

REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104394264

Date: July 24, 2020

REPORT NO. 104394264LAX-001B

TEST OF ONE LED LUMINAIRE

MODEL NO. STR4-LED35-MO
LED MODEL NO. NICHIA 4591A
DRIVER MODEL NO. OSRAM OTI 30W 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 STR4-LED35-MO. The sample was received by Intertek on July 16, 2020, in undamaged condition and one sample was tested as received. The sample designation was LAN2007161137-001.

DATES OF TESTS: July 24, 2020

SUMMARY

Model No.:	STR4-LED35-MO
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	2838
Total Power (W)	24.32
Luminaire Efficacy (LPW)	116.7
Power Factor	0.985

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.

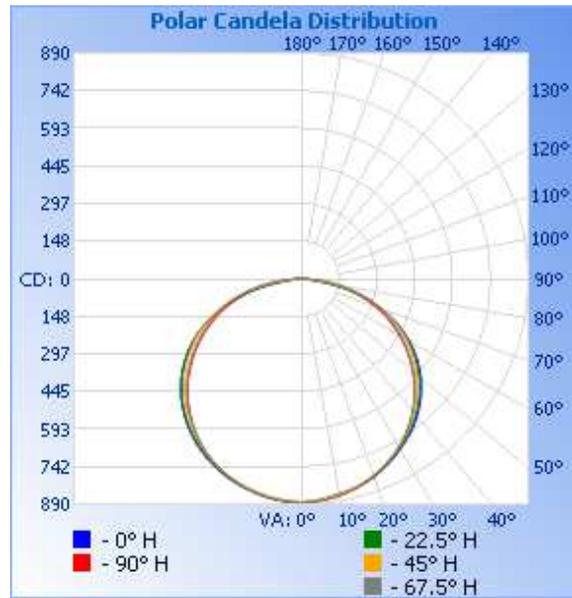
RESULTS OF TEST

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)
LAN2007161137-001	Up	120.0	205.7	24.32	0.985	2838	116.7

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	881	881	881	881	881
5	875	876	873	878	877
10	862	864	862	868	868
15	850	850	847	852	852
20	832	830	824	829	830
25	806	803	796	800	803
30	776	773	765	767	769
35	744	739	728	726	728
40	706	699	686	680	682
45	663	654	640	630	630
50	612	604	589	575	573
55	555	547	534	515	511
60	488	482	474	453	445
65	414	409	406	388	376
70	329	327	330	319	303
75	235	235	245	246	228
80	123	126	148	165	149
85	37	36	44	70	70
90	0	0	0	0	0

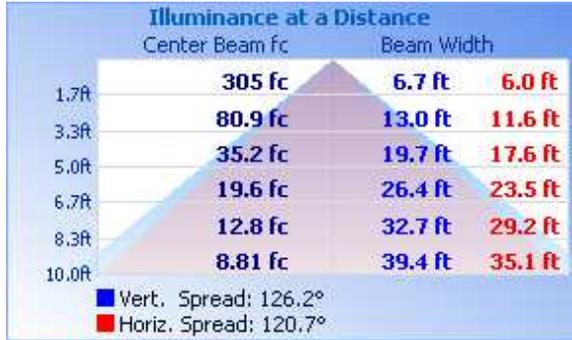


RESULTS OF TEST (cont'd)

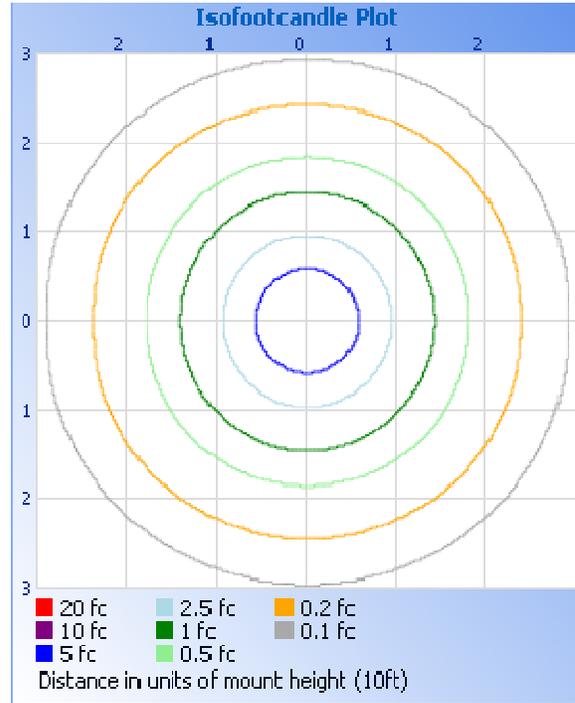
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	694.0	24.5
0-40	1154	40.7
0-60	2128	75.0
60-90	709.3	25.0
0-90	2838	100.0
90-180	0.0	0.0
0-180	2838	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	83.3	2.9
10-20	240.2	8.5
20-30	370.4	13.1
30-40	459.6	16.2
40-50	497.6	17.5
50-60	477.3	16.8
60-70	395.2	13.9
70-80	250.2	8.8
80-90	64.0	2.3

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.44

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:

Handwritten signature of Erik Linares in black ink.

Erik Linares
Associate Engineer
Lighting Division

Attachment: None

Report Reviewed By:

Handwritten signature of Vladimir Kozak in black ink.

Vladimir Kozak
Engineering Supervisor
Lighting Division