



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

20 Audrey Pl
Fairfield, NJ 07004-3416
United States

Catalog Number
MLP3-3-48-2900-(725LMFT)-35K-WG-A401-U

Order Number

12526821

Test Number

12526821.01A

Revision of Test #12526821.01 on:

2018-09-28

Test Date

2018-09-27

Prepared By

Cordaryl Cousar, Technician

Approved By

Alexa Lambert, 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: White formed steel/aluminum housing, frosted plastic lens enclosure
Lamp: 96 white LEDs
Mounting: Recessed
Ballast/Driver: One Philips XI040C110V054BST1 driver

Luminaire



Luminaire Characteristics

Luminous Length: 3.25 in.
Luminous Width: 48.00 in.
Luminous Height: 3.00 in.

Summary of Results

Total Luminaire Output:	2926 Lumens
Luminaire Efficacy:	120.1 lm/w
Maximum Candela:	1971 Candela

Test Conditions

Test Temperature:	24.5 °C
Voltage:	120.0 VAC
Current:	0.2047 A
Power:	24.37 W
Power Factor:	0.992
Frequency:	60 Hz
Current THD:	11.1 %

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



Distribution - Goniophotometer

Distribution Test Conditions

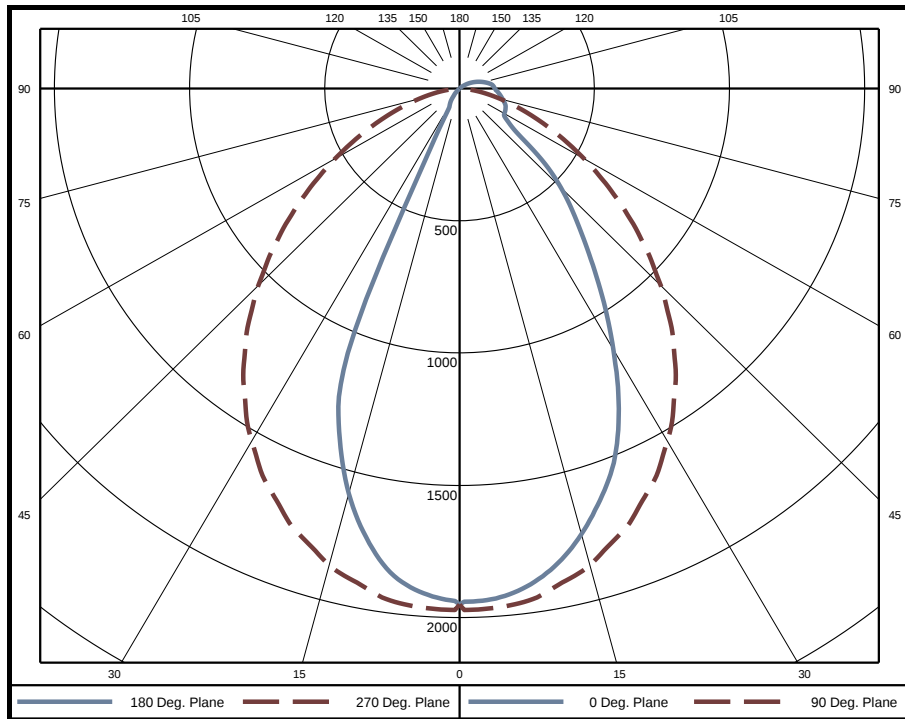
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	120.0 VAC	0.2047 A	24.37 W	0.992	60 Hz	11.1 %

Summary of Results

Spacing Criteria
 0-180: 0.98
 90-270: 1.18

Total Lumen Output: 2926 Lumens
Luminaire Efficacy: 120.1 lm/w
Maximum Candela: 1971 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	46.4	1.6%	60-65	89.3	3.1%	120-125	2.2	0.1%
5-10	136.2	4.7%	65-70	70.7	2.4%	125-130	0.6	0.0%
10-15	215.5	7.4%	70-75	54.6	1.9%	130-135	0.0	0.0%
15-20	277.8	9.5%	75-80	38.9	1.3%	135-140	0	0.0%
20-25	315.6	10.8%	80-85	30.9	1.1%	140-145	0	0.0%
25-30	305.2	10.4%	85-90	24.7	0.8%	145-150	0	0.0%
30-35	284.2	9.7%	90-95	21.8	0.7%	150-155	0	0.0%
35-40	255.5	8.7%	95-100	18.9	0.6%	155-160	0	0.0%
40-45	233.3	8.0%	100-105	14.9	0.5%	160-165	0	0.0%
45-50	200.7	6.9%	105-110	10.9	0.4%	165-170	0	0.0%
50-55	150.2	5.1%	110-115	7.5	0.3%	170-175	0	0.0%
55-60	115.0	3.9%	115-120	4.6	0.2%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1836	62.8%
0-60	2536	86.7%
0-90	2845	97.2%
90-180	81	2.8%



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	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
	5	1925	1930	1932	1948	1964	1941	1918	1914	1901	1914	1918	1941	1964	1948	1932
	10	1859	1866	1886	1911	1925	1897	1855	1817	1787	1817	1855	1897	1925	1911	1886
	15	1744	1755	1788	1843	1865	1818	1722	1639	1585	1639	1722	1818	1865	1843	1788
	20	1594	1606	1667	1745	1777	1703	1543	1397	1312	1397	1543	1703	1777	1745	1667
	25	1394	1432	1516	1624	1667	1558	1313	955	339	955	1313	1558	1667	1624	1516
	30	1140	1201	1366	1489	1538	1386	1022	93	74	93	1022	1386	1538	1489	1366
	35	897	960	1170	1336	1390	1195	192	63	54	63	192	1195	1390	1336	1170
	40	694	748	954	1173	1230	992	67	40	30	40	67	992	1230	1173	954
	45	532	583	759	1021	1054	783	49	23	9	23	49	783	1054	1021	759
	50	338	425	598	867	873	393	29	2	0	2	29	393	873	867	598
	55	220	242	464	701	697	73	11	0	0	0	11	73	697	701	464
	60	191	185	297	546	534	44	2	0	0	0	2	44	534	546	297
	65	188	178	170	415	388	25	1	0	0	0	1	25	388	415	170
	70	181	171	146	303	264	8	0	0	0	0	0	8	264	303	146
	75	167	158	136	137	163	2	0	0	0	0	0	2	163	137	136
	80	154	144	120	85	85	0	0	0	0	0	0	85	85	120	144
	85	141	132	106	67	25	0	0	0	0	0	0	25	67	106	132
	90	130	121	94	51	1	0	0	0	0	0	0	1	51	94	121
	95	124	115	86	40	0	0	0	0	0	0	0	0	40	86	115
	100	111	100	71	25	0	0	0	0	0	0	0	0	25	71	100
	105	92	82	54	12	0	0	0	0	0	0	0	0	12	54	82
	110	73	64	37	3	0	0	0	0	0	0	0	0	3	37	64
	115	55	46	22	2	0	0	0	0	0	0	0	0	2	22	46
	120	36	29	7	0	0	0	0	0	0	0	0	0	0	7	29
	125	19	13	1	0	0	0	0	0	0	0	0	0	0	1	13
	130	3	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)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)			
	0	45	90	
	0	19370	19370	19370
	45	3890	6286	13940
	55	1643	4025	11080
	65	1480	1600	8051
	75	1438	1445	5071
	85	1394	1349	1691



Coefficients of Utilization - 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 percent of total lumen output delivered to the task surface **																	
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97
1	110	106	102	99	107	104	100	97	99	96	94	95	92	91	91	89	87	85
2	102	95	90	85	99	93	88	84	89	85	81	86	82	79	83	80	77	75
3	95	86	79	74	92	84	78	73	81	76	72	78	74	70	75	72	69	67
4	88	78	71	65	86	77	70	65	74	68	64	72	67	62	69	65	61	59
5	82	72	64	58	80	70	63	58	68	62	57	66	60	56	64	59	55	54
6	77	66	58	53	75	65	57	52	63	56	52	61	55	51	59	54	50	49
7	72	61	53	48	71	60	53	47	58	52	47	56	51	47	55	50	46	44
8	68	56	49	44	66	55	48	43	54	48	43	53	47	43	51	46	42	41
9	64	52	45	40	63	52	45	40	50	44	40	49	43	39	48	43	39	37
10	61	49	42	37	59	48	42	37	47	41	37	46	40	36	45	40	36	35

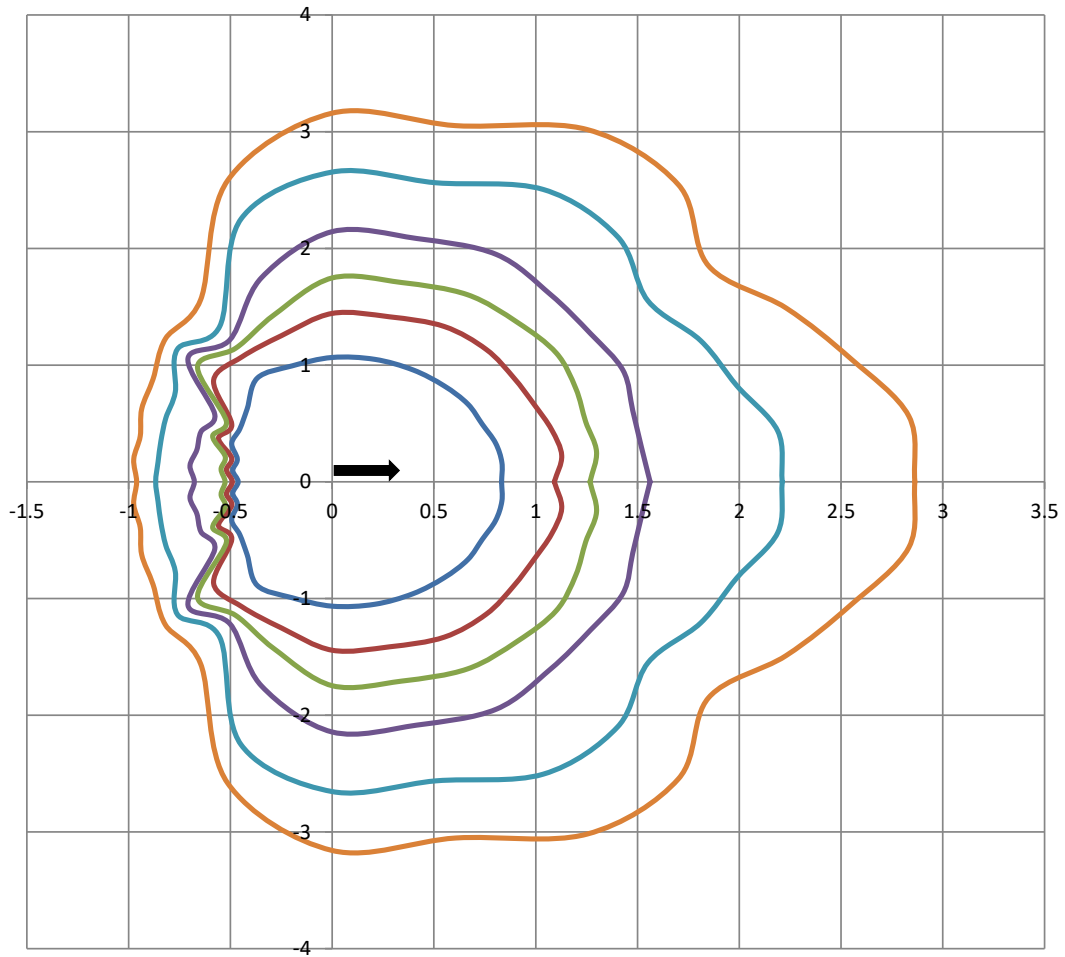
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1950 Candela
Central Cone Intensity:	1944 Candela
Beam Flux:	1866.3 Lumens
Beam Angle (0-180):	56.4 Degrees
Beam Angle (90-270):	94.3 Degrees
Field Angle (0-180):	84.2 Degrees
Field Angle (90-270):	146.5 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		122	3.83
6.00		54.2	5.74
8.00		30.5	7.65
10.0		19.5	9.57
12.0		13.5	11.5
14.0		9.95	13.4
16.0		7.62	15.3



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

— 5 fc — 2 fc — 1 fc — 0.5 fc — 0.2 fc — 0.1 fc