



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
H20-P-UF-30 (Ultra Flood Optic, 3000K)

Order Number
11912334
Test Number
11912334.04

Test Date

2017-08-16

Prepared By

Alexa Lambert, Project Handler

Approved By

Carissa Samonte-cam, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Cylindrical brass housing with clear glass lens.
Lamp: One white LED
Mounting: Recessed
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Diameter: 1.25 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Full Cutoff
BUG Rating: B0 U0 G0

Test Conditions

Test Temperature: 25.7 °C
Voltage: 11.85 VAC
Current: 0.3737 A
Power: 4.347 W
Power Factor: 0.981
Frequency: 60 Hz
Current THD: 10.3 %

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
25.7 °C	11.85 VAC	0.3737 A	4.347 W	0.981	60 Hz	10.3 %

Summary of Results

Spacing Criteria

0-180: 1.20

90-270: 1.20

Total Lumen Output:

298.0 Lumens

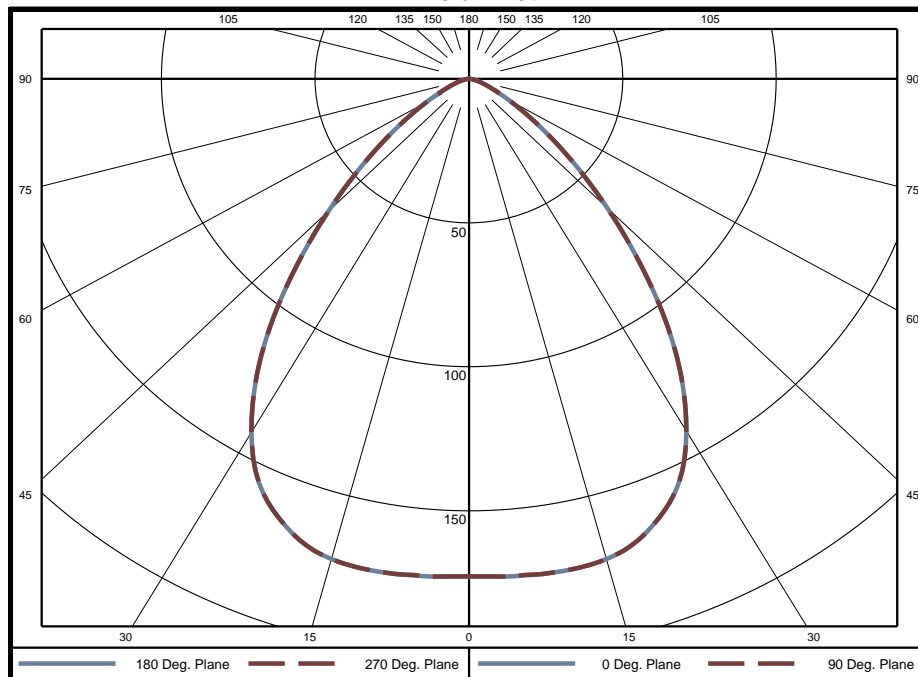
Luminaire Efficacy:

68.6 lm/w

Maximum Candela:

174 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	4.14	1.4%	60-65	5.77	1.9%	120-125	0	0.0%
5-10	12.41	4.2%	65-70	3.44	1.2%	125-130	0	0.0%
10-15	20.55	6.9%	70-75	2.08	0.7%	130-135	0	0.0%
15-20	28.12	9.4%	75-80	1.19	0.4%	135-140	0	0.0%
20-25	34.28	11.5%	80-85	0.53	0.2%	140-145	0.00	0.0%
25-30	38.11	12.8%	85-90	0.08	0.0%	145-150	0.00	0.0%
30-35	38.29	12.8%	90-95	0	0.0%	150-155	0.00	0.0%
35-40	34.79	11.7%	95-100	0	0.0%	155-160	0.00	0.0%
40-45	28.45	9.5%	100-105	0	0.0%	160-165	0.00	0.0%
45-50	21.35	7.2%	105-110	0	0.0%	165-170	0.00	0.0%
50-55	14.83	5.0%	110-115	0	0.0%	170-175	0.00	0.0%
55-60	9.54	3.2%	115-120	0	0.0%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	211	70.7%
0-60	285	95.6%
0-90	298	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	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7
	5	173.3	173.3	173.3	173.3	173.3	173.3	173.3	173.3	173.3	173.3	173.3	173.3	173.3	173.3	173.3
	10	173.6	173.6	173.6	173.6	173.6	173.6	173.6	173.6	173.6	173.6	173.6	173.6	173.6	173.6	173.6
	15	172.6	172.6	172.6	172.6	172.6	172.6	172.6	172.6	172.6	172.6	172.6	172.6	172.6	172.6	172.6
	20	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9
	25	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6
	30	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6
	35	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2
	40	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
	45	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2
	50	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
	55	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
	60	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6
	65	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
	70	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	75	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	3.0
	80	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	85	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
	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)

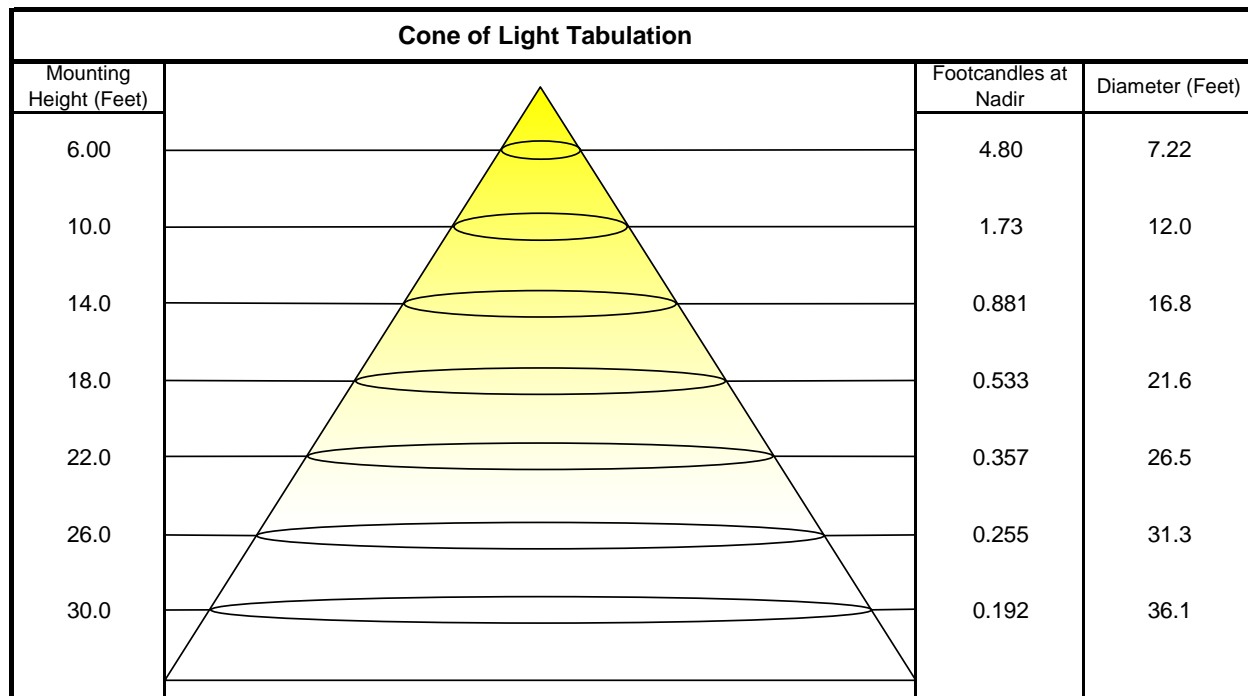
Vertical Angle (Degrees)		0	45	90
	0	218100	218100	218100
	45	114700	114700	114700
	55	58490	58490	58490
	65	26370	26370	26370
	75	14520	14520	14520
	85	6596	6596	6596



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	355	355	355	355	346	346	346	346	331	331	331	317	317	317	304	304	304	298
1	334	323	314	306	326	317	309	301	305	298	292	293	288	283	283	279	275	269
2	312	293	278	266	305	288	274	263	278	267	257	269	259	251	260	253	246	240
3	291	267	248	233	284	262	245	231	254	239	227	246	234	224	239	229	220	215
4	271	243	222	207	265	239	220	205	232	216	203	226	212	200	220	208	198	192
5	253	222	201	185	248	219	199	184	213	196	182	208	192	180	203	189	179	173
6	237	204	182	166	232	201	181	166	197	178	164	192	176	163	188	173	162	157
7	222	188	166	151	217	186	165	150	182	163	149	178	161	148	174	159	148	142
8	208	174	152	137	204	172	151	137	168	150	136	165	148	136	162	146	135	130
9	196	161	140	126	192	160	139	126	157	138	125	154	137	125	151	135	124	119
10	185	150	130	116	181	149	129	116	146	128	115	143	127	115	141	126	114	110

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	172.7 Candela
Central Cone Intensity:	173 Candela
Beam Flux:	215.4 Lumens
Beam Angle (0-180):	81.5 Degrees
Beam Angle (90-270):	81.5 Degrees
Field Angle (0-180):	118.1 Degrees
Field Angle (90-270):	118.1 Degrees





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	68.9	23.1%
FM	(30-60)	73.7	24.7%
FH	(60-80)	6.3	2.1%
FVH	(80-90)	0.3	0.1%
BL	(0-30)	68.9	23.1%
BM	(30-60)	73.7	24.7%
BH	(60-80)	6.3	2.1%
BVH	(80-90)	0.3	0.1%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		298.4	100.0%
BUG Rating	B0 U0 G0		