

List of the absorption lines of neon, Ne I. $[2p^6\ ^1S \rightarrow nd[3/2]_1^\circ, nd[1/2]_1^\circ, ns[3/2]_1^\circ, nd'[3/2]_1^\circ, ns'[1/2]_1^\circ]$

Wavelength Å	Wavenumber cm ⁻¹	n*	$nd'[3/2]_1^\circ$	$ns'[1/2]_1^\circ$	$nd[3/2]_1^\circ$	$ns[3/2]_1^\circ$	$nd[1/2]_1^\circ$
572.592	174677.5	57.8	58				
572.487	174676.4	56.8	57				
572.494	174674.2	55.8	56				
572.496	174673.8	54.8	55				
572.500	174672.5	53.8	54				
572.505	174671.0	52.8	53				
572.510	174669.5	51.8	52				
572.515	174667.8	50.8	51				
572.520	174666.2	49.8	50				
572.527	174664.3	48.8	49				
572.532	174662.5	47.8	48				
572.539	174660.4	46.8	47				
572.547	174658.2	45.8	46				
572.554	174655.8	44.8	45				
572.562	174653.4	43.9	44				
572.564	174653.0	43.7		45			
572.571	174650.8	42.9	43				
572.573	174650.2	42.7		44			
572.580	174647.9	41.9	42				
572.582	174647.4	41.7		43			
572.591	174644.8	40.9	41				
572.593	174644.1	40.7		42			
572.601	174641.5	39.9	40				
572.604	174640.8	39.7		41			
572.613	174638.0	38.9	39				
572.616	174637.2	38.7		40			
572.626	174634.1	37.9	38				
572.628	174633.2	37.7		39			
572.640	174629.9	36.9	37				
572.643	174628.8	36.7		38			
572.654	174625.5	36.0	36				
572.658	174624.2	35.7		37			
572.670	174620.5	34.9	35				
572.674	174619.2	34.7		36			
572.688	174615.2	34.0	34				
572.692	174613.8	33.7		35			
572.706	174609.4	32.96	33				
572.712	174607.7	32.69		34			
572.728	174602.9	31.95	32				
572.734	174601.1	31.69		33			
572.751	174595.9	30.96	31				
572.757	174593.9	30.69		32			

Wavelength Å	Wavenumber cm ⁻¹	n*	$nd'[3/2]_1^{\circ}$	$ns'[1/2]_1^{\circ}$	$nd[3/2]_1^{\circ}$	$ns[3/2]_1^{\circ}$	$nd[1/2]_1^{\circ}$
572.776	174588.2	29.97	30				
572.783	174586.0	29.70		31			
572.804	174579.6	28.96	29				
572.812	174577.1	28.69		30			
572.835	174570.1	27.97	28				
572.844	174567.3	27.69		29			
572.870	174559.5	26.97	27				
572.881	174556.3	26.69		28			
572.909	174547.7	25.91	26				
572.920	174544.2	25.70		27			
572.952	174534.4	24.97	25				
572.965	174530.5	24.70		26			
573.002	174519.5	23.98	24				
573.016	174514.9	23.69		25			
573.057	174502.5	22.97	23				
573.074	174497.4	22.69		24			
573.121	174483.2	21.98	22				
573.140	174477.2	21.69		23			
573.194	174461.0	20.98	21				
573.216	174454.1	20.69		22			
573.278	174435.5	19.97	20				
573.304	174427.5	19.69		21			
573.375	174405.7	18.98	19				
573.406	174396.5	18.70		20			
573.489	174370.9	17.98	18				
573.526	174359.9	17.69		19			
573.625	174329.8	16.98	17				
573.668	174316.7	16.70		18			
573.787	174280.6	15.98	16				
573.838	174265.0	15.70		17			
573.982	174221.4	14.98	15				
574.045	174202.4	14.70		16			
574.221	174149.0	13.98	14				
574.298	174125.4	13.70		15			
574.517	174059.2	12.98	13				
574.614	174029.6	12.70		14			
574.891	173946.0	11.98	12				
575.016	173908.1	11.70	1	13			
575.026	173905.1	66.4			66		
575.029	173904.2	65.2			65		
575.031	173903.6	64.5			64		
575.034	173902.6	63.3			63		
575.039	173901.3	61.8			62		
575.042	173900.5	61.0			61		
575.045	173899.5	60.0			60		
575.048	173898.3	58.8			59		

Wavelength Å	Wavenumber cm ⁻¹	n*	$nd'[3/2]_1^\circ$	$ns'[1/2]_1^\circ$	$nd[3/2]_1^\circ$	$ns[3/2]_1^\circ$	$nd[1/2]_1^\circ$
575.052	173897.1	57.8			58		
575.056	173896.0	56.8			57		
575.060	173894.8	55.8			56		
575.064	173893.5	54.8			55		
575.069	173892.2	53.8			54		
575.074	173890.7	52.8			53		
575.079	173889.2	51.8			52		
575.084	173887.5	50.8			51		
575.090	173885.8	49.8			50		
575.096	173884.0	48.8			49		
575.102	173882.1	47.9			48		
575.109	173880.0	46.8			47		
575.116	173877.8	45.8			46		
575.124	173875.4	44.8			45		
575.132	173872.9	43.8			44		
575.141	173870.4	42.9			43		
575.142	173870.1	42.8				44	
575.151	173867.4	41.9			42		
575.152	173867.0	41.7				43	
575.161	173864.4	40.9			41		
575.162	173863.9	40.7				42	
575.172	173861.1	39.9			40		
575.173	173860.5	39.7				41	
575.183	173857.6	38.9			39		
575.186	173856.8	38.7				40	
575.196	173853.8	37.9			38		
575.198	173853.0	37.8				39	
575.210	173849.6	36.9			37		
575.213	173848.5	36.7				38	
575.225	173845.1	36.0			36		
575.228	173843.8	35.7				37	
575.241	173840.2	35.0			35		
575.245	173838.8	34.7				36	
575.258	173834.9	34.0			34		
575.263	173833.3	33.7				35	
575.278	173829.0	32.96			33		
575.283	173827.3	32.69				34	
575.299	173822.6	31.96			32		
575.305	173820.7	31.69				33	
575.322	173815.5	30.96			31		
575.329	173813.5	30.69				32	
575.348	173807.8	29.97			30		
575.355	173805.6	29.70				31	
575.376	173801.0	29.17			29		
575.370	173799.2	10.974	11				
575.384	173796.7	28.69				30	

Wavelength Å	Wavenumber cm ⁻¹	n*	$nd'[3/2]_1^\circ$	$ns'[1/2]_1^\circ$	$nd[3/2]_1^\circ$	$ns[3/2]_1^\circ$	$nd[1/2]_1^\circ$
575.408	173789.7	27.97			28		
575.417	173786.9	27.69				29	
575.443	173779.2	26.98			27		
575.453	173776.0	26.69				28	
575.482	173767.4	25.98			26		
575.493	173763.9	25.70				27	
575.526	173754.1	24.98			25		
575.535	173751.4	24.79				26	
575.541	173749.6	10.687		12			
575.576	173739.1	23.98			24		
575.590	173734.6	23.70				25	
575.632	173722.1	22.97			23		
575.648	173717.1	22.70				24	
575.696	173702.7	21.97			22		
575.715	173696.9	21.70				23	
575.769	173680.6	20.98			21		
575.791	173674.0	20.70				22	
575.854	173654.9	19.97			20		
575.880	173647.3	19.70				21	
575.953	173625.2	18.97			19		
575.982	173616.3	18.70				20	
576.005	173609.6	9.9843	10				
576.068	173590.4	17.98			18		
576.103	173579.9	17.70				19	
576.205	173549.3	16.98			17		
576.226	173543.0	9.6953		11			
576.248	173536.3	16.70				18	
576.369	173500.0	15.97			16		
576.370	173499.7	15.97					16
576.418	173484.9	15.70				17	
576.566	173441.0	14.98			15		
576.565	173440.3	14.97					15
576.626	173422.5	14.70				16	
576.805	173368.8	13.98			14		
576.808	173367.7	13.97					14
576.864	173350.9	8.9842	9				
576.882	173345.7	13.70				15	
577.103	173279.1	12.98			13		
577.108	173277.6	12.97					13
577.169	173259.4	8.6964		10			
577.202	173249.3	12.70				14	
577.480	173166.0	11.98			12		
577.487	173163.9	11.97					12
577.604	173129.0	11.70				13	
577.965	173020.8	10.986			11		
577.974	173018.1	10.970					11

Wavelength Å	Wavenumber cm ⁻¹	n*	$nd'[3/2]_1^{\circ}$	$ns'[1/2]_1^{\circ}$	$nd[3/2]_1^{\circ}$	$ns[3/2]_1^{\circ}$	$nd[1/2]_1^{\circ}$
578.071	172989.1	7.9844	8				
578.126	172972.5	10.705				12	
578.512	172857.1	7.6946		9			
578.605	172829.4	9.9852			10		
578.618	172825.6	9.9680					10
578.822	172764.6	9.7036				11	
579.471	172571.0	8.9859			9		
579.488	172566.0	8.9694					9
579.770	172482.0	8.7054				10	
579.841	172461.1	6.9847	7				
580.511	172261.8	6.6944		8			
580.689	172209.2	7.9855			8		
580.713	172202.0	7.9689					8
581.122	172081.0	7.7038				9	
582.469	171683.0	6.9883			7		
582.506	171672.0	6.9712					7
582.598	171644.9	5.9830	6				
583.126	171489.5	6.7055				8	
583.689	171324.0	5.6925		7			
585.247	170867.9	5.9863			6		
585.304	170851.3	5.9702					6
586.314	170557.1	5.7038				7	
587.213	170296.0	4.9858	5				
589.179	169727.6	4.6928		6			
589.911	169517.0	4.9866			5		
590.011	169488.4	4.9705					5
591.831	168967.3	4.7023				6	

References:

High-resolution Absorption Spectrum of Ne I in the Region of 565-595 Å, K. Ito, K. Ueda, T. Namioka, K. Yoshino and Y. Morioka J. Opt. Soc. Am. B. **5**, 2006-2014 (1988).