

# ZR22™

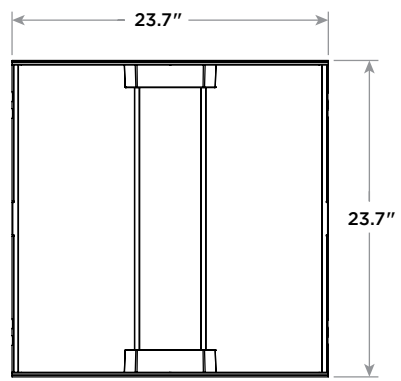
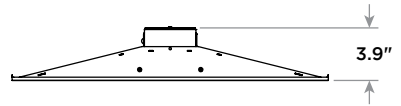
2'x2' LED Troffer

## Product Description

The ZR22™ LED troffer delivers 3200 lumens of superior 90 CRI light quality and is perfect for both new construction or renovation. Powered by Cree TrueWhite® Technology, the slim and lightweight ZR22 LED troffer boasts an efficacious 90 LPW performance 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                  |
| Assembled in the US & Mexico                         |
| <b>Efficacy:</b> 90 LPW                              |
| <b>Delivered Light Output:</b> 3200 lumens           |
| <b>Input Power:</b> 35 watts                         |
| <b>CRI:</b> 90 CRI                                   |
| <b>CCT:</b> 3500K, 4000K                             |
| <b>Input Voltage:</b> 120-277 VAC                    |
| <b>Limited Warranty:</b> 10 years†                   |
| <b>Lifetime:</b> Designed to last up to 75,000 hours |
| <b>Controls:</b> 0-10V (Standard)*                   |
| <b>Mounting:</b> Recessed                            |



## Ordering Information

Example: ZR22-32L-35K-10V

| ZR22    | 32L                  |                                    |                                  | 10V                  |                       |
|---------|----------------------|------------------------------------|----------------------------------|----------------------|-----------------------|
| Product | Lumen Output         | Color Temp                         | Voltage                          | Control              | Options               |
| ZR22™   | 32L 35W, 3200 Lumens | 35K 3500 Kelvin<br>40K 4000 Kelvin | Blank 120-277 Volt<br>(Standard) | 10V 0-10V Dimming 5% | EB Emergency Backup** |

† See [www.cree.com/lighting/products/warranty](http://www.cree.com/lighting/products/warranty) for warranty terms  
 \* Reference [www.cree.com/lighting](http://www.cree.com/lighting) for recommended dimming controls and wiring diagrams  
 \*\* EB option available Q2 2014



Rev. Date: 01/22/2014



## ZR22™ LED Troffer

### Product Specifications

#### CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high efficacy light with superior color rendering and lifelong color consistency. Cree TrueWhite Technology delivers a no compromise solution to enhance any space.

#### LUMEN MAINTENANCE FACTORS

- Reference [www.cree.com/lighting](http://www.cree.com/lighting) for detailed lumen maintenance factors

#### CONSTRUCTION & MATERIALS

- Durable cold rolled steel housing provides strength and uniformity
- Ultra-thin 3.9" fixture height and lightweight design effectively target a broad range of plenum spaces and allow for easy installations
- Fixture is pre-painted for enhanced smooth finish
- Provided t-bar clips and holes for mounting support wires enable recessed or suspended installation
- Fixture sides and ends are hemmed in for safe, easy handling

#### OPTICAL SYSTEM

- Unique fixture design creates perfect balance of both horizontal and vertical illumination
- Optimized smooth 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
- Input Power: Stays constant over life
- Input Voltage: 120-277V, 50/60Hz
- Battery Backup: Consult factory
- Temperature Rating: Designed to operate in temperatures 0-35 °C and below room side and plenum side
- Total Harmonic Distortion: <20%

#### CONTROLS

- Continuous dimming to 5% with 0-10V controls comes standard\*

#### REGULATORY & VOLUNTARY QUALIFICATIONS

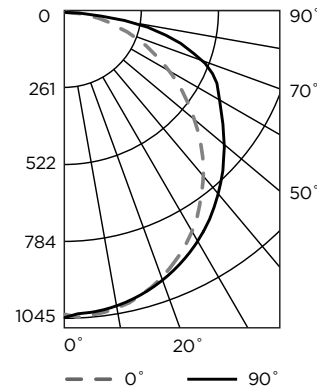
- UL924 (EB option)
- cULus Listed
- Suitable for damp locations
- Designed for Indoor use

\*Reference [www.cree.com/lighting](http://www.cree.com/lighting) for recommended dimming controls and wiring diagrams

### Photometry

#### ZR22 BASED ON CESTL REPORT TEST #: 2014-0006

Fixture photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.



#### Coefficients Of Utilization

| RCC %: | 80  |     |     |     |
|--------|-----|-----|-----|-----|
| RW %:  | 70  | 50  | 30  | 10  |
| RCR: 0 | 119 | 119 | 119 | 119 |
| 1      | 107 | 102 | 97  | 93  |
| 2      | 97  | 88  | 81  | 74  |
| 3      | 88  | 77  | 68  | 61  |
| 4      | 80  | 68  | 58  | 51  |
| 5      | 74  | 60  | 51  | 44  |
| 6      | 68  | 54  | 45  | 38  |
| 7      | 63  | 49  | 40  | 33  |
| 8      | 59  | 45  | 36  | 30  |
| 9      | 55  | 41  | 32  | 27  |
| 10     | 51  | 38  | 30  | 24  |

Effective Floor Cavity Reflectance: 20%

#### Average Luminance Table (cd/m<sup>2</sup>)

|                |     | Horizontal Angle |      |      |
|----------------|-----|------------------|------|------|
|                |     | 0°               | 45°  | 90°  |
| Vertical Angle | 0°  | 1035             | 1035 | 1035 |
|                | 45° | 664              | 710  | 759  |
|                | 55° | 504              | 579  | 657  |
|                | 65° | 342              | 451  | 570  |
|                | 75° | 186              | 321  | 408  |
|                | 85° | 53               | 104  | 125  |

#### Zonal Lumen Summary

| Zone  | Lumens | % Lamp | Luminaire |
|-------|--------|--------|-----------|
| 0-30  | 808    | N/A    | 24.7%     |
| 0-40  | 1328   | N/A    | 40.5%     |
| 0-60  | 2394   | N/A    | 73.1%     |
| 0-90  | 3274   | N/A    | 100%      |
| 0-180 | 3274   | N/A    | 100%      |

Reference [www.cree.com/lighting](http://www.cree.com/lighting) for detailed photometric data.

### Application Reference

| Open Space |        |         |     |                   |            |
|------------|--------|---------|-----|-------------------|------------|
| Spacing    | Lumens | Wattage | LPW | w/ft <sup>2</sup> | Average fc |
| 8 x 8      | 3200L  | 35W     | 90  | 0.53              | 45         |
| 8 x 10     | 3200L  | 35W     | 90  | 0.44              | 37         |
| 10 x 10    | 3200L  | 35W     | 90  | 0.35              | 30         |
| 10 x 12    | 3200L  | 35W     | 90  | 0.28              | 24         |

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