

# REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104359650

Date: June 11, 2020

REPORT NO. 104359650LAX-003A

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO3-FLSH-LED35-SO-4-WWF

LED MODEL NO. LUMILEDS 2835E 9V

DRIVER MODEL NO. SO - OSRAM OTI50G2 - 868MAMP

RENDERED TO

PRUDENTIAL LIGHTING  
1774 EAST 21ST  
LOS ANGELES, CA 90058

**STATEMENT OF LIMITATION:** This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

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

**AUTHORIZATION:** The testing performed was authorized by signed quote number Qu-01069292-0.

**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-WWF. The sample was received by Intertek on June 1, 2020, in undamaged condition and one sample was tested as received. The sample designation was LAN2006021315-003.

**DATES OF TESTS:** June 10, 2020

## SUMMARY

Model No.:	BPRO3-FLSH-LED35-SO-4-WWF
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	3903
Total Power (W)	31.67
Luminaire Efficacy (LPW)	123.2
Power Factor	0.983

## EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	06/10/20
AC Source	CW1251P	000944	VBU	VBU	06/10/20
Power Analyzer	WT210	000945	10/02/19	10/02/20	06/10/20
Tape Measure	33-428	001491	VBU	VBU	06/10/20
Magnetic Level	581-9	001610	10/11/19	10/11/20	06/10/20
Temp. & RH Meter	Testo 622	001910	04/15/20	04/15/21	06/10/20
Thermometer	DPI8-C24	001782	10/15/19	10/15/20	06/10/20

## 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.

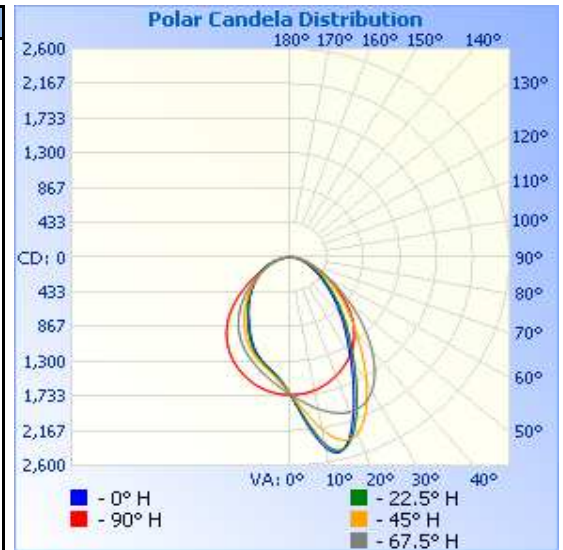
## RESULTS OF TEST

### 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)
LAN2006021315-003	Up	120.0	268.4	31.67	0.983	3903	123.2

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

	Angle	0	22.5	45	67.5	90
	90	0	0	0	0	0
W A L L  S I D E	85	37	37	45	51	54
	80	83	86	105	114	115
	75	135	141	174	184	180
	70	195	204	256	270	256
	65	265	280	355	382	354
	60	349	371	475	533	489
	55	450	484	616	730	659
	50	577	623	784	966	846
	45	736	792	979	1234	1024
	40	928	990	1212	1502	1177
	35	1150	1222	1491	1746	1305
	30	1423	1509	1808	1931	1414
	25	1772	1865	2119	2036	1504
	20	2169	2238	2340	2056	1579
	15	2471	2474	2361	2010	1639
	10	2412	2365	2180	1923	1684
	5	2053	2023	1926	1818	1710
	0	1714	1714	1714	1714	1714
R O O M  S I D E	5	1519	1528	1553	1617	1710
	10	1410	1416	1444	1527	1684
	15	1326	1336	1362	1443	1639
	20	1228	1245	1282	1362	1579
	25	1105	1128	1187	1277	1504
	30	977	1002	1071	1181	1414
	35	866	885	949	1072	1305
	40	768	784	832	950	1177
	45	675	687	721	816	1024
	50	585	593	615	675	846
	55	499	502	512	540	659
	60	420	418	415	418	489
	65	348	340	327	316	354
	70	277	268	249	234	256
	75	203	198	178	166	180
	80	126	127	113	107	115
	85	54	57	53	50	54
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

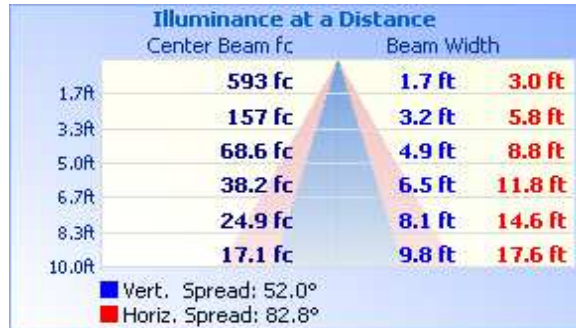


## RESULTS OF TEST (cont'd)

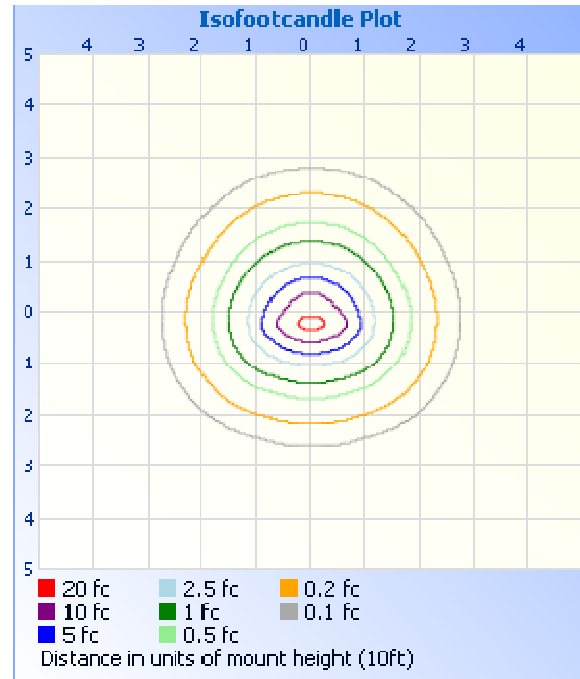
### Illumination Plots

Mounting Height: 10 ft.

#### Illuminance - Cone of Light



#### Isoillumination Plot



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

Zone	Lumens	% Luminaire
0-30	1397	35.8
0-40	2153	55.2
0-60	3331	85.4
60-90	571.6	14.6
0-90	3903	100.0
90-180	0.0	0.0
0-180	3903	100.0

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

Zone	Lumens	% Luminaire
0-10	168.7	4.3
10-20	508.4	13.0
20-30	719.5	18.4
30-40	756.2	19.4
40-50	671.0	17.2
50-60	507.0	13.0
60-70	332.0	8.5
70-80	184.7	4.7
80-90	54.9	1.4

#### Spacing Criterion at 25°C

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

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:

A handwritten signature in black ink, appearing to read 'Kellen Murakami'.

Kellen Murakami  
Technician  
Lighting Division

Attachment: None

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Vladimir Kozak'.

Vladimir Kozak  
Engineering Supervisor  
Lighting Division