



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
LWL3-6-WF-30 (6W, 50° OPTIC, 3000K)

Order Number
13551695
Test Number
13551695.16

Test Date

2020-10-27

Prepared By

Javier Caban, Technician

Approved By

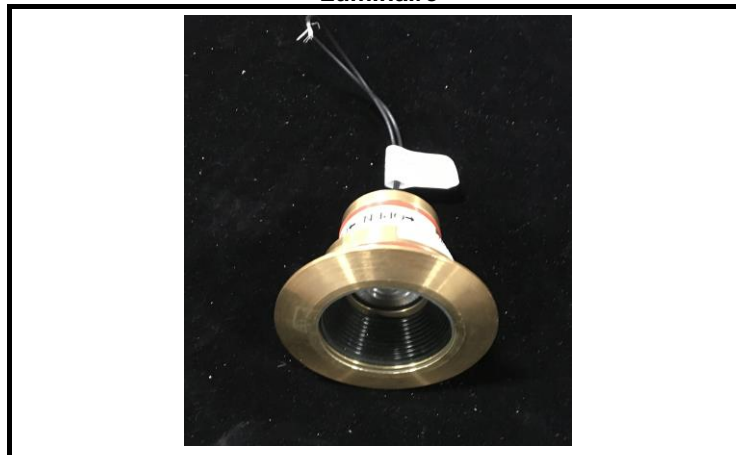
Alexa Lambert, Project Handler

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Luminaire Description: Cylindrical brass housing with circular brass faceplate and clear lens
Lamp: One (1) MHDE 3000K Cree LED
Mounting: Recessed
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Diameter: 2.00 in.

Summary of Results

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

Test Conditions

Test Temperature: 25.1 °C
Voltage: 11.98 VAC
Current: 0.4613 A
Power: 5.520 W
Power Factor: 0.999
Frequency: 60 Hz
Current THD: 4.51 %

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
25.1 °C	11.98 VAC	0.4613 A	5.520 W	0.999	60 Hz	4.51 %

Summary of Results

Spacing Criteria

0-180: 0.88
90-270: 0.88

Total Lumen Output:

389.4 Lumens

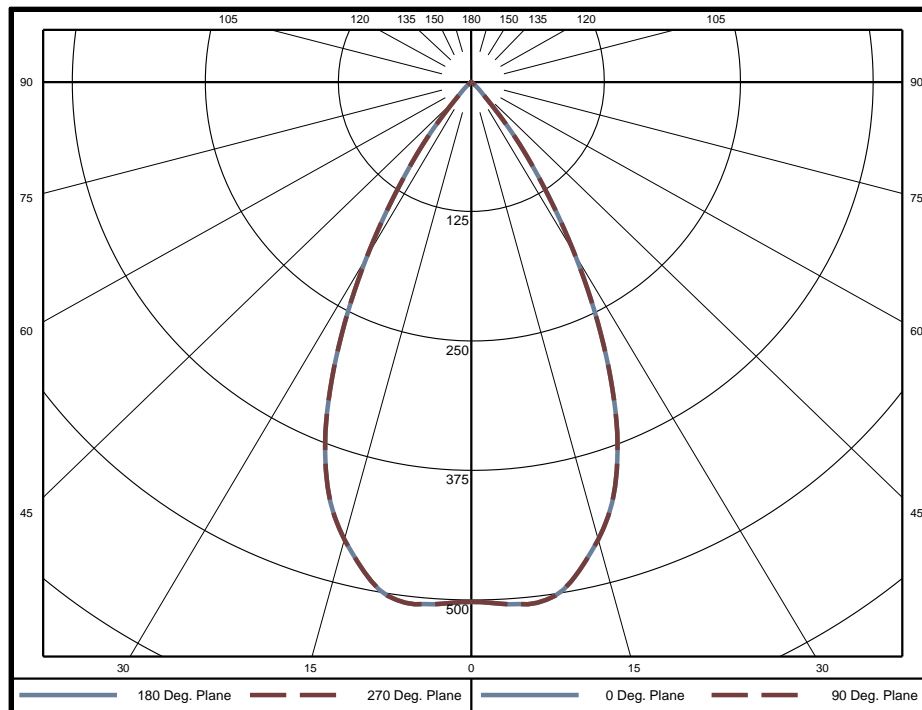
Luminaire Efficacy:

70.5 lm/w

Maximum Candela:

507 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	12.06	3.1%	60-65	0.11	0.0%	120-125	0	0.0%
5-10	36.06	9.3%	65-70	0.02	0.0%	125-130	0	0.0%
10-15	56.62	14.5%	70-75	0	0.0%	130-135	0	0.0%
15-20	70.81	18.2%	75-80	0	0.0%	135-140	0	0.0%
20-25	73.83	19.0%	80-85	0	0.0%	140-145	0	0.0%
25-30	62.99	16.2%	85-90	0	0.0%	145-150	0	0.0%
30-35	43.24	11.1%	90-95	0	0.0%	150-155	0	0.0%
35-40	22.62	5.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	7.24	1.9%	100-105	0	0.0%	160-165	0	0.0%
45-50	2.73	0.7%	105-110	0	0.0%	165-170	0	0.0%
50-55	0.77	0.2%	110-115	0	0.0%	170-175	0	0.0%
55-60	0.26	0.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	378	97.1%
0-60	389	100.0%
0-90	389	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	501.9	501.9	501.9	501.9	501.9	501.9	501.9	501.9	501.9	501.9	501.9	501.9	501.9	501.9	501.9
	5	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9	505.9
	10	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5
	15	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
	20	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2
	25	304.1	304.1	304.1	304.1	304.1	304.1	304.1	304.1	304.1	304.1	304.1	304.1	304.1	304.1	304.1
	30	196.9	196.9	196.9	196.9	196.9	196.9	196.9	196.9	196.9	196.9	196.9	196.9	196.9	196.9	196.9
	35	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3
	40	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
	45	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
	50	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	55	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
	60	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	65	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
	70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	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	247600	247600
	45	7710	7710
	55	735	735
	65	149	149
	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	464	464	464	464	453	453	453	453	433	433	433	414	414	414	397	397	397	389
1	444	433	424	416	434	425	417	410	409	403	397	395	390	385	382	378	374	367
2	424	406	391	379	415	399	386	375	387	376	367	375	366	359	365	358	351	345
3	404	381	363	349	397	376	359	346	366	352	340	356	345	335	348	338	330	324
4	386	358	338	323	379	354	335	321	346	330	317	338	325	314	331	320	310	305
5	368	338	317	301	362	334	314	300	327	310	297	321	306	294	315	302	292	287
6	351	319	297	282	346	316	296	281	310	292	279	305	289	277	300	286	275	270
7	335	302	280	264	330	299	278	264	294	276	262	290	273	261	285	271	260	255
8	320	286	264	249	316	284	263	249	279	261	248	276	259	247	272	257	245	241
9	306	271	250	235	302	269	249	235	266	247	234	262	245	233	259	244	232	228
10	293	258	237	223	289	256	236	222	253	234	222	250	233	221	247	232	220	216

Beam and Field Information

CIE Type:	Direct
Center Beam Intensity:	501.9 Candela
Central Cone Intensity:	504 Candela
Beam Flux:	282.3 Lumens
Beam Angle (0-180):	54.9 Degrees
Beam Angle (90-270):	54.9 Degrees
Field Angle (0-180):	77.6 Degrees
Field Angle (90-270):	77.6 Degrees

Cone of Light Tabulation

Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		13.9	5.30
10.0		5.02	8.84
14.0		2.56	12.4
18.0		1.55	15.9
22.0		1.04	19.4
26.0		0.742	23.0
30.0		0.558	26.5



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	156.1	40.1%
FM	(30-60)	38.5	9.9%
FH	(60-80)	0.1	0.0%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	156.1	40.1%
BM	(30-60)	38.5	9.9%
BH	(60-80)	0.1	0.0%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		389.4	100.0%
BUG Rating	B1 U0 G0		