

**IES INDOOR REPORT**
**PHOTOMETRIC FILENAME : SP-00724\_2 ~ CP0608XT-20L35K-OSD-EX-FASFA-PT.IES**
**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] SP-00724\_2  
 [TESTLAB] Spectrum Lighting Photometric Lab, VLS-245-981  
 [MANUFAC] Spectrum Lighting  
 [ISSUEDATE] 10/17/2018  
 [UPDATE] 10/30/2018  
 [LUMCAT] CP0608XT-20L-35K-OSD-EX-FASFA-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 Lens  
 [OTHER] Frosted Acrylic Shade  
 [OTHER] 83.1% Downlight  
 [OTHER] 16.9% 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	668
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	31
Total Luminaire Watts	21.7
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	0.66
Spacing Criterion (90-270)	0.66
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-00724\_2 ~ CP0608XT-20L35K-OSD-EX-FASFA-PT.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4468	4600	4701
55	2993	3247	3285
65	3486	3785	3532
75	4150	4586	4504
85	5839	6004	5744

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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	563.731	563.731	563.731	563.731	563.731	563.731	563.731	563.731	563.731	563.731
2.5	562.686	563.245	561.268	563.728	562.866	564.249	565.624	566.059	563.191	564.771
5.0	561.380	564.111	560.987	563.547	561.869	557.206	558.731	556.759	555.632	553.833
7.5	556.327	554.553	554.833	553.256	558.284	549.262	550.555	544.937	544.426	540.105
10.0	515.713	522.291	517.576	523.284	518.695	502.686	506.004	499.076	498.809	491.540
12.5	470.714	477.912	473.837	480.201	475.527	453.880	459.188	448.104	449.536	438.067
15.0	402.317	413.827	406.827	417.609	409.059	383.063	389.834	379.322	381.350	371.009
17.5	334.683	348.859	340.801	352.117	342.671	313.060	321.786	309.241	314.722	303.088
20.0	269.750	282.784	277.257	283.331	276.602	252.509	260.916	251.524	253.590	246.337
22.5	213.190	227.724	221.413	226.762	217.943	196.772	206.133	195.749	201.073	191.723
25.0	177.480	183.426	179.866	181.158	180.563	169.336	173.379	169.029	169.958	166.528
27.5	150.510	156.275	150.761	155.445	151.850	146.223	148.134	145.077	147.294	143.805
30.0	139.837	141.959	139.629	143.379	141.191	139.937	141.960	140.830	140.110	138.110
32.5	128.906	130.910	128.985	132.820	131.671	133.019	134.627	135.207	131.717	131.338
35.0	117.608	121.743	118.879	123.041	123.931	124.396	125.095	123.555	121.598	120.054
37.5	106.749	111.494	108.911	112.448	114.263	114.266	115.013	111.947	110.899	108.528
40.0	96.371	100.773	99.062	101.535	102.232	101.164	104.131	100.468	99.567	96.305
42.5	85.888	89.524	88.527	90.389	90.565	89.358	93.015	89.210	88.126	84.728
45.0	75.316	78.110	77.534	79.178	79.238	79.532	81.636	78.434	76.594	74.539
47.5	66.463	69.121	68.141	70.233	70.100	70.368	71.342	68.569	66.809	64.554
50.0	58.743	60.656	59.549	61.688	62.535	61.977	62.000	60.208	58.173	54.898
52.5	51.714	54.455	53.686	55.215	55.756	54.146	54.097	53.197	51.273	48.364
55.0	45.026	48.538	48.838	48.949	49.416	46.818	47.160	47.882	45.231	45.646
57.5	43.624	46.456	47.736	47.858	47.415	44.456	43.967	44.827	43.190	44.097
60.0	44.197	44.603	47.620	46.965	47.214	45.592	42.662	43.983	42.589	43.674
62.5	44.409	46.123	47.949	47.612	46.271	46.054	43.066	44.004	43.447	43.541
65.0	44.528	47.440	48.352	48.080	45.109	46.158	44.122	44.683	44.683	43.621
67.5	43.316	46.406	47.415	46.932	45.176	45.293	42.733	44.555	43.450	43.568
70.0	41.887	45.347	46.363	45.837	45.490	44.049	40.694	43.960	41.818	43.440
72.5	41.870	44.141	46.399	45.004	45.537	43.042	40.250	42.932	41.846	42.799
75.0	41.978	42.896	46.387	44.296	45.553	42.102	40.074	41.713	42.013	41.939
77.5	41.503	41.500	45.040	44.001	43.781	40.879	40.090	41.280	41.093	41.569
80.0	41.065	40.563	43.787	43.483	41.966	39.603	40.124	41.097	40.244	41.347
82.5	41.484	40.864	43.310	42.422	41.483	39.668	39.220	40.987	40.973	41.927
85.0	41.749	41.226	42.929	42.006	41.066	39.871	38.322	40.892	41.634	42.669
87.5	40.776	41.708	43.008	42.747	41.318	39.879	37.893	40.343	41.766	42.297
90.0	39.901	42.032	42.857	43.035	41.581	39.829	37.570	39.735	41.739	41.790
92.5	39.486	42.116	41.980	42.699	41.900	38.398	38.136	40.700	40.969	42.097
95.0	39.185	41.662	41.075	42.438	41.872	37.237	38.339	41.709	40.486	42.418
97.5	39.239	40.583	40.107	42.259	40.572	38.586	36.791	40.486	40.898	41.653
100.0	38.755	39.741	39.372	41.544	39.579	39.510	35.763	39.324	40.777	40.857
102.5	37.025	39.113	39.045	40.390	39.375	38.212	36.400	38.907	39.441	39.718
105.0	35.817	37.408	38.497	37.594	38.309	34.868	36.291	38.258	37.995	38.617
107.5	35.508	34.942	37.658	33.755	35.589	24.529	34.423	36.207	36.360	37.729
110.0	34.601	33.964	36.315	23.143	28.279	14.950	32.235	34.229	34.808	36.571
112.5	32.910	33.776	34.448	9.255	14.233	7.244	29.490	32.535	33.364	34.406
115.0	30.541	31.463	29.297	4.032	5.609	2.130	24.608	30.672	31.700	32.267
117.5	27.474	28.306	21.525	1.851	3.062	1.799	16.847	28.345	29.813	30.199
120.0	24.657	26.111	13.908	1.324	1.773	1.507	10.527	25.570	25.662	26.908
122.5	22.038	24.190	6.385	1.203	1.596	1.270	5.714	21.896	19.727	21.239
125.0	16.309	19.025	3.228	1.128	1.321	1.062	3.131	16.740	13.378	15.096

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## CANDELA TABULATION - (Cont.)

127.5	8.684	13.261	2.114	1.059	0.979	0.886	2.337	9.349	6.781	8.247
130.0	4.971	8.667	1.586	1.181	1.057	0.906	1.814	4.496	3.600	3.876
132.5	3.066	4.193	1.255	1.318	1.348	1.092	1.457	2.648	1.994	2.356
135.0	2.176	2.841	1.184	1.018	1.221	1.239	1.280	1.756	1.632	1.708
137.5	1.624	1.631	1.174	0.737	0.933	1.361	1.188	1.732	1.683	1.828
140.0	1.449	1.602	1.128	0.800	0.916	1.120	1.073	1.595	1.509	1.680
142.5	1.361	1.564	1.078	0.852	0.972	0.697	0.951	1.379	1.284	1.344
145.0	1.534	1.449	1.047	0.820	0.991	0.783	0.822	1.151	1.302	1.137
147.5	1.744	1.338	1.018	0.822	1.003	1.055	0.690	0.917	1.354	0.996
150.0	1.416	1.249	0.897	0.976	1.138	1.064	0.802	0.979	1.184	1.042
152.5	1.055	1.203	0.801	1.123	1.284	1.008	0.950	1.158	1.004	1.160
155.0	1.130	1.311	1.060	1.242	1.143	0.870	1.231	1.197	1.095	1.311
157.5	1.225	1.355	1.221	1.300	1.009	0.717	1.491	1.196	1.169	1.471
160.0	1.482	1.266	0.928	1.245	0.989	0.793	1.216	1.176	1.115	1.276
162.5	1.586	1.150	0.815	1.273	0.902	0.883	1.128	1.203	1.082	1.093
165.0	1.443	1.012	0.939	1.360	0.694	1.003	1.436	1.437	1.085	1.106
167.5	1.264	1.361	0.896	1.386	0.910	1.026	1.176	1.281	0.997	1.120
170.0	1.110	1.259	0.997	1.201	1.117	0.987	1.047	1.076	1.198	1.118
172.5	0.967	1.008	1.080	1.034	1.145	0.992	1.195	1.238	1.482	1.102
175.0	0.882	1.095	0.923	1.037	1.031	1.212	1.129	1.460	1.197	1.102
177.5	0.862	1.139	1.077	1.230	0.828	1.146	1.329	1.156	1.254	0.810
180.0	1.133	1.133	1.133	1.133	1.133	1.133	1.133	1.133	1.133	1.133

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	563.731	563.731	563.731	563.731	563.731	563.731	563.731
2.5	563.897	562.926	564.782	563.556	561.747	564.146	562.686
5.0	553.970	551.355	555.723	560.664	559.126	563.530	561.380
7.5	542.507	536.825	542.058	549.540	550.292	552.196	556.327
10.0	494.326	488.036	494.793	511.915	510.225	518.265	515.713
12.5	444.174	433.287	443.593	465.766	463.817	472.557	470.714
15.0	375.971	364.981	374.833	400.015	395.997	408.258	402.317
17.5	309.233	295.405	308.267	334.331	328.536	342.099	334.683
20.0	249.937	241.413	248.313	268.761	261.951	273.639	269.750
22.5	197.252	189.015	197.716	214.272	206.235	218.372	213.190
25.0	167.533	165.175	167.777	174.579	170.091	175.635	177.480
27.5	144.567	143.325	145.876	149.822	145.606	151.314	150.510
30.0	138.164	138.348	137.415	140.346	137.483	140.386	139.837
32.5	130.548	132.172	128.816	130.923	128.400	130.095	128.906
35.0	120.732	120.211	120.041	121.542	118.284	120.164	117.608
37.5	109.917	108.352	110.026	110.661	107.296	109.878	106.749
40.0	97.691	96.829	98.786	98.858	95.589	99.443	96.371
42.5	86.116	85.564	87.319	88.027	84.915	87.678	85.888
45.0	75.244	74.913	75.677	77.642	74.909	75.517	75.316
47.5	65.339	64.911	65.929	68.507	65.041	66.542	66.463
50.0	56.248	56.051	57.284	59.800	55.241	58.224	58.743
52.5	49.891	48.774	50.491	52.206	49.604	51.465	51.714
55.0	45.313	43.667	44.527	44.873	45.433	44.890	45.026
57.5	43.143	41.726	43.053	44.404	43.804	45.345	43.624
60.0	42.149	43.106	43.023	44.903	42.817	46.071	44.197
62.5	42.339	43.368	43.162	45.912	43.058	46.177	44.409
65.0	42.956	42.731	43.337	46.955	43.492	46.160	44.528

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00724\_2 ~ CP0608XT-20L35K-OSD-EX-FASFA-PT.IES****CANDELA TABULATION - (Cont.)**

67.5	42.736	41.629	44.085	46.745	43.800	44.828	43.316
70.0	42.301	40.234	44.910	46.519	44.099	43.802	41.887
72.5	41.243	39.962	43.643	46.067	44.372	44.469	41.870
75.0	40.086	40.222	42.273	45.538	44.612	44.774	41.978
77.5	40.199	40.061	41.686	44.471	44.291	43.727	41.503
80.0	40.414	39.757	41.142	43.562	43.977	43.111	41.065
82.5	39.444	39.634	41.147	43.310	43.710	43.615	41.484
85.0	38.534	39.555	41.024	42.982	43.494	43.624	41.749
87.5	38.906	38.994	40.107	42.438	43.506	42.672	40.776
90.0	39.270	38.361	39.494	42.160	43.452	42.560	39.901
92.5	39.578	37.868	40.060	42.454	43.199	43.694	39.486
95.0	39.750	37.385	40.308	42.827	42.784	43.711	39.185
97.5	39.294	36.813	39.674	43.325	42.008	42.464	39.239
100.0	38.754	36.276	38.868	42.403	41.123	41.355	38.755
102.5	37.949	36.289	37.714	39.720	40.053	40.367	37.025
105.0	36.991	34.846	35.395	36.609	39.038	39.246	35.817
107.5	35.679	23.443	31.273	33.084	38.095	38.032	35.508
110.0	33.593	13.075	23.372	23.654	36.432	36.561	34.601
112.5	30.194	7.223	10.950	9.864	34.052	34.957	32.910
115.0	24.480	2.662	4.120	3.855	28.624	33.320	30.541
117.5	15.782	1.923	2.423	2.265	20.834	31.671	27.474
120.0	9.201	1.346	1.457	1.518	13.452	28.428	24.657
122.5	4.775	1.118	1.012	1.131	6.312	24.749	22.038
125.0	2.559	0.927	0.925	1.136	3.305	18.034	16.309
127.5	2.068	0.798	1.035	1.260	2.140	10.788	8.684
130.0	1.643	0.849	1.119	1.337	1.784	6.406	4.971
132.5	1.258	1.125	1.193	1.404	1.691	2.295	3.066
135.0	1.094	1.243	1.197	1.463	1.540	2.061	2.176
137.5	1.032	1.207	1.181	1.522	1.375	1.922	1.624
140.0	1.051	1.087	1.202	1.415	1.284	1.813	1.449
142.5	1.097	0.903	1.231	1.299	1.201	1.690	1.361
145.0	1.158	0.965	1.049	1.166	1.159	1.446	1.534
147.5	1.222	1.167	0.844	1.045	1.123	1.240	1.744
150.0	1.008	1.181	0.819	1.071	1.455	1.219	1.416
152.5	0.755	1.113	0.805	1.118	1.736	1.223	1.055
155.0	0.897	1.038	0.976	1.287	1.337	1.307	1.130
157.5	1.048	0.959	1.090	1.344	0.986	1.334	1.225
160.0	0.973	0.897	0.866	1.061	0.851	1.246	1.482
162.5	1.031	0.860	0.814	1.051	0.877	1.184	1.586
165.0	1.367	0.925	1.019	1.311	1.104	1.142	1.443
167.5	1.235	0.896	1.115	1.067	1.232	1.211	1.264
170.0	1.081	0.905	1.196	0.912	1.166	1.457	1.110
172.5	1.068	1.055	1.169	1.046	1.048	1.552	0.967
175.0	0.986	0.938	0.965	1.196	1.061	1.211	0.882
177.5	1.101	1.060	1.026	1.168	0.860	1.259	0.862
180.0	1.133	1.133	1.133	1.133	1.133	1.133	1.133

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Zone	Lumens	%Lamp	%Fixt
0-20	158.94	N.A.	23.80
0-30	241.83	N.A.	36.20
0-40	317.16	N.A.	47.50
0-60	420.72	N.A.	62.90
0-80	510.29	N.A.	76.30
0-90	555.35	N.A.	83.10
10-90	503.38	N.A.	75.30
20-40	158.22	N.A.	23.70
20-50	218.19	N.A.	32.60
40-70	147.87	N.A.	22.10
60-80	89.57	N.A.	13.40
70-80	45.25	N.A.	6.80
80-90	45.06	N.A.	6.70
90-110	82.62	N.A.	12.40
90-120	103.15	N.A.	15.40
90-130	110.01	N.A.	16.50
90-150	112.07	N.A.	16.80
90-180	113.02	N.A.	16.90
110-180	30.39	N.A.	4.50
0-180	668.37	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	51.97
10-20	106.97
20-30	82.89
30-40	75.33
40-50	59.97
50-60	43.59
60-70	44.32
70-80	45.25
80-90	45.06
90-100	44.29
100-110	38.33
110-120	20.53
120-130	6.86
130-140	1.34
140-150	0.72
150-160	0.52
160-170	0.31
170-180	0.11

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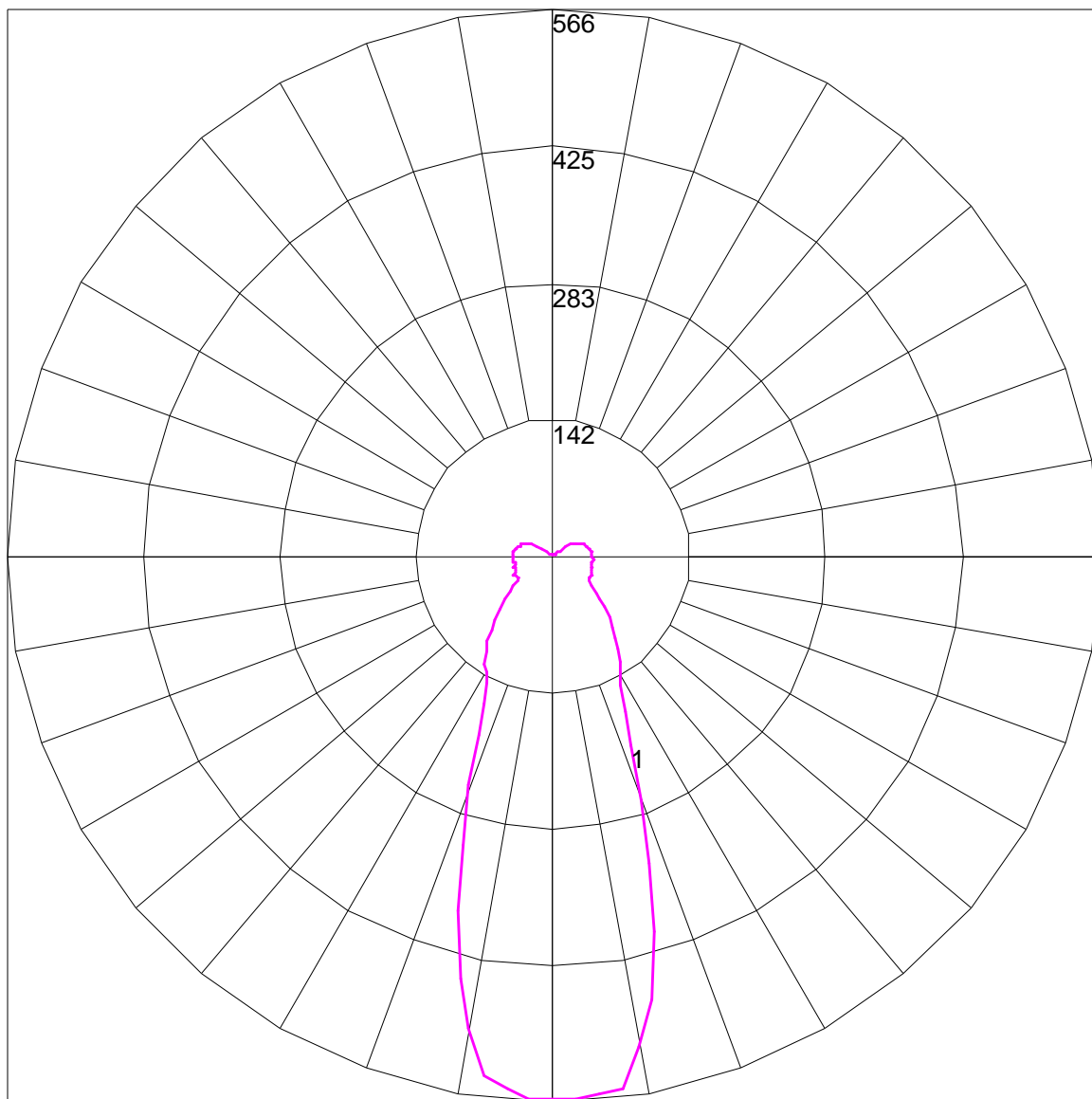
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	87	87	87	83
1	104	99	94	90	99	95	91	87	88	84	81	81	78	76	75	73	71	67
2	96	87	81	75	91	84	78	73	78	73	69	72	68	65	67	64	61	58
3	88	78	71	65	84	76	69	63	70	65	60	65	61	57	61	57	54	51
4	82	71	63	57	79	69	61	56	64	58	53	60	55	51	56	52	48	46
5	77	65	57	51	73	63	55	50	59	53	48	55	50	46	52	47	44	42
6	72	60	52	46	69	58	51	45	55	48	44	51	46	42	48	44	40	38
7	67	55	48	42	65	54	47	41	51	45	40	48	43	39	45	41	37	35
8	64	52	44	39	61	50	43	38	48	41	37	45	40	36	43	38	35	33
9	60	48	41	36	58	47	40	35	45	39	34	42	37	33	40	36	32	31
10	57	45	38	34	55	44	38	33	42	36	32	40	35	31	38	34	30	29

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00724\_2 ~ CP0608XT-20L35K-OSD-EX-FASFA-PT.IES

POLAR GRAPH



Maximum Candela = 566.059 Located At Horizontal Angle = 157.5, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)