

CRT Series

CR4T™ LED Downlight – 4" (102mm)

Rev. Date: V6 10/11/2022

Product Description

The new CR4T LED downlight delivers 790 lumens while achieving over 75 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality 90 CRI light. The CR4T is available in warm and cool color temperatures, and easily installs into most standard four-inch recessed IC or non-IC housings.

Applications: New construction or upgrade for residential and commercial lighting

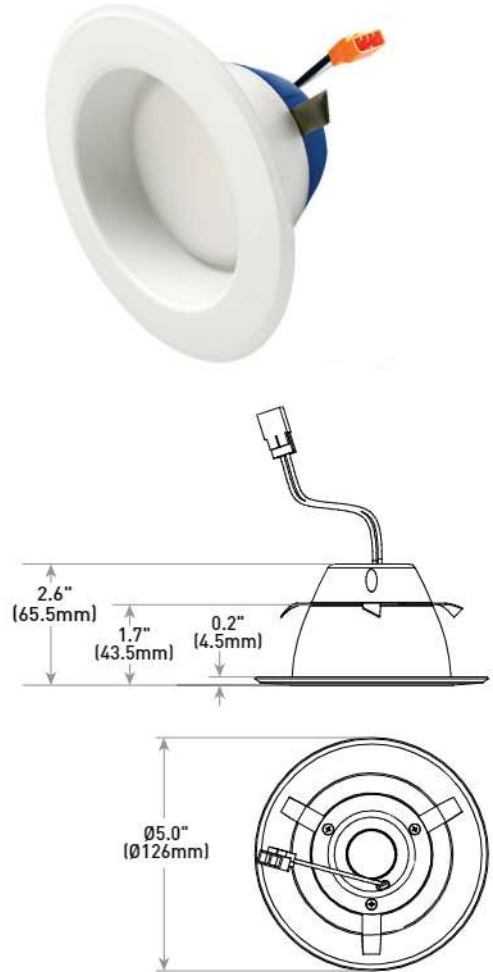
Performance Summary

| |
|--|
| Initial Delivered Lumens: 790 lumens |
| Input Power: 10.5 watts |
| CRI: 90+ |
| CCT: 2700K, 3000K, 3500K, 4000K |
| Limited Warranty¹: 5 years |
| Lifetime: Designed to last 50,000 hours |
| Dimming: Dimmable to 5% |
| Rated for Dry, Damp, and Wet Locations |

¹ See <http://creelighting.com/warranty> for warranty terms

Accessories

| Trims | |
|---|---|
| CR4T-TRMBRAN-1 - 4" (102mm) Plastic Reflector Trim - Bronze CR4T-TRMBKAN-1 - 4" (102mm) Plastic Reflector Trim - Black | CR4T-TRMSTAN-1 - 4" (102mm) Plastic Reflector Trim - Satin Nickel CR4T-TRMBKBB-1 - 4" (102mm) Plastic Reflector Trim w/Extended Flange - Black |
| Housings | |
| GU24 Base Housings Recessed Housings, 120V RR4-GU24 - Retrofit | Universal 120-277V Housings Recessed Housings, 120-277V RC4-UNI -New Construction RR4-UNI -Retrofit |



Ordering Information

Example: CR4T-790L-27K-12-E26GU24

| CR4T | 790L | | 12 | E26GU24 |
|--------------------|------------------------------------|--|-----------------|---|
| Series | Initial Delivered Lumens | CCT | Voltage | Base Type |
| CR4T 4" (102mm) | 790L 10.5W, 790 Lumens – 75 LPW | 27K 2700K 30K 3000K 35K 3500K 40K 4000K | 12 120 Volts | E26GU24 Includes E26 (Title 20 Compliant) and GU24 Base Pigtail (Title 24 Compliant) |

| Ordering Number | Single-Carton UPC | Single Cartons Per Master Carton | Master Carton ITF-14 | Watts | CCT | Lumens | Rated Life (Hrs) |
|--------------------------|-------------------|----------------------------------|----------------------|-------|-------|--------|------------------|
| CR4T-790L-27K-12-E26GU24 | 849665023388 | 12 | 10849665023385 | 10.5 | 2700K | 790 | 50,000 |
| CR4T-790L-30K-12-E26GU24 | 849665023395 | 12 | 10849665023392 | 10.5 | 3000K | 790 | 50,000 |
| CR4T-790L-35K-12-E26GU24 | 849665023401 | 12 | 10849665023408 | 10.5 | 3500K | 790 | 50,000 |
| CR4T-790L-40K-12-E26GU24 | 849665023418 | 12 | 10849665023415 | 10.5 | 4000K | 790 | 50,000 |



US: creelighting.com (800) 236-6800

Canada: creelighting-canada.com (800) 473-1234

CREE ⇄ LIGHTING™

Product Specifications

CONSTRUCTION & MATERIALS

- Durable upper housing protects LEDs and driver. Adjustable flip clips resist heat while providing retention for flush ceiling fit
- Thermal management system uses the lower reflector to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum even when installed in insulated ceilings
- Suitable for insulated and non-insulated ceilings
- One-piece aluminum lower reflector redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane and easily accommodates CR4T snap-in trims

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness
- Diffusing polycarbonate lens shields direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance
- Beam Angle (included angle between points of 50% of max. intensity): ~ 95°
- Field Angle (included angle between points of 10% of max. intensity): ~ 145°

ELECTRICAL SYSTEM

- Integral, high-efficiency power supply
- **Power Factor:** > 0.9
- **Total Harmonic Distortion:** < 20%
- **Input Voltage:** 120V, 50/60Hz
- **Dimming:** Dimmable to 5% with select incandescent dimmers. Forward phase (triac) and reverse phase dimming only.
- Reference <https://www.creelighting.com/products/indoor/retrofit-downlights/crt-series> for recommended dimmers
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- **Operating Temperature Range:** -25°C to +35°C (-13°F - +95°F)

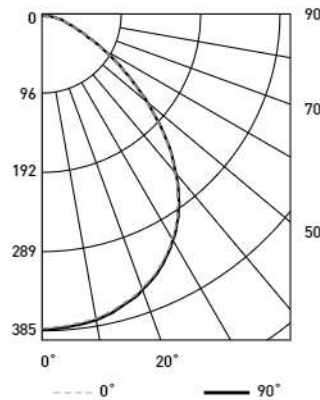
REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Classified
- Suitable for wet locations for covered ceilings only
- Meets FCC Part 15, Subpart B, Class B limits for conducted and radiated emissions
- ENERGY STAR® certified. Please refer to <https://www.energystar.gov/productfinder/product/certified-light-fixtures/results> for most current information
- Meets CA Title 24 JA8 Requirements
- Meets CA Title 20 Appliance Regulations
- RoHS Compliant. Consult factory for additional details
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

Photometry

CR4T-790L-27K BASED ON CESTL REPORT TEST #: PL13048-001A

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



| Vertical Angle | Horizontal Angle | | |
|----------------|------------------|--------|--------|
| | 0° | 45° | 90° |
| 45° | 23,252 | 23,208 | 22,970 |
| 55° | 17,172 | 17,146 | 16,972 |
| 65° | 11,183 | 11,183 | 11,074 |
| 75° | 8,303 | 8,362 | 8,332 |
| 85° | 6,844 | 6,756 | 6,581 |

| RC %: | 80 | | | |
|--------|-----|-----|-----|-----|
| RW %: | 70 | 50 | 30 | 10 |
| RCR: 0 | 119 | 119 | 119 | 119 |
| 1 | 110 | 106 | 103 | 99 |
| 2 | 102 | 95 | 89 | 84 |
| 3 | 94 | 84 | 77 | 71 |
| 4 | 87 | 76 | 68 | 62 |
| 5 | 80 | 68 | 60 | 54 |
| 6 | 74 | 62 | 54 | 48 |
| 7 | 69 | 57 | 48 | 43 |
| 8 | 65 | 52 | 44 | 38 |
| 9 | 60 | 48 | 40 | 35 |
| 10 | 57 | 44 | 37 | 32 |

Effective Floor Cavity Reflectance: 20%

| Zone | Lumens | % Lamp | Luminaire |
|-------|--------|--------|-----------|
| 0-30 | 298 | N/A | 34.8% |
| 0-40 | 478 | N/A | 55.9% |
| 0-60 | 755 | N/A | 88.3% |
| 0-90 | 855 | N/A | 100.0% |
| 0-180 | 855 | N/A | 100.0% |

Reference <https://www.creelighting.com/products/indoor/retrofit-downlights/crt-series> for detailed photometric data

Installation

- Designed easily to install in standard 4" (102mm) downlight housings with minimum housing height of 5" (127mm) and diameter 4" to 4.1" (102mm - 104mm)
- Quick install system utilizes a unique retention feature. Simply attach socket to CR4T. Move light to ready position and slide into housing



NOTE: Reference <https://www.creelighting.com/products/indoor/retrofit-downlights/crt-series> for detailed installation instructions

Application Reference

| Open Space | | | | | |
|------------|--------|---------|-----|-------|------------|
| Spacing | Lumens | Wattage | LPW | w/ft² | Average FC |
| 4 x 4 | 790 | 10.5 | 75 | 0.63 | 46 |
| 6 x 6 | | | | 0.29 | 21 |
| 8 x 8 | | | | 0.15 | 11 |
| 10 x 10 | | | | 0.10 | 7 |

10' Ceiling, 80/50/20 Reflectances, 2.5 workplane. LLF: 1.0 Initial. Open Space: 50' x 40' x 10'

| Corridor | | | | | |
|---------------|--------|---------|-----|-------|------------|
| Spacing | Lumens | Wattage | LPW | w/ft² | Average FC |
| 4' on Center | 790 | 10.5 | 75 | 0.44 | 16 |
| 6' on Center | | | | 0.30 | 11 |
| 8' on Center | | | | 0.21 | 7 |
| 10' on Center | | | | 0.17 | 6 |

10' Ceiling, 80/50/20 Reflectances, Light levels on the ground. LLF: 1.0 Initial. Corridor: 6' Wide x 100' Long