

IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00662_2 ~ CP0608XT-20L35K-OSD-EX-NLSAL-PT.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] SP-00662_2
 [TESTLAB] Spectrum Lighting Photometric Lab, VLS-245-981
 [MANUFAC] Spectrum Lighting
 [ISSUEDATE] 7/9/2018
 [UPDATE] 10/31/2018
 [LUMCAT] CP0608XT-20L35K-OSD-EX-NLSAL-PT
 [LUMINAIRE] Nom 6" diam x 8.2" H, Carli Pendant decorative luminaire
 [LAMPCAT] N/A
 [LAMP] N/A, 19mm LES
 [OTHER] Open Spherical Diffuser at LED
 [OTHER] No Upper Lens
 [OTHER] Aluminum Shade
 [OTHER] 80.9% Downlight
 [OTHER] 19.1% Uplight
 [OTHER] Luminaire tested with Platinum painted finish
 [OTHER] Total Luminaire watts is approximate
 [OTHER] This report prepared by Spectrum Lighting
 [_CRI] 83
 [_CCTMULT] same for all available CCT's
 [_LAMPMULT] 10L x 0.48, 13L x 0.65

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	776
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	36
Total Luminaire Watts	21.7
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	0.62
Spacing Criterion (90-270)	0.64
Spacing Criterion (Diagonal)	0.64
Basic Luminous Shape	Circular w/ Sides
Luminous Length (0-180)	0.50 ft (Diameter)
Luminous Width (90-270)	0.50 ft (Diameter)
Luminous Height	0.12 ft

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00662_2 ~ CP0608XT-20L35K-OSD-EX-NLSAL-PT.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4080	3993	4303
55	1263	1024	1194
65	1782	1794	1578
75	3443	3436	3181
85	6303	6742	6097

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	827.745	827.745	827.745	827.745	827.745	827.745	827.745	827.745	827.745	827.745
2.5	828.914	827.167	828.542	829.787	830.203	827.796	827.555	829.500	827.346	829.263
5.0	815.936	827.633	825.998	831.925	823.705	819.067	828.604	821.239	827.738	829.019
7.5	789.934	788.916	785.706	794.008	791.551	786.280	798.983	798.984	805.362	798.817
10.0	731.644	748.658	740.293	750.025	745.628	736.404	751.397	751.991	762.183	762.684
12.5	646.513	654.921	646.455	663.147	658.528	649.446	674.276	672.306	691.513	676.755
15.0	550.302	560.459	552.185	570.779	569.023	559.844	581.163	582.177	598.153	588.684
17.5	445.653	461.123	454.676	475.202	472.968	465.127	486.297	479.591	500.008	485.552
20.0	357.113	362.696	360.941	379.314	382.257	376.020	390.585	386.486	398.192	386.363
22.5	279.794	292.884	289.908	306.853	304.384	296.631	313.937	303.895	317.380	309.561
25.0	231.556	225.732	226.721	235.964	241.474	235.955	245.489	245.129	251.093	241.200
27.5	201.548	203.390	204.524	210.521	211.011	205.289	210.546	210.246	213.318	213.633
30.0	181.952	181.492	183.371	187.212	186.078	181.083	188.807	186.408	193.285	188.932
32.5	168.398	164.866	166.787	170.591	172.013	166.198	171.018	172.722	175.485	176.210
35.0	149.861	147.882	149.185	154.092	155.291	148.966	154.598	155.206	158.971	161.399
37.5	128.736	127.652	127.779	132.052	133.897	128.636	134.577	134.462	139.580	139.115
40.0	107.866	107.546	106.675	110.052	112.720	108.241	113.447	113.598	118.706	116.992
42.5	87.113	88.306	86.587	89.694	91.888	87.767	92.610	92.641	97.523	95.375
45.0	68.772	69.453	67.313	69.555	72.537	68.752	71.853	73.631	76.196	75.056
47.5	51.457	52.930	50.422	53.676	55.353	51.332	54.785	55.976	58.842	58.398
50.0	37.211	37.276	34.996	37.984	39.868	36.336	38.575	40.743	43.167	42.441
52.5	24.120	25.926	23.407	24.903	26.625	23.767	27.391	27.051	30.858	28.226
55.0	18.997	16.624	15.404	13.093	17.964	16.655	17.214	20.472	19.805	17.671
57.5	16.555	15.869	15.852	13.774	14.922	14.555	15.655	17.953	16.958	15.459
60.0	17.796	15.870	17.101	14.776	14.495	14.872	15.562	18.688	16.847	15.023
62.5	20.138	18.697	20.025	18.191	16.963	17.194	17.820	21.139	20.369	18.188
65.0	22.760	21.765	22.917	21.487	20.157	19.622	20.399	24.732	24.966	21.110
67.5	25.455	25.613	25.747	24.025	24.076	22.133	23.620	28.863	28.316	23.589
70.0	28.831	29.510	28.664	26.653	27.231	24.951	26.913	32.485	31.348	26.182
72.5	32.360	33.549	31.734	29.753	29.674	27.985	30.716	35.894	34.042	28.966
75.0	34.830	37.221	34.759	32.830	32.171	31.123	34.560	38.658	36.659	32.052
77.5	37.095	39.949	37.714	35.808	34.713	34.327	37.727	41.175	39.843	35.594
80.0	39.572	42.810	41.068	38.858	37.646	37.338	40.857	44.084	43.135	38.507
82.5	42.083	45.972	44.998	42.188	40.880	40.237	42.661	47.126	45.338	40.554
85.0	45.063	48.509	48.199	45.325	43.592	43.230	44.418	50.050	47.371	42.977
87.5	48.105	49.760	50.453	47.812	45.935	46.273	47.944	52.940	50.203	45.873
90.0	50.307	51.306	52.274	50.410	48.327	48.038	51.466	54.702	53.139	48.442
92.5	52.422	53.403	53.579	53.338	50.750	49.202	53.572	56.168	54.734	50.639
95.0	52.635	54.932	55.005	55.361	52.076	50.291	55.613	57.356	56.194	51.854
97.5	52.711	55.511	56.561	54.971	52.756	51.348	55.850	58.483	55.667	52.028
100.0	52.373	55.905	56.738	54.437	52.324	51.771	56.004	58.030	54.992	51.766
102.5	52.013	56.010	55.559	53.563	51.306	51.956	54.876	57.275	55.755	51.085
105.0	50.872	54.414	54.532	52.617	50.300	51.007	53.786	49.683	56.591	48.445
107.5	49.711	50.442	53.642	51.518	49.299	49.677	53.133	40.983	46.787	44.109
110.0	28.714	38.791	52.218	50.401	39.268	48.090	52.121	23.087	36.739	31.568
112.5	8.001	17.463	50.352	49.251	25.338	46.426	48.008	4.006	19.181	12.427
115.0	4.375	4.816	42.655	47.850	18.586	44.116	42.319	1.772	1.948	3.253
117.5	0.922	2.340	30.601	46.017	14.574	41.640	25.987	1.329	1.483	1.312
120.0	1.194	0.943	18.317	43.028	12.612	37.842	11.236	1.064	1.047	0.606
122.5	1.436	0.688	5.874	38.194	11.351	33.741	5.644	0.813	1.222	0.720
125.0	1.202	0.660	0.994	28.899	9.069	20.902	0.977	0.958	1.378	0.782

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CANDELA TABULATION - (Cont.)

127.5	0.997	0.852	0.835	13.190	6.478	6.386	0.753	1.122	1.261	0.813
130.0	1.086	1.036	0.882	3.527	4.229	3.069	0.618	1.020	1.141	1.002
132.5	1.184	1.212	1.043	1.819	2.071	1.510	0.848	0.910	0.992	1.276
135.0	1.348	1.150	1.178	0.899	1.344	1.092	0.981	0.819	0.851	1.281
137.5	1.499	0.897	1.299	0.927	0.945	0.827	0.761	0.733	0.768	1.152
140.0	1.562	0.993	1.266	0.940	0.804	0.678	0.632	0.889	0.732	1.061
142.5	1.563	1.348	1.161	0.935	0.714	0.541	0.795	1.043	0.998	0.986
145.0	1.233	1.504	1.059	1.002	0.850	0.766	0.939	1.122	1.199	1.007
147.5	1.044	1.525	0.958	1.140	1.021	1.018	1.033	1.209	1.046	1.065
150.0	1.508	1.375	1.005	1.140	0.946	0.950	1.083	1.413	0.919	1.057
152.5	1.777	1.120	1.109	1.014	0.837	0.865	1.021	1.584	0.913	1.024
155.0	1.272	1.191	1.109	0.945	0.739	0.799	0.961	1.428	0.929	1.043
157.5	0.948	1.436	1.078	0.919	0.645	0.743	0.903	1.240	1.023	1.077
160.0	1.066	1.327	1.235	0.934	0.701	0.811	1.007	0.909	1.107	0.955
162.5	1.079	1.150	1.358	0.966	0.762	0.829	1.293	0.780	1.175	0.873
165.0	1.001	1.401	1.163	0.621	0.833	0.753	1.041	0.907	1.064	1.094
167.5	1.204	1.190	1.119	0.571	0.938	0.764	0.785	0.987	0.960	1.308
170.0	1.215	0.851	1.158	0.810	1.029	0.876	0.801	1.127	1.103	1.336
172.5	1.170	1.339	1.121	0.912	1.018	1.018	0.454	1.097	1.240	0.969
175.0	1.133	1.228	0.778	0.736	0.800	0.914	0.614	0.821	1.094	0.947
177.5	1.062	0.899	0.938	1.030	0.858	1.105	0.907	1.009	1.229	1.045
180.0	1.052	1.052	1.052	1.052	1.052	1.052	1.052	1.052	1.052	1.052

Vert.
Angles

Horizontal Angles

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	827.745	827.745	827.745	827.745	827.745	827.745	827.745
2.5	828.948	829.710	829.136	826.491	828.184	826.906	828.914
5.0	829.896	825.136	829.249	827.239	817.799	825.579	815.936
7.5	800.732	792.640	793.365	795.419	791.579	792.947	789.934
10.0	770.731	749.265	749.474	752.718	739.195	742.540	731.644
12.5	682.299	662.415	665.738	672.206	653.235	662.538	646.513
15.0	593.341	573.637	574.597	580.478	561.594	567.259	550.302
17.5	493.939	478.233	480.682	487.595	463.369	468.822	445.653
20.0	395.431	386.851	386.335	394.416	373.809	368.908	357.113
22.5	319.555	307.724	312.288	317.499	293.451	296.202	279.794
25.0	246.642	241.840	240.836	244.195	237.546	234.800	231.556
27.5	217.603	211.987	213.606	213.809	205.459	205.111	201.548
30.0	189.977	187.153	190.648	191.607	183.902	187.263	181.952
32.5	176.895	174.368	174.841	174.289	171.614	171.046	168.398
35.0	162.922	158.907	159.542	157.732	154.393	155.373	149.861
37.5	141.495	137.551	137.546	137.543	133.135	135.202	128.736
40.0	120.177	116.144	115.235	116.873	112.217	113.725	107.866
42.5	99.571	94.640	94.389	95.642	91.549	93.110	87.113
45.0	79.393	74.773	73.572	74.355	72.557	72.720	68.772
47.5	61.572	57.784	57.067	58.786	54.679	56.044	51.457
50.0	44.487	41.863	40.670	43.624	39.540	40.192	37.211
52.5	30.865	27.678	28.458	30.170	26.090	28.840	24.120
55.0	19.333	18.306	16.800	16.803	19.543	18.323	18.997
57.5	16.135	15.975	15.845	16.265	16.816	17.344	16.555
60.0	14.018	15.368	15.155	16.028	17.262	17.896	17.796
62.5	15.693	17.070	18.155	17.515	19.303	19.936	20.138
65.0	17.691	19.036	21.288	19.051	21.892	22.166	22.760

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67.5	20.693	21.323	25.733	22.778	24.729	25.158	25.455
70.0	23.912	24.405	29.854	26.495	27.090	28.227	28.831
72.5	27.719	28.367	31.462	30.019	29.260	31.561	32.360
75.0	30.728	31.788	33.343	33.547	32.491	34.915	34.830
77.5	31.757	34.662	36.959	37.132	36.108	37.013	37.095
80.0	33.536	38.181	40.526	40.637	39.393	39.054	39.572
82.5	36.968	42.299	43.841	43.334	42.570	41.653	42.083
85.0	40.122	44.986	46.947	45.996	45.134	44.266	45.063
87.5	42.730	46.468	49.116	48.398	47.527	47.131	48.105
90.0	45.208	48.781	51.242	50.722	49.366	49.930	50.307
92.5	47.450	51.742	53.201	52.539	51.067	50.045	52.422
95.0	48.897	53.877	54.819	54.064	51.704	50.155	52.635
97.5	49.052	55.429	55.291	54.023	52.115	50.140	52.711
100.0	49.151	55.410	55.520	53.950	52.990	50.199	52.373
102.5	49.166	54.394	55.010	53.727	53.947	51.279	52.013
105.0	49.497	53.514	53.384	53.327	53.132	50.796	50.872
107.5	50.257	52.715	48.786	52.220	52.046	35.073	49.711
110.0	49.048	51.341	41.381	51.008	49.506	19.988	28.714
112.5	45.429	49.666	27.372	49.437	46.791	10.008	8.001
115.0	39.057	47.492	17.750	47.972	40.095	1.389	4.375
117.5	29.597	45.080	17.611	46.825	33.026	1.395	0.922
120.0	19.145	41.418	16.813	44.423	18.476	1.370	1.194
122.5	7.671	37.216	14.748	38.620	3.417	1.185	1.436
125.0	1.811	25.228	11.744	29.942	1.798	1.054	1.202
127.5	1.168	10.268	7.096	14.390	0.715	1.175	0.997
130.0	0.852	4.326	3.704	3.297	0.857	1.245	1.086
132.5	0.820	1.464	2.317	1.997	1.020	1.117	1.184
135.0	0.801	0.833	1.330	1.084	1.068	0.959	1.348
137.5	0.794	0.880	0.919	0.930	1.122	0.701	1.499
140.0	0.820	0.959	0.774	0.970	1.331	0.508	1.562
142.5	0.871	1.045	0.982	1.347	1.510	0.514	1.563
145.0	0.822	1.098	1.035	1.462	1.117	0.604	1.233
147.5	0.708	1.142	0.902	1.153	0.753	0.918	1.044
150.0	0.713	1.205	0.947	1.046	0.761	1.164	1.508
152.5	0.788	1.271	1.186	1.233	0.784	1.245	1.777
155.0	0.910	1.087	1.229	1.231	0.941	1.315	1.272
157.5	1.056	0.863	1.085	0.994	1.046	1.360	0.948
160.0	1.123	0.890	1.089	0.889	0.933	1.252	1.066
162.5	1.152	0.949	1.174	0.879	0.980	0.980	1.079
165.0	0.994	1.080	0.822	0.912	1.226	0.785	1.001
167.5	1.086	1.062	0.602	0.928	1.062	0.735	1.204
170.0	1.256	0.873	0.563	0.906	1.023	0.949	1.215
172.5	1.019	0.608	0.494	0.808	1.027	0.867	1.170
175.0	0.760	0.847	1.030	1.090	0.877	1.464	1.133
177.5	0.866	0.784	1.186	1.116	0.931	1.152	1.062
180.0	1.052	1.052	1.052	1.052	1.052	1.052	1.052

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Zone	Lumens	%Lamp	%Fixt
0-20	232.09	N.A.	29.90
0-30	349.38	N.A.	45.00
0-40	444.48	N.A.	57.30
0-60	520.93	N.A.	67.10
0-80	578.17	N.A.	74.50
0-90	627.53	N.A.	80.90
10-90	551.41	N.A.	71.10
20-40	212.38	N.A.	27.40
20-50	269.12	N.A.	34.70
40-70	97.92	N.A.	12.60
60-80	57.23	N.A.	7.40
70-80	35.77	N.A.	4.60
80-90	49.37	N.A.	6.40
90-110	111.20	N.A.	14.30
90-120	138.04	N.A.	17.80
90-130	145.99	N.A.	18.80
90-150	147.58	N.A.	19.00
90-180	148.45	N.A.	19.10
110-180	37.25	N.A.	4.80
0-180	775.98	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	76.12
10-20	155.97
20-30	117.29
30-40	95.09
40-50	56.73
50-60	19.72
60-70	21.46
70-80	35.77
80-90	49.37
90-100	57.67
100-110	53.53
110-120	26.83
120-130	7.96
130-140	0.94
140-150	0.65
150-160	0.49
160-170	0.28
170-180	0.09

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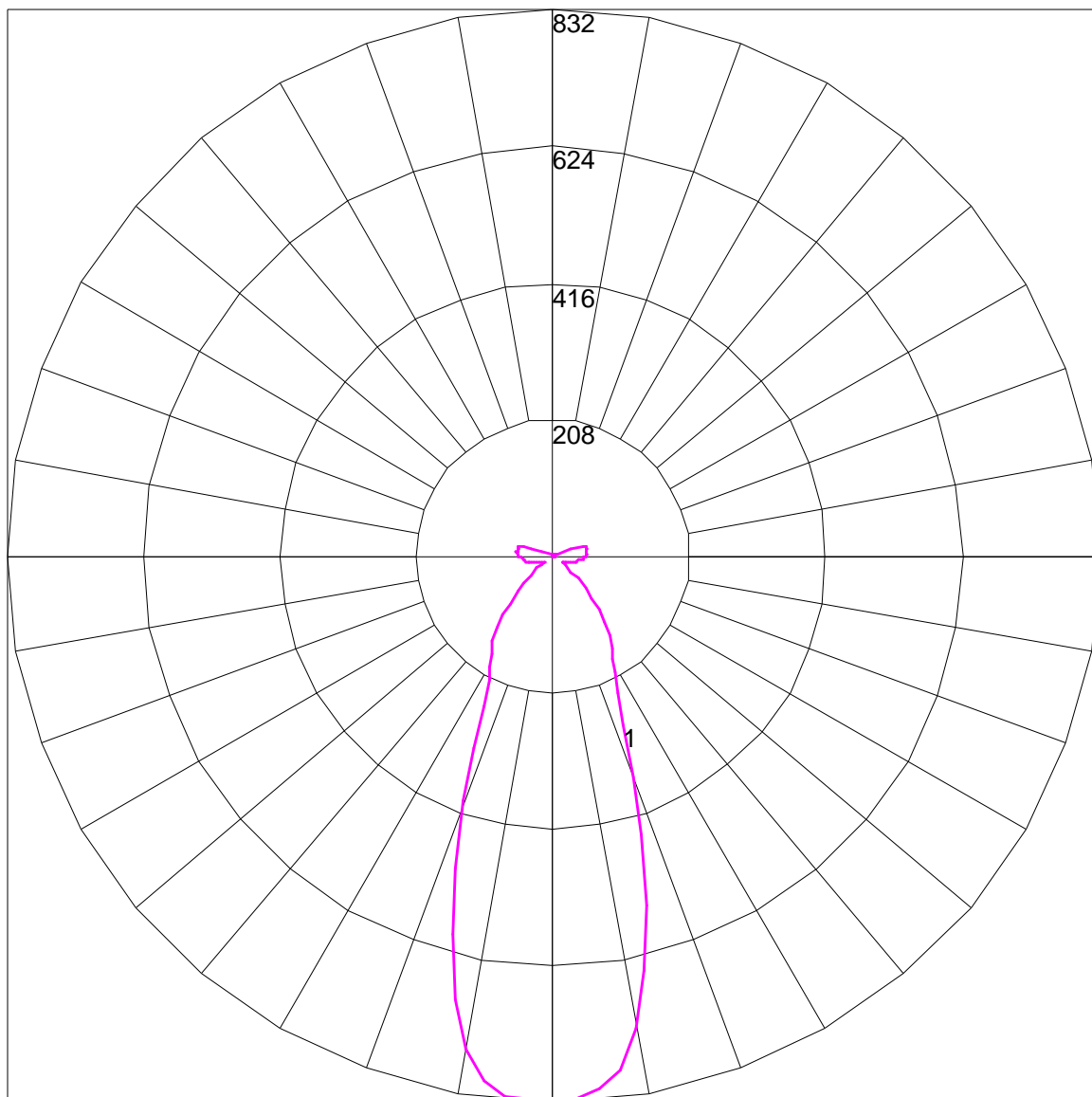
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	81
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	75	73	71	68
2	97	90	84	79	93	87	81	77	80	76	72	74	71	68	69	66	64	61
3	91	82	76	70	87	79	73	68	74	69	65	69	65	61	64	61	58	55
4	85	76	68	63	82	73	67	62	68	63	59	64	60	56	60	56	53	51
5	80	70	63	57	77	68	61	56	64	58	54	60	55	52	56	53	50	47
6	76	65	58	53	73	63	56	52	60	54	50	56	52	48	53	49	46	44
7	72	61	54	49	69	59	52	48	56	50	46	53	48	45	50	46	43	41
8	68	57	50	45	65	55	49	45	53	47	43	50	45	42	48	44	41	39
9	64	53	47	42	62	52	46	42	50	44	41	47	43	39	45	41	38	37
10	61	50	44	40	59	49	43	39	47	42	38	45	40	37	43	39	36	35

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SP-00662_2 ~ CP0608XT-20L35K-OSD-EX-NLSAL-PT.IES

POLAR GRAPH



Maximum Candela = 831.925 Located At Horizontal Angle = 67.5, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180)