

## Indoor Distribution Test Report

### Spectrum Lighting Inc.

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

Luminaire

C0614LM137L35HKNDNL  
6" Round x 12" High Cylinder Luminaire

Test Number

SP-R14

Test Date

9/10/2025

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

## Summary of Results

### Power

Input Watts	100.89 W
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### Lumen Output

Output Lumens	7556
Efficacy	74.89 lm/W

### Luminous Dimensions

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

### Spacing Criterion

Two luminaires, plane 0°	0.44
Two luminaires, plane 90°	0.4
Four luminaires	0.5

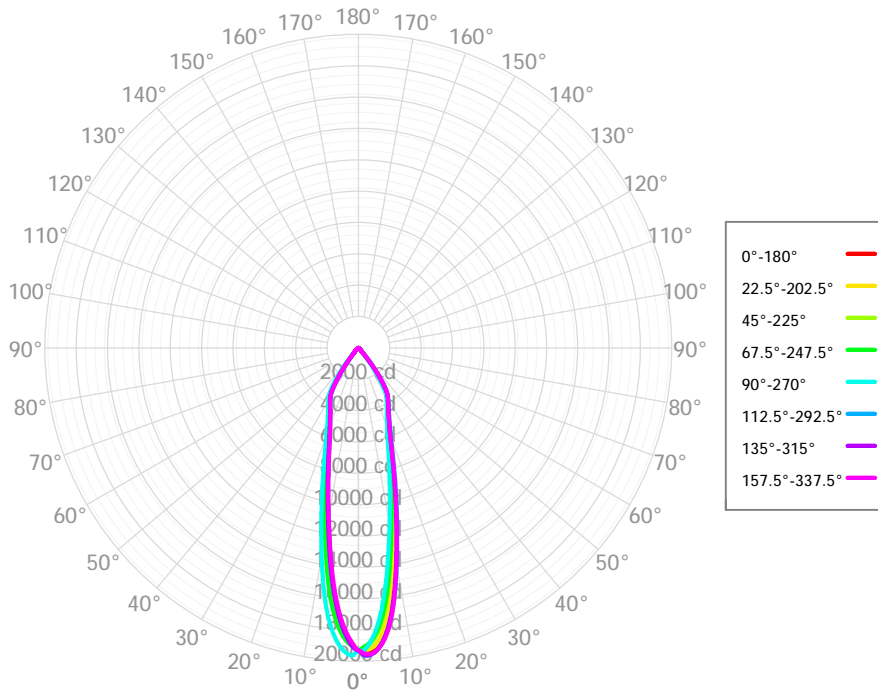
### Full Beam Angle

0° - 180°	25°
90° - 270°	26°

## IES File Header Contents

Keyword	Value
TEST	SP-R14
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM137L35HKNDNL
LUMINAIRE	6" Round x 12" High Cylinder Luminaire
DISTRIBUTION	Beam Angle 25.4
OTHER	CCT 3509 CRI 91.8 R9 60.4
OTHER	Total Luminaire wattage is approximate
OTHER	This report is prepared by Spectrum Lighting
_CRI	90+
_CCTMULT	30K x 1.3, 35K x 1.37, 40K x 1.39, 30HK x 1.02, 40HK x 1.01
_LAMPMULT	100L x 0.77, 120L x 0.88

### Candela Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	1492.18	19.75%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	2267.22	30.01%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	2048.51	27.11%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	1402.33	18.56%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	235.34	3.11%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	87.77	1.16%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	18.02	0.24%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	3.08	0.04%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	1.56	0.02%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	7556.00	100.00%	0.00° - 180.00°	7556.00	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°	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00	19304.00
1.00°	19428.17	19269.91	19149.95	19093.64	19321.60	19092.69	19091.47	18910.36	18960.21	18894.75	19023.96	19070.43	19612.58	19616.55	19595.50	19484.37	19428.17
2.00°	19413.01	19244.20	18991.46	18876.33	18948.52	18615.98	18631.39	18410.71	18531.32	18484.99	18740.73	18832.85	19535.55	19620.82	19612.20	19556.18	19413.01
3.00°	19265.01	19068.37	18670.01	18507.62	18409.26	17980.89	18019.69	17777.69	17983.40	17945.56	18315.92	18443.86	19264.30	19470.68	19468.10	19458.96	19265.01
4.00°	18916.18	18713.93	18182.22	17981.38	17698.45	17193.66	17285.33	17009.33	17277.46	17267.10	17747.85	17906.61	18867.26	19160.93	19146.65	19186.97	18916.18
5.00°	18376.72	18163.34	17507.33	17283.63	16826.63	16271.77	16409.56	16112.44	16444.94	16445.91	17032.86	17219.60	18299.93	18684.79	18644.45	18744.50	18376.72
6.00°	17654.58	17413.25	16644.09	16422.59	15822.64	15251.34	15403.06	15094.08	15501.37	15500.62	16171.17	16398.34	17596.33	18032.09	18000.14	18137.37	17654.58
7.00°	16713.93	16469.23	15594.25	15405.30	14718.99	14159.64	14321.79	13989.59	14444.47	14434.64	15178.30	15419.74	16733.66	17246.17	17161.85	17326.05	16713.93
8.00°	15575.61	15357.79	14444.04	14283.97	13557.29	13034.06	13192.72	12890.91	13333.22	13331.81	14098.32	14331.70	15714.95	16291.33	16127.29	16336.55	15575.61
9.00°	14406.00	14185.11	13288.02	13160.34	12461.98	11956.46	12110.50	11830.67	12247.53	12266.49	12999.27	13229.60	14614.69	15263.27	15028.88	15182.45	14406.00
10.00°	13266.23	13043.78	12194.35	12085.90	11456.59	10966.18	11125.04	10875.06	11245.98	11277.53	11962.18	12185.00	13495.66	14109.76	13874.06	14004.91	13266.23
11.00°	12137.93	11961.27	11184.32	11098.00	10484.78	10087.86	10226.87	9988.90	10344.96	10385.30	11005.11	11197.56	12391.96	12991.38	12740.33	12869.11	12137.93
12.00°	11103.89	10952.06	10258.84	10189.20	9646.24	9276.73	9398.80	9190.31	9527.64	9546.78	10130.71	10298.64	11363.44	11936.90	11674.97	11774.01	11103.89
13.00°	10161.91	10039.27	9415.34	9359.36	8865.45	8544.57	8660.12	8460.11	8765.07	8795.02	9319.73	9469.64	10429.40	10926.36	10692.56	10774.41	10161.91
14.00°	9318.29	9204.39	8652.48	8612.03	8170.40	7885.18	7990.98	7803.53	8072.56	8104.21	8589.02	8716.60	9574.81	10013.76	9776.54	9853.71	9318.29
15.00°	8528.35	8447.62	7959.52	7942.74	7549.41	7282.07	7383.04	7223.43	7464.91	7482.84	7925.10	8035.00	8786.95	9181.42	8922.90	9006.76	8528.35
16.00°	7794.41	7749.24	7341.59	7332.24	6987.53	6756.61	6846.59	6707.84	6914.65	6932.14	7324.16	7410.26	8056.74	8412.17	8155.95	8232.37	7794.41
17.00°	7151.83	7132.06	6794.74	6790.39	6478.98	6299.42	6377.53	6257.34	6450.34	6451.57	6785.91	6853.98	7415.11	7699.75	7476.37	7530.50	7151.83
18.00°	6600.83	6601.38	6320.86	6320.81	6062.13	5903.93	5968.35	5858.21	6036.60	6033.54	6321.78	6369.02	6851.52	7077.76	6881.27	6905.50	6600.83
19.00°	6124.60	6144.50	5911.61	5914.18	5699.10	5556.75	5619.58	5520.63	5660.90	5672.49	5921.44	5952.03	6355.46	6542.30	6358.08	6375.85	6124.60
20.00°	5725.90	5752.30	5561.74	5567.36	5381.46	5261.71	5319.86	5228.24	5353.20	5363.78	5570.06	5592.23	5926.82	6090.95	5919.17	5936.40	5725.90
21.00°	5395.25	5430.98	5267.15	5271.74	5114.59	5003.63	5050.91	4989.15	5077.13	5097.25	5273.35	5285.10	5572.82	5693.98	5569.98	5568.09	5395.25
22.00°	5117.96	5153.36	5019.18	5020.47	4882.63	4788.88	4815.12	4766.40	4840.46	4868.04	5018.93	5026.19	5259.57	5363.24	5250.01	5259.52	5117.96
23.00°	4888.02	4909.86	4800.29	4798.70	4674.04	4578.10	4607.77	4554.33	4644.18	4663.35	4793.03	4800.18	5012.98	5102.62	4998.54	5002.21	4888.02
24.00°	4671.35	4689.31	4591.67	4601.76	4485.11	4390.30	4415.42	4371.44	4452.45	4460.02	4589.90	4602.40	4790.67	4856.77	4751.71	4751.02	4671.35
25.00°	4465.63	4490.56	4416.08	4416.56	4305.52	4235.47	4264.24	4218.74	4285.15	4296.91	4411.79	4421.06	4579.28	4628.08	4539.74	4549.47	4465.63
26.00°	4289.76	4310.56	4255.75	4263.55	4174.43	4090.34	4114.37	4080.12	4136.35	4152.36	4254.66	4257.26	4406.16	4456.02	4360.79	4363.52	4289.76
27.00°	4136.78	4159.04	4110.85	4127.17	4013.41	3929.79	3967.39	3942.28	3991.71	4002.82	4109.92	4110.98	4253.68	4273.70	4215.68	4204.39	4136.78
28.00°	3992.97	4004.34	3943.46	3956.75	3849.99	3788.68	3848.86	3813.05	3863.47	3852.31	3949.11	3959.98	4098.58	4124.57	4055.18	4047.80	3992.97
29.00°	3845.98	3848.24	3790.96	3805.34	3726.35	3667.52	3712.41	3687.36	3734.56	3729.04	3807.22	3804.49	3936.36	3957.75	3897.97	3900.10	3845.98
30.00°	3711.12	3722.20	3663.22	3675.61	3580.41	3528.02	3573.66	3555.44	3616.38	3617.27	3679.76	3675.93	3793.68	3817.48	3769.67	3765.09	3711.12
31.00°	3588.35	3598.47	3518.27	3528.76	3376.84	3294.27	3382.38	3360.20	3477.24	3467.01	3551.67	3549.91	3663.68	3686.83	3646.78	3643.41	3588.35
32.00°	3423.79	3434.85	3296.27	3293.45	3095.99	2995.49	3110.86	3076.91	3231.64	3230.14	3359.84	3346.44	3521.35	3548.59	3493.87	3508.13	3423.79
33.00°	3178.78	3181.62	2999.30	2986.31	2763.27	2666.02	2782.41	2746.02	2913.28	2915.30	3067.83	3052.55	3284.91	3339.19	3263.76	3296.50	3178.78
34.00°	2867.07	2861.36	2667.89	2650.90	2412.09	2305.20	2425.26	2402.84	2563.45	2556.54	2733.75	2719.93	2981.91	3066.07	2973.67	3008.10	2867.07
35.00°	2524.01	2514.52	2317.97	2302.74	2050.02	1939.63	2065.59	2038.05	2206.13	2193.70	2376.31	2374.64	2639.37	2758.63	2645.96	2682.65	2524.01
36.00°	2167.35	2163.05	1961.24	1946.66	1687.95	1581.91	1700.47	1679.16	1849.71	1848.72	2016.81	2012.47	2283.52	2388.00	2278.77	2334.20	2167.35
37.00°	1817.16	1810.54	1608.00	1586.50	1332.14	1231.07	1345.47	1329.99	1496.78	1503.29	1667.20	1652.54	1920.43	2015.72	1919.17	1973.02	1817.16
38.00°	1464.62	1468.30	1265.10	1244.71	1007.05	911.87	1018.08	1006.68	1160.47	1172.28	1325.31	1302.62	1561.21	1649.36	1568.20	1614.69	1464.62
39.00°	1133.75	1129.03	943.39	927.86	715.95	642.78	728.58	715.81	851.69	850.57	1002.95	990.43	1218.78	1293.45	1217.46	1272.99	1133.75
40.00°	814.28	803.78	648.92	643.97	494.24	453.45	503.16	492.32	585.13	588.24	708.50	704.90	899.39	980.25	891.83	944.69	814.28
41.00°	547.19	535.49	437.74	441.55	391.62	378.31	391.24	383.73	412.43	415.54	475.28	482.03	634.24	692.01	618.11	655.92	547.19
42.00°	376.97	378.97	355.62	363.17	348.45	347.13	355.00	345.82	357.24	353.87	364.46	367.68	442.77	471.85	422.90	429.72	376.97
43.00°	319.84	332.06	319.53	328.29	320.75	314.37	324.28	317.75	321.57	320.79	326.95	328.01	354.99	356.15	334.37	330.64	319.84

### 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	8995	8995	8995	8995	8786	8786	8786	8786	8396	8396	8396	8038	8038	8038	7710	7710	7556
	1	8613	8420	8246	8090	8429	8257	8102	7962	7953	7830	7717	7674	7577	7488	7416	7342	7196
	2	8232	7895	7616	7381	8069	7766	7513	7298	7525	7318	7139	7302	7134	6987	7096	6962	6826
	3	7865	7423	7080	6807	7720	7319	7005	6752	7125	6862	6645	6945	6726	6542	6778	6598	6443
	4	7516	6998	6618	6328	7386	6914	6562	6290	6755	6455	6217	6608	6352	6146	6471	6255	6076
	5	7186	6614	6214	5919	7069	6545	6171	5892	6414	6089	5841	6292	6011	5791	6178	5936	5741
	6	6876	6266	5857	5563	6771	6208	5824	5544	6099	5760	5508	5997	5699	5471	5902	5640	5436
	7	6584	5950	5539	5250	6490	5902	5513	5237	5810	5463	5210	5723	5414	5183	5642	5367	5157
	8	6312	5662	5253	4972	6226	5621	5233	4962	5543	5192	4942	5469	5153	4922	5400	5116	4903
	9	6057	5399	4996	4724	5980	5364	4979	4716	5297	4946	4701	5233	4915	4686	5174	4884	4671
	10	5820	5159	4763	4499	5750	5128	4749	4494	5070	4722	4482	5015	4696	4470	4963	4670	4459

### Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	638.1 fc	2.4 ft
6.5 ft	456.9 fc	2.9 ft
7.5 ft	343.2 fc	3.3 ft
8.0 ft	301.6 fc	3.6 ft
10.0 ft	193.0 fc	4.4 ft
12.0 ft	134.1 fc	5.3 ft
14.0 ft	98.5 fc	6.2 ft
16.0 ft	75.4 fc	7.1 ft
20.0 ft	48.3 fc	8.9 ft
24.0 ft	33.5 fc	10.7 ft
28.0 ft	24.6 fc	12.5 ft

### Average Luminaire Luminance [cd/m<sup>2</sup>]

	0.00°	45.00°	90.00°
0.00°	1058248	1058248	1058248
45.00°	20325	20702	21151
55.00°	7728	8370	8545
65.00°	1475	1414	1711
75.00°	543	527	597
85.00°	1212	1010	757

### 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	8.7	9.6	9.1	10.0	10.3	9.3	10.2	9.7	10.5	10.9
	3H	8.6	9.4	8.9	9.7	10.1	9.2	10.0	9.6	10.3	10.7
	4H	8.5	9.2	8.9	9.6	10.0	9.1	9.9	9.5	10.2	10.6
	6H	8.4	9.1	8.8	9.4	9.8	9.0	9.7	9.4	10.1	10.5
	8H	8.3	9.0	8.8	9.4	9.8	8.9	9.6	9.4	10.0	10.4
	12H	8.3	8.9	8.7	9.3	9.7	8.9	9.5	9.3	9.9	10.3
4H	2H	8.5	9.2	8.9	9.6	10.0	9.1	9.9	9.5	10.2	10.6
	3H	8.3	9.0	8.8	9.4	9.8	9.0	9.6	9.4	10.1	10.5
	4H	8.2	8.8	8.7	9.2	9.7	8.9	9.5	9.4	9.9	10.3
	6H	8.2	8.6	8.6	9.1	9.5	8.8	9.3	9.3	9.7	10.2
	8H	8.1	8.5	8.6	9.0	9.5	8.8	9.2	9.2	9.7	10.1
	12H	8.1	8.5	8.6	9.0	9.4	8.7	9.1	9.2	9.6	10.1
8H	4H	8.1	8.5	8.5	9.0	9.4	8.7	9.2	9.2	9.6	10.1
	6H	8.0	8.3	8.5	8.8	9.3	8.6	9.0	9.2	9.5	10.0
	8H	8.0	8.3	8.5	8.8	9.3	8.6	8.9	9.1	9.4	9.9
	12H	8.0	8.2	8.5	8.7	9.3	8.6	8.8	9.1	9.3	9.9
12H	4H	8.0	8.4	8.5	8.9	9.3	8.7	9.1	9.2	9.5	10.0
	6H	7.9	8.2	8.5	8.7	9.2	8.6	8.9	9.1	9.4	9.9
	8H	7.9	8.2	8.4	8.7	9.3	8.5	8.8	9.1	9.3	9.9

Corrected UGR values based on total output energy  
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0