

# REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G104503052

Date: November 6, 2020

REPORT NO. 104503052LAX-004

TEST OF ONE INDIRECT LED LUMINAIRE

MODEL NO. BPRO5-LED35-SO-NW-SYM-ADC

LED MODEL NO. LUMILEDS 2835

DRIVER MODEL NO. OSRAM OTI 50/120-277/1A4 DIM-1 L G2 - 868MA

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-LED35-SO-NW-SYM-ADC. The sample was received by Intertek on October 15, 2020, in undamaged condition and one sample was tested as received. The sample designation was LAN2010151201-005.

**DATES OF TESTS:** November 6, 2020

## SUMMARY

Model No.:	BPRO5-LED35-SO-NW-SYM-ADC
Description:	Indirect LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	4618
Total Power (W)	32.79
Luminaire Efficacy (LPW)	140.8
Power Factor	0.981

## EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	11/06/20
AC Source	CW1251P	000944	VBU	VBU	11/06/20
Power Analyzer	WT210	000945	09/29/20	09/29/21	11/06/20
Tape Measure	33-428	001491	VBU	VBU	11/06/20
Magnetic Level	581-9	001610	10/21/20	10/21/21	11/06/20
Temp. & RH Meter	971	002137	10/13/20	10/13/21	11/06/20
Thermometer	DPI8-C24	001782	10/09/20	10/09/21	11/06/20

## 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.

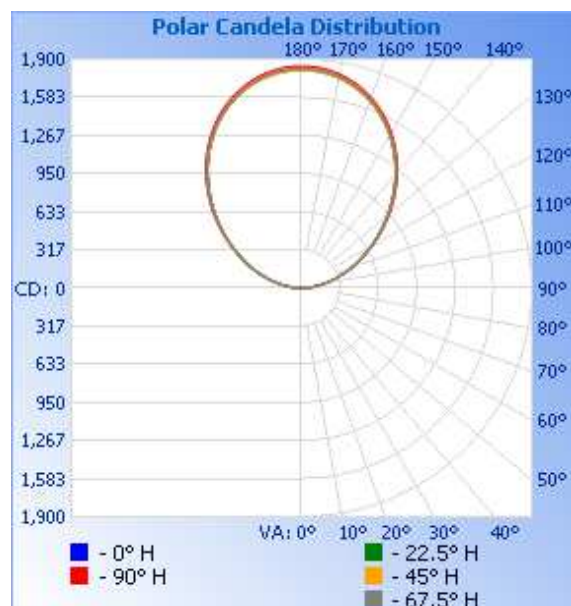
## RESULTS OF TEST

### 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)
LAN2010151201-005	Down	120.0	278.6	32.79	0.981	4618	140.8

### Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	0	0	0	0	0
5	0	0	0	0	0
10	0	0	0	0	0
15	0	0	0	0	0
20	0	0	0	0	0
25	0	0	0	0	0
30	0	0	0	0	0
35	0	0	0	0	0
40	0	0	0	0	0
45	0	0	0	0	0
50	0	0	0	0	0
55	0	0	0	0	0
60	0	0	0	0	0
65	0	0	0	0	0
70	0	0	0	0	0
75	0	0	0	0	0
80	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0
95	74	75	74	73	74
100	162	163	165	164	165
105	274	270	270	266	269
110	392	386	381	381	386
115	510	505	506	507	514
120	636	637	639	642	650
125	775	777	779	783	793
130	918	919	921	928	938
135	1061	1063	1064	1074	1084
140	1203	1205	1204	1216	1227
145	1336	1338	1337	1349	1361
150	1458	1459	1458	1470	1484
155	1565	1567	1564	1576	1592
160	1654	1656	1652	1664	1682
165	1723	1725	1720	1734	1752
170	1774	1774	1769	1784	1803
175	1803	1805	1799	1813	1834
180	1819	1819	1819	1819	1819

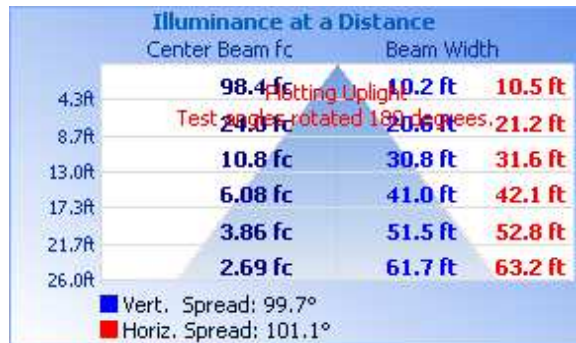


RESULTS OF TEST (cont'd)

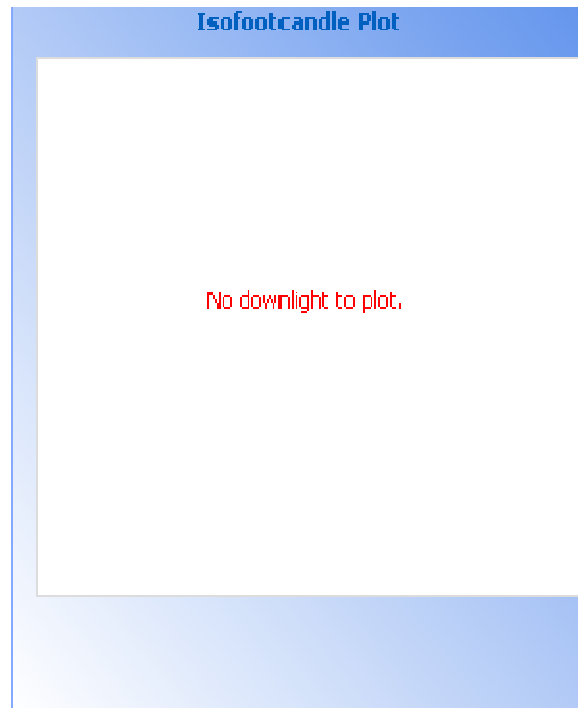
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	0.0	0.0
0-40	0.0	0.0
0-60	0.0	0.0
60-90	0.0	0.0
0-90	0.0	0.0
90-180	4618	100.0
0-180	4618	100.0

Spacing Criterion at 25°C

Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	0.0	0.0
10-20	0.0	0.0
20-30	0.0	0.0
30-40	0.0	0.0
40-50	0.0	0.0
50-60	0.0	0.0
60-70	0.0	0.0
70-80	0.0	0.0
80-90	0.0	0.0
90-100	83.5	1.8
100-110	285.4	6.2
110-120	503.6	10.9
120-130	698.0	15.1
130-140	824.6	17.9
140-150	839.9	18.2
150-160	723.7	15.7
160-170	487.9	10.6
170-180	171.9	3.7

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