



REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G102953252

Date: March 16, 2017

REPORT NO. 102953252LAX-002

TEST OF ONE LED LUMINAIRE

MODEL NO. QUAD-30-LED35-HO-D1
LED MODEL NO. NICHIA NFSL757D
DRIVER MODEL NO. OSRAM 79399

RENDERED TO

PRUDENTIAL LIGHTING
1774 EAST 21ST STREET
LOS ANGELES, CA 90058-1008

TEST: Electrical and Photometric tests as required to the IESNA test standard.

AUTHORIZATION: The testing performed was authorized by signed quote number Qu-00710638-6.

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 Quad-30-LED35-HO-D1 . The sample was received by Intertek on March 7, 2017, in undamaged condition and one sample was tested as received. The sample designation was LAN1703071332-002.

DATES OF TESTS: March 13, 2017

SUMMARY

Model No.:	Quad-30-LED35-HO-D1
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	17904
Total Power (W)	218.3
Luminaire Efficacy (LPW)	82.02
Power Factor	0.998

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	03/01/17	04/01/17	03/13/17
AC Source	CW1251P	000944	VBU	VBU	03/13/17
Power Analyzer	WT210	000945	12/05/16	12/05/17	03/13/17
Tape Measure	33-428	001491	01/06/17	01/06/18	03/13/17
Magnetic Level	581-9	001610	09/28/16	09/28/17	03/13/17
Temp. & RH Meter	971	001178	12/22/16	12/22/17	03/13/17

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 Xitron or Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.

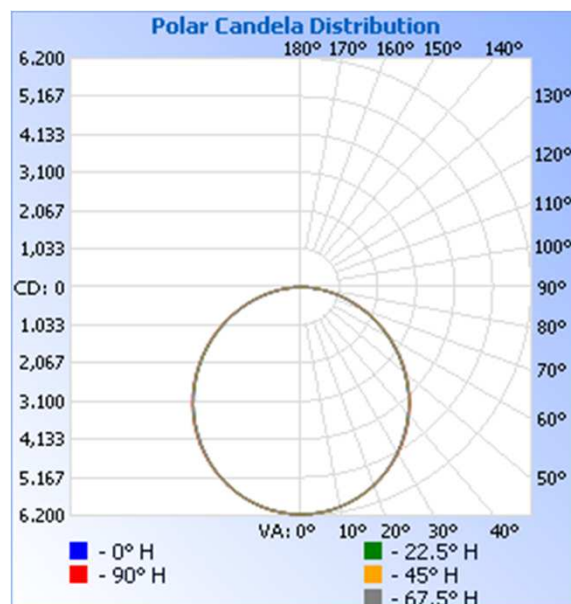
RESULTS OF TEST (cont'd)

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 (LPW)
LAN1703071332-002	Up	120.0	1823	218.3	0.998	17904	82.02

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	6164	6164	6164	6164	6164
5	6136	6137	6137	6134	6137
10	6051	6051	6052	6051	6054
15	5911	5911	5914	5915	5919
20	5719	5721	5725	5725	5732
25	5477	5479	5483	5488	5493
30	5185	5193	5197	5202	5213
35	4854	4862	4871	4878	4886
40	4496	4495	4506	4515	4522
45	4089	4093	4106	4115	4123
50	3653	3662	3674	3688	3690
55	3202	3207	3222	3234	3237
60	2724	2733	2748	2764	2760
65	2238	2253	2264	2277	2274
70	1754	1765	1780	1790	1781
75	1270	1289	1297	1309	1298
80	810	824	833	837	827
85	375	383	387	392	384
90	0	0	0	0	0

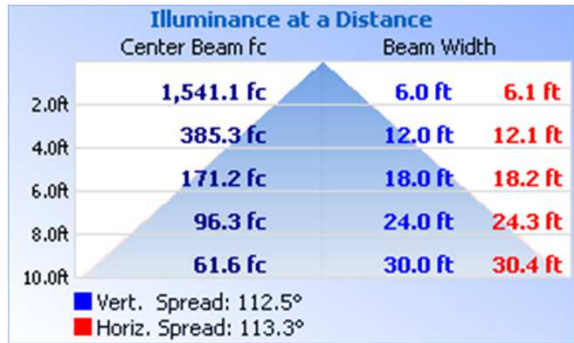


RESULTS OF TEST (cont'd)

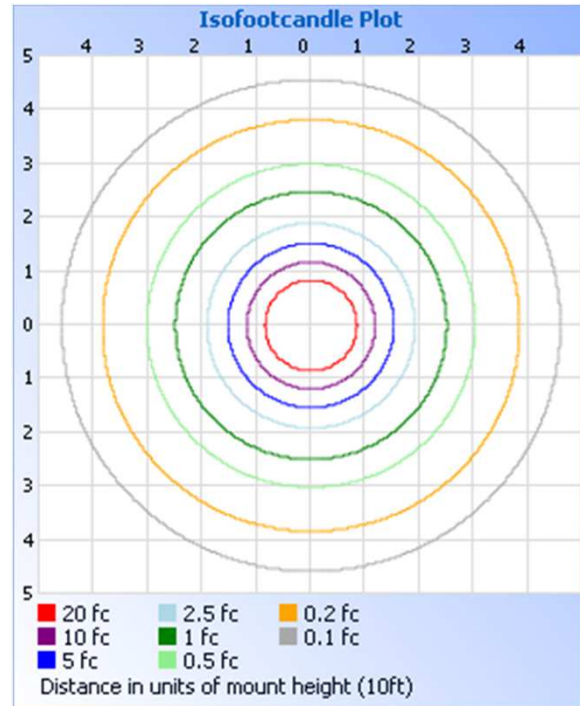
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



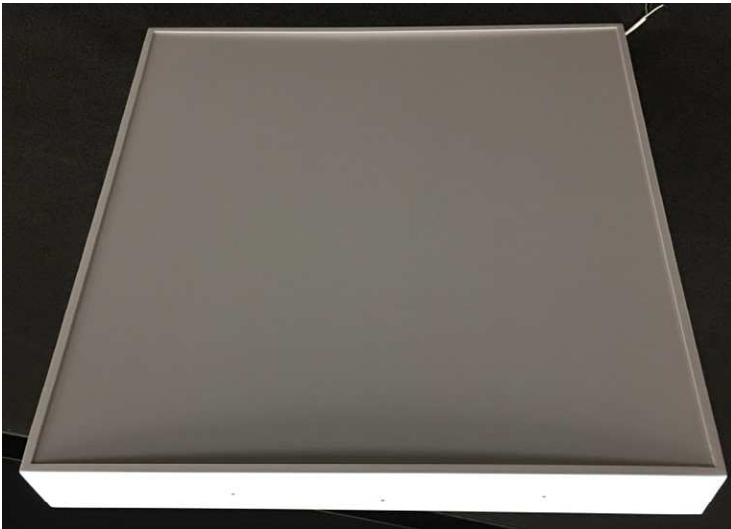
Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	4778	26.7
0-40	7824	43.7
0-60	13866	77.4
60-90	4038	22.6
0-90	17904	100.0
90-180	0	0.0
0-180	17904	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	582.9	3.3
10-20	1668	9.3
20-30	2526	14.1
30-40	3046	17.0
40-50	3165	17.7
50-60	2878	16.1
60-70	2239	12.5
70-80	1369	7.6
80-90	430.3	2.4

PICTURES (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:



Vladimir Kozak
Engineering Supervisor
Lighting Division