



FL800D 4x4

LED Floodlight System with AeroFlow® Cooling



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

FL800D 4x4 LED FLOODLIGHTING SYSTEM

FL800D-1 4x4 or FL800D-2 4x4 can be arranged on a mast with full azimuth rotation and tilt function. These versions have drivers built in so are self contained.

Each module has a range of optical distribution options and a range of elevation angles to build a combined luminaire photometric output that meets even the most challenging of schemes.

FL800D 4x4 uses AeroFlow® Cooling System to provide exceptional thermal management. Maximised heat dissipation enables a compact luminaire design, which can be retrofitted onto existing masts.

Samsung CSP LEDs and AeroFlow® together deliver high lumen output with very low lumen depreciation over life, this minimises energy and operating cost by reducing overlighting.

FL800D 4x4 offers an extremely competitive solution to replace traditional HID sources with performance, versatility and reliability.

Max. Luminous Flux	56268 lm
Max. Luminaire Efficacy	156 lm/W
Max. Luminaire Efficacy (Full Power)	136 lm/W

L90 > 100,000 hrs, Ta = 25°C

L80 > 100,000 hrs, Ta = 45°C

APPLICATIONS

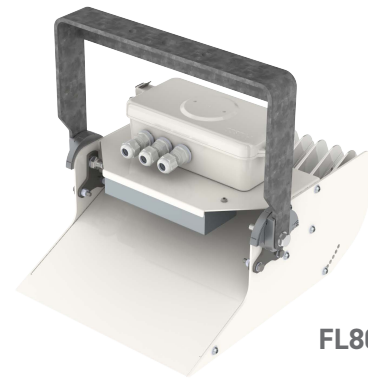
- Airports
- Ports
- Sport facilities
- Logistics
- Car parks
- Roads and roundabouts
- Shopping areas

FEATURES

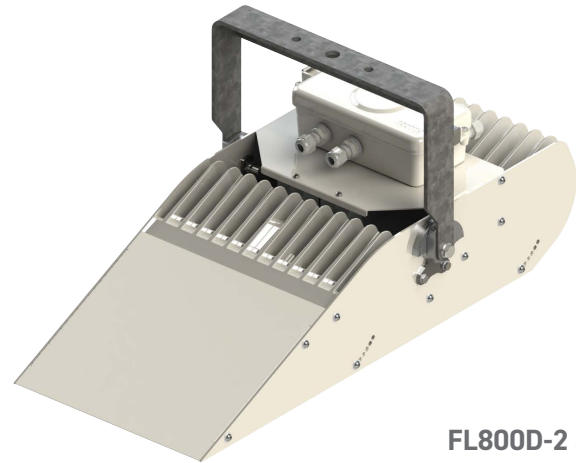
- Samsung CSP LED
- Superior luminaire efficacy - 156lm / W
- High Colour Rendering Index (CRI > 70)
- Constant Light Output (CLO)
- Instant hot restrike
- AeroFlow® Cooling System
- Low wind profile area
- Low maintenance costs
- Full Cowl, distribution cut off 5° below horizontal
- IP66 ingress protection
- 100% recyclable

BENEFITS

- High Flux density and efficacy LED
- Reduces energy costs and carbon emissions
- Improved safety and visual performance
- Minimises over-lighting, saving energy
- Suitable for high security and safety critical lighting tasks
- L80 @ 100,000 hrs, Ta = 45°C*
- Flexible mounting allowing cost savings
- Allows mounting on existing columns / masts
- Minimises Total Cost of Ownership
- DarkSky friendly, minimal glare
- Consistent high performance in aggressive environments
- Fully compliant with WEEE and RoHS regulations



FL800D-1 4x4



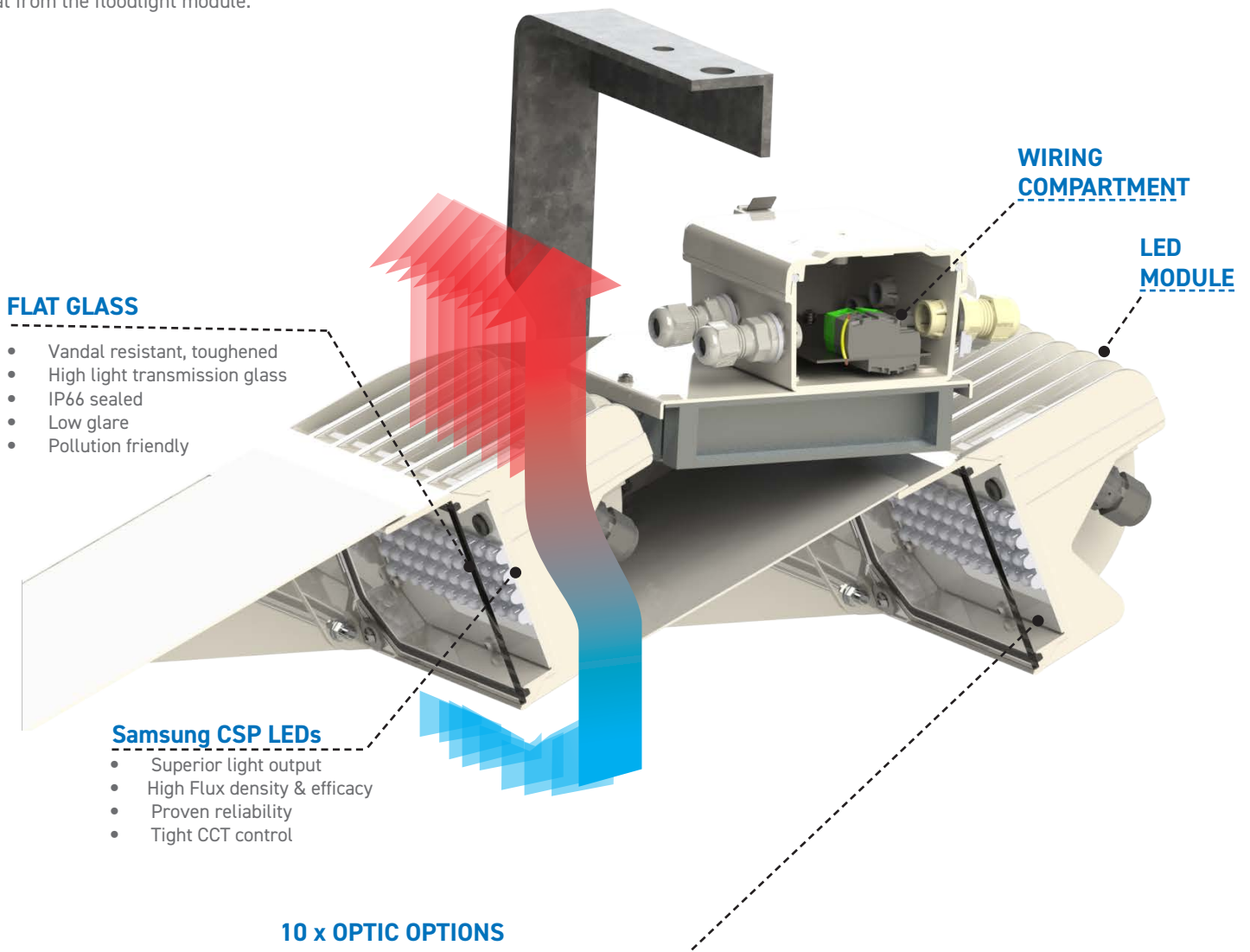
FL800D-2 4x4

* Lumen depreciation calculated up to 100,000 hours using IES TM-21 method.

AeroFlow® COOLING SYSTEM

Unique aerodynamic vents created by the vertical fins are designed to accelerate natural convection through the heatsink. Each airway is heated and the rising hot air draws cold air in from the bottom, immediately cooling the LEDs. The hot air accelerates away from the fins, quickly removing heat from the floodlight module.

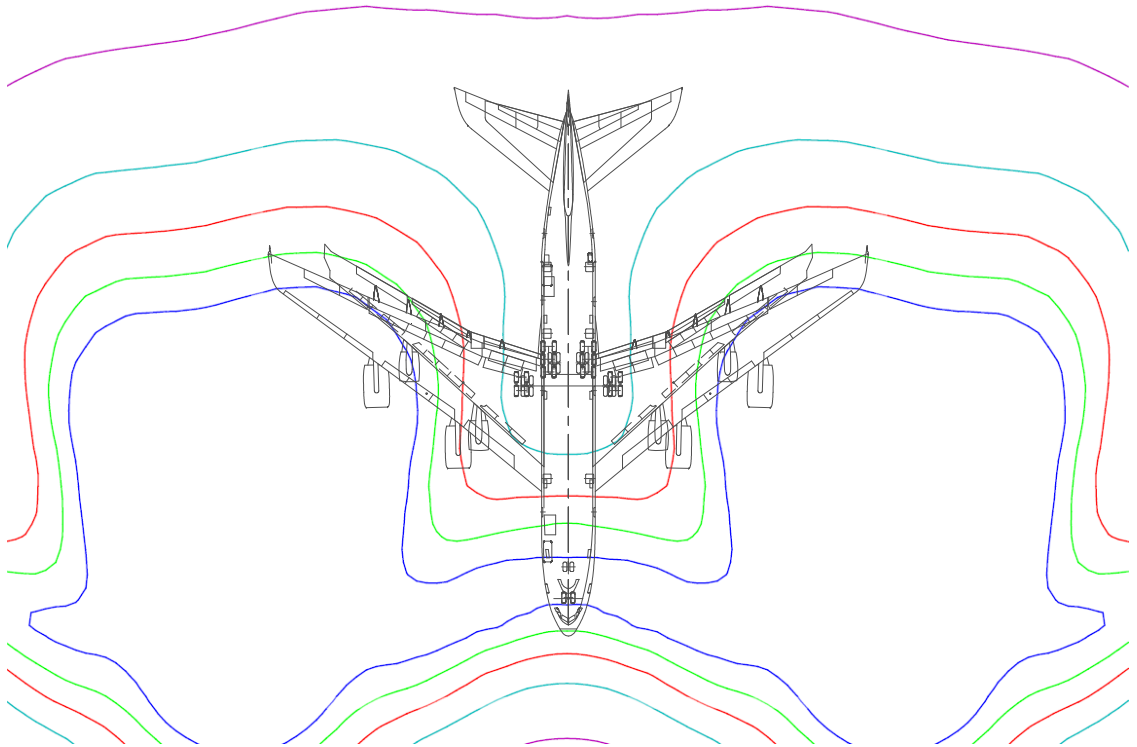
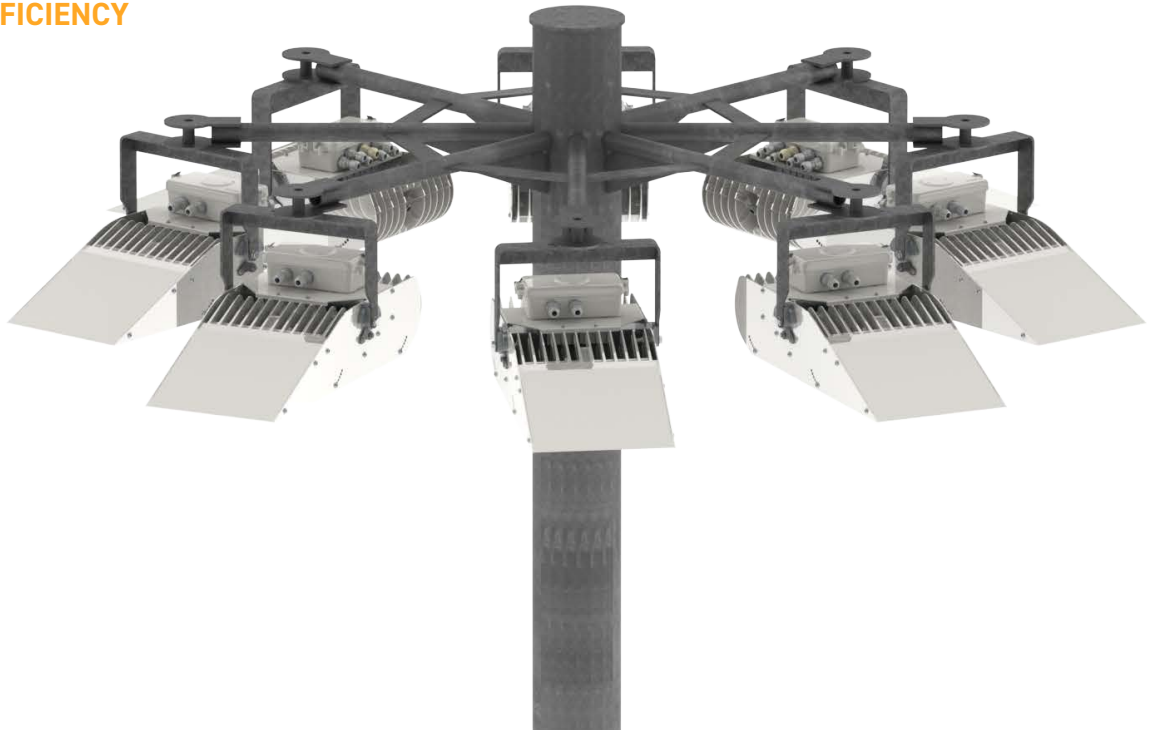
FL800D 4x4 can be used in an environment of up to 50°C whilst still having low lumen depreciation and long life.



LIGHT CONTROL

FL800D 4x4 meets the most demanding requirements for area lighting applications such as sports lighting, airports, ports and traffic junctions. Combined, the cowl and precision optics provide exceptional control minimising obtrusive light, glare and upward light without compromising the lighting performance.

ENERGY EFFICIENCY



The table below shows the energy saving for a typical Airbus A380 aircraft stand (82x87m).

Light Source	Nominal Power	System Power	Number of Units	Total System Power	Energy Savings
SON-T	400W	449W*	8	3592W	-
FL8000D	150W	143W**	16	2288W	37%
FL8000D 4x4	159W	153W**	10	1530W	33/57%

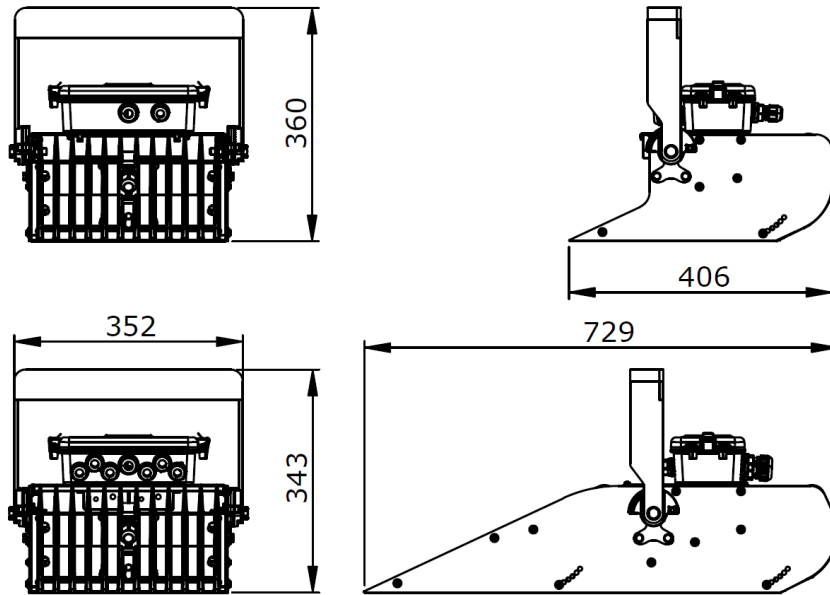
* With electromagnetic control gear

** Average power consumption over life with CLO for lumen depreciation MF = 0.90

FL800D 4x4 SPECIFICATION

Light Source	Samsung CSP LED
Number of LEDs	80 (per module)
Correlated Colour Temperature Colour	Warm - 3000K, Neutral - 4000K, Cool - 5700K
Rendering Index	> 70
Optical Cover	Flat glass
Max. Luminaire Efficacy at full power	136lm/W
Max. Luminaire Efficacy	156lm/W
Electrical Class	I
Lumen Maintenance output*	L80 @ 100,000 hours, Ta = 45°C · L90 @ 100,000 hours, Ta = 25°C
Driver Current	200mA ~ 900mA (in 50mA steps)
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	Natural aluminium (module) · Polyester powder coated RAL 9010 (side plates)
Ingress Protection	IP66
Module Elevation Options	40°, 45°, 50°, 55°, 60°, 65° (select at time of order)
Luminaire Tilt (on site)	-15° to +15° in 2.5° steps
Product Configuration	FL800D-1 FL800D-2
Max. Luminaire luminous flux Power	27,166 lm 54,332 lm
Consumption**	46 ~ 206W 92 ~ 412W
Wind Area (EPA)	0.056m ² 0.096m ²
Weight	8.7kg 14.0kg

* Lumen depreciation calculated up to 100,000 hours using IES TM-21 method.



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