

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00600\_2 ~ CP0608XT-13L35K-OSD-EX-FASAL-PT.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002

[TEST] SP-00661\_2\_M-13L

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

[MANUFAC] Spectrum Lighting

[ISSUE DATE] 7/9/2018

[LUMCAT] CP0608XT-13L35K-OSD-EX-FASAL-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] Frosted Acrylic Upper Lens

[OTHER] Aluminum Shade

[OTHER] 83.1% Downlight

[OTHER] 16.9% 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	683
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	53
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)	0.66
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-00600\_2 ~ CP0608XT-13L35K-OSD-EX-FASAL-PT.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4800	4666	4896
55	3454	3280	3371
65	3984	3886	3626
75	4480	4565	4289
85	6194	6088	5741

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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	539.271	539.271	539.271	539.271	539.271	539.271	539.271	539.271	539.271	539.271
2.5	538.337	540.496	537.613	539.669	538.216	538.629	540.084	537.673	539.883	538.399
5.0	536.843	532.907	533.967	532.145	536.212	532.556	532.641	537.891	535.553	536.192
7.5	515.317	523.404	513.724	518.249	513.737	514.276	519.615	519.156	525.589	524.967
10.0	482.294	479.905	473.232	479.687	475.901	470.347	483.150	486.611	496.194	491.324
12.5	428.154	430.876	420.994	427.014	424.066	420.360	432.646	436.227	448.252	448.372
15.0	364.382	367.921	357.095	368.127	363.620	359.910	374.624	375.034	390.369	386.613
17.5	302.515	303.612	296.678	306.369	305.351	301.322	312.892	313.522	324.544	324.529
20.0	241.337	247.736	239.154	251.924	248.171	245.327	257.602	251.854	265.535	261.917
22.5	198.831	192.436	195.895	200.112	204.165	200.093	204.805	206.753	210.934	210.372
25.0	161.521	167.858	162.250	170.526	165.325	167.025	173.360	168.035	176.262	173.480
27.5	146.910	144.333	145.217	147.228	149.437	147.709	148.206	150.798	151.920	149.817
30.0	136.829	137.782	137.177	138.911	140.556	141.411	139.567	139.988	139.983	140.593
32.5	128.783	130.854	128.413	133.644	132.675	133.828	134.636	131.540	133.290	132.293
35.0	121.020	120.762	119.327	123.404	125.022	125.254	124.806	123.607	124.064	124.812
37.5	110.811	110.715	109.397	112.502	114.798	115.409	114.233	112.888	114.011	114.939
40.0	100.417	100.920	99.178	101.837	104.174	104.763	103.722	101.748	103.806	103.291
42.5	90.639	91.209	88.921	91.192	93.363	93.716	93.218	91.139	93.563	92.917
45.0	80.902	81.824	78.653	81.385	82.534	82.462	83.413	80.578	83.890	83.308
47.5	72.192	72.667	70.410	71.625	74.000	73.414	73.661	73.016	74.318	74.603
50.0	63.674	64.196	62.551	62.951	65.571	65.257	65.656	65.557	65.971	66.331
52.5	57.497	57.087	55.875	54.623	57.973	57.990	57.854	58.403	57.758	59.124
55.0	51.962	53.138	49.343	50.655	50.703	51.004	53.249	51.674	54.618	52.330
57.5	50.955	50.734	48.898	47.277	48.914	49.034	49.113	51.187	51.749	50.812
60.0	50.212	51.169	48.872	48.034	47.267	48.260	48.755	50.755	51.335	50.853
62.5	50.732	51.375	49.275	48.545	46.793	47.748	48.491	50.751	50.905	50.160
65.0	50.889	51.234	49.636	47.837	46.313	47.280	48.716	50.598	50.001	49.310
67.5	49.783	50.792	48.799	47.135	45.801	46.423	48.506	49.657	49.055	48.352
70.0	48.522	49.979	47.957	46.450	45.217	45.524	46.618	48.604	47.711	47.378
72.5	46.842	49.016	47.063	45.740	44.349	44.494	45.033	47.136	46.444	46.635
75.0	45.319	47.900	46.171	44.962	43.387	43.456	44.320	45.805	45.647	45.912
77.5	44.132	47.165	45.288	44.309	42.145	42.335	43.350	44.867	44.911	44.587
80.0	43.589	46.747	44.457	43.924	41.262	41.275	41.800	44.219	44.429	43.252
82.5	44.139	46.347	43.858	43.536	41.203	41.360	41.016	44.227	44.028	42.653
85.0	44.283	45.959	43.525	43.144	41.047	41.460	41.640	43.790	43.883	42.100
87.5	43.852	45.606	44.084	42.896	40.709	41.701	41.991	42.554	43.719	42.199
90.0	43.540	45.272	44.557	42.851	40.361	41.853	41.941	41.860	43.510	42.234
92.5	43.367	45.016	44.810	42.808	39.996	41.496	41.739	41.961	43.337	41.768
95.0	42.691	44.793	44.712	42.769	39.846	40.936	41.355	41.996	43.235	41.328
97.5	41.538	44.096	43.898	42.453	39.961	39.548	40.880	41.950	42.685	41.032
100.0	40.880	43.233	42.976	41.878	39.871	38.404	40.317	41.881	41.424	40.699
102.5	40.610	42.524	41.874	41.036	39.573	37.999	39.857	41.788	40.463	40.231
105.0	39.101	41.857	40.763	39.987	38.239	37.576	39.482	37.259	39.889	38.598
107.5	36.809	36.648	39.638	38.766	36.055	37.110	38.104	29.083	34.358	33.602
110.0	26.341	30.560	38.279	37.434	29.633	36.037	36.043	18.962	23.577	25.952
112.5	11.673	17.633	36.659	35.963	20.306	33.809	33.076	7.548	14.097	12.357
115.0	5.282	3.851	31.387	34.422	15.463	31.816	29.615	2.754	5.757	3.253
117.5	2.296	2.018	22.793	32.929	13.094	30.182	20.372	1.503	1.860	2.258
120.0	1.245	1.043	14.298	31.457	11.797	27.136	8.633	1.004	1.118	1.495
122.5	0.805	0.915	5.877	26.361	10.978	22.288	4.009	0.833	0.734	1.073
125.0	0.673	0.803	2.107	20.101	8.605	15.993	1.849	0.845	0.560	0.818

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## CANDELA TABULATION - (Cont.)

127.5	0.615	0.751	1.198	12.368	5.688	8.198	1.206	0.918	0.529	0.762
130.0	0.569	0.710	0.877	4.286	3.474	3.674	0.957	0.796	0.564	0.661
132.5	0.526	0.794	0.845	2.295	1.446	1.909	0.736	0.622	0.675	0.517
135.0	0.456	0.872	0.772	1.357	1.204	1.049	0.522	0.555	0.812	0.463
137.5	0.382	0.918	0.683	1.043	1.314	0.827	0.668	0.509	0.771	0.482
140.0	0.491	0.925	0.742	0.796	0.866	0.616	0.860	0.473	0.677	0.471
142.5	0.611	0.758	0.848	0.648	0.347	0.411	0.738	0.439	0.613	0.440
145.0	0.595	0.638	0.957	0.505	0.368	0.547	0.596	0.632	0.555	0.509
147.5	0.578	0.683	1.069	0.744	0.424	0.838	0.608	0.838	0.547	0.632
150.0	0.534	0.675	0.905	0.967	0.550	0.819	0.621	0.696	0.546	0.794
152.5	0.522	0.526	0.700	0.887	0.675	0.686	0.595	0.563	0.565	0.974
155.0	0.805	0.432	0.602	0.797	0.737	0.704	0.567	0.721	0.586	0.850
157.5	0.991	0.446	0.522	0.620	0.784	0.762	0.521	0.844	0.784	0.625
160.0	0.796	0.470	0.719	0.562	0.733	0.685	0.476	0.762	0.920	0.625
162.5	0.620	0.506	0.847	0.805	0.701	0.623	0.439	0.742	0.755	0.662
165.0	0.470	0.743	0.812	0.777	0.696	0.680	0.584	0.816	0.677	0.725
167.5	0.582	0.892	0.760	0.640	0.523	0.749	0.773	0.943	0.675	0.701
170.0	0.626	0.766	0.749	0.744	0.549	0.742	0.620	0.758	0.709	0.647
172.5	0.601	0.530	0.738	0.776	0.677	0.577	0.703	0.495	0.887	0.656
175.0	0.679	0.569	0.577	0.697	0.504	0.632	0.613	0.699	0.915	0.798
177.5	0.575	0.627	0.645	0.664	0.705	0.666	0.753	0.557	0.683	0.779
180.0	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.650

## 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	539.271	539.271	539.271	539.271	539.271	539.271	539.271
2.5	539.180	537.595	539.068	540.894	539.322	539.599	538.337
5.0	535.421	538.364	534.047	536.338	537.969	534.470	536.843
7.5	529.562	522.766	524.586	530.370	520.344	523.347	515.317
10.0	497.256	491.500	493.004	494.307	487.794	489.544	482.294
12.5	453.427	444.053	445.115	451.840	439.968	438.528	428.154
15.0	395.650	383.825	388.778	394.176	380.754	379.697	364.382
17.5	333.083	323.952	327.415	334.360	320.438	316.075	302.515
20.0	274.141	264.306	271.041	276.657	259.449	259.137	241.337
22.5	216.151	215.266	217.109	219.129	211.084	205.526	198.831
25.0	181.258	171.828	180.643	183.206	168.975	172.887	161.521
27.5	150.652	150.406	150.881	148.520	149.795	148.587	146.910
30.0	141.005	138.167	137.925	139.541	139.536	138.162	136.829
32.5	134.009	128.952	129.975	130.508	129.947	131.956	128.783
35.0	124.299	120.708	120.394	120.736	120.565	122.892	121.020
37.5	114.413	110.041	110.450	110.950	110.294	113.161	110.811
40.0	103.355	98.774	100.519	101.074	99.822	102.420	100.417
42.5	92.360	89.244	90.589	91.299	90.247	91.517	90.639
45.0	83.448	80.016	81.688	82.023	80.808	83.068	80.902
47.5	74.591	71.889	72.881	73.022	72.604	74.850	72.192
50.0	66.335	63.884	64.382	65.029	64.522	66.531	63.674
52.5	58.502	57.596	55.996	58.336	58.195	58.250	57.497
55.0	53.402	51.401	53.605	55.246	51.995	54.372	51.962
57.5	49.200	51.033	51.367	52.953	51.397	50.714	50.955
60.0	49.041	50.651	51.492	52.406	50.818	50.690	50.212
62.5	48.703	49.948	51.596	51.800	50.529	50.640	50.732
65.0	47.774	49.216	51.531	51.088	50.121	50.359	50.889

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67.5	46.710	48.212	51.225	50.352	48.749	49.873	49.783
70.0	45.300	47.165	49.686	49.583	47.480	48.268	48.522
72.5	43.965	45.865	48.294	48.593	46.767	46.686	46.842
75.0	42.782	44.598	47.464	47.346	46.152	45.192	45.319
77.5	41.622	43.474	46.708	46.426	45.917	43.832	44.132
80.0	40.498	42.607	46.163	45.822	45.568	42.868	43.589
82.5	40.149	42.541	45.649	45.857	44.886	42.182	44.139
85.0	40.849	42.581	45.209	46.395	44.500	42.134	44.283
87.5	40.981	42.874	45.063	46.337	44.802	42.129	43.852
90.0	40.487	43.130	45.455	45.887	44.719	42.203	43.540
92.5	40.117	43.315	45.579	45.475	43.930	41.734	43.367
95.0	39.859	43.225	45.313	45.081	43.566	40.448	42.691
97.5	39.551	42.702	44.674	44.942	43.828	39.909	41.538
100.0	39.205	41.993	43.582	44.907	43.194	40.283	40.880
102.5	38.382	41.046	42.617	44.233	41.453	39.449	40.610
105.0	37.268	39.770	41.777	43.347	40.125	37.380	39.101
107.5	35.857	38.145	36.886	41.936	39.211	29.048	36.809
110.0	34.299	36.737	28.722	40.396	37.757	15.508	26.341
112.5	32.124	35.517	22.040	38.267	35.857	7.658	11.673
115.0	29.706	34.304	16.357	36.034	30.639	3.699	5.282
117.5	22.015	33.097	14.003	34.322	23.158	1.936	2.296
120.0	12.745	30.468	13.451	32.669	14.419	1.399	1.245
122.5	7.034	27.011	12.005	28.218	4.991	1.053	0.805
125.0	2.118	19.248	10.168	23.617	1.743	0.793	0.673
127.5	1.204	9.485	7.112	13.458	1.225	0.673	0.615
130.0	0.915	5.020	3.636	3.679	0.983	0.601	0.569
132.5	0.689	2.540	2.215	2.854	0.840	0.577	0.526
135.0	0.469	1.578	1.320	2.063	0.762	0.566	0.456
137.5	0.633	1.046	0.985	1.596	0.702	0.705	0.382
140.0	0.811	0.749	0.753	1.165	0.787	0.874	0.491
142.5	0.786	0.499	0.649	0.955	0.901	0.806	0.611
145.0	0.758	0.614	0.561	0.765	0.767	0.708	0.595
147.5	0.662	0.783	0.625	0.658	0.603	0.643	0.578
150.0	0.582	0.689	0.697	0.610	0.619	0.580	0.534
152.5	0.636	0.574	0.822	0.748	0.647	0.594	0.522
155.0	0.668	0.591	0.931	0.797	0.649	0.606	0.805
157.5	0.598	0.612	0.734	0.634	0.653	0.552	0.991
160.0	0.589	0.625	0.638	0.629	0.669	0.528	0.796
162.5	0.699	0.621	0.876	0.814	0.724	0.602	0.620
165.0	0.609	0.584	0.794	0.887	0.845	0.652	0.470
167.5	0.501	0.586	0.508	0.839	0.657	0.664	0.582
170.0	0.691	0.558	0.399	0.586	0.657	0.518	0.626
172.5	0.610	0.607	0.552	0.627	0.800	0.608	0.601
175.0	0.439	0.879	0.430	0.423	0.578	0.801	0.679
177.5	0.783	0.703	0.590	0.795	0.618	0.671	0.575
180.0	0.650	0.650	0.650	0.650	0.650	0.650	0.650

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Zone	Lumens	%Lamp	%Fixt
0-20	152.58	N.A.	22.30
0-30	234.92	N.A.	34.40
0-40	310.97	N.A.	45.50
0-60	423.17	N.A.	62.00
0-80	520.11	N.A.	76.20
0-90	567.37	N.A.	83.10
10-90	517.75	N.A.	75.80
20-40	158.38	N.A.	23.20
20-50	221.87	N.A.	32.50
40-70	161.06	N.A.	23.60
60-80	96.94	N.A.	14.20
70-80	48.09	N.A.	7.00
80-90	47.25	N.A.	6.90
90-110	86.84	N.A.	12.70
90-120	107.38	N.A.	15.70
90-130	113.75	N.A.	16.70
90-150	115.02	N.A.	16.80
90-180	115.59	N.A.	16.90
110-180	28.75	N.A.	4.20
0-180	682.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	49.61
10-20	102.97
20-30	82.34
30-40	76.05
40-50	63.49
50-60	48.72
60-70	48.85
70-80	48.09
80-90	47.25
90-100	46.35
100-110	40.49
110-120	20.54
120-130	6.37
130-140	0.86
140-150	0.42
150-160	0.31
160-170	0.19
170-180	0.06

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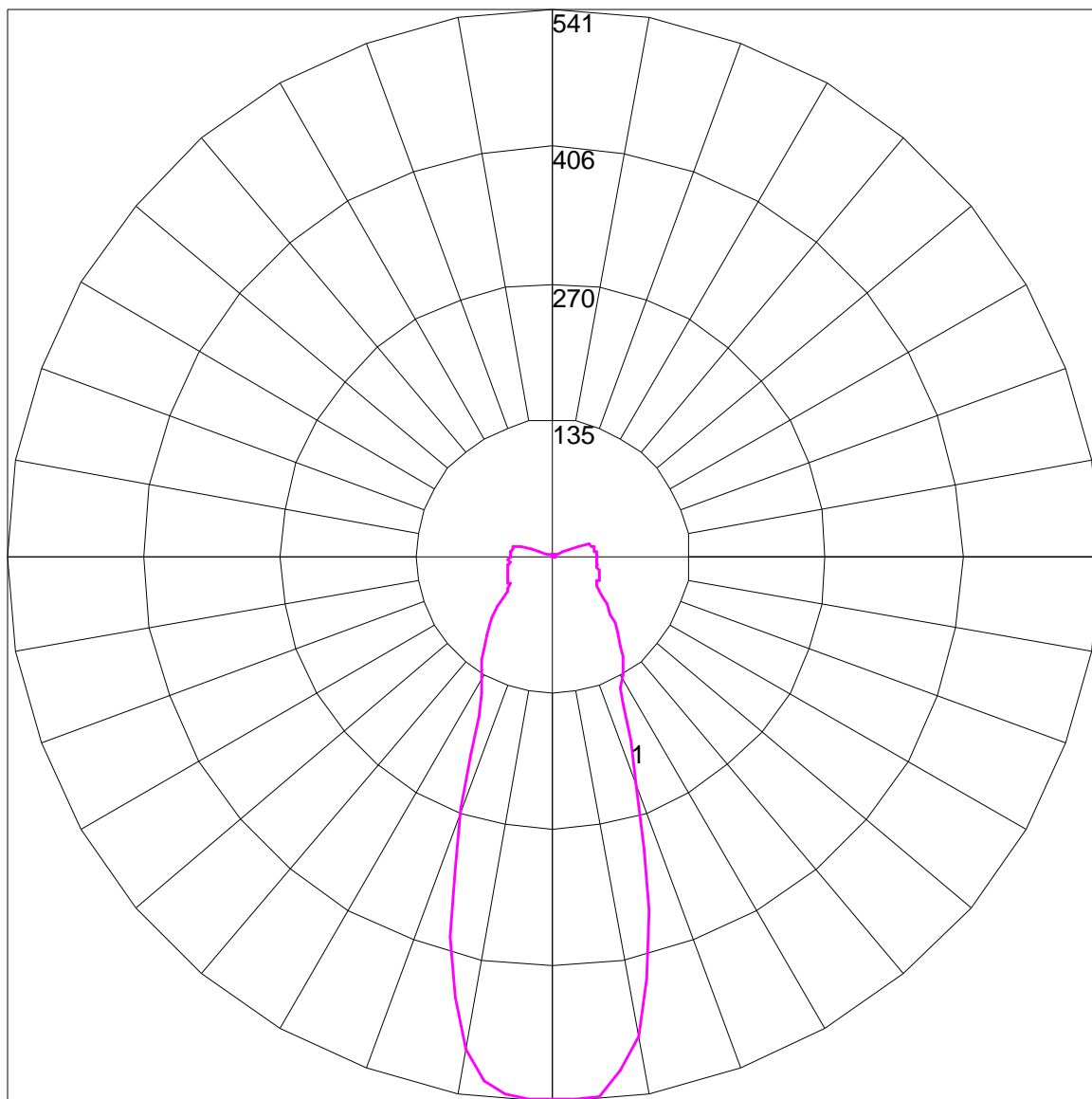
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	102	102	102	94	94	94	86	86	86	83
1	104	98	94	90	99	95	90	87	87	84	81	80	78	75	74	72	70	67
2	95	87	80	74	91	83	77	72	77	72	68	71	67	64	66	63	60	57
3	88	78	70	64	84	75	68	62	69	64	59	65	60	56	60	56	53	50
4	81	70	62	56	78	68	60	54	63	57	52	59	54	50	55	51	47	45
5	76	64	56	50	73	62	54	49	58	52	47	54	49	45	51	46	43	40
6	71	59	51	45	68	57	49	44	54	47	42	50	45	41	47	43	39	37
7	67	54	46	41	64	53	45	40	50	43	39	47	41	37	44	40	36	34
8	63	50	43	37	60	49	42	37	46	40	36	44	38	35	42	37	33	31
9	59	47	40	35	57	46	39	34	44	37	33	41	36	32	39	35	31	29
10	56	44	37	32	54	43	36	32	41	35	31	39	34	30	37	33	29	28

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00600\_2 ~ CP0608XT-13L35K-OSD-EX-FASAL-PT.IES

POLAR GRAPH



Maximum Candela = 540.894 Located At Horizontal Angle = 292.5, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)