

**IES INDOOR REPORT**
**PHOTOMETRIC FILENAME : SP-00648\_2 ~ SR2DMO-XT13L-E1-RDD2F-XXK-MDMWSO.IES**
**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] SP-00648\_2\_M-13L  
 [TESTLAB] VLS-245-981  
 [MANUFAC] Spectrum Lighting  
 [ISSUE DATE] 3/16/2018  
 [UPDATE] 4/30/2018  
 [LUMCAT] SR2DMO-XT13L-E1-RDD2F-xxK-MD-MW-SO  
 [LUMINAIRE] Nom. 2" Round Trim Downlight, Medium Beam  
 [OTHER] Matte White Trim, Solite lens  
 [OTHER] 32.7 Degree Beam Angle  
 [LAMP] N/A  
 [LAMPCAT] N/A, Min. 83 CRI  
 [OTHER] Total Luminaire Watts is approximate  
 [OTHER] For New Construction Non-IC Housing: SR2DMO-XT-series  
 [OTHER] For RDD2F Downlight Trim  
 [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	943
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	63
Total Luminaire Watts	15
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.56
Spacing Criterion (90-270)	0.54
Spacing Criterion (Diagonal)	0.56
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.15 ft (Diameter)
Luminous Width (90-270)	0.15 ft (Diameter)
Luminous Height	0.00 ft

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00648\_2 ~ SR2DMO-XT13L-E1-RDD2F-XXK-MDMWSO.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	34947	35921	34275
55	33544	33759	33255
65	24005	23351	22685
75	13759	13936	11458
85	10006	11716	15773

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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	2488.471	2488.471	2488.471	2488.471	2488.471	2488.471	2488.471	2488.471	2488.471	2488.471
2.5	2478.144	2466.647	2451.642	2474.750	2470.119	2474.530	2474.278	2472.198	2478.792	2469.598
5.0	2338.028	2336.182	2341.447	2341.359	2344.382	2343.948	2339.785	2341.285	2338.664	2338.114
7.5	2181.973	2168.373	2166.020	2177.891	2182.506	2186.198	2179.092	2181.441	2180.089	2175.631
10.0	1930.553	1928.772	1933.080	1933.094	1936.390	1933.672	1929.619	1932.464	1932.467	1931.467
12.5	1674.911	1665.728	1674.829	1669.550	1675.725	1671.381	1662.066	1673.767	1673.796	1677.892
15.0	1395.874	1397.046	1395.110	1391.484	1382.655	1376.847	1376.323	1387.196	1396.251	1400.679
17.5	1123.426	1126.618	1130.873	1110.198	1103.735	1093.651	1087.128	1110.660	1116.501	1132.875
20.0	884.933	889.413	879.265	869.853	854.950	845.948	845.360	862.046	876.145	887.619
22.5	656.740	661.954	662.540	637.777	628.525	615.542	611.955	631.648	639.735	660.112
25.0	478.063	482.058	472.748	462.259	447.669	436.542	437.386	448.590	462.415	473.225
27.5	313.152	315.359	322.850	297.693	292.720	278.788	272.412	288.768	290.602	311.468
30.0	210.181	211.997	203.039	199.374	188.326	181.059	181.191	187.626	196.664	204.678
32.5	120.037	125.221	127.536	112.627	108.657	101.993	101.044	107.086	108.746	120.576
35.0	84.048	85.964	83.650	78.883	75.213	73.110	71.491	75.262	78.003	83.938
37.5	54.094	58.430	59.175	53.976	51.392	50.612	48.896	51.286	51.298	56.582
40.0	48.104	48.996	48.223	46.877	44.815	44.474	43.641	45.362	45.285	47.819
42.5	42.894	43.758	43.071	42.425	40.434	39.725	40.557	40.562	40.416	41.172
45.0	40.607	40.563	41.739	40.342	39.826	38.373	38.715	38.193	37.640	38.589
47.5	38.210	37.810	38.946	38.593	38.421	37.104	37.013	36.130	34.965	36.165
50.0	35.420	36.906	35.214	36.891	35.704	36.024	35.236	34.708	33.854	34.036
52.5	32.963	36.377	33.043	35.195	33.286	34.216	33.453	32.747	32.796	31.592
55.0	31.617	33.497	31.819	32.820	31.344	30.787	31.741	29.718	30.174	28.594
57.5	29.598	30.172	29.082	30.365	28.514	27.692	30.036	26.828	27.507	25.649
60.0	25.451	26.335	25.447	25.926	24.333	25.310	24.411	24.207	23.742	22.793
62.5	21.196	22.409	21.031	21.293	20.086	22.258	18.479	21.163	19.995	19.690
65.0	16.671	17.309	16.217	16.364	15.754	17.978	16.370	17.438	16.989	16.230
67.5	12.917	12.431	12.704	12.026	12.593	14.289	14.069	14.067	14.022	12.807
70.0	10.107	9.652	9.650	10.130	10.193	11.195	10.715	11.008	11.179	9.411
72.5	7.901	7.319	7.775	8.227	7.245	8.187	8.214	7.535	8.679	7.717
75.0	5.852	5.427	5.927	6.350	4.873	5.749	6.381	5.021	6.451	6.284
77.5	3.760	3.655	4.127	4.736	3.385	4.770	3.854	4.687	4.505	4.878
80.0	2.638	2.454	2.457	3.159	2.467	3.326	2.619	2.764	3.329	3.494
82.5	2.163	2.215	2.565	1.999	2.163	1.929	2.312	2.300	2.166	1.836
85.0	1.433	1.648	1.678	1.262	2.259	1.345	1.566	2.241	1.780	1.494
87.5	1.627	1.410	1.246	1.067	1.175	1.177	0.976	1.341	1.305	1.314
90.0	0.837	0.000	0.853	0.000	0.000	1.138	0.483	0.952	0.000	1.049
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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## CANDELA TABULATION - (Cont.)

127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	2488.471	2488.471	2488.471	2488.471	2488.471	2488.471	2488.471
2.5	2445.248	2471.100	2462.843	2470.817	2473.906	2468.690	2478.144
5.0	2333.726	2334.359	2332.506	2334.190	2335.532	2334.442	2338.028
7.5	2150.509	2173.055	2161.267	2167.168	2174.000	2166.823	2181.973
10.0	1925.644	1924.748	1918.696	1917.375	1918.753	1922.222	1930.553
12.5	1658.714	1669.483	1649.575	1647.682	1657.597	1655.914	1674.911
15.0	1391.029	1390.382	1375.217	1370.280	1373.915	1382.094	1395.874
17.5	1122.607	1120.527	1099.003	1091.137	1099.901	1106.319	1123.426
20.0	878.555	880.032	861.552	856.642	860.683	869.491	884.933
22.5	657.283	653.794	637.154	631.585	635.885	642.437	656.740
25.0	470.406	471.429	460.156	457.257	460.158	465.903	478.063
27.5	314.463	309.168	298.316	292.945	301.264	300.997	313.152
30.0	201.328	204.483	196.529	194.762	196.630	200.068	210.181
32.5	125.229	117.965	112.948	108.371	109.838	113.309	120.037
35.0	79.055	81.942	76.536	76.112	77.600	78.257	84.048
37.5	57.783	53.722	53.657	53.073	52.357	53.631	54.094
40.0	46.265	45.759	45.724	46.230	47.434	45.794	48.104
42.5	42.554	39.689	41.842	41.850	43.211	41.204	42.894
45.0	39.713	38.399	39.151	38.830	40.916	39.575	40.607
47.5	37.543	36.956	36.766	36.005	38.626	38.463	38.210
50.0	34.852	35.149	34.742	34.486	36.345	35.779	35.420
52.5	31.774	32.824	32.805	33.133	33.820	32.833	32.963
55.0	28.792	29.307	30.096	29.846	30.682	30.930	31.617
57.5	25.879	25.841	27.211	26.328	27.453	29.182	29.598
60.0	22.257	22.481	23.577	23.404	24.007	25.321	25.451
62.5	18.156	18.883	19.785	20.540	20.491	21.166	21.196
65.0	15.129	14.847	16.485	16.556	16.836	16.566	16.671

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00648\_2 ~ SR2DMO-XT13L-E1-RDD2F-XXK-MDMWSO.IES****CANDELA TABULATION - (Cont.)**

67.5	12.616	11.415	13.237	12.956	13.389	12.421	12.917
70.0	9.771	8.586	9.868	10.996	10.148	10.841	10.107
72.5	7.169	7.132	7.364	8.794	8.811	8.702	7.901
75.0	5.249	6.033	5.955	6.523	7.242	6.156	5.852
77.5	4.391	5.022	4.546	5.038	4.363	4.760	3.760
80.0	3.035	3.253	3.119	2.996	3.076	3.663	2.638
82.5	1.834	2.434	1.869	2.501	2.034	2.760	2.163
85.0	1.104	1.648	1.308	1.067	1.503	2.408	1.433
87.5	1.345	1.214	1.269	1.340	1.195	1.372	1.627
90.0	0.158	0.993	0.660	0.000	1.060	0.000	0.837
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00648\_2 ~ SR2DMO-XT13L-E1-RDD2F-XXK-MDMWSO.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	589.33	N.A.	62.50
0-30	804.23	N.A.	85.30
0-40	860.34	N.A.	91.20
0-60	918.29	N.A.	97.30
0-80	941.42	N.A.	99.80
0-90	943.28	N.A.	100.00
10-90	732.53	N.A.	77.70
20-40	271.01	N.A.	28.70
20-50	301.73	N.A.	32.00
40-70	74.52	N.A.	7.90
60-80	23.13	N.A.	2.50
70-80	6.56	N.A.	0.70
80-90	1.86	N.A.	0.20
90-110	0.07	N.A.	0.00
90-120	0.07	N.A.	0.00
90-130	0.07	N.A.	0.00
90-150	0.07	N.A.	0.00
90-180	0.07	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	943.35	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	210.75
10-20	378.58
20-30	214.91
30-40	56.11
40-50	30.72
50-60	27.23
60-70	16.57
70-80	6.56
80-90	1.86
90-100	0.07
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

# IES INDOOR REPORT

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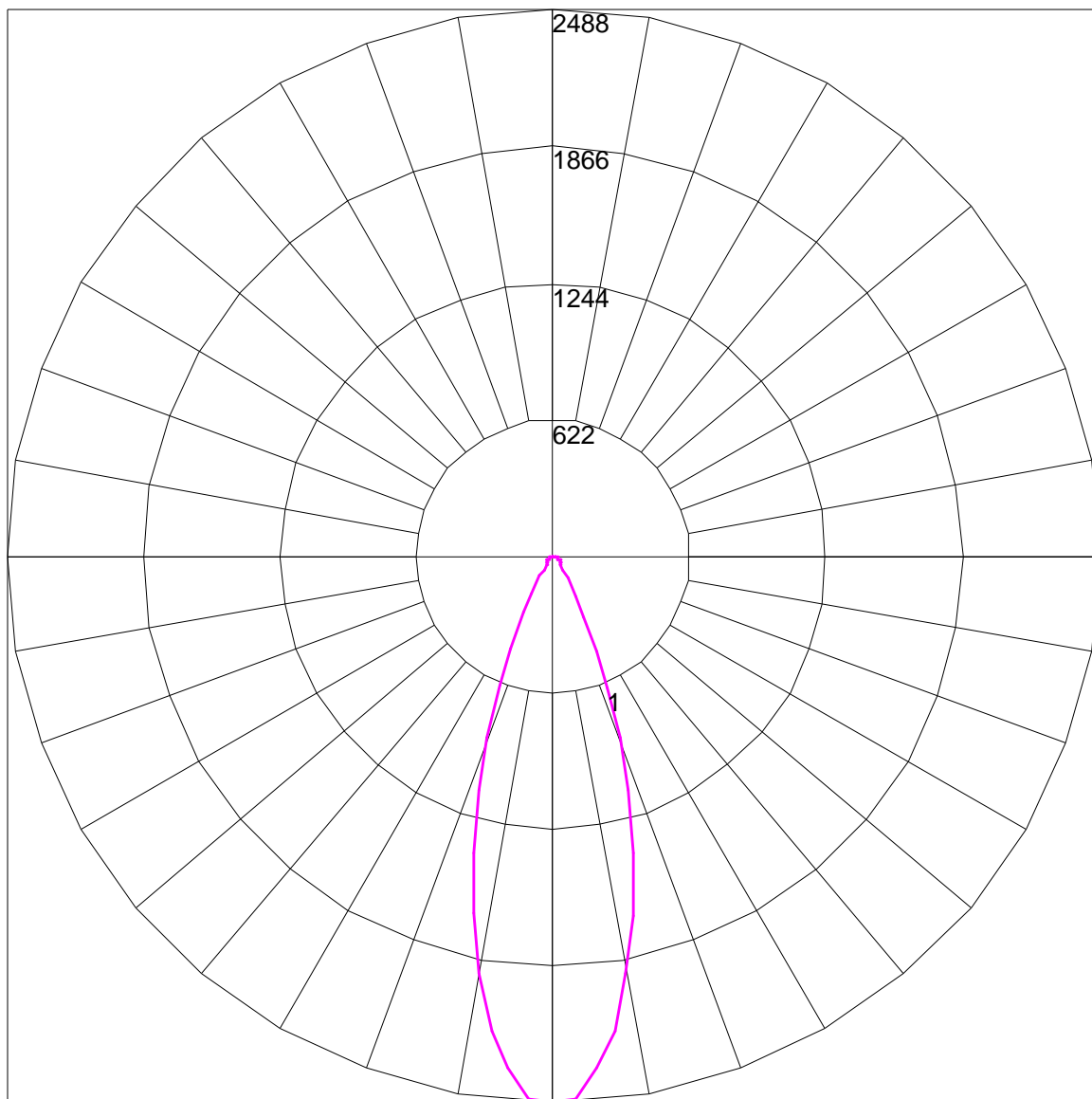
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	94
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89
3	104	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84
4	100	93	89	85	98	92	88	84	90	86	83	88	85	82	87	84	82	80
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76
6	92	85	80	76	91	84	79	76	83	78	75	81	78	75	80	77	74	73
7	89	81	76	72	88	80	76	72	79	75	72	78	74	71	77	74	71	70
8	86	78	73	69	85	77	72	69	76	72	69	75	71	68	74	71	68	67
9	83	75	70	66	82	74	69	66	73	69	66	73	69	66	72	68	66	64
10	80	72	67	64	79	71	67	64	71	66	63	70	66	63	69	66	63	62

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00648\_2 ~ SR2DMO-XT13L-E1-RDD2F-XXK-MDMWSO.IES

POLAR GRAPH



Maximum Candela = 2488.471 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)