



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

Report No: L051704301



Report No: L051704301

Issue Date: 5/23/2017

Report Prepared For: Aubrey Industries Clarte Lighting
975 N Todd Ave, Azusa, CA 91702

Model Number: PAR8 FLOOD

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. Received in working and undamaged condition. No modifications were necessary.

Testing Condition: Fixture is tested with no special conditions.

Sample Arrival Date: 5/12/17

Date of Tests: 5/16/17 - 5/23/17

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	11/28/17
ITECH	IT6122	PS-DC03-S1	11/28/17
Fluke Digital Thermometer	52k/J	MT-TP02-GC	11/28/17
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:	Aubrey Industries Clarte Lighting
Model Number:	PAR8 FLOOD
Driver Model Number:	ERP ESS010W-0750-12
Total Lumens:	907.12
Input Voltage (VAC/60Hz):	120.00
Input Current (Amp):	0.088
Input Power (W):	10.43
Input Power Factor:	0.98
Current ATHD @ 120V(%):	9%
Current ATHD @ 277V(%):	N/A
Efficacy:	87
Color Rendering Index (CRI):	82
Correlated Color Temperature (K):	2991
Chromaticity Coordinate x:	0.4390
Chromaticity Coordinate y:	0.4072
Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:45
Total Operating Time (Hours):	1:45

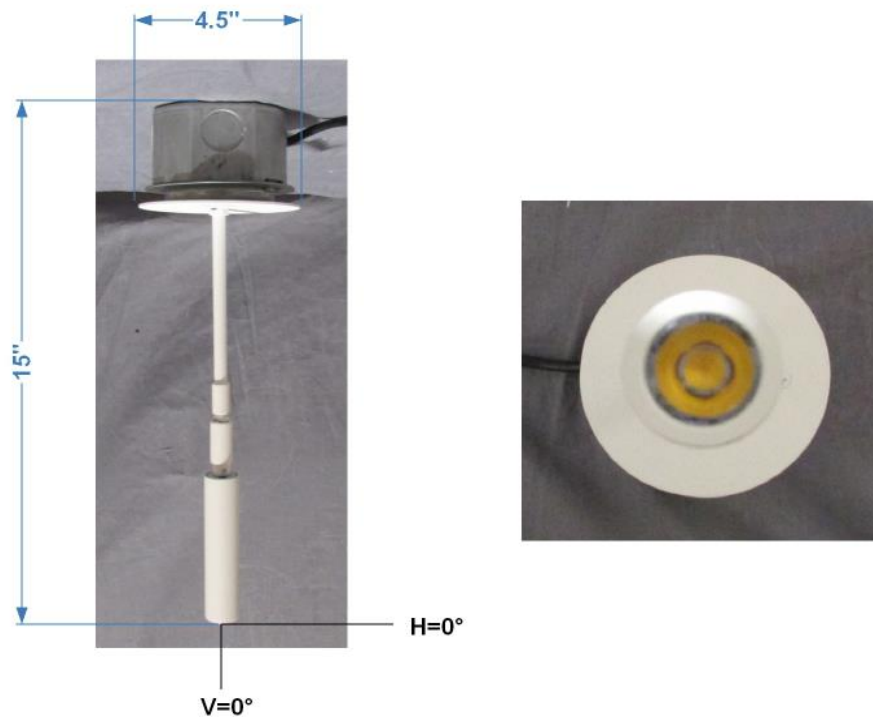
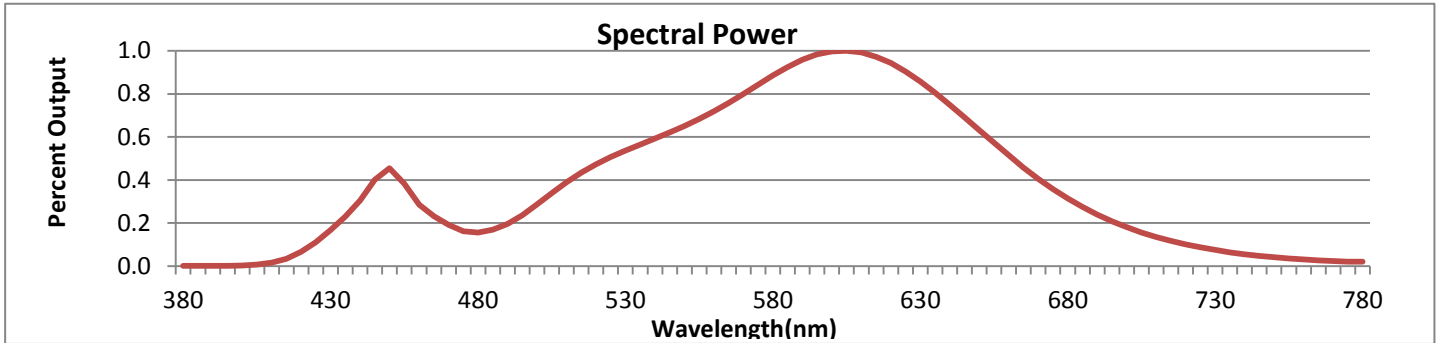


FIG. 1 LUMINAIRE

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



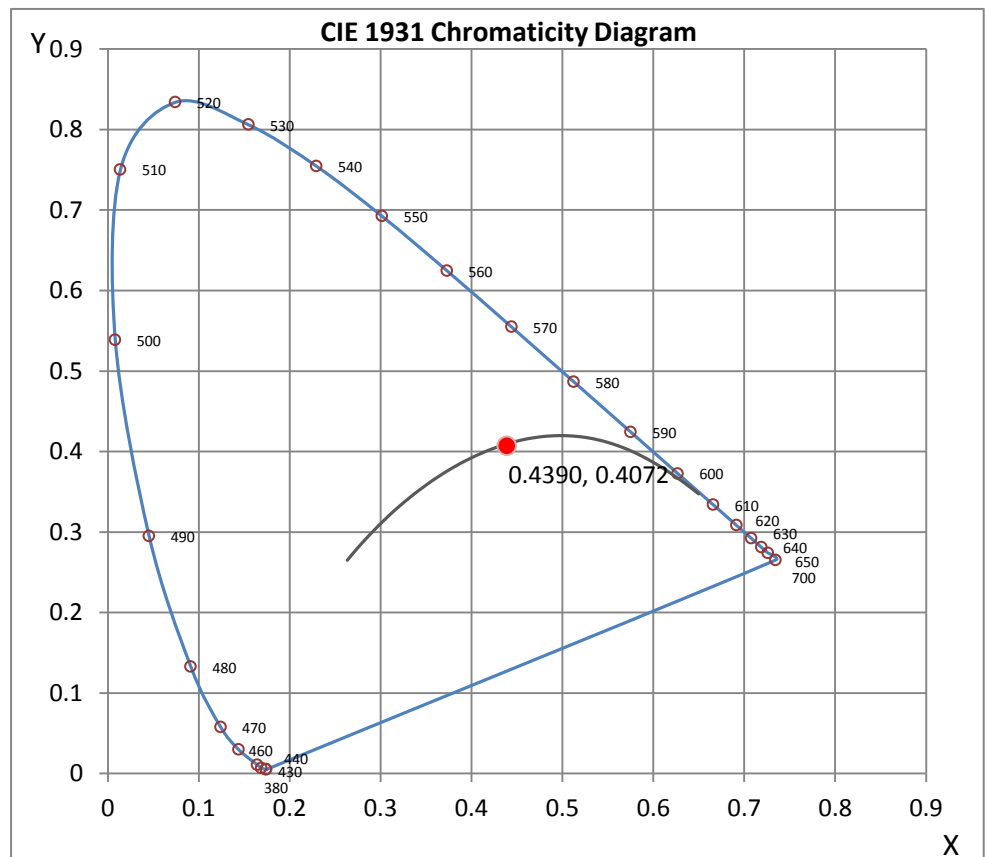
Wavelength	W/m ² nm	440	0.3039	510	0.3894	580	0.8860	650	0.6316	720	0.1008
380	0.0008	450	0.4545	520	0.4730	590	0.9589	660	0.5149	730	0.0749
390	0.0013	460	0.2852	530	0.5366	600	0.9972	670	0.4059	740	0.0554
400	0.0034	470	0.1913	540	0.5934	610	0.9929	680	0.3142	750	0.0416
410	0.0157	480	0.1565	550	0.6515	620	0.9439	690	0.2394	760	0.0311
420	0.0665	490	0.1958	560	0.7189	630	0.8572	700	0.1804	770	0.0234
430	0.1682	500	0.2865	570	0.7993	640	0.7493	710	0.1348	780	0.0203

CRI & CCT

x	0.4390
y	0.4072
u'	0.2506
v'	0.5229
CRI	81.70
CCT	2991
Duv	0.00096

R Values

R1	79.83
R2	88.12
R3	95.36
R4	80.63
R5	79.14
R6	84.39
R7	84.74
R8	61.23
R9	9.63
R10	72.25
R11	78.96
R12	67.09
R13	81.38
R14	97.00



*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: 9*



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

Photometric Test Report

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L051704301.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] L051704301
 [TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)
 [ISSUEDATE] 5/23/2017
 [MANUFAC] Aubrey Industries Clarte Lighting
 [LUMCAT] PAR8 FLOOD
 [LUMINAIRE] Surface Round 1 light 4" Canopy Plate
 [BALLASTCAT] ERP ESS010W-0750-12
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
 [INPUT] 120VAC, 10.43W
 [TEST PROCEDURE] IESNA:LM-79-08

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

CHARACTERISTICS

NEMA Type	5 H x 5 V
Maximum Candela	1615
Maximum Candela Angle	-1H 0V
Horizontal Beam Angle (50%)	40.4
Vertical Beam Angle (50%)	40.4
Horizontal Field Angle (10%)	75.3
Vertical Field Angle (10%)	75.3
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	449
Beam Efficiency	N.A.
Field Lumens	807
Field Efficiency	N.A.
Spill Lumens	100
Luminaire Lumens	907
Total Efficiency	N.A.
Total Luminaire Watts	10.43
Ballast Factor	1.00

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L051704301.IES

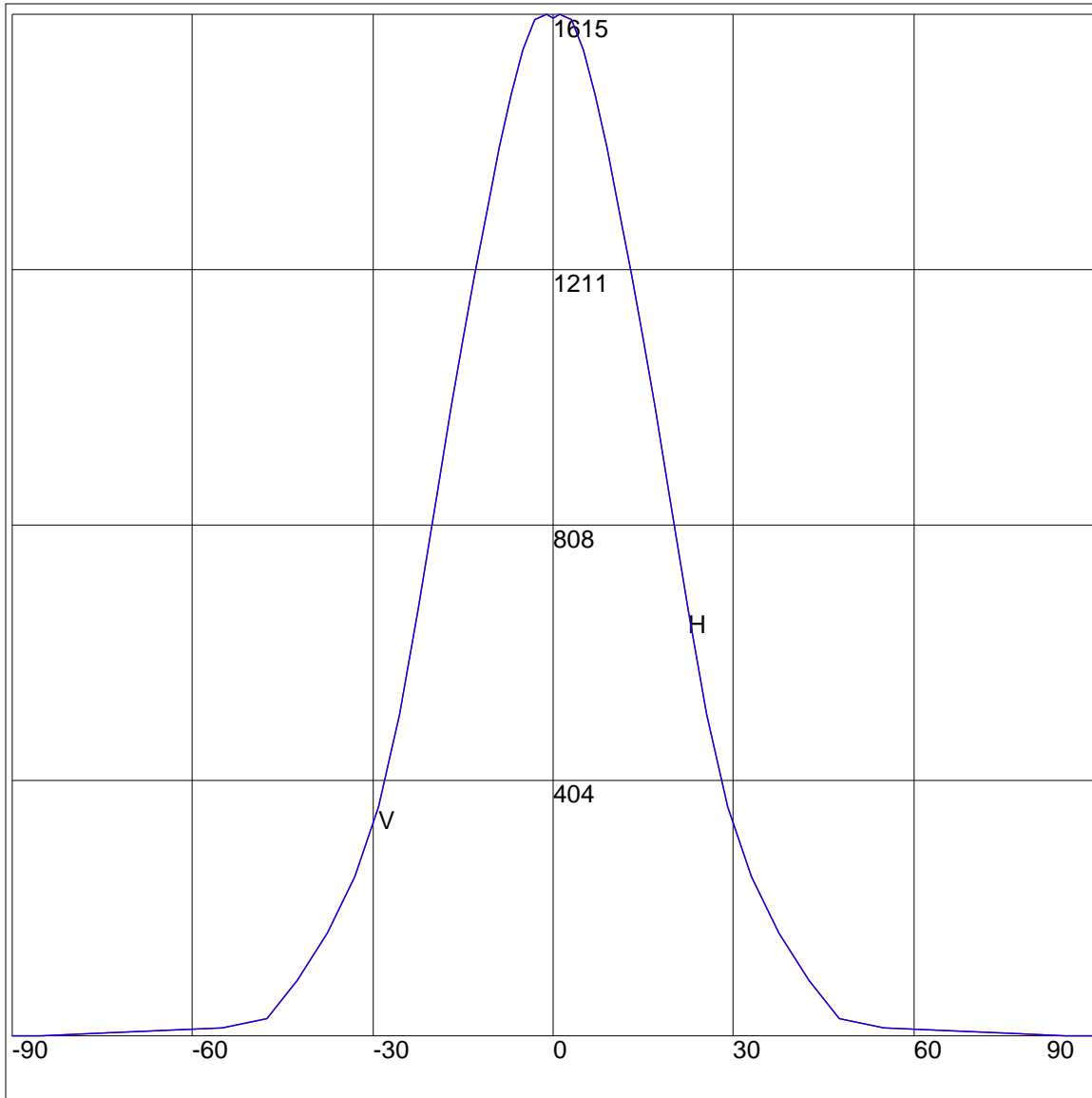
AXIAL CANDELA

DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	2	85	2
75	6	75	6
65	9	65	9
55	13	55	13
47.5	29	47.5	29
42.5	89	42.5	89
37.5	164	37.5	164
33	253	33	253
29	363	29	363
25.5	508	25.5	508
22.5	672	22.5	672
19.5	849	19.5	849
17	991	17	991
15	1098	15	1098
13	1202	13	1202
11	1307	11	1307
9	1405	9	1405
7	1489	7	1489
5	1558	5	1558
3	1606	3	1606
1	1615	1	1615
0	1608	0	1608
-1	1615	-1	1615
-3	1606	-3	1606
-5	1558	-5	1558
-7	1489	-7	1489
-9	1405	-9	1405
-11	1307	-11	1307
-13	1202	-13	1202
-15	1098	-15	1098
-17	991	-17	991
-19.5	849	-19.5	849
-22.5	672	-22.5	672
-25.5	508	-25.5	508
-29	363	-29	363
-33	253	-33	253
-37.5	164	-37.5	164
-42.5	89	-42.5	89
-47.5	29	-47.5	29
-55	13	-55	13
-65	9	-65	9
-75	6	-75	6
-85	2	-85	2
-90	0	-90	0

ZONAL LUMEN SUMMARY

Zone	%
0-20	47.3
0-30	74.3
0-40	88.5
0-60	97.5
0-80	99.5
0-90	100
10-90	87.1
20-40	41.2
20-50	48.7
40-70	10.1
60-80	2
70-80	0.9
80-90	0.5
90-110	0
90-120	0
90-130	0
90-150	0
90-180	0
110-180	0
0-180	100

AXIAL CANDELA DISPLAY

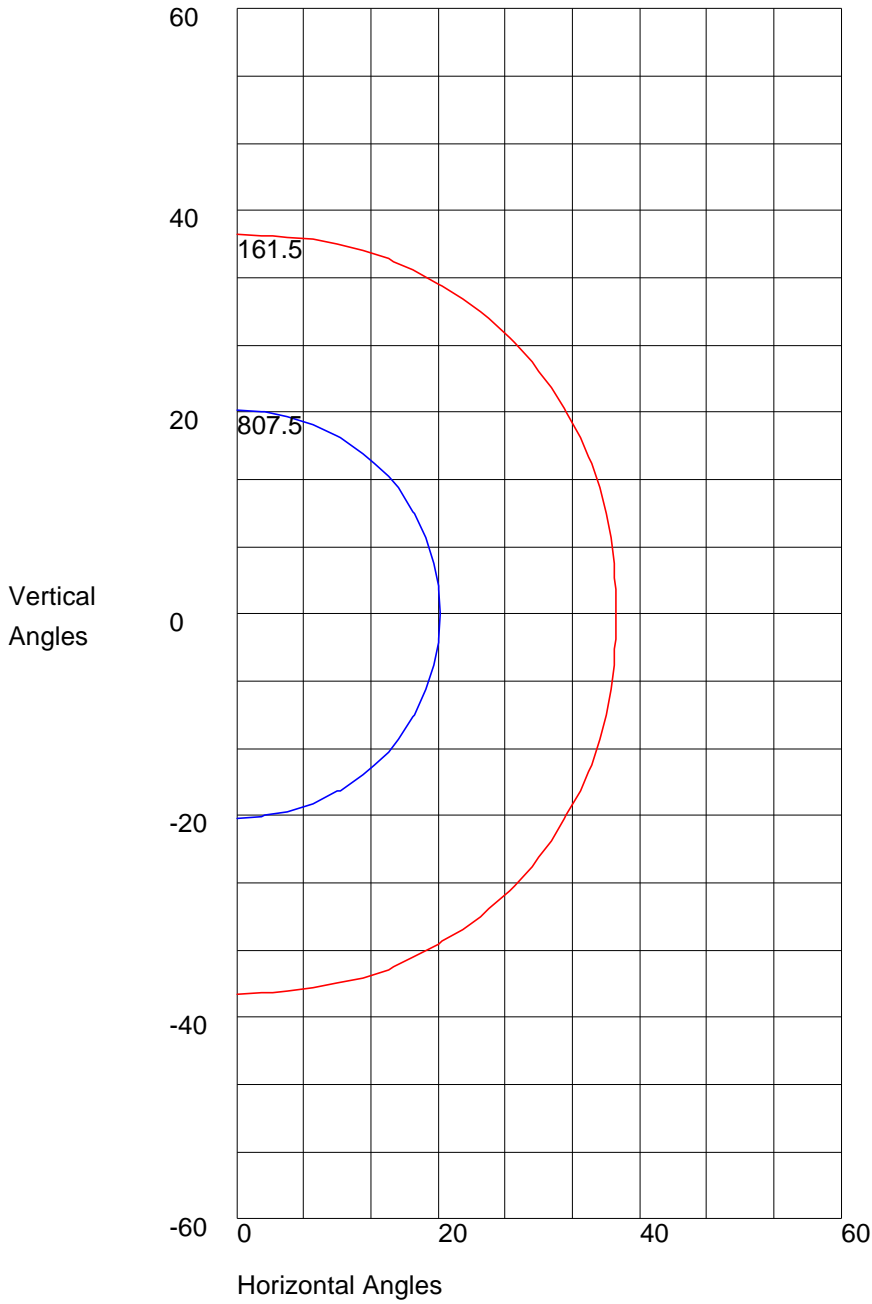


Maximum Candela = 1615 Located At Horizontal Angle = -1, Vertical Angle = 0

H - Horizontal Axial Candela

V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 1615 Located At Horizontal Angle = -1, Vertical Angle = 0
50% Maximum Candela = 807.5
10% Maximum Candela = 161.5

Illuminance cone diagram

Mounting Height = 12 ft.

