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Photometric Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-10-2014, UL 1598-2008
CIE 13.3-1995, CIE 15-2004, ANSI C78.377-2017
IES TM-30-2018

Prepared For
LDPI Inc
4404 Anderson Dr
Eau Claire, WI 54703
United States

Catalog Number
LE451-180-V1-D1-5

Order Number
14480670
Test Number
14480670.05

Test Date

2022-11-15 - 2022-12-01

Prepared By

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Approved By

Tiffany Hamm, Engineering Project Handler

The results contained in this report pertain only to the tested sample.
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Laboratory results may not be representative of field performance
Ballast factors have not been applied

Testing was performed in a 3-meter integrating sphere using the 4π geometry method.

Absorption correction was employed for Sphere measurement

Luminaire Description: White aluminum housing, clear glass lens enclosure
Lamp: 540 LEDs
Mounting: Recessed
Ballast/Driver: 1 INVENTRONICS 150W 0-10V EUM-150S210DT and 1 INVENTRONICS 75W 0-10V EUM-075S210DT

Luminaire



Summary of Results

Integrating Sphere

Luminous Flux: 24230 Lumens
 Efficacy: 137.51 lm/w
 CCT: 5275 K
 CRI (Ra): 84.0

Electrical Data at 277 VAC

Test Temperature: 24.6 °C
 Voltage: 277.0 VAC
 Current: 0.6703 A
 Power: 172.7 W
 Power Factor: 0.930
 Frequency: 60 Hz
 Current THD: 9.35 %

In-Situ

LED Temperature: 70.1 °C
 Driver Temperature: 53.5 °C
 Measured LED Current: 0.01190 A

Temperature is offset to an ambient temperature of 25°C as described in UL1598-2008.

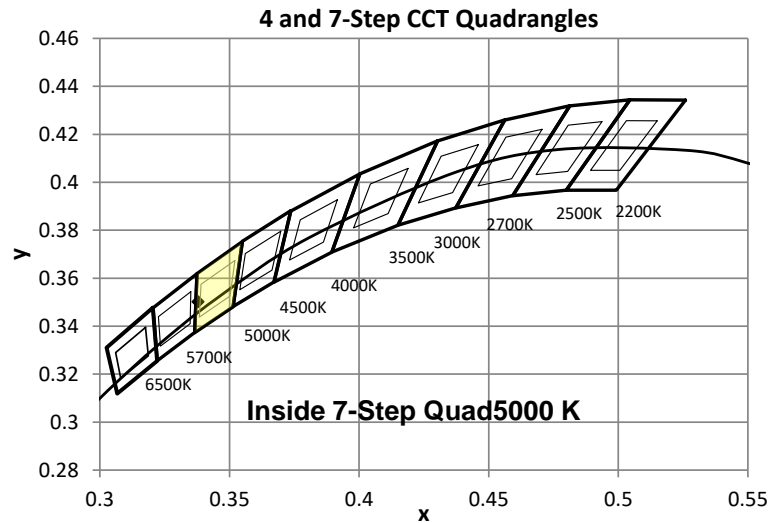
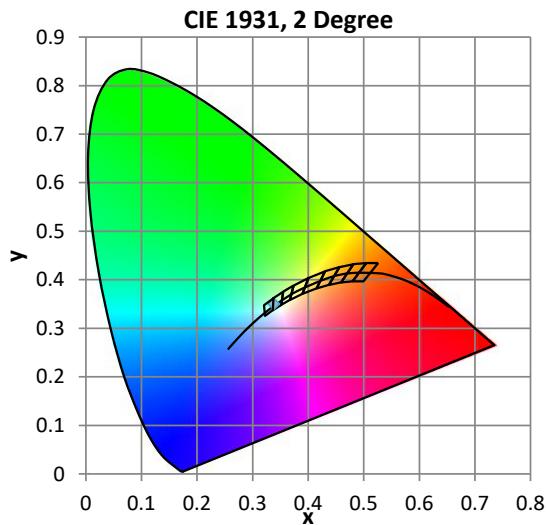
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.7 °C	120.0 VAC	1.470 A	176.2 W	0.999	60 Hz	3.21 %

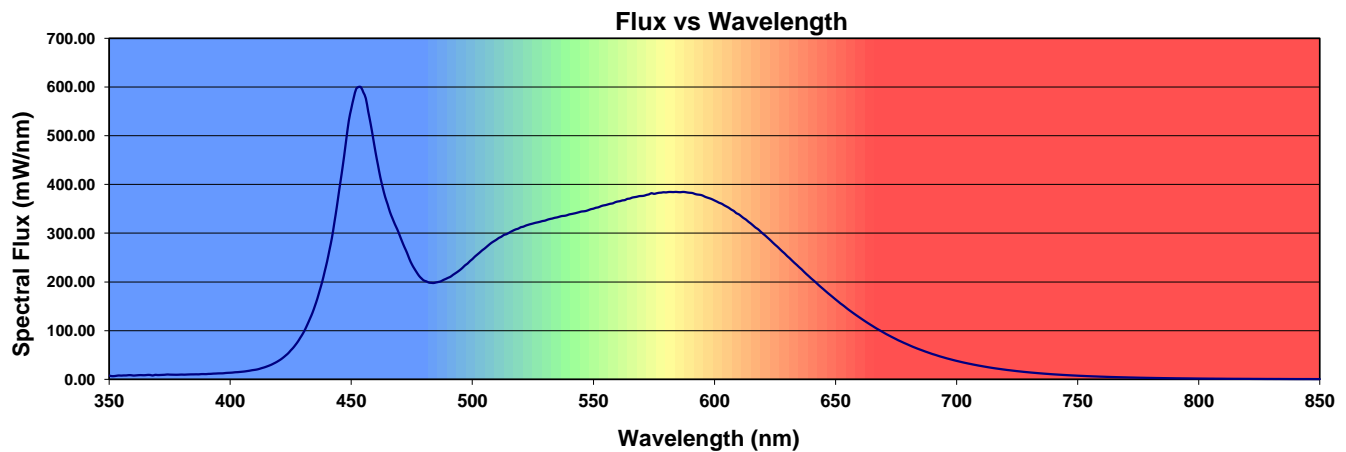
Summary of Results

Total Output:	24230 Lumens	Chromaticity (x):	0.3379
Efficacy:	137.5 lm/w	Chromaticity (y):	0.3502
CCT:	5275 K	Chromaticity (u'):	0.2071
CRI (Ra):	84.0	Chromaticity (v'):	0.4829
CRI (R9):	6.3	TM-30 Rf:	84
Peak Wavelength:	453 nm	TM-30 Rg:	94
Dominant Wavelength:	555 nm	TM-30 Rcs,h1:	-13%
S/P Ratio:	2.06	Duv:	0.0023
M/P Ratio:	0.88	WELL Building Standard v2	



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
84.0	82.3	90.9	94.8	82.2	83.0	86.4	86.2	66.2	6.3	77.7	81.5	65.3	85.0	97.6	76.3



In-Situ Test

In-Situ Test Conditions

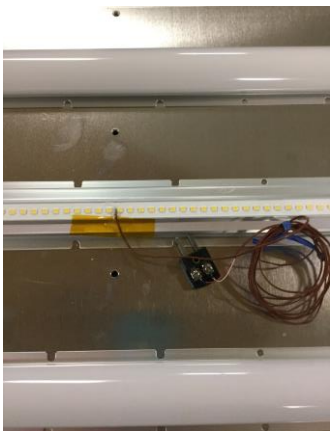
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
23.6 °C	120.0 VAC	N/A	N/A	N/A	60 Hz	N/A

Summary of Results

LED Temperature: 70.1 °C
 Driver Temperature: 53.5 °C
 Measured LED Current: 0.01190 A

Temperatures are offset to an ambient temperature of 25°C as described in UL1598-2008

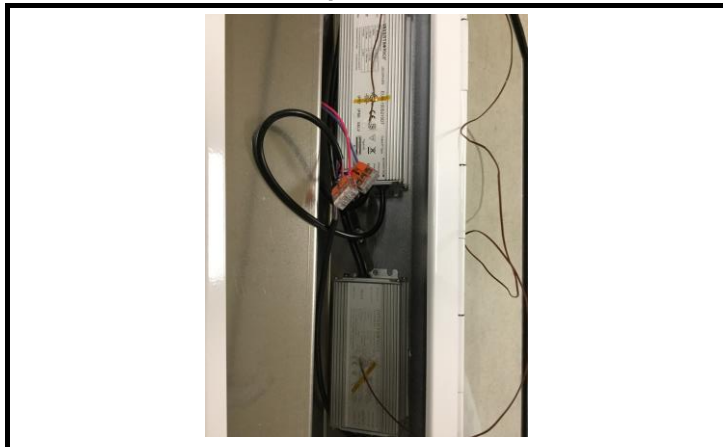
LED Temperature Location



Thermocouple Reference



Driver Temperature Location



ANSI/IES TM-30-18 Color Rendition Report

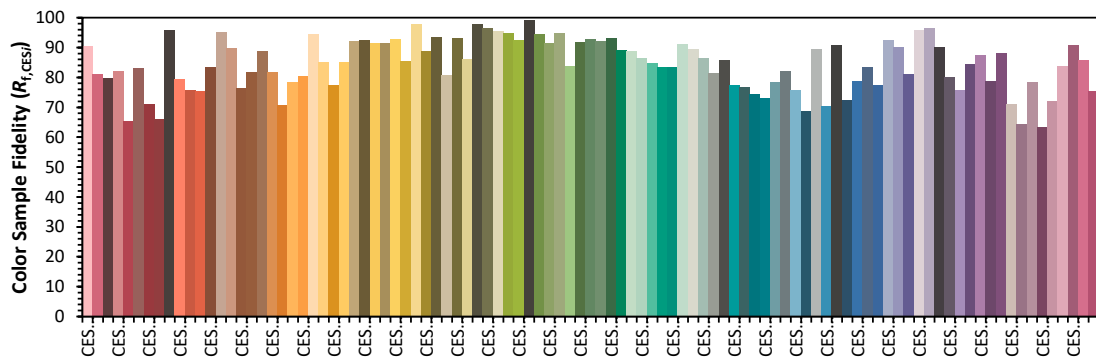
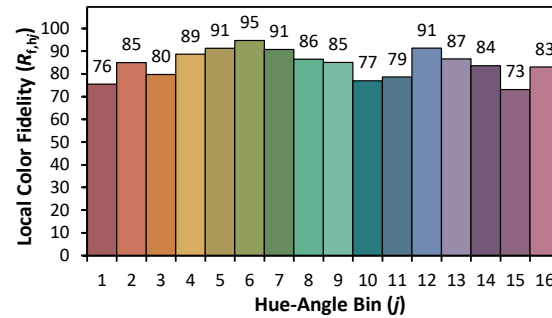
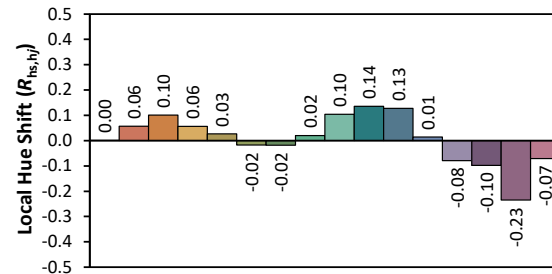
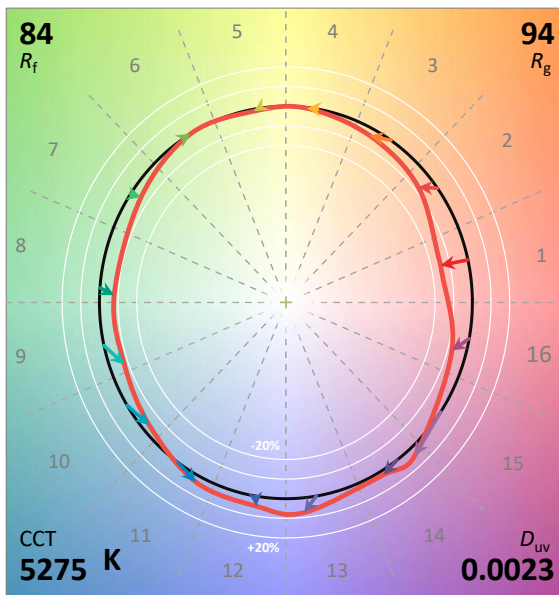
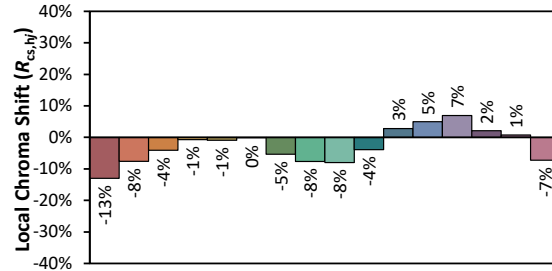
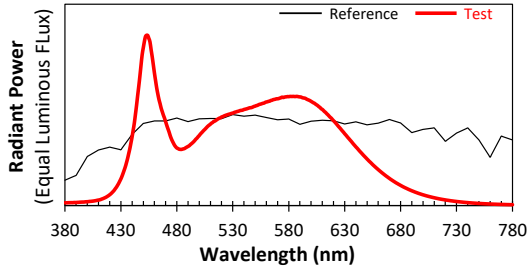
Date: 2022-11-15

Manufacturer:

LDPI Inc

Model:

LE451-180-V1-D1-5



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.3379
 y 0.3502
 u' 0.2071
 v' 0.4829

CIE 13.3-1995
(CRI)

R_a 84

R_g 6

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.