



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
LW45-4-4500-35K-HTA-S50-UNI-XXXX
Project Number
10455369
Test Number
728071

Test Date

2014-09-03

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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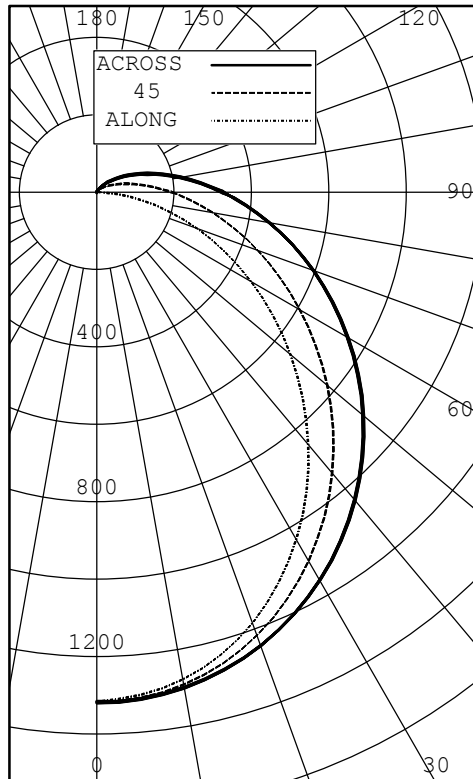
Luminaire Description: Formed white enamel steel housing, white enamel steel reflector, frosted plastic lens enclosure
Catalog Number: LW45-4-4500-35K-HTA-S50-UNI-XXXX
Lamp: 120 white LEDs
Mounting: Surface
Ballast/Driver: One Osram Optotronic OT50W/PRG1400C/UNV/DIM/L

Luminaire



Test Conditions

Test Temperature:	24.6 °C
Voltage:	120.0 VAC
Current:	0.4018 A
Power:	48.04 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	7.64 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT

ANGLE	ALONG	22.5	45	67.5	ACROSS	LUMENS
0	1318	1318	1318	1318	1318	
5	1304	1312	1312	1314	1315	126
15	1238	1250	1261	1272	1277	355
25	1113	1132	1161	1192	1204	534
35	944	971	1025	1078	1100	640
45	753	787	863	940	970	665
55	556	597	691	787	825	618
65	367	414	523	632	672	517
75	196	251	371	481	523	387
85	52	125	245	348	386	257
90	0	81	194	290	326	
95	0	49	150	238	270	157
105	0	17	85	152	177	92
115	0	5	45	90	109	49
125	0	2	23	50	62	24
135	0	0	10	25	32	10
145	0	0	4	11	13	4
155	0	0	0	1	3	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	1015	22.89
0-40	1655	37.31
0-60	2938	66.23
0-90	4099	92.42
40-90	2444	55.11
60-90	1161	26.18
90-180	336	7.58
0-180	4435	100.00

EFFICACY (LUMENS PER WATT): 92.4

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 45.000 INS
WIDTH: 4.750 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3
SC (ALONG): 1.2, SC (ACROSS): 1.3

ANGLE	ALONG	45	ACROSS
45	7717	7261	7589
55	7027	6647	7211
65	6293	6085	6902
75	5478	5679	6756
85	4359	5765	7001

TESTED IN ACCORDANCE WITH IES PROCEDURES.



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INTENSITY (CANDLEPOWER) DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0	1318	1318	1318	1318	1318	1318	
5	1304	1312	1312	1314	1315	1312	126
10	1279	1289	1292	1298	1300	1292	
15	1238	1250	1261	1272	1277	1260	355
20	1182	1197	1216	1237	1245	1216	
25	1113	1132	1161	1192	1204	1161	534
30	1033	1056	1097	1139	1156	1097	
35	944	971	1025	1078	1100	1024	640
40	850	881	946	1011	1037	946	
45	753	787	863	940	970	863	665
50	654	692	777	865	899	778	
55	556	597	691	787	825	691	618
60	460	504	606	709	749	606	
65	367	414	523	632	672	522	517
70	278	329	444	555	597	441	
75	196	251	371	481	523	366	387
80	120	183	305	413	453	297	
85	52	125	245	348	386	235	257
90	0	81	194	290	326	182	
95	0	49	150	238	270	143	157
100	0	28	114	192	221	111	
105	0	17	85	152	177	85	92
110	0	9	62	118	140	65	
115	0	5	45	90	109	49	49
120	0	2	32	68	83	36	
125	0	2	23	50	62	26	24
130	0	0	16	36	45	19	
135	0	0	10	25	32	13	10
140	0	0	7	17	22	9	
145	0	0	4	11	13	5	4
150	0	0	0	6	9	3	
155	0	0	0	1	3	1	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	



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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	1.091	1.030	0.980	0.94	1.061	1.010	0.960	0.92	1.020	0.980	0.930	0.89	0.920	0.880	0.85	0.860	0.840	0.81	0.820	0.790	0.77	0.75			
2	0.990	0.900	0.830	0.76	0.960	0.880	0.810	0.75	0.930	0.850	0.790	0.73	0.800	0.750	0.70	0.760	0.720	0.68	0.720	0.680	0.65	0.62			
3	0.910	0.790	0.700	0.63	0.880	0.770	0.690	0.62	0.850	0.750	0.670	0.61	0.710	0.640	0.59	0.670	0.620	0.57	0.640	0.590	0.55	0.53			
4	0.830	0.700	0.610	0.54	0.810	0.690	0.600	0.53	0.780	0.670	0.590	0.52	0.630	0.560	0.51	0.600	0.540	0.49	0.570	0.520	0.48	0.46			
5	0.770	0.630	0.530	0.46	0.740	0.610	0.520	0.46	0.710	0.600	0.510	0.45	0.570	0.490	0.44	0.540	0.480	0.43	0.510	0.460	0.41	0.39			
6	0.710	0.560	0.470	0.40	0.680	0.550	0.460	0.40	0.660	0.530	0.450	0.39	0.510	0.440	0.38	0.480	0.420	0.37	0.460	0.400	0.36	0.34			
7	0.650	0.500	0.410	0.35	0.630	0.490	0.400	0.34	0.610	0.480	0.400	0.34	0.460	0.380	0.33	0.430	0.370	0.32	0.420	0.360	0.31	0.29			
8	0.600	0.460	0.370	0.31	0.580	0.440	0.360	0.30	0.560	0.430	0.350	0.30	0.410	0.340	0.29	0.400	0.330	0.28	0.380	0.320	0.28	0.26			
9	0.560	0.420	0.330	0.27	0.540	0.410	0.320	0.26	0.520	0.400	0.320	0.26	0.380	0.310	0.26	0.360	0.300	0.25	0.350	0.290	0.24	0.23			
10	0.520	0.380	0.290	0.24	0.500	0.370	0.290	0.24	0.490	0.360	0.290	0.23	0.350	0.280	0.23	0.330	0.270	0.22	0.320	0.260	0.22	0.20			

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.