SPARTAN
FLOOD IR24

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, C1D2, UL, CSA, ABS 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 and IEC Ex approved – Zone 1 & 2 UL/CSA approved, including C1D2 and ABS

- Ultra long life LED

- Easy installation, maintenance and inspection

- Emergency variants

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

- 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 -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 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
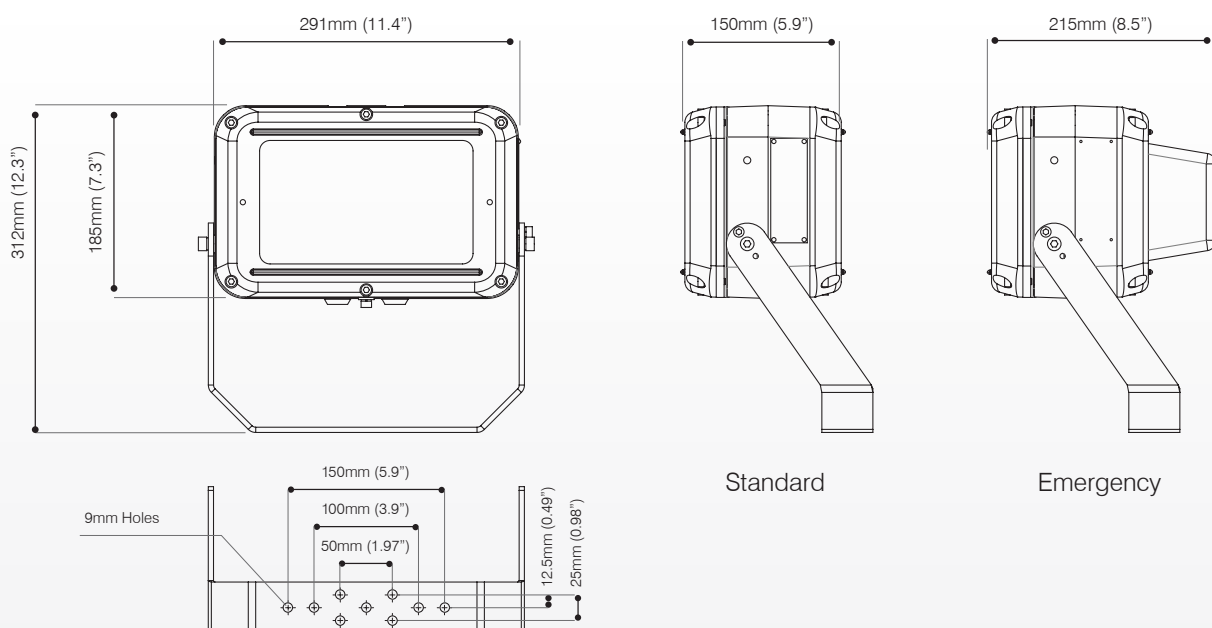
Ultra-Support

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

Product Dimensions

Standard   Emergency

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Raytec Americas:
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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 & 2 – Gas and Dust
Certificates:	CML13ATEX3007 & IEC Ex CML 14.0001
Gas:	UL/CSA, including C1D2
	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
Dust:	Ta -50°C to +48°C (-20°C emergency variants)
	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 - 18-48V AC and 18-69V DC
Power:	Standard - 68W
	Emergency - 71W
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)
LED type:	Platinum Elite SMT LEDs
Number of LEDs:	24

Mechanical/Environmental

Burning position:	Universal
IP rating:	IP66 & IP67
Temperature range:	-50°C to +55°C (-20'C emergency variants)
Weight:	8kg (17.6lbs) Standard, 10kg (22lbs) 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:	Standard - 291 x 312 x 150mm (11.5 x 12.3 x 6") Emergency - 291 x 312 x 215mm (11.5 x 12.3 x 8.5")
Mounting:	U bracket (see dimension drawings on Page 2) – complete with locking screw

Emergency

Duration:	Up to 2hrs at 50% power Other options available
Battery:	Ni/Cd 12V 4.5Ah
Charge time:	20 hours

Circular beam pattern

Part Codes	Description (T4 variants as standard)	Distances
SPX-FL24-I-1010	SPARTAN Flood, 24 LED, Infra-Red, 10°x 10° beam	325m (1,066ft)
SPX-FL24-I-3030	SPARTAN Flood, 24 LED, Infra-Red, 30°x 30° beam	130m (427ft)
SPX-FL24-I-5050	SPARTAN Flood, 24 LED, Infra-Red, 50°x 50° beam	110m (361ft)
SPX-FL24-I-120120	SPARTAN Flood, 24 LED, Infra-Red, 120°x 120° beam	30m (98ft)

Add -C1D2 to part code for North American standards

For emergency versions – add '-EM' to the above codes
Contact Raytec for T5 and T6 variants

Elliptical beam pattern

Part Codes	Description (T4 variants as standard)	Distances
SPX-FL24-I-3510	SPARTAN Flood, 24 LED, Infra-Red, 35°x 10° beam	158m (518ft)
SPX-FL24-I-6025	SPARTAN Flood, 24 LED, Infra-Red, 60°x 25° beam	113m (371ft)
SPX-FL24-I-8030	SPARTAN Flood, 24 LED, Infra-Red, 80°x 30° beam	73m (240ft)
SPX-FL24-I-12050	SPARTAN Flood, 24 LED, Infra-Red, 120°x 50° beam	49m (161ft)

Add -C1D2 to part code for North American standards

For emergency versions – add '-EM' to the above codes
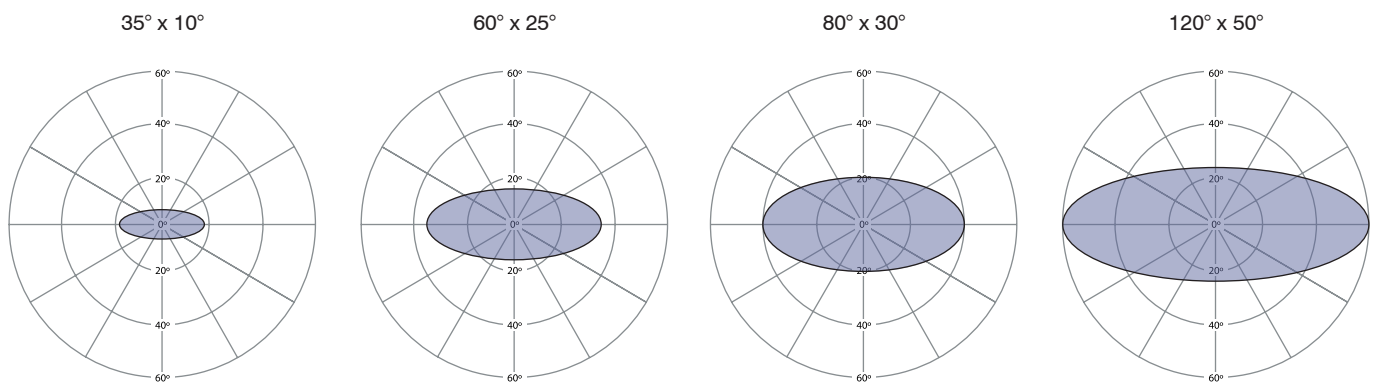Contact Raytec for T5 and T6 variants

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

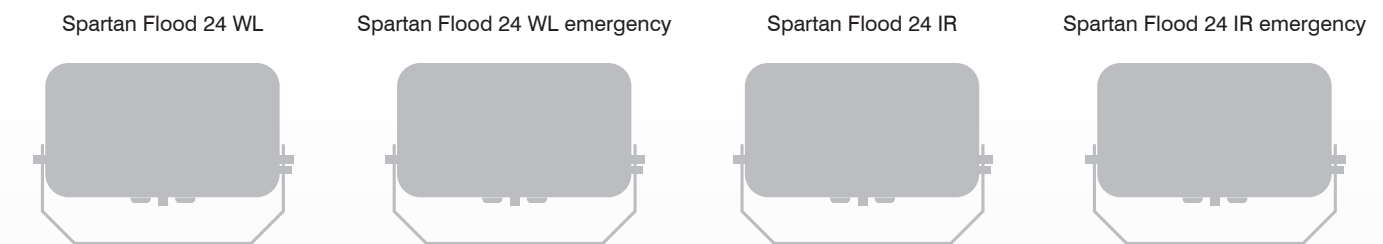# Beam patterns - Circular

| 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° |
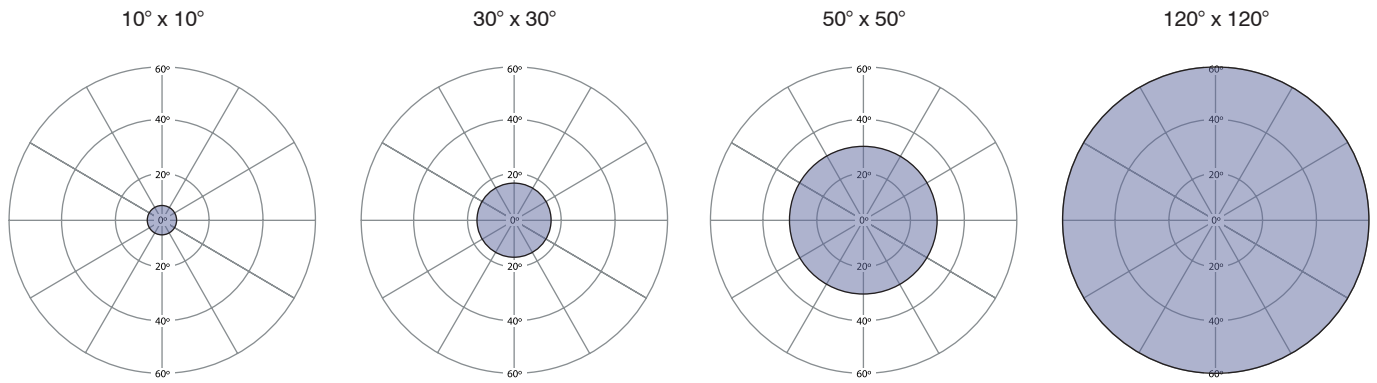
Products in the SPARTAN Flood 24 range

| Spartan Flood 24 WL | Spartan Flood 24 WL emergency | Spartan Flood 24 IR | Spartan Flood 24 IR emergency |

Other Products in the SPARTAN Hazardous Area Family

| SPARTAN Flood 12 | SPARTAN Flood 48 | SPARTAN Bulkhead 24 | SPARTAN Linear WL84 |

Standard

Standard
Emergency

Standard
Emergency

SPARTAN Linear WL84
2 x 18W equivalent

SPARTAN Linear WL168
2 x 36W equivalent

Standard
Emergency

0910-D-00004

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