

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
Fall River, MA 02721
+1.508.678.2303

Spectrum Lighting Photometric Lab

Luminaire

C06xxSQXT 30L ND 35K XX TCY GL MW
Nom. 6" Square x 18" H Cylinder

Test Number

SP-01201_M-30L

Test Date

10/13/2017

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

Summary of Results

Power

Input Watts	32.6 W
-------------	--------

Lumen Output

Output Lumens	2974
Efficacy	91.23 lm/W

Luminous Dimensions

0° - 180° Size	0.35
90° - 270° Size	0.35
Height	0

Spacing Criterion

Two luminaires, plane 0°	0.34
Two luminaires, plane 90°	0.35
Four luminaires	0.38

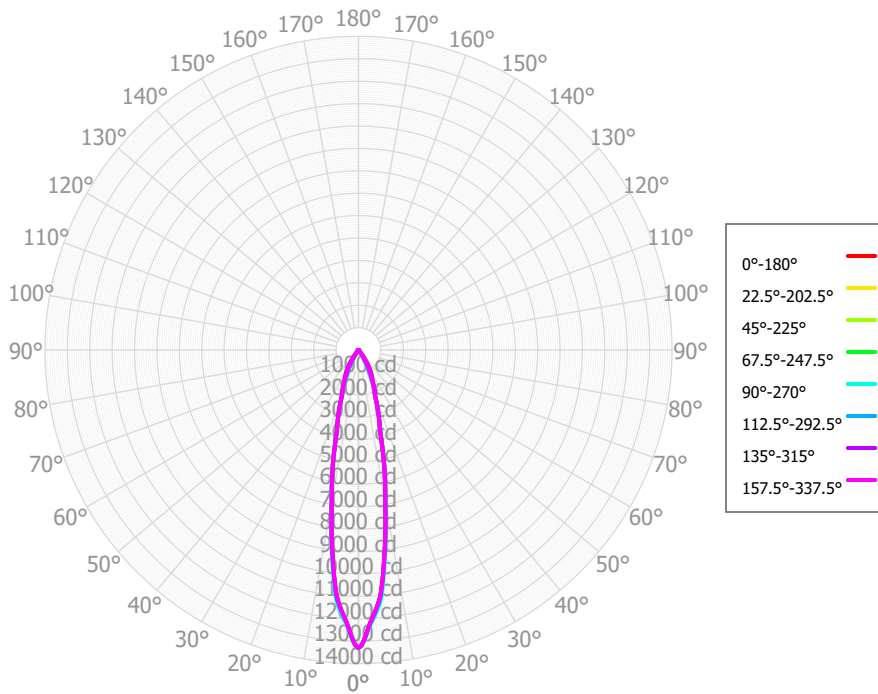
Full Beam Angle

0° - 180°	21°
90° - 270°	21°

IES File Header Contents

Keyword	Value
TEST	SP-01201_M-30L
TESTLAB	VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	10/13/2017
ISSUEDATE	2/23/2021
LUMCAT	C06xxSQXT 30L ND 35K XX TCY GL MW
LUMINAIRE	Nom. 6" Square x 18" H Cylinder
OTHER	Cylinder also available as 24" H variant
OTHER	Downlight: Narrow Beam, Clear Glass lens
OTHER	Downlight: 21 Degree Beam Angle
OTHER	Trim: Same Color as Cylinder, Matte White
LAMP	N/A
OTHER	N/A, 19mm LES direct
OTHER	Total Luminaire Watts is approximate
OTHER	LEDXT lumen output is the same for all available CCT's
OTHER	See Catalog cut sheet for different source lumen multipliers
OTHER	This report prepared by Spectrum Lighting, scaled for 20L
_CRI	83
_CCTMULT	Same for all available CCT's
_LAMPMULT	10L x 0.32, 13L x 0.43, 20L x 0.67

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	961.17	32.32%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	1088.46	36.60%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	629.97	21.18%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	195.01	6.56%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	42.78	1.44%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	38.43	1.29%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	33.96	1.14%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	21.81	0.73%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	6.28	0.21%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	3017.88	101.47%	0.00° - 180.00°	3017.88	101.47%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	13286.14	13286.14	13286.14	13286.14	13286.14
2.50°	12204.58	12177.44	12173.13	12204.60	12279.54
5.00°	11123.03	11068.74	11060.12	11123.06	11272.94
7.50°	9026.06	8975.13	8971.64	8988.27	9127.86
10.00°	6929.09	6881.52	6883.16	6853.48	6982.77
12.50°	5324.01	5295.10	5313.00	5299.72	5360.35
15.00°	3718.93	3708.68	3742.85	3745.96	3737.94
17.50°	2930.11	2927.05	2968.79	2961.77	2935.84
20.00°	2141.29	2145.42	2194.72	2177.59	2133.75
22.50°	1706.61	1774.80	1843.91	1771.83	1681.81
25.00°	1271.92	1404.18	1493.10	1366.08	1229.87
27.50°	884.63	1092.43	1281.80	972.66	841.65
30.00°	497.33	780.69	1070.50	579.23	453.43
32.50°	298.27	488.16	823.06	361.53	262.61
35.00°	99.22	195.63	575.61	143.83	71.80
37.50°	76.98	127.93	354.80	100.76	62.03
40.00°	54.74	60.23	133.99	57.69	52.26
42.50°	51.58	55.25	94.26	53.26	50.33
45.00°	48.41	50.27	54.53	48.83	48.39
47.50°	48.15	48.66	49.59	46.09	47.86
50.00°	47.90	47.04	44.65	43.35	47.34
52.50°	46.60	45.20	44.14	42.57	46.55
55.00°	45.31	43.36	43.62	41.80	45.76
57.50°	40.74	40.29	41.90	40.85	43.02
60.00°	36.16	37.22	40.18	39.91	40.28
62.50°	32.99	35.69	37.52	39.05	37.18
65.00°	29.81	34.17	34.86	38.19	34.08
67.50°	28.67	31.27	32.28	33.74	30.86
70.00°	27.52	28.38	29.70	29.30	27.65
72.50°	23.22	24.69	24.20	26.42	25.24
75.00°	18.91	21.01	18.69	23.55	22.82
77.50°	14.61	15.77	15.75	17.99	18.39
80.00°	10.31	10.54	12.80	12.44	13.96
82.50°	7.15	7.07	8.83	9.11	10.42
85.00°	3.99	3.61	4.86	5.77	6.88
87.50°	2.28	1.80	3.62	3.68	4.29
90.00°	0.56	0.00	2.38	1.58	1.70

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	3593	3593	3593	3593	3509	3509	3509	3509	3353	3353	3353	3211	3211	3211	3079	3079	3018
	1	3452	3380	3315	3256	3379	3315	3257	3205	3194	3148	3107	3083	3047	3015	2981	2953	2895
	2	3319	3196	3094	3008	3255	3145	3053	2975	3050	2975	2910	2962	2902	2849	2881	2833	2778
	3	3196	3037	2914	2816	3139	2996	2884	2794	2920	2827	2750	2850	2773	2708	2785	2722	2671
	4	3081	2898	2764	2661	3032	2865	2742	2646	2804	2699	2616	2747	2658	2586	2694	2619	2558
	5	2975	2775	2635	2532	2931	2748	2618	2521	2698	2586	2500	2652	2555	2479	2608	2525	2459
	6	2875	2665	2523	2422	2837	2643	2510	2414	2601	2485	2398	2563	2461	2383	2527	2438	2368
	7	2783	2565	2424	2325	2748	2547	2414	2319	2512	2394	2308	2480	2375	2297	2450	2357	2286
	8	2696	2474	2335	2239	2665	2459	2327	2235	2430	2311	2226	2402	2296	2218	2377	2281	2209
	9	2615	2391	2254	2161	2587	2378	2248	2158	2353	2235	2152	2330	2223	2145	2308	2211	2139
	10	2539	2315	2181	2091	2514	2304	2175	2089	2282	2165	2084	2262	2155	2079	2243	2145	2074

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	439.2 fc	2.0 ft
6.5 ft	314.5 fc	2.4 ft
7.5 ft	236.2 fc	2.8 ft
8.0 ft	207.6 fc	3.0 ft
10.0 ft	132.9 fc	3.7 ft
12.0 ft	92.3 fc	4.4 ft
14.0 ft	67.8 fc	5.2 ft
16.0 ft	51.9 fc	5.9 ft
20.0 ft	33.2 fc	7.4 ft
24.0 ft	23.1 fc	8.9 ft
28.0 ft	16.9 fc	10.4 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	1167435	1167435	1167435
45.00°	6016	6776	6013
55.00°	6942	6683	7011
65.00°	6198	7248	7086
75.00°	6420	6346	7749
85.00°	4021	4903	6935

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	10.9	11.9	11.3	12.2	12.5	11.1	12.0	11.5	12.4	12.7
	3H	13.1	14.0	13.5	14.3	14.7	13.4	14.2	13.8	14.6	14.9
	4H	13.9	14.7	14.4	15.1	15.5	14.4	15.2	14.8	15.5	15.9
	6H	14.4	15.1	14.8	15.5	15.9	15.1	15.8	15.5	16.1	16.5
	8H	14.5	15.2	15.0	15.6	16.0	15.3	15.9	15.7	16.3	16.7
	12H	14.6	15.2	15.0	15.6	16.0	15.4	16.1	15.9	16.4	16.9
4H	2H	11.7	12.4	12.1	12.8	13.2	11.8	12.6	12.2	12.9	13.3
	3H	14.1	14.7	14.5	15.1	15.5	14.3	14.9	14.7	15.4	15.8
	4H	15.0	15.6	15.5	16.0	16.5	15.4	16.0	15.9	16.4	16.9
	6H	15.6	16.1	16.0	16.5	17.0	16.2	16.7	16.7	17.1	17.6
	8H	15.7	16.2	16.2	16.6	17.1	16.4	16.9	16.9	17.3	17.8
	12H	15.8	16.2	16.3	16.7	17.1	16.6	17.0	17.1	17.5	18.0
8H	4H	15.3	15.8	15.8	16.2	16.7	15.7	16.1	16.1	16.6	17.0
	6H	16.0	16.3	16.5	16.9	17.3	16.6	16.9	17.1	17.4	17.9
	8H	16.2	16.5	16.7	17.0	17.5	16.9	17.2	17.4	17.7	18.2
	12H	16.3	16.6	16.8	17.1	17.7	17.2	17.4	17.7	17.9	18.5
12H	4H	15.3	15.7	15.8	16.2	16.7	15.7	16.0	16.1	16.5	17.0
	6H	16.0	16.4	16.6	16.8	17.4	16.6	16.9	17.1	17.4	17.9
	8H	16.3	16.6	16.8	17.1	17.7	17.0	17.2	17.5	17.7	18.3

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0