Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
Fall River, MA 02721
+1.508.678.2303

Spectrum Lighting Photometric Lab

Luminaire

SL03IND4 25L 35HK DW xx xx MW

Specline Linear Pendant, 1.8" aperture x 2' Long, Matte White Refl

Test Number

SP-01369_3

Test Date

6/3/2022

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

© Spectrum Lighting

Summary of Results

Power

Input Watts	76 W

Lumen Output

Output Lumens	5190
Efficacy	68.29 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	1.25
Two luminaires, plane 90°	1.3
Four luminaires	1.37

Full Beam Angle

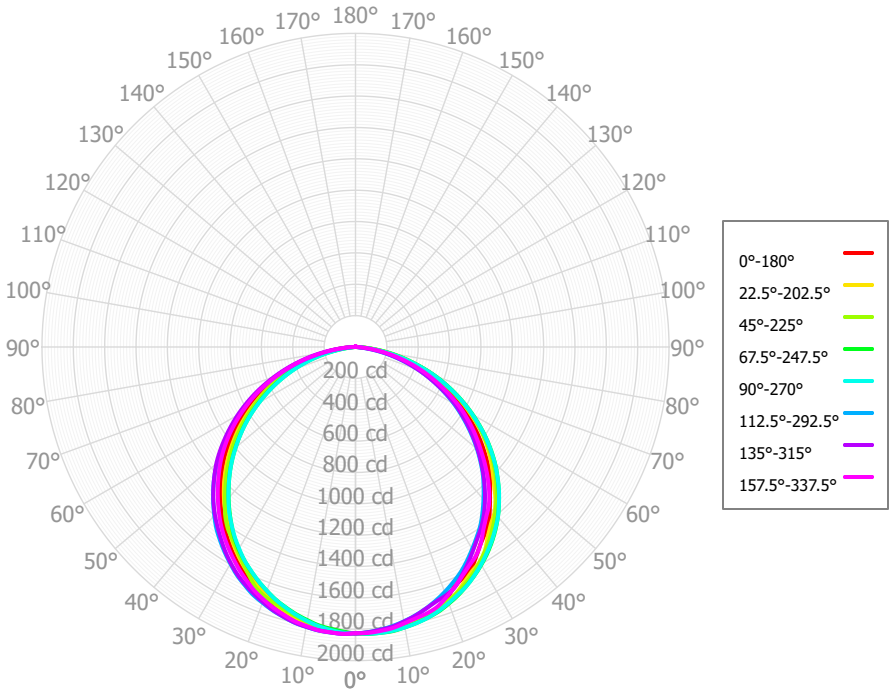
0° - 180°	112°
90° - 270°	111°

IES File Header Contents

Keyword	Value
TEST	SP-01369_3
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/3/2022
ISSUEDATE	11/2/2022
LUMCAT	SL03IND4 25L 35HK DW xx xx MW
LUMINAIRE	Specline Linear Pendant, 1.8" aperture x 2' Long, Matte White Refl
OTHER	Extruded Acrylic Lens, Diffuse Distribution
OTHER	Data for 2' IND fixture, or 2' module for continuous ROW
OTHER	111 Degree Beam Angle
LAMP	N/A, Min. 90 CRI
LAMPCAT	N/A
OTHER	Reference project SL473
OTHER	25L designation for Spectrum linear product indicates 1297 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

© Spectrum Lighting

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	175.56	3.38%	90.00° - 100.00°	3.26	0.06%
10.00° - 20.00°	495.75	9.55%	100.00° - 110.00°	2.81	0.05%
20.00° - 30.00°	750.92	14.47%	100.00° - 120.00°	5.56	0.11%
30.00° - 40.00°	904.64	17.43%	120.00° - 130.00°	2.58	0.05%
40.00° - 50.00°	937.17	18.06%	130.00° - 140.00°	2.33	0.04%
50.00° - 60.00°	843.08	16.24%	140.00° - 150.00°	2.05	0.04%
60.00° - 70.00°	635.02	12.23%	150.00° - 160.00°	1.46	0.03%
70.00° - 80.00°	350.82	6.76%	160.00° - 170.00°	0.93	0.02%
80.00° - 90.00°	78.81	1.52%	170.00° - 180.00°	0.31	0.01%
0.00° - 90.00°	5171.77	99.64%	0.00° - 180.00°	5190.25	100.00%

© Spectrum Lighting

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°	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69	1826.69
2.50°	1822.94	1826.31	1828.66	1832.09	1831.02	1830.83	1831.69	1831.83	1825.96	1824.47	1822.14	1816.66	1823.95	1820.77	1821.74	1825.85	1822.94
5.00°	1815.29	1819.82	1826.98	1830.38	1830.40	1828.47	1827.72	1827.15	1820.61	1815.43	1812.40	1804.59	1812.15	1809.99	1811.27	1818.44	1815.29
7.50°	1805.59	1812.40	1824.63	1827.71	1825.62	1823.60	1823.14	1821.86	1810.85	1805.79	1801.23	1791.50	1796.47	1795.94	1799.70	1808.79	1805.59
10.00°	1791.51	1798.91	1813.13	1815.62	1816.33	1813.05	1812.38	1807.23	1795.39	1787.81	1780.29	1769.47	1774.57	1777.26	1778.66	1790.43	1791.51
12.50°	1776.03	1786.24	1799.91	1802.90	1803.47	1800.89	1800.19	1791.99	1778.47	1768.87	1758.99	1746.57	1750.21	1754.84	1756.55	1773.28	1776.03
15.00°	1764.93	1776.83	1775.79	1786.82	1787.66	1781.66	1780.36	1768.40	1760.09	1743.52	1736.18	1719.39	1721.36	1728.41	1729.28	1759.36	1764.93
17.50°	1754.75	1761.49	1751.25	1768.39	1765.05	1761.15	1758.70	1744.13	1733.84	1716.45	1713.89	1690.32	1691.27	1697.73	1704.11	1737.07	1754.75
20.00°	1706.34	1729.41	1724.99	1741.73	1738.05	1735.89	1730.54	1714.74	1701.50	1681.98	1693.14	1655.02	1654.52	1663.48	1685.91	1697.92	1706.34
22.50°	1653.01	1693.56	1696.80	1712.97	1709.33	1710.15	1701.35	1683.48	1665.92	1645.58	1661.44	1618.10	1616.53	1625.73	1657.79	1656.51	1653.01
25.00°	1624.24	1650.00	1663.21	1679.02	1679.77	1675.17	1669.58	1644.06	1628.47	1603.57	1606.65	1577.39	1575.69	1585.77	1606.47	1611.72	1624.24
27.50°	1596.09	1612.14	1627.11	1643.34	1642.35	1639.61	1634.11	1603.41	1586.69	1560.09	1553.60	1534.96	1534.58	1538.75	1553.87	1571.68	1596.09
30.00°	1541.08	1582.96	1585.93	1604.51	1602.19	1596.37	1591.88	1559.12	1543.07	1513.58	1503.26	1489.55	1484.96	1488.38	1499.06	1537.08	1541.08
32.50°	1487.07	1537.61	1541.81	1562.69	1558.23	1552.81	1546.41	1513.66	1493.99	1464.53	1457.74	1438.65	1434.96	1438.57	1447.43	1486.74	1487.07
35.00°	1444.25	1473.00	1493.12	1516.77	1513.33	1506.33	1496.33	1465.60	1443.17	1411.43	1418.13	1380.38	1379.82	1388.97	1400.05	1422.27	1444.25
37.50°	1398.14	1420.60	1441.79	1467.04	1463.93	1458.16	1446.15	1414.30	1389.66	1357.36	1363.64	1320.68	1323.82	1330.56	1345.74	1368.89	1398.14
40.00°	1333.16	1379.29	1387.37	1413.22	1413.85	1401.68	1395.86	1357.75	1335.58	1302.12	1295.25	1259.51	1260.72	1270.02	1284.33	1323.08	1333.16
42.50°	1270.06	1321.30	1331.07	1354.77	1354.35	1344.29	1340.98	1300.06	1276.46	1243.35	1228.95	1197.27	1197.44	1209.37	1220.44	1262.81	1270.06
45.00°	1213.80	1251.77	1273.06	1292.52	1294.22	1283.96	1282.34	1240.97	1216.75	1181.31	1164.15	1134.19	1133.37	1148.70	1154.62	1195.15	1213.80
47.50°	1153.85	1188.03	1211.42	1228.47	1228.24	1220.93	1221.48	1181.02	1153.70	1116.23	1097.95	1067.82	1068.03	1080.67	1086.61	1123.89	1153.85
50.00°	1084.21	1127.38	1147.23	1163.30	1161.86	1151.66	1159.21	1120.24	1090.32	1048.93	1030.96	999.46	998.54	1012.12	1017.27	1051.24	1084.21
52.50°	1014.20	1064.10	1076.29	1092.44	1089.92	1080.89	1089.60	1054.83	1019.30	979.59	961.17	930.13	928.72	940.31	947.38	981.84	1014.20
55.00°	943.48	999.80	1001.78	1018.87	1017.17	1007.51	1016.49	986.04	948.33	909.12	890.23	860.37	858.17	868.54	877.25	913.29	943.48
57.50°	871.34	923.50	927.78	941.91	939.13	933.27	942.20	914.13	877.87	834.82	818.08	787.63	785.84	797.30	806.33	841.90	871.34
60.00°	797.16	843.94	853.97	863.79	860.65	857.92	867.50	840.49	806.48	758.98	745.60	713.93	710.50	725.58	735.16	770.03	797.16
62.50°	720.75	768.95	773.93	784.07	780.35	778.90	789.15	766.24	729.84	682.76	670.54	639.80	635.92	650.68	657.72	691.26	720.75
65.00°	641.83	694.77	692.14	703.98	699.86	696.15	709.92	691.73	653.23	606.43	595.00	565.57	562.35	576.11	578.91	611.87	641.83
67.50°	563.65	614.09	608.95	622.99	618.84	612.68	628.73	611.21	576.71	533.56	519.67	492.94	488.18	502.87	503.27	536.91	563.65
70.00°	486.12	532.79	525.50	541.86	536.82	528.64	547.26	528.91	500.58	461.34	444.36	420.51	413.40	428.85	428.03	461.98	486.12
72.50°	409.76	452.33	445.71	455.91	452.76	446.67	465.80	450.58	425.40	386.06	372.07	347.47	339.22	352.63	355.92	386.41	409.76
75.00°	334.18	372.08	366.24	369.71	368.92	365.92	384.34	373.01	350.75	310.48	299.83	274.39	265.51	277.84	284.00	311.41	334.18
77.50°	259.85	296.09	287.59	293.07	285.44	285.29	304.53	293.97	277.09	240.84	227.02	201.07	192.96	206.03	215.19	240.84	259.85
80.00°	186.14	220.45	209.11	216.36	205.68	204.70	225.11	214.77	205.81	171.70	155.43	128.93	121.09	136.67	146.65	171.92	186.14
82.50°	123.14	147.63	133.72	138.64	130.38	130.87	150.97	146.25	137.93	111.06	94.57	70.26	67.24	71.12	81.26	110.50	123.14
85.00°	64.00	80.35	63.13	66.70	70.68	59.23	81.22	79.10	80.65	53.84	40.40	19.00	21.40	28.12	23.74	56.49	64.00
87.50°	32.02	38.88	30.57	31.86	25.24	27.61	39.66	39.74	34.82	25.85	18.86	10.63	7.22	11.69	11.75	24.97	32.02
90.00°	6.75	6.85	3.52	3.88	4.99	4.60	5.84	4.17	10.93	2.52	2.42	3.84	3.05	3.54	2.45	2.96	6.75
92.50°	3.06	4.62	2.98	2.95	2.77	2.04	3.98	3.30	5.69	2.68	2.37	3.05	2.49	3.05	3.00	2.32	3.06
95.00°	2.82	3.04	2.69	2.32	2.24	2.00	2.56	2.61	3.44	2.74	2.38	2.57	2.68	2.54	3.18	2.03	2.82
97.50°	2.75	2.96	3.17	2.53	2.62	2.15	2.41	2.88	3.12	2.47	2.54	2.92	2.57	2.02	2.37	2.31	2.75
100.00°	2.69	3.06	3.28	2.70	2.59	2.30	2.26	2.93	2.69	2.36	2.54	3.16	2.41	1.95	2.02	2.52	2.69

© Spectrum Lighting

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	6174	6174	6174	6174	6029	6029	6029	6029	5757	5757	5757	5508	5508	5508	5279	5279	5279	5172
	1	5647	5401	5181	4983	5503	5281	5081	4900	5057	4892	4741	4851	4717	4593	4662	4554	4453	4455
	2	5133	4707	4354	4058	4995	4607	4283	4008	4419	4146	3911	4246	4018	3819	4086	3898	3730	3811
	3	4678	4131	3708	3371	4548	4048	3655	3339	3890	3554	3277	3744	3458	3217	3609	3367	3160	3291
	4	4282	3659	3202	2854	4161	3588	3162	2833	3455	3085	2791	3332	3011	2751	3217	2940	2712	2874
RCR	5	3937	3268	2800	2456	3826	3208	2769	2441	3096	2709	2412	2991	2651	2384	2893	2595	2356	2538
	6	3635	2941	2476	2142	3534	2891	2451	2131	2795	2403	2111	2706	2357	2090	2622	2312	2070	2263
	7	3370	2666	2210	1890	3278	2623	2190	1883	2541	2151	1867	2465	2114	1852	2393	2078	1837	2035
	8	3137	2433	1990	1685	3054	2396	1973	1679	2325	1942	1668	2259	1911	1656	2197	1881	1645	1844
	9	2930	2232	1805	1516	2856	2201	1791	1511	2140	1765	1502	2082	1739	1493	2028	1715	1484	1682
	10	2747	2059	1648	1374	2679	2032	1637	1370	1979	1615	1363	1929	1593	1356	1882	1572	1349	1544

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	60.4 fc	16.3 ft
6.5 ft	43.2 fc	19.3 ft
7.5 ft	32.5 fc	22.3 ft
8.0 ft	28.5 fc	23.8 ft
10.0 ft	18.3 fc	29.7 ft
12.0 ft	12.7 fc	35.6 ft
14.0 ft	9.3 fc	41.6 ft
16.0 ft	7.1 fc	47.5 ft
20.0 ft	4.6 fc	59.4 ft
24.0 ft	3.2 fc	71.3 ft
28.0 ft	2.3 fc	83.2 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	32770	32770	32770
45.00°	30795	32299	32835
55.00°	29509	31333	31814
65.00°	27245	29381	29709
75.00°	23163	25386	25572
85.00°	13174	12995	14548

© Spectrum Lighting

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	24.0	25.6	24.4	26.0	26.3	23.9	25.5	24.2	25.8	26.1
	3H	25.8	27.2	26.1	27.6	27.9	25.6	27.1	26.0	27.4	27.8
	4H	26.4	27.8	26.8	28.1	28.5	26.2	27.6	26.6	28.0	28.3
	6H	26.8	28.1	27.2	28.5	28.9	26.6	27.9	27.0	28.3	28.7
	8H	26.9	28.2	27.4	28.6	29.0	26.7	27.9	27.1	28.3	28.7
	12H	27.0	28.2	27.4	28.6	29.0	26.7	27.9	27.2	28.3	28.7
4H	2H	24.6	26.0	25.0	26.3	26.7	24.5	25.9	24.9	26.3	26.7
	3H	26.6	27.7	27.0	28.2	28.6	26.5	27.6	26.9	28.0	28.5
	4H	27.4	28.4	27.8	28.8	29.3	27.2	28.3	27.6	28.7	29.1
	6H	27.9	28.8	28.4	29.3	29.7	27.7	28.6	28.1	29.0	29.5
	8H	28.1	28.9	28.5	29.4	29.8	27.8	28.7	28.3	29.1	29.6
	12H	28.2	28.9	28.6	29.4	29.9	27.9	28.6	28.3	29.1	29.6
8H	4H	27.6	28.5	28.1	28.9	29.4	27.5	28.4	28.0	28.8	29.3
	6H	28.3	29.0	28.8	29.5	30.0	28.1	28.8	28.6	29.3	29.8
	8H	28.5	29.2	29.0	29.7	30.2	28.3	28.9	28.8	29.4	29.9
	12H	28.7	29.2	29.2	29.7	30.3	28.3	28.9	28.9	29.4	30.0
12H	4H	27.7	28.4	28.1	28.9	29.4	27.6	28.3	28.0	28.8	29.3
	6H	28.3	29.0	28.9	29.4	30.0	28.2	28.8	28.7	29.3	29.8
	8H	28.6	29.2	29.1	29.6	30.2	28.3	28.9	28.9	29.4	30.0

Corrected UGR values based on total output energy
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0

© Spectrum Lighting