

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWGL.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] SP-00648
[TESTLAB] VLS-245-981
[MANUFAC] Spectrum Lighting
[ISSUE DATE] 3/16/2018
[UPDATE] 4/30/2018
[LUMCAT] SR2DMO-XT20L-E1-RDD2F-xxK-MD-MW-GL
[LUMINAIRE] Nom. 2" Round Trim Downlight, Medium Beam
[OTHER] Matte White Trim, Clear Glass lens
[OTHER] 31.8 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 RDD2F 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	1431
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	60
Total Luminaire Watts	23.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.54
Spacing Criterion (90-270)	0.54
Spacing Criterion (Diagonal)	0.54
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 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWGL.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	42869	43361	44530
55	36939	43689	45201
65	27961	32003	31441
75	18137	17366	19210
85	13797	19327	21938

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SP-00648 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWGL.IES

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	4084.595	4084.595	4084.595	4084.595	4084.595	4084.595	4084.595	4084.595	4084.595	4084.595
2.5	4022.378	4075.986	4047.466	4061.586	4056.974	4041.677	3997.390	4070.641	4015.161	4070.939
5.0	3872.017	3862.042	3874.495	3863.414	3876.125	3864.583	3862.198	3862.210	3854.342	3863.217
7.5	3581.869	3626.978	3612.962	3625.656	3629.230	3605.020	3560.098	3637.476	3564.464	3629.573
10.0	3200.365	3189.194	3203.966	3202.148	3222.834	3213.850	3212.789	3208.920	3191.458	3191.579
12.5	2735.448	2732.916	2747.146	2740.374	2774.487	2745.052	2719.788	2765.565	2703.818	2742.918
15.0	2219.033	2216.376	2213.895	2217.644	2229.402	2237.054	2225.769	2241.888	2212.578	2217.654
17.5	1743.782	1695.025	1721.033	1682.867	1721.427	1706.874	1728.569	1713.261	1716.639	1709.939
20.0	1293.327	1295.939	1290.152	1282.035	1295.234	1288.785	1276.147	1321.770	1290.231	1317.749
22.5	939.438	905.254	921.893	905.119	920.794	931.505	953.773	937.251	952.441	942.973
25.0	640.439	641.597	645.944	641.536	655.431	653.092	656.699	671.895	661.727	673.816
27.5	413.506	385.282	414.956	397.284	423.140	415.679	430.918	411.341	427.816	421.762
30.0	226.518	245.728	247.651	253.365	257.561	258.673	242.766	267.202	253.877	265.724
32.5	129.917	111.673	132.893	124.728	134.498	141.701	153.598	126.549	150.630	128.892
35.0	80.524	84.238	89.664	87.798	93.565	89.313	85.205	94.496	86.655	92.253
37.5	60.172	60.706	63.270	64.135	64.334	67.702	69.905	64.594	66.524	60.845
40.0	54.602	57.998	58.903	58.382	56.767	58.389	57.890	58.513	54.468	54.890
42.5	51.594	55.838	54.603	54.908	51.878	54.680	53.735	52.667	51.222	49.773
45.0	49.812	51.444	50.384	52.064	51.742	52.145	49.926	50.237	48.556	48.477
47.5	47.089	47.013	47.426	49.297	50.902	50.122	46.922	47.809	46.490	47.168
50.0	43.928	43.448	45.993	46.808	48.865	46.531	44.185	45.630	44.245	45.802
52.5	39.622	39.896	43.944	44.349	46.226	42.287	42.033	43.433	41.819	44.020
55.0	34.817	38.465	41.179	39.983	42.604	39.381	39.794	40.338	39.474	40.568
57.5	31.472	36.964	37.099	35.433	38.677	37.006	37.367	37.256	37.207	36.870
60.0	28.749	31.042	31.547	32.916	34.272	33.395	33.708	34.606	32.642	32.249
62.5	24.365	25.235	26.600	30.558	28.781	29.317	27.596	31.642	25.935	27.648
65.0	19.418	20.559	22.225	23.366	21.835	24.693	22.252	23.861	20.809	23.111
67.5	15.602	16.248	18.336	17.054	17.267	19.905	18.064	16.967	16.813	18.543
70.0	12.230	12.728	14.679	14.042	14.411	15.303	14.129	13.571	14.207	13.924
72.5	9.929	10.126	10.381	10.942	11.032	10.858	10.356	11.257	11.740	10.907
75.0	7.714	7.648	7.386	7.928	8.170	6.813	6.587	10.009	7.767	8.481
77.5	5.754	4.350	5.966	5.892	6.281	4.729	5.092	6.959	5.754	5.230
80.0	4.187	4.438	5.803	4.481	5.428	4.187	5.222	4.686	4.777	3.747
82.5	2.821	2.750	3.198	2.708	3.397	4.273	3.510	3.246	3.922	3.217
85.0	1.976	1.816	2.768	2.576	3.142	2.234	2.463	2.737	3.048	2.902
87.5	1.654	2.004	2.039	1.701	1.746	1.694	1.293	2.254	1.248	1.554
90.0	0.000	0.000	0.000	0.000	1.734	0.817	1.351	1.691	1.865	1.722
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

IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00648 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWGL.IES

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	4084.595	4084.595	4084.595	4084.595	4084.595	4084.595	4084.595
2.5	4043.450	4064.302	4051.688	4039.300	3996.657	4078.614	4022.378
5.0	3854.182	3859.559	3850.400	3856.217	3860.034	3863.460	3872.017
7.5	3583.063	3608.678	3585.721	3587.952	3550.107	3627.596	3581.869
10.0	3176.559	3177.381	3171.977	3191.905	3195.768	3198.194	3200.365
12.5	2698.346	2728.271	2704.805	2747.065	2723.055	2759.129	2735.448
15.0	2204.526	2211.923	2214.374	2231.906	2221.082	2238.840	2219.033
17.5	1702.787	1721.558	1716.015	1753.845	1750.474	1731.093	1743.782
20.0	1301.512	1321.746	1314.116	1327.163	1286.969	1318.939	1293.327
22.5	949.040	949.488	943.439	954.853	944.521	923.494	939.438
25.0	667.096	670.131	658.972	654.927	628.446	644.340	640.439
27.5	417.929	419.136	400.969	411.172	409.705	383.642	413.506
30.0	258.319	256.851	249.361	239.312	210.248	240.906	226.518
32.5	138.503	125.331	128.682	126.712	132.414	114.535	129.917
35.0	87.590	87.072	84.092	87.053	77.673	84.705	80.524
37.5	65.923	58.415	60.412	62.679	62.256	58.732	60.172
40.0	56.822	56.865	54.858	56.400	53.566	53.843	54.602
42.5	52.810	54.861	54.003	51.504	48.057	49.255	51.594
45.0	50.229	51.613	51.219	48.183	43.067	46.194	49.812
47.5	48.201	48.232	47.964	45.228	42.190	43.490	47.089
50.0	45.188	44.513	43.821	42.667	41.909	42.482	43.928
52.5	41.813	40.877	39.475	40.206	38.859	40.913	39.622
55.0	39.126	37.450	37.503	37.850	35.427	36.842	34.817
57.5	36.680	33.560	36.041	33.698	31.656	32.634	31.472
60.0	32.555	28.590	30.448	27.755	27.844	27.866	28.749
62.5	27.885	24.060	24.032	22.663	23.401	23.293	24.365
65.0	22.032	20.420	18.466	18.246	18.924	19.240	19.418

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWGL.IES****CANDELA TABULATION - (Cont.)**

67.5	15.969	16.421	13.430	14.393	14.630	15.258	15.602
70.0	13.452	12.037	11.935	10.746	10.751	11.348	12.230
72.5	10.168	9.701	9.326	7.290	7.507	10.623	9.929
75.0	5.612	7.947	5.552	5.578	6.926	8.786	7.714
77.5	3.936	6.287	4.808	5.007	5.715	5.074	5.754
80.0	3.993	4.298	3.651	4.369	3.701	2.701	4.187
82.5	3.874	3.399	2.705	2.163	2.197	2.899	2.821
85.0	2.062	2.124	2.036	1.834	1.821	1.635	1.976
87.5	1.093	1.667	1.073	1.625	1.440	1.310	1.654
90.0	1.749	1.834	0.000	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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWGL.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	952.76	N.A.	66.60
0-30	1259.79	N.A.	88.00
0-40	1325.85	N.A.	92.60
0-60	1398.96	N.A.	97.70
0-80	1428.63	N.A.	99.80
0-90	1431.25	N.A.	100.00
10-90	1082.94	N.A.	75.70
20-40	373.09	N.A.	26.10
20-50	411.71	N.A.	28.80
40-70	94.43	N.A.	6.60
60-80	29.67	N.A.	2.10
70-80	8.35	N.A.	0.60
80-90	2.62	N.A.	0.20
90-110	0.11	N.A.	0.00
90-120	0.11	N.A.	0.00
90-130	0.11	N.A.	0.00
90-150	0.11	N.A.	0.00
90-180	0.11	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1431.36	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	348.32
10-20	604.44
20-30	307.03
30-40	66.06
40-50	38.62
50-60	34.49
60-70	21.32
70-80	8.35
80-90	2.62
90-100	0.11
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

IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00648 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWGL.IES

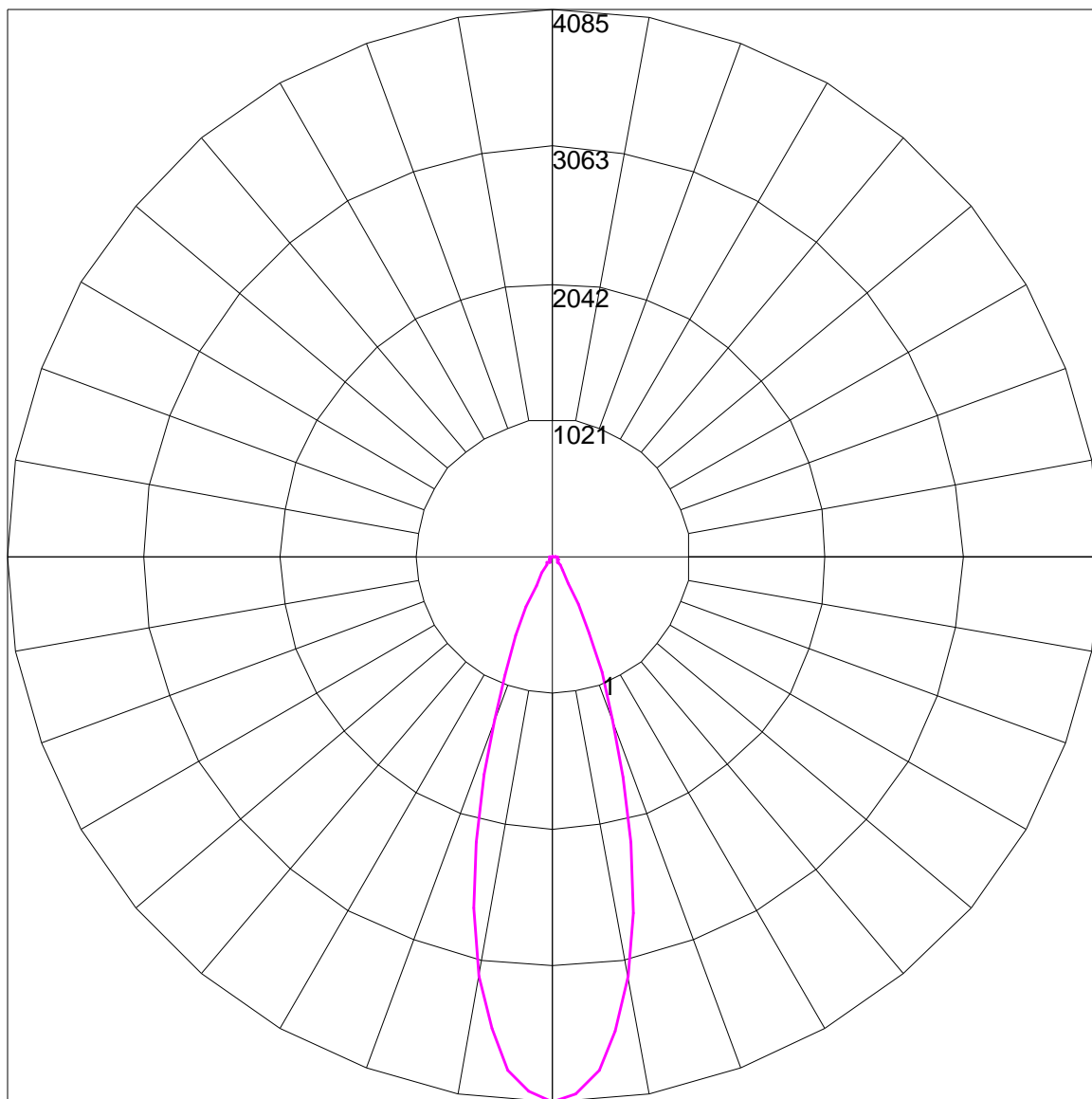
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	112	109	107	112	110	108	106	106	104	102	102	101	99	98	97	97	95
2	109	105	102	99	107	103	100	98	100	98	95	97	95	93	95	93	91	90
3	105	100	95	92	103	98	94	91	96	92	90	93	91	88	91	89	87	86
4	101	95	90	86	99	94	89	86	91	88	85	90	86	84	88	85	83	82
5	97	90	85	82	96	89	85	81	88	84	81	86	83	80	85	82	79	78
6	94	86	81	78	92	86	81	78	84	80	77	83	79	77	82	78	76	75
7	90	83	78	74	89	82	77	74	81	77	74	80	76	73	79	76	73	72
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67
10	82	74	69	66	81	73	69	66	73	69	66	72	68	66	71	68	65	64

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SP-00648 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWGL.IES

POLAR GRAPH



Maximum Candela = 4084.595 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180)