

## **Indoor Distribution Test Report**

# **Spectrum Lighting Inc.**

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## **Spectrum Lighting Photometric Lab**

### **Luminaire**

SJ1GV 15L 35K XX FJ1 MW

Nom 3" diam x 6" tall frosted glass jar Wallaston Series Subway luminaire

### **Test Number**

SP-01054\_M-15L

### **Test Date**

2/13/2020

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

### Summary of Results

#### Power

Input Watts	10 W
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#### Lumen Output

Output Lumens	1027
Efficacy	102.74 lm/W

#### Luminous Dimensions

0° - 180° Size	-0.34
90° - 270° Size	-0.34
Height	0.68

#### Spacing Criterion

Two luminaires, plane 0°	1.24
Two luminaires, plane 90°	1.24
Four luminaires	1.54

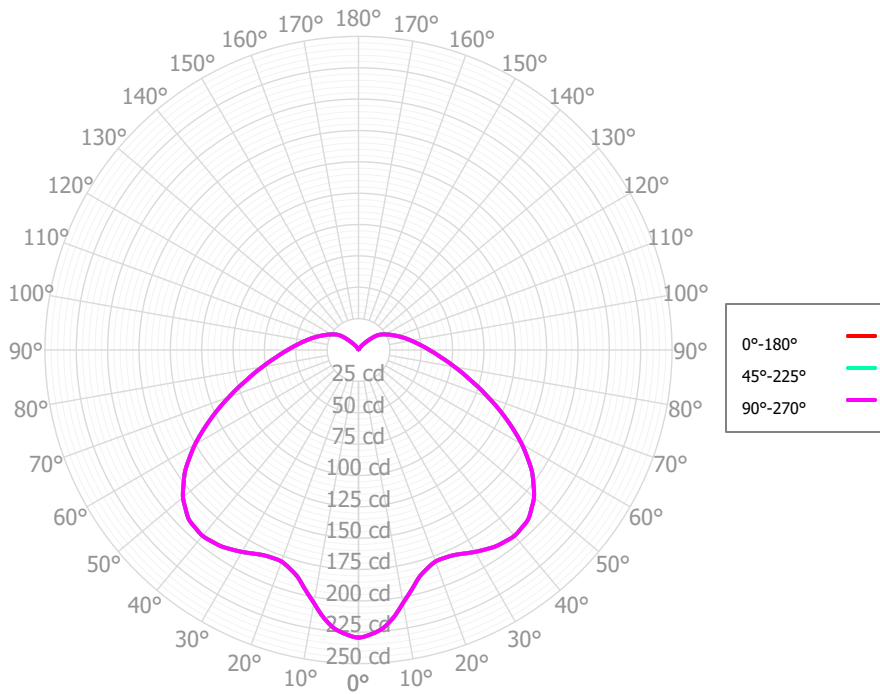
#### Full Beam Angle

0° - 180°	138°
90° - 270°	138°

### IES File Header Contents

Keyword	Value
TEST	SP-01054_M-15L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	2/13/2020
ISSUEDATE	2/17/2020
LUMCAT	SJ1GV 15L 35K XX FJ1 MW
LUMINAIRE	Nom 3" diam x 6" tall frosted glass jar Wallaston Series Subway luminaire
OTHER	Ceiling mount
OTHER	Beam angle: 138 degrees
OTHER	Uplight 15%
OTHER	Downlight 85%
LAMP	27L GV
LAMPCAT	N/A
OTHER	This data is appropriate for a free-standing frosted glass jar
OTHER	CCT Output Multipliers: 27K x 0.97, 30K x 0.99, 40K x 1.03
OTHER	Total luminaire watts is approximate
OTHER	This report prepared by Spectrum Lighting, scaled from 27L

### Candela Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	21.52	2.09%	90.00° - 100.00°	53.80	5.23%
10.00° - 20.00°	53.26	5.18%	100.00° - 110.00°	39.83	3.87%
20.00° - 30.00°	84.04	8.18%	100.00° - 120.00°	68.29	6.64%
30.00° - 40.00°	119.69	11.64%	120.00° - 130.00°	19.10	1.86%
40.00° - 50.00°	146.75	14.28%	130.00° - 140.00°	8.53	0.83%
50.00° - 60.00°	150.14	14.60%	140.00° - 150.00°	2.52	0.25%
60.00° - 70.00°	128.80	12.53%	150.00° - 160.00°	0.57	0.06%
70.00° - 80.00°	98.26	9.56%	160.00° - 170.00°	0.20	0.02%
80.00° - 90.00°	72.48	7.05%	170.00° - 180.00°	0.07	0.01%
0.00° - 90.00°	874.94	85.11%	0.00° - 180.00°	1,028.01	100.00%

### Candela Distribution

	0.00°	45.00°	90.00°
0.00°	229.34	229.34	229.34
2.50°	226.93	226.93	226.93
5.00°	222.76	222.76	222.76
7.50°	214.94	214.94	214.94
10.00°	204.82	204.82	204.82
12.50°	195.81	195.81	195.81
15.00°	187.40	187.40	187.40
17.50°	182.61	182.61	182.61
20.00°	179.51	179.51	179.51
22.50°	179.40	179.40	179.40
25.00°	180.46	180.46	180.46
27.50°	182.95	182.95	182.95
30.00°	185.91	185.91	185.91
32.50°	188.52	188.52	188.52
35.00°	191.04	191.04	191.04
37.50°	192.36	192.36	192.36
40.00°	193.42	193.42	193.42
42.50°	192.48	192.48	192.48
45.00°	191.20	191.20	191.20
47.50°	187.12	187.12	187.12
50.00°	182.71	182.71	182.71
52.50°	175.87	175.87	175.87
55.00°	168.85	168.85	168.85
57.50°	159.71	159.71	159.71
60.00°	150.49	150.49	150.49
62.50°	140.22	140.22	140.22
65.00°	129.97	129.97	129.97
67.50°	119.94	119.94	119.94
70.00°	109.99	109.99	109.99
72.50°	101.03	101.03	101.03
75.00°	92.24	92.24	92.24
77.50°	84.98	84.98	84.98
80.00°	77.87	77.87	77.87
82.50°	71.75	71.75	71.75
85.00°	65.86	65.86	65.86
87.50°	61.10	61.10	61.10
90.00°	56.53	56.53	56.53
92.50°	52.70	52.70	52.70
95.00°	49.02	49.02	49.02
97.50°	45.82	45.82	45.82
100.00°	42.77	42.77	42.77
102.50°	40.12	40.12	40.12
105.00°	37.53	37.53	37.53
107.50°	35.06	35.06	35.06
110.00°	32.70	32.70	32.70
112.50°	30.54	30.54	30.54

### Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

<b>RCR</b>	<b>pfc</b>	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	0%
	<b>pcc</b>	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	10%	0%
	<b>pw</b>	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	30%
	<b>0</b>	1,187	1,187	1,187	1,187	1,142	1,142	1,142	1,142	1,057	1,057	1,057	980	980	980	908	908	908	875
	<b>1</b>	1,052	990	935	885	1,006	951	901	856	878	838	801	811	779	749	749	724	700	694
	<b>2</b>	942	843	762	693	899	810	736	673	748	686	633	690	640	596	637	596	560	571
	<b>3</b>	850	728	634	559	810	700	614	544	646	574	514	597	537	486	551	501	459	479
	<b>4</b>	772	637	538	462	735	612	521	450	566	489	427	523	458	405	484	429	383	410
	<b>5</b>	705	563	463	389	672	542	449	380	502	422	361	465	397	343	430	372	326	356
	<b>6</b>	648	502	403	333	617	483	392	325	449	369	310	417	348	295	386	327	281	313
	<b>7</b>	598	451	356	289	570	435	346	282	405	327	270	377	308	257	350	291	245	279
	<b>8</b>	554	408	317	254	529	395	308	248	368	292	237	343	276	227	320	261	217	250
	<b>9</b>	516	372	284	225	493	360	277	220	337	263	211	315	249	202	294	236	193	227
	<b>10</b>	482	342	257	201	461	331	251	197	310	239	189	290	227	181	272	215	174	207

### Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	7.6 fc	28.4 ft
6.5 ft	5.4 fc	33.6 ft
7.5 ft	4.1 fc	38.7 ft
8.0 ft	3.6 fc	41.3 ft
10.0 ft	2.3 fc	51.6 ft
12.0 ft	1.6 fc	62.0 ft
14.0 ft	1.2 fc	72.3 ft
16.0 ft	0.9 fc	82.6 ft
20.0 ft	0.6 fc	103.3 ft
24.0 ft	0.4 fc	123.9 ft
28.0 ft	0.3 fc	144.6 ft

### Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
<b>0.00°</b>	27,189	27,189	27,189
<b>45.00°</b>	9,039	9,039	9,039
<b>55.00°</b>	7,527	7,527	7,527
<b>65.00°</b>	5,643	5,643	5,643
<b>75.00°</b>	4,023	4,023	4,023
<b>85.00°</b>	2,976	2,976	2,976

### 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	-	-	-	-	-	-	-	-	-	-
	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