

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

CF06XXPC 40L 35K WD XX CL XX
Nom 6" diam Gamma Cylinder (Damp Location), CL lens

Test Number

SP-01287_M-40L

Test Date

5/2/2022

The results contained in this report pertain only to this IES file.

Summary of Results

Power

Input Watts	27 W
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Lumen Output

Output Lumens	2899
Efficacy	107.37 lm/W

Luminous Dimensions

0° - 180° Size	-0.5
90° - 270° Size	-0.5
Height	0

Spacing Criterion

Two luminaires, plane 0°	0.76
Two luminaires, plane 90°	0.8
Four luminaires	0.85

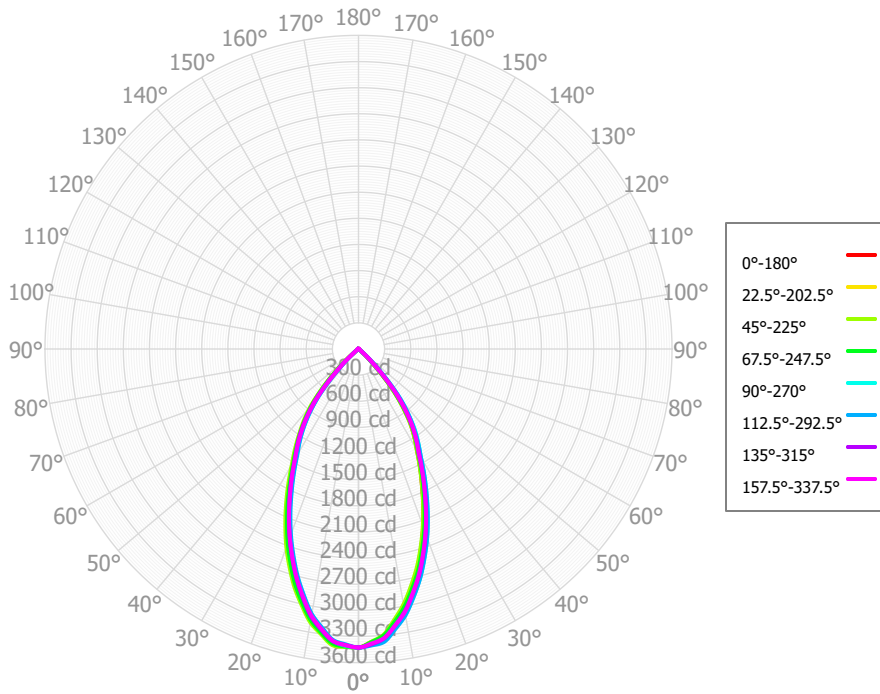
Full Beam Angle

0° - 180°	53°
90° - 270°	53°

IES File Header Contents

Keyword	Value
TEST	SP-01287_M-40L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	5/2/2022
ISSUEDATE	5/18/2022
LUMCAT	CF06XXPC 40L 35K WD XX CL XX
LUMINAIRE	Nom 6" diam Gamma Cylinder (Damp Location), CL lens
OTHER	Beam angle: 53 deg
OTHER	Wide optic
OTHER	Gen7 converted to G6
LAMPCAT	N/A
LAMP	N/A
OTHER	CCT Output Multipliers: 27K x 0.97, 30K x 0.98, 40K x 1.04, 27HK x 0.78, 30HK x 0.83
OTHER	Total luminaire wattage is approximate
OTHER	This report prepared by Spectrum Lighting
_CRI	80
_CCTMULT	27K x 0.97, 30K x 0.98, 40K x 1.04

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	314.73	10.86%	90.00° - 100.00°	2.05	0.07%
10.00° - 20.00°	751.27	25.92%	100.00° - 110.00°	1.93	0.07%
20.00° - 30.00°	839.75	28.97%	100.00° - 120.00°	3.80	0.13%
30.00° - 40.00°	676.50	23.34%	120.00° - 130.00°	1.82	0.06%
40.00° - 50.00°	254.43	8.78%	130.00° - 140.00°	1.69	0.06%
50.00° - 60.00°	27.06	0.93%	140.00° - 150.00°	1.42	0.05%
60.00° - 70.00°	12.28	0.42%	150.00° - 160.00°	1.12	0.04%
70.00° - 80.00°	7.57	0.26%	160.00° - 170.00°	0.68	0.02%
80.00° - 90.00°	2.53	0.09%	170.00° - 180.00°	0.23	0.01%
0.00° - 90.00°	2886.13	99.56%	0.00° - 180.00°	2898.92	100.00%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°	112.50°	135.00°	157.50°	180.00°	202.50°	225.00°	247.50°	270.00°	292.50°	315.00°	337.50°	360.00°
0.00°	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94	3427.94
2.50°	3369.65	3370.85	3365.50	3370.27	3392.23	3394.78	3404.55	3404.09	3410.14	3419.67	3423.99	3420.66	3410.17	3407.59	3394.36	3386.37	3369.65
5.00°	3310.07	3305.62	3295.14	3303.37	3344.70	3353.96	3368.72	3364.23	3387.96	3407.81	3414.38	3395.73	3364.53	3376.19	3337.49	3334.40	3310.07
7.50°	3158.05	3153.88	3137.95	3163.50	3228.34	3223.93	3254.78	3243.61	3273.56	3278.56	3302.34	3285.57	3239.66	3243.22	3205.94	3204.20	3158.05
10.00°	3004.35	2997.75	2977.76	3014.17	3093.24	3090.97	3123.03	3110.66	3152.85	3146.88	3187.51	3161.40	3095.99	3105.61	3060.09	3066.29	3004.35
12.50°	2808.48	2808.04	2786.57	2828.20	2914.60	2896.56	2935.47	2924.28	2971.70	2974.31	3012.97	2986.34	2911.52	2919.53	2878.70	2875.30	2808.48
15.00°	2610.93	2615.26	2592.40	2638.90	2726.24	2700.48	2737.74	2732.18	2787.58	2799.77	2835.91	2802.04	2716.55	2730.31	2686.97	2681.24	2610.93
17.50°	2391.97	2405.25	2377.03	2423.63	2515.29	2485.30	2524.98	2520.03	2583.52	2589.25	2629.74	2590.12	2502.12	2518.50	2473.43	2465.63	2391.97
20.00°	2172.21	2193.37	2160.61	2207.03	2300.42	2268.79	2310.18	2305.40	2376.75	2377.61	2421.23	2373.53	2283.84	2304.35	2255.28	2249.37	2172.21
22.50°	1945.78	1973.11	1938.63	1984.02	2074.29	2042.11	2088.92	2083.59	2155.86	2154.34	2194.03	2145.27	2059.40	2077.65	2028.82	2022.22	1945.78
25.00°	1723.96	1756.53	1721.24	1761.34	1846.72	1817.71	1867.07	1864.54	1935.26	1931.12	1967.29	1918.59	1837.17	1852.78	1805.66	1795.90	1723.96
27.50°	1530.60	1553.26	1523.52	1561.50	1638.19	1606.53	1662.43	1652.30	1715.88	1708.26	1743.21	1695.33	1618.05	1635.80	1587.72	1586.95	1530.60
30.00°	1344.66	1363.76	1336.90	1364.28	1431.35	1406.11	1458.77	1456.25	1506.27	1493.96	1527.98	1490.69	1424.83	1431.02	1394.75	1382.59	1344.66
32.50°	1193.83	1215.96	1188.72	1214.16	1277.15	1254.13	1303.66	1294.06	1329.91	1326.93	1352.88	1320.33	1263.08	1268.59	1235.80	1232.63	1193.83
35.00°	1033.80	1053.75	1025.94	1059.34	1125.51	1095.95	1148.96	1127.93	1156.70	1159.89	1181.52	1154.11	1098.59	1104.50	1068.10	1077.91	1033.80
37.50°	839.05	855.07	821.42	853.51	932.74	915.29	965.67	954.77	992.36	992.79	1024.05	994.43	931.21	935.63	889.88	885.70	839.05
40.00°	637.37	648.03	610.65	645.13	738.72	721.26	779.99	758.89	810.77	812.98	851.07	809.16	731.16	747.62	685.07	688.56	637.37
42.50°	413.81	423.10	384.61	417.83	506.85	486.61	546.98	527.44	588.31	587.99	630.81	588.30	500.69	512.69	452.52	462.97	413.81
45.00°	224.17	236.59	200.39	210.55	281.05	281.46	322.01	326.72	381.87	377.32	420.92	385.57	309.20	307.35	269.11	257.56	224.17
47.50°	123.61	121.60	102.89	116.13	160.14	151.16	185.82	167.56	208.22	208.68	237.93	204.70	149.25	163.53	130.93	144.76	123.61
50.00°	49.23	45.05	36.99	37.69	48.93	55.52	63.29	69.37	84.87	79.66	99.18	92.26	65.60	62.74	57.38	52.71	49.23
52.50°	32.94	30.05	27.16	29.41	36.37	35.57	42.88	42.78	49.72	48.01	57.34	51.55	36.24	38.54	35.48	36.91	32.94
55.00°	21.14	20.42	19.98	21.88	24.83	21.29	24.82	26.65	26.85	25.61	28.20	29.31	23.45	22.51	22.89	23.85	21.14
57.50°	17.97	18.22	16.92	17.00	20.68	17.58	20.15	21.36	22.56	22.84	22.83	24.16	20.85	19.20	16.74	19.09	17.97
60.00°	14.99	15.89	14.24	12.92	16.75	14.32	15.97	17.16	18.66	19.72	19.03	19.50	17.58	15.97	13.23	15.19	14.99
62.50°	12.35	13.40	12.07	11.15	14.06	11.79	13.91	13.95	15.27	15.98	17.78	15.24	13.94	12.86	11.31	13.47	12.35
65.00°	10.37	11.13	10.40	9.75	11.62	10.12	11.92	12.15	13.94	14.48	16.81	13.08	11.12	10.77	10.11	11.54	10.37
67.50°	9.36	9.07	9.31	9.28	10.20	9.66	10.16	11.46	14.99	16.49	16.24	12.38	8.66	9.88	9.28	9.16	9.36
70.00°	8.30	8.07	8.19	8.46	8.85	8.58	8.71	10.67	14.96	17.11	15.76	12.04	7.70	8.59	8.55	7.28	8.30
72.50°	7.18	8.02	7.04	6.93	7.73	6.73	8.20	9.81	13.84	15.84	15.40	11.92	7.32	6.90	7.86	6.33	7.18
75.00°	5.59	6.76	5.59	5.40	6.48	5.43	7.29	8.22	11.49	12.58	12.84	9.97	5.90	5.55	6.05	5.20	5.59
77.50°	3.50	4.52	3.85	3.86	4.82	4.70	5.37	6.21	8.06	6.97	7.91	7.06	4.13	4.51	3.80	3.75	3.50
80.00°	2.27	3.13	2.70	2.86	3.52	3.68	3.72	4.41	5.39	3.60	4.72	4.78	3.09	3.70	2.73	2.62	2.27
82.50°	1.86	2.33	2.00	2.71	3.08	2.39	2.64	2.72	3.29	2.57	3.17	2.78	2.23	3.07	2.02	1.93	1.86
85.00°	1.74	1.88	1.85	2.37	2.63	1.87	1.89	2.06	2.21	1.95	2.46	2.27	2.14	2.48	1.79	1.64	1.74
87.50°	1.87	1.63	2.07	1.80	2.12	1.98	1.76	1.85	1.81	1.71	2.43	2.32	2.22	1.91	1.67	1.83	1.87
90.00°	2.06	1.60	2.07	1.60	1.79	1.86	1.69	1.84	1.74	1.65	2.16	2.07	2.25	1.73	1.72	1.91	2.06
92.50°	2.31	1.69	1.93	1.86	1.75	1.58	1.74	1.91	1.87	1.74	1.72	1.72	2.28	1.79	1.80	1.85	2.31
95.00°	2.33	1.83	1.82	2.00	1.69	1.56	1.76	1.93	1.81	1.92	1.75	1.72	2.17	1.94	2.01	1.77	2.33
97.50°	2.21	1.99	1.73	2.01	1.56	1.69	1.74	1.93	1.68	2.16	2.06	1.81	2.04	2.13	2.24	1.66	2.21
100.00°	2.03	1.99	1.83	2.04	1.60	1.70	1.66	1.80	1.82	1.97	2.08	1.64	1.74	2.23	2.07	1.66	2.03

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

RCR	pfc	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	0%
	pcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	10%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	30%
	0	3448	3448	3448	3448	3366	3366	3366	3366	3214	3214	3214	3074	3074	3074	2946	2946	2946	2886
	1	3282	3200	3126	3059	3209	3136	3070	3010	3016	2963	2914	2906	2864	2825	2804	2772	2741	2715
	2	3114	2969	2849	2749	3048	2918	2809	2717	2822	2732	2655	2733	2660	2596	2651	2592	2540	2540
	3	2952	2761	2613	2495	2892	2719	2583	2474	2641	2526	2432	2568	2473	2393	2501	2422	2354	2374
	4	2797	2572	2408	2282	2743	2538	2386	2268	2474	2343	2239	2414	2302	2212	2358	2263	2185	2220
	5	2650	2402	2229	2101	2602	2374	2212	2090	2320	2179	2070	2270	2147	2051	2223	2117	2032	2078
	6	2513	2248	2071	1943	2469	2224	2057	1936	2179	2031	1921	2137	2007	1907	2097	1983	1893	1947
	7	2385	2109	1930	1805	2345	2089	1920	1800	2050	1899	1789	2014	1879	1779	1980	1860	1768	1828
	8	2265	1983	1805	1683	2229	1966	1797	1679	1933	1780	1671	1902	1764	1663	1872	1748	1655	1720
	9	2154	1868	1693	1575	2121	1854	1686	1572	1825	1673	1566	1798	1659	1560	1773	1646	1554	1620
	10	2052	1765	1593	1478	2021	1752	1587	1476	1727	1575	1471	1703	1564	1466	1681	1554	1462	1530

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	113.3 fc	5.4 ft
6.5 ft	81.1 fc	6.4 ft
7.5 ft	60.9 fc	7.4 ft
8.0 ft	53.6 fc	7.9 ft
10.0 ft	34.3 fc	9.9 ft
12.0 ft	23.8 fc	11.9 ft
14.0 ft	17.5 fc	13.9 ft
16.0 ft	13.4 fc	15.8 ft
20.0 ft	8.6 fc	19.8 ft
24.0 ft	6.0 fc	23.8 ft
28.0 ft	4.4 fc	27.7 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	187920	187920	187920
45.00°	17379	15536	21789
55.00°	2020	1910	2373
65.00°	1346	1349	1507
75.00°	1185	1183	1372
85.00°	1097	1164	1653

UGR CIE 190:2010

Ceiling reflectance		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall reflectance		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Plane reflectance		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
2H	2H	3.0	4.0	3.3	4.3	4.6	3.8	4.8	4.2	5.2	5.5
	3H	4.0	4.9	4.4	5.3	5.6	4.9	5.8	5.3	6.1	6.5
	4H	4.5	5.3	4.9	5.7	6.1	5.4	6.2	5.8	6.6	7.0
	6H	4.7	5.4	5.1	5.8	6.2	5.7	6.4	6.1	6.8	7.2
	8H	4.7	5.4	5.1	5.8	6.2	5.7	6.5	6.2	6.9	7.3
	12H	4.8	5.4	5.2	5.8	6.3	5.8	6.5	6.3	6.9	7.4
4H	2H	3.2	4.0	3.6	4.3	4.7	4.3	5.1	4.7	5.5	5.9
	3H	4.5	5.2	4.9	5.6	6.0	5.7	6.4	6.2	6.8	7.2
	4H	5.1	5.7	5.6	6.1	6.6	6.4	7.0	6.9	7.4	7.9
	6H	5.4	5.9	5.9	6.3	6.8	6.8	7.3	7.3	7.8	8.3
	8H	5.4	5.9	5.9	6.4	6.9	6.9	7.4	7.4	7.8	8.3
	12H	5.5	6.0	6.0	6.5	6.9	7.0	7.4	7.5	7.9	8.4
8H	4H	5.2	5.7	5.7	6.2	6.7	6.8	7.3	7.3	7.8	8.3
	6H	5.6	6.0	6.1	6.5	7.0	7.3	7.7	7.8	8.2	8.7
	8H	5.7	6.1	6.3	6.6	7.1	7.5	7.8	8.0	8.3	8.8
	12H	5.9	6.2	6.5	6.7	7.3	7.7	8.0	8.2	8.5	9.1
12H	4H	5.2	5.6	5.7	6.1	6.6	6.8	7.2	7.3	7.7	8.2
	6H	5.6	5.9	6.1	6.4	7.0	7.3	7.7	7.9	8.1	8.7
	8H	5.8	6.1	6.3	6.6	7.2	7.5	7.8	8.1	8.3	8.9

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0