

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

RG1817GV 37L35K EX CD MWI

Nom 18 inch diam round Banco Pendant decorative luminaire

Test Number

SP-00556_1_M-37L

Test Date

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

Summary of Results

Power

Input Watts	26 W
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Lumen Output

Output Lumens	2782
Efficacy	107.02 lm/W

Luminous Dimensions

0° - 180° Size	-1.5
90° - 270° Size	-1.5
Height	0

Spacing Criterion

Two luminaires, plane 0°	1.27
Two luminaires, plane 90°	1.29
Four luminaires	1.26

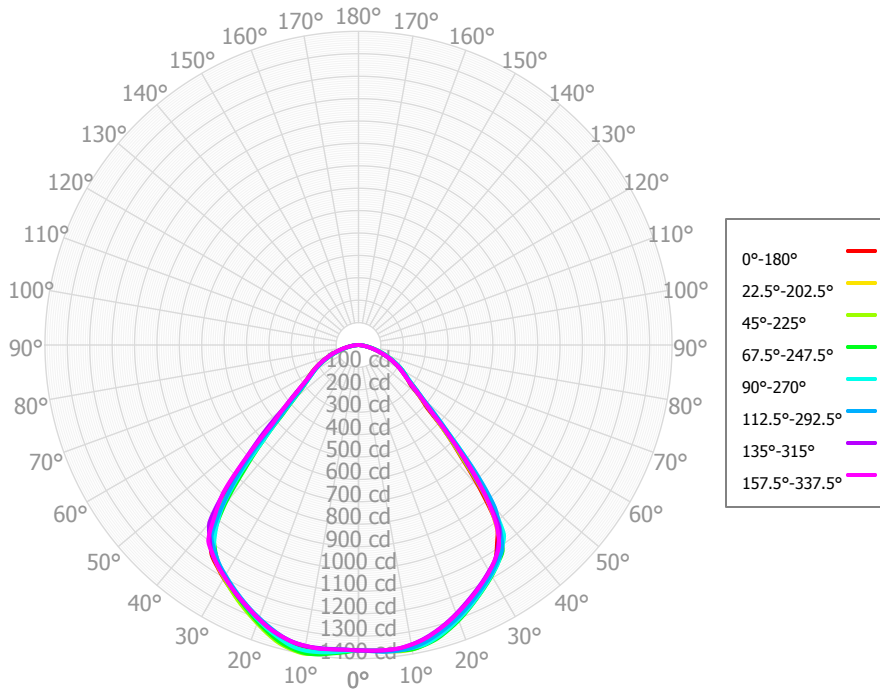
Full Beam Angle

0° - 180°	87°
90° - 270°	87°

IES File Header Contents

Keyword	Value
TEST	SP-00556_1_M-37L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
ISSUEDATE	4/30/2019
UPDATE	6/12/2019
LUMCAT	RG1817GV 37L35K EX CD MWI
LUMINAIRE	Nom 18 inch diam round Banco Pendant decorative luminaire
LAMPCAT	N/A
LAMP	N/A; CRI: 80
OTHER	CCT Output Multipliers; 27K x 0.97, 30K x 0.99, 40K x 1.03
OTHER	Total luminaire wattages is approximate
OTHER	This report prepared by Spectrum Lighting, scaled from 55L

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	133.09	4.78%	90.00° - 100.00°	0.08	0.00%
10.00° - 20.00°	380.08	13.66%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	574.39	20.64%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	685.55	24.64%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	479.70	17.24%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	257.91	9.27%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	172.76	6.21%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	83.29	2.99%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	15.63	0.56%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	2,782.40	100.00%	0.00° - 180.00°	2,782.48	100.00%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°	112.50°	135.00°	157.50°	180.00°	202.50°	225.00°	247.50°	270.00°	292.50°	315.00°	337.50°	360.00°
0.00°	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96	1,363.96
2.50°	1,364.94	1,365.18	1,366.79	1,365.12	1,364.28	1,361.38	1,361.90	1,362.14	1,363.81	1,367.27	1,370.88	1,373.09	1,368.41	1,368.76	1,367.68	1,364.96	1,364.94
5.00°	1,368.44	1,373.18	1,371.19	1,370.10	1,368.37	1,362.49	1,363.71	1,364.29	1,367.98	1,374.20	1,381.12	1,382.48	1,377.39	1,375.28	1,368.91	1,367.35	1,368.44
7.50°	1,372.90	1,377.25	1,379.62	1,375.10	1,374.82	1,366.91	1,364.67	1,367.42	1,371.44	1,383.66	1,390.48	1,393.52	1,383.34	1,376.52	1,367.19	1,366.66	1,372.90
10.00°	1,366.38	1,377.90	1,380.10	1,380.12	1,373.82	1,365.02	1,364.90	1,363.87	1,373.89	1,385.58	1,399.41	1,396.05	1,385.10	1,373.01	1,358.47	1,358.46	1,366.38
12.50°	1,354.99	1,367.91	1,370.24	1,371.27	1,369.38	1,358.54	1,357.66	1,358.81	1,369.78	1,381.83	1,391.53	1,386.50	1,377.09	1,360.71	1,344.34	1,346.50	1,354.99
15.00°	1,335.20	1,349.96	1,353.25	1,357.28	1,352.06	1,342.64	1,344.98	1,343.67	1,357.41	1,366.37	1,376.69	1,369.73	1,357.14	1,341.63	1,325.15	1,326.85	1,335.20
17.50°	1,312.29	1,326.37	1,328.26	1,334.35	1,329.80	1,320.86	1,325.72	1,326.68	1,339.26	1,343.35	1,351.42	1,343.89	1,333.81	1,319.49	1,302.50	1,304.99	1,312.29
20.00°	1,285.81	1,299.06	1,301.86	1,308.68	1,303.70	1,296.97	1,302.37	1,301.58	1,314.84	1,316.70	1,322.44	1,315.71	1,306.93	1,295.27	1,276.76	1,279.29	1,285.81
22.50°	1,258.23	1,270.37	1,274.07	1,279.42	1,276.39	1,271.93	1,277.37	1,275.39	1,288.17	1,287.99	1,293.41	1,284.99	1,279.13	1,268.10	1,249.21	1,252.91	1,258.23
25.00°	1,228.96	1,240.90	1,244.84	1,249.24	1,247.06	1,244.72	1,251.48	1,249.58	1,259.40	1,258.46	1,264.38	1,254.66	1,250.51	1,239.21	1,221.89	1,225.49	1,228.96
27.50°	1,199.26	1,210.75	1,214.39	1,219.67	1,217.21	1,216.49	1,223.85	1,223.81	1,231.19	1,228.53	1,232.89	1,224.69	1,221.63	1,210.88	1,194.70	1,197.46	1,199.26
30.00°	1,168.22	1,180.28	1,182.40	1,190.23	1,187.61	1,187.47	1,195.40	1,196.69	1,203.43	1,199.34	1,200.84	1,194.06	1,192.55	1,182.85	1,165.98	1,168.62	1,168.22
32.50°	1,136.92	1,144.12	1,149.27	1,156.54	1,158.08	1,158.15	1,167.38	1,169.51	1,174.02	1,170.46	1,168.99	1,162.87	1,159.88	1,151.07	1,136.61	1,134.54	1,136.92
35.00°	1,078.83	1,105.59	1,093.38	1,122.22	1,113.78	1,120.03	1,139.54	1,136.61	1,143.43	1,129.24	1,137.17	1,116.63	1,124.74	1,117.68	1,088.32	1,094.54	1,078.83
37.50°	1,016.81	1,006.57	1,022.75	1,032.28	1,067.17	1,078.97	1,091.27	1,102.01	1,086.12	1,083.84	1,062.18	1,059.71	1,048.96	1,040.46	1,033.22	1,011.60	1,016.81
40.00°	853.67	886.72	877.91	936.50	919.27	956.35	1,036.22	1,000.18	1,012.56	952.57	981.30	928.50	949.24	947.56	888.35	886.97	853.67
42.50°	679.54	721.21	692.06	751.65	760.35	811.69	882.83	893.53	860.97	797.09	796.59	752.25	789.14	780.51	717.10	736.30	679.54
45.00°	546.20	542.91	552.09	560.97	603.67	648.63	703.03	702.06	667.75	636.84	602.51	600.73	597.84	591.80	574.44	563.24	546.20
47.50°	415.51	441.60	433.57	462.44	447.16	481.66	561.06	519.88	530.72	475.52	492.56	462.36	475.64	476.42	438.47	443.99	415.51
50.00°	354.06	358.22	359.98	366.84	378.27	396.30	427.09	430.29	418.99	395.29	386.62	377.58	383.53	378.91	364.26	364.52	354.06
52.50°	294.49	310.98	304.61	319.94	312.39	324.81	354.79	346.24	348.84	328.84	333.37	316.88	324.97	322.58	301.76	308.68	294.49
55.00°	267.26	270.18	271.69	274.09	280.81	285.80	292.89	299.80	294.33	291.03	281.55	279.77	278.58	274.00	268.87	267.82	267.26
57.50°	240.13	245.39	246.30	250.95	249.54	250.71	261.42	256.98	262.59	256.96	256.84	251.50	249.63	247.74	240.11	238.80	240.13
60.00°	215.16	222.65	221.73	227.62	226.14	225.97	233.59	233.37	238.16	231.03	232.03	225.52	226.06	224.57	214.90	216.38	215.16
62.50°	190.13	196.45	197.39	202.02	202.50	202.01	208.53	209.21	212.34	205.79	205.58	200.27	201.32	198.16	190.02	192.00	190.13
65.00°	164.41	169.93	171.78	176.44	175.83	176.85	183.68	182.73	186.15	178.73	179.11	173.71	176.30	171.43	163.71	166.70	164.41
67.50°	138.86	144.87	145.88	150.98	149.68	151.65	158.23	156.94	160.22	151.71	152.46	146.83	149.76	145.67	137.45	141.34	138.86
70.00°	114.12	119.90	120.83	125.87	126.01	126.51	132.98	132.87	134.38	126.51	126.74	121.78	123.17	120.13	113.26	115.96	114.12
72.50°	90.44	95.24	96.58	101.58	102.49	102.55	108.83	108.90	109.28	102.33	103.37	97.40	99.67	95.65	90.05	92.41	90.44
75.00°	68.10	73.37	75.00	79.69	79.15	80.88	86.55	85.01	85.82	80.17	80.99	75.06	77.46	72.67	68.83	70.37	68.10
77.50°	50.11	54.20	55.28	59.36	59.34	60.96	66.04	65.06	64.60	60.27	59.70	55.90	56.95	51.45	50.15	51.13	50.11
80.00°	33.74	36.40	37.50	40.10	41.40	42.53	46.86	46.29	45.60	41.96	41.02	38.78	39.20	35.87	32.83	33.85	33.74
82.50°	18.96	20.74	22.31	24.26	25.47	26.51	30.11	29.03	29.53	25.82	26.04	22.82	22.70	21.95	17.48	18.39	18.96
85.00°	6.99	8.56	9.79	12.13	12.17	13.60	15.77	14.40	15.73	12.69	11.88	9.12	10.40	8.61	6.54	7.07	6.99
87.50°	1.24	1.58	2.03	2.37	3.41	3.29	4.29	4.16	4.84	2.79	2.89	2.23	2.33	1.59	1.44	1.20	1.24
90.00°	1.07	0.43	0.93	0.48	0.77	0.41	0.38	0.57	0.44	0.83	0.41	0.74	0.45	0.60	0.64	0.55	1.07
92.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	0	3,312	3,312	3,312	3,312	3,235	3,235	3,235	3,235	3,092	3,092	3,092	2,960	2,960	2,960	2,839	2,839	2,782
	1	3,088	2,982	2,886	2,800	3,016	2,920	2,833	2,755	2,804	2,733	2,669	2,698	2,641	2,588	2,600	2,554	2,502
	2	2,861	2,673	2,517	2,386	2,793	2,622	2,479	2,358	2,527	2,408	2,305	2,439	2,340	2,253	2,358	2,277	2,205
	3	2,651	2,404	2,214	2,063	2,587	2,363	2,187	2,045	2,284	2,134	2,010	2,211	2,083	1,976	2,143	2,036	1,944
	4	2,459	2,174	1,965	1,806	2,400	2,139	1,944	1,794	2,073	1,904	1,771	2,011	1,866	1,748	1,954	1,829	1,726
	5	2,286	1,975	1,758	1,598	2,232	1,946	1,742	1,590	1,890	1,711	1,573	1,838	1,681	1,558	1,790	1,653	1,542
	6	2,129	1,803	1,584	1,426	2,080	1,778	1,571	1,421	1,731	1,546	1,409	1,686	1,523	1,398	1,645	1,500	1,387
	7	1,988	1,653	1,435	1,283	1,944	1,632	1,425	1,279	1,591	1,406	1,271	1,554	1,387	1,262	1,518	1,369	1,254
	8	1,861	1,522	1,309	1,162	1,821	1,504	1,300	1,159	1,469	1,284	1,153	1,437	1,269	1,147	1,406	1,254	1,141
	9	1,747	1,407	1,199	1,059	1,710	1,391	1,192	1,056	1,361	1,179	1,051	1,333	1,166	1,047	1,306	1,154	1,042
	10	1,643	1,306	1,104	969	1,610	1,292	1,098	968	1,266	1,087	964	1,241	1,077	960	1,218	1,066	957

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	45.1 fc	10.2 ft
6.5 ft	32.3 fc	12.1 ft
7.5 ft	24.2 fc	13.9 ft
8.0 ft	21.3 fc	14.8 ft
10.0 ft	13.6 fc	18.5 ft
12.0 ft	9.5 fc	22.3 ft
14.0 ft	7.0 fc	26.0 ft
16.0 ft	5.3 fc	29.7 ft
20.0 ft	3.4 fc	37.1 ft
24.0 ft	2.4 fc	44.5 ft
28.0 ft	1.7 fc	51.9 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	8,308	8,308	8,308
45.00°	4,705	4,756	5,200
55.00°	2,838	2,885	2,982
65.00°	2,370	2,476	2,534
75.00°	1,603	1,765	1,863
85.00°	488	684	850

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	12.9	14.3	13.3	14.6	14.9	13.2	14.6	13.5	14.9	15.2
	3H	14.3	15.6	14.7	15.9	16.3	14.7	15.9	15.0	16.2	16.6
	4H	14.7	15.9	15.1	16.2	16.6	15.1	16.3	15.5	16.6	17.0
	6H	14.9	16.0	15.3	16.4	16.8	15.4	16.4	15.8	16.8	17.2
	8H	15.0	16.0	15.4	16.4	16.8	15.4	16.4	15.8	16.8	17.2
	12H	14.9	15.9	15.4	16.3	16.7	15.4	16.4	15.9	16.8	17.2
4H	2H	13.4	14.6	13.8	14.9	15.3	13.7	14.9	14.1	15.2	15.6
	3H	15.0	16.0	15.4	16.4	16.8	15.4	16.3	15.8	16.8	17.2
	4H	15.5	16.4	16.0	16.8	17.2	15.9	16.8	16.4	17.2	17.7
	6H	15.8	16.5	16.3	17.0	17.5	16.3	17.0	16.8	17.5	17.9
	8H	15.8	16.5	16.3	17.0	17.4	16.4	17.0	16.8	17.5	18.0
	12H	15.8	16.4	16.3	16.9	17.4	16.4	17.0	16.9	17.5	17.9
8H	4H	15.7	16.4	16.1	16.8	17.3	16.1	16.8	16.6	17.3	17.7
	6H	16.0	16.6	16.5	17.1	17.6	16.6	17.1	17.1	17.6	18.1
	8H	16.1	16.6	16.6	17.1	17.6	16.7	17.2	17.2	17.7	18.2
	12H	16.1	16.6	16.6	17.0	17.6	16.7	17.2	17.2	17.7	18.2
12H	4H	15.7	16.3	16.2	16.8	17.2	16.1	16.8	16.6	17.2	17.7
	6H	16.0	16.5	16.6	17.0	17.5	16.6	17.1	17.1	17.6	18.1
	8H	16.1	16.6	16.6	17.1	17.6	16.7	17.2	17.2	17.7	18.2

Corrected UGR values based on total output lumens

SHR = 1.0