ZONE 1 ZONE 2 INDUSTRIAL

# 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



Raytec Americas:

## **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  $-50^{\circ}$ C to  $+55^{\circ}$ 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

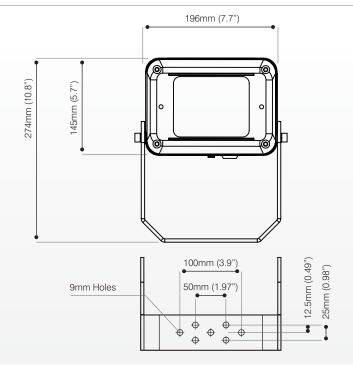
## Ultra-Efficient

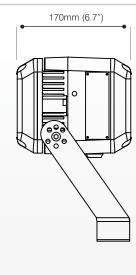
**COOLEXTRUDE™** thermal management delivers class leading energy efficiency
Significant running and maintenance savings compared to traditional lighting technologies
SMART access wiring system for safe and efficient installation, set-up and ongoing inspection

## 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 - 18-30V AC/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 Pa

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  $80^{\circ}x$   $30^{\circ}$  or  $120^{\circ}x$   $50^{\circ}$  (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

 $(10.8 \times 7.7 \times 6.7")$ 

Mounting: U bracket (see dimension drawings

on Page 2)

## Circular beam pattern

SPX-FL12-W-1010 SPARTAN Flood, 12 LED, White-Light, 10°x 10° bear	rail Godes	Description (14 variants as standard)
	SPX-FL12-W-1010	SPARTAN Flood, 12 LED, White-Light, 10°x 10° bear

3FA-FL12-W-1010	STANTAN FIOUL, 12 LED, WHITE-LIGHT, 10 X 10 DEATH
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

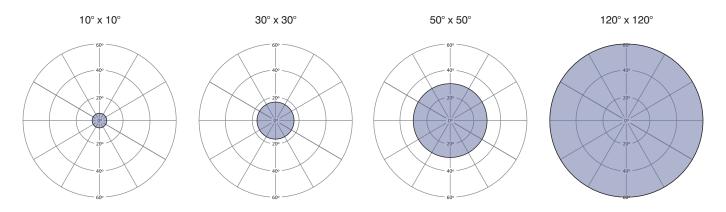
Add -C1D2 to part code for North American standards

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

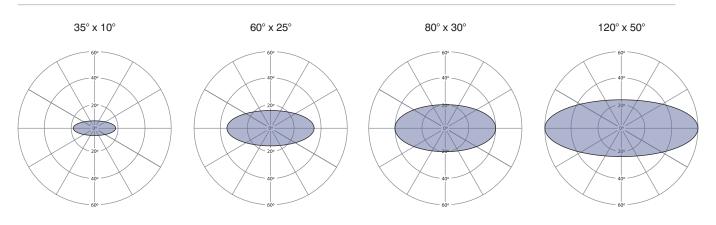


Raytec Americas:

# Beam patterns - Circular



# Beam patterns - Elliptical (VARIO)



# Products in the SPARTAN Flood 12 range





# Other Products in the SPARTAN Zone 1 Family

