



UL Verification Services Inc.
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Allentown, PA 18106
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Photometric Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002

Prepared For
Auroralight Inc

Stacia Elmore
2742 Loker Ave W
#100
Carlsbad, Ca 92010-6619
United States

Catalog Number
LSL40-22-W-30 (22W, 36° Wide Optic, 3000K)
Order Number
13469434
Test Number
13469434.06

Test Date

2020-08-24

Prepared By

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Approved By

Kevin Rodriguez, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Bronzed cast housing, patterned lens enclosure, clear glass lens with bronze trim
Lamp: One white LED
Mounting: Path / Area Light
Ballast/Driver: Integral

Luminaire



Luminaire Characteristics

Luminous Diameter: 3.13 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Cutoff
BUG Rating: B2 U1 G0

Test Conditions

Test Temperature: 24.8 °C
Voltage: 12.25 VAC
Current: 1.730 A
Power: 20.72 W
Power Factor: 0.978
Frequency: 60 Hz
Current THD: 16.3 %

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
24.8 °C	12.25 VAC	1.730 A	20.72 W	0.978	60 Hz	16.3 %

Summary of Results

Spacing Criteria

0-180: 0.72

90-270: 0.72

Total Lumen Output:

1686 Lumens

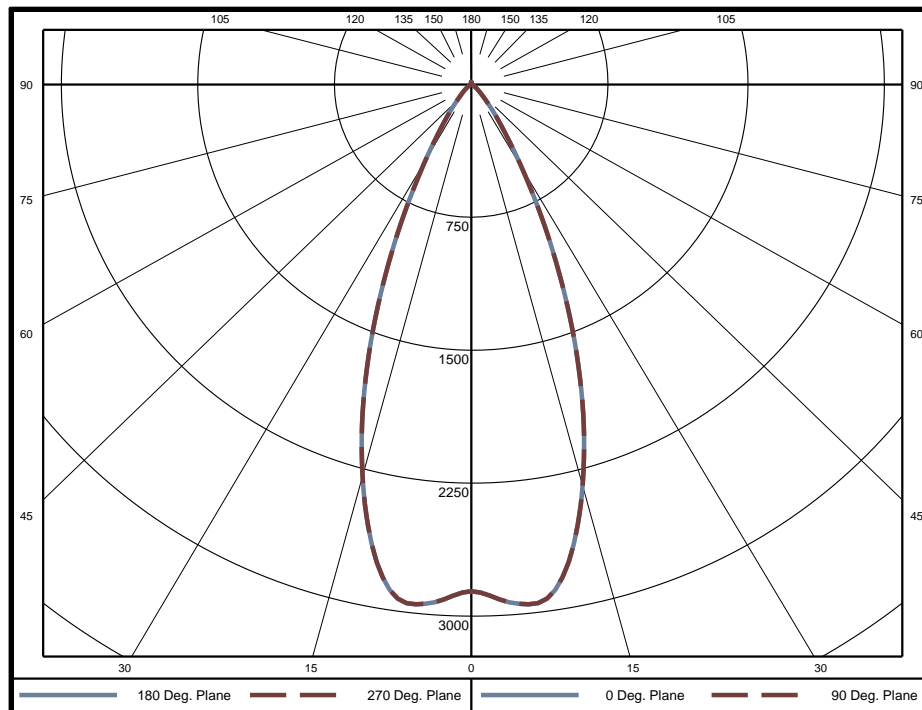
Luminaire Efficacy:

81.4 lm/w

Maximum Candela:

2950 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	69.7	4.1%	60-65	6.7	0.4%	120-125	0.0	0.0%
5-10	208.5	12.4%	65-70	4.1	0.2%	125-130	0.1	0.0%
10-15	305.7	18.1%	70-75	2.6	0.2%	130-135	0.1	0.0%
15-20	329.2	19.5%	75-80	1.6	0.1%	135-140	0.2	0.0%
20-25	282.6	16.8%	80-85	0.8	0.0%	140-145	0.3	0.0%
25-30	195.5	11.6%	85-90	0.3	0.0%	145-150	0.6	0.0%
30-35	115.7	6.9%	90-95	0.1	0.0%	150-155	0.8	0.0%
35-40	67.0	4.0%	95-100	0.0	0.0%	155-160	1.1	0.1%
40-45	38.7	2.3%	100-105	0.0	0.0%	160-165	1.3	0.1%
45-50	24.4	1.4%	105-110	0.0	0.0%	165-170	1.3	0.1%
50-55	15.7	0.9%	110-115	0.0	0.0%	170-175	0.9	0.1%
55-60	10.1	0.6%	115-120	0.0	0.0%	175-180	0.3	0.0%

Zone	Lumens	% of Luminaire
0-40	1574	93.4%
0-60	1663	98.6%
0-90	1679	99.6%
90-180	7	0.4%



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	2860	2860	2860	2860	2860	2860	2860	2860	2860	2860	2860	2860	2860	2860	2860
	5	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942
	10	2825	2825	2825	2825	2825	2825	2825	2825	2825	2825	2825	2825	2825	2825	2825
	15	2323	2323	2323	2323	2323	2323	2323	2323	2323	2323	2323	2323	2323	2323	2323
	20	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686
	25	1042	1042	1042	1042	1042	1042	1042	1042	1042	1042	1042	1042	1042	1042	1042
	30	549	549	549	549	549	549	549	549	549	549	549	549	549	549	549
	35	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275
	40	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142
	45	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77
	50	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
	55	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
	60	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	70	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	75	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	80	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	90	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
	100	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
	110	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
	120	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
	130	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
	140	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	145	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	150	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	155	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	160	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	165	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	170	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	175	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	180	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	576100	576100
	45	21910	21910
	55	9699	9699
	65	5019	5019
	75	3082	3082
	85	2135	2135



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	2006	2006	2006	2006	1958	1958	1958	1958	1870	1870	1870	1788	1788	1788	1714	1714	1714	1679
1	1920	1876	1837	1802	1878	1839	1804	1773	1770	1742	1717	1706	1685	1665	1648	1631	1615	1585
2	1835	1759	1696	1644	1798	1730	1673	1625	1675	1629	1589	1624	1587	1554	1577	1547	1521	1493
3	1754	1655	1579	1518	1721	1631	1561	1505	1587	1529	1480	1546	1497	1457	1508	1468	1434	1408
4	1677	1562	1477	1413	1648	1543	1465	1404	1506	1440	1387	1473	1416	1371	1442	1394	1354	1330
5	1605	1478	1389	1324	1578	1462	1380	1318	1432	1361	1306	1404	1342	1294	1378	1325	1282	1259
6	1537	1402	1312	1247	1513	1389	1304	1242	1364	1289	1233	1341	1275	1225	1319	1261	1216	1194
7	1473	1333	1242	1179	1452	1322	1236	1175	1301	1224	1169	1281	1213	1162	1262	1202	1156	1134
8	1414	1270	1180	1118	1394	1261	1175	1116	1243	1166	1111	1226	1156	1106	1210	1147	1101	1080
9	1358	1212	1124	1063	1340	1204	1120	1062	1189	1112	1058	1174	1104	1054	1160	1097	1050	1030
10	1305	1159	1072	1014	1289	1152	1069	1012	1139	1062	1009	1126	1056	1007	1114	1050	1004	984

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	2860 Candela
Central Cone Intensity:	2899 Candela
Beam Flux:	1031.9 Lumens
Beam Angle (0-180):	43.9 Degrees
Beam Angle (90-270):	43.9 Degrees
Field Angle (0-180):	69.4 Degrees
Field Angle (90-270):	69.4 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		79.4	4.31
10.0		28.6	7.19
14.0		14.6	10.1
18.0		8.83	12.9
22.0		5.91	15.8
26.0		4.23	18.7
30.0		3.18	21.6



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	695.3	41.2%
FM	(30-60)	137.4	8.1%
FH	(60-80)	7.6	0.4%
FVH	(80-90)	0.6	0.0%
BL	(0-30)	695.3	41.2%
BM	(30-60)	137.4	8.1%
BH	(60-80)	7.6	0.4%
BVH	(80-90)	0.6	0.0%
UL	(90-100)	0.1	0.0%
UH	(100-180)	7.1	0.4%
Total		1689.0	100.0%
BUG Rating	B2 U1 G0		