

CRT Series

CR6T LED Downlight - 6" (152mm)

Rev. Date: V6 08/26/2020

Product Description

The new CR6T LED downlight delivers up to 1,650 lumens while achieving over 84 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality 90 CRI light. The CR6T is available in warm and cool color temperatures, and easily installs into most standard five-inch or six-inch recessed IC or non-IC housings.

Applications: New construction or upgrade for residential and commercial lighting

Performance Summary

Initial Delivered Lumens: 825 Lumens - 1,650 Lumens

Input Power: 11 watts, 14.5 watts, 21 watts, 19.5 watts

CRI: 90+

CCT: 2700K, 3000K, 3500K, 4000K

Limited Warranty¹: 5 years

Lifetime: Designed to last 50,000 hours

Dimming: Dimmable to 5% (At 120V Only)

Rated for Dry, Damp, and Wet Locations

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

Accessories

Field-Installed	
Trims CR6T-TRMBRAN-1 - 6" (152mm) Plastic Reflector Trim - Bronze CR6T-TRMBKAN-1 - 6" (152mm) Plastic Reflector Trim - Black CR6T-TRMSTAN-1 - 6" (152mm) Plastic Reflector Trim - Satin Nickel CR6T-TRMBKBB-1 - 6" (152mm) Plastic Reflector Trim w/Extended Flange - Black	8" Adapter Ring GR8 - Optional goof ring accommodates existing housings with apertures from 6.25" (159mm) to 8.5" (216mm) in diameter

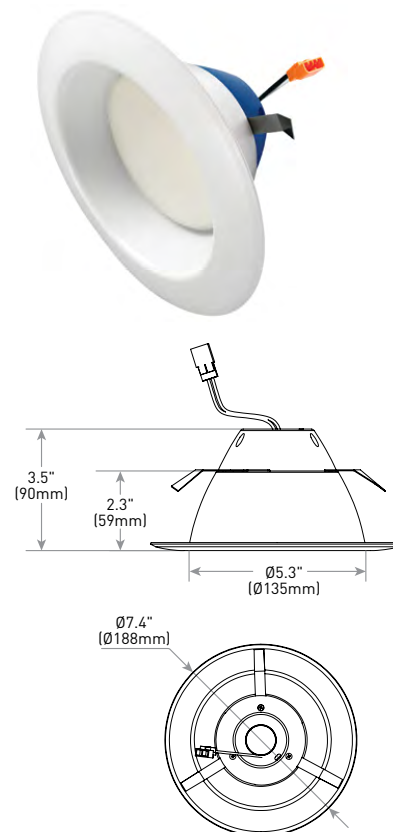
Housings

Refer to page three for details.

Ordering Information

Example: CR6T-825L-27K-12-E26GU24

CR6T		Initial Delivered Lumens		CCT		Voltage	Base Type
Series							
CR6T 6" (152mm)	825L 11W, 825 Lumens - 75 LPW 1100L 14.5W, 1100 Lumens - 76 LPW 1600L 21W, 1600 Lumens - 76 LPW	1200L (120-277V Only) 14.5W, 1,200 Lumens - 82 LPW 1650L (120-277V Only) 19.5W, 1,650 Lumens - 84 LPW	27K 2700K 30K 3000K 35K 3500K 40K 4000K	12 120 Volts 1227 120-277 Volts (Universal)	E26GU24 Includes E26 (Title 20 Compliant) and GU24 Base Pigtail (Title 24 Compliant) Blank Includes E26 (Title 20 Compliant), GU24 Base (Title 24 Compliant), and 277V Connector Pigtails		
Ordering Number	Single-Carton UPC	Single Cartons Per Master Carton	Master Carton ITF-14	Watts	CCT	Lumens	Rated Life (Hrs)
CR6T-825L-27K-12-E26GU24	849665023487	12	10849665023484	11	2700K	825	50,000
CR6T-825L-30K-12-E26GU24	849665023494	12	10849665023491	11	3000K	825	50,000
CR6T-825L-35K-12-E26GU24	849665023500	12	10849665023507	11	3500K	825	50,000
CR6T-825L-40K-12-E26GU24	849665023517	12	10849665023514	11	4000K	825	50,000
CR6T-1100L-27K-12-E26GU24	849665023425	12	10849665023422	14.5	2700K	1,100	50,000
CR6T-1100L-30K-12-E26GU24	849665023432	12	10849665023439	14.5	3000K	1,100	50,000
CR6T-1100L-35K-12-E26GU24	849665025412	12	10849665025419	14.5	3500K	1,100	50,000
CR6T-1100L-40K-12-E26GU24	849665023449	12	10849665023453	14.5	4000K	1,100	50,000
CR6T-1600L-27K-12-E26GU24	849665023456	12	10849665023453	21	2700K	1,600	50,000
CR6T-1600L-30K-12-E26GU24	849665023463	12	10849665023460	21	3000K	1,600	50,000
CR6T-1600L-35K-12-E26GU24	849665025429	12	10849665025426	21	3500K	1,600	50,000
CR6T-1600L-40K-12-E26GU24	849665023470	12	10849665023477	21	4000K	1,600	50,000
CR6T-1200L-27K-1227	849665037231	12	10849665037238	14.5	2700K	1,200	50,000
CR6T-1200L-30K-1227	849665037248	12	10849665037245	14.5	3000K	1,200	50,000
CR6T-1200L-35K-1227	849665037255	12	10849665037252	14.5	3500K	1,200	50,000
CR6T-2100L-40K-1227	849665037262	12	10849665037269	14.5	4000K	1,200	50,000
CR6T-1650L-27K-1227	849665037279	12	10849665037276	19.5	2700K	1,650	50,000
CR6T-1650L-30K-1227	849665037286	12	10849665037283	19.5	3000K	1,650	50,000
CR6T-1650L-35K-1227	849665037293	12	10849665037290	19.5	3500K	1,650	50,000
CR6T-1650L-40K-1227	849665037309	12	10849665037306	19.5	4000K	1,650	50,000



CREE  **LIGHTING**

US: creelighting.com T (800) 236-6800

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

CR6T LED Downlight - 6" (152mm)

Product Specifications

CONSTRUCTION & MATERIALS

- Durable upper housing protects LEDs, driver and power supply. Adjustable flip clips resist heat while providing retention for flush ceiling fit
- Thermal management system uses both upper housing and 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 CR6 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

ELECTRICAL SYSTEM

- Integral, high-efficiency power supply
- **Power Factor:** > 0.9
- **Total Harmonic Distortion:** < 20%
- **Input Voltage:** 120V, 50/60Hz; 120-277V, 50/60Hz
- **Dimming:** Dimmable to 5% with select incandescent dimmers at 120V only. Forward phase (triac) and reverse phase dimming only.
- Reference <http://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)

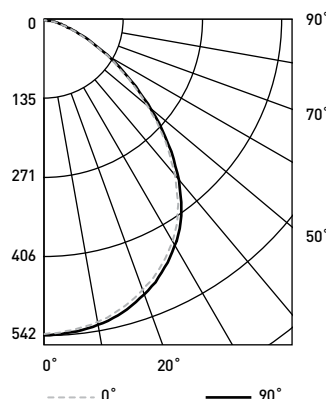
REGULATORY & VOLUNTARY QUALIFICATIONS

- 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

CR6T-1100L-27K BASED ON CESTL REPORT TEST #: PL13053-001A

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



Average Luminance Table (cd/m²)

Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	26,004	26,188	26,575
55°	19,609	19,685	19,880
65°	13,263	13,248	13,366
75°	8,283	8,211	8,235
85°	7,130	6,773	6,702

Coefficients Of Utilization – Zonal Cavity Method				
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

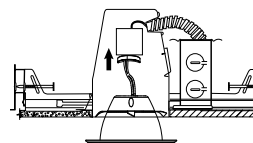
Effective Floor Cavity Reflectance: 20%

Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	418	N/A	34.6%
0-40	673	N/A	55.7%
0-60	1069	N/A	88.5%
0-90	1209	N/A	100.0%
0-180	1209	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 5-6" (127mm - 152mm) downlight housings with minimum housing height of 5.5" (140mm) and diameter 5.5" to 6.5" (140mm - 165mm)
- Quick install system utilizes a unique retention feature. Simply attach socket to CR6T. 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/ft ²	Average FC
4 x 4	825	11	75	0.66	48
6 x 6				0.30	22
8 x 8				0.16	12
10 x 10				0.11	8
4 x 4	1,100	14.5	76	0.87	64
6 x 6				0.40	30
8 x 8				0.21	16
10 x 10				0.14	10
4 x 4	1,600	21	76	1.26	94
6 x 6				0.58	44
8 x 8				0.31	23
10 x 10				0.21	15

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/ft ²	Average FC
4' on Center	825	11	75	0.45	16
6' on Center				0.31	11
8' on Center				0.22	8
10' on Center				0.18	6
4' on Center	1,100	14.5	76	0.60	22
6' on Center				0.41	15
8' on Center				0.29	10
10' on Center				0.24	9
4' on Center	1,600	21	76	0.87	32
6' on Center				0.60	22
8' on Center				0.42	15
10' on Center				0.35	13

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

Housings - Reference Housing spec sheets for additional details		
Edison (E26) Base Housings Recessed Housings, 120V RC6 - New construction RR6 - Retrofit Recessed "Pan" Conversion Kit, 120V C6 Surface Mount Housings, 120V SC6 - Textured white finish SC6-BL - Textured black finish Cord Mount Housings, 120V SC6-CM - Textured white finish - Includes 5" (127mm) canopy and 7' (2.1m) white cord SC6-CM-BL - Textured black finish - Includes 5" (127mm) canopy and 7' (2.1m) black cord	GU24 Base Housings Recessed Housings, 120V H6-GU24 - Architectural new construction RC6-GU24 - New construction RR6-GU24 - Retrofit Recessed "Pan" Conversion Kit, 120V C6-GU24 C6-120V-LSA - Less socket adapter Surface Mount Housings, 120V SC6-GU24 - Textured white finish SC6-BL-GU24 - Textured black finish Cord Mount Housings, 120V SC6-CM-GU24 - Textured white finish - Includes 5" (127mm) canopy and 7' (2.1m) white cord SC6-CM-BL-GU24 - Textured black finish - Includes 5" (127mm) canopy and 7' (2.1m) black cord Wall Mount Housings, 120V SC6-WM-GU24 - Textured white finish SC6-WM-BL-GU24 - Textured black finish	Universal Recessed Housings, 120-277V RC6-UNI -New Construction RR6-UNI -Retrofit