

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C0614LM100L35KWDSO
6" Round x 12" High Cylinder Luminaire

Test Number

SP-R38

Test Date

9/10/2025

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

Summary of Results

Power

Input Watts	69.38 W
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Lumen Output

Output Lumens	8364
Efficacy	120.55 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°	0.96
Four luminaires	0.98

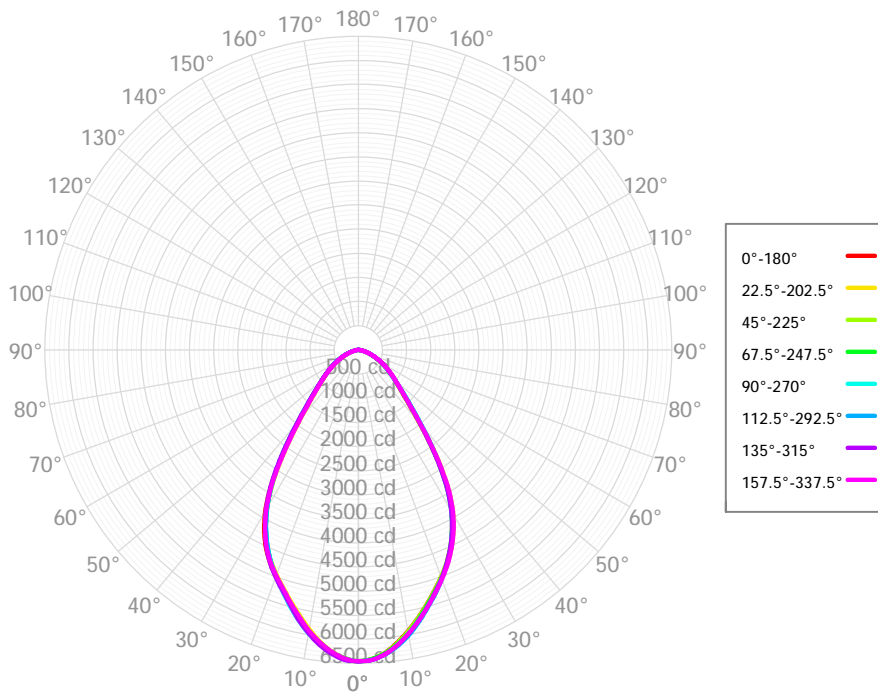
Full Beam Angle

0° - 180°	67°
90° - 270°	67°

IES File Header Contents

Keyword	Value
TEST	SP-R38
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM100L35KWDSO
LUMINAIRE	6" Round x 12" High Cylinder Luminaire
DISTRIBUTION	Beam Angle 66.9
OTHER	CCT 3381 CRI 81.7 R9 5.5
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°	598.68	7.16%	90.00° - 100.00°	1.84	0.02%
10.00° - 20.00°	1536.12	18.37%	100.00° - 110.00°	2.00	0.02%
20.00° - 30.00°	2054.60	24.56%	100.00° - 120.00°	4.05	0.05%
30.00° - 40.00°	1801.07	21.53%	120.00° - 130.00°	2.11	0.03%
40.00° - 50.00°	1069.80	12.79%	130.00° - 140.00°	2.13	0.03%
50.00° - 60.00°	691.27	8.26%	140.00° - 150.00°	1.97	0.02%
60.00° - 70.00°	408.91	4.89%	150.00° - 160.00°	1.53	0.02%
70.00° - 80.00°	167.23	2.00%	160.00° - 170.00°	0.97	0.01%
80.00° - 90.00°	21.40	0.26%	170.00° - 180.00°	0.34	0.00%
0.00° - 90.00°	8349.06	99.82%	0.00° - 180.00°	8364.00	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°	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80	6454.80
2.50°	6417.99	6429.40	6412.70	6415.74	6436.56	6417.01	6434.99	6404.47	6415.36	6399.77	6403.53	6398.10	6420.40	6430.51	6435.12	6433.62	6417.99
5.00°	6306.63	6317.64	6308.78	6318.24	6339.45	6309.33	6327.45	6283.35	6301.24	6278.01	6294.25	6288.09	6316.18	6342.26	6330.96	6338.59	6306.63
7.50°	6127.13	6144.65	6139.55	6159.26	6180.81	6146.43	6170.65	6111.79	6120.64	6097.36	6130.75	6117.27	6161.68	6199.11	6179.34	6177.09	6127.13
10.00°	5919.94	5947.13	5927.95	5967.90	5977.22	5935.05	5959.89	5907.04	5911.33	5870.89	5914.95	5926.62	5970.29	6013.40	5980.54	5976.95	5919.94
12.50°	5696.54	5727.84	5701.73	5734.83	5753.81	5697.26	5734.25	5663.69	5669.07	5631.29	5680.77	5693.06	5740.37	5785.55	5756.38	5760.06	5696.54
15.00°	5465.79	5486.54	5471.64	5492.32	5524.69	5449.79	5469.00	5421.14	5428.83	5395.81	5447.98	5460.59	5493.19	5542.22	5519.93	5528.68	5465.79
17.50°	5235.34	5262.63	5238.58	5263.00	5284.38	5216.32	5232.98	5187.05	5209.90	5170.66	5220.62	5218.38	5240.50	5307.21	5277.46	5295.63	5235.34
20.00°	5015.81	5031.94	5011.01	5039.16	5047.39	4992.94	5014.41	4976.71	4993.76	4958.49	5001.54	4988.74	4996.19	5059.84	5043.31	5065.45	5015.81
22.50°	4797.98	4818.59	4774.37	4798.27	4801.36	4746.59	4784.21	4758.71	4779.03	4731.06	4778.91	4744.32	4742.27	4808.25	4785.94	4829.16	4797.98
25.00°	4551.39	4558.41	4507.92	4520.59	4524.98	4461.65	4511.12	4500.91	4534.40	4478.85	4500.60	4467.59	4465.94	4522.13	4511.36	4564.44	4551.39
27.50°	4249.65	4269.62	4204.34	4196.92	4209.55	4142.37	4190.86	4185.94	4230.99	4164.20	4191.94	4146.52	4146.15	4212.24	4203.88	4274.21	4249.65
30.00°	3898.80	3936.77	3869.25	3851.86	3862.11	3781.49	3833.89	3810.24	3862.94	3794.35	3823.99	3772.85	3784.92	3867.97	3851.22	3938.26	3898.80
32.50°	3474.95	3526.14	3446.90	3441.30	3456.84	3367.63	3409.74	3351.73	3397.70	3328.98	3390.66	3339.88	3362.25	3449.20	3436.53	3527.67	3474.95
35.00°	2963.31	3029.27	2943.10	2956.42	2974.87	2889.36	2915.04	2816.98	2866.04	2800.42	2882.17	2861.08	2888.52	2969.57	2935.50	3019.51	2963.31
37.50°	2431.52	2500.01	2417.91	2454.17	2476.30	2394.29	2412.62	2301.76	2342.38	2283.47	2385.58	2376.01	2398.08	2477.67	2426.56	2485.96	2431.52
40.00°	1946.93	2017.41	1955.70	2009.14	2027.51	1953.83	1968.29	1870.29	1898.93	1850.20	1934.78	1942.42	1952.09	2029.63	1973.75	2006.24	1946.93
42.50°	1583.50	1637.29	1602.34	1652.92	1669.64	1604.16	1621.15	1544.32	1563.77	1526.31	1592.66	1601.64	1614.46	1665.57	1616.21	1637.66	1583.50
45.00°	1328.26	1365.02	1343.16	1379.04	1394.70	1347.40	1360.33	1301.80	1314.77	1287.66	1341.55	1342.99	1350.06	1391.60	1354.16	1371.10	1328.26
47.50°	1146.46	1167.10	1148.01	1170.62	1181.43	1144.05	1159.19	1117.39	1130.13	1110.57	1146.57	1150.34	1152.94	1182.60	1161.52	1174.49	1146.46
50.00°	1008.87	1017.74	998.63	1011.79	1013.15	985.94	1000.41	971.68	985.05	966.47	996.10	996.45	994.67	1021.84	1010.11	1024.56	1008.87
52.50°	889.68	898.20	878.99	886.48	882.58	858.89	874.22	848.63	862.03	850.37	871.80	867.24	872.75	892.89	888.51	904.98	889.68
55.00°	783.55	792.49	774.00	775.93	772.06	751.00	764.87	739.34	753.86	739.67	764.74	759.08	764.98	783.14	782.36	796.36	783.55
57.50°	678.94	690.84	672.67	676.13	673.90	654.83	663.84	640.99	652.08	641.82	664.66	662.79	665.08	682.68	683.71	696.49	678.94
60.00°	583.61	592.46	577.44	585.24	583.00	562.82	571.61	548.59	556.91	549.69	570.92	570.97	574.82	592.96	590.02	599.91	583.61
62.50°	495.35	505.19	491.35	498.68	496.75	479.98	485.97	462.38	470.42	463.65	486.30	486.63	491.66	505.39	504.31	510.72	495.35
65.00°	413.63	422.95	411.34	418.23	416.03	401.09	404.16	385.00	390.18	384.27	408.85	408.75	412.47	423.70	421.54	430.51	413.63
67.50°	338.72	348.72	336.54	343.25	344.37	329.17	331.94	312.70	317.10	311.69	333.90	336.61	339.66	352.31	346.54	353.12	338.72
70.00°	271.12	279.62	272.09	275.79	277.09	264.58	264.39	248.45	253.44	247.56	265.39	266.88	270.94	284.27	278.11	284.38	271.12
72.50°	211.04	214.83	210.52	214.83	216.02	204.73	202.32	190.67	193.46	191.25	206.35	206.61	212.11	220.59	214.85	222.35	211.04
75.00°	157.22	160.86	157.04	158.93	158.03	149.25	148.64	135.93	141.70	139.13	150.59	151.71	159.90	166.64	160.50	166.02	157.22
77.50°	110.44	112.11	108.36	111.23	110.50	102.46	101.28	92.36	97.15	93.40	104.99	105.25	110.92	116.06	111.91	116.91	110.44
80.00°	68.66	72.54	66.13	68.85	70.48	60.17	59.23	53.12	58.18	53.78	63.40	67.45	68.42	75.24	70.69	73.13	68.66
82.50°	36.32	37.19	31.18	34.75	33.45	28.02	26.36	24.16	29.06	24.34	30.96	32.52	34.17	37.99	34.75	39.27	36.32
85.00°	11.92	12.39	8.53	12.01	10.78	8.98	8.11	6.57	7.49	7.27	9.21	10.80	11.44	12.88	10.28	15.08	11.92
87.50°	3.51	4.21	2.29	3.29	2.26	2.24	2.67	1.88	2.15	2.00	2.27	2.76	3.28	3.32	2.75	4.27	3.51
90.00°	2.29	1.85	1.67	2.46	1.81	1.61	1.37	1.65	1.17	1.83	1.71	1.36	1.69	1.50	1.81	1.64	2.29
92.50°	1.84	1.32	1.61	2.19	1.73	1.43	1.38	1.82	1.39	1.76	1.35	2.05	1.87	2.16	1.77	1.24	1.84
95.00°	1.58	1.69	1.63	2.03	1.47	1.25	1.49	1.59	1.47	1.52	1.67	2.06	2.00	1.98	1.77	1.34	1.58
97.50°	1.55	1.98	1.66	2.00	1.50	1.49	1.58	1.39	1.50	1.31	2.01	1.86	1.66	1.81	1.68	1.59	1.55
100.00°	2.12	2.16	1.65	1.96	1.75	1.69	1.66	1.50	1.50	1.55	1.88	1.74	2.06	1.67	1.84	1.97	2.12
102.50°	2.31	2.15	1.57	2.13	1.67	1.72	1.63	1.69	1.41	1.73	1.92	1.72	2.22	1.71	2.03	2.23	2.31
105.00°	2.04	2.12	1.43	2.48	1.57	1.34	1.67	1.92	1.40	1.82	2.01	1.75	1.99	1.79	2.25	2.36	2.04
107.50°	2.08	2.05	1.66	2.53	1.39	1.50	1.86	1.95	1.81	1.76	1.72	1.77	2.09	1.94	2.46	2.19	2.08

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	9954	9954	9954	9954	9720	9720	9720	9720	9285	9285	9285	8887	8887	8887	8521	8521	8349
	1	9347	9055	8793	8557	9131	8869	8633	8418	8522	8330	8154	8202	8048	7906	7908	7786	7626
	2	8727	8210	7782	7423	8527	8059	7668	7336	7775	7450	7169	7514	7245	7010	7272	7053	6907
	3	8147	7470	6945	6528	7962	7345	6861	6471	7112	6700	6362	6895	6548	6256	6694	6403	6272
	4	7615	6827	6250	5810	7445	6724	6187	5772	6529	6065	5698	6348	5949	5626	6180	5838	5721
	5	7129	6268	5667	5222	6975	6182	5618	5196	6018	5524	5145	5866	5434	5094	5724	5347	5243
	6	6688	5780	5171	4734	6547	5707	5133	4715	5569	5059	4678	5440	4987	4642	5319	4919	4827
	7	6287	5352	4746	4321	6159	5290	4716	4308	5172	4656	4281	5062	4599	4254	4958	4544	4462
	8	5923	4975	4379	3969	5807	4922	4354	3958	4820	4306	3938	4725	4259	3918	4636	4214	4141
	9	5592	4641	4058	3664	5487	4595	4038	3656	4507	3998	3641	4425	3960	3626	4347	3922	3857
	10	5290	4343	3776	3399	5195	4303	3759	3393	4227	3726	3381	4155	3694	3369	4087	3663	3605

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	213.4 fc	7.3 ft
6.5 ft	152.8 fc	8.6 ft
7.5 ft	114.8 fc	9.9 ft
8.0 ft	100.9 fc	10.6 ft
10.0 ft	64.5 fc	13.2 ft
12.0 ft	44.8 fc	15.9 ft
14.0 ft	32.9 fc	18.5 ft
16.0 ft	25.2 fc	21.2 ft
20.0 ft	16.1 fc	26.5 ft
24.0 ft	11.2 fc	31.8 ft
28.0 ft	8.2 fc	37.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	353853	353853	353853
45.00°	102977	104132	108127
55.00°	74888	73976	73791
65.00°	53654	53357	53965
75.00°	33301	33262	33473
85.00°	7499	5363	6783

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	25.0	26.2	25.3	26.6	26.9	24.7	25.9	25.0	26.3	26.6
	3H	26.0	27.1	26.4	27.5	27.8	25.7	26.9	26.1	27.2	27.6
	4H	26.3	27.3	26.7	27.7	28.1	26.0	27.1	26.4	27.4	27.8
	6H	26.4	27.3	26.8	27.7	28.1	26.1	27.1	26.5	27.5	27.9
	8H	26.4	27.3	26.8	27.7	28.1	26.1	27.0	26.5	27.4	27.8
	12H	26.3	27.2	26.8	27.6	28.0	26.1	27.0	26.5	27.3	27.8
4H	2H	25.3	26.4	25.7	26.7	27.1	25.0	26.1	25.4	26.4	26.8
	3H	26.5	27.4	26.9	27.8	28.2	26.2	27.1	26.7	27.5	27.9
	4H	26.9	27.6	27.3	28.1	28.5	26.6	27.4	27.0	27.8	28.2
	6H	27.0	27.7	27.5	28.1	28.6	26.8	27.4	27.2	27.9	28.3
	8H	27.0	27.6	27.5	28.1	28.6	26.7	27.4	27.2	27.8	28.3
	12H	27.0	27.5	27.5	28.0	28.5	26.7	27.3	27.2	27.7	28.2
8H	4H	26.9	27.5	27.4	28.0	28.5	26.6	27.3	27.1	27.7	28.2
	6H	27.1	27.6	27.6	28.1	28.6	26.8	27.3	27.3	27.8	28.3
	8H	27.1	27.6	27.7	28.1	28.6	26.8	27.3	27.4	27.8	28.3
	12H	27.1	27.5	27.7	28.0	28.6	26.8	27.2	27.3	27.7	28.3
12H	4H	26.9	27.4	27.4	27.9	28.4	26.6	27.2	27.1	27.6	28.1
	6H	27.1	27.6	27.6	28.0	28.6	26.8	27.3	27.3	27.7	28.3
	8H	27.1	27.5	27.7	28.0	28.6	26.8	27.2	27.3	27.7	28.3

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0