

**IES INDOOR REPORT**
**PHOTOMETRIC FILENAME : SP-00648\_10 ~ SR2MX-XT10L-E1-RH2FG(WHITE INTERIOR)C2-35K-MD-MW.IES**
**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] SP-00648\_10\_M-10L  
 [TESTLAB] VLS-245-981  
 [MANUFAC] Spectrum Lighting  
 [ISSUEDATE] 5/16/2018  
 [UPDATE] 7/12/2018  
 [LUMCAT] SR2Mx-XT10L-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	241
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	22
Total Luminaire Watts	11.1
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-XT10L-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	6995	6417	6085
55	5524	5150	4810
65	5182	4527	3981
75	4670	4017	3877
85	4807	4265	3760

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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	1012.505	1012.505	1012.505	1012.505	1012.505	1012.505	1012.505	1012.505	1012.505	1012.505
2.5	946.409	936.032	936.817	942.346	951.094	952.897	959.541	966.506	977.285	987.712
5.0	898.327	903.636	905.742	910.765	913.301	914.201	915.843	916.891	915.550	915.543
7.5	841.364	832.649	825.503	826.751	831.648	836.718	843.196	839.963	836.189	828.784
10.0	691.466	671.689	657.175	655.464	669.297	684.441	692.744	692.838	682.217	665.079
12.5	466.601	444.818	430.201	431.991	447.752	473.709	487.134	486.227	471.082	449.199
15.0	248.640	236.720	228.108	236.582	252.080	279.274	292.801	295.823	276.100	250.043
17.5	124.185	120.462	119.015	128.057	140.341	154.696	162.386	161.738	145.171	124.280
20.0	64.084	62.603	61.692	67.841	73.182	82.846	83.912	79.325	68.079	57.998
22.5	35.312	35.290	33.571	34.971	38.465	42.853	44.202	43.425	38.461	34.233
25.0	24.707	24.411	23.913	24.613	25.037	25.494	26.189	27.281	29.133	30.199
27.5	21.801	22.217	21.263	21.615	22.116	22.030	22.565	25.614	28.567	30.290
30.0	22.085	21.244	20.715	20.417	20.241	21.212	22.202	26.449	29.213	31.904
32.5	22.926	20.858	20.080	20.403	19.288	21.959	23.087	26.561	29.787	31.550
35.0	23.345	20.758	19.218	18.912	18.650	20.791	22.131	24.540	28.296	29.985
37.5	21.879	19.074	17.722	18.571	17.062	18.229	19.907	21.414	23.280	25.151
40.0	17.263	17.097	15.705	16.203	15.499	15.864	16.216	17.417	19.093	19.751
42.5	16.464	15.857	14.945	14.647	14.324	14.354	15.165	15.903	16.956	17.669
45.0	15.705	14.922	14.407	13.772	13.662	13.520	14.246	14.943	15.192	16.315
47.5	14.680	14.070	13.905	13.468	12.878	13.254	13.262	14.085	13.777	15.246
50.0	14.024	13.362	13.188	12.445	12.114	13.205	12.074	13.361	12.860	13.978
52.5	13.531	12.929	12.364	11.429	11.607	13.222	11.725	12.616	12.248	13.057
55.0	12.821	12.793	11.952	11.187	11.164	12.038	12.083	11.832	11.771	12.662
57.5	12.062	12.520	11.641	10.998	10.898	10.980	11.688	11.139	11.497	12.252
60.0	11.864	12.135	11.118	11.075	10.470	10.764	10.988	10.539	11.256	11.828
62.5	11.752	11.885	10.561	11.006	9.705	10.542	10.192	10.244	10.524	11.328
65.0	12.053	11.726	10.528	10.408	9.260	10.290	9.368	10.203	9.754	10.777
67.5	12.318	11.145	10.492	9.835	9.319	10.059	9.333	9.798	9.795	10.396
70.0	12.023	10.395	9.798	9.311	9.130	9.896	9.465	9.151	9.841	10.107
72.5	11.452	10.546	9.294	8.965	8.731	9.400	9.357	8.738	9.767	9.664
75.0	10.555	10.452	9.079	8.757	8.763	8.451	9.150	8.427	9.638	9.231
77.5	10.618	10.015	9.662	8.885	8.590	7.989	8.666	8.415	9.416	9.113
80.0	10.165	9.416	9.538	8.993	8.146	7.867	8.395	8.816	9.721	8.623
82.5	10.681	9.058	9.162	8.882	8.584	8.135	7.852	9.132	9.798	8.301
85.0	10.219	8.512	9.066	8.484	7.993	7.281	6.890	8.292	9.240	8.340
87.5	8.084	7.053	7.917	6.817	7.014	6.059	6.532	7.126	7.765	6.744
90.0	0.000	0.000	0.000	0.000	0.000	4.623	5.321	5.156	5.180	5.132
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	1012.505	1012.505	1012.505	1012.505	1012.505	1012.505	1012.505
2.5	1001.746	1015.703	1023.013	1011.913	992.310	968.626	946.409
5.0	917.848	920.371	923.358	919.715	909.015	897.860	898.327
7.5	824.161	825.993	835.292	842.636	844.802	844.567	841.364
10.0	652.914	656.635	671.753	694.410	705.769	702.712	691.466
12.5	431.540	431.656	445.766	471.899	485.263	483.131	466.601
15.0	230.280	220.110	230.088	250.417	264.152	262.268	248.640
17.5	109.770	106.758	109.971	119.150	123.236	125.976	124.185
20.0	50.818	50.417	56.974	60.841	62.215	65.298	64.084
22.5	31.932	29.758	31.787	34.246	36.164	36.638	35.312
25.0	29.923	27.842	26.075	24.480	25.504	24.569	24.707
27.5	31.688	30.314	28.632	24.420	22.930	22.714	21.801
30.0	32.566	32.592	31.896	27.225	26.341	23.608	22.085
32.5	32.747	32.424	33.127	29.520	28.703	25.659	22.926
35.0	30.836	31.767	31.007	30.273	28.630	26.372	23.345
37.5	26.112	27.579	27.678	26.445	24.947	23.339	21.879
40.0	20.733	21.562	21.137	21.610	20.412	19.615	17.263
42.5	17.936	17.421	17.852	17.688	17.517	16.579	16.464
45.0	16.360	16.488	16.780	16.891	15.995	15.888	15.705
47.5	15.213	15.620	15.691	15.746	14.894	15.392	14.680
50.0	14.276	14.823	15.006	14.432	14.613	15.244	14.024
52.5	13.322	14.014	14.646	14.139	14.132	14.660	13.531
55.0	12.470	13.201	13.938	13.987	13.196	13.688	12.821
57.5	11.998	12.825	13.113	13.570	12.568	12.998	12.062
60.0	11.700	12.488	12.747	13.136	12.475	12.496	11.864
62.5	11.844	11.994	12.483	12.151	12.307	12.492	11.752
65.0	11.678	11.519	11.895	11.304	12.036	12.757	12.053

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00648\_10 ~ SR2MX-XT10L-E1-RH2FG(WHITE INTERIOR)C2-35K-MD-MW.IES****CANDELA TABULATION - (Cont.)**

67.5	10.889	11.685	11.257	11.644	11.618	12.391	12.318
70.0	10.269	11.653	11.178	11.620	11.084	11.818	12.023
72.5	9.861	10.790	11.076	10.926	11.285	10.971	11.452
75.0	10.007	10.310	10.859	10.513	11.342	10.679	10.555
77.5	10.211	10.160	10.982	10.456	11.012	10.843	10.618
80.0	9.693	9.785	10.848	10.574	11.167	10.501	10.165
82.5	9.807	9.396	9.783	9.706	11.016	10.353	10.681
85.0	9.281	9.742	8.708	8.940	9.210	10.721	10.219
87.5	7.392	7.797	8.033	7.482	7.614	9.048	8.084
90.0	5.313	6.067	5.845	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	157.34	N.A.	65.30
0-30	172.28	N.A.	71.50
0-40	187.26	N.A.	77.70
0-60	210.54	N.A.	87.40
0-80	231.91	N.A.	96.30
0-90	240.53	N.A.	99.80
10-90	160.07	N.A.	66.40
20-40	29.92	N.A.	12.40
20-50	41.91	N.A.	17.40
40-70	34.21	N.A.	14.20
60-80	21.37	N.A.	8.90
70-80	10.44	N.A.	4.30
80-90	8.63	N.A.	3.60
90-110	0.37	N.A.	0.20
90-120	0.37	N.A.	0.20
90-130	0.37	N.A.	0.20
90-150	0.37	N.A.	0.20
90-180	0.37	N.A.	0.20
110-180	0.00	N.A.	0.00
0-180	240.90	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	80.46
10-20	76.88
20-30	14.94
30-40	14.98
40-50	11.99
50-60	11.28
60-70	10.93
70-80	10.44
80-90	8.63
90-100	0.37
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

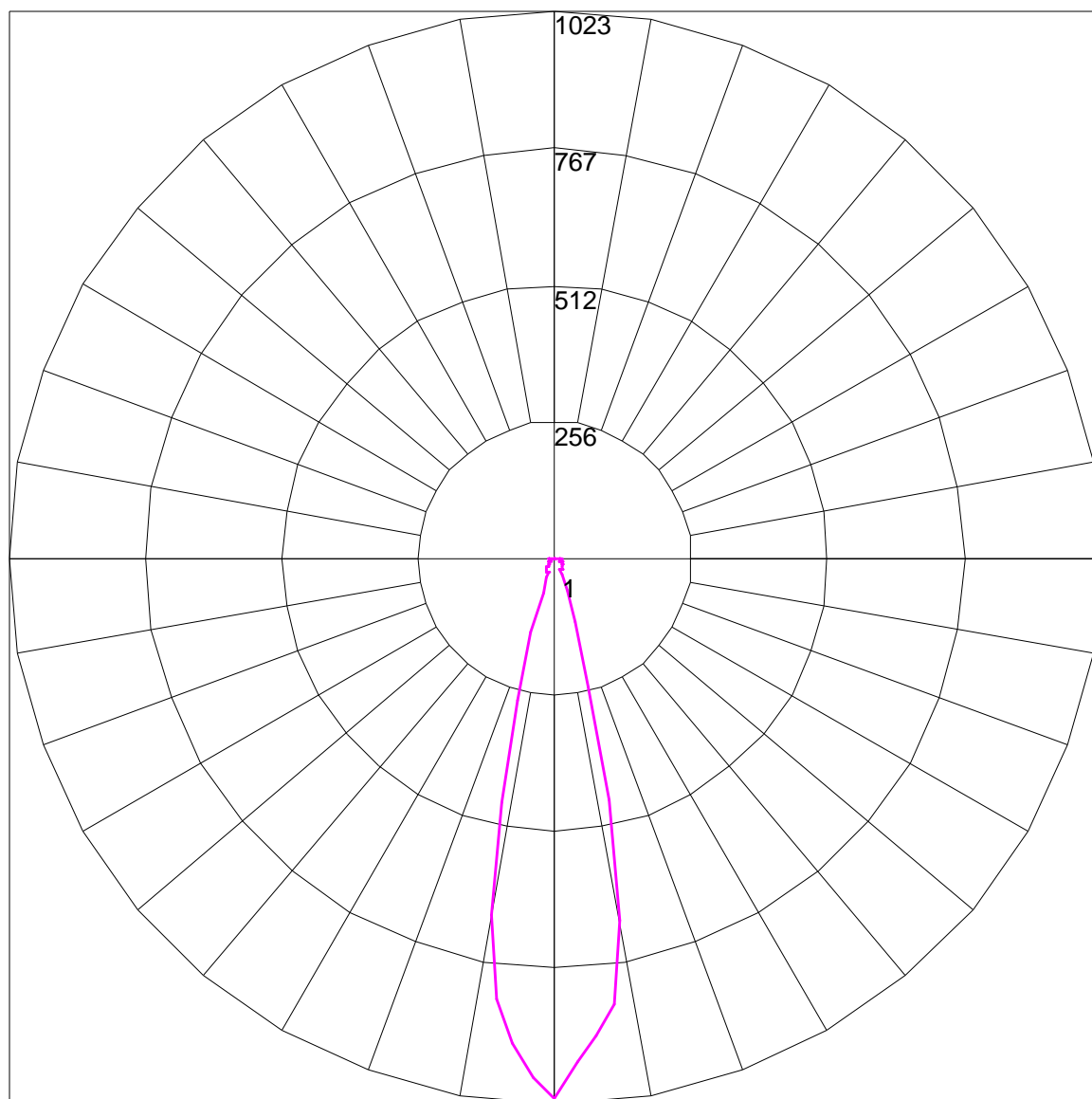
Effective Floor Cavity Reflectance 0.20

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	92	90
2	106	100	96	92	104	98	94	91	95	92	89	92	89	87	89	87	85	83
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78
4	97	89	83	79	95	88	82	78	85	81	77	83	80	77	82	78	76	74
5	93	85	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	70	68
7	86	78	72	68	85	77	72	68	76	71	68	75	71	67	74	70	67	66
8	84	75	70	66	82	74	69	66	73	69	66	72	68	65	72	68	65	64
9	81	73	67	64	80	72	67	64	71	67	64	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-XT10L-E1-RH2FG(WHITE INTERIOR)C2-35K-MD-MW.IES

## POLAR GRAPH



Maximum Candela = 1023.013 Located At Horizontal Angle = 270, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)