



UL LLC  
1075 W Lambert Rd Suite B  
Brea, CA 92821

## Photometric Test Report

Relevant Standards  
IES LM-79-2008  
ANSI C82.77-2002

Prepared For  
**Auroralight Inc**  
2742 Loker Ave. West  
Carlsbad, CA 92010

Catalog Number  
**LBD250-C8-NL-9-30-25 (NO LOUVERS, 3000K)**  
Order Number  
11263738  
Test Number  
1254203

Test Date

2016-07-16

Prepared By

Tony Rubio, Technician

Approved By

Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.  
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.  
This report must not be used by the client to claim product certification, approval, or endorsement by  
NVLAP, NIST, or any agency of the Federal Government.



**Luminaire Description:** Conical 8" copper shade with no louvers and cylindrical 25" copper stem with brass base  
**Lamp:** Six (6) Cree XPL-L 3000K LEDs  
**Mounting:** Path/Area  
**Ballast/Driver:** L.T.F. DL110W350C30-0000

**Luminaire**



**Luminaire Characteristics**

Luminous Diameter: 8.00 in.  
Luminous Height: 1.500 in.

**Summary of Results**

Roadway Classification: Type V, Very Short  
Cutoff Classification: Noncutoff  
BUG Rating: B0 U1 G1

**Test Conditions**

Test Temperature: 24.5 °C  
Voltage: 12.07 VAC  
Current: 1.506 A  
Power: 8.473 W  
Power Factor: 0.466  
Frequency: 60 Hz  
Current THD: 124 %

Tested in 30 planes left side, 30 planes right side, left and right averaged  
Vertical test increments are 2.5 degrees  
Test distance exceeds five times the greatest luminous opening of luminaire

Laboratory results may not be representative of field performance  
Ballast factors have not been applied



## Distribution - Goniophotometer

Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	12.07 VAC	1.506 A	8.473 W	0.466	60 Hz	124 %

### Summary of Results

#### Spacing Criteria

0-180: 1.85

90-270: 1.85

Total Lumen Output:

332.2 Lumens

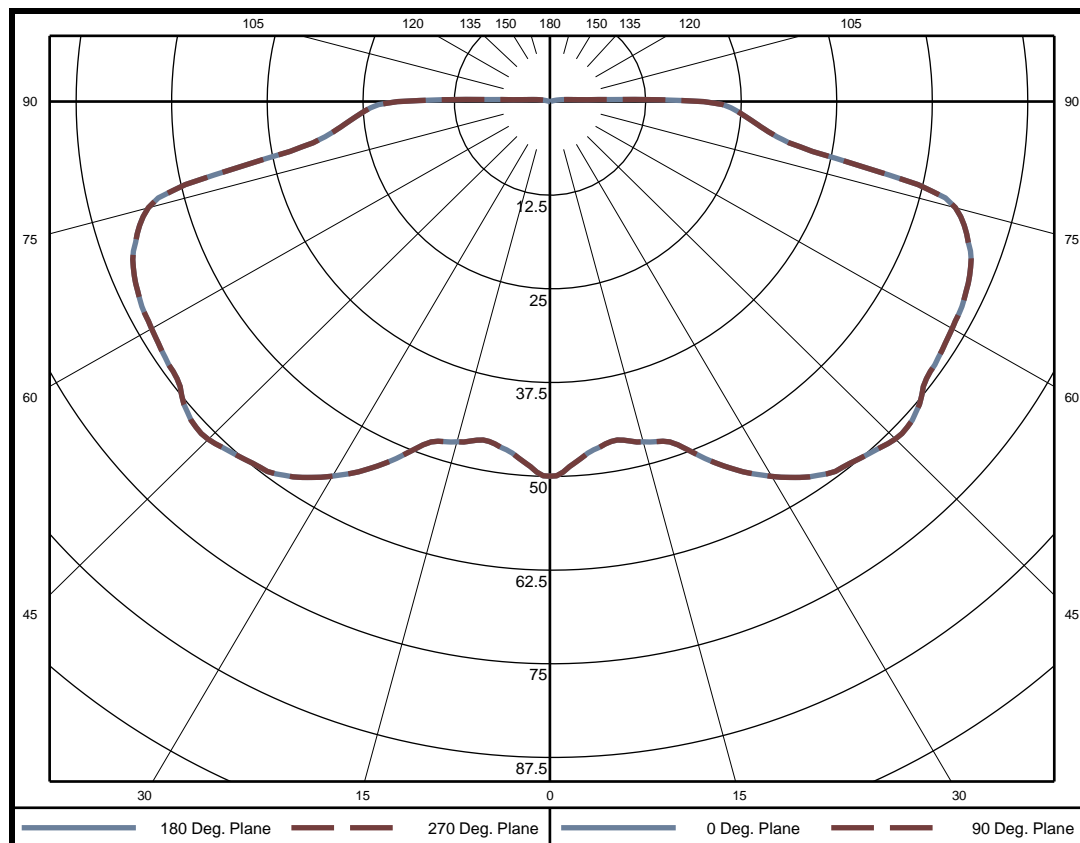
Luminaire Efficacy:

39.2 lm/w

Maximum Candela:

64 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	1.16	0.3%	60-65	29.28	8.8%	120-125	0	0.0%
5-10	3.34	1.0%	65-70	29.97	9.0%	125-130	0	0.0%
10-15	5.51	1.7%	70-75	29.61	8.9%	130-135	0	0.0%
15-20	7.86	2.4%	75-80	23.70	7.1%	135-140	0	0.0%
20-25	10.75	3.2%	80-85	15.43	4.6%	140-145	0	0.0%
25-30	14.12	4.3%	85-90	13.00	3.9%	145-150	0	0.0%
30-35	17.50	5.3%	90-95	4.62	1.4%	150-155	0	0.0%
35-40	20.60	6.2%	95-100	1.18	0.4%	155-160	0	0.0%
40-45	23.32	7.0%	100-105	0.54	0.2%	160-165	0	0.0%
45-50	25.64	7.7%	105-110	0.12	0.0%	165-170	0	0.0%
50-55	26.84	8.1%	110-115	0	0.0%	170-175	0	0.0%
55-60	28.12	8.5%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	81	24.3%
0-60	185	55.6%
0-90	326	98.1%
90-180	6	1.9%



### Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	49.95	49.95	49.95	49.95	49.95	49.95	49.95	49.95	49.95	49.95	49.95	49.95	49.95	49.95	49.95
	5	47.69	47.69	47.69	47.69	47.69	47.69	47.69	47.69	47.69	47.69	47.69	47.69	47.69	47.69	47.69
	10	46.02	46.02	46.02	46.02	46.02	46.02	46.02	46.02	46.02	46.02	46.02	46.02	46.02	46.02	46.02
	15	46.97	46.97	46.97	46.97	46.97	46.97	46.97	46.97	46.97	46.97	46.97	46.97	46.97	46.97	46.97
	20	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71
	25	53.62	53.62	53.62	53.62	53.62	53.62	53.62	53.62	53.62	53.62	53.62	53.62	53.62	53.62	53.62
	30	57.72	57.72	57.72	57.72	57.72	57.72	57.72	57.72	57.72	57.72	57.72	57.72	57.72	57.72	57.72
	35	60.84	60.84	60.84	60.84	60.84	60.84	60.84	60.84	60.84	60.84	60.84	60.84	60.84	60.84	60.84
	40	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33
	45	63.63	63.63	63.63	63.63	63.63	63.63	63.63	63.63	63.63	63.63	63.63	63.63	63.63	63.63	63.63
	50	62.82	62.82	62.82	62.82	62.82	62.82	62.82	62.82	62.82	62.82	62.82	62.82	62.82	62.82	62.82
	55	61.19	61.19	61.19	61.19	61.19	61.19	61.19	61.19	61.19	61.19	61.19	61.19	61.19	61.19	61.19
	60	60.50	60.50	60.50	60.50	60.50	60.50	60.50	60.50	60.50	60.50	60.50	60.50	60.50	60.50	60.50
	65	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81	59.81
	70	58.28	58.28	58.28	58.28	58.28	58.28	58.28	58.28	58.28	58.28	58.28	58.28	58.28	58.28	58.28
	75	54.67	54.67	54.67	54.67	54.67	54.67	54.67	54.67	54.67	54.67	54.67	54.67	54.67	54.67	54.67
	80	31.61	31.61	31.61	31.61	31.61	31.61	31.61	31.61	31.61	31.61	31.61	31.61	31.61	31.61	31.61
	85	25.99	25.99	25.99	25.99	25.99	25.99	25.99	25.99	25.99	25.99	25.99	25.99	25.99	25.99	25.99
	90	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05
	95	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06
	100	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
	105	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
	110	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
	115	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
	120	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
	125	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
	130	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
	135	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
	140	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
	145	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
	150	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
	155	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
	160	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
	165	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
	170	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
	175	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
	180	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

### Average Luminance (cd/m<sup>2</sup>)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	1540	1540
	45	3649	3649
	55	3281	3281
	65	2942	2942
	75	2561	2561
	85	1209	1209



### Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	394	394	394	394	384	384	384	384	366	366	366	349	349	349	333	333	333	326
1	343	320	299	281	332	311	292	275	295	280	265	280	268	256	267	256	247	238
2	303	266	236	210	292	259	231	207	245	221	201	232	213	195	221	204	189	180
3	270	226	191	164	260	219	187	162	208	180	158	197	173	154	187	167	150	141
4	243	195	159	132	234	189	156	130	180	150	127	170	145	125	162	140	122	113
5	221	170	135	108	213	166	132	107	158	128	105	150	124	103	142	120	101	93
6	203	151	116	91	195	147	114	90	140	111	89	133	107	87	127	104	86	78
7	186	135	101	78	180	132	100	77	126	97	76	120	94	75	114	91	74	66
8	173	122	90	68	166	119	88	67	114	86	66	109	84	65	104	81	64	57
9	160	111	80	60	155	108	79	59	104	77	58	99	75	58	95	73	57	50
10	150	101	72	53	145	99	71	52	95	70	52	91	68	51	88	66	50	44

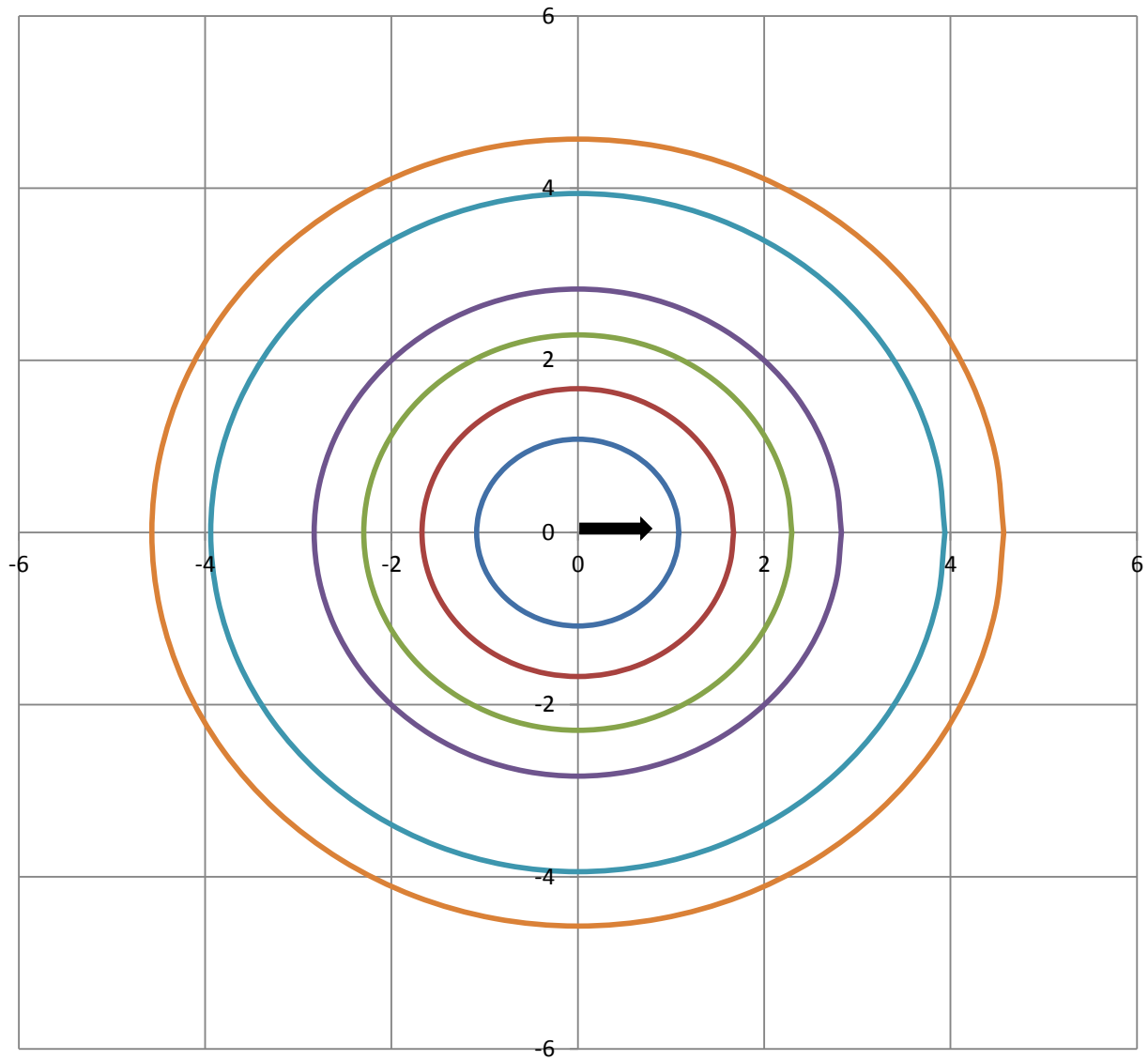
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	49.95 Candela
Central Cone Intensity:	49 Candela
Beam Flux:	316.2 Lumens
Beam Angle (0-180):	172.6 Degrees
Beam Angle (90-270):	172.6 Degrees
Field Angle (0-180):	185.9 Degrees
Field Angle (90-270):	185.9 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		3.12	7.39
6.00		1.39	11.1
8.00		0.781	14.8
10.0		0.500	18.5
12.0		0.347	22.2
14.0		0.255	25.9
16.0		0.195	29.6



## ISOFootcandle Plot

Mounting Height - 2 Feet



Grid Lines in Units of Mounting Height

5 fc    2 fc    1 fc    0.5 fc    0.2 fc    0.1 fc



**IES "BUG" Rating**  
(Back Light, Uplight, Glare)  
Per IES TM-15-11



**Luminaire Classification System (LCS)**

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	21.4	6.5%
FM	(30-60)	70.6	21.4%
FH	(60-80)	55.6	16.8%
FVH	(80-90)	14.2	4.3%
BL	(0-30)	21.4	6.5%
BM	(30-60)	70.6	21.4%
BH	(60-80)	55.6	16.8%
BVH	(80-90)	14.2	4.3%
UL	(90-100)	6.1	1.8%
UH	(100-180)	0.7	0.2%
Total		330.2	100.0%
<b>BUG Rating</b>	<b>B0 U1 G1</b>		