High Heat Environment Version

TITAN 420

Highly efficient LED floodlight designed specifically for high mast and large area lighting in high heat environments.

LED; control gear driving 96 LEDs at 1.5A with asymmetrical distribution. IP67, Class I protection with 15kA surge protection.

Body: recyclable, extruded aluminium and powdercoated galvanized steel. Optic enclosure: PMMA weather-proof lenses. This version is specifically developed to work in very high heat environments. The luminaire is equipped with aerospace grade PCBs and thermal pads as well as heat resistant cabling to ensure top performance and reliability in the most challenging conditions.

CE LED IP67

Technical data

Performance	
Nominal Flux:	48,100 lm
Net Flux:	46,500 lm
Power Absorption:	457W

Optoelectronics	
LED Type:	OSRAM Oslon square
Circuit Board:	Ceramic PCB 1.6mm
CRI:	70 ≥ R ≤ 80
Luminous Eff Loss:	< 1% per annum
Colour Temperature:	3,000K to 5,700K
Lumen Maintenance L90 B10	63,000h
Lumen Maintenance L70 B50	>100,000h

Optics	
Secondary Lens:	Refraction Array
System Treatment:	IP67, Anti-yellowing
Available optics:	FL / FH / SW / SM / ST
No of LEDs / module:	48
No of modules:	2

Luminaire Body	
Structure:	Galvanised Steel
Metal coating:	White Powder Painted
Heatsinks:	Extruded Aluminium
Bracket:	Central Bolt 20mm
Weight:	24kg
Installation height:	15m to 45m
Installation angle	Tilt Adjustment 360°
Dimensions:	602L x 561W x 245H mm
Windage Area:	0.049m²

Electronics	
Voltage input:	90-305 VAC 50-60Hz
Active Power F.C.	0.95
Mean time to Failure:	200,000 hrs
Dimming Function:	1-10V / DALI
Surge Protection:	15kA, IEEE C62.41.2 Location Category C High
Insulation Class:	IEC Class I
IP Rating:	IP 67
Short Circuit Protection:	Auto-recovery
Over Heat Protection:	Drops output current
Rel. Humidity Range:	0% - 94%
Operating Temp:	-40°C up to +75°C

Normative references

EN 60598-1: 2015 - Luminaires - Part 1: General requirements and tests

EN 60598-2-5: 2015 Luminaires - Part 2-5: Particular requirements - Floodlights

EN 62031: 2008 + A2:2015 - LED modules for general lighting - Safety specifications

EN 60598-2-3: 2003 + A1: 2011 - Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting

EN 62493: 2015 Assessment of lighting equipment related to human exposure to electromagnetic fields

EN 60529: 1992 + A2: 2013 - Degrees of protection provided by enclosures (IP Code)

IEC 60068-2-52: 1996 Environmental test - Part 2: Tests - Test Kb - Salt mist cyclic (sodium chloride solutions)

EN 55015: 2013 + A1: 2015 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

EN 61547: 2009 - Equipment for general lighting purposes - EMC immunity requirements

EN 61000-3-2: 2014 - Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)

EN 61000-3-3: 2013 - Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection

EN 61643-11: 2012 - Low-voltage surge protective devices. Part 11: Surge protective devices connected to low-voltage power systems - Requirements and test methods

IEEE C62.41.2-2002 - Recommended practice on characterization of surges in low-voltage AC power

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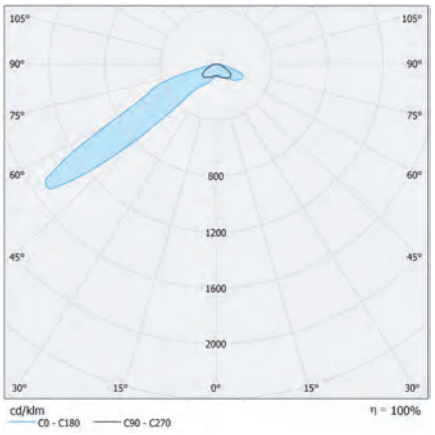
TITAN 420

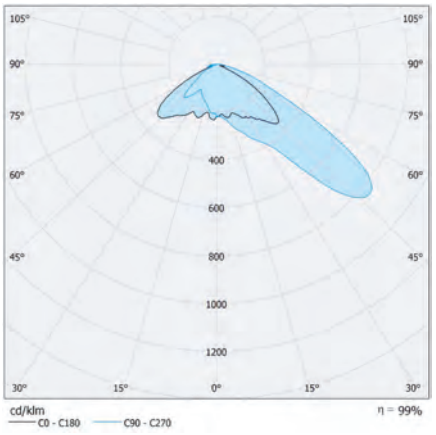
Dimensions

Photometrics

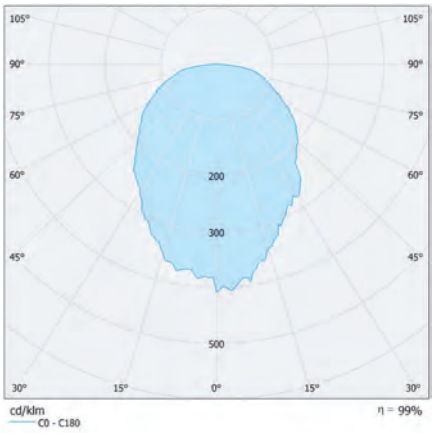
FH Flood light high asymmetry



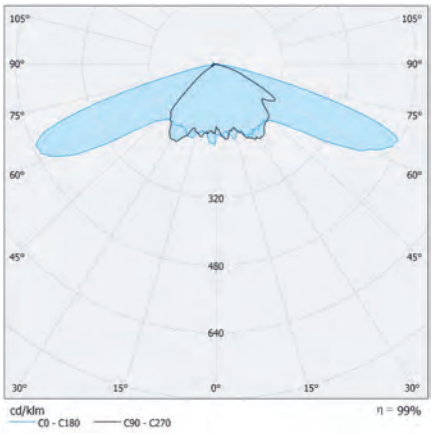
FL Flood light low asymmetry



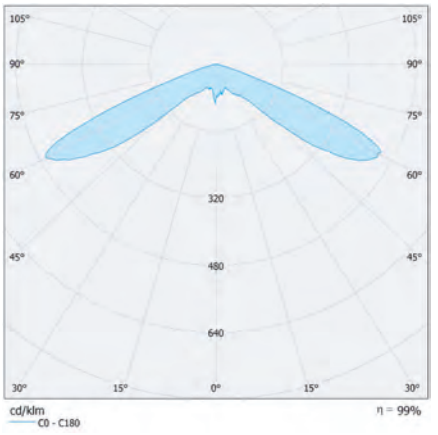
SM symmetrical medium



ST street optic



SW symmetrical wide



Ordering codes

Product Family	Power	Optic	CCT	Bracket	Control system	Body colour	Optional
T (Titan)	42	FL (Flood Low Angle)	A (5700K)	T (Flood Bracket)	10 (1-10V) - Default Option	S (Standard Black and White)	00
		FH (Flood High angle)	B (4000K)	P (Pole Bracket 60-76)	TL (Wireless Control Node)	H (High Heat Environment)	
		SW (Symmetrical Wide)	C (3000K)		DA (DALI)		
		SM (Symmetrical Medium)					
		ST (Street)					

Example: T42FHBPTLH00

Note: Specifications are subject to change without notice

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