



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

Photometric Indoor 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
L450-2-4200-35K-HTA20-S50-20-UNI-XXXX
Project Number
10455369
Test Number
728049

Test Date

2014-08-27

Prepared By

A handwritten signature in black ink, appearing to read 'Bhavik Shah'.

Bhavik Shah, Technician

Approved By

A handwritten signature in black ink, appearing to read 'Kyle Spaziani'.

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.



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

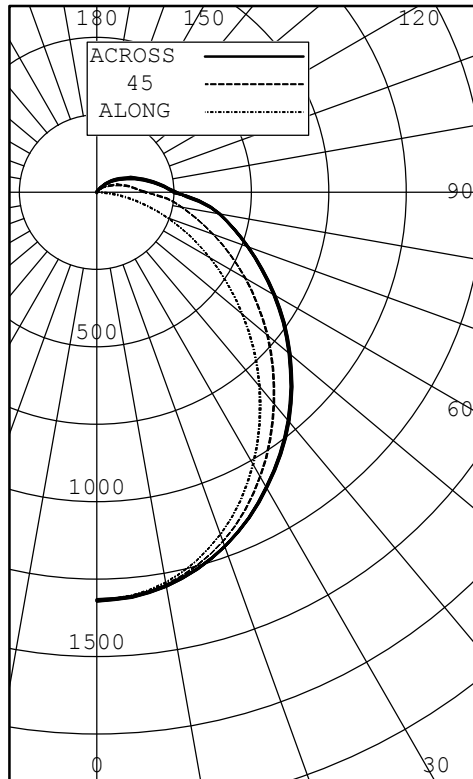
Luminaire Description: Formed white enamel steel housing, white enamel steel reflectors, frosted plastic lens enclosures
Catalog Number: L450-2-4200-35K-HTA20-S50-20-UNI-XXXX
Lamp: 120 white LEDs
Mounting: Surface
Ballast/Driver: One Osram Optotronic OT50W/PRG1400C/UNV/DIM/L

Luminaire



Test Conditions

Test Temperature:	25.1 °C
Voltage:	120.0 VAC
Current:	0.3994 A
Power:	47.74 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	8.81 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT

ANGLE	ALONG	22.5	45	67.5	ACROSS	LUMENS
0	1319	1319	1319	1319	1319	
5	1309	1309	1312	1312	1312	126
15	1235	1239	1250	1257	1260	351
25	1098	1108	1133	1153	1161	520
35	917	935	976	1017	1034	609
45	716	741	805	867	889	619
55	516	548	635	710	737	563
65	331	376	476	559	589	463
75	169	228	337	428	459	346
85	41	119	228	306	332	226
90	0	66	155	227	252	
95	0	47	130	196	219	132
105	0	23	88	140	158	88
115	0	8	55	94	108	53
125	0	0	29	57	67	27
135	0	0	9	28	36	11
145	0	0	0	7	12	2
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	997	24.09
0-40	1606	38.82
0-60	2789	67.40
0-90	3825	92.43
40-90	2219	53.61
60-90	1036	25.03
90-180	313	7.57
0-180	4138	100.00

EFFICACY (LUMENS PER WATT): 86.8

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 23.000 INS
WIDTH: 7.500 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.2
SC: 1.2

ANGLE	ALONG	45	ACROSS
45	9097	8995	9449
55	8084	8311	9009
65	7032	7785	8791
75	5851	7672	9161
85	4273	9002	10448

TESTED IN ACCORDANCE WITH IES PROCEDURES.



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

INTENSITY (CANDLEPOWER) DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0	1319	1319	1319	1319	1319	1319	
5	1309	1309	1312	1312	1312	1311	126
10	1281	1282	1288	1291	1292	1287	
15	1235	1239	1250	1257	1260	1248	351
20	1174	1181	1197	1211	1216	1196	
25	1098	1108	1133	1153	1161	1131	520
30	1011	1025	1058	1087	1099	1056	
35	917	935	976	1017	1034	976	609
40	817	839	890	944	963	891	
45	716	741	805	867	889	804	619
50	615	643	720	789	813	716	
55	516	548	635	710	737	630	563
60	421	459	553	633	661	547	
65	331	376	476	559	589	467	463
70	246	299	402	490	521	394	
75	169	228	337	428	459	327	346
80	100	167	281	371	402	267	
85	41	119	228	306	332	210	226
90	0	66	155	227	252	144	
95	0	47	130	196	219	121	132
100	0	34	108	167	187	101	
105	0	23	88	140	158	83	88
110	0	15	71	116	131	67	
115	0	8	55	94	108	52	53
120	0	2	41	74	86	40	
125	0	0	29	57	67	30	27
130	0	0	18	42	50	21	
135	0	0	9	28	36	14	11
140	0	0	2	17	23	8	
145	0	0	0	7	12	3	2
150	0	0	0	0	2	0	
155	0	0	0	0	0	0	0
160	0	0	0	0	0	0	
165	0	0	0	0	0	0	0
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	



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

COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC WALL	90				80				70				50				30				10				0
	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																									
0	1.211	1.211	1.211	1.21	1.171	1.171	1.171	1.17	1.141	1.141	1.141	1.14	1.071	1.071	1.07	1.011	1.011	1.01	0.950	0.950	0.95	0.92			
1	1.101	1.040	0.990	0.94	1.061	1.010	0.960	0.92	1.030	0.980	0.940	0.90	0.920	0.890	0.86	0.870	0.840	0.82	0.820	0.800	0.78	0.75			
2	1.000	0.910	0.840	0.77	0.970	0.880	0.810	0.75	0.930	0.860	0.790	0.74	0.810	0.760	0.71	0.770	0.720	0.68	0.720	0.690	0.66	0.63			
3	0.910	0.800	0.710	0.64	0.880	0.780	0.700	0.63	0.850	0.760	0.680	0.62	0.720	0.650	0.60	0.680	0.630	0.58	0.640	0.600	0.56	0.54			
4	0.840	0.710	0.620	0.55	0.810	0.700	0.610	0.54	0.790	0.680	0.600	0.53	0.640	0.570	0.52	0.610	0.550	0.50	0.580	0.530	0.49	0.47			
5	0.780	0.640	0.540	0.47	0.750	0.620	0.530	0.47	0.720	0.610	0.520	0.46	0.580	0.500	0.45	0.550	0.490	0.44	0.520	0.470	0.43	0.40			
6	0.710	0.570	0.480	0.41	0.690	0.560	0.470	0.41	0.660	0.540	0.460	0.40	0.520	0.450	0.39	0.490	0.430	0.38	0.470	0.420	0.37	0.35			
7	0.650	0.510	0.420	0.36	0.630	0.500	0.410	0.35	0.610	0.490	0.410	0.35	0.470	0.390	0.34	0.440	0.380	0.33	0.430	0.370	0.32	0.30			
8	0.610	0.460	0.380	0.32	0.590	0.450	0.370	0.31	0.570	0.440	0.360	0.31	0.420	0.350	0.30	0.410	0.340	0.29	0.390	0.330	0.29	0.27			
9	0.570	0.420	0.340	0.28	0.550	0.410	0.330	0.27	0.530	0.400	0.330	0.27	0.390	0.320	0.27	0.370	0.310	0.26	0.360	0.300	0.25	0.24			
10	0.520	0.390	0.300	0.25	0.510	0.380	0.300	0.25	0.490	0.370	0.290	0.24	0.350	0.290	0.24	0.340	0.280	0.23	0.330	0.270	0.23	0.21			

THE ABOVE COEFFICIENTS HAVE BEEN CALCULATED BASED ON LUMINAIRE LUMENS
BECAUSE IN AN ABSOLUTE TEST THE BARE LAMP LUMENS ARE UNKNOWN.
LIGHTING DESIGN CALCULATIONS MADE USING THESE COEFFICIENTS SHOULD
THEREFORE USE THE LUMINAIRE LUMENS IN THE CALCULATION FORMULA

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
BALLAST AND FIELD FACTORS HAVE NOT BEEN APPLIED.

TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST
LUMINOUS OPENING OF LUMINAIRE.