

## REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104516183

Date: November 25, 2020

REPORT NO. 104516183LAX-006B

TEST OF ONE DIRECT LED LUMINAIRE

MODEL NO. BPRO5-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 BPRO5-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 LAN2011200828-004.

**DATES OF TESTS:** November 25, 2020

## SUMMARY

Model No.:	BPRO5-LIN-REG.5-LED35-SO-SAL
Description:	Direct LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	3784
Total Power (W)	32.78
Luminaire Efficacy (LPW)	115.4
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.

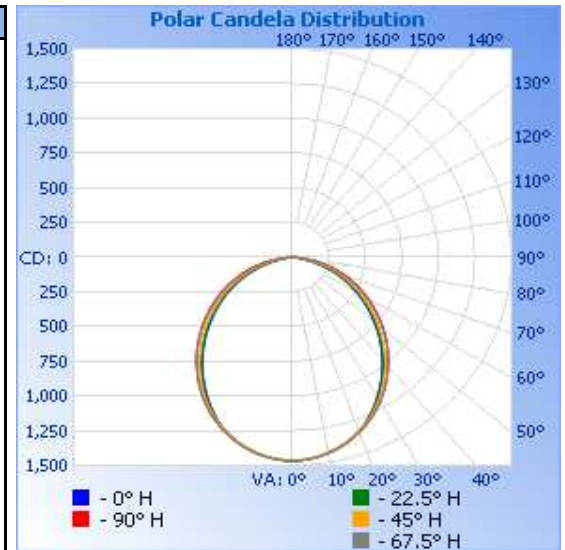
## RESULTS OF TEST

### 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	275.6	32.78	0.989	3784	115.4

### 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	12	12	16	43	74
	80	65	74	104	147	176
	75	171	183	215	256	282
	70	284	296	327	364	388
	65	398	408	438	474	496
	60	511	520	550	585	603
	55	623	633	661	697	711
	50	735	746	773	809	818
	45	849	858	884	917	923
	40	958	967	990	1018	1021
	35	1064	1071	1090	1112	1116
	30	1163	1169	1184	1200	1202
	25	1255	1259	1265	1277	1278
	20	1333	1333	1332	1342	1342
	15	1388	1388	1387	1395	1395
	10	1428	1428	1426	1434	1433
	5	1455	1455	1451	1457	1455
	0	1464	1464	1464	1464	1464
R O O M  S I D E	5	1455	1455	1451	1457	1455
	10	1428	1428	1426	1434	1433
	15	1388	1388	1387	1395	1395
	20	1333	1333	1332	1342	1342
	25	1255	1259	1265	1277	1278
	30	1163	1169	1184	1200	1202
	35	1064	1071	1090	1112	1116
	40	958	967	990	1018	1021
	45	849	858	884	917	923
	50	735	746	773	809	818
	55	623	633	661	697	711
	60	511	520	550	585	603
	65	398	408	438	474	496
	70	284	296	327	364	388
	75	171	183	215	256	282
	80	65	74	104	147	176
	85	12	12	16	43	74
	90	0	0	0	0	0
	Angle	180	202.5	225	247.5	270

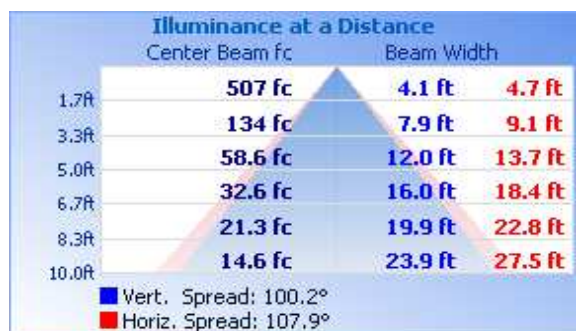


## RESULTS OF TEST (cont'd)

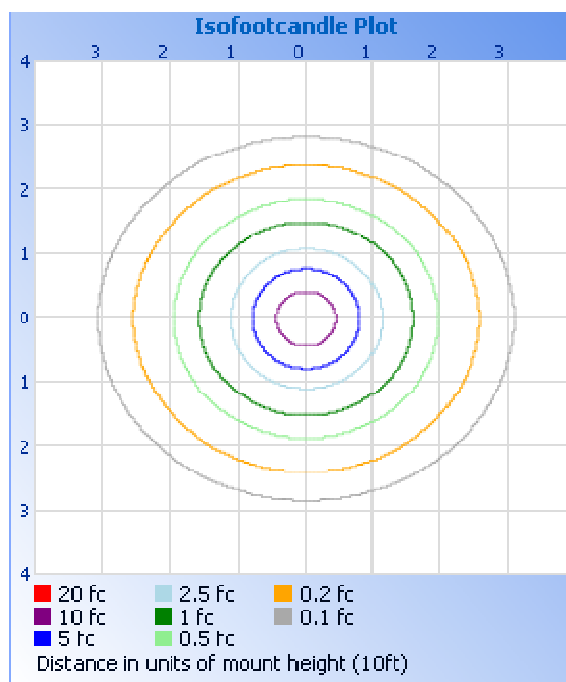
### Illumination Plots

Mounting Height: 10 ft.

#### Illuminance - Cone of Light



#### Isoillumination Plot



#### Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1113	29.4
0-40	1795	47.4
0-60	3073	81.2
60-90	711.2	18.8
0-90	3784	100.0
90-180	0.0	0.0
0-180	3784	100.0

#### Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	138.0	3.6
10-20	391.9	10.4
20-30	583.1	15.4
30-40	682.2	18.0
40-50	683.2	18.1
50-60	594.2	15.7
60-70	437.1	11.6
70-80	232.2	6.1
80-90	41.8	1.1

#### Spacing Criterion at 25°C

Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.32

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