

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

IESNA:LM-63-2002

[TEST] SP-00661\_M-10L

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

[MANUFAC] Spectrum Lighting

[ISSUEDATE] 7/6/2018

[LUMCAT] CP0608XT-10L35K-CSD-EX-FASAL-PT

[LUMINAIRE] Nom 6" diam x 8.2" H, Carli Pendant decorative luminaire

[LAMPCAT] N/A

[LAMP] N/A, 19mm LES

[OTHER] Closed Spherical Diffuser at LED

[OTHER] Frosted Acrylic Upper Lens

[OTHER] Aluminum Shade

[OTHER] 78.3% Downlight

[OTHER] 21.7% 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	628
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	48
Total Luminaire Watts	13
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.28
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 ~ CP0608XT-13L35K-CSD-EX-FASAL-PT.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4937	4818	5062
55	3787	3745	3733
65	4392	4342	4148
75	5209	5274	4945
85	7091	7394	6839

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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>
<b>0.0</b>	161.472	161.472	161.472	161.472	161.472	161.472	161.472	161.472	161.472	161.472
<b>2.5</b>	161.416	161.527	161.671	162.035	161.868	161.638	161.436	161.905	161.905	161.817
<b>5.0</b>	161.838	161.714	162.035	162.579	162.490	162.271	161.755	162.388	162.371	162.163
<b>7.5</b>	162.310	162.409	162.243	163.078	162.875	162.861	162.564	162.646	162.648	162.516
<b>10.0</b>	162.807	162.686	162.326	163.169	163.121	163.421	162.946	162.768	162.712	162.873
<b>12.5</b>	162.337	162.012	161.723	162.639	162.739	162.807	162.651	162.034	162.365	162.319
<b>15.0</b>	161.335	160.909	160.567	161.425	161.983	161.312	161.526	160.778	161.353	161.337
<b>17.5</b>	159.124	158.814	158.753	159.151	159.960	159.136	159.065	158.638	159.032	159.322
<b>20.0</b>	156.237	156.552	156.403	156.796	157.167	156.439	156.492	155.952	156.616	156.817
<b>22.5</b>	153.247	153.897	153.759	154.313	154.591	153.863	153.737	153.693	154.014	154.089
<b>25.0</b>	150.197	150.864	150.871	151.536	152.151	151.382	151.085	151.703	151.406	151.254
<b>27.5</b>	146.090	146.927	146.444	148.287	148.592	147.866	148.606	147.981	148.788	148.023
<b>30.0</b>	141.376	141.614	140.727	143.211	144.332	143.536	144.169	143.158	144.398	144.596
<b>32.5</b>	133.583	132.961	132.707	135.177	137.171	136.334	136.438	135.225	136.361	137.260
<b>35.0</b>	123.989	123.681	122.729	125.975	128.172	126.851	127.358	125.282	127.425	127.964
<b>37.5</b>	113.397	112.846	112.187	114.852	117.683	116.210	115.970	114.670	116.603	117.640
<b>40.0</b>	102.211	102.292	101.158	104.028	106.237	104.632	104.970	103.618	105.951	106.794
<b>42.5</b>	92.325	92.446	90.866	93.699	95.538	93.982	94.642	93.408	95.658	96.450
<b>45.0</b>	83.222	82.900	81.216	83.883	85.329	84.087	84.779	83.761	85.860	86.365
<b>47.5</b>	74.819	74.123	72.700	74.935	76.134	75.018	75.735	75.117	77.134	77.488
<b>50.0</b>	66.844	66.212	65.189	66.731	67.612	66.634	67.548	67.149	69.098	69.242
<b>52.5</b>	61.186	60.561	59.805	59.806	61.183	60.239	60.895	61.388	62.574	63.096
<b>55.0</b>	56.962	56.458	56.336	55.119	56.161	55.520	56.139	57.141	57.711	58.068
<b>57.5</b>	55.561	56.441	54.919	54.328	53.889	53.272	54.820	55.457	56.551	56.039
<b>60.0</b>	55.937	56.531	55.369	53.889	53.496	53.139	53.938	55.552	55.825	55.633
<b>62.5</b>	56.088	56.907	55.541	54.077	53.203	52.824	53.856	55.574	56.085	55.531
<b>65.0</b>	56.096	57.136	55.455	54.100	52.978	52.350	53.637	55.546	56.167	55.593
<b>67.5</b>	55.598	56.965	55.147	53.830	52.586	51.659	53.159	54.985	55.838	55.038
<b>70.0</b>	54.771	56.632	54.631	53.309	52.079	50.778	52.469	54.041	55.251	54.139
<b>72.5</b>	53.784	55.844	54.028	52.332	51.186	49.933	51.377	53.112	54.057	52.920
<b>75.0</b>	52.692	55.154	53.342	51.557	50.017	49.120	50.535	52.194	53.023	51.521
<b>77.5</b>	51.948	54.738	52.882	51.156	49.413	48.496	50.175	51.524	52.370	50.777
<b>80.0</b>	51.436	54.397	52.642	50.917	49.218	48.043	49.865	51.037	51.805	50.411
<b>82.5</b>	51.031	54.267	52.636	50.983	49.047	47.904	49.651	50.902	51.450	50.028
<b>85.0</b>	50.699	54.098	52.860	51.067	48.894	48.055	49.514	51.030	51.180	49.637
<b>87.5</b>	50.671	53.810	52.992	51.188	48.989	48.095	49.530	50.965	51.119	49.580
<b>90.0</b>	50.853	53.544	53.033	51.326	49.268	48.032	49.600	50.754	51.061	49.723
<b>92.5</b>	50.718	53.345	52.874	51.498	49.251	47.958	49.778	50.665	51.013	49.578
<b>95.0</b>	50.359	53.135	52.513	51.490	49.011	47.874	49.676	50.668	50.980	49.260
<b>97.5</b>	49.785	52.892	52.005	51.132	48.348	47.401	48.996	50.326	50.989	48.779
<b>100.0</b>	49.061	52.406	51.346	50.570	47.362	46.559	48.268	49.715	50.638	48.200
<b>102.5</b>	48.050	51.160	50.361	49.600	46.272	45.544	47.434	48.193	49.356	47.191
<b>105.0</b>	46.833	49.026	49.039	48.394	45.101	44.361	46.453	45.953	46.994	45.916
<b>107.5</b>	39.597	44.067	47.551	46.711	40.858	43.028	45.159	35.721	41.767	38.716
<b>110.0</b>	27.990	36.244	45.888	44.955	34.195	41.547	43.445	19.073	33.400	27.799
<b>112.5</b>	17.068	19.101	42.727	43.050	27.571	39.885	40.826	8.881	16.602	17.033
<b>115.0</b>	6.651	5.414	37.977	41.062	20.979	38.044	35.342	3.931	3.882	6.363
<b>117.5</b>	1.804	3.139	28.933	38.901	16.738	35.790	23.577	1.430	2.327	1.806
<b>120.0</b>	1.131	1.292	15.259	36.036	14.401	33.121	13.361	0.951	1.087	1.193
<b>122.5</b>	0.738	0.887	6.479	31.665	12.279	27.136	6.606	0.678	0.725	0.813
<b>125.0</b>	0.556	0.569	3.031	25.041	10.333	17.750	1.772	0.577	0.449	0.586

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**CANDELA TABULATION - (Cont.)**

127.5	0.495	0.555	1.069	13.537	7.521	10.286	1.283	0.502	0.419	0.508
130.0	0.528	0.537	0.751	4.973	3.988	4.815	0.874	0.449	0.400	0.528
132.5	0.524	0.506	0.557	2.889	1.964	1.708	0.645	0.448	0.414	0.545
135.0	0.491	0.494	0.500	1.338	1.215	1.091	0.484	0.494	0.424	0.562
137.5	0.470	0.552	0.495	0.987	0.796	0.707	0.480	0.499	0.421	0.539
140.0	0.458	0.582	0.550	0.693	0.662	0.571	0.474	0.469	0.419	0.489
142.5	0.434	0.502	0.560	0.526	0.562	0.472	0.460	0.484	0.421	0.460
145.0	0.398	0.454	0.521	0.434	0.493	0.411	0.458	0.538	0.417	0.447
147.5	0.429	0.523	0.493	0.513	0.438	0.385	0.489	0.497	0.391	0.456
150.0	0.513	0.575	0.480	0.552	0.396	0.398	0.502	0.371	0.374	0.480
152.5	0.526	0.567	0.473	0.495	0.386	0.406	0.472	0.349	0.389	0.489
155.0	0.482	0.549	0.474	0.471	0.405	0.408	0.454	0.422	0.410	0.488
157.5	0.447	0.495	0.496	0.525	0.428	0.430	0.463	0.419	0.454	0.487
160.0	0.419	0.463	0.543	0.544	0.452	0.474	0.475	0.345	0.482	0.486
162.5	0.389	0.525	0.560	0.481	0.473	0.476	0.493	0.344	0.458	0.484
165.0	0.359	0.570	0.541	0.438	0.489	0.430	0.484	0.410	0.444	0.480
167.5	0.376	0.545	0.532	0.447	0.479	0.398	0.401	0.419	0.465	0.448
170.0	0.434	0.510	0.535	0.460	0.445	0.385	0.358	0.371	0.473	0.396
172.5	0.458	0.432	0.557	0.486	0.448	0.394	0.419	0.363	0.441	0.437
175.0	0.452	0.400	0.602	0.506	0.484	0.430	0.447	0.391	0.440	0.550
177.5	0.461	0.565	0.571	0.510	0.443	0.446	0.381	0.435	0.544	0.558
180.0	0.497	0.497	0.497	0.497	0.497	0.497	0.497	0.497	0.497	0.497

**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	161.472	161.472	161.472	161.472	161.472	161.472	161.472
2.5	161.541	161.483	161.907	161.466	161.526	161.511	161.416
5.0	161.890	161.912	162.105	161.620	161.689	161.690	161.838
7.5	162.625	162.274	162.094	161.801	162.089	162.289	162.310
10.0	163.019	162.589	162.047	161.873	162.646	162.625	162.807
12.5	162.962	162.081	161.936	161.791	162.354	162.500	162.337
15.0	162.040	161.002	161.011	160.805	161.496	161.623	161.335
17.5	159.959	158.894	158.619	158.525	159.292	159.414	159.124
20.0	157.503	156.061	156.125	156.096	156.174	156.843	156.237
22.5	154.535	153.539	153.442	153.449	153.150	153.624	153.247
25.0	151.848	151.238	150.472	150.448	150.192	150.392	150.197
27.5	149.549	147.640	146.968	146.923	146.132	147.139	146.090
30.0	145.206	143.100	141.731	141.768	141.305	142.347	141.376
32.5	138.010	135.583	133.232	134.184	133.853	134.703	133.583
35.0	129.348	125.871	123.969	125.280	124.549	126.066	123.989
37.5	118.617	115.462	113.240	114.378	114.466	115.569	113.397
40.0	107.936	104.534	102.811	103.870	103.823	105.090	102.211
42.5	97.331	94.161	92.968	93.967	93.691	94.648	92.325
45.0	87.337	84.210	83.537	84.458	83.931	84.809	83.222
47.5	78.237	75.343	74.922	75.564	75.323	76.136	74.819
50.0	69.993	67.310	67.293	67.838	67.570	68.314	66.844
52.5	63.010	61.312	61.642	61.959	61.917	62.165	61.186
55.0	57.931	56.898	57.682	57.832	57.835	57.572	56.962
57.5	55.705	54.964	57.175	56.518	56.066	56.094	55.561
60.0	54.318	54.992	56.987	55.832	56.057	55.215	55.937
62.5	54.211	54.862	57.460	56.168	55.760	55.555	56.088
65.0	53.862	54.606	57.614	56.187	55.243	55.675	56.096

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**CANDELA TABULATION - (Cont.)**

67.5	53.139	54.047	57.098	55.683	54.538	55.341	55.598
70.0	52.229	53.245	56.438	55.177	53.683	54.610	54.771
72.5	51.027	52.393	55.468	54.668	53.019	53.047	53.784
75.0	49.917	51.500	54.604	54.203	52.504	51.652	52.692
77.5	48.957	50.896	53.966	53.812	52.016	50.612	51.948
80.0	48.299	50.532	53.463	53.503	51.548	49.830	51.436
82.5	48.126	50.565	53.258	53.338	51.457	49.606	51.031
85.0	47.993	50.935	53.169	53.346	51.671	49.405	50.699
87.5	47.923	51.184	53.339	53.657	51.737	49.254	50.671
90.0	47.857	51.327	53.505	53.861	51.678	49.044	50.853
92.5	47.796	51.194	53.661	53.874	51.585	48.702	50.718
95.0	47.650	50.822	53.561	53.591	51.461	48.380	50.359
97.5	47.360	50.342	52.864	52.770	51.091	48.105	49.785
100.0	46.909	49.768	51.998	51.896	50.511	47.620	49.061
102.5	46.180	48.933	50.732	50.926	49.481	46.652	48.050
105.0	45.171	47.863	48.611	49.755	48.060	42.899	46.833
107.5	43.673	46.426	44.436	48.210	46.388	32.614	39.597
110.0	41.852	44.658	38.054	46.477	44.494	22.096	27.990
112.5	39.458	42.810	26.278	44.386	41.371	11.018	17.068
115.0	34.890	40.890	17.657	42.318	37.155	2.865	6.651
117.5	26.419	38.580	16.901	40.293	27.979	1.836	1.804
120.0	17.693	35.905	15.911	37.471	14.348	1.035	1.131
122.5	8.502	30.172	14.330	33.090	6.155	0.801	0.738
125.0	2.229	21.544	12.023	26.068	2.922	0.621	0.556
127.5	1.347	13.488	7.846	13.801	1.177	0.577	0.495
130.0	0.719	5.984	4.321	4.871	0.811	0.543	0.528
132.5	0.571	1.942	2.493	2.692	0.632	0.538	0.524
135.0	0.473	1.281	1.098	1.158	0.629	0.529	0.491
137.5	0.471	0.848	0.856	0.942	0.565	0.511	0.470
140.0	0.493	0.641	0.652	0.757	0.444	0.515	0.458
142.5	0.564	0.528	0.549	0.640	0.424	0.578	0.434
145.0	0.588	0.510	0.466	0.532	0.502	0.594	0.398
147.5	0.522	0.510	0.437	0.445	0.501	0.482	0.429
150.0	0.488	0.531	0.432	0.402	0.422	0.417	0.513
152.5	0.520	0.531	0.487	0.449	0.405	0.480	0.526
155.0	0.536	0.510	0.528	0.482	0.448	0.516	0.482
157.5	0.521	0.504	0.525	0.483	0.473	0.478	0.447
160.0	0.483	0.512	0.503	0.491	0.477	0.459	0.419
162.5	0.399	0.504	0.433	0.519	0.463	0.491	0.389
165.0	0.370	0.477	0.393	0.514	0.430	0.512	0.359
167.5	0.454	0.465	0.441	0.438	0.411	0.495	0.376
170.0	0.497	0.466	0.474	0.388	0.406	0.490	0.434
172.5	0.454	0.456	0.459	0.397	0.423	0.516	0.458
175.0	0.447	0.435	0.454	0.402	0.464	0.533	0.452
177.5	0.521	0.435	0.484	0.395	0.453	0.523	0.461
180.0	0.497	0.497	0.497	0.497	0.497	0.497	0.497

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Zone	Lumens	%Lamp	%Fixt
0-20	60.92	N.A.	9.70
0-30	130.43	N.A.	20.80
0-40	208.47	N.A.	33.20
0-60	326.55	N.A.	52.00
0-80	436.33	N.A.	69.40
0-90	491.87	N.A.	78.30
10-90	476.38	N.A.	75.80
20-40	147.55	N.A.	23.50
20-50	212.98	N.A.	33.90
40-70	172.57	N.A.	27.50
60-80	109.78	N.A.	17.50
70-80	55.29	N.A.	8.80
80-90	55.53	N.A.	8.80
90-110	103.13	N.A.	16.40
90-120	127.71	N.A.	20.30
90-130	135.10	N.A.	21.50
90-150	136.19	N.A.	21.70
90-180	136.58	N.A.	21.70
110-180	33.46	N.A.	5.30
0-180	628.45	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	15.49
10-20	45.43
20-30	69.51
30-40	78.04
40-50	65.43
50-60	52.65
60-70	54.49
70-80	55.29
80-90	55.53
90-100	55.08
100-110	48.05
110-120	24.58
120-130	7.39
130-140	0.78
140-150	0.31
150-160	0.22
160-170	0.13
170-180	0.04

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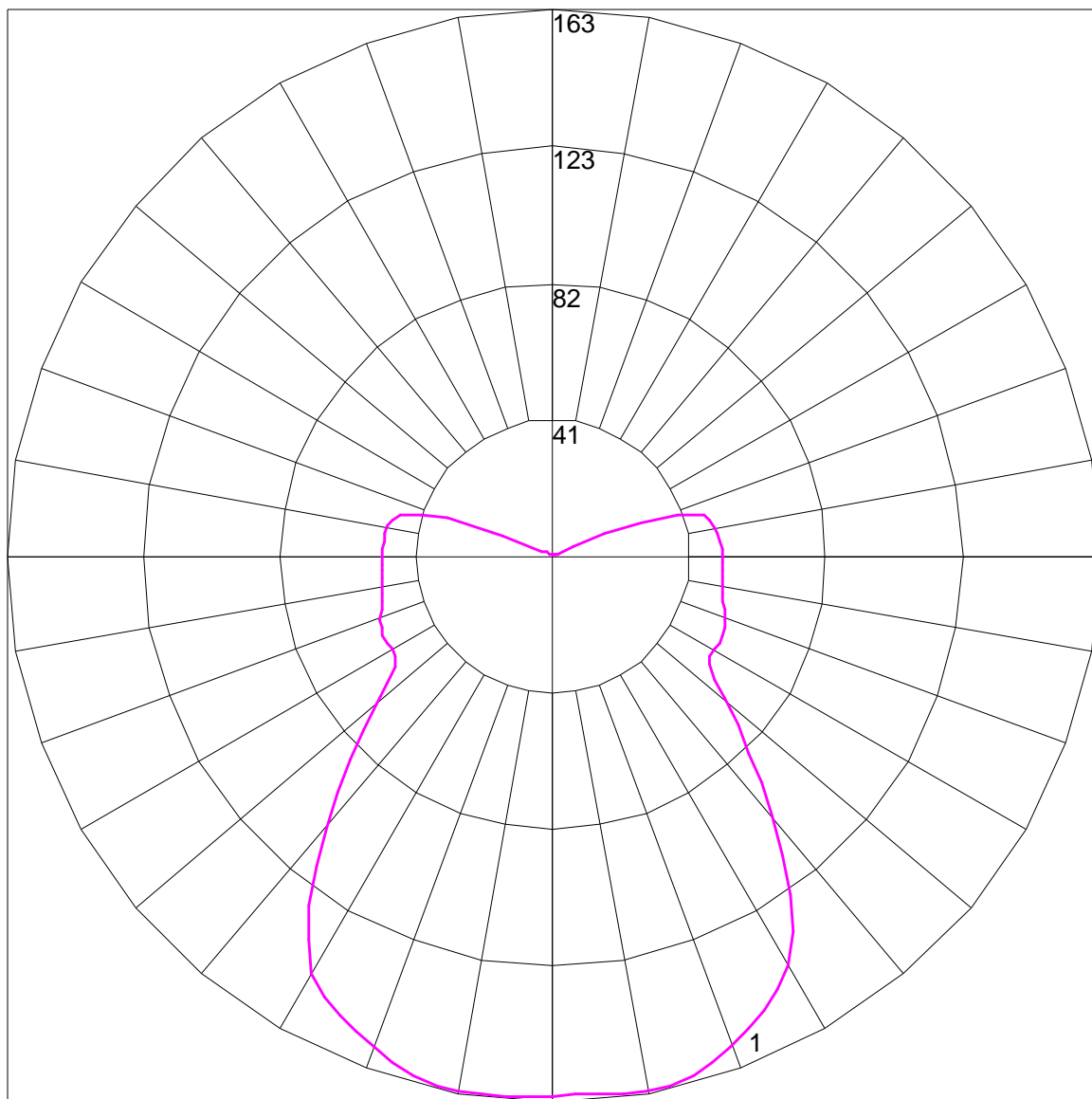
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	109	109	109	109	99	99	99	90	90	90	82	82	82	78
1	101	95	90	85	96	90	86	81	82	78	75	74	71	69	67	65	63	59
2	91	82	74	68	86	78	71	65	71	65	60	64	60	56	58	55	51	48
3	83	72	63	56	79	68	61	54	62	56	50	57	51	47	51	47	43	40
4	76	64	54	48	72	61	52	46	56	49	43	51	45	40	46	41	37	34
5	70	57	48	41	66	54	46	40	50	43	37	46	40	35	42	37	33	30
6	65	51	42	36	61	49	41	35	45	38	33	42	35	31	38	33	29	26
7	60	47	38	32	57	45	37	31	41	34	29	38	32	28	35	30	26	24
8	56	43	34	28	53	41	33	28	38	31	26	35	29	25	32	27	23	21
9	52	39	31	26	50	38	30	25	35	28	24	32	27	22	30	25	21	19
10	49	36	28	23	47	35	28	23	32	26	22	30	24	20	28	23	19	18

IES INDOOR REPORT  
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POLAR GRAPH



Maximum Candela = 163.421 Located At Horizontal Angle = 112.5, Vertical Angle = 10  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)