

# SR6™

## LED Architectural Downlight

### Product Description

The SR6™ LED architectural downlight delivers up to 1800 lumens of exceptional 90+ CRI light with efficacy up to 75 lumens per watt. It features Light Source-Reflector Unity™, a highly effective luminaire design approach that enables exceptional aperture aesthetics, by eliminating before-lamp images and creating a uniform light distribution. Combined with Cree TrueWhite® Technology, the SR6 delivers beautiful, high-quality light with greater optical control than ever before. Available in variety of color temperatures, with high-quality anodized aluminum reflector finishes, and out-of-the-box controls compatibility, the SR6 is an ideal solution for architectural quality downlighting.

### Performance Summary

Utilizes Cree TrueWhite® Technology

Light Source-Reflector Unity™ Design

Delivered Light Output: SR6-12L with SR6T30SSG trim: 1231 lumens; SR6-18L with SR6T30SSG trim: 1824 lumens.

Input Power: **SR6-12L:** 17 watts, **SR6-18L:** 24 watts

**CRI:** 90

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

**Shield Angles:** 30°, 45° (complementary wall wash option available)

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

**Lifetime:** Designed to last minimum 75,000 hours

**Warranty:** 5 Years

### Ordering Information

Example: SR6H-A-120V + SR6E-12L-A-30K + SR6T-30-SSGC-FF-WW

Fully assembled luminaire is composed of three components that must be ordered separately: SR6H: Housing SR6E: Light Engine SR6T: Reflector Kit

Product	PSU Type	Voltage	Controls
<b>SR6H</b> 6" Housing	<b>A</b> Type A Output	<b>120V</b> <b>277V</b>	<b>10V</b> 0-10V Dimming

Product	Options	Input Power	Color Temperature
<b>SR6E</b> 6" Light Engine	<b>12L</b> 17W 1200 Lumens - 71 LPW	<b>A</b> Type A Input	<b>30K</b> 3000 Kelvin
	<b>18L</b> 24W 1800 Lumens - 75 LPW		<b>35K</b> 3500 Kelvin <b>40K</b> 4000 Kelvin

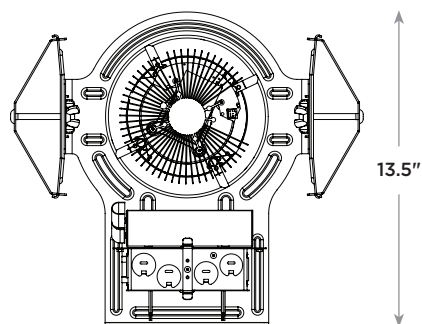
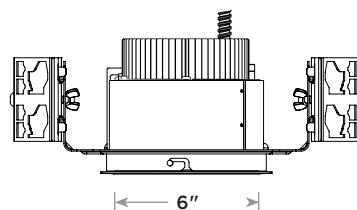
Product	Shield	Finish		Flange Finish	Option
<b>SR6T</b> 6" Reflector	<b>30</b> 30° Shield Angle	<b>W</b> White Paint	<b>SSGC</b> Clear Satin	<b>FF</b> Matching	<b>Blank</b> Standard
	<b>45</b> 45° Shield Angle	<b>C</b> Clear	<b>SSGGR</b> Graphite Satin		
		<b>GR</b> Graphite	<b>SSGBR</b> Bronze Satin	<b>WF</b> White	<b>WW*</b> Wall wash
		<b>BR</b> Bronze	<b>SSGCG</b> Champagne Gold Satin		
		<b>CG</b> Champagne Gold	<b>SSGPE</b> Pewter Satin		
		<b>PE</b> Pewter	<b>SSGWH</b> Wheat Satin		
		<b>WH</b> Wheat	<b>SSGB</b> Black Satin *		
		<b>B</b> Black *			

NOTE: SSG - Soft Satin Glow  
\* Target Availability Mid 2012.

\* Black and Black Satin finish do not qualify for Energy Star



SR6



The SR6 downlight ships as three components: a housing, light engine, and reflector kit.

SR6H  
Housing

SR6E  
Light Engine

SR6T  
Reflector Kit



## Product Specifications

### CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach 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.

### LIGHT SOURCE-REFLECTOR UNITY™ DESIGN

Light Source-Reflector Unity™ optical design is a highly effective luminaire design approach in which the LED light source is seamlessly integrated with the reflector to provide flawless aesthetics and enhanced optical control. Built around a uniform light source, uniquely crafted attachment features and specialized reflector optics, this design platform elevates the appearance of LED lighting to the highest tier. Dark, shadowy bands and before-lamp images are eliminated, providing an exceptionally smooth, non-distracting transition from ceiling to light source. The precisely formed contours and depth of the reflectors are engineered to carefully soften the light source and achieve a beautiful, quiet aperture appearance with optimal light distribution.

### CONSTRUCTION & MATERIALS

- Durable light engine protects LEDs. Adjustable flip clips provide sturdy retention within the collar for flush ceiling fit. Extruded aluminum heat sink is integrated to conduct heat away from LEDs and transfer it to the plenum space for optimal performance.
- Rugged pan-style housing enables tool-less final assembly, featuring a high efficiency power supply with one-click electrical hook-up and adjustable engagement features to accommodate different hanger bar options.
- Field replaceable LED board and heat sink.

### OPTICAL SYSTEM

- Within the light mixing chamber, a unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing.
- Diffusing lens shields direct view of LEDs while the Light Source-Reflector Unity™ enabled design balances the brightness of the luminaire with the ceiling to ensure a low-glare, high angle appearance. Deep set diffusing lens also provides more precise optical control with greater visual cut-off.

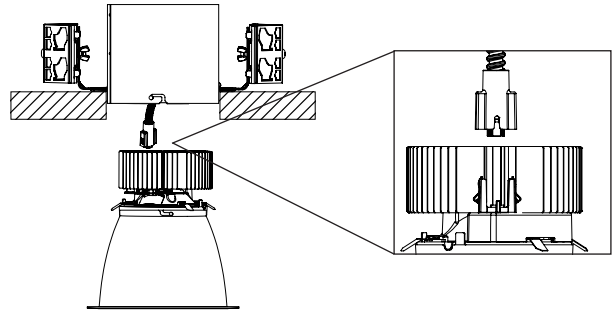
### ELECTRICAL SYSTEM

- Field replaceable, high-efficiency driver and power supply.
- **Power Factor** > 0.9 nominal
- **Input Voltage:** 120V or 277V, 60Hz
- **Dimming:** Dimmable to 5% with most 0-10V dimmers.

### REGULATORY & VOLUNTARY QUALIFICATIONS

- Designed to exceed ENERGY STAR® requirements.
- cULus Listed
- Designed to exceed California Title-24 high efficacy luminaire requirements.
- Suitable for damp locations.

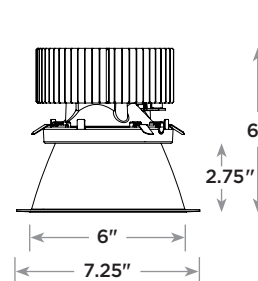
## Installation



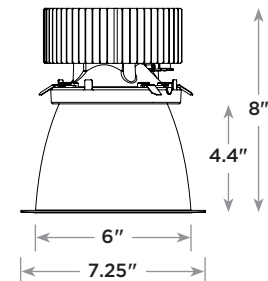
- One-click electrical connection allows for easy, below ceiling, connection of power supply and light engine.
- Flip-clip installation technique accommodates ceiling thickness up to the height of the reflector.

NOTE: Reference [www.cree.com/lighting](http://www.cree.com/lighting) for detailed installation instructions.

SR6  
30° Shield Angle



SR6  
45° Shield Angle



### Reflector Accessories

High-quality anodized aluminum reflector finishes, available in 30° and 45° shield angles and wall wash options.



C-Clear



SSGC-Clear Satin



GR-Graphite



SSGGR-Graphite Satin



BR-Bronze



SSGBR-Bronze Satin



CG-Champagne Gold



SSGCG-Champagne Gold Satin



PE-Pewter



SSGPE-Pewter Satin



WH-Wheat



SSGWH-Wheat Satin



B-Black



SSGB-Black Satin

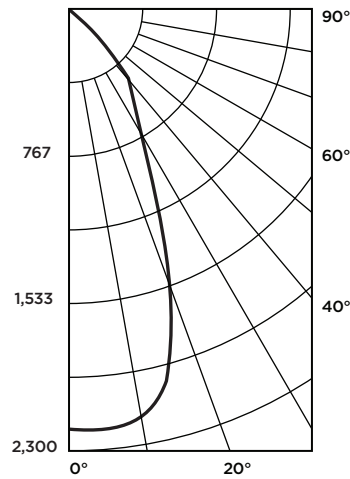


W-White Paint



### Photometry

#### SR6E-18L WITH SR6T-45-C



#### Intensity (Candlepower) Summary

Angle	Mean CP
0°	2177
5°	2196
15°	2012
25°	1116
35°	523
45°	67
55°	17
65°	10
75°	8
85°	6
90°	5

#### Zonal Lumen Summary

Zone	Lumens	% Lamp	Luminaire
0-30	1,291.5	70.8%	70.8%
0-40	1,642.6	90%	90%
0-60	1,783.9	97.8%	97.8%
0-90	1,824.8	100%	100%

For SR6E-12L multiply by 0.67.  
Reference [www.cree.com/lighting](http://www.cree.com/lighting) for detailed photometric data.