REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G101918458 Date: April 10, 2015

REPORT NO. 101918458LAX-030

TEST OF ONE PENDANT DOWNLIGHT

MODEL NO. COLOUR PENDANT WHITE

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 WHITE. 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

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SUMMARY

Model No.:	COLOUR PENDANT WHITE
Description:	PENDANT Downlight

Criteria	Result
Total Lumen Output (Lumens)	3140.8
Total Power (W)	75.42
Luminaire Efficacy (LPW)	41.64
Power Factor	0.972

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

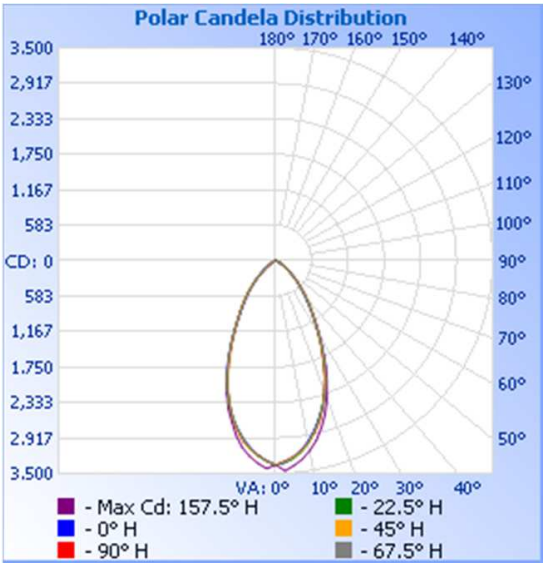
Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) – Distribution Method

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	120.0	0.000	75.42	0.972	3140.8	41.64

Intensity (Candlepower) Summary at 25°C - Candelas

Maximum Candela Value: 3,457.2

Angle	0	22.5	45	67.5	90
0	3357	3357	3357	3357	3357
5	3254	3267	3251	3234	3233
10	3013	3043	3040	3027	3023
15	2688	2695	2717	2708	2734
20	2321	2297	2317	2338	2289
25	1866	1834	1846	1873	1817
30	1385	1376	1379	1396	1363
35	989	1004	1004	995	1003
40	714	730	746	734	720
45	501	504	511	511	485
50	315	313	314	315	299
55	183	180	177	181	171
60	102	100	99	98	95
65	60	59	59	59	61
70	42	41	41	42	41
75	26	26	26	27	26
80	13	13	15	12	14
85	5	6	4	5	5
90	1	0	0	1	0

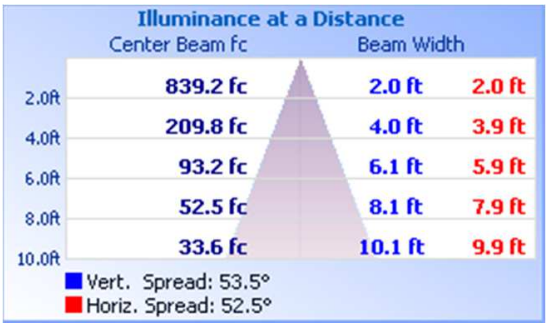


RESULTS OF TEST (cont'd)

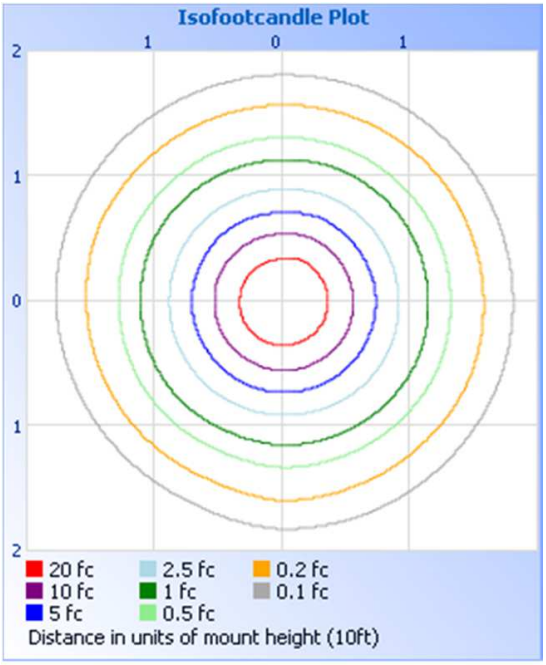
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1888	60.1%
0-40	2508	79.8%
0-60	3045	97.0%
60-90	95.7	3.0%
0-90	3140.8	1.1%
90-180	0	0.0%
0-180	3140.8	100.0%

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	302.7	9.6%
10-20	752.3	24.0%
20-30	833.1	26.5%
30-40	619.7	19.7%
40-50	377.5	12.0%
50-60	159.8	5.1%
60-70	62.4	2.0%
70-80	27.9	0.9%
80-90	5.4	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:

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Technician
Lighting Division

Report Reviewed By:

Kenda Branch
Lighting Performance Team Lead
Lighting Division

Attachment: None