



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-WF-30 (22W, 45° Wide Flood Optic, 3000K)

Order Number
13469434
Test Number
13469434.08

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: 24.6 °C
Voltage: 12.14 VAC
Current: 1.749 A
Power: 20.78 W
Power Factor: 0.978
Frequency: 60 Hz
Current THD: 16.1 %

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
24.6 °C	12.14 VAC	1.749 A	20.78 W	0.978	60 Hz	16.1 %

Summary of Results

Spacing Criteria

0-180: 0.81
90-270: 0.81

Total Lumen Output:

1891 Lumens

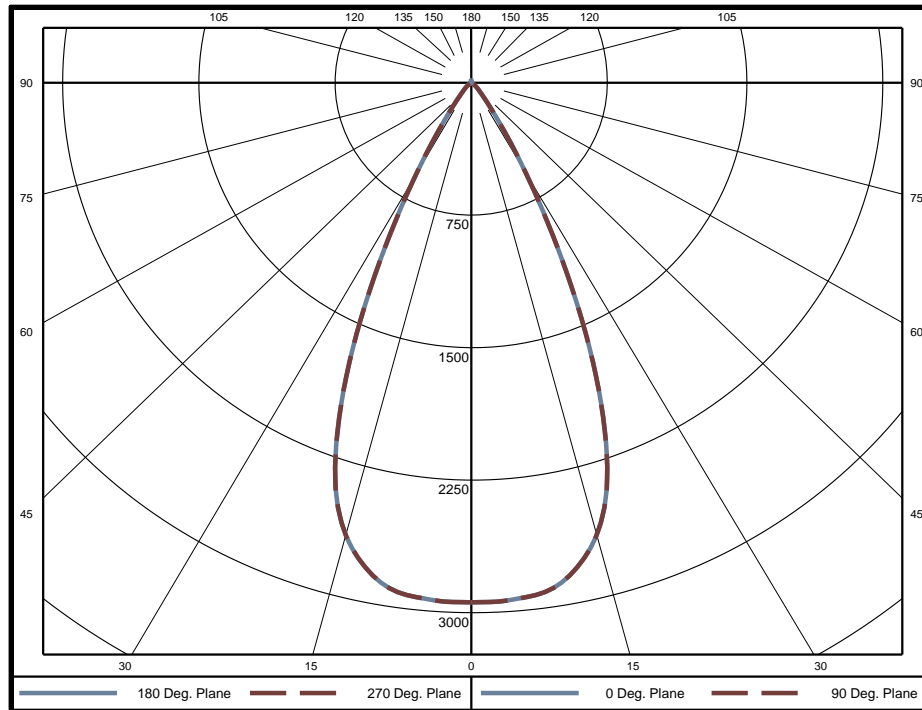
Luminaire Efficacy:

91.0 lm/w

Maximum Candela:

2942 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	70.3	3.7%	60-65	4.2	0.2%	120-125	0.0	0.0%
5-10	208.2	11.0%	65-70	2.6	0.1%	125-130	0.1	0.0%
10-15	328.9	17.4%	70-75	1.7	0.1%	130-135	0.1	0.0%
15-20	401.7	21.2%	75-80	1.1	0.1%	135-140	0.2	0.0%
20-25	372.5	19.7%	80-85	0.6	0.0%	140-145	0.4	0.0%
25-30	247.0	13.1%	85-90	0.2	0.0%	145-150	0.7	0.0%
30-35	122.7	6.5%	90-95	0.1	0.0%	150-155	1.0	0.1%
35-40	55.0	2.9%	95-100	0.0	0.0%	155-160	1.2	0.1%
40-45	29.1	1.5%	100-105	0.0	0.0%	160-165	1.4	0.1%
45-50	18.7	1.0%	105-110	0.0	0.0%	165-170	1.4	0.1%
50-55	11.6	0.6%	110-115	0.0	0.0%	170-175	1.0	0.1%
55-60	6.7	0.4%	115-120	0.0	0.0%	175-180	0.4	0.0%

Zone	Lumens	% of Luminaire
0-40	1806	95.5%
0-60	1872	99.0%
0-90	1883	99.6%
90-180	8	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	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942	2942
	5	2932	2932	2932	2932	2932	2932	2932	2932	2932	2932	2932	2932	2932	2932	2932
	10	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873
	15	2659	2659	2659	2659	2659	2659	2659	2659	2659	2659	2659	2659	2659	2659	2659
	20	2173	2173	2173	2173	2173	2173	2173	2173	2173	2173	2173	2173	2173	2173	2173
	25	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377
	30	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644
	35	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249
	40	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107
	45	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	50	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
	55	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	60	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	65	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	70	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	75	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	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	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	150	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	155	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	160	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	165	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	170	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	175	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	180	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	592600	592600
	45	16690	16690
	55	6747	6747
	65	3155	3155
	75	2059	2059
	85	1502	1502



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																	
Ceiling Cavity Reflectance	80				70				50			30			10		
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																
0	2249	2249	2249	2249	2196	2196	2196	2196	2096	2096	2096	2005	2005	2005	1922	1922	1922
1	2154	2106	2063	2024	2107	2065	2026	1991	1987	1957	1929	1916	1892	1870	1850	1832	1815
2	2061	1978	1909	1851	2020	1945	1882	1829	1883	1832	1788	1827	1786	1749	1774	1741	1712
3	1972	1863	1779	1711	1935	1837	1759	1697	1787	1723	1669	1741	1688	1643	1699	1655	1617
4	1887	1760	1667	1595	1854	1738	1652	1585	1698	1624	1566	1660	1598	1547	1625	1573	1529
5	1807	1666	1568	1496	1777	1649	1557	1489	1615	1536	1475	1584	1516	1462	1555	1496	1449
6	1731	1581	1481	1409	1704	1566	1472	1404	1538	1456	1394	1512	1440	1384	1488	1424	1375
7	1659	1503	1403	1332	1635	1491	1396	1328	1467	1382	1321	1445	1370	1313	1424	1357	1306
8	1591	1432	1332	1263	1570	1421	1326	1260	1401	1315	1254	1382	1305	1249	1364	1295	1243
9	1528	1366	1267	1200	1508	1357	1263	1198	1340	1254	1194	1323	1245	1189	1308	1237	1185
10	1468	1305	1208	1143	1450	1297	1204	1141	1282	1197	1138	1268	1190	1135	1255	1183	1131

Beam and Field Information

CIE Type:	Direct
Center Beam Intensity:	2942 Candela
Central Cone Intensity:	2940 Candela
Beam Flux:	1345.3 Lumens
Beam Angle (0-180):	48.9 Degrees
Beam Angle (90-270):	48.9 Degrees
Field Angle (0-180):	68.3 Degrees
Field Angle (90-270):	68.3 Degrees

Cone of Light Tabulation

Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		81.7	4.89
10.0		29.4	8.15
14.0		15.0	11.4
18.0		9.08	14.7
22.0		6.08	17.9
26.0		4.35	21.2
30.0		3.27	24.4



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	812.0	42.9%
FM	(30-60)	124.3	6.6%
FH	(60-80)	4.9	0.3%
FVH	(80-90)	0.4	0.0%
BL	(0-30)	812.0	42.9%
BM	(30-60)	124.3	6.6%
BH	(60-80)	4.9	0.3%
BVH	(80-90)	0.4	0.0%
UL	(90-100)	0.1	0.0%
UH	(100-180)	8.0	0.4%
Total		1891.2	100.0%
BUG Rating	B2 U1 G0		