

# SIMPLESEAL™ CSSETO

## RECESSED WALKABLE TROFFER

### Luminaires for Cleanroom Applications



#### PRODUCT FEATURES

- Flush walkable top surface; 1'x4', 2'x2' and 2'x4' Sizes
- Side or top conduit entry available
- Designed for 2, 3 or 4" modular ceilings
- Enhanced lens luminance and 90CRI standard for better visual performance
- Serviceable from above or below

#### SPECIFICATIONS

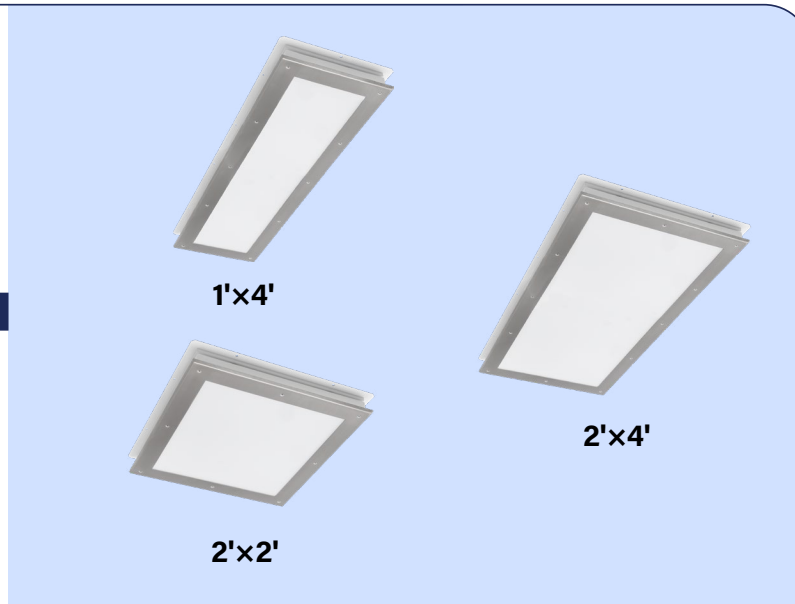
**HOUSING:** Internal housing and room-side ceiling flange constructed of seam-welded, die-formed 18-gauge CRS. Walkable side ceiling flange constructed of die-formed and seam-welded 16-gauge CRS, secured to housing during installation with provided hardware dependent on ceiling thickness. See Ordering 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. 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. 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](http://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-24-162L-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		
	<b>Size</b>		<b>Lamp Color</b>							
	14	1'x4' Nominal	30K9 3000K / 90CRI min.							
	22	2'x2' Nominal	35K9 3500K / 90CRI min.							
	24	2'x4' Nominal	40K9 4000K / 90CRI min.							
			50K9 5000K / 90CRI min.							
	<b>Lamp Power</b>									
	1'x4'									
	44L	44 Watt LED								
	63L	63 Watt LED								
	80L	80 Watt LED								
	2'x2'									
	44L	44 Watt LED								
	63L	63 Watt LED								
	80L	80 Watt LED								
	2'x4'									
	44L	44 Watt LED								
	63L	63 Watt LED								
	80L	80 Watt LED								
	120L	120 Watt LED								
	162L	162 Watt LED								

#### 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

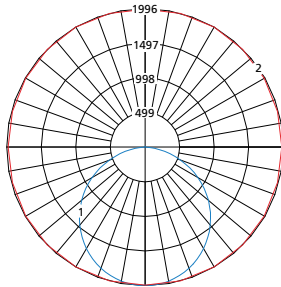
\* Lensing consists of FDA approved Food Zone clear polycarbonate outer lens and diffused acrylic inner lens.

## PERFORMANCE

SIZE	LAMP CODE	Initial Delivered Lumens, By Lamp Color (lm)				EFFICACY (LM/W)	INPUT POWER (W)	TM-21 REPORTED L70 (HRS)
		30K9	35K9	40K9	50K9			
1 x 4	44L	5,405	5,606	5,738	6,046	114 - 128	47	>102,000
	63L	7,788	8,077	8,267	8,711	113 - 126	69	
	80L	10,024	10,396	10,641	11,212	115 - 128	87	
2 x 2	44L	5,877	6,096	6,239	6,574	118 - 132	50	>102,000
	63L	8,374	8,685	8,889	9,366	121 - 135	69	
	80L	10,523	10,914	11,171	11,770	121 - 135	87	
2 x 4	44L	6,307	6,542	6,696	7,055	130 - 146	48	>102,000
	63L	9,210	9,552	9,777	10,301	134 - 150	69	
	80L	11,080	11,492	11,763	12,394	127 - 142	87	
	120L	16,146	16,746	17,140	18,059	124 - 138	131	
	162L	21,451	22,248	22,772	23,993	122 - 136	176	

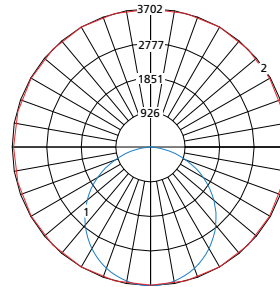
NOTE: Lumen scaling factor for FN lens option is 0.93. Information subject to change without notice. All testing conducted by an ILAC/ISO17025 accredited laboratory. Please visit [www.kenall.com](http://www.kenall.com) for IES files and additional information.

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



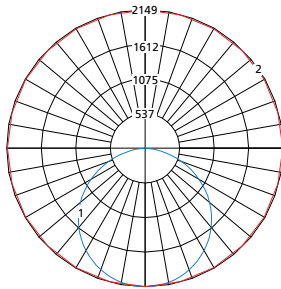
Max Candela = 1996 Located At Horizontal Angle = 60, Vertical Angle = 2.5  
1 - Vertical Plane Through Horizontal Angles (60 - 240) (Through Max. Cd.)  
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

Model: CSSETO-14-82L-40K9-tt-uu-vv-ww-SYM-2IN-zz



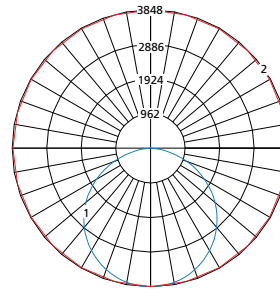
Max Candela = 3702 Located At Horizontal Angle = 60, Vertical Angle = 2.5  
1 - Vertical Plane Through Horizontal Angles (60 - 240) (Through Max. Cd.)  
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

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



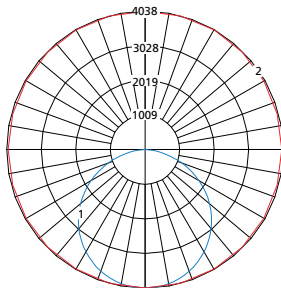
Max Candela = 2149 Located At Horizontal Angle = 90, Vertical Angle = 2.5  
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

Model: CSSETO-22-82L-40K9-tt-uu-vv-ww-SYM-2IN-zz



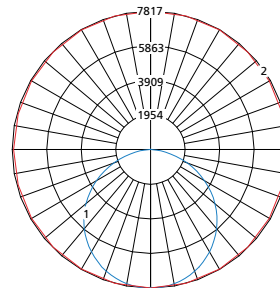
Max Candela = 3848 Located At Horizontal Angle = 90, Vertical Angle = 2.5  
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

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



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-24-162L-40K9-tt-uu-vv-ww-SYM-2IN-zz

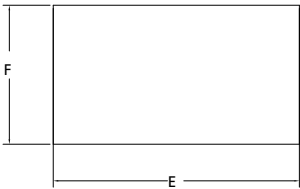
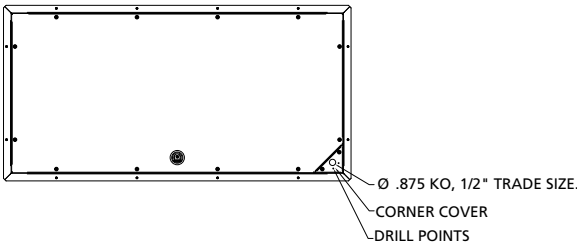


Max Candela = 7817 Located At Horizontal Angle = 90, Vertical Angle = 2.5  
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

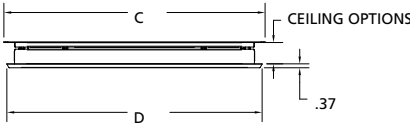
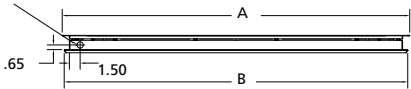


DIMENSIONAL DATA

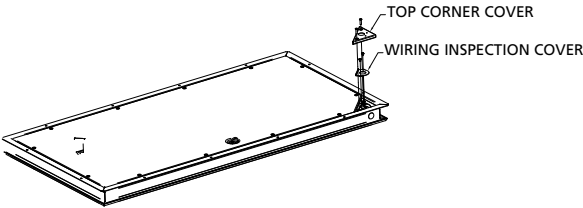
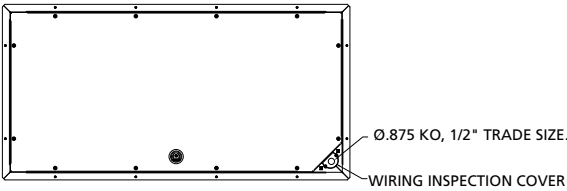
RECOMMENDED CEILING CUTOUT



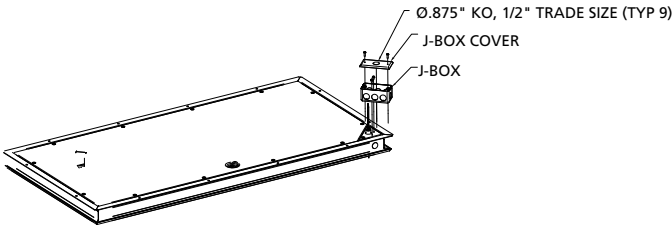
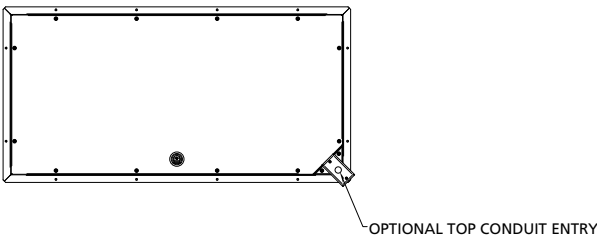
Ø .875 KO, 1/2" TRADE SIZE.  
(ONE ON EACH SIDE)



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

