PRUDENTIAL

TEST REPORT

SCOPE OF WORK
LED Performance Testing

MODEL NUMBER
BPRO2-PER-REG3-LED35-SO-4-SAL

PROJECT NUMBER
G104824537

REPORT NUMBER
104824537LAX-009

ISSUE DATE
September 28, 2021

REVISED DATE
None

TEST DATES
9/28/2021

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

PAGES
7

REPORT NUMBER
104824537LAX-009

MODEL NUMBER(s)
BPRO2-PER-REG3-LED35-SO-4-SAL

REPORT RENDERED TO:
PRUDENTIAL
1774 EAST 21ST STREET
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-01205890.

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

In Charge of Testing:

Bryan Cubillo
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Reviewer:

Vladimir Kozak
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25800 Commercentre Drive
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SAMPLE INFORMATION

REPORT NO. 104824537LAX-009

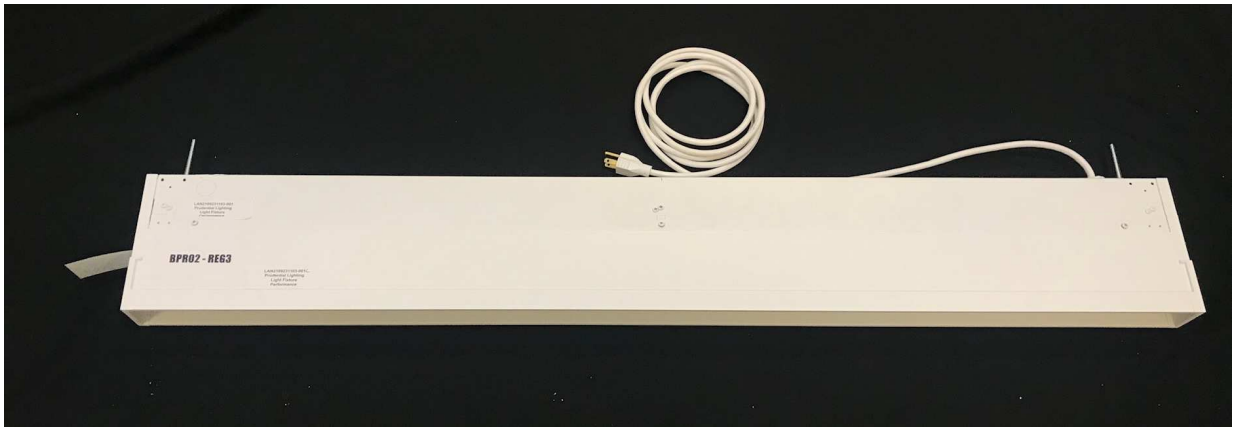
ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Type	Received
1	LAN2109231103-001	BRO2 SERIES	LED Fixture	Production	09/21/21
2	LAN2109231103-001-C	REG3	Regress Frame	Production	09/21/21
3	LAN2109231103-001-5	SAL	Lens	Production	09/21/21

TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	BPRO2-PER-REG3-LED35-SO-4-SAL	1-3

SAMPLE PHOTOS - TESTED CONFIGURATIONS



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SUMMARY **REPORT NO. 104824537LAX-009**

PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	BPRO2-PER-REG3-LED35-SO-4-SAL
Product Description:	Satin Lambertian LED Fixture
LED Model No.:	Lumileds 2835e 9V 3500K 80 CRI
Driver Model No.:	Osram OTI 50W G2 (832mA)
Light Source:	LED

Criteria	Results
Light Output (lumens)	1960.0
Input Power (W) @ 120 (Vac)	31.09
Lumen Efficacy (lm/W)	63.1
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

REPORT NO. 104824537LAX-009

Test Configuration	Tested Model No.	Pass/Fail/NA
1	BPRO2-PER-REG3-LED35-SO-4-SAL	NA

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

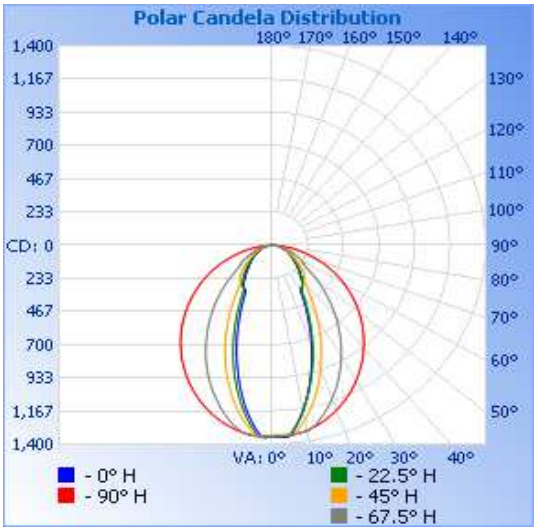
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()	Input ATHD(%)
Up	120.01	264.5	31.09	0.979	9.3

Light Output (lm)	Lumen Efficacy (lm/W)
1960.0	63.1

INTENSITY SUMMARY - CANDELA

Angle	0	22.5	45	67.5	90
0	1343	1343	1343	1343	1343
5	1343	1333	1338	1338	1344
10	1173	1175	1243	1324	1321
15	968	981	1093	1251	1284
20	754	779	927	1148	1233
25	549	582	758	1031	1172
30	376	407	591	905	1100
35	346	346	437	774	1021
40	294	302	327	643	934
45	246	251	297	512	842
50	204	207	246	387	747
55	170	171	199	273	647
60	138	139	158	225	546
65	111	110	122	175	444
70	84	83	91	124	341
75	60	58	63	81	239
80	38	36	39	48	139
85	18	16	17	21	45
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

Polar Candela Plot



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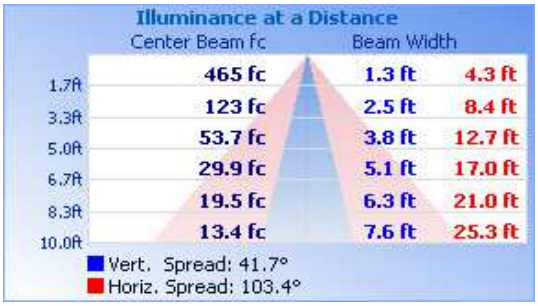
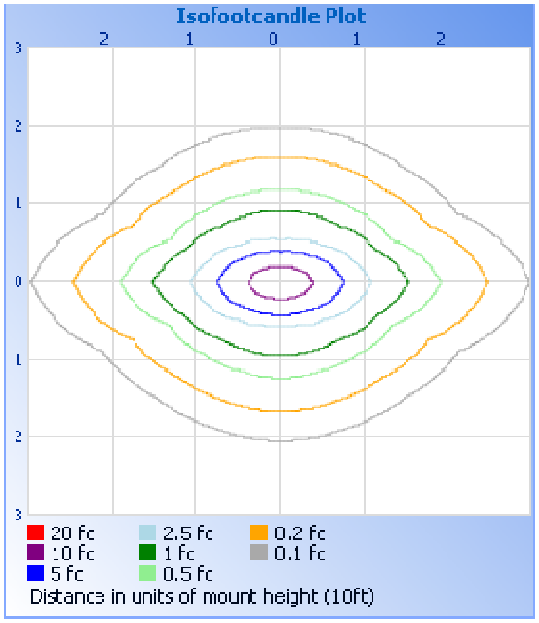
ILLUMINANCE SUMMARY

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





ZONAL LUMENS

Zonal Lumen Summary

Zone	Lumens	Luminaire
0-30	792.1	40.4%
0-40	1,136.3	58.0%
0-60	1,675.2	85.5%
60-90	284.8	14.5%
70-100	117.5	6.0%
90-120	0.0	0.0%
0-90	1,960.0	100.0%
90-180	0.0	0.0%
0-180	1,960.0	100.0%

Zone	Lumens	Total	Zone	Lumens	Total
0-10	123.8	6.3%	90-100	0.0	0.0%
10-20	305.6	15.6%	100-110	0.0	0.0%
20-30	362.7	18.5%	110-120	0.0	0.0%
30-40	344.1	17.6%	120-130	0.0	0.0%
40-50	304.1	15.5%	130-140	0.0	0.0%
50-60	234.8	12.0%	140-150	0.0	0.0%
60-70	167.3	8.5%	150-160	0.0	0.0%
70-80	92.4	4.7%	160-170	0.0	0.0%
80-90	25.1	1.3%	170-180	0.0	0.0%

SPACING CRITERION

Spacing Criterion (0-180)	0.70
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	0.86

LUMINANCE DATA - AVERAGE LUMINANCE (cd/m²)

Angle	0	45	90
45	5792	6992	19824
55	4934	5776	18779
65	4373	4806	17490
75	3859	4052	15373
85	3438	3247	8596

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EQUIPMENT LIST

REPORT NO. 104824537LAX-009

#	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	09/21/21	09/21/22
4	Tape Measure	33-428	002225	08/23/21	08/23/22
5	Thermometer	DPi8-C24	001782	09/22/21	09/22/22
6	Digital Level	1435-1000D	002231	VBU	VBU
7	Temp. & RH Meter	Fluke 1620A	002195	12/17/20	12/27/21
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REVISION HISTORY

#	Revision Date	Updated By	Reviewed BY	Description of Change
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