

LTR-4RD SpectraSync

LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

LITEISTRY™

FEATURES

- 4" architectural LED downlight delivering 600 – 2000 lm
- Four beam distributions from 0.4 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 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
- 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 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 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%
- Integral and remote emergency controller and battery pack options available
- 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 0.5" EMT conduit or 1.5" or 0.75" 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
- EM/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	600-2000
Wattage Range	10-36
Efficacy Range (LPW)	49-60*
Reported Life (Hours)	L70 / >60,000
Input Current (mA)	83-300 (120V)

*Based on Specular, 30K, 90 CRI



LTR-4RD SpectraSync

LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

ORDERING GUIDE

Example: LTR-4RD-H-SL10L-DMTW-LTR-4RD-T-SL2230TD9MD-S

CATALOG #

HOUSING

LTR-4RD-H		Lumen Package		Lumen Output		Driver Options		Control Options		Voltage		Housing Options	
Aperture/Shape/Function		SL	Standard Lumen	06L	600	DMTW	SpectraSync™ Dim to Warm, 0-10V Dimming to 5% ¹	NXE	NX Enabled, Dual SmartPorts	Standard 120-277V		CP	Chicago Plenum ^{7,8,9}
LTR-4RD-H	4" Round Downlight New Construction Housing	ML	Medium Lumen	10L	1000	DMT	SpectraSync™ Tunable White, 0-10V Dimming to 5% ²	NXWE	NX Wireless Enabled	LV	Lutron Vive Enabled, 0-10V ⁶	EM	Emergency Battery Pack with integral test switch and indicator light ^{7,9}
				15L	1500							IC	IC rated ^{7,8,9}
				20L	2000							EMR	Emergency Battery Pack with remote test switch and indicator light ^{7,9}
												F	Fuse ⁷

TRIM

LTR-4RD-T		Lumen Package		CCT		CRI		Distribution	
Aperture/Shape/Function		SL	Standard Lumen	2230TD	2200K-3000K SpectraSync™ Dim to Warm	9	90+CRI	NR	Narrow (0.4 SC/29°)
LTR-4RD-T	4" Round Downlight Light Engine/Trim Assembly	ML	Medium Lumen	2750T	2700K-5000K SpectraSync™ Tunable White			MD	Medium (0.7 SC/44°)
				2765T	2700K-6500K SpectraSync™ Tunable White			WD	Wide (0.9 SC/61°)
								XW	Extra Wide (1.2 SC/78°)

TRIM CONTINUED

Reflector Finish		Reflector Color		Flange Color Options		Lower Trim Options		Reflector Options		
<i>Finish not applicable with painted reflectors (WC or BC)</i>		Standard Clear		Standard matches reflector color		EM		Pre-punched reflector for EM integral test switch and indicator		
S	Specular	CG	Champagne Gold	WT	White Flange ³	FM		Flush Mount Mud-in Ring ⁵		
SS	Semi-Specular	BL	Black	BT	Black Flange ³			AM		Antimicrobial Coating ⁴
MFC	American Matte™	LW	Light Wheat							
VS	Softglow®	PW	Pewter							
VSS	SoftSheen™	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-R** Flush Mount Mud-In Ring Accessory, 4" Round
- LiteGear** LiteGear® Inverter, 125VA-250VA
- LPS Series** LightPower Micro-Inverter, 20VA-55VA
- MOR4-R-WH** Metal Oversized Ring, 4" Round, White (8.25" outside diameter)
- MOR4-R-BL** Metal Oversized Ring, 4" Round, Black (8.25" outside diameter)
- LTR-SCA4-___** Sloped Ceiling Adapter, 4", White¹⁰

- 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 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 EM or FM options.



LTR-4RD SpectraSync

LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

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.



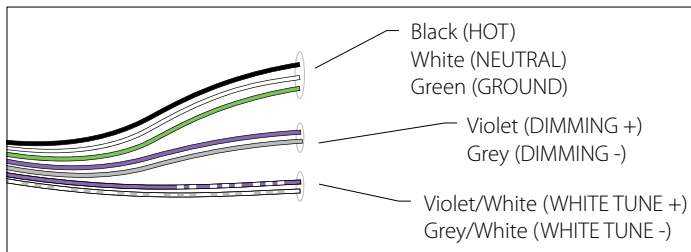
SPECTRASYNCH COLOR TUNING TECHNOLOGY		
Mode	Kelvin Range	Description
Dim to Warm	2200K-3000K	Mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed
Tunable White	2700K-5000K 2700K-6500K	Offers users the ability to tailor CCT to their personal preference,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

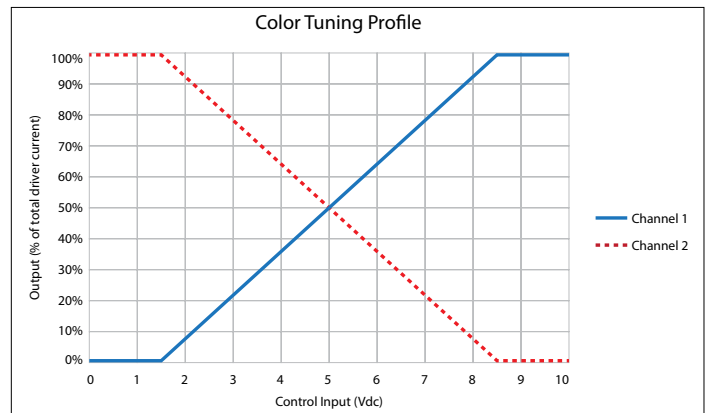


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and grey circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and grey/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

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 NFTV 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-4RD SpectraSync

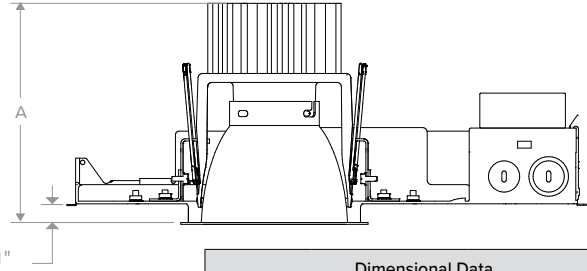
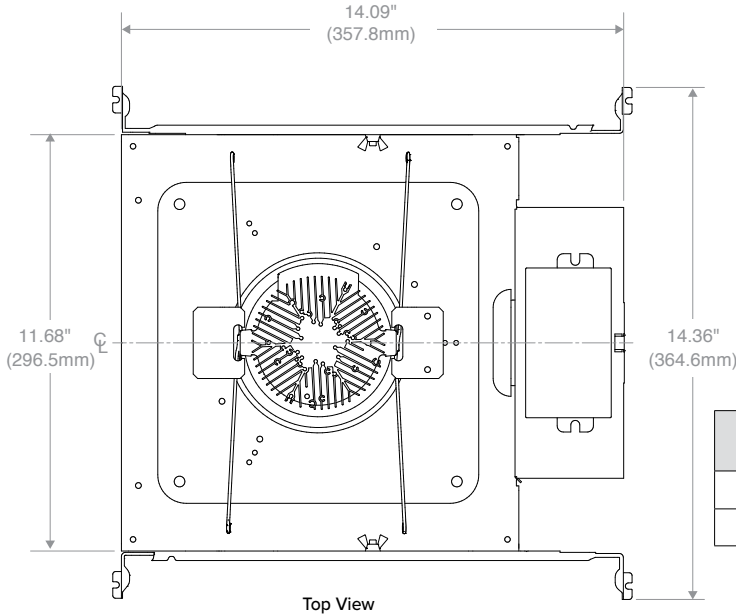
LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

DIMENSIONS

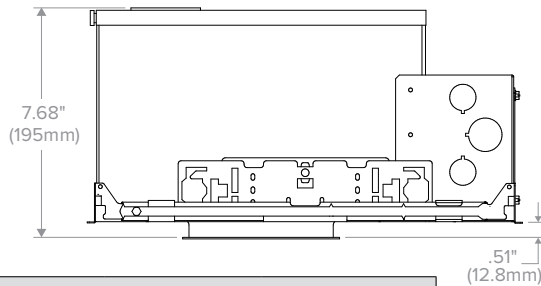
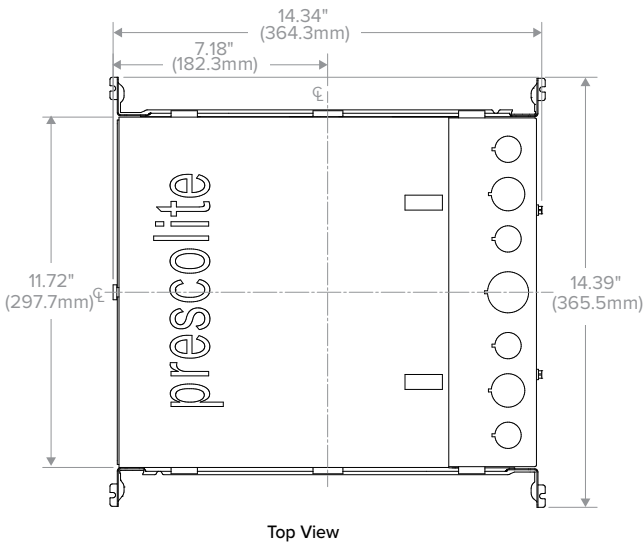


Lumen Package	"A"
06L-10L	4.97" (126.2mm)
15L-20L	7.33" (186.2mm)

Dimensional Data		
Aperture		4.00" (101.6mm)
Flange:	Standard	5.25" (133.4mm)
	Flush Mount	4.50" (114.3mm)
Ceiling Cutout:	Standard	5.00" (127.0mm)
	Flush Mount	5.12" (130.0mm)
Ceiling Thickness:	Standard or w/ SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)
	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)

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

LTR-4RD-H New Construction



Dimensional Data		
Aperture		4.00" (101.6mm)
Flange:	Standard	5.25" (133.4mm)
	Flush Mount	4.50" (114.3mm)
Ceiling Cutout:	Standard	5.00" (127.0mm)
	Flush Mount	5.12" (130.0mm)
Ceiling Thickness:	Standard or w/ SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)
	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)

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

LTR-4RD-H IC/CP

LTR-4RD SpectraSync

LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

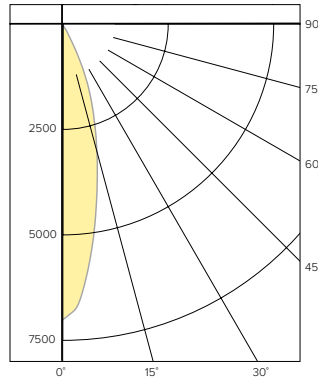
PHOTOMETRY

LTR-4RD-H-ML20L-DMTW / LTR-4RD-T-ML2230TD9NRS

LUMINAIRE DATA

Test No.	19.01948
Description	2000 lm, Narrow, 3000K, 90 CRI
Delivered Lumens	2184
Watts	36.4W
Efficacy	60.0
Mounting	Recessed
Spacing Criterion	0.4
Beam Angle (FWHM)	29

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	7034
5	6209
15	3254
25	1250
35	221
45	22
55	2
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	3838
55°	430
65°	292
75°	0
85°	0

*Candela/Square Meter

ZONAL LUMEN SUMMARY

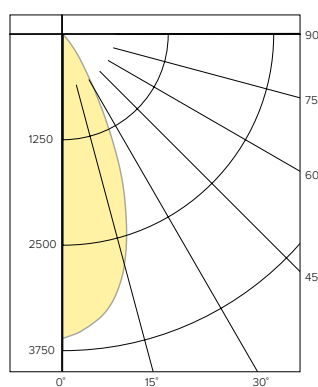
Zone	Lumens	% Luminaire
0-40	2158	98.8
0-60	2183	99.9
0-90	2184	100.0
0-180	2184	100.0

LTR-4RD-H-ML20L-DMTW / LTR-4RD-T-ML2230TD9MDS

LUMINAIRE DATA

Test No.	19.01947
Description	2000 lm, Medium, 3000K, 90 CRI
Delivered Lumens	2006
Watts	36.4W
Efficacy	55.1
Mounting	Recessed
Spacing Criterion	0.7
Beam Angle (FWHM)	44

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	3604
5	3478
15	2826
25	1406
35	351
45	34
55	3
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	5931
55°	645
65°	292
75°	0
85°	0

*Candela/Square Meter

ZONAL LUMEN SUMMARY

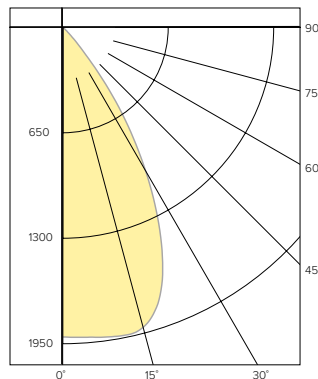
Zone	Lumens	% Luminaire
0-40	1967	98.1
0-60	2005	99.9
0-90	2006	100.0
0-180	2006	100.0

LTR-4RD-H-ML20L-DMTW / LTR-4RD-T-ML2230TD9WDS

LUMINAIRE DATA

Test No.	19.01946
Description	2000 lm, Wide, 3000K, 90 CRI
Delivered Lumens	1795
Watts	36.4W
Efficacy	49.3
Mounting	Recessed
Spacing Criterion	0.9
Beam Angle (FWHM)	61

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1909
5	1918
15	1915
25	1429
35	604
45	54
55	4
65	2
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	9420
55°	860
65°	584
75°	0
85°	0

*Candela/Square Meter

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1733	96.5
0-60	1793	99.9
0-90	1795	100.0
0-180	1795	100.0

LTR-4RD SpectraSync

LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

PHOTOMETRY CONTINUED

LTR-4RD-H-ML20L-DMTW / LTR-4RD-T-ML2230TD9XWS

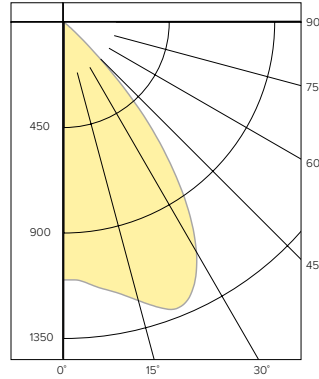
LUMINAIRE DATA

Test No.	19.01945
Description	2000 lm, Extra Wide, 3000K, 90 CRI
Delivered Lumens	1771
Watts	36.4W
Efficacy	48.6
Mounting	Recessed
Spacing Criterion	1.2
Beam Angle (FWHM)	78

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1577	89.0
0-60	1769	99.9
0-90	1771	100.0
0-180	1771	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1100
5	1117
15	1230
25	1282
35	879
45	210
55	5
65	2
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	36632
55°	1075
65°	584
75°	477
85°	0

*Candela/Square Meter

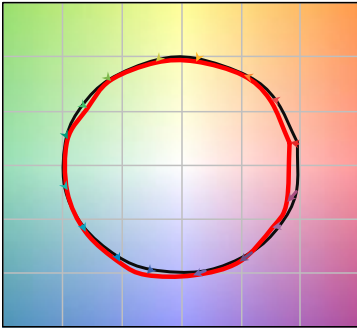
LTR-4RD SpectraSync

LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

TM-30 DATA

SPECTRASYNCTM TUNABLE WHITE (2765T)

COLOR VECTOR GRAPHIC
2700K, 90+ CRI

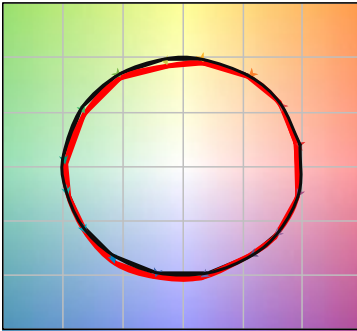


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
2700K, 90+ CRI



COLOR VECTOR GRAPHIC
4600K, 90+ CRI

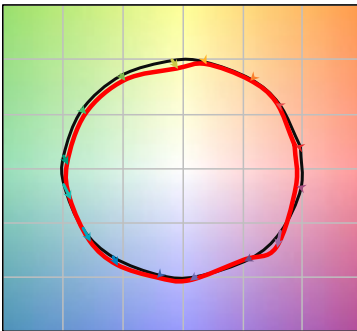


— Reference Illuminant — Test Source

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

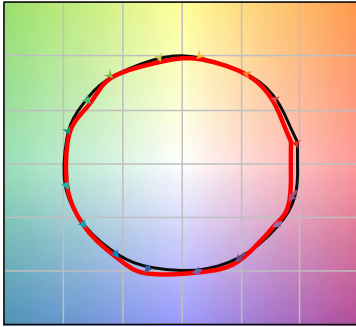
LTR-4RD SpectraSync

LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

TM-30 DATA CONTINUED

SPECTRASYNCTM DIM TO WARM (2230TD)

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

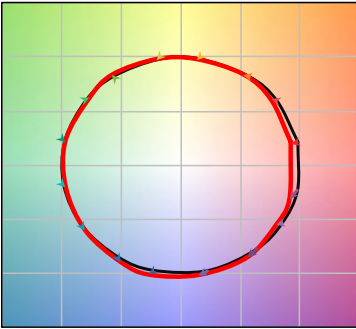


— Reference Illuminant — Test Source

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



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

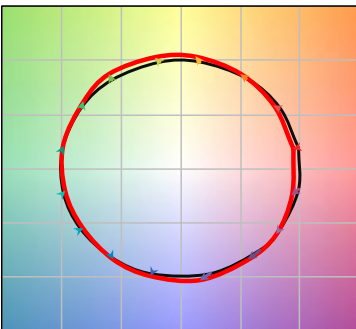


— Reference Illuminant — Test Source

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

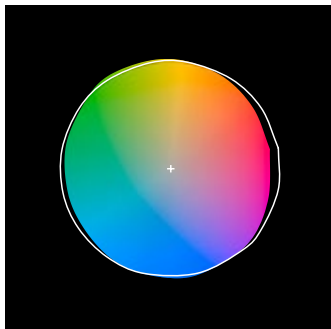


COLOR VECTOR GRAPHIC
2200K, 90 CRI @ 5% DIM



— 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 _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 _g	53	60	64



LTR-4RD SpectraSync

LITEISTRY 4" ROUND 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

WATTAGE DATA		
Lumen Output	Nominal Lumens	Wattage
06L	600	10
10L	1000	18
15L	1500	25
20L	2000	36

* 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