

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
Fall River, MA 02721
+1.508.678.2303

Spectrum Lighting Photometric Lab

Luminaire

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

Test Number

SP-00639_1

Test Date

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

Summary of Results

Power

Input Watts	18 W
-------------	------

Lumen Output

Output Lumens	1697
Efficacy	94.28 lm/W

Luminous Dimensions

0° - 180° Size	-0.92
90° - 270° Size	-0.92
Height	0.33

Spacing Criterion

Two luminaires, plane 0°	1.35
Two luminaires, plane 90°	1.37
Four luminaires	1.49

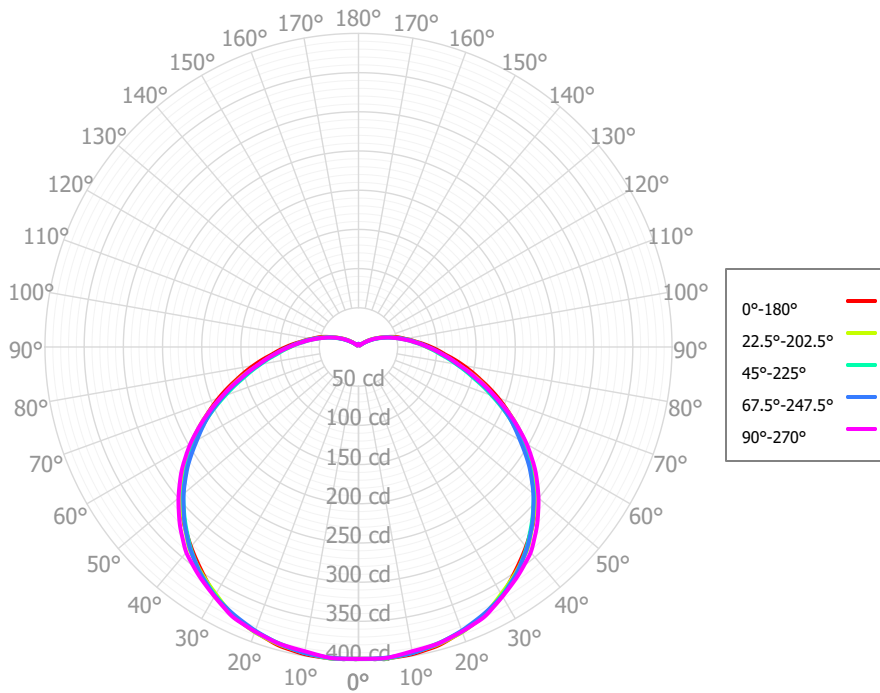
Full Beam Angle

0° - 180°	136°
90° - 270°	136°

IES File Header Contents

Keyword	Value
TEST	SP-00639_1
TESTLAB	VLS-245-981
MANUFAC	Spectrum Lighting
ISSUEDATE	1/31/2018
UPDATE	3/9/2020
LUMCAT	BL1317GV 27L 35K EX FGG MB GW
LUMINAIRE	Nom. 13" diam. x 17"H, Balston LED Pendant
OTHER	Tapered spun aluminum shade, Gloss White finish
OTHER	Nom. 11" diam. frosted glass globe, hemisphere-shape diffuser
OTHER	Radial pattern metal guard, Matte black finish
OTHER	136.1 Degree Beam Angle
OTHER	10.3% 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	81
_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°	39.84	2.35%	90.00° - 100.00°	79.67	4.69%
10.00° - 20.00°	110.85	6.53%	100.00° - 110.00°	49.51	2.92%
20.00° - 30.00°	174.14	10.25%	100.00° - 120.00°	75.95	4.47%
30.00° - 40.00°	220.09	12.96%	120.00° - 130.00°	10.87	0.64%
40.00° - 50.00°	243.37	14.33%	130.00° - 140.00°	3.46	0.20%
50.00° - 60.00°	240.95	14.19%	140.00° - 150.00°	1.73	0.10%
60.00° - 70.00°	212.14	12.49%	150.00° - 160.00°	1.33	0.08%
70.00° - 80.00°	164.98	9.71%	160.00° - 170.00°	0.90	0.05%
80.00° - 90.00°	117.75	6.93%	170.00° - 180.00°	0.35	0.02%
0.00° - 90.00°	1,524.11	89.74%	0.00° - 180.00°	1,698.37	100.00%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	397.92	397.92	397.92	397.92	397.92
2.50°	398.38	398.37	398.44	397.95	398.18
5.00°	398.85	398.82	398.95	397.97	398.44
7.50°	398.31	397.49	397.60	397.23	396.32
10.00°	397.78	396.16	396.25	396.48	394.19
12.50°	395.95	394.44	393.84	394.25	392.96
15.00°	394.11	392.73	391.44	392.01	391.73
17.50°	390.18	389.91	388.94	388.53	389.03
20.00°	386.26	387.10	386.43	385.06	386.34
22.50°	382.50	382.72	382.17	380.80	383.12
25.00°	378.74	378.33	377.91	376.55	379.90
27.50°	372.40	371.17	371.83	371.69	373.70
30.00°	366.07	364.01	365.74	366.84	367.50
32.50°	357.53	357.32	358.95	359.36	361.47
35.00°	348.98	350.62	352.15	351.89	355.44
37.50°	340.78	343.14	342.91	343.32	348.67
40.00°	332.57	335.66	333.66	334.76	341.90
42.50°	323.99	325.17	323.45	324.48	332.01
45.00°	315.41	314.69	313.23	314.21	322.11
47.50°	304.52	305.91	302.51	302.75	310.94
50.00°	293.63	297.13	291.78	291.29	299.76
52.50°	282.32	284.83	279.59	278.67	287.62
55.00°	271.00	272.52	267.40	266.06	275.47
57.50°	258.42	259.53	254.03	252.08	261.68
60.00°	245.84	246.54	240.65	238.10	247.89
62.50°	231.42	232.14	226.29	225.23	232.64
65.00°	216.99	217.74	211.94	212.36	217.39
67.50°	203.15	201.27	196.48	197.91	201.67
70.00°	189.31	184.79	181.01	183.46	185.94
72.50°	175.20	171.21	166.44	168.95	171.13
75.00°	161.10	157.62	151.87	154.44	156.31
77.50°	148.45	143.30	139.42	141.54	143.11
80.00°	135.80	128.97	126.96	128.63	129.90
82.50°	123.43	117.96	115.79	118.06	118.76
85.00°	111.07	106.95	104.63	107.50	107.62
87.50°	101.72	97.05	95.96	98.29	98.03
90.00°	92.37	87.14	87.30	89.09	88.43
92.50°	83.39	80.07	79.15	81.05	80.04
95.00°	74.41	73.00	71.00	73.00	71.64
97.50°	67.26	65.75	64.37	65.98	64.47
100.00°	60.10	58.49	57.75	58.96	57.30
102.50°	54.67	52.68	51.54	52.49	51.33
105.00°	49.23	46.87	45.33	46.02	45.36
107.50°	42.85	41.73	39.92	40.79	40.24
110.00°	36.48	36.58	34.51	35.56	35.12
112.50°	31.47	31.98	29.66	30.93	30.62

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	1,980	1,980	1,980	1,980	1,914	1,914	1,914	1,914	1,790	1,790	1,790	1,677	1,677	1,677	1,573	1,573	1,524
	1	1,759	1,659	1,569	1,487	1,693	1,602	1,520	1,446	1,496	1,429	1,368	1,399	1,345	1,295	1,309	1,266	1,223
	2	1,581	1,419	1,286	1,174	1,517	1,371	1,249	1,146	1,281	1,179	1,092	1,197	1,114	1,040	1,120	1,052	991
	3	1,430	1,231	1,077	954	1,371	1,190	1,048	934	1,113	993	895	1,041	941	857	975	891	820
	4	1,302	1,081	919	795	1,248	1,046	896	779	980	851	749	918	809	720	861	769	692
	5	1,193	959	796	675	1,143	929	777	663	872	740	639	819	705	616	770	672	594
	6	1,098	859	698	582	1,053	833	682	573	784	652	554	738	623	535	695	595	516
	7	1,016	775	619	509	975	752	605	501	710	580	485	670	555	470	632	532	455
	8	943	704	553	450	906	684	542	443	647	521	430	612	500	417	579	479	404
	9	880	644	499	402	846	627	490	396	594	471	385	563	453	374	534	435	363
	10	824	592	454	362	793	577	445	357	548	429	347	521	413	337	495	398	328

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	13.2 fc	27.2 ft
6.5 ft	9.4 fc	32.2 ft
7.5 ft	7.1 fc	37.1 ft
8.0 ft	6.2 fc	39.6 ft
10.0 ft	4.0 fc	49.5 ft
12.0 ft	2.8 fc	59.4 ft
14.0 ft	2.0 fc	69.3 ft
16.0 ft	1.6 fc	79.2 ft
20.0 ft	1.0 fc	99.0 ft
24.0 ft	0.7 fc	118.8 ft
28.0 ft	0.5 fc	138.7 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	6,443	6,443	6,443
45.00°	4,958	4,924	5,064
55.00°	4,630	4,569	4,707
65.00°	4,200	4,102	4,208
75.00°	3,727	3,513	3,616
85.00°	3,317	3,125	3,214

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	22.1	23.7	22.6	24.2	24.7	22.0	23.5	22.5	24.0	24.6
	3H	-	-	-	-	-	-	-	-	-	-
	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
4H	2H	-	-	-	-	-	-	-	-	-	-
	3H	-	-	-	-	-	-	-	-	-	-
	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
8H	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
12H	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-

Corrected UGR values based on total output lumens

SHR = 1.0