

SPARTAN SPZ

LED Zone 2 High Power Floodlight



rayTEC



Power and Performance

High lumen output up to 34,000 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.

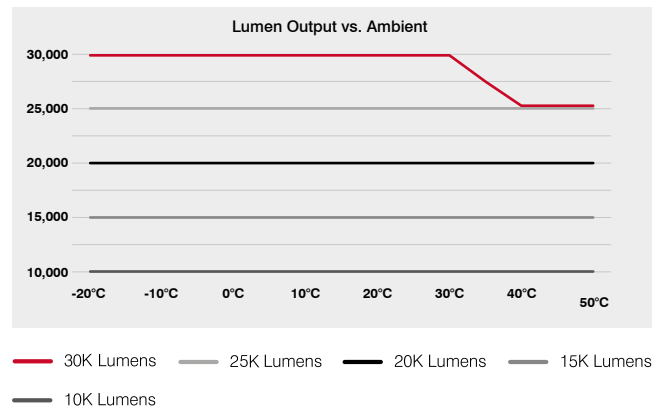


Technical Specifications

Certification

ATEX Rating	ATEX, UKEX and IEC Ex rated for Gas and Dust
Hazardous Area Rating	Zone 2 – Gas and Dust
Certificates	CML 17ATEX 4149 AND IEC Ex CML 17.0074 AND CML21UKEX4101
Gas	II 3 G D Ex ec nR IIC T4 Gc Ta= -50°C to +50°C
Dust	Ex tc IIIC T104°C Dc Ta+ -50°C to +50°C IP66
ABS Certificate #	ABS Certificate # 20-1990083-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		

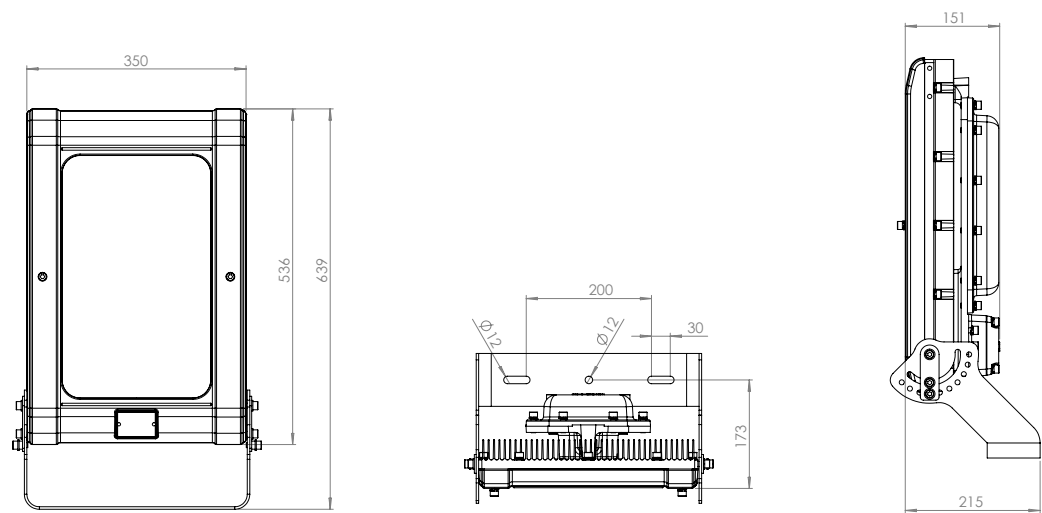
Optical

	20K	25K	30K
Beam Patterns	30° x 30° or 60° x 60° or 90° x 90°		
Lumen Output (Up to)	22,971lm	28,713lm	34,456lm
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		

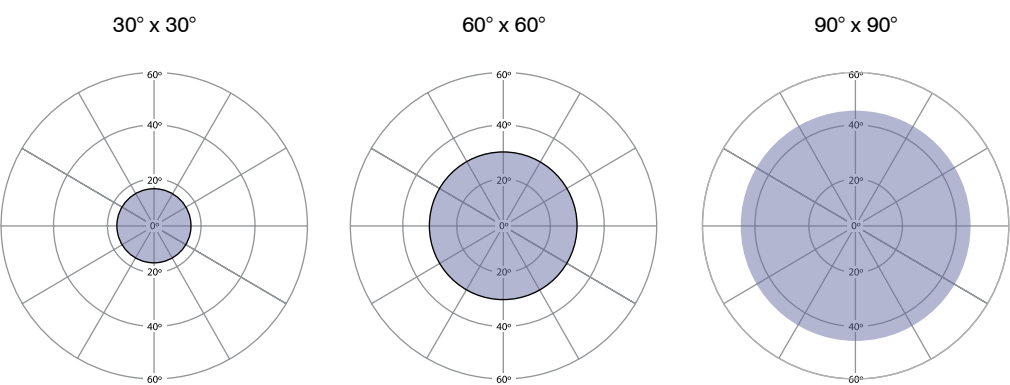
Mechanical

	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-000006 at www.raytecltd.com		
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 - SPZ-HPFL15K-W-9090					
Family	Model	Light Type	Optics	Power	Entry
SPZ	HPFL20K	W- White Light	3030	Not Stated - 150-264ac	Not Stated - M20
	HPFL25K		6060	110 - 110V-277Vac	M25
	HPFL30K		9090		

SPARTAN LED Zone 2/22 SPZ Floodlight



rayTEC[®]



Robust and Durable

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



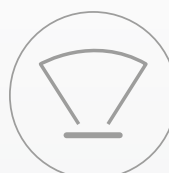
Emergency

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

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Technical Specifications

Certification

ATEX Rating	ATEX, UKCA and IEC Ex rated for Gas and Dust
Hazardous Area Rating	Zone 2 – Gas and Dust
Certificates	CML17ATEX4231, IEC Ex CML 17.0135 & CML 21UKEX4106
Gas	II 3 G D Ex ec mc IIC T4 Gc Ta= Up to -50°C to +55°C (all emergency variants have a lower ambient of -20°C only)
Dust	Ex tc IIIC T82°C Dc Ta= Up to -50°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

Optical	FL24	FL24-EM	FL48	FL48-EM
Beam Patterns - Circular	10°x 10° or 30°x 30° or 50°x 50° or 120°x 120°			
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° - 9304lm 30°x30° - 8502lm 35°x10° - 8248lm 50°x50° - 8700lm 60°x25° - 8140lm 80°x30° - 7948lm 120°x50° - 7112lm 120°x120° - 6174lm		10°x10° - 18608lm 30°x30° - 17004lm 35°x10° - 16496lm 50°x50° - 17400lm 60°x25° - 16280lm 80°x30° - 15896lm 120°x50° - 14224lm 120°x120° - 12348lm	
LED type	Platinum Elite SMT LEDs			
Number of LEDs	24		48	
CRI	70+			
Colour Temperature	6500K as standard (other CCTs available)			

Mechanical

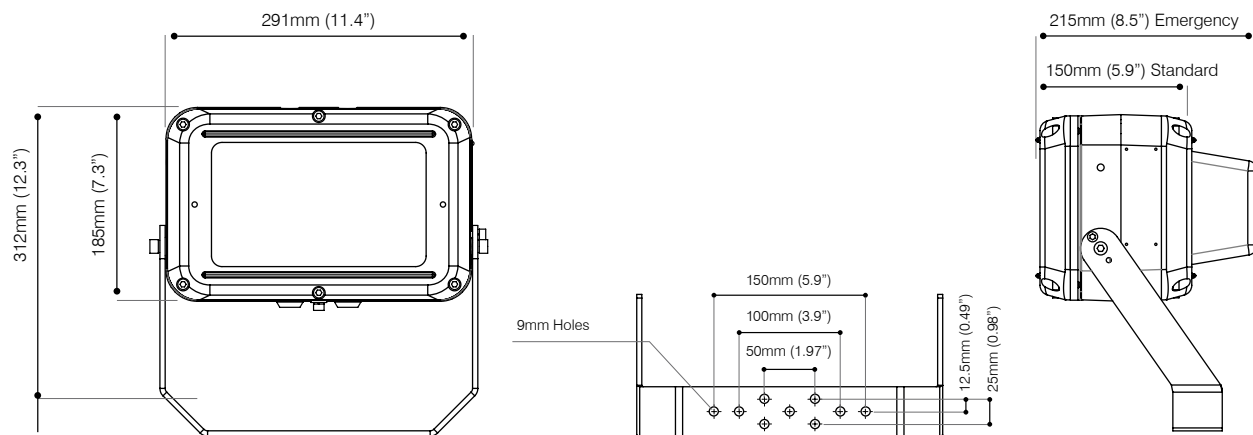
	FL24	FL24-EM	FL48	FL48-EM
Burning Position	Universal			
IP Rating	IP66/IP67			
Temperature Range	- 50°C to +55°C (- 58°F to +131°F)	- 20°C to +55°C (- 4°F to +131°F)	- 50°C to +55°C (- 58°F to +131°F)	- 20°C to +55°C (- 4°F to +131°F)
Weight	8kg (17.6lbs)	10kg (22lbs)	16kg (35.3lbs)	20kg (44lbs)
Enclosure	Marine grade aluminium epoxy powder coated, toughened glass, all external fasteners and brackets are marine grade stainless steel			
Unit Colour	Silver (RAL 9006)	Silver (RAL 9006) Red (RAL3024) - Emergency Cover	Silver (RAL 9006)	Silver (RAL 9006) Red (RAL3024) - Emergency Cover
Installation instructions	Please see document 0910-D-00027 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

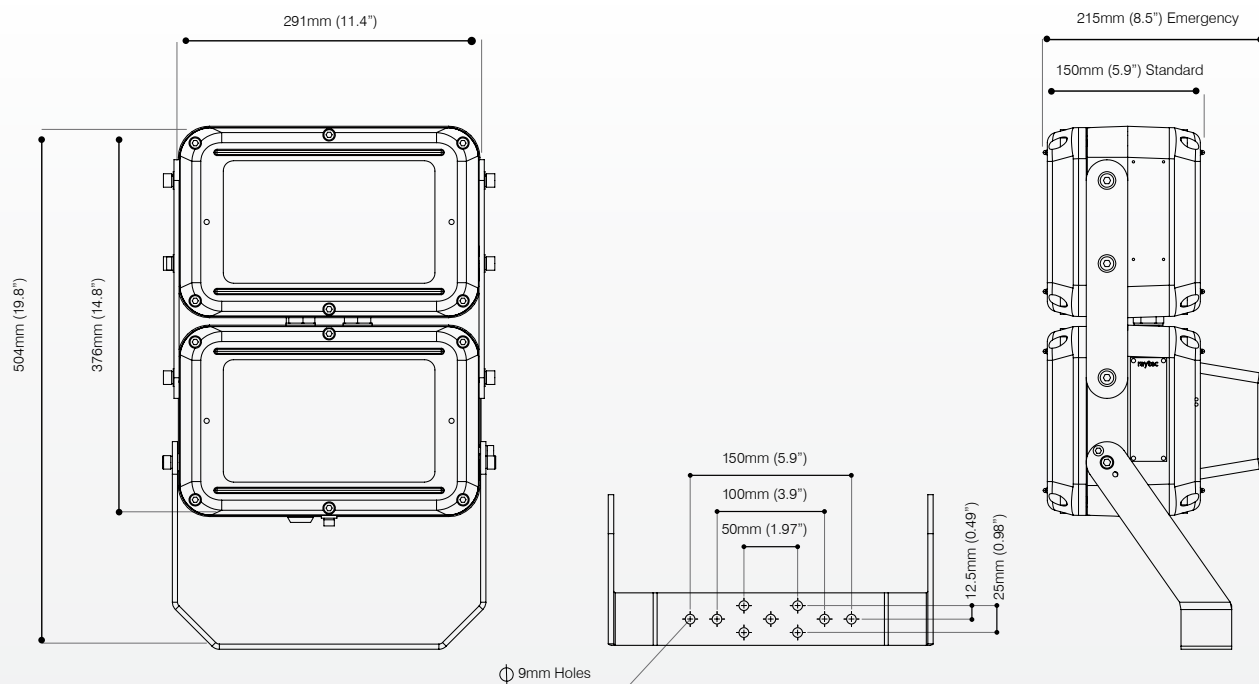
Emergency	FL24-EM	FL48-EM
Emergency Duration	90mins at 50% power Other options available	90mins at 25% power Other options available
Emergency Battery	Ni/Cd 12V 4.5Ah	
Emergency Charge Time	20 hours	

Product Dimensions

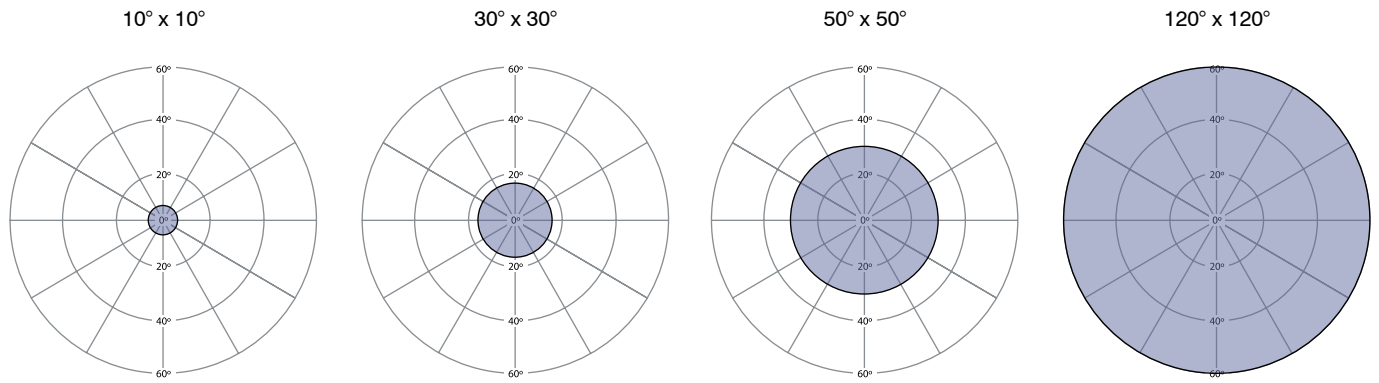
FL24/FL24-EM



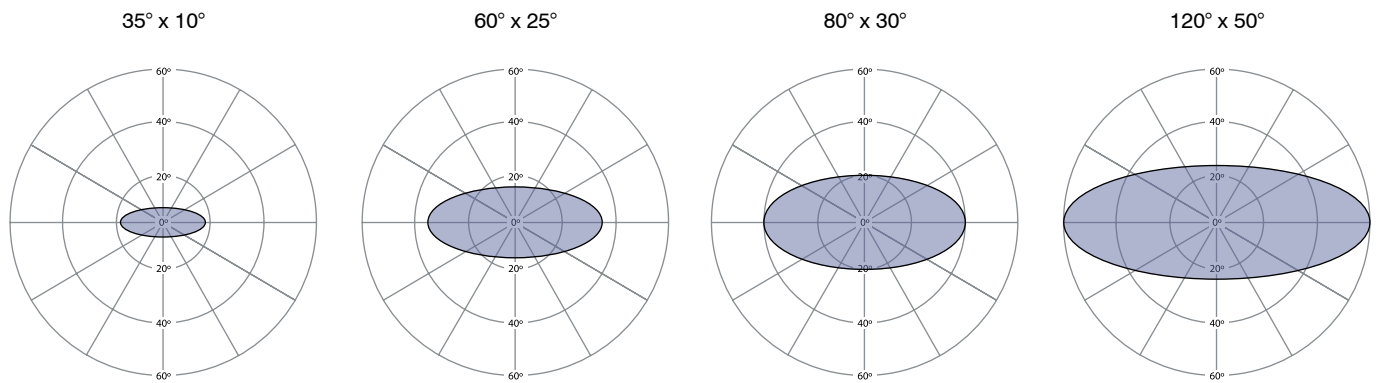
FL48/FL48-EM



Beam patterns - Circular



Beam patterns – Elliptical (VARIO)



Part Code Builder

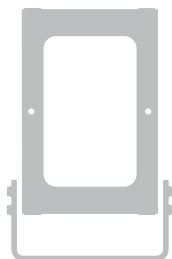
Zone 2

Example - SPZ-FL24-W-1010-EM25

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

Other options available, contact Raytec.

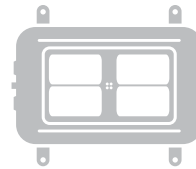
Products in the SPARTAN Family



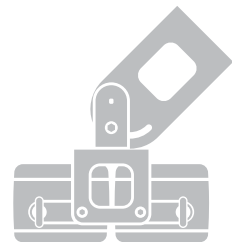
SPARTAN Flood



SPARTAN Linear



SPARTAN Bulkhead



SPARTAN Crane

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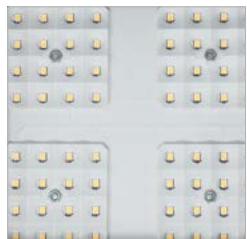
For the most current and detailed information about our products, please contact our sales team at sales@raytecled.com.

SPARTAN LED

Zone 2/22 SPZ 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 2 (Gas), Zone 22 (Dust)
Certificates	CML 17ATEX4231, IEC Ex CML17.0135 & CML21UKEX4106
Gas	II 3 G D Ex ec mc IIC T4 Gc Ta= Up to -50°C to +55°C (-20°C to +55°C for emergency variants)
Dust	Ex tc IIIC T98°C Dc Ta= Up to -50°C to +55°C (-20°C to +55°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 50/60Hz 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 2,426 lm	Up to 4,162 lm	Up to 2,426	Up to 4,162 lm
LED type	Platinum Elite SMT LEDs			
Number of LEDs	96			
CRI	80+			
Colour Temperature	6500K standard			

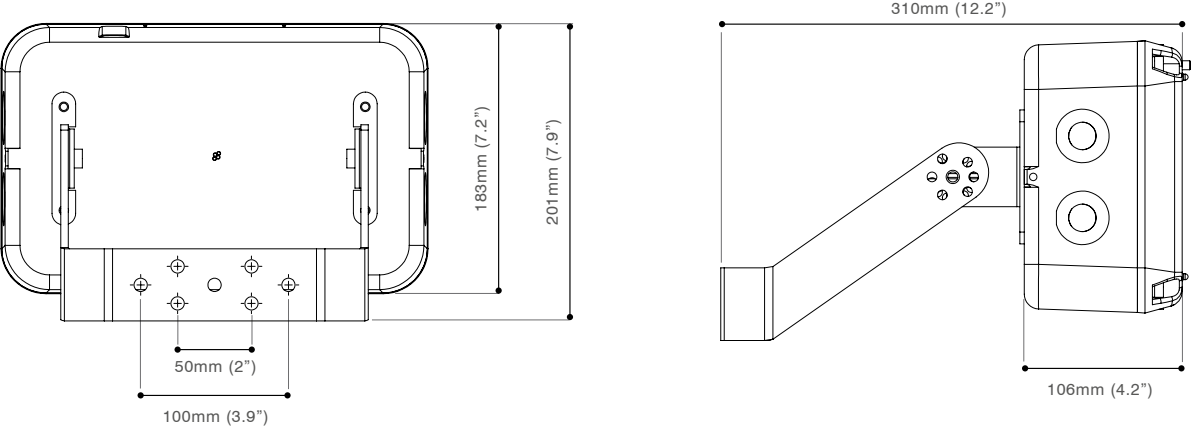
Mechanical

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 + 55°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			

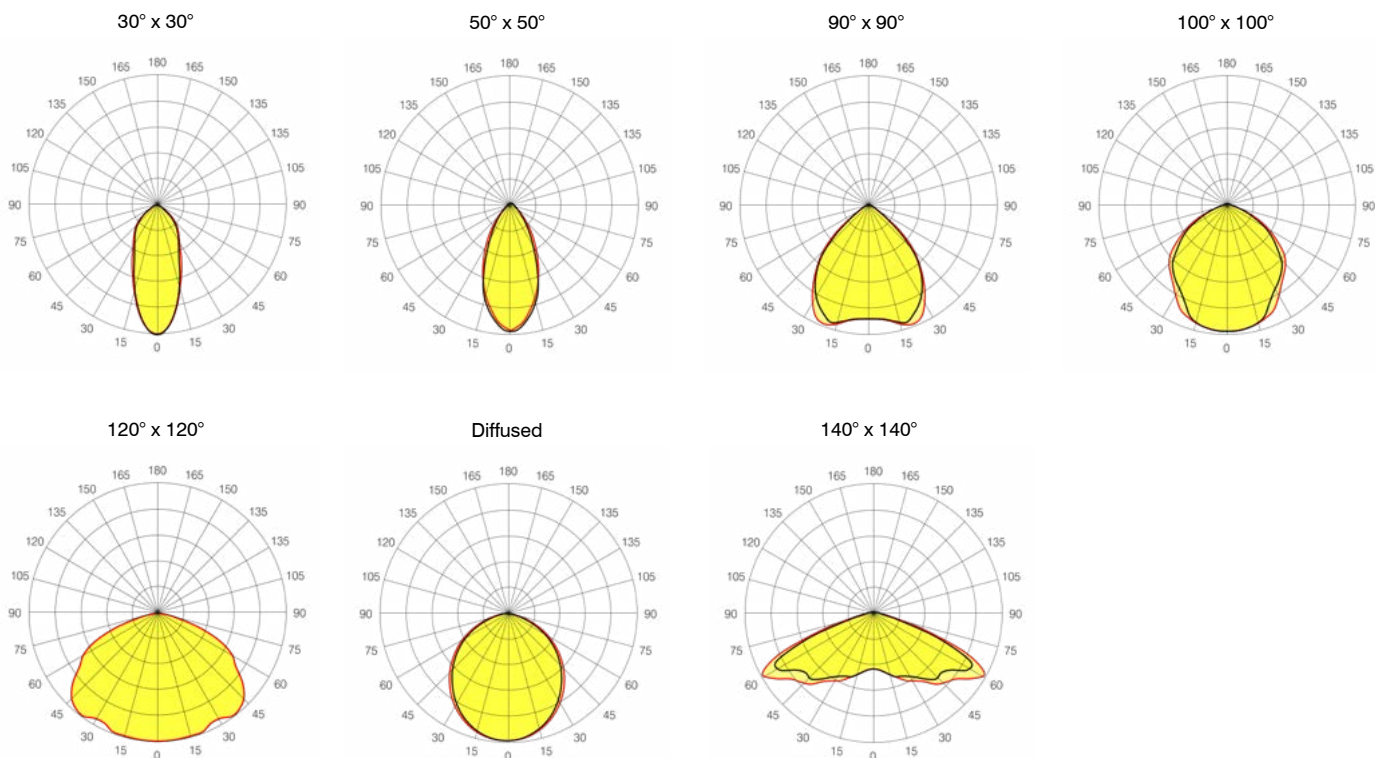
Technical Specifications - Continued

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	

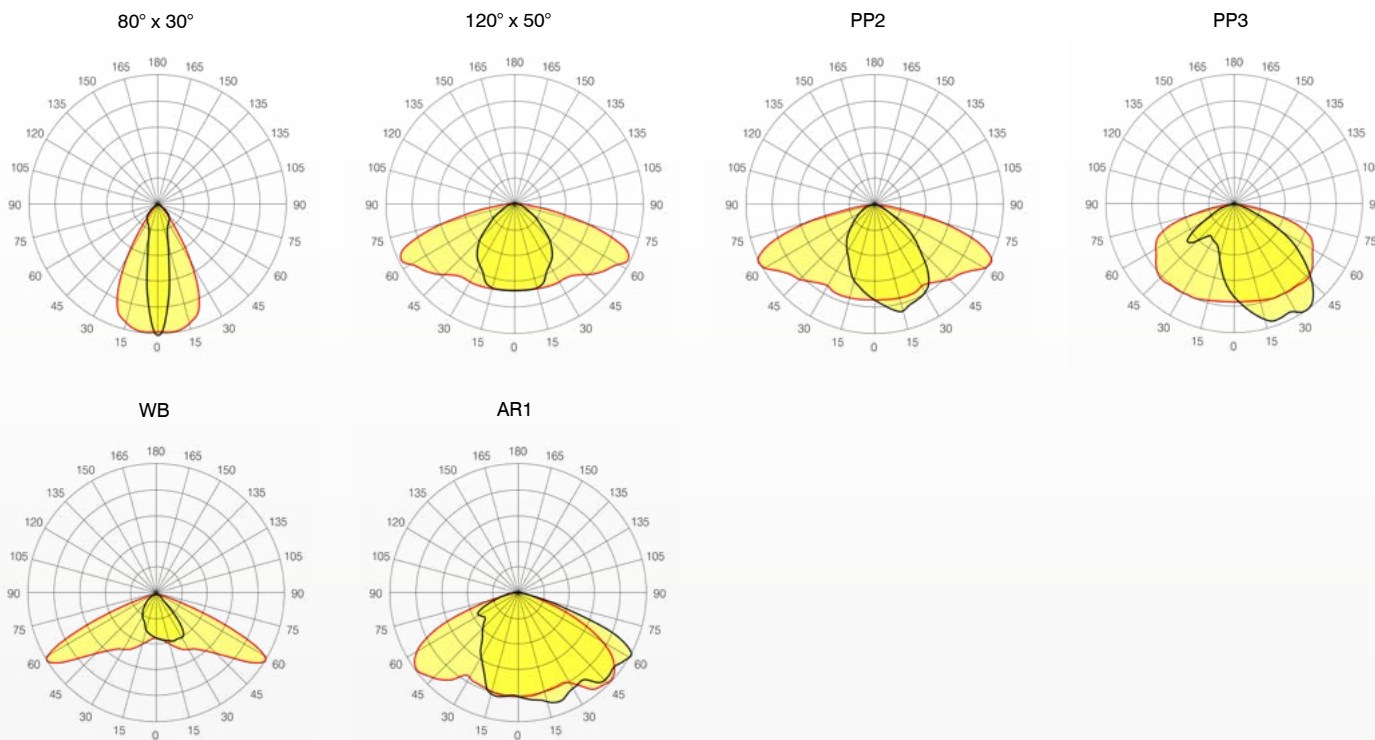
Product Dimensions



Beam patterns - Symmetrical



Beam patterns – Asymmetrical



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

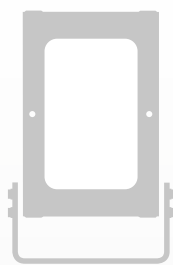
Part Code Builder

SPARTAN Flood BL24

Example - SPZ-BL24-W-5050-SB30

Family	Model	Light Type	Optic	Emergency	CCT	Power	Entry	Mounting
SPZ	BL24	W - White Light	3030	Not Stated - Non EM	Not Stated - 6500K	Not Stated - Standard Mains	Not Stated - M20	SB30 - Stirrup Mount (floodlight 30°)
	BL24-HO		5050	EMX25 (3 hour)	4K - 4000K	277 - 110-277Vac 50/60hz	M25	
			9090	DA - DALI		LV - Low Voltage (Non EM only)		
			100100			LO - Low Output (12W)		
			120120					
			D - Diffused					
			140140					
			8030					
			12050					
			PP2					
			PP3					
			WB					
			AR1					

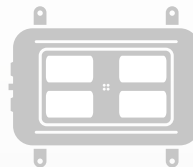
Products in the SPARTAN Family



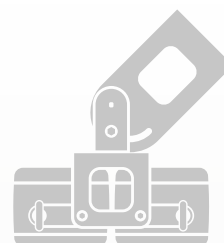
SPARTAN Flood



SPARTAN Linear



SPARTAN Bulkhead



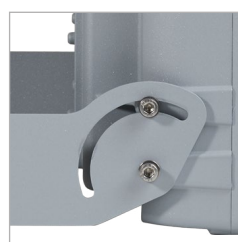
SPARTAN Crane

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SPARTAN LED

Zone 2/22 SPZ Mid Power Floodlight



Power / Performance

High lumen output up to 20,000 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	CML21ATEX3320 & IEC Ex CML21.0038 or CML21UKEX3321
Gas	II 3 G D Ex ec mc IIC T4 Gc Ta= -40°C to +60°C (-20°C to +50°C emergency variants)
Dust	Ex tc IIIC T93°C Dc 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	40W	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				

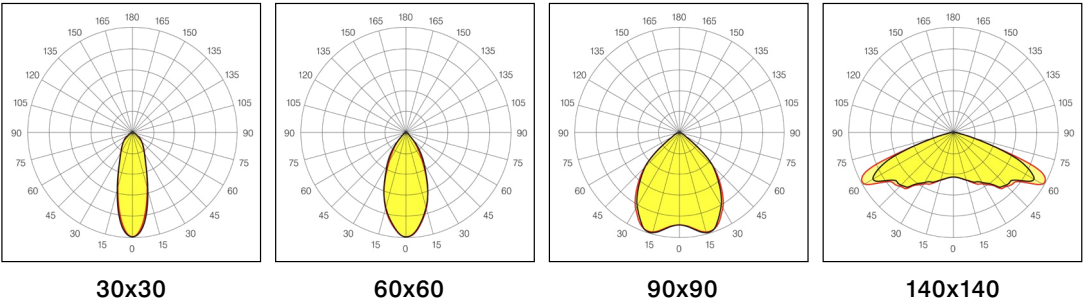
Mechanical

	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.raytecled.com				
Spare Part Availability	For information on spare part availability please contact Raytec.				
Battery Care	Please see document 0010-D-00001 at www.raytecled.com				
Dimensions	See dimension sketches				
Mounting	Stirrup bracket (see dimension sketches)				

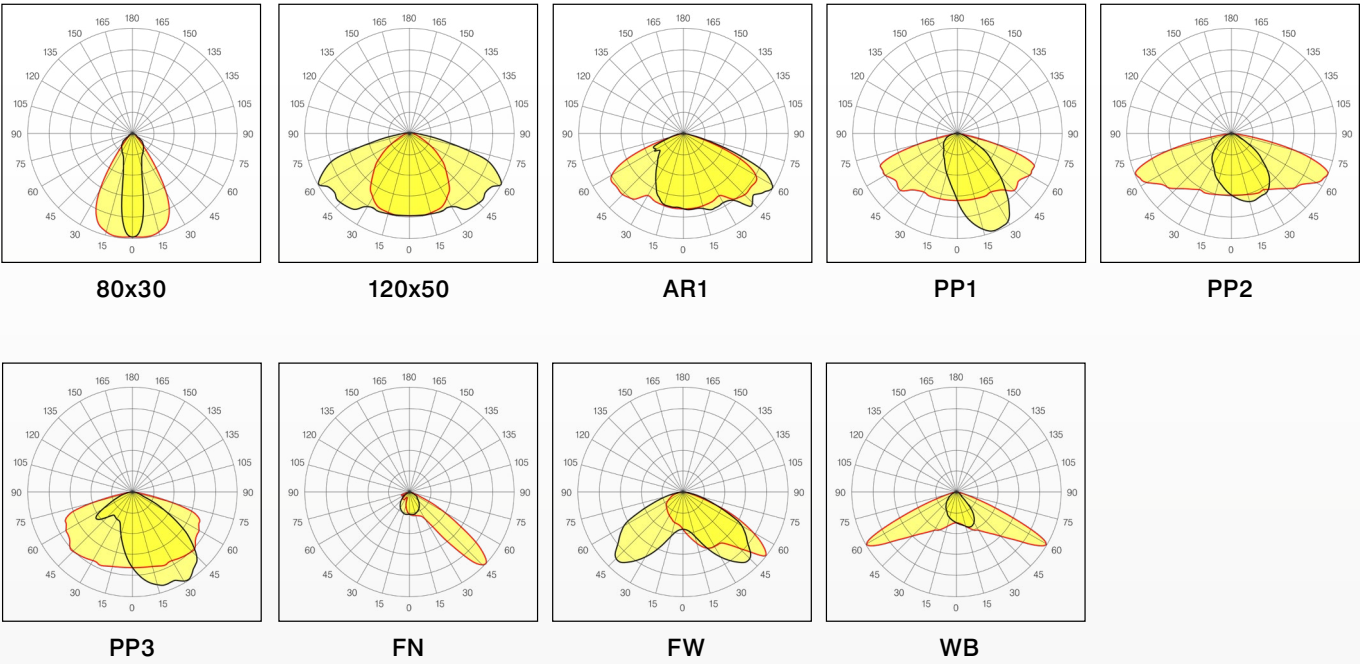
Technical Specifications - Emergency

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



Asymmetrical Beam Patterns



Lumen Output by Beam Pattern

Lumen Output on Mains

Variant	30x30	60x60	90x90	120x50	140x140	AR1	PP1	PP2	PP3	80x30	FN*	FW*	WB
MPFL 5K	7608lm	8329lm	8225lm	7178lm	7309lm	7108lm	7613lm	7360lm	7353lm	7998lm	7842lm	6329lm	7563lm
MPFL 7K5	9134lm	9999lm	9874lm	8618lm	8775lm	8534lm	9140lm	8836lm	8827lm	9602lm	9414lm	7598lm	9079lm
MPFL 10K	12166lm	13319lm	13152lm	11479lm	11688lm	11367lm	12174lm	11770lm	11758lm	12790lm	12540lm	10121lm	12094lm
MPFL 12K5	15208lm	16649lm	16440lm	14349lm	14610lm	14209lm	15218lm	14712lm	12698lm	15987lm	15675lm	12651lm	15117lm
MPFL 15K	18268lm	19999lm	19748lm	17236lm	17550lm	17068lm	18280lm	17672lm	17655lm	19204lm	18829lm	15196lm	18159lm

Lumen Output on Emergency

Variant	30x30	60x60	90x90	120x50	140x140	AR1	PP1	PP2	PP3	80x30	FN*	FW*	WB
EMX90 (90mins duration)	4567lm	5000lm	4937lm	4309lm	4388lm	4267lm	4570lm	4418lm	4414lm	4801lm	4707lm	3799lm	4540lm
EMX180 (180mins duration)	2284lm	2500lm	2469lm	2155lm	2194lm	2134lm	2285lm	2209lm	2207lm	2401lm	2354lm	1900lm	2270lm

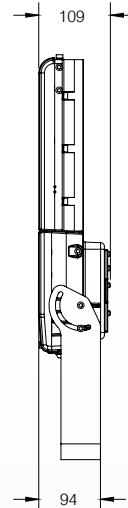
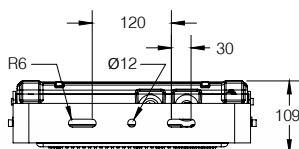
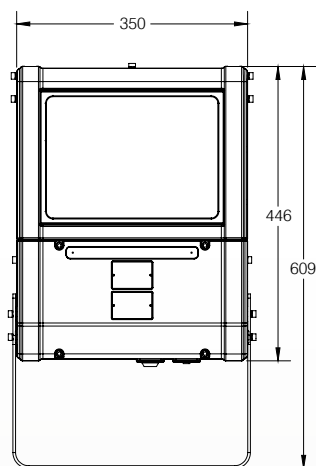
*FN and FW optic variants use 24 or 48 LED light engines.

For more information on Mid Power Lumen Outputs please contact Raytec.

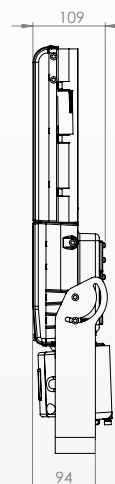
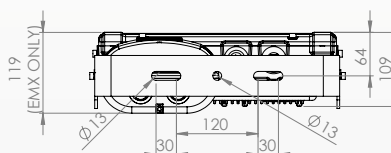
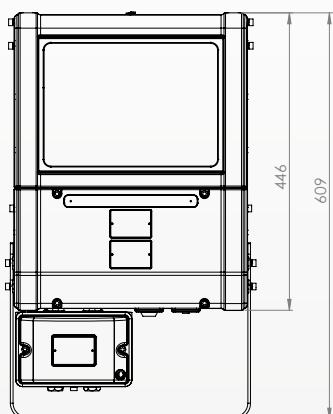
Other beam patterns also available. Please contact Raytec for more information

Product Dimensions

MPFL - Standard



MPFL - Emergency



Part Code Builder

SPARTAN Mid Power Flood

Example - SPZ-MPFL15K-W-9090-EMX90

Family	Model	Light Type	Optics	Emergency	CCT	Entry
SPZ	MPFL5K	W- White Light	3030	EMX90 (90 minute duration)	Not Stated - 6500K	Not Stated - M20
	MPFL7K5		6060	EMX180 (180 minute duration)	4K - 4000K	M25
	MPFL10K		9090			
	MPFL15K		12050			
			140140			
			AR1			
			PP1			
			PP2			
			PP3			
			8030			
			FN			
			FW			
			WB			

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