

**IES INDOOR REPORT**
**PHOTOMETRIC FILENAME : SP-00649\_3 ~ SR2DMO-XT20L-E1-SDD2F-XXK-WDMWGL.IES**
**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] SP-00649\_3  
 [TESTLAB] VLS-245-981  
 [MANUFAC] Spectrum Lighting  
 [ISSUEDATE] 3/16/2018  
 [UPDATE] 4/30/2018  
 [LUMCAT] SR2DMO-XT20L-E1-SDD2F-xxK-WD-MW-GL  
 [LUMINAIRE] Nom. 2" Square Trim Downlight, Wide Beam  
 [OTHER] Matte White Trim, Clear Glass lens  
 [OTHER] 42.6 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	1177
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)	0.72
Spacing Criterion (90-270)	0.68
Spacing Criterion (Diagonal)	0.76
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\_3 ~ SR2DMO-XT20L-E1-SDD2F-XXK-WDMWGL.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	39078	37724	39420
55	28285	26622	28312
65	17218	17518	15713
75	9785	8684	10119
85	11109	9216	9211

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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	1949.823	1949.823	1949.823	1949.823	1949.823	1949.823	1949.823	1949.823	1949.823	1949.823
2.5	1922.706	1920.693	1910.305	1914.720	1906.976	1877.442	1875.871	1871.379	1887.710	1882.438
5.0	1884.917	1883.601	1861.719	1872.317	1847.692	1795.108	1792.559	1788.871	1815.168	1810.478
7.5	1795.409	1777.431	1745.429	1762.808	1741.644	1672.731	1667.579	1670.906	1716.198	1706.344
10.0	1699.726	1669.084	1629.289	1651.661	1630.233	1549.395	1543.797	1552.789	1613.743	1599.221
12.5	1590.536	1556.495	1514.214	1529.351	1508.501	1423.570	1428.739	1432.905	1490.898	1481.631
15.0	1467.088	1442.040	1400.017	1403.928	1375.015	1291.259	1314.282	1310.561	1366.129	1356.900
17.5	1319.852	1311.557	1289.527	1265.136	1224.115	1146.523	1202.401	1171.450	1197.183	1214.701
20.0	1146.617	1174.588	1173.996	1117.572	1049.540	987.366	1083.559	1024.908	1025.230	1055.809
22.5	940.670	1005.684	1043.537	944.642	848.380	807.248	943.823	847.896	819.006	867.015
25.0	746.221	833.288	901.684	770.935	666.061	638.497	795.344	674.621	622.650	688.606
27.5	562.935	649.417	735.683	595.593	499.846	482.276	628.112	512.143	482.756	524.583
30.0	423.564	485.529	574.498	447.922	376.764	361.950	474.986	371.667	349.684	392.252
32.5	317.056	367.948	420.890	344.252	282.415	272.608	344.630	276.849	241.764	293.257
35.0	218.727	259.778	296.444	247.595	196.407	192.259	239.788	192.035	152.486	203.909
37.5	124.997	168.160	207.685	159.366	114.540	117.788	166.499	122.886	111.645	122.393
40.0	89.515	106.713	140.404	106.531	86.268	85.420	114.076	81.677	82.433	85.048
42.5	78.865	85.167	93.125	86.534	77.536	73.520	81.291	74.029	75.202	75.180
45.0	71.662	70.932	69.178	74.201	72.288	66.955	65.228	66.669	68.543	67.660
47.5	65.493	64.045	61.966	67.343	67.927	62.323	61.287	59.574	62.705	61.221
50.0	56.687	56.011	54.524	58.752	58.301	53.100	52.665	52.264	55.183	52.213
52.5	47.369	47.074	46.957	49.232	47.856	42.743	41.459	44.804	45.803	42.346
55.0	42.075	40.272	39.600	42.371	42.114	36.914	35.226	37.942	38.556	35.735
57.5	37.237	34.735	32.327	36.584	36.725	31.781	31.001	31.399	33.102	29.871
60.0	29.789	29.019	27.882	30.014	28.851	26.497	26.381	25.765	26.651	24.807
62.5	22.375	23.223	24.236	23.224	21.209	21.201	21.645	20.483	19.546	19.851
65.0	18.871	18.961	19.200	18.881	17.222	17.563	17.675	16.064	15.288	15.933
67.5	15.338	15.189	13.908	14.973	13.503	14.055	13.850	11.887	12.406	12.192
70.0	11.629	11.844	10.342	11.318	11.095	11.549	11.234	8.931	9.474	10.159
72.5	8.600	8.870	7.323	8.213	8.841	9.266	8.785	6.433	6.740	8.239
75.0	6.568	7.400	5.829	6.748	6.792	7.353	6.730	5.317	5.879	6.545
77.5	4.915	5.294	4.875	5.623	5.197	4.819	4.900	3.870	4.531	4.952
80.0	3.598	3.491	3.947	4.322	3.859	3.044	3.465	2.786	3.090	3.268
82.5	2.848	3.087	2.764	2.770	2.746	2.383	2.651	2.754	2.486	1.879
85.0	2.511	1.933	2.083	2.402	2.082	1.898	2.073	2.128	2.085	1.793
87.5	1.944	1.573	1.603	1.476	1.674	1.857	1.511	1.978	1.613	1.578
90.0	1.155	1.149	1.493	1.064	1.017	0.560	0.958	1.237	0.435	0.903
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	1949.823	1949.823	1949.823	1949.823	1949.823	1949.823	1949.823
2.5	1891.192	1888.319	1910.763	1930.839	1927.225	1929.580	1922.706
5.0	1824.763	1821.909	1852.300	1897.217	1892.307	1901.437	1884.917
7.5	1713.478	1719.023	1768.677	1804.844	1782.570	1803.683	1795.409
10.0	1603.491	1615.682	1680.796	1707.273	1672.907	1702.660	1699.726
12.5	1501.581	1509.492	1568.449	1597.477	1563.687	1588.429	1590.536
15.0	1399.368	1397.848	1454.072	1486.514	1455.097	1468.857	1467.088
17.5	1295.967	1264.663	1289.392	1355.593	1348.939	1334.585	1319.852
20.0	1182.400	1118.880	1121.651	1219.485	1236.080	1188.115	1146.617
22.5	1041.498	938.435	909.766	1043.824	1105.431	1016.597	940.670
25.0	888.836	758.715	703.893	866.143	960.701	839.604	746.221
27.5	712.523	580.435	541.864	679.505	788.414	654.247	562.935
30.0	546.855	429.483	388.753	509.013	620.276	500.375	423.564
32.5	397.142	319.654	274.894	388.257	458.289	382.929	317.056
35.0	276.612	220.835	176.000	275.163	326.454	275.917	218.727
37.5	189.221	134.748	122.075	178.874	228.509	178.358	124.997
40.0	126.421	88.342	82.642	110.183	154.045	119.815	89.515
42.5	85.488	76.862	74.320	86.962	99.959	88.077	78.865
45.0	65.512	67.626	67.262	71.211	72.558	72.595	71.662
47.5	59.662	59.932	62.276	64.879	62.949	65.456	65.493
50.0	51.972	51.258	54.725	56.875	54.553	57.140	56.687
52.5	43.342	42.082	44.000	47.266	46.761	48.370	47.369
55.0	35.877	35.182	36.283	39.490	37.975	40.726	42.075
57.5	28.849	29.128	31.398	33.068	28.820	33.382	37.237
60.0	23.925	24.501	25.757	27.582	24.553	28.255	29.789
62.5	19.545	20.253	19.559	22.625	21.530	23.505	22.375
65.0	16.593	15.669	15.644	18.058	17.319	18.221	18.871

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00649\_3 ~ SR2DMO-XT20L-E1-SDD2F-XXK-WDMWGL.IES****CANDELA TABULATION - (Cont.)**

67.5	13.874	11.030	12.979	13.651	12.924	13.047	15.338
70.0	11.255	9.346	10.040	10.366	10.140	11.605	11.629
72.5	8.488	7.789	7.130	7.539	7.720	9.683	8.600
75.0	5.298	6.426	5.507	6.313	6.251	6.696	6.568
77.5	4.177	4.241	4.227	5.260	4.811	5.505	4.915
80.0	3.632	2.557	3.284	4.026	3.732	4.072	3.598
82.5	2.637	2.253	2.547	2.202	3.142	1.959	2.848
85.0	1.734	1.769	1.494	2.179	2.036	1.655	2.511
87.5	1.695	1.540	1.322	1.902	1.520	1.551	1.944
90.0	1.166	1.089	1.263	0.632	1.349	0.636	1.155
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-00649\_3 ~ SR2DMO-XT20L-E1-SDD2F-XXK-WDMWGL.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	555.46	N.A.	47.20
0-30	905.70	N.A.	76.90
0-40	1058.75	N.A.	89.90
0-60	1150.18	N.A.	97.70
0-80	1174.64	N.A.	99.80
0-90	1176.95	N.A.	100.00
10-90	1007.96	N.A.	85.60
20-40	503.28	N.A.	42.80
20-50	559.67	N.A.	47.50
40-70	108.95	N.A.	9.30
60-80	24.46	N.A.	2.10
70-80	6.94	N.A.	0.60
80-90	2.31	N.A.	0.20
90-110	0.14	N.A.	0.00
90-120	0.14	N.A.	0.00
90-130	0.14	N.A.	0.00
90-150	0.14	N.A.	0.00
90-180	0.14	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1177.09	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	168.99
10-20	386.47
20-30	350.24
30-40	153.05
40-50	56.39
50-60	35.04
60-70	17.52
70-80	6.94
80-90	2.31
90-100	0.14
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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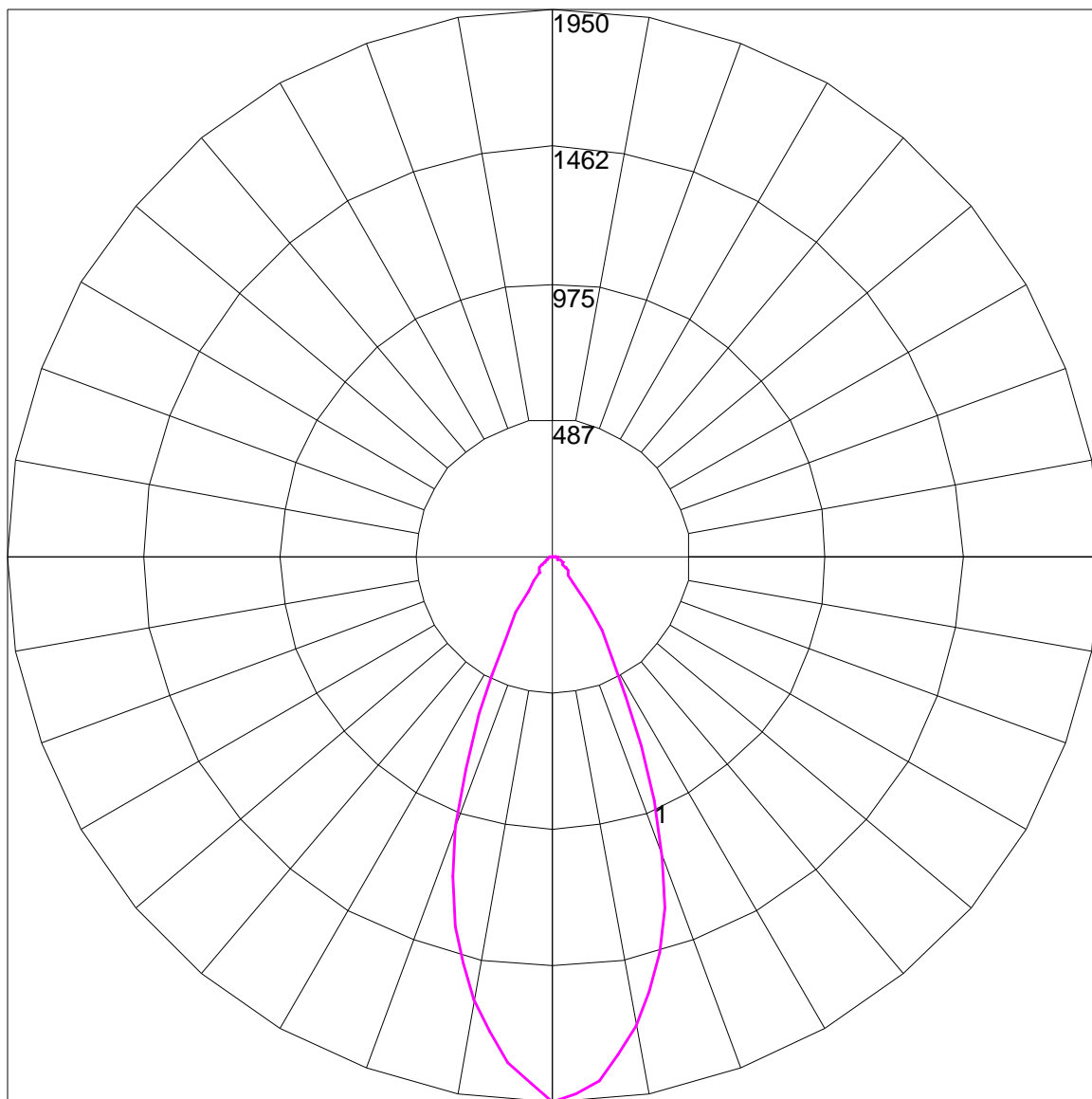
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	109	106	104	105	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	91	89	87
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81
4	98	90	85	81	96	89	84	80	87	83	80	85	82	79	83	80	78	76
5	93	85	79	75	92	84	79	75	82	78	74	81	77	74	79	76	73	72
6	89	80	75	70	88	80	74	70	78	73	70	77	73	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	66	63	80	72	66	62	71	66	62	69	65	62	69	65	62	60
9	78	69	63	59	77	68	63	59	67	62	59	66	62	59	65	61	58	57
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	54

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00649\_3 ~ SR2DMO-XT20L-E1-SDD2F-XXK-WDMWGL.IES

POLAR GRAPH



Maximum Candela = 1949.823 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)