

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

SGES6GK 65L 35K AR6GK SG

Nom 6" diam round recessed open high output luminaire

Test Number

SP-00927_M-65L

Test Date

8/19/2019

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

Summary of Results

Power

Input Watts	53 W
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Lumen Output

Output Lumens	5148
Efficacy	97.13 lm/W

Luminous Dimensions

0° - 180° Size	-0.48
90° - 270° Size	-0.48
Height	0

Spacing Criterion

Two luminaires, plane 0°	1.13
Two luminaires, plane 90°	1.13
Four luminaires	1.15

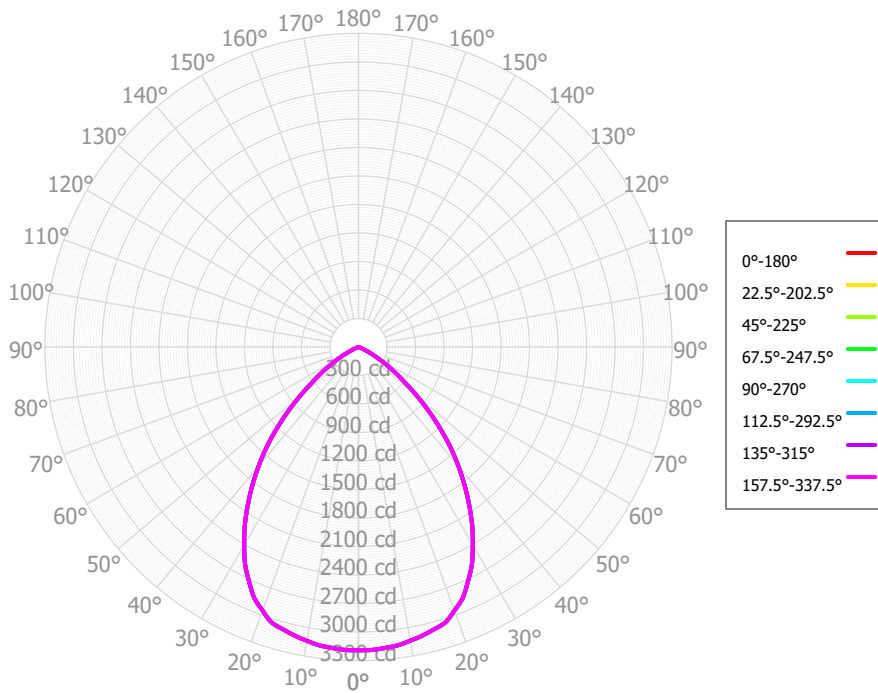
Full Beam Angle

0° - 180°	81°
90° - 270°	81°

IES File Header Contents

Keyword	Value
TEST	SP-00927_M-65L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	8/19/2019
ISSUEDATE	8/28/2019
LUMCAT	SGES6GK 65L 35K AR6GK SG
LUMINAIRE	Nom 6" diam round recessed open high output luminaire
OTHER	Trim: Soft Glow (semi-diffuse aluminum)
OTHER	Beam Angle: 80.9 degrees
LAMPCAT	N/A
LAMP	N/A
OTHER	CCT Output Multipliers: 27K x 0.95, 30K x 0.98, 40K x 1.0
OTHER	Total luminaire wattages is approximate
OTHER	This report prepared by Spectrum Lighting, scaled from 100L

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	306.98	5.96%	90.00° - 100.00°	0.08	0.00%
10.00° - 20.00°	866.61	16.83%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	1,246.47	24.21%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	1,262.48	24.52%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	934.30	18.15%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	434.59	8.44%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	90.57	1.76%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	5.00	0.10%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	1.07	0.02%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	5,148.06	100.00%	0.00° - 180.00°	5,148.14	100.00%

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

	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%
RCR	0	6,129	6,129	6,129	6,129	5,986	5,986	5,986	5,986	5,720	5,720	5,720	5,477	5,477	5,477	5,253	5,253	5,148
	1	5,782	5,613	5,462	5,326	5,652	5,501	5,364	5,241	5,290	5,179	5,079	5,096	5,008	4,926	4,917	4,848	4,783
	2	5,415	5,112	4,861	4,651	5,294	5,021	4,792	4,598	4,849	4,659	4,495	4,691	4,534	4,397	4,545	4,417	4,303
	3	5,060	4,657	4,345	4,097	4,948	4,582	4,294	4,063	4,440	4,196	3,995	4,310	4,104	3,931	4,188	4,016	3,868
	4	4,725	4,251	3,904	3,639	4,623	4,189	3,866	3,616	4,071	3,792	3,571	3,962	3,722	3,527	3,860	3,654	3,485
	5	4,415	3,892	3,527	3,257	4,322	3,840	3,497	3,241	3,741	3,440	3,210	3,648	3,386	3,179	3,562	3,333	3,150
	6	4,131	3,575	3,203	2,935	4,045	3,531	3,179	2,924	3,447	3,135	2,902	3,369	3,092	2,880	3,295	3,050	2,859
	7	3,871	3,296	2,923	2,661	3,793	3,258	2,904	2,653	3,186	2,868	2,637	3,119	2,834	2,621	3,056	2,800	2,605
	8	3,635	3,049	2,680	2,426	3,564	3,016	2,665	2,420	2,954	2,636	2,408	2,896	2,608	2,397	2,842	2,580	2,385
	9	3,420	2,830	2,468	2,224	3,355	2,802	2,456	2,219	2,748	2,432	2,210	2,698	2,409	2,201	2,650	2,386	2,192
	10	3,225	2,635	2,283	2,048	3,166	2,611	2,272	2,044	2,564	2,252	2,037	2,520	2,233	2,030	2,479	2,214	2,023

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	105.5 fc	9.4 ft
6.5 ft	75.6 fc	11.1 ft
7.5 ft	56.7 fc	12.8 ft
8.0 ft	49.9 fc	13.7 ft
10.0 ft	31.9 fc	17.1 ft
12.0 ft	22.2 fc	20.5 ft
14.0 ft	16.3 fc	23.9 ft
16.0 ft	12.5 fc	27.3 ft
20.0 ft	8.0 fc	34.1 ft
24.0 ft	5.5 fc	41.0 ft
28.0 ft	4.1 fc	47.8 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	189,879	189,879	189,879
45.00°	102,615	102,615	102,615
55.00°	49,557	49,557	49,557
65.00°	10,610	10,610	10,610
75.00°	683	683	683
85.00°	655	655	655

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	21.2	22.5	21.6	22.8	23.1	21.2	22.5	21.6	22.8	23.1
	3H	21.1	22.2	21.5	22.6	22.9	21.1	22.2	21.5	22.6	22.9
	4H	21.0	22.1	21.4	22.4	22.8	21.0	22.1	21.4	22.4	22.8
	6H	21.0	21.9	21.4	22.3	22.7	21.0	21.9	21.4	22.3	22.7
	8H	20.9	21.8	21.3	22.2	22.6	20.9	21.8	21.3	22.2	22.6
	12H	20.9	21.7	21.3	22.1	22.5	20.9	21.7	21.3	22.1	22.5
4H	2H	21.1	22.1	21.5	22.5	22.9	21.1	22.1	21.5	22.5	22.9
	3H	21.0	21.8	21.4	22.2	22.6	21.0	21.8	21.4	22.2	22.6
	4H	20.9	21.6	21.3	22.0	22.5	20.9	21.6	21.3	22.0	22.5
	6H	20.8	21.4	21.3	21.9	22.4	20.8	21.4	21.3	21.9	22.4
	8H	20.7	21.3	21.2	21.8	22.3	20.7	21.3	21.2	21.8	22.3
	12H	20.7	21.2	21.2	21.7	22.2	20.7	21.2	21.2	21.7	22.2
8H	4H	20.7	21.3	21.2	21.8	22.3	20.7	21.3	21.2	21.8	22.3
	6H	20.6	21.1	21.1	21.6	22.1	20.6	21.1	21.1	21.6	22.1
	8H	20.6	21.0	21.1	21.5	22.0	20.6	21.0	21.1	21.5	22.0
	12H	20.5	20.9	21.0	21.4	22.0	20.5	20.9	21.0	21.4	22.0
12H	4H	20.7	21.2	21.2	21.7	22.2	20.7	21.2	21.2	21.7	22.2
	6H	20.6	21.0	21.1	21.5	22.0	20.6	21.0	21.1	21.5	22.0
	8H	20.5	20.9	21.0	21.4	22.0	20.5	20.9	21.0	21.4	22.0

Corrected UGR values based on total output lumens

SHR = 1.0