

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

CW06XXUDPC 40LXWCL 40LXWCL 35KXX XXMW (IND/DIR Wet location)
Nom. 6" Diam. Gamma Indirect/Direct Cylinder

Test Number

SP-01085

Test Date

1/20/2020

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

Summary of Results

Power

Input Watts	54.8 W
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Lumen Output

Output Lumens	5478
Efficacy	99.97 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	1.14
Two luminaires, plane 90°	1.14
Four luminaires	1.09

Full Beam Angle

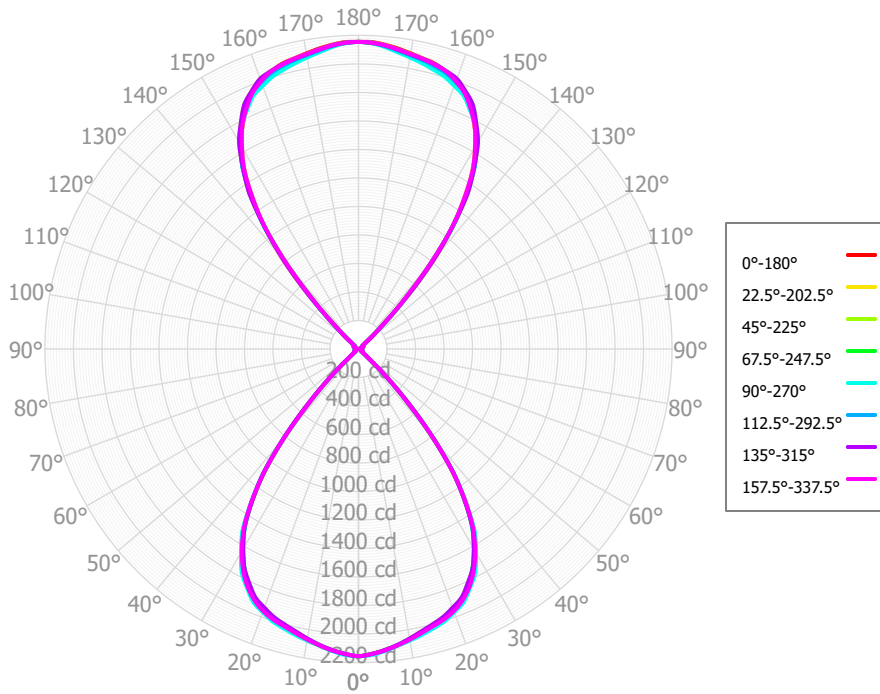
0° - 180°	75°
90° - 270°	75°

IES File Header Contents

Keyword	Value
TEST	SP-01085
TESTLAB	VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	1/20/2020
ISSUEDATE	5/18/2022
LUMCAT	CW06XXUDPC 40LXWCL 40LXWCL 35KXX XMMW (IND/DIR Wet location)
LUMINAIRE	Nom. 6" Diam. Gamma Indirect/Direct Cylinder
OTHER	Uplight: Xtra Wide Optic, Flush Clear Glass lens
OTHER	Uplight: 77.4 Degree Beam Angle
OTHER	Downlight: Xtra Wide Optic, Regressed Glass lens
OTHER	Downlight: 77.4 Degree Beam Angle
OTHER	Trim: Matte White
LAMP	N/A
LAMPCAT	N/A, 19mm LES Uplight
OTHER	N/A, 19mm LES Downlight
OTHER	Total Luminaire Watts is approximate
OTHER	CCT Output Multipliers: 27K x 0.97, 30K x 0.98, 40K x 1.04, 27HK x 0.78, 30HK x 0.82

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 XMMW (IND/DIR Wet location)

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	203.84	3.72%	90.00° - 100.00°	1.82	0.03%
10.00° - 20.00°	568.34	10.37%	100.00° - 110.00°	16.73	0.31%
20.00° - 30.00°	836.14	15.26%	100.00° - 120.00°	51.38	0.94%
30.00° - 40.00°	790.77	14.44%	120.00° - 130.00°	32.04	0.58%
40.00° - 50.00°	245.35	4.48%	130.00° - 140.00°	241.74	4.41%
50.00° - 60.00°	25.48	0.47%	140.00° - 150.00°	795.07	14.51%
60.00° - 70.00°	30.16	0.55%	150.00° - 160.00°	852.70	15.57%
70.00° - 80.00°	15.02	0.27%	160.00° - 170.00°	580.90	10.60%
80.00° - 90.00°	1.75	0.03%	170.00° - 180.00°	205.60	3.75%
0.00° - 90.00°	2716.86	49.59%	0.00° - 180.00°	5478.10	100.00%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	2155.74	2155.74	2155.74	2155.74	2155.74
2.50°	2142.41	2141.79	2142.40	2142.66	2148.93
5.00°	2123.29	2123.16	2119.83	2123.56	2127.03
7.50°	2099.33	2097.34	2095.27	2094.74	2100.78
10.00°	2073.66	2070.55	2063.35	2066.28	2077.35
12.50°	2046.92	2041.80	2030.63	2038.66	2054.54
15.00°	2020.91	2014.90	2001.56	2011.44	2029.58
17.50°	1995.26	1991.00	1972.61	1984.96	2004.31
20.00°	1956.89	1956.80	1931.64	1947.98	1965.27
22.50°	1913.55	1908.64	1888.98	1895.08	1924.98
25.00°	1842.33	1841.34	1813.81	1825.02	1850.16
27.50°	1762.48	1752.96	1734.51	1733.90	1773.24
30.00°	1640.28	1638.37	1618.56	1621.11	1647.87
32.50°	1508.46	1500.28	1491.01	1486.37	1517.39
35.00°	1302.71	1311.56	1298.99	1306.03	1311.81
37.50°	1085.57	1084.87	1090.36	1087.55	1096.17
40.00°	800.28	811.29	813.88	817.06	803.12
42.50°	508.31	509.30	541.35	511.30	518.13
45.00°	28718	28735	280.82	284.55	273.47
47.50°	71.45	104.07	86.23	100.87	75.02
50.00°	47.90	41.42	45.94	36.83	46.02
52.50°	25.86	26.05	20.49	26.18	25.31
55.00°	28.45	24.70	23.37	24.95	27.96
57.50°	30.89	27.55	25.86	26.97	30.47
60.00°	32.10	29.88	27.75	29.38	32.67
62.50°	32.98	32.10	29.07	31.90	33.72
65.00°	32.12	31.04	29.69	32.10	32.77
67.50°	30.50	29.44	28.73	31.88	31.43
70.00°	26.76	25.24	26.45	28.37	29.64
72.50°	20.81	20.15	20.79	22.95	22.28
75.00°	12.95	13.31	14.08	13.68	13.53
77.50°	7.77	6.71	6.70	7.58	7.25
80.00°	3.98	2.86	3.49	3.32	3.48
82.50°	2.12	1.83	1.63	1.52	1.88
85.00°	1.70	1.67	1.53	1.76	1.36
87.50°	1.39	1.72	1.21	1.33	1.09
90.00°	0.00	0.00	0.00	0.00	0.00
92.50°	1.03	1.25	1.60	1.46	1.09
95.00°	1.67	1.75	1.21	1.56	1.36
97.50°	2.38	2.02	1.83	1.98	1.88
100.00°	4.70	3.55	3.42	3.63	3.48

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 XXMW (IND/DIR Wet location)

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	5864	5864	5864	5864	5407	5407	5407	5407	4553	4553	4553	3772	3772	3772	3054	3054	3054	2717
	1	5460	5268	5096	4941	5040	4880	4735	4604	4153	4053	3962	3485	3420	3360	2869	2830	2793	2538
	2	5076	4746	4473	4244	4691	4413	4181	3984	3788	3624	3482	3211	3100	3003	2678	2608	2546	2354
	3	4718	4291	3960	3697	4365	4003	3719	3490	3462	3256	3087	2961	2818	2698	2496	2403	2323	2182
	4	4388	3894	3532	3255	4066	3644	3330	3087	3172	2940	2757	2734	2570	2436	2327	2216	2125	2023
	5	4085	3546	3170	2891	3791	3328	2998	2752	2914	2667	2478	2529	2350	2210	2170	2047	1948	1878
	6	3810	3242	2861	2587	3541	3050	2714	2470	2685	2430	2239	2345	2157	2013	2026	1894	1791	1745
	7	3559	2975	2596	2330	3313	2805	2469	2231	2481	2223	2034	2179	1985	1841	1895	1756	1651	1625
	8	3332	2740	2367	2111	3106	2588	2256	2025	2300	2041	1857	2029	1833	1690	1774	1632	1526	1515
	9	3126	2532	2168	1922	2918	2397	2071	1848	2138	1881	1702	1894	1698	1557	1664	1520	1414	1416
	10	2939	2348	1994	1759	2747	2226	1908	1694	1993	1741	1566	1772	1577	1440	1564	1419	1315	1326

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	71.3 fc	8.5 ft
6.5 ft	51.0 fc	10.0 ft
7.5 ft	38.3 fc	11.5 ft
8.0 ft	33.7 fc	12.3 ft
10.0 ft	21.6 fc	15.4 ft
12.0 ft	15.0 fc	18.5 ft
14.0 ft	11.0 fc	21.5 ft
16.0 ft	8.4 fc	24.6 ft
20.0 ft	5.4 fc	30.8 ft
24.0 ft	3.7 fc	36.9 ft
28.0 ft	2.7 fc	43.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	118178	118178	118178
45.00°	22264	21771	21201
55.00°	2719	2234	2672
65.00°	4167	3852	4251
75.00°	2743	2982	2867
85.00°	1072	961	858

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	1.9	2.5	2.9	3.5	4.8	1.7	2.4	2.7	3.4	4.7
	3H	5.4	6.0	6.4	7.0	8.3	5.7	6.3	6.7	7.3	8.6
	4H	6.0	6.5	7.0	7.5	8.9	6.3	6.9	7.3	7.9	9.2
	6H	6.1	6.6	7.1	7.6	8.9	6.4	6.9	7.4	7.9	9.2
	8H	6.0	6.5	7.1	7.5	8.9	6.3	6.8	7.4	7.8	9.2
	12H	6.0	6.5	7.0	7.5	8.8	6.3	6.8	7.3	7.8	9.1
4H	2H	3.0	3.6	4.0	4.6	5.9	2.9	3.5	3.9	4.5	5.8
	3H	6.4	6.8	7.4	7.8	9.2	6.7	7.1	7.7	8.2	9.5
	4H	7.0	7.4	8.0	8.4	9.8	7.3	7.7	8.3	8.7	10.1
	6H	7.1	7.4	8.1	8.5	9.8	7.4	7.7	8.4	8.8	10.1
	8H	7.0	7.4	8.1	8.4	9.8	7.3	7.7	8.4	8.7	10.1
	12H	7.0	7.3	8.1	8.3	9.7	7.3	7.6	8.4	8.6	10.0
8H	4H	7.1	7.5	8.2	8.5	9.9	7.4	7.8	8.5	8.8	10.2
	6H	7.2	7.5	8.3	8.6	9.9	7.5	7.8	8.6	8.9	10.2
	8H	7.2	7.4	8.3	8.5	9.9	7.5	7.7	8.6	8.8	10.2
	12H	7.2	7.4	8.3	8.5	9.9	7.4	7.7	8.5	8.7	10.1
12H	4H	7.1	7.4	8.1	8.4	9.8	7.3	7.7	8.4	8.7	10.1
	6H	7.2	7.4	8.2	8.5	9.9	7.4	7.7	8.5	8.7	10.1
	8H	7.2	7.4	8.2	8.4	9.9	7.4	7.6	8.5	8.7	10.1

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0