

# REPORT

### 25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G102697884 Date: August 23, 2016

REPORT NO. 102697884LAX-026

TEST OF ONE LED MOVING HEAD BEAM

MODEL NO. PLATINUM SEVEN AMBER ZOOM IN

#### **RENDERED TO**

ELATION LIGHTING 6122 S. EASTERN AVE COMMERCE CA 90040

<u>TEST</u>: 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.

<u>AUTHORIZATION</u>: The testing performed was authorized by signed quote number Qu-00648726.

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

<u>DESCRIPTION OF SAMPLE</u>: The client submitted one production sample of model number PLATINUM SEVEN

AMBER ZOOM IN. The sample was received by Intertek on August 11, 2016, in undamaged condition and one sample was tested as received. The sample

designation was LAN1608110839-005.

DATES OF TESTS: August 22, 2016

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### **SUMMARY**

Model No.: PLATINUM SEVEN AMBER ZOOM IN

Description: LED Moving Head Beam

Criteria	Result
Total Lumen Output (Lumens)	173.6
Total Power (W)	109.7
Luminaire Efficacy (LPW)	1.582

### **EQUIPMENT LIST**

	Model	Control	Last Date	Calibration
Equipment Used	Number	Number	Calibrated	Due Date
LSI High Speed Mirror Goniometer	6440T	000943	08/15/16	09/15/16
Elgar Power Supply	CW1251	000944	VBU	VBU
Yokogawa Power Analyzer	WT210	000945	12/04/15	12/04/16
Temp. & RH Meter	971	001178	12/18/15	12/18/16
Extech Instruments Stop Watch	365510	001379	11/19/15	11/19/16
Tape Measure	C1-25	000915	12/04/15	12/04/16
Empire Magnetic Level	581-9	001610	VBU	VBU

### **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 (cont'd)

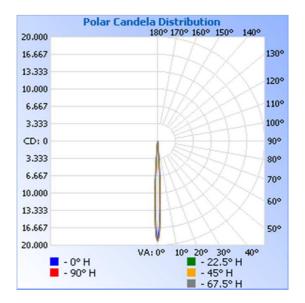
Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) - Distribution Method

			Input	Input	Input	Input	Absolute	Lumen Efficacy
		Base	Voltage	Current	Power	Power	Luminous Flux	(Lumens Per
	Intertek Sample No.	Orientation	{Vac}	(mA)	(Watts)	Factor	(Lumens)	Watt)
,	LAN1608110839-005	UP	120.0	953.7	109.7	0.959	173.6	1.582

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

Maximum Candela Value: 19,242.3

Angle	0	22.5	45	67.5	90
0	19242	19242	19242	19242	19242
5	1848	968	710	416	311
10	0	0	0	0	0
15	0	0	0	0	0
20	0	0	0	0	0
25	0	0	0	0	0
30	0	0	0	0	0
35	0	0	0	0	0
40	0	0	0	0	0
45	0	0	0	0	0
50	0	0	0	0	0
55	0	0	0	0	0
60	0	0	0	0	0
65	0	0	0	0	0
70	0	0	0	0	0
75	0	0	0	0	0
80	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0





# RESULTS OF TEST (cont'd)

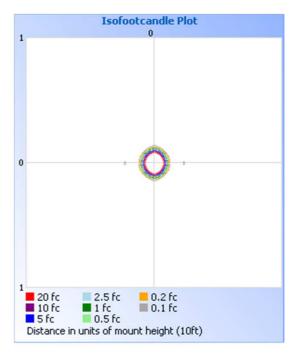
### **Illumination Plots**

### Mounting Height: 10 ft.

## Illuminance - Cone of Light

	Center Beam fc	Beam Wid	th
2.0 <del>R</del>	4,810.6 fc	0.2 ft	0.2 ft
4.0ft	1,202.6 fc	0.4 ft	0.4 ft
6.0A	534.5 fc	0.6 ft	0.6 ft
8.0 <del>R</del>	300.7 fc	0.8 ft	0.8 ft
10.0R	192.4 fc	1.0 ft	1.0 ft

## **Isoillumination Plot**



### Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	173.6	100.0
0-40	173.6	100.0
0-60	173.6	100.0
60-90	0.0	0.0
0-90	173.6	100.0
90-180	0.0	0.0
0-180	173.6	100.0

### Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	173.5	100.0
10-20	0.1	0.0
20-30	0.0	0.0
30-40	0.0	0.0
40-50	0.0	0.0
50-60	0.0	0.0
60-70	0.0	0.0
70-80	0.0	0.0
80-90	0.0	0.0



### 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