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Wavelengths, Energy Level Classifications, and Energy Levels for the Spectrum of Neutral Neon

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We have prepared a comprehensive critically evaluated compilation of the most accurate wavelength measurements for classified lines of neutral neon (Ne I) in its natural isotopic abundance. Data from 19 sources spanning the region 256 Å to 54 931 Å are included. Based on this line list we have derived optimized values for the energy levels of neutral neon. Tabular data for 1595 classified lines and 374 energy levels are provided. In addition to the observed wavelengths, we present revised wavelengths calculated from the optimized energy levels for all lines that have been previously recommended for use as secondary wavelength standards. [DOI: 10.1063/1.1797771]

Key words: atomic energy levels; atomic spectra; atomic wavelengths; atomic wave numbers; energy level classifications; infrared wavelengths; ionization energy; ultraviolet wavelengths; wavelength standards.

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1. Introduction

Neon is a noble gas with ground configuration $1s^2 2s^2 2p^6$. Higher levels are formed by the combination of the $1s^2 2s^2 2p^5\ ^2P^\circ_{1/2,3/2}$ core with an excited valence electron. A few core-excited states have also been reported based on absorption spectra in the extreme ultraviolet region. Neon has three stable isotopes, ^{20}Ne, ^{21}Ne, and ^{22}Ne, whose abundances in the naturally occurring element are 90.48%, 0.27%, and 9.25% respectively.[1] The most complete previous list of energy levels for neutral neon was the compilation presented by Charlotte Moore in *Atomic Energy Levels* (AEL).[2] Revised values for most levels were given by Kaufman and Minnhagen.[3] A compilation of Ne I wavelengths was presented in 1982 by Striganov and Odintsova.[4] Since that time several important new investigations have appeared. In this work we have critically reviewed all of the experimental data for Ne I. We present a comprehensive classified line list for the Ne I spectrum covering the range 256–54 931 Å. Based on this list we have derived optimized values for the energy levels of neutral neon.

2. Background

Early studies of the Ne I spectrum established a good description of the visible and near ultraviolet regions[5,6] and led to the discovery of repeating wave number differences[7] and of several term series.[8] Precise interferometric measurements by Meissner[9,10] and Burns, Meggers, and Merrill[11] confirmed that the repeating differences were constant to a very high degree of exactness, but the significance of this observation was not understood. In fact, Burns *et al.* noted that ''the physical significance and interpretation of all these regularities in the spectrum of neon is one of the attractive problems in physical science at the present time.''

In 1919 Paschen[12] reported a list of wavelengths for Ne I spanning the region 2550–9840 Å. Included in the list were his own measurements, made with large grating and prism spectrographs, and interferometric measurements of Meissner.[9,13] Based on this list Paschen made the first successful interpretation of any complex spectrum. Nearly 800 lines were classified as transitions among 226 levels. A group of eight lines between 3765 and 3899 Å were identified as transitions between levels of the same parity. These lines were later interpreted by Edlén[14] as electric quadrupole transitions. Paschen's analysis has formed the basis for all sub-

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sequent work on Ne I, and the line list he presented remains the most comprehensive description of the spectrum for this wavelength region.

A number of additional lines in the near infrared region were reported in 1928 by Gremmer[15] who classified most of these lines as transitions among the levels of Paschen. He also provided experimental values for four previously unobserved levels in good agreement with predictions of Paschen.

All but two of the levels found by Paschen are now known to belong to configurations of the type $2p^5nl$ with $l=s$, p, or d. Extension of the analysis to levels of higher orbital angular momentum required observations in the infrared. The first data for wavelengths longer than 10 000 Å were reported by Hardy,[16] who used a thermopile to measure 30 lines extending as far as 18 550 Å. Meggers and Humphreys[17] combined these measurements with their own grating measurements of about 200 lines in the photographic infrared to determine 23 new levels of $2p^5nf$ configurations and presented the first concise table of all known terms of Ne I.

Initial observations of the neon emission spectrum in the extreme ultraviolet were made by Lyman and Saunders[18] who reported 16 lines between 586 and 744 Å. By combining their measurements with the term values of Paschen,[12] they obtained 173 930 cm^{-1} as the neon ionization energy. Several additional investigations of this spectral region culminated in the work of Boyce[19] who used improved instrumentation and wavelength standards to provide measurements of significantly higher accuracy.

Because of the ease of exciting the Ne spectrum and the reproducibility of its wavelengths, it was among the first spectra to find wide application as a source of wavelength standards. In 1922 the First General Assembly of the International Astronomical Union (IAU) recommended values for 20 lines from 5852 to 7032 Å as secondary wavelength standards.[20] Additional interferometric measurements to evaluate and more precisely determine wavelength standards in Ne were conducted by Jackson,[21] Meggers and Humphreys,[22] Humphreys,[23] Burns, Adams, and Longwell,[24] Blackie and Littlefield,[25] Sullivan,[26] and Humphreys, Paul, and Adams[27] The results of these investigations, which covered the range 3350–12 066 Å, were combined in a series of recommendations by Commission 14 of the IAU to provide optimized values for the energy levels of the $2p^5 3s$, $4s$, $3p$, $4p$, and $3d$ configurations.[28,29] These level values were recommended as suitable for the calculation of secondary wavelength standards, both in the region of the interferometric measurements and in the infrared.[30]

Additional observations of important infrared lines of Ne I were reported by Johansson,[31] Humphreys, Paul, Cowan, and Andrew,[32] and Litzén.[33] These observations located missing levels of the $2p^5 4f$ and $2p^5 5f$ configurations and established the $2p^5 5g$ configuration.

The Ne I term values of Meggers and Humphreys[17] were updated and extended by Edlén for inclusion in AEL.[2] Designations in the J_1l coupling notation were introduced in AEL based on unpublished work of Shortley. AEL remained the best source for neon levels until 1972, when Kaufman and Minnhagen[3] reported a precise new measurement of the 743 Å resonance line. This measurement provided a greatly improved connection to the ground state and showed that the entire system of excited levels should be shifted to lower energies by about 1.95 cm^{-1}. Based on this result, the IAU recommendations,[29] the new infrared data,[31–33] and other precise measurements adjusted to account for improved knowledge of the index of refraction of air, Kaufman and Minnhagen[3] presented a comprehensive revision of the neon energy levels.

The absorption spectrum of Ne in the extreme ultraviolet was first studied by Codling, Madden, and Ederer[34] who photographed the region 200–600 Å using synchrotron radiation. Their observations established autoionizing states between the Ne II $^2P^\circ_{3/2}$ and $^2P^\circ_{1/2}$ limits and core excited states with one- and two-electron excitations. Higher resolution spectra for the region 500–700 Å were obtained by Baig and Connerade[35] and by Ito *et al.*[36] who provide precise results and multichannel quantum-defect theory analysis for the five Rydberg series converging to the $^2P^\circ$ states of the Ne II ground term. More recently, doubly excited states in which one electron is excited from the $1s$ shell have been reported by Avaldi *et al.*[37] based on absorption spectra at about 13.7 Å.

Accurate measurements in the near ultraviolet and visible regions have also been reported from investigations in which neon was used as a buffer gas in hollow cathode discharges. The most comprehensive of these sets of measurements is that made by Ehrhardt[38] in a gold hollow cathode lamp. Other useful sources include the measurements of Wilkinson and Andrew[39] in a germanium hollow cathode, Crosswhite[40] in an iron hollow cathode, Palmer and Engleman[41] in a thorium hollow cathode, and Sansonetti *et al.*[42] in a platinum hollow cathode.

In 1973 Humphreys[43] published a description of the infrared spectrum from 11 143 to 37 736 Å based on his observations with a 1 m scanning grating spectrometer. Although the intensities in the Humphreys list were experimentally observed, the wavelengths (with the exception of a few interferometrically measured lines below 12 100 Å) were calculated from the energy levels of Moore.[2] Because of the low resolution of the grating observations, many lines were assigned multiple classifications and wavelengths. At about the same time Morillon[44] observed 27 lines between 45 000 and 55 000 Å, 19 of them classified as transitions between known levels. More recently, high precision measurements for selected infrared lines were reported by Chang *et al.*[45] who also suggested new or revised values for almost 100 levels. Eleven additional infrared lines were reported by Mishra *et al.*[46] from Fourier transform spectra.

There remained, however, a large number of important infrared lines for which no experimental wavelengths had been reported. To remedy this, comprehensive high-resolution measurements of Ne I in the infrared were made by Sansonetti, Blackwell, and Saloman[47] using the NIST Fourier transform spectrometer. This work resolved almost all lines that were previously multiply classified and ex-

tended the region of high resolution observations to 47 589 Å.

Doppler-free laser techniques have been applied to make extremely high precision measurements of a few transitions in the $2p^5 3s - 3p$ transition array.[48,49] In these measurements the separated isotopes ^{20}Ne and ^{22}Ne were used, hence the results cannot readily be integrated with the large body of interferometric emission measurements for natural neon. Laser measurements for additional lines of this transition array and an extensive study of more than 500 odd parity Rydberg states with uncertainties of less than 0.003 cm^{-1} were reported by Harth, Raab, and Hotop[50] These observations were made using ^{20}Ne. They have not been included in this compilation. For the $2p^5 3s - 3p$ transitions, the observed isotope shifts are approximately 0.023 Å.[49] For other transition arrays the wavelength shift is smaller.

There have also been numerous observations of the neon spectrum in hollow cathode discharges by Doppler-limited laser optogalvanic spectroscopy. Most of these studies make no new contribution to the known spectrum or energy levels. In two investigations, Rydberg series extending to high principal quantum numbers have been reported.[51,52] As the accuracy of these measurements is low and most of the transitions can be observed only by methods of laser spectroscopy, we have not included the results in this compilation.

3. Wavelength Compilation

The lines of Ne I compiled in this work were drawn from 19 sources which are summarized in Table 1. For each source the table specifies the number of lines contributed to the final list, their range of wavelengths, and an estimate of the experimental uncertainty of lines from that source. Also given in Table 1 are the codes used to refer to each source in the line list and throughout the remainder of this paper.

For each observed line we have selected the most accurate available measurement. We did not average measurements from multiple sources. In spectral regions where several sources of comparable accuracy exist, we have preferred the most extensive data set. The full list of lines with their classifications is given in Table 2. Unclassified lines reported in some sources have not been included. Our considerations in selecting the data presented are summarized below.

In the region short of 572 Å all of the data are attributable to CME.[34] We have chosen to include only single electron core excitations of the type $2s^2 2p^6\ ^1S_0 - 2s2p^6(^2S_{1/2})np\ ^1P_1^\circ$ which are observed in the region 256–273 Å. These are the strongest resonances in the extreme ultraviolet region and their classification appears to be unambiguous. We have not included the approximately 50 weaker absorption resonances given by CME between 145 and 275 Å and the five absorption lines reported by Avaldi *et al.*[37] near 13.7 Å. These features are attributed to two-electron excitations.

Five Rydberg series have been observed in absorption in the region 572–743 Å by CME,[34] BCON,[35] and ITO.[36] In ITO four of these series are reported to principal quantum numbers $n \geqslant 44$. We have arbitrarily truncated the series at $n = 20$. The results of ITO are the most precise and have been selected for Table 2. For a few low-lying members not observed by ITO, results of BCON are given. For the 743 Å resonance line, the very accurate emission measurement by KM[3] is used.

For wavelengths between 2500 and 12 460 Å there are many overlapping sets of measurements. Among these sources we have selected a value for each line according to the following order of priority.

(1) Interferometric measurements by BAL[24] are the most comprehensive of the several sets of high-precision Fabry–Pérot measurements upon which the IAU recommended neon levels are based. Approximately 70 values were rejected because they were in poor agreement with the consensus of other high accuracy measurements or fit poorly in the least-squares adjustment of the level values.

(2) Interferometric measurements by HPA[27] provided ten lines at wavelengths longer than those covered by BAL. The vacuum wavelengths reported by HPA were converted to air using the three term formula of Peck and Reeder.[53]

(3) Interferometric measurements of MH2[22] were used in place of many of the lines rejected from BAL and for 19 of the 20 lines recommended as secondary standards by the IAU in 1935.[54] BAL did not report experimental values for these lines.

(4) Observations with the NIST 2 m Fourier transform spectrometer (FTS) by SBS[47] provide the most comprehensive set of measurements for lines above 7000 Å. The typical uncertainty for these observations is about 0.0015 cm^{-1}, corresponding to 0.0008 Å near 7000 Å and 0.002 Å near 12 000 Å.

(5) FTS measurements of Ne in a thorium hollow cathode lamp by PE[41] were used for some weak lines at wavelengths shorter than 7000 Å. PE report uncertainties ranging from 0.001 cm^{-1} for strong Th lines to 0.005 cm^{-1} for weak Th lines. They state that their measurements for Ne lines are less accurate because of their greater width and suggest an uncertainty of 0.003 cm^{-1}. We assume this estimate applies to strong Ne lines. The Doppler width for Ne is larger than Th by a factor of approximately 3.4. We have taken the Ne uncertainties to be 0.003 cm^{-1} for strong lines, 0.009 cm^{-1} for lines of moderate strength, and 0.015 cm^{-1} for weak lines.

(6) Grating measurements by EHR[38] of Ne in a gold hollow cathode lamp were taken for 141 lines in the ultraviolet and visible regions. EHR states that the uncertainty of the measurements is about 0.015 cm^{-1}, but comparison of the results with the interferometric measurements of BAL and MH2 suggests that this estimate of the uncertainty is very conservative. We have taken the uncertainty to be 0.01 cm^{-1} corresponding to 0.0008 Å near 2800 Å and 0.005 Å near 6800 Å. There are ten lines in the list of EHR for which the wavelength and wave number are not in agreement. These lines are readily identified because they have wavelengths ending in three zeros. For all ten of these lines it is the wave number that is the correct value.

(7) Three weak lines not found in the more precise

sources were taken from the photographic measurements of SRSA,[42] which were made using a platinum hollow cathode lamp.

(8) Six additional weak lines were taken from photographic measurements by WA[39] using a germanium hollow cathode lamp.

(9) Seven lines were taken from photographic measurements of CW[40] in an iron hollow cathode lamp. The three lines at 2644.097, 2645.645, and 2677.905 Å that are identified as Ne I lines in CW are not included because they have been reclassified in the spectra of Ne II and Ne III by SRSA.

(10) Four lines not reported in other sources were taken from the concave grating measurements of GRE[15] made with a low current dc discharge in a Geissler tube. Several additional classified lines of GRE were rejected because their wavelengths disagreed with the difference of the combining levels by 0.3–0.7 Å.

(11) Almost 400 lines that do not appear in any of the sources above were taken from PAS[12] which is the most comprehensive but least precise source for this wavelength region.

For wavelengths longer than 12 460 Å the most complete and accurate source is SBS.[47] Results of CHNG[45] have been adopted for 24 lines that were not observed by SBS or were seen with low signal-to-noise ratio. These lines, whose upper states have high orbital angular momenta, were apparently excited more strongly in the hollow cathode spectra used by CHNG than in the electrodeless lamps of SBS. CHNG have analyzed Stark shifts in their hollow cathode lamp data for $2p^5 nf$ and $2p^5 ng$ levels. The levels were found to be shifted by as much as 0.03 cm^{-1} in either direction by an electric field estimated to be approximately 100 V/cm. The data of CHNG have not been corrected for Stark shifts and their uncertainties have not been expanded to cover source dependent shifts. Five additional infrared lines not reported in other sources are taken from MKBB.[46] The line at 7121.982 cm^{-1} was rejected because its intensity is unreasonably strong for the proposed classification and its wave number does not agree satisfactorily with the level difference. MKBB state that their uncertainty for strong lines is 0.003 cm^{-1}. As the lines adopted here are more than 1 order of magnitude weaker than the strongest lines in their spectra, we take the uncertainty to be 0.01 cm^{-1}. At wavelengths longer than 46 000 Å, results of MOR[44] are reported for lines not observed by SBS. Because of their large uncertainties, these lines do not contribute to our energy level optimization.

The intensities of spectral emission lines are strongly light source dependent, and the intensities reported in most investigations are only qualitative estimates of the relative prominence of the lines in a limited spectral region. In the work of SBS, however, the instrumental response of the Fourier transform spectrometer was calibrated by using a radiometric standard lamp, and the intensities were measured with an accuracy of about 10% over the entire range of the observations. These intensities, which are reported on a scale of 1–100 000, apply to neon in a microwave-excited electrodeless discharge lamp at a pressure of 665 Pa (5 Torr). Because they constitute a large self-consistent set, we have adopted the intensities of SBS for all lines that they observed. This includes almost all lines with wavelengths longer than 6920 Å.

Neon intensities from a variety of sources were adjusted to a common scale with maximum value 1000 in the compilation of Striganov and Odintsova.[4] A comparison of the intensities of SBS and those of Striganov and Odintsova in the near infrared region shows that, for lines of moderate intensity, the values of SBS are greater by a factor of about 10. For most lines not observed by SBS, including almost all lines with wavelengths shorter than 6920 Å, we have adopted for inclusion in this compilation the intensities of Striganov and Odintsova multiplied by a factor of 10. We note, however, that their intensity scale appears to significantly underestimate the actual intensity of the strongest lines. Also, the Striganov and Odintsova intensities for 30 lines taken from MH1[17] in the near infrared were reduced by a factor of 7 because other MH1 lines in this spectral region are too strong by comparison to nearby lines of the same transition arrays observed by SBS. For five lines taken from MKBB we have retained the intensities given by MKBB, as their intensity scale is approximately equal to that of SBS.

4. Classification of Lines

The classification of all emission lines was reviewed by comparing the observed wavelengths with those predicted for electric dipole transitions between preliminary values of the energy levels. These preliminary values were taken mostly from KM who incorporated the IAU recommendations for levels of the $2p^6$, $2p^5 3s$, $4s$, $3p$, and $4p$ configurations. As discussed in the Proceedings of the Eleventh General Assembly of the IAU,[29] the measurements of HPA suggest an error in the IAU adopted value for the $2p^5(^2P^o_{3/2})3p[5/2]_3$ level. For this level we have taken an alternate value given by KM and have made adjustments to the $2p^5(^2P^o_{3/2})3d[7/2]^o_4$, $2p^5(^2P^o_{3/2})3d[5/2]^o_3$, and $2p^5(^2P^o_{1/2})3d[5/2]^o_2$ levels whose values are based mainly on transitions to this level. Preliminary level values for the $2p^5 4f$, $5f$, $6f$, $7f$, $5g$, $6g$, and $7g$ configurations were taken from CHNG. Because the J_1l coupling scheme (also called jK)[55] is the most physically significant coupling for noble gas spectra, we have adopted the J_1l notation for all levels of the type $2p^5 nl$ in this compilation.

For a significant number of observed lines, more than one possible classification could be assigned on the basis of the preliminary energy level values. This was particularly true for transitions involving states having high orbital angular momentum, which are often closely spaced due to the pair coupling that is characteristic of noble gas spectra. To clarify the assignments for these lines, multiconfiguration Hartree–Fock calculations were made using the atomic structure codes RCN and RCG of Cowan.[55] The calculations included the orbitals $2p^6$, $2p^5 3p-11p$, $2p^5 4f-9f$, $2p^5 3s-13s$, $2p^5 3d-13d$, and $2p^5 5g-7g$. The configuration average energies were adjusted to obtain improved agreement with the

experimentally determined energies. For the $2p^5 3p$ configuration, a single-configuration least-squares adjustment of the energy parameters was made using the Cowan program RCE, and these empirically optimized parameters were used for the multiconfiguration calculation. The semiempirical wavefunctions obtained in this way were used to calculate oscillator strengths for all dipole-allowed transitions. These oscillator strengths were used as a guide in assigning classifications in cases where the appropriate classification was otherwise ambiguous.

5. Optimization of the Level Values

Once the classified line list was complete, a least squares adjustment of the energy levels was made using a modified version of the level optimization program ELCALC.[56] This is an iterative procedure that minimizes the differences between the observed wave numbers and those predicted from the optimized level values. In the first iteration, the lines are weighted according to the inverse square of the uncertainties of their wave numbers. For succeeding iterations, the weight assigned to each line in determining a given level is recalculated based on both the uncertainty of the wave number and the uncertainty determined for the combining level of opposite parity in the previous iteration.

The least-squares adjustment was restricted by fixing the levels of the $2p^5 3s$, $2p^5 4s$, $2p^5 3p$, and $2p^5 3d$ configurations (with a few exceptions noted below) at the values adopted by the IAU.[28,29] This was done because the IAU recommendations represent optimized level values based on several very precise data sets, while our least squares optimization includes only the single value for each classification that has been chosen for inclusion in our wavelength compilation. Levels of the $2p^5 4p$ configuration were not fixed at their IAU values because recent infrared data determine these levels more accurately than the ultraviolet lines upon which the IAU recommendations were based. The energy of the $2p^5(^2P^\circ_{3/2})3p[5/2]_3$ level was allowed to vary in the optimization because the accuracy of its recommended value had been called into question.[29] The $2p^5(^2P^\circ_{3/2})3d[7/2]^\circ_4$, $2p^5(^2P^\circ_{3/2})3d[5/2]^\circ_3$, and $2p^5(^2P^\circ_{1/2})3d[5/2]^\circ_2$ levels were also reoptimized in the fit because their dominant transitions are to the $2p^5(^2P^\circ_{3/2})3p[5/2]_3$ level.

For high angular momentum states where many transitions are multiply classified, only the dominant classification for each line, as determined from the oscillator strength calculations, was used in the level optimization. As there were no convincing transitions for the $2p^5(^2P^\circ_{1/2})8f[5/2]_2$ level, its energy was set equal to that of the $2p^5(^2P^\circ_{1/2})8f[5/2]_3$ level since the pair splitting is expected to be very small. For other multiply classified lines the dominant classification was used if it accounted for 90% of the total line strength. Blended lines were not used in the fit if no dominant classification accounting for at least 90% of the line strength could be determined.

TABLE 3. Lines not included in the level optimization[a]

Air wavelength (Å)	Source
5104.7011	BAL
5154.4271	BAL
5158.9018	BAL
5214.3389	BAL
5342.700	PAS
5349.2038	BAL
6000.9275	BAL
6046.1348	BAL
6246.7294	BAL
6402.248	MH2
6444.7118	BAL
12 601.293	MKBB

[a]These classified lines were removed from the level optimization because their measured wavelengths were inconsistent with the overall fit at a level several times their stated uncertainties. Dipole-forbidden transitions and multiply classified lines for which no dominant classification could be determined were also omitted from the optimization. These lines are not listed in this table.

After an initial level optimization was made, a few lines were found to disagree with the revised difference of their combining levels by amounts so large that their identifications appeared uncertain. These lines were removed from the line list. A few additional lines appeared to be correctly classified but were nonetheless excluded from the fit because they were inconsistent with the level values established by the rest of the data. These lines are listed in Table 3. Although they were not used in the optimization of the levels, they appear in the line list. A final optimization was then made to obtain the level values reported in Table 4.

As a result of our reexamination of all available data, a number of levels reported in AEL[2] have been discarded. The level $2p^5(^2P^\circ_{3/2})9p[1/2]_1$ at 172 268.4 cm^{-1} seems to have appeared for the first time in AEL. We could find no lines in the literature to support it. The levels $2p^5(^2P^\circ_{1/2})11s[1/2]^\circ_{0,1}$ were proposed by Paschen[12] in his original analysis of the Ne spectrum. Each of these levels was determined by a single multiply classified line in Paschen's analysis. We have adopted the alternate classifications and dropped these 11*s* levels.

The levels $2p^5(^2P^\circ_{1/2})11d[5/2]^\circ_{2,3}$ and $2p^5(^2P^\circ_{1/2})11d[3/2]^\circ_1$ present a more puzzling problem. We can find no lines that support these levels in the literature that was available at the time AEL was compiled. The AEL value for $2p^5(^2P^\circ_{1/2})11d[3/2]^\circ_1$, however, was confirmed by the later absorption measurements of ITO. This suggests that Edlén used unpublished data to determine the AEL values for these three levels, which are probably correct. We have not included the $2p^5(^2P^\circ_{1/2})11d[5/2]^\circ_{2,3}$ levels in Table 4, but their energies from AEL (corrected to take account of the resonance line measurements of KM) are 173 800.29 and 173 800.35 cm^{-1}, respectively.

Finally, we note that levels of the $2p^5 np$ and $2p^5 nf$ configurations for $n>7$ are not as well established as most other levels in the Ne I analysis. Most of the levels of these con-

figurations are determined by a single transition or by the low accuracy infrared data of MH1. In the absence of evidence to the contrary, we have retained the line identifications of the original literature for these levels. For the line at 9193.8 Å, however, our calculations indicate that the classification given by MH1, $2p^5(^2P^\circ_{3/2})3d[5/2]^\circ_2-2p^5(^2P^\circ_{1/2})8p[3/2]_2$, has a very low transition rate. We have reassigned this line as $2p^5(^2P^\circ_{3/2})3d[5/2]^\circ_3-2p^5(^2P^\circ_{3/2})9f[7/2]_{3,4}$ which is the strongest calculated transition for the upper level. This reassignment significantly shifts the energy of the $8p$ level and determines the $9f$ level.

6. Description of the Tables of Compiled Lines and Levels

The list of Ne I transitions with their classifications is presented in Table 2. Wavelengths between 2000 and 20 000 Å are reported in standard air. All others are vacuum wavelengths. The values reported represent the wavelength observed for a discharge in neon with the naturally occurring isotopic abundance. The first column contains the observed wavelength. Its uncertainty is given in column 10 and the source of the measurement in column 11. The reported uncertainty includes only the measurement uncertainty and has not been expanded to cover possible source dependent shifts. The second column contains the vacuum wave number. In most cases the wave number has been rounded to an appropriate number of significant digits using a rule that an uncertainty greater than 20 in the last digit causes that digit to be dropped. In the case of lines taken from SBS, CHNG, MKBB, and PE, where the wave number was the primary measured quantity, the value is given to the full number of digits in the original source. The third column is the relative emission intensity assigned to the line. Values in italics are from SBS and represent radiometrically calibrated results for a microwave excited electrodeless discharge lamp at a pressure of 665 Pa. Most of the remaining intensities are taken from Striganov and Odintsova[4] adjusted to approximately the same scale as SBS as discussed above. For a few lines not present in either of these sources, we have attempted to assign intensities consistent with the SBS scale. Letters or symbols in the intensity column are codes that have the following meanings: a observed in absorption, * observed intensity shared by more than one classification, S possible Stark asymmetry in the observed line, f transition forbidden for electric dipole radiation. Columns four to nine contain the line classification giving first the configuration, term, and J value for the lower level and then the same information for the upper level. All designations are given in J_1l coupling notation except for the ground state and ten core-excited levels.

The optimized energy levels for neutral Ne obtained in this work are presented in Table 4. The first column contains the energy in cm^{-1} derived from our least-squares optimization. The uncertainty is given in column two. The notation ''fixed'' in this column indicates that the level value was constrained to have a predetermined value, the value previously adopted by the IAU, as described above. Within this system of ''fixed'' levels we estimate the relative uncertainty of the energies to be about 0.001 cm^{-1}, although no uncertainties are given in the IAU reports. For other levels the uncertainties given in Table 4 represent the one standard deviation statistical uncertainty of the level values with respect to the system of ''fixed'' levels. Since all other level values are ultimately referred to one or more of the ''fixed'' levels, we have enforced a minimum uncertainty of 0.001 cm^{-1}. The entire system of excited levels has an absolute uncertainty with respect to the ground state of 0.04 cm^{-1} as indicated by the ground state uncertainty. The uncertainties do not include any explicit contribution for Stark or pressure shifts which may be of the order of 0.03 cm^{-1} for some $2p^5nf$ and $2p^5ng$ levels. The remaining columns specify the parity (0=even, 1=odd), configuration, term, and J value for the level. The J_1l coupling notation is used for all levels except the ground state and ten core-excited levels.

Wavelengths determined from optimized energy levels (Ritz wavelengths) in Ne have a long history of use as wavelength standards. Lines of the $2p^53s-2p^53p$, $2p^53p-2p^53d$, $2p^53s-2p^54p$, $2p^53p-2p^54s$, $2p^54s-2p^54p$, $2p^54p-2p^54d$, and $2p^54p-2p^55s$ transition arrays have previously been recommended for use as secondary standards by the IAU. For many of these lines Ritz wavelengths calculated from our new level values are unchanged from the previous recommendations. For lines in the ultraviolet and infrared, however, our inclusion of new measurements in the energy level optimization has led to improved values. In Table 5 we present a list of Ritz wavelengths spanning the range 3350–47 179 Å that are suitable for use as secondary standards. The observed wavelengths of Ne lines may vary slightly with instrumental resolution and self absorption due to the small isotope splitting between the dominant ^{20}Ne transition (90.48%) and the weaker ^{22}Ne line (9.25%). This can limit the usefulness of Ne as a standard source for instruments with sufficiently high resolving power to observe the asymmetry of the line profiles. In Table 5 we have included only lines that have been experimentally observed. The 6402 Å line has been omitted from the list of Ritz wavelengths because its strong self absorption makes it particularly susceptible to source dependent shifts.

7. Ionization Energy

Accurate values for the ionization energy of Ne depend on the vacuum ultraviolet measurements of Kaufman and Minnhagen[3] to determine the position of the lowest excited levels with respect to the ground state. This sets a lower limit of 0.04 cm^{-1} on the uncertainty. From the Rydberg series $2p^5(^2P^\circ_{3/2})nf[9/2]$, Kaufman and Minnhagen derived an ionization energy of 173 929.75 $cm^{-1}\pm0.06$ cm^{-1} or equivalently 21.564 538±0.000 007 eV for natural Ne. Our revised values for the energies of the $2p^5(^2P^\circ_{3/2})nf[9/2]$ levels make no significant change in the ionization energy reported in Kaufman and Minnhagen.[3] A slightly more accurate value

for the ionization energy of ^{20}Ne has been given by Eikema, Ubachs, and Hogervorst[57] based on their own determination of the ground state isotope splitting and laser measurements of Rydberg series by Harth *et al.*[50]

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9. References

[1] K. J. R. Rosman and P. D. P. Taylor, J. Phys. Chem. Ref. Data **27**, 1275 (1998).
[2] C. E. Moore, *Atomic Energy Levels as Derived from the Analysis of Optical Spectra*, Vol. I, Natl. Bur. Std. Circ. 467 (U.S. Govt. Printing Office, Washington, D.C., 1949).
[3] V. Kaufman and L. Minnhagen, J. Opt. Soc. Am. **62**, 92 (1972).
[4] A. R. Striganov and G. A. Odintsova, *Tables of Spectral Lines of Atoms and Ions* (Energy Publishers, Moscow, 1982).
[5] E. C. C. Baly, Phil. Trans. A. **202**, 183 (1903).
[6] H. E. Watson, Proc. Roy. Soc. A **81**, 181 (1908).
[7] H. E. Watson, Astrophys. J. **33**, 399 (1911).
[8] R. Rossi, Philos. Mag. **9**, 981 (1913).
[9] K. W. Meissner, Ann. Phys. **51**, 95 (1916).
[10] K. W. Meissner, Phys. Zeitschr. **17**, 549 (1916).
[11] K. Burns, W. F. Meggers, and P. W. Merrill, Bull. Bur. Stand. **14**, 765 (1918).
[12] F. Paschen, Ann. Phys. **60**, 405 (1919).
[13] K. W. Meissner, Ann. Phys. **58**, 333 (1919).
[14] B. Edlén, Ark. Mat. Astr. Fys. (Stockholm) **29A**, 1 (1943).
[15] W. Gremmer, Z. Phys. **50**, 716 (1928).
[16] J. D. Hardy, Phys. Rev. **38**, 2162 (1931).
[17] W. F. Meggers and C. J. Humphreys, Bur. Stand. J. Research **10**, 427 (1933).
[18] T. Lyman and F. A. Saunders, Proc. Nat. Acad. Sci. **12**, 92 (1926).
[19] J. C. Boyce, Phys. Rev. **46**, 378 (1934).
[20] C. E. St. John, Trans. Int. Astronom. Union **I**, 35 (1922).
[21] C. V. Jackson, Proc. Roy. Soc. A **143**, 124 (1933).
[22] W. F. Meggars and C. J. Humphreys, Bur. Stand. J. Research **13**, 293 (1934).
[23] C. J. Humphreys, J. Res. Natl. Bur. Stand. (US) **20**, 17 (1938).
[24] K. Burns, K. B. Adams, and J. Longwell, J. Opt. Soc. Am. **40**, 339 (1950).
[25] J. Blackie and T. A. Littlefield, Proc. Roy. Soc. A **229**, 468 (1955).
[26] S. A. Sullivan, J. Opt. Soc. Am. **45**, 1031 (1955).
[27] C. J. Humphreys, E. Paul, Jr., and K. B. Adams, NAVWEPS Report 7190, 11 (Naval Ordnance Laboratory Corona, Corona, CA, 1961).
[28] B. Edlén, Trans. Int. Astronom. Union **IX**, 201 (1957); B. Edlén, Trans. Int. Astronom. Union **X**, 211 (1960).
[29] C. Moore-Sitterly, Trans. Int. Astronom. Union **XIIB**, 173 (1966).
[30] G. Herzberg, Trans. Int. Astronom. Union **XIB**, 208 (1962).
[31] I. Johansson, Arkiv Fysik **25**, 381 (1964).
[32] C. J. Humphreys, E. Paul, Jr., R. D. Cowan, and K. L. Andrew, J. Opt. Soc. Am. **57**, 855 (1967).
[33] U. Litzén, Arkiv Fysik **38**, 317 (1968).
[34] K. Codling, R. P. Madden, and D. L. Ederer, Phys. Rev. **155**, 26 (1967).
[35] M. A. Baig and J. P. Connerade, J. Phys. B **17**, 1785 (1984).
[36] K. Ito, K. Ueda, T. Namioka, K. Yoshino, and Y. Morioka, J. Opt. Soc. Am B **5**, 2006 (1988).
[37] L. Avaldi, R. Camilloni, G. Stefani, C. Comicioli, M. Zacchigna, K. C. Prince, M. Zitnik, C. Quaresima, C. Ottaviani, C. Crotti, and P. Perfetti, J. Phys. B **29**, L737 (1996).
[38] J. C. Ehrhardt, ''Analysis of the Atomic Spectrum of Gold,'' Ph.D. dissertation, University of California, Berkeley, CA, 1970.
[39] P. G. Wilkinson and K. L. Andrew, J. Opt. Soc. Am. **53**, 710 (1963).
[40] H. M. Crosswhite, J. Res. Natl. Bur. Stand. **79A**, 17 (1975).
[41] B. A. Palmer and R. Engleman, Jr., *Atlas of the Thorium Spectrum*, LANL Rep. LA-9615 (Los Alamos National Laboratory, Los Alamos, N.M., 1983).
[42] J. E. Sansonetti, J. Reader, C. J. Sansonetti, and N. Acquista, J. Res. Natl. Inst. Stand. Technol. **97**, 1 (1992).
[43] C. J. Humphreys, J. Phys. Chem. Ref. Data **2**, 519 (1973).
[44] C. Morillon, Spectrochim. Acta **27B**, 527 (1972).
[45] E. S. Chang, W. G. Schoenfeld, E. Bièmont, P. Quinet, and P. Palmeri, Phys. Scr. **49**, 26 (1994).
[46] A. P. Mishra, R. J. Kshirsagar, V. P. Bellary, and T. K. Balasubramanian, J. Quant. Spectrosc. Rad. Transfer **67**, 1 (2000).
[47] C. J. Sansonetti, M. M. Blackwell, and E. B. Saloman, J. Res. Natl. Inst. Stand. Technol. **109**, 371 (2004).
[48] P. Juncar and J. Pinard, Rev. Sci. Instrum. **53**, 939 (1982).
[49] P. Zhao, J. Opt. Soc. Am. B **4**, 644 (1987).
[50] K. Harth, M. Raab, and H. Hotop, Z. Phys. D **7**, 213 (1987).
[51] M. Kumar, G. Ullas, and S. B. Rai, Phys. Scr. **55**, 676 (1997).
[52] S. B. Rai and S. K. Singh, Phys. Scr. **59**, 361 (1999).
[53] E. R. Peck and K. Reeder, J. Opt. Soc. Am. **62**, 958 (1972).
[54] A. Fowler, Trans. Int. Astronom. Union **V**, 81 (1936).
[55] R. D. Cowan, *The Theory of Atomic Structure and Spectra* (University of California Press, Berkeley, 1981).
[56] The program ELCALC was written by L. J. Radziemski, Jr. The procedure and definition of the level value uncertainties are described in L. J. Radziemski, Jr. and V. Kaufman, J. Opt. Soc. Am. **59**, 424 (1969).
[57] K. S. E. Eikema, W. Ubachs, and W. Hogervorst, Phys. Rev. A **49**, 803 (1994).

TABLE 1. Sources for the line list

Code	Source	Reference number	Number of lines	Shortest wavelength (Å)	Longest wavelength (Å)	Uncertainty
CME	Codling, Madden, and Ederer (1967)	34	10	256	272	0.03–0.05 Å
ITO	Ito, Ueda, Namioka, Yoshino, and Morioka (1988)	36	73	573	592	0.0006 Å
BCON	Baig and Connerade (1984)	35	11	576	736	0.004 Å
KM	Kaufman and Minnhagen (1972)	3	1	744	744	0.0002 Å
PAS	Paschen (1919)	12	384	2562	6401	0.02 Å
CW	Crosswhite (1975)	40	7	2614	2828	0.001 Å
WA	Wilkinson and Andrew (1963)	39	6	2725	2826	0.002 Å
SRSA	Sansonetti, Reader, Sansonetti, and Acquista (1992)	42	3	2775	2929	0.002 Å
EHR	Ehrhardt (1970)	38	143	2792	6760	0.01 cm^{-1}
PE	Palmer and Engleman (1983)	41	20	2873	6667	0.003 cm^{-1} strong lines 0.009 cm^{-1} average lines 0.015 cm^{-1} weak lines
BAL	Burns, Adams, and Longwell (1950)	24	158	3149	8866	0.0004 Å
MH2	Meggers and Humphreys (1934)	22	67	4364	8378	0.001 Å lines with 3 decimal places 0.0005 Å lines with 4 decimal places
GRE	Gremmer (1928)	15	4	5521	7621	0.02 Å
SBS	Sansonetti, Blackwell, and Saloman (2004)	47	604	7051	47 589	0.0008–0.08 Å
MH1	Meggers and Humphreys (1933)	17	35	8024	10 039	0.1 Å
HPA	Humphreys, Paul, and Adams (1961)	27	10	9665	12 066	0.0005 Å
CHNG	Chang, Schoenfeld, Biémont, Quinet, and Palmeri (1994)	45	24	18 656	26 283	0.003 cm^{-1}
MKBB	Mishra, Kshiragar, Bellary, and Balasubramanian (2000)	46	5	18 679	24 376	0.010–0.018 Å
MOR	Morillon (1972)	44	30	46 403	54 931	4 Å

TABLE 2. Spectral lines of Ne I

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
256.35	390 090	a	$2s^22p^6$	^{1}S	0	–	$2s2p^612p$	^{1}P°	1	0.03	CME
256.46	389 920	a	$2s^22p^6$	^{1}S	0	–	$2s2p^611p$	^{1}P°	1	0.03	CME
256.63	389 670	a	$2s^22p^6$	^{1}S	0	–	$2s2p^610p$	^{1}P°	1	0.03	CME
256.85	389 330	a	$2s^22p^6$	^{1}S	0	–	$2s2p^69p$	^{1}P°	1	0.03	CME
257.19	388 820	a	$2s^22p^6$	^{1}S	0	–	$2s2p^68p$	^{1}P°	1	0.03	CME
257.68	388 080	a	$2s^22p^6$	^{1}S	0	–	$2s2p^67p$	^{1}P°	1	0.03	CME
258.48	386 880	a	$2s^22p^6$	^{1}S	0	–	$2s2p^66p$	^{1}P°	1	0.03	CME
259.96	384 670	a	$2s^22p^6$	^{1}S	0	–	$2s2p^65p$	^{1}P°	1	0.03	CME
263.11	380 070	a	$2s^22p^6$	^{1}S	0	–	$2s2p^64p$	^{1}P°	1	0.03	CME
272.21	367 360	a	$2s^22p^6$	^{1}S	0	–	$2s2p^63p$	^{1}P°	1	0.05	CME
573.2775	174 435.59	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})20d$	$^2[3/2]^\circ$	1	0.0006	ITO
573.3754	174 405.81	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})19d$	$^2[3/2]^\circ$	1	0.0006	ITO
573.4056	174 396.62	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})20s$	$^2[1/2]^\circ$	1	0.0006	ITO
573.4889	174 371.29	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})18d$	$^2[3/2]^\circ$	1	0.0006	ITO
573.5257	174 360.10	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})19s$	$^2[1/2]^\circ$	1	0.0006	ITO
573.6252	174 329.86	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})17d$	$^2[3/2]^\circ$	1	0.0006	ITO
573.6679	174 316.88	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})18s$	$^2[1/2]^\circ$	1	0.0006	ITO
573.7873	174 280.61	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})16d$	$^2[3/2]^\circ$	1	0.0006	ITO
573.8383	174 265.12	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})17s$	$^2[1/2]^\circ$	1	0.0006	ITO
573.9821	174 221.46	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})15d$	$^2[3/2]^\circ$	1	0.0006	ITO
574.0447	174 202.46	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})16s$	$^2[1/2]^\circ$	1	0.0006	ITO
574.2208	174 149.04	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})14d$	$^2[3/2]^\circ$	1	0.0006	ITO
574.2982	174 125.57	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})15s$	$^2[1/2]^\circ$	1	0.0006	ITO
574.5172	174 059.19	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})13d$	$^2[3/2]^\circ$	1	0.0006	ITO
574.6144	174 029.75	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})14s$	$^2[1/2]^\circ$	1	0.0006	ITO
574.8912	173 945.96	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})12d$	$^2[3/2]^\circ$	1	0.0006	ITO
575.0158	173 908.26	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})13s$	$^2[1/2]^\circ$	1	0.0006	ITO
575.3703	173 801.12	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})11d$	$^2[3/2]^\circ$	1	0.0006	ITO
575.5347	173 751.47	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})12s$	$^2[1/2]^\circ$	1	0.0006	ITO
575.8544	173 655.01	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})20d$	$^2[3/2]^\circ$	1	0.0006	ITO
575.9530	173 625.28	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})19d$	$^2[3/2]^\circ$	1	0.0006	ITO
575.9822	173 616.48	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})20s$	$^2[3/2]^\circ$	1	0.0006	ITO
576.0045	173 609.75	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	1	0.0006	ITO
576.0684	173 590.50	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})18d$	$^2[3/2]^\circ$	1	0.0006	ITO
576.1032	173 580.01	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})19s$	$^2[3/2]^\circ$	1	0.0006	ITO
576.2048	173 549.40	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})17d$	$^2[3/2]^\circ$	1	0.0006	ITO
576.2255	173 543.17	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})11s$	$^2[1/2]^\circ$	1	0.0006	ITO
576.2481	173 536.36	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})18s$	$^2[3/2]^\circ$	1	0.0006	ITO
576.3685	173 500.11	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})16d$	$^2[3/2]^\circ$	1	0.0006	ITO
576.4184	173 485.09	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})17s$	$^2[3/2]^\circ$	1	0.0006	ITO
576.5645	173 441.13	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})15d$	$^2[1/2]^\circ$	1	0.0006	ITO
576.5658	173 440.74	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})15d$	$^2[3/2]^\circ$	1	0.0006	ITO
576.6262	173 422.57	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})16s$	$^2[3/2]^\circ$	1	0.0006	ITO
576.8048	173 368.88	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})14d$	$^2[3/2]^\circ$	1	0.0006	ITO
576.8083	173 367.82	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})14d$	$^2[1/2]^\circ$	1	0.0006	ITO
576.8643	173 350.99	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[3/2]^\circ$	1	0.0006	ITO
576.8816	173 345.80	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})15s$	$^2[3/2]^\circ$	1	0.0006	ITO
577.1034	173 279.17	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[3/2]^\circ$	1	0.0006	ITO
577.1080	173 277.79	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	1	0.0006	ITO
577.1687	173 259.57	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	1	0.0006	ITO
577.2024	173 249.45	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})14s$	$^2[3/2]^\circ$	1	0.0006	ITO
577.4803	173 166.08	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	1	0.0006	ITO
577.4872	173 164.01	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[1/2]^\circ$	1	0.0006	ITO
577.6038	173 129.05	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	1	0.0006	ITO
577.9649	173 020.89	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	1	0.0006	ITO
577.9740	173 018.16	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1	0.0006	ITO
578.0710	172 989.13	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	1	0.0006	ITO
578.1262	172 972.61	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1	0.0006	ITO

TABLE 2. —Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
578.5123	172 857.17	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1	0.0006	ITO
578.6049	172 829.51	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1	0.0006	ITO
578.6175	172 825.74	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	1	0.0006	ITO
578.8220	172 764.68	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.0006	ITO
579.4712	172 571.13	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.0006	ITO
579.4880	172 566.13	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	0.0006	ITO
579.7704	172 482.07	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.0006	ITO
579.8406	172 461.19	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1	0.0006	ITO
580.5113	172 261.94	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.0006	ITO
580.6887	172 209.31	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.0006	ITO
580.7131	172 202.07	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.0006	ITO
581.1215	172 081.05	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.0006	ITO
582.4687	171 683.04	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.0006	ITO
582.5059	171 672.08	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.0006	ITO
582.5977	171 645.03	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.0006	ITO
583.1257	171 489.61	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.0006	ITO
583.6891	171 324.08	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.0006	ITO
585.2472	170 867.97	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.0006	ITO
585.3040	170 851.39	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.0006	ITO
586.3138	170 557.13	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.0006	ITO
587.2127	170 296.04	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.0006	ITO
589.1792	169 727.65	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.0006	ITO
589.9114	169 516.98	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.0006	ITO
590.0109	169 488.39	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.0006	ITO
591.8306	168 967.27	a	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.0006	ITO
595.9200	167 807.8	30	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.0040	BCON
598.7056	167 027.0	20	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.0040	BCON
598.8897	166 975.7	10	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.0040	BCON
600.0365	166 656.5	20	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.0040	BCON
602.7263	165 912.8	40	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.0040	BCON
615.6283	162 435.7	50	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.0040	BCON
618.6716	161 636.6	50	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.0040	BCON
619.1023	161 524.2	40	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	0.0040	BCON
626.8232	159 534.6	60	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	0.0040	BCON
629.7388	158 796.0	60	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	0.0040	BCON
735.8962	135 888.7	300	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	0.0040	BCON
743.7195	134 459.30	120	$2s^22p^6$	^{1}S	0	–	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	0.0002	KM

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2561.79	39 023.5	80	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})9p$	$^2[3/2]$	2	0.02	PAS
2574.55	38 830.1	80*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})11p$	$^2[3/2]$	2	0.02	PAS
2574.55	38 830.1	80*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})11p$	$^2[3/2]$	1	0.02	PAS
2589.48	38 606.2	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})9p$	$^2[3/2]$	2	0.02	PAS
2590.67	38 588.5	100*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	2	0.02	PAS
2590.67	38 588.5	100*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	1	0.02	PAS
2591.15	38 581.4	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3	0.02	PAS
2594.56	38 530.7	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})8p$	$^2[3/2]$	2	0.02	PAS
2595.21	38 521.0	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})8p$	$^2[1/2]$	1	0.02	PAS
2613.59	38 250.1	300*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	0.02	PAS
2613.59	38 250.1	300*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	0.02	PAS
2613.925	38 245.226	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	0.001	CW
2614.26	38 240.3	50	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3	0.02	PAS
2616.62	38 205.8	250	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	0	0.02	PAS
2619.02	38 170.8	50*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	2	0.02	PAS
2619.02	38 170.8	50*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	1	0.02	PAS
2619.77	38 159.9	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	1	0.02	PAS
2621.10	38 140.5	80	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})8p$	$^2[1/2]$	0	0.02	PAS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2622.90	38 114.4	150	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})8p$	$^2[3/2]$	2	0.02	PAS
2639.97	37 867.9	150	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	0	0.02	PAS
2642.47	37 832.1	80*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2	0.02	PAS
2642.47	37 832.1	80*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	0.02	PAS
2645.51	37 788.6	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	1	0.02	PAS
2645.70	37 785.9	300	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[3/2]$	2	0.02	PAS
2647.42	37 761.4	2000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2	0.02	PAS
2647.76	37 756.5	80	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	0.02	PAS
2648.21	37 750.1	150	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	0.02	PAS
2648.56	37 745.1	250	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3	0.02	PAS
2651.01	37 710.2	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	0.02	PAS
2657.52	37 617.9	150*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2	0.02	PAS
2657.52	37 617.9	150*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	3	0.02	PAS
2667.84	37 472.4	20	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1	0.02	PAS
2669.13	37 454.3	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	0	0.02	PAS
2675.275	37 368.229	2000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[3/2]$	2	0.001	CW
2675.64	37 363.1	2000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[3/2]$	1	0.02	PAS
2677.020	37 343.9	10	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2	0.020	PAS
2677.389	37 338.726	150	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1	0.001	CW
2677.87	37 332.0	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2	0.02	PAS
2680.685	37 292.8	10	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	0.020	PAS
2686.742	37 208.751	150	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})9p$	$^2[1/2]$	0	0.001	CW
2700.555	37 018.4	80	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	0.020	PAS
2700.681	37 016.7	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.020	PAS
2701.639	37 003.591	20	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[3/2]$	1	0.001	CW
2701.766	37 001.9	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	0.020	PAS
2702.560	36 990.982	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	0.001	CW
2704.32	36 966.9	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	0.02	PAS
2706.74	36 933.9	30	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1	0.02	PAS
2724.772	36 689.45	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0	0.002	WA
2731.358	36 601.0	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	0.020	PAS
2731.528	36 598.7	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.020	PAS
2732.61	36 584.2	10	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	0.02	PAS
2734.755	36 555.5	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.020	PAS
2735.168	36 550.0	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	0.020	PAS
2735.69	36 543.0	80	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.02	PAS
2736.174	36 536.57	50	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.002	WA
2743.53	36 438.6	150	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	0	0.02	PAS
2755.82	36 276.1	150*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	2	0.02	PAS
2755.82	36 276.1	150*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	3	0.02	PAS
2758.64	36 239.0	30	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.02	PAS
2759.323	36 230.1	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	0.020	PAS
2762.324	36 190.7	30	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	0.020	PAS
2766.364	36 137.86	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.002	WA
2767.28	36 125.9	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.02	PAS
2767.77	36 119.5	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.02	PAS
2775.0515	36 024.73	50	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	0	0.0020	SRSA
2781.42	35 942.3	30*	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	0	0.02	PAS
2781.42	35 942.3	30*	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	1	0.02	PAS
2781.68	35 938.9	30	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[3/2]$	2	0.02	PAS
2782.07	35 933.9	20	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[3/2]$	1	0.02	PAS
2792.3208	35 801.947	200	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	0.0008	EHR
2792.660	35 797.6	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	0.020	PAS
2794.597	35 772.79	50	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	0.002	WA
2795.092	35 766.45	350	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.002	WA
2795.613	35 759.8	10	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.020	PAS
2795.9619	35 755.325	80	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	0.0008	EHR
2799.80	35 706.3	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	0.02	PAS
2814.6921	35 517.41	200	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	0.0020	SRSA
2825.259	35 384.6	100	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	0.020	PAS
2825.613	35 380.14	80	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	0.002	WA
2827.589	35 355.415	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	0.001	CW

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
2832.9226	35 288.854	80	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	0.0008	EHR
2835.2395	35 260.018	150	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0	0.0008	EHR
2842.57	35 169.1	150	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1	0.02	PAS
2843.7	35 155.1	10	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2	0.1	PAS
2846.490	35 120.7	20	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1	0.020	PAS
2854.606	35 020.8	10	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	0.020	PAS
2862.070	34 929.5	80	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	0.020	PAS
2872.6628	34 800.6947	350	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	0.0012	PE
2880.290	34 708.5	30	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.020	PAS
2881.279	34 696.6	10	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.020	PAS
2881.852	34 689.7	20	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.020	PAS
2911.4705	34 336.849	250	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	0.0008	EHR
2913.1735	34 316.7773	2000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	0.0013	PE
2913.417	34 313.9	20	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	0.020	PAS
2929.3257	34 127.56	150	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	0	0.0020	SRSA
2932.7252	34 088.0064	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	0.0013	PE
2944.575	33 950.8	20	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	0.020	PAS
2946.732	33 926.0	20	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	0.020	PAS
2947.3010	33 919.4324	2000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	0.0013	PE
2949.0497	33 899.320	100	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	0.0009	EHR
2949.3218	33 896.193	150	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	0.0009	EHR
2952.527	33 859.4	50	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	0.020	PAS
2957.293	33 804.8	80*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.020	PAS
2957.293	33 804.8	80*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	0.020	PAS
2974.7189	33 606.8117	3000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	0.0008	PE
2975.5233	33 597.7263	350	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	0.0013	PE
2979.8086	33 549.4112	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	0.0013	PE
2980.6453	33 539.9939	400	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	0.0013	PE
2980.9252	33 536.8449	500	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	0.0013	PE
2982.6696	33 517.2326	3000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	3	0.0008	PE
2992.4296	33 407.9182	2000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0	0.0008	PE
2994.250	33 387.6	30	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.020	PAS
3012.1354	33 189.3685	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	0.0014	PE
3012.9576	33 180.3112	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	0.0014	PE
3017.3547	33 131.9611	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	0.0014	PE
3026.913	33 027.3	150*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.020	PAS
3026.913	33 027.3	150*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.020	PAS
3028.424	33 010.9	30*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.020	PAS
3028.424	33 010.9	30*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.020	PAS
3030.3235	32 990.173	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	0.0009	EHR
3045.9471	32 820.963	70	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	0.0009	EHR
3057.3907	32 698.1216	3000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	0	0.0008	PE
3063.6952	32 630.838	2000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	0.0009	EHR
3065.668	32 609.8	50	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.020	PAS
3067.214	32 593.4	250*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.020	PAS
3067.214	32 593.4	250*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.020	PAS
3076.9761	32 490.0015	2000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	0.0009	PE
3078.8806	32 469.905	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	0.0009	EHR
3079.1808	32 466.740	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	0.0009	EHR
3101.407	32 234.1	70	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.020	PAS
3126.1965	31 978.4829	2000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0	0.0009	PE
3147.7135	31 759.894	250	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	0.0010	EHR
3148.6107	31 750.844	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	0.0004	BAL
3153.4107	31 702.516	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	0.0004	BAL
3167.5762	31 560.747	500	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	0.0004	BAL
3206.199	31 180.57	10	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.020	PAS
3207.906	31 163.98	100*	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.020	PAS
3207.906	31 163.98	100*	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.020	PAS
3351.7495	29 826.592	250	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	0.0010	EHR
3369.8076	29 666.763	5000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	0.0005	BAL
3369.9069	29 665.889	7000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	0.0005	BAL
3375.6489	29 615.428	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	0.0005	BAL

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
3417.9031	29 249.316	5000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	0.0005	BAL
3418.0052	29 248.4415	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	0.0011	PE
3423.9120	29 197.985	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	0.0005	BAL
3447.7022	28 996.516	2000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	0.0005	BAL
3450.7641	28 970.788	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	0.0005	BAL
3454.1942	28 942.020	1000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	0.0005	BAL
3460.5235	28 889.087	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	0.0005	BAL
3464.3385	28 857.275	1000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	0.0005	BAL
3466.5781	28 838.632	2000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	0.0005	BAL
3472.5706	28 788.868	5000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	0.0005	BAL
3498.0632	28 579.071	1000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	0.0005	BAL
3501.2154	28 553.342	2000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	0.0005	BAL
3510.7207	28 476.035	500	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	0.0005	BAL
3515.1900	28 439.831	2000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	0.0005	BAL
3520.4714	28 397.167	10 000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	0.0005	BAL
3562.9551	28 058.577	150	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	0.0005	BAL
3593.5263	27 819.881	5000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	0.0005	BAL
3593.6385	27 819.0116	3000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	0.0004	PE
3600.1694	27 768.548	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	0.0005	BAL
3609.1787	27 699.234	500	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	0.0005	BAL
3633.6643	27 512.586	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	0.0005	BAL
3682.2421	27 149.637	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	0.0005	BAL
3685.7351	27 123.908	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	0.0005	BAL
3701.2247	27 010.398	400	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	0.0005	BAL
3754.2148	26 629.160	500	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	0.0005	BAL
3765.819	26 547.11	50f	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.020	PAS
3768.047	26 531.41	50f	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	0.020	PAS
3769.449	26 521.54	70f	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	0.020	PAS
3769.654	26 520.10	50f	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	0.020	PAS
3882.698	25 747.99	20f	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.020	PAS
3887.134	25 718.61	10f	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	0.020	PAS
3889.427	25 703.44	50f	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	0.020	PAS
3899.723	25 635.58	20f	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	0.020	PAS
3943.540	25 350.75	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	2	0.020	PAS
3984.065	25 092.90	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[3/2]^\circ$	1	0.020	PAS
3984.253	25 091.71	70	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[3/2]^\circ$	2	0.020	PAS
3995.298	25 022.35	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[3/2]^\circ$	2	0.020	PAS
3995.721	25 019.70	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	1	0.020	PAS
3998.594	25 001.72	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	1	0.020	PAS
3999.263	24 997.54	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	0	0.020	PAS
4013.752	24 907.30	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	2	0.020	PAS
4013.995	24 905.80	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[1/2]^\circ$	1	0.020	PAS
4020.015	24 868.50	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	2	0.020	PAS
4037.262	24 762.27	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	2	0.020	PAS
4037.615	24 760.10	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1	0.020	PAS
4037.696	24 759.60	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	0	0.020	PAS
4042.327	24 731.24	100	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4042.642	24 729.31	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	2	0.020	PAS
4045.662	24 710.85	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2	0.020	PAS
4064.036	24 599.13	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1	0.020	PAS
4064.829	24 594.34	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	0	0.020	PAS
4068.835	24 570.12	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	2	0.020	PAS
4069.243	24 567.66	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	1	0.020	PAS
4069.389	24 566.78	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	0	0.020	PAS
4079.359	24 506.74	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.020	PAS
4080.148	24 502.00	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2	0.020	PAS
4111.882	24 312.90	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.020	PAS
4112.100	24 311.61	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.020	PAS
4112.694	24 308.10	200	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	0.020	PAS
4112.865	24 307.09	100	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	0	0.020	PAS
4126.941	24 224.19	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.020	PAS
4128.072	24 217.55	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	0.020	PAS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4130.512	24 203.25	200	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4131.0613	24 200.028	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	2	0.0020	EHR
4164.8079	24 003.944	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.0020	EHR
4166.091	23 996.55	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	0	0.020	PAS
4173.966	23 951.28	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4174.3667	23 948.979	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.0020	EHR
4175.2197	23 944.086	600	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.0020	EHR
4175.488	23 942.55	400	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	0	0.020	PAS
4196.415	23 823.15	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.020	PAS
4198.1018	23 813.580	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.0020	EHR
4203.270	23 784.30	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[5/2]^\circ$	3	0.020	PAS
4203.270	23 784.30	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	2	0.020	PAS
4203.270	23 784.30	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[5/2]^\circ$	2	0.020	PAS
4232.323	23 621.03	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	4	0.020	PAS
4249.538	23 525.35	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[5/2]^\circ$	3	0.020	PAS
4252.418	23 509.41	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	3	0.020	PAS
4252.775	23 507.44	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[7/2]^\circ$	4	0.020	PAS
4256.498	23 486.88	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	2	0.020	PAS
4256.498	23 486.88	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[5/2]^\circ$	2	0.020	PAS
4259.739	23 469.01	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	2	0.020	PAS
4262.479	23 453.92	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	3	0.020	PAS
4267.286	23 427.50	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	0.020	PAS
4267.724	23 425.10	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4268.0086	23 423.538	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.0020	EHR
4269.7223	23 414.137	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.0020	EHR
4270.2252	23 411.380	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	0	0.0020	EHR
4274.6617	23 387.083	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.0020	EHR
4275.167	23 384.32	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	2	0.020	PAS
4275.5590	23 382.175	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2	0.0020	EHR
4278.850	23 364.19	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	3	0.020	PAS
4279.279	23 361.85	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[7/2]^\circ$	4	0.020	PAS
4283.242	23 340.23	100	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[7/2]^\circ$	3	0.020	PAS
4288.541	23 311.39	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2	0.020	PAS
4289.799	23 304.56	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	1	0.020	PAS
4291.976	23 292.74	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[5/2]^\circ$	3	0.020	PAS
4291.976	23 292.74	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	2	0.020	PAS
4291.976	23 292.74	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[5/2]^\circ$	2	0.020	PAS
4303.248	23 231.73	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.020	PAS
4303.695	23 229.31	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[3/2]^\circ$	1	0.020	PAS
4303.955	23 227.91	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[5/2]^\circ$	2	0.020	PAS
4306.2508	23 215.527	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.0020	EHR
4310.130	23 194.63	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[7/2]^\circ$	3	0.020	PAS
4314.110	23 173.23	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	3	0.020	PAS
4314.695	23 170.09	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	4	0.020	PAS
4316.008	23 163.04	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[5/2]^\circ$	3	0.020	PAS
4318.834	23 147.89	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1	0.020	PAS
4319.511	23 144.26	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2	0.020	PAS
4321.492	23 133.65	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	0	0.020	PAS
4327.265	23 102.79	100	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2	0.020	PAS
4334.1267	23 066.213	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.0004	BAL
4336.2268	23 055.042	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0	0.0020	EHR
4338.200	23 044.56	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	2	0.020	PAS
4340.256	23 033.64	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[5/2]^\circ$	3	0.020	PAS
4340.420	23 032.77	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1	0.020	PAS
4345.479	23 005.96	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	3	0.020	PAS
4345.479	23 005.96	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	2	0.020	PAS
4345.762	23 004.46	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	2	0.020	PAS
4346.036	23 003.01	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	3	0.020	PAS
4357.298	22 943.55	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	1	0.020	PAS
4357.918	22 940.29	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.020	PAS
4358.816	22 935.56	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2	0.020	PAS
4362.690	22 915.20	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	3	0.020	PAS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4363.228	22 912.37	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.020	PAS
4363.524	22 910.818	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	4	0.001	MH2
4365.705	22 899.37	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	2	0.020	PAS
4371.796	22 867.47	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4372.157	22 865.58	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[5/2]^\circ$	2	0.020	PAS
4374.997	22 850.74	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1	0.020	PAS
4374.997	22 850.74	20*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	3	0.020	PAS
4377.754	22 836.35	20*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	2	0.020	PAS
4377.754	22 836.35	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[5/2]^\circ$	2	0.020	PAS
4381.220	22 818.281	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	0.001	MH2
4394.370	22 750.00	150*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[5/2]^\circ$	3	0.020	PAS
4394.370	22 750.00	150*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[5/2]^\circ$	2	0.020	PAS
4394.370	22 750.00	150*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	2	0.020	PAS
4394.773	22 747.91	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	0.020	PAS
4395.008	22 746.70	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.020	PAS
4395.306	22 745.16	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.020	PAS
4395.556	22 743.861	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	3	0.001	MH2
4395.969	22 741.72	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	0.020	PAS
4397.175	22 735.49	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1	0.020	PAS
4398.136	22 730.52	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	0	0.020	PAS
4402.374	22 708.64	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	2	0.020	PAS
4402.580	22 707.58	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1	0.020	PAS
4402.985	22 705.49	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	3	0.020	PAS
4405.582	22 692.10	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	1	0.020	PAS
4409.620	22 671.32	200	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[5/2]^\circ$	3	0.020	PAS
4412.285	22 657.63	200	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.020	PAS
4413.561	22 651.08	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	0.020	PAS
4415.141	22 642.97	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.020	PAS
4416.817	22 634.38	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[5/2]^\circ$	3	0.020	PAS
4420.558	22 615.23	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.020	PAS
4421.5553	22 610.127	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.0020	EHR
4422.5205	22 605.192	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.0004	BAL
4424.8065	22 593.514	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.0020	EHR
4425.400	22 590.484	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0	0.001	MH2
4427.755	22 578.47	300	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[3/2]^\circ$	1	0.020	PAS
4427.981	22 577.32	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[5/2]^\circ$	2	0.020	PAS
4429.410	22 570.03	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	2	0.020	PAS
4432.5166	22 554.215	200	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	0.0020	EHR
4433.398	22 549.73	100	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.020	PAS
4433.7239	22 548.073	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	4	0.0004	BAL
4435.094	22 541.11	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1	0.020	PAS
4440.363	22 514.36	150*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	3	0.020	PAS
4440.363	22 514.36	150*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	2	0.020	PAS
4440.812	22 512.08	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	2	0.020	PAS
4440.890	22 511.69	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	3	0.020	PAS
4444.978	22 490.99	300	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[5/2]^\circ$	3	0.020	PAS
4445.671	22 487.48	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	1	0.020	PAS
4446.538	22 483.10	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	0	0.020	PAS
4452.983	22 450.55	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	0.020	PAS
4453.253	22 449.19	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.020	PAS
4453.324	22 448.84	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.020	PAS
4453.528	22 447.81	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.020	PAS
4454.285	22 443.99	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2	0.020	PAS
4455.564	22 437.55	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.020	PAS
4456.380	22 433.44	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[3/2]^\circ$	1	0.020	PAS
4460.175	22 414.354	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.001	MH2
4462.856	22 400.89	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	1	0.020	PAS
4465.6544	22 386.852	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	0.0020	EHR
4466.045	22 384.89	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4466.503	22 382.60	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.020	PAS
4466.8120	22 381.050	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	0.0004	BAL
4467.491	22 377.65	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.020	PAS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4470.971	22 360.23	50*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.020	PAS
4470.971	22 360.23	50*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	1	0.020	PAS
4472.246	22 353.86	10*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	2	0.020	PAS
4472.246	22 353.86	10*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	0.020	PAS
4475.131	22 339.45	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4475.656	22 336.826	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[5/2]^\circ$	2	0.001	MH2
4480.823	22 311.07	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[3/2]^\circ$	2	0.020	PAS
4483.190	22 299.289	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.001	MH2
4488.0926	22 274.9308	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.0004	BAL
4491.7716	22 256.687	800	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.0020	EHR
4491.838	22 256.36	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	3	0.020	PAS
4492.132	22 254.90	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.020	PAS
4492.412	22 253.51	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.020	PAS
4492.689	22 252.14	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	3	0.020	PAS
4493.108	22 250.07	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	0.020	PAS
4493.699	22 247.14	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.020	PAS
4499.000	22 220.93	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	1	0.020	PAS
4499.843	22 216.77	50*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4499.843	22 216.77	50*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	0	0.020	PAS
4500.182	22 215.092	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[5/2]^\circ$	2	0.001	MH2
4510.170	22 165.90	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.020	PAS
4511.509	22 159.32	200*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2	0.020	PAS
4511.509	22 159.32	200*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1	0.020	PAS
4514.891	22 142.72	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[5/2]^\circ$	3	0.020	PAS
4515.022	22 142.08	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	2	0.020	PAS
4515.411	22 140.17	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.020	PAS
4516.936	22 132.69	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	0	0.020	PAS
4517.736	22 128.775	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[5/2]^\circ$	3	0.001	MH2
4525.764	22 089.523	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	0.001	MH2
4526.177	22 087.51	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4526.685	22 085.03	150*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.020	PAS
4526.685	22 085.03	150*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1	0.020	PAS
4527.725	22 079.96	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	0	0.020	PAS
4527.973	22 078.75	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	0	0.020	PAS
4529.476	22 071.42	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4532.395	22 057.21	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1	0.020	PAS
4536.3003	22 038.217	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.0020	EHR
4537.6768	22 031.532	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.0020	EHR
4537.7545	22 031.1544	10 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.0004	BAL
4538.3026	22 028.494	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	0.0020	EHR
4539.168	22 024.29	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.020	PAS
4540.3801	22 018.4145	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	4	0.0004	BAL
4544.502	21 998.44	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1	0.020	PAS
4545.729	21 992.51	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1	0.020	PAS
4547.218	21 985.30	100	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	3	0.020	PAS
4547.728	21 982.84	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2	0.020	PAS
4550.640	21 968.77	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	3	0.020	PAS
4552.598	21 959.324	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.001	MH2
4554.415	21 950.56	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4554.561	21 949.86	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.020	PAS
4554.824	21 948.59	400	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	2	0.020	PAS
4555.392	21 945.86	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.020	PAS
4556.698	21 939.57	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1	0.020	PAS
4562.449	21 911.91	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1	0.020	PAS
4565.888	21 895.408	600	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	0.001	MH2
4566.830	21 890.89	400	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.020	PAS
4567.139	21 889.41	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	0.020	PAS
4567.845	21 886.03	100	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.020	PAS
4573.0609	21 861.065	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	0.0020	EHR
4573.557	21 858.69	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4573.898	21 857.06	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.020	PAS
4575.0620	21 851.5035	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	0.0004	BAL

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4575.858	21 847.70	200	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.020	PAS
4582.035	21 818.250	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	3	0.001	MH2
4582.105	21 817.92	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	2	0.020	PAS
4582.4521	21 816.2642	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.0004	BAL
4582.556	21 815.77	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2	0.020	PAS
4582.980	21 813.75	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	0	0.020	PAS
4585.876	21 799.98	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2	0.020	PAS
4586.145	21 798.70	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.020	PAS
4593.243	21 765.01	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.020	PAS
4595.249	21 755.51	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.020	PAS
4604.095	21 713.71	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	3	0.020	PAS
4604.680	21 710.95	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.020	PAS
4604.938	21 709.74	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.020	PAS
4609.365	21 688.89	300	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4609.910	21 686.323	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[5/2]^\circ$	2	0.001	MH2
4614.391	21 665.263	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.001	MH2
4616.911	21 653.44	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1	0.020	PAS
4617.837	21 649.096	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.001	MH2
4627.799	21 602.49	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4628.3113	21 600.1032	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[5/2]^\circ$	3	0.0004	BAL
4628.460	21 599.41	300	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	2	0.020	PAS
4636.125	21 563.699	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	0.001	MH2
4636.6362	21 561.322	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.0020	EHR
4636.974	21 559.75	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.020	PAS
4639.591	21 547.59	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	0	0.020	PAS
4640.443	21 543.63	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4643.182	21 530.93	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2	0.020	PAS
4643.931	21 527.45	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1	0.020	PAS
4644.833	21 523.27	400	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.020	PAS
4645.4180	21 520.5623	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	2	0.0004	BAL
4645.885	21 518.40	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2	0.020	PAS
4649.904	21 499.801	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.001	MH2
4652.101	21 489.65	300	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.020	PAS
4653.699	21 482.27	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	0	0.020	PAS
4656.3936	21 469.8368	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.0004	BAL
4661.1054	21 448.1338	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	0.0004	BAL
4663.092	21 439.00	400	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2	0.020	PAS
4663.518	21 437.04	200	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4666.654	21 422.63	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4667.3643	21 419.372	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	2	0.0020	EHR
4670.884	21 403.232	700	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.001	MH2
4678.218	21 369.679	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	0.001	MH2
4678.6107	21 367.886	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.0020	EHR
4679.135	21 365.491	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.001	MH2
4680.3670	21 359.867	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	0.0020	EHR
4681.200	21 356.07	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.020	PAS
4681.930	21 352.74	200	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3	0.020	PAS
4682.146	21 351.75	200	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.020	PAS
4682.910	21 348.27	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.020	PAS
4683.238	21 346.77	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3	0.020	PAS
4683.764	21 344.38	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.020	PAS
4687.671	21 326.587	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	3	0.001	MH2
4688.191	21 324.22	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2	0.020	PAS
4691.580	21 308.82	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.020	PAS
4695.363	21 291.65	200	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4696.943	21 284.49	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.020	PAS
4700.469	21 268.52	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.020	PAS
4702.5305	21 259.198	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.0020	EHR
4704.3949	21 250.7726	15 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.0004	BAL
4708.8594	21 230.625	12 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.0020	EHR
4710.0650	21 225.191	10 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	0.0020	EHR
4710.4881	21 223.284	300	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.0020	EHR

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4712.0633	21 216.190	15 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	0.0020	EHR
4712.1406	21 215.842	150*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	0	0.0020	EHR
4712.1406	21 215.842	150*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.0020	EHR
4712.800	21 212.87	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.020	PAS
4714.3397	21 205.945	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.0020	EHR
4715.1248	21 202.414	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.0020	EHR
4715.2580	21 201.815	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	0.0020	EHR
4715.344	21 201.429	15 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	0.001	MH2
4717.6085	21 191.252	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0	0.0020	EHR
4721.5337	21 173.635	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.0020	EHR
4722.150	21 170.87	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1	0.020	PAS
4722.714	21 168.34	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2	0.020	PAS
4723.810	21 163.43	700*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1	0.020	PAS
4723.810	21 163.43	700*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1	0.020	PAS
4724.162	21 161.86	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	0	0.020	PAS
4725.145	21 157.453	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.001	MH2
4749.5754	21 048.6269	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.0004	BAL
4750.6826	21 043.721	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.0020	EHR
4751.802	21 038.76	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.020	PAS
4752.7320	21 034.6474	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	0.0004	BAL
4753.123	21 032.92	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2	0.020	PAS
4754.440	21 027.09	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.020	PAS
4758.728	21 008.144	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.001	MH2
4780.338	20 913.176	3000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2	0.001	MH2
4780.884	20 910.79	300	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4781.239	20 909.24	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.020	PAS
4784.022	20 897.07	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	0	0.020	PAS
4788.9258	20 875.674	10 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.0010	MH2
4789.5982	20 872.743	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.0020	EHR
4790.2195	20 870.036	5000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	2	0.0020	EHR
4790.728	20 867.82	300	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2	0.020	PAS
4800.111	20 827.030	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	0.001	MH2
4801.076	20 822.84	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.020	PAS
4802.363	20 817.26	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	0.020	PAS
4803.225	20 813.53	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.020	PAS
4809.500	20 786.37	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.020	PAS
4810.0640	20 783.9353	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	3	0.0004	BAL
4810.6392	20 781.450	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2	0.0020	EHR
4814.338	20 765.48	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4816.900	20 754.44	10	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.020	PAS
4817.6386	20 751.2579	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.0004	BAL
4818.7847	20 746.323	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.0020	EHR
4819.937	20 741.36	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.020	PAS
4821.9218	20 732.825	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.0020	EHR
4823.1725	20 727.449	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.0020	EHR
4823.370	20 726.60	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0	0.020	PAS
4825.529	20 717.33	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.020	PAS
4827.338	20 709.564	10 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.001	MH2
4827.587	20 708.496	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.001	MH2
4829.288	20 701.20	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.020	PAS
4837.3139	20 666.8554	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0004	BAL
4842.566	20 644.44	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
4842.941	20 642.84	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2	0.020	PAS
4845.145	20 633.45	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1	0.020	PAS
4845.767	20 630.80	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	0	0.020	PAS
4849.530	20 614.80	300	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.020	PAS
4851.501	20 606.42	600	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.020	PAS
4852.655	20 601.521	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2	0.001	MH2
4859.604	20 572.06	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.020	PAS
4863.0810	20 557.353	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	0.0020	EHR
4864.3729	20 551.894	300	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.0020	EHR
4865.5065	20 547.105	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.0020	EHR

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
4866.476	20 543.012	800	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	0.001	MH2
4867.0189	20 540.721	700	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0	0.0020	EHR
4868.2766	20 535.414	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.0020	EHR
4883.403	20 471.81	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.020	PAS
4884.9170	20 465.4615	10 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	0.0004	BAL
4885.0971	20 464.707	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.0020	EHR
4888.365	20 451.03	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1	0.020	PAS
4892.090	20 435.455	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.001	MH2
4892.228	20 434.88	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.020	PAS
4897.924	20 411.11	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.020	PAS
4899.013	20 406.58	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.020	PAS
4928.235	20 285.577	700	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.001	MH2
4930.944	20 274.43	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0	0.020	PAS
4939.041	20 241.196	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.001	MH2
4944.987	20 216.857	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.001	MH2
4955.3905	20 174.414	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.002	EHR
4957.0335	20 167.7275	10 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.0004	BAL
4957.122	20 167.367	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.001	MH2
4973.5555	20 100.732	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.0020	EHR
4974.760	20 095.87	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.020	PAS
4975.961	20 091.01	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.020	PAS
4979.625	20 076.23	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0	0.020	PAS
4994.930	20 014.717	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	0.001	MH2
4996.209	20 009.59	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.020	PAS
4997.482	20 004.50	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.020	PAS
4998.502	20 000.41	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	0.020	PAS
5000.395	19 992.84	30	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.020	PAS
5003.561	19 980.19	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.020	PAS
5005.1587	19 973.8149	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	0.0004	BAL
5005.3467	19 973.065	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.0030	EHR
5011.003	19 950.520	250	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.001	MH2
5015.187	19 933.88	50	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.020	PAS
5022.870	19 903.386	250	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.001	MH2
5031.3484	19 869.847	2500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.0010	MH2
5031.5087	19 869.213	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.0030	EHR
5036.0016	19 851.487	350	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.0030	EHR
5037.5927	19 845.217	30	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	0.0030	EHR
5037.7512	19 844.5930	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	0.0004	BAL
5041.598	19 829.45	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.020	PAS
5042.853	19 824.52	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.020	PAS
5045.816	19 812.88	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.020	PAS
5046.608	19 809.77	30	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0	0.020	PAS
5052.9443	19 784.925	250	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.0030	EHR
5059.150	19 760.66	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.020	PAS
5074.0459	19 702.646	30	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.0030	EHR
5074.2007	19 702.0452	350	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.0004	BAL
5076.5971	19 692.745	350	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.0030	EHR
5078.7693	19 684.322	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.0030	EHR
5080.383	19 678.070	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	0.001	MH2
5081.360	19 674.29	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.020	PAS
5083.9773	19 664.158	250	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.0030	EHR
5090.321	19 639.65	80	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.020	PAS
5099.0522	19 606.024	250	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.0030	EHR
5104.7011	19 584.3277	350	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	0.0004	BAL
5113.6724	19 549.9698	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.0004	BAL
5116.5032	19 539.1536	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.0004	BAL
5117.0246	19 537.163	350	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.0030	EHR
5120.5059	19 523.880	250	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.0030	EHR
5121.866	19 518.70	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.020	PAS
5122.2565	19 517.2075	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.0004	BAL
5122.3613	19 516.808	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.0030	EHR
5128.280	19 494.28	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.020	PAS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
5143.265	19 437.49	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.020	PAS
5144.9384	19 431.1653	5000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	0.0004	BAL
5145.011	19 430.89	5000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.020	PAS
5145.1351	19 430.422	350	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.0030	EHR
5150.0842	19 411.751	350	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.0030	EHR
5151.9610	19 404.6792	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.0004	BAL
5154.4271	19 395.3953	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.0004	BAL
5156.6672	19 386.9698	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.0004	BAL
5158.9018	19 378.5724	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.0004	BAL
5163.4847	19 361.373	100	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	0.0030	EHR
5182.320	19 291.00	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.020	PAS
5188.6122	19 267.6105	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0004	BAL
5191.3223	19 257.5521	350	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.0004	BAL
5193.1251	19 250.867	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.0030	EHR
5193.224	19 250.500	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.001	MH2
5203.8962	19 211.0217	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.0004	BAL
5206.565	19 201.17	30	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.020	PAS
5208.8648	19 192.6970	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.0004	BAL
5210.5672	19 186.4264	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	0.0004	BAL
5214.3389	19 172.5484	350	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.0004	BAL
5222.3517	19 143.1318	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.0004	BAL
5234.0271	19 100.4303	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0004	BAL
5274.0393	18 955.5240	400	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.0004	BAL
5280.0853	18 933.8191	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	0.0004	BAL
5298.1891	18 869.1234	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.0004	BAL
5304.7580	18 845.7580	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.0004	BAL
5314.7851	18 810.203	300	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.0030	EHR
5316.8046	18 803.059	250	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0030	EHR
5320.550	18 789.82	20	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	0.020	PAS
5326.396	18 769.200	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.001	MH2
5330.6720	18 754.144	5	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.0030	EHR
5330.7775	18 753.7730	6000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.0004	BAL
5333.3083	18 744.874	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.0030	EHR
5335.710	18 736.44	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.020	PAS
5341.0938	18 717.5506	10 000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.0004	BAL
5342.700	18 711.92	10	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1	0.020	PAS
5343.0048	18 710.856	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	0.0030	EHR
5343.2834	18 709.8805	6000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	0	0.0004	BAL
5349.2038	18 689.1730	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.0004	BAL
5353.513	18 674.13	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.020	PAS
5355.1640	18 668.372	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.0030	EHR
5355.3394	18 667.761	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.0030	EHR
5355.4236	18 667.468	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	0.0030	EHR
5358.020	18 658.42	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.020	PAS
5360.0121	18 651.4872	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.0004	BAL
5360.4271	18 650.043	350	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.0030	EHR
5362.2334	18 643.761	250	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	0.0030	EHR
5366.2169	18 629.921	250	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.0030	EHR
5372.3110	18 608.7886	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0004	BAL
5374.975	18 599.566	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.001	MH2
5383.2457	18 570.990	250	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.0030	EHR
5400.5616	18 511.4462	20 000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]^\circ$	0	0.0004	BAL
5410.12	18 478.74	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.02	PAS
5412.6490	18 470.1074	2500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.0004	BAL
5418.5584	18 449.9644	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.0004	BAL
5420.155	18 444.5297	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	0.020	PAS
5433.6513	18 398.7170	2500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.0004	BAL
5447.120	18 353.22	80	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.020	PAS
5448.5091	18 348.5452	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	0	0.0004	BAL
5494.4158	18 195.2419	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.0004	BAL
5507.3442	18 152.529	250	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0030	EHR
5511.176	18 139.91	30	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.020	PAS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
5511.485	18 138.89	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3	0.020	PAS
5520.63	18 108.84	30	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.02	GRE
5533.6788	18 066.1429	750	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0004	BAL
5538.6510	18 049.9246	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.0004	BAL
5559.0978	17 983.536	350	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.0030	EHR
5562.4416	17 972.726	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.0030	EHR
5562.7662	17 971.6771	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3	0.0004	BAL
5563.0531	17 970.750	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.0030	EHR
5576.0394	17 928.898	350	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.0030	EHR
5585.905	17 897.23	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.020	PAS
5589.3472	17 886.211	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0030	EHR
5591.15	17 880.44	80	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.02	GRE
5652.5664	17 686.1707	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.0004	BAL
5656.0258	17 675.353	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.0030	EHR
5656.6588	17 673.3755	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.0004	BAL
5662.5489	17 654.9921	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.0004	BAL
5684.647	17 586.36	250	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.020	PAS
5689.8163	17 570.3846	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.0004	BAL
5715.3409	17 491.916	350	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.0030	EHR
5718.8798	17 481.092	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.0030	EHR
5719.2248	17 480.0379	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3	0.0004	BAL
5719.5300	17 479.105	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.0030	EHR
5748.2985	17 391.6283	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3	0.0004	BAL
5748.6446	17 390.581	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	0.0030	EHR
5760.5885	17 354.5243	700	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.0004	BAL
5764.0525	17 344.095	30	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	0.0030	EHR
5764.4188	17 342.9928	7000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	4	0.0004	BAL
5770.3067	17 325.297	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.0030	EHR
5804.0900	17 224.454	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3	0.0030	EHR
5804.4496	17 223.3868	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	0.0004	BAL
5811.4066	17 202.7684	3000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.0004	BAL
5816.6219	17 187.344	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.0030	EHR
5820.1558	17 176.9084	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	0.0004	BAL
5828.9063	17 151.122	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.0030	EHR
5852.4878	17 082.0157	20 000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	0.0005	MH2
5868.4165	17 035.650	750	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.0030	EHR
5872.1450	17 024.834	750	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.0030	EHR
5872.8275	17 022.8551	5000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.0004	BAL
5881.8950	16 996.6130	10 000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	0.0005	MH2
5898.3287	16 949.258	200	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.0030	EHR
5902.0944	16 938.444	30	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.0030	EHR
5902.4623	16 937.3883	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3	0.0004	BAL
5902.7835	16 936.4667	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.0004	BAL
5906.4294	16 926.0123	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	0.0004	BAL
5913.633	16 905.394	2500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.001	MH2
5918.9068	16 890.3316	2500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.0004	BAL
5919.0290	16 889.983	80	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.0040	EHR
5934.4522	16 846.088	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	0	0.0040	EHR
5939.3154	16 832.294	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.0040	EHR
5944.8340	16 816.6685	5000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	0.0005	MH2
5961.6228	16 769.3107	700	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.0004	BAL
5965.4710	16 758.4933	5000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.0004	BAL
5966.1790	16 756.505	350	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.0040	EHR
5974.6273	16 732.8106	5000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3	0.0004	BAL
5975.5343	16 730.2709	6000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	0.0005	MH2
5982.3753	16 711.140	80	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.0040	EHR
5987.9074	16 695.7006	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.0004	BAL
5991.6477	16 685.278	750	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	0.0040	EHR
6000.9275	16 659.4766	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.0004	BAL
6029.9968	16 579.1656	10 000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	0.0005	MH2
6042.013	16 546.19	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.020	PAS
6046.1348	16 534.9138	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.0004	BAL

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
6064.5359	16 484.7438	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	0	0.0004	BAL
6074.3376	16 458.1438	10 000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	0.0005	MH2
6096.1630	16 399.2211	3000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	0.0005	MH2
6118.0187	16 340.638	150	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.0040	EHR
6128.4498	16 312.8251	1000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	0.0004	BAL
6142.508	16 275.49	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	0.020	PAS
6143.0627	16 274.0210	10 000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	0.0005	MH2
6150.2985	16 254.875	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.0040	EHR
6156.1380	16 239.456	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.0040	EHR
6163.5937	16 219.8125	10 000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	0.0005	MH2
6172.8156	16 195.581	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	0	0.0040	EHR
6174.8829	16 190.1590	700	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3	0.0004	BAL
6175.2842	16 189.107	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	0.0040	EHR
6182.1460	16 171.1381	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.0004	BAL
6183.1575	16 168.493	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.0040	EHR
6189.0649	16 153.0602	700	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.0004	BAL
6193.0663	16 142.6236	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	0.0004	BAL
6202.9740	16 116.840	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.0040	EHR
6205.7775	16 109.5592	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.0004	BAL
6213.8758	16 088.5644	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.0004	BAL
6217.2812	16 079.7523	10 000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	0.0005	MH2
6225.7350	16 057.918	500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.0040	EHR
6246.7294	16 003.9501	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.0004	BAL
6249.593	15 996.62	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.020	PAS
6252.732	15 988.59	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.020	PAS
6258.7884	15 973.115	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.0040	EHR
6266.4952	15 953.4708	10 000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	0.0005	MH2
6273.0141	15 936.892	700	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.0040	EHR
6276.0327	15 929.227	500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	0	0.0040	EHR
6293.7447	15 884.3989	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.0004	BAL
6304.7893	15 856.5732	1000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	0.0005	MH2
6313.6855	15 834.231	1500	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	0	0.0040	EHR
6328.1646	15 798.0019	3000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.0004	BAL
6330.8894	15 791.202	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.0040	EHR
6334.4276	15 782.3821	10 000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	0.0005	MH2
6351.8532	15 739.085	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.0040	EHR
6364.9963	15 706.586	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.0040	EHR
6382.9914	15 662.3058	10 000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	0.0005	MH2
6401.076	15 618.06	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.020	PAS
6402.248	15 615.197	20 000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	0.001	MH2
6409.7469	15 596.929	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.0040	EHR
6421.7044	15 567.887	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	0	0.0040	EHR
6444.7118	15 512.3105	1500	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.0004	BAL
6506.5277	15 364.9354	15 000	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	0.0005	MH2
6532.8824	15 302.9512	1000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	0.0005	MH2
6598.9528	15 149.7353	10 000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	0.0005	MH2
6602.9007	15 140.677	1000	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.0040	EHR
6640.0095	15 056.062	100	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.0040	EHR
6640.80	15 054.27	50	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.02	GRE
6652.0925	15 028.7137	1500	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	0.0004	BAL
6666.892	14 995.3526	1000	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.007	PE
6678.2766	14 969.7898	5000	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	0.0005	MH2
6717.0430	14 883.3945	700	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	0.0005	MH2
6721.1342	14 874.335	20	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.0050	EHR
6738.0320	14 837.033	700	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.0050	EHR
6759.5821	14 789.732	150	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.0050	EHR
6929.4672	14 427.1441	*100 000*	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	0.0004	BAL
7024.0500	14 232.8758	*34 000*	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	0.0004	BAL
7032.4128	14 215.9504	*85 000*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	0.0004	BAL
7051.2922	14 177.8883	*2200*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.0008	SBS
7059.1079	14 162.1910	*10 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	0.0004	BAL
7064.762	14 150.856	*80*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	0.003	SBS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
7112.3075	14 056.2594	*110*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.0008	SBS
7138.5400	14 004.606	*55*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.0011	SBS
7173.9380	13 935.5044	*77 000*	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	0.0004	BAL
7245.1665	13 798.5028	*77 000*	$2s^22p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	0.0004	BAL
7304.8422	13 685.7789	*89*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.0008	SBS
7438.8981	13 439.1498	*60 000*	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	0.0004	BAL
7472.4383	13 378.8282	*3100*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.0004	BAL
7488.8712	13 349.4711	*32 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	0.0004	BAL
7535.7739	13 266.3844	*28 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	0.0004	BAL
7544.0439	13 251.8415	*13 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0	0.0004	BAL
7621.33	13 117.46	50	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	0	0.02	GRE
7724.6233	12 942.0533	*60*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.0009	SBS
7833.0281	12 762.9433	*56*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	0.0009	SBS
7839.0520	12 753.1358	*230*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	0.0009	SBS
7839.9855	12 751.617	*7*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	0.0018	SBS
7927.1172	12 611.4573	*300*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.0004	BAL
7936.9957	12 595.7610	*1300*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	0.0009	SBS
7943.1805	12 585.9535	*7900*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	0.0004	BAL
7944.1404	12 584.4328	*200*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	0.0009	SBS
8024.11	12 459.01	3	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2	0.10	MH1
8041.79	12 431.62	3	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3	0.10	MH1
8076.06	12 378.87	1	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	0	0.10	MH1
8082.4576	12 369.0732	*5700*	$2s^22p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	0.0004	BAL
8093.08	12 352.84	3	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0	0.10	MH1
8118.5495	12 314.0853	*3800*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.0004	BAL
8128.9110	12 298.3893	*1200*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	0.0009	SBS
8136.4061	12 287.0603	*17 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	0.0004	BAL
8248.6826	12 119.8164	*310*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.0009	SBS
8259.3795	12 104.1199	*3300*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	0.0004	BAL
8266.0769	12 094.3129	*7200*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	0.0009	SBS
8267.1166	12 092.7918	*990*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	0.0004	BAL
8300.3248	12 044.4108	*29 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	0.0004	BAL
8301.5570	12 042.6230	*1900*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	0.0009	SBS
8365.7464	11 950.2218	*4600*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	0.0004	BAL
8376.3590	11 935.0813	*6600*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	0.0009	SBS
8377.6070	11 933.3034	*76 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	0.0010	MH2
8417.1597	11 877.2284	*2700*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	0.0009	SBS
8418.4265	11 875.4411	*26 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	0.0004	BAL
8463.3569	11 812.3969	*3700*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.0004	BAL
8484.4424	11 783.0409	*1300*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	0.0004	BAL
8495.3591	11 767.8995	*69 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	0.0004	BAL
8544.6952	11 699.9533	*1600*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	0.0004	BAL
8571.3535	11 663.5647	*2900*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.0004	BAL
8582.9031	11 647.8696	*1600*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	0.0009	SBS
8591.2583	11 636.5419	*41 000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	0.0004	BAL
8634.6472	11 578.0688	*35 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	0.0004	BAL
8635.3177	11 577.1698	*740*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.0010	SBS
8647.0412	11 561.4737	*6000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	0.0009	SBS
8654.3828	11 551.6661	*64 000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	0.0009	SBS
8655.5220	11 550.1457	*7600*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	0.0009	SBS
8679.4936	11 518.2459	*13 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.0010	SBS
8681.9216	11 515.0247	*15 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.0004	BAL
8704.1122	11 485.6680	*2900*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	0.0010	SBS
8767.536	11 402.581	*160*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	0.004	SBS
8771.6575	11 397.2240	*10 000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.0010	SBS
8778.7322	11 388.0391	*2100*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0	0.0010	SBS
8780.6223	11 385.5878	*57 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	0.0004	BAL
8782.0015	11 383.7997	*230*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	0.0010	SBS
8783.7539	11 381.5286	*43 000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	0.0004	BAL
8792.5056	11 370.1999	*260*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	0.0010	SBS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
8830.9067	11 320.7570	*550*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.0010	SBS
8853.8669	11 291.3996	*27 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	0.0004	BAL
8865.3057	11 276.8305	*2100*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	0.0004	BAL
8865.7562	11 276.2575	*15 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	0.0004	BAL
8892.2315	11 242.684	*12*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	0.0017	SBS
8895.6	11 238.43	3	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	0.1	MH1
8915.44	11 213.42	4	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	0.10	MH1
8919.5007	11 208.3127	*6400*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	0.0010	SBS
8927.4	11 198.40	3	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.1	MH1
8929.2503	11 196.0746	*18*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	0.0012	SBS
8941.5133	11 180.7196	*8*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	0.0014	SBS
8962.328	11 154.753	*4*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	0.004	SBS
8968.6	11 146.95	3	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	0.1	MH1
8988.5564	11 122.2037	*1800*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	0.0010	SBS
9036.9985	11 062.5843	*9*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.0016	SBS
9046.8	11 050.60	1*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1	0.1	MH1
9046.8	11 050.60	1*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	2	0.1	MH1
9049.086	11 047.808	*4*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	0.004	SBS
9052.424	11 043.734	*3*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.008	SBS
9052.642	11 043.468	*7*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	0.002	SBS
9073.033	11 018.649	*5*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	0.002	SBS
9102.1	10 983.46	1	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[9/2]$	5	0.1	MH1
9103.53	10 981.74	4	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[9/2]$	4	0.10	MH1
9115.3	10 967.56	1*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	2	0.1	MH1
9115.3	10 967.56	1*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	3	0.1	MH1
9148.6720	10 927.5491	*12 000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	0.0010	SBS
9193.8	10 873.91	1*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	3	0.1	MH1
9193.8	10 873.91	1*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	4	0.1	MH1
9201.7588	10 864.5060	*8900*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.0010	SBS
9220.0598	10 842.9411	*6000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	0.0010	SBS
9221.5802	10 841.1533	*2200*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	0.0010	SBS
9226.6910	10 835.1483	*1800*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	0.0010	SBS
9275.5191	10 778.1102	*910*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.0010	SBS
9 300.8532	10 748.7524	*7700*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	0.0010	SBS
9 310.5833	10 737.5193	*830*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0	0.0010	SBS
9 313.9731	10 733.6115	*2700*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	0.0010	SBS
9 326.5072	10 719.1864	*6900*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.0010	SBS
9 340.5	10 703.13	3	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	1	0.1	MH1
9 353.3	10 688.48	4*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	1	0.1	MH1
9 353.3	10 688.48	4*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	2	0.1	MH1
9 373.3079	10 665.6659	*1500*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	0.0010	SBS
9 377.2276	10 661.2077	*7*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	0.0013	SBS
9 410.75	10 623.23	9	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})8f$	$^2[9/2]$	5	0.10	MH1
9 412.32	10 621.46	6	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})8f$	$^2[9/2]$	4	0.10	MH1
9 425.3797	10 606.7422	*4800*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	0.0010	SBS
9 433.0082	10 598.1645	*66*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.0010	SBS
9 443.8	10 586.05	3	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})8f$	$^2[7/2]$	3	0.1	MH1
9 445.26	10 584.42	4	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})8f$	$^2[7/2]$	4	0.10	MH1
9 454.0	10 574.63	1	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})8f$	$^2[5/2]$	3	0.1	MH1
9 459.2110	10 568.8068	*2800*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	0.0010	SBS
9 486.6825	10 538.2018	*5000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	0.0010	SBS
9 506.59	10 516.13	4	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	3	0.10	MH1
9 508.4	10 514.13	7	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	4	0.1	MH1
9 534.1640	10 485.7203	*6100*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	0.0010	SBS
9 547.4052	10 471.1778	*2800*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0	0.0010	SBS
9 574.002	10 442.089	*2*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	0.003	SBS
9 642.2	10 368.23	1	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	0.1	MH1
9 665.4200	10 343.3251	*18 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	0.0005	HPA
9 724.8	10 280.17	1	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	0.1	MH1
9 788.1	10 213.69	3	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	0.1	MH1
9 823.453	10 176.929	*3*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	0.009	SBS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
9 837.507	10 162.391	*13**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	0.012	SBS
9 837.507	10 162.391	*13**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	0.012	SBS
9 897.30	10 101.00	4	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	4	0.10	MH1
9 899.06	10 099.20	3*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	4	0.10	MH1
9 899.06	10 099.20	3*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	3	0.10	MH1
9 900.594	10 097.636	30S*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	4	0.010	SBS
9 900.594	10 097.636	30S*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	5	0.010	SBS
9 902.337	10 095.858	25S	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	4	0.010	SBS
9 915.195	10 082.766	*13*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3	0.006	SBS
9 918.602	10 079.303	*6**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	0.008	SBS
9 918.602	10 079.303	*6**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	0.008	SBS
9 936.853	10 060.790	*10*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})7f$	$^2[7/2]$	3	0.003	SBS
9 938.352	10 059.273	*16*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})7f$	$^2[7/2]$	4	0.002	SBS
9 944.140	10 053.418	*9*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	2	0.007	SBS
9 945.058	10 052.489	*4**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2	0.004	SBS
9 945.058	10 052.489	*4**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	3	0.004	SBS
9 948.061	10 049.45	*9*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})7f$	$^2[5/2]$	3	0.020	SBS
9 963.605	10 033.777	*7*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})7f$	$^2[5/2]$	2	0.006	SBS
9 974.2	10 023.12	3	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2	0.1	MH1
10 005.600	9991.664	*13*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	3	0.004	SBS
10 007.385	9989.882	*20*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	4	0.004	SBS
10 008.685	9988.585	*5*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3	0.011	SBS
10 037.1	9960.31	3	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	3	0.1	MH1
10 038.9	9958.52	3	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	4	0.1	MH1
10 210.835	9790.835	*2*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	0	0.004	SBS
10 224.659	9777.597	*4*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	0.002	SBS
10 245.7132	9757.5052	*16*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	0.0013	SBS
10 295.4162	9710.3992	*420*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	0.0011	SBS
10 432.5909	9582.7207	*13**	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1	0.0017	SBS
10 432.5909	9582.7207	*13**	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	0.0017	SBS
10 562.4089	9464.9440	*8000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	0.0012	SBS
10 620.6637	9413.0285	*780*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	0.0015	SBS
10 673.870	9366.107	*19*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.003	SBS
10 690.457	9351.576	*55**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.005	SBS
10 690.457	9351.576	*55**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.005	SBS
10 758.204	9292.686	*15*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	0.013	SBS
10 760.270	9290.902	*14**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	0.004	SBS
10 760.270	9290.902	*14**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	0.004	SBS
10 764.023	9287.662	*150*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	5	0.003	SBS
10 766.087	9285.882	*110*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	4	0.003	SBS
10 780.531	9273.441	*69*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	0.004	SBS
10 786.286	9268.493	*16**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.003	SBS
10 786.286	9268.493	*16**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.003	SBS
10 790.862	9264.562	*2*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1	0.004	SBS
10 798.0430	9258.4012	*6100*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	0.0005	HPA
10 806.358	9251.278	*54*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	3	0.006	SBS
10 808.128	9249.762	*74*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	4	0.005	SBS
10 814.755	9244.095	*40*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.007	SBS
10 819.819	9239.768	*92*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	3	0.006	SBS
10 838.2180	9224.0824	*37*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2	0.0014	SBS
10 844.4774	9218.7583	*9400*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	0.0005	HPA
10 886.277	9183.362	*58*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	0.008	SBS
10 888.392	9181.577	*85*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	0.008	SBS
10 891.151	9179.252	*25*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	0.006	SBS
11 020.8794	9071.2017	*78*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0	0.0015	SBS
11 044.0002	9052.2110	*64*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	0	0.0015	SBS
11 049.7221	9047.5235	*200*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	0.0014	SBS
11 060.808	9038.4556	*29*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	0.002	SBS
11 120.2780	8990.1190	*73*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	0.0016	SBS
11 134.5095	8978.6283	*49*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	0.0019	SBS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
11 138.4329	8975.4657	*55*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	0.0015	SBS
11 143.0200	8971.7709	*26 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	0.0005	HPA
11 160.2133	8957.9491	*270*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	3	0.0014	SBS
11 177.5246	8944.0755	*49 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	0.0005	HPA
11 292.9647	8852.6466	*65*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	0.0015	SBS
11 298.4416	8848.3553	*46*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	0.0016	SBS
11 303.8878	8844.0922	*140*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	0.0014	SBS
11 304.5457	8843.5775	*100*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	0.0014	SBS
11 329.6259	8824.0007	*41*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	0.0019	SBS
11 333.6873	8820.8386	*37*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	0.0018	SBS
11 366.6716	8795.2420	*110*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	0.0014	SBS
11 390.4333	8776.8942	*15 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	0.0005	HPA
11 409.1338	8762.5082	*8800*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	0.0005	HPA
11 522.7450	8676.1124	*33 000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	0.0014	SBS
11 525.0203	8674.3995	*17 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	0.0014	SBS
11 536.3446	8665.8846	*9100*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	0.0014	SBS
11 601.5369	8617.1887	*2600*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	0.0014	SBS
11 614.0805	8607.8818	*13 000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	0.0005	HPA
11 688.0028	8553.4403	*2800*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	0.0014	SBS
11 766.7929	8496.1668	*15 000*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	0.0005	HPA
11 789.0444	8480.1306	*13 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	0.0014	SBS
11 789.8894	8479.5228	*3200*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	0.0014	SBS
11 979.781	8345.1142	*20*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.003	SBS
11 984.9139	8341.5401	*7400*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	0.0014	SBS
11 996.569	8333.4360	*18*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.002	SBS
11 997.813	8332.572	*5*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0	0.005	SBS
12 066.3343	8285.2537	*23 000*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	0.0005	HPA
12 388.983	8069.480	*3*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	0.005	SBS
12 408.769	8056.613	*4*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	0.005	SBS
12 430.505	8042.5253	*18*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	0.003	SBS
12 453.3684	8027.7596	*75*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	0.0014	SBS
12 459.3903	8023.8796	*4300*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	0.0016	SBS
12 464.1163	8020.8372	*160*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.0014	SBS
12 473.468	8014.824	*23**	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.003	SBS
12 473.468	8014.824	*23**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.003	SBS
12 486.7315	8006.3104	*450**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.0014	SBS
12 486.7315	8006.3104	*450**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.0014	SBS
12 520.2343	7984.8864	*21*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	2	0.0018	SBS
12 537.742	7973.7361	*15*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.003	SBS
12 559.7621	7959.7566	*48*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	0.0015	SBS
12 571.0054	7952.6375	*130*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4	0.0016	SBS
12 573.8231	7950.8554	*96**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4	0.0015	SBS
12 573.8231	7950.8554	*96**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3	0.0015	SBS
12 577.349	7948.627	*8*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.005	SBS
12 580.144	7946.861	*6*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.004	SBS
12 584.6021	7944.0453	*1200*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	5	0.0014	SBS
12 587.4256	7942.2634	*850*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	4	0.0014	SBS
12 595.0049	7937.4840	*1600*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	0.0014	SBS
12 600.7778	7933.8475	*32*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	3	0.0019	SBS
12 601.293	7933.523	*13*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	2	0.016	MKBB
12 603.3179	7932.2485	*18*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2	0.0020	SBS
12 604.1773	7931.7077	*550*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.0014	SBS
12 617.6692	7923.2264	*150*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.0014	SBS
12 631.024	7914.849	*6*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	0.005	SBS
12 640.3174	7909.0301	*500*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	3	0.0014	SBS
12 642.7394	7907.5149	*710*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	4	0.0014	SBS
12 650.9824	7902.3626	*330*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.0014	SBS
12 658.3460	7897.7657	*470*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	3	0.0014	SBS
12 664.6063	7893.8617	*98**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.0014	SBS
12 664.6063	7893.8617	*98**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.0014	SBS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
12 683.5329	7882.0824	*300*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	2	0.0014	SBS
12 689.2032	7878.5602	*6500*	$2s^22p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	0.0014	SBS
12 718.797	7860.2284	*23*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.002	SBS
12 726.785	7855.295	*11*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.004	SBS
12 746.2264	7843.3137	*540*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3	0.0015	SBS
12 749.1248	7841.5306	*710*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4	0.0015	SBS
12 752.7222	7839.3186	*120**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.0014	SBS
12 752.7222	7839.3186	*120**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.0014	SBS
12 755.6507	7837.5188	*170*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.0014	SBS
12 759.9494	7834.8784	*37*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	0.0016	SBS
12 766.582	7830.808	*6**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.003	SBS
12 766.582	7830.808	*6**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.003	SBS
12 769.5250	7829.0032	*1600*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	0.0014	SBS
12 776.652	7824.6359	*16*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.003	SBS
12 853.034	7778.136	*5*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.004	SBS
12 864.091	7771.451	*7*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.003	SBS
12 864.730	7771.0649	*11*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.002	SBS
12 887.1630	7757.5378	*14*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	0.0017	SBS
12 912.0141	7742.6073	*8400*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	0.0014	SBS
12 980.0736	7702.0099	*25*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.0015	SBS
13 054.788	7657.9304	*12*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.003	SBS
13 058.815	7655.5690	*6*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0	0.003	SBS
13 096.396	7633.601	*6*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.004	SBS
13 126.171	7616.285	*6*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.005	SBS
13 127.681	7615.4087	*12*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.002	SBS
13 145.446	7605.117	*5*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0	0.005	SBS
13 219.2426	7562.6616	*4500*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	0.0014	SBS
13 251.199	7544.4239	*8*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.002	SBS
13 296.547	7518.6934	*6*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.004	SBS
13 339.714	7494.3634	*10*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.003	SBS
13 389.290	7466.614	*7*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.005	SBS
13 527.073	7390.562	*5*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	0.004	SBS
13 585.088	7359.000	*5*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.007	SBS
13 738.735	7276.701	*4*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.004	SBS
13 866.305	7209.7555	*9*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.002	SBS
13 908.173	7188.0517	*5*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	0.003	SBS
13 970.972	7155.742	*3*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.005	SBS
14 012.921	7134.320	*4*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3	0.005	SBS
14 015.900	7132.804	*6*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4	0.006	SBS
14 043.107	7118.9849	*9*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.003	SBS
14 074.110	7103.303	*5*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.004	SBS
14 283.603	6999.122	*7*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.011	SBS
14 300.8338	6990.6883	*130*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.0016	SBS
14 342.1609	6970.5446	*120*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.0016	SBS
14 353.3494	6965.1110	*51*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	0.0016	SBS
14 384.113	6950.215	*5*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	0	0.005	SBS
14 499.9217	6894.7044	*18*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.0018	SBS
14 929.8061	6696.1806	*110*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.0017	SBS
14 931.183	6695.5633	*7*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.003	SBS
14 970.774	6677.8563	*15*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.002	SBS
14 984.854	6671.5819	*22*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	0.002	SBS
14 986.3193	6670.9294	*530*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	0.0016	SBS
15 058.9894	6638.7376	*19*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.0020	SBS
15 074.1688	6632.0525	*140*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.0017	SBS
15 075.0431	6631.6679	*48*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.0017	SBS
15 083.912	6627.769	*4*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.009	SBS
15 085.3103	6627.1543	*94*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.0017	SBS
15 106.454	6617.8785	*13*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.002	SBS
15 125.728	6609.446	*5*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.005	SBS
15 140.0981	6603.1725	*350*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	0.0017	SBS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
15 171.965	6589.3035	*6*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.004	SBS
15 174.3113	6588.2845	*32*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.0019	SBS
15 176.335	6587.406	*4*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.007	SBS
15 189.7238	6581.5996	*63*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.0018	SBS
15 190.6122	6581.2147	*99*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.0017	SBS
15 190.9319	6581.0762	*270*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	0.0017	SBS
15 192.6365	6580.3378	*48*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.0018	SBS
15 230.7144	6563.8865	*5300*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	0.0017	SBS
15 348.1896	6513.6465	*160*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.0017	SBS
15 370.0789	6504.3701	*74*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.0017	SBS
15 390.028	6495.9391	*17*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.002	SBS
15 407.5930	6488.5334	*250*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.0017	SBS
15 409.058	6487.916	*6*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.006	SBS
15 431.122	6478.640	*4*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.007	SBS
15 450.863	6470.3623	*11*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	0.003	SBS
15 451.2285	6470.2093	*110*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.0017	SBS
15 466.2267	6463.9349	*25*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	0.0019	SBS
15 499.484	6450.0653	*23*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.002	SBS
15 500.897	6449.4773	*13*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.003	SBS
15 604.2140	6406.7747	*65*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0017	SBS
15 761.050	6343.0219	*4*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0	0.004	SBS
15 802.647	6326.3254	*4*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.005	SBS
15 812.181	6322.5108	*7*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.004	SBS
16 022.7694	6239.4137	*130*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	0.0018	SBS
16 045.498	6230.5754	*5*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0	0.003	SBS
16 098.4859	6210.0677	*47*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.0018	SBS
16 252.672	6151.154	*5*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	0	0.007	SBS
16 263.592	6147.0238	*7*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.005	SBS
16 264.2476	6146.7761	*44*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	3	0.0019	SBS
16 268.353	6145.2250	*8*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	0.003	SBS
16 268.9559	6144.9972	*63*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	4	0.0018	SBS
16 346.9230	6115.6885	*40*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.0019	SBS
16 405.2557	6093.9428	*150*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0018	SBS
16 423.662	6087.1132	*15*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.003	SBS
16 468.993	6070.3586	*19*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.002	SBS
16 474.7531	6068.2360	*81*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.0018	SBS
16 528.0869	6048.6547	*34*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	0.0019	SBS
16 591.5089	6025.5334	*34*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0019	SBS
16 607.020	6019.9054	*30*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.002	SBS
16 609.4386	6019.0289	*89*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.0018	SBS
16 634.0497	6010.1234	*35*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.0019	SBS
16 667.111	5998.2016	*16*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0	0.002	SBS
16 788.7921	5954.7281	*54*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.0019	SBS
16 861.6497	5928.9983	*37*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.0020	SBS
16 910.058	5912.0253	*11*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.002	SBS
16 983.9743	5886.2956	*67*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2	0.0019	SBS
17 112.136	5842.2101	*5*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	0.006	SBS
17 161.9348	5825.2578	*1800*	$2s^22p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	0.0019	SBS
17 234.185	5800.8367	*7*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.005	SBS
17 294.240	5780.693	*7*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.006	SBS
17 310.510	5775.2599	*4*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	0.006	SBS
17 961.168	5566.0468	*13*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1	0.002	SBS
18 029.6473	5544.9060	*160*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.0020	SBS
18 035.8121	5543.0107	*1900*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.0020	SBS
18 083.181	5528.4909	*4500*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.003	SBS
18 083.263	5528.4656	*910*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.004	SBS
18 210.3066	5489.8966	*250*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	0.0020	SBS
18 221.0868	5486.6486	*1600*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	0.0020	SBS
18 227.0157	5484.8639	*1300*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	0.0020	SBS
18 247.4481	5478.7223	*87*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.0020	SBS

TABLE 2. —Continued

Observed air wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
18 253.3198	5476.9599	*64*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.0020	SBS
18 276.6415	5469.9711	*14 000*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	0.0020	SBS
18 282.6140	5468.1842	*10 000*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	0.0020	SBS
18 303.9674	5461.8050	*6800*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.0020	SBS
18 359.0945	5445.4048	*1900*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.0020	SBS
18 371.441	5441.7452	*9*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1	0.003	SBS
18 383.9858	5438.0319	*360*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.0020	SBS
18 384.8256	5437.7835	*6400*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	3	0.0020	SBS
18 389.1674	5436.4996	*480*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	0.0020	SBS
18 389.9366	5436.2722	*8600*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	4	0.0020	SBS
18 402.8356	5432.4618	*3900*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.0020	SBS
18 422.4016	5426.6921	*6300*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	0.0020	SBS
18 423.200	5426.457	*26*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	3	0.007	SBS
18 458.6404	5416.0382	*1300**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.0020	SBS
18 458.6404	5416.0382	*1300**	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.0020	SBS
18 475.7997	5411.0081	*4100*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	0.0020	SBS
18 591.541	5377.3221	*6900*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	0.002	SBS
18 597.698	5375.5419	*9500*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	0.002	SBS
18 618.908	5369.4181	*1600*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	0.002	SBS
18 625.159	5367.6161	*2000*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	0.002	SBS
18 655.605	5358.856	9	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	0.010	CHNG
18 676.080	5352.9812	*87*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	0.002	SBS
18 679.45	5352.016	14	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	0	0.03	MKBB
18 682.238	5351.2167	*130*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	0.002	SBS
18 898.826	5289.8897	*30*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.002	SBS
18 937.552	5279.0722	*150*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.002	SBS
18 944.644	5277.0959	*6*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.003	SBS
19 111.191	5231.1081	*5*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.004	SBS
19 573.750	5107.4887	*260*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	0.002	SBS
19 577.110	5106.6120	*790*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	0.002	SBS
19 772.462	5056.1589	*32*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	0.002	SBS
19 877.309	5029.4890	*5*	$2s^22p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	0.006	SBS

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
20 140.224	4965.188	1	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3	0.012	CHNG
20 355.771	4912.6117	*630*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	0.002	SBS
20 359.404	4911.7351	*43*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	0.002	SBS
20 372.201	4908.650	*2*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.009	SBS
20 417.199	4897.8314	*8*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.003	SBS
20 421.587	4896.7792	*37*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3	0.002	SBS
20 425.447	4895.854	*3*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.009	SBS
20 854.446	4795.1406	*11*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.003	SBS
20 901.599	4784.3229	*7*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.005	SBS
20 910.236	4782.3467	*29*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.002	SBS
20 966.936	4769.4140	*2*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.005	SBS
21 014.614	4758.5932	*11*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.004	SBS
21 019.261	4757.5412	*8*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3	0.004	SBS
21 023.342	4756.6177	*3*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.007	SBS
21 047.013	4751.2680	*2700*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	0.002	SBS
21 191.366	4718.903	4	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	0.014	CHNG
21 225.899	4711.226	*11**	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1	0.019	SBS
21 225.899	4711.226	*11**	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2	0.019	SBS
21 331.283	4687.951	*26*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	5	0.015	SBS
21 336.274	4686.854	*20*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	4	0.014	CHNG
21 374.55	4678.462	*15*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3	0.06	SBS
21 392.749	4674.481	*10**	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})7f$	$^2[5/2]$	3	0.014	CHNG
21 392.749	4674.481	*10**	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})7f$	$^2[7/2]$	3	0.014	CHNG

TABLE 2. —Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
21 396.970	4673.559	*15*	$2s^22p^5(^2P^o_{1/2})4d$	$^2[5/2]^o$	3	–	$2s^22p^5(^2P^o_{1/2})7f$	$^2[7/2]$	4	0.014	CHNG
21 401.796	4672.505	*12*	$2s^22p^5(^2P^o_{1/2})4d$	$^2[3/2]^o$	2	–	$2s^22p^5(^2P^o_{1/2})7f$	$^2[5/2]$	3	0.014	CHNG
21 420.939	4668.3294	*30*	$2s^22p^5(^2P^o_{1/2})3d$	$^2[5/2]^o$	2	–	$2s^22p^5(^2P^o_{3/2})4f$	$^2[7/2]$	3	0.003	SBS
21 427.883	4666.8167	*46*	$2s^22p^5(^2P^o_{1/2})3d$	$^2[5/2]^o$	3	–	$2s^22p^5(^2P^o_{3/2})4f$	$^2[7/2]$	4	0.003	SBS
21 457.276	4660.4239	*13*	$2s^22p^5(^2P^o_{1/2})3d$	$^2[5/2]^o$	2	–	$2s^22p^5(^2P^o_{3/2})4f$	$^2[5/2]$	2	0.004	SBS
21 464.337	4658.8908	*17*	$2s^22p^5(^2P^o_{1/2})3d$	$^2[5/2]^o$	3	–	$2s^22p^5(^2P^o_{3/2})4f$	$^2[5/2]$	3	0.003	SBS
21 504.71	4650.144	20	$2s^22p^5(^2P^o_{1/2})3d$	$^2[5/2]^o$	3	–	$2s^22p^5(^2P^o_{3/2})4f$	$^2[9/2]$	4	0.005	MKBB
21 509.615	4649.0836	*90*	$2s^22p^5(^2P^o_{1/2})3d$	$^2[3/2]^o$	2	–	$2s^22p^5(^2P^o_{3/2})4f$	$^2[5/2]$	3	0.002	SBS
21 534.557	4643.699	*8*	$2s^22p^5(^2P^o_{3/2})4d$	$^2[5/2]^o$	2	–	$2s^22p^5(^2P^o_{3/2})7f$	$^2[7/2]$	3	0.014	CHNG
21 539.34	4642.668	*18*	$2s^22p^5(^2P^o_{3/2})4d$	$^2[5/2]^o$	3	–	$2s^22p^5(^2P^o_{3/2})7f$	$^2[7/2]$	4	0.05	SBS
21 569.002	4636.283	*20**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[3/2]$	1	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[5/2]^o$	2	0.016	SBS
21 569.002	4636.283	*20**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[3/2]$	2	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[5/2]^o$	3	0.016	SBS
21 582.413	4633.4022	*34*	$2s^22p^5(^2P^o_{1/2})3d$	$^2[3/2]^o$	1	–	$2s^22p^5(^2P^o_{3/2})4f$	$^2[5/2]$	2	0.003	SBS
21 585.760	4632.6837	*32*	$2s^22p^5(^2P^o_{1/2})3d$	$^2[3/2]^o$	2	–	$2s^22p^5(^2P^o_{3/2})4f$	$^2[3/2]$	2	0.003	SBS
21 602.349	4629.126	*36**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[9/2]$	5	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[11/2]^o$	6	0.014	SBS
21 602.349	4629.126	*36**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[9/2]$	4	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[11/2]^o$	5	0.014	SBS
21 626.639	4623.927	*15**	$2s^22p^5(^2P^o_{1/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^o_{1/2})7g$	$^2[9/2]^o$	5	0.014	CHNG
21 626.639	4623.927	*15**	$2s^22p^5(^2P^o_{1/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^o_{1/2})7g$	$^2[9/2]^o$	4	0.014	CHNG
21 627.560	4623.730	*12**	$2s^22p^5(^2P^o_{1/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^o_{1/2})7g$	$^2[7/2]^o$	3	0.014	CHNG
21 627.560	4623.730	*12**	$2s^22p^5(^2P^o_{1/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^o_{1/2})7g$	$^2[7/2]^o$	4	0.014	CHNG
21 638.469	4621.399	*23**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[7/2]^o$	3	0.014	CHNG
21 638.469	4621.399	*23**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[7/2]^o$	4	0.014	CHNG
21 645.598	4619.877	*3**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[5/2]^o$	3	0.014	CHNG
21 645.598	4619.877	*3**	$2s^22p^5(^2P^o_{3/2})5p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^o_{3/2})8d$	$^2[5/2]^o$	2	0.014	CHNG
21 645.598	4619.877	*3**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[5/2]^o$	3	0.014	CHNG
21 645.598	4619.877	*3**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[5/2]^o$	2	0.014	CHNG
21 659.251	4616.9648	*15*	$2s^22p^5(^2P^o_{1/2})3d$	$^2[3/2]^o$	1	–	$2s^22p^5(^2P^o_{3/2})4f$	$^2[3/2]$	1	0.004	SBS
21 673.267	4613.979	*23**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[9/2]^o$	4	0.012	SBS
21 673.267	4613.979	*23**	$2s^22p^5(^2P^o_{3/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^o_{3/2})7g$	$^2[9/2]^o$	5	0.012	SBS
21 674.67	4613.681	*6*	$2s^22p^5(^2P^o_{1/2})5p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^o_{3/2})12s$	$^2[3/2]^o$	1	0.06	SBS
21 714.039	4605.3155	*2900*	$2s^22p^5(^2P^o_{3/2})4s$	$^2[3/2]^o$	1	–	$2s^22p^5(^2P^o_{3/2})4p$	$^2[1/2]$	0	0.002	SBS
22 177.292	4509.1169	*78*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[3/2]^o$	1	0.007	SBS
22 253.432	4493.6889	*1300*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[3/2]^o$	2	0.003	SBS
22 434.265	4457.4672	*1300*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[1/2]^o$	1	0.003	SBS
22 472.920	4449.8001	*540*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[1/2]^o$	0	0.003	SBS
22 536.528	4437.2408	*8500*	$2s^22p^5(^2P^o_{3/2})4s$	$^2[3/2]^o$	2	–	$2s^22p^5(^2P^o_{3/2})4p$	$^2[3/2]$	2	0.003	SBS
22 667.971	4411.5108	*1300*	$2s^22p^5(^2P^o_{3/2})4s$	$^2[3/2]^o$	2	–	$2s^22p^5(^2P^o_{3/2})4p$	$^2[3/2]$	1	0.003	SBS
22 693.959	4406.4591	*210*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^o_{1/2})4d$	$^2[3/2]^o$	1	0.003	SBS
23 106.784	4327.7334	*2500*	$2s^22p^5(^2P^o_{1/2})4s$	$^2[1/2]^o$	0	–	$2s^22p^5(^2P^o_{1/2})4p$	$^2[1/2]$	1	0.003	SBS
23 266.619	4298.0031	*3800*	$2s^22p^5(^2P^o_{3/2})4s$	$^2[3/2]^o$	2	–	$2s^22p^5(^2P^o_{3/2})4p$	$^2[5/2]$	2	0.003	SBS
23 379.343	4277.2802	*5000*	$2s^22p^5(^2P^o_{1/2})4s$	$^2[1/2]^o$	0	–	$2s^22p^5(^2P^o_{1/2})4p$	$^2[3/2]$	1	0.003	SBS
23 571.764	4242.3638	*3400*	$2s^22p^5(^2P^o_{3/2})4s$	$^2[3/2]^o$	1	–	$2s^22p^5(^2P^o_{3/2})4p$	$^2[3/2]$	2	0.003	SBS
23 642.934	4229.5935	*17 000*	$2s^22p^5(^2P^o_{3/2})4s$	$^2[3/2]^o$	2	–	$2s^22p^5(^2P^o_{3/2})4p$	$^2[5/2]$	3	0.003	SBS
23 708.130	4217.9623	*1200*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[5/2]^o$	3	0.003	SBS
23 714.099	4216.9007	*74*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[5/2]^o$	2	0.003	SBS
23 715.599	4216.6339	*5900*	$2s^22p^5(^2P^o_{3/2})4s$	$^2[3/2]^o$	1	–	$2s^22p^5(^2P^o_{3/2})4p$	$^2[3/2]$	1	0.003	SBS
23 918.541	4180.8571	*170*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[3/2]^o$	2	0.003	SBS
23 957.931	4173.9831	*11 000*	$2s^22p^5(^2P^o_{1/2})4s$	$^2[1/2]^o$	1	–	$2s^22p^5(^2P^o_{1/2})4p$	$^2[3/2]$	2	0.003	SBS
23 961.15	4173.422	45	$2s^22p^5(^2P^o_{3/2})4d$	$^2[1/2]^o$	1	–	$2s^22p^5(^2P^o_{3/2})7p$	$^2[1/2]$	0	0.06	MKBB
23 962.964	4173.1065	*4600*	$2s^22p^5(^2P^o_{1/2})4s$	$^2[1/2]^o$	1	–	$2s^22p^5(^2P^o_{1/2})4p$	$^2[1/2]$	1	0.003	SBS
23 978.372	4170.4249	*220*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[7/2]^o$	3	0.003	SBS
23 984.701	4169.3244	*6000*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[7/2]^o$	4	0.003	SBS
24 093.528	4150.4923	*200*	$2s^22p^5(^2P^o_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^o_{1/2})4d$	$^2[3/2]^o$	1	0.003	SBS
24 098.982	4149.5529	*46*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[5/2]^o$	3	0.003	SBS
24 105.148	4148.4914	*1100*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[5/2]^o$	2	0.003	SBS
24 156.486	4139.6749	*210*	$2s^22p^5(^2P^o_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^o_{1/2})4d$	$^2[3/2]^o$	2	0.003	SBS
24 162.547	4138.6365	*12*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^o_{1/2})5s$	$^2[1/2]^o$	1	0.005	SBS
24 168.025	4137.6984	*2000*	$2s^22p^5(^2P^o_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^o_{1/2})4d$	$^2[5/2]^o$	2	0.003	SBS
24 225.535	4127.8759	*140*	$2s^22p^5(^2P^o_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^o_{3/2})4d$	$^2[3/2]^o$	1	0.003	SBS
24 256.224	4122.6533	*2800*	$2s^22p^5(^2P^o_{1/2})4s$	$^2[1/2]^o$	1	–	$2s^22p^5(^2P^o_{1/2})4p$	$^2[3/2]$	1	0.003	SBS

TABLE 2. —Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
24 293.066	4116.4009	*12*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	4	0.010	SBS
24 316.420	4112.4475	*38*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.003	SBS
24 371.661	4103.1262	*7400*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	0.003	SBS
24 376.33	4102.340	18	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1	0.06	MKBB
24 378.260	4102.0155	*3800*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	0.003	SBS
24 390.011	4100.0391	*360*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.003	SBS
24 395.228	4099.1623	*37*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.003	SBS
24 454.531	4089.2217	*1900*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.003	SBS
24 459.078	4088.4616	*12*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	0	0.004	SBS
24 459.775	4088.3450	*240*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	0.003	SBS
24 466.068	4087.2934	*3300*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3	0.003	SBS
24 471.606	4086.3685	*370*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	0.003	SBS
24 482.800	4084.500	*7*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3	0.016	SBS
24 510.36	4079.908	*4*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7d$	$^2[5/2]^\circ$	3	0.02	SBS
24 532.498	4076.2258	*55*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.003	SBS
24 606.763	4063.9234	*9*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0	0.003	SBS
24 771.40	4036.914	*7*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3	0.03	SBS
24 783.248	4034.9836	*1700*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	0.003	SBS
24 796.287	4032.8618	*5*	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0	0.007	SBS
24 902.752	4015.6205	*21*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	0.008	SBS
24 910.521	4014.3681	*780*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.003	SBS
24 929.689	4011.2815	*3*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	0.009	SBS
24 935.696	4010.3152	*2900*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3	0.003	SBS
24 942.298	4009.2537	*46*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	0.004	SBS
25 006.628	3998.9398	*170*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.003	SBS
25 071.216	3988.6379	*35*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.003	SBS
25 084.899	3986.4622	*7*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	0.005	SBS
25 168.567	3973.2099	*1300*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.003	SBS
25 176.147	3972.0136	*3*	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.008	SBS
25 195.185	3969.0124	*25*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	0.004	SBS
25 234.824	3962.7778	*300*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	0.003	SBS
25 284.125	3955.0508	*100*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	0	0.003	SBS
25 376.263	3940.6906	*15*	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2	0.003	SBS
25 400.128	3936.9881	*280*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.003	SBS
25 438.750	3931.0107	*7*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2	0.004	SBS
25 466.860	3926.6718	*12*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1	0.003	SBS
25 498.245	3921.8386	*6*	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1	0.004	SBS
25 510.427	3919.9657	*6*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1	0.006	SBS
25 531.295	3916.7618	*4600*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	0.003	SBS
25 547.659	3914.2529	*4*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2	0.011	SBS
25 588.111	3908.0650	*14*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.006	SBS
25 628.812	3901.8586	*7*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2	0.004	SBS
25 638.336	3900.4091	*42*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.004	SBS
25 753.06	3883.033	*4*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1	0.03	SBS
25 753.37	3882.987	*10**	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	0.02	SBS
25 753.37	3882.987	*10**	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	0.02	SBS
25 760.661	3881.888	*10**	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	0.020	CHNG
25 760.661	3881.888	*10**	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	0.020	CHNG
25 786.665	3877.9733	*91*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	5	0.007	SBS
25 794.008	3876.8694	*85*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	4	0.003	SBS
25 845.550	3869.1380	*48*S	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	0.004	SBS
25 861.933	3866.6870	*130*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	0.003	SBS
25 873.469	3864.9630	*38*	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	3	0.004	SBS
25 878.656	3864.1883	*18*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.007	SBS
25 879.642	3864.0411	*56*	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	4	0.003	SBS
25 887.950	3862.8011	*38*	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	3	0.004	SBS
25 948.961	3853.7188	*32*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.005	SBS
25 960.581	3851.9939	*21*	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2	0.007	SBS
25 982.412	3848.7574	*10**	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1	0.010	SBS
25 982.412	3848.7574	*10**	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2	0.010	SBS

TABLE 2. —Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
26 072.823	3835.4113	*52*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3	0.005	SBS
26 080.017	3834.3534	*68*S	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4	0.006	SBS
26 088.520	3833.1036	*13*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2	0.009	SBS
26 095.809	3832.0329	*17*S	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3	0.007	SBS
26 131.288	3826.8301	*98**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[5/2]^\circ$	3	0.003	SBS
26 131.288	3826.8301	*98**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[5/2]^\circ$	2	0.003	SBS
26 162.321	3822.2909	*15**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[9/2]^\circ$	5	0.008	SBS
26 162.321	3822.2909	*15**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[9/2]^\circ$	4	0.008	SBS
26 162.321	3822.2909	*15**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[9/2]^\circ$	5	0.008	SBS
26 178.206	3819.9715	*230**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[11/2]^\circ$	6	0.005	SBS
26 178.206	3819.9715	*230**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[11/2]^\circ$	5	0.005	SBS
26 211.856	3815.0675	*120**	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^\circ_{1/2})6g$	$^2[9/2]^\circ$	5	0.003	SBS
26 211.856	3815.0675	*120**	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})6g$	$^2[9/2]^\circ$	4	0.003	SBS
26 213.615	3814.8115	*90**	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6g$	$^2[7/2]^\circ$	3	0.003	SBS
26 213.615	3814.8115	*90**	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})6g$	$^2[7/2]^\circ$	4	0.003	SBS
26 228.172	3812.6942	*110**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[7/2]^\circ$	3	0.004	SBS
26 228.172	3812.6942	*110**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[7/2]^\circ$	4	0.004	SBS
26 243.848	3810.4169	*15**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[5/2]^\circ$	3	0.007	SBS
26 243.848	3810.4169	*15**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[5/2]^\circ$	3	0.007	SBS
26 276.978	3805.6126	*160**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[9/2]^\circ$	5	0.003	SBS
26 276.978	3805.6126	*160**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[9/2]^\circ$	4	0.003	SBS
26 282.67	3804.789	*25**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[7/2]^\circ$	3	0.02	CHNG
26 282.67	3804.789	*25**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[7/2]^\circ$	4	0.02	CHNG
26 282.82	3804.767	10	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[7/2]^\circ$	4	0.02	CHNG
26 868.106	3721.8850	*1000*	$2s^22p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	0.003	SBS
27 528.250	3632.6320	*140*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	0.004	SBS
27 580.984	3625.6865	*930*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.003	SBS
27 826.375	3593.7128	*15*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	0	0.012	SBS
27 979.570	3574.0364	*240*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.003	SBS
28 393.944	3521.8778	*570*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	0.003	SBS
28 540.970	3503.7351	*310*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	0.003	SBS
28 752.113	3478.0052	*81*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	0.003	SBS
29 295.268	3413.5206	*13*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.006	SBS
29 395.843	3401.8415	*13*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.005	SBS
29 455.855	3394.9108	*130*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.004	SBS
29 495.606	3390.3355	*14*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	0.003	SBS
29 676.059	3369.7197	*22*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.004	SBS
29 722.119	3364.4977	*61*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	0.004	SBS
29 812.553	3354.2917	*6*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.004	SBS
29 939.522	3340.0667	*4*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3	0.008	SBS
29 949.038	3339.0054	*9*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	0.004	SBS
30 127.143	3319.2659	*1*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.014	SBS
30 135.096	3318.3900	*2*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.007	SBS
30 138.002	3318.0700	*1*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.008	SBS
30 173.468	3314.1699	*10*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	0.017	SBS
30 208.732	3310.3011	*620*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.004	SBS
30 267.823	3303.8385	*41*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.005	SBS
30 275.862	3302.9613	*17*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	0.004	SBS
30 308.501	3299.4043	*44*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4	0.007	SBS
30 371.786	3292.5295	*20*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	0.008	SBS
30 425.647	3286.7009	*15*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	2	0.006	SBS
30 472.757	3281.6197	*9*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.010	SBS
30 475.223	3281.3542	*12*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2	0.006	SBS
30 603.119	3267.6408	*28*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3	0.007	SBS
30 603.346	3267.6166	*52*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.004	SBS
30 639.710	3263.7385	*21*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	3	0.005	SBS
30 675.320	3259.9497	*23*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	0	0.004	SBS
30 720.023	3255.2059	*53*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.003	SBS
30 928.308	3233.2839	*16*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2	0.008	SBS
30 975.572	3228.3504	*7*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.013	SBS

TABLE 2. —Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
31 011.644	3224.5953	*25*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3	0.005	SBS
31 110.469	3214.3521	*11*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2	0.008	SBS
31 223.94	3202.671	*3*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1	0.02	SBS
31 868.616	3137.8834	*78*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	0.004	SBS
32 179.408	3107.5774	*1*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.013	SBS
32 433.342	3083.2469	*7*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.005	SBS
32 700.54	3058.053	*4*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1	0.03	SBS
33 182.139	3013.6695	*830*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.004	SBS
33 325.251	3000.7276	*5*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1	0.016	SBS
33 341.790	2999.2391	*230*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.004	SBS
33 361.478	2997.4691	*1700*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.004	SBS
33 520.419	2983.2563	*47*	$2s^22p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1	0.004	SBS
33 628.670	2973.6531	*14*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.008	SBS
33 686.444	2968.5532	*2*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.015	SBS
33 717.548	2965.8147	*8*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.005	SBS
33 722.372	2965.3905	*3*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.011	SBS
33 813.686	2957.3824	*3*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0	0.016	SBS
33 849.869	2954.2212	*3*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0	0.009	SBS
33 909.054	2949.0649	*450*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	0	0.004	SBS
33 912.263	2948.7858	*440*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.004	SBS
33 922.350	2947.9090	*1200*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.004	SBS
33 952.413	2945.2988	*7*	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1	0.006	SBS
33 996.462	2941.4826	*4*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.008	SBS
34 140.648	2929.0598	*360*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.004	SBS
34 276.169	2917.4789	*5*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.009	SBS
34 383.050	2908.4098	*3*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.007	SBS
34 480.836	2900.1617	*590*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.004	SBS
34 499.275	2898.6116	*240*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	0	0.004	SBS
34 564.44	2893.1469	*1*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.02	SBS
34 673.121	2884.0784	*6*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2	0.007	SBS
34 789.486	2874.4317	*380*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.004	SBS
35 217.80	2839.473	*2*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.03	SBS
35 517.017	2815.5518	*120*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.006	SBS
35 844.581	2789.8220	*790*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.004	SBS
36 209.395	2761.7142	*33*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	0.004	SBS
36 481.630	2741.1056	*96*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	0.007	SBS
37 176.74	2689.8538	*3*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1	0.02	SBS
37 182.250	2689.4553	*42*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	0.004	SBS
37 396.549	2674.0435	*4*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	0	0.010	SBS
37 746.247	2649.2700	*130*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	0.004	SBS
39 007.087	2563.6367	*10*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.008	SBS
39 019.950	2562.7916	*74*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.004	SBS
39 136.736	2555.1441	*170*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.005	SBS
39 137.029	2555.1250	*65*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.007	SBS
39 207.468	2550.5345	*3*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	0.015	SBS
39 324.462	2542.9464	*66*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4	0.005	SBS
39 341.564	2541.8410	*48*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3	0.005	SBS
39 386.615	2538.9336	*3*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.017	SBS
39 403.46	2537.848	*4*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.05	SBS
39 457.774	2534.3548	*640*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	4	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	5	0.004	SBS
39 474.992	2533.2494	*430*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	4	0.004	SBS
39 518.767	2530.4433	*12*	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	0.005	SBS
39 566.317	2527.4023	*260*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.004	SBS
39 639.886	2522.7116	*240*	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	3	0.004	SBS
39 654.346	2521.7917	*350*	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	4	0.004	SBS
39 669.971	2520.7984	*280*	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	3	0.004	SBS
39 699.524	2518.9219	*75*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.005	SBS
39 809.128	2511.9867	*160*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.004	SBS
39 817.158	2511.4801	*180*	$2s^22p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.004	SBS
39 840.733	2509.9940	*150*	$2s^22p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	2	0.004	SBS

TABLE 2. —Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
39 944.171	2503.4942	*29*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2	0.005	SBS
39 944.482	2503.4747	*20*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.005	SBS
40 074.299	2495.3649	*280*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3	0.004	SBS
40 091.275	2494.3083	*390*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4	0.004	SBS
40 138.549	2491.3706	*65*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	0.005	SBS
40 155.856	2490.2968	*97*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	0.004	SBS
40 254.424	2484.1990	*350*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	2	0.004	SBS
40 254.792	2484.1763	*540*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	3	0.004	SBS
40 276.140	2482.8596	*3*	$2s^22p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1	0.019	SBS
40 291.835	2481.8924	*140**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	4	0.004	SBS
40 291.835	2481.8924	*140**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	5	0.004	SBS
40 314.409	2480.5027	*6**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	3	0.015	SBS
40 314.409	2480.5027	*6**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	4	0.015	SBS
40 356.667	2477.9053	*1900**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[11/2]^\circ$	6	0.004	SBS
40 356.667	2477.9053	*1900**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[11/2]^\circ$	5	0.004	SBS
40 425.964	2473.6578	*1300*	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^\circ_{1/2})5g$	$^2[9/2]^\circ$	5	0.004	SBS
40 429.447	2473.4447	*660**	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5g$	$^2[7/2]^\circ$	3	0.007	SBS
40 429.447	2473.4447	*660**	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})5g$	$^2[7/2]^\circ$	4	0.007	SBS
40 429.682	2473.4303	*300*	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})5g$	$^2[9/2]^\circ$	4	0.008	SBS
40 457.207	2471.7475	*690*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	4	0.004	SBS
40 457.474	2471.7312	*340*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	3	0.005	SBS
40 522.294	2467.7774	*85*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	3	0.007	SBS
40 522.553	2467.7616	*59**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	3	0.008	SBS
40 522.553	2467.7616	*59**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	2	0.008	SBS
40 564.426	2465.2142	*1500**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	5	0.004	SBS
40 564.426	2465.2142	*1500**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	4	0.004	SBS
40 587.308	2463.8244	*180**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	3	0.004	SBS
40 587.308	2463.8244	*180**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	4	0.004	SBS
40 652.823	2459.8538	*7**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	2	0.012	SBS
40 652.823	2459.8538	*7**	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	3	0.012	SBS
40 818.029	2449.8978	*10*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	0.008	SBS
40 827.58	2449.3247	*3*	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.02	SBS
40 828.183	2449.2885	*5*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	0.014	SBS
40 851.083	2447.9155	*2*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1	0.012	SBS
40 929.375	2443.2330	*7*	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	0.014	SBS
40 935.11	2442.891	*3*	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.04	SBS
40 939.10	2442.6527	*2*	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	0.03	SBS
40 941.60	2442.504	*2*	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.04	SBS
40 945.547	2442.2680	*3*	$2s^22p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	0.019	SBS
40 950.274	2441.9861	*8*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	0.010	SBS
40 961.383	2441.3238	*14*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	0.008	SBS
40 992.010	2439.4998	*8*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	0.015	SBS
41 054.95	2435.760	*9*	$2s^22p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	0.08	SBS
41 172.32	2428.8165	*5*	$2s^22p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1	0.03	SBS
42 182.976	2370.6246	*140*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	–	$2s^22p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	0.005	SBS
44 335.80	2255.5134	*5*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	0.02	SBS
45 493.929	2198.0955	*14*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	0.009	SBS
45 796.921	2183.5529	*26*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	0.005	SBS
46 402.5	2155.06	10*	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	5	–	$2s^22p^5(^2P^\circ_{3/2})7g$	$^2[11/2]^\circ$	6	4.0	MOR
46 402.5	2155.06	10*	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	4	–	$2s^22p^5(^2P^\circ_{3/2})7g$	$^2[11/2]^\circ$	5	4.0	MOR
46 452.7	2152.73	10*	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	4	–	$2s^22p^5(^2P^\circ_{1/2})7g$	$^2[9/2]^\circ$	5	4.0	MOR
46 452.7	2152.73	10*	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})7g$	$^2[9/2]^\circ$	4	4.0	MOR
46 452.7	2152.73	10*	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{1/2})7g$	$^2[7/2]^\circ$	4	4.0	MOR
46 452.7	2152.73	10*	$2s^22p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{1/2})7g$	$^2[7/2]^\circ$	3	4.0	MOR
46 475.4	2151.68	10*	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3	–	$2s^22p^5(^2P^\circ_{3/2})7g$	$^2[7/2]^\circ$	4	4.0	MOR
46 475.4	2151.68	10*	$2s^22p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})7g$	$^2[7/2]^\circ$	3	4.0	MOR
47 159.797	2120.4502	*27*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.006	SBS
47 179.303	2119.5735	*11*	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	–	$2s^22p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	0.011	SBS
47 248.165	2116.4843	*10*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	0.017	SBS
47 588.616	2101.3429	*9*	$2s^22p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2	–	$2s^22p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2	0.014	SBS

TABLE 2. —Continued

Observed vacuum wavelength (Å)	Observed wave number (cm^{-1})	Intensity and comment[a]	Classification							Uncertainty of observed wavelength (Å)	Source of line
			Configuration	Term	J		Configuration	Term	J		
48 565.2	2059.09	30	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	–	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	4.0	MOR
49 045.1	2038.94	20	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	–	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1	4.0	MOR
49 176.2	2033.50	10	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1	–	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0	4.0	MOR
50 062.6	1997.50	10	$2s^2 2p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	–	$2s^2 2p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2	4.0	MOR
50 815.6	1967.90	10	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	3	–	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	4.0	MOR
51 165.9	1954.43	30	$2s^2 2p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1	–	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0	4.0	MOR
51 476.6	1942.63	20	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	3	–	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4	4.0	MOR
51 678.0	1935.06	20	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	–	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	4.0	MOR
51 709.0	1933.90	20	$2s^2 2p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	–	$2s^2 2p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	4.0	MOR
51 719.4	1933.51	20	$2s^2 2p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1	–	$2s^2 2p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	4.0	MOR
51 793.7	1930.74	20	$2s^2 2p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	–	$2s^2 2p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2	4.0	MOR
51 804.1	1930.35	40*	$2s^2 2p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1	–	$2s^2 2p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2	4.0	MOR
51 804.1	1930.35	40*	$2s^2 2p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1	–	$2s^2 2p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	0	4.0	MOR
52 327.6	1911.04	60*	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2	–	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3	4.0	MOR
52 327.6	1911.04	60*	$2s^2 2p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2	–	$2s^2 2p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3	4.0	MOR
53 002.1	1886.72	10	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1	–	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2	4.0	MOR
53 240.2	1878.28	20*	$2s^2 2p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3	–	$2s^2 2p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	4	4.0	MOR
53 240.2	1878.28	20*	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	–	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3	4.0	MOR
53 272.4	1877.14	10	$2s^2 2p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1	–	$2s^2 2p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0	4.0	MOR
53 765.7	1859.92	10	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	–	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2	4.0	MOR
54 047.8	1850.21	20	$2s^2 2p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1	–	$2s^2 2p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0	4.0	MOR
54 931.0	1820.47	20	$2s^2 2p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2	–	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2	4.0	MOR

[a]Intensities in italic are radiometrically calibrated results from SBS.[47] Most of the remaining intensities are from Striganov and Odintsova[4] adjusted to approximately the same scale as SBS. Letters or symbols in the intensity column have the following meanings: a observed in absorption; * observed intensity shared by more than one classification; S possible Stark asymmetry in the observed line; f transition forbidden for electric dipole radiation.

TABLE 4. Energy levels of Ne I

Energy level (cm^{-1})	Uncertainty (cm^{-1})	Parity	Configuration	Term	J
0.00	0.04	0	$2s^2 2p^6$	^{1}S	0
134 041.8400	fixed	1	$2s^2 2p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	2
134 459.2871	fixed	1	$2s^2 2p^5(^2P^\circ_{3/2})3s$	$^2[3/2]^\circ$	1
134 818.6405	fixed	1	$2s^2 2p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	0
135 888.7173	fixed	1	$2s^2 2p^5(^2P^\circ_{1/2})3s$	$^2[1/2]^\circ$	1
148 257.7898	fixed	0	$2s^2 2p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	1
149 657.0392	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	3
149 824.2215	fixed	0	$2s^2 2p^5(^2P^\circ_{3/2})3p$	$^2[5/2]$	2
150 121.5922	fixed	0	$2s^2 2p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	1
150 315.8612	fixed	0	$2s^2 2p^5(^2P^\circ_{3/2})3p$	$^2[3/2]$	2
150 772.1118	fixed	0	$2s^2 2p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	1
150 858.5079	fixed	0	$2s^2 2p^5(^2P^\circ_{1/2})3p$	$^2[3/2]$	2
150 917.4307	fixed	0	$2s^2 2p^5(^2P^\circ_{3/2})3p$	$^2[1/2]$	0
151 038.4524	fixed	0	$2s^2 2p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	1
152 970.7328	fixed	0	$2s^2 2p^5(^2P^\circ_{1/2})3p$	$^2[1/2]$	0
158 601.1152	fixed	1	$2s^2 2p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	2
158 795.9924	fixed	1	$2s^2 2p^5(^2P^\circ_{3/2})4s$	$^2[3/2]^\circ$	1
159 379.9935	fixed	1	$2s^2 2p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	0
159 534.6196	fixed	1	$2s^2 2p^5(^2P^\circ_{1/2})4s$	$^2[1/2]^\circ$	1
161 509.6305	fixed	1	$2s^2 2p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	0
161 524.1739	fixed	1	$2s^2 2p^5(^2P^\circ_{3/2})3d$	$^2[1/2]^\circ$	1
161 590.3412	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	4
161 592.1200	fixed	1	$2s^2 2p^5(^2P^\circ_{3/2})3d$	$^2[7/2]^\circ$	3
161 607.2609	fixed	1	$2s^2 2p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	2
161 636.6175	fixed	1	$2s^2 2p^5(^2P^\circ_{3/2})3d$	$^2[3/2]^\circ$	1
161 699.6613	fixed	1	$2s^2 2p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	2
161 701.4486	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})3d$	$^2[5/2]^\circ$	3
162 408.6535	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	2
162 410.1736	fixed	1	$2s^2 2p^5(^2P^\circ_{1/2})3d$	$^2[5/2]^\circ$	3
162 419.9818	fixed	1	$2s^2 2p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	2
162 435.6780	fixed	1	$2s^2 2p^5(^2P^\circ_{1/2})3d$	$^2[3/2]^\circ$	1
162 517.8755	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	1
162 830.7073	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	3
162 899.1169	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4p$	$^2[5/2]$	2
163 012.6247	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	1
163 038.3544	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4p$	$^2[3/2]$	2
163 401.3061	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4p$	$^2[1/2]$	0
163 657.2726	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	1
163 707.7261	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	1
163 708.6029	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})4p$	$^2[3/2]$	2
164 285.8872	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})4p$	$^2[1/2]$	0
165 828.1766	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	2
165 912.7861	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5s$	$^2[3/2]^\circ$	1
166 606.3370	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	0
166 656.5114	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})5s$	$^2[1/2]^\circ$	1
166 967.6752	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	0
166 975.3424	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})4d$	$^2[1/2]^\circ$	1
167 000.0317	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	4
167 001.1327	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})4d$	$^2[7/2]^\circ$	3
167 011.5643	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	2
167 026.9923	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})4d$	$^2[3/2]^\circ$	1
167 047.6082	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	2
167 048.6694	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})4d$	$^2[5/2]^\circ$	3
167 052.6415	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	1
167 052.6654	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4f$	$^2[3/2]$	2
167 060.3044	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	4
167 060.3115	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4f$	$^2[9/2]$	5
167 069.0649	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	3
167 069.0791	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4f$	$^2[5/2]$	2
167 076.9837	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	3
167 076.9896	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})4f$	$^2[7/2]$	4
167 449.4698	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	1

TABLE 4. —Continued

Energy level (cm^{-1})	Uncertainty (cm^{-1})	Parity	Configuration	Term	J
167 559.0633	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	3
167 591.2335	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[5/2]$	2
167 639.5697	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	1
167 648.6382	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[3/2]$	2
167 794.9709	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	2
167 795.8966	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})4d$	$^2[5/2]^\circ$	3
167 796.9475	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	2
167 807.7649	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})4d$	$^2[3/2]^\circ$	1
167 846.4371	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	3
167 846.4456	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})4f$	$^2[7/2]$	4
167 846.6738	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	3
167 846.6854	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})4f$	$^2[5/2]$	2
167 867.1941	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5p$	$^2[1/2]$	0
168 355.4583	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	1
168 358.6202	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	1
168 378.7113	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})5p$	$^2[3/2]$	2
168 586.8304	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})5p$	$^2[1/2]$	0
168 924.6500	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	2
168 967.3526	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})6s$	$^2[3/2]^\circ$	1
169 482.9862	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	0
169 488.4193	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[1/2]^\circ$	1
169 501.6353	0.0011	1	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	4
169 502.2893	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[7/2]^\circ$	3
169 508.5627	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	2
169 516.9948	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[3/2]^\circ$	1
169 526.2708	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	2
169 526.8869	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5d$	$^2[5/2]^\circ$	3
169 530.4673	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	1
169 530.4862	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5f$	$^2[3/2]$	2
169 534.3826	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	4
169 534.3865	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5f$	$^2[9/2]$	5
169 536.8397	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	2
169 536.8424	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5g$	$^2[5/2]^\circ$	3
169 538.2097	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5g$	$^2[11/2]^\circ$	5
169 538.2168	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5g$	$^2[11/2]^\circ$	6
169 538.9668	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	3
169 538.9794	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5f$	$^2[5/2]$	2
169 540.8092	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	3
169 540.8134	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5g$	$^2[7/2]^\circ$	4
169 542.1973	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	4
169 542.2039	0.0010	1	$2s^2 2p^5(^2P^\circ_{3/2})5g$	$^2[9/2]^\circ$	5
169 542.9742	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	3
169 542.9772	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})5f$	$^2[7/2]$	4
169 705.9275	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	0
169 727.6312	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})6s$	$^2[1/2]^\circ$	1
169 748.1423	0.0013	0	$2s^2 2p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	1
169 797.1890	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	3
169 814.642	0.002	0	$2s^2 2p^5(^2P^\circ_{3/2})6p$	$^2[5/2]$	2
169 839.4581	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	1
169 843.7973	0.0010	0	$2s^2 2p^5(^2P^\circ_{3/2})6p$	$^2[3/2]$	2
169 976.7100	0.0011	0	$2s^2 2p^5(^2P^\circ_{3/2})6p$	$^2[1/2]$	0
170 288.9415	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	2
170 289.3243	0.0012	1	$2s^2 2p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	2
170 289.6782	0.0012	1	$2s^2 2p^5(^2P^\circ_{1/2})5d$	$^2[5/2]^\circ$	3
170 296.0099	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})5d$	$^2[3/2]^\circ$	1
170 317.6829	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	3
170 317.6884	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})5f$	$^2[7/2]$	4
170 317.7465	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	3
170 317.7594	0.0010	0	$2s^2 2p^5(^2P^\circ_{1/2})5f$	$^2[5/2]$	2
170 320.1034	0.0010	1	$2s^2 2p^5(^2P^\circ_{1/2})5g$	$^2[9/2]^\circ$	5
170 320.1041	0.0011	1	$2s^2 2p^5(^2P^\circ_{1/2})5g$	$^2[9/2]^\circ$	4
170 320.1185	0.0011	1	$2s^2 2p^5(^2P^\circ_{1/2})5g$	$^2[7/2]^\circ$	4
170 320.1301	0.0011	1	$2s^2 2p^5(^2P^\circ_{1/2})5g$	$^2[7/2]^\circ$	3

TABLE 4. —Continued

Energy level (cm^{-1})	Uncertainty (cm^{-1})	Parity	Configuration	Term	J
170 532.7169	0.0010	1	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	2
170 557.0484	0.0010	1	$2s^22p^5(^2P^\circ_{3/2})7s$	$^2[3/2]^\circ$	1
170 578.3503	0.0010	0	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	1
170 585.10	0.03	0	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	1
170 597.2023	0.0011	0	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[3/2]$	2
170 689.3736	0.0015	0	$2s^22p^5(^2P^\circ_{1/2})6p$	$^2[1/2]$	0
170 848.274	0.005	1	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	0
170 851.3105	0.0012	1	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[1/2]^\circ$	1
170 858.4673	0.0010	1	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	4
170 858.8729	0.0013	1	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[7/2]^\circ$	3
170 862.9893	0.0011	1	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	2
170 867.923	0.002	1	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[3/2]^\circ$	1
170 872.8524	0.0010	1	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	2
170 873.2327	0.0010	1	$2s^22p^5(^2P^\circ_{3/2})6d$	$^2[5/2]^\circ$	3
170 875.7397	0.0014	0	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	1
170 875.7516	0.0010	0	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[3/2]$	2
170 878.0021	0.0010	0	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	4
170 878.0047	0.0013	0	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[9/2]$	5
170 879.4716	0.0011	1	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[5/2]^\circ$	2
170 879.490	0.005	1	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[5/2]^\circ$	3
170 880.2759	0.0013	1	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[11/2]^\circ$	5
170 880.2830	0.0013	1	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[11/2]^\circ$	6
170 880.7022	0.0010	0	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	3
170 880.7114	0.0010	0	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[5/2]$	2
170 881.7588	0.0012	1	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[7/2]^\circ$	4
170 881.7732	0.0011	1	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[7/2]^\circ$	3
170 882.5960	0.0010	1	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[9/2]^\circ$	4
170 882.6023	0.0010	1	$2s^22p^5(^2P^\circ_{3/2})6g$	$^2[9/2]^\circ$	5
170 883.0200	0.0012	0	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	3
170 883.0230	0.0013	0	$2s^22p^5(^2P^\circ_{3/2})6f$	$^2[7/2]$	4
171 009.21	0.18	0	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	1
171 032.821	0.014	0	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	3
171 043.69	0.17	0	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[5/2]$	2
171 058.0	0.2	0	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	1
171 060.19	0.13	0	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[3/2]$	2
171 148.750	0.012	0	$2s^22p^5(^2P^\circ_{3/2})7p$	$^2[1/2]$	0
171 312.8413	0.0010	1	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	0
171 324.0107	0.0010	1	$2s^22p^5(^2P^\circ_{1/2})7s$	$^2[1/2]^\circ$	1
171 473.311	0.004	1	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	2
171 489.486	0.005	1	$2s^22p^5(^2P^\circ_{3/2})8s$	$^2[3/2]^\circ$	1
171 639.9741	0.0010	1	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	2
171 642.1580	0.0013	1	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	2
171 642.4494	0.0015	1	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[5/2]^\circ$	3
171 644.882	0.003	1	$2s^22p^5(^2P^\circ_{1/2})6d$	$^2[3/2]^\circ$	1
171 659.7487	0.0011	0	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	3
171 659.7595	0.0012	0	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[5/2]$	2
171 659.9337	0.0011	0	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	3
171 659.9376	0.0011	0	$2s^22p^5(^2P^\circ_{1/2})6f$	$^2[7/2]$	4
171 661.4853	0.0011	1	$2s^22p^5(^2P^\circ_{1/2})6g$	$^2[7/2]^\circ$	4
171 661.4969	0.0011	1	$2s^22p^5(^2P^\circ_{1/2})6g$	$^2[7/2]^\circ$	3
171 661.5046	0.0011	1	$2s^22p^5(^2P^\circ_{1/2})6g$	$^2[9/2]^\circ$	4
171 661.5131	0.0011	1	$2s^22p^5(^2P^\circ_{1/2})6g$	$^2[9/2]^\circ$	5
171 669.172	0.011	1	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	0
171 671.928	0.011	1	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[1/2]^\circ$	1
171 675.459	0.004	1	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	4
171 675.728	0.003	1	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[7/2]^\circ$	3
171 681.348	0.006	1	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	2
171 682.914	0.009	1	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[3/2]^\circ$	1
171 685.289	0.003	1	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	2
171 685.542	0.004	1	$2s^22p^5(^2P^\circ_{3/2})7d$	$^2[5/2]^\circ$	3
171 686.567	0.004	0	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	2
171 686.576	0.004	0	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[3/2]$	1
171 687.982	0.003	0	$2s^22p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	5

TABLE 4. —Continued

Energy level (cm^{-1})	Uncertainty (cm^{-1})	Parity	Configuration	Term	J
171 687.986	0.003	0	$2s^2 2p^5(^2P^\circ_{3/2})7f$	$^2[9/2]$	4
171 688.942	0.011	1	$2s^2 2p^5(^2P^\circ_{3/2})7g$	$^2[5/2]^\circ$	2
171 688.945	0.003	1	$2s^2 2p^5(^2P^\circ_{3/2})7g$	$^2[5/2]^\circ$	3
171 689.431	0.003	1	$2s^2 2p^5(^2P^\circ_{3/2})7g$	$^2[11/2]^\circ$	5
171 689.438	0.003	1	$2s^2 2p^5(^2P^\circ_{3/2})7g$	$^2[11/2]^\circ$	6
171 690.028	0.005	0	$2s^2 2p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	3
171 690.035	0.007	0	$2s^2 2p^5(^2P^\circ_{3/2})7f$	$^2[5/2]$	2
171 690.464	0.003	1	$2s^2 2p^5(^2P^\circ_{3/2})7g$	$^2[7/2]^\circ$	4
171 690.478	0.003	1	$2s^2 2p^5(^2P^\circ_{3/2})7g$	$^2[7/2]^\circ$	3
171 690.963	0.003	1	$2s^2 2p^5(^2P^\circ_{3/2})7g$	$^2[9/2]^\circ$	4
171 690.969	0.003	1	$2s^2 2p^5(^2P^\circ_{3/2})7g$	$^2[9/2]^\circ$	5
171 691.314	0.006	0	$2s^2 2p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	3
171 691.331	0.004	0	$2s^2 2p^5(^2P^\circ_{3/2})7f$	$^2[7/2]$	4
171 752.24	0.20	0	$2s^2 2p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	1
171 787.0	0.3	0	$2s^2 2p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	3
171 791.6	0.3	0	$2s^2 2p^5(^2P^\circ_{3/2})8p$	$^2[5/2]$	2
171 798.014	0.014	0	$2s^2 2p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	1
171 803.2	0.2	0	$2s^2 2p^5(^2P^\circ_{3/2})8p$	$^2[3/2]$	2
171 822.233	0.014	0	$2s^2 2p^5(^2P^\circ_{1/2})7p$	$^2[3/2]$	1
171 827.517	0.014	0	$2s^2 2p^5(^2P^\circ_{1/2})7p$	$^2[3/2]$	2
171 830.5	0.3	0	$2s^2 2p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	1
171 831.0	0.3	0	$2s^2 2p^5(^2P^\circ_{3/2})8p$	$^2[1/2]$	0
171 913.45	0.02	0	$2s^2 2p^5(^2P^\circ_{1/2})7p$	$^2[1/2]$	0
172 071.389	0.007	1	$2s^2 2p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	2
172 080.915	0.005	1	$2s^2 2p^5(^2P^\circ_{3/2})9s$	$^2[3/2]^\circ$	1
172 200.33	0.06	1	$2s^2 2p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	0
172 201.878	0.011	1	$2s^2 2p^5(^2P^\circ_{3/2})8d$	$^2[1/2]^\circ$	1
172 205.113	0.002	1	$2s^2 2p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	4
172 205.272	0.002	1	$2s^2 2p^5(^2P^\circ_{3/2})8d$	$^2[7/2]^\circ$	3
172 206.770	0.011	1	$2s^2 2p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	2
172 209.15	0.05	1	$2s^2 2p^5(^2P^\circ_{3/2})8d$	$^2[3/2]^\circ$	1
172 211.107	0.010	1	$2s^2 2p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	2
172 211.266	0.006	1	$2s^2 2p^5(^2P^\circ_{3/2})8d$	$^2[5/2]^\circ$	3
172 212.66	0.11	0	$2s^2 2p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	2
172 212.76	0.11	0	$2s^2 2p^5(^2P^\circ_{3/2})8f$	$^2[3/2]$	1
172 213.57	0.11	0	$2s^2 2p^5(^2P^\circ_{3/2})8f$	$^2[9/2]$	5
172 213.58	0.11	0	$2s^2 2p^5(^2P^\circ_{3/2})8f$	$^2[9/2]$	4
172 215.58	0.11	0	$2s^2 2p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	4
172 215.80	0.11	0	$2s^2 2p^5(^2P^\circ_{3/2})8f$	$^2[7/2]$	3
172 254.295	0.009	1	$2s^2 2p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	0
172 261.741	0.004	1	$2s^2 2p^5(^2P^\circ_{1/2})8s$	$^2[1/2]^\circ$	1
172 282.2	0.3	0	$2s^2 2p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	3
172 287.066	0.015	0	$2s^2 2p^5(^2P^\circ_{3/2})9p$	$^2[5/2]$	2
172 291.2	0.2	0	$2s^2 2p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	1
172 292.0	0.3	0	$2s^2 2p^5(^2P^\circ_{3/2})9p$	$^2[3/2]$	2
172 327.358	0.010	0	$2s^2 2p^5(^2P^\circ_{3/2})9p$	$^2[1/2]$	0
172 457.823	0.008	1	$2s^2 2p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	2
172 458.427	0.007	1	$2s^2 2p^5(^2P^\circ_{1/2})7d$	$^2[5/2]^\circ$	2
172 458.613	0.003	1	$2s^2 2p^5(^2P^\circ_{1/2})7d$	$^2[5/2]^\circ$	3
172 460.966	0.011	1	$2s^2 2p^5(^2P^\circ_{1/2})7d$	$^2[3/2]^\circ$	1
172 469.448	0.004	0	$2s^2 2p^5(^2P^\circ_{1/2})7f$	$^2[7/2]$	3
172 469.450	0.004	0	$2s^2 2p^5(^2P^\circ_{1/2})7f$	$^2[7/2]$	4
172 469.452	0.003	0	$2s^2 2p^5(^2P^\circ_{1/2})7f$	$^2[5/2]$	3
172 469.455	0.006	0	$2s^2 2p^5(^2P^\circ_{1/2})7f$	$^2[5/2]$	2
172 470.364	0.003	1	$2s^2 2p^5(^2P^\circ_{1/2})7g$	$^2[9/2]^\circ$	4
172 470.373	0.003	1	$2s^2 2p^5(^2P^\circ_{1/2})7g$	$^2[9/2]^\circ$	5
172 470.404	0.003	1	$2s^2 2p^5(^2P^\circ_{1/2})7g$	$^2[7/2]^\circ$	4
172 470.416	0.003	1	$2s^2 2p^5(^2P^\circ_{1/2})7g$	$^2[7/2]^\circ$	3
172 475.321	0.005	1	$2s^2 2p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	2
172 481.8376	0.0019	1	$2s^2 2p^5(^2P^\circ_{3/2})10s$	$^2[3/2]^\circ$	1
172 562.8	0.3	0	$2s^2 2p^5(^2P^\circ_{1/2})8p$	$^2[1/2]$	1
172 564.88	0.12	1	$2s^2 2p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	0
172 565.93	0.05	1	$2s^2 2p^5(^2P^\circ_{3/2})9d$	$^2[1/2]^\circ$	1

TABLE 4. —Continued

Energy level (cm^{-1})	Uncertainty (cm^{-1})	Parity	Configuration	Term	J
172 567.857	0.005	1	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	4
172 568.083	0.005	1	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[7/2]^\circ$	3
172 569.40	0.04	1	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	2
172 570.83	0.05	1	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[3/2]^\circ$	1
172 572.12	0.06	1	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	2
172 572.22	0.06	1	$2s^22p^5(^2P^\circ_{3/2})9d$	$^2[5/2]^\circ$	3
172 573.1	0.5	0	$2s^22p^5(^2P^\circ_{1/2})8p$	$^2[3/2]$	2
172 573.80	0.12	0	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[9/2]$	5
172 573.86	0.12	0	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[9/2]$	4
172 574.82	0.12	0	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	2
172 574.82	0.12	0	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[5/2]$	3
172 575.36	0.12	0	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	3
172 575.36	0.12	0	$2s^22p^5(^2P^\circ_{3/2})9f$	$^2[7/2]$	4
172 599.8	0.3	0	$2s^22p^5(^2P^\circ_{1/2})8p$	$^2[1/2]$	0
172 619.2	0.3	0	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	1
172 623.2	0.3	0	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[5/2]$	3
172 630.1	0.3	0	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	1
172 630.4	0.3	0	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[3/2]$	2
172 665.1	0.3	0	$2s^22p^5(^2P^\circ_{3/2})10p$	$^2[1/2]$	0
172 759.82	0.06	1	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	2
172 764.60	0.05	1	$2s^22p^5(^2P^\circ_{3/2})11s$	$^2[3/2]^\circ$	1
172 824.57	0.12	1	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	0
172 825.54	0.13	1	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[1/2]^\circ$	1
172 827.13	0.11	1	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	4
172 827.35	0.10	1	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[7/2]^\circ$	3
172 827.93	0.08	1	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	2
172 829.30	0.07	1	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[3/2]^\circ$	1
172 830.20	0.08	1	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	2
172 830.25	0.08	1	$2s^22p^5(^2P^\circ_{3/2})10d$	$^2[5/2]^\circ$	3
172 852.13	0.06	1	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	0
172 857.00	0.05	1	$2s^22p^5(^2P^\circ_{1/2})9s$	$^2[1/2]^\circ$	1
172 871.9	0.3	0	$2s^22p^5(^2P^\circ_{3/2})11p$	$^2[3/2]$	1
172 871.9	0.3	0	$2s^22p^5(^2P^\circ_{3/2})11p$	$^2[3/2]$	2
172 968.51	0.08	1	$2s^22p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	2
172 972.289	0.004	1	$2s^22p^5(^2P^\circ_{3/2})12s$	$^2[3/2]^\circ$	1
172 987.07	0.08	1	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	2
172 987.204	0.005	1	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[5/2]^\circ$	2
172 987.283	0.005	1	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[5/2]^\circ$	3
172 988.99	0.07	1	$2s^22p^5(^2P^\circ_{1/2})8d$	$^2[3/2]^\circ$	1
172 994.59	0.11	0	$2s^22p^5(^2P^\circ_{1/2})8f$	$^2[7/2]$	4
172 994.61	0.11	0	$2s^22p^5(^2P^\circ_{1/2})8f$	$^2[5/2]$	2
172 994.61	0.11	0	$2s^22p^5(^2P^\circ_{1/2})8f$	$^2[5/2]$	3
172 994.71	0.11	0	$2s^22p^5(^2P^\circ_{1/2})8f$	$^2[7/2]$	3
173 017.39	0.12	1	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	0
173 017.98	0.13	1	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[1/2]^\circ$	1
173 018.85	0.11	1	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[7/2]^\circ$	3
173 018.89	0.11	1	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[7/2]^\circ$	4
173 020.06	0.12	1	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	2
173 020.89	0.18	1	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[3/2]^\circ$	1
173 020.96	0.10	1	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	2
173 021.29	0.09	1	$2s^22p^5(^2P^\circ_{3/2})11d$	$^2[5/2]^\circ$	3
173 065.4	0.2	0	$2s^22p^5(^2P^\circ_{1/2})9p$	$^2[3/2]$	2
173 097.468	0.014	0	$2s^22p^5(^2P^\circ_{1/2})9p$	$^2[1/2]$	0
173 126.12	0.09	1	$2s^22p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	2
173 128.85	0.12	1	$2s^22p^5(^2P^\circ_{3/2})13s$	$^2[3/2]^\circ$	1
173 163.72	0.17	1	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[1/2]^\circ$	1
173 164.46	0.11	1	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[7/2]^\circ$	3
173 164.48	0.11	1	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[7/2]^\circ$	4
173 165.09	0.12	1	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	2
173 166.08	0.18	1	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[3/2]^\circ$	1
173 166.15	0.11	1	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	2
173 166.45	0.11	1	$2s^22p^5(^2P^\circ_{3/2})12d$	$^2[5/2]^\circ$	3
173 249.45	0.18	1	$2s^22p^5(^2P^\circ_{3/2})14s$	$^2[3/2]^\circ$	1

TABLE 4. —Continued

Energy level (cm^{-1})	Uncertainty (cm^{-1})	Parity	Configuration	Term	J
173 255.24	0.06	1	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	0
173 259.46	0.06	1	$2s^22p^5(^2P^\circ_{1/2})10s$	$^2[1/2]^\circ$	1
173 277.59	0.14	1	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[1/2]^\circ$	1
173 278.07	0.11	1	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	4
173 278.15	0.11	1	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[7/2]^\circ$	3
173 279.17	0.18	1	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[3/2]^\circ$	1
173 280.14	0.13	1	$2s^22p^5(^2P^\circ_{3/2})13d$	$^2[3/2]^\circ$	2
173 345.80	0.18	1	$2s^22p^5(^2P^\circ_{3/2})15s$	$^2[3/2]^\circ$	1
173 349.46	0.08	1	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[5/2]^\circ$	2
173 349.51	0.08	1	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[3/2]^\circ$	2
173 349.52	0.06	1	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[5/2]^\circ$	3
173 350.78	0.09	1	$2s^22p^5(^2P^\circ_{1/2})9d$	$^2[3/2]^\circ$	1
173 367.82	0.18	1	$2s^22p^5(^2P^\circ_{3/2})14d$	$^2[1/2]^\circ$	1
173 368.88	0.18	1	$2s^22p^5(^2P^\circ_{3/2})14d$	$^2[3/2]^\circ$	1
173 422.57	0.18	1	$2s^22p^5(^2P^\circ_{3/2})16s$	$^2[3/2]^\circ$	1
173 440.74	0.18	1	$2s^22p^5(^2P^\circ_{3/2})15d$	$^2[3/2]^\circ$	1
173 441.13	0.18	1	$2s^22p^5(^2P^\circ_{3/2})15d$	$^2[1/2]^\circ$	1
173 485.09	0.18	1	$2s^22p^5(^2P^\circ_{3/2})17s$	$^2[3/2]^\circ$	1
173 500.11	0.18	1	$2s^22p^5(^2P^\circ_{3/2})16d$	$^2[3/2]^\circ$	1
173 536.36	0.18	1	$2s^22p^5(^2P^\circ_{3/2})18s$	$^2[3/2]^\circ$	1
173 543.17	0.18	1	$2s^22p^5(^2P^\circ_{1/2})11s$	$^2[1/2]^\circ$	1
173 549.40	0.18	1	$2s^22p^5(^2P^\circ_{3/2})17d$	$^2[3/2]^\circ$	1
173 580.01	0.18	1	$2s^22p^5(^2P^\circ_{3/2})19s$	$^2[3/2]^\circ$	1
173 590.50	0.18	1	$2s^22p^5(^2P^\circ_{3/2})18d$	$^2[3/2]^\circ$	1
173 608.51	0.05	1	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[5/2]^\circ$	2
173 608.51	0.08	1	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	2
173 608.54	0.07	1	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[5/2]^\circ$	3
173 609.59	0.11	1	$2s^22p^5(^2P^\circ_{1/2})10d$	$^2[3/2]^\circ$	1
173 616.48	0.18	1	$2s^22p^5(^2P^\circ_{3/2})20s$	$^2[3/2]^\circ$	1
173 625.28	0.18	1	$2s^22p^5(^2P^\circ_{3/2})19d$	$^2[3/2]^\circ$	1
173 655.01	0.18	1	$2s^22p^5(^2P^\circ_{3/2})20d$	$^2[3/2]^\circ$	1
173 751.47	0.18	1	$2s^22p^5(^2P^\circ_{1/2})12s$	$^2[1/2]^\circ$	1
173 801.12	0.18	1	$2s^22p^5(^2P^\circ_{1/2})11d$	$^2[3/2]^\circ$	1
173 908.26	0.18	1	$2s^22p^5(^2P^\circ_{1/2})13s$	$^2[1/2]^\circ$	1
173 945.96	0.18	1	$2s^22p^5(^2P^\circ_{1/2})12d$	$^2[3/2]^\circ$	1
174 029.75	0.18	1	$2s^22p^5(^2P^\circ_{1/2})14s$	$^2[1/2]^\circ$	1
174 059.19	0.18	1	$2s^22p^5(^2P^\circ_{1/2})13d$	$^2[3/2]^\circ$	1
174 125.57	0.18	1	$2s^22p^5(^2P^\circ_{1/2})15s$	$^2[1/2]^\circ$	1
174 149.04	0.18	1	$2s^22p^5(^2P^\circ_{1/2})14d$	$^2[3/2]^\circ$	1
174 202.46	0.18	1	$2s^22p^5(^2P^\circ_{1/2})16s$	$^2[1/2]^\circ$	1
174 221.46	0.18	1	$2s^22p^5(^2P^\circ_{1/2})15d$	$^2[3/2]^\circ$	1
174 265.12	0.18	1	$2s^22p^5(^2P^\circ_{1/2})17s$	$^2[1/2]^\circ$	1
174 280.61	0.18	1	$2s^22p^5(^2P^\circ_{1/2})16d$	$^2[3/2]^\circ$	1
174 316.88	0.18	1	$2s^22p^5(^2P^\circ_{1/2})18s$	$^2[1/2]^\circ$	1
174 329.86	0.18	1	$2s^22p^5(^2P^\circ_{1/2})17d$	$^2[3/2]^\circ$	1
174 360.10	0.18	1	$2s^22p^5(^2P^\circ_{1/2})19s$	$^2[1/2]^\circ$	1
174 371.29	0.18	1	$2s^22p^5(^2P^\circ_{1/2})18d$	$^2[3/2]^\circ$	1
174 396.62	0.18	1	$2s^22p^5(^2P^\circ_{1/2})20s$	$^2[1/2]^\circ$	1
174 405.81	0.18	1	$2s^22p^5(^2P^\circ_{1/2})19d$	$^2[3/2]^\circ$	1
174 435.59	0.18	1	$2s^22p^5(^2P^\circ_{1/2})20d$	$^2[3/2]^\circ$	1
367 360	70	1	$2s2p^63p$	$^1P^\circ$	1
380 070	40	1	$2s2p^64p$	$^1P^\circ$	1
384 670	40	1	$2s2p^65p$	$^1P^\circ$	1
386 880	40	1	$2s2p^66p$	$^1P^\circ$	1
388 080	50	1	$2s2p^67p$	$^1P^\circ$	1
388 820	50	1	$2s2p^68p$	$^1P^\circ$	1
389 330	50	1	$2s2p^69p$	$^1P^\circ$	1
389 670	50	1	$2s2p^610p$	$^1P^\circ$	1
389 920	50	1	$2s2p^611p$	$^1P^\circ$	1
390 090	50	1	$2s2p^612p$	$^1P^\circ$	1

TABLE 5. Wavelengths for Ne I determined from the optimized energy levels (Ritz wavelengths)

Intensity[a]	Ritz air wavelength (Å)	Wave number (cm^{-1})
250	3351.7486	29 826.6001
5 000	3369.8076	29 666.7629
7 000	3369.9072	29 665.8861
500	3375.6484	29 615.4326
5 000	3417.9031	29 249.3158
500	3418.0056	29 248.4390
500	3423.9120	29 197.9855
2 000	3447.7024	28 996.5144
500	3450.7645	28 970.7847
1 000	3454.1944	28 942.0190
1 000	3460.5237	28 889.0856
1 000	3464.3382	28 857.2769
2 000	3466.5781	28 838.6321
5 000	3472.5706	28 788.8673
1 000	3498.0637	28 579.0673
2 000	3501.2159	28 553.3376
500	3510.7207	28 476.0355
2 000	3515.1902	28 439.8298
10 000	3520.4711	28 397.1699
150	3562.9536	28 058.5884
5 000	3593.5257	27 819.8856
3 000	3593.6389	27 819.0088
1 000	3600.1685	27 768.5553
500	3609.1786	27 699.2350
1 000	3633.6640	27 512.5888
1 000	3682.2421	27 149.6371
1 000	3685.7352	27 123.9074
400	3701.2244	27 010.3996
500	3754.2151	26 629.1582
20 000	5400.5618	18 511.4457
20 000	5852.4879	17 082.0155
10 000	5881.8952	16 996.6124
5 000	5944.8342	16 816.6679
6 000	5975.5340	16 730.2718
10 000	6029.9969	16 579.1653
10 000	6074.3377	16 458.1436
3 000	6096.1631	16 399.2208
1 000	6128.4499	16 312.8247
10 000	6143.0626	16 274.0212
10 000	6163.5939	16 219.8119
10 000	6217.2812	16 079.7522
10 000	6266.4950	15 953.4713
1 000	6304.7889	15 856.5741
10 000	6334.4278	15 782.3815
10 000	6382.9917	15 662.3051
1 000	6506.5281	15 364.9344
1 000	6532.8822	15 302.9517
10 000	6598.9529	15 149.7351
1 500	6652.0927	15 028.7134
5 000	6678.2762	14 969.7906
700	6717.0430	14 883.3945
100 000	6929.4673	14 427.1439
34 000	7024.0504	14 232.8749
85 000	7032.4131	14 215.9498
2200	7051.2923	14 177.8882
10 000	7059.1074	14 162.1920
80	7064.7585	14 150.8637
77 000	7173.9381	13 935.5042
77 000	7245.1666	13 798.5027
60 000	7438.8984	13 439.1493
3 100	7472.4386	13 378.8277
32 000	7488.8712	13 349.4711
28 000	7535.7741	13 266.3841

TABLE 5. —Continued

Intensity[a]	Ritz air wavelength (Å)	Wave number (cm^{-1})
13 000	7544.0443	13 251.8407
56	7833.0285	12 762.9426
230	7839.0528	12 753.1344
7	7839.9873	12 751.6143
300	7927.1177	12 611.4565
1 300	7936.9961	12 595.7603
7 900	7943.1814	12 585.9521
200	7944.1409	12 584.4320
5 700	8082.4580	12 369.0725
3 800	8118.5492	12 314.0858
1 200	8128.9108	12 298.3896
17 000	8136.4054	12 287.0613
310	8248.6823	12 119.8168
3 300	8259.3790	12 104.1206
7 200	8266.0772	12 094.3124
990	8267.1163	12 092.7923
29 000	8300.3258	12 044.4094
1 900	8301.5577	12 042.6221
4 600	8365.7465	11 950.2217
6 600	8376.3594	11 935.0808
76 000	8377.6080	11 933.3020
2 700	8417.1606	11 877.2271
26 000	8418.4274	11 875.4398
3 700	8463.3575	11 812.3960
1 300	8484.4435	11 783.0394
69 000	8495.3598	11 767.8985
1 600	8544.6958	11 699.9524
2 900	8571.3524	11 663.5662
1 600	8582.9028	11 647.8700
41 000	8591.2584	11 636.5417
35 000	8634.6470	11 578.0691
740	8635.3175	11 577.1701
6 000	8647.0411	11 561.4739
64 000	8654.3831	11 551.6657
7 600	8655.5221	11 550.1456
13 000	8679.4925	11 518.2473
15 000	8681.9211	11 515.0253
2 900	8704.1116	11 485.6687
160	8767.5360	11 402.5817
10 000	8771.6563	11 397.2256
2 100	8778.7328	11 388.0383
57 000	8780.6226	11 385.5874
230	8782.0012	11 383.8001
43 000	8783.7533	11 381.5294
260	8792.5047	11 370.2011
550	8830.9072	11 320.7563
27 000	8853.8668	11 291.3997
2 100	8865.3063	11 276.8298
15 000	8865.7552	11 276.2588
6 400	8919.5006	11 208.3127
1 800	8988.5564	11 122.2037
12 000	9148.6716	10 927.5495
8 900	9201.7591	10 864.5057
6 000	9220.0601	10 842.9407
2 200	9221.5801	10 841.1534
1 800	9226.6903	10 835.1491
910	9275.5196	10 778.1096
7 700	9300.8527	10 748.7530
830	9310.5839	10 737.5187
2 700	9313.9726	10 733.6121
6 900	9326.5068	10 719.1868
1 500	9373.3078	10 665.6660
7	9377.2265	10 661.2089

TABLE 5. —Continued

Intensity[a]	Ritz air wavelength (Å)	Wave number (cm^{-1})
4 800	9425.3788	10 606.7432
66	9433.0077	10 598.1651
2 800	9459.2095	10 568.8085
5 000	9486.6818	10 538.2026
6 100	9534.1629	10 485.7215
2 800	9547.4049	10 471.1781
18 000	9665.4197	10 343.3254
420	10 295.4174	9710.3981
8 000	10 562.4075	9464.9452
780	10 620.6649	9413.0274
6 100	10 798.0429	9258.4013
9 400	10 844.4772	9218.7584
26 000	11 143.0200	8971.7709
49 000	11 177.5239	8944.0760
15 000	11 390.4339	8776.8937
8 800	11 409.1343	8762.5078
33 000	11 522.7459	8676.1117
17 000	11 525.0194	8674.4002
9 100	11 536.3445	8665.8847
2 600	11 601.5366	8617.1889
13 000	11 614.0807	8607.8817
2 800	11 688.0017	8553.4411
15 000	11 766.7924	8496.1672
13 000	11 789.0435	8480.1312
3 200	11 789.8891	8479.5230
7 400	11 984.912	8341.5411
23 000	12 066.334	8285.2540
4 300	12 459.389	8023.8806
1 600	12 595.004	7937.4845
6 500	12 689.201	7878.5617
1 600	12 769.525	7829.0034
14	12 887.159	7757.5400
8 400	12 912.014	7742.6073
4 500	13 219.241	7562.6628
5 300	15 230.714	6563.8868
1 800	17 161.929	5825.2596
250	18 210.313	5489.8948
30	18 898.827	5289.8894
150	18 937.553	5279.0720
6	18 944.646	5277.0954
260	19 573.754	5107.4877
790	19 577.115	5106.6109
32	19 772.467	5056.1574

Intensity[a]	Ritz vacuum wavelength (Å)	Wave number (cm^{-1})
1	20 140.219	4965.1893
630	20 355.776	4912.6105
43	20 359.410	4911.7337
2	20 372.208	4908.6480
8	20 417.203	4897.8306
37	20 421.584	4896.7797
3	20 425.446	4895.8540
11	20 854.448	4795.1402
7	20 901.600	4784.3228
29	20 910.239	4782.3462
2	20 966.952	4769.4105
11	21 014.615	4758.5931
8	21 019.257	4757.5422
3	21 023.347	4756.6165
2 700	21 047.015	4751.2676

TABLE 5. —Continued

Intensity[a]	Ritz vacuum wavelength (Å)	Wave number (cm^{-1})
2 900	21 714.047	4605.3137
78	22 177.292	4509.1168
1 300	22 253.432	4493.6888
1 300	22 434.266	4457.4669
540	22 472.922	4449.7997
8 500	22 536.536	4437.2392
1 300	22 667.978	4411.5095
210	22 693.960	4406.4588
2 500	23 106.788	4327.7326
3 800	23 266.626	4298.0017
5 000	23 379.349	4277.2791
3 400	23 571.774	4242.3620
17 000	23 642.942	4229.5921
1 200	23 708.131	4217.9621
74	23 714.098	4216.9009
5 900	23 715.608	4216.6323
170	23 918.541	4180.8570
11 000	23 957.930	4173.9833
4 600	23 962.964	4173.1065
220	23 978.369	4170.4254
6 000	23 984.701	4169.3244
200	24 093.527	4150.4923
46	24 098.984	4149.5525
1 100	24 105.149	4148.4913
210	24 156.486	4139.6749
12	24 162.551	4138.6359
2 000	24 168.026	4137.6983
140	24 225.537	4127.8754
2 800	24 256.225	4122.6530
38	24 316.420	4112.4474
7 400	24 371.671	4103.1245
3 800	24 378.258	4102.0158
360	24 390.013	4100.0388
37	24 395.230	4099.1620
1 900	24 454.533	4089.2214
12	24 459.078	4088.4615
240	24 459.778	4088.3446
3 300	24 466.067	4087.2937
370	24 471.609	4086.3680
55	24 532.499	4076.2255
1 700	24 783.249	4034.9835
780	24 910.524	4014.3676
2 900	24 935.697	4010.3150
46	24 942.297	4009.2538
170	25 006.629	3998.9396
35	25 071.215	3988.6379
1 300	25 168.567	3973.2099
300	25 234.821	3962.7783
100	25 284.127	3955.0505
280	25 400.128	3936.9880
4 600	25 531.305	3916.7603
130	25 861.936	3866.6865
1 000	26 868.120	3721.8831
140	27 528.256	3632.6312
930	27 580.986	3625.6862
15	27 826.379	3593.7123
240	27 979.570	3574.0363
570	28 393.945	3521.8777
310	28 540.973	3503.7348
81	28 752.114	3478.0051
130	29 455.857	3394.9106
14	29 495.605	3390.3356
22	29 676.059	3369.7197

TABLE 5. —Continued

Intensity[a]	Ritz vacuum wavelength (Å)	Wave number (cm^{-1})
61	29 722.122	3364.4973
6	29 812.553	3354.2917
4	29 939.524	3340.0665
9	29 949.039	3339.0053
1	30 127.141	3319.2662
2	30 135.101	3318.3894
1	30 138.004	3318.0698
620	30 208.732	3310.3011
41	30 267.826	3303.8382
17	30 275.861	3302.9614
20	30 371.783	3292.5298
52	30 603.348	3267.6163
23	30 675.326	3259.9491
53	30 720.029	3255.2053
78	31 868.630	3137.8820
830	33 182.142	3013.6692
230	33 341.793	2999.2388
1 700	33 361.476	2997.4693
47	33 520.423	2983.2559
450	33 909.059	2949.0644
440	33 912.269	2948.7853
1 200	33 922.355	2947.9085
360	34 140.649	2929.0597
590	34 480.840	2900.1614
240	34 499.284	2898.6109
380	34 789.486	2874.4317
120	35 517.015	2815.5519
790	35 844.578	2789.8222
96	36 481.637	2741.1051
42	37 182.252	2689.4552
180	39 817.16	2511.4800
140	42 182.98	2370.6242
5	44 335.80	2255.5135
27	47 159.79	2120.4505
11	47 179.30	2119.5737

[a]Intensities in italic are radiometrically calibrated results from SBS.[47] Most other intensities are from Striganov and Odintsova[4] adjusted to approximately the same scale as SBS.