

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

CN1812GV 27L 35K EX FJ2

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

Test Number

SP-00960_M-27L (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	18 W
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Lumen Output

Output Lumens	1053
Efficacy	58.49 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

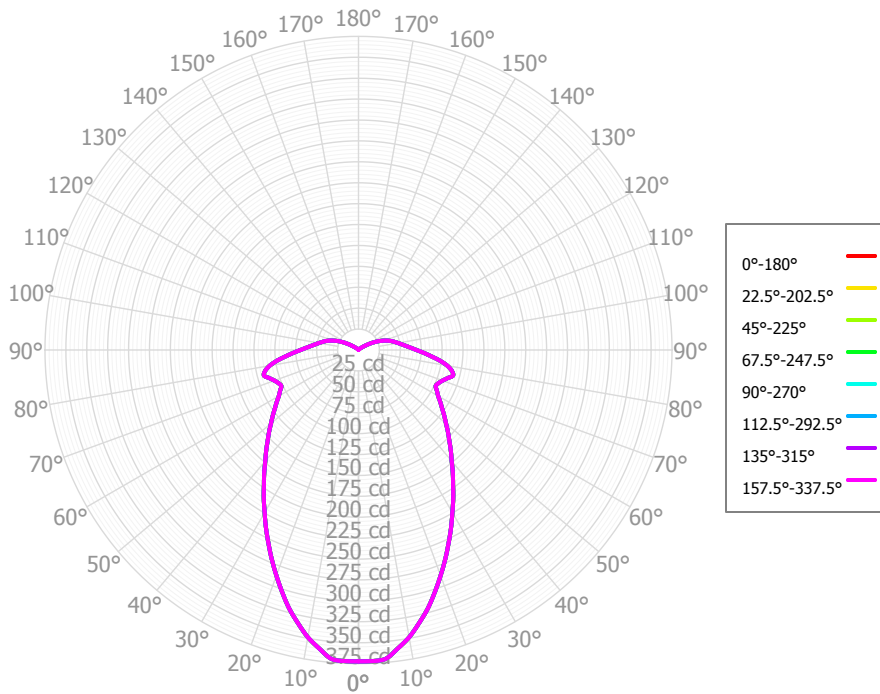
Full Beam Angle

0° - 180°	75°
90° - 270°	75°

IES File Header Contents

Keyword	Value
TEST	SP-00960_M-27L (83-50008)
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	12/12/2019
ISSUEDATE	12/12/2019
LUMCAT	CN1812GV 27L 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°	35.06	3.33%	90.00° - 100.00°	62.73	5.96%
10.00° - 20.00°	89.37	8.49%	100.00° - 110.00°	43.17	4.10%
20.00° - 30.00°	117.15	11.13%	100.00° - 120.00°	66.76	6.34%
30.00° - 40.00°	123.65	11.74%	120.00° - 130.00°	7.10	0.67%
40.00° - 50.00°	119.01	11.30%	130.00° - 140.00°	1.90	0.18%
50.00° - 60.00°	109.77	10.43%	140.00° - 150.00°	0.54	0.05%
60.00° - 70.00°	104.10	9.89%	150.00° - 160.00°	0.28	0.03%
70.00° - 80.00°	119.15	11.32%	160.00° - 170.00°	0.16	0.02%
80.00° - 90.00°	96.05	9.12%	170.00° - 180.00°	0.06	0.01%
0.00° - 90.00°	913.30	86.75%	0.00° - 180.00°	1,052.84	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	1,220	1,220	1,220	1,220	1,176	1,176	1,176	1,176	1,092	1,092	1,092	1,016	1,016	1,016	946	946	946	913
	1	1,076	1,011	952	900	1,031	973	920	872	901	858	818	835	800	768	774	747	721	718
	2	969	868	784	714	927	835	759	694	774	711	657	718	666	620	665	623	586	599
	3	881	759	664	588	842	731	644	573	679	605	545	630	569	518	585	535	492	513
	4	807	672	573	498	771	648	557	487	604	526	465	562	496	443	523	468	423	450
	5	744	602	503	430	711	582	490	421	543	464	404	507	440	386	474	416	370	400
	6	688	544	447	377	659	526	436	370	493	414	356	462	394	342	433	374	328	360
	7	640	495	401	335	613	480	391	329	451	373	317	424	356	305	398	339	294	327
	8	597	453	363	300	573	440	355	295	415	339	285	391	324	275	368	310	266	299
	9	559	418	331	272	537	406	324	268	383	310	259	362	297	251	342	285	242	275
	10	526	387	303	248	505	376	297	244	356	286	237	338	274	229	320	263	222	255

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	12.3 fc	8.4 ft
6.5 ft	8.8 fc	9.9 ft
7.5 ft	6.6 fc	11.4 ft
8.0 ft	5.8 fc	12.2 ft
10.0 ft	3.7 fc	15.2 ft
12.0 ft	2.6 fc	18.3 ft
14.0 ft	1.9 fc	21.3 ft
16.0 ft	1.5 fc	24.4 ft
20.0 ft	0.9 fc	30.5 ft
24.0 ft	0.6 fc	36.6 ft
28.0 ft	0.5 fc	42.7 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	2,269	2,269	2,269
45.00°	976	976	976
55.00°	859	859	859
65.00°	832	832	832
75.00°	1,183	1,183	1,183
85.00°	1,205	1,205	1,205

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	13.2	14.6	13.8	15.2	15.8	13.2	14.6	13.8	15.2	15.8
	3H	18.9	20.2	19.5	20.8	21.4	18.9	20.2	19.5	20.8	21.4
	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
4H	2H	15.4	16.7	16.0	17.2	17.9	15.4	16.7	16.0	17.2	17.9
	3H	16.1	17.2	16.7	17.8	18.5	16.1	17.2	16.7	17.8	18.5
	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
8H	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
12H	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-

Corrected UGR values based on total output lumens

SHR = 1.0