



UL Verification Services Inc.  
7036 Snowdrift Road  
Allentown, PA 18106  
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## 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**  
**LMG3-30 (3000K)**

Order Number  
13551695  
Test Number  
13551695.04

Test Date

2020-11-17

Prepared By

Matt Finn, 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 copper stem with 90° cylindrical brass top and glass lens  
**Lamp:** One (1) XP-L 3000K Cree LED  
**Mounting:** Surface – Wall  
**Ballast/Driver:** Integrated

**Luminaire**



**Luminaire Characteristics**

Luminous Length: 2.00 in.  
Luminous Width: 2.250 in.  
Luminous Height: 0.75 in.

**Summary of Results**

Roadway Classification: Type I, Very Short  
Cutoff Classification: Semicutoff  
BUG Rating: B0 U1 G0

**Test Conditions**

Test Temperature: 24.5 °C  
Voltage: 12.02 VAC  
Current: 0.5439 A  
Power: 4.128 W  
Power Factor: 0.632  
Frequency: 60 Hz  
Current THD: 76.5 %

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
24.5 °C	12.02 VAC	0.5439 A	4.128 W	0.632	60 Hz	76.5 %

### Summary of Results

#### Spacing Criteria

0-180: 1.24  
90-270: 1.37

#### Total Lumen Output:

304.4 Lumens

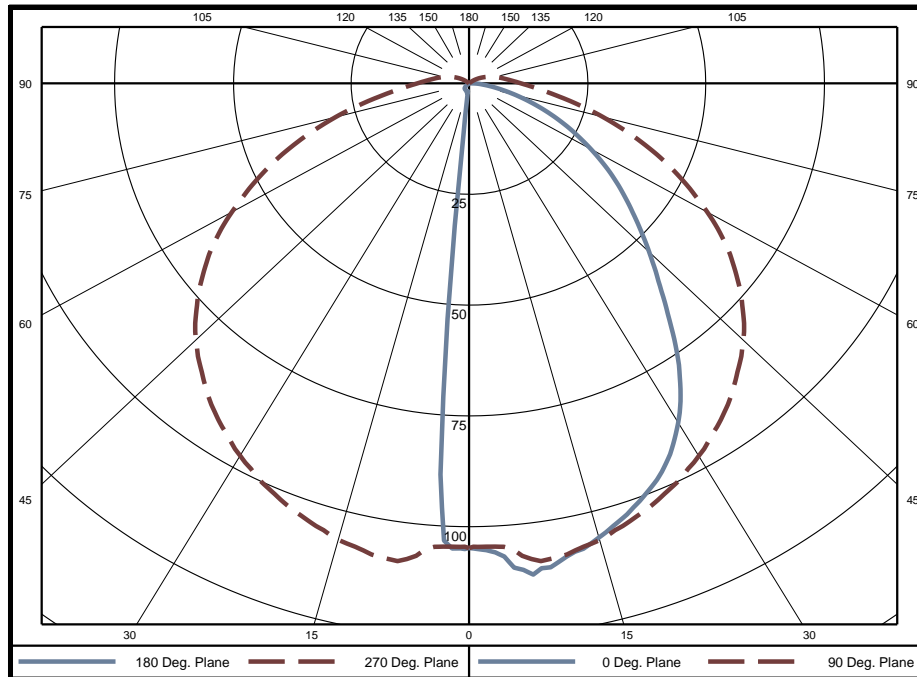
#### Luminaire Efficacy:

73.7 lm/w

#### Maximum Candela:

112 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	2.46	0.8%	60-65	18.94	6.2%	120-125	0.29	0.1%
5-10	6.93	2.3%	65-70	15.91	5.2%	125-130	0.11	0.0%
10-15	11.51	3.8%	70-75	12.61	4.1%	130-135	0.03	0.0%
15-20	15.63	5.1%	75-80	9.45	3.1%	135-140	0.00	0.0%
20-25	19.31	6.3%	80-85	6.69	2.2%	140-145	0	0.0%
25-30	22.41	7.4%	85-90	4.67	1.5%	145-150	0	0.0%
30-35	24.64	8.1%	90-95	3.31	1.1%	150-155	0	0.0%
35-40	25.88	8.5%	95-100	2.43	0.8%	155-160	0	0.0%
40-45	26.01	8.5%	100-105	1.78	0.6%	160-165	0	0.0%
45-50	25.30	8.3%	105-110	1.26	0.4%	165-170	0	0.0%
50-55	23.80	7.8%	110-115	0.85	0.3%	170-175	0	0.0%
55-60	21.68	7.1%	115-120	0.54	0.2%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	129	42.3%
0-60	226	74.1%
0-90	294	96.5%
90-180	11	3.5%



### 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	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8
	5	109.6	109.3	108.4	106.6	105.4	104.8	102.3	76.0	53.3	76.0	102.3	104.8	105.4	106.6	108.4
	10	109.6	109.6	109.5	109.4	108.5	107.1	105.2	77.9	2.1	77.9	105.2	107.1	108.5	109.4	109.5
	15	106.1	106.2	106.8	107.1	106.6	105.1	103.3	80.2	2.0	80.2	103.3	105.1	106.6	107.1	106.8
	20	101.8	102.7	103.8	104.3	103.8	102.3	100.5	79.3	1.8	79.3	100.5	102.3	103.8	104.3	103.8
	25	96.6	98.5	100.6	101.2	100.7	99.6	97.8	77.5	1.7	77.5	97.8	99.6	100.7	101.2	100.6
	30	88.5	92.1	96.1	97.2	96.9	96.1	93.6	73.7	1.7	73.7	93.6	96.1	96.9	97.2	96.1
	35	77.5	83.4	90.8	92.8	92.6	92.0	88.7	68.3	1.6	68.3	88.7	92.0	92.6	92.8	90.8
	40	64.6	71.6	84.0	87.6	87.4	86.6	81.9	59.9	1.5	59.9	81.9	86.6	87.4	87.6	84.0
	45	54.0	60.3	76.3	81.9	81.8	80.7	74.0	50.2	1.2	50.2	74.0	80.7	81.8	81.9	76.3
	50	45.2	50.4	66.7	74.7	75.0	73.2	64.5	41.8	0.7	41.8	64.5	73.2	75.0	74.7	66.7
	55	37.6	42.6	57.0	66.9	67.2	65.2	54.9	34.9	0.2	34.9	54.9	65.2	67.2	66.9	57.0
	60	30.0	35.3	47.1	58.2	58.0	55.8	45.1	28.7	0.0	28.7	45.1	55.8	58.0	58.2	47.1
	65	22.9	28.5	38.3	49.1	48.4	46.2	36.4	23.3	0.0	23.3	36.4	46.2	48.4	49.1	38.3
	70	16.1	22.0	30.1	39.3	38.7	36.5	28.5	18.3	0.0	18.3	28.5	36.5	38.7	39.3	30.1
	75	10.3	16.1	22.8	29.6	29.2	27.5	21.7	13.9	0.0	13.9	21.7	27.5	29.2	29.6	22.8
	80	5.8	11.1	16.5	20.9	20.9	19.8	15.9	9.9	0.0	9.9	15.9	19.8	20.9	20.9	16.5
	85	2.8	7.3	11.5	14.4	14.9	14.0	11.3	6.4	0.0	6.4	11.3	14.0	14.9	14.4	11.5
	90	0.5	4.5	8.1	10.4	11.0	10.4	8.0	4.0	0.0	4.0	8.0	10.4	11.0	10.4	8.1
	95	0.0	2.7	5.8	7.9	8.7	8.0	5.8	2.3	0.0	2.3	5.8	8.0	8.7	7.9	5.8
	100	0.0	1.5	4.2	6.3	7.0	6.4	4.2	1.2	0.0	1.2	4.2	6.4	7.0	6.3	4.2
	105	0.0	0.8	3.0	4.9	5.6	5.0	2.9	0.4	0.0	0.4	2.9	5.0	5.6	4.9	3.0
	110	0.0	0.2	2.0	3.8	4.4	3.8	1.9	0.0	0.0	0.0	1.9	3.8	4.4	3.8	2.0
	115	0.0	0.0	1.2	2.7	3.3	2.7	1.1	0.0	0.0	0.0	1.1	2.7	3.3	2.7	1.2
	120	0.0	0.0	0.6	1.8	2.3	1.8	0.4	0.0	0.0	0.0	0.4	1.8	2.3	1.8	0.6
	125	0.0	0.0	0.1	1.0	1.4	0.8	0.0	0.0	0.0	0.0	0.0	0.8	1.4	1.0	0.1
	130	0.0	0.0	0.0	0.3	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.3	0.0
	135	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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>)

Horizontal Angle (Degrees)

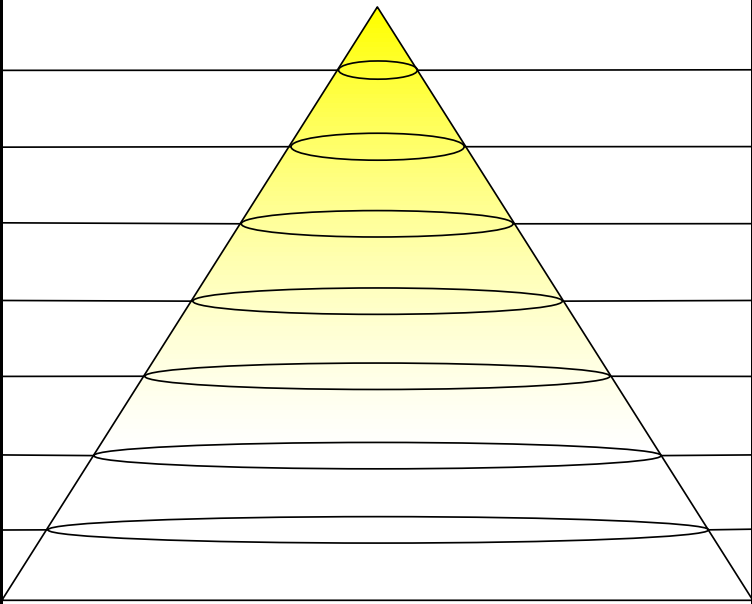
Vertical Angle (Degrees)	0	45	90
	0	36090	36090
	45	19150	24770
	55	14700	19940
	65	10320	15030
	75	5709	10570
	85	2056	6778



### 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	360	360	360	360	350	350	350	350	332	332	332	316	316	316	301	301	301	294
1	326	311	297	284	317	303	290	279	288	277	268	274	265	258	261	254	248	241
2	296	270	248	230	287	263	244	227	251	234	220	239	225	213	228	217	207	200
3	270	237	211	191	261	231	208	189	220	200	184	211	194	179	201	187	175	168
4	247	210	182	162	239	205	179	160	196	174	157	187	169	153	180	163	150	143
5	227	187	159	139	220	183	157	138	175	153	135	168	148	133	162	144	130	124
6	209	168	141	121	203	165	139	120	158	135	118	152	132	116	146	129	115	108
7	194	153	126	107	188	150	124	106	144	121	105	139	118	103	134	115	102	95
8	181	139	113	95	175	137	112	95	132	109	93	127	107	92	123	105	91	85
9	169	128	103	86	164	125	101	85	121	99	84	117	97	83	113	95	82	76
10	158	118	94	78	154	116	93	77	112	91	76	109	89	75	105	87	75	69

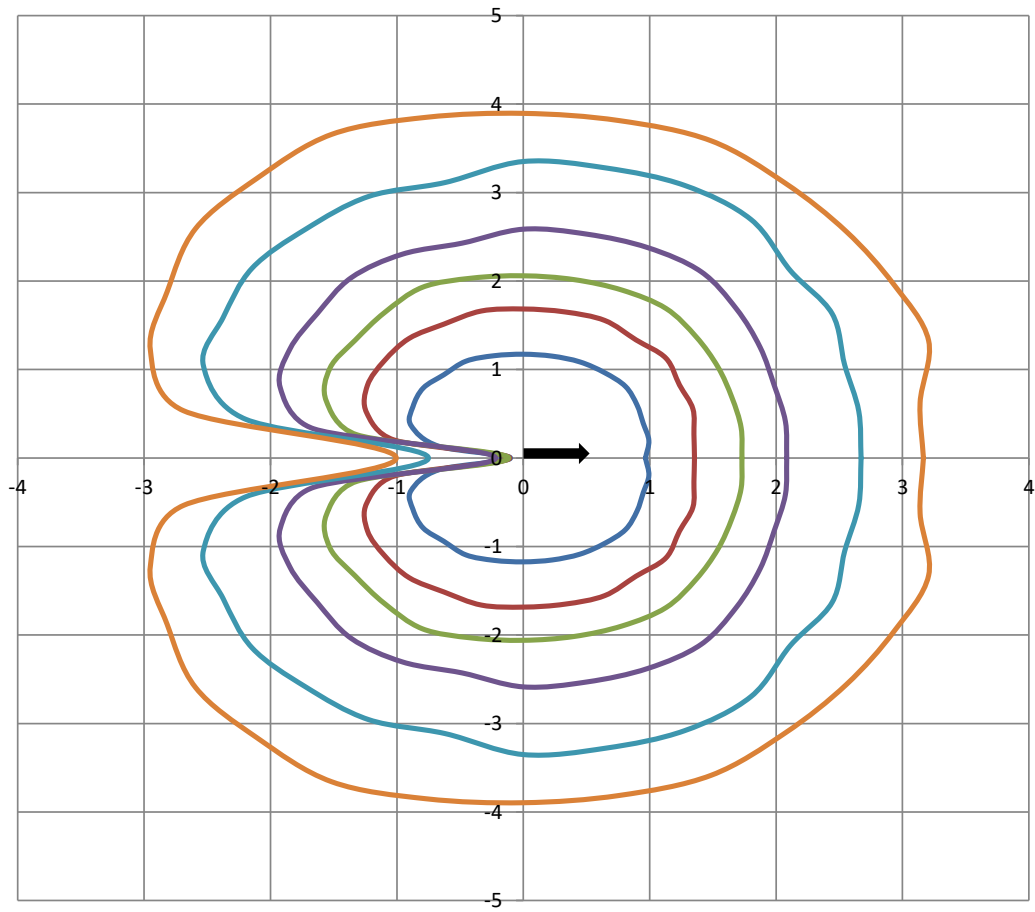
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	104.8 Candela
Central Cone Intensity:	104 Candela
Beam Flux:	211.6 Lumens
Beam Angle (0-180):	50.9 Degrees
Beam Angle (90-270):	125.8 Degrees
Field Angle (0-180):	80.9 Degrees
Field Angle (90-270):	182.0 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		2.91	7.38
10.0		1.05	12.3
14.0		0.535	17.2
18.0		0.323	22.1
22.0		0.216	27.0
26.0		0.155	32.0
30.0		0.116	36.9



## ISOFootcandle Plot

Mounting Height - 2 Feet

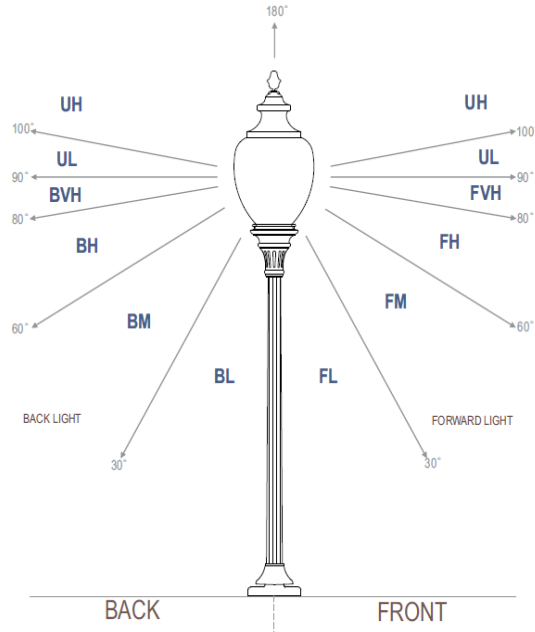


Grid Lines in Units of Mounting Height





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	43.2	14.3%
FM	(30-60)	79.4	26.2%
FH	(60-80)	30.6	10.1%
FVH	(80-90)	5.9	2.0%
BL	(0-30)	34.5	11.4%
BM	(30-60)	67.0	22.1%
BH	(60-80)	26.4	8.7%
BVH	(80-90)	5.5	1.8%
UL	(90-100)	5.7	1.9%
UH	(100-180)	4.9	1.6%
Total		303.2	100.0%
<b>BUG Rating</b>	<b>B0 U1 G0</b>		