

Page 1 of 5

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

N Jones

Certificate No.: IECEx SIR 11.0156

Current Issue No: 5

Date of Issue: 2019-10-28

Applicant: Dialight Corporation

1501 Route 34 South Farmingdale New Jersey 07727 United States of America

Equipment: Safesite Series LED Area Light

Optional accessory:

Status:

Type of Protection: Flameproof and Dust by Enclosure

Marking: Ex d * IIC T4 Gb (Ta = -40°C to +65°C)

Ex d * IIC T5 Gb (Ta = -40°C to +42°C)

Ex tb III C T135°C Db IP 6X (Ta = -40°C to +65°C) Ex tb III C T100°C Db IP 6X (Ta = -40°C to +42°C) * When these Lights are fitted with an increased safety enclosure and terminals, this marking becomes 'd e'.

Approved for issue on behalf of the IECEx

Certification Body:

Position: Certification Manager

Signature:

(for printed version)

Date:

- 1. This certificate and schedule may only be reproduced in full.
- 2. This certificate is not transferable and remains the property of the issuing body.
- The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate history: Issue 4 (2016-11-14)

Issue 3 (2014-09-29) Issue 2 (2014-01-15)

Issue 1 (2012-08-03) Issue 0 (2012-02-09)

Certificate issued by:

SIRA Certification Service CSA Group Unit 6, Hawarden Industrial Park Hawarden, Deeside, CH5 3US United Kingdom







Certificate No.: IECEx SIR 11.0156 Page 2 of 5

Date of issue: 2019-10-28 Issue No: 5

Manufacturer: Dialight Corporation

1501 Route 34 South Farmingdale, NJ 07727 United States of America

Additional DIALIGHT S. de R.L. de C.V.

manufacturing locations:

C. de los Lirios S/N Colonia Carlos Pacheco

Ensenada, Baja California 22830

Mexico

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2007-10 Explosive atmospheres - Part 0:Equipment - General requirements

IEC 60079-1:2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" Edition:6

IEC 60079-31:2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't' Edition:1

IEC 60079-7:2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e" Edition:4

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/SIR/ExTR12.0025/00 GB/SIR/ExTR12.0192/00 GB/SIR/ExTR13.0353/00 GB/SIR/ExTR14.0248/00 GB/SIR/ExTR16.0290/00 GB/SIR/ExTR19.0260/00

Quality Assessment Report:

GB/SIR/QAR11.0014/10



Certificate No.: IECEx SIR 11.0156 Page 3 of 5

Date of issue: 2019-10-28 Issue No: 5

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The SafeSite LED Area Light comprises a cast aluminium body with a hinged aluminium frame and a 19 mm thick soda lime toughened glass window; held together by sixteen, M8 x 35 mm, stainless steel, button head type screws with a property class A2-70 or A4-80 minimum or better. The window is secured within the enclosure by the compression of the cast ring/frame to the main body.

Internally, the following may be fitted: up to 51 LEDs (dissipating a maximum of 1.2 W each), a reflector and a potted power supply.

In the base of the enclosure there is one entry; this is drilled to a maximum diameter of 26 mm and is fitted with suitably certified and dimensioned cable entry device, coded Ex d IIC Gb/Ex t III C Db, accommodating a permanently attached cable that is supplied in various lengths to suit customer requirements. An aluminium, steel or stainless steel bracket for mounting purposes is fixed via the rear of the enclosure.

Refer to EQUIPMENT (continued) for Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: NO



Certificate No.: IECEx SIR 11.0156 Page 4 of 5

Date of issue: 2019-10-28 Issue No: 5

Equipment (continued):

Conditions of manufacture

The Manufacturer shall comply with the following:

- 1. Each enclosure marked for use at -40°C, shall be subjected to a routine overpressure test of 19.3 bar for at least 10 seconds as required by Clause 16.1 of IEC 60079-1. There shall be no permanent deformation or damage to the enclosure.
- 2. The products covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform Sira of any modifications of the devices that may impinge upon the explosion safety design of their products.



Certificate No.: IECEx SIR 11.0156 Page 5 of 5

Date of issue: 2019-10-28 Issue No: 5

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1 – this Issue introduced the following changes:

- 1. The option to fit a component approved, increased safety enclosure (IECEx PTB 08.0005U) was approved, increased safety terminals (IECEx PTB 05.0003U) are installed inside this enclosure which is then mounted to the rear of the Safesite LED Area Light using a flameproof, line bushing (IECEx QPS 09.0001). The manufacturer provides the cable entries with glands/stoppers/blanking plugs that are suitable for the application. The marking was modified to recognise that the Light may incorporate increased safety products and a new Condition of Certification associated with the previously certified devices was applied.
- 2. The option to connect together multiple units was recognised.

Issue 2 - this Issue introduced the following changes:

- 1. The introduction of an alternative rated potted power supply; 24 Vdc to 48 Vdc model. The power supply remains within the Ex d enclosure.
- 2. The introduction of an optional mounting frame to allow for 'temporary lighting installations'.
- 3. Acknowledgement of the silicone foam gasket used between the frame and main housing.
- 4. Removal of the mounting bracket from the drawings.

Issue 3 – this Issue introduced the following changes:

- 1. The introduction of a gasket fitted between the glass and rear enclosure.
- 2. The removal of the -20°C ambient temperature, all models will now be marked with -40°C as standard, the marking being amended accordingly.
- 3. The self adhesive label option was removed, only the existing alternative stainless steel option secured with two stainless steel rivets is now used.

Issue 4 – this Issue introduced the following changes:

1. Modifications to the marking as follows:

dust type of protection is amended from "t" to "tb" to bring it in line with IEC 60079-0:2007 Ed 5. notified body number becomes 0518.

manufacturer's name and address has been changed from Dialight Europe PLC, Exning Road, Newmarket, Suffolk, CB8 0AX, UK to Dialight Corporation, 1501 Route 34 South, Farmingdale New Jersey 07727, USA.

Issue 5 – this Issue introduced the following change:

 Modification to IECEx certificate section 'DETAILS OF CERTIFICATE CHANGES', Issue 1: The increased safety enclosure certification reference IECEx PTB 08.005U was corrected to IECEx PTB 08.0005U