

REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104394264

Date: July 28, 2020

REPORT NO. 104394264LAX-001D

TEST OF ONE LED LUMINAIRE

MODEL NO. STR4-LED35-HO
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-HO. 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 28, 2020

SUMMARY

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

Criteria	Result
Total Lumen Output (Lumens)	4660
Total Power (W)	42.18
Luminaire Efficacy (LPW)	110.5
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	07/28/20
AC Source	CW1251P	000944	VBU	VBU	07/28/20
Power Analyzer	WT210	000945	10/02/19	10/02/20	07/28/20
Tape Measure	33-428	001491	VBU	VBU	07/28/20
Magnetic Level	581-9	001610	10/11/19	10/11/20	07/28/20
Temp. & RH Meter	Testo 622	001912	04/22/20	04/22/21	07/28/20
Thermometer	DPI8-C24	001782	10/15/19	10/15/20	07/28/20

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.

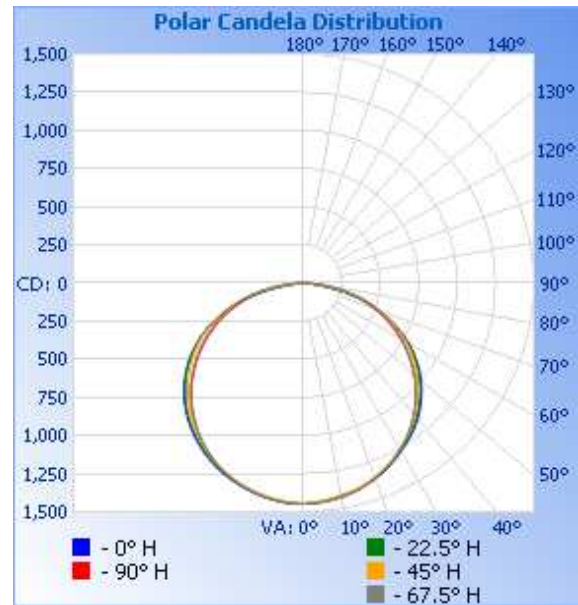
RESULTS OF TEST

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	356.2	42.18	0.986	4660	110.5

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	1446	1446	1446	1446	1446
5	1436	1437	1432	1441	1439
10	1414	1418	1415	1425	1425
15	1394	1394	1389	1398	1399
20	1364	1361	1352	1361	1362
25	1321	1318	1307	1314	1318
30	1271	1267	1255	1258	1262
35	1219	1211	1195	1193	1196
40	1157	1146	1127	1118	1120
45	1084	1071	1050	1035	1036
50	1000	988	966	944	942
55	903	894	875	847	841
60	792	785	774	743	732
65	665	662	661	634	617
70	525	525	534	522	499
75	367	372	393	400	374
80	186	194	232	265	246
85	55	54	66	108	115
90	0	0	0	0	0

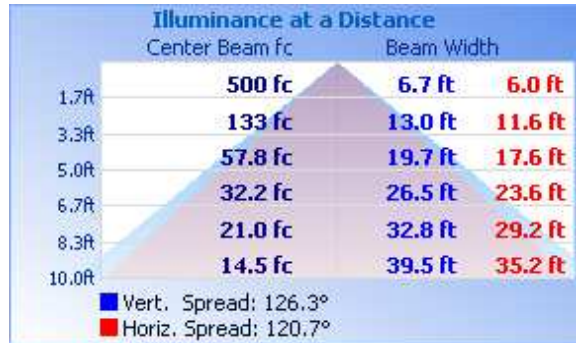


RESULTS OF TEST (cont'd)

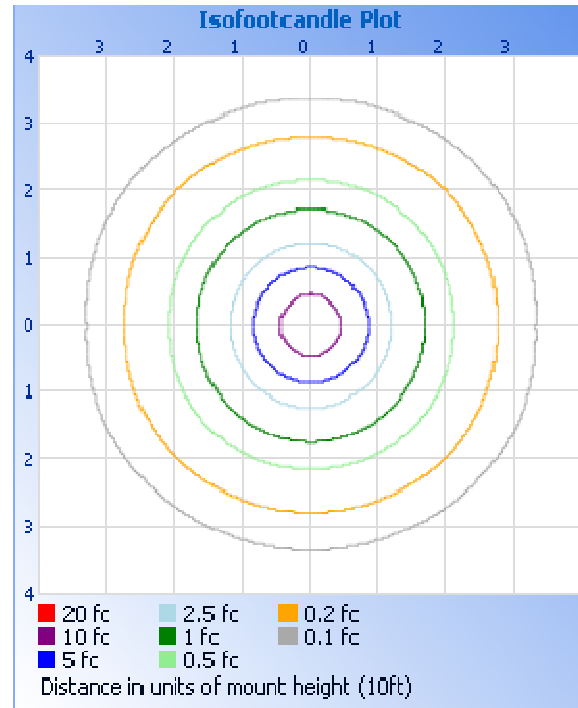
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1139	24.4
0-40	1893	40.6
0-60	3495	75.0
60-90	1166	25.0
0-90	4660	100.0
90-180	0.0	0.0
0-180	4660	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	136.7	2.9
10-20	394.2	8.5
20-30	607.9	13.0
30-40	754.6	16.2
40-50	817.4	17.5
50-60	784.2	16.8
60-70	648.8	13.9
70-80	410.9	8.8
80-90	105.8	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:

A handwritten signature in black ink, appearing to read 'Erik Linares'.

Erik Linares
Associate Engineer
Lighting Division

Attachment: None

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Vladimir Kozak'.

Vladimir Kozak
Engineering Supervisor
Lighting Division