

## DESCRIPTION

The Fail-Safe FMC combines maximum security construction features with energy saving technology. This corner mounted luminaire utilizes a one-piece housing, security lensing and tamper resistant fasteners to maximize impact resistance and prevent unauthorized fixture penetration. UL/cUL listed for wet locations. The FMC is ideal for confinement/security applications. Suitable for use in inmate cells, psychiatric wards, secure corridors and general population areas.

| Catalog #   | Type |
|-------------|------|
|             |      |
| Project     |      |
|             |      |
| Comments    |      |
|             |      |
| Prepared by |      |
|             |      |

## SPECIFICATION FEATURES

### Housing

Die-formed CRS body with continuous welded and ground ends to form a one-piece, seamless housing which maximizes impact resistance and prevents unauthorized fixture penetration.

### Finish

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

### Fasteners

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

### Hinge

Continuous, concealed piano hinge (1/4" dia. knuckle) with welded pin end to prevent removal.

### Door

One-piece CRS door frame with die-formed edges and tightly closed corners increases rigidity.

### 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

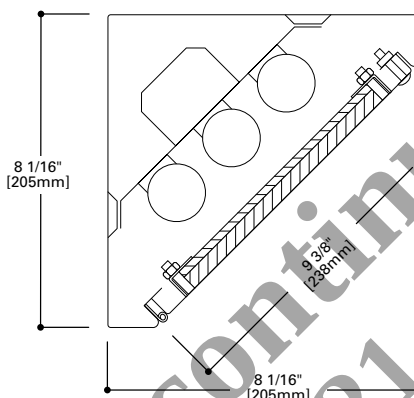
Lens secured by thru-studs and vertically adjustable internal CRS hold-downs.

### Ballast

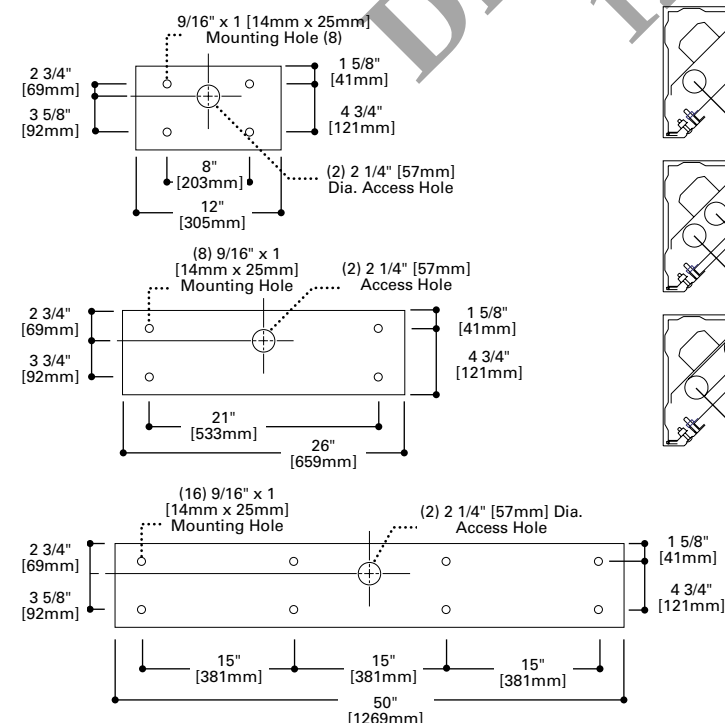
Electronic Class P, CBM/ETL ballast.

### Labels

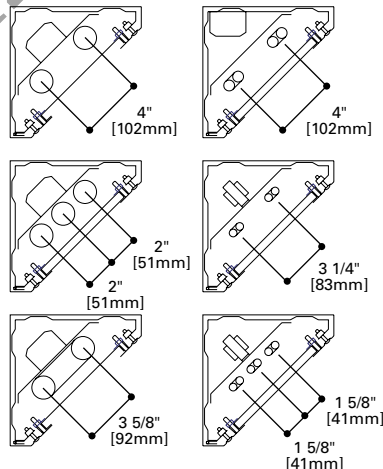
UL/cUL listed for wet locations under covered ceiling.



## MOUNTING DIMENSIONS



## LAMP CONFIGURATIONS



## FMC

T5  
T8  
Biaxial  
Compact Fluorescent  
Fluorescent  
Confinement/Correctional

Maximum Security  
CORNER MOUNT

## ENERGY DATA

Input Watts:

### STD Ballasts & STD Lamps

- (1) 13W Twin Tube: 17W
- (2) 13W Twin Tube: 34W
- (3) 13W Twin Tube: 51W
- (1) 40W Biaxial Fluorescent: 45W
- (2) 40W Biaxial Fluorescents: 82W

### ES Ballasts & STD Lamps

- (1) 17W T8 Fluorescent: 23W
- (2) 17W T8 Fluorescents: 45W
- (3) 17W T8 Fluorescents: 68W
- (1) 32W T8 Fluorescent: 37W
- (2) 32W T8 Fluorescents: 71W
- (3) 32W T8 Fluorescents: 108W

### Electronic Ballast Data

Consult Cooper Lighting Solutions Representative.

TORX® is a registered trademark of Camcar Division of Textron Inc.

## ORDERING INFORMATION

SAMPLE NUMBER: FMC-D-332-277-80/86-EB81-GLR

| Product Family                                                                                                                                                  | Lamp Type                                                     | Voltage                                                                                                                                                                                                                                                             | Lens Type <sup>5</sup>                                                                                                                                                                                                                                                                                                                               | Ballast                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FMC</b>                                                                                                                                                      |                                                               |                                                                                                                                                                                                                                                                     | /                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Corner Luminaires</b><br><b>FMC-S</b> =12 ga. (Ultimax)<br><b>FMC-X</b> =14 ga. (Maximum)<br><b>FMC-D</b> =16 ga. (Medium)<br><b>FMC-N</b> =18 ga. (Minimum) | <b>120</b> =120V<br><b>277</b> =277V<br><b>UNV</b> =120V-277V | <b>Inner Layer (optional)</b><br><b>90</b> =.005 UV Absorbing Overlay<br><b>Fixture Side</b><br><b>80</b> =.125 Prismatic Acrylic<br><b>81</b> =.156 Prismatic Polycarbonate<br><b>82</b> =.187 Prismatic Polycarbonate<br><b>93</b> =.156 Prismatic Tempered Glass | <b>Environmental Side</b><br><b>84</b> =.125 Clear Polycarbonate<br><b>85</b> =.187 Clear Polycarbonate<br><b>86</b> =.250 Clear Polycarbonate<br><b>87</b> =.375 Clear Polycarbonate<br><b>88</b> =.500 Clear Polycarbonate<br><b>94</b> =.187 Clear Tempered Glass<br><b>96</b> =.250 Clear Tempered Glass<br><b>97</b> =.375 Clear Tempered Glass | <b>Electronic Ballasts<sup>1</sup></b><br><b>EB81</b> =One Ballast for use with T8 Lamp<br><b>EB82</b> =Two Ballasts for use with T8 Lamp<br><b>EBT1</b> =One Ballast for use with Compact Lamp<br><b>EBT2</b> =Two Ballasts for use with Compact Lamp<br><b>EBX1</b> =One Ballast for use with Biaxial Lamp<br><b>EBX2</b> =Two Ballasts for use with Biaxial Lamp<br><b>EB51</b> =One Ballast for use with T5 Lamp<br><b>EB52</b> =Two Ballasts for use with T5 Lamp | <b>EL4</b> =EM Pack, T8, Biax, (specify 120 or 277)<br><b>EL5</b> =EM Pack, T5, T5HO, (specify 120 or 277)<br><b>FNL</b> =Fluorescent Night Light (5, 7, 9W)<br><b>GLR</b> =Fuse and Holder<br><b>SPK</b> =Speaker Housing Compartment (extends housing)<br><b>On/Off Switches</b><br><b>SPS</b> =Security Push Button <sup>3</sup><br><b>TCS</b> =Touch Control System <sup>2</sup><br><b>Stainless Steel Fixture</b><br><b>SSN</b> =Natural Brushed Finish<br><b>SSP</b> =Polyester Powder Coat Finish<br><b>Fasteners</b><br><b>SF3</b> =Allen-Head (center pin reject) |

**1' Nom. Length**  
**Compact Fluorescent**  
**113**=(1) 13W Lamp  
**213**=(2) 13W Lamps  
**313**=(3) 13W Lamps  
**126**=(1) 26W Lamp  
**226**=(2) 26W Lamps  
**2' Nom. Length<sup>4</sup>**  
**T5 Fluorescent**  
**114**=(1) 14W Lamp  
**214**=(2) 14W Lamps  
**314**=(3) 14W Lamps  
**124**=(1) 24W Lamp  
**224**=(2) 24W Lamps  
**T8 Fluorescent**  
**117**=(1) 17W Lamp  
**217**=(2) 17W Lamps  
**317**=(3) 17W Lamps

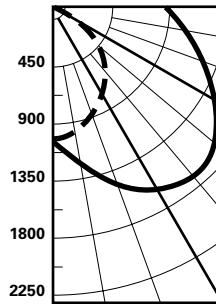
**Biaxial Fluorescent**  
**140BX**=(1) 40W Lamp  
**240BX**=(2) 40W Lamps  
**4' Nom. Length**  
**T5 Fluorescent**  
**128**=(1) 28W Lamp  
**228**=(2) 28W Lamps  
**328**=(3) 28W Lamps  
**154**=(1) 54W Lamp  
**254**=(2) 54W Lamps  
**T8 Fluorescent**  
**132**=(1) 32W Lamp  
**232**=(2) 32W Lamps  
**332**=(3) 32W Lamps

**Notes:**  
<sup>1</sup> For specific electronic ballast specify brand and catalog number.  
<sup>2</sup> For additional information about the TCS option see Fail-Safe spec sheet for TCS Touch Control System.  
<sup>3</sup> 120V only.  
<sup>4</sup> Not available with (2) T5 or (2) T5HO ballast and EM Pack.  
<sup>5</sup> See Lens Ordering Guide (on website) for additional lens choices.

**Accessories (Order separately)**  
**9306**=Allen-Head Wrench  
**VRSD**=T20 Center Pin Tamper-proof TORX®-Head screwdriver

## PHOTOMETRICS

## Candlepower Distribution



Test No. 6026.0  
**FMC-240-80**  
 Lamp=F40T12RS/WW  
 No. Lamps=2  
 Lumens=3200  
 Efficiency=60.0%

## Candlepower

| Deg. | I   | II   |
|------|-----|------|
| 0    | 970 | 970  |
| 5    | 954 | 1126 |
| 15   | 942 | 1368 |
| 25   | 796 | 1533 |
| 35   | 674 | 1733 |
| 45   | 442 | 1721 |
| 55   | 265 | 1555 |
| 65   | 200 | 1478 |
| 75   | 149 | 1330 |
| 85   | 65  | 1115 |
| 90   | 13  | 954  |

## Zonal Lumen Summary

| Zone  | Lumens | %Lamp | %Luminaire |
|-------|--------|-------|------------|
| 0-20  | 351    | 5.5   | 9.1        |
| 0-40  | 1231   | 19.2  | 32.1       |
| 0-60  | 2266   | 35.4  | 59.0       |
| 0-90  | 3477   | 54.3  | 90.6       |
| 0-120 | 3821   | 59.7  | 99.6       |
| 0-180 | 3838   | 60.0  | 100.0      |

## Coefficient of Utilization

| rc  | 80% |    |    |    | 70% |    |    |    | 50% |    |    |    | 30% |    |    |    | 10% |    |    |    | 0% |
|-----|-----|----|----|----|-----|----|----|----|-----|----|----|----|-----|----|----|----|-----|----|----|----|----|
| rw  | 70  | 50 | 30 | 10 | 50  | 30 | 10 | 50 | 10  | 50 | 10 | 50 | 10  | 50 | 10 | 50 | 10  | 50 | 10 | 50 | 0  |
| RCR |     |    |    |    |     |    |    |    |     |    |    |    |     |    |    |    |     |    |    |    |    |
| 0   | 70  | 70 | 70 | 70 | 68  | 68 | 68 | 63 | 63  | 60 | 60 | 56 | 56  | 54 |    |    |     |    |    |    |    |
| 1   | 62  | 59 | 56 | 53 | 57  | 54 | 52 | 53 | 49  | 50 | 46 | 47 | 44  | 42 |    |    |     |    |    |    |    |
| 2   | 56  | 51 | 46 | 42 | 49  | 45 | 41 | 46 | 39  | 43 | 37 | 40 | 36  | 34 |    |    |     |    |    |    |    |
| 3   | 51  | 44 | 39 | 34 | 43  | 38 | 34 | 40 | 32  | 38 | 31 | 35 | 30  | 28 |    |    |     |    |    |    |    |
| 4   | 47  | 39 | 33 | 29 | 38  | 32 | 28 | 35 | 27  | 33 | 26 | 31 | 25  | 24 |    |    |     |    |    |    |    |
| 5   | 42  | 34 | 28 | 24 | 33  | 28 | 24 | 31 | 23  | 29 | 22 | 28 | 21  | 20 |    |    |     |    |    |    |    |
| 6   | 39  | 30 | 25 | 21 | 30  | 24 | 20 | 28 | 20  | 26 | 19 | 25 | 18  | 17 |    |    |     |    |    |    |    |
| 7   | 36  | 27 | 22 | 18 | 26  | 21 | 18 | 25 | 17  | 24 | 17 | 22 | 16  | 15 |    |    |     |    |    |    |    |
| 8   | 33  | 24 | 19 | 15 | 24  | 19 | 15 | 22 | 15  | 21 | 14 | 20 | 14  | 13 |    |    |     |    |    |    |    |
| 9   | 30  | 22 | 17 | 13 | 21  | 16 | 13 | 20 | 13  | 19 | 12 | 18 | 12  | 11 |    |    |     |    |    |    |    |
| 10  | 28  | 20 | 15 | 12 | 19  | 15 | 12 | 18 | 11  | 17 | 11 | 17 | 11  | 10 |    |    |     |    |    |    |    |

rc=Ceiling reflectance, rw=W all reflectance, RCR=Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.