

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : SP-00648\_10 ~ SR2MX-XT13L-E1-RH2FG(WHITE INTERIOR)C2-35K-MD-MW.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] SP-00648\_10\_M-13L  
 [TESTLAB] Spectrum Lighting Photometric Lab, VLS-245-981  
 [MANUFAC] Spectrum Lighting  
 [ISSUE DATE] 5/16/2018  
 [UPDATE] 7/12/2018  
 [LUMCAT] SR2Mx-XT13L-E1-RH2FGC2-35K-MD-MW  
 [LUMINAIRE] Nominal 3" Round Downlight, Medium Beam  
 [OTHER] Matte White Trim, Decorative Round Trim - Frosted Glass  
 [OTHER] Interior of glass accent also frosted  
 [OTHER] 23.5 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: SR2MO-XT-series  
 [OTHER] For New Construction IC Rated Housing: SR2MI-XT-Series  
 [OTHER] For Remodel/Retrofit Housing: SR2MR-XT-Series  
 [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	325
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	22
Total Luminaire Watts	15
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.42
Spacing Criterion (90-270)	0.42
Spacing Criterion (Diagonal)	0.38
Basic Luminous Shape	Circular w/ Sides
Luminous Length (0-180)	0.13 ft (Diameter)
Luminous Width (90-270)	0.13 ft (Diameter)
Luminous Height	0.18 ft

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00648\_10 ~ SR2MX-XT13L-E1-RH2FG(WHITE INTERIOR)C2-35K-MD-MW.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9423	8644	8197
55	7442	6938	6480
65	6981	6098	5363
75	6291	5411	5223
85	6476	5745	5065

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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	1363.997	1363.997	1363.997	1363.997	1363.997	1363.997	1363.997	1363.997	1363.997	1363.997
2.5	1274.955	1260.975	1262.033	1269.482	1281.266	1283.695	1292.647	1302.029	1316.550	1330.597
5.0	1210.182	1217.333	1220.170	1226.937	1230.353	1231.567	1233.779	1235.190	1233.383	1233.374
7.5	1133.443	1121.703	1112.077	1113.757	1120.354	1127.185	1135.912	1131.557	1126.473	1116.497
10.0	931.509	904.866	885.313	883.009	901.644	922.045	933.230	933.357	919.049	895.962
12.5	628.582	599.236	579.546	581.957	603.189	638.157	656.243	655.021	634.618	605.139
15.0	334.955	318.897	307.295	318.712	339.589	376.224	394.447	398.518	371.948	336.845
17.5	167.296	162.280	160.331	172.512	189.061	208.398	218.759	217.886	195.567	167.424
20.0	86.330	84.336	83.108	91.392	98.587	111.606	113.042	106.863	91.712	78.133
22.5	47.570	47.541	45.225	47.111	51.819	57.730	59.546	58.501	51.812	46.117
25.0	33.284	32.885	32.214	33.157	33.729	34.345	35.280	36.751	39.247	40.683
27.5	29.370	29.930	28.644	29.119	29.793	29.678	30.399	34.506	38.484	40.805
30.0	29.751	28.619	27.906	27.505	27.268	28.575	29.909	35.631	39.355	42.980
32.5	30.884	28.099	27.051	27.485	25.984	29.581	31.101	35.782	40.127	42.502
35.0	31.449	27.964	25.890	25.477	25.124	28.009	29.814	33.059	38.119	40.394
37.5	29.474	25.695	23.874	25.018	22.985	24.558	26.818	28.848	31.362	33.882
40.0	23.256	23.033	21.157	21.828	20.880	21.371	21.845	23.464	25.721	26.607
42.5	22.179	21.362	20.133	19.732	19.297	19.337	20.430	21.424	22.842	23.803
45.0	21.157	20.103	19.408	18.553	18.405	18.214	19.192	20.130	20.465	21.979
47.5	19.776	18.954	18.732	18.143	17.349	17.855	17.867	18.975	18.559	20.538
50.0	18.893	18.000	17.766	16.765	16.319	17.789	16.266	17.999	17.324	18.830
52.5	18.228	17.417	16.656	15.397	15.636	17.812	15.795	16.996	16.500	17.590
55.0	17.272	17.234	16.101	15.070	15.040	16.217	16.278	15.940	15.857	17.058
57.5	16.249	16.866	15.683	14.816	14.681	14.791	15.746	15.005	15.488	16.505
60.0	15.982	16.347	14.978	14.920	14.105	14.501	14.803	14.197	15.163	15.933
62.5	15.831	16.011	14.227	14.826	13.075	14.201	13.730	13.801	14.178	15.260
65.0	16.237	15.797	14.183	14.022	12.474	13.862	12.620	13.746	13.140	14.518
67.5	16.594	15.014	14.135	13.250	12.555	13.551	12.574	13.199	13.195	14.005
70.0	16.197	14.004	13.199	12.543	12.299	13.331	12.750	12.327	13.257	13.616
72.5	15.427	14.208	12.520	12.078	11.762	12.663	12.605	11.771	13.158	13.019
75.0	14.219	14.081	12.231	11.797	11.805	11.385	12.326	11.353	12.984	12.436
77.5	14.305	13.492	13.016	11.970	11.573	10.763	11.674	11.336	12.685	12.277
80.0	13.694	12.684	12.849	12.115	10.973	10.598	11.309	11.877	13.096	11.616
82.5	14.389	12.203	12.343	11.966	11.564	10.959	10.577	12.303	13.199	11.183
85.0	13.767	11.467	12.213	11.429	10.768	9.808	9.281	11.170	12.448	11.235
87.5	10.890	9.502	10.666	9.184	9.448	8.162	8.799	9.600	10.461	9.086
90.0	0.000	0.000	0.000	0.000	0.000	6.228	7.168	6.947	6.978	6.914
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	1363.997	1363.997	1363.997	1363.997	1363.997	1363.997	1363.997
2.5	1349.502	1368.305	1378.152	1363.199	1336.791	1304.885	1274.955
5.0	1236.479	1239.878	1243.902	1238.994	1224.579	1209.552	1210.182
7.5	1110.268	1112.736	1125.264	1135.157	1138.075	1137.758	1133.443
10.0	879.573	884.586	904.953	935.475	950.776	946.659	931.509
12.5	581.349	581.506	600.514	635.719	653.722	650.850	628.582
15.0	310.222	296.522	309.963	337.349	355.852	353.315	334.955
17.5	147.876	143.820	148.148	160.513	166.017	169.708	167.296
20.0	68.460	67.920	76.752	81.962	83.814	87.966	86.330
22.5	43.018	40.089	42.822	46.135	48.718	49.356	47.570
25.0	40.310	37.508	35.127	32.978	34.358	33.099	33.284
27.5	42.688	40.837	38.572	32.897	30.890	30.599	29.370
30.0	43.871	43.906	42.968	36.676	35.485	31.803	29.751
32.5	44.115	43.679	44.626	39.768	38.668	34.566	30.884
35.0	41.541	42.795	41.771	40.783	38.568	35.528	31.449
37.5	35.177	37.153	37.286	35.626	33.608	31.440	29.474
40.0	27.930	29.048	28.475	29.112	27.498	26.424	23.256
42.5	24.163	23.469	24.049	23.829	23.598	22.335	22.179
45.0	22.039	22.211	22.606	22.755	21.547	21.403	21.157
47.5	20.494	21.043	21.139	21.212	20.065	20.735	19.776
50.0	19.232	19.969	20.215	19.441	19.685	20.535	18.893
52.5	17.946	18.879	19.730	19.047	19.038	19.749	18.228
55.0	16.799	17.784	18.777	18.843	17.777	18.439	17.272
57.5	16.163	17.278	17.665	18.281	16.931	17.510	16.249
60.0	15.761	16.823	17.172	17.696	16.805	16.834	15.982
62.5	15.956	16.158	16.817	16.369	16.580	16.828	15.831
65.0	15.733	15.518	16.024	15.229	16.214	17.186	16.237

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00648\_10 ~ SR2MX-XT13L-E1-RH2FG(WHITE INTERIOR)C2-35K-MD-MW.IES****CANDELA TABULATION - (Cont.)**

67.5	14.669	15.742	15.164	15.686	15.651	16.693	16.594
70.0	13.834	15.699	15.058	15.654	14.932	15.921	16.197
72.5	13.284	14.536	14.921	14.719	15.202	14.779	15.427
75.0	13.481	13.889	14.629	14.163	15.280	14.386	14.219
77.5	13.755	13.687	14.795	14.085	14.835	14.607	14.305
80.0	13.058	13.181	14.613	14.244	15.044	14.146	13.694
82.5	13.212	12.657	13.179	13.075	14.841	13.948	14.389
85.0	12.503	13.123	11.731	12.043	12.407	14.443	13.767
87.5	9.959	10.503	10.822	10.079	10.258	12.189	10.890
90.0	7.157	8.174	7.873	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	211.96	N.A.	65.30
0-30	232.09	N.A.	71.50
0-40	252.27	N.A.	77.70
0-60	283.62	N.A.	87.40
0-80	312.41	N.A.	96.30
0-90	324.04	N.A.	99.80
10-90	215.64	N.A.	66.40
20-40	40.31	N.A.	12.40
20-50	56.46	N.A.	17.40
40-70	46.08	N.A.	14.20
60-80	28.79	N.A.	8.90
70-80	14.06	N.A.	4.30
80-90	11.62	N.A.	3.60
90-110	0.49	N.A.	0.20
90-120	0.49	N.A.	0.20
90-130	0.49	N.A.	0.20
90-150	0.49	N.A.	0.20
90-180	0.49	N.A.	0.20
110-180	0.00	N.A.	0.00
0-180	324.53	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	108.39
10-20	103.57
20-30	20.13
30-40	20.18
40-50	16.15
50-60	15.20
60-70	14.73
70-80	14.06
80-90	11.62
90-100	0.49
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

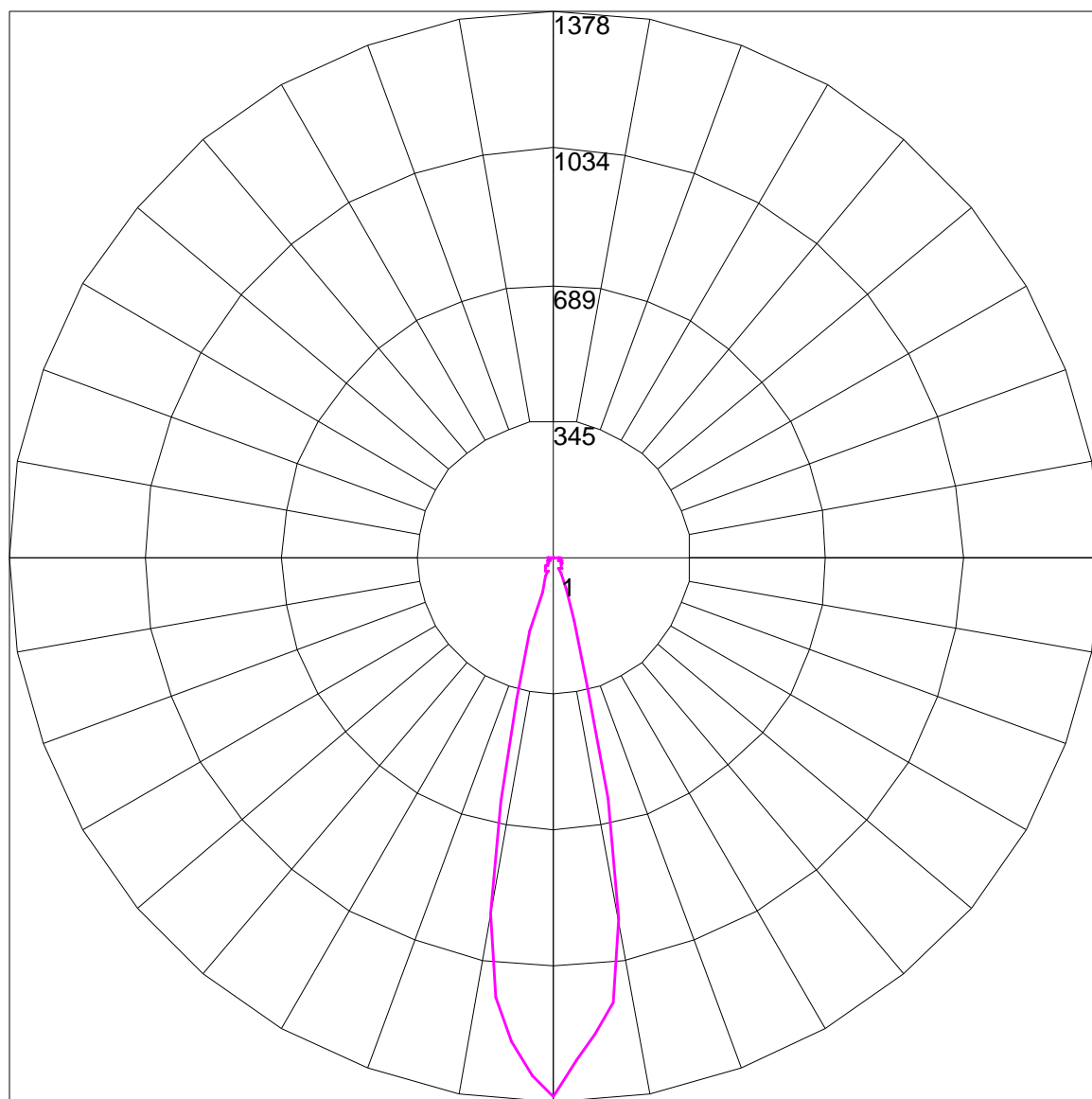
Effective Floor Cavity Reflectance 0.20

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	106	100	95	92	103	98	94	91	95	92	88	92	89	87	89	87	85	83
3	101	94	88	84	99	92	87	84	90	86	82	87	84	81	85	82	80	78
4	96	89	83	79	95	88	82	78	85	81	77	83	80	76	81	78	76	74
5	93	84	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	69	68
7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	74	70	67	66
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64
9	81	73	67	64	80	72	67	64	71	67	63	70	66	63	70	66	63	62
10	79	70	65	62	78	70	65	62	69	65	62	68	64	62	68	64	61	60

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00648\_10 ~ SR2MX-XT13L-E1-RH2FG(WHITE INTERIOR)C2-35K-MD-MW.IES

## POLAR GRAPH



Maximum Candela = 1378.152 Located At Horizontal Angle = 270, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)