

THORN

LIGHTING



AREAFLOOD PRO

A general purpose LED area floodlight
with superior optical performance

New AreaFlood Pro with superior optical performance

New from Thorn, AreaFlood Pro is a general purpose outdoor/indoor area and sports floodlight.

- Superior optical performance and control with minimal spill light and Ocd at 90° for the comfort of users and neighbouring residents
- Efficient LEDs (minimum 117lm/W and up to 140lm/W) can reduce energy consumption by more than 50%
- Maintenance-free 100 000-hour lifetime (L90B10 at Ta 25°C) for both the LED and drivers
- Fantastic lumens per size ratio with a choice of three sizes and multiple optics from 3400lm to 37 100lm
- Compact, lightweight design for ease of installation/retrofit into any existing column and reduced structural costs





Car parks

Regardless of their size, car parks demand highly flexible optics and installation as well as the need for energy savings over long operating hours. AreaFlood Pro offers a variety of optics, installation options and efficient LEDs to place the right level of light where needed.

Logistics areas

Loading zones and other logistical areas have high lighting demands to ensure all activities have the correct levels of light for the safety of those working in the space. Thanks to its range of sizes, installation options and optics, AreaFlood Pro can accommodate a wide range of mounting heights and lighting levels.

Sports halls

In multi-use sports halls there is often one sport which has more lighting demands than others. In addition, the structural design of the building will place restrictions both in luminaire positioning and weight. AreaFlood Pro is able to meet all these requirements with its optimised lumen package per size, specific optics, lighting controls and installation and maintenance flexibility.

Tennis courts

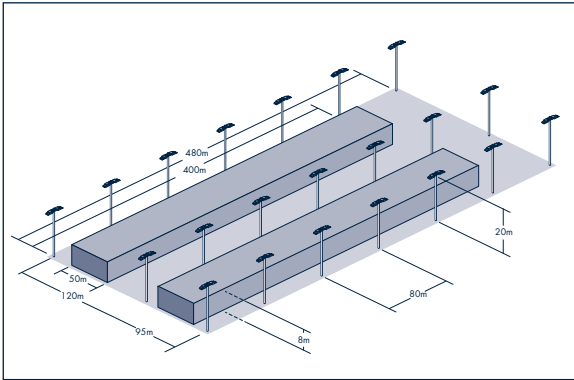
Regardless of whether the court is outdoor or indoor, tennis court lighting demands good visibility for players and spectators, as well as guaranteeing that the ball is always clearly visible. AreaFlood Pro's optics have been specifically developed to meet these requirements by taking into consideration optimum illumination levels, distribution of light across the surface and glare minimisation.

Swimming pools

The aim of swimming pool lighting is to ensure that swimming can be undertaken both safely and skillfully, and that spectators can see the action clearly and comfortably. Surface reflectance and penetration of light into the water varies with the angle of incidence, which impacts on the choice and aiming position of the luminaire. AreaFlood Pro and its specific optics are able to answer these highly demanding requirements.

Optimise your lighting

With its flexible choice of sizes and optics, AreaFlood Pro offers optimum lighting across a wide range of applications.

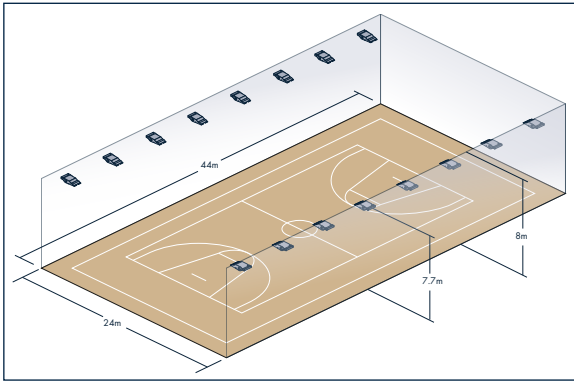


Logistic area

Dimensions: 400 x 175m

Description: 21 x Masts with 20m installation height

EN 12464-2	Product	Specs	Qty	Total Power of Installation	Eav lux	Emin/ Eav	Maintenance Factor
Loading Area Short-term handling of large units	AreaFlood Pro Medium 72L70	18 933lm 154W A6 optic	138	21 252W	20	0.32	0.9
Loading Area Short-term handling of large units	AreaFlood Pro Large 144L70	36 183lm 308W EWR optic	184	56 672W	50	0.44	0.9



Multi purpose sports hall

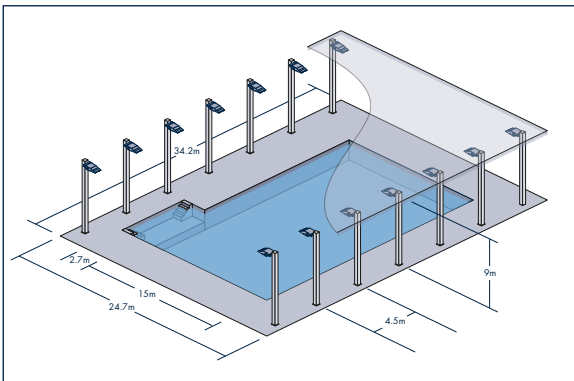
Dimensions: 44 x 24m

Basketball: Playing Area 28x15m (Calculation Grid 13x7 points)

Handball: Playing Area 40x20m (Calculation Grid 15x7 points)

Description: 7.7m installation height

Class EN 12193	Product	Specs	Qty	Total Power of Installation	Eav lux	Emin/ Eav	Maintenance Factor
III	AreaFlood Pro Small 24L70	6318lm 52W A6 optic	14	728W	78	0.55	0.9
II	AreaFlood Pro Medium 72L70	18 933lm 154W A6 optic	14	2156W	225	0.76	0.9
I	AreaFlood Pro Large 144L70	37 145lm 308W A6 optic	16	4928W	510	0.75	0.9



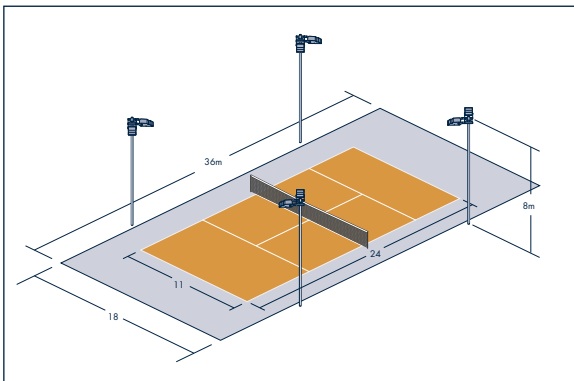
Swimming pool

Dimensions: 25 x 15m

Calculation grid: 13 x 7

Description: 9m installation height

Class EN 12193	Product	Specs	Qty	Total Power of Installation	Eav lux	Emin/ Eav	Maintenance Factor
III	AreaFlood Pro Medium 72L50	14 312lm 109W A5 optic	14	1526W	208	0.75	0.9
II	AreaFlood Pro Large 144L35	20 871lm 151W A5 optic	14	2114W	308	0.75	0.9
I	AreaFlood Pro Large 144L70	37 145lm 308W A5 optic	14	4312W	547	0.75	0.9



Single tennis court

Dimensions: 24 x 11m (Principal Playing Area) - 36 x 18m (Total Playing Area)

Calculation grid: 15 x 7

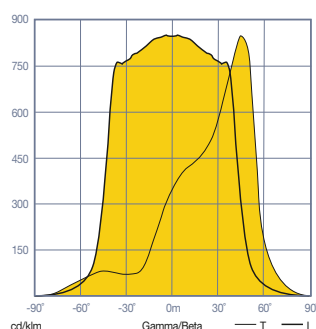
Description: 4 Masts of 8m height

Class EN 12193	Product	Specs	Qty	Total Power of Installation	Eav lux	Emin/ Eav	Maintenance Factor
III	AreaFlood Pro Large 120L70	31 286lm 258W A4/A5 optic	8	2064W	227	0.6	0.9
II	AreaFlood Pro Large 120L70	31 286lm 258W A4/A5 optic	12	3096W	301	0.71	0.9
I	AreaFlood Pro Large 120L70	31 286lm 258W A4/A5 optic	20	5160W	503	0.7	0.9

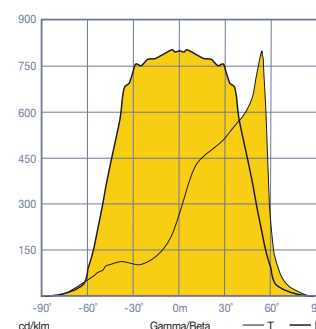
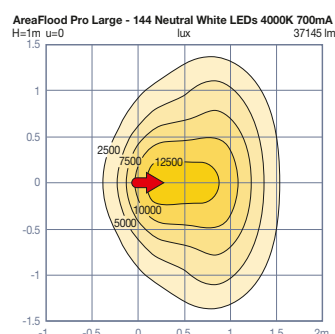
Optical choice

Suitable for a wide range of applications, AreaFlood Pro offers a choice of five optics for efficient and effective lighting. Precise light control and optimum light distribution help maximise comfort and energy savings.

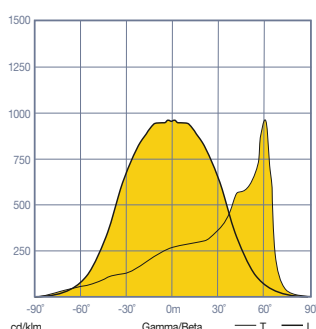
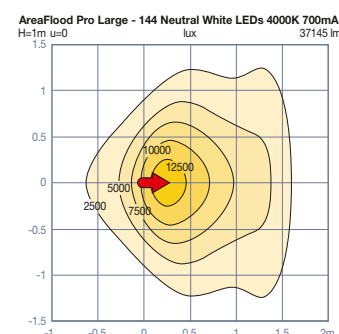
Asymmetrical optics



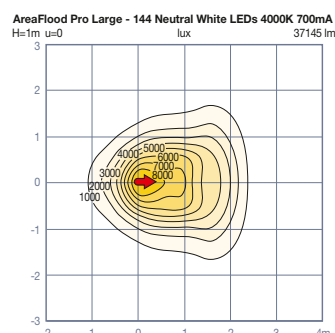
A4: 40° Asymmetrical Optic



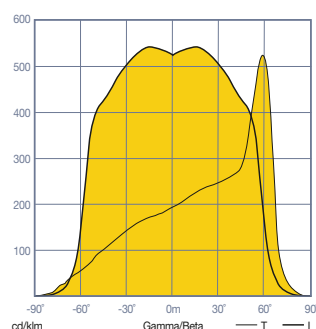
A5: 50° Asymmetrical Optic



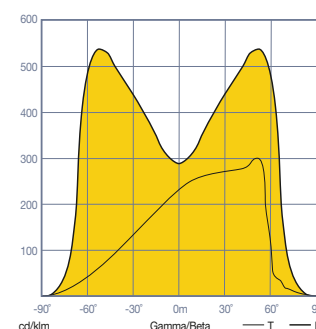
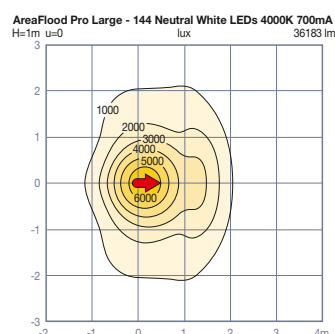
A6: 60° Asymmetrical Optic



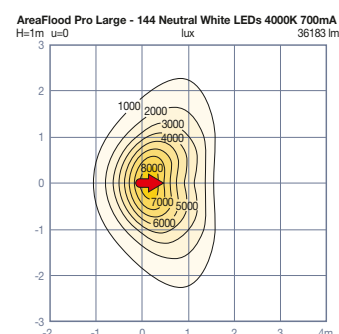
Road optics



EWR: Extra Wide Road Optic



WR: Wide Road Optic



Lighting Controls

Controlling light is easy with a choice of stand alone, local and remote controls.

Rising energy costs combined with reducing budgets and the need to be more resourceful with energy consumption means lighting control has an important role to play.

For maximum flexibility, AreaFlood Pro integrates all types of controls from the lighting point to the network level.

Zumtobel Group Services (ZGS) offers a wide range of consultancy services, as well as installation and maintenance of lighting management systems.

Benefits of lighting control

- Reduced energy consumption
- Longer luminaire life
- Optimised maintenance cycles
- Reduced site visits
- Lower costs

BPS: Bi-Power Switch
BPX-Y%: Bi-Power Customised
BPL: Bi-Power Line
LRT: Light Reduction Twin-Phases.

Stand-alone controls

BPS / BPX-Y% / Minicell / Motion detection

Local controls

BPL / LRT / DALI

Remote Controls

Powerline / Radio Frequency / Nema



Stand-alone controls

Time switches, photocells and motion detection.

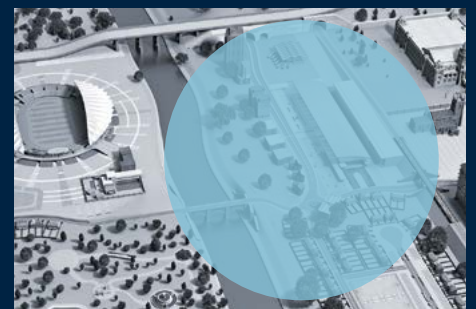
These simple controls offer reliable savings with little effort. AreaFlood Pro is fitted with Thorn's Bi-Power Switch (BPS) as standard to give the option of dimming to 50% for eight hours at night. Bi-Power does not require external control wiring and its settings can be easily customised or deactivated (BPX-Y%). Optional photocells (Minicell) can save as much as 50% by reacting to available daylight, while motion sensors offer the possibility of even higher savings.



Local controls

Cabinet control for a group of luminaires via control line.

Using typically a local control cabinet, local controls via Bi-Power Line Switch dim (BPL and LRT) or DALI allow the dimming of a group of lighting points according to the detection of people and vehicles. Without the need for extensive commissioning, this approach offers good energy savings while still providing all the required light on demand.



Remote controls

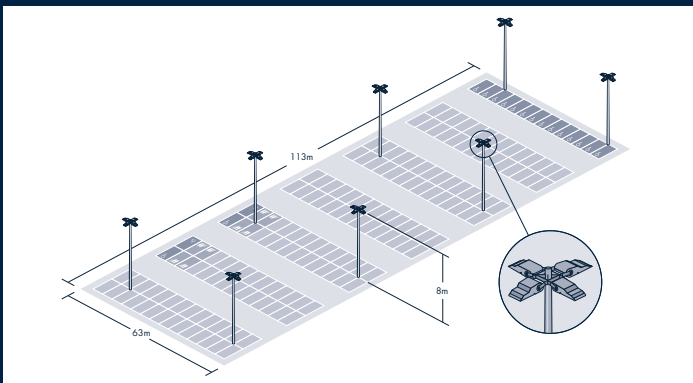
Remote central management systems for individual control and monitoring via power line or radio frequency.

Offering maximum flexibility and convenience, remote controls ensure the provision of the right light at the right time without the need to visit lighting points or scout for failures. Control can be on an individual or group basis with central switching and/or dimming influencing energy use. Performance data can also be collected.

Energy saving opportunities

Reduce energy consumption by more than 50% with AreaFlood Pro.

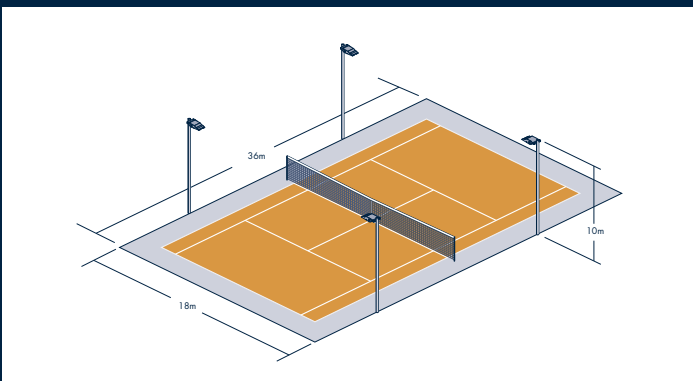
- Efficient LEDs (up to 140Lm/W) can reduce energy consumption by more than 50%
- Choice of several lumen outputs from 3400lm to 37100lm ensure just the right amount of light for the application
- Wide range of control options to provide light as and when needed
- Choice of five optics to optimise light distribution and minimise waste light



Heavy traffic car park

A large DIY (Do It Yourself) store car park, with specific requirements of 50 lux maintained illuminance, due to CCTV, security of visitors and for heavy traffic and specific events. The refurbishment programme aims at replacing old AreaFlood HID 250W with the new AreaFlood Pro. Dimensions of area: 113x63m; 841 calculation points; 8 columns (8m high); 32 floodlights installed.

	Required	Old AreaFlood HID 250W	AreaFlood Pro EWR 72 LED	AreaFlood Pro EWR 96 LED
Power consumption		279W	154W	205W
Luminaire lumens output		18 900lm	18 335lm	24 682lm
Number of floodlights		32	32	24
Number of columns		8	8	8
Mechanical tilting angle		45°	0°	0°
Maintained average illuminance	50lux	52lux	56lux	56lux
Initial average illuminance	62lux	65lux	70lux	70lux
Uniformity (min/ave)	0.25	0.33	0.284	0.253
Energy savings			44%	44%
Additional savings (dimming to the required Eh)			6%	6%



Single Tennis Court Class III (Training)

Single Tennis Court Class III with specific requirements of 200 lux maintained illuminance used for training. The refurbishment programme aims at replacing old AreaFlood HID 400W with the new AreaFlood Pro. Dimensions of area: 36x18m, 4 columns (10m high); 12 floodlights installed.

	Required	Old AreaFlood HID 400W	New AreaFlood Pro 120LEDs/A5 + A4
Power consumption	-	433W	258W
Luminaire lumens output	-	26 700lm	31 286lm
Number of floodlights		12	8
Number of columns		4	4
Maintained average illuminance	200lux	235lux	203lux
Uniformity (min/ave)	0,6	0,62	0,6
Energy savings			51%

Installation and mounting

Increase speed and efficiency.

Designed with contractor speed and efficiency in mind, AreaFlood Pro is very quick and easy to install.

Simply open the luminaire to access the gear housing before placing and connecting the power cable. Once the luminaire is screwed back together, simply install and aim as desired.

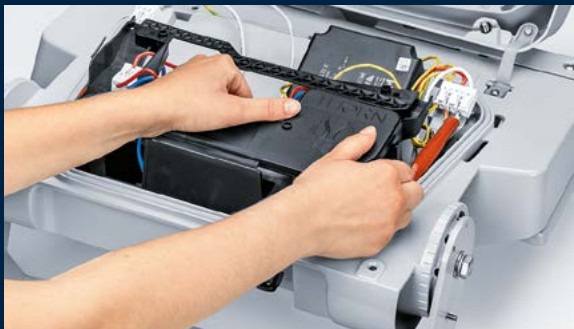
Install in just 6 simple steps



Step 1: Untighten the four screws positioned at the back of the luminaire.



Step 2: Open the back cover to access the gear housing.



Step 3: Open the gear housing cover to access the connectors for main supply and controls.



Step 4: Place the cable into the luminaire through the cable gland and plug into the connector.



Step 5: Close the cover and tighten the screws in the back of the luminaire.



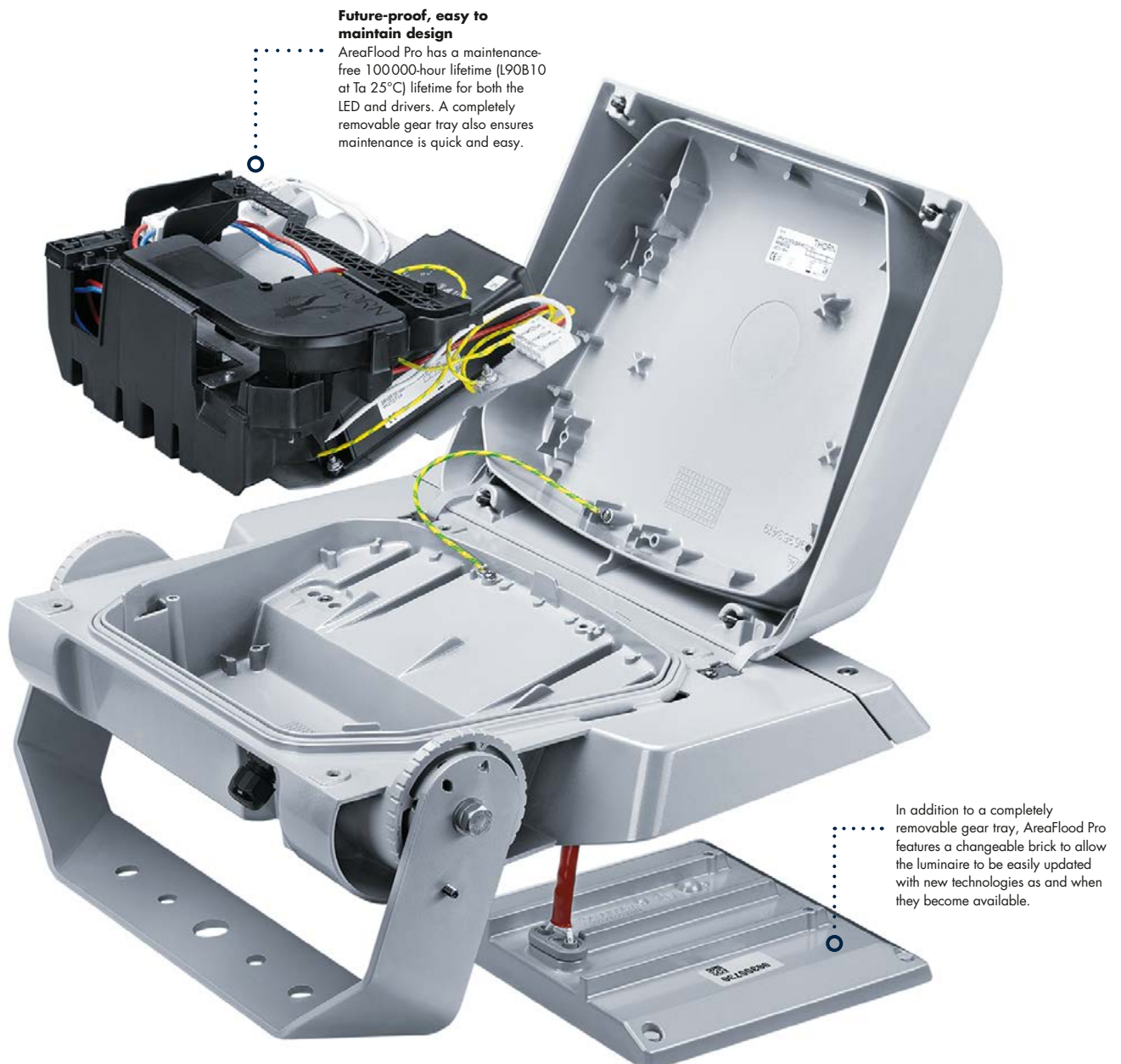
Step 6: After installation in a mast/wall/surface, aim and tilt the luminaire accordingly.

Lightweight and easy to integrate

AreaFlood Pro is ideal for retrofits.

AreaFlood Pro is compact and lightweight to easily replace existing HID solutions and retrofit into any existing column while minimising structural costs

The lightweight design also makes AreaFlood Pro easy to carry and install for contractors.



Product specification

A general purpose LED area floodlight with superior optical performance.

Application

- Building surrounds
- Loading areas
- Car parks
- Sports applications at club level:
multipurpose sports hall, indoor gymnasium,
swimming pool, tennis court (single and double)

Standards

IK08 IP66 $T_a -20$
 $+35$    

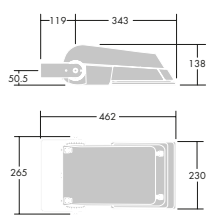
Specification

To specify state: Asymmetrical LED floodlight for general purpose area lighting and sports lighting. 3 sizes available, lumen packages from 3400lm to 37 100lm, with a range of 5 light distributions. High performance floodlight with excellent control of light (Ocd at 90°), high mechanical resistance (IP66, IK08) and full controls compatibility (dimming, lighting controls). Available in electrical class I and class II.

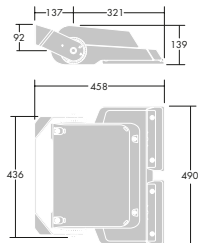
As Thorn AreaFlood Pro.

	Small		Medium		Large		
Number of LED	24	36	48	72	96	120	144
Luminaire power consumption (W)*	28 - 52	39 - 77	51 - 104	76 - 154	101 - 205	125 - 258	151 - 308
Luminaire lumen output (lm)*	3400 - 6300	5100 - 9400	6800 - 12700	10200 - 18900	13600 - 25200	17000 - 31200	20300 - 37100
Luminaire efficacy (lm/W)*	more than 120	more than 120	more than 120	more than 119	more than 120	more than 118	more than 117
Light distributions	A4 / A5 / A6 / EWR / WR						
Colour Temperature	4000K (3000K and 5700K on request)						
CRI	70 for 4000K (other CRI on request)						
Operating temperature	-25°...+35°		-25°...+35°		-25°...+35° (for 96LED - 120LED up to 500mA - 144LED up to 500mA) -25°...+25° (120LED 700mA - 144LED 700mA)		
Housing	Die cast aluminium						
Optical cover	Tempered Flat glass 4mm						
Stirrup	Galvanised Steel						
Shock resitance	IK08						
Optical compartment	IP66						
Control gear	IP66						
Electrical Class	CL1 & CL2						
Dimension	462x265x138mm		458x490x139mm		658x490x139mm		
Weight	6,5kg		14kg		18,5kg		
Colour finish	Light grey close to RAL9006 (any other upon request)						
Mounting	Fixation of the production using a stirrup with different inclination angle and fixation points (Option: Accessory for Post-top Ø60mm/76mm)						
Stand alone controls	BPS (Bi-Power switch with 8h-50% output reduction, dimming activated) - BPx-xx (Bi-Power (xh-x% output reduction) - Minicell						
Local controls	BPL (Bi-Power Line) - LRT (Light Reduction Twin-Phases) - DALI						
	Nema socket - RF - PL						
Surge protection	6KV CM/DM						
	10kV external SPD upon request						
Other accessories, options	Visors, Louvres, Fuses, Pre-wired						

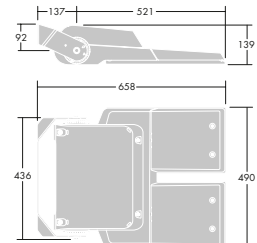
* all the values for Lumen Output, Power and Efficacy are linked to the different driving current and optics available



AreaFlood Pro S



AreaFlood Pro M



AreaFlood Pro L



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**5 YEAR
GUARANTEE**

As a globally leading luminaire manufacturer, Thorn Lighting provides a five-year warranty for its complete product range within all European Countries.
thornlighting.com/guarantee

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02/2020 (INT)

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