



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx BAS 12.0043 Issue No: 0 Certificate history:  
Status: Current Page 1 of 3 Issue No. 0 (2013-12-17)  
Date of Issue: 2013-12-17  
Applicant: Chalmit Lighting  
388 Hillington Road  
Glasgow  
G52 4BL  
United Kingdom  
Electrical Apparatus: Evolution Floodlight (IIC)  
Optional accessory:  
Type of Protection: Flameproof, Increased Safety, Dust Protected, Encapsulation  
Marking:  
Ex d e IIC T<sup>+</sup> Gb Ta -20°C to +\*\*\*C  
Ex tb IIIC T<sup>\*\*\*</sup>C Db IP 66/67 Ta -20°C to + \*\*\*C  
\* See schedule

Approved for issue on behalf of the IECEx  
Certification Body:

R S Sinclair

Position:

General Manager

Signature:  
(for printed version)

Date:

17-12-13

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.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SGS Baseefa Limited  
Rockhead Business Park  
Staden Lane  
Buxton  
Derbyshire  
SK17 9RZ  
United Kingdom





# IECEx Certificate of Conformity

Certificate No: IECEx BAS 12.0043 Issue No: 0  
Date of Issue: 2013-12-17 Page 2 of 3  
Manufacturer: Chalmit Lighting  
388 Hillington Road  
Glasgow  
G52 4BL  
United Kingdom

Additional Manufacturing  
location(s):

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 electrical apparatus 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2009 Edition:3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate does not indicate compliance with electrical 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 Report:

[GB/BAS/ExTR12.0052/00](#)

### Quality Assessment Report:

[GB/BAS/QAR06.0027/04](#)



# IECEx Certificate of Conformity

Certificate No: IECEx BAS 12.0043

Issue No: 0

Date of Issue: 2013-12-17

Page 3 of 3

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The Evolution Floodlight (IIC) is rated up to 254Vac 50Hz, 277Vac 60Hz, having a maximum lamp rating of 600W, comprises a rectangular lamp enclosure with an integral increased safety control gear and terminal enclosure. A cylindrical capacitor housing is provided within the wall between the two enclosures. The lamp enclosure is provided with a glass window, retained by a frame with screws having the heads sealed to prevent removal. Cables pass into the capacitor enclosure via a line bushing to IECEx BAS07.0076U. The control gear enclosure is provided with terminals to IECEx SIR 05.0037U, IECEx SIR 05.0036U, IECEx SIR 05.0035U or IECEx SIR 05.0037U.

### Variation 0.1

To note the use of a ballast to IECEx BAS 11.0046U and subsequent change of marking.

The luminaire is coded:

Ex d e mb IIC T\* Gb Ta -20°C to + \*\* °C  
Ex tb IIIC T\* °C Db IP67 Ta -20°C to + \*\* °C

CONDITIONS OF CERTIFICATION: NO

### Annex:

[IECEx BAS 12.0043 Annex.pdf](#)

The Evolution Floodlight (IIC) is rated up to 254Vac 50Hz, 277Vac 60Hz, having a maximum lamp rating of 600W, comprises a rectangular lamp enclosure with an integral increased safety control gear and terminal enclosure. A cylindrical capacitor housing is provided within the wall between the two enclosures. The lamp enclosure is provided with a glass window, retained by a frame with screws having the heads sealed to prevent removal. Cables pass into the capacitor enclosure via a line bushing to IECEx BAS06.0093U or IECEx BAS07.0076U. The terminal enclosure is provided with terminals to IECEx SIR 05.0037U, IECEx SIR 05.0036U, IECEx SIR 05.0035U or IECEx SIR 05.0037U.

The lamp types, temperature classification and ambient temperature range are indicated below.

Lamp type	Wattage	Temperature Classification	Cable Temperature Rise	Ambient Temperature Range (°C)
Tungsten Halogen	500	T3	50K	-20 °C to +40 °C
SON/T	150	T4	40K	-20 °C to +40 °C
		T3	35K	-20 °C to +55 °C
	250	T4	40K	-20 °C to +40 °C
		T3	35K	-20 °C to +55 °C
		T4	40K	-20 °C to +55 °C
		T3	55K	-20 °C to +35 °C
MBI/T	150	T4	40K	-20 °C to +40 °C
		T3	35K	-20 °C to +55 °C
	250	T4	40K	-20 °C to +40 °C
		T3	35K	-20 °C to +55 °C
	400	T4	40K	-20 °C to +40 °C
		T3	25K	-20 °C to +55 °C

Cable entry holes are provided as specified on the certified drawings for the accommodation of cable entry devices, with or without the interposition of a thread adapter. Unused entries are to be fitted with certified stopping plugs.

The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component).

When used in an explosive dust atmosphere the cable entry devices shall maintain the ingress protection of the enclosure.



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:

IECEx BAS 12.0043

issue No.:1

Status:

Current

Certificate history:

Issue No. 1 (2014-4-28)

Issue No. 0 (2013-12-17)

Date of Issue:

2014-04-28

Page 1 of 4

Applicant:

**Chalmit Lighting**  
388 Hillington Road  
Glasgow  
G52 4BL  
United Kingdom

Electrical Apparatus:  
Optional accessory:

**Evolution Floodlight (IIC)**

Type of Protection:

**Flameproof, Increased Safety, Dust Protected, Encapsulation**

Marking:

**Ex d e IIC T\* Gb Ta -20°C to +\*\*°C**  
**Ex tb IIIC T\*\*\*°C Db IP 66/67 Ta -20°C to + \*\*°C**

\* See schedule

Approved for issue on behalf of the IECEx  
Certification Body:

*R S Sinclair* *M BOWNEY*

Position:

General Manager

Signature:  
(for printed version)

*M Bowney*  
28/4/14

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.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**SGS Baseefa Limited**  
**Rockhead Business Park**  
**Staden Lane**  
**Buxton**  
**Derbyshire**  
**SK17 9RZ**  
**United Kingdom**





# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 12.0043

Date of Issue: 2014-04-28

Issue No.: 1

Page 2 of 4

Manufacturer: **Chalmit Lighting**  
388 Hillington Road  
Glasgow  
G52 4BL  
United Kingdom

Additional Manufacturing location  
(s):

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 electrical apparatus 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:

<b>IEC 60079-0 : 2011</b> Edition: 6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2007-04</b> Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-18 : 2009</b> Edition: 3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
<b>IEC 60079-31 : 2008</b> Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
<b>IEC 60079-7 : 2006-07</b> Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate does not indicate compliance with electrical 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 Report:  
[GB/BAS/ExTR12.0052/00](#)

[GB/BAS/ExTR14.0109/00](#)

Quality Assessment Report:

[GB/BAS/QAR06.0027/04](#)



# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 12.0043

Date of Issue: 2014-04-28

Issue No.: 1

Page 3 of 4

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The Evolution Floodlight (IIC) is rated up to 254Vac 50Hz, 277Vac 60Hz, having a maximum lamp rating of 600W, comprises a rectangular lamp enclosure with an integral increased safety control gear and terminal enclosure. A cylindrical capacitor housing is provided within the wall between the two enclosures. The lamp enclosure is provided with a glass window, retained by a frame with screws having the heads sealed to prevent removal. Cables pass into the capacitor enclosure via a line bushing to IECEx BAS07.0076U. The control gear enclosure is provided with terminals to IECEx SIR 05.0037U, IECEx SIR 05.0036U, IECEx SIR 05.0035U or IECEx SIR 05.0037U.

### Variation 0.1

To note the use of a ballast to IECEx BAS 11.0046U and subsequent change of marking.

The luminaire is coded:

Ex d e mb IIC T\* Gb Ta -20°C to + \*\* °C

Ex tb IIIC T\*°C Db IP67 Ta -20°C to + \*\* °C

### CONDITIONS OF CERTIFICATION: NO



# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 12.0043

Date of Issue: 2014-04-28

Issue No.: 1

Page 4 of 4

## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

### Variation 1.1

To allow the substitution of the existing potting compounds with a two-part potting compound in the capacitor and ignitor housings.

ExTR: GB/BAS/ExTR14.0109 /00

File Reference: 14/0155





# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx BAS 12.0043X issue No.: 2

Status: Current

Date of Issue: 2014-10-22 Page 1 of 4

Certificate history:  
Issue No. 2 (2014-10-22)  
Issue No. 1 (2014-4-28)  
Issue No. 0 (2013-12-17)

Applicant: **Chalmit Lighting**  
388 Hillington Road  
Glasgow  
G52 4BL  
United Kingdom

Electrical Apparatus: **Evolution Floodlight (IIC)**  
Optional accessory:

Type of Protection: **Flameproof, Increased Safety, Dust Protected, Encapsulation**

Marking: **Ex d e IIC T\* Gb Ta -20°C to +\*\*°C**  
**Ex tb IIC T\*\*\*°C Db IP 66/67 Ta -20°C to + \*\*°C**

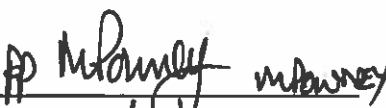
\* See schedule

Approved for issue on behalf of the IECEx  
Certification Body: R S Sinclair

Position: General Manager

Signature:  
(for printed version)

Date:

  
23/10/14

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.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**SGS Baseefa Limited**  
Rockhead Business Park  
Staden Lane  
Buxton  
Derbyshire  
SK17 9RZ  
United Kingdom





# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 12.0043X

Date of Issue: 2014-10-22

Issue No.: 2

Page 2 of 4

Manufacturer: **Chalmit Lighting**  
388 Hillington Road  
Glasgow  
G52 4BL  
United Kingdom

Additional Manufacturing location(s):

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 electrical apparatus 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 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2009 Edition: 3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate does not indicate compliance with electrical 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 Report:

GB/BAS/ExTR12.0052/00

GB/BAS/ExTR14.0109/00

GB/BAS/ExTR14.0142/00

### Quality Assessment Report:

GB/BAS/QAR06.0027/04



# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 12.0043X

Date of Issue: 2014-10-22

Issue No.: 2

Page 3 of 4

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The Evolution Floodlight (IIC) is rated up to 254Vac 50Hz, 277Vac 60Hz, having a maximum lamp rating of 600W, comprises a rectangular lamp enclosure with an integral increased safety control gear and terminal enclosure. A cylindrical capacitor housing is provided within the wall between the two enclosures. The lamp enclosure is provided with a glass window, retained by a frame with screws having the heads sealed to prevent removal. Cables pass into the capacitor enclosure via a line bushing to IECEx BAS07.0076U. The control gear enclosure is provided with terminals to IECEx SIR 05.0037U, IECEx SIR 05.0036U, IECEx SIR 05.0035U or IECEx SIR 05.0037U.

### Variation 0.1

To note the use of a ballast to IECEx BAS 11.0046U and subsequent change of marking.

The luminaire is coded:

Ex d e mb IIC T\* Gb Ta -20°C to + \*\* °C

Ex tb IIIC T\*°C Db IP67 Ta -20°C to + \*\* °C

### CONDITIONS OF CERTIFICATION: YES as shown below:

1 The low voltage Evolution luminaires must be connected to a supply provided with a fuse suitable for a prospective short circuit current of 1500A.

2 The low voltage luminaires must be mounted horizontally  $\pm 10^\circ$ .



# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 12.0043X

Date of Issue: 2014-10-22

Issue No.: 2

Page 4 of 4

## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

### Variation 2.1

To permit the use of a Toroidal transformer for 110-120Vac applications.

The transformer is rated 110/120Vac input; 240Vac output 50/60Hz, 500W. The transformer is for use with the low voltage range of Evolution luminaires from the same manufacturer as indicated below.

Lamp	Temperature Classification	Maximum ambient temperature	Dust marking
400W HPS/MBI	T3	+ 55 °C	T175 °C
250W HPS/MBI	T4	+ 40 °C	T130 °C
	T3	+ 55 °C	T150 °C
150W HPS/MBI	T4	+ 40 °C	T130 °C
	T3	+ 55 °C	T150 °C

The low voltage luminaire is coded:-

Ex d e mb IIC T\* Gb Ta-20 °C to + \*\* °C

Ex tb IIIC T\* °C Db IP67 Ta-20 °C to + \*\* °C

\* See table above

### Variation 2.2

Addition of Conditions of Certification.

ExTR: GB/BAS/ExTR14.0142/00

File Reference: 14/0135