

## **Indoor Distribution Test Report**

# **Spectrum Lighting Inc.**

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## **Spectrum Lighting Photometric Lab**

### **Luminaire**

SLO3IND8 11L 35K LW xx xx MW  
Specline Linear Pendant, 1.8" aperture x 8' Long, Matte White Refl

### **Test Number**

SP-01436\_1

### **Test Date**

6/3/2022

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

### Summary of Results

#### Power

Input Watts	68 W
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#### Lumen Output

Output Lumens	6385
Efficacy	93.9 lm/W

#### Luminous Dimensions

0° - 180° Size	0.15
90° - 270° Size	8
Height	0

#### Spacing Criterion

Two luminaires, plane 0°	1.88
Two luminaires, plane 90°	1.2
Four luminaires	1.7

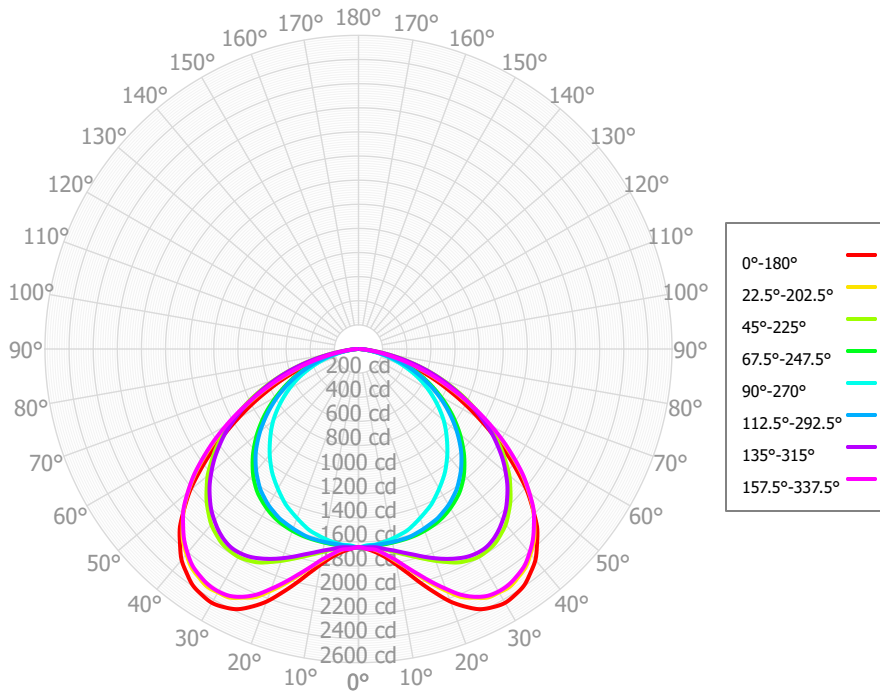
#### Full Beam Angle

0° - 180°	118°
90° - 270°	73°

### IES File Header Contents

Keyword	Value
TEST	SP-01436_1
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/3/2022
ISSUEDATE	11/11/2022
LUMCAT	SLO3IND8 11L 35K LW xx xx MW
LUMINAIRE	Specline Linear Pendant, 1.8" aperture x 8' Long, Matte White Refl
OTHER	Wide Extruded Acrylic Lens, Batwing Distribution
OTHER	Data for 8' IND fixture, or 8' module for continuous ROW
OTHER	118 deg x 73 deg Beam Angle
LAMP	N/A, Min. 80 CRI
LAMPCAT	N/A
OTHER	Reference project SL473
OTHER	11L designation for Spectrum linear product indicates 798 Source Lm/Ft.
OTHER	CCT Output Multipliers: 40K x 1.02, 30K x 0.97
OTHER	Total Luminaire Watts is approximate
OTHER	This report prepared by Spectrum Lighting

### Candela Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	162.26	2.54%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	507.39	7.95%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	883.97	13.84%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	1172.31	18.36%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	1269.43	19.88%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	1129.80	17.69%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	798.27	12.50%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	389.58	6.10%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	72.25	1.13%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	6385.25	100.00%	0.00° - 180.00°	6385.25	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°	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78	1644.78
2.50°	1660.92	1644.91	1647.01	1640.50	1629.55	1638.25	1646.82	1659.52	1660.92	1644.91	1647.01	1640.50	1629.55	1638.25	1646.82	1659.52	1660.92
5.00°	1693.82	1675.65	1658.48	1637.68	1627.35	1631.10	1651.09	1672.57	1693.82	1675.65	1658.48	1637.68	1627.35	1631.10	1651.09	1672.57	1693.82
7.50°	1744.20	1719.39	1677.66	1634.52	1614.81	1627.37	1673.05	1719.01	1744.20	1719.39	1677.66	1634.52	1614.81	1627.37	1673.05	1719.01	1744.20
10.00°	1816.75	1784.86	1708.96	1630.36	1598.26	1624.92	1697.66	1776.38	1816.75	1784.86	1708.96	1630.36	1598.26	1624.92	1697.66	1776.38	1816.75
12.50°	1906.49	1856.86	1743.92	1626.04	1578.74	1620.42	1730.07	1854.32	1906.49	1856.86	1743.92	1626.04	1578.74	1620.42	1730.07	1854.32	1906.49
15.00°	2012.95	1948.72	1783.24	1621.40	1558.40	1615.36	1765.30	1937.24	2012.95	1948.72	1783.24	1621.40	1558.40	1615.36	1765.30	1937.24	2012.95
17.50°	2120.64	2044.50	1825.24	1614.49	1526.41	1601.24	1806.54	2027.25	2120.64	2044.50	1825.24	1614.49	1526.41	1601.24	1806.54	2027.25	2120.64
20.00°	2229.26	2135.54	1869.70	1604.08	1492.40	1585.54	1846.38	2116.30	2229.26	2135.54	1869.70	1604.08	1492.40	1585.54	1846.38	2116.30	2229.26
22.50°	2312.54	2226.01	1912.21	1590.90	1458.58	1567.71	1884.03	2204.28	2312.54	2226.01	1912.21	1590.90	1458.58	1567.71	1884.03	2204.28	2312.54
25.00°	2381.06	2275.88	1953.31	1574.47	1424.77	1549.69	1916.84	2267.24	2381.06	2275.88	1953.31	1574.47	1424.77	1549.69	1916.84	2267.24	2381.06
27.50°	2413.80	2323.01	1976.85	1551.88	1381.44	1522.06	1943.64	2308.72	2413.80	2323.01	1976.85	1551.88	1381.44	1522.06	1943.64	2308.72	2413.80
30.00°	2431.06	2331.35	1990.77	1523.75	1337.86	1493.84	1956.66	2322.35	2431.06	2331.35	1990.77	1523.75	1337.86	1493.84	1956.66	2322.35	2431.06
32.50°	2417.53	2336.61	1984.82	1491.72	1293.93	1457.42	1956.50	2317.72	2417.53	2336.61	1984.82	1491.72	1293.93	1457.42	1956.50	2317.72	2417.53
35.00°	2394.12	2310.22	1970.84	1456.93	1249.16	1419.64	1936.95	2294.88	2394.12	2310.22	1970.84	1456.93	1249.16	1419.64	1936.95	2294.88	2394.12
37.50°	2341.72	2278.90	1937.92	1411.24	1197.63	1370.66	1903.18	2262.80	2341.72	2278.90	1937.92	1411.24	1197.63	1370.66	1903.18	2262.80	2341.72
40.00°	2283.09	2219.92	1899.37	1359.71	1145.42	1320.36	1858.47	2206.50	2283.09	2219.92	1899.37	1359.71	1145.42	1320.36	1858.47	2206.50	2283.09
42.50°	2191.31	2153.96	1842.31	1300.14	1089.90	1263.48	1807.59	2141.21	2191.31	2153.96	1842.31	1300.14	1089.90	1263.48	1807.59	2141.21	2191.31
45.00°	2095.39	2062.80	1781.66	1237.38	1034.57	1203.94	1743.88	2057.40	2095.39	2062.80	1781.66	1237.38	1034.57	1203.94	1743.88	2057.40	2095.39
47.50°	1960.08	1963.50	1708.09	1168.55	979.82	1135.70	1674.72	1968.82	1960.08	1963.50	1708.09	1168.55	979.82	1135.70	1674.72	1968.82	1960.08
50.00°	1822.21	1843.60	1633.15	1097.96	922.67	1065.69	1593.65	1848.08	1822.21	1843.60	1633.15	1097.96	922.67	1065.69	1593.65	1848.08	1822.21
52.50°	1656.59	1713.04	1539.63	1022.85	859.94	991.54	1508.98	1721.87	1656.59	1713.04	1539.63	1022.85	859.94	991.54	1508.98	1721.87	1656.59
55.00°	1490.74	1561.97	1444.90	946.89	796.19	916.62	1413.54	1573.87	1490.74	1561.97	1444.90	946.89	796.19	916.62	1413.54	1573.87	1490.74
57.50°	1322.42	1407.58	1333.86	866.29	730.65	840.35	1315.96	1423.99	1322.42	1407.58	1333.86	866.29	730.65	840.35	1315.96	1423.99	1322.42
60.00°	1156.06	1248.37	1222.09	785.22	665.32	762.90	1203.51	1266.83	1156.06	1248.37	1222.09	785.22	665.32	762.90	1203.51	1266.83	1156.06
62.50°	1001.17	1092.87	1103.41	704.17	600.30	683.88	1089.29	1109.69	1001.17	1092.87	1103.41	704.17	600.30	683.88	1089.29	1109.69	1001.17
65.00°	849.89	941.48	983.73	623.13	531.56	605.23	966.43	954.60	849.89	941.48	983.73	623.13	531.56	605.23	966.43	954.60	849.89
67.50°	712.58	793.16	858.55	542.35	458.98	526.99	843.24	801.19	712.58	793.16	858.55	542.35	458.98	526.99	843.24	801.19	712.58
70.00°	580.40	647.52	732.59	461.50	387.92	447.41	721.36	661.22	580.40	647.52	732.59	461.50	387.92	447.41	721.36	661.22	580.40
72.50°	462.01	514.26	603.89	380.00	318.08	366.74	598.93	524.00	462.01	514.26	603.89	380.00	318.08	366.74	598.93	524.00	462.01
75.00°	349.37	389.27	476.31	299.47	250.63	288.74	470.48	399.50	349.37	389.27	476.31	299.47	250.63	288.74	470.48	399.50	349.37
77.50°	248.04	279.46	351.53	224.14	184.65	212.40	344.35	281.58	248.04	279.46	351.53	224.14	184.65	212.40	344.35	281.58	248.04
80.00°	159.65	177.26	234.88	151.88	127.49	145.95	231.35	184.10	159.65	177.26	234.88	151.88	127.49	145.95	231.35	184.10	159.65
82.50°	90.96	105.16	133.69	90.27	74.42	84.11	129.63	101.61	90.96	105.16	133.69	90.27	74.42	84.11	129.63	101.61	90.96
85.00°	43.32	44.47	60.54	41.16	42.12	46.94	68.70	53.62	43.32	44.47	60.54	41.16	42.12	46.94	68.70	53.62	43.32
87.50°	20.11	21.72	27.60	22.59	17.02	18.08	22.09	20.48	20.11	21.72	27.60	22.59	17.02	18.08	22.09	20.48	20.11
90.00°	8.48	9.01	9.23	9.89	9.71	9.85	13.10	12.73	8.48	9.01	9.23	9.89	9.71	9.85	13.10	12.73	8.48

### 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>	7601	7601	7601	7601	7425	7425	7425	7425	7095	7095	7095	6793	6793	6793	6516	6516	6516	6385
	<b>1</b>	6957	6657	6388	6146	6783	6512	6267	6046	6241	6039	5855	5991	5827	5675	5762	5630	5507	5510
	<b>2</b>	6316	5789	5354	4988	6147	5668	5268	4928	5441	5103	4812	5231	4949	4702	5037	4804	4597	4698
	<b>3</b>	5742	5063	4538	4119	5583	4962	4474	4082	4770	4352	4008	4593	4237	3938	4429	4128	3869	4035
	<b>4</b>	5241	4464	3896	3461	5092	4379	3847	3437	4217	3754	3388	4067	3666	3341	3927	3581	3295	3502
	<b>5</b>	4803	3968	3384	2953	4667	3895	3347	2937	3759	3274	2903	3631	3205	2871	3512	3139	2839	3070
	<b>6</b>	4421	3554	2972	2554	4297	3492	2942	2542	3376	2885	2518	3267	2829	2495	3165	2776	2473	2717
	<b>7</b>	4086	3205	2634	2234	3974	3153	2611	2225	3053	2564	2208	2960	2520	2191	2872	2477	2175	2426
	<b>8</b>	3792	2910	2356	1974	3690	2865	2336	1968	2780	2298	1955	2699	2262	1942	2624	2227	1930	2183
	<b>9</b>	3533	2658	2122	1761	3440	2619	2106	1756	2545	2075	1746	2476	2045	1736	2410	2016	1726	1978
	<b>10</b>	3303	2441	1926	1582	3219	2408	1912	1579	2343	1886	1571	2283	1861	1563	2225	1836	1556	1803

### Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	54.4 fc	18.4 ft
6.5 ft	38.9 fc	21.7 ft
7.5 ft	29.2 fc	25.1 ft
8.0 ft	25.7 fc	26.7 ft
10.0 ft	16.4 fc	33.4 ft
12.0 ft	11.4 fc	40.1 ft
14.0 ft	8.4 fc	46.8 ft
16.0 ft	6.4 fc	53.5 ft
20.0 ft	4.1 fc	66.9 ft
24.0 ft	2.9 fc	80.2 ft
28.0 ft	2.1 fc	93.6 ft

### Average Luminaire Luminance [cd/m<sup>2</sup>]

	0.00°	45.00°	90.00°
<b>0.00°</b>	14754	14754	14754
<b>45.00°</b>	26581	22601	13124
<b>55.00°</b>	23313	22596	12451
<b>65.00°</b>	18039	20879	11282
<b>75.00°</b>	12108	16507	8686
<b>85.00°</b>	4458	6231	4335

### 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>	24.1	25.7	24.4	26.0	26.3	20.4	22.1	20.8	22.4	22.7
	<b>3H</b>	25.3	26.8	25.7	27.1	27.5	22.0	23.5	22.4	23.8	24.2
	<b>4H</b>	25.7	27.1	26.1	27.4	27.8	22.5	23.9	22.9	24.2	24.6
	<b>6H</b>	25.8	27.1	26.2	27.5	27.9	22.7	24.1	23.2	24.4	24.8
	<b>8H</b>	25.9	27.1	26.3	27.5	27.9	22.8	24.0	23.2	24.4	24.8
	<b>12H</b>	25.9	27.0	26.3	27.4	27.9	22.8	24.0	23.2	24.4	24.8
<b>4H</b>	<b>2H</b>	24.6	26.0	25.0	26.4	26.7	22.1	23.5	22.5	23.8	24.2
	<b>3H</b>	26.1	27.3	26.5	27.7	28.1	23.7	24.8	24.1	25.2	25.6
	<b>4H</b>	26.6	27.6	27.0	28.0	28.5	24.2	25.2	24.6	25.6	26.1
	<b>6H</b>	26.8	27.7	27.3	28.2	28.6	24.5	25.4	24.9	25.8	26.3
	<b>8H</b>	26.8	27.7	27.3	28.2	28.6	24.5	25.4	25.0	25.8	26.3
	<b>12H</b>	26.9	27.6	27.3	28.1	28.6	24.6	25.3	25.0	25.8	26.3
<b>8H</b>	<b>4H</b>	26.8	27.7	27.3	28.1	28.6	24.7	25.6	25.2	26.0	26.5
	<b>6H</b>	27.1	27.8	27.6	28.3	28.8	25.1	25.8	25.6	26.3	26.8
	<b>8H</b>	27.2	27.8	27.7	28.3	28.8	25.2	25.8	25.7	26.3	26.8
	<b>12H</b>	27.2	27.8	27.7	28.3	28.8	25.2	25.8	25.7	26.3	26.8
<b>12H</b>	<b>4H</b>	26.8	27.6	27.3	28.0	28.5	24.7	25.5	25.2	26.0	26.5
	<b>6H</b>	27.1	27.8	27.6	28.2	28.8	25.2	25.8	25.7	26.3	26.8
	<b>8H</b>	27.2	27.8	27.7	28.3	28.8	25.3	25.8	25.8	26.3	26.9

Corrected UGR values based on total output energy  
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0