

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
Fall River, MA 02721
+1.508.678.2303

Spectrum Lighting Photometric Lab

Luminaire

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

Test Number

SP-01296

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
-------------	--------

Lumen Output

Output Lumens	5511
Efficacy	100.57 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	0.85

Full Beam Angle

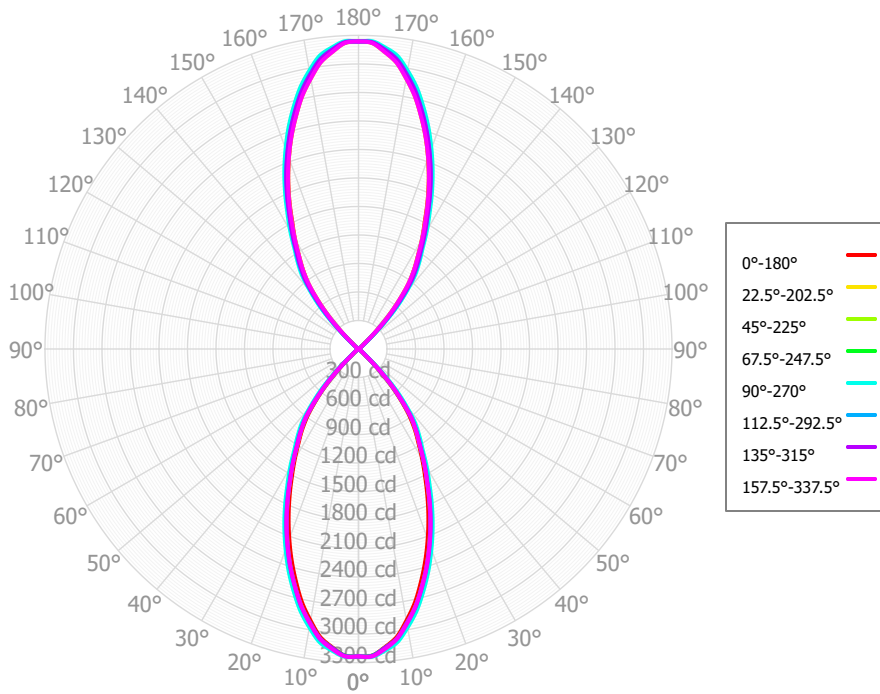
0° - 180°	52°
90° - 270°	55°

IES File Header Contents

Keyword	Value
TEST	SP-01296
TESTLAB	VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	1/20/2020
ISSUEDATE	5/19/2022
LUMCAT	CW06XXUDPC 40LWDCL 40LWDCL 35KXX XXMW (IND/DIR Wet location)
LUMINAIRE	Nom. 6" Diam. Gamma Indirect/Direct Cylinder
OTHER	Uplight: Wide Optic, Flush Clear Glass lens
OTHER	Uplight: 52.0 Degree Beam Angle
OTHER	Downlight: Wide Optic, Regressed Glass lens
OTHER	Downlight: 52.0 Degree Beam Angle
OTHER	Trim: Matte White
OTHER	Gen 7 to Gen 6 conversion
LAMP	N/A
LAMPCAT	N/A, 19mm LES Uplight
OTHER	N/A, 19mm LES Downlight
OTHER	Total Luminaire Watts is approximate

CW06XXUDPC 40LWDCL 40LWDCL 35KXX
 XXMW (IND/DIR Wet location)

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	299.30	5.43%	90.00° - 100.00°	2.79	0.05%
10.00° - 20.00°	718.11	13.03%	100.00° - 110.00°	6.54	0.12%
20.00° - 30.00°	808.90	14.68%	100.00° - 120.00°	17.27	0.31%
30.00° - 40.00°	656.97	11.92%	120.00° - 130.00°	22.01	0.40%
40.00° - 50.00°	239.23	4.34%	130.00° - 140.00°	233.59	4.24%
50.00° - 60.00°	21.81	0.40%	140.00° - 150.00°	652.44	11.84%
60.00° - 70.00°	10.81	0.20%	150.00° - 160.00°	805.23	14.61%
70.00° - 80.00°	6.67	0.12%	160.00° - 170.00°	715.00	12.97%
80.00° - 90.00°	2.46	0.04%	170.00° - 180.00°	298.47	5.42%
0.00° - 90.00°	2764.27	50.16%	0.00° - 180.00°	5511.07	100.00%

CW06XXUDPC 40LWDCL 40LWDCL 35KXX
XXMW (IND/DIR Wet location)

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	3236.53	3236.53	3236.53	3236.53	3236.53
2.50°	3230.89	3239.08	3235.41	3232.58	3243.69
5.00°	3152.95	3171.44	3159.60	3161.04	3187.39
7.50°	3061.33	3080.78	3076.62	3082.93	3115.55
10.00°	2903.86	2935.78	2928.70	2933.96	2976.40
12.50°	2738.07	2775.02	2775.10	2780.58	2824.12
15.00°	2538.73	2587.76	2582.31	2590.70	2638.21
17.50°	2337.46	2393.96	2387.41	2399.63	2447.00
20.00°	2129.54	2189.49	2180.82	2195.25	2243.54
22.50°	1922.35	1982.81	1973.61	1990.67	2038.58
25.00°	1717.35	1772.45	1763.49	1780.29	1830.82
27.50°	1519.99	1561.47	1559.09	1571.34	1622.81
30.00°	1342.29	1379.64	1376.44	1389.67	1438.27
32.50°	1175.58	1201.66	1203.92	1211.24	1255.09
35.00°	1033.68	1058.32	1064.39	1071.97	1115.15
37.50°	871.78	918.38	907.13	926.08	976.46
40.00°	670.00	712.59	699.86	722.93	781.55
42.50°	461.77	502.39	488.07	517.31	585.62
45.00°	242.09	294.63	265.30	295.17	353.49
47.50°	91.99	86.96	99.41	101.33	130.81
50.00°	51.57	54.96	55.23	58.68	76.56
52.50°	25.82	24.96	24.83	23.30	26.32
55.00°	20.71	20.88	20.54	20.11	22.08
57.50°	16.76	16.85	17.10	16.85	18.03
60.00°	14.26	13.94	15.10	13.39	15.52
62.50°	12.04	11.22	12.95	10.68	13.05
65.00°	10.14	10.93	10.59	10.33	10.77
67.50°	9.13	10.61	8.78	9.97	8.90
70.00°	9.01	10.12	7.74	9.57	9.08
72.50°	7.91	9.36	6.73	8.68	8.85
75.00°	5.93	6.70	5.76	6.61	6.81
77.50°	4.37	4.29	4.53	4.72	4.87
80.00°	3.16	3.19	3.02	3.21	3.32
82.50°	2.56	2.25	2.36	2.15	2.16
85.00°	2.39	2.02	2.52	1.97	2.23
87.50°	2.16	1.80	2.45	1.81	2.17
90.00°	1.87	1.61	2.19	1.69	1.82
92.50°	2.07	2.27	2.26	2.22	2.17
95.00°	2.26	2.77	2.66	2.35	2.23
97.50°	2.48	3.14	3.10	2.63	2.16
100.00°	3.38	3.83	3.86	3.26	3.32

CW06XXUDPC 40LWDCL 40LWDCL 35KXX
 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	5907	5907	5907	5907	5450	5450	5450	5450	4597	4597	4597	3817	3817	3817	3101	3101	3101	2764
	1	5512	5324	5155	5003	5093	4936	4795	4667	4211	4114	4026	3545	3482	3424	2930	2893	2858	2601
	2	5138	4816	4549	4325	4755	4484	4257	4065	3861	3701	3564	3286	3179	3085	2754	2688	2629	2434
	3	4790	4373	4050	3793	4440	4087	3809	3586	3547	3348	3184	3049	2911	2795	2586	2497	2421	2275
	4	4469	3986	3633	3363	4149	3738	3432	3195	3268	3044	2866	2833	2674	2545	2427	2321	2234	2128
	5	4175	3648	3280	3009	3883	3431	3110	2870	3020	2780	2596	2637	2464	2329	2279	2162	2067	1992
	6	3906	3352	2979	2712	3639	3161	2833	2596	2798	2550	2365	2460	2278	2139	2143	2017	1918	1867
	7	3662	3091	2721	2462	3417	2922	2595	2362	2601	2349	2166	2300	2113	1974	2017	1885	1784	1752
	8	3440	2861	2497	2247	3216	2711	2387	2162	2424	2173	1994	2155	1966	1828	1902	1766	1664	1648
	9	3239	2659	2303	2063	3032	2524	2206	1989	2267	2018	1843	2025	1835	1699	1796	1658	1557	1553
	10	3056	2479	2133	1903	2865	2358	2047	1839	2126	1880	1711	1907	1718	1585	1700	1561	1460	1466

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	107.0 fc	5.4 ft
6.5 ft	76.6 fc	6.4 ft
7.5 ft	57.5 fc	7.4 ft
8.0 ft	50.6 fc	7.9 ft
10.0 ft	32.4 fc	9.8 ft
12.0 ft	22.5 fc	11.8 ft
14.0 ft	16.5 fc	13.8 ft
16.0 ft	12.6 fc	15.8 ft
20.0 ft	8.1 fc	19.7 ft
24.0 ft	5.6 fc	23.6 ft
28.0 ft	4.1 fc	27.6 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	177427	177427	177427
45.00°	18769	20568	27405
55.00°	1979	1963	2111
65.00°	1315	1373	1397
75.00°	1255	1220	1442
85.00°	1505	1586	1400

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	-1.8	-1.2	-0.8	-0.2	1.1	-1.8	-1.1	-0.8	-0.1	1.2
	3H	-0.3	0.3	0.7	1.3	2.6	-0.3	0.3	0.7	1.3	2.6
	4H	0.3	0.9	1.4	1.9	3.2	0.4	1.0	1.4	1.9	3.3
	6H	0.6	1.1	1.7	2.1	3.5	0.7	1.3	1.8	2.2	3.6
	8H	0.7	1.2	1.7	2.2	3.5	0.8	1.3	1.8	2.3	3.6
	12H	0.8	1.3	1.9	2.3	3.7	0.9	1.4	1.9	2.4	3.7
4H	2H	-1.5	-1.0	-0.5	0.0	1.4	-1.5	-0.9	-0.4	0.1	1.4
	3H	0.4	0.8	1.4	1.9	3.2	0.3	0.7	1.3	1.8	3.1
	4H	1.1	1.6	2.2	2.6	3.9	1.1	1.6	2.2	2.6	3.9
	6H	1.5	1.9	2.6	2.9	4.3	1.6	1.9	2.6	3.0	4.3
	8H	1.6	2.0	2.7	3.0	4.4	1.7	2.0	2.7	3.0	4.4
	12H	1.8	2.1	2.9	3.2	4.5	1.8	2.1	2.9	3.2	4.5
8H	4H	1.3	1.6	2.3	2.7	4.0	1.3	1.6	2.4	2.7	4.0
	6H	1.8	2.0	2.8	3.1	4.5	1.8	2.1	2.9	3.2	4.5
	8H	2.0	2.2	3.0	3.3	4.6	2.0	2.3	3.1	3.3	4.7
	12H	2.3	2.5	3.3	3.5	4.9	2.3	2.5	3.3	3.5	4.9
12H	4H	1.3	1.6	2.3	2.6	4.0	1.3	1.6	2.3	2.6	4.0
	6H	1.8	2.0	2.8	3.1	4.5	1.8	2.1	2.9	3.1	4.5
	8H	2.0	2.2	3.1	3.3	4.7	2.1	2.3	3.1	3.3	4.7

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0