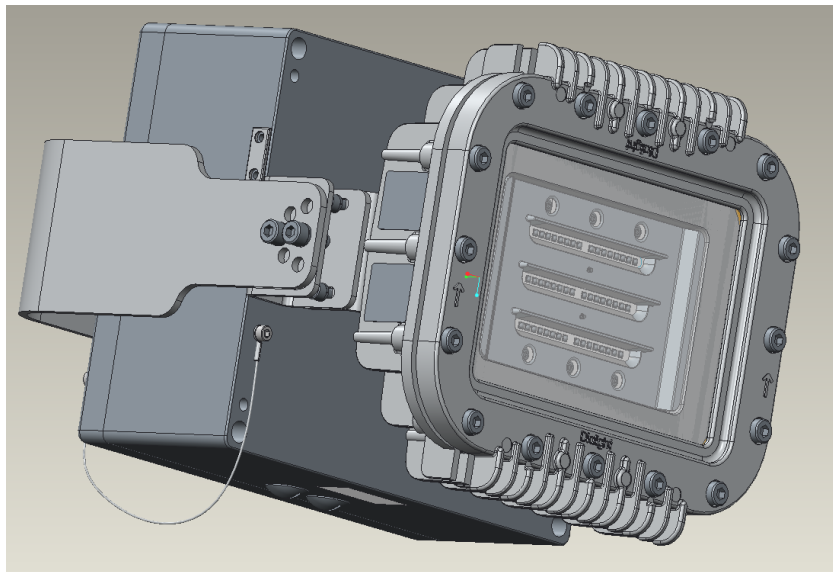


Important Information:

These instructions contain safety information, read and follow them carefully. Dialight will not accept any responsibility for injury, damage or loss which may occur due to incorrect installation, operation or maintenance.

Operating Instructions



Languages

English

Note: Save these instructions for future use

Safety Instruction:

Safety Instruction:

The installation, operation and maintenance must be carried out by an electrician suitably trained in local building codes.

- Changes of the design and modifications to the led fixture are not permitted.
- Repairs must only be carried out by a qualified electrician.
- Observe the national safety rules and regulations during installation.
- No user serviceable parts inside.
- Caution: to avoid electric shock: Power unit down before installation and maintenance. Never open led luminaire. Luminaire must be grounded.
- Potential electrostatic charging hazard
- Wait 10 minutes after disconnection before opening, refer to instructions.
- Caution: cable entry may reach 93°C.
- Clean only with damp cloth.
- Do not let power cord touch hot surfaces.
- Do not mount near gas or electric heaters.
- Do not use this equipment for other than its intended use.
- Caution: polycarbonate lens susceptible to chemical attack reactivity list.
- For maximum long term reliability and light output, the luminaire must be installed in free air

WARNING:

Explosion Hazard – substitution of components may impair suitability for Class I, Division 2.

AVERTISSEMENT

Risque d'explosion – la substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Classe I, Division 2.

WARNING:

Explosion Hazard - do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous.

AVERTISSEMENT:

Risque d'explosion - avant de deconnecter l'equipement, couper le courant ou s'assurer que l'emplacement est designe non dangereux.

Introduction

This Area Light series luminaire is designed for illumination of hazardous locations. It uses the latest in solid state lighting technology for long life, low maintenance, and high efficiency.

The unique optical design focuses light downward to where it is needed, giving improved efficiency over a conventional HID luminaire.

Conformity to Standards

This equipment conforms to the standards specified in the Authorization to Mark. It has been designed, manufactured and tested in accordance with UL1598 and UL844.

Installation

Ensure that the mains voltage supply is disconnected before connecting the luminaire. Install the equipment in accordance with the manufacturer's instructions as well as any other applicable electric codes.

Always transport and store the equipment in its original packaging and keep in a dry location. When unpacking check for any cracks or damage in the housing, glass, and glass frame. If in doubt, do not install.

For best optical performance Dialight Corporation recommends mounting the 180° optic at a 45° angle with respect to the vertical mounting pole or wall. Note: Arrows point opposite the direction of light pattern. Refer to www.dialight.com for the most up to date information on available mounting brackets, hardware and accessories.

NOTE: Improper installation and operation of this luminaire may invalidate the warranty

Cable Entries

This product is not to be connected to conduit.

Cables are required to be a minimum of 18awg (1.5mm diameter).

M20 plugs shipped with unit are for packaging only and must be replaced with suitably rated IP66/67 or better metal blanking plugs or cord grips which include a sealing o-ring. Blanking plugs and cord grips must be fitted with metal locking nuts in order to maintain UL844 certification.

Entry devices must be suitable for use within an operating temperature range of -20°C to +90°C.

When connecting the conductors extra care should be taken in order to maintain the hazardous protection. The insulation of the conductors shall reach up to the terminal block. The conductor itself shall not be damaged.

The AC2 connection is a switchable live feed. It powers the unit in normal mode operation. The AC1 connection is a continuous live feed that allows the unit to be switched off without the unit entering battery backup mode.

Single Fixture Electrical Connections

When assembling the cable entries for the mains connection, always observe the manufacturer's specifications for the cord grips used. Unused cable entries must be closed and sealed by a certified blanking plug.

Loop Through Electrical Connections

Connect incoming cable then connect the outgoing cable to the associated adjoining connection to pass to the next luminaire. Only single cables to be used on each connection.

The cable entries should be securely tightened to ensure that the minimum protection rating is achieved. The cable entry should be rated to minimum of IPX6 to maintain the protection level of the fixture. Do not over tighten as the protection rating may be compromised.

In Service, Battery Charging & Condition Monitoring

If the mains power supply is interrupted, the fixture will switch to battery backup mode operating at reduced light output.

When power is applied (initially or after an outage), the battery will charge for approximately 36 hours. The battery is continually monitored for voltage limits and charge current acceptance (during charge pulses).

Installation Steps

Secure the mounting bracket onto application surface by means of the hole pattern on mounting bracket (Shown in the Technical Diagrams section of this manual). It is recommended that suitably sized flat washers be used when mounting the luminaire to the application surface.

Recommended mounting height: 8 feet to 24 feet (2.4 m to 7.3 m)

If Light Fixture Aiming is Required

Loosen center pivoting M8 socket head cap screw [do not remove] on both sides of light fixture as shown in Figure 1.

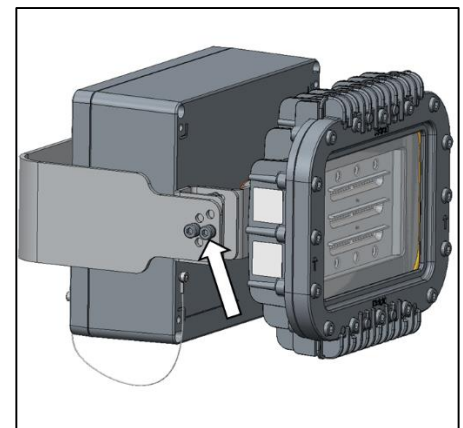


Figure 1

Remove the angle locking M8 socket head cap screw on both sides Figure 2.

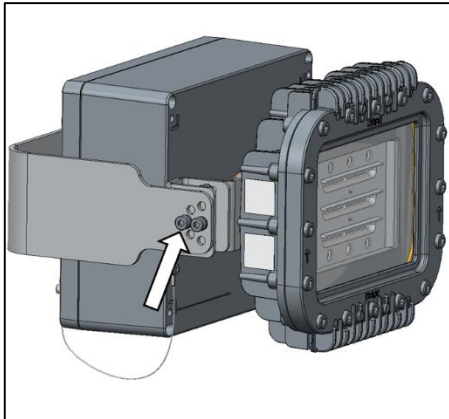


Figure 2

Aim light fixture to desired angle Figure 3.

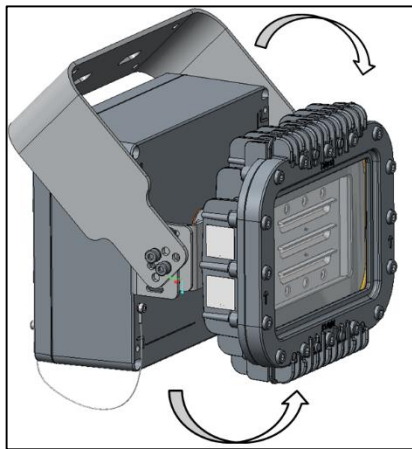


Figure 3

Re-install angle locking M8 socket head cap screw on both sides Figure 2.

Recommended torque = 8 ft-lb

Tighten the center pivoting M8 socket head cap screw on both sides Figure 1.

Recommended torque = 8 ft-lb

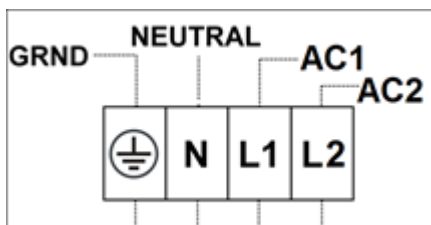
If No Light Fixture Aiming is Required

Secure angle locking M8 socket head cap on both sides Figure 2.

Recommended torque = 8 ft-lb

Tighten the center pivoting M8 socket head cap on both sides Figure 1.

Recommended torque = 8 ft-lb



Wiring

Once the light fixture has been mounted in place, remove plastic m20 plugs and access cover as shown in Figure 4.

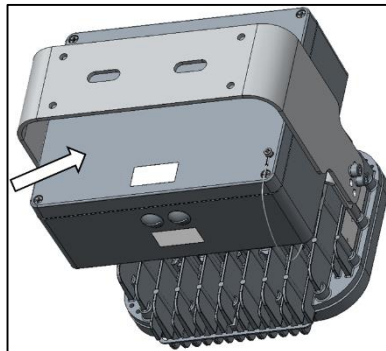


Figure 4

Install a cord grip to suit the gauge source wiring being used Figure 5.

- The cord grip is not supplied with light fixture.*
- Install as per cord grip manufacturer recommendation.
- Must be installed with lock nut to maintain UL844 compliance.

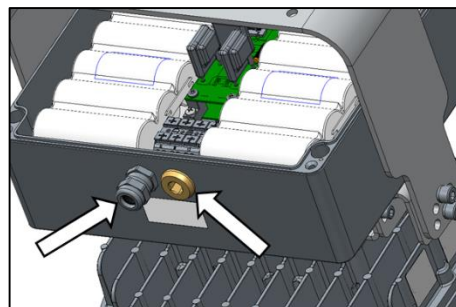


Figure 5

Install a blanking element Figure 5.

- Blanking element is not supplied with light fixture.*
- Install as per manufacturer recommendation.
- Must be installed with lock nut to maintain UL844 compliance.

Feed source wire through installed cord grip into light fixture junction area.

Connect source wires to terminal block Figure 6 as described:

- Strip SOURCE wires = .39"-.43" [10-11 mm], 12-20 AWG.
- Connect source ground wire to terminal block position marked with ground symbol.
- Connect source neutral wire to terminal block position marked with "N".

- Connect source AC1 wire to terminal block position marked with "L1".
- Connect source AC2 wire to terminal block position marked with "L2" or for sustained setup install jumper wire between "L1" and "L2".
 - To connect source wires, press down on the tabs on top of the terminal block [with tool] and hold.
 - Insert stripped source wire, release tab, the terminal should now have engaged the inserted wire.
 - Lightly tug on the inserted wire to ensure engagement has occurred.

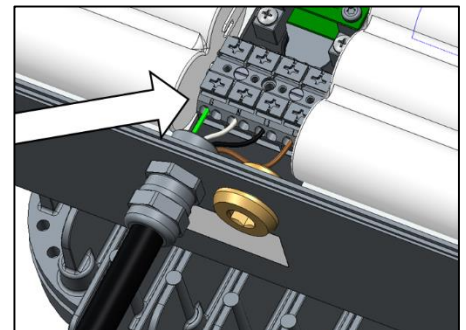


Figure 6

Once source wires are secured and connected, restore proper power to light fixture and check for illumination.

Replace access cover Figure 5. Recommended torque = 26 in-lbs

* Dialight is not responsible for selection of cord grip or blanking element used on the installed light fixture. Dialight only suggests that the cord grip selected to be used on the installed light fixture conforms to agency specifications required.

Conditions for Use

When used with steel wired armor or braided cable the basket weave armor or braid is unable to carry the cable load without fracture. Therefore the cable must be clamped and cleated to prevent pulling on the cable being transmitted to the cable terminations.

Luminaires supplied with a fitted cable must be protected from direct or vibrational impact to prevent damage to the sheathing when operated in ambient temperatures below -30°C.

Improper installation and operation of this luminaire may invalidate the warranty. For maximum long term reliability and light output, the luminaire must be installed in free air.

The SafeSite Area Light fixture design incorporates an over-temperature control circuit that reduces input power should internal temperatures reach a maximum level. In this event light output may be reduced.



Maintenance

To avoid personal injury, disconnect power to the light and allow the unit to cool down before performing maintenance.

WARNING:

No user serviceable parts inside of fixture. Risk of electric shock. Removal of the lens will void the warranty.

Perform visual, mechanical and electrical inspections on a regular basis. We recommend routine checks to be made on a yearly basis. Frequency of use and environment should determine this. It is recommended to follow an Electrical Preventive Maintenance Program as described in NFPA 70B: Recommended Practice for Electrical Equipment.

The lens should be cleaned periodically as needed to ensure continued photometric performance. Clean the lens with a damp, non-abrasive, lint-free cloth. If not sufficient, use mild soap or a liquid cleaner.

Inspect the cooling fins on the luminaire to ensure that they are free of any obstructions or contamination (i.e. excessive dust build-up). Clean with a non-abrasive cloth if needed.

Do not operate if the lens is cracked or damaged. All fasteners should be properly seated

This LED Luminaire should require a minimum amount of maintenance. If any unforeseen repairs are required then always observe explosion protection regulations and requirements.

WARNING:

This LED Luminaire should not require any electrical maintenance. Never open the luminaire (other than the junction box lid if supplied); there are no user-serviceable parts inside.

Inspection

Within the scope of a maintenance or inspection routine the following should be included: protective hoses covering the connection cables. Cable entries must be free of corrosion. Perform visual mechanical and electrical inspections on a regular basis. We recommend routine checks to be made on a yearly basis. Frequency of use and environment should determine this. It is recommended to follow an Electrical Preventive Maintenance Program as described in NFPA 70B: Recommended Practice for Electrical Equipment

The lens should be cleaned periodically, as needed, to ensure continued photometric performance.

Clean the lens with a damp, non-abrasive, and lint-free cloth. If not sufficient, use mild soap or a liquid cleaner. Do not use and abrasive, strong alkaline, or acid cleaners as damage may occur.

Inspect the cooling fins on the luminaire to ensure that they are free of any obstructions or contamination (i.e. excessive dust build-up). Clean with a non-abrasive, damp cloth, if needed.

The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.

Disposal Recycling

When the apparatus is disposed of, the respective national regulations on waste disposal should be observed. WEEE (Waste electrical & electronic equipment) registration number WEE/DC2678RY.

Repairs / Overhaul / Modification

The relevant national regulations which apply to the maintenance / servicing of electrical apparatus in explosive atmospheres shall be observed.

Should the luminaire enclosure be damaged, only a replacement will be permitted. In case of doubt, the equipment should be returned to point of purchase for inspection/repair/replacement.

WARNING:

Modifications to the device or changes to its design are not permitted. The equipment must be operated according to the intended purpose in a perfect and undamaged condition

Chemical Compatibility Guide

The chemical compatibility data referenced in this manual was supplied by the raw material manufacturers and is intended as a general guide. The data represents the basic material properties and does not necessarily represent the performance of the final product due to manufacturing process and design variations for each final product. Chemical compatibility is highly dependent on concentration, temperature, humidity, and other environmental conditions and therefore the customer assumes responsibility for evaluation of gaseous or direct contact chemical compatibility at their site prior to product installation.

www.dialight.com/pubs/MDTFCHEMRFLX001.pdf

Technical Data

Standard Series Certification

UL 1598/UL 1598A
CAN/CSA C22.2 No. 250
IP 66/67

Hazardous Series Certification

ANSI/UL 844
CAN/CSA C22.2 No. 137
CID2 A,B,C,D
CIIID1, D2
IP 66/67

Temperature

-40°F to +149°F [-40°C to +65°C]
T4 = -40°C to 65°C
T5 = -40°C to 45°C
Charging = -20°C to 50°C

Input Voltage

120-277 VAC 50/60Hz

Input Power

84W

Power Factor

>0.90

ATHD

<20%

Backup Run Time

3 hours minimum

Housing Material

Powder Coated Aluminum

Finish

Epoxy Powder Coat
Gray, RAL 7040
ACP Black, RAL 9017
Orange, RAL 2001
White, RAL 9010
Yellow, RAL 1018
Bronze, RAL 7022

Lens

Glass
or
Polycarbonate

Weight

37 lbs [16.8 kg]

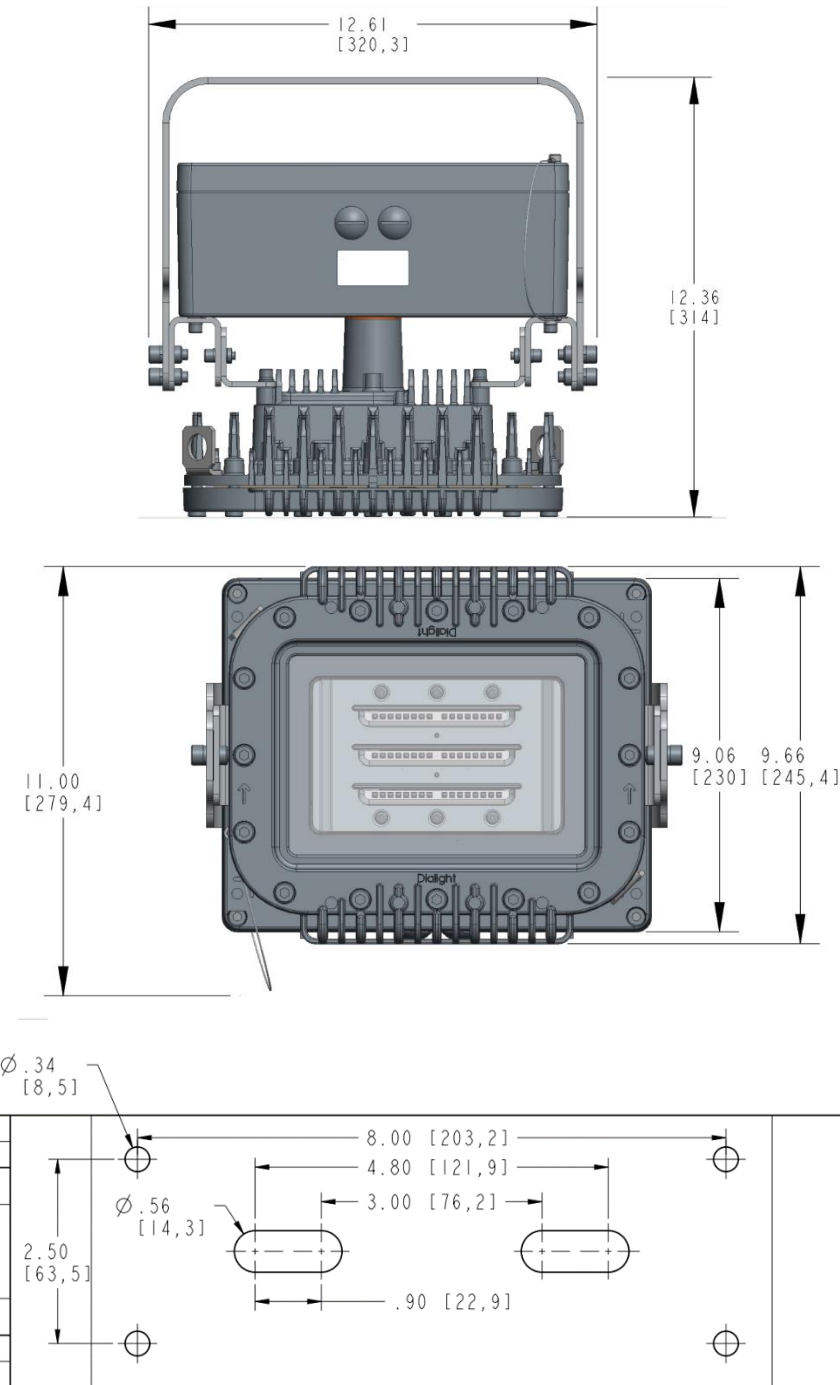
Dimensions

See Technical Diagrams
Figure 1 & Figure 2

***All values typical within ±10%**



Technical Diagrams



Official Statement

All statements, technical information, and recommendations contained herein are based on information and tests that Dialight believes to be reliable. The accuracy or completeness thereof is not guaranteed. In accordance with Dialight "Terms and Conditions of Sale" and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his or her intended use and assumes all risk and liability whatsoever in connection therewith.

