SPARTAN
FLOOD IR48

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. Housed in Marine Grade aluminium with a toughened glass window, 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 and T6 environments/locations. Available in both standard and emergency versions.

Spartan Flood is available in a variety of different beam patterns, both circular and elliptical, to suit any application. The circular beam patterns maximise light output, while the elliptical beam patterns use Raytec's revolutionary VARIO holographic lens technology to shape the light providing greater illumination distances with significantly reduced energy wastage. The VARIO holographic beam patterns can easily be modified – offering ultimate flexibility to specifiers, distributors and end-users.

Spartan Flood has been designed from the ground up for easy installation, easy maintenance, easy inspection, and long life performance. Spartan uses **COOLEXTRUDE™** thermal management technology, ensuring a much cooler LED operating temperature allowing the product to operate for >10 years. A unique, maintenance-friendly design allows quick and easy servicing and inspection of all key components including LED and PSU modules if required.

Features

- ATEX & IEC EX approved - Zone 1 & 2
- Ultra long life LED
- Easy installation, maintenance and inspection
- Emergency variants
- Wide operating temperature range

- Integral photocell (optional)
- 5 year warranty
- VARIO lens technology – easy modification of beam patterns

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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Key Features

Ultra-Powerful

Latest high power LED technology

Ultra-Flexible

Beam patterns from 10° to 120° both circular and elliptical.
Operating temperature range of -52°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
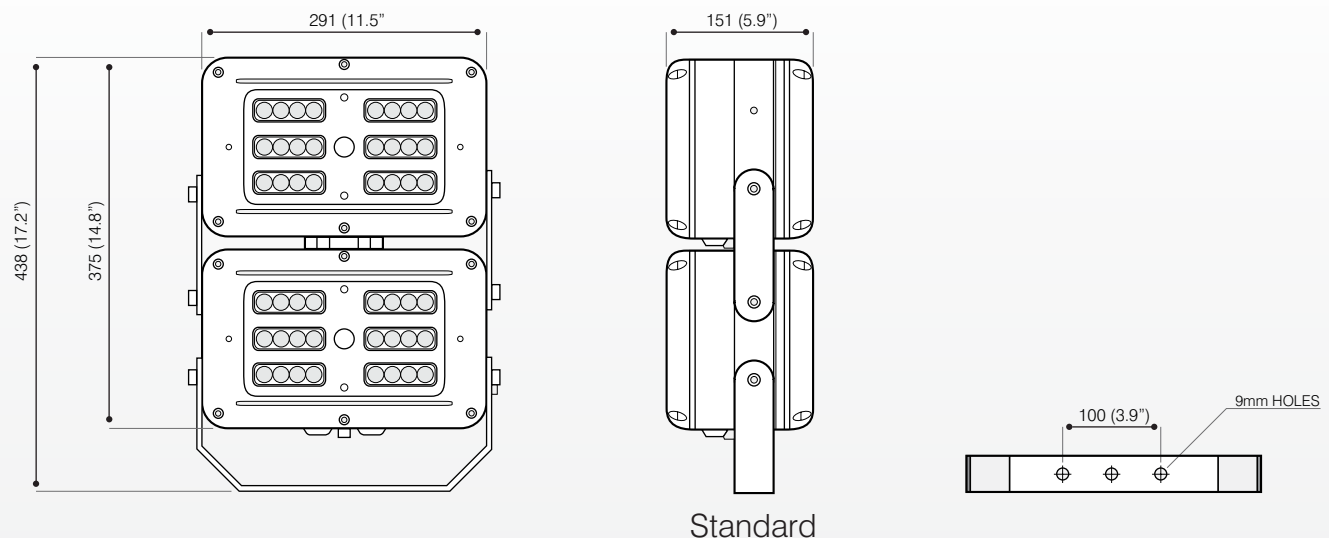
Ultra-Support

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

Product Dimensions

Standard

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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
Gas:	II 2 GD Ex emb IIC T5 or T4 Gb Ta -52°C to +55°C (-20°C emergency variants) II 2 GD Ex emb IIC T6 Gb Ta -52°C to +48°C (-20°C emergency variants)
Dust:	Ex tb IIIC T82°C Db IP66 & IP67 - Ta -52°C to +55°C (-20°C emergency variants)

Electrical

Input:	110-254V 50/60Hz AC only
Power:	120W standard, 130W emergency
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

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)
LED type:	Platinum SMT LEDs
Number of LEDs:	48

Mechanical/Environmental

Burning position:	Universal
IP rating:	IP66 & IP67
Temperature range:	-52°C to +55°C (-20'C emergency variants)
Weight:	19kg (41.9lbs) standard 21kg (46.3lbs) emergency
Enclosure:	Marine grade aluminium epoxy powder coated, toughened glass, all external fasteners and brackets are marine grade stainless steel
Unit Colour:	Silver (RAL 9006), emergency battery box red (RAL3024)
Installation instructions:	Raytec ref 910-M-0094 – please contact Raytec for copy
Dimensions:	291 x 438 x 151std / 215mm emergency (11.4 x 17.2 x 5.9 std / 8.5" emergency)
Mounting:	U bracket (see dimension drawings on Page 2) – complete with locking screw

Emergency

Lumen output on emergency:	Duruation based on 25% of light output (50%, 75% and 100% output available) **NB:** Please consult Raytec prior to ordering
Duration:	90 minutes
Battery:	Ni/Cd 12V 4.5Ah
Charge time:	20 hours
System healthy indicator:	Green LED located adjacent to cable entries

Circular beam pattern

Part Codes	Description (T4 variants as standard)	Distances
SPX-FL48-I-1010	Spartan Flood, 48 LED, Infra-Red, 10°x 10° beam	320m (1,050ft)
SPX-FL48-I-3030	Spartan Flood, 48 LED, Infra-Red, 30°x 30° beam	110m (361ft)
SPX-FL48-I-5050	Spartan Flood, 48 LED, Infra-Red, 50°x 50° beam	90m (295ft)
SPX-FL48-I-120120	Spartan Flood, 48 LED, Infra-Red, 120°x 120° beam	36m (118ft)

For emergency versions – add '-EM' 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

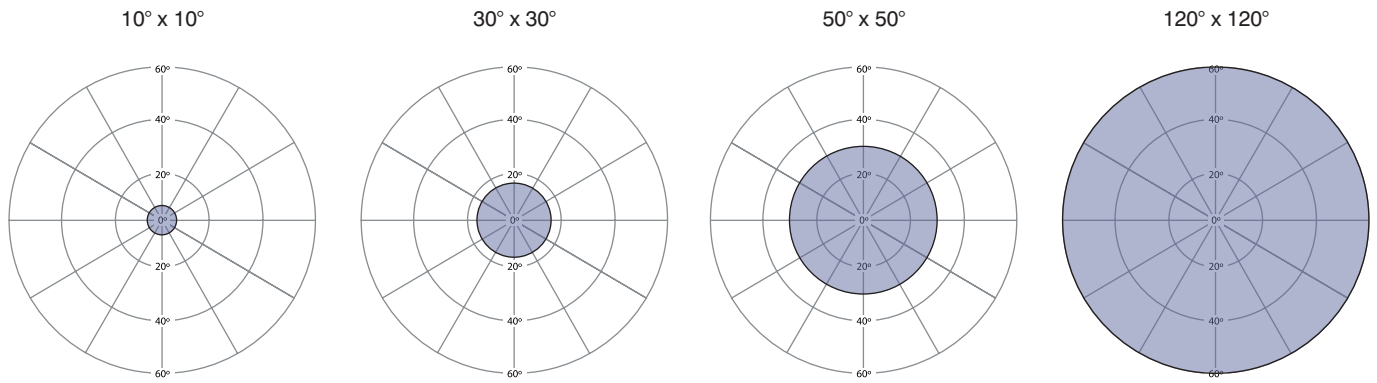| Part Codes	Description (T4 variants as standard)	Distances
SPX-FL48-I-3510	Spartan Flood, 48 LED, Infra-Red, 35°x 10° beam	175m (574ft)
SPX-FL48-I-6025	Spartan Flood, 48 LED, Infra-Red, 60°x 25° beam	120m (394ft)
SPX-FL48-I-8030	Spartan Flood, 48 LED, Infra-Red, 80°x 30° beam	80m (263ft)
SPX-FL48-I-12050	Spartan Flood, 48 LED, Infra-Red 120°x 50° beam	55m (180ft)

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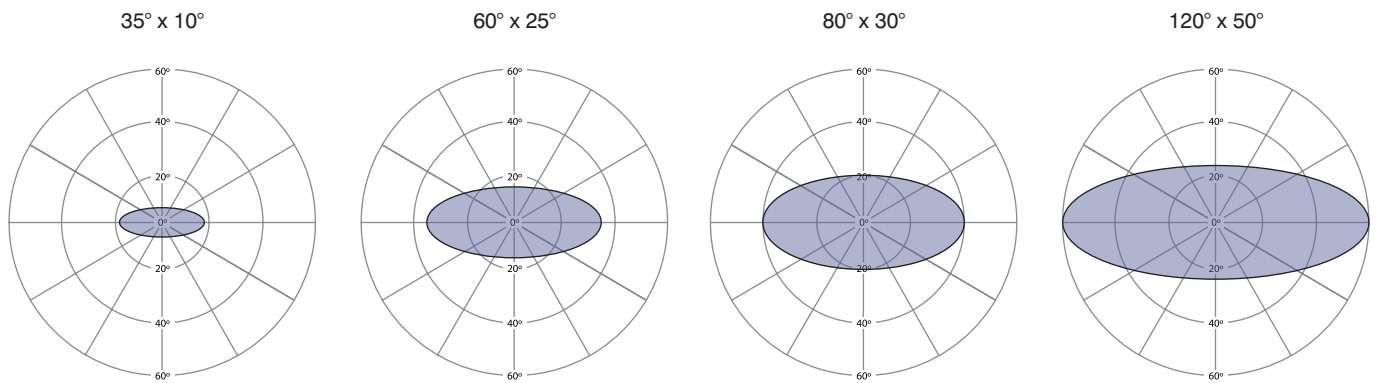Contact Raytec for T5 and T6 varianrs

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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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 WL Spartan Flood 48 WL emergency Spartan Flood 48 IR Spartan Flood 48 IR emergency

Other Products in the Spartan Hazardous Area Family

Spartan Flood 12 Spartan Flood 24 Spartan Linear 2" Spartan Linear 4"

Standard - WL
Standard - IR

Standard - WL
Emergency - WL
Standard - IR
Emergency - IR

Standard - WL
Emergency - WL
Standard - IR
Emergency - IR

Standard - WL
Emergency - WL
Standard - IR
Emergency - IR

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