



PROFESSIONAL
OUTDOOR LIGHTING



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Report No: L081407505

Date: 9/3/2014



NVLAP LAB CODE 200927-0

Report No: L081407505

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

Model Number: 1057-XX-NS-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-NS-B-30 . Received in working and undamaged condition. No modifications were necessary.

Testing Condition: Fixture is tested with no special conditions.

Sample Arrival Date: 8/26/14

Date of Tests: 9/3/14 - 9/3/14

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.

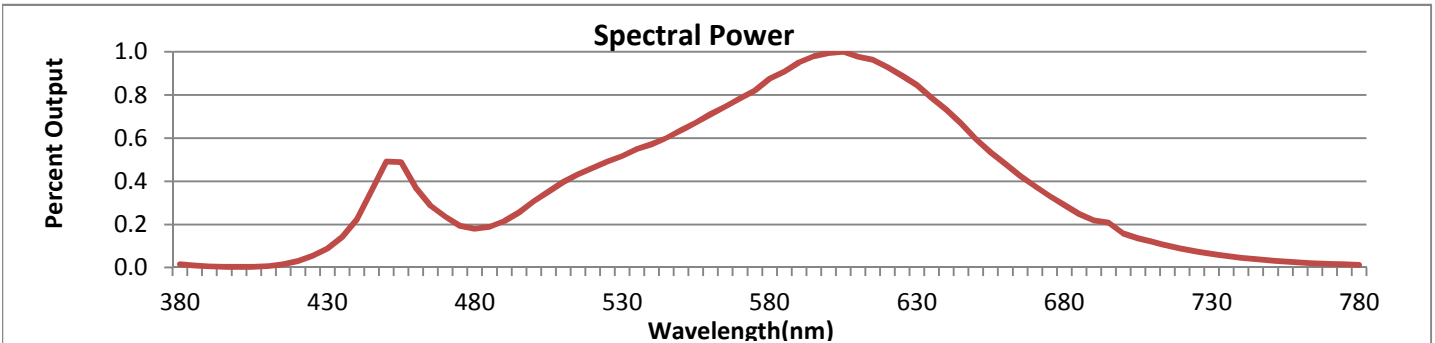
Test Summary

Manufacturer:	U.S.T.E. dba Vista Professional Outdoo
Model Number:	1057-XX-NS-B-30
Driver Model Number:	THOMAS RESEARCH PRODUCTS LED40W-054-C0700-D
Total Lumens:	2588.56
Input Voltage (VAC/60Hz):	120.00
Input Current (Amp):	0.23
Input Power (W):	27.53
Input Power Factor:	0.99
Current ATHD @ 120V(%):	6%
Current ATHD @ 277V(%):	N/A
Efficacy:	94
Color Rendering Index (CRI):	82
Correlated Color Temperature (K):	3015
Chromaticity Coordinate x:	0.4370
Chromaticity Coordinate y:	0.4060
Ambient Temperature (°F):	77.0
Stabilization Time (Hours):	1:20
Total Operating Time (Hours):	2:00
Off State Power(W):	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.



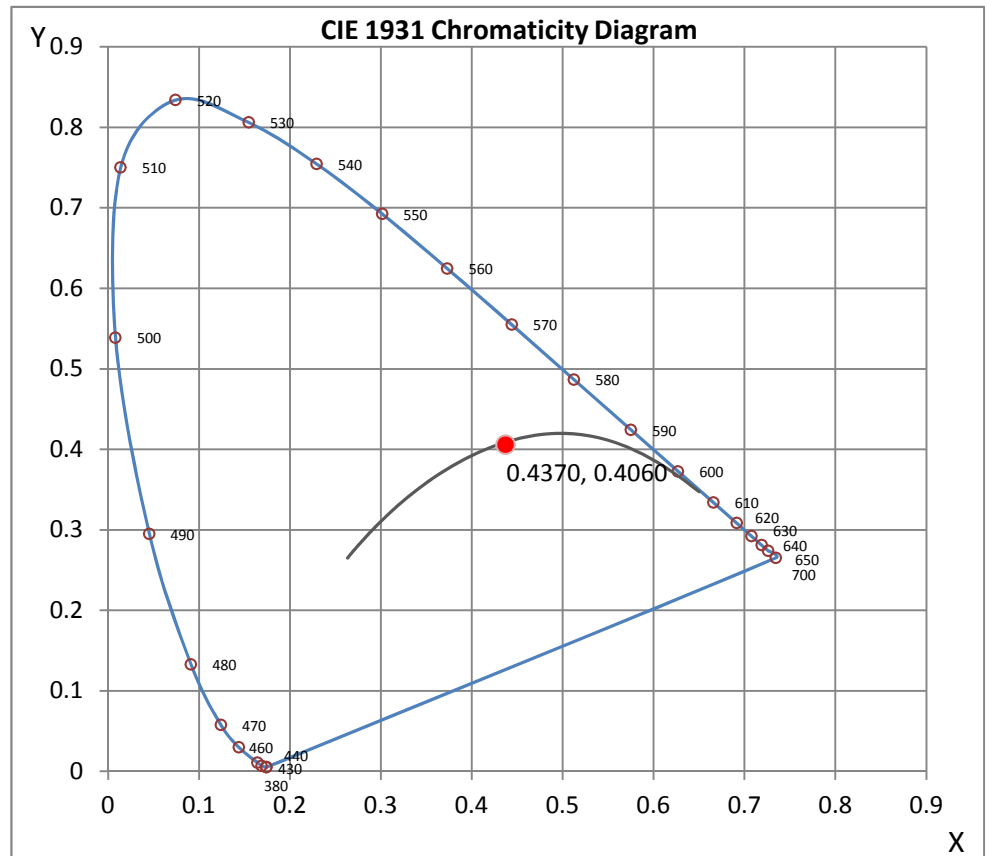
Wavelength	W/m ² nm	440	0.0436	510	0.0776	580	0.1714	650	0.1169	720	0.0169
380	0.0030	450	0.0962	520	0.0905	590	0.1863	660	0.0944	730	0.0124
390	0.0009	460	0.0726	530	0.1013	600	0.1948	670	0.0739	740	0.0089
400	0.0006	470	0.0463	540	0.1119	610	0.1912	680	0.0567	750	0.0064
410	0.0014	480	0.0352	550	0.1248	620	0.1819	690	0.0429	760	0.0046
420	0.0058	490	0.0421	560	0.1393	630	0.1656	700	0.0308	770	0.0034
430	0.0173	500	0.0601	570	0.1536	640	0.1432	710	0.0233	780	0.0025

CRI & CCT

x	0.4370
y	0.4060
u'	0.2498
v'	0.5221
CRI	82.40
CCT	3015
Duv	0.00075

R Values

R1	80.62
R2	89.90
R3	96.85
R4	80.42
R5	80.16
R6	86.96
R7	83.97
R8	60.37
R9	9.08
R10	76.36
R11	78.95
R12	67.72
R13	83.28
R14	98.32



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

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 : Keyur Patel

Test Report Released by:



Jeff Ahn
Engineering Manager

Test Report Reviewed by:



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 : L081407505.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L081407505
[TESTLAB] LIGHT LABORATORY, INC.
[ISSUE DATE] 9/3/2014
[MANUFAC] U.S.T.E. DBA VISTA PROFESSIONAL OUTDOOR LIGHTING
[LUMCAT] 1057-XX-NS-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, 27.53W
[TEST PROCEDURE] IESNA:LM-79-08

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

CHARACTERISTICS

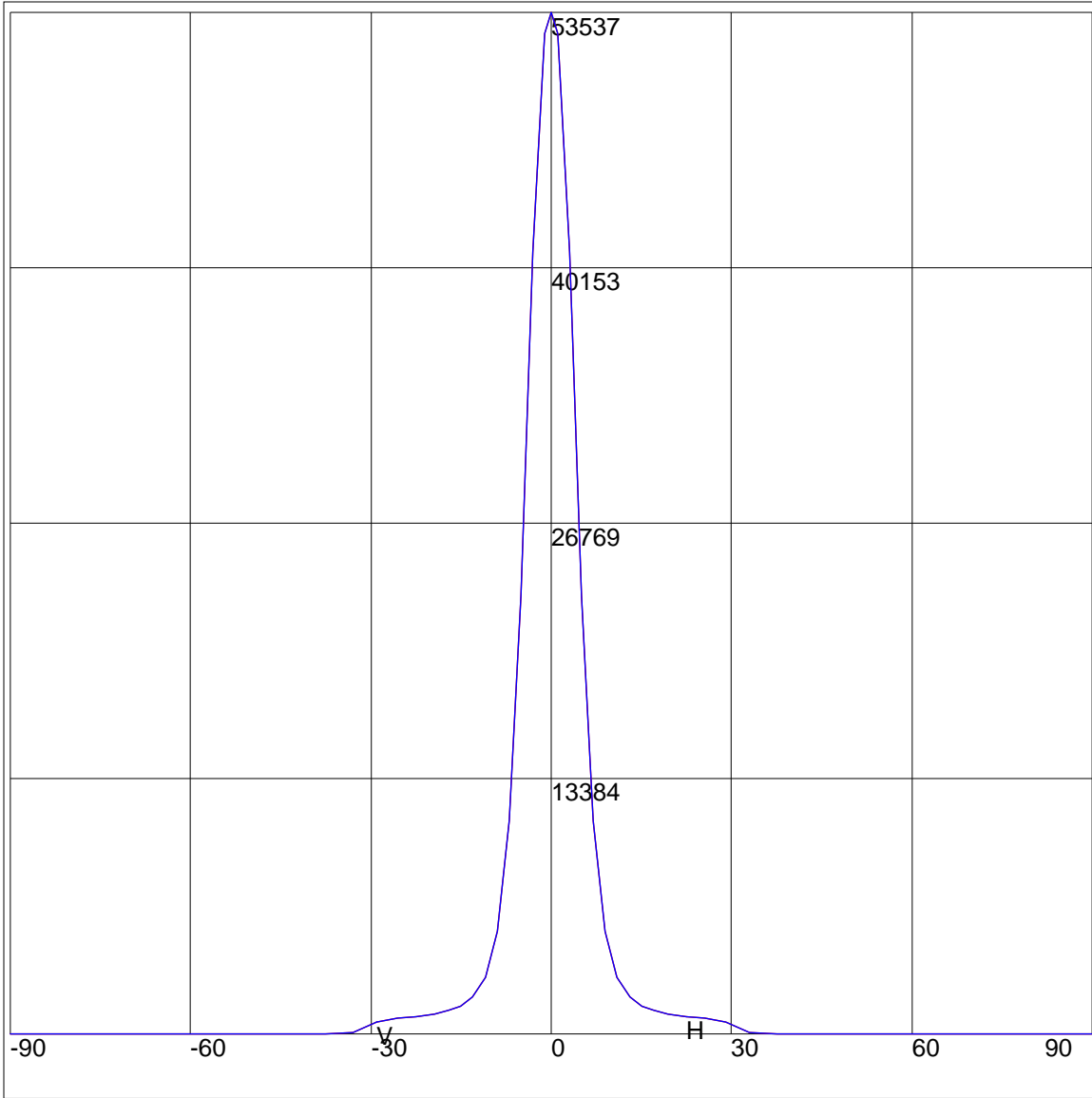
NEMA Type	2 H x 2 V
Maximum Candela	53537
Maximum Candela Angle	0H 0V
Horizontal Beam Angle (50%)	9.2
Vertical Beam Angle (50%)	9.2
Horizontal Field Angle (10%)	18.1
Vertical Field Angle (10%)	18.1
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	903
Beam Efficiency	N.A.
Field Lumens	1551
Field Efficiency	N.A.
Spill Lumens	1037
Luminaire Lumens	2589
Total Efficiency	N.A.
Total Luminaire Watts	27.53
Ballast Factor	1.00

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L081407505.IES

AXIAL CANDELA

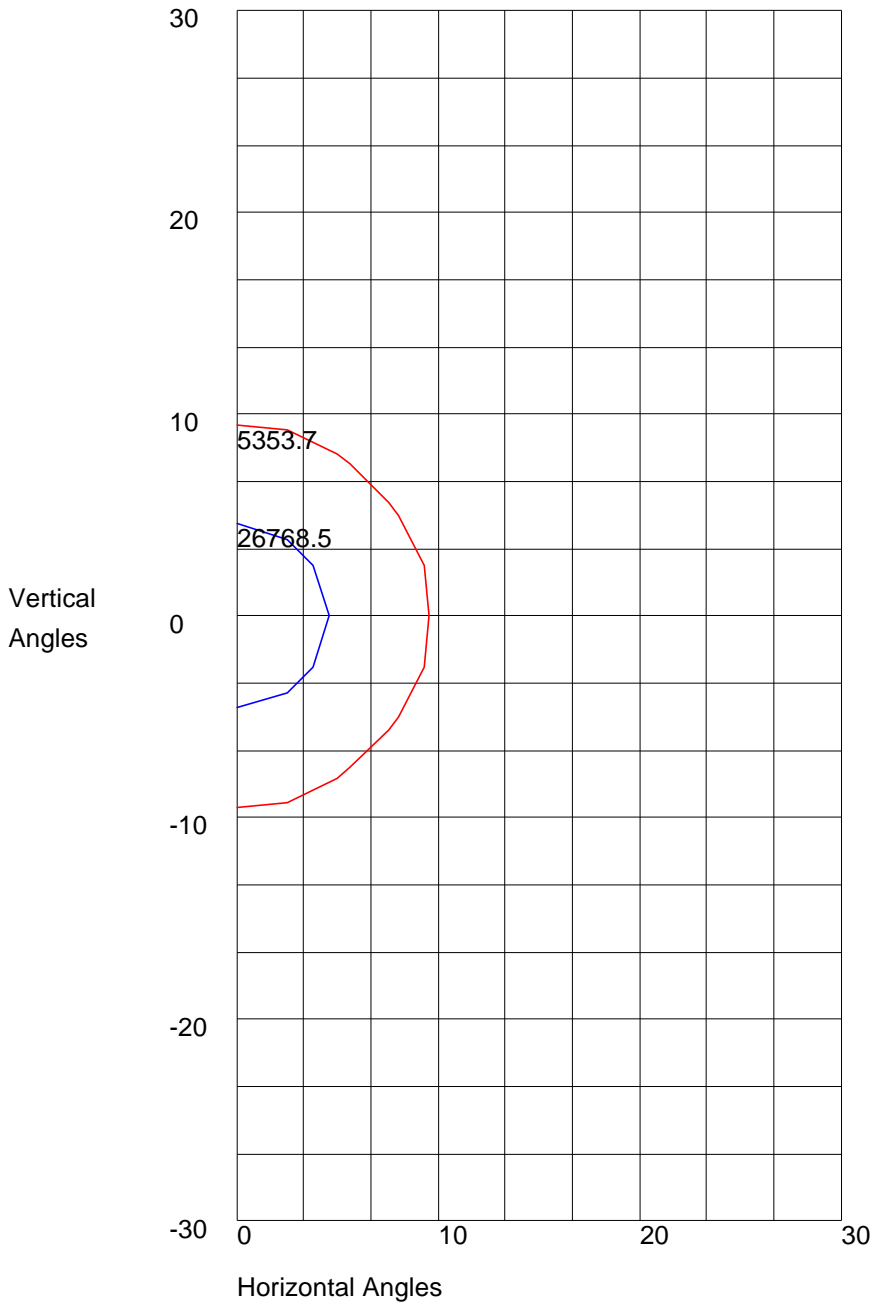
DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	3	85	3
75	3	75	3
65	5	65	5
55	7	55	7
47.5	11	47.5	11
42.5	17	42.5	17
37.5	30	37.5	30
33	78	33	78
29	685	29	685
25.5	888	25.5	888
22.5	960	22.5	960
19.5	1080	19.5	1080
17	1249	17	1249
15	1475	15	1475
13	1938	13	1938
11	3002	11	3002
9	5430	9	5430
7	11233	7	11233
5	23012	5	23012
3	41006	3	41006
1	52446	1	52446
0	53537	0	53537
-1	52446	-1	52446
-3	41006	-3	41006
-5	23012	-5	23012
-7	11233	-7	11233
-9	5430	-9	5430
-11	3002	-11	3002
-13	1938	-13	1938
-15	1475	-15	1475
-17	1249	-17	1249
-19.5	1080	-19.5	1080
-22.5	960	-22.5	960
-25.5	888	-25.5	888
-29	685	-29	685
-33	78	-33	78
-37.5	30	-37.5	30
-42.5	17	-42.5	17
-47.5	11	-47.5	11
-55	7	-55	7
-65	5	-65	5
-75	3	-75	3
-85	3	-85	3
-90	0	-90	0

AXIAL CANDELA DISPLAY



Maximum Candela = 53537 Located At Horizontal Angle = 0, Vertical Angle = 0
H - Horizontal Axial Candela
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 53537 Located At Horizontal Angle = 0, Vertical Angle = 0
50% Maximum Candela = 26768.5
10% Maximum Candela = 5353.7