



UL Verification Services Inc.  
7036 Snowdrift Road  
Allentown, PA 18106  
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## Indoor Distribution Test Report

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

Prepared For  
**Mercury Lighting**  
20 Audrey PL  
Fairfield, NJ 07004-3416  
United States

Catalog Number  
**MLS3-I-4-3800-(950 LM/FT)-35K-HTA-A401-U**  
Order Number  
11654729  
Test Number  
11654729.11

Test Date

2017-03-13

Prepared By

Javier Caban, Technician

Approved By

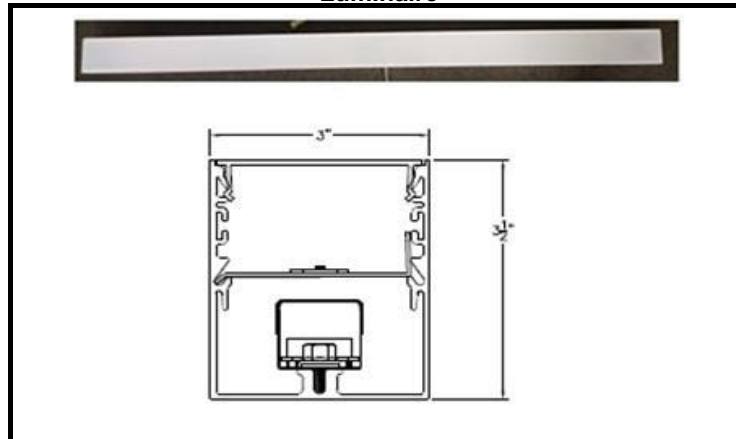
Tiffany Hamm, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Formed white aluminum housing, frosted plastic lens enclosure  
**Lamp:** 96 white LEDs  
**Mounting:** Recessed  
**Ballast/Driver:** Philips Advanced XI040C110V054BST1

**Luminaire**



**Luminaire Characteristics**

Luminous Length: 48.00 in.  
Luminous Width: 2.875 in.

**Summary of Results**

Total Luminaire Output:	3799 Lumens
Luminaire Efficacy:	103 lm/w
Maximum Candela:	1595 Candela

**Test Conditions**

Test Temperature:	25.1 °C
Voltage:	119.9 VAC
Current:	0.3083 A
Power:	36.87 W
Power Factor:	0.997
Frequency:	60 Hz
Current THD:	5.61 %

Laboratory results may not be representative of field performance  
Ballast factors have not been applied



## Distribution - Goniophotometer

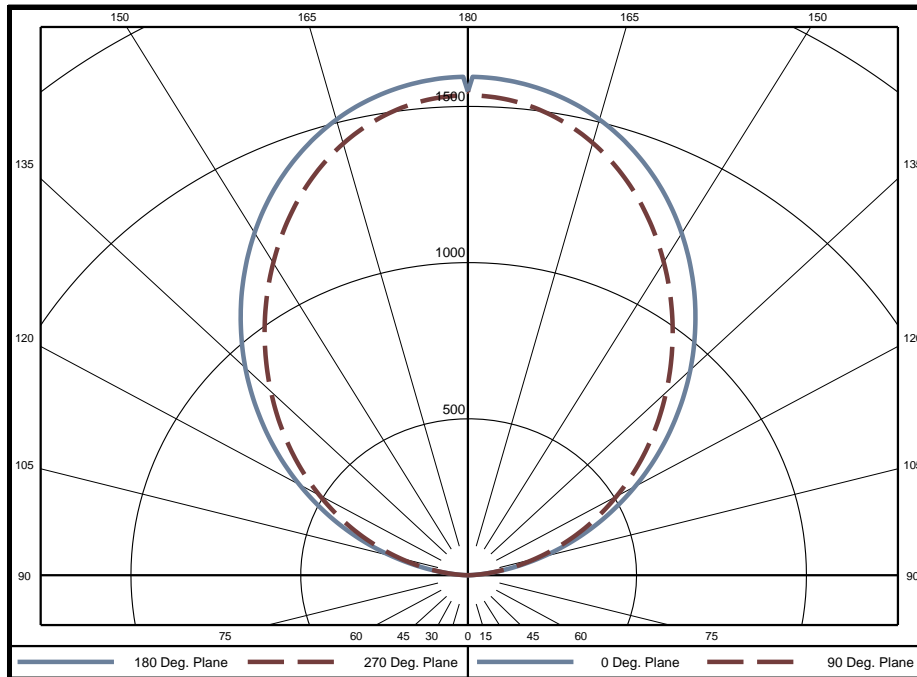
### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	119.9 VAC	0.3083 A	36.87 W	0.997	60 Hz	5.61 %

### Summary of Results

<b>Total Lumen Output:</b>	3799 Lumens
<b>Luminaire Efficacy:</b>	103.0 lm/w
<b>Maximum Candela:</b>	1595 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0	0.0%	60-65	0	0.0%	120-125	273.9	7.2%
5-10	0	0.0%	65-70	0	0.0%	125-130	305.9	8.1%
10-15	0	0.0%	70-75	0	0.0%	130-135	329.2	8.7%
15-20	0	0.0%	75-80	0	0.0%	135-140	343.0	9.0%
20-25	0	0.0%	80-85	0	0.0%	140-145	346.1	9.1%
25-30	0	0.0%	85-90	0.0	0.0%	145-150	337.2	8.9%
30-35	0	0.0%	90-95	9.8	0.3%	150-155	315.6	8.3%
35-40	0	0.0%	95-100	44.8	1.2%	155-160	281.0	7.4%
40-45	0	0.0%	100-105	91.3	2.4%	160-165	233.7	6.2%
45-50	0	0.0%	105-110	141.3	3.7%	165-170	175.4	4.6%
50-55	0	0.0%	110-115	190.1	5.0%	170-175	108.8	2.9%
55-60	0	0.0%	115-120	234.8	6.2%	175-180	36.9	1.0%

Zone	Lumens	% of Luminaire
0-40	0	0.0%
0-60	0	0.0%
0-90	0	0.0%
90-180	3799	100.0%



**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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
95	42	44	45	46	45	46	45	44	42	44	45	46	45	46	45	44
100	128	127	124	121	120	121	124	127	128	127	124	121	120	121	124	127
105	231	227	219	212	209	212	219	227	231	227	219	212	209	212	219	227
110	344	335	321	311	306	311	321	335	344	335	321	311	306	311	321	335
115	459	445	426	413	406	413	426	445	459	445	426	413	406	413	426	445
120	576	557	535	517	509	517	535	557	576	557	535	517	509	517	535	557
125	695	671	645	624	614	624	645	671	695	671	645	624	614	624	645	671
130	814	785	755	731	720	731	755	785	814	785	755	731	720	731	755	785
135	934	899	865	839	828	839	865	899	934	899	865	839	828	839	865	899
140	1049	1012	977	949	938	949	977	1012	1049	1012	977	949	938	949	977	1012
145	1161	1121	1086	1059	1049	1059	1086	1121	1161	1121	1086	1059	1049	1059	1086	1121
150	1266	1224	1190	1167	1157	1167	1190	1224	1266	1224	1190	1167	1157	1167	1190	1224
155	1362	1320	1287	1268	1260	1268	1287	1320	1362	1320	1287	1268	1260	1268	1287	1320
160	1443	1401	1372	1359	1354	1359	1372	1401	1443	1401	1372	1359	1354	1359	1372	1401
165	1509	1467	1441	1433	1430	1433	1441	1467	1509	1467	1441	1433	1430	1433	1441	1467
170	1557	1515	1492	1489	1488	1489	1492	1515	1557	1515	1492	1489	1488	1489	1492	1515
175	1585	1544	1524	1524	1524	1524	1524	1544	1585	1544	1524	1524	1524	1524	1524	1544
180	1547	1547	1547	1547	1547	1547	1547	1547	1547	1547	1547	1547	1547	1547	1547	1547

Vertical Angle (Degrees)



**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	3618	3618	3618	3618	3092	3092	3092	3092	2110	2110	2110	1212	1212	1212	388	388	388	0
1	3290	3138	3002	2879	2805	2685	2576	2478	1836	1772	1714	1057	1026	997	339	330	322	0
2	2992	2735	2523	2345	2547	2343	2172	2027	1606	1503	1414	926	874	829	297	283	270	0
3	2725	2399	2146	1945	2318	2057	1852	1687	1412	1286	1183	815	751	697	262	244	228	0
4	2485	2113	1840	1632	2113	1813	1590	1418	1247	1108	998	721	649	591	232	211	194	0
5	2271	1869	1589	1381	1930	1605	1374	1202	1106	960	849	641	564	503	206	184	166	0
6	2082	1664	1383	1182	1770	1430	1198	1029	987	839	728	572	493	433	185	161	143	0
7	1916	1490	1214	1021	1629	1282	1052	889	885	738	630	514	435	375	166	142	124	0
8	1768	1340	1071	887	1503	1154	929	773	798	652	548	464	385	327	150	126	108	0
9	1637	1212	952	776	1393	1044	826	677	723	581	481	421	343	287	136	113	95	0
1																		0