

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C0614LM100L35KNDNL
6" Round x 12" High Cylinder Luminaire

Test Number

SP-R32

Test Date

9/10/2025

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

Summary of Results

Power

Input Watts	70.53 W
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Lumen Output

Output Lumens	7905
Efficacy	112.08 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.41
Two luminaires, plane 90°	0.41
Four luminaires	0.47

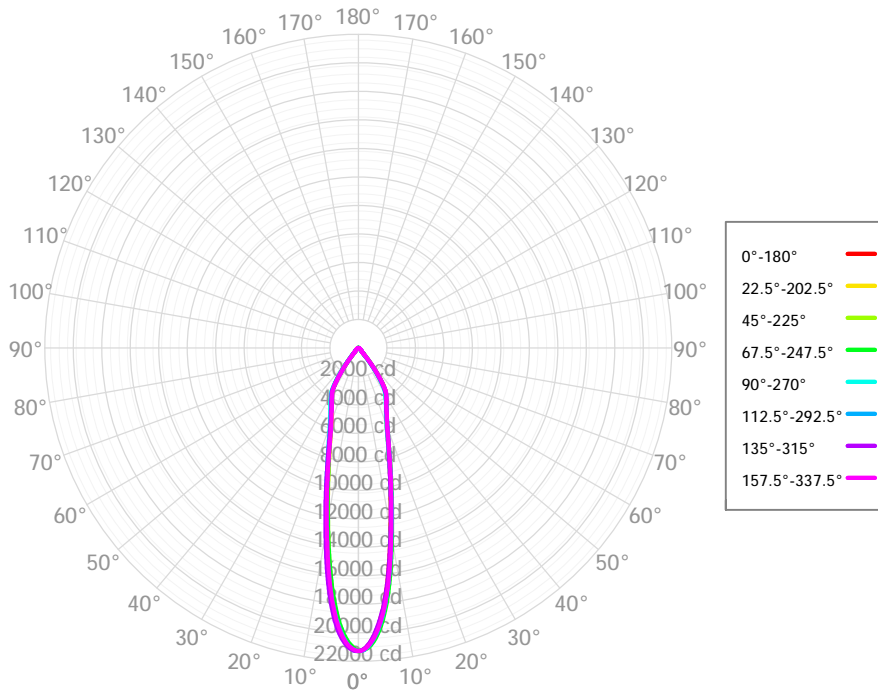
Full Beam Angle

0° - 180°	24°
90° - 270°	25°

IES File Header Contents

Keyword	Value
TEST	SP-R32
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM100L35KNDNL
LUMINAIRE	6" Round x 12" High Cylinder Luminaire
DISTRIBUTION	Beam Angle 24.4
OTHER	CCT 3440 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°	1603.61	20.29%	90.00° - 100.00°	1.40	0.02%
10.00° - 20.00°	2352.78	29.76%	100.00° - 110.00°	1.44	0.02%
20.00° - 30.00°	2122.43	26.85%	100.00° - 120.00°	2.83	0.04%
30.00° - 40.00°	1457.56	18.44%	120.00° - 130.00°	1.39	0.02%
40.00° - 50.00°	242.79	3.07%	130.00° - 140.00°	1.55	0.02%
50.00° - 60.00°	90.90	1.15%	140.00° - 150.00°	1.66	0.02%
60.00° - 70.00°	18.60	0.24%	150.00° - 160.00°	1.50	0.02%
70.00° - 80.00°	3.10	0.04%	160.00° - 170.00°	0.92	0.01%
80.00° - 90.00°	1.73	0.02%	170.00° - 180.00°	0.25	0.00%
0.00° - 90.00°	7893.50	99.85%	0.00° - 180.00°	7905.00	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°	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50	21274.50
1.00°	21170.37	21195.95	21188.18	21203.27	21218.42	21167.09	21228.47	21132.30	21183.23	21106.76	21151.17	21008.49	21209.77	21201.71	21152.94	21185.76	21170.37
2.00°	20830.35	20941.25	20898.12	21021.10	20932.68	20870.71	20986.66	20857.66	20917.99	20725.87	20811.95	20627.74	20871.40	20903.56	20796.63	20890.27	20830.35
3.00°	20302.52	20501.64	20418.98	20633.90	20457.19	20397.65	20561.76	20362.13	20448.53	20175.19	20276.70	20033.61	20304.85	20465.88	20259.51	20430.84	20302.52
4.00°	19614.05	19882.66	19777.04	20045.94	19821.52	19719.69	19978.76	19655.73	19799.30	19421.74	19547.20	19260.66	19604.10	19808.99	19540.14	19789.40	19614.05
5.00°	18763.34	19102.50	18961.38	19292.88	19032.21	18870.38	19158.68	18786.16	18929.87	18466.83	18635.02	18295.84	18768.77	19003.84	18720.85	18978.23	18763.34
6.00°	17778.05	18157.07	17972.47	18369.60	18045.97	17852.57	18162.88	17699.39	17839.12	17319.48	17535.75	17185.04	17773.44	18052.20	17737.81	18032.31	17778.05
7.00°	16623.48	17073.97	16830.90	17285.98	16934.37	16705.98	17022.83	16488.00	16597.78	16031.93	16305.20	15949.57	16634.79	16946.29	16631.12	16943.02	16623.48
8.00°	15386.76	15844.70	15601.82	16079.93	15678.79	15447.51	15792.85	15206.96	15309.35	14757.92	15001.25	14672.10	15401.69	15763.67	15424.13	15746.73	15386.76
9.00°	14163.02	14590.44	14326.68	14802.64	14416.82	14181.29	14489.50	13909.74	14037.67	13481.63	13730.32	13435.49	14158.14	14549.68	14193.42	14513.73	14163.02
10.00°	12976.33	13356.86	13107.64	13556.17	13165.07	12980.02	13244.82	12703.77	12815.48	12307.84	12541.26	12285.76	12977.47	13342.69	12998.85	13280.21	12976.33
11.00°	11881.41	12199.17	11987.56	12391.50	12046.25	11839.22	12106.69	11599.74	11676.62	11241.80	11467.00	11243.67	11861.94	12223.13	11919.97	12169.83	11881.41
12.00°	10884.39	11177.64	10973.79	11327.26	11026.97	10801.75	11052.78	10567.10	10666.53	10240.65	10476.73	10295.95	10858.15	11202.47	10901.80	11140.26	10884.39
13.00°	9986.46	10254.28	10051.28	10360.71	10060.47	9869.89	10051.59	9614.58	9711.71	9366.72	9579.45	9440.82	9961.99	10262.62	9985.51	10214.75	9986.46
14.00°	9180.83	9436.62	9226.85	9488.07	9193.30	9009.50	9169.13	8787.66	8875.07	8565.66	8777.70	8661.99	9148.50	9413.28	9151.33	9384.83	9180.83
15.00°	8448.40	8667.16	8469.20	8694.94	8408.61	8245.46	8376.56	8009.43	8107.10	7861.54	8067.31	7977.56	8412.91	8659.56	8430.33	8629.96	8448.40
16.00°	7797.58	7973.54	7799.66	7996.93	7709.47	7574.88	7659.36	7347.28	7427.40	7238.01	7428.56	7359.44	7745.99	7973.61	7791.38	7935.21	7797.58
17.00°	7197.61	7379.50	7214.74	7366.94	7145.96	6978.07	7035.66	6757.49	6862.39	6721.95	6874.51	6825.70	7168.62	7385.45	7218.88	7345.69	7197.61
18.00°	6694.66	6834.63	6697.78	6824.76	6620.42	6479.58	6506.16	6271.73	6370.25	6258.11	6408.11	6365.39	6668.40	6843.75	6707.78	6849.54	6694.66
19.00°	6257.77	6381.00	6245.48	6353.27	6173.65	6060.78	6097.19	5869.68	5941.15	5871.33	6003.79	5972.07	6230.85	6399.07	6271.31	6358.75	6257.77
20.00°	5878.23	5983.75	5869.69	5947.24	5794.08	5690.48	5714.07	5534.63	5591.66	5540.61	5666.29	5637.08	5862.30	5995.66	5903.22	5970.99	5878.23
21.00°	5571.64	5639.14	5547.82	5615.91	5499.79	5390.33	5397.58	5258.28	5299.48	5245.55	5384.83	5355.73	5555.05	5661.63	5578.10	5644.75	5571.64
22.00°	5293.73	5350.79	5270.65	5325.50	5212.86	5128.16	5129.29	5006.14	5067.97	5015.54	5131.94	5111.78	5293.50	5376.06	5297.47	5357.07	5293.73
23.00°	5050.09	5115.62	5030.59	5065.91	4964.89	4888.28	4910.59	4776.07	4836.60	4791.63	4914.88	4898.15	5050.87	5132.63	5057.67	5131.97	5050.09
24.00°	4847.57	4902.08	4819.69	4850.23	4769.99	4676.36	4693.53	4573.62	4623.98	4588.38	4701.13	4695.27	4836.11	4912.77	4831.54	4878.71	4847.57
25.00°	4645.72	4696.46	4630.91	4646.18	4583.22	4484.73	4509.68	4393.28	4440.74	4422.09	4520.75	4524.44	4639.58	4690.76	4639.25	4683.15	4645.72
26.00°	4465.92	4504.41	4462.15	4480.93	4392.81	4332.35	4315.22	4238.68	4269.77	4259.07	4360.88	4369.21	4481.37	4516.07	4451.12	4480.90	4465.92
27.00°	4306.93	4340.70	4307.65	4321.86	4248.68	4166.37	4165.19	4066.17	4120.97	4100.74	4204.60	4213.84	4334.07	4358.04	4318.58	4339.75	4306.93
28.00°	4152.77	4207.07	4152.63	4177.32	4089.71	4004.52	4004.04	3930.94	3976.45	3950.29	4027.38	4040.88	4155.93	4198.21	4157.24	4222.58	4152.77
29.00°	4008.78	4023.01	3984.97	3996.82	3916.96	3866.76	3870.55	3795.28	3841.52	3818.42	3881.49	3886.22	3987.79	4030.05	4032.44	4068.75	4008.78
30.00°	3879.29	3884.39	3844.44	3856.25	3782.56	3735.36	3747.24	3667.45	3700.61	3694.19	3754.38	3757.92	3851.29	3914.10	3902.00	3921.19	3879.29
31.00°	3752.10	3767.16	3713.28	3727.20	3633.97	3548.36	3580.00	3489.05	3567.26	3515.95	3608.67	3586.16	3710.92	3789.46	3768.73	3804.63	3752.10
32.00°	3608.28	3655.62	3546.32	3570.19	3418.90	3279.42	3332.81	3222.16	3322.06	3250.14	3359.74	3321.66	3493.72	3602.82	3550.75	3670.43	3608.28
33.00°	3372.70	3424.81	3290.75	3310.07	3107.33	2956.18	3006.43	2890.19	3000.20	2929.48	3049.06	2997.86	3198.16	3315.21	3279.18	3431.20	3372.70
34.00°	3056.72	3139.14	2971.56	2975.57	2774.42	2606.69	2655.96	2531.43	2640.33	2570.79	2699.01	2641.66	2858.19	2991.36	2949.46	3110.44	3056.72
35.00°	2702.15	2790.09	2618.12	2623.51	2406.92	2238.07	2281.86	2153.74	2259.09	2178.75	2329.49	2271.46	2493.61	2645.35	2598.21	2772.27	2702.15
36.00°	2326.95	2418.07	2234.94	2247.92	2029.62	1857.23	1913.81	1770.50	1875.76	1783.87	1938.32	1888.58	2121.80	2273.01	2226.83	2398.04	2326.95
37.00°	1937.06	2022.19	1851.70	1867.10	1653.64	1478.92	1529.81	1398.41	1483.15	1397.81	1549.51	1509.82	1739.99	1879.30	1852.80	2016.94	1937.06
38.00°	1554.45	1631.16	1471.50	1492.27	1278.10	1130.83	1171.39	1049.95	1123.61	1044.25	1182.05	1158.20	1371.71	1510.80	1476.38	1636.59	1554.45
39.00°	1195.64	1250.16	1115.31	1135.32	940.26	821.66	852.69	739.03	803.71	745.64	856.27	839.29	1033.23	1153.89	1130.44	1265.96	1195.64
40.00°	874.29	916.83	803.23	812.11	656.47	565.88	579.41	499.27	543.97	519.15	591.42	582.14	742.59	845.47	824.43	932.63	874.29
41.00°	615.91	651.79	554.17	547.38	450.93	410.41	406.41	370.80	380.15	390.29	420.77	431.08	521.94	599.25	578.46	654.70	615.91
42.00°	448.71	453.58	410.61	397.31	365.02	346.19	341.41	320.56	332.02	334.11	355.85	368.45	406.62	438.33	442.72	463.30	448.71
43.00°	374.84	377.34	351.86	353.77	325.39	312.14	302.72	285.64	298.38	301.23	326.35	335.30	361.39	384.47	386.79	397.25	374.84

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%	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	9408	9408	9408	9408	9188	9188	9188	9188	8777	8777	8777	8401	8401	8401	8056	8056	8056	7893
	1	9010	8808	8626	8463	8816	8637	8475	8328	8316	8188	8070	8022	7922	7829	7751	7674	7601	7521
	2	8612	8260	7969	7724	8441	8125	7861	7637	7870	7655	7469	7636	7461	7308	7419	7279	7155	7137
	3	8230	7768	7411	7126	8077	7659	7332	7068	7455	7180	6955	7265	7037	6846	7089	6901	6740	6769
	4	7867	7326	6930	6627	7729	7237	6871	6587	7070	6757	6509	6915	6649	6434	6770	6546	6360	6425
	5	7523	6926	6509	6201	7400	6853	6464	6173	6715	6377	6118	6587	6294	6065	6467	6215	6012	6104
	6	7200	6564	6138	5832	7089	6503	6103	5812	6388	6035	5772	6281	5970	5733	6180	5908	5695	5807
	7	6897	6235	5807	5506	6797	6184	5779	5492	6087	5726	5463	5996	5674	5434	5911	5625	5406	5532
	8	6613	5936	5510	5217	6523	5893	5488	5206	5810	5445	5185	5732	5404	5163	5659	5363	5142	5279
	9	6348	5663	5243	4959	6267	5626	5225	4950	5554	5190	4934	5488	5156	4918	5424	5123	4902	5046
	10	6102	5413	5000	4726	6028	5381	4986	4719	5319	4957	4707	5261	4929	4694	5206	4901	4681	4831

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	703.3 fc	2.4 ft
6.5 ft	503.5 fc	2.8 ft
7.5 ft	378.2 fc	3.2 ft
8.0 ft	332.4 fc	3.4 ft
10.0 ft	212.7 fc	4.3 ft
12.0 ft	147.7 fc	5.2 ft
14.0 ft	108.5 fc	6.0 ft
16.0 ft	83.1 fc	6.9 ft
20.0 ft	53.2 fc	8.6 ft
24.0 ft	36.9 fc	10.3 ft
28.0 ft	27.1 fc	12.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	1166271	1166271	1166271
45.00°	24547	22880	21338
55.00°	11792	10204	8997
65.00°	3153	2495	1755
75.00°	928	565	418
85.00°	1135	1329	1039

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	11.3	12.2	11.6	12.5	12.8	8.5	9.4	8.8	9.7	10.0
	3H	11.2	12.0	11.6	12.3	12.7	8.3	9.2	8.7	9.5	9.9
	4H	11.1	11.8	11.5	12.2	12.6	8.3	9.0	8.7	9.4	9.8
	6H	11.0	11.7	11.4	12.1	12.5	8.2	8.8	8.6	9.2	9.6
	8H	10.9	11.6	11.4	12.0	12.4	8.1	8.8	8.5	9.1	9.6
	12H	10.9	11.5	11.3	11.9	12.3	8.1	8.7	8.5	9.1	9.5
4H	2H	11.0	11.8	11.4	12.1	12.5	8.2	9.0	8.6	9.3	9.7
	3H	11.0	11.6	11.4	12.0	12.4	8.1	8.7	8.5	9.1	9.5
	4H	10.8	11.4	11.3	11.8	12.3	8.0	8.5	8.4	9.0	9.4
	6H	10.8	11.2	11.2	11.7	12.2	7.9	8.4	8.4	8.8	9.3
	8H	10.7	11.1	11.2	11.6	12.1	7.8	8.3	8.3	8.7	9.2
	12H	10.6	11.0	11.1	11.5	12.0	7.8	8.2	8.3	8.7	9.1
8H	4H	10.7	11.1	11.1	11.6	12.0	7.8	8.2	8.3	8.7	9.2
	6H	10.6	10.9	11.1	11.4	11.9	7.7	8.0	8.2	8.6	9.0
	8H	10.5	10.8	11.1	11.3	11.8	7.7	8.0	8.2	8.5	9.0
	12H	10.5	10.8	11.0	11.3	11.8	7.6	7.9	8.2	8.4	9.0
12H	4H	10.6	11.0	11.1	11.5	11.9	7.7	8.1	8.2	8.6	9.1
	6H	10.5	10.8	11.0	11.3	11.8	7.6	7.9	8.2	8.4	9.0
	8H	10.5	10.7	11.0	11.2	11.8	7.6	7.9	8.1	8.4	9.0

Corrected UGR values based on total output energy
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0