



REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G102953252

Date: March 16, 2017

REPORT NO. 102953252LAX-003

TEST OF ONE LED LUMINAIRE

MODEL NO. QUAD-40-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-40-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 LAN1703071332-003.

DATES OF TESTS: March 14, 2017

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.:	Quad-40-LED35-HO-D1
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	31997
Total Power (W)	364.0
Luminaire Efficacy (LPW)	87.90
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	03/14/17
AC Source	CW1251P	000944	VBU	VBU	03/14/17
Power Analyzer	WT210	000945	12/05/16	12/05/17	03/14/17
Tape Measure	33-428	001491	01/06/17	01/06/18	03/14/17
Magnetic Level	581-9	001610	09/28/16	09/28/17	03/14/17
Temp. & RH Meter	971	001178	12/22/16	12/22/17	03/14/17

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.



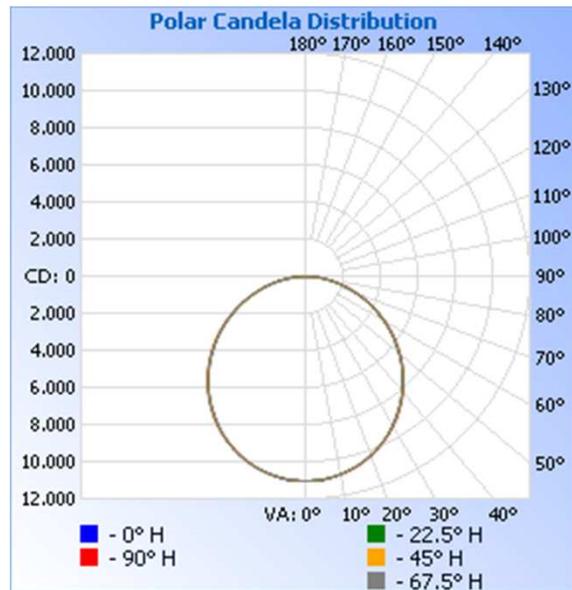
RESULTS OF TEST (cont'd)

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)
LAN1703071332-003	Up	120.0	3040	364.0	0.998	31997	87.90

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	11043	11043	11043	11043	11043
5	11022	10987	10990	10996	11007
10	10845	10838	10849	10833	10854
15	10602	10600	10596	10604	10618
20	10258	10261	10249	10269	10282
25	9829	9828	9834	9846	9862
30	9307	9313	9329	9339	9354
35	8714	8719	8733	8757	8769
40	8048	8070	8089	8108	8110
45	7326	7344	7369	7389	7409
50	6555	6571	6597	6618	6620
55	5745	5743	5772	5792	5809
60	4872	4881	4911	4932	4949
65	4001	3996	4030	4059	4068
70	3108	3113	3136	3161	3190
75	2246	2252	2263	2287	2304
80	1426	1427	1432	1449	1469
85	639	653	651	670	677
90	0	0	0	0	0

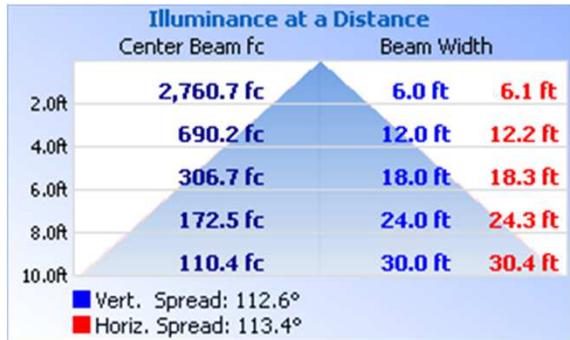


RESULTS OF TEST (cont'd)

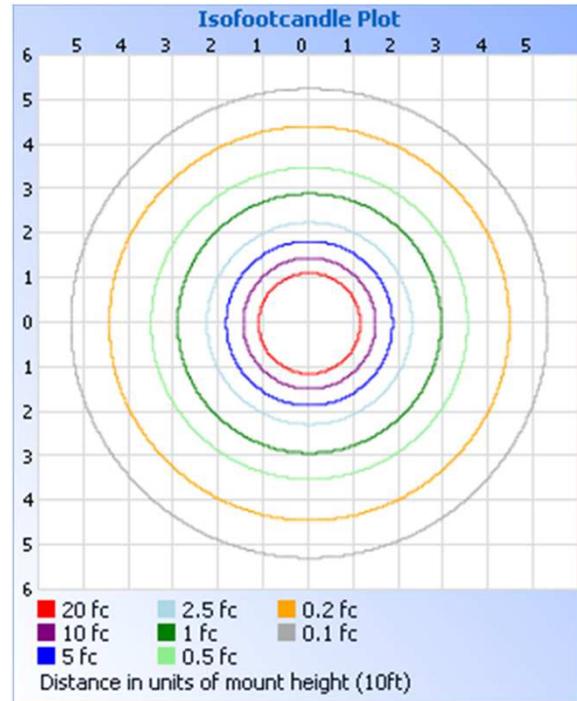
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	8567	26.8
0-40	14032	43.9
0-60	24868	77.7
60-90	7130	22.3
0-90	31997	100.0
90-180	0	0.0
0-180	31997	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	1044	3.3
10-20	2991	9.3
20-30	4532	14.2
30-40	5466	17.1
40-50	5681	17.8
50-60	5154	16.1
60-70	3986	12.5
70-80	2401	7.5
80-90	742.3	2.3

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