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Photometric Test Report

Relevant Standards
IES LM-79-2019, 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
H E Williams Inc

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MO 64836-0837

Catalog Number
FT-14-4-8-3500K-AF-DIM-UNC (FT-14-LS-8CS-AF-DIM-UNV)

Order Number
15184934
Test Number
15184934.03

Test Date
2024-02-27 - 2024-02-28

Prepared By

Jesse Litchfield, Project Handler

Approved By

Shivani Vyas, 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

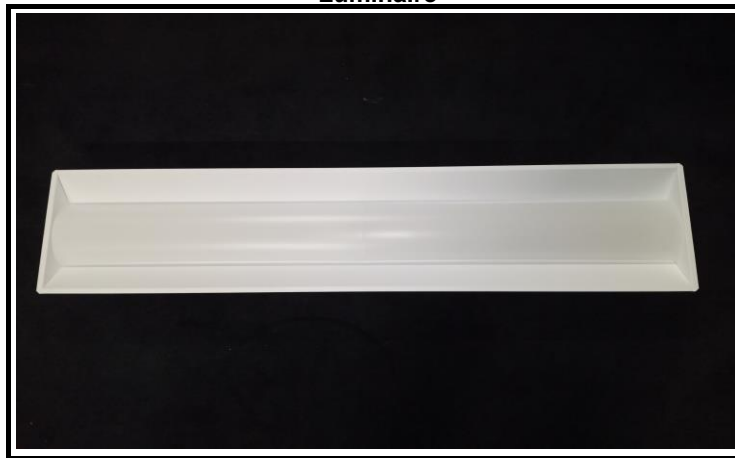
Testing was performed in a 2-meter integrating sphere using the 4π geometry method.

Absorption correction was employed for Sphere measurement



Luminaire Description: Recessed 1 x 4 Lumen/Wattage selectable, CCT selectable, LED Troffer w/center frosted acrylic lens.
Lamp: 224 LEDs
Mounting: Recessed
Ballast/Driver: ISTAR ISC-030W-070DDSM-ADJ33

Luminaire



Summary of Results

Integrating Sphere

Luminous Flux:	4768 Lumens
Efficacy:	151.46 lm/w
CCT:	3494 K
CRI (Ra):	81.1

Electrical Data at 120 VAC

Test Temperature:	25.1 °C
Voltage:	120.0 VAC
Current:	0.2640 A
Power:	31.48 W
Power Factor:	0.994
Frequency:	60 Hz
Current THD:	8.10 %

In-Situ

LED Temperature:	48.8 °C
Driver Temperature:	50.2 °C
Measured LED Current:	0.08821 A

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

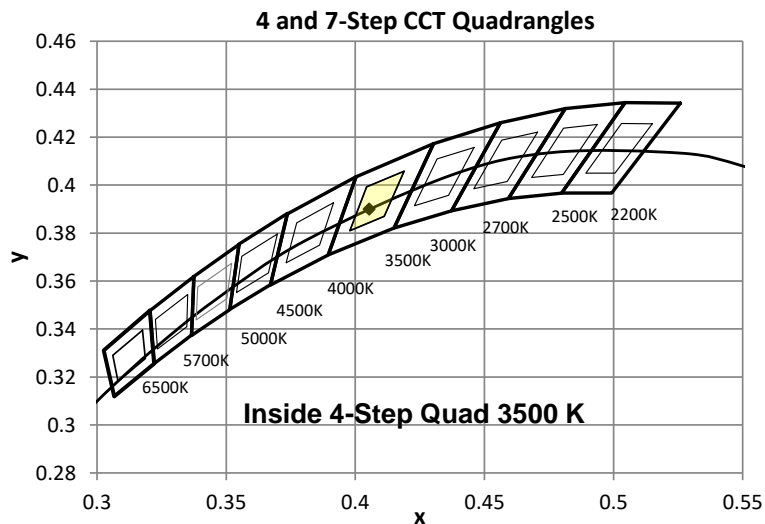
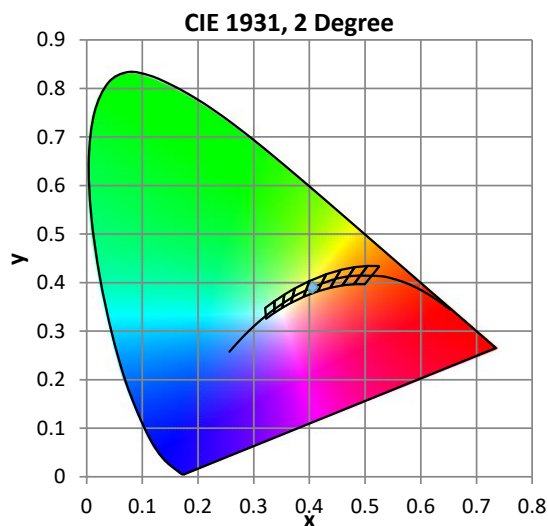
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.0 VAC	0.2640 A	31.48 W	0.994	60 Hz	8.10 %

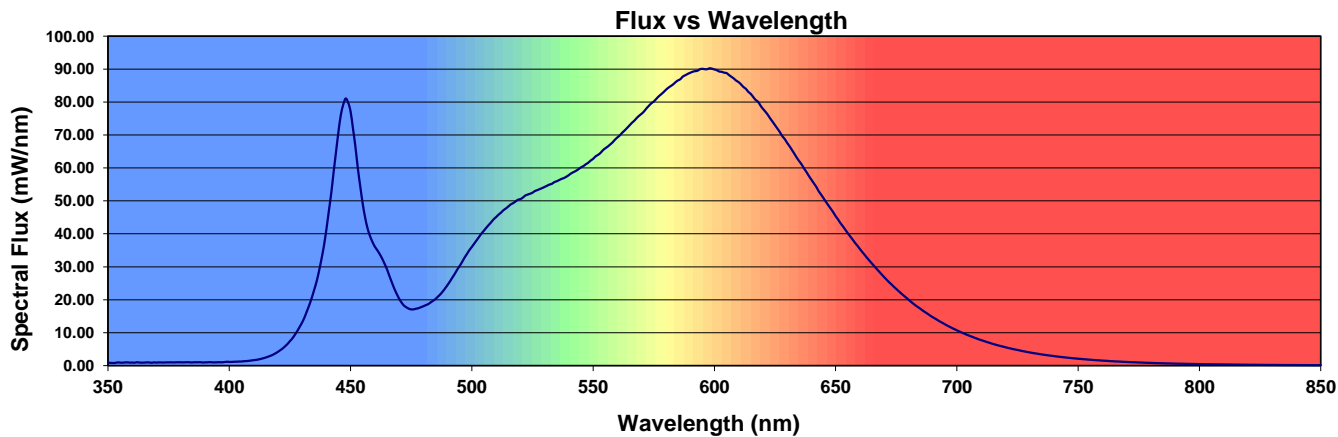
Summary of Results

Total Output:	4768 Lumens	Chromaticity (x):	0.4053
Efficacy:	151.5 lm/w	Chromaticity (y):	0.3901
CCT:	3494 K	Chromaticity (u'):	0.2359
CRI (Ra):	81.1	Chromaticity (v'):	0.5110
CRI (R9):	-1.6	TM-30 Rf:	83
Peak Wavelength:	598 nm	TM-30 Rg:	96
Dominant Wavelength:	555 nm	TM-30 Rcs,h1:	-13%
S/P Ratio:	1.5	Duv:	-0.0002
M/P Ratio:	0.58	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
81.1	79.0	88.1	95.5	80.3	79.6	84.6	83.3	58.7	-1.6	73.0	79.8	65.8	81.0	97.8	71.5



In-Situ Test

In-Situ Test Conditions

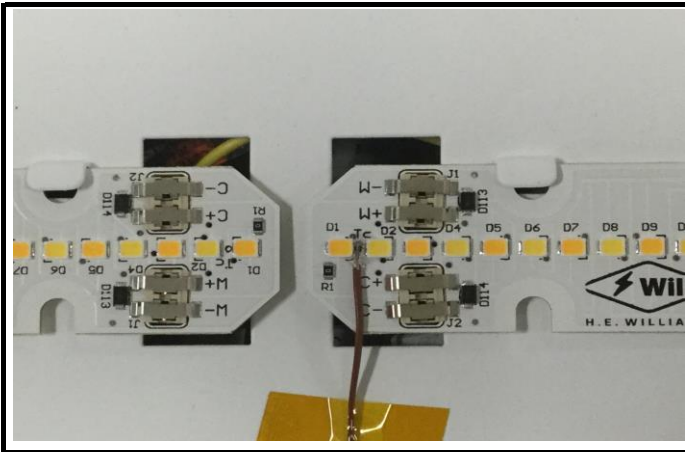
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
23.3 °C	120.1 VDC	N/A	N/A	60.0	N/A	N/A

Summary of Results

LED Temperature: 48.8 °C
 Driver Temperature: 50.2 °C
 Measured LED Current: 0.08821 A

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

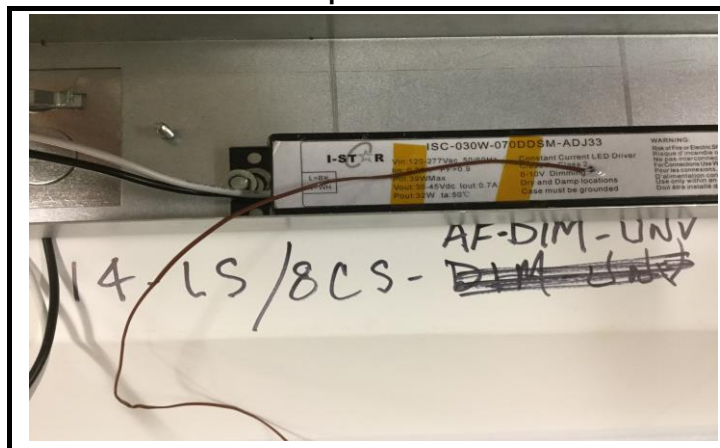
LED Temperature Location



Thermocouple Reference



Driver Temperature Location



ANSI/IES TM-30-18 Color Rendition Report

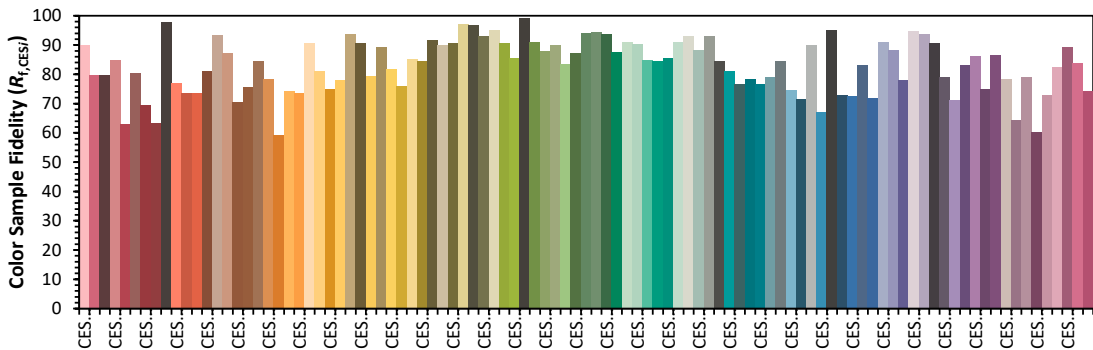
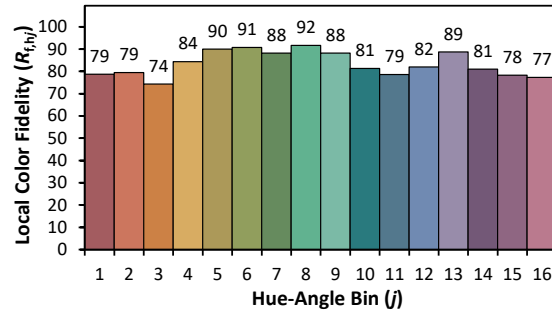
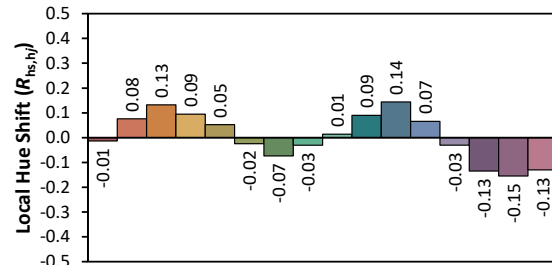
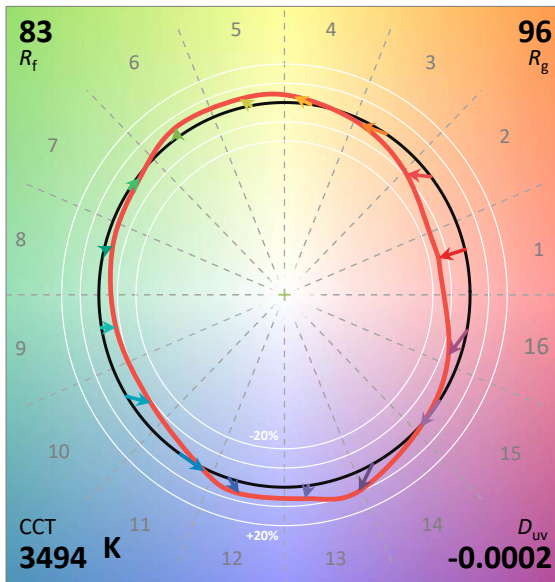
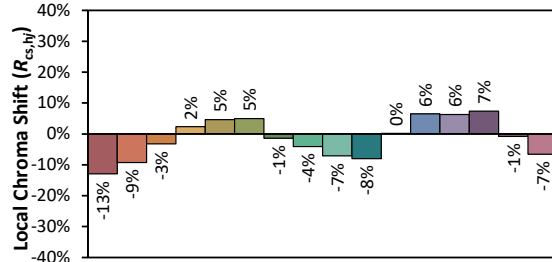
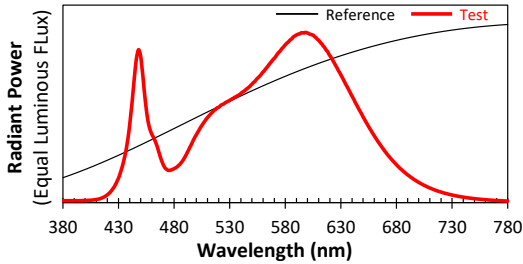
Date: 2024-02-27

Manufacturer:

H E Williams Inc

Model:

FT-14-4-8-3500K-AF-DIM-UNC (FT-14-LS-8CS-AF-DIM-UNV)



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

x 0.4053

y 0.3901

u' 0.2359

v' 0.5110

CIE 13.3-1995
(CRI)

R_a 81

R_g -2

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