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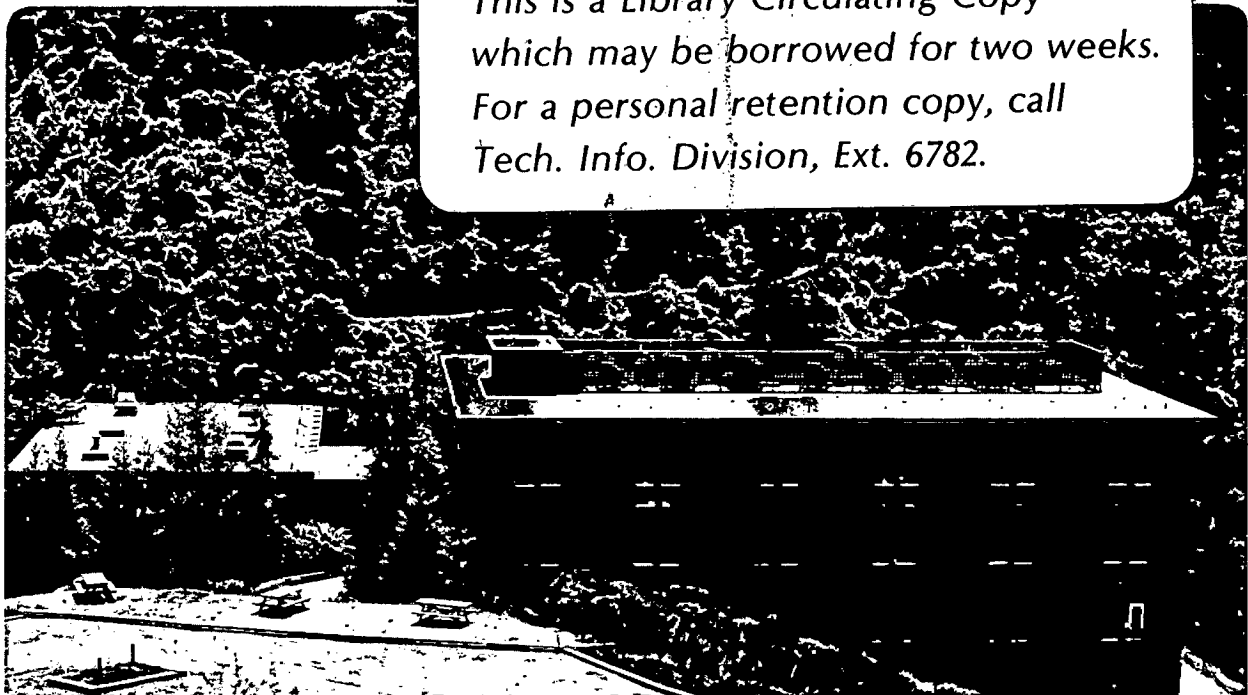
Materials & Molecular Research Division

CLASSIFIED LINES OF THE FIRST AND SECOND SPECTRUM
OF URANIUM BETWEEN 1817 AND 5500 WAVENUMBERS
(5.5 TO 1.8 MICRONS)

John G. Conway, Earl F. Worden, James W. Brault,
Robert P. Hubbard, and Jeremy J. Wagner

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CLASSIFIED LINES OF THE FIRST AND SECOND SPECTRUM OF URANIUM BETWEEN 1817 AND 5500 WAVENUMBERS (5.5 to 1.8 MICRONS)*

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Abstract

The emission spectrum of uranium has been observed in the infrared from 1.8 to 5.5 microns using McMath Fourier transform spectrometer at the the Kitt Peak National Observatory, and a water cooled hollow cathode lamp. The wavenumber, wavelength, and relative intensity of 4433 lines between 1817 and 5598 cm^{-1} that can be classified as transitions between known levels of the first and second spectra of uranium have been tabulated.

CONTENTS

INTRODUCTION

The infrared emission spectrum of uranium has previously been investigated[1-3] at various resolutions and accuracies for portions of the infrared. Because of source and/or instrument limitations none of these investigations extended as far into the infrared (1817 cm^{-1} or 5.5 μm) with as much intensity as we have achieved. The resolution and accuracy of the studies in ref. 1 were not sufficient for reliable and extensive energy level analysis and assignments. While Ref. 2 data were of improved quality, they are still below modern available accuracy. The measurements in ref. 3 were made with a Fourier transform spectrometer (FTS) at Orsay, France using electrodeless and hollow cathode lamps as sources. They represent the most accurate infrared observations available when this study was initiated, but they are limited to lines below 3.4 μm. In addition, our investigation has produced a larger number of observed lines per wavenumber by at least a factor of three.

We have recorded the uranium emission spectrum between 40,000 cm^{-1} and 1817 cm^{-1} (2500Å to 5.5 μm) using the Kitt Peak

Observatory (KPNO) McMath FTS.[4] Six sets of data were recorded to cover this region. We discuss here only the observations between 1817 and 5598 cm^{-1} (5.5 to 1.78 μm) taken on March 28, 1982. Over 9,000 emission lines believed to be uranium first spectrum or neutral atom (U I) lines and second spectrum or singly-ionized (U II) lines have been selected from the observed spectrum. We report here 4433 of these observed lines that can be classified as lines resulting from transitions between the known energy levels of neutral[5] and singly-ionized[6] uranium.

The uranium spectrum was excited in a water cooled hollow cathode operated at a current of 700 milliamperes with a flowing argon carrier gas at a pressure of 2 Torr (266 Pa). The cathode was an open ended cylinder of depleted uranium (99.75 percent ^{238}U, 0.25 percent ^{235}U) 27.9 mm (1.1 in.) long, 11.1 mm (7/16 in.) outside diameter and 7.9 mm (5/16 in.) inside diameter. The viewing window of the lamp was a wedged sapphire window about one mm thick. The rear window was placed at 45° from normal to reduce the amount of reflected infrared background radiation reaching the entrance aperature of the spectrometer. The optical path from the hollow cathode to the spectrometer was enclosed and flushed with dry nitrogen gas. A barium fluoride lens imaged the light from the cathode onto the spectrometer entrance aperature.

The spectrometer was equipped with a potassium chloride beam-splitter, liquid nitrogen cooled InSb detectors and a germanium filter. The maximum path difference was 429 mm with over one million

data points recorded per scan. Eight scans were taken and summed during a total recording time of one hour. The collected data were transformed and a line list computed by derivative analysis methods. This list contains the computed line center, line width, peak intensity and equivalent width. The absolute frequency calibration was obtained in the following manner. Interferometric wavenumbers determined by Norlen[7] for argon lines observed in the 11100 to 10217 cm^{-1} region and calculated lines to 4174 cm^{-1} were used to calibrate the set of uranium lines. The transformed data was also plotted out as intensity versus wavenumber to form an atlas of the observed spectrum. Our techniques are similar to those used by Palmer, Keller and Engleman[8] to generate their uranium atlas for the visible region. The experiment was repeated with a 0.001 inch sleeve of 93 percent ^{235}U metal inserted in the ^{238} cathode. The resulting spectrum indicates about 12 percent intensity of 235.

To make the table we used a computer program that uses the known energy levels derived from analysis of the uranium spectra[5,6] to calculate allowed transitions and search for a coincidence within a ±0.005 cm^{-1} tolerance. This tolerance was set equal to the quoted accuracy of the reported levels.[5] Each coincidence line was checked against the atlas to determine its character and decide if it had inteferences or appeared to be blended.

UNCERTAINTIES

The wavenumbers reported here have an estimated uncertainty of 2 mk or less (1 mk = $10^{-3}cm^{-1}$). In a comparison of our observed

argon infrared emission lines with wavenumbers calculated from interferometric determined energy level values by Norlen[7] we found all 11 lines he reported in the 4170 to 5450 cm^{-1} region. The average deviation of our observed wavenumbers from the calculated values is 0.2 mk, well within our estimated 2 mk uncertainty. A comparison of our uranium wavenumbers with those observed at Laboratoire Aime Cotton, Orsay, France and cataloged in unpublished work[3] shows 2 mk average deviation in the 3.4 to 1.88 μm region.

ACKNOWLEDGEMENTS

EXPLANATION OF TABLE

WAVENUMBER

Wavenumber of line, in vacuum, in cm^{-1}. A number of lines, 429, are listed more than once because more than one possible transition between the known levels of U I and U II has a calculated frequency within ±0.005 cm^{-1} of the line wavenumber. There are 366 double, 27 triple and 3 quadruple assignments. No attempt was made to determine which transition is responsible for the intensity although the transition with the lowest excitation potential (lowest upper level) is the most probable one.

WAVELENGTH

Wavelength, in air, in Å (10^{10} m)

INT

Intensity. Intensities are reported as equivalent width or peak height times width at half maximum times a constant, 1.154. The reported values are relative intensities and proportional to photon per wavenumber. The spectral response of the spectrometer was determined using a tungsten filament lamp with a calibration traceable to the National Bureau of Standards. Lamp scans were taken directly following the uranium spectra. Intensity values are linear on an open whole number scale ranging between 3 and 9928. The intensities are representative of the emission from a depleted uranium hollow cathode with dimensions, operating current and pressure specified in the

Introduction or from a device with similar excitation potential.

J-O, J-E

J- values of the odd and even levels. First spectrum (U I) J-values are integer and second spectrum, singly ionized uranium spectrum (U II) J- values are half-integer.

LEVELS

The energy levels whose difference yields a wavenumber within 0.005 cm^{-1} of the line. The levels listed under ODD and EVEN are truncated values. Assignments were made by calculating the frequency difference of the known levels of U I[5] and U II[6] and searching the line list for a coincidence within 0.005 cm^{-1} tolerance, the quoted uncertainty[5] of the level values. The selection rules used are odd to even (parity rule) and $\Delta J = 0, \pm 1$. Three exceptions were made. The line at 3800.829 cm^{-1} is assigned as the U I transition between the odd levels of the configuration $5f^3 6d7s^2$, 0.000 and 3800.829 cm^{-1} with term designations $^5L_6^o$ and $^5L_7^o$, respectively. The line 4420.871 cm^{-1} is assigned as the U II transition between the odd levels of the configuration $5f^3 7s^2$, 0.000 to 4420.871 cm^{-1} with term symbols $^4I_4^o$, and $^4I_5^o$, respectively. The line at 3030.605 cm^{-1} is assigned as a U I transition between two even parity levels of the same configuration, $5f^4 7s^2$. The levels are 7020.710, $^5I_4$ and 10051.314, $^5I_5$. Parity forbidden transitions among the low lying levels of other

actinides have been identified.[9,10,11] There are 4375 U I transitions identified and 450 U II transitions. A number of lines have multiple assignments, see WAVENUMBER above.

ISOTOPE SHIFT

The isotope shift in mk, 10^{-3} cm^{-1}, between ^{238}U and ^{235}U. A positive shift indicates that the ^{235}U line is at lower wavenumber than the ^{238}U line. Isotope Shift = wavenumber(238)−wavenumber(235). Shifts are reported for 183 lines.

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URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
1817.549	55004.153	206	7	6	12826-14643	
1827.144	54715.306	220	4	4	10208-12035	
1828.117	54686.184	11	4	5	18319-20148	
1828.417	54677.211	19	8	7	18938-20766	
1829.733	54637.986	44	9/2	9/2	13041-16211	
1829.910	54632.601	11	6	5	17102-18932	
1830.229	54623.108	59	5	5	11633-13463	
1830.925	54602.314	137	7/2	9/2	7547- 5716	
1843.131	54240.714	36	8	7	18621-20464	
1844.289	54206.658	30	7	6	13346-11502	
1845.673	54166.010	26	6	6	31857-33703	
1845.968	54157.354	9	4	4	19907-21753	
1847.564	54110.571	6	4	4	14274-16121	
1850.166	54034.472	32	3	4	15560-13710	
1852.107	53977.844	9	6	6	35193-33341	
1852.107	53977.844	9	4	3	19555-21407	
1854.217	53916.420	10	5	6	18359-16505	
1855.166	53888.839	3	4	5	32655-34510	
1857.841	53811.248	13	3	4	8878- 7020	
1858.010	53806.353	4	3	3	24267-22409	
1858.773	53784.266	54	6	6	13361-11502	
1858.773	53784.266	54	11/2	11/2	37543-35684	
1858.842	53782.270	4	5	6	18359-20218	
1860.145	53744.596	9	5	5	31847-33707	
1861.173	53714.911	6	5	4	24445-22584	
1861.173	53714.911	6	5	6	19403-21265	
1861.173	53714.911	6	3	4	29461-31322	
1865.230	53596.078	5	5	5	31915-33780	
1865.230	53596.078	5	5	5	32660-30795	
1866.758	53553.058	4	15/2	13/2	17259-15392	
1868.327	53509.232	24	4	5	19210-21078	
1869.795	53467.221	7	5	6	18065-16195	
1869.795	53467.221	7	11/2	11/2	27496-25626	
1869.795	53467.221	7	11/2	13/2	26964-28834	
1871.045	53431.501	13	4	5	22492-20621	
1879.567	53189.241	30	6	7	18005-19885	
1881.142	53144.708	18	11/2	11/2	13270-11389	
1881.905	53123.161	139	11/2	9/2	7598- 5716	
1882.383	53109.671	4	6	5	34160-32278	
1882.383	53109.671	4	8	7	20178-18295	
1882.383	53109.671	4	6	6	23024-24906	
1882.711	53100.419	17	4	5	14411-16294	
1885.199	53030.339	9	5	6	20139-18253	
1885.657	53011.836	9	6	6	35760-33874	
1885.895	53010.768	4	9/2	11/2	13275-11389	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
1887.042	52978.546	7	5	6	24956-23069	
1889.089	52921.139	24	5	5	31121-29232	
1889.089	52921.139	24	13/2	13/2	12629-10740	
1894.919	52758.319	24	8	7	20738-22633	
1895.746	52735.304	7	6	5	18825-16929	
1895.746	52735.304	7	4	5	31899-30004	
1896.292	52720.120	6	4	4	20199-18299	
1898.851	52649.071	11	4	5	18412-20311	
1898.967	52645.855	10	5	4	20139-22038	
1899.555	52629.559	52	6	6	19685-21584	
1899.712	52625.209	12	5	5	18214-20114	
1899.712	52625.209	12	6	7	31857-29958	
1899.914	52619.614	6	6	6	13402-11502	
1900.399	52606.185	4	6	6	14543-12643	
1900.453	52604.691	6	9	8	19509-21409	
1901.073	52587.535	40	3	4	13936-12035	
1901.837	52566.409	25	7	6	20680-22582	
1902.655	52543.810	129	9/2	11/2	6445- 8347	
1902.983	52534.753	16	4	5	15026-16929	
1903.993	52506.885	5	6	6	34746-32842	
1904.696	52487.506	19	4	5	11558-13463	
1907.063	52422.359	19	4	4	15986-17893	
1907.715	52404.443	30	3	4	15560-17468	
1910.124	52338.352	13	4	4	17217-19127	
1910.429	52329.996	3	6	5	22171-24082	
1912.875	52263.081	5	3	4	29461-27548	
1912.875	52263.081	5	3	2	22678-24591	
1913.806	52237.657	13	5	4	32691-30777	
1917.743	52130.417	8	11/2	11/2	17922-19840	
1918.022	52122.834	10	4	5	8133-10051	
1918.629	52106.344	12	3	2	17909-19828	
1918.978	52096.867	3	5	6	14562-12643	
1919.466	52083.622	7	6	7	16376-18295	
1921.405	52031.062	10	3	4	11788-13710	
1921.553	52026.919	14	4	4	19831-21753	
1921.553	52026.919	14	5	4	23535-25457	
1921.637	52024.780	17	7	6	20680-18759	
1922.282	52007.324	5	5	6	24784-22862	
1923.115	51984.796	4	4	4	22492-20569	
1923.290	51980.066	3	4	3	19907-21830	
1926.191	51901.780	12	5	4	15542-17468	
1926.651	51889.388	59	6	6	15435-17361	
1929.356	51816.638	4	4	4	24196-26125	
1933.427	51707.534	6	5	6	16825-18759	
1934.251	51685.506	19	9/2	11/2	20018-18084	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
1934.305	51684.063	20	6	5	15435-17369	
1935.710	51646.549	4	5	4	19403-17468	
1937.653	51594.760	9	5	6	24401-22464	
1937.653	51594.760	9	4	4	34161-32223	
1938.230	51579.401	14	4	3	18319-20258	
1938.328	51576.793	6	6	5	32267-34205	
1938.328	51576.793	6	3	4	20345-22283	
1940.793	51511.285	103	6	6	35223-33282	
1940.793	51511.285	103	4	5	22752-20851	
1941.001	51505.765	61	6	7	18825-20766	
1944.146	51422.445	8	5	6	17882-19826	
1946.499	51360.284	8	6	5	20353-18406	
1948.281	51313.307	9	6	7	12910-14858	
1949.495	51281.353	66	5	5	14344-16294	
1951.059	51240.245	8	5	6	17589-15638	
1951.252	51235.177	4	6	6	32286-30334	
1952.342	51206.572	17	7	7	20680-22633	
1953.111	51186.411	8	6	6	22171-20218	
1954.602	51147.365	80	5	4	10081-12035	
1954.723	51144.068	102	13/2	11/2	13344-11389	
1954.753	51143.283	21	5	5	26485-28444	
1954.753	51143.283	21	4	5	16451-18406	
1955.488	51124.191	50	3	3	16575-18530	
1956.807	51089.730	6	4	3	25596-23639	
1958.015	51058.210	5	4	5	18567-20525	
1959.239	51026.313	76	5	5	14970-16929	
1961.996	50954.610	112	6	6	14543-16505	
1962.355	50945.288	63	7	6	18256-20218	
1966.948	50826.327	7	4	5	22492-20525	
1968.231	50793.195	5	3	3	23908-21940	
1968.974	50774.028	6	4	4	32480-30511	
1972.309	50688.174	7	4	5	19664-21636	
1973.120	50667.340	9	6	7	26911-24938	
1973.841	50648.832	11	5	4	15799-13825	
1976.718	50575.116	4	3	3	23753-25729	
1978.382	50532.577	15	9/2	9/2	6445- 8423	
1978.809	50521.673	7	4	3	18412-20391	
1979.310	50508.885	19	5	6	18964-20943	
1980.325	50482.997	9	4	5	19555-21536	
1984.626	50373.593	175	13/2	13/2	8755-10740	- 135
1984.955	50365.243	37	3	3	15169-17154	
1986.016	50338.336	14	5	5	16825-14839	
1986.015	50338.336	14	9/2	9/2	26532-28518	
1986.576	50324.146	3	4	3	22792-20805	
1987.056	50311.990	28	3	4	15906-17893	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
1989.391	50252.937	17	4	4	19555-21545	
1990.503	50224.863	4	6	6	19274-21265	
1991.640	50196.191	9	4	5	18319-20311	
1993.050	50160.679	9	4	3	22792-24785	
1993.050	50160.679	9	7	6	16766-18759	
1995.160	50107.631	10	6	6	34160-36155	
1995.715	50093.696	6	13/2	11/2	11787-13783	
1997.039	50060.510	39	11/2	11/2	14709-16706	
1998.051	50035.130	7	3	4	32672-34670	
2000.425	49975.751	4	6	6	22171-24172	
2000.472	49974.577	13	11/2	13/2	13961-15962	
2001.747	49942.746	13	4	5	22149-20148	
2002.504	49923.866	4	4	3	34161-32159	
2004.242	49880.574	27	3	4	32546-34550	
2004.242	49880.574	27	5	6	18214-20218	
2006.080	49834.873	34	5	5	32199-34205	
2006.080	49834.873	34	6	5	11457-13463	
2006.137	49833.457	5	6	5	19914-17908	
2007.807	49792.008	19	6	6	19758-21766	
2009.094	49784.891	16	7	6	15353-17361	
2009.248	49756.298	20	6	7	33584-35593	
2009.248	49756.298	20	6	7	19758-21767	
2010.609	49722.617	6	6	6	28440-30451	
2013.199	49658.648	3	4	4	19907-17893	
2014.615	49623.745	22	5	6	24070-22056	
2018.088	49538.346	12	5	5	13632-11613	
2018.088	49538.346	12	4	5	31899-29881	
2018.887	49518.740	16	6	6	33984-36003	
2018.887	49518.740	16	4	4	16588-18607	
2019.232	49510.280	10	5	6	18214-16195	
2019.272	49509.299	6	8	8	14842-16862	
2019.403	49506.087	24	10	9	20945-22964	
2021.013	49466.649	20	6	6	14174-16195	
2021.013	49466.649	20	7/2	9/2	10444- 8423	
2021.695	49449.962	5	2	2	17098-19119	
2022.333	49434.240	4	8	7	21174-23197	
2022.338	49434.240	4	3	4	33001-30979	
2023.765	49399.382	12	3	3	17091-19115	
2023.827	49397.869	8	4	3	24433-22409	
2025.897	49347.396	6	5	6	28576-26550	
2025.897	49347.396	6	4	5	18319-16294	
2026.073	49343.109	5	6	5	18825-20851	
2027.132	49317.332	5	3	2	22678-20651	
2028.077	49294.352	19	3	2	17091-19119	
2030.327	49239.724	5	2	2	16942-14911	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2032.561	49185.604	6	6	6	19103-17070	
2032.561	49185.604	6	3	3	24562-26594	
2033.208	49169.953	10	5	6	19959-21993	
2035.511	49114.321	6	3	4	17091-19127	
2036.473	49091.120	22	3	4	11788-13825	
2037.263	49072.084	5	7	8	29187-27150	
2037.263	49072.084	5	5	5	27567-29605	
2037.701	49061.536	40	8	7	18938-16900	
2037.985	49054.699	21	11/2	9/2	34070-32032	
2039.800	49011.051	180	5	5	28896-30936	- 311
2045.040	48885.470	4	5	4	19403-21448	
2046.039	48861.601	4	3	2	17261-19307	
2046.419	48852.528	3	5	5	20331-22377	
2047.250	48832.698	5	3	4	33627-31580	
2048.220	48809.572	584	13/2	13/2	13344-15392	- 503
2051.291	48736.499	35	8	7	16244-18295	
2051.549	48730.370	8	8	9	20738-22789	
2053.351	48687.604	13	5	5	30224-32278	
2053.351	48687.604	13	9	8	21873-23926	
2055.597	48634.407	22	4	3	19210-17154	
2059.929	48532.130	37	4	5	11403-13463	
2060.739	48513.053	14	8	8	17428-19489	
2061.114	48504.227	6	7	6	18256-16195	
2061.114	48504.227	6	7/2	9/2	26125-28186	
2063.908	48438.565	12	7	7	13567-15631	
2065.202	48408.214	4	4	3	17799-19864	
2065.325	48405.331	43	7	6	13567-11502	
2065.972	48390.172	17	5	5	18359-16294	
2066.791	48370.957	5	4	3	23129-21062	
2067.712	48349.451	43	4	4	15778-13710	
2068.741	48325.402	6	6	5	20353-22421	
2070.419	48286.236	35	7	6	13567-15638	
2070.911	48274.765	9	11/2	11/2	22813-20742	
2071.599	48258.732	9	4	3	18319-20391	
2073.133	48223.023	43	7	7	16766-18839	
2073.245	48220.418	14	7	6	20680-22754	
2074.137	48199.681	3	6	5	23024-25098	
2074.567	48189.690	9	9/2	9/2	35922-33848	
2077.540	48120.730	5	3	2	14281-12204	
2077.768	48115.449	32	4	5	19007-16929	
2077.768	48115.449	32	5	6	24070-21993	
2078.054	48107.901	4	5	4	19959-22038	
2078.237	48104.591	21	5	6	19148-17070	
2078.723	48093.229	5	3	3	17909-15831	
2078.938	48090.684	4	6	6	19914-21993	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2080.113	48061.091	11	4	4	32094-34174	
2081.072	48039.059	14	6	6	23024-20943	
2081.201	48036.082	14	4	5	19555-21636	
2082.835	47998.397	5	6	7	19685-21767	
2085.452	47938.164	34	6	6	18591-16505	
2085.745	47931.430	10	6	5	16847-18932	
2087.124	47899.761	4	6	5	19016-16929	
2088.617	47865.521	20	5	5	13632-15720	
2090.136	47830.735	7	5	6	24401-22311	
2091.493	47799.701	7	5	4	17461-19552	
2091.739	47794.103	4	3	3	19246-17154	
2092.271	47781.927	4	5	4	18214-20306	
2094.312	47735.362	10	5	6	24956-22862	
2094.636	47727.978	9	5	4	15799-17893	
2095.678	47704.247	32	7/2	5/2	33411-31316	
2096.361	47688.705	6	5	6	19959-22056	
2099.151	47625.321	11	6	6	20353-18253	
2099.347	47620.875	14	5	6	16154-18253	
2099.948	47607.246	53	5	6	14970-17070	
2100.315	47598.927	4	4	3	22792-24892	
2100.701	47590.181	63	3	4	17091-19192	
2100.831	47587.236	13	4	3	22492-20391	
2100.831	47587.236	13	6	6	31134-29033	
2100.969	47584.110	7	1	2	10103-12204	
2105.193	47488.634	6	5	6	28896-26791	
2105.193	47488.634	6	4	5	33444-31339	
2105.607	47479.297	5	6	5	34160-36266	
2107.078	47446.151	13	6	6	18111-20218	
2107.078	47446.151	13	3	3	22678-24785	
2108.354	47417.436	9	6	5	18005-20114	
2108.972	47403.541	17	7	8	20680-22789	
2111.271	47351.922	17	6	6	20353-22464	
2111.755	47341.070	20	6	5	27920-30032	
2111.755	47341.070	20	11/2	13/2	22813-20702	
2111.817	47339.680	59	9	8	20677-22789	
2112.591	47322.336	72	9	8	19297-21409	
2112.723	47319.245	8	5	5	24070-21958	
2112.729	47319.245	8	5	6	29374-27261	
2115.042	47267.497	7	5	6	32885-35000	
2115.042	47267.497	7	4	4	20967-23082	
2116.388	47237.435	8	5	6	19149-21265	
2117.396	47214.947	3	5	5	24539-22421	
2117.396	47214.947	3	11/2	13/2	37490-39607	
2118.686	47186.200	40	4	5	19412-16294	
2119.590	47166.075	8	4	5	19210-21329	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2119.669	47164.317	22	6	5	14174-16294	
2121.806	47116.815	8	7	7	34659-32537	
2121.806	47116.815	8	11/2	13/2	13270-15392	
2121.951	47114.927	9	4	3	24311-22189	
2122.261	47106.713	14	7	6	16766-14643	
2122.782	47095.152	7	4	3	12884-15007	
2124.214	47063.403	7	3	4	32546-34670	
2124.763	47051.243	10	5	4	33853-31728	
2128.030	46979.009	5	4	3	15026-17154	
2129.010	46957.384	28	9	8	21873-24002	
2129.442	46947.858	35	5	6	13632-11502	
2130.129	46932.717	11	4	5	15778-17908	
2130.958	46914.458	11	4	4	19907-22038	
2132.162	46887.967	17	5	5	19403-21536	
2132.162	46887.967	17	3	3	16983-19115	
2132.951	46870.622	5	5	6	20331-22464	
2133.954	46848.592	21	5	6	24445-22311	
2136.471	46793.399	7	3	2	16983-19119	
2136.471	46793.399	7	3	2	27199-25059	
2136.660	46789.260	9	5	5	29531-27394	
2140.880	46697.031	8	6	6	23084-20943	
2142.083	46670.806	24	6	5	18005-20148	
2143.907	46631.099	23	3	4	16983-19127	
2144.542	46617.292	13	4	4	19831-21976	
2145.112	46604.905	15	8	7	18621-20766	
2148.167	46538.626	4	4	4	22792-24940	
2148.775	46525.458	17	3	2	17909-20058	
2148.775	46525.458	17	6	6	33752-31603	
2150.664	46484.593	43	7	6	18068-20218	
2151.272	46471.455	34	5	4	31583-29432	
2151.636	46463.593	19	4	4	11558-13710	
2151.894	46458.023	7	6	7	19274-21426	
2152.357	46448.029	6	3	4	27092-24940	
2152.357	46448.029	6	3	3	24562-22409	
2155.572	46378.753	4	3	2	24267-22112	
2156.834	46351.616	74	5	6	16602-18759	
2157.038	46347.232	42	5	6	20916-18759	
2160.934	46263.671	67	4	3	16588-18749	
2161.412	46253.440	5	4	4	15586-13825	
2161.412	46253.440	5	3	4	32672-30511	
2161.412	46253.440	5	11/2	13/2	26673-28834	
2161.848	46244.112	4	5	5	17882-15720	
2162.064	46239.492	23	6	6	19103-21265	
2162.064	46239.492	23	9/2	9/2	30301-28138	
2164.042	46197.227	10	7	6	18256-20420	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2164.629	46184.700	5	5	6	18359-16195	
2171.074	46047.597	37	4	5	22792-20621	
2171.074	46047.597	37	5	4	29784-31955	
2174.481	45975.449	23	3	3	16575-18749	
2179.859	45862.021	4	3	2	17091-14911	
2180.316	45852.409	37	8	7	20738-22918	
2180.789	45842.464	40	4	5	22492-20311	
2181.332	45831.052	5	2	3	18210-20391	
2181.634	45824.708	8	4	4	22792-24974	
2181.634	45824.708	8	7	6	20680-22862	
2181.884	45819.457	28	5	6	16625-14643	
2185.228	45749.341	29	3	4	13936-16121	
2187.110	45709.974	199	5	5	7864-10051	- 324
2190.304	45643.317	15	8	7	20178-22368	
2190.680	45635.483	19	4	3	15778-17968	
2191.126	45626.194	8	5	6	19553-17361	
2193.911	45568.275	12	5	6	17589-19783	
2195.104	45543.510	7	6	7	26911-29107	
2195.104	45543.510	7	9/2	11/2	36118-38313	
2195.384	45537.701	16	5	6	30255-32450	
2195.384	45537.701	16	5	5	31242-33437	
2195.384	45537.701	16	11/2	11/2	14709-12513	
2196.490	45514.771	13	3	4	15906-13710	
2197.291	45498.179	14	4	4	19555-21753	
2197.983	45483.855	9	4	4	18319-16121	
2198.357	45476.117	4	4	3	20967-23165	
2200.026	45441.618	5	5	4	19553-21753	
2202.644	45387.607	183	6	7	19103-16900	- 322
2203.154	45377.100	15	6	6	16847-14643	
2203.333	45373.414	56	9/2	11/2	20857-18654	
2204.122	45357.172	7	6	6	19274-17070	
2205.430	45329.244	25	4	5	18319-20525	
2205.924	45320.120	4	5	6	18214-20420	
2208.050	45276.484	13	7	7	18256-20464	
2208.259	45272.199	22	6	5	33984-31778	
2209.097	45255.025	69	3	4	16963-19192	
2211.250	45210.962	4	6	6	23024-25235	
2211.250	45210.962	4	5	4	33939-31728	
2212.882	45177.619	18	6	6	18005-20218	
2212.982	45175.578	14	9	9	21630-23843	
2213.173	45171.679	5	8	7	34523-32310	
2216.039	45113.258	9	3	2	17091-19307	
2216.039	45113.258	9	7/2	9/2	26125-28341	
2216.293	45108.088	3	3	3	23753-21536	
2217.449	45084.593	3	4	3	20967-18749	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2217.448	45084.593	3	5	4	23005-25788	
2218.343	45066.403	178	15/2	13/2	8521-10740	− 119
2218.899	45055.111	3	5	6	27567-25348	
2218.946	45054.156	6	5	5	19148-16929	
2219.204	45049.918	31	8	7	17428-19647	
2221.683	44998.652	3	5	4	18964-21185	
2222.210	44987.980	6	4	4	16047-13825	
2222.210	44987.980	6	6	5	27920-30143	
2223.144	44969.080	20	4	4	22792-20569	
2229.191	44847.095	4	6	7	31134-33363	
2229.313	44844.540	31	6	7	13402-15631	
2229.400	44842.890	17	4	4	32333-30107	
2229.400	44842.890	17	11/2	13/2	8510-10740	
2229.632	44838.224	18	6	6	20353-22582	
2230.119	44928.433	7	5	6	23168-25938	
2231.590	44798.883	6	5	5	27567-29799	
2233.866	44753.239	4	4	5	32237-30004	
2234.425	44742.043	9	6	6	19758-21993	
2234.425	44742.043	9	9/2	9/2	31634-29399	
2235.830	44713.927	19	6	6	13402-15638	
2237.014	44690.261	4	4	5	32192-34429	
2238.360	44663.387	116	9/2	11/2	11544-13783	
2238.695	44656.704	4	5	5	20139-22377	
2238.737	44655.866	49	4	4	14274-12035	
2240.650	44617.740	4	5	5	30255-32499	
2242.564	44579.660	151	8	7	19142-16900	− 206
2244.335	44544.482	3	9/2	9/2	15147-17392	
2244.914	44534.977	4	6	5	29488-31733	
2245.114	44529.026	6	6	6	34718-32472	
2246.312	44505.278	15	3	4	14281-12035	
2246.858	44493.671	4	5	4	31174-28927	
2248.213	44467.646	8	6	6	19016-21265	
2249.314	44445.880	33	4	4	18319-20569	
2249.854	44435.212	12	4	4	17302-19552	
2251.999	44392.888	20	5	5	16154-18406	
2251.999	44392.888	20	5	6	32994-30742	
2252.274	44387.468	4	5	4	23535-25788	
2252.274	44387.468	4	9/2	11/2	26262-24010	
2253.226	44368.714	6	6	5	18825-21078	
2253.833	44356.765	4	5	5	24070-26324	
2254.123	44351.058	3	3	3	17261-15007	
2254.773	44338.273	4	4	5	17217-19471	
2255.777	44319.538	5	3	3	23663-21407	
2257.992	44275.064	5	6	7	23024-20766	
2260.354	44228.758	16	6	5	18591-20851	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2260.586	44224.259	29	1	2	15999-18260	
2262.427	44188.272	14	5	5	13876-11613	
2263.120	44174.741	18	6	5	17102-14839	
2264.675	44144.409	3	6	6	23084-25348	
2264.675	44144.409	3	5	4	27020-29285	
2266.978	44099.563	17	4	5	22792-20525	
2267.576	44087.933	6	6	7	28801-31069	
2270.342	44034.220	3	5	6	29281-31551	
2270.342	44034.220	3	11/2	11/2	34634-32364	
2270.459	44031.951	25	6	7	13361-15631	
2270.908	44023.245	6	5	6	33874-31603	
2271.651	44008.846	4	7	6	25134-22862	
2272.422	43993.915	31	7	8	18256-20528	
2273.057	43980.851	14	4	4	24311-22038	
2273.361	43975.743	12	4	5	18567-16294	
2275.572	43933.015	39	15/2	13/2	13015-10740	
2275.766	43929.270	14	5	5	24697-22421	
2275.995	43924.850	8	4	3	19664-21940	
2276.029	43924.213	5	5	4	32005-34281	
2276.971	43906.022	35	6	6	13361-15638	
2279.319	43860.793	4	5	6	32123-34402	
2279.478	43857.734	45	7	6	14790-17070	
2279.478	43857.734	45	3	4	32546-30266	
2280.137	43845.058	27	6	7	20353-22633	
2280.643	43835.330	40	4	5	19210-16929	
2282.693	43795.964	3	5	5	20139-22421	
2283.534	43779.834	14	8	7	19142-21426	
2284.943	43752.837	78	7	7	13346-15631	
2286.424	43724.497	3	5	5	24697-26983	
2286.424	43724.497	3	6	7	22171-19885	
2289.045	43674.432	11	3	4	20345-22634	
2289.864	43658.811	43	5	5	31785-34075	
2289.864	43658.811	43	7	6	17928-20218	
2290.600	43644.783	9	7	6	17928-15638	
2290.768	43641.582	5	4	4	18412-16121	
2291.412	43629.317	7	3	2	19246-21537	
2291.455	43628.498	86	7	6	13346-15638	
2292.566	43607.355	4	4	4	35559-33266	
2294.421	43572.099	3	13/2	11/2	16532-18827	
2294.975	43561.581	17	6	5	19685-21980	
2295.087	43559.455	17	4	3	17302-15007	
2296.027	43541.622	18	9	8	21630-23926	
2297.112	43521.056	11	7	7	17928-15631	
2299.362	43491.386	40	3	4	15169-17468	
2300.977	43447.952	18	5	6	13964-21265	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2301.460	43438.834	10	5	4	16825-19127	
2301.524	43437.626	5	5	6	18359-20661	
2301.919	43430.173	4	4	4	20195-17893	
2302.823	43413.029	293	11/2	13/2	13089-15392	- 556
2304.386	43383.678	12	5	6	24070-21766	
2305.736	43358.277	6	3	3	23753-26058	
2306.267	43348.294	6	11/2	11/2	13699-11389	
2306.335	43347.016	9	4	4	18412-20719	
2308.419	43307.883	4	5	4	20916-18607	
2308.763	43301.430	6	6	6	18111-20420	
2308.889	43299.067	27	5	4	14344-12035	
2308.889	43299.067	27	5	4	29531-31840	
2310.104	43276.294	10	6	6	19274-21584	
2311.135	43256.988	22	4	5	12362-10051	
2311.135	43256.988	22	11/2	9/2	36236-33925	
2312.686	43227.978	10	4	4	15986-18299	
2314.651	43191.280	101	4	5	15778-13463	- 376
2315.925	43167.520	16	11/2	13/2	25423-23107	
2317.667	43135.075	5	3	4	32872-35189	
2317.667	43135.075	5	5	4	32285-29967	
2317.667	43135.075	5	9/2	11/2	26470-24152	
2318.144	43126.199	21	6	5	33584-35902	
2318.144	43126.199	21	6	5	13402-15720	
2318.956	43111.098	6	5	6	13876-16195	
2319.436	43102.176	73	7	7	22440-24760	
2319.436	43102.176	73	8	7	20738-23057	
2319.733	43096.658	10	6	6	18825-16505	
2322.466	43045.943	4	4	3	24196-26518	
2322.466	43045.943	4	4	5	19007-21329	
2323.189	43032.547	76	10	9	23303-25626	
2323.322	43030.083	17	3	3	33627-31304	
2323.484	43027.083	5	5	4	19959-22283	
2324.437	43009.442	29	3	2	16983-19307	
2324.481	43008.628	5	6	6	23024-25348	
2325.224	42994.885	12	5	6	20139-22464	
2329.123	42922.911	8	5	4	16154-13825	
2330.421	42899.004	13	5	5	16602-18932	
2331.425	42880.530	40	6	6	14174-16505	
2332.171	42866.813	3	6	5	31134-33466	
2333.381	42844.584	6	3	4	15560-17893	
2333.453	42843.262	3	5	6	19403-17070	
2335.633	42803.274	6	4	4	16047-18383	
2337.279	42773.130	50	4	4	16047-13710	
2340.921	42706.584	11	3	4	24499-26840	
2340.921	42706.584	11	6	5	15804-13463	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2343.456	42660.387	4	7	8	25134-27477	
2343.510	42659.404	3	5	6	30961-33305	
2344.312	42644.810	4	4	5	22492-20148	
2344.312	42644.810	4	7	8	25134-22789	
2344.474	42641.863	88	5	5	18065-15720	
2345.269	42627.408	4	6	6	22171-19826	
2345.644	42620.593	35	6	5	32236-34631	
2345.644	42620.593	35	5	6	24401-22056	
2345.902	42615.906	73	15/2	13/2	8394-10740	
2347.529	42586.370	5	6	6	15906-18253	
2349.233	42555.480	6	5	6	27020-24671	
2349.323	42553.850	15	11/2	13/2	13089-10740	
2351.576	42513.080	27	6	7	26911-24560	
2351.868	42507.802	8	5	6	19959-22311	
2351.868	42507.802	8	5	5	32787-30435	
2352.350	42499.092	23	7	6	18068-20420	
2353.071	42486.070	53	5	4	31121-33474	
2353.644	42475.727	25	3	2	15906-18260	
2354.760	42455.596	65	6	6	10288-12643	- 317
2356.051	42432.332	4	5	5	31785-29429	
2356.611	42422.249	57	6	7	14543-16900	
2357.043	42414.474	4	2	3	17507-19864	
2357.676	42403.086	6	11/2	9/2	19473-21831	
2359.285	42374.168	16	6	5	13361-15720	
2361.965	42327.522	3	9/2	7/2	18041-15679	
2362.611	42314.515	20	5	6	19403-21766	
2365.877	42256.102	4	5	5	18964-21329	
2366.151	42251.208	76	5	5	15542-17908	
2367.404	42228.846	32	5	5	14562-16929	
2367.581	42225.689	29	6	6	18005-15638	
2369.519	42191.153	10	7	7	19998-22368	
2370.919	42166.240	3	3	2	23908-21537	
2371.687	42152.585	11	9	8	21630-24002	
2373.198	42125.747	23	2	2	16746-19119	
2374.106	42109.636	4	6	5	28440-26066	
2374.106	42109.636	4	5	6	24956-22582	
2374.204	42107.898	106	6	7	19274-16900	
2375.674	42081.842	9	4	4	14411-12035	
2376.707	42063.552	11	6	5	26911-24535	
2378.042	42039.938	32	5	4	30224-32602	
2378.042	42039.938	32	4	5	22492-20114	
2379.052	42022.091	14	2	3	18210-15831	
2380.571	41995.277	10	3	3	14774-17154	
2381.027	41987.234	3	3	2	22678-25059	
2382.736	41957.119	9	3	2	24267-26650	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2382.865	41954.848	13	6	6	16376-18759	
2385.983	41900.021	47	6	5	14543-16929	
2387.691	41870.049	15	5	5	31392-33780	
2388.379	41857.988	27	5	6	10254-12643	
2388.470	41856.393	29	6	7	22171-24560	
2389.461	41839.033	40	5	6	24445-22056	
2391.073	41810.827	21	6	5	18111-15720	
2391.374	41805.564	256	5	6	14970-17361	+ 379
2392.679	41782.763	8	3	4	15906-18299	
2393.270	41772.445	12	11/2	11/2	10740- 8347	
2395.223	41738.385	6	5	5	32831-30435	
2395.223	41738.385	6	9/2	11/2	30559-32994	
2395.437	41734.656	12	4	4	24433-22038	
2395.865	41727.200	40	6	6	18591-16195	
2397.003	41707.390	13	3	4	17909-20306	
2398.578	41680.003	20	8	7	14501-16900	
2399.028	41672.185	23	5	5	14970-17369	
2399.125	41670.500	17	4	4	18319-20719	
2400.343	41649.355	7	4	3	22492-24892	
2400.658	41640.421	5	4	3	22792-20391	
2400.951	41638.808	11	4	5	32094-34495	
2400.951	41638.808	11	4	3	19555-17154	
2401.047	41637.144	15	4	4	31837-34238	
2401.447	41630.208	14	6	5	32267-34669	
2402.062	41619.550	4	6	7	34372-31970	
2404.584	41575.858	8	5	5	32994-30589	
2405.037	41568.067	5	7	6	18256-20661	
2405.037	41568.067	5	4	5	24308-26713	
2405.172	41565.734	17	5	5	19553-21958	
2405.935	41552.552	4	5	6	32994-30588	
2406.713	41539.033	32	3	3	17261-19668	
2407.330	41528.473	4	3	2	20345-22752	
2407.955	41517.694	38	4	4	15778-18185	
2408.115	41514.935	4	4	4	22792-25200	
2408.797	41503.181	9	5	6	24401-21993	
2409.602	41489.316	3	6	7	19016-21426	
2411.459	41457.366	13	9/2	11/2	25910-28322	
2417.823	41348.245	13	5	5	19959-22377	
2417.874	41347.373	7	3	3	22678-25096	
2421.936	41278.027	7	4	4	11403-13825	
2422.793	41263.426	11	6	6	23084-20661	
2422.793	41263.426	11	5	4	32994-30571	
2422.793	41263.426	11	7/2	7/2	34207-31784	
2423.008	41259.764	20	5	4	19553-21976	
2424.356	41236.823	9	4	5	19555-21980	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2426.554	41199.470	5	4	5	19210-21636	
2426.788	41195.497	5	5	6	13065-15638	
2429.026	41157.542	4	5	5	17882-20311	
2429.800	41144.431	15	7	6	19068-15638	
2432.597	41097.123	20	4	4	32237-34670	
2433.959	41074.126	8	5	5	24070-21636	
2435.312	41051.306	67	9	8	19297-16862	− 174
2435.990	41039.880	7	5	6	19148-21584	
2436.439	41032.317	8	4	3	33544-35981	
2436.439	41032.317	8	4	3	20967-18530	
2438.866	40991.485	6	4	4	19907-17468	
2439.589	40979.336	14	6	6	19825-21265	
2440.128	40970.285	9	5	6	19553-21993	
2441.027	40955.196	30	2	2	18210-20651	
2441.435	40948.351	6	4	4	19007-21448	
2441.435	40948.351	6	4	4	15026-17468	
2444.679	40894.014	3	4	4	33544-31100	
2444.849	40891.171	9	6	5	20353-17908	
2449.557	40812.579	29	6	6	15804-18253	
2450.198	40801.902	3	5	5	25984-23534	
2452.615	40761.692	19	5	6	24445-21993	
2454.157	40736.081	5	5	4	31884-34338	
2454.157	40736.081	5	6	7	19914-22368	
2454.994	40722.193	7	8	7	20178-22633	
2455.705	40710.402	6	7	8	18256-20712	
2457.090	40687.455	8	5	5	23535-21078	
2457.444	40681.594	10	4	5	33444-35902	
2457.444	40681.594	10	4	4	24423-21976	
2457.444	40681.594	10	9/2	9/2	20857-23315	
2458.215	40668.834	3	5	4	24539-26997	
2458.345	40666.684	11	5	6	19964-16505	
2458.577	40662.846	15	6	7	18005-20464	
2458.770	40659.654	55	8	7	20738-23197	
2458.826	40658.728	9	4	3	17799-20258	
2458.989	40656.033	231	6	6	17102-14643	− 170
2459.533	40646.958	7	5	6	28122-25662	
2460.731	40627.252	9	7	8	18068-20528	
2462.856	40591.703	8	4	4	20967-23430	
2462.949	40590.665	30	6	7	16376-18839	
2463.292	40585.013	8	4	3	32427-29963	
2463.292	40585.013	8	8	9	31802-29339	
2463.656	40578.358	3	11/2	13/2	36513-34049	
2463.955	40574.053	5	6	5	26911-24448	
2465.341	40551.282	7	7	6	19998-22464	
2468.671	40496.582	6	4	3	35559-33090	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2470.314	40469.648	3	6	7	31134-33604	
2473.385	40419.400	10	6	6	18111-15638	
2476.422	40369.831	5	3	4	15906-18383	
2476.422	40369.831	5	3	4	32372-30395	
2477.288	40355.719	10	4	5	12362-14839	
2477.979	40344.465	10	2	2	18210-15732	
2478.729	40332.258	3	6	6	26911-24433	
2479.359	40313.230	18	6	7	18111-15631	
2480.768	40299.108	7	4	3	24311-21830	
2480.819	40298.296	135	4	5	22792-20311	- 440
2481.664	40284.558	4	4	4	22492-24974	
2481.664	40284.558	4	6	6	19103-21584	
2481.664	40284.558	4	4	3	25596-23114	
2482.281	40274.545	6	4	4	19555-22038	
2482.551	40270.165	32	5	6	19553-17070	
2482.957	40265.202	9	5	6	24533-22056	
2483.240	40258.992	14	4	3	16047-18530	
2484.759	40234.380	4	5	5	28060-30544	
2484.944	40233.004	7	5	4	18964-21449	
2485.511	40222.207	6	4	4	22792-20306	
2485.881	40216.220	5	4	3	18319-20805	
2488.785	40169.295	11	4	3	18319-15831	
2488.785	40169.295	11	3	3	23908-26397	
2490.926	40136.380	5	4	3	32237-29747	
2491.080	40132.287	5	6	6	33907-31416	
2491.466	40126.070	67	6	7	15804-18295	+ 127
2491.723	40121.850	5	5	4	19959-17468	
2491.940	40118.437	18	6	6	19274-21766	
2493.380	40095.267	106	6	7	19274-21767	
2496.004	40053.116	3	5	6	24070-26566	
2497.692	40026.047	14	5	4	14970-17468	
2501.888	39958.918	7	6	5	20353-22854	
2502.829	39943.855	36	9/2	7/2	7166- 4663	
2503.282	39936.666	13	5	6	19553-22056	
2504.353	39919.587	47	5	6	19959-22464	
2504.637	39915.061	7	4	4	20195-22700	
2505.222	39905.740	3	4	4	32708-30203	
2506.298	39888.608	4	5	5	30224-32731	
2508.114	39859.726	89	5	6	14562-17070	
2509.544	39837.013	18	4	3	24196-26705	
2509.544	39837.013	18	6	5	18111-20621	
2509.843	39832.268	10	4	3	19664-17154	
2510.030	39829.300	52	7	7	18256-20766	
2512.610	39788.402	7	4	4	32480-29967	
2512.837	39784.808	7	5	6	27184-24671	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2516.578	39725.666	5	5	5	20916-23432	
2517.422	39712.348	30	2	1	18210-20727	
2517.904	39704.746	31	1	1	15999-18517	
2518.454	39696.075	130	4	5	14411-16929	+ 612
2519.446	39680.445	8	6	5	18005-20525	
2523.881	39610.718	7	3	4	24499-21976	
2524.873	39595.155	50	5	5	17589-20114	
2526.557	39568.764	17	4	3	16588-19115	
2526.694	39566.619	7	6	6	14543-17070	
2526.722	39566.180	8	5	4	14562-12035	
2529.701	39519.597	6	4	4	24311-26840	
2531.105	39497.665	11	5	6	20331-22862	
2531.491	39491.643	6	6	5	18825-16294	
2531.665	39488.928	26	4	5	18319-20851	
2531.665	39488.928	26	5	5	31425-28894	
2532.372	39466.552	7	5	4	20916-18383	
2533.542	39459.673	9	11/2	9/2	16003-18536	
2537.256	39401.912	5	4	5	27262-29799	
2537.989	39390.532	172	6	5	31134-33672	+ 179
2538.302	39385.675	31	4	4	16588-19127	
2540.105	39357.719	6	3	3	16575-19115	
2541.008	39343.732	108	7	6	15712-18253	- 342
2541.056	39342.985	146	3	4	14576-12035	- 250
2541.386	39337.880	7	5	4	29445-31987	
2542.757	39316.670	21	9	8	19509-22052	
2544.416	39291.035	41	3	2	16575-19119	
2544.513	39289.537	6	6	5	35148-32604	
2544.654	39287.360	6	6	7	17102-19647	
2545.251	39278.145	8	4	4	25596-23051	
2545.569	39273.238	14	3	3	23973-26518	
2546.221	39263.182	10	4	3	35559-33013	
2547.344	39245.872	7	5	6	30255-32802	
2550.052	39204.196	4	5	5	32123-29573	
2551.448	39182.745	27	7	6	25134-22582	
2551.811	39177.172	7	5	5	31392-28840	
2551.974	39174.669	26	4	4	19831-22383	
2553.086	39157.607	10	6	6	19758-22311	
2554.600	39134.400	4	5	4	24697-27252	
2555.239	39124.613	13	4	4	32237-29682	
2556.142	39110.792	7	5	5	18065-20621	
2556.453	39106.034	6	5	6	31174-33730	
2556.453	39106.034	6	6	5	16376-18932	
2556.608	39103.663	4	5	4	29430-31987	
2557.049	39096.919	69	11/2	11/2	5790- 8347	
2557.270	39093.540	5	4	3	25391-27948	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2559.397	39061.051	4	3	2	24630-27189	
2559.983	39052.110	6	4	5	31899-29339	
2560.189	39048.968	14	6	7	32267-34827	
2560.189	39048.968	14	4	4	16047-19607	
2560.371	39046.192	240	6	5	14174-11613	− 130
2560.768	39040.139	10	4	5	20967-18406	
2561.162	39034.133	7	2	2	16746-19307	
2561.366	39031.024	6	5	4	20139-22700	
2561.366	39031.024	6	7/2	9/2	31961-29399	
2562.347	39016.081	21	5	6	10081-12643	
2563.129	39004.177	4	5	4	24539-21976	
2563.299	39001.651	75	5	6	13632-16195	
2566.166	38958.017	4	3	3	23753-26319	
2567.291	38940.945	1880	4	4	4453- 7020	− 305
2569.214	38911.798	31	3	4	16983-19552	
2569.305	38910.420	4	6	5	22171-24741	
2569.516	38907.225	121	8	7	17423-14858	
2569.830	38902.471	9	3	2	14774-12204	
2570.339	38894.767	10	2	3	17098-19668	
2570.903	38886.235	22	4	3	31347-33918	
2570.903	38886.235	22	7	6	14790-17361	
2571.056	38883.921	4	5	5	32857-30286	
2572.380	38863.907	219	11/2	11/2	13961-11389	+ 152
2573.472	38847.416	4	7	7	27576-30149	
2574.200	38836.430	9	7	6	10069-12643	
2576.054	38808.479	3	6	6	28801-26225	
2576.190	38806.430	6	5	5	19403-21980	
2576.222	38805.948	6	5	6	18214-15638	
2576.244	38805.617	6	4	5	32532-35108	
2576.244	38805.617	6	4	5	12627-10051	
2576.721	38798.433	52	3	3	17091-19668	
2578.196	38776.236	23	6	7	26911-24333	
2579.730	38753.179	4	5	4	24070-26650	
2579.956	38751.286	7	5	5	34612-32033	
2580.983	38734.365	15	4	5	17533-20114	
2581.030	38733.660	18	5	4	18964-21545	
2581.574	38725.497	4	4	3	18412-15831	
2582.469	38712.076	12	6	6	33421-36003	
2582.469	38712.076	12	2	2	13149-15732	
2582.917	38705.362	55	7	7	15712-18295	
2583.222	38700.792	10	4	5	32336-29753	
2583.702	38693.602	25	7	6	19998-22582	
2584.046	38688.451	4	4	4	20967-18383	
2584.218	38685.876	76	4	5	16047-13463	
2585.238	38670.613	334	5	5	14344-16929	+ 89

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2585.294	38665.775	334	7/2	9/2	18797-16211	+ 433
2588.901	38617.390	10	5	5	14970-17559	
2589.227	38611.036	28	5	6	19403-21993	
2589.356	38609.113	11	4	3	32336-29747	
2593.345	38549.725	6	4	4	20967-23560	
2593.345	38549.725	6	7	6	18068-20661	
2593.957	38540.630	13	8	8	23195-25789	
2594.774	38528.495	45	5	4	29784-32378	
2594.774	38528.495	45	8	7	16244-18839	
2594.774	38528.495	45	5	5	32199-29605	
2594.774	38528.495	45	3	3	27195-29790	
2595.617	38515.982	15	2	3	18210-20805	
2595.669	38515.210	9	8	7	34523-37119	
2596.358	38504.989	115	5	6	18065-20661	
2596.358	38504.989	115	5	5	31583-28987	
2597.258	38491.647	32	4	4	22149-19552	
2597.258	38491.647	32	6	6	19103-16505	
2598.045	38479.987	7	5	6	19959-17361	
2599.233	38462.359	129	4	5	18319-15720	- 343
2600.727	38440.304	5	4	3	23129-25729	
2600.980	38436.565	128	6	7	18825-21426	+ 400
2602.209	38418.412	15	6	5	15804-18406	
2602.819	38409.408	5	3	3	17261-19864	
2603.109	38405.129	8	4	3	24433-21830	
2603.492	38399.479	27	4	4	16588-19192	
2603.745	38395.748	9	4	5	23129-20525	
2603.932	38392.991	72	13/2	13/2	13344-10740	
2605.200	38374.304	17	4	4	15778-18383	
2605.200	38374.304	17	3	4	32872-30266	
2605.977	38362.862	5	5	5	28896-26290	
2606.287	38358.299	4	4	5	22492-25098	
2606.341	38357.505	5	3	4	33001-30395	
2606.287	38358.299	4	11/2	9/2	24771-22165	
2607.281	38343.676	24	5	5	15799-18406	
2607.281	38343.676	24	9/2	9/2	23106-25713	
2609.745	38307.473	11	6	7	19758-22368	
2610.825	38291.627	4	5	4	32787-35398	
2611.960	38276.453	25	13/2	13/2	36353-33781	
2613.923	38246.244	12	5	4	29374-26760	
2613.923	38246.244	12	7	6	22440-19826	
2614.100	38243.654	6	7	7	33118-30504	
2614.646	38235.668	4	11/2	13/2	16003-18617	
2614.667	38235.361	5	6	6	19685-17070	
2614.992	38230.609	74	5	6	20139-22754	
2616.168	38213.424	4	4	5	33444-30828	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2617.825	38189.236	19	5	6	19148-21766	
2618.123	38184.889	244	13/2	13/2	13344-15962	+ 902
2618.776	38175.368	15	4	4	19664-22283	
2620.074	38156.455	12	6	5	19016-21636	
2620.074	38156.455	12	5	6	26489-29109	
2620.579	38149.103	67	5	6	18964-21584	
2620.805	38145.813	9	2	3	15347-17968	
2620.983	38143.222	5	4	4	15986-18607	
2621.233	38139.584	4	6	7	31857-29236	
2621.839	38130.769	3	5	5	26489-29111	
2621.956	38129.067	6	5	4	24070-21448	
2624.028	38098.960	6	3	3	15906-18530	
2625.020	38084.562	946	8	7	19142-21767	+ 125
2625.501	38077.585	13	3	4	15560-18185	
2625.996	38070.407	64	4	5	19555-16929	
2625.996	38070.407	64	6	7	33984-31358	
2626.366	38065.044	5	4	4	16451-13825	
2626.476	38063.450	9	9/2	9/2	20018-17392	
2626.629	38061.232	4	5	6	24445-27072	
2626.673	38060.595	9	6	6	19685-22311	
2627.341	38050.918	5	5	4	27567-24940	
2627.822	38043.953	8	4	3	22492-19864	
2628.478	38034.458	255	4	5	15778-18406	+ 87
2628.706	38031.159	3	6	5	34372-31744	
2629.370	38021.555	11	5	6	13876-16505	
2629.404	38021.064	108	5	6	17589-20218	+ 104
2629.429	38020.717	23	7	7	32019-34649	
2629.429	38020.717	23	5	5	24401-27031	
2629.429	38020.717	23	4	5	19007-21636	
2631.156	37995.747	351	9/2	11/2	9882-12513	- 321
2632.776	37972.367	657	11/2	9/2	5790- 8423	- 347
2633.487	37962.115	4	4	3	19555-22189	
2633.830	37957.171	3	13/2	11/2	8755-11389	
2634.151	37952.546	5	5	5	28168-25534	
2635.415	37934.343	8	5	6	24401-21766	
2636.475	37919.092	5	4	5	20195-17559	
2637.057	37910.723	10	7	6	19958-17361	
2637.858	37899.211	6	4	3	24311-26948	
2639.309	37878.375	3	5	5	18359-15720	
2641.226	37850.983	13	5	6	24697-22056	
2642.934	37826.422	17	5	6	19148-16505	
2643.500	37819.323	3	3	4	27092-24449	
2643.978	37811.486	15	5	4	15542-18185	
2644.014	37810.971	7	7	8	18068-20712	
2644.342	37806.281	9	4	5	22792-20148	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2644.416	37805.223	4	5	4	20916-23560	
2644.880	37798.591	5	6	5	33984-31339	
2644.953	37797.548	6	5	6	24956-22311	
2645.131	37795.004	163	4	3	12362-15007	+ 119
2645.959	37783.177	46	9	8	17882-20528	
2646.859	37770.330	9	6	6	26911-29558	
2647.453	37761.855	154	9	8	19509-16862	
2647.537	37760.657	6	5	5	20139-22786	
2647.613	37759.573	10	6	5	33584-30936	
2647.613	37759.573	10	7/2	7/2	34207-36855	
2647.970	37754.482	18	6	7	23024-25672	
2651.153	37709.154	9	11/2	11/2	16003-18654	
2652.380	37691.710	11	5	6	19403-22056	
2652.380	37691.710	11	5	6	27020-29673	
2653.538	37675.261	20	11/2	11/2	15430-18084	
2655.390	37648.984	498	4	5	14274-16929	+ 551
2655.565	37646.503	4	6	6	18005-20661	
2655.868	37642.208	15	5	6	20916-23572	
2657.262	37622.461	5	7	6	22440-19783	
2658.590	37603.668	3	5	5	24784-27443	
2658.590	37603.668	3	11/2	11/2	25423-22764	
2659.493	37590.900	5	5	4	24697-22038	
2660.394	37578.169	8	4	5	14274-11613	
2661.403	37563.923	4	4	4	32192-34853	
2661.952	37556.176	47	5	5	13632-16294	
2662.347	37550.604	28	5	6	20916-18253	
2663.248	37537.900	633	9/2	9/2	8379- 5716	+ 223
2663.500	37534.348	22	6	6	19103-21766	
2663.702	37531.502	6	4	3	16451-19115	
2664.940	37514.067	9	6	7	19103-21767	
2666.027	37498.771	6	4	5	18412-21078	
2666.178	37496.647	4	8	8	23195-20528	
2668.346	37466.182	20	6	6	19914-22582	
2669.064	37456.103	9	8	9	21174-23843	
2669.064	37456.103	9	5	4	26489-29158	
2672.339	37403.202	28	5	5	18964-21636	
2673.950	37387.661	29	8	7	21174-23848	
2674.179	37384.473	4	4	5	24311-21636	
2675.448	37366.728	13	4	4	16451-19127	
2676.361	37353.980	31	9/2	11/2	25910-28587	
2676.411	37353.283	8	4	5	34578-31902	
2676.683	37349.487	14	4	3	19831-17154	
2677.480	37338.369	4	3	4	23973-26650	
2678.071	37330.129	51	4	5	22792-20114	
2679.232	37313.953	3	5	6	24445-21766	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2681.356	37283.839	7	2	3	13149-15831	
2681.633	37280.544	30	8	7	17540-14858	
2683.333	37256.925	12	6	7	19685-22368	
2684.242	37244.308	13	5	5	23535-20851	
2684.394	37242.199	15	7	8	25134-27818	
2685.118	37232.158	19	3	3	16983-19668	
2685.257	37230.230	5	5	5	30034-27349	
2686.601	37211.605	17	6	5	28801-31488	
2686.701	37210.220	5	5	4	17882-20569	
2687.004	37206.024	17	5	5	17461-20148	
2688.254	37188.724	175	6	6	19758-17070	- 348
2688.636	37183.440	5	5	6	32123-34912	
2688.760	37181.725	23	3	4	13433-16121	
2690.334	37159.972	7	11/2	9/2	36236-33546	
2690.796	37153.592	5	4	4	25391-22700	
2690.796	37153.592	5	3	3	23753-21062	
2690.796	37153.592	5	9/2	11/2	35523-38213	
2691.131	37148.967	35	5	5	16154-13463	
2691.912	37139.569	5	11/2	9/2	19473-22165	
2692.021	37136.685	6	4	5	18412-15720	
2692.021	37136.685	6	7/2	9/2	34594-31902	
2692.627	37128.327	6	6	5	19685-22377	
2693.577	37115.232	4	4	5	17533-14839	
2693.980	37109.680	33	3	4	14774-17468	
2695.910	37083.113	4	4	3	20195-22891	
2697.158	37065.955	7	6	5	33378-30681	
2697.591	37060.005	9	7/2	9/2	14107-16804	
2697.923	37055.445	5	5	4	31583-34281	
2698.339	37049.746	4	7	7	19068-20766	
2699.968	37027.378	51	3	2	15560-18260	
2700.976	37013.560	13	3	4	15906-18607	
2704.354	36967.326	4	6	7	33984-36688	
2704.380	36966.971	5	5	6	24697-21993	
2704.559	36964.524	6	5	6	32885-35590	
2704.654	36963.226	4	6	7	20353-23057	
2705.570	36950.711	10	6	6	19758-22464	
2706.073	36943.843	11	3	4	20345-23051	
2707.770	36920.690	21	9	8	21873-24581	
2710.423	36884.551	219	7	6	15353-12643	- 265
2710.913	36877.903	5	5	6	33045-30334	
2711.850	36865.142	51	5	6	15542-18253	
2712.946	36850.249	8	6	5	23024-20311	
2713.116	36847.940	30	4	5	19664-22377	
2715.473	36815.957	6	11/2	13/2	25726-28441	
2715.473	36815.957	6	11/2	9/2	25423-28138	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2717.257	36751.785	8	4	3	19907-22624	
2717.257	36751.785	8	3	3	27092-29810	
2717.434	36789.389	19	5	4	17589-20306	
2718.558	36774.178	13	6	6	19274-21993	
2718.741	36771.703	22	5	5	18359-21078	
2718.850	36770.229	10	6	7	19914-22633	
2721.347	36736.490	34	6	7	12910-15631	
2721.623	36732.764	9	5	6	18359-15638	
2722.125	36725.990	7	5	5	17589-20311	
2722.511	36720.783	7	3	4	24267-21545	
2722.865	36716.009	4	6	5	19016-16294	
2722.913	36715.362	4	6	5	34718-31995	
2722.913	36715.362	4	11/2	9/2	26540-23817	
2723.817	36703.177	27	6	6	17102-19826	
2724.027	36700.347	99	3	4	15169-17893	+ 74
2725.100	36685.856	26	11/2	11/2	14709-17434	
2726.040	36673.246	8	6	7	14174-16900	
2726.040	36673.246	8	4	5	31899-29173	
2726.185	36671.296	6	6	7	26911-24185	
2726.255	36670.354	6	2	3	16942-19668	
2726.767	36663.465	6	5	4	16825-19552	
2727.585	36652.473	13	4	4	20195-17468	
2727.859	36648.792	216	6	6	12910-15638	+ 183
2728.426	36641.176	9	5	6	24784-22056	
2729.486	36626.946	31	3	4	19246-21976	
2729.701	36624.061	3	3	2	24267-21537	
2729.952	36620.694	18	5	5	35674-32944	
2730.240	36616.831	7	4	3	19210-21940	
2730.545	36612.741	162	5	5	14344-11613	- 225
2731.025	36606.306	4	13/2	11/2	13975-16706	
2732.548	36585.903	15	7	6	17928-20661	
2732.726	36583.520	204	9/2	11/2	21387-18654	+ 177
2733.700	36570.485	4	7	8	29187-26454	
2734.468	36560.214	269	5	6	29445-32180	
2734.939	36553.918	15	6	6	22171-24906	
2735.796	36542.467	5	11/2	9/2	25887-28623	
2736.784	36529.275	58	3	2	17091-19828	
2737.626	36518.040	15	4	3	23129-20391	
2738.150	36511.052	20	6	5	33752-36490	
2738.601	36505.039	71	3	4	14774-12035	- 349
2738.769	36502.800	7	6	5	18591-21329	
2738.769	36502.800	7	5	5	17882-20621	
2739.336	36495.244	11	5	5	24697-21958	
2739.825	36488.730	22	6	5	18111-20851	
2740.350	36481.207	10	8	7	20178-22918	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2740.638	36477.906	12	4	4	16451-19192	
2740.677	36477.387	8	4	3	22792-25533	
2740.822	36475.457	6	5	5	28060-25319	
2740.924	36474.100	7	5	5	24070-21329	
2740.924	36474.100	7	6	7	33907-31166	
2741.257	36469.669	4	6	6	23084-25825	
2741.433	36467.328	56	4	4	16451-13710	
2743.499	36439.866	252	4	3	14411-17154	
2744.455	36427.173	13	4	4	32427-29682	
2744.455	36427.173	13	11/2	11/2	13961-16708	
2745.518	36413.069	7	4	4	19007-21753	
2746.450	36400.712	5	3	4	27195-24449	
2747.395	36388.192	15	3	3	23753-21005	
2747.789	36382.974	4	4	5	19210-21958	
2749.649	36358.363	6	6	6	19016-21766	
2749.690	36357.821	27	5	5	17589-14839	
2749.690	36357.821	27	5	6	29430-32180	
2750.667	36344.907	8	2	3	17507-20258	
2752.109	36325.864	125	8	8	21174-23926	
2752.275	36323.673	4	4	3	19907-17154	
2752.807	36316.653	35	4	3	15778-18530	
2753.103	36312.748	48	4	4	19831-22584	
2753.778	36303.847	41	5	5	32285-35038	
2753.778	36303.847	41	4	5	32237-29484	
2754.359	36296.189	193	11/2	13/2	12638-15392	
2756.085	36273.459	226	7/2	9/2	5667- 8423	
2758.789	36237.906	16	5	6	19553-22311	
2760.557	36214.697	6	6	7	18005-20766	
2761.013	36208.716	9	6	6	26511-29673	
2762.213	36192.986	7	4	3	32336-29574	
2762.858	36184.536	4	4	4	24308-21545	
2762.944	36183.410	9	5	6	29430-32193	
2763.030	36182.284	30	4	3	15986-18749	
2763.063	36181.852	1095	13/2	13/2	12629-15392	− 761
2763.346	36178.146	9	4	5	33444-30681	
2763.507	36176.039	4	4	4	15588-13825	
2765.586	36148.844	3	3	3	23753-26518	
2765.632	36148.242	10	4	4	19210-21976	
2765.632	36148.242	10	7	7	25134-22368	
2765.982	36143.668	6	4	4	24311-21545	
2766.437	36137.724	8	2	3	17098-19864	
2768.920	36106.622	9	6	6	19274-16505	
2769.409	36098.942	5	5	6	30961-33730	
2769.911	36092.400	13	4	4	17799-20569	
2769.911	36092.400	13	5	4	24070-26840	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2771.927	36066.150	4	4	5	24308-21536	
2771.927	36066.150	4	7/2	5/2	26125-23353	
2772.488	36056.852	8	4	5	16699-19471	
2772.754	36055.393	8	6	5	23084-20311	
2773.213	36049.426	12	9/2	11/2	20857-18084	
2774.530	36032.314	6	5	6	31884-29109	
2775.054	36025.510	7	4	5	24311-21536	
2777.174	35998.009	11	5	6	20139-17361	
2778.243	35984.158	9	4	5	17533-20311	
2778.243	35984.158	9	5	5	16154-18932	
2778.714	35978.059	4	6	7	33378-36157	
2779.156	35972.337	38	6	6	19685-22464	
2779.907	35962.619	11	5	6	28119-30899	
2780.578	35953.940	4	5	4	35242-32461	
2781.345	35944.026	10	6	5	23024-25805	
2782.329	35931.314	3	6	6	31134-33916	
2782.779	35925.503	7	5	4	30034-27252	
2783.214	35919.888	25	7	8	17928-20712	
2783.247	35919.462	5	4	5	33544-36327	
2783.247	35919.462	5	5	4	27184-29967	
2783.247	35919.462	5	6	6	34746-31963	
2784.694	35900.758	4	4	3	24311-27095	
2784.750	35900.076	34	5	5	31884-34669	
2784.750	35900.076	34	6	7	19685-16900	
2787.169	35868.918	4	4	4	34161-31374	
2790.936	35821.788	20	7	8	19958-22789	
2791.866	35808.572	22	6	6	15435-12643	
2792.823	35796.302	198	6	6	13402-16195	
2794.417	35775.883	39	11/2	9/2	8510- 5716	
2795.568	35761.153	23	2	3	18210-21005	
2796.132	35753.940	6	11/2	9/2	37408-34612	
2797.329	35738.641	563	4	5	14411-11613	− 717
2798.873	35718.925	63	3	3	15169-17968	+ 95
2799.987	35704.714	8	5	5	30034-32834	
2800.188	35702.151	7	5	5	31242-34042	
2800.487	35698.339	4	6	7	16847-19647	
2800.727	35695.280	5	5	6	32199-35000	
2800.876	35693.391	4	2	2	18210-21011	
2801.067	35690.948	8	6	6	23024-25825	
2801.532	35685.024	4	5	4	31255-28454	
2803.494	35660.050	20	11/2	13/2	26673-29476	
2804.301	35649.788	18	1	2	12107-14911	
2805.091	35639.748	292	8	7	18621-21426	+ 170
2805.537	35634.082	7	7	7	12826-15631	
2807.194	35613.048	57	5	5	14562-17369	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2810.174	35575.283	128	6	5	12910-15720	
2811.453	35559.099	4	6	5	18825-21636	
2813.154	35537.598	3	11/2	11/2	22913-25626	
2813.442	35533.960	3	5	6	32994-35807	
2813.442	35533.960	3	4	3	32655-35468	
2815.468	35508.390	23	4	4	32583-35398	
2817.161	35487.051	10	5	6	17461-14643	
2817.250	35485.930	7	5	6	24401-21584	
2818.119	35474.987	12	6	6	14543-17361	
2818.627	35468.594	78	6	6	15435-18253	
2818.697	35467.713	6	3	4	24267-21448	
2820.109	35449.954	45	11/2	11/2	17922-20742	
2820.940	35439.511	1085	13/2	11/2	5526- 8347	- 352
2821.520	35432.226	5	6	6	19016-16195	
2822.008	35426.099	10	5	4	31255-34077	
2822.008	35426.099	10	4	5	19555-22377	
2822.747	35416.825	26	3	4	15560-18383	
2822.747	35416.825	26	4	5	33444-30622	
2822.971	35415.269	5	5	4	28122-30945	
2823.217	35410.928	97	9/2	11/2	9690-12513	
2823.923	35402.013	72	5	5	31583-34407	
2823.928	35402.013	72	6	6	19758-22582	
2824.243	35398.064	148	5	5	25202-22377	
2826.249	35372.940	11	4	5	20195-17369	
2826.632	35368.147	4	5	5	27567-24741	
2826.666	35367.721	4	5	5	19959-22786	
2826.953	35363.630	6	5	5	29281-32108	
2827.468	35357.689	4	5	5	28005-25178	
2827.634	35355.614	5	4	4	19210-22038	
2827.768	35353.938	16	8	8	21174-24002	
2827.768	35353.938	16	5	4	27567-30395	
2827.970	35351.413	4	6	6	35760-32932	
2828.332	35346.888	22	4	3	18412-15584	
2829.241	35335.532	19	9	8	17882-20712	
2829.883	35327.515	25	8	7	18938-21767	
2830.445	35320.501	9	5	4	19553-22383	
2831.051	35312.441	7	5	6	17589-20420	
2831.406	35308.513	18	5	5	19148-21980	
2831.674	35305.171	5	6	6	18111-20943	
2833.484	35282.619	19	4	5	12884-10051	
2833.964	35276.643	120	6	6	13361-16195	- 119
2834.300	35272.461	3	3	3	24630-27464	
2834.769	35266.625	5	13/2	11/2	14599-17434	
2835.650	35255.668	4	1	2	17222-20058	
2835.650	35255.668	4	9/2	7/2	30301-27465	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2835.884	35252.759	144	4	5	12884-15720	
2837.285	35235.352	26	8	7	15458-18295	
2838.195	35224.054	15	5	6	32885-30047	
2839.752	35204.742	14	6	6	19914-22754	
2839.752	35204.742	14	5	6	28576-31416	
2841.958	35178.157	35	5	6	14344-11502	
2843.022	35164.250	84	3	3	15906-18749	
2843.071	35163.644	8	11/2	9/2	13961-16804	
2843.183	35162.258	4	5	4	34086-31243	
2843.841	35154.123	10	6	6	19914-17070	
2845.180	35137.578	13	3	2	16983-19828	
2845.422	35134.590	33	6	7	26911-24066	
2846.528	35120.939	6	3	3	23908-21062	
2846.695	35118.878	24	4	5	18567-15720	
2848.472	35096.970	10	5	5	27184-30032	
2849.856	35079.925	10	3	2	22678-19828	
2850.052	35077.513	45	11/2	11/2	15234-18084	
2850.335	35074.030	13	9/2	9/2	21387-18536	
2850.527	35071.667	3	5	5	17461-20311	
2851.048	35065.258	12	5	6	25202-28053	
2851.068	35065.012	14	5	5	32994-30143	
2852.837	35043.269	16	6	6	15906-18759	
2853.892	35030.315	5	4	3	19555-22409	
2853.892	35030.315	5	9/2	7/2	30599-27745	
2855.261	35013.519	4	4	3	33444-30589	
2855.595	35009.424	7	5	4	20331-23186	
2856.259	35001.297	9	5	5	30034-32891	
2856.742	34995.367	7	5	4	29604-32461	
2857.225	34989.451	4	9/2	9/2	30996-28139	
2858.336	34975.851	12	6	7	19758-16900	
2859.194	34965.356	13	6	5	12910-10051	
2859.473	34961.944	23	6	5	20353-23212	
2859.795	34958.007	9	5	5	32123-34983	
2859.795	34958.007	9	3	3	24267-21407	
2860.535	34948.964	26	6	7	15435-18295	
2861.068	34942.453	8	5	6	24445-21584	
2861.322	34939.351	15	8	7	19761-16900	
2861.803	34933.479	76	11/2	13/2	12530-15392	
2862.172	34928.975	17	4	4	24311-21448	
2863.499	34912.798	18	7	6	19958-22862	
2864.033	34906.279	4	5	4	30224-33088	
2864.143	34904.938	10	5	5	18214-21078	
2864.501	34900.576	51	5	5	15542-18406	
2864.567	34899.772	4	4	4	24196-27060	
2865.476	34888.701	115	6	6	23084-20218	- 309

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2865.886	34883.710	12	4	4	18319-21185	
2867.101	34868.927	25	4	4	15026-17893	
2868.954	34846.406	5	4	4	19831-22700	
2869.802	34836.109	4	13/2	15/2	27293-24423	
2870.405	34828.791	5	6	5	35148-32278	
2870.543	34827.116	72	6	5	18591-15720	
2870.543	34827.116	72	5	5	28122-30993	
2870.996	34821.621	20	4	3	23129-20258	
2871.449	34816.128	40	8	7	19761-22633	
2872.732	34800.578	154	11/2	13/2	13089-15962	
2873.708	34788.759	672	5	6	13632-16505	+ 600
2873.889	34786.568	12	6	7	33378-30504	
2874.439	34779.912	20	6	7	19758-22633	
2874.507	34779.089	5	7	8	29187-26313	
2875.263	34769.944	49	7	6	18068-20943	
2876.506	34754.920	19	9/2	11/2	14265-11389	
2877.066	34747.913	21	6	5	19103-21980	
2877.708	34740.403	8	3	4	33564-30686	
2878.579	34729.891	27	4	4	16588-13710	
2878.604	34729.589	160	11/2	11/2	8510-11389	- 260
2878.755	34727.768	4	5	6	31121-34000	
2879.869	34714.334	5	6	7	29488-26608	
2880.436	34707.501	95	4	3	14274-17154	
2881.215	34698.117	79	3	3	16983-19864	
2881.379	34696.142	14	7	7	16766-19647	
2881.735	34691.856	12	6	5	28801-31683	
2884.759	34655.489	5	5	5	32503-35398	
2884.759	34655.489	5	6	5	34372-31488	
2885.062	34651.850	4	5	4	28578-31463	
2885.117	34651.189	5	5	4	24070-21185	
2885.157	34650.709	8	4	5	16047-18932	
2885.595	34645.449	43	4	4	19007-16121	
2886.534	34634.179	12	4	4	20195-23082	
2886.534	34634.179	12	6	6	33984-31098	
2887.768	34619.379	44	13/2	11/2	9626-12513	
2889.329	34600.675	7	5	4	19148-22038	
2890.113	34591.229	18	6	6	19103-21993	
2890.397	34587.890	1161	3	4	10819-13710	+ 798
2891.269	34577.459	31	7	6	20680-23572	
2891.479	34574.948	98	6	5	13402-16294	
2891.524	34574.409	11	3	4	14576-17468	
2891.891	34570.022	68	4	4	35559-32667	
2891.891	34570.022	68	8	7	21174-24066	
2892.013	34568.563	26	5	4	16602-13710	
2895.119	34531.489	6	5	4	32503-35398	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2896.121	34519.530	226	6	6	14174-17070	- 149
2896.491	34515.120	3	5	6	27567-24671	
2897.213	34506.519	7	4	5	17217-20114	
2897.517	34502.898	13	6	6	19685-22582	
2898.109	34495.662	33	5	6	31392-34290	
2898.148	34495.386	5	5	6	19403-16505	
2898.588	34490.150	56	10	9	20945-23843	
2898.852	34487.009	18	9	8	18511-21409	
2900.070	34472.525	33	7	6	15353-18253	
2900.254	34470.338	12	11/2	13/2	22813-25714	
2900.356	34469.125	23	13/2	13/2	15717-18617	
2900.462	34467.866	11	5	6	24956-22056	
2903.125	34436.249	7	3	3	23908-21005	
2903.375	34433.284	6	5	4	30870-27966	
2903.375	34433.284	6	8	7	23195-26098	
2904.162	34423.952	6	5	5	24539-27443	
2904.908	34415.112	5	4	3	25596-22691	
2905.857	34403.873	38	5	4	14562-17468	
2906.355	34397.978	1217	4	5	10557-13463	+ 170
2906.900	34391.529	6	5	5	28005-25098	
2907.595	34383.308	13	7	6	36249-33341	
2907.595	34383.308	13	5	6	19148-22056	
2907.671	34382.409	19	6	6	19103-16195	
2908.386	34373.957	3	7	6	22440-25348	
2908.567	34371.818	9	5	6	30870-33778	
2908.567	34371.818	9	4	3	24311-27219	
2909.326	34362.851	9	8	8	19142-22052	
2909.638	34359.166	31	10	9	23303-26213	
2911.273	34339.869	11	5	6	19553-22464	
2912.546	34324.860	7	5	4	31242-34155	
2912.546	34324.860	7	2	2	15347-18260	
2913.739	34310.806	4	6	6	23024-25938	
2916.388	34279.641	5	4	5	19210-16294	
2916.500	34278.325	4	3	4	24267-27184	
2916.500	34278.325	4	9/2	11/2	26470-23553	
2917.290	34269.042	13	4	5	18412-21329	
2917.668	34264.368	10	5/2	7/2	35985-38903	
2919.603	34241.893	14	7	7	19998-22918	
2919.603	34241.893	14	6	7	34718-31798	
2919.719	34240.533	5	4	4	17799-20719	
2920.062	34236.511	11	5	4	30255-33175	
2921.842	34215.654	5	2	3	16746-19668	
2922.225	34211.169	5	5	6	32787-29865	
2923.358	34197.910	14	5	4	14970-17893	
2924.105	34189.174	31	8	7	17540-20464	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2925.152	34176.937	43	15/2	13/2	15692-18617	
2925.859	34168.211	32	5	5	30224-33150	
2926.212	34164.556	9	6	6	31857-34784	
2926.455	34161.719	3	5	4	24070-26997	
2927.851	34145.431	15	4	3	22792-19864	
2928.453	34138.412	27	9/2	11/2	35922-32994	
2928.484	34138.050	63	7	6	19998-17070	
2929.008	34131.543	4	4	5	34161-31232	
2930.654	34112.773	34	5	6	20139-23069	
2930.942	34109.421	9	4	5	17217-20148	
2930.997	34108.781	4	5	6	24697-21766	
2932.620	34089.904	29	6	5	13361-16294	
2933.116	34084.139	8	4	3	19007-21940	
2934.888	34063.560	374	5	4	14970-12035	− 860
2935.967	34051.042	41	5	5	17589-20525	
2936.315	34047.006	8	4	3	32532-35468	
2936.315	34047.006	8	6	6	16847-19783	
2936.315	34047.006	8	11/2	13/2	26540-29476	
2936.340	34046.716	11	9/2	9/2	13275-16211	
2936.557	34044.200	4	9/2	11/2	15147-18084	
2937.480	34033.503	50	6	6	18005-20943	
2937.652	34031.510	96	5	5	14970-17908	
2937.825	34029.506	59	7	6	13567-16505	
2938.470	34022.037	7	5	4	31174-28236	
2938.904	34017.013	19	6	7	33984-36923	
2939.300	34012.430	5	7/2	7/2	33411-36351	
2940.121	34002.932	80	7/2	9/2	11363- 8423	
2940.601	33997.382	4	6	5	19914-22854	
2941.027	33992.457	9	6	6	18825-21766	
2941.979	33981.457	38	7	7	15353-18295	+ 240
2942.465	33975.845	4	6	7	18825-21767	
2942.465	33975.845	4	5	5	33874-30931	
2943.126	33968.214	4	7/2	7/2	32272-29329	
2944.335	33954.266	7	7	6	36249-33305	
2944.855	33948.271	43	6	5	18591-21536	
2944.855	33948.271	43	5	5	31785-28840	
2948.021	33911.812	253	6	7	19685-22633	+ 365
2948.380	33907.683	10	5	5	14562-11613	
2950.664	33881.436	5	4	5	19007-21958	
2952.043	33865.609	5	3	3	24267-27219	
2952.858	33856.262	70	6	6	18591-15638	
2954.866	33833.255	54	6	6	15804-18759	
2955.055	33831.091	10	4	5	33544-30589	
2955.479	33826.237	6	4	3	17302-20258	
2956.812	33810.988	25	4	3	12627-15584	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2957.375	33804.551	52	4	4	22149-19192	
2957.585	33802.151	11	5	6	15825-19783	
2958.243	33794.632	136	4	5	14411-17369	
2959.370	33781.762	36	6	7	18591-15631	
2960.696	33766.633	35	11/2	11/2	9553-12513	
2961.796	33754.092	5	5	5	20331-17369	
2963.610	33733.431	45	4	4	16588-19552	
2963.610	33733.431	45	5	6	24956-21993	
2963.755	33731.781	31	2	3	14191-17154	
2965.446	33712.546	50	3	2	15169-12204	
2966.828	33696.842	95	5	4	31583-34550	
2966.829	33696.842	95	7	6	11677-14643	
2966.929	33695.695	90	7	6	36249-33282	
2966.929	33695.695	90	5	6	31509-28542	
2966.929	33695.695	90	3	2	17091-20058	
2966.975	33695.172	5	6	5	18111-21078	
2969.052	33671.601	10	4	3	16699-19668	
2969.052	33671.601	10	5	5	17882-20851	
2969.474	33666.816	12	4	3	18567-21536	
2970.006	33660.785	28	5	5	18359-21329	
2970.006	33660.785	29	6	5	23084-20114	
2970.354	33656.842	91	3	3	15560-18530	
2971.160	33647.711	4	6	6	28801-31772	
2972.197	33635.972	6	4	4	31899-28927	
2973.059	33626.219	4	4	3	25391-28364	
2974.078	33614.698	45	5	4	30034-27060	
2976.267	33589.975	24	6	6	13016-21993	
2977.056	33581.073	4	5	6	31425-34402	
2977.318	33578.118	23	4	5	19907-16929	
2977.771	33573.009	52	4	4	18567-21545	
2979.652	33551.815	39	6	6	16847-19826	
2979.802	33550.126	37	5	4	17589-20569	
2980.178	33545.894	65	3	4	14488-17468	
2980.608	33541.054	12	5	4	31174-34155	
2981.108	33535.428	19	4	5	23129-20148	
2982.070	33524.610	5	6	7	28440-25458	
2983.004	33514.113	11	4	3	18567-15584	
2983.004	33514.113	11	5	6	31255-28272	
2984.502	33497.292	97	7/2	7/2	18797-15812	
2984.550	33496.753	18	6	5	19914-16929	
2985.582	33485.174	78	10	9	22641-25628	
2986.825	33471.239	7	6	6	35148-32161	
2988.372	33453.912	32	4	5	16451-13463	
2989.042	33446.413	14	4	4	16699-13710	
2989.540	33440.842	62	8	7	18621-15631	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
2989.949	33436.267	6	9/2	9/2	30996-28006	
2991.145	33422.898	80	4	4	20195-23186	
2991.145	33422.898	80	4	4	15026-12035	
2992.079	33412.465	22	4	5	17533-20525	
2992.187	33411.259	41	5	5	24070-21078	
2992.187	33411.259	41	9/2	11/2	23924-20932	
2993.472	33396.916	5	6	6	18591-21584	
2993.844	33392.767	26	5	5	20331-23325	
2995.377	33375.676	8	7	8	29137-26192	
2996.441	33363.825	25	3	3	17261-20258	
2996.630	33361.721	4	4	5	32336-29339	
2996.968	33357.958	5	5	5	14562-17559	
2997.351	33353.696	6	8	8	23195-26192	
2997.387	33353.295	7	5	6	32123-29126	
2998.015	33346.309	13	3	2	17909-14911	
2998.567	33340.170	25	4	3	20967-17968	
2998.567	33340.170	25	5	5	24956-21958	
2998.567	33340.170	25	4	4	34578-31580	
2999.053	33334.323	8	4	4	27262-24263	
3000.118	33322.934	7	3	4	27195-24195	
3000.363	33320.213	11	13/2	13/2	27293-24293	
3000.922	33314.006	4	5	6	16825-19826	
3002.787	33293.315	4	5	5	25984-28987	
3002.953	33291.475	8	5	4	30255-27252	
3003.714	33283.040	3	8	7	31802-28798	
3004.095	33278.819	4	7/2	9/2	33037-36042	
3004.194	33277.722	12	4	4	17302-20306	
3004.246	33277.146	82	6	7	19914-22918	
3005.109	33267.590	15	7	7	22440-25445	
3006.478	33252.441	17	4	3	17799-20805	
3008.046	33235.108	17	5	5	20916-17908	
3008.465	33230.479	12	4	5	33481-36490	
3008.619	33228.789	21	7	6	19256-21265	
3008.887	33225.819	8	4	5	17302-20311	
3009.370	33220.486	14	11/2	11/2	17922-20932	
3009.773	33216.038	46	9/2	11/2	8379-11389	
3010.079	33212.661	55	4	5	18319-21329	
3010.704	33205.766	2217	5	6	11633-14643	+ 182
3011.128	33201.091	26	8	7	21174-24185	
3011.444	33197.607	9	6	5	17102-20114	
3011.913	33192.437	10	5	4	18964-21976	
3013.006	33180.396	24	9/2	7/2	19237-22250	
3013.923	33170.301	143	6	7	19914-16900	
3014.840	33160.212	14	4	5	23129-20114	
3015.546	33152.449	6	6	5	14543-17559	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3016.091	33146.458	9	5	5	24956-27972	
3016.149	33145.821	17	3	4	15169-18185	
3016.634	33140.492	10	5	5	20916-23932	
3017.208	33134.187	23	7	6	16766-19783	
3017.373	33132.375	97	5	6	14344-17361	
3017.841	33127.237	5	5	5	19403-22421	
3018.142	33123.533	6	7	7	22440-25458	
3018.239	33122.869	6	11/2	13/2	25423-28441	
3018.554	33119.412	4	7	7	25134-28152	
3018.846	33116.208	15	8	7	20178-23197	
3021.914	33082.587	309	7/2	5/2	5401- 8423	− 421
3022.067	33080.912	5	7	6	22440-25462	
3022.339	33077.935	10	5	4	20916-17893	
3022.702	33073.963	24	2	2	18210-21232	
3024.820	33050.804	8	4	3	32237-35262	
3025.027	33048.543	303	5	5	14344-17369	+ 333
3025.107	33047.669	5	4	4	32427-35452	
3025.650	33041.301	143	6	7	35123-32098	
3026.426	33033.265	14	6	5	15906-18932	
3028.078	33015.244	16	8	8	19761-22789	
3029.791	32996.577	9	6	6	35223-32193	
3029.791	32996.577	9	7	7	32471-29442	
3030.181	32992.331	32	5	5	19959-16929	
3030.605	32987.715	4	4	5	7020-10051	
3031.569	32977.225	7	5	4	19553-22584	
3031.569	32977.225	7	6	6	33907-30875	
3031.871	32973.940	31	5	5	17589-20621	
3034.948	32940.509	5	6	7	15804-18839	
3035.788	32931.395	7	4	4	19664-22700	
3036.881	32919.543	5	3	4	19246-22283	
3037.219	32915.879	32	6	6	19274-22311	
3038.491	32902.100	5	6	7	16847-19885	
3040.992	32875.040	23	5	6	30870-33911	
3040.992	32875.040	23	4	3	20195-17154	
3041.018	32874.759	33	8	7	20738-23779	
3041.054	32874.370	20	4	3	17217-20258	
3041.090	32873.980	5	5	4	32199-29158	
3041.153	32873.299	196	6	6	14543-11502	
3041.562	32868.879	8	4	5	27262-24220	
3041.861	32865.648	6	4	5	22492-25534	
3042.073	32863.358	2306	11/2	11/2	10740-13783	+1234
3045.732	32823.877	28	6	5	18591-21636	
3045.781	32823.349	44	6	5	7005-10051	
3046.316	32817.585	5	7	6	15712-18759	
3047.248	32807.547	55	5	6	19553-16505	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3047.298	32807.009	5	4	5	32583-35630	
3047.298	32807.009	5	3	4	15560-18607	
3047.871	32800.841	5	5	4	20139-23186	
3048.217	32797.118	6	13/2	15/2	27293-30341	
3048.300	32796.225	4	5	4	31242-28194	
3048.300	32796.225	4	3	4	24499-27548	
3049.124	32787.362	12	5	5	28896-31945	
3049.601	32782.234	3	11/2	9/2	26673-29722	
3050.412	32773.518	16	6	7	35148-32098	
3050.504	32772.530	5	5	6	18214-21265	
3051.522	32761.597	10	3	3	22678-25729	
3051.852	32758.054	3	6	5	35193-32142	
3052.478	32751.336	54	5	5	32285-29232	
3052.957	32746.198	5	6	5	33984-30931	
3055.713	32716.663	4	7/2	7/2	32384-29329	
3056.365	32709.684	7	5	4	20916-23972	
3056.907	32703.884	87	4	4	14411-17468	
3059.464	32676.552	46	9	8	21873-24932	
3059.731	32673.700	14	5	6	14562-11502	
3060.323	32667.380	9	5	4	10081- 7020	
3060.371	32666.867	11	5	6	19403-22464	
3060.544	32665.021	64	7	6	16766-19826	
3060.900	32661.222	18	5	6	17882-20943	
3063.054	32638.254	5	7/2	7/2	18797-21860	
3063.364	32634.951	29	6	7	26911-23848	
3064.167	32626.398	4	5	4	31847-28783	
3064.367	32624.269	16	3	3	32672-35736	
3064.367	32624.269	16	5	5	17461-20525	
3064.924	32618.340	9	2	3	26704-23639	
3065.441	32612.839	5	4	5	17048-20114	
3065.777	32609.264	12	5	4	15542-18607	
3067.857	32587.155	19	4	3	16047-19115	
3069.485	32569.872	89	7	6	15712-12643	
3069.581	32568.853	91	5	5	31425-34495	
3069.581	32568.853	91	4	5	18567-21636	
3069.722	32567.357	4	5	5	23168-25098	
3070.181	32562.488	6	7	7	17928-14858	
3070.827	32555.638	6	3	3	27092-24022	
3073.426	32528.109	49	5	5	20139-23212	
3073.919	32522.891	22	5	4	18964-22038	
3073.952	32522.542	8	6	7	23024-26098	
3075.190	32509.449	10	5	4	28168-31243	
3075.327	32508.001	25	3	2	16983-20058	
3075.384	32507.398	9	5	6	24445-27521	
3077.141	32488.837	14	5	6	24070-27148	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3078.199	32477.671	5	4	4	23129-26207	
3078.199	32477.671	5	8	8	34523-31445	
3078.853	32470.772	4	4	3	23129-26207	
3079.514	32463.902	117	4	3	16588-19668	
3079.602	32462.874	14	4	4	16047-19127	
3079.750	32460.893	7	8	7	23195-26274	
3081.614	32441.679	65	4	4	32136-35217	
3085.079	32405.242	10	3	4	20345-23430	
3086.504	32390.281	4	5	5	29531-26444	
3089.772	32356.023	12	4	4	17217-20306	
3089.890	32354.787	48	5	6	32123-29033	
3090.615	32347.197	24	3	2	15169-18260	
3090.849	32344.748	4	5	4	24401-27492	
3092.185	32330.773	5	5	6	18964-22056	
3093.061	32321.617	16	3	3	16575-19668	
3093.061	32321.617	16	13/2	11/2	14991-18084	
3093.122	32320.980	159	4	5	12627-15720	
3093.423	32317.835	8	5	4	28122-31215	
3093.876	32313.103	6	6	7	19274-22368	
3094.366	32307.986	13	4	4	32192-29098	
3094.465	32306.952	6	4	5	17217-20311	
3095.180	32299.489	27	4	4	32192-35287	
3095.180	32299.489	27	4	5	14274-17369	
3095.891	32292.071	34	3	3	17909-21005	
3098.442	32265.485	6	7	7	20680-23779	
3098.565	32264.204	71	7	7	19958-16900	
3099.359	32255.938	6	9/2	9/2	23924-27023	
3100.596	32243.070	6	8	8	17428-20528	
3100.756	32241.406	42	4	4	16451-19552	
3100.756	32241.406	42	6	5	28801-31902	
3101.469	32233.994	10	6	5	19685-22786	
3103.080	32217.259	5	3	3	23908-20805	
3103.236	32215.640	449	6	6	13402-16505	+ 434
3103.728	32210.533	9	6	6	19758-22862	
3104.513	32202.388	11	6	6	28801-31906	
3105.501	32192.143	48	8	9	20738-23843	
3106.445	32182.360	41	9/2	11/2	35523-32416	
3108.201	32164.179	17	5	4	17461-20569	
3109.061	32155.282	7	3	3	32872-35981	
3109.179	32154.061	9	11/2	9/2	13695-16804	
3109.557	32150.153	19	13/2	11/2	15717-18827	
3109.666	32149.026	32	5	6	28578-31687	
3109.748	32148.178	6	3	4	22678-25788	
3109.904	32146.566	8	5	5	19403-16294	
3110.385	32141.594	47	8	7	20738-23848	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3113.887	32105.447	4	4	5	32788-35902	
3114.192	32102.302	6	5	5	30034-26920	
3114.192	32102.302	6	8	8	18933-22052	
3114.824	32095.789	5	5	4	23535-26650	
3115.974	32083.943	51	6	6	17102-20218	
3117.447	32068.783	226	7/2	7/2	18797-15679	
3117.940	32063.713	16	5	6	32885-36003	
3117.940	32063.713	16	2	3	16746-19864	
3118.220	32060.834	9	8	8	23195-26313	
3119.387	32048.839	96	7	7	16766-19885	
3119.646	32046.179	31	3	4	14774-17893	
3119.900	32043.570	28	1	2	15999-19119	
3120.310	32039.359	7	3	4	27092-23972	
3121.256	32029.648	844	9/2	9/2	11544- 8423	- 15.4
3121.959	32022.436	15	4	5	19664-22786	
3122.117	32020.816	13	11/2	9/2	13089-16211	
3122.394	32017.975	6	5	4	19959-23082	
3122.915	32012.633	6	3	2	11788-14911	
3123.377	32007.898	79	4	5	18412-21536	
3123.691	32004.681	218	5	4	14344-17468	+ 28.7
3123.948	32002.048	6	4	3	22792-19668	
3124.146	32000.019	6	4	3	18412-21536	
3124.660	31994.755	4	5	5	34612-31488	
3124.888	31992.421	8	11/2	13/2	34070-37195	
3125.137	31989.872	8	6	7	35223-32098	
3125.334	31987.856	41	4	4	24311-21185	
3126.236	31978.626	5	9/2	11/2	31634-28507	
3126.236	31978.626	5	9/2	9/2	14265-17392	
3126.399	31976.959	17	7	7	15712-18839	
3127.489	31965.814	75	5	6	24070-20943	
3127.489	31965.814	75	5	4	32199-29072	
3128.894	31951.460	9	3	3	32872-36000	
3129.049	31949.879	7	4	4	18319-21448	
3132.446	31915.229	4	4	4	18412-21545	
3132.656	31912.784	39	6	5	18825-21958	
3132.965	31909.942	25	6	6	28801-31934	
3133.762	31901.827	17	13/2	13/2	27293-24159	
3134.218	31897.185	339	3	4	15169-12035	- 364
3135.744	31881.663	9	4	3	19555-22691	
3136.500	31873.978	23	4	5	34578-31442	
3136.875	31870.127	18	7	8	19998-16862	
3136.917	31869.741	6	3	4	19246-22383	
3138.952	31849.080	631	5	5	16602-13463	- 63.3
3141.912	31819.075	1369	11/2	13/2	7558-10740	- 322
3141.947	31818.720	15	11/2	13/2	19473-22615	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3143.199	31806.147	32	11/2	11/2	26540-29683	
3143.731	31800.664	19	2	2	17507-20651	
3143.844	31799.521	6	11/2	9/2	25245-22101	
3144.377	31794.130	543	4	3	31347-34491	
3144.377	31794.130	543	6	6	13361-16505	
3144.793	31789.925	15	4	4	16047-19192	
3147.157	31766.045	8	6	7	18005-14858	
3148.015	31757.388	14	4	5	14411-17559	
3148.372	31753.786	5	4	4	32427-35575	
3148.372	31753.786	5	5	6	27020-30168	
3148.714	31750.338	7	5	6	29374-26225	
3148.714	31750.338	7	5	4	27567-30716	
3148.969	31747.766	12	5	4	31536-28387	
3151.293	31724.353	9	11/2	13/2	37543-34392	
3152.225	31714.973	250	3	4	3868- 7020	
3152.382	31713.394	19	5	4	24697-21545	
3153.294	31704.222	256	4	4	10557-13710	
3153.503	31702.121	7	7	8	18256-21409	
3155.411	31682.951	20	6	6	19914-23069	
3155.864	31678.403	14	5	6	15799-12643	
3156.348	31673.546	21	4	3	24308-27464	
3156.845	31668.559	20	8	7	19761-22918	
3156.845	31668.559	20	5	5	28576-31733	
3157.085	31666.152	2069	3	4	8878-12035	+ 324
3157.906	31657.919	26	3	4	16983-13825	
3158.961	31648.348	81	7	6	13346-16505	
3159.117	31645.783	52	8	7	21174-24333	
3159.220	31644.752	7	4	4	15026-18185	
3159.834	31638.603	6	6	7	19758-22918	
3160.935	31627.582	10	6	6	15804-12643	
3160.935	31627.582	10	7/2	9/2	34119-30958	
3161.171	31625.221	57	5	4	31509-34670	
3163.103	31605.905	32	3	3	19246-22409	
3163.103	31605.905	32	5	6	19148-22311	
3163.103	31605.905	32	11/2	13/2	39076-35913	
3164.001	31596.934	21	5	4	30224-27060	
3165.079	31586.173	22	5	5	31242-34407	
3165.769	31579.288	6	9	9	20677-23843	
3166.155	31575.438	29	5	5	20916-24082	
3166.212	31574.870	9	6	5	18005-14839	
3166.441	31572.586	95	3	3	17091-20258	
3166.441	31572.586	85	11/2	13/2	36441-39607	
3167.808	31558.962	21	7	6	36509-33341	
3167.808	31558.962	21	7	7	20680-23848	
3169.773	31539.398	9	6	5	19685-22854	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3169.865	31538.483	15	2	1	15347-18517	
3170.035	31536.791	7	5	6	24445-27615	
3170.066	31536.483	14	3	4	10540-13710	
3171.761	31519.630	21	5	4	31121-34293	
3171.761	31519.630	21	8	8	17540-20712	
3171.761	31519.630	21	5	5	31988-28817	
3172.955	31507.371	19	5	4	24956-28129	
3172.955	31507.371	18	3	4	24267-27440	
3173.776	31499.618	14	3	3	27195-24022	
3174.423	31493.198	46	6	7	33584-36758	
3174.423	31493.198	46	4	3	17217-20391	
3175.307	31484.430	40	6	6	18591-21766	
3175.307	31484.430	40	5	6	32285-29109	
3176.747	31470.159	9	6	7	18591-21767	
3177.038	31467.276	6	6	6	22171-25348	
3177.313	31464.553	8	6	6	19685-22862	
3178.734	31450.487	62	5	6	19403-22582	
3179.722	31440.715	9	5	6	26734-29914	
3180.668	31431.363	11	5	6	24445-21265	
3180.668	31431.363	11	5	4	19403-22584	
3180.668	31431.363	11	4	3	32094-28913	
3180.993	31428.152	65	5	6	16602-19733	
3181.087	31427.223	5	3	4	24630-21448	
3181.453	31423.608	8	5	5	24070-27252	
3181.453	31423.608	8	9/2	11/2	23924-20742	
3181.748	31420.695	119	7	7	11677-14858	
3182.933	31408.997	15	2	3	15347-18530	
3184.673	31391.836	18	7/2	7/2	12627-15812	
3185.724	31381.479	36	4	4	17533-20719	
3186.119	31377.589	9	5	5	20139-23325	
3186.267	31376.131	12	3	4	14281-17468	
3186.555	31373.296	2850	6	6	11457-14643	+ 138
3186.765	31371.228	18	4	3	25596-22409	
3186.904	31369.860	9	11/2	13/2	15430-18617	
3187.547	31363.532	68	6	6	14174-17361	
3187.779	31361.249	719	4	4	10208- 7020	
3188.545	31353.715	24	8	8	20738-23926	
3189.347	31345.831	29	3	3	15560-18749	
3189.347	31345.831	28	3	4	32872-29682	
3189.702	31342.342	28	6	6	19274-22464	
3190.293	31336.536	23	3	3	20345-17154	
3190.486	31334.641	81	6	7	20353-23543	
3191.817	31321.574	17	3	3	24499-27691	
3193.843	31301.705	58	4	4	14274-17468	
3194.066	31299.520	217	5	6	13976-17070	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3194.451	31295.356	55	3	3	14774-17968	
3195.201	31288.402	120	6	5	14174-17369	
3196.195	31276.671	18	8	7	23195-26391	
3196.697	31273.759	58	3	3	24267-27464	
3196.697	31273.759	58	6	6	26911-23715	
3196.928	31271.499	55	7	6	18068-21265	
3199.939	31242.074	7	5	6	18065-21265	
3199.939	31242.074	7	6	5	34718-31518	
3200.037	31241.117	11	6	5	32267-35467	
3200.037	31241.117	11	5	6	24784-21584	
3203.570	31206.664	41	4	3	12627-15831	
3203.570	31206.664	41	13/2	11/2	15717-12513	
3204.440	31198.191	8	5	5	34612-31408	
3204.440	31198.191	8	4	4	34578-31374	
3204.440	31198.191	8	4	5	32136-28931	
3205.589	31187.009	26	4	4	15986-19192	
3206.436	31178.770	8	5	5	31392-34599	
3206.436	31178.770	8	4	3	17799-21005	
3206.574	31177.429	10	5	5	11633-14839	
3208.473	31158.976	9	7	6	25134-28342	
3208.643	31157.325	32	3	3	15906-19115	
3208.841	31155.402	19	13/2	13/2	36393-33184	
3209.283	31151.111	17	4	3	17048-20258	
3209.380	31150.170	29	7	7	19068-14858	
3210.129	31142.902	45	13/2	11/2	14599-11389	
3211.358	31130.983	6	4	5	19210-22421	
3212.502	31119.897	17	5	6	28119-24906	
3213.394	31111.259	8	3	4	15169-18383	
3213.394	31111.259	8	11/2	13/2	25423-28636	
3213.767	31107.648	26	9/2	9/2	20018-16804	
3216.148	31084.618	10	5	4	24401-21185	
3216.165	31084.454	12	4	5	19319-21536	
3216.935	31077.013	53	4	3	18319-21536	
3217.010	31076.289	14	4	5	22149-18932	
3217.158	31074.859	162	5	6	15542-18759	
3218.100	31065.763	60	3	3	13936-17154	
3218.651	31060.445	4	4	5	25596-22377	
3218.651	31060.445	4	3	3	11788-15007	
3219.064	31056.460	12	6	6	20353-23572	
3219.338	31053.817	48	5	5	24070-20851	
3219.628	31051.019	6	3	3	27092-23873	
3220.125	31046.227	17	2	1	17507-20727	
3220.395	31043.624	19	3	4	15906-19127	
3220.693	31040.752	8	4	5	25596-28817	
3221.232	31035.558	9	6	6	29488-32709	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3221.583	31032.176	13	11/2	13/2	13961-10740	
3221.923	31028.902	185	4	3	12362-15584	
3222.041	31027.765	9	13/2	15/2	27293-24071	
3223.460	31014.106	27	4	4	17048-13825	
3224.254	31006.469	167	4	5	18412-21636	
3224.323	31005.757	74	5	6	16602-19826	
3225.234	30997.048	13	4	4	18319-21545	
3225.420	30995.260	10	5	5	18065-14839	
3225.517	30994.328	34	8	7	19142-22368	
3226.386	30985.980	19	5	5	29531-26305	
3229.057	30960.349	17	5	5	19148-22377	
3229.608	30955.067	36	4	4	32480-29250	
3230.101	30950.342	40	7	7	29187-32417	
3230.851	30943.159	39	4	5	19555-22786	
3232.404	30928.291	5	4	5	24311-21078	
3233.415	30918.621	4	6	7	19685-22918	
3233.584	30917.005	5	5	6	29784-26550	
3233.584	30917.005	5	5	5	19553-22786	
3233.936	30913.639	4	5	6	28896-25662	
3234.375	30909.444	20	5	4	18214-21448	
3234.375	30909.444	20	4	4	20195-23430	
3234.754	30905.822	7	5	4	19148-22383	
3235.012	30903.357	20	13/2	13/2	13975-10740	
3235.981	30894.103	93	4	5	16699-13463	
3237.136	30883.080	44	4	4	12884-16121	
3238.009	30874.754	19	5	4	28005-31243	
3238.274	30872.227	17	7	6	34599-31361	
3239.178	30863.612	3	6	5	22171-18932	
3239.178	30863.612	3	7/2	7/2	33037-29798	
3239.431	30861.201	7	5	6	29430-32670	
3240.356	30852.391	11	2	3	26704-23464	
3240.523	30850.801	13	5	5	24697-27938	
3240.740	30848.736	26	5	6	20331-23572	
3244.555	30812.463	66	8	8	16244-19489	
3245.968	30799.050	302	7	8	20680-23926	+ 133
3247.971	30780.057	72	6	5	35193-31945	
3248.813	30772.079	61	9	8	20677-23926	
3250.560	30755.541	6	4	5	32237-28987	
3251.495	30746.697	5	5	6	34612-31361	
3251.495	30746.697	5	5	6	32285-29033	
3252.947	30732.973	7	6	6	19758-16505	
3253.123	30731.310	10	3	2	16575-19828	
3253.123	30731.310	10	5	5	31785-35038	
3254.905	30714.485	9051	4	5	10208-13463	+ 479
3255.637	30707.579	16	3	3	24630-27885	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3256.155	30702.694	11	5	6	20916-24172	
3257.667	30688.444	10	3	2	23908-20651	
3258.256	30682.896	30	4	3	24433-27691	
3258.295	30682.529	52	5	5	31536-34795	
3258.295	30682.529	52	4	5	33544-30286	
3259.004	30675.854	5	5	5	19553-16294	
3259.147	30674.508	15	6	6	18005-21265	
3260.875	30656.253	20	5	6	20331-17070	
3261.476	30652.604	10	5	6	29168-24906	
3261.909	30648.535	8	3	3	24267-21005	
3262.153	30646.242	18	5	5	17589-20851	
3262.963	30638.635	71	6	6	15906-12643	
3264.835	30621.058	13	5	5	18065-21329	
3266.302	30607.314	24	3	4	17091-13825	
3267.188	30599.014	13	5	6	27184-30451	
3267.280	30598.152	9	6	5	15847-20114	
3267.523	30595.830	5	3	4	27092-23825	
3268.365	30587.995	20	4	4	10557-13825	
3269.597	30576.469	32	11/2	13/2	25245-21975	
3270.627	30566.840	4	5	6	29374-26103	
3271.195	30561.532	102	6	7	16376-19647	
3272.482	30549.513	24	4	3	17533-20805	
3272.724	30547.254	4	4	4	15026-18299	
3273.763	30537.559	4	6	7	22171-25445	
3274.838	30527.535	28	3	3	15983-20258	
3275.610	30520.340	55	4	3	16588-19864	
3275.610	30520.340	55	5	6	32651-35966	
3275.900	30517.638	8	4	4	19007-22283	
3275.943	30517.238	227	3	4	17909-21185	
3276.943	30507.925	21	9/2	7/2	24446-27723	
3276.967	30507.701	26	5	5	18359-21636	
3277.777	30500.162	62	8	7	20178-16900	
3277.933	30498.711	20	5	5	31392-28114	
3277.933	30498.711	20	9/2	11/2	30470-33748	
3278.770	30490.925	13	9/2	7/2	18041-21320	
3279.551	30483.664	19	6	7	29488-26208	
3279.862	30480.774	21	4	4	19907-23186	
3279.975	30479.723	3	7	8	32019-28739	
3280.266	30477.020	236	9	8	19509-22789	
3281.039	30469.839	14	4	5	11558-14839	
3281.845	30462.356	12	5	4	33853-30571	
3282.553	30455.786	44	6	6	20353-17070	
3282.701	30454.413	33	6	7	19914-23197	
3283.259	30449.237	19	4	3	19831-23114	
3283.350	30448.393	391	5	6	14970-18253 +500	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3283.878	30443.497	194	8	8	17428-20712	
3285.133	30431.867	51	3	4	10540-13825	
3285.581	30427.718	35	3	4	15906-19192	
3286.223	30421.773	8	8	8	31802-28516	
3286.517	30419.052	14	4	3	33481-30195	
3288.366	30401.948	8	7	6	14790-11502	
3288.549	30400.256	30	5	5	16825-20114	
3289.159	30394.619	11	3	3	16575-19864	
3290.722	30380.181	4	6	6	22171-25462	
3291.536	30372.668	9	11/2	11/2	19473-22764	
3293.429	30355.211	46	2	3	17098-20391	
3295.967	30331.836	100	8	7	19761-23057	
3297.027	30322.084	7	5	5	31392-34689	
3297.695	30315.942	263	5	5	13632-16929	
3298.184	30311.447	51	5	6	24445-27743	
3298.184	30311.447	51	6	5	19914-23212	
3298.184	30311.447	51	9/2	9/2	30996-27698	
3298.319	30310.207	34	2	3	17507-20805	
3299.869	30296.520	13	3	3	17091-20391	
3299.940	30295.318	144	4	4	22492-19192	
3299.940	30295.318	144	4	5	32532-29232	
3300.332	30291.719	22	3	2	23753-20452	
3301.761	30278.609	16	13/2	13/2	12660-15962	
3301.891	30277.417	9	5	5	19553-22854	
3302.323	30273.456	11	11/2	9/2	15234-18536	
3302.323	30273.456	11	9/2	11/2	30996-34298	
3304.340	30254.977	8	4	5	32788-29484	
3304.340	30254.977	8	7/2	9/2	18797-22101	
3304.432	30254.135	13	5	5	20916-24220	
3304.762	30251.114	9	5	4	27567-24263	
3305.329	30245.924	26	5	6	27020-23715	
3305.416	30245.128	17	4	5	19907-23212	
3306.233	30237.654	68	8	7	18939-15631	
3307.526	30225.834	7	3	4	17261-20569	
3307.926	30222.179	13	13/2	11/2	16532-19840	
3308.064	30220.918	39	6	6	19274-22582	
3309.224	30210.324	7	4	4	27262-30571	
3309.562	30207.239	156	8	7	23195-19885	
3309.606	30206.838	9	6	5	34718-31408	
3310.083	30202.485	255	6	5	13361-10051	
3312.384	30181.504	48	9/2	11/2	20018-16706	
3313.505	30171.293	10	4	5	22492-25805	
3314.731	30160.134	34	6	7	18111-21426	
3314.731	30160.134	34	6	5	26911-30226	
3315.607	30152.165	40	4	5	32655-29339	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3315.975	30148.819	25	2	3	16942-20258	
3316.089	30147.783	62	8	8	20178-16862	
3316.972	30139.757	14	7	8	25134-28451	
3316.972	30139.757	14	5	4	31536-34853	
3317.045	30139.094	4	4	5	18319-21636	
3317.339	30136.423	36	5	5	16154-19471	
3318.922	30122.049	88	7	6	20680-17361	
3319.307	30118.555	27	5	4	18964-22283	
3319.802	30114.064	38	5	5	24956-21636	
3320.534	30107.426	31	7	8	34599-31279	
3321.037	30102.966	25	5	6	31509-28188	
3321.249	30100.944	10	4	4	32480-29158	
3321.492	30098.742	20	5	5	18214-21536	
3321.627	30097.519	159	7	8	20680-24002	
3322.278	30091.621	9	5	5	16825-20148	
3322.582	30088.868	7	3	3	27199-23873	
3323.027	30084.838	6	3	2	17909-21232	
3323.216	30083.127	10	5	5	24401-21078	
3323.555	30080.059	51	3	4	16983-20306	
3323.935	30076.620	82	6	6	15435-18759	
3324.262	30073.662	18	11/2	13/2	12638-15962	
3324.472	30071.762	204	9	8	20677-24002	
3325.857	30059.239	2956	3	2	8878-12204	− 134
3326.669	30051.902	55	2	3	18210-21536	
3326.885	30049.951	59	9	8	13535-16862	
3326.885	30049.951	59	5	6	31425-28098	
3327.780	30041.869	25	2	2	18210-21537	
3327.975	30040.109	37	5	4	15799-19127	
3328.220	30037.897	18	7	6	18256-21584	
3328.326	30036.941	21	8	7	20738-24066	
3329.980	30031.040	12	5	4	14970-18299	
3330.557	30016.820	15	5	4	18214-21545	
3330.557	30016.820	15	7/2	5/2	33037-29707	
3332.443	29999.832	603	7	7	13567-16900	
3332.967	29995.116	272	13/2	13/2	12629-15962	
3335.952	29968.276	11	4	3	19555-22891	
3337.293	29956.234	10	3	2	27092-23755	
3338.621	29944.318	10	4	5	20195-23534	
3339.020	29940.740	14	3	3	23753-27092	
3339.020	29940.740	14	5	5	29784-26444	
3339.737	29934.312	13	2	1	26704-23364	
3341.808	29915.761	4	7	8	18068-21409	
3342.215	29912.118	12	5	4	31847-35189	
3342.273	29911.599	5	4	5	31347-34689	
3342.642	29908.297	83	8	9	21174-24517	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3342.668	29907.886	7	3	3	23753-27095	
3344.506	29891.628	6	5	6	34086-30742	
3344.690	29889.984	18	4	5	24196-20851	
3345.241	29885.061	18	13/2	13/2	27293-23948	
3345.817	29879.916	44	5	5	14562-17908	
3346.900	29870.247	13	5	4	20916-24263	
3347.231	29867.293	5	5	5	27567-24220	
3347.412	29865.678	552	2	2	8856-12204	- 186
3347.626	29863.769	7	5	5	20139-23486	
3347.690	29863.198	16	5	6	18964-22311	
3349.169	29850.011	72	4	4	15778-19127	
3351.224	29831.706	533	6	5	13402-10051	
3351.224	29831.706	533	3	2	33564-36915	
3351.587	29828.475	14	6	7	19016-22368	
3352.134	29823.608	11	4	4	17217-20569	
3354.002	29806.998	299	5	6	17589-20943	+ 232
3354.430	29803.195	46	11/2	9/2	13450-16804	
3354.720	29800.618	16	2	2	17098-20452	
3356.468	29785.099	37	6	7	31134-27778	
3356.468	29785.099	37	4	4	15026-18393	
3357.660	29774.525	16	5	6	19553-16195	
3358.233	29769.444	1165	4	5	12362-15720	
3358.319	29768.682	94	7	7	18068-21426	
3358.567	29766.484	48	6	7	19274-22633	
3359.284	29760.130	686	7/2	9/2	9075- 5716	
3361.072	29744.299	14	7/2	7/2	18797-22158	
3361.263	29742.609	64	6	6	19103-22464	
3361.626	29739.397	16	3	3	23753-20391	
3361.669	29739.017	58	6	7	17102-20464	
3362.082	29735.363	8	6	6	18005-14643	
3362.269	29733.718	8	6	6	20353-23715	
3362.359	29732.914	223	5	5	16825-13463	
3364.394	29714.929	18	6	5	14543-17908	
3364.835	29711.035	49	4	4	20195-23560	
3365.249	29707.380	19	5	5	19959-23325	
3365.345	29706.532	40	8	7	20178-23543	
3366.132	29699.587	31	7	7	25134-21767	
3366.697	29694.603	13	2	2	26704-30071	
3366.771	29693.950	14	6	7	23024-26391	
3368.480	29678.885	47	6	7	26911-23543	
3368.480	29678.885	47	4	5	32480-29111	
3369.043	29673.925	28	7	6	12826-16195	
3370.179	29663.923	12	4	4	32655-29285	
3370.236	29663.421	217	4	5	19007-22377	
3370.480	29661.274	14	3	4	27195-23825	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3370.600	29660.218	95	5	6	35242-31871	
3371.095	29655.663	5	4	5	24311-27682	
3371.910	29649.574	17	6	6	16847-20218	
3373.267	29636.768	24	4	3	18567-21940	
3373.267	29636.768	24	5	5	32857-29484	
3374.850	29622.866	9	5	5	18214-14839	
3375.934	29613.354	58	4	4	19007-22383	
3376.876	29605.094	30	4	3	22492-19115	
3377.793	29597.056	27	3	3	19246-22624	
3379.745	29579.962	104	4	5	15026-18406	
3380.143	29576.479	54	13/2	11/2	15717-19097	
3380.537	29573.032	9	3	3	22678-26058	
3380.586	29572.604	7	5	5	32885-36266	
3381.213	29567.120	23	5	5	28122-24741	
3381.371	29565.738	48	3	4	17091-13710	
3382.362	29557.076	3910	5	5	10081-13463	+ 645
3382.566	29555.293	149	5	6	17882-21265	
3383.350	29548.445	9	5	6	30961-34344	
3383.424	29547.798	15	11/2	13/2	15234-18617	
3383.509	29547.056	103	6	5	12910-16294	
3383.992	29542.839	139	7	6	8118-11502	
3384.162	29541.355	18	5	4	24445-27829	
3384.585	29537.663	26	6	6	19685-23069	
3384.904	29534.879	6	5	5	23535-26920	
3384.904	29534.879	6	4	3	32136-28751	
3384.972	29534.286	37	7	6	22440-25825	
3384.972	29534.286	37	6	5	14174-17559	
3385.743	29527.560	35	8	7	21174-24560	
3385.802	29527.046	168	5	5	30034-33420	
3386.482	29521.117	22	4	4	17799-21185	
3386.517	29520.811	13	4	4	19664-23051	
3387.597	29511.400	15	3	4	19246-22634	
3388.709	29501.716	13	5	6	28060-24671	
3388.888	29500.158	30	6	5	18591-21980	
3388.888	29500.158	30	5	5	31121-34510	
3389.903	29491.325	17	6	7	29488-26098	
3390.474	29486.358	12	4	3	24196-20805	
3390.552	29485.680	138	5	5	17461-20851	
3390.746	29483.993	101	5	5	15542-18932	
3390.816	29483.384	133	4	5	18567-21958	
3390.816	29483.384	133	3	4	24499-27890	
3391.070	29481.176	11	4	4	32499-29098	
3391.120	29480.741	5	6	5	19685-16294	
3391.669	29475.995	50	4	4	17217-13825	
3391.781	29474.996	21	5	4	28005-24613	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3391.890	29474.048	17	6	6	28801-32193	
3392.032	29472.814	11	3	3	14576-17968	
3393.079	29463.720	308	5	6	16825-20218	+ 133
3395.348	29444.030	7	5	5	20139-23534	
3397.607	29424.454	4	7	8	29187-32585	
3397.690	29423.735	14	7	7	18256-14858	
3401.387	29391.754	8	5	5	32831-29429	
3401.475	29390.994	17	6	7	11457-14858	
3401.587	29390.026	8	5	5	20331-16929	
3401.925	29387.106	31	6	6	18591-21993	
3401.925	29387.106	31	2	3	15347-18749	
3402.122	29385.404	10	4	3	19007-22409	
3402.210	29384.644	7	3	3	29461-26058	
3403.019	29377.658	136	8	7	16244-19647	
3403.934	29369.761	5	3	4	23973-20569	
3404.018	29369.037	36	6	7	15435-18839	
3404.209	29367.389	26	4	5	17217-20621	
3405.125	29359.489	7	4	3	18412-15007	
3405.379	29357.299	81	7	6	15353-18759	
3405.379	29357.299	81	5	4	32503-29098	
3405.847	29353.265	10	3	4	14483-17893	
3406.530	29347.380	73	8	9	21174-24581	
3407.024	29343.125	69	6	6	16376-19783	
3408.207	29332.939	109	3	3	16983-20391	
3408.537	29330.100	55	6	6	19914-16505	
3409.537	29330.100	55	13/2	15/2	36393-39801	
3408.655	29329.084	6	4	4	18567-21976	
3408.957	29326.486	20	2	2	26704-23295	
3409.220	29324.224	414	4	5	12884-16294	+ 317
3409.403	29322.650	60	5	6	24070-20661	
3410.499	29313.226	16	3	2	20345-23755	
3410.879	29309.961	25	6	5	19914-23325	
3411.616	29303.629	6	5	4	24956-21545	
3412.724	29294.115	90	5	4	14970-18383	
3412.801	29293.454	60	4	5	15026-11613	
3413.406	29288.262	42	8	7	23195-26608	
3413.441	29287.962	10	4	3	22492-25905	
3413.647	29286.194	25	5	5	18964-22377	
3413.810	29284.796	5	4	5	22492-25906	
3413.935	29283.724	38	4	3	19210-22624	
3414.234	29281.159	29	4	5	19007-22421	
3414.358	29280.096	8	4	4	15778-19192	
3414.923	29275.209	53	4	5	16699-20114	
3415.352	29271.574	107	5	4	31915-28499	
3415.415	29271.034	14	3	3	19246-15831	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3415.415	29271.034	14	6	5	35148-31733	
3416.370	29262.852	10	4	4	17302-20719	
3417.686	29251.584	23	4	4	19664-23082	
3418.919	29241.890	10	6	5	27920-31339	
3420.533	29227.195	48	6	7	18005-21426	
3421.017	29223.102	82	9	8	21873-25294	
3421.289	29220.779	12	5	6	19065-14643	
3421.512	29218.874	9	5	5	23535-20114	
3421.564	29218.430	21	5	4	20139-23560	
3421.564	29218.430	21	6	5	33421-29999	
3421.753	29216.817	4348	11/2	9/2	2294- 5716	- 332
3422.537	29210.124	19	6	5	17102-20525	
3423.262	29203.938	41	6	5	20353-16929	
3424.250	29195.511	14	4	5	16047-19471	
3424.326	29194.863	21	6	5	18111-21536	
3426.231	29178.631	6	5	5	31588-28562	
3426.231	29178.631	6	6	7	20353-23779	
3428.225	29161.659	46	1	2	17222-20651	
3428.225	29161.659	46	5	5	23535-26964	
3430.939	29138.600	17	9/2	11/2	13275-16706	
3431.088	29137.326	107	5	4	19553-16121	- 402
3431.707	29132.070	50	11/2	13/2	12530-15962	
3433.176	29119.605	13	5	6	30224-26791	
3433.923	29114.118	13	4	4	19555-16121	
3435.300	29101.601	85	8	7	19761-23197	
3435.693	29098.272	50	11/2	11/2	13270-16706	
3435.780	29097.535	12	4	3	32237-28802	
3435.864	29096.654	8	5	4	19148-22584	
3436.002	29095.655	206	5	5	14970-18406	
3436.273	29093.361	31	4	5	11403-14839	
3436.302	29093.115	15	3	2	23753-27189	
3436.302	29093.115	15	3	4	17261-13825	
3436.302	29093.115	15	11/2	13/2	37408-33972	
3437.266	29084.956	16	11/2	11/2	11784- 8347	
3437.569	29082.392	9	3	3	24499-21062	
3437.947	29079.194	30	3	4	15169-18607	
3438.287	29076.319	8	6	7	19758-23197	
3438.404	29075.330	108	5	6	13632-17070	
3439.623	29064.983	97	13/2	11/2	11787- 8347	
3444.136	29026.940	6	4	5	32094-28650	
3444.511	29023.780	13	13/2	13/2	16532-19977	
3444.956	29020.031	74	3	3	19245-22691	
3446.283	29008.857	12	3	4	23753-20306	
3447.412	28999.356	28	6	6	19016-22464	
3447.464	28998.919	12	5	5	17882-21329	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3447.989	28994.504	13	5	6	28119-24671	
3448.883	28986.988	37	4	3	11558-15007	
3449.343	28983.122	39	2	3	16942-20391	
3449.619	28980.803	13	5	5	24070-20621	
3449.656	28980.492	10	9/2	11/2	11797- 8347	
3449.909	28978.367	7	4	3	24308-27757	
3450.058	28976.780	13	4	3	19664-23114	
3450.990	28969.290	11	5	5	19403-22854	
3451.073	28968.593	14	5	6	28122-24671	
3452.635	28955.487	28	6	7	20353-16900	
3452.635	28955.487	28	4	5	32489-29036	
3452.702	28954.926	15	7	6	16766-20218	
3454.170	28942.620	49	5	6	19959-16505	
3454.288	28941.631	31	8	7	34523-31069	
3454.829	28937.099	28	5	4	29430-25975	
3455.032	28935.399	42	9	9	19509-22964	
3456.228	28925.386	60	10	9	23303-26759	
3456.427	28923.721	45	4	5	24308-20851	
3457.036	28918.625	22	8	8	23195-26652	
3457.335	28916.124	11	3	4	17261-20719	
3457.646	28913.524	9	5	5	18964-22421	
3458.517	28906.242	63	5	6	24401-20943	
3458.517	28906.242	63	9/2	7/2	24446-27905	
3460.715	28887.883	19	4	3	23129-19668	
3461.169	28883.927	11	3	4	23908-27370	
3462.860	28869.822	70	7	6	14790-18253	
3464.531	28856.064	13	6	5	16847-20311	
3464.664	28854.957	281	6	6	19103-15638	
3465.078	28851.509	7	6	6	18591-22056	
3465.762	28845.815	691	13/2	11/2	11813- 8347	+ 331
3468.384	28824.008	34	4	4	19907-23375	
3468.681	28821.540	58	4	3	12362-15831	
3469.499	28814.745	19	3	2	16983-20452	
3472.435	28790.382	96	4	3	17533-21005	
3472.516	28789.710	45	11/2	11/2	13961-17434	
3472.855	28786.900	23	5	5	19959-23432	
3472.941	28786.187	11	6	6	18111-21584	
3477.660	28747.126	17	4	5	32788-36266	
3477.729	28746.555	20	5	6	30034-33512	
3479.470	28732.172	20	6	6	19274-22754	
3479.623	28730.908	78	6	6	19103-22582	
3480.177	28726.335	34	4	5	19319-14839	
3480.689	28722.109	207	4	5	8133-11613	
3480.689	28722.109	207	3	3	14488-17968	
3481.009	28719.469	76	7	8	17928-21409	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS	
3481.643	28714.239	12	3	2	24267-27749		
3481.709	28713.695	15	4	4	20781-24263		
3481.709	28713.695	15	5	4	29784-33265		
3482.101	28710.462	7	4	4	20967-24449		
3482.348	28708.426	9	6	5	23801-25319		
3482.401	28707.989	35	5	6	17461-20943		
3482.448	28707.601	9	4	5	31837-28355		
3482.572	28706.579	151	4	4	14411-17893		
3482.612	28706.249	51	6	6	23084-26566		
3485.492	28682.530	56	5	6	13876-17361		
3485.804	28679.963	6	5	5	16825-20311		
3485.939	28678.852	57	3	4	22678-19192		
3486.205	28676.664	34	5	5	27020-23534		
3486.233	28676.434	73	3	2	14774-18260		
3489.303	28651.203	20	5	5	17589-21078		
3489.722	28647.763	268	4	5	19210-15720		
3489.778	28647.303	7	6	6	19685-16195		
3490.035	28645.194	21	4	4	19210-22700		
3490.208	28643.774	126	8	7	19142-22633		
3490.253	28643.405	11	3	3	24267-27757		
3490.479	28641.550	6	5	4	27020-30511		
3492.404	28625.763	1090	9	8	19297-22789	+	94
3492.706	28623.288	17	0	1	15025-18517		
3493.147	28619.674	23	5	5	13876-17369		
3493.180	28619.404	140	7	6	19998-16505		
3494.378	28609.592	15	4	4	12627-16121		
3494.995	28604.541	24	3	3	23753-20258		
3495.604	28599.558	32	6	7	20353-23848		
3496.966	28589.236	165	4	5	14411-17908		
3496.967	28588.411	22	5	6	28168-24671		
3497.522	28583.874	99	7	7	17928-21426		
3497.522	28583.874	99	6	5	15435-18932		
3497.950	28581.194	725	6	7	13402-16900	+	3
3498.009	28579.903	30	3	3	17909-21407		
3498.272	28577.746	129	2	3	17507-21005		
3499.169	28570.420	7	5	5	29445-32944		
3500.174	28562.217	14	5	6	18964-22464		
3500.528	28559.328	7	6	7	22171-25672		
3501.202	28553.831	46	6	7	35223-31722		
3501.669	28549.659	42	5	4	24070-20569		
3501.689	28549.859	42	5	6	29430-32932		
3501.844	28548.596	4637	4	4	10208-13710	+	678
3502.335	28544.593	40	5	6	24445-20943		
3502.521	28543.078	433	7	6	13567-17070		
3503.129	28538.124	15	4	3	17302-20805		

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3503.515	28534.979	11	7	8	32019-28516	
3504.370	28528.017	6	9/2	11/2	30301-33805	
3504.621	28525.974	14	1	1	17222-20727	
3504.789	28524.607	20	7	7	14790-18295	
3506.398	28511.599	17	5	4	15542-12035	
3509.203	28488.728	12	6	7	16376-19885	
3509.594	28485.554	11	7	7	27576-24066	
3510.055	28481.813	226	7	6	18256-21766	
3510.635	28477.099	8	5	4	20331-23841	
3510.636	28477.099	8	2	2	16942-20452	
3511.143	28472.987	5	5	6	16154-12643	
3511.495	28470.133	284	7	7	18256-21767	
3511.873	28467.068	145	6	7	19685-23197	
3511.956	28466.396	257	5	5	16602-20114	
3513.229	28456.081	10	6	6	33378-29865	
3514.249	28447.822	15	4	4	32136-28621	
3514.345	28447.044	19	3	2	19246-15732	
3514.345	28447.044	19	5	5	26489-30004	
3517.847	28418.726	11	6	7	35148-31630	
3519.557	28404.918	150	3	4	10540- 7020	
3520.775	28395.092	12	3	2	22678-26199	
3520.884	28394.212	10	4	3	32480-36000	
3523.625	28372.125	10	5	5	31785-28262	
3524.400	28365.886	8	11/2	9/2	12667-16211	
3524.866	28362.136	26	3	4	15560-12035	
3525.204	28359.416	8	6	5	18111-21636	
3525.266	28358.918	10	3	4	14774-18299	
3525.309	28358.572	37	6	5	33752-30226	
3526.756	28346.937	15	5	5	19959-23486	
3526.935	28345.498	8	4	3	22792-26319	
3527.038	28344.670	126	9	8	17882-21409	
3527.222	28343.191	98	6	5	13402-16929	
3527.222	28343.191	98	5	6	28122-31649	
3527.353	28342.099	20	6	5	19685-23212	
3529.312	28326.407	18	5	4	19553-23082	
3529.553	28324.473	4	9/2	9/2	13275-16804	
3530.129	28319.851	58	6	7	19103-22633	
3530.129	28319.851	58	6	5	18005-21536	
3530.672	28315.456	99	4	5	17799-21329	
3531.817	28306.316	26	5	5	20916-24446	
3532.256	28302.798	19	3	4	27092-23560	
3532.853	28298.015	10	11/2	11/2	37408-33876	
3533.048	28296.453	22	4	5	32427-28894	
3533.771	28290.664	159	4	3	33444-29911	
3533.927	28289.415	36	5	5	27020-23486	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS	
3533.927	28289.415	36	6	6	28440-24906		
3534.418	28285.485	24	11/2	13/2	25245-21710		
3536.327	28270.216	73	4	4	10557- 7020		
3538.459	28253.183	13	5	4	18214-21753		
3538.876	28249.853	6	2	3	26704-23165		
3538.935	28249.382	14	4	4	20195-23734		
3538.991	28248.935	874	6	7	13361-16900	−	75
3539.105	28248.025	11	3	4	17909-21448		
3541.156	28231.665	520	9	8	18511-22052	+	289
3542.715	28219.241	49	4	4	19664-16121		
3542.964	28217.258	8	6	7	18825-22368		
3544.556	28204.584	22	7	7	19958-23543		
3545.489	28197.162	32	4	5	18412-21958		
3545.686	28195.595	30	5	5	16602-20148		
3547.570	28180.622	62	8	7	23195-19647		
3548.622	28172.267	11	3	4	24267-20719		
3550.121	28160.372	7	6	6	29488-25938		
3550.367	28158.421	20	5	5	24401-20851		
3551.942	28145.935	30	5	6	18214-21766		
3552.259	28143.423	7	6	5	18825-22377		
3553.123	28136.580	8	2	2	17958-20651		
3553.475	28133.792	785	7	7	13346-16900	+	83
3554.323	28127.080	41	5	6	20916-17361		
3554.869	28122.760	64	2	3	17507-21062		
3555.117	28120.798	25	5	5	32787-29232		
3557.419	28102.609	103	4	3	14411-17968		
3558.658	28092.817	39	6	6	17102-20661		
3558.768	28091.949	21	4	3	16699-20258		
3559.282	28087.892	18	3	2	15560-19119		
3559.507	28086.116	7	3	2	17091-20651		
3559.575	28085.580	27	4	5	22492-18932		
3559.796	28083.836	11	4	3	18567-15007		
3560.652	28077.085	6	11/2	9/2	37408-33848		
3563.329	28055.999	68	4	4	18412-21976		
3563.650	28053.464	309	5	5	14344-17908	+	159
3563.812	28052.189	42	8	7	23195-26758		
3564.630	28045.752	12	8	9	23195-26759		
3564.936	28043.344	10	5	4	24401-27966		
3565.521	28038.743	35	6	5	15906-19471		
3566.715	28029.357	88	3	4	15560-19127		
3566.715	28029.357	88	6	6	35760-32193		
3567.408	28023.912	25	4	5	18412-21980		
3567.991	28019.333	20	4	5	20967-24535		
3568.364	28016.404	527	6	5	13361-16929	+	233
3570.401	28000.420	33	5	4	10254-13825		

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3571.801	27989.445	136	5	5	18065-21636	
3572.130	27986.867	6	5	6	32885-29313	
3572.384	27984.877	8	6	5	19914-23486	
3572.437	27984.462	18	4	5	17048-20621	
3572.437	27984.462	18	3	4	32546-36118	
3573.497	27976.161	153	6	6	16847-20420	
3573.497	27976.161	153	9/2	7/2	30470-26897	
3573.720	27974.415	7	7	8	27576-24002	
3574.844	27965.620	8	5	6	31425-35000	
3574.969	27964.642	10	4	5	24196-20621	
3576.222	27954.844	65	5	6	20139-23715	
3578.750	27935.097	16	6	6	18005-21584	
3578.967	27933.403	133	13/2	13/2	11813-15392	
3579.617	27928.331	15	4	5	19907-23486	
3579.993	27925.398	40	3	3	15169-18749	
3580.750	27919.494	13	5	5	13632-10051	
3583.998	27894.270	24	6	7	23024-26608	
3585.358	27883.611	9	8	7	21174-24760	
3585.358	27883.611	9	5	5	31947-28262	
3585.469	27882.748	32	4	5	17048-13463	
3585.708	27880.889	22	5	6	24956-28542	
3585.922	27879.225	61	3	4	16983-20569	
3587.235	27869.021	27	7/2	7/2	12092-15679	
3587.860	27864.166	53	6	6	19274-22862	
3588.493	27859.251	15	3	4	23663-27252	
3589.781	27849.255	19	2	3	26704-23114	
3590.447	27844.090	11	5	4	27020-23430	
3590.599	27842.919	9	5	4	24539-28129	
3590.982	27839.941	10	4	5	32094-28503	
3592.334	27829.463	17	4	4	17302-13710	
3594.186	27815.124	15	5	5	24445-20851	
3595.265	27806.776	17	6	6	12910-16505	
3595.553	27804.548	137	8	7	20738-24333	
3596.374	27798.201	42	5	4	17589-21185	
3597.741	27787.639	10	4	5	20967-17369	
3598.475	27781.971	9	5	5	32831-29232	
3598.475	27781.971	9	6	6	35760-32161	
3599.969	27770.441	560	4	4	22792-19192	+ 243
3601.333	27759.923	9	7	7	22440-18839	
3601.507	27758.582	22	5	5	20331-23932	
3602.016	27754.659	8	3	4	23908-20306	
3602.016	27754.659	8	5	5	28576-24974	
3604.115	27738.495	61	4	3	11403-15007	
3605.011	27731.601	13	3	2	23663-20058	
3605.102	27730.901	482	13/2	13/2	11787-15392	- 791

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3605.355	27728.955	38	5	6	19148-22754	
3605.814	27725.426	16	7	8	25134-28739	
3606.852	27717.447	14	5	5	25984-22377	
3608.547	27704.427	119	4	3	17799-21407	
3609.012	27700.858	56	3	4	14774-18383	
3609.892	27694.105	43	4	3	19555-23165	
3609.942	27693.721	7	5	6	25202-28811	
3610.348	27690.607	109	7	6	20680-17070	
3610.785	27687.256	12	2	3	11973-15584	
3611.310	27683.231	12	5	5	24070-27682	
3611.931	27678.471	27	3	4	14281-17893	
3612.144	27676.839	49	5	6	19959-23572	
3612.180	27676.563	63	4	5	16699-20311	
3616.277	27645.207	50	6	7	19016-22633	
3616.277	27645.207	50	6	7	28801-32417	
3616.486	27643.610	201	5	6	16602-20218	+ 117
3617.504	27635.831	26	6	7	16847-20464	
3617.705	27634.295	41	5	5	17461-21078	
3617.705	27634.295	41	5	4	32005-28387	
3619.538	27627.934	23	5	6	18964-22582	
3619.507	27620.537	19	4	4	14274-17893	
3619.507	27620.537	19	7/2	9/2	31961-28341	
3620.186	27615.357	17	2	3	18210-21830	
3620.728	27611.223	16	4	3	18319-21940	
3620.811	27610.590	13	4	3	16047-19668	
3623.993	27586.347	14	5	4	31988-35612	
3626.613	27566.417	41	4	4	19007-22534	
3626.992	27563.537	20	3	3	17909-21536	
3627.679	27558.317	51	4	3	24433-20805	
3628.101	27555.111	54	3	2	17909-21537	
3628.722	27550.396	30	3	3	27092-23464	
3629.198	27546.782	53	6	7	19914-23543	
3629.301	27546.001	1265	5	4	10081-13710	
3629.563	27544.012	9	4	4	20195-23825	
3631.009	27533.043	60	6	5	18005-21636	
3631.905	27526.251	45	3	4	15560-19192	
3632.370	27522.727	9	9/2	9/2	12055- 8423	
3632.681	27520.371	11	4	3	19831-23464	
3633.295	27515.720	28	5	6	20139-16505	
3633.803	27511.873	746	4	5	14274-17908	+ 608
3634.201	27508.960	18	11/2	13/2	19473-23107	
3634.490	27506.673	145	4	5	17217-20851	
3635.206	27501.255	24	3	4	27195-23560	
3635.290	27500.620	33	3	4	17909-21545	
3635.627	27498.070	32	5	4	17461-13825	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3635.627	27496.070	32	6	5	35123-31488	
3636.223	27493.563	12	6	6	19274-15638	
3636.223	27493.563	12	4	4	32136-28499	
3637.276	27485.604	40	5	4	14970-18607	
3637.276	27485.604	40	4	4	27262-30899	
3638.278	27478.034	149	4	5	18319-21958	
3639.315	27471.755	25	4	4	22149-25788	
3638.419	27476.969	24	5	6	7864-11502	
3640.428	27461.806	49	4	4	32094-28454	
3641.028	27457.281	31	8	7	16244-19885	
3642.121	27449.041	25	7	6	20680-24322	
3642.737	27444.399	18	6	7	19274-15631	
3645.658	27422.109	59	3	4	15906-19552	
3646.837	27413.544	97	8	8	19142-22789	
3647.508	27408.501	11	5	6	34612-30965	
3649.525	27393.353	21	5	6	32885-29236	
3649.644	27392.460	38	4	4	17799-21448	
3649.765	27391.552	16	5	6	31255-27605	
3650.325	27387.350	13	5	6	28122-31772	
3650.735	27384.274	24	3	3	23908-20258	
3651.030	27382.061	46	6	6	19103-22754	
3652.486	27371.146	216	4	4	17533-21185	+ 86
3653.393	27364.351	19	5	5	26489-30143	
3653.555	27363.137	52	5	5	17882-21536	
3653.555	27363.137	52	4	4	19907-23560	
3654.389	27356.892	262	7	6	16766-20420	
3656.280	27342.744	111	6	6	10987-14643	
3656.742	27339.289	27	4	5	19555-23212	
3662.368	27297.292	55	4	4	34161-30499	
3663.065	27292.097	16	7	6	22440-26103	
3663.646	27287.769	13	6	7	17102-20766	
3664.370	27282.378	9	7	6	34659-30994	
3665.159	27276.505	22	4	4	22792-19127	
3665.577	27273.394	9	8	9	20178-23843	
3665.924	27270.813	21	5	5	19959-16294	
3665.924	27270.813	21	5	5	25202-21536	
3667.170	27261.547	41	9	9	19297-22964	
3667.932	27255.883	427	6	6	13402-17070	
3668.903	27248.670	1034	7/2	9/2	12092- 8423	+ 344
3669.233	27246.219	19	4	3	16588-20258	
3670.461	27237.104	35	8	7	20178-23848	
3672.150	27224.576	462	5	6	16154-19826	
3672.989	27218.357	20	3	4	29461-25738	
3673.074	27217.727	20	5	5	28060-31733	
3673.362	27215.593	279	4	5	32708-36381	+ 296

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3673.362	27215.593	279	5	5	33853-30179	+ 296
3674.582	27206.558	18	6	7	23084-26758	
3675.668	27198.519	99	5	6	17589-21265	
3675.668	27198.519	99	5	4	27567-31243	
3678.411	27176.237	12	5	4	19403-23082	
3679.457	27170.511	24	7	6	12826-16505	
3680.780	27160.745	22	6	7	28440-24760	
3680.780	27160.745	22	9/2	7/2	26532-30213	
3681.305	27156.871	46	4	3	19210-22891	
3681.609	27154.629	75	4	3	15986-19668	
3682.781	27145.997	68	3	3	16575-20258	
3685.449	27126.336	14	5	6	24784-28470	
3686.202	27120.794	29	4	5	32336-28650	
3686.293	27120.125	17	5	4	20139-23825	
3687.744	27109.454	9	5	4	35674-31987	
3689.835	27094.084	59	4	5	24311-20621	
3691.516	27081.754	35	5	6	14562-18253	
3692.908	27071.545	55	4	4	19007-22700	
3694.354	27060.949	81	4	3	14274-17968	
3694.354	27060.949	81	6	5	34718-31023	
3694.860	27057.243	27	5	6	20331-24026	
3695.069	27055.713	22	8	7	18938-22633	
3696.267	27046.944	196	4	5	16451-20148	
3697.534	27037.676	22	5	5	27184-23486	
3698.397	27031.367	92	7	7	16766-20464	
3699.805	27021.090	134	7	7	18068-21767	
3701.375	27009.618	16	5	6	18065-21766	
3705.717	26977.971	10	6	5	35193-31488	
3706.223	26974.288	87	2	2	16746-20452	
3707.617	26964.146	102	7	7	25134-21426	
3707.712	26963.455	55	2	3	17098-20805	
3707.915	26961.979	58	4	4	17523-13825	
3708.098	26960.648	61	9/2	11/2	12055- 8347	
3709.038	26953.816	26	2	2	16942-20651	
3709.073	26953.561	137	6	6	13361-17070	
3709.210	26952.566	118	5	5	16602-20311	
3713.482	26921.559	13	5	4	26489-30203	
3713.526	26921.240	69	8	9	20738-24451	
3713.745	26919.653	24	5	6	19148-22862	
3714.980	26910.704	50	6	7	26911-23197	
3715.332	26908.154	65	11/2	9/2	13089-16804	
3715.895	26904.077	132	9/2	7/2	8379- 4663	
3716.122	26902.434	28	5	6	18359-14643	
3716.339	26900.863	69	5	6	31988-28272	
3716.339	26900.863	69	7	6	19998-23715	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3717.427	26892.990	19	3	4	27092-23375	
3718.950	26881.976	19	6	6	19914-16195	
3720.180	26873.088	126	7/2	7/2	12092-15812	
3720.584	26870.170	21	6	6	18591-22311	
3721.634	26862.589	166	3	3	13433-17154	
3722.068	26859.457	326	11/2	9/2	25887-22165	+ 348
3723.071	26852.221	24	4	3	15026-18749	
3723.071	26852.221	24	4	5	31837-28114	
3723.557	26848.716	100	7	6	13346-17070	
3726.769	26825.576	10	7	6	25134-28860	
3726.769	26825.576	10	5	4	32885-29158	
3727.795	26818.193	35	4	5	27262-23534	
3729.830	26803.561	640	5	6	13632-17361	+ 280
3730.462	26799.020	67	2	3	18210-21940	
3731.673	26790.323	19	3	3	27195-23464	
3734.147	26772.574	18	9	8	13127-16862	
3735.732	26761.215	14	3	4	16983-20719	
3736.670	26754.497	18	7	6	18256-21993	
3736.979	26752.285	84	5	6	29604-33341	
3737.051	26751.769	11	4	5	20195-23932	
3737.146	26751.089	46	5	4	14562-18299	
3737.484	26748.670	141	5	5	13632-17369	
3739.656	26740.285	23	4	3	32192-35931	
3740.434	26727.574	12	5	6	24401-20661	
3740.565	26726.638	19	5	5	17589-21329	
3741.905	26717.067	46	4	4	24311-20569	
3742.412	26713.447	160	4	4	15778-12035	
3742.459	26712.826	22	4	3	22492-18749	
3743.254	26707.438	12	4	5	22149-18406	
3743.476	26705.855	35	5	4	16825-20569	
3743.476	26705.855	35	5	5	32005-28262	
3744.045	26701.796	22	3	3	17261-21005	
3744.370	26699.478	132	5	4	10081-13825	
3747.070	26680.240	49	8	7	18621-22368	
3747.070	26680.240	49	6	5	33421-29674	
3747.245	26678.994	20	3	2	15560-19307	
3748.622	26669.194	45	5	6	31847-28098	
3748.622	26669.194	45	8	8	20178-23926	
3748.723	26668.475	74	6	5	17102-20851	
3748.723	26668.475	74	9/2	7/2	30559-26850	
3749.039	26666.227	5147	9/2	7/2	914- 4463	- 354
3749.773	26661.007	48	5	5	7864-11613	
3750.391	26656.614	19	4	5	32788-36538	
3750.695	26654.454	42	5	4	17461-13710	
3754.100	26630.278	32	5	6	24697-20943	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3754.428	26627.951	58	5	5	17882-21636	
3755.172	26622.676	46	5	6	20916-24671	
3755.351	26621.407	55	5	6	19959-23715	
3756.937	26610.168	9	4	3	17048-20805	
3757.890	26603.420	40	3	4	24630-28387	
3758.114	26601.834	16	9	8	21630-25388	
3758.222	26601.070	61	8	8	21174-24932	
3758.617	26598.274	115	2	2	11973-15732	
3759.363	26592.996	75	5	5	24070-20311	
3759.421	26592.586	49	6	6	19103-22862	
3759.485	26592.133	104	4	4	12362-16121	
3759.485	26592.133	104	9/2	11/2	20018-23778	
3759.681	26590.747	28	4	3	17302-21062	
3759.681	26590.747	28	5	5	32691-28931	
3760.588	26584.334	30	4	4	22149-25910	
3761.443	26578.291	92	5	4	18214-21976	
3761.602	26577.167	45	3	3	15906-19668	
3762.023	26574.193	93	6	7	18005-21767	
3762.023	26574.193	93	11/2	13/2	27543-33781	
3763.875	26561.117	39	2	2	26704-22940	
3764.193	26558.874	50	8	7	21174-24938	
3764.580	26556.143	39	5	6	19959-16195	
3765.525	26549.479	110	5	5	18214-21980	
3765.525	26549.479	110	4	4	19664-23430	
3765.714	26548.146	16	6	6	33752-29986	
3766.384	26543.424	640	5/2	7/2	8430- 4663	
3767.052	26538.717	35	5	4	33874-30107	
3769.433	26521.953	30	4	5	19555-23325	
3771.718	26505.896	55	6	5	16376-20148	
3772.431	26500.876	15	3	2	14488-18260	
3774.278	26487.907	35	6	5	16847-20621	
3776.191	26474.559	28	7	8	15712-19489	
3778.560	26457.890	56	5	6	18214-21993	
3781.798	26435.237	38	8	7	19761-23543	
3781.990	26433.895	26	5	4	32123-28341	
3783.085	26426.244	42	6	7	19274-23057	
3785.026	26412.692	21	4	5	31899-28114	
3785.026	26412.692	21	5	4	32857-29072	
3786.539	26402.138	44	6	5	18591-22377	
3786.639	26401.441	16	5	4	29604-25818	
3788.070	26391.467	17	1	2	17222-21011	
3788.658	26387.371	33	5	6	14970-18759	
3788.658	26387.371	33	4	3	17217-21005	
3788.658	26387.371	33	4	3	32192-35981	
3789.944	26378.418	39	5	6	18964-22754	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3789.944	26378.418	39	7	6	32471-36261	
3791.115	26370.270	22	11/2	11/2	7598-11389	
3793.971	26350.419	190	8	7	14501-18295	
3795.444	26340.192	59	3	3	11788-15584	
3795.475	26339.977	111	1	2	15999-12204	
3795.804	26337.694	100	7	8	18256-22052	
3796.679	26331.624	43	4	5	17533-21329	
3799.225	26313.979	876	3	4	10819- 7020	
3799.825	26309.824	67	7	6	18256-22056	
3800.644	26304.154	42	3	3	17261-21062	
3800.979	26301.836	20	6	6	19914-23715	
3802.603	26290.603	119	4	3	16588-20391	
3802.603	26290.603	118	4	4	24433-28236	
3802.719	26289.801	85	4	5	17048-20851	
3803.592	26283.767	94	7	6	19998-16195	
3804.068	26280.478	32	5	6	17461-21265	
3804.756	26275.726	52	4	3	24196-20391	
3806.379	26264.522	40	4	3	16451-20258	
3806.981	26260.369	31	9/2	9/2	20018-16211	
3807.653	26255.734	150	6	7	13825-22633	
3810.388	26236.889	51	4	5	18567-22377	
3812.178	26224.569	32	4	5	24433-20621	
3813.363	26216.420	206	6	6	19758-23572	
3814.495	26208.640	18	6	6	16847-20661	
3815.895	26199.024	25	9	8	20677-16862	
3816.911	26192.050	26	4	3	16047-19864	
3818.461	26181.418	73	9/2	11/2	14265-18084	
3818.612	26180.383	52	9/2	7/2	18041-21860	
3819.348	26175.338	32	6	6	20353-24172	
3819.707	26172.878	22	4	4	19555-23375	
3820.379	26168.274	27	3	4	27195-23375	
3822.491	26153.816	95	5	5	18964-22786	
3822.491	26153.816	95	3	3	16983-20805	
3824.465	26140.316	42	5	5	24445-20621	
3825.090	26136.045	50	5	5	13876-10051	
3825.572	26132.752	58	5	6	20331-16505	
3832.340	26086.601	54	5	5	19553-15720	
3832.340	26086.601	54	4	4	20781-24613	
3833.565	26078.265	98	3	4	14774-18607	
3835.075	26067.957	117	4	5	19555-15720	
3835.075	26067.957	117	5	5	28576-24741	
3835.630	26064.225	44	13/2	11/2	14991-18827	
3835.762	26063.328	146	5	6	16825-20661	
3836.148	26060.706	83	5	4	13632-17468	
3836.738	26056.698	1556	11/2	9/2	9553- 5716	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3836.888	26055.680	26	5	4	26734-30571	+ 383
3836.888	26055.680	26	5	5	28578-24741	+ 383
3837.350	26052.543	133	11/2	11/2	16003-19840	
3837.565	26051.083	25	7	6	17928-21766	
3839.005	26041.311	136	7	7	17928-21767	
3840.375	26032.022	33	8	7	23195-27035	
3841.477	26024.554	53	5	4	14344-18185	
3842.269	26019.189	57	4	3	18567-22409	
3842.964	26014.484	48	3	4	24562-20719	
3842.964	26014.484	48	8	8	20738-24581	
3843.193	26012.934	749	6	7	15804-19647	+ 164
3845.258	25998.964	70	4	3	17217-21062	
3845.480	25997.463	60	7/2	9/2	18797-22642	
3846.435	25991.002	70	6	5	18111-21958	
3849.673	25969.147	20	7	7	19998-23848	
3851.178	25958.999	128	7	6	15353-11502	
3858.371	25910.604	108	5	4	32199-28341	
3858.371	25910.604	108	6	7	19685-23543	
3859.334	25904.139	50	13/2	13/2	14599-10740	
3859.605	25902.320	61	4	5	22792-18932	
3859.789	25901.085	754	4	5	16451-20311	+ 241
3861.956	25886.552	30	3	3	20345-24207	
3864.245	25871.218	29	4	4	24433-20569	
3868.359	25843.704	55	6	5	18111-21980	
3869.005	25839.389	38	4	5	20781-24650	
3869.005	25839.389	38	7	6	25134-21265	
3873.071	25812.262	103	6	6	18591-22464	
3874.550	25802.409	53	4	3	17533-21407	
3876.164	25791.665	97	6	7	22171-18295	
3876.164	25791.665	97	8	8	20738-16862	
3876.997	25786.124	436	6	6	15906-19783	
3877.157	25785.060	53	5	4	19553-23430	
3877.442	25783.164	215	3	2	16575-20452	
3877.707	25781.402	30	4	3	15986-19864	
3878.036	25779.215	51	5	5	24956-21078	
3879.596	25768.849	50	7	7	20680-24560	
3879.596	25768.849	50	3	2	22678-26557	
3880.778	25761.001	16	5	6	35242-31361	
3881.251	25757.596	44	3	3	27195-31077	
3884.546	25736.012	60	4	4	22492-18607	
3884.715	25734.893	42	4	5	24196-20311	
3886.573	25722.590	59	4	5	20195-24082	
3886.948	25720.109	118	6	6	19685-23572	
3888.195	25711.860	183	4	4	14411-18299	
3894.900	25667.597	25	5	4	31392-35287	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3900.307	25632.014	79	9/2	11/2	9882-13783	
3900.387	25631.488	465	7	8	20680-24581	
3900.387	25631.488	465	2	3	17507-21407	
3901.907	25621.504	75	2	2	18210-22112	
3902.341	25618.654	1026	4	4	8133-12035	+ 262
3903.233	25612.799	318	9	8	20677-24581	
3904.054	25607.413	38	3	4	14281-18185	
3906.687	25590.155	33	5	4	33874-29967	
3907.664	25583.756	54	2	3	17098-21005	
3908.543	25578.003	154	11/2	13/2	14709-18617	
3909.349	25572.729	428	5	6	14344-18253	
3910.871	25562.777	31	5	4	18065-21976	
3914.724	25537.617	40	8	7	19142-23057	
3915.320	25533.730	36	11/2	13/2	37408-33493	
3915.647	25531.598	96	4	4	17533-21448	
3919.486	25506.590	266	6	7	16847-20766	
3919.486	25506.590	266	5	5	30961-34881	
3919.522	25505.705	50	4	3	24311-20391	
3920.333	25501.080	171	6	6	15906-19826	
3921.664	25492.425	65	3	2	15906-19828	
3922.021	25490.104	34	4	3	19831-23753	
3922.887	25484.477	299	5	5	24070-20148	
3924.982	25470.874	41	7	6	18068-21993	
3927.716	25453.145	22	5	5	28578-24650	
3927.993	25451.350	64	5	6	18065-21993	
3928.044	25451.019	126	5	5	15542-11613	
3929.839	25439.394	34	5	5	15542-19471	
3931.569	25428.200	1073	6	7	27093-31024	
3931.569	25428.200	1073	6	7	27093-31024	+ 205
3932.553	25421.839	153	1	0	15999-19932	
3933.154	25417.953	48	5	5	24784-20851	
3933.631	25414.871	9	5	4	19148-23082	
3934.900	25406.675	48	4	4	19907-23841	
3935.242	25404.467	29	6	5	16376-20311	
3936.452	25396.658	44	11	10	23673-27609	
3938.126	25385.862	60	4	3	24196-20258	
3941.722	25362.703	32	11/2	9/2	13450-17392	
3943.302	25352.540	36	5	5	20139-24082	
3943.647	25350.323	118	6	6	32286-28342	
3943.711	25349.911	34	5	6	20139-16195	
3943.711	25349.911	34	5	5	29604-33548	
3945.612	25337.698	51	3	3	15169-19115	
3946.654	25331.008	102	5	5	17589-21536	
3951.182	25301.979	212	4	4	15986-12035	
3953.729	25285.679	136	4	4	17799-21753	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
3956.569	25267.529	42	6	6	19758-23715	
3956.569	25267.529	42	4	5	34578-30622	
3956.850	25265.480	44	4	3	17048-21005	
3956.850	25265.480	44	7	7	34599-30642	
3957.362	25262.466	70	3	4	15165-19127	
3957.699	25260.315	45	3	3	15906-19864	
3959.357	25249.737	221	6	6	13402-17361	
3961.328	25237.174	2557	7	6	11677-15638	+ 143
3962.245	25231.333	50	5	5	14970-18932	
3963.508	25223.293	53	4	4	18319-22283	
3965.061	25213.414	206	4	5	18412-22377	
3966.693	25203.040	40	4	3	23129-27095	
3966.693	25203.040	40	6	6	19103-23069	
3966.883	25201.833	26	5	4	16602-20569	
3967.012	25201.014	198	6	5	13402-17369	
3968.712	25190.219	55	4	4	17217-21185	
3970.645	25177.956	38	3	3	17091-21062	
3971.939	25169.753	203	4	4	14411-18383	
3978.520	25128.119	73	3	2	14281-18260	
3979.023	25124.942	100	6	6	15804-19783	
3979.175	25123.983	333	6	7	15906-19885	
3980.319	25116.768	366	4	4	16588-20569	
3981.673	25108.220	101	8	8	17428-21409	
3981.673	25108.220	101	4	3	32237-28256	
3981.673	25108.220	101	5	6	29430-33412	
3984.100	25092.925	276	5	6	15799-19783	
3987.202	25073.403	89	6	6	18005-21993	
3989.879	25056.580	389	6	7	12910-16900	
3990.665	25051.645	136	5	6	20916-24906	
3990.665	25051.645	136	5	5	34612-30622	
3991.146	25048.626	111	5	6	18065-22056	
3991.777	25044.666	48	9/2	11/2	20018-24010	
3992.022	25043.129	1065	3	4	15560-19552	
3995.216	25023.108	1194	4	5	14411-18406	
3995.216	25023.108	1194	3	3	23663-19668	
3995.269	25022.776	164	5	6	17589-21584	
3997.540	25008.561	65	9/2	11/2	34167-38165	
3997.634	25007.973	531	5	5	17461-13463	
3998.182	25004.545	37	8	7	17428-21426	
3999.580	24995.805	79	4	5	24311-20311	
4000.383	24990.788	195	7	7	16766-20766	
4000.499	24990.063	741	6	6	13361-17361	
4003.016	24974.350	2355	11/2	11/2	8510-12513	- 817
4005.073	24961.523	65	2	3	13149-17154	
4005.203	24960.713	1179	5	6	11633-15638	+ 738

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS	
4009.901	24931.469	98	1	2	17222-21232		
4011.765	24919.885	89	8	7	18621-22633		
4011.832	24919.469	67	4	4	17533-21545		
4011.888	24919.121	71	4	4	32237-36249		
4011.978	24918.562	136	4	4	16047-12035		
4013.486	24909.199	76	4	3	17048-21062		
4013.672	24908.045	52	4	3	23129-19115		
4015.153	24898.858	34	9/2	7/2	11797-15812		
4017.096	24886.814	58	2	3	13951-17968		
4017.474	24884.473	67	5	4	13876-17893		
4017.556	24883.965	69	3	4	14281-18299		
4018.956	24875.049	75	7	7	36509-32490		
4018.956	24875.049	75	11/2	11/2	12687-16706		
4019.252	24873.465	2343	6	5	12910-16929	+	40
4019.664	24870.915	57	4	4	16699-20719		
4019.862	24869.690	94	10	9	23303-27323		
4022.359	24854.252	380	6	6	15804-19826		
4022.442	24853.739	72	3	3	16983-21005		
4022.552	24853.059	61	3	4	15169-19192		
4022.552	24853.059	61	7	6	34659-30636		
4025.675	24833.779	424	4	3	11558-15584		
4025.773	24833.174	71	4	5	19907-23932		
4025.982	24831.885	46	3	3	19246-23272		
4027.432	24822.945	64	5	6	15799-19826		
4029.373	24810.987	267	2	3	17507-21536		
4030.480	24804.173	86	2	2	17507-21537		
4030.549	24803.748	706	8	8	15458-19489		
4030.786	24802.290	46	3	3	17909-21940		
4032.114	24794.121	72	5	4	31255-35287		
4033.306	24786.793	217	5	6	20139-24172		
4033.306	24786.793	217	5	6	32503-28470		
4035.040	24776.142	111	3	4	13433-17468		
4036.014	24770.162	86	5	6	24697-20661		
4036.617	24766.462	83	6	5	15435-19471		
4039.049	24751.550	70	5	6	30961-35000		
4039.358	24749.411	112	5	6	15542-11502		
4041.432	24736.955	158	11/2	11/2	15430-11389		
4041.962	24733.712	169	4	3	24433-20391		
4043.636	24723.472	33	4	4	19007-23051		
4044.707	24716.926	131	9	8	21873-25918		
4044.963	24715.361	395	4	5	12884-16929		
4046.770	24704.325	54	6	6	19685-15638		
4048.238	24695.367	79	4	5	24196-20148		
4048.238	24695.367	79	4	3	25596-29644		
4049.537	24687.445	75	6	6	26511-22862		

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4050.855	24679.413	277	7	6	32019-36070	
4052.990	24666.412	218	4	3	24311-20258	
4052.990	24666.412	218	7	8	34599-30546	
4057.851	24636.864	93	4	5	18319-22377	
4060.001	24623.817	148	4	5	5991-10051	
4062.001	24611.693	56	5	5	14344-18406	
4063.549	24602.317	231	4	4	18319-22383	
4064.307	24597.729	432	5	6	16154-20218	
4064.522	24596.428	47	4	5	31837-35902	
4066.173	24586.441	204	3	4	17909-21976	
4066.173	24586.441	204	11/2	13/2	36513-32447	
4066.691	24583.309	418	4	5	16047-20114	
4069.416	24566.847	416	2	2	14191-18260	
4073.630	24541.434	55	4	5	16451-20525	
4074.070	24538.784	401	7	7	12826-16900	
4074.805	24534.357	153	4	4	19007-23082	
4075.053	24532.864	318	5	5	17461-21536	
4079.523	24505.983	73	6	6	14174-18253	
4081.021	24496.988	77	6	5	26911-30993	
4081.095	24496.544	42	3	3	27195-23114	
4081.202	24495.901	762	6	7	15804-19885	
4081.202	24495.901	762	6	5	33421-29339	
4085.821	24468.209	96	4	5	22492-18406	
4087.519	24458.051	2726	5	5	11633-15720	+ 36.6
4088.213	24453.893	59	6	7	16376-20464	
4088.650	24451.040	119	4	3	15026-19115	
4090.167	24442.210	160	13/2	11/2	13344-17434	
4091.732	24432.862	96	6	5	23024-18932	
4093.509	24422.255	48	5	6	20916-25009	
4094.099	24418.736	181	3	4	17091-21185	
4096.409	24404.966	46	6	6	16847-20943	
4097.585	24397.962	32	5	5	17882-21980	
4101.843	24372.599	88	4	5	18319-22421	
4102.925	24366.207	34	6	7	22171-26274	
4102.925	24366.207	34	6	7	22171-26274	
4104.304	24358.021	41	5	6	18359-22464	
4104.598	24356.276	58	2	1	26704-22599	
4104.661	24355.902	244	7/2	7/2	11707-15812	
4106.421	24345.463	33	4	3	16699-20805	
4107.925	24336.544	94	3	3	15560-19668	
4108.875	24330.923	39	4	4	14274-18383	
4111.896	24313.047	113	6	6	19914-24026	
4113.310	24301.735	142	7	6	15712-19826	
4116.946	24283.814	72	9/2	9/2	13275-17392	
4117.612	24279.896	45	11/2	9/2	12687-16804	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4117.676	24278.919	373	5	6	16825-20943	
4118.216	24275.735	70	5	4	18964-23082	
4119.387	24268.835	70	7/2	9/2	12092-16211	
4119.766	24266.602	154	3	4	14488-18607	
4120.356	24263.127	122	6	6	19758-15638	
4121.432	24256.793	45	6	7	14174-18295	
4121.922	24253.909	108	4	5	24433-20311	
4121.922	24253.909	108	3	4	24499-28621	
4123.312	24245.733	33	7	8	17928-22052	
4123.736	24243.240	39	9/2	9/2	18041-22165	
4126.034	24229.738	294	5	5	17589-13463	
4126.866	24224.853	35	6	7	19758-15631	
4127.333	24222.112	35	7	6	17928-22056	
4128.179	24217.148	264	3	4	17909-22038	
4128.919	24212.909	89	3	4	19246-23375	
4128.919	24212.808	89	4	3	20967-25096	
4129.855	24207.320	102	8	7	19761-15631	
4129.855	24207.320	102	5	6	30034-34164	
4134.185	24181.966	462	9/2	11/2	8379-12513	
4134.882	24177.890	582	9/2	7/2	11544-15679	
4135.243	24175.779	802	7	8	15353-19489	
4136.940	24165.862	58	4	4	17048-21185	
4137.704	24161.400	36	5	4	27567-23430	
4137.893	24160.296	129	3	2	15169-19307	
4148.872	24096.362	56	13/2	13/2	11813-15962	
4151.542	24080.865	47	6	5	23084-18932	
4152.258	24076.712	38	6	7	19914-24066	
4155.629	24057.181	106	8	7	20178-24333	
4156.692	24051.029	98	5	4	14970-19127	
4156.784	24050.497	133	6	5	13402-17559	
4156.784	24050.497	133	5	5	35674-31518	
4157.031	24049.068	59	5	5	16154-20311	
4157.926	24043.891	42	6	6	26911-22754	
4158.280	24041.844	29	9	8	21630-25789	
4158.999	24037.688	49	9/2	11/2	13275-17434	
4159.962	24032.124	1340	6	6	12910-17070	− 42
4161.986	24020.437	298	4	5	11558-15720	
4162.233	24019.982	111	6	6	17102-21265	
4162.837	24015.526	367	6	6	13591-22754	
4163.103	24013.992	151	4	5	24311-20148	
4163.175	24013.576	77	5	5	13214-22377	
4163.450	24011.760	54	6	7	19685-23848	
4164.067	24008.432	347	4	5	15778-11613	
4164.286	24007.170	33	5	6	29374-33538	
4166.277	23995.697	515	9/2	9/2	9882- 5716	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4166.861	23992.334	143	11/2	9/2	12638-16804	
4167.790	23986.986	28	4	5	19007-14839	
4169.534	23976.953	280	4	3	22149-26319	
4169.534	23976.953	280	4	5	16451-20621	
4171.429	23966.061	114	5	4	7864-12035	
4171.889	23963.418	32	4	4	19412-22584	
4172.653	23959.031	656	3	4	32672-28499	
4172.653	23959.031	656	7	7	15712-19885	
4172.998	23957.050	124	8	7	10685-14858	
4173.416	23954.650	95	7	6	19998-24172	
4173.416	23954.650	95	3	4	24630-28803	
4174.117	23950.627	71	4	5	32788-28614	
4174.543	23948.183	5941	6	7	11457-15631	+ 825
4174.720	23947.168	39	5	6	28005-32180	
4175.005	23945.533	338	13/2	13/2	11787-15962	
4175.044	23945.309	251	7	6	20680-16505	
4175.331	23943.664	327	4	3	24433-20258	
4175.689	23941.611	86	11/2	11/2	12530-16706	
4175.930	23940.229	61	5	5	17461-21636	
4176.482	23937.065	51	5	5	19148-23325	
4176.712	23935.747	29	4	4	17799-21976	
4177.105	23933.495	250	5	6	17589-21766	
4180.907	23911.730	147	4	3	11403-15584	
4181.055	23910.884	1631	4	3	22149-17968	
4181.055	23910.884	1631	6	6	11457-15638	
4182.259	23904.000	89	6	5	20353-24535	
4182.926	23900.189	76	11/2	11/2	12530- 8347	
4183.101	23899.189	24	7	8	34599-30416	
4184.575	23890.770	382	4	4	22792-18607	
4186.398	23880.367	98	4	5	19907-15720	
4186.529	23879.620	44	5	5	28119-23932	
4186.726	23878.496	23	7	6	22440-18253	
4186.874	23877.652	40	11/2	11/2	26673-30860	
4187.260	23875.451	63	3	4	17261-21448	
4189.014	23865.454	69	8	7	15458-19647	
4190.577	23856.553	40	4	3	19831-24022	
4191.222	23852.881	21	4	5	31899-36091	
4195.984	23825.811	32	11/2	13/2	22813-18617	
4196.491	23822.932	47	4	4	14411-18607	
4196.826	23821.031	76	5	6	14562-18759	
4199.526	23805.715	420	3	4	17909-13710	
4200.628	23799.470	44	8	7	20738-24938	
4203.643	23782.400	38	6	6	16847-12643	
4204.410	23778.062	238	5	5	32123-36327	
4207.818	23758.803	141	7	6	18256-22464	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4209.029	23751.968	40	3	2	24267-20058	
4209.409	23749.823	26	5	4	20331-16121	
4210.239	23745.141	38	7	6	15712-11502	
4212.264	23733.726	413	6	7	15435-19647	
4214.196	23722.845	75	8	8	21174-25388	
4214.644	23720.324	740	11/2	9/2	12633- 8423	
4215.403	23716.053	250	6	6	14543-18759	
4216.776	23708.331	3216	7/2	9/2	9933- 5716	+ 252
4216.886	23707.712	281	4	3	16588-20805	
4220.037	23690.010	504	8	7	16244-20464	
4221.147	23683.781	644	3	4	23973-28194	
4221.147	23683.781	644	5	6	32691-28470	
4221.147	23683.781	644	7	6	36509-32288	
4221.147	23683.781	644	6	5	27920-32142	
4222.391	23676.803	28	4	5	19210-23432	
4222.923	23674.381	82	5	4	18964-23186	
4227.137	23650.220	163	6	5	17102-21329	
4227.551	23647.904	36	8	7	17540-21767	
4231.875	23623.741	77	4	4	17217-21448	
4232.175	23622.067	57	6	7	18825-23057	
4232.175	23622.067	57	6	5	14174-18406	
4237.059	23594.838	26	6	6	23024-27261	
4238.122	23588.920	20	3	2	20345-24583	
4238.719	23585.597	28	4	4	17799-22038	
4238.965	23584.229	24	3	3	19246-15007	
4240.221	23577.243	31	6	7	23084-27324	
4240.734	23574.391	42	8	8	19761-24002	
4241.316	23571.156	1732	5	6	15542-19783	
4241.316	23571.156	1732	5	5	32503-28262	
4241.691	23569.072	36	6	5	15906-20148	
4243.643	23558.230	63	7	6	18068-22311	
4243.973	23556.399	31	4	3	32192-27948	
4243.973	23556.399	31	15/2	13/2	16690-20934	
4244.244	23554.895	119	6	7	19103-14859	
4244.244	23554.895	119	5	6	24070-19826	
4244.986	23550.777	43	6	5	16376-20621	
4246.653	23541.533	47	5	6	18065-22311	
4248.905	23529.055	70	3	3	14281-18530	
4249.235	23527.229	153	5	5	16602-20851	
4249.294	23526.901	22	3	4	13936-18185	
4249.705	23524.626	344	5	6	18214-22464	
4253.915	23501.344	406	5	5	24401-20148	
4255.508	23492.547	21	6	6	28801-33057	
4256.515	23486.989	27	6	6	20353-24609	
4256.714	23485.891	255	6	7	18111-22368	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4256.903	23484.848	17	6	7	31857-27600	
4258.923	23473.709	38	8	7	18938-23197	
4259.649	23469.708	24	13/2	13/2	15717-19977	
4259.822	23468.755	24	6	5	19274-23534	
4260.709	23463.869	56	5	5	19959-24220	
4261.521	23459.399	73	4	3	22792-18530	
4261.865	23457.505	33	5	5	32199-27938	
4262.673	23453.059	28	4	5	16588-20851	
4263.275	23449.747	49	5	4	14344-18607	
4263.369	23449.230	137	6	5	11457-15720	
4263.369	23449.230	137	9/2	11/2	34845-39108	
4263.455	23449.757	16	4	4	33481-29218	
4263.687	23447.481	22	6	5	18591-22854	
4263.944	23446.068	50	4	5	16047-20311	
4264.199	23444.666	24	5	6	29578-32842	
4264.678	23442.032	195	4	4	18319-22584	
4264.957	23440.279	33	4	3	19007-23272	
4265.318	23438.515	23	6	6	23024-18759	
4267.827	23424.736	1463	9/2	7/2	11544-15812	+ 625
4267.989	23423.847	47	3	2	15560-19828	
4268.952	23419.111	19	4	5	32336-28067	
4268.918	23418.749	111	6	7	19274-23543	
4269.607	23414.970	97	4	4	19555-23825	
4270.253	23411.428	196	5	6	26734-22464	
4271.227	23406.089	54	6	6	18591-22862	
4272.433	23399.482	79	4	3	11558-15831	
4273.601	23393.087	16	8	8	20178-24451	
4275.147	23384.627	58	3	3	17261-21536	
4275.943	23380.274	91	7	6	32019-27743	
4275.943	23380.274	91	6	6	19914-15638	
4276.107	23379.377	242	5	5	13632-17908	
4277.010	23374.441	42	5	6	24697-20420	
4278.665	23365.400	75	9	8	18511-22789	
4278.831	23364.494	41	6	7	26911-22633	
4279.386	23361.463	16	3	3	17909-22189	
4279.386	23361.463	16	5	6	25202-29481	
4281.668	23349.012	15	6	7	29488-33770	
4281.668	23349.012	15	13/2	11/2	12629- 8347	
4282.700	23343.386	191	4	5	10557-14839	
4284.089	23335.818	25	5	5	19148-23432	
4284.164	23335.409	38	8	7	19142-14859	
4284.410	23334.069	268	8	8	16244-20528	
4284.445	23333.879	149	15/2	13/2	15692-19977	
4284.538	23333.372	41	5	5	31536-27252	
4284.652	23332.751	1365	5	6	15542-19826	+ 302

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4285.444	23328.439	365	4	5	24433-20148	
4287.383	23317.889	22	9	8	21630-25918	
4287.433	23317.617	22	9/2	11/2	14366-18654	
4287.535	23317.062	227	4	5	18567-22854	
4287.580	23316.817	36	5	6	24070-19783	
4287.645	23316.464	70	5	5	24401-20114	
4287.733	23315.985	118	4	4	18412-22700	
4287.733	23315.985	118	5	4	32831-28543	
4289.236	23307.815	722	5	5	5762-10051	
4290.371	23301.649	54	5	6	28122-32412	
4290.371	23301.649	54	11/2	11/2	12638- 8347	
4290.711	23299.803	20	2	2	16942-21232	
4292.021	23292.691	52	5	4	17461-21753	
4293.209	23286.246	25	5	5	14344-10051	
4293.707	23283.545	765	7	7	15353-19647	
4294.192	23280.915	47	5	6	20139-24433	
4297.053	23265.414	21	4	3	17533-21830	
4297.163	23264.819	29	8	7	18621-22918	
4297.494	23263.027	156	6	6	19274-23572	
4297.733	23261.733	362	5	5	24445-20148	
4300.301	23247.842	243	7	7	18068-22368	
4301.690	23240.336	169	6	6	15804-11502	
4302.201	23237.575	148	4	5	12627-16929	
4302.624	23235.291	20	11/2	9/2	13089-17392	
4303.178	23232.299	29	5	4	19959-24263	
4303.455	23230.804	11	4	3	22792-27095	
4303.627	23229.875	28	7	7	29187-24884	
4304.422	23225.585	21	4	3	18319-22624	
4304.633	23224.447	17	6	7	32286-36590	
4305.504	23219.748	120	5	6	17461-21766	
4305.861	23217.823	39	6	6	18005-22311	
4306.412	23214.852	31	10	10	23303-27609	
4309.596	23197.701	65	5	4	13876-18185	
4309.596	23197.701	65	3	3	33564-29255	
4309.781	23196.705	23	2	3	17058-21407	
4309.988	23195.591	133	6	5	15804-20114	
4310.284	23193.998	22	6	5	29488-25178	
4311.370	23188.156	83	5	6	19403-23715	
4312.174	23183.832	16	4	4	24433-28745	
4312.490	23182.134	391	6	6	15906-20218	
4312.784	23180.553	158	5	5	26734-22421	
4313.976	23174.148	14	6	7	33421-29107	
4314.088	23173.547	12	3	4	19246-23560	
4314.229	23172.789	63	4	4	18319-22634	
4314.976	23168.778	225	1	2	17222-21537	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-C	J-E	LEVELS ODD-EVEN	IS
4315.060	23166.326	23	5	5	15799-20114	
4315.766	23164.536	149	2	3	16746-21062	
4316.019	23163.184	202	7/2	7/2	11363-15679	
4316.162	23162.411	624	3	3	17091-21407	
4317.218	23156.746	4038	4	5	11403-15720	− 174
4319.058	23152.241	16	5	6	32660-28342	
4319.307	23150.906	96	5	4	18065-22383	
4318.991	23147.239	139	4	5	17217-21536	
4318.991	23147.239	139	9	8	21873-26192	
4320.250	23140.454	41	5	6	19964-14643	
4320.506	23139.123	37	2	3	15347-19668	
4322.383	23129.075	25	11/2	9/2	26964-22642	
4322.883	23126.399	28	4	4	33481-29158	
4323.189	23124.762	18	3	4	24630-20306	
4323.629	23122.409	250	6	7	17102-21426	
4323.761	23121.703	29	3	2	13936-18260	
4324.903	23115.598	28	5	6	32994-28669	
4325.366	23113.124	249	5	5	11968-16294	
4326.179	23108.780	82	7	6	13256-22582	
4327.331	23102.628	171	6	7	18591-22918	
4327.983	23099.148	1396	13/2	11/2	15717-11389	− 168
4328.914	23094.180	105	7	6	20680-25009	
4329.334	23091.939	162	6	6	26911-22582	
4330.536	23085.530	126	5	4	31121-35452	
4331.463	23080.589	70	5	5	24445-20114	
4333.006	23072.370	17	3	4	11798-16121	
4333.428	23070.123	19	4	4	14274-18607	
4335.463	23059.295	21	5	5	24956-20621	
4336.257	23055.072	1560	4	5	15778-20114	+ 33
4337.454	23048.710	2915	8	7	14501-18839	+ 203
4337.967	23045.878	20	5	5	19148-23486	
4338.538	23042.951	545	4	3	14411-18749	
4339.150	23039.701	79	8	9	20178-24517	
4339.620	23037.206	70	11/2	11/2	12667- 8347	
4339.801	23036.245	1214	2	3	14191-18530	+ 512
4340.462	23032.737	43	3	2	27092-22752	
4341.068	23029.521	163	6	6	19685-24026	
4343.417	23017.067	131	5	4	23535-19192	
4343.717	23015.477	16	6	5	15804-20148	
4343.717	23015.477	16	5	4	33874-29530	
4343.901	23014.502	17	4	3	16047-20391	
4344.776	23009.867	42	11/2	11/2	13089-17434	
4344.960	23008.893	30	6	6	32286-27941	
4345.546	23005.790	109	3	2	14774-19119	
4347.720	22994.286	47	6	6	35223-30875	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4349.058	22992.287	1241	5	6	11290-15638	+ 104
4350.235	22980.993	87	4	4	19210-23560	
4350.830	22977.850	25	11/2	11/2	16003-20353	
4351.066	22976.604	37	7	6	22440-26791	
4351.322	22975.252	88	3	3	15906-20258	
4351.986	22971.746	32	4	5	20967-25319	
4352.541	22968.817	38	6	6	18111-22464	
4354.825	22956.771	127	5	4	18065-13710	
4354.910	22956.322	45	5	4	23535-27890	
4355.249	22954.536	121	6	6	10288-14643	
4355.815	22951.553	105	8	7	23195-18839	
4355.899	22951.110	51	3	2	23663-19307	
4356.607	22947.380	170	5	5	18065-22421	
4357.260	22943.941	63	3	4	17091-21448	
4359.026	22934.646	91	9/2	7/2	23106-27465	
4360.049	22929.265	154	5	4	16825-21185	
4360.586	22926.441	337	7	6	19998-15638	
4361.838	22919.860	32	4	3	31899-27538	
4362.553	22916.104	45	4	4	32192-27829	
4363.568	22910.774	23	5	6	26734-31098	
4364.231	22907.293	35	4	4	19831-24195	
4364.670	22904.989	39	4	3	20195-15831	
4367.596	22889.644	60	7	7	25134-20766	
4367.935	22887.868	27	4	4	19007-23375	
4368.766	22883.514	40	5	5	17589-21958	
4369.276	22880.843	33	2	1	17507-21876	
4369.988	22877.115	56	4	5	15778-20148	
4369.988	22877.115	56	5	4	32199-27829	
4370.412	22874.896	93	5	5	14562-18932	
4370.666	22873.566	739	4	5	19210-14839	- 167
4370.870	22872.499	61	5	5	16154-20525	
4371.560	22868.784	111	4	3	18319-22691	
4371.816	22867.549	116	6	5	18005-22377	
4372.427	22864.354	17	3	2	23753-28125	
4373.904	22856.633	73	4	5	18412-22786	
4374.247	22854.841	25	6	7	29440-24066	
4375.565	22847.956	35	4	3	19831-24207	
4375.973	22845.826	19	5	5	30574-34950	
4376.683	22842.120	180	7	7	18256-22633	
4378.488	22832.703	13	6	6	22171-26550	
4378.633	22831.947	22	7/2	9/2	32384-36763	
4379.296	22828.491	22	4	3	23129-18749	
4379.357	22828.173	53	4	5	16699-21078	
4379.357	22828.173	53	4	3	20781-25160	
4379.823	22825.744	89	7/2	9/2	37504-33124	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4380.931	22819.971	27	5	6	28005-32386	
4382.249	22813.113	167	8	7	20178-24560	
4382.669	22810.921	1229	3	4	15169-19522	- 49
4382.755	22810.474	18	4	4	11403- 7020	
4382.841	22810.026	21	7	6	17928-22311	
4383.638	22805.879	39	4	5	24433-28817	
4385.850	22794.377	54	4	5	22792-18406	
4388.428	22780.986	39	9/2	9/2	18041-22429	
4388.699	22779.580	38	11/2	11/2	13695-18084	
4388.991	22778.064	405	6	5	14543-18932	
4389.189	22777.036	213	5	4	18214-13825	
4390.194	22771.822	37	6	7	16376-20766	
4390.686	22769.271	111	5	5	17589-21980	
4391.128	22766.979	110	5	5	24539-20148	
4391.128	22766.979	110	3	3	23973-28364	
4391.429	22765.418	523	6	6	15435-19826	
4393.056	22756.987	11	3	3	19246-23639	
4394.422	22749.913	13	5	5	31425-27031	
4394.978	22747.035	57	6	6	22171-25566	
4394.978	22747.035	57	9/2	9/2	30301-25906	
4399.815	22722.028	131	4	5	16451-20851	
4400.102	22720.546	89	4	4	17048-21448	
4400.557	22718.196	57	8	7	19142-23543	
4403.059	22705.287	27	5	5	20916-25319	
4403.139	22704.874	50	3	3	24267-19864	
4403.139	22704.874	50	5	5	25202-29605	
4403.722	22701.868	25	5	6	17589-21993	
4404.698	22696.838	31	4	3	15986-20391	
4405.215	22694.174	113	6	5	15906-20311	
4406.261	22688.787	11	5	5	28168-32574	
4406.612	22686.980	19	5	4	30224-25813	
4406.873	22685.636	26	5	4	31847-27440	
4407.301	22683.433	110	4	5	27262-22854	
4408.876	22675.330	12	4	3	23129-27538	
4409.127	22674.039	27	4	4	22792-18383	
4411.345	22662.639	14	5	4	18964-23375	
4411.931	22659.629	365	5	4	19148-23560	
4411.931	22659.629	365	7/2	7/2	9075- 4663	
4412.560	22656.398	13	4	4	22149-26562	
4413.643	22650.813	13	6	6	19758-24172	
4414.156	22648.207	159	2	3	18210-22624	
4414.379	22647.063	14	4	3	34161-29747	
4414.518	22646.350	307	6	6	15804-20218	
4414.657	22645.636	163	5	6	14344-18759	
4416.132	22638.073	232	4	4	16451-12035	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4416.839	22634.449	92	4	3	16588-21005	
4417.262	22632.282	71	9	8	19509-23926	
4417.876	22629.136	42	3	2	22678-18260	
4418.388	22626.514	76	5	5	20139-15720	
4419.136	22622.684	12	5	5	17892-13463	
4419.562	22620.503	52	5	4	19553-23972	
4419.590	22620.360	339	5	6	15799-20218	
4419.869	22618.932	28	4	5	17217-21636	
4422.144	22607.296	21	11/2	11/2	40553-36131	
4424.559	22594.956	282	3	3	16983-21407	
4424.858	22593.430	40	5	5	24539-20114	
4425.261	22591.372	405	5	5	30870-26444	
4426.614	22584.467	13	5	5	18359-22786	
4427.021	22582.391	85	8	7	15459-19885	
4427.329	22580.820	25	4	3	22792-27219	
4427.665	22579.106	359	4	3	11403-15831	
4427.665	22579.106	359	5	4	23060-32487	
4428.101	22576.883	30	4	5	31999-36327	
4428.380	22575.460	17	4	5	22492-26920	
4428.426	22575.226	11	5	4	31425-26597	
4429.537	22569.564	83	7	6	15353-19783	
4430.387	22565.234	114	3	3	16575-21005	
4430.415	22565.091	56	5	5	11290-15720	
4430.415	22565.091	56	3	2	23973-28403	
4431.369	22560.233	53	5	5	24956-20525	
4432.766	22553.123	18	5	6	20516-25348	
4433.224	22550.793	48	6	5	17102-21536	
4433.573	22549.018	27	1	2	13826-18260	
4433.633	22548.713	19	4	5	16047-11613	
4434.306	22545.291	19	7	6	19998-24433	
4436.282	22535.248	71	8	7	18621-23057	
4436.282	22535.249	71	4	5	25596-30032	
4436.838	22532.425	25	6	6	23084-27521	
4437.381	22529.667	132	3	2	29461-25023	
4438.271	22525.149	20	11/2	9/2	19473-23911	
4438.765	22522.642	124	2	3	17098-21536	
4439.021	22521.344	53	8	7	38009-33570	
4439.174	22520.567	44	3	2	24267-19828	
4439.864	22517.067	118	9	8	21873-26313	
4440.702	22512.818	100	6	6	19274-23715	
4441.293	22509.873	16	3	2	24469-20058	
4442.208	22505.186	75	4	5	18412-22854	
4443.412	22499.088	27	3	2	27195-22752	
4444.907	22491.521	12	5	4	28005-23560	
4445.084	22490.625	65	4	5	15026-19471	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4445.401	22489.021	155	3	2	23753-19307	
4446.541	22483.255	42	3	4	13936-18383	
4446.798	22481.956	45	4	5	17533-21980	
4448.965	22471.006	21	7/2	7/2	11363-15812	
4450.272	22464.406	1816	6	7	15435-19885	− 305
4450.382	22463.851	91	4	4	17302-21753	
4450.542	22463.043	52	4	3	10557-15007	
4451.387	22458.779	988	6	6	12910-17361	− 154
4451.906	22456.161	17	7	6	22440-26892	
4451.994	22455.717	92	8	9	21174-25626	
4452.923	22451.032	131	1	2	15999-20452	
4453.445	22448.401	226	3	4	17091-21545	
4454.964	22440.746	15	3	3	23973-28428	
4455.577	22437.659	14	5	5	33939-29484	
4456.646	22432.277	10	4	3	22492-26948	
4456.836	22431.321	50	13/2	13/2	6293-10740	
4458.345	22423.729	108	6	6	18005-22464	
4459.926	22420.806	17	5	6	24401-28860	
4459.042	22420.223	927	6	5	12910-17369	+ 297
4459.479	22418.026	67	6	6	17102-12643	
4460.706	22411.860	214	3	4	13433-17893	
4462.099	22404.863	19	3	2	19246-23708	
4465.657	22387.012	214	3	4	16983-21448	
4466.059	22384.997	26	5	4	18964-23430	
4466.693	22381.820	106	4	5	18319-22786	
4466.876	22380.903	37	5	6	17589-22056	
4467.313	22378.713	107	3	3	10540-15007	
4467.693	22376.810	230	8	8	16244-20712	
4467.899	22375.778	417	3	3	14281-18749	
4468.064	22374.952	17	3	4	24630-29098	
4468.554	22372.498	15	3	3	27092-22624	
4468.678	22371.878	30	5	5	18964-23432	
4469.054	22369.995	440	6	6	19103-23572	
4469.432	22368.103	34	13/2	11/2	15884-20353	
4469.927	22365.626	15	4	4	22492-26962	
4470.467	22362.925	32	5	6	20139-24609	
4471.124	22359.639	23	5	5	28005-23534	
4471.238	22359.069	59	3	4	23663-19192	
4472.588	22352.320	70	7	6	25134-20661	
4472.650	22352.010	9	11/2	11/2	26673-31145	
4472.876	22350.880	9	7	6	15353-19826	
4472.983	22350.346	53	5	6	24401-29874	
4473.320	22348.662	103	5	6	19959-24433	
4473.434	22348.092	56	4	3	16588-21062	
4473.605	22347.238	62	3	4	17909-22383	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4475.117	22339.688	66	4	5	20195-15720	
4475.266	22338.944	29	6	5	16376-20851	
4475.474	22337.906	107	4	3	14274-18749	
4475.606	22337.247	12	4	5	27262-22786	
4476.286	22333.854	24	5	5	24697-29173	
4476.386	22333.355	84	5	5	16602-21078	
4477.338	22328.606	28	4	3	24196-28673	
4477.784	22326.382	267	4	5	16047-20525	
4479.166	22319.494	20	4	5	19007-23486	
4480.100	22314.840	89	4	3	15779-20258	
4480.568	22312.510	16	2	2	15347-19828	
4481.320	22308.765	65	2	3	18210-22691	
4481.839	22306.182	212	6	6	17102-21584	
4481.887	22305.943	19	5	4	24445-28927	
4482.971	22300.549	34	5	4	25202-20719	
4482.971	22300.549	34	6	5	16847-21329	
4484.105	22294.910	17	4	4	17799-22283	
4484.691	22291.997	89	3	3	15906-20391	
4484.691	22291.997	89	5	5	28119-32604	
4484.691	22291.997	89	6	5	33584-29099	
4484.752	22291.693	1172	4	5	12984-17369	+ 286
4485.457	22288.190	53	7	6	20680-16195	
4486.428	22283.366	42	4	4	16699-21185	
4486.984	22280.605	590	3	3	16575-21062	
4486.984	22280.605	590	5	6	31583-36070	
4487.221	22279.428	125	4	5	17048-21536	
4488.012	22275.501	25	5	6	28060-23572	
4488.770	22271.740	224	5	4	11633-16121	
4490.226	22264.518	27	6	5	26911-22421	
4490.226	22264.518	27	7	6	34659-30168	
4491.347	22258.961	25	3	4	17261-21753	
4491.347	22258.961	25	6	5	34718-30226	
4491.347	22258.961	25	11/2	11/2	25423-20932	
4492.204	22254.714	20	11/2	13/2	26673-31165	
4492.331	22254.085	25	4	4	24311-28803	
4492.461	22253.441	21	6	5	14543-10051	
4492.871	22251.410	113	4	4	22792-18299	
4492.921	22251.163	194	9	8	19509-24002	
4494.118	22245.236	219	11/2	13/2	15234-10740	
4494.921	22241.262	18	5	5	18359-22854	
4495.094	22240.406	768	13/2	11/2	15884-11389	
4495.235	22239.704	61	5	5	17882-22377	
4495.494	22238.873	41	3	4	27195-22700	
4496.127	22235.296	10	5	5	31242-35738	
4496.287	22234.505	44	4	4	17048-21545	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4497.091	22230.530	44	6	6	7005-11502	
4497.166	22230.159	17	5	5	17461-21958	
4497.585	22228.088	66	7	6	18256-22754	
4497.794	22227.055	109	8	7	21174-25672	
4498.135	22225.370	155	3	2	15560-20058	
4498.573	22223.206	48	3	3	15169-19668	
4498.966	22221.265	79	7	6	16766-21265	
4500.702	22212.694	98	5	6	20139-15638	
4504.245	22195.222	59	5	5	16825-21329	
4504.722	22192.871	35	4	4	17533-22038	
4505.342	22189.817	23	4	4	32583-28077	
4505.635	22188.374	12	6	5	13402-17908	
4505.968	22186.735	348	7	6	15712-20218	
4506.991	22181.699	69	5	6	16154-20661	
4507.620	22178.603	70	5	4	15799-20306	
4511.351	22160.261	106	5	5	20139-24650	
4511.860	22157.761	196	8	8	17540-22052	
4512.313	22155.537	84	5	5	15799-20311	
4513.417	22150.117	6	5	5	33853-29339	
4513.732	22148.572	33	5	4	26489-21976	
4514.957	22142.562	25	4	4	18567-23082	
4515.006	22142.322	16	5	4	17461-21976	
4516.087	22137.022	8	11/2	11/2	26673-22157	
4517.499	22130.103	115	5	6	18065-22582	
4517.534	22129.931	13	6	5	19016-23534	
4517.999	22127.702	13	3	2	27092-22574	
4517.989	22127.702	13	5	5	30870-35388	
4518.321	22126.077	678	7	6	11677-16195	− 333
4518.954	22122.977	12	6	6	19914-24433	
4519.085	22122.336	15	5	5	17461-21980	
4519.435	22120.623	24	5	4	18065-22584	
4521.342	22111.293	48	4	4	23129-18607	
4521.405	22110.985	71	6	7	18111-22633	
4521.461	22110.711	5712	4	5	14411-18932	+ 300
4521.619	22109.943	120	4	4	16047-20569	
4521.618	22109.943	120	6	7	31134-35656	
4522.018	22107.987	1187	8	7	16244-20766	
4522.578	22105.250	50	5	5	18964-23486	
4524.332	22096.680	11	4	4	19210-23734	
4524.747	22094.653	27	7	6	8118-12643	
4525.476	22091.094	10	6	7	33421-28895	
4525.746	22089.776	40	4	4	15028-19552	
4526.617	22085.526	72	4	5	19555-24082	
4526.699	22085.126	21	3	4	23973-28499	
4526.892	22084.184	15	4	5	19007-23534	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4527.704	22080.223	18	4	3	17302-21830	
4527.845	22079.536	33	4	3	24196-19668	
4528.817	22074.797	75	4	4	15778-20306	
4528.930	22074.246	48	5	5	19403-23932	
4528.930	22074.246	48	5	6	30255-34784	
4530.119	22068.452	82	5	5	13876-18406	
4530.467	22066.757	84	2	1	26704-22174	
4531.073	22063.806	27	4	4	19664-24195	
4531.156	22063.402	45	6	7	20353-24884	
4531.190	22063.236	36	7	7	22440-26971	
4531.715	22060.680	1339	7	7	15353-19885	+ 185
4532.124	22058.689	18	5	6	17461-21993	
4533.275	22053.089	20	6	7	31857-27324	
4533.313	22052.904	227	7	8	18256-22789	
4533.509	22051.950	52	4	5	15778-20311	
4533.509	22051.950	52	3	2	14774-19307	
4533.724	22050.905	13	6	5	19914-24448	
4534.223	22048.478	21	6	5	26911-22377	
4534.310	22048.055	24	5	5	31847-36381	
4534.530	22046.985	44	3	3	24267-28802	
4534.998	22044.710	79	4	5	18319-22854	
4534.998	22044.710	79	11/2	9/2	26964-22429	
4535.328	22043.106	42	7	6	17928-22464	
4535.419	22042.664	10	5	6	28896-33432	
4535.553	22042.012	56	3	3	13433-17968	
4535.676	22041.901	54	7	6	12826-17361	
4535.675	22041.420	20	4	5	35559-31023	
4535.809	22040.768	26	3	4	24267-28803	
4535.958	22040.044	55	4	4	17217-21753	
4536.425	22037.776	24	3	4	23663-19127	
4537.097	22034.511	15	11/2	11/2	19473-24010	
4537.120	22034.400	19	5	6	11968-16505	
4537.987	22030.190	104	4	4	11558- 7020	
4538.577	22027.326	202	4	5	15986-20525	
4538.790	22026.341	64	3	3	14576-19115	
4539.234	22024.138	15	5	5	17882-22421	
4539.535	22022.678	53	5	4	31536-26997	
4539.742	22021.673	39	4	5	32192-36732	
4539.953	22020.650	17	5	5	29281-24741	
4540.495	22018.021	81	5	6	25202-20661	
4540.546	22017.774	69	5	5	16154-11613	
4541.063	22015.267	18	9/2	11/2	9241-13783	
4541.407	22013.600	15	1	2	13719-19260	
4542.178	22009.863	38	2	2	16746-12204	
4542.242	22009.553	21	2	2	19210-22752	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-C	J-E	LEVELS ODD-EVEN	IS
4542.4C7	22CC6.753	35	4	3	19664-24207	
4542.556	22008.032	72	6	5	18005-13463	
4543.148	22005.164	20	11/2	13/2	25245-20702	
4543.521	22003.357	116	6	7	26911-22368	
4544.742	21997.446	59	13/2	13/2	36393-31848	
4545.350	21994.503	16	5	5	31509-26964	
4545.983	21991.441	56	3	2	15906-20452	
4546.195	21990.415	20	11/2	13/2	15430-19977	
4546.310	21989.859	10	8	7	20178-15631	
4546.357	21989.632	38	9	9	19297-23843	
4546.445	21989.206	15	5	6	20916-25462	
4548.177	21980.832	41	3	3	23663-19115	
4548.177	21980.832	41	4	3	19555-15007	
4549.496	21974.460	56	5	5	24697-20148	
4550.615	21969.056	14	5	4	24445-28996	
4553.278	21956.207	17	4	4	16588-12035	
4553.860	21953.401	24	6	6	20353-24906	
4553.933	21953.049	105	5	4	13632-18185	
4553.933	21953.049	105	4	5	24433-28987	
4553.985	21952.799	23	4	3	16451-21005	
4554.654	21949.574	39	3	2	16983-21537	
4554.654	21949.574	39	11/2	13/2	25423-29978	
4554.783	21948.952	23	5	6	25202-29756	
4554.933	21948.230	54	7	6	20680-25235	
4556.CC4	21943.070	19	4	5	19664-24220	
4556.370	21941.3C8	17	4	5	34161-29605	
4556.992	21938.313	16	6	5	32286-27729	
4558.185	21932.571	1298	6	7	15906-20464	+ 189
4558.794	21929.641	113	2	3	14191-18749	
4560.741	21920.279	313	3	4	23753-19192	
4561.035	21918.866	60	9/2	11/2	14265-19827	
4562.156	21913.288	873	5	6	11633-16195	
4562.837	21910.210	6663	5	6	10081-14643	+ 199
4564.212	21903.609	38	6	6	19758-24322	
4564.518	21902.141	31	5	4	16154-20719	
4564.992	21899.867	227	7	7	18068-22633	
4564.992	21899.867	227	5	4	32005-27440	
4566.586	21892.222	50	5	6	19148-23715	
4566.586	21892.222	50	4	3	32427-27860	
4566.715	21891.6C4	37	5	4	16602-12035	
4567.114	21889.691	50	6	6	16376-20943	
4567.312	21888.742	483	4	5	12362-16929	+ 263
4569.663	21882.270	50	5	4	19403-23972	
4569.663	21882.270	50	3	3	17261-21830	
4570.170	21875.C54	170	6	7	10288-14858	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4570.250	21874.671	13	7/2	9/2	26125-21555	
4570.302	21874.422	12	5	5	18964-23534	
4570.675	21872.637	9	5	6	24539-29109	
4572.083	21865.901	37	8	7	19761-24333	
4572.282	21864.950	19	5	5	15542-20114	
4572.437	21864.208	20	3	4	23663-28236	
4572.739	21862.764	15	5	5	28005-23432	
4573.663	21859.252	15	4	5	16047-20621	
4574.034	21856.575	93	6	7	19274-23848	
4574.559	21854.066	15	9/2	9/2	37658-33124	
4574.690	21853.440	1785	7	6	10065-14643	– 335
4574.858	21852.638	226	11/2	9/2	13961-18536	
4575.274	21850.651	14	5	6	24401-19826	
4575.363	21850.226	15	5	4	23005-23430	
4575.613	21849.032	8	8	7	18621-23197	
4576.401	21845.270	28	6	7	23024-27600	
4576.526	21844.673	20	7	6	33118-28542	
4576.806	21843.337	639	5	6	35674-31098	– 212
4579.224	21831.803	40	2	3	13951-18530	
4579.378	21831.069	18	5	5	30670-26290	
4579.378	21831.069	18	5	5	24070-28650	
4579.465	21830.654	309	6	7	16847-21426	
4579.465	21830.654	309	3	4	32546-27966	
4580.117	21827.546	12	9/2	9/2	19237-23817	
4580.675	21824.887	19	9	8	21873-26454	
4581.869	21819.200	21	8	7	20178-24760	
4581.869	21819.200	21	5	4	31536-36118	
4582.000	21818.576	211	5	4	14970-19552	
4582.217	21817.543	16	7	7	29187-33770	
4582.414	21816.605	128	4	4	15986-20569	
4583.229	21812.725	21	5	5	24697-20114	
4583.416	21811.835	726	4	4	12884-17468	+ 192
4583.456	21811.645	79	5	4	16602-21185	
4584.145	21808.367	50	4	4	17799-22383	
4584.831	21805.104	125	6	6	14174-18759	
4584.964	21804.471	26	5	5	28119-23534	
4584.964	21804.471	26	5	4	31425-26840	
4585.366	21802.560	59	3	3	29461-34046	
4585.845	21800.282	50	6	7	20353-24938	
4586.946	21795.050	11	6	7	22171-26758	
4587.301	21793.363	13	4	4	13412-13825	
4587.301	21793.363	13	6	5	29488-34075	
4588.058	21789.577	31	4	5	17048-21636	
4588.245	21788.879	197	5	5	14344-18932	
4590.456	21778.384	17	4	5	22149-17559	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4590.522	21778.071	17	6	5	31857-27267	
4594.146	21760.892	98	5	6	32199-27605	
4594.146	21760.892	98	3	3	13936-18530	
4594.680	21758.363	422	2	3	16942-21536	
4594.856	21757.530	31	7	7	22440-27035	
4595.275	21755.546	42	5	6	17461-22056	
4596.517	21749.667	24	5	4	18964-23560	
4596.890	21747.902	695	4	4	16588-21185	+ 120
4597.921	21743.026	17	6	5	23094-27682	
4598.412	21740.704	22	3	2	33001-28403	
4598.469	21740.435	102	4	4	19664-24263	
4599.056	21737.660	14	5	5	24070-19471	
4600.179	21732.353	84	6	6	26911-22311	
4601.132	21727.852	244	3	2	23908-19307	
4601.566	21725.803	13	5	6	27184-22582	
4601.763	21724.873	90	5	5	18065-13463	
4602.091	21723.324	35	5	6	24956-29558	
4602.177	21722.918	61	5	5	20139-24741	
4603.963	21714.491	18	6	5	33421-28817	
4604.180	21713.468	22	6	7	29488-24884	
4605.204	21708.640	18	7	8	25134-20528	
4605.422	21707.612	17	8	7	18938-23543	
4605.978	21704.992	80	7	6	18256-22862	
4605.978	21704.992	80	9/2	11/2	24446-19840	
4606.011	21704.836	20	5	5	15542-20148	
4607.292	21698.802	30	6	5	18825-23432	
4607.968	21695.618	118	5	6	18964-23572	
4608.445	21693.373	1897	6	5	7005-11613	+ 179
4608.940	21691.043	12	6	5	23024-27633	
4609.051	21690.520	65	5	4	27184-31793	
4609.583	21688.017	72	4	4	18319-13710	
4610.441	21683.981	16	3	4	16575-21185	
4610.441	21683.981	16	5	4	29604-34215	
4610.583	21683.313	11	4	3	16451-21062	
4610.583	21683.313	11	7	6	19998-24609	
4610.663	21682.937	12	5	5	20331-15720	
4611.250	21680.177	10	3	4	27195-22584	
4611.359	21679.664	625	6	7	33752-38363	
4612.455	21674.513	2306	5	4	11633- 7020	- 237
4613.279	21670.641	42	4	3	17217-21830	
4613.470	21669.744	58	4	3	15778-20391	
4613.700	21668.664	34	11/2	11/2	16003-11389	
4613.700	21668.664	34	11/2	9/2	22613-18200	
4614.360	21665.565	65	8	8	21174-25789	
4614.960	21662.748	108	4	4	19210-23825	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4615.713	21659.214	34	3	4	14576-19192	
4616.204	21656.910	67	6	6	15804-20420	
4617.210	21652.191	14	5	6	33853-29236	
4617.595	21650.386	15	7/2	7/2	14900-19517	
4617.902	21648.947	61	4	4	19831-24449	
4617.989	21648.539	36	5	5	20916-25534	
4618.201	21647.545	17	5	4	20139-24757	
4618.608	21645.638	25	5	6	24401-19783	
4619.054	21643.548	52	6	5	15906-20525	
4619.090	21643.379	65	5	6	24445-19826	
4619.090	21643.379	65	5/2	7/2	36118-31499	
4619.349	21642.165	134	5	6	19553-24172	
4619.558	21641.186	18	4	4	18567-23186	
4620.941	21634.709	25	3	2	27195-22574	
4621.276	21633.141	408	5	6	15799-20420	
4622.284	21628.423	59	5	6	19403-24026	
4623.210	21624.091	17	5	4	16825-21448	
4623.421	21623.104	15	8	8	23199-27818	
4623.976	21620.509	72	8	8	17423-22052	
4626.031	21610.905	17	8	7	31802-36428	
4625.153	21610.335	24	6	6	23024-27650	
4626.966	21606.538	311	4	5	16451-21078	
4627.211	21605.394	313	6	7	18005-22633	
4627.434	21604.352	28	3	3	14488-19115	
4628.204	21600.758	17	4	5	19907-24535	
4629.400	21595.177	789	9	8	19297-23926	+ 188
4629.921	21592.747	14	5	4	28060-23430	
4630.049	21592.150	16	5	4	14562-19192	
4630.049	21592.150	16	5	6	29281-33911	
4630.550	21589.814	14	5	5	29604-24974	
4630.621	21589.483	80	4	5	16699-21329	
4631.249	21586.556	1170	4	5	10208-14839	
4631.575	21585.036	48	4	4	19210-23841	
4631.746	21584.239	10	3	2	14488-19119	
4632.108	21582.553	12	11/2	9/2	16003-20635	
4632.339	21581.476	62	6	5	20353-15720	
4632.684	21579.869	18	5	5	28119-23486	
4632.776	21579.441	19	5	4	25202-20569	
4633.945	21573.997	170	11/2	11/2	13450-18084	
4635.394	21567.253	20	3	3	24499-19864	
4636.307	21563.006	47	8	7	19142-23779	
4636.541	21561.917	10	13/2	11/2	15717-20353	
4636.702	21561.169	157	5	5	24784-20148	
4637.874	21555.720	26	4	3	27262-22624	
4637.972	21555.265	30	4	3	17302-21940	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4638.462	21552.988	44	4	4	18412-23051	
4638.730	21551.742	10	9/2	9/2	36118-31480	
4639.071	21550.158	11	4	5	31899-36538	
4639.710	21547.190	29	5	5	26489-31129	
4639.965	21546.006	29	4	4	19555-24195	
4640.324	21544.339	15	5	5	18214-22854	
4641.187	21540.333	24	5	6	34397-29756	
4641.607	21538.384	10	4	4	22492-27133	
4642.307	21535.136	85	6	6	18111-22754	
4642.706	21533.286	106	4	3	24311-19668	
4642.965	21532.084	30	5	5	20331-24974	
4643.848	21527.990	71	7	8	16766-21409	
4644.268	21526.043	367	4	4	32152-27548	
4644.268	21526.043	367	6	7	10987-15631	
4644.268	21526.043	367	5	5	29385-24741	
4644.917	21523.036	28	6	5	23084-27729	
4645.119	21522.100	235	4	5	19567-23212	
4645.206	21521.697	10	5	5	24956-20311	
4645.944	21518.278	113	9/2	9/2	20857-16211	
4646.103	21517.542	170	6	7	19914-24560	
4646.103	21517.542	170	3	3	24267-28913	
4646.242	21516.898	52	8	8	14842-19489	
4648.362	21507.084	72	6	5	18111-13463	
4648.656	21505.724	100	6	7	19685-24333	
4648.656	21505.724	100	4	3	19907-24555	
4648.656	21505.724	100	3	3	29461-34109	
4648.814	21504.993	285	6	5	12910-17559	
4648.814	21504.993	285	7	6	33118-28470	
4650.632	21496.587	152	8	8	20738-25388	
4650.780	21495.903	230	6	6	10987-15638	
4651.325	21493.384	20	1	2	15999-20651	
4651.459	21492.765	665	11/2	13/2	10740-15392	
4651.901	21490.723	30	5	6	16154-11502	
4653.685	21482.466	47	7	6	17928-22582	
4655.524	21473.998	22	4	5	17302-21958	
4656.651	21468.801	66	7	7	25134-29790	
4656.709	21468.534	86	6	6	20353-25009	
4657.068	21466.879	22	4	3	19664-15007	
4658.397	21460.754	497	4	5	14274-18932	
4658.882	21458.520	22	4	4	27262-31921	
4659.989	21453.423	61	3	4	24267-28927	
4660.213	21452.392	856	6	7	15804-20464	+ 144
4660.357	21451.729	121	7	7	16766-21426	
4660.853	21449.446	194	5	5	11633-16294	
4661.185	21447.918	24	6	5	18825-23486	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4661.510	21446.423	19	5	4	20916-25577	
4662.080	21443.801	220	7	7	18256-22918	
4662.407	21442.297	335	3	4	15906-20569	
4662.750	21440.719	616	5	6	16602-21265	+ 521
4663.742	21436.159	17	4	4	16699-12035	
4663.805	21435.869	134	9/2	7/2	0- 4663	
4665.115	21429.850	391	6	7	17102-21767	
4665.423	21428.435	35	3	2	23973-19307	
4666.173	21424.991	3486	11/2	9/2	13089- 8423	- 147
4666.235	21424.706	342	10	9	23303-27969	
4666.582	21423.113	11	2	1	17507-22174	
4667.034	21421.038	1024	9/2	9/2	11544-16211	- 543
4668.565	21414.014	18	5	4	31509-26840	
4669.578	21409.368	113	7	7	25134-20464	
4669.629	21409.134	17	4	4	18412-23082	
4670.431	21405.458	10	5	5	24784-20114	
4671.092	21402.429	52	3	4	13936-18607	
4671.428	21400.889	270	3	2	24499-19828	
4671.428	21400.889	270	4	4	16047-20719	
4671.466	21400.715	16	6	5	27093-22421	
4672.435	21396.273	12	7	6	19958-24671	
4672.436	21396.273	12	6	6	35123-30451	
4673.187	21392.834	942	6	6	31134-35807	
4673.274	21392.436	50	4	5	20967-16294	
4673.366	21392.015	47	4	4	17302-21976	
4674.537	21386.656	44	6	6	19758-24433	
4674.735	21385.750	82	3	4	17909-22584	
4676.227	21378.927	21	6	7	19103-23779	
4676.656	21376.965	12	5	4	19148-23825	
4676.810	21376.262	1486	5	6	15542-20218	- 66
4677.447	21373.350	93	4	5	17302-21980	
4677.787	21371.797	73	6	5	23084-18406	
4678.395	21369.065	37	5	6	20331-25009	
4678.449	21368.773	15	5	5	19403-24082	
4678.449	21368.773	15	6	5	35223-30544	
4679.057	21365.996	40	6	5	15435-20114	
4679.437	21364.261	24	11/2	11/2	19473-24152	
4680.737	21358.328	12	9/2	11/2	21387-16706	
4680.822	21357.940	367	5/2	7/2	9344- 4663	
4681.264	21355.923	18	5/2	5/2	36637-31955	
4681.519	21354.764	392	10	9	20949-25626	
4681.564	21354.555	31	4	4	22149-17468	
4681.766	21353.633	58	2	3	17507-22189	
4682.540	21350.104	26	9	8	21630-26313	
4683.242	21346.903	14	5	4	31174-26491	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4683.242	21346.903	14	3	3	27092-22409	
4685.380	21337.162	11	5	5	29784-25098	
4685.923	21334.690	62	7	6	13567-18253	
4687.144	21329.132	28	5	4	27020-31707	
4689.060	21320.417	53	6	5	16847-21536	
4690.479	21313.967	30	5	5	19959-24650	
4690.479	21313.967	30	9/2	9/2	30756-26065	
4690.637	21313.249	492	11/2	13/2	15430-10740	
4692.282	21305.777	40	5	4	28122-23430	
4692.468	21304.932	414	11/2	11/2	13961-18654	
4692.976	21302.626	24	5	6	20331-15638	
4694.670	21294.940	33	3	3	15169-19864	
4696.890	21284.874	13	4	3	20199-24892	
4697.056	21284.122	58	5	5	16154-20851	
4697.645	21281.453	31	3	3	15560-20258	
4698.053	21279.605	73	7	8	14790-19489	
4698.410	21277.988	78	6	6	19016-23715	
4698.624	21277.019	76	2	2	18210-22908	
4698.624	21277.019	76	5	6	34612-29914	
4700.789	21267.220	44	8	9	19142-23843	
4700.789	21267.220	44	4	4	23129-27829	
4701.977	21261.847	16	5	5	32857-37559	
4702.060	21261.471	33	5	4	17882-22584	
4702.372	21260.061	19	4	4	13412-13710	
4702.417	21259.857	39	6	5	16376-21078	
4704.162	21251.971	92	4	3	14411-19115	
4704.193	21251.831	48	7	7	17928-22633	
4704.193	21251.831	48	7/2	7/2	33037-28333	
4705.059	21247.919	699	9	8	19297-24002	+ 285
4706.013	21243.612	11	8	7	20178-24884	
4708.054	21234.402	53	7	8	20680-25388	
4708.612	21231.886	13	5	5	31536-36245	
4708.612	21231.886	13	5	4	24956-29665	
4709.428	21228.207	50	3	4	27092-22383	
4710.331	21224.138	72	5	5	16825-21536	
4711.267	21219.921	61	6	5	27093-31804	
4711.400	21219.322	18	5	6	31255-35966	
4712.788	21213.072	81	6	5	15435-20148	
4713.284	21210.840	128	5	5	19553-14839	
4714.479	21205.464	33	3	3	17909-22624	
4716.021	21198.530	41	4	5	19555-14839	
4716.472	21196.503	151	3	4	23908-19192	
4718.002	21189.629	19	6	7	18825-23543	
4718.470	21187.528	52	4	4	11403-16121	
4718.755	21186.248	77	6	7	26911-31630	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4719.396	21183.370	41	5	4	16825-21545	
4720.498	21178.425	298	8	7	20738-25458	
4721.450	21174.155	35	5	5	18065-22786	
4721.450	21174.155	35	11/2	13/2	25423-20702	
4721.623	21173.379	42	7	8	18068-22789	
4722.449	21169.676	14	4	5	19210-23932	
4723.581	21164.602	49	11	10	23673-28397	
4724.284	21161.453	77	3	4	17909-22634	
4725.426	21156.339	56	5	5	30224-34950	
4725.570	21155.694	32	8	8	31802-36528	
4726.153	21153.084	106	5	5	15799-20525	
4727.207	21148.368	16	4	4	19007-23734	
4727.313	21147.894	13	2	2	17507-22234	
4727.313	21147.894	13	5	6	31988-27261	
4727.649	21146.391	395	5	5	16602-21329	
4727.932	21145.572	1822	7	7	13567-18295	
4727.983	21144.897	8624	7/2	9/2	10444- 5716	+ 205
4728.324	21143.372	10	6	7	29488-24760	
4728.384	21143.104	6	5	6	30961-35689	
4728.695	21141.713	17	5	5	32123-27394	
4728.695	21141.713	17	9/2	9/2	26470-31199	
4730.469	21133.785	35	2	2	18210-22940	
4731.252	21130.287	31	4	4	18319-23051	
4731.394	21129.653	190	5	4	13876-18607	
4732.221	21125.960	42	5	6	32831-28098	
4732.221	21125.960	42	4	4	15986-20719	
4733.094	21122.064	205	6	5	10987-15720	
4733.348	21120.930	37	6	5	33907-29173	
4733.517	21120.176	58	3	2	24562-19828	
4733.963	21118.186	87	6	5	18591-23325	
4735.321	21112.130	3057	4	5	11559-16294	+ 613
4736.949	21104.874	11	6	6	28801-33538	
4737.674	21101.645	30	6	6	16847-21584	
4737.929	21100.509	35	5	6	24956-20218	
4738.048	21099.979	4035	6	6	11457-16195	+ 247
4738.665	21097.232	73	3	3	17091-21830	
4739.941	21091.552	18	3	2	23663-28403	
4740.987	21086.899	15	3	2	19246-23987	
4741.104	21086.378	51	4	5	17217-21958	
4741.900	21082.839	778	11/2	11/2	13089- 8347	
4742.719	21079.198	35	11/2	13/2	15234-19977	
4743.343	21076.425	24	4	5	19907-24650	
4743.465	21075.883	167	8	8	21174-25918	
4744.880	21069.598	11	3	3	27092-31837	
4745.855	21065.092	122	4	4	23129-18383	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4746.365	21063.006	39	3	4	15560-20306	
4746.580	21062.052	94	6	6	18825-23572	
4747.110	21059.700	25	6	5	29488-24741	
4747.350	21059.635	825	4	5	15778-20525	
4748.121	21055.216	282	6	6	19665-24433	
4750.115	21046.377	57	11/2	9/2	25726-30476	
4750.555	21044.410	16	3	4	24499-29250	
4751.180	21041.660	120	5	6	18964-23715	
4751.180	21041.660	120	5	4	13632-18383	
4751.615	21039.733	25	5	4	17882-22634	
4751.615	21039.733	25	6	6	19274-24026	
4751.662	21039.525	21	7	7	15712-20464	
4751.736	21039.198	40	5	4	29784-34535	
4753.343	21032.085	21	5	4	32831-28077	
4755.168	21024.013	15	5	4	33853-29098	
4755.605	21022.081	112	8	9	19761-24517	
4755.668	21021.802	63	9/2	11/2	30996-35751	
4757.078	21015.571	21	6	6	19914-24671	
4757.808	21012.347	16	4	5	18567-23325	
4758.185	21010.682	38	4	3	16047-20805	
4758.419	21009.649	84	6	5	14174-18932	
4758.612	21008.797	21	4	4	24311-19552	
4758.707	21008.377	2892	5	5	10081-14839	+ 194
4758.944	21007.331	1055	4	4	17217-21976	
4758.944	21007.331	1055	5	6	16825-21584	
4760.054	21002.432	93	5	6	19403-14643	
4760.506	21000.438	12	6	7	35123-30363	
4761.594	20995.640	11	4	4	23129-27890	
4761.594	20995.640	11	5	5	29291-34042	
4762.179	20993.061	168	4	4	19210-23972	
4762.379	20992.179	12	6	7	19016-23779	
4762.379	20992.179	12	5	4	24697-29459	
4762.417	20992.012	79	4	4	18319-23082	
4762.417	20992.012	79	3	3	33564-28802	
4762.462	20991.813	29	5	5	27184-22421	
4763.023	20989.341	175	4	5	17217-21980	
4763.382	20985.556	20	2	3	26704-21940	
4764.386	20983.338	72	7/2	9/2	12627-17392	
4764.436	20983.116	11	3	3	10819-15584	
4764.840	20981.337	213	5	4	15542-20306	
4764.889	20981.121	92	7	7	20680-25445	
4765.053	20980.399	44	4	3	24433-19668	
4767.291	20970.550	79	5	5	20331-25098	
4767.812	20968.258	275	5	6	20139-24906	
4767.812	20968.258	275	4	3	32192-27424	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-C	J-E	LEVELS ODD-EVEN	IS
4768.449	20965.457	37	5	6	19403-24172	
4768.449	20965.457	37	5	5	30574-25805	
4768.684	20964.424	32	9	8	21630-16862	
4769.533	20960.692	207	5	5	15542-20311	
4769.919	20958.996	88	5	6	19553-24322	
4770.622	20955.907	19	6	6	23024-18253	
4770.622	20955.907	19	11/2	13/2	37408-32638	
4770.851	20954.901	31	8	7	23195-27965	
4770.944	20954.493	27	4	5	22149-26920	
4774.241	20940.022	120	4	4	18412-23186	
4774.458	20939.070	83	5	5	13632-18406	
4774.639	20938.277	37	8	9	23195-27969	
4774.939	20936.961	9	4	5	22492-27267	
4775.615	20933.997	18	5	5	28896-33672	
4776.334	20930.846	82	3	4	17261-22038	
4777.922	20923.890	36	7	7	20680-25458	
4777.958	20923.732	18	4	5	20967-25745	
4778.209	20922.633	14	4	4	20195-24974	
4778.287	20922.291	237	3	4	14774-19552	
4778.670	20920.614	316	2	1	17098-21876	
4779.174	20918.408	45	5	6	7864-12643	
4780.228	20913.796	44	4	5	22149-17369	
4780.660	20911.906	39	6	5	18005-22786	
4780.660	20911.906	39	5	5	31121-35902	
4780.764	20911.451	92	3	4	23973-19192	
4781.097	20909.995	245	4	4	14411-19192	
4781.307	20909.076	63	5	5	19959-24741	
4781.507	20908.202	17	4	3	17048-21830	
4781.642	20907.611	67	3	3	17909-22691	
4782.267	20904.879	90	4	4	19831-24613	
4782.691	20903.026	81	5	4	14344-19127	
4782.691	20903.026	81	5	6	30574-25791	
4783.588	20899.106	249	6	6	15435-20218	
4783.588	20899.106	249	5	5	26734-31518	
4783.834	20898.031	94	8	8	19142-23926	
4783.834	20898.031	94	5	5	30255-35038	
4784.146	20896.668	53	5	5	19148-23932	
4785.274	20891.743	408	4	4	17799-22584	
4786.633	20885.811	21	13/2	15/2	36393-31606	
4788.333	20878.374	61	5	5	17585-22377	
4789.610	20872.829	32	7	7	10069-14858	
4789.754	20872.202	38	5	5	18065-22854	
4790.119	20870.611	65	5	4	16825-12035	
4790.269	20869.958	129	2	3	16746-21536	
4790.578	20868.612	72	3	4	17909-22700	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4790.831	20867.510	16	3	2	22678-27469	
4791.185	20865.968	309	4	4	15778-20569	
4792.358	20860.861	73	4	3	12362-17154	
4792.399	20860.682	18	5	6	31174-35966	
4794.284	20852.480	123	5	4	20916-16121	
4794.284	20852.480	123	7	6	18068-22862	
4794.284	20852.480	123	3	4	32872-28077	
4795.085	20848.997	45	4	3	24311-29106	
4797.296	20839.388	58	5	6	18065-22862	
4798.217	20835.388	34	2	3	13951-18749	
4799.091	20831.593	94	4	3	10208-15007	
4799.793	20828.547	68	4	5	18412-23212	
4800.472	20825.600	23	4	5	24311-29111	
4800.763	20824.338	31	5	4	27184-22383	
4801.199	20822.447	26	7	7	18256-23057	
4801.470	20821.272	99	5	4	20139-24940	
4801.686	20820.335	91	6	7	19758-24560	
4801.686	20820.335	91	9/2	9/2	914- 5716	
4802.390	20817.283	66	6	5	22171-17369	
4805.011	20805.928	107	13/2	11/2	12629-17434	
4806.802	20798.176	196	6	7	18111-22918	
4808.088	20792.613	28	4	4	18567-23375	
4808.732	20789.828	49	5	5	24956-20148	
4809.070	20788.367	214	9/2	11/2	13275-18084	
4810.048	20784.140	87	6	6	22171-17361	
4811.204	20779.146	26	5	5	16825-21636	
4811.662	20777.168	19	4	3	19210-24022	
4812.378	20774.077	78	3	4	27195-22383	
4812.817	20772.182	3740	5	6	14970-19783	+ 543
4813.249	20770.319	51	7	6	18256-23069	
4813.886	20767.569	15	7/2	9/2	34207-29393	
4816.036	20758.298	383	7	8	15712-20528	
4816.530	20756.169	23	3	3	27092-31909	
4817.835	20750.547	61	4	4	19007-23825	
4818.567	20747.395	34	7	6	16766-21584	
4818.953	20745.733	50	4	3	16588-21407	
4818.953	20745.733	50	3	4	33564-28745	
4818.988	20745.582	544	2	3	13149-17968	
4820.950	20737.139	144	4	4	17217-22038	
4823.125	20727.788	11	4	4	33444-28621	
4823.313	20726.958	30	8	8	31802-26979	
4823.649	20725.536	35	4	3	22792-17968	
4825.019	20719.651	32	4	3	17799-22624	
4826.933	20711.414	19	6	5	19914-24741	
4827.293	20709.891	380	3	2	13433-18260	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4827.773	20707.832	68	2	1	26704-21876	
4828.733	20703.715	1557	7	6	11677-16505	+ 160
4830.435	20696.420	25	6	6	23084-18253	
4831.015	20693.935	115	3	3	15560-20391	
4831.741	20690.826	69	6	7	19016-23848	
4831.784	20690.642	9379	3	4	8878-13710	+ 295
4832.336	20688.278	78	5	5	17589-22421	
4832.501	20687.572	37	3	3	16575-21407	
4833.524	20683.193	47	3	3	14281-19115	
4834.168	20680.438	40	4	5	19907-24741	
4834.168	20680.438	40	4	5	22149-26983	
4834.449	20679.236	49	4	4	19007-23841	
4835.240	20675.853	28	5	5	20139-24974	
4836.707	20669.582	110	6	5	11457-16294	
4836.707	20669.582	110	4	5	16699-21536	
4837.744	20665.151	40	4	3	15026-19864	
4837.744	20665.151	40	4	4	23129-27966	
4837.788	20664.963	326	4	5	16451-11613	
4837.935	20664.331	34	6	5	29488-24650	
4839.558	20661.675	20	4	5	20967-25805	
4939.558	20661.675	20	3	3	24267-29106	
4840.654	20652.728	56	4	4	12627-17468	
4840.968	20651.389	93	11/2	9/2	13695-18536	
4841.058	20650.834	149	4	3	14274-19115	
4841.170	20650.527	68	8	7	18938-23779	
4841.651	20648.475	34	5	4	33939-29098	
4842.133	20646.420	41	11/2	11/2	17922-22764	
4842.305	20645.687	34	3	3	23908-28751	
4842.560	20644.599	168	2	3	17098-21940	
4843.254	20641.641	40	4	5	15778-20621	
4843.363	20641.177	30	4	3	20967-25810	
4844.397	20636.771	22	5	5	28576-33420	
4844.449	20636.549	40	4	5	17533-22377	
4845.268	20633.061	108	3	4	14281-19127	
4845.731	20631.090	53	4	3	18319-23165	
4845.731	20631.090	53	3	3	29461-34306	
4845.774	20630.907	309	4	4	16699-21545	
4846.729	20626.846	37	5	5	20331-25178	
4847.063	20625.420	12	3	3	16983-21830	
4847.196	20624.854	58	11/2	9/2	13270- 8423	
4847.382	20621.936	11	4	3	32708-27860	
4847.882	20621.936	11	5	4	14344-19192	
4848.173	20620.658	13	7/2	9/2	11363-16211	
4848.941	20617.432	270	3	3	17091-21940	
4848.965	20617.330	120	6	5	18005-22854	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4850.143	20612.301	96	6	5	19685-24535	
4850.148	20612.301	96	4	4	17533-22383	
4850.389	20611.277	131	7	7	18066-22918	
4851.822	20605.189	21	4	4	24433-29285	
4851.950	20604.646	108	9/2	9/2	13275- 8423	
4851.950	20604.646	108	11/2	13/2	37490-32638	
4852.843	20600.654	150	4	4	14274-19127	
4853.680	20597.302	19	3	3	29461-34314	
4855.135	20591.129	17	5	6	18214-23069	
4855.336	20590.277	102	6	5	17102-21958	
4855.687	20588.788	34	6	6	26911-22056	
4856.153	20586.812	1313	5	6	14970-19826	+ 549
4856.521	20585.253	546	7	7	14790-19647	
4856.521	20585.253	546	4	5	18319-13463	
4857.200	20582.375	24	6	6	15804-20661	
4857.533	20580.964	14	5	6	33045-28188	
4859.201	20573.899	30	5	4	19403-24263	
4859.921	20571.274	44	4	3	18412-23272	
4860.052	20570.297	68	4	4	16588-21448	
4860.167	20569.810	106	6	7	15906-20766	
4860.290	20569.289	13	5	6	29430-34290	
4860.822	20567.038	500	7	8	17928-22789	
4860.951	20566.492	19	6	6	35760-30899	
4861.246	20565.244	27	5	4	18964-23825	
4861.599	20563.751	16	11/2	9/2	12530-17392	
4862.194	20561.235	17	3	4	27092-31955	
4862.272	20560.905	38	4	3	31899-27037	
4862.272	20560.905	38	5	6	15799-20661	
4863.271	20556.681	20	6	7	27920-23057	
4865.031	20549.244	23	7	6	15353-20218	
4865.161	20548.695	565	11/2	11/2	13961-18827	
4866.325	20543.780	48	3	4	13433-18299	
4867.026	20540.821	40	4	4	18319-23186	
4867.026	20540.821	40	3	4	32672-27805	
4867.444	20539.057	88	5	4	27567-22700	
4867.745	20537.787	39	5	4	18214-23082	
4869.146	20531.878	54	5	4	20331-25200	
4869.842	20528.943	21	6	6	27093-31963	
4869.907	20528.669	22	7/2	7/2	32272-27402	
4870.635	20525.601	187	4	5	19664-24535	
4870.855	20524.674	73	5	6	24697-19826	
4871.533	20521.817	11	5	6	17882-22754	
4871.719	20521.034	73	3	3	19246-24118	
4872.609	20517.286	9498	5	6	11633-16505	+ 743
4873.153	20514.995	12	5	4	28060-23186	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4874.867	20507.782	297	5	6	17589-22464	
4875.275	20506.066	154	6	7	19685-24560	
4875.382	20505.616	30	5	6	20916-25791	
4876.311	20501.709	36	6	5	15435-20311	
4878.042	20494.434	61	5	4	20139-25017	
4878.229	20493.653	121	4	5	16451-21329	
4878.513	20492.456	204	5	4	24070-19192	
4878.919	20491.170	99	6	6	29488-24609	
4880.239	20485.208	14	5	6	19553-24433	
4881.471	20480.038	126	10	9	23303-28184	
4882.776	20474.564	161	5	6	13876-18759	
4884.202	20468.586	23	4	5	22792-17908	
4884.202	20468.586	23	5	4	29281-34165	
4884.323	20468.058	60	3	4	17091-21976	
4885.225	20464.300	114	7	7	19998-24884	
4888.196	20451.862	43	2	3	16942-21830	
4888.334	20451.285	14	6	6	35223-30334	
4888.782	20449.411	432	6	6	16376-21265	
4888.782	20449.411	432	3	2	15169-20058	
4888.782	20449.411	432	5	6	28168-33057	
4889.105	20448.060	28	1	2	17222-22112	
4889.786	20445.212	115	6	6	18825-23715	
4890.293	20443.092	191	6	6	17102-21993	
4890.449	20442.440	21	5	5	25202-20311	
4890.553	20442.005	1020	4	5	11403-16294	+ 405
4891.781	20436.874	24	4	3	17048-21940	
4892.475	20433.975	217	6	6	13361-18253	
4892.582	20433.528	577	4	5	18315-23212	
4893.242	20430.772	220	5	4	24445-19552	
4893.242	20430.772	220	6	7	13402-18295	
4893.662	20428.935	34	2	2	17098-12204	
4895.471	20421.469	28	6	5	18591-23486	
4896.558	20416.769	79	5	5	18359-13463	
4896.793	20415.956	150	4	3	18567-23464	
4896.793	20415.956	150	7	6	27576-32472	
4897.778	20411.850	81	6	6	19274-24172	
4898.017	20410.854	27	4	5	31347-36245	
4898.494	20408.867	158	4	4	22792-17893	
4898.494	20408.867	158	5	4	28576-33474	
4898.974	20406.867	225	3	3	15906-20805	
4899.938	20402.852	90	7	6	20680-25580	
4899.938	20402.852	90	6	7	19758-14858	
4900.449	20400.725	55	6	6	22171-27072	
4901.118	20397.940	162	4	4	17799-22700	
4902.171	20393.558	414	2	3	17507-22409	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4902.923	20390.430	304	8	7	19761-14858	
4903.650	20387.407	37	3	3	27092-22189	
4904.404	20384.273	94	5	6	20331-25235	
4904.566	20383.600	48	2	3	18210-23114	
4905.094	20381.406	305	5	6	11290-16195	
4905.094	20381.406	305	5	4	25202-30107	
4906.397	20375.993	17	6	5	28440-23534	
4906.397	20375.993	17	7	6	36509-31603	
4906.849	20374.116	3518	9	8	17882-22789	+ 105
4907.823	20370.073	46	3	2	19246-24154	
4907.860	20369.919	25	4	3	19210-24118	
4907.930	20369.628	17	7	6	19998-24906	
4909.153	20364.554	238	5	6	19553-14643	
4909.349	20363.741	379	5	6	20916-25825	
4909.967	20361.178	82	5	5	29122-23212	
4910.458	20359.142	188	3	4	14281-19192	
4910.458	20359.142	188	8	7	38009-33099	
4911.213	20356.012	247	6	7	19274-24185	
4912.268	20351.640	809	3	2	10819-15732	
4912.484	20350.745	44	4	5	18412-23325	
4912.608	20350.232	429	6	7	18005-22918	
4912.608	20350.232	429	5	4	24697-29610	
4912.666	20349.991	38	6	6	19758-24671	
4914.192	20343.672	45	5	6	24697-19783	
4915.272	20339.202	35	7	6	25134-20218	
4915.352	20338.871	496	5	5	30034-34950	
4915.528	20338.143	114	11/2	11/2	7598-12513	
4916.738	20333.138	401	5	5	17461-22377	
4917.746	20328.970	22	5	4	29531-24613	
4918.033	20327.784	172	4	4	14274-19192	
4919.208	20322.928	215	5	5	14970-10051	
4919.319	20322.469	317	4	5	18567-23486	
4920.950	20315.734	22	6	7	16847-21767	
4921.353	20314.070	45	11/2	11/2	11784-16706	
4922.113	20310.934	25	8	7	18621-23543	
4922.923	20307.592	61	11/2	11/2	13270-8347	
4923.174	20306.556	88	6	6	19103-24026	
4923.771	20304.094	72	8	7	23195-28118	
4924.207	20302.296	134	5	5	16154-21078	
4924.207	20302.296	134	3	4	33001-28077	
4924.399	20301.505	61	6	6	19685-24609	
4924.729	20300.149	74	9/2	9/2	13275-18200	
4927.296	20289.569	349	5	4	16825-21753	
4927.678	20287.996	2134	9/2	11/2	13275-8347	+ 207
4927.812	20287.444	37	13/2	11/2	27293-32221	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4928.083	20286.328	1129	6	5	14543-19471	
4928.729	20283.670	158	2	2	14191-19119	
4928.762	20283.534	25	9/2	7/2	24446-19517	
4928.977	20282.649	58	11/2	11/2	16003-20932	
4929.484	20280.563	42	11/2	9/2	13270-18200	
4931.255	20273.279	30	4	5	17048-21980	
4931.711	20271.405	3700	3	4	7103-12035	+ 284
4933.735	20263.089	81	5	5	16602-21536	
4933.735	20263.089	81	5	4	27567-22634	
4933.945	20262.226	78	7	8	19998-24932	
4934.229	20261.060	302	8	7	20738-25672	
4934.383	20260.428	55	6	7	13361-18295	
4934.383	20260.428	55	4	4	22427-27492	
4934.584	20259.602	57	2	1	16942-21876	
4935.516	20255.777	46	5	4	29122-23186	
4936.315	20252.498	28	5	6	28576-33512	
4937.583	20247.297	46	4	4	31899-26962	
4937.583	20247.297	46	4	5	16699-21636	
4939.379	20239.935	12	5	4	32123-27184	
4939.916	20237.735	40	7	7	19998-24938	
4940.165	20236.715	293	8	7	17428-22368	
4940.534	20235.203	211	7	7	18256-23197	
4940.777	20234.208	24	5	6	16825-21766	
4940.996	20233.311	24	4	4	15778-20719	
4942.242	20228.210	57	9	8	19509-24451	
4943.140	20224.535	46	4	4	23129-18185	
4943.192	20224.323	63	6	5	18591-23534	
4944.436	20219.234	451	9/2	11/2	6445-11389	
4945.239	20215.951	189	6	5	15906-20851	
4946.066	20212.571	137	8	7	10685-15631	
4946.853	20209.355	1313	3	4	8878-13825	- 121
4946.941	20208.996	35	5	6	19959-24906	
4947.468	20206.843	52	5/2	7/2	10732-15679	
4947.541	20206.545	11	5	5	32199-27252	
4947.940	20204.916	154	4	3	16598-21536	
4947.940	20204.916	154	5	4	11968- 7020	
4948.867	20201.131	2460	7	7	13346-18295	+ 60
4949.173	20199.882	26	3	4	19246-24195	
4949.219	20199.694	57	9/2	11/2	25910-30860	
4949.310	20199.323	44	4	5	18412-13463	
4949.626	20198.033	423	11/2	13/2	5790-10740	
4950.072	20196.213	196	3	4	13433-18383	
4951.076	20192.118	143	1	1	17222-22174	
4952.283	20187.196	24	6	7	18591-23543	
4952.392	20186.752	32	15/2	13/2	15692-10740	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4952.392	20186.752	32	11/2	9/2	25245-30197	
4953.681	20181.499	115	6	5	16376-21329	
4953.681	20181.499	115	5	5	26489-21536	
4953.752	20181.210	295	6	7	18825-23779	
4954.110	20179.752	49	6	5	28440-23486	
4955.466	20174.230	46	2	3	18210-23165	
4955.861	20172.622	15	5	5	28168-23212	
4956.237	20171.091	151	4	4	16588-21545	
4957.337	20166.616	30	3	3	16983-21940	
4957.578	20165.635	17	8	7	23195-28152	
4957.970	20164.041	24	6	6	18111-23069	
4958.137	20163.362	42	4	3	16047-21005	
4959.565	20157.556	105	5	5	20139-25098	
4959.917	20156.126	708	3	2	24267-19307	
4960.736	20152.798	72	5	5	17461-22421	
4961.610	20149.248	54	4	5	24433-19471	
4962.194	20146.876	58	6	7	15804-20766	
4962.760	20144.579	45	4	4	18412-23375	
4963.537	20141.425	41	6	7	19103-24066	
4964.321	20138.244	40	5	6	27020-22056	
4964.784	20136.366	18	10	9	23303-28268	
4964.981	20135.567	12	4	3	20195-25160	
4965.198	20134.687	33	5	5	18359-23325	
4965.300	20134.274	35	6	6	31857-26892	
4965.915	20131.780	77	5	4	20139-25104	
4966.254	20130.406	29	6	5	20353-25319	
4967.907	20123.708	25	5	6	31255-26287	
4968.014	20123.275	65	5	6	26734-21766	
4968.673	20120.606	22	6	5	35148-30179	
4968.735	20120.354	60	5	5	18964-23932	
4969.863	20115.768	343	6	7	19914-24884	
4972.351	20105.723	95	5	4	18214-23186	
4973.088	20102.743	21	3	2	17261-22234	
4975.464	20093.143	553	4	5	15026-10051	
4976.116	20090.510	34	6	6	22171-27148	
4977.187	20086.187	710	13/2	13/2	15717-10740	
4977.187	20086.187	710	11/2	13/2	14999-19977	
4980.061	20074.595	35	11/2	9/2	19473-24453	
4980.598	20072.431	17	5	4	19959-24940	
4980.759	20071.782	95	4	4	17302-22283	
4980.805	20071.597	21	5	5	31425-26444	
4980.805	20071.597	21	3	2	27092-22112	
4980.861	20071.371	117	6	6	18591-23572	
4981.852	20067.378	19	3	3	17909-22891	
4981.852	20067.378	19	4	4	33481-23499	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
4982.277	20065.667	45	4	5	20195-25178	
4982.351	20065.369	1341	5	6	16602-21584	+ 168
4983.074	20062.457	52	5	6	30574-35557	
4983.373	20061.254	303	5	5	15542-20525	
4984.587	20056.368	52	13/2	13/2	15717-20702	
4985.226	20053.797	23	5	6	27567-22582	
4985.318	20053.427	70	4	4	19210-24195	
4986.008	20050.652	78	5	4	18065-23051	
4986.368	20041.166	542	5	5	16602-11613	
4988.697	20039.844	177	8	8	13938-23926	
4989.177	20037.916	27	4	4	17048-22038	
4989.589	20036.261	284	5	4	32123-27133	
4989.589	20036.261	284	7	7	17928-22918	
4989.936	20034.868	28	5	5	20916-25906	
4990.163	20033.957	27	5	4	14562-19552	
4990.212	20033.760	20	9/2	7/2	24446-29436	
4991.278	20029.481	37	5	4	24539-29530	
4991.652	20027.981	228	7	7	20680-25672	
4992.346	20025.196	86	7	6	14790-19783	
4992.725	20023.676	1047	3	4	16983-21976	
4993.229	20021.659	229	5	6	17589-22582	
4993.228	20021.659	229	4	5	25596-30589	
4994.683	20015.827	119	11/2	11/2	17922-22917	
4994.948	20015.165	382	11/2	11/2	13085-18084	
4994.973	20014.665	27	4	3	22149-17154	
4995.166	20013.891	60	5	4	17589-22584	
4997.200	20005.745	70	4	4	16451-21448	
4997.664	20003.888	110	6	5	12910-17908	
4997.906	20002.919	26	5	5	18214-23212	
4998.473	20000.650	38	2	3	16942-21940	
4999.720	19995.662	44	4	3	25391-20391	
4999.980	19994.622	130	4	3	19555-24555	
5001.397	19988.957	28	5	6	24784-19783	
5001.343	19987.175	178	7	7	16766-21767	
5001.858	19986.955	160	2	2	18210-23212	
5002.390	19984.989	21	6	7	27920-22918	
5003.750	19979.557	124	5	5	11290-16294	
5003.985	19978.619	18	6	5	13402-18406	
5004.247	19977.573	21	5	4	29531-34535	
5004.568	19976.291	44	5	6	18065-23069	
5005.274	19973.474	154	4	5	18319-23325	
5006.558	19968.192	27	3	3	27195-22189	
5007.576	19964.292	32	5	4	23535-28543	
5007.576	19964.292	32	9/2	9/2	11797-16804	
5007.791	19963.435	361	9	9	19509-24517	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5008.731	19959.688	36	3	4	15560-20569	
5009.323	19957.329	32	6	6	19016-24026	
5009.382	19957.094	207	15/2	13/2	15692-20702	
5010.440	19952.880	14	5	5	28168-33178	
5010.777	19951.538	91	7	6	19998-25009	
5011.194	19949.878	164	3	3	10819-15831	
5011.194	19949.878	164	5	5	29784-34795	
5011.357	19949.229	76	9	8	21873-16862	
5011.808	19947.434	83	1	2	17222-22234	
5012.723	19943.793	135	2	2	7191-12204	
5013.021	19942.607	87	4	3	19664-24677	
5013.021	19942.607	87	6	5	33907-28894	
5014.003	19938.701	103	2	2	17098-22112	
5014.737	19935.783	57	4	3	16047-21062	
5017.636	19924.265	136	5	6	20331-25348	
5017.636	19924.265	136	3	4	24267-29285	
5018.578	19920.525	47	1	2	17222-12204	
5018.935	19919.108	39	4	3	15986-21005	
5020.093	19914.513	213	4	5	18412-23432	
5020.931	19911.190	8	0	1	15025-20046	
5021.356	19909.504	68	9	8	21630-26652	
5022.018	19906.880	23	5	6	20916-25938	
5023.119	19902.516	252	6	7	18825-23848	
5023.375	19901.502	290	4	5	12884-17908	
5024.511	19897.003	283	11/2	9/2	10740- 5716	
5025.429	19893.368	167	5	4	31785-26760	
5025.429	19893.368	167	13/2	11/2	15717-20742	
5025.799	19891.903	28	3	2	14281-19307	
5026.863	19887.693	1587	9/2	7/2	9690- 4663	
5027.334	19885.830	659	4	3	10557-15584	
5027.392	19885.600	61	13/2	11/2	8755-13783	
5027.753	19884.173	55	4	3	15778-20805	
5028.567	19880.954	197	5	6	29374-34402	
5029.231	19878.131	38	6	7	15435-20464	
5029.340	19877.898	74	5	6	19403-24433	
5030.793	19872.157	101	3	2	17909-22940	
5030.793	19872.157	101	3	3	29461-34491	
5031.121	19870.862	74	4	5	16047-21078	
5031.121	19870.862	74	5	4	32660-27629	
5031.277	19870.245	103	5	4	16154-21185	
5032.225	19866.502	32	6	6	33907-28874	
5034.613	19857.079	111	5	5	16602-21636	
5035.683	19852.860	57	7	6	14790-19826	
5036.929	19847.949	23	6	6	27093-22056	
5037.088	19847.322	115	6	6	15906-20943	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5038.179	19843.024	20	5	6	25202-30240	
5042.450	19826.217	814	7	6	20680-15638	
5042.715	19825.175	98	8	7	14842-19885	
5042.852	19824.637	128	8	7	19142-24185	
5043.596	19821.712	70	2	3	15347-20391	
5044.104	19819.716	257	3	3	10540-15584	
5045.126	19815.701	212	6	5	13361-18406	
5047.579	19806.071	89	13/2	11/2	15884-20932	
5048.460	19802.615	9928	6	6	11457-16505	+ 735
5050.171	19795.906	67	6	7	16376-21426	
5050.795	19793.460	30	8	8	20738-25789	
5051.279	19791.563	84	4	4	17533-22584	
5051.729	19789.800	75	6	7	18005-23057	
5052.339	19787.411	40	5	5	15799-20851	
5052.715	19785.939	53	4	4	19210-24263	
5053.644	19782.301	65	7	7	15712-20766	
5054.254	19779.914	94	3	2	14774-19828	
5054.731	19778.047	279	3	4	16983-22038	
5054.855	19777.562	42	3	4	27092-22038	
5054.955	19777.562	42	5	6	32660-27605	
5055.549	19774.847	140	4	4	18319-23375	
5055.592	19774.679	27	4	5	17799-22854	
5055.844	19773.693	50	3	4	23663-18607	
5056.071	19772.805	21	3	4	17091-12035	
5056.364	19771.660	23	5	5	13876-18932	
5057.298	19768.008	21	3	2	17261-12204	
5058.544	19763.139	44	5	5	32787-27729	
5059.201	19760.572	71	6	7	19274-24333	
5059.999	19757.456	54	6	5	19914-24974	
5060.555	19755.285	101	4	5	14411-19471	
5060.735	19754.583	32	4	5	20761-15720	
5060.735	19754.583	32	5	4	19553-24613	
5062.388	19749.303	812	5	6	18964-24026	
5063.775	19742.723	88	6	6	19005-23069	
5064.484	19739.959	98	3	4	14488-19552	
5066.717	19731.260	411	7	6	15353-20420	
5067.232	19729.254	20	4	5	19907-24974	
5067.342	19728.826	96	4	5	19907-14839	
5067.422	19728.514	184	2	2	17507-22574	
5069.057	19722.151	23	4	4	24196-19127	
5069.338	19721.058	263	6	6	19103-24172	
5069.925	19718.775	35	4	3	22149-27219	
5070.404	19716.912	1123	8	8	15458-20528	+ 366
5071.680	19711.951	84	9	8	19509-24581	
5071.943	19710.929	11	5	5	19148-24220	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5072.226	19705.929	19	4	3	18567-23639	
5073.536	19704.740	528	4	5	15778-20851	
5073.992	19702.969	19	4	5	18412-23486	
5074.371	19701.498	33	3	3	24499-29574	
5074.575	19700.706	18	6	5	19914-14839	
5075.100	19698.668	31	4	5	17302-22377	
5075.257	19698.058	642	4	4	32136-27060	
5075.257	19698.058	642	3	4	24267-19192	
5075.974	19695.276	271	2	1	17098-22174	
5076.601	19692.843	65	4	5	19664-24741	
5078.702	19684.657	100	7	6	22440-17361	
5078.891	19683.964	152	5	6	33939-28860	
5080.801	19676.564	193	4	4	17302-22383	
5080.801	19676.564	193	4	3	24196-19115	
5081.615	19673.412	1446	9	9	17882-22964	+ 207
5082.773	19668.930	60	6	7	19103-24185	
5083.753	19665.139	17	3	2	27195-22112	
5083.927	19664.466	17	4	3	12884-17968	
5084.315	19662.965	61	4	5	16451-21536	
5084.724	19661.383	25	9	8	21630-26715	
5085.066	19659.984	39	4	3	16451-21536	
5085.390	19658.808	73	2	2	18210-23295	
5086.215	19655.620	329	11/2	9/2	13450-18536	
5087.123	19652.111	87	8	8	31802-26715	
5087.524	19650.562	199	4	5	15026-20114	
5087.708	19649.852	31	5	5	25202-20114	
5088.294	19647.589	106	3	3	15169-20259	
5089.616	19642.485	30	6	6	22171-27261	
5090.150	19640.425	21	6	5	15435-20525	
5090.713	19638.253	14	8	7	23195-28285	
5090.713	19638.253	14	3	2	15560-20651	
5091.153	19636.532	43	2	3	17098-22189	
5091.159	19636.532	43	6	5	35123-30032	
5091.736	19634.307	45	3	3	14576-19668	
5092.448	19631.562	149	2	1	17507-22599	
5092.623	19630.887	40	4	4	19664-24757	
5092.739	19630.440	220	8	7	17540-22633	
5093.383	19627.958	211	4	4	16451-21545	
5093.542	19627.345	99	10	10	23303-28397	
5094.524	19623.562	236	7	7	14790-19885	
5094.665	19623.019	40	4	5	19555-24650	
5095.036	19621.590	41	11/2	11/2	27496-32591	
5097.083	19613.710	478	7/2	9/2	11707-16804	
5098.930	19606.605	27	3	3	15906-21005	
5099.722	19603.560	127	5	6	16602-11502	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5100.192	19601.754	32	8	7	21174-26274	
5100.483	19600.635	374	3	2	7103-12204	
5100.929	19599.306	56	4	4	17533-22634	
5101.473	19596.832	136	6	6	22171-17070	
5101.932	19595.069	26	5	5	24697-29799	
5102.903	19591.724	3497	11/2	11/2	13450- 8347	+ 78
5102.921	19591.271	61	2	2	16746-21849	
5103.732	19588.158	397	6	7	14543-19647	
5103.984	19587.191	59	4	5	18567-13463	
5104.231	19586.243	231	3	2	15936-21011	
5105.765	19580.358	928	4	4	12362-17468	+ 456
5105.855	19580.013	28	9	8	21873-26979	
5106.261	19578.456	17	9/2	11/2	30599-25492	
5106.385	19577.981	44	8	7	20738-15631	
5106.982	19575.692	28	4	3	17302-22409	
5108.217	19570.959	105	7	8	20680-25789	
5109.641	19565.505	43	6	6	20353-25462	
5110.034	19564.000	60	4	4	19907-25017	
5110.263	19563.124	37	4	4	18319-23430	
5110.600	19561.834	309	3	4	33564-28454	
5110.600	19561.834	309	5	5	18214-23325	
5110.726	19561.351	1986	7	7	15353-20464	+ 287
5111.172	19559.645	63	5	4	29374-24263	
5111.172	19559.645	63	6	5	16847-21958	
5112.981	19553.107	57	4	5	18319-23432	
5113.777	19549.681	33	6	7	34718-29604	
5113.834	19549.463	25	9/2	11/2	30470-25356	
5115.604	19542.699	205	4	4	24308-19192	
5115.681	19542.404	29	5	6	30574-35689	
5116.692	19538.543	63	2	2	14191-19307	
5118.254	19532.580	46	5	5	18964-24082	
5118.369	19532.141	89	5	6	19553-24671	
5121.629	19519.709	55	5	6	17461-22582	
5121.716	19519.377	32	4	5	18412-23534	
5121.794	19519.118	141	5	4	18065-23186	
5122.795	19515.266	41	4	5	22492-17369	
5123.565	19512.333	108	5	4	17461-22584	
5123.565	19512.333	108	6	6	35760-30636	
5124.483	19508.838	58	4	4	24308-29432	
5127.115	19498.823	813	5	6	13632-18759	
5127.340	19497.967	264	5	5	14344-19471	
5127.833	19496.093	103	6	5	18591-13463	
5128.709	19492.763	230	7	7	17928-23057	
5129.781	19492.489	69	3	2	16983-22112	
5129.310	19490.479	36	3	2	29461-24331	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5130.172	19487.204	347	2	1	16746-21876	
5131.250	19483.110	190	11/2	11/2	14709-19840	
5131.319	19482.848	55	5	6	20331-25462	
5131.570	19481.895	47	3	2	20345-25476	
5132.441	19478.589	39	5	5	16825-21958	
5133.091	19476.122	221	6	5	16847-21980	
5134.336	19471.399	43	6	5	27920-22786	
5135.148	19468.320	29	5	4	31785-26650	
5135.747	19466.050	137	11/2	11/2	13961-19097	
5137.024	19461.211	44	5	6	26734-31871	
5138.621	19455.163	25	8	8	21174-26313	
5138.693	19454.890	199	5	5	19959-25098	
5139.115	19453.292	488	6	6	15804-20943	
5140.384	19448.490	48	4	3	17048-22189	
5140.812	19446.871	30	4	3	24433-29574	
5141.213	19445.354	123	4	4	14411-19552	
5141.309	19444.991	51	3	4	17909-23051	
5142.514	19440.435	29	4	4	19831-24974	
5143.120	19438.144	96	5	4	32691-27548	
5143.120	19438.144	96	13/2	11/2	16532-11389	
5143.781	19435.646	1660	5	5	14970-20114	+ 294
5144.188	19434.108	45	5	6	15799-20943	
5144.255	19433.855	575	4	3	18319-23464	
5144.298	19433.693	585	13/2	13/2	15884-10740	
5145.044	19430.875	50	5	4	19959-25104	
5145.191	19430.320	96	10	9	23303-28448	
5145.191	19430.320	96	5	5	28005-33150	
5145.347	19429.731	111	3	4	23753-18607	
5145.458	19429.312	312	6	6	26911-21766	
5147.339	19422.212	61	5	5	18065-23212	
5148.157	19419.125	42	6	6	19758-24906	
5150.278	19411.128	153	5	4	16825-21976	
5150.630	19409.802	181	5	5	28005-22854	
5151.903	19405.006	39	4	4	24308-29459	
5152.132	19404.143	116	4	5	32136-26983	
5152.249	19403.702	40	3	3	27092-21940	
5154.361	19395.752	62	5	5	16825-21980	
5154.832	19393.980	28	5	4	30034-35189	
5155.524	19391.376	29	3	3	15906-21062	
5155.750	19390.526	29	5	5	30961-25805	
5157.863	19382.583	108	8	7	18621-23779	
5158.541	19380.035	51	3	4	15560-20719	
5158.670	19379.551	261	6	6	19274-24433	
5159.637	19375.919	115	5	4	29784-34943	
5159.637	19375.919	115	5	6	27020-32180	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5159.767	19375.430	194	6	5	16376-21536	
5159.767	19375.430	194	5	5	26489-21329	
5160.416	19372.994	81	4	3	23129-17968	
5160.676	19372.018	51	4	5	17217-22377	
5160.875	19371.271	93	5	4	18214-23375	
5161.632	19368.430	263	9/2	11/2	11544-16706	
5163.644	19360.883	6622	4	5	10557-15720	- 113
5164.137	19359.035	402	4	4	16588-21753	
5164.187	19358.847	429	5	6	16602-21766	
5164.633	19357.175	56	5	6	17589-22754	
5165.409	19354.267	51	6	6	29488-24322	
5165.488	19353.971	91	8	8	16244-21409	
5166.374	19350.652	265	4	4	17217-22383	
5166.568	19349.926	216	2	2	26704-21537	
5167.358	19346.967	82	4	4	18567-23734	
5167.396	19346.825	63	5	6	16825-21993	
5168.153	19343.991	37	2	2	13951-19119	
5168.638	19342.176	45	5	4	17882-23051	
5169.918	19337.387	230	2	2	16942-22112	
5171.188	19332.638	170	8	8	19761-24932	
5172.390	19328.145	71	6	5	15906-21078	
5172.476	19327.824	578	3	4	17909-23082	
5174.235	19321.254	52	5	6	19148-24322	
5174.626	19319.794	162	3	4	13433-18607	
5175.098	19318.032	2982	7	8	15353-20528	+ 410
5175.469	19316.647	52	5	5	16154-21329	
5176.135	19314.161	139	6	5	23084-17908	
5177.317	19310.871	354	5	4	15542-20719	
5177.510	19309.032	104	5	5	14570-20148	
5178.762	19304.364	101	3	3	13936-19115	
5180.145	19299.210	82	6	7	19758-24939	
5180.207	19298.979	54	5	5	20139-25319	
5180.390	19298.297	522	3	3	14488-19668	
5181.193	19295.344	125	6	5	20353-25534	
5181.221	19295.202	81	2	3	11973-17154	
5181.457	19294.323	157	4	4	17217-12035	
5181.995	19292.320	35	8	7	16244-21426	
5183.075	19288.300	33	3	2	13936-19119	
5183.518	19286.652	222	5	6	31121-25938	
5183.922	19285.149	142	4	4	24311-19127	
5184.023	19284.773	65	2	3	17507-22691	
5184.324	19283.653	48	6	5	19914-25099	
5185.034	19281.013	407	7	8	11677-16862	
5185.193	19280.421	439	4	5	16451-21636	
5185.493	19279.306	49	4	5	19555-24741	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5187.196	19272.976	28	5	6	17882-23069	
5187.953	19270.164	58	3	3	20345-25533	
5188.191	19269.280	114	4	4	19007-24195	
5188.222	19269.165	57	4	3	20195-15007	
5188.222	19269.165	57	6	6	23084-28272	
5188.222	19269.165	57	5	5	19553-24741	
5190.259	19261.603	61	4	3	19210-24400	
5190.259	19261.603	61	9/2	11/2	30301-35491	
5190.507	19260.682	374	3	4	13936-19127	
5190.841	19259.443	81	8	7	19142-24333	
5191.062	19258.623	189	6	7	18005-23197	
5191.231	19257.996	153	7	6	13567-18759	
5191.555	19256.794	37	4	5	19907-25098	
5191.722	19256.175	64	3	4	17091-22283	
5192.172	19254.506	63	3	2	24499-19307	
5192.559	19253.071	34	4	3	17217-22409	
5194.061	19247.503	283	2	3	16746-21940	
5194.105	19247.340	68	15/2	13/2	10198-15392	
5195.666	19241.557	292	4	3	24311-19115	
5196.873	19237.089	229	4	5	12362-17559	
5197.490	19234.805	37	4	5	14274-19471	
5198.469	19231.182	158	5	5	26734-21536	
5198.469	19231.182	158	4	3	25391-30589	
5198.987	19229.266	228	4	4	15986-21185	
5198.987	19229.266	228	4	5	25596-30795	
5199.525	19227.277	62	4	3	19007-24207	
5199.805	19226.241	58	5	4	17882-23082	
5200.699	19222.936	52	6	6	18825-24026	
5202.861	19214.948	50	5	5	20331-25534	
5204.368	19209.394	62	11/2	9/2	15430-20635	
5204.675	19208.251	90	4	5	17217-22421	
5204.856	19207.583	519	8	7	17428-22633	
5204.857	19207.432	95	4	3	25596-20391	
5205.186	19206.366	52	5	5	28060-22854	
5205.939	19203.588	30	3	3	16983-22189	
5206.547	19201.345	101	6	5	18005-23212	
5207.773	19196.825	377	6	6	10987-16195	
5207.998	19195.995	81	5	4	14344-19552	
5208.251	19195.063	427	5	6	18964-24172	
5208.953	19192.476	59	6	6	17102-22311	
5209.544	19190.299	52	5	4	24401-19192	
5209.834	19189.231	165	5	4	19403-24613	
5209.834	19189.231	165	5	4	23535-28745	
5209.912	19188.943	135	5	6	20139-25348	
5211.775	19182.084	1286	5	5	16825-11613	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5212.285	19180.207	77	5	4	16825-22038	
5213.122	19177.128	104	4	5	19007-24220	
5213.434	19175.980	36	6	5	18111-23325	
5213.517	19175.675	851	13/2	13/2	5526-10740	
5214.691	19171.358	95	13/2	11/2	15717-20932	
5215.508	19168.354	216	5	6	11290-16505	
5215.596	19169.031	31	5	5	21121-25906	
5218.131	19158.719	38	5	5	19959-25178	
5218.924	19155.808	4281	9/2	7/2	9882- 4663	+ 547
5220.018	19151.793	233	4	5	22149-16929	
5220.814	19148.873	48	5	5	30870-36091	
5220.992	19148.257	772	5	6	14562-19783	
5221.363	19146.860	537	11/2	13/2	10740-15962	
5221.662	19145.763	88	3	3	15169-20391	
5221.744	19145.463	248	6	6	19685-24906	
5223.346	19139.591	56	7	7	11677-16900	
5223.346	19139.591	56	4	3	31347-36570	
5226.070	19129.615	73	3	4	17261-12035	
5226.271	19128.879	255	6	6	15435-20661	
5226.271	19128.879	255	7	6	27576-32802	
5226.896	19126.592	37	4	3	18412-23639	
5227.020	19126.138	211	7	6	16766-21993	
5227.020	19126.138	211	11/2	13/2	39199-33972	
5227.232	19125.362	62	8	7	18621-23848	
5230.550	19113.230	1451	5	6	16825-22056	+ 194
5230.758	19112.470	38	6	7	19103-24333	
5233.051	19104.095	77	4	5	22792-17559	
5235.123	19096.534	999	7/2	7/2	10444-15679	
5237.325	19088.505	100	7	8	20680-25918	
5239.151	19081.852	158	5	6	17882-12643	
5239.151	19081.852	158	5	4	34397-29158	
5239.409	19080.913	77	5	4	17461-22700	
5240.169	19078.145	538	9	8	20677-25918	
5240.548	19076.765	38	5	4	19959-25200	
5240.720	19076.139	221	4	4	18319-23560	
5241.062	19074.895	122	6	7	18825-24066	
5241.269	19074.141	50	4	3	16699-21940	
5243.202	19067.109	66	4	5	25391-20148	
5243.490	19066.062	109	4	3	32192-26948	
5244.953	19060.744	26	2	2	17507-22752	
5245.259	19059.486	88	3	3	15560-20805	
5246.608	19054.731	58	4	5	20967-15720	
5247.074	19053.039	80	2	3	16942-22189	
5248.033	19049.557	49	6	6	23024-28272	
5248.314	19048.537	459	5	6	14970-20218	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5248.588	19047.543	129	7	7	25134-19885	
5249.411	19044.557	34	5	6	20331-25580	
5249.411	19044.557	34	5	6	25202-30451	
5251.757	19036.049	90	9/2	7/2	14265-19517	
5253.359	19030.244	140	5	4	24445-19192	
5253.595	19029.389	9445	6	6	6249-11502	+ 952
5253.687	19029.056	1124	8	8	15458-20712	
5253.727	19028.911	79	6	7	19685-24938	
5254.089	19027.600	65	5	6	27020-21766	
5254.261	19026.977	290	3	2	24562-19307	
5255.005	19024.284	110	3	3	16575-21830	
5255.792	19021.435	80	3	3	17909-23165	
5257.119	19016.633	224	4	3	14411-19668	
5257.419	19015.548	66	7	6	20680-25938	
5257.577	19014.977	1041	5	5	29374-34631	
5257.989	19013.487	52	4	4	18567-23825	
5258.817	19010.493	56	4	5	16699-21958	
5260.011	19006.178	65	5	6	28122-22862	
5260.249	19005.318	1022	9/2	9/2	11544-16804	
5260.790	19003.364	52	4	4	22492-27753	
5262.899	18995.748	717	11/2	13/2	16003-10740	
5263.427	18993.843	150	5	4	24401-29665	
5265.146	18987.642	47	4	5	32708-27443	
5265.484	18986.423	69	5	5	17589-22854	
5266.318	18983.416	55	4	4	12627-17893	
5267.034	18980.835	225	4	4	17302-12035	
5267.146	18980.432	32	4	5	19831-25098	
5267.465	18979.282	87	5	6	19403-24671	
5267.465	18979.282	87	9/2	7/2	30470-35738	
5267.545	18978.994	403	8	7	20178-25445	
5267.545	18978.994	403	5	5	28122-22854	
5267.837	18977.942	170	11/2	13/2	14709-19977	
5267.967	18977.474	156	10	9	20945-26213	
5269.753	18971.042	101	11	10	23673-28943	
5270.445	18968.551	77	6	6	19914-14643	
5270.445	18968.551	77	5	6	33939-28669	
5270.576	18968.080	85	3	4	14281-19552	
5271.312	18965.431	43	7	7	13567-18839	
5272.167	18962.355	2971	11/2	11/2	8510-13783	
5272.323	18961.794	268	11/2	9/2	13695- 8423	
5273.024	18959.274	47	5	6	17589-22862	
5273.024	18959.274	47	5	5	34612-29339	
5274.907	18952.506	91	6	5	17102-22377	
5276.222	18947.782	65	5	5	29604-34881	
5277.851	18941.934	111	5	6	20916-15638	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5278.979	18937.886	447	3	4	15906-21185	
5279.432	18936.261	103	8	8	21174-26454	
5279.489	18936.057	145	5	5	15799-21078	
5279.489	18936.057	145	3	4	24630-29909	
5280.573	18932.170	131	8	7	20178-25458	
5280.615	18932.019	98	4	5	12627-17908	
5280.615	18932.019	98	9/2	9/2	26470-31751	
5280.739	18931.575	142	4	5	16699-21980	
5282.383	18925.683	425	4	5	16047-21329	
5282.897	18923.841	1479	6	6	14543-19826	
5283.015	18923.419	40	4	4	17799-23082	
5284.302	18918.810	29	4	3	15778-21062	
5284.401	18918.455	49	3	2	14774-20058	
5284.509	18918.069	961	8	7	10347-15631	
5284.555	18917.904	280	5	6	19148-24433	
5285.378	18914.958	113	15/2	13/2	16690-21975	
5285.589	18914.203	211	7	6	17928-12643	
5285.821	18913.373	1115	6	7	19274-24560	
5287.034	18909.034	62	7	7	18256-23543	
5289.507	18900.193	48	5	6	30870-25580	
5290.174	18897.810	97	7	6	16766-22056	
5290.860	18895.360	55	3	3	10540-15831	
5291.123	18894.421	131	5	4	20916-26207	
5292.881	18888.145	75	5	5	31583-26290	
5292.881	18888.145	75	1	2	13826-19119	
5293.035	18887.596	146	5	6	17461-22754	
5296.596	18874.897	8179	5	5	11633-16929	+ 606
5296.661	18874.665	64	2	3	26704-21407	
5299.896	18863.145	71	7/2	9/2	12092-17392	
5300.119	18862.351	238	3	4	16983-22283	
5301.077	18858.942	81	3	4	23908-18607	
5301.999	18855.663	2166	3	4	10819-16121	+ 362
5302.222	18854.870	141	3	2	17909-23212	
5304.412	18847.085	131	5	4	17882-23186	
5304.412	18847.085	131	7	8	32019-26715	
5305.390	18843.611	236	8	8	18621-23926	
5306.263	18840.511	126	4	4	24433-19127	
5307.513	18836.073	69	3	4	24499-19192	
5307.513	18836.073	69	6	5	33752-28444	
5307.513	18836.073	69	5	5	24445-29753	
5308.012	18834.303	1004	8	7	15458-20766	
5309.191	18830.120	74	3	3	19246-24555	
5309.559	18828.815	406	5	5	15542-20851	
5310.221	18826.468	43	3	4	20345-25655	
5311.564	18821.708	279	2	3	17098-22409	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5311.979	18820.237	58	11/2	11/2	15430-20742	
5312.899	18816.978	56	4	3	32532-27219	
5313.444	18815.048	71	5	5	28168-22854	
5314.796	18810.262	48	5/2	5/2	36346-31031	
5315.610	18807.391	113	7	6	18256-23572	
5316.672	18803.625	117	3	3	13433-18749	
5317.259	18801.549	91	7	6	7326-12643	
5318.007	18798.904	433	4	3	24433-19115	
5318.906	18795.727	413	6	5	17102-22421	
5319.240	18794.547	133	6	5	18005-23325	
5319.376	18794.066	52	8	7	20178-14858	
5319.448	18793.812	54	9/2	7/2	30533-25213	
5321.597	18786.222	217	4	5	17533-22854	
5322.323	18783.660	115	11/2	11/2	37543-32221	
5322.890	18781.659	272	3	4	17261-22584	
5323.305	18780.195	200	5	4	19148-13825	
5324.881	18774.636	55	4	5	19210-24535	
5325.580	18772.172	62	5	5	17461-22786	
5336.426	18734.019	118	9/2	9/2	12055-17392	
5337.537	18730.119	57	4	3	22492-17154	
5338.663	18726.169	57	4	4	16699-22038	
5338.663	18726.169	57	5	6	28578-33916	
5341.034	18717.856	63	5	5	14970-20311	
5341.740	18715.382	7808	6	7	14543-19885	+ 109
5343.237	18710.138	332	6	7	10288-15631	
5343.364	18709.694	210	6	6	12910-18253	
5344.673	18705.111	57	3	2	19246-24591	
5344.971	18704.068	73	3	4	23753-29098	
5344.971	18704.068	73	5	5	24445-29790	
5346.863	18697.450	224	6	6	18825-24172	
5347.251	18696.093	343	9/2	11/2	7166-12513	
5348.050	18693.300	1534	11/2	11/2	13695- 8347	
5348.497	18691.738	55	8	8	31802-26454	
5349.750	18687.360	2807	6	6	10288-15638	+ 145
5350.029	18686.385	131	7	6	19998-25348	
5351.919	18679.786	327	1	2	17222-22574	
5353.860	18673.014	173	5	6	19553-24906	
5355.847	18666.087	171	5	5	16602-21958	
5356.061	18665.341	158	4	5	20195-14839	
5356.061	18665.341	158	7	8	25134-30490	
5356.107	18665.180	60	7	6	27576-32932	
5356.107	18665.180	60	15/2	13/2	17259-22615	
5357.497	18660.338	234	5	6	18214-23572	
5357.497	18660.338	234	7/2	5/2	37504-32146	
5357.757	18659.432	37	6	6	35223-29865	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5358.381	18657.259	122	7	8	15353-20712	
5358.754	18655.961	78	6	6	15906-21265	
5358.823	18655.720	71	5	6	18964-24322	
5358.923	18655.720	71	5	5	24070-29429	
5359.085	18654.808	152	5	4	32199-26840	
5360.211	18650.890	74	6	5	23084-28444	
5360.211	18650.890	74	8	7	20738-26098	
5360.791	18648.872	61	4	3	17048-22409	
5360.791	18648.872	61	5	5	32994-27633	
5361.486	18646.454	1178	8	8	17428-22789	
5362.571	18642.682	79	6	6	18005-12643	
5364.949	18634.418	441	6	5	6249-11613	+ 736
5365.280	18633.269	1267	3	3	16575-21940	
5365.475	18632.591	528	3	3	27195-21830	
5365.475	18632.591	528	4	5	18567-23932	
5367.638	18625.083	79	5	5	18065-23432	
5368.052	18623.647	537	2	1	13149-18517	
5368.401	18622.436	61	5	6	29122-22754	
5369.601	18618.274	223	3	4	24562-19192	
5371.064	18613.203	7764	4	5	11558-16929	+ 301
5371.311	18612.347	90	8	7	23195-28566	
5373.684	18604.128	157	5	4	16602-21976	
5375.884	18596.514	276	4	3	10208-15584	
5375.908	18596.431	122	6	5	26911-21536	
5376.519	18594.318	457	11/2	11/2	13450-18827	
5377.504	18590.912	504	13/2	13/2	14599-19977	
5378.024	18589.114	65	3	3	23908-18530	
5381.113	18579.426	59	4	3	31899-26518	
5381.113	18578.426	59	2	3	13149-18530	
5383.369	18570.658	412	5	6	10254-15638	
5383.706	18569.495	265	8	7	14501-19885	
5383.706	18569.495	265	11/2	11/2	13270-18654	
5383.864	18568.950	103	5	4	30961-25577	
5384.079	18568.209	91	6	7	33907-28523	
5385.580	18563.034	73	6	5	34372-28987	
5385.711	18562.582	126	3	2	17909-23295	
5386.480	18559.932	227	3	3	14281-19668	
5387.121	18557.724	393	4	4	16588-21976	
5387.519	18556.353	91	5	4	19553-24940	
5387.623	18555.995	131	4	4	17799-23186	
5387.623	18555.995	131	9/2	9/2	23924-18536	
5390.218	18547.061	113	6	6	16376-21766	
5390.805	18545.042	502	5	6	16602-21993	
5393.430	18536.016	6692	7	6	11677-17070	- 73
5394.483	18532.397	540	6	5	35193-29799	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5394.483	18532.397	540	5/2	7/2	10285-15679	
5395.134	18530.161	115	5	5	20139-25534	
5397.782	18521.071	419	6	6	13361-18759	
5399.379	18515.593	93	3	4	15169-20569	
5399.379	18515.593	93	11/2	11/2	26964-32364	
5400.158	18512.922	269	3	4	16983-22383	
5400.721	18510.992	303	1	2	13719-19119	
5401.352	18508.829	192	4	4	16047-21448	
5401.426	18508.576	126	5	6	17461-22862	
5401.603	18507.969	85	5	4	34397-28996	
5403.176	18502.581	174	3	2	23663-18260	
5403.336	18502.033	209	4	4	32655-27252	
5403.336	18502.033	209	9/2	11/2	8379-13783	
5407.757	18486.907	166	4	4	15778-21185	
5412.267	18471.502	1054	7	6	13346-18759	
5412.706	18470.004	340	7	7	15253-20766	
5414.704	18463.189	202	4	4	12884-18299	
5414.820	18462.793	213	4	4	18319-23734	
5415.661	18459.926	619	9	8	18511-23926	
5417.054	18455.179	149	4	4	17217-22634	
5417.461	18453.793	956	8	7	19142-24560	
5417.461	18453.793	956	11/2	9/2	26964-32382	
5423.653	18432.725	153	6	5	15906-21329	
5427.477	18419.738	193	2	1	16746-22174	
5427.477	18419.738	193	11/2	13/2	39076-33648	
5427.839	18418.509	127	7	6	14790-20218	
5430.172	18410.596	304	5	6	16154-21584	
5432.063	18404.187	249	6	5	10288-15720	
5433.173	18400.427	250	2	2	17507-22940	
5433.255	18400.149	63	3	2	20345-14911	
5436.725	18388.405	887	6	7	13402-18839	
5437.306	18386.440	6314	5	6	11633-17070	
5437.645	18385.294	130	3	4	24630-19192	
5441.385	18372.657	302	7/2	9/2	11363-16804	
5443.075	18366.953	899	6	7	11457-16900	
5443.791	18364.537	144	4	4	32094-26650	
5443.791	18364.537	144	3	2	33564-28120	
5445.254	18359.603	170	3	3	15560-21005	
5446.378	18355.814	282	11/2	11/2	12638-18084	
5447.113	18353.320	745	11/2	9/2	13089-18535	
5448.384	18349.056	155	4	5	25556-20148	
5448.384	18349.056	155	4	3	24196-29644	
5448.508	18348.638	486	8	9	20178-25626	
5449.127	18346.554	317	4	4	16588-22038	
5449.127	18346.554	317	5	5	29531-24082	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5453.216	18332.797	142	4	3	14411-19864	
5453.216	18332.797	142	5	4	24697-30150	
5460.332	18308.905	209	6	6	18111-23572	
5460.781	18307.400	158	6	6	15804-21265	
5466.516	18288.193	90	6	6	35223-29756	
5467.479	18284.972	296	2	3	16942-22409	
5469.144	18279.406	1663	5	6	13964-24433	
5469.144	18279.406	1663	5	6	29531-35000	
5469.462	18278.343	1626	7	6	32019-26550	
5469.462	18278.343	1626	7	7	12826-18295	
5470.565	18274.657	384	8	7	20738-26208	
5471.643	18271.057	230	2	2	26704-21232	
5473.160	18265.993	458	6	7	14174-19647	
5475.340	18258.720	502	7	7	18068-23543	
5475.340	18258.720	502	6	7	18591-24066	
5477.437	18251.730	339	5	6	28060-22582	
5477.437	18251.730	339	8	8	21174-26652	
5482.811	18233.840	464	13/2	11/2	13344-18827	
5486.058	18223.049	140	5	6	16825-22311	
5488.880	18213.680	2707	4	3	16451-21940	
5488.880	18213.680	2707	6	5	17102-11613	
5492.353	18202.162	227	7	7	13346-18839	
5495.203	18192.722	440	5	6	20139-14643	
5496.013	18190.041	464	6	5	12910-18406	
5497.537	18184.998	648	4	4	16047-21545	
5505.124	18159.936	267	5	4	24697-19192	
5506.429	18155.632	748	4	5	16451-21958	
5512.194	18136.644	787	4	5	10208-15720	
5518.187	18116.947	587	6	6	10987-16505	
5520.146	18110.517	1195	6	7	15906-21429	
5520.146	18110.517	1195	5	4	18214-23734	
5520.146	18110.517	1195	4	5	18412-23932	
5520.146	18110.517	1195	11/2	11/2	36236-30716	
5523.493	18099.576	359	8	7	16244-21767	
5523.537	18099.399	434	3	3	22678-17154	
5526.296	18090.363	3398	4	5	11403-16929	
5527.754	18085.591	327	4	5	19007-24535	
5538.435	18050.713	1640	11/2	9/2	13961- 8423	
5542.440	18037.669	1507	3	4	17091-22634	
5545.724	18026.988	837	4	5	12362-17908	
5549.013	18016.287	385	4	4	17533-23082	
5551.950	18006.772	1354	5	5	14562-20114	
5551.950	18006.772	1354	4	5	15778-21329	
5552.232	18005.858	776	7	6	15712-21265	
5553.795	18000.790	570	5	4	17589-12035	

URANIUM LINES

WAVE NUMBER	WAVE LENGTH	INT	J-O	J-E	LEVELS ODD-EVEN	IS
5557.337	17989.318	1462	5	6	10081-15638	
5564.896	17964.982	792	4	4	10557-16121	
5568.305	17953.884	354	9/2	9/2	34845-29277	
5569.190	17951.031	1588	7	6	10069-15638	
5581.145	17912.579	944	6	6	18591-24172	
5585.008	17900.189	2002	6	6	23084-28669	
5589.348	17886.290	1120	4	5	16047-21636	
5597.895	17858.981	1034	4	5	4453-10051	
5598.707	17856.391	937	5	4	14970-20569	