

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C0614LM137L30KNDNL
6" Round x 12" High Cylinder Luminaire

Test Number

SP-R39

Test Date

9/10/2025

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

Summary of Results

Power

Input Watts	97.83 W
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Lumen Output

Output Lumens	9789
Efficacy	100.06 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°	0.38
Four luminaires	0.49

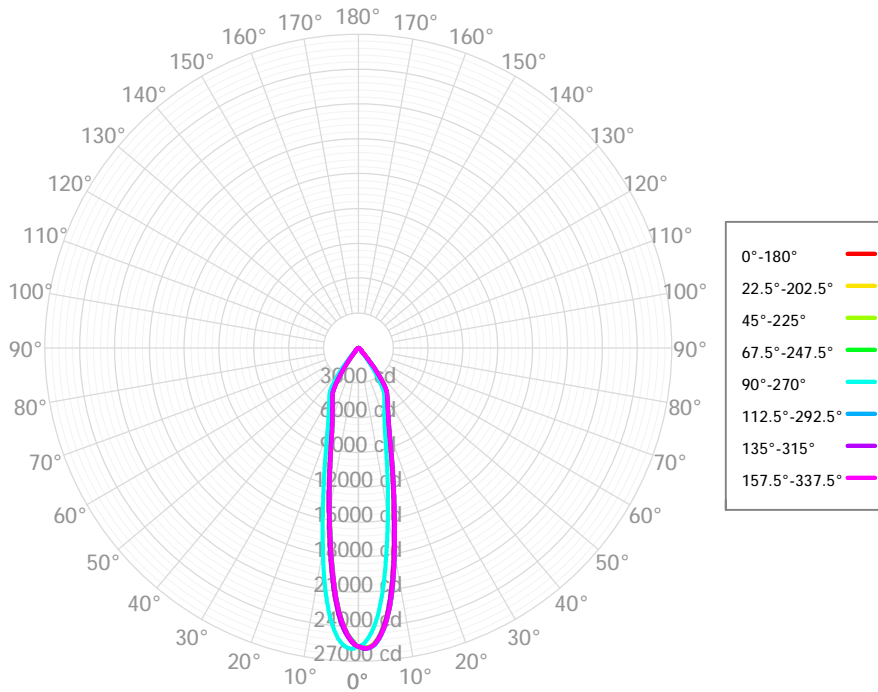
Full Beam Angle

0° - 180°	25°
90° - 270°	25°

IES File Header Contents

Keyword	Value
TEST	SP-R39
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM137L30KNDNL
LUMINAIRE	6" Round x 12" High Cylinder Luminaire
DISTRIBUTION	Beam Angle 24.8
OTHER	CCT 3069 CRI 82.5 R9 6.8
OTHER	Total Luminaire wattage is approximate
OTHER	This report is prepared by Spectrum Lighting
_CRI	80+
_CCTMULT	35K x 1.056, 40K x 1.07, 30HK x 0.79, 35HK x 0.77, 40HK x 0.78
_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°	1970.77	20.13%	90.00° - 100.00°	1.49	0.02%
10.00° - 20.00°	2917.68	29.81%	100.00° - 110.00°	1.39	0.01%
20.00° - 30.00°	2623.95	26.81%	100.00° - 120.00°	2.78	0.03%
30.00° - 40.00°	1798.59	18.37%	120.00° - 130.00°	1.52	0.02%
40.00° - 50.00°	321.76	3.29%	130.00° - 140.00°	1.73	0.02%
50.00° - 60.00°	112.49	1.15%	140.00° - 150.00°	1.72	0.02%
60.00° - 70.00°	26.00	0.27%	150.00° - 160.00°	1.75	0.02%
70.00° - 80.00°	3.81	0.04%	160.00° - 170.00°	0.93	0.01%
80.00° - 90.00°	1.76	0.02%	170.00° - 180.00°	0.29	0.00%
0.00° - 90.00°	9776.80	99.88%	0.00° - 180.00°	9789.00	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°	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68	25716.68
1.00°	25868.75	25819.05	25846.13	25821.61	25504.47	25356.41	25470.22	25354.09	25434.84	25290.15	25412.84	25270.89	25913.02	25874.62	25906.58	25831.64	25868.75
2.00°	25790.24	25809.50	25785.42	25827.82	24976.51	24821.10	24940.53	24782.81	24934.17	24736.84	24907.96	24728.36	25850.41	25874.95	25869.34	25838.44	25790.24
3.00°	25526.89	25611.31	25506.87	25612.83	24251.75	24030.39	24263.62	23967.49	24201.44	23958.40	24198.16	23942.71	25589.84	25673.48	25583.36	25619.32	25526.89
4.00°	25009.23	25148.71	24970.13	25159.05	23282.01	23000.80	23304.56	22948.72	23261.62	22931.15	23242.56	22918.71	25085.09	25190.70	25038.63	25158.10	25009.23
5.00°	24236.51	24426.89	24186.64	24435.62	22068.16	21685.88	22049.80	21663.45	22036.69	21639.55	22022.91	21624.99	24276.63	24477.60	24252.67	24445.67	24236.51
6.00°	23252.72	23501.17	23192.00	23508.51	20635.99	20217.76	20641.87	20171.95	20630.37	20162.77	20592.13	20157.56	23305.04	23533.62	23260.84	23540.59	23252.72
7.00°	22050.41	22373.49	22003.94	22383.77	19073.13	18639.57	19072.53	18614.26	19086.61	18588.42	19029.93	18581.72	22070.70	22411.30	22036.51	22394.91	22050.41
8.00°	20632.79	21046.34	20617.65	21049.99	17508.75	17084.60	17508.67	17064.92	17519.92	17031.35	17457.52	17021.48	20682.85	21083.30	20652.34	21027.98	20632.79
9.00°	19109.94	19563.76	19103.32	19539.37	16016.44	15597.44	16012.45	15583.48	16008.35	15554.37	15960.02	15550.71	19152.52	19585.20	19154.72	19556.66	19109.94
10.00°	17557.61	18009.11	17553.26	17973.94	14644.17	14241.86	14615.86	14263.47	14603.68	14204.98	14573.54	14211.59	17590.71	18031.72	17598.76	18021.81	17557.61
11.00°	16068.57	16491.97	16060.35	16470.02	13376.36	13023.50	13332.29	13003.66	13362.07	12979.13	13308.33	12979.92	16093.05	16512.82	16112.25	16521.21	16068.57
12.00°	14685.03	15080.78	14682.77	15050.16	12196.51	11852.38	12194.71	11856.14	12172.82	11835.27	12146.65	11839.27	14719.40	15091.87	14711.79	15100.23	14685.03
13.00°	13451.92	13793.80	13447.07	13769.54	11139.78	10833.79	11106.83	10820.12	11101.73	10800.24	11091.03	10805.94	13465.95	13822.43	13471.96	13820.64	13451.92
14.00°	12341.34	12647.31	12338.21	12631.70	10166.97	9935.11	10145.30	9880.26	10140.50	9883.35	10135.02	9883.02	12352.78	12692.15	12365.07	12678.11	12341.34
15.00°	11349.29	11627.63	11334.38	11608.90	9313.45	9091.66	9296.49	9083.51	9281.29	9047.18	9279.13	9057.82	11359.72	11655.77	11363.53	11638.05	11349.29
16.00°	10443.03	10694.98	10432.03	10670.15	8567.05	8369.51	8561.18	8348.50	8553.24	8339.44	8539.99	8351.11	10457.10	10703.07	10451.60	10706.36	10443.03
17.00°	9631.49	9855.64	9623.10	9830.51	7940.15	7774.98	7922.84	7774.77	7923.07	7747.20	7906.54	7750.33	9648.95	9870.33	9642.21	9859.64	9631.49
18.00°	8911.43	9112.52	8908.71	9102.17	7411.73	7276.26	7403.03	7256.52	7391.80	7254.02	7382.95	7242.87	8932.45	9131.17	8920.86	9106.08	8911.43
19.00°	8292.99	8464.32	8286.45	8456.42	6966.45	6861.97	6968.08	6844.00	6930.99	6835.77	6948.40	6826.37	8326.93	8479.02	8295.88	8456.16	8292.99
20.00°	7756.20	7896.65	7744.31	7899.90	6598.54	6501.93	6604.71	6486.77	6584.84	6476.96	6585.03	6478.84	7788.76	7911.90	7763.06	7900.29	7756.20
21.00°	7297.35	7407.14	7284.79	7414.59	6278.12	6200.92	6278.66	6180.37	6264.14	6177.18	6265.44	6177.51	7319.47	7422.71	7305.70	7420.70	7297.35
22.00°	6889.68	7003.22	6895.12	7001.24	5995.74	5925.37	5992.99	5904.44	5980.43	5904.04	5979.62	5902.42	6927.46	7021.31	6919.35	7004.86	6889.68
23.00°	6567.95	6659.57	6556.01	6640.74	5732.75	5657.11	5728.58	5651.17	5718.52	5647.07	5728.99	5648.24	6578.76	6675.40	6573.99	6665.89	6567.95
24.00°	6260.81	6347.18	6259.19	6328.51	5498.17	5442.59	5494.76	5439.18	5495.66	5426.62	5488.50	5426.44	6267.37	6352.52	6278.77	6357.06	6260.81
25.00°	5987.01	6065.78	5989.07	6059.73	5301.08	5252.15	5297.80	5239.53	5290.80	5231.46	5287.19	5230.85	5996.15	6073.26	6019.24	6053.87	5987.01
26.00°	5738.96	5808.00	5744.71	5808.46	5120.05	5072.34	5117.56	5063.23	5094.25	5047.87	5098.06	5053.64	5761.68	5811.68	5765.22	5805.21	5738.96
27.00°	5523.98	5589.88	5533.11	5581.31	4937.64	4898.87	4939.52	4885.07	4918.41	4873.93	4919.21	4876.74	5547.35	5594.63	5533.16	5579.40	5523.98
28.00°	5341.29	5390.88	5337.49	5384.83	4765.12	4737.64	4760.55	4723.89	4766.35	4708.58	4750.64	4707.97	5350.19	5392.06	5334.22	5388.26	5341.29
29.00°	5134.12	5198.87	5140.49	5187.94	4603.06	4565.67	4608.08	4557.80	4598.16	4544.41	4591.23	4548.64	5167.79	5199.00	5156.00	5193.47	5134.12
30.00°	4960.79	5015.01	4956.97	5005.24	4411.39	4337.69	4415.43	4340.45	4415.06	4325.19	4398.20	4321.09	4984.67	5011.68	4976.36	5010.68	4960.79
31.00°	4792.07	4839.91	4794.35	4842.76	4101.80	3987.69	4103.19	3994.32	4099.17	3982.33	4089.60	3977.93	4819.06	4844.97	4802.80	4843.51	4792.07
32.00°	4648.72	4689.87	4643.73	4683.37	3688.68	3558.97	3690.70	3567.57	3688.91	3569.65	3681.83	3553.94	4661.02	4697.96	4650.94	4670.26	4648.72
33.00°	4476.58	4510.84	4447.56	4497.75	3227.64	3105.92	3226.31	3095.63	3224.92	3097.06	3218.64	3088.40	4450.36	4519.25	4452.93	4507.45	4476.58
34.00°	4132.60	4225.56	4126.33	4214.87	2760.49	2633.95	2757.15	2629.59	2748.92	2623.82	2748.45	2622.89	4128.03	4231.93	4137.43	4228.27	4132.60
35.00°	3738.81	3842.00	3730.44	3834.19	2294.49	2165.29	2286.12	2165.82	2284.79	2158.62	2283.04	2154.32	3735.86	3856.58	3737.60	3860.93	3738.81
36.00°	3301.14	3417.71	3300.34	3407.62	1835.16	1720.81	1830.90	1717.23	1833.49	1710.00	1833.24	1714.16	3307.83	3426.10	3307.41	3432.78	3301.14
37.00°	2842.06	2973.57	2852.95	2966.07	1417.46	1311.87	1414.01	1310.55	1414.24	1304.27	1415.65	1307.85	2860.43	2973.56	2857.32	2965.10	2842.06
38.00°	2398.06	2518.99	2400.10	2510.03	1034.31	939.15	1035.94	940.87	1026.00	937.97	1032.91	933.60	2412.41	2520.84	2399.82	2519.27	2398.06
39.00°	1950.75	2068.06	1952.37	2056.04	702.53	638.87	704.57	634.32	701.38	637.81	705.85	627.02	1955.33	2074.83	1946.51	2066.04	1950.75
40.00°	1488.31	1602.96	1482.09	1602.63	490.89	466.54	492.82	465.30	492.28	462.58	496.56	455.92	1493.83	1602.87	1490.67	1601.40	1488.31
41.00°	1069.71	1162.45	1062.41	1169.60	413.39	400.89	411.83	401.62	409.77	398.65	413.44	401.92	1076.89	1168.65	1072.21	1164.21	1069.71
42.00°	738.41	803.78	724.46	809.75	373.46	362.87	370.20	364.31	373.93	363.58	372.69	362.86	733.87	803.15	737.68	804.08	738.41
43.00°	534.08	553.84	516.42	571.10	341.47	329.53	338.62	332.29	340.31	330.37	338.15	329.40	536.29	555.02	534.63	560.43	534.08

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%	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	11651	11651	11651	11651	11378	11378	11378	11378	10870	10870	10870	10405	10405	10405	9978	9978	9978	9777
	1	11156	10906	10681	10479	10917	10694	10493	10311	10298	10139	9993	9934	9809	9694	9599	9502	9412	9313
	2	10663	10226	9864	9561	10450	10058	9731	9453	9744	9476	9245	9453	9237	9046	9185	9012	8857	8835
	3	10188	9615	9171	8818	9999	9480	9074	8746	9227	8886	8606	8992	8709	8471	8775	8541	8341	8378
	4	9737	9065	8574	8198	9567	8956	8501	8149	8749	8361	8053	8557	8227	7959	8378	8099	7868	7949
	5	9310	8569	8052	7670	9158	8479	7996	7635	8308	7889	7567	8149	7786	7501	8001	7688	7436	7550
	6	8909	8120	7591	7211	8772	8045	7548	7186	7902	7464	7137	7769	7384	7089	7645	7307	7043	7181
	7	8533	7712	7180	6807	8409	7649	7146	6789	7529	7080	6753	7416	7016	6718	7310	6955	6684	6840
	8	8181	7341	6812	6449	8070	7287	6785	6435	7184	6732	6409	7088	6680	6382	6998	6631	6356	6526
	9	7853	7002	6480	6128	7752	6956	6458	6118	6868	6415	6097	6785	6373	6077	6707	6332	6057	6237
	10	7547	6692	6180	5839	7455	6652	6162	5831	6576	6126	5815	6504	6091	5800	6436	6058	5785	5970

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	850.1 fc	2.4 ft
6.5 ft	608.7 fc	2.9 ft
7.5 ft	457.2 fc	3.3 ft
8.0 ft	401.8 fc	3.5 ft
10.0 ft	257.2 fc	4.4 ft
12.0 ft	178.6 fc	5.3 ft
14.0 ft	131.2 fc	6.2 ft
16.0 ft	100.5 fc	7.0 ft
20.0 ft	64.3 fc	8.8 ft
24.0 ft	44.6 fc	10.6 ft
28.0 ft	32.8 fc	12.3 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	1409792	1409792	1409792
45.00°	32686	31821	21794
55.00°	15484	15686	7663
65.00°	4559	4860	1096
75.00°	688	617	481
85.00°	1327	1342	914

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	12.7	13.7	13.1	14.0	14.3	6.9	7.9	7.3	8.2	8.5
	3H	12.7	13.5	13.1	13.8	14.2	6.9	7.7	7.3	8.0	8.4
	4H	12.6	13.3	13.0	13.7	14.1	6.8	7.6	7.2	7.9	8.3
	6H	12.5	13.2	12.9	13.5	13.9	6.7	7.4	7.1	7.8	8.2
	8H	12.4	13.1	12.9	13.5	13.9	6.7	7.3	7.1	7.7	8.1
	12H	12.4	13.0	12.8	13.4	13.8	6.6	7.2	7.1	7.6	8.1
4H	2H	12.6	13.4	13.0	13.7	14.1	6.7	7.5	7.1	7.8	8.2
	3H	12.5	13.1	12.9	13.6	14.0	6.6	7.3	7.1	7.7	8.1
	4H	12.4	13.0	12.9	13.4	13.8	6.5	7.1	7.0	7.5	8.0
	6H	12.3	12.8	12.8	13.2	13.7	6.5	6.9	6.9	7.4	7.9
	8H	12.2	12.7	12.7	13.1	13.6	6.4	6.8	6.9	7.3	7.8
	12H	12.2	12.6	12.7	13.1	13.5	6.4	6.7	6.9	7.2	7.7
8H	4H	12.2	12.7	12.7	13.1	13.6	6.4	6.8	6.9	7.3	7.7
	6H	12.1	12.5	12.6	13.0	13.5	6.3	6.6	6.8	7.1	7.6
	8H	12.1	12.4	12.6	12.9	13.4	6.3	6.6	6.8	7.1	7.6
	12H	12.0	12.3	12.6	12.8	13.4	6.3	6.5	6.8	7.0	7.6
12H	4H	12.2	12.5	12.7	13.0	13.5	6.3	6.7	6.8	7.2	7.7
	6H	12.1	12.4	12.6	12.8	13.4	6.2	6.5	6.8	7.0	7.6
	8H	12.0	12.3	12.5	12.8	13.4	6.2	6.5	6.7	7.0	7.6

Corrected UGR values based on total output energy
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0