

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

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

Test Number

SP-01021

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	10246
Efficacy	115.12 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.98
Two luminaires, plane 90°	0.98
Four luminaires	1.01

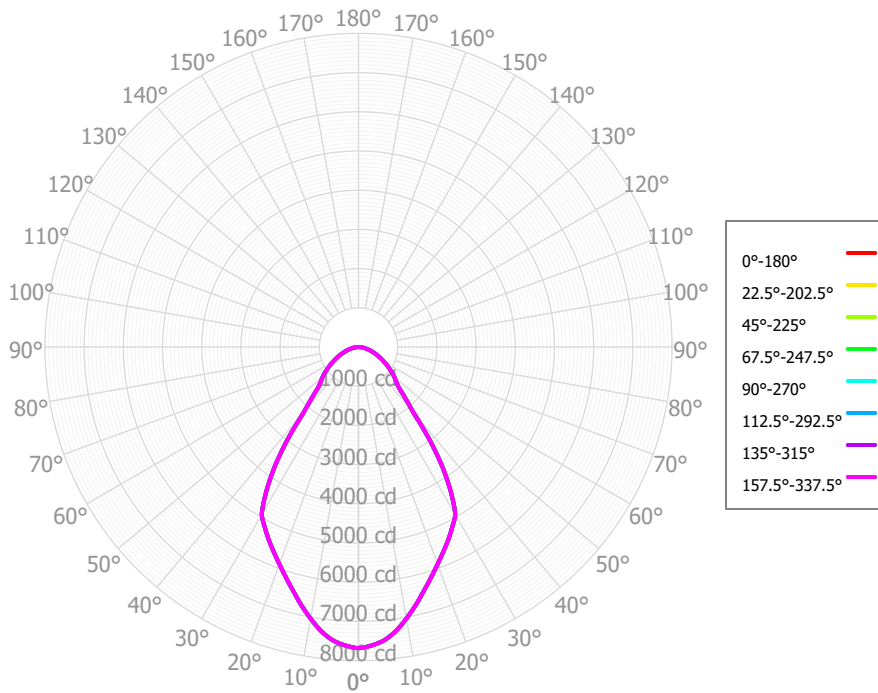
Full Beam Angle

0° - 180°	69°
90° - 270°	69°

IES File Header Contents

Keyword	Value
TEST	SP-01021
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	1/15/2020
ISSUEDATE	2/5/2020
LUMCAT	C0614LM 120L 35K WD DX NL CD XX
LUMINAIRE	Nom 6" diam x 14" H 120L Cylinder for Whole Foods project
OTHER	Beam Angle: 68.9 degrees
OTHER	Wide 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°	711.19	6.94%	90.00° - 100.00°	1.87	0.02%
10.00° - 20.00°	1,809.27	17.66%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	2,492.19	24.32%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	2,256.59	22.02%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	1,184.66	11.56%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	864.77	8.44%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	563.36	5.50%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	287.13	2.80%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	74.72	0.73%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	10,243.88	99.98%	0.00° - 180.00°	10,245.75	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%
	pcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	10%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%
	0	12,197	12,197	12,197	12,197	11,913	11,913	11,913	11,913	11,383	11,383	11,383	10,898	10,898	10,898	10,453	10,453	10,453
	1	11,413	11,038	10,701	10,398	11,148	10,811	10,507	10,231	10,386	10,139	9,912	9,996	9,797	9,613	9,637	9,479	9,331
	2	10,634	9,978	9,435	8,979	10,387	9,793	9,296	8,875	9,446	9,032	8,674	9,126	8,784	8,483	8,831	8,550	8,300
	3	9,914	9,060	8,400	7,874	9,686	8,908	8,298	7,806	8,622	8,103	7,675	8,357	7,918	7,549	8,111	7,743	7,427
	4	9,258	8,270	7,547	6,995	9,049	8,144	7,471	6,950	7,906	7,323	6,862	7,684	7,182	6,776	7,478	7,048	6,693
	5	8,663	7,587	6,836	6,281	8,472	7,481	6,777	6,250	7,281	6,663	6,188	7,095	6,554	6,129	6,921	6,449	6,070
	6	8,123	6,992	6,233	5,689	7,950	6,903	6,187	5,667	6,734	6,097	5,623	6,576	6,011	5,580	6,428	5,929	5,538
	7	7,633	6,471	5,718	5,190	7,476	6,396	5,681	5,174	6,251	5,609	5,142	6,116	5,540	5,111	5,990	5,474	5,080
	8	7,189	6,013	5,273	4,764	7,047	5,948	5,243	4,752	5,824	5,185	4,728	5,708	5,129	4,705	5,599	5,074	4,682
	9	6,786	5,607	4,885	4,397	6,656	5,551	4,860	4,388	5,444	4,812	4,369	5,344	4,766	4,352	5,249	4,721	4,334
	10	6,418	5,246	4,544	4,077	6,301	5,197	4,524	4,070	5,104	4,484	4,056	5,017	4,445	4,042	4,934	4,408	4,028

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	254.0 fc	7.6 ft
6.5 ft	181.9 fc	9.0 ft
7.5 ft	136.6 fc	10.3 ft
8.0 ft	120.1 fc	11.0 ft
10.0 ft	76.8 fc	13.8 ft
12.0 ft	53.4 fc	16.5 ft
14.0 ft	39.2 fc	19.3 ft
16.0 ft	30.0 fc	22.1 ft
20.0 ft	19.2 fc	27.6 ft
24.0 ft	13.3 fc	33.1 ft
28.0 ft	9.8 fc	38.6 ft

Average Luminaire Luminance [cd/m

	0.00°	45.00°	90.00°
0.00°	421,230	421,230	421,230
45.00°	111,916	111,916	111,916
55.00°	92,268	92,268	92,268
65.00°	73,135	73,135	73,135
75.00°	56,791	56,791	56,791
85.00°	40,281	40,281	40,281

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	24.9	26.2	25.3	26.5	26.8	24.9	26.2	25.3	26.5	26.8
	3H	26.2	27.4	26.6	27.7	28.1	26.2	27.4	26.6	27.7	28.1
	4H	26.7	27.8	27.1	28.1	28.5	26.7	27.8	27.1	28.1	28.5
	6H	27.0	28.0	27.4	28.4	28.8	27.0	28.0	27.4	28.4	28.8
	8H	27.1	28.1	27.5	28.4	28.9	27.1	28.1	27.5	28.4	28.9
	12H	27.2	28.1	27.6	28.4	28.9	27.2	28.1	27.6	28.4	28.9
4H	2H	25.3	26.4	25.8	26.8	27.2	25.3	26.4	25.8	26.8	27.2
	3H	26.9	27.8	27.3	28.2	28.6	26.9	27.8	27.3	28.2	28.6
	4H	27.5	28.3	27.9	28.7	29.1	27.5	28.3	27.9	28.7	29.1
	6H	27.9	28.6	28.3	29.0	29.5	27.9	28.6	28.3	29.0	29.5
	8H	28.0	28.6	28.5	29.1	29.6	28.0	28.6	28.5	29.1	29.6
	12H	28.1	28.7	28.6	29.1	29.6	28.1	28.7	28.6	29.1	29.6
8H	4H	27.6	28.3	28.1	28.7	29.2	27.6	28.3	28.1	28.7	29.2
	6H	28.2	28.7	28.7	29.2	29.7	28.2	28.7	28.7	29.2	29.7
	8H	28.3	28.8	28.9	29.3	29.8	28.3	28.8	28.9	29.3	29.8
	12H	28.5	28.9	29.0	29.4	30.0	28.5	28.9	29.0	29.4	30.0
12H	4H	27.6	28.2	28.1	28.7	29.2	27.6	28.2	28.1	28.7	29.2
	6H	28.2	28.7	28.7	29.1	29.7	28.2	28.7	28.7	29.1	29.7
	8H	28.4	28.8	28.9	29.3	29.9	28.4	28.8	28.9	29.3	29.9

Corrected UGR values based on total output lumens

SHR = 1.0