PRUDENTIAL LIGHTING

TEST REPORT

SCOPE OF WORK
LED Performance Testing

MODEL NUMBER
BPRO-1R-LED35-90-NRW

PROJECT NUMBER
G104819833

REPORT NUMBER
104819833LAX-001

ISSUE DATE **REVISED DATE**
September 20, 2021 None

TEST DATES
September 20, 2021 through September 20, 2021.

DOCUMENT CONTROL NUMBER
RTTDS-R-AMER-Test-3407

PAGES
7

REPORT NUMBER
104819833LAX-001

MODEL NUMBER(s)
BPRO-1R-LED35-90-NRW

REPORT 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.

AUTHORIZATION

The testing performed was authorized by signed quote number Qu-01120100-3.

TEST STANDARDS

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting

In Charge of Testing:

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Reviewer:

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SAMPLE INFORMATION

REPORT NO. 104819833LAX-001

ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Type	Received
1	LAN2109131331-002 (Array #1)	BPRO-1R-LED35-90-NRW	downlight	Prototype	09/13/21

TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	BPRO-1R-LED35-90-NRW	1

SAMPLE PHOTOS - TESTED CONFIGURATIONS

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SUMMARY **REPORT NO. 104819833LAX-001**

PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	BPRO-1R-LED35-90-NRW
Product Description:	downlight
LED Model No.:	Cree XHP35B
Driver Model No.:	Osram Oti 30W G2
Light Source:	LED

Criteria	Results
Light Output (lumens)	444.8
Input Power (W) @ 120 (Vac)	9.00
Lumen Efficacy (lm/W)	49.4
Input Power Factor () @ 120 (Vac)	0.979

TEST METHODS

SEASONING IN SAMPLE ORIENTATION - LED PRODUCTS

No seasoning was performed in accordance with IESNA LM-79.

TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

A Type C Mirror Goniophotometer system was used to measure the luminous intensity (candela) at each angle of distribution for the EUT. Electrical measurements of the unit were measured using a power analyzer. Each EUT was operated at the rated input voltage of the system in its designated orientation. The ambient temperature was measured at a position near the EUT at equal height and stabilization procedures to LM-79 were followed.

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TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

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Test Configuration	Tested Model No.	Pass/Fail/NA
1	BPRO-1R-LED35-90-NRW	NA

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS (25°C +/- 1°C)

Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()	Input ATHD(%)
Up	120.00	76.6	9.00	0.979	8.5

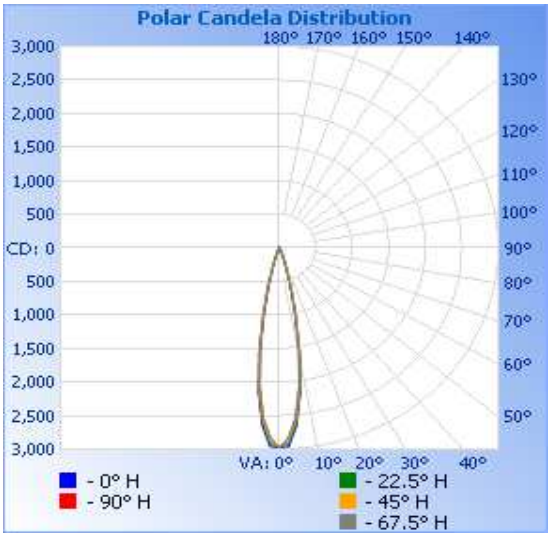
Light Output (lm)	Lumen Efficacy (lm/W)
444.8	49.4

INTENSITY SUMMARY - CANDELA

Angle	0	22.5	45	67.5	90
0	2972	2972	2972	2972	2972
5	2663	2631	2584	2552	2544
10	1577	1592	1582	1531	1495
15	575	616	649	597	560
20	164	180	197	177	163
25	52	57	63	56	53
30	28	29	31	29	28
35	17	20	22	20	18
40	12	12	15	13	13
45	9	9	9	9	9
50	5	6	6	6	4
55	1	1	3	1	1
60	1	1	1	1	1
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	0	0	0	0	0
100	0	0	0	0	0
105	0	0	0	0	0
110	0	0	0	0	0
115	0	0	0	0	0
120	0	0	0	0	0
125	0	0	0	0	0
130	0	0	0	0	0
135	0	0	0	0	0
140	0	0	0	0	0
145	0	0	0	0	0
150	0	0	0	0	0
155	0	0	0	0	0
160	0	0	0	0	0
165	0	0	0	0	0
170	0	0	0	0	0
175	0	0	0	0	0
180	0	0	0	0	0

Entire luminous intensity matrix found in .IES file

Polar Candela Plot



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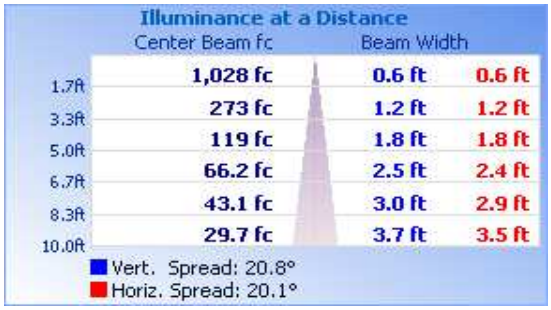
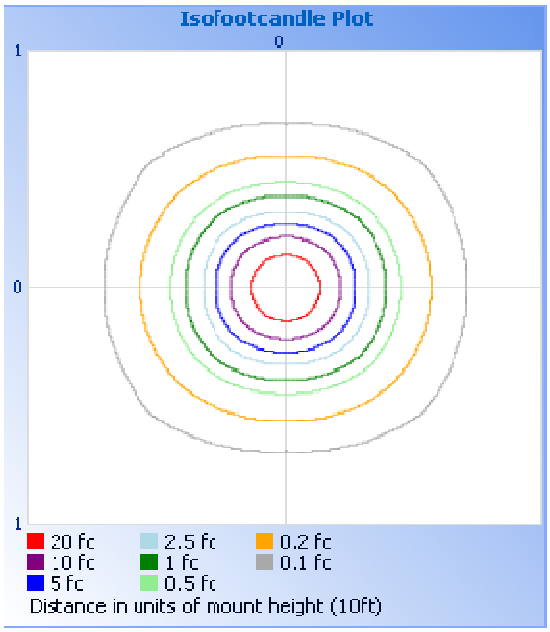
ILLUMINANCE SUMMARY

Mounting Height: 10ft	
Illuminance - Cone Of Light	**Isoillumination Plot**





ZONAL LUMENS

Zonal Lumen Summary

Zone	Lumens	Luminaire
0-30	423.0	95.1%
0-40	435.5	97.9%
0-60	444.5	99.9%
60-90	0.3	0.1%
70-100	0.0	0.0%
90-120	0.0	0.0%
0-90	444.8	100.0%
90-180	0.0	0.0%
0-180	444.8	100.0%

Zone	Lumens	Total	Zone	Lumens	Total
0-10	211.7	47.6%	90-100	0.0	0.0%
10-20	178.9	40.2%	100-110	0.0	0.0%
20-30	32.4	7.3%	110-120	0.0	0.0%
30-40	12.5	2.8%	120-130	0.0	0.0%
40-50	7.1	1.6%	130-140	0.0	0.0%
50-60	1.9	0.4%	140-150	0.0	0.0%
60-70	0.3	0.1%	150-160	0.0	0.0%
70-80	0.0	0.0%	160-170	0.0	0.0%
80-90	0.0	0.0%	170-180	0.0	0.0%

SPACING CRITERION

Spacing Criterion (0-180)	0.36
Spacing Criterion (90-270)	0.36
Spacing Criterion (Diagonal)	0.36

LUMINANCE DATA - AVERAGE LUMINANCE (cd/m²)

Angle	0	45	90
45	6864	7173	7095
55	951	2662	951
65	387	387	387
75	0	0	0
85	0	0	0

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EQUIPMENT LIST

REPORT NO. 104819833LAX-001

#	Equipment	Model No	Control No.	Last Cal	Cal Due
1	Goniophotometer	6440T	000943	VBU	VBU
2	AC Source	CW1251P	000944	VBU	VBU
3	Power Analyzer	WT210	000945	09/29/20	09/29/21
4	Tape Measure	33-428	002225	08/23/21	08/23/22
5	Temp. & RH Meter	Fluke 1620A	002195	12/17/20	12/27/21
6	Thermometer	DPi8-C24	001782	10/09/20	10/09/21
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REVISION HISTORY

#	Revision Date	Updated By	Reviewed BY	Description of Change
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