

# EU-TYPE EXAMINATION CERTIFICATE

## Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

- EU-Type Examination Certificate Number:** ITS20ATEX305465X Issue 1
- Product:** Guardian CFL Portable Light
- Manufacturer:** BME Nitech Ltd.
- Address:** Unit 2A, Nevis Business Park,  
Balgownie Road,  
Bridge of Don  
Aberdeen, AB22 8NT, UK
- This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- Intertek Testing and Certification Limited, Notified Body number 0359 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council dated 26 February 2014, certifies that the product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II of the Directive.
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018, EN IEC 60079-7:2015+A1:2018, EN 60079-11:2012, EN 60079-18:2015+A1:2017 and EN 60079-31:2014 except in respect of those requirements referred to within item 14 of the Schedule.
- If the sign "X" is placed after the certificate number, it indicates that the product is subject to the special conditions of use specified in the Schedule to this certificate.
- This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- The marking of the product shall include the following:



Ex eb ib mb IIC T4 Gb  
II 2GD Ex ib mb tb IIIC T135C Db  
-20°C ≤ Ta ≤ +40°C

**Certification Officer:**

M Newman

**Date:**

13 February 2020

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Intertek Testing & Certification Limited, Cleeve Road, Leatherhead, Surrey, KT22 7SA  
Registered No 3272281 Registered Office: Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ.

## SCHEDULE:

**EU-Type Examination Certificate Number:** ITS20ATEX305465X Issue 1

### 11. Description of Equipment or Protective System

The BME Nitech Ltd. Guardian CFL (GU-Z1-CFL) and Guardian LED (GU-Z1-LED) Portable Lights are transportable luminaires powered by a rechargeable battery for providing a light source for use in hazardous areas where explosive gas atmospheres or explosive dust atmospheres may be present.

The equipment comprises a base unit containing a lead/acid battery linked to light head mounted on an adjustable bracket to permit adjustment of the light distribution provided by the luminaire.

The compact fluorescent (CFL) light sources or LED light sources are placed behind a polycarbonate lens, which is coated in an anti-static coating.

Charging of the battery is permitted only in a non-hazardous area.

The battery and CFL Lamps or LED light source are not user serviceable and must be returned to the manufacturer for service.

Charging is only permitted using the manufacturer's supplied charger.

### 12. Report Number

Intertek Report: 102585159LHD-004A Issue 1 dated 30<sup>th</sup> January 2020.

### 13. Special Conditions of Certification

#### (a). Special Conditions of Use

- Do not charge in the hazardous area
- Lamp and battery are not user serviceable items
- Use only the manufacturer's specified charger
- Refer to the manufacturer's instructions for guidance on the durability of the anti-static coating on the lens.

#### (b). Conditions of Manufacture (Routine Tests)

- Encapsulated parts shall be visually inspected.
- A dielectric strength test shall be performed at on the completed luminaire at 500V ac for 1 minute between the battery terminals and the case of the equipment.
- The lamp connections of the CFL ballast module shall be routinely tested at 2000V ac for 1 minute between the lamp connections connected together and the case of the module.
- The low voltage connections of the encapsulated modules shall be routinely tested at 500V ac for 1 minute between the connections connected together and the case of the module.

### 14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report: 102585159LHD-004A Issue 1 dated 30th January 2020.

## SCHEDULE:

EU-Type Examination Certificate Number: ITS20ATEX305465X Issue 1

### 15. Drawings and Documents

Title:	Drawing No. :	Revision:	Date:
Guardian Zone I CFL Light-Head Assembly	EX-DRW-001-1	2	30-01-2020
Guardian Zone I CFL Handle Assembly Detail	EX-DRW-001-2	2	30-01-2020
Guardian Zone I CFL Pivot Bracket Assembly Detail	EX-DRW-001-3	2	30-01-2020
Guardian Zone I CFL Reflector Tray Assembly Detail	EX-DRW-001-4	2	30-01-2020
Guardian Zone I CFL Lens Assembly Detail	EX-DRW-001-5	2	30-01-2020
Guardian Zone I CFL Battery Enclosure Assembly	EX-DRW-001-6	2	30-01-2020
Guardian Zone I CFL Lid Assembly Detail	EX-DRW-001-7	2	30-01-2020
Guardian Zone I CFL Base Assembly Detail	EX-DRW-001-8	2	30-01-2020
Guardian Zone I CFL Battery Enclosure Earth Detail	EX-DRW-001-9	2	30-01-2020
Guardian Zone I CFL Light-Head Wiring	EX-DRW-002-1	2	30-01-2020
Guardian Zone I CFL Base Wiring	EX-DRW-002-2	2	30-01-2020
Guardian Zone I CFL Wiring	EX-DRW-002-6	2	30-01-2020
Guardian Zone I CFL-LED Light-Head Machining	EX-DRW-003-1A	2	30-01-2020
Guardian Zone I CFL-LED Lid Machining Op. 2	EX-DRW-003-2B	2	30-01-2020
Potted CFL Lamp Assembly	EX-DRW-003-17	2	30-01-2020
Guardian Zone I CFL Label	EX-DRW-003-18	2	30-01-2020
Items List for Charge & Switch Control PCB Assembly	ARCV1	A1	20-01-2020
ARCV10 PCB Schematic, Charge & Switch Schematic	ARCV11	A	24-10-2019
ARCV10 PCB Details	ARCV12	A	24-10-2019
Charge & Switch Potting Details	ARCV16	A1	17-01-2020
Charge and Switch Box	ARCV17	A	24-10-2019
Items List for CFL Driver PCB ARCV20 and Assembly	ARCV2	D1	20-01-2020
PCB Schematic CFL Driver Circuit	ARCV20	D	24-10-2019
ARCV20 PCB Details	ARCV22	D	24-10-2019
CFL Driver Box	ARCV27	C	24-10-2019
CFL Driver Potting Details	ARCV26	B1	17-01-2020

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## SCHEDULE:

EU-Type Examination Certificate Number: ITS20ATEX305465X Issue 1

### 16. Details of Certificate changes Issue 1

Introduction of the Guardian LED portable light.

#### Drawings and Documents

Title:	Drawing No. :	Revision:	Date:
Guardian Zone I LED Light-Head Assembly	EX-DRW-001-10	2	30-01-2020
Guardian Zone I LED Handle Assembly Detail	EX-DRW-001-11	2	30-01-2020
Guardian Zone I LED Pivot Bracket Assembly Detail	EX-DRW-001-12	2	30-01-2020
Guardian Zone I LED LED Backplate Assembly Detail	EX-DRW-001-13	2	30-01-2020
Guardian Zone I LED Lens Assembly Detail	EX-DRW-001-14	2	30-01-2020
Guardian Zone I LED Battery Enclosure Assembly	EX-DRW-001-15	2	30-01-2020
Guardian Zone I LED Lid Assembly Detail	EX-DRW-001-16	2	30-01-2020
Guardian Zone I LED Base Assembly Detail	EX-DRW-001-17	2	30-01-2020
Guardian Zone I LED Battery Enclosure Earth Detail	EX-DRW-001-18	2	30-01-2020
Guardian Zone I LED Light-Head Wiring	EX-DRW-002-3	2	30-01-2020
Guardian Zone I LED Base Wiring	EX-DRW-002-4	2	30-01-2020
Guardian Zone I LED Wiring	EX-DRW-002-7	2	30-01-2020
Guardian Zone I CFL-LED Light-Head Machining	EX-DRW-003-1A	2	30-01-2020
Guardian Zone I CFL-LED Lid Machining Op. 2	EX-DRW-003-2B	2	30-01-2020
Guardian Zone I LED Label	EX-DRW-003-19	2	30-01-2020
Items List for Charge & Switch Control PCB Assembly	ARCV13	A1	20-01-2020
ARCV10 PCB Schematic, Charge and Switch Schematic	ARCV11	A	24-10-2019
ARCV10 PCB Details	ARCV12	A	24-10-2019
Charge & Switch Potting Details	ARCV16	A1	17-01-2020
Charge & Switch Box	ARCV17	A	24-10-2019
Items List for Zones I and II LED PCB	ARCV35	D	24-10-2019
ARCV30 Zone I & II LED PCB Schematic	ARCV31	D	24-10-2019
ARCV30 PCB Details	ARCV32	D	24-10-2019

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