prescolite

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 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)	4.97 (126)	7.4 (3.3)
20L	14.56 (370)	14.36 (365)	6.15 (156)	7.8 (3.6)

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 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

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
- Integral and remote emergency controller and battery pack options available
- Refer to additional spec sheets for information on standard LITEISTRY solutions
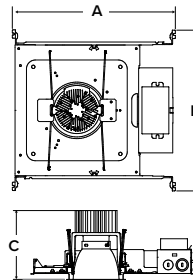
INSTALLATION
- Accommodates ceiling thickness up to 2" (See DIMENSIONS section for details)
- Universal adjustable mounting brackets also accept ½" EMT conduit or 1 ½" or ¾" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)
- Light Engine and driver serviceable from above or below the ceiling

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

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)	49-60*
Reported Life (Hours)	L70 / >60,000
Input Current (mA)	83-300 (120V)

*Based on Specular, 30K, 90 CRI

Current

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DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LTR-4RD SpectraSync
LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

ORDERING GUIDE

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

CATALOG # [   ]

HOUSING

LTR-4RD-H —

Aperture/Shape/Function		Lumen Package	Lumen Output	Driver Options		Control Options		Voltage	Housing Options	
LTR-4RD-H	4" Round 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-4RD-T —

Aperture/Shape/Function		Lumen Package		CCT		CRI		Distribution	
LTR-4RD-T	4" Round Downlight Light Engine/Trim Assembly	SL	Standard Lumen	2230TD	2200K-3000K SpectraSync™ Dim to Warm	9	90+CRI	NR	Narrow (0.4 SC/29°)
		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	
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
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", White [9]

(See next page for Bezel Trim Accessories for Complex Environments) [10]

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. Specify slope angle 5°-35° in 5° increments. Not available with EM or FM options.
10. See next page for option restrictions when using with bezel trim accessories.

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LTR-4RD SpectraSync
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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

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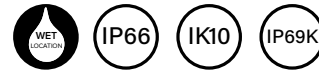
Complex Environment (Includes stainless steel Philips head screws)	
☐ LTR-4RD-CE-WT	Bezel Trim Accessory, IP66/IP69K, 4" Round, White
☐ LTR-4RD-CE-WTAM	Bezel Trim Accessory, IP66/IP69K, 4" Round, White Antimicrobial

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

Dimensional Data	
Aperture Opening	Ø 4.00" (101.6 mm)
Overall Flange	Ø 7.67" (194.8 mm)
Trim Height	0.42" (10.7 mm)
Ceiling Cutout	Ø 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, LTR-MOR or LTR-SCA 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

Current

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Rev 12/17/23
LTR-4RD SpectraSync_R03

LTR-4RD SpectraSync
LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING
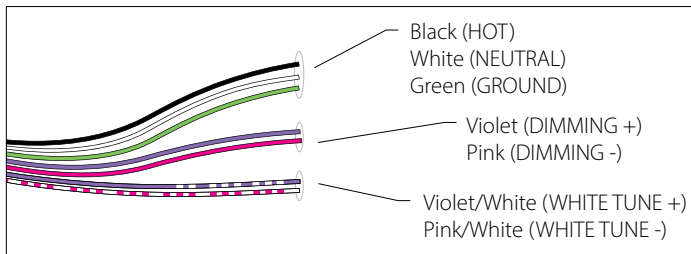
SPECTRASYNC™ COLOR TUNING TECHNOLOGY

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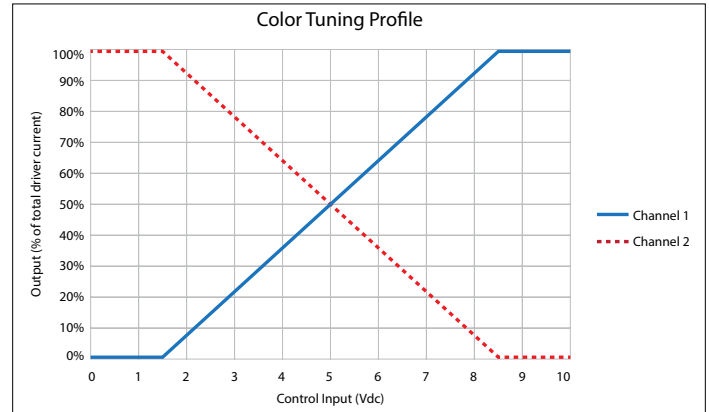
Violet/White (WHITE TUNE +)
Pink/White (WHITE TUNE -)

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.

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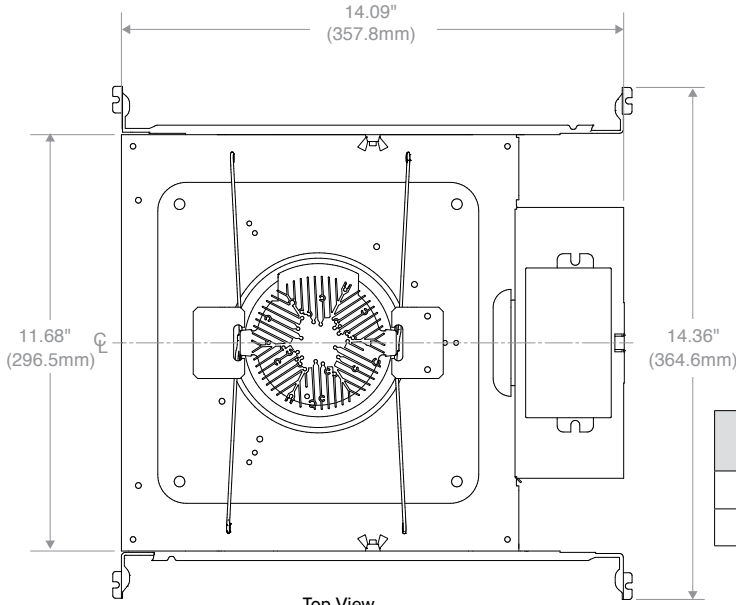
DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LTR-4RD SpectraSync
LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

DIMENSIONS

14.09"
(357.8mm)

11.68"
(296.5mm)

14.36"
(364.6mm)

.51"
(12.8mm)

A

Top View

LTR-4RD-H New Construction
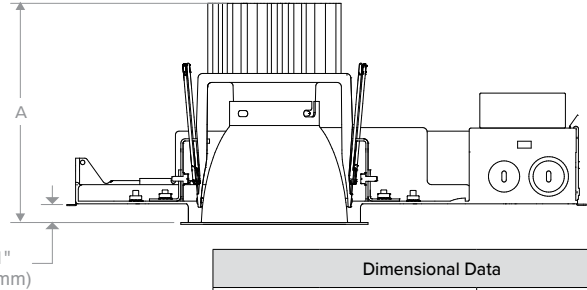
Lumen Package	"A"
06L-10L	4.97" (126.2mm)
15L-20L	7.33" (186.2mm)

Dimensional Data		
Aperture		4.00" (101.6mm)
Flange:	Standard	5.25" (133.4mm)
	Flush Mount	4.50" (114.3mm)
	With Bezel Trim Accessory**	Ø 7.67" (194.8 mm)
Ceiling Cutout:	Standard	5.00" (127.0mm)
	Flush Mount	5.12" (130.0mm)
	With Bezel Trim Accessory**	Ø 6.50" (165.1 mm)
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)
	With Bezel Trim Accessory**	0.50" to 2.00" (12.7 mm to 50.8 mm)

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

* For complete details on Bezel Trim Accessories, see Accessory section on Page 3 and Bezel Trim Installation Instructions on currentlighting.com/prescolite.
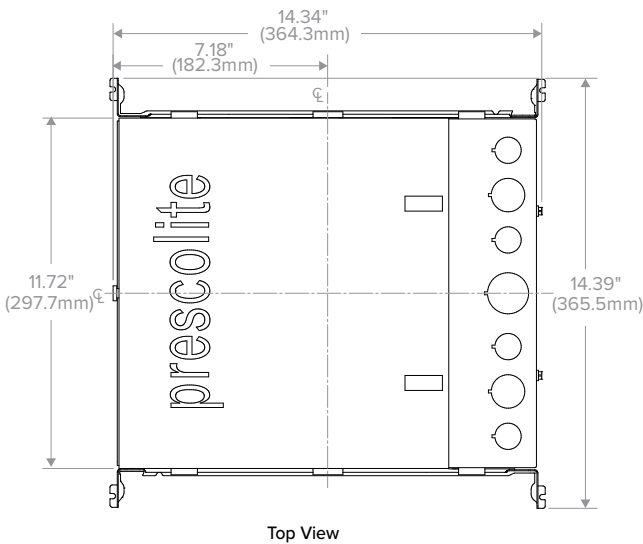
14.34"
(364.3mm)

7.18"
(182.3mm)

11.72"
(297.7mm)

14.39"
(365.5mm)

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Top View

7.68"
(195mm)

.51"
(12.8mm)
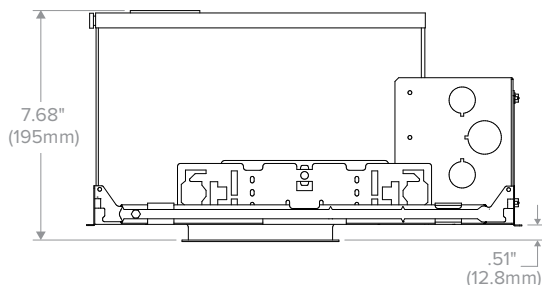
Dimensional Data		
Aperture		4.00" (101.6mm)
Flange:	Standard	5.25" (133.4mm)
	Flush Mount	4.50" (114.3mm)
Ceiling Cutout:	Standard	5.00" (127.0mm)
	Flush Mount	5.12" (130.0mm)
Ceiling Thickness:	Standard or w/ SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)
	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)

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

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DATE: LOCATION:

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LTR-4RD SpectraSync
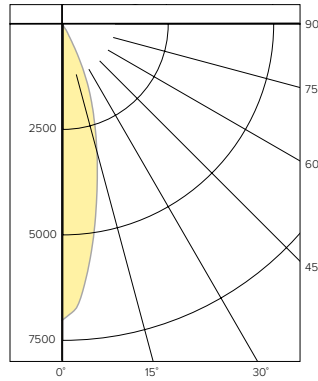## LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

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

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

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

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

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

POLAR GRAPH
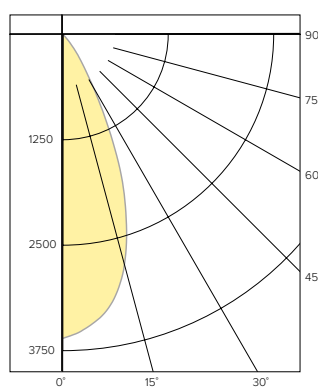
CANDELA DISTRIBUTION

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

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

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

POLAR GRAPH
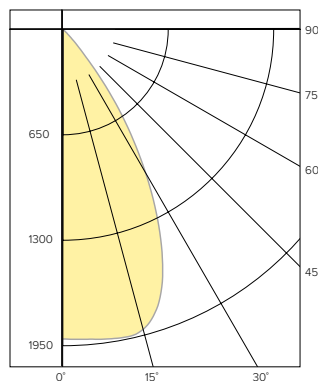
CANDELA DISTRIBUTION

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

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LTR-4RD SpectraSync
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PHOTOMETRY CONTINUED

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

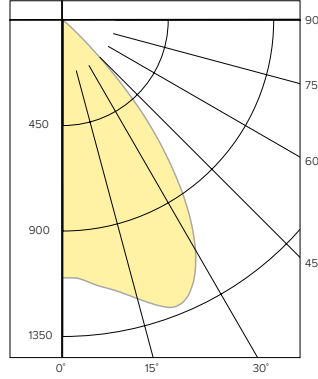#### LUMINAIRE DATA

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

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LTR-4RD SpectraSync
LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

TM-30 DATA

SPECTRASYNC™ TUNABLE WHITE (2765T)
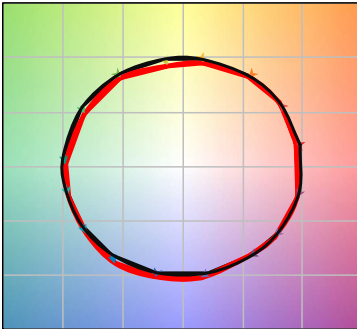
COLOR VECTOR GRAPHIC
2700K, 90+ CRI
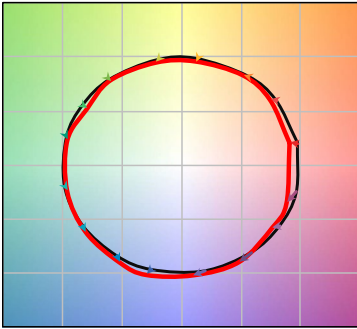
—— Reference Illuminant   —— Test Source

COLOR DISTORTION GRAPHIC
2700K, 90+ CRI

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

COLOR VECTOR GRAPHIC
4600K, 90+ CRI

—— Reference Illuminant   —— Test Source

COLOR DISTORTION GRAPHIC
4600K, 90+ CRI

COLOR VECTOR GRAPHIC
6500K, 90+ CRI
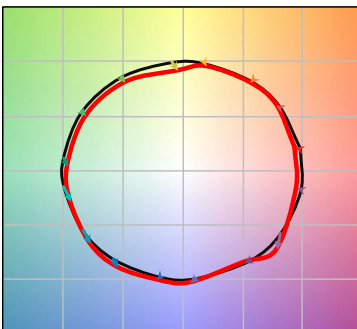
—— Reference Illuminant   —— Test Source

COLOR DISTORTION GRAPHIC
6500K, 90+ CRI

Current

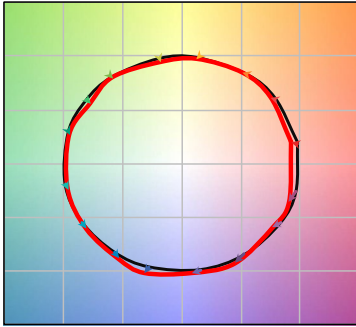| DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LTR-4RD SpectraSync
LITEISTRY 4" ROUND DOWNLIGHT WITH COLOR TUNING

TM-30 DATA CONTINUED

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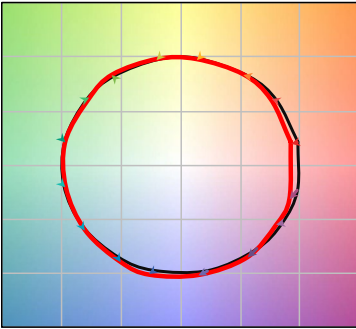
COLOR VECTOR GRAPHIC
3000K, 90+ CRI @ 100%

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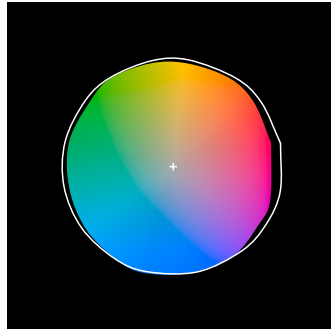
COLOR DISTORTION GRAPHIC
3000K, 90+ CRI @ 100%

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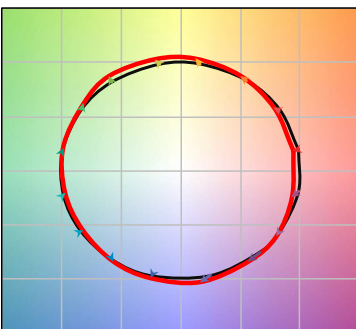**2600K, 90 CRI @ 50% DIM**

—— Reference Illuminant   —— Test Source

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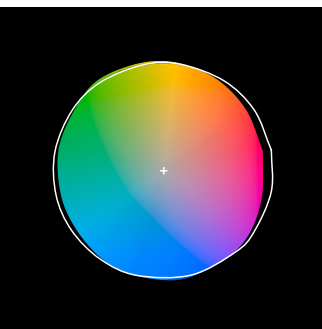**2600K, 90 CRI @ 50% DIM**

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)	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

LTR-4RD SpectraSync
LITEISTRY 4" ROUND 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.