

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00649\_1 ~ SR2DMO-XT20L-E1-SDD2F-XXK-MDMWNL.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] SP-00649\_1  
[TESTLAB] VLS-245-981  
[MANUFAC] Spectrum Lighting  
[ISSUE DATE] 3/16/2018  
[UPDATE] 4/30/2018  
[LUMCAT] SR2DMO-XT20L-E1-SDD2F-xxK-MD-MW-NL  
[LUMINAIRE] Nom. 2" Square Trim Downlight, Medium Beam  
[OTHER] Matte White Trim, No lens  
[OTHER] 34.7 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 SDD2F Downlight Trim  
[OTHER] LEDXT lumen output is the same for all available CCT's  
[OTHER] This report prepared by Spectrum Lighting

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1173
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	50
Total Luminaire Watts	23.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.60
Spacing Criterion (90-270)	0.60
Spacing Criterion (Diagonal)	0.62
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\_1 ~ SR2DMO-XT20L-E1-SDD2F-XXK-MDMWNL.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	36388	27298	36249
55	25860	17939	26488
65	14061	14244	13522
75	7260	7901	8140
85	9437	9357	8614

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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	2732.272	2732.272	2732.272	2732.272	2732.272	2732.272	2732.272	2732.272	2732.272	2732.272
2.5	2712.741	2712.580	2717.200	2713.681	2711.910	2683.380	2686.535	2694.322	2698.416	2694.508
5.0	2648.238	2674.546	2645.457	2666.539	2651.334	2593.975	2625.827	2595.782	2632.535	2623.216
7.5	2514.556	2528.920	2535.398	2532.136	2518.779	2415.531	2433.262	2443.088	2468.961	2454.209
10.0	2310.872	2367.217	2309.244	2353.529	2320.868	2179.590	2229.196	2196.646	2267.517	2240.645
12.5	2012.991	2063.465	2023.553	2068.329	2017.964	1848.452	1895.107	1888.772	1957.984	1910.772
15.0	1705.429	1746.388	1719.432	1740.665	1703.861	1531.526	1559.026	1579.554	1615.882	1588.281
17.5	1387.281	1446.518	1407.609	1436.015	1374.787	1233.601	1304.284	1269.619	1306.992	1280.891
20.0	1094.714	1148.066	1167.979	1138.657	1077.660	966.268	1055.398	1009.490	1005.579	998.302
22.5	825.578	908.907	951.570	892.553	815.245	732.652	888.374	770.733	745.316	756.229
25.0	583.636	672.498	776.721	658.415	578.231	528.267	721.581	570.308	491.332	538.726
27.5	361.935	478.250	611.977	468.226	363.684	350.487	556.516	382.585	326.717	354.607
30.0	227.065	295.377	452.744	285.068	226.810	228.854	397.661	259.111	170.738	222.670
32.5	144.369	202.168	294.466	196.994	147.374	148.741	270.023	152.169	131.548	148.337
35.0	105.808	120.571	200.996	118.746	108.034	105.550	158.850	112.158	97.201	104.670
37.5	89.091	99.763	114.439	97.344	92.623	84.731	108.249	84.263	88.889	88.959
40.0	79.937	81.513	86.466	78.512	82.034	72.220	67.625	71.852	80.630	78.477
42.5	73.720	72.995	61.485	70.662	73.778	63.791	54.660	61.197	73.221	71.925
45.0	66.729	63.684	50.060	62.709	66.474	57.186	44.377	56.423	65.895	62.991
47.5	59.504	52.111	38.979	52.926	59.536	51.284	39.982	52.008	59.243	52.612
50.0	51.852	42.345	34.141	43.490	53.042	46.402	35.540	45.991	52.632	43.510
52.5	44.105	36.721	29.495	37.022	46.678	41.831	31.016	39.996	46.240	35.037
55.0	38.467	31.993	26.685	31.070	39.402	35.624	27.291	34.709	39.554	30.389
57.5	33.153	28.893	23.981	27.989	31.929	29.052	24.708	29.364	31.734	27.245
60.0	26.186	25.067	21.895	24.586	24.953	23.309	22.289	23.417	24.484	21.993
62.5	19.066	20.182	19.461	19.904	18.052	17.690	20.063	17.720	18.876	16.108
65.0	15.411	15.777	15.612	15.601	14.820	13.883	16.586	13.550	14.137	13.250
67.5	11.981	11.941	12.135	12.358	11.910	10.289	11.925	9.966	11.285	11.076
70.0	9.708	9.175	9.568	9.468	9.297	8.144	9.132	8.241	8.662	8.694
72.5	7.362	7.111	7.305	7.065	7.009	6.374	7.321	6.882	6.298	6.454
75.0	4.873	4.974	5.303	5.168	5.464	5.476	5.348	5.904	4.792	4.767
77.5	3.795	3.898	4.477	3.724	3.747	4.223	3.752	4.014	3.668	3.496
80.0	3.111	4.072	3.794	3.039	2.540	3.033	2.712	2.694	2.917	2.581
82.5	2.607	2.109	2.999	2.307	2.209	2.044	2.326	2.123	1.771	1.958
85.0	2.133	1.874	2.115	1.987	1.947	1.448	1.908	1.806	1.987	1.371
87.5	1.340	1.452	1.349	1.524	1.675	1.840	1.706	1.726	1.852	1.461
90.0	0.857	0.628	1.197	0.394	1.107	1.155	0.522	1.235	0.653	1.117
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	2732.272	2732.272	2732.272	2732.272	2732.272	2732.272	2732.272
2.5	2704.061	2698.873	2697.896	2711.461	2708.001	2712.934	2712.741
5.0	2632.326	2611.877	2633.872	2670.182	2657.225	2654.433	2648.238
7.5	2481.865	2452.105	2458.738	2525.756	2500.526	2518.621	2514.556
10.0	2248.126	2216.183	2249.152	2350.594	2307.737	2317.702	2310.872
12.5	1958.256	1898.823	1940.822	2062.488	1989.666	2041.254	2012.991
15.0	1620.054	1586.867	1610.030	1748.690	1682.288	1713.228	1705.429
17.5	1336.647	1279.684	1312.192	1454.238	1403.608	1415.697	1387.281
20.0	1091.526	1012.195	1019.607	1162.778	1153.976	1135.433	1094.714
22.5	894.390	773.588	758.823	919.480	965.281	887.186	825.578
25.0	725.082	566.276	501.172	680.723	784.299	653.335	583.636
27.5	557.853	377.330	333.993	493.082	616.414	464.512	361.935
30.0	391.582	250.173	171.154	308.673	456.884	291.412	227.065
32.5	266.867	152.842	131.777	214.828	308.967	195.859	144.369
35.0	157.359	107.922	94.128	125.030	195.379	121.489	105.808
37.5	108.637	82.801	84.950	97.719	120.537	95.773	89.091
40.0	77.069	71.526	75.944	72.290	74.483	79.546	79.937
42.5	62.167	64.220	68.355	62.299	55.647	68.032	73.720
45.0	50.648	55.471	60.921	53.738	44.106	57.133	66.729
47.5	42.501	46.407	54.350	52.693	38.173	52.647	59.504
50.0	34.819	39.638	47.690	50.397	33.948	48.625	51.852
52.5	29.275	33.203	40.681	43.230	30.784	42.688	44.105
55.0	23.901	29.690	33.908	36.215	27.864	36.725	38.467
57.5	22.350	26.428	27.829	29.645	25.067	30.943	33.153
60.0	20.830	21.643	22.120	23.805	22.734	25.172	26.186
62.5	16.963	16.838	17.272	19.610	20.587	19.532	19.066
65.0	13.188	13.480	13.090	15.659	17.211	14.375	15.411

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67.5	10.350	10.215	10.089	12.141	13.460	12.051	11.981
70.0	7.885	7.595	7.655	9.196	9.724	9.570	9.708
72.5	6.459	5.479	5.765	6.796	6.362	6.738	7.362
75.0	4.984	4.158	4.491	4.802	4.778	4.846	4.873
77.5	3.612	2.813	3.588	3.329	3.818	3.575	3.795
80.0	3.021	2.174	3.127	2.712	3.372	2.864	3.111
82.5	2.413	2.197	1.755	2.569	3.137	2.378	2.607
85.0	1.698	1.976	1.505	1.975	1.848	2.235	2.133
87.5	1.925	1.622	1.398	1.968	1.555	1.449	1.340
90.0	0.681	1.224	1.460	0.451	1.426	0.606	0.857
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	694.25	N.A.	59.20
0-30	984.04	N.A.	83.90
0-40	1075.86	N.A.	91.70
0-60	1150.44	N.A.	98.10
0-80	1171.09	N.A.	99.80
0-90	1173.19	N.A.	100.00
10-90	933.21	N.A.	79.50
20-40	381.61	N.A.	32.50
20-50	426.63	N.A.	36.40
40-70	89.61	N.A.	7.60
60-80	20.64	N.A.	1.80
70-80	5.62	N.A.	0.50
80-90	2.11	N.A.	0.20
90-110	0.13	N.A.	0.00
90-120	0.13	N.A.	0.00
90-130	0.13	N.A.	0.00
90-150	0.13	N.A.	0.00
90-180	0.13	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1173.32	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	239.99
10-20	454.27
20-30	289.78
30-40	91.83
40-50	45.02
50-60	29.56
60-70	15.03
70-80	5.62
80-90	2.11
90-100	0.13
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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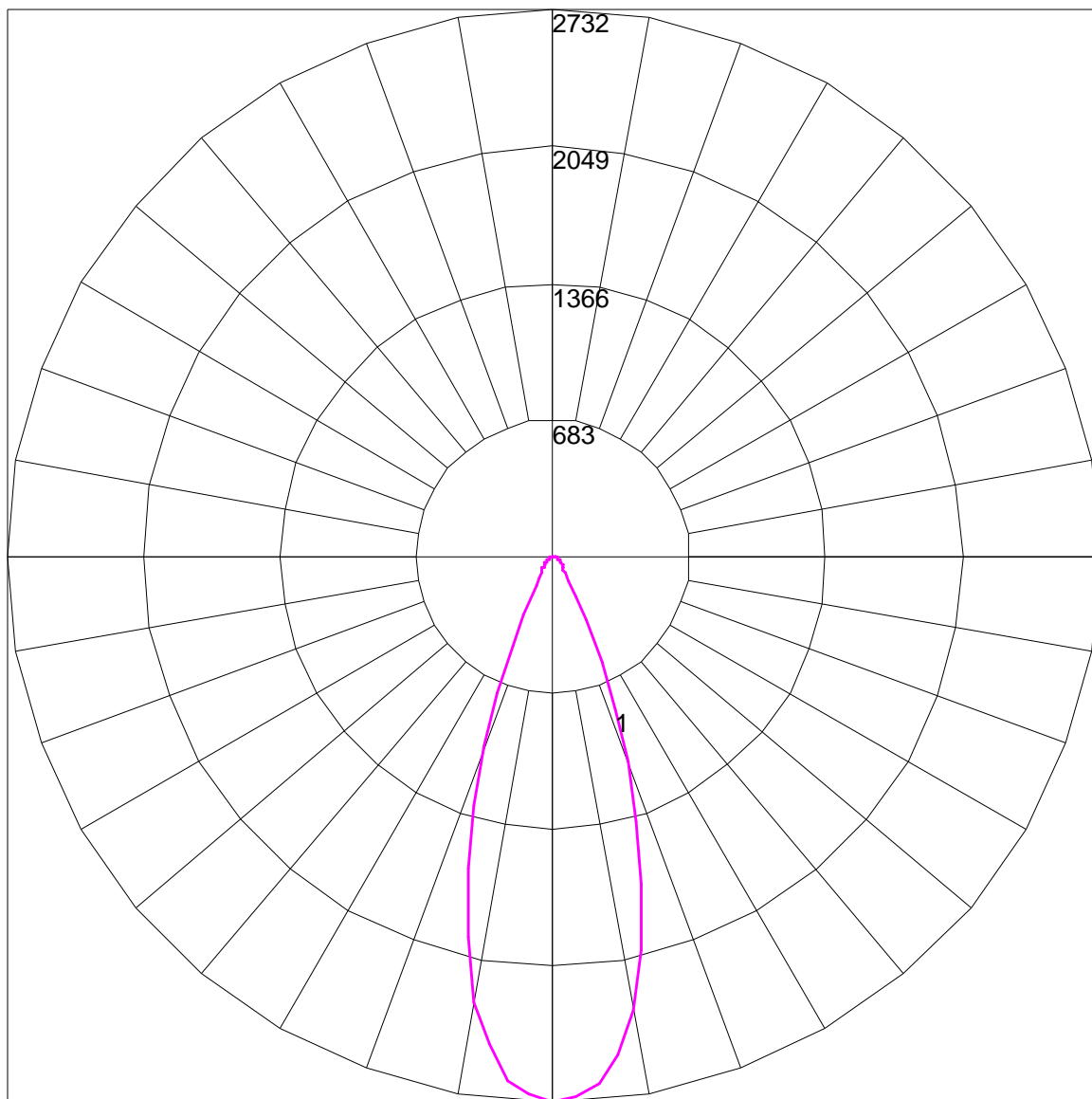
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	109	107	112	109	107	105	105	104	102	101	100	99	98	97	96	94
2	109	105	101	98	107	103	99	97	100	97	95	97	94	93	94	92	91	89
3	104	98	94	90	102	97	93	90	95	91	88	92	89	87	90	88	86	84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80
5	96	88	83	79	94	87	83	79	86	82	78	84	81	78	83	80	77	76
6	92	84	79	75	91	83	78	75	82	78	74	81	77	74	79	76	73	72
7	88	80	75	71	87	80	75	71	78	74	71	77	73	70	76	73	70	69
8	85	77	72	68	84	76	71	68	75	71	68	74	70	67	73	70	67	66
9	82	74	68	65	81	73	68	65	72	68	65	71	67	64	71	67	64	63
10	79	71	66	62	78	70	65	62	69	65	62	69	65	62	68	64	62	61

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00649\_1 ~ SR2DMO-XT20L-E1-SDD2F-XXK-MDMWNL.IES

POLAR GRAPH



Maximum Candela = 2732.272 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)