

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C06xxSQXT 30L XW 35K EX TCY SO MW
Nom. 6" Square x 18" H Cylinder

Test Number

SP-01199_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
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Lumen Output

Output Lumens	2360
Efficacy	72.38 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.81
Two luminaires, plane 90°	0.8
Four luminaires	0.82

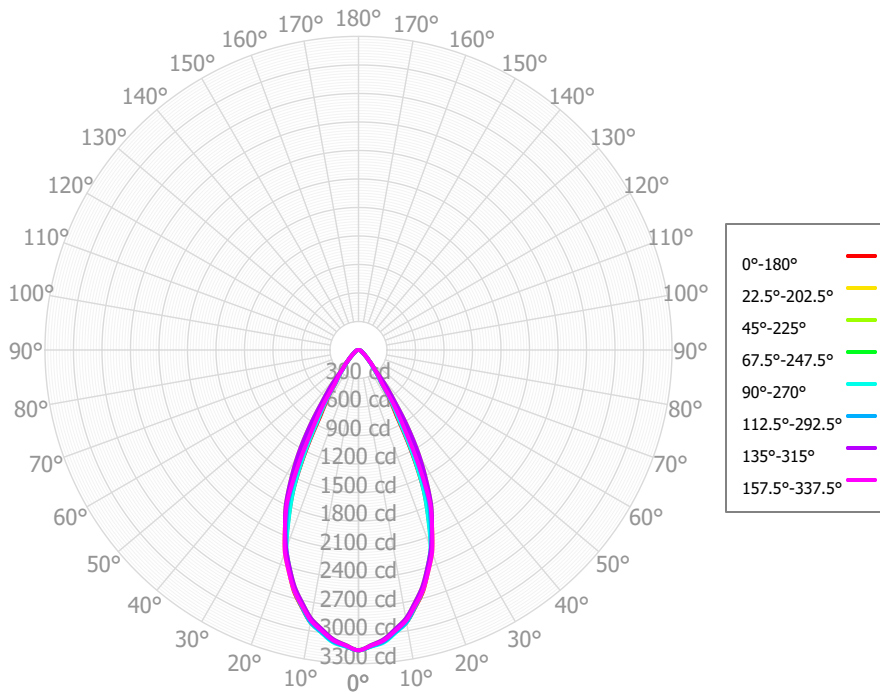
Full Beam Angle

0° - 180°	50°
90° - 270°	50°

IES File Header Contents

Keyword	Value
TEST	SP-01199_M-30L
TESTLAB	VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	10/13/2017
ISSUEDATE	2/23/2021
LUMCAT	C06xxSQXT 30L XW 35K EX TCY SO MW
LUMINAIRE	Nom. 6" Square x 18" H Cylinder
OTHER	Cylinder also available as 24" H. variant
OTHER	Downlight: Xtra Wide Beam, Regressed Solite lens
OTHER	Downlight: 50.4 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 from 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°	301.41	12.77%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	722.26	30.61%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	760.10	32.21%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	342.16	14.50%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	124.03	5.26%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	57.67	2.44%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	35.47	1.50%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	20.83	0.88%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	6.10	0.26%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	2370.02	100.44%	0.00° - 180.00°	2370.02	100.44%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	3160.70	3160.70	3160.70	3160.70	3160.70
2.50°	3118.20	3114.21	3108.29	3119.91	3124.49
5.00°	3075.71	3067.73	3055.89	3079.13	3088.29
7.50°	2993.52	2979.63	2963.15	2992.69	3000.50
10.00°	2911.34	2891.53	2870.40	2906.25	2912.71
12.50°	2769.62	2755.41	2728.81	2758.66	2763.65
15.00°	2627.91	2619.30	2587.22	2611.07	2614.58
17.50°	2432.88	2442.66	2407.38	2424.86	2415.29
20.00°	2237.84	2266.03	2227.55	2238.65	2216.00
22.50°	1929.25	2023.80	2020.47	1988.29	1916.04
25.00°	1620.66	1781.56	1813.39	1737.94	1616.09
27.50°	1212.63	1387.66	1540.92	1372.32	1237.51
30.00°	804.60	993.76	1268.44	1006.71	858.93
32.50°	605.48	713.89	968.05	725.38	630.45
35.00°	406.35	434.02	667.67	444.05	401.96
37.50°	328.40	341.27	470.65	342.89	318.63
40.00°	250.45	248.52	273.63	241.71	235.30
42.50°	201.77	202.41	211.31	197.07	191.88
45.00°	153.10	156.30	148.98	152.43	148.46
47.50°	120.71	126.48	123.21	124.37	120.08
50.00°	88.32	96.67	97.43	96.31	91.70
52.50°	69.21	78.32	81.60	79.82	74.23
55.00°	50.10	59.96	65.78	63.33	56.75
57.50°	43.00	51.17	56.43	54.05	49.07
60.00°	35.89	42.38	47.09	44.78	41.39
62.50°	33.98	39.22	41.87	40.31	38.35
65.00°	32.07	36.05	36.65	35.85	35.32
67.50°	29.45	32.67	32.72	32.68	32.83
70.00°	26.84	29.28	28.79	29.52	30.33
72.50°	23.00	24.84	24.00	23.63	25.80
75.00°	19.15	20.39	19.22	17.74	21.26
77.50°	15.55	15.87	14.99	14.58	16.26
80.00°	11.95	11.35	10.76	11.41	11.25
82.50°	8.32	8.39	7.29	7.80	7.96
85.00°	4.69	5.44	3.82	4.19	4.68
87.50°	3.66	3.82	2.78	3.15	3.32
90.00°	2.62	2.20	1.74	2.10	1.97

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	2821	2821	2821	2821	2756	2756	2756	2756	2633	2633	2633	2521	2521	2521	2418	2418	2370
	1	2686	2618	2557	2503	2627	2567	2512	2463	2471	2427	2387	2382	2348	2316	2301	2274	2229
	2	2551	2434	2337	2255	2499	2393	2305	2230	2316	2244	2181	2245	2186	2134	2180	2132	2090
	3	2424	2271	2152	2058	2377	2238	2129	2041	2176	2084	2008	2118	2041	1977	2065	2001	1962
	4	2305	2126	1995	1895	2262	2099	1978	1884	2048	1944	1861	2001	1912	1840	1957	1881	1846
	5	2193	1997	1859	1758	2155	1974	1846	1750	1932	1820	1734	1892	1795	1719	1856	1772	1739
	6	2088	1880	1740	1640	2054	1861	1730	1634	1826	1710	1623	1793	1690	1612	1762	1672	1642
	7	1991	1775	1635	1536	1960	1759	1626	1532	1729	1610	1524	1701	1595	1516	1675	1580	1554
	8	1900	1679	1540	1445	1872	1666	1534	1442	1640	1521	1436	1616	1508	1430	1594	1496	1472
	9	1816	1592	1455	1363	1790	1581	1450	1361	1559	1440	1356	1538	1429	1352	1518	1420	1398
	10	1737	1513	1379	1290	1714	1503	1374	1288	1484	1366	1284	1466	1357	1281	1449	1349	1329

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	104.5 fc	5.2 ft
6.5 ft	74.8 fc	6.1 ft
7.5 ft	56.2 fc	7.1 ft
8.0 ft	49.4 fc	7.5 ft
10.0 ft	31.6 fc	9.4 ft
12.0 ft	21.9 fc	11.3 ft
14.0 ft	16.1 fc	13.2 ft
16.0 ft	12.3 fc	15.1 ft
20.0 ft	7.9 fc	18.9 ft
24.0 ft	5.5 fc	22.6 ft
28.0 ft	4.0 fc	26.4 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	277726	277726	277726
45.00°	19024	18513	18448
55.00°	7675	10077	8694
65.00°	6668	7621	7344
75.00°	6502	6524	7219
85.00°	4726	3853	4714

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	13.0	14.0	13.4	14.4	14.7	13.5	14.5	13.8	14.8	15.1
	3H	14.7	15.6	15.1	15.9	16.3	15.1	16.0	15.5	16.4	16.7
	4H	15.3	16.2	15.7	16.5	16.9	15.7	16.6	16.1	16.9	17.3
	6H	15.8	16.6	16.2	16.9	17.3	16.1	16.9	16.5	17.3	17.7
	8H	15.9	16.6	16.4	17.0	17.4	16.2	16.9	16.7	17.3	17.7
	12H	16.0	16.7	16.4	17.1	17.5	16.3	17.0	16.7	17.4	17.8
4H	2H	13.6	14.4	14.0	14.7	15.1	13.9	14.8	14.3	15.1	15.5
	3H	15.5	16.2	15.9	16.6	17.0	15.8	16.5	16.2	16.9	17.3
	4H	16.2	16.9	16.7	17.3	17.7	16.4	17.1	16.9	17.5	17.9
	6H	16.8	17.3	17.3	17.8	18.2	16.9	17.5	17.4	17.9	18.4
	8H	17.0	17.5	17.4	17.9	18.4	17.1	17.6	17.6	18.0	18.5
	12H	17.1	17.5	17.6	18.0	18.5	17.2	17.6	17.7	18.1	18.6
8H	4H	16.4	16.9	16.9	17.4	17.9	16.6	17.1	17.1	17.6	18.1
	6H	17.1	17.5	17.6	18.0	18.5	17.2	17.6	17.8	18.1	18.6
	8H	17.4	17.7	17.9	18.2	18.7	17.5	17.8	18.0	18.3	18.8
	12H	17.6	17.9	18.1	18.4	18.9	17.6	17.9	18.1	18.4	19.0
12H	4H	16.4	16.9	16.9	17.3	17.8	16.6	17.0	17.1	17.5	18.0
	6H	17.1	17.5	17.7	18.0	18.5	17.3	17.6	17.8	18.1	18.6
	8H	17.4	17.7	18.0	18.2	18.8	17.5	17.8	18.0	18.3	18.9

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0