

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

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

Test Number

SP-01020

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	8855
Efficacy	99.49 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.43
Two luminaires, plane 90°	0.43
Four luminaires	0.48

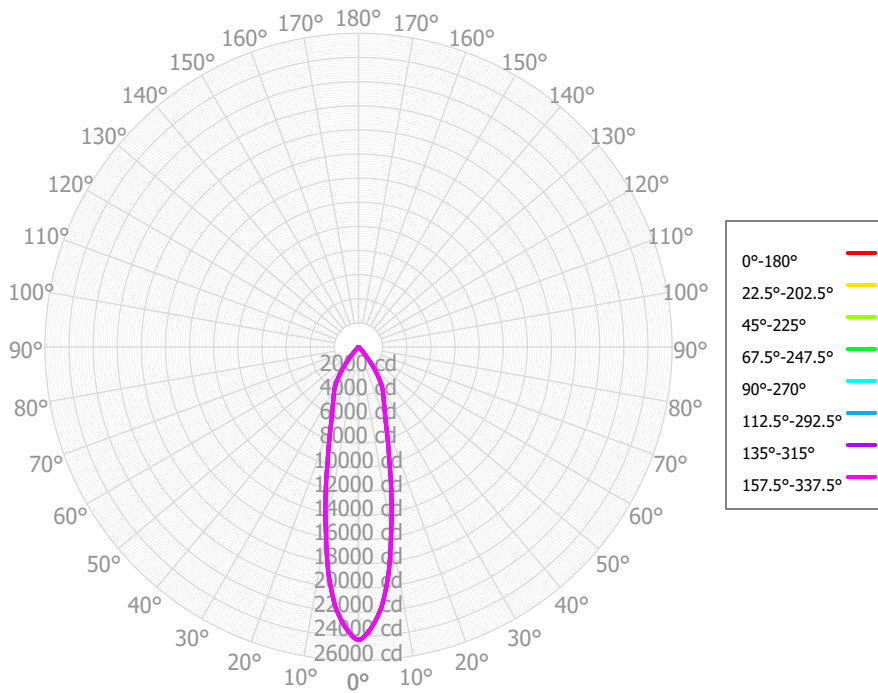
Full Beam Angle

0° - 180°	26°
90° - 270°	26°

IES File Header Contents

Keyword	Value
TEST	SP-01020
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	1/15/2020
ISSUEDATE	2/5/2020
LUMCAT	C0614LM 120L 35K ND DX NL CD XX
LUMINAIRE	Nom 6" diam x 14" H 120L Cylinder for Whole Foods project
OTHER	Beam Angle: 25.9 degrees
OTHER	Narrow 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°	1,885.45	21.29%	90.00° - 100.00°	0.14	0.00%
10.00° - 20.00°	2,793.06	31.54%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	2,310.62	26.09%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	1,538.79	17.38%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	264.13	2.98%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	49.35	0.56%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	9.79	0.11%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	2.27	0.03%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	1.10	0.01%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	8,854.56	100.00%	0.00° - 180.00°	8,854.69	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	10,541	10,541	10,541	10,541	10,296	10,296	10,296	10,296	9,838	9,838	9,838	9,420	9,420	9,420	9,035	9,035	9,035	8,855
	1	10,106	9,885	9,686	9,507	9,891	9,695	9,517	9,357	9,339	9,198	9,070	9,012	8,902	8,800	8,711	8,626	8,547	8,455
	2	9,675	9,289	8,971	8,703	9,484	9,139	8,850	8,606	8,857	8,622	8,418	8,597	8,407	8,240	8,357	8,205	8,069	8,045
	3	9,259	8,755	8,364	8,053	9,090	8,634	8,276	7,988	8,408	8,109	7,862	8,198	7,950	7,741	8,004	7,799	7,623	7,651
	4	8,864	8,273	7,841	7,510	8,713	8,175	7,775	7,466	7,991	7,650	7,379	7,820	7,530	7,295	7,661	7,416	7,213	7,280
	5	8,490	7,838	7,382	7,046	8,355	7,757	7,333	7,015	7,606	7,237	6,954	7,464	7,145	6,895	7,332	7,057	6,836	6,932
	6	8,137	7,443	6,977	6,642	8,016	7,376	6,938	6,620	7,249	6,864	6,576	7,131	6,792	6,533	7,020	6,724	6,491	6,609
	7	7,805	7,083	6,614	6,286	7,696	7,027	6,584	6,270	6,920	6,525	6,238	6,820	6,469	6,206	6,727	6,414	6,175	6,310
	8	7,495	6,754	6,289	5,969	7,396	6,707	6,265	5,957	6,616	6,218	5,933	6,531	6,172	5,909	6,451	6,128	5,886	6,032
	9	7,204	6,454	5,994	5,684	7,115	6,413	5,975	5,675	6,336	5,937	5,657	6,262	5,900	5,639	6,193	5,864	5,621	5,776
	10	6,933	6,179	5,727	5,427	6,852	6,144	5,711	5,420	6,076	5,680	5,406	6,013	5,649	5,392	5,953	5,620	5,379	5,539

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	802.9 fc	2.5 ft
6.5 ft	574.8 fc	3.0 ft
7.5 ft	431.8 fc	3.4 ft
8.0 ft	379.5 fc	3.7 ft
10.0 ft	242.9 fc	4.6 ft
12.0 ft	168.7 fc	5.5 ft
14.0 ft	123.9 fc	6.4 ft
16.0 ft	94.9 fc	7.3 ft
20.0 ft	60.7 fc	9.2 ft
24.0 ft	42.2 fc	11.0 ft
28.0 ft	31.0 fc	12.9 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	1,331,390	1,331,390	1,331,390
45.00°	17,805	17,805	17,805
55.00°	4,826	4,826	4,826
65.00°	964	964	964
75.00°	414	414	414
85.00°	513	513	513

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	3.6	4.6	4.0	4.9	5.2	3.6	4.6	4.0	4.9	5.2
	3H	3.5	4.4	3.9	4.7	5.1	3.5	4.4	3.9	4.7	5.1
	4H	3.5	4.2	3.9	4.6	5.0	3.5	4.2	3.9	4.6	5.0
	6H	3.4	4.1	3.8	4.4	4.8	3.4	4.1	3.8	4.4	4.8
	8H	3.3	4.0	3.8	4.4	4.8	3.3	4.0	3.8	4.4	4.8
	12H	3.3	3.9	3.7	4.3	4.7	3.3	3.9	3.7	4.3	4.7
4H	2H	3.4	4.2	3.8	4.5	4.9	3.4	4.2	3.8	4.5	4.9
	3H	3.3	3.9	3.8	4.4	4.8	3.3	3.9	3.8	4.4	4.8
	4H	3.3	3.8	3.7	4.2	4.7	3.3	3.8	3.7	4.2	4.7
	6H	3.2	3.6	3.7	4.1	4.6	3.2	3.6	3.7	4.1	4.6
	8H	3.1	3.6	3.6	4.0	4.5	3.1	3.6	3.6	4.0	4.5
	12H	3.1	3.5	3.6	3.9	4.4	3.1	3.5	3.6	3.9	4.4
8H	4H	3.1	3.5	3.6	4.0	4.4	3.1	3.5	3.6	4.0	4.4
	6H	3.0	3.4	3.5	3.9	4.4	3.0	3.4	3.5	3.9	4.4
	8H	3.0	3.3	3.5	3.8	4.3	3.0	3.3	3.5	3.8	4.3
	12H	3.0	3.2	3.5	3.7	4.3	3.0	3.2	3.5	3.7	4.3
12H	4H	3.0	3.4	3.5	3.9	4.4	3.0	3.4	3.5	3.9	4.4
	6H	3.0	3.3	3.5	3.7	4.3	3.0	3.3	3.5	3.7	4.3
	8H	2.9	3.2	3.5	3.7	4.3	2.9	3.2	3.5	3.7	4.3

Corrected UGR values based on total output lumens

SHR = 1.0