



REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G101918458

Date: April 10, 2015

REPORT NO. 101918458LAX-031

TEST OF ONE PENDANT DOWNLIGHT

MODEL NO. COLOUR PENDANT

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 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 prototype sample of model number COLOUR PENDANT . The sample was received by Intertek on April 2, 2015, in undamaged condition and one sample was tested as received. The sample designation was LAN1504020937-001.

DATES OF TESTS: April 10, 2015

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.



SUMMARY

Model No.:	COLOUR PENDANT
Description:	PENDANT Downlight

Criteria	Result
Total Lumen Output (Lumens)	2741.6
Total Power (W)	87.43
Luminaire Efficacy (LPW)	31.36
Power Factor	0.980

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date
LSI High Speed Mirror Goniometer	6440T	000943	03/23/15	04/23/15
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

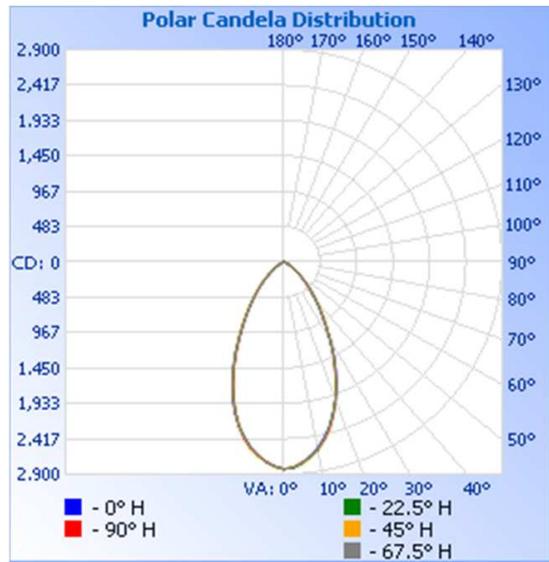
Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) – Distribution Method

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)
LAN1504020937-001	UP	120.3	742.4	87.43	0.980	2741.6	31.36

Intensity (Candlepower) Summary at 25°C - Candelas

Maximum Candela Value: 2,877.7

Angle	0	22.5	45	67.5	90
0	2828	2828	2828	2828	2828
5	2763	2766	2758	2744	2749
10	2577	2601	2593	2585	2600
15	2327	2330	2343	2336	2353
20	2005	1993	2002	2010	1996
25	1629	1605	1621	1621	1600
30	1226	1229	1229	1227	1218
35	882	900	901	884	895
40	631	650	654	636	638
45	438	444	449	441	424
50	275	276	279	274	266
55	163	160	159	161	154
60	92	91	89	89	88
65	54	54	54	53	54
70	36	36	37	36	37
75	23	23	23	23	24
80	11	12	11	12	12
85	4	5	4	4	4
90	0	0	0	0	1

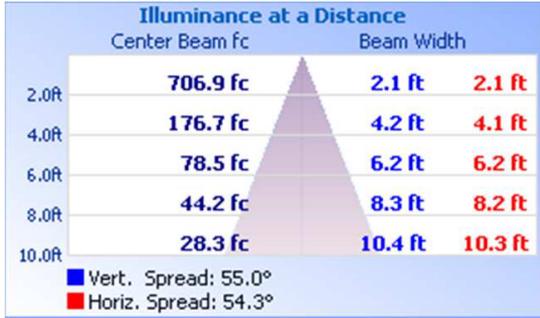


RESULTS OF TEST (cont'd)

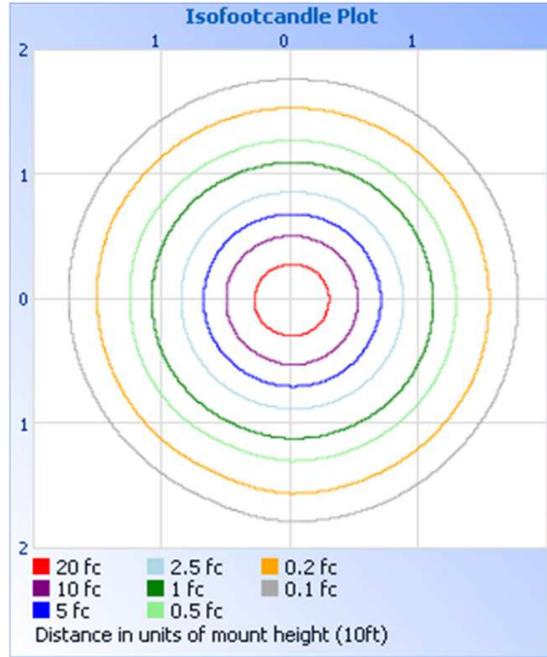
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1632	59.5%
0-40	2183	79.6%
0-60	2656	96.9%
60-90	85.0	3.1%
0-90	2741.6	1.1%
90-180	0	0.0%
0-180	2741.6	100.0%

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	256.8	9.4%
10-20	646.4	23.6%
20-30	728.6	26.6%
30-40	551.3	20.1%
40-50	330.8	12.1%
50-60	142.6	5.2%
60-70	55.6	2.0%
70-80	24.7	0.9%
80-90	4.8	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:



Kenda Branch
Lighting Performance Team Lead
Lighting Division