

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00649\_7 ~ SR2DMO-XT10L-E1-SDD2F-XXK-XNMWNL.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002

[TEST] SP-00649\_7\_M-10L

[TESTLAB] VLS-245-981

[MANUFAC] Spectrum Lighting

[ISSUE DATE] 3/16/2018

[UPDATE] 4/30/2018

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

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

[OTHER] Matte White Trim, No lens

[OTHER] 18.5 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	654
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	44
Total Luminaire Watts	14.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.32
Spacing Criterion (90-270)	0.30
Spacing Criterion (Diagonal)	0.34
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\_7 ~ SR2DMO-XT10L-E1-SDD2F-XXK-XNMWNL.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	25594	29670	24617
55	21000	21446	23331
65	11061	11839	11943
75	5515	6202	7728
85	5375	6225	4982

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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	2526.699	2526.699	2526.699	2526.699	2526.699	2526.699	2526.699	2526.699	2526.699	2526.699
2.5	2321.381	2513.172	2353.603	2504.167	2309.890	2483.729	2265.212	2486.606	2359.045	2499.912
5.0	1895.198	2008.709	1900.361	1990.667	1860.629	2063.962	1985.176	2086.827	2065.892	2019.407
7.5	1501.882	1515.170	1446.188	1430.893	1436.715	1495.784	1453.292	1551.211	1569.349	1506.723
10.0	1127.238	1138.406	991.220	1093.949	1027.217	1106.029	915.615	1149.318	1153.965	1148.564
12.5	857.626	784.993	724.779	775.456	779.164	784.559	733.141	794.556	864.861	799.671
15.0	645.225	653.536	610.070	652.132	617.672	632.256	555.284	636.984	648.553	662.385
17.5	530.420	532.703	541.717	542.782	523.664	540.403	525.249	546.841	541.028	535.516
20.0	466.560	502.567	509.808	501.297	464.922	492.244	495.654	502.477	459.757	497.724
22.5	379.658	466.933	473.756	463.925	382.898	459.235	461.346	472.673	416.180	463.380
25.0	281.235	388.771	434.622	366.423	289.423	379.784	427.066	406.117	338.828	373.520
27.5	187.449	305.720	389.404	265.920	193.483	285.347	394.512	328.241	214.878	282.084
30.0	95.883	188.181	339.764	168.810	96.362	188.920	360.090	222.242	125.393	179.297
32.5	58.890	83.732	250.303	71.833	57.067	91.871	255.077	108.220	81.619	76.302
35.0	46.877	64.010	133.473	56.733	43.801	59.548	151.823	69.242	53.167	61.049
37.5	41.892	46.671	72.537	44.009	37.325	45.979	96.381	50.962	44.253	46.549
40.0	39.982	43.557	49.101	39.815	33.823	40.985	43.559	46.283	40.966	45.582
42.5	42.528	41.898	45.475	35.783	37.922	38.393	46.188	45.062	44.578	44.676
45.0	46.934	48.279	54.409	44.615	45.143	44.621	48.890	48.796	47.846	49.187
47.5	48.545	52.891	55.579	53.552	50.267	53.126	52.854	53.746	50.707	53.510
50.0	49.041	48.406	51.945	49.050	54.555	50.582	55.806	50.212	50.051	48.923
52.5	41.640	42.997	43.367	44.497	46.865	45.285	44.062	44.775	45.404	44.197
55.0	31.238	33.159	31.901	35.075	34.705	37.264	32.737	36.211	38.694	35.025
57.5	24.215	24.423	24.450	25.766	27.179	28.622	26.647	26.972	29.733	26.049
60.0	18.416	20.591	19.286	21.443	21.332	23.284	20.773	22.791	23.017	21.774
62.5	14.940	16.898	15.753	17.227	16.991	18.674	17.187	19.603	18.656	17.564
65.0	12.123	13.610	12.976	14.033	13.090	15.330	13.838	15.929	14.737	14.132
67.5	9.850	10.452	10.154	11.205	10.691	12.202	11.690	12.223	11.186	10.953
70.0	7.690	7.447	7.510	9.197	8.494	10.018	9.533	10.584	9.245	8.618
72.5	5.746	5.857	5.773	7.715	6.534	7.800	7.361	8.447	7.848	6.567
75.0	3.702	4.652	4.163	6.244	5.187	5.513	5.212	5.303	6.211	4.765
77.5	2.148	3.620	2.991	3.990	4.005	4.264	3.505	4.077	4.793	3.499
80.0	1.583	2.397	2.582	2.626	2.700	3.393	2.704	3.167	3.393	2.830
82.5	1.597	2.037	1.697	1.719	1.676	2.563	1.738	2.217	1.896	2.295
85.0	1.215	1.157	1.407	1.186	1.126	1.440	1.672	1.739	1.633	1.432
87.5	0.634	0.630	0.716	1.096	0.912	0.748	0.886	1.197	0.974	0.806
90.0	0.000	0.000	0.000	0.000	0.000	0.601	0.601	1.276	0.748	0.685
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	2526.699	2526.699	2526.699	2526.699	2526.699	2526.699	2526.699
2.5	2377.797	2495.596	2344.882	2411.617	2229.635	2423.952	2321.381
5.0	2034.284	1958.195	2025.183	1920.805	1924.579	1953.759	1895.198
7.5	1478.898	1437.756	1482.284	1459.970	1436.285	1513.229	1501.882
10.0	1058.199	1061.219	1058.901	1068.455	962.837	1144.124	1127.238
12.5	778.571	716.538	824.308	759.198	763.067	834.732	857.626
15.0	610.270	616.772	641.161	628.481	572.584	665.183	645.225
17.5	554.155	525.515	534.807	528.454	524.780	536.440	530.420
20.0	508.199	493.946	452.576	493.282	477.815	497.364	466.560
22.5	472.094	457.878	405.497	445.660	441.854	443.386	379.658
25.0	438.578	392.839	325.445	373.290	406.514	357.525	281.235
27.5	407.478	319.396	199.948	284.348	378.288	263.331	187.449
30.0	347.827	196.023	110.819	163.311	342.565	152.372	95.883
32.5	262.555	87.964	70.638	77.830	231.121	73.497	58.890
35.0	177.073	64.210	45.079	57.225	126.273	57.503	46.877
37.5	91.410	43.466	38.148	42.013	80.968	46.456	41.892
40.0	49.948	38.128	33.951	36.394	41.091	44.541	39.982
42.5	45.187	35.157	33.154	35.547	45.407	44.679	42.528
45.0	47.215	43.494	36.797	42.707	49.388	48.511	46.934
47.5	54.664	49.699	45.672	46.411	50.895	49.453	48.545
50.0	53.060	46.373	48.680	44.455	50.781	45.489	49.041
52.5	44.503	42.048	44.936	39.949	39.703	39.722	41.640
55.0	34.882	33.530	38.037	31.498	29.261	30.970	31.238
57.5	24.475	25.663	27.702	24.507	22.787	23.989	24.215
60.0	18.678	20.369	20.316	19.674	17.031	19.759	18.416
62.5	16.144	15.780	16.052	15.777	14.782	15.713	14.940
65.0	13.733	13.457	12.859	12.931	12.322	11.883	12.123

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67.5	11.387	10.892	10.510	10.071	9.387	9.426	9.850
70.0	8.956	7.938	8.258	7.301	7.613	7.632	7.690
72.5	6.656	5.985	6.159	6.371	6.483	5.972	5.746
75.0	4.915	4.551	4.799	4.986	4.080	4.684	3.702
77.5	3.629	3.512	3.624	3.412	2.840	3.616	2.148
80.0	2.861	2.153	2.780	2.336	2.171	2.519	1.583
82.5	2.536	1.635	2.147	1.974	1.562	1.777	1.597
85.0	1.846	1.794	1.158	0.851	0.923	1.031	1.215
87.5	0.868	0.864	0.862	1.051	0.746	0.837	0.634
90.0	0.814	0.846	0.902	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	344.56	N.A.	52.70
0-30	509.38	N.A.	77.80
0-40	566.88	N.A.	86.60
0-60	633.63	N.A.	96.80
0-80	652.83	N.A.	99.80
0-90	654.37	N.A.	100.00
10-90	495.38	N.A.	75.70
20-40	222.32	N.A.	34.00
20-50	258.31	N.A.	39.50
40-70	80.47	N.A.	12.30
60-80	19.20	N.A.	2.90
70-80	5.48	N.A.	0.80
80-90	1.55	N.A.	0.20
90-110	0.06	N.A.	0.00
90-120	0.06	N.A.	0.00
90-130	0.06	N.A.	0.00
90-150	0.06	N.A.	0.00
90-180	0.06	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	654.43	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	158.99
10-20	185.56
20-30	164.82
30-40	57.50
40-50	35.99
50-60	30.77
60-70	13.72
70-80	5.48
80-90	1.55
90-100	0.06
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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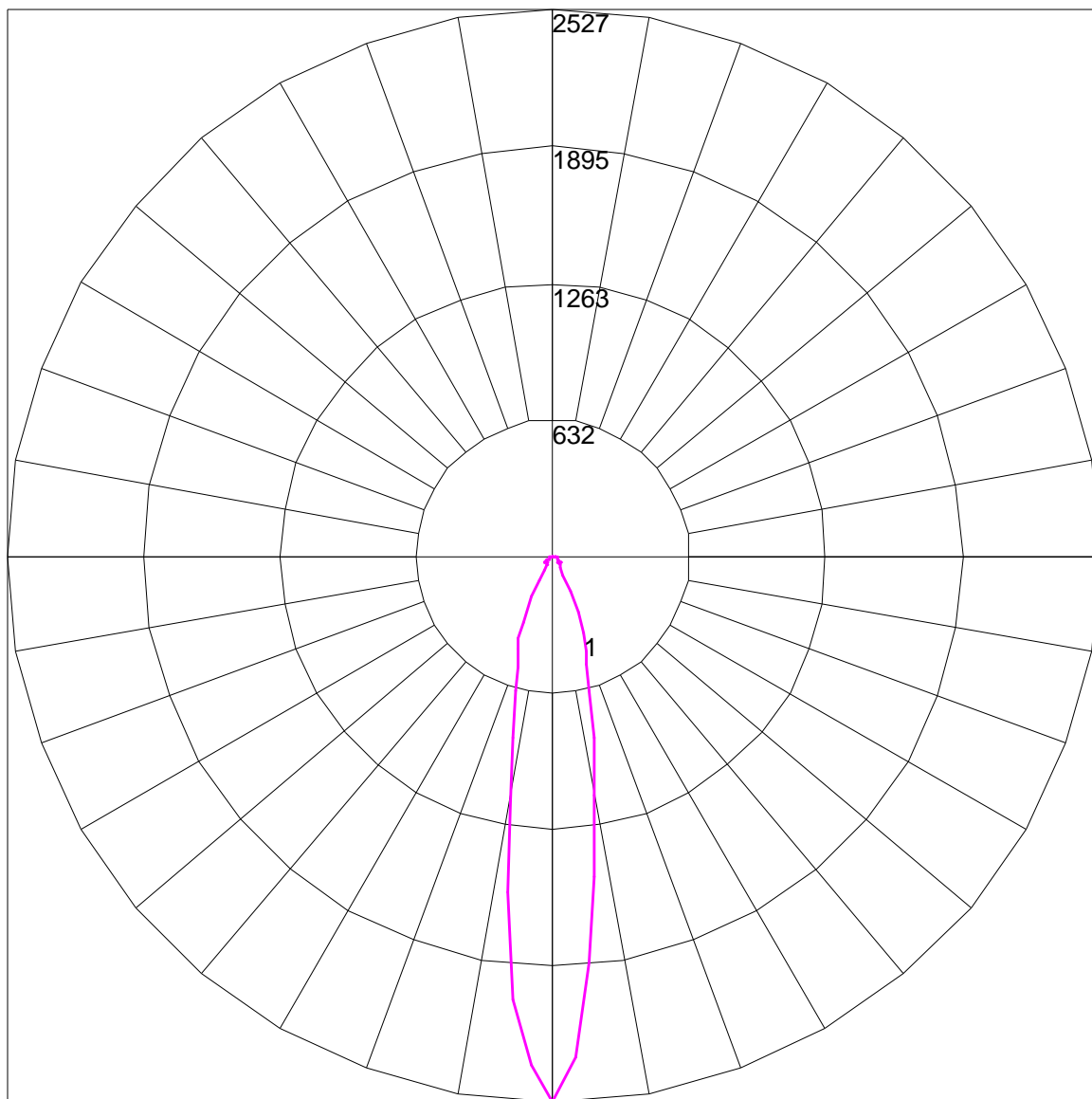
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88
3	103	97	92	88	101	96	91	88	93	89	86	91	88	85	88	86	84	82
4	99	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	81	77	93	86	80	77	84	79	76	82	78	75	81	77	75	73
6	90	82	77	73	89	81	76	72	80	75	72	78	74	71	77	74	71	70
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66
8	83	75	69	66	82	74	69	65	73	68	65	72	68	65	71	67	65	63
9	80	72	66	63	79	71	66	62	70	66	62	69	65	62	69	65	62	61
10	77	69	63	60	76	68	63	60	67	63	60	67	63	60	66	62	59	58

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00649\_7 ~ SR2DMO-XT10L-E1-SDD2F-XXK-XNMWNL.IES

POLAR GRAPH



Maximum Candela = 2526.699 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)