

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

SGE6LEDOS 30L 35K DS101 AR6223OS MW SO FACY4
Nom 6" diam illumitech decorative trim recessed downlight

Test Number

SP-00919

Test Date

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

Summary of Results

Power

Input Watts	29.6 W
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Lumen Output

Output Lumens	2165
Efficacy	73.13 lm/W

Luminous Dimensions

0° - 180° Size	-0.5
90° - 270° Size	-0.5
Height	0

Spacing Criterion

Two luminaires, plane 0°	0.69
Two luminaires, plane 90°	0.69
Four luminaires	0.62

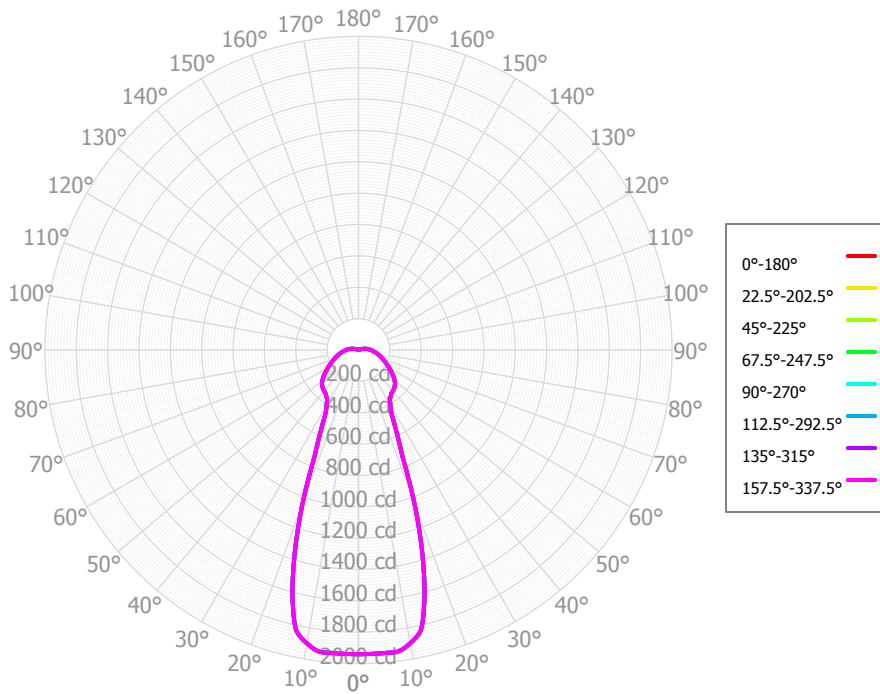
Full Beam Angle

0° - 180°	41°
90° - 270°	41°

IES File Header Contents

Keyword	Value
TEST	SP-00919
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
ISSUEDATE	10/9/2018
UPDATE	8/19/2019
LUMCAT	SGE6LEDOS 30L 35K DS101 AR6223OS MW SO FACY4
LUMINAIRE	Nom 6" diam illumitech decorative trim recessed downlight
OTHER	Solite lens, Frosted 4" Deep Acrylic Ring
LAMPCAT	N/A
LAMP	N/A
OTHER	CCT Output Multipliers: 27K x 0.89, 30K x 0.95, 40K x 1.03
OTHER	Total luminaire wattage is approximate
OTHER	This report prepared by Spectrum Lighting
_CRI	80+
_CCTMULT	27K x 0.89, 30K x 0.95, 40K x 1.03
_LAMPMULT	10L x 0.41, 15L x 0.52, 20L x 0.67, 45L x 1.64

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	187.09	8.64%	90.00° - 100.00°	68.20	3.15%
10.00° - 20.00°	429.89	19.86%	100.00° - 110.00°	30.47	1.41%
20.00° - 30.00°	276.68	12.78%	100.00° - 120.00°	40.00	1.85%
30.00° - 40.00°	227.27	10.50%	120.00° - 130.00°	3.27	0.15%
40.00° - 50.00°	250.80	11.59%	130.00° - 140.00°	1.45	0.07%
50.00° - 60.00°	234.54	10.83%	140.00° - 150.00°	0.87	0.04%
60.00° - 70.00°	190.34	8.79%	150.00° - 160.00°	0.62	0.03%
70.00° - 80.00°	147.16	6.80%	160.00° - 170.00°	0.38	0.02%
80.00° - 90.00°	106.05	4.90%	170.00° - 180.00°	0.12	0.01%
0.00° - 90.00°	2,049.82	94.69%	0.00° - 180.00°	2,164.74	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	2,550	2,550	2,550	2,550	2,477	2,477	2,477	2,477	2,341	2,341	2,341	2,217	2,217	2,217	2,103	2,103	2,050
	1	2,324	2,219	2,125	2,040	2,253	2,158	2,073	1,996	2,045	1,975	1,912	1,941	1,885	1,833	1,845	1,801	1,759
	2	2,136	1,966	1,825	1,707	2,069	1,915	1,787	1,678	1,821	1,714	1,621	1,733	1,645	1,568	1,653	1,581	1,517
	3	1,974	1,763	1,599	1,468	1,913	1,720	1,570	1,448	1,641	1,513	1,408	1,567	1,460	1,370	1,499	1,410	1,333
	4	1,835	1,597	1,424	1,291	1,778	1,562	1,401	1,276	1,495	1,357	1,247	1,432	1,314	1,219	1,375	1,274	1,191
	5	1,713	1,461	1,284	1,154	1,662	1,430	1,266	1,143	1,374	1,231	1,121	1,320	1,197	1,099	1,271	1,164	1,078
	6	1,605	1,346	1,171	1,046	1,559	1,320	1,156	1,037	1,271	1,127	1,020	1,226	1,099	1,003	1,183	1,073	986
	7	1,510	1,248	1,077	958	1,469	1,226	1,065	951	1,184	1,041	937	1,145	1,018	923	1,108	996	910
	8	1,426	1,163	998	885	1,388	1,144	988	879	1,108	968	868	1,074	948	857	1,042	930	846
	9	1,350	1,090	931	823	1,316	1,074	922	819	1,042	905	809	1,012	889	800	984	873	791
	10	1,282	1,026	873	771	1,251	1,012	865	767	984	851	759	958	837	751	933	823	743

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	64.2 fc	4.1 ft
6.5 ft	45.9 fc	4.9 ft
7.5 ft	34.5 fc	5.6 ft
8.0 ft	30.3 fc	6.0 ft
10.0 ft	19.4 fc	7.5 ft
12.0 ft	13.5 fc	9.0 ft
14.0 ft	9.9 fc	10.5 ft
16.0 ft	7.6 fc	12.0 ft
20.0 ft	4.9 fc	15.0 ft
24.0 ft	3.4 fc	18.0 ft
28.0 ft	2.5 fc	21.0 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	106,386	106,386	106,386
45.00°	25,290	25,290	25,290
55.00°	25,067	25,067	25,067
65.00°	24,832	24,832	24,832
75.00°	29,410	29,410	29,410
85.00°	60,807	60,807	60,807

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	21.1	22.5	21.5	22.9	23.4	21.1	22.5	21.5	22.9	23.4
	3H	23.3	24.5	23.7	25.0	25.5	23.3	24.5	23.7	25.0	25.5
	4H	24.3	25.6	24.8	26.0	26.5	24.3	25.6	24.8	26.0	26.5
	6H	25.5	26.7	26.0	27.1	27.6	25.5	26.7	26.0	27.1	27.6
	8H	26.1	27.2	26.7	27.7	28.2	26.1	27.2	26.7	27.7	28.2
	12H	26.8	27.9	27.4	28.4	28.9	26.8	27.9	27.4	28.4	28.9
4H	2H	21.7	23.0	22.2	23.4	23.9	21.7	23.0	22.2	23.4	23.9
	3H	24.2	25.3	24.7	25.8	26.3	24.2	25.3	24.7	25.8	26.3
	4H	25.5	26.4	26.0	27.0	27.5	25.5	26.4	26.0	27.0	27.5
	6H	26.9	27.7	27.4	28.2	28.8	26.9	27.7	27.4	28.2	28.8
	8H	27.6	28.4	28.1	28.9	29.5	27.6	28.4	28.1	28.9	29.5
	12H	28.4	29.1	29.0	29.7	30.3	28.4	29.1	29.0	29.7	30.3
8H	4H	26.0	26.8	26.6	27.3	27.9	26.0	26.8	26.6	27.3	27.9
	6H	27.6	28.3	28.2	28.9	29.5	27.6	28.3	28.2	28.9	29.5
	8H	28.6	29.2	29.1	29.7	30.4	28.6	29.2	29.1	29.7	30.4
	12H	29.6	30.1	30.2	30.7	31.4	29.6	30.1	30.2	30.7	31.4
12H	4H	26.1	26.8	26.7	27.4	28.0	26.1	26.8	26.7	27.4	28.0
	6H	27.9	28.5	28.5	29.0	29.7	27.9	28.5	28.5	29.0	29.7
	8H	28.9	29.4	29.5	30.0	30.7	28.9	29.4	29.5	30.0	30.7

Corrected UGR values based on total output lumens

SHR = 1.0