

# LTR-6RD SpectraSync

LITEISTRY 6" ROUND DOWNLIGHT WITH COLOR TUNING

## FEATURES

- 6" architectural LED downlight delivering 600 – 3000 lm
- Four beam distributions from 0.3 to 1.1 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 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 controller and battery pack options available
- Refer to additional spec sheets for information on standard LITEISTRY solutions

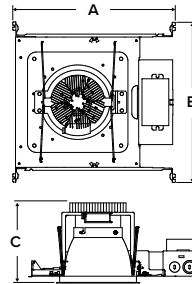
### INSTALLATION

- 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

## 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)	5.9 (150)	7.8 (3.5)
20L - 30L	14.56 (370)	14.36 (365)	6.68 (170)	8.2 (3.7)

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)	49-60*
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-6RD-H-SL10L-DMTW-LTR-6RD-T-SL2230TD9MD-S

CATALOG #

### HOUSING

LTR-6RD-H		Lumen Package		Lumen Output		Driver Options		Control Options		Voltage		Housing Options	
Aperture/Shape/Function													
LTR-6RD-H	6" Round Downlight New Construction Housing	SL	Standard Lumen	06L	600	DMTW	SpectraSync™ Dim to Warm, 0-10V Dimming to 5% <sup>1</sup>	NX Lighting Controls	Networked Wireless	Standard 120-277V		CP	Chicago Plenum <sup>6,7,8</sup>
		ML	Medium Lumen	10L	1000							IC	IC rated <sup>6,7,8</sup>
		HL	High Lumen	15L	1500							EM	7W Emergency Battery Pack (CEC Title 20 Compliant) with integral test switch and indicator light <sup>6,8</sup>
				20L	2000	DMT	SpectraSync™ Tunable White, 0-10V Dimming to 5% <sup>2</sup>	NXW	NX Networked Wireless Radio Module NXR2 and Bluetooth Programming, without Sensor			EMR	7W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light <sup>6,8</sup>
				25L	2500			Networked Wired				F	Fuse <sup>6</sup>
				30L	3000			NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor			BAA	Buy American Act (FAR 52.225-9) Compliant
												TAA	Trade Agreements Act (FAR 52.225-11) Compliant

### TRIM

LTR-6RD-T		Lumen Package		CCT		CRI		Distribution	
Aperture/Shape/Function									
LTR-6RD-T	6" Round Downlight Light Engine/Trim Assembly	SL	Standard Lumen	2230TD	2200K-3000K SpectraSync™ Dim to Warm	9	90+CRI	NR	Narrow (0.3 SC/18")
		ML	Medium Lumen	2750T	2700K-5000K SpectraSync™ Tunable White			MD	Medium (0.6 SC/37")
		HL	High Lumen	2765T	2700K-6500K SpectraSync™ Tunable White			WD	Wide (0.9 SC/59")
								XW	Extra Wide (1.1 SC/76")

### 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	AM	Antimicrobial Coating <sup>4</sup>
S	Specular	CG	Champagne Gold	WT	White Flange <sup>3</sup>	FM	Flush Mount Mud-in Ring <sup>5</sup>	BAA	Buy American Act (FAR 52.225-9) Compliant
SS	Semi-Specular	BL	Black	BT	Black Flange <sup>3</sup>			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
- FMR6-R** Flush Mount Mud-In Ring, 6" Round
- LiteGear** LiteGear® Inverter, 125VA-250VA
- LPS Series** LightPower Micro-Inverter, 20VA-55VA
- MOR6-R-WH** Metal Oversized Ring, 6" Round, White (10" outside diameter)
- MOR6-R-BL** Metal Oversized Ring, 6" Round, Black (10" outside diameter)
- LTR-SCA6-\_\_** Sloped Ceiling Adapter, 6", White<sup>9</sup>

(See next page for Bezel Trim Accessories for Complex Environments)<sup>10</sup>

#### 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.

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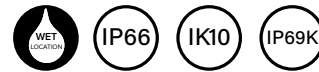
## ACCESSORIES CONTINUED

### Bezel Trim Accessories <sup>1,2,3,4</sup>

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-6RD-CE-WT Bezel Trim Accessory, IP66/IP69K, 6" Round, White
- LTR-6RD-CE-WTAM Bezel Trim Accessory, IP66/IP69K, 6" Round, White Antimicrobial

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

- LTR-6RD-CEVR-WT Bezel Trim Accessory, Vandal Resistant/IP66/IP69K, 6" Round, White
- LTR-6RD-CEVR-WTAM Bezel Trim Accessory, Vandal Resistant/IP66/IP69K, 6" Round, White Antimicrobial

Dimensional Data	
Aperture Opening	Ø 5.75" (146.1 mm)
Overall Flange	Ø 9.42" (293.3 mm)
Trim Height	0.42" (10.7 mm)
Ceiling Cutout	Ø 8.25" (209.6 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	✓	✓	✓	-	-	✓	✓	✓ <sup>1</sup>		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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## SPECTRASYN<sup>™</sup> COLOR TUNING TECHNOLOGY

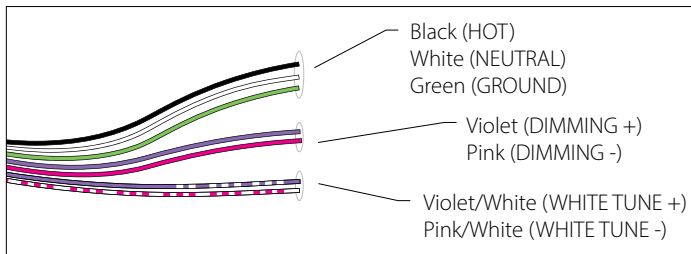
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync<sup>™</sup> Color Tuning Technologies.



SPECTRASYN <sup>™</sup> 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.

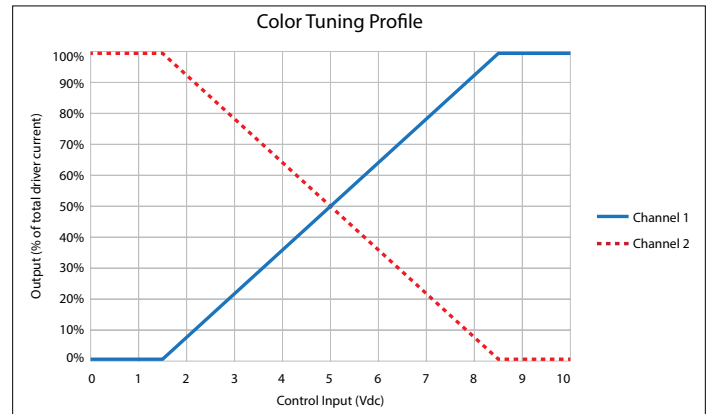


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and pink circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and pink/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

### 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: DVTV, 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 SpectraSync technical sheet.

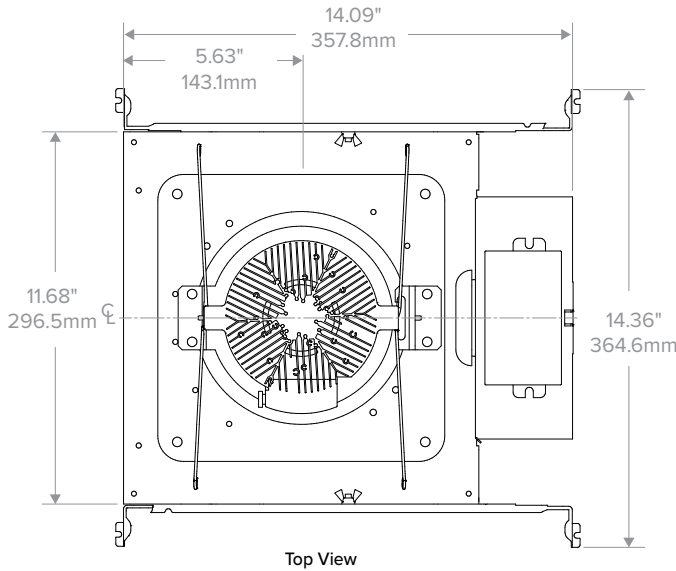
# LTR-6RD SpectraSync

LITEISTRY 6" ROUND DOWNLIGHT WITH COLOR TUNING

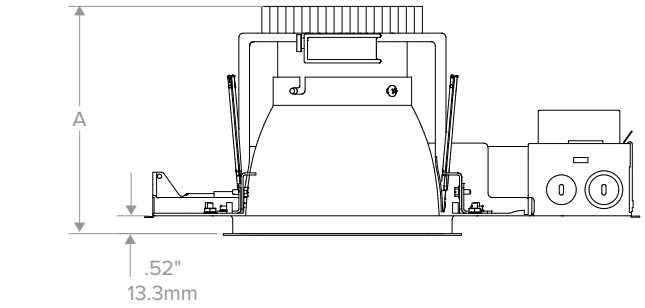
## DIMENSIONS

Lumen Package	"A"
06L-10L	5.90" (149.9mm)
15L-20L	7.86" (199.6mm)
25L-30L	9.04" (229.6mm)

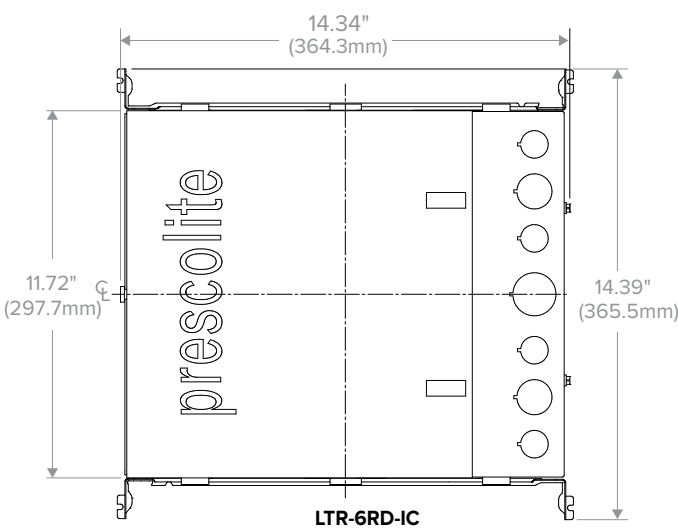
Dimensional Data		
Aperture		5.75" (146.1mm)
Flange:	Standard	7.00" (177.8mm)
	Flush Mount	6.54" (166.0mm)
	With Bezel Trim Accessory**	Ø 9.42" (293.3 mm)
Ceiling Cutout:	Standard	6.50" (165.1mm)
	Flush Mount	6.75" (171.5mm)
	With Bezel Trim Accessory**	Ø 8.25" (209.6 mm)
Ceiling Thickness:	Standard 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)



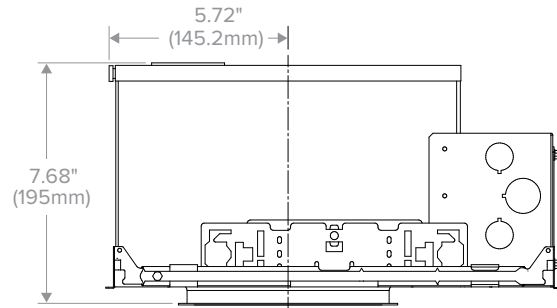
LTR-6RD-H New Construction



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](http://currentlighting.com/prescolite).



LTR-6RD-IC



Dimensional Data		
Aperture		5.75" (146.1mm)
Flange:	Standard	7.00" (177.8mm)
	Flush Mount	6.54" (166.0mm)
Ceiling Cutout:	Standard	6.50" (165.1mm)
	Flush Mount	6.75" (171.5mm)
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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LITEISTRY 6" ROUND DOWNLIGHT WITH COLOR TUNING

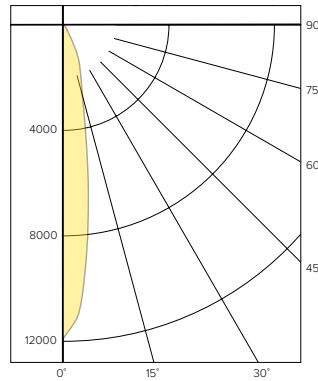
## PHOTOMETRY

### LTR-6RD-H-ML20L-DMT / LTR-6RD-T-ML2765T9NRS

#### LUMINAIRE DATA

Test No.	R19.02201-C01
Description	2000 lm, Narrow, 3000K, 90 CRI
Delivered Lumens	2146
Watts	35.2W
Efficacy	61.0
Mounting	Recessed
Spacing Criterion	0.4
Beam Angle (FWHM)	18

#### POLAR GRAPH



#### CANDELA DISTRIBUTION

Degree	Candela
0	7976
5	6898
15	2784
25	1179
35	263
45	72
55	0
65	0
75	0
85	0
90	0

#### LUMINANCE DATA\*

Vertical Angle	Average
45°	6072
55°	0
65°	0
75°	0
85°	0

\*Candela/Square Meter

#### ZONAL LUMEN SUMMARY

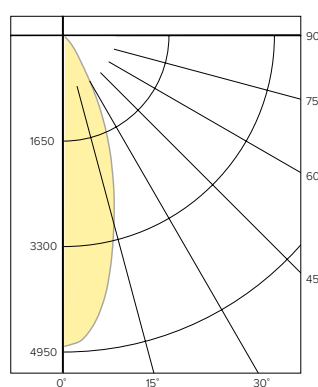
Zone	Lumens	% Luminaire
0-40	2083	97.1
0-60	2146	100.0
0-90	2146	100.0
0-180	2146	100.0

### LTR-6RD-H-ML20L-DMT / LTR-6RD-T-ML2765T9MDS

#### LUMINAIRE DATA

Test No.	R19.02200-C01
Description	2000 lm, Medium, 3000K, 90 CRI
Delivered Lumens	2077
Watts	35.4W
Efficacy	59.0
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	37

#### POLAR GRAPH



#### CANDELA DISTRIBUTION

Degree	Candela
0	4221
5	4036
15	2741
25	1362
35	369
45	91
55	6
65	2
75	1
85	0
90	0

#### LUMINANCE DATA\*

Vertical Angle	Average
45°	7675
55°	624
65°	282
75°	230
85°	0

\*Candela/Square Meter

#### ZONAL LUMEN SUMMARY

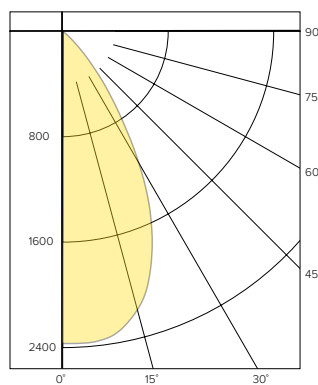
Zone	Lumens	% Luminaire
0-40	1992	95.9
0-60	2074	99.9
0-90	2077	100.0
0-180	2077	100.0

### LTR-6RD-H-ML20L-DMT / LTR-6RD-T-ML2765T9WDS

#### LUMINAIRE DATA

Test No.	R19.02199-C01
Description	2000 lm, Wide, 3000K, 90 CRI
Delivered Lumens	1989
Watts	35.3W
Efficacy	56.0
Mounting	Recessed
Spacing Criterion	0.9
Beam Angle (FWHM)	59

#### POLAR GRAPH



#### CANDELA DISTRIBUTION

Degree	Candela
0	2069
5	2080
15	1973
25	1454
35	677
45	168
55	10
65	3
75	1
85	0
90	0

#### LUMINANCE DATA\*

Vertical Angle	Average
45°	14168
55°	1040
65°	423
75°	230
85°	0

\*Candela/Square Meter

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1833	92.1
0-60	1985	99.8
0-90	1989	100.0
0-180	1989	100.0

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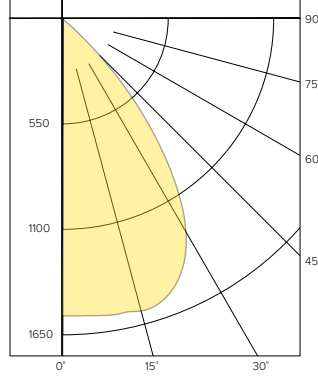
## PHOTOMETRY CONTINUED

### LTR-6RD-H-ML20L-DMT / LTR-6RD-T-ML2765T9XWS

#### LUMINAIRE DATA

Test No.	<b>R19.00586-20</b>
Description	<b>2000 lm, Extra Wide, 3000K, 90 CRI</b>
Delivered Lumens	<b>1951</b>
Watts	<b>35.3W</b>
Efficacy	<b>55.0</b>
Mounting	<b>Recessed</b>
Spacing Criterion	<b>1.1</b>
Beam Angle (FWHM)	<b>76</b>

#### POLAR GRAPH



#### CANDELA DISTRIBUTION

Degree	Candela
0	1411
5	1416
15	1437
25	1333
35	919
45	275
55	8
65	3
75	1
85	0
90	0

#### LUMINANCE DATA\*

Vertical Angle	Average
45°	23154
55°	853
65°	386
75°	210
85°	0

\*Candela/Square Meter

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1711	87.7
0-60	1946	99.8
0-90	1951	100.0
0-180	1951	100.0

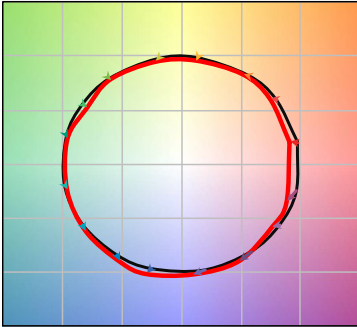
# LTR-6RD SpectraSync

LITEISTRY 6" ROUND DOWNLIGHT WITH COLOR TUNING

## TM-30 DATA

### SPECTRASYNCTM TUNABLE WHITE (2765T)

COLOR VECTOR GRAPHIC  
2700K, 90+ CRI

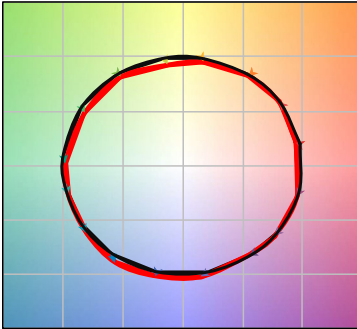


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC  
2700K, 90+ CRI

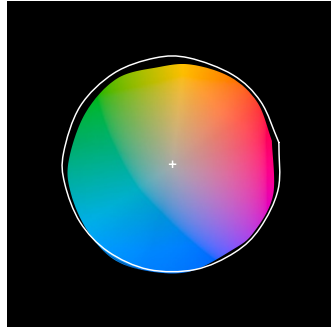


COLOR VECTOR GRAPHIC  
4600K, 90+ CRI

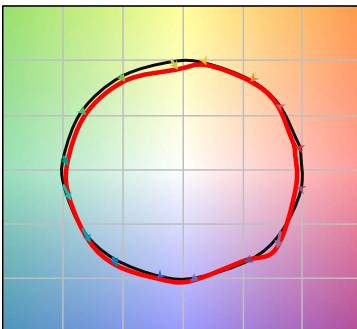


— Reference Illuminant — Test Source

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 <sub>f</sub>	90	89	87
R <sub>g</sub>	97	98	96
CCT (K)	2817	4588	6518
D <sub>UV</sub>	-0.0013	-0.0040	0.0018
x	0.4482	0.3565	0.3131
y	0.4047	0.3531	0.3273
CIE R <sub>a</sub>	91	95	94
CIE R <sub>g</sub>	47	81	76



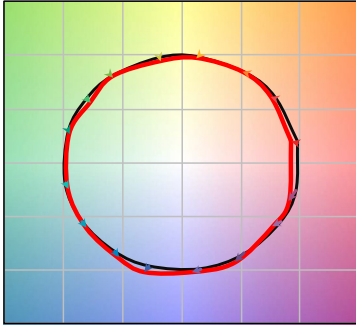
# LTR-6RD SpectraSync

LITEISTRY 6" ROUND DOWNLIGHT WITH COLOR TUNING

## TM-30 DATA CONTINUED

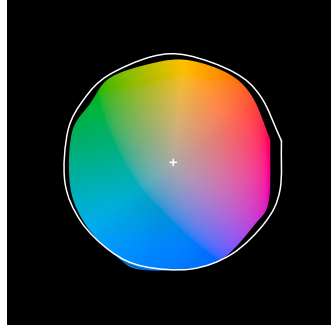
### SPECTRASYNCTM DIM TO WARM (2230TD)

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

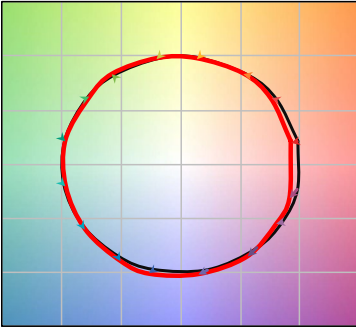


— Reference Illuminant — Test Source

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

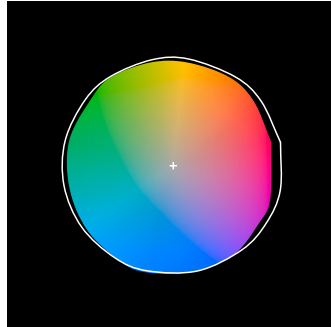


**COLOR VECTOR GRAPHIC**  
2600K, 90 CRI @ 50% DIM

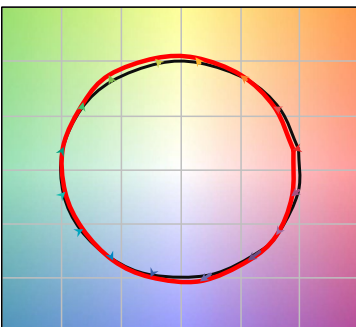


— Reference Illuminant — Test Source

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

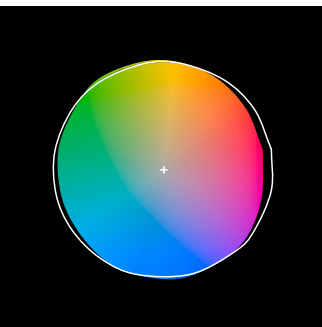


**COLOR VECTOR GRAPHIC**  
2200K, 90 CRI @ 5% DIM



— 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 <sub>t</sub>	90	92	91
R <sub>g</sub>	97	99	102
CCT (K)	3123	2590	2282
D <sub>uv</sub>	-0.0017	-0.0015	-0.0029
x	0.4261	0.4662	0.4907
y	0.3965	0.4082	0.4068
CIE R <sub>a</sub>	92	93	93
CIE R <sub>g</sub>	53	60	64

# LTR-6RD SpectraSync

LITEISTRY 6" 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](http://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](http://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.