Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

SL03IND2 05L 35K LW xx xx MW

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

Test Number

SP-01430

Test Date

6/3/2022

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

Summary of Results

Power

Input Watts	9.5 W

Lumen Output

Output Lumens	753
Efficacy	79.28 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	1.9
Two luminaires, plane 90°	1.2
Four luminaires	1.72

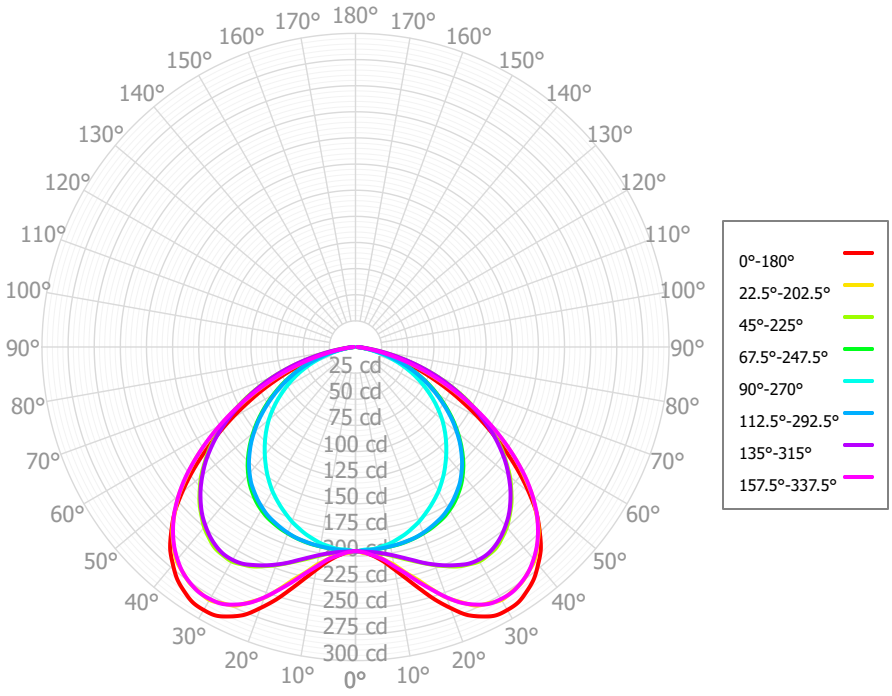
Full Beam Angle

0° - 180°	118°
90° - 270°	72°

IES File Header Contents

Keyword	Value
TEST	SP-01430
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/3/2022
ISSUEDATE	11/1/2022
LUMCAT	SL03IND2 05L 35K LW xx xx MW
LUMINAIRE	Specline Linear Pendant, 1.8" aperture x 2' Long, Matte White Refl
OTHER	Wide Extruded Acrylic Lens, Batwing Distribution
OTHER	Data for 2' IND fixture, or 2' module for continuous ROW
OTHER	118 deg x 73 deg Beam Angle
LAMP	N/A, Min. 80 CRI
LAMPCAT	N/A
OTHER	Reference project SL473
OTHER	05L designation for Spectrum linear product indicates 377 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°	19.32	2.56%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	60.49	8.03%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	105.51	14.01%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	139.85	18.57%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	151.23	20.08%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	133.75	17.76%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	92.97	12.34%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	42.66	5.66%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	7.43	0.99%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	753.20	100.00%	0.00° - 180.00°	753.20	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°	195.45	195.45	195.45	195.45	195.45	195.45	195.45	195.45	195.45	195.45	195.45	195.45	195.45	195.45	195.45	195.45	195.45
2.50°	197.04	197.54	195.16	194.68	194.16	194.89	196.12	196.96	197.04	197.54	195.16	194.68	194.16	194.89	196.12	196.96	197.04
5.00°	200.85	198.72	196.70	194.51	194.08	194.62	197.09	200.48	200.85	198.72	196.70	194.51	194.08	194.62	197.09	200.48	200.85
7.50°	207.16	204.99	199.53	194.17	192.48	194.18	199.19	205.16	207.16	204.99	199.53	194.17	192.48	194.18	199.19	205.16	207.16
10.00°	216.41	211.47	202.98	193.76	190.80	193.63	202.26	213.07	216.41	211.47	202.98	193.76	190.80	193.63	202.26	213.07	216.41
12.50°	227.41	221.04	207.25	193.27	188.01	193.03	206.34	221.80	227.41	221.04	207.25	193.27	188.01	193.03	206.34	221.80	227.41
15.00°	240.05	230.68	211.86	192.41	185.15	192.13	211.11	232.60	240.05	230.68	211.86	192.41	185.15	192.13	211.11	232.60	240.05
17.50°	253.58	243.04	216.93	191.26	181.54	191.06	216.55	243.58	253.58	243.04	216.93	191.26	181.54	191.06	216.55	243.58	253.58
20.00°	265.79	255.32	222.17	189.78	177.83	189.25	221.55	254.98	265.79	255.32	222.17	189.78	177.83	189.25	221.55	254.98	265.79
22.50°	277.34	264.30	227.00	188.06	173.34	187.06	226.18	264.93	277.34	264.30	227.00	188.06	173.34	187.06	226.18	264.93	277.34
25.00°	284.50	273.01	231.68	185.91	168.80	184.49	230.24	271.97	284.50	273.01	231.68	185.91	168.80	184.49	230.24	271.97	284.50
27.50°	289.69	276.42	234.58	183.49	164.02	181.76	233.83	277.04	289.69	276.42	234.58	183.49	164.02	181.76	233.83	277.04	289.69
30.00°	290.60	279.49	236.92	180.10	159.09	178.01	235.24	278.52	290.60	279.49	236.92	180.10	159.09	178.01	235.24	278.52	290.60
32.50°	289.79	277.95	236.22	176.17	153.37	173.84	235.01	278.44	289.79	277.95	236.22	176.17	153.37	173.84	235.01	278.44	289.79
35.00°	285.60	276.14	234.68	171.32	147.55	169.04	232.57	275.76	285.60	276.14	234.68	171.32	147.55	169.04	232.57	275.76	285.60
37.50°	280.19	271.59	230.30	166.01	141.29	164.00	228.63	271.59	280.19	271.59	230.30	166.01	141.29	164.00	228.63	271.59	280.19
40.00°	271.82	266.54	225.22	159.63	135.00	157.71	223.34	265.13	271.82	266.54	225.22	159.63	135.00	157.71	223.34	265.13	271.82
42.50°	262.49	257.46	218.33	152.76	128.54	151.00	217.22	257.13	262.49	257.46	218.33	152.76	128.54	151.00	217.22	257.13	262.49
45.00°	249.28	247.83	211.06	144.87	122.02	143.35	209.56	246.99	249.28	247.83	211.06	144.87	122.02	143.35	209.56	246.99	249.28
47.50°	234.95	234.53	202.13	136.56	115.25	135.42	201.02	235.11	234.95	234.53	202.13	136.56	115.25	135.42	201.02	235.11	234.95
50.00°	216.72	220.72	192.90	127.80	108.27	126.63	191.28	221.00	216.72	220.72	192.90	127.80	108.27	126.63	191.28	221.00	216.72
52.50°	197.51	204.08	181.98	118.87	100.61	117.63	180.93	205.12	197.51	204.08	181.98	118.87	100.61	117.63	180.93	205.12	197.51
55.00°	177.26	186.98	170.81	109.43	92.84	108.08	169.14	187.18	177.26	186.98	170.81	109.43	92.84	108.08	169.14	187.18	177.26
57.50°	156.79	167.74	157.88	99.82	84.72	98.41	156.67	168.74	156.79	167.74	157.88	99.82	84.72	98.41	156.67	168.74	156.79
60.00°	137.04	148.57	144.74	90.27	76.63	88.84	142.96	149.76	137.04	148.57	144.74	90.27	76.63	88.84	142.96	149.76	137.04
62.50°	117.43	129.66	130.16	80.72	68.60	79.29	128.72	130.75	117.43	129.66	130.16	80.72	68.60	79.29	128.72	130.75	117.43
65.00°	99.47	110.89	115.44	70.66	60.42	69.80	114.06	111.70	99.47	110.89	115.44	70.66	60.42	69.80	114.06	111.70	99.47
67.50°	81.77	92.65	99.96	60.46	51.90	60.32	99.24	93.43	81.77	92.65	99.96	60.46	51.90	60.32	99.24	93.43	81.77
70.00°	66.16	74.85	84.43	50.52	43.31	50.31	83.79	75.86	66.16	74.85	84.43	50.52	43.31	50.31	83.79	75.86	66.16
72.50°	50.83	58.47	68.23	40.65	34.58	40.23	68.12	59.39	50.83	58.47	68.23	40.65	34.58	40.23	68.12	59.39	50.83
75.00°	37.71	42.85	52.00	31.49	26.28	31.14	52.75	43.83	37.71	42.85	52.00	31.49	26.28	31.14	52.75	43.83	37.71
77.50°	24.81	29.39	37.63	22.46	18.78	22.17	37.47	30.29	24.81	29.39	37.63	22.46	18.78	22.17	37.47	30.29	24.81
80.00°	16.09	17.59	23.31	15.23	12.27	15.04	24.85	18.27	16.09	17.59	23.31	15.23	12.27	15.04	24.85	18.27	16.09
82.50°	7.69	9.96	14.17	8.30	7.44	8.06	12.95	10.37	7.69	9.96	14.17	8.30	7.44	8.06	12.95	10.37	7.69
85.00°	4.78	4.19	5.19	5.08	3.92	5.06	7.25	5.32	4.78	4.19	5.19	5.08	3.92	5.06	7.25	5.32	4.78
87.50°	2.16	2.57	3.29	2.36	2.46	2.29	3.01	2.82	2.16	2.57	3.29	2.36	2.46	2.29	3.01	2.82	2.16
90.00°	1.78	1.47	1.47	1.76	1.55	1.80	1.86	1.95	1.78	1.47	1.47	1.76	1.55	1.80	1.86	1.95	1.78

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	897	897	897	897	876	876	876	876	837	837	837	801	801	801	769	769	769	753
	1	822	787	756	727	801	770	741	716	738	714	693	708	689	672	681	666	652	652
	2	747	685	634	592	727	671	624	585	644	605	571	619	587	558	597	570	545	557
	3	679	600	538	489	661	588	531	485	565	516	476	544	503	468	525	490	460	479
	4	620	529	462	412	603	519	457	409	500	446	403	482	435	397	466	425	392	416
RCR	5	568	470	402	351	552	462	397	349	446	389	345	431	381	342	417	373	338	365
	6	523	421	353	304	509	414	350	303	400	343	300	388	336	297	376	330	294	323
	7	484	380	313	266	470	374	310	265	362	305	263	351	299	261	341	294	259	288
	8	449	345	280	235	437	340	278	234	330	273	233	320	269	231	311	265	230	259
	9	418	315	252	210	407	311	250	209	302	247	208	294	243	207	286	240	206	235
	10	391	290	229	188	381	286	227	188	278	224	187	271	221	186	264	218	185	214

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	6.5 fc	18.3 ft
6.5 ft	4.6 fc	21.6 ft
7.5 ft	3.5 fc	24.9 ft
8.0 ft	3.1 fc	26.6 ft
10.0 ft	2.0 fc	33.2 ft
12.0 ft	1.4 fc	39.9 ft
14.0 ft	1.0 fc	46.5 ft
16.0 ft	0.8 fc	53.2 ft
20.0 ft	0.5 fc	66.5 ft
24.0 ft	0.3 fc	79.7 ft
28.0 ft	0.2 fc	93.0 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	7013	7013	7013
45.00°	12649	10710	6191
55.00°	11089	10685	5807
65.00°	8445	9801	5129
75.00°	5228	7208	3644
85.00°	1969	2138	1615

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	21.5	23.2	21.9	23.5	23.8	17.7	19.4	18.1	19.7	20.0
	3H	22.7	24.2	23.1	24.5	24.9	19.2	20.7	19.6	21.0	21.4
	4H	23.0	24.4	23.4	24.7	25.1	19.6	21.0	20.0	21.4	21.7
	6H	23.1	24.4	23.5	24.8	25.2	19.8	21.1	20.2	21.5	21.9
	8H	23.1	24.3	23.5	24.7	25.1	19.8	21.1	20.3	21.5	21.9
	12H	23.1	24.3	23.5	24.7	25.1	19.9	21.0	20.3	21.4	21.8
4H	2H	22.1	23.5	22.5	23.8	24.2	19.4	20.8	19.8	21.1	21.5
	3H	23.5	24.6	23.9	25.0	25.4	20.9	22.1	21.3	22.5	22.9
	4H	23.9	24.9	24.3	25.3	25.8	21.3	22.4	21.7	22.8	23.2
	6H	24.0	25.0	24.5	25.4	25.9	21.6	22.5	22.0	22.9	23.4
	8H	24.1	24.9	24.5	25.4	25.8	21.6	22.4	22.0	22.9	23.3
	12H	24.1	24.8	24.5	25.3	25.8	21.6	22.4	22.1	22.8	23.3
8H	4H	24.1	24.9	24.5	25.4	25.8	21.8	22.7	22.3	23.1	23.6
	6H	24.3	25.0	24.8	25.5	26.0	22.1	22.8	22.6	23.3	23.8
	8H	24.3	25.0	24.8	25.5	25.9	22.2	22.8	22.7	23.3	23.8
	12H	24.3	24.9	24.8	25.4	26.0	22.2	22.8	22.7	23.3	23.8
12H	4H	24.1	24.8	24.5	25.3	25.8	21.8	22.6	22.3	23.1	23.6
	6H	24.3	24.9	24.8	25.4	25.9	22.2	22.8	22.7	23.3	23.8
	8H	24.4	24.9	24.9	25.4	26.0	22.3	22.8	22.8	23.3	23.9

Corrected UGR values based on total output energy
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0