



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
L450-4-4800-35K-HTA20-S50-20-UNI-XXXX
Project Number
10455369
Test Number
728055

Test Date

2014-08-22

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.
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Luminaire Description: Formed white enamel steel housing, white enamel steel reflectors, frosted plastic lens enclosures
Catalog Number: L450-4-4800-35K-HTA20-S50-20-UNI-XXXX
Lamp: 240 white LEDs
Mounting: Surface
Ballast/Driver: One Osram Optotronic OT50W/PRG1400C/UNV/DIM/L

Luminaire

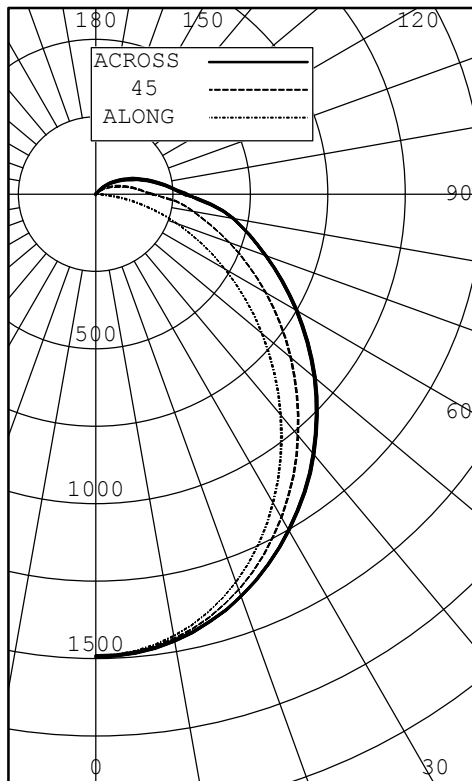


Test Conditions

Test Temperature:	24.7 °C
Voltage:	120.0 VAC
Current:	0.3948 A
Power:	47.20 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	7.93 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	1493	1493	1493	1493	1493	
5	1482	1482	1485	1488	1488	143
15	1400	1404	1416	1426	1429	398
25	1246	1258	1285	1310	1319	590
35	1041	1063	1112	1157	1175	693
45	815	845	919	986	1010	706
55	590	629	726	807	835	643
65	379	432	544	634	665	528
75	194	264	385	482	515	393
85	48	137	260	346	374	257
90	0	77	182	262	290	
95	0	54	148	221	244	150
105	0	25	98	155	174	97
115	0	5	57	100	115	55
125	0	0	26	57	68	27
135	0	0	3	24	32	9
145	0	0	0	1	4	1
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	1131	24.12
0-40	1824	38.90
0-60	3172	67.65
0-90	4351	92.79
40-90	2527	53.89
60-90	1179	25.14
90-180	338	7.21
0-180	4689	100.00

EFFICACY (LUMENS PER WATT): 99.4

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 44.000 INS
 WIDTH: 7.500 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.2
 SC: 1.2

ANGLE	ALONG	45	ACROSS
45	5411	6127	6733
55	4827	5967	6859
65	4216	6067	7413
75	3519	6988	9380
85	2565	14053	20230

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0	1493	1493	1493	1493	1493	1493	
5	1482	1482	1485	1488	1488	1485	143
10	1450	1453	1458	1465	1466	1458	
15	1400	1404	1416	1426	1429	1415	398
20	1330	1339	1357	1374	1379	1356	
25	1246	1258	1285	1310	1319	1284	590
30	1148	1166	1202	1237	1250	1201	
35	1041	1063	1112	1157	1175	1110	693
40	929	956	1016	1074	1095	1014	
45	815	845	919	986	1010	916	706
50	701	736	822	897	923	817	
55	590	629	726	807	835	719	643
60	482	527	633	719	748	623	
65	379	432	544	634	665	533	528
70	283	344	460	554	586	448	
75	194	264	385	482	515	371	393
80	115	192	320	419	451	303	
85	48	137	260	346	374	238	257
90	0	77	182	262	290	167	
95	0	54	148	221	244	136	150
100	0	38	122	186	208	112	
105	0	25	98	155	174	91	97
110	0	14	76	126	143	72	
115	0	5	57	100	115	55	55
120	0	0	41	77	90	41	
125	0	0	26	57	68	29	27
130	0	0	14	39	49	19	
135	0	0	3	24	32	11	9
140	0	0	0	11	17	5	
145	0	0	0	1	4	1	1
150	0	0	0	0	0	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	



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	.211	.211	.21	1.171	.171	.171	.17	1.141	.141	.141	.14	1.071	.071	.07	1.011	.011	.01	0.950	.950	.95	0.93		
	1	1.101	.040	.990	.94	1.061	.010	.960	.92	1.030	.980	.940	.90	0.920	.890	.86	0.870	.840	.82	0.820	.800	.78	0.76		
	2	1.000	.910	.840	.77	0.970	.880	.820	.75	0.940	.860	.790	.74	0.810	.760	.71	0.770	.720	.69	0.730	.690	.66	0.63		
	3	0.910	.800	.710	.64	0.880	.780	.700	.63	0.850	.760	.680	.62	0.720	.650	.60	0.680	.630	.58	0.650	.600	.56	0.54		
	4	0.840	.710	.620	.55	0.810	.700	.610	.54	0.790	.680	.600	.53	0.640	.570	.52	0.610	.550	.51	0.580	.530	.49	0.47		
	5	0.780	.640	.540	.47	0.750	.620	.530	.47	0.720	.610	.520	.46	0.580	.500	.45	0.550	.490	.44	0.520	.470	.43	0.40		
	6	0.720	.570	.480	.41	0.690	.560	.470	.41	0.670	.540	.460	.40	0.520	.450	.39	0.490	.430	.38	0.470	.420	.37	0.35		
	7	0.650	.510	.420	.36	0.630	.500	.410	.35	0.610	.490	.410	.35	0.470	.390	.34	0.440	.380	.33	0.430	.370	.32	0.30		
	8	0.610	.460	.380	.32	0.590	.450	.370	.31	0.570	.440	.360	.31	0.420	.350	.30	0.410	.340	.30	0.390	.330	.29	0.27		
	9	0.570	.420	.340	.28	0.550	.410	.330	.27	0.530	.410	.330	.27	0.390	.320	.27	0.370	.310	.26	0.360	.300	.26	0.24		
	10	0.520	.390	.300	.25	0.510	.380	.300	.24	0.490	.370	.290	.24	0.350	.290	.24	0.340	.280	.23	0.330	.270	.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.