

LTR-6SQD SpectraSync

LITEISTRY 6" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

FEATURES

- 6" architectural LED downlight delivering 600 – 3000 lm
- Four beam distributions from 0.6 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 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



CONTROLS TECHNOLOGY



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

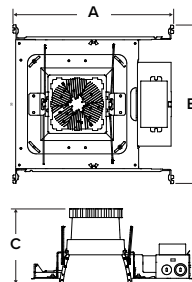
INSTALLATION

- Accommodates ceiling thicknesses up to 1.25" (See DIMENSIONS section for details)
- Universal adjustable mounting brackets also accept ½" EMT conduit or 1 ½" 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

CERTIFICATIONS

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

LITEISTRY™



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)	6 (152)	8 (3.6)
20L - 30L	14.56 (370)	14.36 (365)	6.78 (172)	8.4 (3.8)

See DIMENSIONS section for complete details

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	
Lumen Range	600-3000
Wattage Range	10-49
Efficacy Range (LPW)	51-58*
Reported Life (Hours)	L70 / >60,000
Input Current (mA)	83-408 (120V)

*Based on Specular, 30K, 90 CRI

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ORDERING GUIDE

Example: LTR-6SQD-H-SL10L-DMTW-LTR-6SQD-T-SL2230TD9MD-SS

CATALOG #

HOUSING

LTR-6SQD-H									
Aperture/Shape/Function		Lumen Package		Lumen Output		Driver Options			
LTR-6SQD-H	6" Square Downlight New Construction Housing	SL	Standard Lumen	06L	600	DMTW	SpectraSync™ Dim to Warm, 0-10V Dimming to 5% ¹		
				10L	1000				
		ML	Medium Lumen	15L	1500				
				20L	2000				
		HL	High Lumen	25L	2500	DMT	SpectraSync™ Tunable White, 0-10V Dimming to 5% ²		
				30L	3000				
								Control Options	
								Voltage	
						Housing Options			
						Standard 120-277V			
						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			
						CP Chicago Plenum ^{6,7,8}			
						IC IC rated ^{6,7,8}			
						EM 7W Emergency Battery Pack (CEC Title 20 Compliant) with integral test switch and indicator light ^{6,8}			
						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-6SQD-T									
Aperture/Shape/Function		Lumen Package		CCT		CRI		Distribution	
LTR-6SQD-T	6" Square Downlight Light Engine/Trim Assembly	SL	Standard Lumen	2230TD	2200K-3000K SpectraSync™ Dim to Warm	9	90+CRI	NR	Narrow (0.6 SC/36°)
		ML	Medium Lumen	2750T	2700K-5000K SpectraSync™ Tunable White			MD	Medium (0.7 SC/43°)
		HL	High Lumen	2765T	2700K-6500K SpectraSync™ Tunable White			WD	Wide (1.0 SC/65°)
								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	BL Black	WT White Flange ³	BT Black Flange ³	FM Flush Mount Mud-in Ring ⁵		BAA Buy American Act (FAR 52.225-9) Compliant	TAA Trade Agreements Act (FAR 52.225-11) Compliant
SS Semi-Specular		LW Light Wheat	PW Pewter						
VS Softglow®		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
- ☐ FMR6-SQ Flush Mount Mud-In Ring, 6" Square
- ☐ LiteGear LiteGear® Inverter, 125VA-250VA
- ☐ LPS Series LightPower Micro-Inverter, 20VA-55VA
- ☐ MOR6-SQ-WH Metal Oversized Ring, 6" Square, White (10.25" outer dimension)
- ☐ MOR6-SQ-BL Metal Oversized Ring, 6" Square, Black (10.25" outer dimension)

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

Notes:

- Must select 2230TD with DMTW driver.
- Must select either 2750T or 2765T with DMT driver.
- WT not needed for WC, BT not needed for BC.
- AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
- Flush Mount Flange (FM) requires FMR accessory (sold separately).
- Housing options (except Fuse, BAA/TAA) not available in combination.
- IC, CP available in 06L.
- Not available with Control options.
- See next page for option restrictions when using with bezel trim accessories.

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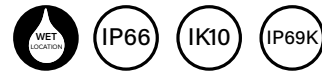
ACCESSORIES CONTINUED

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



Complex Environment (Includes stainless steel Philips head screws)

- ☐ LTR-6SQD-CE-WT Bezel Trim Accessory, IP66/IP69K, 6" Square, White
- ☐ LTR-6SQD-CE-WTAM Bezel Trim Accessory, IP66/IP69K, 6" Square, White Antimicrobial

Vandal Resistant (Includes stainless steel Torx® screws with tamper resistant center pin reject)

- ☐ LTR-6SQD-CEVR-WT Bezel Trim Accessory, Vandal Resistant/IP66/IP69K, 6" Square, White
- ☐ LTR-6SQD-CEVR-WTAM Bezel Trim Accessory, Vandal Resistant/IP66/IP69K, 6" Square, White Antimicrobial

Dimensional Data

Aperture Opening	□ 6.00" (152.4 mm)
Overall Flange	□ 9.69" (246.1 mm)
Trim Height	0.42" (10.7 mm)
Ceiling Cutout	□ 8.50" (215.9 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

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SPECTRASync™ COLOR TUNING TECHNOLOGY

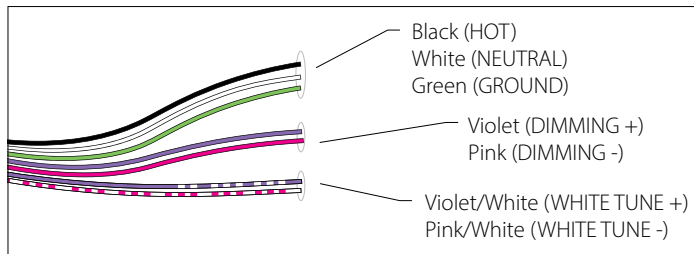
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.



SPECTRASync COLOR TUNING TECHNOLOGY		
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.

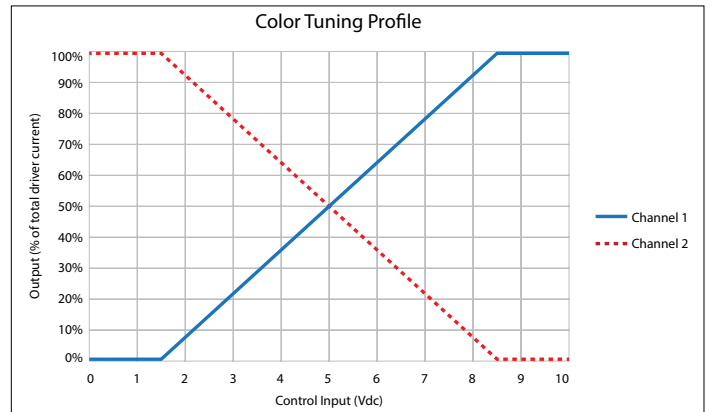


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and pink circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and pink/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

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: DDTV, DVSTV, and NDTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers



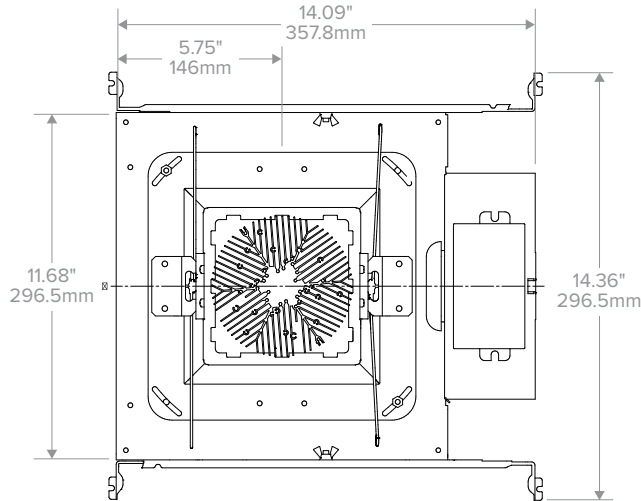
To enable scheduling and for use with NX wall control preset stations please refer to SpectraSync technical sheet.

LTR-6SQD SpectraSync

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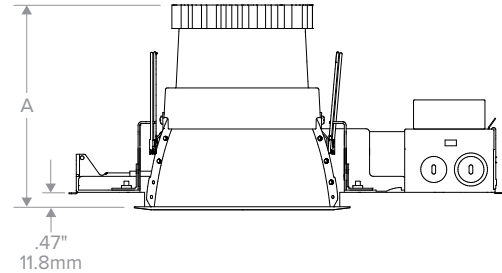
DIMENSIONS

DATE:	LOCATION:
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Top View

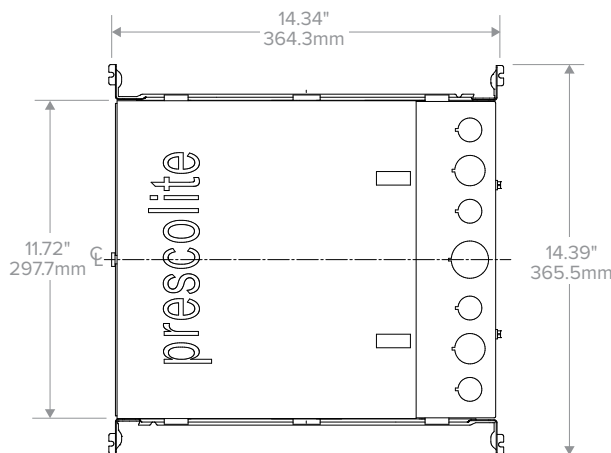
LTR-6SQD-H New Construction



Dimensional Data		
Aperture		6.00" (152.4mm) SQ
Flange	Standard	7.25" (184.2mm) SQ
	Flush Mount	6.47" (164.3mm) SQ
	With Bezel Trim Accessory**	□ 9.69" (246.1 mm)
Ceiling Cutout	Standard	6.69" (169.9mm) SQ
	Flush Mount	6.88" (174.8mm) SQ
	With Bezel Trim Accessory**	□ 8.50" (215.9 mm)
Ceiling Thickness	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)

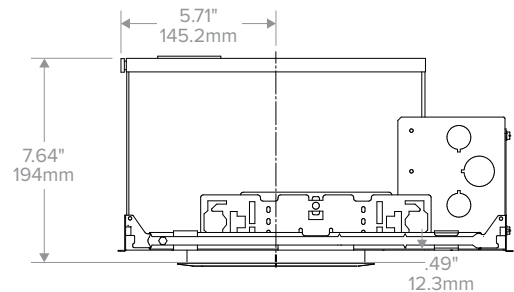
Lumen Package	"A"
06L-10L	6.00" (152.4mm)
15L-20L	7.96" (202.2mm)
25L-30L	9.14" (232.2mm)

** For complete details on Bezel Trim Accessories, see Accessory section on Page 3 and Bezel Trim Installation Instructions on currentlighting.com/prescolite.



Top View

LTR-6SQD-H IC/CP



Dimensional Data		
Aperture		6.00" (152.4mm) SQ
Flange	Standard	7.25" (184.2mm) SQ
	Flush Mount	6.47" (164.3mm) SQ
Ceiling Cutout	Standard	6.69" (169.9mm) SQ
	Flush Mount	6.88" (174.8mm) SQ
Ceiling Thickness		0.50" to 1.25" (12.7mm to 31.8mm)

PHOTOMETRY

LTR-6SQD-H-ML20L-DMT / LTR-6SQD-T-ML2765T9NRS

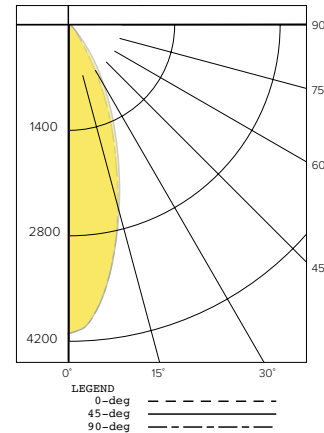
LUMINAIRE DATA

Test No.	R19.00935-21
Description	2000 lm, Narrow, 3000K, 90 CRI
Delivered Lumens	2035
Watts	35.3W
Efficacy	58.0
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	43

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1919	94.3
0-60	2028	99.7
0-90	2035	100.0
0-180	2035	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	4127	4127	4127
5	3890	3892	3890
15	2530	2597	2535
25	1205	1389	1214
35	309	567	311
45	89	121	91
55	17	23	17
65	4	5	4
75	2	2	2
85	0	1	0
90	0	0	0

LTR-6SQD-H-ML20L-DMT / LTR-6SQD-T-ML2765T9MDS

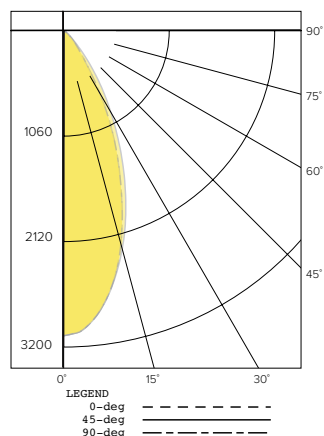
LUMINAIRE DATA

Test No.	R19.01046-21
Description	2000 lm, Medium, 3000K, 90 CRI
Delivered Lumens	2023
Watts	35.3W
Efficacy	57.0
Mounting	Recessed
Spacing Criterion	0.7
Beam Angle (FWHM)	65

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1891	93.5
0-60	2016	99.7
0-90	2023	100.0
0-180	2023	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	3315	3315	3315
5	3197	3198	3196
15	2392	2447	2386
25	1272	1460	1270
35	378	627	378
45	103	142	103
55	18	27	18
65	4	5	5
75	2	2	2
85	0	1	0
90	0	0	0

LTR-6SQD-H-ML20L-DMT / LTR-6SQD-T-ML2765T9WDS

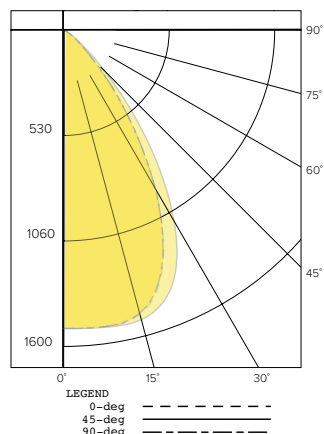
LUMINAIRE DATA

Test No.	R19.00936-21
Description	2000 lm, Wide, 3000K, 90 CRI
Delivered Lumens	1853
Watts	35.3W
Efficacy	52.0
Mounting	Recessed
Spacing Criterion	1.0
Beam Angle (FWHM)	69

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1613	87.0
0-60	1843	99.5
0-90	1853	100.0
0-180	1853	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1548	1548	1548
5	1552	1553	1552
15	1525	1556	1518
25	1218	1369	1210
35	640	835	636
45	187	281	189
55	28	49	29
65	5	6	5
75	3	3	3
85	1	1	1
90	0	0	0

PHOTOMETRY CONTINUED

LTR-6SQD-H-ML20L-DMT / LTR-6SQD-T-ML2765T9XWS

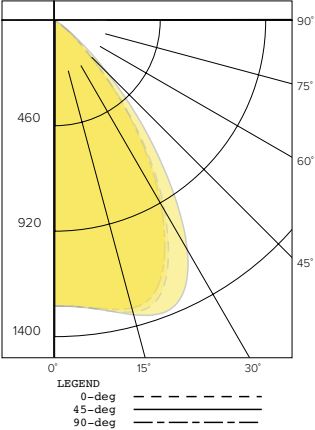
LUMINAIRE DATA

Test No.	R19.01047-21
Description	2000 lm, Extra Wide, 3000K, 90 CRI
Delivered Lumens	1802
Watts	35.3W
Efficacy	51.0
Mounting	Recessed
Spacing Criterion	1.2
Beam Angle (FWHM)	69

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1523	84.5
0-60	1792	99.4
0-90	1802	100.0
0-180	1802	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1235	1235	1235
5	1244	1245	1243
15	1306	1318	1289
25	1163	1310	1127
35	707	885	681
45	223	335	219
55	33	58	33
65	6	7	6
75	3	3	3
85	1	1	1
90	0	0	0

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LOCATION:

TYPE:

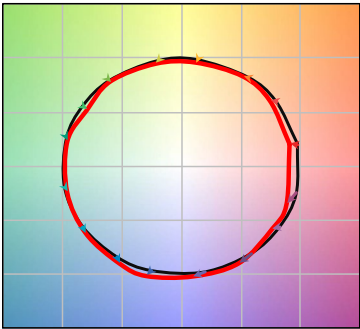
PROJECT:

CATALOG #:

TM-30 DATA

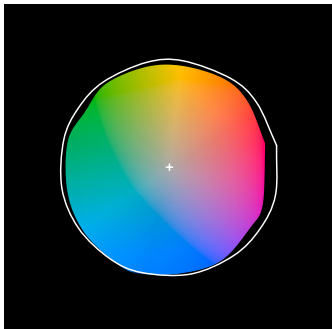
SPECTRASYNCTM TUNABLE WHITE (2765T)

COLOR VECTOR GRAPHIC
2700K, 90+ CRI

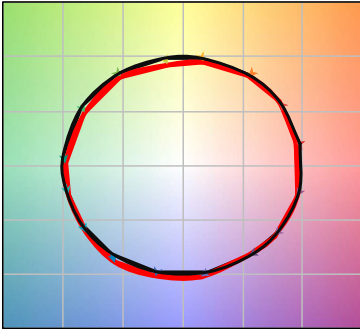


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
2700K, 90+ CRI

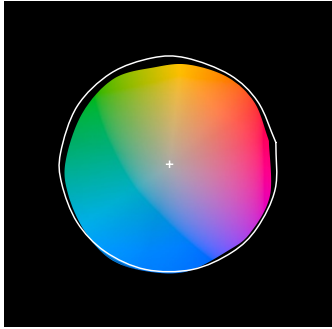


COLOR VECTOR GRAPHIC
4600K, 90+ CRI

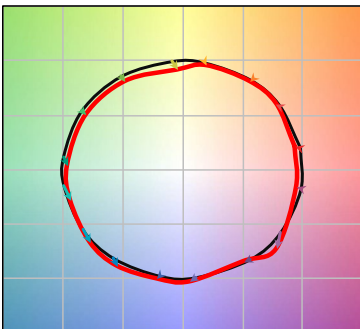


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
4600K, 90+ CRI

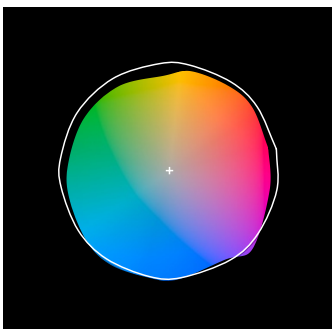


COLOR VECTOR GRAPHIC
6500K, 90+ CRI



— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
6500K, 90+ CRI

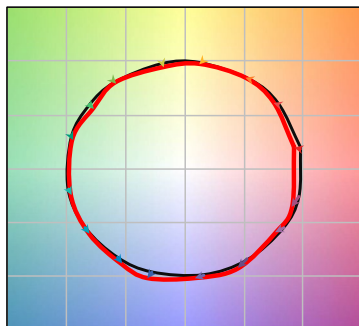


TEST RESULTS - TUNABLE WHITE @ 1500 LUMENS (NOMINAL)			
Value	2700K	4600K	6500K
Luminous Flux (lm)	1407	1604	1660
Wattage (W)	23.9	24.3	24.6
Efficacy (lm/W)	59	66	68
R _f	90	89	87
R _g	97	98	96
CCT (K)	2817	4588	6518
D _{uv}	-0.0013	-0.0040	0.0018
x	0.4482	0.3565	0.3131
y	0.4047	0.3531	0.3273
CIE R _a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

TM-30 DATA CONTINUED

SPECTRASYNCTM DIM TO WARM (2230TD)

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

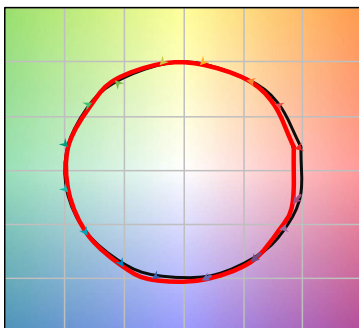


— Reference Illuminant — Test Source

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

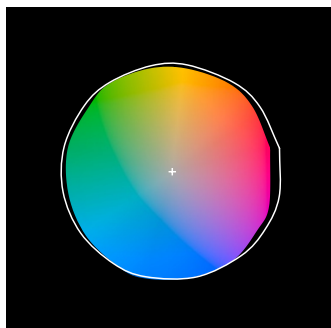


COLOR VECTOR GRAPHIC
2600K, 90 CRI @ 50% DIM

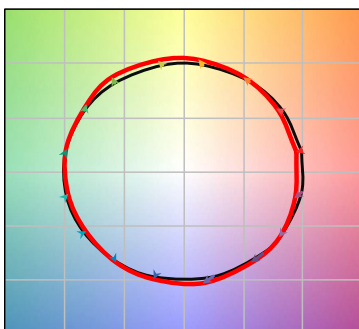


— Reference Illuminant — Test Source

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

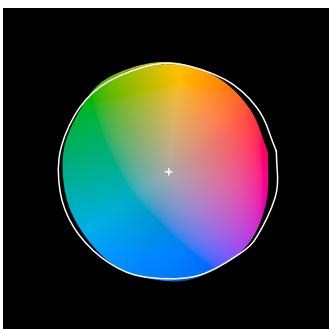


COLOR VECTOR GRAPHIC
2200K, 90 CRI @ 5% DIM



— 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 _t	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 _g	53	60	64

LTR-6SQD SpectraSync

LITEISTRY 6" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

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.