

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

ME1314UDGV 15LGL 15LTF2 35KEX MWI
Indirect/direct Espresso

Test Number

SP-00255_55

Test Date

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

Summary of Results

Power

Input Watts	20 W
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Lumen Output

Output Lumens	2179
Efficacy	108.94 lm/W

Luminous Dimensions

0° - 180° Size	-1.16
90° - 270° Size	-1.16
Height	0

Spacing Criterion

Two luminaires, plane 0°	1.37
Two luminaires, plane 90°	1.37
Four luminaires	1.33

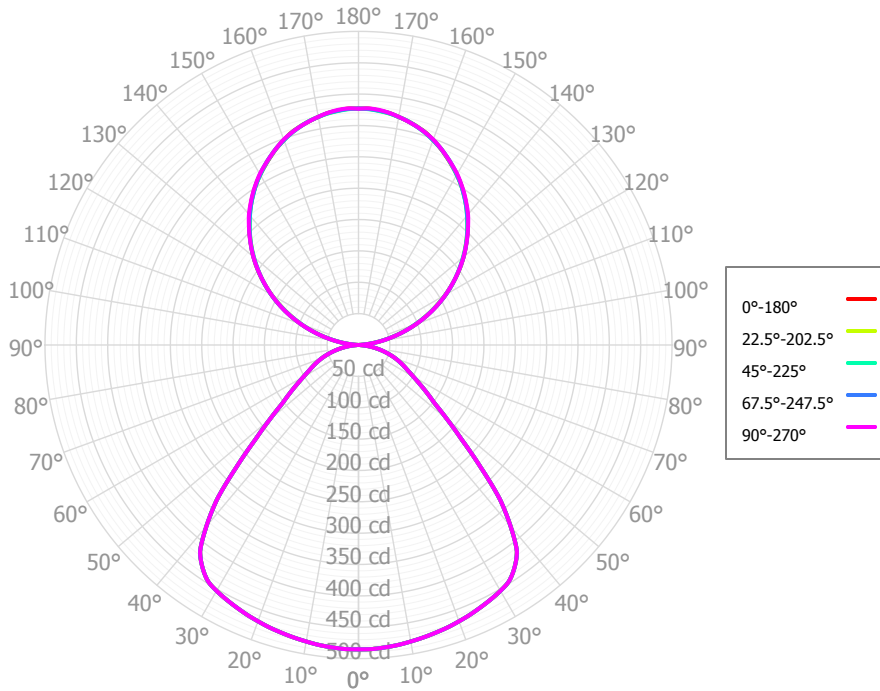
Full Beam Angle

0° - 180°	269°
90° - 270°	269°

IES File Header Contents

Keyword	Value
TEST	SP-00255_55
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
ISSUEDATE	5/6/2019
UPDATE	6/11/2019
LUMCAT	ME1314UDGV 15LGL 15LTF2 35KEX MWI
LUMINAIRE	Indirect/direct Espresso
LAMPCAT	N/A
LAMP	Indirect/direct source: 15L GV board / 15L GV board
OTHER	Uplight: 90 degree beam angle
OTHER	Uplight: Flush clear glass lens
OTHER	Downlight: 93.2 degree beam angle
OTHER	Downlight: Regressed 3 inch domed diffuser
OTHER	CCT Output Multipliers: 27K x 0.97, 30K x 0.98, 40K x 1.03, 50K x 1.06
OTHER	Total luminaire watts is approximate
OTHER	This report prepared by Spectrum Lighting

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	48.39	2.22%	90.00° - 100.00°	14.11	0.65%
10.00° - 20.00°	134.40	6.16%	100.00° - 110.00°	69.84	3.20%
20.00° - 30.00°	213.17	9.77%	100.00° - 120.00°	197.38	9.05%
30.00° - 40.00°	267.51	12.26%	120.00° - 130.00°	169.69	7.78%
40.00° - 50.00°	212.94	9.76%	130.00° - 140.00°	188.71	8.65%
50.00° - 60.00°	121.46	5.57%	140.00° - 150.00°	183.17	8.40%
60.00° - 70.00°	79.82	3.66%	150.00° - 160.00°	152.89	7.01%
70.00° - 80.00°	46.97	2.15%	160.00° - 170.00°	101.61	4.66%
80.00° - 90.00°	11.96	0.55%	170.00° - 180.00°	37.41	1.71%
0.00° - 90.00°	1,136.62	52.10%	0.00° - 180.00°	2,181.59	100.00%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	485.42	485.42	485.42	485.42	485.42
2.50°	485.42	485.42	485.42	485.42	485.42
5.00°	484.07	484.07	484.07	484.07	484.07
7.50°	482.54	482.54	482.54	482.54	482.54
10.00°	480.18	480.18	480.18	480.18	480.18
12.50°	477.77	477.77	477.77	477.77	477.77
15.00°	475.06	475.06	475.06	475.06	475.06
17.50°	472.32	472.32	472.32	472.32	472.32
20.00°	468.90	468.90	468.90	468.90	468.90
22.50°	465.42	465.42	465.42	465.42	465.42
25.00°	461.38	461.38	461.38	461.38	461.38
27.50°	457.28	457.28	457.28	457.28	457.28
30.00°	452.77	452.77	452.77	452.77	452.77
32.50°	446.70	446.70	446.70	446.70	446.70
35.00°	433.69	433.69	433.69	433.69	433.69
37.50°	414.93	414.93	414.93	414.93	414.93
40.00°	377.40	377.40	377.40	377.40	377.40
42.50°	333.85	333.85	333.85	333.85	333.85
45.00°	275.20	275.20	275.20	275.20	275.20
47.50°	223.26	223.26	223.26	223.26	223.26
50.00°	184.72	184.72	184.72	184.72	184.72
52.50°	153.33	153.33	153.33	153.33	153.33
55.00°	133.38	133.38	133.38	133.38	133.38
57.50°	115.75	115.75	115.75	115.75	115.75
60.00°	101.13	101.13	101.13	101.13	101.13
62.50°	89.24	89.24	89.24	89.24	89.24
65.00°	80.18	80.18	80.18	80.18	80.18
67.50°	71.44	71.44	71.44	71.44	71.44
70.00°	62.89	62.89	62.89	62.89	62.89
72.50°	53.73	53.73	53.73	53.73	53.73
75.00°	44.55	44.55	44.55	44.55	44.55
77.50°	35.40	35.40	35.40	35.40	35.40
80.00°	26.31	26.31	26.31	26.31	26.31
82.50°	17.51	17.51	17.51	17.51	17.51
85.00°	9.38	9.38	9.38	9.38	9.38
87.50°	2.67	2.67	2.67	2.67	2.67
90.00°	2.60	2.60	2.60	2.60	2.60
92.50°	0.00	0.00	0.00	0.00	0.74
95.00°	11.06	10.28	8.95	10.14	9.41
97.50°	23.31	21.94	21.77	22.97	23.40
100.00°	36.76	36.11	35.53	36.90	36.86
102.50°	50.90	50.49	50.24	50.84	51.24
105.00°	66.11	65.59	65.93	66.31	66.30
107.50°	81.87	81.29	81.32	82.42	81.78
110.00°	97.95	97.10	96.48	97.93	97.75
112.50°	113.59	112.72	112.77	113.90	113.74

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	2,348	2,348	2,348	2,348	2,172	2,172	2,172	2,172	1,843	1,843	1,843	1,543	1,543	1,543	1,266	1,266	1,137
	1	2,159	2,071	1,991	1,920	1,996	1,921	1,853	1,791	1,640	1,591	1,546	1,382	1,348	1,316	1,144	1,121	1,009
	2	1,980	1,828	1,702	1,597	1,829	1,699	1,590	1,498	1,456	1,376	1,307	1,233	1,176	1,126	1,026	987	890
	3	1,816	1,621	1,470	1,349	1,678	1,509	1,377	1,271	1,299	1,200	1,118	1,105	1,032	971	924	873	789
	4	1,670	1,445	1,281	1,155	1,543	1,348	1,203	1,092	1,165	1,054	967	995	912	846	837	777	704
	5	1,538	1,295	1,126	1,000	1,422	1,211	1,060	948	1,050	933	844	900	812	743	761	696	632
	6	1,421	1,167	997	875	1,315	1,093	941	830	951	832	743	819	727	658	695	627	571
	7	1,317	1,057	889	771	1,219	991	841	734	866	746	659	748	655	586	638	568	519
	8	1,224	962	798	685	1,134	904	756	653	792	674	589	687	594	526	588	517	474
	9	1,141	880	721	613	1,058	828	684	585	727	611	530	633	541	475	544	473	435
	10	1,066	809	655	552	990	762	622	528	671	558	479	586	495	431	505	435	400

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	16.0 fc	0.0 ft
6.5 ft	11.5 fc	0.0 ft
7.5 ft	8.6 fc	0.0 ft
8.0 ft	7.6 fc	0.0 ft
10.0 ft	4.9 fc	0.0 ft
12.0 ft	3.4 fc	0.0 ft
14.0 ft	2.5 fc	0.0 ft
16.0 ft	1.9 fc	0.0 ft
20.0 ft	1.2 fc	0.0 ft
24.0 ft	0.8 fc	0.0 ft
28.0 ft	0.6 fc	0.0 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	4,944	4,944	4,944
45.00°	3,964	3,964	3,964
55.00°	2,368	2,368	2,368
65.00°	1,932	1,932	1,932
75.00°	1,753	1,753	1,753
85.00°	1,096	1,096	1,096

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	8.8	9.7	9.8	10.6	11.9	8.8	9.7	9.8	10.6	11.9
	3H	10.4	11.2	11.4	12.1	13.4	10.4	11.2	11.4	12.1	13.4
	4H	11.1	11.8	12.0	12.7	14.0	11.1	11.8	12.0	12.7	14.0
	6H	11.5	12.1	12.5	13.1	14.4	11.5	12.1	12.5	13.1	14.4
	8H	11.6	12.2	12.6	13.2	14.5	11.6	12.2	12.6	13.2	14.5
	12H	11.7	12.2	12.7	13.2	14.5	11.7	12.2	12.7	13.2	14.5
4H	2H	9.3	10.0	10.3	11.0	12.2	9.3	10.0	10.3	11.0	12.2
	3H	11.1	11.7	12.1	12.7	14.0	11.1	11.7	12.1	12.7	14.0
	4H	11.9	12.4	12.9	13.4	14.7	11.9	12.4	12.9	13.4	14.7
	6H	12.5	12.9	13.5	13.9	15.2	12.5	12.9	13.5	13.9	15.2
	8H	12.6	13.0	13.6	14.1	15.4	12.6	13.0	13.6	14.1	15.4
	12H	12.7	13.1	13.7	14.1	15.4	12.7	13.1	13.7	14.1	15.4
8H	4H	12.1	12.6	13.1	13.6	14.9	12.1	12.6	13.1	13.6	14.9
	6H	12.8	13.2	13.9	14.2	15.5	12.8	13.2	13.9	14.2	15.5
	8H	13.1	13.4	14.1	14.4	15.7	13.1	13.4	14.1	14.4	15.7
	12H	13.2	13.5	14.2	14.5	15.9	13.2	13.5	14.2	14.5	15.9
12H	4H	12.1	12.5	13.2	13.5	14.9	12.1	12.5	13.2	13.5	14.9
	6H	12.9	13.2	13.9	14.2	15.6	12.9	13.2	13.9	14.2	15.6
	8H	13.1	13.4	14.2	14.4	15.8	13.1	13.4	14.2	14.4	15.8

Corrected UGR values based on total output lumens

SHR = 1.0