

## REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104359650

Date: June 18, 2020

REPORT NO. 104361023LAX-004B

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO4-FLSH-LED35-LO-4-WWF

LED MODEL NO. LUMILEDS 2835E 9V

DRIVER MODEL NO. LO - OSRAM OTI20G2 - 409MAMP

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 BPRO4-FLSH-LED35-LO-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 LAN2006021315-004.

**DATES OF TESTS:** June 18, 2020

## SUMMARY

Model No.:	BPRO4-FLSH-LED35-LO-4-WWF
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	2056
Total Power (W)	15.37
Luminaire Efficacy (LPW)	133.8
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	06/18/20
AC Source	CW1251P	000944	VBU	VBU	06/18/20
Power Analyzer	WT210	000945	10/02/19	10/02/20	06/18/20
Tape Measure	33-428	001491	VBU	VBU	06/18/20
Magnetic Level	581-9	001610	10/11/19	10/11/20	06/18/20
Temp. & RH Meter	Testo 622	001910	04/15/20	04/15/21	06/18/20
Thermometer	DPI8-C24	001782	10/15/19	10/15/20	06/18/20

## 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.

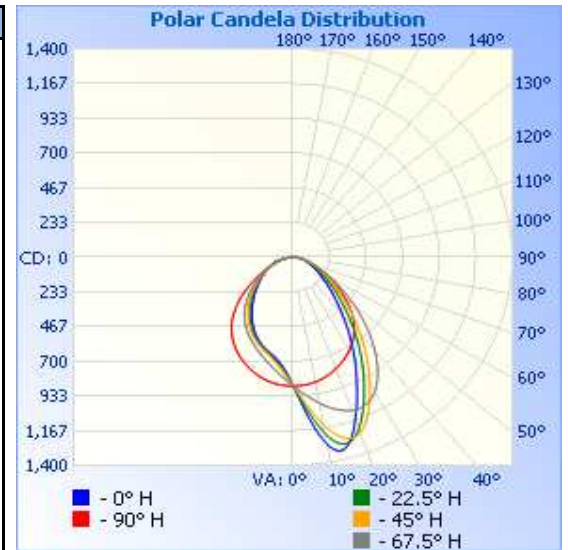
## RESULTS OF TEST

### 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)
LAN2006021315-004	Up	120.0	130.3	15.37	0.982	2056	133.8

### 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	22	23	25	27	28
	80	47	51	56	60	60
	75	75	82	91	96	93
	70	103	117	132	141	133
	65	135	159	181	201	185
	60	174	210	242	285	257
	55	224	274	316	393	346
	50	288	354	409	524	443
	45	372	457	526	668	533
	40	482	586	666	812	609
	35	625	736	821	944	670
	30	790	900	982	1044	721
	25	967	1070	1140	1095	763
	20	1164	1228	1256	1095	798
	15	1321	1297	1257	1058	828
	10	1279	1207	1147	998	850
	5	1065	1027	992	930	862
	0	863	863	863	863	863
R O O M  S I D E	5	740	757	766	804	862
	10	680	693	703	752	850
	15	646	655	661	704	828
	20	612	622	628	662	798
	25	567	583	591	622	763
	30	514	535	547	580	721
	35	456	482	497	533	670
	40	399	426	443	480	609
	45	344	369	384	419	533
	50	294	312	324	352	443
	55	247	258	265	283	346
	60	208	209	212	218	257
	65	173	167	165	164	185
	70	142	130	124	120	133
	75	109	96	89	85	93
	80	72	63	57	55	60
	85	33	30	27	26	28
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

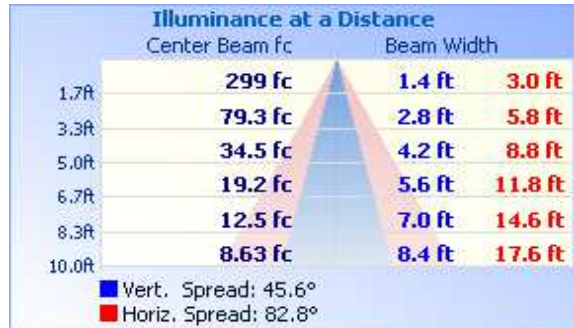


## RESULTS OF TEST (cont'd)

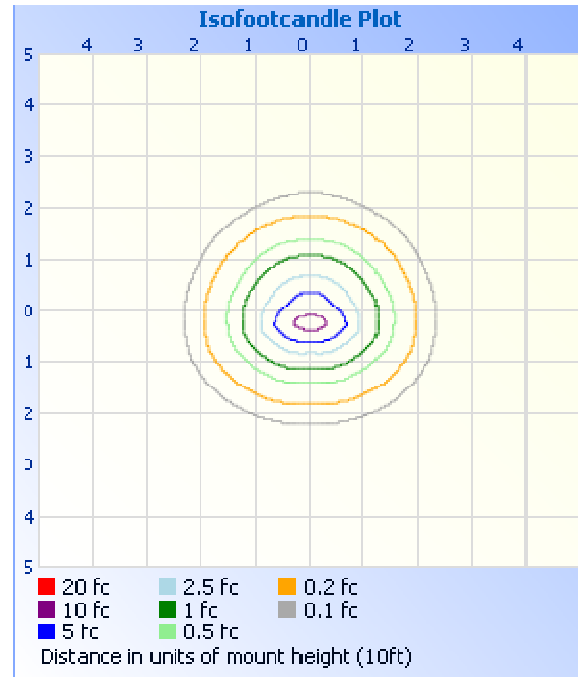
### Illumination Plots

Mounting Height: 10 ft.

#### Illuminance - Cone of Light



#### Isoillumination Plot



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

Zone	Lumens	% Luminaire
0-30	726.6	35.3
0-40	1134	55.2
0-60	1758	85.5
60-90	297.6	14.5
0-90	2056	100.0
90-180	0.0	0.0
0-180	2056	100.0

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

Zone	Lumens	% Luminaire
0-10	85.2	4.1
10-20	261.1	12.7
20-30	380.2	18.5
30-40	407.5	19.8
40-50	358.3	17.4
50-60	266.2	12.9
60-70	172.0	8.4
70-80	96.1	4.7
80-90	29.5	1.4

#### Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.28

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