

REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104516183

Date: November 23, 2020

REPORT NO. 104516183LAX-003A

TEST OF ONE DIRECT LED LUMINAIRE

MODEL NO. BPRO2-LIN-LVR-LED35-SO-SAL
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 BPRO2-LIN-LVR-LED35-SO-SAL. The sample was received by Intertek on November 20, 2020, in undamaged condition and one sample was tested as received. The sample designation was LAN2011200828-001 .

DATES OF TESTS: November 23, 2020

SUMMARY

Model No.:	BPRO2-LIN-LVR-LED35-SO-SAL
Description:	Direct LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	944.0
Total Power (W)	32.66
Luminaire Efficacy (LPW)	28.90
Power Factor	0.991

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	11/23/20
AC Source	CW1251P	000944	VBU	VBU	11/23/20
Power Analyzer	WT210	000945	09/29/20	09/29/21	11/23/20
Tape Measure	33-428	001491	VBU	VBU	11/23/20
Magnetic Level	581-9	001610	10/21/20	10/21/21	11/23/20
Thermometer	DPI8-C24	001782	10/09/20	10/09/21	11/23/20
Temp. & RH Meter	971	002137	10/13/20	10/13/21	11/23/20

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.

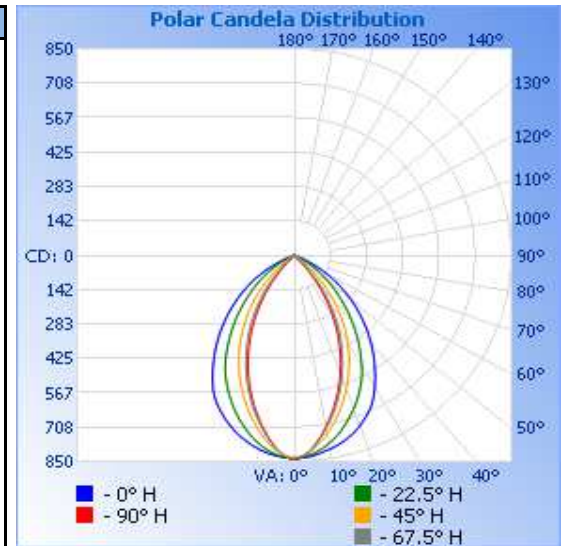
RESULTS OF TEST

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)
LAN2011200828-001	Up	120.0	274.5	32.66	0.991	944.0	28.90

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	0	0	0	0	0
	80	0	0	1	1	1
	75	1	1	2	2	2
	70	2	3	3	3	3
	65	53	16	6	5	5
	60	132	56	10	8	8
	55	213	114	18	13	12
	50	298	185	63	18	17
	45	380	263	143	48	29
	40	466	348	233	140	105
	35	548	438	328	240	210
	30	630	529	419	342	316
	25	700	609	507	443	422
	20	748	677	592	542	525
	15	785	737	673	636	624
	10	810	786	745	722	717
	5	829	821	805	799	800
	0	836	836	836	836	836
R O O M S I D E	5	829	824	808	800	800
	10	810	789	746	723	717
	15	780	739	674	636	624
	20	742	680	596	543	525
	25	696	614	512	446	422
	30	636	541	425	346	316
	35	554	454	337	246	210
	40	471	366	247	147	105
	45	387	281	159	56	29
	50	304	202	79	18	17
	55	222	131	23	13	12
	60	143	71	11	9	8
	65	63	25	7	6	5
	70	2	4	4	4	3
	75	1	1	2	2	2
	80	0	0	1	1	1
	85	0	0	0	0	0
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

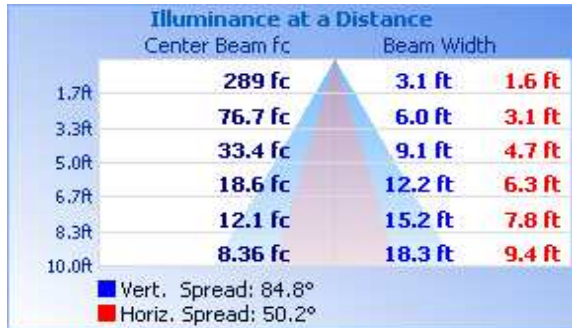


RESULTS OF TEST (cont'd)

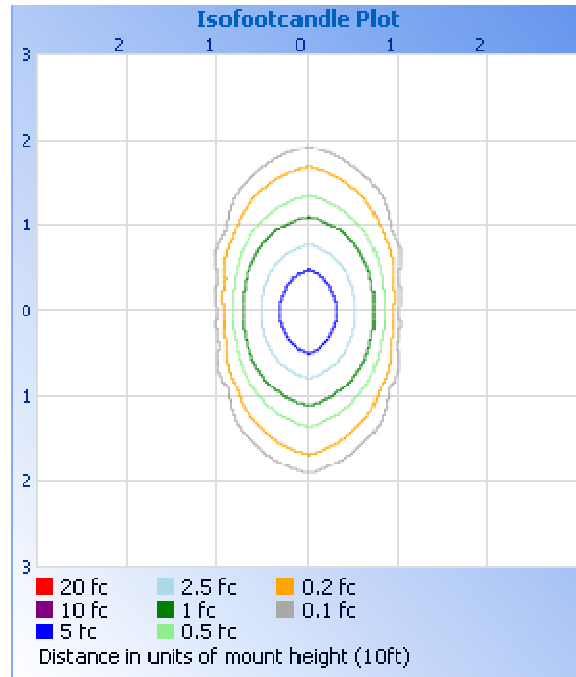
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	510.8	54.1
0-40	728.6	77.2
0-60	924.7	98.0
60-90	19.3	2.0
0-90	944.0	100.0
90-180	0.0	0.0
0-180	944.0	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	75.5	8.0
10-20	192.3	20.4
20-30	242.9	25.7
30-40	217.8	23.1
40-50	134.0	14.2
50-60	62.2	6.6
60-70	17.2	1.8
70-80	1.8	0.2
80-90	0.3	0.0

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.14
Spacing Criterion (90-270)	0.76
Spacing Criterion (Diagonal)	0.94

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