

## Indoor Distribution Test Report

### Spectrum Lighting Inc.

994 Jefferson Street  
Fall River, MA 02721  
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### Spectrum Lighting Photometric Lab

Luminaire

C0614LM120L35KMDNL

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	9056
Efficacy	93.79 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

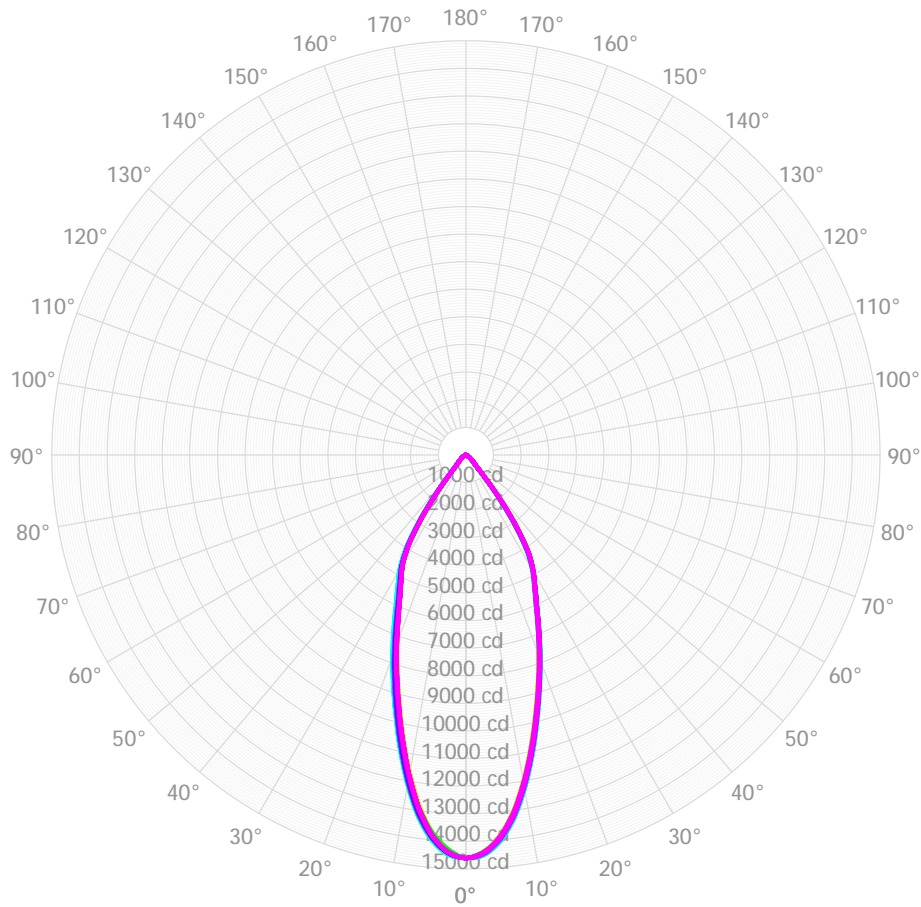
### Full Beam Angle

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	C0614LM120L35KMDNL
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	100L x 0.88, 137L x 1.15

### Candela Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	1281.24	14.15%	90.00° - 100.00°	1.48	0.02%
10.00° - 20.00°	2687.04	29.67%	100.00° - 110.00°	1.35	0.01%
20.00° - 30.00°	2742.00	30.28%	100.00° - 120.00°	2.76	0.03%
30.00° - 40.00°	1803.29	19.91%	120.00° - 130.00°	1.58	0.02%
40.00° - 50.00°	356.43	3.94%	130.00° - 140.00°	1.73	0.02%
50.00° - 60.00°	133.10	1.47%	140.00° - 150.00°	2.03	0.02%
60.00° - 70.00°	32.79	0.36%	150.00° - 160.00°	1.72	0.02%
70.00° - 80.00°	5.28	0.06%	160.00° - 170.00°	1.06	0.01%
80.00° - 90.00°	1.78	0.02%	170.00° - 180.00°	0.34	0.00%
0.00° - 90.00°	9042.95	99.86%	0.00° - 180.00°	9055.65	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°	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01	14607.01
2.50°	14408.22	14411.23	14414.24	14417.24	14420.25	14423.26	14426.27	14429.28	14432.29	14435.30	14438.31	14441.32	14444.33	14447.34	14450.35	14453.36	14456.37
5.00°	13890.41	13897.60	13904.79	13911.98	13919.17	13926.37	13933.56	13940.75	13947.94	13955.13	13962.32	13969.51	13976.70	13983.89	13991.08	13998.27	14005.46
7.50°	13078.07	13088.11	13098.16	13108.20	13118.25	13128.29	13138.34	13148.39	13158.43	13168.48	13178.52	13188.57	13198.61	13208.66	13218.70	13228.75	13238.79
10.00°	12019.11	12031.19	12043.26	12055.34	12067.41	12079.48	12091.56	12103.63	12115.70	12127.78	12139.85	12151.92	12164.00	12176.07	12188.14	12200.22	12212.29
12.50°	10879.90	10892.56	10905.23	10917.89	10930.55	10943.22	10955.88	10968.54	10981.21	10993.87	10977.72	10961.57	10945.42	10929.27	10913.11	10896.96	10880.81
15.00°	9747.33	9759.11	9770.89	9782.67	9794.44	9806.22	9818.00	9829.78	9841.56	9853.33	9865.11	9876.89	9888.67	9899.45	9910.23	9921.01	9931.79
17.50°	8697.89	8707.79	8717.69	8727.58	8737.48	8747.38	8757.28	8767.18	8777.08	8786.98	8796.88	8806.78	8816.68	8826.58	8836.48	8846.38	8856.28
20.00°	7730.75	7739.91	7749.07	7758.23	7767.40	7776.56	7785.72	7794.88	7804.05	7813.21	7822.38	7831.54	7840.71	7849.87	7859.04	7868.20	7877.37
22.50°	6825.45	6836.02	6846.60	6857.17	6867.75	6878.32	6888.89	6899.47	6910.04	6920.62	6931.20	6941.77	6952.35	6962.92	6973.50	6984.07	6994.65
25.00°	6011.03	6018.77	6026.51	6034.25	6041.98	6049.72	6057.46	6065.20	6072.94	6080.68	6088.42	6096.16	6103.90	6111.64	6119.38	6127.12	6134.86
27.50°	5368.63	5374.12	5379.61	5385.10	5390.59	5396.08	5401.57	5407.06	5412.55	5418.04	5423.53	5429.02	5434.51	5440.00	5445.49	5450.98	5456.47
30.00°	4841.43	4843.90	4846.36	4848.83	4851.30	4853.76	4856.23	4858.70	4861.17	4863.63	4866.10	4868.57	4871.04	4873.51	4875.98	4878.45	4880.92
32.50°	4215.35	4224.60	4233.85	4243.10	4252.35	4261.60	4270.84	4280.09	4289.34	4298.59	4307.84	4317.09	4326.34	4335.59	4344.84	4354.09	4363.34
35.00°	3223.13	3237.61	3252.09	3266.57	3281.05	3295.53	3310.01	3324.49	3338.97	3353.45	3367.93	3382.41	3396.89	3411.37	3425.85	3440.33	3454.81
37.50°	2075.23	2088.22	2101.20	2114.19	2127.18	2140.16	2153.15	2166.14	2179.12	2192.11	2205.10	2218.09	2231.08	2244.07	2257.06	2270.05	2283.04
40.00°	1078.40	1087.41	1096.42	1105.43	1114.44	1123.45	1132.46	1141.47	1150.48	1159.49	1168.50	1177.51	1186.52	1195.53	1204.54	1213.55	1222.56
42.50°	572.49	573.69	574.88	576.07	577.27	578.46	579.65	580.85	582.04	583.24	584.43	585.62	586.82	588.01	589.21	590.40	591.60
45.00°	435.56	436.40	437.24	438.08	438.92	439.76	440.60	441.44	442.28	443.12	443.96	444.80	445.64	446.48	447.32	448.16	449.00
47.50°	349.67	351.01	352.34	353.67	355.00	356.33	357.66	358.99	360.33	361.66	362.99	364.32	365.65	366.98	368.31	369.64	370.97
50.00°	276.04	277.24	278.43	279.62	280.81	282.00	283.19	284.38	285.57	286.76	287.95	289.14	290.33	291.52	292.71	293.90	295.09
52.50°	207.58	208.77	209.96	211.15	212.34	213.52	214.71	215.90	217.09	218.28	219.47	220.66	221.85	223.04	224.23	225.42	226.61
55.00°	156.04	156.64	157.23	157.82	158.42	159.01	159.61	160.20	160.79	161.39	161.98	162.57	163.16	163.75	164.34	164.93	165.52
57.50°	110.94	111.22	111.50	111.78	112.05	112.33	112.61	112.89	113.17	113.45	113.73	114.01	114.29	114.57	114.85	115.13	115.41
60.00°	79.72	79.47	79.21	78.95	78.69	78.43	78.18	77.92	77.66	77.40	77.14	76.88	76.62	76.36	76.10	75.84	75.58
62.50°	51.34	51.38	51.41	51.45	51.49	51.52	51.56	51.60	51.63	51.67	51.70	51.74	51.78	51.81	51.85	51.88	51.92
65.00°	32.17	32.19	32.21	32.24	32.26	32.28	32.31	32.33	32.35	32.38	32.40	32.43	32.45	32.48	32.50	32.53	32.55
67.50°	17.52	18.02	18.52	19.02	19.53	20.03	20.53	21.04	21.54	22.04	22.54	23.04	23.54	24.04	24.54	25.04	25.54
70.00°	9.34	9.66	9.99	10.31	10.64	10.97	11.29	11.62	11.94	12.27	12.59	12.92	13.24	13.57	13.89	14.22	14.54
72.50°	5.66	5.76	5.85	5.95	6.05	6.14	6.24	6.33	6.43	6.53	6.62	6.72	6.81	6.91	7.00	7.10	7.19
75.00°	4.28	4.19	4.09	3.99	3.90	3.80	3.70	3.61	3.51	3.41	3.31	3.21	3.11	3.01	2.91	2.81	2.71
77.50°	3.26	3.19	3.11	3.04	2.96	2.89	2.81	2.74	2.66	2.59	2.51	2.44	2.36	2.29	2.21	2.14	2.06
80.00°	2.46	2.39	2.33	2.26	2.19	2.13	2.06	2.00	1.93	1.87	1.80	1.74	1.67	1.61	1.54	1.48	1.41
82.50°	1.80	1.73	1.66	1.59	1.53	1.46	1.39	1.32	1.25	1.18	1.12	1.05	0.98	0.92	0.85	0.78	0.72
85.00°	1.23	1.21	1.20	1.18	1.17	1.15	1.13	1.12	1.10	1.09	1.07	1.06	1.04	1.03	1.01	1.00	0.98
87.50°	1.05	1.06	1.06	1.07	1.07	1.08	1.09	1.09	1.10	1.10	1.11	1.11	1.12	1.12	1.13	1.13	1.14
90.00°	1.03	1.07	1.12	1.17	1.22	1.26	1.31	1.36	1.40	1.45	1.49	1.54	1.58	1.63	1.67	1.72	1.76
92.50°	1.12	1.19	1.27	1.35	1.43	1.51	1.58	1.66	1.74	1.82	1.90	1.98	2.06	2.14	2.22	2.30	2.38
95.00°	1.25	1.33	1.41	1.49	1.57	1.64	1.72	1.80	1.88	1.96	2.04	2.12	2.20	2.28	2.36	2.44	2.52
97.50°	1.48	1.54	1.60	1.66	1.72	1.77	1.83	1.89	1.95	2.01	2.07	2.13	2.19	2.25	2.31	2.37	2.43
100.00°	1.70	1.69	1.67	1.65	1.64	1.62	1.60	1.59	1.57	1.55	1.53	1.51	1.49	1.47	1.45	1.43	1.41
102.50°	1.42	1.39	1.36	1.34	1.31	1.29	1.26	1.24	1.21	1.18	1.16	1.14	1.11	1.09	1.07	1.05	1.03
105.00°	1.01	1.03	1.06	1.08	1.10	1.13	1.15	1.17	1.19	1.22	1.24	1.26	1.29	1.31	1.33	1.36	1.38
107.50°	1.09	1.12	1.15	1.17	1.20	1.23	1.26	1.28	1.31	1.34	1.37	1.40	1.43	1.46	1.49	1.52	1.55

### 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	10778	10778	10778	10778	10525	10525	10525	10525	10055	10055	10055	9624	9624	9624	9229	9229	9229	9043
	1	10296	10054	9837	9641	10073	9857	9663	9487	9489	9335	9193	9151	9030	8917	8840	8746	8658	8571
	2	9811	9386	9036	8741	9611	9230	8912	8642	8937	8676	8451	8667	8454	8268	8416	8246	8094	8084
	3	9342	8784	8352	8008	9163	8658	8262	7942	8421	8088	7814	8201	7924	7691	7998	7768	7572	7619
	4	8895	8240	7761	7394	8734	8137	7693	7349	7943	7563	7261	7763	7438	7176	7595	7320	7093	7183
	5	8472	7748	7243	6869	8327	7663	7191	6838	7502	7091	6776	7352	6996	6716	7212	6904	6657	6779
	6	8074	7302	6784	6413	7943	7231	6744	6390	7096	6666	6346	6970	6592	6302	6852	6520	6260	6406
	7	7701	6897	6376	6011	7583	6837	6344	5994	6723	6283	5962	6616	6223	5930	6516	6166	5899	6063
	8	7352	6528	6010	5654	7245	6477	5984	5642	6379	5935	5617	6288	5887	5593	6202	5840	5570	5747
	9	7026	6192	5680	5334	6929	6148	5659	5325	6063	5619	5307	5984	5579	5288	5910	5541	5270	5456
	10	6723	5884	5381	5047	6634	5846	5364	5040	5773	5331	5026	5704	5298	5011	5639	5266	4997	5189

### Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	482.9 fc	4.1 ft
6.5 ft	345.7 fc	4.9 ft
7.5 ft	259.7 fc	5.7 ft
8.0 ft	228.2 fc	6.0 ft
10.0 ft	146.1 fc	7.5 ft
12.0 ft	101.4 fc	9.0 ft
14.0 ft	74.5 fc	10.5 ft
16.0 ft	57.1 fc	12.1 ft
20.0 ft	36.5 fc	15.1 ft
24.0 ft	25.4 fc	18.1 ft
28.0 ft	18.6 fc	21.1 ft

### Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	800759	800759	800759
45.00°	33768	33821	32760
55.00°	14914	14672	13252
65.00°	4173	4122	3371
75.00°	907	908	837
85.00°	774	1106	615

### 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	12.4	13.3	12.8	13.7	14.0	11.2	12.2	11.6	12.5	12.8
	3H	12.3	13.1	12.7	13.5	13.9	11.1	12.0	11.5	12.3	12.7
	4H	12.2	13.0	12.6	13.3	13.7	11.1	11.8	11.5	12.2	12.6
	6H	12.1	12.8	12.5	13.2	13.6	11.0	11.7	11.4	12.0	12.4
	8H	12.1	12.7	12.5	13.1	13.5	10.9	11.6	11.3	12.0	12.4
	12H	12.0	12.6	12.4	13.0	13.5	10.8	11.5	11.3	11.9	12.3
4H	2H	12.2	13.0	12.6	13.3	13.7	11.0	11.8	11.5	12.2	12.6
	3H	12.1	12.8	12.6	13.2	13.6	11.0	11.6	11.4	12.0	12.4
	4H	12.0	12.6	12.5	13.0	13.5	10.9	11.5	11.3	11.9	12.3
	6H	11.9	12.4	12.4	12.9	13.4	10.8	11.3	11.3	11.7	12.2
	8H	11.9	12.3	12.4	12.8	13.3	10.7	11.2	11.2	11.6	12.1
	12H	11.8	12.2	12.3	12.7	13.2	10.7	11.1	11.2	11.6	12.0
8H	4H	11.9	12.3	12.3	12.8	13.2	10.7	11.2	11.2	11.6	12.1
	6H	11.8	12.1	12.3	12.6	13.1	10.6	11.0	11.1	11.5	12.0
	8H	11.7	12.0	12.2	12.5	13.0	10.6	10.9	11.1	11.4	11.9
	12H	11.7	11.9	12.2	12.4	13.0	10.5	10.8	11.1	11.3	11.9
12H	4H	11.8	12.2	12.3	12.7	13.2	10.7	11.0	11.2	11.5	12.0
	6H	11.7	12.0	12.2	12.5	13.0	10.6	10.9	11.1	11.4	11.9
	8H	11.6	11.9	12.2	12.4	13.0	10.5	10.8	11.1	11.3	11.9

Corrected UGR values based on total output energy  
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0