

SPARTAN LED Zone 1/21 SPX Floodlight



rayTEC[®]



Robust and Durable

Designed from marine grade aluminium and able to withstand the most extreme environments.



Emergency

Available as an emergency variant, and capable of providing up to 100% light output in emergency mode.



Easy Maintenance

Featuring a unique modular design, key components such as the LED and PSU modules are easily accessible for straightforward maintenance and inspection.



Beam Angles

Available in a range of different beam patterns, both circular and elliptical.

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

Certification

ATEX Rating	ATEX and IEC Ex rated for Gas and Dust
Hazardous Area Rating	Zone 1 – Gas and Dust
Certificates	CML13ATEX3007 & IEC Ex CML 14.0001
Gas	II 2 G D Ex eb mb IIC T4 Gb Ta= Up to -52°C to +55°C (all emergency variants have a lower ambient of -20°C only)
Dust	Ex tb IIIC T82°C Db Ta= Up to -52°C to +55°C IP66/IP67
ABS Certificate #	#25-0220600-PDA

Electrical

	FL24	FL24-EM	FL48	FL48-EM
Input	110-254V 50/60Hz AC only Low voltage: 18-48V AC and 18-69V DC	110-254V 50/60Hz AC only	110-254V 50/60Hz AC only Low voltage: 18-48V AC and 18-69V DC	110-254V 50/60Hz AC only
Power	68W	71W	136W	139W
Termination	Incoming terminal block suitable for looping 4 core 4mm ² cable (6mm ² available - POA)			
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)	
Lumen output on mains	10°x10° - 8460lm 30°x30° - 7730lm 35°x10° - 7500lm 50°x50° - 7912lm 60°x25° - 7404lm 80°x30° - 7228lm 120°x50° - 6466lm 120°x120° - 5614lm	10°x10° - 16920lm 30°x30° - 15460lm 35°x10° - 15000lm 50°x50° - 15824lm 60°x25° - 14808lm 80°x30° - 14456lm 120°x50° - 12932lm 120°x120° – 11228lm
LED type	Platinum Elite SMT LEDs	
Number of LEDs	24	48
CRI	80+	
Colour Temperature	6000K+	

Mechanical

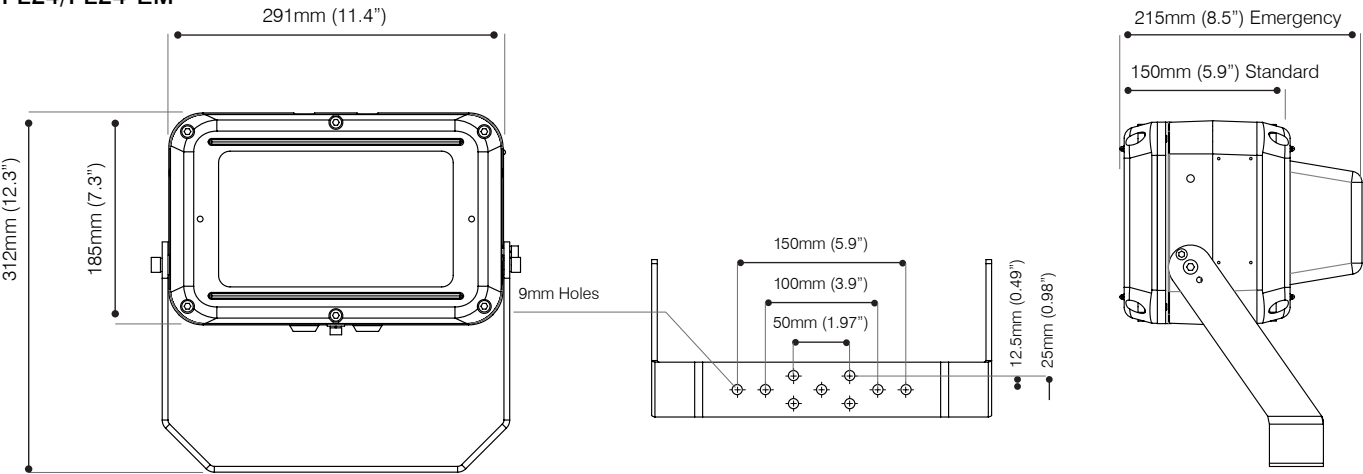
	FL24	FL24-EM	FL48	FL48-EM
Burning Position	Universal			
IP Rating	IP66/IP67			
Temperature Range	-52°C to +55°C (-61°F to +131°F)	-20°C to +55°C (-4°F to +131°F)	-52°C to +55°C (-61°F to +131°F)	-20°C to +55°C (-4°F to +131°F)
Weight	8kg (17.6lbs)	10kg (22lbs)	8kg (17.6lbs)	10kg (22lbs)
Enclosure	Marine grade aluminium epoxy powder coated, toughened glass, all external fasteners and brackets are marine grade stainless steel			
Unit Colour	Silver (RAL 9006)	Silver (RAL 9006) Red (RAL3024) - Emergency Cover	Silver (RAL 9006)	Silver (RAL 9006) Red (RAL3024) - Emergency Cover
Installation instructions	Please see document 0910-M-0094 at www.rayteclcd.com			
Battery care instructions	Please see document 0010-D-00001 at www.rayteclcd.com			
Spare part availability:	For detailed information on spare part availability please contact Raytec			
Dimensions	291 x 312 x 150mm (11.5 x 12.3 x 6")	291 x 312 x 215mm (11.5 x 12.3 x 8.5")	291 x 502 x 158mm (11.5 x 19.8x 6.2")	291 x 502 x 219mm (11.5 x 19.8 x 8.6")
Mounting	U bracket (as shown on next page).			

Technical Specifications - Continued

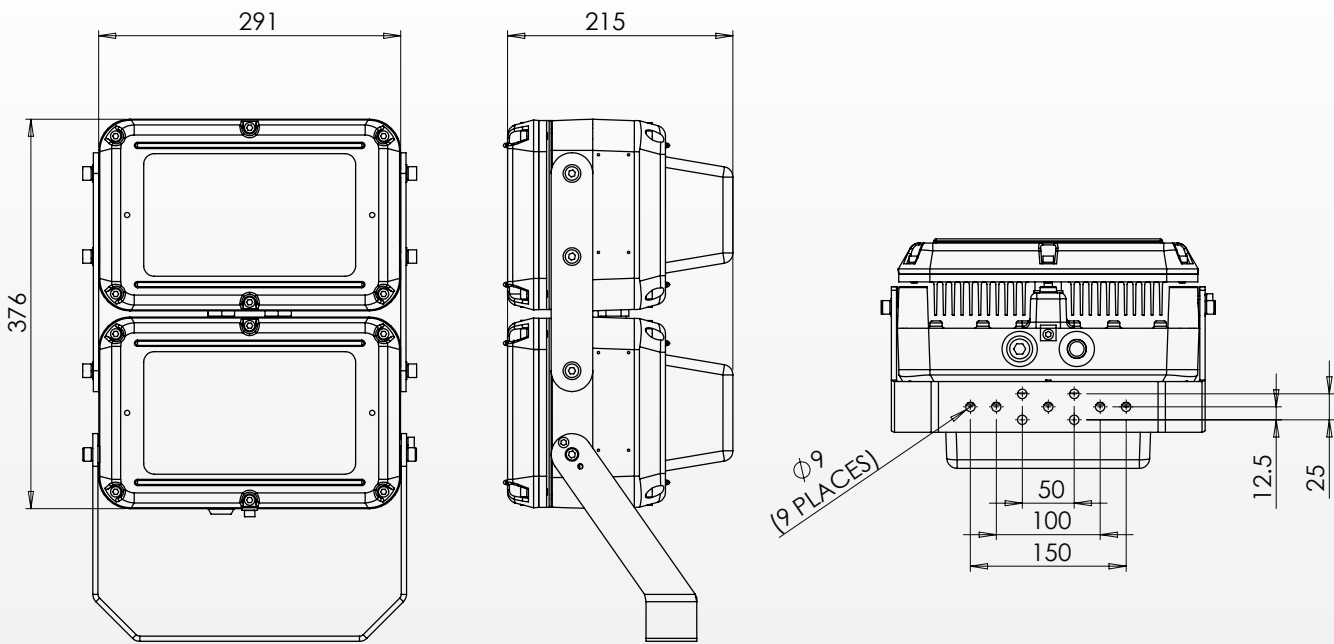
Intelligent Emergency	FL24-EM	FL48-EM
Emergency Duration	90mins at 50% power Other options available	90mins at 25% power Other options available
Emergency Battery	Ni/Cd 12V 4.5Ah	
Emergency Charge Time	20 hours	

Product Dimensions

FL24/FL24-EM



FL48/FL48-EM

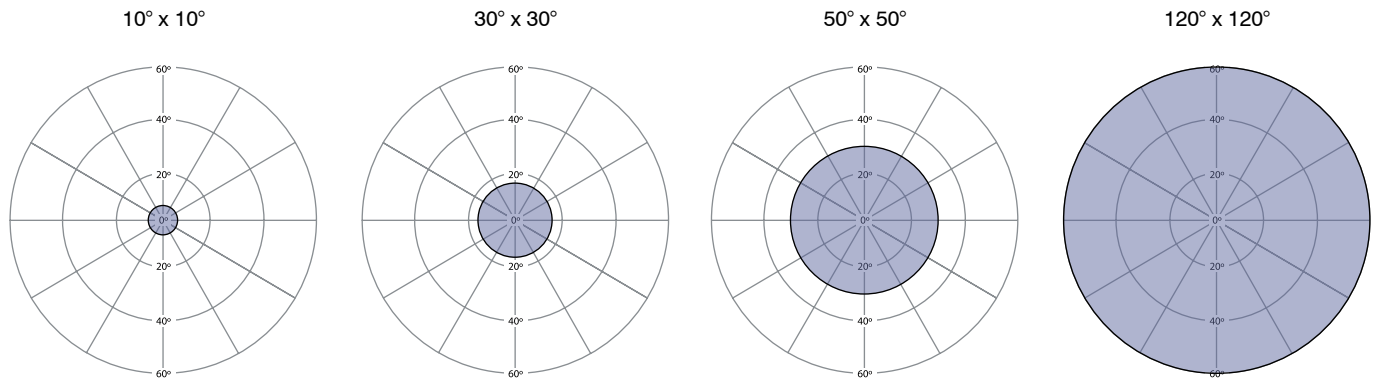


Part Code Builder

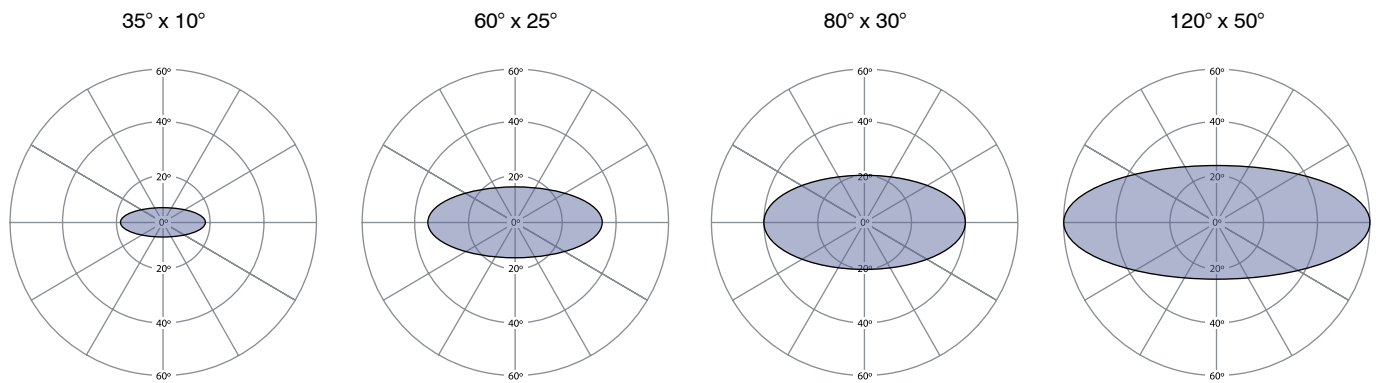
Zone 1

Example - SPX-FL24-W-1010-EM25							
Family	Model	Light Type	Optic	Emergency	CCT	Power	Entry
SPX	FL24	W - White Light	1010	Not Stated - Non Em	Not Stated - 6000k	Not Stated - Standard Mains	Not Stated - M20
	FL48	I - Infrared	3030	EM25 (FL48)	4K - 4000k	LV - Low Voltage (Non EM only)	M25
			5050	EM50 (FL24)			
			120120				
			3510				
			6025				
			8030				
			12050				

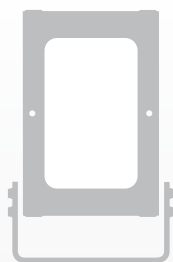
Beam patterns - Circular



Beam patterns – Elliptical (VARIO)



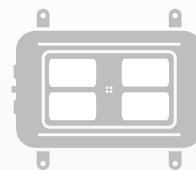
Products in the SPARTAN Family



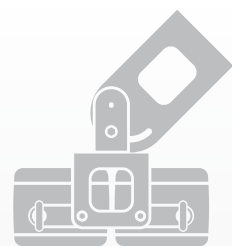
SPARTAN Flood



SPARTAN Linear



SPARTAN Bulkhead



SPARTAN Crane

SPARTAN LED

Zone 1/21 SPX Flood BL24



rayTEC[®]



Robust and Durable

Designed from marine grade aluminium and able to withstand the most extreme environments.



Intelligent Emergency

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



Beam Angles

Available in a range of different beam patterns, both symmetrical and asymmetric.



Controllable

DALI 2.0 Dimmable as an option on non emergency variants for precise and flexible control of lighting assets.

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

Certification

ATEX Rating	ATEX, UKCA and IEC Ex rated for Gas and Dust
Hazardous Area Rating	Zone 1 (Gas), Zone 21 (Dust)
Certificates	CML 13ATEX3007, IEC Ex CML14.0001 & CML21UKEX3099
Gas	II 2 G D Ex eb mb IIC T4 Gb Ta= Up to -50°C to +55°C (-20°C to +46°C for emergency variants)
Dust	Ex tb IIIC T98°C Db Ta= Up to -50°C to +55°C (-20°C to +46°C for emergency variants) IP66 & IP67
ABS Certificate #	#25-0220600-PDA

Electrical

	BL24	BL24-HO	BL24 EMX25	BL24-HO EMX25
Input	Standard: 110-254V AC or DC 50/60/0Hz Optional: 110-277 50/60hz Low voltage: 18-48V AC and 18-69V DC		110-254V 50/60Hz AC only	
Power	15W	26W	19W	33W
Termination	Incoming terminal block suitable for looping 4 core 4mm ² cable (6mm ² available - POA)			
Power Factor	>0.9			
Cable Entries	4xM20 as standard (other entries available upon request), dispatched complete with three ATEX/UKEX/IEC Ex approved blanking plug			
DALI	Non-emergency products are available as DALI 2.0 enabled as an option. In these variants terminals are provided for loop in/loop out 2 core control cable			

Optical

	BL24	BL24-HO	BL24 EMX25	BL24-HO EMX25
Beam Patterns	See beam angle options below			
Lumen output on mains	Up to 2,274 lm	Up to 3,979 lm	Up to 2,274 lm	Up to 3,979 lm
LED type	Platinum Elite SMT LEDs			
Number of LEDs	96			
CRI	80+			
Colour Temperature	6500K standard			

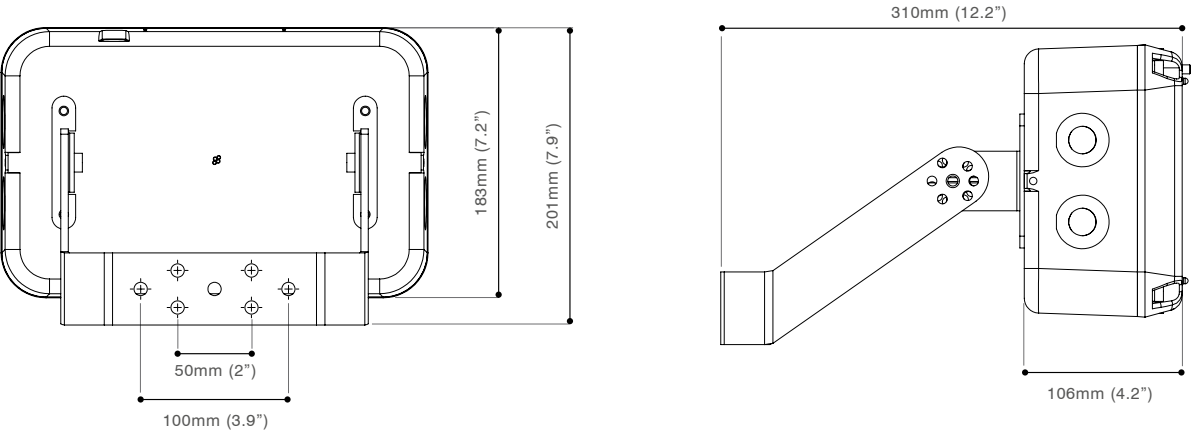
Mechanical

Mechanical	BL24	BL24-HO	BL24 EMX25	BL24-HO EMX25
Burning Position	Universal			
IP Rating	IP66 & IP67			
Temperature Range	- 50°C to + 55°C (- 58°F to + 131°F)		- 20°C to + 46°C (- 4°F to + 131°F)	
Weight	5kg (11.0lbs)		6kg (13.2lbs)	
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	Please see document 0940-D-00007 at www.raytecd.com			
Battery care instructions	Please see document 0010-D-00001 at www.raytecd.com			
Spare Part Information	Please contact Raytec for information regarding spare part availability			
Dimensions	See Dimensional Sketches			
Mounting	Comes complete with stainless steel brackets (as shown on next page). Other options available			

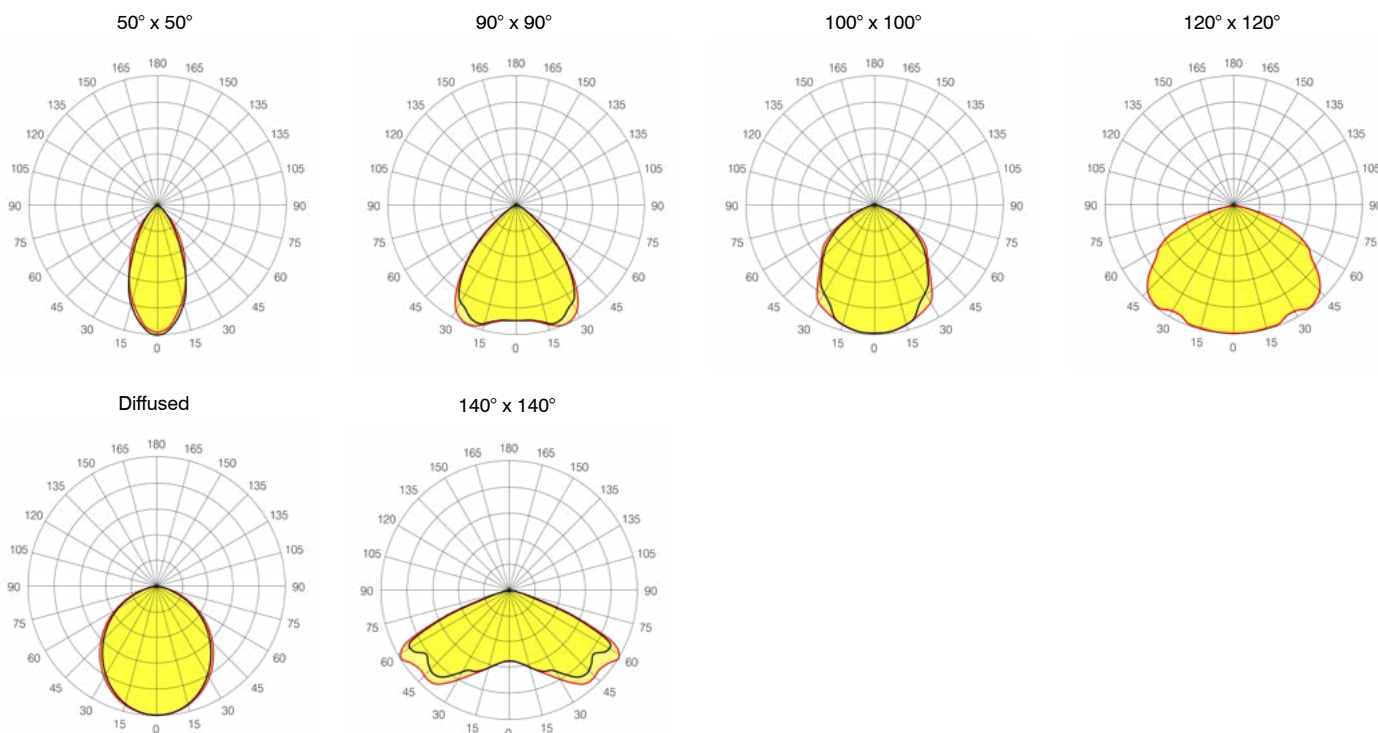
Technical Specifications - Continued

Intelligent Emergency	BL24 EMX25	BL24-HO EMX25
Function	Self-testing intelligent emergency	
System health indicator	Tri-colour LED indicator	
Emergency Duration	Up to 3hrs @ 25% power, Other options available	
Emergency Battery	2.5 Ah	
Emergency Charge Time	20 hours	

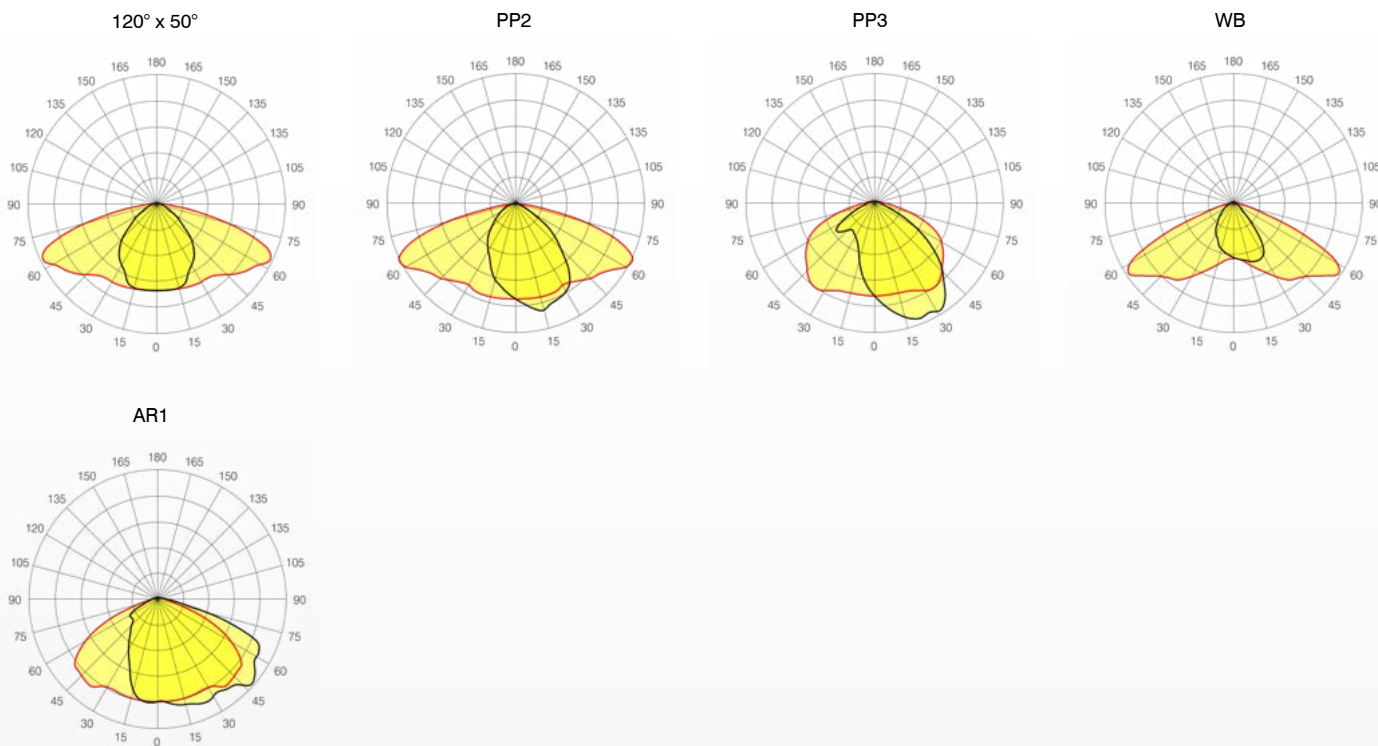
Product Dimensions



Beam patterns - Symmetrical



Beam patterns – Asymmetrical



*Other beam angles available, please contact Raytec for more information

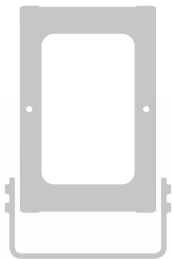
Part Code Builder

SPARTAN Flood BL24

Example - SPX-BL24-W-5050-SB30

Family	Model	Light Type	Optic	Emergency	CCT	Power	Entry	Mounting
SPX	BL24	W - White Light	5050	Not Stated - Non EM	Not Stated - 6500K	Not Stated - Standard Mains	Not Stated - M20	SB30 - Stirrup Mount (floodlight 30°)
	BL24-HO		9090	EMX25 (3 hour)	4K - 4000K	277 - 110-277Vac 50/60hz	M25	
			100100	DA - DALI		LV - Low Voltage (Non EM only)		
			120120			LO - Low Output (12W)		
			D - Diffused					
			140140					
			12050					
			PP2					
			PP3					
			WB					
			AR1					

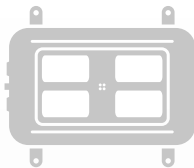
Products in the SPARTAN Family



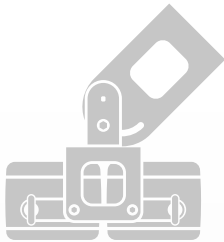
SPARTAN Flood



SPARTAN Linear



SPARTAN Bulkhead



SPARTAN Crane

Disclaimer

The information provided in this document was accurate at the time of its creation. However, due to the evolving nature of our products and continuous improvements, there may be changes or updates that occur after its publication. For the most current and detailed information about our products, please contact our sales team at sales@raytecltd.com.

SPARTAN LED

Zone 1/21 SPX Mid Power Floodlight



rayTEC



Power / Performance

High lumen output up to 18,000 lumens, designed to directly replace traditional discharge light sources up to 250W SON.



Robust and Durable

Robust and durable construction from marine grade aluminium and with a wide operating temperature for even the most challenging conditions.



Intelligent Emergency

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



Multiple Beam Angles

Available with a range of beam patterns to effectively light up large open areas. The use of secondary optics means no loss of output on wider angles.

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

Certification

Hazardous Area Rating	ATEX, UKEX and IEC Ex rated for Gas and Dust
Certificates	CML21ATEX3317 & IEC Ex CML21.0037 or CML21UKEX3319
Gas	II 2 G D Ex eb mb IIC T4 Gb Ta= -40°C to +60°C (-20°C to +50°C emergency variants)
Dust	Ex tb IIIC T93°C Db Ta= -40°C to +60°C (-20°C to +50°C emergency variants)
ABS Certificate	#25-0220600-PDA

Electrical

	5K	7.5K	10K	12.5K	15K
Input	110-277V 50/60Hz AC only				
Power	50W	60W	80W	100W	120W
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/UKEX approved blanking plug				

Optical

	5K	7.5K	10K	12.5K	15K
Beam Patterns	See light distribution graphs below				
Lumen Output on Mains	See Lumen Output by Optic Table below				
LED Type	Platinum Elite SMT LEDs				
Number of LEDs	192				
CRI	80+				
Colour Temperature	6,500K				

Mechanical

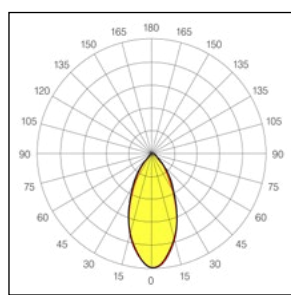
	5K	7.5K	10K	12.5K	15K
Burning Position	Universal				
IP Rating	IP66 & IP67				
Temperature Range	-40°C to +60°C (-40°F to +140°F) -20°C to +50°C for emergency variants (-4°F to +122°F)				
Weight	13.2kg (29.1lbs) 16kg (35.2lbs) for emergency variant				
Enclosure	Marine grade aluminium epoxy powder coated, toughened glass, all external fasteners and brackets are marine grade stainless steel				
Unit Colour	Silver (RAL 9006)				
Installation Instructions	Please see document 1250-D-00005 at www.raytecd.com				
Spare Part Availability	For information on spare part availability please contact Raytec.				
Battery Care	Please see document 0010-D-00001 at www.raytecd.com				
Dimensions	See dimension sketches				
Mounting	Stirrup bracket (see dimension sketches)				

Technical Specifications - Emergency

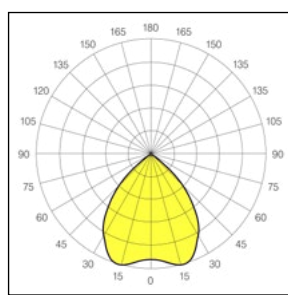
Intelligent Emergency

Function	Self testing Intelligent Emergency
System Health Indicator	Bi Colour Indicator LED
Emergency Duration	180 or 90 mins depending on variant Other options available
Emergency Output (upto)	See Lumen Output by Beam Pattern table below
Emergency Battery	NiMH 12V 6.0Ah
Emergency Charge Time	20 Hours

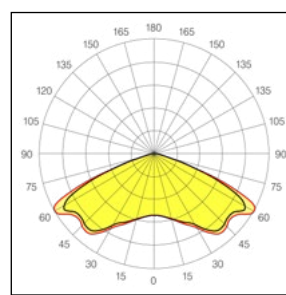
Symmetrical Beam Patterns



60x60

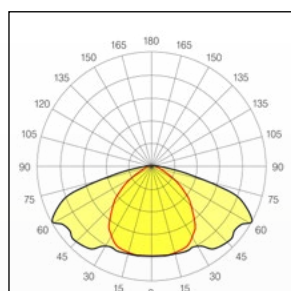


90x90

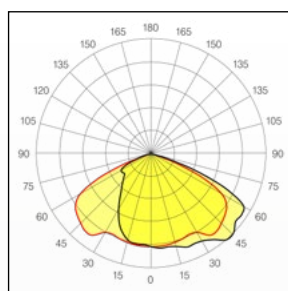


140x140

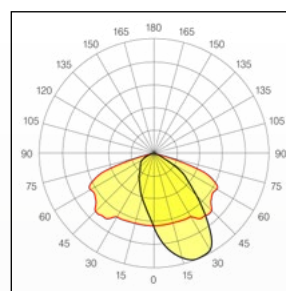
Asymmetrical Beam Patterns



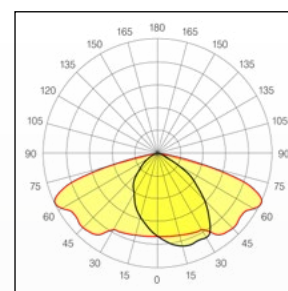
120x50



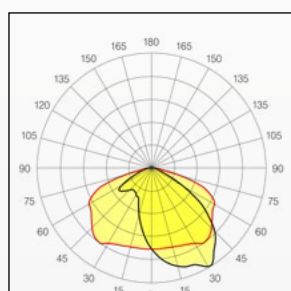
AR1



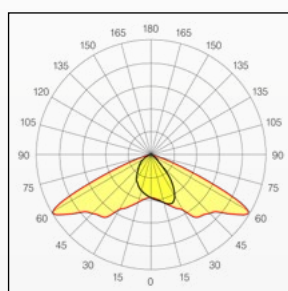
PP1



PP2



PP3



WB

Lumen Output by Beam Pattern

Lumen Output on Mains

Variant	60x60	90x90	120x50	140x140	AR1	PP1	PP2	PP3	WB
MPFL 5K	7471lm	7390lm	5542lm	5442lm	5491lm	5965lm	5622lm	5948lm	6328lm
MPFL 7K5	8969lm	8872lm	6654lm	6534lm	6592lm	7161lm	6749lm	7141lm	7597lm
MPFL 10K	11947lm	11818lm	8862lm	8703lm	8780lm	8703lm	8990lm	9512lm	10119lm
MPFL 12K5	14993lm	14772lm	11078lm	10878lm	10975lm	11923lm	11237lm	11890lm	12469lm
MPFL 15K	17938lm	17744lm	13307lm	13067lm	13183lm	14322lm	13498lm	14282lm	15194lm

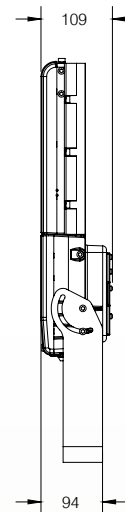
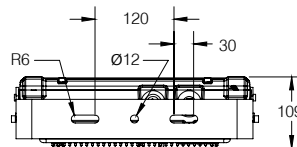
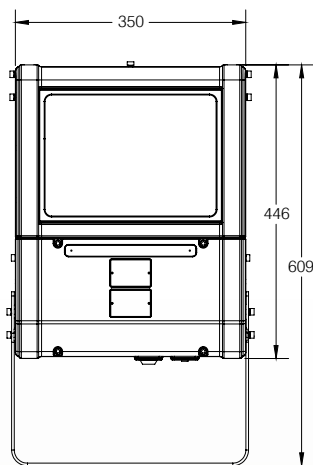
Lumen Output on Emergency

Variant	60x60	90x90	120x50	140x140	AR1	PP1	PP2	PP3	WB
EMX90 (90mins duration)	4485lm	4436lm	3327lm	3267lm	3296lm	3581lm	3375lm	3571lm	3799lm
EMX180 (180mins duration)	2242lm	2218lm	1663lm	1633lm	1648lm	1790lm	1687lm	1785lm	1899lm

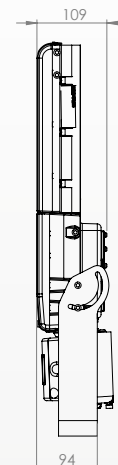
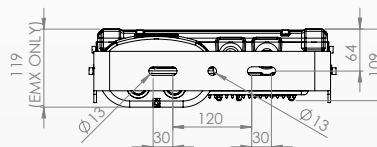
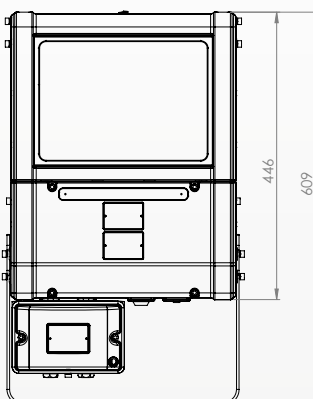
For more information on Mid Power Lumen Outputs please contact Raytec.
Other beam patterns also available. Please contact Raytec for more information

Product Dimensions

MPFL - Standard



MPFL - Emergency



Part Code Builder

SPARTAN Mid Power Flood

Example - SPX-MPFL15K-W-9090-EMX90

Family	Model	Light Type	Optics	Emergency	CCT	Entry
SPX	MPFL5K	W- White Light	6060	EMX90 (90 minute duration)	Not Stated - 6500K	Not Stated - M20
	MPFL7K5		9090	EMX180 (180 minute duration)	4K - 4000K	M25
	MPFL10K		140140			
	MPFL12K5		12050			
	MPFL15K		AR1			
			PP1			
			PP2			
			PP3			
			WB			

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SPARTAN SPX

LED Zone 1 High Power Floodlight



rayTEC



Power and Performance

High lumen output up to 29,000 lumens and a range of beam patterns to effectively light up large open areas such as oil rigs.



Robust and Durable

Robust and durable construction from marine grade aluminium and with a wide operating temperature for even the most challenging conditions.



Retrofittable and Modular

Designed to directly replace traditional discharge light sources up to 400W SON. The modular design allows easy access to key components and the ability to mount the PSU remotely (contact Raytec for details).



Controllable

DALI 2.0 Dimmable as standard for precise and flexible control of lighting assets.

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.

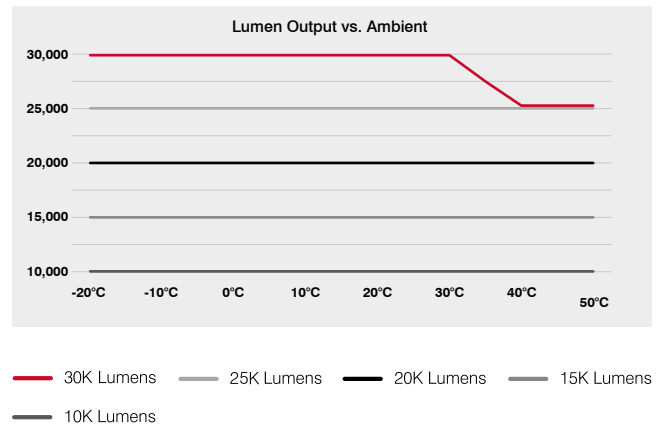


Technical Specifications

Certification

ATEX Rating	ATEX, UKEX and IEC Ex rated for Gas and Dust
Hazardous Area Rating	Zone 1 (Gas), Zone 21(Dust)
Certificates	Zone 1/21 Version CML17ATEX1148 and IECEx CML 17.0074 and CML21UKEX1102 Zone 21 Only Version CML 18ATEX3161 and IECEx CML 18.0087 and CML21UKEX3107
Gas	Gas Group IIB version II 2 G D Ex db eb mb IIB T4 Gb Gas Group IIB + H2 version II 2 G D Ex db eb mb IIB+H2 T4 Gb Ta = -50°C to + 50°C
Dust (Zone 1/21 version and Zone 21 only version)	Ex tb IIIC T104°C Db Ta=-50°C to +50°C
ABS Certificate #	#25-0220600-PDA

Automatic Thermal Cutback Feature



Electrical

	20K	25K	30K
Input	150-264V 50/60Hz AC/DC 110V variant available - please contact Raytec		
Power	200W	250W	300W
Termination	Incoming terminal block suitable for looping 4 core 4mm ² cable (6mm ² available - POA)		
Power Factor	>0.95		
Cable Entries	2xM20 as standard (other entries available upon request), dispatched complete with one ATEX/IEC Ex approved blanking plug		

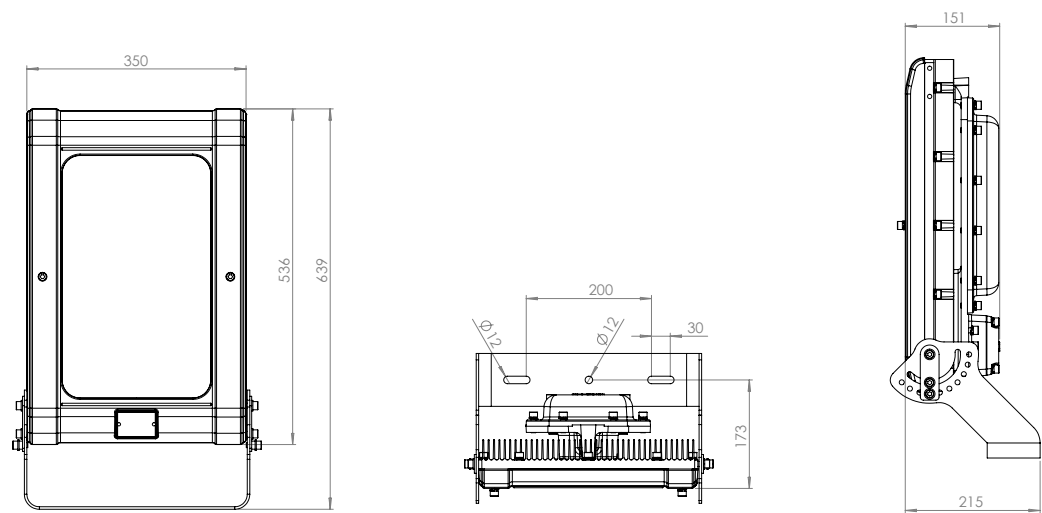
Optical

	20K	25K	30K
Beam Patterns	30° x 30° or 60° x 60° or 90° x 90°		
Lumen Output (Up to)	19,423lm	24,278lm	29,134lm
LED Type	Platinum Elite SMT LEDs		
Number of LEDs	24		
CRI	70+		
Colour Temperature	5,700K		
Automatic Thermal Cutback Feature	Refer to the graph above		

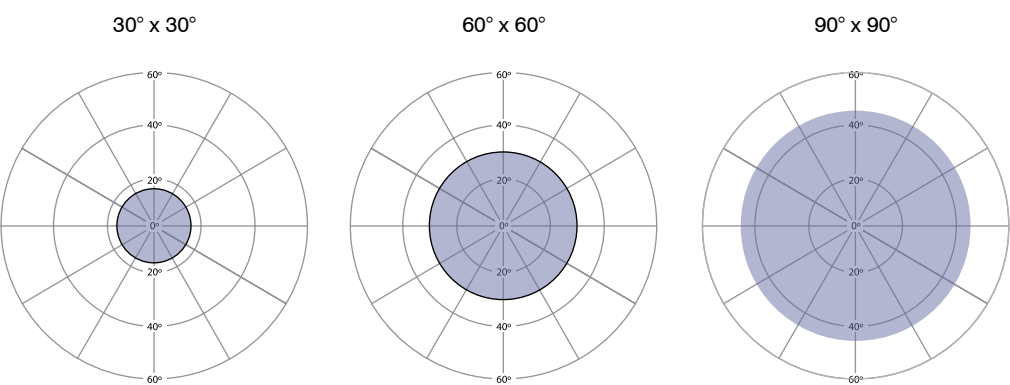
Mechanical

	20K	25K	30K
Burning Position	Universal		
IP Rating	IP66		
Temperature Range	-50°C to +50°C		
Weight	23.5kg (51.8lbs)		
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	Please see document 1050-D-00006 at www.raytecltd.com		
Spare Part Availability:	Please contact Raytec for information on spare part availability		
Dimensions	639 x 350 x 215mm (25.2 x 13.8 x 8.5")		
Mounting	Stirrup bracket (see dimension drawings on Page 3)		

Product Dimensions



Beam patterns - Circular



Part Code Builder

SPARTAN High Power Flood

Example - SPX-HPFL15K-W-9090						
Family	Model	Light Type	Optics	Variant	Power	Entry
SPX	HPFL20K	W- White Light	3030	NOT STATED - Standard IIB	Not Stated - 150-264ac	Not Stated - M20
SPZ (for Z21 version only)	HPFL25K		6060	H2 - IIB+H2	110 - 110V-277Vac	M25
	HPFL30K		9090	Z21 - (SPZ Only)		

Disclaimer

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