



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Indoor Distribution Test Report

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

Prepared For
Mercury Lighting
Stephen Bambush
20 Audrey Pl.
Fairfield, NJ 07004-3416

Catalog Number
LW3-2-2100-30K-HTA-1%-UNI
Order Number
10626167
Test Number
856721

Test Date

2014-29-30

Prepared By

Dane Hernandez-Adams, Technician

Approved By

Kyle Spaziani, Project Handler

The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.
This report must not be used by the client to claim product certification, approval, or endorsement by
NVLAP, NIST, or any agency of the Federal Government.



Luminaire Description: Formed white enamel steel housing, white enamel steel reflector, frosted plastic lens enclosure
Lamp: 60 white LEDs
Mounting: Surface
Ballast/Driver: One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L

Luminaire



Luminaire Characteristics

Luminous Length: 24.00 in.
Luminous Width: 2.750 in.

Summary of Results

Total Luminaire Output:	1894 Lumens
Luminaire Efficacy:	82.1 lm/w
Maximum Candela:	666.2 Candela

Electrical Data

Test Temperature:	24.7 °C
Voltage:	120.0 VAC
Current:	0.1931 A
Power:	23.07 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	5.17 %

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



Distribution - Goniophotometer

Distribution Test Conditions

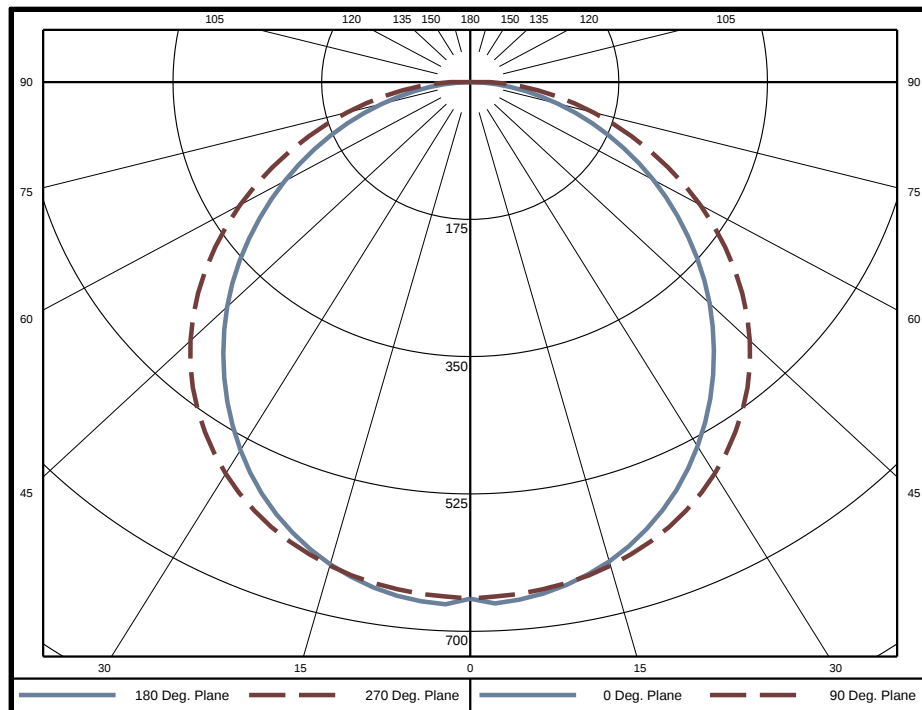
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.7 °C	120.0 VAC	0.1931 A	23.07 W	0.996	60 Hz	5.17 %

Summary of Results

Spacing Criteria
 0-180: 1.21
 90-270: 1.30

Total Lumen Output: 1894 Lumens
Luminaire Efficacy: 82.1 lm/w
Maximum Candela: 666 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	16.7	0.88%	60-65	125.3	6.62%	120-125	0.0	0.00%
5-10	46.6	2.46%	65-70	104.1	5.49%	125-130	0.0	0.00%
10-15	75.9	4.01%	70-75	81.1	4.28%	130-135	0.0	0.00%
15-20	102.6	5.42%	75-80	57.9	3.06%	135-140	0.0	0.00%
20-25	125.8	6.64%	80-85	35.9	1.89%	140-145	0.0	0.00%
25-30	144.5	7.63%	85-90	16.1	0.85%	145-150	0.0	0.00%
30-35	158.2	8.35%	90-95	1.8	0.10%	150-155	0.0	0.00%
35-40	166.5	8.79%	95-100	0.0	0.00%	155-160	0.0	0.00%
40-45	169.1	8.93%	100-105	0.0	0.00%	160-165	0.0	0.00%
45-50	165.9	8.76%	105-110	0.0	0.00%	165-170	0.0	0.00%
50-55	157.0	8.29%	110-115	0.0	0.00%	170-175	0.0	0.00%
55-60	143.3	7.56%	115-120	0.0	0.00%	175-180	0.0	0.00%



Candela Tabulation
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	113	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	658	658	658	658	658	658	658	658	658	658	658	658	658	658	658
	5	662	655	655	656	655	656	655	655	664	655	655	656	655	656	655
	10	651	644	646	649	649	649	646	644	654	644	646	649	649	649	646
	15	633	627	633	637	638	637	633	627	636	627	633	637	638	637	633
	20	606	603	613	621	623	621	613	603	611	603	613	621	623	621	613
	25	574	572	588	599	602	599	588	572	579	572	588	599	602	599	588
	30	535	537	558	571	576	571	558	537	541	537	558	571	576	571	558
	35	493	496	523	539	545	539	523	496	498	496	523	539	545	539	523
	40	446	453	484	501	508	501	484	453	452	453	484	501	508	501	484
	45	399	407	441	459	466	459	441	407	404	407	441	459	466	459	441
	50	349	358	393	411	418	411	393	358	354	358	393	411	418	411	393
	55	298	308	343	360	367	360	343	308	302	308	343	360	367	360	343
	60	249	259	291	307	313	307	291	259	252	259	291	307	313	307	291
	65	199	209	237	252	257	252	237	209	202	209	237	252	257	252	237
	70	152	160	185	198	203	198	185	160	154	160	185	198	203	198	185
	75	107	114	135	146	151	146	135	114	108	114	135	146	151	146	135
	80	67	72	89	99	103	99	89	72	67	72	89	99	103	99	89
	85	31	36	49	56	60	56	49	36	31	36	49	56	60	56	49
	90	1	6	15	21	23	21	15	6	1	6	15	21	23	21	15
	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Vertical Angle (Degrees)	Horizontal Angle (Degrees)			
	0	45	90	
	45	13240	14630	15470
	55	12210	14030	15010
	65	11080	13180	14290
	75	9728	12220	13690
	85	8322	13140	16050



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	2255	2255	2255	2255	2202	2202	2202	2202	2104	2104	2104	2015	2015	2015	1933	1933	1933	1894
1	2052	1958	1874	1798	2000	1915	1838	1768	1834	1770	1712	1759	1707	1660	1691	1649	1610	1570
2	1863	1703	1571	1459	1813	1667	1545	1442	1599	1497	1408	1537	1451	1375	1479	1408	1344	1303
3	1697	1494	1336	1211	1650	1464	1317	1200	1407	1281	1178	1354	1247	1157	1305	1215	1137	1095
4	1553	1323	1154	1025	1509	1297	1139	1017	1249	1112	1003	1205	1086	989	1163	1061	975	934
5	1428	1181	1009	882	1388	1160	998	876	1119	976	867	1082	956	857	1046	936	848	807
6	1319	1063	892	769	1282	1045	883	765	1011	866	758	979	850	752	948	834	745	705
7	1223	964	796	679	1189	948	789	676	919	776	671	891	762	666	865	750	661	623
8	1138	880	717	605	1108	866	711	603	841	700	599	817	689	596	795	679	592	555
9	1063	807	650	544	1036	796	646	543	774	636	540	753	627	537	734	619	534	499
10	997	745	594	494	972	735	590	492	716	582	490	698	575	488	681	567	485	452

Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
4.00	41.2	5.02
6.00	18.3	7.52
8.00	10.3	10.0
10.0	6.58	12.5
12.0	4.57	15.0
14.0	3.36	17.6
16.0	2.57	20.1

Cone of Light Plot

