

# REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104013131

Date: July 22, 2019

REPORT NO. 104013131LAX-003F

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO4-FLSH-LED35-MO-4-TMW-SAL-SC-UNV-X1-DM01

LED MODEL NO. LUMILEDS 2835E 9V

DRIVER MODEL NO. OSRAM OTI30W 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 BPRO4-FLSH-LED35-MO-4-TMW-SAL-SC-UNV-X1-DM01. The sample was received by Intertek on July 18, 2019, in undamaged condition and one sample was tested as received. The sample designation was LAN1907191346-003.

DATES OF TESTS: July 19, 2019

## SUMMARY

Model No.:	BPRO4-FLSH-LED35-MO-4-TMW-SAL-SC-UNV-X1-DM01
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	2740
Total Power (W)	22.76
Luminaire Efficacy (LPW)	120.4
Power Factor	0.984

## EQUIPMENT LIST

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

## 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.

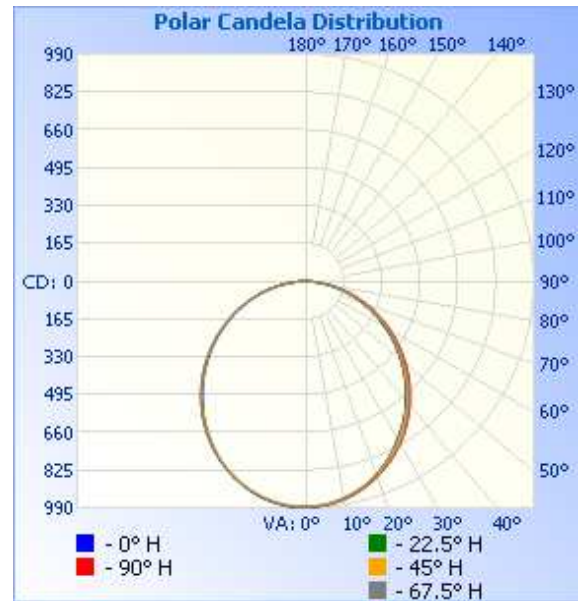
## RESULTS OF TEST

### 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)
LAN1907191346-003	Up	120.0	192.8	22.76	0.984	2740	120.4

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

Angle	0	22.5	45	67.5	90
0	986	986	986	986	986
5	980	980	977	982	982
10	960	962	960	967	968
15	934	935	934	942	943
20	898	898	898	907	910
25	852	852	854	865	869
30	797	799	803	816	821
35	742	742	746	760	765
40	678	679	684	697	704
45	613	612	617	630	639
50	542	542	548	560	570
55	472	471	477	488	497
60	396	397	403	413	423
65	323	323	329	339	348
70	248	248	254	263	273
75	175	175	181	190	198
80	104	104	110	117	126
85	37	37	42	49	56
90	0	0	0	0	0

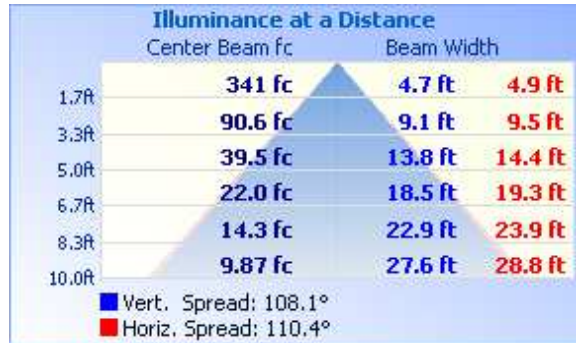


## RESULTS OF TEST (cont'd)

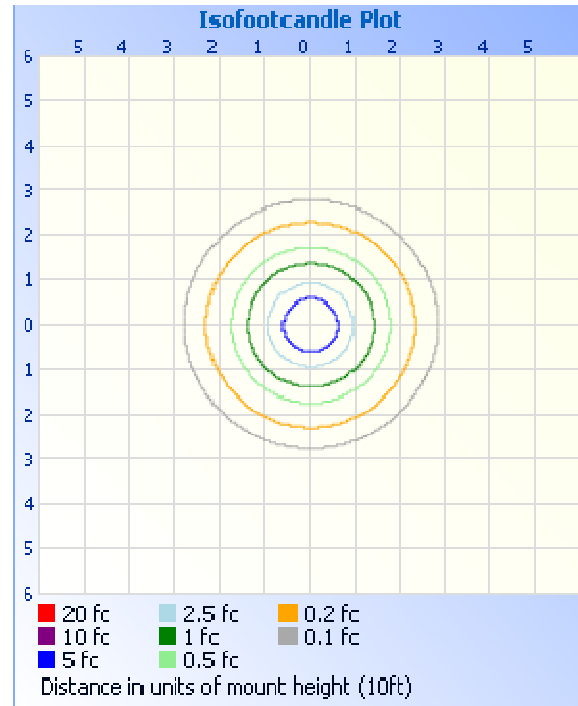
### Illumination Plots

Mounting Height: 10 ft.

#### Illuminance - Cone of Light



#### Isoillumination Plot



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

Zone	Lumens	% Luminaire
0-30	755.2	27.6
0-40	1228	44.8
0-60	2147	78.3
60-90	593.5	21.7
0-90	2740	100.0
90-180	0.0	0.0
0-180	2740	100.0

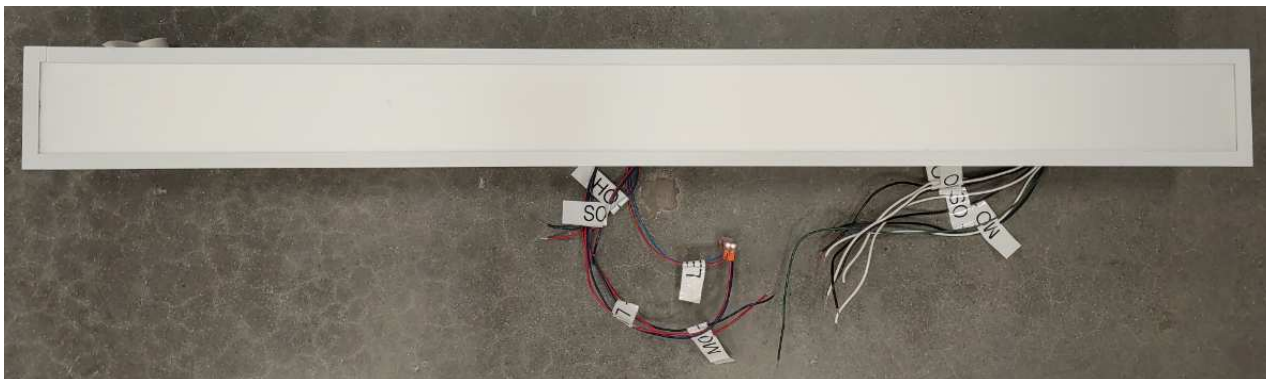
#### Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	93.1	3.4
10-20	265.0	9.7
20-30	397.1	14.5
30-40	472.5	17.2
40-50	484.3	17.7
50-60	435.0	15.9
60-70	334.8	12.2
70-80	201.0	7.3
80-90	57.7	2.1

#### Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.36

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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Technician  
Lighting Division

Attachment: None

Report Reviewed By:

Vladimir Kozak  
Engineering Supervisor  
Lighting Division