

LTR-3SQD SpectraSync

LITEISTRY 3" SQUARE DOWNLIGHT WITH COLOR TUNING

LITEISTRY™

FEATURES

- 3" architectural LED downlight delivering 600–1300 lm
- Four beam distributions from 0.6 to 1.2 Spacing Criteria
- Quiet reflector appearance with 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 Distributed Intelligence™ wired and wireless controls capability available



RELATED PRODUCTS

Ø 3" LITEISTRY
Family

Ø 4" LITEISTRY
Family

Ø 6" LITEISTRY
Family



CONTROL 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
- Optical grade silicone lens integral to light engine
- The light distribution is free of distracting bright spots or pixelation and the perimeter has a smooth transition
- 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
- Long LED life: L70 / >60,000 hours (TM-21)
- Universal voltage 120V–277V driver
- UL Class 2, inherent short circuit and overload protection, RoHS compliant
- Flicker free 0–10V dimming to 5%
- NX Distributed Intelligence or Lutron Vive control options available
- Emergency Battery Pack option available with remote test switch an indicator light
- Refer to additional spec sheets for information on [standard LITEISTRY](#) or [PowerHUBB™ PoE enabled](#) solutions

INSTALLATION

- Accommodates ceiling thicknesses up to 1.25"
- Universal adjustable mounting brackets also accept 1/2" EMT conduit or 1 1/2" or 3/4" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)
- Light Engine fully serviceable from above or below the ceiling; driver and EMR battery pack are serviceable above ceiling only

CERTIFICATIONS

- cCSAus certified to UL 1598
- Suitable for wet locations, covered ceiling EMR: Suitable for damp locations
- EMR: Certified under UL 924 standard for emergency lighting and power equipment
- 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. See [Buy American Solutions](#).

WARRANTY

- 5 year warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	600–1300
Wattage Range	10–23
Efficacy Range (LPW)	52–59*
Reported Life (Hours)	L70 / >60,000
Input Current (mA)	83–192 (120V)

* Based on Specular, 30K, 90 CRI



LTR-3SQD SpectraSync

LITEISTRY 3" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ORDERING GUIDE

Example: LTR-3SQD-H-SL10L-DMTW-LTR-3SQD-T-SL2230TD9MD-SS

CATALOG #

HOUSING

LTR-3SQD-H												
Aperture/Shape/Function		Lumen Package		Lumen Output		Driver Options		Control Options		Voltage	Housing Options	
LTR-3SQD-H	3" Square Downlight New Construction Housing	SL	Standard Lumen	06L	600	DMTW	SpectraSync™ Dim to Warm, 0-10V Dimming to 5% ¹	NXE	NX, Dual SmartPORTs	Standard 120-277V	CP	Chicago Plenum ^{6, 7, 8}
				10L	1000						IC	IC rated ^{6, 7, 8}
				13L	1300						EMR	Emergency Battery Pack with remote test switch and indicator light ^{6, 8}
											F	Fuse ⁶
						DMT	SpectraSync™ Tunable White, 0-10V Dimming to 5% ²					
								NXWE	NX Wireless Enabled			
								NXWD	NX Wireless, Dual SmartPORTs			
								LV	Lutron Vive Enabled, 0-10V ⁵			

TRIM

LTR-3SQD-T											
Aperture/Shape/Function		Lumen Package		CCT		CRI		Distribution		Reflector Finish	
LTR-3SQD-T	3" Square Downlight Light Engine/Trim Assembly	SL	Standard Lumen	2230TD	2200K-3000K SpectraSync™ Dim to Warm		9	90+CRI	NR	Narrow (0.6 SC/38°)	<i>Finish not applicable with painted reflectors (WC or BC)</i>
				2750T	2700K-5000K SpectraSync™ Tunable White				MD	Medium (0.8 SC/48°)	
				2765T	2700K-6500K SpectraSync™ Tunable White				WD	Wide (1.0 SC/62°)	
						XW			Extra Wide (1.2 SC/74°)		
										S Specular	
										SS Semi-Specular	
										VS Softglow®	
										VSS SoftSheen™	

TRIM CONTINUED

Reflector Color		Flange Color Options		Reflector Options	
Standard Clear		Standard matches reflector color		AM Antimicrobial Coating ⁴	
CG	Champagne Gold	WT	White Flange ³		
BL	Black	BT	Black Flange ³		
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
- ☐ FMR3-SQ Flush Mount Flange 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)

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.
- LV available only with DMTW driver option.
- Housing options (except Fuse) not available in combination.
- IC, CP available in 06L
- Not available with Control options.

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CONTROLS

NX Distributed Intelligence™ Lighting Controls:

Supports applications in a variety of deployment options- wired, wireless, hybrid. Integrates with and enables a wide array of luminaires including those with SpectraSync™ Color Tuning Technology.



NX INTEGRATED CONTROLS REFERENCE								
NX Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0-10V Dimming	On/off Control	Bluetooth® App Programming
NX Networked – Wired								
NXE	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R ¹
NX Networked – Wireless								
NXWE ²	N/A	Yes	Yes	No	No	Yes	Yes	No ³
NX Networked – Wired/Wireless								
NXWD	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R ^{1,3}

¹ NXBTC/R needs to be plugged into an available NX SmartPort™ on the fixture network

² Programming via App requires factory assistance

³ To program NXWE option, need to consult factory. If connected to an area controller, programming can be done from that

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.



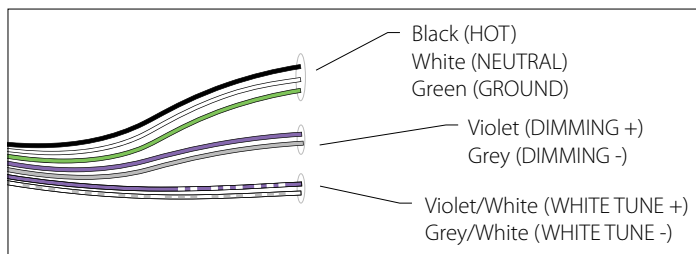
SPECTRASYNCH COLOR TUNING TECHNOLOGY		
Mode	Kelvin Range	Description
Dim to Warm	2200K-3000K	Mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed
Tunable White	2700K-5000K 2700K-6500K	Offers users the ability to tailor CCT to their personal preference, 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.

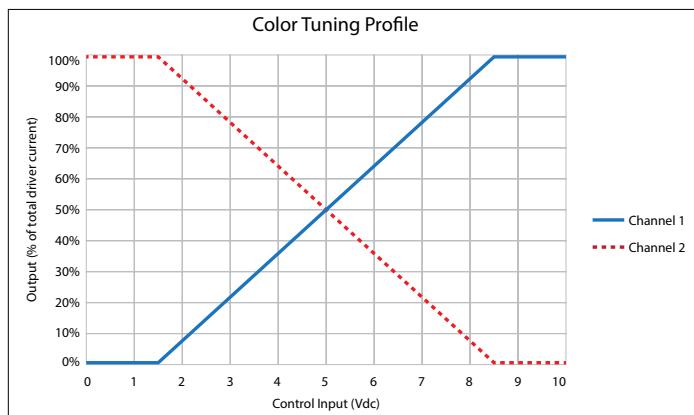


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and grey circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and grey/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

Controller Manufacturer Data

SpectraSync Tunable White was designed to be used with sinking style dimmers (provided by others) and is compatible with:

- Hubbell Control Solutions (HCS): NX Distributed Intelligence™ Room Controllers (NXRC) and In-fixture Controllers (NXFM)
- Lutron: DDTV, DVSTV, and NDTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers



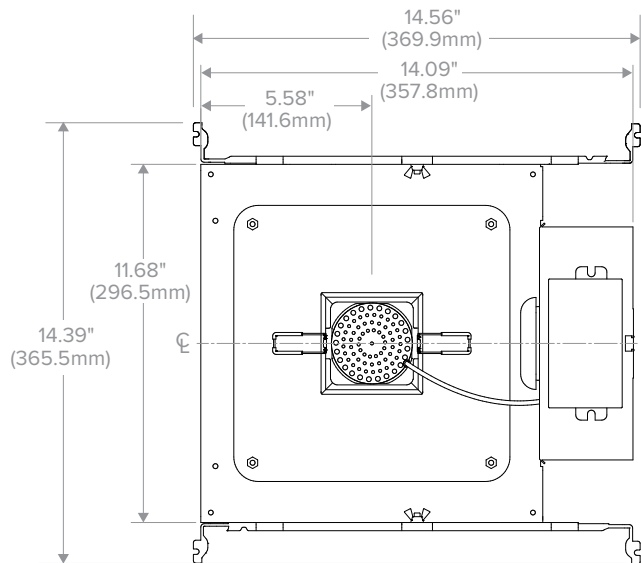
To enable scheduling and for use with NX wall control preset stations please refer to Hubbell Control Solutions NX SpectraSync technical sheet.



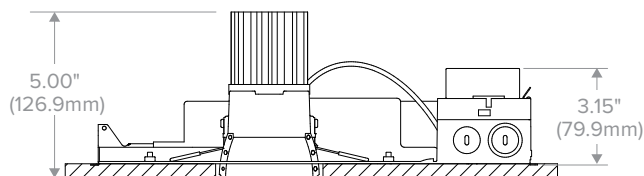
LTR-3SQD SpectraSync

LITEISTRY 3" SQUARE DOWNLIGHT WITH COLOR TUNING

DIMENSIONS

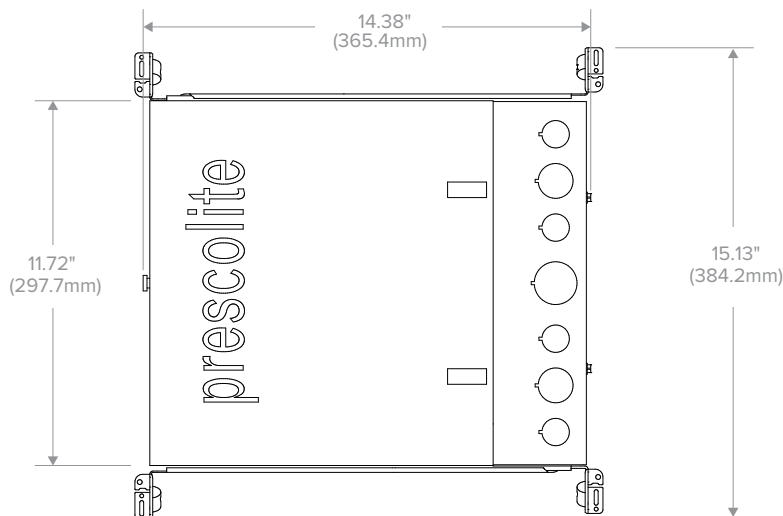


Top View

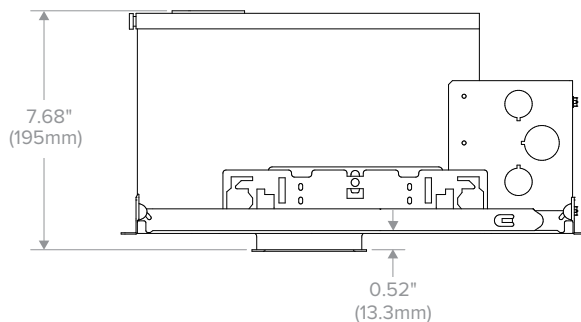


Dimensional Data		
Aperture		2.88" SQ. (73.2mm)
Flange	Standard	3.62" SQ. (91.9mm)
	Flush Mount	3.62" SQ. (91.9mm)
Ceiling Cutout	Standard	3.31" SQ. (84.1mm)
	Flush Mount	3.94" SQ (100.1mm)
Ceiling Thickness		0.50" to 1.25" (12.7mm to 31.8mm)

LTR-3SQD-H New Construction



Top View



Dimensional Data		
Aperture		2.88" SQ. (73.2mm)
Flange	Standard	3.62" SQ. (91.9mm)
	Flush Mount	3.62" SQ. (91.9mm)
Ceiling Cutout	Standard	3.31" SQ. (84.1mm)
	Flush Mount	3.94" SQ (100.1mm)
Ceiling Thickness		0.50" to 1.25" (12.7mm to 31.8mm)

LTR-3SQD-H IC/CP



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PHOTOMETRY

LTR-3SQD-H-SL13L-DMT / LTR-3SQD-T-SL2765T9NRS

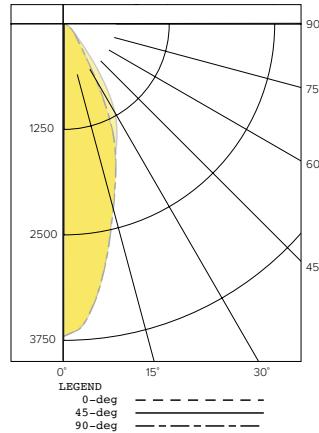
LUMINAIRE DATA

Test No.	R19.00953-21
Description	1300 lm, Narrow, 3000K, 90 CRI
Delivered Lumens	1339
Watts	23.3W
Efficacy	57.0
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	38

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1210	90.4
0-60	1330	99.3
0-90	1339	100.0
0-180	1339	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	2419	2419	2419
5	2245	2246	2250
15	1458	1430	1468
25	826	959	841
35	220	480	228
45	98	117	102
55	34	37	39
65	5	6	5
75	2	3	2
85	1	1	1
90	0	0	0

LTR-3SQD-H-SL13L-DMT / LTR-3SQD-T-SL2765T9MDS

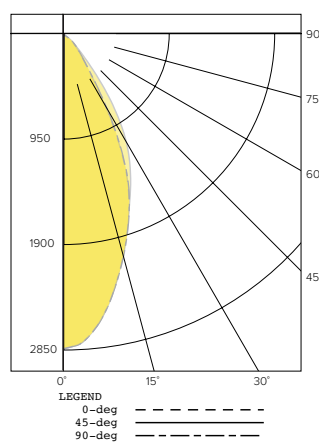
LUMINAIRE DATA

Test No.	R19.00954-21
Description	1300 lm, Medium, 3000K, 90 CRI
Delivered Lumens	1297
Watts	23.3W
Efficacy	56.0
Mounting	Recessed
Spacing Criterion	0.8
Beam Angle (FWHM)	48

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1156	89.2
0-60	1287	99.3
0-90	1297	100.0
0-180	1297	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1826	1826	1826
5	1753	1752	1753
15	1336	1325	1338
25	842	920	851
35	263	496	271
45	106	130	110
55	37	40	42
65	5	6	5
75	2	3	3
85	1	1	1
90	0	0	0

LTR-3SQD-H-SL13L-DMT / LTR-3SQD-T-SL2765T9WDS

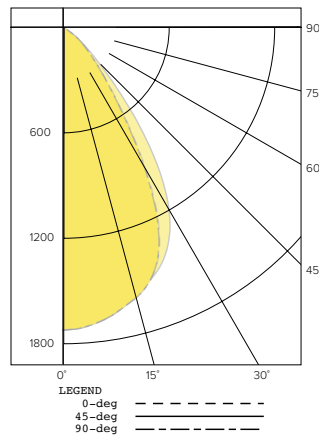
LUMINAIRE DATA

Test No.	R19.01044-21
Description	1300 lm, Wide, 3000K, 90 CRI
Delivered Lumens	1212
Watts	23.3W
Efficacy	52.0
Mounting	Recessed
Spacing Criterion	1.0
Beam Angle (FWHM)	62

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1025	84.6
0-60	1200	99.1
0-90	1212	100.0
0-180	1212	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1062	1062	1062
5	1051	1050	1050
15	985	978	983
25	801	861	793
35	368	561	356
45	145	187	137
55	53	52	46
65	6	7	6
75	2	3	2
85	1	1	1
90	0	0	0

LTR-3SQD SpectraSync

LITEISTRY 3" SQUARE DOWNLIGHT WITH COLOR TUNING

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PHOTOMETRY CONTINUED

LTR-3SQD-H-SL13L-DMT / LTR-3SQD-T-SL2765T9XWS

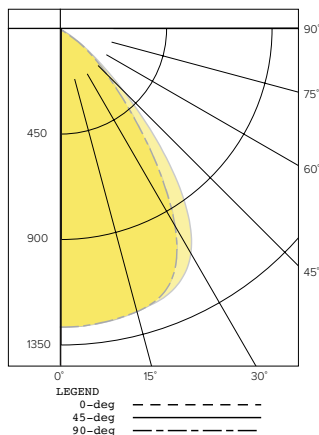
LUMINAIRE DATA

Test No.	R19.00956-21
Description	1300 lm, Extra Wide, 3000K, 90 CRI
Delivered Lumens	1188
Watts	23.4W
Efficacy	51.0
Mounting	Recessed
Spacing Criterion	1.2
Beam Angle (FWHM)	74

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1519	79.5
0-60	1889	98.9
0-90	1188	100.0
0-180	1188	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	793	793	793
5	792	792	792
15	779	780	780
25	715	746	715
35	460	587	457
45	191	256	187
55	63	67	57
65	7	9	6
75	3	3	3
85	1	1	1
90	0	0	0

LTR-3SQD SpectraSync

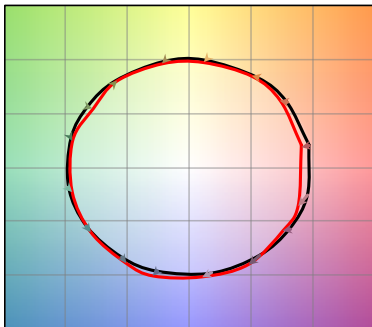
LITEISTRY 3" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE:	LOCATION:
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TM-30 DATA

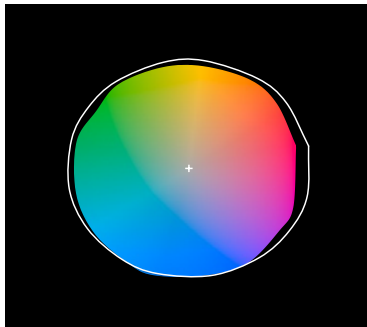
SPECTRASYNCTM TUNABLE WHITE (2765T)

COLOR VECTOR GRAPHIC
2700K, 90+ CRI

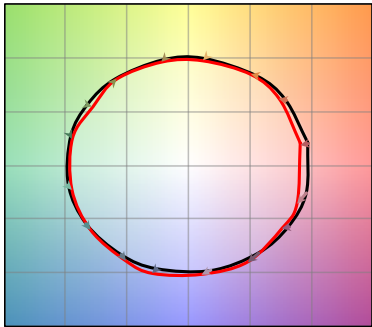


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
2700K, 90+ CRI

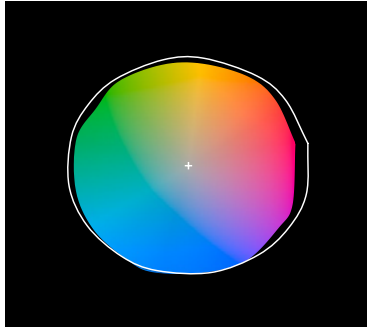


COLOR VECTOR GRAPHIC
4600K, 90+ CRI

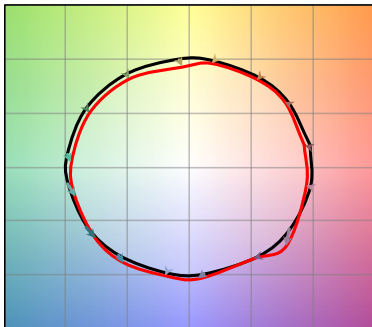


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
4600K, 90+ CRI

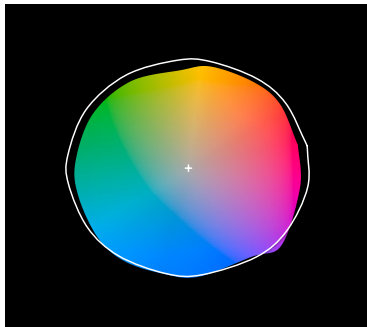


COLOR VECTOR GRAPHIC
6500K, 90+ CRI



— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
6500K, 90+ CRI



TEST RESULTS - TUNABLE WHITE @ 1300 LUMENS (NOMINAL)

Value	2700K	4600K	6500K
Luminous Flux (lm)	1063	1231	1270
Wattage (W)	23.1	23.0	23.0
Efficacy (lm/W)	46	54	55
R _f	89	89	88
R _g	97	98	97
CCT (K)	2875	4615	6504
D _{uv}	-0.0021	-0.0057	0.0011
x	0.4427	0.355	0.3135
y	0.4013	0.3486	0.3262
CIE R _a	90	95	94
CIE R _g	44	82	72

LTR-3SQD SpectraSync

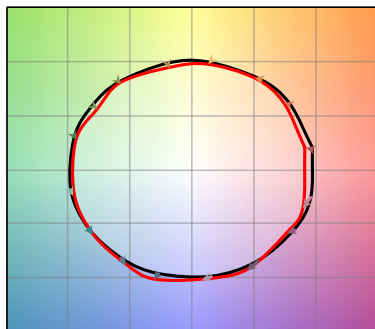
LITEISTRY 3" SQUARE DOWNLIGHT WITH COLOR TUNING

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TM-30 DATA CONTINUED

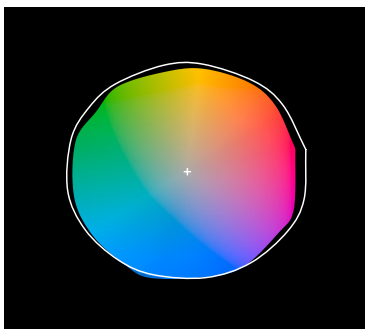
SPECTRASYNCTM DIM TO WARM (2230TD)

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

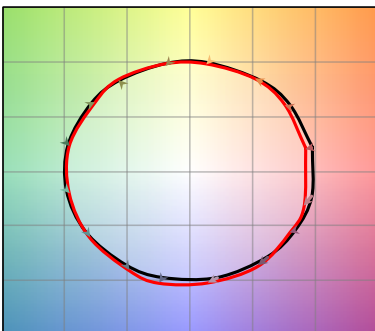


— Reference Illuminant — Test Source

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

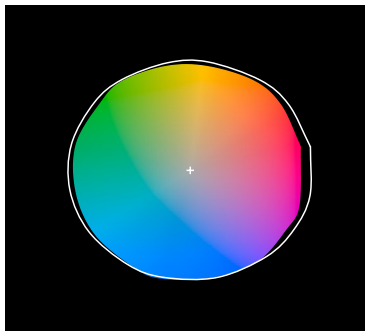


COLOR VECTOR GRAPHIC
2600K, 90 CRI @ 50% DIM

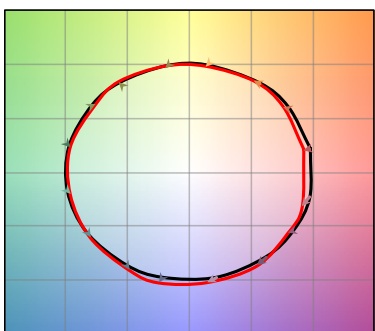


— Reference Illuminant — Test Source

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

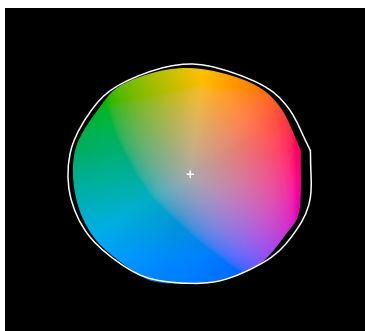


COLOR VECTOR GRAPHIC
2200K, 90 CRI @ 5% DIM



— 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)	1198	662	52
Wattage (W)	23.07	12.14	2.43
Efficacy (lm/W)	52	55	21
R _t	89	91	91
R _g	97	99	99
CCT (K)	3212	2642	2210
D _{uv}	-0.0019	-0.0020	-0.0008
x	0.4201	0.4609	0.5035
y	0.3936	0.4058	0.4145
CIE R _a	91	93	92
CIE R _g	49	59	58



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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

WATTAGE DATA		
Lumen Output	Nominal Lumens	WATTAGE
06L	600	10
10L	1000	18
13L	1300	23

* Wattage may vary based on configuration and options selected

ADDITIONAL INFORMATION

Central Inverters

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

LiteGear: www.dual-lite.com/products/litegear_lg_series

LPS Series: www.dual-lite.com/products/lps