



# EU Type Examination Certificate CML 18ATEX3161 Issue 2

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment HP Spartan LED Luminaire (for dust atmospheres)
- 3 Manufacturer Raytec Ltd.
- 4 Address Unit 15 Wansbeck Business Park Rotary Parkway Ashington Northumberland NE63 8QW, UK
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-31:2014

10 The equipment shall be marked with the following:



Ex tb IIIC T104°C Db Ta = -50°C to +50°C





Ben Trafford Certification Officer





# 11 Description

The combined PSU and JB assembly consists of two separate dust protected enclosures, one containing LED Driver circuits and the other containing suitably certified Ex component terminals, for connection of internal and field wiring using suitably certified cable glands. The two enclosures are separated using a suitably certified bushing.

The above combined assembly is mounted to the dust protected LED compartment, with the wiring from the JB compartment connected to the LED assemblies.

The units have an environmental rating of IP 66.

A maximum of two cable entries can be supplied with each luminaire. Suitably certified cable entries may be various thread types up to a maximum diameter of 25 mm.

The equipment is also marked with an ingress protection rating of IP67. An ingress protection rating of IPX7 has not been verified under the CML certification.

An optional self-adhesive anti-static film can be fitted over the glass externally.

Operating voltage may be 150-264V AC/DC or 110V-264V AC/DC with a maximum wattage of 300W.

#### Variation 1

This variation introduced the following modifications:

- i. To update and review the product against the latest editions of the standards.
- ii. To remove the type of protection 'op is' and standard IEC/EN 60079-28 from the certification.
- iii. To assess and confirm the toughened glass window assembly meets the high risk level impact energy (7J).
- iv. To amend the certification by including the latest component certification for the BK and MK series terminal blocks and remove the old versions.
- v. To transfer the ATEX certification from CML UK to CML B.V.
- vi. Clarification regarding the marked current rating.
- vii. Changes to the ingress protection rating specified on the marking and the addition of information to the product description, also relating to the marked IP rating.
- viii. The introduction of an alternative LED.

### Variation 2

This variation introduced the following modifications:

- i. Increase the flamepath gap on IIB variants from 0.1mm to 0.2mm
- ii. To update conditions of manufacture
- iii. To update the product description
- iv. To provide clarification on product specification on certification documents





# 12 Certificate history and evaluation reports

| Issue | Date        | Associated report | Notes  |  |
|-------|-------------|-------------------|--|--|
|       | 24 Jul 2017 | R1722A/00         | Contributing report (for Zone 1/21 and 2/22 variants:<br>CML 17ATEX1148 & CML 17ATEX4149).       |  |
| 0     | 15 Jun 2018 | R11782A/00        | Contributing report (variation to Zone 1/21 and 2/22 variants: CML 17ATEX1148 & CML 17ATEX4149). |  |
|       | 15 Jun 2018 | R11783A/00        | Report for initial certificate for Zone 21 variant.  |  |
| 1     | 27 Oct 2020 | R13535A/00        | Introduction of variation 1  |  |
| 2     | 23 Jan 2023 | R16084A/00        | Introduction of variation 2  |  |

Note: Drawings that describe the equipment or component are listed in the Annex.

#### 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.
- ii. The manufacturer shall fit only the certified Ex Components listed in the certification documentation and the manufacturer's instructions. All Special Conditions of Certification/ Special Conditions for Safe Use/ Schedule of Limitations shall be satisfied for each part fitted.
- iii. If the terminals or components are fitted with cables/wiring by the manufacturer; all cables/wires shall be suitable for rated voltage and current of each separate circuits and Ex Components to which they are connected.
- iv. The Line Bushing shall be suitable for a service temperature range of at least -50°C to +85°C.

### 14 Specific Conditions of Use (Special Conditions)

None

# **Certificate Annex**

Certificate NumberCML 18ATEX3161EquipmentHP Spartan LED Luminaire (for dust atmospheres)ManufacturerRaytec Ltd.



The following documents describe the equipment or component defined in this certificate:

### Issue 0

| Drawing No    | Sheets | Rev | Approved date | Title   |
|---------------|--------|-----|---------------|---|
| 1050-SD-00034 | 1 to 4 | В   | 15/06/2018    | Spartan High Power LED<br>Floodlight/Highbay  |
| 1050-SD-0001  | 1 to 5 | А   | 15/06/2018    | HPFL FMEA Dated 22-05-2017                    |
| 1050-SD-0002  | 1 of 1 | А   | 15/06/2018    | HP Flood Protection circuit schematic         |
| 1050-SD-0003  | 1 of 1 | А   | 15/06/2018    | Protection circuit parts list                 |
| 1050-SD-0006  | 1 of 1 | А   | 15/06/2018    | Wadco Bosse HP LED Luminaire Zone 1 nameplate |

#### Issue 1

| Drawing No    | Sheets | Rev | Approved date | Title  |
|---------------|--------|-----|---------------|--|
| 1050-SD-00034 | 1 to 4 | С   | 26 Oct 2020   | Spartan High-Power LED<br>Floodlight/Highbay |

Note: Previously approved drawing number 1050-SD-0006 has been removed from the certification.

#### Issue 2

| Drawing No    | Sheets | Rev | Approved date | Title  |
|---------------|--------|-----|---------------|--|
| 1050-SD-00034 | 1 of 4 | D   | 23 Jan 2023   | Spartan High Power LED<br>Floodlight/Highbay |
| 1050-SD-00034 | 2 of 4 | Е   | 23 Jan 2023   | Spartan High Power LED<br>Floodlight/Highbay |