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

PRODUCT FEATURES:

SPECIFICATIONS

- » 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

Approved by

Catalog Number.

PROJECT INFORMATION

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. CSEDI is participating in Declare. Build America, Buy America Act compliant.















ORDERING INFORMATION (Ex: CSEDI-24-23RD/67L-40K8-DIM1-DV-2F-2H-SYM)

Model CSEDI	Size	Lamp Power	Lamp Color / CRI	Driver	Voltage	Doorframe	Housi	5	ptics YM	Options
Size 14 1'×4' 22 2'×2' 24 2'×4'				DIM1	3	o 1% o 0.1% (n/a with 347V)	4H 2H 5H	ing Options 24-Ga CRS (20-Ga CRS 20-Ga Type : .050" Painte	(STD) 304 SS	
Lamp Power 1'×4' 23R/45L 23R/67L 23R	23 Wa	tt Red/45 Watt White I tt Red/67 Watt White I tt Red LED		DV 120 277 347	120-277VAC, 50/6 120VAC 277VAC 347VAC	0Hz	Optics SYM Optio	s Symmetric	c, Diffused	DR Acrylic
2'×2' 23RD/45LD 23RD/67L 23RD	23 Wa	tt Red/45 Watt White I tt Red/67 Watt White I tt Red LED		Door 2F 5F AF PAF	frame Options 18-Ga CRS (STD) 20-Ga Type 304 SS Anodized Aluminum Painted Fabricated A		20KV	10W Emerg 20KV/KA Su Antimicrobi Fuse & Hold Sealed Wire Radio Fregu	urge Prote ial Finish der eway	ction per IEEE/ANSI C62.41.2 Cat. A
2'×4' 23RD/67L 23RD/90L 23RD/135L 46R	23 Wa 23 Wa	tt Red/67 Watt White I tt Red/90 Watt White I tt Red/135 Watt White tt Red LED	ED				RM† Acces	Continuous ssories Install Fram	Row Mou	
Lamp Color / 55K8 3500K / 35K8 3500K / 40K8 4000K / 40K8 4000K / 50K8 5000K / 50K8 5000K /	82 CRI 90 CRI 82 CRI 90 CRI 82 CRI						† Only Cons • Volta and • n/a v when ‡ Not	sult factory for age specific so 2'×2' sizes with 347V inport on red/white la applicable for	nen installe or ceiling la election re put. 0°C/3 amping is r all-red co	ed in drywall ceilings (flange mount), ayout assistance quired. n/a with 23R/67L lamp on 1'×4' 2°F min. ambient. Wired to white LED selected.



(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)
	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
4. 4.	23R/45L-50K8	1,019	46	22	5,810	119	49	36,000 / 80,000
1' × 4'	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
	23RD/45LD-40K8	993	45	22	5,404	110	49	36,000 / 80,000
2' × 2'	23RD/45LD-50K8	993	45	22	5,620	115	49	36,000 / 80,000
2 × 2	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
	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
2' × 4'	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

90 CRI MULTIPLIER

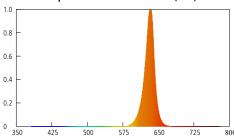
Lamp Color / CCT	Lumen Multiplier
30K9	0.83
35K9	0.87
40K9	0.89
50K9	0.89

Red LED

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

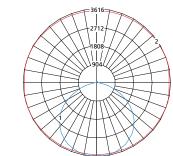


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CSEDI SERIES – TECHNICAL DATA

PERFORMANCE

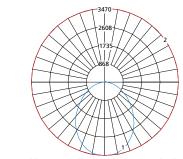
Model: CSEDI14-23R/67L-40K8-DIM1-120-2F-2H-SYM (White Mode)



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.)

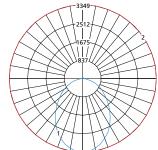
Model: CSEDI24-23RD/67L-40K8-DIM1-120-2F-2H-SYM (White Mode)



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

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

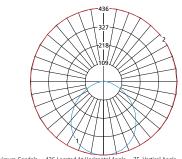
Model: CSEDI22-23RD/67L-40K8-DIM1-120-2F-2H-SYM (White Mode)



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)*

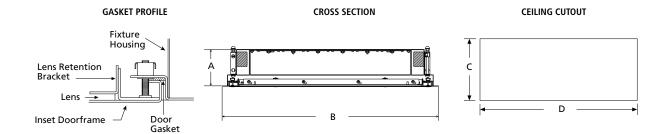


Maximum Candela = 436 Located At Horizontal Angle = 75, Vertical Angle = 2.5

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 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						

