



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
LS1-4-4200-35K-S50-UNI
Project Number
10455369
Test Number
728082

Test Date

2014-08-22

Prepared By

Handwritten signature of Javier Caban in black ink.

Javier Caban, Technician

Approved By

Handwritten signature of Kyle Spaziani in black ink.

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, no enclosure
Catalog Number: LS1-4-4200-35K-S50-UNI
Lamp: 120 white LEDs
Mounting: Surface
Ballast/Driver: One Osram Optotronic OT50W/PRG1400C/UNV/DIM/L

Luminaire

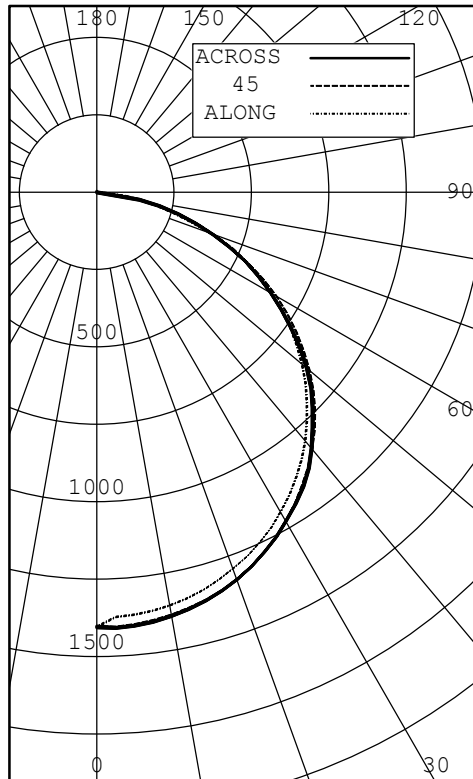


Test Conditions

Test Temperature:	24.0 °C
Voltage:	120.0 VAC
Current:	0.3207 A
Power:	38.33 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	7.28 %



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INTENSITY (CANDLEPOWER) SUMMARY OUTPUT

ANGLE	ALONG	22.5	45	67.5	ACROSS	LUMENS
0	1405	1405	1405	1405	1405	
5	1371	1408	1402	1409	1406	135
10	1356	1392	1387	1393	1391	
15	1330	1367	1363	1368	1366	384
20	1293	1332	1328	1330	1330	
25	1248	1286	1282	1284	1283	589
30	1191	1229	1224	1225	1225	
35	1124	1161	1157	1160	1162	721
40	1047	1082	1082	1081	1079	
45	960	993	996	988	986	760
50	866	897	896	888	886	
55	763	793	787	776	767	696
60	653	684	670	658	649	
65	534	558	542	534	528	533
70	397	425	412	402	400	
75	251	282	278	273	274	290
80	139	145	153	154	141	
85	40	52	2	2	1	42
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	1108	26.69
0-40	1829	44.07
0-60	3286	79.15
0-90	4151	100.00
40-90	2322	55.93
60-90	866	20.85
90-180	0	0.00
0-180	4151	100.00

EFFICACY (LUMENS PER WATT): 108.4

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 44.380 INS
WIDTH: 1.880 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3
SC: 1.3

ANGLE	ALONG	45	ACROSS
45	25229	26279	26003
55	24704	25582	24951
65	23464	23918	23300
75	18023	19978	19724
85	8600	438	299

TESTED IN ACCORDANCE WITH IES PROCEDURES.



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INTENSITY (CANDLEPOWER) DATA
IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0.0	1405	1405	1405	1405	1405	1405	
2.5	1375	1412	1406	1413	1410	1406	
5.0	1371	1408	1402	1409	1406	1402	135
7.5	1365	1402	1395	1402	1400	1395	
10.0	1356	1392	1387	1393	1391	1386	
12.5	1344	1381	1376	1382	1380	1375	
15.0	1330	1367	1363	1368	1366	1362	384
17.5	1313	1351	1347	1351	1349	1345	
20.0	1293	1332	1328	1330	1330	1325	
22.5	1272	1310	1306	1308	1308	1304	
25.0	1248	1286	1282	1284	1283	1279	589
27.5	1221	1260	1255	1256	1256	1252	
30.0	1191	1229	1224	1225	1225	1221	
32.5	1159	1196	1192	1193	1194	1189	
35.0	1124	1161	1157	1160	1162	1155	721
37.5	1087	1123	1121	1124	1124	1119	
40.0	1047	1082	1082	1081	1079	1077	
42.5	1005	1039	1041	1033	1033	1033	
45.0	960	993	996	988	986	988	760
47.5	915	945	949	940	939	940	
50.0	866	897	896	888	886	889	
52.5	815	846	843	833	828	836	
55.0	763	793	787	776	767	780	696
57.5	709	739	728	718	708	723	
60.0	653	684	670	658	649	666	
62.5	594	624	607	596	589	605	
65.0	534	558	542	534	528	541	533
67.5	470	491	477	469	465	476	
70.0	397	425	412	402	400	409	
72.5	318	355	345	337	336	341	
75.0	251	282	278	273	274	274	290
77.5	193	210	212	213	209	209	
80.0	139	145	153	154	141	148	
82.5	82	94	97	10	2	61	
85.0	40	52	2	2	1	19	42
87.5	10	1	1	0	0	2	
90.0	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	1.221	.221	.221	.22	1.191	.191	.191	.19	1.161	.161	.161	.16	1.111	.111	.11	1.061	.061	.06	1.021	.021	.02	1.00			
1	1.121	.071	.030	.99	1.101	.051	.010	.98	1.071	.031	.000	.96	0.990	.960	.93	0.950	.930	.90	0.910	.890	.88	0.86			
2	1.030	.950	.880	.82	1.010	.930	.870	.81	0.980	.910	.850	.80	0.870	.830	.79	0.840	.800	.77	0.810	.780	.75	0.73			
3	0.940	.830	.750	.69	0.920	.820	.740	.68	0.900	.800	.730	.68	0.780	.720	.67	0.750	.700	.65	0.720	.680	.64	0.62			
4	0.870	.750	.660	.59	0.850	.730	.650	.59	0.830	.720	.650	.58	0.700	.630	.58	0.670	.610	.57	0.650	.600	.56	0.54			
5	0.800	.670	.570	.51	0.780	.660	.570	.50	0.760	.640	.560	.50	0.620	.550	.50	0.600	.540	.49	0.580	.530	.48	0.46			
6	0.740	.600	.500	.44	0.720	.590	.500	.44	0.700	.580	.490	.43	0.560	.480	.43	0.540	.480	.43	0.530	.470	.42	0.40			
7	0.670	.530	.440	.38	0.660	.520	.440	.38	0.640	.510	.430	.37	0.500	.420	.37	0.480	.420	.37	0.470	.410	.36	0.35			
8	0.620	.480	.390	.33	0.610	.470	.390	.33	0.590	.470	.390	.33	0.450	.380	.33	0.440	.370	.32	0.430	.370	.32	0.30			
9	0.580	.440	.350	.29	0.560	.430	.350	.29	0.550	.420	.350	.29	0.410	.340	.29	0.400	.330	.29	0.390	.330	.28	0.27			
10	0.530	.400	.310	.26	0.520	.390	.310	.26	0.510	.380	.310	.26	0.370	.300	.26	0.370	.300	.25	0.360	.300	.25	0.23			

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.