

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C0614LM100L35KNDSO
6" Round x 12" High Cylinder Luminaire

Test Number

SP-R36

Test Date

9/10/2025

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

Summary of Results

Power

Input Watts	69.07 W
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Lumen Output

Output Lumens	7456
Efficacy	107.95 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.49
Two luminaires, plane 90°	0.5
Four luminaires	0.57

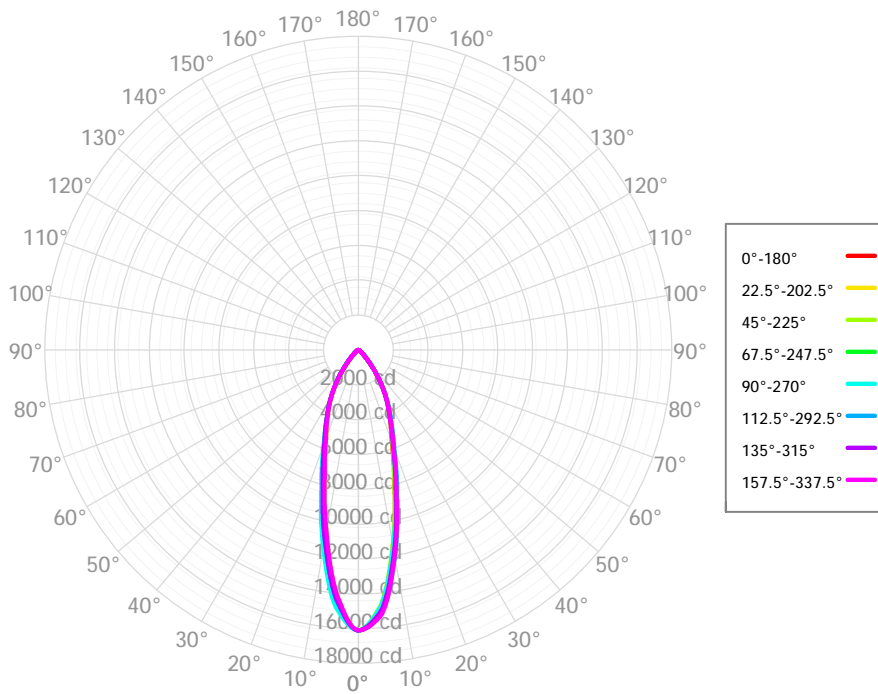
Full Beam Angle

0° - 180°	29°
90° - 270°	31°

IES File Header Contents

Keyword	Value
TEST	SP-R36
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM100L35KNDSO
LUMINAIRE	6" Round x 12" High Cylinder Luminaire
DISTRIBUTION	Beam Angle 29.6
OTHER	CCT 3430 CRI 81.8 R9 5.7
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°	1336.43	17.92%	90.00° - 100.00°	1.48	0.02%
10.00° - 20.00°	2208.38	29.62%	100.00° - 110.00°	1.39	0.02%
20.00° - 30.00°	1959.44	26.28%	100.00° - 120.00°	2.72	0.04%
30.00° - 40.00°	1278.50	17.15%	120.00° - 130.00°	1.36	0.02%
40.00° - 50.00°	450.39	6.04%	130.00° - 140.00°	1.50	0.02%
50.00° - 60.00°	143.56	1.93%	140.00° - 150.00°	1.65	0.02%
60.00° - 70.00°	53.00	0.71%	150.00° - 160.00°	1.38	0.02%
70.00° - 80.00°	12.82	0.17%	160.00° - 170.00°	0.82	0.01%
80.00° - 90.00°	2.31	0.03%	170.00° - 180.00°	0.25	0.00%
0.00° - 90.00°	7444.84	99.85%	0.00° - 180.00°	7456.00	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°	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80	16103.80
5.00°	14936.72	15062.94	14722.99	14822.03	14771.92	14437.70	14381.24	14112.06	14206.60	14101.76	14410.79	14525.30	14833.56	15205.88	15031.56	15271.23	14936.72
10.00°	11527.87	11740.56	11335.25	11523.46	11464.80	11019.80	11086.76	10557.25	10752.57	10501.24	11053.12	11136.47	11577.94	12083.30	11797.46	12033.64	11527.87
15.00°	7992.38	8215.25	7939.17	8188.51	8154.50	7834.27	7916.26	7439.26	7596.02	7373.07	7831.90	7906.63	8230.79	8615.93	8283.11	8453.29	7992.38
20.00°	5611.28	5810.91	5665.50	5863.43	5842.11	5655.38	5704.69	5421.91	5518.09	5367.84	5645.52	5653.24	5812.16	6039.46	5783.66	5880.40	5611.28
25.00°	4244.16	4356.07	4282.74	4371.75	4362.62	4235.26	4281.61	4164.49	4222.55	4127.88	4260.45	4227.17	4277.05	4414.18	4268.87	4345.59	4244.16
30.00°	3179.37	3263.04	3186.95	3227.06	3241.96	3127.21	3163.87	3084.31	3142.12	3055.15	3142.77	3094.05	3118.38	3237.78	3146.89	3235.14	3179.37
35.00°	2071.58	2165.01	2085.25	2143.99	2157.68	2065.36	2084.23	1972.61	2012.13	1928.92	2035.57	2006.76	2046.46	2149.77	2058.51	2142.48	2071.58
40.00°	1046.55	1138.73	1086.92	1171.16	1182.63	1125.42	1137.22	1021.06	1039.94	978.07	1076.03	1070.71	1120.20	1185.75	1082.18	1139.04	1046.55
45.00°	457.61	513.76	500.99	566.52	578.08	549.63	556.87	489.67	488.09	457.63	513.03	517.17	542.67	573.42	501.89	523.04	457.61
50.00°	230.80	249.70	247.98	284.47	289.22	277.48	284.13	252.71	251.59	238.34	261.36	263.15	270.34	277.45	245.38	252.04	230.80
55.00°	139.05	142.90	143.67	159.50	162.90	158.15	161.22	147.86	150.45	140.10	150.04	151.83	152.68	154.86	142.27	141.66	139.05
60.00°	81.43	87.15	85.73	92.88	100.11	96.38	96.64	89.62	93.35	82.81	91.69	93.73	91.92	93.29	85.13	83.24	81.43
65.00°	44.11	50.54	45.93	51.55	56.81	54.10	55.32	49.84	49.81	47.14	50.52	52.98	51.82	52.83	47.73	47.50	44.11
70.00°	22.72	23.35	22.74	24.07	28.24	27.18	26.99	22.99	24.22	24.21	25.72	24.71	28.63	26.29	25.70	23.65	22.72
75.00°	8.66	8.26	9.39	9.69	11.27	11.89	11.41	8.31	8.26	9.91	11.06	9.52	11.80	10.88	11.19	10.49	8.66
80.00°	3.62	2.87	3.41	4.39	4.62	3.81	2.93	2.99	3.03	3.05	4.32	4.22	3.35	4.03	4.00	4.72	3.62
85.00°	2.04	1.59	1.56	2.15	2.48	1.51	1.25	1.27	1.20	1.64	1.61	1.93	1.62	2.55	1.90	2.15	2.04
90.00°	1.32	1.01	1.73	1.31	1.47	1.18	1.01	0.99	1.49	1.00	0.94	1.13	1.88	1.16	1.11	1.08	1.32
95.00°	1.08	1.32	1.28	1.16	1.46	1.97	1.70	0.82	1.80	1.42	1.83	1.77	0.91	0.95	0.78	1.81	1.08
100.00°	0.88	1.83	1.01	1.86	1.89	1.51	1.12	1.01	1.54	1.28	1.61	1.46	1.37	1.25	1.19	2.16	0.88
105.00°	0.83	1.33	1.14	1.63	1.20	1.15	1.19	1.32	1.45	1.07	0.84	1.85	1.33	0.98	1.15	1.32	0.83
110.00°	1.55	0.83	1.26	1.28	0.92	1.12	1.45	0.89	1.45	1.50	1.38	1.54	1.28	1.46	1.56	1.86	1.55
115.00°	1.79	1.31	1.46	1.40	1.40	0.89	1.06	1.15	1.60	1.17	1.12	1.38	1.08	1.53	1.68	1.16	1.79
120.00°	1.39	1.60	1.89	1.64	0.93	0.91	1.26	1.32	0.93	1.44	1.35	1.55	1.07	1.55	1.12	2.34	1.39
125.00°	1.13	2.07	2.41	1.79	1.32	1.22	1.37	0.64	1.44	0.77	1.44	1.36	1.66	2.04	1.58	2.61	1.13
130.00°	1.77	1.87	1.98	1.65	1.14	1.04	1.74	1.31	1.16	1.15	1.48	1.51	1.87	2.27	1.56	2.12	1.77
135.00°	2.01	3.11	3.18	2.01	1.05	1.25	1.06	0.95	1.12	2.04	1.58	0.86	2.35	2.85	3.43	3.19	2.01
140.00°	2.56	3.94	3.31	2.67	1.44	1.19	1.30	1.44	1.52	1.51	1.94	1.22	2.26	3.52	2.09	3.40	2.56
145.00°	3.95	4.48	2.77	3.52	1.16	1.48	1.57	1.46	1.91	1.45	1.88	1.86	3.50	5.15	3.72	3.96	3.95
150.00°	3.81	4.17	3.92	4.45	2.16	1.49	1.76	1.64	1.74	1.97	1.71	1.46	4.49	4.04	3.53	4.24	3.81
155.00°	4.47	4.21	4.34	5.05	2.04	1.78	1.45	2.13	1.73	1.69	1.93	1.37	4.57	3.54	3.69	4.04	4.47
160.00°	3.76	3.90	5.53	4.33	1.94	1.62	1.74	2.44	1.89	2.39	1.82	2.21	4.85	4.51	3.07	3.06	3.76
165.00°	3.84	4.15	3.84	4.17	1.49	2.03	1.79	2.24	2.09	2.20	1.86	1.61	3.59	4.33	2.51	4.04	3.84
170.00°	2.79	2.11	3.17	3.08	2.53	1.99	1.71	2.22	2.13	2.10	2.42	1.69	3.31	3.26	2.97	4.12	2.79
175.00°	1.96	1.96	2.56	3.70	2.44	1.55	2.34	2.17	2.36	2.77	1.91	1.98	2.12	2.97	2.92	3.34	1.96
180.00°	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26

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	8874	8874	8874	8874	8666	8666	8666	8666	8278	8278	8278	7924	7924	7924	7598	7598	7445
	1	8478	8279	8101	7940	8294	8117	7958	7813	7814	7687	7571	7536	7436	7344	7280	7202	7130
	2	8081	7732	7445	7203	7917	7604	7343	7121	7362	7148	6964	7140	6966	6813	6934	6794	6670
	3	7699	7242	6889	6607	7552	7139	6814	6553	6944	6671	6447	6763	6536	6345	6595	6408	6247
	4	7338	6803	6412	6113	7206	6719	6356	6076	6559	6249	6003	6411	6146	5932	6273	6049	5864
	5	6999	6409	5997	5693	6880	6339	5955	5667	6207	5873	5616	6084	5794	5566	5969	5719	5517
	6	6681	6054	5633	5331	6574	5996	5600	5313	5885	5536	5276	5782	5475	5240	5685	5416	5205
	7	6385	5734	5311	5015	6289	5685	5285	5002	5591	5234	4975	5504	5186	4948	5421	5138	4922
	8	6109	5443	5024	4736	6022	5401	5003	4726	5322	4962	4706	5247	4923	4686	5176	4885	4666
	9	5853	5179	4766	4488	5774	5143	4749	4480	5075	4716	4464	5010	4684	4449	4949	4652	4434
	10	5615	4939	4534	4265	5543	4908	4520	4259	4848	4493	4247	4792	4466	4235	4739	4440	4224

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	532.4 fc	2.9 ft
6.5 ft	381.2 fc	3.4 ft
7.5 ft	286.3 fc	3.9 ft
8.0 ft	251.6 fc	4.2 ft
10.0 ft	161.0 fc	5.2 ft
12.0 ft	111.8 fc	6.3 ft
14.0 ft	82.2 fc	7.3 ft
16.0 ft	62.9 fc	8.3 ft
20.0 ft	40.3 fc	10.4 ft
24.0 ft	28.0 fc	12.5 ft
28.0 ft	20.5 fc	14.6 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	882813	882813	882813
45.00°	35477	38840	44817
55.00°	13290	13731	15569
65.00°	5722	5958	7370
75.00°	1835	1988	2386
85.00°	1283	979	1559

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	13.1	14.1	13.4	14.4	14.7	13.8	14.8	14.2	15.1	15.4
	3H	13.3	14.2	13.7	14.5	14.9	14.1	15.0	14.5	15.3	15.7
	4H	13.3	14.1	13.7	14.5	14.9	14.1	14.9	14.5	15.3	15.6
	6H	13.2	14.0	13.6	14.3	14.7	14.0	14.8	14.4	15.1	15.5
	8H	13.2	13.9	13.6	14.3	14.7	14.0	14.7	14.4	15.1	15.5
	12H	13.1	13.8	13.6	14.2	14.6	13.9	14.6	14.3	15.0	15.4
4H	2H	13.1	13.9	13.5	14.3	14.6	13.8	14.6	14.2	15.0	15.4
	3H	13.4	14.1	13.8	14.5	14.9	14.2	14.8	14.6	15.2	15.7
	4H	13.4	14.0	13.8	14.4	14.8	14.2	14.7	14.6	15.2	15.6
	6H	13.3	13.8	13.8	14.3	14.7	14.1	14.6	14.6	15.1	15.5
	8H	13.3	13.7	13.7	14.2	14.7	14.0	14.5	14.5	15.0	15.4
	12H	13.2	13.6	13.7	14.1	14.6	14.0	14.4	14.5	14.9	15.4
8H	4H	13.3	13.7	13.7	14.2	14.7	14.0	14.5	14.5	15.0	15.4
	6H	13.2	13.6	13.7	14.1	14.6	14.0	14.3	14.5	14.8	15.3
	8H	13.1	13.5	13.7	14.0	14.5	13.9	14.2	14.5	14.8	15.3
	12H	13.1	13.4	13.6	13.9	14.5	13.9	14.2	14.4	14.7	15.2
12H	4H	13.2	13.6	13.7	14.1	14.6	14.0	14.4	14.5	14.9	15.3
	6H	13.1	13.5	13.7	13.9	14.5	13.9	14.2	14.4	14.7	15.3
	8H	13.1	13.4	13.6	13.9	14.5	13.9	14.2	14.4	14.7	15.2

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0