



REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G102328456

Date: August 2, 2016

REPORT NO. 102328456LAX-075

TEST OF ONE LED BAR

MODEL NO. SIXBAR 1000IP-NO UV W/FROST FILTER

RENDERED TO

ELATION LIGHTING
6122 S. EASTERN AVE
COMMERCE CA 90040

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 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

DESCRIPTION OF SAMPLE: The client submitted one prototype sample of model number SIXBAR 1000IP-NO UV W/FROST FILTER. The sample was received by Intertek on July 27, 2016, in undamaged condition and one sample was tested as received. The sample designation was LAN1607271107-001.

DATES OF TESTS: July 28, 2016



SUMMARY

Model No.:	SIXBAR 1000IP-NO UV W/FROST FILTER
Description:	LED BAR

Criteria	Result
Total Lumen Output (Lumens)	1966
Total Power (W)	100.5
Luminaire Efficacy (LPW)	19.57

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date
LSI High Speed Mirror Goniometer	6440T	000943	07/13/16	08/13/16
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

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

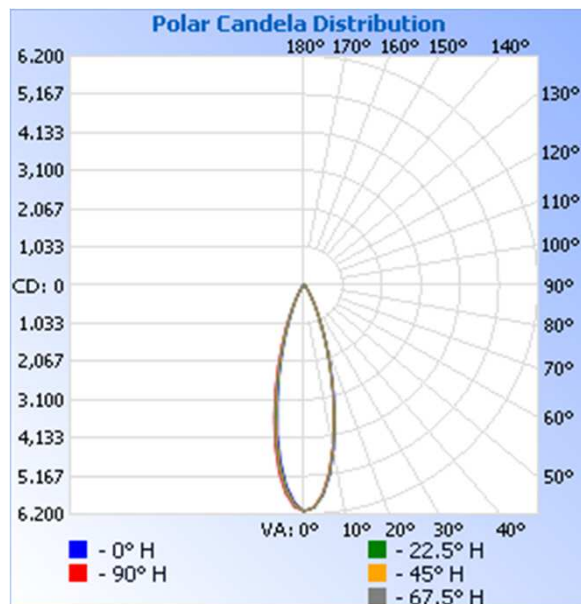
Intertek Sample No.	Base Orientation	Input Voltage {Vac}	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
LAN1607271107-001	UP	120.0	858.8	100.5	0.980	1966	19.57

Intensity (Candlepower) Summary at 25°C - Candelas

Maximum Candela Value: 6,111.3

Note: Test Performed with the FROST FILTER

Angle	0	22.5	45	67.5	90
0	6111	6111	6111	6111	6111
5	5716	5699	5681	5676	5652
10	4507	4453	4440	4439	4414
15	3014	2953	2965	2965	2936
20	1748	1709	1724	1719	1711
25	897	879	893	910	901
30	421	436	447	461	447
35	219	225	221	238	233
40	118	125	127	136	129
45	77	83	80	79	82
50	50	60	57	53	50
55	30	33	35	42	31
60	24	26	21	28	24
65	11	19	20	21	25
70	15	17	10	10	23
75	4	13	10	17	13
80	10	1	9	9	6
85	10	6	3	3	2
90	0	0	0	0	0

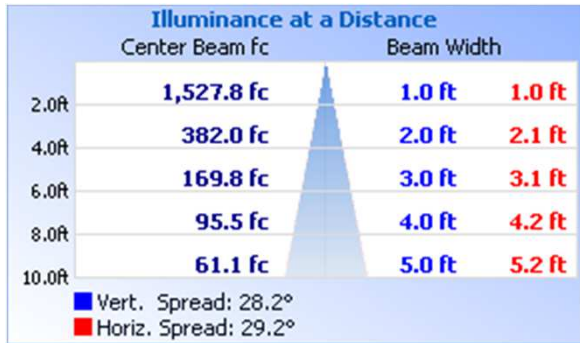


RESULTS OF TEST (cont'd)

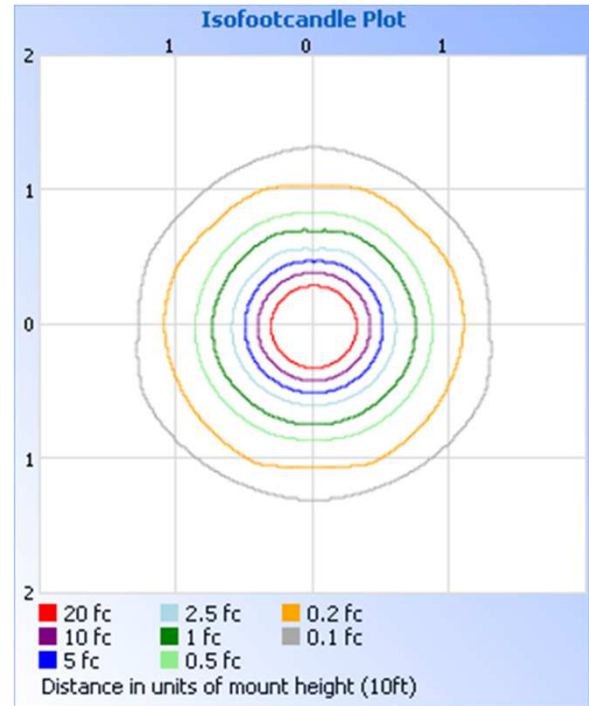
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1688	85.9
0-40	1836	93.4
0-60	1931	98.3
60-90	34.4	1.7
0-90	1966	100.0
90-180	0.0	0.0
0-180	1966	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	492.6	25.1
10-20	783.9	39.9
20-30	411.1	20.9
30-40	148.1	7.5
40-50	61.7	3.1
50-60	33.9	1.7
60-70	19.9	1.0
70-80	10.7	0.5
80-90	3.8	0.2

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:



Melanie Brittain
Associate Engineer
Lighting Division