Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

SL03IND4 25L 35K LW xx xx MW

Specline Linear Pendant, 1.8" aperture x 4' Long, Matte White Refl

Test Number

SP-01430_3

Test Date

6/3/2022

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

Summary of Results

Power

Input Watts	74 W

Lumen Output

Output Lumens	6798
Efficacy	91.87 lm/W

Luminous Dimensions

0° - 180° Size	0.15
90° - 270° Size	4
Height	0

Spacing Criterion

Two luminaires, plane 0°	1.9
Two luminaires, plane 90°	1.21
Four luminaires	1.72

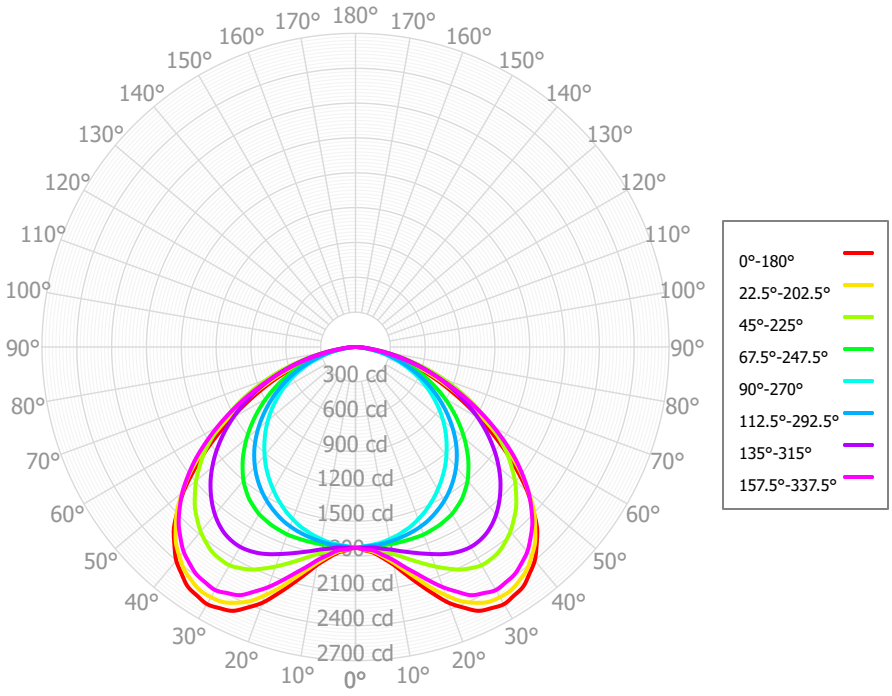
Full Beam Angle

0° - 180°	119°
90° - 270°	74°

IES File Header Contents

Keyword	Value
TEST	SP-01430_3
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/3/2022
ISSUEDATE	11/1/2022
LUMCAT	SL03IND4 25L 35K LW xx xx MW
LUMINAIRE	Specline Linear Pendant, 1.8" aperture x 4' Long, Matte White Refl
OTHER	Wide Extruded Acrylic Lens, Batwing Distribution
OTHER	Data for 4' IND fixture, or 4' 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	25L designation for Spectrum linear product indicates 1700 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°	170.73	2.51%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	533.76	7.85%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	930.94	13.69%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	1235.89	18.18%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	1342.42	19.75%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	1201.65	17.68%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	860.37	12.66%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	435.38	6.40%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	86.94	1.28%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	6798.09	100.00%	0.00° - 180.00°	6798.09	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°	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64	1729.64
2.50°	1751.86	1747.64	1731.57	1722.80	1717.11	1720.91	1730.63	1745.27	1751.86	1747.64	1731.57	1722.80	1717.11	1720.91	1730.63	1745.27	1751.86
5.00°	1778.25	1770.57	1746.01	1720.67	1708.48	1717.05	1733.52	1759.19	1778.25	1770.57	1746.01	1720.67	1708.48	1717.05	1733.52	1759.19	1778.25
7.50°	1835.04	1819.91	1770.22	1722.05	1699.31	1711.89	1751.57	1806.54	1835.04	1819.91	1770.22	1722.05	1699.31	1711.89	1751.57	1806.54	1835.04
10.00°	1906.05	1886.62	1806.49	1724.01	1680.74	1701.71	1771.96	1861.39	1906.05	1886.62	1806.49	1724.01	1680.74	1701.71	1771.96	1861.39	1906.05
12.50°	2004.61	1969.99	1850.33	1723.45	1661.82	1690.73	1800.99	1938.07	2004.61	1969.99	1850.33	1723.45	1661.82	1690.73	1800.99	1938.07	2004.61
15.00°	2113.53	2067.20	1901.75	1722.61	1637.39	1677.47	1831.02	2018.02	2113.53	2067.20	1901.75	1722.61	1637.39	1677.47	1831.02	2018.02	2113.53
17.50°	2228.07	2175.15	1955.79	1720.43	1612.14	1662.57	1863.90	2109.30	2228.07	2175.15	1955.79	1720.43	1612.14	1662.57	1863.90	2109.30	2228.07
20.00°	2344.19	2274.47	2011.93	1718.13	1578.61	1644.08	1897.19	2201.54	2344.19	2274.47	2011.93	1718.13	1578.61	1644.08	1897.19	2201.54	2344.19
22.50°	2428.92	2368.42	2064.57	1707.84	1544.16	1622.13	1931.35	2280.78	2428.92	2368.42	2064.57	1707.84	1544.16	1622.13	1931.35	2280.78	2428.92
25.00°	2507.33	2430.41	2114.86	1697.12	1503.91	1593.99	1959.92	2358.61	2507.33	2430.41	2114.86	1697.12	1503.91	1593.99	1959.92	2358.61	2507.33
27.50°	2535.59	2476.03	2147.39	1679.88	1462.67	1563.22	1978.72	2389.62	2535.59	2476.03	2147.39	1679.88	1462.67	1563.22	1978.72	2389.62	2535.59
30.00°	2557.10	2488.30	2170.38	1661.19	1417.20	1528.70	1987.29	2417.46	2557.10	2488.30	2170.38	1661.19	1417.20	1528.70	1987.29	2417.46	2557.10
32.50°	2539.31	2487.22	2167.20	1630.44	1371.04	1490.05	1981.10	2405.20	2539.31	2487.22	2167.20	1630.44	1371.04	1490.05	1981.10	2405.20	2539.31
35.00°	2518.59	2458.26	2153.00	1597.26	1322.74	1446.63	1962.25	2389.50	2518.59	2458.26	2153.00	1597.26	1322.74	1446.63	1962.25	2389.50	2518.59
37.50°	2461.20	2420.81	2117.65	1551.25	1272.54	1399.03	1928.68	2348.27	2461.20	2420.81	2117.65	1551.25	1272.54	1399.03	1928.68	2348.27	2461.20
40.00°	2401.94	2357.65	2075.21	1501.67	1217.62	1347.40	1883.71	2301.96	2401.94	2357.65	2075.21	1501.67	1217.62	1347.40	1883.71	2301.96	2401.94
42.50°	2309.01	2288.83	2017.39	1438.81	1162.01	1290.89	1828.02	2231.10	2309.01	2288.83	2017.39	1438.81	1162.01	1290.89	1828.02	2231.10	2309.01
45.00°	2212.38	2189.06	1955.76	1373.18	1105.06	1230.58	1763.53	2153.74	2212.38	2189.06	1955.76	1373.18	1105.06	1230.58	1763.53	2153.74	2212.38
47.50°	2074.21	2084.46	1875.76	1299.57	1046.33	1164.19	1692.16	2053.87	2074.21	2084.46	1875.76	1299.57	1046.33	1164.19	1692.16	2053.87	2074.21
50.00°	1931.72	1946.82	1792.62	1223.75	984.86	1094.00	1610.64	1946.14	1931.72	1946.82	1792.62	1223.75	984.86	1094.00	1610.64	1946.14	1931.72
52.50°	1761.45	1806.21	1692.93	1143.00	921.27	1020.43	1522.71	1817.15	1761.45	1806.21	1692.93	1143.00	921.27	1020.43	1522.71	1817.15	1761.45
55.00°	1589.69	1644.71	1591.56	1060.85	855.00	945.12	1426.30	1680.26	1589.69	1644.71	1591.56	1060.85	855.00	945.12	1426.30	1680.26	1589.69
57.50°	1411.51	1482.46	1471.17	976.21	788.17	867.82	1325.63	1526.78	1411.51	1482.46	1471.17	976.21	788.17	867.82	1325.63	1526.78	1411.51
60.00°	1237.64	1312.85	1349.78	890.24	720.76	789.72	1217.24	1370.72	1237.64	1312.85	1349.78	890.24	720.76	789.72	1217.24	1370.72	1237.64
62.50°	1077.94	1144.18	1216.72	802.36	651.21	710.26	1105.81	1210.36	1077.94	1144.18	1216.72	802.36	651.21	710.26	1105.81	1210.36	1077.94
65.00°	923.32	988.32	1083.34	713.58	579.86	630.40	987.31	1052.04	923.32	988.32	1083.34	713.58	579.86	630.40	987.31	1052.04	923.32
67.50°	781.39	834.20	944.71	623.76	507.01	550.05	866.61	896.52	781.39	834.20	944.71	623.76	507.01	550.05	866.61	896.52	781.39
70.00°	644.27	692.61	805.84	534.03	433.13	469.58	742.92	746.33	644.27	692.61	805.84	534.03	433.13	469.58	742.92	746.33	644.27
72.50°	516.55	553.90	664.87	444.37	361.56	392.23	618.56	602.06	516.55	553.90	664.87	444.37	361.56	392.23	618.56	602.06	516.55
75.00°	396.23	429.59	524.98	356.36	291.28	315.36	495.67	466.78	396.23	429.59	524.98	356.36	291.28	315.36	495.67	466.78	396.23
77.50°	287.81	310.35	390.86	269.64	221.67	241.81	373.01	339.59	287.81	310.35	390.86	269.64	221.67	241.81	373.01	339.59	287.81
80.00°	191.37	209.08	263.10	190.54	152.36	168.56	262.10	229.28	191.37	209.08	263.10	190.54	152.36	168.56	262.10	229.28	191.37
82.50°	110.42	120.29	159.37	116.28	96.74	107.25	152.26	131.61	110.42	120.29	159.37	116.28	96.74	107.25	152.26	131.61	110.42
85.00°	54.03	64.80	73.13	63.63	45.73	46.93	83.85	68.11	54.03	64.80	73.13	63.63	45.73	46.93	83.85	68.11	54.03
87.50°	23.31	23.31	38.00	21.88	22.36	25.75	18.05	25.15	23.31	23.31	38.00	21.88	22.36	25.75	18.05	25.15	23.31
90.00°	7.38	11.83	12.03	7.33	6.18	5.91	10.86	8.53	7.38	11.83	12.03	7.33	6.18	5.91	10.86	8.53	7.38

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

	ρfc	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	0%
	ρcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	10%	0%
	ρw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	30%
	0	8093	8093	8093	8093	7905	7905	7905	7905	7553	7553	7553	7232	7232	7232	6937	6937	6937	6798
	1	7398	7075	6786	6525	7213	6921	6657	6418	6631	6414	6215	6365	6188	6024	6120	5978	5845	5851
	2	6711	6146	5678	5286	6531	6017	5587	5222	5774	5412	5099	5551	5248	4982	5344	5093	4870	4981
	3	6099	5371	4808	4359	5929	5263	4740	4319	5059	4611	4242	4870	4488	4167	4695	4371	4094	4273
	4	5565	4733	4125	3660	5406	4642	4073	3634	4470	3974	3582	4310	3880	3532	4161	3790	3484	3706
RCR	5	5099	4206	3581	3121	4954	4128	3542	3103	3982	3464	3068	3846	3391	3033	3719	3320	2999	3247
	6	4693	3766	3144	2697	4560	3700	3112	2684	3576	3051	2659	3460	2992	2635	3351	2936	2611	2873
	7	4337	3396	2786	2359	4217	3340	2761	2349	3234	2712	2331	3134	2664	2313	3041	2618	2295	2564
	8	4025	3083	2491	2084	3916	3035	2470	2077	2944	2430	2063	2858	2391	2050	2777	2353	2036	2307
	9	3749	2816	2244	1858	3651	2774	2227	1852	2696	2194	1842	2621	2162	1831	2551	2130	1821	2090
	10	3505	2586	2036	1669	3416	2550	2021	1665	2482	1994	1657	2417	1967	1649	2356	1941	1641	1905

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	57.2 fc	18.6 ft
6.5 ft	40.9 fc	22.0 ft
7.5 ft	30.7 fc	25.4 ft
8.0 ft	27.0 fc	27.1 ft
10.0 ft	17.3 fc	33.8 ft
12.0 ft	12.0 fc	40.6 ft
14.0 ft	8.8 fc	47.4 ft
16.0 ft	6.8 fc	54.1 ft
20.0 ft	4.3 fc	67.7 ft
24.0 ft	3.0 fc	81.2 ft
28.0 ft	2.2 fc	94.7 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	31029	31029	31029
45.00°	56130	49619	28036
55.00°	49721	49779	26742
65.00°	39194	45987	24615
75.00°	27464	36388	20190
85.00°	11122	15052	9412

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	26.7	28.3	27.0	28.6	29.0	23.2	24.8	23.5	25.2	25.5
	3H	28.0	29.5	28.4	29.8	30.2	24.8	26.3	25.1	26.6	27.0
	4H	28.4	29.8	28.8	30.1	30.5	25.3	26.7	25.7	27.1	27.4
	6H	28.6	29.9	29.0	30.3	30.7	25.6	27.0	26.1	27.3	27.7
	8H	28.6	29.9	29.1	30.3	30.7	25.7	27.0	26.1	27.4	27.8
	12H	28.6	29.8	29.1	30.2	30.6	25.7	26.9	26.2	27.3	27.8
4H	2H	27.2	28.6	27.6	29.0	29.4	24.7	26.2	25.1	26.5	26.9
	3H	28.8	30.0	29.2	30.4	30.8	26.4	27.6	26.8	28.0	28.4
	4H	29.3	30.4	29.7	30.8	31.2	27.0	28.0	27.4	28.4	28.9
	6H	29.6	30.5	30.1	31.0	31.4	27.3	28.3	27.8	28.7	29.2
	8H	29.7	30.5	30.1	31.0	31.4	27.4	28.3	27.9	28.7	29.2
	12H	29.7	30.5	30.2	30.9	31.4	27.5	28.2	27.9	28.7	29.2
8H	4H	29.5	30.4	30.0	30.8	31.3	27.5	28.4	28.0	28.8	29.3
	6H	29.9	30.6	30.4	31.1	31.6	28.0	28.7	28.5	29.2	29.7
	8H	30.0	30.6	30.5	31.2	31.6	28.1	28.7	28.6	29.2	29.7
	12H	30.0	30.6	30.6	31.1	31.7	28.2	28.7	28.7	29.2	29.8
12H	4H	29.5	30.3	30.0	30.8	31.3	27.5	28.3	28.0	28.8	29.3
	6H	29.9	30.6	30.5	31.1	31.6	28.1	28.7	28.6	29.2	29.7
	8H	30.1	30.6	30.6	31.1	31.7	28.2	28.8	28.7	29.3	29.8

Corrected UGR values based on total output energy
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0