



# FL820 AREA

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HIGH OUTPUT LED FLOODLIGHT SYSTEM



This luminaire complies with ETL guidelines for White Light Emitting Diode Lighting Units and is eligible for the Enhanced Capital Allowance (ECA) scheme.

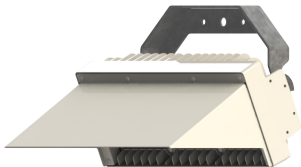


## FL820 LED FLOODLIGHTING SYSTEM provides an innovative solution for Area Lighting.

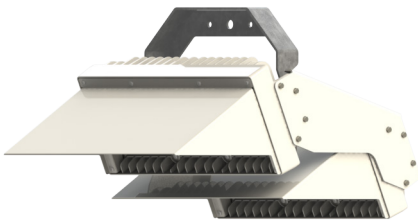
The FL820 is a high output LED floodlight, which is designed for all types of area lighting, and may be used as a replacement for existing 1kW or 2kW floodlight systems. It is available as a single, twin or triple module with CSP (Chip Scale Package) LEDs.



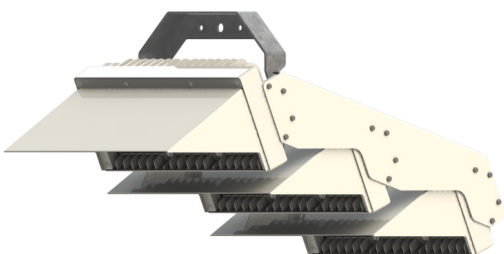
### FL820-1



### FL820-2



### FL820-3



## FEATURES & BENEFITS

- High output up to 2000W replacement
- Superior luminaire efficacy up to 154lm / W
- High Colour Rendering Index
- Low glare, Dark Sky friendly
- Single Module and twin module Options
- CSP LED array for long life
- Can be mounted on existing columns and masts
- Integral driver box
- IP66
- Fully recyclable

Max. Luminous Flux	70,000 lm per module
Max. Luminaire Efficacy	154 lm/W
Luminaire Efficacy ( Full Power)	137 lm/W
Lumen Maintenance	L92 100Khrs 25°C
Photometric Options	10 optical distributions

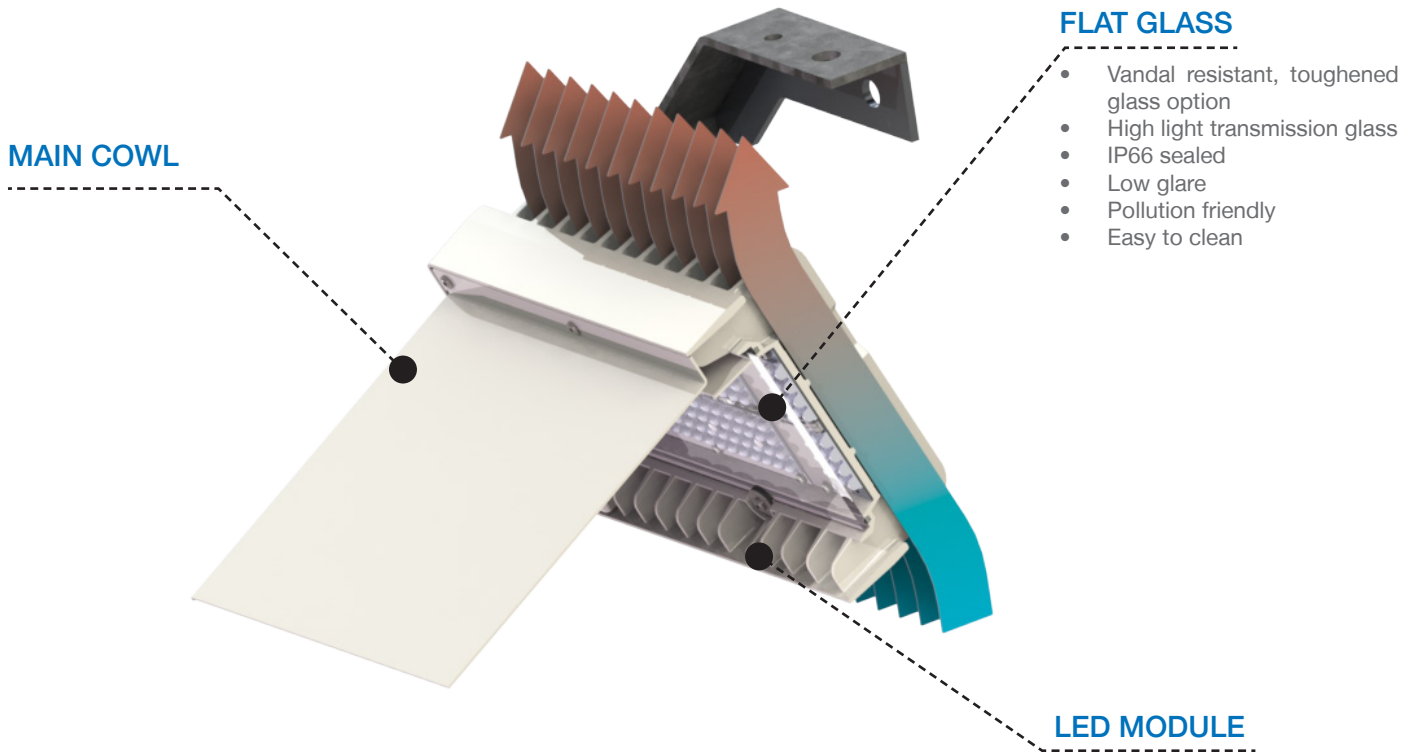
## APPLICATIONS

- Airports
- Ports
- Logistics
- Parking & Industrial Areas
- Roads and roundabouts
- Shopping areas

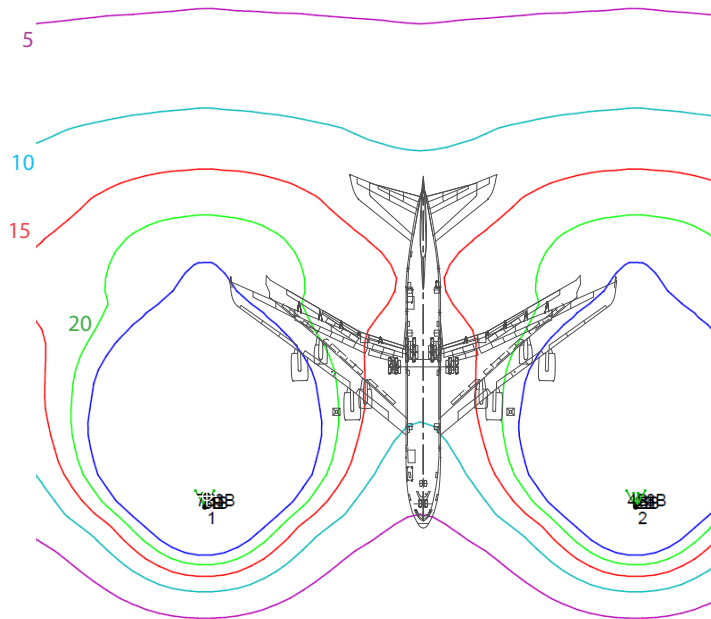
## ADVANCED HEAT SINK

Cooling fins are optimised with a high surface area to quickly draw heat away from the LEDs. Vents created by the vertical cooling fins accelerate natural convection through the heatsink. The rising hot air draws cold air in from below, immediately cooling the LEDs and maximising their lifespan and light output.

This cooling effect allows the FL820 to function in ambient temperatures up to 50°C whilst ensuring its high efficacy is maintained over life.



## ENERGY EFFICIENCY



The table below shows the energy saving for a typical Airbus A380 aircraft stand.

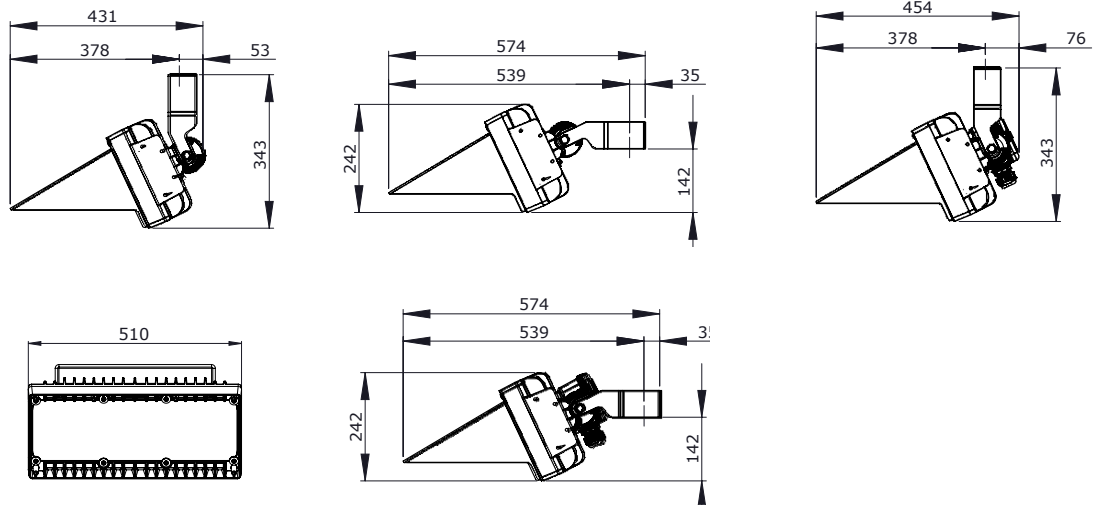
Light Source	SON-T	FL810	FL820-1
Nominal Power	400W	625W	438W
System Power	449W*	550W**	422W
Number of Units	8	4	4
Total System Power	3592W	2200W	1688W
Energy Savings	-	39%	SON-T = 53% FL810 = 23%

A380 Aircraft Stand 87 x 82m lit to CAP168  
Overall MF = 0.80  
Mounting height = 20m

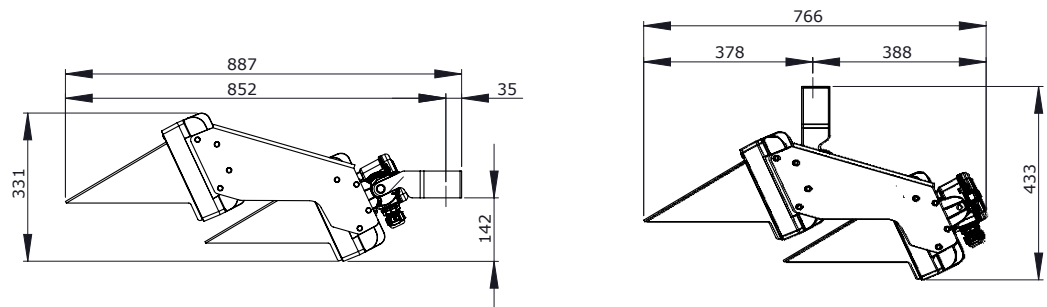
\* With electromagnetic control gear  
\*\* Average power consumption over life with CLO for lumen depreciation MF = 0.90

# FL820 AREA SPECIFICATION

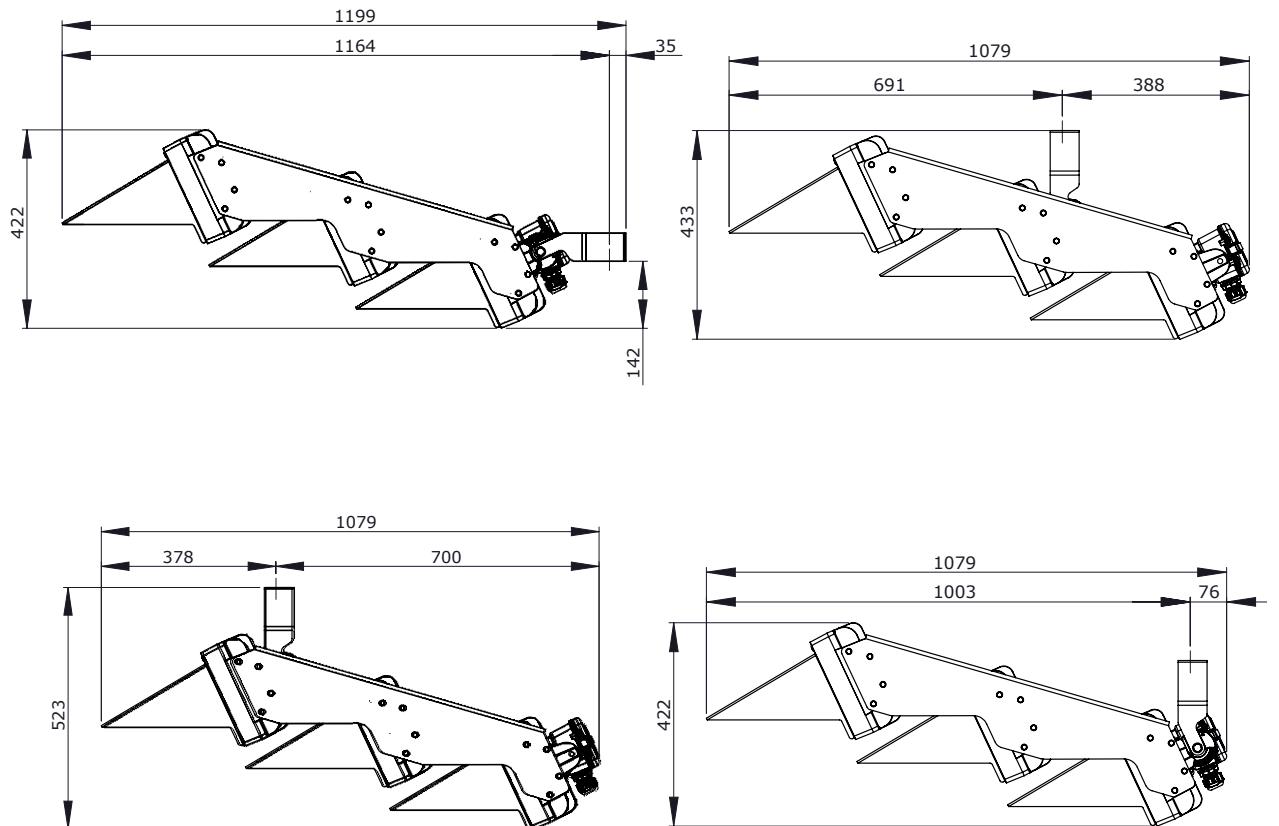
## FL820-1



## FL820-2



## FL820-3



# FL820 AREA SPECIFICATION

Light Source	CSP LEDs		
Number of LEDs	256 ( per module )		
Correlated Colour Temperature	Warm - 3000K, Neutral - 4000K, Cool - 5700K		
Colour Rendering Index	> 70		
Optical Cover	Flat glass		
Max. Luminaire Efficacy at full Power	137lm/W		
Max Luminaire Efficacy	154lm/W		
Electrical Class	I		
Lumen Maintenance Output*	L90 @ 80,000 hours, Ta = 45°C • L92 @ 100,000 hours, Ta = 25°C		
Driver Current	700, 850, 1050, 1200, 1400mA		
Operating Temperature	-40°C to +50°C		
Storage Temperature	-40°C to +80°C		
Installation Height	10 ~ 50m		
Installation	Stirrup mount		
Material	Marine Grade Aluminium LM6 ( module ) • Aluminium side plates • Galvanised steel stirrup		
Finish	Polyester powder coated RAL 9010		
Ingress Protection	IP66		
Luminaire Tilt (On Site)	-15° to +15° in 2.5° steps		
Product Configuration	FL820-1	FL820-2	FL820-3
Max. Luminaire Luminous Flux	70260lm	140532	210798
Power Consumption	255-512W	510-1024W	765-1536W
Wind Area Side (EPA)	0.063m <sup>2</sup>	0.132m <sup>2</sup>	0.198m <sup>2</sup>
Wind Area Front (EPA)	0.153m <sup>2</sup>	0.202m <sup>2</sup>	0.249m <sup>2</sup>
Weight (Kg)	11.6	22.1	32.6

\* Power limitation will apply at high external ambients



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