

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

SL03IND4 11L 35K LW xx xx MW

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

Test Number

SP-01550_1

Test Date

6/3/2022

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

Summary of Results

Power

Input Watts	36 W
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Lumen Output

Output Lumens	3193
Efficacy	88.68 lm/W

Luminous Dimensions

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

Spacing Criterion

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

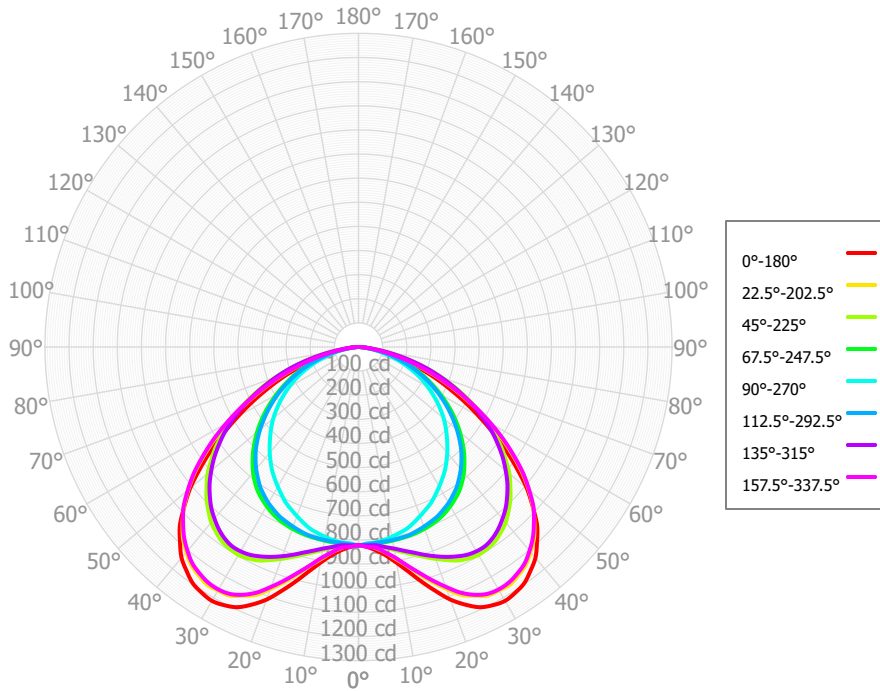
Full Beam Angle

0° - 180°	118°
90° - 270°	73°

IES File Header Contents

Keyword	Value
TEST	SP-01550_1
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/3/2022
ISSUEDATE	3/27/2023
LUMCAT	SL03IND4 11L 35K LW xx xx MW
LUMINAIRE	Specline Linear, 1.8" aperture x 4' Long, Matte White Refl
OTHER	Wide Extruded Acrylic Lens, Batwing Distribution
OTHER	Data for 4' IND fixture, Ceiling mount
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°	81.13	2.54%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	253.70	7.95%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	441.98	13.84%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	586.16	18.36%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	634.71	19.88%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	564.90	17.69%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	399.13	12.50%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	194.79	6.10%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	36.12	1.13%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	3192.63	100.00%	0.00° - 180.00°	3192.63	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°	822.39	822.39	822.39	822.39	822.39	822.39	822.39	822.39	822.39	822.39	822.39	822.39	822.39	822.39	822.39	822.39	822.39
2.50°	830.46	822.45	823.51	820.25	814.78	819.12	823.41	829.76	830.46	822.45	823.51	820.25	814.78	819.12	823.41	829.76	830.46
5.00°	846.91	837.82	829.24	818.84	813.67	815.55	825.54	836.28	846.91	837.82	829.24	818.84	813.67	815.55	825.54	836.28	846.91
7.50°	872.10	859.69	838.83	817.26	807.40	813.69	836.52	859.50	872.10	859.69	838.83	817.26	807.40	813.69	836.52	859.50	872.10
10.00°	908.38	892.43	854.48	815.18	799.13	812.46	848.83	888.19	908.38	892.43	854.48	815.18	799.13	812.46	848.83	888.19	908.38
12.50°	953.24	928.43	871.96	813.02	789.37	810.21	865.04	927.16	953.24	928.43	871.96	813.02	789.37	810.21	865.04	927.16	953.24
15.00°	1006.48	974.36	891.62	810.70	779.20	807.68	882.65	968.62	1006.48	974.36	891.62	810.70	779.20	807.68	882.65	968.62	1006.48
17.50°	1060.32	1022.25	912.62	807.24	763.20	800.62	903.27	1013.63	1060.32	1022.25	912.62	807.24	763.20	800.62	903.27	1013.63	1060.32
20.00°	1114.63	1067.77	934.85	802.04	746.20	792.77	923.19	1058.15	1114.63	1067.77	934.85	802.04	746.20	792.77	923.19	1058.15	1114.63
22.50°	1156.27	1113.01	956.10	795.45	729.29	783.86	942.01	1102.14	1156.27	1113.01	956.10	795.45	729.29	783.86	942.01	1102.14	1156.27
25.00°	1190.53	1137.94	976.66	787.23	712.38	774.84	958.42	1133.62	1190.53	1137.94	976.66	787.23	712.38	774.84	958.42	1133.62	1190.53
27.50°	1206.90	1161.51	988.43	775.94	690.72	761.03	971.82	1154.36	1206.90	1161.51	988.43	775.94	690.72	761.03	971.82	1154.36	1206.90
30.00°	1215.53	1165.68	995.38	761.87	668.93	746.92	978.33	1161.17	1215.53	1165.68	995.38	761.87	668.93	746.92	978.33	1161.17	1215.53
32.50°	1208.77	1168.31	992.41	745.86	646.97	728.71	978.25	1158.86	1208.77	1168.31	992.41	745.86	646.97	728.71	978.25	1158.86	1208.77
35.00°	1197.06	1155.11	985.42	728.47	624.58	709.82	968.48	1147.44	1197.06	1155.11	985.42	728.47	624.58	709.82	968.48	1147.44	1197.06
37.50°	1170.86	1139.45	968.96	705.62	598.81	685.33	951.59	1131.40	1170.86	1139.45	968.96	705.62	598.81	685.33	951.59	1131.40	1170.86
40.00°	1141.54	1109.96	949.69	679.86	572.71	660.18	929.24	1103.25	1141.54	1109.96	949.69	679.86	572.71	660.18	929.24	1103.25	1141.54
42.50°	1095.65	1076.98	921.16	650.07	544.95	631.74	903.80	1070.61	1095.65	1076.98	921.16	650.07	544.95	631.74	903.80	1070.61	1095.65
45.00°	1047.69	1031.40	890.83	618.69	517.28	601.97	871.94	1028.70	1047.69	1031.40	890.83	618.69	517.28	601.97	871.94	1028.70	1047.69
47.50°	980.04	981.75	854.05	584.27	489.91	567.85	837.36	984.41	980.04	981.75	854.05	584.27	489.91	567.85	837.36	984.41	980.04
50.00°	911.11	921.80	816.57	548.98	461.34	532.85	796.83	924.04	911.11	921.80	816.57	548.98	461.34	532.85	796.83	924.04	911.11
52.50°	828.29	856.52	769.81	511.42	429.97	495.77	754.49	860.93	828.29	856.52	769.81	511.42	429.97	495.77	754.49	860.93	828.29
55.00°	745.37	780.98	722.45	473.45	398.10	458.31	706.77	786.94	745.37	780.98	722.45	473.45	398.10	458.31	706.77	786.94	745.37
57.50°	661.21	703.79	666.93	433.14	365.32	420.17	657.98	712.00	661.21	703.79	666.93	433.14	365.32	420.17	657.98	712.00	661.21
60.00°	578.03	624.19	611.05	392.61	332.66	381.45	601.76	633.42	578.03	624.19	611.05	392.61	332.66	381.45	601.76	633.42	578.03
62.50°	500.59	546.44	551.70	352.08	300.15	341.94	544.65	554.85	500.59	546.44	551.70	352.08	300.15	341.94	544.65	554.85	500.59
65.00°	424.95	470.74	491.86	311.56	265.78	302.62	483.22	477.30	424.95	470.74	491.86	311.56	265.78	302.62	483.22	477.30	424.95
67.50°	356.29	396.58	429.27	271.17	229.49	263.49	421.62	400.60	356.29	396.58	429.27	271.17	229.49	263.49	421.62	400.60	356.29
70.00°	290.20	323.76	366.30	230.75	193.96	223.70	360.68	330.61	290.20	323.76	366.30	230.75	193.96	223.70	360.68	330.61	290.20
72.50°	231.00	257.13	301.94	190.00	159.04	183.37	299.46	262.00	231.00	257.13	301.94	190.00	159.04	183.37	299.46	262.00	231.00
75.00°	174.69	194.63	238.15	149.74	125.31	144.37	235.24	199.75	174.69	194.63	238.15	149.74	125.31	144.37	235.24	199.75	174.69
77.50°	124.02	139.73	175.76	112.07	92.32	106.20	172.18	140.79	124.02	139.73	175.76	112.07	92.32	106.20	172.18	140.79	124.02
80.00°	79.82	88.63	117.44	75.94	63.75	72.98	115.67	92.05	79.82	88.63	117.44	75.94	63.75	72.98	115.67	92.05	79.82
82.50°	45.48	52.58	66.84	45.13	37.21	42.05	64.81	50.81	45.48	52.58	66.84	45.13	37.21	42.05	64.81	50.81	45.48
85.00°	21.66	22.23	30.27	20.58	21.06	23.47	34.35	26.81	21.66	22.23	30.27	20.58	21.06	23.47	34.35	26.81	21.66
87.50°	10.05	10.86	13.80	11.29	8.51	9.04	11.05	10.24	10.05	10.86	13.80	11.29	8.51	9.04	11.05	10.24	10.05
90.00°	4.24	4.50	4.61	4.95	4.85	4.93	6.55	6.37	4.24	4.50	4.61	4.95	4.85	4.93	6.55	6.37	4.24

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

RCR	ptc	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%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	0	3801	3801	3801	3801	3712	3712	3712	3712	3547	3547	3547	3396	3396	3396	3258	3258	3193
	1	3479	3329	3194	3073	3392	3256	3134	3023	3120	3020	2927	2996	2914	2838	2881	2815	2753
	2	3158	2894	2677	2494	3074	2834	2634	2464	2720	2552	2406	2616	2475	2351	2519	2402	2298
	3	2871	2532	2269	2060	2791	2481	2237	2041	2385	2176	2004	2297	2118	1969	2215	2064	1935
	4	2620	2232	1948	1731	2546	2189	1924	1718	2109	1877	1694	2033	1833	1671	1964	1791	1648
	5	2402	1984	1692	1477	2333	1948	1673	1468	1879	1637	1452	1815	1603	1435	1756	1569	1420
	6	2210	1777	1486	1277	2148	1746	1471	1271	1688	1442	1259	1633	1415	1248	1582	1388	1236
	7	2043	1603	1317	1117	1987	1577	1305	1113	1527	1282	1104	1480	1260	1096	1436	1238	1087
	8	1896	1455	1178	987	1845	1433	1168	984	1390	1149	977	1350	1131	971	1312	1113	965
	9	1766	1329	1061	880	1720	1310	1053	878	1273	1038	873	1238	1023	868	1205	1008	863
	10	1651	1221	963	791	1610	1204	956	789	1172	943	785	1141	931	782	1113	918	778

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	27.2 fc	18.4 ft
6.5 ft	19.5 fc	21.7 ft
7.5 ft	14.6 fc	25.1 ft
8.0 ft	12.8 fc	26.7 ft
10.0 ft	8.2 fc	33.4 ft
12.0 ft	5.7 fc	40.1 ft
14.0 ft	4.2 fc	46.8 ft
16.0 ft	3.2 fc	53.5 ft
20.0 ft	2.1 fc	66.9 ft
24.0 ft	1.4 fc	80.2 ft
28.0 ft	1.0 fc	93.6 ft

Average Luminaire Luminance [cd/m²]

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

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