

HazLoc LED LUMINAIRE

Installation and Maintenance Manual

HazLoc L2302 series

THT-EX

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1. General Information

HazLoc L2302 LED Luminaires are suitable for use in the following hazardous (classified) areas as defined by the National Electrical Code (NEC) and Canadian Electrical Code (CEC):

- Class I, Division 2, Groups A, B, C, D

Wet Locations (UL 1598)

Refer to the luminaire nameplate for specific classification information, maximum ambient temperature suitability and corresponding operating temperature (T-Code).

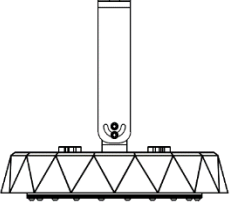
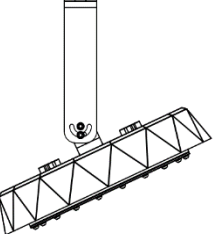

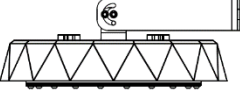
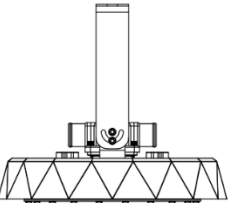
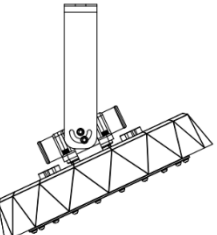
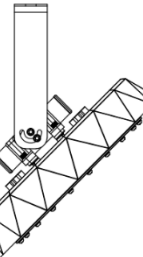
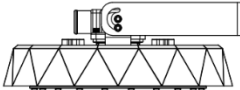
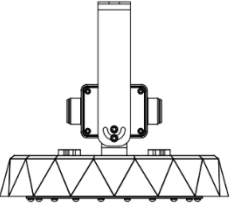
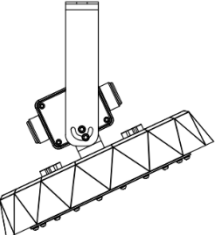

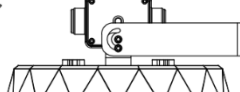
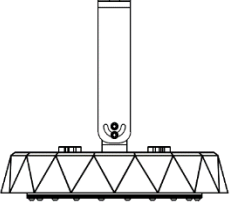
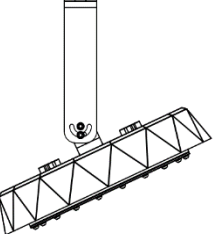

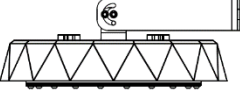
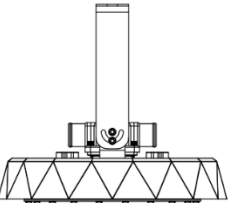
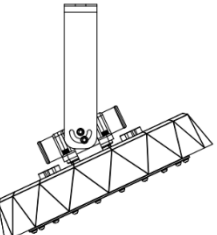
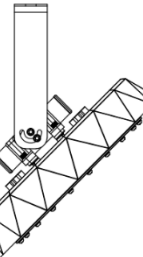
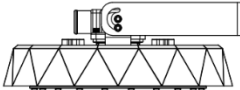
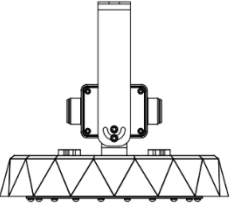
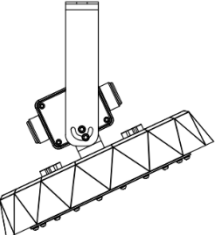

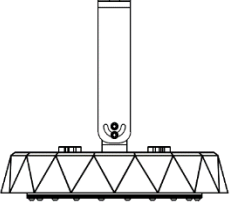
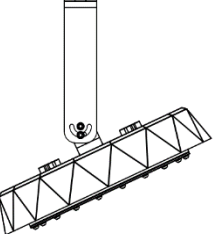

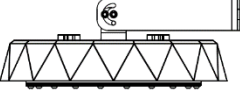
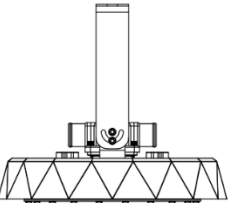
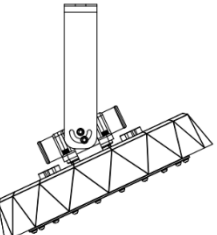
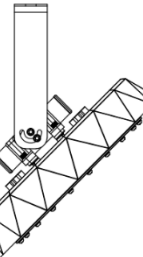
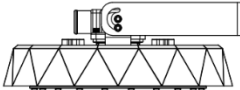
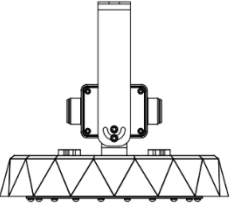
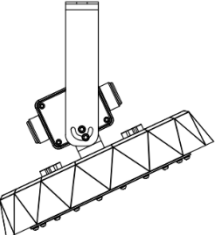

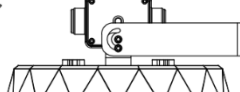
HazLoc L2302 LED Luminaire is designed for using in indoors and outdoors environment.



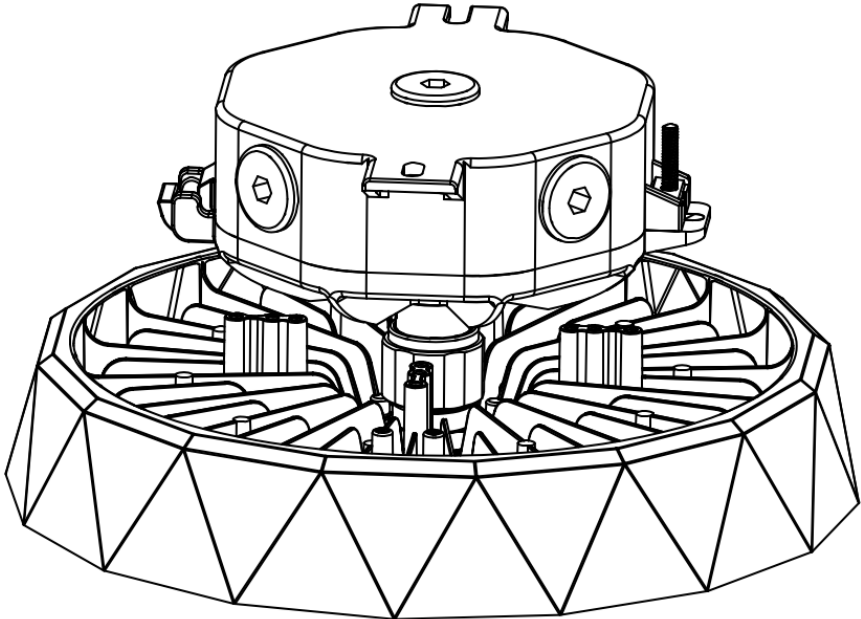
WARNING

- **To avoid the risk of fire, explosion or electric shock, this product should be installed, inspected and maintained by a qualified electrician only, in accordance with all applicable codes and regulations.**
- **To avoid electric shock:**
 - ✓ **Be certain electrical power is OFF before and during installation and maintenance.**
 - ✓ **Luminaire must be supplied by a wiring system with an equipment grounding conductor.**
- **To avoid surges:**
 - ✓ **A suitable anti-surge absorber should be installed.**
- **To avoid explosion:**
 - ✓ **Make sure that the supply voltage is the same as the luminaire voltage.**
 - ✓ **Do not install where the marked operating temperatures exceed the ignition temperature of the hazardous atmosphere.**
 - ✓ **Do not operate in ambient temperatures above those indicated on the luminaire nameplate.**
 - ✓ **All gasket seals must be clean and undamaged.**
 - ✓ **Use proper supply wiring as specified on the luminaire nameplate.**
 - ✓ **Before dismounting, electrical power to the luminaire must be turned off. Keep tightly closed when in operation.**
- **To avoid burning hands, ensure the luminaire is cool when performing maintenance.**
- **Before assembly/commissioning:**
 - ✓ **Read through the operating instructions.**
 - ✓ **Give adequate training to the assembly and operating personnel.**
 - ✓ **Ensure that the contents of the operating instructions are fully understood by the personnel in charge.**
 - ✓ **The national installation and assembly regulations apply.**
- **When operating the device:**
 - ✓ **Ensure the operating instructions are made available for the person in charge on location at all times.**
 - ✓ **Observe these instructions, other working instructions and national safety regulations.**
 - ✓ **Verify the implementation of safety instructions.**

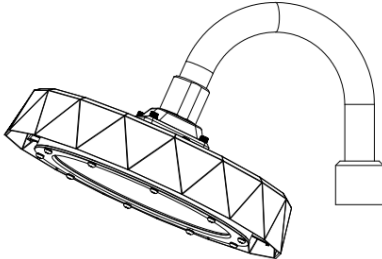
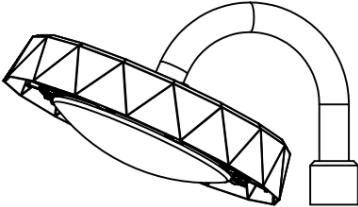
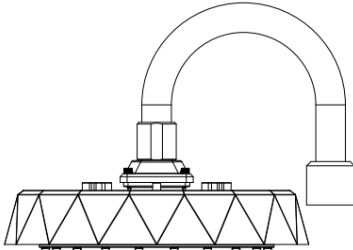
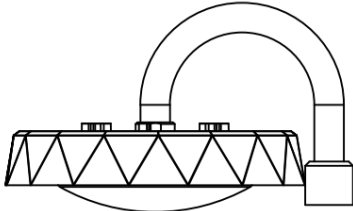
2. Technical Data

Item	Description															
Voltage (±10%)	110/ 120/ 220/ 230/ 277 Vac 、 24Vdc (Univoltage) 100-277 Vac (Full Voltage)															
Watts (±10%)	40/ 50/ 60/ 65/ 75/ 80/ 90/ 95/ 120/ 140/ 150/ 180/ 200/ 220/ 240/ 250 Watts (Univoltage) 30/ 40/ 50/ 60/ 70/ 80/ 90/ 100/ 110/ 120/ 130/ 140/ 150/ 160/ 170/ 180/ 190/ 200/ 210/ 220 Watts (Full Voltage)															
Frequency	50/60 Hz															
Power Factor	PF>0.9 (Univoltage) PF>0.98/115VAC, PF>0.95/230VAC, PF>0.92/277VAC@full load (Full Voltage) (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)															
Degree of protection	IP67															
Ambient Temperature Range	-20°C ~ +43°C / -20°C ~ +50°C / -20°C ~ +55°C / -20°C ~ +66°C / -20°C ~ +77°C -20°C ~ +63°C / -20°C ~ +69°C / -20°C ~ +79°C / -20°C ~ +84°C / -20°C ~ +88°C -20°C ~ +90°C / -20°C ~ +93°C / -20°C ~ +94°C / -20°C ~ +95°C / -20°C ~ +97°C															
Material Enclosure Glass	Aluminum alloy Heat and impact resistant tempered Glass or Polycarbonate															
LED Service Life	60,000 hrs.															
Wiring Instructions	Black-wire connects to Live; Green-wire connects to Ground (Japan is the exception)															
Mounting Type	WHT Mounting															
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%; text-align: center;">Lens facing down 90° from vertical</th> <th style="width: 25%; text-align: center;">Lens facing down 25° from vertical</th> <th style="width: 25%; text-align: center;">Lens facing down 60° from vertical</th> <th style="width: 25%; text-align: center;">Lens facing horizontal</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> </tr> </tbody> </table>	Lens facing down 90° from vertical	Lens facing down 25° from vertical	Lens facing down 60° from vertical	Lens facing horizontal											
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Ceiling

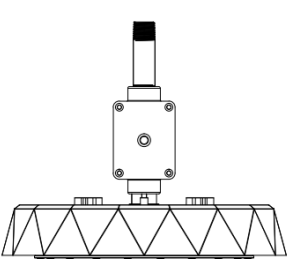
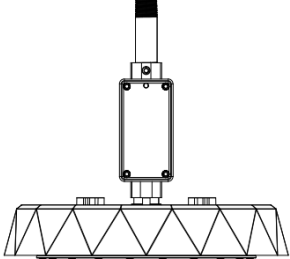
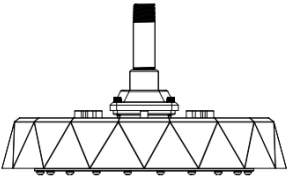
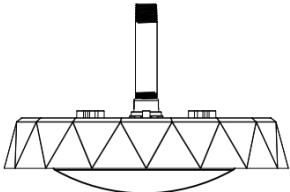


Stanchion type(25° & 90°)



Mounting Type

Pendant

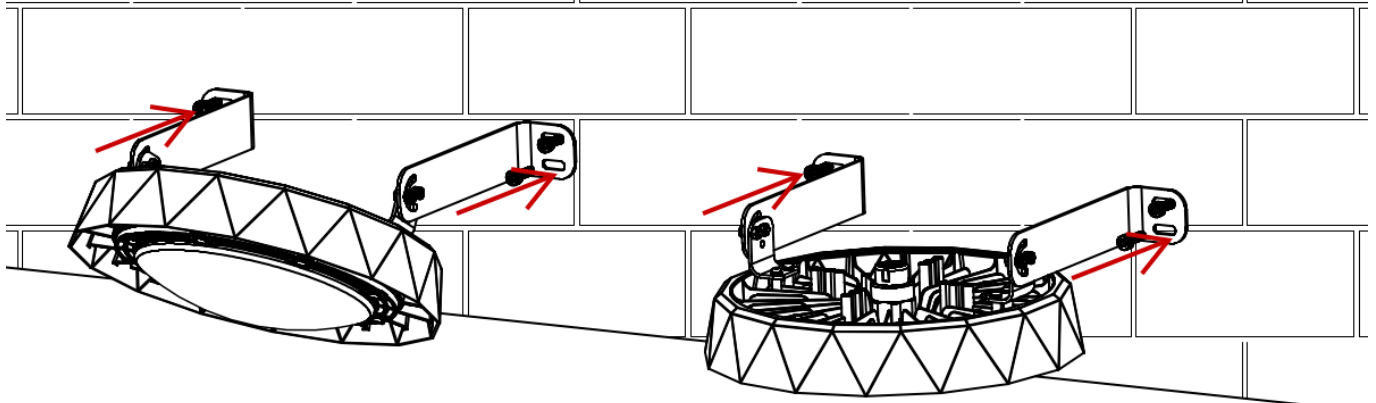
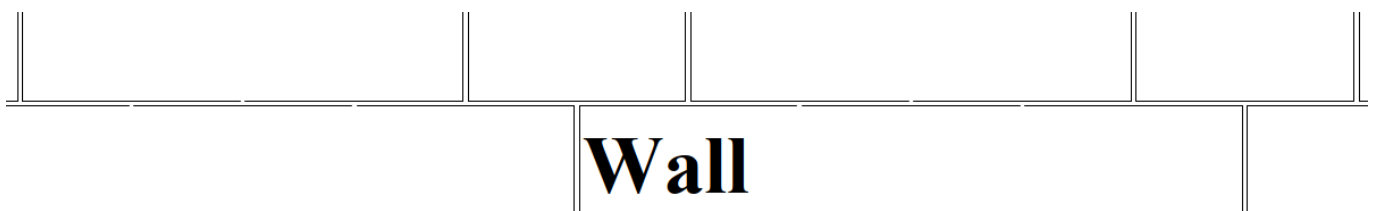
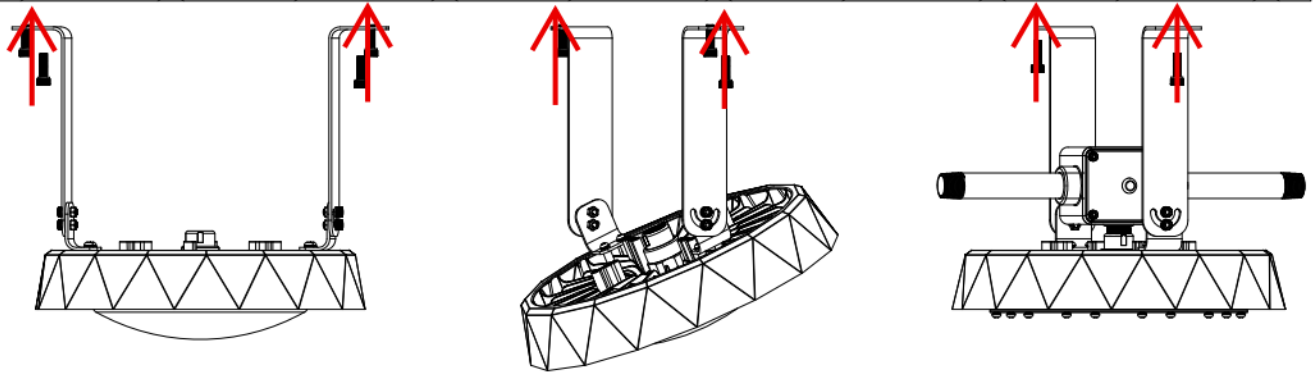
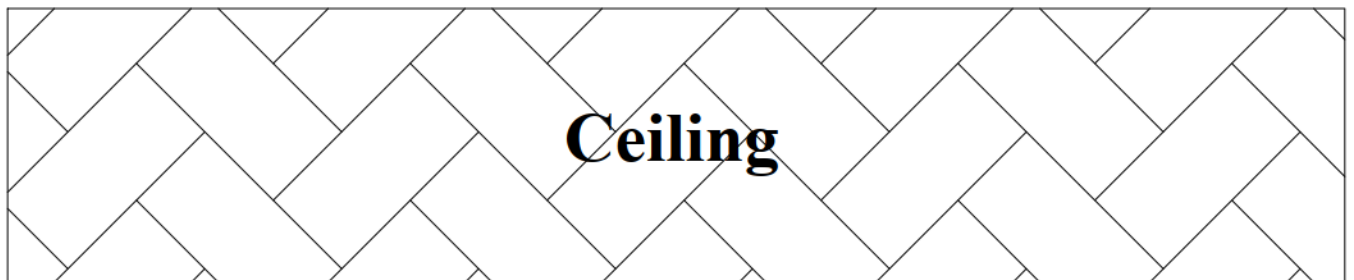


3. Assembly and Installation

3.1 Mounting Bracket Installation

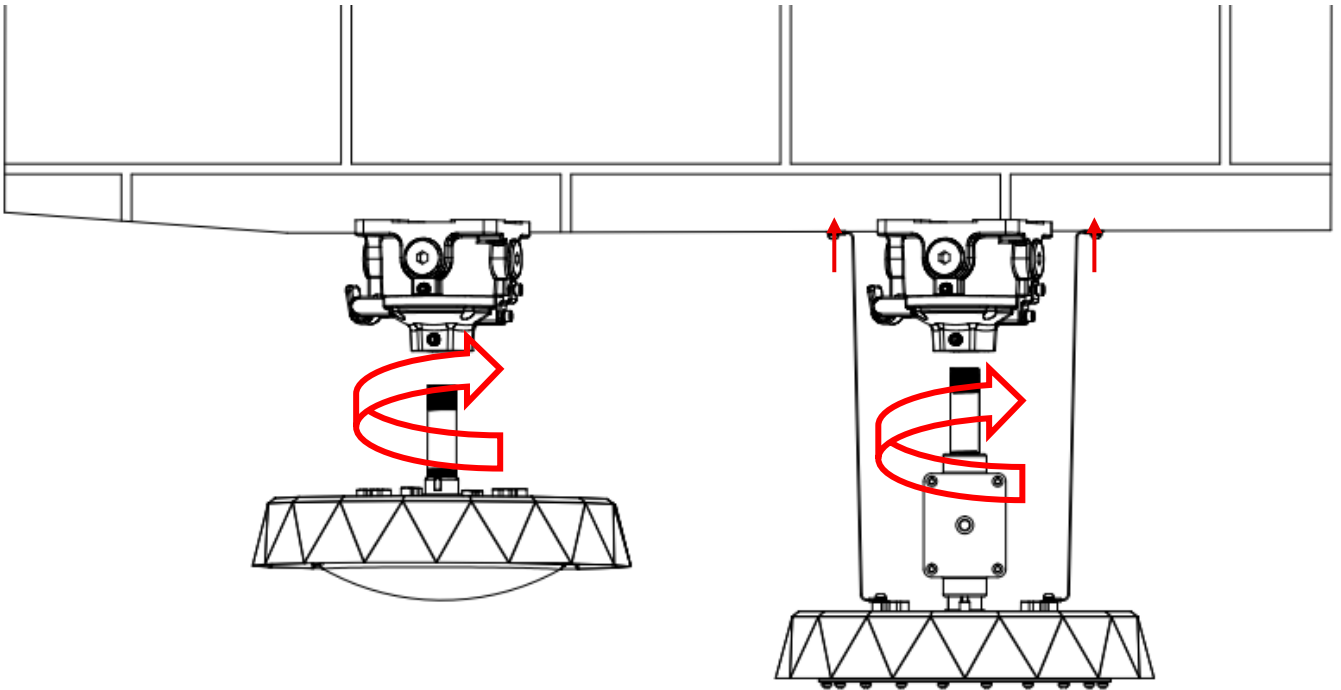
3.1.1 Two position Adjustable Trunnion (Wall & Ceiling) Mounting(WHT) - each position with one aiming angle(0 degree 、 25 degree 、 60 degree 、 90 degree) - Secured to wall/ceiling surface (The projection angle of the lamp can be adjusted according to the angle set by the bracket)

- ☞ The mount bracket is for surface mounting to wall and ceiling.
- ☞ Position the bracket holders and secured by means of the provided M8 screws(not provided) with 122 kgf-cm.
- ☞ Secure the wall/ceiling mounting bracket to the mounting surface by using four fasteners (not provided).



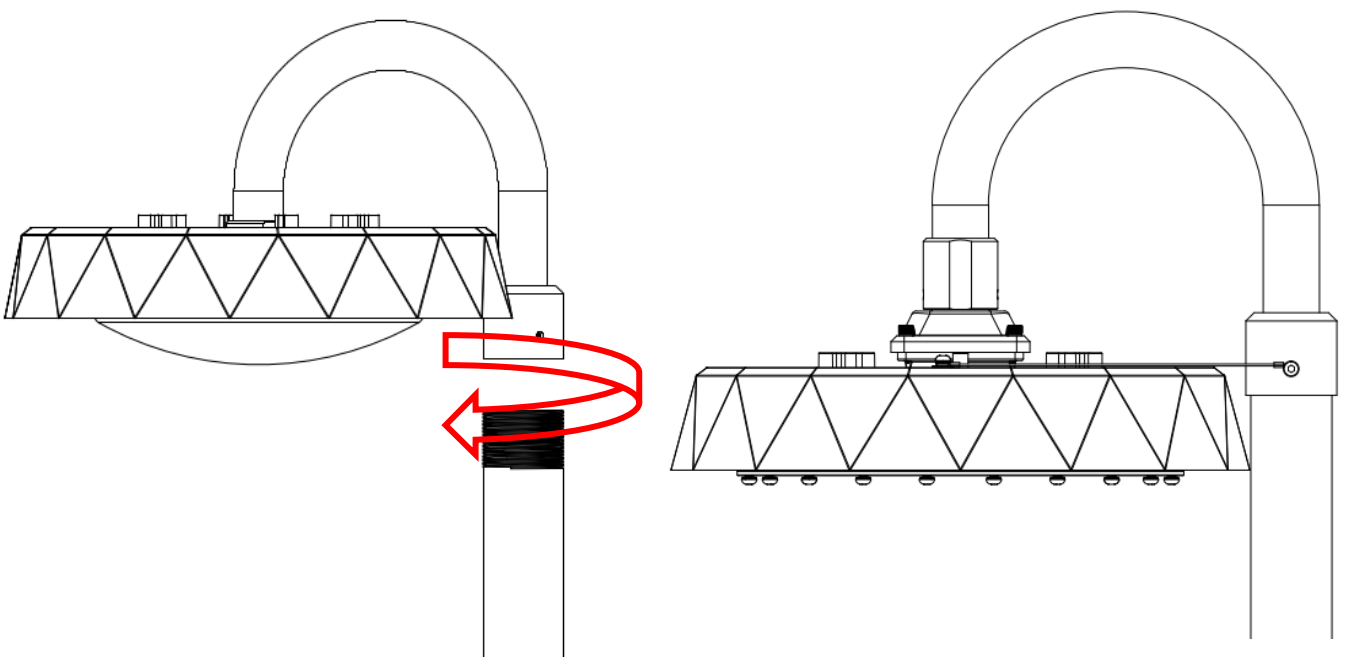
3.1.2 Pendant Mounting

- ☞ For suspended installation, use a junction box or mounting box equipped with a thread-locking device.
- ☞ After the are installed, secure the safety cable to a dedicated structural anchor on the ceiling or wall. Do not attach the safety cable to the primary mounting hardware. Verify the anchor's pull-out capacity meets the specified rating.



3.1.3 Stanchion type(25° & 90°)

- ☞ The pipe thread with thread lock on the stanchion.
(After the installation is completed to confirm the electric tube is locking in the column.)
- ☞ After completing installation of the bent-pipe assembly, secure the safety cable to the dedicated structural anchor on the light pole. Verify that the anchor's pull-out capacity meets the specified rating.



3.2 Cable Specification

3.2.1 The cable of the lamp is a 3-core wire with 3 colors: black, white and green. Their functions are as follows:

- ☞ AC LIVE WIRE : Black Wire
- ☞ AC NEUTRAL WIRE : White Wire
- ☞ AC EARTH WIRE : Green Wire

3.2.2 The cable of the Heat Resistant LED Light is a 3-core wire with 3 colors. Their functions are as follows:

- ☞ AC LIVE WIRE : Black Wire or Red Wire
- ☞ AC NEUTRAL WIRE: White Wire or Blue line.
- ☞ AC EARTH WIRE: Green Wire or Yellow-Green Wire

3.3 Ground wire

- ☞ External earth screw location in the Tank plane.
- ☞ The external earth ground wire installation and terminal type as show the below pictures.
- ☞ Ground wire cross-sectional area=4mm².
- ☞ Both ground screw and washer material are stainless steel.
- ☞ Screw hole spec: M5.
- ☞ Torque requirement: 14.5 kgf-cm. (Ensure wire is tied assured.)



3.4 Putting into Service

Before putting into operating, it's necessary to ensure that :

- ☞ The lighting is correctly installed.
- ☞ The connection has been correctly made.
- ☞ The field wiring has been inserted correctly.
- ☞ The voltage is correctly.
- ☞ If the area of use generates surges, a suitable anti-surge absorber should be installed.

4. Maintenance

- To avoid personal injury, disconnect power to the light and allow the unit to cool down before performing maintenance.
- Perform visual, electrical, and mechanical inspections on a regular basis. The environment and frequency of use should determine this. However, it is recommended that checks be made at least once a year. Frequency of use and environment should determine this. It is recommended to follow an Electrical Preventive Maintenance Program as described in the National Fire Protection Association Bulletin NFPA No. 70B: Recommended Practice for Electrical Equipment Maintenance.
- The lens should be cleaned periodically to ensure continued lighting performance. Clean the lens with a clean, damp, non-abrasive, lint-free cloth. If this is not sufficient, use a mild soap or a liquid cleaner. Do not use an abrasive, strong alkaline or acid cleaner as damage may occur.
- Inspect the cooling fins on the luminaire to ensure that they are free of any contamination (i.e. excessive dust build-up). Clean with a non-abrasive cloth if needed.
- Electrically check to make sure that all connections are clean and tight.
- Mechanically check that all parts are properly assembled.

5. Transport, Storage and Disposal

- Transport and storage is only allowed in the original packaging, on the way pointed out on the carton box.
- Transport – Shock-free in its original carton, do not drop, and handle carefully.
- Store – Store in a dry place in its original packaging.
- Disposal – Ensure environmentally friendly disposal of all components according to the legal regulations.