

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

SLO3IND8 20L 35HK LA xx xx MW
Specline Linear Pendant, 1.8" aperture x 8' Long, Matte White Refl

Test Number

SP-01373_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	10120
Efficacy	84.33 lm/W

Luminous Dimensions

0° - 180° Size	0.15
90° - 270° Size	8
Height	0

Spacing Criterion

Two luminaires, plane 0°	1.12
Two luminaires, plane 90°	1.1
Four luminaires	1.19

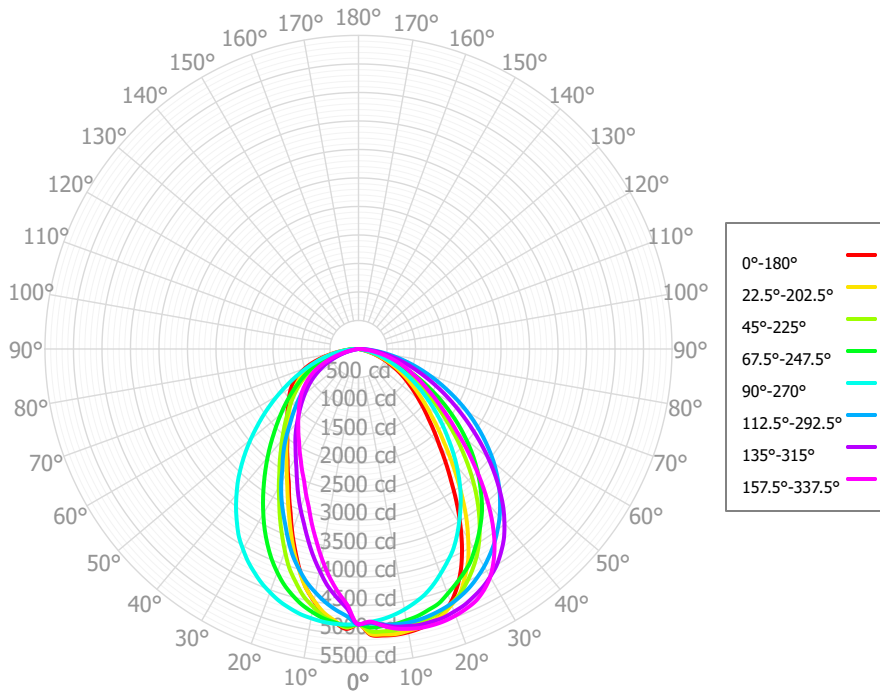
Full Beam Angle

0° - 180°	67°
90° - 270°	91°

IES File Header Contents

Keyword	Value
TEST	SP-01373_2
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	6/3/2022
ISSUE DATE	11/2/2022
LUMCAT	SLO3IND8 20L 35HK LA 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	67 Degree x 85 Degree Beam Angle
LAMP	N/A, Min. 90 CRI
LAMPCAT	N/A
OTHER	Reference project SL473
OTHER	20L designation for Spectrum linear product indicates 1265 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

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	459.17	4.54%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	1243.08	12.28%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	1747.11	17.26%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	1900.39	18.78%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	1748.32	17.28%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	1416.33	14.00%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	983.14	9.71%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	498.18	4.92%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	124.18	1.23%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	10119.91	100.00%	0.00° - 180.00°	10119.91	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°	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64	4830.64
2.50°	5021.33	5006.04	4959.27	4889.90	4793.31	4692.48	4559.56	4493.36	4914.88	4888.93	4887.68	4858.12	4838.84	4818.68	4800.54	4788.37	5021.33
5.00°	5045.52	5025.98	4972.74	4881.22	4759.12	4592.77	4375.79	4260.94	4809.22	4783.90	4812.30	4815.68	4838.19	4852.61	4859.02	4874.62	5045.52
7.50°	5055.21	5042.10	4975.26	4869.16	4708.18	4477.79	4183.67	4005.32	4682.06	4664.30	4729.06	4764.25	4824.65	4873.83	4914.36	4945.12	5055.21
10.00°	5044.61	5021.65	4949.91	4834.76	4640.17	4339.50	3943.03	3722.86	4492.30	4485.22	4590.74	4684.27	4795.84	4878.77	4936.47	4984.89	5044.61
12.50°	5016.39	4999.45	4918.79	4798.20	4558.89	4191.81	3699.15	3434.20	4279.87	4284.65	4444.38	4592.82	4759.02	4867.83	4957.03	5010.95	5016.39
15.00°	4968.27	4948.02	4875.80	4740.00	4466.34	4009.05	3442.24	3167.13	3998.38	4019.38	4241.03	4472.57	4700.44	4840.42	4951.68	5015.71	4968.27
17.50°	4872.97	4893.11	4822.82	4680.14	4343.72	3815.55	3195.19	2903.43	3698.17	3746.33	4032.84	4336.22	4632.92	4802.52	4942.63	5005.73	4872.97
20.00°	4733.29	4775.58	4753.55	4570.58	4200.51	3587.02	2978.52	2697.47	3405.00	3455.28	3773.22	4168.30	4541.68	4755.53	4903.59	4976.77	4733.29
22.50°	4521.60	4646.02	4651.56	4460.88	4054.74	3350.52	2763.10	2496.68	3113.26	3178.79	3512.50	3985.37	4443.01	4690.38	4859.78	4933.11	4521.60
25.00°	4255.12	4414.22	4506.72	4349.49	3907.57	3138.18	2550.60	2344.12	2876.70	2929.63	3261.08	3779.01	4323.73	4612.56	4789.97	4874.14	4255.12
27.50°	3932.73	4168.99	4343.78	4232.22	3725.27	2929.66	2357.31	2193.76	2647.31	2705.16	3012.22	3564.46	4199.52	4515.72	4714.40	4767.10	3932.73
30.00°	3576.15	3848.30	4161.09	4069.88	3527.30	2708.19	2199.62	2065.57	2479.31	2517.67	2796.05	3339.33	4053.65	4408.27	4616.81	4619.51	3576.15
32.50°	3209.63	3521.94	3946.12	3906.40	3326.67	2485.54	2055.01	1939.13	2315.39	2349.52	2584.77	3115.87	3904.25	4285.00	4505.87	4411.45	3209.63
35.00°	2838.14	3173.43	3702.66	3737.25	3125.13	2309.88	1930.36	1836.43	2182.04	2204.73	2407.62	2894.16	3718.21	4154.55	4357.02	4161.04	2838.14
37.50°	2514.87	2833.00	3443.34	3559.56	2905.96	2135.63	1802.57	1735.15	2050.22	2072.77	2235.59	2682.81	3528.64	4005.62	4190.18	3863.76	2514.87
40.00°	2210.45	2516.00	3172.71	3351.78	2682.30	1955.23	1670.94	1644.89	1945.30	1953.54	2087.14	2480.25	3328.68	3850.19	3982.52	3540.19	2210.45
42.50°	1967.76	2219.88	2895.10	3141.20	2454.62	1777.37	1549.59	1556.69	1843.00	1844.31	1943.22	2287.73	3128.08	3676.48	3757.46	3205.36	1967.76
45.00°	1743.34	1972.01	2613.39	2922.97	2226.20	1634.68	1438.46	1478.75	1767.66	1743.23	1815.02	2102.27	2910.36	3498.00	3501.29	2865.56	1743.34
47.50°	1559.46	1743.48	2343.54	2699.60	2017.94	1493.87	1332.28	1401.78	1692.31	1653.72	1691.26	1935.21	2692.42	3300.18	3238.64	2552.64	1559.46
50.00°	1384.63	1550.16	2079.21	2465.25	1812.04	1366.79	1230.19	1328.30	1616.81	1571.79	1579.11	1778.51	2471.14	3098.64	2966.72	2249.22	1384.63
52.50°	1235.57	1370.08	1838.59	2229.81	1616.76	1240.72	1132.42	1251.75	1544.70	1492.45	1469.77	1632.57	2251.37	2878.96	2695.70	1998.55	1235.57
55.00°	1090.36	1209.26	1606.53	1992.52	1422.06	1119.68	1037.52	1166.68	1487.34	1414.46	1366.16	1491.42	2043.91	2657.07	2425.75	1761.76	1090.36
57.50°	963.45	1059.35	1398.10	1757.77	1252.54	1000.96	938.42	1080.48	1428.28	1338.45	1263.51	1360.90	1838.52	2429.99	2168.06	1567.17	963.45
60.00°	838.07	922.61	1196.30	1526.58	1083.63	890.61	837.09	991.82	1363.89	1263.27	1162.44	1234.17	1643.80	2202.61	1922.19	1380.34	838.07
62.50°	712.42	788.64	1008.69	1303.54	927.31	781.43	739.04	896.01	1292.60	1183.50	1063.51	1116.46	1453.72	1968.24	1690.37	1220.12	712.42
65.00°	587.07	657.38	823.91	1089.70	772.87	675.44	642.42	788.07	1203.99	1102.24	967.45	1001.14	1280.63	1734.42	1469.50	1063.19	587.07
67.50°	476.10	530.33	669.57	887.42	635.52	568.26	538.94	673.87	1109.40	1006.24	871.30	890.12	1113.06	1514.62	1264.58	931.02	476.10
70.00°	365.88	406.60	519.15	695.71	501.44	458.54	433.18	550.91	1003.09	906.74	775.04	779.92	961.24	1295.96	1069.94	800.36	365.88
72.50°	265.18	296.10	381.58	520.44	385.72	353.96	339.11	427.94	883.46	795.30	677.06	675.04	814.49	1088.21	894.77	672.14	265.18
75.00°	167.48	194.28	244.97	357.65	273.56	258.16	247.90	304.99	743.08	681.79	577.53	570.84	678.90	884.00	729.59	544.23	167.48
77.50°	90.58	113.61	143.30	222.84	175.88	169.19	162.98	197.03	602.76	558.01	477.56	469.12	548.08	701.47	578.40	422.91	90.58
80.00°	25.30	44.00	45.16	105.10	91.06	89.58	79.18	102.82	462.52	433.17	377.27	367.56	425.52	524.99	432.82	303.65	25.30
82.50°	15.91	17.99	24.27	45.97	44.85	37.36	42.07	45.98	332.04	311.30	281.18	272.95	310.49	373.78	305.18	204.28	15.91
85.00°	8.33	9.86	5.15	15.21	11.40	16.30	10.03	17.67	211.76	189.74	187.53	179.36	206.26	233.56	183.22	111.40	8.33
87.50°	6.93	6.98	5.68	5.74	7.34	6.15	7.09	6.99	119.40	111.07	112.33	109.24	120.22	127.01	100.70	56.42	6.93
90.00°	5.92	5.73	6.10	4.59	5.24	6.05	5.54	7.12	50.64	36.01	45.94	43.77	55.23	44.82	27.32	11.29	5.92

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%	20%	0%
	pcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	10%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	30%
	0	12048	12048	12048	12048	11767	11767	11767	11767	11244	11244	11244	10766	10766	10766	10326	10326	10326	10120
	1	11113	10674	10280	9926	10842	10446	10089	9765	10020	9727	9458	9628	9390	9170	9267	9077	8899	8886
	2	10192	9426	8793	8262	9934	9238	8657	8164	8885	8396	7975	8559	8152	7795	8257	7922	7623	7752
	3	9363	8374	7610	7001	9120	8218	7509	6939	7922	7316	6818	7649	7134	6701	7395	6960	6588	6810
	4	8628	7495	6665	6032	8404	7363	6589	5991	7115	6443	5910	6885	6303	5831	6671	6170	5755	6038
	5	7978	6756	5901	5271	7773	6645	5842	5242	6435	5729	5187	6240	5620	5132	6058	5515	5079	5401
	6	7404	6130	5275	4661	7217	6036	5228	4641	5858	5138	4602	5692	5052	4563	5537	4969	4525	4869
	7	6895	5596	4754	4164	6725	5516	4717	4150	5365	4645	4121	5222	4575	4092	5089	4508	4064	4421
	8	6442	5138	4317	3753	6289	5069	4287	3742	4939	4228	3721	4816	4171	3699	4701	4116	3678	4040
	9	6038	4741	3946	3409	5900	4682	3921	3400	4569	3872	3384	4463	3825	3367	4363	3780	3351	3713
	10	5677	4395	3627	3116	5552	4344	3607	3110	4246	3566	3097	4154	3527	3084	4067	3489	3072	3430

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	159.7 fc	7.3 ft
6.5 ft	114.3 fc	8.6 ft
7.5 ft	85.9 fc	9.9 ft
8.0 ft	75.5 fc	10.6 ft
10.0 ft	48.3 fc	13.3 ft
12.0 ft	33.5 fc	15.9 ft
14.0 ft	24.6 fc	18.6 ft
16.0 ft	18.9 fc	21.2 ft
20.0 ft	12.1 fc	26.5 ft
24.0 ft	8.4 fc	31.8 ft
28.0 ft	6.2 fc	37.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	43330	43330	43330
45.00°	22115	33152	28240
55.00°	17052	25124	22239
65.00°	12460	17487	16404
75.00°	5804	8490	9481
85.00°	857	530	1174

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	21.9	23.5	22.3	23.8	24.1	21.9	23.4	22.3	23.8	24.1
	3H	22.9	24.3	23.3	24.6	25.0	23.7	25.1	24.1	25.4	25.8
	4H	23.1	24.4	23.5	24.8	25.1	24.3	25.6	24.7	26.0	26.4
	6H	23.1	24.3	23.6	24.7	25.1	24.8	26.0	25.2	26.4	26.8
	8H	23.1	24.3	23.5	24.6	25.0	25.0	26.1	25.4	26.5	26.9
	12H	23.1	24.2	23.5	24.6	25.0	25.1	26.2	25.5	26.6	27.0
4H	2H	23.0	24.3	23.4	24.6	25.0	22.4	23.7	22.8	24.0	24.4
	3H	24.2	25.3	24.7	25.7	26.1	24.3	25.4	24.7	25.8	26.2
	4H	24.6	25.6	25.0	26.0	26.4	25.1	26.0	25.5	26.5	26.9
	6H	24.7	25.6	25.2	26.0	26.5	25.7	26.5	26.1	27.0	27.4
	8H	24.7	25.5	25.2	26.0	26.4	25.9	26.7	26.4	27.1	27.6
	12H	24.7	25.4	25.2	25.9	26.4	26.1	26.8	26.6	27.3	27.7
8H	4H	25.1	25.9	25.6	26.3	26.8	25.3	26.1	25.8	26.6	27.0
	6H	25.4	26.0	25.9	26.5	27.0	26.0	26.7	26.5	27.2	27.7
	8H	25.4	26.0	25.9	26.5	27.0	26.3	26.9	26.8	27.4	27.9
	12H	25.4	26.0	25.9	26.4	27.0	26.6	27.1	27.1	27.6	28.2
12H	4H	25.2	25.9	25.6	26.3	26.8	25.4	26.1	25.9	26.6	27.0
	6H	25.5	26.1	26.0	26.5	27.1	26.1	26.7	26.6	27.2	27.7
	8H	25.6	26.1	26.1	26.6	27.2	26.4	27.0	26.9	27.4	28.0

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0