

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

LT03IND24 25L 35HK xx DW xx xx MW
Specline Linear, 1.8" aperture x 2' Long, Matte White Refl

Test Number

SP-01376_3

Test Date

6/3/2022

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

Summary of Results

Power

Input Watts	40 W
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Lumen Output

Output Lumens	2595
Efficacy	64.88 lm/W

Luminous Dimensions

0° - 180° Size	0.15
90° - 270° Size	2
Height	0

Spacing Criterion

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

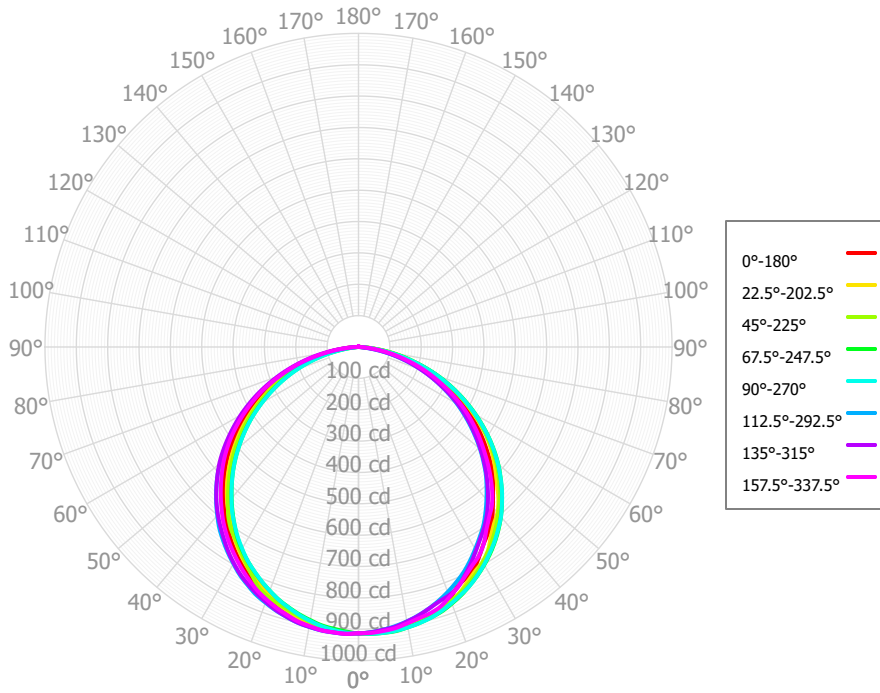
Full Beam Angle

0° - 180°	112°
90° - 270°	111°

IES File Header Contents

Keyword	Value
TEST	SP-01376_3
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/3/2022
ISSUEDATE	3/27/2023
LUMCAT	LT03IND24 25L 35HK xx DW xx xx MW
LUMINAIRE	Specline Linear, 1.8" aperture x 2' Long, Matte White Refl
OTHER	Extruded Acrylic Lens, Diffuse Distribution
OTHER	Data for 2' IND fixture, Ceiling mount
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
_CRI	90
_LAMPMULT	05L x 0.21, 11L x 0.46, 20L x 0.81

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	87.78	3.38%	90.00° - 100.00°	1.63	0.06%
10.00° - 20.00°	247.87	9.55%	100.00° - 110.00°	1.40	0.05%
20.00° - 30.00°	375.46	14.47%	100.00° - 120.00°	2.78	0.11%
30.00° - 40.00°	452.32	17.43%	120.00° - 130.00°	1.29	0.05%
40.00° - 50.00°	468.58	18.06%	130.00° - 140.00°	1.17	0.04%
50.00° - 60.00°	421.54	16.24%	140.00° - 150.00°	1.02	0.04%
60.00° - 70.00°	317.51	12.23%	150.00° - 160.00°	0.73	0.03%
70.00° - 80.00°	175.41	6.76%	160.00° - 170.00°	0.47	0.02%
80.00° - 90.00°	39.40	1.52%	170.00° - 180.00°	0.16	0.01%
0.00° - 90.00°	2585.88	99.64%	0.00° - 180.00°	2595.12	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°	913.34	913.34	913.34	913.34	913.34	913.34	913.34	913.34	913.34	913.34	913.34	913.34	913.34	913.34	913.34	913.34	913.34
2.50°	911.47	913.16	914.33	916.05	915.51	915.41	915.85	915.91	912.98	912.24	911.07	908.33	911.97	910.38	910.87	912.93	911.47
5.00°	907.65	909.91	913.49	915.19	915.20	914.23	913.86	913.57	910.31	907.71	906.20	902.30	906.08	905.00	905.64	909.22	907.65
7.50°	902.80	906.20	912.32	913.86	912.81	911.80	911.57	910.93	905.42	902.89	900.62	895.75	898.24	897.97	899.85	904.40	902.80
10.00°	895.75	899.46	906.56	907.81	908.16	906.52	906.19	903.61	897.70	893.90	890.15	884.74	887.29	888.63	889.33	895.22	895.75
12.50°	888.02	893.12	899.95	901.45	901.73	900.44	900.09	895.99	889.23	884.44	879.49	873.28	875.10	877.42	878.27	886.64	888.02
15.00°	882.47	888.41	887.89	893.41	893.83	890.83	890.18	884.20	880.05	871.76	868.09	859.69	860.68	864.21	864.64	879.68	882.47
17.50°	877.38	880.74	875.62	884.20	882.53	880.58	879.35	872.06	866.92	858.23	856.95	845.16	845.64	848.87	852.05	868.54	877.38
20.00°	853.17	864.71	862.50	870.86	869.03	867.95	865.27	857.37	850.75	840.99	846.57	827.51	827.26	831.74	842.95	848.96	853.17
22.50°	826.51	846.78	848.40	856.49	854.66	855.07	850.67	841.74	832.96	822.79	830.72	809.05	808.27	812.87	828.90	828.26	826.51
25.00°	812.12	825.00	831.60	839.51	839.89	837.58	834.79	822.03	814.23	801.78	803.33	788.70	787.85	792.88	803.23	805.86	812.12
27.50°	798.04	806.07	813.55	821.67	821.18	819.80	817.06	801.70	793.35	780.05	776.80	767.48	767.29	769.37	776.93	785.84	798.04
30.00°	770.54	791.48	792.97	802.25	801.10	798.19	795.94	779.56	771.54	756.79	751.63	744.77	742.48	744.19	749.53	768.54	770.54
32.50°	743.53	768.81	770.91	781.34	779.11	776.40	773.20	756.83	746.99	732.26	728.87	719.32	717.48	719.29	723.71	743.37	743.53
35.00°	722.13	736.50	746.56	758.38	756.66	753.17	748.17	732.80	721.59	705.71	709.07	690.19	689.91	694.49	700.03	711.14	722.13
37.50°	699.07	710.30	720.90	733.52	731.96	729.08	723.08	707.15	694.83	678.68	681.82	660.34	661.91	665.28	672.87	684.45	699.07
40.00°	666.58	689.65	693.69	706.61	706.93	700.84	697.93	678.88	667.79	651.06	647.62	629.76	630.36	635.01	642.16	661.54	666.58
42.50°	635.03	660.65	665.53	677.39	677.18	672.15	670.49	650.03	638.23	621.68	614.48	598.64	598.72	604.68	610.22	631.40	635.03
45.00°	606.90	625.89	636.53	646.26	647.11	641.98	641.17	620.49	608.38	590.66	582.08	567.10	566.68	574.35	577.31	597.57	606.90
47.50°	576.92	594.02	605.71	614.24	614.12	610.46	610.74	590.51	576.85	558.11	548.97	533.91	534.01	540.34	543.30	561.94	576.92
50.00°	542.10	563.69	573.62	581.65	580.93	575.83	579.61	560.12	545.16	524.47	515.48	499.73	499.27	506.06	508.64	525.62	542.10
52.50°	507.10	532.05	538.14	546.22	544.96	540.44	544.80	527.42	509.65	489.79	480.58	465.07	464.36	470.16	473.69	490.92	507.10
55.00°	471.74	499.90	500.89	509.43	508.59	503.75	508.24	493.02	474.17	454.56	445.11	430.19	429.08	434.27	438.63	456.65	471.74
57.50°	435.67	461.75	463.89	470.96	469.56	466.64	471.10	457.06	438.93	417.41	409.04	393.82	392.92	398.65	403.17	420.95	435.67
60.00°	398.58	421.97	426.99	431.89	430.33	428.96	433.75	420.24	403.24	379.49	372.80	356.97	355.25	362.79	367.58	385.02	398.58
62.50°	360.37	384.47	386.96	392.03	390.17	389.45	394.58	383.12	364.92	341.38	335.27	319.90	317.96	325.34	328.86	345.63	360.37
65.00°	320.91	347.39	346.07	351.99	349.93	348.07	354.96	345.87	326.61	303.22	297.50	282.79	281.18	288.06	289.46	305.94	320.91
67.50°	281.83	307.04	304.47	311.49	309.42	306.34	314.37	305.60	288.36	266.78	259.84	246.47	244.09	251.44	251.63	268.45	281.83
70.00°	243.06	266.39	262.75	270.93	268.41	264.32	273.63	264.45	250.29	230.67	222.18	210.26	206.70	214.42	214.02	230.99	243.06
72.50°	204.88	226.17	222.85	227.95	226.38	223.33	232.90	225.29	212.70	193.03	186.03	173.73	169.61	176.31	177.96	193.21	204.88
75.00°	167.09	186.04	183.12	184.85	184.46	182.96	192.17	186.51	175.38	155.24	149.92	137.19	132.76	138.92	142.00	155.70	167.09
77.50°	129.92	148.04	143.80	146.54	142.72	142.64	152.27	146.99	138.54	120.42	113.51	100.54	96.48	103.01	107.60	120.42	129.92
80.00°	93.07	110.22	104.55	108.18	102.84	102.35	112.55	107.38	102.91	85.85	77.71	64.47	60.55	68.34	73.33	85.96	93.07
82.50°	61.57	73.81	66.86	69.32	65.19	65.44	75.48	73.13	68.97	55.53	47.29	35.13	33.62	35.56	40.63	55.25	61.57
85.00°	32.00	40.18	31.57	33.35	35.34	29.61	40.61	39.55	40.32	26.92	20.20	9.50	10.70	14.06	11.87	28.24	32.00
87.50°	16.01	19.44	15.28	15.93	12.62	13.80	19.83	19.87	17.41	12.93	9.43	5.32	3.61	5.84	5.87	12.48	16.01
90.00°	3.37	3.43	1.76	1.94	2.50	2.30	2.92	2.08	5.47	1.26	1.21	1.92	1.53	1.77	1.22	1.48	3.37
92.50°	1.53	2.31	1.49	1.48	1.39	1.02	1.99	1.65	2.85	1.34	1.19	1.53	1.25	1.53	1.50	1.16	1.53
95.00°	1.41	1.52	1.34	1.16	1.12	1.00	1.28	1.31	1.72	1.37	1.19	1.29	1.34	1.27	1.59	1.02	1.41
97.50°	1.37	1.48	1.58	1.26	1.31	1.07	1.21	1.44	1.56	1.23	1.27	1.46	1.28	1.01	1.18	1.16	1.37
100.00°	1.35	1.53	1.64	1.35	1.30	1.15	1.13	1.46	1.35	1.18	1.27	1.58	1.21	0.98	1.01	1.26	1.35
102.50°	1.23	1.74	1.28	1.40	1.20	1.18	1.05	1.11	1.11	1.32	1.14	1.59	1.52	1.06	1.28	1.32	1.23
105.00°	1.12	1.83	1.05	1.52	1.25	1.22	1.08	0.92	1.01	1.43	1.21	1.63	1.84	1.17	1.46	1.35	1.12

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	3087	3087	3087	3087	3014	3014	3014	3014	2878	2878	2878	2754	2754	2754	2640	2640	2586
	1	2823	2701	2591	2491	2752	2641	2541	2450	2529	2446	2371	2426	2359	2296	2331	2277	2228
	2	2567	2353	2177	2029	2497	2303	2141	2004	2210	2073	1955	2123	2009	1909	2043	1949	1865
	3	2339	2066	1854	1686	2274	2024	1828	1670	1945	1777	1639	1872	1729	1609	1804	1683	1580
	4	2141	1829	1601	1427	2080	1794	1581	1416	1728	1542	1396	1666	1505	1375	1608	1470	1356
	5	1968	1634	1400	1228	1913	1604	1385	1220	1548	1354	1206	1495	1325	1192	1446	1298	1178
	6	1817	1471	1238	1071	1767	1445	1226	1066	1398	1201	1055	1353	1178	1045	1311	1156	1035
	7	1685	1333	1105	945	1639	1312	1095	941	1271	1076	934	1232	1057	926	1196	1039	919
	8	1568	1216	995	843	1527	1198	987	840	1163	971	834	1130	955	828	1099	941	822
	9	1465	1116	902	758	1428	1100	896	756	1070	882	751	1041	870	747	1014	857	742
	10	1374	1030	824	687	1340	1016	818	685	989	807	682	965	797	678	941	786	674

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	30.2 fc	16.3 ft
6.5 ft	21.6 fc	19.3 ft
7.5 ft	16.2 fc	22.3 ft
8.0 ft	14.3 fc	23.8 ft
10.0 ft	9.1 fc	29.7 ft
12.0 ft	6.3 fc	35.6 ft
14.0 ft	4.7 fc	41.6 ft
16.0 ft	3.6 fc	47.5 ft
20.0 ft	2.3 fc	59.4 ft
24.0 ft	1.6 fc	71.3 ft
28.0 ft	1.2 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

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