LIGHT LABORATORY INC.
8165 E Kaiser Blvd.
Anaheim, CA 92808
www.lightlaboratory.com

NVLAP TESTING
NVLAP LAB CODE 200927-0

Report No: L081912701R01 **Issue Date: 5/27/2021**

Report Prepared For: Beachside Lighting
905 Kalanianaole Hwy., #2901, Kailua, HI 96734 USA

Model Number: L-016-F-11W-930-NFL

Test: Photometric/Colorimetric/Electrical Test

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. Received in working and undamaged condition. No modifications were necessary.

Special Test Condition: Fixture is tested with no special conditions.

Sample Arrival Date: 8/29/19

Date of Tests: 8/29/19 - 8/30/19

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-S4	1/9/21
BK PRECISION	1747	PS-DC04	1/10/21
Fluke Digital Thermometer	52K/J	MT-TP05	1/10/21
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

LIGHT LABORATORY INC.
8165 E Kaiser Blvd.
Anaheim, CA 92808
www.lightlaboratory.com

NVLAP TESTING
NVLAP LAB CODE 200927-0

General Information	
Manufacturer:	Beachside Lighting
Model Number:	L-016-F-11W-930-NFL
Driver Model Number:	CLASS H TRANSFORMER TJ-H-120-50-1

Test Summary	
Total Lumens:	678.36
Efficacy:	50.90
Color Redering Index:	91.9
Correlated Color Temperature:	3121
Input Voltage (VAC/60Hz):	120.01
Input Current (Amp):	0.1401
Input Power (W):	13.33
Input Power Factor:	0.7928
Current ATHD (%):	51.8%

Test Condition	
Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	1:00
Total Operating Time (Hours):	1:30

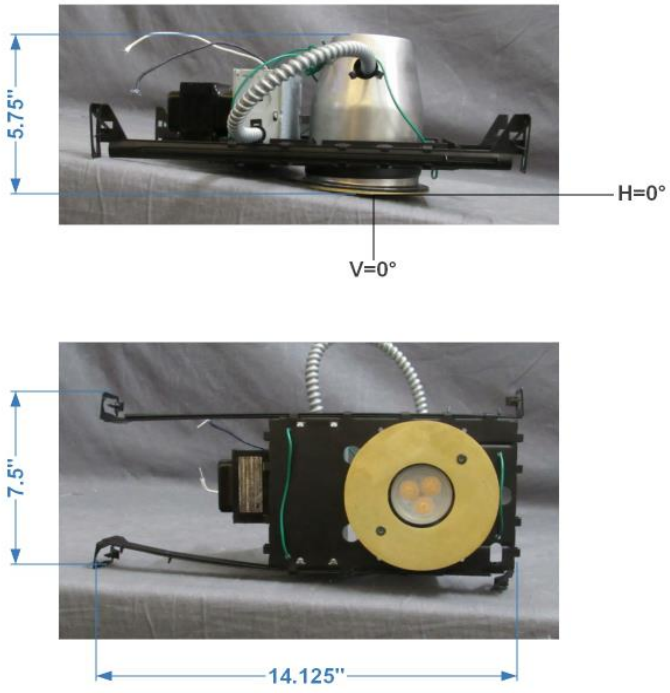
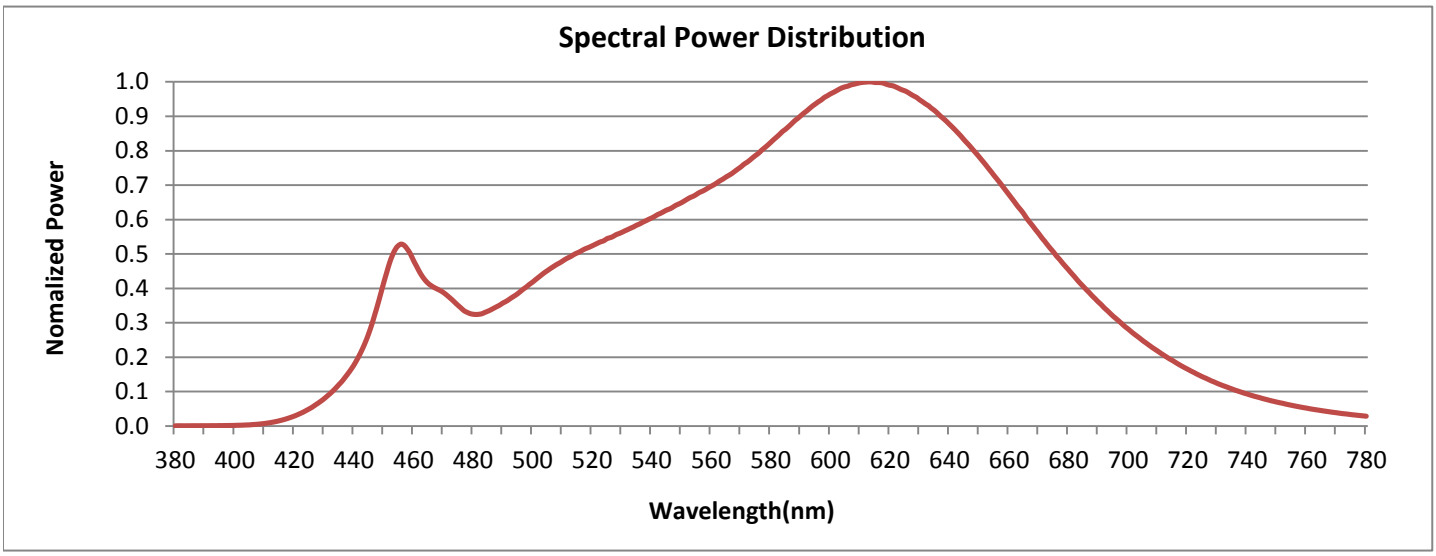


FIG. 1 LUMINAIRE

LIGHT LABORATORY INC.
8165 E Kaiser Blvd.
Anaheim, CA 92808
www.lightlaboratory.com

NVLAP TESTING
NVLAP LAB CODE 200927-0

Colorimetry Test Results

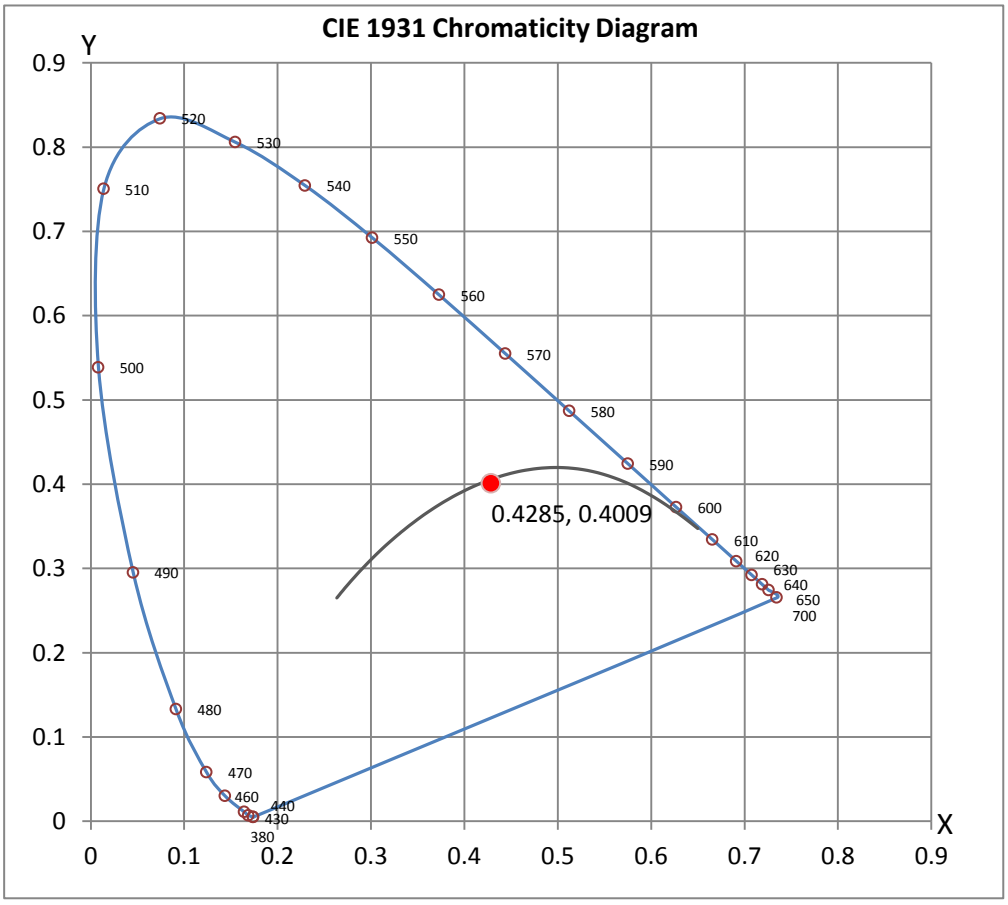


CRI & CCT

x	0.4285
y	0.4009
u'	0.2465
v'	0.5189
CRI	91.90
CCT	3121
Duv	-0.00005

R Values

R1	92.48
R2	97.97
R3	96.96
R4	91.09
R5	92.77
R6	96.97
R7	89.17
R8	78.03
R9	52.89
R10	94.64
R11	92.33
R12	82.73
R13	94.24
R14	99.15
R15	87.46



LIGHT LABORATORY INC.
8165 E Kaiser Blvd.
Anaheim, CA 92808
www.lightlaboratory.com

NVLAP TESTING
NVLAP LAB CODE 200927-0

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 Reviewed by:

Steve Kang
Quality Assurance

**Attached are photometric data reports. Total number of pages: 8*

LIGHT LABORATORY INC.
8165 E. Kaiser Blvd. Anaheim, CA 92808
www.lightlaboratory.com

Photometric Test Report

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L081912701R01.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L081912701R01
[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)
[ISSUEDATE] 5/27/21
[MANUFAC] Beachside Lighting
[LUMCAT] L-016-F-11W-930-NFL
[LUMINAIRE] L-016-F Fixture with Clear Borosilicate Lens, Narrow Flood Lamping
[BALLASTCAT] CLASS H TRANSFORMER TJ-H-120-50-1
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
[INPUT] 120.01VAC, 13.33W
[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	2197
Maximum Candela Angle	0H 0V
Horizontal Beam Angle (50%)	29.7
Vertical Beam Angle (50%)	29.7
Horizontal Field Angle (10%)	51.7
Vertical Field Angle (10%)	51.7
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	346
Beam Efficiency	N.A.
Field Lumens	567
Field Efficiency	N.A.
Spill Lumens	111
Luminaire Lumens	678
Total Efficiency	N.A.
Total Luminaire Watts	13.33
Ballast Factor	1.00

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L081912701R01.IES

AXIAL CANDELA

DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	2	85	2
75	2	75	2
65	5	65	5
55	11	55	11
47.5	19	47.5	19
42.5	27	42.5	27
37.5	42	37.5	42
33	73	33	73
29	131	29	131
25.5	229	25.5	229
22.5	365	22.5	365
19.5	588	19.5	588
17	841	17	841
15	1082	15	1082
13	1314	13	1314
11	1565	11	1565
9	1782	9	1782
7	1971	7	1971
5	2082	5	2082
3	2154	3	2154
1	2191	1	2191
0	2197	0	2197
-1	2191	-1	2191
-3	2154	-3	2154
-5	2082	-5	2082
-7	1971	-7	1971
-9	1782	-9	1782
-11	1565	-11	1565
-13	1314	-13	1314
-15	1082	-15	1082
-17	841	-17	841
-19.5	588	-19.5	588
-22.5	365	-22.5	365
-25.5	229	-25.5	229
-29	131	-29	131
-33	73	-33	73
-37.5	42	-37.5	42
-42.5	27	-42.5	27
-47.5	19	-47.5	19
-55	11	-55	11
-65	5	-65	5
-75	2	-75	2
-85	2	-85	2
-90	0	-90	0

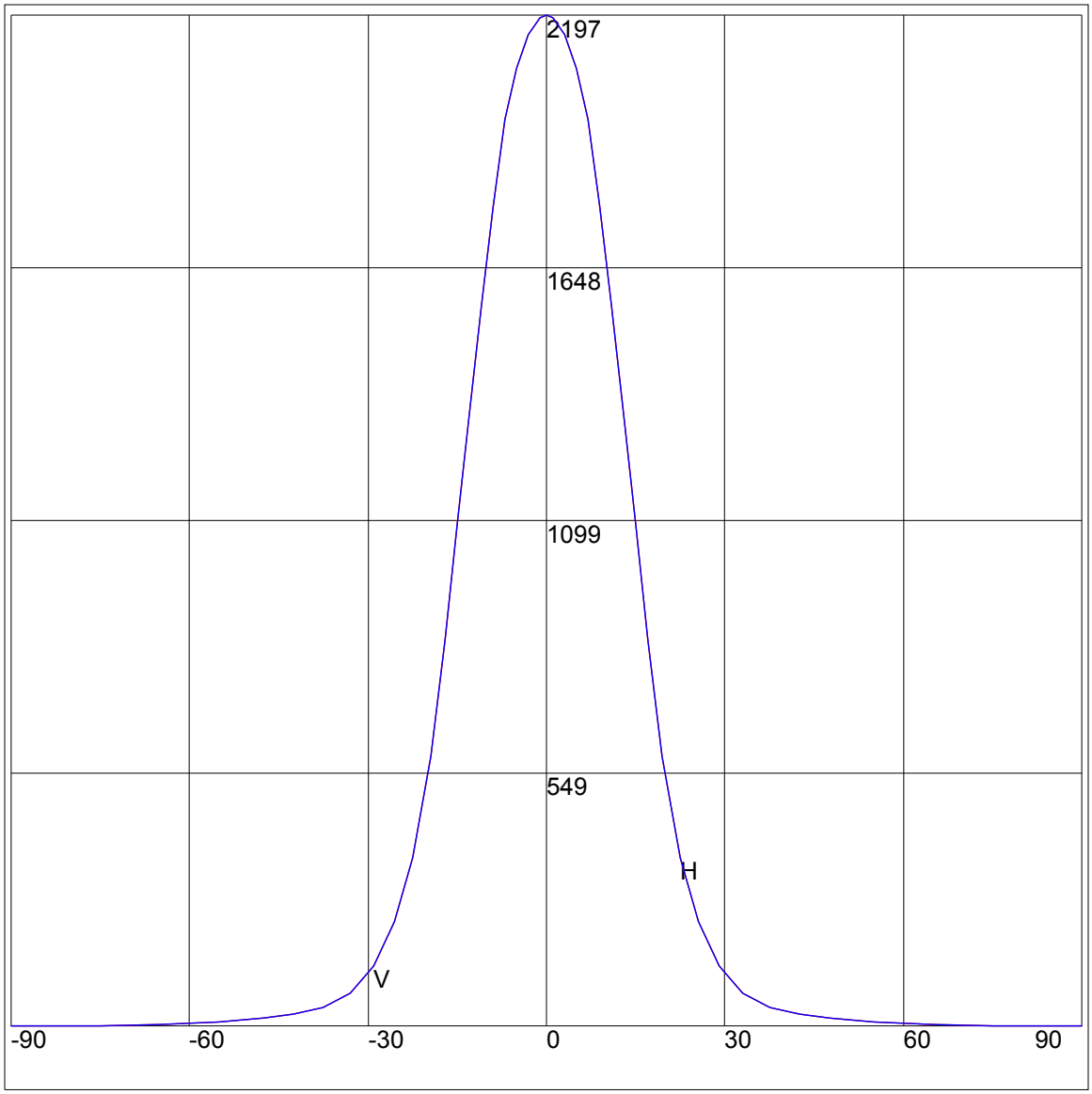
ZONAL LUMEN SUMMARY

Zone	%
0-20	68.8
0-30	87.6
0-40	93.4
0-60	98
0-80	99.6
0-90	100
10-90	77.2
20-40	24.6
20-50	27.7
40-70	5.6
60-80	1.6
70-80	0.5
80-90	0.4
90-110	0
90-120	0
90-130	0
90-150	0
90-180	0
110-180	0
0-180	100

Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L081912701R01.IES

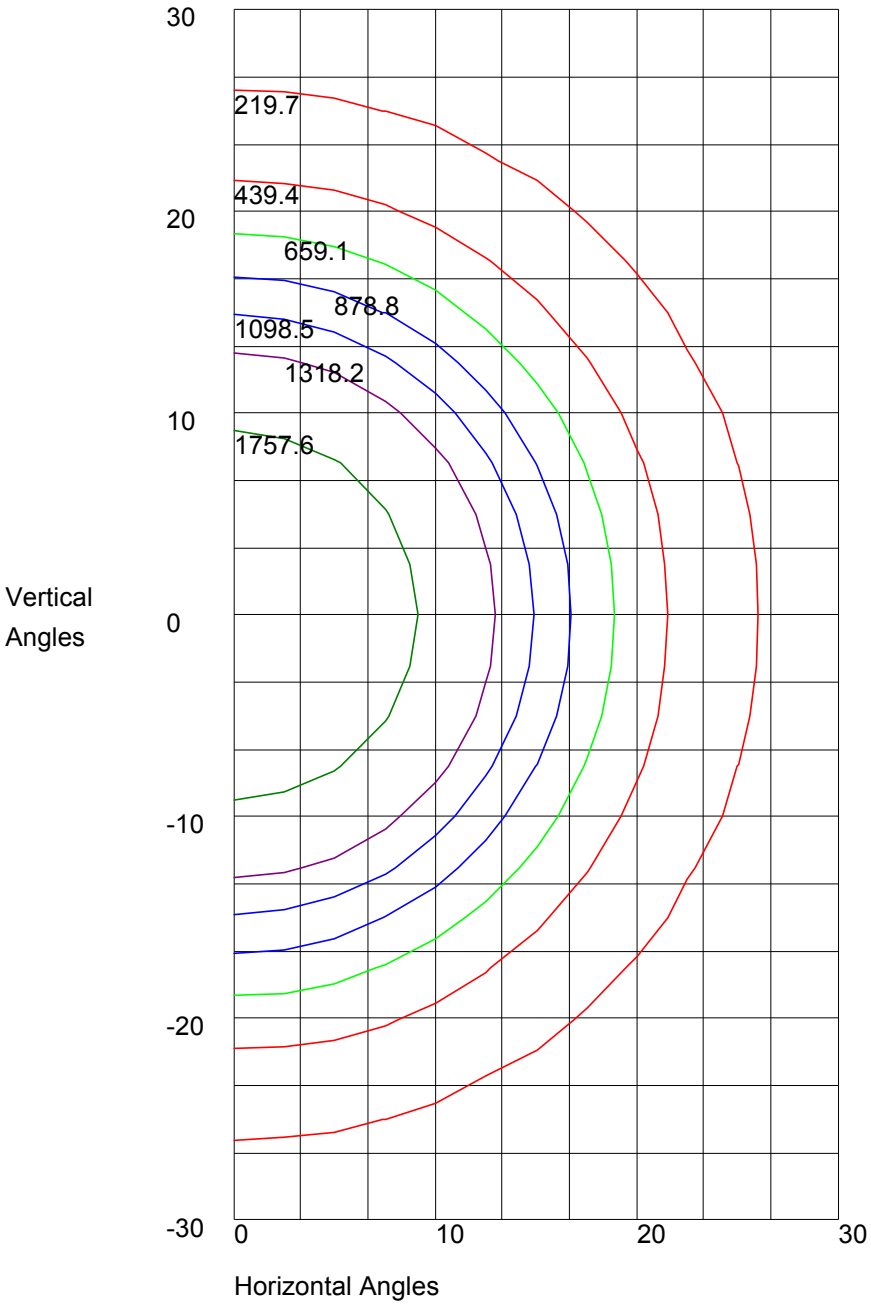
AXIAL CANDELA DISPLAY



Maximum Candela = 2197 Located At Horizontal Angle = 0, Vertical Angle = 0
H - Horizontal Axial Candela
V - Vertical Axial Candela

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L081912701R01.IES

ISOCANDELA CURVES



Maximum Candela = 2197 Located At Horizontal Angle = 0, Vertical Angle = 0
50% Maximum Candela = 1098.5
10% Maximum Candela = 219.7