

! CAUTION

- All wiring should be done by a licensed electrician in accordance with state codes, local codes, and National Electrical Code (NEC) or International Electric Commission (IEC) standards.
- Improper installation may result in serious injury and void warranty.
- Contains parts and assemblies susceptible to damage by electrostatic discharge (ESD).
- Surge protective devices should be utilized for fixtures installed in environments subject to power surges outside the specified operating parameters.

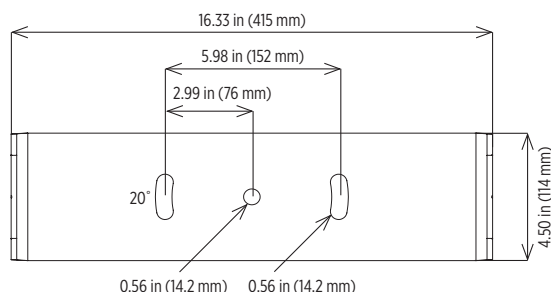
Mounting

Fasten fixture with 3 x ½ inch (M12) bolts (not provided) through center hole and slots in harp assembly to a recommended torque of 45 lb-ft. Use mounting dimensions shown in Figure 1. Attach near corner supports or use adequate subbase for the weight of the fixture.

Figure 1: Dimensions for Standard Mounting Brackets

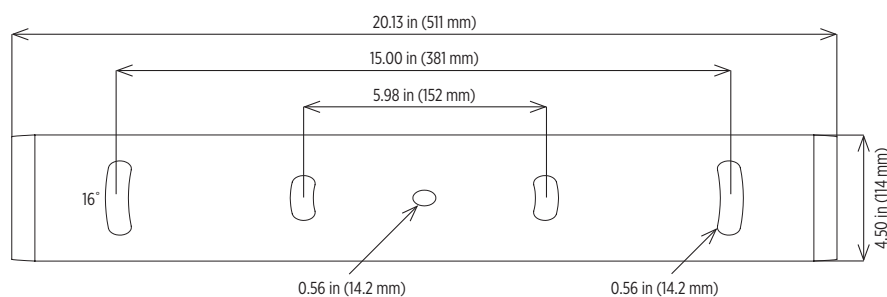
EcoMod 2140

Fixture weight: 23.2 lb (10.5 kg)



EcoMod 2280

Fixture weight: 38.0 lb (17.2 kg)



EcoMod 2420

Fixture weight: 51.8 lb (23.5 kg)

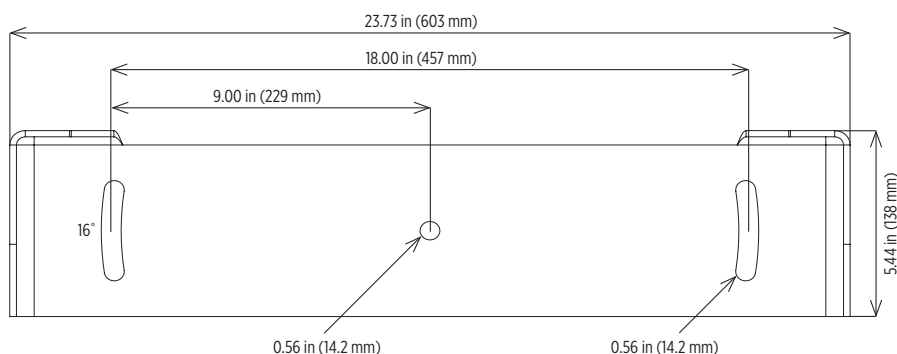
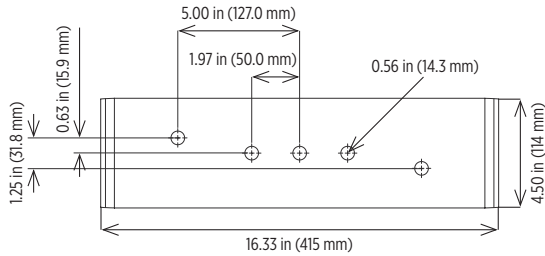


Figure 2: Dimensions for Alternative Mounting Brackets

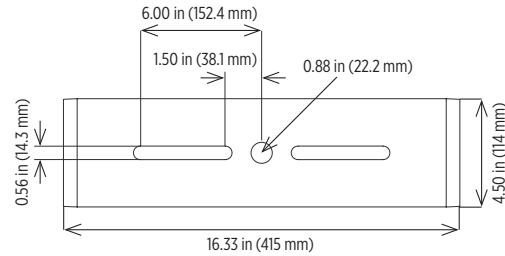
140 Model

Bracket A



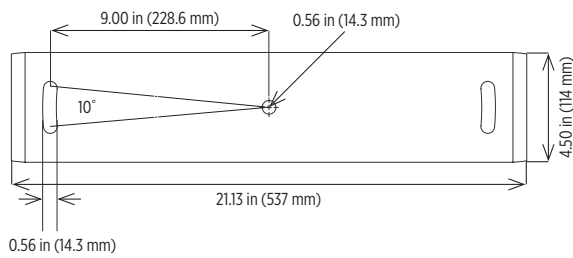
140 Model

Bracket B



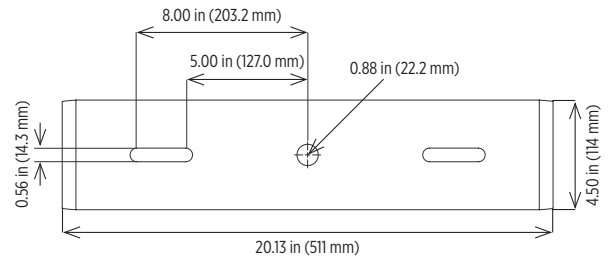
280 Model

Bracket A



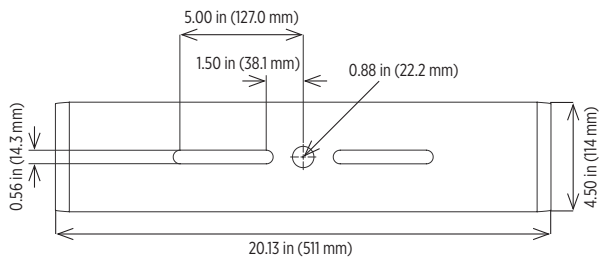
280 Model

Bracket B



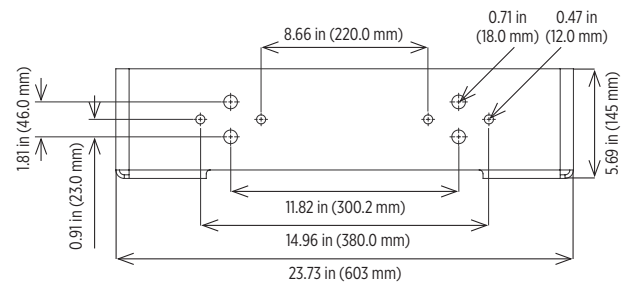
280 Model

Bracket C



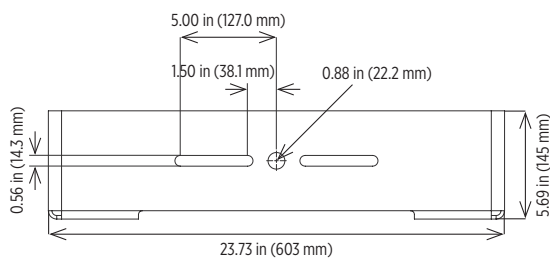
420 Model

Bracket A



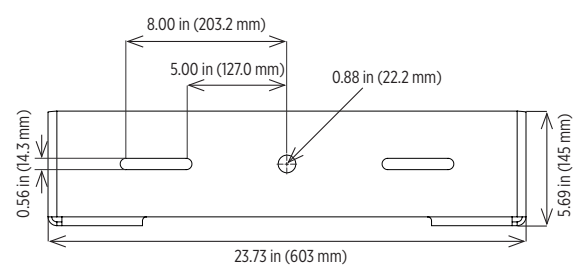
420 Model

Bracket B



420 Model

Bracket C

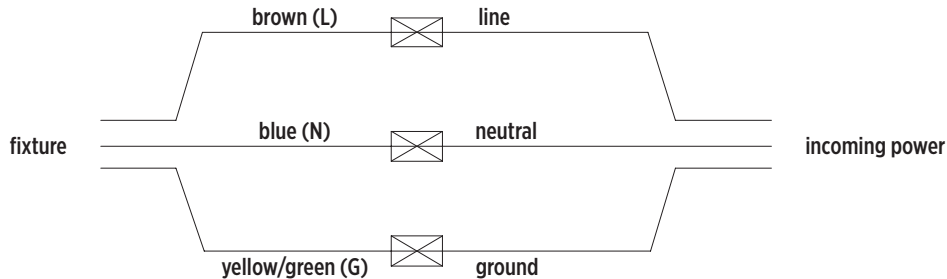


Wiring

Power

The standard fixture is supplied with a 72.00 inch (1,829 mm) cord. Cord should be connected per the diagram (Figure 3) in the water tight junction box (Figure 4).

Figure 3



Through Wire Option

If fixture is provided with open cord grips and no incoming power cord, the fixture is set up for through (continuous row) wiring. Incoming power cable diameter should be $\frac{3}{8}$ to $\frac{1}{2}$ inch for use with standard supplied cord grips.

1. Open junction box cover, remove conduit plug if installed and save for a later step. Replace with second cord grip provided.
2. Run incoming power cord through cord grip. Cord jacket should be visible inside box.
3. Tighten cord grip - hand tight plus $\frac{1}{4}$ turn. Verify cord grip is tight by pulling on the cord. It should not move.
4. Repeat for outgoing cord.
5. Connect wires to the terminals provided (see Figure 4).
6. If no outgoing power cord is to be installed, replace unused cord grip with conduit plug. Tighten to 30-35 lb-in.
7. Replace cover. Tighten screws to 15 lb-in (see Figure 5).

Figure 4

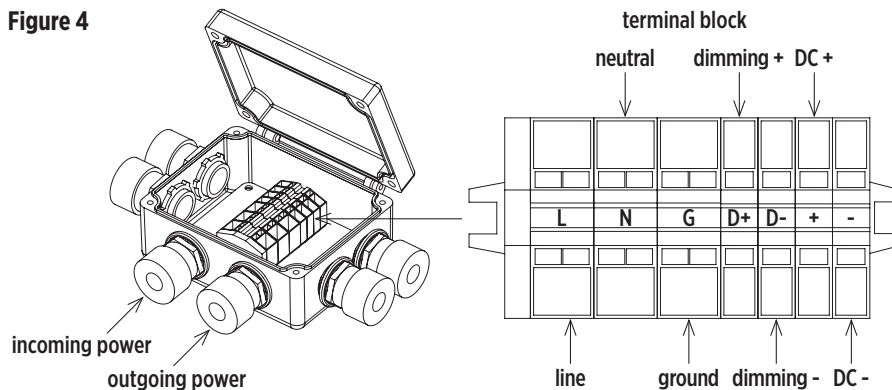
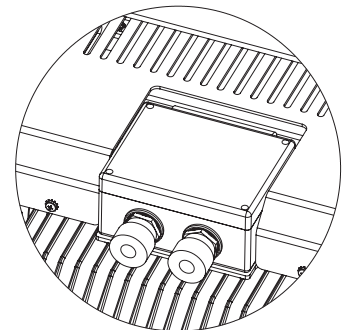


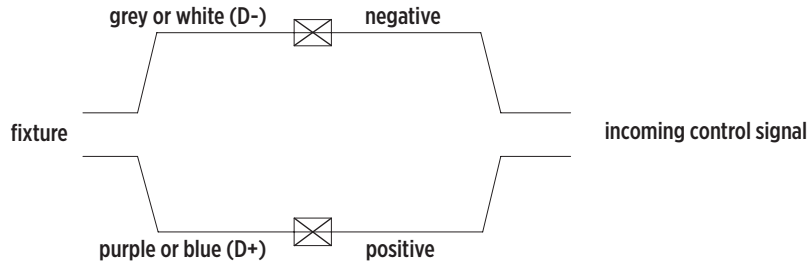
Figure 5



Dimming

If fixture is provided with a cord for any dimming option, make wire connection per the diagram below (see Figures 4 and 6).

Figure 6



Aiming

All EcoMod® 2 fixtures are equipped with aiming gears to assist with aligning the fixtures to the intended area of illumination.

To aim:

1. Loosen the two bolts on either side of the harp.
2. Adjust fixture to the desired angle in 5 degree increments (see Figure 7). The fixture flat with lens facing down represents a 0 degree orientation (see Figure 8).

Figure 7

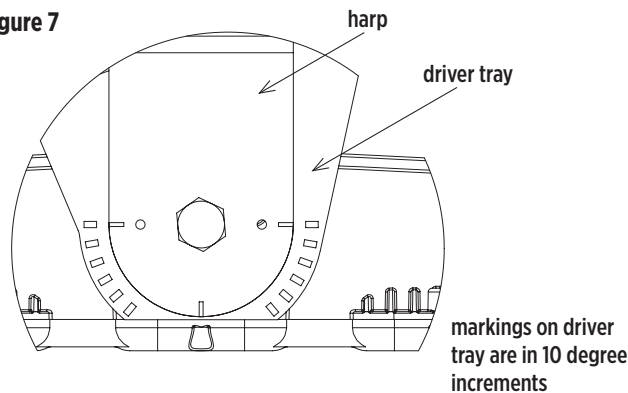
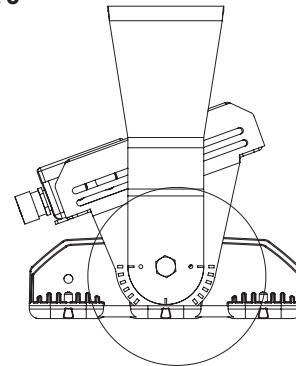


Figure 8



3. Once aligned, retighten bolts to 45 lb-ft.
4. Additional aiming can be done by rotating the entire fixture at the base with standard brackets. Loosen mounting bolts, rotate fixture to desired position, and retighten bolts to 45 lb-ft.

Safety Cable Installation

Phoenix strongly suggests using a safety cable when installing EcoMod® 2 fixtures.

1. Locate a sturdy support structure for the safety cable. Please keep in mind that the safety cable is 60.00 inches (1524 mm) long and must be able to loop around a sturdy bar or bracket on the support structure.
2. Take the loop end (see Figure 9) of the cable and wrap it around the bar/bracket on the support structure.
3. Take the eyelet end (see Figure 9) and insert into the loop, pulling it until tight.
4. Drop M8 nut (provided) into slot on side of fixture (see Figure 10). Place flat washer on bolt, then insert bolt into hole of eyelet. Fasten bolt to nut, torque to 70 to 80 lb-in.

Figure 9

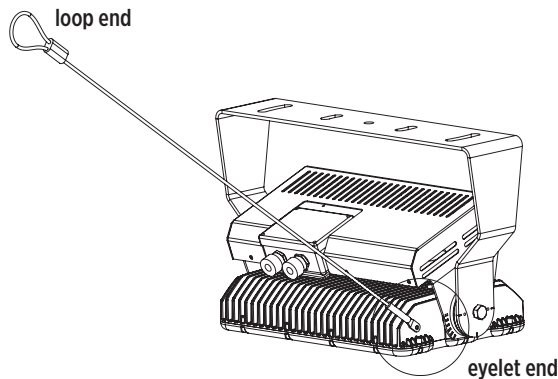
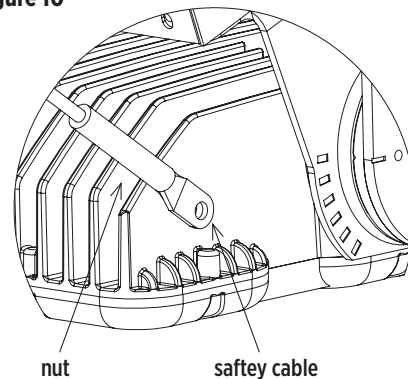


Figure 10



Maintenance

Periodic maintenance and cleaning is required to keep light fixture in peak operating condition. Buildup of dirt and/or debris will diminish performance, lead to premature failure and will void the fixture's warranty.

1. Inspect fixture monthly for buildup of dirt and debris on lenses and between fins of heatsink. Wash fixture and/or components with water as needed.
2. Inspect fasteners and verify cord grips are tight. Retighten as needed.

Note: Cord grips should be hand tight plus ¼ turn.

EM2-140 Repair Parts List¹

Description	V1 (8 LEDs per PCB)		V2 (22 LEDs per PCB)	
	Part Number	Quantity	Part Number	Quantity
120-277V or 277-480V cool white (5000K) LED board kit (8 LEDs)	010202.904	1	-	-
120-277V or 277-480V neutral white (4000K) LED board kit (8 LEDs)	010202.915	1	-	-
120-277V or 277-480V warm white (2700K) LED board kit (8 LEDs)	010175.903	1	-	-
120-277V or 277-480V cool white (5000K) LED board kit (22 LEDs)	-	-	010178.900	1
120-277V driver kit	010175.907	1	010178.906	1
277-480V driver kit	010175.908	1	010178.907	1
VS optic kit ²	010196.912	contact factory	010178.902	contact factory
SP optic kit ²	010196.916	contact factory	010178.903	contact factory
MF optic kit ²	010196.914	contact factory	010178.904	contact factory
WF optic kit ²	010196.915	contact factory	010178.905	contact factory

Notes

- 1 The quantities listed are the total required per fixture.
- 2 There are two optic kits required per EM2-140, four per EM2-280 and six per EM2-420 fixtures. Contact factory for the optic kits required for your fixture.



EM2-280 Repair Parts List¹

Description	V1 (8 LEDs per PCB)		V2 (22 LEDs per PCB)	
	Part Number	Quantity	Part Number	Quantity
120-277V or 277-480V cool white (5000K) LED board kit (8 LEDs)	010202.904	2	-	-
120-277V or 277-480V neutral white (4000K) LED board kit (8 LEDs)	010202.915	2	-	-
120-277V or 277-480V warm white (2700K) LED board kit (8 LEDs)	010175.903	2	-	-
120-277V or 277-480V cool white (5000K) LED board kit (22 LEDs)	-	-	010178.900	2
120-277V driver kit	010175.909	1	010178.908	1
277-480V driver kit	010175.910	1	010175.909	1
VS optic kit ²	010196.912	contact factory	010178.902	contact factory
SP optic kit ²	010196.916	contact factory	010178.903	contact factory
MF optic kit ²	010196.914	contact factory	010178.904	contact factory
WF optic kit ²	010196.915	contact factory	010178.905	contact factory

Notes

- The quantities listed are the total required per fixture.
- There are two optic kits required per EM2-140, four per EM2-280 and six per EM2-420 fixtures. Contact factory for the optic kits required for your fixture.

EM2-420 Repair Parts List¹

Description	V1 (8 LEDs per PCB)		V2 (22 LEDs per PCB)	
	Part Number	Quantity	Part Number	Quantity
120-277V or 277-480V cool white (5000K) LED board kit (12 LEDs)	010202.905	2	-	-
120-277V or 277-480V neutral white (4000K) LED board kit (12 LEDs)	010202.916	2	-	-
120-277V or 277-480V warm white (2700K) LED board kit (12 LEDs)	010175.905	2	-	-
120-277V or 277-480V cool white (5000K) LED board kit (33 LEDs)	-	-	010178.901	2
120-277V driver kit	010175.911	2	010178.910	2
277-480V driver kit	010175.912	2	010178.911	2
VS optic kit ²	010196.912	contact factory	010178.902	contact factory
SP optic kit ²	010196.916	contact factory	010178.903	contact factory
MF optic kit ²	010196.914	contact factory	010178.904	contact factory
WF optic kit ²	010196.915	contact factory	010178.905	contact factory

Notes

- The quantities listed are the total required per fixture.
- There are two optic kits required per EM2-140, four per EM2-280 and six per EM2-420 fixtures. Contact factory for the optic kits required for your fixture.

Additional Resources

http://www.meanwell.com/Upload/PDF/LED_EN.pdf

6 <http://www.inventronics-co.com/upload/2016082308081965610.PDF>

Product design and specifications are subject to change without notice.