

IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00661_2 ~ CP0608XT-20L35K-OSDEX-NLSFA-PT.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] SP-00661_2
 [TESTLAB] Spectrum Lighting Photometric Lab, VLS-245-981
 [MANUFAC] Spectrum Lighting
 [ISSUEDATE] 4/18/2018
 [UPDATE] 10/31/2018
 [LUMCAT] CP0608XT-20L-35K-OSD-EX-NLSFA-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] Acrylic Shade
 [OTHER] 75.8% Downlight
 [OTHER] 24.2% 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	836
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	39
Total Luminaire Watts	21.7
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	0.60
Spacing Criterion (90-270)	0.60
Spacing Criterion (Diagonal)	0.62
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-00661_2 ~ CP0608XT-20L35K-OSDEX-NLSFA-PT.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2937	2960	3314
55	653	783	664
65	2800	2932	2430
75	6070	6584	5805
85	11275	12734	11178

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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	759.980	759.980	759.980	759.980	759.980	759.980	759.980	759.980	759.980	759.980
2.5	758.216	761.138	757.843	762.050	759.116	757.873	760.631	757.351	759.053	757.895
5.0	755.489	750.654	755.584	749.192	753.340	752.396	750.711	753.373	751.926	757.860
7.5	724.755	727.964	717.543	731.886	722.670	715.160	725.855	731.074	739.868	732.338
10.0	667.477	672.309	661.871	666.845	660.607	656.644	675.428	674.181	691.035	688.704
12.5	587.925	590.798	578.744	591.078	583.560	576.971	594.211	602.317	620.750	614.812
15.0	491.163	498.874	484.785	499.279	491.100	485.517	507.429	507.363	530.583	523.546
17.5	396.963	400.225	394.188	405.024	402.485	397.532	415.178	414.299	430.850	429.942
20.0	304.393	316.069	304.629	324.174	317.189	311.082	332.153	323.600	343.245	335.231
22.5	239.450	239.557	241.853	244.523	249.892	246.714	256.524	251.568	260.220	263.358
25.0	188.841	195.330	185.161	203.013	195.246	189.953	205.630	198.873	211.187	199.951
27.5	164.684	164.588	165.294	163.395	167.737	166.788	171.318	168.656	171.936	175.441
30.0	151.380	148.604	151.321	153.278	155.629	152.697	154.227	157.717	158.685	161.888
32.5	135.320	137.473	135.381	142.712	142.132	140.881	146.436	145.730	151.138	150.811
35.0	118.372	121.198	119.245	125.018	127.986	129.504	132.674	133.012	138.465	140.263
37.5	101.020	103.635	101.188	107.318	110.685	110.992	116.310	116.622	125.033	123.018
40.0	83.570	84.105	83.055	89.564	92.228	91.553	98.158	98.098	106.447	104.812
42.5	66.508	64.228	66.397	71.912	74.011	74.509	79.389	79.587	87.422	87.258
45.0	49.513	49.774	49.888	54.803	55.861	57.638	62.172	61.083	69.711	69.758
47.5	36.518	35.963	35.970	38.517	41.729	42.156	45.356	46.531	52.077	52.443
50.0	23.978	23.724	22.848	25.437	28.442	26.884	31.798	33.411	36.360	35.258
52.5	16.756	11.577	16.516	15.030	18.951	17.588	18.852	22.082	21.278	24.303
55.0	9.824	12.992	11.781	12.583	9.990	9.186	13.682	11.264	15.672	14.043
57.5	15.460	14.661	16.206	12.759	12.848	11.471	9.488	12.761	11.272	13.508
60.0	21.178	21.000	21.389	18.993	16.624	14.330	15.797	16.811	16.625	13.858
62.5	28.472	27.583	29.621	25.905	23.794	21.100	22.785	25.036	22.513	21.110
65.0	35.761	36.647	37.446	34.080	31.037	27.935	29.940	33.836	31.190	28.386
67.5	42.998	45.473	44.047	42.086	37.133	35.076	37.128	41.456	39.614	35.784
70.0	49.995	52.840	50.976	49.836	43.346	42.266	45.154	48.977	47.074	43.152
72.5	55.563	60.276	58.692	57.685	51.122	49.630	53.240	55.582	54.403	50.409
75.0	61.399	68.013	66.601	65.657	58.716	56.806	61.966	62.199	61.354	57.391
77.5	68.400	75.707	74.875	73.110	64.928	63.484	70.439	70.549	68.448	63.584
80.0	74.474	83.261	82.051	80.023	70.899	69.488	77.237	78.638	75.870	69.368
82.5	77.586	89.227	87.518	85.319	75.668	74.033	83.692	83.120	81.895	74.241
85.0	80.610	91.146	91.044	89.245	79.916	77.965	88.573	87.279	85.358	78.510
87.5	83.418	92.275	92.081	91.167	82.253	80.838	92.438	89.032	88.166	81.688
90.0	84.545	91.793	91.684	91.706	83.466	81.600	92.887	90.135	89.991	82.868
92.5	82.296	90.382	89.787	90.660	81.502	79.422	92.265	87.960	89.977	81.095
95.0	79.778	87.452	87.741	88.705	79.260	76.881	88.785	85.593	87.724	79.058
97.5	76.828	84.285	85.566	85.745	76.410	73.916	85.197	82.513	85.153	76.703
100.0	73.326	80.799	81.936	82.325	73.560	70.752	81.378	79.244	82.259	73.802
102.5	69.092	76.922	77.267	78.309	70.710	67.397	77.411	75.444	78.096	70.352
105.0	63.195	72.611	72.715	74.080	66.631	63.599	73.194	65.365	72.875	64.929
107.5	55.478	60.082	68.230	69.075	60.758	59.456	68.406	41.096	57.084	57.885
110.0	38.480	40.102	63.305	63.852	48.183	55.501	62.824	21.066	34.116	39.018
112.5	13.194	22.729	58.173	59.622	27.645	51.670	55.892	8.654	17.742	12.247
115.0	2.102	7.308	45.702	55.593	15.747	47.219	47.429	1.274	5.089	2.241
117.5	1.488	1.322	30.492	50.641	12.467	42.444	32.465	1.189	1.127	1.549
120.0	1.281	1.150	17.126	45.565	9.950	36.229	11.478	1.136	1.072	1.320
122.5	1.319	1.102	4.284	35.179	8.055	29.408	1.918	1.123	0.999	1.296
125.0	1.197	1.114	1.652	24.366	5.713	17.840	1.237	1.208	0.921	1.187

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CANDELA TABULATION - (Cont.)

127.5	0.997	1.205	1.223	12.581	3.075	4.701	1.177	1.389	0.974	1.048
130.0	1.083	1.326	1.215	1.052	1.970	1.824	1.509	1.303	1.064	1.099
132.5	1.281	1.232	1.268	1.191	1.707	1.479	1.559	1.000	1.086	1.200
135.0	1.291	1.071	1.285	1.318	1.505	1.421	1.467	0.994	1.095	1.236
137.5	1.244	1.148	1.299	1.291	1.328	1.414	1.333	1.189	1.108	1.260
140.0	1.100	1.278	1.388	1.248	1.418	1.194	1.183	1.215	1.122	1.183
142.5	0.935	1.199	1.473	1.093	1.598	0.950	1.230	1.148	1.071	1.094
145.0	1.137	1.085	1.256	0.990	1.832	1.236	1.341	1.217	1.016	1.001
147.5	1.397	1.373	1.059	1.137	2.079	1.552	1.329	1.345	1.093	0.909
150.0	1.399	1.702	1.118	1.258	1.816	1.352	1.286	1.447	1.169	1.060
152.5	1.376	1.586	1.186	1.285	1.457	1.158	1.461	1.539	1.119	1.212
155.0	1.212	1.451	1.329	1.324	1.301	1.157	1.672	1.398	1.077	1.272
157.5	1.089	1.282	1.319	1.397	1.172	1.171	1.374	1.196	1.103	1.298
160.0	1.596	1.121	0.759	1.469	1.285	1.277	1.068	1.252	1.075	1.106
162.5	1.830	0.987	0.813	1.541	1.337	1.258	1.044	1.268	0.895	0.945
165.0	1.532	1.077	1.560	1.418	1.230	1.059	1.208	1.016	0.959	0.829
167.5	1.289	1.288	1.286	1.336	1.497	1.211	1.567	0.879	1.137	1.173
170.0	1.100	0.990	1.194	1.511	1.679	1.229	1.507	0.905	1.069	1.346
172.5	1.009	1.163	1.201	1.839	1.454	1.271	1.292	1.154	1.218	1.193
175.0	1.017	1.296	1.011	1.370	1.194	1.433	1.403	1.342	1.212	0.957
177.5	0.932	1.083	1.188	0.911	1.483	1.024	1.374	1.115	1.530	1.160
180.0	1.194	1.194	1.194	1.194	1.194	1.194	1.194	1.194	1.194	1.194

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	759.980	759.980	759.980	759.980	759.980	759.980	759.980
2.5	760.476	757.228	760.989	761.581	760.367	761.379	758.216
5.0	754.385	754.026	752.334	754.314	760.942	751.643	755.489
7.5	738.817	733.958	739.196	739.375	728.812	738.137	724.755
10.0	695.516	679.406	684.354	691.671	682.078	678.938	667.477
12.5	621.566	610.909	611.866	616.743	602.718	608.224	587.925
15.0	536.683	518.873	525.240	531.426	511.587	514.356	491.163
17.5	441.938	428.880	433.896	439.093	419.974	416.269	396.963
20.0	354.210	341.678	349.231	354.438	328.230	330.457	304.393
22.5	271.790	268.204	266.267	274.028	260.105	246.062	239.450
25.0	216.417	210.003	216.060	219.066	196.725	202.790	188.841
27.5	177.621	175.029	171.740	175.475	172.361	162.135	164.684
30.0	160.423	161.757	158.105	156.263	153.327	151.568	151.380
32.5	153.831	148.287	148.077	145.534	139.941	140.930	135.320
35.0	141.027	134.667	131.955	130.878	126.978	122.226	118.372
37.5	125.740	118.682	115.458	115.172	109.001	103.709	101.020
40.0	107.974	101.216	97.429	96.719	90.912	87.219	83.570
42.5	89.446	82.968	79.395	77.728	72.895	70.923	66.508
45.0	71.840	64.320	61.542	60.535	55.198	55.865	49.513
47.5	54.447	48.814	44.131	43.571	41.418	41.046	36.518
50.0	38.611	34.574	31.351	31.215	28.055	27.264	23.978
52.5	23.029	23.042	19.598	19.185	17.671	15.815	16.756
55.0	15.611	12.367	14.283	15.110	9.717	12.169	9.824
57.5	9.001	12.339	11.095	11.503	13.643	11.342	15.460
60.0	12.413	14.858	17.515	17.488	18.385	17.732	21.178
62.5	16.287	20.686	24.160	23.572	26.013	24.078	28.472
65.0	23.359	27.062	31.553	30.876	33.559	30.335	35.761

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67.5	30.458	35.205	39.078	38.298	40.880	36.864	42.998
70.0	38.027	43.542	46.941	46.539	48.526	43.846	49.995
72.5	45.394	51.572	54.489	54.573	56.878	51.009	55.563
75.0	50.991	59.584	61.385	61.638	64.910	58.417	61.399
77.5	56.693	66.560	68.222	68.805	72.387	64.635	68.400
80.0	62.993	73.483	74.961	76.332	78.686	69.528	74.474
82.5	68.992	79.337	81.248	83.051	83.284	73.882	77.586
85.0	73.784	85.068	86.918	87.597	87.719	77.741	80.610
87.5	77.456	89.659	90.367	90.809	91.961	79.118	83.418
90.0	77.650	93.096	91.320	91.208	92.719	78.627	84.545
92.5	77.139	89.868	90.089	90.654	90.134	77.153	82.296
95.0	74.936	86.692	86.856	88.446	87.285	75.070	79.778
97.5	72.924	83.740	84.161	86.005	84.222	73.260	76.828
100.0	71.274	80.445	81.873	83.236	80.323	71.588	73.326
102.5	68.405	76.071	78.132	79.526	75.878	68.359	69.092
105.0	63.618	72.304	73.485	74.739	71.475	64.512	63.195
107.5	59.687	70.004	59.480	70.227	67.095	42.626	55.478
110.0	56.851	66.848	40.798	65.978	62.769	15.021	38.480
112.5	52.271	61.998	27.612	61.432	58.467	6.154	13.194
115.0	45.873	56.754	16.628	56.653	47.161	1.684	2.102
117.5	32.726	50.886	12.474	52.232	33.516	1.175	1.488
120.0	13.674	44.689	10.465	48.042	18.727	1.308	1.281
122.5	4.380	38.063	8.823	38.100	3.646	1.106	1.319
125.0	2.036	26.608	7.265	25.132	1.058	0.869	1.197
127.5	1.211	9.943	4.664	14.193	0.783	0.982	0.997
130.0	1.273	1.839	1.887	4.101	0.903	1.110	1.083
132.5	1.196	1.274	1.346	1.390	1.071	1.031	1.281
135.0	1.053	1.140	1.037	1.101	0.987	0.961	1.291
137.5	1.084	1.319	1.408	1.040	0.887	1.066	1.244
140.0	1.179	1.269	1.809	1.036	1.101	1.167	1.100
142.5	1.182	1.081	1.516	1.089	1.302	1.239	0.935
145.0	1.159	0.925	1.243	1.153	1.133	1.289	1.137
147.5	1.025	0.783	1.338	0.969	0.990	1.219	1.397
150.0	0.868	0.873	1.395	0.758	1.117	1.138	1.399
152.5	0.967	1.052	1.118	0.836	1.197	1.011	1.376
155.0	1.102	1.028	0.922	0.933	0.969	0.988	1.212
157.5	1.220	0.946	1.153	1.164	0.877	1.265	1.089
160.0	1.313	1.173	1.279	1.340	1.224	1.384	1.596
162.5	1.239	1.385	1.191	1.278	1.389	1.281	1.830
165.0	1.107	1.365	1.205	1.075	1.358	1.150	1.532
167.5	0.923	1.201	1.286	0.829	1.279	1.109	1.289
170.0	0.945	1.081	1.441	1.273	1.171	1.339	1.100
172.5	1.022	1.222	1.320	1.363	1.298	1.082	1.009
175.0	1.314	1.211	1.118	1.186	1.569	1.316	1.017
177.5	0.949	1.222	1.310	1.003	1.086	1.346	0.932
180.0	1.194	1.194	1.194	1.194	1.194	1.194	1.194

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Zone	Lumens	%Lamp	%Fixt
0-20	208.35	N.A.	24.90
0-30	306.59	N.A.	36.70
0-40	386.14	N.A.	46.20
0-60	447.29	N.A.	53.50
0-80	543.27	N.A.	65.00
0-90	634.06	N.A.	75.80
10-90	564.47	N.A.	67.50
20-40	177.79	N.A.	21.30
20-50	223.94	N.A.	26.80
40-70	92.60	N.A.	11.10
60-80	95.98	N.A.	11.50
70-80	64.54	N.A.	7.70
80-90	90.79	N.A.	10.90
90-110	161.89	N.A.	19.40
90-120	191.98	N.A.	23.00
90-130	199.14	N.A.	23.80
90-150	200.89	N.A.	24.00
90-180	201.91	N.A.	24.20
110-180	40.02	N.A.	4.80
0-180	835.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	69.60
10-20	138.75
20-30	98.24
30-40	79.55
40-50	46.15
50-60	15.00
60-70	31.44
70-80	64.54
80-90	90.79
90-100	91.12
100-110	70.77
110-120	30.08
120-130	7.17
130-140	0.98
140-150	0.76
150-160	0.56
160-170	0.35
170-180	0.12

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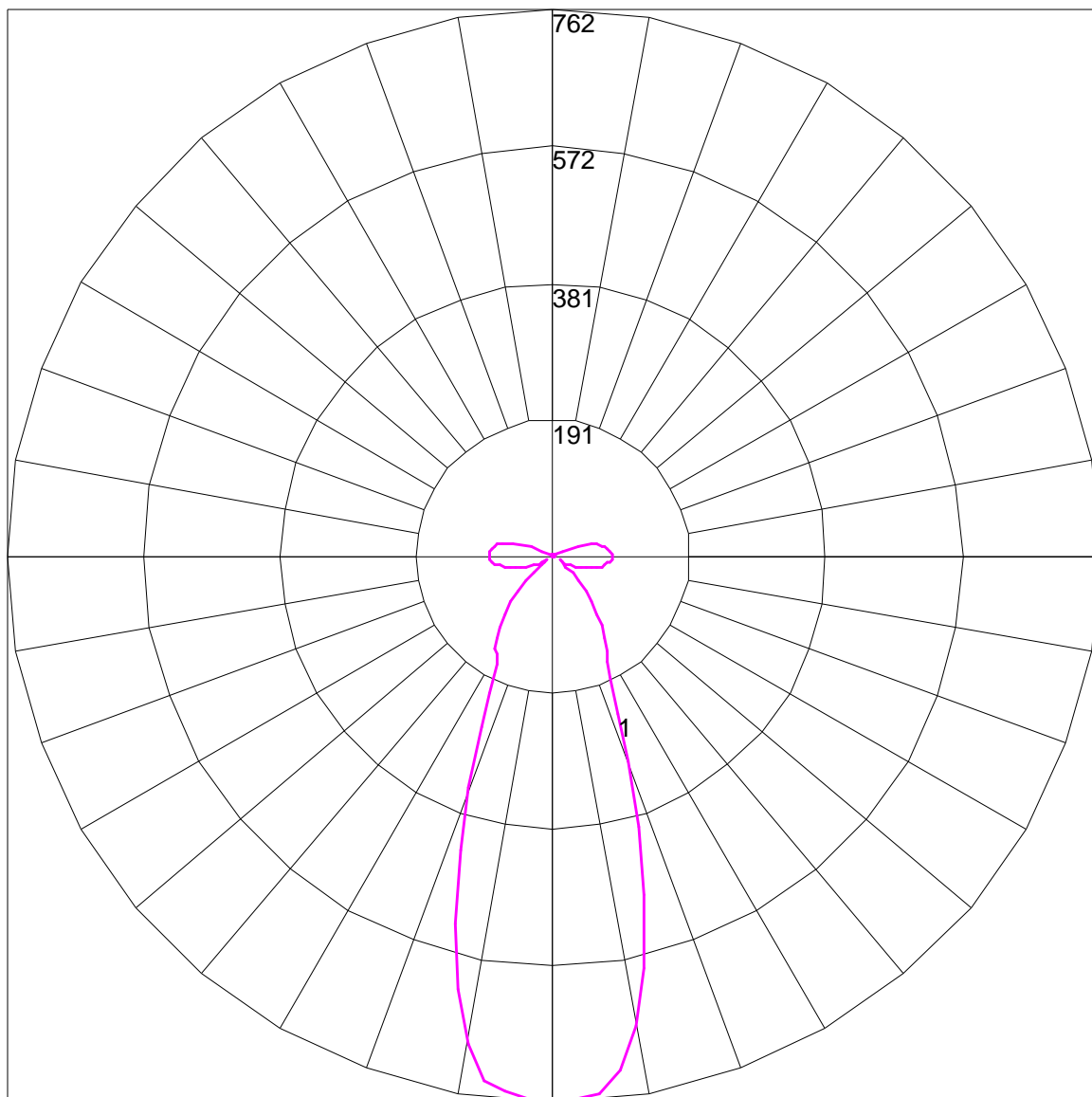
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76
1	101	95	90	86	96	91	86	82	82	78	75	74	71	68	66	64	62	58
2	93	84	77	72	88	80	74	69	73	68	64	66	62	59	60	57	54	50
3	86	76	68	62	82	73	66	60	66	61	56	60	56	52	55	51	48	45
4	80	69	61	55	76	67	59	54	61	55	50	56	51	47	51	47	44	41
5	75	64	56	50	72	61	54	49	57	51	46	52	47	43	48	44	41	38
6	71	59	51	46	68	57	50	45	53	47	42	49	44	40	45	41	38	36
7	67	55	47	42	64	53	46	41	50	44	39	46	41	37	43	39	36	34
8	63	51	44	39	60	50	43	38	47	41	37	44	39	35	41	37	34	32
9	60	48	41	36	57	47	40	36	44	38	34	41	36	33	39	35	32	30
10	57	46	39	34	55	44	38	34	42	36	32	39	35	31	37	33	30	28

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SP-00661_2 ~ CP0608XT-20L35K-OSDEX-NLSFA-PT.IES

POLAR GRAPH



Maximum Candela = 762.05 Located At Horizontal Angle = 67.5, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (0 - 180)