

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

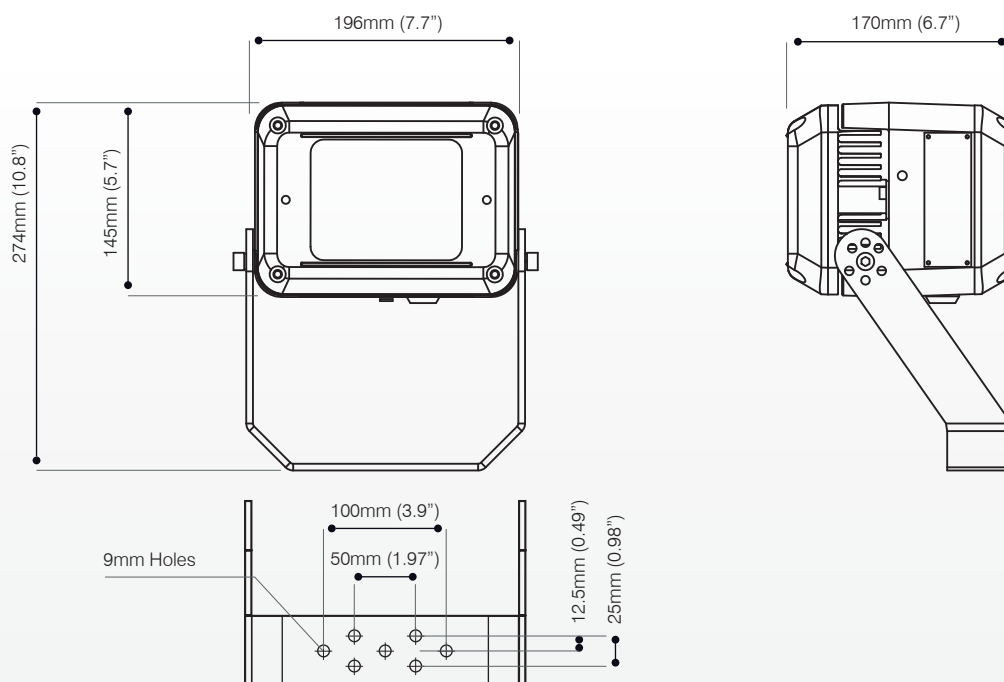
Ultra-Efficient

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 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 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

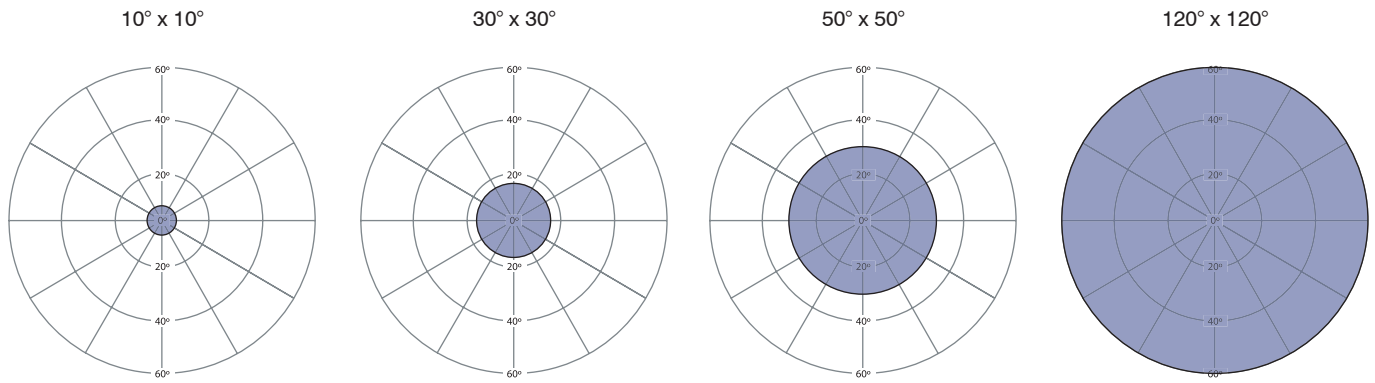
Elliptical beam pattern

| 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 |

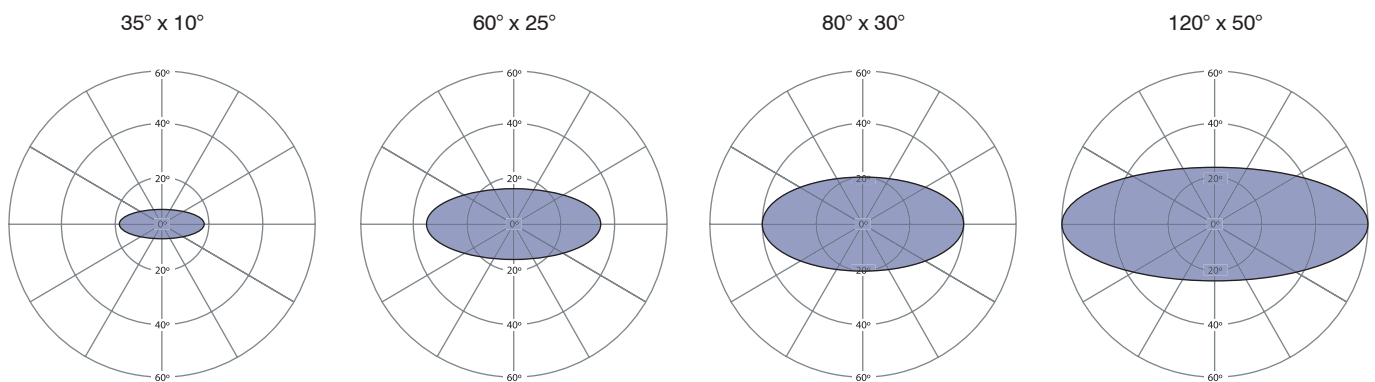
Add -C1D2 to part code for North American standards

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

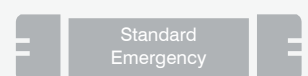


SPARTAN Bulkhead 24



SPARTAN Linear WL84
2 x 18W equivalent

SPARTAN Linear WL168
2 x 36W equivalent



SPARTAN

FLOOD FL24



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 5,000 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

Extended Features

Ultra-Powerful

High lumen output - up to 5,000 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 housing allows power supply to be fitted remotely

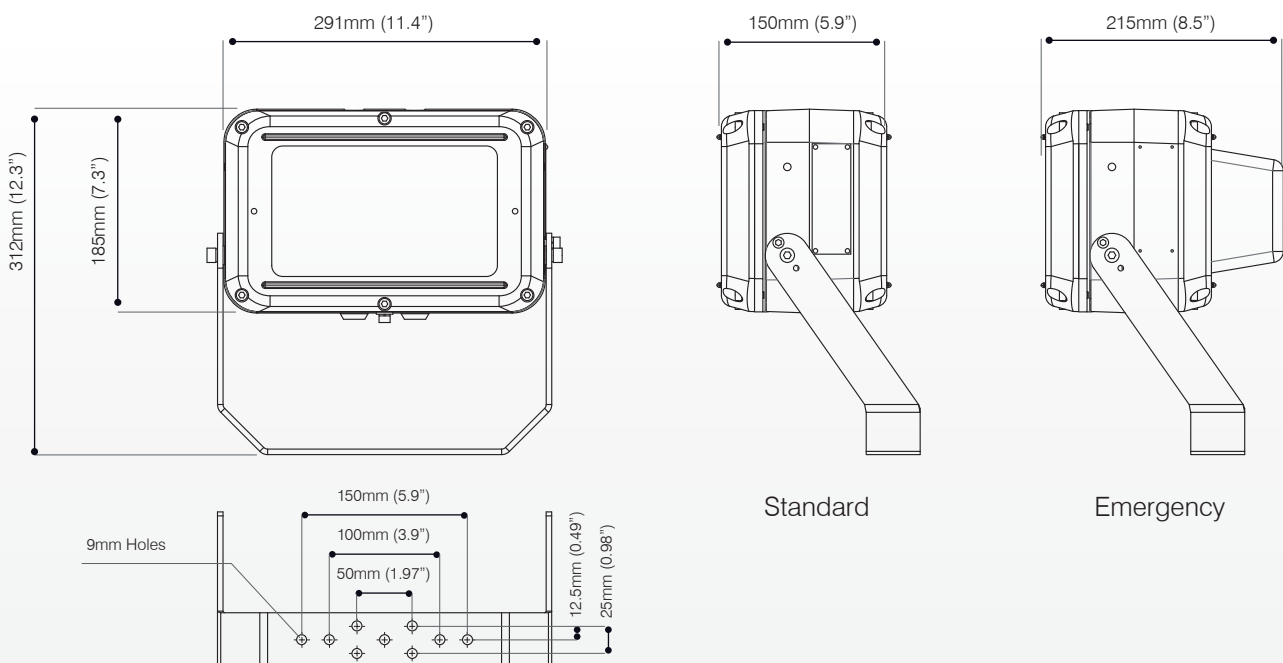
Ultra-Efficient

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 (-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 - 18-48V AC and 18-69V DC |
| Power: | Standard - 68W Emergency - 71W |
| Termination: | Incoming terminal block suitable for looping 4 core 4mm ² 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 5,000 lm – circular beam patterns Up to 4,500 lm – elliptical beam patterns (VARIO) |
| LED type: | Platinum Elite SMT LEDs |
| Number of LEDs: | 24 |
| 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 - 8kg (17.6lbs) Emergency - 10Kg (22lbs) |
| 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 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) |
|-------------------|---|
| SPX-FL24-W-1010 | SPARTAN Flood, 24 LED, White-Light, 10°x 10° beam |
| SPX-FL24-W-3030 | SPARTAN Flood, 24 LED, White-Light, 30°x 30° beam |
| SPX-FL24-W-5050 | SPARTAN Flood, 24 LED, White-Light, 50°x 50° beam |
| SPX-FL24-W-120120 | SPARTAN Flood, 24 LED, White-Light, 120°x 120° beam |

Add -C1D2 to part code for North American standards

For emergency versions – add '-EM50' to the above codes
For low voltage versions add '-LV' to the above codes
For options fitted with photocell add '-PC' to the above codes
Contact Raytec for T5 and T6 variants

Elliptical beam pattern

| Part Codes | Description (T4 variants as standard) |
|------------------|--|
| SPX-FL24-W-3510 | SPARTAN Flood, 24 LED, White-Light, 35°x 10° beam |
| SPX-FL24-W-6025 | SPARTAN Flood, 24 LED, White-Light, 60°x 25° beam |
| SPX-FL24-W-8030 | SPARTAN Flood, 24 LED, White-Light, 80°x 30° beam |
| SPX-FL24-W-12050 | SPARTAN Flood, 24 LED, White-Light, 120°x 50° beam |

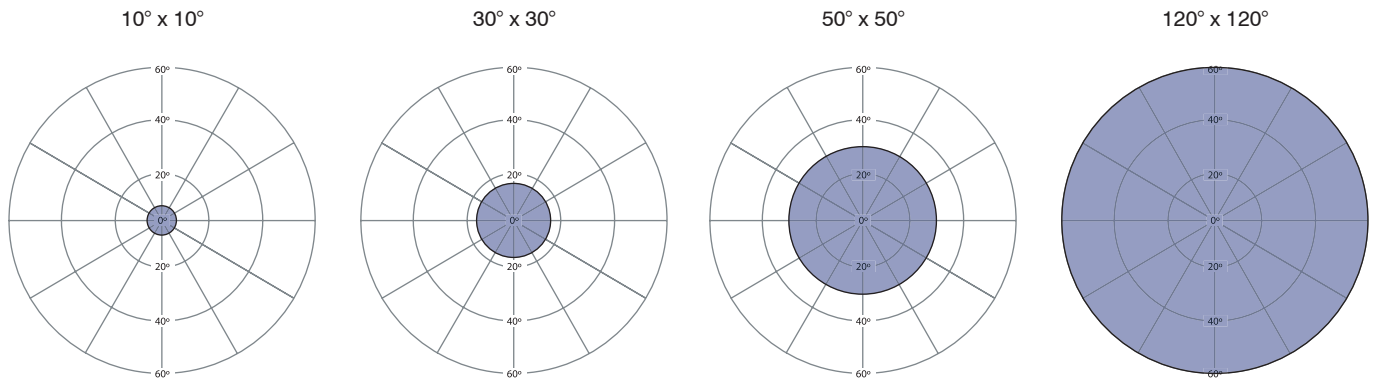
Add -C1D2 to part code for North American standards

For emergency versions – add '-EM50' to the above codes
For low voltage versions add '-LV' to the above codes
For options fitted with photocell add '-PC' to the above codes
Contact Raytec for T5 and T6 variants

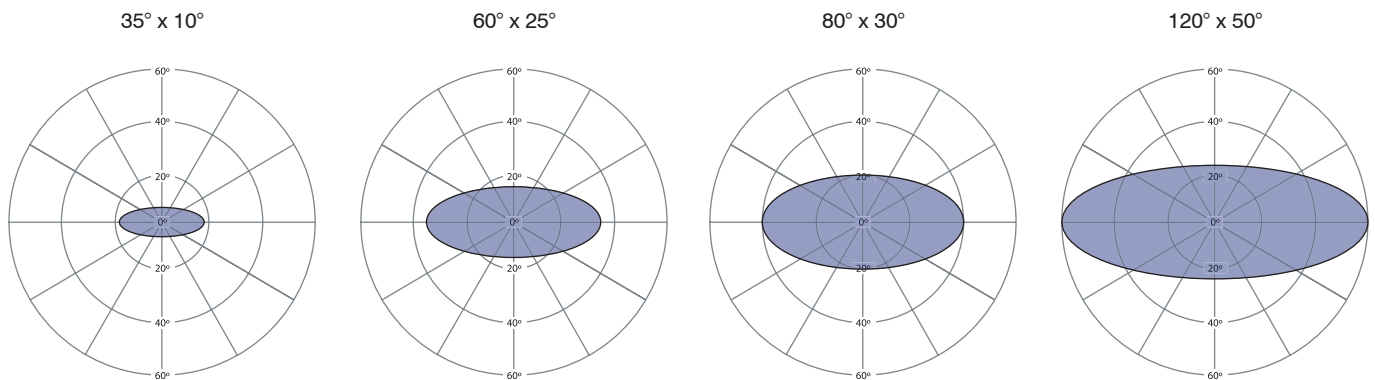


All Raytec luminaires are provided with an industry leading 5 year warranty and have an expected useful life in excess of 10 years

Beam patterns - Circular



Beam patterns – Elliptical (VARIO)



Products in the SPARTAN Flood 24 range

SPARTAN Flood 24



SPARTAN Flood 24 Emergency



Other Products in the SPARTAN Zone 1 Family

SPARTAN Flood 12



SPARTAN Flood 48

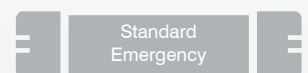


SPARTAN Bulkhead 24



SPARTAN Linear WL84
2 x 18W equivalent

SPARTAN Linear WL168
2 x 36W equivalent



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

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

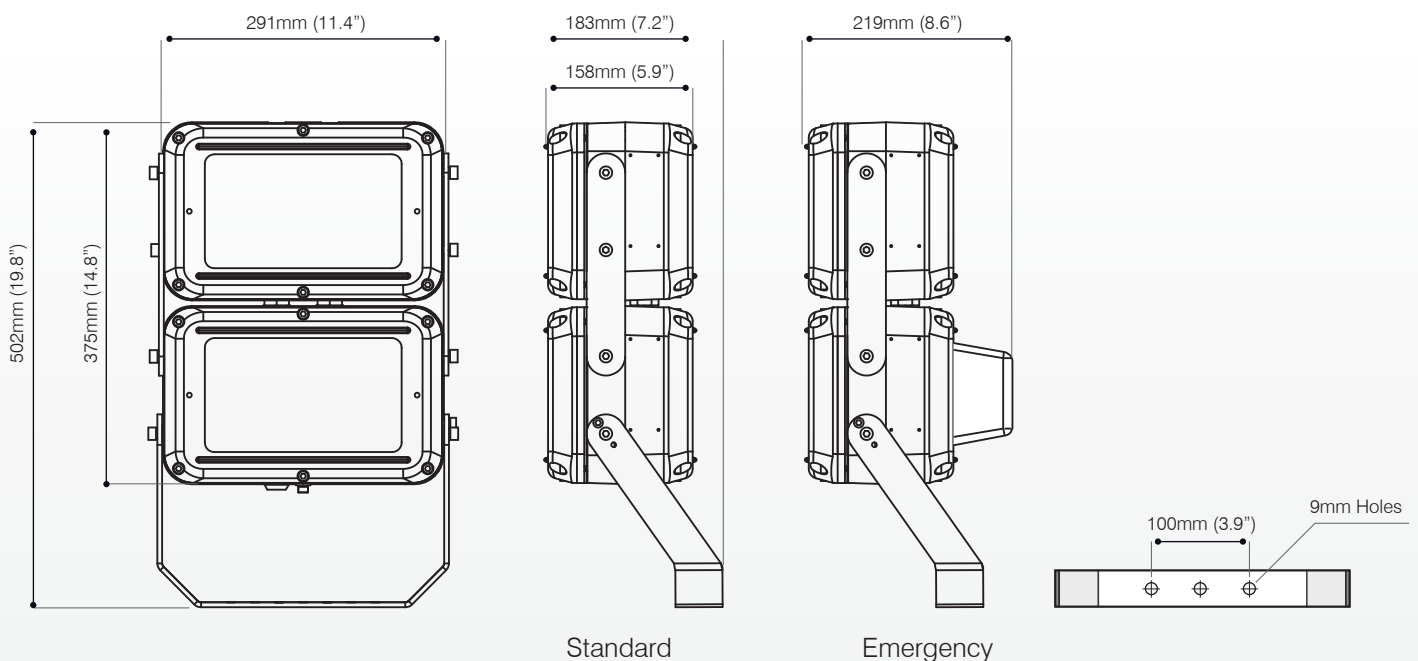
Ultra-Efficient

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



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 - 18-48V AC and 18-69V DC |
| Power: | Standard - 136W Emergency - 139W |
| Termination: | Incoming terminal block suitable for looping 4 core 4mm ² 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 variants

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 |

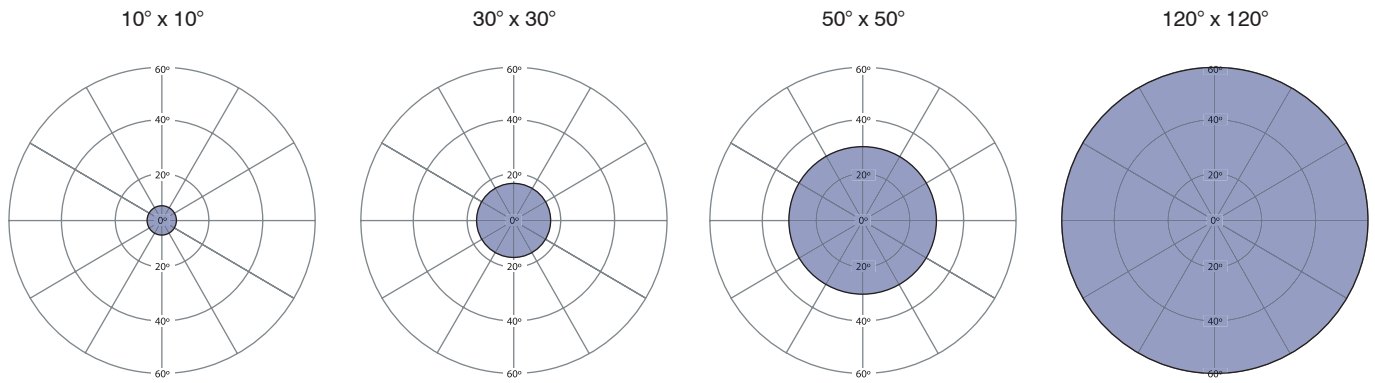
Add -C1D2 to part code for North American standards

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 variants

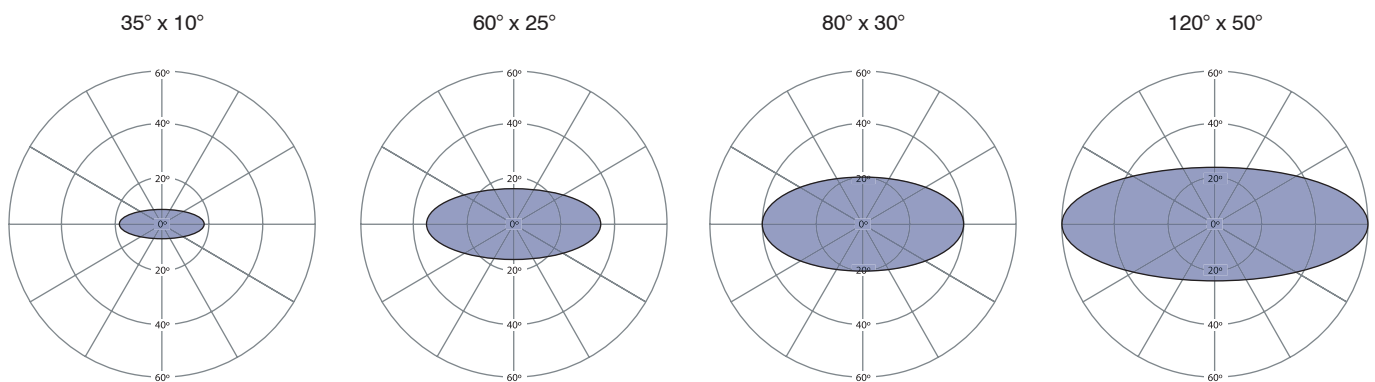


All Raytec luminaires are provided with an industry leading 5 year warranty and have an expected useful life in excess of 10 years

Beam patterns - Circular



Beam patterns – Elliptical (VARIO)



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

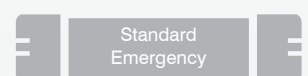
SPARTAN Bulkhead 24



Standard
Emergency

SPARTAN Linear WL84
2 x 18W equivalent

SPARTAN Linear WL168
2 x 36W equivalent



Standard
Emergency

SPARTAN

FLOOD FL72



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 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.

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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)
- Anchor point for safety suspension cord
- 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

Extended Features

Ultra-Powerful

High lumen output - up to 15,000 lumens
 Latest high power LED technology
 Emergency variant provides up to 33% light output under emergency conditions.

Ultra-Flexible

Beam patterns from 10° to 120° both circular and elliptical.
 Operating temperature range of -50°C to + 55°C with a T4 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

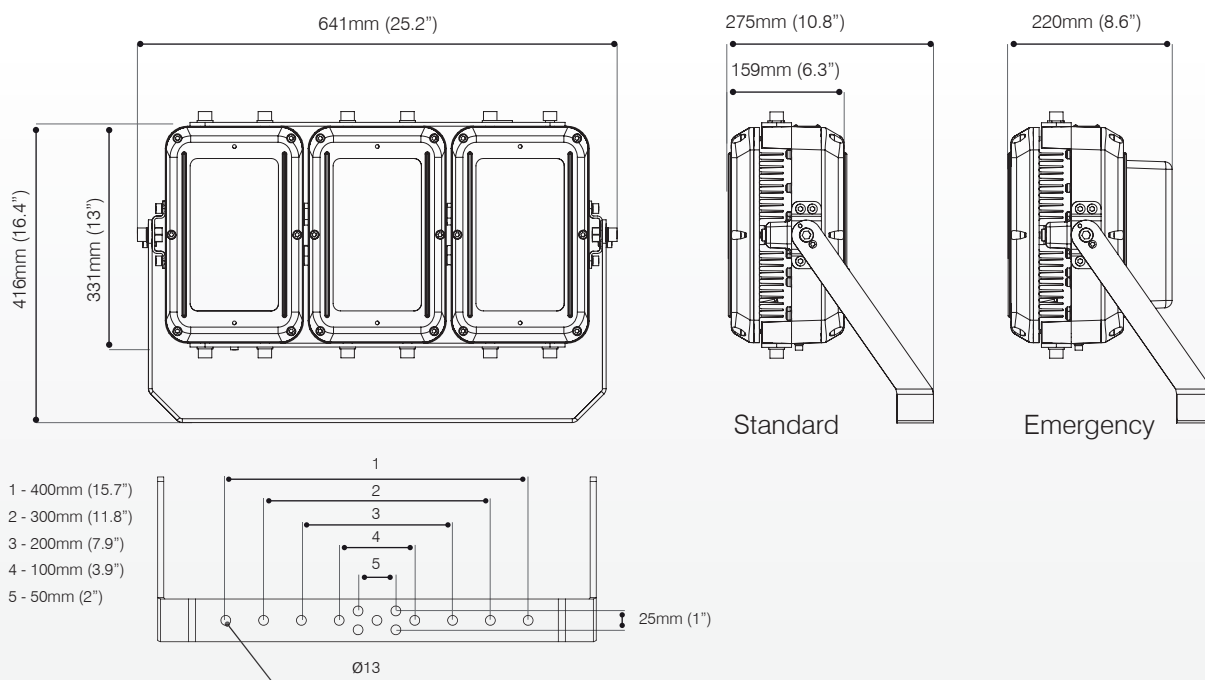
Ultra-Efficient

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



All Raytec luminaires are provided with an industry leading 5 year warranty and have an expected useful life in excess of 10 years

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 T4 Gb Ta -50°C to +55°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 - 18-48V AC and 18-69V DC |
| Power: | Standard - 204W Emergency - 207W |
| Termination: | Incoming terminal block suitable for looping 4 core 4mm ² 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 15,000 lm – circular beam patterns Up to 13,500 lm – elliptical beam patterns (VARIO) |
| LED type: | Platinum Elite SMT LEDs |
| Number of LEDs: | 72 |
| 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 - 27kg (59.5lbs) Emergency - 29Kg (63.9lbs) |
| 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 - 641 x 416 x 159mm (25.2 x 16.4 x 6.3") Emergency - 641 x 416 x 220mm (25.2 x 16.4 x 8.6") |
| Mounting: | U bracket (see dimension drawings on Page 2) – complete with locking screw |

Emergency

| | |
|--------------|---|
| Duration: | Up to 90 mins at 17% power Other options available |
| Battery: | Ni/Cd 12V 4.5Ah |
| Charge time: | 20 hours |

Circular beam pattern

| Part Codes | Description (T4 variants as standard) |
|-------------------|---|
| SPX-FL72-W-1010 | SPARTAN Flood, 72 LED, White-Light, 10°x 10° beam |
| SPX-FL72-W-3030 | SPARTAN Flood, 72 LED, White-Light, 30°x 30° beam |
| SPX-FL72-W-5050 | SPARTAN Flood, 72 LED, White-Light, 50°x 50° beam |
| SPX-FL72-W-120120 | SPARTAN Flood, 72 LED, White-Light, 120°x 120° beam |

Add -C1D2 to part code for North American standards

For emergency versions add '-EM17' 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 variants

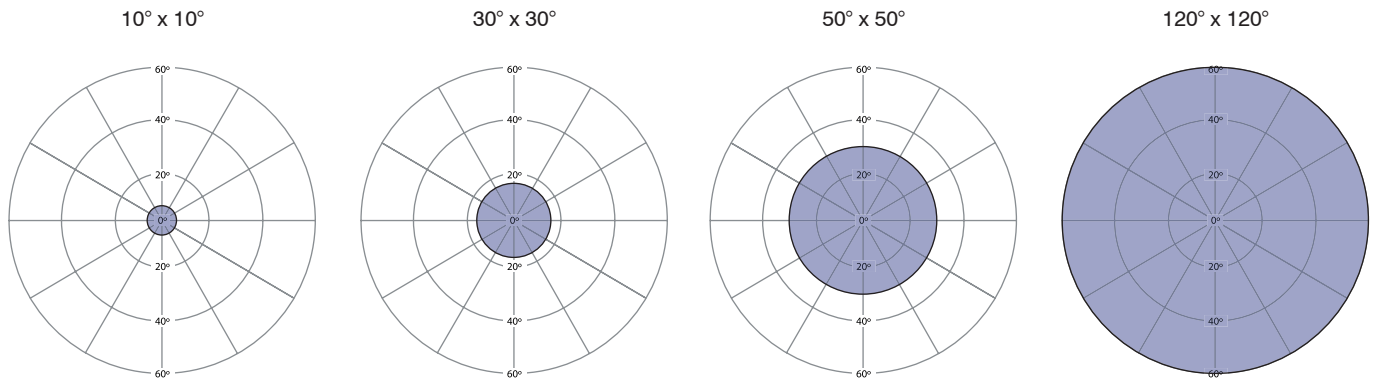
Elliptical beam pattern

| Part Codes | Description (T4 variants as standard) |
|------------------|--|
| SPX-FL72-W-3510 | SPARTAN Flood, 72 LED, White-Light, 35°x 10° beam |
| SPX-FL72-W-6025 | SPARTAN Flood, 72 LED, White-Light, 60°x 25° beam |
| SPX-FL72-W-8030 | SPARTAN Flood, 72 LED, White-Light, 80°x 30° beam |
| SPX-FL72-W-12050 | SPARTAN Flood, 72 LED, White-Light, 120°x 50° beam |

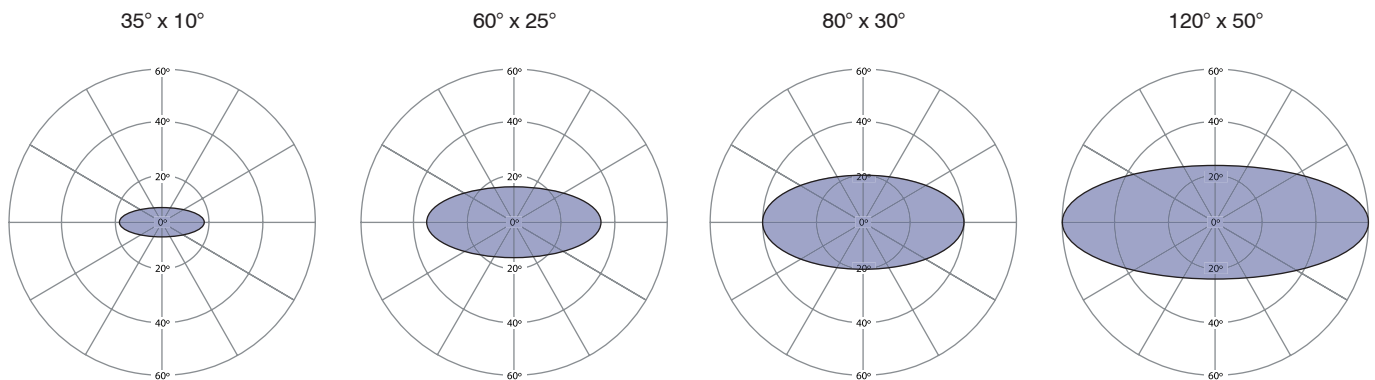
Add -C1D2 to part code for North American standards

For emergency versions – add '-EM17' 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 variants

Beam patterns - Circular



Beam patterns – Elliptical (VARIO)



Products in the SPARTAN Flood 72 range

SPARTAN Flood 72



SPARTAN Flood 72 Emergency



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

