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INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx LCIE 15.0037X Issue No: 2 Certificate history:

Issue No. 2 (2019-04-23)

Issue No. 0 (2015-07-22)

Status: Current Issue No. 1 (2018-02-20)

Date of Issue: 2019-04-23

Applicant: Sunleem Technology Incorporated Company

No.15, Xihenggang Street, Yangchenghu Town, Xiangcheng District, Suzhou, Jiangsu,

China. 215138

China

Equipment: Explosion-proof floodlight - Type: BFD610-**

Optional accessory:

Type of Protection: Ex d, Ex tb

Marking:

Ex d IIB+H2 T... or ...°C Gb

Ex tb IIIC T...°C Db

IECEx LCIE 15.0037 X

(see attachment for full marking)

Approved for issue on behalf of the IECEx

Certification Body:

Jérôme REYSSON

Position:

Signature:

(for printed version)

Date:

Certification Officer

· REYSSOI

LABORATOIRE CENTRAL DES
INDUSTRIES ELECTRIQUES
S.A.S au capital de 15.745.984 €

F - 92266 FONTENAY AUX ROSES

-04-23 LC | E 33 avenue du Général Leclerc

2019-04-23

- 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:

Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France





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Manufacturer: Sunleem Technology Incorporated Company

No.15, Xihenggang Street, Yangchenghu Town, Xiangcheng District, Suzhou, Jiangsu, China. 215138

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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 60079-1: 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:6

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

Test Report:

FR/LCIE/ExTR15.0057/00 FR/LCIE/ExTR19.0034/00

Quality Assessment Report:

DE/TUR/QAR18.0015/00



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The BFD610-** explosion-proof floodlight consists of an aluminum alloy enclosure, a cemented toughened glass light transmitting cover and two entries. The enclosure is divided into two compartments as follows:

- the electrical compartment includes terminals, ballast, a capacitor, a trigger (for high pressure sodium lamp or metal halide lamp) and two entries for external connection. The two entries are closed by two blanking elements before packaging.
- the lighting compartment includes a lamp holder and a bulb.

The wire-through part between these two compartments is encapsulated.

See attachment for type designation and specific parameters of the concerned protection mode.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Operating ambient temperature: -20°C to +55°C.
- Repair of the threaded joints must be made in compliance with the structural specifications provided by the manufacturer. Repair must not be made on the basis of values specified in Table 3 or Table 4 of IEC 60079-1:2007 standard.
- The entries shall be equipped with Ex certified cable glands with compatible modes of protection for the intended use.
- In order to ensure the temperature class the apparatus shall be mounted at horizontal or vertical downward position.



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

<u>Issue 01</u>:

Modification of QAR reference (LCIE file #153462).

<u>Issue 02</u>:

Manufacturer name and applicant address change.

Modification of QAR reference.

Annex:

Annex 01 to Certificate IECEx LCIE 15.0037 X issue 02.pdf



Annex 01 to Certificate IECEx LCIE 15.0037 X issue 02



MARKING

Sunleem Technology Incorporated Company

Address: ...

Type: BFD610-** (1)

Serial number: ... Year of construction: ...

Ex d IIB+H₂ T... or ... °C Gb (2) Ex tb IIIC T... °C Db (2)

IECEx LCIE 15.0037 X

WARNING - AFTER DE-ENERGIZING, DELAY 15 MINUTES BEFORE OPENING

WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS

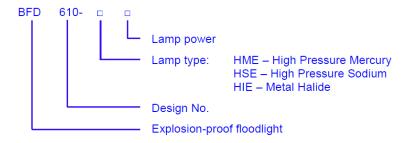
WARNING - DO NOT OPEN WHEN ENERGIZED

CAUTION - USE FASTENER WITH YIELD STRESS ≥ 450 N/mm²

(1): completed by type designation

(2): completed by temperature class specified in ratings

RANGE DETAILS



RATINGS

1) Rated voltage: 220 V \sim 240 V AC 50/60 Hz

2) Light source parameters:

2) Light source parameters.							
Lamp type	Lamp specification	Ballast	Trigger	Compensation capacitor			
High Pressure Mercury	HPL-N 250 W	BHLA 250L	1	CP18BU28 18µF			
	HPL-N 400W	BHLA 400L	1	CP25BU28 25µF			
High Pressure Sodium	SON 150W	BSN 150L	SN58(T5)	CP18BU28 18µF			
	SON 250W	BSN 250L	SN58(T5)	CP32ET28 32µF			
	SON 400W	BSN 400L	SN58(T5)	CA32GV28 50µF			
Metal Halide	MH UPS 175W	BPI 175L	SI53	CP12BP28 12µF			
	HPI PLUS 250W BU	BSN 250L 200TS	SI51	CP18BU28 18µF			
	MH UPS 400W	BPI 400L	SN53	CP25CU28 25uF			

3) Temperature classes:

Lamp type	Rated power (W)	Temperature class			
		-20°C ≤ Ta ≤ +40°C		-20°C ≤ Ta ≤ +55°C	
		Gas	Dust	Gas	Dust
Metal Halide	175	T4	T130°C	T3	T195°C
	250	T3	T190°C	T3	T195°C
	400	T3	T190°C	T3	T195°C
High Pressure Mercury	250	T3	T190°C	T3	T195°C
	400	T3	T190°C	208°C	T200°C
High Pressure Sodium	150	T4	T130°C	T3	T195°C
	250	T3	T190°C	T3	T195°C
	400	T3	T195°C	218°C	T210°C

ROUTINE TESTS

Each apparatus shall be submitted to a static overpressure test under 1.2 MPa during minimum 10 seconds in accordance with clause 16.1 of IEC 60079-1:2007 standard.