

REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104464711

Date: September 30, 2020

REPORT NO. 104464711LAX-003

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO2-FLSH-LED35-LO-4-WWG-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 BPRO2-FLSH-LED35-LO-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 LAN2009290928-003.

DATES OF TESTS: September 30, 2020

SUMMARY

Model No.:	BPRO2-FLSH-LED35-LO-4-WWG-DM01
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	1656
Total Power (W)	15.12
Luminaire Efficacy (LPW)	109.5
Power Factor	0.989

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	09/30/20
AC Source	CW1251P	000944	VBU	VBU	09/30/20
Power Analyzer	WT210	000945	09/29/20	09/29/21	09/30/20
Tape Measure	33-428	001491	VBU	VBU	09/30/20
Magnetic Level	581-9	001610	10/11/19	10/11/20	09/30/20
Temp. & RH Meter	Testo 622	001897	04/22/20	04/22/21	09/30/20

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.

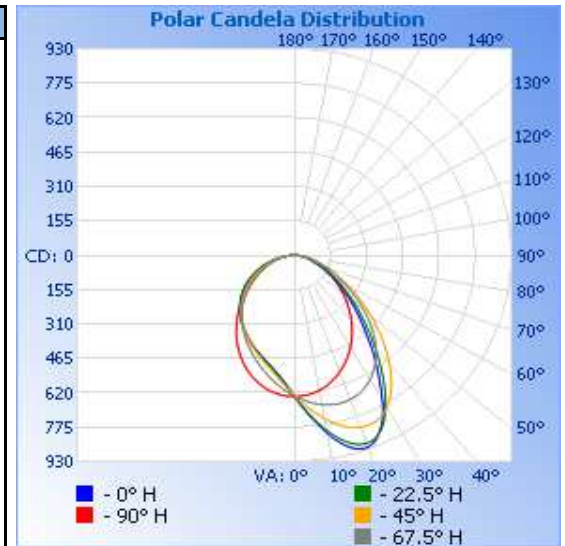
RESULTS OF TEST

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)
LAN2009290928-003	Up	120.0	127.4	15.12	0.989	1656	109.5

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	17	17	21	24	26
	80	38	40	51	56	56
	75	62	67	86	90	85
	70	93	100	132	130	115
	65	132	143	189	180	147
	60	181	197	259	241	184
	55	241	261	340	314	226
	50	311	337	432	393	275
	45	394	427	532	473	328
	40	495	535	633	544	381
	35	618	660	725	604	432
	30	756	783	793	649	481
	25	870	874	826	678	525
	20	920	903	825	693	563
	15	893	871	796	694	595
	10	814	801	747	683	618
	5	722	716	689	662	632
	0	634	634	634	634	634
R O O M S I D E	5	565	570	578	601	632
	10	519	523	534	566	618
	15	487	491	499	529	595
	20	462	464	469	494	563
	25	436	438	441	458	525
	30	410	411	412	423	481
	35	385	384	382	387	432
	40	358	356	352	350	381
	45	329	326	318	311	328
	50	297	294	282	269	275
	55	262	259	244	225	226
	60	225	221	204	183	184
	65	186	182	164	145	147
	70	144	143	126	111	115
	75	102	102	89	81	85
	80	60	62	56	52	56
	85	24	26	25	24	26
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

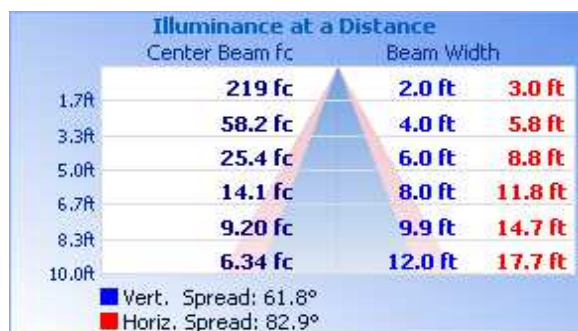


RESULTS OF TEST (cont'd)

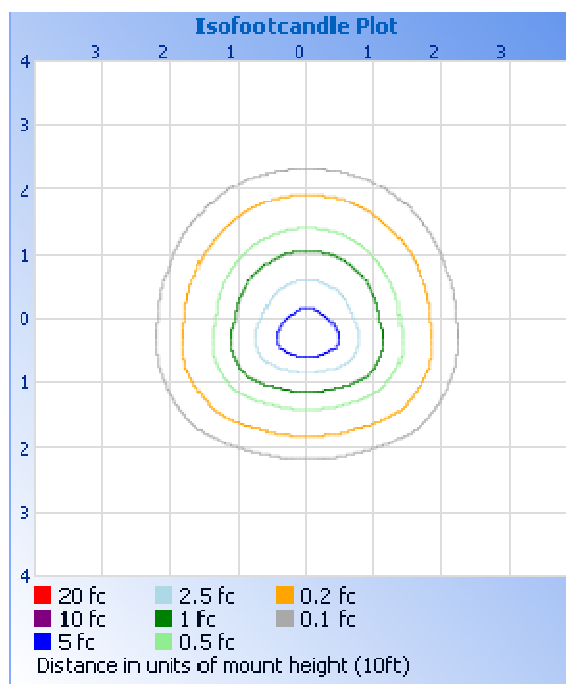
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	523.9	31.6
0-40	841.9	50.8
0-60	1376	83.1
60-90	279.6	16.9
0-90	1656	100.0
90-180	0.0	0.0
0-180	1656	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	60.9	3.7
10-20	182.4	11.0
20-30	280.6	16.9
30-40	318.0	19.2
40-50	296.6	17.9
50-60	237.6	14.3
60-70	162.9	9.8
70-80	90.7	5.5
80-90	26.1	1.6

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.46
Spacing Criterion (90-270)	1.16
Spacing Criterion (Diagonal)	1.40

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:

Handwritten signature of Kellen Murakami.

Kellen Murakami
Technician
Lighting Division

Attachment: None

Report Reviewed By:

Handwritten signature of Vladimir Kozak.

Vladimir Kozak
Engineering Supervisor
Lighting Division