

# REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104013131

Date: July 19, 2019

REPORT NO. 104013131LAX-002E

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO3-FLSH-LED35-LO-4-TMW-SAL-SC-UNV-X1-DM01

LED MODEL NO. LUMILEDS 2835E 9V

DRIVER MODEL NO. OSRAM OTI20W G2

RENDERED TO

PRUDENTIAL LIGHTING

1774 E 21ST STREET

LOS ANGELES, CA 90058

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

AUTHORIZATION: The testing performed was authorized by signed quote number Qu-00978421-1 .

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 Prototype sample of model number BPRO3-FLSH-LED35-LO-4-TMW-SAL-SC-UNV-X1-DM01. The sample was received by Intertek on July 10, 2019, in undamaged condition and one sample was tested as received. The sample designation was LAN1907101436-002.

DATES OF TESTS: July 18, 2019

## SUMMARY

Model No.:	BPRO3-FLSH-LED35-LO-4-TMW-SAL-SC-UNV-X1-DM01
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	1752
Total Power (W)	15.43
Luminaire Efficacy (LPW)	113.5
Power Factor	0.989

## EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	07/18/19
AC Source	CW1251P	000944	VBU	VBU	07/18/19
Power Analyzer	WT210	000945	11/28/18	11/28/19	07/18/19
Tape Measure	33-428	001491	VBU	VBU	07/18/19
Magnetic Level	581-9	001610	10/31/18	10/31/19	07/18/19
Thermometer	DPI8-C24	001782	09/21/18	09/21/19	07/18/19
Temp. & RH Meter	971	001177	01/29/19	01/29/20	07/18/19

## 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.

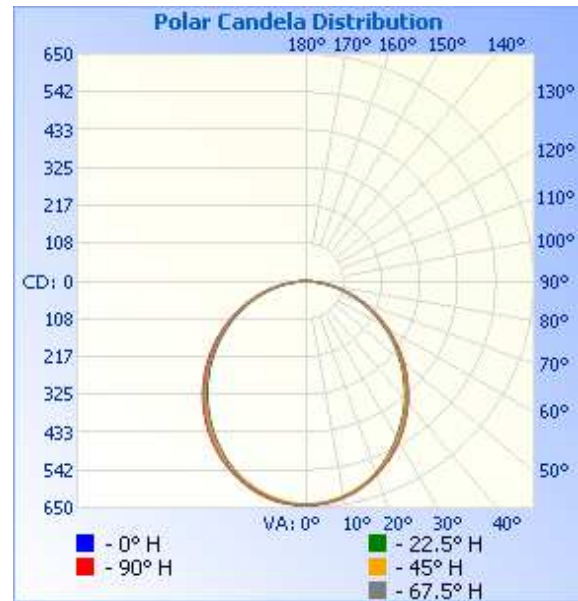
## RESULTS OF TEST

### 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)
LAN1907101436-002	Up	120.0	129.9	15.43	0.989	1752	113.5

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

Angle	0	22.5	45	67.5	90
0	641	641	641	641	641
5	637	637	635	638	640
10	626	626	625	629	630
15	609	609	608	612	614
20	585	585	584	590	591
25	554	554	555	562	564
30	519	519	521	529	531
35	481	482	484	492	494
40	441	441	443	452	454
45	398	398	400	408	411
50	352	352	355	362	366
55	307	306	309	314	318
60	259	259	261	266	270
65	212	211	213	218	222
70	164	164	165	169	174
75	118	117	119	122	126
80	72	72	73	76	80
85	30	29	31	33	36
90	0	0	0	0	0

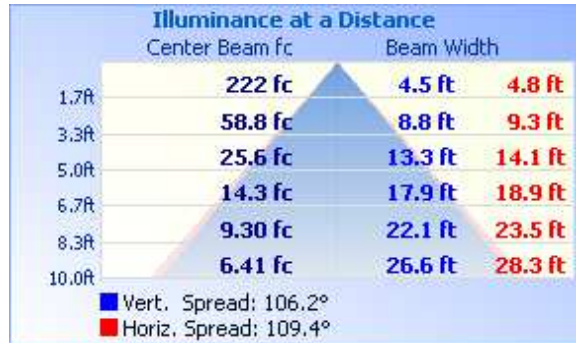


## RESULTS OF TEST (cont'd)

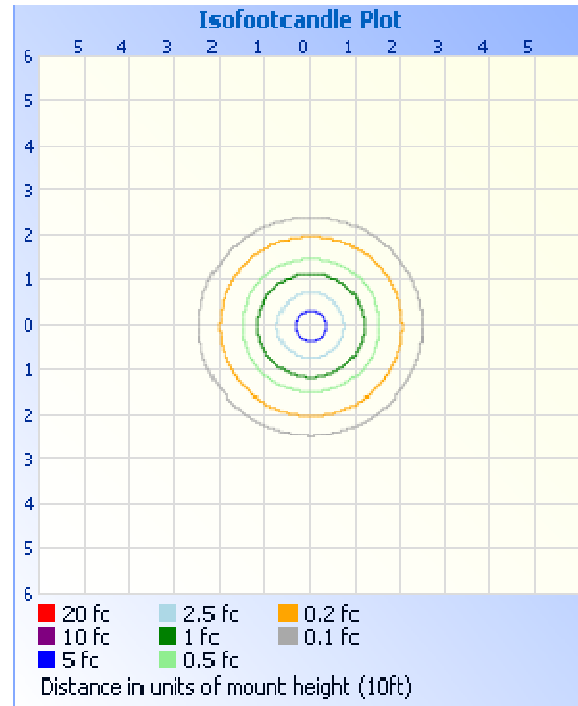
### Illumination Plots

Mounting Height: 10 ft.

#### Illuminance - Cone of Light



#### Isoillumination Plot



#### Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	488.2	27.9
0-40	791.5	45.2
0-60	1377	78.6
60-90	374.3	21.4
0-90	1752	100.0
90-180	0.0	0.0
0-180	1752	100.0

#### Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	60.4	3.5
10-20	171.6	9.8
20-30	256.1	14.6
30-40	303.3	17.3
40-50	309.4	17.7
50-60	276.4	15.8
60-70	211.6	12.1
70-80	126.3	7.2
80-90	36.3	2.1

#### Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.34

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:



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Lighting Division

Attachment: None

Report Reviewed By:



Vladimir Kozak  
Engineering Supervisor  
Lighting Division