

## INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

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

Certificate No.:

**IECEX BAS 05.0053X** 

Issue No.: 0

Status:

Current

Date of Issue:

2005-08-26

Page 1 of 3

Applicant:

**Chalmit Lighting** 

388 Hillington Road Glasgow

G52 4BL

**United Kingdom** 

Electrical Apparatus:

**Eclipse II and Eclipse II Junior Luminaires** 

Optional accessory:

Type of Protection:

Type of protection "n"

Marking:

Ex n AR II T\* °C (Tamb = -45°C to + \* °C)

(\*see schedule)

DIP A22 T\* °C (Tamb = -45°C to + \* °C)

(\*see schedule)

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

Position:

Managing Director

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.

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** 





Certificate No.:

**IECEX BAS 05.0053X** 

Date of Issue:

2005-08-26

Issue No.: 0

Page 2 of 3

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'rs 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 60079-15: 2001

Edition: 2

Electrical apparatus for explosive gas atmospheres - Part 15: Type of protection 'n'

IEC 61241-1-1: 1999

Edition: 2

Electrical apparatus for use in the presence of combustible dust - Part 1-1: Electrical apparatus protected by enclosures and surface temperature limitation - Specification for

apparatus

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:

File Reference:

UK/BAS/05/0476

05/0476



Certificate No.:

**IECEX BAS 05.0053X** 

Date of Issue:

2005-08-26

Issue No.: 0

Page 3 of 3

## **Schedule**

## **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

Eclipse II and Eclipse II Junior Luminaires comprises a circular aluminium alloy enclosure with a hinged rear cover and an internal thread to which is attached one of a number of wellglass diffusers.

Silicone rubber gaskets are provided between the enclosure and cover and the enclosure and wellglass. Ignition protection is provided by the lampholder and diffuser forming a restricted breathing enclosure and the control gear enclosure is considered non-sparking.

The luminaires are intended to be vertically mounted at a maximum of 25 degrees from the vertical. Options include wall and stanchion mounting and enclosed, dome and angled reflectors, and a wire guard.

The types of lamp, wattage, temperature classification and ambient temperature range are indicated in the Annex.

## CONDITIONS OF CERTIFICATION: YES as shown below:

- 1. The wellglasses form a restricted breathing enclosure when fitted in accordance with the manufacture's instructions. Silicone grease shall be applied to the base of the wellglass or the silicone seal and hand tightened and then tightened a
- 2. The symmetrical refractor is suitable only for areas with a low risk of mechanical impact.
- 3. Cable entry devices must be able to withstand a 7J impact test and maintain the ingress protection rating of the enclosure.

Annexe: IECEx BAS 05.0053X Annexe.pdf

## Baseefa (2001) Ltd. Rockhead Business Park Staden lane, Buxton

Rockhead Business Park Staden lane, Buxton Derbyshire SK17 9RZ United Kingdom



ANNEX to IECEx BAS 05.0053X

Issue No. 1

Date: 2012/03/15

## **Eclipse II Luminaire with Globe Optics**

Lamp	Wattage	Max. Ambient (°C)	Temperature Classification	Min. Ambient (°C)	Max. Surface Temperature (°C)
SON	400	45	то		160
MBI	400	40	Т3		160
SON	250	50			400
MBI	250	50			130
SON	450				
MBI	150	55		-30	110
SON	400	55	T4		
MBI	100				
SON	70				
MBI	70	55			
SON	50				
	400	35			180
MBFU	250	50	<b>T</b> 0		
IVIDEU	125	45	Т3		135
	80	45			

## **Eclipse II Luminaire with Enclosed reflector**

		•				
Lamp	Wattage	Temperature Classification	Max. Ambient (°C)	Min. Ambient (°C)	Max. Surface Temperature(°C)	
SON	400		45			
MBI	400		10			
SON	050		50			
MBI	250	Т3	30	-30	160	
SON	450	13	55			
MBI	150					
SON	100					
MBI	100					
MBFU	400	T3	40	Ï	180	
250	13 40			100		

## **Eclipse Junior Luminaire**

Lamp	Wattage	Max. Ambient (°C)	Temperature Classification	Max. Ambient (°C) (No PFC)	Temperature Classification (No PFC)	Min. Ambient (°C)	Max. Surface Temperature (°C)
SON	50	50	T4				400
SON	70	50	T4				130
MBI	70	50	T4			-30	130
MBF	80	50	T3	55	Т3		135
MBF	125	40	T3				140
GLS	100	55	T4			45	
GLS	150	55	T4			-45	100
CFL-DE	13						
CFL-DE	18	50	T4	N/A	N/A	-20	130
CFL-DE	26						

Baseefa (2001) Ltd.

Rockhead Business Park
Staden lane, Buxton
Derbyshire
SK17 9RZ
United Kingdom



ANNEX to IECEx BAS 05.0053X

Issue No. 0

Date: 2005/08/26

## **Eclipse II Luminaire with Globe Optics**

Lamp	Wattage	Max. Ambient (°C)	Temperature Classification	Min. Ambient (°C)	Max. Surface Temperature (°C)			
SON	400	45	Т3		160			
MBI	100	70	10		100			
SON	250	50			130			
MBI	250	30			150			
SON	150	55	55	EE	1			
MBI	130	33						
SON	100	55	T4					
MBI	100	33	33	33	55		-45	110
SON	70							
MBI	70	55						
SON	50							
	400	35			180			
MBFU	250	50	Т3					
MIDEO	125	45	13		135			
	80	45						

## Eclipse II Luminaire with Enclosed reflector

Lamp	Wattage	Temperature Classification	Max. Ambient (°C)	Min. Ambient (°C)	Max. Surface Temperature(°C)
SON	400		45		*
MBI	400		,-		
SON	250	1	50		160
MBI	250	Т3			
SON	150			-45	
MBI	150		55		
SON	100				
MBI	100				
MBFU	400	T3	40		180
250		10 40			

## **Eclipse Junior Luminaire**

Lamp	Wattage	Max. Ambient (°C)	Temperature Classification	Max. Ambient (°C) (No PFC)	Temperature Classification (No PFC)	Min. Ambient (°C)	Max. Surface Temperature (°C)
SON	50	50	T4				130
SON	70	50	T4				130
MBI	70	50	T4				130
MBF	80	50	T3	55	T3	-45	135
MBF	125	40	T3				140
GLS	100	55	T4				
GLS	150	55	T4				100
CFL-DE	13						
CFL-DE	18	50	T4	N/A	N/A	-20	130
CFL-DE	26	1					



## INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

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

Certificate No.:

**IECEx BAS 05.0053X** 

issue No.:1

Certificate history:

Issue No. 1 (2010-4-29) Issue No. 0 (2005-8-26)

Status:

Current

Date of Issue:

2010-04-29

Page 1 of 4

Applicant:

**Chalmit Lighting** 388 Hillington Road

Glasgow G52 4BL

**United Kingdom** 

**Electrical Apparatus:** Optional accessory:

**Eclipse II and Eclipse II Junior Luminaires** 

Type of Protection:

Type of protection "n"

Marking:

Ex nAR II T\* °C (Tamb = -45°C to + \* °C)

(\*see schedule)

DIP A22 T\* °C (Tamb = -45°C to + \* °C)

(\*see schedule)

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

MHOWNEY

Position:

Managing Director

Signature: (for printed version)

Date:

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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 the Official IECEx Website.

Certificate issued by:

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





Certificate No.:

**IECEX BAS 05.0053X** 

Date of Issue:

2010-04-29

Issue No.: 1

Page 2 of 4

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 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 60079-15: 2001

Electrical apparatus for explosive gas atmospheres - Part 15: Type of protection 'n'

Edition: 2

IEC 61241-1-1: 1999

Edition: 2

Electrical apparatus for use in the presence of combustible dust - Part 1-1: Electrical apparatus protected by enclosures and surface temperature limitation - Specification for

apparatus

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:	File Reference:
UK/BAS/05/0476	05/0476
GB/BAS/ExTR10.0085/00	



Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2010-04-29

Issue No.: 1

Page 3 of 4

## **Schedule**

## **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

Eclipse II and Eclipse II Junior Luminaires comprises a circular aluminium alloy enclosure with a hinged rear cover and an internal thread to which is attached one of a number of wellglass diffusers.

Silicone rubber gaskets are provided between the enclosure and cover and the enclosure and wellglass. Ignition protection is provided by the lampholder and diffuser forming a restricted breathing enclosure and the control gear enclosure is considered non-sparking.

The luminaires are intended to be vertically mounted at a maximum of 25 degrees from the vertical. Options include wall and stanchion mounting and enclosed, dome and angled reflectors, and a wire guard.

The types of lamp, wattage, temperature classification and ambient temperature range are indicated in the Annex.

## CONDITIONS OF CERTIFICATION: YES as shown below:

- 1. The wellglasses form a restricted breathing enclosure when fitted in accordance with the manufacture's instructions. Silicone grease shall be applied to the base of the wellglass or the silicone seal and hand tightened and then tightened a further 10 degrees.
- 2. The symmetrical refractor is suitable only for areas with a low risk of mechanical impact.
- 3. Cable entry devices must be able to withstand a 7J impact test and maintain the ingress protection rating of the enclosure.



Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2010-04-29

Issue No.: 1

Page 4 of 4

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

Variation 1.1

To include the use of the type refractor glass globe and to permit its use in areas with a high risk of mechanical impact.

ExTR: GB/BAS/ExTR10.0085/00

File Reference: 09/0328

Annexe: IECEx BAS 05.0053X Annexe.pdf



## INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

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

Certificate No.:

IECEx BAS 05.0053X

issue No.:2

Certificate history:

Status:

Current

Issue No. 2 (2012-3-15) Issue No. 1 (2010-4-29) Issue No. 0 (2005-8-26)

Date of Issue:

2012-03-15

Page 1 of 4

Applicant:

**Chalmit Lighting** 388 Hillington Road

Glasgow G52 4BL

**United Kingdom** 

Electrical Apparatus:

Eclipse II and Eclipse II Junior Luminaires

Optional accessory:

Type of Protection:

Type of protection "n"

Marking:

Ex nA nR IIC T\* Ta -\*\*°C to + \*\*°C Gc Ex tc IIIC T\*\*\*°C to + \*\*°C Dc IP66

(\*\*see schedule)

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

Position:

General 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.

3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

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





Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2012-03-15

Issue No.: 2

Page 2 of 4

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 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

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-15: 2010

Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition: 4

IEC 60079-31: 2008

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

Edition: 1

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/05/0476 GB/BAS/ExTR10.0085/00 GB/BAS/ExTR11.0320/00 File Reference:

05/0476

11/0984



Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2012-03-15

Issue No.: 2

Page 3 of 4

## Schedule

## **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

Eclipse II and Eclipse II Junior Luminaires comprises a circular aluminium alloy enclosure with a hinged rear cover and an internal thread to which is attached one of a number of wellglass diffusers.

Silicone rubber gaskets are provided between the enclosure and cover and the enclosure and wellglass. Ignition protection is provided by the lampholder and diffuser forming a restricted breathing enclosure and the control gear enclosure is considered non-sparking.

The luminaires are intended to be vertically mounted at a maximum of 25 degrees from the vertical. Options include wall and stanchion mounting and enclosed, dome and angled reflectors, and a wire guard.

The types of lamp, wattage, temperature classification and ambient temperature range are indicated in the Annex.

## CONDITIONS OF CERTIFICATION: YES as shown below:

- The wellglasses form a restricted breathing enclosure when fitted in accordance with the manufacture's instructions.
   Silicone grease shall be applied to the base of the wellglass or the silicone seal and hand tightened and then tightened a further 10 degrees.
- 2. The symmetrical refractor is suitable only for areas with a low risk of mechanical impact.
- Cable entry devices must be able to withstand a 7J impact test and maintain the ingress protection rating of the enclosure.



File Reference: 11/0984

Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2012-03-15

Issue No.: 2

Page 4 of 4

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

## Variation 2.1

The equipment covered by this certificate has been reviewed against the requirements of IEC 60079-0: 2011, IEC 60079-15: 2010 and IEC 60079-31: 2008 in respect of the differences from IEC60079-15: 2001 and IEC61241-1-1:1999 and compliance is confirmed.

## Variation 2.2

ExTR: GB/BAS/ExTR11.0320/00

To note a change in the minimum ambient temperature to -30°C when ignitors to IECEx BAS 11.0009U are used.

In this form the luminaires are coded Ex nA nR nC IIC T\* Ta -30°C to \*\*°C Gc

Annexe: IECEx BAS 05.0053X Annex1.pdf



## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:

IECEx BAS 05.0053X

issue No.:3

Status:

Current

Date of Issue:

2012-12-04

Page 1 of 4

Certificate history:

Issue No. 3 (2012-12-4) Issue No. 2 (2012-3-15) Issue No. 1 (2010-4-29) Issue No. 0 (2005-8-26)

Applicant:

Chalmit Lighting 388 Hillington Road

Glasgow G52 4BL

**United Kingdom** 

Electrical Apparatus:

Optional accessory:

Eclipse II and Eclipse II Junior Luminaires

Type of Protection:

Type of protection "n"

Marking:

Ex nA nR IIC T\* Ta -\*\*°C to + \*\*°C Gc Ex tc IIIC T\*\*\*°C to + \*\*°C Dc IP66

(\*\*see schedule)

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

Position:

General 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.

3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

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





Certificate No.:

**IECEx BAS 05.0053X** 

Date of Issue:

2012-12-04

Issue No.: 3

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

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-15: 2010

Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition: 4

IEC 60079-31: 2008

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition: 1

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/05/0476, GB/BAS/ExTR10.0085/00 GB/BAS/ExTR11.0320/00, GB/BAS/ExTR12.0320/00 File Reference: 05/0476 11/0984, 12/0982



Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2012-12-04

Issue No.: 3

Page 3 of 4

## Schedule

## **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

Eclipse II and Eclipse II Junior Luminaires comprises a circular aluminium alloy enclosure with a hinged rear cover and an internal thread to which is attached one of a number of wellglass diffusers.

Silicone rubber gaskets are provided between the enclosure and cover and the enclosure and wellglass. Ignition protection is provided by the lampholder and diffuser forming a restricted breathing enclosure and the control gear enclosure is considered non-sparking.

The luminaires are intended to be vertically mounted at a maximum of 25 degrees from the vertical. Options include wall and stanchion mounting and enclosed, dome and angled reflectors, and a wire guard.

The types of lamp, wattage, temperature classification and ambient temperature range are indicated in the Annex.

## CONDITIONS OF CERTIFICATION: YES as shown below:

- The wellglasses form a restricted breathing enclosure when fitted in accordance with the manufacture's instructions.
   Silicone grease shall be applied to the base of the wellglass or the silicone seal and hand tightened and then tightened a further 10 degrees.
- 2. The symmetrical refractor is suitable only for areas with a low risk of mechanical impact.
- Cable entry devices must be able to withstand a 7J impact test and maintain the ingress protection rating of the enclosure.



Certificate No.:	No.:
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IECEx BAS 05.0053X

Date of Issue:

2012-12-04

Issue No.: 3

Page 4 of 4

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

## Variation 3.1

To permit the use of an alternative cable entry and thread adapter arrangement.

EXTR: GB/BAS/ExTR12.0320/00 File Reference: 12/0982

Annexe: IECEx BAS 05.0053X Annex1.pdf



## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:

IECEx BAS 05.0053X

issue No.:4

Status:

Current

Date of Issue:

2013-09-18

Page 1 of 4

Certificate history: Issue No. 4 (2013-9-18) Issue No. 3 (2012-12-4) Issue No. 2 (2012-3-15) Issue No. 1 (2010-4-29) Issue No. 0 (2005-8-26)

Applicant:

Chalmit Lighting 388 Hillington Road

Glasgow G52 4BL

**United Kingdom** 

Electrical Apparatus: Optional accessory:

**Eclipse II and Eclipse II Junior Luminaires** 

Type of Protection:

Type of protection "n"

Marking:

Ex nA nR IIC T\* Ta -\*\*°C to + \*\*°C Gc

Ex tc IIIC T\*\*\*°C to + \*\*°C Dc IP66

(\*\*see schedule)

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

Monney

Position:

General 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.

3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

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





Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2013-09-18

Issue No.: 4

Page 2 of 4

Manufacturer:

Chalmit Lighting 388 Hillington Road

Glasgow G52 4BL

**United Kingdom** 

Additional Manufacturing location

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.

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Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-15: 2010

Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition: 4

IEC 60079-31: 2008

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

Edition: 1

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/05/0476, GB/BAS/ExTR10.0085/00 GB/BAS/ExTR11.0320/00, GB/BAS/ExTR12.0320/00 GB/BAS/ExTR13.0202/00 File Reference: 05/0476 11/0984, 12/0982 13/0692



Certificate No.:

**IECEx BAS 05.0053X** 

Date of Issue:

2013-09-18

Issue No.: 4

Page 3 of 4

## **Schedule**

## **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

Eclipse II and Eclipse II Junior Luminaires comprises a circular aluminium alloy enclosure with a hinged rear cover and an internal thread to which is attached one of a number of wellglass diffusers.

Silicone rubber gaskets are provided between the enclosure and cover and the enclosure and wellglass. Ignition protection is provided by the lampholder and diffuser forming a restricted breathing enclosure and the control gear enclosure is considered non-sparking.

The luminaires are intended to be vertically mounted at a maximum of 25 degrees from the vertical. Options include wall and stanchion mounting and enclosed, dome and angled reflectors, and a wire guard.

The types of lamp, wattage, temperature classification and ambient temperature range are indicated in the Annex.

## CONDITIONS OF CERTIFICATION: YES as shown below:

- The wellglasses form a restricted breathing enclosure when fitted in accordance with the manufacture's instructions.
   Silicone grease shall be applied to the base of the wellglass or the silicone seal and hand tightened and then tightened a further 10 degrees.
- 2. The symmetrical refractor is suitable only for areas with a low risk of mechanical impact.
- Cable entry devices must be able to withstand a 7J impact test and maintain the ingress protection rating of the enclosure.
- 4. When provided with thread adapters to IECEx SIR 12.0016X the IP rating of the electronic housing is reduced to IP64.



Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2013-09-18

Issue No.: 4

Page 4 of 4

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

Variation 4.1

To permit the use of an alternative cable entry thread adapter to IECEx BAS 11.0037X or, IECEx SIR 12.0016X.

Variation 4.2

Addition of Condition of Certification No. 4

ExTR: GB/BAS/ExTR13.0202/00	File Reference: 13/0692	

Annex: IECEx BAS 05.0053X Annex1.pdf



## INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

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

Certificate No.:

IECEx BAS 05,0053X

issue No.:5

Status:

Current

Date of Issue:

2016-02-03

Page 1 of 4

Certificate history:

Issue No. 5 (2016-2-3) Issue No. 4 (2013-9-18) Issue No. 3 (2012-12-4) Issue No. 2 (2012-3-15) Issue No. 1 (2010-4-29) Issue No. 0 (2005-8-26)

Applicant:

**Chalmit Lighting** 388 Hillington Road

Glasgow G52 4BL

**United Kingdom** 

Electrical Apparatus: Optional accessory:

Eclipse II and Eclipse II Junior Luminaires

Type of Protection:

Type of protection "n"

Marking:

Ex nA nR IIC T\* Ta -\*\*°C to + \*\*°C Gc Ex to IIIC T\*\*\*°C to + \*\*\*°C Dc IP66

(\*\*see schedule)

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

Position:

**Technical 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.

3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

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







Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2016-02-03

Issue No.: 5

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

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-15: 2010

Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition: 4

IEC 60079-31: 2008

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

Edition: 1

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/05/0476, GB/BAS/ExTR10.0085/00 GB/BAS/ExTR11.0320/00, GB/BAS/ExTR12.0320/00 GB/BAS/ExTR13.0202/00

File Reference: 05/0476 11/0984, 12/0982

13/0692



Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2016-02-03

Issue No.: 5

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## Schedule

## **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

Eclipse II and Eclipse II Junior Luminaires comprises a circular aluminium alloy enclosure with a hinged rear cover and an internal thread to which is attached one of a number of wellglass diffusers.

Silicone rubber gaskets are provided between the enclosure and cover and the enclosure and wellglass. Ignition protection is provided by the lampholder and diffuser forming a restricted breathing enclosure and the control gear enclosure is considered non-sparking.

The luminaires are intended to be vertically mounted at a maximum of 25 degrees from the vertical. Options include walf and stanchion mounting and enclosed, dome and angled reflectors, and a wire guard.

The types of lamp, wattage, temperature classification and ambient temperature range are indicated in the Annex.

Alternatively the lamps can be replaced by multiple PCBs containing LEDs, and control gear to to form an-

## Eclipse II LED Floodlight

The various wattage luminaires are afforded the temperature classification and ambient temperature range as indicated below.

Model Number	Watts	Hz	Volts	Amps	Temperature classificationTa +40°C	Temperature classificationTa +55°C
EC2N/05L/LE/**	40		·	0.1 - 0.3	T5	T4
EC2N/06L/LE/**	55			0.2 - 0.5	T5	T4
EC2N/09L/LE/**	80	50/60	120-254	0.3 - 0.8	T5	T4
EC2N/12L/LE/**	100			0.4 - 1.0	T5	T4
EC2N/16L/LE/**	140			0.5 - 1.4	T4	N/A

The Eclipse II LED Floodlight is coded -

Ex nA IIC T\* Gc Ex tc IIIC T90°C Dc IP66 Ta -40°C to + \* °C

## CONDITIONS OF CERTIFICATION: YES as shown below:

- The wellglasses form a restricted breathing enclosure when fitted in accordance with the manufacture's instructions.
   Silicone grease shall be applied to the base of the wellglass or the silicone seal and hand tightened and then tightened a further 10 degrees.
- 2. The symmetrical refractor is suitable only for areas with a low risk of mechanical impact.
- Cable entry devices must be able to withstand a 7J impact test and maintain the ingress protection rating of the enclosure.
- When provided with thread adapters to IECEx SIR 12.0016X the IP rating of the electronic housing is reduced to IP64.

## Specific Conditions of Use applicable to the Eclipse II LED Floodlight

1. When provided with thread adaptors to SIRA00ATEX1094X the IP rating of the enclosure is reduced to IP64.



Certificate No.:

IECEx BAS 05.0053X

Date of Issue:

2016-02-03

Issue No.: 5

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

## Variation 5.1

To permit the use of multiple PCBs containing LEDs, and control gear to replace the types of previously permitted lamps if required to form an:-

## Eclipse II LED Floodlight

The various wattage luminaires are afforded the temperature classification and ambient temperature range as indicated below.

Model Number	Watts	Hz	Volts	Amps	Temperature classificationTa +40°C	Temperature classificationTa +55°C
EC2N/05L/LE/**	40			0.1 - 0.3	T5	T4
EC2N/06L/LE/**	55			0.2 - 0.5	T5	T4
EC2N/09L/LE/**	80	50/60	120-254	0.3 - 0.8	T5	T4
EC2N/12L/LE/**	100	1		0.4 - 1.0	T5	T4
EC2N/16L/LE/**	140			0.5 - 1.4	T4	N/A

The Eclipse II LED Floodlight is coded:-

ExTR: GB/BAS/ExTR15.0290 /00

Ex nA IIC T° Gc Ex tc IIIC T90°C Dc IP66 Ta -40°C to + \* °C

Specific Conditions of Use applicable to the Eclipse II LED Floodlight

1. When provided with thread adaptors to SIRA00ATEX1094X the IP rating of the enclosure is reduced to IP64.

File Reference: 15/0346



## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:

**IECEx BAS 05.0053X** 

Issue No: 6

Certificate history:

Status:

Current

Issue No. 6 (2019-07-02)

Date of Issue:

Page 1 of 4

Issue No. 5 (2016-02-03) Issue No. 4 (2013-09-18)

2019-07-02

Issue No. 3 (2012-12-04)

Applicant:

**Chalmit Lighting** 

Issue No. 2 (2012-03-15)

388 Hillington Road

Issue No. 1 (2010-04-29)

Glasgow

G52 4BL

United Kingdom

Issue No. 0 (2005-08-26)

Equipment:

Eclipse II and Eclipse II Junior Luminaires

Optional accessory:

Type of Protection:

Type of protection "n"

Marking:

Ex nA nR IIC T\* Ta -\*\*°C to + \*\*°C Gc

Ex to III C T\*\*\*\*C to + \*\*\*C Dc IP66

(\*\*see schedule)

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

Position:

Signature:

(for printed version)

Date:

**Technical Manager** 

- 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:

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





Certificate No:

**IECEx BAS 05.0053X** 

Issue No: 6

Date of Issue:

2019-07-02

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 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

Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-15: 2010

Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

IEC 60079-31 : 2013

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

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:

File Reference:

UK/BAS/05/0476, GB/BAS/ExTR10.0085/00

05/0476

GB/BAS/Extr11.0320/00, GB/BAS/Extr12.0320/00 GB/BAS/Extr13.0202/00, GB/BAS/Extr19.0172X 11/0984, 12/0982 13/0692, 19/0336



Certificate No:

**IECEx BAS 05.0053X** 

Issue No: 6

Date of Issue:

2019-07-02

Page 3 of 4

## Schedule

## **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

Eclipse II and Eclipse II Junior Luminaires comprises a circular aluminium alloy enclosure with a hinged rear cover and an internal thread to which is attached one of a number of wellglass diffusers

Silicone rubber gaskets are provided between the enclosure and cover and the enclosure and wellglass. Ignition protection is provided by the lampholder and diffuser forming a restricted breathing enclosure and the control gear enclosure is considered non-sparking.

The luminaires are intended to be vertically mounted at a maximum of 25 degrees from the vertical. Options include wall and stanchion mounting and enclosed, dome and angled reflectors, and a wire guard.

The types of lamp, wattage, temperature classification and ambient temperature range are indicated in the Annex.

Alternatively the lamps can be replaced by multiple PCBs containing LEDs, and control gear to to form an:-

## Eclipse II LED Floodlight

The various wattage luminaires are afforded the temperature classification and ambient temperature range as indicated below.

Model Number	Watts	Hz	Volts	Amps	Temperature classificationTa +40 °C	Temperature classificationTa +55 °C
EC2N/05L/LE / * *	40	50/60	120-254	0.1 - 0.3	Т5	T4
EC2N/06L/LE / * *	55	1		0.2 - 0.5	T5	T4
EC2N/09L/LE / * *	80	4		0.3 - 0.8	T5	T4
EC2N/12L/LE / * *	100	4		0.4 – 1.0	т5	Т4
EC2N/16L/LE / * *	140			0.5 - 1.4	T4	N/A

The Eclipse II LED Floodlight is coded:-

Ex nA IIC T\* Gc Ex tc III C T90 \*C Dc IP66 Ta -40 \*C to + \* \*C

## SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1. The wellglasses form a restricted breathing enclosure when fitted in accordance with the manufacture's instructions. Silicone grease shall be applied to the base of the wellglass or the silicone seal and hand tightened and then tightened a further 10 degrees.
- 2. The symmetrical refractor is suitable only for areas with a low risk of mechanical impact.
- 3. Cable entry devices must be able to withstand a 7J impact test and maintain the ingress protection rating of the enclosure.
- 4. When provided with thread adapters to IECEx SIR 12.0016X the IP rating of the electronic housing is reduced to IP64.
- 5. The entry holes shall be fitted with suitable cable glands or other suitable accessories such as breather/drains having an equipment certificate that maintain the IP66 Ingress Protection rating of the luminaire enclosure. These devices shall incorporate a suitable o-ring or sealing washer on the entry thread to maintain the IP66 rating.
- 6. Unused entry holes shall be fitted with suitable stopping plugs having an equipment certificate, or having a component certificate subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature of the component. The stopping plugs shall incorporate a suitable o-ring or sealing washer on the entry thread to maintain the IP66 rating.
- 7. The operating temperature range and ingress protection rating of the enclosure is limited to that of the devices/accessories fitted,

## Specific Conditions of Use applicable to the Eclipse II LED Floodlight

1. When provided with thread adaptors to SIRA00ATEX1094X the IP rating of the enclosure is reduced to IP64.



Certificate No:

IECEx BAS 05.0053X

Issue No: 6

Date of Issue:

2019-07-02

Page 4 of 4

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

### Variation 6.1

To confirm that the equipment covered by this certificate has been reviewed against the requirements of IEC 60079-31: 2013 in respect to the differences from IEC 60079-31: 2008, and that none of these differences in the standards affects this equipment.

### Variation 6.2

To add an alternative E40 lampholder and breather barrier

### Variation 6.3

To add new Specific Conditions of Use Numbers 5, 6 and 7 to all luminaires.

ExTR: GB/BAS/ExTR19.0172/00 File Reference: 19/0338

### Annex

IECEx BAS 05.0053X Annex1.pdf

Baseefa (2001) Ltd.

Rockhead Business Park
Staden lane, Buxton
Derbyshire
SK17 9RZ
United Kingdom



ANNEX to IECEx BAS 05.0053X

Issue No. 1

Date: 2012/03/15

## **Eclipse II Luminaire with Globe Optics**

Lamp	Wattage	Max. Ambient (°C)	Temperature Classification	Min. Ambient (°C)	Max. Surface Temperature (°C)
SON	400	45	То		160
MBI	400		Т3		
SON	250 150 100 70	50			400
MBI				-30	130
SON		55			
MBI		55			
SON		55	T4		
MBI					110
SON		55			
МВІ					
SON					
	400	35			180
MADELL	250	50			
MBFU	125	45	Т3		135
	80	45			

## Eclipse II Luminaire with Enclosed reflector

Lamp	Wattage	Temperature Classification	Max. Ambient (°C)	Min. Ambient (°C)	Max. Surface Temperature(°C)	
SON	400		45			
MBI	] 400				160	
SON	250	тз	50	1		
MBI	250			-30		
SON	150		55			
MBI	150			"		
SON	100					
MBI	] 100					
MBFU	400	Т3	40		180	
	250				. 30	

## **Eclipse Junior Luminaire**

Lamp	Wattage	Max. Ambient (°C)	Temperature Classification	Max. Ambient (°C) (No PFC)	Temperature Classification (No PFC)	Min. Ambient (°C)	Max. Surface Temperature (°C)
SON	50	50	T4				400
SON	70	50	T4	}			130
MBI	70	50	T4			-30	130
MBF	80	50	T3	55	Т3		135
MBF	125	40	T3				140
GLS	100	55	T4			45	
GLS	150	55	T4			-45	100
CFL-DE	13						
CFL-DE	18	50	T4	N/A	N/A	-20	130
CFL-DE	26	1					