

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

BL1317GV 27L 35K EX CGG MB GW
Nom. 13" diam. x 17"H, Balston LED Pendant

Test Number

SP-00639

Test Date

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

Summary of Results

Power

Input Watts	18 W
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Lumen Output

Output Lumens	1645
Efficacy	91.41 lm/W

Luminous Dimensions

0° - 180° Size	-0.92
90° - 270° Size	-0.92
Height	0

Spacing Criterion

Two luminaires, plane 0°	1.53
Two luminaires, plane 90°	1.53
Four luminaires	1.6

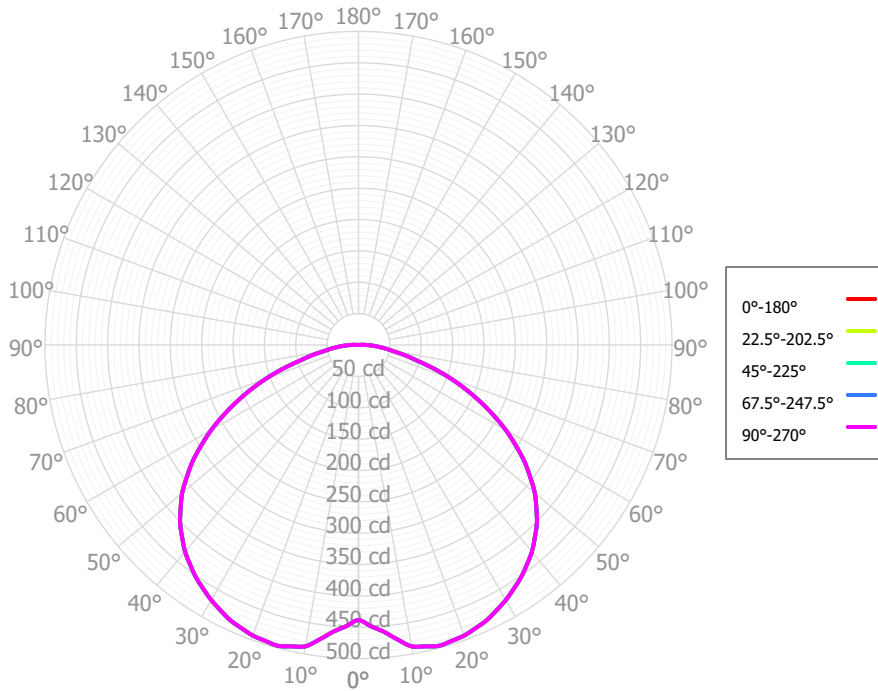
Full Beam Angle

0° - 180°	124°
90° - 270°	124°

IES File Header Contents

Keyword	Value
TEST	SP-00639
TESTLAB	VLS-245-981
MANUFAC	Spectrum Lighting
ISSUEDATE	1/31/2018
UPDATE	3/9/2020
LUMCAT	BL1317GV 27L 35K EX CGG MB GW
LUMINAIRE	Nom. 13" diam. x 17"H, Balston LED Pendant
OTHER	Tapered spun aluminum shade, Gloss White finish
OTHER	Nom. 11" diam. clear glass globe, hemisphere-shape diffuser
OTHER	Radial pattern metal guard, Matte black finish
OTHER	121.6 Degree Beam Angle
OTHER	0.2% Uplight, above 90 Degrees
LAMPCAT	N/A
LAMP	N/A, Gen3
OTHER	Total Luminaire Watts is approximate
OTHER	CCT Output Multipliers: 40K x 1.03, 30K x 0.985, 27K x 0.971
OTHER	This report generated by Spectrum Lighting
_CRI	82
_CCTMULT	40K x 1.03, 30K x 0.985, 27K x 0.971
_LAMPMULT	15L x 0.573

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	46.99	2.85%	90.00° - 100.00°	3.41	0.21%
10.00° - 20.00°	139.96	8.50%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	223.04	13.54%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	282.72	17.17%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	309.30	18.78%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	286.86	17.42%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	211.80	12.86%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	107.06	6.50%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	35.64	2.16%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	1,643.36	99.79%	0.00° - 180.00°	1,646.77	100.00%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	438.84	438.84	438.84	438.84	438.84
2.50°	448.87	448.87	448.87	448.87	448.87
5.00°	458.91	458.91	458.91	458.91	458.91
7.50°	473.46	473.46	473.46	473.46	473.46
10.00°	488.01	488.01	488.01	488.01	488.01
12.50°	492.29	492.29	492.29	492.29	492.29
15.00°	496.56	496.56	496.56	496.56	496.56
17.50°	494.81	494.81	494.81	494.81	494.81
20.00°	493.06	493.06	493.06	493.06	493.06
22.50°	488.62	488.62	488.62	488.62	488.62
25.00°	484.18	484.18	484.18	484.18	484.18
27.50°	476.96	476.96	476.96	476.96	476.96
30.00°	469.75	469.75	469.75	469.75	469.75
32.50°	460.93	460.93	460.93	460.93	460.93
35.00°	452.12	452.12	452.12	452.12	452.12
37.50°	441.21	441.21	441.21	441.21	441.21
40.00°	430.30	430.30	430.30	430.30	430.30
42.50°	416.31	416.31	416.31	416.31	416.31
45.00°	402.33	402.33	402.33	402.33	402.33
47.50°	384.71	384.71	384.71	384.71	384.71
50.00°	367.09	367.09	367.09	367.09	367.09
52.50°	344.88	344.88	344.88	344.88	344.88
55.00°	322.67	322.67	322.67	322.67	322.67
57.50°	296.95	296.95	296.95	296.95	296.95
60.00°	271.23	271.23	271.23	271.23	271.23
62.50°	242.87	242.87	242.87	242.87	242.87
65.00°	214.50	214.50	214.50	214.50	214.50
67.50°	185.73	185.73	185.73	185.73	185.73
70.00°	156.96	156.96	156.96	156.96	156.96
72.50°	127.03	127.03	127.03	127.03	127.03
75.00°	97.11	97.11	97.11	97.11	97.11
77.50°	76.32	76.32	76.32	76.32	76.32
80.00°	55.53	55.53	55.53	55.53	55.53
82.50°	43.51	43.51	43.51	43.51	43.51
85.00°	31.49	31.49	31.49	31.49	31.49
87.50°	21.97	21.97	21.97	21.97	21.97
90.00°	12.44	12.44	12.44	12.44	12.44
92.50°	6.22	6.22	6.22	6.22	6.22
95.00°	0.00	0.00	0.00	0.00	0.00
97.50°	0.00	0.00	0.00	0.00	0.00
100.00°	0.00	0.00	0.00	0.00	0.00
102.50°	0.00	0.00	0.00	0.00	0.00
105.00°	0.00	0.00	0.00	0.00	0.00
107.50°	0.00	0.00	0.00	0.00	0.00
110.00°	0.00	0.00	0.00	0.00	0.00
112.50°	0.00	0.00	0.00	0.00	0.00

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%	10%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	0	1,960	1,960	1,960	1,960	1,914	1,914	1,914	1,914	1,828	1,828	1,828	1,749	1,749	1,749	1,677	1,677	1,677
	1	1,786	1,706	1,633	1,568	1,741	1,668	1,602	1,542	1,597	1,543	1,493	1,532	1,487	1,446	1,471	1,436	1,403
	2	1,620	1,481	1,366	1,270	1,576	1,449	1,344	1,254	1,390	1,301	1,224	1,335	1,261	1,195	1,284	1,223	1,168
	3	1,473	1,295	1,158	1,048	1,431	1,269	1,141	1,038	1,219	1,109	1,019	1,172	1,079	1,001	1,129	1,050	983
	4	1,345	1,143	995	881	1,306	1,120	982	875	1,078	958	862	1,039	934	850	1,002	912	838
	5	1,233	1,017	865	753	1,198	998	855	749	962	836	740	929	818	731	897	801	723
	6	1,136	912	761	653	1,104	896	753	650	865	738	643	837	724	637	810	710	631
	7	1,051	824	676	573	1,022	810	670	570	784	658	566	760	646	561	737	635	557
	8	977	749	606	508	950	738	601	506	715	591	502	694	581	499	674	572	496
	9	911	686	548	454	887	676	543	453	656	535	450	638	527	448	621	519	445
	10	853	631	498	410	831	622	495	409	605	488	407	590	481	404	575	475	402

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	14.5 fc	20.7 ft
6.5 ft	10.4 fc	24.5 ft
7.5 ft	7.8 fc	28.2 ft
8.0 ft	6.9 fc	30.1 ft
10.0 ft	4.4 fc	37.7 ft
12.0 ft	3.0 fc	45.2 ft
14.0 ft	2.2 fc	52.7 ft
16.0 ft	1.7 fc	60.2 ft
20.0 ft	1.1 fc	75.3 ft
24.0 ft	0.8 fc	90.4 ft
28.0 ft	0.6 fc	105.4 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	7,106	7,106	7,106
45.00°	9,213	9,213	9,213
55.00°	9,109	9,109	9,109
65.00°	8,218	8,218	8,218
75.00°	6,075	6,075	6,075
85.00°	5,851	5,851	5,851

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	19.2	20.9	19.6	21.2	21.5	19.2	20.9	19.6	21.2	21.5
	3H	20.8	22.4	21.2	22.7	23.0	20.8	22.4	21.2	22.7	23.0
	4H	21.3	22.8	21.7	23.1	23.5	21.3	22.8	21.7	23.1	23.5
	6H	21.7	23.0	22.1	23.4	23.8	21.7	23.0	22.1	23.4	23.8
	8H	21.8	23.1	22.2	23.5	23.9	21.8	23.1	22.2	23.5	23.9
	12H	21.9	23.1	22.4	23.5	24.0	21.9	23.1	22.4	23.5	24.0
4H	2H	19.8	21.2	20.2	21.6	22.0	19.8	21.2	20.2	21.6	22.0
	3H	21.6	22.8	22.1	23.2	23.6	21.6	22.8	22.1	23.2	23.6
	4H	22.2	23.3	22.7	23.7	24.2	22.2	23.3	22.7	23.7	24.2
	6H	22.7	23.6	23.2	24.1	24.5	22.7	23.6	23.2	24.1	24.5
	8H	22.9	23.7	23.3	24.2	24.7	22.9	23.7	23.3	24.2	24.7
	12H	23.0	23.8	23.5	24.3	24.8	23.0	23.8	23.5	24.3	24.8
8H	4H	22.5	23.4	22.9	23.8	24.3	22.5	23.4	22.9	23.8	24.3
	6H	23.0	23.8	23.5	24.3	24.7	23.0	23.8	23.5	24.3	24.7
	8H	23.3	23.9	23.8	24.4	24.9	23.3	23.9	23.8	24.4	24.9
	12H	23.5	24.1	24.1	24.6	25.2	23.5	24.1	24.1	24.6	25.2
12H	4H	22.5	23.3	23.0	23.8	24.3	22.5	23.3	23.0	23.8	24.3
	6H	23.1	23.8	23.6	24.2	24.8	23.1	23.8	23.6	24.2	24.8
	8H	23.4	24.0	23.9	24.5	25.0	23.4	24.0	23.9	24.5	25.0

Corrected UGR values based on total output lumens

SHR = 1.0