

# MODUS 450

Highly efficient LED floodlight designed specifically for sport and large area lighting.  
Integrated control gear driving 128 LEDs at 1.05A with multiple photometric distributions.  
IP66, IEC Class I with 10 kV Surge Protection.  
Body: fully recyclable, stainless steel and aluminium.  
Optic Enclosure: proprietary PC Weather-proof lens matrix. Fully reversible mounting bracket.



CE LED IP66 ⚡

## Technical data

Performance	
Luminaire Output	Up to 65.000lm
Power Absorption	475W
Lumen Maintenance [L90 B10]	90.700h
Lumen Maintenance [L70 B50]	>150.000h

Optoelectronics	
CRI	70 - 80 - 90
Colour Temperature	<ul style="list-style-type: none"><li>• 3000K Warm White</li><li>• 4000K Neutral White</li><li>• 5000K Pure White</li><li>• 5700K Cool White</li></ul>
Secondary Optics	Weather proof, Anti-yellowing PC refraction matrix
No of LEDs	128

Luminaire Body	
Chassis and Bracket	Stainless Steel
Metal Finish	Powder Coating
Heatsinks	Anodized Extruded Aluminium (Copper Content <0.1%)
Bracket	Reversible bracket, M20 Fixing Bolt
Weight	13.5 kg
Dimensions (L-W-H)	434-202-221mm
Protection Level	IP66
Impact Resistance	IK09

Electronics	
Voltage input	90-305 VAC 50-60Hz
Active Power F.C.	0.98
Surge Protection	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547

Insulation class	IEC Class I
Short Circuit Protection	Constant current limiting, recovers automatically after fault condition is removed
Over Heat Protection	Shut down output voltage, re-power on to recovery

Operation Conditions	
Working temperature	-40°C / +55°C
Humidity Range	0% - 94%

## Normative reference

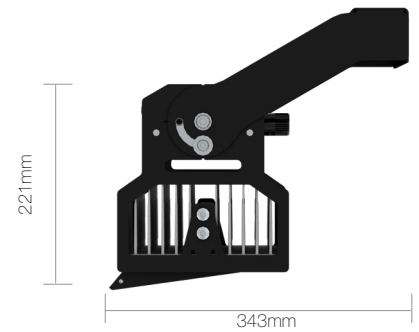
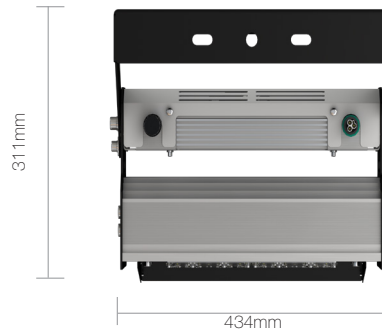
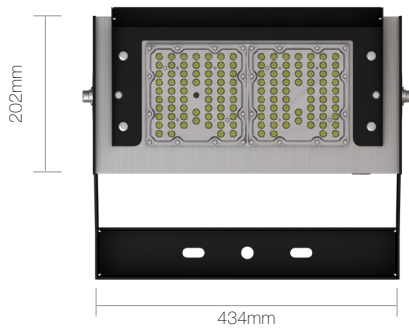
EN 60598-1: 2015 - Luminaires - Part 1: General requirements and tests  
EN 60598-2-5: 2015 Luminaires - Part 2-5: Particular requirements - Floodlights  
EN 62031: 2008 + A2:2015 - LED modules for general lighting - Safety specifications  
EN 60598-2-3: 2003 + A1: 2011 - Luminaires - Part 2-3: Particular 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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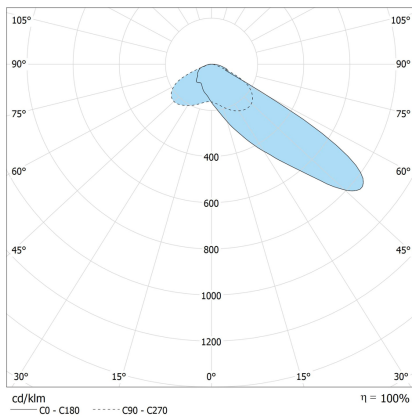
## Dimensions



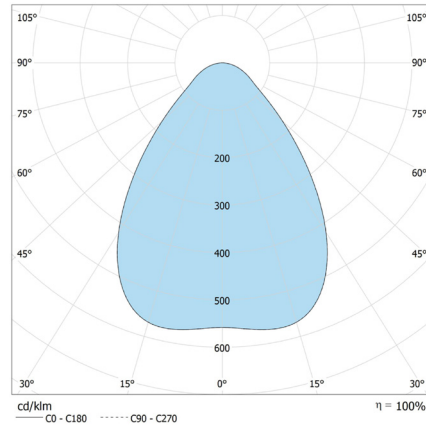
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## Photometrics

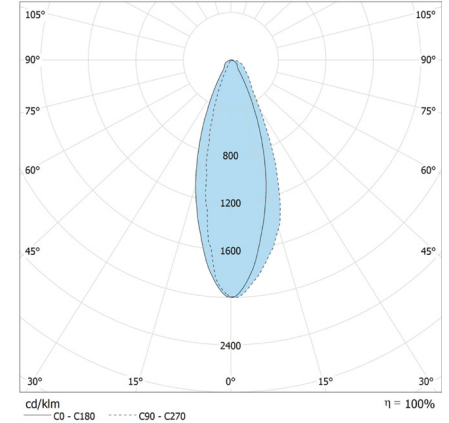
### FS



### WR



### MS



## Ordering codes

Product Family	Power	Optic	CCT	CRI	Voltage Input	Control System	Body Material	Bracket	Optional	Visor
M (Modus)	04 (450)	FS	A (5000k)	70	EU (90-305 VAC)	10 (0-10v)	T (AISI 3CR12 Stainless Steel)	C (Angled Bracket)	00	Fx (Visor for F Optics)
		MS	B (4000k)	80		DA (DALI)	M (AISI 316 Stainless Steel)			00 (No Visor)
		WR	C (3000k)	90						
			D (5700k)							

Example: M04FSA70EUDATC00Fx



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