

REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104516183

Date: November 25, 2020

REPORT NO. 104516183LAX-006E

TEST OF ONE DIRECT LED LUMINAIRE

MODEL NO. BPRO5-LIN-LVR-LED35-SO-WWG
LED MODEL NO. LUMILEDS 2835
DRIVER MODEL NO. OSRAM OTI 50W G2

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-01120100-0.

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 BPRO5-LIN-LVR-LED35-SO-WWG. The sample was received by Intertek on November 20, 2020, in undamaged condition and one sample was tested as received. The sample designation was LAN2011200828-004.

DATES OF TESTS: November 25, 2020

SUMMARY

Model No.:	BPRO5-LIN-LVR-LED35-SO-WWG
Description:	Direct LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	1836
Total Power (W)	32.69
Luminaire Efficacy (LPW)	56.16
Power Factor	0.990

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	11/25/20
AC Source	CW1251P	000944	VBU	VBU	11/25/20
Power Analyzer	WT210	000945	09/29/20	09/29/21	11/25/20
Tape Measure	33-428	001491	VBU	VBU	11/25/20
Magnetic Level	581-9	001610	10/21/20	10/21/21	11/25/20
Thermometer	DPI8-C24	001782	10/09/20	10/09/21	11/25/20
Temp. & RH Meter	971	002137	10/13/20	10/13/21	11/25/20

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.

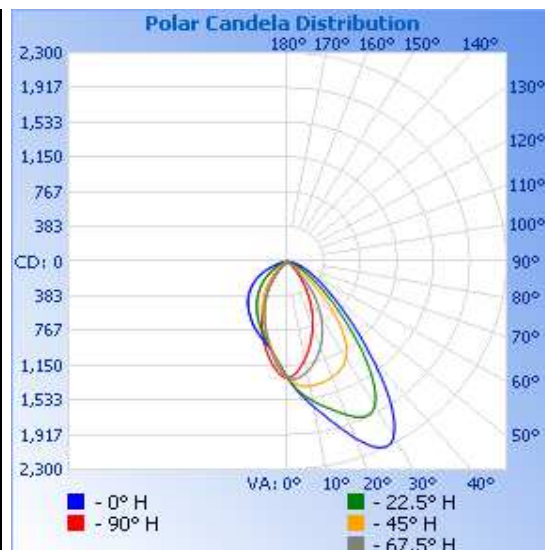
RESULTS OF TEST

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)
LAN2011200828-004	Up	120.0	275.2	32.69	0.990	1836	56.16

Intensity (Candlepower) Summary at 25°C - Candelas

	Angle	0	22.5	45	67.5	90
	0	0	0	0	0	0
W A L L S I D E	90	0	0	0	0	0
	85	1	1	1	1	1
	80	24	3	3	2	2
	75	70	8	6	5	4
	70	132	20	10	8	6
	65	215	66	17	13	10
	60	317	152	27	19	14
	55	456	276	56	28	20
	50	649	459	208	39	28
	45	948	733	474	122	47
	40	1368	1116	785	328	152
	35	1879	1545	1058	526	297
	30	2233	1837	1233	706	450
	25	2270	1895	1319	868	611
	20	2076	1803	1364	1012	775
	15	1837	1681	1391	1134	936
	10	1638	1568	1398	1232	1088
	5	1462	1444	1371	1295	1220
	0	1285	1285	1285	1285	1285
R O O M S I D E	5	1112	1122	1129	1165	1220
	10	996	985	967	998	1088
	15	920	884	830	838	936
	20	864	799	715	689	775
	25	810	719	609	553	611
	30	754	638	505	425	450
	35	697	556	402	300	297
	40	643	476	299	180	152
	45	584	395	197	70	47
	50	516	311	99	26	28
	55	441	226	30	19	20
	60	359	140	17	13	14
	65	264	62	11	9	10
	70	158	16	7	6	6
	75	70	6	4	3	4
	80	15	2	2	2	2
	85	1	1	1	1	1
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

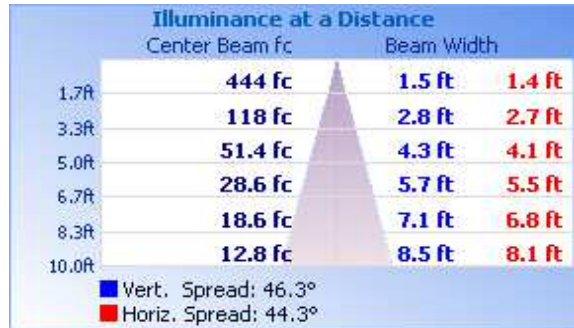


RESULTS OF TEST (cont'd)

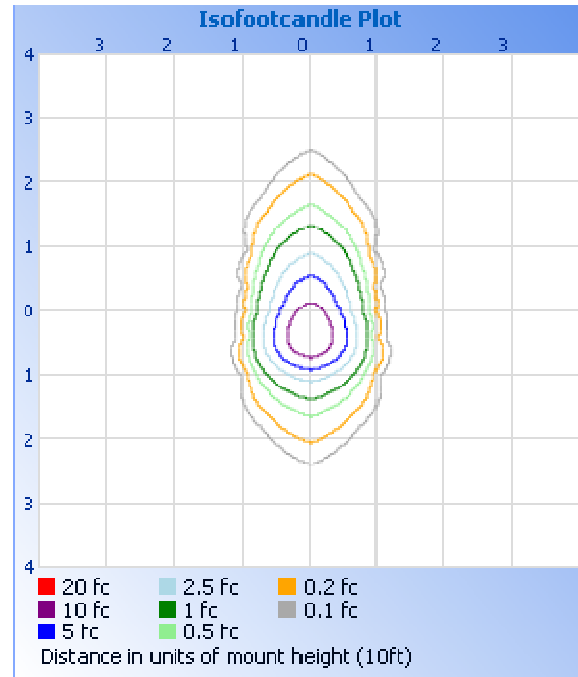
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	901.7	49.1
0-40	1362	74.2
0-60	1766	96.2
60-90	70.4	3.8
0-90	1836	100.0
90-180	0.0	0.0
0-180	1836	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	117.7	6.4
10-20	319.9	17.4
20-30	464.0	25.3
30-40	459.9	25.0
40-50	276.2	15.0
50-60	127.9	7.0
60-70	54.4	3.0
70-80	14.8	0.8
80-90	1.3	0.1

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.66
Spacing Criterion (90-270)	0.74
Spacing Criterion (Diagonal)	1.10

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