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

Certificate No.: IECEx BAS 05.0053X

Issue No: 6

Certificate history:
Issue No. 6 (2019-07-02)
Issue No. 5 (2016-02-03)
Issue No. 4 (2013-09-18)
Issue No. 3 (2012-12-04)
Issue No. 2 (2012-03-15)
Issue No. 1 (2010-04-29)
Issue No. 0 (2005-08-26)

Status: **Current**

Date of Issue: **2019-07-02**

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

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 tc III C 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

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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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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	11/0984, 12/0982
GB/BAS/ExTR13.0202/00, GB/BAS/ExTR19.0172X	13/0692, 19/0336

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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 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	T5	T4
EC2N/06L/LE / * *	55			0.2 - 0.5	T5	T4
EC2N/09L/LE / * *	80			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 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.

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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: **19/0336**

Annex:

IECEx BAS 05.0053X Annex1.pdf

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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	T3	-30	160
MBI					
SON	250	50	T4		130
MBI					
SON	150	55			110
MBI					
SON	100	55			
MBI					
SON	70	55			
MBI					
SON	50				
MBFU	400	35	T3		180
	250	50			135
	125	45			
	80	45			

Eclipse II Luminaire with Enclosed reflector

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

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	55	T3	-30	130
SON	70	50	T4				
MBI	70	50	T4				130
MBF	80	50	T3				135
MBF	125	40	T3				140
GLS	100	55	T4			-45	
GLS	150	55	T4				100
CFL-DE	13	50	T4	N/A	N/A	-20	130
CFL-DE	18						
CFL-DE	26						