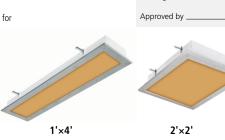
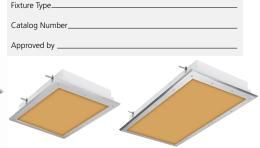
SIMPLESEAL™ NARROW SPECTRUM CSEDO SERIES -Amber & White LED - OVERLAPPING DOOR

PRODUCT FEATURES:

- » Narrow-spectrum 570nm amber LED circuit provides only high-purity light without UV for spectrally-sensitive applications
- » Available high-output, high-CRI white LED circuit provides visual acuity and accurate rendition
- » Diffused high-efficiency lens for reduced glare
- » One-piece overlapping door provides air-tight integrity of luminaire
- » Suitable for universal installation into 1.0" and 1.5" grid or flange (drywall) ceilings



Job Name



2'×4

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: 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 2×2, (12) for 2×4.

OPTICS: Symmetric optic includes diffused, impact-resistant 0.118" thick acrylic lens.

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

ELECTRICAL: Replaceable 570nm amber (115 nm FWHM bandwidth) mid-power LED arrays produce no Ultraviolet and less than 0.019 watts of light below 480nm. Available separately circuited white mid-power LED arrays in 3500K, 4000K and 5000K color temperatures with maximum 3-step MacAdam variation allowance. Minimum 82 CRI. 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 and dim-to-dark capabilities on white and amber circuits (non dim-to-dark with 347V; 330µA 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; 400µA max, source current). White circuit and amber 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. Housing is field-convertible between grid and flange-style mounting types. 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 IP66 per IEC 60598. CCEA Approved. Optional NSF Protocol P442 certified. FED-STD-209E/Class 1 (ISO 3) Cleanrooms. Suitable for BSL 1-4 laboratories. Suitable for EU GMP Grade A cleanrooms. CSEDO is participating in Declare. Build America, Buy America Act compliant.









50K8 5000K / 90 CRI













ORDERING INFORMATION (Ex: CSEDO-24-45AD/90L-40K8-DIM1-DV-2F-2H-SYM) Model Lamp Power Lamp Color / CRI Voltage Doorframe Housing Optics Driver Ontions **CSEDO** SYM Size Lamp Power **Driver Type** Options 14 1'×4' 1'×4' DIM1 0-10V Dimming to 1% I FI ‡ 10W Emergency Integral Battery Backup 45W Amber/45W White 22 2'×2' 45A/45L **DIM01** 0-10V Dimming to 0.1% 20KV 20KV/KA Surge Protection per 24 2'×4' 45A 45 Watt Amber Only (n/a with 347 Voltage) IEEE/ANSI C62.41.2 Cat. A 90A 90 Watt Amber Only P442[▲] Optional NSF Protocol P442 Certified Voltage AMF▼ Antimicrobial Finish 120-277VAC, 50/60Hz 2'×2' DΛ FS Fuse & Holder 45AD/45LD 45W Amber/ 45W White 120 120VAC Sealed Wireway 45AD 45 Watt Amber Only 277 277VAC RM† Continuous Row Mounting 90A 90 Watt Amber Only 347 347VAC Accessories **Doorframe Options** IF*† Install Frame 45AD/45LD 45W Amber/45W White 20-Ga Type 304 SS (STD) Add .375" to ceiling cut out dimensions 45W Amber/67W White 45AD/67L 20-Ga CRS 45AD/90L 45W Amber/90W White 20-Ga Type 316 SS n/a with 347V input. 0°C/32°F min. ambient. Wired to amber 90W Amber/90W White .063" Painted Fabricated Aluminum circuit when amber/white lamping is selected. 90A/90L 45AD 45 Watt Amber Only Only available when installed in drywall ceilings (flange mount) 90A 90 Watt Amber Only **Housing Options** Applied only to exposed painted surfaces of luminaire (not available on stainless steel doorframes) 135A 135 Watt Amber Only 24-Ga CRS (STD) 2Н 20-Ga CRS P442 only available on CSEDO24 20-Ga Type 304 SS White Lamp Color / CRI **5H** 35K8 3500K / 82 CRI хн 20-Ga Type 316 SS 35K8 3500K / 90 CRI .050" Painted Aluminum PAH 40K8 4000K / 82 CRI 40K8 4000K / 90 CRI Optics **50K8** 5000K / 82 CRI SYM Symmetric, Diffused DR Acrylic



SIMPLESEAL™

CSEDO SERIES – Amber & White LED – OVERLAPPING DOOR

PERFORMANCE

Amber/White		Amber 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)	Amber/White Estd. L ₇₀ LED Life (hrs)
1' × 4'	45A/45L-35K8	5,622	115	49	5,140	105	49	60,000 / 80,000
	45A/45L-40K8	5,622	115	49	5,230	107	49	60,000 / 80,000
	45A/45L-50K8	5,622	115	49	5,439	111	49	60,000 / 80,000
2' × 2'	45AD/45LD-35K8	5,973	122	49	5,461	111	49	60,000 / 80,000
	45AD/45LD-40K8	5,973	122	49	5,556	113	49	60,000 / 80,000
	45AD/45LD-50K8	5,973	122	49	5,779	118	49	60,000 / 80,000
	45AD/45LD-35K8	6,538	139	47	6,593	143	46	60,000 / 80,000
	45AD/45LD-40K8	6,538	139	47	6,709	146	46	60,000 / 80,000
	45AD/45LD-50K8	6,538	139	47	6,977	152	46	60,000 / 80,000
	45AD/67L-35K8	6,538	139	47	9,171	127	72	60,000 / 80,000
	45AD/67L-40K8	6,538	139	47	9,331	130	72	60,000 / 80,000
21 41	45AD/67L-50K8	6,538	139	47	9,704	135	72	60,000 / 80,000
2' × 4'	45AD/90L-35K8	6,538	139	47	11,784	121	97	60,000 / 80,000
	45AD/90L-40K8	6,538	139	47	11,990	124	97	60,000 / 80,000
	45AD/90L-50K8	6,538	139	47	12,470	129	97	60,000 / 80,000
	90A/90L-35K8	12,126	122	99	11,784	121	97	60,000 / 80,000
	90A/90L-40K8	12,126	122	99	11,990	124	97	60,000 / 80,000
	90A/90L-50K8	12,126	122	99	12,470	129	97	60,000 / 80,000

90 CRI MULTIPLIER

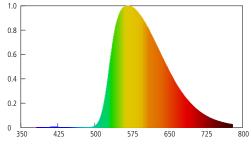
Lamp Color / CCT	Lumen Multiplier		
30K9	0.83		
35K9	0.87		
40K9	0.89		
50K9	0.89		

Amber only

Size	Lamp Type	Delivered lumens @ 25°C (lm)	Efficacy (lm/W)	Input Power (W)	Estd. L ₇₀ LED Life (hrs)	
1' × 4'	45A	5,622	115	49	80,000	
	90A	11,243	114	99	60,000	
2' × 2'	45AD	5,973	122	49	80,000	
	90A	11,946	121	99	60,000	
2' × 4'	45AD	6,538	139	47	80,000	
	90A	12,126	122	99	80,000	
	135A	18,189	122	149	60,000	

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

Spectroradiometric Parameters



Purity: 0.985 UV: 0.0000% (<390nm) Radiant Flux < 480nm: 0.08% Bandwidth: 115nm Peak Wavelength: 570nm

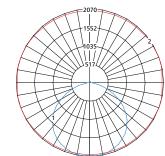


SIMPLESEAL™

CSEDO SERIES – TECHNICAL DATA

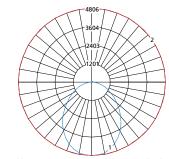
PERFORMANCE

Model: CSEDO14-45A/45L-40K8-DIM1-120-2F-2H-SYM (White Mode)



Maximum Candela = 1859 Located At Horizontal Angle = 15, Vertical Angle = 5

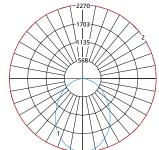
- 1 Vertical Plane Through Horizontal Angles (15-195) (Through Max. Cd.)
 2 Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)
- Model: CSEDO24-90A/90L-40K8-DIM1-120-2F-2H-SYM (White Mode)



Maximum Candela = 4806 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.)

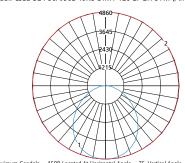
Model: CSEDO22-45AD/45LD-40K8-DIM1-120-2F-2H-SYM (White Mode)



Maximum Candela = 2270 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: CSEDO24-90A/90L-40K8-DIM1-120-2F-2H-SYM (Amber Mode)



Maximum Candela = 4598 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.)

DIMENSIONAL DATA

GASKET PROFILE

Fixture Housing Ceiling Line Gasket mechanically retained Doorframe

CROSS SECTION



CEILING CUTOUT



DIMENSIONAL DATA (IN INCHES)						
	Α	В	C	[
1/	1 12	11 04 × 47 04	10.95	46		

1×4	4.43	11.94 × 47.94	10.85	46.85
2×2	4.43	23.94 × 23.94	22.85	22.85
2×4	4.43	23.94 × 47.94	22.85	46.85

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