

## **Indoor Distribution Test Report**

# **Spectrum Lighting Inc.**

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## **Spectrum Lighting Photometric Lab**

### **Luminaire**

ME1314DGV 27L 35K EX TF2

Espresso Downlight Pendant with regressed 3 inch domed diffuser

### **Test Number**

SP-00255\_53\_M-27L

### **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	1934
Efficacy	107.46 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

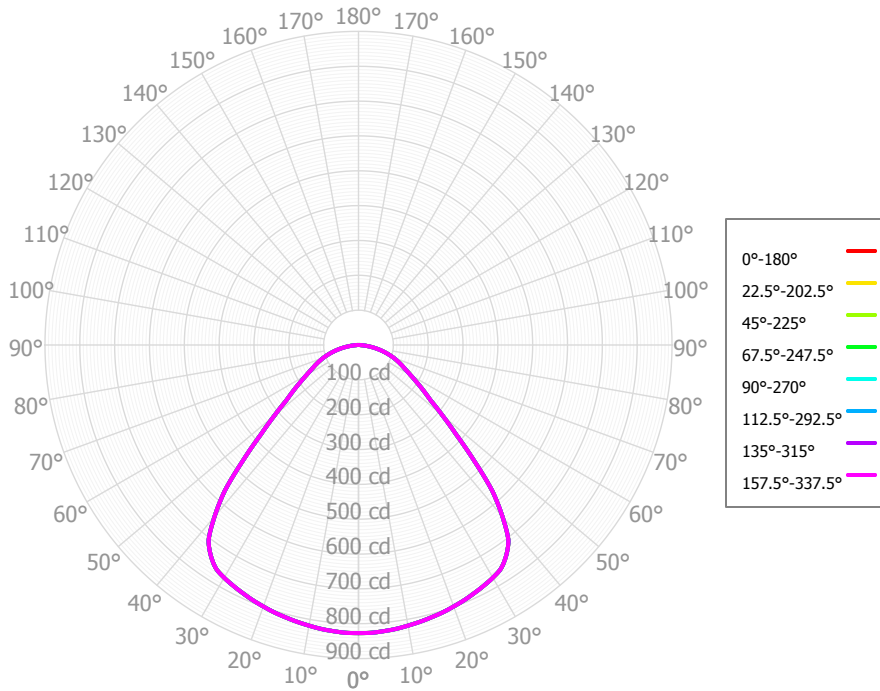
#### Full Beam Angle

0° - 180°	93°
90° - 270°	93°

### IES File Header Contents

Keyword	Value
TEST	SP-00255_53_M-27L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
ISSUEDATE	4/1/2019
UPDATE	5/31/2019
LUMCAT	ME1314DGV 27L 35K EX TF2
LUMINAIRE	Espresso Downlight Pendant with regressed 3 inch domed diffuser
LAMPCAT	N/A
LAMP	N/A
OTHER	Beam Angle: 93.2 degrees
OTHER	CCT Output Multipliers: 27K x 0.97, 30K x 0.98, 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°	79.72	4.12%	90.00° - 100.00°	0.61	0.03%
10.00° - 20.00°	228.98	11.84%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	363.18	18.78%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	455.76	23.56%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	362.79	18.76%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	206.93	10.70%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	135.99	7.03%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	80.02	4.14%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	20.38	1.05%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	1,933.75	99.97%	0.00° - 180.00°	1,934.36	100.00%



### 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%	0%
	<b>pcc</b>	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	0%
	<b>pw</b>	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	<b>0</b>	2,303	2,303	2,303	2,303	2,249	2,249	2,249	2,249	2,149	2,149	2,149	2,057	2,057	2,057	1,973	1,973	1,934
	<b>1</b>	2,134	2,055	1,983	1,919	2,083	2,011	1,947	1,888	1,930	1,877	1,829	1,856	1,813	1,773	1,787	1,753	1,716
	<b>2</b>	1,967	1,828	1,713	1,617	1,919	1,793	1,687	1,598	1,726	1,637	1,561	1,664	1,590	1,526	1,607	1,546	1,492
	<b>3</b>	1,815	1,634	1,495	1,383	1,769	1,605	1,475	1,371	1,549	1,438	1,348	1,497	1,403	1,325	1,449	1,370	1,303
	<b>4</b>	1,677	1,469	1,317	1,201	1,635	1,444	1,302	1,192	1,398	1,274	1,177	1,354	1,248	1,161	1,314	1,222	1,146
	<b>5</b>	1,554	1,328	1,170	1,054	1,515	1,307	1,159	1,048	1,268	1,137	1,038	1,231	1,117	1,027	1,197	1,097	1,016
	<b>6</b>	1,443	1,207	1,048	934	1,408	1,189	1,039	930	1,156	1,022	923	1,124	1,006	915	1,095	990	908
	<b>7</b>	1,344	1,102	945	835	1,312	1,087	938	832	1,058	924	827	1,032	911	821	1,006	898	816
	<b>8</b>	1,255	1,011	858	752	1,226	998	852	750	974	841	746	950	830	742	929	819	737
	<b>9</b>	1,176	932	782	682	1,149	921	778	680	899	768	677	879	759	674	860	751	670
	<b>10</b>	1,104	862	718	621	1,080	852	714	620	834	706	617	816	698	615	800	691	613

### Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	27.3 fc	11.6 ft
6.5 ft	19.6 fc	13.7 ft
7.5 ft	14.7 fc	15.8 ft
8.0 ft	12.9 fc	16.9 ft
10.0 ft	8.3 fc	21.1 ft
12.0 ft	5.7 fc	25.3 ft
14.0 ft	4.2 fc	29.6 ft
16.0 ft	3.2 fc	33.8 ft
20.0 ft	2.1 fc	42.2 ft
24.0 ft	1.4 fc	50.7 ft
28.0 ft	1.1 fc	59.1 ft

### Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
<b>0.00°</b>	8,423	8,423	8,423
<b>45.00°</b>	6,753	6,753	6,753
<b>55.00°</b>	4,035	4,035	4,035
<b>65.00°</b>	3,292	3,292	3,292
<b>75.00°</b>	2,987	2,987	2,987
<b>85.00°</b>	1,867	1,867	1,867

### UGR CIE 190:2010

<b>Ceiling reflectance</b>		<b>0.7</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>	<b>0.7</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>
<b>Wall reflectance</b>		<b>0.5</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>
<b>Plane reflectance</b>		<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
<b>Room dimensions</b>		<b>Viewed crosswise</b>					<b>Viewed endwise</b>				
<b>2H</b>	<b>2H</b>	14.4	15.9	14.8	16.2	16.5	14.4	15.9	14.8	16.2	16.5
	<b>3H</b>	16.1	17.4	16.5	17.7	18.1	16.1	17.4	16.5	17.7	18.1
	<b>4H</b>	16.7	18.0	17.1	18.3	18.7	16.7	18.0	17.1	18.3	18.7
	<b>6H</b>	17.2	18.3	17.6	18.7	19.1	17.2	18.3	17.6	18.7	19.1
	<b>8H</b>	17.3	18.4	17.8	18.8	19.2	17.3	18.4	17.8	18.8	19.2
	<b>12H</b>	17.4	18.4	17.8	18.8	19.2	17.4	18.4	17.8	18.8	19.2
<b>4H</b>	<b>2H</b>	15.0	16.2	15.4	16.5	16.9	15.0	16.2	15.4	16.5	16.9
	<b>3H</b>	16.9	17.9	17.3	18.3	18.7	16.9	17.9	17.3	18.3	18.7
	<b>4H</b>	17.6	18.6	18.1	19.0	19.4	17.6	18.6	18.1	19.0	19.4
	<b>6H</b>	18.2	19.0	18.7	19.5	19.9	18.2	19.0	18.7	19.5	19.9
	<b>8H</b>	18.4	19.1	18.9	19.6	20.1	18.4	19.1	18.9	19.6	20.1
	<b>12H</b>	18.5	19.2	19.0	19.6	20.1	18.5	19.2	19.0	19.6	20.1
<b>8H</b>	<b>4H</b>	17.9	18.7	18.4	19.1	19.6	17.9	18.7	18.4	19.1	19.6
	<b>6H</b>	18.6	19.2	19.1	19.7	20.2	18.6	19.2	19.1	19.7	20.2
	<b>8H</b>	18.9	19.4	19.4	19.9	20.4	18.9	19.4	19.4	19.9	20.4
	<b>12H</b>	19.0	19.5	19.5	20.0	20.6	19.0	19.5	19.5	20.0	20.6
<b>12H</b>	<b>4H</b>	17.9	18.6	18.4	19.1	19.6	17.9	18.6	18.4	19.1	19.6
	<b>6H</b>	18.7	19.2	19.2	19.7	20.2	18.7	19.2	19.2	19.7	20.2
	<b>8H</b>	19.0	19.4	19.5	19.9	20.5	19.0	19.4	19.5	19.9	20.5

Corrected UGR values based on total output lumens

SHR = 1.0