

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

CW06XXPC 40L 35K WD XX CL XX
Nom 6" diam Gamma Cylinder (Wet Location), Clear lens

Test Number

SP-01290_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	27.2 W
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Lumen Output

Output Lumens	2871
Efficacy	105.56 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.78
Two luminaires, plane 90°	0.82
Four luminaires	0.84

Full Beam Angle

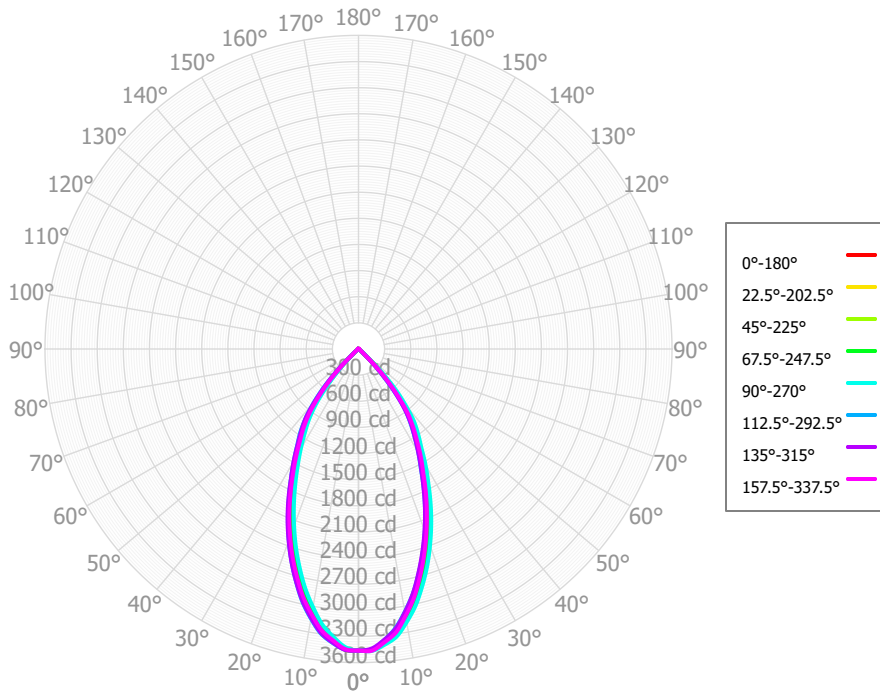
0° - 180°	52°
90° - 270°	52°

IES File Header Contents

Keyword	Value
TEST	SP-01290_M-40L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	5/2/2022
ISSUE DATE	5/18/2022
LUMCAT	CW06XXPC 40L 35K WD XX CL XX
LUMINAIRE	Nom 6" diam Gamma Cylinder (Wet Location), Clear lens
OTHER	Beam angle: 52 deg
OTHER	Wide optic
OTHER	G7 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

CW06XXPC 40L 35K WD XX CL XX

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	317.76	11.07%	90.00° - 100.00°	1.99	0.07%
10.00° - 20.00°	753.86	26.26%	100.00° - 110.00°	1.93	0.07%
20.00° - 30.00°	839.83	29.25%	100.00° - 120.00°	3.70	0.13%
30.00° - 40.00°	673.00	23.44%	120.00° - 130.00°	1.69	0.06%
40.00° - 50.00°	230.01	8.01%	130.00° - 140.00°	1.56	0.05%
50.00° - 60.00°	22.62	0.79%	140.00° - 150.00°	1.38	0.05%
60.00° - 70.00°	11.70	0.41%	150.00° - 160.00°	1.08	0.04%
70.00° - 80.00°	7.25	0.25%	160.00° - 170.00°	0.63	0.02%
80.00° - 90.00°	2.91	0.10%	170.00° - 180.00°	0.22	0.01%
0.00° - 90.00°	2858.93	99.57%	0.00° - 180.00°	2871.17	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°	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01	3463.01
2.50°	3456.98	3465.74	3461.81	3458.79	3470.67	3455.69	3459.54	3449.80	3454.33	3439.77	3459.77	3450.14	3427.94	3452.23	3443.27	3468.82	3456.98
5.00°	3373.58	3393.36	3380.70	3382.24	3410.43	3389.29	3384.65	3359.37	3367.85	3351.53	3360.14	3346.75	3317.58	3356.80	3354.98	3383.07	3373.58
7.50°	3275.55	3296.36	3291.91	3298.67	3333.56	3297.71	3289.56	3256.57	3270.89	3236.32	3255.96	3232.64	3189.98	3235.65	3243.24	3285.73	3275.55
10.00°	3107.06	3141.22	3133.64	3139.27	3184.67	3144.43	3134.99	3093.02	3103.93	3059.91	3077.62	3052.53	3009.03	3064.12	3069.30	3113.24	3107.06
12.50°	2929.67	2969.21	2969.29	2975.15	3021.74	2974.46	2966.24	2921.46	2929.98	2872.30	2897.62	2867.59	2819.26	2879.30	2881.24	2933.50	2929.67
15.00°	2716.39	2768.84	2763.01	2771.99	2822.82	2768.51	2766.63	2717.05	2722.78	2662.26	2686.31	2658.53	2605.80	2667.43	2660.34	2717.97	2716.39
17.50°	2501.03	2561.48	2554.47	2567.55	2618.23	2558.33	2560.90	2510.11	2513.33	2447.26	2474.51	2447.09	2388.58	2449.55	2439.25	2500.11	2501.03
20.00°	2278.56	2342.70	2333.43	2348.86	2400.53	2340.06	2345.21	2294.36	2290.35	2223.43	2249.41	2225.78	2162.66	2223.49	2217.75	2275.83	2278.56
22.50°	2056.87	2121.56	2111.71	2129.97	2181.23	2119.19	2127.93	2076.32	2066.86	1999.12	2024.39	2003.40	1938.80	1995.94	1994.87	2051.33	2056.87
25.00°	1837.52	1896.48	1886.90	1904.87	1958.93	1893.93	1904.61	1851.40	1841.42	1774.05	1800.68	1777.21	1719.14	1773.21	1769.45	1831.88	1837.52
27.50°	1626.35	1670.73	1668.18	1681.30	1736.37	1680.00	1680.55	1633.83	1616.67	1565.36	1580.85	1561.04	1511.62	1551.17	1559.27	1613.23	1626.35
30.00°	1436.22	1476.18	1472.76	1486.91	1538.91	1483.23	1488.68	1435.38	1431.97	1379.84	1400.33	1375.28	1326.18	1373.39	1373.74	1431.89	1436.22
32.50°	1257.84	1285.75	1288.16	1296.00	1342.92	1308.46	1299.79	1250.01	1248.48	1209.07	1222.76	1198.55	1151.97	1200.55	1202.77	1251.61	1257.84
35.00°	1106.01	1132.37	1138.87	1146.98	1193.19	1163.12	1143.80	1094.50	1091.22	1057.00	1067.44	1045.64	995.94	1040.61	1052.86	1092.68	1106.01
37.50°	932.78	982.65	970.61	990.88	1044.79	991.81	989.82	918.50	929.04	875.47	902.84	871.79	810.93	881.71	873.44	928.95	932.78
40.00°	716.89	762.45	748.83	773.52	836.24	789.35	762.26	701.16	702.79	660.44	683.02	649.49	584.06	647.53	655.81	705.30	716.89
42.50°	494.08	537.55	522.22	553.51	626.60	558.69	532.39	479.02	478.28	441.70	465.47	432.20	371.44	409.69	438.13	483.34	494.08
45.00°	259.03	315.25	283.87	315.83	378.23	297.67	310.00	248.28	269.60	219.16	258.99	225.10	177.26	234.64	220.38	276.44	259.03
47.50°	98.42	93.04	106.36	108.42	139.96	133.18	92.11	91.47	83.16	90.32	86.55	80.18	62.17	62.01	89.33	91.69	98.42
50.00°	55.18	58.80	59.10	62.78	81.92	61.90	59.19	51.23	51.77	47.25	52.12	47.76	38.76	43.51	48.54	57.69	55.18
52.50°	27.62	26.71	26.57	24.94	28.17	26.53	27.72	26.36	24.73	25.08	24.74	26.01	24.83	25.55	26.87	28.29	27.62
55.00°	22.16	22.34	21.98	21.51	23.63	22.26	23.25	23.13	21.80	20.07	21.60	21.48	20.76	22.88	23.08	23.92	22.16
57.50°	17.93	18.03	18.30	18.03	19.29	18.85	18.89	19.70	18.83	16.52	18.41	17.98	17.35	20.15	19.47	19.73	17.93
60.00°	15.26	14.92	16.15	14.33	16.61	16.08	15.77	16.04	15.64	14.05	15.10	15.93	14.58	16.55	16.02	16.29	15.26
62.50°	12.88	12.01	13.86	11.42	13.96	13.12	12.86	13.10	12.79	11.71	12.30	13.92	12.91	13.19	13.68	13.35	12.88
65.00°	10.85	11.69	11.33	11.05	11.53	10.01	11.75	11.00	11.22	9.46	10.84	11.96	12.17	12.39	12.18	12.24	10.85
67.50°	9.77	11.35	9.40	10.67	9.52	8.91	10.62	9.63	9.86	9.26	9.72	11.23	11.77	11.57	10.87	10.94	9.77
70.00°	9.64	10.83	8.28	10.24	9.72	9.06	9.38	9.01	9.21	10.27	9.39	11.91	11.63	10.68	9.68	9.02	9.64
72.50°	8.47	10.01	7.20	9.29	9.47	8.13	8.09	7.98	8.28	9.07	8.42	10.82	10.23	9.59	8.12	7.42	8.47
75.00°	6.34	7.17	6.16	7.08	7.29	6.60	6.50	6.60	6.54	6.72	6.18	7.92	8.00	7.30	6.34	6.72	6.34
77.50°	4.67	4.59	4.85	5.05	5.22	5.05	5.04	5.31	4.93	5.12	4.53	5.62	5.91	5.25	4.70	5.74	4.67
80.00°	3.38	3.41	3.24	3.43	3.56	3.49	4.14	4.10	3.62	3.86	3.90	3.86	3.91	4.34	3.15	4.09	3.38
82.50°	2.73	2.41	2.53	2.30	2.31	2.81	3.32	3.36	2.65	3.38	3.44	2.93	2.94	3.48	2.62	2.79	2.73
85.00°	2.56	2.16	2.70	2.11	2.38	2.52	2.85	2.97	2.42	3.20	3.22	2.69	2.51	2.86	2.58	2.25	2.56
87.50°	2.31	1.93	2.63	1.94	2.33	2.37	2.42	2.43	2.21	2.67	2.83	2.26	2.16	2.30	2.28	1.96	2.31
90.00°	2.00	1.72	2.34	1.81	1.94	2.29	2.11	1.81	2.05	2.01	2.21	1.71	1.83	1.98	1.87	2.13	2.00
92.50°	1.78	1.59	2.18	1.75	1.65	2.12	1.87	1.71	1.89	1.81	1.90	1.58	1.76	1.77	1.77	2.08	1.78
95.00°	1.61	1.66	2.10	1.81	1.58	1.92	1.79	1.92	1.74	1.75	2.00	1.74	1.80	1.89	1.79	1.66	1.61
97.50°	1.54	1.68	1.99	1.78	1.57	1.71	1.73	1.99	1.71	1.77	2.09	1.87	1.98	1.93	1.76	1.50	1.54
100.00°	1.53	1.55	1.84	1.62	1.68	1.50	1.75	1.98	1.86	1.80	2.18	1.99	2.20	1.79	1.72	1.73	1.53

CW06XXPC 40L 35K WD XX CL XX

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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	3415	3415	3415	3415	3334	3334	3334	3334	3183	3183	3183	3045	3045	3045	2919	2919	2919	2859
	1	3252	3171	3098	3033	3180	3108	3042	2983	2989	2937	2889	2880	2839	2801	2780	2748	2718	2692
	2	3087	2945	2827	2728	3022	2894	2787	2696	2799	2711	2635	2711	2639	2576	2630	2572	2521	2521
	3	2928	2740	2594	2479	2869	2699	2565	2458	2621	2509	2417	2550	2456	2377	2483	2406	2339	2358
	4	2776	2555	2393	2270	2722	2521	2371	2255	2457	2329	2227	2398	2289	2200	2343	2250	2173	2207
	5	2632	2388	2217	2091	2584	2360	2200	2081	2307	2168	2061	2257	2137	2042	2211	2107	2023	2068
	6	2497	2236	2062	1936	2453	2213	2049	1929	2168	2023	1915	2126	1998	1901	2087	1975	1887	1940
	7	2370	2099	1924	1800	2331	2079	1913	1795	2041	1893	1785	2006	1873	1774	1972	1854	1764	1823
	8	2253	1975	1800	1680	2217	1958	1792	1676	1925	1775	1668	1895	1759	1661	1866	1744	1653	1715
	9	2143	1862	1690	1573	2111	1847	1683	1570	1819	1669	1564	1793	1656	1558	1768	1643	1552	1618
	10	2042	1759	1590	1478	2012	1747	1585	1475	1722	1573	1471	1699	1562	1466	1677	1552	1461	1528

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	114.5 fc	5.4 ft
6.5 ft	82.0 fc	6.4 ft
7.5 ft	61.6 fc	7.4 ft
8.0 ft	54.1 fc	7.9 ft
10.0 ft	34.6 fc	9.8 ft
12.0 ft	24.0 fc	11.8 ft
14.0 ft	17.7 fc	13.8 ft
16.0 ft	13.5 fc	15.7 ft
20.0 ft	8.7 fc	19.7 ft
24.0 ft	6.0 fc	23.6 ft
28.0 ft	4.4 fc	27.5 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	189843	189843	189843
45.00°	20082	22008	29323
55.00°	2118	2101	2258
65.00°	1407	1469	1495
75.00°	1343	1305	1543
85.00°	1610	1697	1498

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	3.1	4.1	3.5	4.4	4.7	3.0	4.0	3.4	4.3	4.6
	3H	4.5	5.4	4.9	5.7	6.1	4.5	5.4	4.9	5.7	6.1
	4H	5.1	5.9	5.5	6.2	6.6	5.3	6.1	5.7	6.4	6.8
	6H	5.4	6.1	5.8	6.5	6.9	5.6	6.4	6.1	6.8	7.2
	8H	5.5	6.2	5.9	6.6	7.0	5.7	6.4	6.2	6.8	7.2
	12H	5.6	6.3	6.0	6.7	7.1	5.8	6.5	6.3	6.9	7.3
4H	2H	3.4	4.2	3.8	4.6	5.0	3.3	4.1	3.7	4.5	4.9
	3H	5.1	5.8	5.5	6.2	6.6	5.1	5.8	5.6	6.2	6.6
	4H	5.8	6.4	6.3	6.8	7.3	6.0	6.6	6.5	7.0	7.5
	6H	6.2	6.7	6.7	7.2	7.7	6.5	7.0	7.0	7.5	7.9
	8H	6.4	6.8	6.8	7.3	7.8	6.6	7.1	7.1	7.5	8.0
	12H	6.6	7.0	7.1	7.5	7.9	6.8	7.2	7.3	7.7	8.2
8H	4H	6.0	6.4	6.5	6.9	7.4	6.2	6.6	6.7	7.1	7.6
	6H	6.5	6.9	7.0	7.4	7.9	6.8	7.1	7.3	7.6	8.1
	8H	6.7	7.0	7.2	7.6	8.1	7.0	7.3	7.5	7.8	8.3
	12H	7.0	7.3	7.5	7.8	8.4	7.3	7.6	7.8	8.1	8.7
12H	4H	6.0	6.4	6.5	6.9	7.3	6.2	6.6	6.7	7.1	7.5
	6H	6.5	6.8	7.1	7.3	7.9	6.8	7.1	7.3	7.6	8.2
	8H	6.8	7.1	7.3	7.6	8.2	7.1	7.4	7.6	7.9	8.5

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0