

REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104394264

Date: July 24, 2020

REPORT NO. 104394264LAX-002

TEST OF ONE LED LUMINAIRE

MODEL NO. STR2-LED35-LO
LED MODEL NO. NICHIA 4591A
DRIVER MODEL NO. OSRAM OTI 50W G2

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-01069292.

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 STR2-LED35-LO. The sample was received by Intertek on July 16, 2020, in undamaged condition and one sample was tested as received. The sample designation was LAN2007161137-002.

DATES OF TESTS: July 24, 2020

SUMMARY

Model No.:	STR2-LED35-LO
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	1815
Total Power (W)	16.19
Luminaire Efficacy (LPW)	112.1
Power Factor	0.973

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	07/24/20
AC Source	CW1251P	000944	VBU	VBU	07/24/20
Power Analyzer	WT210	000945	10/02/19	10/02/20	07/24/20
Tape Measure	33-428	001491	VBU	VBU	07/24/20
Magnetic Level	581-9	001610	10/11/19	10/11/20	07/24/20
Temp. & RH Meter	Testo 622	001912	04/22/20	04/22/21	07/24/20
Thermometer	DPI8-C24	001782	10/15/19	10/15/20	07/24/20

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.

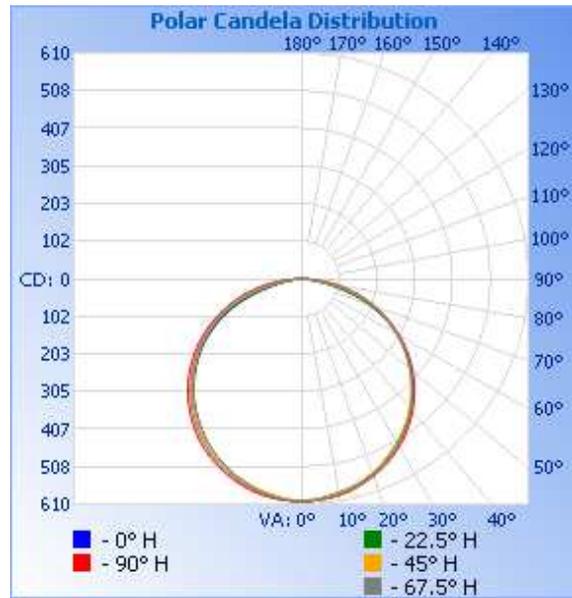
RESULTS OF TEST

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)
LAN2007161137-002	Up	120.0	138.8	16.19	0.973	1815	112.1

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	601	601	601	601	601
5	596	597	595	599	600
10	586	588	588	593	594
15	576	576	576	581	583
20	561	560	559	565	567
25	540	539	538	545	548
30	515	514	513	521	525
35	489	487	486	493	497
40	458	456	454	460	466
45	424	421	419	424	430
50	386	383	381	384	391
55	345	342	341	342	348
60	298	297	298	298	303
65	247	246	251	252	255
70	188	190	199	203	206
75	125	127	141	154	154
80	62	64	77	99	101
85	26	25	25	37	46
90	0	0	0	0	0

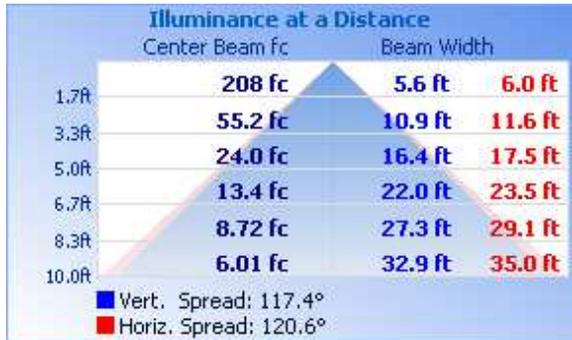


RESULTS OF TEST (cont'd)

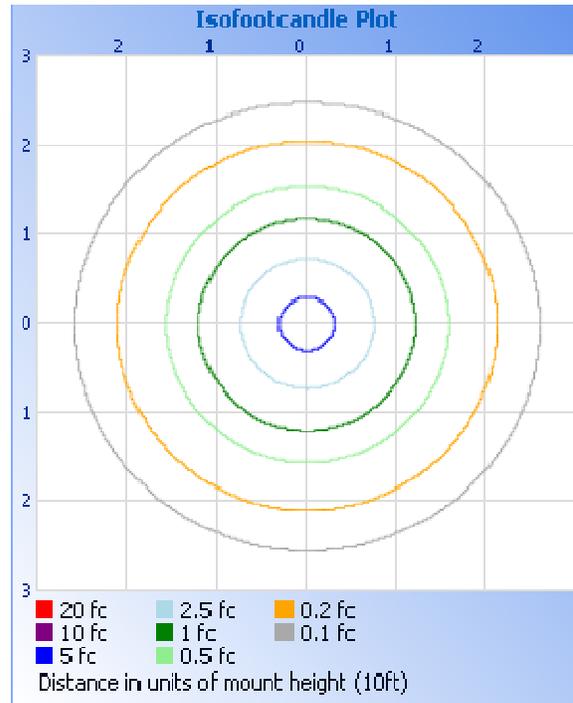
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	468.1	25.8
0-40	772.5	42.6
0-60	1398	77.1
60-90	416.4	22.9
0-90	1815	100.0
90-180	0.0	0.0
0-180	1815	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	56.7	3.1
10-20	162.7	9.0
20-30	248.7	13.7
30-40	304.4	16.8
40-50	323.4	17.8
50-60	302.4	16.7
60-70	241.3	13.3
70-80	140.9	7.8
80-90	34.1	1.9

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.40

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:

Erik Linares
Associate Engineer
Lighting Division

Attachment: None

Report Reviewed By:

Vladimir Kozak
Engineering Supervisor
Lighting Division