

## Indoor Distribution Test Report

### Spectrum Lighting Inc.

994 Jefferson Street  
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### Spectrum Lighting Photometric Lab

Luminaire

C0614LM100L35KMDNL

6" Round x 12" High Cylinder Luminaire

Test Number

SP-R22-M

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	8015
Efficacy	83.01 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

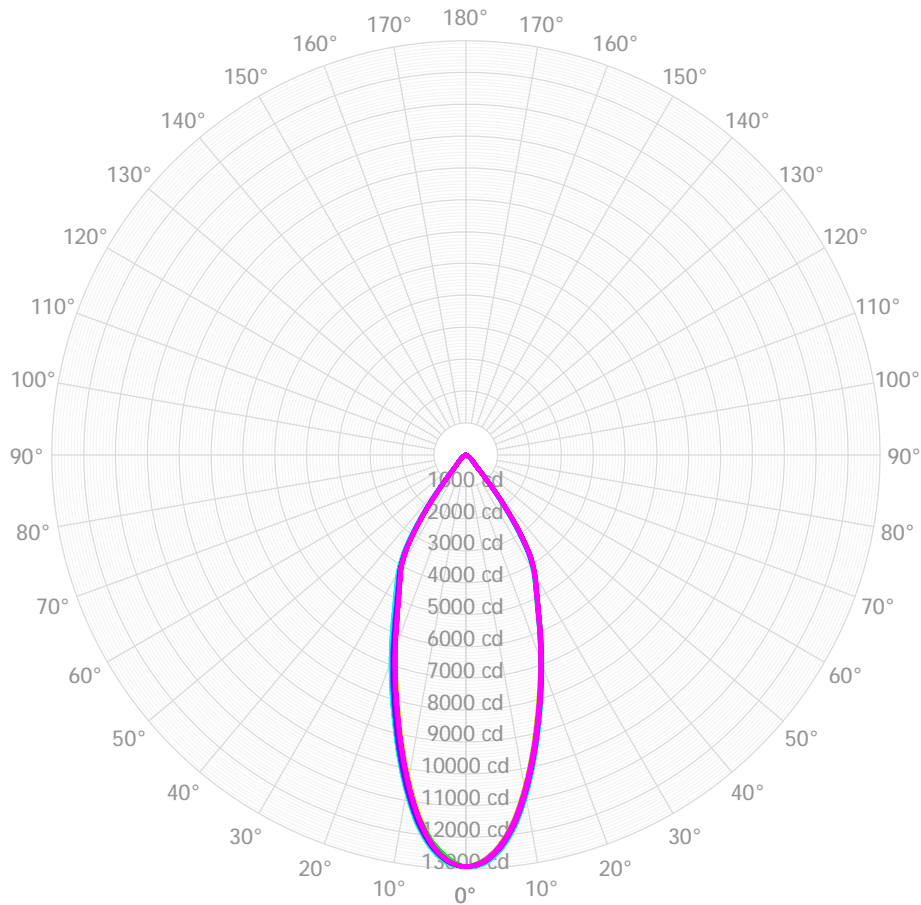
### Full Beam Angle

0° - 180°	41°
90° - 270°	42°

## IES File Header Contents

Keyword	Value
TEST	SP-R22-M
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM100L35KMDNL
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 scaled from 137L
_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°	1133.97	14.15%	90.00° - 100.00°	1.31	0.02%
10.00° - 20.00°	2378.18	29.67%	100.00° - 110.00°	1.20	0.01%
20.00° - 30.00°	2426.83	30.28%	100.00° - 120.00°	2.44	0.03%
30.00° - 40.00°	1596.01	19.91%	120.00° - 130.00°	1.40	0.02%
40.00° - 50.00°	315.46	3.94%	130.00° - 140.00°	1.53	0.02%
50.00° - 60.00°	117.80	1.47%	140.00° - 150.00°	1.80	0.02%
60.00° - 70.00°	29.03	0.36%	150.00° - 160.00°	1.52	0.02%
70.00° - 80.00°	4.67	0.06%	160.00° - 170.00°	0.94	0.01%
80.00° - 90.00°	1.57	0.02%	170.00° - 180.00°	0.30	0.00%
0.00° - 90.00°	8003.53	99.86%	0.00° - 180.00°	8014.77	100.00%

	0.00°	2.50°	5.00°	7.50°	10.00°	12.50°	15.00°	17.50°	20.00°	22.50°	25.00°	27.50°	30.00°	32.50°	35.00°	37.50°	40.00°
0.00°	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05	12928.05
2.50°	12752.10	12754.76	12757.43	12760.09	12762.75	12765.42	12768.08	12770.74	12773.41	12776.07	12771.92	12767.76	12763.61	12759.46	12755.30	12751.15	12747.00
5.00°	12293.82	12300.18	12306.54	12312.91	12319.27	12325.63	12332.00	12338.36	12344.72	12351.09	12344.01	12336.93	12329.85	12322.77	12315.69	12308.61	12301.53
7.50°	11574.84	11583.73	11592.62	11601.51	11610.40	11619.29	11628.19	11637.08	11645.97	11654.86	11643.83	11632.80	11621.78	11610.75	11599.72	11588.70	11577.67
10.00°	10637.61	10648.29	10658.98	10669.66	10680.35	10691.04	10701.72	10712.41	10723.09	10733.78	10720.69	10707.59	10694.50	10681.41	10668.31	10655.22	10642.13
12.50°	9629.34	9640.55	9651.75	9662.96	9674.17	9685.38	9696.58	9707.79	9719.00	9730.21	9715.91	9701.62	9687.32	9673.03	9658.73	9644.44	9630.15
15.00°	8626.95	8637.37	8647.80	8658.22	8668.65	8679.07	8689.49	8699.92	8710.34	8720.77	8706.97	8693.18	8679.38	8665.59	8651.80	8638.00	8624.21
17.50°	7698.13	7706.89	7715.65	7724.41	7733.18	7741.94	7750.70	7759.46	7768.22	7776.98	7765.06	7753.13	7741.21	7729.29	7717.36	7705.44	7693.52
20.00°	6842.15	6850.26	6858.37	6866.48	6874.59	6882.70	6890.81	6898.92	6907.03	6915.14	6905.19	6895.25	6885.30	6875.35	6865.41	6855.46	6845.51
22.50°	6040.91	6050.27	6059.63	6068.99	6078.35	6087.71	6097.07	6106.43	6115.78	6125.14	6115.75	6106.36	6096.97	6087.58	6078.18	6068.79	6059.40
25.00°	5320.10	5326.95	5333.80	5340.65	5347.50	5354.35	5361.20	5368.05	5374.90	5381.75	5374.69	5367.63	5360.57	5353.51	5346.45	5339.40	5332.34
27.50°	4751.55	4756.40	4761.26	4766.12	4770.98	4775.84	4780.70	4785.56	4790.42	4795.27	4791.28	4787.29	4783.29	4779.30	4775.31	4771.31	4767.32
30.00°	4284.94	4287.13	4289.31	4291.49	4293.68	4295.86	4298.04	4300.23	4302.41	4304.59	4300.78	4296.96	4293.14	4289.33	4285.51	4281.69	4277.87
32.50°	3730.83	3739.01	3747.20	3755.38	3763.57	3771.76	3779.94	3788.13	3796.31	3804.50	3795.56	3786.62	3777.68	3768.74	3759.79	3750.85	3741.91
35.00°	2852.66	2865.47	2878.29	2891.10	2903.92	2916.73	2929.55	2942.36	2955.18	2967.99	2953.41	2938.82	2924.23	2909.64	2895.05	2880.47	2865.88
37.50°	1836.70	1848.19	1859.69	1871.18	1882.68	1894.17	1905.66	1917.16	1928.65	1940.14	1926.26	1912.37	1898.48	1884.59	1870.70	1856.81	1842.92
40.00°	954.45	962.42	970.40	978.37	986.35	994.32	1002.29	1010.27	1018.24	1026.22	1016.32	1006.43	996.54	986.64	976.75	966.86	956.97
42.50°	506.69	507.75	508.80	509.86	510.92	511.97	513.03	514.08	515.14	516.20	513.86	511.53	509.19	506.86	504.53	502.19	499.86
45.00°	385.49	386.24	386.98	387.73	388.47	389.21	389.96	390.70	391.45	392.19	391.51	390.84	390.16	389.48	388.81	388.13	387.45
47.50°	309.48	310.66	311.84	313.02	314.20	315.37	316.55	317.73	318.91	320.09	319.25	318.42	317.58	316.74	315.91	315.07	314.23
50.00°	244.32	245.37	246.42	247.48	248.53	249.59	250.64	251.70	252.75	253.80	253.15	252.49	251.83	251.17	250.51	249.85	249.19
52.50°	183.72	184.77	185.82	186.88	187.93	188.98	190.03	191.09	192.14	193.19	192.22	191.24	190.27	189.29	188.31	187.34	186.37
55.00°	138.11	138.63	139.16	139.68	140.21	140.74	141.26	141.79	142.31	142.84	142.06	141.29	140.51	139.74	138.97	138.19	137.41
57.50°	98.19	98.43	98.68	98.93	99.17	99.42	99.67	99.92	100.16	100.41	99.72	99.03	98.34	97.65	96.96	96.27	95.58
60.00°	70.56	70.33	70.10	69.88	69.65	69.42	69.19	68.96	68.73	68.50	68.25	68.00	67.75	67.50	67.24	66.99	66.74
62.50°	45.44	45.47	45.50	45.54	45.57	45.60	45.63	45.67	45.70	45.73	45.28	44.83	44.39	43.94	43.49	43.04	42.59
65.00°	28.47	28.49	28.51	28.53	28.55	28.57	28.59	28.61	28.63	28.66	28.60	28.54	28.48	28.42	28.36	28.30	28.24
67.50°	15.50	15.95	16.39	16.84	17.28	17.73	18.17	18.62	19.06	19.51	19.12	18.74	18.35	17.97	17.58	17.19	16.80
70.00°	8.26	8.55	8.84	9.13	9.42	9.71	9.99	10.28	10.57	10.86	10.73	10.61	10.48	10.36	10.23	10.11	9.99
72.50°	5.01	5.10	5.18	5.27	5.35	5.44	5.52	5.61	5.69	5.77	5.82	5.86	5.90	5.94	5.98	6.02	6.06
75.00°	3.79	3.71	3.62	3.53	3.45	3.36	3.28	3.19	3.11	3.02	3.11	3.19	3.28	3.37	3.45	3.54	3.63
77.50°	2.89	2.82	2.75	2.69	2.62	2.55	2.49	2.42	2.35	2.29	2.31	2.34	2.36	2.38	2.41	2.43	2.46
80.00°	2.18	2.12	2.06	2.00	1.94	1.88	1.83	1.77	1.71	1.65	1.68	1.71	1.74	1.77	1.80	1.83	1.86
82.50°	1.59	1.53	1.47	1.41	1.35	1.29	1.23	1.17	1.11	1.04	1.12	1.18	1.25	1.32	1.39	1.46	1.53
85.00°	1.09	1.08	1.06	1.05	1.03	1.02	1.00	0.99	0.98	0.96	1.03	1.09	1.16	1.23	1.29	1.36	1.43
87.50°	0.93	0.94	0.94	0.95	0.95	0.96	0.96	0.97	0.97	0.98	1.02	1.07	1.12	1.17	1.22	1.26	1.31
90.00°	0.91	0.95	0.99	1.03	1.08	1.12	1.16	1.20	1.24	1.28	1.28	1.28	1.27	1.27	1.26	1.26	1.25
92.50°	0.99	1.06	1.13	1.20	1.26	1.33	1.40	1.47	1.54	1.61	1.54	1.47	1.40	1.33	1.26	1.19	1.12
95.00°	1.11	1.18	1.25	1.32	1.39	1.45	1.52	1.59	1.66	1.73	1.63	1.52	1.42	1.32	1.21	1.11	1.01
97.50°	1.31	1.36	1.41	1.47	1.52	1.57	1.62	1.68	1.73	1.78	1.72	1.66	1.59	1.53	1.46	1.40	1.33
100.00°	1.51	1.49	1.48	1.46	1.45	1.43	1.42	1.40	1.39	1.37	1.41	1.44	1.47	1.50	1.53	1.56	1.59
102.50°	1.25	1.23	1.21	1.18	1.16	1.14	1.12	1.09	1.07	1.05	1.10	1.15	1.20	1.25	1.30	1.35	1.40
105.00°	0.90	0.92	0.94	0.96	0.98	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.16	1.18	1.20	1.22
107.50°	0.97	0.99	1.01	1.04	1.06	1.09	1.11	1.14	1.16	1.19	1.17	1.16	1.15	1.14	1.13	1.12	1.11

### 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	9539	9539	9539	9539	9316	9316	9316	9316	8899	8899	8899	8518	8518	8518	8168	8168	8004
	1	9112	8898	8706	8533	8915	8724	8552	8396	8399	8262	8136	8100	7992	7892	7824	7740	7585
	2	8683	8307	7997	7736	8507	8169	7887	7648	7910	7679	7479	7670	7483	7318	7449	7298	7154
	3	8268	7774	7392	7087	8110	7663	7312	7029	7453	7158	6916	7259	7013	6807	7078	6875	6743
	4	7873	7293	6869	6544	7730	7202	6809	6505	7030	6693	6427	6870	6583	6351	6722	6479	6358
	5	7498	6858	6410	6080	7370	6782	6364	6052	6640	6276	5997	6507	6191	5944	6383	6111	6000
	6	7146	6463	6005	5676	7030	6400	5969	5656	6281	5900	5616	6169	5834	5578	6065	5770	5670
	7	6816	6104	5643	5320	6711	6051	5615	5305	5950	5560	5277	5856	5508	5248	5767	5457	5366
	8	6507	5778	5319	5004	6412	5733	5297	4993	5646	5253	4972	5565	5210	4951	5489	5169	5086
	9	6219	5480	5027	4721	6133	5441	5009	4713	5367	4973	4697	5296	4938	4681	5230	4904	4829
	10	5950	5207	4763	4467	5872	5174	4748	4461	5109	4718	4448	5048	4689	4435	4990	4661	4593

### Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	427.4 fc	4.1 ft
6.5 ft	306.0 fc	4.9 ft
7.5 ft	229.8 fc	5.7 ft
8.0 ft	202.0 fc	6.0 ft
10.0 ft	129.3 fc	7.5 ft
12.0 ft	89.8 fc	9.0 ft
14.0 ft	66.0 fc	10.5 ft
16.0 ft	50.5 fc	12.1 ft
20.0 ft	32.3 fc	15.1 ft
24.0 ft	22.4 fc	18.1 ft
28.0 ft	16.5 fc	21.1 ft

### Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	708717	708717	708717
45.00°	29886	29933	28995
55.00°	13200	12986	11728
65.00°	3693	3649	2983
75.00°	803	804	741
85.00°	685	979	544

### 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	12.0	12.9	12.3	13.2	13.5	10.8	11.7	11.1	12.0	12.4
	3H	11.9	12.7	12.3	13.1	13.4	10.7	11.5	11.1	11.9	12.3
	4H	11.8	12.6	12.2	12.9	13.3	10.6	11.4	11.0	11.8	12.2
	6H	11.7	12.4	12.1	12.8	13.2	10.5	11.2	11.0	11.6	12.0
	8H	11.6	12.3	12.1	12.7	13.1	10.5	11.1	10.9	11.5	12.0
	12H	11.6	12.2	12.0	12.6	13.0	10.4	11.1	10.9	11.4	11.9
4H	2H	11.8	12.6	12.2	12.9	13.3	10.6	11.4	11.0	11.8	12.1
	3H	11.7	12.4	12.1	12.8	13.2	10.6	11.2	11.0	11.6	12.0
	4H	11.6	12.2	12.1	12.6	13.1	10.5	11.0	10.9	11.5	11.9
	6H	11.5	12.0	12.0	12.5	12.9	10.4	10.9	10.9	11.3	11.8
	8H	11.5	11.9	11.9	12.4	12.8	10.3	10.8	10.8	11.2	11.7
	12H	11.4	11.8	11.9	12.3	12.8	10.3	10.6	10.8	11.1	11.6
8H	4H	11.4	11.9	11.9	12.3	12.8	10.3	10.7	10.8	11.2	11.7
	6H	11.3	11.7	11.9	12.2	12.7	10.2	10.6	10.7	11.1	11.6
	8H	11.3	11.6	11.8	12.1	12.6	10.2	10.5	10.7	11.0	11.5
	12H	11.2	11.5	11.8	12.0	12.6	10.1	10.4	10.6	10.9	11.5
12H	4H	11.4	11.8	11.9	12.3	12.7	10.2	10.6	10.7	11.1	11.6
	6H	11.3	11.6	11.8	12.1	12.6	10.1	10.5	10.7	10.9	11.5
	8H	11.2	11.5	11.7	12.0	12.6	10.1	10.4	10.6	10.9	11.5

Corrected UGR values based on total output energy  
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0