



8165 E Kaiser Blvd. Anaheim, CA 92808  
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Report No: L061507808

Date: 7/20/2015



NVLAP LAB CODE 200927-0

**Report No:** L061507808

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

**Model Number:** L-014S-120V-5W-A-NFL

**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 L-014S-120V-5W-A-NFL . Received in working and undamaged condition. No modifications were necessary.

**Testing Condition:** DAUER LED GU10 AC120V 5W lamp was used for testing.

**Sample Arrival Date:** 7/14/15

**Date of Tests:** 7/17/15 - 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**

<b>Manufacturer:</b>	Beachside Lighting
<b>Model Number:</b>	L-014S-120V-5W-A-NFL
<b>Driver Model Number:</b>	N/A
<b>Total Lumens:</b>	62.36
<b>Input Voltage (VAC/60Hz):</b>	120.00
<b>Input Current (Amp):</b>	0.03
<b>Input Power (W):</b>	3.49
<b>Input Power Factor:</b>	0.93
<b>Current ATHD @ 120V(%):</b>	32%
<b>Current ATHD @ 277V(%):</b>	N/A
<b>Efficacy:</b>	18
<b>Color Rendering Index (CRI):</b>	-11
<b>Correlated Color Temperature (K):</b>	1293
<b>Chromaticity Coordinate x:</b>	0.6176
<b>Chromaticity Coordinate y:</b>	0.3817
<b>Ambient Temperature (°C):</b>	25.0
<b>Stabilization Time (Hours):</b>	1:45
<b>Total Operating Time (Hours):</b>	2:15
<b>Off State Power(W):</b>	0.00

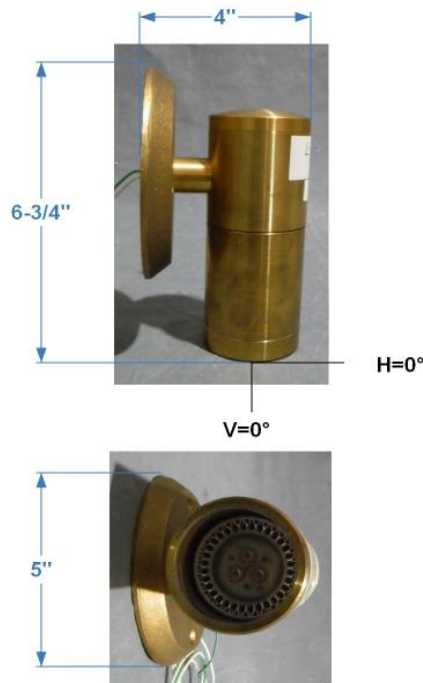
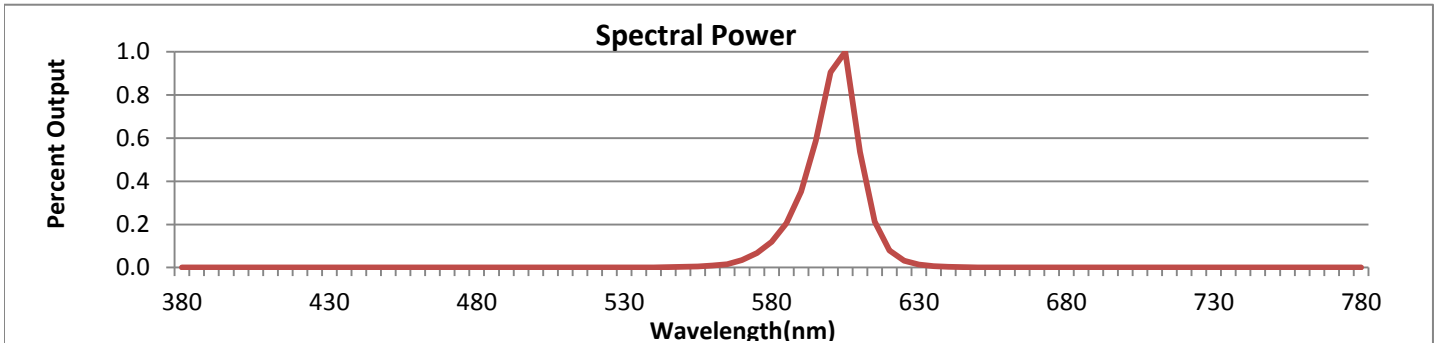


FIG. 1 LUMINAIRE



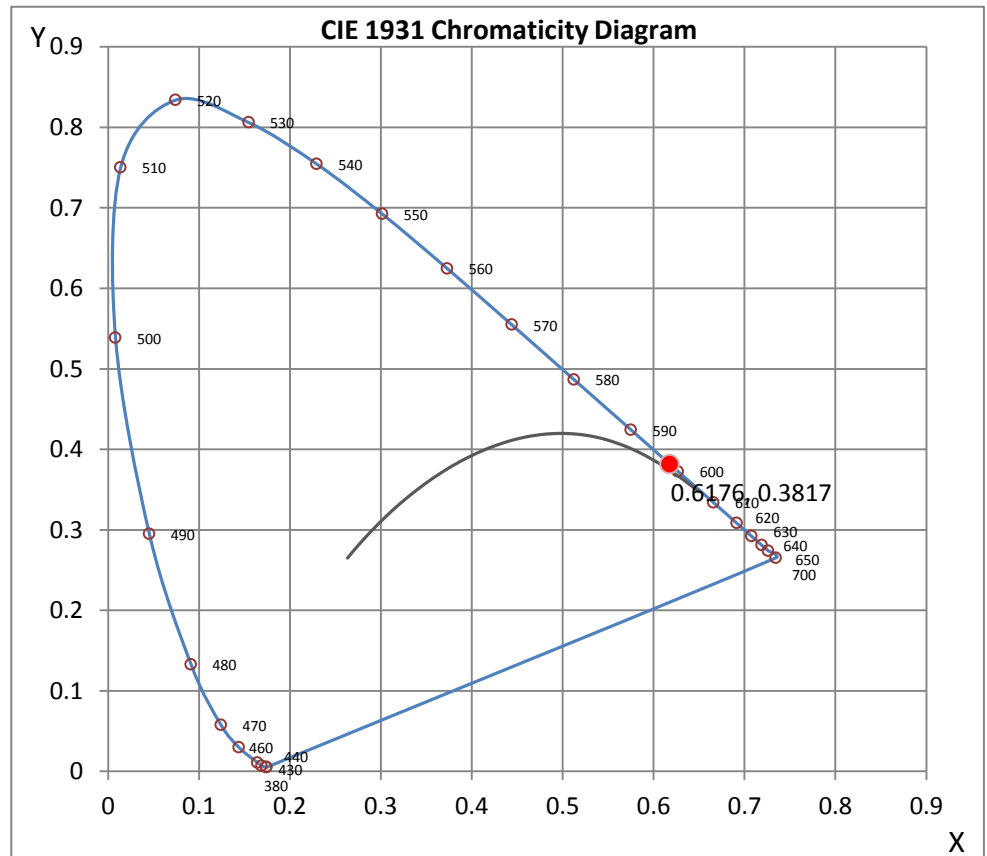
Wavelength	W/m <sup>2</sup> nm	440	0.0001	510	0.0001	580	0.1193	650	0.0010	720	0.0001
380	0.0000	450	0.0000	520	0.0002	590	0.3521	660	0.0005	730	0.0001
390	0.0000	460	0.0000	530	0.0004	600	0.9063	670	0.0002	740	0.0001
400	0.0001	470	0.0001	540	0.0010	610	0.5367	680	0.0002	750	0.0001
410	0.0000	480	0.0001	550	0.0030	620	0.0798	690	0.0001	760	0.0000
420	0.0000	490	0.0001	560	0.0087	630	0.0145	700	0.0001	770	0.0000
430	0.0000	500	0.0001	570	0.0343	640	0.0033	710	0.0001	780	0.0001

**CRI & CCT**

x	0.6176
y	0.3817
u'	0.3893
v'	0.5414
CRI	-10.70
CCT	1293
Duv	0.01928

**R Values**

R1	-17.45
R2	63.37
R3	15.58
R4	-55.32
R5	-26.75
R6	64.70
R7	-7.27
R8	-122.21
R9	-332.06
R10	48.50
R11	-70.60
R12	31.94
R13	2.17
R14	47.41



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



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**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:

Test Report Reviewed by:

Jeff Ahn  
 Engineering Manager

Steve Kang  
 Quality Assurance

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

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## Photometric Test Report

### IES FLOOD REPORT

PHOTOMETRIC FILENAME : L061507808.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] L061507808  
[TESTLAB] LIGHT LABORATORY, INC.  
[ISSUEDATE] 7/20/2015  
[MANUFAC] BEACHSIDE LIGHTING  
[LUMCAT] L-014S-120V-5W-A-NFL  
[LUMINAIRE] 4"L. X 5"W. X 6-3/4"H. WALL MOUNTED FIXED DOWNLIGHT  
[MORE] CLEAR LENS  
[BALLASTCAT] N.A.  
[BALLAST] N.A.  
[LAMPPOSITION] 0,0  
[LAMPCAT] DAUER LED GU10 AC120V 5W  
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
[INPUT] 120VAC, 3.49W  
[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	264.9
Maximum Candela Angle	0H 0V
Horizontal Beam Angle (50%)	24.0
Vertical Beam Angle (50%)	24.0
Horizontal Field Angle (10%)	47.1
Vertical Field Angle (10%)	47.1
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	25
Beam Efficiency	N.A.
Field Lumens	50
Field Efficiency	N.A.
Spill Lumens	13
Luminaire Lumens	62
Total Efficiency	N.A.
Total Luminaire Watts	3.49
Ballast Factor	1.00

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L061507808.IES**

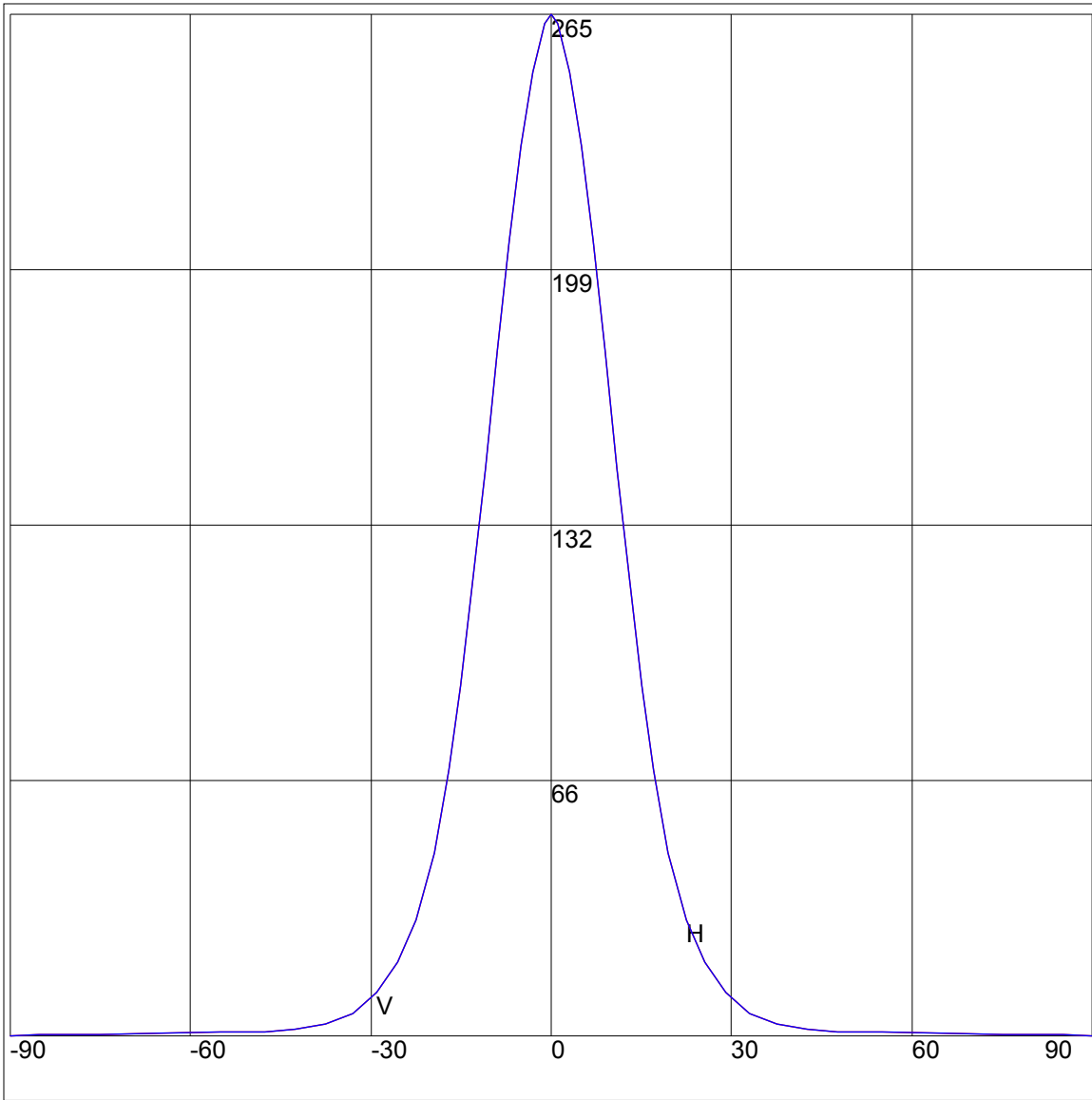
**AXIAL CANDELA**

DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	.39	85	.39
75	.48	75	.48
65	.77	65	.77
55	1.02	55	1.02
47.5	1.26	47.5	1.26
42.5	1.76	42.5	1.76
37.5	3.07	37.5	3.07
33	5.96	33	5.96
29	11.46	29	11.46
25.5	19.2	25.5	19.2
22.5	30.33	22.5	30.33
19.5	47.61	19.5	47.61
17	68.97	17	68.97
15	91.03	15	91.03
13	117.57	13	117.57
11	147.05	11	147.05
9	177.88	9	177.88
7	206.29	7	206.29
5	230.71	5	230.71
3	249.76	3	249.76
1	262.43	1	262.43
0	264.9	0	264.9
-1	262.43	-1	262.43
-3	249.76	-3	249.76
-5	230.71	-5	230.71
-7	206.29	-7	206.29
-9	177.88	-9	177.88
-11	147.05	-11	147.05
-13	117.57	-13	117.57
-15	91.03	-15	91.03
-17	68.97	-17	68.97
-19.5	47.61	-19.5	47.61
-22.5	30.33	-22.5	30.33
-25.5	19.2	-25.5	19.2
-29	11.46	-29	11.46
-33	5.96	-33	5.96
-37.5	3.07	-37.5	3.07
-42.5	1.76	-42.5	1.76
-47.5	1.26	-47.5	1.26
-55	1.02	-55	1.02
-65	.77	-65	.77
-75	.48	-75	.48
-85	.39	-85	.39
-90	0	-90	0

**ZONAL LUMEN SUMMARY**

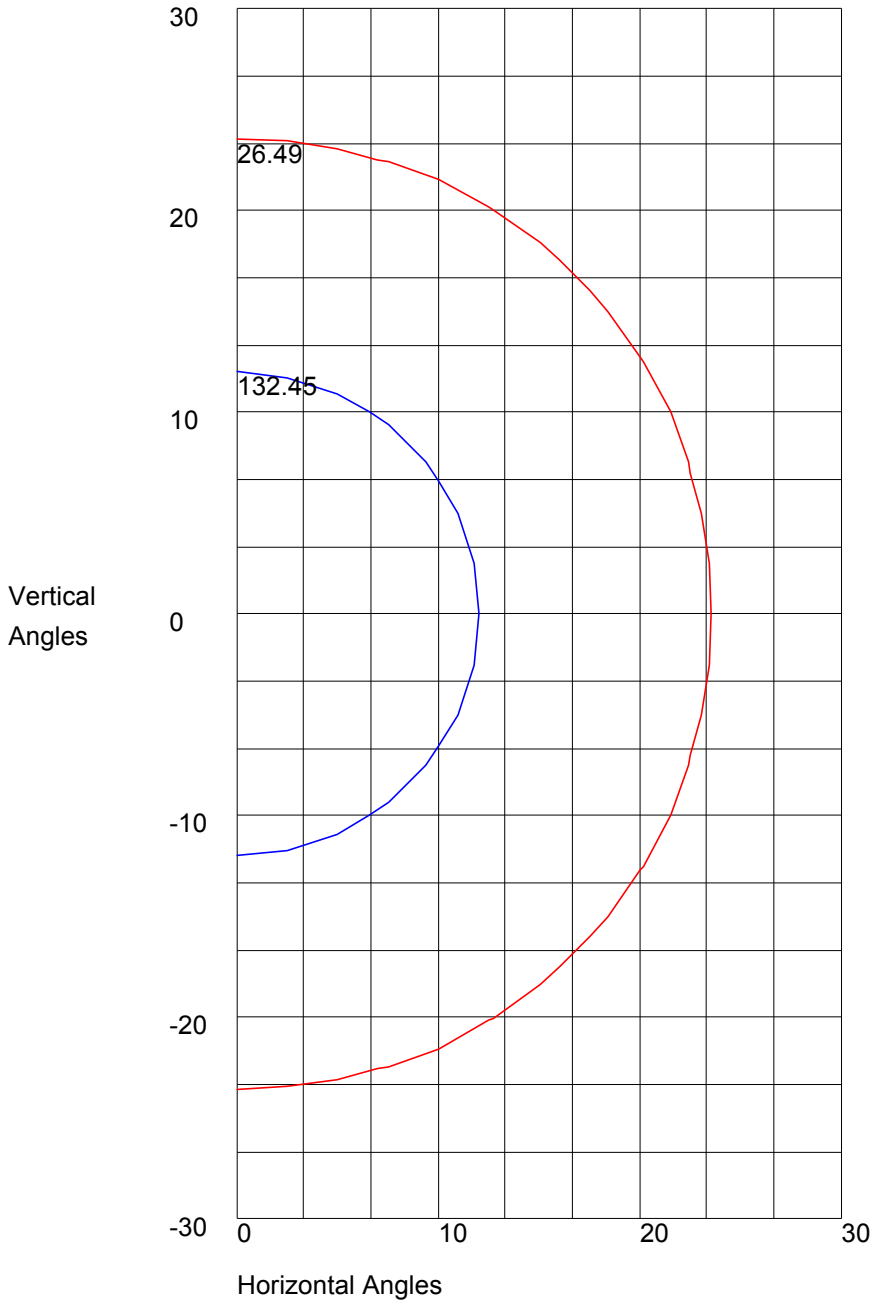
Zone	%
0-20	71
0-30	88
0-40	93.2
0-60	96.7
0-80	99.1
0-90	100
10-90	73.2
20-40	22.2
20-50	24.5
40-70	4.8
60-80	2.4
70-80	1
80-90	0.9
90-110	0
90-120	0
90-130	0
90-150	0
90-180	0
110-180	0
0-180	100

AXIAL CANDELA DISPLAY



Maximum Candela = 264.9 Located At Horizontal Angle = 0, Vertical Angle = 0  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 264.9 Located At Horizontal Angle = 0, Vertical Angle = 0  
50% Maximum Candela = 132.45  
10% Maximum Candela = 26.49



## ADDENDUM: Illuminance cone diagram

Mounting Height = 8 ft.

