	
O IV	289.469	100	
P IX	289.528	P	
O IV	289.590	50	
O IV	289.898	100	
O IV	289.933	50	
S VI	290.132	300	
F IV	290.147	400	
F IV	290.440	300	
F IV	290.461	200	
F IV	290.608	200	
Si IX	290.63	130P	
F III	290.848	600	
F III	290.947	500	
S XVI	291.0	P	
O IV	291.054	50	
O IV	291.203	50	
C III	291.3261	500	
Mg VI	291.348	300	
Mg VI	291.458	200	
Ar VI	292.154	200	
N III	292.447	300	
N III	292.595	400	
O VIII	292.8	P	
Si IX	292.83	270P	
Mg VI	293.026	200	
Ne IV	293.123	75	
Mg VI	293.124	400d	
Cl VII	293.253	400	
Ne IV	293.429	50	
Ne IV	293.649	25	
Ne IV	293.947	5	
Ar VI	294.052	240	
Ne IV	294.100	15	
Ne IV	294.390	15	
O IV	294.650	50	
O IV	294.853	50	
Cl VII	294.889	500	
O IV	295.051	50	
O IV	295.140	50	
F III	295.365	200	
Mg	295.393	10	
F III	295.405	100	
O III	295.511	150	
O III	295.619	250	
O III	295.657	300	
F III	295.710	500	
O III	295.716	300	
O IV	295.874	100	
F III	295.886	600	
O III	295.944	150	
O III	296.012	200	
P V	296.112	70	
Si IX	296.19	420P	
O III	296.270	50d	
C IV	296.857	600	8
C IV	296.951	700	8
N IV	297.595	250	15
Ar VII	297.621	150	
N IV	297.644	350	15
Ar VII	297.658	200	
Ar VII	297.701	300	
N IV	297.712	250	15
N IV	297.768	250	15
N IV	297.815	400	15
O III	299.275	100d	
O IV	299.49	150	
O IV	299.620	100	
N III	299.670	10	
O IV	299.710	100	
N III	299.820	100	
O IV	299.850	200	

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Element	Wavelength	Intensity	Multiplet
Na II	300.151	100	4
N IV	300.316	300	
O III	300.455	150d	
Ne III	301.124	400	7
C III	301.206	200	
C III	301.243	300	
C III	301.279	100	
Na II	301.311	10	
Na II	301.432	100	3
N IV	303.009	350	14
N IV	303.048	400	14
N IV	303.079	350	14
N IV	303.123	500	14
N IV	303.163	350	14
Si XI	303.41	50P	
O III	303.411	350	6
C III	303.432	400d	
O III	303.460	350	6
C III	303.468	100	
O III	303.515	350	6
O III	303.621	350	6
O VIII	303.69	P	
O III	303.693	350	6
C VI	303.70	P	
Be IV	303.72	P	
He II	303.781	665	1
He II	303.786	335	1
O III	303.799	450	6
N III	303.891	200	
N III	303.981	200	
N III	304.032	200	
N III	304.818	400d	
N III	304.874	400	
N III	304.912	300	
O III	305.596	400	5
O III	305.656	450	5
O III	305.703	400	5
O III	305.769	500	5
O III	305.836	400	5
O III	305.879	200	5
N III	305.918	100	
O IV	306.621	400	
O IV	306.882	350	
Na V	307.152	800	
Al VI	307.248	350d	
Si VIII	307.65	20P	
C IV	307.806	100f	
O III	308.051	50	
Si VIII	308.26	20P	
Na V	308.264	1000	
O III	308.306	100	
Ne III	308.559	100	10
Al VI	308.560	300d	
P IX	308.652	P	
Al VII	309.012	100d	
Al VII	309.122	100d	
P X	309.444	P	
Al VI	309.596	400d	
Al VI	309.852	300d	
C III	310.1697	700	3
P V	310.579	200	
Al VI	310.908	300d	
C III	311.157	10d	
P V	311.347	250	
F III	311.415	400	
O IV	311.490	250	
N III	311.539	200	
N III	311.628	300	
O IV	311.679	300	
O IV	311.726	150	
Mg VIII	311.806	10d	
Na VI	311.921	400	
Al VI	312.241	300d	
Mg V	312.311	1000	
C IV	312.422	1000	2
P IV	312.443	160	
C IV	312.453	950	2
Na VI	312.608	300	
P X	312.872	P	
Ne III	313.048	400	2
Ne III	313.677	300	2
Mg VIII	313.743	100d	
Na VI	313.748	500	
Ne III	313.92	100	2
Si VIII	314.31	50	
C III	314.395	100d	
Mg VI	314.554	300	
Mg VI	314.676	400	
N III	314.715	800	7
P IX	314.772	P	
N III	314.850	900	7
N III	314.877	600	7
P IX	314.951	P	
Mg VIII	315.022	200d	
N IV	315.053	800	18
F III	315.221	800	
F III	315.539	700	
F III	315.748	600	
Si VIII	316.202	100	
F III	316.488	400	
F III	316.823	300	
O III	316.967	150	
F III	316.998	200	
Mg VIII	317.029	100d	
O III	317.265	50d	
Na VI	317.641	600	
P X	318.258	P	
Cl IV	318.750	100	
Mg VII	319.016	400d	
C III	319.266	300d	
Cl IV	319.513	100	
Cl IV	319.616	300	
Na IV	319.638	1000	
F IV	319.695	300	
F IV	319.740	10	
Si VIII	319.829	100d	
Cl IV	319.993	10	
O III	319.996	150	
F IV	320.004	200	
F IV	320.192	100	

Element	Wavelength	Intensity	Multiplet
Cl IV	320.250	100	
He I	320.392	20	
O III	320.720	100d	
Cl IV	320.881	100	
O III	320.979	600	11
Mg IV	320.999	1000	
N III	321.071	100	
N III	321.161	200	
N III	321.270	100d	
P IX	321.326	P	
C III	321.372	10d	
O IV	321.457	50	
N IV	322.503	600	4
N IV	322.570	650	4
C III	322.5741	800	
F III	322.650	800	
F III	322.685	700	
N IV	322.724	750	4
Mg XII	322.9	P	
N IV	323.175	700	17
Mg IV	323.310	900	
Cl VI	323.356	600	
N III	323.431	400	6
N III	323.488	500	6
N III	323.615	600	6
N III	323.671	400	6
F IX	323.9	P	
Cl VI	323.936	800	
Ne II	324.56	120	
Cl VI	325.161	1000	
P XI	325.214	P	
C III	325.570	100d	
Ne II	326.54	350	
Ne II	326.77	200	
C III	327.112	400d	
Si IV	327.137	P	2.02
C III	327.176	400d	
Si IV	327.181	P	2.02
Ne II	327.25	120	
O IV	327.320	50	
Ne II	327.33	200	
O IV	327.519	10	
Ne II	327.63	120	
C III	327.784	100	
Ne II	328.08	120	
Al VIII	328.200	10d	
F IV	328.213	10	
O III	328.448	500	10
P V	328.455	300	
S VI	328.505	600	
O III	328.742	450	
P V	328.768	300	
Ne II	330.20	120	
Ne II	330.62	120	
C III	330.637	100	
C III	330.687	100	
Na V	330.718	10	
Ne II	330.77	200	
Ne II	331.06	65	
P XV	331.1	P	
Ne II	331.50	120	
Cl IV	331.835	200	
N III	332.133	200	
N III	332.327	300	
Na V	332.550	800	
Al X	332.891	10	
Na V	333.910	900	
Na XI	334.5	P	
N IV	335.050	1000	10
Mg VIII	335.230	10d	
Ar V	336.555	150	6
Ar VIII	337.257	100d	
Ar V	337.555	150	6
Ar V	337.998	300	6
O VIII	338.19	P	
Ar VIII	338.222	10d	
N III	338.345	200	
Ar V	338.426	100	6
Mg VIII	339.007	100d	
Ar V	339.009	150	6
O IV	339.330	50	
O IV	339.436	10	
C III?	339.773	100	
Ar V	339.886	150	6
Cl VII	340.229	750	
Cl VII	340.298	900	
C III	341.143	500	
C III	341.179	600	
C III	341.242	700	
O V	341.391	10	
Mg	341.790	10	
F III	341.924	700	
Al VII	343.290	10	
Al VII	343.650	10d	
F III	343.892	700	
F III	343.931	400	
F III	344.388	600	
N IV	344.915	250	13
N IV	345.023	250	13
N IV	345.063	400	13
Si IX	345.10	30	
N IV	345.107	250	13
N IV	345.201	250	13
O III	345.309	500	15
O IV	346.372	200	
O IV	346.688	150	
P V	347.237	150	
Si X	347.43	40	
C III	347.777	300	
C III	347.854	300	
P V	348.194	250	
N III	348.690	10d	
N III	348.800	10d	
F II	348.800	10	
Mg VI	349.155	700d	
O III	349.825	150	
O III	349.918	100	
Si IX	349.96	40	
O III	349.961	50	
C III	350.132	10d	

Element	Wavelength	Intensity	Multiplet
C III	350.330	200d	
Na VII	350.645	500	
Ar V	350.878	150	8
Mg V	351.089	850	
N IV	351.931	500	16
N III	351.979	100	
N IV	352.058	400	
Al VII	352.160	100d	
Mg V	352.202	700	
Ne II	352.237	120	
Na VII	352.275	600	
Ne II	352.946	250	
C III	353.000	300d	
Mg V	353.094	1000	
Ne II	353.206	200	
Na VII	353.294	800	
Mg V	353.300	650	
F II	353.421	15	
Al VII	353.776	200d	
Ne II	353.922	120	
Mg V	354.223	700	
Na VII	354.950	400	
Ne II	354.954	250	
F IV	355.045	200	
O III	355.137	300	
O III	355.293	150	
Mg V	355.326	850	
O III	355.333	250	
Ne II	355.450	120	
O III	355.469	250	
Ne II	355.647	200	
Ne II	355.848	65	
C VI	355.89	P	
Ne II	355.946	120	
Mg VIII	356.000	10	
Si X	356.07	40	
Ne II	356.131	250	
Ne II	356.436	120	
Ne II	356.534	200	6
O III	356.558	10	
O III	356.625	50	
O III	356.725	100	
O III	356.768	10	
Ne II	356.795	350d	6
Al VII	356.885	250d	
Ne II	357.534	350	6
Ne IV	357.831	250	5
Ne V	357.955	400	3
N III	358.278	250	11
N III	358.327	400	11
N III	358.356	400	11
N III	358.401	250	11
N III	358.469	400	11
Ne V	358.472	500	3
N III	358.509	400	11
N III	358.578	500	11
Ne IV	358.721	1000d	5
C III	358.740	400	
O III	359.016	400	
O III	359.223	400	
O III	359.384	350	
Ne V	359.385	500	3
P IV	359.628	20	
Na V	360.319	800	
Na V	360.367	800	
C III	360.557	600	
C III	360.623	700	
F IV	360.635	100	
C III	360.675	500	
Na IV	360.761	600	
F IV	361.208	10	
Na VI	361.250	800d	
Ne II	361.427	350	5
Si IV	361.560	P	2.01
Si IV	361.659	P	2.01
Na VI	362.444	400	
Ne II	362.456	250	5
N III	362.833	600	10
N III	362.881	650	10
N III	362.946	650	10
N III	362.985	500	10
C III	363.7538	400	
Mg VII	363.770	10	
Na VI	363.774	200	
C III	363.7852	500	
C III	363.8598	600	
Na VI	364.477	300	
O III	364.739	150	
O III	364.867	100	
O III	364.940	50	
Mg VII	365.230	200d	
Ne V	365.594	1000	5
C III	365.778	100d	
F III	365.874	700	
Na VI	366.110	400	
C III	366.169	400d	
Na VI	366.240	10	
F III	366.391	600	
O IV	367.192	100	
Na V	367.557	200	
Mg VII	367.679	400d	
Mg IX	368.071	100d	
C III	369.415	500	
C III	369.472	200	
Na V	369.743	300	
N VII	370.74	P	
C III?	370.951	10d	
C III	371.694	1000	7
C III	371.747	1000	7
C III	371.784	800	7
Na II	372.069	600	2
Cl V	372.589	200	
Cl V	373.165	200	
Cl V	373.776	300	
O III	373.805	400	4
Cl V	373.911	10	
O III	374.005	400	4
O III	374.075	500	4
O III	374.165	400	4
N III	374.204	900	5

Element	Wavelength	Intensity	Multiplet
O III	374.331	400	4
O III	374.436	400	4
N III	374.441	1000	5
Cl V	374.662	100	
Cl V	375.103	200	
F II	375.300	200	
F II	375.434	100	
F II	375.718	100	
F II	375.793	100	
F II	375.928	100d	
B III	376.372	100	
Na II	376.375	300	1
Mg	376.665	100	
F II	376.686	100	
O II	376.693	10	
O II	376.745	10	
O II	377.045	10	
F II	377.140	10	
Na III	378.143	1000	
F III	378.563	100	
F III	378.603	200	
C III	379.065	100	
C III	379.254	10d	
Ne III	379.308	700	6
O III	379.505	200	
O III	379.575	150	
O III	379.631	100	
O IV	379.775	200	
O IV	379.919	150	
Na III	380.107	800	
Si XIV	380.2	P	
F II	380.903	200	
Na VII	381.300	300	
Ar XVIII	381.4	P	
Al VIII?	381.689	10	
B V	381.70	P	
O III	382.214	50d	
N VII	382.45	P	
O III	382.903	50d	
Al VIII	383.785	50	
C IV	384.032	950	7
C IV	384.178	1000	7
Na XI	384.3	P	
Al IX	385.030	10P	
Na VII	385.061	10	
Na VII	385.254	10	
C III	386.2028	850	2
Ne IV	387.141	700	10
N IV	387.353	400	9
O III	387.398	100	
O III	387.482	150	
O III	387.639	200	
Mg VI	387.787	200d	
Al VIII	387.970	100	
Mg VI	388.020	300d	
Ne IV	388.218	500	10
P IV	388.315	240	
S VI	388.940	600	4
C III	388.9687	500	
C III	389.0045	600	
C III	389.0898	700	
P V	389.500	200	
C III	390.055	300	
Cl V	390.148	400	
P V	390.700	550	
S VI	390.859	800	4
O II	391.912	50	
O II	391.943	100	
O II	392.002	150	
O II	392.322	150	
Al IX	392.418	10P	
Cl V	392.433	500	
F II	393.676	100	
F II	394.204	10	
F III	395.442	300	
O III	395.558	600	9
Ar III	395.92	50	
F III	395.968	200	
F III	396.247	100	
Na VII	396.335	200	
Ar III	396.38	200	
N VII	396.68	P	
Ar IV	396.869	160	
O III	397.120	100	
O III	397.231	50	
O III	397.310	10	
Na VII	397.490	300	
Ar III	397.67	50	
C III?	398.168	10	
Ar IV	398.546	160	
C III?	398.551	10	
Ar III	398.86	50	
N III	398.885	250	
N III	399.045	350	
N III	399.084	100	
Na VII	399.182	400	
Mg VI	399.289	600	
Ar IV	399.634	120	
C III	399.637	600d	
C III	399.688	600d	
Ne VI	399.820	50	
Cl VI	399.938	250	
Cl VI	399.957	350	
Cl VI	399.995	400	
F II	400.575	100	
Mg VI	400.676	700	
Na V	400.722	1000	
Ne VI	401.138	150	
Al X	401.183	10	
B V	401.83	P	
Ne VI	401.939	250	
O II	403.035	10	
O II	403.087	10	
Ne VI	403.262	100	
O II	403.273	10	
Mg VI	403.315	800	
O II	403.372	10	
Ne X	404.8	P	
Ar	405.42	20	
F II	405.640	300	

Element	Wavelength	Intensity	Multiplet
Ne II	405.852	600	4
Cl III	406.274	100	
F II	407.046	400	
Ne II	407.136	550	4
F II	407.505	300	
Cl III	407.513	10	
Na IV	408.682	800	
Ar	409.12	20	
C III?	409.204	10	
C III	409.325	600	
Na IV	409.615	800	
O VIII	409.97	P	
Be IV	410.01	P	
P V	410.073	150h	
Ar	410.10	20	
Na IV	410.371	1000	
Na IV	410.540	600	
Na VIII	411.145	100	
Cl III	411.163	300	
Na IV	411.333	700	
Cl III	411.373	400	
C III	411.697	10	
B III	411.810	300	
Cl III	411.812	400	
C III	411.9577	300	
Si IV	412.155	P	9
Na IV	412.240	800	
P IV?	412.9	10h	
Si IV	412.939	P	9
N III	413.681	10	
N III	413.797	10	
Na VI	414.370	200	
C?	414.592	10	
P IV	415.022	20	
Cl III	415.196	100	
Cl III	415.333	100	
Na VI	415.505	400	
P IV	415.815	40	
Ar	415.86	20	
Ne V	416.198	800	4
C III	416.769	500	
Ne V	416.834	250	
Ar	417.12	10	
Na VI	417.595	600	
F II	417.874	100	
O II	418.598	50	
C III	418.609	200d	
N III	418.705	600	16
O II	418.812	10	
N III	418.910	500	16
C IV	419.525	950	6
F IV	419.644	900	
C IV	419.714	1000	6
F IV	420.041	950	
Ne V	420.386	100	
F IV	420.727	1000	
N IV	420.769	100	
Ne V	420.951	150	
Na VI	421.465	100	
Ne IV	421.609	750	9
Cl III	421.771	300	
Cl III	421.990	300	
F II	422.012	100	
Ne V	422.214	150	
Ne V	422.347	50	
F II	422.618	650	
Cl III	422.713	100	
Ar IV?	423.58	10	
Si III	423.817	P	3.04
Na VI	423.821	200	
O II	424.577	10	
N V	424.61	35	
N V	424.75	40	
Na	425.245	10	
O II	425.273	10	
C II	425.326	10	
Na	425.493	100	
O II	426.526	50d	
Si III	426.644	P	3.03
Cl XVII	427.6	P	
Ne III	427.840	300	9
N III	428.180	500	15
N III	428.244	400	15
Mg VII	429.134	100d	
F III	429.511	650	
O II	429.557	100	
O II	429.647	250	
O II	429.716	200	
Ar	429.80	10	
O II	429.918	250	3
O II	430.041	300	3
F III	430.154	700	
O II	430.177	300	3
F III	430.218	500	
Mg VIII	430.467	10d	
F IV	430.758	950	
Mg	430.767	10	
F II	430.909	250	
Mg VII	431.318	200d	
Ne IV	431.472	125	
F II	431.545	200	
F II	431.826	150	
Ne VI?	432.393	50	
Ne VI	433.176	400	
Ne IV	433.237	250	
C III	433.3391	800	
Cl III	433.664	10	
Cl III	433.774	10	
N III	433.911	500	9
N III	434.014	500	9
N III	434.066	600	9
N III	434.129	450	9
N III	434.246	500	9
O III	434.256	200	
N III	434.280	500	9
B III	434.627	100	
O III	434.646	150	
Mg VII	434.710	10d	
O III	434.840	100	
Mg VII	434.923	200d	

Element	Wavelength	Intensity	Multiplet
O III	434.975	500	14
F II	435.634	300	
Ne VI	435.649	400	
F II	436.279	200	
O II	436.510	50	
F II	436.563	100	
Ar V	436.60		
O II	436.649	10	
Ar	436.67	120	
Mg VIII	436.726	100d	
N V	436.85	60	
Na	436.946	10	
C II	437.102	100d	
Si III	437.255	P	3.02
O II	437.332	150	
B V	437.36	P	
S V	437.37	100	4
O II	437.683	150	
Cl IV	437.825	400	
Si IV	437.849	P	8
S V	438.19	100	4
Ar	438.64	10	
Si IV	438.734	P	8
C II	438.824	P	
C II	438.897	100P	
Mg IX	439.180	10	
Cl IV	439.255	300	
S V	439.65	100	4
Ar	439.96	40	
Cl IV	440.245	200	
Na VI	440.266	300	
Ne VI	440.404	100	
O II	440.552	150	
O II	440.598	100	
Ne VI	440.60	10	
Al XIII	440.9	P	
Ar	440.91	30	
Li III	441.00	P	
Cl III	441.398	300	
N VII	441.75	P	
Ar	441.83	30	
O II	442.001	200	
O II	442.048	200	
O IV	442.705	50	
O IV	442.873	10	
Cl III	442.947	200	
Ar IV	443.40		
Ar	443.42	80	
O II	443.681	10	
Mg IX	443.981	10d	
P IV	444.249	20	
Ne II	445.032	450	3
Na V	445.046	500	
Na V	445.190	600	
P IV	445.194	20	
O II	445.601	200	
O II	445.638	200	
Ar V	445.997	250	5
Ne II	446.252	550	3
Ne II	446.591	450	3
Ar V	446.949	400	5
Ar V	447.527	200	5
O VI	447.712	10	
Ne II	447.813	550	3
O VI	447.840	10	
Ar V	449.065	900	5
Ar V	449.493	200	5
Ar V	450.079	50	5
N V	450.08	50	
Ar	450.44	80	
C III	450.7338	800	
Ar IV	451.20		
Ar	451.55	60	
Ne VI	451.843	200	
N III	451.869	850	4
Ar IV	451.87		
N III	452.226	900	4
Ne VI	452.745	300	
Ar IV	452.91		
Ar	452.92	80	
N II	453.257	20	
N II	453.340	100	
Ne VI	454.072	300	
Si IV	454.112	P	7
Ne II	454.648	350	2
Ar	454.76	20	
Si IV	455.065	P	7
Ne II	455.270	450	2
Cl VII	455.273	100	
Li III	455.63	P	
Ar VI	455.813	80	
N III	456.078	100	
P XIII	456.100	P	
Ne II	456.344	250	2
Ar VI	456.375	120	
Cl VII	456.556	50	
Ne II	456.895	350	2
O II	456.997	50	
Ar VI	457.007	200	
Cl III	457.169	300	
F II	457.177	500	
Cl III	457.245	200	
Cl III	457.444	10	
Ar VI	457.475	800b	
Ar VI	457.475	800b	
Si IV	457.818	250	2
Ar VI	458.039	40	
Ar V	458.121	150	4
Si IV	458.155	200	2
O II	458.422	10	
B III	458.700	100	
Ar V	458.975	100	4
Ar VI	459.320	400	
C III	459.462	900	6
C III	459.521	950	6
Ar VI	459.603	100	
C III	459.633	1000	6
Ar V	459.728	50	4
Na V	459.897	600	
C III	460.0487	800	

Element	Wavelength	Intensity	Multiplet
Ar VI	460.058	40	
Ar VI	460.202	40	
Ne II	460.725	1000	1
Na V	461.051	850	
C II	461.120	100d	
Ar V	461.227	300b	4
Ar VI	461.227	300b	
Ar VI	461.898	40	
Ar VI	462.007	1000d	
Ar VI	462.146	160	
Ne II	462.388	930	1
Ar V	462.415	150	4
Cl IV	463.011	300	
Na V	463.263	1000	
N IV	463.737	300	
Ar V	463.938	350	4
O II	464.194	100	
Ar VI	464.257	160	
F III	464.284	600	
Cl IV	464.292	300	
O II	464.310	50	
F V	464.370	650	
S VI	464.654	1000	5
O II	464.785	150	
Cl IV	464.861	400	
Ne X	465.0	P	
Ar	465.02	150	
F III	465.113	650	
Ne VII	465.221	700	
Cl IV	465.350	300	
F V	465.374	700	
O II	465.529	50	
Ar VI	465.586	80	
O II	465.760	100	
Mg	465.972	10	
F V	465.978	750	
Si III	466.129	80	3.01
Cl IV	466.132	300	
C II	466.352	10P	
C II	466.407	100P	
C II	466.491	200P	
Ar III	466.530	250	
C II	466.547	10P	
Ar	466.82	60	
Ar VI	466.932	160	
F V	466.99	650	
Cl IV	467.194	300	
Ar III	467.390	300	
O II	467.926	10	
Ar	468.38	80	
Ar III	468.467	200	
O II	468.766	100	
C III	468.931	10	
Ar III	468.956	150	
Ne IV	469.773	700	4
Ne IV	469.820	1000	4
Ar III	469.831	200	
Ne IV	469.866	900	4
Ne IV	469.921	700	4
Ar III	469.968	200	
O II	470.408	200	
Ar	470.57	80	
Ar	471.09	60	
O IV	471.273	50	
O IV	471.603	10	
F II	471.949	200	
Ar	471.97	60	
F II	471.990	400	3
N III	472.232	350	18
N III	472.392	400	18
F II	472.710	350	3
P IV	472.957	80	
F II	473.016	300	3
Ar III?	473.025	300	
Ar III	473.918	300	
Ar VII	473.938	200	
N II	474.493	10P	
O VIII	474.54	P	
N II	474.546	10P	
N II	474.602	10P	
N II	474.706	20P	
N II	474.787	20P	
N II	474.891	200P	
P V	475.610	550h	
N II	475.647	100P	
Ar VII	475.656	400	
N II	475.698	200P	
Ar VII	475.733	100	
N II	475.757	P	
N II	475.803	250P	
N II	475.884	100P	
Ar III	476.432	350	
C III	477.6246	300	
Ar VII	479.379	600	
Ar VII	479.485	100	
Ne V	480.406	250	2
O III	480.955	200	
O V	481.12	700	
Ne V	481.281	150	2
O III	481.354	150	
Ne V	481.361	250	2
O III	481.381	100	
P XIII	481.417	P	
O II	481.587	200b	10
O III	481.587	200b	
O II	481.635	10	10
O II	481.704	50	10
O II	481.755	150	10
Ar III	481.848	300	
Li III	482.14	P	
Ar III	482.548	400	
S XVI	482.7	P	
Ne V	482.987	500	2
Na VII	483.216	200	
Na VII	483.328	300	
C III	483.567	300	
C III	483.618	400	
C III	483.733	500	
O II	483.752	200	9
Ar	483.86	20	

Element	Wavelength		Intensity	Multiplet
O II	483.976		250	9
O II	484.025		100	9
Ar III	484.116		250	
Ar III	484.445		250	
S III	484.58		50	
F II	484.600		550	
O II	485.086		300	8
Ar III	485.150		300	
S III	485.22		50	
O II	485.465		10	8
O II	485.515		250	8
Ar III	485.515		200	
O II	485.572		50	
O II	485.631		200	
Ar	485.79		60	
N II	485.849		10P	
Cl IV	486.172		800	
Ar	486.60		300	
Na VII	486.740		400	
Al III	486.95		100	
Ar III?	487.025		350	
Ne V	487.070		30d	
Ar II	487.2274	ST	20	
Ar III?	487.988		350	
Ne III	488.103		800	1
Ar III	488.452		350	
Ar II	488.7928	ST	50	
Ne III	488.868		700	1
Ne V	488.940		P	
Ar II	488.9616	ST	20	
Ar II	489.1955	ST	100	
Ne III	489.501		1000	1
Na VI	489.580		500	
Ne III	489.641		400	1
Ne III	490.310		700	1
F IV	490.566		800	
Ar III?	490.68		150	
Ar II	490.7010	ST	50	
F IV	490.997		1000	
Mg	491.045		10	
Ne III	491.050		900	1
Ar III	491.121		200	
Na VI	491.240		300	
Na VI	491.340		600	
O III	491.714		10	
Na VII	491.950		400d	
O III	491.980		50	
Ar III	492.228		150	
Na VIII	492.329		10	
Ar II	492.4080	ST	20	
Ar	492.64		50	
C III	492.6500		700	
C III	493.341		500	
C III	493.364		500	
C III	493.396		500	
C III	493.464		500	
C III	493.519		500	
C III	493.587		700	
Na VI	494.160		300	
Na VI	494.382		700	

Element	Wavelength		Intensity	Multiplet
Ar II	494.6678	ST	50	
Ar	495.55		80	
Na VIII	496.249		100	
Ar II	496.6438	ST	25	
Ar II	496.6594	ST	25	
Ar	496.91		40	
P III?	497.17		1	
F IV	497.363		500	
F IV	497.802		600	
F IV	497.842		400	
C III	497.910		100	
O VI	498.090		10d	
O VI	498.431		100d	
F IV	498.790		700	
F IV	498.911		400	
Si XII	499.27		P	
C III	499.425		700	
C III	499.462		800	
C III	499.530		900	
C III	499.583		700	
F IX	499.8		P	
O II	499.871		100	
S III	499.983		300	
O II	500.343		50	
Ar II	500.8019	ST	50	
Ar	501.01		120	
Ar II	501.1899	ST	50	
Ar II	502.027		20	
Ar II	502.1632	ST	100	
Ar	502.42		40	
Ar II	503.6501	ST	50	
C VI	504.65		P	
Ar II	504.811		50	
Ar II	505.0119	ST	50	
Ar	505.45		60	
He I	505.5001		4	
He I	505.6840		6	
He I	505.9122		8	
N II	505.986		100P	
N II	506.054		200P	
N II	506.153		300P	
F V	506.163		850	
He I	506.2000		10	
He I	506.5702		15	
C III	506.658		10	
He I	507.0576		20	10
O III	507.391		800	3
O III	507.683		850	3
He I	507.7178		30	9
F V	508.079		900	
O III	508.182		900	3
F III	508.384		900	
Ar III	508.441		450	
N II	508.484		10P	
Ar III	508.611		300	
He I	508.6431		40	8
N II	508.668		P	
Ar III	508.675		180	
N II	508.697		150P	
N II	508.928		10P	

Element	Wavelength		Intensity	Multiplet
N II	509.006		15P	
Ar	509.02		200	
N III	509.586		400	14
N III	509.897		350	14
He I	509.9979		50	7
Si III	510.079		P	6.08
Na V	510.102		10	
He I	510.2586		f	
Si III	510.414		P	6.08
Ar II	510.5511	ST	40	
Ar II	510.5566	ST	60	
N II	510.758		250P	
B III	510.777		200	
B III	510.865		300	
Si III	511.096		P	6. 8
Na V	511.193		100	
Al III	511.215		400	
Ar III	511.505		300	
C III	511.5225		1000	
Ar III	511.570		180	
N V	511.834		70	
Ar V	511.886		25	
Si III	511.994		P	6.07
He I	512.0982		70	6
Si III	512.219		P	6.07
He I	512.5183		f	
B V	512.53		P	
Si III	512.557		P	6.07
Si III	512.681		P	6.07
Ar III	512.770		180	
Si III	512.772		P	6.07
Si III	513.245		P	6.07
F II	513.649		400	
N II	513.849		P	
Ar V	513.914		50	
F V	513.975		700	
F V	514.087		600	
Ar II	514.3097	ST	100	
Na V	514.350		10	
O VIII	514.80		P	
F II	514.945		600	
Si IV	515.118		150	6
O II	515.498		250	17
He I	515.6165		100	5
Ar	515.62		20	
O II	515.640		200	17
Na	515.952		100	
Si IV	516.348		200	6
He I	516.3592		f	
C II	516.652		10d	
C II	517.069		100d	
Ar	517.17		80	
Ar V	517.250		25	
Mg XII	517.5		P	
O II	517.937		200	16
O II	518.242		250	16
B III	518.244		460	
B III	518.271		230	
Ar II	518.9090	ST	100	12
S IV	519.30		200	
Ar II	519.3271	ST	100	12
Ar VIII	519.429		150	
O VI	519.610		200d	
O VI	519.723		200d	
S IV	520.11		200	
C VI	520.6		P	
Si III	520.79		10	6.06
S IV	520.83		300	
Si III	520.92		20	6.06
Si XII	521.10		P	
S IV	521.13		100	
Si III	521.149		P	6.06
Si III	521.510		P	6.06
Ne IV	521.741		125	8
Ne IV	521.820		125	8
Si III	521.861		P	6.06
S IV	521.99		200	
P IV	522.02		10h	
Ar V	522.090		150	3
He I	522.2128		160	4
F III	522.288		300	
S IV	522.54		200	
Ar II	522.7921	ST	100	12
F III	523.661		400	
He I	523.7238		f	
Ar V	524.189		250	3
F V	524.597		600	
Ar II	524.6805	ST	100	
F V	525.292		650	
O III	525.795		900	8
F V	526.298		700	
Ar VIII	526.457		250	
Ar II	526.4971	ST	100	
Ar VIII	526.870		50	
Ar V	527.693		300	3
B III	528.219		10	
Ar II	528.6508	ST	50	
Na VI	528.730		10	
O V	529.20		500	
N II	529.355		250	6
N II	529.413		250	6
N II	529.491		250	6
N II	529.637		250	6
N II	529.722		250	6
N II	529.867		400	6
Ar III	529.900		450	
N III	530.037		200	
N III	530.268		250	
C II	530.274		300P	
C II	530.359		400P	
C II	530.454		P	
Ar II	530.4951	ST	100	
C II	531.721		5P	
C II	531.742		5P	
C II	531.917		100d	
Ar III	532.413		350	
C II	532.659		100P	
C II	532.705		200P	
Ar II	533.0796	ST	100	
Si III	533.226		P	6.05

Element	Wavelength		Intensity	Multiplet
N II	533.511		350	5
Si III	533.530		P	6.05
N II	533.581		400	5
Si III	533.592		P	6.05
N II	533.650		350	5
N II	533.729		500	5
N II	533.815		350	5
C II?	533.935		100d	
Si III	534.189		P	6.05
Ar III	534.26		50	
Si III	534.276		P	6.05
Si III	534.339		P	6.05
Cl IV	534.727		800	
Cl IV	535.039		400	
Ar II	535.0713	ST	50	
F VI	535.204		1000	
C III	535.2885		850	
Cl V	535.455		200	
N VII	535.51		P	
Ar III	535.580		350	
Cl IV	535.666		700	
Cl V	535.916		200	
Cl IV	536.150		600	
Cl V	536.532		300	
Ar III?	536.745		400	
Ne IV	536.965		5	
Cl V	537.006		400	
He I	537.0296		400	3
Ar II	537.1398	ST	100	
He I	537.3309		f	
Ar II	537.4195	ST	50	
Ar III	537.459		300	
Cl V	537.461		300	
Cl IV	537.606		900	
O II	537.830		450	7
Cl V	538.032		500	
C III	538.0801		900	5
Cl IV	538.119		600	
C III	538.1487		950	5
O II	538.256		500	7
C III	538.3120		1000	5
O II	538.318		350	7
Ar	538.41		40	
Cl IV	538.595		400	
Cl V	538.681		400	
Ar III	538.788		300	
He I	538.8956		f	
Cl V	538.977		300	
O II	539.086		400	2
Ar	539.19		30	
Cl V	539.441		10	
O II	539.547		400	2
Ne IV	539.731		15	
Ar	539.79		50	
O II	539.853		350	2
C VI	539.95		P	
Li III	540.00		P	
Ar II	540.8063	ST	50	
He I	540.9354		f	
Ne IV	541.127		400	1
Cl V	541.284		300	
Ar II	541.3017	ST	50	
Ne IV	542.073		500	1
Cl V	542.229		800	
Cl V	542.297		600	
Cl V	542.395		300	
P V	542.567		500	
Cl V	542.868		400	
Ar II	542.9125	ST	200	
S III	543.031		200	
Ar II	543.2035	ST	200	
C II	543.257		200d	
C II	543.444		300d	
C II	543.446		30P	
Ar II	543.508		20	
Ar II	543.7307	ST	200	
Cl V	543.818		100	
Ne IV	543.891		750	1
Ar VI	544.731		160	
P V	544.914		550	
Cl V	545.114		1000	
Ar II	546.1770	ST	200	
Cl V	546.329		600	
F II	546.851		1000	2
C II	547.140		P	
C II	547.153		10	
Ar II	547.1647	ST	200	
C II	547.277		5	
C II	547.291		5	
Ar II	547.4602	ST	200	
Cl V	547.630		1000	
N II	547.818		10P	
F II	547.875		400	2
Ar II	547.9958	ST	50	
F II	548.322		300	2
F II	548.517		200	
Ar II	548.7810	ST	200	
Ar VI	548.905		200	
Cl IV	549.219		500	
P XV	549.3		P	
C II	549.3195	ST	300	
C II	549.3785	ST	400	
C II	549.5110	ST	500	
C II	549.5700	ST	300	
Cl IV	550.020		400	
Cl VI	550.355		250	
Ar II	550.4807	ST	100	
Cl IV	550.706		300	
Ar II	550.9042	ST	100	
Cl V?	551.117		200	
S IV	551.17		200	5
Ar VI	551.371		320	
Cl V?	551.643		100	
C II	551.874		10	
Cl VI	551.992		500	
Cl IV	552.017		700	
Cl VI	552.053		100	
Cl III	552.908		200b	
Cl V?	552.908		200b	
Ar II	553.1260	ST	100	

Element	Wavelength		Intensity	Multiplet
Cl IV	553.297		600	
O IV	553.328		800	3
Ar III	553.470		450	4
O IV	554.074		850	3
S IV	554.17		P	5
Cl V?	554.210		100	
O III	554.275		10	
Ar	554.50		120	
O IV	554.514		900	3
Cl IV	554.619		700	
C III	554.655		200	
O II	555.056		250	6
O II	555.121		250	6
O IV	555.262		800	3
Cl V?	555.485		1000b	
Cl VI	555.485		1000b	
Cl VI	555.580		150	
Ar VI	555.639		160	
Ar II	555.7662	ST	100	
Cl III	556.232		600	3
Cl III	556.605		700	3
Ar II	556.8172	ST	200	
Ar III	556.893		300	4
Ar	557.04		40	
Cl III	557.118		700	3
Cl II	558.14		100	
Ar III	558.321		250	4
Cl III	558.385		100	
Ar V	558.481		250	7
Ne VI	558.595		50	
Ne VII	558.61		400b	
Ar	559.48		40	
Si IV	559.533		2	5
N II	559.762		10P	
Ne VII	559.947		300	
Ar II	560.2229	ST	200	
C II	560.2394	ST	400	
Al III	560.390		700	3
C II	560.4367	ST	500	
C II	560.4386	ST	40	
Cl III	560.636		100	
Si IV	560.980		5	5
Ar	561.06		20	
Ne VII	561.378		200	
Cl III	561.530		700	5
Cl III	561.680		700	5
Ne VII	561.728		400	
Cl III	561.738		700	5
Ar	562.18		30	
Cl II	562.28		300	
C II	562.338		150	
C II	562.367		150	
C II	562.473		150	
C II	562.497		150	
Cl II	562.54		10	
C II	562.562		300	
Ne VI	562.735		10	
Ne VI	562.805		150	
Ne VII	562.992		200	
Cl II	563.58		10	
Cl III	564.287		400	
Cl III	564.514		200	
Ne VII	564.529		200	
C II	564.565		40	
C II	564.582		40	
C II	564.608		100	
C II	564.635		50	
C II	564.663		200	
C II	564.698		40	
Cl III	565.272		300	
Si III	565.289		20	6. 4
Ar	565.31		20	
Cl III	565.480		400b	
Cl VI	565.480		400b	
C III	565.5280		700	
Si III	565.698		40	6.04
Cl II	565.75		10	
C III	566.490		400	
Si III	566.546		P	6.04
Si III	566.613		160	3
Cl VI	566.630		200	
Cl II	566.77		10	
Cl VI	567.479		100	
F III	567.629		500	
F III	567.676		700	
F III	567.737		650	
F III	567.794		500	
Si III	567.878		P	19
P III	568.09		10	
Ne V	568.418		400	1
Ne V	569.759		250	1
Ne V	569.830		500	1
P III	569.90		200h	
Cl VI	570.025		400	
Cl VI	570.529		200	
Ar	570.61		80	
F IV	570.636		900	
Cl VI	570.881		10	
F IV	571.302		900	
Cl VI	571.376		100	
F IV	571.384		950	
Cl VI	571.435		10	
Cl II	571.95		100	
Ar II	572.0139	ST	200	11
N II	572.069		P	
Ne V	572.106		250	1
Ne V	572.336		800	1
F IV	572.657		1000	
Cl III	572.693		400	2
Ar II	573.3622	ST	200	11
Ar III	573.468		200	
Si III	573.538		P	6.03
Si III	573.951		P	6.03
Si III	573.961		P	6.03
O III	574.065		1	
F IX	574.1		P	
C III	574.2809		1000	11
Cl II	574.37		300	
Cl III	574.408		300	2
N II	574.650		500	11

Element	Wavelength		Intensity	Multiplet
Si III	574.799		P	6.03
Si III	574.814		P	6.03
Si III	574.824		P	6.03
Cl II	575.30		10	
Cl III	575.582		300	2
F IV	575.633		200	
F IV	576.266		300	
F IV	576.349		200	
Cl VI	576.419		200	
Ar II	576.7361	ST	200	11
C II	576.8748		100	
C II	577.0859		200	
Ar III	577.153		150	
Cl VI	577.444		100	
F IV	577.737		400	
Ar II	578.1068	ST	200	11
Ar III	578.386		200	
Ar II	578.6046	ST	200	10
Ne I	578.82			
Ar III	579.212		150	
Ne I	579.75			
P III	579.98		1h	
Ar II	580.2634	ST	300	10
O II	580.400		300	15
Cl VI	580.444		200	
Ne I	580.50			
O II	580.967		350	15
Ne I	581.14			
P III	581.898		1h	
N II	582.156		400	10
Ne I	582.46			
Ar II	583.4368	ST	200	10
O VIII	584.05		P	
Cl II	584.10		100	
He I	584.3340		1000	2
Ne I	585.25			
C III	585.261		600	
C III	585.417		800	
C III	585.496		500	
C III	585.608		600	
C III	585.666		600	
Ar VII	585.754		750	
Cl II	586.25		10	
Ne I	586.30			
Cl III	586.874		400	
Ar VI	587.006		40	
Cl III	587.078		300	
Ne I	587.20		35	
Cl III	587.295		400	
Cl II	588.77		10	
Ar VI	588.921		200	
Ne I	589.16		35	
Ar VI	589.783		80	
Cl II	589.82		10	
Ne I	589.92		35b	
Cl III	591.118		300	6
He I	591.4117		40f	1
Cl III	591.428		400	6
Cl III	591.646		400	6
Ne I	591.82		70	
Cl III	591.962		200	6
Ar VI	594.096		100	
Cl II	594.49		10	
Cl III	594.636		400	
C II	594.8000	ST	600	6
C II	595.0219	ST	700	6
C II	595.0245	ST	70	6
Ne I	595.919		100	
Cl III	595.990		300	
Cl III	596.240		400	
Be IV	596.44		P	
Ar VI	596.694		160	
Ar II	597.7003	ST	200	9
Ar II?	597.76		20	
O III	597.818		750	13
Cl VII	598.211		600	
Ne I	598.705		75	
Ne I	598.890		35b	
Cl II	599.19		10	
O III	599.598		900	7
Cl IV	599.733		200	
Ne I	600.036		70	
C II	600.251		100	
C II	600.337		100P	
C II	600.353		300	
C II	600.503		100	
C II	600.518		100	
O II	600.585		300	14
C VI	601.31		P	
He I	601.4041		f	
N III	601.468		100	
Cl IV	601.499		500	
N III	601.878		10	
Ne I	602.725		170	
Ar II	602.8581	ST	200	9
Ne IV	602.999		10	
Ar II?	603.26		20	
Ar III?	604.152		500	
O V	604.41		500	
Cl IV	604.590		500	
Cl VII	604.785		1000	
Cl VII	605.052		50	
Ne IV	605.595		10	
F II	605.668		700	1
Cl III	605.855		100	
Si III	605.873		P	18
Cl III	606.100		200	4
F II	606.284		600	1
Cl III	606.345		500	4
Ne IV	606.527		25	
F II	606.805		800	1
F II	606.925		500	1
Cl IV	607.088		300	
F II	607.472		600	1
F II	608.065		700	1
O IV	608.395		700	2
Cl IV	608.903		400	
C III	609.025		400	
Ne IV	609.168		5	
C III	609.275		600	

Element	Wavelength		Intensity	Multiplet
Cl III	609.673		400	4
O III	609.705		300	16
O IV	609.829		750	2
Mg X	609.85		P	
Cl III	609.901		10	4
O III	610.043		350	16
O III	610.746		400	16
O III	610.850		300	16
Cl IV	612.070		400	
Ar II	612.3719	ST	500	
Cl II	612.73		10	
Ar	613.40		20	
Cl III?	613.643		10	
Cl III?	613.874		100	
Ar	614.69		10	
Ne I	615.627		170	7
Na XI	616.0		P	
O II	616.291		350	5
O II	616.363		200	5
O IV	616.933		400	
O IV	617.033		350	
O II	617.051		300	5
Cl II	617.27		10	
Cl II	617.61		100	
Cl III?	617.630		200	
Cl II	618.02		200	
Ar	618.63		200	
Ne I	618.671		170	6
Cl III	619.025		100	
Ar	619.04		200	
Ne I	619.101		120	5
N VII	619.84		P	
Cl II	619.95		10	
Ar	620.05		20	
Cl II	620.28		100	
Cl III	621.027		300	
Ar	621.05		20	
Cl II	621.12		400	
Cl III	621.280		400	
C III	622.144		200	
Ar III?	623.767		250	
Cl III	623.768		300	
O IV	624.617		650	6
Si III	624.997		P	17
O IV	625.130		700	6
Mg X	625.28		P	
O IV	625.852		700	6
Cl II	626.70		100	
Ne I	626.822		200	4
O V	627.36		500	
O V	627.63		700	
Be IV	627.90		P	
N V	628.744		70	
N V	628.874		50	
P IV	629.023		120	4
N II	629.167		300P	
Cl V	629.354		300	
N II	629.447		200P	
N II	629.670		P	
O V	629.732		1000	1
Ne I	629.738		200	3
P IV	629.920		160	4
F III	630.131		600	
F III	630.194		700	
Ar VII	630.306		100	
Cl III	630.380		100	
Si XIV	630.6		P	
Cl III	630.746		100	
Cl III	631.006		100	
Ar	631.68		60	
P IV	631.790		400	4
O VIII	632.7		P	
Na VI	632.90		10	
Cl V	633.186		400	
Ar VII	634.208		100	
Cl II	634.24		100	
Si III	634.255		P	16
Ar V?	635.12		150	
N II	635.197		400	13
Cl V	635.323		400	
Cl II	635.87		200	
C II	635.9945	ST	300	
C II	636.2511	ST	400	
Cl II	636.62		200	
Ar III	636.818		150	3
Ar VII	637.052		200	
Cl II	637.06		100	
Ar III	637.282		1000	3
Ar VII	637.466		50	
Na VI	638.21		10	
Cl II	638.23		200	
Cl V	639.226		300	
Cl II	639.42		200	
Cl III	639.757		100	
S II	640.41		50	
Cl III	640.928		100	
S II	640.93		50	
Cl III	641.304		100	
Ar VII	641.318		100	
Ar III	641.364		250	3
C II	641.593		300	
C II	641.627		300	
C II	641.771		300	
C II	641.800		300	
Ar III	641.808		600	3
S II	641.81		100	
C II	641.888		630	
Ar III	643.256		450	3
F VI	643.98		700	
O II	644.148		600	13
Ar VII	644.388		100	
N II	644.634		650	4
N II	644.837		750	4
F VI	645.02		600	
N II	645.178		850	4
Si IV	645.759		150	15
F VI	646.10		500	
F VI	646.36		800	
F VI	647.31		600	
F V	647.771		500	

Element	Wavelength		Intensity	Multiplet
F V	647.879		600	
F VI	648.50		700	
P IV	648.507		80	
S VI	648.628		100	
Ar	649.03		50	
P IV	649.69		20	
S VI	650.430		100	
Cl II	650.88		100	
Ar	651.04		10	
Cl II	651.13		100	
C II	651.211		300	9
C II	651.234		300	9
C II	651.269		700	9
C II	651.304		300P	9
C II	651.345		800	9
C II	651.389		300P	9
Si III	651.668		80	6.02
Si III	652.223		120	6.02
S IV	652.523		300	8
P IV	652.79		80	
S IV	653.000		300	8
Cl III	653.013		200	
Si III	653.332		160	6.02
P IV	653.51		80	
S IV	653.560		400	8
Cl IV	653.696		400	
Cl II	653.80		100	
S IV	653.988		300	8
F V	654.034		600	
S IV	654.37		100	8
P IV	654.54		40	
P IV	654.86		120	
Cl II	655.09		100	
S IV	655.553		400	8
P IV	655.78		80	
S IV	655.887		200	8
F III	656.125		700	
S IV	656.30		100	8
P IV	656.55		80	
Cl III	656.772		200	
F III	656.878		750	
F V	657.220		200	
Cl III	657.320		200	
N II?	657.327		50	
F V	657.335		400	
S IV	657.34		500	4
S V	658.262		300	3
F III	658.337		800	
O III	658.578		50	
N II?	659.538		10	
O III	659.538		10	
S V	659.853		400	3
N II	660.286		750	9
S IV	660.945		300	7
Cl III?	661.414		200	
S IV	661.42		600	4
Cl II	661.62		10	
Cl II	661.82		200	
Cl III?	661.836		200	
Ar II	661.8692	ST	500	8
Cl II	662.15		100	
Cl IV	662.454		300	
Cl II	663.08		200	
S V	663.155		500	3
Cl II	663.67		200	
S IV	663.707		300	7
Ar	663.93		10	
Ar II	664.5626	ST	400	8
Cl II	664.67		200	
S IV	664.822		300	7
Ar	664.93		50	
Cl II	665.21		100	
Ar II	666.0112	ST	600	7
Cl III?	666.040		300	
Cl II	666.08		300	
S IV	666.114		400	7
Cl II	666.17		200	
Cl III?	666.500		100	
F V	667.23		300	
Cl II	667.49		100	
Cl IV	668.770		200	
Cl III	669.949		200	
Al III	670.144		100	
N II	670.296		220P	
Cl III	670.383		300	
Ar	670.39		20	
N II	670.515		120P	
N II	670.884		100P	
Ar II	670.9450	ST	500	8
N II	671.016		500	3
Al III	671.198		200	
Cl VI	671.37		400	
N II	671.386		500	3
N II	671.411		650	3
N II	671.630		500	3
Si III	671.718		40	6.01
N II	671.773		500	3
Ar II	671.8516	ST	600	6
N II	672.001		500	3
Si III	672.293		80	6.01
N VII	672.42		P	
Cl IV	672.428		10	
Ar II	672.8565	ST	200	6
O II	672.948		400	12
Cl III	673.127		300	
Si III	673.477		100	6.01
Cl III	673.598		100	
O II	673.768		350	12
P V	673.888		650	
Ar	675.28		20	
F IV	676.130		850	
S V	676.21		100	
Ar II	676.2428	ST	600	
Cl V	676.785		300	
B III	677.004		500	
B III	677.147		600	
F IV	677.154		800	
F IV	677.224		950	
S V	677.342		100	
S III	677.75		200	7

Element	Wavelength		Intensity	Multiplet
Ar II	677.9521	ST	500	
Si III	678.055		40	15
S V	678.08		200	
S III	678.46		200	7
F IV	679.003		800	
S III	679.11		200	7
F IV	679.217		1000	
Ar II	679.2187	ST	300	
Cl V	679.257		300	
Ar II	679.4001	ST	600	6
S V	680.326		300	
P IV	680.570		20	
Ar	680.60		20	
S III	680.69		200	7
F I	680.709		2	
S V	680.940		500b	
S III	680.95		200b	7
Ar	681.15		10	
O V	681.28		800	
S III	681.50		100b	6
S V	681.565		300b	
Na IX	681.72		10	
Cl V	681.924		400	
F I	682.581		2	
S III	683.07		50	6
Cl V	683.171		400	
Ar IV	683.278		400	3
Be IV	683.42		P	
S III	683.47		100	6
Cl IV	684.490		10	
Ar	684.81		100	
Cl II	684.83		10	
N III	684.996		700	3
S III	685.35		50	6
N III	685.513		750	3
N III	685.816		800	3
S V	686.150		100	
N III	686.335		700	3
C II	686.416		120	
C II	686.488		80	
Ar II	686.4888	ST	200	
S V	686.93		100	
C II	687.0526	ST	560	5
C II	687.3453	ST	1000	5
C II	687.3521	ST	110	5
Cl II	687.55		100	
S V	688.04		50	
Si IV	688.194		1	14
Si IV	688.200		P	14
Ar IV	688.392		300	3
Si IV	688.395		P	14
Cl V	688.933		400	
Ar IV	689.007		500	3
S V	689.838		100	
Ar III	690.170		400d	2
C III	690.526		700	10
Si III	690.689		40	14
Ar II	691.0377	ST	100	
N III	691.187		100	
N III	691.388		50	
S V	691.74		100	
Ar II	693.3015	ST	200	
S V	693.522		200	
Cl II	693.55		10	
B II	693.952		200	2
Na IX	694.26		P	
S II	694.71		50	
Ar	694.85		100	
Ar III	695.537		300	2
Al III	695.817		500	2
Cl II	696.11		10	
Al III	696.212		400	2
Ar II	697.4893	ST	200	5
Ar III	697.74		100	2
Ar II	697.9414	ST	200	
Ar	698.08		20	
S III	698.73		200	5
Ar II	698.7748	ST	400	5
Ar IV	699.408		240	
Ar III	699.72		50	
S III	700.15		300	5
Ar IV	700.277		320	
S III	700.29		300	5
Ar VIII	700.398		1000P	
Ar	701.11		150	
O III	702.332		800	2
S III	702.78		P	5
S III	702.82		P	5
O III	702.822		800	2
O III	7 2.899		850	2
O III	703.850		900	2
Ar II	704.5233	ST	400	5
Ar V	705.353		150	2
S II	705.62		50	
O III	705.762		100	
O III	706.224		150	
O III	706.298		100	
S VI	706.480		600	3
O III	707.315		200	
Cl II	707.43		400	
S II	707.86		50	
Cl II	709.16		200	
Ar V	709.195		250	2
Cl II	710.53		10	
Si II	711.34		0h	6.09
Si II	711.83		1h	6.09
Cl II	712.66		300	
S VI	712.682		400	3
S VI	712.844		300	3
N V	713.518		85	
N V	713.860		120	
Ar VIII	713.990		500P	
Cl II	714.03		200	
C III	714.879		100	
Cl II	715.58		300	
Ar V	715.599		200	2
Ar V	715.645		150	2
Ar	716.42		10	
O V	716.55		500	
Cl II	717.15		200	

Element	Wavelength		Intensity	Multiplet
Ar II	718.0903	ST	400	4
O II	718.484		850	4
O II	718.562		800	4
Cl II	719.26		100	
Ar	720.94		10	
Ar II	723.3611	ST	500	4
Cl VI	724.129		150	
S III	724.29		300	4
Ar	725.11		100	
Cl II	725.27		300	
Ar II	725.5481	ST	400	4
Cl II	725.64		200	
Be II	725.71		100	
Al III	725.716		200	
S III	725.86		3	4
O VIII	726.6		P	
B V	726.73		P	
Al III	726.948		300	
Cl VI	727.537		150	
Ar	727.58		1	
S III	728.69		300	4
O V	728.74		700	
C VI	728.93		P	
Cl II	728.94		300	
Li III	728.98		P	
Cl II	729.39		300	
Cl II	729.52		200	
S III	729.529		400	12
O VIII	729.61		P	
Cl VI	730.311		200	
S III	730.783		300	3
Cl II	730.92		300	
Ar II	730.9293	ST	500	4
B II	731.357		100	
Al XIII	731.4		P	
B II	731.442		100	
S III	732.376		500	3
F I	732.960		1	
S III	732.98		50	
S III	733.34		50	
Cl VI	733.891		150	
S III	733.92		100	
F I	734.642		1	
F I	734.795		1	
F I	735.154		1	
S III	735.251		400	3
F I	735.469		1	
Ne I	735.895		1000	2
S III	736.25		200	11
Cl VI	736.762		150	
F I	736.987		2	
Ar II	737.4541	ST	100	3
S III	738.474		400	11
O II	739.949		100	
Ar II	740.2695	ST	1000	3
O II	740.838		10	
O II	741.293		1	
F III	742.69		100	
Be II	743.579		300	
Ne I	743.718		400	1
S IV	744.92		500	3
Ar II	744.9252	ST	800	3
Cl IV	745.205		400	
Ar II	745.3217	ST	700	3
Ne X	745.4		P	
F I	745.767		2	
N II	745.841		500	12
F I	746.400		1	
F I	746.627		3	
Cl III	746.864		100	
N II	746.984		650	8
Cl III	747.415		100	
Cl III	747.553		100	
F I	747.999		2	
F I	748.134		1	
N V	748.195		120	
Ar II	748.1977	ST	400	3
N V	748.291		150	
F I	748.338		2	
N II	748.369		P	
O I	748.4		100	
S IV	748.40		500	3
F I	748.580		4	
F I	748.709		2	
F I	748.946		3	
O I	749.3		100	
B V	749.74		P	
Si IV	749.941		300	13
S IV	750.23		500	3
F I	750.418		1	
F I	750.610		3	
F I	750.885		1	
F I	751.861		4	
O III	752.762		200	
F I	752.884		4	
F I	753.303		4	
Cl II	753.66		10	
S IV	753.76		500	3
F I	754.148		2	
Ar IV	754.205		160	
Cl II	754.55		10	
Ar II	754.8243	ST	300	2
Ar VI	754.93		100	
Ar IV	755.212		120	
Si II	755.362		2	6.08
F I	755.603		2	
O I	755.8		200	
P IV	756.510		240	
Cl IV	756.563		100	
O I	756.7		100	
F V	757.08		400	
Ne IV	758.317		15d	
B III	758.476		100	
B III	758.673		200	
O V	758.677		700	3
O V	759.440		700	3
O V	760.229		700	3
Ar IV	760.439		120	
O V	760.445		800	3
O V	761.130		700	3

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Element	Wavelength		Intensity	Multiplet
Ar IV	761.470		200	
O V	762.001		700	3
Ar II	762.1995	ST	300	2
N VII	762.88		P	
N III	763.340		700	2
Ne IV	763.959		P	
N III	764.357		750	2
N IV	765.148		850	1
P IV	765.28		10	
Ar VI	767.06		200	
Ar VI	767.71		100	
Ar III	769.152		600	5
O I	769.355		100	
O I	769.411		100	
O I	770.264		50	
O I	770.294		50	
O I	770.350		50	
C IV	770.379		10d	
Ne VIII	770.409		1000	
O I	770.698		10	
Cl II	771.00		10	
N III	771.544		500	8
N III	771.901		550	8
N III	772.385		600	8
Ar IV?	772.41		10	
N III	772.891		450	13
N III	772.975		400	13
O V	774.522		500	8
Cl II	774.76		10	
Be II	775.362		400	
N II	775.965		1000	7
P IV	776.366		120	
Cl IV	776.91		10	
F I	776.926		4	
F I	777.010		5	
F I	777.531		4	
Cl II	777.55		300	
B V	777.57		P	
N V	777.712		35	
F I	778.059		6	
N V	778.172		40	
F I	779.192		2	
F I	779.365		6	
O IV	779.821		450	8
O IV	779.905		500	8
F I	779.910		5	
F I	779.972		2	
F I	780.134		1	
Ne IV	780.250		15d	
Ne VIII	780.324		500	
F I	780.390		15	
F I	780.519		10	
F I	780.713		5	
F I	781.654		3	
P III	781.726		100	
F I	782.378		10	
F I	782.575		2	
P II	782.59		5	
P II	782.72		1	
P II	782.90		1	
F I	782.976		5	
P III	782.977		100	
Ar	783.14		250	
Ar	783.65		120	
P II	783.71		5	
P III	783.752		100	
Ar	784.38		30	
C III	784.393		300	
P II	784.46		1	
P II	784.81		5	
P III	785.392		100	
Ne IV	786.141		5	
P II	786.18		5	
P III	786.244		100	
S V	786.476		800	1
P II	786.52		5	
Cl II	787.15		100	
Cl II	787.62		300	
O IV	787.710		750	1
Cl II	788.75		400	5
S III	788.984		400	10
Cl II	789.01		700	5
F I	790.006		7	
O IV	790.103		650	1
O IV	790.203		800	1
O I	791.514		50	
F I	791.875		12	
O I	791.974		150	
Ar	792.08		10	
Cl II	792.19		200	
O I	792.233		50	
O I	792.507		50	
F I	792.536		10	
O I	792.938		150	
O I	792.968		200	
F I	793.237		1	
Cl II	793.34		300	5
Cl II	793.47		300	5
F I	794.417		10	
Ar	794.53		10	
C II	794.964		10	
C II	795.134		100	
Cl II	795.36		200	5
Ar	795.37		20	
F I	795.774		2	
Ar	796.62		10	
O II	796.661		500	11
S III	796.692		400	9
F I	796.982		3	
Cl II	797.81		10	
S IV	798.277		300	6
S II	798.92		50	
Ar	798.92		20	
S II	799.14		50	
C II	799.660		500	
C II	799.928		25P	
C II	799.944		350	
S II	800.04		50	
Si III	800.066		100	13
S IV	800.477		400	6

Element	Wavelength	Intensity	Multiplet
Ar IV	800.573	200	2
Cl VII	800.698	150	
O VIII	800.8	P	
Be IV	800.88	P	
Ar IV	801.086	400	2
P II	801.35	1	
Ar IV	801.409	400	2
Ar IV	801.913	200	2
O IV	802.198	300	
P II	802.20	1	
O IV	802.250	250	
Si II	803.234	3h	6.07
Ar	803.59	20	
S IV	803.996	400	6
Ar	804.59	60	
Si II	805.101	10h	6.07
C II	806.384	500	8
C II	806.533	200	8
C II	806.568	500	8
C II	806.676	250	8
C II	806.686	150	8
C II	806.830	300	8
C II	806.860	300	8
Ar I	806.875	80	
F I	806.964	150	2
Ar I	807.220	80	
Ar	807.46	30	
Ar I	807.702	80	
P II	808.25	50	
F I	809.599	125	2
C II	809.677	400	
S IV	809.69	400	2
C II	809.693	30P	
C II	809.747	30P	
C II	809.764	300	
Ar I	809.933	80	
P II	810.00	30	
P II	810.24	100	
O I	810.667	50	
O I	811.052	200	
P II	811.10	20	
O I	811.501	50	
O I	811.710	50	
P II	811.85	30	
O I	812.096	75	
O I	812.158	75	
Cl VII	813.002	100	
P II	813.10	40	
P II	813.768	5	
Si IV	815.049	500	4
Ar	815.14	30	
S IV	815.97	500	2
Ar I	816.233	160	
Ar I	816.466	160	
Si IV	818.129	550	4
Si II	818.590	2h	6.06
Si II	819.49	0h	8.08
Ar I	820.129	10	
Si II	820.516	20h	6.06
Ar	820.56	20	
Si II	820.63	3h	8.08
Si II	820.9210	3h	6.
Ar	820.98	50	
Si II	821.450	2h	8.07
Si III	822.004	P	29
Ar V	822.161	200	1
Si II	822.8613	5h	6.05
P IV	823.181	800	3
Si III	823.408	180	12
P II	824.66	30	
P IV	824.726	800	3
S III	824.887	400	14
Ar I	825.346	40	
Ar I	826.364	80	
N VII	826.4	P	
Si II	826.42	1h	8.06
Ar V	827.052	250	1
Ar V	827.349	150	1
Cl II	827.85	100	
P IV	827.932	1000	3
Ar	828.86	20	
Cl IV	831.431	400	
O II	832.762	700	1
O III	832.927	700	1
O II	833.332	750	1
O III	833.742	800	1
Ar I	834.392	240	
O II	834.462	750	1
Cl IV	834.659	300	
Cl II	834.67	1000	4
Cl IV	834.840	500	
Ar V	834.878	200	1
Cl IV	834.967	500	
Ar I	835.003	240	
O III	835.096	700	1
O III	835.292	800	1
Ar V	835.792	50	1
Ar V	836.126	100	1
N II	836.187	P	
N II	836.279	P	
S IV	836.286	400	
N II	836.289	P	
S III	836.315	400	13
N II	836.616	P	
N II	836.627	P	
N II	836.837	P	
S IV	837.447	400	
Cl II	839.30	200	4
Cl II	839.63	200	4
Ar IV	840.029	600	1
P II	840.04	1	
Cl IV	840.808	400	
Cl IV	840.933	600	
P II	841.21	20	
Cl II	841.41	400	4
Be II	842.025	500	2
Be II	842.031	250	2
Ar I	842.808	80	
Si II	843.7192	20h	6.04
C VI	843.72	P	

Element	Wavelength		Intensity	Multiplet
Ar IV	843.772		800	1
S II	843.82		200	
P IV	843.984		40	
P II	844.01		20	
P III	844.635		100	5
P III	845.047		100	5
P III	845.656		100	5
Ar	845.68		150	
Si II	845.7684		40h	6.04
P IV	845.995		80	
P III	846.125		100b	5
P IV	846.125		80b	
P III	846.494		10b	5
P IV	846.494		40b	
P IV	846.999		200	
P III	847.658		300b	5
P IV	847.658		240b	
P III	848.023		200d	5
Si II	848.0700		5	6.03
P III	848.445		100	5
P III	848.636		300d	
S V	849.241		600	2
P IV	849.764		160	
Si II	850.1409		10	6.03
P IV	850.390		120	
Ar IV	850.602		1000	1
O I	850.74		P	
P IV	851.09		10	
Cl II	851.70		700	
S V	852.185		500	2
P III	852.679		500	
S IV	852.716		300	
S IV	853.135		300	
P III	853.346		10	
P III	854.223		100	
S V	854.792		700	2
P III	854.855		100	
Al III	855.040		400	
P III	855.618		500	4
Ar	855.71		10	
Al III	856.768		500	
P III	856.963		200	
S V	857.872		500	2
C II	858.0918	ST	500	4
P III	858.139		100	
N II	858.376		100P	
Mg XII	858.4		P	
C II	858.5590	ST	900	4
P III	859.411		10	
P III	859.667		800	4
N II	860.205		P	
P IV	860.449		80	
S V	860.462		500	2
Si IV	860.551		P	12
Si IV	860.560		20	12
Si IV	861.118		5	12
P IV	861.552		40	
P II	861.61		10	
O I	861.63		P	
P IV	863.325		120	
B II	864.08		10	
Cl II	864.67		500	3
P IV	865.04		120	
P V	865.435		1000	
P II	865.44		100	
S II	865.87		50	
B V	865.93		P	
S II	866.23		100	
Ar I	866.805		200	
P IV	866.84		20	
S II	867.15		100	
S II	867.50		100	
Ar	868.20		10	
Ar	869.24		10	
Ar I	869.754		100	
Ar III	871.099		500	1
P V	871.396		1000d	
N III	871.850		10	
Cl II	872.00		10	3
P II	872.84		5	
N I	875.092		65	
P IV	875.132		440	
Ar III	875.534		450	1
Ar I	876.063		200	4
P IV	877.493		440	
O I	877.802		100	
O I	877.882		300	
Ar III	878.728		600	1
O I	878.976		75	
O I	879.023		70	
O I	879.104		80	
Si III	879.233		10	28
P IV	879.310		80	
O I	879.554		75	
Ar III	879.622		400	1
Ar I	879.949		120	
Mg	880.16		200	
B II	882.536		200	
B II	882.670		200	
O I	882.88		P	
F VII	883.097			
Cl V	883.127		400	
Ar III	883.179		450	1
Si III	883.398		100	27
S V	883.59		200	
S V	884.46		200	
C III	884.516		800	
Mg II	884.6967		P	
Mg II	884.7189		P	
S V	885.77		100	
Ar III	887.404		500	1
N I	888.019		35	
Cl II	888.07		400	2
N I	888.363		35	
Si II	889.7228		100	6.02
F VII	890.762			
Si III	891.479		P	26
Si II	892.0007		200	6.02
Al III	892.056		400	
Ar	892.07		10	

Element	Wavelength		Intensity	Multiplet
Ar	892.74		10	
Ar	893.50		50	
Cl II	893.56		300	2
Al III	893.905		500	
Ar I	894.310		200	3
Cl V	894.340		400	
Cl V	894.910		100	
Ar	894.97		10	
Si IV	895.228		P	17
Si IV	895.558		P	17
Cl II	895.95		300	2
O III	898.957		400	17
Si II	899.4063		10	6.01
Ar IV	900.362		200	
S V	900.93		200	
Ar IV	901.168		400	
Si II	901.7359		20	6.01
Ar IV	901.804		80	
S V	902.80		100	
C II	903.6235	ST	200	3
C II	903.9616	ST	400	3
C II	904.1416	ST	1000	3
C II	904.4801	ST	200	3
Ar	904.89		80	
Si II	905.71		0	8.05
N I	905.829		150	
S V	905.92		200	
Si II	906.126		0	8.05
N I	906.202		35	
N I	906.426		35	
Si II	906.586		1	8.05
Cl II	906.60		10	
N I	906.722		35	
N I	906.824		35P	
S II	906.87		300	2
P II?	906.89		5	
P II	906.987		10	
Si II	907.033		0	8.05
N I	907.268		35P	
Mg II	907.3752		P	
Mg II	907.4115		P	
P II	907.56		40	
P IV	907.590		80	
Si II	907.762		0	8.05
P IV	908.050		160	
N I	908.2332		3	
P II	908.38		1	
Si II	908.461		1	8.05
N I	908.7958		1	
Si II	909.209		3	8.05
N I	909.6976	ST	9	
P III	909.846		100	
Cl II	910.25		10	
N I	910.2785	ST	6	
S II	910.49		300	2
N I	910.6456	ST	5	
P II	910.88		5	
S III	911.77		20	
Cl II	912.34		10	
Si II	912.375		5	8.04
Si II	912.459		5	8.04
S II	912.74		300	2
Ar	912.91		10	
Si II	913.012		10	8.03
Si II	913.264		3	8.04
P II	913.59		10	
Ar	913.80		10	
Si II	913.853		20	8.04
P III	913.989		500	3
Si II	914.476		2	8.04
H I	914.576		2P	17
Cl II	914.90		100	
H I	914.919		2P	16
C VI	915.30		P	
H I	915.329		2P	15
N II	915.612		700	2
H I	915.824		3P	14
N II	915.962		700	2
N II	916.012		800	2
N II	916.020		600	2
H I	916.429		3P	13
N II	916.701		1000	2
N II	916.710		800	2
P III	917.130		400	3
H I	917.181		4P	12
Ar	917.72		10	
H I	918.129		5P	11
P III	918.706		500	3
S II	918.82		300	
S II	919.24		100	
H I	919.351		7P	10
Ar II	919.7815	ST	1000	1
F IX	920.3		P	
H I	920.963		9P	9
O IV	921.301		200	
O IV	921.364		250	
P III	921.863		500	3
N IV	921.992		850	3
O I	922.011		P	8
N IV	922.519		800	3
O VIII	922.6		P	
N IV	923.057		700	3
H I	923.150		10P	8
N IV	923.220		1000	3
O IV	923.353		300	
N IV	923.675		800	3
N IV	924.283		850	3
Be II	925.246		100	
D I	925.974		P	7
H I	926.226		20P	7
Cl II	926.96		10	
P II	927.771		10	
Si II	928.297		5	8.03
P II	928.550		10	
Si II	929.206		1	8.03
O I	929.517		P	
P II	929.642		10	
Si II	929.810		20	8.03
Si II	930.242		0	8.03
D I	930.495		P	6

Element	Wavelength		Intensity	Multiplet
H I	930.748		30P	6
O I	930.889		P	
Cl III	930.94		100	
Si II	931.200		5	8.03
O I	931.479		P	
Si II	931.667		5	8.03
Ar II	932.0528	ST	1000	1
Al II	933.08		10	
S VI	933.382		400	1
Al II	933.95		10	
Ar	934.84		20	
O I	935.183		400	
Al II	935.20		50	
Si III	936.056		25	44
Si III	936.058		2	44
Si III	936.060		1	44
Si III	936.077		18	44
Si III	936.079		2	44
Si III	936.100		12	44
Cl III	936.28		100	
O I	936.630		150	
S II	937.41		300	6
D I	937.548		40P	5
S II	937.69		300	6
H I	937.803		40P	5
O I	937.841		150	
O I	938.022		P	
O I	938.621		P	
Si III	939.093		140	25
O I	939.237		P	
Cl III	939.31		10	
O I	939.837		P	
Cl III	943.22		100	
Be II	943.481		30	
Be II	943.540		70	
S VI	944.517		500	1
C I	945.191		20	31
C I	945.338		50	31
C I	945.579		75	31
C II	945.977		100	
C II	946.198		200	
Mg II	946.7032		P	
Mg II	946.7694		P	
Cl III	946.97		100	
C IV	948.098		200	
N IV	948.155		100	
C IV	948.214		100	
N IV	948.244		200	
N IV	948.540		250	
O I	948.6867		250	
Cl III	948.72		100	
N VII	949.1		P	
He II	949.301		9P	19
He II	949.354		17P	19
D I	949.485		70P	4
H I	949.743		70P	4
Be II	949.746		100	
O I	950.1134		200	
P IV	950.662		1000	1
O I	950.7340		100	
O I	950.8845		200	
N I	951.0791		5	
N I	951.2947		3	
F I	951.871		500	1
N I	952.3037	ST	18	
O I	952.3179		200	
N I	952.4151	ST	14	
Al II	952.43		1	
N I	952.5231	ST	10	
O I	952.9414		80	
N VII	952.99		P	
Al II	953.18		10	
Cl III	953.40		200	
N I	953.4150		25	
N I	953.6548		27	
N I	953.9698		30	
N I	954.1040		30	
Al II	954.35		20	
F I	954.825		1000	1
Al II	954.87		10	
N I	955.2647	ST	4	
N IV	955.335		1000	8
N I	955.4376	ST	4	
N I	955.5292		3	
F I	955.545		750	1
N I	955.8814		5	
Al II	955.99		50	
S II	957.88		100	
F I	958.524		500	1
He II	958.670		13P	18
He II	958.724		22P	18
N I	959.4936		5	
N I	960.2017		P	
P II	961.04		1	
Cl II	961.49		500	
P II	962.13		5	
P II	962.57		5	
P II	963.59		1	
P II	963.81		5	
N I	963.9904	ST	25	3
P III	963.993		100b	
P IV	963.993		100b	
P II	964.09		10	
P III	964.251		100	
N I	964.6258	ST	23	3
P II	964.95		10	
N I	965.0415	ST	23	3
P II	965.43		20	
P II	966.52		10	
Si III	967.946		180	24
P II	968.17		1	
S II	968.37		50	
P II	969.38		5	
O I	971.7376		400	
He II	972.083		18P	17
He II	972.138		32P	17
P II	972.24		5	
D I	972.272		140P	3
F I	972.401		20	
H I	972.537		130P	3

Element	Wavelength	Intensity	Multiplet
P II	972.807	30	
P III	972.807	300	
Cl IV	973.212	500	
Be II	973.213	150	
O I	973.2346	250	
Be II	973.276	350	
O I	973.8857	200	
F I	973.895	350	
P II	974.36	5	
P III	974.776	300	
F I	976.217	100	
O I	976.4480	250	
F I	976.505	40	
C III	977.020	1000	1
P II	977.258	1	
Cl IV	977.560	600	
F I	977.745	100	
P III	977.888	400	
Cl IV	977.901	400	
O I	977.9595	250	
O I	978.6170	200	
N III	979.842	400	12
N III	979.919	450	12
Be II	983.984	50	
Be II	984.048	150	
B II	984.65	100	
Cl IV	984.952	700	
Cl IV	985.749	400	
Al II	986.55	10	
Al II	987.80	10	
O I	988.581	100	5
O I	988.6548	300	5
O I	988.7733	400	5
Al II	989.70	10	
N III	989.790	800	1
Si II	989.8730	100	6
O I	990.1270	300	5
O I	990.2044	300	5
O I	990.8010	100	5
Al II	990.88	50	
N III	991.514	600	1
N III	991.579	900	1
He II	992.334	27P	16
He II	992.391	48P	16
Si II	992.6826	200	6
Si III	993.519	200	6
Si III	994.787	260	6
S II	996.00	200	5
Si III	997.389	320	6
P V	997.641	200	
P III	998.000	800	2
O I	999.493	200	7
P V	1000.360	200	
S II	1000.48	200	5
S II	1000.75	65	5
Ar III	1002.095	150	
P III	1003.592	1000	2
Cl III	1005.280	500	1
Si III	1005.349	60	43
Si III	1005.353	5	43
Si III	1005.357	1	43
Si III	1005.374	40	43
Si III	1005.378	5	43
Si III	1005.403	30	43
N III	1006.015	300	17
S II?	1006.15	270	
P IV	1006.218	40	
S II?	1006.95	35	
Cl III	1008.777	600	1
N I?	1008.875	5	
C II	1009.862	400	7
C II	1010.092	600	7
C II	1010.374	1000	7
S III	1012.49	300	2
S II	1014.09	50	4
S II	1014.42	200	4
Cl III	1015.023	700	1
P II	1015.47	100	
S III	1015.51	200	2
S III	1015.76	100	2
S II	1019.53	200	4
Si II	1020.6988	25	5.01
S III	1021.10	100	2
S III	1021.32	200	2
Na XI	1021.6	P	
Si II	1023.7002	50	5.01
He II	1025.241	42P	15
He II	1025.302	77P	15
D I	1025.443	320P	2
P IV	1025.564	160	2
H I	1025.722	300P	2
O I	1025.7616	450	4
Mg II	1025.9681	P	
Mg II	1026.1133	P	
Be II	1026.890	200	
Be II	1026.959	400	
O I	1027.4309	400	4
P IV	1028.093	40	2
O I	1028.1571	350	4
P IV	1030.511	400	2
S II	1030.87	100	9
Si III	1031.169	140	33
S II	1031.34	100	9
O VI	1031.912	850	1
Si III	1032.851	60	33
N I?	1032.958	10	
P IV	1033.099	320	2
P II	1033.41	100	
N I?	1033.453	10	
Si III	1033.920	160	33
Si III	1034.287	80	33
Si II	1034.967	0	13.08
P IV	1035.505	320	2
Si III	1035.657	60	33
N IV	1036.16	400w	
Be II	1036.299	550	1
Be II	1036.319	250	1
C II	1036.3367 ST	500	2
S II?	1036.41	15	
C II	1037.0182 ST	1000	2

Element	Wavelength		Intensity	Multiplet
Si III	1037.053		140	33
O VI	1037.613		750	1
Ar IV	1037.931		40	
C VI	1038.42		P	
O I	1039.2303		400	3
O I	1040.9427		400	3
O I	1041.6876		400	3
N I?	1043.092		65	
N I?	1044.094		65	
N I?	1044.724		35	
Si IV	1045.500		P	21
S II	1045.74		65	
N VII	1046.02		P	
Si IV	1047.271		P	21
S II	1047.56		35	
Al II	1047.82		10	
S II	1047.86		35	
Be II	1048.147		200	
N V	1048.20		40	
Ar I	1048.218		1000	2
Be II	1048.220		400	
S II?	1048.43		35	
Al II	1048.53		50	
B II	1048.67		10	
S II	1049.06		35	
N V	1049.65		50	
B V	1049.72		P	
S II?	1049.77		35	
P III	1049.824		400	
Al II	1049.93		100	
P III	1050.518		100	
P III	1050.817		400	
S II?	1052.25		65	
S II?	1052.60		35	
S II?	1053.21		35	
S II?	1055.15		35	
Al II	1055.28		20	
Al II	1056.68		1	
S II?	1056.79		65d	
Si II	1056.899		2	13.07
Si II	1057.050		30	13.07
Si II	1057.503		15	13.07
Si II	1057.690		2	13.07
Li III	1060.41		P	
S IV	1062.672		600	1
C II	1063.285		5	
C II	1063.313		5	
N I?	1063.351		5	
Cl II	1063.83		500	1
P IV	1064.60		120	
P II	1064.80		150	
P IV	1065.554		120	
C II	1065.8913	ST	700	12
C II	1065.9199	ST	100	12
N I?	1066.126		5	
C II	1066.1332	ST	500	12
Si IV	1066.629		550	11
P IV	1066.640		80	
N I?	1066.641		20	
Ar I	1066.660		750	1

Element	Wavelength	Intensity	Multiplet
N I?	1067.399	35	
N I	1067.607	5	
Cl II	1067.94	200	1
N I	1068.476	20	
N I	1069.198	10	
N I	1069.984	15	
N I	1070.821	1	
Cl II	1071.05	1000	1
N I?	1071.656	5	
F III	1071.66	10	
Cl II	1071.76	500	1
P IV?	1072.528	120	
S IV	1072.992	600	1
P IV?	1073.373	120	
S IV	1073.522	400	1
Cl II	1075.24	350	1
S III	1077.135	800	8
N IV	1078.708	300	
Cl II	1079.08	750	1
B II	1081.85	200	
B II	1082.06	200	
Si II?	1082.400	2	
Si III	1083.210	120	23
N II	1083.990	400	1
Si II?	1084.144	3	
N II	1084.562	150	1
N II	1084.580	750	1
He II	1084.908	73P	14
He II	1084.975	132P	14
N II	1085.529	P	1
N II	1085.546	400	1
N II	1085.701	1000	1
N IV	1086.084	b	
N IV	1086.269	50	
N IV	1086.691	100	
P IV	1086.943	80	
F V	1088.41	100	
P IV	1088.608	120	
P IV	1091.442	160	
C II	1091.937	100	
C II	1092.232	10	
C II	1092.431	10	
C II	1092.726	200	
Si III	1092.915	P	42
Si III	1092.940	P	42
Si III	1092.969	P	42
Si III	1093.105	P	42
Si III	1093.133	P	42
N I?	1093.275	1	
Si III	1093.293	P	42
P IV	1093.318	80	
P III	1093.627	200	
N I?	1094.688	1	
N I?	1095.279	40	
N I	1095.940	40	
N I	1096.322	10	
S II	1096.57	200	3
N I	1096.749	10	
N I?	1097.245	40	
N I	1097.990	15	

Element	Wavelength	Intensity	Multiplet
N I	1098.103	20	
P IV	1098.183	80	
N I	1098.264	20	
F III	1099.10	10	
N I	1099.153	10	
N I	1100.3593	50	
N I	1100.4649	15	
Na III	1100.49	100	
N I	1101.2910	45	
F III	1101.55	10	
P IV	1101.65	40	
S II	1102.32	300	3
F III	1103.64	10	
C IV	1107.600	300	
C IV	1107.933	400	
S IV	1108.36	200	
Si III	1108.368	280	5
Si III	1109.965	320	5
S IV	1110.90	200	
P IV	1111.127	40	
C I	1112.058	10	
Si III	1113.228	360	5
C I	1114.457	50	30
Li III	1116.33	P	
P IV	1116.915	20	
C I	1117.581	20	
C I	1117.724	50	29
S VI	1117.91	0	
P V	1117.979	1000	
C I	1118.180	50	
P IV	1118.586	160	
Al IV	1118.80	200d	
C?	1121.19	20	
C I	1122.098	20	28
C I	1122.260	50	
Na III	1122.30	10	
C I	1122.328	100	27
S III	1122.42	200	
C I	1122.447	20	27
Si IV	1122.486	550	3
C I	1122.725	50	
C I	1122.794	20	
C I	1123.107	20	
S II	1124.39	100	8
C VI	1124.9	P	
P II	1124.945	10	
S II	1125.00	100	8
S III	1126.48	50	
S III	1126.85	100	
Si II	1127.442	20h	13.06
Si II	1127.907	40h	13.06
P V	1128.006	650	
C I	1128.252	50	26
Si IV	1128.325	P	3
Si IV	1128.340	650	3
C I	1128.686	20	
C I	1128.752	100	26
C I	1128.903	20	
C I	1129.030	100	
C I	1129.135	200	25
C I	1129.161	P	25
C I	1129.196	P	25
C I	1129.405	20	25
C I	1129.624	50	24
C I	1129.749	20	25
C I	1129.924	50	24
C I	1130.171	20	
P II	1130.925	10	
S II	1131.05	200	8
S II	1131.65	200	8
Li II	1132.1	150	
N IV	1133.117	200	
C II?	1134.08	50	
N I	1134.1651	560	2
N I	1134.4147	550	2
C II?	1134.52	20	
N I	1134.9801	780	2
N IV	1135.244	150	
N IV	1136.241	100	
Al IV	1136.80	150	
S IV	1138.227	100	
C I	1138.383	20	23
O III	1138.545	100	
C I	1138.557	30	23
C I	1138.595	20	23
C II	1138.9358 ST	200	
C I	1138.946	50	23
C I	1139.093	100	23
C I	1139.300	20	
C II	1139.3317 ST	300	
C I	1139.426	50	
C II	1139.4730 ST	10	
C I	1139.514	20	22
F VI	1139.60	200	
C I	1139.650	20	
C I	1139.766	150	
C I	1139.812	150	22
N I?	1139.818	5	
C I	1139.865	50	22
C I	1140.005	50	22
C I	1140.223	20	
C I	1140.357	100	21
Si III	1140.545	120	32
C I	1140.574	20	
C I	1140.641	150	21
P II	1141.00	5	
C I	1141.327	20	20
Si III	1141.580	140	32
C II	1141.6246 ST	300	
C II	1141.6574 ST	30P	
C I	1141.678	20	20
C II	1141.7445 ST	200	
Al IV	1142.03	50d	
Si III	1142.282	120	32
P II	1142.88	20	
Be II	1142.956	250	
Al II	1142.97	100	
Be II	1143.039	500	
N I?	1143.606	90	
N I	1143.6458	15	

Element	Wavelength	Intensity	Multiplet
N I	1143.6508	30	
P II?	1143.71	1	
Si III	1144.306	160	32
Si III	1144.959	120	32
P II	1145.01	1	
Si III	1145.122	150	41
Si III	1145.149	13	41
Si III	1145.16	1	41
Si III	1145.177	80	41
Si III	1145.19	10	41
Si III	1145.22	50	41
Si III	1145.669	P	32
O III	1149.603	50	
P II	1149.96	70	3
Al	1150.27	10	
Al IV	1150.85	10	
O III	1150.882	100	
S II?	1152.11	65	
N I?	1152.139	20	
Al II?	1152.14	200	
O I	1152.152	250	6
P II	1152.81	50	3
Na III	1153.04	40	
O III	1153.773	150	
P II	1153.99	120	3
N I?	1154.993	1	
Si III	1154.998	120	31
P II	1155.00	40	3
S III	1155.34	200	
C I	1155.809	50	19
Si III	1155.957	120	31
C I	1156.028	150	19
C I	1156.199	20	19
Al IV	1156.21	50	
C I	1156.389	100	19
C I	1156.560	200	19
N I?	1156.593	1	
C I	1156.765	20	
Si III	1156.782	80	31
P II	1156.96	50	3
Al II	1157.10	10	
C I	1157.186	20	17
C I	1157.330	50	18
S II?	1157.37	35	
C I	1157.405	150	17
C I	1157.770	350	16
C I	1157.910	730	16
C I	1158.019	750	16
N I?	1158.051	10	
Si III	1158.102	140	31
C I	1158.132	400	16
Al II	1158.14	50	
C I	1158.324	100	
C I	1158.397	100	
C I	1158.492	20	16
C I	1158.674	100	
C I	1158.732	100	15
C I	1158.907	50	
C I	1158.967	200	15
P II	1159.08	80	3
N I	1159.285	8	
N I	1159.8172	P	
N I	1159.858	5	
Si III	1160.255	120	31
N I?	1160.480	10	
N I	1160.9370	P	
Si III	1161.579	160	31
P IV	1161.783	40	
Al IV	1161.85	10d	
S III	1162.52	100	
Al III	1162.66	10	
N I	1163.8835	150	7
N I	1164.0016	30	7
N I	1164.2064	60	7
N I	1164.3246	95	7
O VIII	1164.8	P	
Al	1165.38	10d	
N I	1165.5943	40	
C III	1165.698	10P	
N I	1165.8358	15	
C III	1165.870	100P	
S III	1166.13	50	
Li II	1166.4	200	
N I?	1166.950	1	
Al IV	1167.35	10	
N I	1167.4484	350	6
N I	1168.2154	50	
N I	1168.3344	200	
N I	1168.4167	60	6
N I	1168.5358	300	6
N IV	1168.599	150	
C IV	1168.873	300	
C IV	1168.990	400	
N IV	1169.063	100	
N IV	1169.478	50	
N I	1169.6933	80	
N I	1170.1572	10	
N I	1170.2766	80	
N I	1170.4165	5	
N I	1170.6743	20	
N I	1171.0834	60	
O VIII	1171.5	P	
Be IV	1171.56	P	
S II?	1171.91	65	
Si III	1172.529	80	30
Si III	1174.369	100	30
Si III	1174.432	120	30
C III	1174.933	350	4
C III	1175.263	300	4
C III	1175.590	200	4
C III	1175.711	1000	4
C III	1175.987	300	4
C III	1176.370	350	4
N I	1176.5097	350	
N I	1176.6304	180	
Al II	1177.43	40	
N I	1177.6948	320	
Si III	1178.004	160	30
Al II	1179.34	10	
Na III	1180.40	160	

Element	Wavelength	Intensity	Multiplet
N I?	1180.428	1	
Si III	1182.018	60	64
N III	1183.030	350	20
Al	1183.62	10	
N I?	1183.998	20	
N III	1184.544	400	20
Ar IV	1187.80	40	
N IV	1188.006	300	
Cl I	1188.768	1000	
C I	1188.833	200	14
N I	1188.972	40	
C I	1188.992	500	14
C I	1189.065	200	14
Al II	1189.18	60	
N I	1189.244	20	
C I	1189.249	250	14
C I	1189.447	500	14
N I?	1189.628	90	
C I	1189.631	700	14
C I	1190.021	35	
Al II	1190.05	80	
S II?	1190.11	65	
S III	1190.17	200	1
C I	1190.253	35	
Ar IV	1190.354	80	
Si II	1190.4157	100	5
S II?	1191.80	65	
Al II	1191.82	100	
C I	1191.838	120	13
C I	1192.218	70	12
Si III	1192.228	P	40
Si III	1192.258	P	40
Si III	1192.293	P	40
C I	1192.451	120	12
C I	1193.009	700	11
C I	1193.031	300	11
C I	1193.240	850	11
C I	1193.264	150	11
Si II	1193.2894	200	5
C I	1193.393	350	11
C I	1193.679	500	
C I	1193.996	120	
S III	1194.02	400	1
C I	1194.064	350	
C I	1194.229	120	
C I	1194.301	120	10
S III	1194.40	300	1
C I	1194.406	200	
C I	1194.488	350	10
Si II	1194.5001	250	5
C I	1194.615	250	
Si III	1196.436	P	40
Si III	1196.470	P	40
Be II	1197.094	330	5
Be II	1197.188	670	5
Si II	1197.3936	100	5
P IV	1197.822	40	
Ar IV	1197.84	40	
Li II	1198.092	10	
Si III	1198.297	P	40
Al IV	1198.47	50	
C IV	1198.58	100d	
N I	1199.5490 ST	1000	1
N I	1200.2238 ST	950	1
N I	1200.7113 ST	700	1
S III	1200.97	400	1
Cl I	1201.358	900	
S III	1201.71	200	1
S III	1202.10	50	1
P IV	1203.410	40	
S II?	1204.30	500	
P IV	1204.302	40	
N VII	1205.0	P	
Ar III?	1205.95	50	
Si III	1206.510	600	2
P IV	1206.513	40d	
Si III	1206.533	600	11
Si III	1207.517	180	22
Al II	1208.35	60	
Al II	1209.19	40	
Al II	1210.09	80	
Si III	1210.456	200	21
P III	1210.600	100	
Si IV	1210.652	P	16
Si IV	1211.757	P	16
Al IV	1211.80	10	
Al II	1211.90	100	
Si III	1212.011	40	50
Si III	1212.247	P	74
B V	1214.99	P	
Li III	1215.05	P	
He II	1215.088	143P	13
He II	1215.171	260P	13
He II	1215.175	30P	13
D I	1215.339	1000P	1
H I	1215.668	670P	1
H I	1215.674	330P	1
Si II?	1216.117	10h	
Al IV	1216.78	50	
O I	1217.643	100	9
Al IV	1219.19	10	
Al	1220.57	10	
Na III	1221.12	100	
Si II	1222.288	0	8.02
Si II	1222.635	5	8.02
Na III	1223.44	80d	
Cl II	1223.71	100	
Si II	1223.907	20	8.02
Si II	1224.252	20	8.02
Na III	1224.73	80	
N IV	1224.960	50	
Si II	1224.972	10	8.02
N I	1225.028	40	
N IV	1225.192	150	
N I	1225.372	40	
N IV	1225.719	200	
S II	1226.70	100	7
Si II	1226.814	50	8.01
N I	1226.831	5	
Si II	1226.887	20	8.02

Element	Wavelength	Intensity	Multiplet
Si II	1226.986	40	8.01
N I	1227.226	5	
S II	1227.45	100	7
Si II	1227.604	100	8.02
N I	1227.788	10	
Al IV	1228.30	50	
Si IV	1228.349	P	20
N I	1228.410	40	
Si II	1228.437	10	8.01
Si II	1228.617	25	8.01
Si II	1228.746	150	8.01
N I	1228.790	150	
N I?	1229.172	20	
Si II	1229.388	200	8.01
Al IV	1229.94	10	
C IV	1230.046	200	
B II	1230.160	200	
N I	1230.288	1	
C IV	1230.511	300	
Si IV	1230.795	P	20
P II	1231.18	50	
Si II	1231.406	5	8.01
N I	1231.588	5	
Si II?	1233.354	5h	
S II	1233.36	50	7
S II	1234.14	300	7
Na III	1235.40	80d	
Si III	1235.431	140	49
Si II?	1235.920	10	
Ne X	1236.3	P	
Al IV	1237.14	200	
Si II?	1237.36	3h	
N V	1238.821	1000	1
Mg II	1239.9252	P	
Al IV	1240.18	100	
Mg II	1240.3947	P	
Al IV	1240.83	150	
P I	1241.49	1	
S I	1241.95	65	
P I	1242.02	3	
N V	1242.804	800	1
N I	1243.1796	550	5
N I	1243.3066	400	5
P I	1243.37	3	
N IV	1243.73	b	
N IV	1244.92	50	
P I	1245.19	6	
N IV	1246.51	100	
Si II	1246.738	100	8
S I	1247.17	65	
P I	1247.31	2	
C III	1247.383	800	9
P I	1248.20	1	
Si II	1248.426	150	8
P I	1248.61	1	
Al IV	1248.76	100d	
P II	1249.82	200	
Si II	1250.089	100	13.05
Si II	1250.433	150	13.05
S II	1250.50	300	1
Si II	1251.164	200	8
Al IV	1251.35	50	
Li II	1253.3	100	
C I	1253.467	50	
C I	1253.541	100	
P I	1253.74	6	
S II	1253.79	500	1
Ne III	1255.026	200	13
Si I	1255.276	10	
Ne III	1255.685	500	13
Si I	1256.490	40	
C I	1256.498	200	
C III	1256.52	100d	
Na III	1256.68	20	
Ne III	1257.190	600	13
Al IV	1257.58	150	
Si I	1258.795	50	
Al II	1258.86	60	
S II	1259.53	500	1
Si II	1260.4212	500	4
C I	1260.613	200	59
C I	1260.736	250	9
C I	1260.927	200	9
C I	1260.996	150	9
C I	1261.122	250	9
C I	1261.426	250	9
C I	1261.552	500	9
Al IV	1262.51	50	
S I	1262.83	65	
Al IV	1264.14	150d	
P II	1264.47	30	
P IV	1264.481	40	
Si II	1264.7374	1000	4
Si II	1265.0010	100	4
Na III	1265.66	40	
C I	1266.270	20	
C I	1266.419	100	58
Al II	1266.66	20	
P II	1267.06	5	
C I	1267.596	50	57
Ar II	1268.483	100	
S I	1269.20	65	
N I?	1269.761	1	
N IV	1270.280	250	
S I	1270.78	130	
Mg II	1271.2388	P	
Al?	1271.27	10	
Al	1271.38	10	
Mg II	1271.9402	P	
S I	1272.07	35	
N IV	1272.160	200	
Al IV	1272.70	150d	
Mg II	1272.7202	P	
Mg II	1272.7212	P	
N IV	1272.74	100	
Mg II	1273.4232	P	
N IV	1273.47	150	
N IV	1273.716	100	
C I	1274.109	50	8
Si II	1274.300	3h	

Element	Wavelength	Intensity	Multiplet
C I	1274.756	20	56
C I	1274.984	150	55
N II	1275.038	300P	
N II	1275.251	P	
N II	1275.275	P	
Si II	1275.662	5h	
N II	1276.201	200P	
N II	1276.225	P	
C I	1276.287	50	
C I	1276.483	100	
C I	1276.750	200	
N II	1276.800	100P	
S I	1277.24	170d	
C I	1277.245	300	7
C I	1277.282	700	7
C I	1277.513	100	7
C I	1277.550	1000	7
C I	1277.723	250	7
C I	1277.954	70	7
P II	1278.094	5	
P I	1278.57	3	
C I	1279.056	100	6
N I?	1279.223	1	
C I	1279.229	150	6
C I	1279.498	70	6
C I	1279.890	250	5
N I?	1279.995	5	
S I	1280.13	130	
C I	1280.135	200	5
Ar II	1280.225	100	
C I	1280.333	700	5
Si III	1280.354	120	63
N I?	1280.362	5	
C I	1280.404	75	5
C I	1280.597	200	5
C I	1280.847	250	5
P I	1282.61	6	
Ar II	1282.620	100	
P I	1282.96	6w	
S I?	1283.11	15	
Al IV	1283.48	10	
P I	1283.89	6	
P III	1283.949	10	
N IV	1284.218	150	
P II	1284.31	5	
Ar II	1284.793	100	
P I	1284.80	3	
P I	1285.84	2	
S IV	1286.063	100	
P I	1286.44	9	
C I	1288.037	200	54
C I	1288.422	500	53
C I	1288.710	100	52
C I	1288.917	100	
P II	1289.57	30	
C I	1289.891	50	
C I	1289.977	300	51
P III	1290.134	1	
C I	1291.304	100	50
Al	1291.81	10	
C VI	1291.94	P	
Si III	1294.543	340	4
P II	1294.64	150	
Al	1294.86	40	
S I	1295.661	500	9
S I	1296.174	400	9
C III	1296.30	200d	
N IV	1296.600	250	
S IV	1296.640	200	
Si III	1296.726	280	4
C?	1298.14	100	
Si III	1298.891	300	4
Si III	1298.960	360	4
Si III	1300.703	P	54
Si III	1301.146	280	4
N I?	1301.681	1	
P II	1301.87	200	2
Al IV	1302.13	100	
O I	1302.1686 ST	500	2
S I	1302.344	500	9
S I	1302.865	400	9
S I	1303.114	400	9
Si III	1303.320	320	4
S I	1303.42	130	
Si II	1304.3720	100	3
P II	1304.47	200	2
P II	1304.68	150	2
O I	1304.8575 ST	500	2
P II	1305.48	350	2
Si II	1305.590	50h	13.04
S I	1305.885	400	9
O I	1306.0286 ST	450	2
Mg II	1306.7139	P	
Mg II	1307.8754	P	
Mg II	1308.2792	P	
Mg II	1308.2809	P	
C III	1308.73	200	
Si II	1309.2769	200	3
Mg II	1309.4434	P	
Si II	1309.458	20h	13.04
N IV	1309.557	200	
Si II	1309.77	2h	13.04
P II	1309.87	250	2
N I?	1310.057	5	
S I	1310.21	170	
N I	1310.5401	200	13
C I	1310.637	200	49
P II	1310.70	600	2
N I	1310.9429	150	13
N I	1310.9495	25	13
Si II	1311.265	2h	
C I	1311.363	1000	48
C I	1311.924	200	47
C I	1312.247	100	46
Si III	1312.590	260	10
N I?	1313.129	20	
S I	1313.25	130	
C I	1313.387	100	
C I	1313.464	300	45
N I	1315.484	35	

Element	Wavelength		Intensity	Multiplet
C I	1315.918		200	44
N I	1316.2906		2	
S I	1316.57		330	8
B V	1318.05		P	
N I	1318.8224		5	
P III	1318.91		10	
S I?	1318.97		130	
N I	1318.9981		150	12
N I	1319.0048		80	12
N I	1319.6693		50	12
N I	1319.6760		250	12
Al	1320.71		10	
S I	1323.521		230	8
C II	1323.8617	ST	30	11
C II	1323.9059	ST	300	11
C II	1323.9513	ST	450	11
N IV	1323.98		100b	
C II	1323.9955	ST	30	11
C?	1324.14		150	
C?	1324.22		200	
N III	1324.40		150	
C?	1324.60		10	
P III	1325.509		70	
N IV	1325.685		50	
N I	1326.5639		10	11
N I	1326.5707		50	11
S I	1326.635		170	8
N IV	1326.964		20	
Si III	1327.703		P	53
N I	1327.9170		25	11
N I	1327.9238		15	11
S III	1328.12		50	
S III	1328.52		50	
Si III	1328.806		P	48
C I	1328.8332	ST	150	4
C I	1329.0863	ST	150	4
C I	1329.1001	ST	200	4
C I	1329.1230	ST	110	4
C I	1329.5775	ST	600	4
C I	1329.6005	ST	200	4
Al	1332.57		20	
Al	1333.99		20	
C II	1334.5323	ST	600	1
P III	1334.866		650	1
C II	1335.6627	ST	100	1
C II	1335.7077	ST	1000	1
Cl I	1335.723		750	2
Al	1336.86		40	
Na III	1337.39		120d	
P III	1337.498		70	
P III	1337.710		150	
Al	1337.86		50	
O IV	1338.603		300	
Si III	1341.465		160	39
Si III	1341.496		P	39
Si III	1342.351		P	39
Si III	1342.392		140	39
Si III	1342.432		P	39
O IV	1342.995		200	
S III	1343.25		50	
N II	1343.338		200P	
Si III	1343.388		120	39
O IV	1343.507		350	
S III	1343.53		50	
N II	1343.574		P	
P III	1343.687		70	
P III	1344.343		1000	1
P III	1344.900		650	1
N II	1345.076		P	
N II	1345.313		100P	
N II	1345.340		P	
N III	1345.69		200	
N III	1346.27		200	
N II	1346.413		P	
N II	1346.441		10P	
Si II	1346.873		100	7
P III	1346.998		200	
Cl I	1347.238		1000	2
P III	1347.508		10	
N III	1347.56		10	
P III	1348.449		10	
Si II	1348.543		100	7
Ar II	1348.751		100	
P III	1349.110		200	
Si II	1350.057		150	7
Al II	1350.18		300	
Si II	1350.520		20	7
Si II	1350.658		20	7
Ar II	1351.333		100	
Cl I	1351.657		850	2
Si II	1352.635		100	7
Al III	1352.83		200	
S I?	1353.47		35	
Si II	1353.718		100	7
Al IV	1353.73		10	
C I	1354.288		500	43
Ar II	1354.915		200	
P III	1354.957		10	
O I	1355.5975		400	1
C I	1355.844		750	42
N I?	1355.887		150	
C I	1357.134		300	41
N I?	1357.359		1	
Ar II	1357.435		20	
C I	1357.659		100	
O I	1358.5125		250	1
C I	1359.275		200	40
C I	1359.438		50	
Al IV	1359.49		10	
Si III	1359.751		P	68
Si III	1360.360		20	68
N I?	1360.566		1	
Ar II	1360.735		100	
Si III	1361.597		160	46
Si III	1361.719		P	68
Si III	1362.366		100	38
B II	1362.460		500	1
Ar II	1363.032		200	
S I?	1363.04		100	
Cl I	1363.449		850	2

Element	Wavelength	Intensity	Multiplet
Si III	1363.459	140	38
Si III	1363.504	P	38
Al	1364.10	10	
C I	1364.164	600	39
Si III	1365.253	160	38
Si III	1365.292	P	38
Si III	1365.337	P	38
Al	1365.54	10	
Mg II	1365.5442	P	
Si IV	1365.549	P	19
Al	1367.02	10	
Si III	1367.049	140	46
Al	1367.07	20	
Mg II	1367.2537	P	
Mg II	1367.2568	P	
Mg II	1367.7082	P	
Al	1368.51	10	
Si IV	1368.571	P	19
Si IV	1368.573	P	19
Al	1369.20	10d	
Mg II	1369.4231	P	
Si III	1369.437	100	46
Al	1370.00	10	
P III	1370.39	10	
Al II	1371.24	60	
O V	1371.287	670	7
Si III	1371.652	60	67
P III	1372.01	100	
P I	1372.03	9	
P III	1372.711	300	
Si III	1373.030	100	67
Cl I	1373.118	350	1
P I	1373.49	60	
P I	1374.73	6	
P III	1374.780	100	
Si III	1375.083	40	67
Si III	1375.688	40	67
Ar II	1376.106	50	
Ar II	1376.956	100	
P I	1377.06	60	
Si III	1377.082	60	67
Ar II	1377.211	400	
Si III	1377.238	40	67
Ar II	1377.442	20	
N I?	1377.787	1	
P I	1377.93	60	
B I	1378.43	300	
B I	1378.69	500b	
B I	1378.9	300	
N I?	1379.003	1	
Ar II	1379.378	100	
P I	1379.40	75	
Cl I	1379.529	900	1
Al III	1379.670	600	
P III	1379.873	500	7
Ar II	1379.884	300	
P III	1380.464	1000	7
Ar II	1380.728	100	
P III	1381.111	1000	7
P I	1381.47	75	
S I	1381.571	330	7
P III	1381.633	800	7
P I	1381.65	45	
Ar II	1382.228	200	
Ar II	1382.770	100	
Al III	1384.144	800	
P V	1385.11	20	
S I	1385.524	230	7
N III	1387.31	200	
Si III	1387.948	25	37
Si III	1387.979	10	37
Si III	1387.994	8	37
Si III	1388.011	50	37
Si I	1388.052	8	37
Si III	1388.098	1	37
S I	1388.463	400	7
Al IV	1388.77	100	
S I	1389.160	230	7
N V	1389.514	50	
Cl I	1389.688	500	1
N V	1389.822	40	
Cl I	1389.961	500	1
S III	1390.67	50	
S I	1392.607	330	7
Si IV	1393.755	1000	1
S I	1396.147	400	7
Ar II	1396.231	100	
Cl I	1396.527	650	1
Si III	1399.615	P	73
Cl II	1401.16	10	
S I	1401.541	330	6
Si IV	1402.770	800	1
Si II	1403.783	5h	13.03
Si II	1404.170	1h	13.03
Si II	1404.478	6h	13.03
Al IV	1404.72	100d	
Si II	1409.073	10h	13.02
S I	1409.368	330	6
Al IV	1409.52	10	
Si II	1409.90	2h	13.02
Si II	1410.219	20h	13.02
P I	1411.31	24	
N I?	1411.510	5	
P I	1411.75	2	
N I	1411.9318	150	10
N I	1411.9395	P	10
N I	1411.9494	300	10
Al IV	1412.24	10	
S I	1412.899	230	6
Cl IV	1413.39	100	
Al	1414.24	40	
Al	1416.49	40	
Si II	1416.972	10h	18.06
Al	1417.14	10	
Si III	1417.237	260	9
Al IV	1417.58	10	
Si II	1417.781	5	18.06
Si II	1418.110	0	18.06
O V	1418.41	500	
P I	1420.08	30	

Element	Wavelength	Intensity	Multiplet
Al	1420.45	10	
Li II	1420.89	100	
Cl IV	1421.97	100	
Al	1422.17	10	
C?	1422.57	10	
Li III	1423.88	P	
Si III	1424.775	40	62
Al IV	1425.00	10	
S I	1425.065	500	5
S I	1425.229	400	5
P I	1425.29	30	
Be I	1426.117	125	
C III	1426.16	10	
C III	1426.45	400	
C III	1426.78	100	
Cl IV	1426.89	100	
Na III	1427.27	10	
P I	1427.77	1	
C III	1427.85	300	
P I	1428.05	1	
C III	1428.17	200	
C III	1428.53	200	
C III	1428.66	10	
C III	1428.95	100	
C III	1429.08	10	
P III	1429.242	100	
Al	1429.57	10	
P I	1429.77	12	
P I	1430.13	150d	
P III	1430.409	200	
P I	1430.73	30	
P I	1431.50	1	
C I	1431.597	100	65
Al IV	1431.93	100	
C I	1432.105	75	65
C I	1432.530	50	65
S I	1433.328	500	5
Si III	1433.690	120	66
Si II	1434.400	1h	13.01
Si II	1434.542	2h	13.01
Si III	1435.776	160	61
Si III	1436.166	140	52
Na III	1436.21	240	
Si III	1436.724	80	66
S I	1437.005	400	5
Al	1437.40	20	
Si III	1438.228	40	66
Al	1438.32	10	
N IV	1438.37	150	
Si II	1438.576	2h	13
Si III	1438.702	40	66
Si II	1438.931	4h	13
Si III	1439.391	40	66
Al	1439.96	20	
P I	1440.24	15	
Si III	1440.908	P	66
Cl IV	1440.95	10	
Si III	1441.732	100	3.05
Al IV	1441.81	50d	
P I	1442.76	15	
Al	1443.28	40	
Al	1443.66	10	
S I	1444.317	330	
P I	1445.66	3	
P I	1446.01	12	
N IV	1446.114	250	
P I	1446.33	3	
Si III	1447.196	120	3.05
Al IV	1447.47	100d	
P I	1447.50	60	
P III	1447.512	200	
P V	1447.92	150	
S I	1448.254	500	12
Al IV	1449.70	10	
P I	1450.38	9	
Ar II	1451.879	100	
P II	1452.89	300	
P I	1453.01	45	
Ar II	1455.484	100	
Si III	1457.253	100	60
Al	1457.92	50d	
Na III	1458.15	60	
C I	1459.0317	300	38
Mg IV	1459.52	100	
Ar II	1459.878	100	
Ar III	1460.077	200	
Ar III	1460.234	100	
N I?	1462.822	10	
Ar II	1463.155	200	
C I	1463.3360	600	37
Ar II	1464.176	100	
Ar II	1465.153	100	
Ar III	1465.532	100	
B I	1465.59	100d	
B I	1465.69	200d	
Ar III	1465.712	150	
B I	1465.82	200d	
N I?	1466.723	1	
N I?	1467.384	20	
P I	1467.39	3	
C I	1467.402	350	36
P IV	1467.424	40	
P I	1467.58	9	
Ar III	1467.841	150	
C I	1467.877	30	
Ar III	1468.006	100	
C I	1468.410	100	
P I	1469.71	3	
C I	1470.094	100	35
N III	1470.68	10	
N III	1471.02	50	
Cl II	1471.06	200	
P III?	1471.218	10	
N III	1471.69	100	
Si II	1471.775	2	30
S I	1471.82	130	
C I	1472.231	60	
S I	1472.993	670	4
P II	1473.129	10	
P I	1473.65	6	

Element	Wavelength	Intensity	Multiplet
S I	1474.005	730	3
Si II	1474.304	1h	12. 2
S I	1474.390	500	3
Ar II	1474.537	100	
S I	1474.569	330	3
Si II	1474.649	15h	12.02
Si II	1475.188	5h	12.02
Mg II	1475.9998	P	
P I	1476.11	9	
O III	1476.89	600	
Si II	1476.928	1	12.01
C III	1477.68	300	
Mg II	1477.9972	P	
Mg II	1478.0037	P	
C III	1478.05	200	
C III	1478.30	100	
Mg II	1480.8797	P	
Al IV	1481.46	10	
S I	1481.680	500	4
N I?	1481.750	40	
C I	1481.7635	450	34
Mg II	1482.8903	P	
S I	1483.036	670	3
S I	1483.232	500	3
P IV	1484.506	240	
Cl II	1484.66	10	
Si II	1484.873	15	12
Si II	1485.024	90h	15.04
Si II	1485.224	30	12
P II	1485.49	250	
Si II	1485.513	100h	15.04
S I	1485.613	230	4
N IV	1486.496	100	
Al IV	1486.87	50d	
S I	1487.149	500	3
P IV	1487.796	160	
P I	1488.01	60	
P IV	1489.101	160	
P II	1489.834	10	
Mg IV	1490.41	10	
P I	1491.36	150	
Be I	1491.765	250	
P III?	1492.031	500	
N I	1492.6254	620	4
C I	1492.738	60	
N I	1492.8195	100	4
Li II	1492.931	60	
Li II	1492.973	100	
P I	1492.99	120	
Li II	1493.036	20	
C I	1493.273	10	
P I	1493.34	45	
C I	1494.532	25	
N I	1494.6751	400	4
P II	1494.990	10	
B V	1495.38	P	
N V	1495.5	40	
P II	1496.44	5	
N I?	1496.707	1	
P I	1499.51	24	
Si III	1500.241	240	36
Si III	1501.150	P	36
Si III	1501.191	200	36
P III	1501.551	700	6
Si III	1501.780	P	36
P I	1501.81	60	
Si III	1501.827	P	36
Si III	1501.870	180	36
P I	1502.17	24	
P III	1502.273	1000	6
P I	1503.12	3	
P I	1503.48	3	
P I	1504.37	36	
P III	1504.719	900b	6
P I	1504.72	6b	
P I	1505.84	2	
Si III	1506.060	120	72
P II	1506.44	30	
P I	1506.63	21	
O V	1506.72	800	
P II	1506.975	10	
P I	1506.98	18	
P I?	1508.74	9w	
Si II	1508.741	3h	11.01
Mg IV	1508.82	10	
Si II	1509.101	100h	11.01
C I	1510.668	25	
C I	1510.981	100	
C I	1511.907	25	
Si II	1512.072	50h	11.01
Be II	1512.269	555	4
Be II	1512.407	1000	4
Be II	1512.419	110	4
P II	1512.87	5h	
C I	1513.150	50	
Si III	1513.533	40	94
Si II	1513.570	30	29
P I	1515.10	6w	
Si II	1516.910	60	29
Si II	1518.221	5	29
N VII	1521.4	P	
P II	1521.62	300w	
P II	1522.11	4	
P II	1522.392	10	
P I	1522.59	2	
P II	1522.59	5	
P II	1523.44	10	
B I	1525.50	1	
P II	1525.58	1	
B I	1525.84	1	
Al IV	1526.15	50d	
F IX	1526.3	P	
Si II	1526.7076	500	2
N I?	1527.495	1	
Cl II	1528.91	100	
Cl IV	1529.28	10	
Na III	1529.67	20	
N VII	1530.2	P	
P I	1530.58	12	
C III	1531.85	200	

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Element	Wavelength	Intensity	Multiplet
Cl IV	1532.19	100	
P II	1532.51	700w	1
Si IV	1533.220	P	24
Cl IV	1533.25	100	
Si II	1533.4320	1000	2
B I	1533.81	10d	
B I	1534.29	10d	
P I	1534.73	15	
P II	1535.90	1000w	1
P II	1536.39	700w	1
Cl IV	1537.21	300	
Al IV	1537.52	100	
Cl IV	1539.30	200	
Al II	1539.84	300	10
Na III	1541.19	20	
C I	1541.510	40	
P I	1541.69	30	
Al	1541.71	10	
C I	1542.1766	160	64
P II	1542.29	1000w	1
N I?	1542.499	5	
Al	1542.66	20	
Cl II	1542.94	10	
P II	1543.09	400	1
P I	1543.26	45	
P II	1543.61	150	1
Si I?	1543.713	1r	
C I	1543.960	60	
Ar II	1544.177	200	
Ar II	1544.711	200	
Cl IV	1545.19	200	
C I	1545.249	40	
Si I	1545.565	1r	
P I	1545.95	45	
P I	1546.32	9	
B I	1546.44	100d	
Si I	1546.559	1r	
B I	1546.85	200d	
Ar II	1547.356	100	
Si I?	1547.373	1r	
C IV	1548.195	1000	1
P I	1548.43	180	
N V	1548.67	P	
Na III	1548.68	160	
Si I	1548.7149	2	
Cl IV	1549.15	200	
N V	1549.336	85	
C IV	1550.768	950	1
P I	1551.04	105	
Si I?	1551.2411	2	
Cl IV	1551.27	100	
P I	1551.42	45	
Si I	1551.8595	2	
Si I?	1551.9323	1	
Si I	1552.2089	1	
P II	1552.51	5h	
P II	1552.94	1	
Si I	1552.9498	2	
N I?	1552.995	1	
Al IV	1553.00	50d	
Si I?	1553.3712	1	
P II	1553.392	1	
P II	1553.82	10	
Si I?	1554.7021	2	
P I	1554.84	3	
P I	1555.25	6	
Si I	1555.5157	1	
Si I?	1555.6630	1	
Al II	1555.93	20	
Si I?	1556.1626	1	
P I	1556.18	2	
Si I	1556.5273	1	
Al IV	1557.24	250d	
Ar II	1557.305	100	
Cl II	1558.05	100	
Si I	1558.2400	2	
B I	1558.71	200	
N I?	1558.834	1	
Ar II	1559.072	300	
B I	1559.11	300	
Si I	1559.3645	2	
N I?	1559.751	1	
Ar II	1560.191	400	14
C I	1560.3095	250	3
Al II	1560.35	50	
C I	1560.6832	500	3
C I	1560.7079	200	3
Si I	1560.7425	8	
Si III	1560.974	P	71
C I	1561.3407	200	3
C I	1561.367	P	3
C I	1561.4382	1000	3
Si I	1562.0065	4	
Si I	1562.0531	1	
Ar II	1562.442	200	
Si II	1562.451	10	11
Si II	1562.845	15	11
Ar II	1563.043	100	
Si I	1563.3641	1	
Al II	1563.58	20	
Si II	1563.765	10	10.02
Si II	1564.066	5	10.02
Al IV	1564.14	50d	
Si I	1564.6138	8	
Ar II	1565.377	100	
B I	1566.32	200d	
B I	1566.70	300d	
Ar II	1566.811	100	
Si I	1567.7263	8	
Si I?	1567.8095	1	
Ar II	1567.987	400	
Si I	1568.1963	10	
Si I	1568.6182	3	40
Si I	1569.3185	8	
Al II	1569.37	20	
Si I?	1569.3841	1	
Si I	1570.0275	2	
Si I	1570.5175	3	40
Si I	1570.8104	1	
Si I	1571.3226	1	

Element	Wavelength	Intensity	Multiplet
Ar II	1571.391	100	
Si I	1571.4058	10	40
Si I?	1571.7956	6	
Si I	1572.7173	2	
Mg III	1572.72	400	
Si I?	1572.9245	1	
N I?	1572.976	1	
Al II	1573.01	20	
B I	1573.31	300	
Si I?	1573.3483	1	
Si I	1573.6350	10	
B I	1573.67	500	
Si I	1573.8840	25	40
Si I?	1574.1275	1	
Ar II	1574.401	100	
Si I	1574.7456	1	
Si I	1574.8435	30	
Ar II	1574.993	600	14
Si I	1575.1268	10	
P I	1575.18	9	
P I	1575.47	3	
Ar II	1575.815	300	
C III	1576.49	300	
Si I	1576.8294	12	39
Ar II	1576.898	300	
Si I	1577.0439	2	
N I?	1577.131	5	
C III	1577.32	200	
C III	1577.89	200	
Ar II	1578.812	300	
Mg	1579.05	10d	
Si I	1580.3001	12	38
Ar II	1580.770	200	
Al II	1580.90	20	
Ar II	1580.960	100	
Al IV	1582.04	150d	
P I	1583.73	24	
Ar II	1583.833	100	
Si I	1584.0216	8	
Si I	1584.3455	12	38
O III	1584.45	400	
Al IV	1584.45	100d	
Al II	1584.72	40	
Si I	1584.8540	2	
Si I	1585.9580	3	
Si I	1586.1372	15	
P I	1586.25	3	
Mg III	1586.26	300	
Ar II	1586.261	200	
Si I	1586.7913	20	
P I	1586.88	2	
Si I	1586.8920	3	
Si I	1587.7612	15	
O III	1587.87	400	
Si III	1588.950	40	59
Si I	1589.1728	15	
Al IV	1589.27	50d	
Ar II	1589.465	500	
Si I	1589.6389	7	
O III	1590.01	800	
Ar II	1590.233	200	
Si I	1590.4768	20	
Si I	1590.5763	15	
O III	1590.61	400	
Si I	1591.1232	20	
O III	1591.33	600	
C III	1591.48	200	
Ar II	1591.939	1	
Si I	1592.0200	20	
Mg III	1592.39	100	
Si I	1592.4234	60	
S I	1592.72	65	
N I?	1592.867	20	
Ar II	1593.587	200	
Si I	1594.1455	3	
Si I	1594.5655	70	
Ar II	1594.799	100	
Si I	1594.9493	70	
P I	1595.08	6	
P I	1595.72	1	
Ar II	1595.737	100	
Si I	1595.7552	30	
P I	1596.06	3	
Al II	1596.07	80	
Ar II	1596.151	100	
O V	1596.37	500	
N I?	1597.181	10	
Si I	1597.721	25	
Si I?	1597.7357	20	
Si I	1597.9627	60	
P I	1597.97	3	
Ar II	1598.575	100	
Ar II	1598.722	200	
P I	1598.76	3	
Ar II	1598.880	100	
Ar II	1599.130	100	
N I?	1599.202	1	
P I	1599.25	15	
Al II	1599.44	40	
Ar II	1599.607	100	
Ar II	1600.133	400	
B I	1600.41	500d	
Ar II	1600.694	600	
B I	1600.83	800d	
Ar II	1602.554	200	
Ar II	1602.891	200	
Na III	1602.91	100	
C I	1602.9715	200	63
N I?	1602.973	5	
B I	1602.99	200d	
Ar II	1603.075	400	
Ar II	1603.442	400	
Ar II	1604.082	500	
Na III	1604.47	120	
Al III	1605.75	700	
Si I	1605.8374	20	33
Ar II	1606.197	300	
Ar II	1606.926	400	
C I	1606.960	50	
Mg	1607.13	10	

Element	Wavelength	Intensity	Multiplet
Ar II	1607.180	100	
C I	1608.438	70	
Si I	1608.9164	25	33
B I	1610.40	10	
P V	1610.54	20	
B I	1610.72	10	
Na III	1610.97	80	
P I	1611.29	30	
Al III	1611.85	900	
Na III	1613.77	160	
P I	1614.19	30	
Si I	1614.5672	30	30
Si I	1614.6300	25	
P I	1614.67	3	
P IV?	1614.85	80	
P I	1614.87	9	
P I	1615.79	36	
Ar II	1615.807	50	
Si I	1615.9488	50	30
P I	1616.20	120	
N V	1616.328	150	
Al II	1616.43	120	
Si I	1616.5791	70	30
Ar II	1616.972	100	
Cl IV	1617.43	100	
Si I	1618.0062	8	
P I	1618.11	45	
Al II	1618.40	80	
P III	1618.665	600	
P I	1618.93	36	
P III	1618.944	600	
Si I	1619.0458	8	30
Si I	1619.5264	15	
N V	1619.688	250	
B V	1619.92	P	
C III	1620.05	300	
C III	1620.33	200	
Si I	1620.4043	60	30
C III	1620.59	10	
C III	1620.68	100	
P I	1621.33	9	
Si I	1621.8380	2	
Na III	1621.94	100	
N V	1621.966	35	
P I?	1622.08	3	
Cl IV	1622.86	200	
Si I	1622.8806	90	30
Si III	1622.892	P	45
Si III	1622.913	P	45
Si III	1623.055	P	45
O VII	1623.29		
Si I	1623.3677	8	
Si I	1623.4983	10	
B II	1623.57	400	3
S IV	1623.62	50	
B II	1623.77	400	3
P I	1623.83	75	
B II	1623.99	500	3
P I	1623.99	30	
S IV	1624.00	200	
Na III	1624.07	240	
B II	1624.16	400	3
B II	1624.37	400	3
P I	1624.43	2	
P I	1624.67	3	
P I	1625.40	30	
Si I	1625.5307	35	
Al II	1625.62	120	9
Si I	1625.7045	70	27
P I	1625.80	75	
Si I	1627.0498	20	
Ar II	1627.085	20	
N II	1627.349	P	
N I?	1627.366	5	
N II	1627.376	100P	
Si I	1627.7451	30	27
P I	1627.86	9	
Ar II	1628.825	100	
N II	1628.896	P	
N II	1628.922	P	
N II	1629.079	100P	
P I	1629.17	60	
S IV	1629.20	200	
Si I	1629.4034	20	
Si I	1629.4382	100	27
P I	1629.59	15	
N II	1629.832	10P	
Ar II	1629.834	100	
Si I	1629.9458	100	27
Si I	1631.1676	70	26
Si I	1633.2230	45	26
Si I	1633.3262	40	27
Na III	1633.64	80	
P I	1633.69	2	
Si I	1633.9829	90	
P I	1634.10	21	
Si IV	1634.607	70	28
P I	1635.79	9	
P III	1635.799	200	
P I	1636.20	9	
Si III	1636.990	20	47
Si I	1637.0106	4	
P III	1637.377	100	
O VII	1637.96		
Si I	1638.2823	2	
P I	1638.68	3	
P I	1638.89	15	
Cl IV	1638.95	10	
Al IV	1639.00	100	
P I	1639.09	24	
O VII	1639.58		
Si I	1640.267	1	
He II	1640.332	333P	12
Ar II	1640.343	100	
N I?	1640.437	10	
He II	1640.474	600P	12
P IV	1640.476	120	
He II	1640.490	70P	12
S I	1641.30	200	
Mg III	1642.86	100	

Element	Wavelength	Intensity	Multiplet
Cl IV	1643.40	100	
O V	1643.66	1000	
Al II	1644.22	80	
Al II	1644.80	100	
C III	1645.06	100	
P III	1645.914	200	
N I?	1647.493	20	
P III	1647.546	300	
Cl IV	1648.04	10	
Mg III	1648.88	10	
Ar II	1650.535	100	
Na III	1650.91	20	
Si I	1651.0280	25	25
Cl IV	1651.21	100	
Mg III	1652.26	10	
P I	1652.97	30	
Li II	1653.076	60	
Li II	1653.132	100	
N I?	1653.148	1	
Li II	1653.212	20	
Ar II	1653.322	100	
Si I	1653.3758	40	25
P I	1653.68	24	
N V	1655.922	40	
C I	1656.2665	350	2
C I	1656.9282	300	2
C I	1657.0078	1000	2
C I	1657.3797	300	2
C I	1657.9070	300	2
C I	1658.1222	350	2
Na III	1658.71	40	
Mg IV	1658.92	10	
Mg III	1659.28	10	
Si I	1660.4759	15	24
Si II	1661.059	3h	28
Be I	1661.478	1000	
Si II	1661.633	1h	28
Ar II	1662.253	100	
B I	1662.62	200	
B I	1663.05	300	
B I	1664.25	200d	
Si I	1664.5113	35	24
B I	1664.76	200d	
Si I	1666.3762	60	23
S I	1666.691	730	11
B I	1666.87	800d	
Si II	1667.267	750	28
B I	1667.30	1000d	
Si I	1667.6288	70	23
Si I	1668.5204	70	23
Ar III	1669.10	50	6
Ar III	1669.304	250	6
Na III	1669.52	60d	
N I?	1669.598	1	
Ar III	1669.671	350	6
Al II	1670.786	600	2
N I?	1671.020	5	
P I	1671.07	210	
Si I	1671.1168	40	23
P I	1671.49	105	
P I	1671.68	540	2
P I	1672.05	105	
P I	1672.48	270	
Si I	1672.5961	80	23
Si IV	1672.612	P	27
Ar III	1673.14	50	6
Ar III	1673.241	150	6
Al	1673.28	10	
Si III	1673.315	140	58
Ar III	1673.425	350	6
P IV	1673.759	20	
P I	1673.94	3	
P III	1674.26	1	
P I	1674.61	690	2
Si I	1675.2053	200	23
Ar III	1675.484	350	6
Ar III	1675.637	200	6
N II	1675.726	P	
Al	1675.75	20	
N II	1675.755	400P	
Mg III	1675.76	10	
N II	1675.920	100P	
Si I	1676.8214	15	
N I?	1677.906	40	
P III	1678.12	10	
Na III	1678.74	20	
O III	1679.06	400	
Mg III	1679.56	10	
P I	1679.71	900	2
Mg IV	1680.02	10	
Li II	1681.660	10	
Ne II	1681.683	200	7
Al II	1681.81	60	
Si I	1682.6717	70	
Mg IV	1683.04	300	
Si I	1683.1186	3	
Cl III	1683.18	10	
P I	1685.99	360	6
Ar II	1686.076	50	
Al II	1686.25	100	
Si I	1686.8175	100	
Si I	1687.0918	20	
S I	1687.49	330	
N IV	1687.60	50	
N IV	1687.82	100	
N IV	1688.11	150	
Ne II	1688.356	250	7
P I	1688.64	9	
P I	1689.25	105	
Si I	1689.2898	60	
Ar II	1689.470	50	
Cl III	1689.50	100	
Si I?	1689.921	1	
P I	1690.17	30	
Si I	1690.7882	60	
P I	1690.90	9	
Na III	1691.70	20	
P I	1691.75	60	
P IV	1691.807	40	

Element	Wavelength	Intensity	Multiplet
P I	1692.48	15	
P III	1693.03	100	
Si I	1693.2926	125	18
Si I	1693.4676	60	
P I	1694.06	300	6
P I	1694.50	120	6
N III	1694.79	10	
P I	1695.35	45	
Si I	1695.5074	90	18
Si I	1696.2065	200	18
N III	1696.54	150	
N IV	1696.86	150	
P III	1696.92	100	
N III	1697.19	10	
Mg III	1697.32	200	
Si I	1697.9409	250	18
N III	1698.16	100	
Mg IV	1698.83	200d	
N III	1699.00	100	
N IV	1699.03	200	
N III	1699.32	250	
Si I	1699.7169	10	18
Mg	1699.75	10	
Al	1699.78	10	
N III	1699.95	200	
Si I	1700.4193	90	18
Si I	1700.6354	80	16
Al	1701.05	10	
Ar II	1701.358	100	
N IV	1702.006	250	
F II	1702.16	10	
Ar II	1702.188	100	
N V	1702.25	50P	
Si I?	1702.6978	1	
Si I	1702.8685	70	16
N V	1703.218	60	
Mg III	1703.43	10d	
Mg III	1703.78	100	
Si I	1704.4416	100	17
F II	1704.90	100	
Si II	1704.967	2h	10.01
S I	1704.99	170	
Ar II	1705.980	100	
S I	1706.38	270	10
P I	1706.41	180	
Si I	1707.1148	8	16
S I	1707.13	270	10
P I	1707.57	120	
O V	1708.01	700	
P I	1708.03	3	
P I	1708.45	12	
P I	1708.90	3	
Si I?	1710.744	1	
Si II	1710.826	10h	10
Ar II	1710.909	50	
Si II	1711.296	20h	10
Ar II	1713.218	200	
S I?	1713.54	35	
Mg III	1714.85	10	
Na III	1718.48	10	
P I	1718.55	60	
N IV	1718.551	1000	7
Ar II	1718.680	100	
P I	1719.00	30	
P I	1719.31	90	
Ar II	1719.346	200	
Al II	1719.43	300	6
Na III	1719.60	10	
C II	1720.456	10	
C II	1721.012	100	
N I?	1721.014	1	
Al II	1721.26	500	6
C?	1721.3	5	
C II	1721.682	200	
N I?	1721.746	20	
C?	1722.0	5	
Mg III	1722.10	200	
C II	1722.238	10	
Si IV	1722.534	400	10
Si I	1722.562	4	
Si I	1724.242	6	
Al II	1724.97	600	6
N II	1725.028	P	
Ar II	1725.147	100	
Ar II	1725.549	50	
Al	1727.11	20	
Si IV	1727.377	300	10
Si I	1727.444	2	
P I	1727.85	15	
N I?	1728.170	20	
Ar II	1729.075	100	
Ar II	1729.259	100	
N I?	1729.481	5	
N III	1730.04	400	
Al	1730.56	20	
N I?	1730.734	5	
Mg III	1730.81	100	
Na III	1731.08	10	
Mg III	1731.88	100	
N II	1732.428	P	
Ne II?	1732.69	200	
Si I	1733.346	1	
Ar II	1733.372	100	
Si I	1734.718	8	
Mg II	1734.8523	P	
P II	1734.88	1	
Ar II	1735.378	50	
Si I	1736.538	3	
Ar II	1736.834	100	
Mg II	1737.6124	P	
Mg II	1737.6283	P	
N I?	1738.502	1	
Mg III	1738.91	600	
S IV	1739.03	50	
Mg III	1739.56	10	
Al II	1739.75	40	
Si I	1740.2988	20	80
N II	1740.310	400P	
Na III	1741.33	20	
N I	1742.7189	50	9

Element	Wavelength		Intensity	Multiplet
N I	1742.7306		350	9
N II	1743.197		200P	
N II	1743.228		P	
Si I	1743.8941		20	79
Mg III	1744.08		10	
F II	1744.86		100	
N II	1745.046		P	
N II	1745.076		P	
N I	1745.2482		150	9
N II	1745.256		P	
N I	1745.2600		50	9
Si I	1745.3475		25	15
S IV	1745.42		100	
F II	1745.57		200	
Si I	1745.647		1	
Na III	1746.39		10	
F II	1747.40		300	
Si I	1747.4144		40	15
Mg III	1747.64		400	
N III	1747.86		450	19
Mg III	1749.02		500	
Si I	1749.808		3	15
Al	1749.99		80	
N I?	1750.079		10	
Al II	1750.52		120	
Mg II	1750.6637		P	
Ar II	1750.694		50	
N III	1751.24		300	19
Ar II	1751.679		200	
N III	1751.7		500	19
C I	1751.8277		800	62
Na III	1752.06		20	
Si I	1752.634		3	78
Na III	1752.65		60	
Si I	1753.101		15	78
Mg II	1753.4744		P	
P I	1754.40		90	
Na III	1754.97		10	
Li II	1755.331		10	
Ar II	1755.819		100	
P I	1755.86		9	
P I	1756.65		9	
P III	1756.82		10	
N I?	1757.223		5	
Si I	1757.283		3	
P I	1757.47		60	
P III	1757.68		100	
P I	1757.95		60	
Mg III	1758.01		100	
Si I	1759.5831		10	
N I?	1759.789		1	
P I	1759.91		30	
Al II	1760.103		160	5
O III	1760.12		700	
C II	1760.3954	ST	450	10
P I	1760.40		45	
O III	1760.42		500	
C II	1760.4735	ST	100	10
C II	1760.8191	ST	300	10
Na III	1761.05		20	

Element	Wavelength	Intensity	Multiplet
C?	1761.2	100	
P I	1761.67	30	
Al II	1761.979	140	5
Na III	1762.13	10	
Al I	1762.892	100	
O III	1763.22	700	
N II	1763.639	100P	
Si I	1763.6612	80	
Ar II	1763.669	50	
Na III	1763.84	60	
Al II	1763.874	60	5
C I	1763.909	120	
Mg III	1763.93	200	
Al II	1763.947	200	5
O III	1764.48	700	
Si I	1765.0296	90	
N II	1765.140	50P	
C I	1765.366	50	
Si I	1765.6215	50	76
Al I	1765.632	200	
Al II	1765.811	100	5
Si I	1765.9452	8	76
Si I	1766.0634	100	
N II	1766.079	100P	
O III	1766.34	400	
Si I	1766.3538	50	
Al I	1766.381	200	
Na III	1767.21	10	
Cl II	1767.24	100	
Al II	1767.735	160	5
O III	1767.78	1000	
Ar II	1768.043	100	
O III	1768.24	900	
P I	1768.45	60	
P I	1768.94	45	
Al I	1769.133	200	
O III	1769.32	400	
Si I	1769.4609	2	
Si I	1769.7852	70	
Si I	1770.6298	125	
Ar II	1770.658	100	
Si I	1770.9216	300	
O III	1771.67	900	
Ar II	1771.829	200	
Cl II	1772.01	300	
Si I	1772.2263	12	13
P II	1772.30	30	
O III	1772.31	400	
N II	1772.735	P	
Al	1772.78	40	
O III	1773.00	500	
Na III	1773.00	10	
Mg III	1773.09	300	
Al	1773.18	40	
O III	1773.85	500	
Al	1773.99	60	
Al	1774.76	40	
P I	1774.99	750	1
Na III	1775.32	10	
Be II	1776.100	500	3

Element	Wavelength	Intensity	Multiplet
Al II	1776.19	20	
Be II	1776.307	1000	3
Ar II	1776.672	100	
Si I	1776.8245	150	13
Al	1776.97	80	
Al	1777.82	60	
Al	1778.25	20	
Al	1778.59	20	
Si III	1778.715	P	35
C III	1779.12	10	
O III	1779.16	700	
N II	1780.551	P	
O III	1781.03	600	
Al	1781.07	40	
S I	1782.258	500	13
Ar II	1782.596	100	
Al	1782.65	20	
P I	1782.87	600	1
Na III	1782.92	240	
Si III	1783.079	P	35
Si III	1783.146	P	35
Si I	1783.2318	25	73
Mg III	1783.36	400	
Al	1783.55	40	
Si I	1784.0884	8	73
O III	1784.85	600	
Cl II	1785.06	100	
Al	1785.29	20	
Ar II	1785.672	100	
Si III	1786.371	P	35
Si III	1786.438	P	35
Si III	1786.515	P	35
Al	1786.78	20	
Si II	1786.817	4	18.05
Al	1786.93	20	
Cl II	1787.10	300	
Al	1787.41	40	
Si II	1787.538	8	18.05
P I	1787.68	540	1
Mg III	1788.05	100	
Ar II	1788.104	300	
Al	1788.15	60	
O III	1789.66	700	
Si I	1790.2544	25	72
Al	1791.21	20	
Na III	1791.23	200	
Mg III	1791.50	100	
Ar II	1791.561	100	
Na III	1791.80	160	
Cl II	1791.91	400	
Al	1792.04	60	
Ar II	1793.435	50	
Al	1793.54	40	
Al?	1793.92	10	
Mg III	1794.68	300	
Si IV	1796.162	P	23
Si IV	1796.166	P	23
Al	1797.18	20	
Si I	1797.3565	6	70
Al	1797.45	60	
Si IV	1797.496	P	23
P II	1797.54	10	
Cl II	1797.91	10	
Cl III	1797.98	200	7
P II	1798.37	5	
Al	1798.45	20	
P II	1799.10	50	
Si I	1799.1177	30	
Al	1799.89	10	
P II	1799.91	20	
P II	1800.27	20	
Mg	1800.28	100	
Si I	1800.404	1	70
Mg III	1800.75	400	
Na III	1801.27	140	
Al	1801.90	20	
Al	1802.00	20	
Si III	1803.023	60	51
N III	1804.3	300	22
P II	1805.11	30	
N III	1805.5	350	22
Al	1805.94	40	
P II	1806.12	150	
P II	1806.67	50	
N I?	1807.328	1	
S I	1807.341	950	2
Al II?	1807.42	60	
Al	1807.58	20	
Al	1807.64	20	
Si II	1808.0117	150	1
Si I	1808.4293	20	69
Cl III	1808.51	400	7
Si I	1809.1042	100	67
Cl III	1810.26	100	7
Na III	1810.74	80	
N V	1811.08	30	
Al	1811.09	10	
N V	1811.62	35	
Na III	1811.70	100	
Ar II	1812.475	50	
Ar II	1813.014	100	
Al	1813.15	20	
Cl II	1813.75	10	
Ar II	1813.766	100	
Si I	1814.0789	250	68
Na III	1814.35	60	
Cl II	1814.43	10	
Cl II	1815.16	10	
Cl II	1815.61	10	
Ar II	1816.14	50	
Na III	1816.83	40	
Si II	1816.9278	200	1
Al	1817.15	20	
Al	1817.35	20	
Si II	1817.4511	10	1
Cl III	1817.73	400	7
B I	1817.849	400	
Si I	1817.9562	10	66
B I	1818.349	500	
Al	1818.37	100	

Element	Wavelength	Intensity	Multiplet
Al IV	1818.55	50d	
Na III	1819.01	40	
Al	1819.28	80	
Al	1820.11	60	
S I	1820.361	850	2
Mg III	1820.47	100	
Na III	1821.68	240	
Al	1822.32	10	
Si I	1822.4549	30	12
Cl III	1822.50	600	7
Ar II	1823.205	100	
Al	1823.63	10	
Al	1823.71	10	
Na III	1824.52	10	
Cl III	1824.59	300	7
Ar II	1824.842	50	
Si I	1825.021	1	12
Na III	1825.44	200	
B I	1825.899	750d	3
S I	1826.261	850	2
B I	1826.400	1000d	3
Al	1827.56	20	
Mg I	1827.94	P	
Cl III	1828.40	500	7
Al II	1828.59	500	
P II	1828.63	30	
Al	1829.28	40	
C?	1829.85	1	
Si I	1829.8971	10	12
N II	1830.527	1P	
Ar II	1830.770	500	
Ar II	1831.527	500	
N II	1831.586	10P	
Al	1831.62	40	
Cl III	1832.08	400	7
Al II	1832.85	400	
C?	1833.26	1	
Al	1833.26	20	
Cl III	1833.31	400	7
P I	1833.98	30	
Ar II	1834.038	200	
Al	1834.13	60	
Al II	1834.82	200	
P I	1834.83	60	
Na III	1835.22	300	
N III	1835.578	150	
N II	1836.172	100P	
P II	1836.47	10	
Si I	1836.5090	200	11
N I	1836.752	10	8
Al II	1836.97	80	
P II	1837.51	20	
Si I	1838.0113	40	65
Na III	1838.11	120	
Al II	1838.21	40	
Mg III	1838.32	100	
Si III	1838.466	P	65
Al	1839.39	10	
Al II?	1839.53	20	
Si III	1839.585	P	65
N III	1839.59	100	
Al II?	1839.78	60	
N II	1839.931	P	
Si I	1840.0415	8	65
Al	1840.62	10	
N II	1840.983	100P	
Si I	1841.1515	125	11
Si I	1841.4486	400	11
N III	1841.68	50	
Si III	1842.064	P	65
N II	1842.284	10P	
Si III	1842.547	180	20
B II	1842.80	300	
N II	1843.357	10P	
Na III	1843.43	40	
Si I	1843.7695	200	11
N I?	1844.042	90	
P II	1844.06	5	
Mg	1844.18	100	
N II	1844.259	10P	
Al	1844.29	20	
P I	1844.33	60	
Na III	1844.36	400	
Na III	1845.10	240	
P I	1845.19	30	
Si I	1845.5203	200	10
N II	1845.616	100P	
N III	1845.64	250	
N III	1845.80	200	
Si I	1846.1115	200	11
N I?	1846.399	150	
Al	1846.42	40	
P II	1846.78	20	
P I	1847.19	300	
Si I	1847.4733	300	10
Na III	1847.54	200	
N II	1848.002	10P	
Si I	1848.1503	200	10
O III	1848.26	500	
Al	1848.69	40	
Cl III	1848.74	10	
Si I	1848.7478	250	11
Al II	1848.90	40	
P I	1849.05	3	
Al	1849.15	40	
N II	1849.414	100P	
P I	1849.52	9	
Na III	1849.58	700	
Cl III	1849.64	10	
P I	1849.84	105	
Na III	1850.24	400	
Na III	1850.39	360	
Al	1850.56	40	
P II	1850.61	20	
Si I	1850.6717	400	10
P I	1851.22	240	
Si I	1851.7823	70	64
N II	1851.810	P	
P I	1852.09	120	
Cl III	1852.11	200	

Element	Wavelength	Intensity	Multiplet
P II	1852.27	20	
Si I	1852.4715	250	10
P II	1852.65	10	
N II	1852.721	P	
Si I	1853.1517	35	10
C?	1853.2	1	
Ne II?	1853.22	65	
Ne II?	1854.11	65	
P II	1854.59	150	
Al III	1854.720	1000	1
Ar II	1854.986	50	
P I	1855.48	1	
Na III	1855.91	300	
Al II	1855.928	400	4
Si III	1856.062	20	70
Al	1856.10	20	
Al	1856.27	40	
O III	1856.62	500	
Na III	1856.73	400	
P I	1857.04	45	
Na III	1857.57	100	
N V	1857.69	50	
N II	1857.87	300P	
N V	1857.88	50	
Al II	1858.031	800	4
Mg III	1858.19	200d	
N II	1858.545	200P	
P I	1858.91	450	5
Na III	1859.20	10	
N II	1859.260	500P	
P I	1859.43	450	5
Na III	1859.61	10	
N II	1859.636	P	
Al II	1859.99	240	
N V	1860.37	85	
B V	1860.46	P	
P I	1860.63	45	
Na III	1861.19	300	
Si I	1861.7949	2	63
Al II	1862.318	800	4
Na III	1862.40	120	
N II	1862.588	200P	
Al III	1862.795	600	1
P I	1863.78	3	
P II	1864.22	150	
N II	1864.364	P	
P I	1864.37	105	
P I	1864.64	3	
Si I	1865.0278	2	63
Mg	1865.64	10	
Ar II	1866.089	100	
N II	1866.457	P	
Mg III	1868.23	100	
N II	1868.240	10P	
Ar II	1868.660	300	
Si II	1868.765	1	9.02
Si II	1869.317	20	9.02
Na III	1869.43	20	
Al	1869.56	20	
Si II	1870.227	15	9.02
Al	1870.75	10	
Si II	1870.782	3	9.02
Al	1871.74	60	
P II	1872.36	1	
Na III	1872.45	20	
Ar II	1872.589	100	
O III	1872.78	800	
O III	1872.87	800	
Si I	1873.1043	25	9
Ar II	1873.140	600	
N I?	1873.217	5	
Na III	1873.32	80	
Na III	1874.22	10	
Mg IV	1874.59	10d	
Si I	1874.8424	175	
O III	1874.94	800	
Al	1875.63	20	
Si I	1875.8129	30	9
Al	1875.98	40	
P II	1876.79	100	
Al II	1877.04	100	
Ar II	1877.523	400	
Al II	1878.50	60	
N II	1878.624	200P	
Ar II	1879.420	100	
Mg III	1879.46	400d	
P II	1879.62	250	
Ar II	1879.790	200	
Cl III	1880.10	300	
Ne II?	1880.21	200	
Si I	1880.9684	5	9
Al IV	1881.19	50	
Si I	1881.8538	30	8
N V	1882.36	30	
N V	1882.92	35	
Cl II	1883.14	300	
Ne II?	1883.82	65	
N III	1885.25	500	24
Na III	1885.75	80	
Ar II	1886.386	400	
Mg III	1887.31	10	
N II	1887.404	350P	14
Na III	1887.48	300	
Si I	1887.6929	45	61
Cl II	1887.90	10	
Ne II?	1888.15	65	
P IV	1888.652	400	5
Ar II	1888.782	400	
Ar II	1889.029	600	
N I?	1889.056	10	
Cl III	1889.06	10	
Ne II?	1889.77	65	
Mg III	1890.35	200	
Na III	1890.75	240	
Si III	1892.030	60	1
Si I	1893.252	175	58
Mg IV	1893.87	100	
C III?	1894.49	200	
Si I	1895.461	1	58
Al	1895.51	20	

Element	Wavelength		Intensity	Multiplet
Mg III	1896.26		10	
Si I	1896.339		1	58
N VI	1896.82		300	
Ar II	1897.352		50	
Al II	1897.44		120	
Cl III	1897.85		300	8
Al II	1899.19		80	
Ar II?	1899.287		100	
Na III	1899.70		60	
Ar II	1899.847		100	
Mg	1900.04		100	
S I	1900.27		670	1
Ar II	1900.638		400	
Si I	1901.3370		400	57
Mg III	1901.55		100	
Cl III	1901.61		500	8
Si II	1902.459		100h	18.04
P IV	1902.62		40	
Al II	1904.32		40	
Si II	1904.326		5h	31
Si I	1904.6660		40	56
Al	1904.69		10	
P IV	1904.80		40	
P I	1905.48		90	
Si II	1905.878		3h	31
N III	1906.22		100	
Al II	1906.40		60	
P I	1906.40		60	
Al II	1906.60		40	
Al II	1906.67		40	
Mg IV	1906.71		10	
N III	1906.89		100	
Be I	1907.12		100	
N III	1907.28		400	
N VI	1907.34		200	
Ne II	1907.49		350	9
P I	1907.66		120	
N VI	1907.87		200	
Ar II	1907.988		400	
N III	1907.99		300P	27
N III	1908.21		400P	27
Mg III	1908.46		300	
N III	1908.96		100	27
Ar II	1909.5689	ST	50	
P IV	1910.18		40	
Si II	1910.621		50h	18.04
Cl II	1910.76		10	
Al II	1910.83		40	
Al II	1911.01		40	
Ar II	1911.053		50	
Si II	1911.265		0h	18.04
C?	1911.83		10	
Be I	1912.49		100	
C?	1912.75		10	
Cl III	1912.90		400	8
Na III	1913.17		160	
Cl III	1914.09		300	8
Ar III	1914.398		450	7
Ar III	1914.653		150	7
S I	1914.68		500	1

Element	Wavelength	Intensity	Multiplet
Ar III	1915.564	350	7
Ne II	1916.09	550	9
Cl III	1916.53	400	8
Cl III	1917.87	400	8
Ar III	1918.06	50	7
Na III	1918.46	120	
Ar III	1918.667	200	7
N III	1918.69	10	29
Mg III	1918.76	100	
N III	1919.06	10	
Ar II	1919.199	300	
N III	1919.44	50	29
Ar III	1919.515	200	7
N III	1919.71	100	29
Be I	1919.76	200	
N III	1919.99	100	29
Ar II	1920.007	200	
O III	1920.04	600	
Na III	1920.12	120	
Cl III	1920.32	400	8
O III	1920.75	500	
N III	1920.86	400	29
N III	1921.49	200	29
O III	1921.52	500	
Al	1921.94	20	
Al	1922.16	20	
Al	1922.26	10	
C III	1922.93	300	
N III?	1923.11	100	
C III	1923.14	200	
C III	1923.31	200	
Cl II	1923.35	400	
O III	1923.49	700	
O III	1923.82	500	
N III?	1923.86	100	
Mg III	1923.87	300	
Mg	1924.48	10	
Al II	1924.83	200	
Mg IV	1925.99	10	
Al II	1926.05	80	
Na III	1926.27	900	
O III	1926.94	500	
Al II?	1926.96	60	
Al	1927.09	40	
Al	1927.13	10	
Na III	1927.21	300	
C II?	1928.30	10	
P II	1928.30	5	
Mg	1928.43	10	
Be I	1929.67	300	
Al II	1929.99	240	
Ne II	1930.02	450	9
Mg III	1930.64	300	
C I	1930.9054	1000	33
Al II?	1931.06	200	
C?	1931.15	100	
Ar II	1931.419	100	
O VIII	1931.8	P	
Ar II	1932.230	200	
Al II	1932.39	240	

Element	Wavelength		Intensity	Multiplet
Mg III	1933.59		10	
Ar II	1933.694		200	
Na III	1933.87		600	
Al II	1934.52		400	
Al II	1934.73		300	
Na III	1935.54		10	
Al III	1935.88		60	
S II	1936.84		300	
Al II	1936.93		300	
Ar II	1937.041		100	
Mg III	1937.80		200	
Ne II	1938.82		350	9
Mg III	1938.95		10	
Al II	1939.27		300	
Na III	1939.32		10	
Ar II	1941.0724	ST	300	13
Mg III	1941.50		10	
Na III	1941.61		10	
Si II	1941.667		50	27
Na III	1941.77		10	
Na III	1942.19		120	
Na III	1943.40		120	
Si?	1943.42		0	
Be I	1943.68		500	
Si II	1944.586		15	23
Na III	1944.99		60d	
Si II	1945.504		3	23
P II	1945.54		50	
Mg IV	1946.20		10	
Na III	1946.43		400d	
Na III	1946.70		10	
Ar II	1946.795		200	
N III	1946.99		250	
Si II	1947.769		1	23
Si?	1949.17		0	
N III	1949.22		300	
Si II	1949.331		10	27
Si II	1949.564		100	27
N III	1949.81		200	
S II	1950.53		300	
Na III	1950.79		300	
Na III	1951.21		800	
N III	1951.43		100	
N III	1952.20		50	
Si?	1952.96		0	
N III	1953.66		150	
N III	1953.80		150	
Si III	1953.968		P	69
P I	1954.01		12	
P I	1954.20		21	
Mg III	1954.87		10	
Si I	1954.9664		50	55
P I	1955.16		21	
Na III	1955.31		160	
P I	1955.79		21	
Na III	1956.48		10	
Mg IV	1956.58		10	
Be I	1956.63		100	
Si?	1956.75		0	
O II	1957.42		10	
Ar III	1957.83		50	
Si I	1957.965		1	55
Al II	1958.25		40	
S II	1958.38		300	
Al II	1958.77		20	
Al II	1959.00		10	
Al	1959.10		10	
Si?	1960.17		0	
Al II?	1960.32		40	
O II	1960.34		100	
Al II?	1960.64		40	
Na III	1960.76		400	
Al II?	1960.84		40	
Ar II	1961.3610	ST	400	13
Ar II	1962.161		300	
Mg III	1962.18		10	
O II	1962.24		300	
Al II	1962.59		100	
Al II	1962.72		120	
Ar III	1962.74		100	
O II	1963.84		200	
O II	1964.35		10	
Be I	1964.59		900	
Al	1964.99		60	
Na III	1965.04		360	
Al II	1965.31		40	
Al	1966.38		10	
Ar II?	1966.953		100	
S II	1970.99		400	
Mg III	1971.57		10	
Ar II?	1972.274		200	
Ar II	1973.4837	ST	200	
Ar III	1973.780		200	
Ar II	1974.462		300	
Mg	1974.75		10	
Na III	1975.58		10	
Na III	1976.62		20	
Ar II	1976.765		300	
Na III	1977.14		20	
Ar II?	1977.200		20	
Mg III	1977.56		100	
Si I	1977.597		400	7
C III	1979.16		100	
Si I	1979.206		400	7
Si III	1979.233		P	83
Mg III	1979.31		100	
Cl III	1979.46		300	
C III	1979.62		50	
Si I	1980.617		300	7
Al	1980.82		20	
Na III	1980.95		10	
Ar II?	1981.74		100	
S II	1981.80		200	
Ne VII	1981.974		600	
Si I	1983.232		300	7
Ar II	1983.299		100	
Cl III	1983.61		500	
Al II	1983.65		60	
Ar II	1983.829		100	
Si I	1984.0688		3	

Element	Wavelength	Intensity	Multiplet
Si I	1984.4393	20	
Be I	1985.13	300	
S II	1985.17	200	
Na III	1985.58	600	
Si I	1986.363	500	7
C II	1987.33	40	
C II	1987.76	120	
C II	1988.09	80	
C II	1988.51	40	
Ar II	1988.620	300	
Al II	1988.71	40	
Si I	1988.993	1000	7
C?	1990.53	10	
Al II	1990.530	800	8
Al II	1991.05	20	
C?	1991.14	5	
N II	1991.301	10P	
Si I	1991.8522	50	
Ne VII	1992.060	300	
Ar II?	1993.555	20	
C I	1993.620	50	32
Na III	1995.62	60	
Al	1996.30	20	
Ne VII	1997.345	100	
Be I	1998.01	1000	
S II	1998.92	200	

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Standard wavelengths: 197, 306, 308, 368, 371, 500, 607, 610, 662, 794, 795, 796
Surveys of spectra: 197, 201, 242, 367, 488, 816
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Na IV:	693
Na V:	692, 693
Na VI:	692, 693
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Mg III:	693
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Mg VI:	692, 693
Mg VII:	692, 693
Mg VIII:	691, 693
Mg IX:	691, 693
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Mg XII:	309
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Al II:	190, 653
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Al VII:	233, 336, 693
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13. ABSTRACT

A tabulation of observed spectral lines below 2000 Angstroms has been prepared from the published literature up to January 1967. It is intended principally as an aid to the astrophysicist and to the plasma spectroscopist who deals with the spectra of highly stripped atoms. This report includes the first 18 elements, hydrogen through argon. The tabulation is divided into two main sections: the emission lines by spectrum, and a finding list. The entries give the element and spectrum, vacuum wavelength, intensity, and classification. A reference list is included.

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