

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

SL03IND8 20L 35K NL xx xx MW

Specline Linear Pendant, 1.8" aperture x 8' Long, Matte White Refl

Test Number

SP-01432_2

Test Date

6/3/2022

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

Summary of Results

Power

Input Watts	120 W
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Lumen Output

Output Lumens	11792
Efficacy	98.26 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

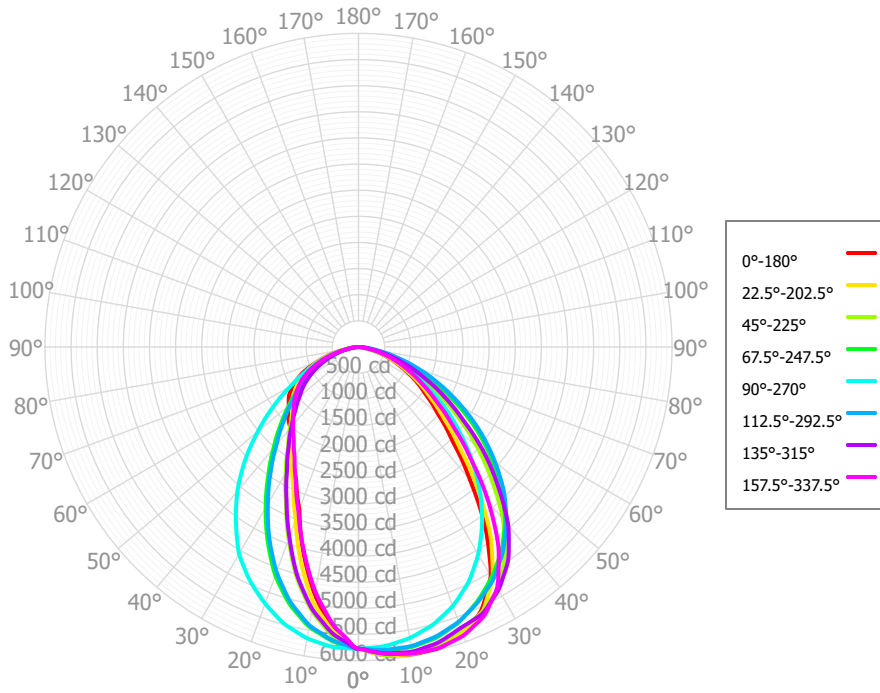
Full Beam Angle

0° - 180°	66°
90° - 270°	92°

IES File Header Contents

Keyword	Value
TEST	SP-01432_2
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/3/2022
ISSUEDATE	11/11/2022
LUMCAT	SL03IND8 20L 35K NL 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 1489 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°	545.89	4.63%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	1465.92	12.43%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	2066.77	17.53%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	2267.79	19.23%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	2066.46	17.52%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	1644.33	13.94%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	1107.23	9.39%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	521.97	4.43%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	105.29	0.89%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	11791.66	100.00%	0.00° - 180.00°	11791.66	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°	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44	5775.44
2.50°	5848.91	5849.02	5846.88	5803.51	5760.79	5705.83	5646.25	5566.46	5612.01	5623.21	5666.59	5714.00	5767.80	5796.01	5830.15	5835.91	5848.91
5.00°	5922.38	5922.59	5918.30	5831.57	5746.14	5636.21	5517.06	5357.47	5448.56	5470.97	5557.72	5652.55	5760.16	5816.56	5884.85	5896.37	5922.38
7.50°	5945.81	5943.98	5922.48	5830.59	5700.20	5522.31	5305.72	5055.92	5128.79	5219.34	5343.87	5543.17	5709.91	5814.22	5902.51	5925.54	5945.81
10.00°	5969.24	5965.37	5926.65	5829.60	5654.27	5408.40	5094.38	4754.37	4809.01	4967.70	5130.03	5433.78	5659.65	5811.89	5920.17	5954.71	5969.24
12.50°	5966.17	5949.76	5907.57	5792.77	5577.78	5227.14	4811.21	4396.73	4439.97	4613.40	4847.32	5263.38	5572.30	5772.80	5889.78	5957.15	5966.17
15.00°	5963.10	5934.13	5888.47	5755.95	5501.29	5045.87	4528.04	4039.07	4070.93	4259.09	4564.59	5092.98	5484.92	5733.71	5859.38	5959.58	5963.10
17.50°	5906.48	5880.06	5820.82	5681.81	5387.82	4813.55	4197.35	3699.44	3691.79	3889.57	4235.94	4872.64	5354.85	5664.88	5790.62	5917.04	5906.48
20.00°	5849.86	5825.99	5753.16	5607.67	5274.35	4581.22	3866.65	3359.81	3312.64	3520.05	3907.28	4652.29	5224.77	5596.04	5721.86	5874.50	5849.86
22.50°	5704.65	5713.97	5673.85	5491.10	5122.62	4310.12	3561.46	3097.93	3067.52	3234.88	3594.19	4380.00	5075.21	5494.50	5672.76	5777.37	5704.65
25.00°	5559.43	5601.94	5594.51	5374.53	4970.89	4039.02	3256.26	2836.04	2822.38	2949.70	3281.10	4107.71	4925.63	5392.97	5623.67	5680.23	5559.43
27.50°	5309.59	5364.15	5463.93	5232.70	4776.13	3753.26	2997.03	2641.22	2653.30	2754.53	3032.45	3829.41	4747.89	5269.75	5492.01	5494.87	5309.59
30.00°	5059.74	5126.36	5333.35	5090.87	4581.36	3467.49	2737.81	2446.40	2484.21	2559.34	2783.79	3551.12	4570.16	5146.53	5360.35	5309.51	5059.74
32.50°	4649.90	4764.12	5109.30	4927.31	4352.45	3201.05	2535.50	2303.44	2338.73	2405.76	2566.40	3282.08	4329.36	4977.67	5175.73	4988.97	4649.90
35.00°	4240.05	4401.88	4885.25	4763.74	4123.52	2934.60	2333.19	2160.47	2193.25	2252.17	2348.99	3013.03	4088.55	4808.80	4991.11	4668.41	4240.05
37.50°	3780.32	3974.68	4592.50	4564.59	3869.37	2688.32	2164.63	2054.09	2109.79	2134.33	2197.22	2771.13	3846.95	4605.62	4724.42	4268.36	3780.32
40.00°	3320.59	3547.48	4299.73	4365.43	3615.22	2442.02	1996.06	1947.70	2026.33	2016.49	2045.43	2529.24	3605.35	4402.44	4457.74	3868.32	3320.59
42.50°	2933.56	3149.79	3954.43	4121.89	3344.30	2239.42	1852.03	1854.01	1965.80	1906.47	1903.19	2318.45	3337.56	4170.84	4119.23	3460.43	2933.56
45.00°	2546.52	2752.08	3609.14	3878.32	3073.39	2036.81	1707.98	1760.33	1905.26	1796.44	1760.93	2107.65	3069.77	3939.25	3780.72	3052.53	2546.52
47.50°	2265.31	2448.13	3281.01	3601.01	2795.54	1860.69	1589.27	1678.74	1824.05	1714.89	1647.83	1922.03	2790.63	3671.88	3457.45	2709.42	2265.31
50.00°	1984.08	2144.18	2952.89	3323.68	2517.69	1684.56	1470.55	1597.14	1742.82	1633.33	1534.72	1736.39	2511.48	3404.51	3134.17	2366.31	1984.08
52.50°	1773.05	1911.21	2633.10	3041.29	2264.56	1528.41	1372.14	1515.61	1682.95	1563.36	1410.39	1581.17	2250.01	3130.64	2793.21	2099.49	1773.05
55.00°	1562.01	1678.22	2313.29	2758.90	2011.41	1372.25	1273.74	1434.07	1623.09	1493.39	1286.04	1425.94	1988.52	2856.78	2452.24	1832.67	1562.01
57.50°	1399.79	1489.16	2035.71	2463.26	1765.73	1226.13	1160.81	1340.24	1531.59	1404.51	1193.22	1279.23	1743.19	2571.46	2171.96	1620.02	1399.79
60.00°	1237.57	1300.10	1758.13	2167.64	1520.04	1080.02	1047.89	1246.39	1440.09	1315.61	1100.39	1132.52	1497.87	2286.15	1891.69	1407.36	1237.57
62.50°	1071.30	1123.58	1523.54	1881.41	1316.60	943.97	942.67	1130.95	1312.32	1212.47	982.27	1003.79	1309.24	2013.32	1636.00	1227.47	1071.30
65.00°	905.02	947.07	1288.93	1595.19	1113.16	807.91	837.44	1015.49	1184.54	1109.33	864.15	875.04	1120.59	1740.48	1380.30	1047.57	905.02
67.50°	769.71	794.82	1074.86	1344.55	938.93	701.90	716.01	883.46	1020.92	976.09	764.99	760.29	950.86	1483.50	1164.63	892.02	769.71
70.00°	634.41	642.57	860.77	1093.90	764.69	595.87	594.58	751.42	857.30	842.84	665.83	645.52	781.13	1226.53	948.95	736.47	634.41
72.50°	502.18	514.63	677.84	863.75	605.06	484.16	487.42	612.59	708.08	699.85	541.91	532.83	643.79	985.96	757.46	593.41	502.18
75.00°	369.94	386.68	494.89	633.60	445.41	372.43	380.24	473.74	558.84	556.85	417.98	420.12	506.44	745.37	565.96	450.35	369.94
77.50°	251.05	278.17	350.91	446.76	323.80	266.02	286.90	345.54	399.68	418.21	313.55	319.17	353.06	558.10	420.38	330.46	251.05
80.00°	132.16	169.67	206.91	259.91	202.17	159.61	193.55	217.34	240.52	279.58	209.11	218.20	199.68	370.82	274.81	210.56	132.16
82.50°	88.44	110.29	132.87	166.02	140.24	106.55	123.75	141.55	154.80	187.53	135.70	149.00	134.60	250.10	176.00	140.74	88.44
85.00°	44.72	50.91	58.84	72.12	78.29	53.46	53.95	65.75	69.08	95.47	62.28	79.78	69.51	129.39	77.16	70.91	44.72
87.50°	32.29	36.03	39.22	47.99	50.36	39.48	39.59	44.08	42.72	63.56	43.96	54.06	44.39	82.53	51.45	48.90	32.29
90.00°	19.83	21.13	19.59	23.87	22.42	25.50	25.21	22.40	16.35	31.66	25.62	28.33	19.27	35.65	25.73	26.86	19.83

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

RCR	pfc	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	14038	14038	14038	14038	13711	13711	13711	13711	13102	13102	13102	12544	12544	12544	12032	12032	11792
	1	12979	12480	12033	11631	12665	12215	11810	11442	11720	11388	11083	11265	10995	10746	10846	10630	10408
	2	11919	11043	10319	9711	11620	10825	10160	9596	10414	9857	9375	10036	9572	9164	9686	9304	8963
	3	10959	9824	8946	8246	10678	9642	8829	8173	9299	8604	8032	8982	8391	7895	8688	8189	7762
	4	10104	8799	7844	7115	9845	8647	7756	7067	8359	7585	6972	8092	7422	6880	7843	7267	6791
	5	9347	7936	6950	6223	9109	7808	6882	6190	7565	6749	6125	7338	6623	6061	7127	6501	5999
	6	8676	7204	6216	5507	8459	7095	6162	5483	6889	6057	5437	6696	5956	5391	6516	5860	5347
	7	8080	6578	5604	4922	7884	6485	5561	4905	6309	5477	4871	6144	5396	4838	5990	5318	4805
	8	7550	6040	5090	4437	7373	5961	5055	4424	5809	4986	4399	5667	4920	4374	5534	4856	4350
	9	7078	5574	4653	4030	6917	5506	4624	4021	5375	4567	4001	5252	4513	3982	5136	4460	3963
	10	6654	5168	4278	3685	6509	5108	4254	3678	4995	4207	3663	4888	4161	3648	4786	4117	3633

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	190.9 fc	7.4 ft
6.5 ft	136.7 fc	8.7 ft
7.5 ft	102.7 fc	10.0 ft
8.0 ft	90.2 fc	10.7 ft
10.0 ft	57.8 fc	13.4 ft
12.0 ft	40.1 fc	16.0 ft
14.0 ft	29.5 fc	18.7 ft
16.0 ft	22.6 fc	21.4 ft
20.0 ft	14.4 fc	26.7 ft
24.0 ft	10.0 fc	32.1 ft
28.0 ft	7.4 fc	37.4 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	51805	51805	51805
45.00°	32304	45783	38987
55.00°	24428	36177	31456
65.00°	19209	27357	23627
75.00°	12821	17151	15437
85.00°	4603	6056	8058

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	22.7	24.2	23.1	24.5	24.9	21.8	23.3	22.2	23.7	24.0
	3H	23.9	25.3	24.3	25.6	26.0	23.4	24.8	23.8	25.1	25.5
	4H	24.2	25.5	24.6	25.9	26.2	24.0	25.2	24.4	25.6	26.0
	6H	24.4	25.5	24.8	25.9	26.3	24.2	25.4	24.6	25.8	26.2
	8H	24.4	25.5	24.8	25.9	26.3	24.3	25.4	24.7	25.8	26.2
	12H	24.4	25.4	24.8	25.8	26.2	24.3	25.4	24.7	25.7	26.2
4H	2H	23.6	24.9	24.0	25.3	25.6	22.2	23.5	22.6	23.9	24.2
	3H	25.0	26.0	25.4	26.4	26.8	24.0	25.1	24.4	25.5	25.9
	4H	25.4	26.3	25.8	26.7	27.2	24.6	25.6	25.1	26.0	26.4
	6H	25.5	26.4	26.0	26.8	27.3	25.0	25.8	25.4	26.2	26.7
	8H	25.6	26.3	26.0	26.8	27.2	25.0	25.8	25.5	26.3	26.7
	12H	25.6	26.2	26.0	26.7	27.2	25.1	25.8	25.6	26.2	26.7
8H	4H	25.7	26.4	26.1	26.9	27.4	24.8	25.6	25.3	26.0	26.5
	6H	25.9	26.5	26.4	27.0	27.5	25.2	25.9	25.7	26.3	26.8
	8H	26.0	26.5	26.5	27.0	27.5	25.3	25.9	25.8	26.4	26.9
	12H	26.0	26.5	26.5	27.0	27.5	25.4	25.9	25.9	26.4	27.0
12H	4H	25.7	26.4	26.2	26.9	27.3	24.8	25.5	25.3	26.0	26.5
	6H	25.9	26.5	26.5	27.0	27.5	25.2	25.8	25.8	26.3	26.8
	8H	26.0	26.5	26.5	27.0	27.6	25.4	25.9	25.9	26.4	26.9

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0