

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
Fall River, MA 02721
+1.508.678.2303

Spectrum Lighting Photometric Lab

Luminaire

CF06XXUDPC 40LWDCL 40LWDNL 35KXX XXMW (IND/DIR Damp location)
Nom. 6" Diam Indirect/Direct Cylinder damp location

Test Number

SP-01295

Test Date

1/21/2020

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	5430
Efficacy	99.08 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°	0.77
Four luminaires	0.82

Full Beam Angle

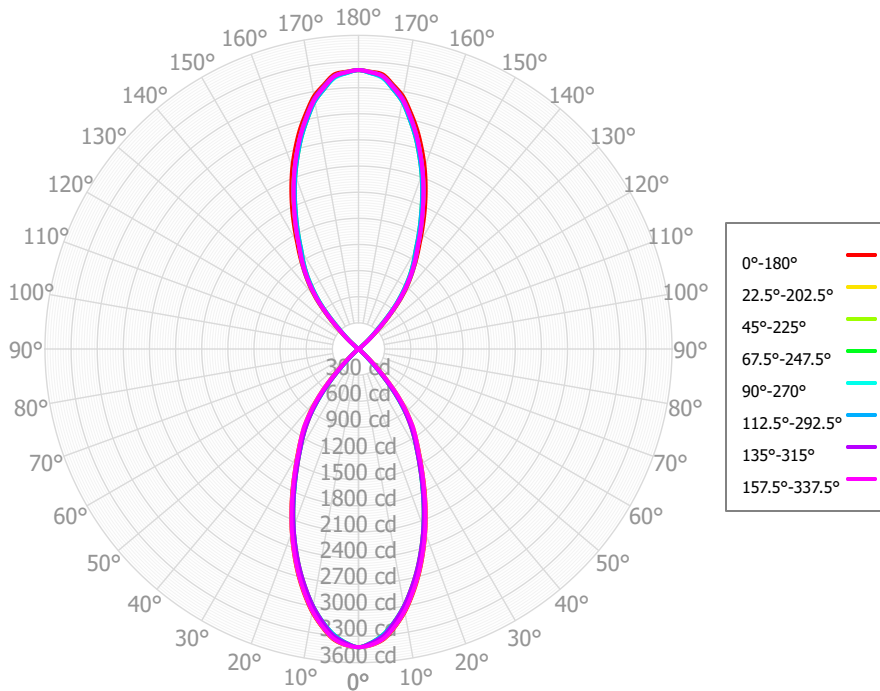
0° - 180°	52°
90° - 270°	51°

IES File Header Contents

Keyword	Value
TEST	SP-01295
TESTLAB	VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	1/21/2020
ISSUEDATE	5/26/2022
LUMCAT	CF06XXUDPC 40LWDCL 40LWDNL 35KXX XXMW (IND/DIR Damp location)
LUMINAIRE	Nom. 6" Diam Indirect/Direct Cylinder damp location
OTHER	Uplight: Wide Optic, Flush Clear Glass lens
OTHER	Uplight: 53 Degree Beam Angle
OTHER	Downlight: Wide Optic, No lens
OTHER	Downlight: 53 Degree Beam Angle
OTHER	Trim: Matte White
OTHER	G7 to G6 conversion
LAMP	N/A
LAMPCAT	N/A, 19mm LES Uplight
OTHER	N/A, 19mm LES Downlight
OTHER	Total Luminaire Watts is approximate

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 XXMW (IND/DIR Damp location)

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	310.72	5.72%	90.00° - 100.00°	2.44	0.04%
10.00° - 20.00°	730.64	13.46%	100.00° - 110.00°	7.16	0.13%
20.00° - 30.00°	804.58	14.82%	100.00° - 120.00°	18.57	0.34%
30.00° - 40.00°	636.27	11.72%	120.00° - 130.00°	25.95	0.48%
40.00° - 50.00°	196.54	3.62%	130.00° - 140.00°	249.64	4.60%
50.00° - 60.00°	4.69	0.09%	140.00° - 150.00°	646.55	11.91%
60.00° - 70.00°	1.78	0.03%	150.00° - 160.00°	794.46	14.63%
70.00° - 80.00°	1.75	0.03%	160.00° - 170.00°	707.73	13.03%
80.00° - 90.00°	1.80	0.03%	170.00° - 180.00°	295.59	5.44%
0.00° - 90.00°	2688.77	49.52%	0.00° - 180.00°	5429.70	100.00%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	3424.04	3424.04	3424.04	3424.04	3424.04
2.50°	3403.31	3400.77	3379.45	3375.22	3391.76
5.00°	3343.75	3335.58	3304.25	3289.44	3310.45
7.50°	3216.64	3209.30	3162.37	3158.89	3185.38
10.00°	3064.88	3054.53	3001.57	3001.01	3026.66
12.50°	2878.16	2866.46	2810.80	2815.25	2842.21
15.00°	2677.68	2666.16	2610.12	2615.79	2641.63
17.50°	2461.23	2452.21	2396.65	2400.74	2425.80
20.00°	2240.35	2234.43	2179.15	2179.62	2202.27
22.50°	2015.26	2009.39	1957.37	1955.60	1981.22
25.00°	1796.22	1782.86	1739.44	1730.71	1761.15
27.50°	1581.88	1581.48	1524.84	1533.23	1559.97
30.00°	1397.78	1383.52	1342.11	1341.81	1364.63
32.50°	1232.88	1233.48	1181.74	1184.49	1205.97
35.00°	1070.48	1087.07	1011.33	1032.33	1055.75
37.50°	909.36	893.07	835.21	824.22	856.75
40.00°	701.47	696.94	616.21	611.11	649.97
42.50°	474.51	462.99	377.65	384.91	424.97
45.00°	283.66	238.19	207.72	161.19	198.21
47.50°	104.21	121.67	62.40	81.94	102.43
50.00°	42.06	18.84	19.78	7.95	12.83
52.50°	7.52	9.78	5.18	4.80	7.50
55.00°	2.51	2.28	2.47	2.06	2.48
57.50°	2.35	2.02	2.11	2.24	2.19
60.00°	2.07	1.77	1.90	2.35	1.92
62.50°	1.78	1.56	1.71	2.10	1.85
65.00°	1.75	1.51	1.73	1.86	1.81
67.50°	1.73	1.87	1.77	1.67	1.94
70.00°	1.85	1.98	1.74	1.51	2.00
72.50°	1.95	1.57	1.71	1.42	1.86
75.00°	1.82	1.34	1.90	1.37	1.76
77.50°	1.69	1.43	2.05	1.39	1.81
80.00°	1.55	1.52	1.81	1.49	1.79
82.50°	1.47	1.62	1.60	1.72	1.63
85.00°	1.66	1.72	1.58	1.80	1.54
87.50°	1.75	1.83	1.57	1.69	1.60
90.00°	1.50	1.75	1.60	1.60	1.66
92.50°	1.69	1.73	1.64	1.85	1.99
95.00°	2.07	1.92	1.77	1.75	2.46
97.50°	3.07	2.54	2.47	2.23	2.88
100.00°	5.03	4.12	3.48	3.44	3.29

CF06XXUDPC 40LWDCL 40LWDNL 35KXX
 XXMW (IND/DIR Damp location)

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

	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%
RCR	0	5811	5811	5811	5811	5357	5357	5357	5357	4510	4510	4510	3735	3735	3735	3023	3023	3023	2689
	1	5426	5243	5078	4930	5011	4858	4720	4595	4137	4043	3957	3475	3415	3359	2864	2829	2796	2539
	2	5063	4748	4488	4270	4682	4419	4198	4011	3799	3645	3512	3228	3126	3036	2700	2637	2581	2385
	3	4724	4318	4003	3752	4377	4033	3764	3546	3497	3304	3145	3002	2870	2759	2542	2458	2386	2238
	4	4412	3941	3597	3334	4094	3694	3396	3166	3228	3010	2838	2795	2642	2519	2392	2292	2209	2099
	5	4125	3611	3253	2988	3835	3396	3083	2849	2987	2755	2577	2606	2440	2310	2251	2139	2050	1970
	6	3863	3322	2959	2699	3598	3132	2814	2582	2772	2532	2353	2436	2261	2127	2121	2001	1906	1851
	7	3624	3067	2706	2453	3381	2899	2581	2355	2580	2337	2159	2281	2101	1967	2000	1874	1778	1742
	8	3407	2843	2488	2244	3184	2693	2378	2159	2408	2165	1991	2141	1959	1825	1889	1759	1662	1642
	9	3210	2644	2297	2063	3005	2510	2201	1989	2255	2013	1844	2014	1831	1700	1787	1655	1558	1550
	10	3031	2468	2130	1906	2842	2347	2045	1841	2117	1879	1714	1899	1717	1588	1693	1560	1464	1466

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	113.2 fc	5.4 ft
6.5 ft	81.0 fc	6.3 ft
7.5 ft	60.9 fc	7.3 ft
8.0 ft	53.5 fc	7.8 ft
10.0 ft	34.2 fc	9.7 ft
12.0 ft	23.8 fc	11.7 ft
14.0 ft	17.5 fc	13.6 ft
16.0 ft	13.4 fc	15.6 ft
20.0 ft	8.6 fc	19.5 ft
24.0 ft	5.9 fc	23.4 ft
28.0 ft	4.4 fc	27.3 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	187706	187706	187706
45.00°	21992	16104	15367
55.00°	240	236	237
65.00°	227	225	235
75.00°	386	402	373
85.00°	1041	992	970

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	-16.3	-15.6	-15.3	-14.7	-13.4	-15.7	-15.1	-14.7	-14.1	-12.8
	3H	-13.3	-12.7	-12.2	-11.7	-10.4	-13.2	-12.6	-12.2	-11.6	-10.3
	4H	-11.7	-11.2	-10.7	-10.2	-8.9	-11.8	-11.2	-10.7	-10.2	-8.9
	6H	-10.1	-9.6	-9.0	-8.6	-7.2	-9.9	-9.4	-8.8	-8.4	-7.0
	8H	-9.2	-8.7	-8.1	-7.7	-6.4	-8.9	-8.4	-7.8	-7.4	-6.0
	12H	-8.0	-7.5	-6.9	-6.5	-5.1	-7.7	-7.3	-6.7	-6.3	-4.9
4H	2H	-15.6	-15.1	-14.6	-14.1	-12.7	-15.2	-14.6	-14.2	-13.6	-12.3
	3H	-12.2	-11.8	-11.2	-10.8	-9.4	-12.4	-11.9	-11.3	-10.9	-9.5
	4H	-10.7	-10.3	-9.7	-9.3	-7.9	-10.8	-10.4	-9.8	-9.4	-8.0
	6H	-8.8	-8.5	-7.8	-7.4	-6.1	-8.7	-8.4	-7.7	-7.3	-6.0
	8H	-7.7	-7.4	-6.7	-6.4	-5.0	-7.5	-7.2	-6.4	-6.1	-4.8
	12H	-6.3	-6.0	-5.3	-5.0	-3.6	-6.2	-5.9	-5.1	-4.8	-3.4
8H	4H	-9.9	-9.5	-8.8	-8.5	-7.1	-9.9	-9.6	-8.9	-8.6	-7.2
	6H	-7.7	-7.5	-6.7	-6.4	-5.0	-7.7	-7.4	-6.6	-6.3	-4.9
	8H	-6.4	-6.2	-5.4	-5.1	-3.8	-6.2	-6.0	-5.1	-4.9	-3.5
	12H	-4.8	-4.6	-3.7	-3.5	-2.1	-4.6	-4.4	-3.5	-3.4	-1.9
12H	4H	-9.7	-9.4	-8.6	-8.4	-7.0	-9.8	-9.5	-8.7	-8.4	-7.0
	6H	-7.4	-7.2	-6.3	-6.1	-4.7	-7.3	-7.1	-6.3	-6.0	-4.6
	8H	-6.0	-5.8	-4.9	-4.7	-3.3	-5.8	-5.6	-4.7	-4.5	-3.1

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0