

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SP-00649_6 ~ SS2MX-XT13L-E1-SH2BGC2-35K-MD-MW.IES
DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] SP-00649_6_M-13L

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

[MANUFAC] Spectrum Lighting

[ISSUEDATE] 5/16/2018

[UPDATE] 7/12/2018

[LUMCAT] SS2Mx-XT13L-E1-SH2BGC2-35K-MD-MW

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

[OTHER] Matte White Trim, Decorative - Bubble Glass

[OTHER] 28.6 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] For SD2F or SD2N Downlight Trim

[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	403
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	27
Total Luminaire Watts	15
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.54
Spacing Criterion (90-270)	0.44
Spacing Criterion (Diagonal)	0.46
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_6 ~ SS2MX-XT13L-E1-SH2BGC2-35K-MD-MW.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	28142	20062	28297
55	21166	12643	20865
65	15361	6862	12678
75	8477	2933	6102
85	2970	1027	1541

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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	1052.479	1052.479	1052.479	1052.479	1052.479	1052.479	1052.479	1052.479	1052.479	1052.479
2.5	1053.144	1041.507	1038.657	1035.986	1041.722	1024.485	1030.983	1044.326	1054.812	1067.645
5.0	1030.839	1026.037	1013.462	1017.018	982.431	971.223	1014.695	985.864	1045.436	1051.656
7.5	983.724	957.347	947.422	910.424	883.223	822.059	875.569	875.341	948.583	969.520
10.0	887.866	875.664	840.886	799.387	731.084	655.929	700.851	713.453	813.735	845.535
12.5	733.339	696.492	628.200	599.816	537.425	454.131	511.350	508.888	639.348	642.866
15.0	566.047	500.510	438.621	405.870	386.337	295.090	318.778	358.156	451.772	463.939
17.5	386.315	357.546	296.204	292.122	262.514	208.389	227.782	244.015	319.884	320.640
20.0	256.316	220.337	188.508	186.194	181.426	144.184	150.539	173.215	202.314	212.463
22.5	166.663	158.597	137.949	138.588	122.479	110.516	121.710	126.324	146.643	148.002
25.0	115.016	100.604	101.320	96.587	95.118	87.647	96.730	102.324	102.051	106.220
27.5	88.204	86.390	83.372	83.186	80.568	76.796	84.048	88.267	88.273	87.282
30.0	74.580	72.642	71.232	71.429	70.917	68.661	71.777	77.813	77.884	73.970
32.5	67.936	67.233	65.388	65.615	62.808	63.011	64.007	68.609	67.313	65.246
35.0	60.713	61.846	59.137	60.161	58.731	57.370	56.484	61.175	56.733	58.048
37.5	53.247	56.641	52.518	55.682	55.602	51.736	51.919	54.196	54.212	51.884
40.0	50.236	51.650	48.032	51.700	52.604	47.960	47.444	49.444	51.654	47.050
42.5	48.664	47.822	45.102	48.795	49.626	45.316	43.574	45.090	48.279	42.933
45.0	45.921	43.978	41.468	45.258	46.174	41.794	39.943	40.842	44.948	39.653
47.5	42.892	40.067	37.422	40.635	42.676	37.846	37.409	36.607	42.011	36.727
50.0	40.245	36.504	33.797	36.901	40.360	34.895	34.648	34.382	39.170	33.256
52.5	37.662	33.951	30.372	34.394	38.085	32.322	31.125	32.271	36.875	29.601
55.0	35.740	31.329	27.723	31.541	35.231	28.927	27.634	28.936	34.588	27.156
57.5	33.886	28.553	25.364	28.292	32.324	25.290	24.229	25.602	32.333	25.015
60.0	32.001	25.743	22.194	24.706	28.566	21.749	20.880	22.283	29.488	22.108
62.5	30.103	22.875	18.799	20.809	24.850	18.230	17.640	18.946	24.859	19.065
65.0	26.021	19.521	15.452	17.341	21.477	15.304	14.399	15.426	20.959	15.211
67.5	21.959	15.484	12.114	14.190	18.168	12.460	11.152	12.199	18.668	11.312
70.0	18.047	12.335	10.280	11.871	15.097	10.245	8.843	10.111	16.292	10.100
72.5	15.164	9.887	8.489	9.904	12.375	8.263	7.337	8.443	13.816	8.715
75.0	13.970	8.824	6.577	8.480	10.056	6.902	5.908	7.282	11.665	6.909
77.5	12.270	7.701	5.314	6.778	9.125	5.373	4.628	6.300	10.013	5.492
80.0	10.630	6.180	4.127	5.001	8.873	4.026	3.592	5.028	9.261	4.488
82.5	8.576	4.580	2.725	4.176	7.004	3.110	2.729	3.355	4.234	3.638
85.0	4.610	2.829	2.224	2.848	2.391	2.249	1.353	2.096	1.747	2.131
87.5	1.759	2.129	1.791	1.964	1.252	1.530	1.732	1.427	1.420	1.828
90.0	0.942	0.684	1.312	0.515	0.873	1.225	0.651	1.298	0.490	1.024
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	1052.479	1052.479	1052.479	1052.479	1052.479	1052.479	1052.479
2.5	1069.727	1062.981	1064.852	1053.551	1054.850	1053.307	1053.144
5.0	1088.605	1060.158	1058.752	1063.884	1049.614	1049.355	1030.839
7.5	1009.321	982.028	997.218	1006.826	1013.625	998.469	983.724
10.0	915.994	882.065	897.253	935.835	923.040	916.912	887.866
12.5	708.703	685.116	741.408	762.783	741.708	757.697	733.339
15.0	492.040	499.263	554.575	575.524	560.908	558.025	566.047
17.5	348.952	349.242	396.635	419.252	380.838	396.692	386.315
20.0	210.114	223.098	251.745	265.294	247.473	251.274	256.316
22.5	154.909	156.685	171.341	190.298	165.951	170.966	166.663
25.0	102.380	105.708	113.409	118.385	113.554	111.697	115.016
27.5	84.659	85.405	88.160	95.124	87.336	88.221	88.204
30.0	68.329	70.029	71.377	73.160	71.379	73.225	74.580
32.5	61.803	62.438	62.575	65.827	63.092	66.273	67.936
35.0	55.321	55.922	55.295	58.765	56.725	60.656	60.713
37.5	49.035	50.793	52.519	53.570	51.509	54.449	53.247
40.0	43.637	46.316	50.283	48.596	47.154	48.180	50.236
42.5	41.346	42.530	47.479	44.632	43.213	46.190	48.664
45.0	38.671	39.068	44.642	41.088	39.213	44.367	45.921
47.5	34.988	35.883	41.738	38.933	35.190	39.712	42.892
50.0	31.751	33.195	38.847	36.583	32.744	35.197	40.245
52.5	29.426	30.861	36.248	33.727	30.753	32.989	37.662
55.0	26.862	28.387	33.777	30.796	28.266	30.732	35.740
57.5	23.895	25.832	32.521	27.712	25.674	28.083	33.886
60.0	20.651	23.048	30.795	25.067	22.766	25.436	32.001
62.5	17.033	20.161	26.221	23.126	19.813	22.810	30.103
65.0	14.013	16.910	22.110	20.125	16.590	19.963	26.021

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00649_6 ~ SS2MX-XT13L-E1-SH2BGC2-35K-MD-MW.IES****CANDELA TABULATION - (Cont.)**

67.5	11.628	13.530	19.771	15.755	13.372	16.342	21.959
70.0	9.422	11.292	17.302	12.499	10.793	13.297	18.047
72.5	7.324	9.372	14.613	10.035	8.749	11.172	15.164
75.0	6.581	8.213	12.725	9.073	7.898	9.376	13.970
77.5	5.459	6.584	11.408	7.871	6.302	7.682	12.270
80.0	3.768	4.942	10.878	6.125	4.702	5.905	10.630
82.5	2.315	3.875	5.710	4.862	3.447	4.676	8.576
85.0	1.865	2.319	2.421	3.485	2.565	3.299	4.610
87.5	1.592	2.016	1.492	2.090	2.456	1.832	1.759
90.0	0.571	1.175	1.081	0.755	1.392	0.629	0.942
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	221.32	N.A.	54.90
0-30	275.15	N.A.	68.30
0-40	312.08	N.A.	77.50
0-60	371.89	N.A.	92.30
0-80	399.39	N.A.	99.20
0-90	402.69	N.A.	100.00
10-90	311.02	N.A.	77.20
20-40	90.76	N.A.	22.50
20-50	123.36	N.A.	30.60
40-70	77.91	N.A.	19.30
60-80	27.49	N.A.	6.80
70-80	9.40	N.A.	2.30
80-90	3.30	N.A.	0.80
90-110	0.13	N.A.	0.00
90-120	0.13	N.A.	0.00
90-130	0.13	N.A.	0.00
90-150	0.13	N.A.	0.00
90-180	0.13	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	402.81	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	91.66
10-20	129.66
20-30	53.83
30-40	36.93
40-50	32.60
50-60	27.21
60-70	18.09
70-80	9.40
80-90	3.30
90-100	0.13
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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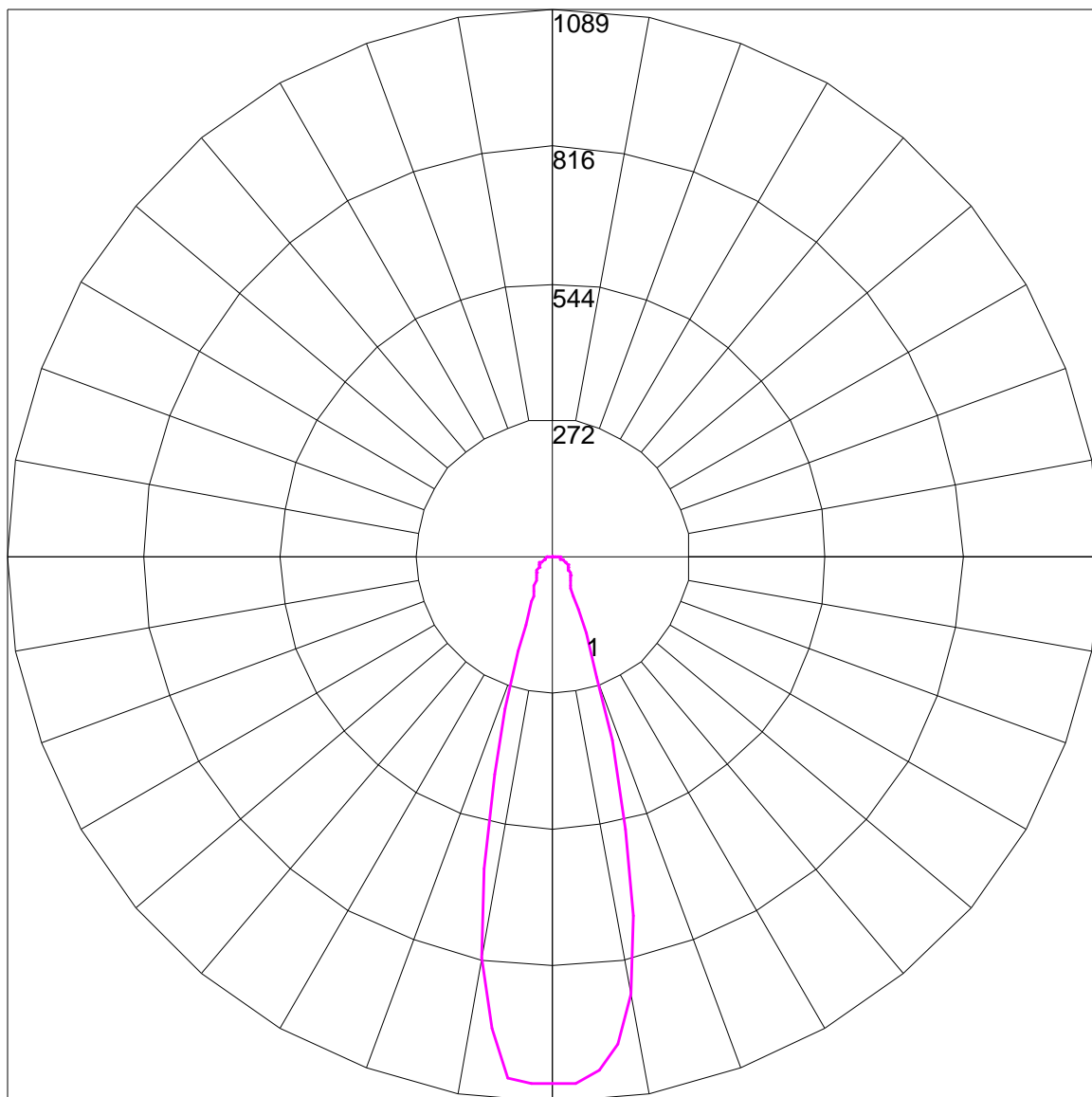
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	83	77	72	90	82	76	72	80	75	71	78	74	71	77	73	70	69
6	87	78	72	68	86	78	72	68	76	71	67	75	70	67	73	69	66	65
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62
8	80	71	65	61	79	71	65	61	69	64	61	68	64	61	67	63	60	59
9	77	68	62	59	76	68	62	58	67	62	58	66	61	58	65	61	58	57
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	54

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SP-00649_6 ~ SS2MX-XT13L-E1-SH2BGC2-35K-MD-MW.IES

POLAR GRAPH



Maximum Candela = 1088.605 Located At Horizontal Angle = 225, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180)