



UL Verification Services Inc.
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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
HSL11-6-W-30 (6W, 40° OPTIC, 3000K)

Order Number
12250114
Test Number
12250114.47

Report Date

2018-05-07

Prepared By

Sean Gregory, Project Handler

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 metal housing, with adjustable knuckle, clear glass lens and internal LED module

Lamp: One (1) Cree XHP 3000K LED with 40°, wide optic

Mounting: Flood

Ballast/Driver: Integrated

Note: This report has been pro-rated using data from report numbers 12250114.48, 12250114.01, 12250114.02, 12250114.03, 12250114.04, 12250114.05, and 12250114.06 to account for differences in color temperature.

Luminaire



Luminaire Characteristics

Luminous Diameter: 1.50 in.
Luminous Height: 1.000 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Full Cutoff
BUG Rating: B1 U0 G0

Test Conditions

Test Temperature: 24.3 °C
Voltage: 12.01 VAC
Current: 0.5349 A
Power: 6.359 W
Power Factor: 0.990
Frequency: 60 Hz
Current THD: 7.14 %

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
24.3 °C	12.01 VAC	0.5349 A	6.359 W	0.990	60 Hz	7.14 %

Summary of Results

Spacing Criteria

0-180: 0.50

90-270: 0.50

Total Lumen Output:

297.0 Lumens

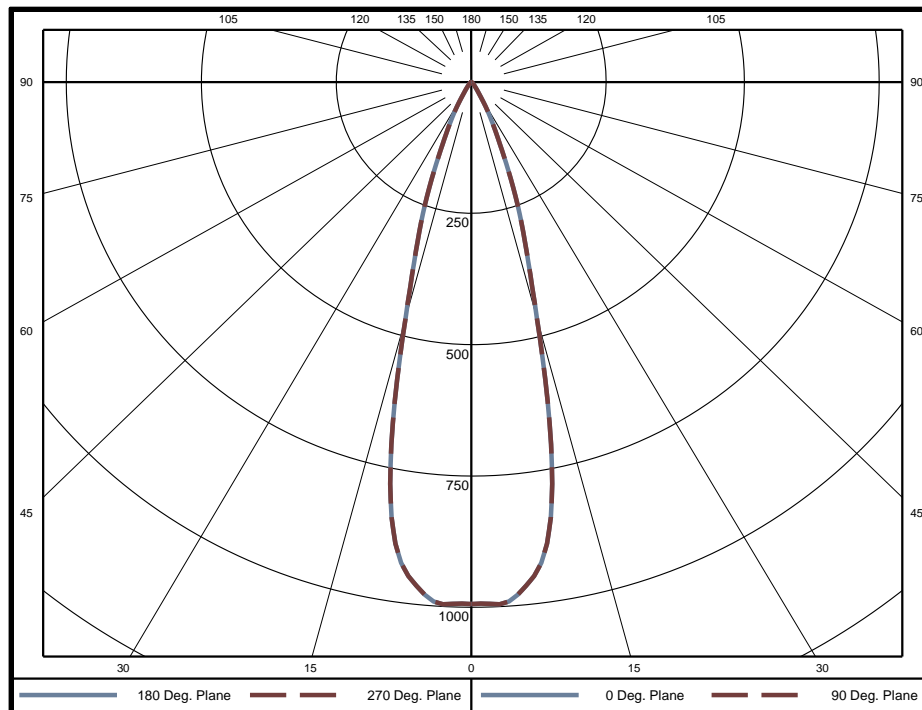
Luminaire Efficacy:

46.7 lm/w

Maximum Candela:

996 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	23.69	8.0%	60-65	0.38	0.1%	120-125	0	0.0%
5-10	65.84	22.2%	65-70	0.16	0.1%	125-130	0	0.0%
10-15	76.93	25.9%	70-75	0.02	0.0%	130-135	0	0.0%
15-20	55.99	18.9%	75-80	0	0.0%	135-140	0	0.0%
20-25	35.46	11.9%	80-85	0	0.0%	140-145	0	0.0%
25-30	19.17	6.5%	85-90	0	0.0%	145-150	0	0.0%
30-35	8.60	2.9%	90-95	0	0.0%	150-155	0	0.0%
35-40	4.37	1.5%	95-100	0	0.0%	155-160	0	0.0%
40-45	2.71	0.9%	100-105	0	0.0%	160-165	0	0.0%
45-50	1.80	0.6%	105-110	0	0.0%	165-170	0	0.0%
50-55	1.17	0.4%	110-115	0	0.0%	170-175	0.00	0.0%
55-60	0.69	0.2%	115-120	0	0.0%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	290	97.7%
0-60	296	99.8%
0-90	297	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	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8
	5	979.6	979.6	979.6	979.6	979.6	979.6	979.6	979.6	979.6	979.6	979.6	979.6	979.6	979.6	979.6
	10	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6
	15	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8
	20	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7
	25	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1
	30	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6
	35	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
	40	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
	45	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	50	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	55	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	60	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	65	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	70	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	75	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
	80	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
	85	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
	90	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
	95	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
	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	871700	871700
	45	6989	6989
	55	3082	3082
	65	1062	1062
	75	0	0
	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	354	354	354	354	345	345	345	345	330	330	330	316	316	316	303	303	303	297
1	341	334	329	323	334	328	323	318	316	312	308	305	302	299	295	293	291	286
2	329	318	308	301	323	313	304	297	304	297	291	295	290	285	287	283	279	275
3	318	303	292	283	312	299	289	281	292	283	276	285	278	272	279	273	268	264
4	307	290	278	268	302	287	276	267	281	272	264	276	268	261	270	264	258	254
5	297	279	266	256	293	276	264	255	271	261	253	267	258	251	263	255	249	245
6	288	268	255	246	284	266	254	245	262	251	243	258	249	242	255	247	240	237
7	279	258	245	236	275	257	244	236	253	242	234	250	241	233	247	239	232	229
8	270	250	237	228	267	248	236	227	245	234	226	243	233	226	240	231	225	222
9	263	242	229	220	260	240	228	220	238	227	219	236	226	218	234	224	218	215
10	255	234	221	213	253	233	221	213	231	220	212	229	219	212	227	218	211	208

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	993.8 Candela
Central Cone Intensity:	992 Candela
Beam Flux:	160.3 Lumens
Beam Angle (0-180):	29.2 Degrees
Beam Angle (90-270):	29.2 Degrees
Field Angle (0-180):	51.4 Degrees
Field Angle (90-270):	51.4 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		27.6	2.99
10.0		9.94	4.98
14.0		5.07	6.97
18.0		3.07	8.96
22.0		2.05	10.9
26.0		1.47	12.9
30.0		1.10	14.9



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	138.7	46.8%
FM	(30-60)	9.4	3.2%
FH	(60-80)	0.0	0.0%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	138.7	46.8%
BM	(30-60)	9.4	3.2%
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		296.2	100.0%
BUG Rating	B1 U0 G0		