



**PROFESSIONAL  
OUTDOOR LIGHTING**



8165 E Kaiser Blvd. Anaheim, CA 92808  
p. 714.282.2270  
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Report No: L081407507

Date: 9/9/2014



NVLAP LAB CODE 200927-0

**Report No: L081407507**

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

**Model Number: 1057-XX-WF-B-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-B-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-B-30	
<b>Driver Model Number:</b>	THOMAS RESEARCH PRODUCTS LED40W-054-C0700-D	
<b>Total Lumens:</b>	2263.08	
<b>Input Voltage (VAC/60Hz):</b>	120.00	
<b>Input Current (Amp):</b>	0.23	
<b>Input Power (W):</b>	27.51	
<b>Input Power Factor:</b>	0.99	
<b>Current ATHD @ 120V(%):</b>	7%	
<b>Current ATHD @ 277V(%):</b>	8% (0.11A, 27.2W, 0.91PF)	
<b>Efficacy:</b>	82	
<b>Color Rendering Index (CRI):</b>	83	
<b>Correlated Color Temperature (K):</b>	3035	
<b>Chromaticity Coordinate x:</b>	0.4357	
<b>Chromaticity Coordinate y:</b>	0.4058	
<b>Ambient Temperature (°F):</b>	77.0	
<b>Stabilization Time (Hours):</b>	0:25	
<b>Total Operating Time (Hours):</b>	1:15	
<b>Off State Power(W):</b>	0.00	

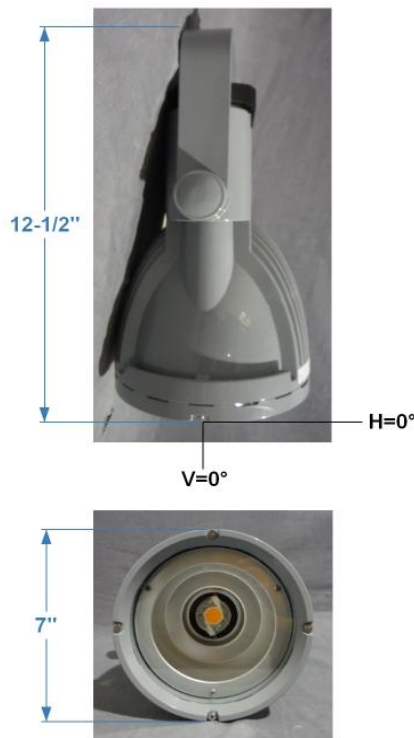
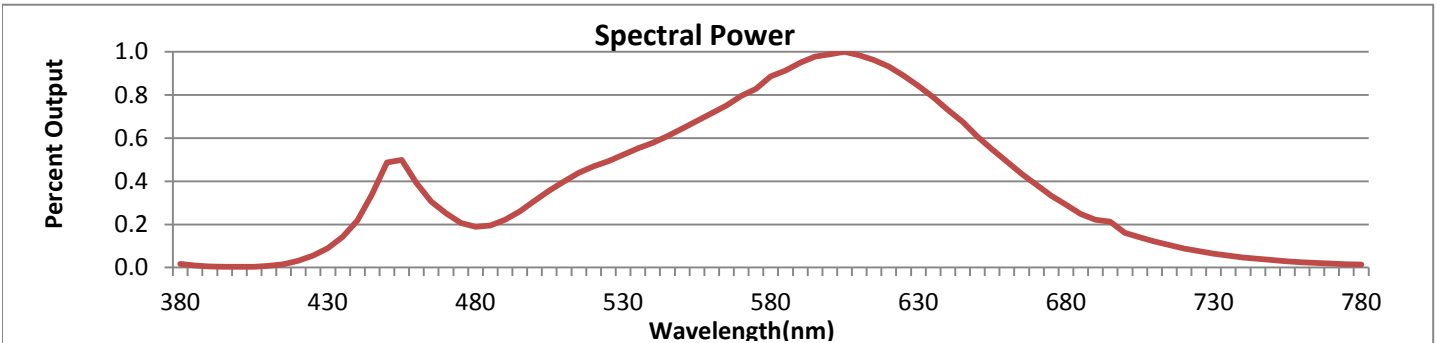


FIG. 1 LUMINAIRE

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



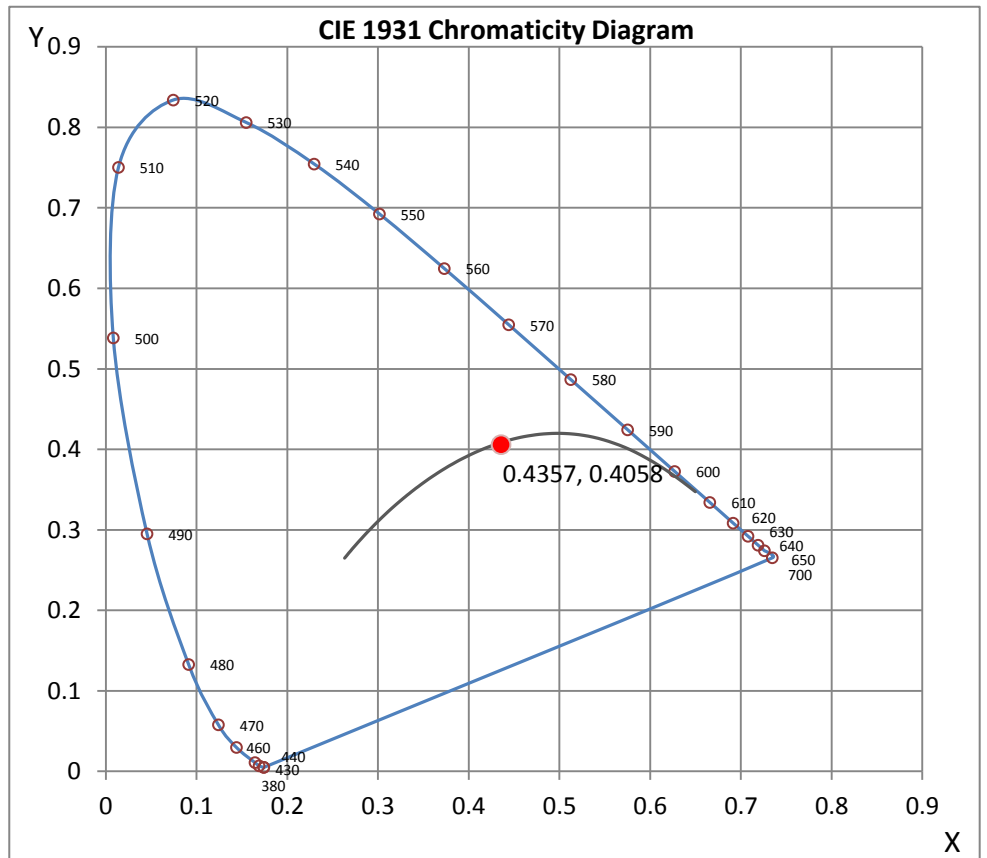
Wavelength	W/m <sup>2</sup> nm	440	0.0353	510	0.0646	580	0.1432	650	0.0981	720	0.0143
380	0.0026	450	0.0787	520	0.0757	590	0.1534	660	0.0794	730	0.0104
390	0.0008	460	0.0632	530	0.0844	600	0.1597	670	0.0619	740	0.0075
400	0.0005	470	0.0405	540	0.0934	610	0.1589	680	0.0471	750	0.0056
410	0.0012	480	0.0304	550	0.1041	620	0.1506	690	0.0359	760	0.0040
420	0.0050	490	0.0358	560	0.1156	630	0.1360	700	0.0260	770	0.0028
430	0.0145	500	0.0500	570	0.1286	640	0.1180	710	0.0196	780	0.0021

**CRI & CCT**

x	0.4357
y	0.4058
u'	0.2490
v'	0.5219
CRI	82.50
CCT	3035
Duv	0.00086

**R Values**

R1	80.69
R2	89.99
R3	96.87
R4	80.34
R5	80.20
R6	86.99
R7	84.18
R8	60.83
R9	10.03
R10	76.52
R11	78.72
R12	67.58
R13	83.34
R14	98.35



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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 : L081407507.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] L081407507  
 [TESTLAB] LIGHT LABORATORY, INC.  
 [ISSUE DATE] 9/9/2014  
 [MANUFAC] U.S.T.E. DBA VISTA PROFESSIONAL OUTDOOR LIGHTING  
 [LUMCAT] 1057-XX-WF-B-30  
 [LUMINAIRE] 7"DIA X 12-1/2"H. LED FLOODLIGHT  
 [MORE] CLEAR LENS  
 [BALLASTCAT] THOMAS RESEARCH PRODUCTS LED40W-054-C0700-D  
 [BALLAST] INPUT: 100-277VAC, 0.40A, 50/60HZ. OUTPUT: 18-54VDC, 700mA, 37.8W max  
 [LAMPPOSITION] 0,0  
 [LAMP CAT] N/A  
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
 [INPUT] 120VAC, 27.51W  
 [TEST PROCEDURE] IESNA:LM-79-08

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

**CHARACTERISTICS**

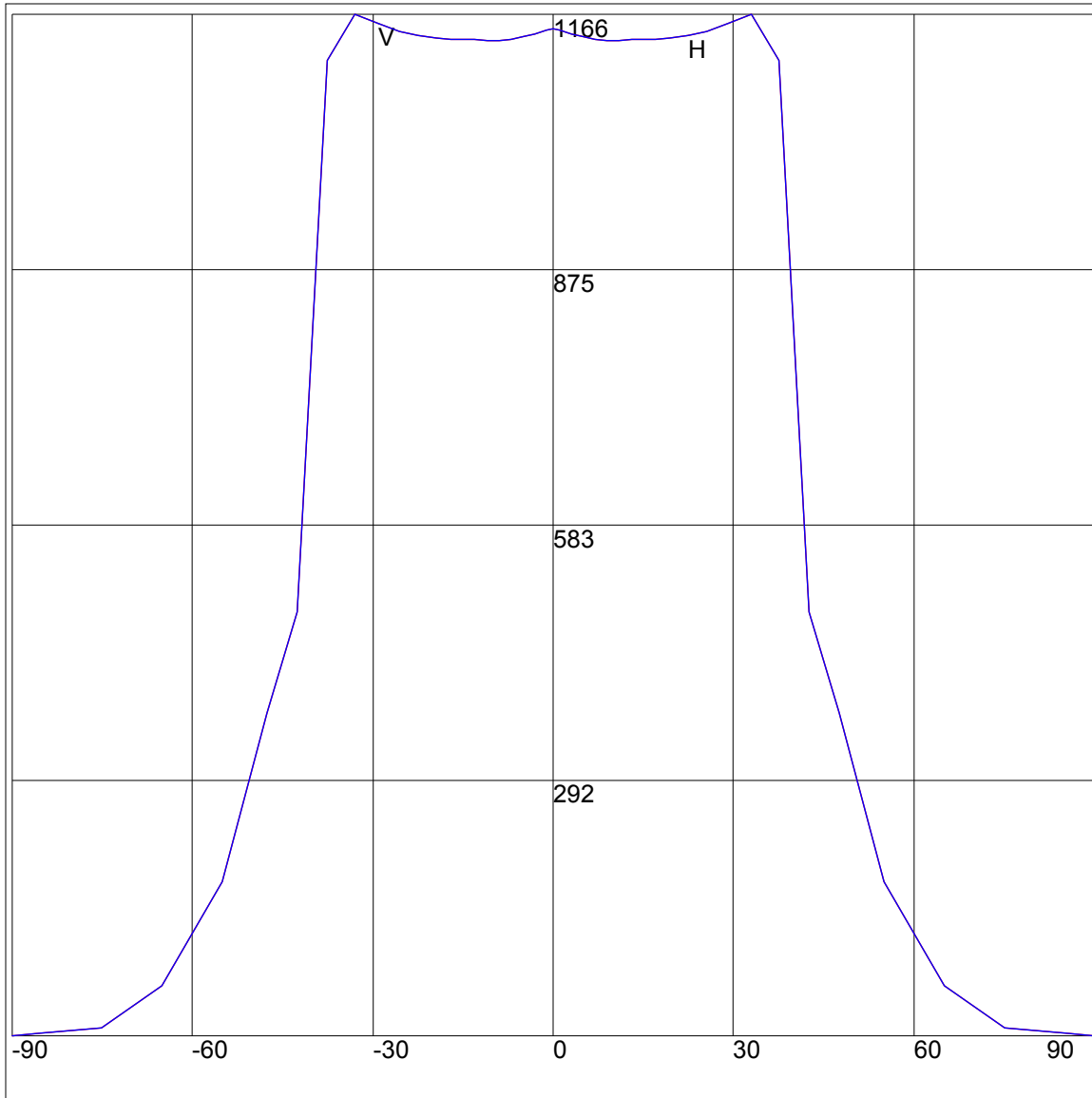
NEMA Type	6 H x 6 V
Maximum Candela	1166
Maximum Candela Angle	-33H -1V
Horizontal Beam Angle (50%)	83.4
Vertical Beam Angle (50%)	54.6
Horizontal Field Angle (10%)	120.2
Vertical Field Angle (10%)	107.0
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	1768
Beam Efficiency	N.A.
Field Lumens	2160
Field Efficiency	N.A.
Spill Lumens	103
Luminaire Lumens	2263
Total Efficiency	N.A.
Total Luminaire Watts	27.51
Ballast Factor	1.00

IES FLOOD REPORT  
 PHOTOMETRIC FILENAME : L081407507.IES

AXIAL CANDELA

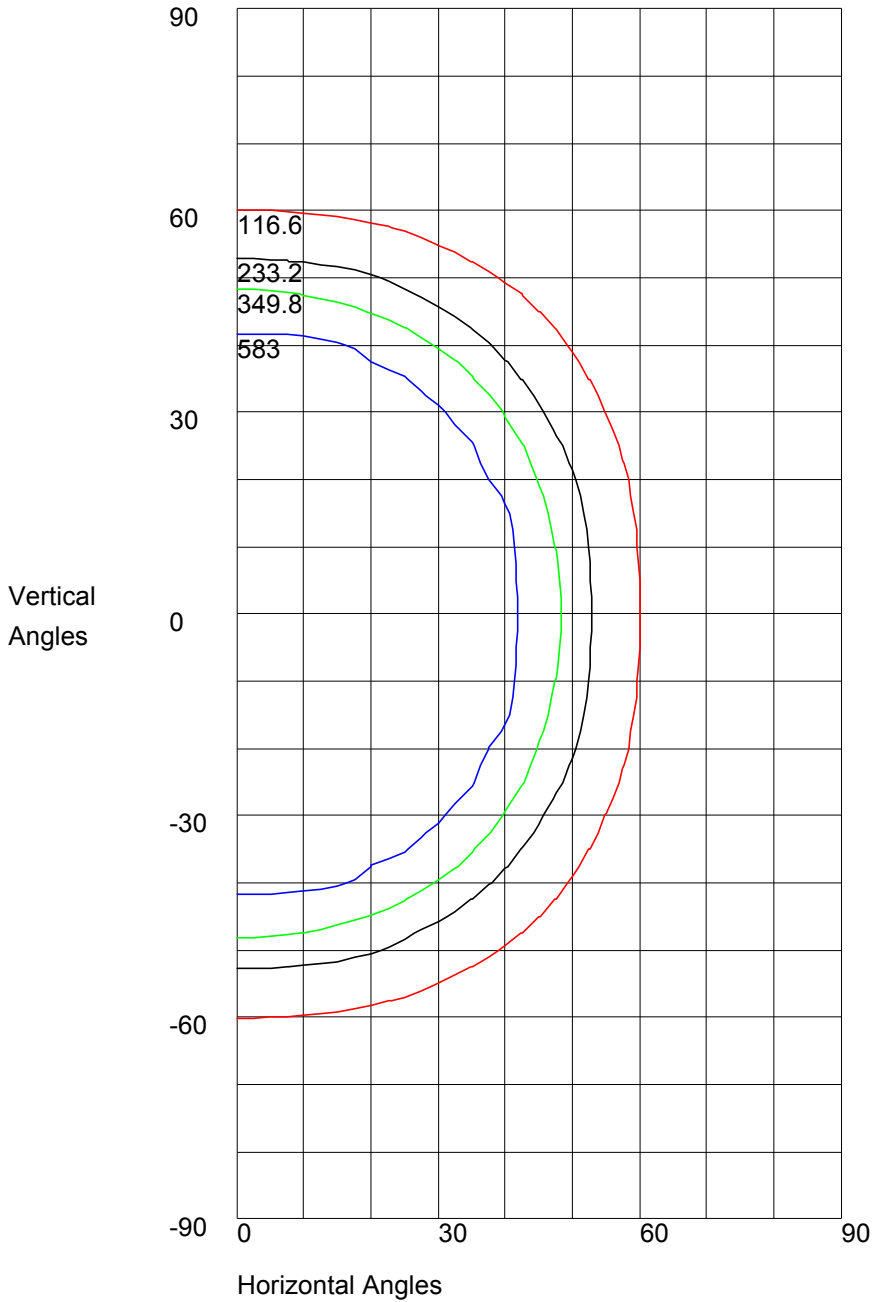
DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	4	85	4
75	10	75	10
65	58	65	58
55	177	55	177
47.5	368	47.5	368
42.5	484	42.5	484
37.5	1113	37.5	1113
33	1166	33	1166
29	1155	29	1155
25.5	1146	25.5	1146
22.5	1142	22.5	1142
19.5	1139	19.5	1139
17	1138	17	1138
15	1137	15	1137
13	1137	13	1137
11	1136	11	1136
9	1136	9	1136
7	1137	7	1137
5	1140	5	1140
3	1144	3	1144
1	1148	1	1148
0	1149	0	1149
-1	1148	-1	1148
-3	1144	-3	1144
-5	1140	-5	1140
-7	1137	-7	1137
-9	1136	-9	1136
-11	1136	-11	1136
-13	1137	-13	1137
-15	1137	-15	1137
-17	1138	-17	1138
-19.5	1139	-19.5	1139
-22.5	1142	-22.5	1142
-25.5	1146	-25.5	1146
-29	1155	-29	1155
-33	1166	-33	1166
-37.5	1113	-37.5	1113
-42.5	484	-42.5	484
-47.5	368	-47.5	368
-55	177	-55	177
-65	58	-65	58
-75	10	-75	10
-85	4	-85	4
-90	0	-90	0

AXIAL CANDELA DISPLAY



Maximum Candela = 1166 Located At Horizontal Angle =-33, Vertical Angle =-1  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 1166 Located At Horizontal Angle = -33, Vertical Angle = -1  
50% Maximum Candela = 583  
10% Maximum Candela = 116.6