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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-G-4-3500-(875 LMFT)-35K-ASO-U
Order Number
11913761
Test Number
11913761.02

Test Date

2017-08-16

Prepared By

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Approved By

Alexa Lambert, Project Handler

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

Luminaire



Luminaire Characteristics

Luminous Length: 48.00 in.
Luminous Width: 1.750 in.

Summary of Results

Total Luminaire Output:	3512 Lumens
Luminaire Efficacy:	78.8 lm/w
Maximum Candela:	1208 Candela

Test Conditions

Test Temperature:	24.8 °C
Voltage:	120.1 VAC
Current:	0.3720 A
Power:	44.57 W
Power Factor:	0.998
Frequency:	60 Hz
Current THD:	4.76 %

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



Distribution - Goniophotometer

Distribution Test Conditions

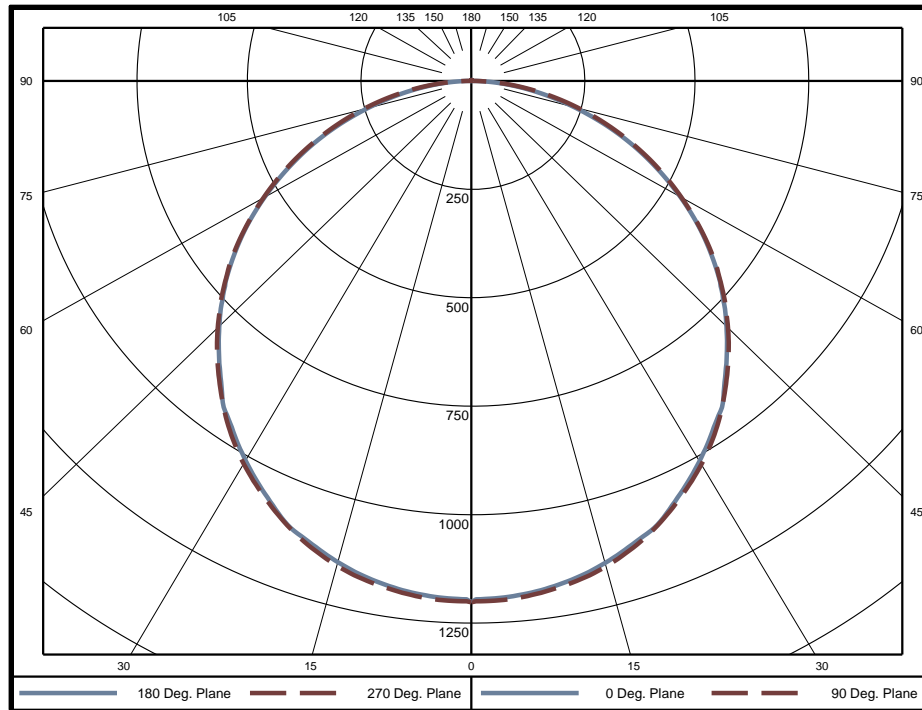
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.8 °C	120.1 VAC	0.3720 A	44.57 W	0.998	60 Hz	4.76 %

Summary of Results

Spacing Criteria
 0-180: 1.25
 90-270: 1.25

Total Lumen Output: 3512 Lumens
Luminaire Efficacy: 78.8 lm/w
Maximum Candela: 1208 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	28.7	0.8%	60-65	239.6	6.8%	120-125	0	0.0%
5-10	85.2	2.4%	65-70	199.9	5.7%	125-130	0	0.0%
10-15	138.9	4.0%	70-75	154.7	4.4%	130-135	0	0.0%
15-20	188.0	5.4%	75-80	107.4	3.1%	135-140	0	0.0%
20-25	230.9	6.6%	80-85	61.5	1.8%	140-145	0	0.0%
25-30	265.7	7.6%	85-90	19.6	0.6%	145-150	0	0.0%
30-35	291.7	8.3%	90-95	0	0.0%	150-155	0	0.0%
35-40	307.9	8.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	313.6	8.9%	100-105	0	0.0%	160-165	0	0.0%
45-50	310.0	8.8%	105-110	0	0.0%	165-170	0	0.0%
50-55	296.6	8.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	272.5	7.8%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1537	43.8%
0-60	2730	77.7%
0-90	3512	100.0%
90-180	0	0.0%



Candela Tabulation
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	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	1202	1202	1202	1202	1202	1202	1202	1202	1202	1202	1202	1202	1202	1202	1202	1202
5	1190	1203	1196	1197	1196	1197	1196	1203	1190	1203	1196	1197	1196	1197	1196	1203
10	1175	1189	1182	1183	1182	1183	1182	1189	1175	1189	1182	1183	1182	1183	1182	1189
15	1150	1164	1157	1159	1159	1159	1157	1164	1150	1164	1157	1159	1159	1159	1157	1164
20	1117	1128	1120	1123	1123	1123	1120	1128	1117	1128	1120	1123	1123	1123	1120	1128
25	1070	1085	1076	1077	1075	1077	1076	1085	1070	1085	1076	1077	1075	1077	1076	1085
30	1013	1027	1024	1022	1022	1022	1024	1027	1013	1027	1024	1022	1022	1022	1024	1027
35	952	962	958	959	958	959	958	962	952	962	958	959	958	959	958	962
40	878	893	886	886	885	886	886	893	878	893	886	886	885	886	886	893
45	802	811	809	808	807	808	809	811	802	811	809	808	807	808	809	811
50	722	730	726	726	724	726	726	730	722	730	726	726	724	726	726	730
55	633	640	637	638	636	638	637	640	633	640	637	638	636	638	637	640
60	537	545	542	543	540	543	542	545	537	545	542	543	540	543	542	545
65	438	446	444	446	445	446	444	446	438	446	444	446	445	446	444	446
70	339	345	345	349	347	349	345	345	339	345	345	349	347	349	345	345
75	240	245	248	251	252	251	248	245	240	245	248	251	252	251	248	245
80	149	152	156	160	160	160	156	152	149	152	156	160	160	160	156	152
85	69	70	73	75	75	75	73	70	69	70	73	75	75	75	73	70
90	1	5	7	9	10	9	7	5	1	5	7	9	10	9	7	5
95	0	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	0
105	0	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	0
115	0	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	0
125	0	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	0
135	0	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	0
145	0	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	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)

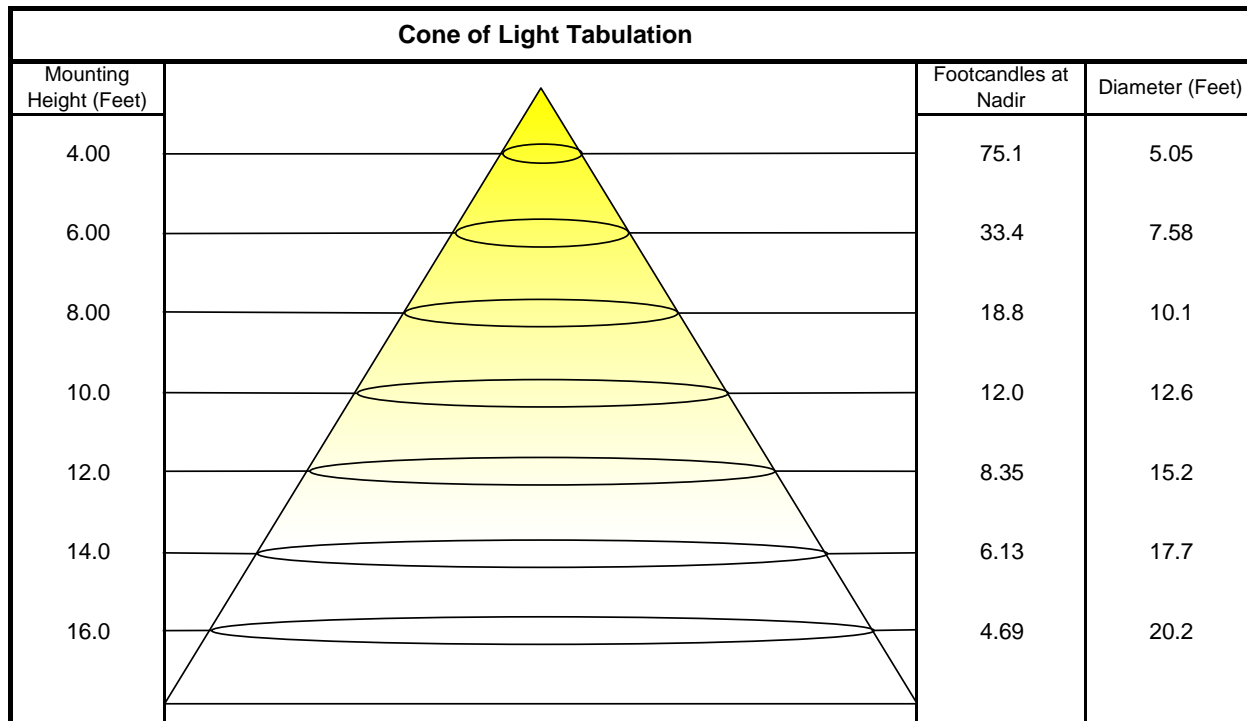
Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
0	22180	22180	22180
45	20920	21110	21050
55	20350	20500	20440
65	19140	19390	19420
75	17090	17670	17950
85	14530	15430	15980



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	4182	4182	4182	4182	4084	4084	4084	4084	3903	3903	3903	3737	3737	3737	3584	3584	3584	3512
1	3808	3635	3480	3340	3712	3555	3414	3286	3405	3288	3181	3267	3172	3084	3140	3063	2992	2917
2	3456	3159	2914	2707	3363	3092	2866	2674	2967	2776	2612	2851	2692	2552	2744	2612	2494	2417
3	3146	2768	2475	2242	3058	2712	2441	2222	2606	2373	2182	2509	2310	2143	2418	2250	2106	2028
4	2877	2448	2134	1894	2796	2401	2108	1881	2312	2057	1854	2230	2008	1829	2153	1962	1803	1726
5	2644	2185	1864	1628	2569	2145	1844	1618	2070	1804	1600	2000	1766	1582	1934	1729	1565	1489
6	2440	1966	1647	1418	2372	1932	1631	1412	1868	1599	1399	1808	1569	1386	1752	1539	1373	1300
7	2262	1781	1469	1251	2200	1752	1456	1246	1697	1430	1236	1646	1406	1227	1598	1382	1217	1147
8	2105	1624	1322	1114	2049	1599	1311	1110	1552	1290	1103	1508	1270	1096	1467	1251	1089	1021
9	1966	1490	1198	1001	1916	1469	1190	999	1428	1172	993	1390	1156	988	1354	1139	982	917
10	1843	1374	1094	907	1797	1356	1087	905	1321	1072	901	1287	1058	896	1256	1045	892	830

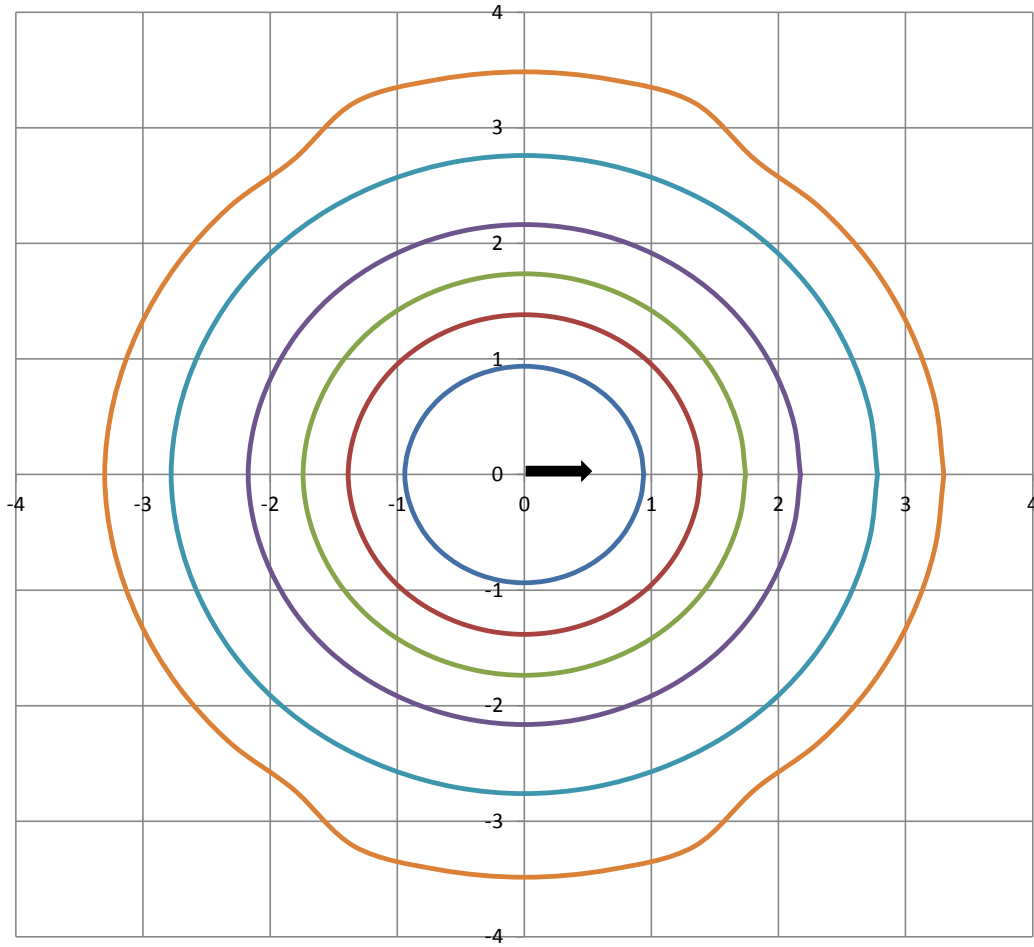
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1202 Candela
Central Cone Intensity:	1200 Candela
Beam Flux:	2565.4 Lumens
Beam Angle (0-180):	113.4 Degrees
Beam Angle (90-270):	113.7 Degrees
Field Angle (0-180):	163.4 Degrees
Field Angle (90-270):	164.6 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

