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Report No: L061606102

Date: 7/19/2016



NVLAP LAB CODE 200927-0

Report No: L061606102

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

Model Number: STL - A

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 STL - A. Received in working and undamaged condition. No modifications were necessary.

Testing Condition: Fixture is tested with no special conditions.

Sample Arrival Date: 6/25/16

Date of Tests: 7/12/16 - 7/13/16

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	11/18/16
Xitron Power Analyzer	2503AH	MT-EL01	11/30/16
ITECH DC Power Supply	IT6122	PSDC-03-S1	11/17/16
Fluke Digital Thermometer	52k/J	MT-TP02-GC	11/24/16
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:	STL - A
Driver Model Number:	N/A
Total Lumens:	0.40
Input Voltage (VAC/60Hz):	120.00
Input Current (Amp):	0.022
Input Power (W):	1.03
Input Power Factor:	0.40
Current ATHD @ 120V(%):	223%
Current ATHD @ 277V(%):	N/A
Efficacy:	0.39
Color Rendering Index (CRI):	-24
Correlated Color Temperature (K):	1659
Chromaticity Coordinate x:	0.5769
Chromaticity Coordinate y:	0.4149
Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:35
Total Operating Time (Hours):	1:25
Off State Power(W):	0.00

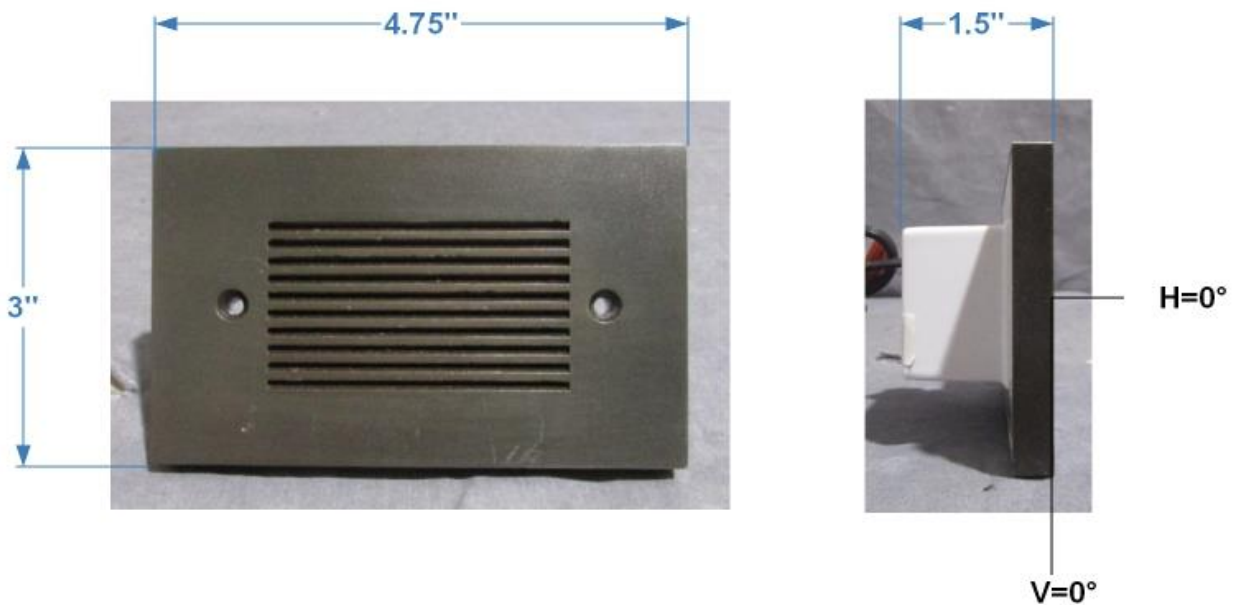
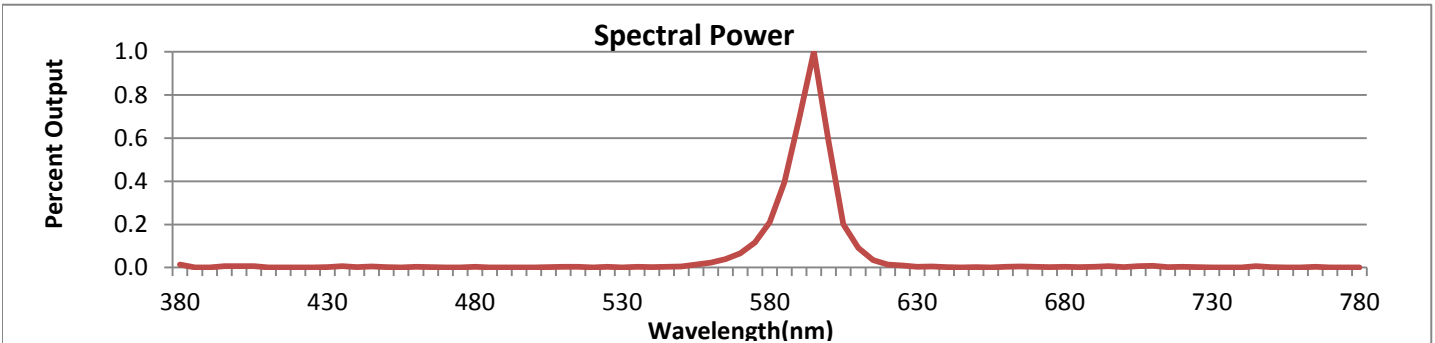


FIG. 1 LUMINAIRE

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



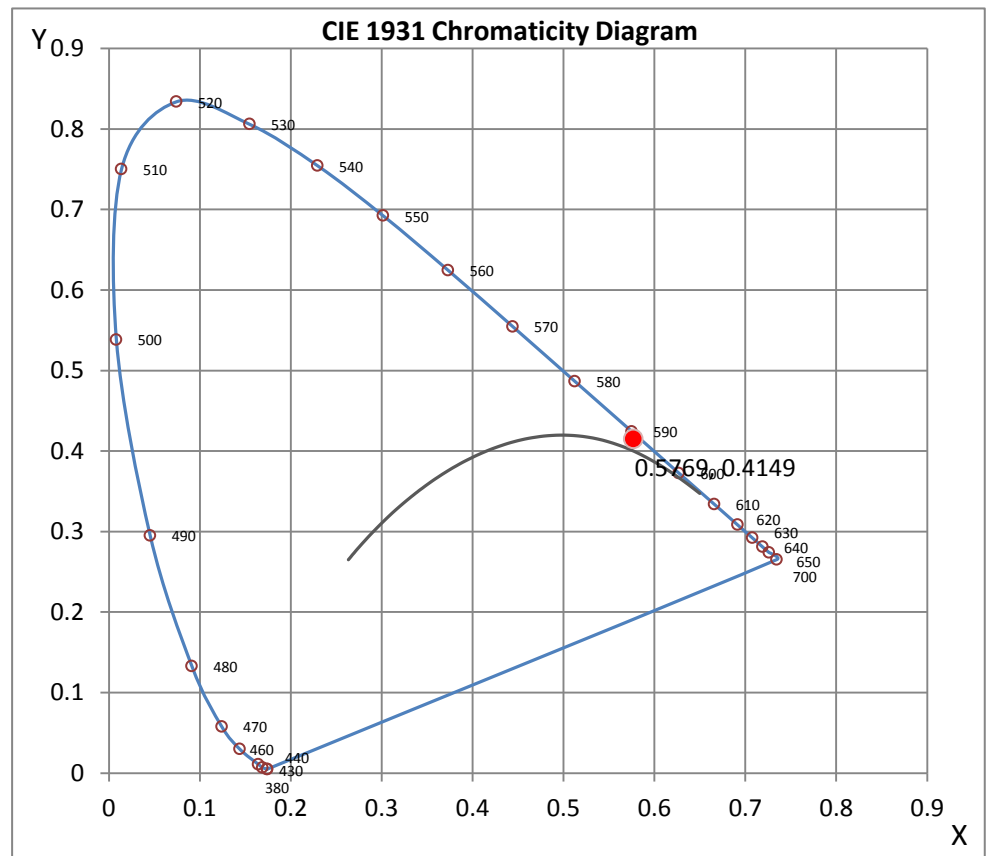
Wavelength	W/m ² nm	440	0.0015	510	0.0031	580	0.2095	650	0.0026	720	0.0032
380	0.0131	450	0.0024	520	0.0000	590	0.6884	660	0.0028	730	0.0000
390	0.0000	460	0.0040	530	0.0000	600	0.5855	670	0.0029	740	0.0006
400	0.0063	470	0.0000	540	0.0015	610	0.0918	680	0.0029	750	0.0027
410	0.0000	480	0.0032	550	0.0052	620	0.0134	690	0.0030	760	0.0012
420	0.0011	490	0.0000	560	0.0225	630	0.0038	700	0.0015	770	0.0000
430	0.0025	500	0.0000	570	0.0654	640	0.0019	710	0.0075	780	0.0006

CRI & CCT

x	0.5769
y	0.4149
u'	0.3381
v'	0.5471
CRI	-24.40
CCT	1659
Duv	0.00602

R Values

R1	-38.73
R2	51.22
R3	16.83
R4	-71.42
R5	-43.57
R6	39.23
R7	-9.35
R8	-139.24
R9	-407.50
R10	28.02
R11	-98.97
R12	-9.05
R13	-18.71
R14	45.06



*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:



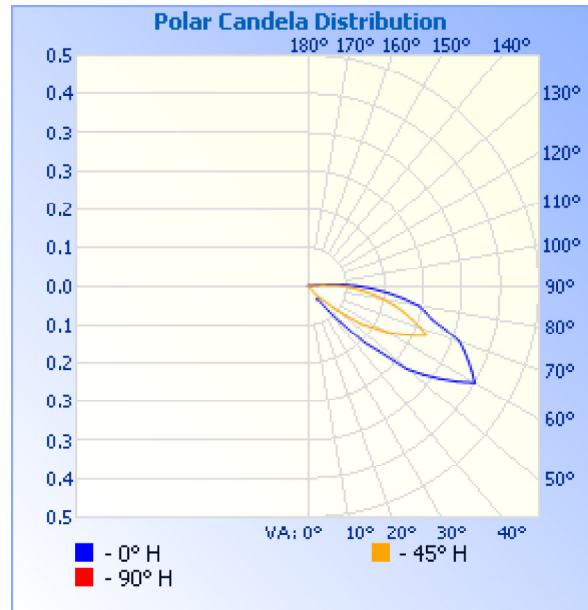
Steve Kang
Quality Assurance

**Attached are photometric data reports. Total number of pages: 6*

Photometrics Pro

Luminaire Photometric Report

Filename: L061606102
Manufacturer: BEACHSIDE LIGHTING
Luminaire: STEP LIGHT
Luminaire Cat: STL-A
Lamp Cat: N/A
Ballast Cat: N/A
Lamp Output: Total luminaire Lumens: 0.4
Max Candela: 0.4 at Horizontal: 0°, Vertical: 60°
Input Wattage: 1.03
Luminous Opening: (L: 0", W: 2.76", H: 1.56")
Test: L061606102
Test Lab: LIGHT LABORATORY, INC.
Photometry : Type C
Nema Type: 7 X 4



Roadway Summary

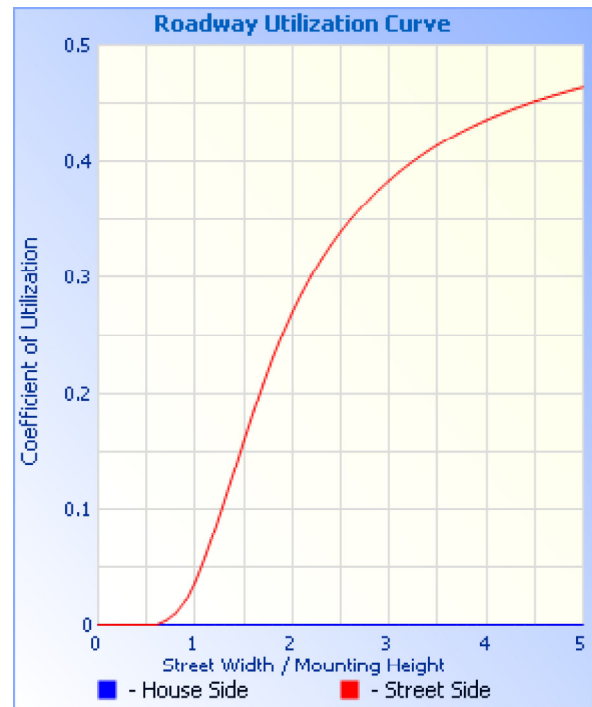
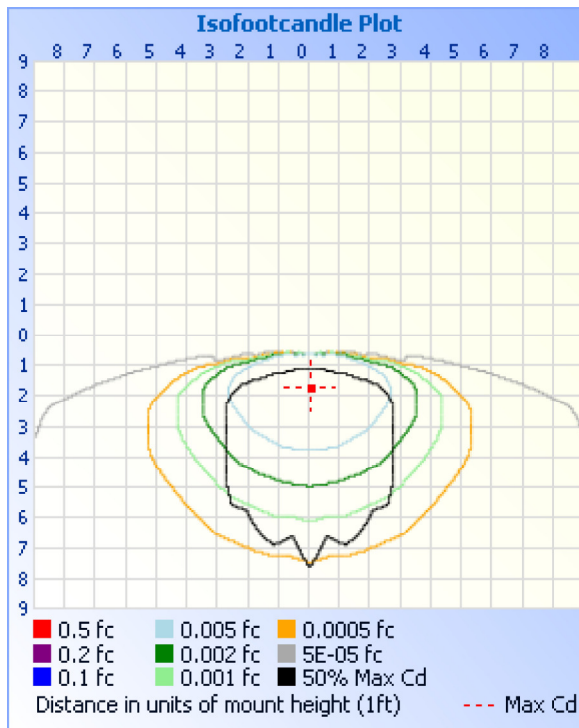
Cutoff Classification:	NONCUTOFF	
Distribution:	TYPE IV, VERY SHORT	
Max Cd, 90 Deg Vert:	0.1	
Max Cd, 80 to <90 Deg:	0.2	
	Lumens % Lamp	
Downward Street Side:	0.3	97.4%
Downward House Side:	0	0%
Downward Total:	0.3	97.4%
Upward Street Side:	0.0	2.6%
Upward House Side:	0	0%
Upward Total:	0.0	2.6%
Total Lumens:	0.4	100%

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	0	0%
0-40	0.0	0.8%
0-60	0.1	26.5%
60-90	0.3	70.9%
70-100	0.2	44.5%
90-120	0.0	2.6%
0-90	0.3	97.4%
90-180	0.0	2.6%
0-180	0.4	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	0	0.0%	90-100	0.0	2.6%
10-20	0	0.0%	100-110	0	0%
20-30	0	0.0%	110-120	0	0%
30-40	0.0	0.8%	120-130	0	0%
40-50	0.0	6.6%	130-140	0	0%
50-60	0.1	19.1%	140-150	0	0%
60-70	0.1	29.0%	150-160	0	0%
70-80	0.1	26.4%	160-170	0	0%
80-90	0.1	15.5%	170-180	0	0%



Photometrics Pro 1.3.29 copyright 2003-2016 by jSolutions, Inc.
 Reported data calculated from manufacturer's data file, based on IES recommended methods.