



Type Examination Certificate **CML 17ATEX4149** **Issue 0**

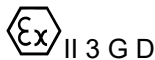
- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment HP Spartan LED Luminaire
- 3 Manufacturer Raytec Ltd
- 4 Address Unit 15 Wansbeck Business Park
 Rotary Parkway
 Ashington
 Northumberland
 NE63 8QW
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of equipment intended for use in potentially explosive atmospheres given in Annex II of Directive 2014/34/EU.

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 certification (affecting correct installation or safe use). These are specified in Section 14.
- 8 This Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Annex VIII apply to the manufacture of the equipment or component.
- 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 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-15:2010
EN 60079-31:2015 EN 60079-28:2015

- 10 The equipment shall be marked with the following:



II 3 G D

Ex ec nR op is IIC T4 Gc
Ex tc op is IIIC T104°C Dc
IP66

Ta= -50°C to +50°C



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11 Description

The combined restrictive breathing PSU and increased safety JB assembly, consists of separate enclosures containing LED Driver circuits and 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 increased safety JB assembly consisting a single enclosure containing suitably certified Ex Component terminals for connection of internal and field wiring using suitably certified cable glands. The combined assembly is used with a separately mounted combined restrictive breathing PSU and increased safety JB assembly, connected using suitably certified cable glands.

The combined or separate assemblies have an environmental rating of IP 66.

Nomenclature:

SP (1) - HP (22) (33) K - W - xxyy

Where:

SP SPARTAN High Power Flood,
(1) Z Zone 2 / Zone 22
(22) FL Floodlight
BY Highbay
(33) ** Lumens (x 1,000) up to a maximum of 25
K Lumens (x 1,000)
W White Light
3030 Circular beam pattern, xx° x yy° beam

12 Certificate history and evaluation Reports

Issue	Date	Associated report	Notes
0	24/07/2017	R1722A-00	First issue

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.

- 13.1 Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- 13.2 The manufacturer shall fit only the certified Ex Components listed in the certification documentation and the manufacturer's instructions. All Special Conditions of



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Certification/ Special Conditions for Safe Use/ Schedule of Limitations must be satisfied for each part fitted

- 13.3 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.
- 13.4 All creepage and clearance distances as defined in IEC 60079-7 Table 2 shall be observed for the voltage rating marking
- 13.5 A dielectric strength test shall be carried out on all units manufactured in accordance with EN 60079-7:2015 clause 7.1, at 1508 V for 1 minute, or alternatively at 1.2 times this test voltage for 100 ms. No breakdown shall occur. Tests shall be carried out between each circuit and earth.
- 13.6 The Line Bushing shall be suitable for an upper ambient temperature of at least 85 °C

14 Special Conditions for Safe Use (Conditions of Certification)

None

Certificate Annex

Certificate Number CML 17ATEX4149
Equipment HP Spartan LED Luminaire
Manufacturer Raytec 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 of 4	A	24/07/2017	General Construction Details
1050-SD-00034	2 of 4	A	24/07/2017	Power Supply, Bushing, Flamepaths and Notes
1050-SD-00034	3 of 4	A	24/07/2017	Light Engine Details
1050-SD-00034	4 of 4	A	24/07/2017	Nameplate, Wiring etc..
1050-SD-0001	1 to 5	A	24/07/2017	HPFL FMEA Dated 22-05-2017
1050-SD-0002	1 of 1	A	24/07/2017	HP Flood Protection circuit schematic
1050-SD-0003	1 of 1	A	24/07/2017	Protection circuit parts list