

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

CN1812GV 45L 35K EX FJ2

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

Test Number

SP-00960 (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	32 W
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Lumen Output

Output Lumens	2289
Efficacy	71.52 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

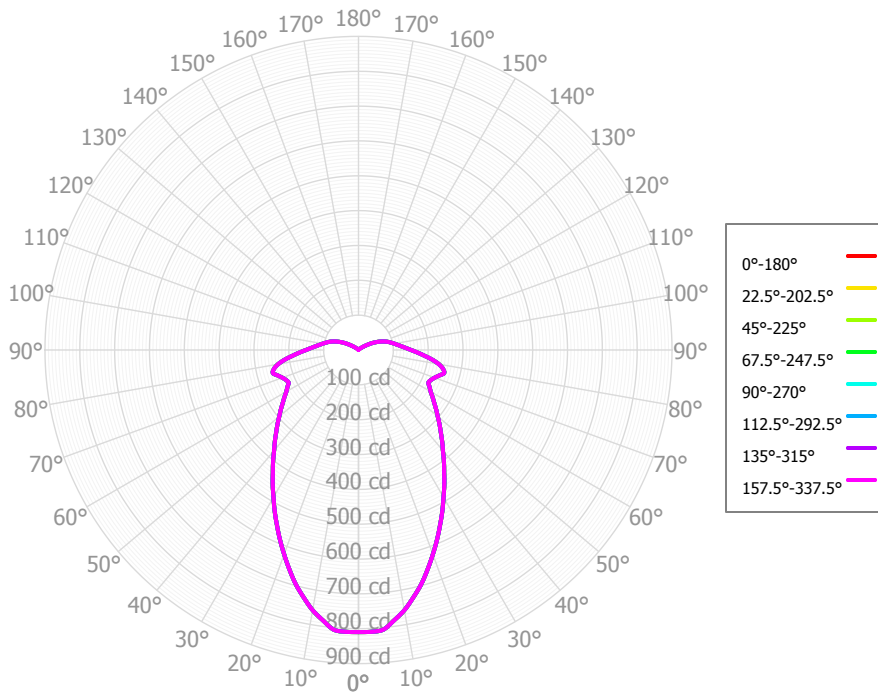
Full Beam Angle

0° - 180°	75°
90° - 270°	75°

IES File Header Contents

Keyword	Value
TEST	SP-00960 (83-50008)
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	12/12/2019
ISSUEDATE	12/12/2019
LUMCAT	CN1812GV 45L 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
_CRI	80
_CCTMULT	27K x 0.97, 30K x 0.99, 40K x 1.03
_LAMPMULT	15L x 0.27, 27L x 0.46, 37L x 0.68

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	76.22	3.33%	90.00° - 100.00°	136.36	5.96%
10.00° - 20.00°	194.28	8.49%	100.00° - 110.00°	93.85	4.10%
20.00° - 30.00°	254.68	11.13%	100.00° - 120.00°	145.14	6.34%
30.00° - 40.00°	268.79	11.74%	120.00° - 130.00°	15.45	0.67%
40.00° - 50.00°	258.72	11.30%	130.00° - 140.00°	4.12	0.18%
50.00° - 60.00°	238.62	10.43%	140.00° - 150.00°	1.18	0.05%
60.00° - 70.00°	226.31	9.89%	150.00° - 160.00°	0.61	0.03%
70.00° - 80.00°	259.02	11.32%	160.00° - 170.00°	0.35	0.02%
80.00° - 90.00°	208.80	9.12%	170.00° - 180.00°	0.13	0.01%
0.00° - 90.00°	1,985.44	86.75%	0.00° - 180.00°	2,288.78	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%	0%
	pcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	0	2,653	2,653	2,653	2,653	2,556	2,556	2,556	2,556	2,375	2,375	2,375	2,209	2,209	2,209	2,057	2,057	1,985
	1	2,340	2,198	2,071	1,956	2,242	2,114	1,999	1,895	1,958	1,865	1,779	1,815	1,739	1,669	1,683	1,623	1,567
	2	2,107	1,887	1,705	1,552	2,015	1,816	1,650	1,509	1,683	1,546	1,427	1,560	1,448	1,349	1,447	1,355	1,274
	3	1,916	1,649	1,443	1,278	1,830	1,589	1,399	1,247	1,475	1,316	1,185	1,370	1,237	1,126	1,272	1,163	1,069
	4	1,755	1,461	1,246	1,082	1,676	1,410	1,211	1,058	1,312	1,144	1,010	1,222	1,079	964	1,138	1,018	919
	5	1,617	1,309	1,093	935	1,545	1,264	1,065	915	1,181	1,009	877	1,103	956	840	1,030	904	804
	6	1,497	1,182	971	820	1,432	1,144	947	804	1,072	901	773	1,004	856	742	941	813	713
	7	1,391	1,076	871	728	1,333	1,043	851	715	980	812	689	921	774	664	865	737	639
	8	1,298	985	788	653	1,245	956	771	642	901	737	620	849	705	599	801	673	578
	9	1,216	908	719	591	1,168	882	704	582	834	674	563	788	646	545	745	619	527
	10	1,143	840	659	539	1,099	818	646	531	775	621	515	734	596	499	695	572	483

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	26.8 fc	8.4 ft
6.5 ft	19.2 fc	9.9 ft
7.5 ft	14.4 fc	11.4 ft
8.0 ft	12.7 fc	12.2 ft
10.0 ft	8.1 fc	15.2 ft
12.0 ft	5.6 fc	18.3 ft
14.0 ft	4.1 fc	21.3 ft
16.0 ft	3.2 fc	24.4 ft
20.0 ft	2.0 fc	30.5 ft
24.0 ft	1.4 fc	36.6 ft
28.0 ft	1.0 fc	42.7 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	4,932	4,932	4,932
45.00°	2,122	2,122	2,122
55.00°	1,868	1,868	1,868
65.00°	1,809	1,809	1,809
75.00°	2,571	2,571	2,571
85.00°	2,620	2,620	2,620

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	15.9	17.3	16.5	17.9	18.5	15.9	17.3	16.5	17.9	18.5
	3H	21.6	22.9	22.2	23.5	24.1	21.6	22.9	22.2	23.5	24.1
	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
4H	2H	18.1	19.4	18.7	19.9	20.6	18.1	19.4	18.7	19.9	20.6
	3H	18.8	19.9	19.4	20.5	21.2	18.8	19.9	19.4	20.5	21.2
	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
8H	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
12H	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-

Corrected UGR values based on total output lumens

SHR = 1.0