

# REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104484038

Date: October 23, 2020

REPORT NO. 104484038LAX-016

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO5-FLSH-LED35-SO-4-MGZ-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-SO-4-MGZ-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 LAN2009290928-002.

**DATES OF TESTS:** October 23, 2020

## SUMMARY

Model No.:	BPRO5-FLSH-LED35-SO-4-MGZ-DM01
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	4162
Total Power (W)	30.98
Luminaire Efficacy (LPW)	134.3
Power Factor	0.979

## EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	10/23/20
AC Source	CW1251P	000944	VBU	VBU	10/23/20
Power Analyzer	WT210	000945	09/29/20	09/29/21	10/23/20
Tape Measure	33-428	001491	VBU	VBU	10/23/20
Temp. & RH Meter	Testo 622	001897	04/22/20	04/22/21	10/23/20
Thermometer	DPI8-C24	001782	10/09/20	10/09/21	10/23/20

## 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.

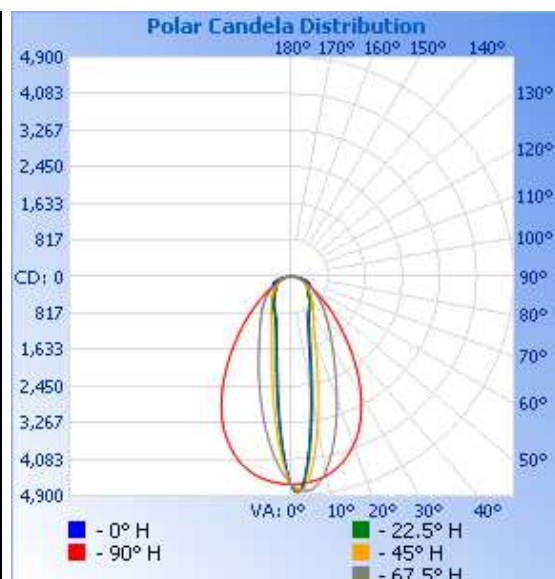
## RESULTS OF TEST

### 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)
LAN2009290928-002	Up	120.0	263.6	30.98	0.979	4162	134.3

### 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	113	107	66	54	57
	80	216	201	125	117	123
	75	327	286	181	186	194
	70	410	342	237	268	278
	65	447	370	297	369	387
	60	451	391	364	494	543
	55	457	422	440	641	764
	50	483	470	523	808	1068
	45	534	536	614	993	1460
	40	603	620	710	1202	1944
	35	690	711	819	1461	2497
	30	782	811	958	1804	3070
	25	902	942	1166	2282	3590
	20	1090	1160	1537	2927	4004
	15	1491	1623	2225	3688	4309
	10	2468	2640	3335	4397	4506
	5	4120	4216	4514	4787	4607
	0	4647	4647	4647	4647	4647
R O O M  S I D E	5	3084	3225	3550	4085	4607
	10	1817	1955	2408	3370	4506
	15	1238	1321	1666	2674	4309
	20	991	1038	1255	2109	4004
	25	864	890	1028	1691	3590
	30	770	791	883	1396	3070
	35	672	698	777	1180	2497
	40	579	604	686	1011	1944
	45	505	519	597	864	1460
	50	451	451	507	725	1068
	55	422	399	425	592	764
	60	421	367	353	466	543
	65	428	350	288	354	387
	70	400	330	231	261	278
	75	323	283	176	183	194
	80	215	204	122	115	123
	85	111	110	64	53	57
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

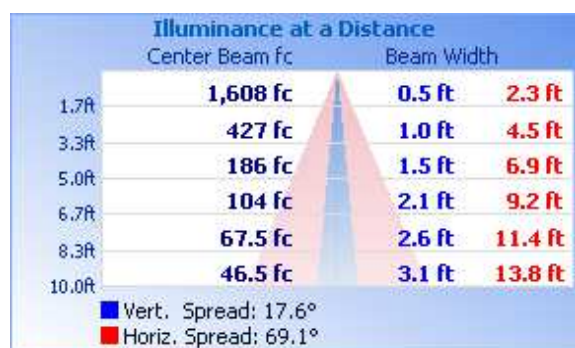


## RESULTS OF TEST (cont'd)

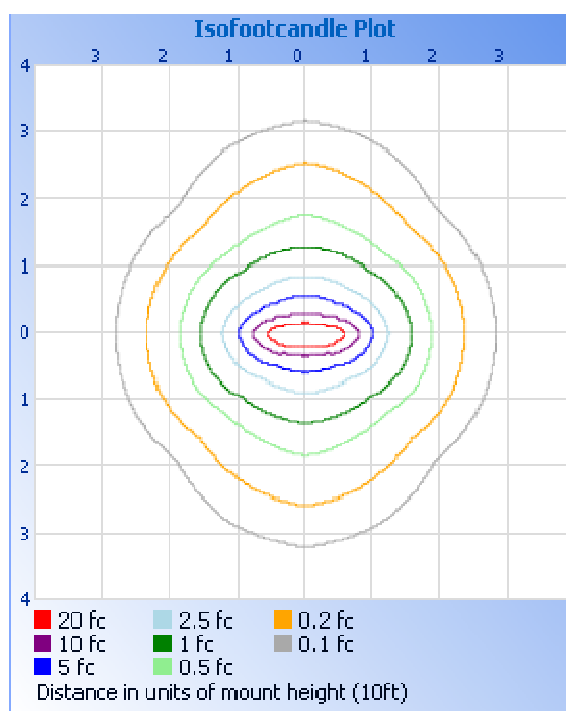
### Illumination Plots

Mounting Height: 10 ft.

#### Illuminance - Cone of Light



#### Isoillumination Plot



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

Zone	Lumens	% Luminaire
0-30	1738	41.7
0-40	2428	58.3
0-60	3483	83.7
60-90	679.7	16.3
0-90	4162	100.0
90-180	0.0	0.0
0-180	4162	100.0

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

Zone	Lumens	% Luminaire
0-10	355.8	8.5
10-20	662.6	15.9
20-30	719.2	17.3
30-40	690.6	16.6
40-50	590.5	14.2
50-60	464.2	11.2
60-70	354.2	8.5
70-80	238.1	5.7
80-90	87.3	2.1

#### Spacing Criterion at 25°C

Spacing Criterion (0-180)	0.36
Spacing Criterion (90-270)	1.06
Spacing Criterion (Diagonal)	0.52

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