CRU-MXo

LED - Maximum Performance Cleanroom Luminaire with Overlapping Doorframe



Project:	Catalog #:	Туре:
Notes:		

Product Description

The CRU-MXo series by Certolux is a high output recessed luminaire that provides illumination in high ceiling industrial cleanrooms. The high efficacy LEDs are directly coupled to radiating surfaces to maintain long life at up to 57,000 lumens. It is certified IP65 and ready for ISO Class 3-8 cleanrooms. To maintain cleanliness, the overlapping door seals to the ceiling and housing, completely covering the fixture flange. It is triple gasketed and listed for wet locations. The mounting is universal for 1.0" to 1.5" t-bar grid and flanged installations. It is certified NSF2 food, splash and non-food zones. Thermal protection is built into the design to prevent inadvertent application of thermal insulation and therefore UL listed as type Non-IC with Thermal Insulation Detection.

Features:

- Up to 57000 lumens
- Clear and Diffuse Lens Options
- Ready for 2500 PSI Wash-Down
- Thermal Insulation Detection

Housing

Precision formed, seam welded, one-piece, hole-free construction. 20 gauge cold rolled steel standard. Rigid 18 gauge flange with welded and rounded corners for safety. Stainless Steel and Aluminum are available options. 5 Stage pretreatement and gloss white polyester powder coated after fabrication. ASTM B117 1000hr Salt Spray tested.

Door Frame

Overlapping one-piece 18 gauge cold rolled steel standard, optional types 304 or 316 stainless steel or aluminum. welded corners blended smooth. Countersunk flat head, stainless steel, captive fasteners with integral silicone o-rings. Door frame is removable, reversible, and hinged by stainless steel aircraft cables. Highly resilient and chemical resistant CertaSeal microcellular closed-cell gasket seals door frame to the housing and/or ceiling.

Lens & Lens Retention

Standard lens: Impact resistant 0.125" clear acrylic lens. Smooth external surface for easy cleaning. Sealed to doorframe with RTV silicone sealant and retained by continuous perimeter brackets. See order code for other

Gasket Systems

Triple gasketed: Lens: RTV 100% pure silicone seals lens to door. Door: Highly resilient and chemical resistant CertaSeal microcellular closed-cell gasket seals door frame to the housing and/or ceiling. Housing: Closed cell neoprene gasket provided to seal flange to ceiling. Door screws: Silicone o-rings with special sealing flat-head screws.

LED

LED board modules are high efficiency and closely regulated to maintain CRI, color consistency, lumen performance, and efficacy. Select from 3000K, 3500K, 4000K, and 5000K color temperatures with a color consistency of 3 SDCM, standard 80 CRI, optional 90 CRI. Modules are field replaceable and commercially available. Optional amber and red LEDs arrays available alone or in combination with white LEDs.

Electrical

The standard electronic driver is constant current, programmable and dimmable to 5% using a 0-10V protocol. $High\ efficiency\ (>85\%)\ and\ low\ THD\ (<10\%).\ Certified\ to\ FCC\ Part\ 15,\ Class\ A.\ Provided\ with\ a\ thermal\ insulation$ detection device. Input voltage is selected as either 120V or 277V.

5 Stage pretreatement and gloss white polyester powder coated after fabrication. ASTM B117 1000hr Salt Spray tested. Stainless Steel is available with a choice of brushed #4 polished finish or gloss white polyester powder coated.

Installation

Flange installation is supported by swing style mounting brackets. Bracket vertical range is 1.3-2.9 inches. Grid installation suitable for 1" and 1.5" T-Bar NEMA LE4 Type G ceilings. See ordering key for use with 2" T-Bar Grid systems. (option C57) Consult factory for compatibility with non-standard grid systems). Ambient operating temperture: -4°F (-20°C) to 77°F (25°C).

Listings, Certifications and Ratings

UL listed for wet locations under covered ceiling (CAN & USA, ANSI/UL1598 & UL8750). Recessed Type Non-IC for uninsulated ceilings. NSF2 for Splash zone and non-food zones (See option X5 for Food Zone certification). IEC60529 IP65 (Certified dust-tight and resistant to jets of water). Cleanroom classified IS03-8. EU GMP Grade A, Suitable for Biosafety BSL1-3. Compliant with CCEA requirements. Rated for 2500psi washdown conditions.

5 year limited warranty. For complete warranty, click here:









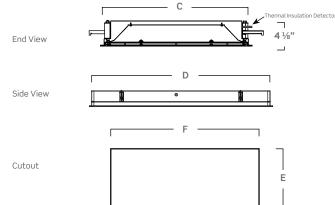








Dimensions В Top View



	Dimensions (inch) & Weights							
	Α	В	С	D	Е	F	Weight	
2x4	47.75	23.75	22.69	46.75	22.69	46.75	50 lbs.	

Consult installation guide for exact dimensions.

CRU-MXo

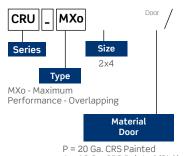
LED - Maximum Performance Cleanroom Luminaire with Overlapping Doorframe



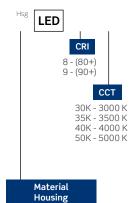
Project:	Catalog #:	Туре:
Notes:		

Order Key

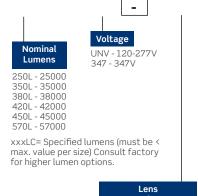
EXAMPLE: CRU-MXo2x4A/P840K570L277V-P68



P = 20 Ga. CRS Painted A = 18 Ga. CRS Painted (Std.) R = 20 Ga. 304 SS #4 Brushed T = 20 Ga. 304 SS Painted E = 18 Ga. 304 SS Painted H = 18 Ga. 304 SS #4 Brushed L = 18 Ga. 316 SS Painted Q = 18 Ga. 316 SS #4 Brushed U = .050" Aluminum Painted



T = 20 Ga. 304 SS Painted P = 20 Ga. CRS Painted (Std.) L = 18 Ga. SS #316 Painted U = .050" Aluminum Painted



Р

D

P

	Options
68	High Impact Clear Acrylic (Standard)
SA	Diffuse Symmetric Acrylic
11	.156" Prismatic Acrylic (pattern #19, inverted)
13	.125" Prismatic Acrylic (pattern #12, inverted)
15	.140" Prismatic High
	Impact Acrylic (pattern #12, inverted)
56	125 (3mm) Clear Acrylic

Consult Factory for glass and other lens options

Options

DSA

Wiring Options

V33 Two Circuit Switching V55 Sealed wireway

Finish Options

F47 Gloss White Antimicrobial C77 White Stainless Steel Door Screws

Accessories

M70 Install Frame, (Typ. for wet plaster ceilings)
M46 Continuous Row Mtg. -Not Required for Grid

Approval and Rating

X5 NSF Food Zone-Non-contact

Consult factory for details regarding with emergency pack options.

Performance Data								
Size	Nominal Lumens	Lumens (4000K)	Watts	Lumens per Watt				
	25000	25466	185.4	137.36				
	35000	35149	253.6	138.60				
2x4	38000	38249	282.0	135.70				
2X4	42000	42229	311.1	135.74				
	45000	45501	327.3	139.02				
	57000	56306	414.8	135.74				

^{*} Lumen values are based on 4000K, 80 CRI erformance. See Lumen Multipliers below for other CCT or CRI perfomance data.

Standard White										
сст	80CRI					90CRI				
	Lumen Factor	CRI	R9	Rf	Rg	Lumen Factor	CRI	R9	Rf	Rg
3000	0.95		-	-	-	0.77		-	-	-
3500	0.97	80	12	85	97	0.80	90	62	91	100
4000	1.00		10	84	97	0.82	90	68	91	101
5000	1.01		10	84	97	0.84		65	91	98