

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

C0614LM100L30HKNDGL
6" Round x 12" High Cylinder Luminaire

Test Number

SP-R5

Test Date

9/10/2025

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

Summary of Results

Power

Input Watts	73.92 W
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Lumen Output

Output Lumens	5693
Efficacy	77.02 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.46
Two luminaires, plane 90°	0.41
Four luminaires	0.51

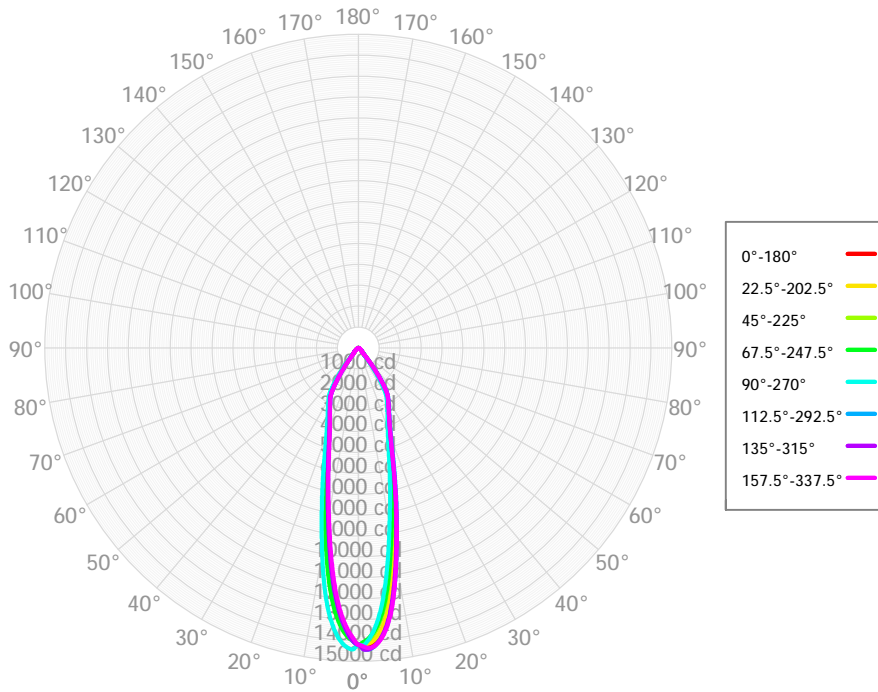
Full Beam Angle

0° - 180°	26°
90° - 270°	26°

IES File Header Contents

Keyword	Value
TEST	SP-R5
TESTLAB	Spectrum Lighting Photometric Lab. VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	9/10/2025
ISSUEDATE	9/10/2025
LUMCAT	C0614LM100L30HKNDGL
LUMINAIRE	6" Round x 12" High Cylinder Luminaire
DISTRIBUTION	Beam Angle 25.9
OTHER	CCT 3063 CRI 92.4 R9 60.8
OTHER	Total Luminaire wattage is approximate
OTHER	This report is prepared by Spectrum Lighting
_CRI	90+
_CCTMULT	30K x 1.27, 35K x 1.34, 40K x 1.37, 35HK x 0.98, 40HK x 0.99
_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°	1105.38	19.42%	90.00° - 100.00°	0.00	0.00%
10.00° - 20.00°	1709.44	30.03%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	1554.29	27.30%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	1008.42	17.71%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	203.33	3.57%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	84.83	1.49%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	21.57	0.38%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	4.06	0.07%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	1.67	0.03%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	5693.00	100.00%	0.00° - 180.00°	5693.00	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°	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06	14200.06
1.00°	14268.27	14173.21	14094.81	14075.23	14225.89	14057.25	14047.03	13895.99	13965.30	13922.33	14018.67	14036.04	14427.68	14420.70	14426.60	14294.62	14268.27
2.00°	14252.75	14151.21	13991.93	13913.47	13976.36	13708.80	13711.86	13551.85	13659.87	13611.82	13810.32	13867.43	14360.99	14439.79	14429.28	14366.76	14252.75
3.00°	14147.82	14017.98	13760.62	13648.08	13602.07	13269.19	13287.03	13106.11	13270.77	13225.18	13511.25	13583.84	14183.50	14317.66	14304.39	14301.97	14147.82
4.00°	13889.18	13768.15	13405.63	13278.67	13104.16	12730.12	12750.86	12558.41	12778.39	12749.10	13102.82	13194.17	13887.53	14080.43	14077.54	14110.32	13889.18
5.00°	13522.34	13382.14	12919.46	12792.27	12499.85	12081.22	12118.36	11916.53	12172.93	12162.19	12577.42	12698.67	13476.11	13753.11	13725.46	13795.64	13522.34
6.00°	13007.42	12864.09	12308.19	12179.46	11776.56	11338.58	11408.48	11175.75	11471.95	11473.43	11941.00	12085.77	12953.62	13310.63	13258.76	13357.92	13007.42
7.00°	12353.47	12209.73	11591.95	11468.65	10991.58	10542.61	10635.44	10386.29	10730.13	10706.86	11229.24	11375.40	12323.17	12711.44	12654.26	12794.19	12353.47
8.00°	11582.11	11447.37	10786.71	10669.59	10172.56	9726.97	9830.92	9595.65	9941.01	9913.31	10459.49	10601.61	11599.71	12021.62	11921.61	12086.77	11582.11
9.00°	10762.12	10619.13	9958.63	9849.10	9359.74	8953.79	9044.62	8826.10	9133.45	9143.25	9665.26	9816.42	10785.74	11260.51	11132.42	11277.59	10762.12
10.00°	9927.84	9800.22	9177.57	9096.24	8589.99	8245.70	8316.36	8115.95	8407.01	8422.24	8915.43	9056.65	9968.66	10445.95	10313.36	10441.35	9927.84
11.00°	9118.25	9005.41	8442.33	8366.56	7920.01	7585.42	7660.21	7475.79	7740.05	7764.68	8222.90	8346.57	9168.79	9633.00	9497.87	9620.26	9118.25
12.00°	8360.54	8279.49	7761.68	7690.50	7284.04	6988.00	7062.96	6889.43	7139.80	7145.74	7581.45	7689.76	8419.97	8872.47	8726.19	8831.96	8360.54
13.00°	7675.48	7610.56	7135.84	7091.86	6732.75	6443.69	6512.21	6364.21	6590.55	6578.34	6995.06	7081.16	7756.09	8163.98	8011.76	8103.83	7675.48
14.00°	7034.19	6980.58	6569.75	6542.99	6214.52	5955.78	6011.06	5879.24	6090.75	6085.91	6454.41	6526.46	7135.26	7495.24	7347.41	7434.90	7034.19
15.00°	6446.09	6407.56	6066.51	6030.64	5730.83	5517.76	5565.87	5444.46	5628.73	5636.28	5961.25	6030.34	6559.69	6878.63	6729.14	6797.10	6446.09
16.00°	5915.74	5903.53	5608.01	5569.92	5304.31	5126.64	5170.05	5059.57	5212.16	5228.23	5511.35	5572.66	6028.70	6307.15	6155.86	6212.38	5915.74
17.00°	5438.46	5443.47	5201.72	5180.69	4941.32	4791.55	4819.21	4727.52	4852.38	4871.24	5112.79	5160.59	5554.32	5780.07	5637.79	5694.03	5438.46
18.00°	5021.83	5045.31	4842.18	4829.60	4616.92	4487.02	4524.44	4442.95	4538.52	4556.11	4774.39	4806.72	5138.30	5324.84	5189.42	5233.15	5021.83
19.00°	4662.69	4699.85	4526.55	4518.52	4337.18	4226.49	4263.41	4190.69	4271.33	4286.99	4477.18	4499.19	4775.91	4933.28	4812.08	4842.31	4662.69
20.00°	4364.09	4399.51	4266.19	4257.70	4114.02	4005.03	4034.54	3974.12	4047.96	4059.14	4222.22	4232.21	4465.61	4592.62	4491.82	4513.24	4364.09
21.00°	4112.56	4148.87	4047.04	4040.37	3908.47	3813.34	3836.44	3788.10	3850.98	3856.80	3995.44	3998.49	4205.69	4306.18	4219.61	4237.76	4112.56
22.00°	3902.25	3941.39	3853.28	3847.98	3733.67	3640.04	3658.63	3622.78	3680.67	3685.85	3799.35	3795.42	3997.36	4058.37	3987.12	4007.85	3902.25
23.00°	3711.07	3748.65	3682.19	3674.82	3571.00	3486.91	3507.59	3468.86	3530.94	3531.86	3635.16	3628.05	3789.81	3852.97	3794.91	3802.90	3711.07
24.00°	3541.58	3583.25	3525.71	3512.59	3428.23	3347.35	3360.13	3338.38	3379.72	3383.16	3480.05	3483.35	3609.65	3670.78	3624.36	3619.56	3541.58
25.00°	3390.54	3428.63	3386.81	3374.14	3289.84	3211.39	3227.55	3219.79	3248.04	3254.30	3334.63	3342.38	3464.86	3510.90	3460.30	3463.38	3390.54
26.00°	3253.07	3297.90	3255.00	3252.79	3181.45	3086.61	3107.33	3096.09	3125.94	3144.96	3215.73	3216.50	3329.47	3368.09	3316.67	3325.81	3253.07
27.00°	3135.39	3176.64	3139.42	3139.14	3056.00	2966.80	2996.36	2970.63	3007.77	3025.07	3111.34	3109.98	3205.26	3243.60	3192.34	3195.92	3135.39
28.00°	3025.46	3058.18	3016.32	3013.16	2926.11	2858.84	2895.03	2860.83	2908.39	2909.68	2989.96	2989.83	3080.70	3119.26	3072.40	3071.32	3025.46
29.00°	2910.40	2936.83	2890.75	2887.62	2808.06	2759.24	2797.98	2760.27	2812.15	2811.02	2867.27	2868.30	2958.17	2987.15	2953.12	2951.12	2910.40
30.00°	2803.88	2829.21	2786.71	2782.53	2699.10	2626.29	2679.55	2640.38	2707.59	2712.87	2764.17	2766.35	2850.77	2869.13	2848.75	2845.76	2803.88
31.00°	2705.22	2726.68	2668.06	2667.08	2529.32	2437.35	2503.87	2451.83	2561.24	2556.47	2640.42	2642.54	2747.64	2775.25	2750.16	2748.48	2705.22
32.00°	2566.22	2575.59	2482.42	2472.10	2295.02	2199.75	2274.64	2200.17	2330.15	2327.41	2449.01	2449.98	2603.50	2651.36	2612.86	2625.18	2566.22
33.00°	2350.55	2358.32	2236.85	2229.79	2024.68	1929.99	2003.69	1933.02	2059.53	2063.57	2204.14	2205.28	2392.02	2475.40	2413.80	2441.42	2350.55
34.00°	2091.52	2101.24	1969.41	1960.18	1753.24	1650.94	1725.52	1658.94	1784.06	1786.54	1930.57	1938.62	2142.14	2248.61	2172.80	2195.87	2091.52
35.00°	1818.90	1841.51	1691.38	1690.02	1470.46	1374.28	1446.52	1375.46	1508.48	1507.11	1657.62	1664.13	1869.95	1982.65	1900.63	1924.41	1818.90
36.00°	1539.40	1558.98	1414.76	1411.02	1206.11	1106.69	1174.15	1103.33	1239.27	1236.29	1388.14	1389.03	1593.50	1695.29	1618.36	1648.17	1539.40
37.00°	1267.31	1279.22	1144.92	1140.53	949.01	856.74	909.83	855.49	974.85	979.79	1122.90	1120.93	1318.90	1419.45	1340.08	1371.45	1267.31
38.00°	1004.96	1018.25	889.56	881.72	714.18	637.27	674.63	637.08	732.81	736.04	866.87	870.83	1054.24	1146.43	1066.78	1107.71	1004.96
39.00°	758.71	770.84	658.65	649.31	520.77	469.62	492.93	463.85	521.84	528.31	634.48	639.01	804.61	887.11	818.77	857.18	758.71
40.00°	543.23	550.11	471.31	462.17	392.37	376.78	383.21	370.25	389.76	395.28	456.51	453.92	587.04	656.48	600.13	628.23	543.23
41.00°	393.90	399.10	364.20	360.07	348.09	338.89	341.83	335.27	334.33	335.72	357.73	355.98	427.66	473.44	431.42	445.60	393.90
42.00°	325.93	335.86	324.12	329.74	317.92	311.09	312.01	306.49	310.68	306.89	321.98	319.15	348.23	362.08	341.16	343.02	325.93
43.00°	293.27	303.94	294.66	300.98	290.72	284.94	289.59	282.49	284.56	282.70	293.88	294.08	312.60	316.75	305.28	304.43	293.27

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	6777	6777	6777	6777	6620	6620	6620	6620	6326	6326	6326	6056	6056	6056	5809	5809	5809	5693
	1	6487	6340	6208	6089	6348	6217	6099	5992	5988	5894	5808	5777	5704	5636	5583	5526	5473	5417
	2	6196	5940	5727	5549	6073	5843	5650	5487	5661	5503	5367	5493	5365	5253	5337	5235	5144	5133
	3	5917	5581	5320	5112	5807	5503	5264	5071	5356	5156	4991	5220	5053	4914	5094	4957	4839	4862
	4	5652	5258	4969	4749	5553	5194	4927	4721	5075	4846	4665	4964	4769	4612	4860	4696	4560	4609
	5	5402	4967	4663	4439	5313	4915	4631	4419	4816	4569	4380	4724	4510	4343	4638	4454	4306	4374
	6	5167	4704	4393	4170	5087	4660	4368	4156	4578	4320	4128	4501	4274	4101	4429	4230	4074	4157
	7	4946	4465	4153	3934	4875	4428	4133	3924	4359	4095	3904	4294	4059	3884	4232	4024	3864	3957
	8	4740	4248	3938	3725	4676	4217	3922	3717	4157	3892	3702	4102	3862	3687	4049	3834	3672	3773
	9	4549	4050	3744	3537	4490	4023	3731	3532	3972	3706	3520	3924	3682	3509	3879	3659	3498	3604
	10	4370	3868	3568	3369	4316	3845	3558	3364	3801	3538	3355	3760	3518	3347	3720	3498	3338	3448

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	469.4 fc	2.5 ft
6.5 ft	336.1 fc	3.0 ft
7.5 ft	252.4 fc	3.4 ft
8.0 ft	221.9 fc	3.6 ft
10.0 ft	142.0 fc	4.5 ft
12.0 ft	98.6 fc	5.4 ft
14.0 ft	72.4 fc	6.4 ft
16.0 ft	55.5 fc	7.3 ft
20.0 ft	35.5 fc	9.1 ft
24.0 ft	24.7 fc	10.9 ft
28.0 ft	18.1 fc	12.7 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	778450	778450	778450
45.00°	19091	19379	19127
55.00°	8160	8282	8288
65.00°	2262	2025	2251
75.00°	861	789	718
85.00°	944	611	1147

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	10.2	11.1	10.5	11.4	11.8	10.2	11.2	10.6	11.5	11.8
	3H	10.1	10.9	10.5	11.3	11.7	10.2	11.0	10.6	11.4	11.7
	4H	10.0	10.8	10.4	11.2	11.6	10.1	10.9	10.5	11.3	11.6
	6H	9.9	10.7	10.4	11.0	11.4	10.0	10.7	10.4	11.1	11.5
	8H	9.9	10.6	10.3	11.0	11.4	10.0	10.6	10.4	11.0	11.4
	12H	9.9	10.5	10.3	10.9	11.3	9.9	10.6	10.4	11.0	11.4
4H	2H	10.0	10.8	10.4	11.2	11.5	10.1	10.9	10.5	11.2	11.6
	3H	10.0	10.6	10.4	11.0	11.4	10.1	10.7	10.5	11.1	11.5
	4H	9.9	10.5	10.4	10.9	11.3	10.0	10.6	10.4	11.0	11.4
	6H	9.8	10.3	10.3	10.8	11.2	9.9	10.4	10.4	10.8	11.3
	8H	9.8	10.2	10.3	10.7	11.1	9.9	10.3	10.3	10.7	11.2
	12H	9.7	10.1	10.2	10.6	11.1	9.8	10.2	10.3	10.7	11.2
8H	4H	9.8	10.2	10.2	10.6	11.1	9.8	10.3	10.3	10.7	11.2
	6H	9.7	10.0	10.2	10.5	11.0	9.7	10.1	10.2	10.6	11.1
	8H	9.6	9.9	10.2	10.5	11.0	9.7	10.0	10.2	10.5	11.0
	12H	9.6	9.9	10.1	10.4	11.0	9.7	9.9	10.2	10.4	11.0
12H	4H	9.7	10.1	10.2	10.6	11.0	9.8	10.1	10.3	10.6	11.1
	6H	9.6	9.9	10.1	10.4	10.9	9.7	10.0	10.2	10.5	11.0
	8H	9.6	9.8	10.1	10.3	10.9	9.6	9.9	10.2	10.4	11.0

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0