



8165 E Kaiser Blvd. Anaheim, CA 92808
 p. 714.282.2270
 f. 714.676.5558

Report No: L061507801

Date: 7/20/2015



NVLAP LAB CODE 200927-0

Report No: L061507801

Report Prepared For: Beachside Lighting
 905 Kalaniana'ole Hwy # 29A Kailua, HI. 96734

Model Number: E1-2W-A-FL

Test: Electrical and Photometric tests

Standards Used: Appropriate part or all test guidelines were used for test performed:
IESNA LM79: 2008 Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products
ANSI NEMA ANSLG C78.377: 2008 Specification of the Chromaticity of Solid State Lighting Products
ANSI C82.77:2002: Harmonic Emission Limits-Related Quality Requirements for Lighting Equipment

Description of Sample: Client submitted the sample. Catalog number is E1-2W-A-FL. Received in working and undamaged condition. No modifications were necessary.

Testing Condition: Fixture is tested with no special conditions.

Sample Arrival Date: 7/14/15

Date of Tests: 7/16/15 - 7/20/15

Seasoning of Sample: No seasoning was performed in accordance with IESNA LM-79.

Equipment List

Equipment Used	Model No	Stock No	Calibration Due Date
Chroma Programmable AC Source	61604	PS-AC02	--
Yokogawa Digital Power Meter	WT210	MT-EL06-S1	11/10/15
Xitron Power Analysis System	2503AH	MT-EL01	10/20/15
BK Precision DC Power Supply	1747	PSDC-04	01/08/16
Fluke Digital Thermometer	52k/J	MT-TP02-GC	01/05/16
LLI Type C Goniophotometer System	RMG-C-MKII	CD-LL04-GC	--
LLI 2M Sphere	2MR97	CD-SN03-S2	--
LLI Spectroradiometer	SPR-3000	MT-SC01-S2	Before Use

*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

Test Summary

Manufacturer:	Beachside Lighting
Model Number:	E1-2W-A-FL
Driver Model Number:	HATCH RS12-30M-LED
Total Lumens:	39.68
Input Voltage (VAC/60Hz):	120.00
Input Current (Amp):	0.03
Input Power (W):	2.50
Input Power Factor:	0.77
Current ATHD @ 120V(%):	59%
Current ATHD @ 277V(%):	N/A
Efficacy:	16
Color Rendering Index (CRI):	-25
Correlated Color Temperature (K):	1541
Chromaticity Coordinate x:	0.5915
Chromaticity Coordinate y:	0.4078
Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	1:30
Total Operating Time (Hours):	2:00
Off State Power(W):	0.00

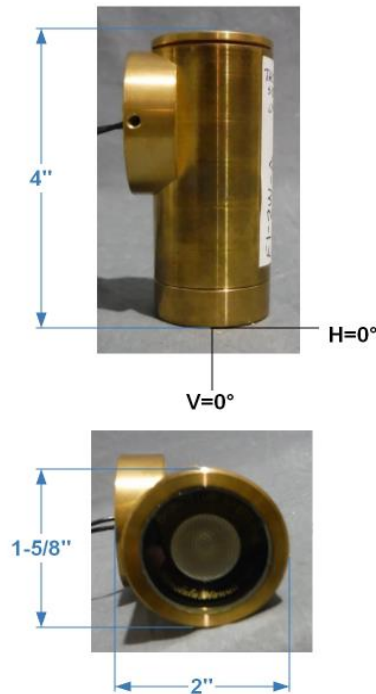
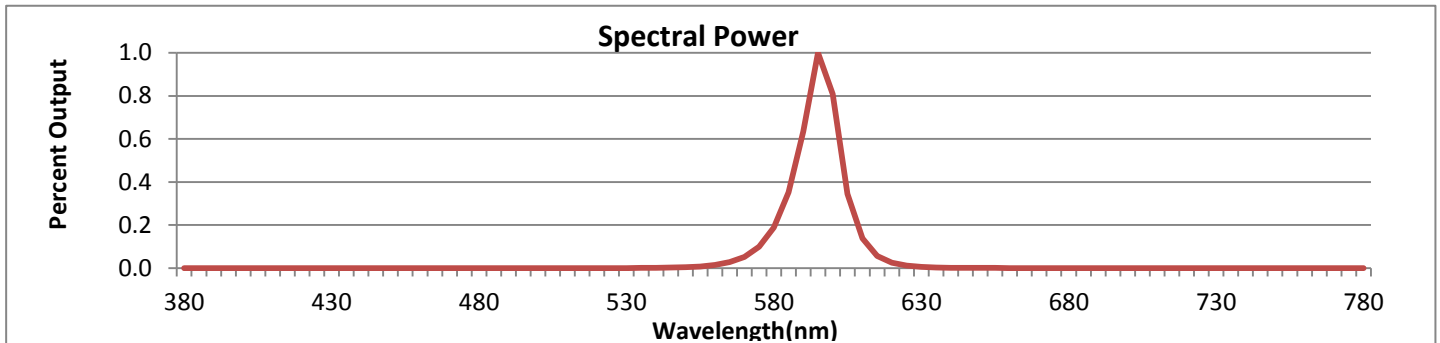


FIG. 1 LUMINAIRE

*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.



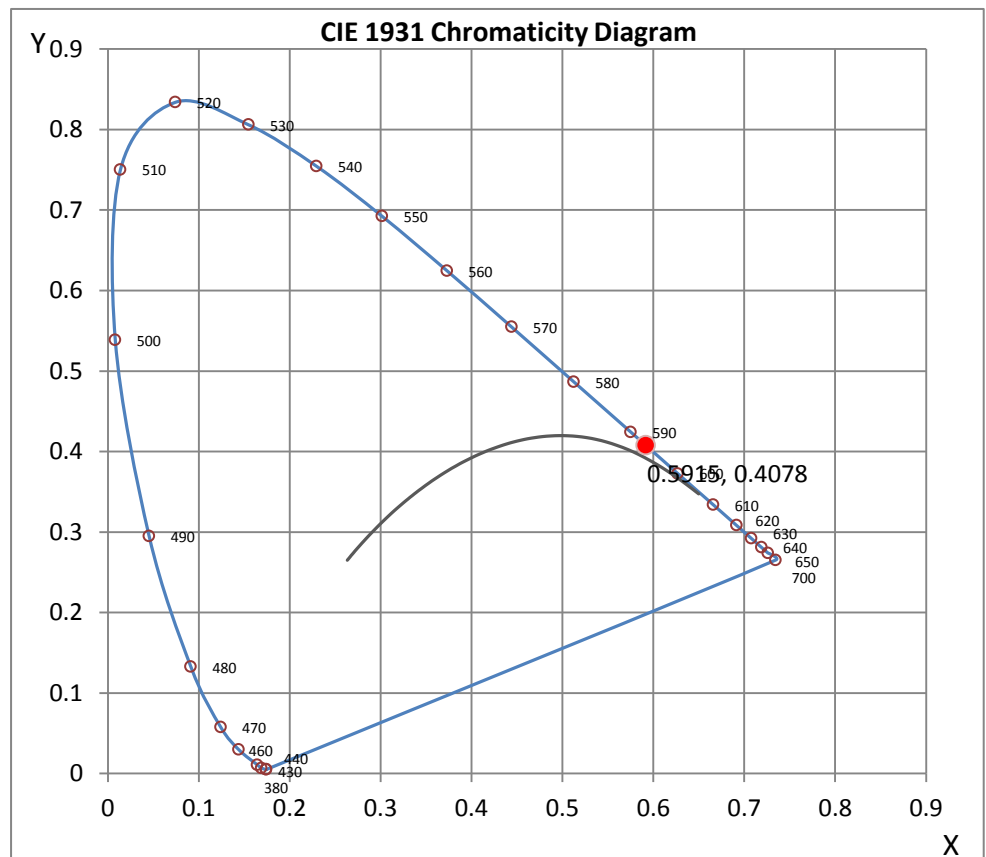
Wavelength	W/m ² nm	440	0.0000	510	0.0001	580	0.1889	650	0.0007	720	0.0000
380	0.0000	450	0.0000	520	0.0001	590	0.6346	660	0.0003	730	0.0001
390	0.0000	460	0.0001	530	0.0003	600	0.8086	670	0.0003	740	0.0001
400	0.0000	470	0.0001	540	0.0010	610	0.1374	680	0.0001	750	0.0001
410	0.0000	480	0.0001	550	0.0039	620	0.0247	690	0.0002	760	0.0000
420	0.0000	490	0.0000	560	0.0144	630	0.0053	700	0.0001	770	0.0001
430	0.0000	500	0.0001	570	0.0515	640	0.0017	710	0.0001	780	0.0001

CRI & CCT

x	0.5915
y	0.4078
u'	0.3526
v'	0.5469
CRI	-24.50
CCT	1541
Duv	0.00820

R Values

R1	-37.71
R2	51.81
R3	13.95
R4	-72.49
R5	-44.37
R6	41.25
R7	-9.71
R8	-138.84
R9	-396.96
R10	29.29
R11	-99.23
R12	-8.99
R13	-17.80
R14	43.67



*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

Test Methods

Photometric Measurements - Goniophotometer

A Custom Light Laboratory Type C Rotating Mirror Goniophotometer was used to measure candelas(intensity) at each angle of distribution as defined by IESNA for the appropriate fixture type.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Spectral Measurements - Integrating Sphere

A Sensing Spectroradiometer SPR-3000, in conjunction with Light Laboratory 2 meter integrating sphere was used to measure chromaticity coordinates, correlated color temperature(CCT) and the color rendering index(CRI) for each sample.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Disclaimers:

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of Federal Government.

Report Prepared by : Keyur Patel

Test Report Released by:



Jeff Ahn
Engineering Manager

Test Report Reviewed by:



Steve Kang
Quality Assurance

**Attached are photometric data reports. Total number of pages: 9*



8165 E. Kaiser Blvd. Anaheim, CA 92808
 p. 714.282.2270
 f. 714.676.5558

Photometric Test Report

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L061507801.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] L061507801
 [TESTLAB] LIGHT LABORATORY, INC.
 [ISSUEDATE] 7/20/2015
 [MANUFAC] BEACHSIDE LIGHTING
 [LUMCAT] E1-2W-A-FL
 [LUMINAIRE] 2"L. X 1-5/8"DIA. X 4"H. POST MOUNTED FIXED DOWNLIGHT
 [MORE] CLEAR LENS
 [BALLASTCAT] HATCH RS12-30M-LED
 [BALLAST] INPUT: 120V, 0.3A, 50/60Hz OUTPUT: 12V, 30W
 [LAMPPOSITION] 0,0
 [LAMPCAT] N/A
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
 [INPUT] 120VAC, 2.50W
 [TEST PROCEDURE] IESNA:LM-79-08

Note: Candela values converted from Type-C to Type-B

CHARACTERISTICS

NEMA Type	4 H x 4 V
Maximum Candela	108.02
Maximum Candela Angle	0H 0V
Horizontal Beam Angle (50%)	28.1
Vertical Beam Angle (50%)	28.1
Horizontal Field Angle (10%)	60.3
Vertical Field Angle (10%)	60.3
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	14
Beam Efficiency	N.A.
Field Lumens	31
Field Efficiency	N.A.
Spill Lumens	9
Luminaire Lumens	40
Total Efficiency	N.A.
Total Luminaire Watts	2.5
Ballast Factor	1.00

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L061507801.IES

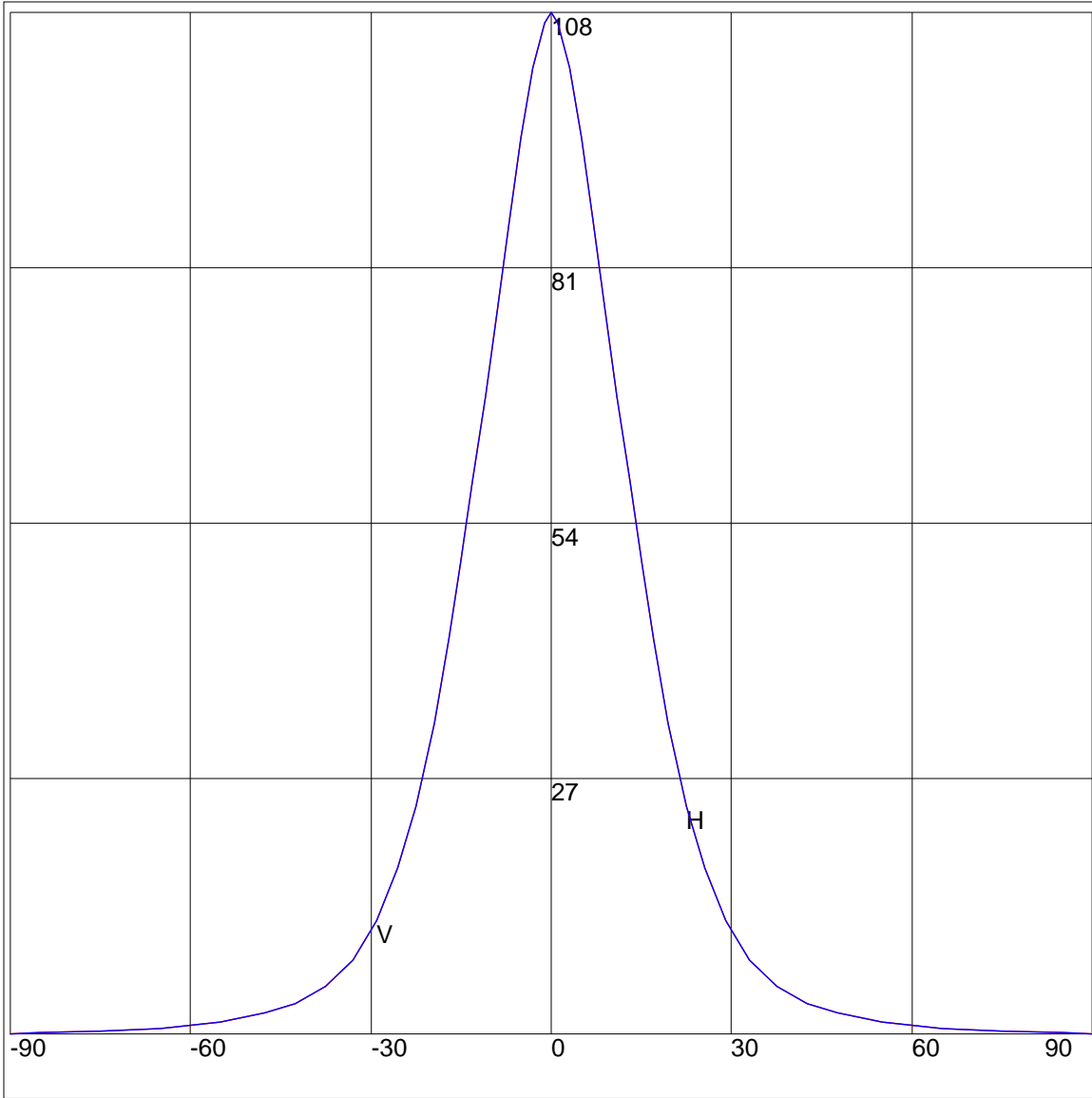
AXIAL CANDELA

DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	.22	85	.22
75	.31	75	.31
65	.65	65	.65
55	1.33	55	1.33
47.5	2.27	47.5	2.27
42.5	3.27	42.5	3.27
37.5	5.02	37.5	5.02
33	7.86	33	7.86
29	12.02	29	12.02
25.5	17.6	25.5	17.6
22.5	24.07	22.5	24.07
19.5	32.84	19.5	32.84
17	41.82	17	41.82
15	49.8	15	49.8
13	58.44	13	58.44
11	67.39	11	67.39
9	76.58	9	76.58
7	85.84	7	85.84
5	94.78	5	94.78
3	102.18	3	102.18
1	106.88	1	106.88
0	108.02	0	108.02
-1	106.88	-1	106.88
-3	102.18	-3	102.18
-5	94.78	-5	94.78
-7	85.84	-7	85.84
-9	76.58	-9	76.58
-11	67.39	-11	67.39
-13	58.44	-13	58.44
-15	49.8	-15	49.8
-17	41.82	-17	41.82
-19.5	32.84	-19.5	32.84
-22.5	24.07	-22.5	24.07
-25.5	17.6	-25.5	17.6
-29	12.02	-29	12.02
-33	7.86	-33	7.86
-37.5	5.02	-37.5	5.02
-42.5	3.27	-42.5	3.27
-47.5	2.27	-47.5	2.27
-55	1.33	-55	1.33
-65	.65	-65	.65
-75	.31	-75	.31
-85	.22	-85	.22
-90	0	-90	0

ZONAL LUMEN SUMMARY

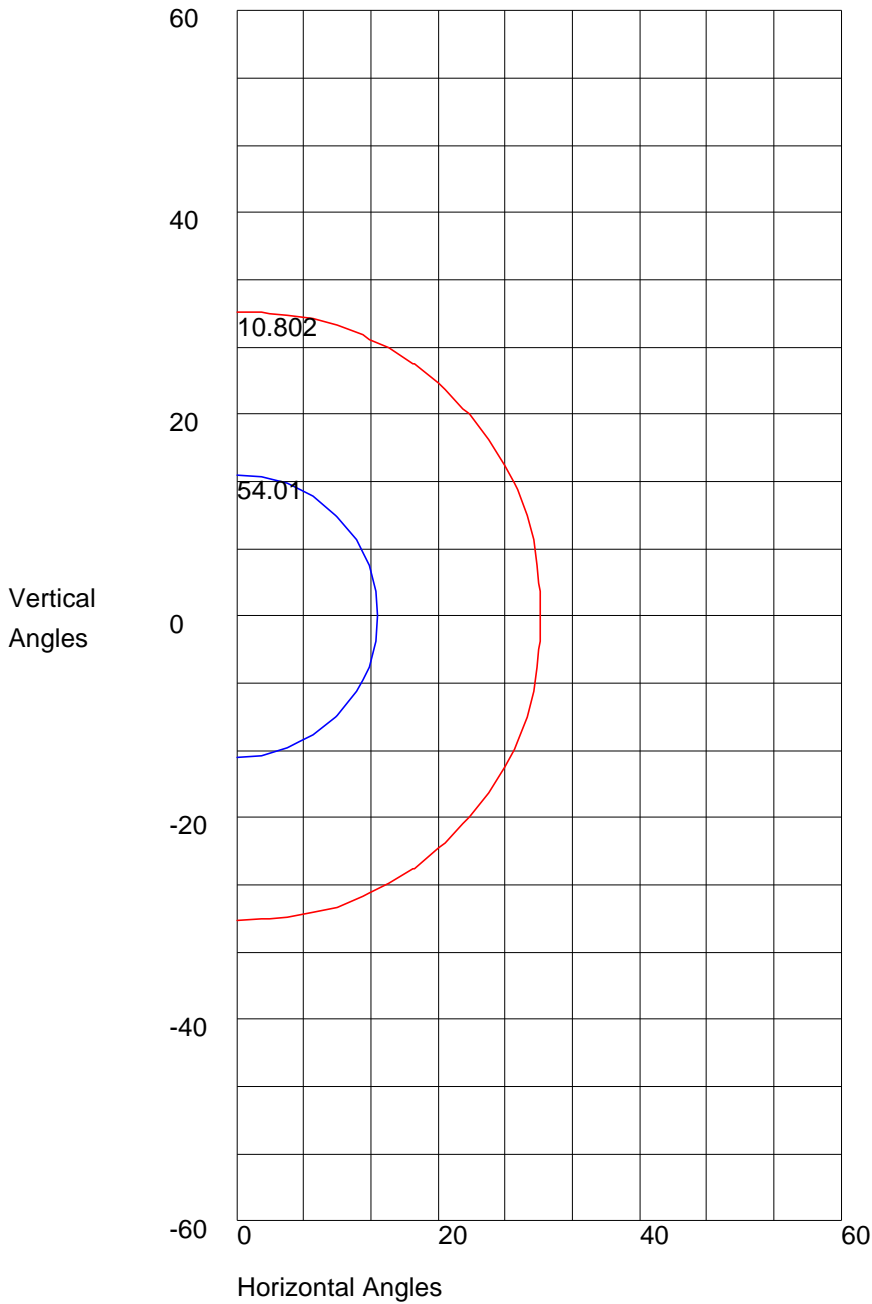
Zone	%
0-20	53.9
0-30	76
0-40	86.2
0-60	95.5
0-80	99.1
0-90	100
10-90	82.5
20-40	32.3
20-50	38.7
40-70	11.7
60-80	3.6
70-80	1.2
80-90	0.9
90-110	0
90-120	0
90-130	0
90-150	0
90-180	0
110-180	0
0-180	100

AXIAL CANDELA DISPLAY



Maximum Candela = 108.02 Located At Horizontal Angle = 0, Vertical Angle = 0
H - Horizontal Axial Candela
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 108.02 Located At Horizontal Angle = 0, Vertical Angle = 0
50% Maximum Candela = 54.01
10% Maximum Candela = 10.802

ADDENDUM: Illuminance cone diagram

Mounting Height = 8 ft.

