

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

LT03IND24 25L 35K DW xx xx MW

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

Test Number

SP-01546_3

Test Date

6/2/2022

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

Summary of Results

Power

Input Watts	39 W
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Lumen Output

Output Lumens	2938
Efficacy	75.32 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°	1.25
Four luminaires	1.37

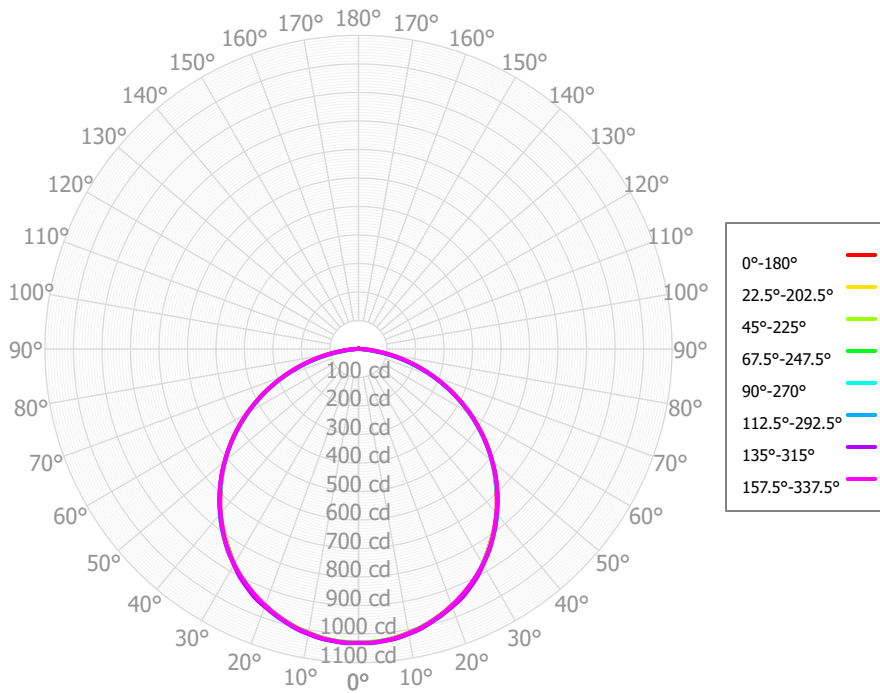
Full Beam Angle

0° - 180°	112°
90° - 270°	112°

IES File Header Contents

Keyword	Value
TEST	SP-01546_3
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/2/2022
ISSUEDATE	03/23/2023
LUMCAT	LT03IND24 25L 35K DW xx xx MW
LUMINAIRE	SpecLine Linear, 1.8" aperture x 2' Long, Matte White Refl
OTHER	Diffuse White Extruded Acrylic Lens, Symmetric Distribution
OTHER	Data for 2' IND fixture, Ceiling mount
OTHER	111 Degree Beam Angle
LAMP	N/A, Min. 80 CRI
LAMPCAT	N/A
OTHER	Reference project SL473
OTHER	25L designation for Spectrum linear product indicates 1469 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
_CRI	80
_CCTMULT	30K x 0.97, 40K x 1.02

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	99.10	3.37%	90.00° - 100.00°	2.54	0.09%
10.00° - 20.00°	279.41	9.51%	100.00° - 110.00°	1.87	0.06%
20.00° - 30.00°	423.84	14.43%	100.00° - 120.00°	3.69	0.13%
30.00° - 40.00°	510.68	17.38%	120.00° - 130.00°	1.70	0.06%
40.00° - 50.00°	528.49	17.99%	130.00° - 140.00°	1.48	0.05%
50.00° - 60.00°	476.30	16.21%	140.00° - 150.00°	1.20	0.04%
60.00° - 70.00°	360.32	12.27%	150.00° - 160.00°	0.90	0.03%
70.00° - 80.00°	200.16	6.81%	160.00° - 170.00°	0.57	0.02%
80.00° - 90.00°	47.07	1.60%	170.00° - 180.00°	0.19	0.01%
0.00° - 90.00°	2925.37	99.58%	0.00° - 180.00°	2937.65	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°	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17	1031.17
2.50°	1030.55	1029.02	1028.91	1030.14	1031.96	1033.34	1031.99	1031.39	1030.55	1029.02	1028.91	1030.14	1031.96	1033.34	1031.99	1031.39	1030.55
5.00°	1026.25	1026.59	1026.40	1026.47	1027.73	1028.41	1028.79	1027.32	1026.25	1026.59	1026.40	1026.47	1027.73	1028.41	1028.79	1027.32	1026.25
7.50°	1019.64	1021.23	1020.36	1022.18	1022.80	1023.26	1024.33	1021.96	1019.64	1021.23	1020.36	1022.18	1022.80	1023.26	1024.33	1021.96	1019.64
10.00°	1010.97	1013.97	1012.56	1013.01	1013.81	1014.73	1015.49	1013.12	1010.97	1013.97	1012.56	1013.01	1013.81	1014.73	1015.49	1013.12	1010.97
12.50°	1001.05	1004.06	1001.96	1002.82	1004.25	1006.03	1005.63	1002.99	1001.05	1004.06	1001.96	1002.82	1004.25	1006.03	1005.63	1002.99	1001.05
15.00°	988.22	991.82	990.41	989.79	990.42	992.43	991.44	990.05	988.22	991.82	990.41	989.79	990.42	992.43	991.44	990.05	988.22
17.50°	973.32	975.92	977.11	976.05	976.32	978.81	977.14	975.84	973.32	975.92	977.11	976.05	976.32	978.81	977.14	975.84	973.32
20.00°	956.46	958.53	962.31	959.00	959.27	960.17	962.29	958.25	956.46	958.53	962.31	959.00	959.27	960.17	962.29	958.25	956.46
22.50°	938.05	938.47	944.37	940.92	941.96	941.53	946.56	938.91	938.05	938.47	944.37	940.92	941.96	941.53	946.56	938.91	938.05
25.00°	917.91	918.47	924.14	919.39	920.00	919.63	924.64	918.06	917.91	918.47	924.14	919.39	920.00	919.63	924.64	918.06	917.91
27.50°	896.21	898.61	898.35	896.60	897.95	897.62	902.16	896.32	896.21	898.61	898.35	896.60	897.95	897.62	902.16	896.32	896.21
30.00°	870.99	875.32	872.43	872.81	871.67	872.38	874.43	872.67	870.99	875.32	872.43	872.81	871.67	872.38	874.43	872.67	870.99
32.50°	842.05	843.68	846.14	848.60	845.40	846.93	846.56	847.75	842.05	843.68	846.14	848.60	845.40	846.93	846.56	847.75	842.05
35.00°	813.04	813.20	818.97	819.27	816.73	818.18	816.87	818.26	813.04	813.20	818.97	819.27	816.73	818.18	816.87	818.26	813.04
37.50°	783.93	786.01	788.74	787.37	788.02	789.09	787.10	785.24	783.93	786.01	788.74	787.37	788.02	789.09	787.10	785.24	783.93
40.00°	752.38	756.83	757.53	754.69	754.19	755.97	754.50	753.24	752.38	756.83	757.53	754.69	754.19	755.97	754.50	753.24	752.38
42.50°	717.59	721.10	722.28	721.58	720.12	722.25	721.91	722.13	717.59	721.10	722.28	721.58	720.12	722.25	721.91	722.13	717.59
45.00°	682.52	685.23	686.84	686.24	684.15	686.16	686.87	687.72	682.52	685.23	686.84	686.24	684.15	686.16	686.87	687.72	682.52
47.50°	647.05	648.82	650.41	649.46	648.03	649.64	651.82	650.09	647.05	648.82	650.41	649.46	648.03	649.64	651.82	650.09	647.05
50.00°	610.64	612.21	613.63	611.57	610.35	611.46	612.87	612.19	610.64	612.21	613.63	611.57	610.35	611.46	612.87	612.19	610.64
52.50°	572.60	574.60	574.56	572.82	572.48	572.90	573.79	574.01	572.60	574.60	574.56	572.82	572.48	572.90	573.79	574.01	572.60
55.00°	533.55	536.44	535.30	532.93	531.81	532.38	533.17	534.77	533.55	536.44	535.30	532.93	531.81	532.38	533.17	534.77	533.55
57.50°	492.49	494.81	494.33	492.07	490.68	491.29	492.42	494.18	492.49	494.81	494.33	492.07	490.68	491.29	492.42	494.18	492.49
60.00°	450.97	453.03	453.19	450.20	448.19	449.27	450.37	452.50	450.97	453.03	453.19	450.20	448.19	449.27	450.37	452.50	450.97
62.50°	408.40	409.90	409.72	407.36	405.42	406.92	408.18	409.26	408.40	409.90	409.72	407.36	405.42	406.92	408.18	409.26	408.40
65.00°	365.62	366.71	366.21	363.72	361.95	363.65	364.57	365.87	365.62	366.71	366.21	363.72	361.95	363.65	364.57	365.87	365.62
67.50°	322.28	322.84	321.34	319.18	318.30	320.01	320.75	322.25	322.28	322.84	321.34	319.18	318.30	320.01	320.75	322.25	322.28
70.00°	278.76	279.01	276.47	274.77	273.90	275.40	276.92	278.82	278.76	279.01	276.47	274.77	273.90	275.40	276.92	278.82	278.76
72.50°	234.68	235.95	234.16	230.52	229.27	230.32	233.09	235.76	234.68	235.95	234.16	230.52	229.27	230.32	233.09	235.76	234.68
75.00°	191.17	192.89	191.85	186.46	184.48	185.74	189.91	193.22	191.17	192.89	191.85	186.46	184.48	185.74	189.91	193.22	191.17
77.50°	149.83	151.59	149.48	142.64	139.62	141.45	146.89	151.81	149.83	151.59	149.48	142.64	139.62	141.45	146.89	151.81	149.83
80.00°	109.58	110.28	107.11	100.53	97.45	99.15	105.27	111.39	109.58	110.28	107.11	100.53	97.45	99.15	105.27	111.39	109.58
82.50°	74.61	74.37	69.38	61.18	56.42	58.08	64.07	73.59	74.61	74.37	69.38	61.18	56.42	58.08	64.07	73.59	74.61
85.00°	41.76	38.62	31.96	30.00	30.65	30.77	36.88	40.10	41.76	38.62	31.96	30.00	30.65	30.77	36.88	40.10	41.76
87.50°	21.78	21.63	17.37	14.19	12.52	13.04	14.41	19.84	21.78	21.63	17.37	14.19	12.52	13.04	14.41	19.84	21.78
90.00°	3.89	5.76	5.14	3.11	4.61	4.25	5.71	3.70	3.89	5.76	5.14	3.11	4.61	4.25	5.71	3.70	3.89
92.50°	2.74	3.26	2.86	2.21	2.53	2.71	2.60	2.54	2.74	3.26	2.86	2.21	2.53	2.71	2.60	2.54	2.74
95.00°	1.68	2.12	1.98	1.58	1.73	1.88	1.68	1.59	1.68	2.12	1.98	1.58	1.73	1.88	1.68	1.59	1.68
97.50°	1.71	1.87	1.79	1.66	1.77	1.70	1.78	1.51	1.71	1.87	1.79	1.66	1.77	1.70	1.78	1.51	1.71
100.00°	1.74	1.74	1.72	1.71	1.77	1.59	1.97	1.45	1.74	1.74	1.72	1.71	1.77	1.59	1.97	1.45	1.74
102.50°	1.81	1.71	1.80	1.70	1.75	1.55	2.22	1.47	1.81	1.71	1.80	1.70	1.75	1.55	2.22	1.47	1.81
105.00°	1.88	1.70	1.90	1.73	1.69	1.59	2.21	1.52	1.88	1.70	1.90	1.73	1.69	1.59	2.21	1.52	1.88

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	3494	3494	3494	3494	3412	3412	3412	3412	3257	3257	3257	3116	3116	3116	2986	2986	2925
	1	3194	3055	2930	2817	3113	2987	2873	2770	2859	2766	2680	2743	2666	2596	2635	2574	2518
	2	2903	2661	2461	2293	2825	2604	2420	2265	2498	2343	2210	2400	2270	2157	2309	2202	2107
	3	2646	2336	2096	1904	2572	2288	2066	1886	2198	2008	1851	2116	1953	1817	2039	1901	1784
	4	2421	2068	1810	1612	2353	2028	1787	1600	1953	1743	1576	1882	1701	1553	1817	1660	1531
	5	2226	1847	1582	1387	2163	1813	1564	1378	1749	1530	1362	1690	1497	1346	1634	1465	1330
	6	2055	1662	1399	1210	1998	1634	1385	1203	1579	1357	1192	1528	1331	1180	1481	1306	1168
	7	1906	1507	1249	1067	1854	1482	1237	1063	1436	1215	1054	1392	1194	1045	1351	1173	1037
	8	1774	1375	1124	952	1727	1354	1115	948	1314	1097	941	1276	1079	935	1241	1062	928
	9	1657	1262	1019	856	1614	1244	1012	853	1209	997	848	1176	982	843	1146	968	838
	10	1553	1164	931	776	1515	1148	924	774	1118	912	769	1090	900	765	1063	888	761

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	34.1 fc	16.3 ft
6.5 ft	24.4 fc	19.3 ft
7.5 ft	18.3 fc	22.3 ft
8.0 ft	16.1 fc	23.7 ft
10.0 ft	10.3 fc	29.7 ft
12.0 ft	7.2 fc	35.6 ft
14.0 ft	5.3 fc	41.6 ft
16.0 ft	4.0 fc	47.5 ft
20.0 ft	2.6 fc	59.4 ft
24.0 ft	1.8 fc	71.2 ft
28.0 ft	1.3 fc	83.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	36998	36998	36998
45.00°	34632	34851	34715
55.00°	33376	33485	33267
65.00°	31041	31091	30729
75.00°	26502	26596	25574
85.00°	17191	13158	12617

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	24.4	26.0	24.7	26.3	26.6	24.3	26.0	24.7	26.3	26.6
	3H	26.2	27.6	26.5	28.0	28.3	26.1	27.6	26.5	27.9	28.3
	4H	26.8	28.2	27.2	28.5	28.9	26.7	28.1	27.1	28.5	28.8
	6H	27.2	28.5	27.7	28.9	29.3	27.1	28.4	27.5	28.8	29.2
	8H	27.4	28.6	27.8	29.0	29.4	27.2	28.4	27.6	28.8	29.2
	12H	27.5	28.6	27.9	29.0	29.5	27.2	28.4	27.6	28.8	29.2
4H	2H	25.0	26.4	25.4	26.7	27.1	25.0	26.4	25.4	26.7	27.1
	3H	27.0	28.2	27.4	28.6	29.0	26.9	28.1	27.4	28.5	28.9
	4H	27.8	28.8	28.2	29.2	29.7	27.7	28.7	28.1	29.2	29.6
	6H	28.3	29.3	28.8	29.7	30.2	28.2	29.1	28.6	29.5	30.0
	8H	28.5	29.4	29.0	29.8	30.3	28.3	29.1	28.7	29.6	30.1
	12H	28.6	29.4	29.1	29.9	30.4	28.3	29.1	28.8	29.6	30.1
8H	4H	28.1	28.9	28.5	29.4	29.8	28.0	28.8	28.4	29.3	29.8
	6H	28.7	29.5	29.2	29.9	30.4	28.6	29.3	29.1	29.8	30.3
	8H	29.0	29.6	29.5	30.1	30.6	28.7	29.4	29.2	29.9	30.4
	12H	29.1	29.7	29.6	30.2	30.8	28.8	29.4	29.3	29.9	30.4
12H	4H	28.1	28.9	28.6	29.3	29.8	28.0	28.8	28.5	29.3	29.7
	6H	28.8	29.4	29.3	29.9	30.4	28.6	29.3	29.1	29.7	30.3
	8H	29.0	29.6	29.6	30.1	30.7	28.8	29.4	29.3	29.9	30.4

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0