



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

LDM3-180-30

Order Number

12790877

Test Number

12790877.19A

Revision of Test Number 12790877.19 on:

2021-06-16

Test Date

2019-04-05

Prepared By

Jesse Litchfield, Technician

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 brass housing with circular brass dome w/ 180° cutaway, clear glass lens and PVC sleeve
Lamp: One (1) Cree XP-L 3000K LED with 25° medium silicone optic
Mounting: Recessed

Luminaire



Luminaire Characteristics

Luminous Diameter: 1.50 in.
Luminous Height: 0.500 in.

Summary of Results

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

Test Conditions

Test Temperature: 24.7 °C
Voltage: 12.04 VAC
Current: 0.4027 A
Power: 3.039 W
Power Factor: 0.627
Frequency: 60 Hz
Current THD: 89.6 %

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
24.7 °C	12.04 VAC	0.4027 A	3.039 W	0.627	60 Hz	89.6 %

Summary of Results

Spacing Criteria

0-180: 45.63

90-270: 31.10

Total Lumen Output:

17.36 Lumens

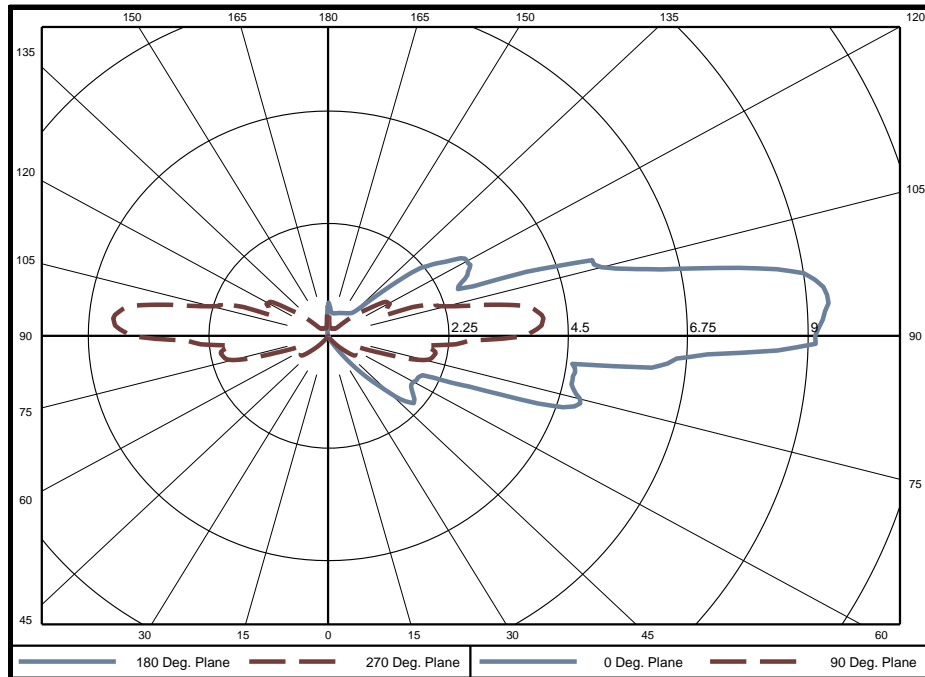
Luminaire Efficacy:

5.7 lm/w

Maximum Candela:

9 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.000	0.0%	60-65	0.361	2.1%	120-125	0.596	3.4%
5-10	0.000	0.0%	65-70	0.483	2.8%	125-130	0.413	2.4%
10-15	0.000	0.0%	70-75	0.948	5.5%	130-135	0.180	1.0%
15-20	0.000	0.0%	75-80	1.120	6.5%	135-140	0.090	0.5%
20-25	0.001	0.0%	80-85	1.192	6.9%	140-145	0.075	0.4%
25-30	0.009	0.1%	85-90	1.854	10.7%	145-150	0.062	0.4%
30-35	0.035	0.2%	90-95	2.311	13.3%	150-155	0.050	0.3%
35-40	0.093	0.5%	95-100	2.182	12.6%	155-160	0.039	0.2%
40-45	0.185	1.1%	100-105	1.550	8.9%	160-165	0.030	0.2%
45-50	0.299	1.7%	105-110	1.115	6.4%	165-170	0.021	0.1%
50-55	0.357	2.1%	110-115	0.659	3.8%	170-175	0.015	0.1%
55-60	0.354	2.0%	115-120	0.674	3.9%	175-180	0.009	0.1%

Zone	Lumens	% of Luminaire
0-40	0	0.8%
0-60	1	7.7%
0-90	7	42.0%
90-180	10	58.0%



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	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	5	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	10	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	15	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	20	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	25	0.071	0.023	0.029	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.029	0.023
	30	0.196	0.157	0.177	0.095	0.008	0.000	0.000	0.004	0.000	0.000	0.000	0.008	0.095	0.177	0.157
	35	0.464	0.429	0.441	0.287	0.067	0.000	0.000	0.004	0.000	0.000	0.000	0.067	0.287	0.441	0.429
	40	0.964	0.905	0.863	0.623	0.187	0.012	0.000	0.002	0.000	0.000	0.012	0.187	0.623	0.863	0.905
	45	1.573	1.441	1.290	1.023	0.365	0.037	0.000	0.000	0.001	0.000	0.037	0.365	1.023	1.290	1.441
	50	2.096	1.879	1.651	1.381	0.584	0.072	0.000	0.000	0.001	0.000	0.072	0.584	1.381	1.651	1.879
	55	1.922	1.781	1.557	1.343	0.627	0.092	0.000	0.000	0.001	0.000	0.092	0.627	1.343	1.557	1.781
	60	1.844	1.697	1.447	1.234	0.555	0.094	0.000	0.000	0.001	0.000	0.094	0.555	1.234	1.447	1.697
	65	1.910	1.683	1.485	1.213	0.534	0.092	0.000	0.000	0.003	0.000	0.092	0.534	1.213	1.485	1.683
	70	3.422	3.025	2.655	2.296	0.874	0.087	0.000	0.000	0.004	0.000	0.087	0.874	2.296	2.655	3.025
	75	4.890	4.315	4.145	3.735	1.867	0.073	0.000	0.000	0.007	0.000	0.073	1.867	3.735	4.145	4.315
	80	4.659	4.407	4.101	3.873	2.047	0.047	0.000	0.000	0.008	0.000	0.047	2.047	3.873	4.101	4.407
	85	6.384	5.897	5.297	4.768	2.107	0.016	0.000	0.000	0.008	0.000	0.016	2.107	4.768	5.297	5.897
	90	9.128	8.776	8.376	7.611	3.715	0.000	0.000	0.000	0.007	0.000	0.000	3.715	7.611	8.376	8.776
	95	9.387	8.941	8.311	7.779	4.056	0.030	0.000	0.000	0.010	0.000	0.030	4.056	7.779	8.311	8.941
	100	7.828	7.475	7.112	6.682	3.552	0.068	0.000	0.000	0.011	0.000	0.068	3.552	6.682	7.112	7.475
	105	5.302	5.020	4.799	4.482	2.289	0.104	0.001	0.000	0.011	0.000	0.104	2.289	4.482	4.799	5.020
	110	2.896	2.815	2.862	2.693	1.689	0.119	0.004	0.000	0.012	0.000	0.119	1.689	2.693	2.862	2.815
	115	2.882	2.807	2.760	2.466	1.229	0.118	0.000	0.000	0.010	0.000	0.118	1.229	2.466	2.760	2.807
	120	3.003	2.883	2.824	2.564	1.311	0.088	0.000	0.000	0.010	0.000	0.088	1.311	2.564	2.824	2.883
	125	2.545	2.354	2.234	1.961	1.009	0.059	0.000	0.000	0.011	0.000	0.059	1.009	1.961	2.234	2.354
	130	1.668	1.564	1.417	1.275	0.635	0.048	0.000	0.000	0.008	0.000	0.048	0.635	1.275	1.417	1.564
	135	0.660	0.569	0.525	0.448	0.228	0.031	0.000	0.000	0.010	0.000	0.031	0.228	0.448	0.525	0.569
	140	0.588	0.502	0.450	0.377	0.188	0.030	0.000	0.000	0.010	0.000	0.030	0.188	0.377	0.450	0.502
	145	0.554	0.471	0.423	0.349	0.180	0.031	0.000	0.000	0.013	0.000	0.031	0.180	0.349	0.423	0.471
	150	0.527	0.443	0.396	0.326	0.172	0.031	0.000	0.000	0.016	0.000	0.031	0.172	0.326	0.396	0.443
	155	0.504	0.414	0.365	0.303	0.166	0.034	0.000	0.000	0.021	0.000	0.034	0.166	0.303	0.365	0.414
	160	0.482	0.389	0.340	0.277	0.160	0.038	0.002	0.000	0.023	0.000	0.038	0.160	0.277	0.340	0.389
	165	0.465	0.372	0.326	0.262	0.155	0.047	0.007	0.000	0.031	0.000	0.047	0.155	0.262	0.326	0.372
	170	0.463	0.373	0.334	0.269	0.172	0.073	0.019	0.000	0.055	0.000	0.073	0.172	0.269	0.334	0.373
	175	0.526	0.438	0.399	0.340	0.264	0.189	0.138	0.108	0.174	0.108	0.138	0.189	0.264	0.340	0.399
	180	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580

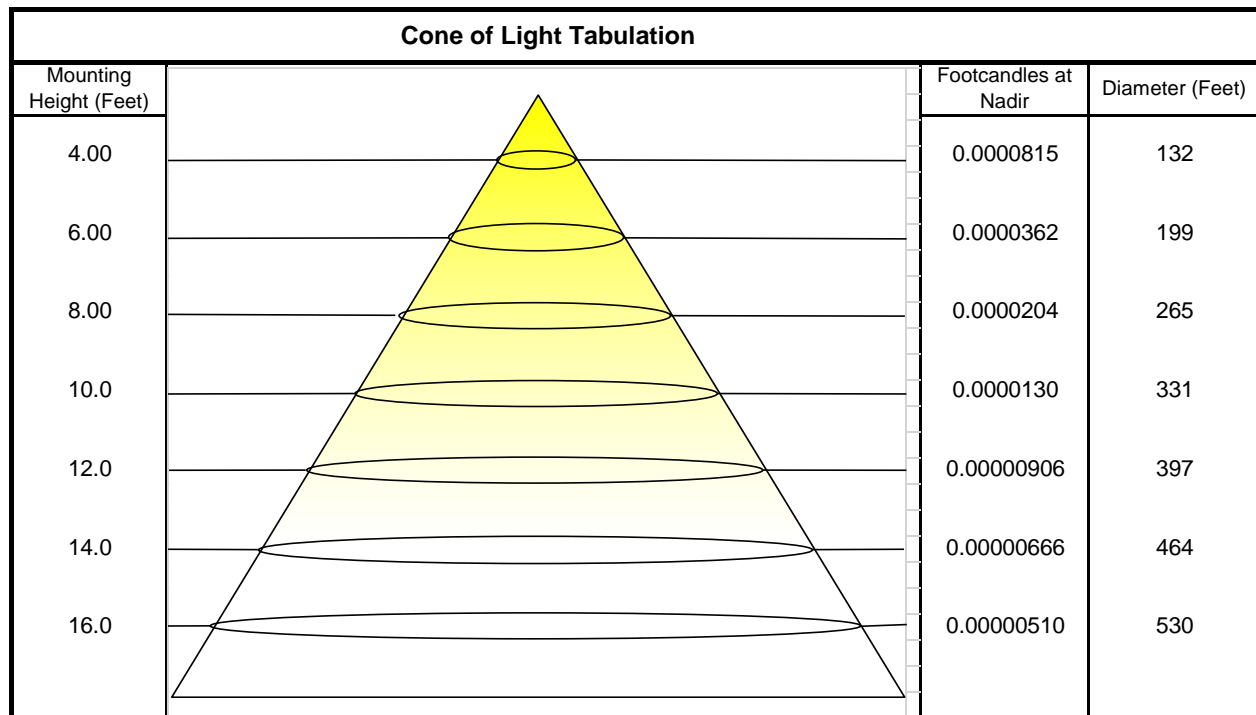
Average Luminance (cd/m²)
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	1	1
	45	2118	1737
	55	2468	1999
	65	2437	1895
	75	6424	5446
	85	8931	7409



Utilization of Lumens - Zonal Cavity Method

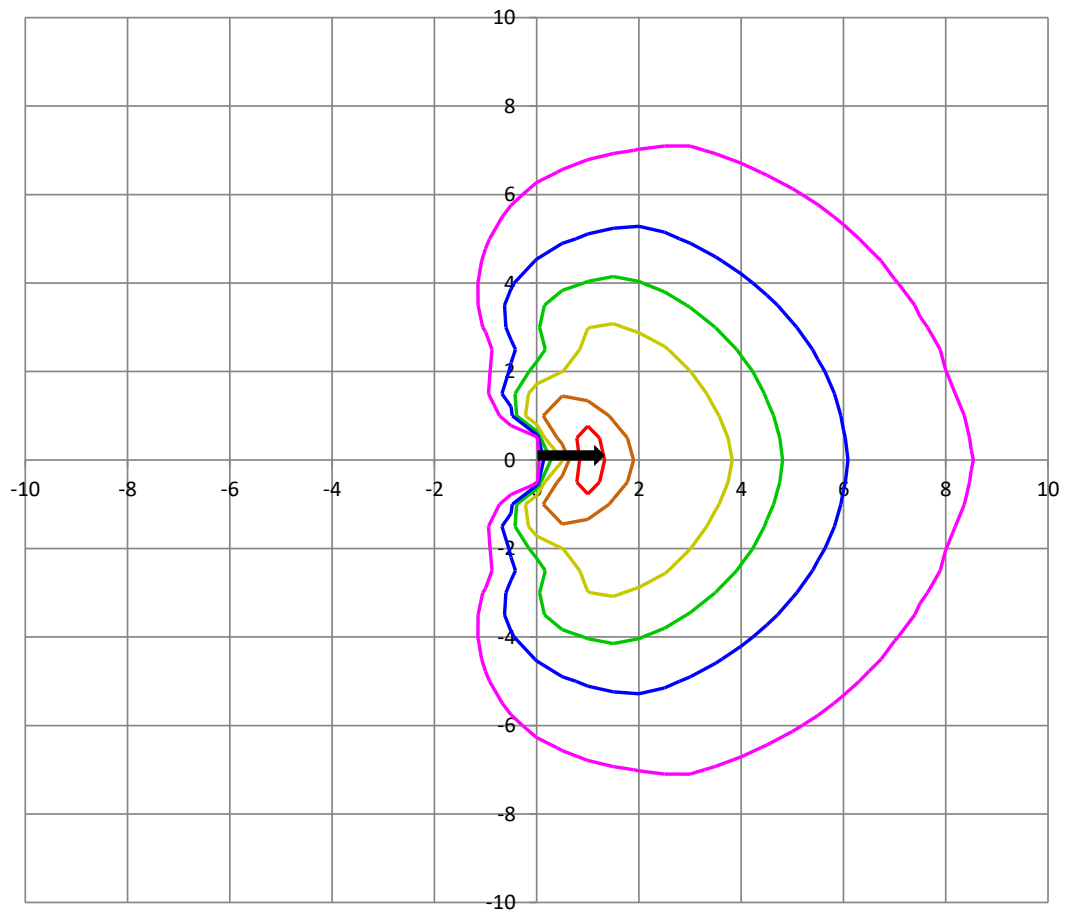
Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	18	18	18	18	17	17	17	17	14	14	14	11	11	11	8	8	8	7
1	15	14	13	12	14	12	11	10	10	9	8	7	7	6	5	5	4	3
2	13	12	10	9	12	10	9	8	8	7	6	6	5	4	4	3	3	2
3	12	10	8	7	11	9	7	6	7	6	5	5	4	3	3	3	2	1
4	11	9	7	5	10	8	6	5	6	5	4	4	3	3	3	2	2	1
5	10	7	6	5	9	7	5	4	5	4	3	4	3	2	2	2	1	1
6	9	7	5	4	8	6	4	3	5	3	3	3	2	2	2	2	1	0
7	8	6	4	3	7	5	4	3	4	3	2	3	2	1	2	1	1	0
8	8	5	4	3	7	5	3	2	4	3	2	3	2	1	2	1	1	0
9	7	5	3	2	6	4	3	2	3	2	2	3	2	1	2	1	1	0
10	7	4	3	2	6	4	3	2	3	2	1	2	2	1	2	1	1	0





ISOFootcandle Plot

Mounting Height - 2 Feet

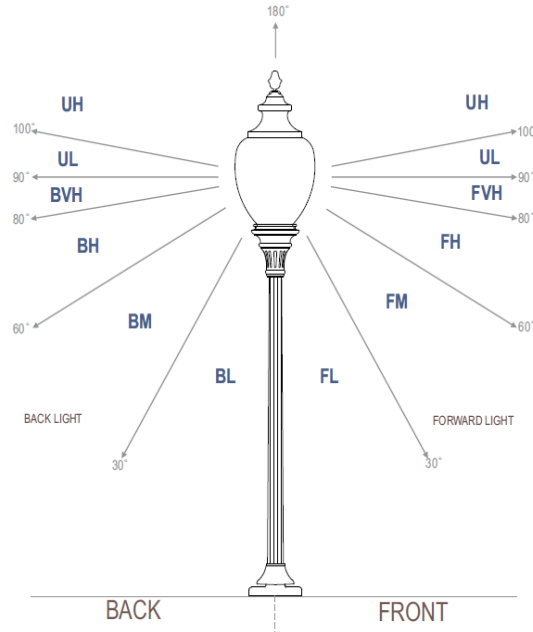


Grid Lines in Units of Mounting Height

0.1fc 0.05fc 0.02fc 0.01fc 0.005fc 0.002fc



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	0.0	0.1%
FM	(30-60)	1.3	7.6%
FH	(60-80)	2.7	16.2%
FVH	(80-90)	2.8	16.9%
BL	(0-30)	0.0	0.0%
BM	(30-60)	0.1	0.3%
BH	(60-80)	0.1	0.7%
BVH	(80-90)	0.1	0.6%
UL	(90-100)	4.2	25.4%
UH	(100-180)	5.4	32.3%
Total		16.7	100.0%
BUG Rating	B0 U1 G0		



Attachment A

Amended Report Documentation

[illegible]