

REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104516183

Date: November 25, 2020

REPORT NO. 104516183LAX-006A

TEST OF ONE DIRECT LED LUMINAIRE

MODEL NO. BPRO5-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 BPRO5-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 LAN2011200828-004.

DATES OF TESTS: November 25, 2020

SUMMARY

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

Criteria	Result
Total Lumen Output (Lumens)	1618
Total Power (W)	32.71
Luminaire Efficacy (LPW)	49.46
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.

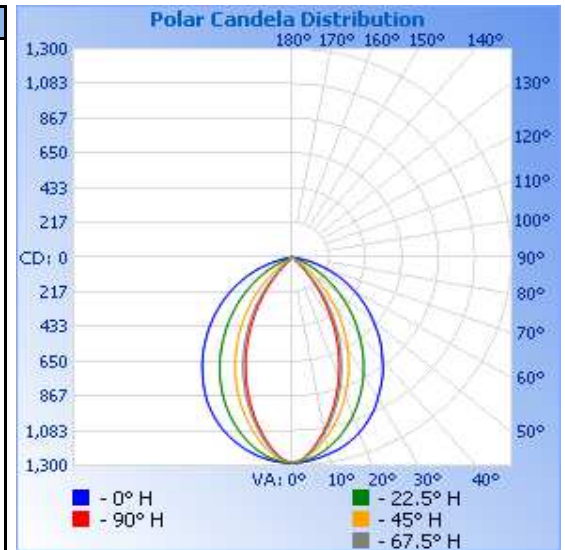
RESULTS OF TEST

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	275.4	32.71	0.990	1618	49.46

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	1	1	1	1	1
	80	33	3	2	2	2
	75	124	8	5	4	4
	70	223	20	8	6	6
	65	327	76	14	10	9
	60	429	170	21	15	14
	55	532	272	37	22	19
	50	631	381	124	30	27
	45	736	496	251	85	49
	40	832	612	385	224	166
	35	930	730	521	377	324
	30	1016	845	656	531	486
	25	1098	952	789	684	646
	20	1164	1052	918	835	804
	15	1213	1138	1038	978	954
	10	1246	1209	1145	1110	1095
	5	1272	1260	1235	1224	1218
	0	1280	1280	1280	1280	1280
R O O M S I D E	5	1276	1266	1242	1227	1218
	10	1252	1219	1154	1112	1095
	15	1214	1149	1047	980	954
	20	1163	1065	929	839	804
	25	1099	968	802	689	646
	30	1019	860	667	536	486
	35	927	744	532	380	324
	40	830	626	395	228	166
	45	727	509	261	89	49
	50	626	394	132	31	27
	55	524	284	43	22	19
	60	421	180	22	15	14
	65	318	84	14	10	9
	70	216	25	8	6	6
	75	116	9	5	4	4
	80	28	3	2	2	2
	85	1	1	1	1	1
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

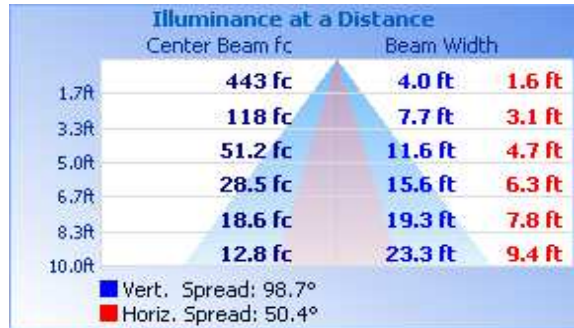


RESULTS OF TEST (cont'd)

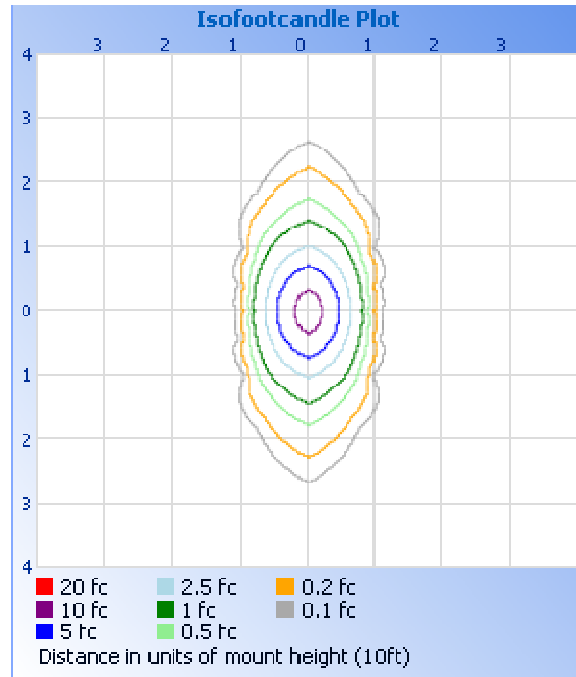
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	792.5	49.0
0-40	1145	70.8
0-60	1526	94.4
60-90	91.0	5.6
0-90	1618	100.0
90-180	0.0	0.0
0-180	1618	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	116.0	7.2
10-20	297.2	18.4
20-30	379.2	23.4
30-40	352.7	21.8
40-50	241.6	14.9
50-60	139.7	8.6
60-70	68.3	4.2
70-80	21.3	1.3
80-90	1.5	0.1

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	0.76
Spacing Criterion (Diagonal)	0.96

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