

REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104394264

Date: July 24, 2020

REPORT NO. 104394264LAX-001C

TEST OF ONE LED LUMINAIRE

MODEL NO. STR4-LED35-SO
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 STR4-LED35-SO. 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-SO
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	3906
Total Power (W)	34.20
Luminaire Efficacy (LPW)	114.2
Power Factor	0.982

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.

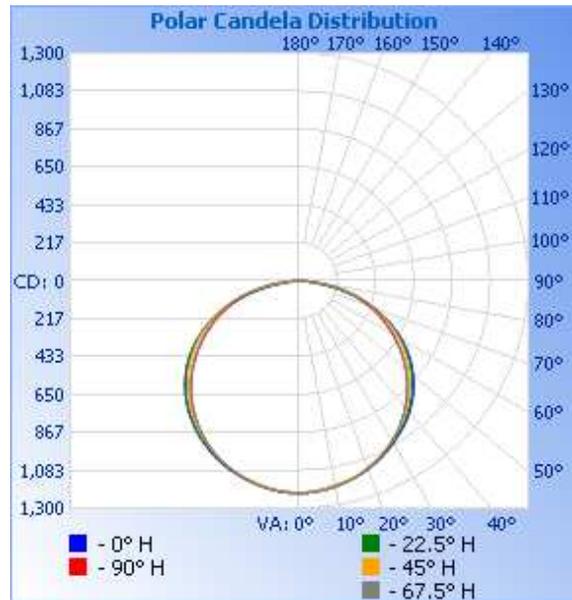
RESULTS OF TEST

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	290.2	34.20	0.982	3906	114.2

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	1212	1212	1212	1212	1212
5	1204	1205	1202	1209	1206
10	1187	1189	1187	1195	1194
15	1170	1170	1165	1173	1172
20	1146	1142	1135	1142	1141
25	1111	1106	1097	1102	1104
30	1069	1064	1053	1055	1057
35	1026	1018	1004	1001	1002
40	975	964	946	938	938
45	916	903	882	868	868
50	846	833	812	792	790
55	767	755	737	710	704
60	674	665	652	624	614
65	572	564	560	534	518
70	455	451	454	440	418
75	326	324	339	339	314
80	172	176	205	227	205
85	52	50	62	97	96
90	0	0	0	0	0



RESULTS OF TEST (cont'd)

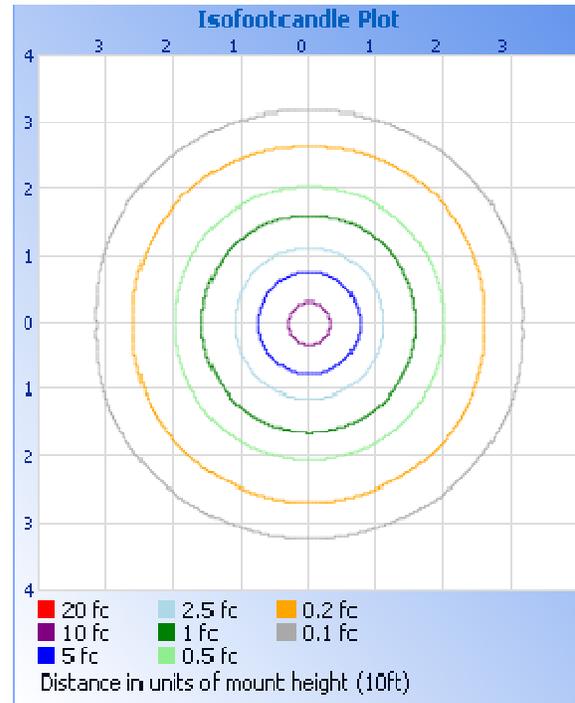
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	954.9	24.4
0-40	1588	40.6
0-60	2930	75.0
60-90	976.2	25.0
0-90	3906	100.0
90-180	0.0	0.0
0-180	3906	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	114.6	2.9
10-20	330.5	8.5
20-30	509.7	13.0
30-40	632.8	16.2
40-50	685.5	17.5
50-60	657.1	16.8
60-70	543.7	13.9
70-80	344.3	8.8
80-90	88.1	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