



# REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G103143275

Date: July 10, 2017

REPORT NO. 103143275LAX-002

TEST OF ONE LED LUMINAIRE

MODEL NO. FLAIR-LED35-LO-SAL  
LED MODEL NO. NICHIA NFSL757D  
DRIVER MODEL NO. OSRAM 79399

RENDERED TO

PRUDENTIAL LIGHTING  
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-00710638-6.

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 Flair-LED35-LO-SAL. The sample was received by Intertek on June 28, 2017, in undamaged condition and one sample was tested as received. The sample designation was LAN1706281107-002.

DATES OF TESTS: July 10, 2017



## SUMMARY

Model No.:	Flair-LED35-LO-SAL
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	2333
Total Power (W)	18.30
Luminaire Efficacy (LPW)	127.5
Power Factor	0.993

## EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	06/30/17	07/30/17	07/10/17
AC Source	CW1251P	000944	VBU	VBU	07/10/17
Power Analyzer	WT210	000945	12/05/16	12/05/17	07/10/17
Tape Measure	33-428	001491	01/06/17	01/06/18	07/10/17
Magnetic Level	581-9	001610	09/28/16	09/28/17	07/10/17
Temp. & RH Meter	971	001178	12/22/16	12/22/17	07/10/17

## 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.

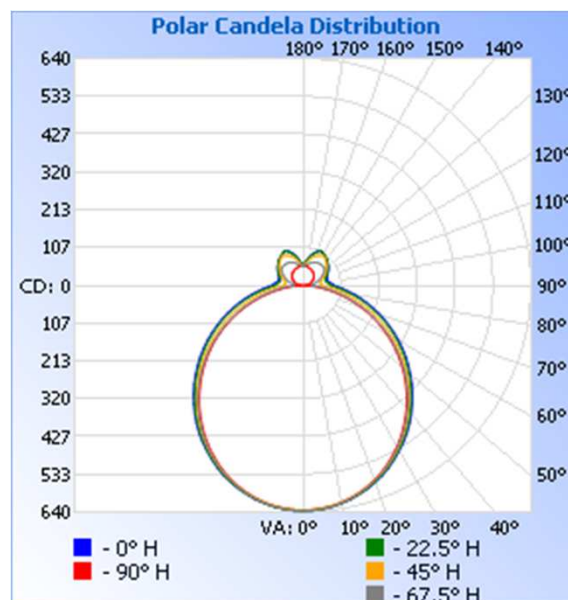
## RESULTS OF TEST (cont'd)

### 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)
LAN1706281107-002	Up	120.0	153.6	18.30	0.993	2333	127.5

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

Angle	0	22.5	45	67.5	90
0	635	635	635	635	635
5	633	633	631	633	631
10	624	624	622	623	621
15	610	610	607	608	605
20	592	591	587	587	584
25	568	566	561	560	557
30	539	537	532	530	526
35	508	505	498	495	491
40	472	469	461	456	452
45	434	430	420	414	409
50	393	389	378	370	364
55	352	346	333	323	318
60	309	303	287	273	268
65	266	259	241	224	218
70	224	216	195	174	167
75	183	175	151	125	116
80	146	137	112	81	68
85	113	104	78	46	27
90	86	78	54	23	2
95	78	71	50	27	9
100	71	65	50	33	16
105	69	65	54	41	21
110	71	68	60	49	25
115	76	74	67	57	29
120	82	80	74	65	33
125	87	86	81	73	36
130	92	91	87	77	40
135	96	96	92	78	43
140	101	101	97	77	45
145	104	105	102	76	47
150	107	109	98	75	49
155	108	106	92	71	51
160	99	97	86	68	52
165	89	87	78	64	53
170	77	75	68	60	54
175	63	63	59	55	54
180	54	54	54	54	54

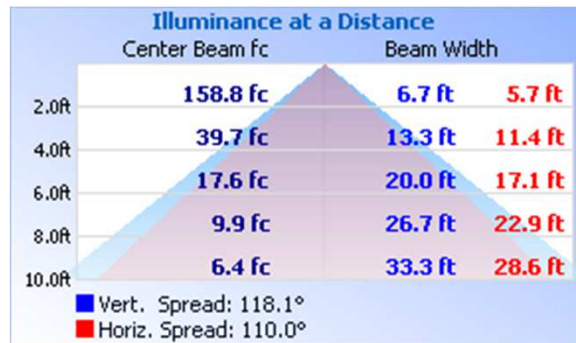


## RESULTS OF TEST (cont'd)

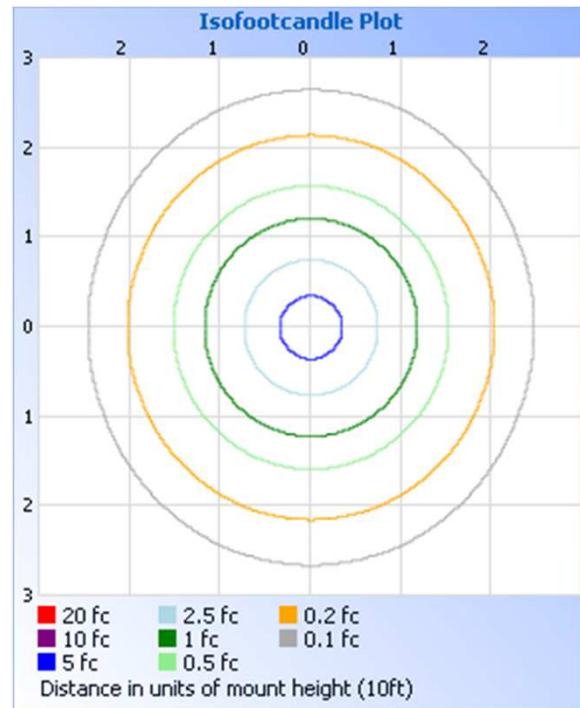
### Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	490.8	21.0
0-40	803.0	34.4
0-60	1427	61.1
60-90	481.6	20.6
0-90	1908	81.8
90-180	425	18.2
0-180	2333	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	60.0	2.6
10-20	171.5	7.4
20-30	259.2	11.1
30-40	312.2	13.4
40-50	325.1	13.9
50-60	298.6	12.8
60-70	239.1	10.2
70-80	159.3	6.8
80-90	83.1	3.6
90-100	52.9	2.3
100-110	54.5	2.3
110-120	62.2	2.7
120-130	67.2	2.9
130-140	64.8	2.8
140-150	55.9	2.4
150-160	40.3	1.7
160-170	21.4	0.9
170-180	5.9	0.3

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:



Ameet Alawi  
Technician  
Lighting Division

Attachment: None

Report Reviewed By:



Vladimir Kozak  
Engineering Supervisor  
Lighting Division