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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-M-27 (6W, 25° OPTIC, 2700K)**

Order Number  
12250114  
Test Number  
12250114.41

Test Date

2018-04-10

Prepared By

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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 metal housing, with adjustable knuckle, clear glass lens and internal LED module  
**Lamp:** One (1) Cree XHP 2700K LED with 25°, medium optic  
**Mounting:** Flood  
**Ballast/Driver:** Integrated

**Luminaire**



**Luminaire Characteristics**

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

**Summary of Results**

Roadway Classification: Type II, Very Short  
Cutoff Classification: Cutoff  
BUG Rating: B1 U1 G0

**Test Conditions**

Test Temperature: 24.8 °C  
Voltage: 12.00 VAC  
Current: 0.5308 A  
Power: 6.309 W  
Power Factor: 0.990  
Frequency: 60 Hz  
Current THD: 7.22 %

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
24.8 °C	12.00 VAC	0.5308 A	6.309 W	0.990	60 Hz	7.22 %

### Summary of Results

#### Spacing Criteria

0-180: 0.51

90-270: 0.44

#### Total Lumen Output:

369.3 Lumens

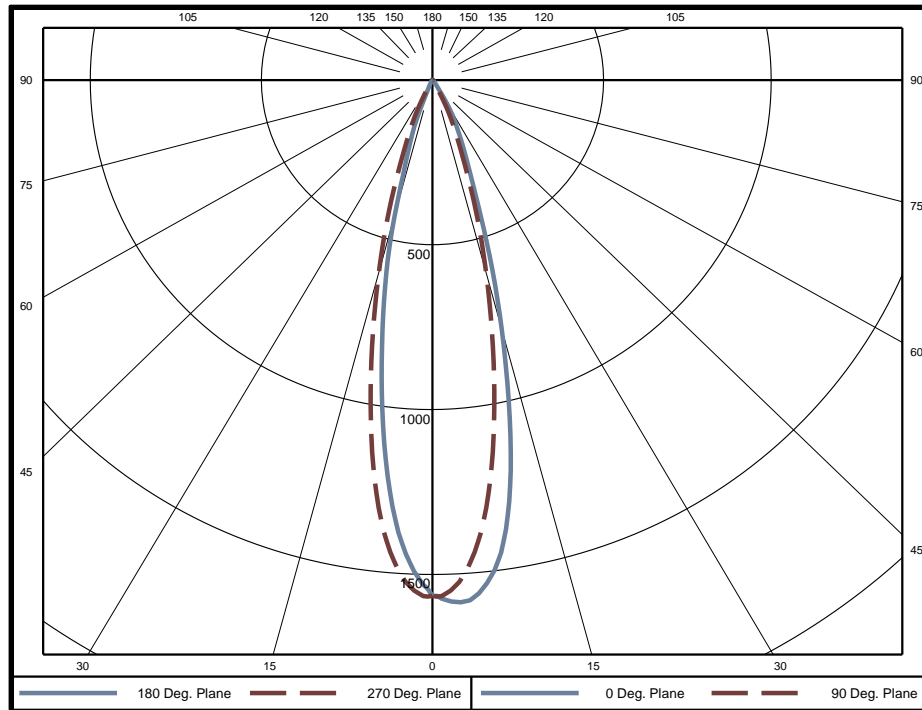
#### Luminaire Efficacy:

58.5 lm/w

#### Maximum Candela:

1591 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	35.91	9.7%	60-65	0.47	0.1%	120-125	0	0.0%
5-10	88.96	24.1%	65-70	0.32	0.1%	125-130	0	0.0%
10-15	97.11	26.3%	70-75	0.20	0.1%	130-135	0	0.0%
15-20	70.19	19.0%	75-80	0.10	0.0%	135-140	0	0.0%
20-25	39.43	10.7%	80-85	0.03	0.0%	140-145	0	0.0%
25-30	20.07	5.4%	85-90	0.01	0.0%	145-150	0	0.0%
30-35	8.01	2.2%	90-95	0.00	0.0%	150-155	0	0.0%
35-40	3.28	0.9%	95-100	0	0.0%	155-160	0	0.0%
40-45	2.08	0.6%	100-105	0	0.0%	160-165	0	0.0%
45-50	1.46	0.4%	105-110	0	0.0%	165-170	0	0.0%
50-55	1.01	0.3%	110-115	0	0.0%	170-175	0	0.0%
55-60	0.69	0.2%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	363	98.3%
0-60	368	99.7%
0-90	369	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	1565	1565	1565	1565	1565	1565	1565	1565	1565	1565	1565	1565	1565	1565	1565
	5	1563	1566	1539	1493	1437	1381	1335	1309	1297	1309	1335	1381	1437	1493	1539
	10	1298	1300	1242	1153	1051	957	883	833	817	833	883	957	1051	1153	1242
	15	789	795	761	700	622	548	480	406	378	406	480	548	622	700	761
	20	369	383	377	348	297	246	205	163	147	163	205	246	297	348	377
	25	195	200	196	168	132	80	44	29	24	29	44	80	132	168	196
	30	102	100	92	67	30	19	14	10	9	10	14	19	30	67	92
	35	24	25	24	17	13	9	6	4	3	4	6	9	13	17	24
	40	13	13	12	9	7	4	3	2	2	2	3	4	7	9	12
	45	8	8	8	6	4	2	2	1	1	1	2	2	4	6	8
	50	6	6	5	4	3	2	1	0	0	0	1	2	3	4	5
	55	4	4	3	2	2	1	0	0	0	0	0	1	2	2	3
	60	3	3	2	2	1	0	0	0	0	0	0	0	1	2	2
	65	2	2	2	1	1	0	0	0	0	0	0	0	1	1	2
	70	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1
	75	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1
	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)

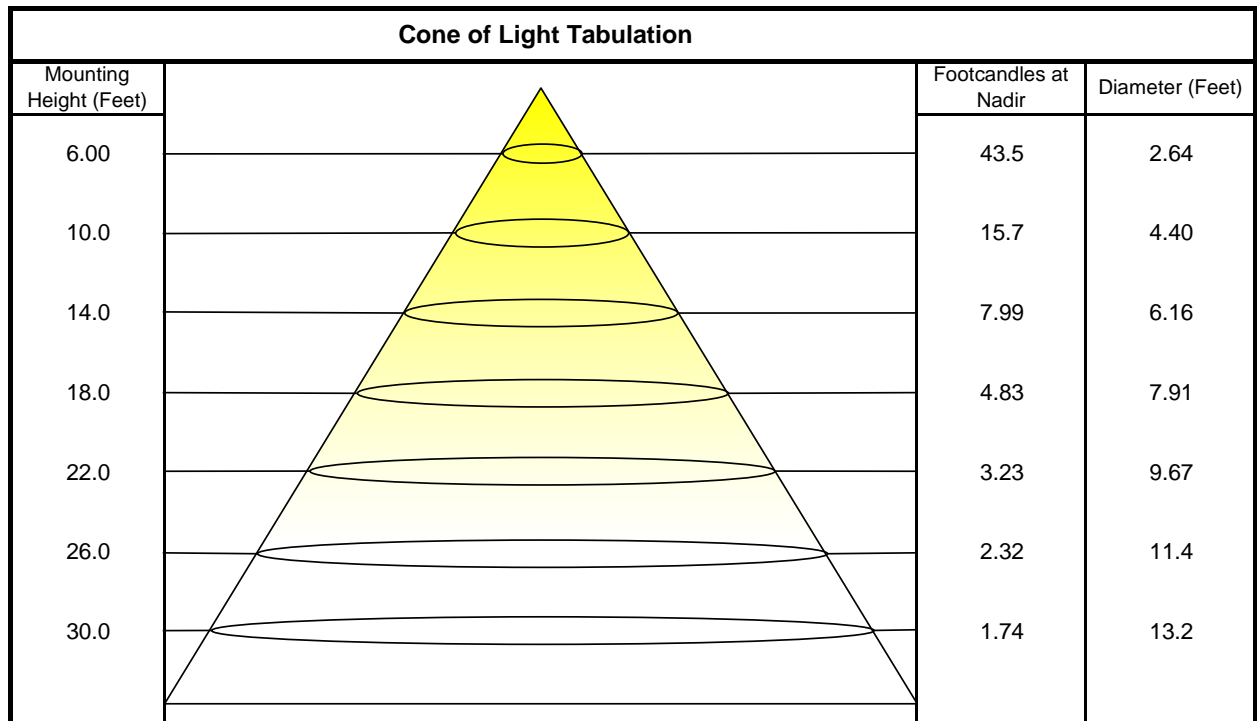
Vertical Angle (Degrees)	0	45	90
	0	1373000	1373000
	45	7365	6823
	55	3702	3252
	65	1914	1651
	75	984	630
	85	268	50



### 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	440	440	440	440	429	429	429	429	410	410	410	393	393	393	377	377	377	369
1	425	417	410	403	416	409	402	397	394	389	385	381	377	373	368	365	363	356
2	410	397	386	376	403	391	381	372	379	371	364	369	362	357	359	354	349	344
3	397	380	366	356	390	375	363	353	366	356	347	357	349	342	349	343	337	332
4	385	365	350	339	379	361	347	337	353	342	333	347	337	329	340	332	326	321
5	373	351	336	324	368	348	334	323	342	330	320	336	326	318	331	322	315	311
6	362	339	323	312	357	336	322	311	331	319	309	327	316	307	322	313	305	301
7	352	328	312	301	348	325	311	300	321	308	299	318	306	298	314	304	296	292
8	342	317	302	291	338	316	301	291	312	299	290	309	297	289	306	295	288	284
9	333	308	293	282	329	306	292	282	303	290	281	301	289	280	298	287	280	276
10	324	299	284	274	321	298	284	274	295	282	273	293	281	273	291	280	272	269

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1565 Candela
Central Cone Intensity:	1520 Candela
Beam Flux:	189.1 Lumens
Beam Angle (0-180):	25.5 Degrees
Beam Angle (90-270):	26.0 Degrees
Field Angle (0-180):	46.5 Degrees
Field Angle (90-270):	47.9 Degrees





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	212.4	57.4%
FM	(30-60)	13.5	3.6%
FH	(60-80)	1.0	0.3%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	139.5	37.7%
BM	(30-60)	3.4	0.9%
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		369.9	100.0%
<b>BUG Rating</b>	<b>B1 U1 G0</b>		