

REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G101918458 Date: April 27, 2015

REPORT NO. 101918458LAX-054

TEST OF ONE LED BLINDER

MODEL NO. COLOUR 5 PROFILE 19°

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 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

<u>DESCRIPTION OF SAMPLE</u>: The client submitted one production sample of model number COLOUR 5 PROFILE

19°. The sample was received by Intertek on April 24, 2015, in undamaged condition

and one sample was tested as received. The sample designation was

LAN1504240948-008.

DATES OF TESTS: April 27, 2015

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SUMMARY

Model No.: COLOUR 5 PROFILE 19°
Description: LED Blinder

Criteria	Result
Total Lumen Output (Lumens)	3968.1
Total Power (W)	210.70
Luminaire Efficacy (LPW)	18.83
Power Factor	0.990

EQUIPMENT LIST

	Model	Control	Last Date	Calibration
Equipment Used	Number	Number	Calibrated	Due Date
LSI High Speed Mirror Goniometer	6440T	000943	04/22/15	05/22/15
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

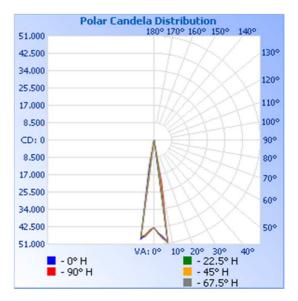
Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) - Distribution Method

		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)
LAN1504240948-008	UP	119.99	1773.10	210.7	0.990	3968.1	18.83

Intensity (Candlepower) Summary at 25°C - Candelas

Maximum Candela Value: 50,632.0

Angle	0	22.5	45	67.5	90
0	42834	42834	42834	42834	42834
5	47320	48444	48596	48363	48022
10	1947	3833	9078	15264	21137
15	21	30	55	29	34
20	30	25	45	37	25
25	15	38	14	14	30
30	10	8	17	3	12
35	0	8	0	0	6
40	0	8	10	0	0
45	0	3	5	0	0
50	7	0	9	0	8
55	9	11	9	0	5
60	0	2	6	0	4
65	0	0	0	2	0
70	7	10	2	0	19
75	9	0	12	0	0
80	11	5	0	12	0
85	0	0	0	4	2
90	0	2	0	8	3



Report No. 101918458LAX-054 3 of 5 Date: April 27, 2015



RESULTS OF TEST (cont'd)

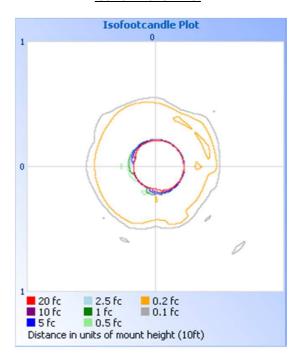
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light

	Center Beam fc	Beam Wid	th
2.0 R	10,708.5 fc	0.6 ft	0.3 ft
4.0R	2,677.1 fc	1.3 ft	0.6 ft
6.0 R	1,189.8 fc	1.9 ft	0.9 ft
8.0A	669.3 fc	2.5 ft	1.2 ft
10.0 R	428.3 fc	3.2 ft	1.5 ft
■ V	ert. Spread: 17.9° Ioriz. Spread: 8.9°		

Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	3950	99.6%
0-40	3954	99.6%
0-60	3959	99.8%
60-90	9.1	0.2%
0-90	3967.9	0.2%
90-180	0.2	0.0%
0-180	3968.1	100.0%

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	3681	92.8%
10-20	258.2	6.5%
20-30	11.5	0.3%
30-40	3.1	0.1%
40-50	2.3	0.1%
50-60	2.9	0.1%
60-70	2.9	0.1%
70-80	2.5	0.1%
80-90	3.8	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