

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C0614LM137L35KMDNL

6" Round x 12" High Cylinder Luminaire

Test Number

SP-R22

Test Date

9/10/2025

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

Summary of Results

Power

Input Watts	96.55 W
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Lumen Output

Output Lumens	10399
Efficacy	107.71 lm/W

Luminous Dimensions

0° - 180° Size	-0.5
90° - 270° Size	-0.5
Height	0

Spacing Criterion

Two luminaires, plane 0°	0.65
Two luminaires, plane 90°	0.65
Four luminaires	0.74

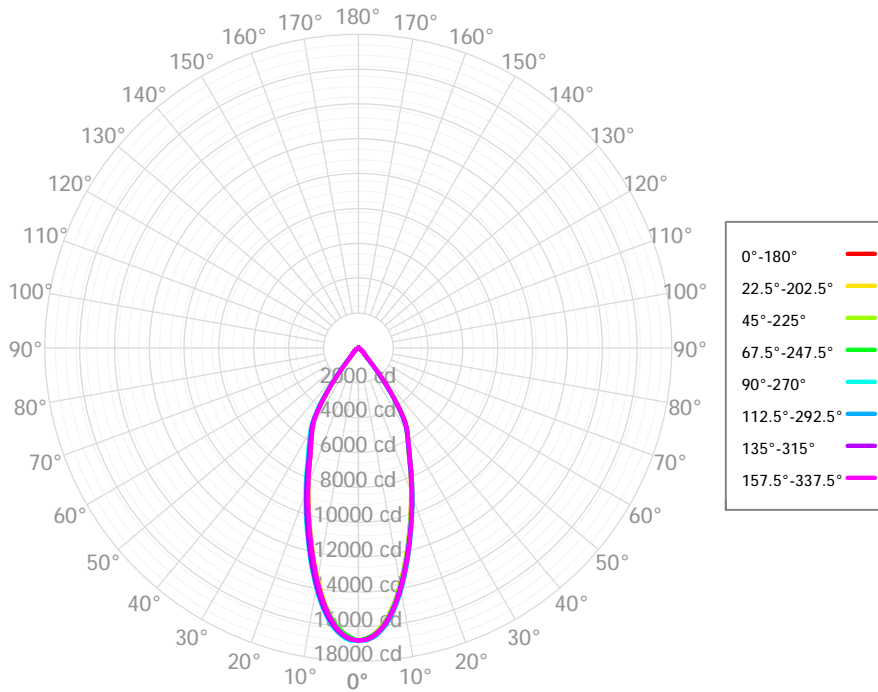
Full Beam Angle

0° - 180°	41°
90° - 270°	42°

IES File Header Contents

Keyword	Value
TEST	SP-R22
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM137L35KMDNL
LUMINAIRE	6" Round x 12" High Cylinder Luminaire
DISTRIBUTION	Beam Angle 41.8
OTHER	CCT 3478 CRI 81.6 R9 4.9
OTHER	Total Luminaire wattage is approximate
OTHER	This report is prepared by Spectrum Lighting
_CRI	80+
_CCTMULT	30K x 0.95, 40K x 1.02, 30HK x 0.744, 35HK x 0.73, 40HK x 0.74
_LAMPMULT	100L x 0.77, 120L x 0.88

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	1460.65	14.05%	90.00° - 100.00°	1.70	0.02%
10.00° - 20.00°	2825.38	27.17%	100.00° - 110.00°	1.38	0.01%
20.00° - 30.00°	3479.92	33.46%	100.00° - 120.00°	3.00	0.03%
30.00° - 40.00°	2084.39	20.04%	120.00° - 130.00°	1.82	0.02%
40.00° - 50.00°	329.74	3.17%	130.00° - 140.00°	1.79	0.02%
50.00° - 60.00°	178.01	1.71%	140.00° - 150.00°	2.56	0.02%
60.00° - 70.00°	37.22	0.36%	150.00° - 160.00°	1.98	0.02%
70.00° - 80.00°	4.81	0.05%	160.00° - 170.00°	1.06	0.01%
80.00° - 90.00°	2.32	0.02%	170.00° - 180.00°	0.47	0.00%
0.00° - 90.00°	10384.40	99.86%	0.00° - 180.00°	10399.00	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°	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67	16789.67
1.50°	16706.79	16708.95	16684.41	16693.13	16783.69	16731.38	16745.44	16716.69	16721.75	16651.94	16659.92	16616.12	16808.11	16790.51	16737.69	16754.45	16706.79
3.00°	16488.36	16533.97	16473.43	16524.60	16574.34	16501.26	16546.87	16481.42	16499.43	16400.20	16440.48	16371.68	16620.20	16636.03	16536.31	16572.70	16488.36
4.50°	16130.47	16199.03	16122.41	16231.09	16224.39	16153.89	16207.04	16100.68	16124.57	16008.33	16075.17	15986.33	16291.60	16325.94	16212.47	16241.16	16130.47
6.00°	15637.04	15723.06	15628.06	15767.87	15732.04	15663.38	15727.79	15544.16	15586.50	15434.41	15555.07	15472.62	15814.10	15875.49	15733.13	15788.02	15637.04
7.50°	15032.26	15136.18	15007.29	15182.89	15120.41	15031.30	15117.04	14852.81	14908.22	14749.65	14919.76	14836.35	15213.70	15301.65	15135.67	15204.18	15032.26
9.00°	14324.88	14449.10	14304.00	14511.27	14411.18	14310.07	14401.12	14085.39	14135.79	13975.75	14190.91	14106.22	14498.46	14626.72	14426.59	14518.24	14324.88
10.50°	13560.17	13685.41	13528.40	13742.96	13647.71	13533.39	13607.73	13258.08	13289.41	13164.23	13399.35	13329.41	13716.08	13873.59	13662.06	13767.56	13560.17
12.00°	12769.60	12901.23	12733.79	12964.00	12862.23	12736.49	12788.00	12405.08	12444.09	12317.29	12576.33	12520.39	12911.45	13081.14	12875.06	12979.60	12769.60
13.50°	11977.70	12107.44	11941.07	12169.97	12067.07	11920.77	11963.25	11569.06	11603.62	11480.21	11757.39	11708.84	12076.11	12279.54	12090.86	12193.44	11977.70
15.00°	11203.83	11325.67	11164.44	11402.43	11290.36	11152.79	11151.09	10772.63	10794.66	10688.42	10952.49	10921.19	11266.93	11487.59	11305.84	11408.37	11203.83
16.50°	10467.18	10572.33	10426.45	10644.99	10553.00	10417.58	10375.09	10020.10	10038.80	9953.75	10213.36	10161.11	10517.24	10723.91	10577.27	10653.41	10467.18
18.00°	9762.77	9863.79	9727.69	9951.42	9850.43	9688.82	9643.36	9298.66	9328.30	9232.21	9495.40	9442.26	9783.89	10005.20	9860.56	9942.46	9762.77
19.50°	9096.85	9191.38	9072.40	9286.27	9178.96	8999.74	8943.11	8603.75	8653.26	8571.09	8800.33	8765.47	9083.91	9307.54	9162.88	9262.31	9096.85
21.00°	8464.03	8559.34	8448.52	8643.17	8534.91	8338.61	8259.75	7950.73	8007.38	7935.05	8157.40	8118.30	8430.82	8634.12	8499.40	8606.38	8464.03
22.50°	7845.34	7954.73	7844.95	8013.33	7893.72	7685.58	7595.92	7309.77	7378.51	7316.51	7534.72	7494.06	7799.01	8003.49	7876.51	7987.28	7845.34
24.00°	7255.44	7353.68	7253.31	7396.43	7279.63	7071.98	6992.73	6745.42	6816.83	6758.81	6960.29	6922.77	7197.36	7388.02	7283.61	7392.42	7255.44
25.50°	6736.12	6807.09	6733.51	6851.74	6759.09	6578.60	6505.59	6299.59	6355.43	6316.63	6480.77	6450.69	6695.01	6842.10	6758.09	6853.72	6736.12
27.00°	6300.56	6367.75	6317.93	6412.87	6315.78	6142.43	6083.08	5914.54	5960.02	5927.24	6075.27	6046.17	6279.09	6394.78	6327.25	6402.67	6300.56
28.50°	5911.40	5947.39	5906.99	6009.40	5903.08	5734.16	5706.43	5556.65	5608.42	5556.45	5663.05	5651.62	5872.92	5965.73	5929.93	6009.18	5911.40
30.00°	5564.86	5590.38	5545.77	5630.57	5539.87	5391.79	5379.02	5231.57	5291.39	5233.88	5320.78	5313.06	5499.90	5615.33	5582.81	5654.38	5564.86
31.50°	5203.98	5265.04	5200.14	5264.02	5130.70	4944.69	4952.84	4791.45	4882.20	4811.58	4932.97	4866.69	5090.25	5246.76	5185.17	5299.29	5203.98
33.00°	4665.85	4778.85	4654.53	4734.68	4510.74	4291.36	4331.49	4140.38	4279.73	4189.04	4326.48	4210.92	4490.26	4673.01	4602.65	4773.16	4665.85
34.50°	3965.63	4116.78	3947.72	4020.23	3769.45	3536.47	3587.02	3383.57	3541.93	3433.39	3582.72	3456.01	3753.59	3951.73	3868.75	4069.80	3965.63
36.00°	3183.00	3330.05	3156.65	3241.11	2976.03	2745.55	2805.17	2607.16	2752.19	2625.84	2792.85	2675.09	2965.82	3169.27	3084.26	3288.11	3183.00
37.50°	2385.32	2519.67	2357.33	2458.73	2194.86	1982.56	2028.19	1857.60	1975.92	1854.11	2014.30	1905.11	2192.02	2365.81	2309.10	2506.03	2385.32
39.00°	1643.86	1760.43	1612.57	1718.37	1478.32	1315.51	1335.48	1192.15	1292.16	1198.04	1318.82	1225.27	1486.36	1642.32	1593.23	1758.74	1643.86
40.50°	1037.39	1118.91	1019.39	1098.32	904.05	836.00	814.96	748.87	801.31	757.00	822.85	736.38	933.16	1040.29	1012.27	1117.46	1037.39
42.00°	699.78	713.98	677.10	732.54	651.48	612.18	598.86	572.73	589.66	565.75	588.41	568.80	642.28	674.40	688.97	724.26	699.78
43.50°	574.55	583.20	575.10	588.75	558.13	525.02	518.45	496.96	509.06	488.95	501.96	489.25	535.15	561.78	568.44	593.49	574.55
45.00°	500.64	509.34	501.43	510.83	485.71	456.30	452.92	437.55	448.11	428.82	435.11	427.67	461.11	489.80	494.62	512.46	500.64
46.50°	442.01	455.15	445.20	447.32	425.70	397.80	395.04	384.29	394.20	378.92	380.34	381.18	403.01	425.03	433.36	451.72	442.01
48.00°	381.88	395.97	386.29	389.53	367.51	345.73	345.51	334.44	342.85	331.57	332.23	325.78	351.71	370.45	378.08	389.54	381.88
49.50°	334.74	346.50	340.10	337.59	317.48	297.33	294.53	283.89	295.17	284.43	288.85	280.35	300.94	325.66	329.61	343.60	334.74
51.00°	282.39	295.85	285.53	284.81	264.86	246.60	248.35	241.05	248.86	242.48	242.92	237.64	256.43	273.37	281.49	291.16	282.39
52.50°	238.60	250.90	239.50	238.59	220.28	203.60	210.41	204.50	210.13	205.29	204.84	202.40	215.52	229.62	235.51	247.73	238.60
54.00°	201.47	208.76	199.83	200.64	182.50	173.15	177.60	167.41	175.11	173.24	170.30	169.24	181.75	194.28	196.09	208.08	201.47
55.50°	168.31	173.87	164.76	164.07	147.80	139.78	144.25	137.18	143.80	140.82	142.87	139.61	150.47	161.83	161.42	170.46	168.31
57.00°	136.29	140.32	131.10	129.69	119.98	115.26	116.23	116.02	122.26	114.72	116.08	114.81	119.86	128.10	130.88	136.74	136.29
58.50°	109.97	110.56	104.81	104.33	98.15	94.11	94.35	91.66	100.85	98.28	93.62	92.90	101.04	103.97	103.83	111.73	109.97
60.00°	91.64	88.97	86.02	83.76	79.28	73.42	76.40	71.77	81.21	76.15	78.98	77.64	80.92	85.47	85.47	91.78	91.64
61.50°	71.21	71.04	64.34	66.98	55.68	56.19	58.89	55.22	62.73	58.01	63.07	60.51	64.74	65.70	67.20	72.49	71.21
63.00°	52.91	53.57	49.04	52.14	43.18	41.72	46.36	40.78	48.39	43.95	46.43	47.06	51.22	51.97	49.32	56.64	52.91
64.50°	40.65	39.59	39.67	38.69	32.55	30.73	35.33	30.65	37.37	34.46	34.26	37.60	38.90	40.01	37.32	42.39	40.65

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

	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%
RCR	0	12376	12376	12376	12376	12087	12087	12087	12087	11546	11546	11546	11052	11052	11052	10598	10598	10384
	1	11828	11553	11305	11083	11573	11327	11106	10905	10905	10729	10568	10517	10379	10251	10160	10053	9852
	2	11268	10781	10379	10041	11039	10602	10237	9927	10265	9966	9708	9955	9712	9498	9668	9472	9286
	3	10726	10084	9588	9192	10520	9939	9484	9117	9667	9285	8970	9415	9096	8828	9181	8917	8691
	4	10209	9454	8902	8480	10023	9336	8825	8429	9113	8675	8328	8905	8532	8230	8713	8396	8135
	5	9719	8884	8301	7871	9552	8787	8242	7835	8601	8128	7764	8429	8018	7695	8268	7913	7628
	6	9257	8367	7770	7341	9107	8286	7724	7315	8130	7634	7265	7985	7549	7215	7850	7466	7166
	7	8825	7897	7296	6874	8688	7828	7259	6856	7697	7189	6818	7574	7120	6782	7458	7054	6746
	8	8420	7469	6871	6460	8296	7410	6841	6446	7298	6784	6418	7192	6729	6390	7093	6676	6363
	9	8042	7078	6487	6088	7930	7027	6463	6078	6930	6417	6056	6839	6371	6036	6753	6328	6015
	10	7690	6721	6140	5754	7588	6677	6121	5746	6593	6082	5729	6513	6044	5713	6438	6008	5697

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	555.0 fc	4.1 ft
6.5 ft	397.4 fc	4.9 ft
7.5 ft	298.5 fc	5.6 ft
8.0 ft	262.3 fc	6.0 ft
10.0 ft	167.9 fc	7.5 ft
12.0 ft	116.6 fc	9.0 ft
14.0 ft	85.7 fc	10.5 ft
16.0 ft	65.6 fc	12.0 ft
20.0 ft	42.0 fc	15.0 ft
24.0 ft	29.1 fc	18.1 ft
28.0 ft	21.4 fc	21.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	920412	920412	920412
45.00°	38813	38875	37656
55.00°	17143	16865	15232
65.00°	4796	4738	3874
75.00°	1043	1044	962
85.00°	890	1271	707

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		Viewing C0-180					Viewing C90-270				
2H	2H	12.8	13.8	13.2	14.1	14.4	11.7	12.6	12.0	12.9	13.3
	3H	12.8	13.6	13.1	13.9	14.3	11.6	12.4	12.0	12.8	13.1
	4H	12.7	13.4	13.1	13.8	14.2	11.5	12.3	11.9	12.6	13.0
	6H	12.6	13.3	13.0	13.6	14.1	11.4	12.1	11.8	12.5	12.9
	8H	12.5	13.2	12.9	13.6	14.0	11.4	12.0	11.8	12.4	12.8
	12H	12.5	13.1	12.9	13.5	13.9	11.3	11.9	11.7	12.3	12.8
4H	2H	12.7	13.4	13.1	13.8	14.2	11.5	12.3	11.9	12.6	13.0
	3H	12.6	13.2	13.0	13.6	14.0	11.5	12.1	11.9	12.5	12.9
	4H	12.5	13.0	12.9	13.5	13.9	11.4	11.9	11.8	12.3	12.8
	6H	12.4	12.9	12.9	13.3	13.8	11.3	11.7	11.7	12.2	12.7
	8H	12.3	12.8	12.8	13.2	13.7	11.2	11.7	11.7	12.1	12.6
	12H	12.3	12.6	12.8	13.1	13.6	11.2	11.5	11.6	12.0	12.5
8H	4H	12.3	12.8	12.8	13.2	13.7	11.2	11.6	11.7	12.1	12.6
	6H	12.2	12.6	12.7	13.1	13.6	11.1	11.4	11.6	11.9	12.4
	8H	12.1	12.5	12.7	13.0	13.5	11.0	11.3	11.6	11.9	12.4
	12H	12.1	12.4	12.6	12.9	13.5	11.0	11.3	11.5	11.8	12.4
12H	4H	12.2	12.6	12.7	13.1	13.6	11.1	11.5	11.6	12.0	12.5
	6H	12.1	12.5	12.7	12.9	13.5	11.0	11.3	11.6	11.8	12.4
	8H	12.1	12.4	12.6	12.9	13.4	11.0	11.3	11.5	11.8	12.3

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0