



# REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G103425744

Date: February 26, 2018

REPORT NO. 103425744LAX-002

TEST OF ONE LED LUMINAIRE

MODEL NO. SDOT-LED35-LO  
LED MODEL NO. NICHIA NFSL757D  
DRIVER MODEL NO. MAGTECH MD22-U24-0200-XP

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.

AUTHORIZATION: The testing performed was authorized by signed quote number Qu-00849811-9.

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 SDOT-LED35-LO. The sample was received by Intertek on February 26, 2018, in undamaged condition and one sample was tested as received. The sample designation was LAN1802261110-001.

DATES OF TESTS: February 26, 2018



## SUMMARY

Model No.:	SDOT-LED35-LO
Description:	LED LUMINAIRE

Criteria	Result
Total Lumen Output (Lumens)	299.2
Total Power (W)	4.389
Luminaire Efficacy (LPW)	68.17
Power Factor	0.903

## EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	02/01/18	03/01/18	02/26/18
AC Source	CW1251P	000944	VBU	VBU	02/26/18
Power Analyzer	WT210	000945	11/10/17	11/10/18	02/26/18
Tape Measure	33-428	000684	01/04/18	01/04/19	02/26/18
Magnetic Level	581-9	001610	10/10/17	10/10/18	02/26/18
Temp. & RH Meter	971	001180	12/21/17	12/21/18	02/26/18

## 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.

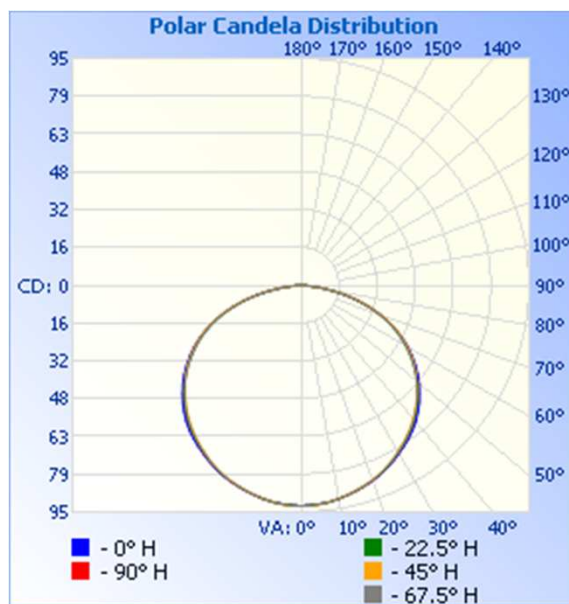
## RESULTS OF TEST

### 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)
LAN1802261110-001	Up	120.0	40.66	4.389	0.902	299.2	68.17

### Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	92	92	92	92	92
5	92	92	92	92	92
10	91	91	91	91	91
15	89	89	89	89	89
20	87	87	87	87	87
25	85	84	84	84	85
30	81	81	80	81	81
35	78	77	77	77	78
40	74	73	73	73	74
45	70	69	68	68	69
50	64	63	63	63	64
55	58	57	57	57	58
60	51	50	51	50	51
65	44	43	44	43	43
70	35	34	35	34	34
75	25	24	25	24	24
80	14	14	14	14	14
85	4	4	5	4	4
90	0	0	0	0	0



## RESULTS OF TEST (cont'd)

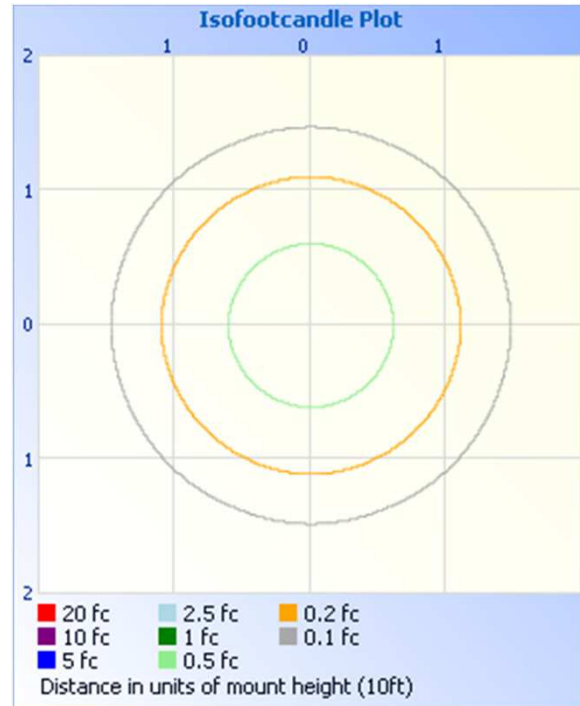
### Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



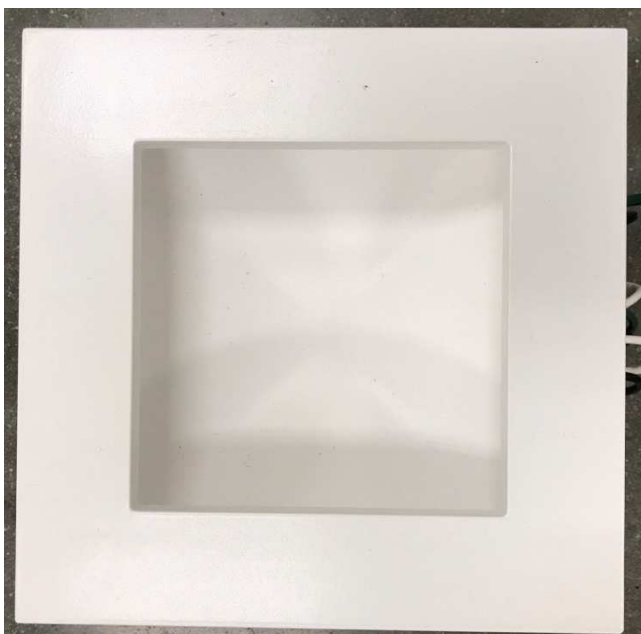
Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	72.7	24.3
0-40	121.1	40.5
0-60	225.2	75.3
60-90	74.0	24.7
0-90	299.2	100.0
90-180	0.0	0.0
0-180	299.2	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	8.7	2.9
10-20	25.1	8.4
20-30	38.8	13.0
30-40	48.4	16.2
40-50	52.9	17.7
50-60	51.2	17.1
60-70	42.5	14.2
70-80	25.6	8.6
80-90	5.9	2.0

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