

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

CN1812GV 15L 35K EX FJ2

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

Test Number

SP-00960_M-15L (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	10 W
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Lumen Output

Output Lumens	618
Efficacy	61.8 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

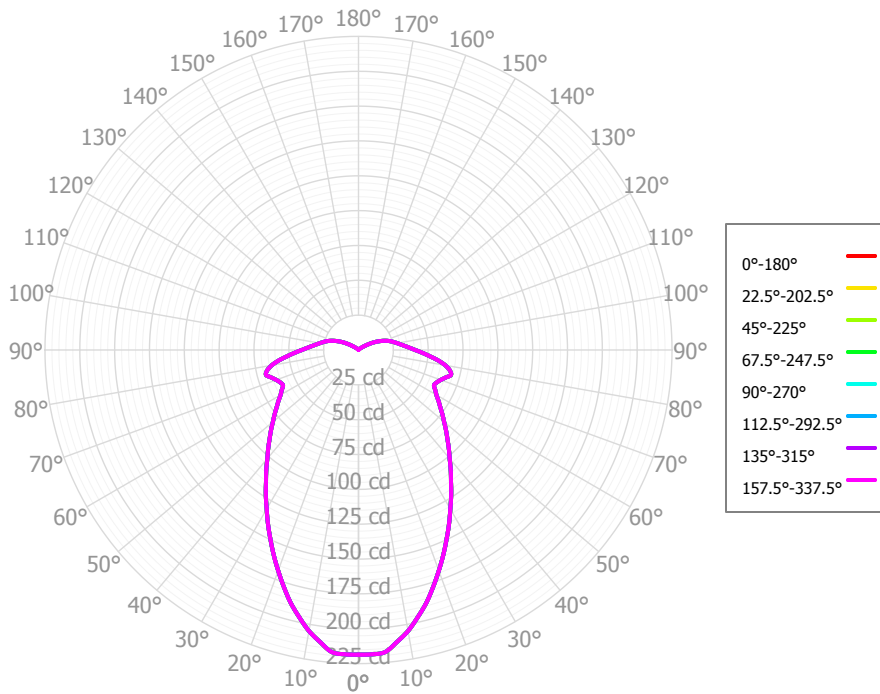
Full Beam Angle

0° - 180°	75°
90° - 270°	75°

IES File Header Contents

Keyword	Value
TEST	SP-00960_M-15L (83-50008)
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	12/12/2019
ISSUEDATE	12/12/2019
LUMCAT	CN1812GV 15L 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°	20.58	3.33%	90.00° - 100.00°	36.82	5.96%
10.00° - 20.00°	52.45	8.49%	100.00° - 110.00°	25.34	4.10%
20.00° - 30.00°	68.76	11.13%	100.00° - 120.00°	39.19	6.34%
30.00° - 40.00°	72.57	11.74%	120.00° - 130.00°	4.17	0.67%
40.00° - 50.00°	69.85	11.30%	130.00° - 140.00°	1.11	0.18%
50.00° - 60.00°	64.43	10.43%	140.00° - 150.00°	0.32	0.05%
60.00° - 70.00°	61.10	9.89%	150.00° - 160.00°	0.16	0.03%
70.00° - 80.00°	69.94	11.32%	160.00° - 170.00°	0.09	0.02%
80.00° - 90.00°	56.37	9.12%	170.00° - 180.00°	0.03	0.01%
0.00° - 90.00°	536.07	86.75%	0.00° - 180.00°	617.97	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	716	716	716	716	690	690	690	690	641	641	641	596	596	596	555	555	536
	1	632	593	559	528	605	571	540	512	529	503	480	490	470	451	454	438	421
	2	569	509	460	419	544	490	446	408	454	417	385	421	391	364	391	366	351
	3	517	445	390	345	494	429	378	337	398	355	320	370	334	304	344	314	301
	4	474	395	336	292	453	381	327	286	354	309	273	330	291	260	307	275	264
	5	436	353	295	252	417	341	287	247	319	272	237	298	258	227	278	244	235
	6	404	319	262	221	387	309	256	217	289	243	209	271	231	200	254	219	211
	7	376	290	235	197	360	282	230	193	265	219	186	249	209	179	234	199	192
	8	351	266	213	176	336	258	208	173	243	199	167	229	190	162	216	182	175
	9	328	245	194	160	315	238	190	157	225	182	152	213	174	147	201	167	162
	10	309	227	178	145	297	221	174	143	209	168	139	198	161	135	188	154	150

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	7.2 fc	8.4 ft
6.5 ft	5.2 fc	9.9 ft
7.5 ft	3.9 fc	11.4 ft
8.0 ft	3.4 fc	12.2 ft
10.0 ft	2.2 fc	15.2 ft
12.0 ft	1.5 fc	18.3 ft
14.0 ft	1.1 fc	21.3 ft
16.0 ft	0.9 fc	24.4 ft
20.0 ft	0.5 fc	30.5 ft
24.0 ft	0.4 fc	36.6 ft
28.0 ft	0.3 fc	42.7 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	1,332	1,332	1,332
45.00°	573	573	573
55.00°	504	504	504
65.00°	488	488	488
75.00°	694	694	694
85.00°	707	707	707

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	11.4	12.8	11.9	13.4	14.0	11.4	12.8	11.9	13.4	14.0
	3H	17.0	18.4	17.6	18.9	19.6	17.0	18.4	17.6	18.9	19.6
	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
4H	2H	13.5	14.8	14.1	15.4	16.1	13.5	14.8	14.1	15.4	16.1
	3H	14.2	15.3	14.8	15.9	16.6	14.2	15.3	14.8	15.9	16.6
	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
8H	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
12H	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-

Corrected UGR values based on total output lumens

SHR = 1.0