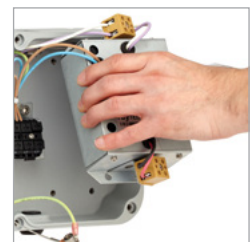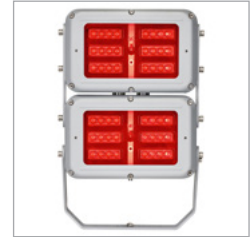# SPARTAN SPX-FL48R, Low Wavelength LED Zone 1 Red Floodlight Standard and Emergency Variants

rayTEC

- ATEX and IEC Ex approved – Zone 1 UL/CSA approved, including C1D2 and ABS

- Emergency variants available

- Ultra long life Red LEDs

- Wavelength - 620nm

- Easy installation, maintenance and inspection

- Wide operating temperature range -50° to +55°C

- VARIO lens technology – easy modification of beam patterns

- Integral photocell (optional)

- 5 year warranty

- Now 'op is' approved (EN60079-28)

The SPARTAN Red Floodlight range is designed specifically for hazardous area environments which require low light/ low wavelength illumination. Typical applications include military use, warning and status indication lighting. Available in both standard and emergency versions and using Raytec's field-proven, long-life LED technology, the FL48 (136W) red floodlight is ATEX and IEC Ex approved for all Zone 1 applications, C1D2, UL, CSA, ABS and rated for T4, T5 and T6 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.
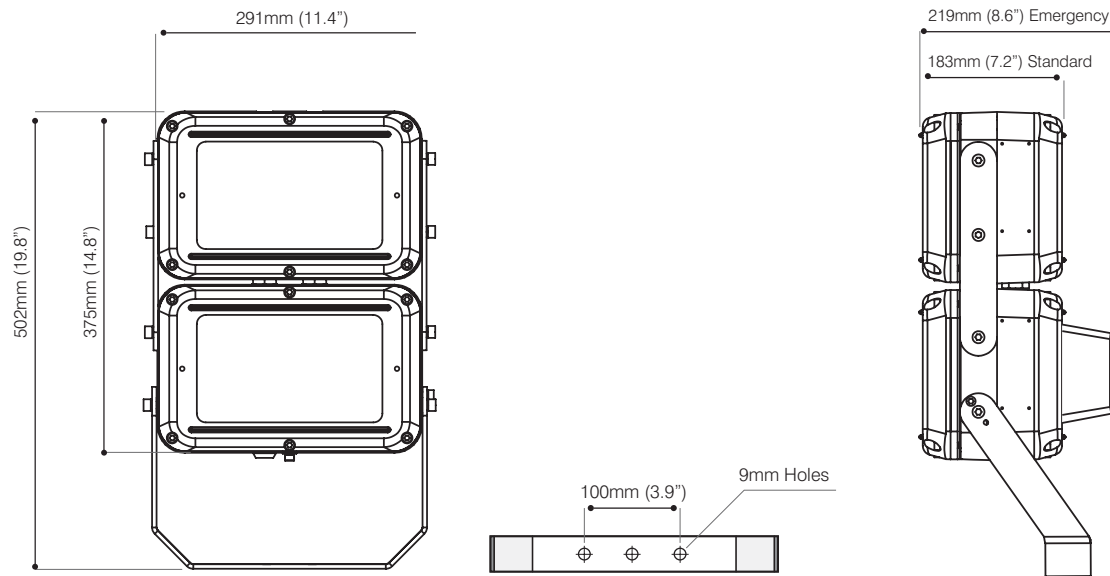
SPARTAN Flood is available in a range of different beam patterns, both circular and elliptical, with revolutionary interchangeable VARIO lens inserts which can be easily altered on-site delivering the ultimate flexibility to specifiers, distributors and end users. SPARTAN uses **COOLEXTRUDE™** thermal 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.

THORNE & DERRICK INTERNATIONAL
Thorne & Derrick
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Product Dimensions

291mm (11.4")

502mm (19.8")

375mm (14.8")

219mm (8.6") Emergency

183mm (7.2") Standard

100mm (3.9")

9mm Holes

Features	Benefits
Ultra-Powerful	Up to 4,000 lumens - low wavelength (620nm) 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 fitting only 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

5 YEAR WARRANTY

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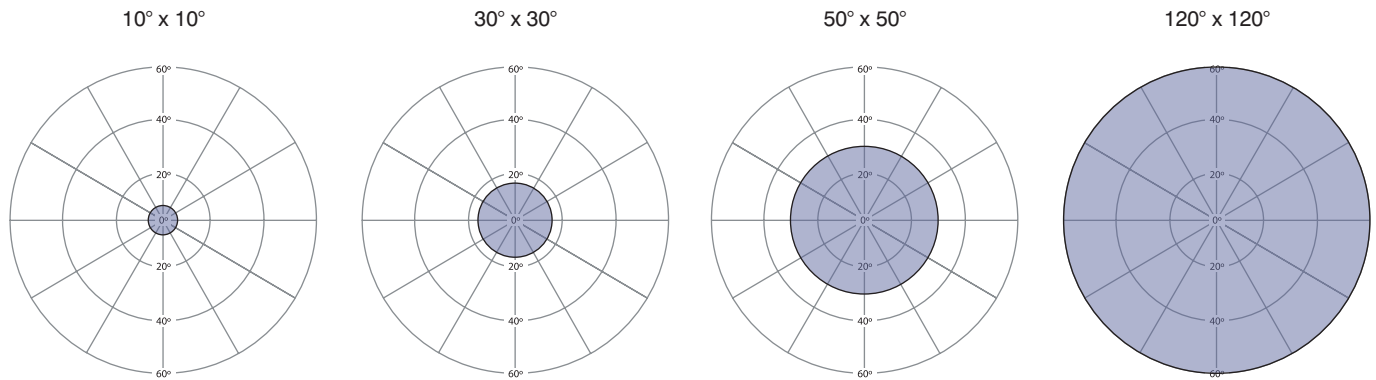
5 YEAR WARRANTY

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Raytec Americas: +1 613 270 9990 • ushazsales@raytecled.com

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Technical Specifications

Certification

ATEX Rating:	ATEX and IEC Ex rated for Gas and Dust
Hazardous Area rating:	Zone 1 – Gas and Dust
Certificates:	CML13ATEX3007 & IEC Ex CML 14.0001 UL/CSA, including C1D2
Gas:	II 2 G D Ex e mb op is IIC T4 Gb Ta= Up to -52°C to +55°C (all emergency variants have a lower ambient of -20°C only)
Dust:	Ex tb op is IIIC T82°C Db Ta= Up to -52°C to +55°C IP66/IP67
North America Rating:	Class I, Division 2 Groups A, B, C, D, T5 Class II, Division 1 & 2 Groups E, F, G Class III, Division 1 & 2 NEMA 4x, IP66/IP67 UL50E, UL8750, UL 1203 C22.2 No
ABS Rating	ABS Certificate # 15-LD1364539-1-PD

Electrical

Input:	110-254V 50/60Hz AC only Low voltage: 18-48V AC and 18-69V DC Extra low voltage: 12V AC/DC (low voltage not available for emergency variants)
Power:	Standard - 136W Emergency - 139W
Termination	Incoming terminal block suitable for looping 4 core 4mm² cable
Power Factor:	>0.95
Cable Entries	2xM20 as standard (other entries available upon request), dispatched complete with one ATEX/IEC Ex approved blanking plug 3/4" NPT as standard on C1D2

Optical

Beam Patterns-circular:	10°x 10° or 30°x 30° or 50°x 50° or 120°x 120° (10 x 10 option can be upgraded to VARIO Technology)
Beam Patterns-elliptical:	35°x 10°or 60°x 25° or 80°x 30° or 120°x 50° (VARIO)
Lumen output on mains:	Up to 4,000 lm – circular beam patterns Up to 3,600 lm – elliptical beam patterns (VARIO)
LED type:	Platinum Elite SMT LEDs
Number of LEDs:	48
Dominant Wavelength:	620nm (Red)

Mechanical/Environmental

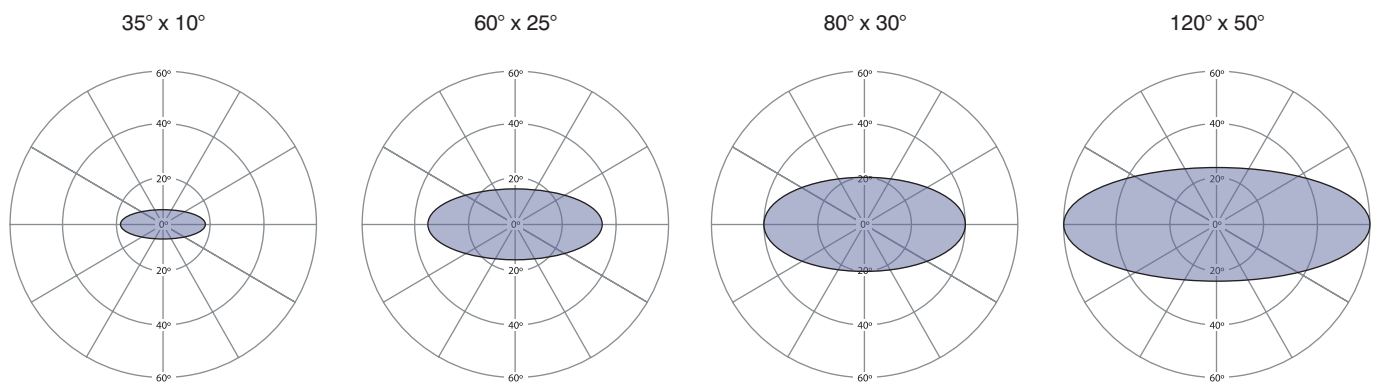|	
Burning position:	Universal
IP rating:	IP66 & IP67
Temperature range:	-50°C to +55°C (lower ambient of -20°C only for emergency variants
Weight:	Standard - 16kg (35.2lbs) Emergency - 20Kg (44lbs)
Enclosure:	Marine grade aluminium epoxy powder coated, toughened glass, all external fasteners and brackets are marine grade stainless steel
Unit Colour:	Silver (RAL 9006) Red (RAL3024) - Emergency cover
Installation instructions:	Please contact Raytec for copy
Dimensions:	Standard - 291 x 502 x 158mm (11.5 x 19.8x 6.2") Emergency - 291 x 502 x 219mm (11.5 x 19.8 x 8.6")
Mounting:	U bracket (see dimension drawings on Page 2 - complete with locking screw)
Emergency Duration:	Up to 90mins at 25% power (1x battery unit) Other options available
Emergency Battery:	Ni/Cd 12V 4.5Ah
Emergency Charge Time:	20 hours

Product Codes - Zone 1

Circular beam pattern

Part Codes	Description (T4 variants as standard)
SPX-FL48R-W-1010	SPARTAN Zone 1 Floodlight, 48 LED, Red Light, 10°x 10° beam
SPX-FL48R-W-3030	SPARTAN Zone 1 Floodlight, 48 LED, Red Light, 30°x 30° beam
SPX-FL48R-W-5050	SPARTAN Zone 1 Floodlight, 48 LED, Red Light, 50°x 50° beam
SPX-FL48R-W-120120	SPARTAN Zone 1 Floodlight, 48 LED, Red Light, 120°x 120° beam

For emergency versions – add '-EM50' to the above codes
18-69V variants available, add -LV to the above codes
12V variants available, add -ELV to the above codes
Contact Raytec for T5 and T6 variants

Elliptical beam pattern

Part Codes	Description (T4 variants as standard)
SPX-FL48R-W-3510	SPARTAN Zone 1 Floodlight, 48 LED, Red Light, 35°x 10° beam
SPX-FL48R-W-6025	SPARTAN Zone 1 Floodlight, 48 LED, Red Light, 60°x 25° beam
SPX-FL48R-W-8030	SPARTAN Zone 1 Floodlight, 48 LED, Red Light, 80°x 30° beam
SPX-FL48R-W-12050	SPARTAN Zone 1 Floodlight, 48 LED, Red Light, 120°x 50° beam

For emergency versions – add '-EM50' to the above codes
18-69V variants available, add -LV to the above codes
12V variants available, add -ELV to the above codes
Contact Raytec for T5 and T6 variants

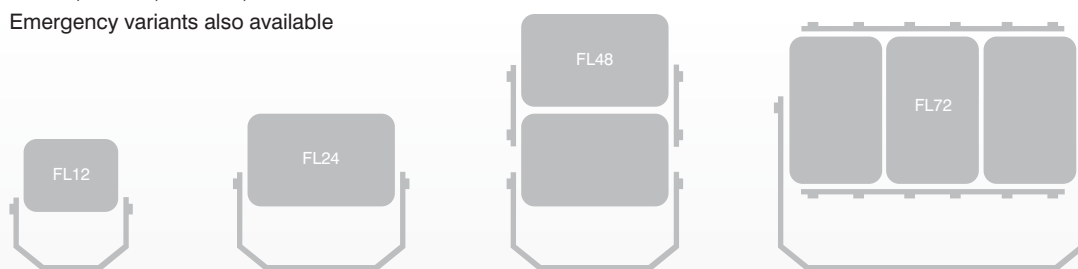Raytec Global (excluding Americas): +44 (0) 01670 520055 • sales@raytecled.com
Raytec Americas: +1 613 270 9990 • ushazsales@raytecled.com

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Beam patterns - Circular

| 10° x 10° | 30° x 30° | 50° x 50° | 120° x 120° |

Beam patterns – Elliptical (VARIO)

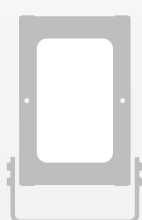| 35° x 10° | 60° x 25° | 80° x 30° | 120° x 50° |

Products in the SPARTAN Flood range

Zone 1, Zone 2, UL/CSA, Industrial
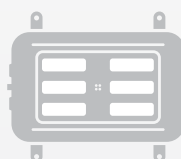Emergency variants also available

FL48

FL72

FL12

FL24

Products in the SPARTAN Family

SPARTAN Flood   SPARTAN Linear   SPARTAN Bulkhead   SPARTAN Bay   SPARTAN Crane

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