

LED lighting for hazardous rated areas

CROUSE-HINDS  
SERIES

# Champ FMVA

**LED FLOODLIGHTING** for hazardous areas



**Safe. Reliable. Efficient.**  
**9,000 to 15,000 lumens**

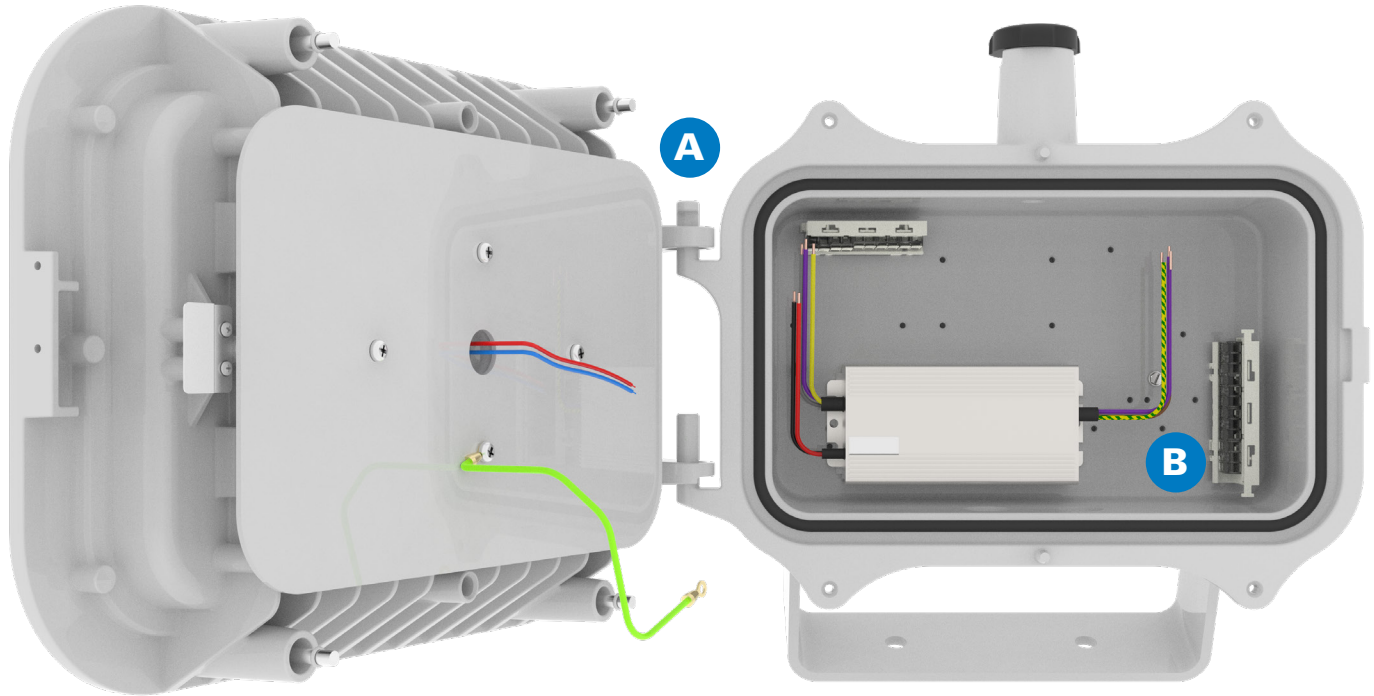


*Powering Business Worldwide*

# Design features

Our Champ LED floodlight is a field-proven design that helps ensure safety, reliability and performance in harsh and hazardous rated areas. Champ products are engineered to deliver more operational value and better total cost of ownership.

## INSTALLATION EASE

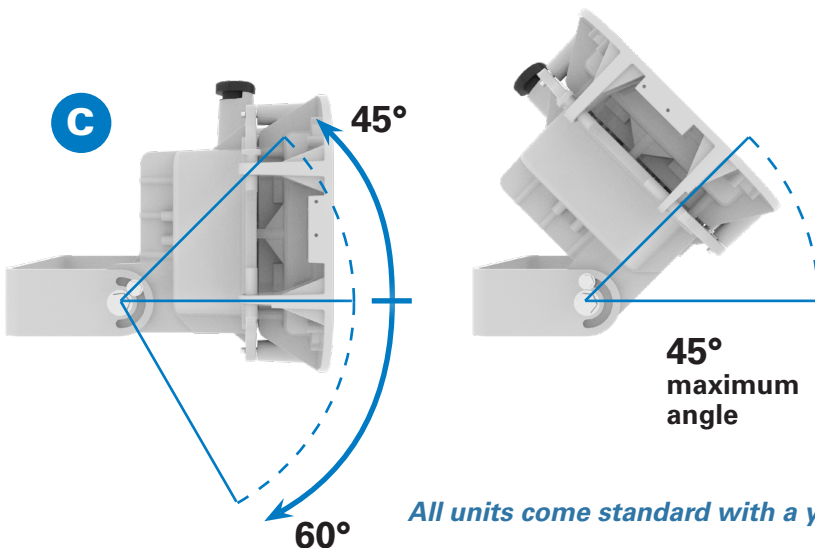
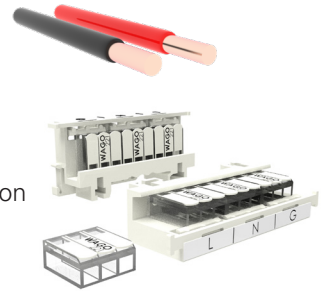


### A Light weight & serviceable

- Driver and light engine subassembly are field replaceable for extended life even beyond the warranty
- Removable cover for LED engine and hinged driver compartment enables faster installation, access to wiring and field maintenance
- 22% weight reduction from previous generation Champ floodlight models

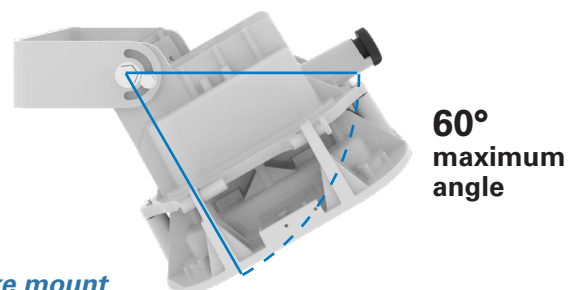
### B Now supports up to 10 AWG wire for easier, less costly retrofits!

- Customers with 10 AWG wire already running through their facility from older, higher power HID fixtures can reuse the same wiring
- Plug and play wiring helps speed installation



### C Versatile mounting options

- Yoke mount and accessories help ensure the fixtures are installed in the correct location to properly light your facility

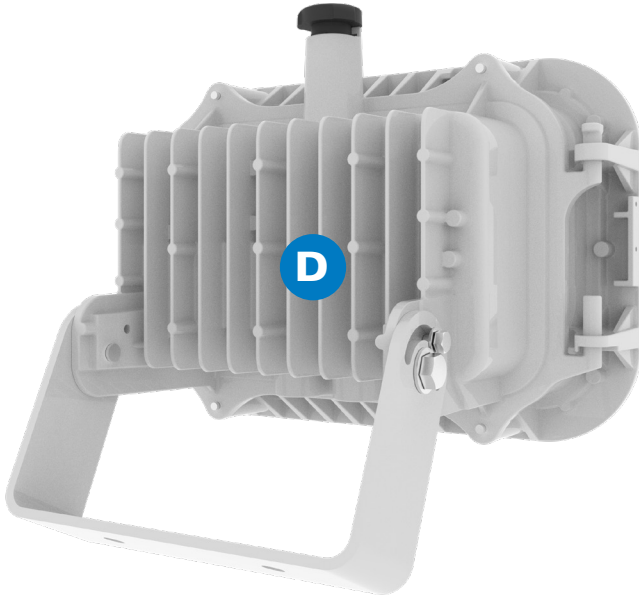


*All units come standard with a yoke mount*

## RELIABLE PERFORMANCE

### D Thermal management

- Heat fins help ensure proper air flow and facilitate dust-shedding for effective heat dissipation and thermal management of LED engine and driver



### E Performance in extreme environments

- Operating ambient -40°C to 65°C
- Type 4X, IP66/IP67
- 6kV surge protection
- Corrosion resistant aluminum housing with Corro-free™ epoxy powder coating
- Vibration tested in accordance with Section 33 of UL844
- Impact tested in accordance with IEC/EN/UL/CSA 60079-0 Section 26.4.2



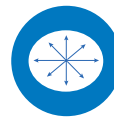
## OPTIMIZED LIGHT & QUALITY

### F Custom optics & colors

- Directs light where you need it, helping eliminate gaps and dark spots.
- Can potentially reduce the number of light fixtures required in your application
- 2200K–DEEP WARM, 3000K–WARM, 4000K–NEUTRAL and 5000K–COOL color options available



**NEMA 4x4**  
Narrow uniform  
pattern for use at  
larger distances

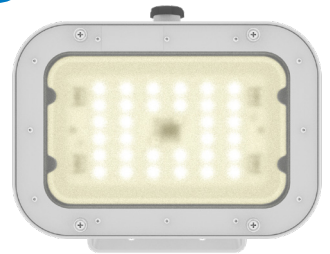


**NEMA 7X6**  
Wide flood  
distribution provides  
a large and uniform  
light pattern

**F**



**5000K – COOL**  
Crisp, bright white  
with a blue hue



**3000K – WARM**  
Soft, warm white  
with a yellow hue

### G Multiple lens & epoxy powder coat options

- Clear glass lens (standard)
- Diffused glass and clear polycarbonate lenses optional
- Corro-free epoxy powder coat available in gray

**G**



### H Visor option available for dark sky readiness

**H**



# Specifications

## Applications:

- For general area illumination of locations with mounting heights from 15 to 30 feet
- Locations requiring continuous and consistent light levels where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- IP66/IP67, Type 4X, marine, wet locations and hose-down environments
- Oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels



## NEC and CEC:

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2, IIC
- Class II, Division 1 Groups E, F and G
- Class II, Zone 21
- Marine and wet locations, Type 4X, IP66/67
- Class I, Zone 2, AEx ec IIC T\* Gc, Class I Zone 2, Ex ec IIC T\* Gc X Tamb -40°C - +40°C , +55°C, +65°C
- Class II Zone 21, AEx tb IIIC T\*\*°C Db; Class II Zone 21, Ex tb IIIC T\*\*°C Db X Tamb -40°C - +40°C , +55°C, +65°C

## IECEX & ATEX‡:

- IECEX ETL 25.0055X
- ETL25ATEX0623X
- ETL25ATEX0624X
- II 3 G Ex ec IIC T\* Gc Tamb -40° - +40°C , +55°C, +65°C
- Ex ec IIC T\* Gc Tamb -40°C - +40°C , +55°C, +65°C
- II 2 D Ex tb IIIC T\*\*°C Db Tamb -40°C - +40°C , +55°C, +65°C
- Ex tb IIIC T\*\*°C Db Tamb -40°C - +40°C , +55°C, +65°C
- 2903
- IP66/67

‡UNV3 models are suitable for Class and Division applications only

\*Please see page 7 for applicable T-codes.

## UL standards:

- UL 844 Hazardous (Classified), UL1598 Luminaires, UL1598A Marine, UL8750, UL50, UL50E
- UL 60079-0
- UL 60079-7
- UL 60079-31

## IEC/EN standards‡:

- IEC 60079-0
- IEC 60079-7
- IEC 60079-31
- EN 60079-0
- EN 60079-7
- EN 60079-31
- IEC 60598-1/EN60598-1
- IEC 60598-2/EN60598-2

## CSA standards:

- CSA C22.2 NO. 137 – The Standard for Electric Luminaires for Use in Hazardous Locations
- CSA C22.2 NO. 250.0 – The Standard for Luminaires
- CSA C22.2 NO. 250.13
- CSA C22.2 No. 60079-0
- CSA C22.2 No. 60079-7
- CSA C22.2 No. 60079-31
- CSA C22.2 No. 94.1
- CSA C22.2 No. 94.2

## FCC:

- CAN ICES-005 (A) / NMB-005 (A)

## Electrical ratings:

| Model               | Weight lbs. (kg.) | Nominal lumens | Efficacy† lm/W | Wattage | Voltage               | Amps        | Power Factor | THD   | Surge protection |
|---------------------|-------------------|----------------|----------------|---------|-----------------------|-------------|--------------|-------|------------------|
| <b>FMVA-9-UNV1</b>  | 24.92 (11.30)     | 9,261          | 162            | 58.12   | 100-277 VAC, 50/60 Hz | 0.59 - 0.22 | 0.90         | ≤ 20% | 6kV              |
| <b>FMVA-11-UNV1</b> | 24.92 (11.30)     | 11,602         | 158            | 77.35   | 100-277 VAC, 50/60 Hz | 0.79 - 0.28 | 0.90         | ≤ 20% | 6kV              |
| <b>FMVA-13-UNV1</b> | 24.92 (11.30)     | 13,581         | 154            | 89.60   | 100-277 VAC, 50/60 Hz | 0.91 - 0.32 | 0.90         | ≤ 20% | 6kV              |
| <b>FMVA-15-UNV1</b> | 24.92 (11.30)     | 15,845         | 154            | 106.78  | 100-277 VAC, 50/60 Hz | 1.07 - 0.38 | 0.90         | ≤ 20% | 6kV              |
| <b>FMVA-9-UNV3</b>  | 24.95 (11.32)     | 9,261          | 162            | 58.34   | 347-480 VAC, 50/60 Hz | 0.17 - 0.12 | 0.90         | ≤ 20% | 6kV              |
| <b>FMVA-11-UNV3</b> | 24.95 (11.32)     | 11,602         | 158            | 75.01   | 347-480 VAC, 50/60 Hz | 0.22 - 0.16 | 0.90         | ≤ 20% | 6kV              |
| <b>FMVA-13-UNV3</b> | 24.95 (11.32)     | 13,581         | 154            | 90.38   | 347-480 VAC, 50/60 Hz | 0.26 - 0.19 | 0.90         | ≤ 20% | 6kV              |
| <b>FMVA-15-UNV3</b> | 24.95 (11.32)     | 15,845         | 154            | 105.38  | 347-480 VAC, 50/60 Hz | 0.30 - 0.22 | 0.90         | ≤ 20% | 6kV              |

†Consult IES files for exact performance data.

### LED system:

- High intensity discrete power emitters
- Standard: cool white (5000K, 70 CRI);
- Available options: deep warm (2200K, 70 CRI), warm white (3000K, 80 CRI) or neutral white (4000K, 80 CRI)
- Dimmable driver, 0-10v
- NEMA 7x6 or 4x4 optical patterns available
- Rated life of 60,000 hours continuous operation at 55°C operating ambient temperature
- 5 year fixture warranty §

§Refer to [terms & conditions](#) on Eaton.com for Crouse-Hinds series solutions.

### Standard materials:

- Lamp housing - die cast aluminum with Corro-free™ epoxy powder coat
- Lens - heat and impact-resistant glass or polycarbonate
- Gaskets - silicone
- External hardware - 316 stainless steel
- Factory-sealed, no external seals required

## Ordering information

Champ FMVA LED, 9,000 lumens, 3000K warm white, yoke mount, diffused glass lens, visor, 100-277 VAC driver, gray epoxy powder coat paint

Part number example: **FMVA-9-W-76-M20-DG-V-UNV1-M2**

| Light source/intensity |                               | Beam pattern                              |                     | Entries      |                                                 | Voltage     |                       | Epoxy powder coat |      |
|------------------------|-------------------------------|-------------------------------------------|---------------------|--------------|-------------------------------------------------|-------------|-----------------------|-------------------|------|
| <b>9</b>               | 9,261 nominal lumens          | <b>76</b>                                 | NEMA 7x6            | <b>BLANK</b> | 3/4" NPT                                        | <b>UNV1</b> | 100-277 VAC, 50/60 Hz | <b>BLANK</b>      | Gray |
| <b>11</b>              | 11,602 nominal lumens         | <b>44††</b>                               | NEMA 4x4            | <b>M20</b>   | 20mm                                            | <b>UNV3</b> | 347-480 VAC, 50/60 Hz |                   |      |
| <b>13</b>              | 13,581 nominal lumens         | ††Consult customer service for lead time. |                     | <b>M25</b>   | 25mm                                            |             |                       |                   |      |
| <b>15</b>              | 15,845 nominal lumens         |                                           |                     |              |                                                 |             |                       |                   |      |
| Color temperature      |                               | Lens material                             |                     | Accessories  |                                                 |             |                       |                   |      |
| <b>BLANK</b>           | 5000K, 70 CRI (cool white)    | <b>BLANK</b>                              | Clear glass         | <b>Blank</b> | No accessories                                  |             |                       |                   |      |
| <b>N††</b>             | 4000K, 80 CRI (neutral white) | <b>DG</b>                                 | Diffused glass      | <b>G</b>     | Bolt-on wireguard (P63)                         |             |                       |                   |      |
| <b>W</b>               | 3000K, 80 CRI (warm white)    | <b>PC††</b>                               | Clear polycarbonate | <b>V</b>     | Standard visor (DSV5)                           |             |                       |                   |      |
| <b>22††</b>            | 2200K, 70 CRI (deep warm)     | ††Consult customer service for lead time. |                     | <b>GV</b>    | Bolt-on wireguard (P63) & standard visor (DSV5) |             |                       |                   |      |

††Consult customer service for lead time.

Replacement light engine ordering information: **FMVA-W-76-DG-V-BZ-ML-LED-KIT#**

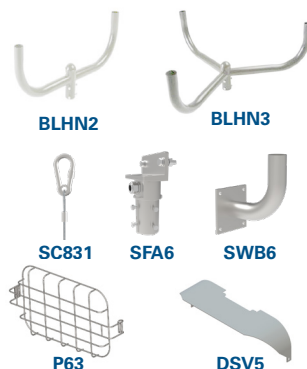
| Color temperature |                               | Beam pattern                              |          | Lens material                             |                     | Accessories  |                                                 |
|-------------------|-------------------------------|-------------------------------------------|----------|-------------------------------------------|---------------------|--------------|-------------------------------------------------|
| <b>BLANK</b>      | 5000K, 70 CRI (cool white)    | <b>76</b>                                 | NEMA 7x6 | <b>BLANK</b>                              | Clear glass         | <b>Blank</b> | No accessories                                  |
| <b>N††</b>        | 4000K, 80 CRI (neutral white) | <b>44††</b>                               | NEMA 4x4 | <b>DG</b>                                 | Diffused glass      | <b>G</b>     | Bolt-on wireguard (P63)                         |
| <b>W</b>          | 3000K, 80 CRI (warm white)    | ††Consult customer service for lead time. |          | <b>PC††</b>                               | Clear polycarbonate | <b>V</b>     | Standard visor (DSV5)                           |
| <b>22††</b>       | 2200K, 70 CRI (deep warm)     |                                           |          | ††Consult customer service for lead time. |                     | <b>GV</b>    | Bolt-on wireguard (P63) & standard visor (DSV5) |

††Consult customer service for lead time.

# The model information shown on the kit nameplate takes precedence over the details on the luminaire nameplate regarding LED subassembly features such as Lens type, secondary optics, CCT, and guard/visor. LED light engine kits shall be used with ETL (Intertek) listed Crouse-Hinds hazardous locations luminaires, catalog numbers beginning with FMVA and must end with the M2 suffix.

### Accessories (ordered separately)

|              |                                |
|--------------|--------------------------------|
| <b>BLHN2</b> | Bull horn, 2 tenon, gray       |
| <b>BLHN3</b> | Bull horn, 3 tenon, gray       |
| <b>P63</b>   | Bolt-on wireguard              |
| <b>DSV5</b>  | Standard visor                 |
| <b>SC831</b> | Safety cable                   |
| <b>SFA6</b>  | Slip fitter                    |
| <b>SWB6</b>  | Slip fitter wall mount adapter |

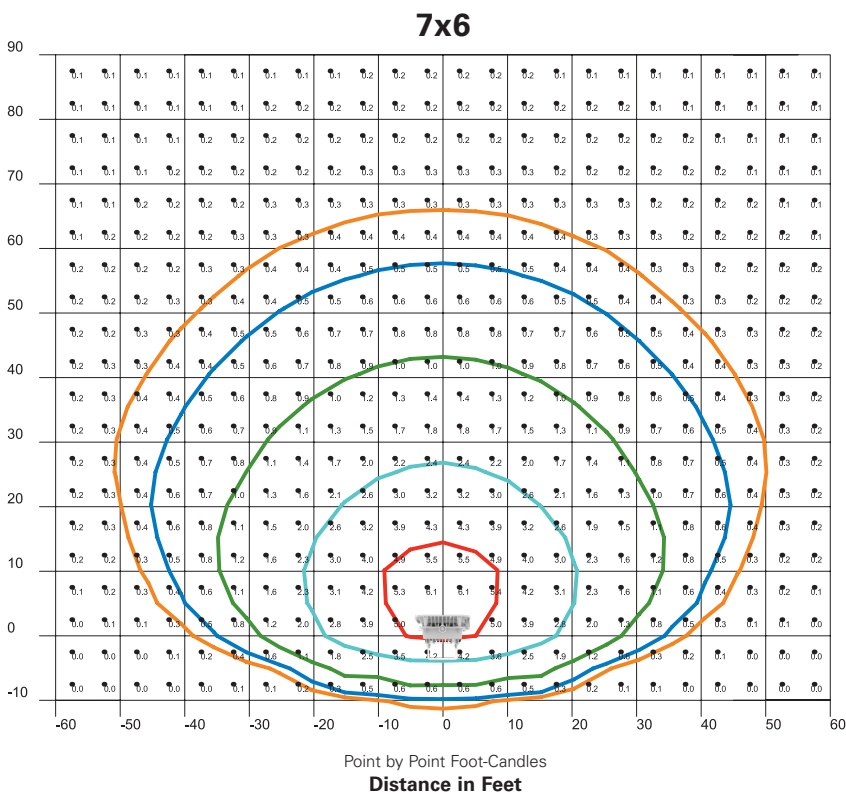


### Replacement driver kits (ordered separately)

|                                   |                                            |
|-----------------------------------|--------------------------------------------|
| <b>FMVA-9-UNV1-M2-DRIVER KIT</b>  | UNV1 M2 replacement driver kit for FMVA-9  |
| <b>FMVA-11-UNV1-M2-DRIVER KIT</b> | UNV1 M2 replacement driver kit for FMVA-11 |
| <b>FMVA-13-UNV1-M2-DRIVER KIT</b> | UNV1 M2 replacement driver kit for FMVA-13 |
| <b>FMVA-15-UNV1-M2-DRIVER KIT</b> | UNV1 M2 replacement driver kit for FMVA-15 |
| <b>FMVA-9-UNV3-M2-DRIVER KIT</b>  | UNV3 M2 replacement driver kit for FMVA-9  |
| <b>FMVA-11-UNV3-M2-DRIVER KIT</b> | UNV3 M2 replacement driver kit for FMVA-11 |
| <b>FMVA-13-UNV3-M2-DRIVER KIT</b> | UNV3 M2 replacement driver kit for FMVA-13 |
| <b>FMVA-15-UNV3-M2-DRIVER KIT</b> | UNV3 M2 replacement driver kit for FMVA-15 |

# Photometrics

For IES photometric files – please refer to the resource tab of the [FMVA LED product page](#) on Eaton.com

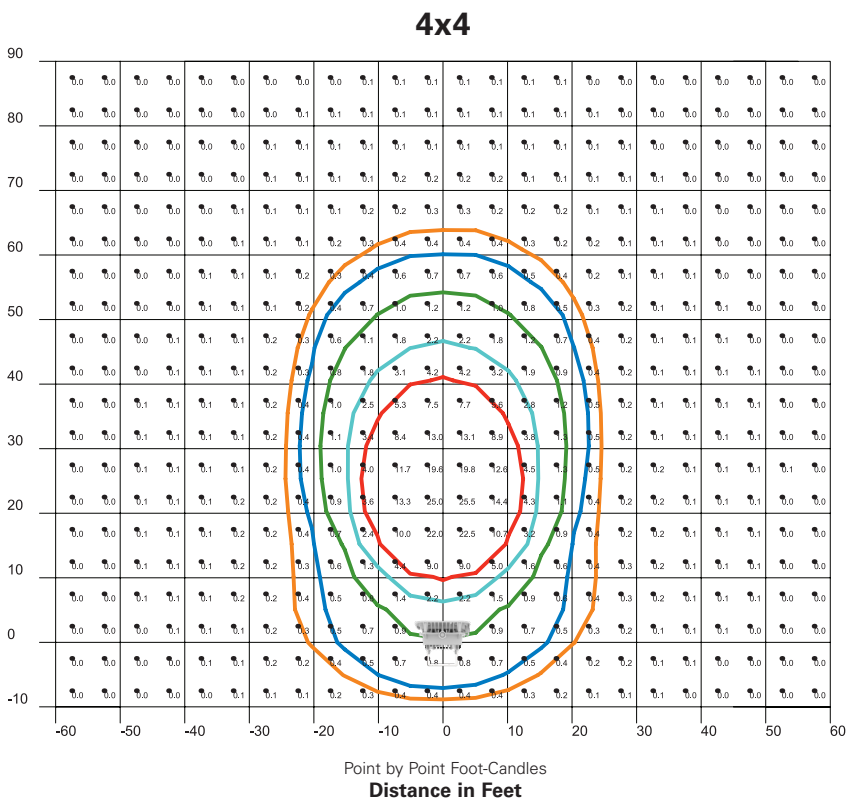


## 7x6 optics

FMVA-15 Height: 25 ft.; Tilt angle: 45°

| Illuminance (Fc) |      | Mounting<br>height – 25 ft.<br>Tilt – 45° |
|------------------|------|-------------------------------------------|
| Average          | 0.82 |                                           |
| Minimum          | 0.00 |                                           |
| Maximum          | 6.10 |                                           |

PFMA-15 fixture with UNV1 driver and clear glass lens



## 4x4 optics

FMVA-15 Height: 25 ft.; Tilt angle: 45°

| Illuminance (Fc) |      | Mounting<br>height – 25 ft.<br>Tilt – 45° |
|------------------|------|-------------------------------------------|
| Average          | 0.95 |                                           |
| Minimum          | 0.00 |                                           |
| Maximum          | 25.5 |                                           |

PFMA-15 fixture with UNV1 driver and clear glass lens



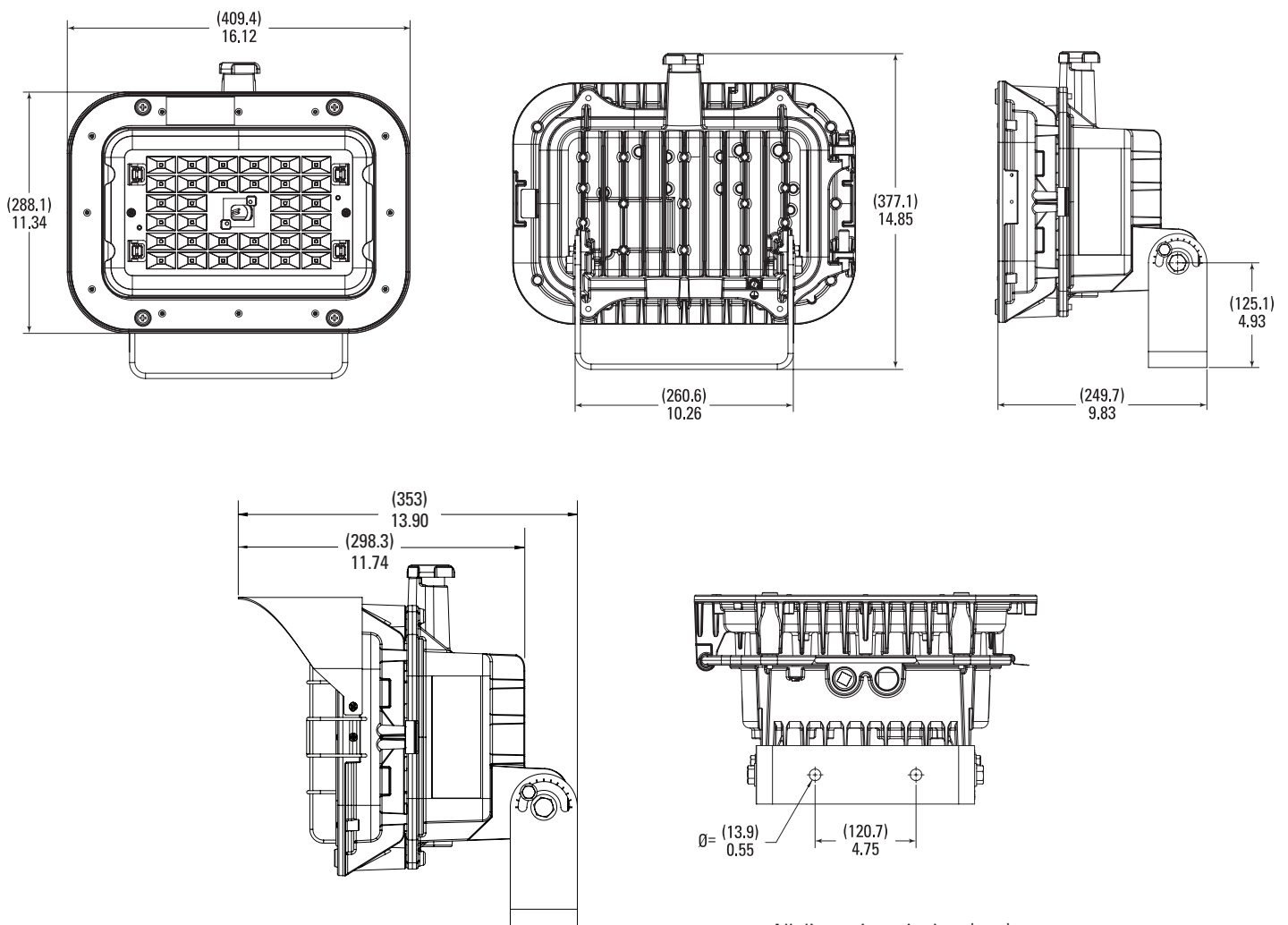
# Specifications

Temperature codes:

| Model                  | Ambient temperature | Class I, Div. 2; Class I, Zone 2 | Class II, Div. 1; Zone 21 | Simultaneous rating<br>Class I, Div. 2, Class II, Div. 1 | Class I, Zone 2, AEx ec; Ex ec IIC Gc | Class II, Zone 21, AEx tb; Ex tb IIIC Db, Zone 21 Ex tb IIIC | Zone 2, Ex ec IIC | Minimum supply wire temperature |
|------------------------|---------------------|----------------------------------|---------------------------|----------------------------------------------------------|---------------------------------------|--------------------------------------------------------------|-------------------|---------------------------------|
| FMVA9L-FMVA11L (UNV1)  | 40°C                | T6                               | T4A                       | T4A                                                      | T6                                    | T130°C                                                       | T6                | 90°C                            |
|                        | 55°C                | T5                               | T4                        | T4                                                       | T5                                    | T130°C                                                       | T5                | 90°C                            |
|                        | 65°C                | T4A                              | T3C                       | T3C                                                      | T4                                    | T140°C                                                       | T4                | 90°C                            |
| FMVA13L-FMVA15L (UNV1) | 40°C                | T6                               | T4A                       | T4A                                                      | T6                                    | T130°C                                                       | T6                | 90°C                            |
|                        | 55°C                | T5                               | T4                        | T4                                                       | T5                                    | T130°C                                                       | T5                | 90°C                            |
|                        | 65°C                | T4A                              | T3C                       | T3C                                                      | T4                                    | T140°C                                                       | T4                | 90°C                            |
| FMVA9L-FMVA11L (UNV3)  | 40°C                | T6                               | T4A                       | T4A                                                      | —                                     | —                                                            | —                 | 90°C                            |
|                        | 55°C                | T5                               | T4                        | T4                                                       | —                                     | —                                                            | —                 | 90°C                            |
|                        | 65°C                | T4A                              | T3C                       | T3C                                                      | —                                     | —                                                            | —                 | 90°C                            |
| FMVA13L-FMVA15L (UNV3) | 40°C                | T6                               | T4A                       | T4A                                                      | —                                     | —                                                            | —                 | 90°C                            |
|                        | 55°C                | T5                               | T4                        | T4                                                       | —                                     | —                                                            | —                 | 90°C                            |
|                        | 65°C                | T4A                              | T3C                       | T3C                                                      | —                                     | —                                                            | —                 | 90°C                            |

Note: The minimum low ambient temperature for all models is -40°C.

## Dimensions: Fixture with standard yoke mount



All dimensions: inches (mm)

| Mounting method | Angle range  | Mounting surface                         |
|-----------------|--------------|------------------------------------------|
| Yoke (standard) | +45° to -60° | Wall, Ceiling, Horizontal Surface/Ground |