

## **Indoor Distribution Test Report**

# **Spectrum Lighting Inc.**

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## **Spectrum Lighting Photometric Lab**

### **Luminaire**

CN1812GV 37L 35K EX FJ2

Nom 18" diam pendant mount Concorida with (FJ2) frosted glass jar

### **Test Number**

SP-00960\_M-37L (83-50008)

### **Test Date**

12/12/2019

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

### Summary of Results

#### Power

Input Watts	26 W
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#### Lumen Output

Output Lumens	1556
Efficacy	59.86 lm/W

#### Luminous Dimensions

0° - 180° Size	-1.5
90° - 270° Size	-1.5
Height	0.42

#### Spacing Criterion

Two luminaires, plane 0°	0.94
Two luminaires, plane 90°	0.94
Four luminaires	1.08

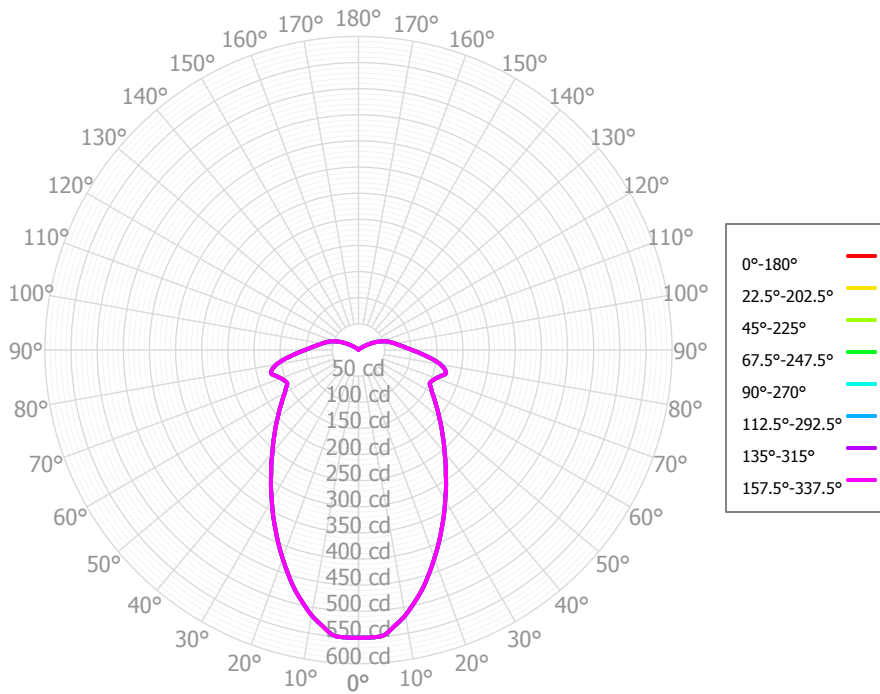
#### Full Beam Angle

0° - 180°	75°
90° - 270°	75°

### IES File Header Contents

Keyword	Value
TEST	SP-00960_M-37L (83-50008)
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	12/12/2019
ISSUEDATE	12/12/2019
LUMCAT	CN1812GV 37L 35K EX FJ2
LUMINAIRE	Nom 18" diam pendant mount Concorida with (FJ2) frosted glass jar
OTHER	Beam angle: 74 deg
OTHER	13% Uplight
OTHER	87% Downlight
LAMPCAT	N/A
LAMP	GV Gen3
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, scaled from 45L

### Candela Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	51.83	3.33%	90.00° - 100.00°	92.73	5.96%
10.00° - 20.00°	132.11	8.49%	100.00° - 110.00°	63.82	4.10%
20.00° - 30.00°	173.19	11.13%	100.00° - 120.00°	98.69	6.34%
30.00° - 40.00°	182.78	11.74%	120.00° - 130.00°	10.50	0.67%
40.00° - 50.00°	175.93	11.30%	130.00° - 140.00°	2.80	0.18%
50.00° - 60.00°	162.26	10.43%	140.00° - 150.00°	0.80	0.05%
60.00° - 70.00°	153.89	9.89%	150.00° - 160.00°	0.41	0.03%
70.00° - 80.00°	176.13	11.32%	160.00° - 170.00°	0.24	0.02%
80.00° - 90.00°	141.98	9.12%	170.00° - 180.00°	0.09	0.01%
0.00° - 90.00°	1,350.10	86.75%	0.00° - 180.00°	1,556.37	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>	1,804	1,804	1,804	1,804	1,738	1,738	1,738	1,738	1,615	1,615	1,615	1,502	1,502	1,502	1,399	1,399	1,350
	<b>1</b>	1,591	1,494	1,408	1,330	1,525	1,438	1,359	1,288	1,332	1,268	1,209	1,234	1,183	1,135	1,145	1,104	1,061
	<b>2</b>	1,433	1,283	1,159	1,055	1,370	1,235	1,122	1,026	1,144	1,051	970	1,061	984	917	984	922	885
	<b>3</b>	1,303	1,121	981	869	1,244	1,080	951	848	1,003	895	806	932	841	766	865	791	759
	<b>4</b>	1,193	994	847	736	1,140	959	824	719	892	778	687	831	734	655	774	692	665
	<b>5</b>	1,099	890	744	636	1,051	860	724	622	803	686	596	750	650	571	700	615	591
	<b>6</b>	1,018	804	660	557	974	778	644	547	729	612	526	683	582	505	640	553	532
	<b>7</b>	946	732	593	495	906	709	579	486	666	552	469	626	526	451	588	501	483
	<b>8</b>	883	670	536	444	847	650	524	437	613	501	422	578	479	407	544	458	442
	<b>9</b>	827	617	489	402	794	600	479	395	567	459	383	536	439	370	506	421	407
	<b>10</b>	777	571	448	366	747	556	439	361	527	422	350	499	405	339	473	389	377

### Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	18.2 fc	8.4 ft
6.5 ft	13.0 fc	9.9 ft
7.5 ft	9.8 fc	11.4 ft
8.0 ft	8.6 fc	12.2 ft
10.0 ft	5.5 fc	15.2 ft
12.0 ft	3.8 fc	18.3 ft
14.0 ft	2.8 fc	21.3 ft
16.0 ft	2.2 fc	24.4 ft
20.0 ft	1.4 fc	30.5 ft
24.0 ft	1.0 fc	36.6 ft
28.0 ft	0.7 fc	42.7 ft

### Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
<b>0.00°</b>	3,354	3,354	3,354
<b>45.00°</b>	1,443	1,443	1,443
<b>55.00°</b>	1,271	1,271	1,271
<b>65.00°</b>	1,230	1,230	1,230
<b>75.00°</b>	1,749	1,749	1,749
<b>85.00°</b>	1,781	1,781	1,781

### UGR CIE 190:2010

<b>Ceiling reflectance</b>		<b>0.7</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>	<b>0.7</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>
<b>Wall reflectance</b>		<b>0.5</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>
<b>Plane reflectance</b>		<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
<b>Room dimensions</b>		<b>Viewed crosswise</b>					<b>Viewed endwise</b>				
<b>2H</b>	<b>2H</b>	14.6	16.0	15.1	16.6	17.2	14.6	16.0	15.1	16.6	17.2
	<b>3H</b>	20.2	21.6	20.8	22.1	22.8	20.2	21.6	20.8	22.1	22.8
	<b>4H</b>	-	-	-	-	-	-	-	-	-	-
	<b>6H</b>	-	-	-	-	-	-	-	-	-	-
	<b>8H</b>	-	-	-	-	-	-	-	-	-	-
	<b>12H</b>	-	-	-	-	-	-	-	-	-	-
<b>4H</b>	<b>2H</b>	16.8	18.0	17.3	18.6	19.3	16.8	18.0	17.3	18.6	19.3
	<b>3H</b>	17.4	18.5	18.0	19.1	19.8	17.4	18.5	18.0	19.1	19.8
	<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