

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C0614LM100L35KMDGL

6" Round x 12" High Cylinder Luminaire

Test Number

SP-R35

Test Date

9/10/2025

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

Summary of Results

Power

Input Watts	69.45 W
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Lumen Output

Output Lumens	7219
Efficacy	103.95 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

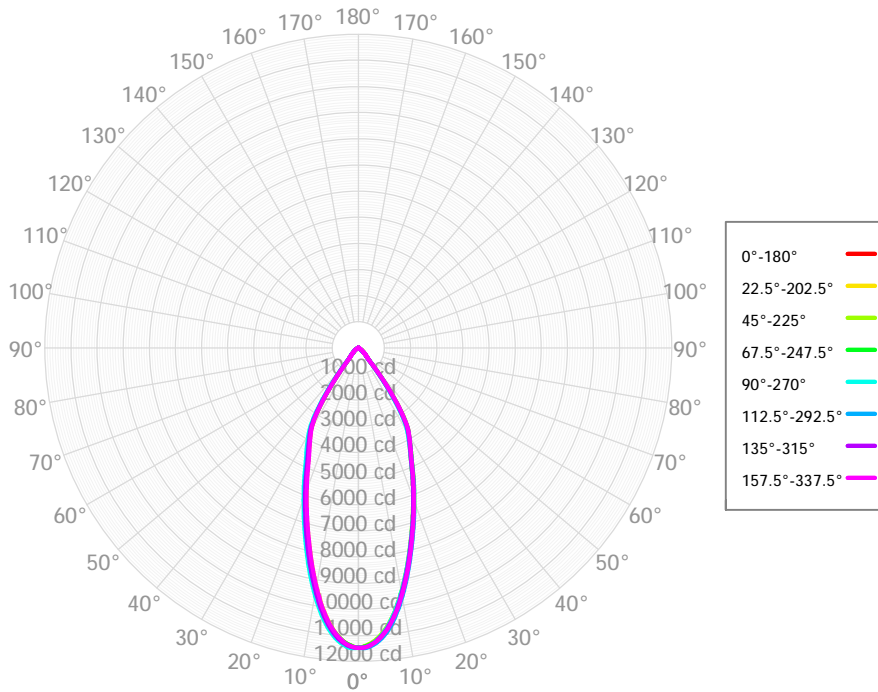
Full Beam Angle

0° - 180°	42°
90° - 270°	43°

IES File Header Contents

Keyword	Value
TEST	SP-R35
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM100L35KMDGL
LUMINAIRE	6" Round x 12" High Cylinder Luminaire
DISTRIBUTION	Beam Angle 42.2
OTHER	CCT 3474 CRI 81.3 R9 3.1
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	120L x 1.14, 137L x 1.31

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	999.87	13.85%	90.00° - 100.00°	1.74	0.02%
10.00° - 20.00°	1945.61	26.95%	100.00° - 110.00°	1.65	0.02%
20.00° - 30.00°	2405.13	33.32%	100.00° - 120.00°	3.35	0.05%
30.00° - 40.00°	1387.11	19.21%	120.00° - 130.00°	1.87	0.03%
40.00° - 50.00°	267.95	3.71%	130.00° - 140.00°	1.85	0.03%
50.00° - 60.00°	156.09	2.16%	140.00° - 150.00°	2.22	0.03%
60.00° - 70.00°	46.73	0.65%	150.00° - 160.00°	1.68	0.02%
70.00° - 80.00°	9.15	0.13%	160.00° - 170.00°	0.94	0.01%
80.00° - 90.00°	2.93	0.04%	170.00° - 180.00°	0.42	0.01%
0.00° - 90.00°	7204.70	99.80%	0.00° - 180.00°	7219.00	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°	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19	11482.19
1.50°	11427.01	11426.58	11397.58	11417.39	11459.48	11434.55	11439.04	11414.83	11426.94	11393.80	11416.23	11393.81	11493.42	11486.83	11453.60	11457.38	11442.19
3.00°	11289.90	11303.72	11255.43	11294.42	11304.72	11269.31	11300.26	11249.66	11277.96	11228.22	11265.32	11232.79	11366.07	11370.96	11316.21	11327.24	11289.90
4.50°	11052.72	11084.59	11017.06	11072.28	11062.05	11011.65	11058.73	10977.07	11018.87	10955.84	11016.81	10975.81	11145.66	11172.12	11082.60	11109.29	11052.72
6.00°	10726.12	10774.64	10691.67	10764.04	10724.39	10663.11	10719.89	10606.99	10657.29	10592.14	10680.17	10630.08	10831.62	10877.95	10764.01	10802.76	10726.12
7.50°	10314.52	10384.95	10292.77	10374.92	10300.95	10236.42	10297.35	10152.33	10206.22	10138.88	10262.95	10204.99	10420.31	10483.76	10367.56	10409.41	10314.52
9.00°	9847.61	9927.51	9821.10	9909.57	9819.40	9747.03	9804.33	9628.06	9696.50	9617.97	9774.69	9724.99	9949.91	10016.66	9893.19	9946.48	9847.61
10.50°	9345.24	9421.44	9302.14	9407.70	9303.59	9224.42	9267.43	9072.96	9141.52	9070.45	9252.35	9197.48	9418.55	9504.29	9361.04	9443.27	9345.24
12.00°	8803.48	8893.68	8774.03	8886.66	8776.76	8686.95	8716.29	8508.76	8566.57	8513.69	8700.90	8649.15	8878.30	8965.99	8828.09	8911.77	8803.48
13.50°	8269.04	8358.06	8239.89	8361.38	8244.28	8143.83	8151.49	7932.97	7997.40	7940.10	8150.83	8090.66	8321.25	8419.32	8290.96	8369.34	8269.04
15.00°	7745.79	7825.74	7712.50	7836.69	7721.54	7607.95	7613.72	7393.81	7454.62	7405.26	7605.95	7553.96	7775.91	7884.24	7749.57	7838.15	7745.79
16.50°	7246.39	7325.90	7208.45	7336.37	7227.74	7103.34	7090.08	6880.24	6948.15	6904.53	7089.05	7046.63	7253.98	7371.54	7248.69	7328.60	7246.39
18.00°	6764.44	6848.62	6733.00	6864.80	6757.63	6628.53	6584.89	6391.62	6456.74	6414.63	6591.95	6540.73	6759.29	6887.75	6770.34	6842.42	6764.44
19.50°	6303.91	6387.19	6276.07	6400.00	6300.43	6162.63	6110.70	5920.61	5988.50	5947.16	6115.79	6079.42	6280.86	6409.66	6299.97	6371.22	6303.91
21.00°	5852.09	5939.22	5848.16	5969.84	5863.65	5721.56	5654.36	5481.21	5546.63	5508.12	5669.06	5627.35	5834.85	5955.47	5852.69	5921.53	5852.09
22.50°	5436.18	5518.59	5435.86	5547.45	5431.22	5273.56	5205.07	5047.05	5121.51	5079.90	5244.21	5204.45	5408.00	5518.83	5438.07	5502.42	5436.18
24.00°	5024.70	5104.57	5028.52	5123.00	5009.95	4856.21	4789.14	4659.79	4726.79	4704.22	4826.68	4808.39	4992.89	5099.02	5037.21	5089.20	5024.70
25.50°	4667.31	4726.70	4664.77	4745.48	4649.83	4520.78	4464.31	4350.19	4406.35	4401.31	4501.85	4490.27	4646.06	4722.02	4674.24	4723.08	4667.31
27.00°	4363.28	4420.77	4377.03	4445.97	4350.77	4220.12	4178.97	4087.46	4132.99	4114.65	4216.61	4201.98	4358.57	4412.79	4380.18	4421.71	4363.28
28.50°	4092.46	4137.63	4097.76	4153.00	4046.65	3946.64	3922.61	3831.73	3881.85	3856.60	3919.56	3919.99	4065.86	4129.83	4109.37	4149.32	4092.46
30.00°	3847.17	3881.81	3845.47	3892.89	3779.46	3697.13	3680.37	3589.13	3653.85	3607.54	3663.78	3663.02	3804.51	3872.94	3865.43	3896.27	3847.17
31.50°	3570.84	3644.86	3572.26	3630.74	3476.63	3349.51	3348.96	3244.61	3322.89	3244.85	3326.96	3307.33	3492.40	3600.33	3575.23	3642.11	3570.84
33.00°	3170.06	3269.53	3159.71	3214.60	3012.21	2864.42	2883.19	2750.69	2844.70	2752.11	2854.33	2809.26	3039.62	3182.96	3146.47	3255.09	3170.06
34.50°	2655.24	2761.36	2642.86	2688.31	2463.42	2321.68	2338.19	2201.97	2287.06	2192.00	2306.07	2264.02	2500.95	2665.28	2621.22	2744.76	2655.24
36.00°	2094.18	2194.63	2070.91	2129.08	1910.03	1763.79	1794.66	1654.84	1729.16	1629.84	1750.93	1715.88	1945.00	2108.11	2062.33	2193.38	2094.18
37.50°	1544.31	1638.10	1521.70	1589.66	1385.65	1248.74	1274.31	1151.30	1212.19	1122.23	1236.62	1204.08	1417.43	1560.86	1522.20	1648.27	1544.31
39.00°	1059.04	1135.24	1043.60	1094.47	932.57	834.09	845.92	750.04	795.03	743.25	820.44	791.79	956.22	1079.69	1041.53	1144.26	1059.04
40.50°	708.78	756.71	702.66	725.47	638.83	584.34	576.98	537.03	551.74	542.00	576.08	563.09	640.54	714.87	692.75	755.00	708.78
42.00°	542.95	560.21	540.23	549.43	515.09	487.31	478.41	458.68	470.57	462.28	480.14	473.08	500.40	533.16	528.18	552.01	542.95
43.50°	469.30	484.86	469.67	475.96	447.15	425.42	420.21	404.01	415.13	410.44	421.01	413.87	434.83	455.25	458.18	474.90	469.30
45.00°	415.89	425.24	416.33	419.64	395.92	375.40	370.07	357.64	365.80	362.09	370.26	363.26	383.37	396.74	403.24	421.57	415.89
46.50°	363.72	377.33	369.20	370.16	348.12	331.22	326.41	317.87	324.08	318.55	325.79	319.14	338.84	352.03	355.58	371.92	363.72
48.00°	318.85	335.75	323.46	324.16	302.45	288.56	285.04	275.30	285.58	279.36	285.37	277.17	295.55	307.59	312.52	324.97	318.85
49.50°	278.66	291.14	281.27	279.17	259.73	246.22	246.01	237.37	246.34	238.10	247.81	238.42	256.04	267.06	273.40	284.74	278.66
51.00°	237.86	246.81	240.15	238.23	220.94	210.19	209.60	202.64	211.16	206.36	210.56	206.53	217.71	230.23	233.32	245.79	237.86
52.50°	202.81	209.49	202.91	205.09	188.03	179.02	180.12	172.64	184.99	175.59	180.48	176.64	188.50	198.21	200.41	208.61	202.81
54.00°	176.80	179.46	173.86	171.96	159.39	150.99	153.29	146.21	155.89	146.95	154.77	149.64	161.49	170.11	169.89	177.49	176.80
55.50°	144.02	148.99	144.39	141.54	133.22	126.24	129.24	124.29	129.38	124.83	130.99	127.85	134.81	141.00	141.84	149.43	144.02
57.00°	122.32	126.41	119.21	119.10	113.37	107.07	110.71	104.57	109.21	106.29	109.66	109.34	117.36	120.02	119.78	125.39	122.32
58.50°	103.96	110.04	102.44	102.48	95.64	89.54	92.76	89.99	93.00	90.93	95.61	91.71	100.20	102.54	103.57	107.78	103.96
60.00°	86.94	91.31	85.57	86.07	80.52	75.38	78.41	73.89	78.83	75.65	79.00	77.74	83.42	86.16	85.62	89.85	86.94
61.50°	72.52	74.06	71.89	72.22	68.14	64.25	66.48	62.43	65.43	63.37	65.41	64.32	69.24	72.72	71.68	73.59	72.52
63.00°	59.94	60.87	60.76	62.60	58.02	55.20	55.55	53.33	54.57	52.64	56.15	51.80	57.01	61.33	60.24	60.87	59.94
64.50°	50.51	51.80	50.75	51.97	48.75	45.81	45.25	43.27	45.90	41.91	47.71	44.71	49.44	51.26	51.40	51.34	50.51

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	8591	8591	8591	8591	8389	8389	8389	8389	8013	8013	8013	7669	7669	7669	7353	7353	7205
	1	8205	8012	7838	7682	8027	7855	7699	7559	7561	7437	7324	7291	7193	7103	7042	6966	6826
	2	7810	7467	7185	6947	7650	7342	7086	6868	7108	6897	6715	6891	6720	6570	6691	6553	6424
	3	7428	6977	6628	6350	7284	6876	6555	6297	6686	6416	6195	6510	6285	6096	6346	6160	6041
	4	7065	6535	6147	5851	6935	6452	6093	5815	6296	5988	5745	6151	5889	5676	6016	5794	5685
	5	6722	6136	5727	5425	6605	6068	5686	5400	5938	5606	5351	5818	5529	5302	5705	5456	5357
	6	6400	5776	5357	5056	6294	5718	5324	5038	5610	5262	5002	5508	5202	4968	5413	5144	5054
	7	6099	5449	5027	4732	6003	5400	5002	4719	5308	4952	4693	5222	4904	4667	5141	4858	4777
	8	5817	5151	4732	4444	5731	5110	4712	4434	5031	4672	4415	4957	4633	4396	4888	4596	4522
	9	5555	4880	4467	4187	5476	4845	4450	4180	4777	4417	4165	4713	4386	4151	4653	4355	4288
	10	5311	4633	4227	3957	5239	4602	4213	3951	4543	4186	3939	4487	4159	3928	4435	4134	4073

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	379.6 fc	4.2 ft
6.5 ft	271.8 fc	5.0 ft
7.5 ft	204.1 fc	5.7 ft
8.0 ft	179.4 fc	6.1 ft
10.0 ft	114.8 fc	7.6 ft
12.0 ft	79.7 fc	9.1 ft
14.0 ft	58.6 fc	10.7 ft
16.0 ft	44.9 fc	12.2 ft
20.0 ft	28.7 fc	15.2 ft
24.0 ft	19.9 fc	18.3 ft
28.0 ft	14.6 fc	21.3 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	629455	629455	629455
45.00°	32243	32277	30694
55.00°	14809	14739	13567
65.00°	6189	6174	5930
75.00°	2410	2279	2121
85.00°	1112	1323	1022

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	13.6	14.6	14.0	14.9	15.2	12.6	13.6	13.0	13.9	14.2
	3H	13.8	14.7	14.2	15.0	15.4	12.8	13.7	13.2	14.0	14.4
	4H	13.8	14.6	14.2	15.0	15.3	12.8	13.6	13.2	14.0	14.4
	6H	13.7	14.4	14.1	14.8	15.2	12.7	13.5	13.2	13.8	14.2
	8H	13.7	14.4	14.1	14.8	15.2	12.7	13.4	13.1	13.8	14.2
	12H	13.6	14.3	14.1	14.7	15.1	12.6	13.3	13.1	13.7	14.1
4H	2H	13.6	14.4	14.0	14.7	15.1	12.6	13.4	13.0	13.7	14.1
	3H	13.9	14.5	14.3	14.9	15.3	12.9	13.5	13.3	13.9	14.3
	4H	13.8	14.4	14.3	14.9	15.3	12.9	13.4	13.3	13.9	14.3
	6H	13.8	14.3	14.3	14.7	15.2	12.8	13.3	13.3	13.7	14.2
	8H	13.7	14.2	14.2	14.6	15.1	12.7	13.2	13.2	13.7	14.1
	12H	13.7	14.1	14.2	14.6	15.0	12.7	13.1	13.2	13.6	14.1
8H	4H	13.7	14.2	14.2	14.6	15.1	12.7	13.2	13.2	13.6	14.1
	6H	13.7	14.0	14.2	14.5	15.0	12.7	13.0	13.2	13.5	14.0
	8H	13.6	13.9	14.1	14.5	15.0	12.6	12.9	13.2	13.5	14.0
	12H	13.6	13.8	14.1	14.4	14.9	12.6	12.9	13.1	13.4	14.0
12H	4H	13.7	14.0	14.2	14.5	15.0	12.7	13.1	13.2	13.5	14.0
	6H	13.6	13.9	14.1	14.4	14.9	12.6	12.9	13.1	13.4	13.9
	8H	13.6	13.8	14.1	14.3	14.9	12.6	12.8	13.1	13.3	13.9

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0