



UL Verification Services Inc.
7036 Snowdrift Road
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 Locker Avenue West
Carlsba, CA 92010
United States

Catalog Number
LML250-S5-GTL-30
Order Number
12571021
Test Number
12571021.03

Test Date

2018-10-29

Prepared By

Josh Mitchell, Technician

Approved By

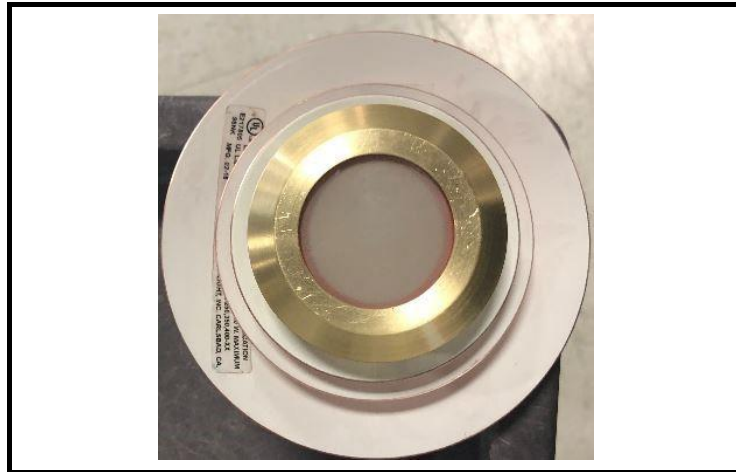
Alexa Lambert, Project Handler

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Luminaire Description: Spherical 5" stacked copper shade with graduated louvers and frosted glass lens
8W
Lamp: One White Cree XHP50 3000K LED
Lamp Catalog Number: HD230G/510
Mounting: Pendant
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Diameter: 5.00 in.
Luminous Height: 3.000 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Noncutoff
BUG Rating: B0 U2 G1

Test Conditions

Test Temperature: 24.0 °C
Voltage: 12.01 VAC
Current: 0.5188 A
Power: 6.164 W
Power Factor: 0.989
Frequency: 60 Hz
Current THD: 7.72 %

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

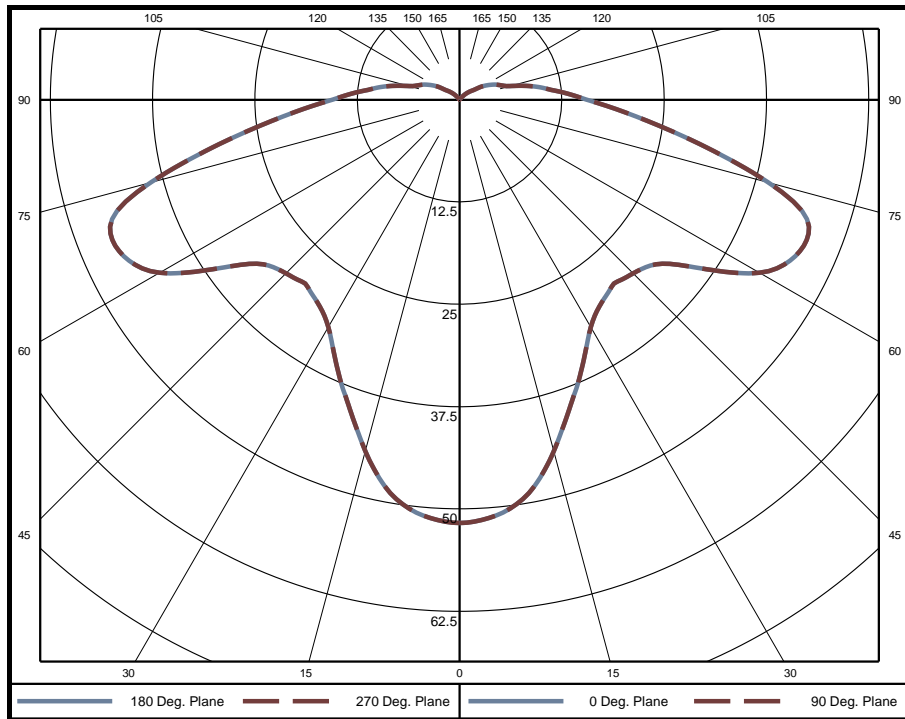
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.0 °C	12.01 VAC	0.5188 A	6.164 W	0.989	60 Hz	7.72 %

Summary of Results

Spacing Criteria
 0-180: 0.96
 90-270: 0.96

Total Lumen Output: 244.1 Lumens
Luminaire Efficacy: 39.6 lm/w
Maximum Candela: 52 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	1.23	0.5%	60-65	21.43	8.8%	120-125	1.17	0.5%
5-10	3.57	1.5%	65-70	23.09	9.5%	125-130	0.71	0.3%
10-15	5.53	2.3%	70-75	22.44	9.2%	130-135	0.42	0.2%
15-20	6.91	2.8%	75-80	18.10	7.4%	135-140	0.14	0.1%
20-25	7.89	3.2%	80-85	13.43	5.5%	140-145	0.04	0.0%
25-30	8.53	3.5%	85-90	9.90	4.1%	145-150	0.02	0.0%
30-35	9.14	3.7%	90-95	7.47	3.1%	150-155	0.01	0.0%
35-40	9.93	4.1%	95-100	5.71	2.3%	155-160	0.00	0.0%
40-45	10.99	4.5%	100-105	4.16	1.7%	160-165	0.00	0.0%
45-50	12.35	5.1%	105-110	2.96	1.2%	165-170	0.00	0.0%
50-55	14.48	5.9%	110-115	2.40	1.0%	170-175	0.00	0.0%
55-60	18.16	7.4%	115-120	1.83	0.7%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	53	21.6%
0-60	109	44.5%
0-90	217	88.9%
90-180	27	11.1%



Candela Tabulation

Horizontal 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	51.72	51.72	51.72	51.72	51.72	51.72	51.72	51.72	51.72	51.72	51.72	51.72	51.72	51.72	51.72	51.72
5	51.01	51.01	51.01	51.01	51.01	51.01	51.01	51.01	51.01	51.01	51.01	51.01	51.01	51.01	51.01	51.01
10	48.80	48.80	48.80	48.80	48.80	48.80	48.80	48.80	48.80	48.80	48.80	48.80	48.80	48.80	48.80	48.80
15	44.47	44.47	44.47	44.47	44.47	44.47	44.47	44.47	44.47	44.47	44.47	44.47	44.47	44.47	44.47	44.47
20	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69
25	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64
30	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08
35	30.27	30.27	30.27	30.27	30.27	30.27	30.27	30.27	30.27	30.27	30.27	30.27	30.27	30.27	30.27	30.27
40	29.33	29.33	29.33	29.33	29.33	29.33	29.33	29.33	29.33	29.33	29.33	29.33	29.33	29.33	29.33	29.33
45	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01
50	31.31	31.31	31.31	31.31	31.31	31.31	31.31	31.31	31.31	31.31	31.31	31.31	31.31	31.31	31.31	31.31
55	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93
60	42.31	42.31	42.31	42.31	42.31	42.31	42.31	42.31	42.31	42.31	42.31	42.31	42.31	42.31	42.31	42.31
65	45.27	45.27	45.27	45.27	45.27	45.27	45.27	45.27	45.27	45.27	45.27	45.27	45.27	45.27	45.27	45.27
70	45.43	45.43	45.43	45.43	45.43	45.43	45.43	45.43	45.43	45.43	45.43	45.43	45.43	45.43	45.43	45.43
75	38.98	38.98	38.98	38.98	38.98	38.98	38.98	38.98	38.98	38.98	38.98	38.98	38.98	38.98	38.98	38.98
80	28.89	28.89	28.89	28.89	28.89	28.89	28.89	28.89	28.89	28.89	28.89	28.89	28.89	28.89	28.89	28.89
85	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
90	15.45	15.45	15.45	15.45	15.45	15.45	15.45	15.45	15.45	15.45	15.45	15.45	15.45	15.45	15.45	15.45
95	11.91	11.91	11.91	11.91	11.91	11.91	11.91	11.91	11.91	11.91	11.91	11.91	11.91	11.91	11.91	11.91
100	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22
105	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
110	5.17	5.17	5.17	5.17	5.17	5.17	5.17	5.17	5.17	5.17	5.17	5.17	5.17	5.17	5.17	5.17
115	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27
120	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23
125	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94
135	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
140	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
145	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
150	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
155	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
160	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

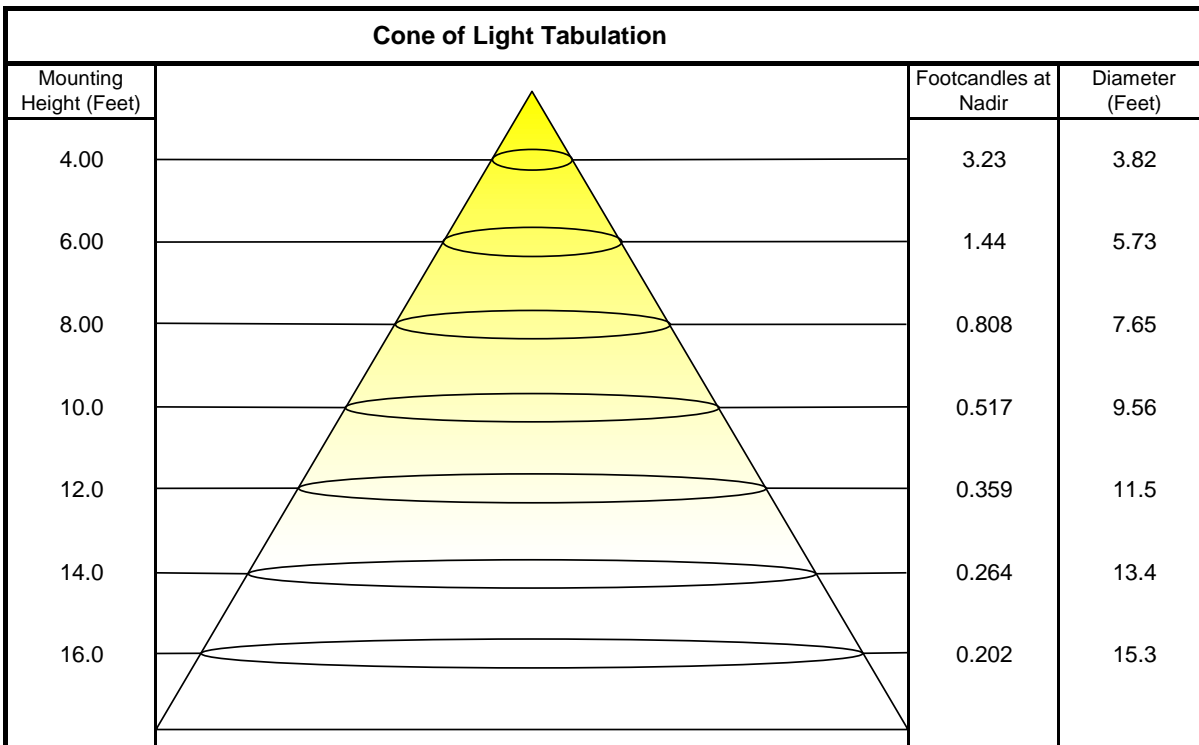
	0	45	90
0	4083	4083	4083
45	3351	3351	3351
55	4946	4946	4946
65	8456	8456	8456
75	11890	11890	11890
85	19020	19020	19020



Coefficients of Utilization - 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 percent of total lumen output delivered to the task surface **																	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	101	94	87	81	96	90	84	79	84	79	74	78	74	70	72	69	66	63
2	89	78	68	61	85	75	66	59	69	62	56	64	58	53	59	54	50	47
3	79	66	55	47	75	63	54	46	58	50	44	54	47	41	50	44	39	36
4	72	57	46	38	68	55	45	37	51	42	35	47	40	34	43	37	32	29
5	65	50	40	32	62	48	38	31	45	36	30	41	34	28	38	32	27	24
6	60	45	34	27	57	43	33	26	40	32	25	37	30	24	34	28	23	20
7	55	40	30	23	53	39	29	23	36	28	22	34	26	21	31	25	20	18
8	51	36	27	21	49	35	26	20	33	25	19	31	24	19	29	22	18	15
9	48	33	24	18	46	32	24	18	30	23	17	28	21	17	26	20	16	14
10	45	31	22	16	43	30	22	16	28	21	16	26	20	15	25	19	14	12

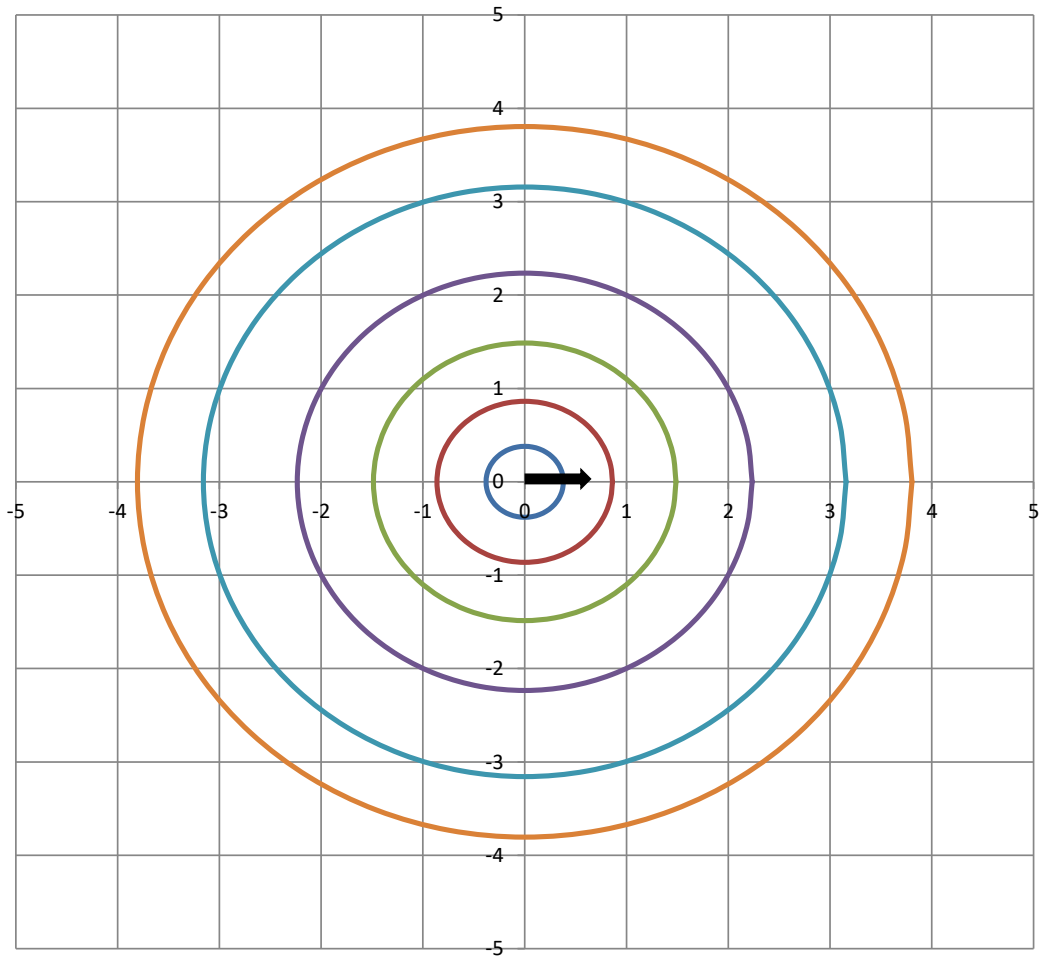
Beam and Field Information	
CIE Type:	Semi-Direct
Center Beam Intensity:	51.72 Candela
Central Cone Intensity:	51 Candela
Beam Flux:	198.9 Lumens
Beam Angle (0-180):	163.5 Degrees
Beam Angle (90-270):	163.5 Degrees
Field Angle (0-180):	219.9 Degrees
Field Angle (90-270):	219.9 Degrees



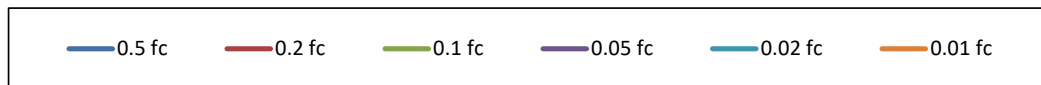


ISOFootcandle Plot

Mounting Height - 8 Feet

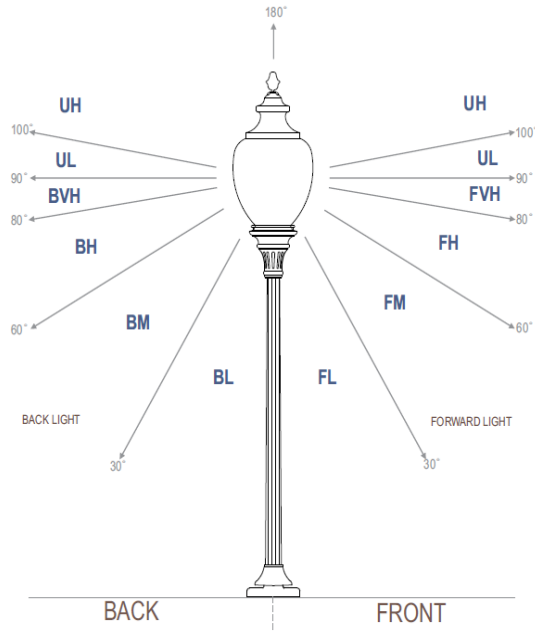


Grid Lines in Units of Mounting Height





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	16.8	6.9%
FM	(30-60)	37.5	15.4%
FH	(60-80)	42.4	17.4%
FVH	(80-90)	11.7	4.8%
BL	(0-30)	16.8	6.9%
BM	(30-60)	37.5	15.4%
BH	(60-80)	42.4	17.4%
BVH	(80-90)	11.7	4.8%
UL	(90-100)	13.2	5.4%
UH	(100-180)	13.9	5.7%
Total		244.1	100.0%
BUG Rating	B0 U2 G1		