



# REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G101918458

Date: March 13, 2015

REPORT NO. 101918458LAX-026

TEST OF ONE LED WASH

MODEL NO. COLOUR CHORUS 72

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 72. The sample was received by Intertek on March 10, 2015, in undamaged condition and one sample was tested as received. The sample designation was LAN1503101019-006.

DATES OF TESTS: March 11, 2015

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SUMMARY

Model No.:	COLOUR CHORUS 72
Description:	LED Wash

Criteria	Result
Total Lumen Output (Lumens)	13438.8
Total Power (W)	522.20
Luminaire Efficacy (LPW)	25.73
Power Factor	0.988

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**

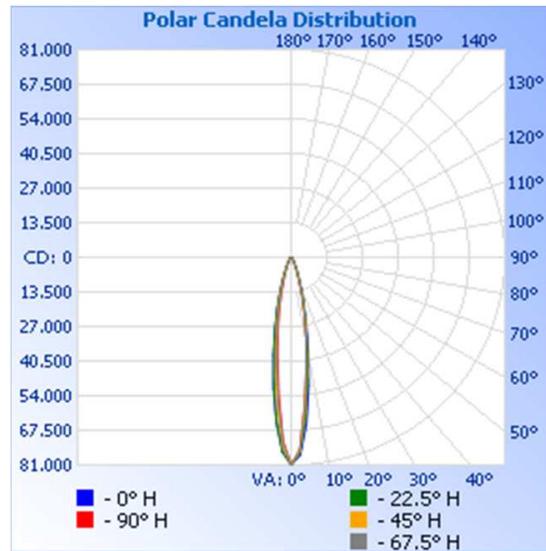
**Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) – Distribution Method**

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)
LAN1503101019-006	UP	120.1	4407	522.2	0.988	13438.8	25.73

**Intensity (Candlepower) Summary at 25°C - Candelas**

Maximum Candela Value: 80,933.9

Angle	0	22.5	45	67.5	90
0	80934	80934	80934	80934	80934
5	65333	63002	60583	58306	58201
10	36593	34949	33471	32322	32720
15	18033	17527	16885	16139	15968
20	8463	7995	7440	6888	7143
25	4060	3958	3521	3428	3300
30	2152	1968	1893	1811	1721
35	1316	978	1164	1138	999
40	756	646	615	615	441
45	465	407	282	434	302
50	435	347	316	275	258
55	350	279	204	188	32
60	164	188	215	101	120
65	171	111	281	221	202
70	109	136	197	85	132
75	0	0	182	1	124
80	224	152	1	95	172
85	124	227	18	92	0
90	94	59	3	187	6

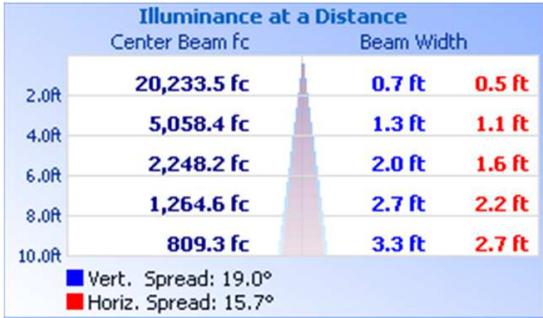


RESULTS OF TEST (cont'd)

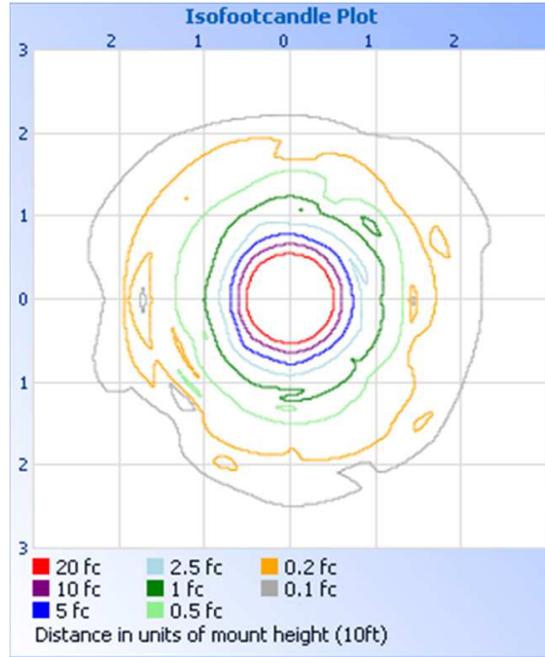
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	11711	87.1%
0-40	12495	93.0%
0-60	13050	97.1%
60-90	378.2	2.8%
0-90	13428.6	1.7%
90-180	10.2	0.1%
0-180	13438.8	100.0%

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	4852	36.1%
10-20	4885	36.4%
20-30	1974	14.7%
30-40	784.0	5.8%
40-50	332.3	2.5%
50-60	223.0	1.7%
60-70	165.5	1.2%
70-80	119.0	0.9%
80-90	93.7	0.7%
90-100	10.2	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