

KR6™

LED Architectural Downlight – Round 6" Aperture

Product Description

The KR6™ LED specification downlight features Cree TrueWhite® Technology and delivers beautiful, high-quality light with efficacy up to 65 lumens per watt. Designed for new construction applications, the KR Series is available in variety of color temperatures, with high-quality anodized aluminum reflector finishes, dimmable product options, and sloped ceiling adaptor options, making it suitable for a wide variety of applications.

Performance Summary

Utilizes Cree TrueWhite® Technology
Made in the U.S.A. of U.S. and imported parts
Delivered Light Output*: 9L: 660Lumens(L), 13L: 1050L, 20L: 1700L, 30L: 2650L
Input Power: KR6-9L: 13 watts(W), KR6-13L: 18W, KR6-20L: 30W, KR6-30L: 39W
CRI: 90
CCT: 2700K , 3000K , 3500K, 4000K
Dimming: 5% Triac Dimming, 10% 0/1-10V Dimming**
Lifetime: Designed to last 50,000 hours
Warranty: 10 years†

* Delivered lumen output is typical when using a SSGC type reflector. See Application Performance Chart under Photometry for more detail.

**0/1-10V for 120V or 277V on 20L and 30L models, Triac for 120V on 9L and 13L models

† See [www.creeled.com](#) for warranty terms.

Ordering Information - Housing

Example: KR6-9L-27K-120V

KR6					
Series	Size	Source Lumen Output	CCT	Voltage	Options
KR	6 inch	9L 850 Lumens	35K 3500K	120V 120 Volts	Triac Dimming*
		13L 1250 Lumens	30K 3000K		
		20L 2000 Lumens	27K 2700K	277V 277 Volts	
		30L 3000 Lumens	40K 4000K		

*Triac available on 9L and 13L, 10V available on 20L and 30L

Ordering Information - Reflector

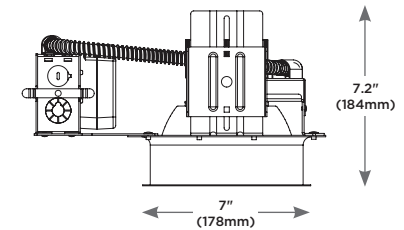
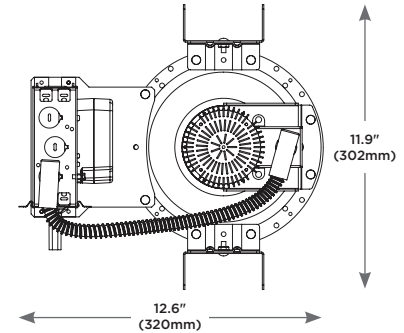
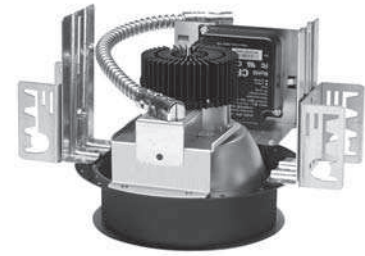
Example: KR6T-SSGC-FF

KR6T				
Series	Reflector Finish	Flange Finish	Options	
KR6T	SSGC Soft Satin Glow, Clear	FF Matching	WW Wall Wash	
	SSGCG Soft Satin Glow, Champagne Gold			WF White Paint

Ordering Information-Sloped Ceiling Adaptor

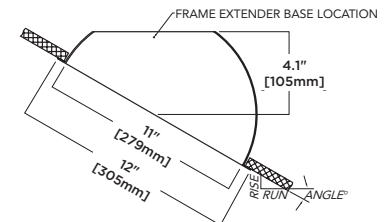
Example: KRKS605WW

KRKS6		WW
Part	Adaptor Angle	Option
KRKS6	05 thru 35 (order in 5 degree increments)	WW Required



Accessories:

6" Sloped Ceiling Adaptor



Rev. Date 02/19/2013



Product Specifications

CREE TRUEWHITE TECHNOLOGY

Cree TrueWhite® technology begins with the highest performing commercially available LEDs. Cree TrueWhite® Technology mixes the light from red and unsaturated yellow LEDs to create beautiful, warm, white light. This patented approach enables color management to preserve high color consistency over the life of the product. Cree TrueWhite® Technology also enables a CRI of at least 90 while maintaining high luminous efficacy — a no compromise solution.

CONSTRUCTION & MATERIALS

- Initial color within a 3-step MacAdam Ellipse.
- Low brightness parabolic spun Alzak aluminum cone, 0.06" (2mm) thick with polished radius and continuous self-flange.
- Soft Satin Glow Clear finish, standard.
- 2" (51mm) aperture throat to accommodate all standard and extra-thick ceilings and provide flexibility in mounting within grid.
- Provided with quick mounting brackets for optional carrying channels.
- Light engine, optics, and driver accessible from below ceiling.

ELECTRICAL SYSTEM

- **Input Voltage:** 120 or 277V
- 5%-100% Triac dimming standard on 120V (9L and 13L models)
- 10% - 100% 0/1-10V dimming standard (20L and 30L models)
- **Power Factor:** >0.9

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed® for thru-wiring 8#12AWG-90°C and damp location.
- RoHS compliant.
- Thermally protected.
- Meets Buy American requirements within ARRA.

Installation

- Recommended ceiling cutout 6.5" (165mm)

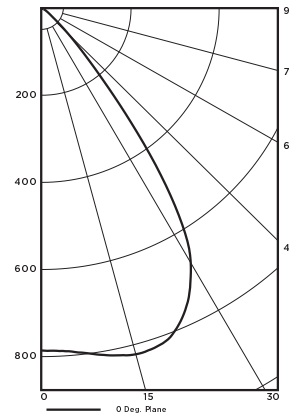


Note: 30L versions require marked spacing: 24" (600mm) X 12" (300mm) X ½" (12mm). (24" [600mm] luminaire to luminaire, 12" (300mm) luminaire to side wall, ½" (12mm) above luminaire.

Photometry

All published luminaire photometric testing performed to IESNA LM-79-2008 standards.

Champagne Reflector



Intensity (Candlepower) Summary

Angle	Mean CP
0°	786
5°	791
15°	822
25°	765
35°	468
45°	96
55°	22
65°	8
75°	3
85°	0
90°	0

LTL Test Report #: 30144
KR6-13L-27K-120V (SSGCG-WF)
Initial Delivered Lumens: 1051
Efficacy: 59.6 Lm/W
S/M: 1.2

Cone of Light

Distance from Workplane	Footcandles	Beam Diameter
6'	21	7.2'
8'	12	9.4'
10'	7	12.2'
12'	5	14.6'
14'	4	16.0'

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	657	62.5%
0-40	939	89.3%
0-60	1039	98.9%
0-90	1051	100%

Application Performance

Lumen Output	Multiplier
9L	0.68
20L	1.60
30L	2.40

Testing represents 13L output models. To estimate performance for other output models, use the Application Performance chart above. For exact photometric data please reference our available IES and LM-79 test results at www.cree.com/krseries

Application Reference

Open Space					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
4 x 4	1051	17.6	60	1.06	66
6 x 6				0.49	31
8 x 8				0.26	17
10 x 10				0.18	11

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	1051	17.6	60	0.73	28
6' on Center				0.50	19
8' on Center				0.35	13
10' on Center				0.29	11

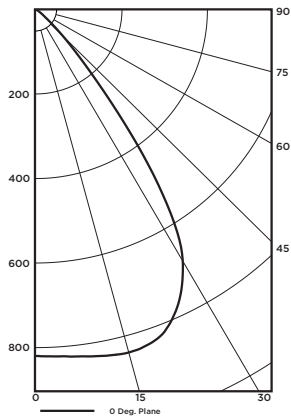
10' Ceiling, 80/50/20 Reflectances, Light levels on the ground.
 LLF: 1.0 Initial. Corridor: 6' Wide x 100' Long



Photometry

All published luminaire photometric testing performed to IESNA LM-79-2008 standards.

Soft Satin Reflector



Intensity (Candlepower) Summary

Angle	Mean CP
0°	820
5°	824
15°	840
25°	778
35°	478
45°	101
55°	22
65°	8
75°	3
85°	0
90°	0

LTL Test Report #: 30142
 KR6-13L-27K-120V (SSGC-WF)
 Initial Delivered Lumens: 1074
 Efficacy: 61.0 Lm/W
 S/M: 1.2

Cone of Light

Distance from Workplane	Footcandles	Beam Diameter
6'	21	7.2'
8'	12	9.5'
10'	8	11.5'
12'	5	14.6'
14'	4	16.3'

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	671	62.4%
0-40	959	89.3%
0-60	1063	99.0%
0-90	1074	100%

Application Performance

Lumen Output	Multiplier
9L	0.68
20L	1.60
30L	2.40

Testing represents 13L output models. To estimate performance for other output models, use the Application Performance chart above. For exact photometric data please reference our available IES and LM-79 test results at www.cree.com/krseries

Application Reference

Open Space					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
4 x 4	1074	17.6	61	1.06	68
6 x 6				0.49	31
8 x 8				0.26	17
10 x 10				0.18	12

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	1074	17.6	61	0.73	28
6' on Center				0.50	19
8' on Center				0.35	14
10' on Center				0.29	11

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

