



REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G102753375

Date: October 11, 2016

REPORT NO. 102753375LAX-003

TEST OF ONE LED RECESSED IN PERIMETER

MODEL NO. P83-FLSH-LED35-SO-04-WA
LED MODEL NO. NICHIA NFSL757D
DRIVER MODEL NO. OSRAM 79399

RENDERED TO

PRUDENTIAL LTG
1774 EAST 21ST STREET
LOS ANGELES, CA 90058-1008

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

STATEMENT OF LIMITATION: This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the federal government.

AUTHORIZATION: The testing performed was authorized by signed quote number Qu-00710638-1.

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 P83-FLSH-LED35-SO-04-WA. The sample was received by Intertek on September 27, 2016, in undamaged condition and one sample was tested as received. The sample designation was LAN1609271342-004.

DATES OF TESTS: October 6, 2016



SUMMARY

Model No.:	P83-FLSH-LED35-SO-04-WA
Description:	LED recessed in perimeter

Criteria	Result
Total Lumen Output (Lumens)	1750
Total Power (W)	38.53
Luminaire Efficacy (LPW)	45.42
Power Factor	0.996

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
LSI High Speed Mirror Goniometer	6440T	000943	09/12/16	10/12/16	10/06/16
Elgar Power Supply	CW1251	000944	VBU	VBU	10/06/16
Yokogawa Power Analyzer	WT210	000945	12/04/15	12/04/16	10/06/16
Temp. & RH Meter	971	001380	12/17/15	12/17/16	10/06/16
Extech Instruments Stop Watch	365510	001379	11/19/15	11/19/16	10/06/16
Tape Measure	C1-25	000915	12/04/15	12/04/16	10/06/16
Protractor	33840	000087	12/22/15	12/22/16	10/06/16



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 Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.

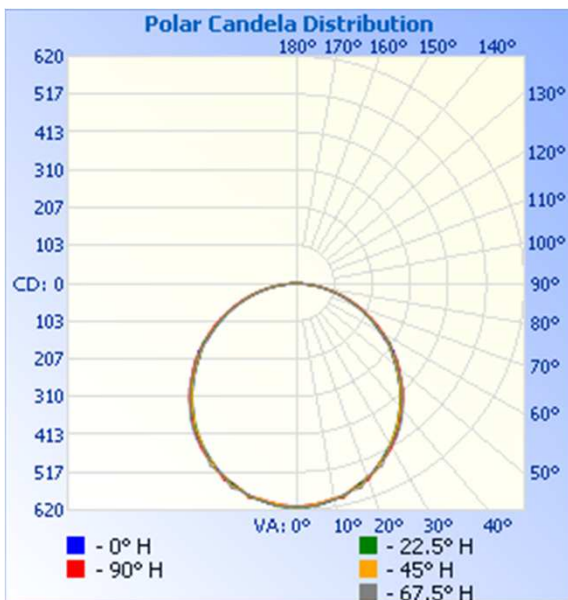
RESULTS OF TEST

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 (Lumens Per Watt)
LAN1609271342-004	UP	120.0	322.2	38.53	0.996	1750	45.42

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	610	610	610	610	610
5	610	609	605	612	605
10	599	599	596	600	596
15	585	584	582	584	582
20	564	564	562	565	572
25	539	539	538	551	539
30	510	510	509	514	518
35	481	476	479	487	484
40	439	438	441	449	447
45	398	398	401	409	409
50	355	356	357	361	365
55	322	311	316	315	321
60	262	263	266	268	273
65	214	216	220	220	226
70	166	169	171	173	178
75	120	122	124	129	130
80	74	76	78	79	83
85	31	33	34	35	36
90	0	0	0	0	0



RESULTS OF TEST

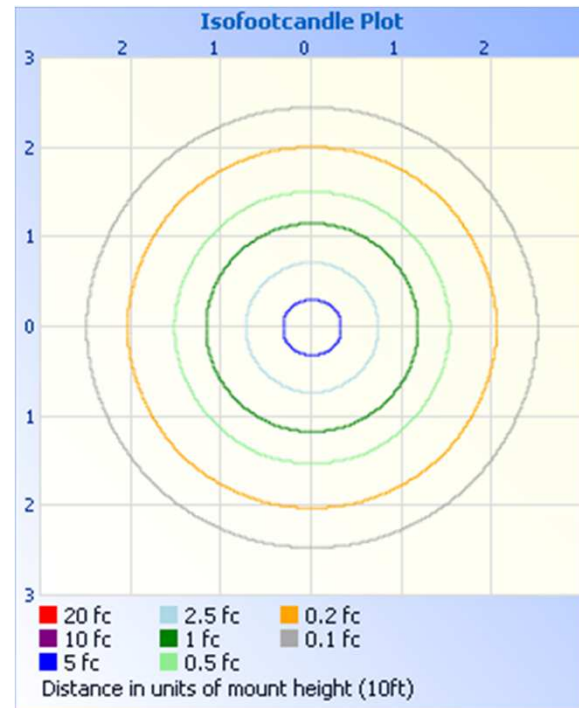
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	472.5	27.0
0-40	772.7	44.1
0-60	1364	77.9
60-90	386.1	22.1
0-90	1750	100.0
90-180	0.0	0.0
0-180	1750	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	57.7	3.3
10-20	165.3	9.4
20-30	249.5	14.3
30-40	300.2	17.1
40-50	310.1	17.7
50-60	281.4	16.1
60-70	216.5	12.4
70-80	131.1	7.5
80-90	38.4	2.2



PICTURE (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 "Jesse Reyna".

Jesse Reyna
Engineer
Lighting Division

Report Reviewed By:

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

Vladimir Kozak
Engineering Supervisor
Lighting Division

Attachment: None