

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C0614LM 120L 35K MD DX NL CD XX
Nom 6" diam x 14" H 120L Cylinder for Whole Foods project

Test Number

SP-01019

Test Date

1/15/2020

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

Summary of Results

Power

Input Watts	89 W
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Lumen Output

Output Lumens	9168
Efficacy	103.01 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.7
Two luminaires, plane 90°	0.7
Four luminaires	0.77

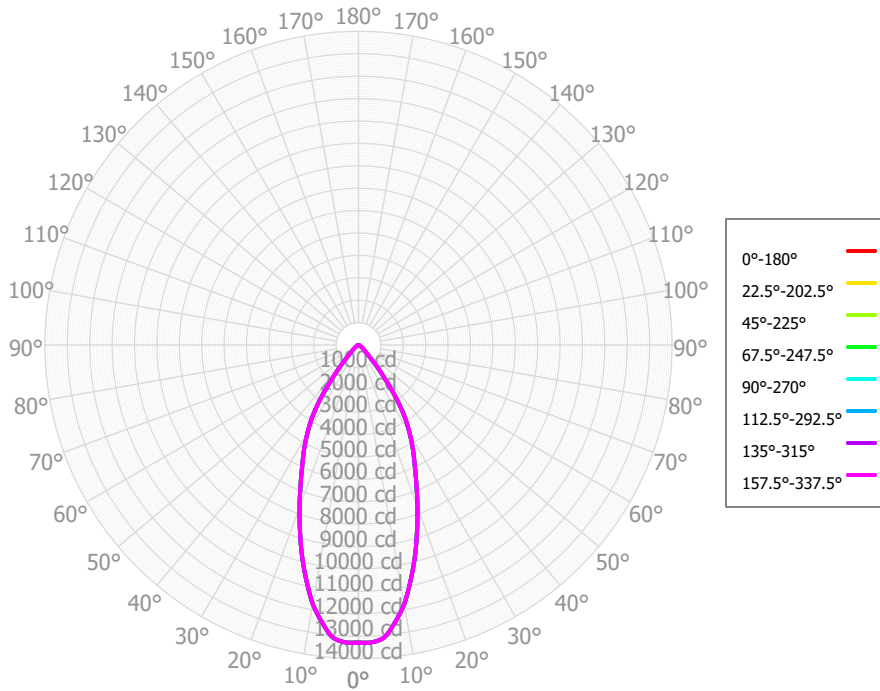
Full Beam Angle

0° - 180°	46°
90° - 270°	46°

IES File Header Contents

Keyword	Value
TEST	SP-01019
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	1/15/2020
ISSUEDATE	2/5/2020
LUMCAT	C0614LM 120L 35K MD DX NL CD XX
LUMINAIRE	Nom 6" diam x 14" H 120L Cylinder for Whole Foods project
OTHER	Beam Angle: 45.7 degrees
OTHER	Medium Optic
LAMPCAT	N/A
LAMP	N/A
OTHER	CCT Output Multipliers: 27K x .934, 30K x .963, 40K x 1.02, 50K x 1.03
OTHER	Total luminaire wattage is approximate
OTHER	This report prepared by Spectrum Lighting

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	1,218.73	13.29%	90.00° - 100.00°	0.16	0.00%
10.00° - 20.00°	2,686.34	29.30%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	2,737.27	29.86%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	1,832.93	19.99%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	475.87	5.19%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	158.20	1.73%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	47.35	0.52%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	8.45	0.09%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	2.28	0.02%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	9,167.42	100.00%	0.00° - 180.00°	9,167.58	100.00%

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%	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%
	0	10,914	10,914	10,914	10,914	10,660	10,660	10,660	10,660	10,186	10,186	10,186	9,753	9,753	9,753	9,355	9,355	9,355	9,167
	1	10,417	10,167	9,944	9,743	10,191	9,969	9,769	9,588	9,599	9,439	9,293	9,259	9,133	9,016	8,945	8,847	8,756	8,671
	2	9,914	9,477	9,115	8,811	9,713	9,319	8,991	8,712	9,024	8,754	8,521	8,751	8,532	8,339	8,499	8,322	8,165	8,159
	3	9,429	8,853	8,408	8,053	9,248	8,726	8,317	7,987	8,487	8,143	7,860	8,265	7,978	7,737	8,060	7,822	7,618	7,672
	4	8,967	8,291	7,796	7,418	8,803	8,187	7,729	7,374	7,991	7,598	7,287	7,809	7,474	7,202	7,639	7,355	7,120	7,218
	5	8,530	7,784	7,262	6,877	8,383	7,698	7,210	6,846	7,535	7,110	6,785	7,383	7,015	6,725	7,242	6,923	6,667	6,798
	6	8,120	7,324	6,790	6,407	7,987	7,252	6,750	6,385	7,116	6,672	6,341	6,989	6,597	6,298	6,870	6,525	6,256	6,412
	7	7,736	6,908	6,371	5,994	7,616	6,847	6,339	5,978	6,732	6,277	5,946	6,624	6,218	5,915	6,522	6,160	5,884	6,058
	8	7,378	6,529	5,995	5,628	7,269	6,478	5,970	5,617	6,379	5,920	5,593	6,286	5,872	5,570	6,199	5,826	5,547	5,733
	9	7,044	6,185	5,658	5,302	6,945	6,140	5,637	5,293	6,055	5,597	5,275	5,975	5,557	5,257	5,900	5,519	5,240	5,435
	10	6,734	5,870	5,353	5,009	6,644	5,832	5,336	5,002	5,758	5,302	4,988	5,688	5,270	4,974	5,622	5,238	4,961	5,162

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	439.4 fc	4.6 ft
6.5 ft	314.6 fc	5.5 ft
7.5 ft	236.3 fc	6.3 ft
8.0 ft	207.7 fc	6.7 ft
10.0 ft	132.9 fc	8.4 ft
12.0 ft	92.3 fc	10.1 ft
14.0 ft	67.8 fc	11.8 ft
16.0 ft	51.9 fc	13.5 ft
20.0 ft	33.2 fc	16.8 ft
24.0 ft	23.1 fc	20.2 ft
28.0 ft	17.0 fc	23.6 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	728,677	728,677	728,677
45.00°	39,992	39,992	39,992
55.00°	16,509	16,509	16,509
65.00°	5,851	5,851	5,851
75.00°	1,366	1,366	1,366
85.00°	1,249	1,249	1,249

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	12.3	13.3	12.7	13.6	13.9	12.3	13.3	12.7	13.6	13.9
	3H	12.4	13.2	12.7	13.6	13.9	12.4	13.2	12.7	13.6	13.9
	4H	12.3	13.1	12.7	13.4	13.8	12.3	13.1	12.7	13.4	13.8
	6H	12.2	12.9	12.6	13.3	13.7	12.2	12.9	12.6	13.3	13.7
	8H	12.1	12.8	12.6	13.2	13.6	12.1	12.8	12.6	13.2	13.6
	12H	12.1	12.7	12.5	13.1	13.5	12.1	12.7	12.5	13.1	13.5
4H	2H	12.2	13.0	12.6	13.4	13.8	12.2	13.0	12.6	13.4	13.8
	3H	12.3	13.0	12.7	13.4	13.8	12.3	13.0	12.7	13.4	13.8
	4H	12.2	12.8	12.7	13.2	13.7	12.2	12.8	12.7	13.2	13.7
	6H	12.1	12.6	12.6	13.1	13.6	12.1	12.6	12.6	13.1	13.6
	8H	12.1	12.5	12.6	13.0	13.5	12.1	12.5	12.6	13.0	13.5
	12H	12.0	12.4	12.5	12.9	13.4	12.0	12.4	12.5	12.9	13.4
8H	4H	12.1	12.5	12.5	13.0	13.4	12.1	12.5	12.5	13.0	13.4
	6H	12.0	12.3	12.5	12.8	13.3	12.0	12.3	12.5	12.8	13.3
	8H	11.9	12.2	12.4	12.8	13.3	11.9	12.2	12.4	12.8	13.3
	12H	11.9	12.2	12.4	12.7	13.2	11.9	12.2	12.4	12.7	13.2
12H	4H	12.0	12.4	12.5	12.9	13.4	12.0	12.4	12.5	12.9	13.4
	6H	11.9	12.2	12.4	12.7	13.2	11.9	12.2	12.4	12.7	13.2
	8H	11.9	12.1	12.4	12.6	13.2	11.9	12.1	12.4	12.6	13.2

Corrected UGR values based on total output lumens

SHR = 1.0