

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C0614LM100L35KWDGL
6" Round x 12" High Cylinder Luminaire

Test Number

SP-R34

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	8283
Efficacy	119.27 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.96
Two luminaires, plane 90°	0.95
Four luminaires	0.99

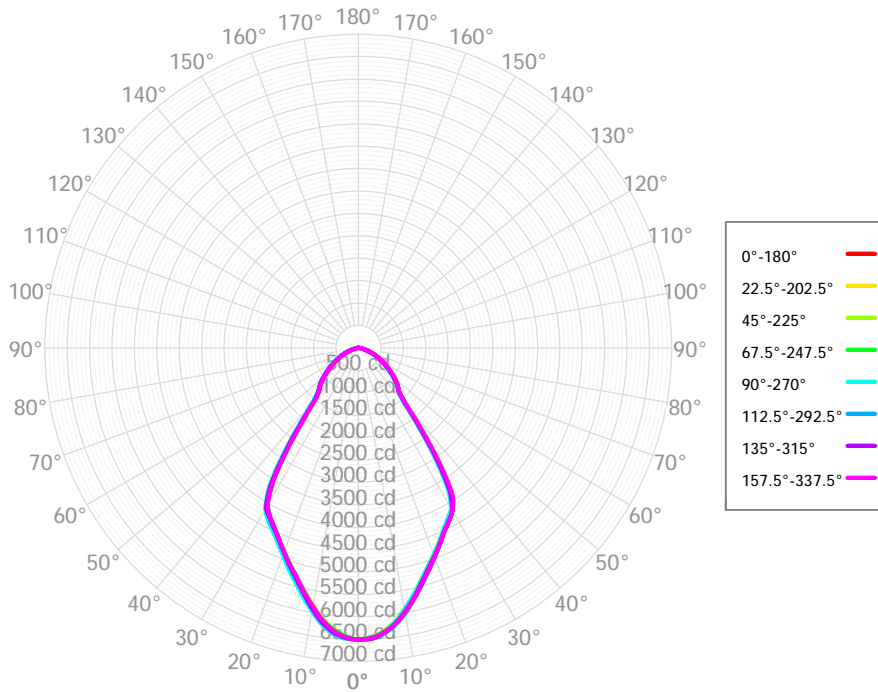
Full Beam Angle

0° - 180°	68°
90° - 270°	68°

IES File Header Contents

Keyword	Value
TEST	SP-R34
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM100L35KWDGL
LUMINAIRE	6" Round x 12" High Cylinder Luminaire
DISTRIBUTION	Beam Angle 68.2
OTHER	CCT 3427 CRI 81.1 R9 2.2
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°	601.37	7.26%	90.00° - 100.00°	2.03	0.02%
10.00° - 20.00°	1511.50	18.25%	100.00° - 110.00°	2.03	0.02%
20.00° - 30.00°	2071.38	25.01%	100.00° - 120.00°	4.09	0.05%
30.00° - 40.00°	1796.59	21.69%	120.00° - 130.00°	2.16	0.03%
40.00° - 50.00°	960.57	11.60%	130.00° - 140.00°	2.23	0.03%
50.00° - 60.00°	718.47	8.67%	140.00° - 150.00°	2.00	0.02%
60.00° - 70.00°	427.86	5.17%	150.00° - 160.00°	1.61	0.02%
70.00° - 80.00°	163.38	1.97%	160.00° - 170.00°	1.04	0.01%
80.00° - 90.00°	16.38	0.20%	170.00° - 180.00°	0.34	0.00%
0.00° - 90.00°	8267.51	99.81%	0.00° - 180.00°	8283.00	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°	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61	6508.61
2.50°	6471.89	6481.21	6460.98	6468.61	6488.72	6475.65	6479.05	6471.09	6468.35	6448.57	6460.33	6443.66	6500.16	6505.12	6502.02	6484.80	6471.89
5.00°	6363.91	6381.73	6357.93	6376.12	6389.33	6381.64	6376.79	6338.81	6339.96	6303.08	6327.38	6313.68	6410.27	6411.10	6387.39	6393.76	6363.91
7.50°	6186.43	6205.13	6167.25	6202.85	6192.27	6162.59	6187.14	6131.58	6137.60	6094.97	6129.62	6118.76	6233.58	6250.78	6221.96	6221.28	6186.43
10.00°	5938.23	5965.48	5920.34	5962.00	5931.05	5913.01	5918.75	5858.18	5877.66	5828.01	5871.99	5866.32	5974.40	6021.77	5982.40	5997.37	5938.23
12.50°	5668.38	5699.66	5666.82	5689.07	5659.47	5615.56	5622.16	5589.00	5600.92	5551.86	5590.42	5577.32	5696.07	5748.70	5716.06	5739.43	5668.38
15.00°	5409.22	5434.57	5382.37	5423.57	5386.70	5344.79	5344.08	5302.57	5327.39	5295.63	5327.85	5303.26	5422.65	5478.06	5434.06	5461.50	5409.22
17.50°	5164.17	5188.61	5132.86	5179.03	5138.84	5101.29	5095.13	5077.38	5096.46	5058.29	5095.77	5069.10	5176.09	5220.92	5179.44	5205.80	5164.17
20.00°	4940.07	4963.60	4913.63	4948.28	4917.94	4856.24	4858.74	4849.11	4872.95	4838.27	4863.19	4839.00	4923.81	4983.04	4954.63	4969.55	4940.07
22.50°	4721.08	4745.86	4695.88	4733.97	4708.45	4636.88	4639.16	4625.44	4648.92	4623.12	4646.70	4620.83	4709.83	4755.73	4740.76	4749.95	4721.08
25.00°	4512.51	4537.32	4500.27	4522.12	4488.16	4445.67	4448.91	4426.37	4451.96	4428.08	4433.61	4429.47	4511.21	4542.05	4527.81	4531.88	4512.51
27.50°	4345.85	4370.99	4336.99	4345.39	4309.13	4287.02	4282.92	4259.87	4290.96	4275.05	4283.43	4266.35	4352.43	4365.55	4371.13	4368.07	4345.85
30.00°	4176.16	4203.86	4159.89	4189.98	4142.28	4068.79	4124.56	4055.29	4116.00	4037.84	4097.74	4047.62	4149.81	4208.08	4190.11	4202.61	4176.16
32.50°	3815.05	3919.65	3800.05	3842.80	3710.65	3573.06	3650.55	3543.54	3628.86	3519.19	3610.97	3552.14	3726.55	3827.47	3807.79	3919.46	3815.05
35.00°	3110.06	3220.28	3087.82	3147.67	2940.60	2815.32	2867.29	2748.83	2830.45	2716.53	2835.38	2781.93	2989.57	3122.60	3082.24	3207.59	3110.06
37.50°	2292.30	2366.01	2269.54	2312.02	2147.60	2030.94	2068.66	1972.53	2023.04	1937.21	2030.09	2004.89	2190.66	2307.62	2276.23	2386.18	2292.30
40.00°	1650.70	1676.33	1632.73	1618.62	1547.05	1504.90	1497.34	1473.88	1471.01	1463.83	1488.44	1496.39	1593.87	1623.42	1634.84	1689.67	1650.70
42.50°	1357.12	1366.20	1349.28	1345.27	1331.72	1318.00	1317.73	1297.20	1306.20	1293.89	1314.67	1309.62	1338.09	1349.53	1351.06	1358.56	1357.12
45.00°	1253.90	1265.90	1247.65	1254.00	1232.48	1217.31	1223.48	1203.78	1212.25	1200.76	1220.79	1210.16	1240.01	1252.74	1249.67	1262.08	1253.90
47.50°	1158.33	1170.20	1148.50	1154.97	1128.99	1115.22	1121.87	1099.12	1110.46	1097.07	1114.89	1109.85	1139.85	1157.02	1151.51	1169.19	1158.33
50.00°	1049.29	1063.24	1039.26	1044.88	1020.05	997.74	1007.28	986.00	997.12	983.71	1004.55	998.90	1029.65	1052.02	1041.18	1064.54	1049.29
52.50°	936.22	947.91	926.92	927.44	905.28	887.64	892.81	873.89	880.71	871.84	889.09	885.61	916.23	935.93	929.36	949.88	936.22
55.00°	825.13	835.77	815.22	818.65	797.33	774.26	785.19	763.91	775.55	765.46	782.49	778.59	807.68	826.55	821.06	837.10	825.13
57.50°	722.57	732.63	713.47	714.17	694.58	675.50	684.57	665.14	676.49	665.62	684.22	681.65	709.40	722.50	717.65	733.57	722.57
60.00°	625.84	634.64	612.41	618.01	597.19	580.87	589.05	570.62	581.97	571.32	591.05	585.94	607.80	625.85	620.64	635.22	625.84
62.50°	533.47	540.99	523.27	527.71	511.32	493.26	500.41	484.43	494.69	488.92	503.76	495.44	518.94	535.87	529.39	543.13	533.47
65.00°	448.29	455.83	438.85	442.61	425.65	410.76	415.82	402.36	409.79	402.22	419.69	414.00	433.72	451.93	444.62	458.07	448.29
67.50°	368.68	372.73	359.35	362.96	347.39	331.54	336.71	324.04	334.57	323.94	340.10	335.56	355.53	368.73	363.74	375.65	368.68
70.00°	295.63	300.19	289.12	290.14	273.53	259.33	265.01	255.71	263.24	254.66	269.29	265.11	283.86	295.13	294.40	302.00	295.63
72.50°	222.41	228.96	216.12	217.81	202.76	190.58	196.16	187.85	196.32	187.78	198.59	196.18	213.17	226.52	221.55	229.72	222.41
75.00°	161.90	166.76	155.74	157.40	143.73	134.73	140.95	130.97	136.96	131.04	142.50	138.73	151.20	162.71	159.90	166.19	161.90
77.50°	108.36	116.29	105.28	105.18	93.92	85.91	87.92	81.48	87.15	82.89	92.38	89.75	103.53	109.05	107.81	114.68	108.36
80.00°	62.19	66.33	60.34	58.90	50.68	44.76	46.02	42.34	43.56	44.40	49.75	47.60	58.23	64.64	63.71	68.64	62.19
82.50°	28.24	29.62	27.10	25.87	22.17	17.01	19.29	16.14	16.21	16.46	21.26	19.10	25.60	28.83	30.45	32.10	28.24
85.00°	8.53	9.53	8.94	6.54	4.69	4.74	4.12	4.16	3.33	4.48	4.16	5.62	7.53	9.97	9.00	10.17	8.53
87.50°	2.57	2.55	2.42	1.83	1.68	1.88	1.84	1.71	1.69	2.20	1.94	1.95	2.79	2.78	2.40	2.70	2.57
90.00°	1.90	1.78	2.03	1.60	1.97	1.63	1.49	1.43	2.01	1.94	1.86	1.43	1.92	2.45	1.86	1.78	1.90
92.50°	2.02	1.62	1.81	1.78	1.51	1.99	1.84	1.49	1.84	1.88	1.73	1.38	1.58	2.41	1.65	1.58	2.02
95.00°	2.34	1.78	1.85	1.69	1.63	2.10	2.10	1.64	1.82	2.00	1.76	1.41	1.71	2.13	1.70	1.98	2.34
97.50°	2.32	2.24	2.33	1.70	1.87	1.70	1.92	1.67	1.75	1.83	1.67	1.60	1.75	1.97	1.86	2.44	2.32
100.00°	2.03	2.58	2.37	1.84	2.08	1.91	1.62	1.83	1.70	1.82	1.59	1.97	2.01	2.09	1.87	2.75	2.03
102.50°	1.69	2.12	2.27	2.22	2.11	1.82	1.53	1.98	1.72	1.84	1.70	2.08	2.24	1.92	1.82	2.51	1.69
105.00°	1.57	2.11	2.04	2.35	2.06	1.29	1.68	1.89	1.71	1.85	1.69	1.55	1.78	1.80	1.68	2.51	1.57
107.50°	1.63	2.45	1.94	2.07	1.98	1.21	2.04	1.89	1.68	1.82	1.59	1.38	1.58	2.09	1.71	2.68	1.63

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	9857	9857	9857	9857	9626	9626	9626	9626	9195	9195	9195	8800	8800	8800	8438	8438	8268
	1	9257	8968	8710	8476	9044	8785	8551	8339	8440	8251	8077	8124	7972	7831	7833	7712	7554
	2	8643	8131	7707	7352	8445	7981	7594	7266	7701	7378	7100	7442	7176	6942	7202	6985	6841
	3	8068	7398	6878	6465	7885	7274	6795	6409	7043	6636	6300	6828	6484	6196	6629	6341	6211
	4	7542	6762	6191	5754	7374	6659	6128	5717	6466	6007	5643	6287	5892	5572	6120	5782	5666
	5	7062	6209	5614	5174	6908	6124	5565	5148	5962	5472	5097	5811	5383	5047	5670	5297	5194
	6	6626	5727	5125	4692	6486	5655	5087	4673	5518	5013	4637	5390	4943	4601	5270	4875	4783
	7	6230	5305	4705	4285	6103	5244	4675	4271	5127	4616	4245	5017	4560	4218	4914	4505	4424
	8	5870	4933	4343	3937	5756	4880	4318	3927	4780	4270	3907	4685	4224	3887	4597	4180	4107
	9	5544	4603	4026	3637	5439	4557	4006	3629	4471	3967	3614	4389	3929	3599	4312	3892	3828
	10	5246	4309	3749	3375	5151	4270	3732	3369	4195	3699	3357	4123	3667	3346	4056	3637	3579

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	215.2 fc	7.4 ft
6.5 ft	154.0 fc	8.8 ft
7.5 ft	115.7 fc	10.1 ft
8.0 ft	101.7 fc	10.8 ft
10.0 ft	65.1 fc	13.5 ft
12.0 ft	45.2 fc	16.2 ft
14.0 ft	33.2 fc	18.9 ft
16.0 ft	25.4 fc	21.7 ft
20.0 ft	16.3 fc	27.1 ft
24.0 ft	11.3 fc	32.5 ft
28.0 ft	8.3 fc	37.9 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	356803	356803	356803
45.00°	97212	96727	95551
55.00°	78863	77915	76205
65.00°	58150	56925	55213
75.00°	34293	32988	30442
85.00°	5368	5620	2950

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	25.4	26.7	25.8	27.0	27.3	24.9	26.2	25.3	26.5	26.8
	3H	26.5	27.6	26.9	27.9	28.3	26.0	27.1	26.3	27.4	27.8
	4H	26.7	27.8	27.1	28.1	28.5	26.2	27.2	26.6	27.6	28.0
	6H	26.8	27.8	27.2	28.1	28.5	26.2	27.2	26.6	27.6	28.0
	8H	26.8	27.7	27.2	28.1	28.5	26.2	27.1	26.6	27.5	27.9
	12H	26.7	27.6	27.2	28.0	28.4	26.2	27.0	26.6	27.4	27.9
4H	2H	25.7	26.8	26.1	27.1	27.5	25.3	26.3	25.7	26.7	27.1
	3H	27.0	27.8	27.4	28.2	28.7	26.4	27.3	26.9	27.7	28.1
	4H	27.3	28.1	27.7	28.5	28.9	26.7	27.5	27.1	27.9	28.4
	6H	27.4	28.1	27.9	28.5	29.0	26.8	27.5	27.3	27.9	28.4
	8H	27.4	28.0	27.9	28.5	28.9	26.8	27.4	27.2	27.8	28.3
	12H	27.4	27.9	27.9	28.4	28.9	26.7	27.3	27.2	27.8	28.2
8H	4H	27.3	28.0	27.8	28.4	28.9	26.7	27.3	27.2	27.8	28.3
	6H	27.5	28.0	28.0	28.5	29.0	26.8	27.3	27.3	27.8	28.3
	8H	27.5	27.9	28.0	28.5	28.9	26.8	27.2	27.3	27.8	28.3
	12H	27.5	27.8	28.0	28.3	28.9	26.8	27.2	27.3	27.7	28.2
12H	4H	27.3	27.9	27.8	28.3	28.8	26.7	27.2	27.2	27.7	28.2
	6H	27.5	27.9	28.0	28.4	28.9	26.8	27.2	27.3	27.7	28.3
	8H	27.5	27.9	28.0	28.4	28.9	26.8	27.2	27.3	27.7	28.2

Corrected UGR values based on total output energy
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0