



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**  
**LDL1-AC-B7-30 (3000K)**

Order Number  
13551695  
Test Number  
13551695.02

Test Date

2020-10-26

Prepared By

Jesse Litchfield, 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 7" cylindrical bubble acrylic tube  
**Lamp:** One (1) XP-L 3000K Cree LED  
**Mounting:** Pendant  
**Ballast/Driver:** Integrated

#### Luminaire



#### Luminaire Characteristics

Luminous Diameter: 1.25 in.  
Luminous Height: 6.400 in.

#### Summary of Results

Roadway Classification: Type V, Very Short  
Cutoff Classification: Semicutoff  
BUG Rating: B0 U2 G0

#### Test Conditions

Test Temperature: 25.2 °C  
Voltage: 12.07 VAC  
Current: 0.4195 A  
Power: 2.955 W  
Power Factor: 0.584  
Frequency: 60 Hz  
Current THD: 106 %

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
25.2 °C	12.07 VAC	0.4195 A	2.955 W	0.584	60 Hz	106 %

### Summary of Results

#### Spacing Criteria

0-180: 1.80  
90-270: 1.80

#### Total Lumen Output:

180.9 Lumens

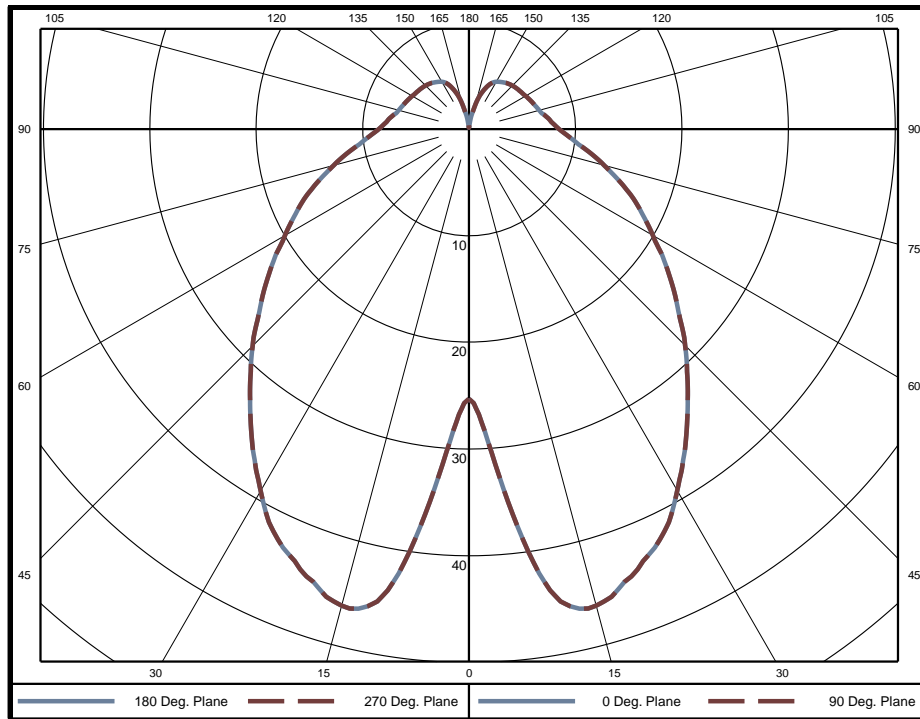
#### Luminaire Efficacy:

61.2 lm/w

#### Maximum Candela:

46 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.70	0.4%	60-65	9.14	5.1%	120-125	2.81	1.6%
5-10	2.81	1.6%	65-70	8.39	4.6%	125-130	2.59	1.4%
10-15	5.43	3.0%	70-75	7.45	4.1%	130-135	2.36	1.3%
15-20	7.50	4.1%	75-80	6.51	3.6%	135-140	2.10	1.2%
20-25	9.13	5.0%	80-85	5.60	3.1%	140-145	1.83	1.0%
25-30	10.35	5.7%	85-90	4.92	2.7%	145-150	1.55	0.9%
30-35	10.99	6.1%	90-95	4.43	2.4%	150-155	1.24	0.7%
35-40	11.25	6.2%	95-100	4.09	2.3%	155-160	0.88	0.5%
40-45	11.23	6.2%	100-105	3.75	2.1%	160-165	0.52	0.3%
45-50	10.94	6.0%	105-110	3.50	1.9%	165-170	0.21	0.1%
50-55	10.48	5.8%	110-115	3.27	1.8%	170-175	0.04	0.0%
55-60	9.84	5.4%	115-120	3.05	1.7%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	58	32.2%
0-60	101	55.6%
0-90	143	78.9%
90-180	38	21.1%



### Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal 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	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30
	5	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68
	10	43.91	43.91	43.91	43.91	43.91	43.91	43.91	43.91	43.91	43.91	43.91	43.91	43.91	43.91	43.91
	15	46.25	46.25	46.25	46.25	46.25	46.25	46.25	46.25	46.25	46.25	46.25	46.25	46.25	46.25	46.25
	20	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64
	25	42.46	42.46	42.46	42.46	42.46	42.46	42.46	42.46	42.46	42.46	42.46	42.46	42.46	42.46	42.46
	30	39.15	39.15	39.15	39.15	39.15	39.15	39.15	39.15	39.15	39.15	39.15	39.15	39.15	39.15	39.15
	35	35.55	35.55	35.55	35.55	35.55	35.55	35.55	35.55	35.55	35.55	35.55	35.55	35.55	35.55	35.55
	40	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
	45	28.73	28.73	28.73	28.73	28.73	28.73	28.73	28.73	28.73	28.73	28.73	28.73	28.73	28.73	28.73
	50	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52
	55	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71
	60	19.96	19.96	19.96	19.96	19.96	19.96	19.96	19.96	19.96	19.96	19.96	19.96	19.96	19.96	19.96
	65	17.69	17.69	17.69	17.69	17.69	17.69	17.69	17.69	17.69	17.69	17.69	17.69	17.69	17.69	17.69
	70	15.41	15.41	15.41	15.41	15.41	15.41	15.41	15.41	15.41	15.41	15.41	15.41	15.41	15.41	15.41
	75	13.15	13.15	13.15	13.15	13.15	13.15	13.15	13.15	13.15	13.15	13.15	13.15	13.15	13.15	13.15
	80	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17
	85	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58
	90	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45
	95	7.76	7.76	7.76	7.76	7.76	7.76	7.76	7.76	7.76	7.76	7.76	7.76	7.76	7.76	7.76
	100	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26
	105	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82
	110	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57
	115	6.36	6.36	6.36	6.36	6.36	6.36	6.36	6.36	6.36	6.36	6.36	6.36	6.36	6.36	6.36
	120	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16	6.16
	125	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01
	130	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89
	135	5.76	5.76	5.76	5.76	5.76	5.76	5.76	5.76	5.76	5.76	5.76	5.76	5.76	5.76	5.76
	140	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59
	145	5.37	5.37	5.37	5.37	5.37	5.37	5.37	5.37	5.37	5.37	5.37	5.37	5.37	5.37	5.37
	150	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12
	155	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62
	160	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
	165	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42
	170	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
	175	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
	180	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13

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

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)			
	0	45	90	
	0	31950	31950	31950
	45	17008	17008	17008
	55	15449	15449	15449
	65	11083	11083	11083
	75	9293	9293	9293
	85	7262	7262	7262



### 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	206	206	206	206	197	197	197	197	180	180	180	164	164	164	149	149	149	143
1	184	175	166	158	176	167	159	151	152	146	140	138	133	129	126	122	118	112
2	167	151	137	126	158	144	132	122	131	122	113	120	112	105	109	103	97	91
3	152	132	116	104	144	126	112	101	115	104	94	105	96	88	96	88	81	76
4	138	116	100	88	131	111	96	85	102	89	80	93	83	75	85	77	70	64
5	127	104	87	75	121	99	84	73	91	78	69	84	73	64	76	68	60	55
6	117	93	77	65	111	89	74	63	82	69	60	76	65	56	69	60	53	48
7	109	84	68	57	103	81	66	56	75	62	53	69	58	50	63	54	47	43
8	101	77	61	51	96	74	59	50	68	56	47	63	52	44	58	49	42	38
9	94	70	55	45	90	68	54	44	63	51	42	58	48	40	54	45	38	34
10	88	65	50	41	84	62	49	40	58	46	38	54	43	36	50	41	34	31

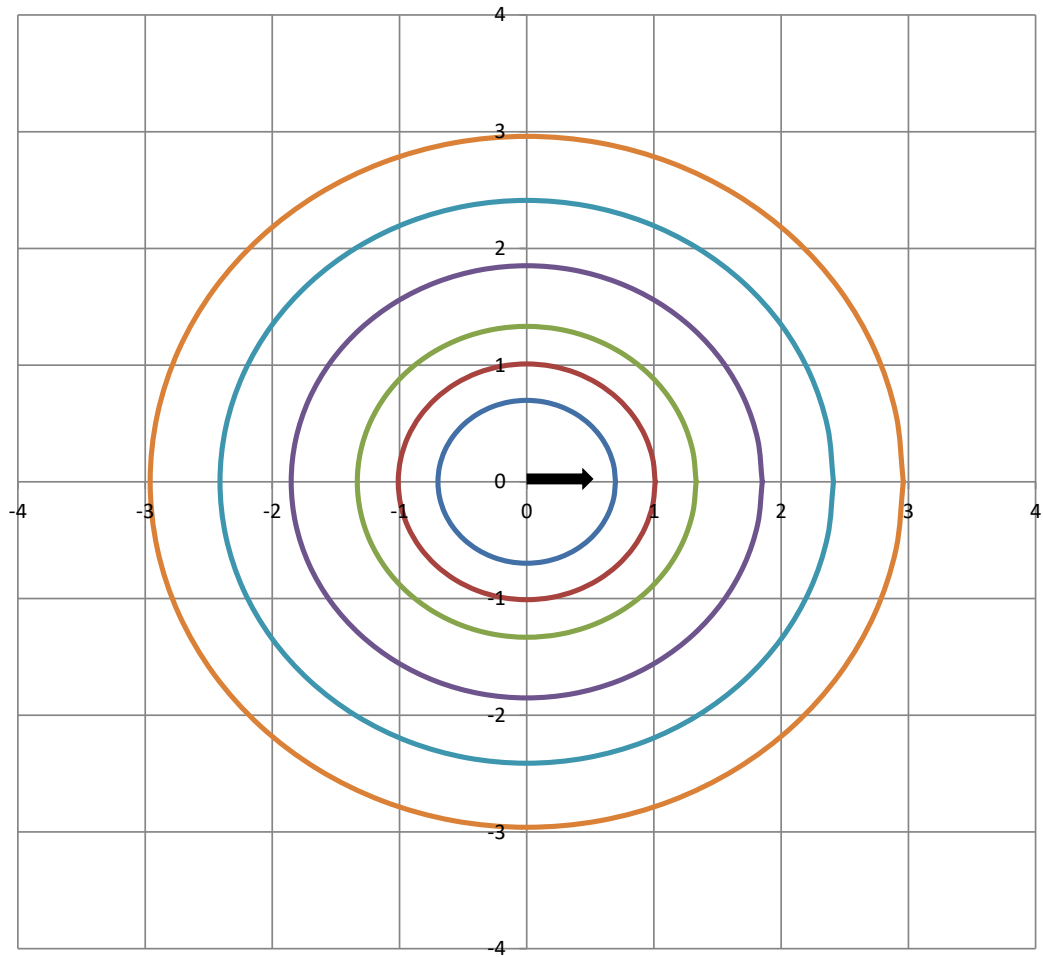
Beam and Field Information	
CIE Type:	Semi-Direct
Center Beam Intensity:	25.30 Candela
Central Cone Intensity:	28 Candela
Beam Flux:	127.3 Lumens
Beam Angle (0-180):	152.6 Degrees
Beam Angle (90-270):	152.6 Degrees
Field Angle (0-180):	329.3 Degrees
Field Angle (90-270):	329.3 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		0.703	10.8
10.0		0.253	18.0
14.0		0.129	25.1
18.0		0.0781	32.3
22.0		0.0523	39.5
26.0		0.0374	46.7
30.0		0.0281	53.9



## ISOFootcandle Plot

Mounting Height - 10 Feet

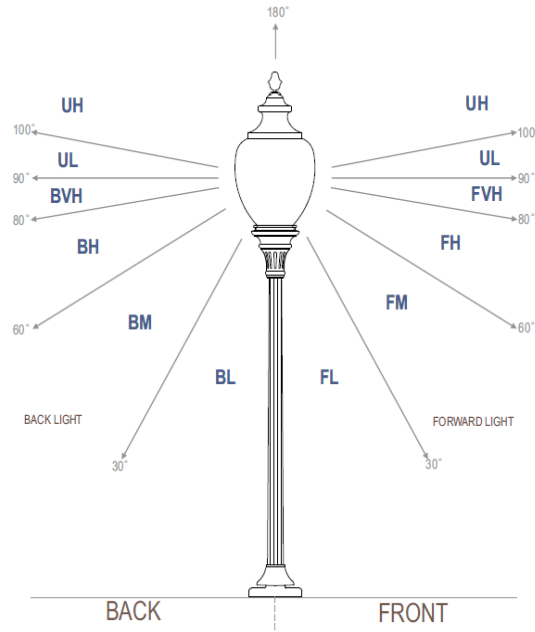


Grid Lines in Units of Mounting Height

— 0.2 fc — 0.1 fc — 0.05 fc — 0.02 fc — 0.01 fc — 0.005 fc



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



**Luminaire Classification System (LCS)**

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	18.0	9.9%
FM	(30-60)	32.4	17.9%
FH	(60-80)	15.7	8.7%
FVH	(80-90)	5.3	2.9%
BL	(0-30)	18.0	9.9%
BM	(30-60)	32.4	17.9%
BH	(60-80)	15.7	8.7%
BVH	(80-90)	5.3	2.9%
UL	(90-100)	8.5	4.7%
UH	(100-180)	29.7	16.4%
Total		180.8	100.0%
<b>BUG Rating</b>	<b>B0 U2 G0</b>		