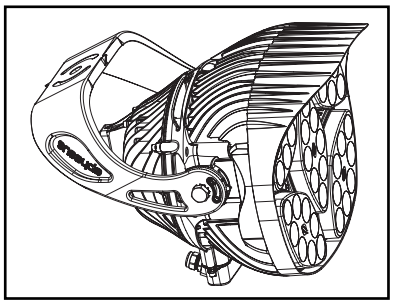
Installation Instructions – All Field LED Luminaire



WARNING

This manual applies to the following models:
All Field 750/550/400
Arena 750/650/550

SAFETY INSTRUCTIONS

Read and understand this entire manual before attempting to assemble, operate, or install the LED Luminaire. If you have any questions regarding the product, please call Ephesus Customer Service at (800) 573-3600.

1. All electrical work must conform to the National Electric Code (NEC) and all applicable local codes and ordinances.
2. Only qualified personnel shall install and maintain the luminaires. Ephesus recommends that a licensed electrician install and maintain the luminaire. Verify the safety of existing power distribution system before beginning installation. Failure to follow Operating Instructions may lead to death, Severe Injury, or Property Damage.

WARNING

Risk of Fire and Electric Shock - Make certain power is OFF before starting installation or attempting any maintenance. Disconnect power at fuse or circuit breaker.

Risk of Burn- Disconnect power and allow fixture to cool before handling or servicing.

DO NOT make or alter any open holes in the luminaire. Do not modify the luminaire.

WARNING

Follow all applicable safety procedures and use Personal Protective Equipment such as hardhats, safety glasses, reflective vests, electrical safety gloves, fall protection equipment and safety toe boots during the installation, operation, and maintenance of the luminaire. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO DEATH, SEVERE INJURY, OR PROPERTY DAMAGE.

WARNING

Risk of eye injury! Eye protection is required at all times during the installation, operation, and maintenance of the luminaire. The high intensity light produced by the luminaire can cause severe damage to the eye if viewed directly at close range. Avoid being in front of a luminaire that is on or wear suitable light blocking protective eyewear such as welding goggles.

Store luminaires in a clean, dry place, protected from dirt, water, and sunlight. See table for required storage and operating conditions:

Storage Temperature	Operating Temperature	Humidity
-40°C to +75°C (-40°F to 167°F)	-40°C to +55°C (-40°F to 131°F)	5% to 95% non-condensing

Storage and Operating Conditions

COOPER Lighting Solutions

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Note: Charge the provided laser battery before installation begins.

Required Material	For more information refer to Section:
EP-2000 or equal waveform correction device	Power Requirements
Mounting Hardware	Step 1 - Mount the Luminaires
Power cable	Step 3 - Make Electrical Connections
Electrical splicing connectors	Step 3 - Make Electrical Connections
Cable ties or wire management	Step 4 - Aim the Luminaires

Required Tools Installer shall provide	For more information refer to Section:
Socket wrenches and/or crescent wrenches sized to fit mounting hardware	Step 1 - Mount the Luminaires
3/16" Hex driver	Step 3 - Make Electrical Connections
Torque wrench rated to a minimum of 35 ft-lbs	Step 4 - Aim the Luminaires
Torque driver with 3/16" hex bit rated to a minimum of 35 in-lbs	Step 4 - Aim the Luminaires
Calibrated light meter	Step 4 - Aim the Luminaires

Required Materials & Tools

SUPPLY POWER SPECIFICATIONS

Ephesus LED light fixtures are not traditional incandescent lights, they are high-tech, new generation solid-state devices. To protect your valuable investment, the electrical power shall be clean and have stable voltage and current and undistorted waveforms..

WARNING

Follow proper grounding methods. The electrical system must be properly grounded for power electronics in accordance with IEEE Emerald Book, including using equipment grounding conductors. Metallic conduits are NOT an acceptable grounding method for Cooper Lighting Systems LED lighting systems. Power must also be phase balanced. If you are not sure if your power system is grounded or load balanced, DO NOT install the Luminaire and contact a licensed electrician for information on proper grounding and balancing methods as required by the National Electrical Code and IEEE standards.

WARNING – Failure to follow all electrical safety codes may result in damage, injury, or death.

Cooper Lighting Solutions highly recommends that surge protection be installed in power distribution systems that feed LED sports lighting.

WARNING – Failure to protect electrical circuits from surges may result in damage to fixtures.

Circuit Voltage (Refer Table 1)

Low Voltage (LV)	High Voltage (HV)
120V, 208V or 240V	277V, 347V, or 480VAC

Table 1

WARNING

Do not attempt to connect All Field fixtures to any circuits outside a 5% voltage variance from the listed rating. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO LUMINAIRE INTERNAL DAMAGE AND FAILURE.

The voltage on the lighting circuits must stay within 3% of nominal at 60Hz. Voltage that is consistently too high or low shall be corrected before LED luminaires are installed.

Fusing

If individual branch circuit protection is required, Table 2 shows the minimum fuse ratings for each individually circuited luminaire. Fuses must be Time delay type.

Circuit Voltage (VAC)	Minimum Fuse Rating (amps)
120VAC	10 amps
208VAC	7 amps
240VAC	5 amps
277VAC	4 amps
347VAC	4 amps
480VAC	3 amps

Table 2

Power Quality

The lighting circuits shall have surge protection. If you require assistance in checking your power system or designing or implementing solutions, contact Cooper Lighting Solutions Electrical Engineering Services and Systems. Find more information at www.cooperlighting.com.

INSTALLATION INSTRUCTIONS

Step 1 – Mount The Luminaire

The first step is to attach the luminaire to the mounting structure. The mounting structure may be a light pole cross arm, an indoor catwalk bracket, or other structural component that will hold the fixture in place. Refer to photometric drawings or project Installation Drawings for luminaire installation locations and any additional mounting instructions.

⚠WARNING

It is the responsibility of the installer to verify that all proposed mounting structures including poles, cross arms, catwalk brackets, and other mounting structures are certified to support the weight of the luminaires, withstand wind loads, and meet all other applicable codes and regulations. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO DEATH, SEVERE INJURY, OR PROPERTY DAMAGE.

⚠WARNING

Do not suspend any luminaire by electrical or control wires, as these will not support the weight of the fixture, resulting in the potential for the fixture to fall and cause damage or injury. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO DEATH, SEVERE INJURY, OR PROPERTY DAMAGE.

Equipment Required:

- Mounting Hardware
- Socket wrenches and/or crescent wrenches sized to fit mounting hardware
- Cable ties or wire management – For outdoor installations use UV rated

Hardware Required	Size	Quantity per luminaire
Hex bolt	5/8"-3/4" (16mm-18mm)	1
Flat washers	5/8"-3/4" (16mm-18mm) ID	2
Hex Locknut	5/8"-3/4" (16mm-18mm)	1

Mounting Hardware Required

Mounting hardware shall be stainless steel or other high-strength, corrosion-resistant material. Length of Hex bolt shall be determined in the field; size the bolt appropriately to allow secure fastening of the luminaire to the mounting structure.

⚠WARNING

An impact driver may be used on mounting hardware while the power is off, but NEVER use any power tools on the fixture while the power is on. The vibration caused by power tools may damage the fixture. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO LUMINAIRE INTERNAL DAMAGE AND FAILURE.

There are two different ways to mount the All Field fixture – Standard and Inverted. Standard mounting is when the luminaire sits on top of the mounting structure, and Inverted is when the luminaire hangs from underneath the structure Heat-dissipating fins must always be vertical when the fixture is installed. Do not install fixture with fins in a horizontal or sideways configuration.

Standard Mounting

This is the most common mounting. The luminaire sits on top of mounting structure.

1. Refer to the project Installation Drawings to determine luminaire installation locations and lens type.
2. For each fixture location, install a luminaire that has the correct lens type. Unless otherwise noted, fixtures that share the same lens type are identical.
3. Set luminaire in place and install bolt, flat washers, and nut to securely fasten the fixture mounting bracket to the mounting structure. Tighten hardware hand tight so that fixture is secure but do not fully torque hardware until aiming is complete.
4. Remove the clear protective film from the front of the lenses, if present.

Note: Example mounting structure shown for illustration purposes only.

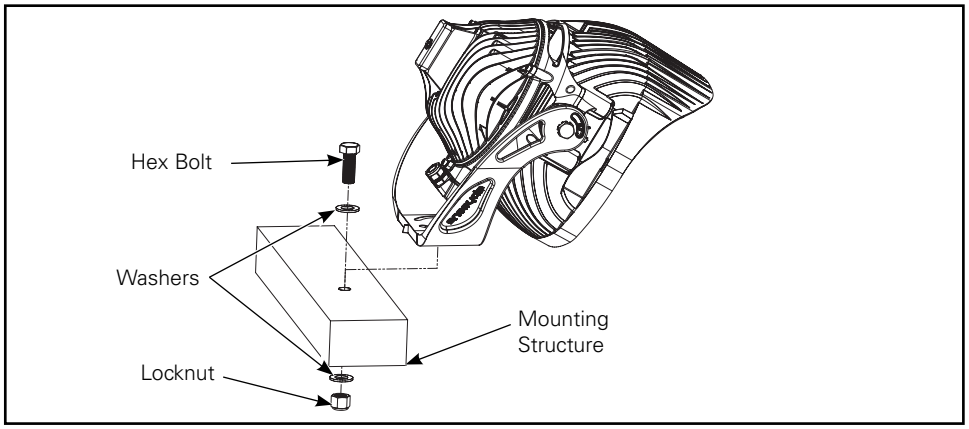

Figure 1. Standard Mounting

Inverted Mounting

The luminaire hangs from underneath mounting structure.

⚠WARNING

When using inverted mounting, flip the mounting bracket so that the luminaire stays upright. NEVER install the luminaire upside down. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO LUMINAIRE INTERNAL DAMAGE AND FAILURE.

1. To install the luminaire underneath a mounting structure, the fixture mounting bracket must first be inverted.
   - Remove Hex bolt and set screw on each side of the fixture.
   - Remove Fixture Mounting bracket and flip it so that the bracket faces up.
   - Reinstall hex bolts and set screws on each side of the fixture.
2. Refer to the project Installation Drawings to determine luminaire installation locations.
3. For each fixture location, install a luminaire that has the correct lens type. Unless otherwise noted, fixtures that share the same lens type are identical.
4. Hold luminaire in place and install bolt, flat washers, and nut to securely fasten the fixture mounting bracket to the mounting structure. Tighten hardware hand tight so that fixture is secure but do not fully torque hardware until aiming is complete.
5. Remove the clear protective film from the front of the lenses, if present.

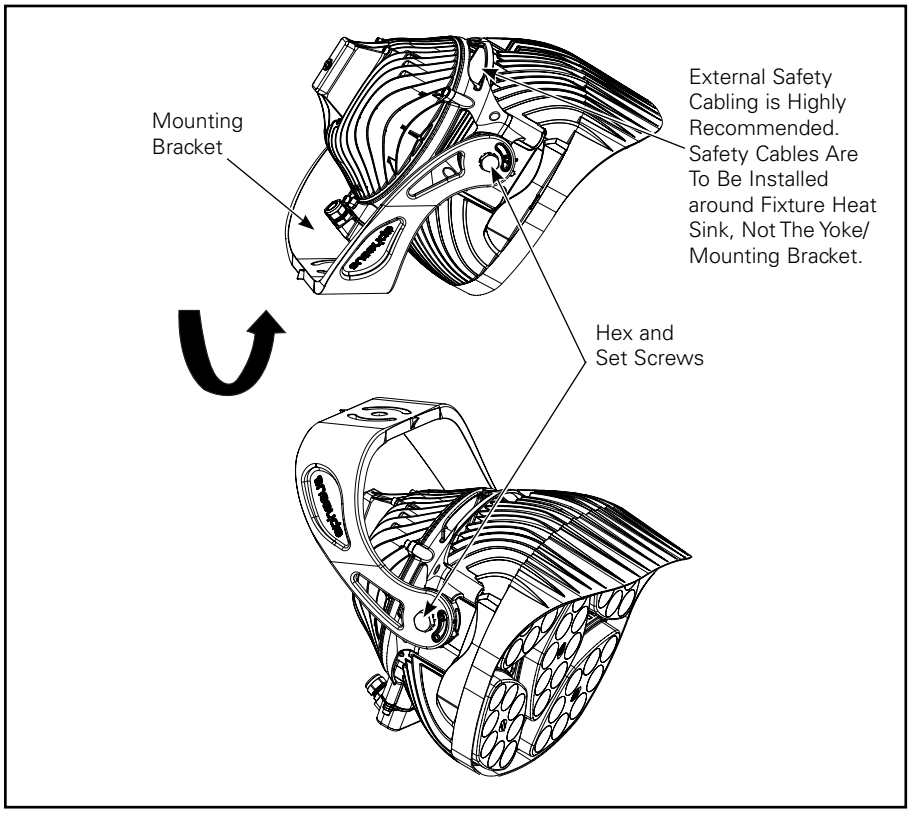

Figure 2. Inverting the Mounting Bracket

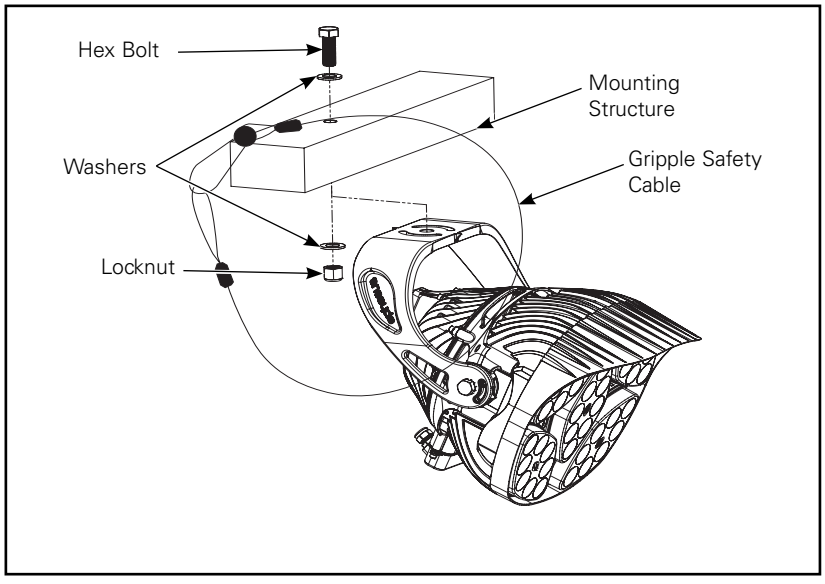

Figure 3. Inverted Mounting

Step 2 – Label the Luminaires (If Required)

For outdoor applications where smaller groups of luminaires are installed on poles, it is not necessary to label the fixtures. If you are installing fixtures on poles or other applications where labeling is not required, skip this step and proceed to step 3.

For indoor applications where many luminaires are installed in a row along a catwalk, the fixtures are typically labeled to facilitate identifying each one at a glance from the catwalk.

1. Label each fixture with Luminaire Number as indicated on schedules in the project Installation drawings.
2. Labels shall be white background with black lettering. Text shall be at least 1/4" tall.
3. Affix the label to the mounting bracket in a prominent location, avoiding manufacturer labels. See Figure 4.

Figure 4. Luminaire Label

Step 3 – Make Electrical Connections

WARNING

Never connect the luminaire to an electrical system that is not grounded. Installing a luminaire in an ungrounded electrical system could allow the metal housing to become energized in the event of an electrical short, resulting in the risk of electrical shock for anyone who comes into contact with the fixture. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO DEATH, SEVERE INJURY, OR PROPERTY DAMAGE.

Equipment Required:

- 3/16" Imperial Hex Key
- Power cable
- Electrical splicing connectors. For all outdoor installations, silicone filled water resistant connectors are highly recommended.

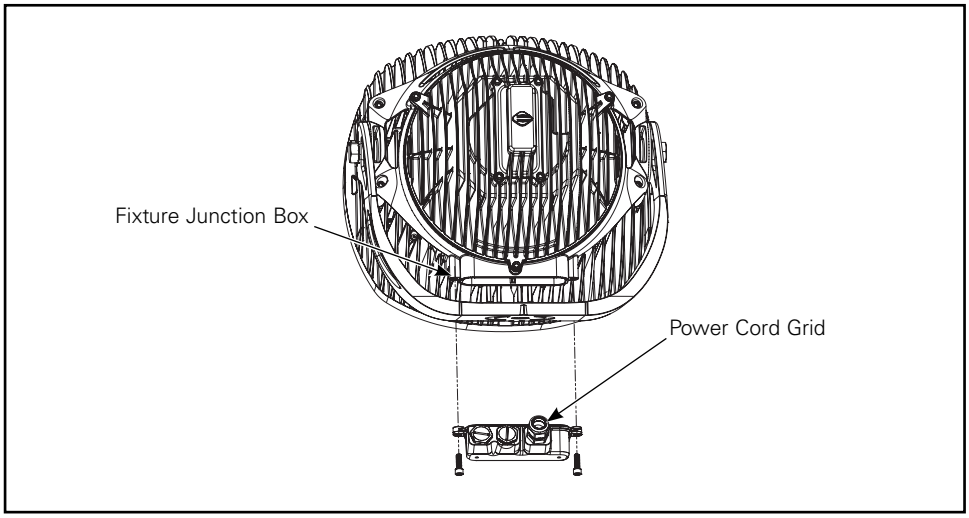

Figure 5. Electrical Connections

Power wiring

Incoming power cable shall be SOOW style 3C cable with a minimum of 14AWG annealed stranded bare copper per ASTM B-174 with a minimum temperature range of -40°C to +90°C.

1. Remove cover from junction box at the base of the luminaire.
2. Route incoming power cable through the cord grip in the junction box cover.
3. Strip outer jacket of incoming power cable back 3". (76.2mm) Connect the incoming power wires to the fixture power wires on right side of junction box.

Fixture power wire color	Designation
Black	Line
White	Line or Neutral
Green	Ground

Power wiring connections

WARNING

NEVER connect the bare or green insulation ground wire to the black (HOT) current-carrying or white (NEUTRAL) supply wire, as this could energize the metal housing. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO DEATH, SEVERE INJURY, OR PROPERTY DAMAGE.

WARNING

Do not damage or cut the wire insulation (covering) during installation. Do not permit wires to contact any surface having a sharp edge, as this may damage the wire insulation. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO DEATH, SEVERE INJURY, OR PROPERTY DAMAGE.

Control Wiring

WARNING

Always turn power to fixture OFF before performing any work on control wiring. Turn transmitters off before working on main control lines. Performing any work on control connections while fixtures are receiving the signal may result in transient or fluttering control signals which can cause damage to the luminaire. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO LUMINAIRE INTERNAL DAMAGE AND FAILURE.

Control Standards

All control work shall conform to ANSI E1.11 – 2008 (r2013), USITT DMX512-A, Asynchronous Serial Digital Data Transmission Standard for Controlling Lighting Equipment and Accessories. At a minimum DMX cable shall be 1-pair (24AWG, 7x32 Stranding) Twisted (minimum of 4.8 twists/foot), Shielded, minimum of 100 ohms impedance, and <25pF/ft. Capacitance.

WARNING

Use caution when connecting any 24AWG wires as they are more prone to breaking.

1. If using wireless controls, cap off each control wire in the luminaire junction box individually with splicing connector or wire nut.

Note: If using Air Mesh wireless controls, remove the MAC address sticker from the fixture and affix it to the MAC address record sheet with the fixture number.

2. If using wired controls, route the incoming control line into the left side of the fixture junction box by removing the plug and providing and installing a ½" cord grip appropriately sized to hold the control wires securely.
3. Connect the incoming control wires to the fixture control wires. If connecting multiple fixtures in daisy-chain configuration, connect the incoming wires to both the fixture wires and the outgoing wires.
4. Ensure all power and control wires are securely terminated and there are no exposed conductors. Carefully push power and control wires down into their respective halves of the junction box to ensure no wires get pinched by the cover.
5. Reinstall fixture junction box cover and torque screws to 35-75 in-lbs (4-8 N-m).

Fixture control wire color	Designation
Purple	Data +
Grey	Data -
Yellow	Shield

Control Wiring Connections

Step 4 – Aim The Luminaires

Aiming the luminaires is a critical part of the LED lighting solution to ensure that light is evenly distributed on the playing surface. There are two basic methods to properly aim a sports venue – Precision Laser Aiming by Coordinates, and Orient-Tilt.

Precision Laser Aiming by Coordinates

Laser aiming is the most effective and preferred technique for aiming Ephesus LED sports lighting. This method uses a laser mounted to the luminaire to point the fixture at a predetermined point on the playing surface using (X,Y) coordinates.

Unless otherwise noted, aiming coordinates on Ephesus photometrics or project Installation drawings are based on the origin (0,0,0) placed at center field, court, or ice. All dimensions from that point are in feet along the playing surface unless otherwise noted.

Orient –tilt

With the Orient-tilt method, the installer turns the luminaire according to predetermined angles. This technique is extremely helpful for pre-aiming fixtures mounted on a cross arm on the ground before the lighting pole is lifted up and set in place. However, this method is less accurate due to the variances in actual final pole and luminaire locations and orientations compared to the approximated parameters used in the photometric design.

The Orient angle refers to the direction the luminaire faces in the Z-plane. In other words, mount the luminaire to the structure but leave the mounting nut slightly loosened to allow the entire fixture to spin about the mounting bolt. Set the luminaire Orient by rotating the luminaire mounting bracket relative to the mounting structure.

Unless otherwise noted, Orient values shown in Ephesus photometrics or project Installation Drawings are based on 0° being Plan East. Plan East means 0° is heading to the right side of the sheet as you hold it in front of you, which is not necessarily geodetic or True East.

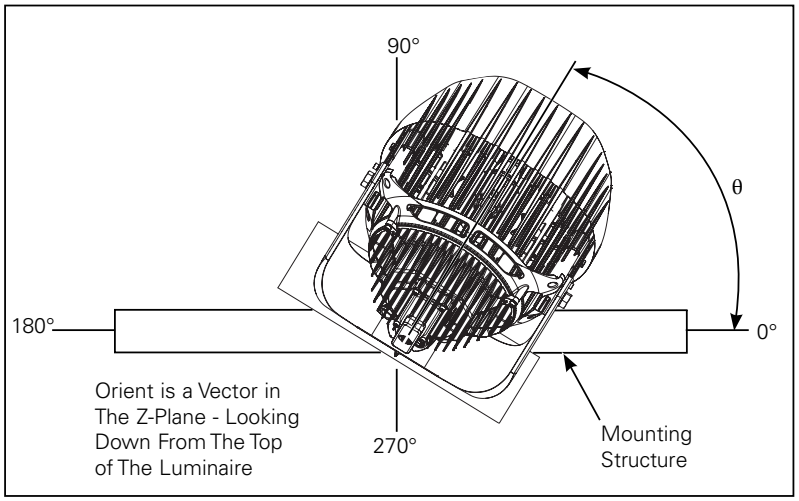

Figure 6. Orient

The Tilt angle refers to the direction the luminaire faces in the Y-plane. When the luminaire is securely mounted to the structure so that the mounting bracket does not move but the side Hex and Set screws are loosened, the fixture may rotate up inside the mounting bracket. Set the luminaire Tilt angle by rotating the fixture housing relative to the luminaire mounting bracket.

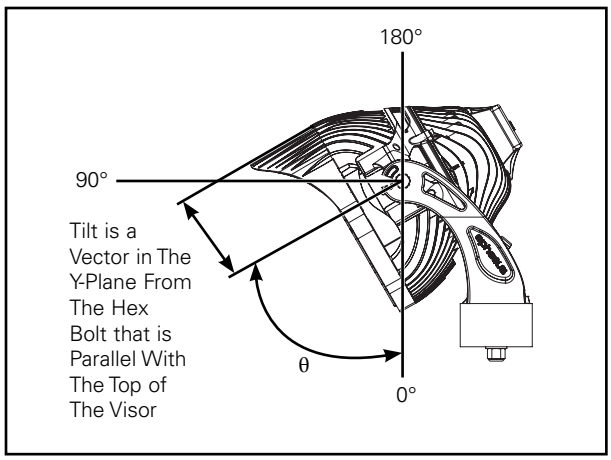

Figure 7. Tilt (Please refer to minimum tilt angles on next page)

Minimum tilt angles:

The side set screws will not allow the All Field to be tilted downward at an angle of less than 30° relative to vertical. If fixture must be tilted between 20-30°, remove the side set screws.

If the fixture must be aimed at less than 20° tilt, use the inverted mounting configuration.

Note: If a luminaire is installed downward at low angles in a warm or hot environment, the luminaire lumen output may decrease to compensate for decreased heat dispersion ability.

If aiming by Orient-Tilt, use an inclinometer and protractor or similar tools to set the luminaires to the correct angles and skip to Final Aiming.

Equipment Required:

- Laser or Aiming Tube
- Aiming Mount
- 15/16" Socket Wrench or impact driver
- 3/16" Imperial Hex Key
- Torque wrench/driver

⚠WARNING

NEVER use any power tools on the fixture while the power is on. The vibration caused by power tools may damage the fixture. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO LUMINAIRE INTERNAL DAMAGE AND FAILURE.

Note: For outdoor daytime aiming when the laser dot is difficult to see, a piece of rigid tubing may be used in place of the laser. Outside diameter of tube must be 0.8"-0.87" (ANSI NPS ½") to fit into the Aiming Mount. Slightly smaller conduit such as ½" EMT may be used in the mount with a grommet or other shim only if the shim is evenly distributed around the tubing to keep it correctly aligned parallel with the top front visor of the luminaire.

⚠WARNING

NEVER point the aiming laser at any person or animal as it can cause permanent damage to eyes. Use laser only for aiming fixtures as directed. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO SEVERE INJURY.

Note: Turn off laser while not in use to conserve battery. Have spare battery charged to facilitate the aiming process.

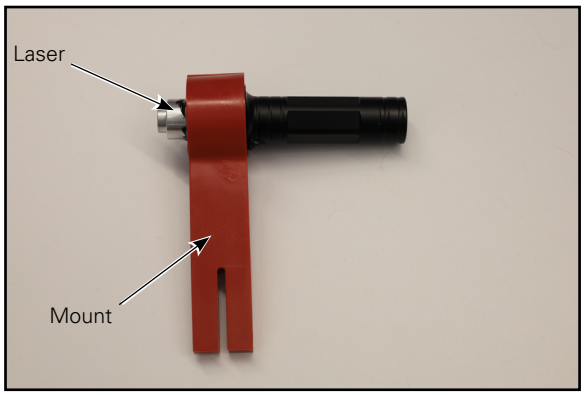

Figure 8. Aiming Laser & Mount

1. Insert the laser or tube into the aiming mount and tighten the holding screw.
2. Insert the aiming mount onto the fixture aiming pin until it is fully seated. Aiming mount must be tight against the fixture because any movement or wiggle in the mount will cause aiming to be inaccurate.

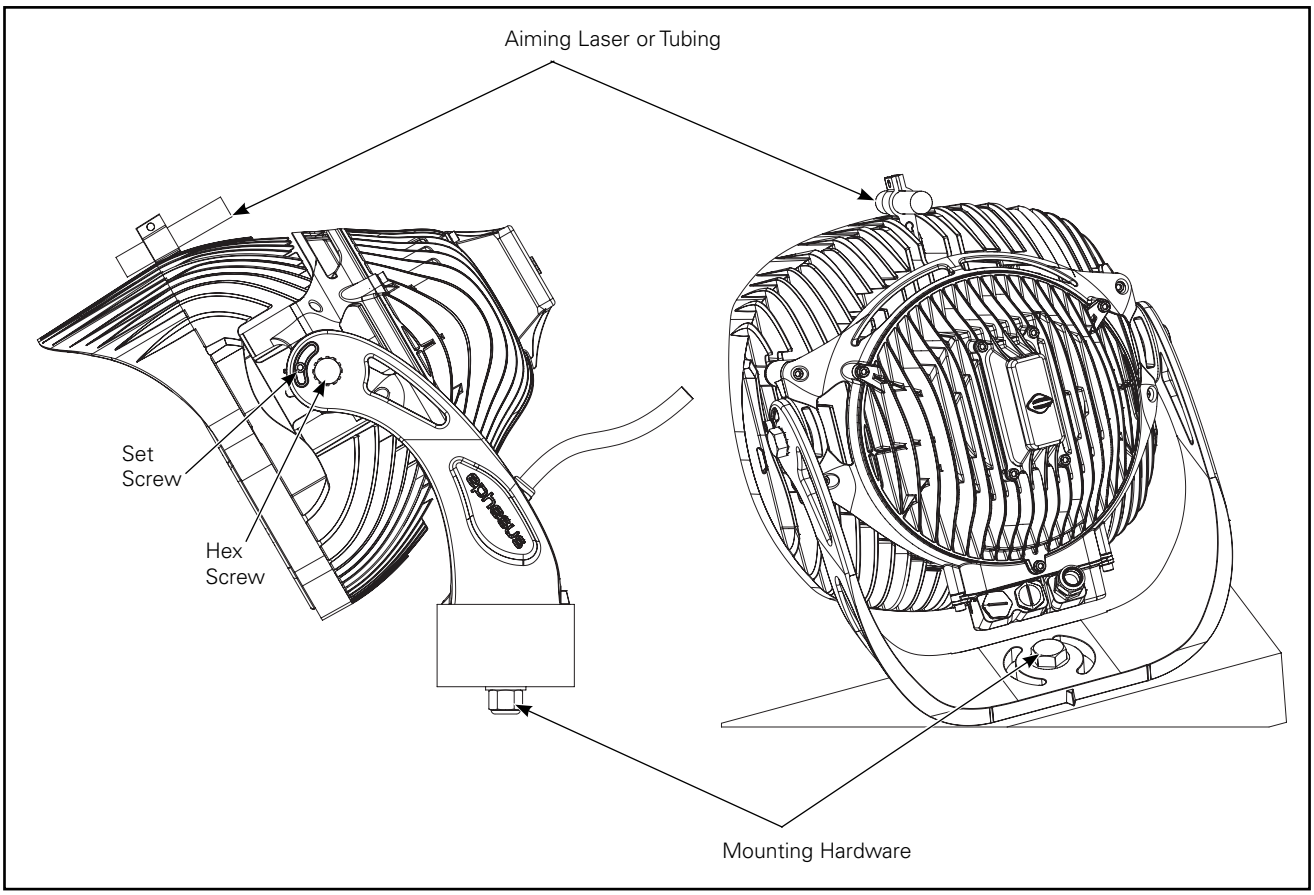

Figure 9. Aiming

3. Slightly loosen the fixture aiming screws just enough to allow the fixture to rotate and tilt.
4. Turn on the laser and aim the fixture by targeting the green laser dot at the aiming point. If aiming tube is used, look through tube and adjust fixture until aiming point is centered in view through tube. Refer to photometrics or project installation drawings for aiming point coordinates.

Note: After targeting the aiming point with the laser, turn off the laser to conserve battery life.

Hardware	Torque Value
Side Set screw	35-75 in-lbs (4 to 8 N-m)
Side Hex screw	25-35 ft-lbs (34 to 47 N-m)
Mounting bolt/nut	35-45 ft-lbs (47 to 61 N-m)

5. After aiming is complete, tighten all bolts and screws including hex and set screws on side of fixture and mounting hardware.
6. Briefly turn the laser back on or re-check view through tube to verify that the luminaire aim did not shift during tightening.
7. Remove the aiming mount from the fixture and proceed to the next luminaire.

Final aiming:

Aiming information is exported from computer lighting simulation software. Since on site conditions may vary from the computer models, final aiming is usually required to fully achieve desired lighting specifications. Final aiming means deviating from designed aiming parameters to produce the best outcome on the playing surface. Typically, final aiming only requires slight adjustments.

1. Verify that all lights are correctly aimed according to the photometric or installation drawings.
2. Measure light levels on the playing surface using a calibrated light meter. Unless otherwise noted, take readings at 3' (1m) above ground, holding the meter out at arm's length as much as possible, thereby reducing the effect of the shadow from your body.

Note: Take horizontal readings by holding the meter face up, horizontal with the ground. Take Vertical footcandle readings by facing the meter at an angle toward the vertical main or vertical end point. These vary based on venue and sport, but basically refer to the typical locations for elevated main cameras, at the center lines directly off of the side and off of the end of the playing surface.

Refer to specific project requirements or governing league regulations for more information. For reference, the NCAA lighting best practices website has grid layouts by sport:

http://www.ncaa.com/news/ncaa/article/2013-11-21/ncaa-best-lighting-practices

3. Review the light measurements and compare the data to project requirements or photometric drawings. If the light measurements do not meet designed levels, final aiming is required.

Note: There is no hard and fast rule on how to make final aiming adjustments as it is essentially an art form due to the propagation and reflection properties of light. A bright spot is usually not caused by one individual luminaire but rather the additive effect from several luminaires aimed in the same general vicinity.

4. Note the areas of the playing surface that are the brightest and darkest and determine which luminaires are aimed toward the bright areas and which are aimed near the darkest areas.
5. Re-aim one or a few lights away from the bright areas and closer to the darker areas.

⚠WARNING

During final re-aiming, always minimize the number and size of aiming modifications. Make just one or a few small adjustments and then re-check light levels. Making too many significant aiming changes may result in failure to meet specified levels or introducing unwanted results such as glare.

6. Re-measure light levels in areas where adjustments were made and compare new results to project specifications.
7. Repeat steps 5-6 as necessary to meet light level requirements.

Step 5 – Finishing Touches

To complete the installation, verify that all mounting, connection, and aiming work is finished.

- Verify all electrical connections are tight and secured. The installer is responsible for the integrity of all connections.
- Verify all bolts and screws are tightened and properly torqued.
- Straighten up all cabling. Tie down all cables neatly. For all outdoor projects, use UV rated tye wraps and wire management.

Note: When power is turned on, the luminaires default to 100% on unless a different control signal is present.

If using the Ephesus Air Mesh control system, see the Air Mesh Installation Manual for more information on controlling the luminaires.

Care and Maintenance

All luminaires are prepared with a powder-coated finish. The finish on exterior luminaires may weather over time, depending on the environmental conditions at the installation site. Proper care of the luminaires will maintain their performance and appearance.

Follow a regular maintenance schedule to retain optimal light output and thermal performance. Remove any dirt, leaves and other foreign debris from the luminaire housing. Wipe the optical lenses with a clean, dry, cotton cloth to remove dust and other contaminants. A non-abrasive polycarbonate cleanser may be used periodically.

WARNING

Do NOT use any abrasives such as car wax, brass cleaners or other polishes or chemicals. These may scratch, remove, or damage the protective coating, allowing moisture and pollutants to come into contact with the aluminum, possibly discoloring or pitting the finish.

Troubleshooting

WARNING

Before performing any work on the luminaire, shut off the power circuit, verify the power is off with a multimeter, and wait 2 minutes before handling luminaire. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO DEATH, SEVERE INJURY, OR PROPERTY DAMAGE.

The All Field luminaire is designed to provide reliable quality lighting. If the system appears to not be operating correctly, perform the following steps.

How many fixtures are affected?	Recommendation
One, or a few independent fixtures not grouped together	Investigate at each fixture
A string, section, pole, or group of fixtures operating the same way	Investigate at the source of power or control for the affected fixtures

Look for anything obvious

- ☐ **Have any external forces been in the area?** For instance, were any riggers, electricians, or other workers near the fixtures or controls?
- ☐ **Have there been any power disturbances in the facility such as lightning storms?**
- ☐ **Has anything changed recently?** Any changes to control programming?

Description	Possible Causes	Recommendation
Fixture stuck off	• Branch circuit power is off • Fixture power supply issue	1. Verify power is on, stable, and at the correct voltage. 2. Reset fixture – Turn power off for 10 seconds 3. **Test fixture default operation without control signal** - Disconnect control wires in fixture junction box (wired) or turn off power to wireless Main Hub, then restore power to fixture. All Field fixtures should default to 100% on. (*Note – RGBA fixtures default off until control signal above 0 is present) 4. If fixture will not illuminate, replace fixture
Fixture stuck on, will not respond to control	• Loss of control signal	1. Verify control system is operational 2. Reset fixture – Turn power off for 10 seconds 3. For wired systems - Verify control connections at fixture and source are secure 4. Verify control card in back of fixture is seated properly 5. If no communication with control card - replace control card in back of fixture 6. If fixture control card is communicating but fixture is not responding, replace fixture

Fixture flickering intermittently	• Loose connection	1. Check power and control connections
Fixture strobing rhythmically	• Loss of control signal • Interference in the control system	1. Verify electrical system is properly grounded per NEC and IEEE standards for electronics 2. Verify control system is properly insulated and distanced from all line voltage circuits per NEC
Part of the fixture stuck on/off	• Fixture internal issue	1. Replace fixture
Fixture not responding correctly in one or more control scenes	• Programming error	1. Verify control system programming is correct 2. Verify fixture address is correct (MAC, DMX, etc.) 3. Verify individual control of fixture

Contacting Warranty Technical Support - Before you call:

- ☐ Run the system through some different control scenes, including all on (Game mode) and then all off (blackout mode). Take note of all fixtures not responding correctly to the scenes.
- ☐ Is the power supply on, at the correct voltage, and stable? Have an electrician measure the voltage at the fixture to confirm.
- ☐ Check all power and control connections at the source and at the fixture. Have an electrician check the connections inside the fixture junction box if necessary. WARNING – Always remember to disconnect power from the luminaire before opening the junction box.
- ☐ Reset the fixture by turning off branch circuit power to the fixture for at least 10 seconds. Then restore power and note if the fixture responds correctly.
- ☐ Record as much detail about the issue as possible
- ☐ Record the fixture model number if possible

Fixture Replacement

If you have attic stock fixtures available and need to replace a fixture, simply follow the installation instructions in this manual to replace the fixture in question.

- ✓ Verify the attic stock fixture is EXACTLY the same model number (especially beam width) as the fixture to be replaced
- ✓ Be sure to address the replacement fixture with the correct luminaire number
- ✓ Contact us to set up a Return Material Authorization (RMA) for the defective unit

Refer to your luminaire warranty document for more information.

Call Warranty Support at 800-573-3600

Email Warranty Support at Ephesuswarranty@Eaton.com

Website claim form/resources?

FCC Statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off an on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Declaración de la FCC

Nota: El equipo ha sido probado y cumple con los límites para un dispositivo digital de Clase A, de conformidad con la parte 15 de las Normas de la FCC. Estos límites están diseñados para proporcionar una protección razonable contra las interferencias dañinas en una instalación residencial. Este equipo genera usos y puede emitir energía de radiofrecuencia y si no se instala y utiliza de acuerdo con las instrucciones, puede causar interferencia dañina en las comunicaciones de radio. Sin embargo, no se puede garantizar que dicha interferencia no ocurra en una instalación determinada. Si este equipo causa interferencia dañina en la recepción de radio o televisión, lo que puede determinarse apagando y encendiendo el equipo, se recomienda al usuario que intente corregir la interferencia mediante una o más de las siguientes medidas:

- Reorientar o reubicar la antena receptora.
- Aumentar la separación entre el equipo y el receptor.
- Conectar el equipo a una toma de corriente en un circuito diferente al que está conectado el receptor
- Consultar con el distribuidor o con un técnico de radio/TV experimentado para obtener ayuda.

Warranties and Limitation of Liability

Please refer to **www.cooperlighting.com/legal** for our terms and conditions.

Garanties et limitation de responsabilité

Veuillez consulter le site **www.cooperlighting.com/legal** pour obtenir les conditions générales.

Garantías y Limitación de Responsabilidad

Visite **www.cooperlighting.com/legal** para conocer nuestros términos y condiciones.

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