



**PROFESSIONAL  
OUTDOOR LIGHTING**



8165 E Kaiser Blvd. Anaheim, CA 92808  
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Report No: L081407504  
Date: 9/9/2014



NVLAP LAB CODE 200927-0

**Report No: L081407504**

**Report Prepared For:** U.S.T.E. dba Vista Professional Outdoor Lighting  
1625 Surveyor Ave. Simi Valley CA 93063

**Model Number: 1057-XX-WF-A-30**

**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 1057-XX-WF-A-30 . Received in working and undamaged condition. No modifications were necessary.

**Testing Condition:** Fixture is tested with no special conditions.

**Sample Arrival Date:** 9/8/14

**Date of Tests:** 9/8/14 - 9/8/14

**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	01/04/15
Xitron Power Analysis System	2503AH	MT-EL01	01/09/15
BK Precision DC Power Supply	1747	PSDC-04	01/08/15
Fluke Digital Thermometer	52k/J	MT-TP02-GC	01/04/15
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**

<b>Manufacturer:</b>	U.S.T.E. dba Vista Professional Outdoor Lighting	
<b>Model Number:</b>	1057-XX-WF-A-30	
<b>Driver Model Number:</b>	THOMAS RESEARCH PRODUCTS LED40W-089-C0450-D	
<b>Total Lumens:</b>	1613.12	
<b>Input Voltage (VAC/60Hz):</b>	120.00	
<b>Input Current (Amp):</b>	0.16	
<b>Input Power (W):</b>	18.03	
<b>Input Power Factor:</b>	0.93	
<b>Current ATHD @ 120V(%):</b>	20%	
<b>Current ATHD @ 277V(%):</b>	21% (0.09A, 18.36W, 0.75PF)	
<b>Efficacy:</b>	89	
<b>Color Rendering Index (CRI):</b>	83	
<b>Correlated Color Temperature (K):</b>	3018	
<b>Chromaticity Coordinate x:</b>	0.4375	
<b>Chromaticity Coordinate y:</b>	0.4075	
<b>Ambient Temperature (°F):</b>	77.0	
<b>Stabilization Time (Hours):</b>	0:30	
<b>Total Operating Time (Hours):</b>	1:20	
<b>Off State Power(W):</b>	0.00	

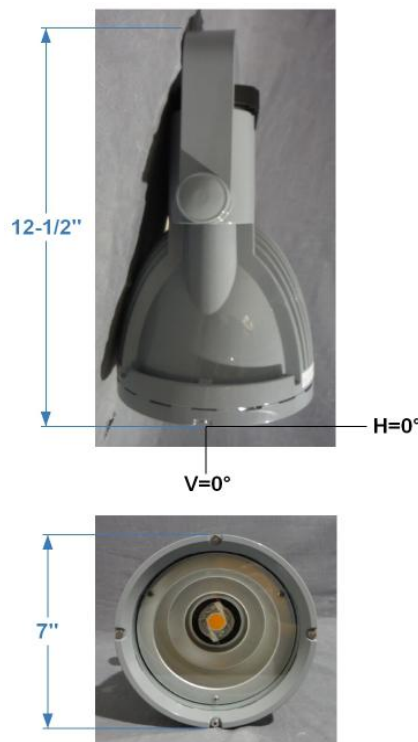
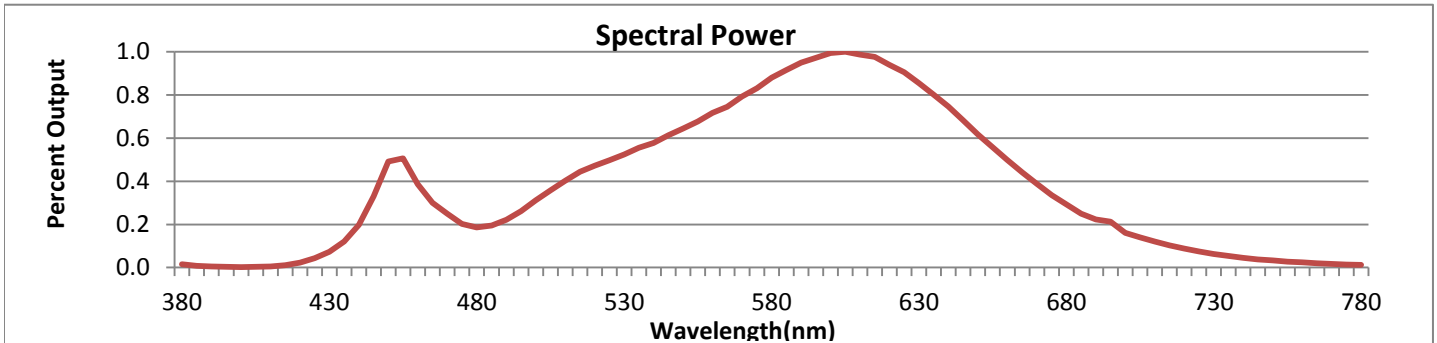


FIG. 1 LUMINAIRE

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



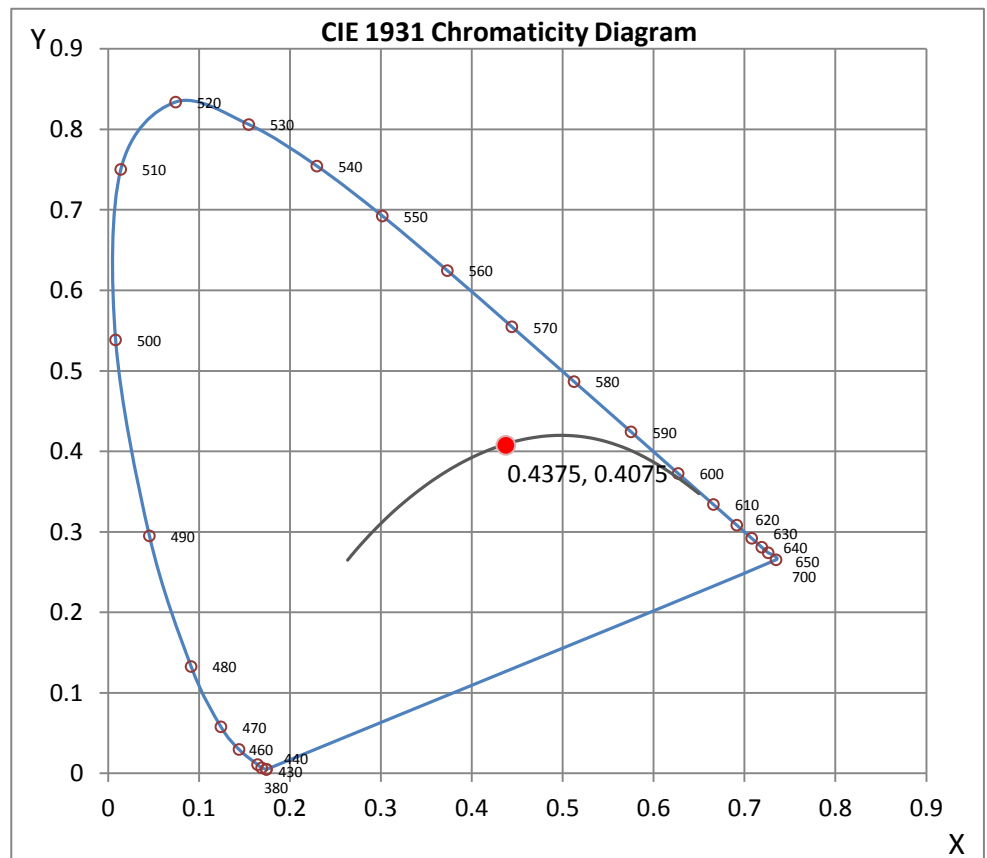
Wavelength	W/m <sup>2</sup> nm	440	0.0221	510	0.0449	580	0.0984	650	0.0690	720	0.0098
380	0.0017	450	0.0549	520	0.0527	590	0.1061	660	0.0556	730	0.0070
390	0.0005	460	0.0431	530	0.0585	600	0.1110	670	0.0432	740	0.0050
400	0.0003	470	0.0278	540	0.0646	610	0.1103	680	0.0327	750	0.0036
410	0.0006	480	0.0207	550	0.0719	620	0.1049	690	0.0249	760	0.0026
420	0.0026	490	0.0248	560	0.0801	630	0.0955	700	0.0180	770	0.0019
430	0.0082	500	0.0349	570	0.0885	640	0.0833	710	0.0135	780	0.0013

**CRI & CCT**

x	0.4375
y	0.4075
u'	0.2495
v'	0.5228
CRI	82.90
CCT	3018
Duv	0.00128

**R Values**

R1	81.18
R2	90.22
R3	97.06
R4	80.91
R5	80.63
R6	87.37
R7	84.57
R8	61.59
R9	11.84
R10	77.04
R11	79.49
R12	67.26
R13	83.80
R14	98.43



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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:**

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 : Wilson Khounlavong

Test Report Released by:

Test Report Reviewed by:

Jeff Ahn  
 Engineering Manager

Steve Kang  
 Quality Assurance

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

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# Photometric Test Report

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L081407504.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] L081407504  
 [TESTLAB] LIGHT LABORATORY, INC.  
 [ISSUEDATE] 9/9/2014  
 [MANUFAC] U.S.T.E. DBA VISTA PROFESSIONAL OUTDOOR LIGHTING  
 [LUMCAT] 1057-XX-WF-A-30  
 [LUMINAIRE] 7"DIA X 12-1/2"H. LED FLOODLIGHT  
 [MORE] CLEAR LENS  
 [BALLASTCAT] THOMAS RESEARCH PRODUCTS LED40W-089-C0450-D  
 [BALLAST] INPUT: 90-305VAC, 0.56A, 50/60HZ. OUTPUT: 30-89VDC, 450mA, 40W max  
 [LAMPPOSITION] 0,0  
 [LAMP] N/A  
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
 [INPUT] 120VAC, 18.03W  
 [TEST PROCEDURE] IESNA:LM-79-08

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

**CHARACTERISTICS**

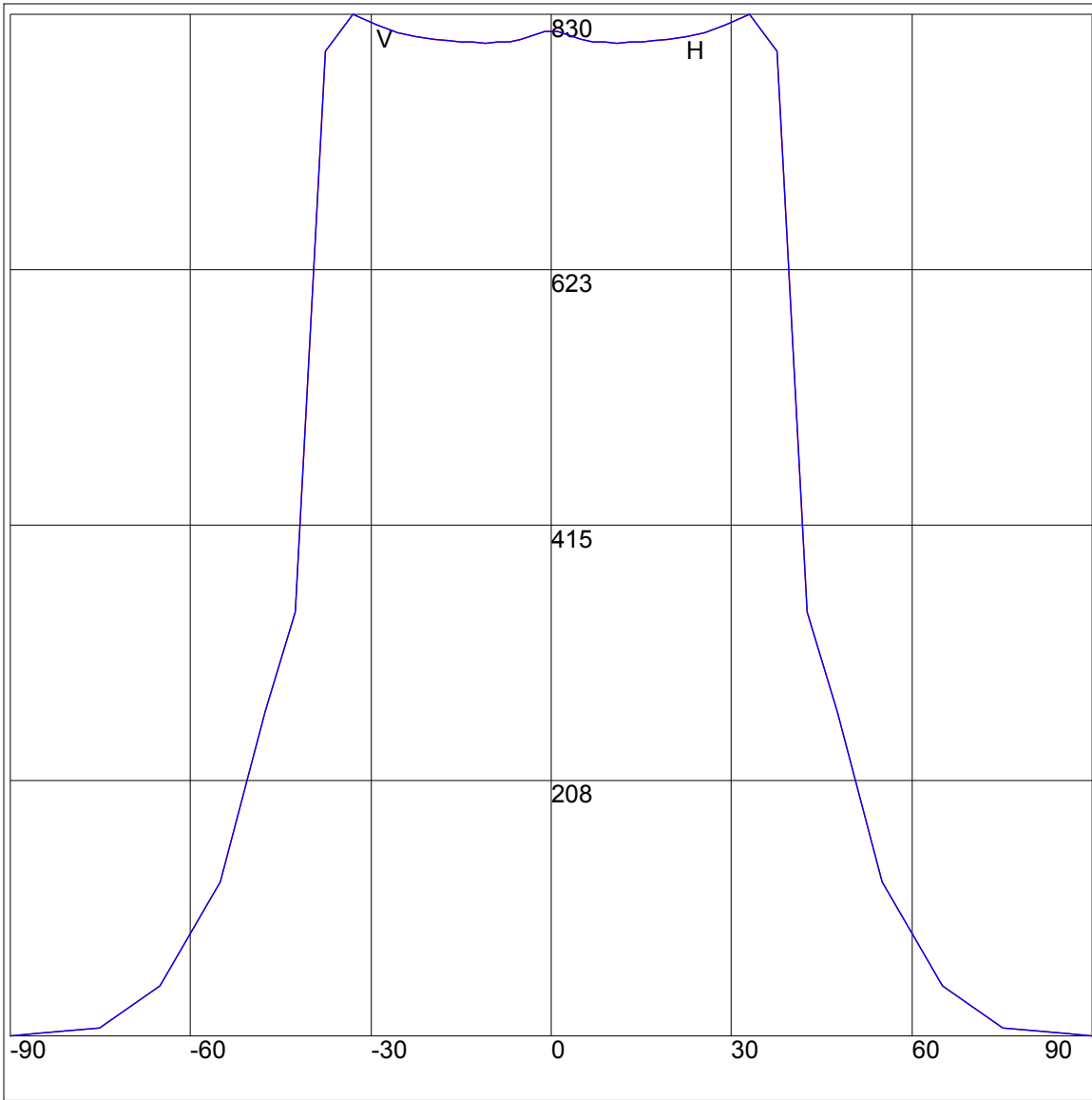
NEMA Type	6 H x 6 V
Maximum Candela	830.05
Maximum Candela Angle	-33H -1V
Horizontal Beam Angle (50%)	83.4
Vertical Beam Angle (50%)	54.7
Horizontal Field Angle (10%)	120.2
Vertical Field Angle (10%)	107.0
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	1260
Beam Efficiency	N.A.
Field Lumens	1540
Field Efficiency	N.A.
Spill Lumens	73
Luminaire Lumens	1613
Total Efficiency	N.A.
Total Luminaire Watts	18.03
Ballast Factor	1.00

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L081407504.IES**

**AXIAL CANDELA**

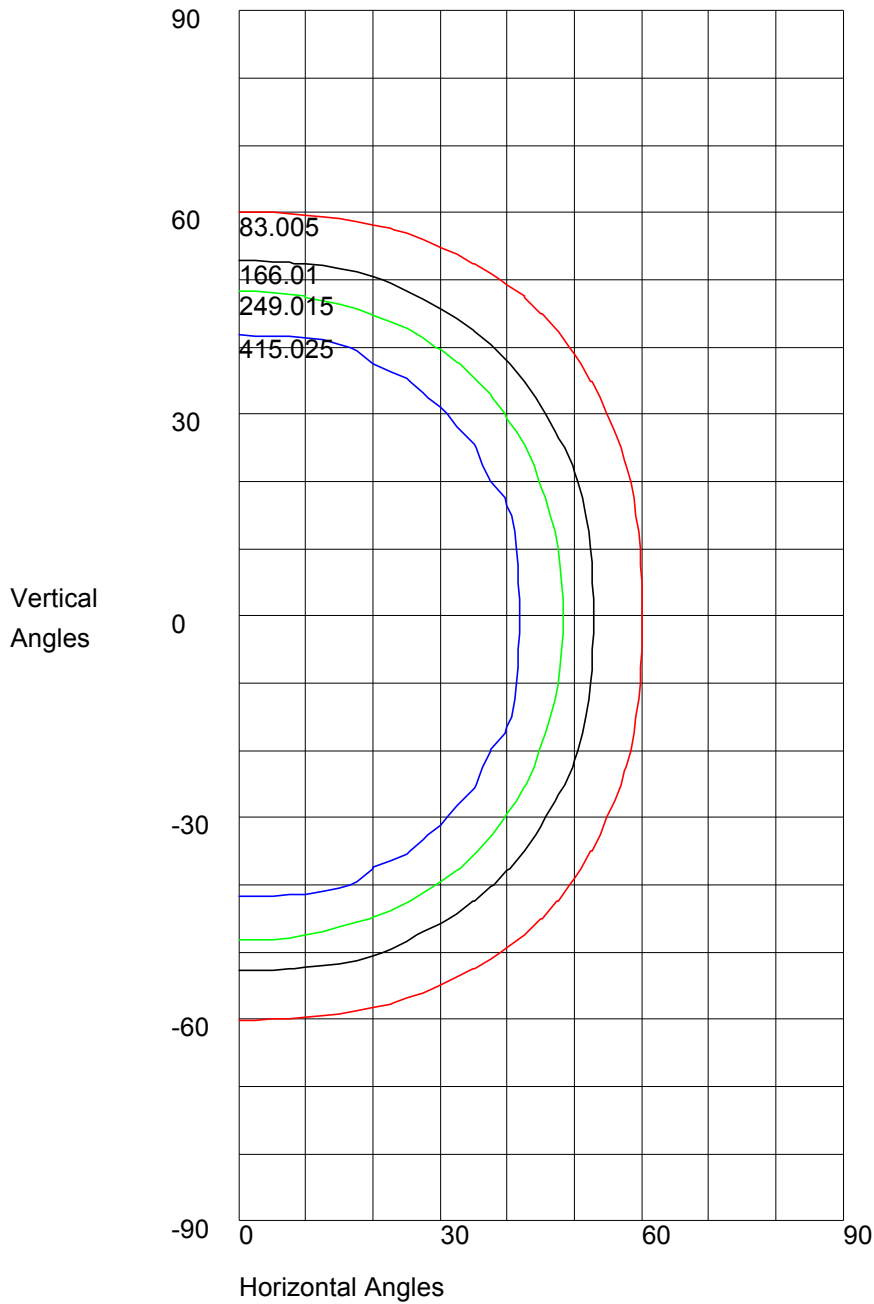
DEG.	HOR.	DEG.	VERT.
90	.01	90	.01
85	2.95	85	2.95
75	7.07	75	7.07
65	41.63	65	41.63
55	125.83	55	125.83
47.5	263.06	47.5	263.06
42.5	344.36	42.5	344.36
37.5	799.74	37.5	799.74
33	830.05	33	830.05
29	821.62	29	821.62
25.5	815.37	25.5	815.37
22.5	812.08	22.5	812.08
19.5	809.56	19.5	809.56
17	808.43	17	808.43
15	807.65	15	807.65
13	807.11	13	807.11
11	807.04	11	807.04
9	807.1	9	807.1
7	807.84	7	807.84
5	810.13	5	810.13
3	813.04	3	813.04
1	815.63	1	815.63
0	816.28	0	816.28
-1	815.63	-1	815.63
-3	813.04	-3	813.04
-5	810.13	-5	810.13
-7	807.84	-7	807.84
-9	807.1	-9	807.1
-11	807.04	-11	807.04
-13	807.11	-13	807.11
-15	807.65	-15	807.65
-17	808.43	-17	808.43
-19.5	809.56	-19.5	809.56
-22.5	812.08	-22.5	812.08
-25.5	815.37	-25.5	815.37
-29	821.62	-29	821.62
-33	830.05	-33	830.05
-37.5	799.74	-37.5	799.74
-42.5	344.36	-42.5	344.36
-47.5	263.06	-47.5	263.06
-55	125.83	-55	125.83
-65	41.63	-65	41.63
-75	7.07	-75	7.07
-85	2.95	-85	2.95
-90	.01	-90	.01

AXIAL CANDELA DISPLAY



Maximum Candela = 830.05 Located At Horizontal Angle = -33, Vertical Angle = -1  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 830.05 Located At Horizontal Angle =-33, Vertical Angle =-1  
50% Maximum Candela = 415.025  
10% Maximum Candela = 83.005