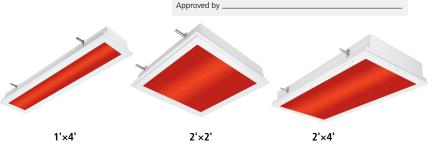
SIMPLESEAL™ NARROW SPECTRUM **CSEDI SERIES – RED & WHITE LED – INSET DOOR**

PRODUCT FEATURES:

- » Narrow-spectrum 630nm red LED circuit provides only high-purity light for spectrally-sensitive applications
- » High-output, high-CRI white LED circuit provides visual acuity and accurate color rendition
- » Diffused high-efficiency lens for reduced glare
- » One-piece inset doorframe, secured to housing with aircraft cables
- » Suitable for universal installation into 1.0" and 1.5" grid or flange (drywall) ceilings



Job Name

Fixture Type

Catalog Number.

PROJECT INFORMATION

SPECIFICATIONS

HOUSING: Standard 24-gauge (optional 20-gauge) cold rolled steel, hole-free, one-piece, seam-welded construction. 18-gauge housing flange with mitered and welded corners. White TGIC polyester powder coat finish - 5-step pre-treatment. Salt spray test: 1,000 hours; Reflectance: 92%.

DOORFRAME: 18-gauge CRS. One-piece inset-style construction with welded corners. Gloss white TGIC polyester powder coat finish with 5-stage pre-treatment. Doorframe secured to housing with stainless steel aircraft cables and captive, flush-mounted Phillips-head fasteners. Closed-cell silicone gasket seals doorframe to housing.

OPTICS: Symmetric optic includes diffused, impact-resistant acrylic lens.

ELECTRICAL: Replaceable white mid-power LED array. Available 3500K, 4000K and 5000K color temperatures with maximum 3-step MacAdam variation allowance. Minimum 82 CRI, R9>0. 630nm red mid-power LED array (16nm FWHM bandwidth). 120/277VAC or 347VAC, 50/60Hz electrical input with replaceable high power factor electronic, constant-current driver (<10% THD, >0.90 PF). Minimum 85% driver efficiency. Standard 0-10V dimming with 1-100% range with dim-to-dark capabilities on white and red circuit (non dim-to-dark with 347V; 495 µA maximum source current per circuit). Optional 0-10V dimming with 0.1-100% range and dim-to-dark capabilities via eldoLED SOLOdrive series driver (n/a 347V input; ≤0.5V required from dimming control for dim-to-dark operation; 600µA max. source current). White circuit and red circuit can be independently powered and dimmed.

INSTALLATION: Non-IC recessed ceiling mounting into grid and flange application types. Flange installation utilizes included adjustable swing-out mounting brackets. Grid installation suitable for 1" and 1.5" T-bar ceilings. Universal installation into grid or flange (drywall) ceiling applications. See Options for continuous row mounting and install frames.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard. For additional photometric data, please go to www.kenall.com

WARRANTY: Limited five (5) year warranty.

LISTINGS: Luminaire is certified to UL standards by Intertek Testing Laboratories for Wet Location, Certified IP65 per IEC 60598, NSF2 Splash/Non-Food Zone, CCEA Approved, Meets K230 Leakage Standard for luminaire leakage in pressurized environments and FED-STD-209E/Class 1 (ISO 3) Cleanrooms. Suitable for BSL 1-2 laboratories. Suitable for EU GMP Grade A cleanrooms.















ORDERING INFORMATION (Fx: CSFDL-24-23RD/67L-40K8-DIM1-DV-2F-2H-SVM)

Model CSEDI	Size La	mp Power	Lamp Color	Driver	Voltage	Doorframe	Housing	Optics SYM	Options
Size 14 1'×4' 22 2'×2' 24 2'×4'				DIM1	5	o 1% o 0.1% (n/a with 347V)	4H 2 2H 2 5H 2	y Options 4-Ga CRS (STD) 0-Ga CRS 0-Ga Type 304 SS 0-50" Painted Alumin	
Lamp Power 1'×4' 23R/45L 23R/67L	23 Watt Re	d/45 Watt White I		Volta DV 120 277 347	ge 120-277VAC, 50/60 120VAC 277VAC 347VAC)Hz	Optics SYM	Symmetric, Diffused	
23R 2'×2' 23RD/45LD 23RD/67L 23RD 2'×4'		d/45 Watt White I d/67 Watt White I		Door 2F 5F AF PAF	frame Options 18-Ga CRS (STD) 20-Ga Type 304 SS I Anodized Aluminum Painted Fabricated A		20KV 2 AMF♥ A FS F HJ S RF• F	3.4W Emergency Bat	ection per IEEE/ANSI C62.41.2 Cat. A
23RD/67L 23RD/90L 23RD/135L 46R	23 Watt Re	d/67 Watt White I d/90 Watt White I d/135 Watt White d LED	.ED				Accesso IF*†	ories nstall Frame	
40K8 40	00K, 82 CRI 00K, 82 CRI 00K, 82 CRI						† Only a Consul • Voltage and 2' • Voltage LED wi with Li	t factory for ceiling I e specific selection ro ×2' sizes e specific selection ro nen red white lampin	ed in drywall ceilings (flange mount), ayout assistance equired. n/a with 23R/67L lamp on 1'×4 equired; n/a with 347V. Wired to white 19 is selected. Height of fixture is 5.875' min. operating environment.



Applied only to exposed painted surfaces of luminaire (not available on stainless steel doorframes)

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CSEDI SERIES – TECHNICAL DATA

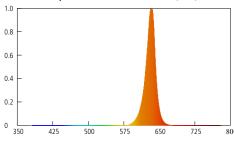
PERFORMANCE

Red/White LED		Red Circuit			White Circuit			
Size	Lamp Code	Delivered Lumens @ 25°C (lm)	Efficacy (lm/W)	Input Power (W)	Delivered Lumens @ 25°C (lm)	Efficacy (lm/W)	Input Power (W)	White/Red Estd. L ₇₀ LED Life (hrs)
1' × 4'	23R/45L-35K8	1,019	46	22	5,403	110	49	36,000 / 80,000
	23R/45L-40K8	1,019	46	22	5,587	114	49	36,000 / 80,000
	23R/45L-50K8	1,019	46	22	5,810	119	49	36,000 / 80,000
	23R/67L-35K8	1,019	46	22	8,277	115	72	36,000 / 80,000
	23R/67L-40K8	1,019	46	22	8,559	119	72	36,000 / 80,000
	23R/67L-50K8	1,019	46	22	8,901	124	72	36,000 / 80,000
	23RD/45LD-35K8	993	45	22	5,226	107	49	36,000 / 80,000
2' × 2'	23RD/45LD-40K8	993	45	22	5,404	110	49	36,000 / 80,000
	23RD/45LD-50K8	993	45	22	5,620	115	49	36,000 / 80,000
	23RD/67L-35K8	993	45	22	8,005	111	72	36,000 / 80,000
	23RD/67L-40K8	993	45	22	8,278	115	72	36,000 / 80,000
	23RD/67L-50K8	993	45	22	8,609	120	72	36,000 / 80,000
	23RD/67L-35K8	1,108	50	22	8,677	121	72	36,000 / 80,000
2' × 4'	23RD/67L-40K8	1,108	50	22	8,828	123	72	36,000 / 80,000
	23RD/67L-50K8	1,108	50	22	9,181	128	72	36,000 / 80,000
	23RD/90L-35K8	1,108	50	22	10,970	112	98	36,000 / 60,000
	23RD/90L-40K8	1,108	50	22	11,344	116	98	36,000 / 60,000
	23RD/90L-50K8	1,108	50	22	11,798	120	98	36,000 / 60,000
	23RD/135L-35K8	1,108	50	22	15,550	106	147	36,000 / 60,000
	23RD/135L-40K8	1,108	50	22	16,081	109	147	36,000 / 60,000
	23RD/135L-50K8	1,108	50	22	16,724	114	147	36,000 / 60,000

Red LED		Initial Deliv	ered Lumens		
Size	Lamp Type	Red Lamp @ 25°C (lm)	Efficacy - Red (lm/W)	Input Power Red (W)	Estd. L ₇₀ LED Life (hrs)
1' × 4'	23R	1,019	46	22	36,000
2' × 2'	23RD	993	45	22	36,000
2' × 4'	46R	2,215	50	44	36,000

Subject to change without notice. Visit www.kenall.com for .ies files and additional information

Red Circuit Spectral Power Distribution (SPD)



Purity: 1.0 UV: 0.0000% (<390nm) Radiant Flux < 575nm: 0.000% Bandwidth: 16nm Peak Wavelength: 630nm

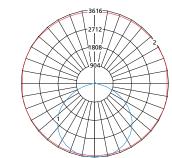


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CSEDI SERIES – TECHNICAL DATA

PERFORMANCE

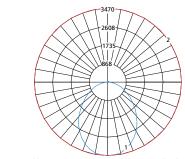
Model: CSEDI14-23R/67L-40K8-DIM1-120-2F-2H-SYM (White Mode)



Maximum Candela = 3616 Located At Horizontal Angle = 15, Vertical Angle = 5

 1 - Vertical Plane Through Horizontal Angles (15-195) (Through Max. Cd.) 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

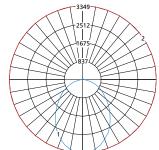
Model: CSEDI24-23RD/67L-40K8-DIM1-120-2F-2H-SYM (White Mode)



 $\label{eq:maximum Candela} \mbox{Maximum Candela} = 3470 \mbox{ Located At Horizontal Angle} = 0, \mbox{Vertical Angle} = 0$

— 1 - Vertical Plane Through Horizontal Angles (0-180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

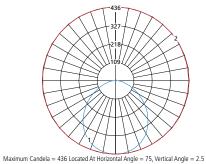
Model: CSEDI22-23RD/67L-40K8-DIM1-120-2F-2H-SYM (White Mode)



Maximum Candela = 3349 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (0-180) (Through Max. Cd.)
 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

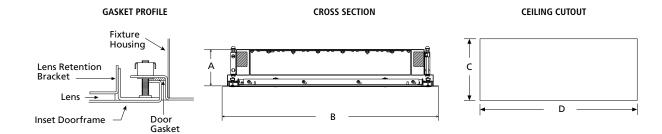
Model: CSEDI24-23RD/67L-40K8-DIM1-120-2F-2H-SYM (Red Mode)*



1 - Vertical Plane Through Horizontal Angles (75-255) (Through Max. Cd.)
 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

*Luminous intensity of "red" mode is equal across all product sizes

DIMENSIONAL DATA



DIMENSIONAL DATA (IN INCHES)						
	Α	В	C	D		
1×4	4.20	11.75×47.75	10.85	46.85		
2×2	4.20	23.75 × 23.75	22.85	22.85		
2×4	4.20	23.75 × 47.75	22.85	46.85		

* Add .375" to ceiling cut out dimensions when IF Option is specified

** Height is 5.875" with LEL option