



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 CML 14.0024X Issue No: 0 Certificate history:
Issue No. 0 (2014-12-18)

Status: **Current** Page 1 of 3

Date of Issue: **2014-12-18**

Applicant: **Oxalis Group Limited**
Oxalis House,
Masons Road,
Stratford Upon Avon,
Warckshire
CV37 9NB
United Kingdom

Electrical Apparatus: **LFX Floodlight Luminaires**
Optional accessory:

Type of Protection: **Increased safety and Encapsulation and Dust**

Marking:
Ex e mb IIC T5 Gb / Ex tb IIIC T90°C Db (Ta -50°C to +50°C)
Ex e mb IIC T4 Gb / Ex tb IIIC T100°C Db (Ta -50°C to +60°C)

Approved for issue on behalf of the IECEx
Certification Body:

M D Shearman FlinstMC

Position:

Managing Director

Signature:
(for printed version)

Date:

18/12/2014

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:

Certification Management Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port
CH65 4LZ
United Kingdom





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Manufacturer: **Oxalis Group Limited**
Oxalis House,
Masons Road,
Stratford Upon Avon,
Warckshire
CV37 9NB
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 60079-18 : 2009 Edition:3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2013 Edition:2	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/CML/ExTR14.0038/00](#)

Quality Assessment Report:

[GB/BAS/QAR12.0018/01](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Lumenox floodlights are a range of luminaires fitted with LED's and operating at a rated voltage of 110v to 240V.

See Annex for full description and Conditions of Manufacture

CONDITIONS OF CERTIFICATION: YES as shown below:

See Annex for Conditions of Certification

Annex:

[Certificate Annex IECEx CML 14_0024X.pdf](#)

Annexe to: IECEx CML 14.0024X Issue 0
Applicant: Oxalis Group Limited
Apparatus: LFX Floodlight Luminaires



Description of Equipment

The Lumenox floodlights are a range of luminaires fitted with LED's and operating at a rated voltage of 110v to 240v. The enclosures are available in 3 sizes (LFX3, LFX6 and LFX12) and two colours (grey or black), all of which have internal and external earth, a number of cable entry points and mounting brackets. The mounting bracket enables the luminaires to be fixed in an orientation pointing down, through 90°, lamp beam horizontal.

The enclosures comprise an aluminium base (housing the LED board, driver board, power supply and connection terminals) and an aluminium lid with toughened glass window and stainless steel or aluminium access panel. The lid and base are fixed together using M6 bolts which pass through the lid and into threaded holes in the base.

The base of the enclosure has a silicone seal permanently fixed into a groove using a silicone adhesive. The top half of the base enclosure houses the LED board/boards and the driver board/boards, which is covered with a black epoxy resin encapsulate. The lower half houses the connection terminals, wiring and the separately potted (black epoxy resin) power supply unit/units. This separately potted PSU may be fitted remotely from the luminaire where appropriate.

The lid has a toughened glass window and stainless steel access panel both secured by screws. Underneath the window and the access panel is a silicone seal permanently fixed into a groove using a silicone adhesive. There are clearance holes to allow fixing to the base and a ridge to allow compression of the seal in the base.

There are 2 size LED boards available 3x3 (9 LEDs) and 4x4 (16 LEDs) each LED is fitted with an individual optic, these optics are available in a range of beam patterns (narrow, medium and wide) to suit the end user application. Each LED inside each optic is separately potted with a transparent silicone encapsulant.

All units available may be supplied with a current of 300mA or 350mA. A complete list of available variants is shown in the table below.

Model	Type Identifier	Board	Board Qty	Beam Pattern	Current	Ambient	T Class	T Rating
+40 Ambient / 300mA								
LFX12	Floodlight	4 x 4	2	Narrow	300mA	-20 to +40	T6	T85 C
LFX12	Floodlight	4 x 4	2	Medium		-20 to +40	T6	T85 C
LFX12	Floodlight	4 x 4	2	Wide		-20 to +40	T6	T85 C
LFX6	Floodlight	4 x 4	1	Narrow		-20 to +40	T5	T100 C
LFX6	Floodlight	4 x 4	1	Medium		-20 to +40	T5	T100 C
LFX6	Floodlight	4 x 4	1	Wide		-20 to +40	T6	T85 C
LFX3	Floodlight	3 x 3	1	Narrow		-20 to +40	T6	T85 C

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Model	Type Identifier	Board	Board Qty	Beam Pattern	Current	Ambient	T Class	T Rating
LFX3	Floodlight	3 x 3	1	Medium		-20 to +40	T6	T85 C
LFX3	Floodlight	3 x 3	1	Wide		-20 to +40	T6	T85 C
+40 Ambient / 350mA								
LFX12	Floodlight	4 x 4	2	Narrow	350mA	-20 to +40	T5	T100 C
LFX12	Floodlight	4 x 4	2	Medium		-20 to +40	T5	T100 C
LFX12	Floodlight	4 x 4	2	Wide		-20 to +40	T6	T85 C
LFX6	Floodlight	4 x 4	1	Narrow		-20 to +40	T5	T100 C
LFX6	Floodlight	4 x 4	1	Medium		-20 to +40	T5	T100 C
LFX6	Floodlight	4 x 4	1	Wide		-20 to +40	T5	T100 C
LFX3	Floodlight	3 x 3	1	Narrow		-20 to +40	T6	T85 C
LFX3	Floodlight	3 x 3	1	Medium		-20 to +40	T6	T85 C
LFX3	Floodlight	3 x 3	1	Wide		-20 to +40	T6	T85 C
+65 or +70 Ambient / 300mA								
LFX12	Floodlight	4 x 4	2	Narrow	300mA	-20 to +70	T4	T135 C
LFX12	Floodlight	4 x 4	2	Medium		-20 to +70	T4	T135 C
LFX12	Floodlight	4 x 4	2	Wide		-20 to +70	T4	T135 C
LFX6	Floodlight	4 x 4	1	Narrow		-20 to +65	T4	T135 C
LFX6	Floodlight	4 x 4	1	Medium		-20 to +65	T4	T135 C
LFX6	Floodlight	4 x 4	1	Wide		-20 to +65	T4	T135 C
LFX3	Floodlight	3 x 3	1	Narrow		-20 to +70	T4	T135 C
LFX3	Floodlight	3 x 3	1	Medium		-20 to +70	T4	T135 C
LFX3	Floodlight	3 x 3	1	Wide		-20 to +70	T4	T135 C
+60 or +70 Ambient / 350mA								
LFX12	Floodlight	4 x 4	2	Narrow	350mA	-20 to +60	T4	T135 C
LFX12	Floodlight	4 x 4	2	Medium		-20 to +60	T4	T135 C
LFX12	Floodlight	4 x 4	2	Wide		-20 to +60	T4	T135 C
LFX6	Floodlight	4 x 4	1	Narrow		-20 to +60	T4	T135 C
LFX6	Floodlight	4 x 4	1	Medium		-20 to +60	T4	T135 C
LFX6	Floodlight	4 x 4	1	Wide		-20 to +60	T4	T135 C
LFX3	Floodlight	3 x 3	1	Narrow		-20 to +70	T4	T135 C
LFX3	Floodlight	3 x 3	1	Medium		-20 to +70	T4	T135 C
LFX3	Floodlight	3 x 3	1	Wide		-20 to +70	T4	T135 C



Conditions of Manufacture

- i. A visual inspection shall be carried out on the encapsulated parts to check for damage, in accordance with IEC 60079-18:2009, clause 9.1.

Conditions of Certification

- i. Mounting orientation - Luminaires may only be mounted with lamp beam facing down, through 90° to lamp beam horizontal.