

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C0614LM100L35KMDSO
6" Round x 12" High Cylinder Luminaire

Test Number

SP-R37

Test Date

9/10/2025

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

Summary of Results

Power

Input Watts	69.42 W
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Lumen Output

Output Lumens	7420
Efficacy	106.89 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.67
Two luminaires, plane 90°	0.7
Four luminaires	0.75

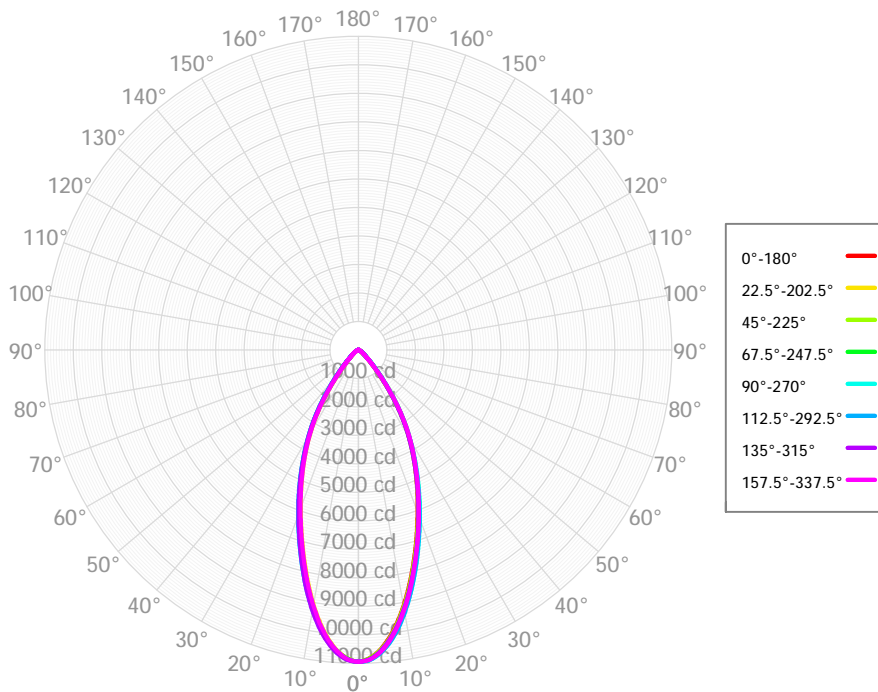
Full Beam Angle

0° - 180°	44°
90° - 270°	45°

IES File Header Contents

Keyword	Value
TEST	SP-R37
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM100L35KMDSO
LUMINAIRE	6" Round x 12" High Cylinder Luminaire
DISTRIBUTION	Beam Angle 44.7
OTHER	CCT 3432 CRI 81.8 R9 6.1
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°	965.85	13.02%	90.00° - 100.00°	1.73	0.02%
10.00° - 20.00°	2118.95	28.56%	100.00° - 110.00°	1.68	0.02%
20.00° - 30.00°	2174.86	29.31%	100.00° - 120.00°	3.47	0.05%
30.00° - 40.00°	1413.10	19.04%	120.00° - 130.00°	1.76	0.02%
40.00° - 50.00°	478.53	6.45%	130.00° - 140.00°	2.05	0.03%
50.00° - 60.00°	165.20	2.23%	140.00° - 150.00°	2.03	0.03%
60.00° - 70.00°	67.02	0.90%	150.00° - 160.00°	1.70	0.02%
70.00° - 80.00°	19.34	0.26%	160.00° - 170.00°	1.03	0.01%
80.00° - 90.00°	3.07	0.04%	170.00° - 180.00°	0.32	0.00%
0.00° - 90.00°	7405.91	99.81%	0.00° - 180.00°	7420.00	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°	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15	10941.15
2.00°	10833.21	10866.29	10835.66	10861.09	10894.82	10861.53	10885.12	10852.93	10858.22	10829.67	10862.34	10835.63	10873.90	10892.84	10871.03	10878.47	10833.21
4.00°	10581.10	10637.93	10590.82	10640.70	10689.32	10628.59	10669.90	10597.20	10636.43	10584.84	10640.58	10605.66	10653.51	10686.88	10632.94	10662.11	10581.10
6.00°	10189.04	10267.82	10219.98	10294.69	10345.17	10260.25	10314.84	10206.11	10256.51	10180.13	10284.57	10237.12	10291.34	10355.89	10253.78	10301.53	10189.04
8.00°	9689.96	9777.89	9720.57	9826.10	9887.89	9788.62	9845.45	9698.02	9750.80	9663.76	9803.42	9765.36	9820.22	9908.85	9777.28	9821.61	9689.96
10.00°	9120.68	9218.85	9164.28	9271.48	9340.29	9247.40	9285.65	9100.63	9147.71	9065.72	9226.01	9211.94	9272.99	9367.74	9222.95	9271.86	9120.68
12.00°	8509.89	8607.71	8549.88	8677.33	8758.00	8644.36	8674.58	8456.56	8494.26	8415.35	8608.76	8601.32	8664.61	8762.08	8616.96	8668.38	8509.89
14.00°	7882.32	7973.51	7919.00	8059.56	8141.53	8011.04	8012.40	7792.31	7828.74	7752.04	7960.18	7969.43	8023.71	8134.22	7988.01	8035.83	7882.32
16.00°	7261.77	7354.35	7299.65	7431.48	7521.02	7375.10	7360.65	7139.02	7172.85	7105.15	7312.72	7336.15	7377.34	7493.38	7364.01	7405.18	7261.77
18.00°	6654.57	6748.92	6689.66	6830.97	6896.97	6764.59	6730.51	6514.38	6547.13	6490.40	6688.17	6715.79	6747.85	6871.29	6751.71	6797.32	6654.57
20.00°	6078.50	6164.64	6111.78	6249.99	6323.78	6176.55	6137.14	5928.77	5965.47	5914.81	6105.16	6119.44	6146.38	6272.72	6156.79	6210.12	6078.50
22.00°	5543.56	5619.94	5565.19	5692.28	5745.98	5602.56	5565.65	5381.20	5421.76	5367.99	5537.08	5538.60	5565.76	5688.87	5590.79	5649.14	5543.56
24.00°	5024.86	5093.75	5038.74	5144.15	5185.56	5043.50	5012.84	4856.17	4905.61	4844.77	4996.15	4982.37	5014.12	5126.60	5042.54	5113.79	5024.86
26.00°	4529.16	4586.32	4525.71	4611.05	4658.34	4507.38	4474.82	4349.70	4409.55	4342.67	4472.50	4446.38	4490.31	4601.70	4523.07	4603.47	4529.16
28.00°	4047.24	4100.75	4034.82	4095.03	4141.99	3989.49	3964.89	3862.32	3920.62	3852.66	3966.46	3933.02	3979.49	4096.30	4028.84	4120.39	4047.24
30.00°	3570.68	3630.17	3562.52	3600.89	3645.06	3497.52	3478.99	3379.32	3427.70	3365.53	3473.69	3435.78	3481.76	3605.86	3545.65	3645.88	3570.68
32.00°	3078.57	3148.32	3074.89	3115.03	3150.08	3015.11	2988.71	2879.58	2935.44	2861.32	2974.75	2949.96	2994.45	3116.69	3061.42	3158.49	3078.57
34.00°	2574.63	2644.74	2576.41	2620.12	2643.34	2515.62	2490.50	2361.15	2415.83	2342.73	2465.76	2458.28	2503.50	2616.35	2561.84	2650.65	2574.63
36.00°	2058.76	2134.13	2070.60	2126.08	2143.52	2029.65	2004.58	1861.64	1905.51	1842.10	1968.32	1973.67	2023.71	2124.27	2071.49	2138.34	2058.76
38.00°	1577.58	1652.50	1603.51	1670.02	1685.99	1580.31	1554.00	1414.50	1445.38	1400.02	1515.75	1531.70	1586.87	1671.87	1618.87	1657.53	1577.58
40.00°	1165.82	1237.77	1206.71	1282.39	1291.82	1205.68	1177.82	1054.49	1073.55	1040.30	1139.78	1162.86	1205.52	1279.67	1228.73	1243.76	1165.82
42.00°	850.54	907.44	895.90	968.58	979.17	903.96	883.71	778.34	788.59	764.79	849.21	873.59	907.42	962.89	914.50	919.00	850.54
44.00°	621.38	663.38	666.61	727.11	738.33	679.20	662.48	584.11	584.38	565.12	631.73	654.18	680.73	721.58	681.16	681.24	621.38
46.00°	469.00	493.50	499.66	545.09	555.46	509.19	497.13	438.55	442.34	428.66	472.12	490.74	512.65	541.36	513.08	508.94	469.00
48.00°	363.69	378.28	381.18	412.00	421.15	391.18	379.92	338.19	342.42	331.42	361.94	375.28	391.72	409.95	395.18	388.62	363.69
50.00°	291.85	300.47	302.56	319.20	323.00	299.81	293.66	266.37	271.27	260.50	282.06	292.18	304.24	318.68	306.29	306.03	291.85
52.00°	239.05	242.09	243.94	254.56	255.00	240.83	234.07	215.58	220.39	211.92	227.15	232.22	237.53	252.03	245.71	248.49	239.05
54.00°	196.22	201.32	201.75	206.37	206.45	196.12	192.68	176.70	181.32	179.50	187.20	192.10	198.09	205.24	198.93	205.91	196.22
56.00°	162.71	166.42	166.44	170.65	172.32	163.05	155.76	145.40	151.17	146.46	157.77	159.57	164.40	171.39	168.89	168.63	162.71
58.00°	133.17	135.31	136.43	140.67	143.06	133.50	130.68	121.55	123.37	120.17	126.33	128.79	135.07	141.55	138.05	140.00	133.17
60.00°	109.61	111.43	111.47	114.95	115.84	110.85	110.07	102.88	100.21	97.95	104.93	107.66	113.98	117.20	115.57	113.29	109.61
62.00°	88.61	87.57	88.50	96.94	95.22	89.94	87.75	81.80	80.47	79.90	86.99	88.18	92.86	96.72	91.99	93.29	88.61
64.00°	71.11	72.87	72.94	78.78	78.60	73.53	71.38	65.32	63.78	65.27	70.65	70.52	75.66	79.20	76.84	74.28	71.11
66.00°	55.68	59.99	59.31	64.05	64.88	61.18	57.94	48.82	51.62	52.65	56.27	59.34	60.01	64.73	63.22	61.42	55.68
68.00°	44.30	47.43	45.88	50.67	52.19	48.41	45.41	39.17	41.83	40.67	45.47	47.47	50.42	52.08	49.27	49.18	44.30
70.00°	34.30	35.21	34.75	38.16	39.21	36.81	33.83	31.11	32.12	29.99	37.24	36.80	41.27	40.64	36.58	36.77	34.30
72.00°	26.33	26.81	28.45	29.82	29.53	28.35	26.30	23.33	24.44	22.28	27.29	29.46	29.93	31.31	28.92	28.06	26.33
74.00°	19.24	19.18	21.41	22.06	20.98	21.06	19.48	16.83	17.71	16.34	18.66	22.15	20.81	22.83	21.65	20.13	19.24
76.00°	13.03	13.48	13.85	15.84	15.62	15.10	13.94	11.19	12.66	11.90	14.07	14.85	14.59	15.61	14.81	14.70	13.03
78.00°	8.71	8.73	9.17	10.41	10.40	10.15	9.26	7.33	7.81	8.24	9.78	9.58	9.76	8.51	10.37	9.88	8.71
80.00°	6.65	6.28	6.14	6.99	7.22	6.56	5.99	4.47	5.50	5.13	6.44	5.66	7.11	6.10	8.29	6.94	6.65
82.00°	4.66	3.97	3.90	3.73	4.18	3.40	3.17	2.67	3.55	2.97	3.17	3.00	4.66	4.21	6.20	4.03	4.66
84.00°	3.01	3.36	2.57	2.89	2.83	2.43	2.45	2.09	2.54	2.22	2.43	2.06	3.50	3.09	4.07	2.86	3.01
86.00°	1.36	2.75	1.39	2.05	2.23	1.46	1.73	1.57	2.06	1.50	1.68	1.20	2.35	2.37	1.95	1.69	1.36

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	8830	8830	8830	8830	8623	8623	8623	8623	8237	8237	8237	7883	7883	7883	7558	7558	7558	7406
	1	8416	8210	8025	7858	8232	8048	7882	7732	7745	7613	7491	7467	7362	7265	7210	7129	7053	6986
	2	7998	7635	7335	7084	7832	7506	7234	7003	7264	7040	6847	7041	6858	6698	6834	6687	6556	6554
	3	7596	7119	6750	6456	7446	7014	6675	6402	6818	6533	6298	6636	6398	6197	6467	6269	6100	6148
	4	7214	6655	6246	5933	7080	6570	6190	5897	6408	6083	5825	6258	5981	5756	6119	5883	5688	5772
	5	6855	6239	5808	5489	6734	6168	5765	5464	6033	5683	5414	5909	5604	5365	5792	5528	5317	5427
	6	6520	5863	5422	5106	6410	5804	5389	5088	5691	5325	5052	5586	5263	5016	5487	5204	4982	5112
	7	6206	5524	5081	4771	6107	5474	5055	4758	5378	5004	4731	5289	4955	4705	5205	4907	4680	4824
	8	5915	5217	4777	4475	5825	5174	4756	4465	5092	4715	4446	5015	4675	4426	4943	4636	4407	4562
	9	5644	4938	4505	4212	5562	4901	4487	4204	4830	4454	4189	4764	4421	4175	4702	4389	4160	4321
	10	5393	4684	4259	3976	5318	4652	4245	3971	4591	4217	3959	4533	4190	3947	4478	4163	3936	4102

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	361.7 fc	4.5 ft
6.5 ft	259.0 fc	5.3 ft
7.5 ft	194.5 fc	6.1 ft
8.0 ft	171.0 fc	6.5 ft
10.0 ft	109.4 fc	8.1 ft
12.0 ft	76.0 fc	9.7 ft
14.0 ft	55.8 fc	11.3 ft
16.0 ft	42.7 fc	13.0 ft
20.0 ft	27.4 fc	16.2 ft
24.0 ft	19.0 fc	19.4 ft
28.0 ft	14.0 fc	22.7 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	599795	599795	599795
45.00°	42267	45209	50152
55.00°	17152	17595	18101
65.00°	8223	8577	9306
75.00°	3418	3734	3876
85.00°	1373	1247	1593

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	14.8	15.8	15.1	16.1	16.4	14.6	15.6	14.9	15.9	16.2
	3H	15.1	16.0	15.5	16.4	16.7	15.0	15.9	15.4	16.3	16.7
	4H	15.2	16.0	15.6	16.3	16.7	15.1	15.9	15.5	16.3	16.7
	6H	15.1	15.8	15.5	16.2	16.6	15.0	15.8	15.5	16.2	16.6
	8H	15.1	15.8	15.5	16.2	16.6	15.0	15.7	15.4	16.1	16.5
	12H	15.0	15.7	15.4	16.1	16.5	14.9	15.6	15.4	16.0	16.4
4H	2H	14.8	15.7	15.3	16.0	16.4	14.6	15.4	15.0	15.8	16.2
	3H	15.3	16.0	15.7	16.4	16.8	15.2	15.9	15.6	16.3	16.7
	4H	15.3	15.9	15.8	16.4	16.8	15.3	15.9	15.7	16.3	16.7
	6H	15.3	15.8	15.8	16.3	16.7	15.2	15.8	15.7	16.2	16.7
	8H	15.3	15.7	15.7	16.2	16.7	15.2	15.7	15.7	16.1	16.6
	12H	15.2	15.6	15.7	16.1	16.6	15.1	15.5	15.6	16.0	16.5
8H	4H	15.3	15.7	15.7	16.2	16.7	15.2	15.6	15.6	16.1	16.6
	6H	15.2	15.6	15.7	16.1	16.6	15.1	15.5	15.7	16.0	16.5
	8H	15.2	15.5	15.7	16.0	16.5	15.1	15.4	15.6	16.0	16.5
	12H	15.1	15.4	15.7	15.9	16.5	15.1	15.3	15.6	15.8	16.4
12H	4H	15.2	15.6	15.7	16.1	16.6	15.1	15.5	15.6	16.0	16.5
	6H	15.2	15.5	15.7	16.0	16.5	15.1	15.4	15.6	15.9	16.4
	8H	15.1	15.4	15.7	15.9	16.5	15.0	15.3	15.6	15.8	16.4

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0