SPARTAN
FLOOD FL48

LED Zone 1 Floodlight
Standard and Emergency Variants

The SPARTAN Flood range is designed specifically for hazardous environments which require high performance, high reliability, White-Light 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 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 while still delivering a high lumen output of up to 10,000 lumens.

Key Features

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

- Ultra long life LED

- High lumen output LED

- Easy installation, maintenance and inspection

- Emergency variants

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

- VARIO lens technology – easy
  modification of beam patterns

- Integral photocell (optional)

- Clear external tear off strips on outer optics available

- 5 year warranty

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

High lumen output - up to 10,000 lumens
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.
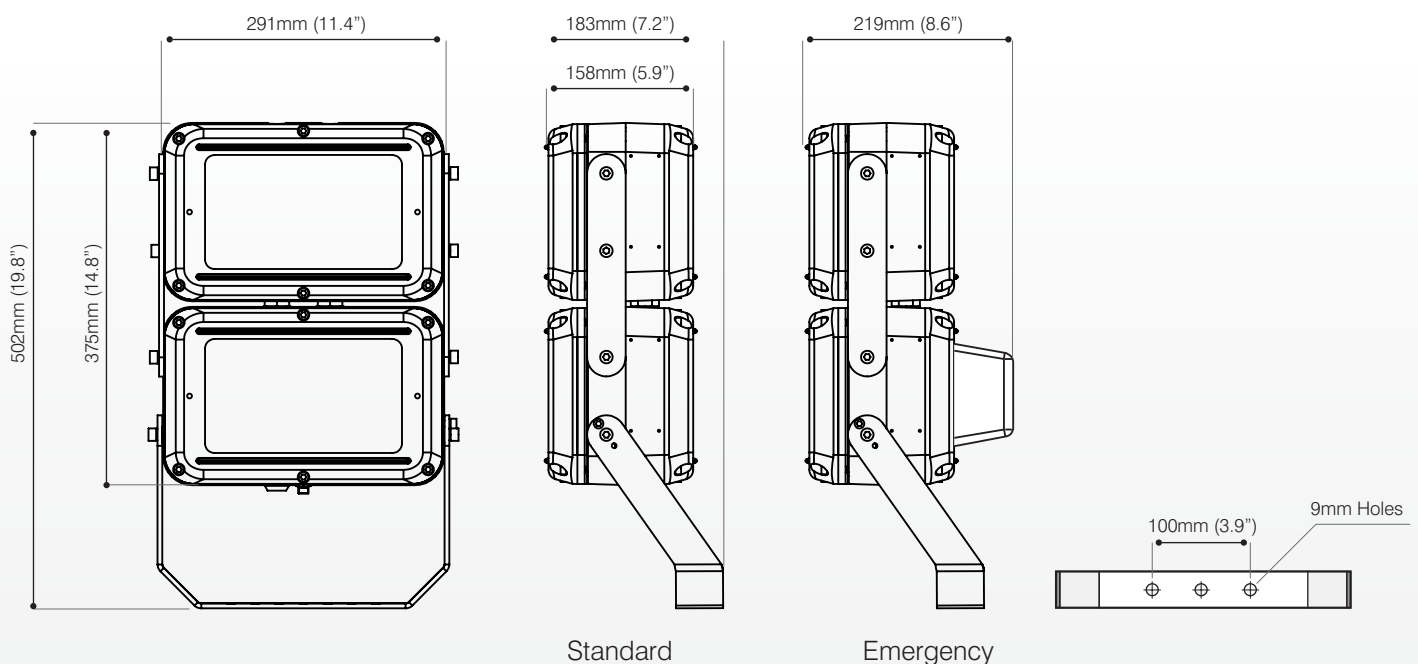Removable PSU housings allows power supply to be fitted remotely

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

291mm (11.4")   183mm (7.2")   219mm (8.6")

158mm (5.9")

502mm (19.8")

375mm (14.8")

Standard   Emergency

100mm (3.9")   9mm Holes

Version 2

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Technical Specifications

Certification

ATEX Rating:	ATEX and IEC Ex rated for Gas and Dust
Hazardous Area rating:	Zone 1 & 2 – Gas and Dust
Certificates:	CML13ATEX3007 & IEC Ex CML 14.0001 UL/CSA including C1D2
Gas:	II 2 GD Ex emb IIC T5 or T4 Gb Ta -50°C to +55°C (-20°C emergency variants) II 2 GD Ex emb IIC T6 Gb Ta -50°C to +48°C (-20°C emergency variants)
Dust:	Ex tb IIIC T82°C Db IP66 & IP67 - Ta -50°C to +55°C (-20°C emergency variants)
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 Emergency Variants - Certification Pending ABS Certificate # 15-LD1364539-1-PD

Electrical

Input:	110-254V 50/60Hz AC only Low voltage option also available for standard variants only - 18-30V AC/DC
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 10,000 lm – circular beam patterns Up to 9,000 lm – elliptical beam patterns (VARIO)
LED type:	Platinum Elite SMT LEDs
Number of LEDs:	48
CRI:	70+
Colour Temperature:	6,000K+

Mechanical/Environmental

Burning position:	Universal
IP rating:	IP66 & IP67
Temperature range:	-50°C to +55°C (-20°C 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:	Raytec ref 910-M-0094 – please contact Raytec for copy
Dimensions:	Standard - 291 x 502 x 158mm (11.5 x 19.8 x 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 2hrs at 25% power (1x battery unit) Other options available
Battery:	Ni/Cd 12V 4.5Ah
Charge time:	20 hours

Circular beam pattern

Part Codes	Description (T4 variants as standard)
SPX-FL48-W-1010	SPARTAN Flood, 48 LED, White-Light, 10°x 10° beam
SPX-FL48-W-3030	SPARTAN Flood, 48 LED, White-Light, 30°x 30° beam
SPX-FL48-W-5050	SPARTAN Flood, 48 LED, White-Light, 50°x 50° beam
SPX-FL48-W-120120	SPARTAN Flood, 48 LED, White-Light, 120°x 120° beam

Add -C1D2 to part code for North American standards

For emergency versions add '-EM25' to the above codes
For standard versions add '-LV' to the above codes
For options fitted with photocell add '-PC' to the above codes
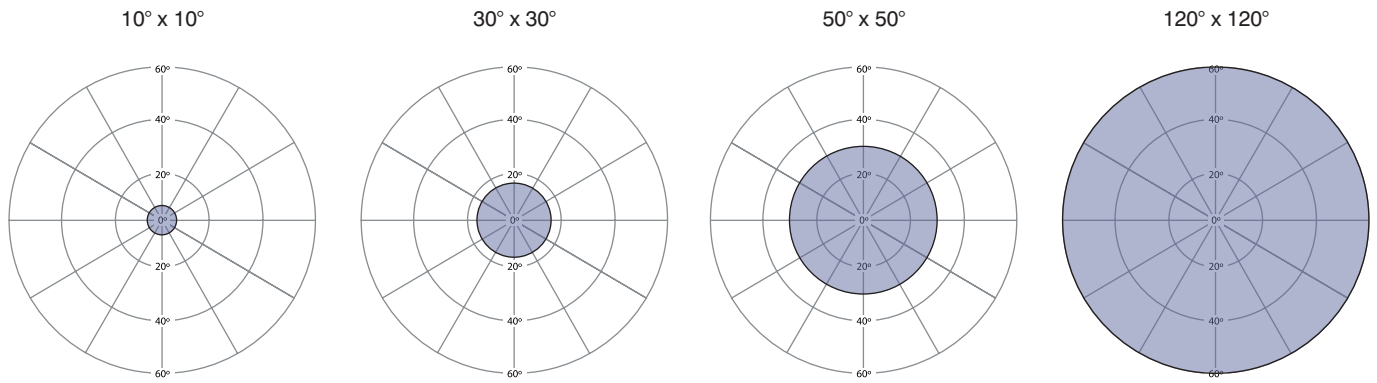Contact Raytec for T5 and T6 varianrs

Elliptical beam pattern

Part Codes	Description (T4 variants as standard)
SPX-FL48-W-3510	SPARTAN Flood, 48 LED, White-Light, 35°x 10° beam
SPX-FL48-W-6025	SPARTAN Flood, 48 LED, White-Light, 60°x 25° beam
SPX-FL48-W-8030	SPARTAN Flood, 48 LED, White-Light, 80°x 30° beam
SPX-FL48-W-12050	SPARTAN Flood, 48 LED, White-Light, 120°x 50° beam

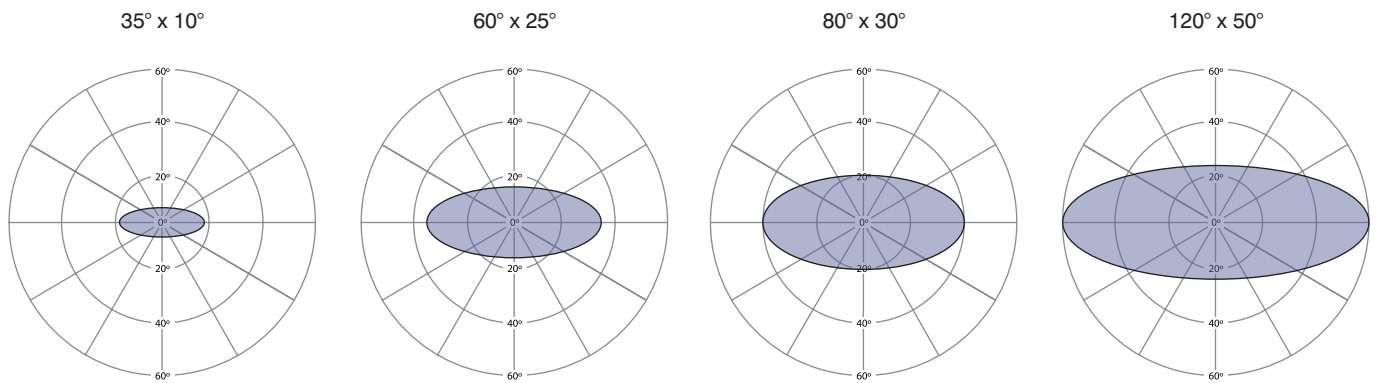**Add -C1D2 to part code for North American standards**

For emergency versions – add '-EM25' to the above codes
For standard versions add '-LV' to the above codes
For options fitted with photocell add '-PC' to the above codes
Contact Raytec for T5 and T6 varianrs

Raytec Global (excluding Americas)

Tel: +44 (0) 01670 520055
hazsales@raytecled.com
www.**raytec**led.com

Raytec Americas:

Tel: +1 613 270 9990
ushazsales@raytecled.com

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

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 48 range

SPARTAN Flood 48

SPARTAN Flood 48 Emergency

Other Products in the SPARTAN Zone 1 Family

SPARTAN Flood 12

Standard

SPARTAN Flood 24

Standard
Emergency
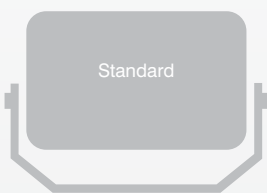
SPARTAN Bulkhead 24

Standard
Emergency

SPARTAN Linear WL84
2 x 18W equivalent

SPARTAN Linear WL168
2 x 36W equivalent

Standard
Emergency

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