



### LED Hazardous Area Floodlight Standard and Emergency Variants

The SPARTAN Floodlight range is designed specifically for hazardous environments which require high performance, high reliability, Infra-Red illumination. Available in both standard and emergency versions and using Raytec's field-proven, long-life LED technology, SPARTAN Floodlights are ATEX and IEC Ex approved for all Zone 1 and Zone 2 applications and rated for T4, T5 andT6 environments.

SPARTAN Flood has been designed with maintenance in mind. A unique modular design allows key components to be easily accessed and serviced if required, making inspection and maintenance quicker and easier. It also allows for the most flexible installation. The PSU chassis can be removed and located remotely at ground level for areas with difficult access, while standard units can also be upgraded to an emergency fitting at any time with an additional battery back-up module.

SPARTAN Flood is available in a variety of different beam patterns, both circular and elliptical, with revolutionary interchagable VARIO lens inserts which can be easily altered on-site delivering the ultimate flexibility to specifiers, distributors and end-users.

SPARTAN uses **COOLEXTRUDE™** thermal management technology, ensuring a much cooler LED operating temperature and up to 60% better heat dissipation compared to traditional lighting solutions, allowing the product to operate for > 10 years while still delivering high performance Infra-Red illumination

### Features

- ATEX & IEC EX approved Zone 1 & 2 UL/CSA approved including C1D2
- Ultra long life LED
- Easy installation, maintenance and inspection
- Wide operating temperature range of -50° to +55°C
- Integral photocell (optional)
- VARIO lens technology easy modification of beam patterns
- 5 year warranty

• Emergency variants

## Why Raytec

- UK Designed & Manufactured
- Manufacturing precision engineered LED products
- Worldwide distributor support

- Lighting design and full technical support
- ISO9001 and ISO140001 accredited
- Award Winning Technology



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### **Extended Features**

#### Ultra-Powerful

Latest high power LED technology

### Ultra-Flexible

Beam patterns from 10° to 120° both circular and elliptical. Operating temperature range of -50°C to + 55°C with a T4/T5/T6 rating for even the most challenging conditions. (-20°C emergency variants) Models incorporating VARIO Technology allow for easy modification of beam pattern.

#### Ultra-Reliable

Industry leading 5 year warranty Designed and manufactured in the UK to the highest standards including both ISO9001 & ISO14001. Advanced electronics and LED's protected by vibration resistant and water proof potting compound

### Ultra-Modular

Both the LED and PSU modules are easily accessible for maintenance and inspection Available as a standard or emergency fitting – upgradeable on site. Removable PSU housing allows power supply to be fitted remotely

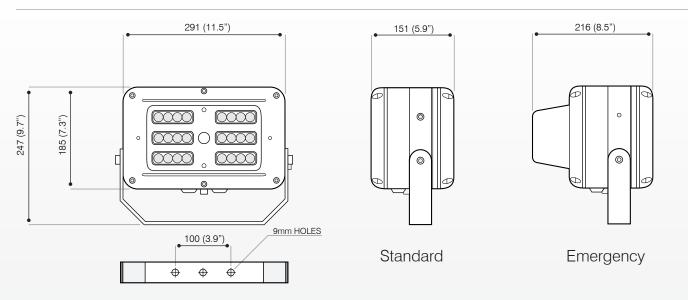
### Ultra-Efficient

**COOLEXTRUDE™** thermal management delivers class leading energy efficiency Significant running and maintenance savings compared to traditional lighting technologies SMART access wiring system for safe and efficient installation, set-up and ongoing inspection

### Ultra-Support

Photometric files available (.ies & .ldt) Full Lighting Design Service Site specific Energy and Cost Saving Report available

### **Product Dimensions**





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## **Technical Specifications**

| Certification             |   | Mechanical/Environmental  |   |                                      |
|---------------------------|---|---------------------------|---|--------------------------------------|
| ATEX Rating:              | ATEX and IEC Ex rated for Gas and Dust  | Burning position:         | Universal   |                                      |
| Hazardous Area rating:    | Zone 1 & 2 – Gas and Dust   | IP rating:                | IP66 & IP67   |                                      |
| Certificates:             | CML13ATEX3007 & IEC Ex CML 14.0001<br>UL/CSA, including C1D2                                    | Temperature range:        | -50°C to +55°<br>(-20'C emergen   |                                      |
| Gas:                      | II 2 GD Ex emb IIC T5 or T4 Gb<br>Ta -50°C to +55°C (-20°C emergency variants)                  | Weight:                   | 8kg (17.6lbs) Standard,<br>10Kg (22lbs) Emergency<br>Marine grade aluminium epoxy<br>powder coated, toughened glass,<br>all external fasteners and brackets<br>are marine grade stainless steel |                                      |
| Dust:                     | II 2 GD Ex emb IIC T6 Gb<br>Ta -50°C to +48°C (-20°C emergency variants)<br>Ex tb IIIC T82°C Db | Enclosure:                |   |                                      |
|                           | IP66 & IP67 -<br>Ta -50°C to +55°C (-20°C emergency variants)                                   | Unit Colour:              | Silver (RAL 9   |                                      |
| Electrical                |   | Installation instructions | s: Raytec ref 910-M-0094 –<br>please contact Raytec for copy  |                                      |
| Input:                    | 110-254V 50/60Hz AC only  |                           |   |                                      |
|                           | Low voltage option also available for standard variants only - 18-30V AC/DC                     | Dimensions:               | Standard -  | 291 x 247 x 150<br>(11.5 x 9.7 x 6") |
| Power:                    | 68W standard, 70W emergency   |                           | Emergency -   | ( )                                  |
| Termination:              | Incoming terminal block suitable for looping 4 core 4mm <sup>2</sup> cable                      | Mounting:                 | (11.5 x 9.7 x 8.5")<br>U bracket (see dimension drawings<br>on Page 2) – complete with locking<br>screw   |                                      |
| Power Factor              | >0.95   | wounting.                 |   |                                      |
| Cable entries             | 2xM20 as standard (other entries available upon<br>request), dispatched complete with one ATEX/ |                           |   |                                      |
|                           | IEC Ex approved blanking plug   | Emergency                 |   |                                      |
| Optical                   |   | Duration:                 | Up to 2hrs at 50% power   |                                      |
| Beam Patterns-circular:   | 10°x 10° or 30°x 30° or 50°x 50° or 120°x 120°  |                           | Other options available   |                                      |
|                           | (10 x 10 option can be upgraded to VARIO Technology)  | Battery:                  | Ni/Cd 12V 4.5   | ōAh                                  |
| Beam Patterns-elliptical: | 35°x 10°or 60°x 25°or 80°x 30° or 120°x 50°<br>(VARIO)  | Charge time:              | 20 hours  |                                      |
| LED type:                 | Platinum Elite SMT LEDs   |                           |   |                                      |
| Number of LEDs:           | 24  |                           |   |                                      |

#### Circular beam pattern

| Part Codes        | Description (T4 variants as standard)             | Distances |
|-------------------|---|-----------|
| SPX-FL24-I-1010   | SPARTAN Flood, 24 LED, Infra-Red, 10°x 10° beam   | 325m      |
| SPX-FL24-I-3030   | SPARTAN Flood, 24 LED, Infra-Red, 30°x 30° beam   | 99m       |
| SPX-FL24-I-5050   | SPARTAN Flood, 24 LED, Infra-Red, 50°x 50° beam   | 80m       |
| SPX-FL24-I-120120 | SPARTAN Flood, 24 LED, Infra-Red, 120°x 120° beam | 32m       |

For emergency versions – add '-EM' to the above codes For options fitted with photocell add '-PC' to the above codes For low voltage versions add 'LV' to the above codes Contact Raytec for T5 and T6 varianrs

#### Elliptical beam pattern

| Part Codes       | Description (T4 variants as standard)            | Distances |
|------------------|--|-----------|
| SPX-FL24-I-3510  | Spartan Flood, 24 LED, Infra-Red, 35°x 10° beam  | 158m      |
| SPX-FL24-I-6025  | Spartan Flood, 24 LED, Infra-Red, 60°x 25° beam  | 113m      |
| SPX-FL24-I-8030  | Spartan Flood, 24 LED, Infra-Red, 80°x 30° beam  | 73m       |
| SPX-FL24-I-12050 | Spartan Flood, 24 LED, Infra-Red, 120°x 50° beam | 49m       |

For emergency versions – add '-EM' to the above codes For options fitted with photocell add '-PC' to the above codes For low voltage versions add '-LV' to the above codes Contact Raytec for T5 and T6 varianrs

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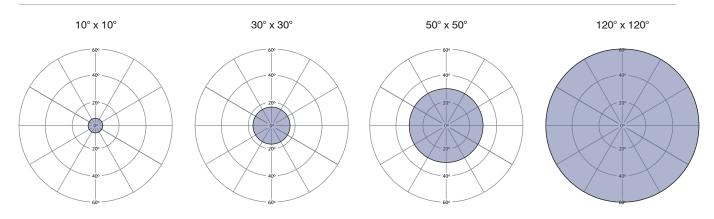
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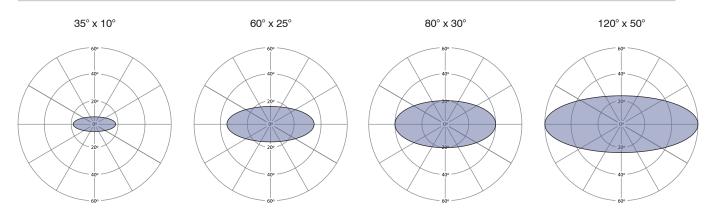
All Raytec luminaires are provided with an industry leading 5 year warranty and have an expected useful life in excess of 10 years

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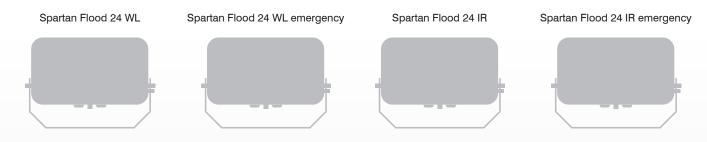
### Beam patterns - Circular



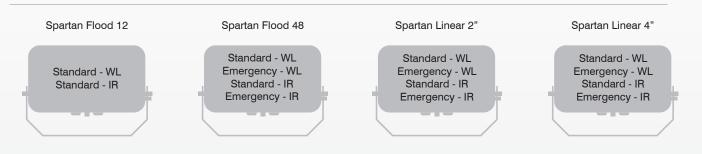
# Beam patterns – Elliptical (VARIO)



## Products in the Spartan Flood 24 range



## Other Products in the Spartan Hazardous Area Family



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