



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

Report No: L082112808



**Report No:** L072112808R01

**Issue Date:** 9/13/2021

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

**Model Number:** 1141-X-MF-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.

**Sample Arrival Date:** 7/29/21

**Date of Tests:** 8/18/21 - 8/19/21

**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	4/7/23
HP Power Supply	6032A	PS-DC05-S2	--
Fluke Digital Thermometer	52K/J	MT-TP05	3/17/23
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

**General Information**

<b>Manufacturer:</b>	USTE dba Vista Professional Outdoor Lighting
<b>Model Number:</b>	1141-X-MF-30-B-MV-ND
<b>Driver Model Number:</b>	ERP ESS020W-1400-14

**Test Summary**

<b>Total Lumens:</b>	2028.90
<b>Efficacy:</b>	107.75
<b>Color Redering Index:</b>	81.8
<b>Correlated Color Temperature:</b>	3157
<b>Input Voltage (VAC/60Hz):</b>	119.98
<b>Input Current (Amp):</b>	0.1608
<b>Input Power (W):</b>	18.83
<b>Input Power Factor:</b>	0.9762
<b>Current ATHD (%):</b>	10.4%

**Test Condition**

<b>Ambient Temperature (°C):</b>	25.0
<b>Stabilization Time (Hours):</b>	1:05
<b>Total Operating Time (Hours):</b>	1:35

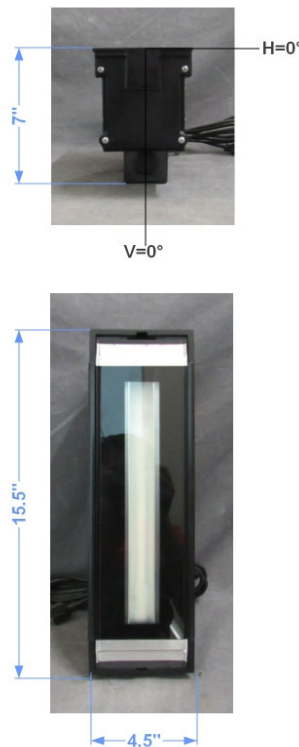
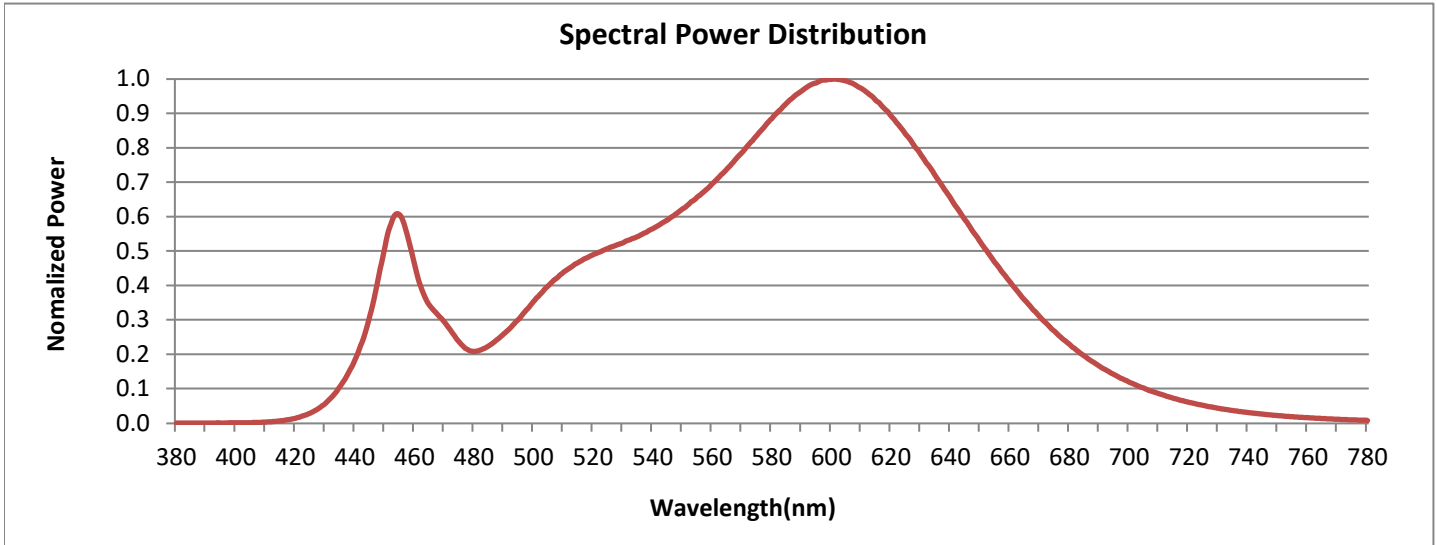


FIG. 1 LUMINAIRE

**Colorimetry Test Results**

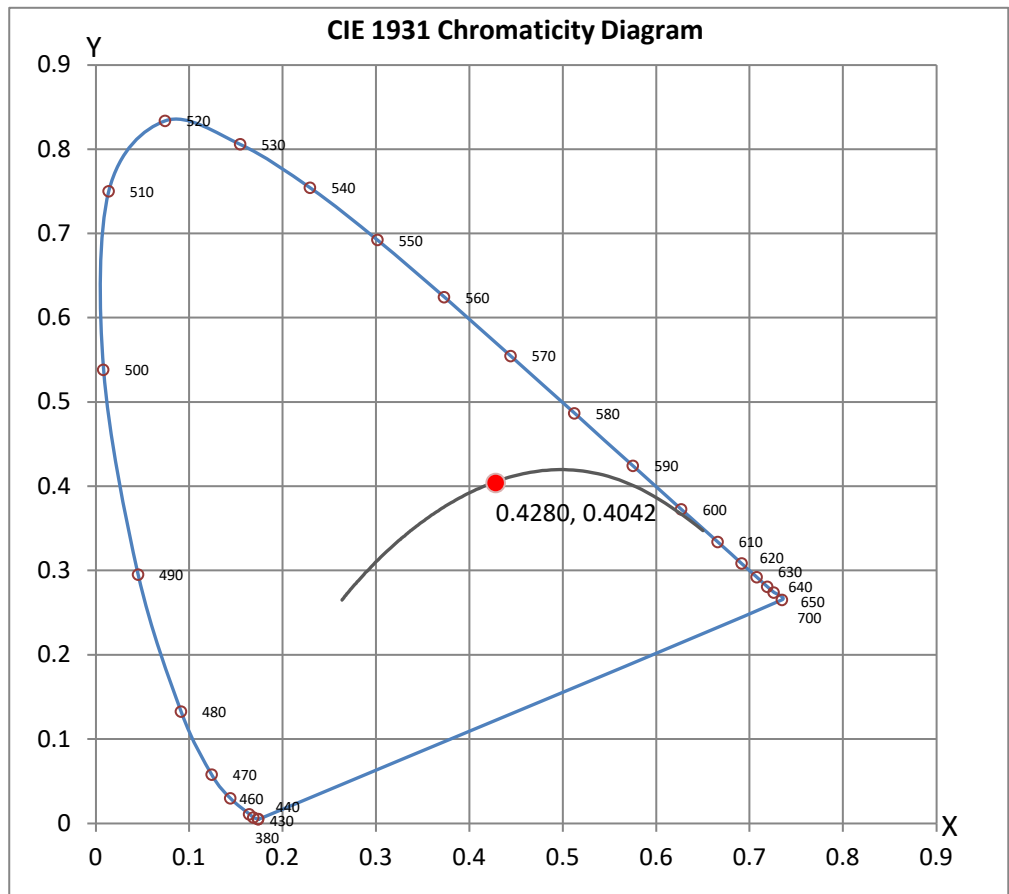


**CRI & CCT**

x	0.4280
y	0.4042
u'	0.2448
v'	0.5201
CRI	81.80
CCT	3157
Duv	0.00138

**R Values**

R1	79.92
R2	90.84
R3	95.75
R4	79.73
R5	80.67
R6	89.49
R7	81.71
R8	56.38
R9	0.14
R10	79.59
R11	79.31
R12	68.51
R13	82.59
R14	98.21
R15	71.55



## 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.

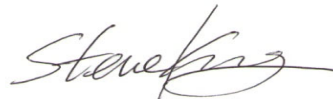
Electrical measurements are measured using the listed equipment.

### 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 :           Kunjan Modi          

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 : L072112808R01.IES**

## DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] L072112808R01  
[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)  
[ISSUEDATE] 8/25/21  
[MANUFAC] USTE dba Vista Professional Outdoor Lighting  
[LUMCAT] 1141-X-MF-30-B-MV-ND  
[LUMINAIRE] LED LUMINAIRE  
[BALLASTCAT] ERP ESS020W-1400-14  
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
[INPUT] 119.98VAC  
[TEST PROCEDURE] IESNA:LM-79-08

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

## CHARACTERISTICS

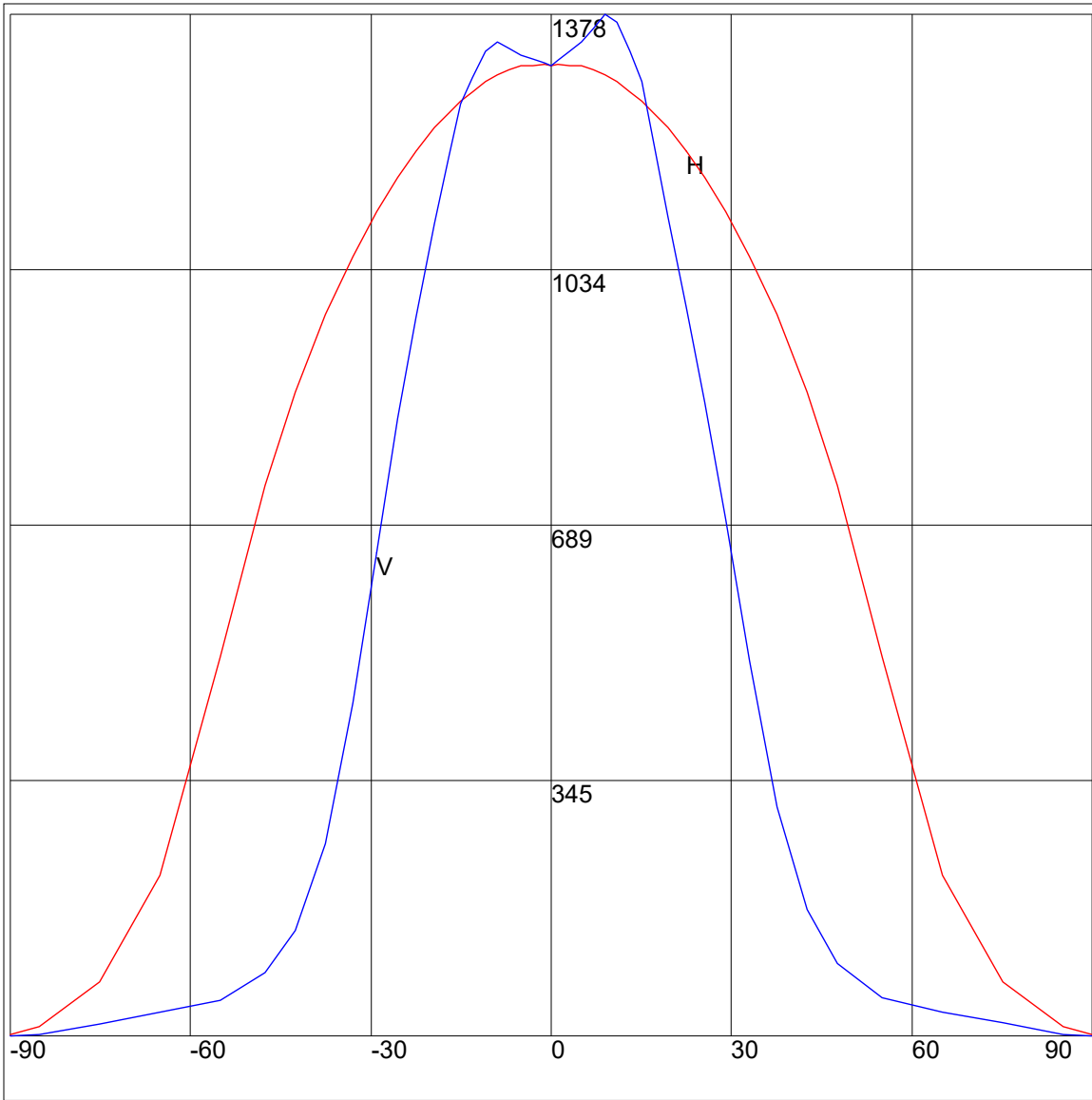
NEMA Type	7 H x 5 V
Maximum Candela	1378.412
Maximum Candela Angle	0H 9V
Horizontal Beam Angle (50%)	96.0
Vertical Beam Angle (50%)	57.4
Horizontal Field Angle (10%)	140.3
Vertical Field Angle (10%)	87.8
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	1375
Beam Efficiency	N.A.
Field Lumens	1873
Field Efficiency	N.A.
Spill Lumens	157
Luminaire Lumens	2031
Total Efficiency	N.A.
Total Luminaire Watts	18.83
Ballast Factor	1.00

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L072112808R01.IES**

**AXIAL CANDELA**

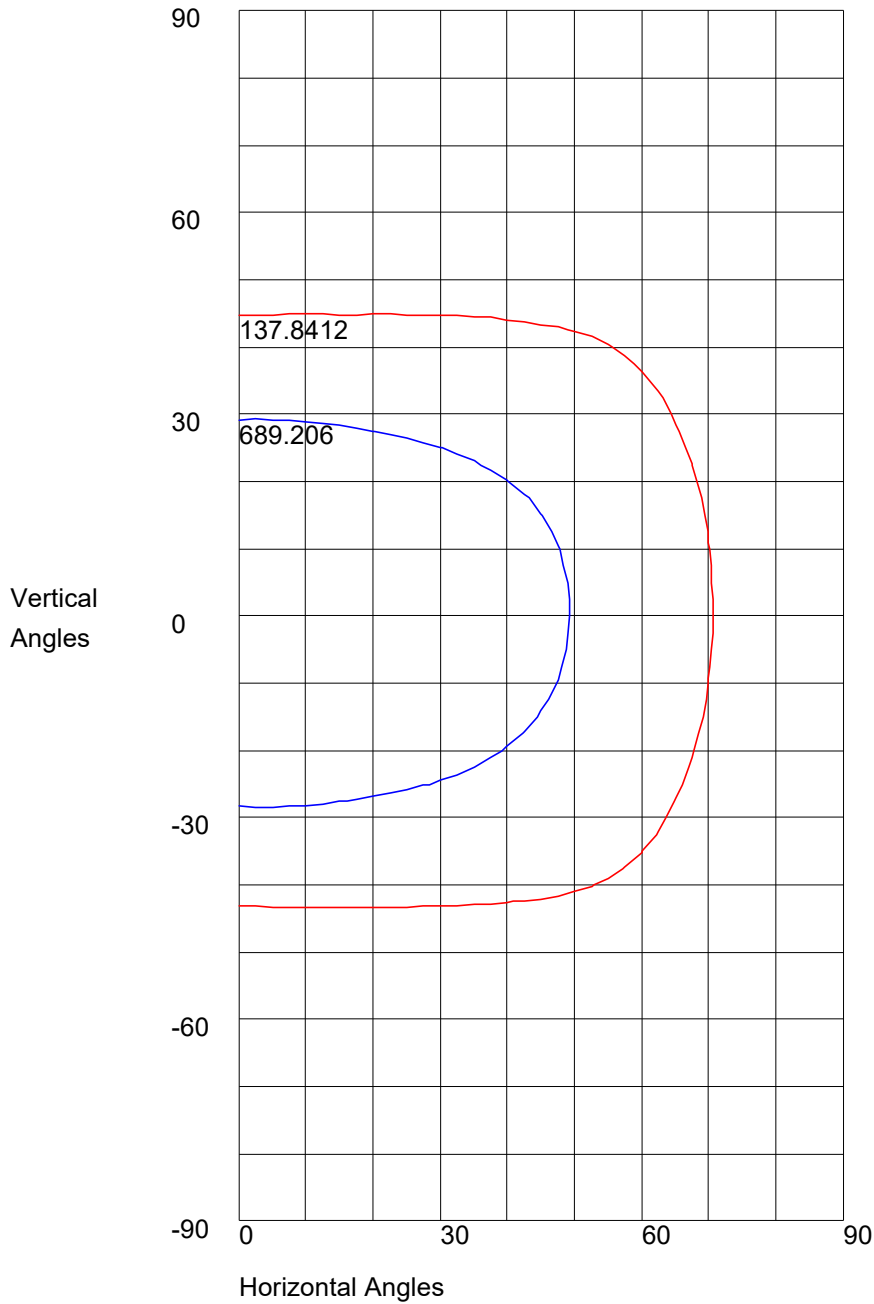
DEG.	HOR.	DEG.	VERT.
90	2.272	90	.823
85	12.551	85	3.411
75	74.283	75	17.871
65	217.526	65	32.059
55	512.744	55	51.977
47.5	742.82	47.5	97.678
42.5	868.056	42.5	171.074
37.5	973.101	37.5	309.679
33	1051.284	33	507.573
29	1111.965	29	696.572
25.5	1158.471	25.5	855.573
22.5	1193.389	22.5	981.9
19.5	1225.673	19.5	1105.744
17	1245.728	17	1206.902
15	1261.771	15	1287.828
13	1274.485	13	1327.826
11	1287.2	11	1367.825
9	1296.736	9	1378.412
7	1303.093	7	1359.585
5	1309.45	5	1340.759
3	1310.059	3	1328.844
1	1310.084	1	1316.346
0	1310	0	1310
-1	1310.084	-1	1312.908
-3	1310.059	-3	1318.53
-5	1309.45	-5	1323.57
-7	1303.093	-7	1332.301
-9	1296.736	-9	1341.032
-11	1287.2	-11	1327.99
-13	1274.485	-13	1293.175
-15	1261.771	-15	1258.36
-17	1245.728	-17	1186.656
-19.5	1225.673	-19.5	1097.027
-22.5	1193.389	-22.5	969.69
-25.5	1158.471	-25.5	834.182
-29	1111.965	-29	651.499
-33	1051.284	-33	450.412
-37.5	973.101	-37.5	259.885
-42.5	868.056	-42.5	143.653
-47.5	742.82	-47.5	85.673
-55	512.744	-55	48.566
-65	217.526	-65	31.923
-75	74.283	-75	16.916
-85	12.551	-85	2.865
-90	2.272	-90	.822

AXIAL CANDELA DISPLAY



Maximum Candela = 1378.412 Located At Horizontal Angle = 0, Vertical Angle = 9  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 1378.412 Located At Horizontal Angle = 0, Vertical Angle = 9  
50% Maximum Candela = 689.206  
10% Maximum Candela = 137.8412