

SIMPLESEAL™

CSETO SERIES – LED – TOP ACCESS OVERLAPPING DOOR

PRODUCT FEATURES:

- » Provides service from above to all electronics without entering the cleanroom
- » Durable construction resists damage from unintended foot traffic
- » 600lb load tested to reduce the hazard of foot traffic.
- » Recessed ceiling mount; grid or flange - 1'x4', 2'x2' & 2'x4'
- » One piece overlapping door provides easy cleaning and air-tight integrity of luminaire
- » Optional Food Zone/Non-Contact listing, ideal for food processing applications
- » Easy opening using rotary latches and a full length piano hinge

SPECIFICATIONS

HOUSING: 20-gauge CRS or stainless steel. Hole-free, die formed and 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: 20-gauge type 304 stainless steel (#4 finish-post fabrication). One-piece 60° beveled perimeter construction. Continuous angle lens retention system. Mechanical guide for doorframe fastener alignment. Doorframe secured to housing with stainless steel aircraft cables and captive flush mounted Phillips head stainless steel fasteners (8) for 2x2, (12) for 2x4. Thumb screws used for FN option.

OPTICS: Symmetric optic includes diffused, impact-resistant acrylic lens. FN option includes FDA approved Food Zone clear polycarbonate lens outer lens; diffused acrylic inner lens.

DOORFRAME GASKET: One-piece closed cell extruded Nitrile gasket seals Doorframe to housing and ceiling structure.

TOP ACCESS PANEL: 20-gauge CRS panel is cable hinged to housing for room-side removal. Panel is sealed with a closed cell gasket to housing inner surface. Protected from accidental foot traffic to 600lbs static load without damage when properly installed.

ELECTRICAL: Available 3500K, 4000K and 5000K color temperatures with maximum 3-step MacAdam variation allowance. 120-277VAC or 347VAC, 50/60Hz electrical input with serviceable high power factor electronic, constant-current driver (<20% THD, >0.95 PF). Standard 0-10V dimming with 1-100% range with dim-to-dark capabilities (non dim-to-dark with 347V; 660µA maximum source current per circuit). Optional 0-10V dimming with 0.1-100% range and dim-to-dark capabilities via eLoLED SOLOdrive series driver (n/a 347V input; ≤0.5V required from dimming control for dim-to-dark operation; 800µA max. source current). Optional DALI control with 1-100% dimming range.

INSTALLATION: Non-IC recessed ceiling mounting into walkable grid or walkable ceiling systems. Walkable ceiling (flange) installation suitable for ceilings up to 4" in thickness. Secured to ceiling with continuous perimeter compression to ceiling panel. Grid installation suitable for 1" and 1.5" T-bar ceilings. Supplemental support required. Housing is universal in construction between grid and flange-style mounting types.

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 IP6x from above ceiling (Dust Tight). Certified IP65 from below per IEC 60598. NSF2 Splash/Non-Food Zone. CCEA Approved. Suitable for FED-STD-209E/Class 1 (ISO 3), Biosafety Labs Rated BSL 3 and 4 as well as EU GMP Grade A Cleanrooms. Optional NSF2 Food Zone/ Non-Contact.



PROJECT INFORMATION	
Job Name	_____
Fixture Type	_____
Catalog Number	_____
Approved by	_____



ORDERING INFORMATION (Ex: CSETO-24-67L-40K8-DIM1-DV-2F-2H-SYM)

Model	Size	Lamp Power	Lamp Color	Driver	Voltage	Doorframe	Housing	Optics	Options
CSETO							2H	SYM	
Size		Lamp Power		Driver Type				Optics	
14 1'x4'		1'x4'		DIM1 0-10V Dimming to 1%				SYM Symmetric, Diffused DR Acrylic	
22 2'x2'		45L 45 Watt LED		DIM01 0-10V Dimming to 0.1% (n/a with 347V)				Options	
24 2'x4'		67L 67 Watt LED		DALI DALI Dimming to 1% (n/a with 347V)				LEL 10W Self-Testing Emergency Battery Backup (120V and 277V specified voltages only)	
		90L 90 Watt LED		Voltage				AMF Antimicrobial Finish	
				DV 120-277VAC, 50/60Hz				FN** Food Zone/Non-Contact	
		2'x2'		120 120VAC				FS Fuse & Holder	
		45LD 45 Watt Dual-Row LED		277 277VAC				HJ Sealed Wireway	
		67L 67 Watt LED		347 347VAC				2C Two Circuit Wiring (n/a with 45L lamp power)	
		90L 90 Watt LED		Doorframe Options				** Lensing consists of FDA approved Food Zone clear polycarbonate outer lens and diffused acrylic inner lens	
		2'x4'		5F 20-Ga Type 304 SS with 4B Brushed Finish (STD)				▲ Applied only to exposed painted surfaces of luminaire	
		45LD 45 Watt Dual-Row LED		2F 20-Ga CRS in Gloss White					
		67L 67 Watt LED		Housing Options					
		90L 90 Watt LED		2H 20-Ga CRS in Gloss White					
		135L 135 Watt LED							
		180L 180 Watt LED							
		Lamp Color							
		35K8 3500K / 82 CRI min.							
		40K8 4000K / 82 CRI min.							
		50K8 5000K / 82 CRI min.							



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PERFORMANCE

Model	Lamp Type	Initial Delivered Lumens		Input Power (W)	Drive Current (mA)	Estd. L70 LED Life (Hrs)	Delivered Output in LEL Battery Mode (lm)
		@ 25°C	Efficacy (lm/W)				
CSETO14	45L-35K8	5,876	118	50	100	80,000	1,180
	45L-40K8	6,077	122	50	100	80,000	1,220
	45L-50K8	6,493	130	50	100	80,000	1,303
	67L-35K8	8,824	120	73	75	80,000	1,201
	67L-40K8	9,126	124	73	75	80,000	1,242
	67L-50K8	9,750	133	73	75	80,000	1,327
	90L-35K8	11,391	114	100	100	60,000	1,139
	90L-40K8	11,779	118	100	100	60,000	1,178
	90L-50K8	12,585	126	100	100	60,000	1,259
CSETO22	45LD-35K8	6,771	138	49	100	80,000	1,253
	45LD-40K8	7,002	143	49	100	80,000	1,296
	45LD-50K8	7,481	153	49	100	80,000	1,385
	67L-35K8	9,376	128	73	75	80,000	1,276
	67L-40K8	9,696	132	73	75	80,000	1,320
	67L-50K8	10,359	141	73	75	80,000	1,410
	90L-35K8	12,102	121	100	100	60,000	1,210
	90L-40K8	12,515	125	100	100	60,000	1,252
	90L-50K8	13,371	134	100	100	60,000	1,337
CSETO24	45LD-35K8	6,873	149	46	100	80,000	1,272
	45LD-40K8	7,108	155	46	100	80,000	1,316
	45LD-50K8	7,594	165	46	100	80,000	1,406
	67L-35K8	9,517	130	73	75	80,000	1,295
	67L-40K8	9,842	134	73	75	80,000	1,339
	67L-50K8	10,515	143	73	75	80,000	1,431
	90L-35K8	12,285	123	100	100	60,000	1,228
	90L-40K8	12,704	127	100	100	60,000	1,270
	90L-50K8	13,573	136	100	100	60,000	1,357
	135L-35K8	18,083	121	149	100	60,000	1,211
	135L-40K8	18,700	125	149	100	60,000	1,252
	135L-50K8	19,979	134	149	100	60,000	1,338
	180L-35K8	23,014	116	198	100	60,000	1,165
	180L-40K8	23,799	120	198	100	60,000	1,204
180L-50K8	25,427	129	198	100	60,000	1,287	

NOTE: Performance information provided with the SYM optic. Reduce output by 11% when specified with FN option. Information subject to change without notice. Visit www.kenall.com for IES files and additional information.



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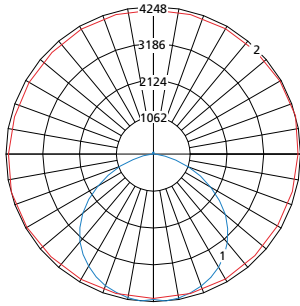
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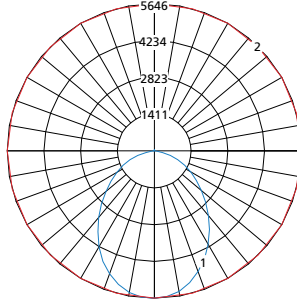
Model: CSETO14-90L-40K8-DIM1-DV-2F-2H-SYM



Maximum Candela = 4248 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.)

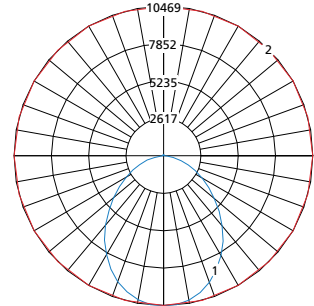
Model: CSETO22-90L-40K8-DIM1-DV-2F-2H-SYM



Maximum Candela = 5646 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: CSETO24-180L-40K8-DIM1-DV-2F-2H-SYM

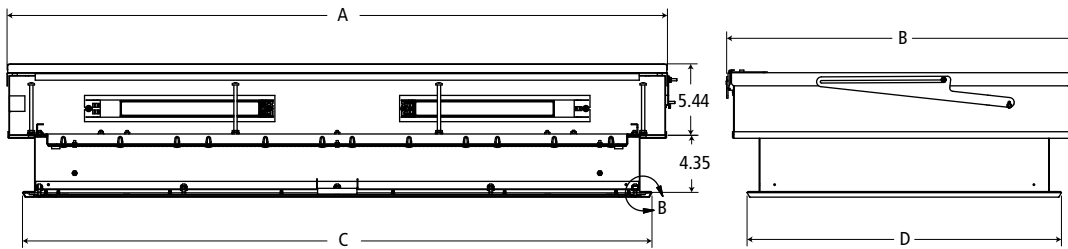


Max Candela = 10469 Located At Horizontal Angle = 0, Vertical Angle = 0

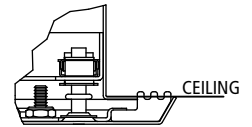
- 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
- 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

DIMENSIONAL DATA

CROSS SECTION



GASKET PROFILE



DIMENSIONAL DATA (IN INCHES)					
	A	B	C	D	CEILING CUTOUT
1x4	50.30	14.70	47.90	11.90	46.25 x 10.25
2x2	26.30	26.70	23.90	23.90	22.25 x 22.25
2x4	50.30	26.70	47.90	23.90	46.25 x 22.25



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