PROJECT | FIXTURE TYPE

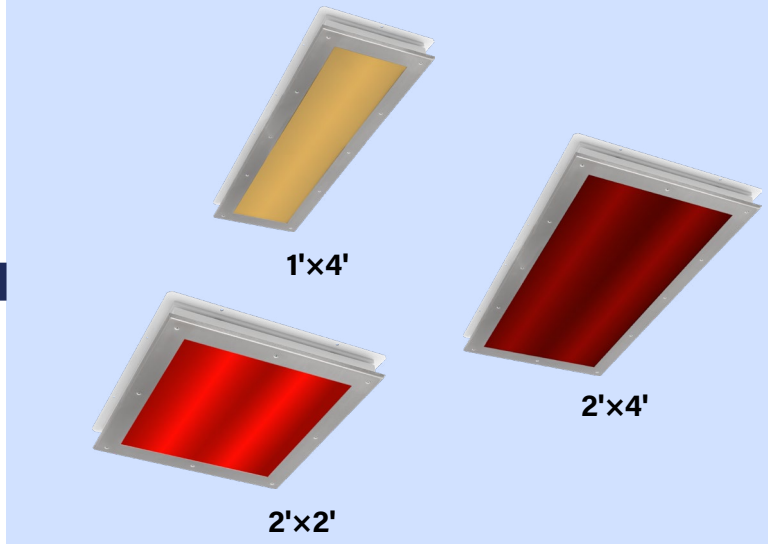
CATALOG #

SIMPLESEAL® CSSETO

RECESSED WALKABLE TROFFER

Narrow Spectrum Luminaires for Cleanroom Applications

IP66 NSF2 ISO3-9 BABA



PRODUCT FEATURES

- Flush walkable top surface rated for 900lb load; 1'x4', 2'x2' and 2'x4' Sizes
- Side or top conduit entry available
- Designed for 2, 3 or 4" thick modular ceilings
- Native 590 nm Amber, 630 nm Red and 660 nm Deep red lamping options for spectrally sensitive applications such as photo-sensitive manufacturing
- Enhanced lens luminance and 90CRI standard for better visual performance
- Serviceable from above or below

SPECIFICATIONS

HOUSING: Internal housing and room-side ceiling flange constructed of seam-welded, die-formed 18-gauge CRS. Walkable side ceiling flange constructed of die-formed and seam-welded 16-gauge CRS, secured to housing during installation with provided hardware dependent on ceiling thickness. See Ordering Information for ceiling thickness selection - for use with 2"-4" ceiling systems.

TOP ACCESS DOOR: 16-gauge door with welded stiffening rails and die-formed perimeter. One-piece, closed cell extruded Nitrile gasketing seals doorframe to housing. Secured to housing with stainless steel counter-sunk flush-head screws. Single, hinged D-ring flush with walkable surface provides lifting point. Closed cell silicone gasket seals door to housing. Provides access to service all internal electrical components.

ROOM-SIDE DOOR: Standard one-piece, 18-gauge Type 304 stainless steel with 4B brushed finish. Other materials available. Die-formed with welded corners and a 60° progressive perimeter bend construction. Secured by countersunk flush-head stainless steel screws. Self-retracting safety cable supports doorframe during room-side servicing.

LENS: High impact diffuse acrylic lens, nominal .125" thick. Sealed to perimeter ledge of door aperture using RTV silicone and secured with continuous brackets.

FINISH: All painted metal surfaces finished after fabrication in gloss white TGIC polyester powder coat with 5-step pre-treatment. Salt spray test: 1,000 hours; Reflectance: 92%.

LED MODULE: Serviceable back-lit LED array. Native 590 nm Amber, 630 nm Red and 660 nm Deep Red (non phosphor-converted) LED options. Narrow bandwidth native sources provide optimal control over spectral emissions. Available as single native color or separately circuited native color and white lamping. Standard 90CRI min. (R9>50). See Ordering Information for available color temperature options. Serviceable from above or below ceiling structure.

DRIVER: 120-277VAC or 347VAC, 50/60Hz electrical input with serviceable constant-current drivers (<20% THD, >0.90 PF). Minimum 85% driver efficiency. Standard 0-10V dimming with 1-100% range and dim-to-dark capabilities. 0.4mA maximum driver source current. Wired for independent power and control when ordered with native color and white lamping. Serviceable from above or below ceiling structure.

INSTALLATION: Recessed installation into 2", 3" or 4" thick modular structural ceiling panels. One 7/8" KO on each side of housing for conduit runs internal to ceiling system. One 7/8" KO on top of luminaire for vertical conduit entry into luminaire, or horizontal surface run conduit entry via TCE option which provides a surface junction box and sealed feed into luminaire. Tested to 900lbs of uniform loading without damage or deflection of the luminaire structure. Suitable for -30°C to 40°C ambient environments, unless otherwise noted.

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 LED warranty.

LISTINGS: Luminaire is certified to UL standards by Intertek Testing Laboratories for recessed ceiling insulation contact (IC-rated) and Indoor Wet Location installations. IP66 rating per IEC60598. NSF2 Splash/Non-Food Zone rated. For use in spaces that are ISO 14644-1 rated ISO3-9. Build America, Buy America Act. Compliant

ORDERING INFORMATION (EX: CSSETO-24-54DR/80L-40K9-DIM1-DV-5F-2H-SYM-3IN-LEL)

Model	Size	Lamp Power	Lamp Color	Driver	Voltage	Room-side Doorframe	Housing	Optics	Ceiling Options	Options
CSSETO				DIM1			2H	SYM		

Size
- **14** 1'×4' Nominal
- **22** 2'×2' Nominal
- **24** 2'×4' Nominal

Lamp Power

1'×4'
- **22NA/44L** 22W Native Amber / 44W White
- **22R/44L** 22W Native Red / 44W White
- **22NA** 22W 590 nm Native Amber
- **22R** 22W 630 nm Native Red
- **54DR** 54W 660 nm Native Deep Red

2'×2'
- **22NA/44L** 22W Native Amber / 44W White
- **22R/44L** 22W Native Red / 44W White
- **22NA** 22W 590 nm Native Amber
- **22R** 22W 630 nm Native Red
- **54DR** 54W 660 nm Native Deep Red

2'×4'
- **22NA/63L** 22W Native Amber / 63W White
- **22NA/80L** 22W Native Amber / 80W White
- **22R/63L** 22W Native Red / 63W White
- **22R/80L** 22W Native Red / 80W White
- **54DR/63L** 54W Deep Red / 63W White
- **54DR/80L** 54W Deep Red / 80W White
- **44NA** 44W 590 nm Native Amber
- **88NA** 88W 590 nm Native Amber
- **44R** 44W 630 nm Native Red
- **88R** 88W 630 nm Native Red
- **108DR** 108W 660 nm Native Deep Red

Lamp Color▲
- **30K9** 3000K / 90CRI min.
- **35K9** 3500K / 90CRI min.
- **40K9** 4000K / 90CRI min.
- **50K9** 5000K / 90CRI min.

Driver Type
- **DIM1** 0-10V Dimming to 1%

Voltage
- **DV** 120-277VAC, 50/60Hz
- **347** 347VAC, 60Hz

Room-side Doorframe
- **5F** 18-Ga Type 304 SS with 4B Brushed Finish (STD)
- **2F** 18-Ga CRS in Gloss White
- **XF** 18-Ga Type 316 SS with 4B Brushed Finish
- **PAF** .063" Fabricated Aluminum in Gloss White

Housing Options
- **2H** 18-Ga CRS in Gloss White

Optics
- **SYM** Diffuse DR Acrylic .125" thick

Ceiling Options
- **2IN** 2-2.5" thick (50-64mm)
- **3IN** 3-3.5" thick (75-89mm)
- **4IN** 4-4.5" thick (101-114mm)

Options
- **LEL†** Integral 10W Emergency Battery Pack
- **FS** Fuse & Holder
- **FN*** Food Zone/Non-Contact
- **TCE** Top Conduit Entry

† n/a 347V input; 0°C min. ambient; wired to colored LED source when color/white lamping is selected

* Lensing consists of FDA approved Food Zone clear polycarbonate outer lens and diffused acrylic inner lens.

▲ n/a with exclusive native color configurations

CSSETO-NS-012026

| KENALL.COM | P: 800.4.KENALL | F: 262.891.9700 | 10200 55TH ST. KENOSHA, WI 53144, US |

This product is able to comply with the latest domestic preference legislation, such as the Buy America Act (BAA), Trade Agreement Act (TAA), Build America, Buy America Act (BABA), and others. It may be covered by patents found at www.kenall.com/patents. Content of specification sheets is subject to change; please consult www.kenall.com for current product details ©2025 Kenall Mfg. Co.

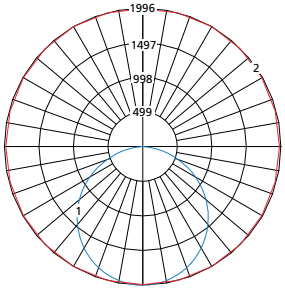
A brand of legrand®

PERFORMANCE

SIZE	LAMP CODE	LAMP DESCRIPTION	Initial Delivered Lumens, By Lamp Color (lm)					EFFICACY (LM/W)	INPUT POWER, COLOR (W)	INPUT POWER, WHITE (W)	TM-21 REPORTED L70 (HRS)
			COLORS	30K9	35K9	40K9	50K9				
1 x 4	22NA/44L	590nm Native Amber / White	1,043	5,405	5,606	5,738	6,046	114 - 128	27	47	>60K / >102K
	22R/44L	630nm Native Red / White	1,322	5,405	5,606	5,738	6,046	114 - 128	27	47	>60K / >102K
	22NA	590nm Native Amber	1,043	-	-	-	-	-	27	-	>60,000
	22R	630nm Native Red	1,322	-	-	-	-	-	27	-	>60,000
	54DR	660nm Native Deep Red	939	-	-	-	-	-	61	-	>54,000
2 x 2	22NA/44L	590nm Native Amber / White	1,134	5,877	6,096	6,239	6,574	118 - 132	27	50	>60K / >102K
	22R/44L	630nm Red / White	1,438	5,877	6,096	6,239	6,574	118 - 132	61	50	>60K / >102K
	22NA	590nm Native Amber	1,134	-	-	-	-	-	27	-	>60,000
	22R	630nm Native Red	1,438	-	-	-	-	-	27	-	>60,000
	54DR	660nm Native Deep Red	1,021	-	-	-	-	-	61	-	>54,000
2 x 4	22NA/63L	590nm Native Amber / White	1,311	9,210	9,552	9,777	10,301	134 - 150	26	69	>60K / >102K
	22NA/80L		1,311	11,080	11,492	11,763	12,394	127 - 142	26	87	
	22R/63L	630nm Native Red / White	1,492	9,210	9,552	9,777	10,301	134 - 150	26	69	>60K / >102K
	22R/80L		1,492	11,080	11,492	11,763	12,394	127 - 142	26	87	
	54DR/63L	660nm Native Deep Red / White	1,117	9,210	9,552	9,777	10,301	134 - 150	62	69	>54K / >102K
	54DR/80L		1,117	11,080	11,492	11,763	12,394	127 - 142	62	87	
	44NA	590nm Native Amber	2,623	-	-	-	-	-	52	-	>60,000
	88NA		4,147	-	-	-	-	-	106	-	
	44R	630nm Native Red	2,984	-	-	-	-	-	51	-	>60,000
	88R		5,454	-	-	-	-	-	105	-	
	108DR	660nm Native Deep Red	2,253	-	-	-	-	-	123	-	>54,000

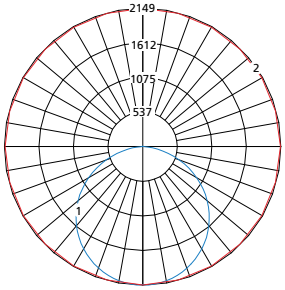
NOTE: Lumen scaling factor for FN lens option is 0.93. Information subject to change without notice. All testing conducted by an ILAC/ISO17025 accredited laboratory.
Please visit www.kenall.com for IES files and additional information.

Model: CSSETO-14-qq-44L-40K9-tt-uu-vv-ww-SYM-2IN-zz White On



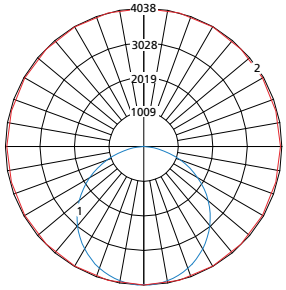
Max Candela = 1996 Located At Horizontal Angle = 60, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (60 - 240) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

Model: CSSETO-22-qq-44L-40K9-tt-uu-vv-ww-SYM-2IN-zz White On



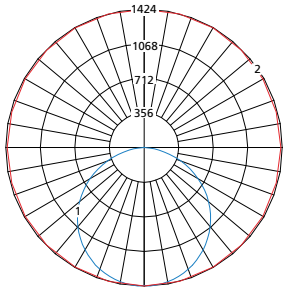
Max Candela = 2149 Located At Horizontal Angle = 90, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

Model: CSSETO-24-qq-80L-40K9-tt-uu-vv-ww-SYM-2IN-zz White On



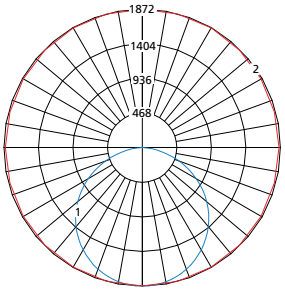
Max Candela = 4038 Located At Horizontal Angle = 90, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

Model: CSSETO-24-88NA-tt-uu-vv-ww-SYM-2IN-zz



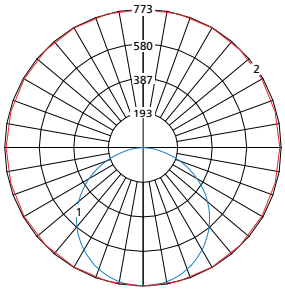
Max Candela = 1424 Located At Horizontal Angle = 90, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

Model: CSSETO-24-88R-tt-uu-vv-ww-SYM-2IN-zz



Max Candela = 1872 Located At Horizontal Angle = 90, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

Model: CSSETO-24-108DR-tt-uu-vv-ww-SYM-2IN-zz



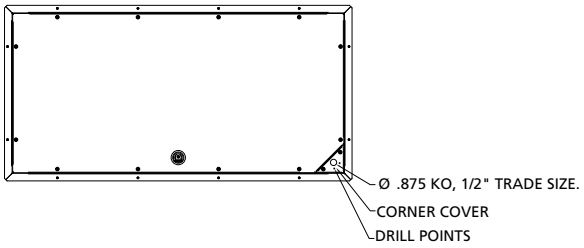
Max Candela = 773 Located At Horizontal Angle = 90, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

CSSETO-NS-012026

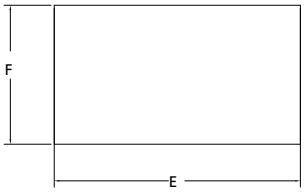
This product is able to comply with the latest domestic preference legislation, such as the Buy America Act (BAA), Trade Agreement Act (TAA), Build America, Buy America Act (BABA), and others. It may be covered by patents found at www.kenall.com/patents. Content of specification sheets is subject to change; please consult www.kenall.com for current product details ©2025 Kenall Mfg. Co.

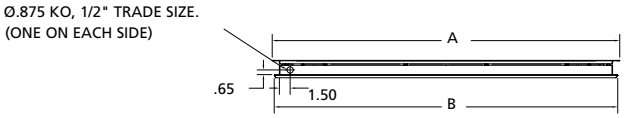
A brand of legrand®

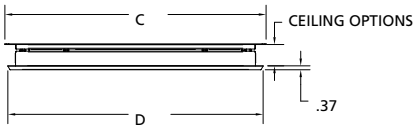
DIMENSIONAL DATA



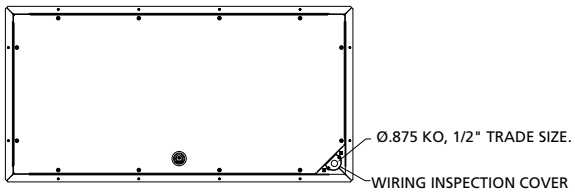
RECOMMENDED CEILING CUTOUT

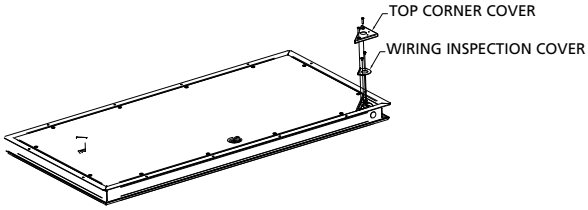




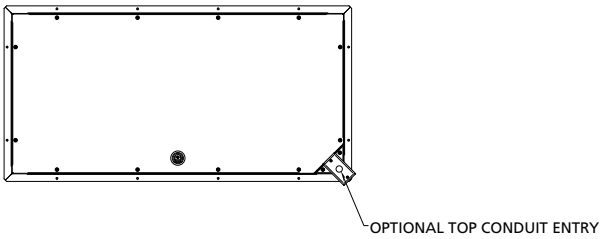


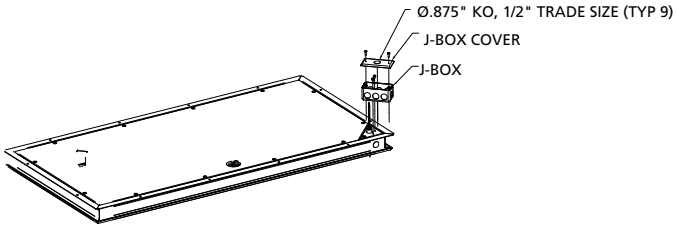
TOP WIRING INSPECTION ACCESS





TOP CONDUIT ENTRY OPTION





DIMENSIONAL DATA (IN INCHES)

	A	B	C	D	E	F
1×4	48.50	47.94	12.50	11.94	46.70	10.70
2×2	26.10	25.54	24.50	23.94	24.30	22.70
2×4	48.50	47.94	24.50	23.94	46.70	22.70

CSSETO-NS-012026

This product is able to comply with the latest domestic preference legislation, such as the Buy America Act (BAA), Trade Agreement Act (TAA), Build America, Buy America Act (BABA), and others. It may be covered by patents found at www.kenall.com/patents. Content of specification sheets is subject to change; please consult www.kenall.com for current product details ©2025 Kenall Mfg. Co.

A brand of legrand®