

CRT-G Series

CR6T-G LED Gimbal Downlight - 6" (152mm)

Rev. Date: V7 12/19/2024

Product Description

The new CR6T-G LED downlight delivers up to 1,600 lumens while achieving over 91 lumens per watt. Ideal for accent and wall wash lighting, 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

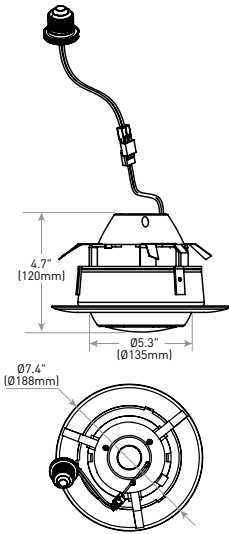
Performance Summary

Initial Delivered Lumens: 825 Lumens - 1600 Lumens
Input Power: 9 watts, 12.8 watts, 18.8 watts
CRI: 90+
CCT: 2700K, 3000K, 3500K, 4000K
Limited Warranty*: 5 years for luminaire, 1 year for accessories and housings
Lifetime: Designed to last 50,000 hours
Dimming: Dimmable to 5% (At 120V Only)
Tilt: 35° Tilt, with 360° rotation
Rated for Dry, Damp, and Wet Locations

*See <https://www.creelighting.com/resources/warranties/> for warranty terms

Housings

Refer to page three for details.



Ordering Information

Example: CR6T-G-1600L-27K-1227

CR6T-G					1227		
Ordering Information					Additional Information		
Series	Initial Delivered Lumens	CCT	Voltage	Base Type	Single Carton UPC	Single Cartons/ Master Carton	Master Carton ITF-14
CR6T-G 6" (152mm)	825L 9W, 825 Lumens - 91 LPW	30K 3000K	1227 120-277 Volts (Universal)	Blank Includes E26 (Title 20 Compliant), GU24 Base (Title 24 Compliant), and 277V Connector Pigtails	849665037590	6	10849665037597
		35K 3500K			849665037606	6	10849665037603
		40K 4000K			849665037613	6	10849665037610
	1100L 12.8W, 1100 Lumens - 85 LPW	30K 3000K			849665037637	6	10849665037634
		35K 3500K			849665037644	6	10849665037641
		40K 4000K			849665037668	6	10849665037665
	1600L 18.8W, 1600 Lumens - 85 LPW	27K 2700K			849665037675	6	10849665037672
		30K 3000K			849665037682	6	10849665037689
		35K 3500K			849665037699	6	10849665037696
		40K 4000K					



Cree TrueWhite®
Technology

CREE ⇄ LIGHTING®

Website: [creelighting.com](https://www.creelighting.com)

US: (800) 236-6800 Canada: (800) 473-1234

CR6T-G LED Gimbal Downlight - 6" (152mm)

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 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
- 35° Tilt, with 360° rotation

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): ~ 85°
- Field Angle (included angle between points of 10% of max. intensity): ~ 135°

ELECTRICAL SYSTEM

- Integral, high-efficiency power supply
- Power Factor:** > 0.9
- Total Harmonic Distortion:** < 20%
- Input Voltage:** 120-277V, 50/60Hz
- Dimming:** Dimmable to 5% with select incandescent dimmers at 120V only. 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]

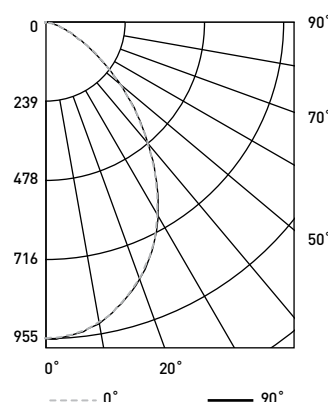
REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Classified (UL1598C)
- Meets NEMA C82.77 standards
- Suitable for wet locations for covered ceilings only
- Meets FCC Part 15, Subpart B, Class B limits for conducted and radiated emissions
- 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-G-1600L-27K-1227 BASED ON CESTL REPORT TEST #: PL15479-001B

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%.



Average Luminance Table (cd/m²)				
Vertical Angle	Horizontal Angle			
		0°	45°	90°
	45°	118,685	118,229	118,199
	55°	79,129	78,985	78,626
	65°	46,860	47,088	47,043
	75°	27,731	27,796	27,861
	85°	18,501	18,501	18,259

Coefficients Of Utilization – Zonal Cavity Method				
RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	111	107	103	100
2	103	96	90	85
3	95	86	79	74
4	88	78	70	64
5	82	71	63	57
6	76	64	57	51
7	71	59	51	46
8	67	54	47	42
9	63	50	43	38
10	59	47	40	35

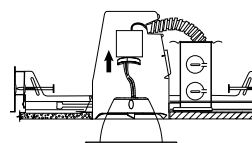
Effective Floor Cavity Reflectance: 20%

Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	683	N/A	39.8%
0-40	1046	N/A	60.9%
0-60	1544	N/A	89.9%
0-90	1711	N/A	99.7%
0-180	1716	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	Lumen Package	Lumens	Wattage	LPW	w/ft²	Average FC
4 x 4	825L	825	9	91.7	0.54	95
6 x 6					0.25	44
8 x 8					0.14	24
10 x 10					0.09	16
4 x 4	1100L	1,100	12.8	85.9	0.77	95
6 x 6					0.36	44
8 x 8					0.19	24
10 x 10					0.13	16
4 x 4	1600L	1,600	18.8	85.1	1.13	95
6 x 6					0.53	44
8 x 8					0.28	24
10 x 10					0.19	16

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

Corridor						
Spacing	Lumen Package	Lumens	Wattage	LPW	w/ft²	Average FC
4' on Center	825L	825	9	91.7	0.38	18
6' on Center					0.26	12
8' on Center					0.18	8
10' on Center					0.15	7
4' on Center	1100L	1,100	12.8	85.9	0.53	23
6' on Center					0.36	16
8' on Center					0.26	11
10' on Center					0.21	9
4' on Center	1600L	1,600	18.8	85.1	0.78	34
6' on Center					0.53	23
8' on Center					0.38	16
10' on Center					0.31	14

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

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