



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-F7-30 (3000K)**

Order Number  
13551695  
Test Number  
13551695.03

Test Date

2020-10-27

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 frosted 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: Noncutoff  
BUG Rating: B0 U2 G0

#### Test Conditions

Test Temperature: 25.0 °C  
Voltage: 12.06 VAC  
Current: 0.4199 A  
Power: 2.960 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
25.0 °C	12.06 VAC	0.4199 A	2.960 W	0.584	60 Hz	106 %

### Summary of Results

#### Spacing Criteria

0-180: 2.35

90-270: 2.35

Total Lumen Output:

159.2 Lumens

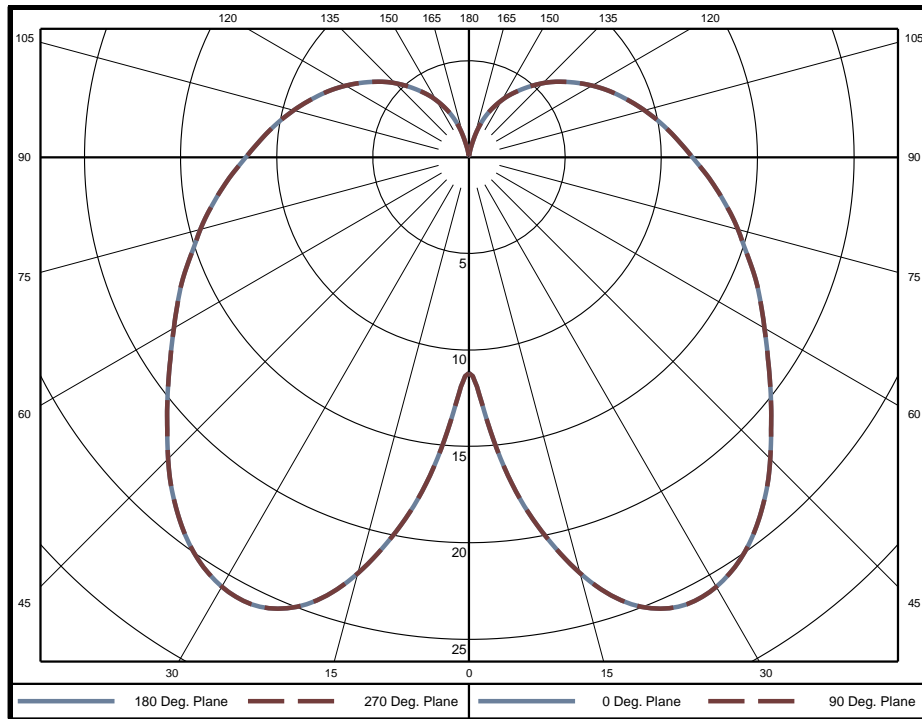
Luminaire Efficacy:

53.8 lm/w

Maximum Candela:

26 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.315	0.2%	60-65	8.338	5.2%	120-125	3.272	2.1%
5-10	1.234	0.8%	65-70	8.125	5.1%	125-130	2.790	1.8%
10-15	2.474	1.6%	70-75	7.812	4.9%	130-135	2.331	1.5%
15-20	3.901	2.5%	75-80	7.476	4.7%	135-140	1.884	1.2%
20-25	5.309	3.3%	80-85	7.062	4.4%	140-145	1.471	0.9%
25-30	6.528	4.1%	85-90	6.599	4.1%	145-150	1.107	0.7%
30-35	7.478	4.7%	90-95	6.137	3.9%	150-155	0.777	0.5%
35-40	8.132	5.1%	95-100	5.694	3.6%	155-160	0.494	0.3%
40-45	8.492	5.3%	100-105	5.230	3.3%	160-165	0.252	0.2%
45-50	8.600	5.4%	105-110	4.747	3.0%	165-170	0.079	0.0%
50-55	8.581	5.4%	110-115	4.259	2.7%	170-175	0.012	0.0%
55-60	8.480	5.3%	115-120	3.769	2.4%	175-180	0.002	0.0%

Zone	Lumens	% of Luminaire
0-40	35	22.2%
0-60	70	43.7%
0-90	115	72.2%
90-180	44	27.8%



### 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	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20
	5	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75
	10	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	15	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35
	20	24.68	24.68	24.68	24.68	24.68	24.68	24.68	24.68	24.68	24.68	24.68	24.68	24.68	24.68	24.68
	25	25.73	25.73	25.73	25.73	25.73	25.73	25.73	25.73	25.73	25.73	25.73	25.73	25.73	25.73	25.73
	30	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72
	35	24.98	24.98	24.98	24.98	24.98	24.98	24.98	24.98	24.98	24.98	24.98	24.98	24.98	24.98	24.98
	40	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71
	45	22.13	22.13	22.13	22.13	22.13	22.13	22.13	22.13	22.13	22.13	22.13	22.13	22.13	22.13	22.13
	50	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49
	55	19.01	19.01	19.01	19.01	19.01	19.01	19.01	19.01	19.01	19.01	19.01	19.01	19.01	19.01	19.01
	60	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72
	65	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60
	70	15.47	15.47	15.47	15.47	15.47	15.47	15.47	15.47	15.47	15.47	15.47	15.47	15.47	15.47	15.47
	75	14.46	14.46	14.46	14.46	14.46	14.46	14.46	14.46	14.46	14.46	14.46	14.46	14.46	14.46	14.46
	80	13.47	13.47	13.47	13.47	13.47	13.47	13.47	13.47	13.47	13.47	13.47	13.47	13.47	13.47	13.47
	85	12.52	12.52	12.52	12.52	12.52	12.52	12.52	12.52	12.52	12.52	12.52	12.52	12.52	12.52	12.52
	90	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60
	95	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83
	100	10.12	10.12	10.12	10.12	10.12	10.12	10.12	10.12	10.12	10.12	10.12	10.12	10.12	10.12	10.12
	105	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
	110	8.74	8.74	8.74	8.74	8.74	8.74	8.74	8.74	8.74	8.74	8.74	8.74	8.74	8.74	8.74
	115	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08
	120	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41
	125	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74
	130	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09
	135	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43
	140	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.74
	145	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07
	150	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41
	155	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71
	160	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
	165	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
	170	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
	175	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	180	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

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

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	14140	14140
	45	5258	5258
	55	4064	4064
	65	3316	3316
	75	2797	2797
	85	2402	2402



### 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	179	179	179	179	170	170	170	170	152	152	152	136	136	136	122	122	122	115
1	157	147	138	130	148	139	131	124	124	118	112	110	105	101	98	94	90	84
2	141	125	112	102	132	118	107	97	105	96	88	93	86	79	82	76	71	65
3	127	108	94	82	119	102	89	78	91	80	71	81	72	65	71	64	58	52
4	115	95	79	68	108	89	76	65	80	68	59	71	61	54	62	55	48	43
5	105	84	68	57	99	79	65	55	71	59	50	63	53	45	55	47	41	36
6	97	74	60	49	91	71	57	47	63	52	43	56	47	39	50	42	35	31
7	89	67	52	42	84	63	50	41	57	46	37	51	41	34	45	37	31	27
8	83	61	47	37	78	57	45	36	52	41	33	46	37	30	41	33	27	23
9	77	55	42	33	72	52	40	31	47	36	29	42	33	27	38	30	24	21
10	72	50	38	29	68	48	36	28	43	33	26	39	30	24	35	27	22	18

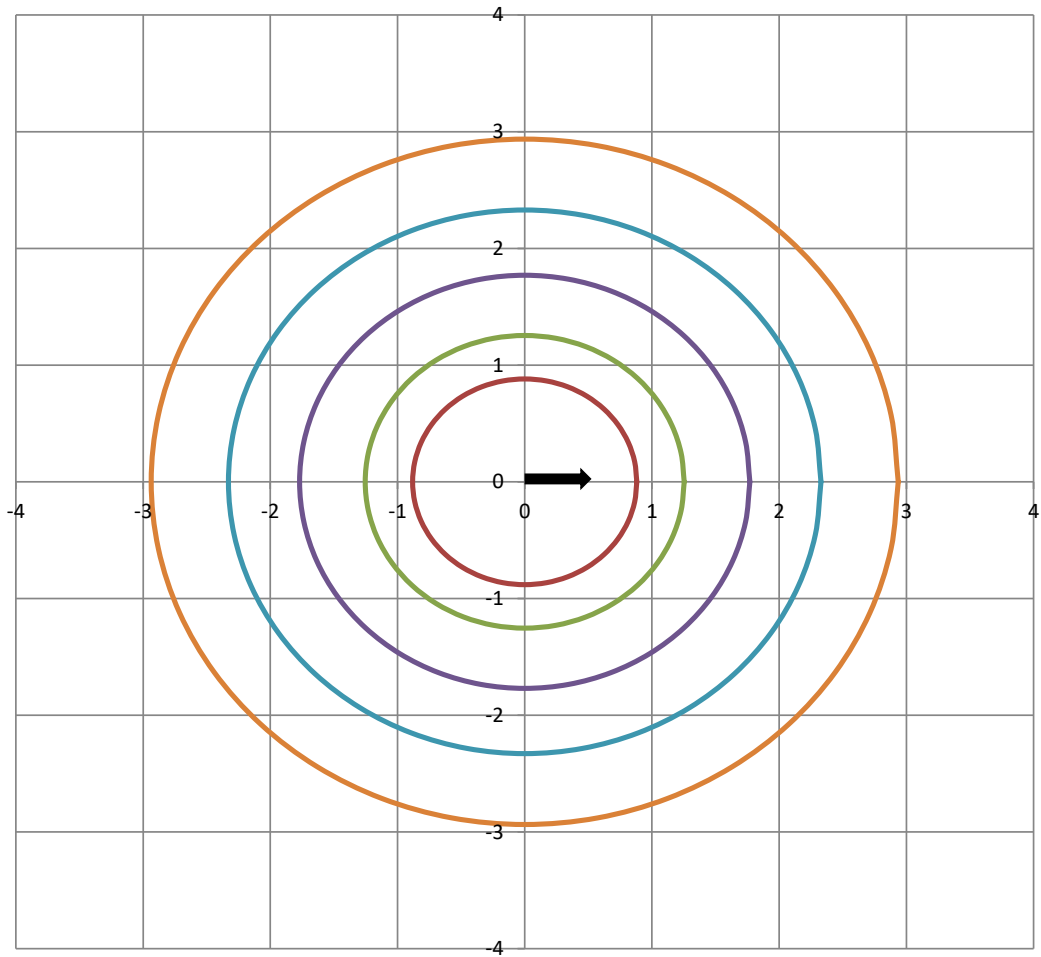
Beam and Field Information	
CIE Type:	Semi-Direct
Center Beam Intensity:	11.20 Candela
Central Cone Intensity:	13 Candela
Beam Flux:	152.6 Lumens
Beam Angle (0-180):	267.5 Degrees
Beam Angle (90-270):	267.5 Degrees
Field Angle (0-180):	329.2 Degrees
Field Angle (90-270):	329.2 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		0.311	14.1
10.0		0.112	23.5
14.0		0.0571	32.9
18.0		0.0346	42.3
22.0		0.0231	51.8
26.0		0.0166	61.2
30.0		0.0124	70.6



## ISOFootcandle Plot

Mounting Height - 10 Feet

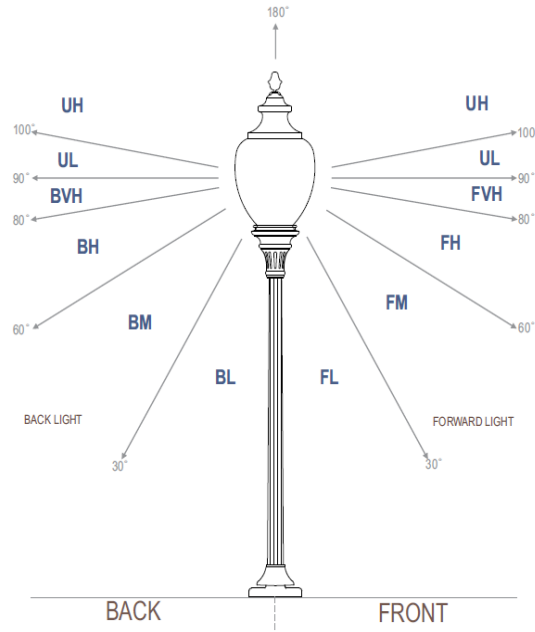


Grid Lines in Units of Mounting Height

— 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)	9.9	6.2%
FM	(30-60)	24.9	15.6%
FH	(60-80)	15.9	10.0%
FVH	(80-90)	6.8	4.3%
BL	(0-30)	9.9	6.2%
BM	(30-60)	24.9	15.6%
BH	(60-80)	15.9	10.0%
BVH	(80-90)	6.8	4.3%
UL	(90-100)	11.8	7.4%
UH	(100-180)	32.5	20.4%
Total		159.2	100.0%
<b>BUG Rating</b>	<b>B0 U2 G0</b>		