prescolite

LTR-4SQD SpectraSync
LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

LITEISTRY™

FEATURES

- 4" architectural LED downlight delivering 600 – 2000 lm

- Four beam distributions from 0.6 to 1.2 Spacing Criteria

- Quiet reflector appearance with superior 50º 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 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

WET LOCATION   C CSA US   BAA (-BAA Option)   TAA (-TAA Option)

IP66**   IK10**   IP69K**   **Select models

CONTROLS TECHNOLOGY

NX WIRELESS   NX WIRED   SpectraSync Color Tuning Technology

Typical Dimensions and Weights

Lumen Package	"A" Length Inches (mm)	"B" Width Inches (mm)	"C" Height Inches (mm)	Weight lbs (kg)
06L - 15L	14.56 (370)	14.36 (365)	4.83 (123)	7.7 (3.5)
20L	14.56 (370)	14.36 (365)	6.02 (153)	8.1 (3.7)

See DIMENSIONS section for complete details

SPECIFICATIONS

CONSTRUCTION
- New Construction: Painted black durable steel platform with pre-installed bar hangers
- 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 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

ELECTRICAL (CONTINUED)
- 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%
- 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
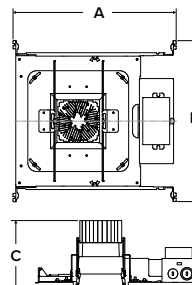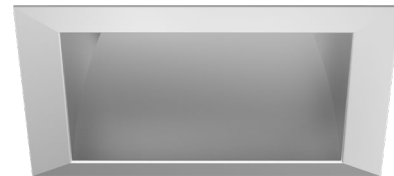
INSTALLATION
- Accommodates ceiling thicknesses up to 1.25" (See DIMENSIONS section for details)
- Universal adjustable mounting brackets also accept ½" EMT conduit or 1½" or ¾" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)
- Light Engine/Driver fully serviceable from above or below the ceiling except with Control options which require top access for driver replacement.

CERTIFICATIONS
- cCSAus certified to UL 1598
- Suitable for wet locations, covered ceiling EM/EMR: Suitable for damp locations

CERTIFICATIONS (CONTINUED)
- EM/EMR: Certified under UL 924 standard for emergency lighting and power equipment
- EM/EMR: Emergency battery packs are California Energy Commission (CEC) Title 20 Compliant
- When used with CE Bezel Trim Accessories: IP66/IP69K rating; also meets IK10 per IEC 60068-2-75 impact testing
- 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	600-2000
Wattage Range	10-36
Efficacy Range (LPW)	50-60*
Reported Life (Hours)	L70 / >60,000
Input Current (mA)	83-300 (120V))

*Based on Specular, 30K, 90 CRI

Current

prescolite

LTR-4SQD SpectraSync
LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

ORDERING GUIDE

Example: LTR–4SQD–H–SL10L–DMTW–LTR–4SQD–T–SL2230TD9MD–SS

CATALOG #

HOUSING

LTR-4SQD-H —

Aperture/Shape/Function		Lumen Package	Lumen Output	Driver Options		Control Options		Voltage	Housing Options	
LTR-4SQD-H	4" Square Downlight New Construction Housing	SL Standard Lumen	**06L** 600	DMTW	SpectraSync™ Dim to Warm, 0-10V Dimming to 5% [1]	**NX Lighting Controls**		*Standard 120-277V*	CP	Chicago Plenum [6, 7, 8]
			10L 1000			**Networked Wireless**			IC	IC rated [6, 7, 8]
		ML Medium Lumen	**15L** 1500	DMT	SpectraSync™ Tunable White, 0-10V Dimming to 5% [2]	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor		EM	7W Emergency Battery Pack (CEC Title 20 Compliant) with integral test switch and indicator light [6, 8]
			20L 2000			**Networked Wired**			EMR	7W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light [6, 8]
						NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor		F	Fuse [6]
									BAA	Buy American Act (FAR 52.225-9) Compliant
									TAA	Trade Agreements Act (FAR 52.225-11) Compliant

TRIM

LTR-4SQD-T —

Aperture/Shape/Function		Lumen Package		CCT		CRI		Distribution	
LTR-4SQD-T	4" Square Downlight Light Engine/Trim Assembly	SL	Standard Lumen	**2230TD**	2200K-3000K SpectraSync™ Dim to Warm	9	90+CRI	NR	Narrow (0.6 SC /37°)
		ML	Medium Lumen	**2750T**	2700K-5000K SpectraSync™ Tunable White			MD	Medium (0.8 SC /46°)
				2765T	2700K-6500K SpectraSync™ Tunable White			WD	Wide (1.0 SC/60°)
								XW	Extra Wide (1.2 SC/69°)

TRIM CONTINUED

Reflector Finish		Reflector Color		Flange Color Options		Lower Trim Options		Reflector Options	
Finish not applicable with painted reflectors (WC or BC)		*Standard Clear*		*Standard matches reflector color*		EM	Pre-punched reflector for EM integral test switch and indicator	AM	Antimicrobial Coating [4]
S	Specular	CG	Champagne Gold	WT	White Flange [3]	FM	Flush Mount Mud-in Ring [5]	BAA	Buy American Act (FAR 52.225-9) Compliant
SS	Semi-Specular	BL	Black	BT	Black Flange [3]			TAA	Trade Agreements Act (FAR 52.225-11) Compliant
VS	Softglow®	LW	Light Wheat						
		PW	Pewter						
		WC	Painted White Cone and Flange						
		BC	Painted Black Cone and Flange						

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
☐ FMR4-SQ	Flush Mount Flange Mud-In Ring, 4" Square
☐ LiteGear	LiteGear® Inverter, 125VA-250VA
☐ LPS Series	LightPower Micro-Inverter, 20VA-55VA
☐ MOR4-SQ-WH	Metal Oversized Ring, 4" Square, White (8.25" outer dimension)
☐ MOR4-SQ-BL	Metal Oversized Ring, 4" Square, Black (8.25" outer dimension)

(See next page for Bezel Trim Accessories for Complex Environments) [9]

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. Flush Mount Flange (FM) requires FMR accessory (sold separately).
6. Housing options (except Fuse, BAA/TAA) not available in combination.
7. IC, CP available in 06L.
8. Not available with Control options.
9. See next page for option restrictions when using with bezel trim accessories.

Current

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Rev 12/17/23
LTR-4SQD SpectraSync_R04

DATE:　　　　　　LOCATION:

TYPE:　　　　　　PROJECT:

LTR-4SQD SpectraSync
LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

CATALOG #:

ACCESSORIES CONTINUED

Bezel Trim Accessories [1, 2, 3, 4]

For more demanding environments, LITEISTRY™ offers bezel trim accessories that can be field installed onto standard housing/trim assemblies and are available with antimicrobial trim finish and/or vandal resistant hardware options.

FEATURES:

- Marine grade die cast aluminum bezel trim with low-copper alloy for durability
- Shatter resistant, 1/4" clear polycarbonate lens, completely flush for easy wipe down
- Closed cell silicone gasket protects against dust and water ingress
- Suitable for wet locations, covered ceiling
- IP66/IP69K rated (room side) when properly installed per installation instructions
- Meets IK10 per IEC 60068-2-75 impact testing
- Optional anti-microbial (AM) trim finish

| WET LOCATION | IP66 | IK10 | IP69K |
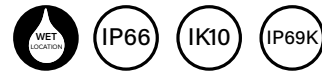
Complex Environment (Includes stainless steel Philips head screws)	
☐ **LTR-4SQD-CE-WT**	Bezel Trim Accessory, IP66/IP69K, 4" Square, White
☐ **LTR-4SQD-CE-WTAM**	Bezel Trim Accessory, IP66/IP69K, 4" Square, White Antimicrobial

Vandal Resistant (Includes stainless steel Torx® screws with tamper resistant center pin reject)	
☐ **LTR-4SQD-CEVR-WT**	Bezel Trim Accessory, Vandal Resistant/IP66/IP69K, 4" Square, White
☐ **LTR-4SQD-CEVR-WTAM**	Bezel Trim Accessory, Vandal Resistant/IP66/IP69K, 4" Square, White Antimicrobial

Dimensional Data	
Aperture Opening	☐ 4.00" (101.6 mm)
Overall Flange	☐ 7.68" (195.1 mm)
Trim Height	0.42" (10.7 mm)
Ceiling Cutout	☐ 6.50" (165.1 mm)
Ceiling Thickness	0.50" to 2.00" (12.7 mm to 50.8 mm)

Notes:
1　Available up to 4000 Max Lumens.
2　Not available in combination with EM or FM options.
3　Not available in combination with FMR or LTR-MOR accessories.
4　Refer to all Installation Instructions for complete details.

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

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LTR-4SQD SpectraSync
LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING
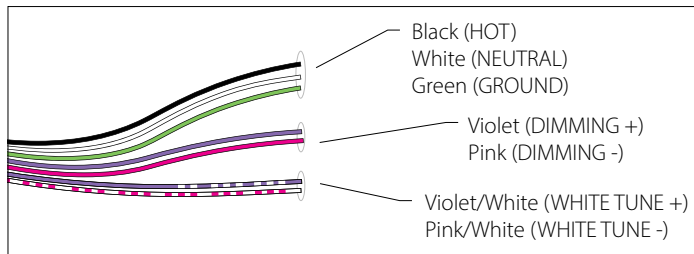
SPECTRASYNC™ COLOR TUNING TECHNOLOGY

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 -)

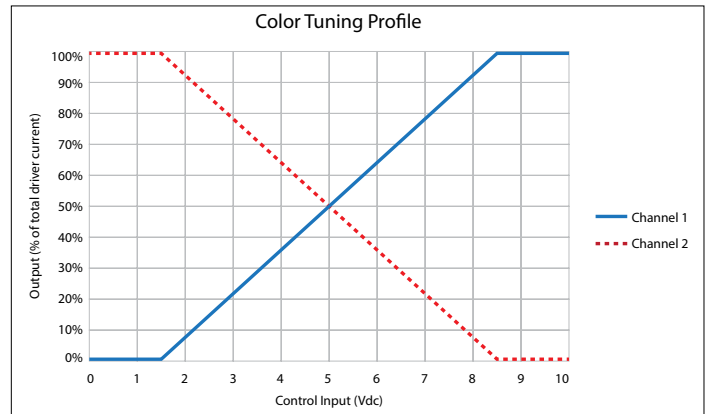Violet/White (WHITE TUNE +)
Pink/White (WHITE TUNE -)

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-4SQD SpectraSync
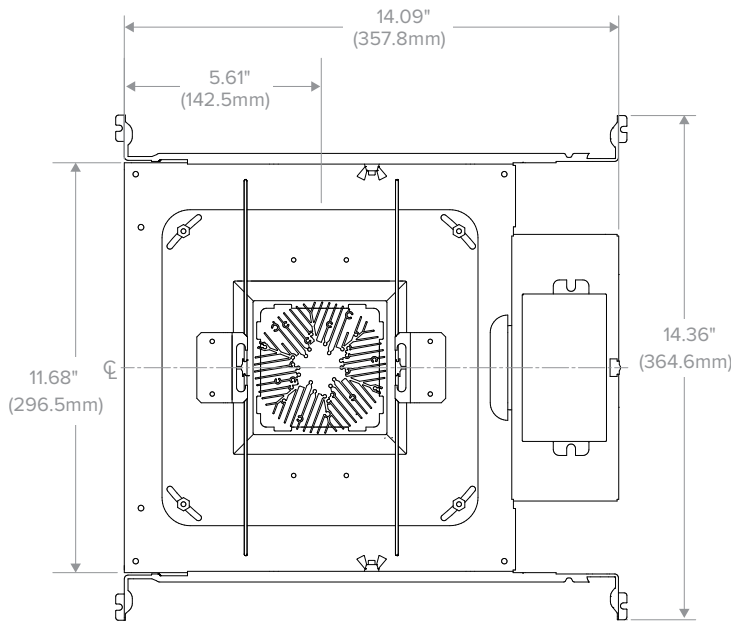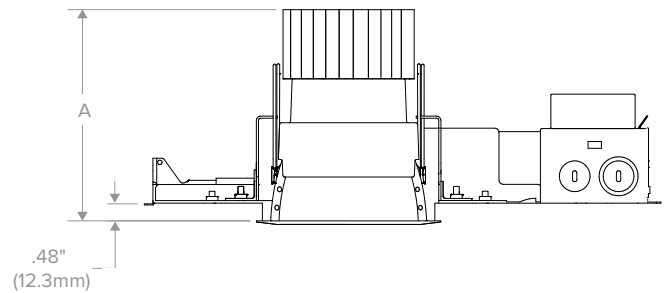LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

DIMENSIONS

Top View

LTR-4SQD-H New Construction

Dimensional Data		
Aperture		4.00" (101.6mm) SQ
Flange	Standard	5.25" (133.4mm) SQ
	Flush Mount	4.69" (119.1mm) SQ
	With Bezel Trim Accessory**	7.67" (194.8 mm)
Ceiling Cutout	Standard	5.00" (127.0mm) SQ
	Flush Mount	5.00" (127.0mm) SQ
	With Bezel Trim Accessory**	6.50" (165.1 mm)
Ceiling Thickness	Standard	0.50" to 1.25" (12.7mm to 31.8mm)
	With Bezel Trim Accessory**	0.50" to 2.00" (12.7 mm to 50.8 mm)

Lumen Package	"A"
06L-10L	4.83" (122.7mm)
15L-20L	7.20" (182.9mm)

**For complete details on Bezel Trim Accessories, see Accessory section on Page 3 and Bezel Trim Installation Instructions on currentlighting.com/prescolite.
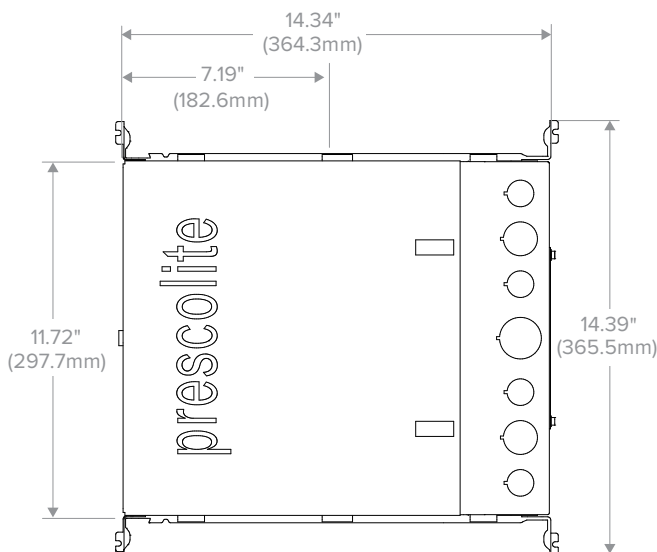
LTR-4SQD-H IC/CP
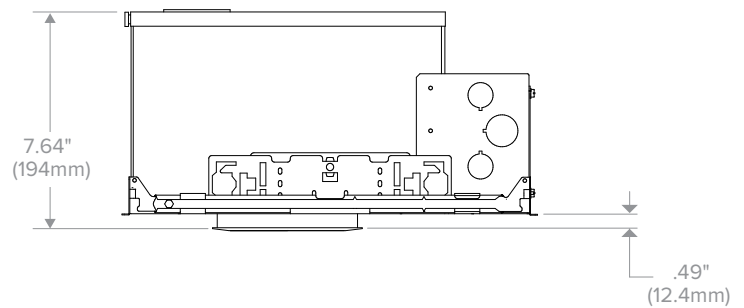
Dimensional Data		
Aperture		4.00" (101.6mm) SQ
Flange	Standard	5.25" (133.4mm) SQ
	Flush Mount	4.69" (119.1mm) SQ
Ceiling Cutout	Standard	5.00" (127.0mm) SQ
	Flush Mount	5.00" (127.0mm) SQ
Ceiling Thickness		0.50" to 1.25" (12.7mm to 31.8mm)

LTR-4SQD SpectraSync
LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

PHOTOMETRY

LTR-4SQD-H-ML20L-DMT / LTR-4SQD-T-ML2765T9NRS

LUMINAIRE DATA

Test No.	R19.00949-11
Description	2000 lm, Narrow, 3000K, 90 CRI
Delivered Lumens	2132
Watts	35.3W
Efficacy	60.0
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	37

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2004	94.0
0-60	2123	99.6
0-90	2132	100.0
0-180	2132	100.0

POLAR GRAPH

LEGEND
0–deg
45–deg
90–deg
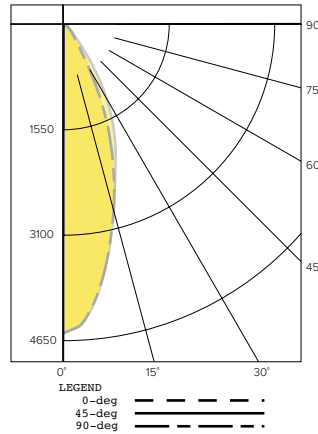
CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	4316	4316	4316
5	4035	4037	4033
15	2670	2661	2658
25	1259	1631	1256
35	269	624	270
45	105	127	105
55	22	29	23
65	5	6	5
75	2	2	2
85	1	1	1
90	0	0	0

LTR-4SQD-H-ML20L-DMT / LTR-4SQD-T-ML2765T9MDS

LUMINAIRE DATA

Test No.	R19.00950-11
Description	2000 lm, Medium, 3000K, 90 CRI
Delivered Lumens	2059
Watts	35.3W
Efficacy	58.0
Mounting	Recessed
Spacing Criterion	0.8
Beam Angle (FWHM)	46

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1917	93.1
0-60	2050	99.6
0-90	2059	100.0
0-180	2059	100.0

POLAR GRAPH

LEGEND
0–deg
45–deg
90–deg
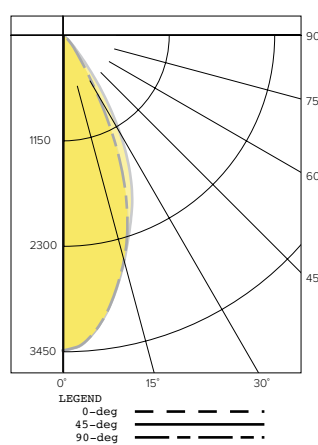
CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	3202	3202	3202
5	3081	3085	3083
15	2377	2391	2383
25	1318	1642	1327
35	340	689	346
45	115	144	116
55	24	32	24
65	6	6	5
75	2	3	2
85	1	1	1
90	0	0	0

LTR-4SQD-H-ML20L-DMT / LTR-4SQD-T-ML2765T9WDS

LUMINAIRE DATA

Test No.	R19.01045-11
Description	2000 lm, Wide, 3000K, 90 CRI
Delivered Lumens	1814
Watts	35.3W
Efficacy	51.0
Mounting	Recessed
Spacing Criterion	1.0
Beam Angle (FWHM)	60

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1609	88.7
0-60	1803	99.4
0-90	1814	100.0
0-180	1814	100.0

POLAR GRAPH

LEGEND
0–deg
45–deg
90–deg
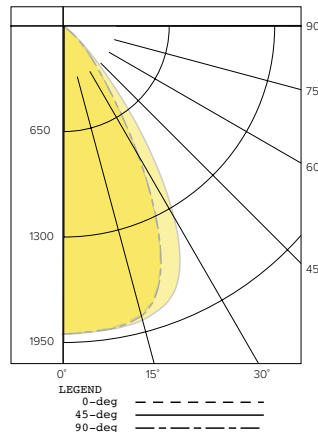
CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1662	1662	1662
5	1654	1658	1656
15	1613	1645	1622
25	1214	1484	1223
35	479	819	486
45	166	224	167
55	33	45	34
65	6	7	6
75	3	3	3
85	1	1	1
90	0	0	0

LTR-4SQD SpectraSync
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PHOTOMETRY CONTINUED
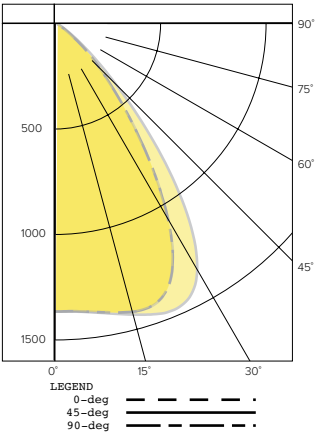
LTR-4SQD-H-ML20L-DMT / LTR-4SQD-T-ML2765T9XWS

LUMINAIRE DATA

Test No.	R19.00952-11
Description	2000 lm, Extra Wide, 3000K, 90 CRI
Delivered Lumens	1770
Watts	35.3W
Efficacy	50.0
Mounting	Recessed
Spacing Criterion	1.2
Beam Angle (FWHM)	69

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1484	83.9
0-60	1757	99.3
0-90	1770	100.0
0-180	1770	100.0

POLAR GRAPH

LEGEND
0–deg
45–deg
90–deg

CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1195	1195	1195
5	1199	1201	1199
15	1238	1251	1237
25	1139	1273	1136
35	647	929	644
45	237	328	237
55	42	64	43
65	7	8	7
75	3	3	3
85	1	1	1
90	0	0	0

![prescolite logo]

LTR-4SQD SpectraSync
LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

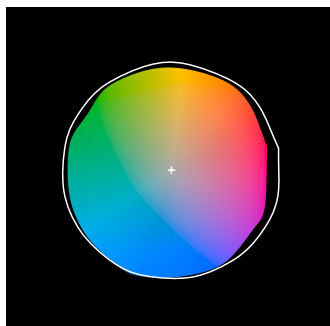| DATE:	LOCATION:
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TM-30 DATA

SPECTRASYNC™ TUNABLE WHITE (2765T)

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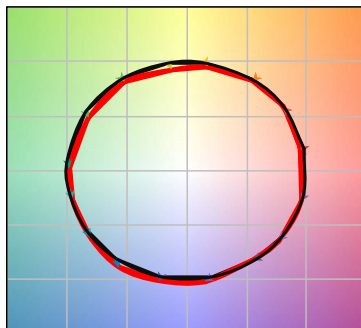**2700K, 90+ CRI**
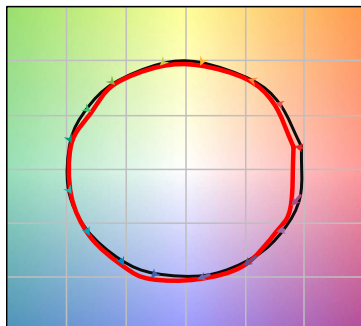
— Reference Illuminant   — Test Source

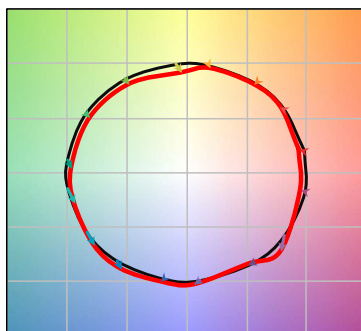**COLOR DISTORTION GRAPHIC**
2700K, 90+ CRI

COLOR VECTOR GRAPHIC
4600K, 90+ CRI

— Reference Illuminant   — Test Source

COLOR DISTORTION GRAPHIC
4600K, 90+ CRI

COLOR VECTOR GRAPHIC
6500K, 90+ CRI

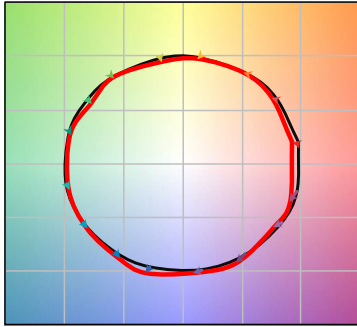— Reference Illuminant   — Test Source

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

LTR-4SQD SpectraSync
LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING
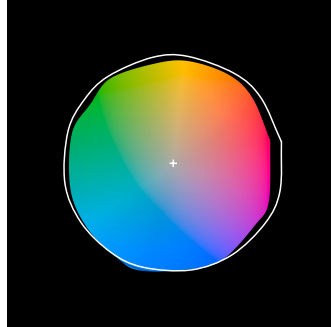
TM-30 DATA CONTINUED

SPECTRASYNC™ DIM TO WARM (2230TD)

COLOR VECTOR GRAPHIC
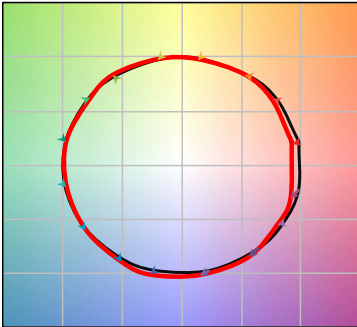**3000K, 90+ CRI @ 100%**

—— Reference Illuminant   —— Test Source

COLOR DISTORTION GRAPHIC
3000K, 90+ CRI @ 100%

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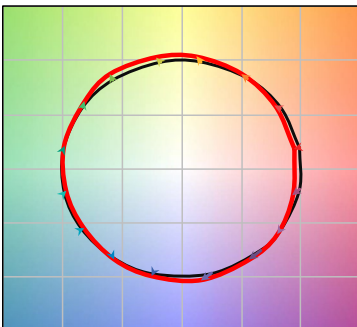**2600K, 90 CRI @ 50% DIM**

—— 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

prescolite

LTR-4SQD SpectraSync
LITEISTRY 4" SQUARE DOWNLIGHT 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.

Bezel Trim Accessories for Complex Environments
See installation instructions on currentlighting.com/prescolite for complete details.

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.

Current