

DESCRIPTION

The Fail-Safe FMR combines maximum security construction features with energy saving technology. This recessed luminaire is designed for applications utilizing solid ceiling plaster or drywall construction. Luminaire utilizes a one-piece overlapping door frame, security lensing and tamper-resistant fasteners to maximize impact-resistance and prevent contraband concealment and unauthorized fixture penetration. UL/cUL listed for damp locations. The FMR is ideal for confinement/security applications. Suitable for use in inmate cells, psychiatric wards, secure corridors and general population areas.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Fasteners

Stainless steel tamper-resistant T20 TORX® screws with center pin reject standard. Allen-head screws with center pin reject optional (SF3).

Housing

Die-formed CRS body with welded corners to form a one-piece housing which prevents contraband concealment and unauthorized fixture penetration.

Finish

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

Hinge

Concealed piano hinge optional.

Door

One-piece, CRS door frame (12, 14, 16 or 18 ga.) with die-formed edges and tightly closed corners increases rigidity. Aircraft cable secures door to housing.

Light Mask

Gasketing surrounds door frame and prevents light leaks.

Mounting

Specify Yoke Mounting Frame (YMF) or Swing-Out Brackets (SWBR).

Mounting Yoke Assembly

16 ga., galvanized steel plaster frame assembly (see Accessories).

Lens

Choice of prismatic acrylic, prismatic polycarbonate or prismatic tempered glass on fixture side, clear polycarbonate or clear tempered glass on environmental side.

Lamps

By others.

Lens Retention

Lens secured by thru-studs and vertically adjustable internal CRS hold-downs.

Ballast

Electronic Class P, CBM/ETL ballast.

Labels

UL/cUL listed for damp location. Wet location under covered ceiling optional.



FMR12

1 x 1

1 x 2

1 x 4

Biaxial

Quad

TT

T5

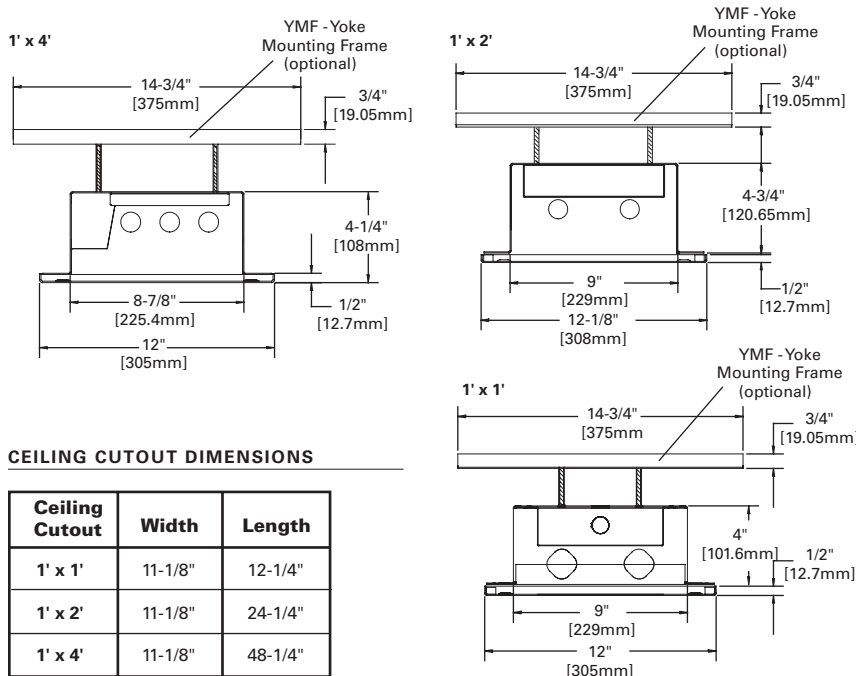
T8

Fluorescent

Confinement/Correctional

RECESSED FLANGE

CROSS-SECTION DIMENSIONS / SHOWN WITH OPTIONAL YOKE MOUNTING FRAME - YMF

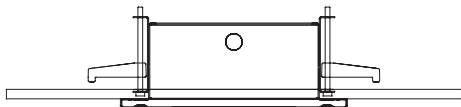


CEILING CUTOUT DIMENSIONS

Ceiling Cutout	Width	Length
1' x 1'	11-1/8"	12-1/4"
1' x 2'	11-1/8"	24-1/4"
1' x 4'	11-1/8"	48-1/4"

OPTIONAL SWING-OUT BRACKET (SWBR)

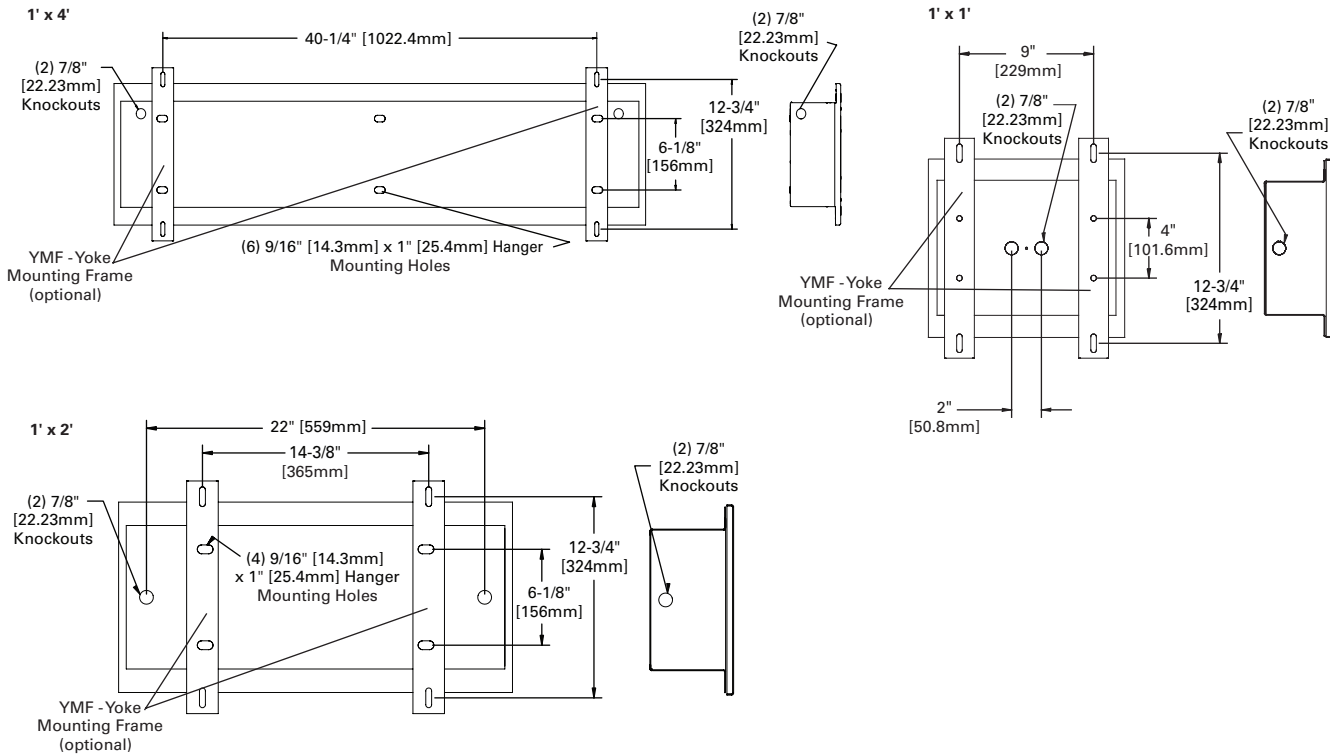
1' x 1', 1' x 2', 1' x 4'



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Electronic Ballast Data
Consult Cooper Lighting Representative

TYPICAL MOUNTING DETAIL / SHOWN WITH OPTIONAL YOKE MOUNTING FRAME - YMF



ORDERING INFORMATION

SAMPLE NUMBER: FMR-D12-332-UNV-80/86-EB81-GLR

Fixture ships with no mounting hardware, unless specified in "mounting options"

Product Family	Door	Fixture Width	Lamp Type	Voltage	Lens Type	Ballast	Options	Accessories (Order separately)
FMR		12			/			
FMR=Maximum Security Recessed Flange ⁸								
S = 12 ga. (Ultimax) X = 14 ga. (Maximum) D = 16 ga. (Medium) N = 18 ga. (Minimum)								
12 = 12" Wide								
1' Nom. Length Compact Fluorescent ⁹ 113=(1) 13W Lamp 126=(1) 26W Lamp 213=(2) 13W Lamps 226=(2) 26W Lamps 313=(3) 13W Lamps ⁵ 2' Nom. Length T5 Fluorescent 114=(1) 14W Lamp 214=(2) 14W Lamps 314=(3) 14W Lamps 124=(1) 24W Lamp 224=(2) 24W Lamps 324=(3) 24W Lamps T8 Fluorescent 117=(1) 17W Lamp 217=(2) 17W Lamps 317=(3) 17W Lamps Biaxial Fluorescent 140BX=(1) 40W Lamp 240BX=(2) 40W Lamps		4' Nom. Length T5 Fluorescent 128=(1) 28W Lamp 228=(2) 28W Lamps 328=(3) 28W Lamps ³ 154=(1) 54W Lamp 254=(2) 54W Lamps 354=(3) 54W Lamps ⁴ T8 Fluorescent 132=(1) 32W Lamp 232=(2) 32W Lamps 332=(3) 32W Lamps	120 =120V 277 =277V UNV =120V-277V 347 =347V Inner Layer (optional) ^{2,7} / 90 =0.005 UV Absorbing Overlay Fixture Side 80 =0.125 Prismatic Acrylic 81 =0.156 Prismatic Polycarbonate 82 =0.187 Prismatic Polycarbonate 93 =0.156 Prismatic Tempered Glass Electronic Ballasts ¹ EB81 =One Ballast for use with T8 Lamp EB82 =Two Ballasts for use with T8 Lamp EBT1 =One Ballast for use with Compact Lamp EBT2 =Two Ballasts for use with Compact Lamp EBX1 =One Ballast for use with Biaxial Lamp EBX2 =Two Ballasts for use with Biaxial Lamp EB51 =One Ballast for use with T5 Lamp EB52 =Two Ballasts for use with T5 Lamp Environmental Side ^{2,7} 84 =0.125 Clear Polycarbonate 85 =0.187 Clear Polycarbonate 86 =0.250 Clear Polycarbonate 87 =0.375 Clear Polycarbonate 88 =0.500 Clear Polycarbonate 94 =0.187 Clear Tempered Glass 96 =0.250 Clear Tempered Glass 97 =0.375 Clear Tempered Glass 98 =0.500 Clear Tempered Glass	EL4 =EM Pack, T8, Biax EL5 =EM Pack, T5, T5HO FNL =Fluorescent Night Light - 5, 7, 9 Watt ¹⁰ FNL13 =Fluorescent Night Light - 13 Watt ¹⁰ LNL =LED Night Light GLR =Fuse and Holder 14G =14-Gauge Housing CPHF =Concealed piano hinge, full length RGT =Removable Gear Tray WL = Wet Location Mounting Options SWBR =Swing-out brackets (4) YMF =Yoke Mounting Frame (2) ⁶ Stainless Steel Door SSN =Natural Brushed Finish SSP =Polyester Powder Coat Finish Fasteners SF3 =Allen-Head (center pin reject) 9306 =Allen-Head Wrench VRSD =T20 Center Pin Tamper- proof TORX®-Head screwdriver PF12-1FT = Plaster Frame and Yoke Assembly PF12-2FT = Plaster Frame and Yoke Assembly PF12-4FT = Plaster Frame and Yoke Assembly				

Notes:

- For specific electronic ballast, specify brand and catalog number.
- See Lens Ordering Guide for other available lens choices.
- Not available with EM ballast.
- EBP available with single 3-lamp ballast.
- Not compatible with FNL.
- Yoke Mounting Frame consists of (2) C-channel frames 14-3/4" length, with (4) 3-1/2" bolts and nuts to attach the YMF to the fixture housing. Installer typically attaches the YMFs to a rigid structure above, using the (2) out-board holes in the YMF.
- See Lens Ordering Guide (on website) for additional lens choices.
- Fixture does not include mounting hardware. SWBR, YMF options, or PF accessory required.
- Compact fluorescent – "twin-tube" lamps only.
- Voltage specific.