

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00649_6 ~ SS2MX-XT20L-E1-SH2BGC2-35K-MD-MW.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] SP-00649_6
[TESTLAB] Spectrum Lighting Photometric Lab, VLS-245-981
[MANUFAC] Spectrum Lighting
[ISSUE DATE] 5/16/2018
[UPDATE] 7/12/2018
[LUMCAT] SS2MX-XT20L-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 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	620
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	26
Total Luminaire Watts	23.7
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-XT20L-E1-SH2BGC2-35K-MD-MW.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	43295	30865	43534
55	32564	19451	32100
65	23632	10557	19505
75	13042	4512	9388
85	4570	1580	2370

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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	1619.198	1619.198	1619.198	1619.198	1619.198	1619.198	1619.198	1619.198	1619.198	1619.198
2.5	1620.222	1602.319	1597.934	1593.825	1602.649	1576.131	1586.128	1606.656	1622.788	1642.531
5.0	1585.906	1578.519	1559.173	1564.643	1511.432	1494.189	1561.070	1516.714	1608.363	1617.933
7.5	1513.422	1472.841	1457.572	1400.652	1358.805	1264.706	1347.029	1346.679	1459.359	1491.570
10.0	1365.947	1347.175	1293.671	1229.826	1124.744	1009.122	1078.233	1097.620	1251.900	1300.823
12.5	1128.214	1071.526	966.462	922.794	826.808	698.663	786.692	782.905	983.612	989.024
15.0	870.841	770.015	674.802	624.415	594.364	453.984	490.427	551.010	695.034	713.752
17.5	594.331	550.071	455.698	449.418	403.867	320.599	350.434	375.407	492.130	493.292
20.0	394.333	338.980	290.012	286.452	279.117	221.822	231.598	266.485	311.252	326.866
22.5	256.404	243.995	212.230	213.213	188.430	170.024	187.246	194.344	225.604	227.695
25.0	176.947	154.775	155.877	148.595	146.335	134.842	148.816	157.422	157.002	163.416
27.5	135.698	132.907	128.265	127.979	123.951	118.147	129.305	135.795	135.804	134.280
30.0	114.739	111.757	109.588	109.891	109.103	105.633	110.426	119.713	119.822	113.800
32.5	104.517	103.435	100.597	100.946	96.627	96.940	98.472	105.552	103.559	100.378
35.0	93.405	95.147	90.980	92.555	90.355	88.262	86.899	94.115	87.281	89.305
37.5	81.919	87.140	80.797	85.665	85.542	79.594	79.875	83.378	83.403	79.822
40.0	77.286	79.461	73.895	79.538	80.929	73.784	72.991	76.067	79.467	72.384
42.5	74.868	73.572	69.387	75.069	76.348	69.717	67.037	69.369	74.276	66.051
45.0	70.647	67.658	63.797	69.628	71.037	64.298	61.451	62.834	69.151	61.004
47.5	65.988	61.641	57.573	62.515	65.656	58.224	57.552	56.319	64.632	56.503
50.0	61.915	56.160	51.995	56.771	62.093	53.685	53.305	52.896	60.261	51.163
52.5	57.942	52.232	46.726	52.914	58.592	49.726	47.884	49.648	56.731	45.540
55.0	54.985	48.199	42.651	48.525	54.202	44.503	42.514	44.517	53.213	41.779
57.5	52.132	43.927	39.021	43.526	49.730	38.907	37.276	39.387	49.743	38.485
60.0	49.233	39.604	34.145	38.010	43.947	33.460	32.123	34.282	45.366	34.012
62.5	46.313	35.192	28.921	32.014	38.231	28.046	27.139	29.147	38.245	29.331
65.0	40.033	30.032	23.772	26.679	33.041	23.545	22.152	23.733	32.244	23.402
67.5	33.783	23.822	18.637	21.831	27.951	19.169	17.157	18.767	28.720	17.403
70.0	27.764	18.977	15.816	18.263	23.226	15.761	13.605	15.555	25.064	15.538
72.5	23.329	15.211	13.060	15.237	19.039	12.713	11.288	12.990	21.256	13.408
75.0	21.493	13.575	10.118	13.046	15.471	10.618	9.090	11.203	17.946	10.629
77.5	18.877	11.848	8.175	10.427	14.038	8.266	7.120	9.693	15.405	8.449
80.0	16.354	9.507	6.349	7.694	13.651	6.194	5.526	7.735	14.247	6.905
82.5	13.194	7.046	4.193	6.424	10.775	4.784	4.198	5.162	6.514	5.597
85.0	7.093	4.352	3.421	4.381	3.678	3.460	2.081	3.224	2.688	3.278
87.5	2.706	3.275	2.755	3.022	1.926	2.354	2.665	2.196	2.185	2.813
90.0	1.449	1.053	2.019	0.792	1.343	1.884	1.001	1.997	0.754	1.576
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	1619.198	1619.198	1619.198	1619.198	1619.198	1619.198	1619.198
2.5	1645.734	1635.356	1638.234	1620.848	1622.846	1620.472	1620.222
5.0	1674.777	1631.012	1628.850	1636.744	1614.791	1614.393	1585.906
7.5	1552.801	1510.812	1534.182	1548.963	1559.423	1536.106	1513.422
10.0	1409.221	1357.023	1380.390	1439.746	1420.062	1410.634	1365.947
12.5	1090.313	1054.025	1140.628	1173.513	1141.090	1165.687	1128.214
15.0	756.984	768.097	853.192	885.422	862.936	858.500	870.841
17.5	536.850	537.295	610.208	645.003	585.904	610.295	594.331
20.0	323.253	343.228	387.300	408.144	380.727	386.576	394.333
22.5	238.321	241.054	263.601	292.766	255.309	263.025	256.404
25.0	157.508	162.627	174.476	182.131	174.698	171.841	176.947
27.5	130.245	131.393	135.631	146.344	134.363	135.725	135.698
30.0	105.121	107.737	109.811	112.554	109.814	112.654	114.739
32.5	95.082	96.059	96.270	101.272	97.065	101.958	104.517
35.0	85.109	86.034	85.070	90.408	87.269	93.317	93.405
37.5	75.438	78.143	80.798	82.415	79.245	83.767	81.919
40.0	67.134	71.256	77.359	74.763	72.544	74.123	77.286
42.5	63.609	65.431	73.045	68.664	66.481	71.062	74.868
45.0	59.494	60.105	68.680	63.213	60.327	68.257	70.647
47.5	53.828	55.205	64.213	59.897	54.139	61.095	65.988
50.0	48.848	51.069	59.765	56.281	50.375	54.150	61.915
52.5	45.271	47.479	55.766	51.888	47.312	50.753	57.942
55.0	41.326	43.673	51.965	47.378	43.486	47.280	54.985
57.5	36.762	39.742	50.033	42.634	39.499	43.204	52.132
60.0	31.771	35.459	47.377	38.564	35.025	39.133	49.233
62.5	26.204	31.017	40.340	35.578	30.482	35.092	46.313
65.0	21.558	26.015	34.015	30.961	25.523	30.712	40.033

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00649_6 ~ SS2MX-XT20L-E1-SH2BGC2-35K-MD-MW.IES****CANDELA TABULATION - (Cont.)**

67.5	17.889	20.815	30.417	24.239	20.572	25.142	33.783
70.0	14.495	17.372	26.619	19.230	16.604	20.457	27.764
72.5	11.268	14.419	22.481	15.439	13.460	17.187	23.329
75.0	10.125	12.635	19.577	13.958	12.151	14.424	21.493
77.5	8.398	10.129	17.551	12.110	9.695	11.818	18.877
80.0	5.797	7.603	16.735	9.423	7.234	9.085	16.354
82.5	3.561	5.962	8.784	7.480	5.303	7.194	13.194
85.0	2.870	3.567	3.724	5.362	3.946	5.076	7.093
87.5	2.450	3.102	2.296	3.215	3.779	2.819	2.706
90.0	0.879	1.808	1.663	1.161	2.141	0.967	1.449
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	340.50	N.A.	54.90
0-30	423.31	N.A.	68.30
0-40	480.13	N.A.	77.50
0-60	572.14	N.A.	92.30
0-80	614.44	N.A.	99.10
0-90	619.52	N.A.	100.00
10-90	478.50	N.A.	77.20
20-40	139.63	N.A.	22.50
20-50	189.78	N.A.	30.60
40-70	119.85	N.A.	19.30
60-80	42.30	N.A.	6.80
70-80	14.46	N.A.	2.30
80-90	5.07	N.A.	0.80
90-110	0.19	N.A.	0.00
90-120	0.19	N.A.	0.00
90-130	0.19	N.A.	0.00
90-150	0.19	N.A.	0.00
90-180	0.19	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	619.71	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	141.02
10-20	199.48
20-30	82.81
30-40	56.82
40-50	50.15
50-60	41.87
60-70	27.84
70-80	14.46
80-90	5.07
90-100	0.19
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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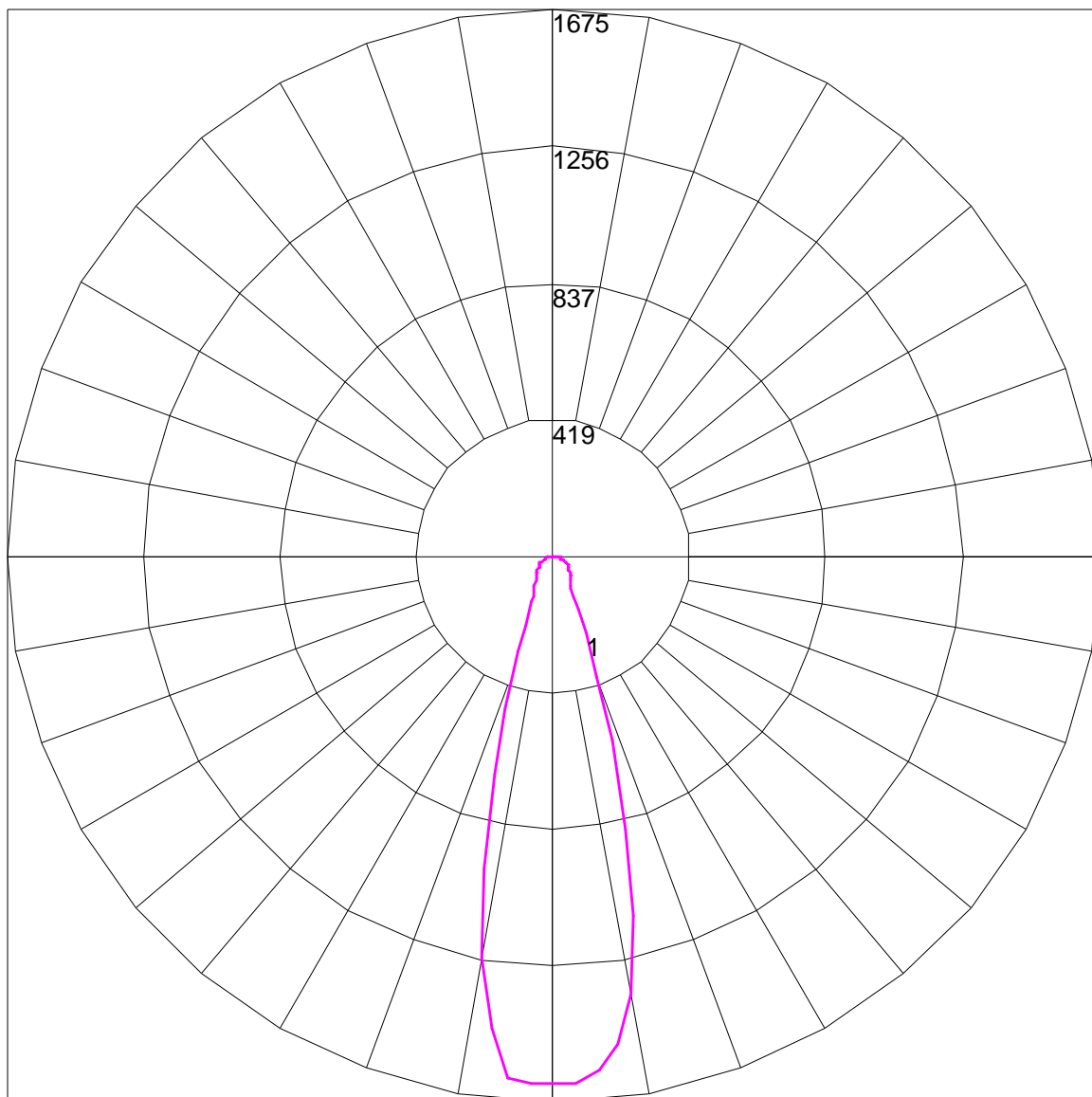
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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-XT20L-E1-SH2BGC2-35K-MD-MW.IES

POLAR GRAPH



Maximum Candela = 1674.777 Located At Horizontal Angle = 225, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180)