



# 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 05.0045X** Issue No.: 0

Status: **Current**

Date of Issue: **2005-10-11** Page 1 of 3


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

Electrical Apparatus: **Evolution II Luminaire**  
Optional accessory:

Type of Protection: **de and tD**

Marking: **IECEx BAS 05.0045X**  
**Ex de IIB T\* (- \*\*C ≤ ta ≤ + \*\*C) and**  
**Ex tD A21 IP67 T\*\*C**  
(\* see Annex)

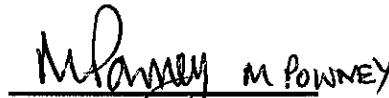
Approved for issue on behalf of the IECEx  
Certification Body:

 R S Sinclair

Position:

Managing Director

Signature:  
(for printed version)

  
M POWNEY  
11/10/05

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.

Certificate issued by:

**Baseefa (2001) Ltd.**

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





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

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 manufacture'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 : 2004</b> Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2003</b> Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
<b>IEC 60079-7 : 2001</b> Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: 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*

IECEX ATR:  
**UK/BAS/04/0886**

File Reference:  
**04/0886**



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## Schedule

### EQUIPMENT:

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

The Evolution II Luminaire comprises a rectangular lamp housing with an integral increased safety control gear housing at one end. The partition wall between the enclosures is fitted with a capacitor housing and a potted ignitor/lamp holder housing. Cemented into a recess in the lamp housing is a glass window which is secured with a frame and socket head screws. The screws heads are filled with potting compound to prevent removal. An optional wire guard or anti glare shield may be fitted.

The increased safety enclosure is fitted with a ballast and two terminal strips. An optional step up toroidal transformer can be fitted to provide a low voltage version.

The wall between the increased safety and flameproof capacitor enclosure may be fitted with potted leads or a line bushing.

The luminaire is rated up to 277V 600W and can be fitted with tungsten halogen, SON/T or MBIT lamps.

See Annex for the electrical data and variations.

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

The low voltage (110-120V) luminaires must be mounted with the lamp pointing horizontally  $\pm 10^\circ$ .

Annexe: IECEx BAS 05.0045X Annex.pdf

# Baseefa (2001) Ltd.

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Staden lane, Buxton  
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ANNEX to IECEx BAS 05.0045X

Issue No. 0

Date: 2005/10/11

Lamp Type	Wattage	Voltage (V a.c.)	Temperature Classification	Maximum Temperature for Dust Atmospheres	Ambient Temperature Range	Cable Temperature Rise (K)	Delay Before Opening Time (Minutes)
Tungsten Halogen E40 Lampholder	Up to 500W	100-277	T3	195°C	-20°C to +40°C	50	15
Tungsten Halogen R7S Lampholder	Up to 500W	100-277	T3	195°C	-20°C to +55°C	40	
HPS SON/T	150W	110-277 50/60 HZ	T4	130°C	-20°C to +40°C	40	
			T3	175°C	-20°C to +55°C	35	
	250W		T4	130°C	-20°C to +40°C	40	
			T3	175°C	-20°C to +55°C	35	
400W	T3		175°C	-20°C to +55°C	40		
	600W		T3	195°C	-20°C to +35°C	55	
MBI (MBI/T)	150W		T4	130°C	-20°C to +40°C	40	
			T3	175°C	-20°C to +55°C	35	
	250W	T4	130°C	-20°C to +40°C	40		
		T3	175°C	-20°C to +55°C	35		
400W	T3	175°C	-20°C to +55°C	40			

## Variation 0.1

To permit a larger increased safety enclosure fitted with a step up toroidal transformer to provide a low voltage version.

The luminaire is rated up to 120V 400W and can be fitted with SON/T or MBI/T lamps as indicated below.

Lamp Type	Wattage	Voltage (V a.c.)	Temperature Classification	Maximum Temperature for Dust Atmospheres	Ambient Temperature Range	Cable Temperature Rise (K)	Delay Before Opening Time (Minutes)
HPS SON/T	150W	110-120 50/60 HZ	T4	130°C	-20°C to +40°C	40	15
			T3	150°C	-20°C to +55°C	35	
	250W		T4	130°C	-20°C to +40°C	40	
			T3	150°C	-20°C to +55°C	35	
400W	T3		175°C	-20°C to +55°C	40		
	MBI (MBI/T)		150W	T4	130°C	-20°C to +40°C	
T3				150°C	-20°C to +55°C	35	
250W			T4	130°C	-20°C to +40°C	40	
		T3	150°C	-20°C to +55°C	35		
400W	T3	175°C	-20°C to +55°C	40			