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## Photometric Test Report

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

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

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

**Catalog Number**  
**HSL11-6-N-30 (6W, 15° OPTIC, 3000K)**

Order Number

12250114

Test Number

12250114.44

Report Date

2018-05-07

Prepared By

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Approved By

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The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Cylindrical metal housing, with adjustable knuckle, clear glass lens and internal LED module

**Lamp:** One (1) Cree XHP 3000K LED with 15°, narrow optic

**Mounting:** Flood

**Ballast/Driver:** Integrated

**Note:** This report has been pro-rated using data from report numbers 12250114.45, 12250114.01, 12250114.02, 12250114.03, 12250114.04, 12250114.05, and 12250114.06 to account for differences in color temperature.

**Luminaire**



**Luminaire Characteristics**

Luminous Diameter: 1.50 in.  
Luminous Height: 1.000 in.

**Summary of Results**

Roadway Classification: Type V, Very Short  
Cutoff Classification: Full Cutoff  
BUG Rating: B1 U0 G0

**Test Conditions**

Test Temperature: 24.4 °C  
Voltage: 12.02 VAC  
Current: 0.5352 A  
Power: 6.370 W  
Power Factor: 0.990  
Frequency: 60 Hz  
Current THD: 7.19 %

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
24.4 °C	12.02 VAC	0.5352 A	6.370 W	0.990	60 Hz	7.19 %

### Summary of Results

#### Spacing Criteria

0-180: 0.29

90-270: 0.29

#### Total Lumen Output:

349.7 Lumens

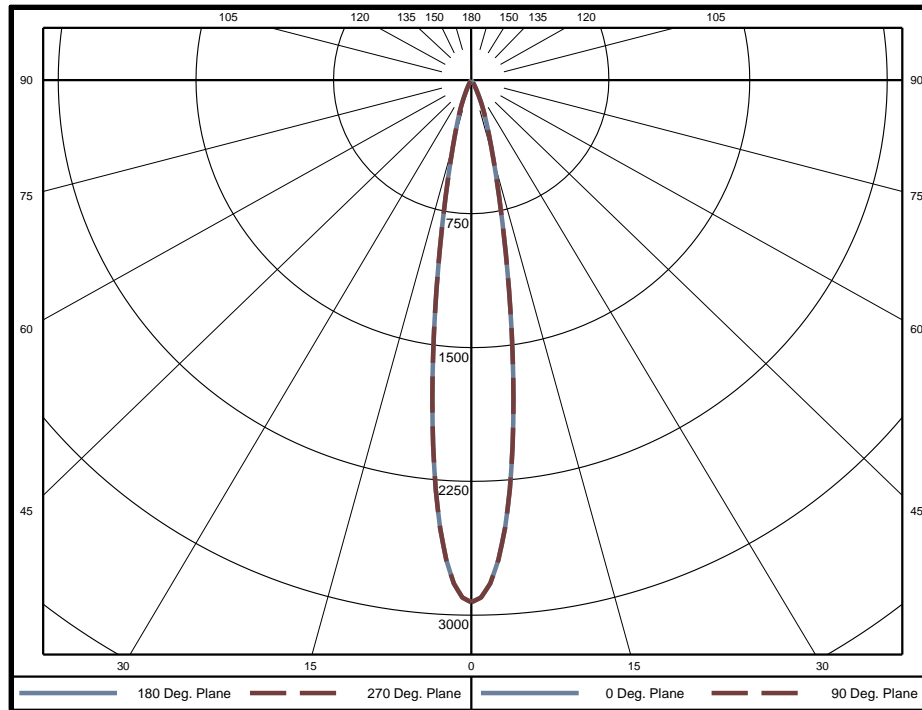
#### Luminaire Efficacy:

54.9 lm/w

#### Maximum Candela:

2928 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	62.4	17.8%	60-65	0	0.0%	120-125	0	0.0%
5-10	115.3	33.0%	65-70	0	0.0%	125-130	0	0.0%
10-15	80.1	22.9%	70-75	0	0.0%	130-135	0	0.0%
15-20	47.0	13.4%	75-80	0	0.0%	135-140	0	0.0%
20-25	26.1	7.5%	80-85	0	0.0%	140-145	0	0.0%
25-30	11.5	3.3%	85-90	0	0.0%	145-150	0	0.0%
30-35	4.6	1.3%	90-95	0	0.0%	150-155	0	0.0%
35-40	1.9	0.5%	95-100	0	0.0%	155-160	0	0.0%
40-45	0.8	0.2%	100-105	0	0.0%	160-165	0	0.0%
45-50	0	0.0%	105-110	0	0.0%	165-170	0	0.0%
50-55	0	0.0%	110-115	0	0.0%	170-175	0	0.0%
55-60	0	0.0%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	349	99.8%
0-60	350	100.0%
0-90	350	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	2928	2928	2928	2928	2928	2928	2928	2928	2928	2928	2928	2928	2928	2928	2928
	5	2302	2302	2302	2302	2302	2302	2302	2302	2302	2302	2302	2302	2302	2302	2302
	10	1078	1078	1078	1078	1078	1078	1078	1078	1078	1078	1078	1078	1078	1078	1078
	15	422	422	422	422	422	422	422	422	422	422	422	422	422	422	422
	20	193	193	193	193	193	193	193	193	193	193	193	193	193	193	193
	25	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	30	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
	35	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	40	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	2568000	2568000
	45	0	0
	55	0	0
	65	0	0
	75	0	0
	85	0	0



### 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	416	416	416	416	407	407	407	407	389	389	389	372	372	372	357	357	357	350
1	404	397	391	386	396	390	385	380	376	372	368	363	360	357	352	349	347	341
2	393	381	372	364	386	376	367	360	365	358	352	355	350	345	346	342	338	333
3	382	368	357	348	376	363	353	345	355	347	340	347	340	335	340	335	330	326
4	373	356	344	335	367	353	342	333	346	337	329	340	332	326	334	327	322	318
5	364	346	333	324	359	343	331	323	338	328	320	333	324	318	328	321	315	312
6	355	337	324	315	352	334	323	314	330	320	312	326	317	310	322	314	308	305
7	348	328	316	307	344	326	315	306	323	312	305	319	310	303	316	308	302	299
8	340	321	308	300	337	319	307	299	316	306	298	313	304	297	311	302	296	293
9	334	314	302	293	331	312	301	293	310	299	292	307	298	291	305	297	291	288
10	327	307	295	288	325	306	295	287	304	294	287	302	293	286	300	291	285	283

#### Beam and Field Information

CIE Type:	Direct
Center Beam Intensity:	2928 Candela
Central Cone Intensity:	2702 Candela
Beam Flux:	141.1 Lumens
Beam Angle (0-180):	16.6 Degrees
Beam Angle (90-270):	16.6 Degrees
Field Angle (0-180):	34.5 Degrees
Field Angle (90-270):	34.5 Degrees

#### Cone of Light Tabulation

Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		81.3	1.72
10.0		29.3	2.86
14.0		14.9	4.00
18.0		9.04	5.15
22.0		6.05	6.29
26.0		4.33	7.43
30.0		3.25	8.58



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	171.6	49.0%
FM	(30-60)	3.5	1.0%
FH	(60-80)	0.0	0.0%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	171.6	49.0%
BM	(30-60)	3.5	1.0%
BH	(60-80)	0.0	0.0%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		350.3	100.0%
<b>BUG Rating</b>	<b>B1 U0 G0</b>		