



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**

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

**Catalog Number**  
**LWL2-4-N-30 (4W, 15° OPTIC, 3000K)**

Order Number  
13551695  
Test Number  
13551695.19

Test Date

2021-08-02

Prepared By

Alexa Lambert, Project Handler

Approved By

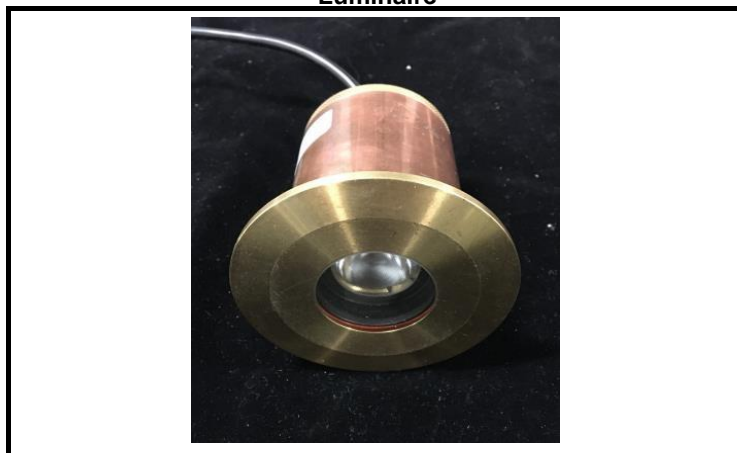
Kevin Rodriguez, Project Handler

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:** Cylindrical brass housing with circular brass faceplate and clear lens  
**Lamp:** One (1) XHP35 3000K Cree LED  
**Mounting:** Ground recessed  
**Ballast/Driver:** Integrated  
**Note:** Report extrapolated using data from Test Numbers 13551695.21, 13551695.11, and 13551695.09

**Luminaire**



**Luminaire Characteristics**

Luminous Diameter: 1.25 in.

**Summary of Results**

Roadway Classification:	Type V, Very Long
Cutoff Classification:	Noncutoff
BUG Rating:	B0 U3 G0

**Test Conditions**

Test Temperature:	24.8 °C
Voltage:	12.04 VAC
Current:	0.3736 A
Power:	4.483 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	4.58 %

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

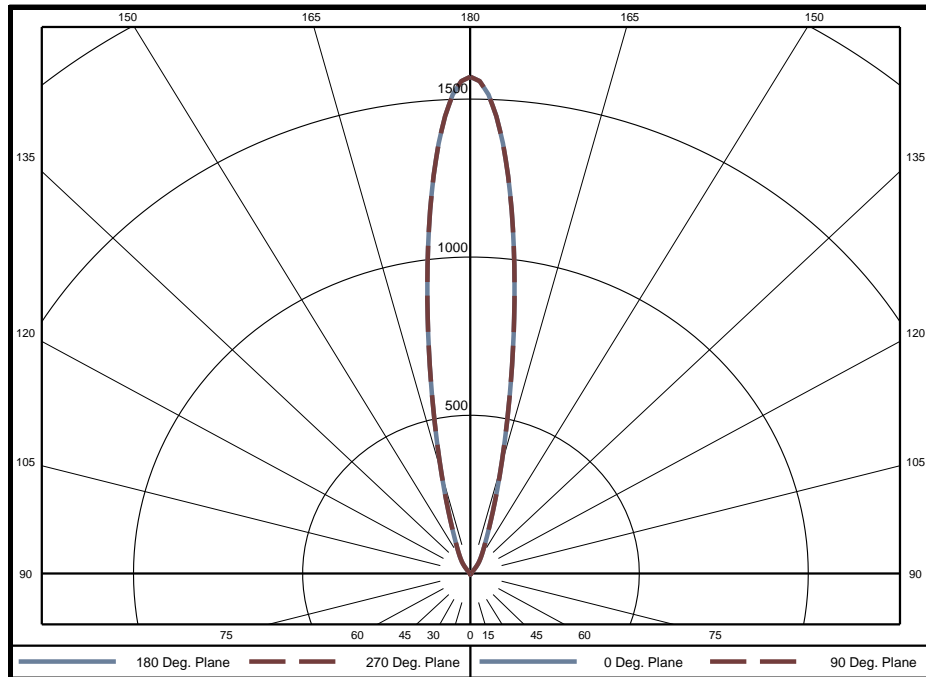
### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.8 °C	12.04 VAC	0.3736 A	4.483 W	0.996	60 Hz	4.58 %

### Summary of Results

Total Lumen Output:	286.5 Lumens
Luminaire Efficacy:	63.9 lm/w
Maximum Candela:	1571 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0	0.0%	60-65	0	0.0%	120-125	1.63	0.6%
5-10	0	0.0%	65-70	0	0.0%	125-130	1.97	0.7%
10-15	0	0.0%	70-75	0	0.0%	130-135	2.49	0.9%
15-20	0	0.0%	75-80	0	0.0%	135-140	4.27	1.5%
20-25	0	0.0%	80-85	0	0.0%	140-145	10.02	3.5%
25-30	0	0.0%	85-90	0	0.0%	145-150	15.43	5.4%
30-35	0	0.0%	90-95	0.03	0.0%	150-155	20.00	7.0%
35-40	0	0.0%	95-100	0.15	0.1%	155-160	26.67	9.3%
40-45	0	0.0%	100-105	0.37	0.1%	160-165	39.61	13.8%
45-50	0	0.0%	105-110	0.62	0.2%	165-170	58.96	20.6%
50-55	0	0.0%	110-115	0.90	0.3%	170-175	68.39	23.9%
55-60	0	0.0%	115-120	1.26	0.4%	175-180	33.70	11.8%

Zone	Lumens	% of Luminaire
0-40	0	0.0%
0-60	0	0.0%
0-90	0	0.0%
90-180	286	100.0%



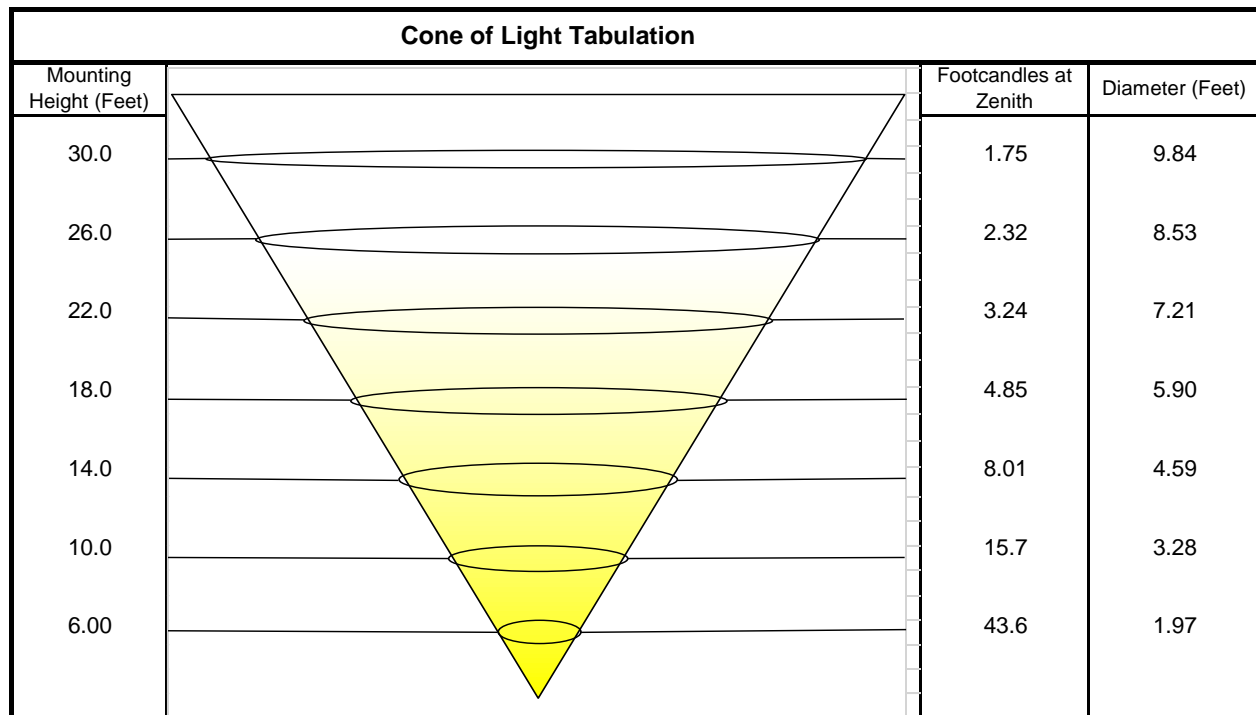
**Candela Tabulation**  
Horizontal Angle (Degrees)

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	110	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	115	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	120	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	125	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	130	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	135	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	140	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	145	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
	150	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
	155	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
	160	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169
	165	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343
	170	715	715	715	715	715	715	715	715	715	715	715	715	715	715	715
	175	1263	1263	1263	1263	1263	1263	1263	1263	1263	1263	1263	1263	1263	1263	1263
	180	1571	1571	1571	1571	1571	1571	1571	1571	1571	1571	1571	1571	1571	1571	1571



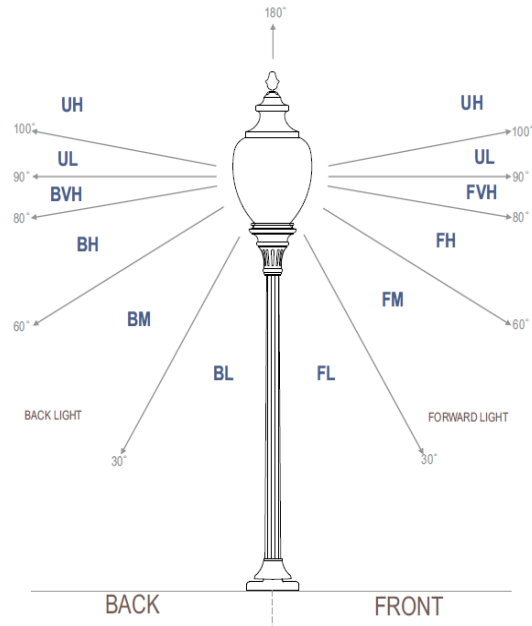
### Utilization of Lumens - Zonal Cavity Method

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	273	273	273	273	233	233	233	233	159	159	159	91	91	91	29	29	29	0
1	248	237	226	217	212	202	194	187	138	134	129	80	77	75	26	25	24	0
2	226	206	190	177	192	177	164	153	121	113	107	70	66	63	22	21	20	0
3	205	181	162	147	175	155	140	127	106	97	89	61	57	53	20	18	17	0
4	187	159	139	123	159	137	120	107	94	84	75	54	49	45	18	16	15	0
5	171	141	120	104	146	121	104	91	83	72	64	48	43	38	16	14	13	0
6	157	125	104	89	133	108	90	78	74	63	55	43	37	33	14	12	11	0
7	144	112	92	77	123	97	79	67	67	56	48	39	33	28	13	11	9	0
8	133	101	81	67	113	87	70	58	60	49	41	35	29	25	11	10	8	0
9	123	91	72	59	105	79	62	51	55	44	36	32	26	22	10	8	7	0
10	115	83	64	51	98	72	56	45	50	39	32	29	23	19	9	8	6	0





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	0.0	0.0%
FM	(30-60)	0.0	0.0%
FH	(60-80)	0.0	0.0%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	0.0	0.0%
BM	(30-60)	0.0	0.0%
BH	(60-80)	0.0	0.0%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.2	0.1%
UH	(100-180)	286.8	99.9%
Total		287.0	100.0%
<b>BUG Rating</b>	<b>B0 U3 G0</b>		