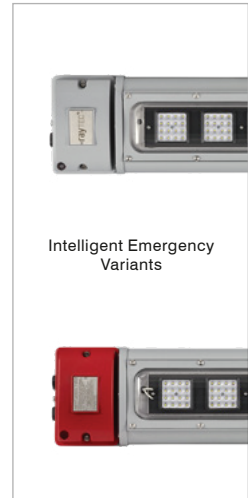


SPARTAN SPX Linear  
LED Zone 1/21 Linear Luminaire



**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 1 (Gas), Zone 21(Dust)
Certificates	CML14ATEX3119 & IECExCML15.0001 & CML21UKEX3105
Gas	II 2 G D Ex eb mb IIC T4 Gb Ta= -40°C to +60°C (-20°C to +50°C for emergency variants) (T6 variants also available - contact Raytec)
Dust	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	3065	3065	6130	6130
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 1 (Gas), Zone 21(Dust)
Certificates	CML14ATEX3119 & IECExCML15.0001 & CML21UKEX3105
Gas	II 2 G D Ex eb mb IIC T4 Gb Ta= -40°C to +60°C (T6 variants also available - contact Raytec)
Dust	Ex IIIC T80°C Db Ta= -40°C to +60°C
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/DC	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/UKEX/IEC Ex approved blanking plugs	

\*T6 variant is AC Only.

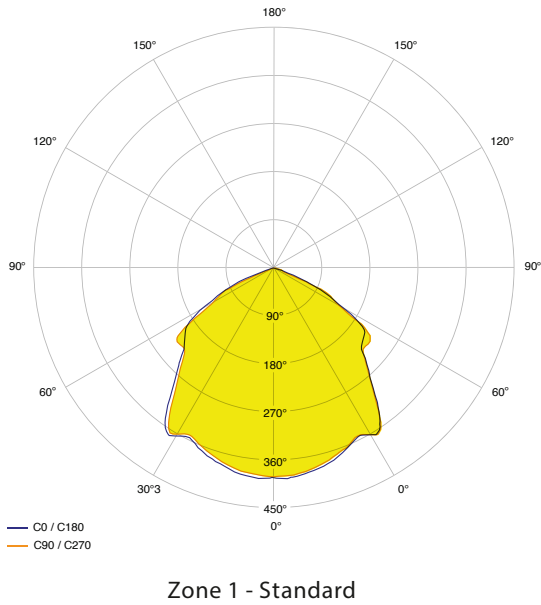
## Optical

	WL84-LL	WL168-LL
Lumen output on mains	3065	6130
LED type	Platinum Elite SMT LEDs	Platinum Elite SMT LEDs
Number of LEDs	80	160
CRI	80+	80+
Colour Temperature	6500K standard	6500K standard

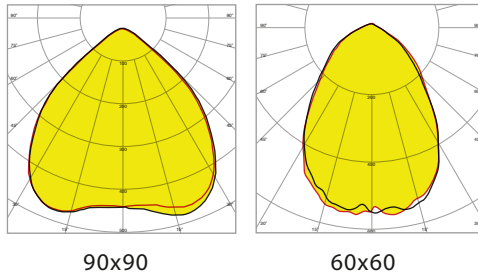
## Mechanical

	WL84-LL	WL168-LL
Burning Position	Universal	Universal
IP Rating	IP66 & IP67	IP66 & IP67
IK Rating	IK10	IK10
Temperature Range	-40°C to +60°C	-40°C 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)	

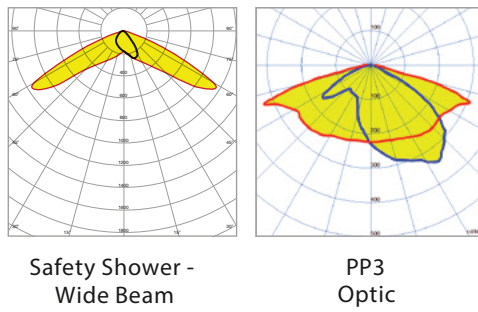
# Light Distribution



## Symmetrical Optics

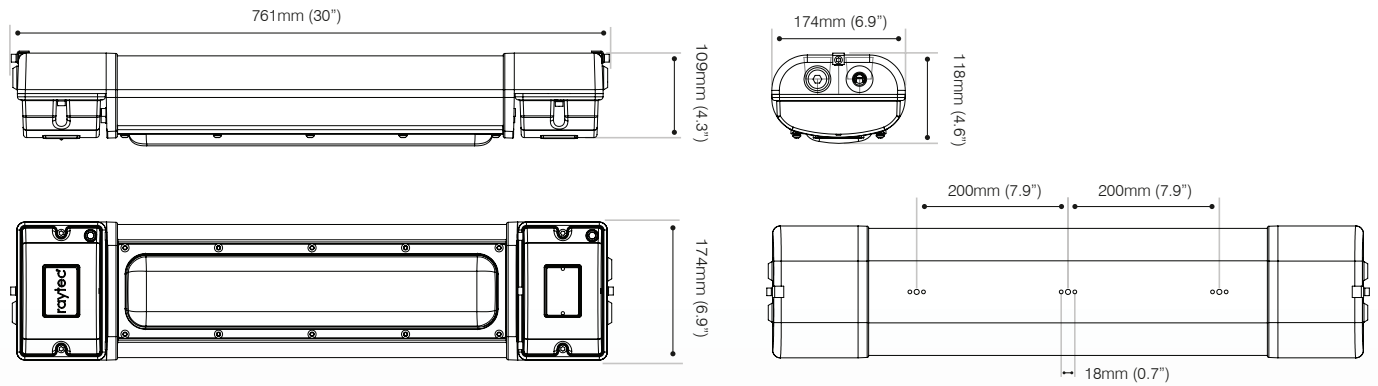


## Asymmetrical Optics

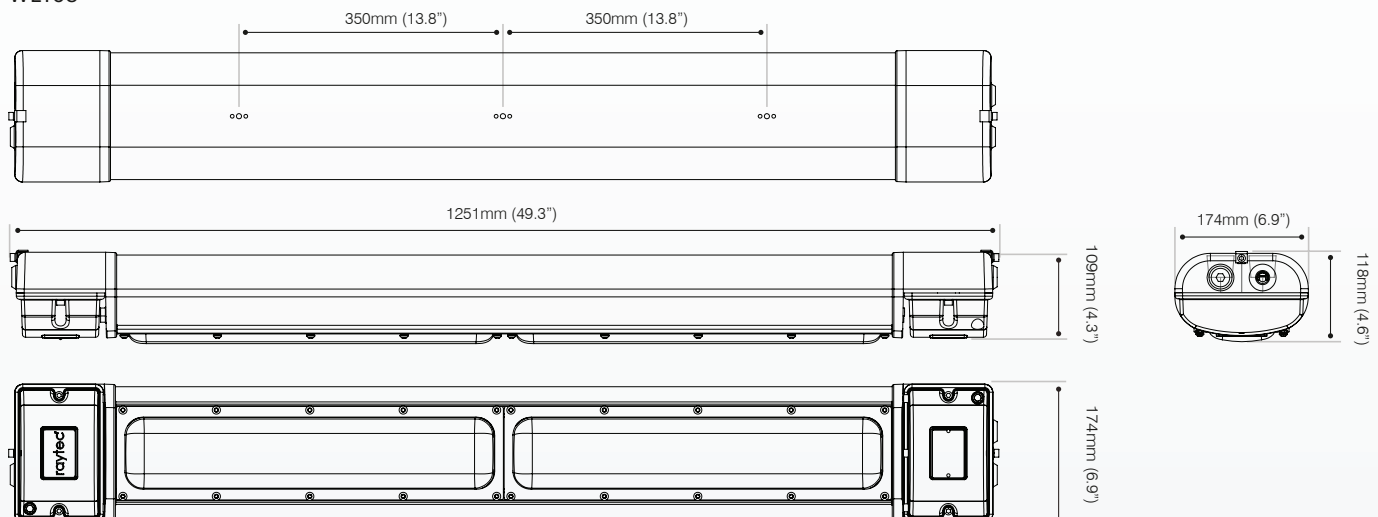


# Product Dimensions

## WL84, WL84 Emergency

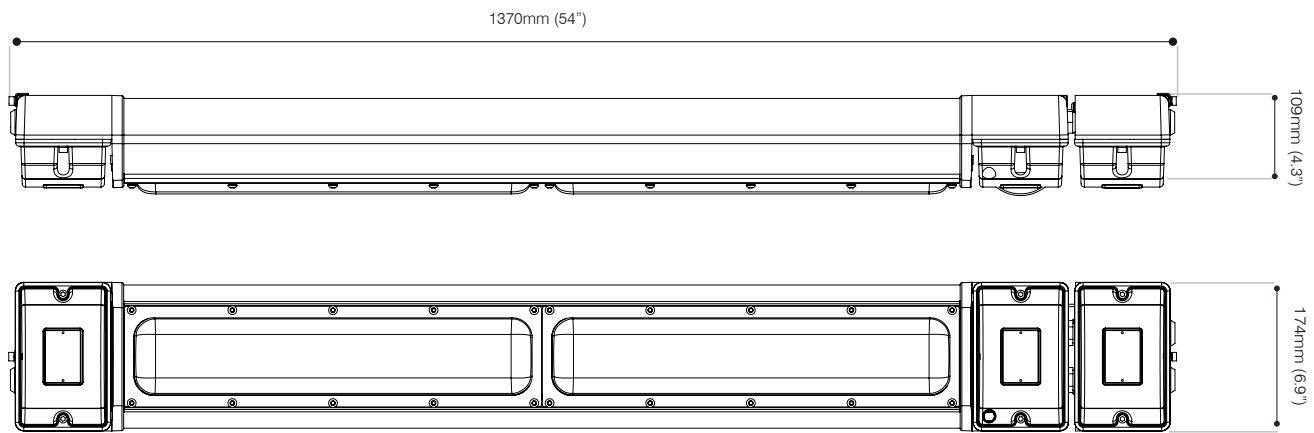


## WL168

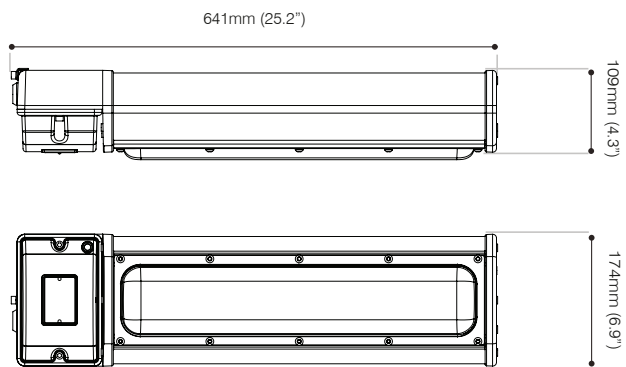


## Product Dimensions

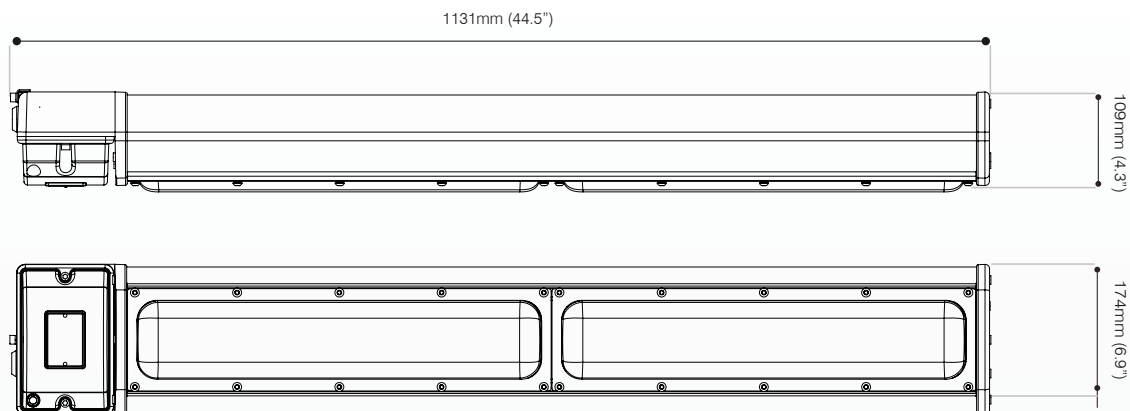
### WL168 Emergency



### WL84 Essential



### WL168 Essential

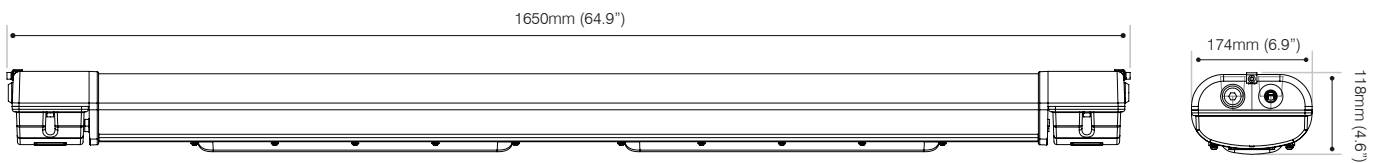


## Product Dimensions

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 1 Family

Standard: Example - SPX-WL84-EMX25							
Family	Model	Emergency	Variant	CCT	Power	Optics	Entry
SPX	WL84	NOT STATED - Non EM	Not stated - T4 variant	Not Stated - 6500K	Not Stated - 110-254Vac	Not Stated - Standard	Not Stated - M20
	WL168	EMX25 (25% for 3 hours)	T6 - T6 variant	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 - SPX-WL84-LL							
Family	Model	Variant	CCT	Power	Optics	Entry	
SPX	WL84-LL	Not stated - T4 variant	Not Stated - 6500K	Not Stated - 110-254Vac	Not Stated - Standard	Not Stated - M20	
	WL168-LL	T6 - T6 variant	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