LTR-3RD SpectraSync

LITEISTRY 3" ROUND DOWNLIGHT WITH COLOR TUNING

LITEISTRY™

FEATURES

- 3" architectural LED downlight delivering 600–1300 lm

- Four beam distributions from 0.4 to 1.1 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

- 3" LITEISTRY Family
- 4" LITEISTRY Family
- 6" LITEISTRY Family

WET LOCATION

C CSA US

BUY AMERICAN SOLUTIONS
See Certification Specifications

CONTROL TECHNOLOGY

NX DISTRIBUTED™ INTELLIGENCE

SpectraSync™
Color Tuning Technology

SPECIFICATIONS

CONSTRUCTION
- New Construction: Painted black durable steel platform with pre-installed bar hangers
- Light Engine/Trim Assembly: Die cast and spun aluminum construction
- Light Engine connections use plenum rated (CMP) cable
- Pre-wired junction box with snap-on covers for easy access
- Snap-in connection from driver compartment allows easy installation

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 spun 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 at >60,000 (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 thickness up to 2"
- 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 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)	83-191 (120V)

*Based on Specular, 30K, 90 CRI

HUBBELL Lighting

LTR-3RD SpectraSync

LITEISTRY 3" ROUND DOWNLIGHT WITH COLOR TUNING

ORDERING GUIDE

Example: LTR–3RD–H–SL10L–DMTW–LTR–3RD–T–SL2230TD9MD–S

CATALOG #

HOUSING

LTR-3RD-H	–			–					–
Aperture/Shape/Function		**Lumen Package**	**Lumen Output**		**Driver Options**	**Control Options**	**Voltage**	**Housing Options**	

Aperture/Shape/Function	Lumen Package	Lumen Output	Driver Options	Control Options	Voltage	Housing Options
LTR-3RD-H 3" Round Downlight New Construction Housing	**SL** Standard Lumen	**06L** 600 **10L** 1000 **13L** 1300	**DMTW** SpectraSync™ Dim to Warm, 0-10V Dimming to 5% [1] **DMT** SpectraSync™ Tunable White, 0-10V Dimming to 5% [2]	**NXE** NX Enabled, Dual SmartPorts **NXWE** NX Wireless Enabled **NXWD** NX Wireless Enabled, Dual SmartPorts **LV** Lutron Vive Enabled, 0-10V [6]	*Standard 120-277V*	**CP** Chicago Plenum [7, 8, 9] **IC** IC rated [7, 8, 9] **EMR** Emergency Battery Pack with remote test switch and indicator light [7, 9] **F** Fuse [7]

TRIM

LTR-3RD-T	–			–
Aperture/Shape/Function				

Aperture/Shape/Function	Lumen Package	CCT	CRI	Distribution
LTR-3RD-T 3" Round Downlight Light Engine/Trim Assembly	**SL** Standard 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/53°) **WD** Wide (0.9 SC/59°) **XW** Extra Wide (1.1 SC/66°)

TRIM CONTINUED

			–

Reflector Finish	Reflector Color	Flange Color 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 [5] **BT** Black Flange [5]	**AM** Antimicrobial Coating [3]

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-R**	Flush Mount Mud-In Ring, 3" Round [4]
☐ **LiteGear**	LiteGear® Inverter, 125VA-250VA
☐ **LPS Series**	LightPower Micro-Inverter, 20VA-55VA
☐ **MOR3-R-WH**	Metal Oversized Ring, 3" Round, White (6.75" outside diameter)
☐ **MOR3-R-BL**	Metal Oversized Ring, 3" Round, Black (6.75" outside diameter)
☐ **LTR-SCA3-___**	Sloped Ceiling Adapter, 3", White [10]

Notes:
1. Must select 2230TD with DMTW driver
2. Must select either 2750T or 2765T with DMT driver
3. AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
4. Flush Mount Flange requires FMR accessory (sold separately).
5. WT not needed for WC, BT not needed for BC.
6. LV available only with DMTW driver option.
7. Housing options (except Fuse) not available in combination.
8. IC, CP available in 06L
9. Not available with Control options.
10. Specify slope angle 5°-35° in 5° increments. Not available with FMR accessory.

HUBBELL Lighting

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LTR-3RD SpectraSync
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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 DISTRIBUTED™ INTELLIGENCE

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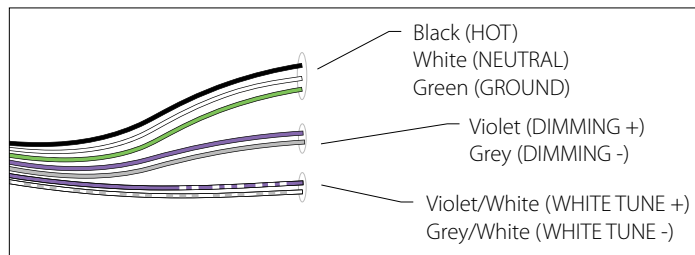
SpectraSync™ Color Tuning Technology:
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.

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 +)
Grey (DIMMING -)
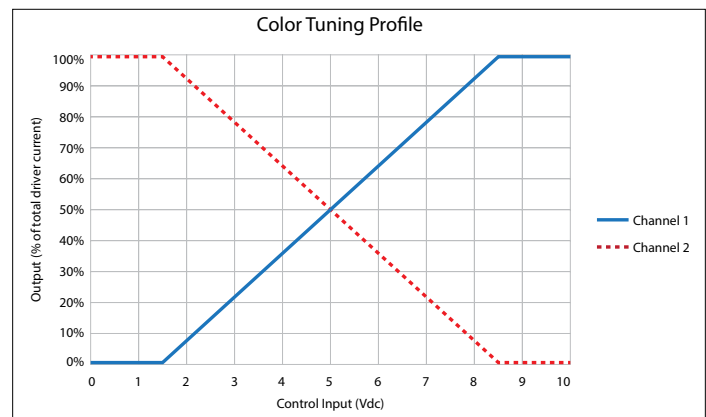Violet/White (WHITE TUNE +)
Grey/White (WHITE TUNE -)

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: DVTV, DVSTV, and NFTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers

Color Tuning Profile

Channel 1
Channel 2

Output (% of total driver current) vs Control Input (Vdc)

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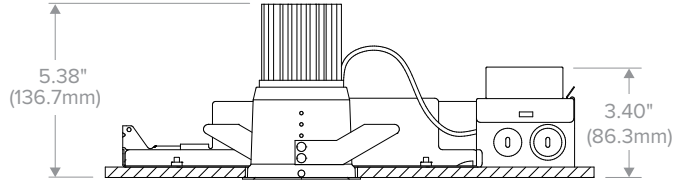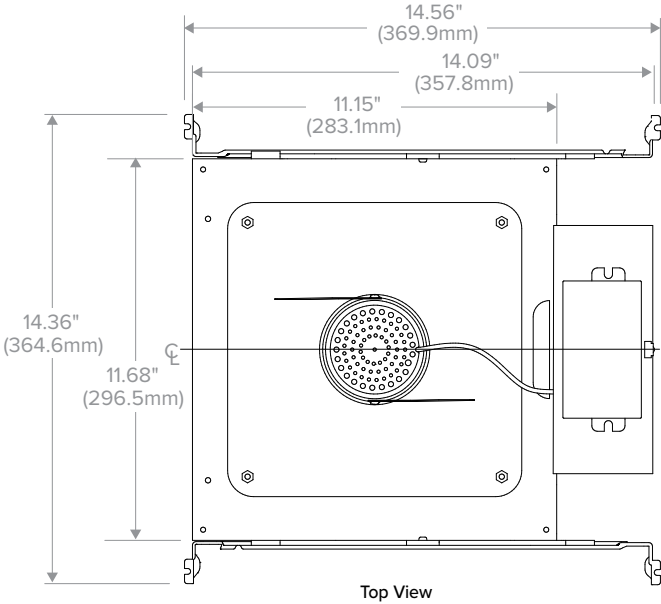
HUBBELL Lighting

prescolite

LTR-3RD SpectraSync

LITEISTRY 3" ROUND DOWNLIGHT WITH COLOR TUNING

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

DIMENSIONS

14.56"
(369.9mm)

14.09"
(357.8mm)

11.15"
(283.1mm)

14.36"
(364.6mm)

11.68"
(296.5mm)

Top View

5.38"
(136.7mm)

3.40"
(86.3mm)

Dimensional Data	
Aperture	2.88" (73.2mm)
Flange: Standard & Flush Mount	3.68" (93.5mm)

Ceiling Cutout:	Standard	3.38" (85.9mm)
	Flush Mount	4.00" (101.6mm)
Ceiling Thickness:	Standard	0.50" to 2.00" (12.7mm to 50.8mm)
	With SCA	0.50" to 1.25" (12.7mm to 31.8mm)

SCA Sloped Ceiling Adapter accessory available, see LTR-SCA specification sheet and installation instructions for dimensional data and other details.

LTR-3RD-H New Construction

14.38"
(365.4mm)

11.72"
(297.7mm)

15.13"
(384.2mm)

Top View

7.68"
(195mm)

0.52"
(13.3mm)

Dimensional Data	
Aperture	2.88" (73.2mm)
Flange: Standard & Flush Mount	3.68" (93.5mm)

Ceiling Cutout:	Standard	3.38" (85.9mm)
	Flush Mount	4.00" (101.6mm)
Ceiling Thickness:	Standard	0.50" to 2.00" (12.7mm to 50.8mm)
	With SCA	0.50" to 1.25" (12.7mm to 31.8mm)

SCA Sloped Ceiling Adapter accessory available, see LTR-SCA specification sheet and installation instructions for dimensional data and other details.

LTR-3RD-H IC/CP

HUBBELL Lighting

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

LTR-3RD SpectraSync
LITEISTRY 3" ROUND DOWNLIGHT WITH COLOR TUNING

PHOTOMETRY

LTR-3RD-H-SL13L-DMTW / LTR-3RD-T-SL2230TD9NRS

LUMINAIRE DATA

Test No.	19.01976
Description	1300 lm, Narrow, 3000K, 90 CRI
Delivered Lumens	1367
Watts	23.3W
Efficacy	58.6
Mounting	Recessed
Spacing Criterion	0.5
Beam Angle (FWHM)	29

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1345	98.4
0-60	1366	99.9
0-90	1367	100.0
0-180	1367	100.0

POLAR GRAPH
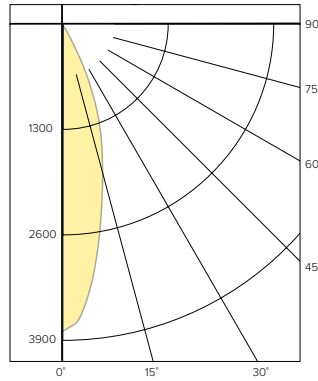
CANDELA DISTRIBUTION

Degree	Candela
0	3798
5	3554
15	1970
25	855
35	148
45	20
55	2
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	6637
55°	818
65°	555
75°	0
85°	0

*Candela/Square Meter

LTR-3RD-H-SL13L-DMTW / LTR-3RD-T-SL2230TD9MDS

LUMINAIRE DATA

Test No.	19.01975
Description	1300 lm, Medium, 3000K, 90 CRI
Delivered Lumens	1254
Watts	23.3W
Efficacy	53.8
Mounting	Recessed
Spacing Criterion	0.8
Beam Angle (FWHM)	44

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1220	97.2
0-60	1253	99.9
0-90	1254	100.0
0-180	1254	100.0

POLAR GRAPH
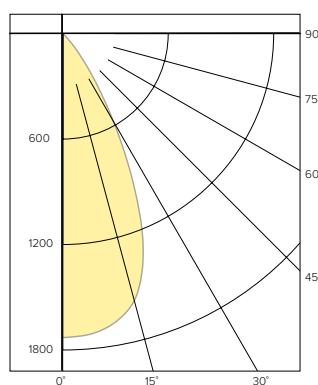
CANDELA DISTRIBUTION

Degree	Candela
0	1730
5	1719
15	1573
25	961
35	291
45	30
55	2
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	9956
55°	818
65°	555
75°	0
85°	0

*Candela/Square Meter

LTR-3RD-H-SL13L-DMTW / LTR-3RD-T-SL2230TD9WDS

LUMINAIRE DATA

Test No.	19.01974
Description	1300 lm, Wide, 3000K, 90 CRI
Delivered Lumens	1218
Watts	23.3W
Efficacy	52.2
Mounting	Recessed
Spacing Criterion	0.9
Beam Angle (FWHM)	61

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1173	96.3
0-60	1217	99.9
0-90	1218	100.0
0-180	1218	100.0

POLAR GRAPH
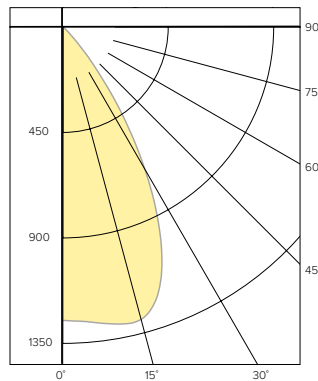
CANDELA DISTRIBUTION

Degree	Candela
0	1252
5	1263
15	1291
25	982
35	401
45	39
55	3
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	12943
55°	1227
65°	555
75°	0
85°	0

*Candela/Square Meter

HUBBELL
Lighting

LTR-3RD SpectraSync

LITEISTRY 3" ROUND DOWNLIGHT WITH COLOR TUNING

PHOTOMETRY CONTINUED
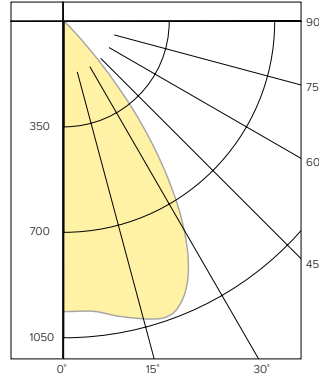
LTR-3RD-H-SL13L-DMTW / LTR-3RD-T-SL2230TD9XWS

LUMINAIRE DATA

Test No.	19.01973
Description	1300 lm, Extra Wide, 3000K, 90 CRI
Delivered Lumens	1210
Watts	23.4W
Efficacy	51.8
Mounting	Recessed
Spacing Criterion	1.1
Beam Angle (FWHM)	78

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1149	94.9
0-60	1209	99.9
0-90	1210	100.0
0-180	1210	100.0

POLAR GRAPH

CANDELA DISTRIBUTION

Degree	Candela
0	963
5	965
15	1022
25	965
35	544
45	43
55	3
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	14270
55°	1227
65°	555
75°	0
85°	0

*Candela/Square Meter

HUBBELL Lighting

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LTR-3RD SpectraSync

LITEISTRY 3" ROUND DOWNLIGHT WITH COLOR TUNING

TM-30 DATA

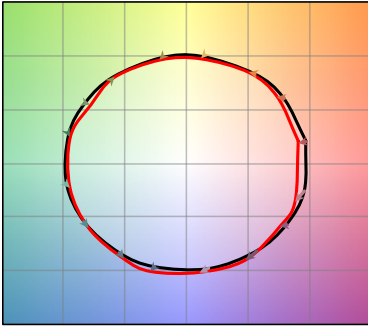**SPECTRASYNC™ TUNABLE WHITE (2765T)**

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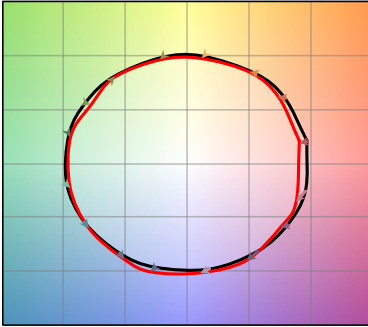
Reference Illuminant —— Test Source

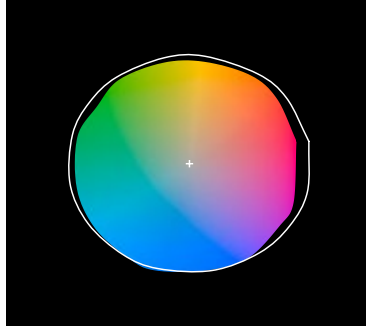**COLOR DISTORTION GRAPHIC**
2700K, 90+ CRI
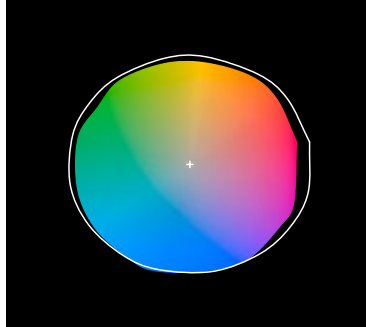
COLOR VECTOR GRAPHIC
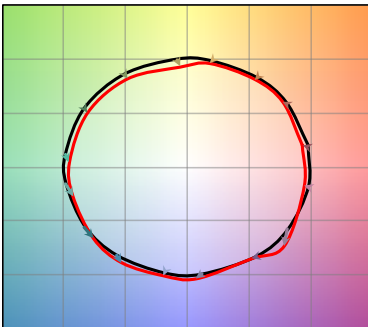**4600K, 90+ CRI**

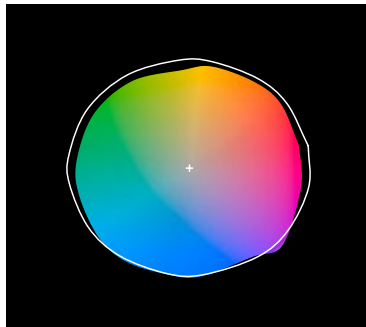Reference Illuminant —— Test Source

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 @ 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_9	44	82	72

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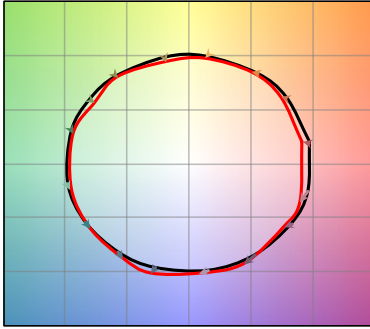| DATE: | LOCATION: |
| TYPE: | PROJECT: |
| CATALOG #: | |

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LITEISTRY 3" ROUND DOWNLIGHT WITH COLOR TUNING

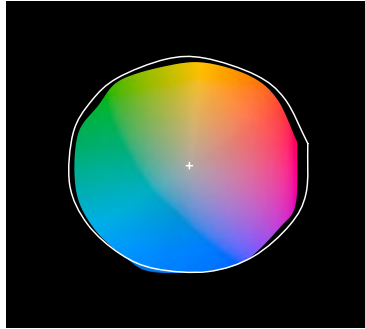## TM-30 DATA CONTINUED

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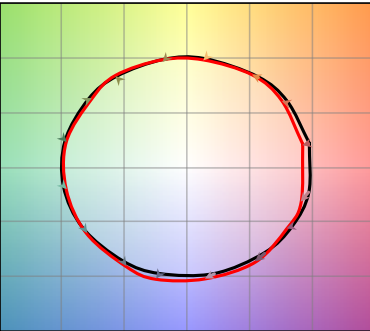
COLOR VECTOR GRAPHIC
3000K, 90+ CRI @ 100%

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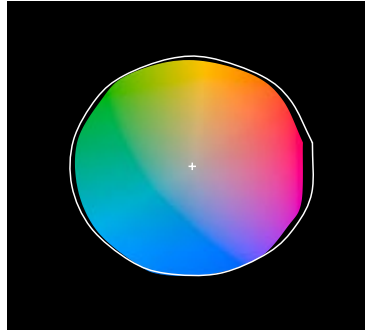
COLOR DISTORTION GRAPHIC
3000K, 90+ CRI @ 100%

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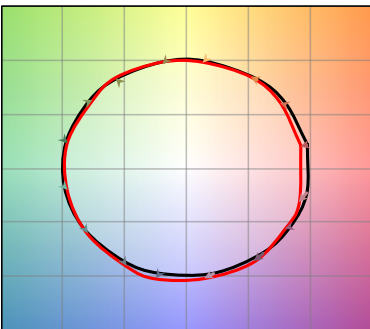**2600K, 90 CRI @ 50% DIM**

—— 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)	1198	662	52
Wattage (W)	23.07	12.14	2.43
Efficacy (lm/W)	52	55	21
R_f	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_9	49	59	58

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ELECTRICAL DATA

DRIVER DATA	
Input Voltage	120-277V
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