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LTR-4RD-RFH SpectraSync
LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

LITEISTRY

FEATURES

- 4" architectural LED downlight delivering 600 – 1500 lm

- Four beam distributions from 0.4 to 1.2 Spacing Criteria

- Quiet reflector appearance with superior 50° optical cutoff

- SpectraSync™ Color Tuning technology allows the flexibility to tailor CCT to aesthetic preferences

- Available in Dim to Warm (2200K-3000K) or Tunable White (2700K-5000K or 2700K-6500K), 90+ CRI

- Available for Retrofit (non-IC) applications

- Standard with 0-10V dimming to 5%

WET LOCATION   C CSA US   BUY AMERICAN SOLUTIONS — See Certification Specifications

CONTROL TECHNOLOGY

SpectraSync — Color Tuning Technology

SPECIFICATIONS

CONSTRUCTION
- Die cast aluminum mounting ring with 5 axis adjustable junction box

- Retrofit housing allows below ceiling installation without removing the existing fixture

- Pre-wired junction box with snap-on covers for easy access

- Snap-in connection from driver compartment allows easy installation

- Light Engine connections use plenum rated (CMP) cable

OPTICS
- Visually pleasing 50° cutoff to source and source image

- The light distribution is free of distracting bright spots or pixelation and the perimeter has a smooth transition

- Optical grade silicone lens integral to light engine

- High purity spun aluminum reflector, self-flanged

- Large selection of anodized finishes and colors

- Painted cones and flange options available

ELECTRICAL
- LED array with 3 SDCM color consistency

- Dim to Warm (2200K-3000K) or Tunable White (2700K-5000K or 2700K-6500K) options available

- 90+ CRI standard

- Long LED life: L70 at >60,000 hours (TM-21)

- Universal voltage 120V–277V driver

- UL Class 2, inherent short circuit and overload protection

- Flicker free 0–10V dimming to 5%

- Refer to additional spec sheets for information on standard LITEISTRY solutions

INSTALLATION
- Accommodates ceiling thickness up to 2"

- Light Engine/Driver fully serviceable from above or below the ceiling

CERTIFICATIONS
- cCSAus certified to UL 1598

- Suitable for wet locations, covered ceiling

- Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring

- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction. Materials under Trade Agreements effective 6/6/2020.

WARRANTY
- 5 year warranty

KEY DATA	
Lumen Range	600-1500
Wattage Range	10-25
Efficacy Range (LPW)	52-64*
Reported Life (Hours)	L70 / >60,000
Input Current (mA)	83-208 (120V)

*Based on Specular, 30K, 90 CRI

Current ⊡

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DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LTR-4RD-RFH SpectraSync
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ORDERING GUIDE

Example: LTR–4RD–RFH–SL10L–DMTW–LTR–4RD–T–SL2230TD9MD–S

CATALOG #

HOUSING

LTR-4RD-RFH	–			–				–
Aperture/Shape/Function		**Lumen Package**	**Lumen Output**		**Driver Options**	**Voltage**	**Housing Options**	
LTR-4RD-RFH	4" Round Downlight Retrofit Housing [5]	**SL** Standard Lumen	**06L** 600 / **10L** 1000		**DMTW** SpectraSync™ Dim to Warm, 0-10V Dimming to 5% [1]	*Standard 120-277V*	**F** Fuse	
LTR-4RD-RFHW	4" Round Downlight Retrofit Housing (for Wide Diameter) [5]	**ML** Medium Lumen	**15L** 1500		**DMT** SpectraSync™ Tunable White, 0-10V Dimming to 5% [2]			

TRIM

LTR-4RD-T	–						–
Aperture/Shape/Function		**Lumen Package**	**CCT**	**CRI**	**Distribution**		
LTR-4RD-T	4" Round Downlight Light Engine/Trim Assembly	**SL** Standard Lumen **ML** Medium Lumen	**2230TD** 2200K-3000K SpectraSync™ Dim to Warm **2750T** 2700K-5000K SpectraSync™ Tunable White **2765T** 2700K-6500K SpectraSync™ Tunable White	**9** 90+CRI	**NR** Narrow (0.4 SC/29°) **MD** Medium (0.7 SC/44°) **WD** Wide (0.9 SC/61°) **XW** Extra Wide (1.2 SC/78°)		

TRIM CONTINUED

					–
Reflector Finish	**Reflector Color**	**Flange Color Options**	**Lower Trim Options**	**Reflector Options**	
Finish not applicable with painted reflectors (WC or BC) **S** Specular **SS** Semi-Specular **MFC** American Matte™ **VS** Softglow® **VSS** SoftSheen™	*Standard Clear* **CG** Champagne Gold **BL** Black **LW** Light Wheat **PW** Pewter **WC** Painted White Cone and Flange **BC** Painted Black Cone and Flange	*Standard matches reflector color* **WT** White Flange [3] **BT** Black Flange [3]	**WF** Wide Flange	**AM** Antimicrobial Coating [4]	

Accessories

☐ **LiteGear**	LiteGear® Inverter, 125VA-250VA
☐ **LPS Series**	LightPower Micro-Inverter, 20VA-55VA
☐ **MOR4-R-WH**	Metal Oversized Ring, 4" Round, White (8.25" outside diameter)
☐ **MOR4-R-BL**	Metal Oversized Ring, 4" Round, Black (8.25" outside diameter)

Notes:
1. Must select 2230TD with DMTW driver.
2. Must select either 2750T or 2765T with DMT driver.
3. WT not needed for WC, BT not needed for BC.
4. AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
5. See line art for compatibility with existing aperture diameters.

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LTR-4RD-RFH SpectraSync
LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING
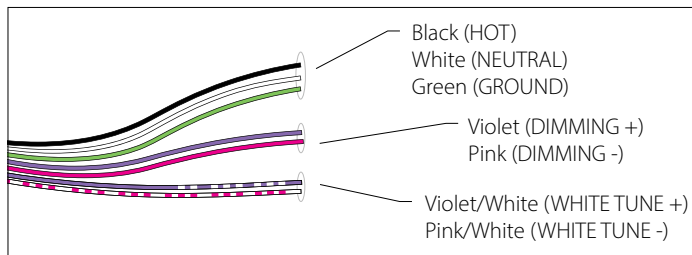
CONTROLS

SpectraSync™ Color Tuning Technology:
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.

SpectraSync
Color Tuning Technology

SPECTRASYNC COLOR TUNING TECHNOLOGY		
Mode	Kelvin Range	Description
Dim to Warm	2200K-3000K	Mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed
Tunable White	2700K-5000K 2700K-6500K	Offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors or the aesthetics of the space
Scheduled White	2700K-5000K 2700K-6500K	Mimics the rhythm of natural light or follows an alternative user-defined schedule throughout the day, enhancing an occupant's mood and well-being

SpectraSync Tunable White
Available in two options: 2750T (2700K–5000K) or 2765T (2700K–6500K). Requires two 0–10V controllers, one for intensity and one for CCT. Minimum 5% dimming.

Black (HOT)
White (NEUTRAL)
Green (GROUND)

Violet (DIMMING +)
Pink (DIMMING -)

Violet/White (WHITE TUNE +)
Pink/White (WHITE TUNE -)

SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and pink circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and pink/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

Controller Manufacturer Data
SpectraSync Tunable White was designed to be used with sinking style dimmers (provided by others) and is compatible with:
- Current: NX Lighting Controls Room Controllers (NXRC) and In-fixture Controllers (NXFM)
- Lutron: DVTV, DVSTV, and NFTV dimmers
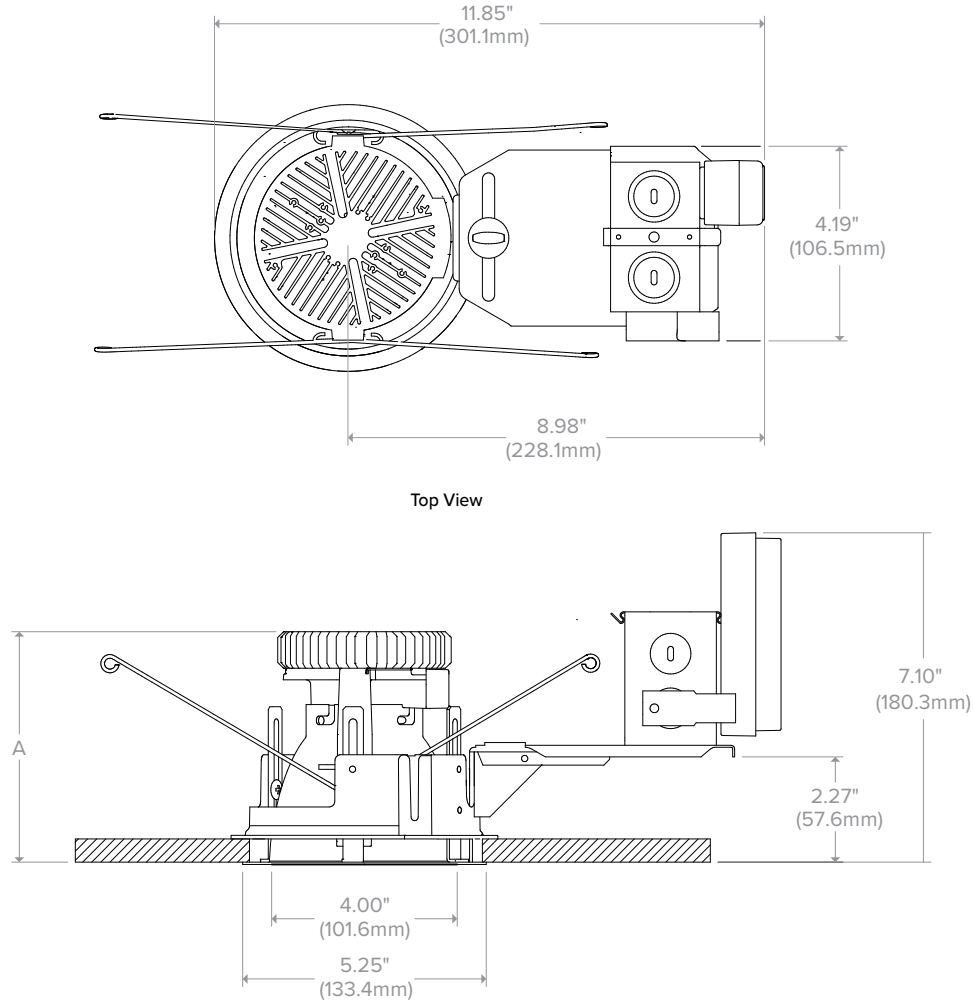- Wattstopper: ADF120277 and CD4BL (Titan) dimmers

Color Tuning Profile
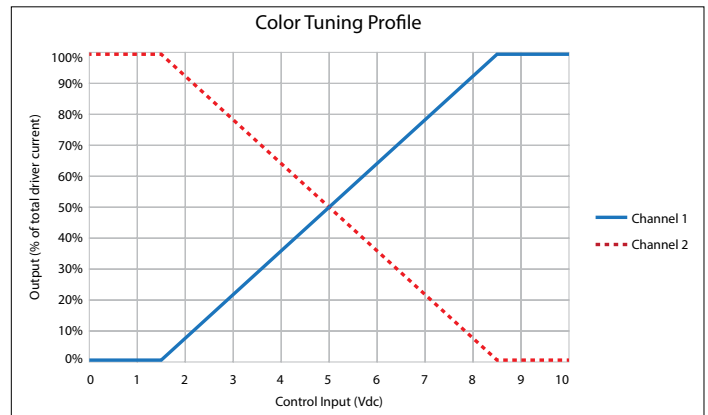
To enable scheduling and for use with NX wall control preset stations please refer to SpectraSync technical sheet.

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LTR-4RD-RFH SpectraSync
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DIMENSIONS

Top View

LTR-4RD-RFH/-RFHW

Housing Compatibility Guide			
Existing Frame Opening**		Use Housing	Use Flange Option
MIN	MAX		
4.75" (120.7mm)	5.00" (127.0mm)	-RFH	(Standard)
5.00" (127.0mm)	5.50" (139.7mm)	-RFHW	WF

Dimensional Data		
Aperture		4.00" (101.6mm)
Flange:	Standard	5.25" (133.4mm)
	Wide (WF)	5.75" (146.1mm)
Ceiling Cutout:	Standard	5.00" (127.0mm)
Ceiling Thickness:		0.50" to 2.00" (12.7mm to 50.8mm)

Lumen Package	"A"
06L-10L	4.97" (126.2mm)
15L	7.33" (186.2mm)

Current

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LTR-4RD-RFH SpectraSync
LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

PHOTOMETRY
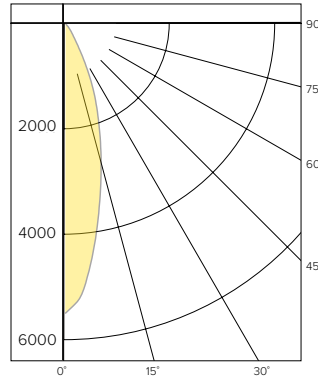
LTR-4RD-RFH-ML15L-DMTW / LTR-4RD-T-ML2230TD9NRS

LUMINAIRE DATA

Test No.	R19.01948-C01
Description	1500 lm, Narrow, 3000K, 90 CRI
Delivered Lumens	1608
Watts	25.0W
Efficacy	64.0
Mounting	Pendant
Spacing Criterion	0.5
Beam Angle (FWHM)	29

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2208	98.6
0-60	2237	99.9
0-90	1608	100.0
0-180	1608	100.0

POLAR GRAPH

CANDELA DISTRIBUTION

Degree	Candela
0	5179
5	4571
15	2396
25	920
35	163
45	16
55	1
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	2823
55°	316
65°	215
75°	0
85°	0

*Candela/Square Meter

LTR-4RD-RFH-ML15L-DMTW / LTR-4RD-T-ML2230TD9MDS

LUMINAIRE DATA

Test No.	R19.01974-C01
Description	1500 lm, Medium, 3000K, 90 CRI
Delivered Lumens	1477
Watts	25.0W
Efficacy	59.0
Mounting	Pendant
Spacing Criterion	0.7
Beam Angle (FWHM)	44

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1449	98.1
0-60	1476	99.9
0-90	1477	100.0
0-180	1477	100.0

POLAR GRAPH
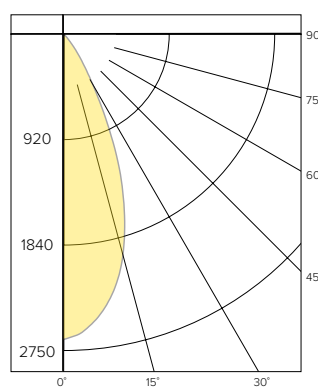
CANDELA DISTRIBUTION

Degree	Candela
0	2654
5	2561
15	2081
25	1035
35	258
45	25
55	2
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	4363
55°	475
65°	215
75°	0
85°	0

*Candela/Square Meter

LTR-4RD-RFH-ML15L-DMTW / LTR-4RD-T-ML2230TD9WDS

LUMINAIRE DATA

| Test No.	R19.01946-C01
Description	1500 lm, Wide, 3000K, 90 CRI
Delivered Lumens	1321
Watts	25.0W
Efficacy	53.0
Mounting	Pendant
Spacing Criterion	1.0
Beam Angle (FWHM)	61

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1275	96.5
0-60	1320	99.9
0-90	1321	100.0
0-180	1321	100.0

POLAR GRAPH
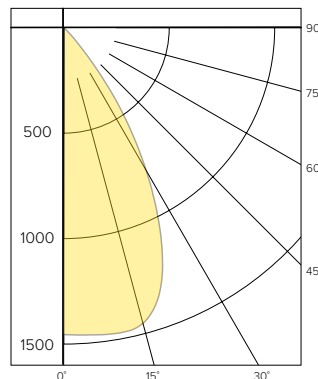
CANDELA DISTRIBUTION

Degree	Candela
0	1405
5	1412
15	1409
25	1052
35	445
45	40
55	3
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	6926
55°	633
65°	429
75°	0
85°	0

*Candela/Square Meter

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DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

PHOTOMETRY CONTINUED

LTR-4RD-RFH-ML15L-DMTW / LTR-4RD-T-ML2230TD9XWS

LUMINAIRE DATA

Test No.	R19.01945-C01
Description	1500 lm, Extra Wide, 3000K, 90 CRI
Delivered Lumens	1303
Watts	25.0W
Efficacy	52.0
Mounting	Pendant
Spacing Criterion	1.2
Beam Angle (FWHM)	78

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1160	89.0
0-60	1301	99.9
0-90	1303	100.0
0-180	1303	100.0

POLAR GRAPH
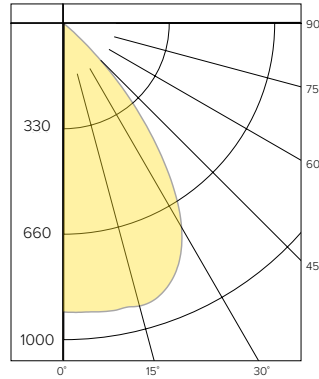
CANDELA DISTRIBUTION

Degree	Candela
0	809
5	822
15	905
25	943
35	647
45	155
55	4
65	1
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	26926
55°	790
65°	429
75°	350
85°	0

*Candela/Square Meter

Current

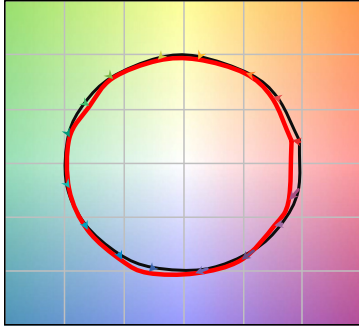| DATE:	LOCATION:
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CATALOG #:	

LTR-4RD-RFH SpectraSync
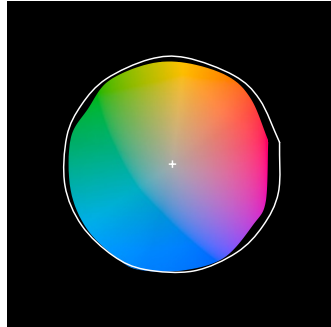LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

TM-30 DATA

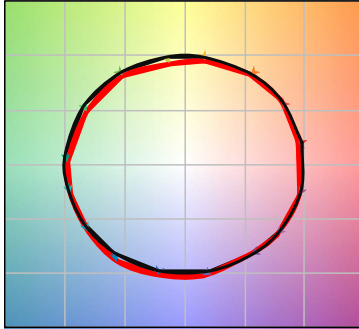**SPECTRASYNC™ TUNABLE WHITE (2765T)**

COLOR VECTOR GRAPHIC
2700K, 90+ CRI

—— Reference Illuminant　—— Test Source

COLOR DISTORTION GRAPHIC
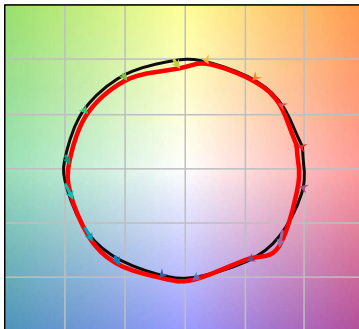**2700K, 90+ CRI**

COLOR VECTOR GRAPHIC
4600K, 90+ CRI

—— Reference Illuminant　—— Test Source

COLOR DISTORTION GRAPHIC
4600K, 90+ CRI

COLOR VECTOR GRAPHIC
6500K, 90+ CRI

—— Reference Illuminant　—— Test Source

COLOR DISTORTION GRAPHIC
6500K, 90+ CRI

TEST RESULTS - TUNABLE WHITE @ 1500 LUMENS (NOMINAL)			
Value	2700K	4600K	6500K
Luminous Flux (lm)	1407	1604	1660
Wattage (W)	23.9	24.3	24.6
Efficacy (lm/W)	59	66	68
R_f	90	89	87
R_g	97	98	96
CCT (K)	2817	4588	6518
D_{uv}	-0.0013	-0.0040	0.0018
x	0.4482	0.3565	0.3131
y	0.4047	0.3531	0.3273
CIE R_a	91	95	94
CIE R_9	47	81	76

![Current logo]　　currentlighting.com/prescolite

DATE: LOCATION:

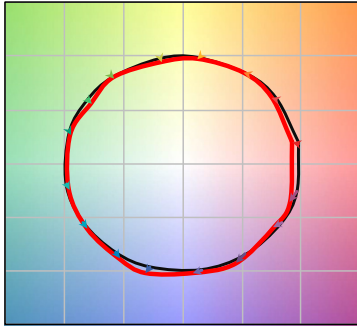TYPE: PROJECT:

CATALOG #:

LTR-4RD-RFH SpectraSync

LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

TM-30 DATA CONTINUED

SPECTRASYNC™ DIM TO WARM (2230TD)
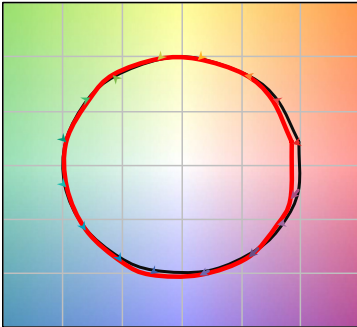
COLOR VECTOR GRAPHIC
3000K, 90+ CRI @ 100%

—— Reference Illuminant   —— Test Source
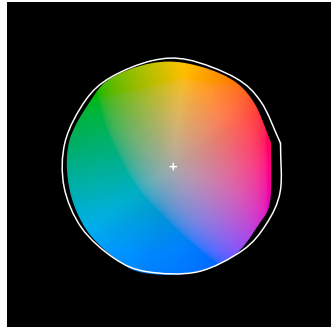
COLOR DISTORTION GRAPHIC
3000K, 90+ CRI @ 100%

COLOR VECTOR GRAPHIC
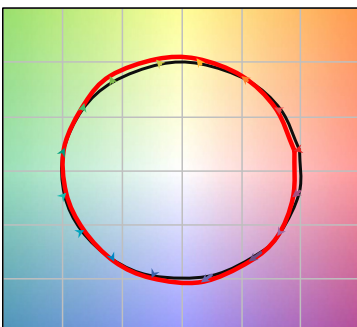**2600K, 90 CRI @ 50% DIM**

—— Reference Illuminant   —— Test Source

COLOR DISTORTION GRAPHIC
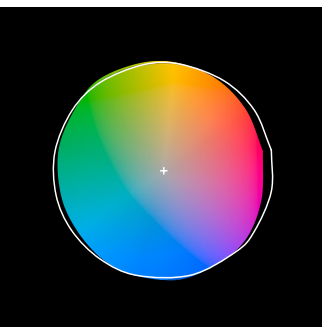**2600K, 90 CRI @ 50% DIM**

COLOR VECTOR GRAPHIC
2200K, 90 CRI @ 5% DIM

—— Reference Illuminant   —— Test Source

COLOR DISTORTION GRAPHIC
2200K, 90 CRI @ 5% DIM

TEST RESULTS - DIM TO WARM @ 3 DIMMING LEVELS			
Value	100%	50% Dim	5% Dim
Luminous Flux (lm)	1501	772	53
Wattage (W)	24.3	14	3.4
Efficacy (lm/W)	62	55	16
R_f	90	92	91
R_g	97	99	102
CCT (K)	3123	2590	2282
D_{UV}	-0.0017	-0.0015	-0.0029
x	0.4261	0.4662	0.4907
y	0.3965	0.4082	0.4068
CIE R_a	92	93	93
CIE R_9	53	60	64

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ELECTRICAL DATA

DRIVER DATA	
Input Voltage	120-277 V
Input Frequency	50/60 Hz
Power Factor	≥0.90
THD	<20%
EMI Filtering (FCC 47 CFR Part 15)	Class A

ADDITIONAL INFORMATION

Central Inverters
For full fixture output in back-up mode, we recommend you visit currentlighting.com/dual-lite.com for your Central Lighting Inverter options. Please contact your local Current representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.

Current