

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00649\_4 ~ SR2DMO-XT10L-E1-SDD2F-XXK-WDMWNL.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002

[TEST] SP-00649\_4\_M-10L

[TESTLAB] VLS-245-981

[MANUFAC] Spectrum Lighting

[ISSUE DATE] 3/16/2018

[UPDATE] 4/30/2018

[LUMCAT] SR2DMO-XT10L-E1-SDD2F-xxK-WD-MW-NL

[LUMINAIRE] Nom. 2" Square Trim Downlight, Wide Beam

[OTHER] Matte White Trim, No Lens

[OTHER] 43.9 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 SDD2F 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	648
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	58
Total Luminaire Watts	11.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.74
Spacing Criterion (90-270)	0.72
Spacing Criterion (Diagonal)	0.78
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.17 ft
Luminous Width (90-270)	0.17 ft
Luminous Height	0.00 ft

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00649\_4 ~ SR2DMO-XT10L-E1-SDD2F-XXK-WDMWNL.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	18854	19774	19022
55	14717	13564	13790
65	8679	8941	9209
75	5786	4657	6210
85	5185	5141	4482

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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	1033.095	1033.095	1033.095	1033.095	1033.095	1033.095	1033.095	1033.095	1033.095	1033.095
2.5	1025.630	1031.035	1023.828	1025.743	1021.580	1009.545	1014.069	1007.769	1015.179	1013.846
5.0	1000.111	994.711	989.612	996.438	993.530	970.438	963.566	965.572	975.116	972.143
7.5	955.592	951.408	936.079	949.597	942.748	911.955	908.144	908.221	927.424	920.954
10.0	905.716	894.890	878.620	892.863	887.692	850.553	845.431	848.404	874.415	864.997
12.5	850.767	837.094	818.692	831.557	826.918	785.573	785.053	786.653	813.662	807.510
15.0	785.747	777.168	761.894	768.059	758.424	716.778	727.740	721.187	748.281	741.544
17.5	712.374	712.239	706.778	697.284	680.891	643.886	668.144	653.175	665.867	673.376
20.0	621.953	640.161	645.135	623.524	590.020	559.971	605.964	572.896	574.495	586.544
22.5	519.170	558.323	580.523	534.006	485.471	465.683	535.661	485.410	471.016	495.805
25.0	416.698	464.475	503.445	439.013	386.055	373.395	457.417	393.531	362.148	398.384
27.5	314.418	371.223	421.440	348.054	291.182	282.729	372.873	299.384	279.828	299.875
30.0	239.522	278.624	333.890	258.242	220.006	214.023	282.857	227.316	207.399	232.887
32.5	179.643	205.904	244.525	198.728	167.193	160.902	208.614	164.892	148.550	169.534
35.0	123.503	151.947	178.286	146.237	116.765	112.983	146.184	114.873	94.036	118.111
37.5	69.103	103.899	118.330	99.955	67.953	68.281	99.956	69.379	64.088	67.640
40.0	47.390	60.664	80.510	54.814	45.515	46.288	64.157	48.449	40.485	50.057
42.5	38.443	39.359	47.568	42.184	38.360	36.276	43.727	35.186	34.929	33.747
45.0	34.574	33.898	36.262	33.923	34.882	32.181	32.022	31.346	33.033	31.741
47.5	32.408	30.507	28.594	31.452	33.279	30.819	26.909	29.879	30.764	29.695
50.0	29.163	28.401	26.181	29.547	28.978	27.126	24.976	26.041	28.434	26.044
52.5	25.623	24.852	24.423	25.041	23.518	22.531	21.424	21.723	24.014	22.373
55.0	21.891	20.527	20.177	20.392	20.513	18.612	17.204	18.677	19.355	18.410
57.5	18.116	17.660	15.721	18.155	18.389	14.909	14.677	15.830	17.218	14.687
60.0	14.800	15.471	13.583	15.950	15.319	12.757	12.743	13.485	15.271	13.155
62.5	11.563	12.777	11.544	13.279	11.959	11.025	11.077	11.194	12.351	11.546
65.0	9.512	9.888	9.800	10.667	10.093	8.947	9.488	9.443	9.414	9.434
67.5	7.605	7.804	8.060	8.798	8.587	6.798	8.096	7.726	7.322	7.417
70.0	6.628	5.940	6.344	6.867	6.847	5.784	6.735	5.979	5.544	5.718
72.5	5.481	4.864	4.686	4.740	5.229	4.732	5.182	4.549	5.067	4.405
75.0	3.884	3.834	3.126	3.664	4.168	3.309	3.854	3.808	4.086	3.508
77.5	2.687	2.858	2.464	3.202	2.993	2.552	2.853	2.764	2.754	2.750
80.0	1.909	2.069	1.875	2.065	2.016	1.895	2.133	1.982	1.900	1.985
82.5	1.575	1.446	1.294	1.799	1.541	1.023	1.363	1.587	1.433	1.477
85.0	1.172	1.082	1.162	0.982	1.013	1.058	0.780	0.978	0.863	1.257
87.5	0.833	0.788	0.951	0.912	0.813	0.859	0.959	0.874	0.885	0.972
90.0	0.566	0.370	0.736	0.263	0.662	0.843	0.503	0.939	0.574	0.644
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	1033.095	1033.095	1033.095	1033.095	1033.095	1033.095	1033.095
2.5	1015.420	1010.840	1018.838	1028.436	1030.681	1030.840	1025.630
5.0	972.699	974.855	985.851	1001.888	997.260	1002.092	1000.111
7.5	922.931	922.201	943.852	958.212	947.715	959.484	955.592
10.0	865.688	868.504	897.517	905.462	891.471	905.193	905.716
12.5	811.110	813.596	839.513	849.008	832.354	846.977	850.767
15.0	759.010	753.501	776.785	790.893	777.484	785.867	785.747
17.5	703.417	688.069	695.576	725.154	724.133	717.244	712.374
20.0	645.025	610.219	607.917	656.447	663.366	643.865	621.953
22.5	574.968	521.339	503.371	570.490	600.380	556.703	519.170
25.0	496.739	427.764	394.006	478.979	522.391	461.850	416.698
27.5	409.143	330.540	305.279	384.001	440.714	369.316	314.418
30.0	315.833	250.499	221.362	288.097	350.650	277.882	239.522
32.5	235.752	182.121	159.918	219.323	258.980	212.334	179.643
35.0	162.554	125.496	102.626	156.400	190.508	157.099	123.503
37.5	110.511	75.707	69.853	105.442	125.540	107.619	69.103
40.0	68.097	50.281	40.400	56.444	86.479	60.112	47.390
42.5	46.134	37.107	35.358	42.763	50.125	43.347	38.443
45.0	31.973	31.604	32.618	33.344	38.621	35.192	34.574
47.5	26.984	29.412	30.472	30.782	28.645	31.780	32.408
50.0	24.883	25.859	28.358	28.774	26.662	29.450	29.163
52.5	21.019	21.817	23.503	24.412	24.889	25.080	25.623
55.0	16.686	18.524	18.631	19.957	20.235	20.342	21.891
57.5	14.635	15.462	16.079	17.384	15.688	17.471	18.116
60.0	13.061	13.079	13.529	14.840	13.646	14.845	14.800
62.5	10.892	10.863	11.018	12.724	11.604	12.134	11.563
65.0	8.625	8.872	8.580	10.605	9.559	9.415	9.512

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67.5	6.968	6.922	6.762	8.447	7.648	8.081	7.605
70.0	5.392	5.854	5.207	6.499	6.360	6.744	6.628
72.5	4.041	4.704	4.358	5.175	5.186	5.202	5.481
75.0	3.031	3.133	3.638	3.922	4.161	4.158	3.884
77.5	2.404	2.261	2.929	2.838	2.975	3.526	2.687
80.0	2.013	1.622	1.870	2.492	2.090	2.049	1.909
82.5	1.324	1.038	1.726	1.277	1.523	1.506	1.575
85.0	0.933	1.185	1.391	1.326	1.171	1.057	1.172
87.5	0.690	0.820	0.883	0.884	1.151	0.827	0.833
90.0	0.463	0.607	0.451	0.326	0.724	0.410	0.566
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	300.84	N.A.	46.40
0-30	498.32	N.A.	76.90
0-40	586.93	N.A.	90.60
0-60	632.73	N.A.	97.70
0-80	646.44	N.A.	99.80
0-90	647.72	N.A.	100.00
10-90	557.10	N.A.	86.00
20-40	286.09	N.A.	44.20
20-50	314.06	N.A.	48.50
40-70	55.45	N.A.	8.60
60-80	13.71	N.A.	2.10
70-80	4.07	N.A.	0.60
80-90	1.28	N.A.	0.20
90-110	0.08	N.A.	0.00
90-120	0.08	N.A.	0.00
90-130	0.08	N.A.	0.00
90-150	0.08	N.A.	0.00
90-180	0.08	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	647.79	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	90.62
10-20	210.22
20-30	197.49
30-40	88.61
40-50	27.97
50-60	17.83
60-70	9.64
70-80	4.07
80-90	1.28
90-100	0.08
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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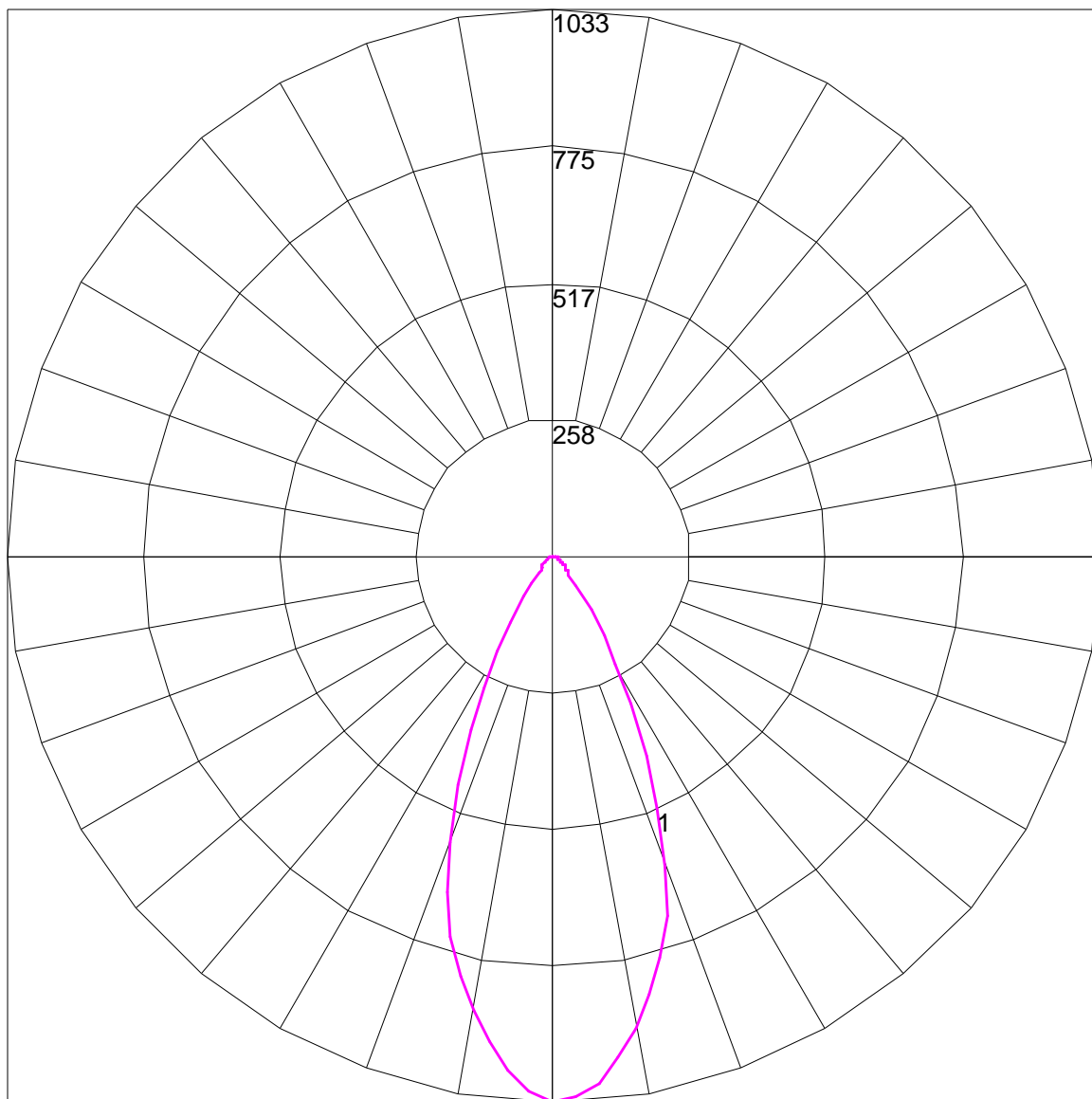
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	96	106	101	98	95	98	95	93	95	93	91	92	90	89	87
3	103	96	91	88	101	95	90	87	92	89	85	90	87	84	88	85	83	81
4	98	90	85	81	96	89	84	80	87	83	79	85	81	79	83	80	78	76
5	93	85	79	75	92	84	79	75	82	78	74	81	77	74	79	76	73	71
6	89	80	75	70	87	79	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	68	65	72	68	65	64
8	81	72	66	62	80	71	66	62	70	65	62	69	65	62	68	64	61	60
9	78	68	63	59	77	68	63	59	67	62	59	66	62	58	65	61	58	57
10	74	65	60	56	73	65	59	56	64	59	56	63	59	56	62	58	55	54

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00649\_4 ~ SR2DMO-XT10L-E1-SDD2F-XXK-WDMWNL.IES

POLAR GRAPH



Maximum Candela = 1033.095 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)