



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-SF-30 (6W, 60° OPTIC, 3000K)

Order Number
13551695
Test Number
13551695.17

Test Date

2020-10-28

Prepared By

Javier Caban, Technician

Approved By

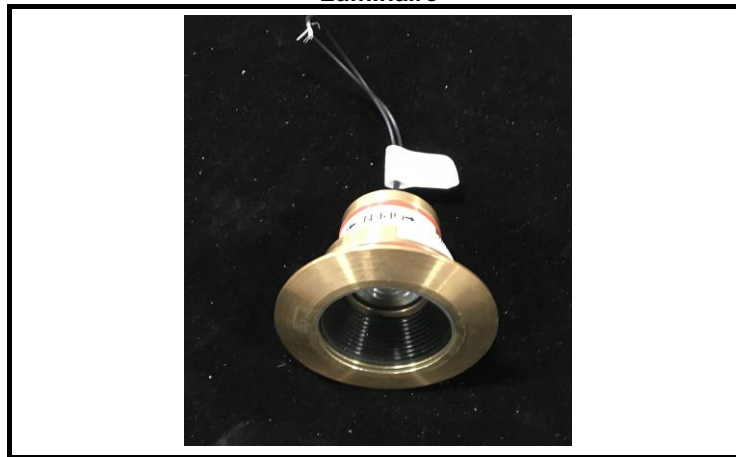
Alexa Lambert, Project Handler

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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: 24.8 °C
Voltage: 12.07 VAC
Current: 0.4642 A
Power: 5.595 W
Power Factor: 0.999
Frequency: 60 Hz
Current THD: 4.39 %

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
24.8 °C	12.07 VAC	0.4642 A	5.595 W	0.999	60 Hz	4.39 %

Summary of Results

Spacing Criteria

0-180: 1.05
90-270: 1.05

Total Lumen Output:

346.0 Lumens

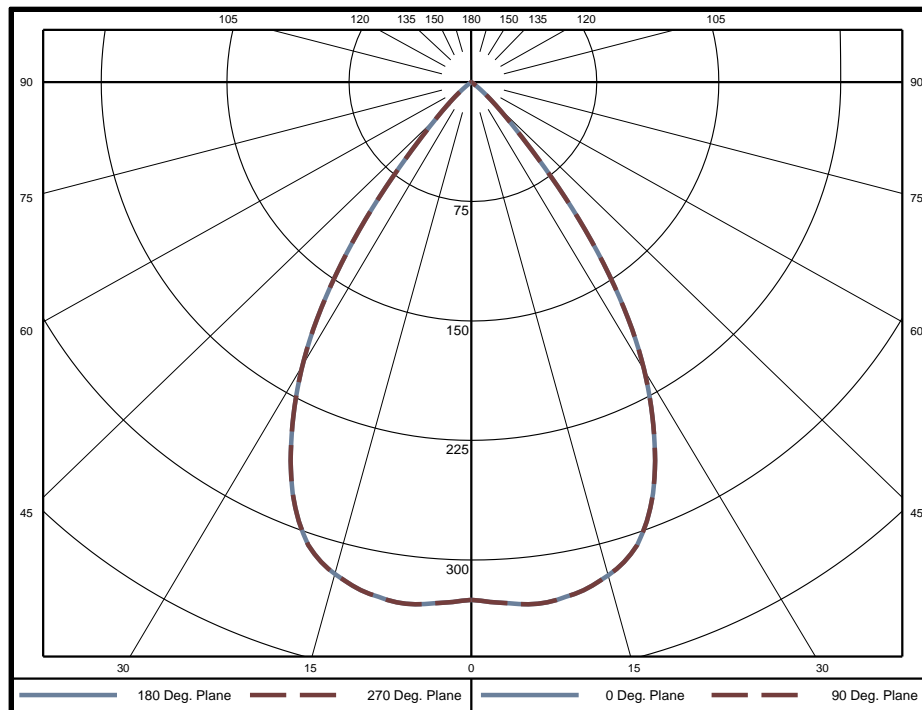
Luminaire Efficacy:

61.8 lm/w

Maximum Candela:

330 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	7.83	2.3%	60-65	0.01	0.0%	120-125	0	0.0%
5-10	23.57	6.8%	65-70	0	0.0%	125-130	0	0.0%
10-15	38.52	11.1%	70-75	0	0.0%	130-135	0	0.0%
15-20	51.46	14.9%	75-80	0	0.0%	135-140	0	0.0%
20-25	59.34	17.2%	80-85	0	0.0%	140-145	0	0.0%
25-30	59.57	17.2%	85-90	0	0.0%	145-150	0	0.0%
30-35	51.36	14.8%	90-95	0	0.0%	150-155	0	0.0%
35-40	33.13	9.6%	95-100	0	0.0%	155-160	0	0.0%
40-45	14.34	4.1%	100-105	0	0.0%	160-165	0	0.0%
45-50	5.51	1.6%	105-110	0	0.0%	165-170	0	0.0%
50-55	1.18	0.3%	110-115	0	0.0%	170-175	0	0.0%
55-60	0.16	0.0%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	325	93.9%
0-60	346	100.0%
0-90	346	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	325.1	325.1	325.1	325.1	325.1	325.1	325.1	325.1	325.1	325.1	325.1	325.1	325.1	325.1	325.1
	5	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0
	10	328.1	328.1	328.1	328.1	328.1	328.1	328.1	328.1	328.1	328.1	328.1	328.1	328.1	328.1	328.1
	15	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3
	20	301.6	301.6	301.6	301.6	301.6	301.6	301.6	301.6	301.6	301.6	301.6	301.6	301.6	301.6	301.6
	25	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3
	30	208.5	208.5	208.5	208.5	208.5	208.5	208.5	208.5	208.5	208.5	208.5	208.5	208.5	208.5	208.5
	35	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0
	40	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2
	45	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
	50	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
	55	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	60	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
	65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	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	160400	160400
	45	15890	15890
	55	563	563
	65	0	0
	75	0	0
	85	0	0



Utilization of Lumens - Zonal Cavity Method

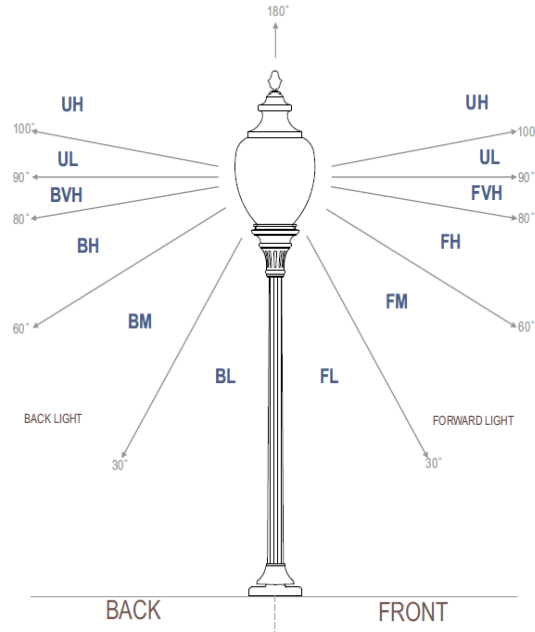
Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	412	412	412	412	402	402	402	402	384	384	384	368	368	368	353	353	353	346
1	393	383	375	367	384	376	368	361	362	356	350	349	344	339	337	333	330	324
2	373	356	342	331	366	350	338	327	339	329	320	329	320	313	319	313	306	301
3	354	332	315	301	347	327	311	299	318	305	294	310	299	289	302	293	285	279
4	336	310	291	276	330	306	288	274	298	283	271	291	278	268	285	274	265	259
5	319	289	269	254	313	286	267	253	280	263	251	274	260	248	269	256	246	241
6	302	271	250	235	297	268	249	234	263	246	233	258	243	231	254	240	230	225
7	287	254	233	218	282	252	232	218	247	230	217	243	227	215	239	225	214	209
8	272	239	218	204	268	237	217	203	233	215	202	230	213	201	226	211	200	196
9	259	225	204	190	255	223	203	190	220	202	189	217	200	189	214	199	188	183
10	246	212	192	178	243	211	191	178	208	190	177	205	189	177	203	187	176	172

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	325.1 Candela
Central Cone Intensity:	327 Candela
Beam Flux:	277.2 Lumens
Beam Angle (0-180):	66.9 Degrees
Beam Angle (90-270):	66.9 Degrees
Field Angle (0-180):	86.3 Degrees
Field Angle (90-270):	86.3 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		9.03	6.30
10.0		3.25	10.5
14.0		1.66	14.7
18.0		1.00	18.9
22.0		0.672	23.1
26.0		0.481	27.3
30.0		0.361	31.5



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	120.3	34.7%
FM	(30-60)	53.0	15.3%
FH	(60-80)	0.0	0.0%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	120.3	34.7%
BM	(30-60)	53.0	15.3%
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		346.5	100.0%
BUG Rating	B1 U0 G0		