



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



## 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**  
**LWL3-6-W-30 (6W, 40° OPTIC, 3000K)**

Order Number  
13551695  
Test Number  
13551695.15

Test Date

2020-10-28

Prepared By

Javier Caban, Technician

Approved By

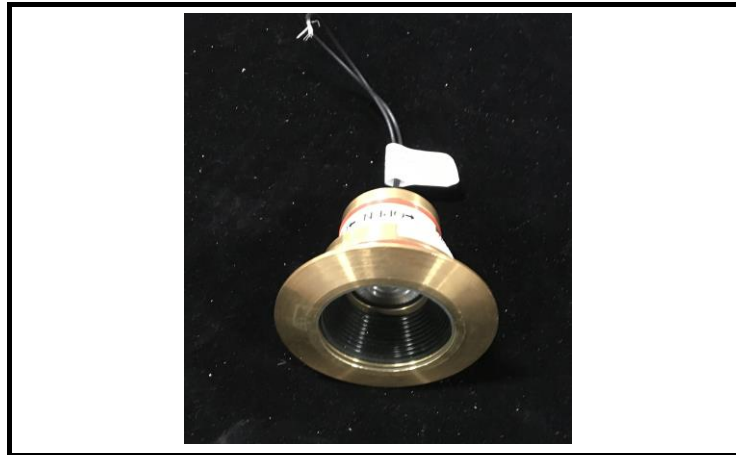
Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Cylindrical brass housing with circular brass faceplate and clear lens  
**Lamp:** One (1) MHDE 3000K Cree LED  
**Mounting:** Recessed  
**Ballast/Driver:** Integrated

**Luminaire**



**Luminaire Characteristics**

Luminous Diameter: 2.00 in.

**Summary of Results**

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

**Test Conditions**

Test Temperature: 25.1 °C  
Voltage: 12.30 VAC  
Current: 0.4689 A  
Power: 5.758 W  
Power Factor: 0.999  
Frequency: 60 Hz  
Current THD: 4.89 %

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
25.1 °C	12.30 VAC	0.4689 A	5.758 W	0.999	60 Hz	4.89 %

### Summary of Results

#### Spacing Criteria

0-180: 0.66

90-270: 0.66

#### Total Lumen Output:

420.6 Lumens

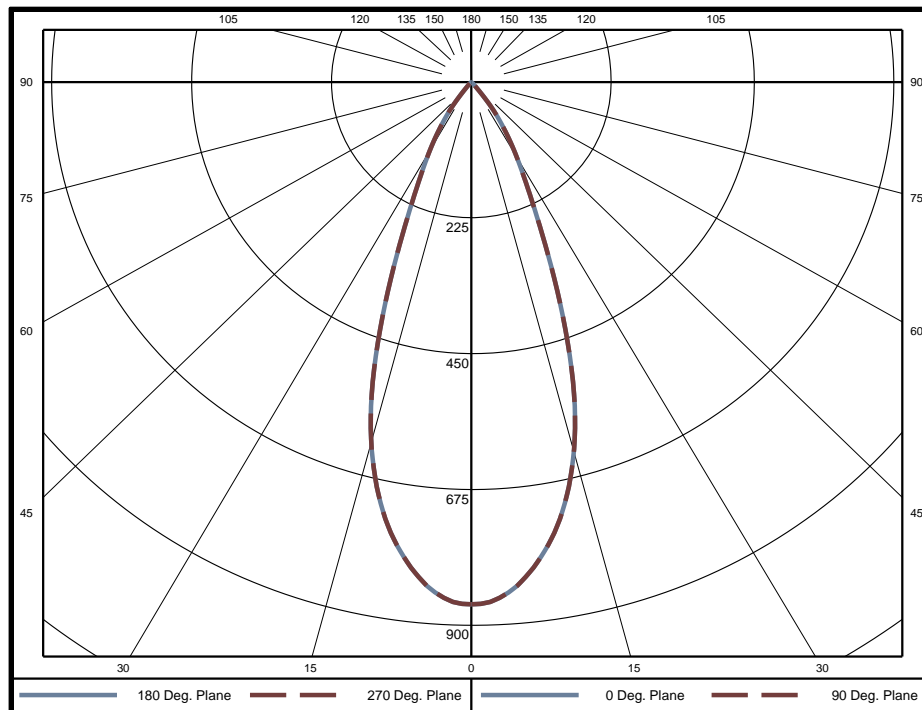
#### Luminaire Efficacy:

73.1 lm/w

#### Maximum Candela:

865 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	20.36	4.8%	60-65	0	0.0%	120-125	0	0.0%
5-10	56.99	13.5%	65-70	0	0.0%	125-130	0	0.0%
10-15	82.36	19.6%	70-75	0	0.0%	130-135	0	0.0%
15-20	88.02	20.9%	75-80	0	0.0%	135-140	0	0.0%
20-25	69.57	16.5%	80-85	0	0.0%	140-145	0	0.0%
25-30	47.74	11.4%	85-90	0	0.0%	145-150	0	0.0%
30-35	32.54	7.7%	90-95	0	0.0%	150-155	0	0.0%
35-40	17.01	4.0%	95-100	0	0.0%	155-160	0	0.0%
40-45	4.15	1.0%	100-105	0	0.0%	160-165	0	0.0%
45-50	1.42	0.3%	105-110	0	0.0%	165-170	0	0.0%
50-55	0.39	0.1%	110-115	0	0.0%	170-175	0	0.0%
55-60	0.02	0.0%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	415	98.6%
0-60	421	100.0%
0-90	421	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	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1
	5	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4
	10	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2
	15	629.6	629.6	629.6	629.6	629.6	629.6	629.6	629.6	629.6	629.6	629.6	629.6	629.6	629.6	629.6
	20	435.9	435.9	435.9	435.9	435.9	435.9	435.9	435.9	435.9	435.9	435.9	435.9	435.9	435.9	435.9
	25	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0
	30	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0
	35	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7
	40	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
	45	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	50	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
	0	426800	426800
	45	4197	4197
	55	221	221
	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	501	501	501	501	489	489	489	489	467	467	467	447	447	447	429	429	429	421
1	481	471	462	453	471	462	454	446	445	438	432	429	424	420	415	411	408	400
2	461	444	429	417	452	437	423	412	423	413	403	411	402	395	400	393	387	380
3	443	420	402	388	435	414	398	385	403	390	379	394	382	373	384	375	367	361
4	425	398	378	363	418	393	375	361	385	369	357	377	364	353	369	358	349	343
5	408	378	358	342	402	375	355	341	367	351	338	361	346	335	355	342	332	327
6	392	360	339	324	386	357	337	323	351	334	321	346	330	319	341	327	317	311
7	377	344	322	307	372	341	321	307	336	318	305	331	315	304	327	313	302	297
8	362	329	307	293	358	326	306	292	322	304	291	318	302	290	314	300	289	284
9	349	314	293	279	345	313	293	279	309	291	278	305	289	277	302	287	276	271
10	336	301	281	267	332	300	280	267	297	279	266	294	277	265	291	276	265	260

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	865.1 Candela
Central Cone Intensity:	856 Candela
Beam Flux:	248.5 Lumens
Beam Angle (0-180):	40.2 Degrees
Beam Angle (90-270):	40.2 Degrees
Field Angle (0-180):	68.8 Degrees
Field Angle (90-270):	68.8 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		24.0	3.99
10.0		8.65	6.64
14.0		4.41	9.30
18.0		2.67	12.0
22.0		1.79	14.6
26.0		1.28	17.3
30.0		0.961	19.9



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	182.6	43.4%
FM	(30-60)	27.9	6.6%
FH	(60-80)	0.0	0.0%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	182.6	43.4%
BM	(30-60)	27.9	6.6%
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		421.0	100.0%
<b>BUG Rating</b>	<b>B1 U0 G0</b>		