

## REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104464711

Date: October 1, 2020

REPORT NO. 104464711LAX-015

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO5-FLSH-LED35-LO-4-WWG-DM01

LED MODEL NO. LUMILEDS 2835E 9V

DRIVER MODEL NO. OSRAM OTI20G2 - 391MAMP

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 Production sample of model number BPRO5-FLSH-LED35-LO-4-WWG-DM01. The sample was received by Intertek on September 29, 2020, in undamaged condition and one sample was tested as received. The sample designation was LAN2009290928-001.

**DATES OF TESTS:** October 1, 2020

## SUMMARY

Model No.:	BPRO5-FLSH-LED35-LO-4-WWG-DM01
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	2042
Total Power (W)	15.08
Luminaire Efficacy (LPW)	135.4
Power Factor	0.990

## EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	10/01/20
AC Source	CW1251P	000944	VBU	VBU	10/01/20
Power Analyzer	WT210	000945	09/29/20	09/29/21	10/01/20
Tape Measure	33-428	001491	VBU	VBU	10/01/20
Magnetic Level	581-9	001610	10/11/19	10/11/20	10/01/20
Temp. & RH Meter	Testo 622	001897	04/22/20	04/22/21	10/01/20

## 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.

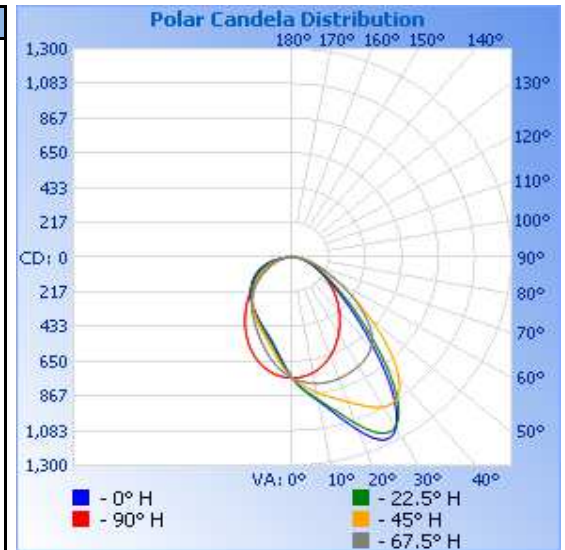
## RESULTS OF TEST

### 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)
LAN2009290928-001	Up	120.0	127.0	15.08	0.990	2042	135.4

### 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	27	27	30	32	31
	80	52	54	64	69	64
	75	79	83	104	111	97
	70	111	118	156	163	131
	65	151	163	225	232	167
	60	205	225	320	326	210
	55	281	310	450	440	259
	50	387	435	618	561	315
	45	550	613	811	662	373
	40	772	849	983	728	431
	35	1042	1087	1078	764	491
	30	1228	1222	1078	785	550
	25	1256	1209	1024	798	607
	20	1150	1104	960	806	657
	15	1019	993	906	808	698
	10	915	905	858	800	729
	5	835	833	808	782	747
	0	754	754	754	754	754
R O O M  S I D E	5	658	668	682	712	747
	10	577	587	611	661	729
	15	520	528	550	605	698
	20	481	488	503	550	657
	25	450	456	466	499	607
	30	422	425	434	455	550
	35	397	397	402	414	491
	40	374	371	369	374	431
	45	349	344	335	333	373
	50	322	316	298	288	315
	55	294	285	261	243	259
	60	264	252	223	200	210
	65	232	217	184	160	167
	70	196	180	145	125	131
	75	154	141	107	93	97
	80	106	99	71	61	64
	85	57	55	36	30	31
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

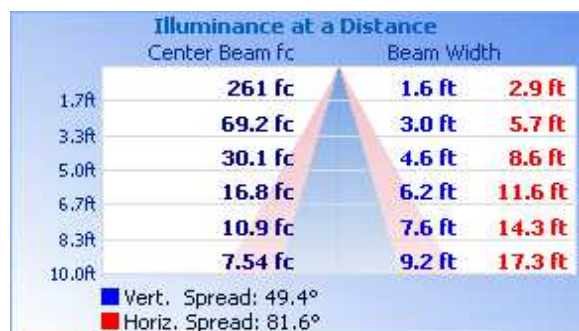


## RESULTS OF TEST (cont'd)

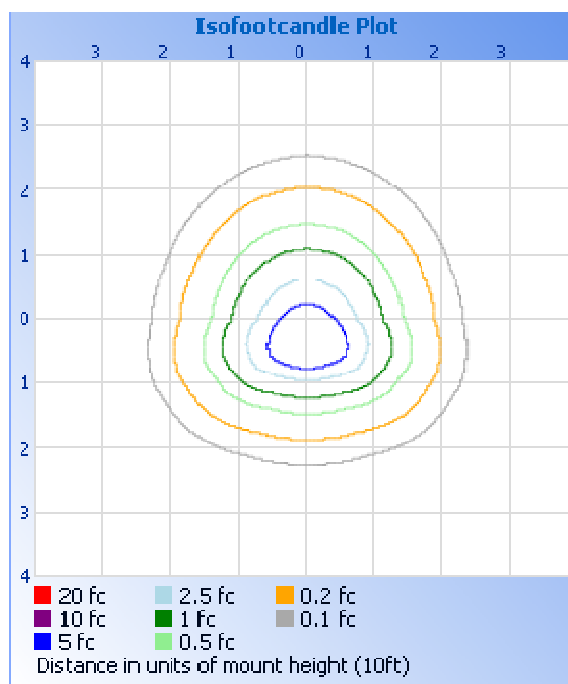
### Illumination Plots

Mounting Height: 10 ft.

#### Illuminance - Cone of Light



#### Isoillumination Plot



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

Zone	Lumens	% Luminaire
0-30	619.1	30.3
0-40	1034	50.7
0-60	1697	83.1
60-90	344.7	16.9
0-90	2042	100.0
90-180	0.0	0.0
0-180	2042	100.0

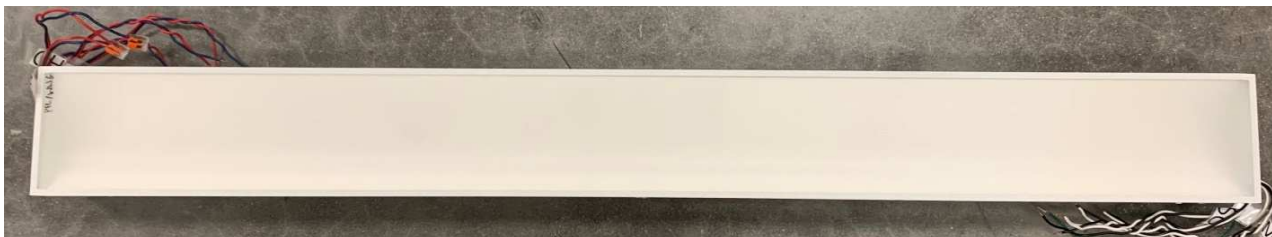
#### Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	71.0	3.5
10-20	207.9	10.2
20-30	340.2	16.7
30-40	415.1	20.3
40-50	377.9	18.5
50-60	285.0	14.0
60-70	192.0	9.4
70-80	113.1	5.5
80-90	39.5	1.9

#### Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.64
Spacing Criterion (90-270)	1.12
Spacing Criterion (Diagonal)	1.46

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:

Kellen Murakami  
Technician  
Lighting Division

Attachment: None

Report Reviewed By:

Vladimir Kozak  
Engineering Supervisor  
Lighting Division