Fail-Safe

DESCRIPTION

Fail-Safe's LED sealed enclosure product is available with overlapping and inset doors. Available in 1 x 1, 1 x 2, 1 x 4, 2 x 2 and 2 x 4 sizes, the CLP Series cleanroom fixtures are Class 100 rated (English 209E), ISO Class 5-8 rated, IP66 compliant, absent of holes for a robust seal from above the ceiling, and NSF rated. Overlapping door compatible with 2" wide ceiling systems, with standard on-center spacing (1 x 4, 2 x 2, 2 x 4).

Catalog #		**Type**
Project		
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Mounting
Recessed grid for 1" or 1 1/2" NEMA Type "G" ceiling systems. Overlapping door compatible with 2" wide ceiling systems, with standard on-center spacing (1 x 4, 2 x 2, 2 x 4). Recessed flange for use with hard-pan ceilings. Optional mounting safety clips (4) available.

Housing
Die-formed, heavy gauge steel, powder coat painted white. Seam-welded construction, absent of holes. Optional stainless steel (Type 304 or 316) or aluminum.

Door
Overlapping door, constructed of one piece die-formed steel, stainless steel (304 standard, 316 optional) or aluminum.

Inset door, constructed of die-formed steel, stainless steel (304 standard, 316 optional), or aluminum. All doors attached to the housing with two stainless steel aircraft cables.

Fasteners
Captive, countersunk stainless steel Philips head screws secure door frame to the housing.

Gasketing
Lens to Door Frame: One piece continuous closed-cell silicone gasket seals lens to door frame.
Door Frame to Housing or Ceiling: One piece continuous closed-cell gasket.
Housing to Grid: Closed-cell silicone gasket.

Lens
Pattern 12 acrylic, 0.125" thick, inverted. Other lenses available, including polycarbonate and glass.

LED
LEDs available in 2000K, 2700K, 3000K, 3500K, 4000K, and 5000K with 85 CRI. Red (630nm) LEDs available. Life is 50,000 hours at 70% lumen maintenance.

Driver
Electronic, standard 0-10V dimming.

Finish
High gloss, electrostatically applied, white powder coat finish, average minimum reflectance 92%.

Compliance/Ratings
Class 100
ISO Class 5-8
IP66
NSF=NSF2 Listed (Non-food, splash zone)

Labels
ETL listed for wet locations under covered ceilings.

CLP

LD4 LED

Sealed/ Cleanroom Vivarium / Red LED's

RECESSED FLANGE
RECESSED GRID
2x4/2x2
1x4/1x2/1x1
Inset or Overlapping Door
Wet Location
IP66 Rated
ISO Class 5, 6, 7, 8
NSF Rated

2' x 2'		
No. of Modules, Level	**Input Watts**	**Delivered Lumens***
2LO	26.2	2552
2STD	36.6	3384
2HI	45.2	4100
3LO	39.3	3179
3STD	54.9	4247
3HI	70.8	5522
4LO	52.4	4889
4STD	73.2	6482
4HI	90.3	7852

2' x 4'		
No. of Modules, Level	**Input Watts**	**Delivered Lumens***
2LO	52.4	5461
2STD	73.2	7240
2HI	90.5	8772
3LO	78.6	6408
3STD	109.8	9140
3HI	141.8	11295
4LO	104.8	10663
4STD	146.4	14138
4HI	181.1	17129

1' x 4'		
No. of Modules, Level	**Input Watts**	**Delivered Lumens***
1LO	26.2	2598
1STD	36.6	3445
1HI	45.3	4173
2LO	52.4	5010
2STD	73.2	6643
2HI	90.2	8048

* Approximate delivered lumens, 4000K.
* Verify with actual photometric test reports.
* A12125 lens.
* DF option decreases delivered lumens by ~12%.

Approximate Color Temperature Multiplier

5000K	1.09
4000K	1.00
3500K	0.97
3000K	0.94
2700K	0.91
2000K	0.68

ORDERING INFORMATION

SAMPLE NUMBER: **CLPF-12-4-ALH-INA-A12125-LD4-2STD-40-UNV-EDC2-AMD** (White only)
CLPG-24-2-ALH-INA-A19156-LD4-4STD-50-UNV-EDC1-EL10W-DF-AMA (White only)
CLPG-24-4-INS-A12125-LD4-3HIR63-UNV-EDC2 (Red only)

Product Family	Width	Length	Housing Material	Door Type	Lens	LEDs	Rows of LEDs	Illumination Level	Color Temp.	Voltage	Driver	No. of Circuits	Options
CLP_						LD4							

Series
CLPF=Recessed [2] Flange
CLPFE=Recessed Flange Extended [2]
CLPG=Recessed Grid (1", 1-1/2", 2" NEMA G) [3,6]
CLPS=Surface [5] (available in 1x4, 2x2, and 2x4)

24=24" Wide
12=12" Wide

1=1' Length
2=2' Length
4=4' Length

Blank=Cold Rolled Steel, Powder Coat Painted White
ALH=Aluminum Housing, Painted Powder Coat White
SHB=Stainless Steel (304) Brushed
SH316B=Stainless Steel (316) Brushed
SHP=Stainless Steel (304) Powder Coat Painted White
SH316P=Stainless Steel (316) Powder Coat Painted White

Inset Die Formed, One Piece
INS=Inset Door, Die-formed Steel, Painted White
INA=Inset Door, Die-formed Aluminum, Painted White
INSSP=Inset Door, Die-formed Stainless Steel, Painted White (Replace P with B for Brushed)
INSS316P=inset Door, Die-formed Stainless Steel (316) Painted White (Replace P with B for Brushed)

Overlapping, One Piece [6]
OLS=Overlapping Door, Die-formed Steel, Painted White
OLA=Overlapping Door, Die-formed Aluminum, Painted White
OLSSP=Overlapping Door, Die-formed Stainless Steel, Painted White - (Replace P with B for Brushed)
OLSS316P=Overlapping Door, Die-formed Stainless Steel (316), Painted White (Replace P with B for Brushed)

A12125=Pattern 12 Acrylic, 0.125" Thick, Inverted
A19156=Pattern 19, 0.156" Thick, Inverted
P12125=Pattern 12 Polycarbonate, 0.125" Thick, Inverted

Other Lenses / thicknesses available, consult factory or the Lens Ordering Guide on web-site

LD4=Linear LED, Version 4.0

1=(1) LED Module in X-section
2=(2) LED Modules in X-section
3=(3) LED Modules in X-section (2' Width Only)
4=(4) LED Modules in X-section (2' Width Only)

STD=Standard
LO=Low
HI=High

20=2000K (White LEDs only)
27=2700K (White LEDs only)
30=3000K (White LEDs only)
35=3500K (White LEDs only)
40=4000K (White LEDs only)
50=5000K (White LEDs only)
R63=Red, 630nm (Red LEDs only)

120=120V
277=277V
UNV=120-277V

EDC_=Electronic Driver, Non-Dimming
EDD_=Electronic Driver, 0-10V Dimming,10%
ED1D_ Electronic Driver, 0-10V Dimming,1%
LUA/ES_=Lutron A-Series, 1% EcoSystem Dimming
LUA/3W_=Lutron A-Series, 1% EcoSystem 3-wire Dimming

1 = 1 Circuit
2 = 2 Circuits
3 = 3 Circuits
4 = 4 Circuits

EL7W=7W EM Pack [4,5]
EL10W=10W EM Pack [4,5]
EL14W=14W EM Pack [4,5]
AMA=Anti-microbial, All Parts (Not avaialable with stainless brushed door or housing)
AMD=Anti-microbial, Door Only
DF=Diffusing Film
MSB4=Mounting Safety Brackets [7] (4) with Hardware

Accessories
MSB4-PK=Mounting Safety Brackets [7] (4) with Hardware

Notes:

1. 3 and 4 Circuit only available with 4' length fixtures.
2. Flange and extended flange ship standard with (4) Swing-out brackets for quick and easy installation.
3. Hard metric fixtures available (600mm x 600mm, 300mm x 1200mm, 600mm x 1200mm). Consult product technical support to verify ceiling compatibility (Main-T height and width, Cross-T height and width, other related specifications).
4. Emergency requires backbox on fixture top, which adds approximately 3" to fixture height.
5. Emergency not available on CLPS (surface mount).
6. Compatible with 2" wide ceiling systems with standard on-center spacing (1 x 4, 2 x 2, 2 x 4).
7. MSB4 for use with grid fixtures only.

Please see below for ordering logic for the application of Red & White Leds in combination

Sample Number: CLPG-24-4-INS-A12125-LD4-4LOR63-UNV-EDC1 (Red only)
Sample Number: CLPG-24-4-INS-A12125-LD4-4STD-40-UNV-EDC1 (White only)
Sample Number: CLPF-24-4-INS-A12125-LD4-2LO30/2LOR63-UNV-EDC2 (White/Red)

* Red & White LEDs (4 modules max in cross-section)

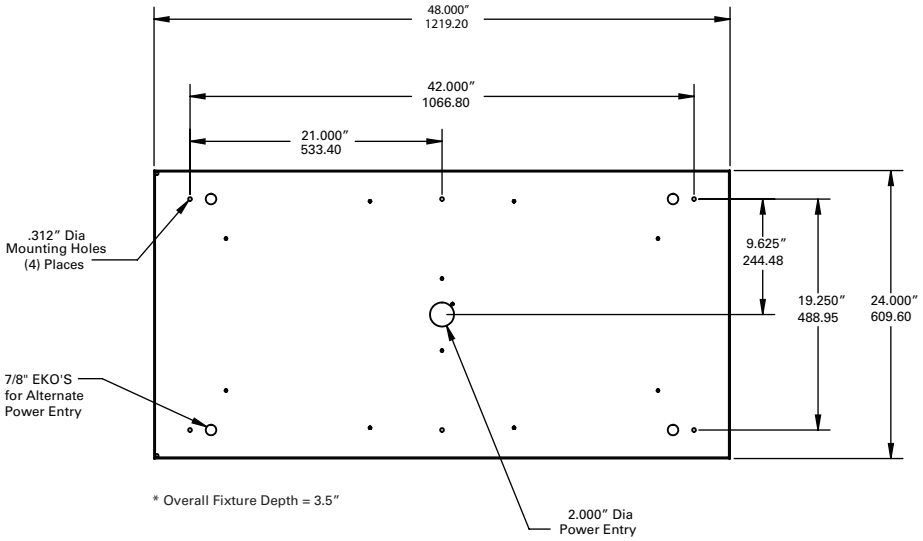
Rows of White	Illumination Level White	Color Temp White	Rows of Red	Illumination Level Red	Color Temp Red
1	STD	30	1	STD	R63
2	LO	35	2	LO	
3	HI	40	3	HI	
4		50	4		

2x2/2x4 LED Placement (Red/White)			
#Total Rows of LEDs	# Rows of White LEDs	# Rows of Red LEDs	Placement of Red & White LEDs
3	2	1	White,Red,White
3	1	2	Red,White,Red
4	3	1	White,White,Red,White
4	2	2	White,Red,Red,White
4	1	3	Red,Red,White,Red

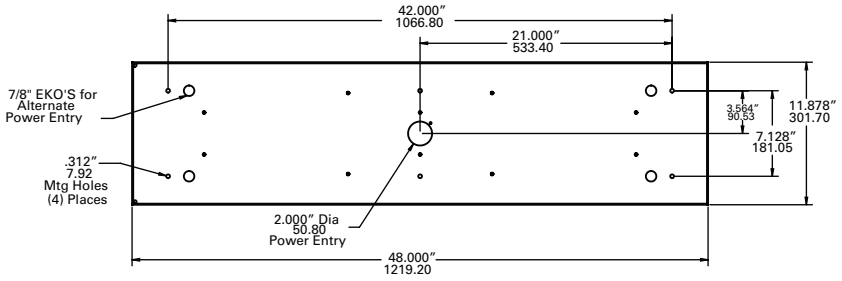
Approximate Lumen Multiplier for Red LED's	
Color	Multiplier from White 4000K
White, 4000K	1.00
Red, 630nm	0.30

Surface

2x4 CLPS Mounting Detail

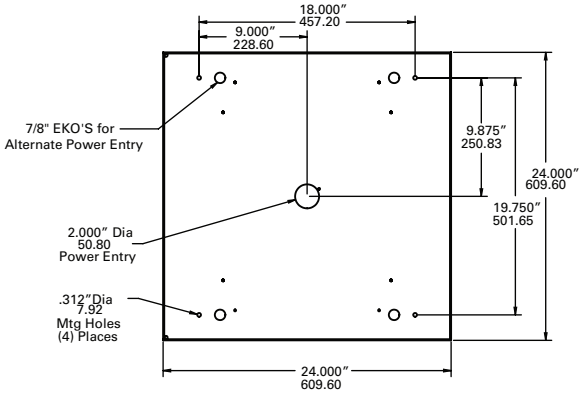


1x4 CLPS Mounting Detail



* Overall Fixture Depth = 3.5″

2x2 CLPS Mounting Detail



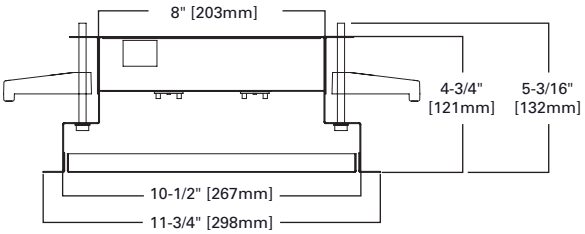
* Overall Fixture Depth = 3.5″

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

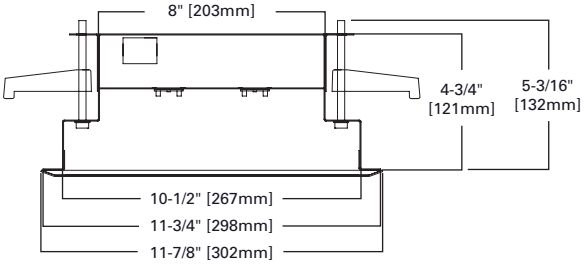
Specifications and
dimensions subject to
change without notice.

Recessed Flange

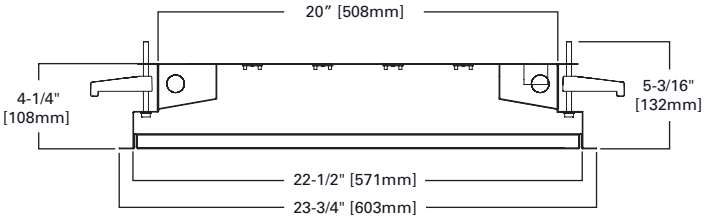
1' Wide, Inset Door



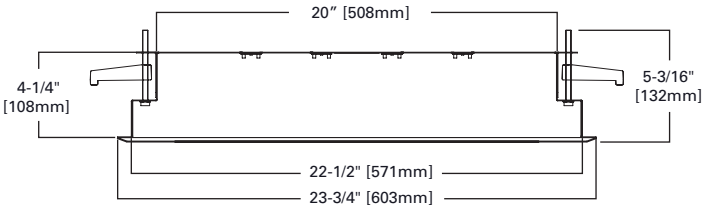
1' Wide, Overlapping Door



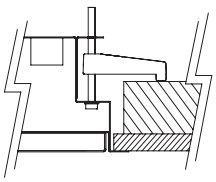
2' Wide, Inset Door



2' Wide, Overlapping Door



Swing-out Bracket - Standard

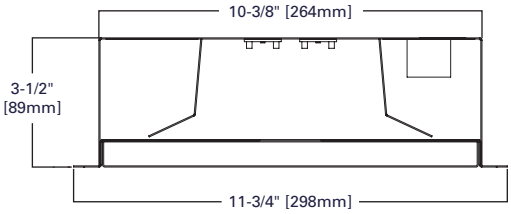


Cut-Out Dimensions

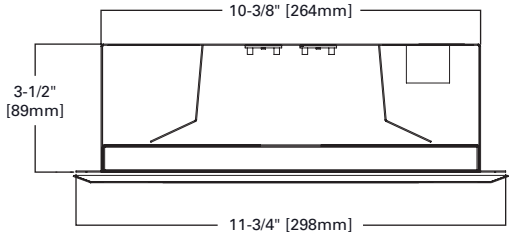
1x4	10-3/4" x 46-3/4"
1x2	10-3/4" x 22-3/4"
1x1	10-3/4" x 10-3/4"
2x4	22-3/4" x 46-3/4"
2x2	22-3/4" x 22-3/4"

Recessed Grid

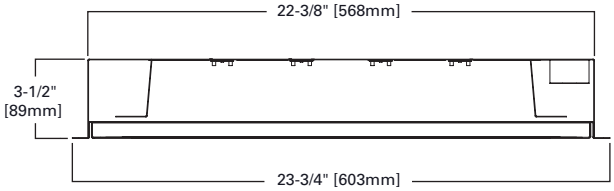
1' Wide, Inset Door



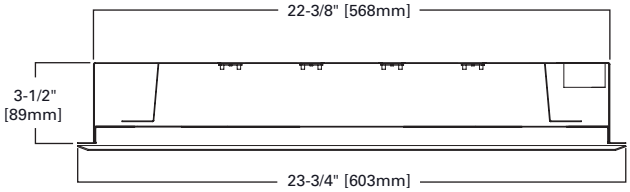
1' Wide, Overlapping Door



2' Wide, Inset Door



2' Wide, Overlapping Door



Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.