

## Indoor Distribution Test Report

# Spectrum Lighting Inc.

994 Jefferson Street  
Fall River, MA 02721  
+1.508.678.2303

## Spectrum Lighting Photometric Lab

### Luminaire

CN1308 15L 35K XX FJ0

Nom 13" diam canopy x 8" H Concorida with mini frosted glass jar (FJ0)

### Test Number

SP-01025

### Test Date

8/29/2019

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

### Summary of Results

#### Power

Input Watts	10 W
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#### Lumen Output

Output Lumens	605
Efficacy	60.54 lm/W

#### Luminous Dimensions

0° - 180° Size	-1.08
90° - 270° Size	-1.08
Height	0.4

#### Spacing Criterion

Two luminaires, plane 0°	0.83
Two luminaires, plane 90°	0.83
Four luminaires	0.95

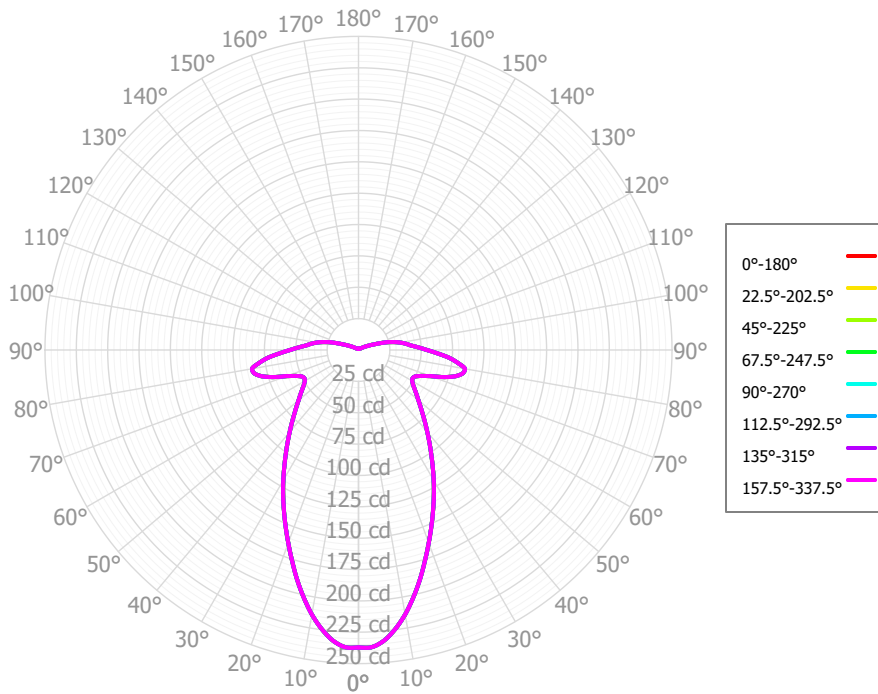
#### Full Beam Angle

0° - 180°	61°
90° - 270°	61°

### IES File Header Contents

Keyword	Value
TEST	SP-01025
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	8/29/2019
ISSUEDATE	2/12/2020
LUMCAT	CN1308 15L 35K XX FJ0
LUMINAIRE	Nom 13" diam canopy x 8" H Concorida with mini frosted glass jar (FJ0)
OTHER	Beam angle: 60.7 deg
OTHER	14.2% Uplight
OTHER	85.8% Downlight
LAMPCAT	N/A
LAMP	N/A
OTHER	CCT Output Multipliers: 27K x 0.97, 30K x 0.99, 40K x 1.03
OTHER	Total system wattages is approximate
OTHER	This report prepared by Spectrum Lighting
_CRI	80+
_CCTMULT	27K x 0.97, 30K x 0.99, 40K x 1.03
_LAMPMULT	Only 15L offered

### Candela Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	21.88	3.61%	90.00° - 100.00°	46.92	7.75%
10.00° - 20.00°	52.72	8.71%	100.00° - 110.00°	25.18	4.16%
20.00° - 30.00°	64.61	10.67%	100.00° - 120.00°	33.00	5.45%
30.00° - 40.00°	63.33	10.46%	120.00° - 130.00°	2.36	0.39%
40.00° - 50.00°	56.23	9.29%	130.00° - 140.00°	1.09	0.18%
50.00° - 60.00°	49.33	8.15%	140.00° - 150.00°	0.77	0.13%
60.00° - 70.00°	51.62	8.53%	150.00° - 160.00°	0.56	0.09%
70.00° - 80.00°	82.39	13.61%	160.00° - 170.00°	0.34	0.06%
80.00° - 90.00°	78.11	12.90%	170.00° - 180.00°	0.11	0.02%
0.00° - 90.00°	520.23	85.93%	0.00° - 180.00°	605.40	100.00%



### Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

<b>RCR</b>	<b>pfc</b>	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	0%
	<b>pcc</b>	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	0%
	<b>pw</b>	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	<b>0</b>	700	700	700	700	674	674	674	674	625	625	625	581	581	581	540	540	520
	<b>1</b>	608	566	529	495	581	543	509	479	501	473	448	462	439	418	426	408	391
	<b>2</b>	546	484	432	389	520	464	417	377	428	389	355	394	362	334	363	337	314
	<b>3</b>	496	423	366	320	473	406	354	312	375	331	295	346	310	279	320	289	263
	<b>4</b>	455	375	317	272	434	361	307	266	335	289	253	310	271	240	287	255	228
	<b>5</b>	421	337	279	237	401	325	272	231	303	256	221	281	242	211	261	228	201
	<b>6</b>	390	306	249	209	373	296	243	204	276	230	196	257	218	188	240	206	179
	<b>7</b>	364	279	225	187	348	270	219	183	253	208	176	237	198	169	222	188	162
	<b>8</b>	340	257	204	168	326	249	200	165	234	190	159	220	181	153	206	173	147
	<b>9</b>	319	237	187	153	306	230	183	151	217	175	145	205	167	140	193	160	135
	<b>10</b>	300	220	172	140	288	214	169	138	202	162	134	191	155	129	181	148	125

### Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	7.8 fc	6.4 ft
6.5 ft	5.6 fc	7.6 ft
7.5 ft	4.2 fc	8.8 ft
8.0 ft	3.7 fc	9.4 ft
10.0 ft	2.4 fc	11.7 ft
12.0 ft	1.6 fc	14.0 ft
14.0 ft	1.2 fc	16.4 ft
16.0 ft	0.9 fc	18.7 ft
20.0 ft	0.6 fc	23.4 ft
24.0 ft	0.4 fc	28.1 ft
28.0 ft	0.3 fc	32.8 ft

### Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	2,788	2,788	2,788
45.00°	818	818	818
55.00°	670	670	670
65.00°	690	690	690
75.00°	1,324	1,324	1,324
85.00°	1,538	1,538	1,538

### UGR CIE 190:2010

<b>Ceiling reflectance</b>		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
<b>Wall reflectance</b>		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
<b>Plane reflectance</b>		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<b>Room dimensions</b>		<b>Viewed crosswise</b>					<b>Viewed endwise</b>				
<b>2H</b>	<b>2H</b>	13.6	15.0	14.1	15.6	16.2	13.6	15.0	14.1	15.6	16.2
	<b>3H</b>	-	-	-	-	-	-	-	-	-	-
	<b>4H</b>	-	-	-	-	-	-	-	-	-	-
	<b>6H</b>	-	-	-	-	-	-	-	-	-	-
	<b>8H</b>	-	-	-	-	-	-	-	-	-	-
	<b>12H</b>	-	-	-	-	-	-	-	-	-	-
<b>4H</b>	<b>2H</b>	-	-	-	-	-	-	-	-	-	-
	<b>3H</b>	-	-	-	-	-	-	-	-	-	-
	<b>4H</b>	-	-	-	-	-	-	-	-	-	-
	<b>6H</b>	-	-	-	-	-	-	-	-	-	-
	<b>8H</b>	-	-	-	-	-	-	-	-	-	-
	<b>12H</b>	-	-	-	-	-	-	-	-	-	-
<b>8H</b>	<b>4H</b>	-	-	-	-	-	-	-	-	-	-
	<b>6H</b>	-	-	-	-	-	-	-	-	-	-
	<b>8H</b>	-	-	-	-	-	-	-	-	-	-
	<b>12H</b>	-	-	-	-	-	-	-	-	-	-
<b>12H</b>	<b>4H</b>	-	-	-	-	-	-	-	-	-	-
	<b>6H</b>	-	-	-	-	-	-	-	-	-	-
	<b>8H</b>	-	-	-	-	-	-	-	-	-	-

Corrected UGR values based on total output lumens

SHR = 1.0