

# ZR-MT TrueWhite® Series

ZR22™ 2' x 2' TrueWhite® Series LED Troffer with Matte Finish

## Product Description

The ZR-MT TrueWhite® LED troffer delivers 3200 lumens of superior 90+ CRI light quality and is perfect for both new construction and renovation. Powered by Cree TrueWhite® Technology, the slim and lightweight ZR-MT LED troffer boasts an efficacious 100 LPW along with 0-10V dimming to meet local energy codes. The ZR22™ LED troffer embodies a breakthrough in balancing energy savings, visual comfort and initial cost.

## Performance Summary

Utilizes Cree TrueWhite® Technology

**Efficacy:** 100 LPW

**Initial Delivered Lumens:** 3,200 lumens

**Input Power:** 32 watts

**CRI:** 90+ CRI

**CCT:** 3000K, 3500K, 4000K, 5000K

**Input Voltage:** 120-277 VAC or 347 VAC

**Limited Warranty\*:** 10 years on luminaire

**Limited Warranty Emergency Back Up (EB) Battery:** 1 Year on Battery Back Up. Test regularly in accordance with local codes

**Controls:** 0-10V dimming to 5%

**Mounting:** Recessed\*

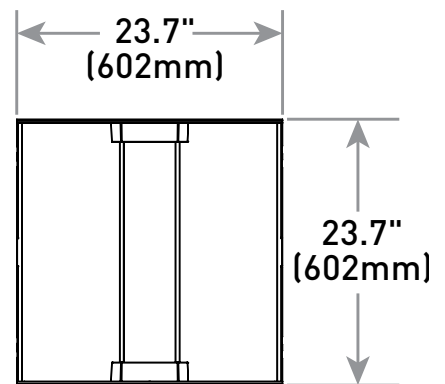
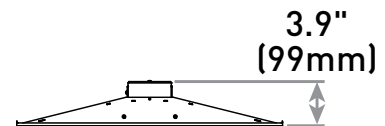
Room-side accessible snap and lock removable lens

\* See <http://lighting.cree.com/warranty> for warranty terms

\* Not intended for use with 9/16" T-Bar grids unless used with a 9/16" accessory clip like "Armstrong® LFC - Fixture Clip" which can be purchased through distribution. Consult factory for non-standard grid applications.

## Accessories

Field-Installed	
<b>Drywall Grid Adapter</b> <a href="#">DGA22-WHT</a>	<b>Wireless 0-10V Dimming/Switching Interface with Cree SmartCast® Technology</b> <a href="#">CIF-10V-CWC-SNSR</a>
<b>Surface Mount Kit</b> <a href="#">SMK-ZR22</a>	- For use with luminaires with 10V controls when integral SmartCast isn't available
- Not for use with EB14 or SmartCast® Technology	<b>Cree SmartCast® Technology Configuration Tool</b> <a href="#">CCT-CWC-1</a>
<b>6' Flexible Power Whip</b> <a href="#">PW-18/4-06-9T/SS</a>	- One required per project when CIF-10V is selected
- For use in non-dimming applications only	<b>Chicago Plenum Field Kit</b> CPLZR
	- Fits all ZR types to be installed in the field



## Ordering Information

Example: ZR22MT-32L-35K-10V

ZR22MT	32L			10V	
Product	Initial Delivered Lumens	CCT	Voltage	Control	Options
ZR22MT	32L 32W, 3,200 Lumens	30K 3000K 35K 3500K 40K 4000K 50K 5000K	Blank 120-277 Volt 34 347 Volt	10V <a href="#">0-10V</a> dimming to 5%	<b>EB14 Emergency Backup</b> - 1,400 lumens - Not available with 347 Volt - Provides 90 minutes of emergency operation



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US: [lighting.cree.com](http://lighting.cree.com)

T (800) 236-6800 F (262) 504-5415

Canada: [www.cree.com/canada](http://www.cree.com/canada)

T (800) 473-1234 F (800) 890-7507



ZR22™ 2' x 2' TrueWhite® Series LED Troffer with Matte Finish

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable 22 ga. cold rolled steel housing provides strength and uniformity
- Ultra-thin 3.9" (99mm) luminaire height and lightweight design effectively target a broad range of plenum spaces and allow for easy installations
- Luminaire is pre-painted for enhanced matte finish
- Includes t-bar clips and holes for mounting support wires (by others)
- Luminaire sides and ends are hemmed in for safe, easy handling
- Includes lens gasket to prevent ingress of insects
- Not for installation within 3" (76mm) of insulation
- Removable lens for easy maintenance and cleaning
- Magnetic lens to prevent dust and bug intrusion
- **Weight:** Standard - 10 lbs. (4.5kg); EB14 - 12 lbs. (5.4kg)

OPTICAL SYSTEM

- Unique luminaire design creates perfect balance of both horizontal and vertical illumination
- Optimized smooth acrylic lens eliminates pixelation and delivers a low-glare, diffused light distribution


ELECTRICAL SYSTEM

- Cree born components including highly efficacious Cree® LED chips along with an integral high-efficiency Cree® driver
- **Power Factor:** = 0.9 nominal for 120-277V
- **Input Power:** Stays constant over life
- **Input Voltage:** 120-277V or 347V, 60Hz
- **Operating Temperature Range:** 0°C - + 35°C (32°F - + 95°F)
- **Total Harmonic Distortion:** < 20% for standard fixtures; < 25% for EB option

CONTROLS

- Continuous dimming to 5% with 0-10V DC control protocol
- **10V Source Current:** 0.25mA
- For use with Class 2 dimming systems only
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- Reference [www.creelink.com/exLink.asp?70982140Z58R34I26620963](http://www.creelink.com/exLink.asp?70982140Z58R34I26620963) for recommended dimming controls and wiring diagrams

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for damp locations
- Designed for indoor use only
- UL924 (EB option). Maximum mounting height: 15.0' (4.6m)
- RoHS compliant. Consult factory for additional details
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- DLC qualified. Please refer to [www.designlights.org/QPL](http://www.designlights.org/QPL) for most current information
-  **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – [www.p65warnings.ca.go](http://www.p65warnings.ca.go)

Electrical Data*						
Initial Delivered Lumens	System Watts 120-347V	Total Current (A)				
		120V	208V	240V	277V	347V
32L	32	0.26	0.16	0.13	0.12	0.10
32L w/EB14 Option	35	0.29	0.19	0.16	0.14	N/A

\* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-347V +/- 10%

ZR-MT Series Ambient Adjusted Lumen Maintenance¹					
Ambient	Initial LMF	25K hr Projected² LMF	50K hr Projected² LMF	75K hr Calculated³ LMF	100K hr Calculated³ LMF
0°C (32°F)	1.04	1.04	1.04	1.04	1.04
5°C (41°F)	1.03	1.03	1.03	1.03	1.03
10°C (50°F)	1.02	1.02	1.02	1.02	1.02
15°C (59°F)	1.02	1.02	1.02	1.02	1.02
20°C (68°F)	1.01	1.01	1.01	1.01	1.01
25°C (77°F)	1.00	1.00	1.00	1.00	1.00
30°C (86°F)	0.99	0.99	0.99	0.99	0.99
35°C (95°F)	0.98	0.98	0.98	0.98	0.98

¹ Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.

Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ([DUT] i.e. the packaged LED chip)

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ([DUT] i.e. the packaged LED chip)

Application Reference

Open Space					
Spacing	Lumens	Wattage	LPW	w/ft²	Average fc
8 x 8	3,200	32	100	0.48	45
8 x 10				0.40	38
10 x 10				0.32	30
10 x 12				0.26	24

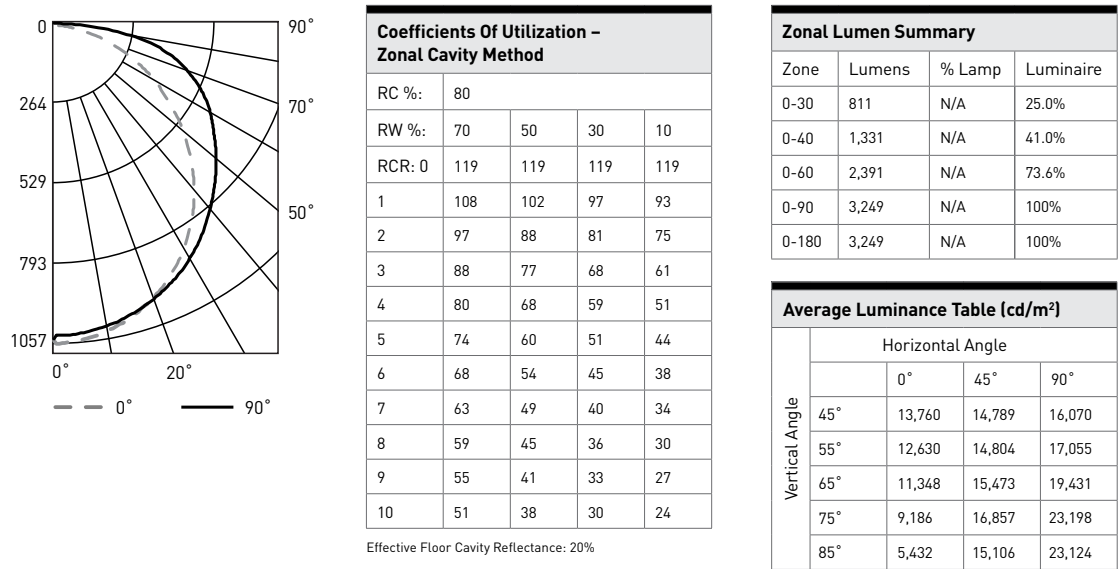
10' ceiling: 80/50/20 reflectances; 2.5' workplane, open room. LLF: 1.0 Initial Open Space: 50' x 40' x 10'



Photometry

ZR22MT-32L-30K-10V BASED ON DTC REPORT TEST #: PL13407-001A

Luminaire photometry has been conducted in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a luminaire efficiency of 100%.



Reference <http://lighting.cree.com/products/indoor/troffers/zr-series> for detailed photometric data

