

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SGX6FX-40L35KXX-XX6223FX-MWSO.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] CRT1612221119-008_M-40L-35K
[TESTLAB] Intertek
[ISSUE DATE] 01/19/2017
[UPDATE] 09/15/2017
[LAB-REF LUMCAT] CRT1612221119-008_M-40L-35K
[MANUFAC] Spectrum Lighting
[LUMCAT] SGX6LEDFX-40L-35K-xx-xx6223FX-MW-SO
[LUMINAIRE] Nom. 6" Diam. LED Downlight, Matte White Trim
[OTHER] Regressed Integral Solite Lens
[OTHER] Data for New Construction: SGE6LEDFX-series w/ AR6223FX-MW-SO
[OTHER] And: SGE6PZLEDFX-series w/ NF6223FX-MW-SO
[OTHER] Data for Retrofit: SGRTE6LEDFX-series w/ AR6223FX-MW-SO
[OTHER] 67.6 Degree Beam Angle
[LAMP] N/A
[LAMP CAT] N/A
[OTHER] Total Luminaire Watts is approximate
[OTHER] CCT Output Multipliers: 40K x 1.075, 30K x 1.0, 27K x 0.953
[OTHER] This Report Updated By Spectrum Lighting, scaled from 10L-27K
[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2871
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	83
Total Luminaire Watts	34.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.06
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	1.00
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.50 ft (Diameter)
Luminous Width (90-270)	0.50 ft (Diameter)
Luminous Height	0.00 ft

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	24852	25016	24161
55	13819	13860	13454
65	10175	10285	10010
75	7634	7724	7454
85	1867	2400	1600

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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	2383.487	2383.487	2383.487	2383.487	2383.487	2383.487	2383.487	2383.487	2383.487	2383.487
2.5	2386.457	2384.760	2383.487	2385.609	2386.457	2385.609	2383.487	2384.760	2386.457	2384.760
5.0	2386.033	2383.487	2385.609	2385.609	2383.911	2385.609	2385.609	2383.487	2386.033	2383.487
7.5	2375.847	2371.603	2376.272	2374.574	2373.301	2374.574	2376.272	2371.603	2375.847	2371.603
10.0	2349.958	2350.807	2351.656	2350.383	2347.836	2350.383	2351.656	2350.807	2349.958	2350.807
12.5	2308.366	2309.215	2310.913	2306.244	2304.122	2306.244	2310.913	2309.215	2308.366	2309.215
15.0	2250.222	2249.373	2246.827	2243.007	2238.338	2243.007	2246.827	2249.373	2250.222	2249.373
17.5	2170.008	2171.282	2165.340	2160.247	2155.578	2160.247	2165.340	2171.282	2170.008	2171.282
20.0	2074.092	2076.638	2070.696	2061.359	2058.813	2061.359	2070.696	2076.638	2074.092	2076.638
22.5	1967.140	1971.809	1963.745	1956.955	1953.559	1956.955	1963.745	1971.809	1967.140	1971.809
25.0	1846.184	1850.003	1847.032	1834.724	1833.876	1834.724	1847.032	1850.003	1846.184	1850.003
27.5	1709.524	1711.646	1705.704	1692.547	1694.669	1692.547	1705.704	1711.646	1709.524	1711.646
30.0	1552.067	1545.701	1545.701	1512.173	1523.632	1512.173	1545.701	1545.701	1552.067	1545.701
32.5	1323.735	1327.130	1325.008	1284.265	1293.602	1284.265	1325.008	1327.130	1323.735	1327.130
35.0	1073.757	1082.670	1079.275	1037.682	1051.264	1037.682	1079.275	1082.670	1073.757	1082.670
37.5	824.204	835.239	838.210	790.676	800.013	790.676	838.210	835.239	824.204	835.239
40.0	606.906	613.272	613.272	569.558	584.413	569.558	613.272	613.272	606.906	613.272
42.5	432.049	437.991	437.142	407.858	418.468	407.858	437.142	437.991	432.049	437.991
45.0	320.854	324.674	322.976	304.726	311.941	304.726	322.976	324.674	320.854	324.674
47.5	249.977	251.675	250.826	239.792	244.036	239.792	250.826	251.675	249.977	251.675
50.0	203.292	204.566	204.141	197.351	198.624	197.351	204.141	204.566	203.292	204.566
52.5	171.462	172.735	172.310	166.793	167.218	166.793	172.310	172.735	171.462	172.735
55.0	144.724	145.573	145.148	140.480	140.904	140.480	145.148	145.573	144.724	145.573
57.5	121.806	122.654	122.654	119.684	119.259	119.684	122.654	122.654	121.806	122.654
60.0	104.405	104.829	104.829	103.556	103.132	103.556	104.829	104.829	104.405	104.829
62.5	90.824	91.673	91.673	89.975	89.551	89.975	91.673	91.673	90.824	91.673
65.0	78.516	78.940	79.365	77.243	77.243	77.243	79.365	78.940	78.516	78.940
67.5	66.632	67.481	67.481	65.784	65.359	65.784	67.481	67.481	66.632	67.481
70.0	56.022	56.447	56.871	55.173	54.749	55.173	56.871	56.447	56.022	56.447
72.5	45.836	46.261	46.261	45.412	44.563	45.412	46.261	46.261	45.836	46.261
75.0	36.075	36.075	36.499	35.650	35.226	35.650	36.499	36.075	36.075	36.075
77.5	27.162	27.162	27.587	26.738	26.313	26.738	27.587	27.162	27.162	27.162
80.0	18.250	18.674	18.674	18.250	17.825	18.250	18.674	18.674	18.250	18.674
82.5	10.186	10.186	11.035	10.186	9.761	10.186	11.035	10.186	10.186	10.186
85.0	2.971	2.971	3.820	2.971	2.546	2.971	3.820	2.971	2.971	2.971
87.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90.0	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	2383.487	2383.487	2383.487	2383.487	2383.487	2383.487	2383.487
2.5	2383.487	2385.609	2386.457	2385.609	2383.487	2384.760	2386.457
5.0	2385.609	2385.609	2383.911	2385.609	2385.609	2383.487	2386.033
7.5	2376.272	2374.574	2373.301	2374.574	2376.272	2371.603	2375.847
10.0	2351.656	2350.383	2347.836	2350.383	2351.656	2350.807	2349.958
12.5	2310.913	2306.244	2304.122	2306.244	2310.913	2309.215	2308.366
15.0	2246.827	2243.007	2238.338	2243.007	2246.827	2249.373	2250.222
17.5	2165.340	2160.247	2155.578	2160.247	2165.340	2171.282	2170.008
20.0	2070.696	2061.359	2058.813	2061.359	2070.696	2076.638	2074.092
22.5	1963.745	1956.955	1953.559	1956.955	1963.745	1971.809	1967.140
25.0	1847.032	1834.724	1833.876	1834.724	1847.032	1850.003	1846.184
27.5	1705.704	1692.547	1694.669	1692.547	1705.704	1711.646	1709.524
30.0	1545.701	1512.173	1523.632	1512.173	1545.701	1545.701	1552.067

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CANDELA TABULATION - (Cont.)

32.5	1325.008	1284.265	1293.602	1284.265	1325.008	1327.130	1323.735
35.0	1079.275	1037.682	1051.264	1037.682	1079.275	1082.670	1073.757
37.5	838.210	790.676	800.013	790.676	838.210	835.239	824.204
40.0	613.272	569.558	584.413	569.558	613.272	613.272	606.906
42.5	437.142	407.858	418.468	407.858	437.142	437.991	432.049
45.0	322.976	304.726	311.941	304.726	322.976	324.674	320.854
47.5	250.826	239.792	244.036	239.792	250.826	251.675	249.977
50.0	204.141	197.351	198.624	197.351	204.141	204.566	203.292
52.5	172.310	166.793	167.218	166.793	172.310	172.735	171.462
55.0	145.148	140.480	140.904	140.480	145.148	145.573	144.724
57.5	122.654	119.684	119.259	119.684	122.654	122.654	121.806
60.0	104.829	103.556	103.132	103.556	104.829	104.829	104.405
62.5	91.673	89.975	89.551	89.975	91.673	91.673	90.824
65.0	79.365	77.243	77.243	77.243	79.365	78.940	78.516
67.5	67.481	65.784	65.359	65.784	67.481	67.481	66.632
70.0	56.871	55.173	54.749	55.173	56.871	56.447	56.022
72.5	46.261	45.412	44.563	45.412	46.261	46.261	45.836
75.0	36.499	35.650	35.226	35.650	36.499	36.075	36.075
77.5	27.587	26.738	26.313	26.738	27.587	27.162	27.162
80.0	18.674	18.250	17.825	18.250	18.674	18.674	18.250
82.5	11.035	10.186	9.761	10.186	11.035	10.186	10.186
85.0	3.820	2.971	2.546	2.971	3.820	2.971	2.971
87.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	855.20	N.A.	29.80
0-30	1694.08	N.A.	59.00
0-40	2351.8	N.A.	81.90
0-60	2748.23	N.A.	95.70
0-80	2864.82	N.A.	99.80
0-90	2870.98	N.A.	100.00
10-90	2644.43	N.A.	92.10
20-40	1496.6	N.A.	52.10
20-50	1761.95	N.A.	61.40
40-70	474.55	N.A.	16.50
60-80	116.59	N.A.	4.10
70-80	38.47	N.A.	1.30
80-90	6.16	N.A.	0.20
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	2870.98	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	226.55
10-20	628.65
20-30	838.88
30-40	657.72
40-50	265.35
50-60	131.08
60-70	78.12
70-80	38.47
80-90	6.16
90-100	0.00
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

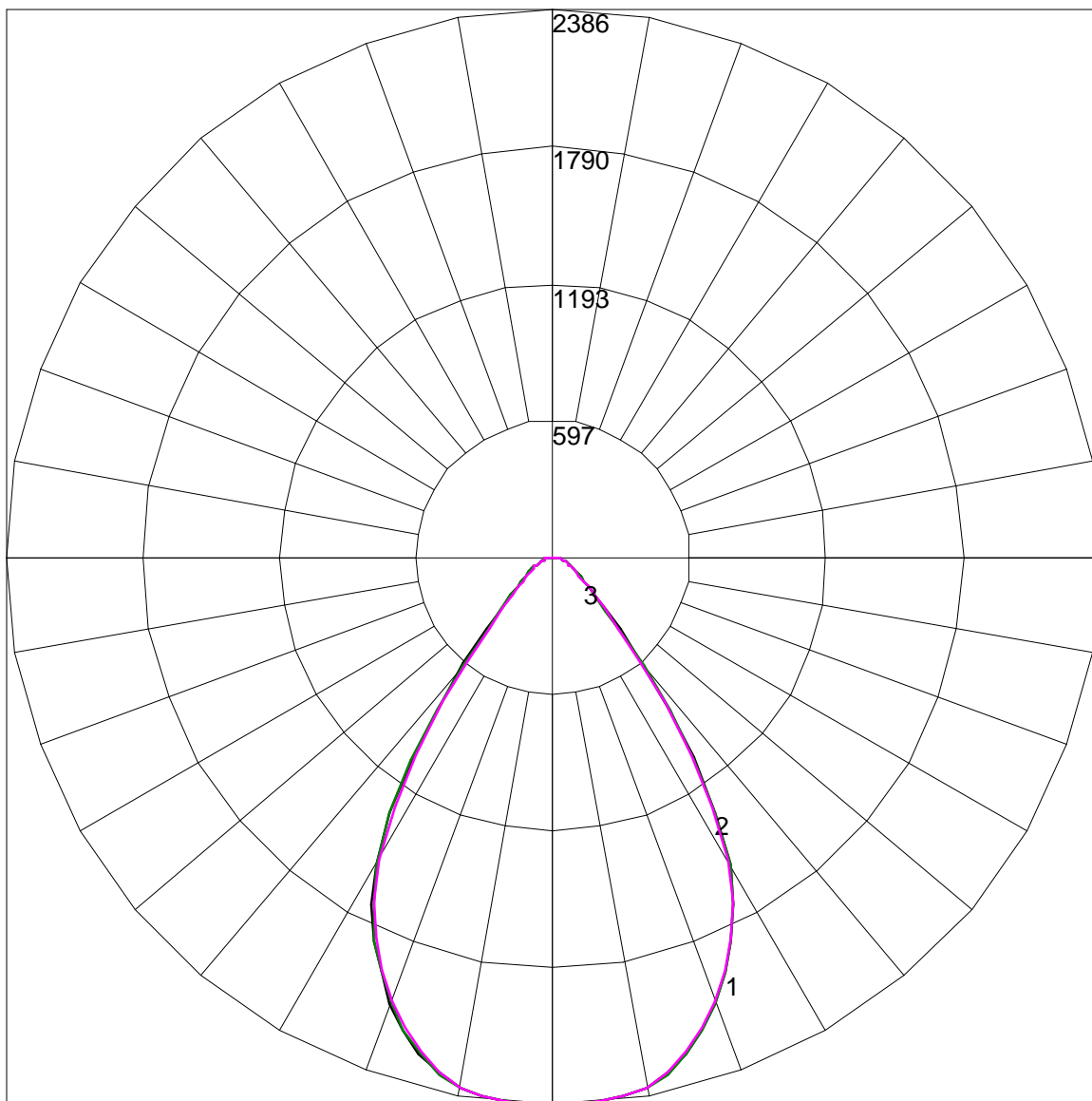
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	106	104	110	107	105	102	103	101	99	99	98	96	96	95	93	91
2	106	100	96	92	104	98	94	91	95	92	89	92	89	87	89	87	85	83
3	100	92	86	82	97	91	86	81	88	84	80	86	82	79	83	80	77	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	87	78	72	67	76	71	66	74	69	66	73	68	65	64
6	83	73	67	62	82	72	66	61	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48	47
10	67	56	50	46	66	56	50	45	55	49	45	54	49	45	53	48	45	44

POLAR GRAPH



Maximum Candela = 2386.457 Located At Horizontal Angle = 0, Vertical Angle = 2.5

1 - Vertical Plane Through Horizontal Angles (0 - 180)

2 - Vertical Plane Through Horizontal Angles (45 - 225)

3 - Vertical Plane Through Horizontal Angles (90 - 270)