KR Series
KR4™ & KR6™ LED Specification Downlights

Product Description

The KR Series LED specification downlights deliver beautiful, high-quality light with efficacy up to 90 lumens per watt. Designed for new construction applications, the KR Series is available in a variety of color temperatures, round and square trims with high-quality anodized aluminum reflector finish, a sloped ceiling adapter accessory, and a variety of dimming options. The KR Series downlights with SmartCast® Technology, Cree Lighting's intelligent light solution, provide extreme energy productivity and code compliance – all with installation that's so intuitive and simple, it just works.

Performance Summary

Initial Delivered Lumens: 850-6,750 lumens

Input Power : 13-78 watts

Emergency Performance: Minimum 90 Minutes, 10W (9L-40L) / 20W (60L)

CRI: 90

CCT : 2700K, 3000K, 3500K, 4000K, 5000K

Controls: 0-10V Dimming to 5%, SmartCast® Technology Dimming to 5%, and Lutron EcoSystem® Dimming to 1%, Lutron Vive Dimming to 5%

Limited Warranty‡: 10 years for luminaire/up to 5 years for SmartCast® accessories/1 year for luminaire accessories

Limited Warranty Emergency Back Up (EB) Battery: 1 Year Battery Back Up. Test regularly in accordance with local codes

Assembled in the USA by Cree Lighting from US and imported parts

† See http://creelighting.com/warranty for warranty terms. Consult SmartCast accessory spec sheets for details on warranty terms.

Accessories

Field-Installed

Sloped Ceiling Adapter
KXKS4**WW (4" Round only)
KS6**WW (6" Round only)
** 0-35 (order in 5 degree increments)
C-Channel Hanger Bars
RBH30C
- Pair of 30" (762mm) rigid
  3/4" x 1/2"
  (19mm x 13mm) C
  Channel bars
RBH24C-1
- Pair of 24" (610mm) x 1-1/2" (38mm)
  x 1/2" (13mm) standard C-Channel bars
T-Bar Clips
RARC7
- Set of four
- For use with RBH24C-1 hanger bars
Beauty Ring
KR4TA (4" Round only)
KR6TA (6" Round only)
- White beauty ring to cover pan head fasteners on round reflectors

SmartCast® Technology Configuration Tool
CCT-CWC-1
- One required per project when 10R control is selected
SmartCast® Technology Face Plates
CFP-1-WH
- Matching face plate, 1-gang, white
CFP-2-WH
- Matching face plate, 2-gang, white
CFP-3-WH
- Matching face plate, 3-gang, white
SmartCast® 5-Button Wireless Scene Controller
CSC-SC-5B-CWC-WH (w/o text)
CSC-SC-5S-CWC-WH (w/scene text)
CSC-SC-5X-CWC-WH (w/custom text)
SmartCast® 10V Zone Controller
CSC-ZC-10V-CWC
- Intelligent sensing and control of 0-10V luminaires

SmartCast® Technology Wireless Dimmer
CSC-CWD-UNVN-WH (neutral wire required)
CSC-CWD-UNV-WH (no neutral required)
SmartCast® Technology Wireless Switch
CSC-CWS-UNVN-WH (neutral wire required)
CSC-CWS-UNV-WH (no neutral required)
SmartCast® Technology Wireless Plug Load Controller
CPLC-JB-CWC
SmartCast® Touchscreen Control
CSC-TS-A-BK
SmartCast® Wireless Gateway with Wi-Fi
CSC-GW-CWC-W
- Required with SmartCast Touchscreen Control
SmartCast® Wall Plug Power Supply
CSC-WPS-120V
- For use with SmartCast Wireless Gateway with Wi-Fi
SmartCast® Ceiling Plug Power Supply
CSC-CPS-120V
- For use with SmartCast Wireless Gateway with Wi-Fi
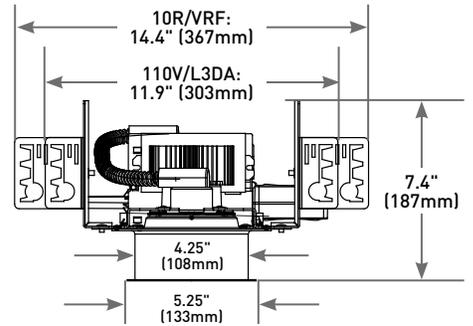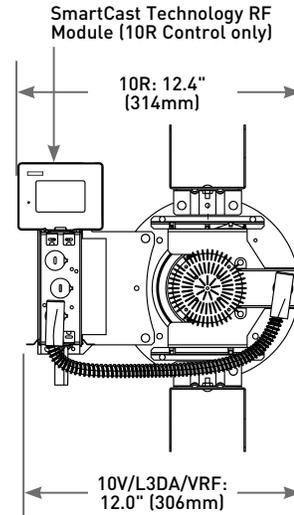
Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Housing:** KR4R-20L-935-12-10V + **Reflector:** KR4T-SSGC-FF

Reflector (Housing must be ordered separately)

Series		Reflector Finish	Flange Finish	Options
KR4T	4" Round Trim	**SSGC**	**FF**	**WW**
KR4TS	4" Square Trim	Soft Satin Glow, Clear	Matches Reflector	Wall Wash
KR6T	6" Round Trim		**WF**	- For use only with 6"round trims
KR6TS	6" Square Trim		White Paint	

Housing (Reflector must be ordered separately)

KR

Series	Size	Lumen Package*	CRI/CCT	Voltage	Controls	Options
KR	**4R** 4" Round	**9L** 1,000 Lumens, 13W - 77 LPW	**927** 90 CRI, 2700K	**12** 120V	**10V** 0-10V Dimming to 5%	- **EB** Emergency Backup
	4S 4" Square	**13L** 1,340 Lumens, 16W - 84 LPW	**930** 90 CRI, 3000K	**27** 277V	**10R** SmartCast® Wireless Technology with 5% Dimming, Integral Motion and Ambient Sensors	- Available only with 12 & 27 voltages
	6R 6" Round	**20L** 1,970 Lumens, 24W - 82 LPW	**935** 90 CRI, 3500K	**34** 347V	- Available only with 9L-30L lumen packages	- Provides 90 minutes and 10W (9L-40L) or 20W (60L) of power
	6S 6" Square	**30L** 2,810 Lumens, 33W - 85 LPW	**940** 90 CRI, 4000K		- Available only with 12 & 27 voltages	- Minimum operating temperature: 0°C (32°F)
		40L 3,760 Lumens, 44W - 85 LPW	**950** 90 CRI, 5000K		**L3DA** Lutron EcoSystem® Dimming to 1%	
		60L 6,490 Lumens, 75W - 87 LPW			- Available only with 13L-40L lumen packages	
		- Available only with 6" downlights			- Available only with 12 & 27 voltages	
					- Minimum operating temperature: 0°C (32°F)	
					VRF Lutron Vive Wireless Integral Fixture Control with Dimming to 5% (RF only)	
					- Available only with 12 & 27 voltages	
					- Minimum operating temperature: 0°C (32°F)	

* Lumen package information based on 35K/40K. Actual lumen output levels vary depending on CCT. Refer to Delivered Lumens & Electrical Data and Reflector Illumination Performance tables for specific lumen values.

KR4R

SmartCast Technology RF Module (10R Control only)

10R: 12.4" (314mm)

10V/L3DA/VRF: 12.0" (306mm)

10R/VRF: 14.4" (367mm)

110V/L3DA: 11.9" (303mm)

7.4" (187mm)

4.25" (108mm)

5.25" (133mm)

Refer to page 7&8 for additional downlight drawings.

SMARTCAST® TECHNOLOGY
EcoSystem Enabled
VIVE by Lutron

CREE ⇕ LIGHTING®

US: creelighting.com   T (800) 236-6800
Canada: creelighting-canada.com   T (800) 473-1234

Product Specifications

SMARTCAST® TECHNOLOGY

SmartCast® Technology is the most intuitive and easiest to install intelligent light solution on the market. SmartCast Technology delivers up to 70% energy savings at up to half the cost of other solutions. Luminaires combine best-in-class light with onboard sensors and intelligence to deliver a better light experience. Extreme energy productivity, code compliance and a better light experience without any extra design, installation or setup work.

CONSTRUCTION & MATERIAL

- 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 up to 3" (76mm) 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
- Beam Angle: ~70º (included angle between points of 50% of maximum intensity)

ELECTRICAL SYSTEM

- **Power Factor :** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- **Input Voltage :** 120, 277V, or 347V, 50/60Hz
- **Operating Temperature Range:** -18˚C - +40˚C (0˚F - +104˚F); minimum operating temperature with L3DA control or EB option is 0°C (32°F)

CONTROLS

- Continuous dimming to 5% with 0-10V DC control protocol
- 10V Source Current: 9L-40L: 0.2mA (max.); 60L: 0.6mA (max.)
- For use with Class 2 dimming systems only
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- Lutron EcoSystem® Dimming to 1%
- SmartCast® Technology Dimming to 5%
- Reference www.creelighting.com/products/indoor/new-constructiondownlights/kr-series for recommended dimming controls and wiring diagrams

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for thru-wiring 8#12AWG-90°C
- Suitable for damp locations
- Designed for indoor use only
- Thermally protected Type NON-IC in accordance with Article 410 of the NEC and UL 1598
- Requires minimum 90˚C supply conductors
- UL924 (EB option). Maximum mounting height: 9L - 21' (6.4m); 13L - 25' (7.6m); 20L - 26' (7.9m); 30L/40L - 28' (8.5m); 60L - 43' (13.1m)
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Pending EnergyStar® certified. Please refer to https:www.energystar.gov/productfinder/product/certified-lightfixtures/ results for most current information
- RoHS compliant. Consult factory for additional details
- Assembled in the USA by Cree Lighting from US and imported parts
- Meets Buy American requirements within ARRA
- ⚠ **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

SmartCast® Technology

INTEGRAL MOTION SENSOR

- Passive infrared (PIR)
- **Coverage area:** 100 sq. ft. (30.5m2) at 10 ft. (3.0m) mounting height
- Not intended to be mounted higher than 12 ft. (3.7m)
- **Operation:**
  - Grouped with a wall control: Luminaire will operate in vacancy mode (manual on/auto-off)
  - Not grouped with a wall control: Luminare will operate in occupancy mode (auto-on/auto-off)
- Luminaires operate at full intensity until OneButton™ Setup is initiated by the Cree Lighting Configuration Tool

AMBIENT LIGHT SENSOR

- Sensor response matches response of human eye
- Not intended to be mounted higher than 12 ft. (3.7m)
- Luminaires operate at full intensity until OneButton™ Setup is initiated by the Cree Lighting Configuration Tool
- Daylight harvesting calibration performed automatically during OneButton™ Setup

INTEGRAL WIRELESS COMMUNICATION

- 2.4GHz wireless mesh technology with AES 128-bit encryption
- Self assigns to quietest channel during OneButton™ Setup
- **Range:**
  - 30 ft. (9.1m) in typical commercial applications
  - 300 ft. (91.4m) open air without obstructions
- **Network:** 250 devices max.
- **Space:** 100 devices max. per group
- FCC and IC Certifications
- **NOTE:** SmartCast luminaires must be installed on unswitched AC power. Constant power is required to maintain all luminaires on the SmartCast network. If wall control or manual dimming is required, a SmartCast wall control dimmer must be used for manual on, off, and dimming.

LUMINAIRE

- Luminaires operate at full intensity until OneButton™ Setup is initiated by the Cree Lighting Configuration Tool
- 10 year power fail memory of settings

DEPLOYMENT

- Please refer to the SmartCast® Deployment Guide at https://cree.widen.net/s/mvxtfd2pcz/smartcastr-wireless-deployment-guide

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Installation - 4"

- Recommended round ceiling cutout: ⌀ 4.75" (120mm)
- Recommended square ceiling cutout: 4.75" x 4.75" (120mm x 120mm)

Note: 30L and 40L 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.

Installation - 6"

- Recommended ceiling cutout: ⌀ 6.5" (165mm)
- Recommended ceiling cutout: 6.5" x 6.5" (165mm x 165mm)

Note: 30L and 40L 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. 60L versions require marked spacing: 48" (1219mm) x 24" (600mm) x 1" (25mm). 48" (1219mm) luminaire to luminaire, 24" (600mm) luminaire to side wall, 1" (25mm) above luminaire.

Electrical Data*

Lumen Package	System Watts 120V, 277V, 347V	Total Current (A)		
		120V	277V	347V
9L	13	0.12	0.06	0.06
9L w/EB	18	0.16	0.07	N/A
13L	16	0.15	0.07	0.07
13L w/EB	21	0.19	0.08	N/A
20L	24	0.23	0.11	0.09
20L w/EB	29	0.26	0.11	N/A
30L	33	0.30	0.13	0.11
30L w/EB	38	0.34	0.15	N/A
40L	44	0.39	0.17	0.14
40L w/EB	48	0.43	0.19	N/A
60L	75	0.67	0.30	0.25
60L w/EB	82	0.74	0.33	N/A

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating at 120V, 277V, or 347V +/- 10%.

Initial Delivered Lumens

Lumen Package	2700K/3000K		3500K/4000K		5000K	
	Initial Delivered Lumens*	Efficacy (LPW)	Initial Delivered Lumens*	Efficacy (LPW)	Initial Delivered Lumens*	Efficacy (LPW)
9L	850	65	1,000	77	1,040	80
13L	1,140	71	1,340	84	1,390	87
20L	1,680	70	1,970	82	2,050	85
30L	2,390	72	2,810	85	2,930	89
40L	3,200	73	3,760	85	3,910	89
60L	5,520	74	6,490	87	6,750	90

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens.

Delivered Emergency Lumens

Lumen Package	2700K/3000K	3500K/4000K	5000K
9L	650	770	800
13L	710	840	870
20L	700	820	850
30L	720	850	890
40L	730	850	890
60L	1,470	1,730	1,800

KR Gen II Series Ambient Adjusted Lumen Maintenance[1]

	Initial LMF	25K hr Reported[2] LMF	50K hr Reported[2] LMF	75K hr Estimated[3] LMF	100K hr Estimated[3] LMF
0°C (32°F)	1.04	0.99	0.97	0.94	0.92
5°C (41°F)	1.03	0.99	0.96	0.93	0.91
10°C (50°F)	1.02	0.98	0.95	0.93	0.90
15°C (59°F)	1.02	0.97	0.95	0.92	0.90
20°C (68°F)	1.01	0.96	0.94	0.91	0.89
25°C (77°F)	1.00	0.96	0.93	0.91	0.88
30°C (86°F)	0.99	0.95	0.92	0.90	0.88
35°C (95°F)	0.99	0.94	0.92	0.89	0.87
40°C (104°F)	0.98	0.94	0.91	0.89	0.86

[1] Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors.
[2] In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.
[3] Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

Photometry

KR4R-40L-927-12-10V W/KR4T-SSGC-FF BASED ON RESTL TEST #: PL16884-001B
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%.
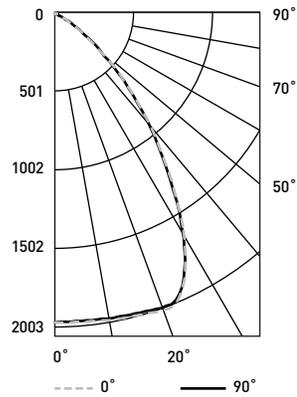
RESTL Test Report #: PL16884-001B
KR4R-40L-927-12-10V w/KR4T-SSGC-FF
Initial Delivered Lumens: 3,224
Efficacy: 73 LPW
S/M: 1.2

Coefficients Of Utilization – Zonal Cavity Method

RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	112	109	106	104
2	105	100	95	91
3	99	91	85	80
4	92	83	77	72
5	86	76	69	64
6	81	70	63	58
7	76	65	58	53
8	71	60	53	48
9	67	56	49	44
10	63	52	45	41

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m²)

		Horizontal Angle		
		0°	45°	90°
Vertical Angle	45°	115,443	115,835	117,842
	55°	51,419	51,759	50,739
	65°	15,576	15,690	14,996
	75°	6,038	6,212	5,899
	85°	2,554	2,805	2,399

Cone of Light

Distance from Workplane	Footcandles	Beam Diameter
6' (1.8m)	60	3.5
8' (2.4m)	33	9.2
10' (3.0m)	21	11.6
12' (3.7m)	14	14.2
14' (4.3m)	10	16.8

Zonal Lumen Summary

Zone	Lumens	% Lamp	Luminaire
0-30	1,612	N/A	50.0%
0-40	2,415	N/A	74.9%
0-60	3,149	N/A	97.7%
0-90	3,224	N/A	100.0%
0-180	3,224	N/A	100.0%

For exact photometric data, please reference our available IES and LM-79 test results at http://creelighting.com/products/indoor/new-construction-downlights/kr-series

Photometry

KR6R-40L-927-12-10V W/KR6T-SSGC-FF BASED ON RESTL TEST #: PL16884-002B
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%.
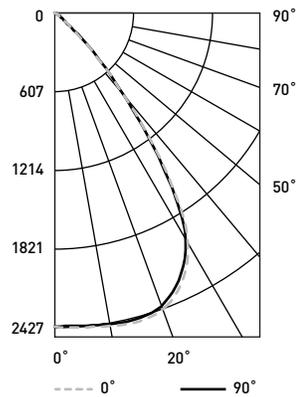
RESTL Test Report #: PL16884-002B
KR6R-40L-927-12-10V w/KR6T-SSGC-FF
Initial Delivered Lumens: 3,294
Efficacy: 75 LPW
S/M: 1.2

Coefficients Of Utilization – Zonal Cavity Method

RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	113	110	107	105
2	107	101	97	93
3	101	94	88	84
4	95	86	80	76
5	89	80	74	69
6	84	74	68	63
7	79	69	63	58
8	75	65	58	54
9	71	60	54	50
10	67	57	50	46

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m²)

		Horizontal Angle		
		0°	45°	90°
Vertical Angle	45°	31,167	31,229	32,618
	55°	7,262	7,488	7,916
	65°	3,026	3,142	3,402
	75°	1,300	1,360	1,465
	85°	601	626	654

Cone of Light

Distance from Workplane	Footcandles	Beam Diameter
6' (1.8m)	71	7.4
8' (2.4m)	39	9.4
10' (3.0m)	25	11.8
12' (3.7m)	17	14.2
14' (4.3m)	12	16.9

Zonal Lumen Summary

Zone	Lumens	% Lamp	Luminaire
0-30	1,942	N/A	59.0%
0-40	2,850	N/A	86.5%
0-60	3,259	N/A	99.0%
0-90	3,294	N/A	100.0%
0-180	3,294	N/A	100.0%

For exact photometric data, please reference our available IES and LM-79 test results at http://creelighting.com/products/indoor/new-construction-downlights/kr-series

Photometry

KR6S-40L-927-12-10V W/KR6TS-SSGC-FF BASED ON RESTL TEST #: PL16890-001B

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%.
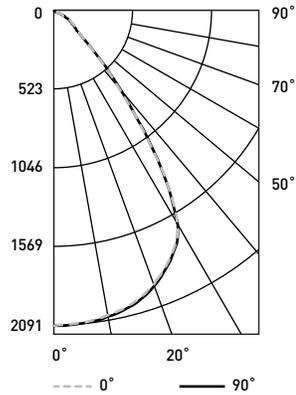
RESTL Test Report #: PL16890-001B
KR6S-40L-927-12-10V w/KR6TS-SSGC-FF
Initial Delivered Lumens: 3,091
Efficacy: 70 LPW
S/M: 1.2

Coefficients Of Utilization – Zonal Cavity Method

RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	112	109	106	104
2	106	100	95	91
3	99	92	86	81
4	93	84	78	73
5	87	78	71	66
6	82	72	65	60
7	77	66	59	55
8	73	62	55	50
9	68	57	51	46
10	65	54	47	43

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m²)

		Horizontal Angle		
		0°	45°	90°
Vertical Angle	45°	22,640	44,329	23,522
	55°	12,562	8,710	11,699
	65°	8,225	4,566	7,355
	75°	2,857	2,636	2,624
	85°	1,031	2,990	958

Cone of Light

Distance from Workplane	Footcandles	Beam Diameter
6' (1.8m)	67	3.5
8' (2.4m)	37	8.8
10' (3.0m)	23	11.3
12' (3.7m)	16	13.5
14' (4.3m)	12	15.7

Zonal Lumen Summary

Zone	Lumens	% Lamp	Luminaire
0-30	1,615	N/A	52.2%
0-40	2,456	N/A	79.4%
0-60	3,005	N/A	97.2%
0-90	3,091	N/A	100.0%
0-180	3,091	N/A	100.0%

For exact photometric data, please reference our available IES and LM-79 test results at http://creelighting.com/products/indoor/new-construction-downlights/kr-series

Application Reference

Based on 3500K/4000K CCT. Applies to 4"/6" round/square downlights.

Open Space

Spacing	Lumen Package	Initial Delivered Lumens	Wattage	LPW	w/ft²	Average fc
4 x 4	9L	1,000	13	77	0.78	62
	13L	1,340	16	84	0.96	83
	20L	1,970	24	82	1.44	123
	30L	2,810	33	85	1.98	175
	40L	3,760	44	85	2.64	234
	60L	6,490	75	87	4.50	404
6 x 6	9L	1,000	13	77	0.36	29
	13L	1,340	16	84	0.45	39
	20L	1,970	24	82	0.67	57
	30L	2,810	33	85	0.92	82
	40L	3,760	44	85	1.23	109
	60L	6,490	75	87	2.10	189
8 x 8	9L	1,000	13	77	0.20	16
	13L	1,340	16	84	0.24	21
	20L	1,970	24	82	0.36	31
	30L	2,810	33	85	0.50	44
	40L	3,760	44	85	0.66	59
	60L	6,490	75	87	1.13	101
10 x 10	9L	1,000	13	77	0.13	10
	13L	1,340	16	84	0.16	14
	20L	1,970	24	82	0.24	20
	30L	2,810	33	85	0.33	29
	40L	3,760	44	85	0.44	39
	60L	6,490	75	87	0.75	67

10' ceiling: 80/50/20 reflectances; 2.5' workplane, open room. LLF: 1.0 Initial
Open Space: 50' x 40' x 10

Corridor Space

Spacing	Lumen Package	Initial Delivered Lumens	Wattage	LPW	w/ft²	Average fc
4' OC	9L	1,000	13	77	0.54	28
	13L	1,340	16	84	0.67	37
	20L	1,970	24	82	1.00	55
	30L	2,810	33	85	1.38	78
	40L	3,760	44	85	1.83	105
	60L	6,490	75	87	3.13	181
6' OC	9L	1,000	13	77	0.37	19
	13L	1,340	16	84	0.45	25
	20L	1,970	24	82	0.68	37
	30L	2,810	33	85	0.94	53
	40L	3,760	44	85	1.25	71
	60L	6,490	75	87	2.13	122
8' OC	9L	1,000	13	77	0.26	13
	13L	1,340	16	84	0.32	18
	20L	1,970	24	82	0.48	26
	30L	2,810	33	85	0.66	38
	40L	3,760	44	85	0.88	51
	60L	6,490	75	87	1.50	87
10' OC	9L	1,000	13	77	0.22	11
	13L	1,340	16	84	0.27	15
	20L	1,970	24	82	0.40	22
	30L	2,810	33	85	0.55	32
	40L	3,760	44	85	0.73	42
	60L	6,490	75	87	1.25	73

10' ceiling: 80/50/20 reflectances; 2.5' workplane, open room. LLF: 1.0 Initial
Corridor Space: 6' x 100' x 10

Photometry

KR6R-40L-927-12-10V W/KR6T-SSGC-FF-WW BASED ON RESTL TEST #: PL16891-001B
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%.
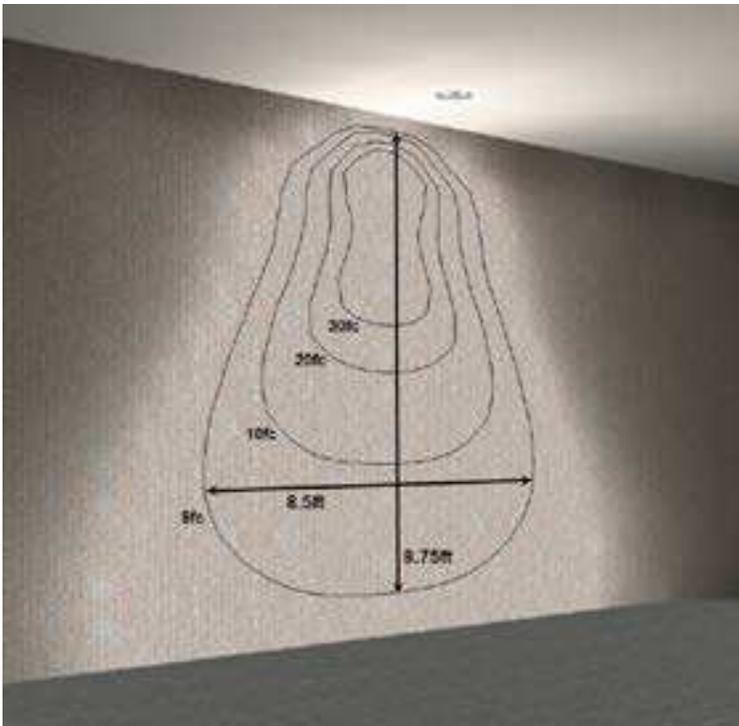

RESTL Test Report #: PL16891-001B
KR6R-40L-927-12-10V w/KR6T-SSGC-FF-WW
Initial Delivered Lumens: 3,370
Efficacy: 77 LPW
S/M: 1.2
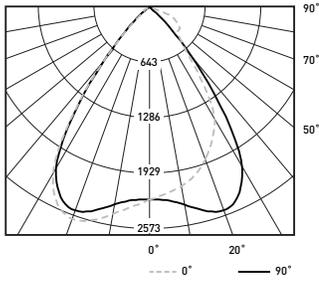
Coefficients Of Utilization – Zonal Cavity Method

RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	113	109	106	104
2	106	100	95	91
3	99	92	86	81
4	93	85	78	73
5	88	78	71	66
6	82	72	65	60
7	78	67	60	55
8	73	62	56	51
9	69	58	52	47
10	65	55	48	44

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m²)

		Horizontal Angle		
		0°	45°	90°
Vertical Angle	45°	38,922	34,675	28,528
	55°	41,045	28,828	5,175
	65°	41,496	27,761	2,825
	75°	5,742	3,695	1,367
	85°	1,477	1,004	640

Zonal Lumen Summary

Zone	Lumens	% Lamp	Luminaire
0-30	1,883	N/A	55.9%
0-40	2,757	N/A	81.8%
0-60	3,239	N/A	96.1%
0-90	3,370	N/A	100.0%
0-180	3,370	N/A	100.0%

For exact photometric data, please reference our available IES and LM-79 test results at http://creelighting.com/products/indoor/new-construction-downlights/kr-series
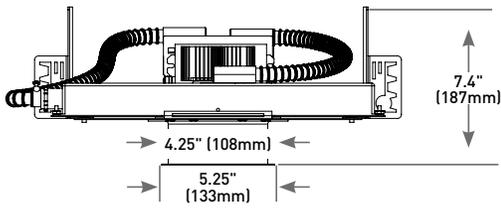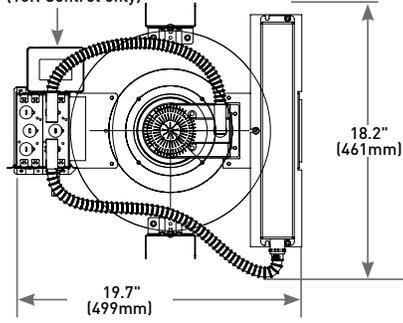
Application Reference

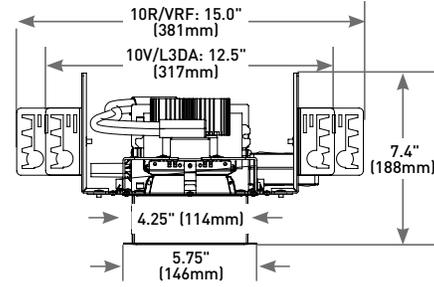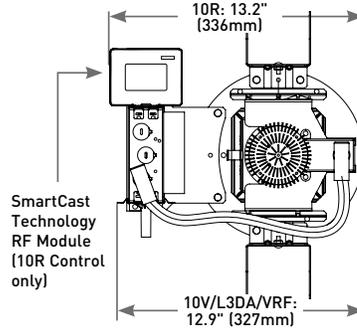Based on KR6R-30L-927-12-10V w/KR6T-SSGC-FF-WW Luminaire : 2,390 lumens, 10' ceiling height, 2' set back.

KR4R w/EB

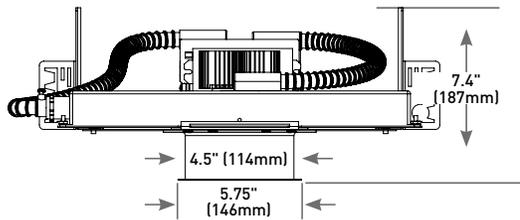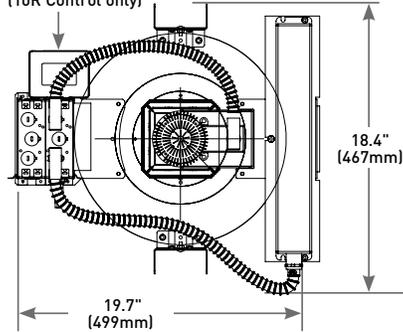SmartCast Technology RF Module
(10R Control only)

18.2"
(461mm)

19.7"
(499mm)

7.4"
(187mm)

4.25" (108mm)

5.25"
(133mm)

KR4S

10R: 13.2"
(336mm)

SmartCast
Technology
RF Module
(10R Control
only)

10V/L3DA/VRF:
12.9" (327mm)

10R/VRF: 15.0"
(381mm)

10V/L3DA: 12.5"
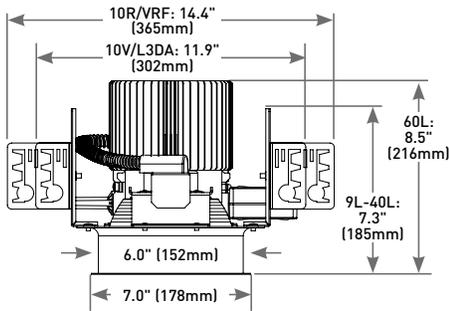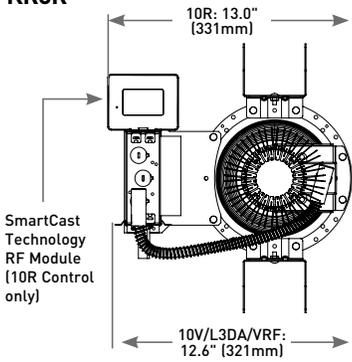(317mm)

7.4"
(188mm)

4.25" (114mm)

5.75"
(146mm)

KR4S w/EB

SmartCast Technology RF Module
(10R Control only)

18.4"
(467mm)

19.7"
(499mm)

7.4"
(187mm)

4.5" (114mm)

5.75"
(146mm)

KR6R

10R: 13.0"
(331mm)

SmartCast
Technology
RF Module
(10R Control
only)

10V/L3DA/VRF:
12.6" (321mm)

10R/VRF: 14.4"
(365mm)

10V/L3DA: 11.9"
(302mm)

60L:
8.5"
(216mm)

9L-40L:
7.3"
(185mm)

6.0" (152mm)

7.0" (178mm)

KR6R w/EB

SmartCast
Technology
RF Module
(10R Control
only)

19.7"
(499mm)

60L: 19.5"
(495mm)

9L-40L:
17.0" (432mm)

60L:
8.6"
(218mm)

9L-40L:
7.4"
(187mm)

6.0" (152mm)

7.0" (178mm)

KR6S

10R: 14.8"
(375mm)

SmartCast
Technology
RF Module
(10R Control
only)

10V/L3DA/VRF:
14.4" (365mm)

10R/VRF: 16.6"
(422mm)

10V/L3DA: 14.1"
(359mm)

60L: 8.7"
(220mm)

9L-40L:
7.4"
(188mm)

6.0" (152mm)

7.3"
(185mm)

KR6S w/EB

SmartCast
Technology
RF Module
(10R Control
only)
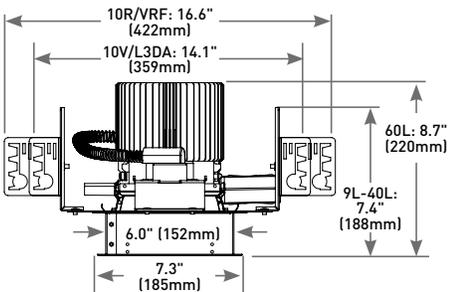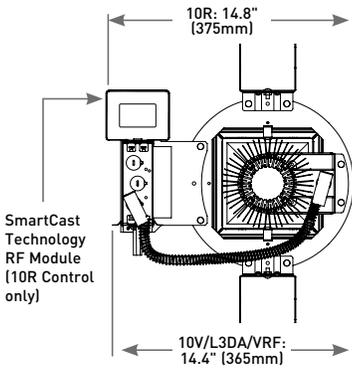
19.7"
(499mm)

60L: 19.5"
(496mm)

9L-40L:
17.0" (433mm)

60L:
8.6"
(219mm)

9L-40L:
7.4"
(188mm)

6.0" (152mm)

7.3" (185mm)

US: creelighting.com (800) 236-6800

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

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