



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
LF Illumination LLC
Scott Hershman
9200 Deering Avenue
Chatsworth, CA 91311
United States

Catalog Number
8422-16L-9030-N-MW
Project Number
10581561
Test Number
835671

Test Date

2014-12-04

Prepared By

Handwritten signature of Dane Hernandez-Adams in black ink.

Dane Hernandez-Adams, Technician

Approved By

Handwritten signature of Eric M. Gaudreau in black ink.

Eric Gaudreau, Engineering Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Black steel housing, black aluminum heatsink, patterned specular reflector
above white aluminum trim
Catalog Number: 8422-16L-9030-N-MW
Lamp: One white LED
Mounting: Recessed
Ballast/Driver: One ERP ESS030W-0500-42

Luminaire



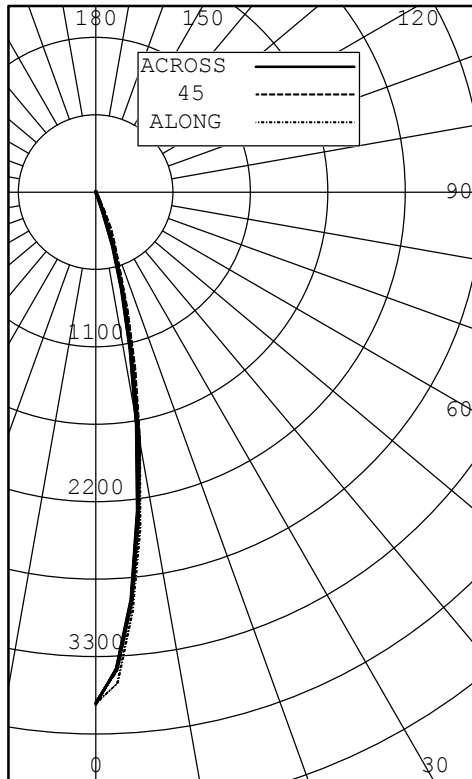
Test Conditions

Test Temperature:	24.6 °C
Voltage:	120.0 VAC
Current:	0.1288 A
Power:	15.24 W
Power Factor:	0.986
Frequency:	60 Hz
Current THD:	0.129 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	3634	3634	3634	3634	3634	
5	2995	2939	2925	2908	2906	242
10	1794	1774	1795	1756	1684	
15	751	805	870	812	714	226
20	155	281	384	292	167	
25	4	9	144	21	5	34
30	2	2	4	2	4	
35	0	0	0	2	5	1
40	0	0	0	1	4	
45	0	0	0	0	2	0
50	0	0	0	0	0	
55	0	0	0	0	0	0
60	0	0	0	0	0	
65	0	0	0	0	0	0
70	0	0	0	0	0	
75	0	0	0	0	0	0
80	0	0	0	0	0	
85	0	0	0	0	0	0
90	0	0	0	0	0	



ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	502	99.79
0-40	503	99.96
0-60	503	100.00
0-90	503	100.00
40-90	0	0.04
60-90	0	0.00
90-180	0	0.00
0-180	503	100.00

EFFICACY (LUMENS PER WATT): 33.1

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 4.000 INS
 WIDTH: 4.000 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 0.3
 SC: 0.3

ANGLE	ALONG	45	ACROSS
45	0	0	226
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA
 IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0.0	3634	3634	3634	3634	3634	3634	
2.5	3495	3455	3408	3387	3390	3423	
5.0	2995	2939	2925	2908	2906	2930	242
7.5	2416	2371	2343	2317	2282	2345	
10.0	1794	1774	1795	1756	1684	1766	
12.5	1188	1229	1286	1222	1145	1226	
15.0	751	805	870	812	714	805	226
17.5	406	523	551	511	404	497	
20.0	155	281	384	292	167	279	
22.5	27	97	275	114	44	130	
25.0	4	9	144	21	5	45	34
27.5	2	2	43	3	4	13	
30.0	2	2	4	2	4	3	
32.5	1	1	1	2	5	2	
35.0	0	0	0	2	5	1	1
37.5	0	0	0	2	5	1	
40.0	0	0	0	1	4	1	
42.5	0	0	0	0	3	0	
45.0	0	0	0	0	2	0	0
47.5	0	0	0	0	1	0	
50.0	0	0	0	0	0	0	
52.5	0	0	0	0	0	0	
55.0	0	0	0	0	0	0	0
57.5	0	0	0	0	0	0	
60.0	0	0	0	0	0	0	
62.5	0	0	0	0	0	0	
65.0	0	0	0	0	0	0	0
67.5	0	0	0	0	0	0	
70.0	0	0	0	0	0	0	
72.5	0	0	0	0	0	0	
75.0	0	0	0	0	0	0	0
77.5	0	0	0	0	0	0	
80.0	0	0	0	0	0	0	
82.5	0	0	0	0	0	0	
85.0	0	0	0	0	0	0	0
87.5	0	0	0	0	0	0	
90.0	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	1.221	1.221	1.221	1.221	1.191	1.191	1.191	1.191	1.161	1.161	1.161	1.161	1.111	1.111	1.111	1.111	1.061	1.061	1.061	1.061	1.021	1.021	1.021	1.021	1.00
1	1.181	1.161	1.151	1.13	1.161	1.141	1.131	1.12	1.141	1.131	1.111	1.10	1.081	1.071	1.07	1.051	1.041	1.03	1.021	1.01	1.021	1.011	1.00	0.99	0.99
2	1.151	1.121	1.101	1.08	1.131	1.111	1.091	1.06	1.121	1.091	1.071	1.05	1.061	1.041	1.03	1.031	1.021	1.01	1.01	1.01	1.011	1.000	0.99	0.98	0.98
3	1.131	1.091	1.061	1.04	1.111	1.081	1.051	1.03	1.101	1.071	1.041	1.03	1.051	1.031	1.01	1.021	1.011	1.00	1.00	1.00	1.000	0.990	0.98	0.97	0.97
4	1.111	1.071	1.031	1.01	1.091	1.061	1.031	1.01	1.081	1.051	1.021	1.00	1.031	1.010	0.99	1.010	0.990	0.98	0.98	0.98	0.990	0.980	0.97	0.96	0.96
5	1.091	1.041	1.010	0.99	1.071	1.031	1.000	0.98	1.061	1.031	1.000	0.98	1.010	0.990	0.97	1.000	0.980	0.96	0.96	0.96	0.980	0.970	0.96	0.95	0.95
6	1.071	1.030	0.990	0.97	1.061	1.020	0.990	0.97	1.051	1.010	0.980	0.97	1.000	0.980	0.96	0.990	0.970	0.95	0.95	0.95	0.980	0.960	0.95	0.94	0.94
7	1.051	1.000	0.970	0.96	1.041	1.000	0.970	0.95	1.031	1.000	0.970	0.95	0.980	0.960	0.95	0.970	0.950	0.94	0.94	0.94	0.970	0.950	0.94	0.93	0.93
8	1.040	0.990	0.960	0.94	1.030	0.980	0.960	0.94	1.020	0.970	0.950	0.93	0.970	0.950	0.93	0.960	0.940	0.93	0.93	0.93	0.960	0.940	0.92	0.92	0.92
9	1.020	0.980	0.950	0.93	1.010	0.970	0.950	0.93	1.010	0.970	0.940	0.93	0.960	0.940	0.92	0.960	0.930	0.92	0.92	0.92	0.950	0.930	0.92	0.91	0.91
10	1.010	0.960	0.930	0.91	1.000	0.960	0.930	0.91	0.990	0.950	0.930	0.91	0.950	0.920	0.91	0.940	0.920	0.91	0.91	0.91	0.940	0.920	0.91	0.90	0.90

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.