

# REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104464711

Date: October 1, 2020

REPORT NO. 104464711LAX-012

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO4-FLSH-LED35-MO-4-WWG-DM01

LED MODEL NO. LUMILEDS 2835E 9V

DRIVER MODEL NO. OSRAM OTI30G2 - 587MAMP

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 BPRO4-FLSH-LED35-MO-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.:	BPRO4-FLSH-LED35-MO-4-WWG-DM01
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	2937
Total Power (W)	22.13
Luminaire Efficacy (LPW)	132.7
Power Factor	0.986

## 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.

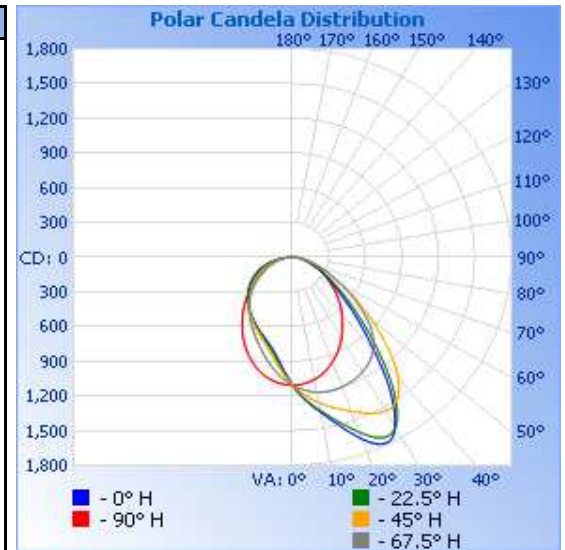
## RESULTS OF TEST

### 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	119.9	187.0	22.13	0.986	2937	132.7

### 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	35	35	41	45	45
	80	72	75	92	99	94
	75	114	120	152	159	142
	70	162	174	230	233	192
	65	226	243	331	330	244
	60	304	334	467	458	306
	55	413	454	644	614	378
	50	552	617	863	781	460
	45	757	845	1113	928	546
	40	1035	1144	1348	1036	633
	35	1400	1472	1501	1104	720
	30	1689	1694	1536	1148	807
	25	1778	1721	1488	1177	889
	20	1670	1609	1417	1193	962
	15	1509	1472	1347	1196	1024
	10	1365	1349	1276	1183	1070
	5	1240	1235	1196	1152	1096
	0	1104	1104	1104	1104	1104
R O O M  S I D E	5	955	970	992	1040	1096
	10	839	854	887	962	1070
	15	766	777	804	880	1024
	20	716	724	742	804	962
	25	674	680	691	734	889
	30	633	637	645	671	807
	35	595	594	598	613	720
	40	558	554	549	554	633
	45	519	512	497	493	546
	50	476	467	442	427	460
	55	428	418	386	359	378
	60	379	365	328	294	306
	65	327	310	269	236	244
	70	269	253	211	183	192
	75	203	192	154	135	142
	80	131	128	100	89	94
	85	62	64	49	43	45
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

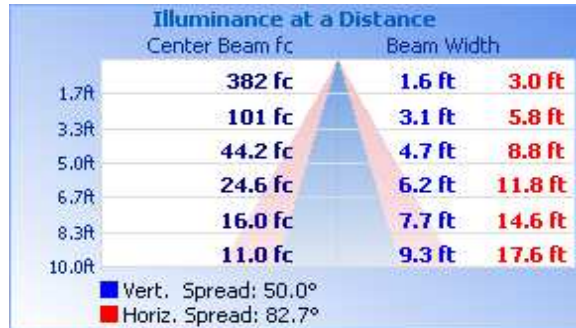


## RESULTS OF TEST (cont'd)

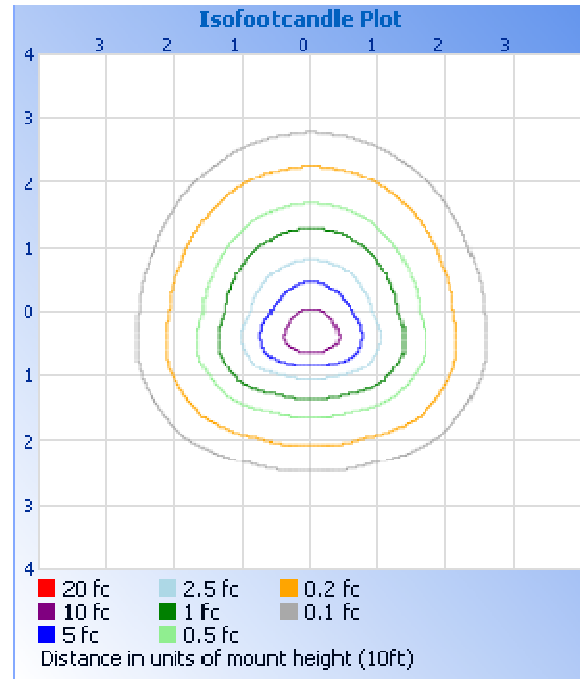
### Illumination Plots

Mounting Height: 10 ft.

#### Illuminance - Cone of Light



#### Isoillumination Plot



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

Zone	Lumens	% Luminaire
0-30	905.2	30.8
0-40	1495	50.9
0-60	2445	83.3
60-90	491.6	16.7
0-90	2937	100.0
90-180	0.0	0.0
0-180	2937	100.0

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

Zone	Lumens	% Luminaire
0-10	104.3	3.6
10-20	306.3	10.4
20-30	494.6	16.8
30-40	590.2	20.1
40-50	537.3	18.3
50-60	412.4	14.0
60-70	279.0	9.5
70-80	160.9	5.5
80-90	51.7	1.8

#### Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.60
Spacing Criterion (90-270)	1.12
Spacing Criterion (Diagonal)	1.44

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