

REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104484038

Date: October 21, 2020

REPORT NO. 104484038LAX-003

TEST OF ONE LED LUMINAIRE

MODEL NO. BPRO2-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 BPRO2-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 LAN2009290928-003.

DATES OF TESTS: October 21, 2020

SUMMARY

Model No.:	BPRO2-FLSH-LED35-MO-4-MGZ-DM01
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	2525
Total Power (W)	22.22
Luminaire Efficacy (LPW)	113.6
Power Factor	0.983

EQUIPMENT LIST

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

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.

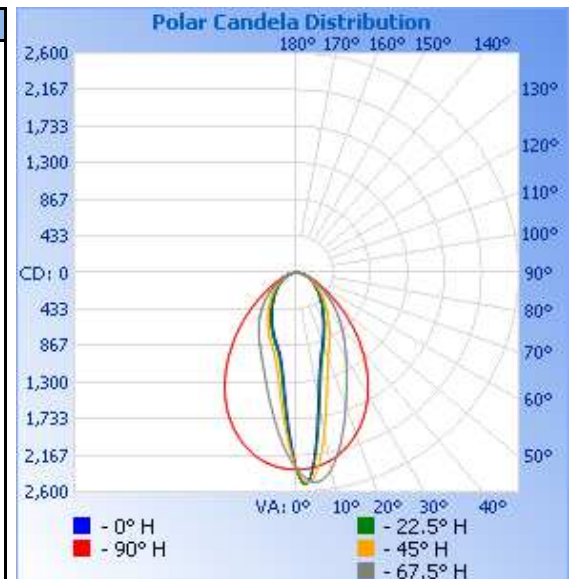
RESULTS OF TEST

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	188.2	22.22	0.983	2525	113.6

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	25	24	27	31	34
	80	54	54	59	68	75
	75	88	88	95	110	120
	70	126	126	136	160	175
	65	169	169	184	225	251
	60	215	216	238	309	364
	55	265	268	298	412	521
	50	321	326	367	534	723
	45	382	390	446	668	955
	40	451	464	537	814	1199
	35	531	550	644	976	1442
	30	628	652	766	1162	1670
	25	747	778	910	1392	1871
	20	892	926	1088	1688	2037
	15	1084	1133	1387	2039	2170
	10	1490	1571	1890	2362	2264
	5	2275	2301	2426	2491	2317
	0	2326	2326	2326	2326	2326
R O O M S I D E	5	1496	1581	1721	2000	2317
	10	1044	1093	1247	1652	2264
	15	882	909	1000	1361	2170
	20	774	800	873	1151	2037
	25	668	695	770	998	1871
	30	573	597	669	877	1670
	35	489	511	574	766	1442
	40	416	434	490	658	1199
	45	351	367	413	554	955
	50	293	306	343	454	723
	55	242	251	279	358	521
	60	196	201	222	275	364
	65	154	157	171	204	251
	70	116	118	126	148	175
	75	79	82	87	102	120
	80	45	48	53	64	75
	85	17	19	22	28	34
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

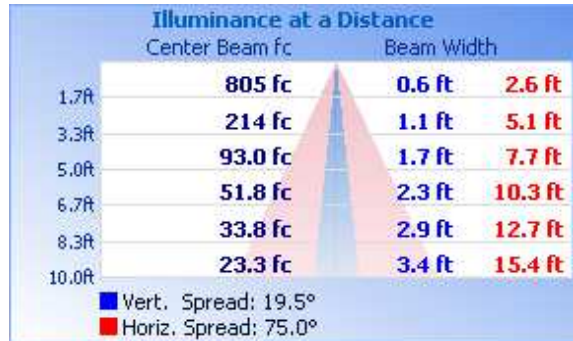


RESULTS OF TEST (cont'd)

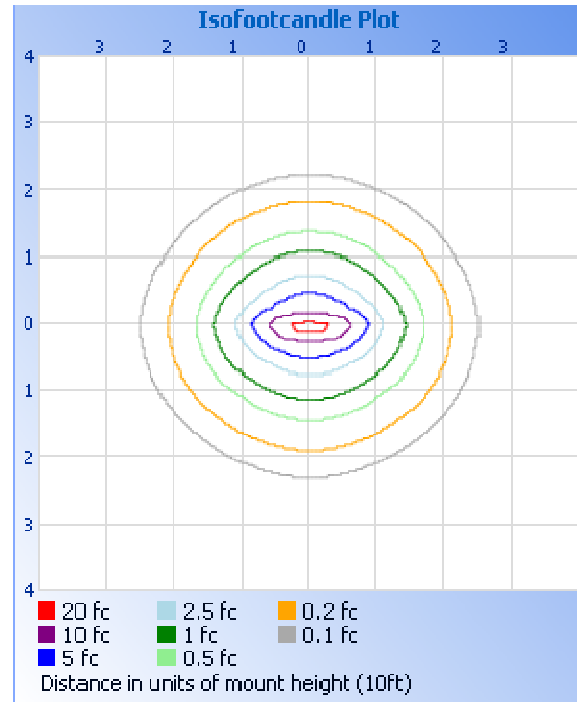
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1038	41.1
0-40	1505	59.6
0-60	2204	87.3
60-90	321.4	12.7
0-90	2525	100.0
90-180	0.0	0.0
0-180	2525	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	185.1	7.3
10-20	386.3	15.3
20-30	466.9	18.5
30-40	466.9	18.5
40-50	401.6	15.9
50-60	296.8	11.8
60-70	190.1	7.5
70-80	102.2	4.0
80-90	29.1	1.2

Spacing Criterion at 25°C

Spacing Criterion (0-180)	0.46
Spacing Criterion (90-270)	1.10
Spacing Criterion (Diagonal)	0.70

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