

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C06xxSQXT 10L WD 35K XX TCY SO MW
Nom. 6" Square x 18" H Cylinder

Test Number

SP-01203_M-10L

Test Date

10/13/2017

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

Summary of Results

Power

Input Watts	9.1 W
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Lumen Output

Output Lumens	820
Efficacy	90.09 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.69
Two luminaires, plane 90°	0.69
Four luminaires	0.74

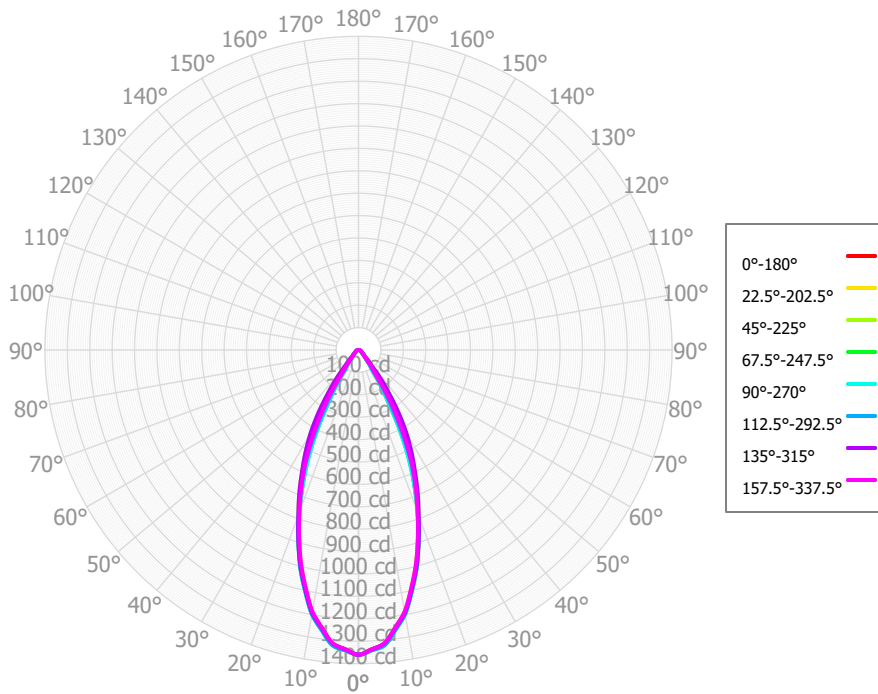
Full Beam Angle

0° - 180°	44°
90° - 270°	44°

IES File Header Contents

Keyword	Value
TEST	SP-01203_M-10L
TESTLAB	VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	10/13/2017
ISSUEDATE	1/30/2018
LUMCAT	C06xxSQXT 10L WD 35K XX TCY SO MW
LUMINAIRE	Nom. 6" Square x 18" H Cylinder
OTHER	Cylinder also available as 24" H variant
OTHER	Downlight: Wide Beam, Regressed Solite lens
OTHER	Downlight: 43.8 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

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	127.32	15.53%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	273.81	33.40%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	251.20	30.64%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	104.32	12.72%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	30.36	3.70%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	15.99	1.95%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	11.23	1.37%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	7.66	0.93%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	2.44	0.30%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	824.33	100.55%	0.00° - 180.00°	824.33	100.55%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	1360.80	1360.80	1360.80	1360.80	1360.80
2.50°	1339.30	1338.18	1338.58	1342.53	1339.69
5.00°	1317.79	1315.57	1316.37	1324.26	1318.59
7.50°	1254.02	1251.06	1253.87	1261.09	1256.19
10.00°	1190.24	1186.55	1191.38	1197.92	1193.79
12.50°	1092.45	1088.71	1095.79	1101.44	1097.49
15.00°	994.66	990.87	1000.19	1004.96	1001.20
17.50°	883.27	881.53	892.47	891.84	887.50
20.00°	771.88	772.20	784.75	778.72	773.80
22.50°	652.41	669.25	689.50	668.83	648.76
25.00°	532.94	566.30	594.24	558.94	523.71
27.50°	397.41	454.15	509.60	431.35	390.95
30.00°	261.88	342.00	424.96	303.75	258.18
32.50°	184.05	239.04	332.08	206.77	177.49
35.00°	106.22	136.08	239.21	109.80	96.81
37.50°	80.87	95.76	165.74	81.58	74.19
40.00°	55.52	55.44	92.27	53.36	51.58
42.50°	45.38	45.53	64.85	44.34	42.59
45.00°	35.24	35.62	37.44	35.32	33.59
47.50°	29.84	30.15	30.87	30.07	28.29
50.00°	24.43	24.68	24.31	24.82	22.99
52.50°	20.25	21.18	21.10	21.13	19.26
55.00°	16.07	17.69	17.89	17.44	15.54
57.50°	13.74	15.52	15.94	15.33	13.63
60.00°	11.41	13.35	14.00	13.22	11.73
62.50°	11.27	12.30	12.68	12.45	11.23
65.00°	11.13	11.25	11.37	11.68	10.74
67.50°	10.44	10.61	10.19	11.03	10.04
70.00°	9.75	9.97	9.01	10.38	9.35
72.50°	8.64	8.64	7.78	9.13	8.74
75.00°	7.53	7.31	6.55	7.87	8.14
77.50°	5.80	5.84	5.30	6.37	6.88
80.00°	4.07	4.37	4.05	4.88	5.62
82.50°	2.98	2.98	2.80	3.55	3.87
85.00°	1.89	1.59	1.56	2.22	2.13
87.50°	1.27	1.15	1.16	1.52	1.51
90.00°	0.66	0.71	0.76	0.82	0.89

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	981	981	981	981	959	959	959	959	916	916	916	877	877	877	841	841	824
	1	936	913	893	874	916	895	877	860	862	847	834	831	820	809	803	794	778
	2	891	852	820	792	873	838	808	783	811	787	766	787	767	750	764	748	734
	3	850	798	759	727	833	787	751	721	766	735	710	746	720	699	727	706	693
	4	810	751	707	674	796	742	701	670	724	689	662	708	678	654	693	668	655
	5	774	708	663	629	761	701	658	626	686	649	621	673	640	615	660	632	621
	6	739	670	623	590	727	664	620	588	651	613	584	640	606	580	630	600	589
	7	707	635	589	556	696	630	586	554	620	580	552	610	575	549	601	570	560
	8	677	604	557	526	667	599	555	525	590	551	522	582	546	520	574	542	534
	9	649	575	529	499	640	571	527	498	563	524	496	556	520	494	550	517	509
	10	623	548	504	474	615	545	502	473	538	499	472	532	496	471	527	494	486

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	45.0 fc	4.4 ft
6.5 ft	32.2 fc	5.2 ft
7.5 ft	24.2 fc	6.0 ft
8.0 ft	21.3 fc	6.4 ft
10.0 ft	13.6 fc	8.0 ft
12.0 ft	9.4 fc	9.6 ft
14.0 ft	6.9 fc	11.3 ft
16.0 ft	5.3 fc	12.9 ft
20.0 ft	3.4 fc	16.1 ft
24.0 ft	2.4 fc	19.3 ft
28.0 ft	1.7 fc	22.5 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	119571	119571	119571
45.00°	4379	4652	4175
55.00°	2462	2740	2380
65.00°	2313	2364	2232
75.00°	2555	2222	2765
85.00°	1900	1568	2142

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	8.5	9.5	8.9	9.8	10.1	8.4	9.4	8.8	9.7	10.1
	3H	10.5	11.4	10.9	11.7	12.1	10.5	11.4	10.9	11.7	12.1
	4H	11.4	12.2	11.8	12.6	13.0	11.5	12.3	11.9	12.6	13.0
	6H	11.9	12.7	12.4	13.1	13.5	12.3	13.0	12.7	13.4	13.8
	8H	12.1	12.8	12.5	13.2	13.6	12.5	13.2	13.0	13.6	14.0
	12H	12.2	12.9	12.6	13.3	13.7	12.7	13.4	13.1	13.7	14.2
4H	2H	9.0	9.9	9.5	10.2	10.6	9.0	9.8	9.4	10.2	10.6
	3H	11.3	12.0	11.7	12.4	12.8	11.3	12.0	11.7	12.4	12.8
	4H	12.3	12.9	12.7	13.3	13.8	12.4	13.0	12.9	13.5	13.9
	6H	13.0	13.5	13.5	13.9	14.4	13.4	13.9	13.8	14.3	14.8
	8H	13.2	13.7	13.7	14.1	14.6	13.7	14.1	14.1	14.6	15.1
	12H	13.3	13.7	13.8	14.2	14.7	13.9	14.3	14.3	14.8	15.2
8H	4H	12.6	13.0	13.0	13.5	14.0	12.7	13.2	13.2	13.6	14.1
	6H	13.4	13.8	13.9	14.3	14.7	13.7	14.1	14.2	14.6	15.1
	8H	13.6	14.0	14.2	14.5	15.0	14.1	14.5	14.7	15.0	15.5
	12H	13.9	14.1	14.4	14.6	15.2	14.4	14.7	14.9	15.2	15.8
12H	4H	12.6	13.0	13.1	13.5	13.9	12.7	13.1	13.2	13.6	14.1
	6H	13.4	13.8	14.0	14.2	14.8	13.8	14.1	14.3	14.6	15.1
	8H	13.7	14.0	14.3	14.5	15.1	14.2	14.5	14.7	15.0	15.6

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0