

REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104516183

Date: November 25, 2020

REPORT NO. 104516183LAX-006C

TEST OF ONE DIRECT LED LUMINAIRE

MODEL NO. BPRO5-LIN-LVR-LED35-SO-BTW
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-BTW. 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-BTW
Description:	Direct LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	1746
Total Power (W)	32.72
Luminaire Efficacy (LPW)	53.36
Power Factor	0.989

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBV	VBV	11/25/20
AC Source	CW1251P	000944	VBV	VBV	11/25/20
Power Analyzer	WT210	000945	09/29/20	09/29/21	11/25/20
Tape Measure	33-428	001491	VBV	VBV	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.

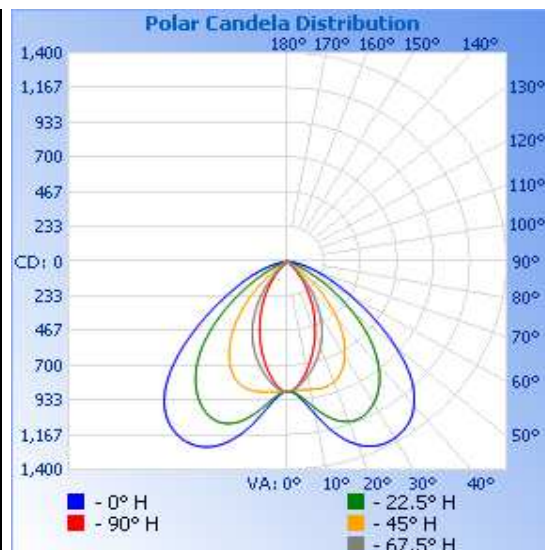
RESULTS OF TEST

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	32.72	0.989	1746	53.36

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	34	4	2	2	2
	75	107	9	5	4	4
	70	199	24	10	7	6
	65	318	87	16	10	9
	60	476	210	25	16	13
	55	685	377	49	22	18
	50	913	567	172	30	25
	45	1122	752	335	78	39
	40	1259	904	488	190	109
	35	1340	1023	624	307	202
	30	1373	1104	734	418	303
	25	1366	1148	816	522	408
	20	1312	1147	865	616	518
	15	1200	1093	881	700	630
	10	1050	1000	875	775	736
	5	920	909	870	841	830
	0	876	876	876	876	876
R O O M S I D E	5	934	919	881	848	830
	10	1071	1014	891	784	736
	15	1216	1109	898	709	630
	20	1320	1160	882	626	518
	25	1369	1158	830	530	408
	30	1368	1109	743	424	303
	35	1322	1020	628	309	202
	40	1225	897	488	190	109
	45	1063	735	331	76	39
	50	844	545	166	30	25
	55	617	353	44	22	18
	60	427	193	24	15	13
	65	287	77	15	10	9
	70	179	20	9	6	6
	75	93	8	5	4	4
	80	24	3	2	2	2
	85	1	1	1	1	1
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

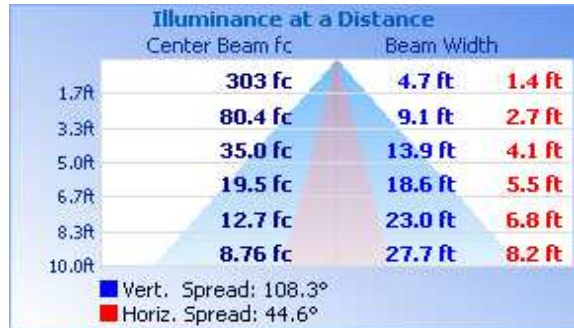


RESULTS OF TEST (cont'd)

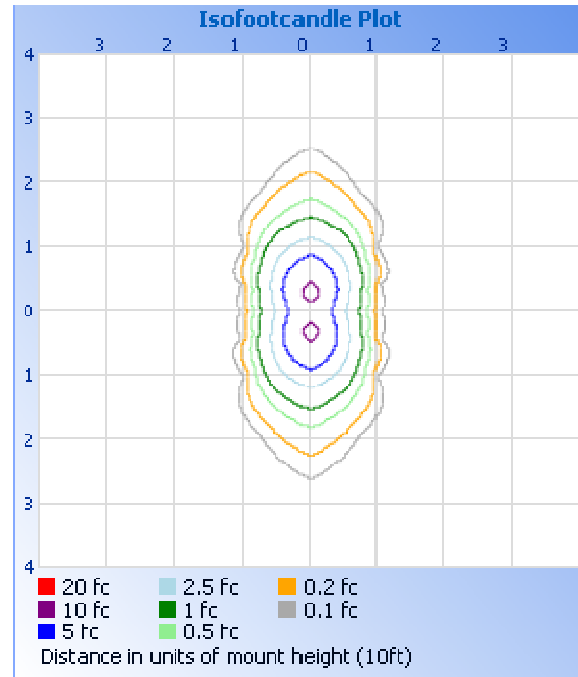
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	727.6	41.7
0-40	1150	65.9
0-60	1657	94.9
60-90	88.7	5.1
0-90	1746	100.0
90-180	0.0	0.0
0-180	1746	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	84.3	4.8
10-20	255.0	14.6
20-30	388.3	22.2
30-40	422.5	24.2
40-50	330.8	18.9
50-60	176.5	10.1
60-70	68.3	3.9
70-80	18.9	1.1
80-90	1.5	0.1

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.92
Spacing Criterion (90-270)	0.72
Spacing Criterion (Diagonal)	1.20

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