PRUDENTIAL LIGHTING

TEST REPORT

SCOPE OF WORK
LED Performance Testing

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

PROJECT NUMBER
G104819833

REPORT NUMBER
104819833LAX-002

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-002

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

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:

Bryan Cubillo
Technician III
Lighting Division

Reviewer:

Vladimir Kozak
Engineering Supervisor
Lighting Division

25800 Commercentre Drive
Lake Forest, CA 92630
Telephone: (949) 448-4100
www.intertek.com

SAMPLE INFORMATION

REPORT NO. 104819833LAX-002

ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Type	Received
1	LAN2109131331-002 (Array #2)	BPRO-1R-LED35-90-MED	downlight	Prototype	09/13/21

TESTED SAMPLE CONFIGURATIONS

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

SAMPLE PHOTOS - TESTED CONFIGURATIONS

25800 Commercentre Drive
Lake Forest, CA 92630
Telephone: (949) 448-4100
www.intertek.com

SUMMARY **REPORT NO. 104819833LAX-002**

PRODUCT INFORMATION AND SUMMARY OF DATA

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

Criteria	Results
Light Output (lumens)	425.5
Input Power (W) @ 120 (Vac)	8.99
Lumen Efficacy (lm/W)	47.3
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.

25800 Commercentre Drive
Lake Forest, CA 92630
Telephone: (949) 448-4100
www.intertek.com

TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

REPORT NO. 104819833LAX-002

Test Configuration	Tested Model No.	Pass/Fail/NA
1	BPRO-1R-LED35-90-MED	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	120.02	76.5	8.99	0.979	8.6

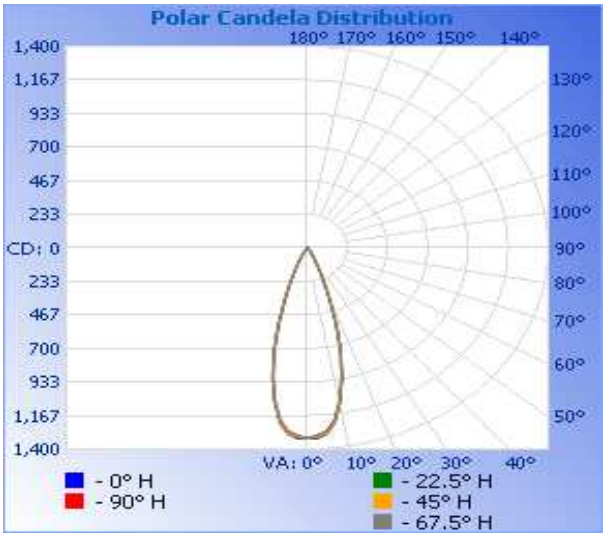
Light Output (lm)	Lumen Efficacy (lm/W)
425.5	47.3

INTENSITY SUMMARY - CANDELA

Angle	0	22.5	45	67.5	90
0	1323	1323	1323	1323	1323
5	1298	1296	1295	1280	1276
10	1087	1094	1088	1074	1080
15	762	756	753	743	738
20	379	386	399	380	370
25	152	174	176	160	163
30	68	62	69	68	56
35	25	29	28	26	24
40	12	13	16	13	12
45	7	8	9	8	8
50	4	5	6	5	4
55	1	1	2	1	1
60	0	1	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	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



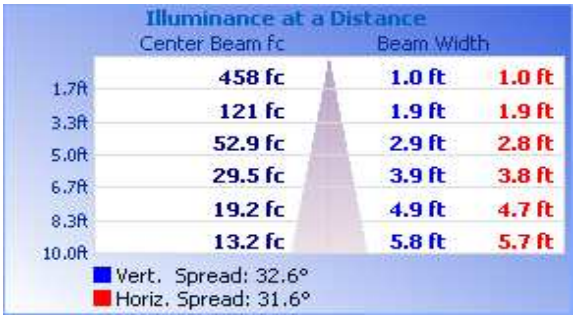
intertek
Total Quality. Assured.

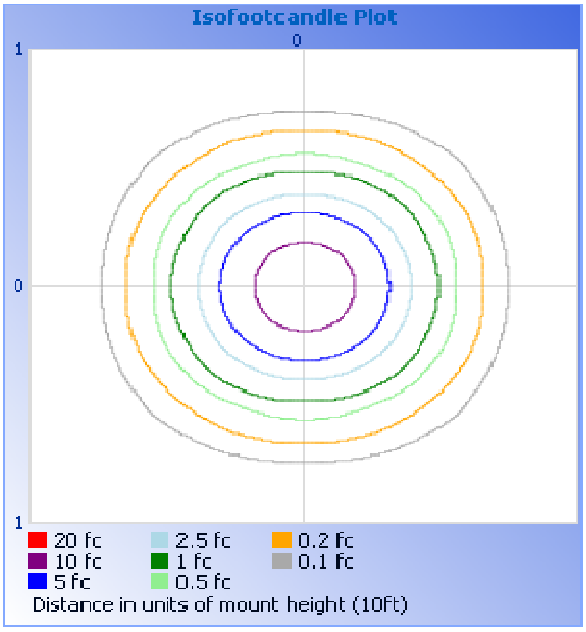
25800 Commercentre Drive
Lake Forest, CA 92630
Telephone: (949) 448-4100
www.intertek.com

REPORT NO. 104819833LAX-002

ILLUMINANCE SUMMARY

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





ZONAL LUMENS

Zonal Lumen Summary

Zone	Lumens	Luminaire
0-30	398.1	93.6%
0-40	417.0	98.0%
0-60	425.2	99.9%
60-90	0.3	0.1%
70-100	0.0	0.0%
90-120	0.0	0.0%
0-90	425.5	100.0%
90-180	0.0	0.0%
0-180	425.5	100.0%

Zone	Lumens	Total	Zone	Lumens	Total
0-10	116.3	27.3%	90-100	0.0	0.0%
10-20	199.2	46.8%	100-110	0.0	0.0%
20-30	82.6	19.4%	110-120	0.0	0.0%
30-40	19.0	4.5%	120-130	0.0	0.0%
40-50	6.5	1.5%	130-140	0.0	0.0%
50-60	1.6	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)	0.56
Spacing Criterion (90-270)	0.54
Spacing Criterion (Diagonal)	0.52

LUMINANCE DATA - AVERAGE LUMINANCE (cd/m²)

Angle	0	45	90
45	5630	7018	6324
55	951	2092	1046
65	258	387	258
75	0	0	0
85	0	0	0

25800 Commercentre Drive
Lake Forest, CA 92630
Telephone: (949) 448-4100
www.intertek.com

EQUIPMENT LIST

REPORT NO. 104819833LAX-002

#	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
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

REVISION HISTORY

#	Revision Date	Updated By	Reviewed BY	Description of Change
---	None	---	---	---
---	---	---	---	---
---	---	---	---	---