

# SPARTAN

## FLOOD FL12



### LED Zone 1 Floodlight Standard Variants

The SPARTAN Flood range is designed specifically for hazardous environments which require high performance, high reliability, White-Light illumination. 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 the compact design of the SPARTAN Flood FL12 means it is more suited to applications with restricted space.

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 2,500 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
- Wide operating temperature range of -50° to +55°C
- VARIO lens technology – easy modification of beam patterns
- Integral photocell (optional)
- 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

## Extended Features

### Ultra-Powerful

High lumen output - up to 2,500 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  
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

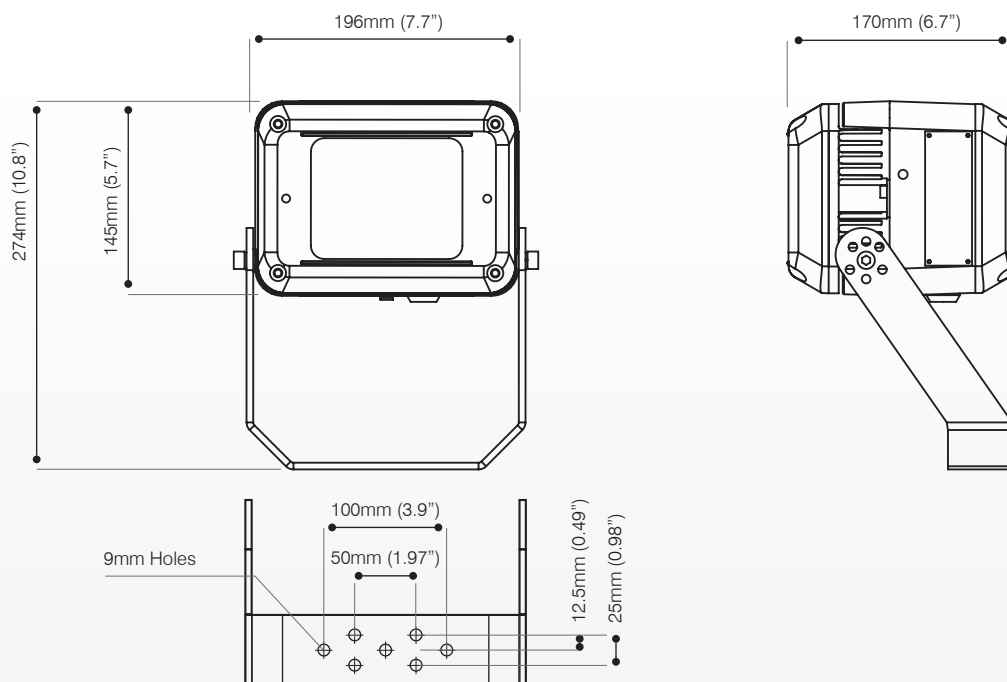
### Ultra-Efficient

**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

## Product Dimensions



# 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  
 II 2 GD Ex emb IIC T6 Gb  
 Ta -50°C to +48°C  
 Dust: Ex tb IIIC T82°C Db  
 IP66 & IP67 -  
 Ta -50°C to +55°C  
 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 - 18-48V AC and 18-69V DC  
 Power: 34W  
 Termination: Incoming terminal block suitable for looping 4 core 4mm<sup>2</sup> 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 2,500 lm – circular beam patterns  
 Up to 2,250 lm – elliptical beam patterns (VARIO)  
 LED type: Platinum Elite SMT LEDs  
 Number of LEDs: 12  
 CRI: 70+  
 Colour Temperature: 6,000K+

## Mechanical/Environmental

Burning position: Universal  
 IP rating: IP66 & IP67  
 Temperature range: -50°C to +55°C  
 Weight: 5kg (11lbs)  
 Enclosure: Marine grade aluminium epoxy powder coated, toughened glass, all external fasteners and brackets are marine grade stainless steel  
 Unit Colour: Silver (RAL 9006)  
 Installation instructions: Raytec ref 910-M-0094 – please contact Raytec for copy  
 Dimensions: 196 x 274 x 170mm  
 (10.8 x 7.7 x 6.7")  
 Mounting: U bracket (see dimension drawings on Page 2)

## Circular beam pattern

Part Codes	Description (T4 variants as standard)
SPX-FL12-W-1010	SPARTAN Flood, 12 LED, White-Light, 10°x 10° beam
SPX-FL12-W-3030	SPARTAN Flood, 12 LED, White-Light, 30°x 30° beam
SPX-FL12-W-5050	SPARTAN Flood, 12 LED, White-Light, 50°x 50° beam
SPX-FL12-W-120120	SPARTAN Flood, 12 LED, White-Light, 120°x 120° beam

Add -C1D2 to part code for North American standards

For options fitted with photocell add '-PC' to the above codes  
 For low voltage options add '-LV' to the above codes  
 Contact Raytec for T5 and T6 variants

## Elliptical beam pattern

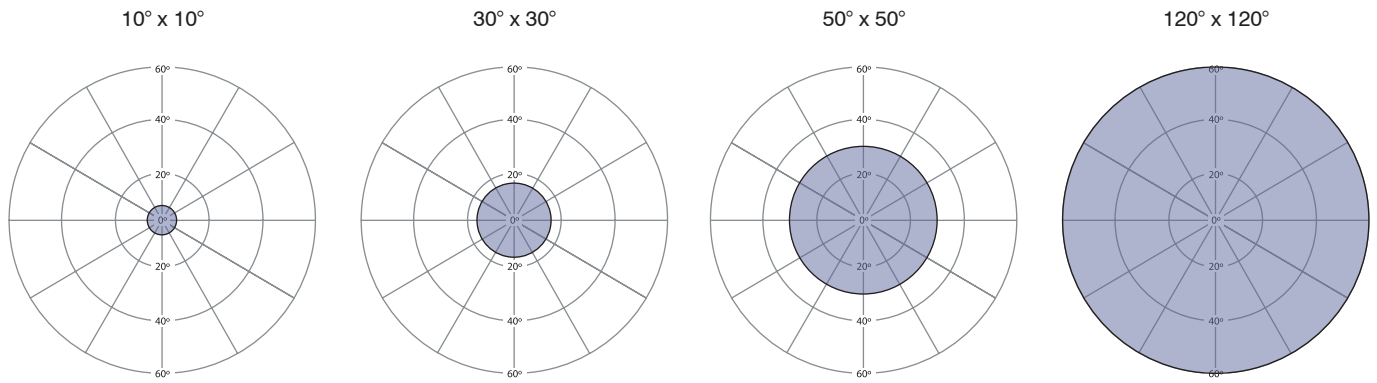
Part Codes	Description (T4 variants as standard)
SPX-FL12-W-3510	SPARTAN Flood, 12 LED, White-Light, 35°x 10° beam
SPX-FL12-W-6025	SPARTAN Flood, 12 LED, White-Light, 60°x 25° beam
SPX-FL12-W-8030	SPARTAN Flood, 12 LED, White-Light, 80°x 30° beam
SPX-FL12-W-12050	SPARTAN Flood, 12 LED, White-Light, 120°x 50° beam

Add -C1D2 to part code for North American standards

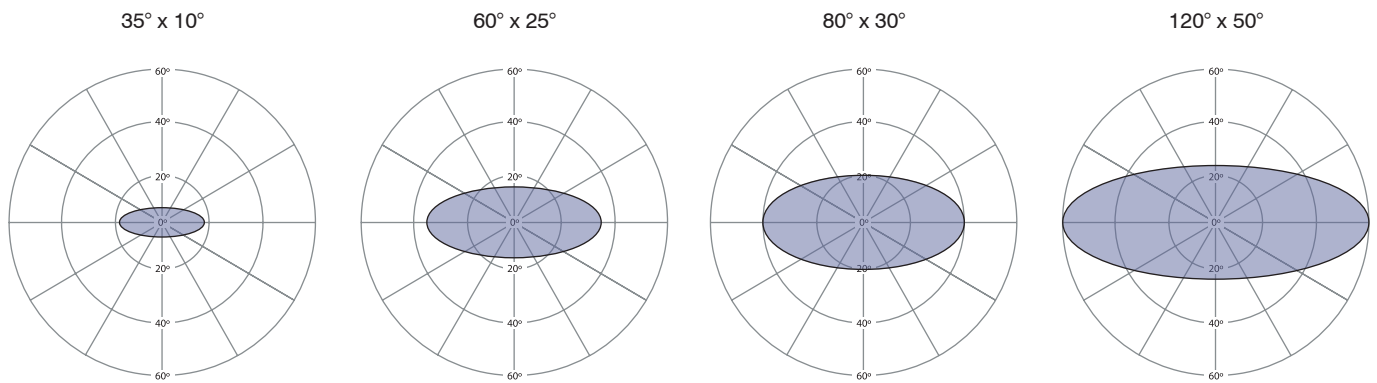
For options fitted with photocell add '-PC' to the above codes  
 For low voltage versions add '-LV' to the above codes  
 Contact Raytec for T5 and T6 variants



## Beam patterns - Circular



## Beam patterns – Elliptical (VARIO)



## Products in the SPARTAN Flood 12 range

SPARTAN Flood 12



## Other Products in the SPARTAN Zone 1 Family

SPARTAN Flood 24



SPARTAN Flood 48



SPARTAN Bulkhead 24



SPARTAN Linear WL84  
2 x 18W equivalent

SPARTAN Linear WL168  
2 x 36W equivalent

