

REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G101918458

Date: March 13, 2015

REPORT NO. 101918458LAX-025

TEST OF ONE LED WASH

MODEL NO. COLOUR CHORUS 48

RENDERED TO

ELATION PROFESSIONAL
6122 S. EASTERN AVE
COMMERCE, CA 90040 USA

TEST: Electrical and Photometric tests as required to the IESNA test standard.

STATEMENT OF LIMITATION: This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the federal government.

AUTHORIZATION: The testing performed was authorized by signed quote number Q500519256.

STANDARDS USED: The following American National Standards or Illuminating Engineering Society of North America Test Guides were used in part or totally to test each specimen:

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting

DESCRIPTION OF SAMPLE: The client submitted one production sample of model number COLOUR CHORUS 48. The sample was received by Intertek on March 10, 2015, in undamaged condition and one sample was tested as received. The sample designation was LAN1503101019-005.

DATES OF TESTS: March 11, 2015



SUMMARY

Model No.: COLOUR CHORUS 48
Description: LED Wash

Criteria	Result
Total Lumen Output (Lumens)	8647
Total Power (W)	280.87
Luminaire Efficacy (LPW)	30.79
Power Factor	0.979

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date
LSI High Speed Mirror Goniometer	6440T	000943	02/25/15	03/25/15
Elgar Power Supply	CW1251	000944	VBU	VBU
Yokogawa Power Analyzer	WT210	000945	11/26/14	11/26/15
Temp. & RH Meter	971	001178	12/22/14	12/22/15
Extech Instruments Stop Watch	365510	001390	12/08/14	12/08/15
Tape Measure	33-430	001491	12/08/14	12/08/15

TEST METHODS

Seasoning in Sample Orientation – LED Products

No seasoning was performed in accordance with IESNA LM-79.

Photometric and Electrical Measurements – Distribution Method

A LSI Type C High Speed Model 6440 Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for each sample.

Ambient temperature was measured equal to the height of the sample mounted on the Goniometer equipment. Each sample was operated at input rated voltage in its designated orientation. Each sample was allowed to stabilize for at least thirty minutes before measurements were made. Electrical measurements including voltage, current, and power were measured using the Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.

RESULTS OF TEST

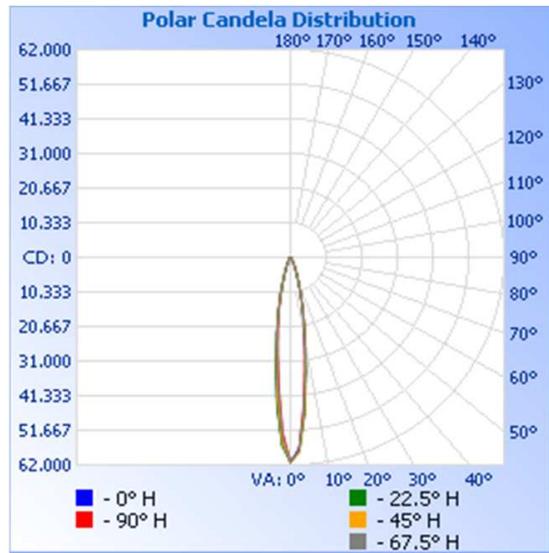
Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage {Vac}	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
LAN1503101019-005	UP	120.0	2348	280.9	0.979	8647	30.79

Intensity (Candlepower) Summary at 25°C - Candelas

Maximum Candela Value: 61,183.7

Angle	0	22.5	45	67.5	90
0	61184	61184	61184	61184	61184
5	46319	46875	46355	45002	44019
10	23536	24256	24364	23817	23257
15	11459	11596	11784	11519	11412
20	5204	5195	5080	4834	4897
25	2474	2531	2660	2383	2178
30	1154	1160	1324	1379	932
35	559	687	637	616	467
40	414	422	348	322	290
45	291	414	331	139	147
50	108	87	253	18	169
55	0	37	141	0	189
60	78	0	75	120	6
65	137	0	25	34	42
70	92	330	0	0	0
75	0	0	0	0	0
80	68	0	216	3	10
85	0	0	110	19	101
90	0	208	34	0	0

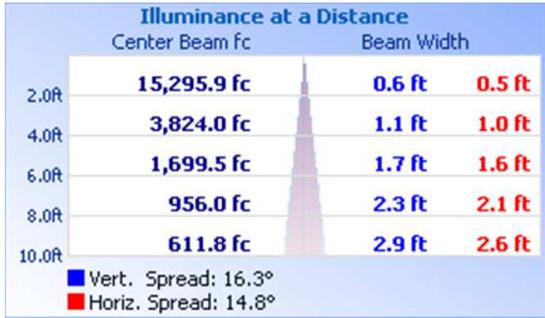


RESULTS OF TEST (cont'd)

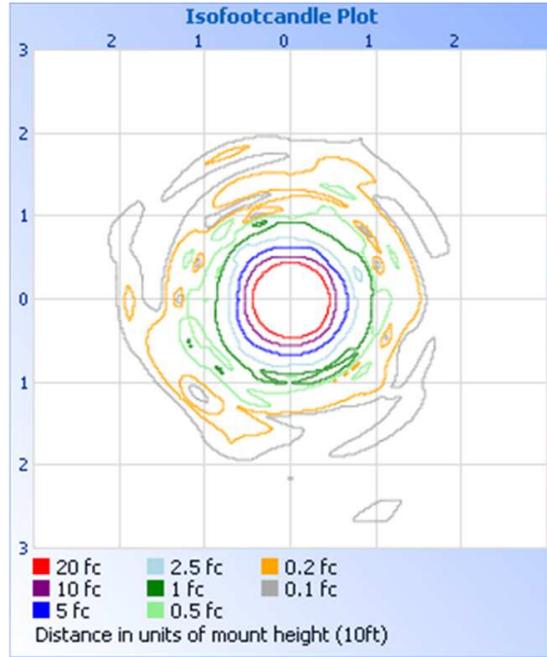
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	7735	89.5%
0-40	8187	94.7%
0-60	8467	97.9%
60-90	173.2	2.0%
0-90	8640.1	1.2%
90-180	6.9	0.1%
0-180	8647	100.0%

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	3437	39.7%
10-20	3136	36.3%
20-30	1162	13.4%
30-40	451.5	5.2%
40-50	171.6	2.0%
50-60	108.7	1.3%
60-70	77.1	0.9%
70-80	59.2	0.7%
80-90	36.8	0.4%
90-100	6.9	0.1%

PICTURE (not to scale)



CONCLUSION

The results tabulated in this report are representative of the actual test samples submitted for this report only. The data is provided to the client for further evaluation. Compliance to the referenced specification requirements was not determined in this report.

In Charge Of Tests:



Ameet Alawi
Technician
Lighting Division

Attachment: None

Report Reviewed By:



Kenda Branch
Lighting Performance Team Lead
Lighting Division