

CLDF

Recessed Flanged LED Clean Room



SPECIFICATIONS

DESCRIPTION

The CLDF is an IP65, Wet location, IC-rated luminaire which provides a cost-effective LED clean room lighting solution. Gasketed housing and door frame create a sealed enclosure. The CLDF is available in 1x2, 1x4, 2x2, and 2x4 sizes. Available options such as anti-microbial paint, 90 CRI, MILSTD 461G compliant, and 12W emergency driver. Suitable for biosafety labs rated BSL 1 and 2 (inset doorframe) and biosafety labs rated BSL 3 and 4 (overlap doorframe). Suitable for Class 1/ISO 3 Cleanrooms. For use in insulated ceilings. NSF/ANSI 2 Food Zone, Splash Zone and Non-Food Zone Applications.

DOORFRAME

Inset or Overlap door frame options with choice of Cold Roll Steel, Stainless Steel, or Aluminum. White TGIC polyester powder coat standard, with optional Anti-Microbial Paint. Door-frame secured to housing with stainless steel aircraft cables and captive flush mounted Phillips head stainless steel fasteners. Closed-cell gasket completely seals the doorframe and the housing.

ELECTRICAL SYSTEM

Electronic driver 0-10V 1% dimming standard. Long-life LED system rated for >100K hours (L70 @ 25°C). Complies with federal energy efficiency standards.

OPTICAL SYSTEM

A variety of lensing options are available to fit the needs of any application. If additional lensing options are needed, consult factory. RF grid lens required for MIL STD 461G compliance.

LISTINGS

Approved to CSA and UL standards.

UL listed for wet location.

NSF Listed.

Food Safe.

IP65 rated with inset doorframe, IP66 rated with overlap doorframe. Inset doorframe suitable for biosafety labs rated BSL 1 and 2, overlap doorframe suitable for biosafety labs rated BSL3 and 4.

Suitable for Class 1/ISO 3 Cleanrooms.

MOUNTING

Recessed flanged applications. Easy installation with adjustable 90° swing arm system standard. Universal mounting allows for both recessed flanged and recessed grid mounting.

HOUSING

Various housing material options are available, if options needed are not listed, consult factory. Seam-welded construction. All doors attached to the housing with stainless steel aircraft cables, and are completely sealed with closed cell gaskets. Stainless steel Philips head screws painted to match door finish to secure door frame to housing. White TGIC polyester powder coat standard. Anti-microbial paint optional.

LED

80 CRI or 90 CRI LEDs available in 2700K, 3000K, 3500K, 4000K and 5000K. Life is 100,000 hours at 70% lumen maintenance. LM79, LM80 and TM21 compliant.

WARRANTY

5 - Year Limited Warranty. Complete warranty and terms located at: www.aelnow.com/warranty

Output	Delivered Lumens	System Wattage	L70 @20C (hrs)
SL	4650	33	>100K
ML	7974	57	>100K
HL	11150	80	>100K
SM	12040	86	>100K
MM	13016	93	>100K
HM	15728	112	>100K
SH	16500	118	>100K
MH	20000	143	>100K
HH	25000	179	>100K

*Delivered Lumens shown were tested with 4000K LEDs.

*For custom lumen requirements, add desired lumens to end of part number

Approximate Color Temperature Multiplier	
5000K	1.03
4000K	1
3500K	0.97
3000K	0.94
2700K	0.91



Example: CLDF24-40-MM-B20-B18-INS-SY-M-1-12750

Custom Lumen Output: CLDF24-40-MM-B20-B18-INS-SY-M-1-12750 for 12,750 lumens.

Series	CCT	Illumination Level ¹	Housing
CLDF12 1x2	27 2700K	SL Standard Low	B20 20 Gauge Cold Roll Steel
CLDF14 1x4	30 3000K	ML Medium Low	B18 18 Gauge Cold Roll Steel
CLDF22 2x2	35 3500K	HL High Low	SH18 18 Gauge Stainless Steel (DR)
CLDF24 2x4	40 4000K	SM Standard Medium	SHP18 18 Gauge Stainless Steel (Painted)
	50 5000K	MM Medium Medium	SHB18 18 Gauge Stainless Steel (Brushed)
		HM High Medium	ALH .063" Aluminum (Painted)
		SH Standard High	
		MH Medium High	
		HH High High	

¹CLDF12 (1x2) only available up to ML - Medium Low (7974 lumens)

¹CLDF14 (1x4) only available up to HM - High Medium (15728 lumens)

¹CLDF22 (2x2) only available up to HM - High Medium (15728 lumens)

¹If higher lumens than are available on spec sheet are needed, consult factory

Door Frame	Inverted Lens	Voltage
Inset Doorframe	PA125 .125 Prismatic Acrylic	M 120/277V
B18INS 18 Gauge Cold Roll Steel	PA156 .156 Prismatic Acrylic	
SH18INS 18 Gauge Stainless Steel (DR)	PA187 .187 Prismatic Acrylic	
SHP18INS 18 Gauge Stainless Steel (Painted)	PP125 Prismatic Inner with .125 Clear Outer Polycarbonate	
SHB18INS 18 Gauge Stainless Steel (Brushed)	SY Symmetric Diffused DR Acrylic	
ALHINS .063" Aluminum (Painted)	125P .125 Clear Polycarbonate	
Overlap Doorframe	K19RF KSH-19 RFI Prismatic Acrylic ²	
B18OVL 18 Gauge Cold Roll Steel	Other lens options available, consult factory.	
SH18OVL 18 Gauge Stainless Steel (DR)		
SHP18OVL 18 Gauge Stainless Steel (Painted)		
SHB18OVL 18 Gauge Stainless Steel (Brushed)		
SHPL18OVL 18 Gauge Stainless Steel (Polished)		
ALHOVL .063" Aluminum (Painted)		

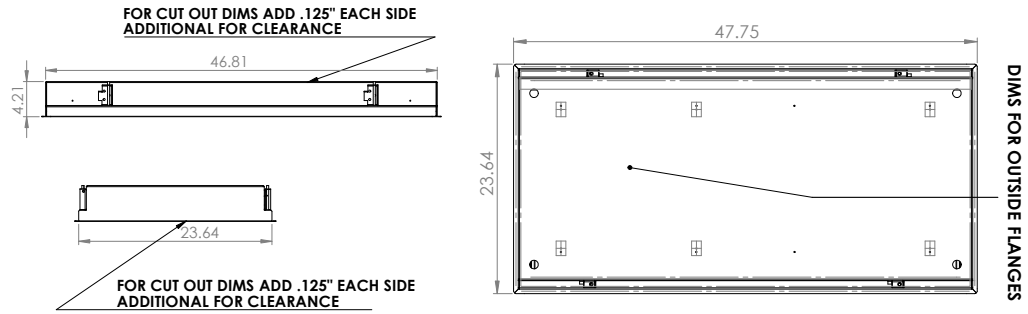
Driver Options	Circuits	Options
BLANK 0-10V Dimming Driver (<i>included standard</i>)	1 1 Circuit	12EBL 12 Watt Emergency Driver
CD5 0-10V 5% to Off Dimming Driver	2 2 Circuits	90 90 CRI
EDN Electronic Driver Non-Dimming		AM Anti-Microbial White Paint
DALI Fifth Light Dali, Dimming		VDO Lutron Vive Integral Fixture Control (RF with Daylight and Occupancy Sensing)
LDE1 Lutron Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology		CPOL Clear .125 Polycarbonate Outer Lens
LDE5 Lutron LDE5 5-Series Ecosystem 5% Dimming		MIL1 MILSTD 461G compliant, 1 circuit ²
		MIL2 461G compliant, 2 circuit ²
		IF Install Frame

²K19RF lens option must be chosen for MILSTD 461G Compliance

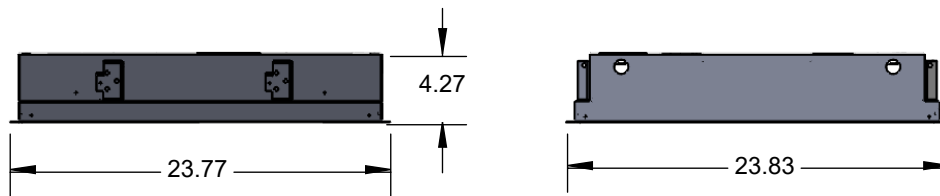


Catalog Number	
Project	
Type	

2x4



2x2



1x4



1x2

