



UL Verification Services Inc.  
7036 Snowdrift Road  
Allentown, PA 18106  
610-774-1300



## Photometric Test Report

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

**Prepared For**  
**Auroralight Inc**

Stacia Elmore  
2742 Loker Ave W  
#100  
Carlsbad, CA 92010-6619  
United States

**Catalog Number**  
**LPL8-30 (3000K)**

Order Number  
14012719  
Test Number  
14012719.08

Test Date

2021-09-29

Prepared By

Cordaryl Cousar, Technician

Approved By

Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Cylindrical copper stem with 8" shade and glass lens  
**Lamp:** One Cree XLAMP XHP35 High Density LED  
**Mounting:** Bollard  
**Ballast/Driver:** PROPRIETARY

#### Luminaire



#### Luminaire Characteristics

Luminous Diameter: 8.00 in.

#### Summary of Results

Roadway Classification: Type V, Very Short  
Cutoff Classification: Full Cutoff  
BUG Rating: B0 U0 G1

#### Test Conditions

Test Temperature: 24.6 °C  
Voltage: 12.11 VAC  
Current: 0.4845 A  
Power: 5.856 W  
Power Factor: 0.998  
Frequency: 60 Hz  
Current THD: 4.87 %

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
24.6 °C	12.11 VAC	0.4845 A	5.856 W	0.998	60 Hz	4.87 %

### Summary of Results

#### Spacing Criteria

0-180: 1.01  
90-270: 1.01

#### Total Lumen Output:

353.6 Lumens

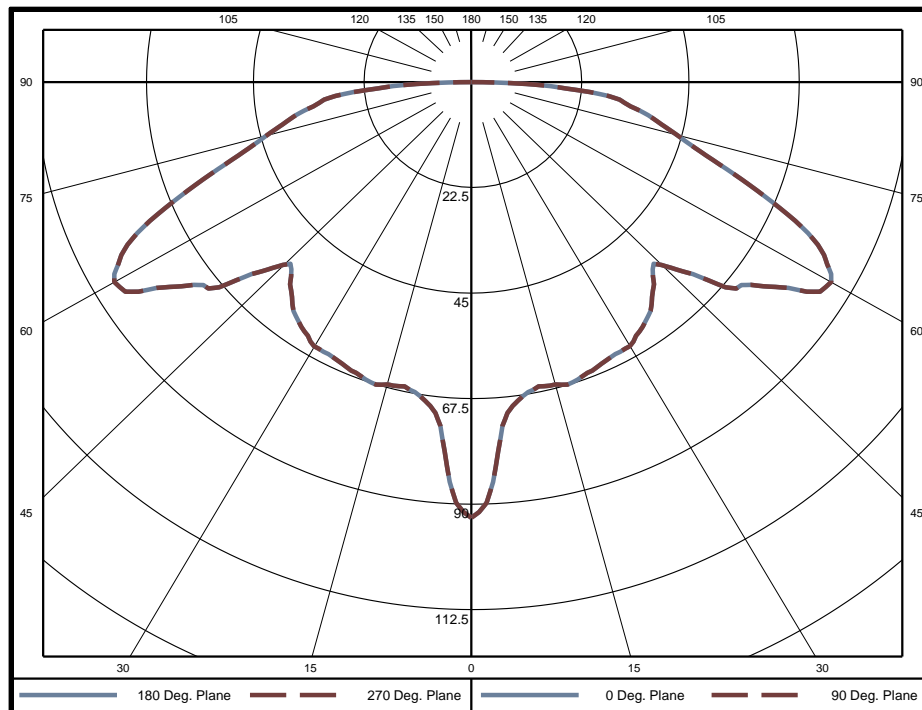
#### Luminaire Efficacy:

60.4 lm/w

#### Maximum Candela:

93 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	1.97	0.6%	60-65	39.67	11.2%	120-125	0	0.0%
5-10	4.95	1.4%	65-70	33.82	9.6%	125-130	0	0.0%
10-15	7.91	2.2%	70-75	25.98	7.3%	130-135	0	0.0%
15-20	11.07	3.1%	75-80	21.05	6.0%	135-140	0	0.0%
20-25	13.87	3.9%	80-85	16.68	4.7%	140-145	0	0.0%
25-30	16.49	4.7%	85-90	7.00	2.0%	145-150	0	0.0%
30-35	18.74	5.3%	90-95	0	0.0%	150-155	0	0.0%
35-40	20.14	5.7%	95-100	0	0.0%	155-160	0	0.0%
40-45	20.56	5.8%	100-105	0	0.0%	160-165	0	0.0%
45-50	24.55	6.9%	105-110	0	0.0%	165-170	0	0.0%
50-55	31.18	8.8%	110-115	0	0.0%	170-175	0	0.0%
55-60	37.97	10.7%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	95	26.9%
0-60	209	59.2%
0-90	354	100.0%
90-180	0	0.0%



**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	92.90	92.90	92.90	92.90	92.90	92.90	92.90	92.90	92.90	92.90	92.90	92.90	92.90	92.90	92.90
	5	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54
	10	67.12	67.12	67.12	67.12	67.12	67.12	67.12	67.12	67.12	67.12	67.12	67.12	67.12	67.12	67.12
	15	66.75	66.75	66.75	66.75	66.75	66.75	66.75	66.75	66.75	66.75	66.75	66.75	66.75	66.75	66.75
	20	66.73	66.73	66.73	66.73	66.73	66.73	66.73	66.73	66.73	66.73	66.73	66.73	66.73	66.73	66.73
	25	65.49	65.49	65.49	65.49	65.49	65.49	65.49	65.49	65.49	65.49	65.49	65.49	65.49	65.49	65.49
	30	65.03	65.03	65.03	65.03	65.03	65.03	65.03	65.03	65.03	65.03	65.03	65.03	65.03	65.03	65.03
	35	62.28	62.28	62.28	62.28	62.28	62.28	62.28	62.28	62.28	62.28	62.28	62.28	62.28	62.28	62.28
	40	57.97	57.97	57.97	57.97	57.97	57.97	57.97	57.97	57.97	57.97	57.97	57.97	57.97	57.97	57.97
	45	55.14	55.14	55.14	55.14	55.14	55.14	55.14	55.14	55.14	55.14	55.14	55.14	55.14	55.14	55.14
	50	68.07	68.07	68.07	68.07	68.07	68.07	68.07	68.07	68.07	68.07	68.07	68.07	68.07	68.07	68.07
	55	76.15	76.15	76.15	76.15	76.15	76.15	76.15	76.15	76.15	76.15	76.15	76.15	76.15	76.15	76.15
	60	85.24	85.24	85.24	85.24	85.24	85.24	85.24	85.24	85.24	85.24	85.24	85.24	85.24	85.24	85.24
	65	76.24	76.24	76.24	76.24	76.24	76.24	76.24	76.24	76.24	76.24	76.24	76.24	76.24	76.24	76.24
	70	57.34	57.34	57.34	57.34	57.34	57.34	57.34	57.34	57.34	57.34	57.34	57.34	57.34	57.34	57.34
	75	43.75	43.75	43.75	43.75	43.75	43.75	43.75	43.75	43.75	43.75	43.75	43.75	43.75	43.75	43.75
	80	35.13	35.13	35.13	35.13	35.13	35.13	35.13	35.13	35.13	35.13	35.13	35.13	35.13	35.13	35.13
	85	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51
	90	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	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	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	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	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	2865	2865
	45	2405	2405
	55	4094	4094
	65	5563	5563
	75	5212	5212
	85	8672	8672



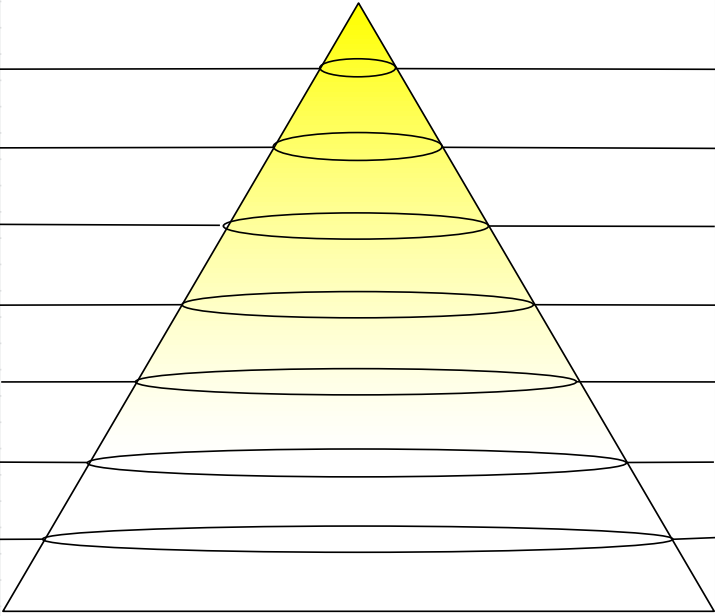
### Utilization of Lumens - Zonal Cavity Method

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	421	421	421	421	411	411	411	411	393	393	393	376	376	376	361	361	361	354
1	370	347	326	308	360	339	320	303	323	307	293	309	296	284	295	285	275	266
2	328	290	259	233	317	283	255	230	270	246	225	257	237	219	246	229	214	205
3	293	247	211	182	283	241	207	181	229	201	177	219	194	174	209	188	170	161
4	264	213	176	147	255	208	173	146	198	168	143	189	163	141	181	158	139	130
5	240	186	149	122	232	182	147	121	174	143	119	166	139	117	159	135	116	107
6	220	165	129	103	212	162	127	102	155	124	101	148	121	100	142	118	99	90
7	202	148	113	88	196	145	112	88	139	109	87	134	106	86	129	104	85	77
8	188	134	100	77	182	131	99	77	126	97	76	122	95	76	117	93	75	67
9	175	122	90	68	169	120	89	68	116	87	68	112	86	67	108	84	67	59
10	164	112	82	61	159	110	81	61	107	79	61	103	78	60	100	76	60	53

#### Beam and Field Information

CIE Type:	Direct
Center Beam Intensity:	92.90 Candela
Central Cone Intensity:	86 Candela
Beam Flux:	302.4 Lumens
Beam Angle (0-180):	147.3 Degrees
Beam Angle (90-270):	147.3 Degrees
Field Angle (0-180):	176.6 Degrees
Field Angle (90-270):	176.6 Degrees

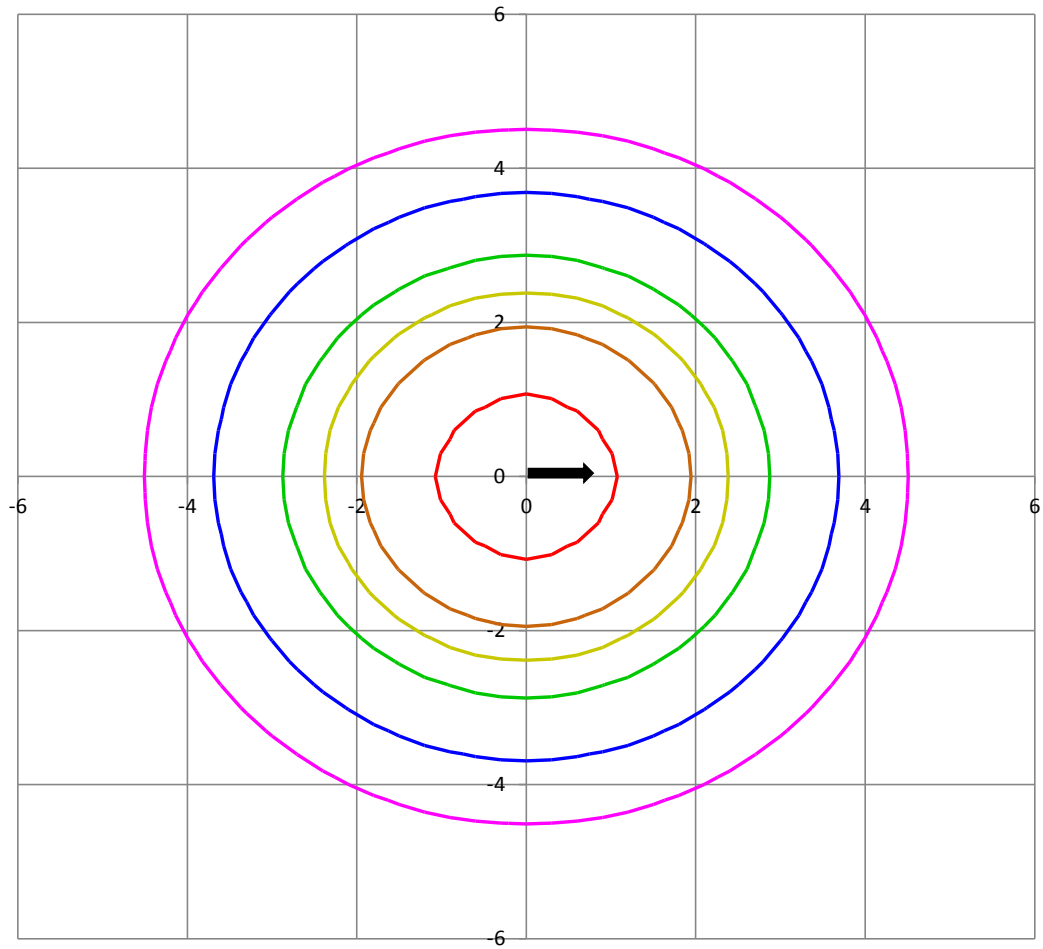
#### Cone of Light Tabulation

Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		5.81	4.02
6.00		2.58	6.03
8.00		1.45	8.05
10.0		0.929	10.1
12.0		0.645	12.1
14.0		0.474	14.1
16.0		0.363	16.1

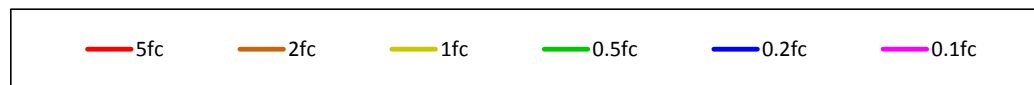


## ISOFootcandle Plot

Mounting Height - 2 Feet



Grid Lines in Units of Mounting Height





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	28.2	8.0%
FM	(30-60)	76.8	21.7%
FH	(60-80)	60.3	17.0%
FVH	(80-90)	11.9	3.4%
BL	(0-30)	28.2	8.0%
BM	(30-60)	76.8	21.7%
BH	(60-80)	60.3	17.0%
BVH	(80-90)	11.9	3.4%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		354.4	100.0%
<b>BUG Rating</b>	<b>B0 U0 G1</b>		