Luminaire For Hazardous Locations Installation and Maintenance Manual Model L1512

Top Hi-Tech Co., Ltd. 9F 1 Zhongshan Rd Tucheng District, New Taipei, 236 Taiwan. Website: <u>www.tht-ex.com</u> TEL: +886 2 22671234 FAX: +886 2 22691166 e-mail: <u>sales@tht-ex.com</u>

1. General Information

Model L1512 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
- Class II, Division 2, Groups F, G

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

Model L1512 LED luminaire is designed for using in indoors and outdoors environment.



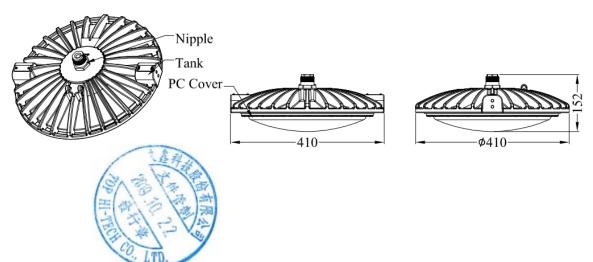
Revision: UL-L1512-01 Subject to alterations.



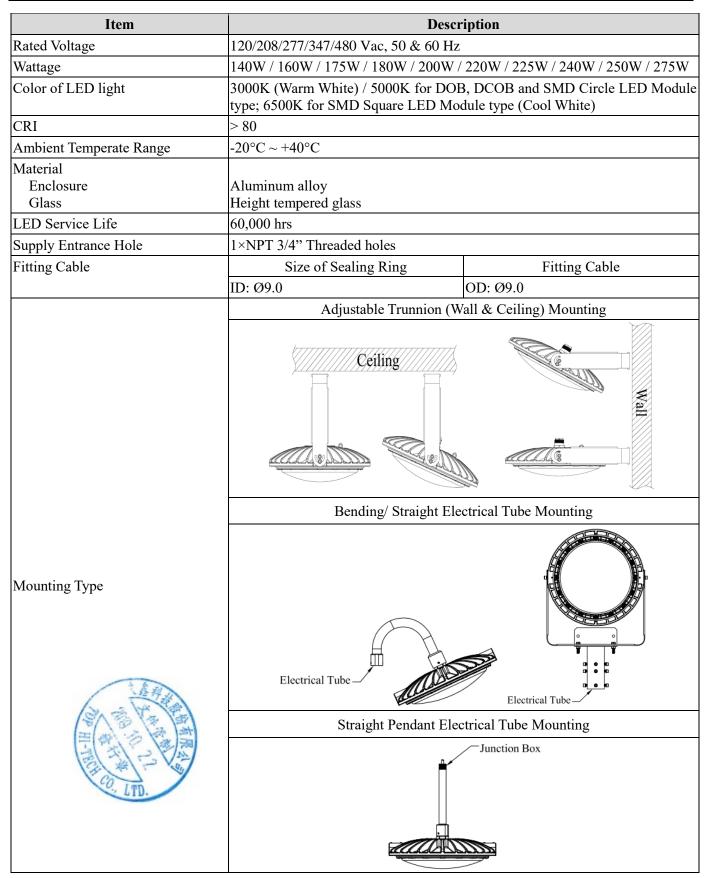
Rated Voltage (DCOB): 120/208/277/347V/480 Vac, 50 & 60 Hz Rated Voltage (DOB/SMD): 120/277 Vac, 50 & 60 Hz

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 required by the NEC and CEC for the specific hazardous locations with an equipment grounding conductor.
- ► 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.
 - ✓ 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.
- 2. Dimensions (All Dimensions in mm)



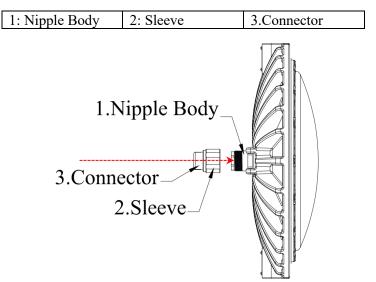
3. Technical Data



4. Assembly and Installation

4.1 Electrical Connection

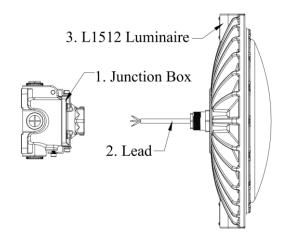
Overview of Nipple Assembly



The Sleeve is equipped by mounting the Nipple Body.

Overview of Electrical Connection

1: Junction Box	2: Leads	3: L1512 Luminaire
(Provide by customer)	(Length: min, 24 inches)	5: L1512 Luminaire



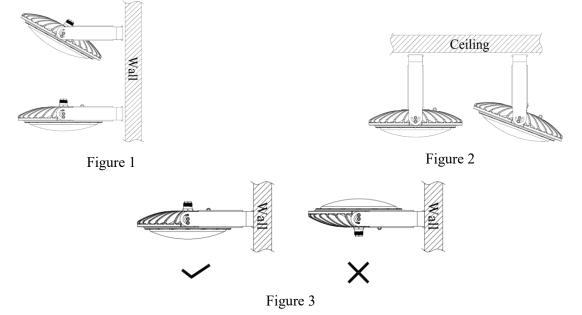
- 1. Insert the lead (2) through the conduit (not shown, provide in the field).
- 2. Connect conduit to 3/4 in, NPT external threads of adapter with at least five full threads engaging.
- 3. Connect branch conduit wires to luminaire wiring necessary raceway component, boxes and fitting required per NEC and CEC. (White-wire connects to Neutral; Red-wire connects to Live; Green-wire connects to Ground.)



4.2 Mounting Bracket Installation

4.2.1 Two position Adjustable Trunnion (Wall & Ceiling) Mounting - each position with one aiming angle

- The mount bracket is for surface mounting to wall (Figure 1) and ceiling (Figure 2).
- Position the bracket holders and secured by means of the provided M8 screws with 122 kgf-cm.
- Secure the wall/ceiling mounting bracket to the mounting surface by using four fasteners (not provided).
- The luminaire can be adjusted in one position as shown in Figures 1 and 2.
- Mounting Orientation Lens horizontal Facing Down or Lens Facing Down 45° from vertical. Don't adjust the Mounting Orientation as "Lens horizontal Facing Up" position. (Figure 3).



4.2.2 Straight Pendant Electrical Tube Mounting

- The mounting type is for the use of straight electrical tube mounting (Figure 4).
- The Straight electrical tube mounting thread is NPT 3/4".
- Thread the tube mounting on conduit and torque until wrench-tight as requirement, 2700 kgf-cm.



Figure 4

4.2.3 Bending Electrical Tube mounting

- The mounting types are for the use of Bending electrical tube mounting (Figure 5). Tube mounting thread is NPT 1-1/2".
- Thread the tube mounting on conduit and torque until wrench-tight as requirement, 6600 kgf-cm.
- Tighten tube locking set screw to conduit 24.5 kgf-cm (Figures 5).

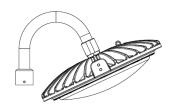




Figure 5

4.2.4 Straight Electrical Tube mounting

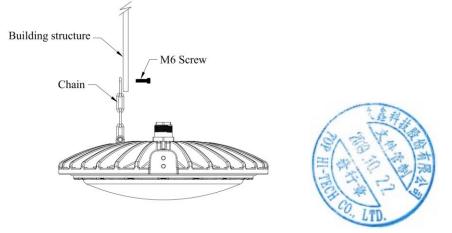
- This mounting bracket type is for mounting unto the straight electrical tube (Figure 6).
- The assembly of the bracket onto the conduit must be secured with the use of M8 threaded screws and by applying 122.0 kgf-cm torque.



Figure 6

4.3 Chain mounting

- The Use the M6 screw to secure the chain to the building structure.
- The screw passes through the chain and the torque is 49 kgf-cm fixed on the structure.



5. 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 luminaire 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.

6. 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.