

## **Indoor Distribution Test Report**

# **Spectrum Lighting Inc.**

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## **Spectrum Lighting Photometric Lab**

### **Luminaire**

SLO3IND8 05L 35K LA xx xx MW  
Specline Linear Pendant, 1.8" aperture x 8' Long, Matte White Refl

### **Test Number**

SP-01435

### **Test Date**

6/3/2022

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

### Summary of Results

#### Power

Input Watts	38 W
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#### Lumen Output

Output Lumens	3087
Efficacy	81.23 lm/W

#### Luminous Dimensions

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

#### Spacing Criterion

Two luminaires, plane 0°	1.24
Two luminaires, plane 90°	1.18
Four luminaires	1.18

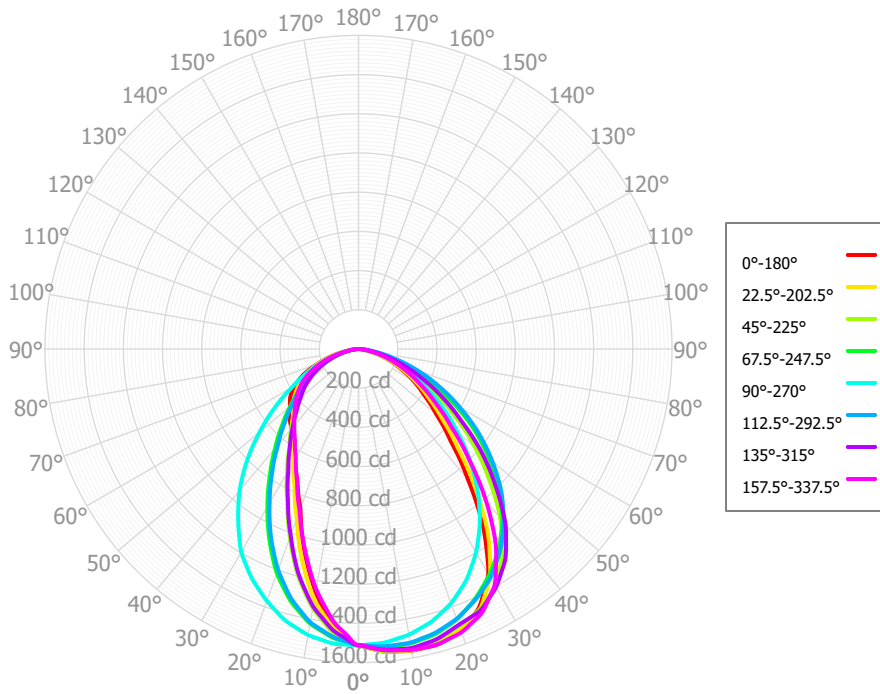
#### Full Beam Angle

0° - 180°	66°
90° - 270°	92°

### IES File Header Contents

Keyword	Value
TEST	SP-01435
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/3/2022
ISSUEDATE	11/11/2022
LUMCAT	SL03IND8 05L 35K LA xx xx MW
LUMINAIRE	Specline Linear Pendant, 1.8" aperture x 8' Long, Matte White Refl
OTHER	Extruded Acrylic Lens, Asymmetric Distribution
OTHER	Data for 8' IND fixture, or 8' module for continuous ROW
OTHER	66 deg x 96 deg Beam Angle
LAMP	N/A, Min. 80 CRI
LAMPCAT	N/A
OTHER	Reference project SL473
OTHER	05L designation for Spectrum linear product indicates 390 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°	142.90	4.63%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	383.75	12.43%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	541.04	17.53%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	593.66	19.23%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	540.96	17.52%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	430.45	13.94%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	289.85	9.39%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	136.64	4.43%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	27.56	0.89%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	3086.82	100.00%	0.00° - 180.00°	3086.82	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°	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90	1511.90
2.50°	1531.13	1531.16	1530.60	1519.24	1508.06	1493.67	1478.08	1457.19	1469.11	1472.04	1483.40	1495.81	1509.90	1517.28	1526.22	1527.72	1531.13
5.00°	1550.36	1550.42	1549.29	1526.59	1504.22	1475.45	1444.26	1402.48	1426.32	1432.19	1454.90	1479.72	1507.90	1522.66	1540.54	1543.55	1550.36
7.50°	1556.50	1556.02	1550.39	1526.33	1492.20	1445.63	1388.93	1323.54	1342.62	1366.32	1398.92	1451.09	1494.74	1522.05	1545.16	1551.19	1556.50
10.00°	1562.63	1561.62	1551.48	1526.07	1480.18	1415.81	1333.61	1244.60	1258.90	1300.44	1342.94	1422.46	1481.58	1521.44	1549.78	1558.82	1562.63
12.50°	1561.82	1557.53	1546.48	1516.43	1460.15	1368.36	1259.48	1150.98	1162.30	1207.70	1268.93	1377.85	1458.72	1511.20	1541.83	1559.46	1561.82
15.00°	1561.02	1553.44	1541.48	1506.79	1440.13	1320.91	1185.35	1057.35	1065.69	1114.94	1194.92	1333.24	1435.84	1500.97	1533.87	1560.10	1561.02
17.50°	1546.20	1539.28	1523.78	1487.38	1410.42	1260.09	1098.78	968.44	966.44	1018.21	1108.88	1275.56	1401.79	1482.95	1515.87	1548.96	1546.20
20.00°	1531.38	1525.13	1506.06	1467.98	1380.72	1199.27	1012.21	879.53	867.18	921.48	1022.85	1217.88	1367.74	1464.93	1497.87	1537.83	1531.38
22.50°	1493.36	1495.80	1485.30	1437.46	1341.00	1128.30	932.32	810.98	803.02	846.83	940.89	1146.60	1328.59	1438.35	1485.02	1512.40	1493.36
25.00°	1455.35	1466.48	1464.53	1406.94	1301.28	1057.34	852.42	742.42	738.84	772.17	858.93	1075.32	1289.43	1411.77	1472.16	1486.97	1455.35
27.50°	1389.94	1404.23	1430.35	1369.82	1250.30	982.53	784.56	691.42	694.58	721.08	793.84	1002.46	1242.90	1379.52	1437.70	1438.45	1389.94
30.00°	1324.54	1341.98	1396.16	1332.69	1199.31	907.72	716.70	640.42	650.32	669.98	728.74	929.61	1196.38	1347.26	1403.23	1389.92	1324.54
32.50°	1217.25	1247.15	1337.51	1289.87	1139.38	837.97	663.74	603.00	612.23	629.78	671.83	859.18	1133.34	1303.06	1354.90	1306.01	1217.25
35.00°	1109.96	1152.32	1278.86	1247.05	1079.46	768.22	610.78	565.57	574.15	589.57	614.92	788.75	1070.30	1258.85	1306.57	1222.10	1109.96
37.50°	989.61	1040.49	1202.22	1194.92	1012.92	703.75	566.66	537.72	552.30	558.72	575.19	725.43	1007.06	1205.66	1236.76	1117.37	989.61
40.00°	869.26	928.66	1125.58	1142.78	946.39	639.27	522.53	509.87	530.45	527.88	535.45	662.10	943.81	1152.47	1166.95	1012.65	869.26
42.50°	767.95	824.55	1035.19	1079.03	875.47	586.24	484.82	485.34	514.61	499.08	498.22	606.92	873.71	1091.84	1078.33	905.87	767.95
45.00°	666.63	720.44	944.80	1015.27	804.55	533.20	447.12	460.82	498.76	470.27	460.98	551.74	803.60	1031.22	989.72	799.09	666.63
47.50°	593.01	640.87	858.90	942.67	731.82	487.09	416.04	439.46	477.50	448.92	431.37	503.15	730.53	961.22	905.09	709.27	593.01
50.00°	519.39	561.30	773.01	870.07	659.08	440.98	384.96	418.10	456.24	427.57	401.76	454.55	657.46	891.23	820.46	619.45	519.39
52.50°	464.15	500.32	689.29	796.15	592.82	400.11	359.20	396.76	440.56	409.26	369.21	413.92	589.01	819.54	731.21	549.60	464.15
55.00°	408.90	439.32	605.57	722.22	526.55	359.23	333.44	375.41	424.89	390.94	336.66	373.28	520.56	747.85	641.95	479.76	408.90
57.50°	366.44	389.83	532.91	644.83	462.23	320.98	303.88	350.85	400.94	367.67	312.36	334.88	456.33	673.16	568.58	424.09	366.44
60.00°	323.97	340.34	460.24	567.44	397.92	282.73	274.32	326.28	376.99	344.40	288.06	296.47	392.11	598.47	495.21	368.42	323.97
62.50°	280.44	294.13	398.83	492.52	344.66	247.11	246.77	296.06	343.54	317.40	257.14	262.77	342.73	527.05	428.27	321.33	280.44
65.00°	236.92	247.92	337.42	417.59	291.40	211.50	219.22	265.84	310.09	290.40	226.22	229.07	293.35	455.62	361.34	274.23	236.92
67.50°	201.50	208.07	281.38	351.98	245.79	183.74	187.44	231.27	267.26	255.52	200.26	199.03	248.92	388.35	304.88	233.51	201.50
70.00°	166.08	168.21	225.33	286.36	200.18	155.99	155.65	196.71	224.42	220.64	174.30	168.98	204.48	321.08	248.42	192.79	166.08
72.50°	131.46	134.72	177.44	226.11	158.39	126.74	127.60	160.36	185.36	183.21	141.86	139.48	168.53	258.10	198.29	155.34	131.46
75.00°	96.84	101.22	129.55	165.86	116.60	97.50	99.54	124.02	146.29	145.77	109.42	109.98	132.58	195.12	148.16	117.89	96.84
77.50°	65.72	72.82	91.86	116.95	84.76	69.64	75.10	90.46	104.63	109.48	82.08	83.55	92.42	146.10	110.05	86.51	65.72
80.00°	34.60	44.42	54.16	68.04	52.92	41.78	50.67	56.90	62.96	73.19	54.74	57.12	52.27	97.07	71.94	55.12	34.60
82.50°	23.15	28.87	34.78	43.46	36.71	27.89	32.40	37.06	40.52	49.09	35.52	39.00	35.24	65.47	46.07	36.84	23.15
85.00°	11.71	13.33	15.40	18.88	20.50	14.00	14.12	17.21	18.08	24.99	16.30	20.88	18.20	33.87	20.20	18.56	11.71
87.50°	8.45	9.43	10.27	12.56	13.18	10.34	10.36	11.54	11.18	16.64	11.51	14.15	11.62	21.60	13.47	12.80	8.45
90.00°	5.19	5.53	5.13	6.25	5.87	6.68	6.60	5.86	4.28	8.29	6.71	7.42	5.04	9.33	6.74	7.03	5.19

### 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>	3675	3675	3675	3675	3589	3589	3589	3589	3430	3430	3430	3284	3284	3284	3150	3150	3087
	<b>1</b>	3398	3267	3150	3045	3316	3198	3092	2995	3068	2981	2901	2949	2878	2813	2839	2783	2725
	<b>2</b>	3120	2891	2701	2542	3042	2834	2660	2512	2726	2580	2454	2627	2506	2399	2536	2435	2383
	<b>3</b>	2869	2572	2342	2159	2795	2524	2311	2140	2434	2252	2102	2351	2197	2067	2274	2144	2098
	<b>4</b>	2645	2304	2053	1863	2577	2264	2030	1850	2188	1986	1825	2118	1943	1801	2053	1902	1862
	<b>5</b>	2447	2078	1819	1629	2385	2044	1802	1620	1980	1767	1603	1921	1734	1587	1866	1702	1667
	<b>6</b>	2271	1886	1627	1442	2214	1857	1613	1435	1803	1586	1423	1753	1559	1411	1706	1534	1503
	<b>7</b>	2115	1722	1467	1288	2064	1698	1456	1284	1652	1434	1275	1608	1413	1266	1568	1392	1365
	<b>8</b>	1977	1581	1332	1162	1930	1560	1323	1158	1521	1305	1152	1484	1288	1145	1449	1271	1248
	<b>9</b>	1853	1459	1218	1055	1811	1441	1210	1053	1407	1196	1047	1375	1181	1042	1344	1168	1147
	<b>10</b>	1742	1353	1120	965	1704	1337	1114	963	1308	1101	959	1280	1089	955	1253	1078	1059

### Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	50.0 fc	7.4 ft
6.5 ft	35.8 fc	8.7 ft
7.5 ft	26.9 fc	10.0 ft
8.0 ft	23.6 fc	10.7 ft
10.0 ft	15.1 fc	13.4 ft
12.0 ft	10.5 fc	16.0 ft
14.0 ft	7.7 fc	18.7 ft
16.0 ft	5.9 fc	21.4 ft
20.0 ft	3.8 fc	26.7 ft
24.0 ft	2.6 fc	32.1 ft
28.0 ft	1.9 fc	37.4 ft

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

	0.00°	45.00°	90.00°
<b>0.00°</b>	13562	13562	13562
<b>45.00°</b>	8456	11985	10206
<b>55.00°</b>	6395	9470	8234
<b>65.00°</b>	5028	7162	6185
<b>75.00°</b>	3356	4490	4041
<b>85.00°</b>	1205	1585	2109

### 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	18.0	19.6	18.4	19.9	20.2	17.2	18.7	17.5	19.0	19.3
	3H	19.2	20.6	19.6	20.9	21.3	18.8	20.1	19.2	20.5	20.8
	4H	19.6	20.9	20.0	21.2	21.6	19.3	20.6	19.7	20.9	21.3
	6H	19.7	20.9	20.1	21.3	21.6	19.6	20.7	20.0	21.1	21.5
	8H	19.7	20.8	20.1	21.2	21.6	19.6	20.7	20.0	21.1	21.5
	12H	19.7	20.8	20.1	21.2	21.6	19.6	20.7	20.1	21.1	21.5
4H	2H	19.0	20.2	19.4	20.6	21.0	17.6	18.9	18.0	19.2	19.6
	3H	20.3	21.4	20.7	21.8	22.2	19.4	20.4	19.8	20.8	21.2
	4H	20.7	21.7	21.1	22.1	22.5	20.0	20.9	20.4	21.3	21.8
	6H	20.9	21.7	21.3	22.2	22.6	20.3	21.1	20.8	21.6	22.0
	8H	20.9	21.7	21.4	22.1	22.6	20.4	21.2	20.8	21.6	22.1
	12H	20.9	21.6	21.4	22.1	22.5	20.4	21.1	20.9	21.6	22.1
8H	4H	21.0	21.8	21.5	22.2	22.7	20.2	20.9	20.6	21.4	21.9
	6H	21.3	21.9	21.8	22.4	22.9	20.6	21.2	21.1	21.7	22.2
	8H	21.3	21.9	21.8	22.4	22.9	20.7	21.2	21.2	21.8	22.2
	12H	21.3	21.8	21.8	22.3	22.9	20.7	21.3	21.3	21.7	22.3
12H	4H	21.0	21.7	21.5	22.2	22.7	20.2	20.9	20.7	21.3	21.8
	6H	21.3	21.9	21.8	22.3	22.9	20.6	21.2	21.1	21.6	22.2
	8H	21.4	21.9	21.9	22.4	22.9	20.7	21.2	21.2	21.7	22.3

Corrected UGR values based on total output energy  
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0