

REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104280179

Date: March 17, 2020

REPORT NO. 104280179LAX-001

TEST OF ONE LED LUMINAIRE

MODEL NO. P3614-LED35-HO-WA
LED MODEL NO. NICHIA 4591A
DRIVER MODEL NO. OSRAM OPTOTRONIC

RENDERED TO

PRUDENTIAL LIGHTING
1774 EAST 21ST
LOS ANGELES, CA 90058

STATEMENT OF LIMITATION: This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

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

AUTHORIZATION: The testing performed was authorized by signed quote number Qu-01019626-1.

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 Production sample of model number P3614-LED35-HO-WA. The sample was received by Intertek on March 17, 2020, in undamaged condition and one sample was tested as received. The sample designation was LAN2003171300-001.

DATES OF TESTS: March 17, 2020

SUMMARY

Model No.:	P3614-LED35-HO-WA
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	4286
Total Power (W)	45.50
Luminaire Efficacy (LPW)	94.20
Power Factor	0.987

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	03/17/20
AC Source	CW1251P	000944	VBU	VBU	03/17/20
Power Analyzer	WT210	000945	10/02/19	10/02/20	03/17/20
Tape Measure	33-428	001491	VBU	VBU	03/17/20
Magnetic Level	581-9	001610	10/11/19	10/11/20	03/17/20
Thermometer	DPI8-C24	001782	10/15/19	10/15/20	03/17/20
Temp. & RH Meter	971	001867	06/03/19	06/03/20	03/17/20

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.

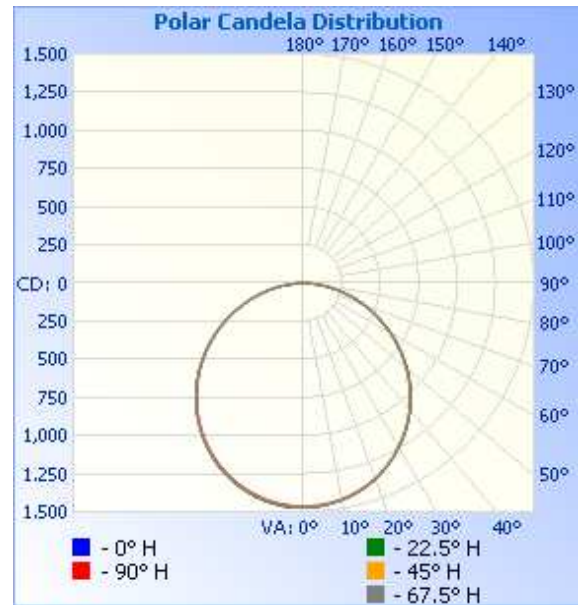
RESULTS OF TEST

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)
LAN2003171300-001	Up	120.0	384.1	45.50	0.987	4286	94.20

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	1470	1470	1470	1470	1470
5	1464	1464	1461	1462	1456
10	1442	1444	1441	1443	1438
15	1412	1412	1410	1410	1405
20	1368	1367	1364	1366	1361
25	1310	1308	1306	1310	1306
30	1240	1239	1238	1243	1241
35	1165	1162	1161	1166	1164
40	1080	1074	1074	1079	1079
45	984	978	978	984	985
50	880	874	874	880	882
55	769	764	766	770	773
60	654	649	652	657	660
65	536	532	535	539	543
70	419	414	417	422	427
75	303	298	301	306	311
80	190	186	189	193	199
85	86	81	85	88	93
90	0	0	0	0	0

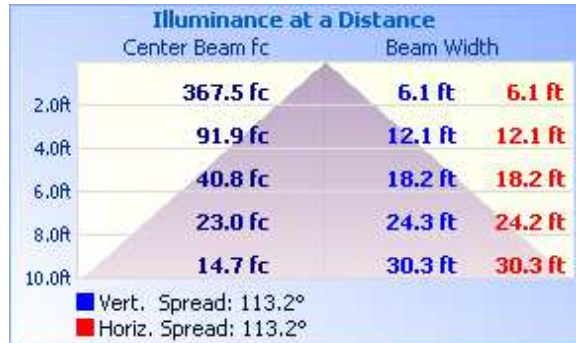


RESULTS OF TEST (cont'd)

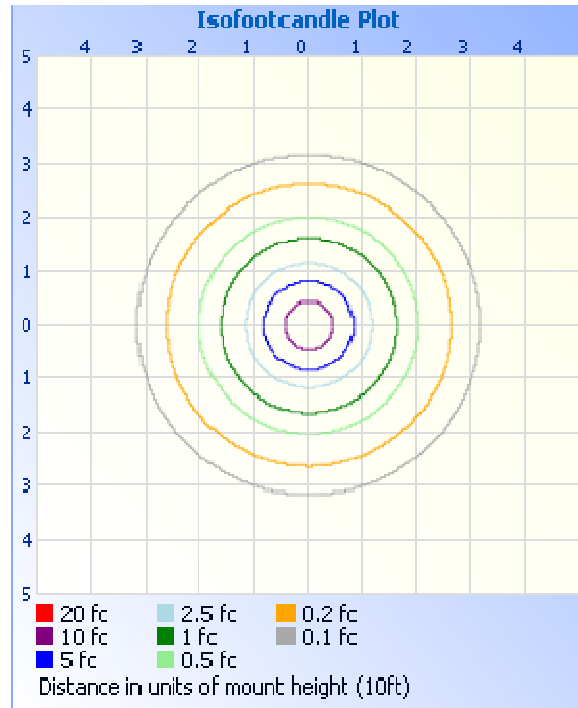
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1141	26.6
0-40	1871	43.7
0-60	3322	77.5
60-90	964.0	22.5
0-90	4286	100.0
90-180	0.0	0.0
0-180	4286	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	139.0	3.2
10-20	398.2	9.3
20-30	604.1	14.1
30-40	729.8	17.0
40-50	760.0	17.7
50-60	690.6	16.1
60-70	536.1	12.5
70-80	326.1	7.6
80-90	101.7	2.4

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.38

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:



Kellen Murakami
Technician
Lighting Division

Attachment: None

Report Reviewed By:



Vladimir Kozak
Engineering Supervisor
Lighting Division