



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  
**LSW3-SQ-6-30 (6W, 3000K)**

Order Number

13469434

Test Number

13469434.10B

Revision of Test Number 13469434.10A on:

2021-11-03

Test Date

2020-08-13

Prepared By

Jesse Litchfield, Technician

Approved By

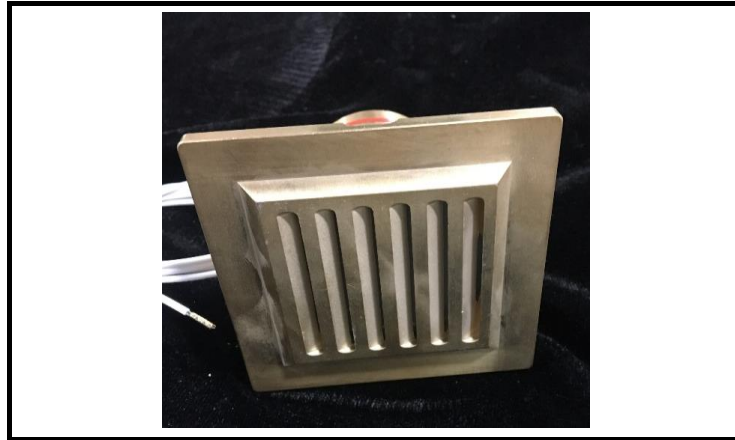
Kevin Rodriguez, Project Handler

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**Luminaire Description:** Bronze formed aluminum housing, frosted internal lens enclosure  
**Lamp:** White LEDs  
**Mounting:** Step Light  
**Ballast/Driver:** Integrated

#### Luminaire



#### Luminaire Characteristics

Luminous Length: 0.25 in.  
Luminous Width: 2.000 in.  
Luminous Height: 2.00 in.

#### Summary of Results

Roadway Classification: Type I, Very Short  
Cutoff Classification: Full Cutoff  
BUG Rating: B0 U0 G0

#### Test Conditions

Test Temperature: 24.9 °C  
Voltage: 11.29 VAC  
Current: 0.5864 A  
Power: 6.616 W  
Power Factor: 0.999  
Frequency: 60 Hz  
Current THD: 4.05 %

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
24.9 °C	11.29 VAC	0.5864 A	6.616 W	0.999	60 Hz	4.05 %

### Summary of Results

#### Spacing Criteria

0-180: 1.36

90-270: 0.72

Total Lumen Output:

46.67 Lumens

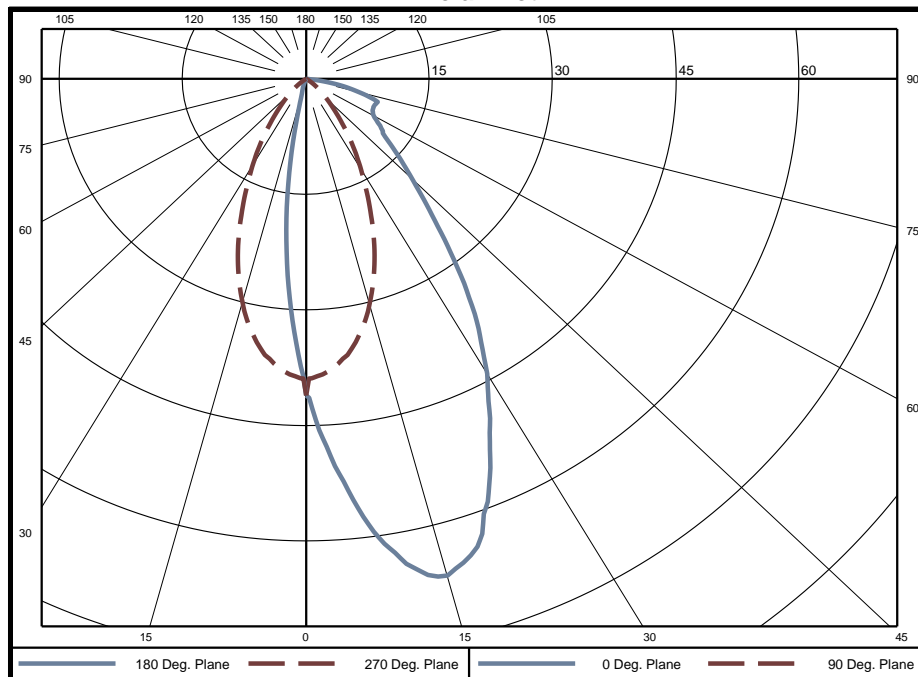
Luminaire Efficacy:

7.1 lm/w

Maximum Candela:

67 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.969	2.1%	60-65	1.413	3.0%	120-125	0	0.0%
5-10	2.755	5.9%	65-70	1.227	2.6%	125-130	0	0.0%
10-15	4.133	8.9%	70-75	1.021	2.2%	130-135	0	0.0%
15-20	5.071	10.9%	75-80	0.613	1.3%	135-140	0	0.0%
20-25	5.476	11.7%	80-85	0.112	0.2%	140-145	0	0.0%
25-30	5.311	11.4%	85-90	0	0.0%	145-150	0	0.0%
30-35	4.843	10.4%	90-95	0	0.0%	150-155	0	0.0%
35-40	4.095	8.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	3.267	7.0%	100-105	0	0.0%	160-165	0	0.0%
45-50	2.608	5.6%	105-110	0	0.0%	165-170	0	0.0%
50-55	2.071	4.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	1.690	3.6%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	33	70.0%
0-60	42	90.6%
0-90	47	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	41.11	41.11	41.11	41.11	41.11	41.11	41.11	41.11	41.11	41.11	41.11	41.11	41.11	41.11	41.11
	5	52.45	54.54	50.10	45.42	37.68	34.63	30.11	28.31	25.63	28.31	30.11	34.63	37.68	45.42	50.10
	10	62.46	63.53	55.27	46.99	34.73	26.91	18.57	13.64	10.94	13.64	18.57	26.91	34.73	46.99	55.27
	15	66.74	67.35	56.79	44.97	30.01	18.99	7.92	2.93	1.98	2.93	7.92	18.99	30.01	44.97	56.79
	20	62.85	63.71	53.99	40.31	24.36	11.91	2.19	1.49	0.98	1.49	2.19	11.91	24.36	40.31	53.99
	25	53.08	54.78	46.85	34.03	18.29	6.18	1.11	0.54	0.12	0.54	1.11	6.18	18.29	34.03	46.85
	30	44.20	45.51	38.50	27.20	13.16	2.67	0.25	0.00	0.00	0.00	0.25	2.67	13.16	27.20	38.50
	35	34.67	36.45	30.70	20.68	8.92	0.95	0.00	0.00	0.00	0.00	0.00	0.95	8.92	20.68	30.70
	40	24.96	26.85	23.26	14.69	5.46	0.12	0.00	0.00	0.00	0.00	0.00	0.12	5.46	14.69	23.26
	45	18.21	19.63	17.67	10.46	3.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.21	10.46	17.67
	50	13.70	14.79	13.27	7.56	1.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68	7.56	13.27
	55	11.18	11.50	9.99	5.46	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	5.46	9.99
	60	9.49	9.57	7.56	3.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.87	7.56
	65	9.04	8.34	5.77	2.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.53	5.77
	70	9.16	7.82	4.27	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21	4.27
	75	6.65	6.00	3.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.26
	80	3.02	2.52	1.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18
	85	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
	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)

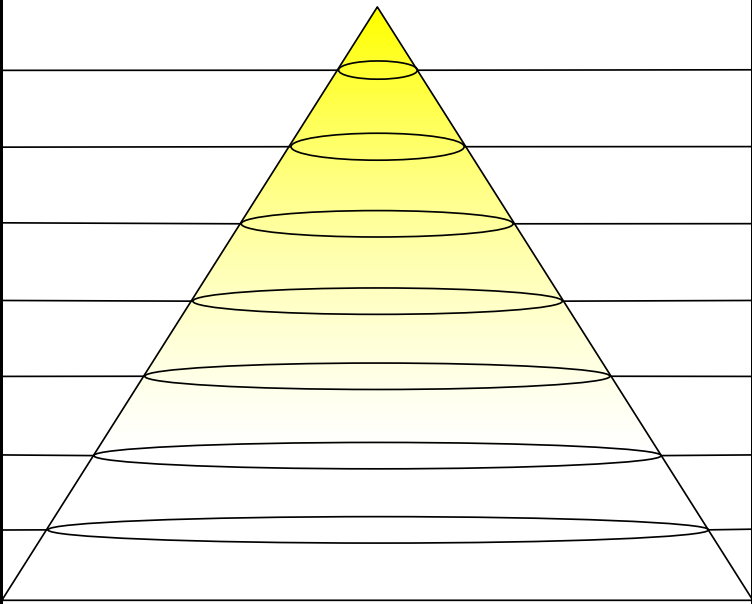
Vertical Angle (Degrees)	0	45	90
	0	127400	127400
	45	8869	10520
	55	4864	5350
	65	3652	2887
	75	2580	1576
	85	0	0



### 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	56	56	56	56	54	54	54	54	52	52	52	50	50	50	48	48	48	47
1	52	50	49	48	51	49	48	47	47	46	45	46	45	44	44	43	43	42
2	49	46	43	41	47	45	42	41	43	41	40	42	40	39	40	39	38	37
3	45	41	38	36	44	41	38	36	39	37	35	38	36	35	37	35	34	33
4	42	38	35	32	41	37	34	32	36	34	32	35	33	31	34	32	31	30
5	40	35	31	29	39	34	31	29	33	31	29	33	30	28	32	30	28	27
6	37	32	29	26	36	32	29	26	31	28	26	30	28	26	30	27	26	25
7	35	30	26	24	34	29	26	24	29	26	24	28	26	24	28	25	24	23
8	33	28	24	22	32	28	24	22	27	24	22	26	24	22	26	24	22	21
9	31	26	23	21	31	26	23	21	25	22	20	25	22	20	24	22	20	20
10	30	24	21	19	29	24	21	19	24	21	19	23	21	19	23	21	19	18

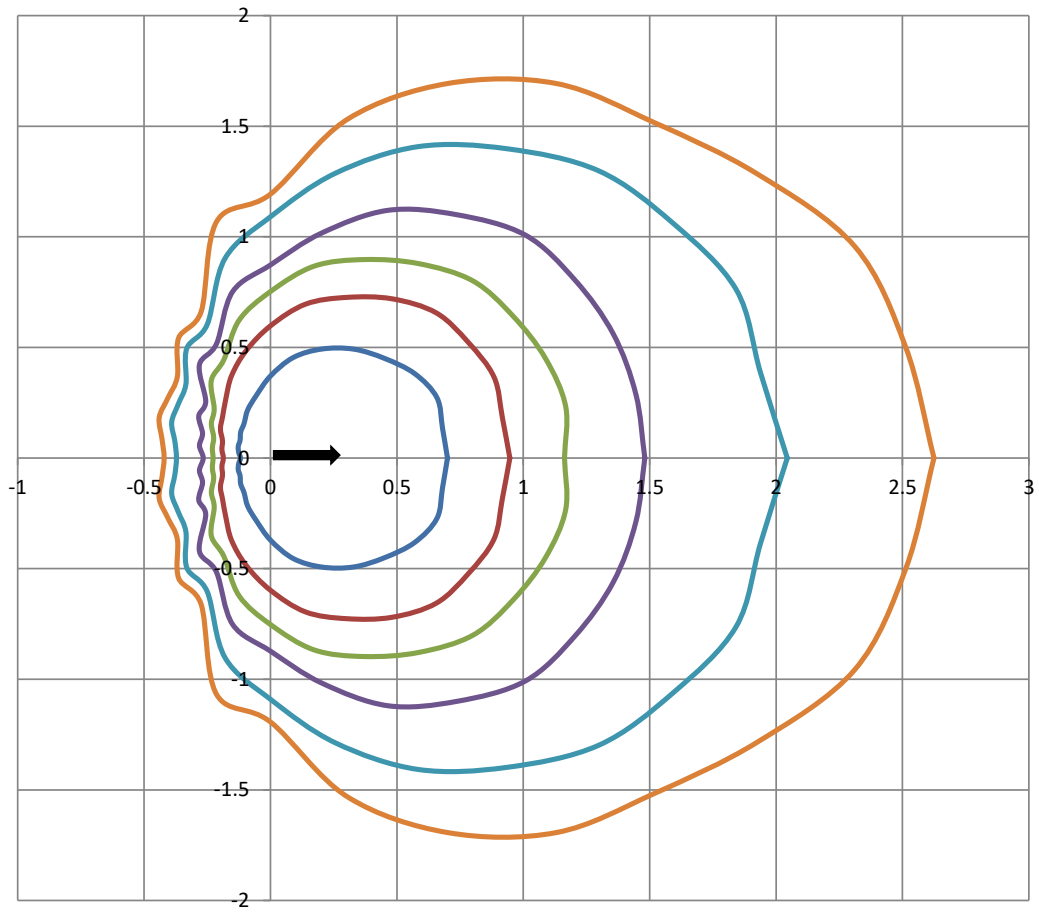
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	41.11 Candela
Central Cone Intensity:	41 Candela
Beam Flux:	30.6 Lumens
Beam Angle (0-180):	49.7 Degrees
Beam Angle (90-270):	46.3 Degrees
Field Angle (0-180):	91.5 Degrees
Field Angle (90-270):	85.5 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		2.57	3.33
6.00		1.14	5.00
8.00		0.642	6.66
10.0		0.411	8.33
12.0		0.285	9.99
14.0		0.210	11.7
16.0		0.161	13.3



## 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)	20.0	42.6%
FM	(30-60)	18.2	38.7%
FH	(60-80)	4.3	9.1%
FVH	(80-90)	0.1	0.3%
BL	(0-30)	3.9	8.3%
BM	(30-60)	0.5	1.1%
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		47.0	100.0%
<b>BUG Rating</b>	<b>B0 U0 G0</b>		



## Attachment A

## Amended Report Documentation

[illegible]