



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
LWW-3-30 (3000K)

Order Number
12250114
Test Number
12250114.07

Test Date

2018-04-13

Prepared By

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Approved By

Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Brass housing with brass glare shield, triple light source and adjustable knuckle
Lamp: Three (3) XP-L 4000K LEDs with three (3) acrylic optics
Mounting: Flood
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Length: 2.00 in.
Luminous Width: 4.500 in.
Luminous Height: 1.00 in.

Summary of Results

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

Test Conditions

Test Temperature: 25.3 °C
Voltage: 12.03 VAC
Current: 0.5829 A
Power: 6.936 W
Power Factor: 0.989
Frequency: 60 Hz
Current THD: 8.73 %

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
25.3 °C	12.03 VAC	0.5829 A	6.936 W	0.989	60 Hz	8.73 %

Summary of Results

Spacing Criteria

0-180: 1.29

90-270: 1.22

Total Lumen Output:

249.0 Lumens

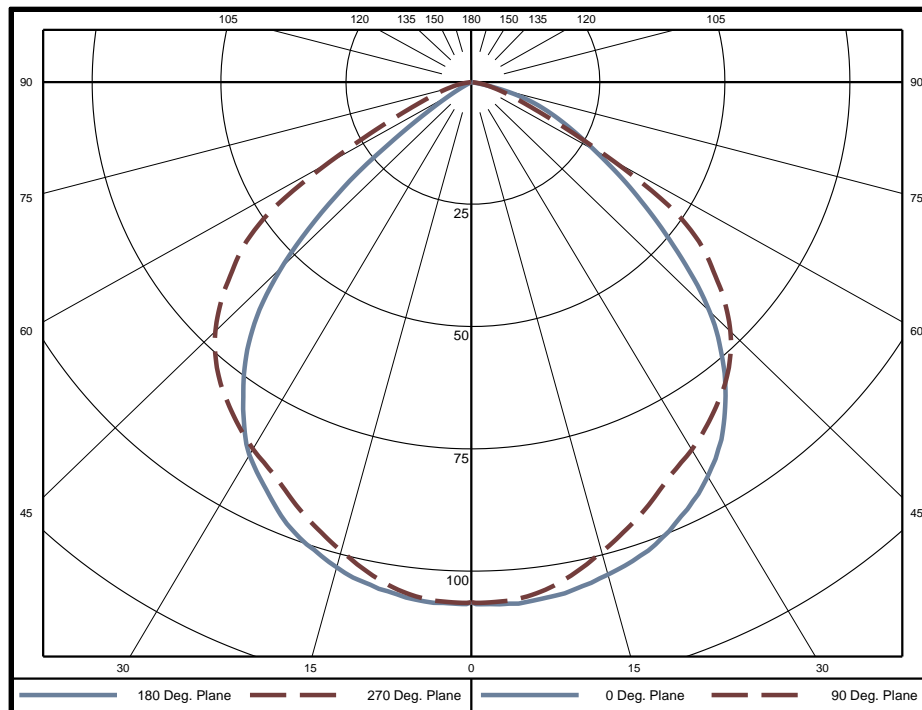
Luminaire Efficacy:

35.9 lm/w

Maximum Candela:

107 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	2.54	1.0%	60-65	11.05	4.4%	120-125	0	0.0%
5-10	7.53	3.0%	65-70	6.90	2.8%	125-130	0	0.0%
10-15	12.19	4.9%	70-75	4.25	1.7%	130-135	0	0.0%
15-20	16.33	6.6%	75-80	2.38	1.0%	135-140	0	0.0%
20-25	19.87	8.0%	80-85	0.92	0.4%	140-145	0	0.0%
25-30	22.79	9.2%	85-90	0.34	0.1%	145-150	0	0.0%
30-35	25.16	10.1%	90-95	0.09	0.0%	150-155	0	0.0%
35-40	26.55	10.7%	95-100	0.00	0.0%	155-160	0	0.0%
40-45	26.74	10.7%	100-105	0	0.0%	160-165	0	0.0%
45-50	25.04	10.1%	105-110	0	0.0%	165-170	0	0.0%
50-55	21.57	8.7%	110-115	0	0.0%	170-175	0	0.0%
55-60	16.78	6.7%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	133	53.4%
0-60	223	89.6%
0-90	249	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	106.4	106.4	106.4	106.4	106.4	106.4	106.4	106.4	106.4	106.4	106.4	106.4	106.4	106.4	106.4
	5	107.1	106.5	106.1	105.7	106.1	105.7	106.0	106.5	106.6	106.5	106.0	105.7	106.1	105.7	106.1
	10	106.2	105.5	104.6	103.6	103.5	103.2	103.8	104.9	105.2	104.9	103.8	103.2	103.5	103.6	104.6
	15	104.3	103.7	101.8	99.9	99.4	98.8	99.9	101.7	102.7	101.7	99.9	98.8	99.4	99.9	101.8
	20	102.0	100.8	97.9	95.8	95.1	94.3	95.5	97.4	99.2	97.4	95.5	94.3	95.1	95.8	97.9
	25	97.9	96.1	93.3	91.1	90.4	89.6	90.2	91.7	93.9	91.7	90.2	89.6	90.4	91.1	93.3
	30	93.2	92.0	89.3	87.8	86.8	85.7	85.6	86.3	87.9	86.3	85.6	85.7	86.8	87.8	89.3
	35	86.6	86.6	84.8	84.2	82.9	81.2	79.9	79.7	78.6	79.7	79.9	81.2	82.9	84.2	84.8
	40	77.7	79.6	79.3	79.5	78.4	75.7	73.4	71.5	67.9	71.5	73.4	75.7	78.4	79.5	79.3
	45	66.5	70.9	72.7	73.1	72.2	68.9	65.8	59.1	52.2	59.1	65.8	68.9	72.2	73.1	72.7
	50	52.0	59.2	64.2	64.8	63.3	60.7	57.1	37.0	31.3	37.0	57.1	60.7	63.3	64.8	64.2
	55	39.1	47.3	54.8	56.3	52.8	51.3	43.1	16.5	10.3	16.5	43.1	51.3	52.8	56.3	54.8
	60	28.3	35.6	46.1	45.2	32.6	31.5	22.6	4.7	1.9	4.7	22.6	31.5	32.6	45.2	46.1
	65	20.5	25.0	38.9	25.7	15.7	13.8	9.5	0.0	0.0	0.0	9.5	13.8	15.7	25.7	38.9
	70	14.2	17.6	30.2	12.1	8.5	6.6	1.7	0.0	0.0	0.0	1.7	6.6	8.5	12.1	30.2
	75	7.1	12.3	20.1	5.8	4.6	3.1	0.0	0.0	0.0	0.0	0.0	3.1	4.6	5.8	20.1
	80	0.3	7.2	10.6	2.0	2.1	0.7	0.0	0.0	0.0	0.0	0.0	0.7	2.1	2.0	10.6
	85	0.0	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
	90	0.0	1.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	95	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	100	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
	105	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
	110	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
	115	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
	120	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
	125	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
	130	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
	135	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
	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/m²)
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	18320	18320
	45	10800	14390
	55	6845	12030
	65	4039	4339
	75	1645	1656
	85	0	1080



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	296	296	296	296	290	290	290	290	277	277	277	265	265	265	254	254	254	249
1	275	265	256	248	269	260	252	244	249	243	237	240	234	229	231	227	223	218
2	253	236	221	208	247	231	217	206	222	211	201	214	205	197	207	199	192	187
3	233	210	192	177	227	206	189	176	199	184	173	192	180	170	186	176	167	162
4	215	188	168	153	209	185	166	152	178	162	150	173	159	148	168	156	146	141
5	198	169	148	133	193	166	147	132	161	144	131	156	141	130	152	139	128	123
6	184	153	132	117	179	151	131	117	146	129	116	142	127	115	138	125	114	109
7	171	139	119	104	167	137	118	104	133	116	103	130	114	102	127	112	102	97
8	159	127	107	93	155	126	106	93	122	105	92	119	103	92	116	102	91	87
9	149	117	97	84	145	115	97	84	113	96	84	110	94	83	108	93	83	78
10	140	108	89	77	136	107	89	76	104	88	76	102	87	76	100	86	75	71

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	106.4 Candela
Central Cone Intensity:	106 Candela
Beam Flux:	198.1 Lumens
Beam Angle (0-180):	94.3 Degrees
Beam Angle (90-270):	109.7 Degrees
Field Angle (0-180):	127.6 Degrees
Field Angle (90-270):	136.0 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		2.96	7.41
10.0		1.06	12.4
14.0		0.543	17.3
18.0		0.328	22.2
22.0		0.220	27.2
26.0		0.157	32.1
30.0		0.118	37.1



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	41.1	16.5%
FM	(30-60)	76.8	30.8%
FH	(60-80)	19.4	7.8%
FVH	(80-90)	1.2	0.5%
BL	(0-30)	40.2	16.1%
BM	(30-60)	64.8	26.0%
BH	(60-80)	5.3	2.1%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.2	0.1%
UH	(100-180)	0.0	0.0%
Total		249.0	100.0%
BUG Rating	B0 U1 G0		