

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00649\_7 ~ SS2MX-XT13L-E1-SH2FG(WHITE INTERIOR)C2-35K-MD-MW.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002

[TEST] SP-00649\_7\_M-13L

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

[MANUFAC] Spectrum Lighting

[ISSUE DATE] 5/16/2018

[UPDATE] 7/12/2018

[LUMCAT] SS2MX-XT13L-E1-SH2FGC2-35K-MD-MW

[LUMINAIRE] Nom. 2" Square Downlight, Medium Beam

[OTHER] Matte White Trim, Decorative - Frosted Glass

[OTHER] Interior of glass accent also frosted

[OTHER] 22.7 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: SS2MO-XT-series

[OTHER] For New Construction IC Rated Housing: SS2MI-XT-Series

[OTHER] For Remodel/Retrofit Housing: SS2MR-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	237
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	16
Total Luminaire Watts	15
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.44
Spacing Criterion (90-270)	0.42
Spacing Criterion (Diagonal)	0.38
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.09 ft
Luminous Width (90-270)	0.09 ft
Luminous Height	0.17 ft

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00649\_7 ~ SS2MX-XT13L-E1-SH2FG(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	9432	8185	8520
55	7942	6703	6859
65	6296	6048	5998
75	5789	5832	5581
85	5024	5888	4572

# IES INDOOR REPORT

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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	990.894	990.894	990.894	990.894	990.894	990.894	990.894	990.894	990.894	990.894
2.5	959.946	959.356	948.017	961.468	960.727	935.986	939.591	937.931	947.326	941.620
5.0	914.145	916.778	895.375	916.600	912.384	870.042	873.679	862.608	892.484	881.969
7.5	804.976	804.316	803.944	801.982	791.861	704.850	705.237	670.951	706.461	685.920
10.0	678.563	677.490	666.203	677.861	647.997	534.750	522.829	481.807	520.535	491.806
12.5	479.846	475.727	461.241	471.388	435.061	334.409	341.795	301.717	343.353	317.213
15.0	301.768	293.291	292.722	259.968	255.963	161.213	161.738	154.831	180.500	161.071
17.5	184.164	178.291	164.755	165.426	149.438	98.000	102.113	95.209	118.964	105.061
20.0	94.117	87.597	86.551	75.808	73.222	48.476	46.073	51.683	65.539	58.014
22.5	62.663	56.948	51.566	52.343	47.232	37.237	38.209	39.255	47.659	43.217
25.0	39.874	34.816	33.994	31.416	30.836	29.036	31.271	30.891	33.172	31.684
27.5	31.331	28.748	28.174	27.839	26.566	27.040	30.287	28.459	28.995	28.574
30.0	26.027	24.816	25.730	24.848	24.024	25.590	29.207	26.085	25.132	25.870
32.5	24.787	23.933	25.006	24.304	23.184	25.007	27.735	23.778	21.958	23.939
35.0	22.650	22.525	24.116	23.191	20.904	23.228	25.498	20.850	19.371	21.769
37.5	19.648	20.543	23.161	20.414	17.517	20.003	21.066	17.371	17.763	19.248
40.0	17.740	18.720	20.676	18.209	15.608	17.763	17.932	15.540	16.171	17.493
42.5	16.666	17.035	17.776	17.237	14.562	16.438	17.510	14.827	14.599	16.608
45.0	15.391	16.061	16.918	16.450	13.903	15.684	16.745	14.090	13.829	15.610
47.5	13.998	15.557	16.417	15.962	13.414	15.348	15.430	13.341	13.855	14.513
50.0	13.713	14.978	16.344	15.272	12.644	14.646	14.563	13.447	13.287	14.178
52.5	13.905	14.361	16.310	14.328	11.784	13.739	14.247	13.887	12.254	14.367
55.0	13.411	13.961	14.698	13.663	11.582	12.993	13.873	13.418	11.515	13.961
57.5	12.695	13.645	13.120	13.271	11.524	12.316	13.441	12.700	10.950	13.246
60.0	12.007	13.623	13.290	12.914	10.980	12.152	13.214	12.054	10.783	12.889
62.5	11.324	13.678	13.459	12.581	10.370	12.145	13.140	11.422	10.795	12.670
65.0	10.666	13.296	13.619	12.072	10.161	12.265	12.722	11.518	10.338	12.652
67.5	10.013	12.841	13.645	11.460	9.991	12.411	12.109	11.662	9.725	12.691
70.0	10.311	12.654	13.168	11.480	10.049	11.587	12.019	10.881	9.715	11.836
72.5	10.310	12.537	12.966	11.690	9.866	10.986	12.113	10.622	9.690	11.179
75.0	9.540	12.602	13.079	11.929	9.197	11.279	12.631	11.591	9.194	11.686
77.5	9.125	12.684	13.223	11.600	8.562	10.858	12.470	11.062	8.831	11.552
80.0	8.893	12.609	12.969	11.038	8.222	10.536	12.002	10.778	8.376	11.693
82.5	8.583	12.322	12.615	11.212	7.983	10.685	12.342	11.511	7.673	12.529
85.0	7.797	12.397	12.748	10.016	7.096	9.541	11.899	11.226	7.593	10.418
87.5	7.023	11.519	10.616	8.913	6.397	8.446	9.530	8.362	5.511	9.751
90.0	3.929	7.404	6.851	2.410	4.132	5.713	2.822	5.814	2.774	6.186
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	990.894	990.894	990.894	990.894	990.894	990.894	990.894
2.5	947.477	942.993	953.196	967.282	959.384	959.860	959.946
5.0	889.106	861.860	903.447	933.952	911.033	918.687	914.145
7.5	718.770	676.999	733.348	787.780	802.264	812.700	804.976
10.0	517.086	492.509	555.108	634.952	661.365	701.054	678.563
12.5	344.837	308.847	381.228	430.889	448.640	491.737	479.846
15.0	178.210	169.178	213.493	247.640	273.380	292.631	301.768
17.5	112.811	102.994	141.437	158.970	162.627	186.256	184.164
20.0	58.036	58.240	75.496	84.284	85.711	92.182	94.117
22.5	43.210	40.771	52.055	54.190	53.134	62.189	62.663
25.0	29.969	30.058	32.241	31.926	34.070	37.341	39.874
27.5	29.106	26.147	28.122	27.577	28.616	30.066	31.331
30.0	28.100	23.510	24.487	24.478	25.784	24.730	26.027
32.5	25.717	21.859	22.302	23.546	25.041	24.175	24.787
35.0	23.336	20.437	20.226	22.212	23.830	23.282	22.650
37.5	20.968	19.151	18.385	20.338	22.334	21.758	19.648
40.0	18.912	18.403	16.966	18.656	20.643	20.179	17.740
42.5	17.980	17.899	16.243	17.168	18.862	18.520	16.666
45.0	17.277	16.731	15.505	16.197	17.539	17.256	15.391
47.5	17.155	15.346	14.745	15.636	16.372	16.427	13.998
50.0	16.792	15.291	14.247	15.417	16.288	16.257	13.713
52.5	15.979	15.539	14.006	15.409	16.457	16.649	13.905
55.0	15.194	15.558	13.738	15.104	16.090	16.201	13.411
57.5	14.449	15.545	13.448	14.662	15.648	15.205	12.695
60.0	14.088	14.604	13.006	13.986	14.995	14.602	12.007
62.5	14.154	13.607	12.475	13.229	14.329	14.200	11.324
65.0	14.171	13.034	11.819	13.014	14.608	13.874	10.666

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67.5	14.145	12.507	11.107	12.928	14.804	13.577	10.013
70.0	13.556	12.327	10.948	12.858	14.364	13.142	10.311
72.5	12.700	12.433	10.787	12.789	13.976	12.856	10.310
75.0	12.657	13.001	9.718	12.720	13.673	13.555	9.540
77.5	12.867	11.961	8.890	12.808	13.567	13.226	9.125
80.0	13.183	10.934	8.333	12.608	13.733	12.463	8.893
82.5	12.647	10.692	8.024	11.678	13.959	12.285	8.583
85.0	12.567	10.743	7.063	11.037	13.261	12.622	7.797
87.5	10.274	8.842	5.825	10.057	11.856	11.645	7.023
90.0	2.846	5.824	3.986	6.766	8.441	2.900	3.929
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	144.94	N.A.	61.10
0-30	162.67	N.A.	68.50
0-40	176.44	N.A.	74.30
0-60	201.46	N.A.	84.90
0-80	226.13	N.A.	95.30
0-90	236.66	N.A.	99.70
10-90	161.71	N.A.	68.10
20-40	31.51	N.A.	13.30
20-50	43.96	N.A.	18.50
40-70	37.40	N.A.	15.80
60-80	24.67	N.A.	10.40
70-80	12.29	N.A.	5.20
80-90	10.53	N.A.	4.40
90-110	0.67	N.A.	0.30
90-120	0.67	N.A.	0.30
90-130	0.67	N.A.	0.30
90-150	0.67	N.A.	0.30
90-180	0.67	N.A.	0.30
110-180	0.00	N.A.	0.00
0-180	237.34	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	74.95
10-20	69.98
20-30	17.74
30-40	13.77
40-50	12.45
50-60	12.56
60-70	12.39
70-80	12.29
80-90	10.53
90-100	0.67
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

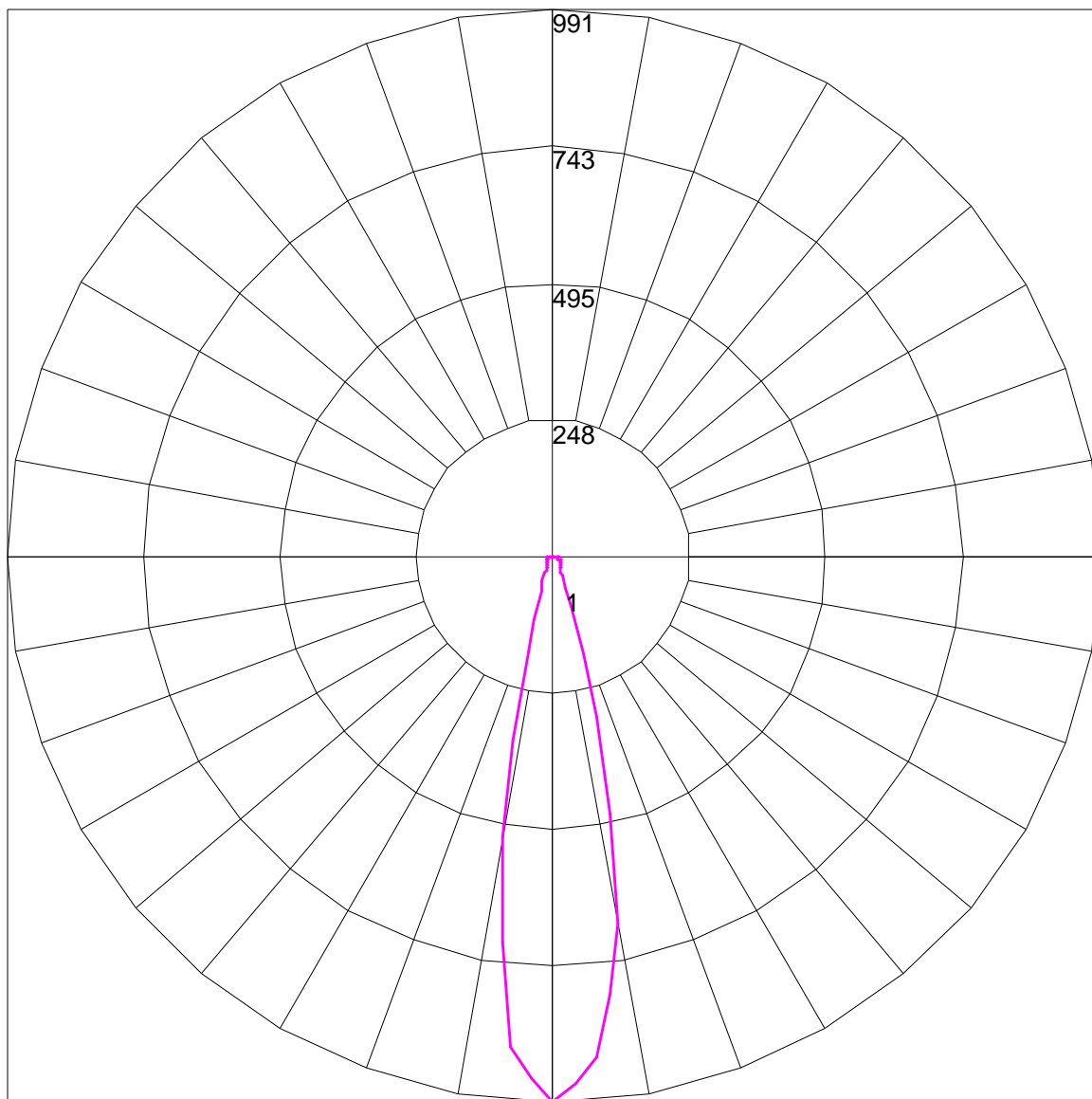
PHOTOMETRIC FILENAME : SP-00649\_7 ~ SS2MX-XT13L-E1-SH2FG(WHITE INTERIOR)C2-35K-MD-MW.IES

## 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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	105	99	94	90	103	97	92	89	94	90	87	91	87	85	88	85	83	81
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	77	76
4	95	87	81	76	93	86	80	76	84	79	75	81	77	74	79	76	73	71
5	91	83	76	72	90	82	76	72	80	75	71	78	74	70	76	73	70	68
6	88	79	73	69	86	78	72	68	76	71	68	75	71	67	74	70	67	65
7	85	76	70	66	83	75	69	65	74	69	65	72	68	65	71	67	64	63
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	62	61
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	63	60	59
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	65	61	59	57

POLAR GRAPH



Maximum Candela = 990.894 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)