

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00662_2 ~ CP0608XT-13L35K-OSD-EX-NLSAL-PT.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002

[TEST] SP-00662_2_M-13L

[TESTLAB] Spectrum Lighting Photometric Lab, VLS-245-981

[MANUFAC] Spectrum Lighting

[ISSUEDATE] 7/9/2018

[UPDATE] 10/31/2018

[LUMCAT] CP0608XT-13L35K-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] LEDXT lumen output is the same for all available CCT's

[OTHER] This report prepared by Spectrum Lighting, scaled from 20L

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	504
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	39
Total Luminaire Watts	13
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-13L35K-OSD-EX-NLSAL-PT.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2652	2596	2797
55	821	666	776
65	1158	1166	1026
75	2238	2234	2067
85	4097	4382	3963

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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	538.034	538.034	538.034	538.034	538.034	538.034	538.034	538.034	538.034	538.034
2.5	538.794	537.659	538.552	539.362	539.632	538.067	537.911	539.175	537.775	539.021
5.0	530.358	537.961	536.899	540.751	535.408	532.394	538.593	533.805	538.030	538.862
7.5	513.457	512.795	510.709	516.105	514.508	511.082	519.339	519.340	523.485	519.231
10.0	475.569	486.628	481.190	487.516	484.658	478.663	488.408	488.794	495.419	495.745
12.5	420.233	425.699	420.196	431.046	428.043	422.140	438.279	436.999	449.483	439.891
15.0	357.696	364.298	358.920	371.006	369.865	363.899	377.756	378.415	388.799	382.645
17.5	289.674	299.730	295.539	308.881	307.429	302.333	316.093	311.734	325.005	315.609
20.0	232.123	235.752	234.612	246.554	248.467	244.413	253.880	251.216	258.825	251.136
22.5	181.866	190.375	188.440	199.454	197.850	192.810	204.059	197.532	206.297	201.215
25.0	150.511	146.726	147.369	153.377	156.958	153.371	159.568	159.334	163.210	156.780
27.5	131.006	132.203	132.941	136.839	137.157	133.438	136.855	136.660	138.657	138.861
30.0	118.269	117.970	119.191	121.688	120.951	117.704	122.725	121.165	125.635	122.806
32.5	109.459	107.163	108.412	110.884	111.808	108.029	111.162	112.269	114.065	114.536
35.0	97.410	96.123	96.970	100.160	100.939	96.828	100.489	100.884	103.331	104.909
37.5	83.678	82.974	83.056	85.834	87.033	83.613	87.475	87.400	90.727	90.425
40.0	70.113	69.905	69.339	71.534	73.268	70.357	73.741	73.839	77.159	76.045
42.5	56.623	57.399	56.282	58.301	59.727	57.049	60.196	60.217	63.390	61.994
45.0	44.702	45.144	43.753	45.211	47.149	44.689	46.704	47.860	49.527	48.786
47.5	33.447	34.404	32.774	34.889	35.979	33.366	35.610	36.384	38.247	37.959
50.0	24.187	24.229	22.747	24.690	25.914	23.618	25.074	26.483	28.059	27.587
52.5	15.678	16.852	15.215	16.187	17.306	15.449	17.804	17.583	20.058	18.347
55.0	12.348	10.806	10.013	8.510	11.677	10.826	11.189	13.307	12.873	11.486
57.5	10.761	10.315	10.304	8.953	9.699	9.461	10.176	11.669	11.023	10.048
60.0	11.567	10.315	11.116	9.604	9.422	9.667	10.115	12.147	10.951	9.765
62.5	13.090	12.153	13.016	11.824	11.026	11.176	11.583	13.740	13.240	11.822
65.0	14.794	14.147	14.896	13.967	13.102	12.754	13.259	16.076	16.228	13.721
67.5	16.546	16.648	16.736	15.616	15.649	14.386	15.353	18.761	18.405	15.333
70.0	18.740	19.181	18.632	17.324	17.700	16.218	17.493	21.115	20.376	17.018
72.5	21.034	21.807	20.627	19.339	19.288	18.190	19.965	23.331	22.127	18.828
75.0	22.639	24.194	22.593	21.339	20.911	20.230	22.464	25.128	23.828	20.834
77.5	24.112	25.967	24.514	23.275	22.563	22.313	24.523	26.764	25.898	23.136
80.0	25.722	27.826	26.694	25.258	24.470	24.270	26.557	28.655	28.038	25.030
82.5	27.354	29.882	29.249	27.422	26.572	26.154	27.730	30.632	29.470	26.360
85.0	29.291	31.531	31.329	29.461	28.335	28.099	28.872	32.532	30.791	27.935
87.5	31.268	32.344	32.794	31.078	29.858	30.077	31.164	34.411	32.632	29.817
90.0	32.700	33.349	33.978	32.766	31.413	31.225	33.453	35.556	34.540	31.487
92.5	34.074	34.712	34.826	34.670	32.987	31.981	34.822	36.509	35.577	32.915
95.0	34.213	35.706	35.753	35.985	33.849	32.689	36.148	37.281	36.526	33.705
97.5	34.262	36.082	36.765	35.731	34.291	33.376	36.302	38.014	36.184	33.818
100.0	34.042	36.338	36.880	35.384	34.011	33.651	36.403	37.719	35.745	33.648
102.5	33.808	36.406	36.113	34.816	33.349	33.771	35.669	37.229	36.241	33.205
105.0	33.067	35.369	35.446	34.201	32.695	33.155	34.961	32.294	36.784	31.489
107.5	32.312	32.787	34.867	33.487	32.044	32.290	34.536	26.639	30.412	28.671
110.0	18.664	25.214	33.942	32.761	25.524	31.258	33.879	15.007	23.880	20.519
112.5	5.201	11.351	32.729	32.013	16.470	30.177	31.205	2.604	12.468	8.078
115.0	2.844	3.130	27.726	31.102	12.081	28.675	27.507	1.152	1.266	2.114
117.5	0.599	1.521	19.891	29.911	9.473	27.066	16.892	0.864	0.964	0.853
120.0	0.776	0.613	11.906	27.968	8.198	24.597	7.303	0.692	0.681	0.394
122.5	0.933	0.447	3.818	24.826	7.378	21.932	3.669	0.528	0.794	0.468
125.0	0.781	0.429	0.646	18.784	5.895	13.586	0.635	0.623	0.896	0.508

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CANDELA TABULATION - (Cont.)

127.5	0.648	0.554	0.543	8.573	4.211	4.151	0.489	0.729	0.820	0.528
130.0	0.706	0.673	0.573	2.293	2.749	1.995	0.402	0.663	0.742	0.651
132.5	0.770	0.788	0.678	1.182	1.346	0.981	0.551	0.591	0.645	0.829
135.0	0.876	0.747	0.766	0.584	0.874	0.710	0.638	0.532	0.553	0.833
137.5	0.974	0.583	0.844	0.603	0.614	0.538	0.495	0.476	0.499	0.749
140.0	1.015	0.645	0.823	0.611	0.523	0.441	0.411	0.578	0.476	0.690
142.5	1.016	0.876	0.755	0.608	0.464	0.352	0.517	0.678	0.649	0.641
145.0	0.801	0.978	0.688	0.651	0.552	0.498	0.610	0.729	0.779	0.655
147.5	0.679	0.991	0.623	0.741	0.664	0.662	0.671	0.786	0.680	0.692
150.0	0.980	0.894	0.653	0.741	0.615	0.617	0.704	0.918	0.597	0.687
152.5	1.155	0.728	0.721	0.659	0.544	0.562	0.664	1.030	0.593	0.666
155.0	0.827	0.774	0.721	0.614	0.480	0.519	0.625	0.928	0.604	0.678
157.5	0.616	0.933	0.701	0.597	0.419	0.483	0.587	0.806	0.665	0.700
160.0	0.693	0.863	0.803	0.607	0.456	0.527	0.655	0.591	0.720	0.621
162.5	0.701	0.747	0.883	0.628	0.495	0.539	0.840	0.507	0.764	0.567
165.0	0.651	0.911	0.756	0.404	0.541	0.489	0.677	0.590	0.692	0.711
167.5	0.783	0.773	0.727	0.371	0.610	0.497	0.510	0.642	0.624	0.850
170.0	0.790	0.553	0.753	0.526	0.669	0.569	0.521	0.733	0.717	0.868
172.5	0.760	0.870	0.729	0.593	0.662	0.662	0.295	0.713	0.806	0.630
175.0	0.736	0.798	0.506	0.478	0.520	0.594	0.399	0.534	0.711	0.616
177.5	0.690	0.584	0.610	0.669	0.558	0.718	0.590	0.656	0.799	0.679
180.0	0.684	0.684	0.684	0.684	0.684	0.684	0.684	0.684	0.684	0.684

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	538.034	538.034	538.034	538.034	538.034	538.034	538.034
2.5	538.816	539.311	538.938	537.219	538.320	537.489	538.794
5.0	539.432	536.338	539.012	537.705	531.569	536.626	530.358
7.5	520.476	515.216	515.687	517.022	514.526	515.416	513.457
10.0	500.975	487.022	487.158	489.267	480.477	482.651	475.569
12.5	443.494	430.570	432.730	436.934	424.603	430.650	420.233
15.0	385.672	372.864	373.488	377.311	365.036	368.718	357.696
17.5	321.060	310.851	312.443	316.937	301.190	304.734	289.674
20.0	257.030	251.453	251.118	256.370	242.976	239.790	232.123
22.5	207.711	200.021	202.987	206.374	190.743	192.531	181.866
25.0	160.317	157.196	156.543	158.727	154.405	152.620	150.511
27.5	141.442	137.792	138.844	138.976	133.548	133.322	131.006
30.0	123.485	121.649	123.921	124.545	119.536	121.721	118.269
32.5	114.982	113.339	113.647	113.288	111.549	111.180	109.459
35.0	105.899	103.290	103.702	102.526	100.355	100.992	97.410
37.5	91.972	89.408	89.405	89.403	86.538	87.881	83.678
40.0	78.115	75.494	74.903	75.967	72.941	73.921	70.113
42.5	64.721	61.516	61.353	62.167	59.507	60.521	56.623
45.0	51.605	48.602	47.822	48.331	47.162	47.268	44.702
47.5	40.022	37.560	37.094	38.211	35.541	36.429	33.447
50.0	28.917	27.211	26.435	28.356	25.701	26.125	24.187
52.5	20.062	17.991	18.498	19.610	16.958	18.746	15.678
55.0	12.566	11.899	10.920	10.922	12.703	11.910	12.348
57.5	10.488	10.384	10.299	10.572	10.930	11.274	10.761
60.0	9.112	9.989	9.851	10.418	11.220	11.632	11.567
62.5	10.200	11.095	11.801	11.385	12.547	12.958	13.090
65.0	11.499	12.373	13.837	12.383	14.230	14.408	14.794

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67.5	13.450	13.860	16.726	14.806	16.074	16.353	16.546
70.0	15.543	15.863	19.405	17.222	17.608	18.348	18.740
72.5	18.017	18.439	20.450	19.512	19.019	20.515	21.034
75.0	19.973	20.662	21.673	21.806	21.119	22.695	22.639
77.5	20.642	22.530	24.023	24.136	23.470	24.058	24.112
80.0	21.798	24.818	26.342	26.414	25.605	25.385	25.722
82.5	24.029	27.494	28.497	28.167	27.670	27.074	27.354
85.0	26.079	29.241	30.516	29.897	29.337	28.773	29.291
87.5	27.774	30.204	31.925	31.459	30.893	30.635	31.268
90.0	29.385	31.708	33.307	32.969	32.088	32.454	32.700
92.5	30.842	33.632	34.581	34.150	33.194	32.529	34.074
95.0	31.783	35.020	35.632	35.142	33.608	32.601	34.213
97.5	31.884	36.029	35.939	35.115	33.875	32.591	34.262
100.0	31.948	36.016	36.088	35.067	34.443	32.629	34.042
102.5	31.958	35.356	35.756	34.923	35.066	33.331	33.808
105.0	32.173	34.784	34.700	34.663	34.536	33.017	33.067
107.5	32.667	34.265	31.711	33.943	33.830	22.797	32.312
110.0	31.881	33.372	26.898	33.155	32.179	12.992	18.664
112.5	29.529	32.283	17.792	32.134	30.414	6.505	5.201
115.0	25.387	30.870	11.537	31.182	26.062	0.903	2.844
117.5	19.238	29.302	11.447	30.436	21.467	0.907	0.599
120.0	12.444	26.922	10.928	28.875	12.009	0.890	0.776
122.5	4.986	24.190	9.586	25.103	2.221	0.770	0.933
125.0	1.177	16.398	7.634	19.462	1.169	0.685	0.781
127.5	0.759	6.674	4.612	9.353	0.465	0.764	0.648
130.0	0.554	2.812	2.408	2.143	0.557	0.809	0.706
132.5	0.533	0.952	1.506	1.298	0.663	0.726	0.770
135.0	0.521	0.541	0.864	0.705	0.694	0.623	0.876
137.5	0.516	0.572	0.597	0.604	0.729	0.456	0.974
140.0	0.533	0.623	0.503	0.630	0.865	0.330	1.015
142.5	0.566	0.679	0.638	0.876	0.981	0.334	1.016
145.0	0.534	0.714	0.673	0.950	0.726	0.393	0.801
147.5	0.460	0.742	0.586	0.749	0.489	0.597	0.679
150.0	0.463	0.783	0.616	0.680	0.495	0.757	0.980
152.5	0.512	0.826	0.771	0.801	0.510	0.809	1.155
155.0	0.591	0.707	0.799	0.800	0.612	0.855	0.827
157.5	0.686	0.561	0.705	0.646	0.680	0.884	0.616
160.0	0.730	0.578	0.708	0.578	0.606	0.814	0.693
162.5	0.749	0.617	0.763	0.571	0.637	0.637	0.701
165.0	0.646	0.702	0.534	0.593	0.797	0.510	0.651
167.5	0.706	0.690	0.391	0.603	0.690	0.478	0.783
170.0	0.816	0.567	0.366	0.589	0.665	0.617	0.790
172.5	0.662	0.395	0.321	0.525	0.668	0.564	0.760
175.0	0.494	0.551	0.669	0.708	0.570	0.952	0.736
177.5	0.563	0.510	0.771	0.725	0.605	0.749	0.690
180.0	0.684	0.684	0.684	0.684	0.684	0.684	0.684

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Zone	Lumens	%Lamp	%Fixt
0-20	150.86	N.A.	29.90
0-30	227.10	N.A.	45.00
0-40	288.91	N.A.	57.30
0-60	338.61	N.A.	67.10
0-80	375.81	N.A.	74.50
0-90	407.90	N.A.	80.90
10-90	358.42	N.A.	71.10
20-40	138.05	N.A.	27.40
20-50	174.93	N.A.	34.70
40-70	63.65	N.A.	12.60
60-80	37.20	N.A.	7.40
70-80	23.25	N.A.	4.60
80-90	32.09	N.A.	6.40
90-110	72.28	N.A.	14.30
90-120	89.72	N.A.	17.80
90-130	94.90	N.A.	18.80
90-150	95.93	N.A.	19.00
90-180	96.49	N.A.	19.10
110-180	24.21	N.A.	4.80
0-180	504.39	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	49.48
10-20	101.38
20-30	76.24
30-40	61.81
40-50	36.88
50-60	12.82
60-70	13.95
70-80	23.25
80-90	32.09
90-100	37.49
100-110	34.79
110-120	17.44
120-130	5.17
130-140	0.61
140-150	0.42
150-160	0.32
160-170	0.18
170-180	0.06

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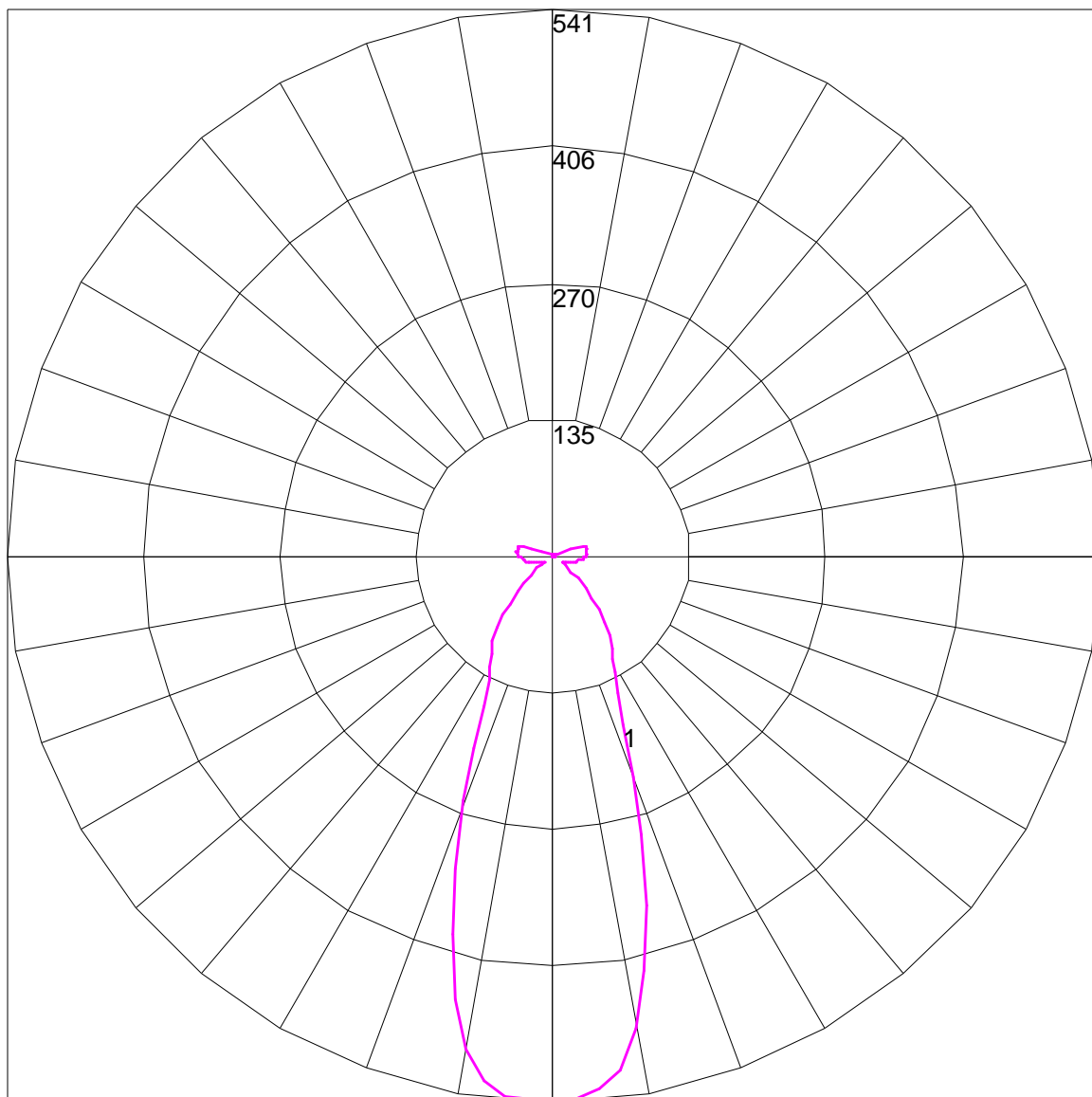
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	115	115	115	115	110	110	110	110	101	101	101	92	92	92	85	85	85	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	82	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	69	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	57	52	60	54	50	56	52	48	53	49	46	44
7	72	61	54	49	69	59	53	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	54	47	42	62	52	46	42	50	44	41	48	43	39	45	41	38	37
10	61	51	44	40	59	49	43	39	47	42	38	45	41	37	43	39	36	35

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SP-00662_2 ~ CP0608XT-13L35K-OSD-EX-NLSAL-PT.IES

POLAR GRAPH



Maximum Candela = 540.751 Located At Horizontal Angle = 67.5, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180)