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LTR-3SQA SpectraSync
## LITEISTRY 3" SQUARE ADJUSTABLE WITH COLOR TUNING

LITEISTRY

FEATURES

- 3" architectural LED adjustable accent delivering 600–1000 lm

- Four field interchangeable beam distributions from 15° to 45°

- Translating center beam optic allows 0–35° vertical tilt, 362° horizontal rotation

- 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

- Accommodates up to two lens media including hexcell louver and linear spread options

- Available for New Construction (non-IC), IC and Chicago Plenum applications

- Standard with 0-10V dimming to 5%

- NX Lighting Controls wired and wireless controls capability available

CSA C US

BAA (-BAA Option)   **TAA** (-TAA Option)

CONTROLS TECHNOLOGY
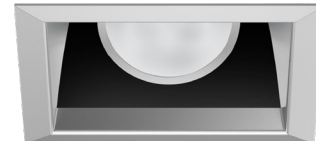
NX WIRELESS   NX WIRED   SpectraSync™ Color Tuning Technology
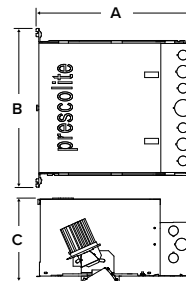
Typical Dimensions

"A" Length Inches (mm)	"B" Width Inches (mm)	"C" Height Inches (mm)
14.56 (370)	14.36 (365)	7.48 (190)

See DIMENSIONS section for complete details

SPECIFICATIONS

CONSTRUCTION
- Painted black enclosed steel platform with tool-less top access and pre-installed bar hangers

- Smooth friction adjustment with 0–35° vertical tilt, 362° horizontal rotation without tools

- Precise hot aiming capability, securely locks with thumbscrews for dependable control

OPTICS
- Translating center beam optic ensures full beam optimization from 0.5" to 1.25" ceiling thickness

- Proprietary twist-and-lock upper reflector with diffusion film provides 15°, 25°, 35° or 45° beam distributions

- Optional accessory lens media including linear spread and hexcell louver (order separately)

- Upper reflector can accommodate up to two additional lens media up to 0.25" max. thickness

- All reflectors and lens media are field interchangeable for maximum flexibility

- Provides dramatic, crisp highlights without distracting rings or excessive spill light

- Standard angle cut cone: High purity, four-panel aluminum reflector, self-flanged

- Flush mount flange option with mud-in ring available

- 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

- Universal voltage 120V–277V driver

- UL Class 2, inherent short circuit and overload protection

- Flicker free 0–10V dimming to 5%

- NX Lighting Controls provides options for standalone and networked functionality with wired or wireless connectivity for NX system deployments

- Emergency Battery Pack option available with remote test switch an indicator light

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

INSTALLATION
- Accommodates ceiling thickness up to 1.25"

- Universal adjustable mounting brackets also accept ½" EMT conduit or 1 ½" or ¾" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)

- Light Engine serviceable from above or below ceiling. Top access required for driver, EMR battery pack or Controls component replacement

CERTIFICATIONS
- cCSAus certified to UL 1598

- Suitable for damp locations

- EMR: Certified under UL 924 standard for emergency lighting and power equipment

- EMR: Emergency battery packs are California Energy Commission (CEC) Title 20 Compliant

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

- For -BAA Option: This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) See Buy America(n) Solutions

- For -TAA Option: Product configurations meet federal procurement law requirements under the Trade Agreements Act (FAR 52.225-11) See Buy America(n) Solutions

WARRANTY
- 5 year warranty

KEY DATA

KEY DATA	
Lumen Range	600-1000
Wattage Range	11-20
Efficacy Range (LPW)	40-52*
Reported Life (Hours)	L70 / >60,000
Input Current (mA)	91-167 (120V)

*Based on Specular, 30K, 90 CRI

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LTR-3SQA SpectraSync
LITEISTRY 3" SQUARE ADJUSTABLE WITH COLOR TUNING

ORDERING GUIDE

Example: LTR–3SQA–H–10L2230TD9MD–DMTW–LTR–3SQA–T–SS

CATALOG #

HOUSING

LTR-3SQA-H	–					–
Aperture/Shape/Function		**Lumen Output**	**CCT**		**CRI**	**Distribution**
LTR-3SQA-H 3" Square Adjustable New Construction Housing		**06L** 600 **10L** 1000	**2230TD** 2200K-3000K SpectraSync™ Dim to Warm **2750T** 2700K-5000K SpectraSync™ Tunable White **2765T** 2700K-6500K SpectraSync™ Tunable White		**9** 90+CRI	**NR** Narrow 15° **MD** Medium 25° **WD** Wide 35° **XW** Extra Wide 45°

HOUSING (CONTINUED)

			–
Driver Options	**Control Options**	**Voltage**	**Housing Options**
DMTW SpectraSync™ Dim to Warm, 0-10V Dimming to 5% [1] **DMT** SpectraSync™ Tunable White, 0-10V Dimming to 5% [2]	**NX Lighting Controls** *Networked Wireless* **NXW** NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor *Networked Wired* **NXE** NX Wired Dual RJ45 SmartPORTS, without Sensor	*Standard 120-277V*	**CP** Chicago Plenum [6,7,8] **IC** IC rated [6,7,8] **EMR** 7W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light [6,8] **F** Fuse [6] **BAA** Buy American Act (FAR 52.225-9) Compliant **TAA** Trade Agreements Act (FAR 52.225-11) Compliant

TRIM

LTR-3SQA-T	–						–
Aperture/Shape/Function		**Lower Trim Style**	**Reflector Finish**	**Reflector Color**	**Flange Color Options**	**Reflector Options**	
LTR-3SQA-T 3" Square Adjustable Trim Assembly		*Standard Angle Cut Cone*	*Finish not applicable with painted reflectors (WC or BC)* **S** Specular **SS** Semi-Specular **VS** Softglow®	*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]	**AM** Antimicrobial Coating [4] **BAA** Buy American Act (FAR 52.225-9) Compliant **TAA** Trade Agreements Act (FAR 52.225-11) Compliant	

Accessories	
☐ **B24**	Set of two (2) 24" bar hangers for T-bar ceilings
☐ **B6**	Set of two bar hangers for ceiling joist up to 24" centers
☐ **FMR3-SQ**	Flush Mount Mud-In Ring, 3" Square
☐ **LiteGear**	LiteGear® Inverter, 125VA-250VA
☐ **LPS Series**	LightPower Micro-Inverter, 20VA-55VA
☐ **MOR3-SQ-WH**	Metal Oversized Ring, 3" Square, White (6.75" outer dimension)
☐ **MOR3-SQ-BL**	Metal Oversized Ring, 3" Square, Black (6.75" outer dimension)

Lens/Media Accessories	
☐ **LL3**	Linear Spread Lens for 3" [5]
☐ **PL3**	Prismatic Lens for 3" [5]
☐ **SOL3**	Solite Lens for 3" [5]
☐ **HL3**	Hexcell Louver Black for 3" [5]

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. Lens holder supplied with fixture accommodates up to 2 media (0.25" total max. thickness).
6. Housing options (except Fuse, BAA/TAA) not available in combination.
7. IC, CP available in 06L.
8. Not available with Control options.

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LITEISTRY 3" SQUARE ADJUSTABLE WITH COLOR TUNING

NX LIGHTING CONTROLS

Control Option Ordering Logic & Description			Control Option Functionality								Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming		
NX Wireless	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor	✓	✓	✓	–	–	✓	✓	✓		NXRM2-H
NX Wired	NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor	✓	✓	✓	–	–	✓	✓	✓₁		NXDSP

1   Requires NXBTC, order separately.

NX LIGHTING CONTROLS APP

The NX Lighting Controls App is a free to use mobile application for programming both an NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enabled luminaires and program your NX system settings.

Android   Apple iOS

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DATE: LOCATION:

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LTR-3SQA SpectraSync
LITEISTRY 3" SQUARE ADJUSTABLE WITH COLOR TUNING
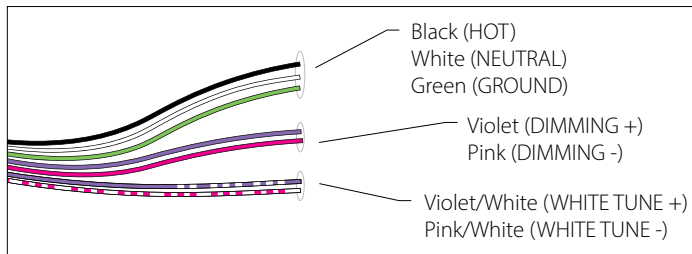
SPECTRASYNC™ COLOR TUNING TECHNOLOGY

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 +)
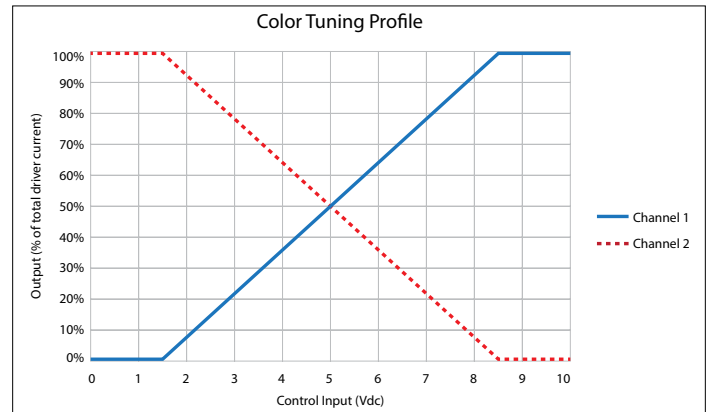Pink/White (WHITE TUNE -)

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

Output (% of total driver current) vs Control Input (Vdc)
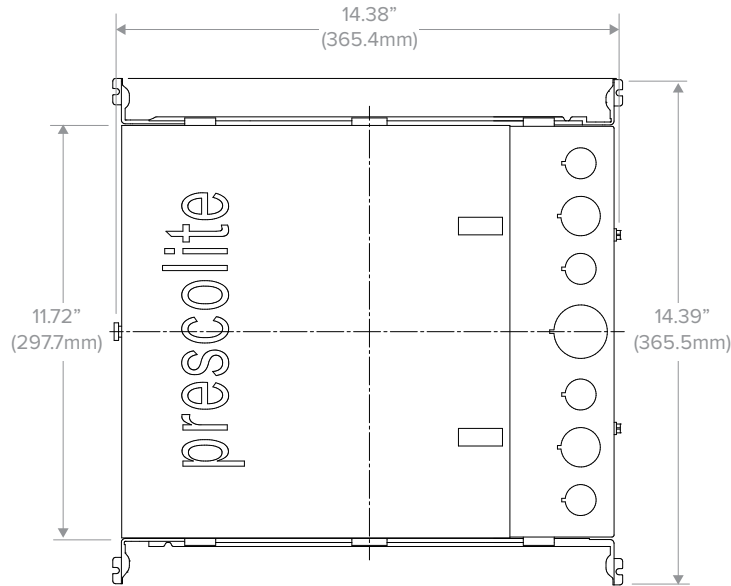
— Channel 1
---- Channel 2

To enable scheduling and for use with NX wall control preset stations please refer to SpectraSync technical sheet.
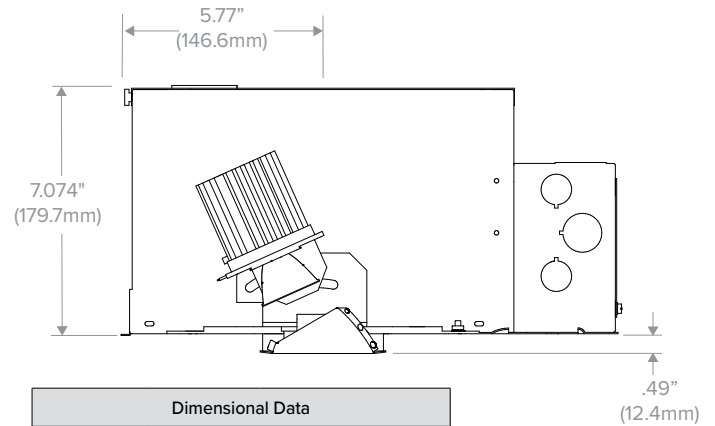
LTR-3SQA SpectraSync
LITEISTRY 3" SQUARE ADJUSTABLE WITH COLOR TUNING

DIMENSIONS

14.38" (365.4mm)

11.72" (297.7mm)

14.39" (365.5mm)

Top View

5.77" (146.6mm)

7.074" (179.7mm)

.49" (12.4mm)

Dimensional Data		
Aperture		2.88" (73.2mm)
Flange	Standard	3.62" (91.9mm)
	Flush Mount	3.62" (91.9mm)
Ceiling Cutout	Standard	3.31" (84.1mm)
	Flush Mount	3.94" (100.1mm)
Ceiling Thickness		0.5" to 1.25" (12.7mm to 31.8mm)

PHOTOMETRY
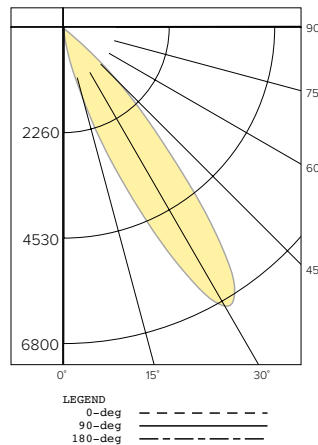
LTR-3SQA-H-10L2765T9NR-DMT / LTR-3SQA-T-S

LUMINAIRE DATA

Test No.	R19.01120-01
Description	1000 lm, Narrow, 3000K, 90 CRI
Delivered Lumens	1055
Watts	20.2W
Efficacy	52.0
Mounting	Recessed
Beam Angle (FWHM)	20

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	858	81.3
0-60	1053	99.8
0-90	1055	100.0
0-180	1055	100.0

POLAR GRAPH

2260
4530
6800

0°   15°   30°

90°
75°
60°
45°

LEGEND
0–deg
90–deg
180–deg

CANDELA DISTRIBUTION

Degree	Candela-0	Candela-45	Candela-90
0	43	43	43
5	110	75	42
15	1362	497	33
25	4940	971	19
35	5832	460	6
45	1764	37	4
55	54	10	1
65	7	1	1
75	1	1	0
85	0	0	0
90	0	0	0

LTR-3SQA SpectraSync
LITEISTRY 3" SQUARE ADJUSTABLE WITH COLOR TUNING

PHOTOMETRY CONTINUED

LTR-3SQA-H-10L2765T9MD-DMT / LTR-3SQA-T-S

LUMINAIRE DATA

Test No.	R19.01121-01
Description	1000 lm, Medium, 3000K, 90 CRI
Delivered Lumens	960
Watts	20.2W
Efficacy	48.0
Mounting	Recessed
Beam Angle (FWHM)	28

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	749	78.0
0-60	957	99.8
0-90	960	100.0
0-180	960	100.0

POLAR GRAPH

LEGEND
0–deg
90–deg
180–deg
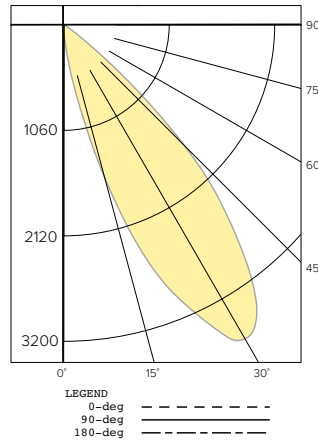
CANDELA DISTRIBUTION

Degree	Candela-0	Candela-45	Candela-90
0	89	89	89
5	259	181	85
15	1620	637	68
25	3261	1006	39
35	3379	547	14
45	1703	76	5
55	118	14	1
65	7	1	1
75	1	1	0
85	0	0	0
90	0	0	0

LTR-3SQA-H-10L2765T9WD-DMT / LTR-3SQA-T-S

LUMINAIRE DATA

Test No.	R19.01122-01
Description	1000 lm, Wide, 3000K, 90 CRI
Delivered Lumens	915
Watts	20.2W
Efficacy	45.0
Mounting	Recessed
Beam Angle (FWHM)	34

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	680	74.3
0-60	912	99.6
0-90	915	100.0
0-180	915	100.0

POLAR GRAPH

LEGEND
0–deg
90–deg
180–deg
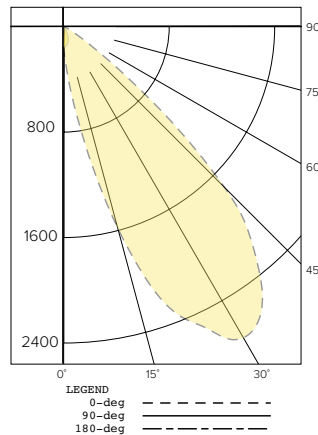
CANDELA DISTRIBUTION

Degree	Candela-0	Candela-45	Candela-90
0	151	151	151
5	372	280	145
15	1485	736	117
25	2360	1031	66
35	2457	636	18
45	1614	139	6
55	223	29	1
65	10	1	1
75	1	1	0
85	0	0	0
90	0	0	0

LTR-3SQA-H-10L2765T9XW-DMT / LTR-3SQA-T-S

LUMINAIRE DATA

Test No.	R19.00781-01
Description	1000 lm, Extra Wide, 3000K, 90 CRI
Delivered Lumens	810
Watts	20.2W
Efficacy	40.0
Mounting	Recessed
Beam Angle (FWHM)	45

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	575	71.0
0-60	801	98.9
0-90	810	100.0
0-180	810	100.0

POLAR GRAPH

LEGEND
0–deg
90–deg
180–deg
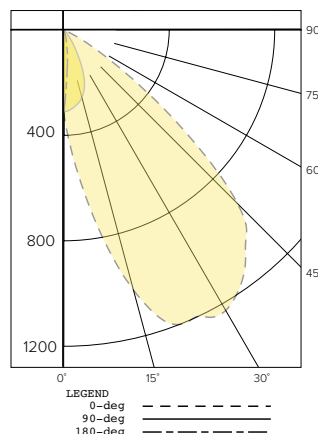
CANDELA DISTRIBUTION

Degree	Candela-0	Candela-45	Candela-90
0	341	341	341
5	567	489	333
15	1119	801	292
25	1316	927	188
35	1288	684	59
45	1024	285	12
55	325	67	1
65	24	1	1
75	1	1	1
85	0	0	0
90	0	0	0

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LTR-3SQA SpectraSync
LITEISTRY 3" SQUARE ADJUSTABLE WITH COLOR TUNING

TM-30 DATA

SPECTRASYNC™ TUNABLE WHITE (2765T)

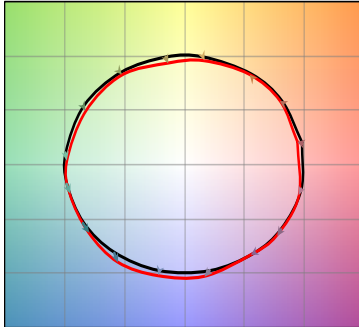**COLOR VECTOR GRAPHIC
2700K, 90+ CRI**
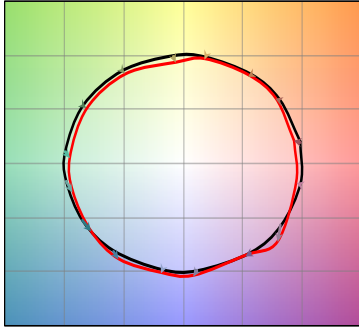
—— Reference Illuminant   —— Test Source

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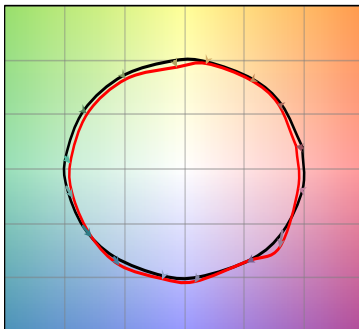

**COLOR VECTOR GRAPHIC
4600K, 90+ CRI**

—— Reference Illuminant   —— Test Source
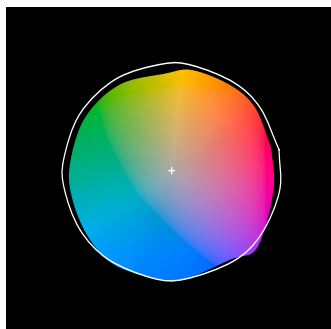
**COLOR DISTORTION GRAPHIC
4600K, 90+ CRI**

**COLOR VECTOR GRAPHIC
6500K, 90+ CRI**

—— Reference Illuminant   —— Test Source
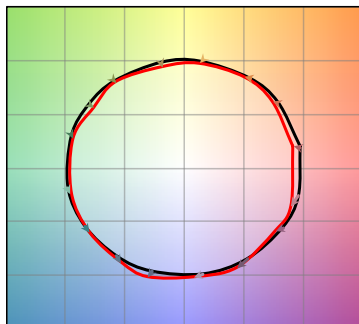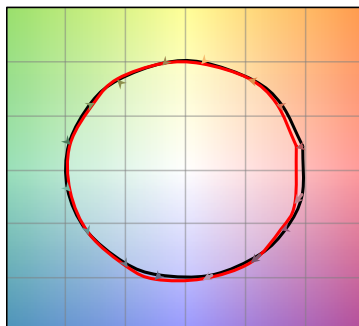
**COLOR DISTORTION GRAPHIC
6500K, 90+ CRI**

TEST RESULTS - TUNABLE WHITE @ 1000 LUMENS (NOMINAL)			
Value	2700K	4600K	6500K
Luminous Flux (lm)	846	941	982
Wattage (W)	17.0	16.8	16.9
Efficacy (lm/W)	50	56	58
R_f	88	89	88
R_g	97	98	97
CCT (K)	2809	4597	6326
D_{uv}	-0.0018	-0.0052	0.0017
x	0.4481	0.3558	0.3163
y	0.4035	0.3502	0.33
CIE R_a	91	95	94
CIE R_9	48	83	73

LTR-3SQA SpectraSync
LITEISTRY 3" SQUARE ADJUSTABLE 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%

TEST RESULTS - DIM TO WARM @ 3 DIMMING LEVELS			
Value	100%	50% Dim	5% Dim
Luminous Flux (lm)	945	507	34
Wattage (W)	16.94	9.69	2.43
Efficacy (lm/W)	56	52	14
R_f	90	92	92
R_g	97	99	98
CCT (K)	3136	2650	2204
D_{UV}	-0.0016	-0.0016	-0.0005
x	0.4254	0.461	0.5063
y	0.3965	0.4069	0.4168
CIE R_a	92	93	92
CIE R_9	52	60	57

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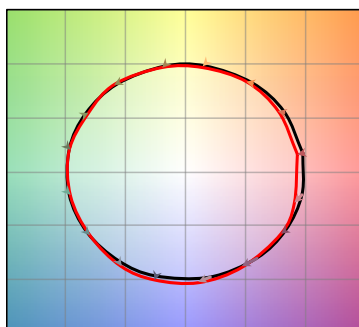**2600K, 90 CRI @ 50% DIM**

— 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

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LITEISTRY 3" SQUARE ADJUSTABLE WITH COLOR TUNING

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 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.

Lumen Output in Emergency Mode
To determine the lumen output in emergency mode multiply the battery pack wattage by the fixture lumens per watt (LPW).
For example, 7W x 120 LPW = 840 lumens in emergency mode.