

# REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104013131

Date: July 19, 2019

REPORT NO. 104013131LAX-002C

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO3-FLSH-LED35-SO-4-TMW-BTW-SC-UNV-X1-DM01

LED MODEL NO. LUMILEDS 2835E 9V

DRIVER MODEL NO. OSRAM OTI50W 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-SO-4-TMW-BTW-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-SO-4-TMW-BTW-SC-UNV-X1-DM01
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	3792
Total Power (W)	32.03
Luminaire Efficacy (LPW)	118.4
Power Factor	0.980

## 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.

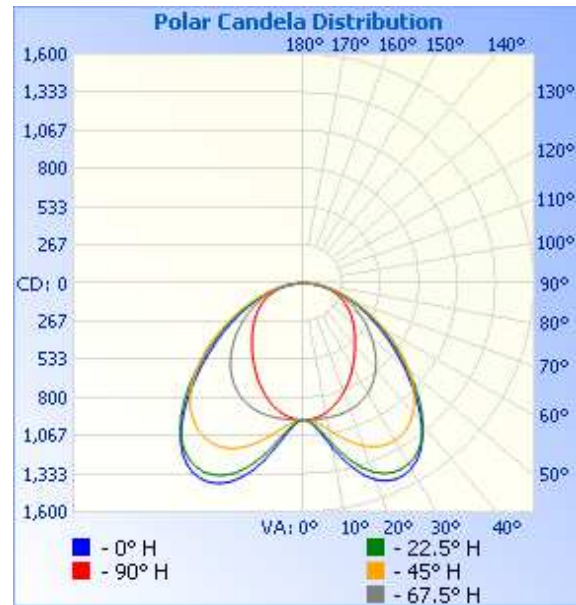
## RESULTS OF TEST

### 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	120.1	272.3	32.03	0.980	3792	118.4

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

Angle	0	22.5	45	67.5	90
0	954	954	954	954	954
5	1015	1004	976	955	947
10	1170	1136	1045	956	917
15	1341	1288	1132	952	871
20	1462	1403	1209	943	812
25	1513	1461	1257	922	748
30	1497	1460	1270	889	681
35	1419	1405	1247	842	618
40	1279	1290	1185	780	558
45	1096	1131	1086	707	504
50	913	954	958	626	454
55	744	782	810	542	406
60	596	624	656	459	360
65	463	485	511	377	311
70	348	362	379	299	260
75	244	254	265	224	203
80	151	157	164	148	140
85	66	68	74	72	72
90	0	0	0	0	0

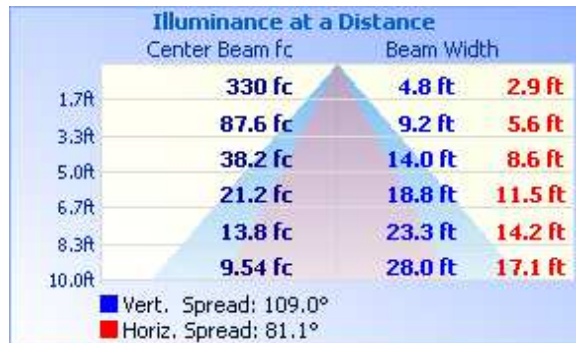


## RESULTS OF TEST (cont'd)

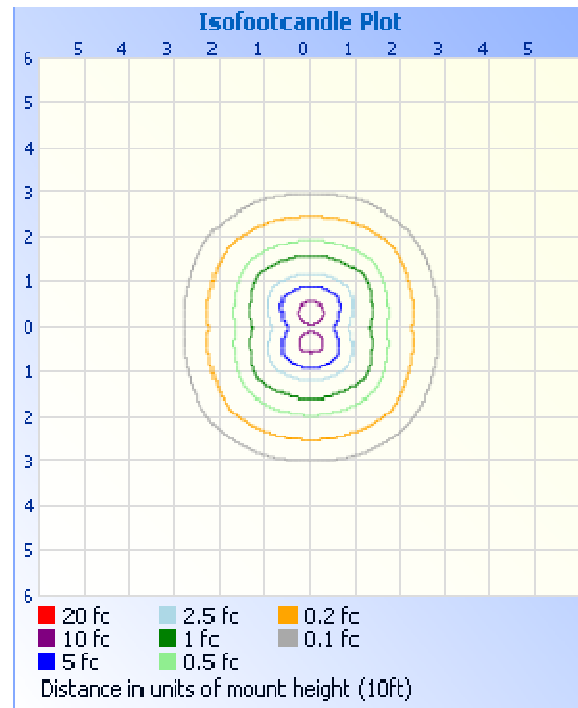
### Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	967.3	25.5
0-40	1676	44.2
0-60	3016	79.5
60-90	776.1	20.5
0-90	3792	100.0
90-180	0.0	0.0
0-180	3792	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	95.9	2.5
10-20	319.3	8.4
20-30	552.2	14.6
30-40	709.0	18.7
40-50	726.0	19.1
50-60	613.5	16.2
60-70	440.3	11.6
70-80	256.9	6.8
80-90	78.9	2.1

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.84
Spacing Criterion (90-270)	1.10
Spacing Criterion (Diagonal)	1.74

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:



Gregory V. Rosandich  
Technician  
Lighting Division

Attachment: None

Report Reviewed By:



Vladimir Kozak  
Engineering Supervisor  
Lighting Division