

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648_9 ~ SR2MX-XT13L-E1-RH2BGC2-35K-MD-MW.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002

[TEST] SP-00648_9_M-13L

[TESTLAB] Spectrum Lighting Photometric Lab, VLS-245-981

[MANUFAC] Spectrum Lighting

[ISSUEDATE] 5/16/2018

[UPDATE] 7/12/2018

[LUMCAT] SR2Mx-XT13L-E1-RH2BGC2-35K-MD-MW

[LUMINAIRE] Nominal 2" Round Downlight, Medium Beam

[OTHER] Matte White Trim, Decorative Round Trim - Bubble Glass

[OTHER] 28.9 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	493
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	33
Total Luminaire Watts	15
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.52
Spacing Criterion (90-270)	0.54
Spacing Criterion (Diagonal)	0.50
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_9 ~ SR2MX-XT13L-E1-RH2BGC2-35K-MD-MW.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	19029	20216	21271
55	11439	13145	13330
65	6164	7435	7265
75	2278	2181	2366
85	1070	956	812

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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	1302.508	1302.508	1302.508	1302.508	1302.508	1302.508	1302.508	1302.508	1302.508	1302.508
2.5	1305.439	1303.379	1300.128	1297.137	1294.083	1277.266	1275.672	1263.344	1268.362	1266.041
5.0	1345.569	1330.816	1309.118	1281.510	1254.324	1219.017	1213.874	1232.812	1248.580	1264.808
7.5	1280.280	1285.846	1266.299	1261.705	1249.716	1228.071	1223.703	1226.665	1239.900	1230.296
10.0	1119.905	1142.760	1131.671	1164.878	1165.005	1112.338	1117.517	1093.680	1099.360	1059.739
12.5	885.196	920.576	914.265	966.123	953.510	867.195	872.926	834.229	843.843	802.544
15.0	651.301	679.434	665.137	703.321	685.422	595.697	598.283	571.650	590.820	557.350
17.5	486.999	507.556	495.390	507.368	480.433	414.708	415.536	396.041	404.163	397.776
20.0	340.565	360.972	358.078	380.158	358.400	310.094	299.321	269.567	274.886	277.965
22.5	232.537	243.763	237.284	258.019	253.922	229.156	218.808	193.136	196.030	190.511
25.0	145.139	152.244	149.443	170.033	174.334	156.241	148.797	134.959	136.108	128.755
27.5	92.764	94.203	92.986	107.896	115.146	112.691	112.230	104.419	105.813	106.577
30.0	73.740	74.257	76.844	85.884	92.533	94.089	94.559	90.415	92.500	93.099
32.5	62.601	63.722	64.348	70.670	77.978	82.906	84.256	82.179	87.114	86.934
35.0	57.784	59.481	62.048	66.496	71.319	74.816	78.810	77.176	81.191	79.943
37.5	54.839	56.211	58.436	62.763	64.321	66.107	68.556	67.099	74.223	71.575
40.0	51.085	53.750	55.420	58.564	58.102	57.030	59.600	59.442	64.802	62.647
42.5	47.185	49.083	50.850	51.224	51.844	50.367	52.248	53.498	56.535	57.242
45.0	42.726	45.019	45.390	47.474	47.759	45.982	45.694	45.733	49.438	49.650
47.5	39.606	40.078	39.480	43.199	42.125	39.566	41.127	42.364	45.480	46.477
50.0	36.126	36.627	37.467	39.497	37.563	38.299	38.862	39.631	42.451	42.386
52.5	31.715	33.654	33.998	35.036	34.169	34.312	35.316	35.365	37.177	36.805
55.0	26.547	29.221	30.507	29.503	30.937	29.370	30.048	30.972	31.452	31.478
57.5	23.795	25.943	27.522	27.126	26.439	25.544	26.870	27.773	27.452	28.018
60.0	20.775	22.771	24.366	24.215	22.928	23.089	24.035	24.409	24.156	24.398
62.5	17.266	19.696	21.095	20.764	20.645	21.068	21.558	20.977	21.131	20.719
65.0	14.337	16.511	17.293	17.188	16.897	16.084	17.368	15.822	15.618	15.081
67.5	11.803	13.244	13.530	13.564	12.405	11.404	12.511	10.971	10.418	9.923
70.0	8.829	10.298	9.853	10.250	9.648	8.294	9.248	7.693	7.740	7.363
72.5	5.862	7.507	7.038	7.172	7.310	5.877	6.431	5.207	5.686	5.268
75.0	5.149	5.715	4.930	5.053	5.348	4.413	4.791	3.799	4.606	3.821
77.5	4.373	4.630	4.355	4.186	4.282	3.905	3.535	2.972	4.141	3.388
80.0	3.590	4.118	3.443	3.737	3.499	3.233	2.749	2.328	3.344	2.840
82.5	2.983	3.277	2.625	2.740	1.915	2.354	2.437	1.876	2.229	2.209
85.0	2.274	1.946	2.032	2.311	1.726	1.678	1.561	1.702	1.561	1.815
87.5	1.254	1.225	1.579	1.390	1.249	1.457	1.504	1.405	1.246	1.285
90.0	1.134	0.486	0.868	1.175	0.967	0.788	0.982	0.825	0.846	0.952
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	1302.508	1302.508	1302.508	1302.508	1302.508	1302.508	1302.508
2.5	1276.606	1289.909	1301.373	1300.440	1305.530	1305.380	1305.439
5.0	1277.977	1286.977	1303.782	1326.185	1340.943	1346.167	1345.569
7.5	1228.361	1213.530	1226.588	1268.751	1277.747	1290.478	1280.280
10.0	1067.098	1027.801	1045.875	1122.525	1120.339	1146.096	1119.905
12.5	818.277	778.400	798.275	887.710	881.926	912.820	885.196
15.0	585.770	565.815	581.160	648.626	642.539	671.557	651.301
17.5	430.828	410.220	417.935	473.314	478.859	497.531	486.999
20.0	297.091	281.700	286.326	327.109	330.520	351.127	340.565
22.5	206.208	195.655	199.825	227.684	234.196	242.137	232.537
25.0	130.161	118.930	118.706	142.299	143.669	154.019	145.139
27.5	101.581	92.848	85.715	90.580	89.376	94.736	92.764
30.0	86.705	77.505	72.583	72.939	73.356	74.732	73.740
32.5	78.882	70.298	63.641	62.268	62.187	62.989	62.601
35.0	73.655	63.660	58.763	56.932	56.315	58.486	57.784
37.5	65.713	58.186	52.651	52.359	52.519	53.394	54.839
40.0	58.413	50.218	45.957	48.471	47.807	51.441	51.085
42.5	53.655	47.783	42.001	42.065	43.581	44.953	47.185
45.0	47.836	44.193	38.232	37.288	39.874	40.681	42.726
47.5	44.748	39.402	34.032	32.969	34.834	37.008	39.606
50.0	40.581	35.179	30.303	29.840	31.465	32.868	36.126
52.5	34.646	30.474	26.362	26.586	27.763	28.814	31.715
55.0	30.556	25.593	22.460	22.508	23.663	24.715	26.547
57.5	27.146	21.936	19.347	19.789	20.260	22.209	23.795
60.0	23.641	18.820	16.914	17.126	17.283	19.382	20.775
62.5	19.325	16.058	14.830	14.457	14.576	15.805	17.266
65.0	15.018	12.434	11.883	12.143	12.247	12.899	14.337

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648_9 ~ SR2MX-XT13L-E1-RH2BGC2-35K-MD-MW.IES****CANDELA TABULATION - (Cont.)**

67.5	10.722	8.657	8.914	10.101	9.986	10.507	11.803
70.0	7.855	6.388	7.067	7.949	7.700	8.102	8.829
72.5	5.987	4.640	5.622	5.787	5.763	5.754	5.862
75.0	5.115	4.276	4.993	4.585	4.711	5.445	5.149
77.5	4.244	3.599	3.799	3.760	3.713	4.591	4.373
80.0	3.244	2.786	2.761	3.304	3.056	3.354	3.590
82.5	2.410	2.016	2.075	2.875	2.645	2.640	2.983
85.0	1.136	1.509	1.299	1.471	1.411	1.532	2.274
87.5	1.239	0.987	1.065	1.274	0.957	1.546	1.254
90.0	0.306	0.848	0.789	0.387	0.985	0.454	1.134
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	294.70	N.A.	59.70
0-30	368.67	N.A.	74.70
0-40	410.79	N.A.	83.20
0-60	471.14	N.A.	95.50
0-80	491.35	N.A.	99.60
0-90	493.38	N.A.	100.00
10-90	375.52	N.A.	76.10
20-40	116.08	N.A.	23.50
20-50	150.81	N.A.	30.60
40-70	75.13	N.A.	15.20
60-80	20.22	N.A.	4.10
70-80	5.44	N.A.	1.10
80-90	2.03	N.A.	0.40
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	493.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	117.86
10-20	176.84
20-30	73.97
30-40	42.12
40-50	34.72
50-60	25.63
60-70	14.78
70-80	5.44
80-90	2.03
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

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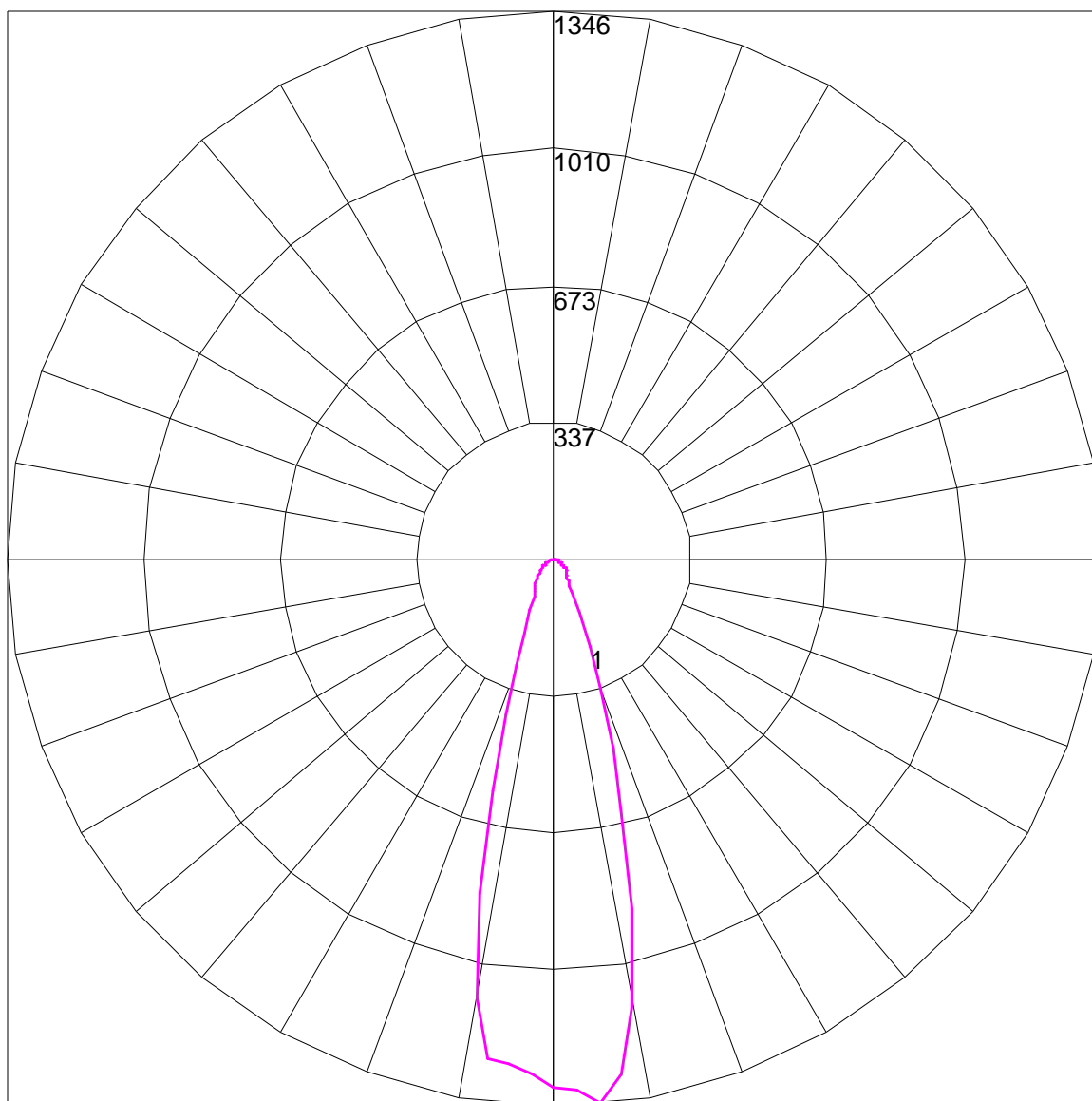
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	104	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	90	89	87
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	82
4	98	91	86	82	96	90	85	81	88	83	80	86	82	79	84	81	78	77
5	94	86	81	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	82	76	72	89	81	76	72	80	75	71	78	74	71	77	73	71	69
7	87	78	72	69	85	77	72	68	76	71	68	75	71	68	74	70	67	66
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63
9	80	72	66	63	79	71	66	63	70	66	62	69	65	62	69	65	62	61
10	77	69	64	60	77	68	63	60	68	63	60	67	63	60	66	62	60	58

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SP-00648_9 ~ SR2MX-XT13L-E1-RH2BGC2-35K-MD-MW.IES

POLAR GRAPH



Maximum Candela = 1346.167 Located At Horizontal Angle = 337.5, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180)