



FL800D

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 LED FLOODLIGHTING SYSTEM

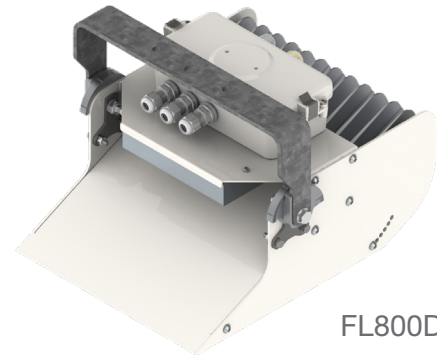
FL800D-1 or FL800D -2 can be arranged on a mast with full azimuth rotation and tilt function. These versions have drivers built in so are self contained.

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.

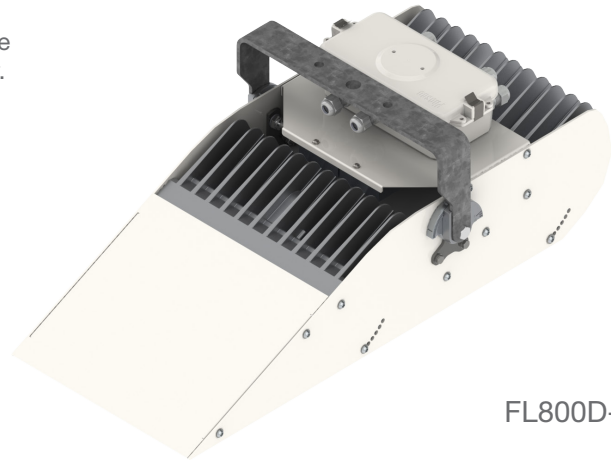
FL800D uses AeroFlow® Cooling System to provide exceptional thermal management. Maximised heat dissipation enables a compact luminaire design, which can be retrofitted onto existing masts.

Lumileds LUXEON® MX 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 offers an extremely competitive solution to replace traditional HID sources with performance, versatility and reliability.



FL800D-1



FL800D-2

Max. Luminous Flux	49760 lm
Max. Luminaire Efficacy	136 lm/W
Max. Luminaire Efficacy (Full Power)	115 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

- Lumileds LUXEON® MX LED
- Superior luminaire efficacy - 136lm / 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 overlighting, 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
- Dark sky friendly, minimal glare
- Consistent high performance in aggressive environments
- Fully compliant with WEEE and RoHS regulations

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

FLAT GLASS

- Vandal resistant, toughened
- High light transmission glass
- IP66 sealed
- Low glare
- Pollution friendly

LUXEON® MX LEDs

- Superior light output
- High flux density & efficacy
- Proven reliability
- Tight CCT control

WIRING COMPARTMENT

LED MODULE

OPTICAL OPTIONS

SPOT

OVAL

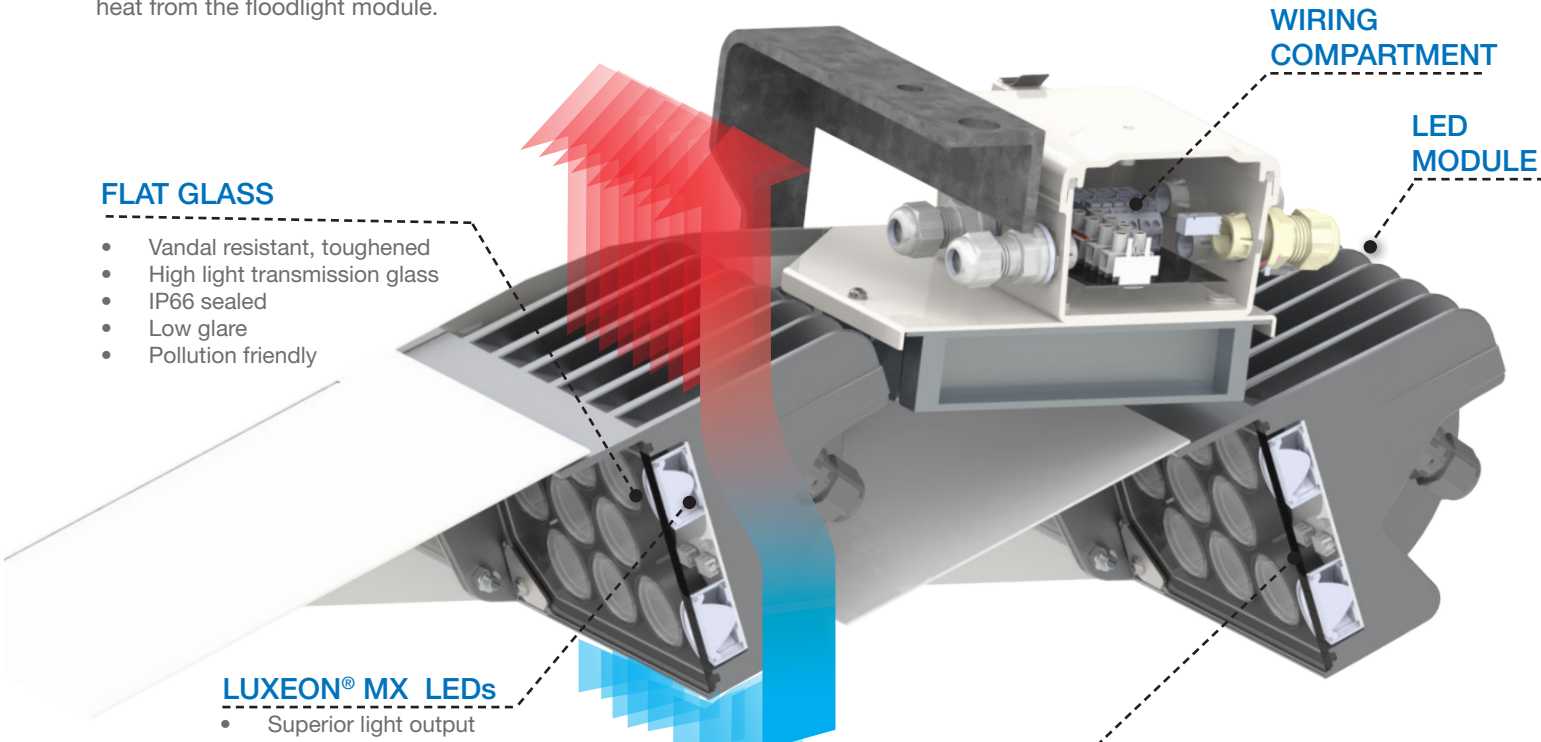
MEDIUM

WIDE

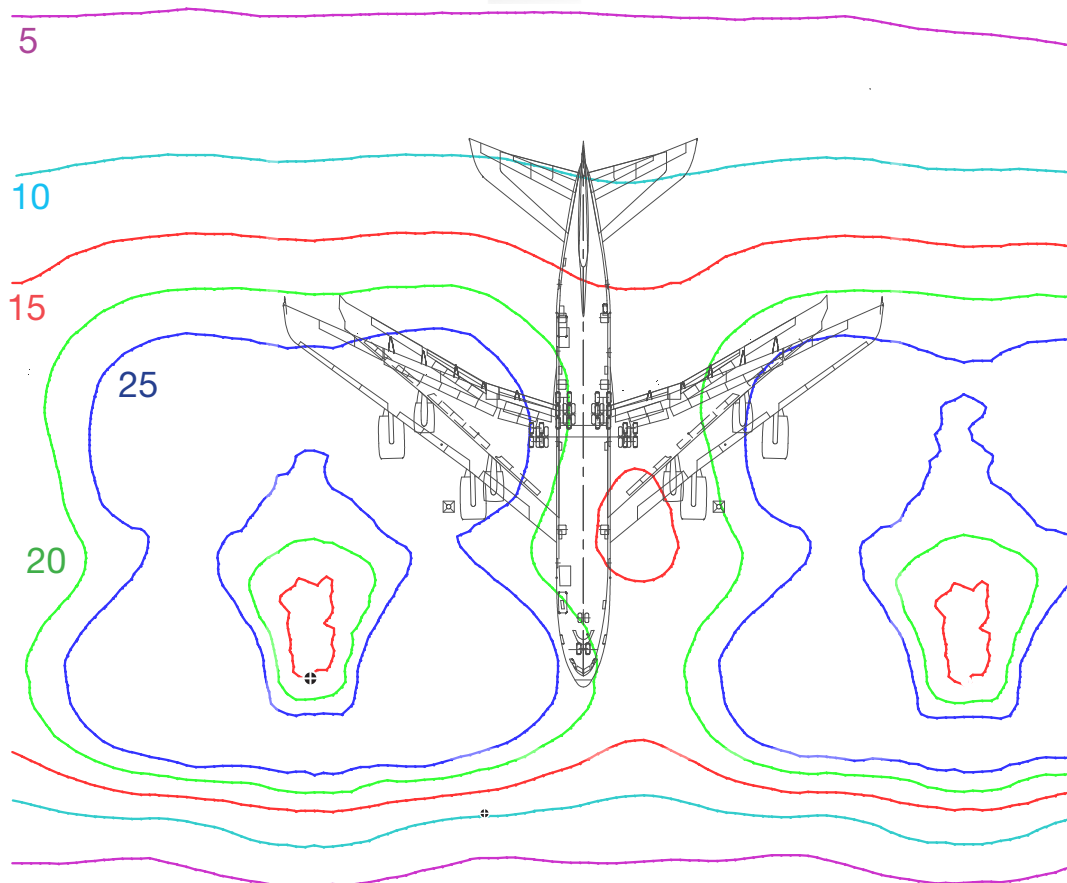
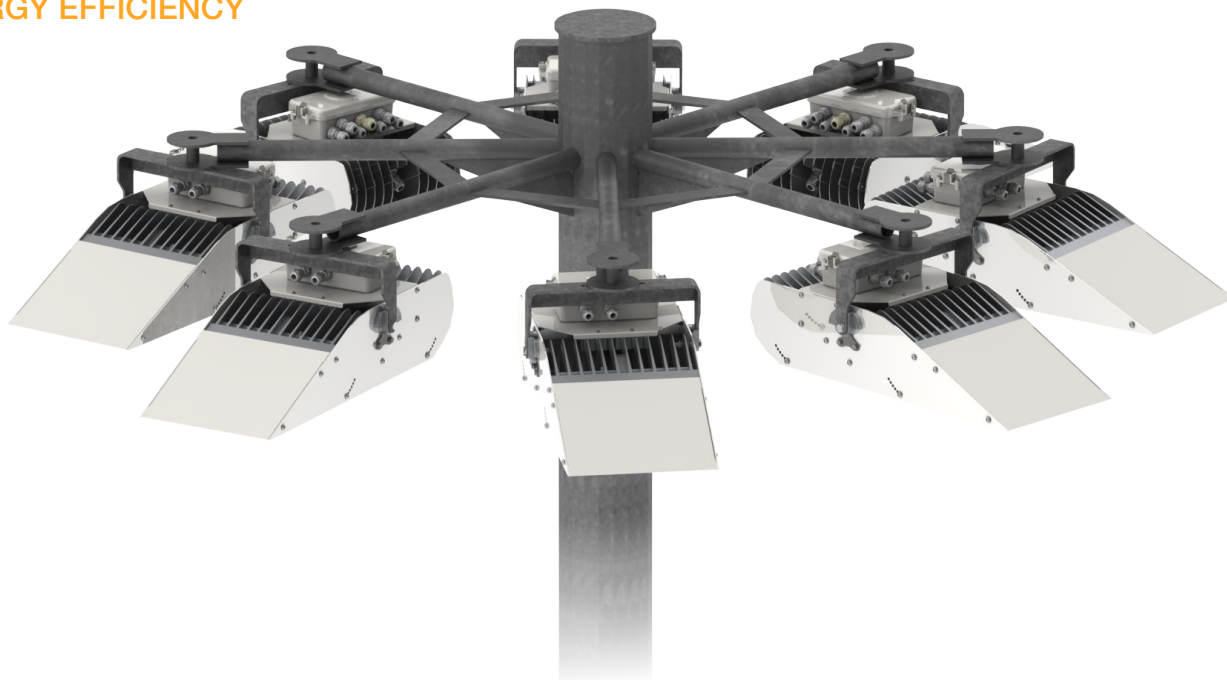
EXTRA WIDE

LIGHT CONTROL

FL800D 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



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

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

Light Source	Nominal Power	System Power	Number of Units	Total System Power	Energy Savings
SON-T	400W	449W*	8	3592W	-
FL800D	150W	143W**	16	2288W	37%

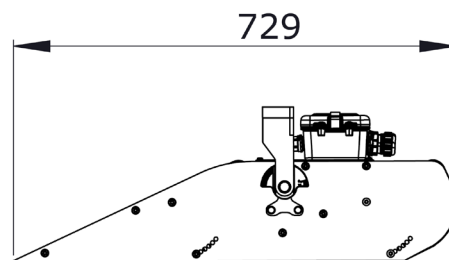
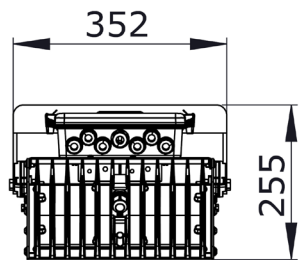
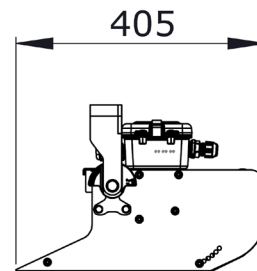
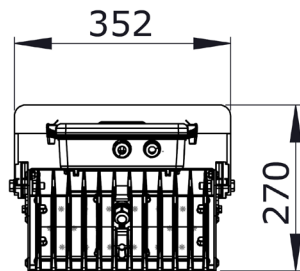
* With electromagnetic control gear

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

FL800D SPECIFICATION

Light Source	Lumileds LUXEON® MX LED
Number of LEDs	18 (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	115lm/W
Max. Luminaire Efficacy	136lm/W
Electrical Class	I
Lumen Maintenance output*	L80 @ 100,000 hours, Ta = 45°C • L90 @ 100,000 hours, Ta = 25°C
Driver Current	300mA ~ 1000mA (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	25,140 lm 49,760 lm
Power Consumption**	64 ~ 206W 129 ~ 411W
Wind Area (EPA)	0.055m ² 0.095m ²
Weight	8.2kg 13.5kg

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



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Crown
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