

## REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104484038

Date: October 23, 2020

REPORT NO. 104484038LAX-015

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO5-FLSH-LED35-MO-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-MO-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-MO-4-MGZ-DM01
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	3008
Total Power (W)	22.10
Luminaire Efficacy (LPW)	136.1
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	10/23/20
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.

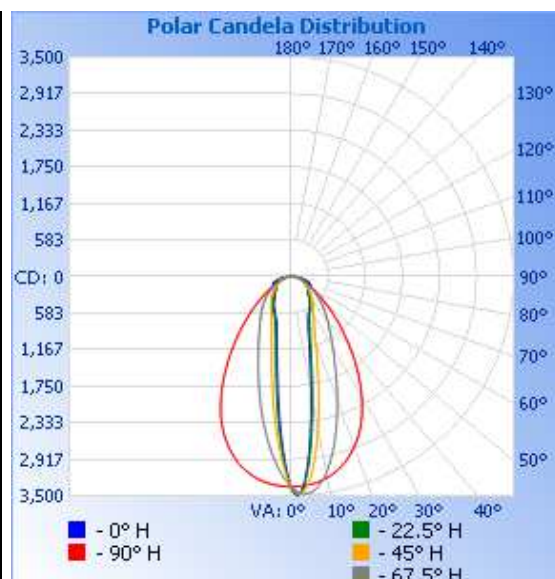
## RESULTS OF TEST

### 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	186.7	22.10	0.986	3008	136.1

### 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	82	78	48	39	41
	80	158	145	91	85	89
	75	237	207	131	135	140
	70	297	247	171	194	200
	65	323	267	215	267	279
	60	326	282	263	357	391
	55	330	306	318	463	551
	50	350	340	379	583	770
	45	386	388	444	716	1054
	40	437	448	514	868	1402
	35	500	514	592	1054	1804
	30	566	586	692	1302	2216
	25	653	680	844	1646	2593
	20	788	838	1112	2112	2892
	15	1080	1170	1615	2661	3113
	10	1780	1912	2416	3174	3257
	5	2988	3040	3268	3459	3330
	0	3356	3356	3356	3356	3356
R O O M  S I D E	5	2212	2332	2560	2956	3330
	10	1300	1411	1740	2438	3257
	15	889	956	1200	1939	3113
	20	714	750	906	1526	2892
	25	623	643	742	1225	2593
	30	555	571	637	1010	2216
	35	485	505	561	854	1804
	40	418	436	496	731	1402
	45	364	375	432	625	1054
	50	326	326	367	525	770
	55	305	289	308	429	551
	60	305	265	255	338	391
	65	309	253	209	257	279
	70	289	238	167	189	200
	75	232	205	128	132	140
	80	155	147	88	83	89
	85	79	80	46	38	41
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

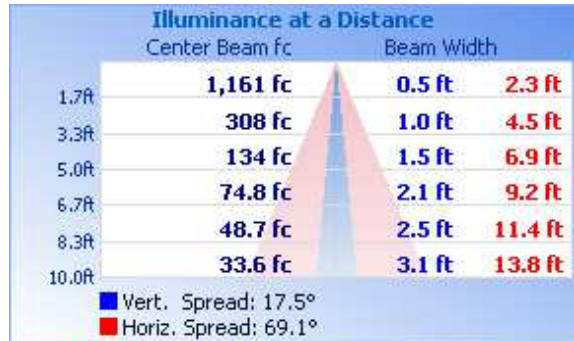


## RESULTS OF TEST (cont'd)

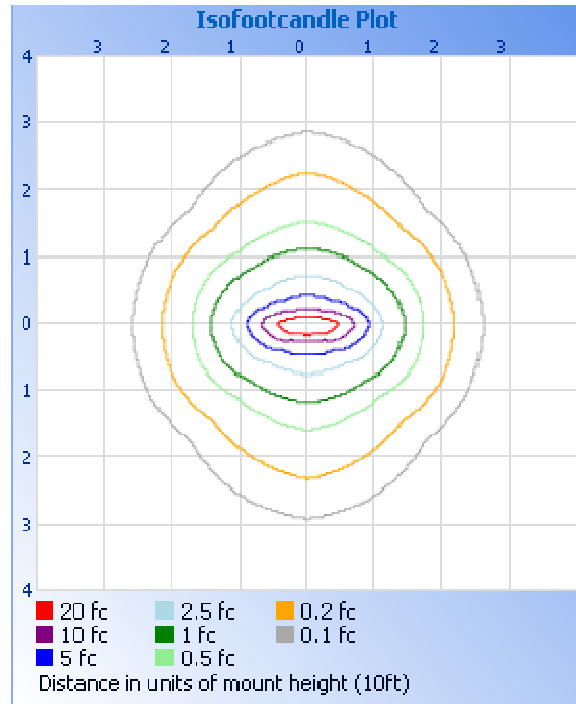
### Illumination Plots

Mounting Height: 10 ft.

#### Illuminance - Cone of Light



#### Isoillumination Plot



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

Zone	Lumens	% Luminaire
0-30	1256	41.7
0-40	1754	58.3
0-60	2516	83.7
60-90	491.2	16.3
0-90	3008	100.0
90-180	0.0	0.0
0-180	3008	100.0

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

Zone	Lumens	% Luminaire
0-10	257.1	8.5
10-20	478.8	15.9
20-30	519.6	17.3
30-40	498.9	16.6
40-50	426.6	14.2
50-60	335.5	11.2
60-70	256.1	8.5
70-80	172.1	5.7
80-90	63.1	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