

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648_1 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWNL.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] SP-00648_1
[TESTLAB] VLS-245-981
[MANUFAC] Spectrum Lighting
[ISSUEDATE] 3/16/2018
[UPDATE] 4/30/2018
[LUMCAT] SR2DMO-XT20L-E1-RDD2F-xxK-MD-MW-NL
[LUMINAIRE] Nom. 2" Round Trim Downlight, Medium Beam
[OTHER] Matte White Trim, No lens
[OTHER] 31.4 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	1564
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	66
Total Luminaire Watts	23.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.56
Spacing Criterion (90-270)	0.56
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_1 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWNL.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	41135	42128	41914
55	41083	43163	45135
65	35506	37290	37070
75	24088	21953	16635
85	15570	13127	16911

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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	4462.473	4462.473	4462.473	4462.473	4462.473	4462.473	4462.473	4462.473	4462.473	4462.473
2.5	4492.651	4486.173	4496.059	4495.347	4479.349	4400.635	4411.198	4389.709	4401.313	4379.608
5.0	4284.822	4310.366	4277.845	4309.699	4262.313	4130.251	4151.357	4084.237	4118.014	4089.474
7.5	4056.890	4080.559	4051.235	4094.503	4035.179	3823.749	3844.011	3768.279	3803.207	3761.058
10.0	3601.172	3654.414	3594.325	3669.130	3582.459	3329.402	3363.944	3246.320	3296.506	3247.165
12.5	3134.120	3194.939	3132.940	3219.343	3124.746	2809.799	2859.331	2721.985	2780.871	2707.480
15.0	2572.845	2635.095	2551.598	2634.699	2527.140	2235.870	2280.799	2168.117	2223.006	2170.887
17.5	2012.118	2094.185	1978.510	2065.942	1937.053	1656.900	1743.553	1624.003	1698.760	1634.594
20.0	1564.796	1602.127	1515.843	1566.318	1475.347	1257.027	1312.825	1246.406	1302.375	1264.700
22.5	1125.062	1165.340	1070.319	1109.413	1029.566	867.558	930.063	878.427	934.831	905.138
25.0	830.149	849.920	779.798	806.746	746.983	609.354	652.626	613.509	659.510	645.305
27.5	542.928	568.447	503.117	529.906	477.035	355.559	412.114	363.731	414.068	388.605
30.0	344.374	352.020	316.525	330.352	300.691	226.677	242.352	226.110	248.670	245.402
32.5	162.014	187.810	151.902	169.285	143.852	102.166	121.637	104.919	121.614	106.669
35.0	106.262	110.071	99.939	105.223	98.453	76.646	82.145	77.589	83.245	78.894
37.5	57.819	61.452	57.592	59.661	60.261	52.781	56.479	54.226	56.031	52.972
40.0	53.029	55.341	54.493	54.503	54.344	50.152	50.997	48.626	50.920	50.835
42.5	48.893	51.432	51.515	51.256	49.528	47.791	47.662	44.271	47.586	48.711
45.0	47.797	50.323	48.951	51.654	48.703	47.694	47.059	44.430	47.335	46.708
47.5	46.576	48.597	46.825	50.559	47.748	47.172	45.839	44.290	46.587	44.666
50.0	44.875	46.186	45.942	47.004	46.388	44.029	43.924	43.232	45.091	42.369
52.5	42.640	43.617	44.272	44.181	44.783	40.847	41.936	41.793	42.702	40.127
55.0	38.722	40.891	40.683	42.406	42.542	37.470	39.877	39.370	39.124	38.165
57.5	35.388	37.638	37.131	39.725	39.691	34.261	36.674	36.518	35.353	35.838
60.0	33.629	33.924	33.657	35.896	35.477	31.709	32.470	32.711	31.358	32.042
62.5	30.598	30.393	29.971	31.136	30.929	28.483	27.915	28.542	26.830	27.670
65.0	24.658	27.000	25.897	25.346	25.744	23.039	23.092	23.677	21.755	21.364
67.5	19.730	22.687	21.707	21.661	20.843	18.244	18.920	18.691	17.170	15.859
70.0	16.462	17.839	17.361	19.759	16.341	14.866	15.132	13.533	12.967	12.132
72.5	13.317	13.257	13.248	14.115	11.689	11.955	12.046	10.323	10.751	9.806
75.0	10.245	9.188	9.337	8.062	7.075	9.441	9.052	8.215	9.061	8.682
77.5	6.416	6.797	6.810	7.148	5.446	6.887	5.860	5.818	6.905	6.086
80.0	4.871	5.552	4.744	5.002	4.908	4.721	3.601	4.022	4.893	4.183
82.5	3.989	3.916	3.025	3.072	3.974	3.123	2.843	2.935	3.076	2.887
85.0	2.230	2.237	1.880	2.321	2.422	2.236	2.484	2.086	1.928	1.951
87.5	1.609	1.885	1.450	1.927	1.939	1.647	1.928	1.899	1.750	1.603
90.0	0.874	0.783	1.008	0.591	0.953	1.258	0.998	1.309	0.630	1.182
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	4462.473	4462.473	4462.473	4462.473	4462.473	4462.473	4462.473
2.5	4423.393	4409.266	4433.497	4482.972	4478.939	4502.353	4492.651
5.0	4146.774	4120.599	4173.434	4302.763	4274.459	4312.969	4284.822
7.5	3849.167	3817.033	3889.354	4071.171	4031.286	4097.769	4056.890
10.0	3342.542	3298.524	3401.588	3648.764	3588.230	3663.624	3601.172
12.5	2830.244	2774.192	2905.358	3194.810	3118.299	3212.792	3134.120
15.0	2278.175	2231.956	2355.121	2644.024	2568.854	2655.501	2572.845
17.5	1750.183	1695.833	1827.373	2112.126	2011.689	2112.258	2012.118
20.0	1353.590	1316.445	1410.142	1629.838	1569.192	1638.050	1564.796
22.5	979.544	944.532	1018.926	1199.114	1133.357	1196.455	1125.062
25.0	702.598	675.768	732.343	883.516	835.348	886.041	830.149
27.5	448.494	418.255	470.034	598.171	541.734	596.211	542.928
30.0	276.098	260.725	287.764	371.718	348.286	374.260	344.374
32.5	135.726	119.132	140.339	199.324	160.299	191.533	162.014
35.0	90.381	83.078	90.697	117.819	107.825	118.879	106.262
37.5	56.750	52.842	54.434	65.157	58.739	64.985	57.819
40.0	52.933	52.100	49.944	55.225	53.123	55.643	53.029
42.5	49.506	50.839	46.360	48.695	47.796	48.418	48.893
45.0	46.922	47.433	44.647	46.555	45.012	45.564	47.797
47.5	44.114	44.221	43.090	43.877	42.598	43.498	46.576
50.0	40.881	41.666	41.809	40.584	42.536	42.834	44.875
52.5	38.627	39.253	39.730	38.992	41.998	41.501	42.640
55.0	37.977	37.240	36.403	39.100	39.066	39.125	38.722
57.5	36.011	34.367	33.346	37.229	36.043	36.516	35.388
60.0	32.147	29.410	30.657	33.629	32.657	33.591	33.629
62.5	27.378	25.146	26.738	29.572	28.863	29.745	30.598
65.0	21.470	22.339	21.358	25.160	23.698	24.804	24.658

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648_1 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWNL.IES****CANDELA TABULATION - (Cont.)**

67.5	17.075	18.887	16.940	20.585	18.946	20.405	19.730
70.0	14.129	14.461	13.395	15.913	15.108	16.499	16.462
72.5	10.979	10.056	9.767	11.836	11.365	12.414	13.317
75.0	7.961	5.752	6.514	8.318	7.701	8.563	10.245
77.5	6.543	4.648	6.044	6.412	5.223	6.762	6.416
80.0	4.792	3.913	4.366	4.428	3.823	4.483	4.871
82.5	3.193	3.105	2.709	2.999	3.231	3.036	3.989
85.0	1.945	2.000	1.959	2.200	2.276	2.069	2.230
87.5	1.850	2.448	1.574	1.771	1.017	1.803	1.609
90.0	1.078	1.476	0.905	0.907	1.282	0.882	0.874
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	1039.59	N.A.	66.50
0-30	1385.29	N.A.	88.60
0-40	1456.89	N.A.	93.10
0-60	1528.36	N.A.	97.70
0-80	1561.57	N.A.	99.80
0-90	1564.26	N.A.	100.00
10-90	1183.81	N.A.	75.70
20-40	417.29	N.A.	26.70
20-50	453.97	N.A.	29.00
40-70	95.16	N.A.	6.10
60-80	33.21	N.A.	2.10
70-80	9.53	N.A.	0.60
80-90	2.68	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	1564.39	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	380.45
10-20	659.15
20-30	345.70
30-40	71.59
40-50	36.68
50-60	34.80
60-70	23.68
70-80	9.53
80-90	2.68
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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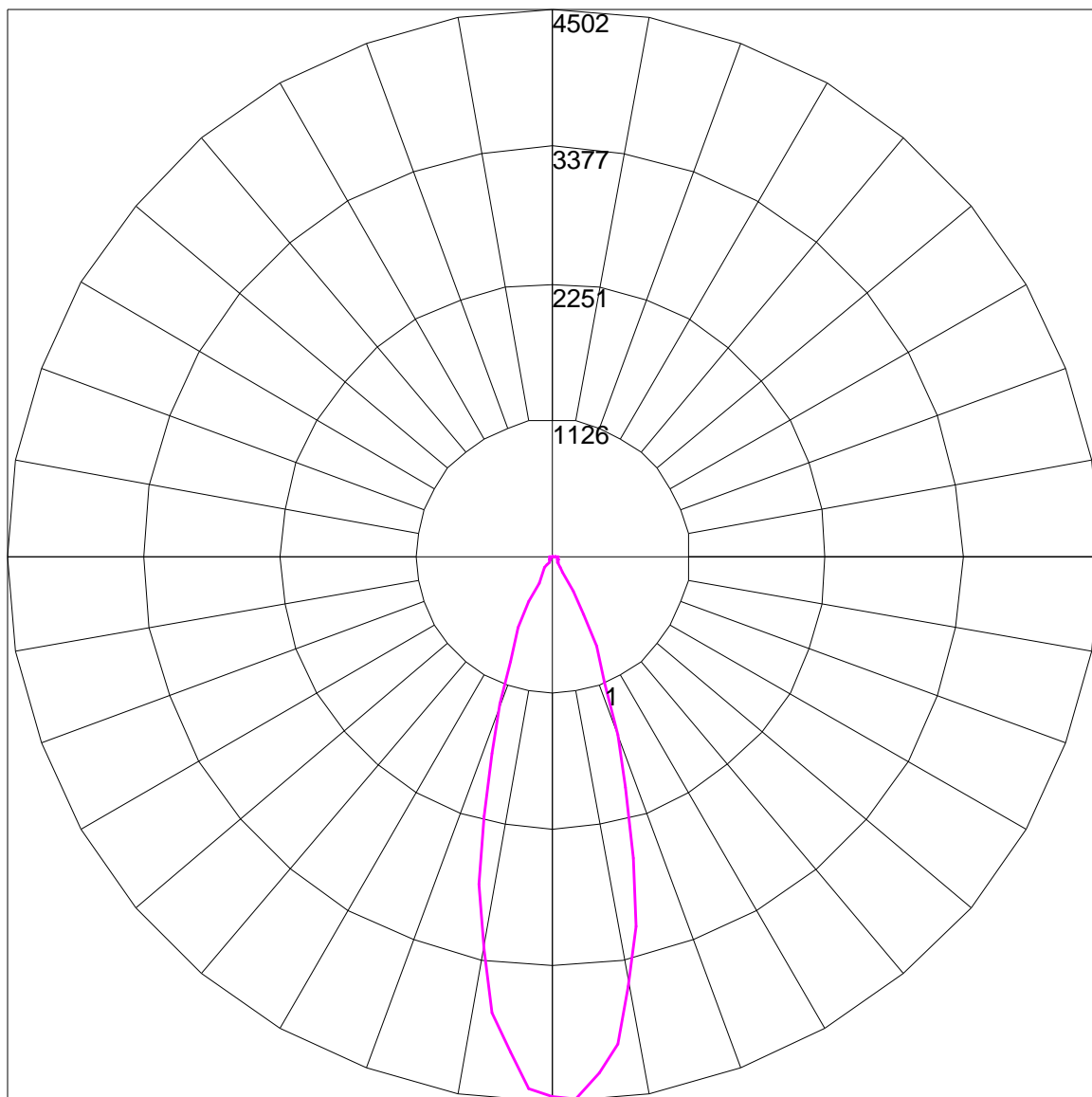
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	114	112	109	107	112	110	108	106	106	104	103	102	101	99	98	97	97	95
2	110	105	102	99	107	104	100	98	100	98	96	97	95	93	95	93	92	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	92	88	85	90	87	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	79	76	75
7	90	83	78	74	89	82	78	74	81	77	74	80	76	74	79	76	73	72
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69
9	85	77	72	69	84	76	72	69	75	71	68	75	71	68	74	70	68	67
10	82	74	69	66	81	74	69	66	73	69	66	72	68	66	72	68	66	65

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SP-00648_1 ~ SR2DMO-XT20L-E1-RDD2F-XXK-MDMWNL.IES

POLAR GRAPH



Maximum Candela = 4502.353 Located At Horizontal Angle = 337.5, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (0 - 180)