

REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104359650

Date: June 18, 2020

REPORT NO. 104361023LAX-004C

TEST OF ONE LED LUMINAIRE

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

LED MODEL NO. LUMILEDS 2835E 9V

DRIVER MODEL NO. MO - OSRAM OTI30G2 - 613MAMP

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-MO-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 17, 2020

SUMMARY

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

Criteria	Result
Total Lumen Output (Lumens)	2988
Total Power (W)	22.62
Luminaire Efficacy (LPW)	132.1
Power Factor	0.987

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	06/17/20
AC Source	CW1251P	000944	VBU	VBU	06/17/20
Power Analyzer	WT210	000945	10/02/19	10/02/20	06/17/20
Tape Measure	33-428	001491	VBU	VBU	06/17/20
Magnetic Level	581-9	001610	10/11/19	10/11/20	06/17/20
Temp. & RH Meter	Testo 622	001910	04/15/20	04/15/21	06/17/20
Thermometer	DPI8-C24	001782	10/15/19	10/15/20	06/17/20

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.

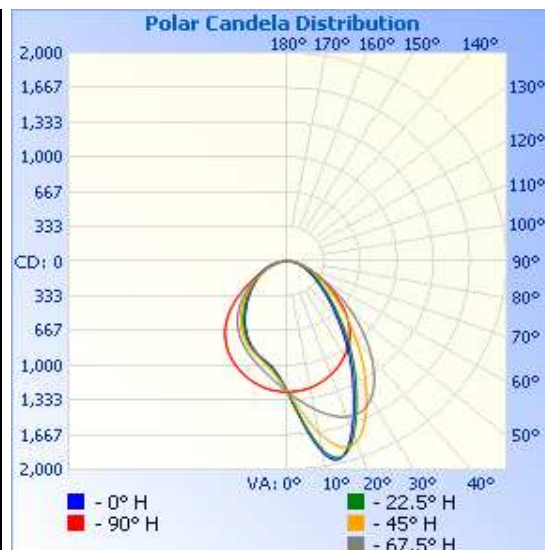
RESULTS OF TEST

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	120.1	190.9	22.62	0.987	2988	132.1

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	32	32	37	40	41
	80	70	70	82	88	87
	75	110	111	133	142	137
	70	152	156	193	208	195
	65	200	208	266	296	272
	60	258	274	354	418	376
	55	331	355	462	579	506
	50	427	461	596	773	646
	45	550	596	768	985	777
	40	713	770	973	1195	886
	35	922	988	1203	1384	974
	30	1171	1232	1442	1525	1047
	25	1432	1495	1677	1593	1108
	20	1725	1770	1844	1589	1158
	15	1944	1942	1842	1532	1201
	10	1864	1831	1672	1443	1232
	5	1542	1530	1443	1346	1249
	0	1254	1254	1254	1254	1254
R O O M S I D E	5	1082	1094	1115	1170	1249
	10	999	1006	1027	1096	1232
	15	951	957	969	1030	1201
	20	901	909	922	972	1158
	25	836	849	869	914	1108
	30	761	776	804	853	1047
	35	676	696	731	784	974
	40	590	610	652	706	886
	45	510	527	565	617	777
	50	434	446	476	519	646
	55	366	373	390	417	506
	60	307	306	312	323	376
	65	256	249	244	242	272
	70	210	198	185	178	195
	75	162	151	132	126	137
	80	106	101	85	81	87
	85	48	49	41	38	41
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

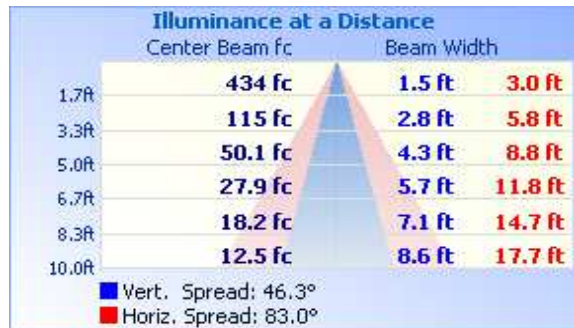


RESULTS OF TEST (cont'd)

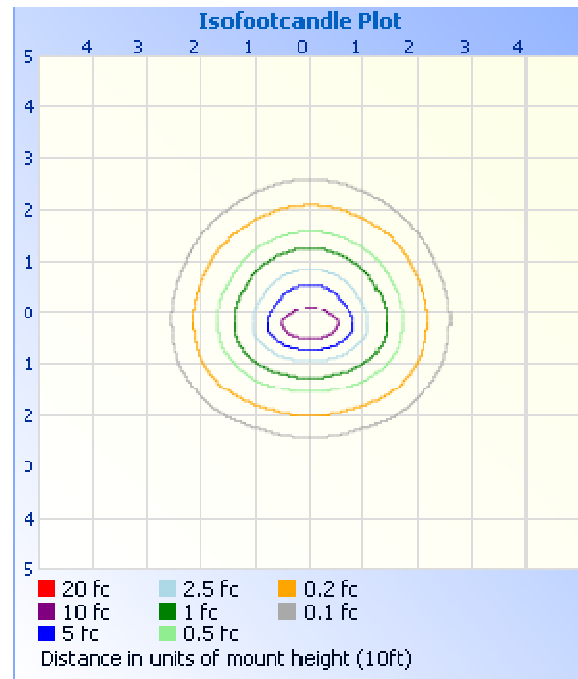
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1060	35.5
0-40	1650	55.2
0-60	2552	85.4
60-90	436.0	14.6
0-90	2988	100.0
90-180	0.0	0.0
0-180	2988	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	124.4	4.2
10-20	382.5	12.8
20-30	552.9	18.5
30-40	589.7	19.7
40-50	517.4	17.3
50-60	385.4	12.9
60-70	250.5	8.4
70-80	141.6	4.7
80-90	43.9	1.5

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.28

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