

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
Fall River, MA 02721
+1.508.678.2303

Spectrum Lighting Photometric Lab

Luminaire

SLO3IND8 11L 35HK LW xx xx MW

Specline Linear Pendant, 1.8" aperture x 8' Long, Matte White Refl

Test Number

SP-01374_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
-------------	------

Lumen Output

Output Lumens	5604
Efficacy	82.41 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°	1.21
Four luminaires	1.69

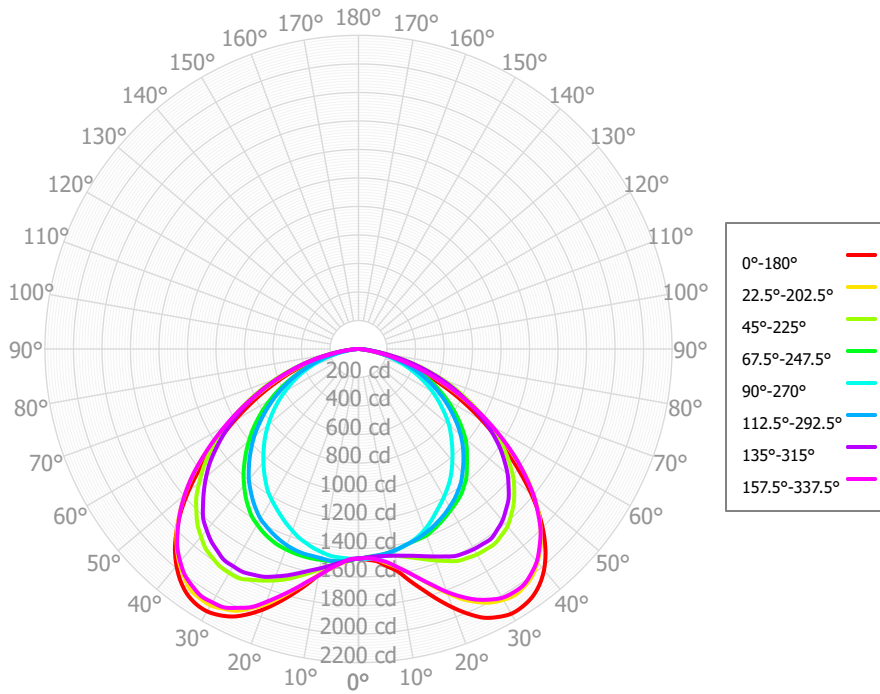
Full Beam Angle

0° - 180°	117°
90° - 270°	76°

IES File Header Contents

Keyword	Value
TEST	SP-01374_1
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/3/2022
ISSUEDATE	11/2/2022
LUMCAT	SLO3IND8 11L 35HK 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	76 Degree x 118 Degree Beam Angle
LAMP	N/A, Min. 90 CRI
LAMPCAT	N/A
OTHER	Reference project SL473
OTHER	11L designation for Spectrum linear product indicates 700 Source Lm/Ft.
OTHER	CCT Output Multipliers: 40HK x 1.01, 30HK x 0.98, 27HK x 0.95
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°	145.39	2.59%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	450.36	8.04%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	778.43	13.89%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	1034.31	18.46%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	1115.84	19.91%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	986.20	17.60%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	695.62	12.41%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	338.27	6.04%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	59.55	1.06%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	5603.96	100.00%	0.00° - 180.00°	5603.96	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°	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36	1470.36
2.50°	1480.64	1470.03	1460.46	1464.16	1475.06	1484.40	1483.53	1477.95	1486.49	1486.07	1487.02	1485.82	1472.69	1462.23	1463.44	1469.20	1480.64
5.00°	1495.92	1483.55	1457.67	1458.20	1470.87	1495.37	1505.56	1513.73	1508.45	1515.97	1508.61	1495.74	1469.18	1454.76	1461.36	1483.67	1495.92
7.50°	1537.99	1515.96	1463.01	1448.47	1461.04	1499.01	1533.90	1556.80	1557.06	1560.43	1534.56	1500.05	1465.29	1448.73	1464.58	1508.01	1537.99
10.00°	1584.14	1555.03	1472.50	1437.45	1440.63	1492.02	1563.49	1614.44	1611.15	1607.48	1569.07	1503.37	1450.54	1436.00	1472.66	1552.49	1584.14
12.50°	1666.43	1606.88	1492.78	1423.19	1421.73	1487.74	1593.68	1674.41	1695.04	1677.19	1611.18	1505.45	1433.78	1421.40	1485.84	1604.94	1666.43
15.00°	1750.17	1669.23	1517.22	1408.16	1405.00	1486.45	1628.79	1744.40	1778.95	1749.19	1652.82	1504.86	1411.54	1406.79	1502.62	1669.62	1750.17
17.50°	1841.06	1746.78	1547.19	1399.84	1381.96	1479.12	1665.66	1815.15	1863.01	1828.30	1694.16	1501.67	1388.75	1392.18	1524.61	1739.03	1841.06
20.00°	1929.84	1823.24	1578.66	1392.46	1351.92	1466.50	1698.44	1888.46	1943.14	1906.89	1728.34	1495.18	1356.94	1373.39	1549.47	1814.15	1929.84
22.50°	2011.41	1898.46	1609.86	1371.66	1315.71	1448.52	1730.16	1960.22	2013.20	1968.45	1758.86	1486.22	1324.78	1354.17	1575.88	1880.69	2011.41
25.00°	2080.70	1958.61	1641.03	1349.94	1274.25	1426.96	1747.52	2004.18	2071.16	2026.67	1786.96	1469.76	1289.59	1330.84	1602.90	1939.31	2080.70
27.50°	2120.28	2005.59	1653.58	1325.28	1235.76	1402.04	1762.58	2043.90	2106.35	2054.49	1814.12	1449.06	1254.46	1307.23	1614.20	1982.98	2120.28
30.00°	2144.89	2032.50	1664.34	1300.65	1199.22	1375.42	1759.86	2052.53	2125.70	2077.08	1814.91	1422.22	1220.04	1279.32	1621.00	2016.09	2144.89
32.50°	2142.70	2046.01	1666.34	1276.38	1160.16	1336.69	1755.75	2055.41	2121.88	2073.21	1808.54	1392.73	1183.44	1250.84	1622.78	2025.04	2142.70
35.00°	2125.00	2032.60	1667.22	1250.71	1119.83	1293.35	1727.79	2031.89	2097.96	2059.27	1787.31	1349.46	1135.99	1217.05	1623.58	2020.68	2125.00
37.50°	2085.70	2005.68	1647.88	1215.47	1073.34	1245.78	1698.83	2000.89	2051.56	2011.83	1763.52	1301.91	1087.88	1181.24	1599.11	1989.20	2085.70
40.00°	2025.41	1953.40	1626.19	1177.12	1024.57	1197.09	1657.74	1946.82	1987.00	1957.45	1718.94	1248.61	1037.54	1135.21	1571.93	1946.71	2025.41
42.50°	1942.74	1891.52	1584.08	1125.80	975.52	1139.16	1613.17	1882.12	1906.82	1886.38	1672.35	1194.13	986.93	1088.76	1531.05	1880.52	1942.74
45.00°	1840.09	1807.96	1539.46	1075.96	926.38	1079.70	1542.74	1793.85	1805.64	1804.14	1608.89	1132.10	935.66	1040.86	1489.18	1807.54	1840.09
47.50°	1721.09	1718.69	1482.52	1030.33	877.72	1018.04	1471.42	1698.65	1690.29	1701.73	1544.12	1069.11	882.88	990.67	1428.42	1709.76	1721.09
50.00°	1583.90	1606.94	1420.40	979.32	829.14	956.19	1396.00	1591.63	1559.82	1591.31	1459.06	1003.68	827.43	934.88	1366.30	1607.12	1583.90
52.50°	1435.02	1491.43	1341.44	916.78	772.10	886.91	1315.99	1473.85	1421.67	1469.92	1372.76	937.99	771.46	876.24	1290.98	1483.22	1435.02
55.00°	1287.22	1350.82	1257.30	852.99	714.34	817.50	1221.79	1342.16	1279.52	1340.60	1275.62	865.62	714.78	812.46	1213.30	1357.02	1287.22
57.50°	1139.92	1207.92	1160.67	787.20	657.88	748.28	1126.19	1210.91	1135.88	1202.88	1175.94	792.90	656.47	748.47	1123.23	1219.81	1139.92
60.00°	999.20	1071.51	1059.97	720.02	601.26	678.88	1027.48	1080.12	1005.13	1069.82	1063.82	716.08	596.40	684.19	1029.95	1082.27	999.20
62.50°	860.79	935.27	952.01	651.14	541.00	608.05	925.93	953.18	877.84	940.60	952.42	638.39	537.44	619.00	925.24	945.86	860.79
65.00°	728.64	799.85	845.06	580.92	480.63	536.74	819.56	829.26	759.64	814.82	843.40	555.58	479.42	552.82	820.90	809.62	728.64
67.50°	598.06	665.19	739.49	509.40	419.33	463.12	710.59	709.72	642.98	691.19	733.28	474.06	418.88	483.45	717.47	674.98	598.06
70.00°	483.90	536.94	629.36	436.85	358.16	391.61	598.26	592.79	540.36	576.89	620.52	397.42	356.73	411.44	610.86	542.56	483.90
72.50°	372.28	412.68	514.39	363.54	297.60	326.81	491.85	484.06	438.96	466.99	508.64	321.92	292.16	339.54	498.36	421.86	372.28
75.00°	276.92	307.47	398.05	294.90	236.92	260.94	391.33	378.97	341.30	361.84	398.31	249.55	226.41	267.71	387.35	306.26	276.92
77.50°	182.73	207.94	280.60	228.88	175.86	192.66	294.24	278.57	244.46	258.39	294.52	180.98	167.90	201.92	278.46	208.86	182.73
80.00°	118.50	126.44	182.50	163.02	119.42	129.29	199.85	179.72	163.33	172.22	199.50	119.91	111.92	139.09	180.73	122.51	118.50
82.50°	56.61	59.99	96.39	97.22	73.58	74.49	119.93	110.11	86.73	90.26	119.27	68.61	68.19	85.06	95.27	63.92	56.61
85.00°	28.88	28.88	46.38	53.91	37.87	35.14	48.64	46.99	46.12	48.49	54.50	31.82	27.53	34.16	42.70	22.27	28.88
87.50°	4.60	8.35	13.62	17.44	19.40	16.22	19.52	25.30	11.80	12.69	19.63	10.07	14.29	16.39	17.87	12.01	4.60
90.00°	4.87	6.26	4.65	8.18	8.06	6.10	9.11	9.03	8.10	7.06	9.08	5.86	5.34	6.66	6.80	5.67	4.87

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%	10%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	0	6671	6671	6671	6671	6516	6516	6516	6516	6227	6227	6227	5962	5962	5962	5718	5718	5718
	1	6109	5847	5612	5401	5957	5720	5506	5312	5482	5306	5145	5263	5120	4987	5061	4946	4839
	2	5547	5087	4706	4387	5400	4981	4631	4334	4782	4487	4232	4598	4352	4135	4428	4224	4043
	3	5046	4451	3992	3625	4906	4362	3936	3592	4195	3829	3528	4039	3728	3466	3895	3632	3406
	4	4606	3926	3429	3048	4476	3851	3386	3027	3709	3305	2984	3578	3227	2943	3456	3153	2903
	5	4222	3491	2980	2603	4103	3427	2947	2588	3307	2884	2559	3196	2823	2530	3091	2765	2502
	6	3887	3127	2618	2252	3778	3074	2592	2241	2971	2541	2221	2876	2493	2200	2787	2446	2180
	7	3593	2822	2321	1971	3494	2776	2301	1963	2688	2260	1948	2606	2221	1933	2530	2183	1919
	8	3335	2562	2076	1743	3246	2523	2059	1737	2448	2026	1725	2377	1994	1714	2311	1963	1703
	9	3107	2341	1872	1555	3026	2307	1858	1550	2242	1830	1541	2181	1804	1533	2123	1778	1524
	10	2905	2150	1699	1398	2832	2121	1687	1394	2065	1664	1388	2011	1642	1381	1961	1620	1374

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	48.6 fc	18.1 ft
6.5 ft	34.8 fc	21.4 ft
7.5 ft	26.1 fc	24.7 ft
8.0 ft	23.0 fc	26.3 ft
10.0 ft	14.7 fc	32.9 ft
12.0 ft	10.2 fc	39.5 ft
14.0 ft	7.5 fc	46.1 ft
16.0 ft	5.7 fc	52.6 ft
20.0 ft	3.7 fc	65.8 ft
24.0 ft	2.6 fc	79.0 ft
28.0 ft	1.9 fc	92.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	13189	13189	13189
45.00°	23342	19529	11752
55.00°	20130	19662	11171
65.00°	15465	17936	10201
75.00°	9597	13795	8211
85.00°	2972	4773	3897

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	23.5	25.1	23.8	25.4	25.7	20.2	21.8	20.6	22.2	22.5
	3H	24.6	26.1	25.0	26.5	26.8	21.7	23.2	22.1	23.5	23.9
	4H	24.9	26.4	25.3	26.7	27.1	22.2	23.6	22.6	23.9	24.3
	6H	25.1	26.4	25.5	26.7	27.1	22.5	23.8	22.9	24.1	24.5
	8H	25.1	26.3	25.5	26.7	27.1	22.5	23.8	22.9	24.2	24.6
	12H	25.1	26.2	25.5	26.6	27.1	22.5	23.7	23.0	24.1	24.5
4H	2H	24.0	25.4	24.4	25.8	26.1	21.7	23.1	22.1	23.4	23.8
	3H	25.4	26.6	25.8	27.0	27.4	23.2	24.4	23.6	24.8	25.2
	4H	25.8	26.9	26.2	27.3	27.7	23.7	24.8	24.2	25.2	25.6
	6H	26.0	26.9	26.4	27.4	27.8	24.1	25.0	24.5	25.4	25.9
	8H	26.0	26.9	26.5	27.3	27.8	24.1	25.0	24.6	25.4	25.9
	12H	26.0	26.8	26.5	27.2	27.7	24.1	24.9	24.6	25.4	25.9
8H	4H	26.0	26.9	26.5	27.3	27.8	24.2	25.1	24.7	25.6	26.0
	6H	26.3	27.0	26.8	27.5	27.9	24.6	25.3	25.1	25.8	26.3
	8H	26.3	26.9	26.8	27.4	27.9	24.7	25.4	25.2	25.9	26.3
	12H	26.3	26.9	26.8	27.3	27.9	24.8	25.3	25.3	25.8	26.4
12H	4H	26.0	26.8	26.5	27.3	27.8	24.3	25.1	24.8	25.5	26.0
	6H	26.3	26.9	26.8	27.4	27.9	24.7	25.4	25.2	25.8	26.3
	8H	26.3	26.9	26.8	27.4	27.9	24.8	25.4	25.3	25.9	26.4

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0