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

NVLAP TESTING
NVLAP LAB CODE 200927-0

Report No: L072310305

Issue Date: 8/1/2023
Reference:N/A
Amendment:N/A

Report Prepared For: USTE dba Vista Professioinal Outdoor Lighting
1625 Surveyor Ave., Simi Valley CA 93063

Model Number: 1051-X-VF-30-A-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: 7/31/23

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-A-MV-ND
Driver Model Number:	ERP ESS015W-1000-12

Test Summary	
Total Lumens:	1314.00
Efficacy:	97.03
Color Redering Index:	82.3
Correlated Color Temperature:	3037
Input Voltage (VAC/60Hz):	120.03
Input Current (Amp):	0.1156
Input Power (W):	13.54
Input Power Factor:	0.9759
Current ATHD (%):	13.2%

Test Condition	
Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	1:30
Total Operating Time (Hours):	2:10

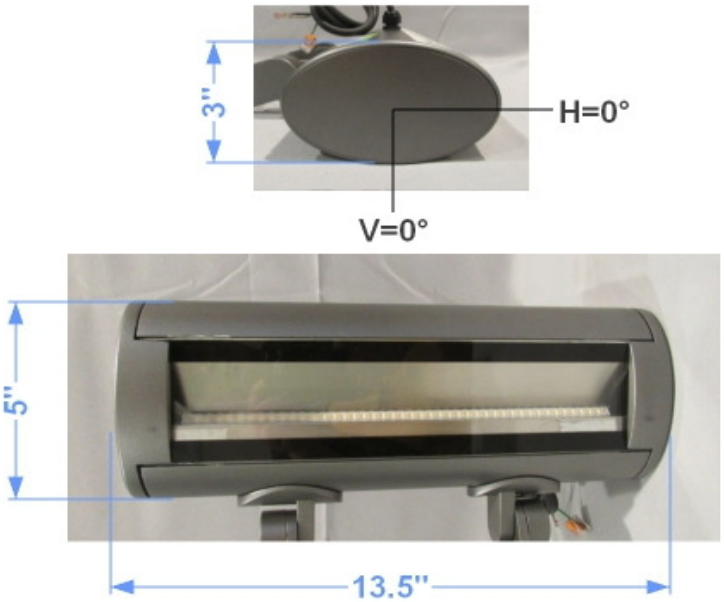

FIG. 1 LUMINAIRE

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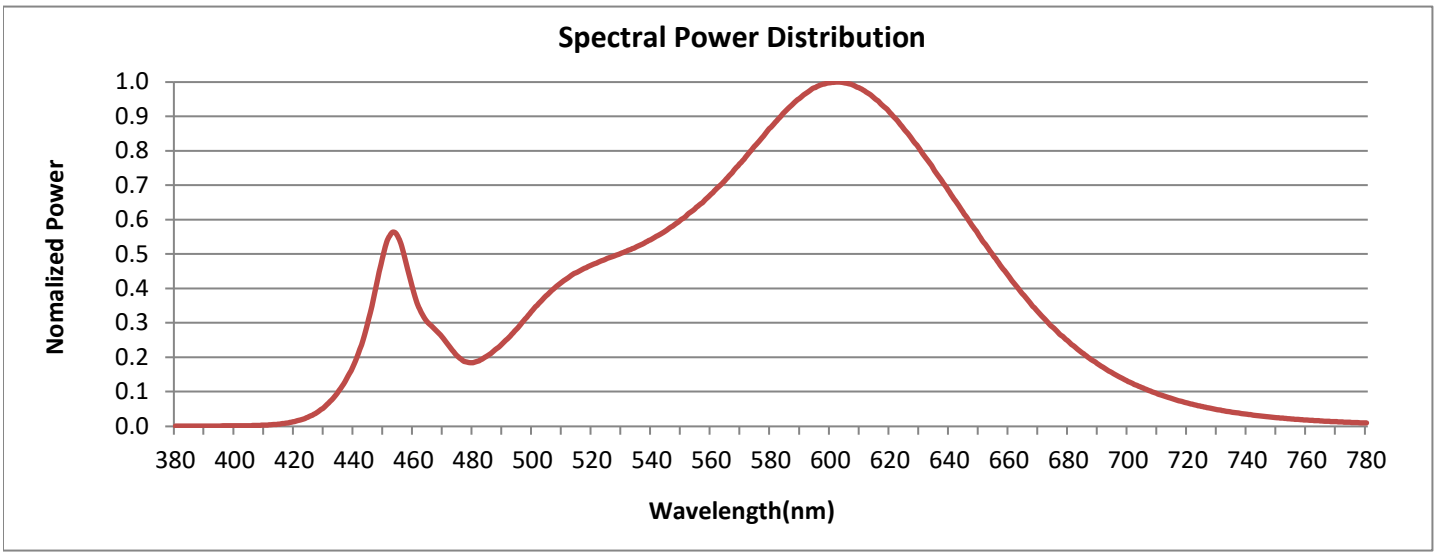
Colorimetry Test Results

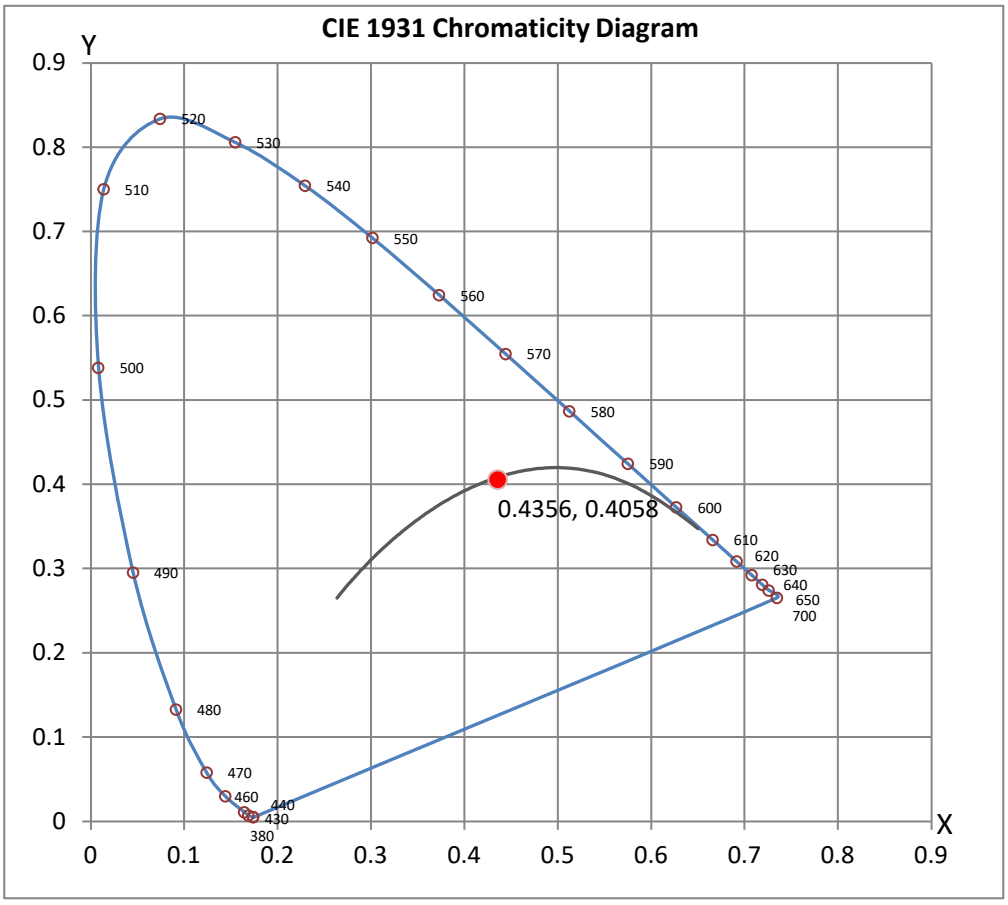


CRI & CCT

x	0.4356
y	0.4058
u'	0.2490
v'	0.5219
CRI	82.30
CCT	3037
Duv	0.00087

R Values

R1	80.46
R2	91.03
R3	95.91
R4	80.53
R5	81.29
R6	90.01
R7	81.84
R8	57.01
R9	3.09
R10	80.19
R11	80.39
R12	70.53
R13	82.99
R14	98.35
R15	72.20



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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.

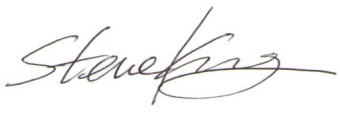
Electrical measurements are measured using the listed equipment.

Disclaimers:

The results related only to the samples as received and tested. This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government.

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 : L072310305.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L072310305
[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)
[ISSUEDATE] 8/1/2023
[MANUFAC] USTE dba Vista Professioinal Outdoor Lighting
[LUMCAT] 1051-X-VF-30-A-MV-ND
[LUMINAIRE] LED LINEAR FLOODLIGHT-VERTICAL FLOOD
[BALLASTCAT] ERP ESS015W-1000-12
[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	779
Maximum Candela Angle	0H 37.5V
Horizontal Beam Angle (50%)	98.6
Vertical Beam Angle (50%)	73.9
Horizontal Field Angle (10%)	145.2
Vertical Field Angle (10%)	87.1
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	1013
Beam Efficiency	N.A.
Field Lumens	1267
Field Efficiency	N.A.
Spill Lumens	48
Luminaire Lumens	1314
Total Efficiency	N.A.
Total Luminaire Watts	13.54
Ballast Factor	1.00

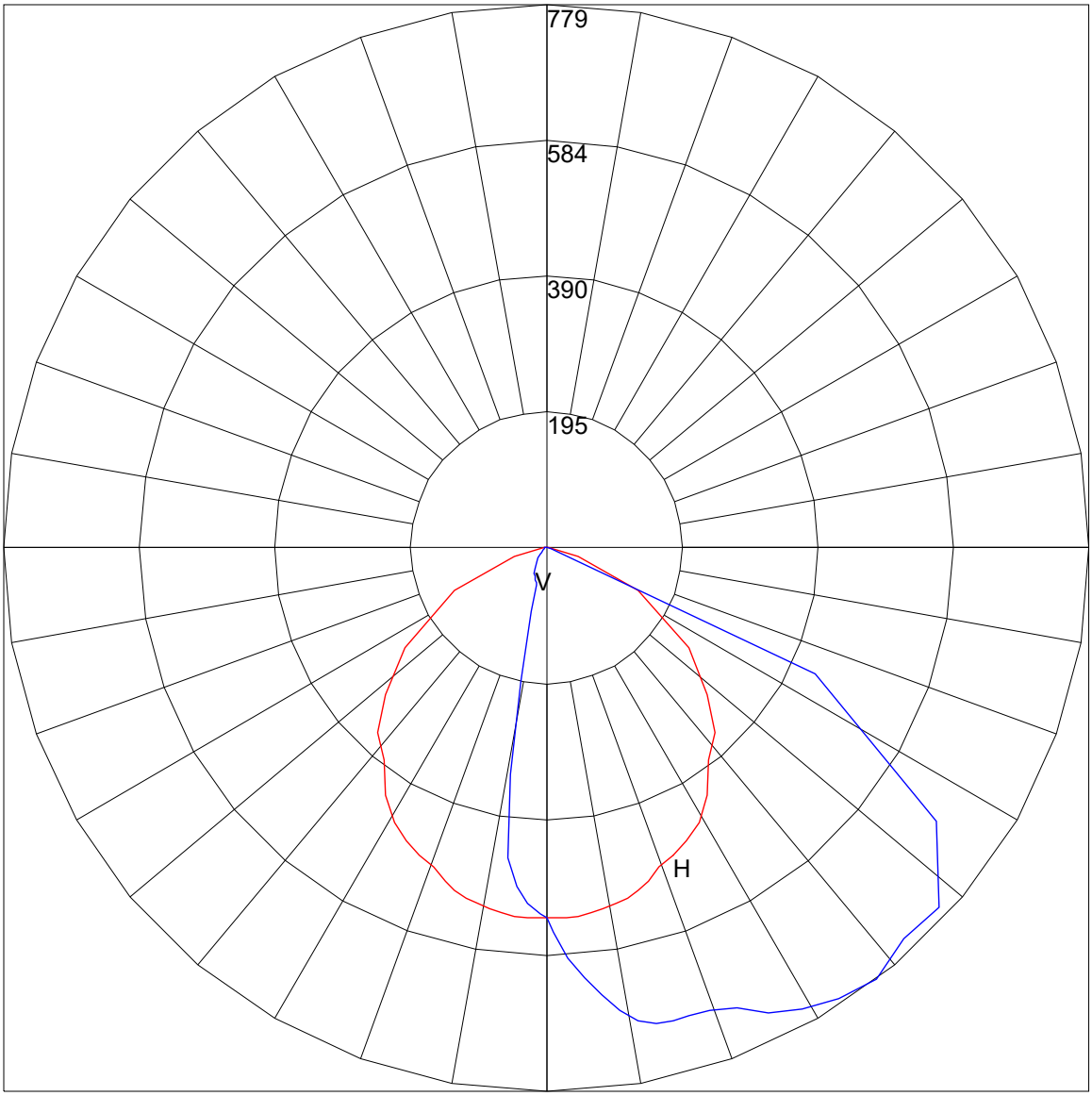
IES FLOOD REPORT
PHOTOMETRIC FILENAME : L072310305.IES

AXIAL CANDELA

DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	3	85	1
75	48	75	6
65	145	65	426
55	249	55	684
47.5	313	47.5	763
42.5	359	42.5	760
37.5	383	37.5	779
33	423	33	771
29	451	29	756
25.5	466	25.5	739
22.5	477	22.5	713
19.5	485	19.5	704
17	499	17	701
15	509	15	702
13	515	13	699
11	519	11	690
9	523	9	672
7	526	7	646
5	530	5	619
3	532	3	589
1	531	1	551
0	531	0	531
-1	531	-1	525
-3	532	-3	510
-5	530	-5	487
-7	526	-7	448
-9	523	-9	329
-11	519	-11	195
-13	515	-13	93
-15	509	-15	55
-17	499	-17	52
-19.5	485	-19.5	48
-22.5	477	-22.5	44
-25.5	466	-25.5	41
-29	451	-29	34
-33	423	-33	27
-37.5	383	-37.5	19
-42.5	359	-42.5	13
-47.5	313	-47.5	9
-55	249	-55	5
-65	145	-65	3
-75	48	-75	3
-85	3	-85	3
-90	0	-90	0

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L072310305.IES

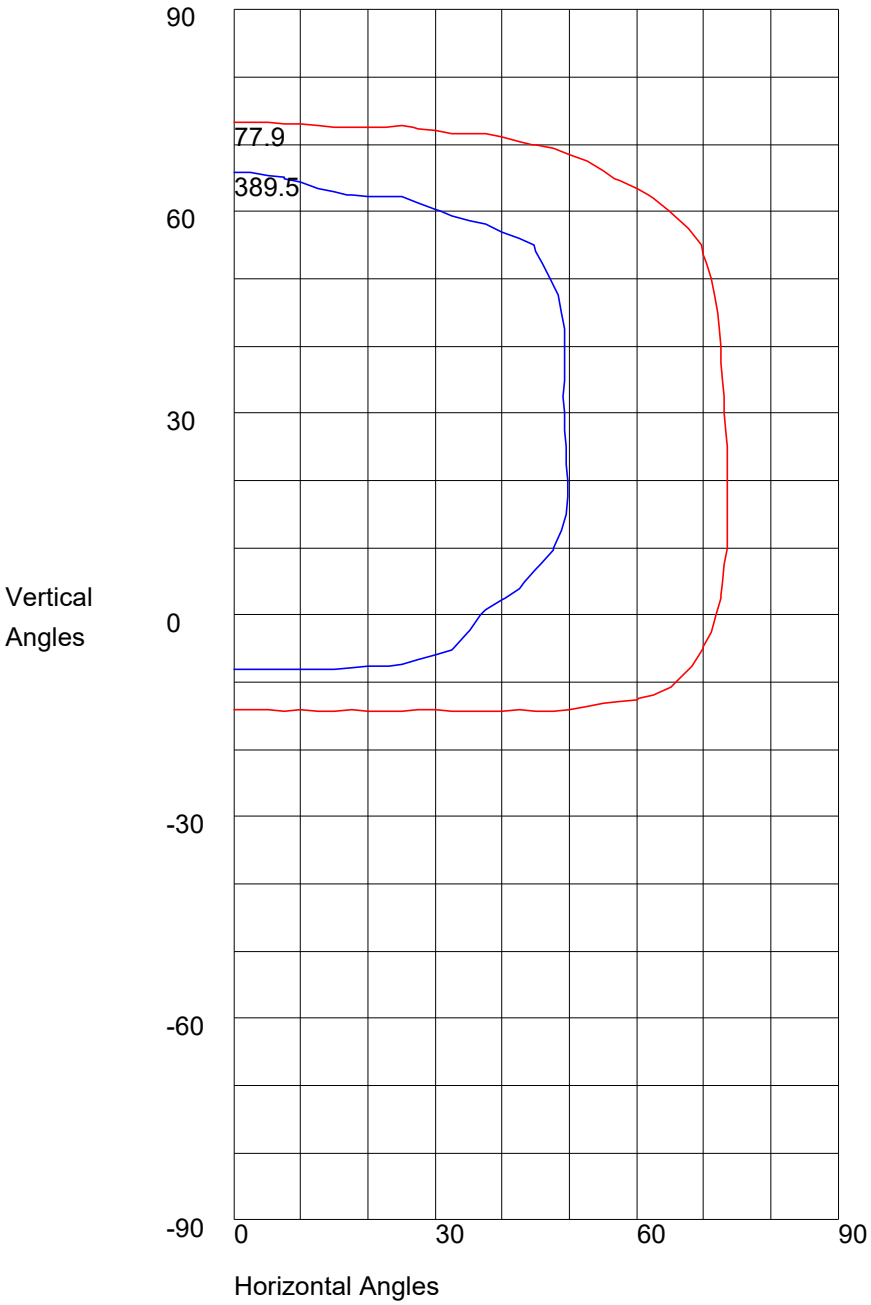
AXIAL CANDELA DISPLAY



Maximum Candela = 779 Located At Horizontal Angle = 0, Vertical Angle = 37.5
H - Horizontal Axial Candela
V - Vertical Axial Candela

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L072310305.IES

ISOCANDELA CURVES



Maximum Candela = 779 Located At Horizontal Angle = 0, Vertical Angle = 37.5
50% Maximum Candela = 389.5
10% Maximum Candela = 77.9