

## Installation Instructions for Appleton™ Areamaster™ High Lumen LED Luminaire - Yoke Mount

FOR PROPER AND SAFE INSTALLATION OF THIS PRODUCT, PLEASE READ THE FOLLOWING INSTRUCTIONS.

### Product Safety

#### Signal Words Defined

**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury. **WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury. **CAUTION** indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. **NOTICE** is used to address practices not related to physical injury.

### Safety Instructions

#### ▲ WARNING:

- Do not open or remove luminaire with the circuit energized.
- Do not use this luminaire on ungrounded systems. Failure to ground this luminaire can result in an electric shock, which may be fatal.
- Do not use on ungrounded 480 Volt circuits.

#### ▲ CAUTION:

- Do not look directly at the LEDs when energized.

#### ▲ NOTICE:

- Do not touch the LEDs; touching could leave oily deposits, causing hot spots and potential premature failure.
- This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.
- This luminaire is designed for and should be installed in accordance with all applicable local codes.

### Maintenance

There are no maintenance requirements or restrictions on the use of the Areamaster High Lumen family of luminaires. However, if there is a noticeable loss of light from dust or debris it is advisable to wipe the surface of the lens with a damp cloth.

### Marine & Hazardous Locations

#### ▲ CAUTION:

- To reduce the risk of ignition of hazardous atmospheres, disconnect the luminaire from the supply circuit before opening. Keep tightly closed when in operation.
- Make sure to tighten unused close-up plug to 400 in.-lb. (46 Nm) after applying lubricating grease. Lubricating grease shall be applied in 3 lines, spaced approximately 120 degrees apart, perpendicular to the threads.
- Where flexible cord is used, it should be approved for extra hard, wet location usage and shall have a separate ground conductor.



## Agency Ratings: (IEC)

### For Catalog Numbers Starting With “AMHZL” and Ending With “BU”

INSTALLATION INSTRUCTIONS FOR LED FLOODLIGHT ZONE 1 - Type AMHZL

<b>Equipment</b>	 II 2GD II 3GD
Protection Level	Gb - Gc - Db - Dc
Protection Mode	Ex eb mb op is IIC Ex ec IIC Ex tb op is IIIC Ex tc IIIC
Temperature Class	T# - T# #
Ambient Temperature	-40°C ≤ Ta ≤ +65°C
ATEX Certificate	ITS 18 ATEX 303521
IECEX Certificate	IECEX ITS 18.0031
IP & IK Codes	IP64, IP66, IP67, IK08

# GAS			
Ambient	40°C	55°C	65°C
<b>AMHZL1</b>	T5	T4	T4
<b>AMHZL2</b>	T4	T4	T4
<b>AMHZL3</b>	T4	T4	--

## DUST			
Ambient	40°C	55°C	65°C
<b>AMHZL1</b>	85°C	100°C	100°C
<b>AMHZL2</b>	85°C	100°C	100°C
<b>AMHZL3</b>	100°C	100°C	--

ELECTRICAL PARAMETERS							
Line Voltage	(AC)	120-277	Line Max. Current (A)	AC	AMHZL1	AMHZL2	AMHZL3
	(DC)	170-300		DC	1.4	1.7	2.4
AC Line Frequency	(Hz)	50/60	Line Max. Watts	AC	165	205	275
				DC	162	202	270

# Dimensions

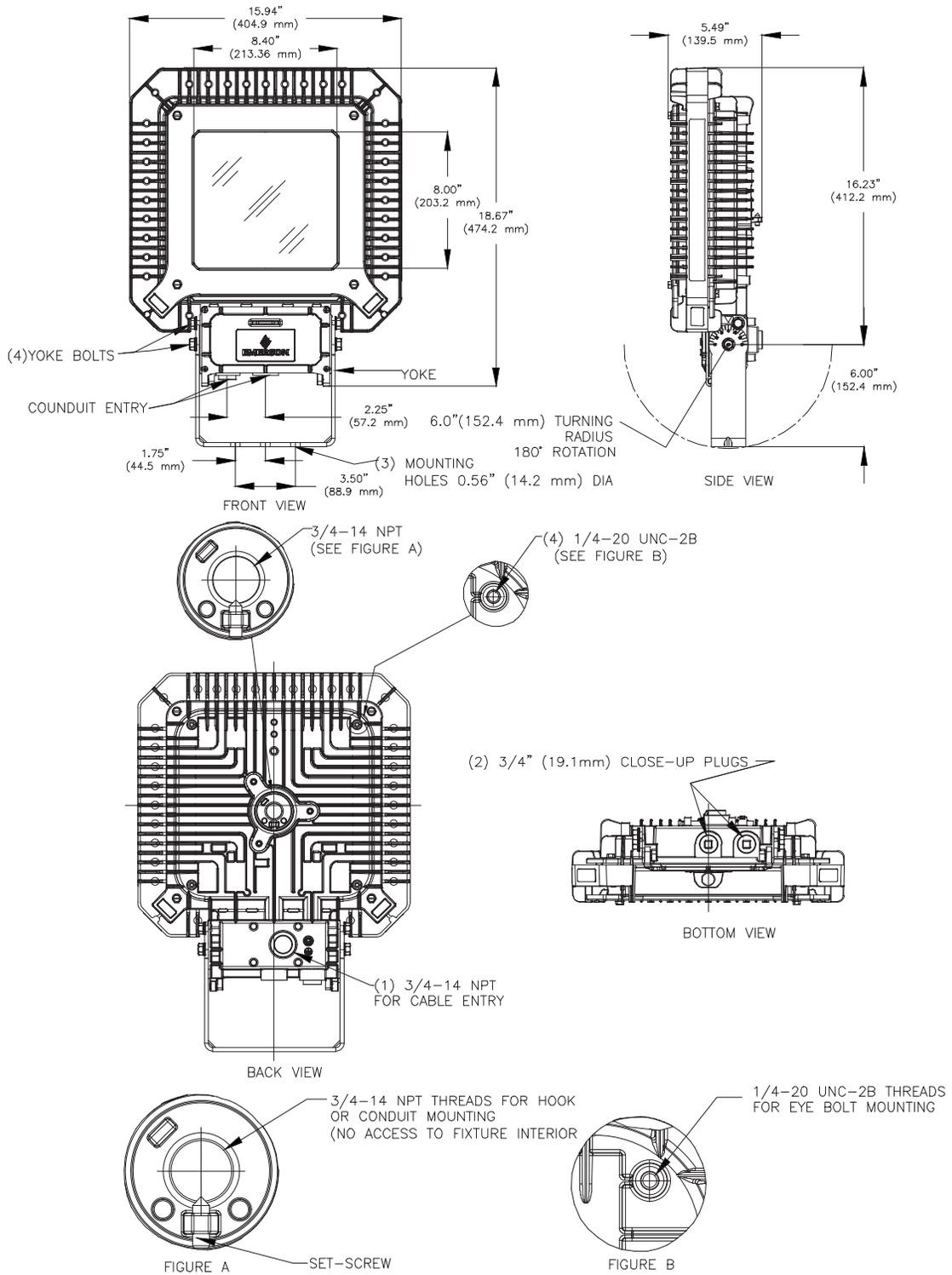


Figure 1: Areamaster High Lumen LED Luminaire

# Mounting Options

## Yoke Mounting

The Areamaster High Lumen LED luminaire with yoke (supplied) will mount directly onto flat surfaces. The yoke has a center clearance hole for a 1/2 inch (12.7 mm) bolt and two 1/2 inch (12.7 mm) clearance holes spaced 3-1/2 inches (88.9 mm) apart on the yoke center line. See Figure 2.

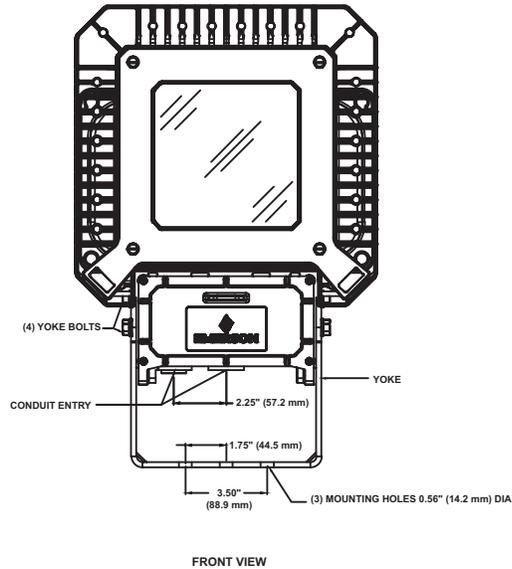


Figure 2: Luminaire with Yoke

## Mounting with Yoke

1. Mount the luminaire with yoke to a flat surface using user-supplied hardware. See Figure 2 for mounting hole locations.
2. Slightly loosen the four yoke bolts and tilt the luminaire to the desired position with your free hand. See Figures 2 & 3.
3. Retighten the bolts to secure the luminaire in place.

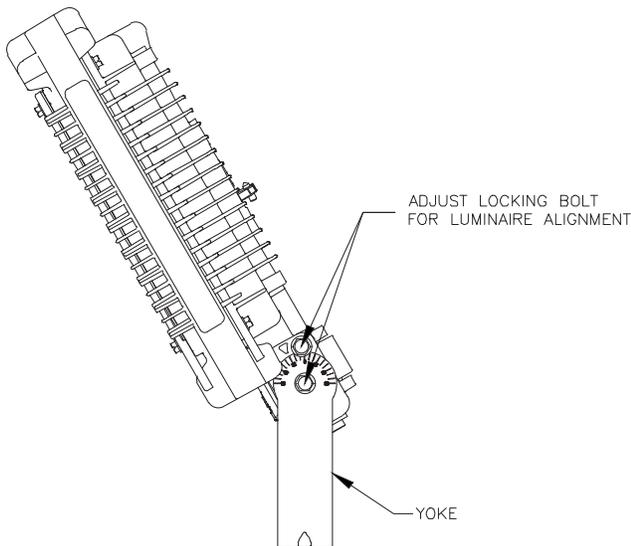
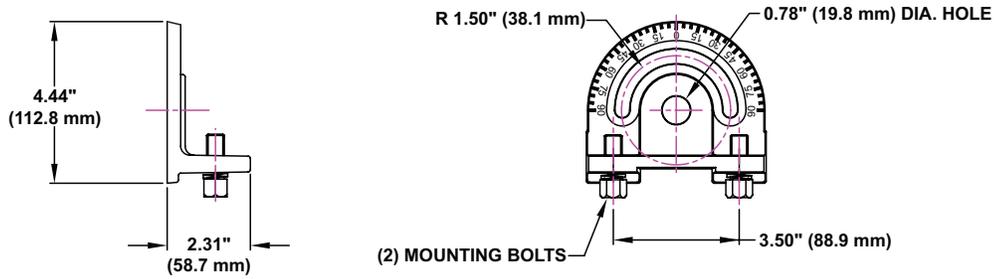


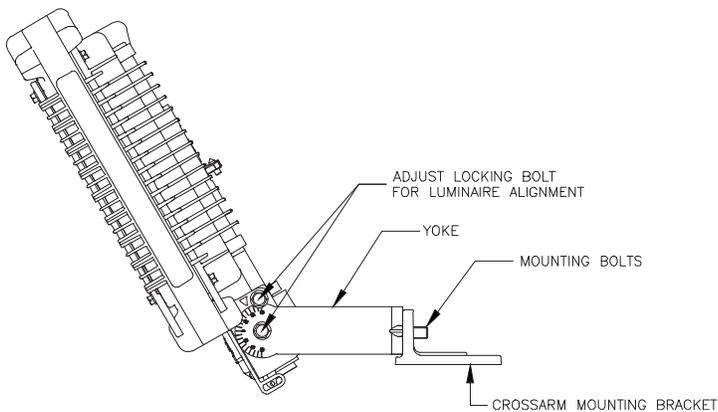
Figure 3: Adjusting the Luminaire with Yoke

## Mounting with Optional Crossarm Mounting Bracket



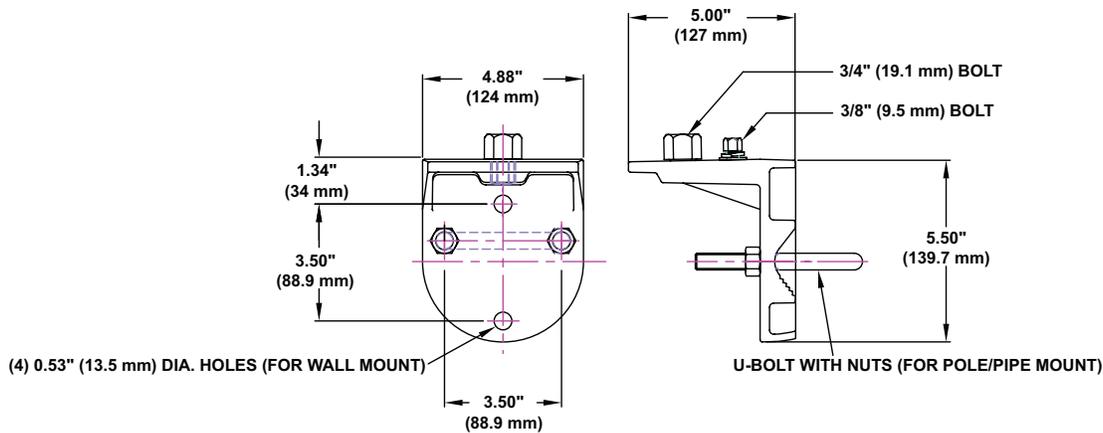
**Figure 4: Crossarm Mounting Bracket (P/N: G-AM-8-CA)**

1. Mount the luminaire with yoke to the crossarm mounting bracket with two 1/2 inch (12.7 mm) mounting bolts (supplied) and two 1/2 inch (12.7 mm) lockwashers (supplied). See Figures 4 & 5.
2. Mount the crossarm mounting bracket to a flat surface with one 3/4 inch (19 mm) bolt (not supplied). The crossarm mounting bracket may be locked into position with a 3/8 inch (9.5 mm) bolt (not supplied).



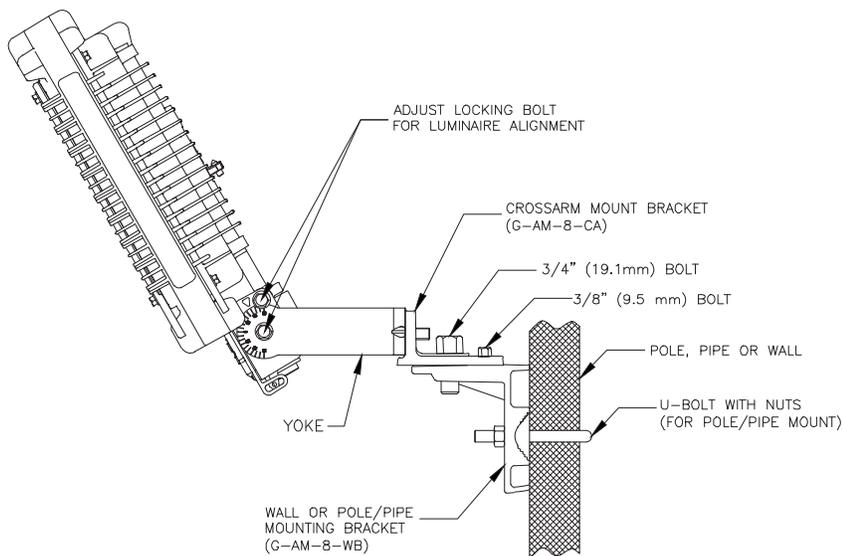
**Figure 5: Luminaire with Crossarm Mounting Bracket (P/N: G-AM-8-CA)**

## Mounting with Optional Crossarm Mounting Bracket & Optional Pipe/Wall Mount Bracket



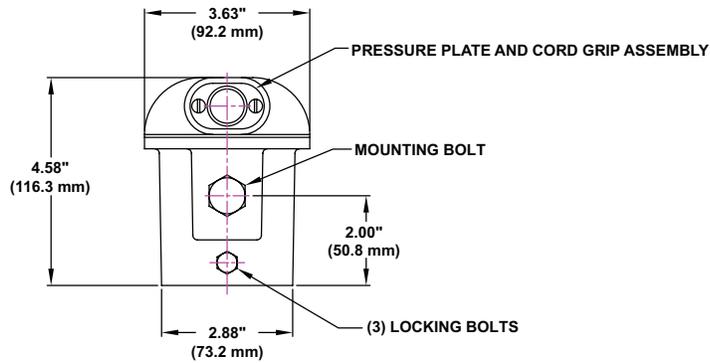
**Figure 6: Pipe/Wall Mount Bracket (P/N: G-AM-8-WB)**

3. Mount the pipe/wall mount bracket to a flat surface with user-supplied hardware or clamp to a pipe or pole [1 inch (25.4 mm) to 2-1/2 inch (63.5 mm)] with U-Bolt and nuts (supplied). Tighten nuts to secure in position. See Figures 6 & 7.
4. Mount the luminaire with yoke to the crossarm mounting bracket with two 1/2 inch (12.7 mm) bolts (supplied) and two 1/2 inch (12.7 mm) lockwashers (supplied). See Figures 4 & 5.
5. Mount the luminaire with yoke and crossarm mounting bracket (attached) to the pipe/wall mount bracket with one 3/4 inch (19 mm) bolt (supplied). See Figure 7.
6. Install one 3/8 inch (9.5 mm) bolt (supplied) through the crossarm mounting bracket and into the pipe/wall mount bracket. See Figure 7.
7. Aim the luminaire in the desired direction and tighten the 3/8 inch (9.5 mm) bolt to lock in place.



**Figure 7: Luminaire with Crossarm Mounting Bracket (P/N: G-AM-8-CA) and Pipe/Wall Mount Bracket (P/N: G-AM-8-WB)**

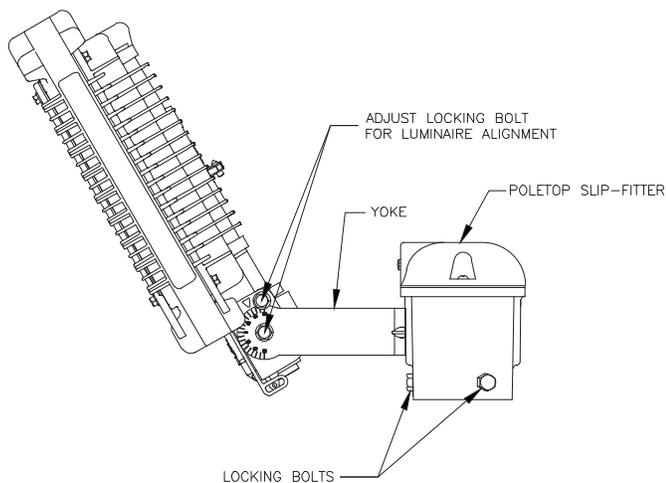
## Mounting with Optional Poletop Slip-Fitter



**Figure 8: Poletop Slip-Fitter (P/N: G-SF20)**

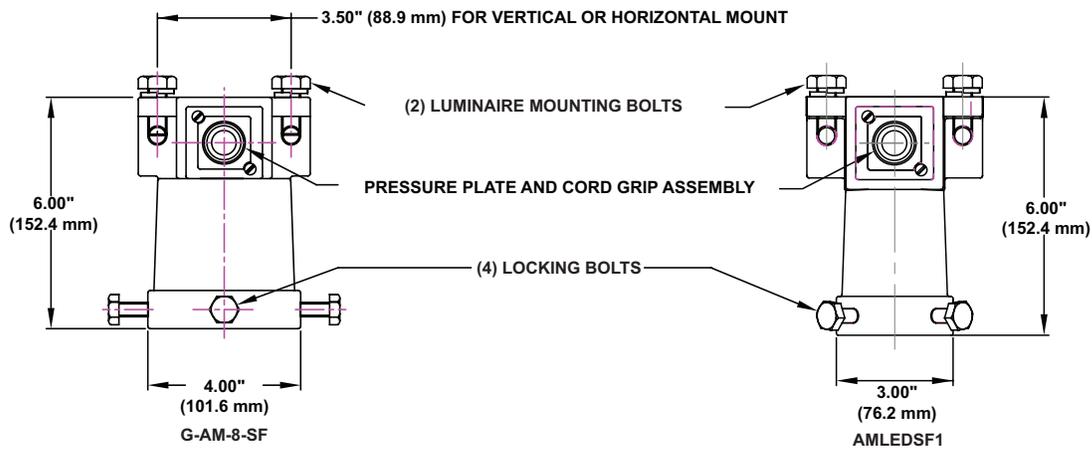
**▲ NOTICE:** Flexible cord or cable shall be used for extra hard, wet locations and have a temperature rating as indicated on the luminaire nameplate. The cord/cable should have a diameter between 1/2 inch and 5/8 inch (13 mm–16 mm). Cords/cables outside of this range may prevent the proper functioning of the pressure plate and cord grip assembly, and may result in water ingress. Make sure to tighten unused close-up plug to 400 in.-lb. (46 Nm) after applying lubricating grease. Lubricating grease shall be applied in 3 lines, spaced approximately 120 degrees apart, perpendicular to the threads.

1. Loosen the two screws on the pressure plate for cord/cable entrance. See Figure 8.
2. Feed the supply cord/cable up through the poletop slip-fitter and out through the cord grip assembly. Leave at least 10 inches (254 mm) of slack to make connections inside the luminaire. **NOTE:** #16 AWG (1.5 mm<sup>2</sup>) cord/cable is recommended.
3. Tighten the pressure plate screws.
4. Install the poletop slip-fitter onto a 1-1/2 inch (38.1 mm) or 2 inch (50.8 mm) pole. Tighten the three locking bolts.
5. Mount the luminaire with yoke to the poletop slip-fitter using the mounting bolt (supplied). Tighten the mounting bolt in place. See Figures 8 & 9.



**Figure 9: Luminaire with Poletop Slip-Fitter (P/N: G-SF20)**

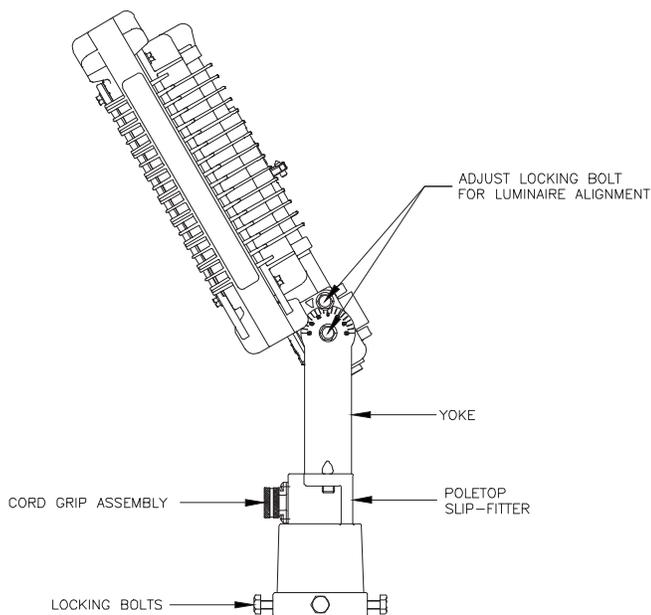
## Mounting with Optional Poletop Slip-Fitters



**Figure 10: Poletop Slip-Fitters (P/Ns: G-AM-8-SF & AMLEDSF1)**

**▲ NOTICE:** Flexible cord or cable shall be used for extra hard wet locations and have a temperature rating as indicated on the luminaire nameplate. The cord/cable should have a diameter between 1/2 inch and 5/8 inch (13 mm–16 mm). Cords/cables outside of this range may prevent the proper functioning of the pressure plate and cord grip assembly, and may result in water ingress. Make sure to tighten unused close-up plug to 400 in.-lb. (46 Nm) after applying lubricating grease. Lubricating grease shall be applied in 3 lines, spaced approximately 120 degrees apart, perpendicular to the threads.

1. Loosen the two screws on the pressure plate for cord/cable entrance. See Figure 10.
2. Feed the supply cord/cable up through the poletop slip-fitter and out through the cord grip assembly. Leave at least 10 inches (254 mm) of slack to make connections inside the luminaire. **NOTE:** #16 AWG (1.5 mm<sup>2</sup>) cord/cable is recommended.
3. Tighten the pressure plate screws.
4. For Poletop Slip-Fitter G-AM-8-SF: Install onto a 1-1/2 inch (38 mm) or 2 inch (51 mm) pole. Tighten the four locking bolts. For Poletop Slip-Fitter AMLEDSF1: Install onto a 1 inch (25 mm) or 1-1/2 inch (38 mm) pole. Tighten the four locking bolts.
5. Mount the luminaire with yoke to the poletop slip-fitter using the two luminaire mounting bolts (supplied). Tightly secure the bolts. See Figures 10 & 11.



**Figure 11: Luminaire with Poletop Slip-Fitter (P/N: G-AM-8-SF)**

# Wiring

**▲ WARNING:** The luminaire must be grounded. Verify that ground continuity has been established by using an Ohm meter or other suitable testing equipment before energizing the luminaire. Failure to properly ground the luminaire will create an electric shock hazard, which can cause serious injury or death.

## Wiring the Areamaster High Lumen LED Luminaire

1. Open the luminaire wiring compartment by loosening the four captive screws. Allow the cover to swing open, exposing the wiring compartment. See Figure 13.

### 2. A. Wiring with Cable

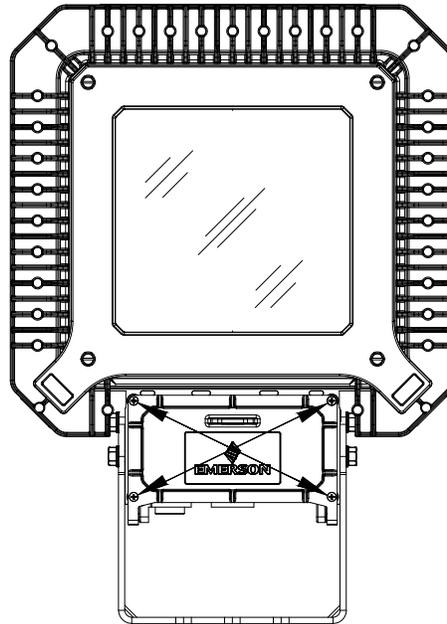
1. Strip the cable outer jacket as required.
2. Insert the cable through the conduit entry (with appropriate fitting attached) to the luminaire wiring compartment.

### B. Wiring with Individual Conductor Wire

1. Run conductors down through the conduit to the luminaire wiring compartment.

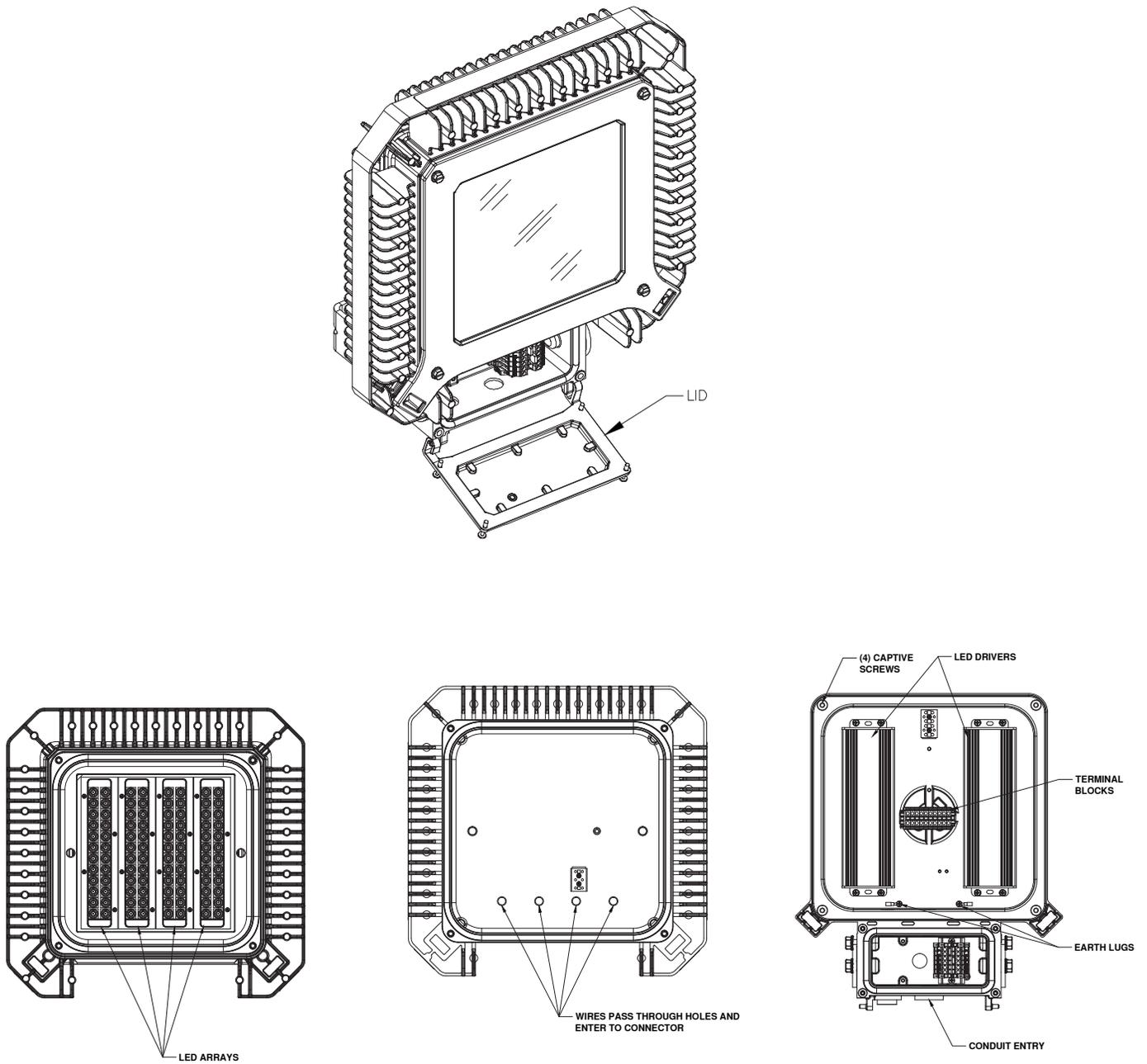
**NOTE:** See the product nameplate for supply wire requirements. The terminal block can accept 24–10 AWG (0.2 mm<sup>2</sup>–5.26 mm<sup>2</sup>) wire. Use the appropriate wire gauge based on the application.

3. Strip the individual conductors to bare wire and insert them into the proper terminal block connections. The connection points are identified on the terminal block as: “L” = Line, “N” = Neutral, and “G” = Ground. Tighten down the terminal block screws onto the wire. See Figures 13.
4. Once the terminal block is wired to incoming power, close the luminaire wiring compartment cover.
5. Tighten the four captive screws by applying a minimum of 14 in.-lb. (1.58 Nm) using an (x) pattern.



**Figure 12: (x) Pattern**

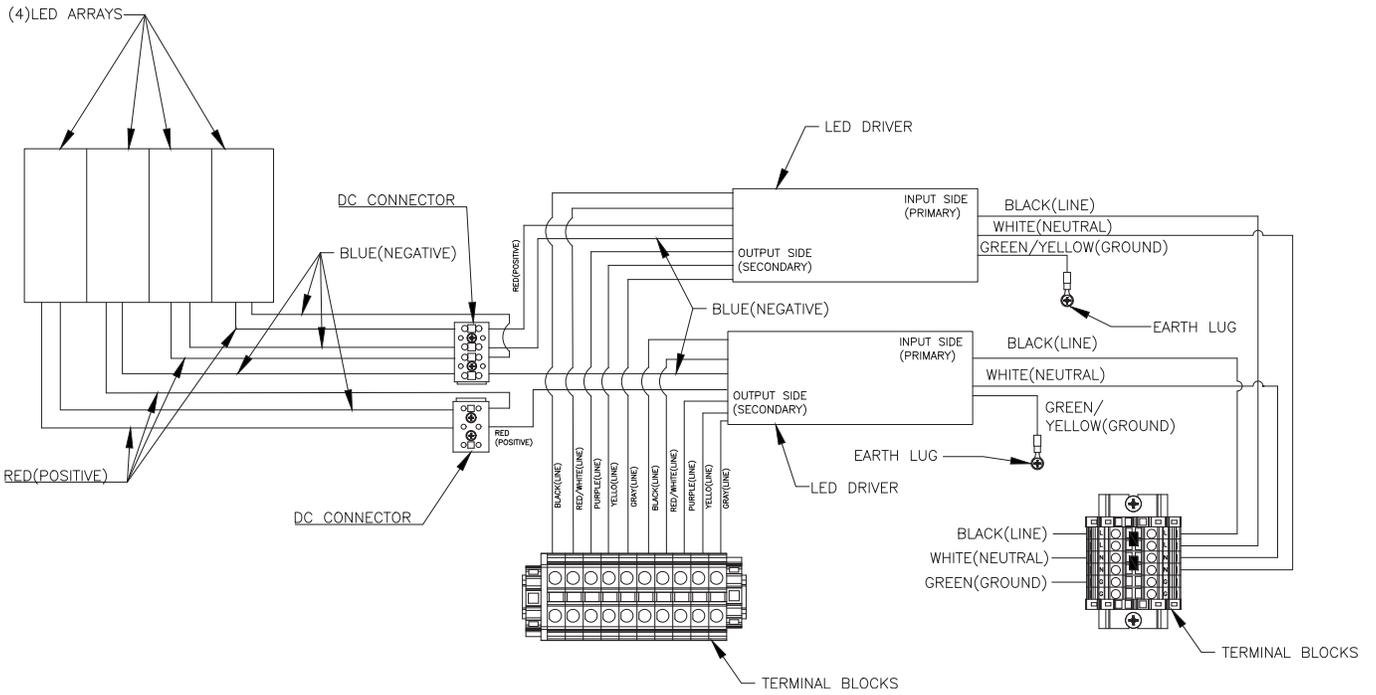
6. Close all unused conduit entries with close-up plug (1 supplied). Make sure to tighten unused close-up plug to 400 in.-lb. (46 Nm) after applying lubricating grease. Lubricating grease shall be applied in 3 lines, spaced approximately 120 degrees apart, perpendicular to the threads.
7. Power can now be applied to the luminaire.



**Figure 13: Wiring Compartment**

### Operating Instructions

To operate the Areamaster High Lumen family of luminaires, ensure that power is live to the fixture after wiring and closing all wiring compartments. 120–277 VAC or 170–300 VDC is the acceptable range of voltages on these products.



**LED Circuit**

**Figure 14: Wiring Diagram**

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