

REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104516183

Date: November 23, 2020

REPORT NO. 104516183LAX-003B

TEST OF ONE DIRECT LED LUMINAIRE

MODEL NO. BPRO2-LIN-REG.5-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-REG.5-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-REG.5-LED35-SO-SAL
Description:	Direct LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	2610
Total Power (W)	32.74
Luminaire Efficacy (LPW)	79.72
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.

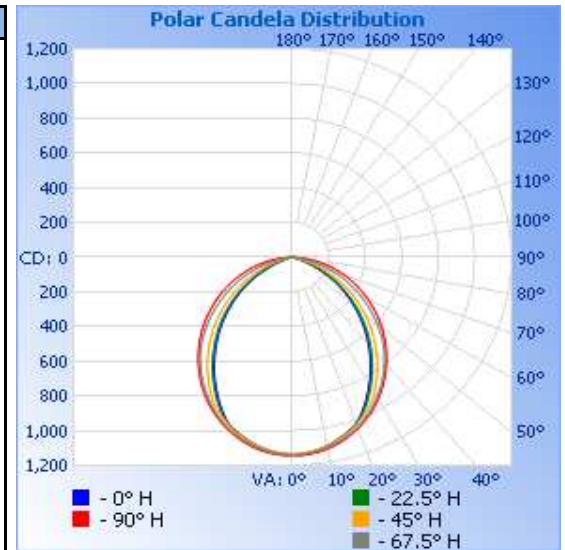
RESULTS OF TEST

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	275.2	32.74	0.991	2610	79.72

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	11	11	11	10	59
	80	21	20	19	57	138
	75	28	27	55	143	222
	70	64	83	141	234	306
	65	152	173	234	327	390
	60	247	269	330	422	475
	55	346	367	428	517	559
	50	446	467	525	612	643
	45	547	566	622	705	723
	40	647	666	717	786	801
	35	747	764	810	860	874
	30	843	859	898	928	942
	25	937	949	970	989	1000
	20	1019	1021	1025	1040	1050
	15	1066	1068	1070	1082	1091
	10	1102	1103	1103	1113	1121
	5	1128	1128	1124	1132	1138
	0	1136	1136	1136	1136	1136
R O O M S I D E	5	1128	1128	1124	1132	1138
	10	1102	1103	1103	1113	1121
	15	1066	1068	1070	1082	1091
	20	1019	1021	1025	1040	1050
	25	937	949	970	989	1000
	30	843	859	898	928	942
	35	747	764	810	860	874
	40	647	666	717	786	801
	45	547	566	622	705	723
	50	446	467	525	612	643
	55	346	367	428	517	559
	60	247	269	330	422	475
	65	152	173	234	327	390
	70	64	83	141	234	306
	75	28	27	55	143	222
	80	21	20	19	57	138
	85	11	11	11	10	59
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

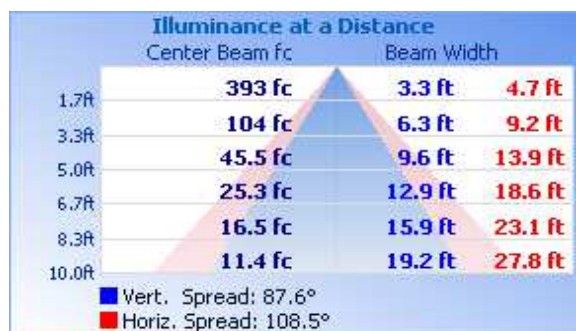


RESULTS OF TEST (cont'd)

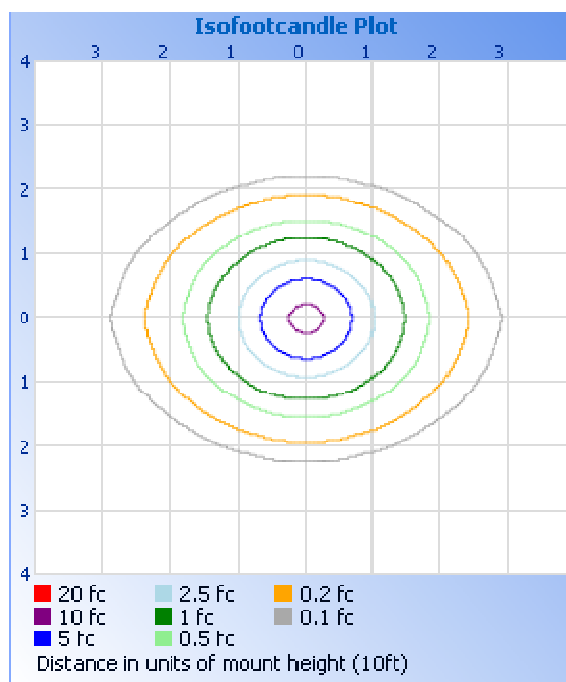
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	855.5	32.8
0-40	1362	52.2
0-60	2244	86.0
60-90	366.0	14.0
0-90	2610	100.0
90-180	0.0	0.0
0-180	2610	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	107.1	4.1
10-20	302.9	11.6
20-30	445.6	17.1
30-40	506.9	19.4
40-50	487.0	18.7
50-60	394.1	15.1
60-70	248.9	9.5
70-80	97.1	3.7
80-90	20.0	0.8

Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.14
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.28

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