

**IES INDOOR REPORT**
**PHOTOMETRIC FILENAME : SP-00648\_3 ~ SR2DMO-XT13L-E1-RDD2F-XXK-WDMWGL.IES**
**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] SP-00648\_3\_M-13L  
 [TESTLAB] VLS-245-981  
 [MANUFAC] Spectrum Lighting  
 [ISSUEDATE] 3/16/2018  
 [UPDATE] 4/20/2018  
 [LUMCAT] SR2DMO-XT13L-E1-RDD2F-xxK-WD-MW-GL  
 [LUMINAIRE] Nom. 2" Round Trim Downlight, Wide Beam  
 [OTHER] Matte White Trim, Clear Glass lens  
 [OTHER] 39.3 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 New Construction IC Housing: SR2DMI-XT-series  
 [OTHER] For Remodel/Retrofit Housing: SR2DMR-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	917
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	61
Total Luminaire Watts	15
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.64
Spacing Criterion (90-270)	0.64
Spacing Criterion (Diagonal)	0.66
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\_3 ~ SR2DMO-XT13L-E1-RDD2F-XXK-WDMWGL.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	42429	42706	42556
55	37466	38720	38965
65	29991	31690	31872
75	20604	21481	20717
85	12778	13155	13504

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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	1693.648	1693.648	1693.648	1693.648	1693.648	1693.648	1693.648	1693.648	1693.648	1693.648
2.5	1681.261	1658.334	1681.606	1648.722	1666.263	1645.211	1667.589	1646.596	1673.468	1655.527
5.0	1608.233	1603.625	1608.375	1599.753	1600.683	1593.048	1593.602	1589.887	1595.993	1598.092
7.5	1507.827	1492.567	1511.966	1482.944	1493.695	1474.781	1491.123	1474.720	1498.194	1487.287
10.0	1383.879	1375.709	1387.421	1365.075	1374.077	1355.586	1365.396	1356.485	1370.741	1366.284
12.5	1251.674	1245.785	1254.784	1235.026	1243.312	1224.197	1233.437	1224.829	1238.726	1233.916
15.0	1108.818	1109.971	1113.124	1103.065	1104.925	1091.269	1097.235	1090.584	1101.311	1100.158
17.5	963.038	963.295	969.589	958.061	960.996	947.283	958.235	948.021	964.503	960.921
20.0	829.035	823.322	834.418	815.939	824.074	805.868	817.703	810.443	828.289	821.326
22.5	697.345	693.276	700.472	687.019	691.322	677.345	684.566	685.139	695.072	693.430
25.0	566.279	565.554	570.458	559.604	560.773	549.891	554.637	558.739	564.271	565.926
27.5	435.297	440.622	440.770	437.417	431.270	426.275	433.070	430.143	442.412	444.302
30.0	333.009	334.442	340.027	326.986	329.629	315.518	314.412	320.404	326.390	326.217
32.5	232.829	247.115	240.827	247.572	238.504	240.337	239.303	240.869	241.843	247.660
35.0	169.371	173.267	176.786	174.730	172.524	170.821	175.544	169.627	174.035	171.682
37.5	107.591	110.445	114.936	115.463	113.893	113.723	120.214	109.125	118.412	112.444
40.0	78.627	74.337	81.955	72.719	81.882	72.050	66.477	70.789	67.996	62.606
42.5	51.746	56.201	52.533	58.056	55.511	57.253	54.787	56.467	52.073	54.211
45.0	49.301	47.943	49.623	48.595	49.449	47.930	48.355	48.423	47.527	47.291
47.5	46.620	45.108	46.662	46.267	46.439	46.407	44.872	45.916	44.998	45.329
50.0	42.365	42.075	43.447	43.752	43.895	43.961	41.578	42.857	42.983	42.866
52.5	38.327	38.956	40.139	41.026	41.391	40.433	39.105	39.396	39.507	39.112
55.0	35.313	35.590	36.495	37.625	36.726	36.952	36.614	36.159	35.768	35.446
57.5	32.157	32.140	32.999	33.594	32.027	33.519	33.332	33.054	32.193	31.962
60.0	28.513	28.469	29.921	29.651	29.057	29.654	29.991	29.886	28.636	28.452
62.5	24.783	24.742	26.425	25.775	26.023	25.444	26.040	26.686	25.051	24.898
65.0	20.828	20.964	22.008	21.917	22.134	21.707	22.168	22.585	21.466	21.157
67.5	17.178	17.179	17.727	18.069	18.372	18.273	18.777	18.143	18.396	17.167
70.0	14.018	14.119	13.634	14.350	15.192	14.975	15.354	14.535	15.179	13.866
72.5	11.291	11.045	11.038	10.770	12.006	11.728	11.849	11.209	11.198	11.136
75.0	8.763	7.922	9.136	7.957	8.811	8.418	8.744	9.126	7.990	8.203
77.5	5.937	5.963	6.985	6.116	6.521	5.629	5.934	6.696	5.596	5.592
80.0	3.866	4.009	4.661	4.856	4.617	3.630	3.464	4.215	3.684	3.860
82.5	2.752	2.473	3.007	3.585	3.160	3.192	3.124	3.710	2.774	3.072
85.0	1.830	1.812	1.884	2.036	1.934	1.943	2.345	1.968	2.090	1.775
87.5	1.011	1.088	1.242	0.983	1.652	1.405	1.460	1.406	1.145	1.622
90.0	0.000	0.000	0.000	0.000	0.000	1.066	1.085	0.962	1.210	0.611
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	1693.648	1693.648	1693.648	1693.648	1693.648	1693.648	1693.648
2.5	1677.359	1647.091	1666.651	1647.273	1671.917	1651.394	1681.261
5.0	1600.583	1596.024	1597.686	1595.569	1604.246	1600.265	1608.233
7.5	1505.490	1482.086	1493.816	1479.333	1498.763	1482.629	1507.827
10.0	1379.253	1365.756	1368.167	1361.157	1376.396	1361.968	1383.879
12.5	1247.360	1230.964	1234.560	1229.285	1242.600	1228.738	1251.674
15.0	1107.597	1095.215	1096.983	1094.957	1100.261	1094.838	1108.818
17.5	969.788	954.661	959.977	948.793	953.274	949.766	963.038
20.0	834.218	817.185	823.204	808.142	821.491	806.929	829.035
22.5	702.111	691.262	694.136	686.667	696.364	683.273	697.345
25.0	573.235	565.782	567.465	563.687	565.930	559.287	566.279
27.5	451.870	441.551	444.339	436.656	433.662	433.452	435.297
30.0	336.286	329.878	322.021	323.433	330.528	317.265	333.009
32.5	246.377	245.757	239.457	239.710	234.922	238.825	232.829
35.0	172.681	169.029	163.452	164.589	164.832	165.524	169.371
37.5	116.226	105.598	109.988	104.103	99.640	107.823	107.591
40.0	68.483	64.078	58.759	64.204	72.597	64.401	78.627
42.5	51.616	54.263	52.245	53.390	50.254	54.430	51.746
45.0	47.449	47.720	47.724	46.512	46.633	47.031	49.301
47.5	44.771	45.072	45.148	44.149	44.172	44.397	46.620
50.0	42.564	41.636	42.493	40.934	41.468	41.510	42.365
52.5	39.211	37.422	38.502	36.927	38.748	38.234	38.327
55.0	35.590	34.161	34.559	33.673	35.719	34.822	35.313
57.5	32.594	31.661	31.041	31.007	32.616	31.240	32.157
60.0	29.702	28.328	27.568	27.882	28.715	27.804	28.513
62.5	25.165	24.448	24.342	24.469	24.798	24.516	24.783
65.0	20.457	20.535	21.057	20.372	20.779	20.948	20.828

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00648\_3 ~ SR2DMO-XT13L-E1-RDD2F-XXK-WDMWGL.IES****CANDELA TABULATION - (Cont.)**

67.5	17.053	16.606	17.558	15.937	16.860	17.157	17.178
70.0	13.683	13.788	14.243	13.428	13.245	13.383	14.018
72.5	10.288	11.314	11.258	11.227	10.046	9.742	11.291
75.0	7.643	8.660	8.418	8.412	7.229	7.687	8.763
77.5	5.840	6.157	5.888	5.843	5.903	5.580	5.937
80.0	4.293	3.952	4.354	3.685	3.940	3.795	3.866
82.5	2.848	2.867	3.009	2.289	2.289	2.725	2.752
85.0	2.033	1.925	1.852	1.440	1.577	1.703	1.830
87.5	1.136	1.230	1.242	0.926	1.167	1.250	1.011
90.0	1.171	0.875	1.056	0.000	0.000	0.000	0.000
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

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Zone	Lumens	%Lamp	%Fixt
0-20	448.22	N.A.	48.90
0-30	703.62	N.A.	76.70
0-40	813.77	N.A.	88.70
0-60	884.90	N.A.	96.40
0-80	915.14	N.A.	99.70
0-90	917.41	N.A.	100.00
10-90	772.38	N.A.	84.20
20-40	365.55	N.A.	39.80
20-50	404.74	N.A.	44.10
40-70	92.28	N.A.	10.10
60-80	30.24	N.A.	3.30
70-80	9.09	N.A.	1.00
80-90	2.27	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	917.48	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	145.02
10-20	303.20
20-30	255.39
30-40	110.15
40-50	39.20
50-60	31.93
60-70	21.15
70-80	9.09
80-90	2.27
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

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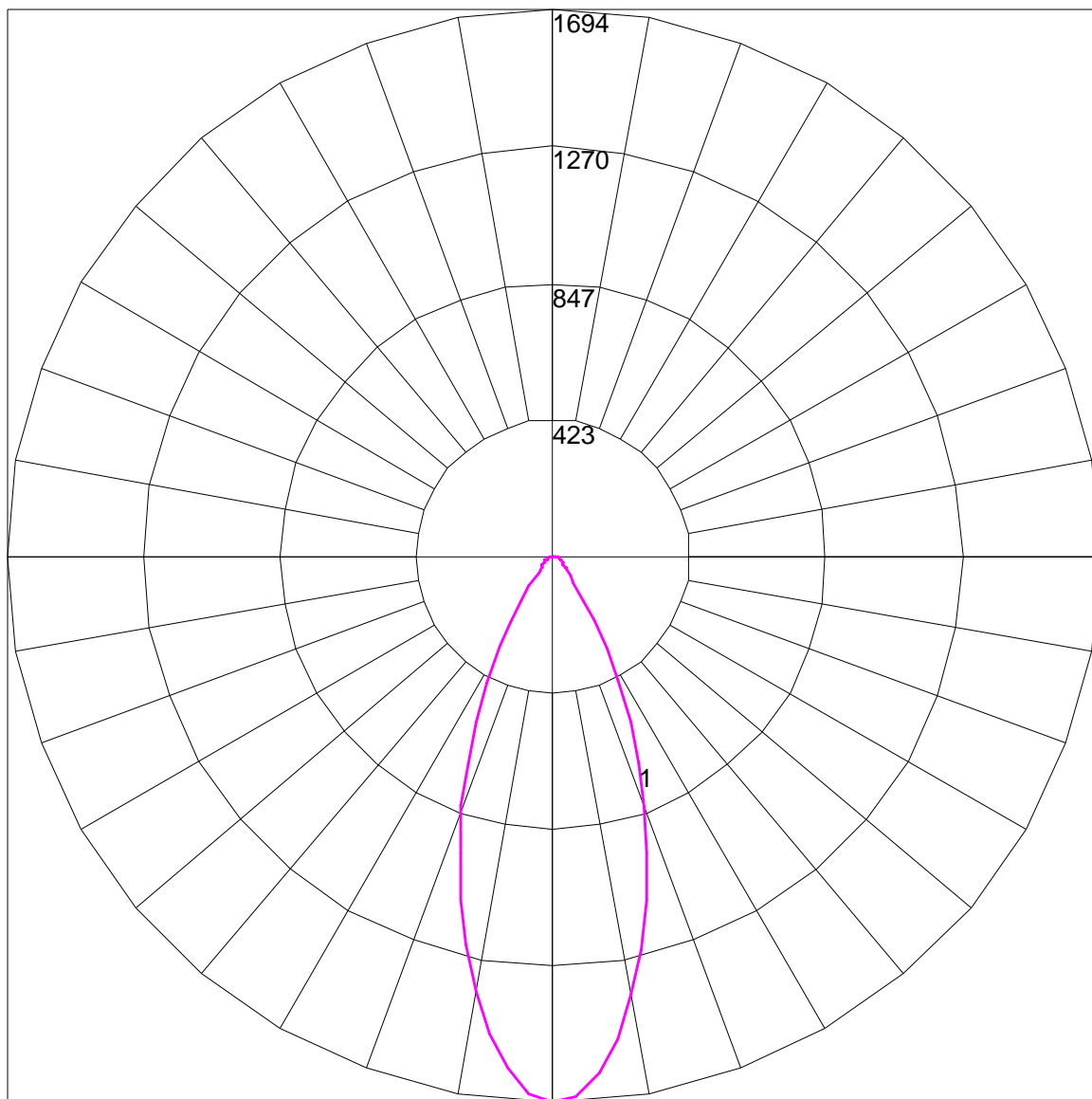
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76
5	93	85	79	75	92	84	79	75	82	78	74	81	77	73	79	76	73	71
6	89	80	75	70	87	80	74	70	78	73	70	77	72	69	75	72	69	67
7	85	76	70	66	84	75	70	66	74	69	66	73	69	65	72	68	65	64
8	81	72	67	63	80	72	66	63	71	66	62	70	65	62	69	65	62	60
9	78	69	63	59	77	68	63	59	67	63	59	67	62	59	66	62	59	57
10	75	66	60	57	74	65	60	56	64	60	56	64	59	56	63	59	56	55

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00648\_3 ~ SR2DMO-XT13L-E1-RDD2F-XXK-WDMWGL.IES

POLAR GRAPH



Maximum Candela = 1693.648 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)