

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

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

Test Number

SP-01081_1

Test Date

4/21/2020

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	5927
Efficacy	108.16 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.23
Two luminaires, plane 90°	0.23
Four luminaires	0.24

Full Beam Angle

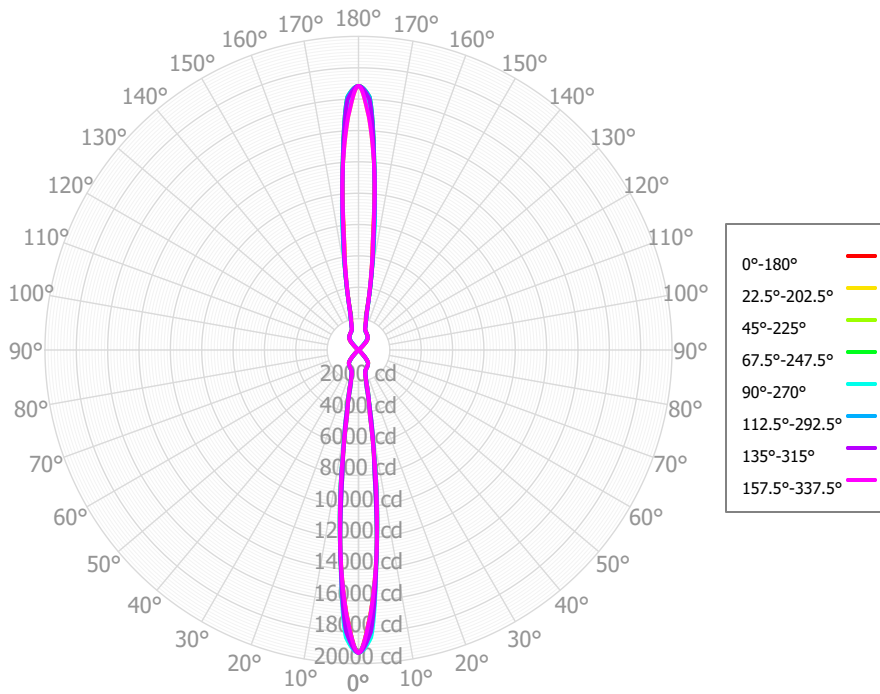
0° - 180°	348°
90° - 270°	347°

IES File Header Contents

Keyword	Value
TEST	SP-01081_1
TESTLAB	VLS-245-981
MANUFAC	Spectrum Lighting
ISSUEDATE	12/15/2020
TESTDATE	4/21/2020
LUMCAT	CF06XXUDPC 40LNDCL 40LNDNL 35KXX XXMW (IND/DIR Damp location)
LUMINAIRE	Nom. 6" Diam Indirect/Direct Cylinder damp location
OTHER	Uplight: Narrow Optic, Flush Clear Glass lens
OTHER	Uplight: 13.5 Degree Beam Angle
OTHER	Downlight: Narrow Optic, No lens
OTHER	Downlight: 13.6 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
OTHER	See Catalog cut sheet for different source lumen multipliers
OTHER	This report prepared by Spectrum Lighting
_CRI	80
CCTMULT	27K x 0.97. 30K x 0.98. 40K x 1.04

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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°	1019.59	17.20%	90.00° - 100.00°	1.17	0.02%
10.00° - 20.00°	569.00	9.60%	100.00° - 110.00°	1.78	0.03%
20.00° - 30.00°	575.77	9.71%	100.00° - 120.00°	3.99	0.07%
30.00° - 40.00°	645.19	10.89%	120.00° - 130.00°	12.84	0.22%
40.00° - 50.00°	240.75	4.06%	130.00° - 140.00°	320.53	5.41%
50.00° - 60.00°	4.18	0.07%	140.00° - 150.00°	626.31	10.57%
60.00° - 70.00°	1.24	0.02%	150.00° - 160.00°	551.19	9.30%
70.00° - 80.00°	0.96	0.02%	160.00° - 170.00°	554.71	9.36%
80.00° - 90.00°	0.95	0.02%	170.00° - 180.00°	917.47	15.48%
0.00° - 90.00°	3057.64	51.59%	0.00° - 180.00°	6045.85	102.01%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	19307.58	19307.58	19307.58	19307.58	19307.58
2.50°	16976.35	17025.49	18011.61	17206.99	18359.62
5.00°	13254.84	13133.39	13203.04	13208.98	13194.67
7.50°	8028.03	8607.87	7752.57	8738.88	7793.20
10.00°	4647.70	4117.62	4917.69	4237.70	5014.28
12.50°	2656.78	2828.40	2333.91	2892.05	2349.09
15.00°	1735.38	1614.40	1830.40	1629.43	1862.25
17.50°	1472.12	1472.86	1413.74	1478.02	1415.51
20.00°	1346.09	1342.17	1353.32	1335.77	1352.92
22.50°	1289.51	1295.95	1293.75	1294.03	1293.62
25.00°	1243.37	1249.98	1248.97	1251.86	1254.12
27.50°	1201.43	1205.28	1203.95	1206.87	1213.71
30.00°	1158.95	1160.14	1156.86	1160.59	1169.48
32.50°	1116.31	1113.30	1109.26	1108.33	1123.93
35.00°	1067.06	1059.60	1058.70	1049.42	1074.10
37.50°	1016.23	985.95	977.10	967.65	981.15
40.00°	824.83	842.56	768.15	820.19	779.88
42.50°	609.43	536.94	541.09	495.32	547.88
45.00°	341.39	280.73	258.06	230.53	254.37
47.50°	67.66	116.66	49.15	94.21	58.69
50.00°	28.67	14.74	22.33	7.18	23.95
52.50°	2.68	7.02	4.20	5.12	3.49
55.00°	1.82	2.38	3.11	3.54	2.24
57.50°	1.09	1.62	2.24	2.62	1.86
60.00°	1.02	1.31	1.73	1.77	2.44
62.50°	0.95	1.47	1.51	0.99	2.20
65.00°	0.88	1.36	1.71	0.79	1.20
67.50°	0.83	1.02	1.44	1.12	1.03
70.00°	0.84	0.82	0.77	1.04	1.41
72.50°	0.84	0.70	0.65	0.79	1.24
75.00°	0.83	0.86	0.71	0.91	1.13
77.50°	1.08	0.76	0.79	1.13	1.42
80.00°	1.02	0.52	1.46	1.09	0.85
82.50°	0.70	0.59	1.35	0.40	1.08
85.00°	0.86	1.14	1.02	0.68	0.98
87.50°	1.58	1.19	1.23	1.40	0.81
90.00°	0.00	0.00	0.00	0.00	0.00
92.50°	1.49	0.97	0.90	1.29	0.88
95.00°	1.04	1.33	1.15	1.25	0.65
97.50°	1.14	1.76	1.68	1.14	0.41
100.00°	1.72	1.56	1.58	1.47	0.89
102.50°	1.64	2.60	1.05	1.75	1.18
105.00°	1.11	3.15	1.02	1.40	0.95
107.50°	1.45	2.04	1.84	1.71	0.80
110.00°	1.75	2.30	2.25	2.06	0.80
112.50°	2.02	2.83	1.53	2.11	1.70

CF06XXUDPC 40LNDCL 40LNDNL 35KXX
 XXMW (IND/DIR Damp 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%	0%
	pcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	0	6486	6486	6486	6486	5988	5988	5988	5988	5057	5057	5057	4206	4206	4206	3425	3425	3058
	1	6079	5884	5709	5551	5624	5462	5316	5183	4672	4573	4483	3946	3884	3826	3277	3241	2923
	2	5698	5364	5089	4858	5282	5004	4771	4574	4326	4165	4026	3701	3595	3503	3123	3060	2782
	3	5345	4915	4583	4318	4966	4605	4321	4092	4019	3818	3652	3477	3342	3228	2975	2890	2647
	4	5021	4526	4163	3886	4676	4256	3944	3703	3747	3521	3343	3275	3119	2993	2835	2735	2522
	5	4726	4188	3811	3533	4412	3952	3626	3381	3507	3266	3082	3092	2923	2790	2705	2594	2406
	6	4459	3893	3513	3240	4172	3686	3354	3113	3294	3046	2861	2928	2750	2614	2585	2465	2299
	7	4217	3636	3259	2995	3954	3453	3122	2886	3105	2855	2672	2780	2598	2462	2475	2350	2202
	8	3998	3410	3040	2786	3757	3248	2921	2693	2938	2688	2510	2647	2463	2328	2374	2245	2113
	9	3801	3212	2852	2609	3579	3067	2747	2528	2789	2542	2369	2528	2344	2211	2282	2152	2033
	10	3623	3038	2688	2456	3418	2907	2596	2385	2657	2414	2246	2421	2238	2109	2197	2067	1960

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	638.3 fc	0.0 ft
6.5 ft	457.0 fc	0.0 ft
7.5 ft	343.2 fc	0.0 ft
8.0 ft	301.7 fc	0.0 ft
10.0 ft	193.1 fc	0.0 ft
12.0 ft	134.1 fc	0.0 ft
14.0 ft	98.5 fc	0.0 ft
16.0 ft	75.4 fc	0.0 ft
20.0 ft	48.3 fc	0.0 ft
24.0 ft	33.5 fc	0.0 ft
28.0 ft	24.6 fc	0.0 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	1058444	1058444	1058444
45.00°	26467	20007	19721
55.00°	174	297	214
65.00°	115	221	155
75.00°	175	150	239
85.00°	543	642	617

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	-18.8	-18.1	-17.8	-17.2	-15.9	-15.4	-14.8	-14.4	-13.8	-12.5
	3H	-17.2	-16.6	-16.2	-15.6	-14.3	-14.4	-13.8	-13.4	-12.8	-11.5
	4H	-16.1	-15.6	-15.1	-14.6	-13.3	-13.6	-13.0	-12.6	-12.1	-10.7
	6H	-14.2	-13.7	-13.2	-12.7	-11.4	-12.2	-11.7	-11.1	-10.7	-9.3
	8H	-13.6	-13.1	-12.5	-12.1	-10.7	-11.6	-11.1	-10.5	-10.1	-8.8
	12H	-12.5	-12.0	-11.4	-11.0	-9.7	-10.7	-10.3	-9.7	-9.3	-7.9
4H	2H	-17.5	-16.9	-16.4	-15.9	-14.6	-15.0	-14.5	-14.0	-13.5	-12.2
	3H	-16.0	-15.6	-15.0	-14.6	-13.2	-13.9	-13.5	-12.9	-12.4	-11.1
	4H	-14.8	-14.4	-13.8	-13.4	-12.0	-12.9	-12.5	-11.9	-11.5	-10.2
	6H	-13.1	-12.7	-12.0	-11.7	-10.3	-11.2	-10.8	-10.1	-9.8	-8.4
	8H	-12.3	-12.0	-11.3	-10.9	-9.6	-10.5	-10.2	-9.5	-9.2	-7.8
	12H	-10.9	-10.6	-9.9	-9.6	-8.2	-9.6	-9.3	-8.5	-8.2	-6.9
8H	4H	-14.3	-13.9	-13.2	-12.9	-11.6	-12.7	-12.3	-11.6	-11.3	-9.9
	6H	-12.2	-11.9	-11.1	-10.8	-9.5	-10.5	-10.2	-9.4	-9.1	-7.8
	8H	-11.3	-11.0	-10.2	-10.0	-8.6	-9.8	-9.5	-8.7	-8.5	-7.1
	12H	-9.4	-9.2	-8.4	-8.2	-6.8	-8.7	-8.5	-7.6	-7.4	-6.0
12H	4H	-13.9	-13.6	-12.9	-12.6	-11.2	-12.5	-12.3	-11.5	-11.2	-9.8
	6H	-11.5	-11.3	-10.5	-10.3	-8.9	-10.1	-9.9	-9.1	-8.8	-7.4
	8H	-10.4	-10.2	-9.4	-9.2	-7.8	-9.3	-9.1	-8.3	-8.1	-6.7

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0