



Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

CW606TD-10L-30K-EX-FG-MW
Nom 6" diam cylinder luminaire

Test Number

SP-00814

Test Date

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

**Summary of Results****Power**

Input Watts	15.9 W
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Lumen Output

Output Lumens	672
Efficacy	42.29 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	1.1
Two luminaires, plane 90°	1.1
Four luminaires	1.2

Full Beam Angle

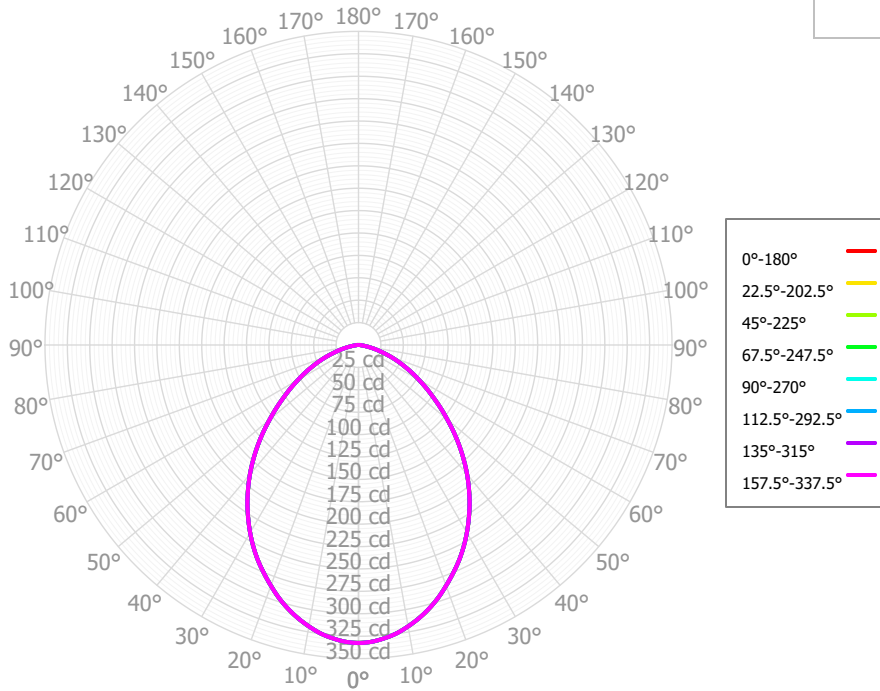
0° - 180°	88°
90° - 270°	88°

IES File Header Contents

Keyword	Value
TEST	SP-00814
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
ISSUEDATE	3/28/2019
UPDATE	4/23/2019
LUMCAT	CW606TD-10L-30K-EX-FG-MW
LUMINAIRE	Nom 6" diam cylinder luminaire
OTHER	Beam Angle: 87.6 degrees
OTHER	Matte white trim; Frosted glass lens
LAMPCAT	N/A
LAMP	N/A, White light
OTHER	CCT Output Multipliers: only 30K available
OTHER	Total luminaire wattages is approximate
OTHER	This report prepared by Spectrum Lighting
_CRI	80
_CCTMULT	only 30K available
_LAMPMULT	only 10L available

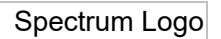


Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	31.53	4.69%	90.00° - 100.00°	0.25	0.04%
10.00° - 20.00°	85.53	12.72%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	121.83	18.12%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	134.75	20.04%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	122.49	18.22%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	91.61	13.63%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	56.65	8.43%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	23.55	3.50%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	4.17	0.62%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	672.13	99.96%	0.00° - 180.00°	672.39	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°	332.62	332.62	332.62	332.62	332.62	332.62	332.62	332.62	332.62	332.62	332.62	332.62	332.62	332.62	332.62	332.62	332.62
2.50°	331.66	331.66	331.66	331.66	331.66	331.66	331.66	331.66	331.66	331.66	331.66	331.66	331.66	331.66	331.66	331.66	331.66
5.00°	328.75	328.75	328.75	328.75	328.75	328.75	328.75	328.75	328.75	328.75	328.75	328.75	328.75	328.75	328.75	328.75	328.75
7.50°	324.75	324.75	324.75	324.75	324.75	324.75	324.75	324.75	324.75	324.75	324.75	324.75	324.75	324.75	324.75	324.75	324.75
10.00°	318.96	318.96	318.96	318.96	318.96	318.96	318.96	318.96	318.96	318.96	318.96	318.96	318.96	318.96	318.96	318.96	318.96
12.50°	312.35	312.35	312.35	312.35	312.35	312.35	312.35	312.35	312.35	312.35	312.35	312.35	312.35	312.35	312.35	312.35	312.35
15.00°	304.63	304.63	304.63	304.63	304.63	304.63	304.63	304.63	304.63	304.63	304.63	304.63	304.63	304.63	304.63	304.63	304.63
17.50°	295.86	295.86	295.86	295.86	295.86	295.86	295.86	295.86	295.86	295.86	295.86	295.86	295.86	295.86	295.86	295.86	295.86
20.00°	285.94	285.94	285.94	285.94	285.94	285.94	285.94	285.94	285.94	285.94	285.94	285.94	285.94	285.94	285.94	285.94	285.94
22.50°	275.80	275.80	275.80	275.80	275.80	275.80	275.80	275.80	275.80	275.80	275.80	275.80	275.80	275.80	275.80	275.80	275.80
25.00°	265.44	265.44	265.44	265.44	265.44	265.44	265.44	265.44	265.44	265.44	265.44	265.44	265.44	265.44	265.44	265.44	265.44
27.50°	254.07	254.07	254.07	254.07	254.07	254.07	254.07	254.07	254.07	254.07	254.07	254.07	254.07	254.07	254.07	254.07	254.07
30.00°	241.95	241.95	241.95	241.95	241.95	241.95	241.95	241.95	241.95	241.95	241.95	241.95	241.95	241.95	241.95	241.95	241.95
32.50°	229.24	229.24	229.24	229.24	229.24	229.24	229.24	229.24	229.24	229.24	229.24	229.24	229.24	229.24	229.24	229.24	229.24
35.00°	216.18	216.18	216.18	216.18	216.18	216.18	216.18	216.18	216.18	216.18	216.18	216.18	216.18	216.18	216.18	216.18	216.18
37.50°	202.53	202.53	202.53	202.53	202.53	202.53	202.53	202.53	202.53	202.53	202.53	202.53	202.53	202.53	202.53	202.53	202.53
40.00°	188.58	188.58	188.58	188.58	188.58	188.58	188.58	188.58	188.58	188.58	188.58	188.58	188.58	188.58	188.58	188.58	188.58
42.50°	174.05	174.05	174.05	174.05	174.05	174.05	174.05	174.05	174.05	174.05	174.05	174.05	174.05	174.05	174.05	174.05	174.05
45.00°	159.29	159.29	159.29	159.29	159.29	159.29	159.29	159.29	159.29	159.29	159.29	159.29	159.29	159.29	159.29	159.29	159.29
47.50°	144.38	144.38	144.38	144.38	144.38	144.38	144.38	144.38	144.38	144.38	144.38	144.38	144.38	144.38	144.38	144.38	144.38
50.00°	129.42	129.42	129.42	129.42	129.42	129.42	129.42	129.42	129.42	129.42	129.42	129.42	129.42	129.42	129.42	129.42	129.42
52.50°	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54
55.00°	101.90	101.90	101.90	101.90	101.90	101.90	101.90	101.90	101.90	101.90	101.90	101.90	101.90	101.90	101.90	101.90	101.90
57.50°	89.81	89.81	89.81	89.81	89.81	89.81	89.81	89.81	89.81	89.81	89.81	89.81	89.81	89.81	89.81	89.81	89.81
60.00°	77.95	77.95	77.95	77.95	77.95	77.95	77.95	77.95	77.95	77.95	77.95	77.95	77.95	77.95	77.95	77.95	77.95
62.50°	67.33	67.33	67.33	67.33	67.33	67.33	67.33	67.33	67.33	67.33	67.33	67.33	67.33	67.33	67.33	67.33	67.33
65.00°	56.87	56.87	56.87	56.87	56.87	56.87	56.87	56.87	56.87	56.87	56.87	56.87	56.87	56.87	56.87	56.87	56.87
67.50°	47.38	47.38	47.38	47.38	47.38	47.38	47.38	47.38	47.38	47.38	47.38	47.38	47.38	47.38	47.38	47.38	47.38
70.00°	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04
72.50°	28.97	28.97	28.97	28.97	28.97	28.97	28.97	28.97	28.97	28.97	28.97	28.97	28.97	28.97	28.97	28.97	28.97
75.00°	21.69	21.69	21.69	21.69	21.69	21.69	21.69	21.69	21.69	21.69	21.69	21.69	21.69	21.69	21.69	21.69	21.69
77.50°	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13
80.00°	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
82.50°	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94
85.00°	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85
87.50°	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89
90.00°	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
92.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**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	800	800	800	800	782	782	782	782	747	747	747	715	715	715	686	686	672
	1	743	715	691	669	725	700	678	658	672	654	637	646	631	618	622	610	599
	2	684	635	595	562	667	623	586	555	600	569	542	578	553	530	558	537	518
	3	630	567	518	479	614	556	511	475	537	498	467	519	486	459	502	475	465
	4	581	509	455	415	567	500	450	412	484	440	406	468	431	401	454	422	413
	5	538	459	404	363	525	452	400	361	438	393	358	425	385	354	413	378	371
	6	500	417	362	322	488	411	359	321	399	353	318	388	347	315	378	341	335
	7	466	381	326	288	454	376	324	287	366	319	285	356	314	283	348	310	304
	8	435	350	296	260	425	345	294	259	337	291	257	329	287	256	321	283	278
	9	408	323	271	236	399	319	269	235	312	266	234	305	263	233	298	260	255
	10	383	299	249	216	375	296	248	215	290	245	214	284	242	213	278	240	236

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	11.0 fc	10.6 ft
6.5 ft	7.9 fc	12.5 ft
7.5 ft	5.9 fc	14.4 ft
8.0 ft	5.2 fc	15.3 ft
10.0 ft	3.3 fc	19.2 ft
12.0 ft	2.3 fc	23.0 ft
14.0 ft	1.7 fc	26.9 ft
16.0 ft	1.3 fc	30.7 ft
20.0 ft	0.8 fc	38.4 ft
24.0 ft	0.6 fc	46.0 ft
28.0 ft	0.4 fc	53.7 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	18,234	18,234	18,234
45.00°	12,349	12,349	12,349
55.00°	9,739	9,739	9,739
65.00°	7,377	7,377	7,377
75.00°	4,594	4,594	4,594
85.00°	1,790	1,790	1,790

**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		Viewed crosswise					Viewed endwise				
2H	2H	18.4	19.9	18.8	20.3	20.6	18.4	19.9	18.8	20.3	20.6
	3H	19.6	21.0	20.0	21.3	21.6	19.6	21.0	20.0	21.3	21.6
	4H	19.9	21.2	20.3	21.5	21.9	19.9	21.2	20.3	21.5	21.9
	6H	20.1	21.2	20.5	21.6	22.0	20.1	21.2	20.5	21.6	22.0
	8H	20.1	21.2	20.5	21.5	21.9	20.1	21.2	20.5	21.5	21.9
	12H	20.0	21.1	20.5	21.5	21.9	20.0	21.1	20.5	21.5	21.9
4H	2H	18.9	20.1	19.3	20.5	20.9	18.9	20.1	19.3	20.5	20.9
	3H	20.2	21.3	20.6	21.7	22.1	20.2	21.3	20.6	21.7	22.1
	4H	20.6	21.5	21.0	21.9	22.4	20.6	21.5	21.0	21.9	22.4
	6H	20.8	21.6	21.3	22.0	22.5	20.8	21.6	21.3	22.0	22.5
	8H	20.8	21.5	21.3	22.0	22.5	20.8	21.5	21.3	22.0	22.5
	12H	20.8	21.5	21.3	21.9	22.4	20.8	21.5	21.3	21.9	22.4
8H	4H	20.7	21.5	21.2	21.9	22.4	20.7	21.5	21.2	21.9	22.4
	6H	20.9	21.5	21.4	22.0	22.5	20.9	21.5	21.4	22.0	22.5
	8H	21.0	21.5	21.5	22.0	22.5	21.0	21.5	21.5	22.0	22.5
	12H	21.0	21.5	21.5	22.0	22.5	21.0	21.5	21.5	22.0	22.5
12H	4H	20.7	21.4	21.2	21.8	22.3	20.7	21.4	21.2	21.8	22.3
	6H	20.9	21.5	21.4	21.9	22.5	20.9	21.5	21.4	21.9	22.5
	8H	21.0	21.5	21.5	21.9	22.5	21.0	21.5	21.5	21.9	22.5

Corrected UGR values based on total output lumens

SHR = 1.0