



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
L455-4-4500-35K-HTA20-S50-20-UNI-XXXX
Project Number
10455369
Test Number
728063

Test Date

2014-08-28

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: L455-4-4500-35K-HTA20-S50-20-UNI-XXXX
Lamp: 120 white LEDs
Mounting: Surface
Ballast/Driver: One Osram Optotronic OT50W/PRG1400C/UNV/DIM/L

Luminaire

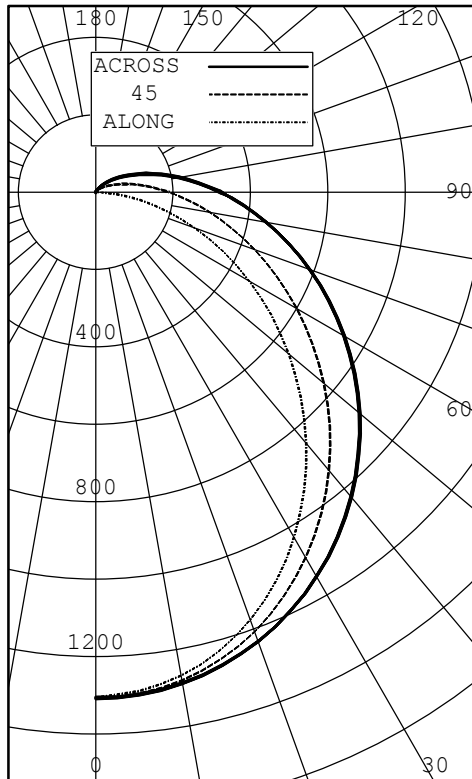


Test Conditions

Test Temperature:	24.7 °C
Voltage:	120.0 VAC
Current:	0.3883 A
Power:	46.44 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	7.51 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	1307	1307	1307	1307	1307	
5	1294	1301	1301	1303	1303	125
15	1229	1240	1249	1261	1266	352
25	1106	1123	1151	1181	1193	529
35	939	965	1016	1067	1089	634
45	749	781	855	929	960	659
55	553	593	683	778	816	612
65	364	409	516	624	665	511
75	193	247	366	476	518	382
85	52	121	241	344	383	253
90	0	77	190	287	323	
95	0	47	147	235	268	155
105	0	15	83	150	176	90
115	0	4	43	89	108	48
125	0	0	22	49	61	23
135	0	0	10	25	32	10
145	0	0	1	11	14	3
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	0

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	1007	22.94
0-40	1641	37.40
0-60	2911	66.36
0-90	4057	92.49
40-90	2417	55.09
60-90	1146	26.12
90-180	330	7.51
0-180	4387	100.00

EFFICACY (LUMENS PER WATT): 94.5

*** 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	7680	7192	7511
55	6995	6575	7135
65	6244	6012	6830
75	5393	5598	6685
85	4326	5661	6935

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0	1307	1307	1307	1307	1307	1307	
5	1294	1301	1301	1303	1303	1301	125
10	1269	1278	1281	1287	1289	1281	
15	1229	1240	1249	1261	1266	1249	352
20	1173	1188	1206	1226	1234	1206	
25	1106	1123	1151	1181	1193	1151	529
30	1027	1048	1087	1128	1145	1087	
35	939	965	1016	1067	1089	1015	634
40	846	875	937	1001	1027	937	
45	749	781	855	929	960	855	659
50	652	687	769	855	890	770	
55	553	593	683	778	816	685	612
60	457	500	599	700	740	599	
65	364	409	516	624	665	516	511
70	275	324	438	548	590	436	
75	193	247	366	476	518	361	382
80	118	178	300	407	448	292	
85	52	121	241	344	383	231	253
90	0	77	190	287	323	179	
95	0	47	147	235	268	140	155
100	0	27	111	189	219	109	
105	0	15	83	150	176	84	90
110	0	8	60	116	139	64	
115	0	4	43	89	108	48	48
120	0	2	31	67	82	35	
125	0	0	22	49	61	26	23
130	0	0	15	35	45	18	
135	0	0	10	25	32	13	10
140	0	0	7	16	21	9	
145	0	0	1	11	14	5	3
150	0	0	0	6	9	3	
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	1.211	1.211	1.211	1.171	1.171	1.171	1.171	1.141	1.141	1.141	1.141	1.071	1.071	1.071	1.071	1.071	1.071	1.011	1.011	1.011	1.011	1.011	1.011	0.950	0.950	0.950	0.950	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	0.870	0.840	0.81	0.820	0.800	0.77	0.820	0.800	0.77	0.75	0.75	0.75	0.75	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	0.720	0.680	0.65	0.62	0.62	0.62	0.62	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	0.640	0.590	0.55	0.53	0.53	0.53	0.53	0.53
4	0.840	0.710	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	0.570	0.520	0.48	0.46	0.46	0.46	0.46	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	0.42	0.510	0.460	0.42	0.39	0.39	0.39	0.39	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	0.410	0.36	0.460	0.410	0.36	0.34	0.34	0.34	0.34	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	0.440	0.370	0.32	0.420	0.360	0.31	0.420	0.360	0.31	0.29	0.29	0.29	0.29	0.29
8	0.600	0.460	0.370	0.31	0.580	0.450	0.360	0.30	0.560	0.430	0.350	0.30	0.420	0.340	0.29	0.400	0.330	0.28	0.380	0.320	0.28	0.380	0.320	0.28	0.26	0.26	0.26	0.26	0.26
9	0.560	0.420	0.330	0.27	0.540	0.410	0.320	0.27	0.520	0.400	0.320	0.26	0.380	0.310	0.26	0.360	0.300	0.25	0.350	0.290	0.25	0.350	0.290	0.25	0.23	0.23	0.23	0.23	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	0.320	0.260	0.22	0.20	0.20	0.20	0.20	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.