

Neon (Ne)  
 Atomic number= 10  
 Atomic weight= 20.1797

Isotope	Mass	Abundance	Spin	Mag moment
<sup>20</sup> Ne	19.992435	90.48%	0	
<sup>21</sup> Ne	20.993843	0.27%	3/2	- 0.66179
<sup>22</sup> Ne	21.991383	9.25%	0	

Ne I Ground state:  $1s^2 2s^2 2p^6 \ ^1S_0$   
 Ionization energy:  $173\,929.75\text{ cm}^{-1}$  (21.564 54 eV)

Ne II Ground state:  $1s^2 2s^2 2p^5 \ ^2P_{3/2}^o$   
 Ionization energy:  $330\,388.6\text{ cm}^{-1}$  (40.962 96 eV)

Strong Lines of Neon (Ne)

Intensity	Wavelength (Å)	Spectrum	Ref
	Vacuum		
90 P	352.9549	Ne II	P71
60 P	354.9620	Ne II	P71
90	361.4321	Ne II	P71
60	362.4544	Ne II	P71
150	405.8538	Ne II	P71
120	407.1377	Ne II	P71
200 P	445.0393	Ne II	P71
300 P	446.2552	Ne II	P71
250 P	446.5902	Ne II	P71
200	447.8146	Ne II	P71
150	454.6540	Ne II	P71
200	455.2730	Ne II	P71
10	456.2728	Ne II	P71
120	456.3485	Ne II	P71
90	456.8962	Ne II	P71
1000 P	460.7284	Ne II	P71
500 P	462.3908	Ne II	P71
30	587.2127	Ne I	SS04
30	587.1792	Ne I	SS04
30	589.9114	Ne I	SS04
70	591.8306	Ne I	SS04
100	595.9200	Ne I	SS04
70	598.7056	Ne I	SS04
30	598.8897	Ne I	SS04
70	600.0365	Ne I	SS04
130	602.7263	Ne I	SS04
170 P	615.6283	Ne I	SS04
170 P	618.6716	Ne I	SS04
130 P	619.1023	Ne I	SS04
200 P	626.8232	Ne I	SS04
200 P	629.7388	Ne I	SS04
1000 P	735.8962	Ne I	SS04
400 P	743.7195	Ne I	SS04
60	993.8825	Ne II	P71
70	1068.6488	Ne II	P71
90	1131.7224	Ne II	P71
100	1131.8490	Ne II	P71
90	1229.8367	Ne II	P71
90	1418.3779	Ne II	P71

## Strong Lines of Neon (Ne)—Continued

Intensity	Wavelength (Å)	Spectrum	Ref
90	1428.5822	Ne II	P71
90	1436.0813	Ne II	P71
120	1681.6840	Ne II	P71
200	1688.3553	Ne II	P71
100	1888.1064	Ne II	P71
100	1889.7120	Ne II	P71
200	1907.4940	Ne II	P71
500 P	1916.0818	Ne II	P71
300 P	1930.0345	Ne II	P71
200	1938.8269	Ne II	P71
100 c	1945.4521	Ne II	P71
	Air		
80	2007.009	Ne II	P71
80	2025.560	Ne II	P71
150	2085.466	Ne II	P71
200	2096.106	Ne II	P71
120	2096.248	Ne II	P71
80	2562.123	Ne II	P71
90 w	2567.121	Ne II	P71
80	2623.107	Ne II	P71
80	2629.885	Ne II	P71
90 w	2636.069	Ne II	P71
80	2638.289	Ne II	P71
80	2644.097	Ne II	P71
80	2762.921	Ne II	P71
90	2792.019	Ne II	P71
80	2794.221	Ne II	P71
100	2809.485	Ne II	P71
80	2906.592	Ne II	P71
80	2906.816	Ne II	P71
90	2910.061	Ne II	P71
90	2910.408	Ne II	P71
80	2911.138	Ne II	P71
80	2915.122	Ne II	P71
80	2925.618	Ne II	P71
80 w	2932.103	Ne II	P71
80	2940.653	Ne II	P71
90	2946.044	Ne II	P71
150	2955.725	Ne II	P71
150	2963.236	Ne II	P71
150	2967.184	Ne II	P71
100	2972.997	Ne II	P71
30	2974.7189	Ne I	SS04
100	2979.461	Ne II	P71
30	2982.6696	Ne I	SS04
150	3001.668	Ne II	P71
120	3017.311	Ne II	P71
300 P	3027.016	Ne II	P71
300 P	3028.864	Ne II	P71
100	3030.787	Ne II	P71
120	3034.461	Ne II	P71
100	3035.923	Ne II	P71
100	3037.720	Ne II	P71
100	3039.586	Ne II	P71
100	3044.088	Ne II	P71
100	3045.556	Ne II	P71
120	3047.556	Ne II	P71
100	3054.345	Ne II	P71
100	3054.677	Ne II	P71

## Strong Lines of Neon (Ne)—Continued

Intensity	Wavelength (Å)	Spectrum	Ref
30	3057.3907	Ne I	SS04
100	3059.106	Ne II	P71
100	3062.491	Ne II	P71
100	3063.301	Ne II	P71
100	3070.887	Ne II	P71
100	3071.529	Ne II	P71
100	3075.731	Ne II	P71
120	3088.166	Ne II	P71
100	3092.092	Ne II	P71
120	3092.901	Ne II	P71
100	3094.006	Ne II	P71
100	3095.103	Ne II	P71
100	3097.131	Ne II	P71
100	3117.980	Ne II	P71
120	3118.160	Ne II	P71
300	3141.332	Ne II	P71
100	3143.721	Ne II	P71
100	3148.681	Ne II	P71
100	3164.429	Ne II	P71
100	3165.648	Ne II	P71
100	3188.743	Ne II	P71
120	3194.579	Ne II	P71
500 P	3198.586	Ne II	P71
60	3208.965	Ne II	P71
120	3209.356	Ne II	P71
120	3213.735	Ne II	P71
150	3214.329	Ne II	P71
150	3218.193	Ne II	P71
120	3224.818	Ne II	P71
120	3229.573	Ne II	P71
200	3230.070	Ne II	P71
120	3230.419	Ne II	P71
120	3232.022	Ne II	P71
150	3232.372	Ne II	P71
100	3243.396	Ne II	P71
100	3244.095	Ne II	P71
100	3248.345	Ne II	P71
100	3250.355	Ne II	P71
150	3297.726	Ne II	P71
150	3309.740	Ne II	P71
300	3319.722	Ne II	P71
1000 P	3323.745	Ne II	P71
150	3327.153	Ne II	P71
100	3329.158	Ne II	P71
200	3334.836	Ne II	P71
150	3344.395	Ne II	P71
300	3345.453	Ne II	P71
150	3345.829	Ne II	P71
200	3355.016	Ne II	P71
120	3357.820	Ne II	P71
200	3360.597	Ne II	P71
120	3362.161	Ne II	P71
100	3362.707	Ne II	P71
120	3367.218	Ne II	P71
50	3369.8076	Ne I	SS04
70	3369.9072	Ne I	SS04
100	3371.799	Ne II	P71
500 P	3378.216	Ne II	P71
150	3388.417	Ne II	P71

## Strong Lines of Neon (Ne)—Continued

Intensity	Wavelength (Å)	Spectrum	Ref
120	3388.945	Ne II	P71
300	3392.798	Ne II	P71
100	3404.822	Ne II	P71
120	3406.947	Ne II	P71
100	3413.148	Ne II	P71
120	3416.914	Ne II	P71
120	3417.688	Ne II	P71
50	3417.9031	Ne I	SS04
5	3418.0055	Ne I	SS04
120	3428.687	Ne II	P71
20	3447.7024	Ne I	SS04
10	3454.1944	Ne I	SS04
100	3456.610	Ne II	P71
100	3459.321	Ne II	P71
10	3460.5237	Ne I	SS04
10	3464.3382	Ne I	SS04
20	3466.5781	Ne I	SS04
50	3472.5706	Ne I	SS04
150	3479.519	Ne II	P71
200	3480.718	Ne II	P71
200	3481.933	Ne II	P71
10	3498.0636	Ne I	SS04
20	3501.2159	Ne I	SS04
20	3515.1902	Ne I	SS04
100 P	3520.4711	Ne I	SS04
120	3542.847	Ne II	P71
120	3557.805	Ne II	P71
100	3561.198	Ne II	P71
250	3568.502	Ne II	P71
100	3574.181	Ne II	P71
200	3574.612	Ne II	P71
50	3593.5257	Ne I	SS04
30	3593.6389	Ne I	SS04
10	3600.1685	Ne I	SS04
10	3633.6640	Ne I	SS04
150	3643.927	Ne II	P71
200	3664.073	Ne II	P71
10	3682.2421	Ne I	SS04
10	3685.7352	Ne I	SS04
200	3694.213	Ne II	P71
4	3701.2244	Ne I	SS04
150	3709.622	Ne II	P71
250	3713.079	Ne II	P71
250	3727.107	Ne II	P71
800 P	3766.259	Ne II	P71
1000 P	3777.133	Ne II	P71
100	3818.427	Ne II	P71
120	3829.749	Ne II	P71
150	4219.745	Ne II	P71
100	4233.850	Ne II	P71
120	4250.649	Ne II	P71
120	4369.862	Ne II	P71
70	4379.400	Ne II	P71
150	4379.550	Ne II	P71
100	4385.059	Ne II	P71
200	4391.991	Ne II	P71
150	4397.990	Ne II	P71
150	4409.299	Ne II	P71
100	4413.215	Ne II	P71

## Strong Lines of Neon (Ne)—Continued

Intensity	Wavelength (Å)	Spectrum	Ref
100	4421.389	Ne II	P71
100	4428.516	Ne II	P71
100	4428.634	Ne II	P71
150	4430.904	Ne II	P71
150	4430.942	Ne II	P71
120	4457.049	Ne II	P71
100	4522.720	Ne II	P71
100	4537.7545	Ne I	SS04
100	4569.057	Ne II	P71
150	4704.3949	Ne I	SS04
120	4708.8594	Ne I	SS04
100	4710.0650	Ne I	SS04
150	4712.0633	Ne I	SS04
150	4715.344	Ne I	SS04
50	4752.7320	Ne I	SS04
100	4788.9258	Ne I	SS04
50	4790.2195	Ne I	SS04
100	4827.338	Ne I	SS04
100	4884.9170	Ne I	SS04
50	5005.1587	Ne I	SS04
50	5037.7512	Ne I	SS04
50	5144.9384	Ne I	SS04
60	5330.7775	Ne I	SS04
100	5341.0938	Ne I	SS04
60	5343.2834	Ne I	SS04
200 P	5400.5618	Ne I	SS04
50	5562.7662	Ne I	SS04
50	5656.6588	Ne I	SS04
50	5719.2248	Ne I	SS04
50	5748.2985	Ne I	SS04
70	5764.4188	Ne I	SS04
50	5804.4496	Ne I	SS04
50	5820.1558	Ne I	SS04
200 P	5852.4879	Ne I	SS04
50	5872.8275	Ne I	SS04
100	5881.8952	Ne I	SS04
5	5902.4623	Ne I	SS04
5	5906.4294	Ne I	SS04
50	5944.8342	Ne I	SS04
50	5965.4710	Ne I	SS04
50	5974.6273	Ne I	SS04
60	5975.5340	Ne I	SS04
15	5987.9074	Ne I	SS04
100 P	6029.9969	Ne I	SS04
100 P	6074.3377	Ne I	SS04
30	6096.1631	Ne I	SS04
10	6128.4499	Ne I	SS04
100 P	6143.0626	Ne I	SS04
100 P	6163.5939	Ne I	SS04
15	6182.1460	Ne I	SS04
100 P	6217.2812	Ne I	SS04
100 P	6266.4950	Ne I	SS04
10	6304.7889	Ne I	SS04
30	6328.1646	Ne I	SS04
100	6334.4278	Ne I	SS04
100 P	6382.9917	Ne I	SS04
200 P	6402.248	Ne I	SS04
150 P	6506.5281	Ne I	SS04
10	6532.8822	Ne I	SS04

## Strong Lines of Neon (Ne)—Continued

Intensity	Wavelength (Å)	Spectrum	Ref
100 P	6598.9529	Ne I	SS04
15	6652.0927	Ne I	SS04
50	6678.2762	Ne I	SS04
7	6717.0430	Ne I	SS04
1000 P	6929.4673	Ne I	SS04
300	7024.0504	Ne I	SS04
800 P	7032.4131	Ne I	SS04
20	7051.2923	Ne I	SS04
100	7059.1074	Ne I	SS04
800 P	7173.9381	Ne I	SS04
150	7213.200	Ne II	P71
150	7235.188	Ne II	P71
800 P	7245.1666	Ne I	SS04
150	7343.945	Ne II	P71
30	7472.4386	Ne I	SS04
300	7488.8712	Ne I	SS04
100	7492.102	Ne II	P71
150	7522.818	Ne II	P71
300	7535.7741	Ne I	SS04
130	7544.0443	Ne I	SS04
1	7724.6233	Ne I	SS04
120	7740.738	Ne II	P71
2	7839.0529	Ne I	SS04
120	7926.201	Ne II	P71
3	7927.1177	Ne I	SS04
13	7936.9961	Ne I	SS04
80	7943.1814	Ne I	SS04
60	8082.4580	Ne I	SS04
100	8084.345	Ne II	P71
40	8118.5492	Ne I	SS04
12	8128.9108	Ne I	SS04
170	8136.4054	Ne I	SS04
30	8259.3790	Ne I	SS04
100	8264.807	Ne II	P71
70	8266.0772	Ne I	SS04
10	8267.1162	Ne I	SS04
300	8300.3258	Ne I	SS04
100	8314.995	Ne II	P71
50	8365.7466	Ne I	SS04
100	8372.106	Ne II	P71
800 P	8377.6080	Ne I	SS04
30	8417.1606	Ne I	SS04
250	8418.4274	Ne I	SS04
40	8463.3575	Ne I	SS04
13	8484.4435	Ne I	SS04
700	8495.3598	Ne I	SS04
15	8544.6958	Ne I	SS04
30	8571.3524	Ne I	SS04
400	8591.2584	Ne I	SS04
350	8634.6470	Ne I	SS04
60	8647.0411	Ne I	SS04
600 P	8654.3831	Ne I	SS04
80	8655.5220	Ne I	SS04
100	8668.256	Ne II	P71
130	8679.4925	Ne I	SS04
150	8681.9211	Ne I	SS04
30	8704.1116	Ne I	SS04
100	8771.6563	Ne I	SS04
600 P	8780.6226	Ne I	SS04

Strong Lines of Neon (Ne)—Continued

Intensity	Wavelength (Å)	Spectrum	Ref
400 P	8783.7533	Ne I	SS04
6	8830.9072	Ne I	SS04
300	8853.8668	Ne I	SS04
20	8865.3063	Ne I	SS04
150	8865.7552	Ne I	SS04
60	8919.5006	Ne I	SS04
20	8988.5564	Ne I	SS04
100	9079.462	Ne II	P71
120	9148.6716	Ne I	SS04
90	9201.7591	Ne I	SS04
60	9220.0601	Ne I	SS04
20	9221.5801	Ne I	SS04
20	9226.6903	Ne I	SS04
9	9275.5196	Ne I	SS04
200	9287.563	Ne II	P71
80	9300.8527	Ne I	SS04
8	9310.5839	Ne I	SS04
30	9313.9726	Ne I	SS04
70	9326.5068	Ne I	SS04
15	9373.3078	Ne I	SS04
50	9425.3788	Ne I	SS04
30	9459.2095	Ne I	SS04
50	9486.6818	Ne I	SS04
60	9534.1629	Ne I	SS04
30	9547.4049	Ne I	SS04
120	9577.013	Ne II	P71
180	9665.4197	Ne I	SS04
100	9808.860	Ne II	P71
4	10295.4174	Ne I	SS04
80	10562.4075	Ne I	SS04
60	10798.0429	Ne I	SS04
90	10844.4772	Ne I	SS04
300 P	11143.0200	Ne I	SS04
500 P	11177.5240	Ne I	SS04
150	11390.4339	Ne I	SS04
90	11409.1343	Ne I	SS04
300 P	11522.7459	Ne I	SS04
150	11525.0194	Ne I	SS04
90	11536.3445	Ne I	SS04
30	11601.5366	Ne I	SS04
130	11614.0807	Ne I	SS04
30	11688.0017	Ne I	SS04
150	11766.7924	Ne I	SS04
130	11789.0435	Ne I	SS04
30	11789.8891	Ne I	SS04
70	11984.912	Ne I	SS04
200	12066.334	Ne I	SS04
40	12459.389	Ne I	SS04
60	12689.201	Ne I	SS04
80	12912.014	Ne I	SS04
40	13219.241	Ne I	SS04
50	15230.714	Ne I	SS04
20	17161.929	Ne I	SS04
20	18035.812	Ne I	SS04
40	18083.181	Ne I	SS04
9	18083.263	Ne I	SS04
15	18221.087	Ne I	SS04
13	18227.016	Ne I	SS04
140	18276.642	Ne I	SS04

## Strong Lines of Neon (Ne)—Continued

Intensity	Wavelength (Å)	Spectrum	Ref
100	18282.614	Ne I	SS04
70	18303.967	Ne I	SS04
20	18359.094	Ne I	SS04
60	18384.826	Ne I	SS04
90	18389.937	Ne I	SS04
40	18402.836	Ne I	SS04
60	18422.402	Ne I	SS04
13	18458.640	Ne I	SS04
40	18475.800	Ne I	SS04
70	18591.541	Ne I	SS04
100	18597.698	Ne I	SS04
16	18618.908	Ne I	SS04
20	18625.159	Ne I	SS04
30	21041.27	Ne I	SS04
30	21708.11	Ne I	SS04
13	22247.36	Ne I	SS04
13	22428.14	Ne I	SS04
80	22530.38	Ne I	SS04
13	22661.79	Ne I	SS04
25	23100.48	Ne I	SS04
40	23260.27	Ne I	SS04
50	23372.96	Ne I	SS04
30	23565.33	Ne I	SS04
170	23636.48	Ne I	SS04
12	23701.66	Ne I	SS04
60	23709.13	Ne I	SS04
110	23951.40	Ne I	SS04
50	23956.43	Ne I	SS04
60	23978.16	Ne I	SS04
11	24098.57	Ne I	SS04
20	24161.43	Ne I	SS04
30	24249.61	Ne I	SS04
70	24365.01	Ne I	SS04
40	24371.61	Ne I	SS04
20	24447.86	Ne I	SS04
30	24459.39	Ne I	SS04
17	24776.49	Ne I	SS04
30	24928.89	Ne I	SS04
13	25161.70	Ne I	SS04
50	25524.33	Ne I	SS04
6	28386.20	Ne I	SS04
6	30200.49	Ne I	SS04
8	33173.09	Ne I	SS04
17	33352.38	Ne I	SS04
5	33899.81	Ne I	SS04
4	33903.02	Ne I	SS04
12	33913.10	Ne I	SS04
4	34131.34	Ne I	SS04
6	34471.43	Ne I	SS04
8	35834.81	Ne I	SS04



## Persistent Lines of Neutral Neon (Ne I)

Inten	Wavelength (Å)	$A_{ki}(10^8 \text{ s}^{-1})$	Configuration	Term	$J$	Level ( $\text{cm}^{-1}$ )	WI Ref	A Ref
170	615.6283	0.380	$2p^6$ $2p^5(^2P_{1/2}^o)3d$	$^1S$ $^2[3/2]^o$	0 1	0.00 162435.6780	SS04	VVF96
170	618.6716	0.929	$2p^6$ $2p^5(^2P_{3/2}^o)3d$	$^1S$ $^2[3/2]^o$	0 1	0.00 161636.6175	SS04	VVF96
130	619.1023	0.330	$2p^6$ $2p^5(^2P_{3/2}^o)3d$	$^1S$ $^2[1/2]^o$	0 1	0.00 161524.1739	SS04	VVF96
200	626.8232	0.741	$2p^6$ $2p^5(^2P_{1/2}^o)4s$	$^1S$ $^2[1/2]^o$	0 1	0.00 159534.6196	SS04	VVF96
200	629.7388	0.480	$2p^6$ $2p^5(^2P_{3/2}^o)4s$	$^1S$ $^2[3/2]^o$	0 1	0.00 158795.9924	SS04	VVF96
1000	735.8962	3.16	$2p^6$ $2p^5(^2P_{1/2}^o)3s$	$^1S$ $^2[1/2]^o$	0 1	0.00 135888.7173	SS04	VVF96
400	743.7195	0.486	$2p^6$ $2p^5(^2P_{3/2}^o)3s$	$^1S$ $^2[3/2]^o$	0 1	0.00 134459.2871	SS04	VVF96
100	3520.4711	0.093	$2p^5(^2P_{1/2}^o)3s$ $2p^5(^2P_{1/2}^o)4p$	$^2[1/2]^o$ $^2[1/2]$	1 0	135888.7173 164285.8872	SS04	FW96
200	5400.5618	0.0090	$2p^5(^2P_{3/2}^o)3s$ $2p^5(^2P_{1/2}^o)3p$	$^2[3/2]^o$ $^2[1/2]$	1 0	134459.2871 152970.7328	SS04	FW96
200	5852.4879	0.682	$2p^5(^2P_{1/2}^o)3s$ $2p^5(^2P_{1/2}^o)3p$	$^2[1/2]^o$ $^2[1/2]$	1 0	135888.7173 152970.7328	SS04	FW96
100	6029.9969	0.0561	$2p^5(^2P_{3/2}^o)3s$ $2p^5(^2P_{1/2}^o)3p$	$^2[3/2]^o$ $^2[1/2]$	1 1	134459.2871 151038.4524	SS04	FW96
100	6074.3377	0.603	$2p^5(^2P_{3/2}^o)3s$ $2p^5(^2P_{3/2}^o)3p$	$^2[3/2]^o$ $^2[1/2]$	1 0	134459.2871 150917.4307	SS04	FW96
100	6143.0626	0.282	$2p^5(^2P_{3/2}^o)3s$ $2p^5(^2P_{3/2}^o)3p$	$^2[3/2]^o$ $^2[3/2]$	2 2	134041.8400 150315.8612	SS04	FW96
100	6163.5939	0.146	$2p^5(^2P_{1/2}^o)3s$ $2p^5(^2P_{1/2}^o)3p$	$^2[1/2]^o$ $^2[1/2]$	0 1	134818.6405 151038.4524	SS04	FW96
100	6217.2812	0.0637	$2p^5(^2P_{3/2}^o)3s$ $2p^5(^2P_{3/2}^o)3p$	$^2[3/2]^o$ $^2[3/2]$	2 1	134041.8400 150121.5922	SS04	FW96
100	6266.4950	0.249	$2p^5(^2P_{1/2}^o)3s$ $2p^5(^2P_{1/2}^o)3p$	$^2[1/2]^o$ $^2[3/2]$	0 1	134818.6405 150772.1118	SS04	FW96
100	6382.9917	0.321	$2p^5(^2P_{3/2}^o)3s$ $2p^5(^2P_{3/2}^o)3p$	$^2[3/2]^o$ $^2[3/2]$	1 1	134459.2871 150121.5922	SS04	FW96
200	6402.248	0.514	$2p^5(^2P_{3/2}^o)3s$ $2p^5(^2P_{3/2}^o)3p$	$^2[3/2]^o$ $^2[5/2]$	2 3	134041.8400 149657.0393	SS04	FW96
150	6506.5281	0.300	$2p^5(^2P_{3/2}^o)3s$ $2p^5(^2P_{3/2}^o)3p$	$^2[3/2]^o$ $^2[5/2]$	1 2	134459.2871 149824.2215	SS04	FW96
100	6598.9529	0.232	$2p^5(^2P_{1/2}^o)3s$ $2p^5(^2P_{1/2}^o)3p$	$^2[1/2]^o$ $^2[1/2]$	1 1	135888.7173 151038.4524	SS04	FW96
1000	6929.4673	0.174	$2p^5(^2P_{1/2}^o)3s$ $2p^5(^2P_{3/2}^o)3p$	$^2[1/2]^o$ $^2[3/2]$	1 2	135888.7173 150315.8612	SS04	FW96

## Persistent Lines of Neutral Neon (Ne I)—Continued

Inten	Wavelength (Å)	$A_{ki}(10^8 \text{ s}^{-1})$	Configuration	Term	$J$	Level ( $\text{cm}^{-1}$ )	WI Ref	A Ref
800	7032.4131	0.253	$2p^5(^2P_{3/2}^0)3s$	$^2[3/2]^0$	2	134041.8400	SS04	FW96
			$2p^5(^2P_{3/2}^0)3p$	$^2[1/2]$	1	148257.7898		
800	7173.9381	0.0287	$2p^5(^2P_{1/2}^0)3s$	$^2[1/2]^0$	1	135888.7173	SS04	FW96
			$2p^5(^2P_{3/2}^0)3p$	$^2[5/2]$	2	149824.2215		
800	7245.1666	0.0935	$2p^5(^2P_{3/2}^0)3s$	$^2[3/2]^0$	1	134459.2871	SS04	FW96
			$2p^5(^2P_{3/2}^0)3p$	$^2[1/2]$	1	148257.7898		
800	8377.6080	0.51	$2p^5(^2P_{3/2}^0)3p$	$^2[5/2]$	3	149657.0393	SS04	WSG66
			$2p^5(^2P_{3/2}^0)3d$	$^2[7/2]^0$	4	161590.3412		
600	8654.3831	0.445	$2p^5(^2P_{1/2}^0)3p$	$^2[3/2]$	2	150858.5079	SS04	WSG66
			$2p^5(^2P_{1/2}^0)3d$	$^2[5/2]^0$	3	162410.1736		
600	8780.6226		$2p^5(^2P_{3/2}^0)3p$	$^2[3/2]$	2	150315.8612	SS04	
			$2p^5(^2P_{3/2}^0)3d$	$^2[5/2]^0$	3	161701.4486		
400	8783.7533	0.313	$2p^5(^2P_{1/2}^0)3p$	$^2[1/2]$	1	151038.4524	SS04	FW96
			$2p^5(^2P_{1/2}^0)3d$	$^2[3/2]^0$	2	162419.9818		
300	11143.0200		$2p^5(^2P_{3/2}^0)3p$	$^2[5/2]$	2	149824.2215	SS04	
			$2p^5(^2P_{3/2}^0)4s$	$^2[3/2]^0$	1	158795.9924		
500	11177.5240		$2p^5(^2P_{3/2}^0)3p$	$^2[5/2]$	3	149657.0393	SS04	
			$2p^5(^2P_{3/2}^0)4s$	$^2[3/2]^0$	2	158601.1152		
300	11522.7459		$2p^5(^2P_{1/2}^0)3p$	$^2[3/2]$	2	150858.5079	SS04	
			$2p^5(^2P_{1/2}^0)4s$	$^2[1/2]^0$	1	159534.6196		

## Energy Levels of Neutral Neon (Ne I)

Configuration	Term	$J$	Level ( $\text{cm}^{-1}$ )	Ref
$2p^6$	$^1S$	0	0.00	SS04
$2p^5(^2P_{3/2}^0)3s$	$^2[3/2]^0$	2	134041.8400	SS04
		1	134459.2871	SS04
$2p^5(^2P_{1/2}^0)3s$	$^2[1/2]^0$	0	134818.6405	SS04
		1	135888.7173	SS04
$2p^5(^2P_{3/2}^0)3p$	$^2[1/2]$	1	148257.7898	SS04
		0	150917.4307	SS04
$2p^5(^2P_{3/2}^0)3p$	$^2[5/2]$	3	149657.0393	SS04
		2	149824.2215	SS04
$2p^5(^2P_{3/2}^0)3p$	$^2[3/2]$	1	150121.5922	SS04
		2	150315.8612	SS04
$2p^5(^2P_{1/2}^0)3p$	$^2[3/2]$	1	150772.1118	SS04
		2	150858.5079	SS04
$2p^5(^2P_{1/2}^0)3p$	$^2[1/2]$	1	151038.4524	SS04
		0	152970.7328	SS04
$2p^5(^2P_{3/2}^0)4s$	$^2[3/2]^0$	2	158601.1152	SS04
		1	158795.9924	SS04
$2p^5(^2P_{1/2}^0)4s$	$^2[1/2]^0$	0	159379.9935	SS04
		1	159534.6196	SS04

Energy Levels of Neutral Neon (Ne I)—Continued

Configuration	Term	<i>J</i>	Level (cm <sup>-1</sup> )	Ref
2 <i>p</i> <sup>5</sup> ( <sup>2</sup> P <sub>3/2</sub> <sup>o</sup> )3 <i>d</i>	<sup>2</sup> [1/2] <sup>o</sup>	0	161509.6305	SS04
		1	161524.1739	SS04
2 <i>p</i> <sup>5</sup> ( <sup>2</sup> P <sub>3/2</sub> <sup>o</sup> )3 <i>d</i>	<sup>2</sup> [7/2] <sup>o</sup>	4	161590.3412	SS04
		3	161592.1200	SS04
2 <i>p</i> <sup>5</sup> ( <sup>2</sup> P <sub>3/2</sub> <sup>o</sup> )3 <i>d</i>	<sup>2</sup> [3/2] <sup>o</sup>	2	161607.2609	SS04
		1	161636.6175	SS04
2 <i>p</i> <sup>5</sup> ( <sup>2</sup> P <sub>3/2</sub> <sup>o</sup> )3 <i>d</i>	<sup>2</sup> [5/2] <sup>o</sup>	2	161699.6613	SS04
		3	161701.4486	SS04
2 <i>p</i> <sup>5</sup> ( <sup>2</sup> P <sub>1/2</sub> <sup>o</sup> )3 <i>d</i>	<sup>2</sup> [5/2] <sup>o</sup>	2	162408.6536	SS04
		3	162410.1736	SS04
2 <i>p</i> <sup>5</sup> ( <sup>2</sup> P <sub>1/2</sub> <sup>o</sup> )3 <i>d</i>	<sup>2</sup> [3/2] <sup>o</sup>	2	162419.9818	SS04
		1	162435.6780	SS04
2 <i>p</i> <sup>5</sup> ( <sup>2</sup> P <sub>1/2</sub> <sup>o</sup> )4 <i>p</i>	<sup>2</sup> [1/2]	0	164285.8872	SS04
2 <i>p</i> <sup>5</sup> ( <sup>2</sup> P <sub>3/2</sub> <sup>o</sup> )4 <i>d</i>	<sup>2</sup> [7/2] <sup>o</sup>	4	167000.0317	SS04
Ne II ( <sup>2</sup> P <sub>3/2</sub> <sup>o</sup> )		<i>Limit</i>	<b>173929.75</b>	KM72

Persistent Lines of Singly-ionized Neon (Ne II)

Inten	Wavelength (Å)	<i>A</i> <sub>ki</sub> (10 <sup>8</sup> s <sup>-1</sup> )	Configuration	Term	<i>J</i>	Level (cm <sup>-1</sup> )	W1 Ref	A Ref
90	352.9549	6.69	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>5</sup>	<sup>2</sup> P <sup>o</sup>	3/2	0.00	P71	VVF96
			2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)4 <i>s</i>	<sup>2</sup> P	3/2	283322.35		
60	354.9620	17.3	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>5</sup>	<sup>2</sup> P <sup>o</sup>	3/2	0.00	P71	VVF96
			2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)3 <i>d</i>	<sup>2</sup> P	3/2	281720.28		
200	445.0397	13.1	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>5</sup>	<sup>2</sup> P <sup>o</sup>	3/2	0.00	P71	VVF96
			2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)3 <i>s</i>	<sup>2</sup> P	1/2	224699.27		
300	446.2556	32.6	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>5</sup>	<sup>2</sup> P <sup>o</sup>	3/2	0.00	P71	VVF96
			2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)3 <i>s</i>	<sup>2</sup> P	3/2	224087.02		
250	446.5901	26.0	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>5</sup>	<sup>2</sup> P <sup>o</sup>	1/2	780.34	P71	VVF96
			2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)3 <i>s</i>	<sup>2</sup> P	1/2	224699.27		
1000	460.7284	53.9	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>5</sup>	<sup>2</sup> P <sup>o</sup>	3/2	0.00	P71	VVF96
			2 <i>s</i> 2 <i>p</i> <sup>6</sup>	<sup>2</sup> S	1/2	217047.61		
500	462.3908	26.6	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>5</sup>	<sup>2</sup> P <sup>o</sup>	1/2	780.34	P71	VVF96
			2 <i>s</i> 2 <i>p</i> <sup>6</sup>	<sup>2</sup> S	1/2	217047.61		
500	1916.083	0.69	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)3 <i>s</i>	<sup>2</sup> P	3/2	224087.02	P71	FW96
			2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>1</sup> D)3 <i>p</i>	<sup>2</sup> P <sup>o</sup>	3/2	276276.85		
300	1930.028	0.57	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)3 <i>s</i>	<sup>2</sup> P	1/2	224699.27	P71	FW96
			2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>1</sup> D)3 <i>p</i>	<sup>2</sup> P <sup>o</sup>	1/2	276511.82		
300	3027.016	1.4	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)3 <i>p</i>	<sup>4</sup> P <sup>o</sup>	5/2	246192.45	P71	FW96
			2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)3 <i>d</i>	<sup>4</sup> D	5/2	279218.66		
300	3028.864	0.47	2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)3 <i>s</i>	<sup>4</sup> P	1/2	219947.46	P71	FW96
			2 <i>s</i> <sup>2</sup> 2 <i>p</i> <sup>4</sup> ( <sup>3</sup> P)3 <i>p</i>	<sup>4</sup> S <sup>o</sup>	3/2	252953.54		

## Persistent Lines of Singly-ionized Neon (Ne II)—Continued

Inten	Wavelength (Å)	$A_{ki}(10^8 \text{ s}^{-1})$	Configuration	Term	$J$	Level ( $\text{cm}^{-1}$ )	W1 Ref	A Ref
500	3198.586	1.7	$2s^2 2p^4(^3P)3p$	$^4D^o$	5/2	249445.99	P71	FW96
			$2s^2 2p^4(^3P)3d$	$^2F$	7/2	280700.77		
1000	3323.745	1.6	$2s^2 2p^4(^3P)3s$	$^2P$	3/2	224087.02	P71	FW96
			$2s^2 2p^4(^3P)3p$	$^2P^o$	3/2	254165.01		
500	3378.216	1.7	$2s^2 2p^4(^3P)3s$	$^2P$	1/2	224699.27	P71	FW96
			$2s^2 2p^4(^3P)3p$	$^2P^o$	1/2	254292.19		
800	3766.259	0.29	$2s^2 2p^4(^3P)3s$	$^4P$	3/2	219648.44	P71	FW96
			$2s^2 2p^4(^3P)3p$	$^4P^o$	5/2	246192.45		
1000	3777.133	0.42	$2s^2 2p^4(^3P)3s$	$^4P$	1/2	219947.46	P71	FW96
			$2s^2 2p^4(^3P)3p$	$^4P^o$	3/2	246415.04		

## Energy Levels of Singly-ionized Neon (Ne II)

Configuration	Term	$J$	Level ( $\text{cm}^{-1}$ )	Ref
$2s^2 2p^5$	$^2P^o$	3/2	0.00	P71
		1/2	780.34	P71
$2s^2 2p^6$	$^2S$	1/2	217047.61	P71
$2s^2 2p^4(^3P)3s$	$^4P$	5/2	219130.78	P71
		3/2	219648.44	P71
		1/2	219947.46	P71
$2s^2 2p^4(^3P)3s$	$^2P$	3/2	224087.02	P71
		1/2	224699.27	P71
$2s^2 2p^4(^3P)3p$	$^4P^o$	5/2	246192.45	P71
		3/2	246415.04	P71
		1/2	246597.71	P71
$2s^2 2p^4(^1D)3s$	$^2D$	5/2	246394.13	P71
		3/2	246397.49	P71
$2s^2 2p^4(^3P)3p$	$^4D^o$	7/2	249108.64	P71
		5/2	249445.99	P71
		3/2	249695.53	P71
		1/2	249839.63	P71
$2s^2 2p^4(^3P)3p$	$^2S^o$	1/2	252798.48	P71
$2s^2 2p^4(^3P)3p$	$^4S^o$	3/2	252953.54	P71
$2s^2 2p^4(^3P)3p$	$^2P^o$	3/2	254165.01	P71
		1/2	254292.19	P71
$2s^2 2p^4(^1D)3p$	$^2P^o$	3/2	276276.85	P71
		1/2	276511.82	P71
$2s^2 2p^4(^1S)3s$	$^2S$	1/2	276677.13	P71
$2s^2 2p^4(^3P)3d$	$^4D$	5/2	279218.66	P71
$2s^2 2p^4(^3P)3d$	$^2F$	7/2	280700.77	P71
$2s^2 2p^4(^3P)3d$	$^2P$	3/2	281720.28	P71
$2s^2 2p^4(^3P)4s$	$^2P$	3/2	283322.35	P71
Ne III ( $^3P_2$ )		Limit	<b>330388.6</b>	P71