

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

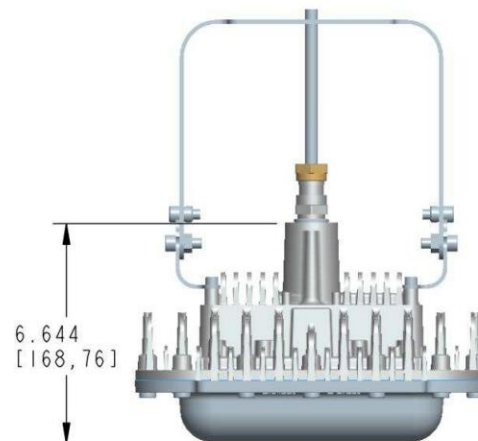
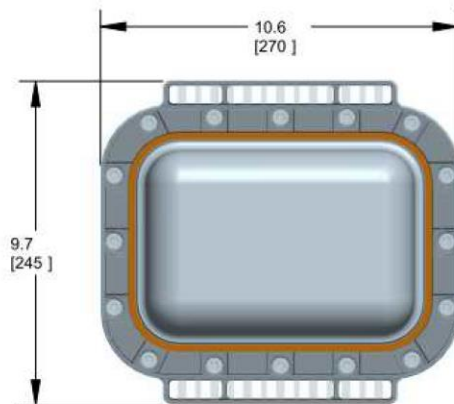
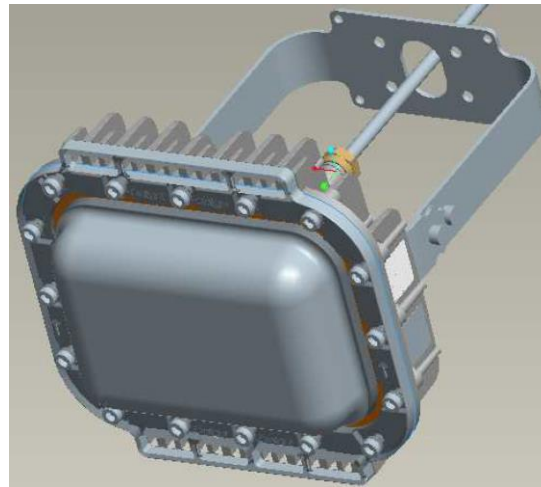


Figure 1

Languages

Page Number

English

1

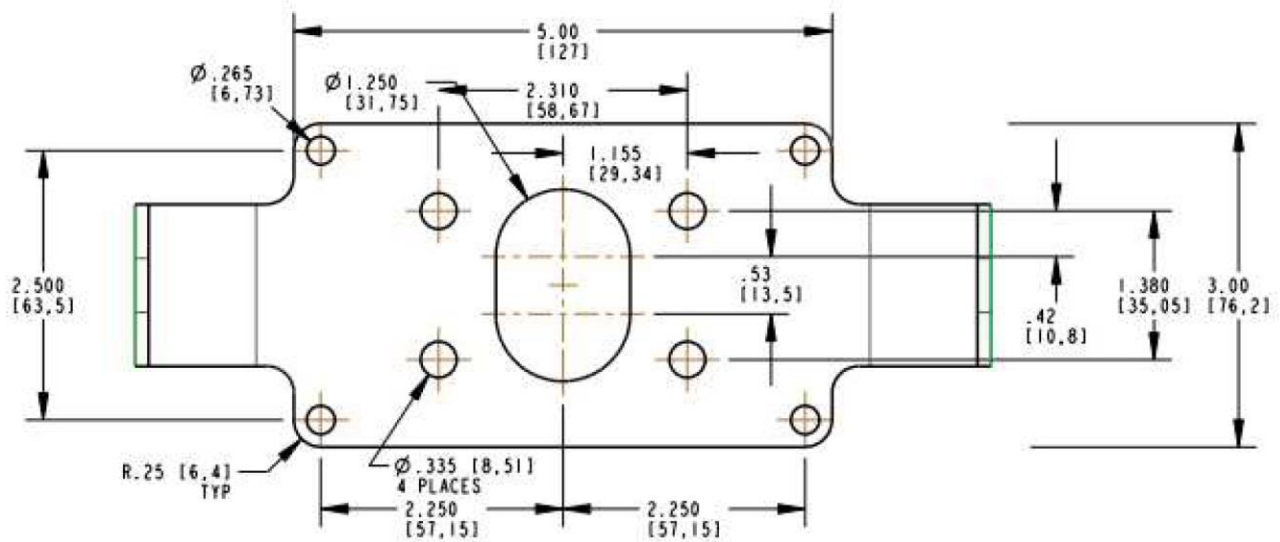
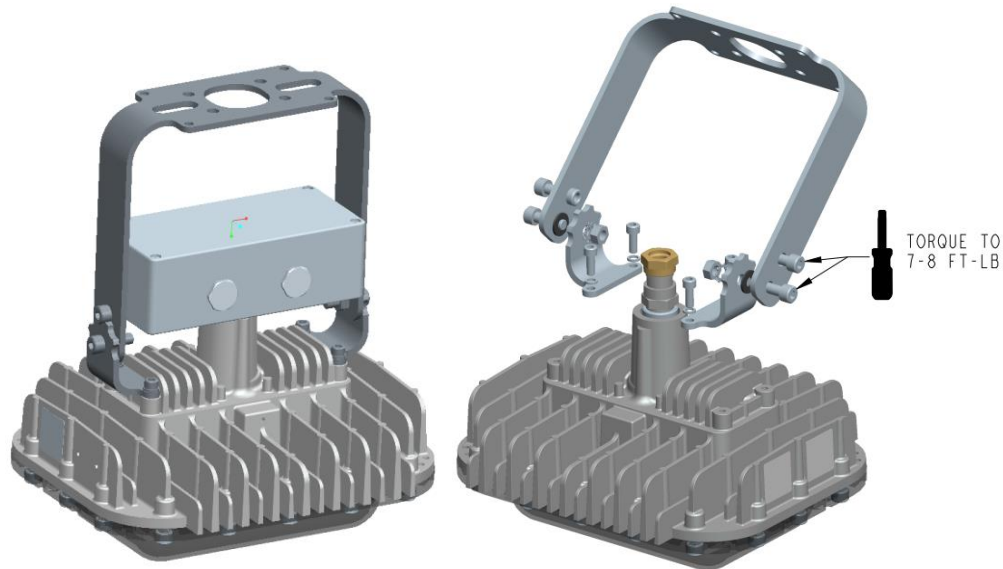
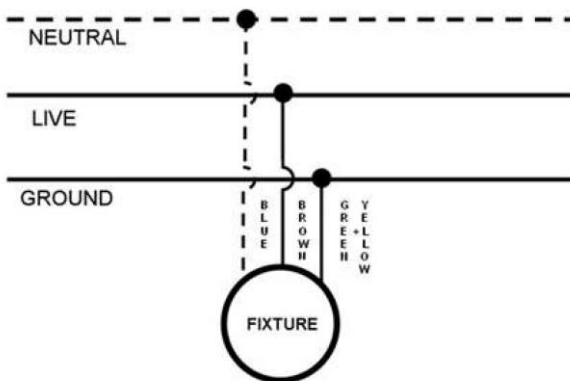
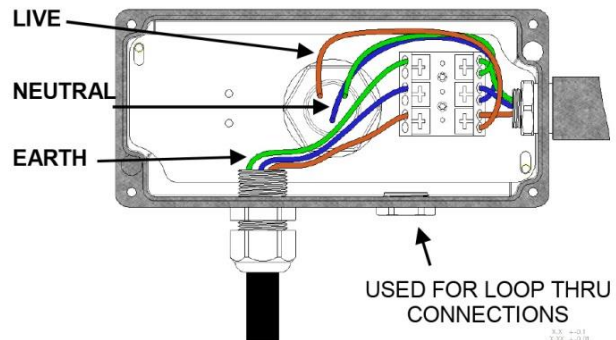


Figure 2 Bracket Mounting Detail



WIRE DIAGRAM FOR USE WITH STW SERIES LUMINAIRE



RFP-1042T

REV: 01  
DATE: 03/01  
DRAWN: 03/01  
APP: 03/01

# DuroSite® STW Series Area Light for Industrial Locations

### Safety Instruction:

The installation, operation and maintenance must be carried out by an electrician.

- The technical data indicated on the LED fixtures are to be observed.
- Changes of the design and modifications to the LED fixture are not permitted.
- Repairs must only be carried out by a qualified electrician.
- Only genuine Dialight replacement must be used when unforeseen repairs are required.
- Observe the national safety rules and regulations during installation.
- NO user serviceable Parts inside.
- NO field replaceable parts.
- WARNING: To avoid electric shock:
  - Power unit down before installation and maintenance.
  - NEVER open LED luminaire.
  - Luminaire must be grounded.
- Potential electrostatic charging hazard REFER TO INSTRUCTIONS.
- WARNING: 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.
- WARNING: POLYCARBONATE LENS SUSCEPTIBLE TO CHEMICAL ATTACK SEE REACTIVITY LIST BELOW.

### Technical Data

#### Certifications:

CE Compliant  
IEC 55015  
IEC 61597  
IEC 62031  
IEC 62471  
NEMA 4x  
IPX6  
EN60529

**Operating Temp:** T4 = -40°C to +65°C

**Input Voltage:** 100-277 VAC 50/60Hz

**Input Power:** 68W (STWE, STWF SRS)  
57W (STW8, STW9 SRS)  
47W (STW4, STW5 SRS)  
38W (STW2, STW3 SRS)  
21W (STW0, STW1 SRS)

**Power Factor:** >0.90

**ATHD:** <20%

**Housing Material:** Powder coated alum

**Finish:** Epoxy powder coat gray RAL 7001  
**Lens:** Polycarbonate

**Weight:** 4.5 kg (Without J/BOX)

**Dimensions:** See figure 1

### Conformity with Standards

This equipment conforms to the standards specified in the Declaration of Conformity. It has been designed, manufactured and tested in accordance with BS EN 9001.

### Installation (Single Version)

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.

### Electrical Connection:

#### COLOURED CABLE

LIVE	BROWN
NEUTRAL	BLUE
GROUND	GRN/YEL

### Mounting Luminaire

Secure the luminaire using the four fixing locations, see mounting bracket detail above. Cable can be passed through the central hole of stirrup bracket if required.

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: Arrow point towards the direction of light pattern. Refer to [www.dialight.com](http://www.dialight.com) for the most up to date information on available mounting brackets, hardware and accessories.

**DO NOT remove or tamper with cable gland. The gland has been supplied and installed to the luminaire accordance with the manufacturer's instructions. Tampering with this cable gland may compromise IPX6/X7 rating.**

**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.**

### Temperature Control

The STW-EU Series fixture design incorporates an over-temperature control circuit that reduces input power should internal temperatures reach a maximum level. As a result, light output may be reduced.

### Installation (Junction Box Versions)

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.

### Electrical Connection

The terminal block is suitable for multi-stranded and single core cables up to a maximum of 4mm<sup>2</sup>, strip length 10mm. For single phase (100 / 277 VAC):

- Green/yellow wire connects to Safety Ground
- Blue wire connects to Neutral
- Brown wire connects to Live

### Single Fixture Electrical Connections:

Push down at the 'cross point' insert correct cable and

release, ensuring the cable has been securely retained Cable Entries and Cables.

The cable glands used with this fixture must be certified to the IP requirements. The cable used must be suitable for the site application and/or the site requirements.

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

### Loop Thru 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.**

### Installation for Cord Grip Versions

Run jacketed cable into appropriate wire box. For single phase (100 / 277 VAC):

- Green/yellow wire connects to Safety Ground
- Blue wire connects to Neutral
- Brown wire connects to Live

### Taking into Operation

Prior to operating, check the luminaire for its correct installation in compliance with these operating instructions and other applicable regulations. **Note: This fixture is supplied with one dust cap and one certified blanking plug.**

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.**

Suitably certified cable entries must be used which include a sealing washer to maintain the IPX6/X7 rating of the enclosure.

The glands must be suitable for use within an operating temperature range of -40°C to +90°C.

**Attention: Improper installation and operation of this luminaire may invalidate the warranty.**

### Maintenance

Disconnect the power supply to the wire box before maintenance or repair. Wait at least 10 minutes before opening the lid of the luminaire after de-energizing.

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

### Inspection

Within the scope of 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.

## DuroSite® STW Series Area Light for Industrial Locations

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

### **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 Dialight Corporation for inspection/repair.

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

### **Disposal Recycling**

When the apparatus is disposed of, the respective national regulations on waste disposal should be observed.

### **For supply connections use wire rated for at least 90°C**

Models STW are factory supplied with 10feet (3m) of cable. If longer lengths of cables are required a minimum of 18awg (1.5mm diameter) is required. It is recommended that to ensure moisture does not flow through the cable a loop in the cord should be implemented where possible during installation. If this is not practical for the install than

Necessary precautions should be taken to prevent moisture entering the conduit thus entering the fixture.

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

### **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.

For general guidelines describing chemical compatibility, visit us at:

[www.dialight.com/pubs/MDIFCHEMRFLX001.pdf](http://www.dialight.com/pubs/MDIFCHEMRFLX001.pdf)

Year CE Mark Affixed: **12**

## EC DECLARATION OF CONFORMITY

**Manufacturer:** Dialight  
Exning Road, Newmarket, Suffolk, CB8 0AX, UK  
+44 (0) 1638 665161

**Equipment:** LED Luminaire: DuroSite™ Series LED Area Light  
**Model Series:** STW-xx2x-EU

We Declare that the products listed above to which this declaration relates is in conformity with the following Directives:

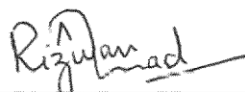
- Low Voltage Directive 2006/95/EC
- Electromagnetic Compatibility Directive 2004/108/EC

Per the provisions of the following standards:

Luminaires – Part I: General Requirements	EN 60598-1 :2008
Luminaires - Part 2 : Fixed General Purpose Luminaires	EN 60598-2-1: 1989
LED Modules for General Lighting. Safety Specifications	EN 02031. 2008 + A1:2013
Photobiological Safety of Lamps & Lamp Systems	EN 62471:2008
Radio Disturbance	EN 55015:2013
EMC – Harmonic Currents	EN 61000-3-2:2006 + A2:2009
EMC - Immunity	EN 61547:2009

**Quality Management System Accreditation to ISO 9001: BSI file FM518958/UL DQS file 10002116 QM08**

We declare that our products to which this declaration relates are in conformity with the listed directives per the provisions of the aforementioned standards.

x  Date: 27-May-2015

Rizwan Ahmad, VP – Lighting Power and Controls  
1501 Route 34 South, Farmingdale, NJ 07727 USA

Authorized contact in the EC:  
Dialight Europe Ltd.  
Exning Road, Newmarket, Suffolk, England, CB8 0AX  
+44 (0) 1638 665161