



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

John Andrews
20 Audrey Pl.
Fairfield, NJ 07004-3416

Catalog Number
L455-4-2100-35K-HTA20-S30-20-UNI-XXXX (190mA)

Order Number
10644857
Test Number
868182

Test Date

2015-01-14

Prepared By

Javier Caban, 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: 120 white LEDs
Mounting: Surface
Ballast/Driver: One Osram OT30W/PRG1050C/UNV/DIM/L

Luminaire



Luminaire Characteristics

Luminous Length: 45.00 in.
Luminous Width: 4.250 in.
Luminous Height: 1.75 in.

Summary of Results

Total Luminaire Output: 2073 Lumens
Luminaire Efficacy: 110 lm/w
Maximum Candela: 625.2 Candela

Electrical Data

Test Temperature: 24.4 °C
Voltage: 120.0 VAC
Current: 0.1588 A
Power: 18.92 W
Power Factor: 0.993
Frequency: 60 Hz
Current THD: 5.02 %

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
24.4 °C	120.0 VAC	0.1588 A	18.92 W	0.993	60 Hz	5.02 %

Summary of Results

Spacing Criteria

0-180: 1.21
90-270: 1.30

Total Lumen Output:

2073 Lumens

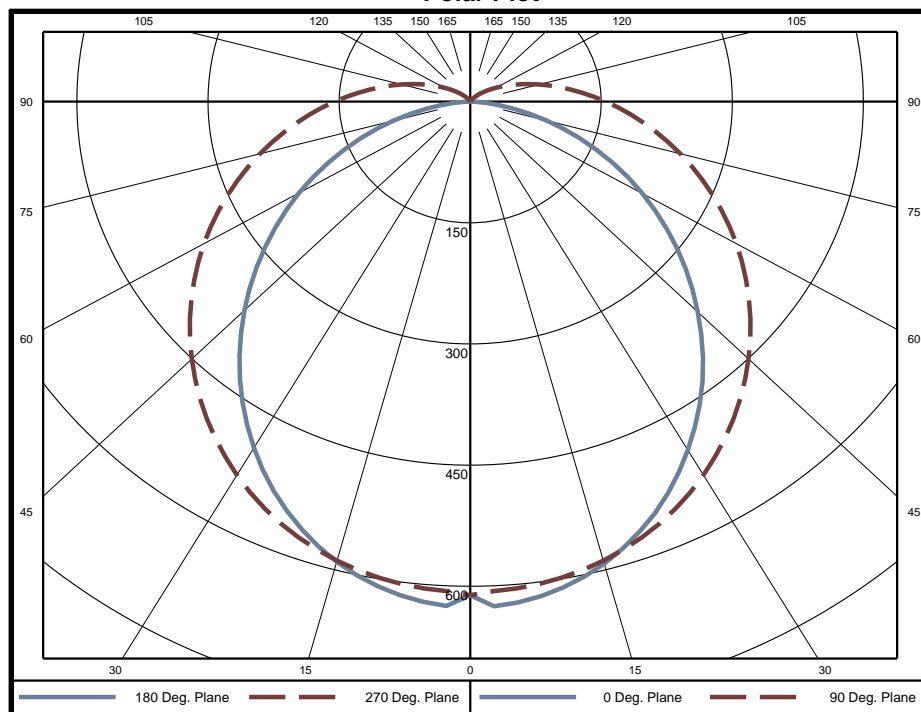
Luminaire Efficacy:

109.6 lm/w

Maximum Candela:

625 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	15.5	0.7%	60-65	129.9	6.3%	120-125	5.6	0.3%
5-10	43.1	2.1%	65-70	115.5	5.6%	125-130	3.5	0.2%
10-15	70.2	3.4%	70-75	99.7	4.8%	130-135	2.1	0.1%
15-20	94.7	4.6%	75-80	83.3	4.0%	135-140	1.1	0.1%
20-25	115.9	5.6%	80-85	67.2	3.2%	140-145	0.5	0.0%
25-30	133.0	6.4%	85-90	52.9	2.5%	145-150	0.2	0.0%
30-35	145.7	7.0%	90-95	41.2	2.0%	150-155	0.0	0.0%
35-40	153.8	7.4%	95-100	31.6	1.5%	155-160	0.0	0.0%
40-45	157.0	7.6%	100-105	23.8	1.1%	160-165	0.0	0.0%
45-50	155.9	7.5%	105-110	17.4	0.8%	165-170	0.0	0.0%
50-55	150.6	7.3%	110-115	12.3	0.6%	170-175	0.0	0.0%
55-60	141.8	6.8%	115-120	8.5	0.4%	175-180	0.0	0.0%



Candela Tabulation
Horizontal 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	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611
5	622	611	604	605	605	604	603	609	621	609	603	604	605	605	604	611
10	611	601	596	598	598	597	594	598	609	598	594	597	598	598	596	601
15	592	585	583	587	588	585	579	580	590	580	579	585	588	587	583	585
20	566	562	564	572	574	569	560	556	563	556	560	569	574	572	564	562
25	535	533	541	552	556	548	535	526	532	526	535	548	556	552	541	533
30	498	500	512	529	534	524	506	492	495	492	506	524	534	529	512	500
35	458	462	480	501	508	497	473	455	454	455	473	497	508	501	480	462
40	414	420	445	471	481	466	438	413	410	413	438	466	481	471	445	420
45	368	377	407	439	450	434	400	370	365	370	400	434	450	439	407	377
50	322	333	368	406	419	400	361	327	319	327	361	400	419	406	368	333
55	274	288	328	371	385	366	322	282	272	282	322	366	385	371	328	288
60	227	243	288	335	352	331	283	239	226	239	283	331	352	335	288	243
65	180	199	249	300	317	296	245	196	179	196	245	296	317	300	249	199
70	134	157	212	264	283	260	207	155	134	155	207	260	283	264	212	157
75	90	118	177	230	249	227	174	118	91	118	174	227	249	230	177	118
80	50	84	145	197	216	195	142	83	51	83	142	195	216	197	145	84
85	18	55	115	167	185	164	113	56	19	56	113	164	185	167	115	55
90	0	34	90	138	155	136	89	35	0	35	89	136	155	138	90	34
95	0	20	68	112	128	111	67	20	0	20	67	111	128	112	68	20
100	0	11	51	90	104	89	50	12	0	12	50	89	104	90	51	11
105	0	6	37	69	82	69	37	7	0	7	37	69	82	69	37	6
110	0	3	26	53	63	52	26	4	0	4	26	52	63	53	26	3
115	0	2	18	39	47	39	18	2	0	2	18	39	47	39	18	2
120	0	1	12	28	35	28	12	1	0	1	12	28	35	28	12	1
125	0	0	8	19	25	19	8	0	0	0	8	19	25	19	8	0
130	0	0	5	13	17	13	5	0	0	0	5	13	17	13	5	0
135	0	0	3	8	11	8	2	0	0	0	2	8	11	8	3	0
140	0	0	1	4	6	5	1	0	0	0	1	5	6	4	1	0
145	0	0	0	2	3	2	0	0	0	0	0	2	3	2	0	0
150	0	0	0	1	1	1	0	0	0	0	0	1	1	1	0	0
155	0	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	0
165	0	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	0
175	0	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	0

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

	0	45	90
45	4060	3541	3657
55	3672	3185	3429
65	3193	2841	3229
75	2466	2529	3073
85	1146	2312	3011



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	2434	2434	2434	2434	2360	2360	2360	2360	2223	2223	2223	2097	2097	2097	1981	1981	1981	1927
1	2180	2064	1960	1867	2107	2002	1908	1822	1885	1808	1737	1778	1715	1657	1679	1629	1582	1526
2	1969	1780	1624	1492	1898	1727	1584	1463	1628	1509	1406	1537	1438	1351	1452	1372	1299	1244
3	1788	1553	1371	1227	1722	1508	1341	1206	1424	1282	1165	1346	1227	1126	1274	1174	1088	1034
4	1633	1370	1178	1032	1572	1332	1154	1016	1261	1107	986	1194	1063	956	1132	1020	928	876
5	1499	1221	1027	883	1444	1189	1007	871	1127	969	848	1070	933	825	1017	898	803	753
6	1383	1097	905	768	1333	1069	889	758	1016	858	740	967	828	721	921	799	703	656
7	1281	993	806	676	1236	969	793	668	923	767	653	880	741	638	840	717	623	578
8	1192	905	725	601	1151	884	713	594	844	691	582	807	670	569	771	649	557	515
9	1113	830	656	539	1076	811	647	534	776	627	523	744	609	513	712	591	502	462
10	1043	765	598	487	1009	749	590	483	718	574	474	689	558	465	661	542	456	418

Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
4.00	38.2	4.98
6.00	17.0	7.48
8.00	9.54	9.97
10.0	6.11	12.5
12.0	4.24	15.0
14.0	3.12	17.4
16.0	2.39	19.9

Cone of Light Plot

