LIGHT LABORATORY INC.

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

NVLAP ®
TESTING
NVLAP LAB CODE 200927-0

Report No:	L072310306		**Issue Date: 7/21/2023**
			Reference:N/A
Report Prepared For:	USTE dba Vista Professioinal Outdoor Lighting		**Amendment:N/A**
	1625 Surveyor Ave., Simi Valley CA 93063		
Model Number:	1051-X-VF-30-B-MV-ND		
Test:	Photometric/Colorimetric/Electrical Test		

Standards Used: Appropriate part or all test guidelines were used for test performed:

IESNA LM79: 2019 Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products

ANSI NEMA ANSLG C78.377: 2017 Specification of the Chromaticity of Solid State Lighting Products

ANSI C82.77-10:2014: 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.

Date of Tests: 7/20/23

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	4/7/25
HP Power Supply	6032A	PS-DC05-S2	--
Fluke Digital Thermometer	52K/J	MT-TP05	5/24/25
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

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General Information

Manufacturer:	USTE dba Vista Professioinal Outdoor Lighting
Model Number:	1051-X-VF-30-B-MV-ND
Driver Model Number:	UNABLE TO HAVE ACCESS TO DRIVER

Test Summary

Total Lumens:	1866.00
Efficacy:	98.47
Color Redering Index:	82.4
Correlated Color Temperature:	3086
Input Voltage (VAC/60Hz):	120.01
Input Current (Amp):	0.1599
Input Power (W):	18.95
Input Power Factor:	0.9873
Current ATHD (%):	9.9%

Test Condition

Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:30
Total Operating Time (Hours):	1:10

FIG. 1 LUMINAIRE

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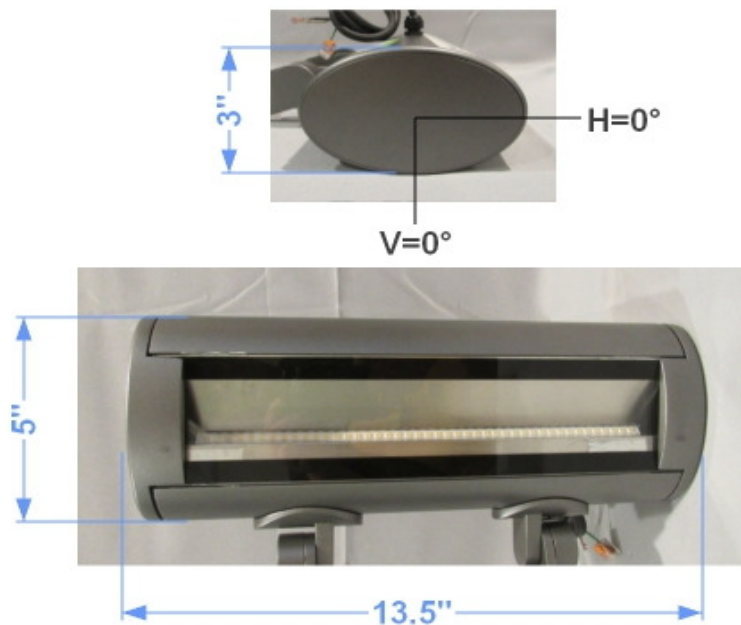
Colorimetry Test Results

Spectral Power Distribution
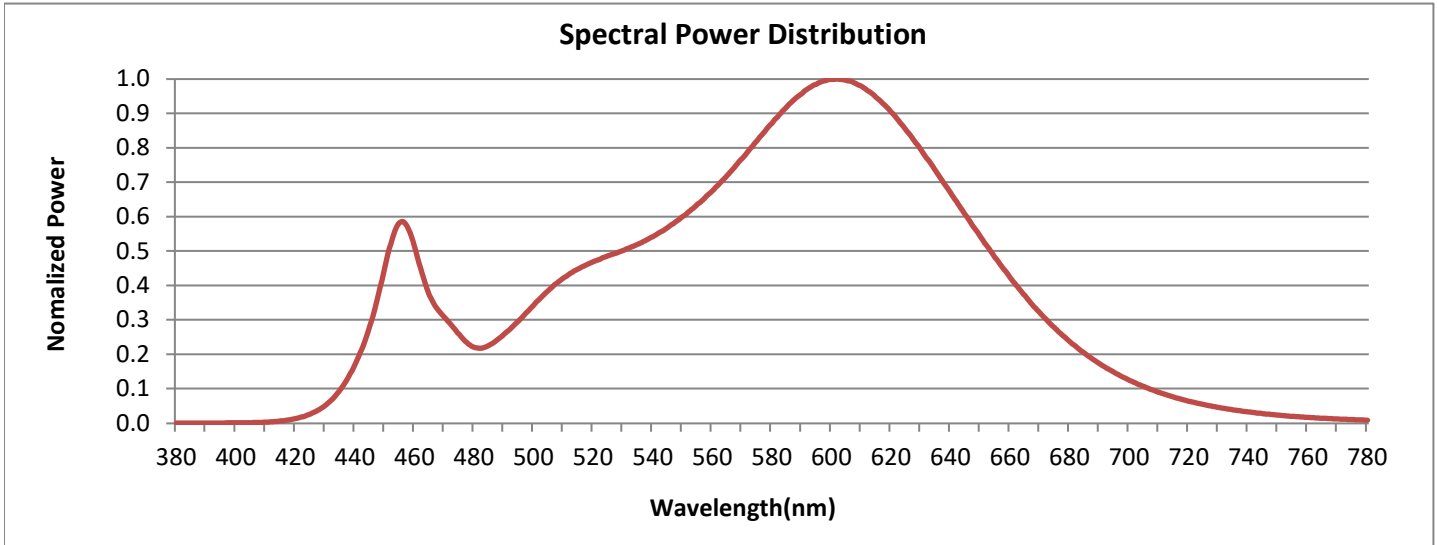
CRI & CCT

x	0.4309
y	0.4018
u'	0.2477
v'	0.5196
CRI	82.40
CCT	3086
Duv	-0.00005

R Values

R1	81.08
R2	92.29
R3	94.45
R4	79.99
R5	81.98
R6	91.44
R7	80.95
R8	56.80
R9	3.72
R10	82.86
R11	79.79
R12	71.65
R13	83.96
R14	97.59
R15	72.90

CIE 1931 Chromaticity Diagram

0.4309, 0.4018

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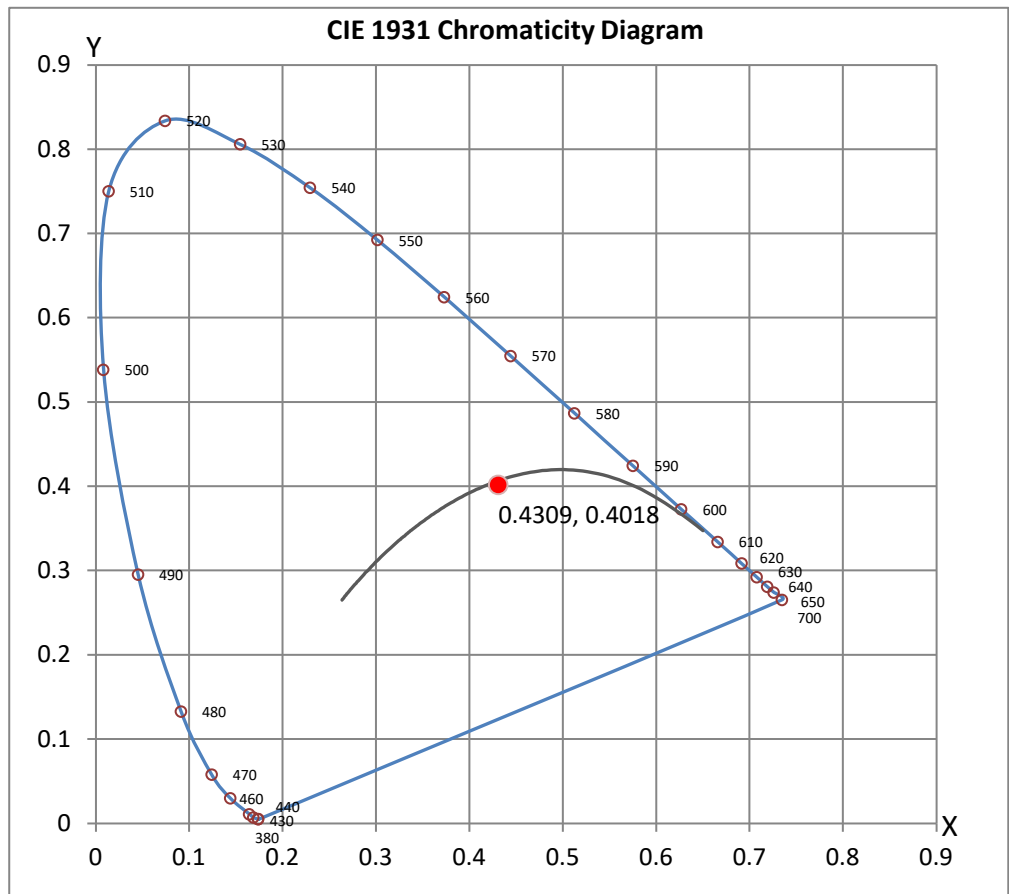
Test Methods

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.
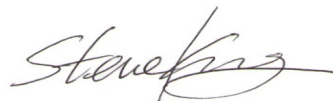
Electrical measurements are measured using the listed equipment.

Disclaimers:

Report Prepared by : _____ JG _____

Test Report Reviewed by:

Steve Kang
Quality Assurance

Attached are photometric data reports.

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Photometric Test Report

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L072310306.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L072310306
[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)
[ISSUEDATE] 7/20/2023
[MANUFAC] USTE dba Vista Professioinal Outdoor Lighting
[LUMCAT] 1051-X-VF-30-B-MV-ND
[LUMINAIRE] LED LINEAR FLOODLIGHT-VERTICAL FLOOD
[BALLASTCAT] UNABLE TO HAVE ACCESS TO DRIVER
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
[INPUT] 120VAC
[TEST PROCEDURE] IESNA:LM-79-19

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

CHARACTERISTICS

NEMA Type	7 H x 5 V
Maximum Candela	1081
Maximum Candela Angle	0H 47.5V
Horizontal Beam Angle (50%)	97.1
Vertical Beam Angle (50%)	72.0
Horizontal Field Angle (10%)	143.5
Vertical Field Angle (10%)	87.2
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	1447
Beam Efficiency	N.A.
Field Lumens	1787
Field Efficiency	N.A.
Spill Lumens	79
Luminaire Lumens	1866
Total Efficiency	N.A.
Total Luminaire Watts	18.95
Ballast Factor	1.00

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L072310306.IES

AXIAL CANDELA

DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	8	85	2
75	70	75	12
65	209	65	477
55	351	55	985
47.5	449	47.5	1081
42.5	508	42.5	1064
37.5	568	37.5	1040
33	605	33	1045
29	640	29	1048
25.5	669	25.5	1028
22.5	688	22.5	1019
19.5	708	19.5	1026
17	728	17	1036
15	738	15	1030
13	740	13	1016
11	743	11	990
9	748	9	954
7	754	7	910
5	755	5	865
3	757	3	819
1	758	1	778
0	758	0	758
-1	758	-1	738
-3	757	-3	705
-5	755	-5	689
-7	754	-7	643
-9	748	-9	480
-11	743	-11	290
-13	740	-13	143
-15	738	-15	89
-17	728	-17	84
-19.5	708	-19.5	77
-22.5	688	-22.5	71
-25.5	669	-25.5	65
-29	640	-29	55
-33	605	-33	46
-37.5	568	-37.5	35
-42.5	508	-42.5	25
-47.5	449	-47.5	18
-55	351	-55	12
-65	209	-65	7
-75	70	-75	5
-85	8	-85	5
-90	0	-90	0

AXIAL CANDELA DISPLAY
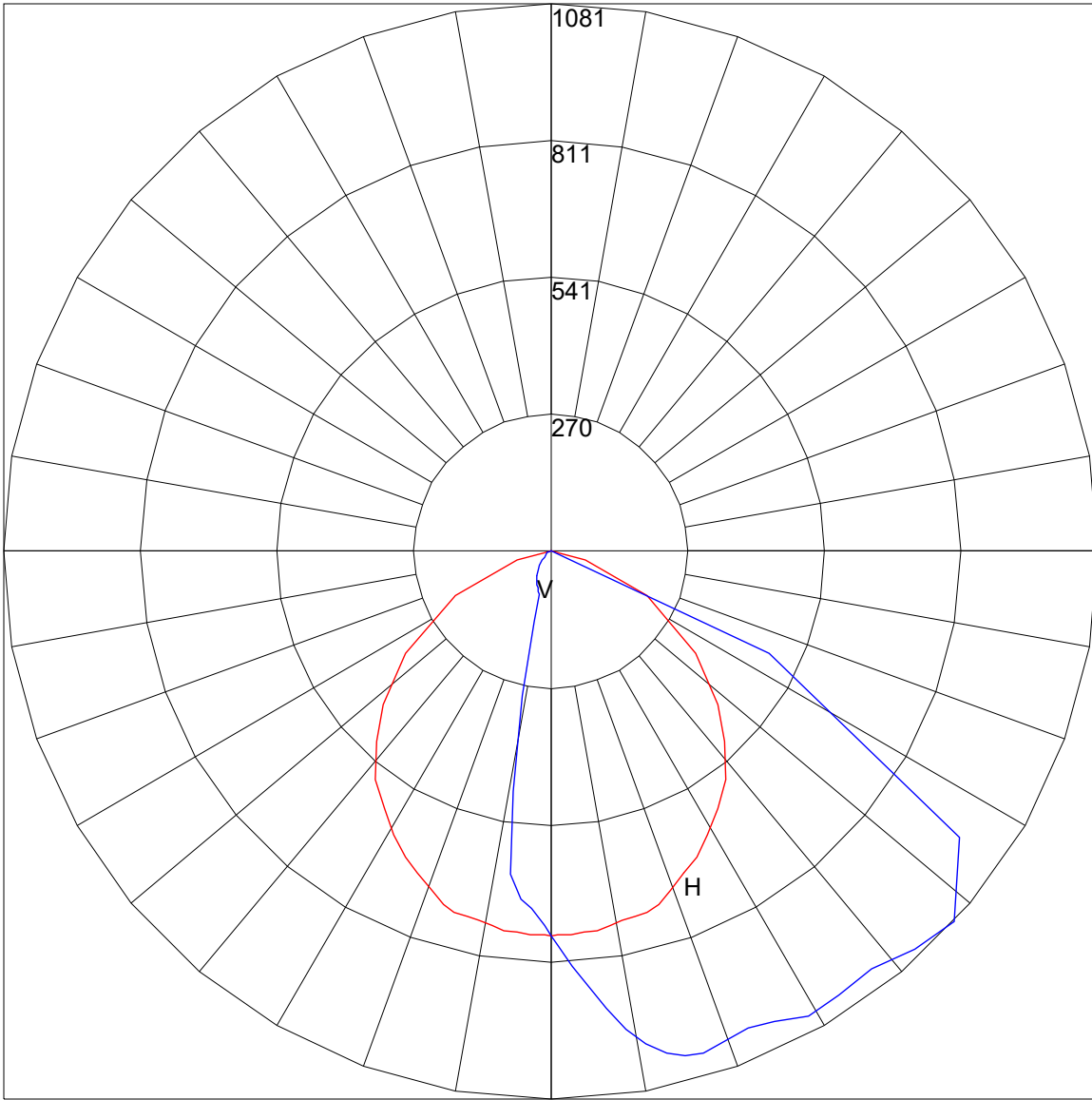
Maximum Candela = 1081   Located At Horizontal Angle = 0, Vertical Angle = 47.5
H - Horizontal Axial Candela
V - Vertical Axial Candela

ISOCANDELA CURVES
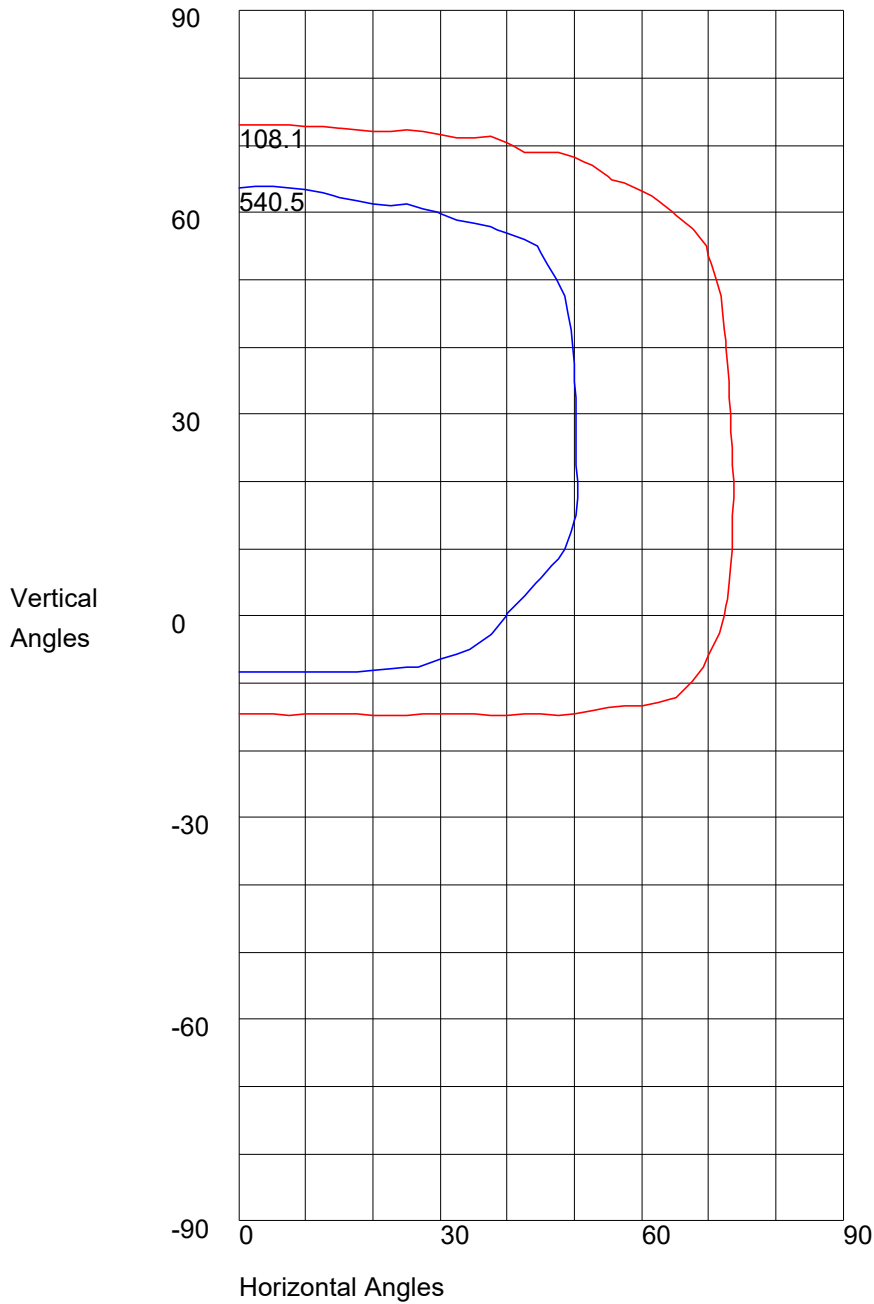
Maximum Candela = 1081   Located At Horizontal Angle = 0, Vertical Angle = 47.5
50% Maximum Candela = 540.5
10% Maximum Candela = 108.1