

# REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104359650

Date: June 11, 2020

REPORT NO. 104359650LAX-004A

TEST OF ONE LED LUMINAIRE

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

LED MODEL NO. LUMILEDS 2835E 9V

DRIVER MODEL NO. SO - OSRAM OTI50G2 - 868MAMP

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-SO-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 10, 2020

## SUMMARY

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

Criteria	Result
Total Lumen Output (Lumens)	4105
Total Power (W)	31.67
Luminaire Efficacy (LPW)	129.6
Power Factor	0.981

## EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	06/10/20
AC Source	CW1251P	000944	VBU	VBU	06/10/20
Power Analyzer	WT210	000945	10/02/19	10/02/20	06/10/20
Tape Measure	33-428	001491	VBU	VBU	06/10/20
Magnetic Level	581-9	001610	10/11/19	10/11/20	06/10/20
Temp. & RH Meter	Testo 622	001910	04/15/20	04/15/21	06/10/20
Thermometer	DPI8-C24	001782	10/15/19	10/15/20	06/10/20

## 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.

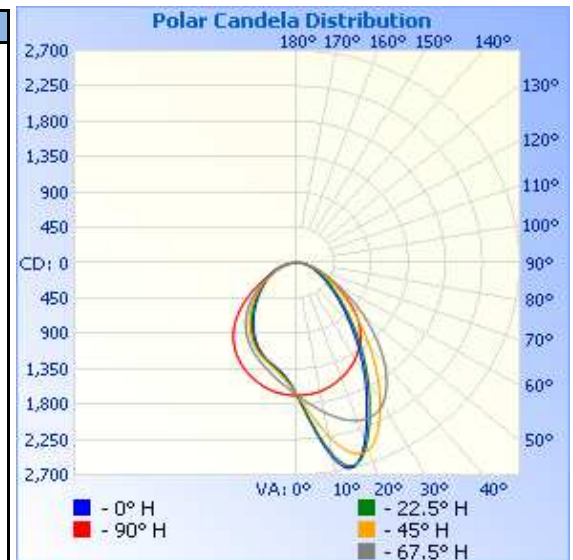
## RESULTS OF TEST

### 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	268.8	31.67	0.981	4105	129.6

### 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	48	47	53	57	56
	80	99	100	116	123	120
	75	155	156	187	197	188
	70	213	218	271	289	268
	65	280	292	372	412	372
	60	362	384	496	581	514
	55	465	500	647	804	690
	50	598	647	838	1071	880
	45	775	839	1075	1362	1055
	40	1005	1083	1363	1648	1200
	35	1299	1385	1682	1897	1318
	30	1643	1723	2014	2078	1414
	25	2008	2091	2332	2155	1495
	20	2410	2465	2536	2136	1561
	15	2683	2669	2496	2052	1617
	10	2519	2471	2241	1934	1658
	5	2064	2048	1932	1805	1681
	0	1686	1686	1686	1686	1686
R O O M  S I D E	5	1469	1485	1510	1579	1681
	10	1366	1374	1399	1485	1658
	15	1303	1311	1326	1401	1617
	20	1234	1246	1263	1325	1561
	25	1145	1163	1190	1249	1495
	30	1040	1063	1101	1167	1414
	35	923	951	1001	1073	1318
	40	805	834	890	966	1200
	45	694	718	771	845	1055
	50	590	607	648	708	880
	55	496	506	531	570	690
	60	416	416	424	439	514
	65	348	338	331	330	372
	70	284	268	250	242	268
	75	217	203	178	172	188
	80	140	135	113	110	120
	85	60	64	53	52	56
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

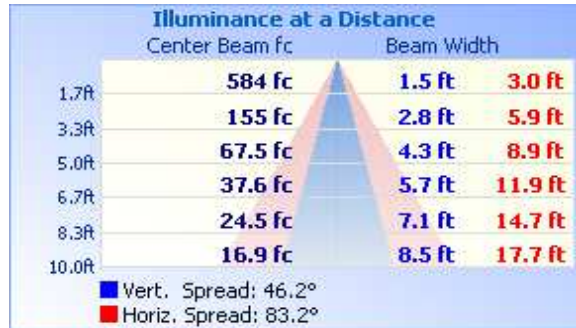


## RESULTS OF TEST (cont'd)

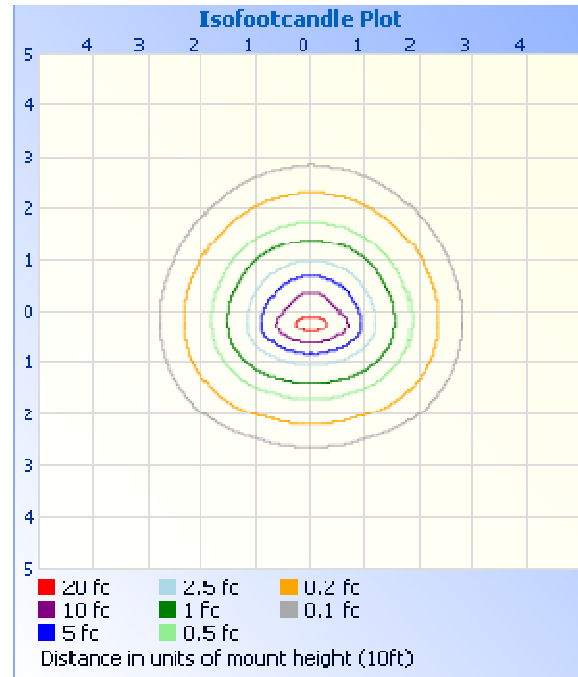
### Illumination Plots

Mounting Height: 10 ft.

#### Illuminance - Cone of Light



#### Isoillumination Plot



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

Zone	Lumens	% Luminaire
0-30	1449	35.3
0-40	2261	55.1
0-60	3506	85.4
60-90	599.5	14.6
0-90	4105	100.0
90-180	0.0	0.0
0-180	4105	100.0

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

Zone	Lumens	% Luminaire
0-10	167.7	4.1
10-20	521.0	12.7
20-30	759.9	18.5
30-40	812.7	19.8
40-50	713.6	17.4
50-60	531.0	12.9
60-70	344.8	8.4
70-80	194.7	4.7
80-90	60.0	1.5

#### Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.30

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