SIMPLESEAL™

CSERO SERIES – OVERLAPPING DOOR USING KORE TECHNOLOGY™

PRODUCT FEATURES:

- » Designed specifically to improve the visual performance while providing industry leading efficacy of up to 157 lm/W
- » Distribution provides uniform flat-field illumination, suppressing central hot spots and allowing greater ceiling spacing
- » Evenly illuminated diffuser with reduced surface brightness
- » Recessed ceiling mount; grid or flange 1' \times 4', 2' \times 2', 2' \times 4'
- » Suitable for universal installation into 1.0" and 1.5" grid or flange (drywall) ceilings
- » One piece overlapping doorframe

1'x4'



Job Name

Fixture Type

Approved by

Catalog Number



PROJECT INFORMATION

SPECIFICATIONS

HOUSING: Standard 24-gauge cold rolled steel, hole-free, welded construction. Alternate material options available. Rigid housing flange with mitered and welded corners. White TGIC polyester powder coat finish – 5-step pre-treatment. Salt spray test: 1,000 hours. Internal surfaces use a proprietary high reflectance coating (Reflectance: >92%.)

DOORFRAME: Standard 20-gauge Type 304 brushed stainless steel. One-piece overlapping style construction with welded corners and 60 degree beveled perimeter. Cold rolled steel and Aluminum selections are finished with 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 stainless steel fasteners (10) for 1×4, (8) for 2×2, (12) for 2×4.

DOORFRAME GASKET: One-piece closed-cell, NSF listed extruded Nitrile gasket with vulcanized corners seals doorframe to housing and ceiling structure.

OPTICS: Injection molded high refraction polycarbonate optics provided for each LED. Proprietary KORE Technology[™] (Kenall Optical Radiance Engine) delivers improved visual performance and uniform diffuser luminance, impact-resistant acrylic lens (<1.5/1 max/min ratio within full lens area).

ELECTRICAL: Available 3000K, 3500K, 4000K and 5000K color temperatures with maximum 3-step MacAdam variation allowance. Minimum 80 CRI (R9 >0) or 90 CRI (R9 >50) options. 120-277VAC, 50/60Hz electrical input with room-side serviceable high power factor electronic, constant-current driver (<20% THD, >0.95 PF). Standard 0-10V dimming with 1-100% range and dim-to-dark capabilities (non dim-to-dark with 347V). 330μA maximum source current.

SENSOR & CONTROLS: Optional sensor available with compatible third party controls. To see the full list of compatible controls, click here.

INSTALLATION: 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 below for 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 LED warranty.

LISTINGS: Luminaire is certified to UL standards by Intertek Testing Laboratories for Wet Location and IC recessed installations. Certified IP66 per IEC 60598. NSF2 Splash/Non-Food Zone. CCEA Approved. Suitable for biosafety labs rated BSL 1 thru 4. Meets Standard for FED-STD-209E/Class 1 (ISO 3-9) Cleanrooms. Suitable for installation into -30°C to 40°C ambient environments, unless otherwise noted.















ORDERING INFORMATION (Ex: CSERO-24-60L-40K8-DIM1-DV-5F-4H-SYMW)

Model	Si	ze	Lamp Power	Lamp	Color	Driver	Voltage	Doorframe	Hous	ing	Optics	Options	Accessories
CSE	RO					DIM1					SYMW		
22	1'×4' 2'×2' 2'×4'			30K8 35K8 35K9	P Color 3 3000K / 80 (3 3500K / 80 (9 3500K / 90 (3 4000K / 80 (CRI min. CRI min.			Hous 4H 2H P5H PXH	20-Ga (20-Ga 1	ions CRS in White (S CRS in White Type 304 SS in N Type 316 SS in N	White	
	Power				9 4000K / 90				PAH	.050" A	Aluminum in Wh	nite	
24L 30L	14 Watt LE 24 Watt LE 30 Watt LE	D D		Drive	3 5000K / 80 (er Type 1 0-10V Dimm	CRI min. ning to 1% with	Dim-to-Dark			W Wide	Symmetric, Dif	fused DR Acrylic	:
	48 Watt LE	-			(non dim-to-	dark with 347V)		Optio			Dl.	
60L 2'×2'	60 Watt LE	D		Volta DV	a ge 120-277VA	C, 50/60Hz			LEL FN	(n/a wi			ng environment) crews)
	14 Watt LE 24 Watt LE			347	347VAC, 60)Hz			AMF ⁴ FS		crobial Finish Holder		
	30 Watt LE 42 Watt LE			Dooi 5F	rframe Optio 20-Ga Type :		Brushed Finish (STD)	HJ	Sealed	Wireway		
	48 Watt LE 60 Watt LE	-		2F XF PAF	20-Ga CRS i 20-Ga Type :	n Gloss White 316 SS with 4B Iuminum in Glos	Brushed Finish	,	Acce IF*†	ssories Install	Frame		
48L 60L 84L	28 Watt LE 48 Watt LE 60 Watt LE 84 Watt LE 96 Watt LE	D D D							† Opt ▲ App	ionally us lied only		nount in hard ce nted surfaces of	eilings (not required) f luminaire



120L 120 Watt LED

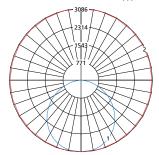
$SIMPLESEAL^{\mathsf{TM}}$

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PERFORMANCE		lı	nitial Deliv	ered Lume	ns, By Lam	p Color (lm	1)				
Size	Lamp Power	30K8	35K8	35K9	40K8	40K9	50K8	Efficacy (lm/W)	Input Power (W)	LED Drive Current (mA)	Estd. L70 LED Life (hrs)
	14L	2,196	2,246	1,874	2,283	1,892	2,326	104 - 129	18	31	100,000
	24L	3,459	3,537	2,951	3,596	2,980	3,665	103 - 128	29	51	95,000
1' x 4'	30L	4,162	4,256	3,550	4,326	3,585	4,408	105 - 130	34	63	90,000
	48L	6,564	6,712	5,599	6,823	5,655	6,953	101 - 125	55	100	80,000
	60L	7,950	8,130	6,782	8,265	6,850	8,422	99 - 123	69	125	90,000
	14L	2,278	2,330	1,944	2,369	1,963	2,414	108 - 133	18	31	100,000
	24L	3,682	3,765	3,141	3,828	3,173	3,901	112 - 140	28	51	90,000
2' x 2'	30L	4,389	4,488	3,744	4,563	3,781	4,649	111 - 138	34	63	95,000
2 X Z	42L	6,023	6,160	5,139	6,262	5,190	6,381	109 - 136	47	88	90,000
	48L	6,959	7,116	5,937	7,234	5,995	7,372	107 - 133	55	100	85,000
	60L	8,430	8,620	7,191	8,763	7,263	8,930	104 - 129	69	125	80,000
	28L	4,975	5,087	4,244	5,172	4,286	5,270	125 - 156	34	31	95,000
	48L	8,276	8,463	7,061	8,604	7,131	8,767	127 - 157	56	51	100,000
2' x 4'	60L	9,877	10,100	8,426	10,268	8,510	10,463	125 - 155	67	63	90,000
Z X 4	84L	13,515	13,821	11,530	14,050	11,645	14,317	122 - 151	95	88	90,000
	96L	15,114	15,455	12,894	15,711	13,022	16,010	119 - 148	108	100	85,000
	120L	18,627	19,048	15,891	19,363	16,048	19,732	117 - 145	136	125	80,000

NOTE: 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.

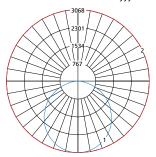
Model: CSERO-14-60L-40K8-DIM1-xxx-yyy-SYMW-zzz



Maximum Candela = 3086 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.)

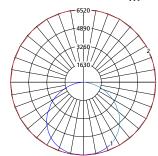
Model: CSERO-22-60L-40K8-DIM1-xxx-yyy-SYMW-zzz



Maximum Candela = 3068 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: CSERO-24-120L-40K8-DIM1-xxx-yyy-SYMW-zzz



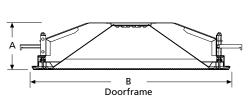
Max Candela = 6520 Located At Horizontal Angle = 90, Vertical Angle = 2.5

1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

DIMENSIONAL DATA

Fixture Housing Gasket mechanically retained Doorframe

CROSS SECTION



DIMENSIONAL DATA (IN INCHES)								
	Α	В	c c	D				
1×4	5.50	11.94 × 47.94	10.85	46.85				
2×2	5.50	23.94 × 23.94	22.85	22.85				
2×4	5.50	23.94 × 47.94	22.85	46.85				

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

CEILING CUTOUT



