

## SPARTAN SPZ Linear LED Zone 2/22 Linear Luminaire



Intelligent Emergency  
Variants



### Modular Design

Key components such as the LED and PSU modules are easily accessible for straightforward maintenance and inspection.



### Intelligent Emergency

Self-testing emergency battery providing up to 3 hours emergency back-up.



### Retrofitable

Linear has been designed with the same dimensions, fixing centres and cable entries as traditional fluorescent fittings making it a direct replacement.



### Bespoke LED

Raytec are specialists in LEDs and all our products are designed around LEDs with bespoke housing for optimum performance and reliability.

## 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. See Warranty Statement for details.



# Technical Specifications - Core Products

## SPARTAN Linear WL84



## SPARTAN Linear WL168



### Certification

ATEX Rating	ATEX UKEX and IEC Ex rated for Gas and Dust
Hazardous Area Rating	Zone 2 (Gas), Zone 22 (Dust) (Zone 21 Version also available : Zone 2 (Gas) Zone 21/22 (Dust))
Certificates	Zone 2/22 version: CML15ATEX4138 & IEC Ex CML15.0068 & CML21UKEX4104 (Zone 21 version: CML16ATEX1130 & IEC Ex CML16.0052 & CML21UKEX1100)
Gas	Gas: II 3 G D Ex ec mc IIC T4 Gc Ta= -40°C to +60°C (-20°C to +50°C for emergency variants) (T6 variants also available - contact Raytec)
Dust	Ex tc IIIC T80°C Dc Ta= -40°C to +60°C (-20°C to +50°C for emergency variants)
Dust (Zone 21 version)	II 2 D Ex tb IIIC T80°C Db Ta= -40°C to +60°C (-20°C to +50°C for emergency variants)
ABS Certificate #	ABS Certificate # 20-1990083-PDA

### Electrical

	WL84	WL84 Emergency	WL168	WL168 Emergency
Input	Standard: 110-254Vac 50/60Hz 110-254Vdc * Low voltage version: 18-48V AC and 18-69V DC Extra low voltage version: 12V AC/DC	110-254V 50/60Hz AC only	Standard: 110-254Vac 50/60Hz 110-254Vdc * Low voltage version: 18-48V AC and 18-69V DC Extra low voltage version: 12V AC/DC	110-254V 50/60Hz AC only
Power	24W	32W	49W	56W
Termination	Incoming terminal block suitable for looping 4 core 4mm <sup>2</sup> cable (6mm <sup>2</sup> available - POA)			
Power Factor	>0.95	>0.95	>0.95	>0.95
Cable Entries	2xM20 cable entries at both ends, through wired as standard (other entries available upon request), dispatched complete with three ATEX/IEC Ex/UKEX approved blanking plugs			

\*T6 variant is AC Only.

### Optical

	WL84	WL84 Emergency	WL168	WL168 Emergency
Lumen output on mains	3524	3524	7048	7048
LED type	Platinum Elite SMT LEDs	Platinum Elite SMT LEDs	Platinum Elite SMT LEDs	Platinum Elite SMT LEDs
Number of LEDs	80	80	160	160
CRI	80+	80+	80+	80+
Colour Temperature	6500K standard	6500K standard	6500K standard	6500K standard

### Mechanical

	WL84	WL84 Emergency	WL168	WL168 Emergency
Burning Position	Universal	Universal	Universal	Universal
IP Rating	IP66 & IP67	IP66 & IP67	IP66 & IP67	IP66 & IP67
IK Rating	IK10	IK10	IK10	IK10
Temperature Range	-40°C to +60°C	-20°C to +50°C	-40°C to +60°C	-20°C to +50°C
Weight	6kg (13.2lbs)	7kg (15.4lbs)	9kg (19.8lbs)	10kg (22lbs)

## Technical Specifications - Core Products

Mechanical	WL84	WL84 Emergency	WL168	WL168 Emergency
Enclosure	Marine grade aluminium epoxy powder coated, UV stabilised polycarbonate, all external fasteners and brackets are marine grade stainless steel			
Unit Colour	Silver (RAL 9006)	Silver (RAL 9006) Red (RAL3024) - Emergency battery cover	Silver (RAL 9006)	Silver (RAL 9006) Red (RAL3024) - Emergency battery cover
Installation instructions	Please see document 0920-D-00042 at <a href="http://www.raytecltd.com">www.raytecltd.com</a>			
Battery Care	Please see document 0010-D-00001 at <a href="http://www.raytecltd.com">www.raytecltd.com</a>			
Dimensions	See dimensional sketches			
Mounting	Via M8/M6 tapped holes. Various mounting arrangements available (please see product overview guide)			

Intelligent Emergency	WL84 Emergency	WL168 Emergency
Function	Self-testing intelligent emergency	Self-testing intelligent emergency
System health indicator	Tri-colour LED indicator	Tri-colour LED indicator
Emergency Duration	Up to 3hrs @ 25% power Other options available	Up to 3hrs @ 25% power Other options available
Emergency Battery	Ni/Cd 12V	Ni/Cd 12V
Emergency Charge Time	20 hours	20 hours

# Technical Specifications - SPARTAN Linear Essential

## SPARTAN Linear WL84-LL



## SPARTAN Linear WL168-LL



### Certification

ATEX Rating	ATEX UKEX and IEC Ex rated for Gas and Dust
Hazardous Area Rating	Zone 2 (Gas), Zone 22 (Dust) (Zone 21 Version also available : Zone 2 (Gas) Zone 21/22 (Dust))
Certificates	Zone 2/22 version: CML15ATEX4138 & IEC Ex CML15.0068 & CML21UKEX4104 (Zone 21 version: CML16ATEX1130 & IEC Ex CML16.0052 & CML21UKEX1100)
Gas	Gas: II 3 G D Ex ec mc IIC T4 Gc Ta= -40°C to +60°C (-20°C to +50°C for emergency variants) (T6 variants also available - contact Raytec)
Dust	Ex tc IIIC T80°C Dc Ta= -40°C to +60°C (-20°C to +50°C for emergency variants)
Dust (Zone 21 version)	II 2 D Ex tb IIIC T80°C Db Ta= -40°C to +60°C (-20°C to +50°C for emergency variants)
ABS Certificate #	ABS Certificate # 20-1990083-PDA

### Electrical

	WL84-LL	WL168-LL
Input	Standard: 110-254Vac 50/60Hz 110-254Vdc * Low voltage version: 18-48V AC and 18-69V DC Extra low voltage version: 12V AC/D	110-254Vac 50/60Hz 110-254Vdc *
Power	24W	49W
Termination	Incoming terminal block suitable for looping 4 core 4mm <sup>2</sup> cable (6mm <sup>2</sup> available - POA)	
Power Factor	>0.95	
Cable Entries	2xM20 cable entries at one end. Loop in loop out as standard (other entries available upon request), dispatched complete with one ATEX/IEC Ex approved blanking plug	

\*T6 variant is AC Only.

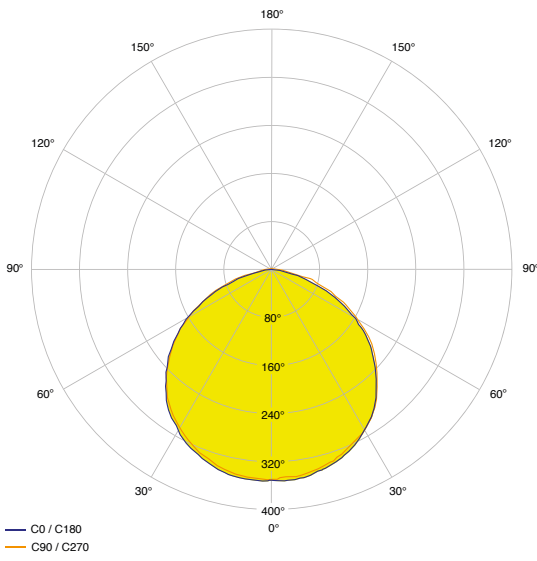
### Optical

	WL84-LL	WL168-LL
Lumen output on mains	3524	7048
LED type	Platinum Elite SMT LEDs	Platinum Elite SMT LEDs
Number of LEDs	80	160
CRI	80+	80+
Colour Temperature	6500K standard	6500K standard

## Technical Specifications - SPARTAN Linear Essential

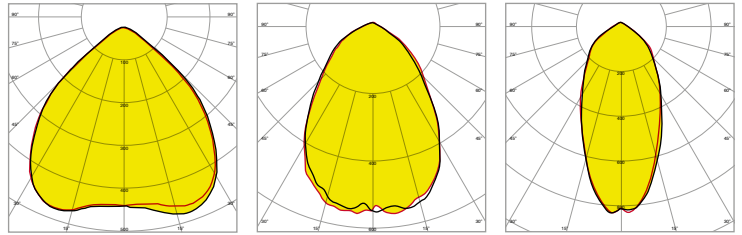
Mechanical	WL84-LL	WL168-LL
Burning Position	Universal	Universal
IP Rating	IP66 & IP67	IP66 & IP67
IK Rating	IK10	IK10
Temperature Range	-40 to +60°C	-40 to +60°C
Weight	6kg (13.2lbs)	9kg (19.8lbs)
Enclosure	Marine grade aluminium epoxy powder coated, UV stabilised polycarbonate, all external fasteners and brackets are marine grade stainless steel	
Unit Colour	Silver (RAL 9006)	Silver (RAL 9006)
Installation instructions	Please see document 920-D-0042 at <a href="http://www.rayteclcd.com">www.rayteclcd.com</a>	
Dimensions	See dimensional sketches	
Mounting	Via M8/M6 tapped holes. Various mounting arrangements available (please see product overview guide)	

# Light Distribution



Zone 2 - Standard

## Symmetrical Optics

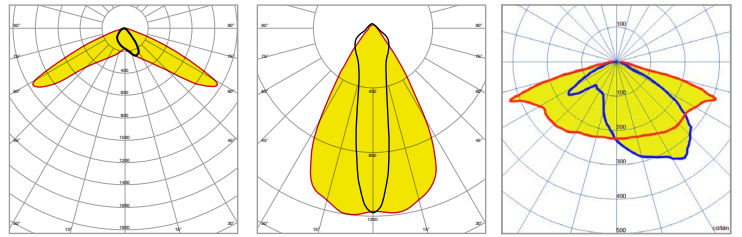


90x90

60x60

30x30

## Asymmetrical Optics



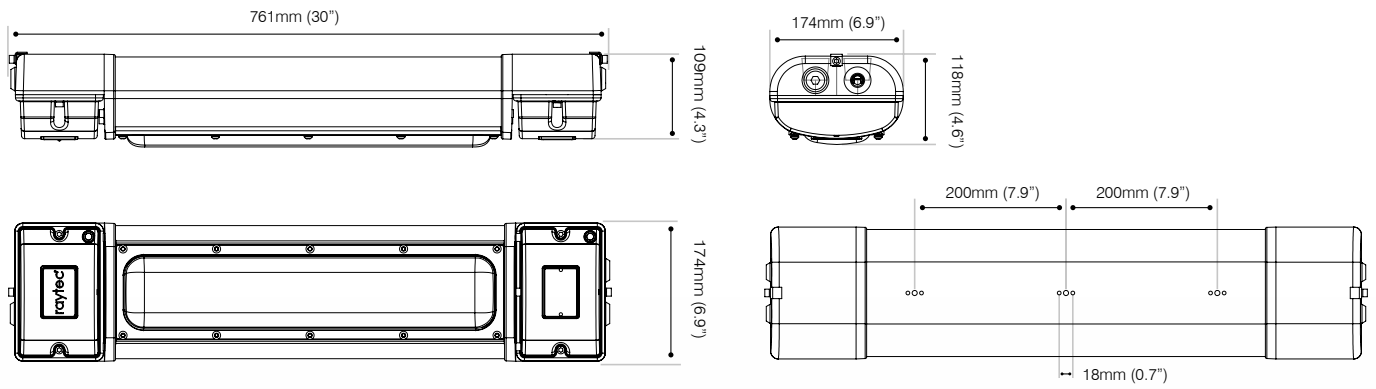
Safety Shower -  
Wide Beam

Aisle -  
80x30

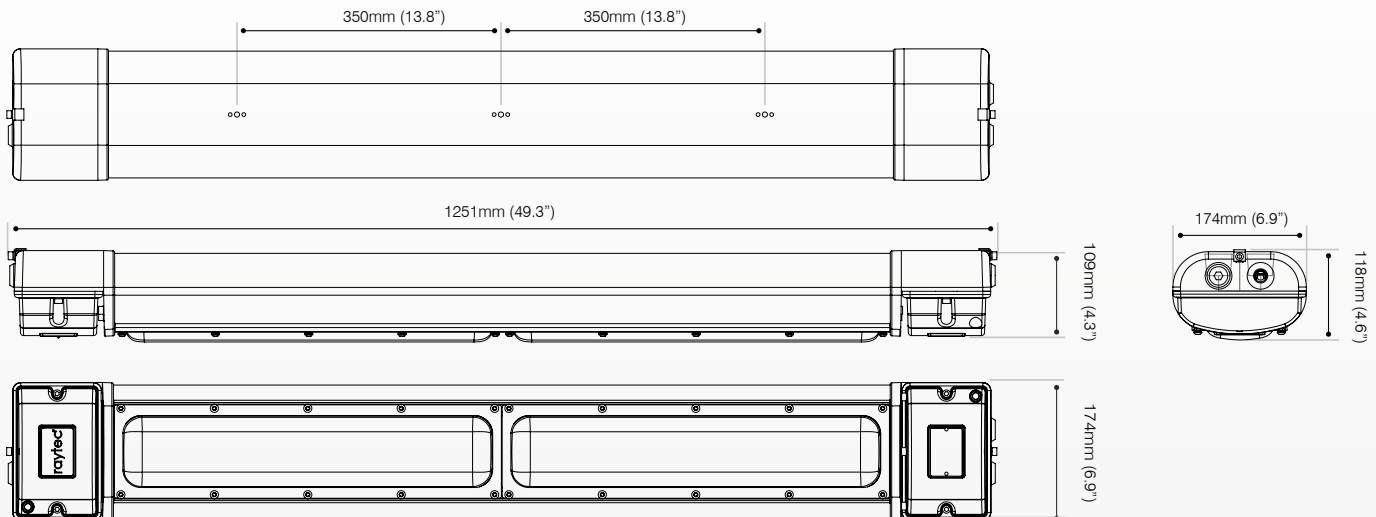
PP3  
Optic

# Product Dimensions

## WL84, WL84 Emergency

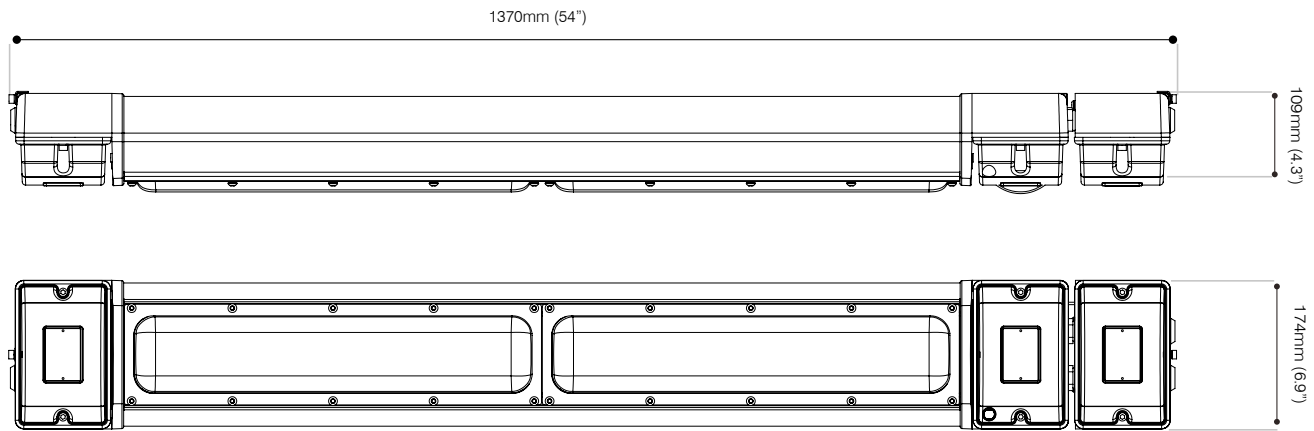


## WL168

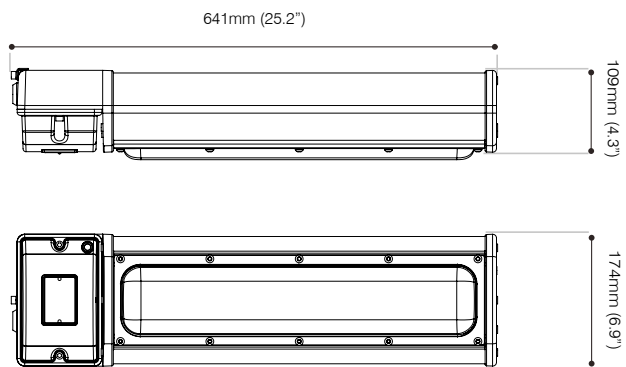


## Product Dimensions

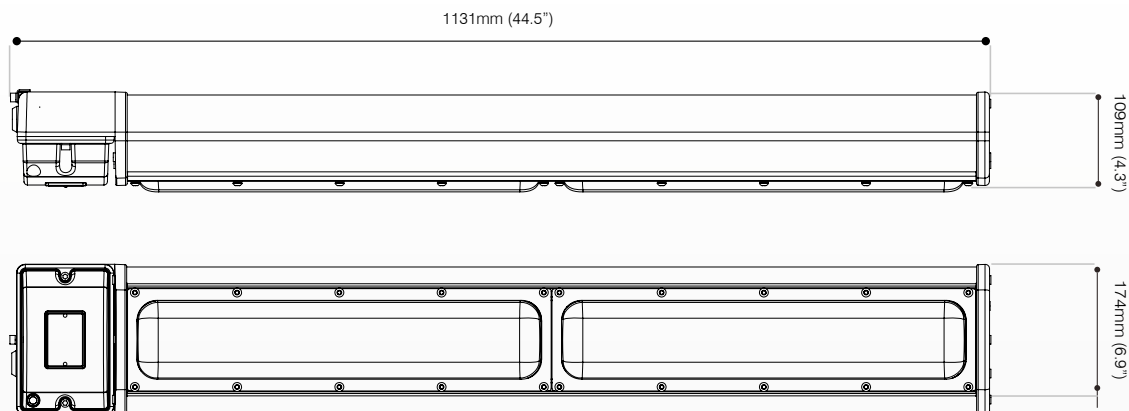
### WL168 Emergency



### WL84 Essential



### WL168 Essential

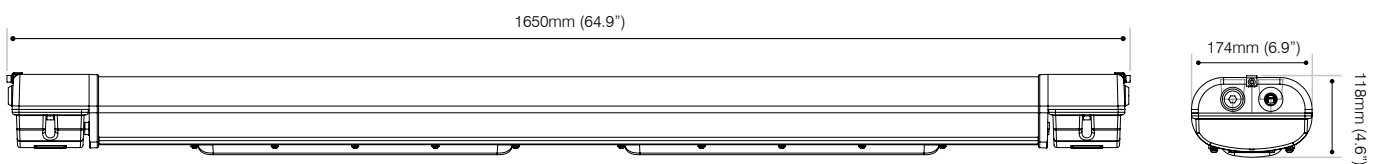


## Product Dimensions

### WL84 - 1200, WL84 - 1200 Emergency



### WL168 - 1500



### SPARTAN Linear Models with 200mm mounting points:

WL84 / WL84 Emergency / WL84 Essential

### SPARTAN Linear Models with 350mm mounting points:

WL168 / WL168 Emergency / WL168 Essential / WL84-1200 /  
WL84-1200 Emergency / WL168-1500



## Part Code Builder

### SPARTAN Linear Zone 2 Family

**Standard:** Example - SPZ-WL84-EMX25

Family	Model	Emergency	Variant	CCT	Power	Optics	Entry
SPZ	WL84	NOT STATED - Non EM	T6 - T6 variant	Not Stated - 6500K	Not Stated - 110-254Vac	Not Stated - Standard	Not Stated - M20
	WL168	EMX25 (25% for 3 hours)	Z21 - Zone 2/21/22 version	4K - 4000K	LV - Low Voltage (Non EM only)	Other optics available - please contact Raytec	M25
	WL84-1200				ELV - Extra Low Voltage (Non EM only)		
	WL168-1500						

**Essential:** Example - SPZ-WL84-LL

Family	Model	Variant	CCT	Power	Optics	Entry
SPZ	WL84-LL	T6 - T6 variant	Not Stated - 6500K	Not Stated - 110-254Vac	Not Stated - Standard	Not Stated - M20
	WL168-LL	Z21 - Zone 2/21/22 version	4K - 4000K	LV - Low Voltage (WL84 only)	Other optics available - please contact Raytec	M25
				ELV - Extra Low Voltage (WL84 only)		

\*Alternative versions available. Please contact Raytec for details.

## SPARTAN Linear Specials



### Safety Shower Variants

- Green LED technology designed for use where safety shower units are located.
- Dominant wavelength: 519nm
- Dedicated safety shower optic for maximum visibility

Example ordering code: SPX-WL168-G

Other options available, contact Raytec for full ordering information.



### Wildlife-Friendly Variants

- Amber LED technology designed to protect wildlife in coastal locations or natures reserves.
- Dominant wavelength: 600nm

Example ordering code: SPX-WL168-4K-A

Other options available, contact Raytec for full ordering information



See SPARTAN Linear Mounting & Accessories Guide for full range of accessories