

# THORN

LIGHTING



# AREA FLOOD PRO

A general purpose LED area floodlight  
with superior optical performance

# A FLOODLIGHT WITH SUPERIOR OPTICAL PERFORMANCE

Areaflood Pro provides exceptional optical performance and control with minimal spill light and 0 cd at 90°. This ensures maximum comfort of users and neighbouring residents. The very efficient LEDs ranging from 107 lm/W to up to 169 lm/W can reduce energy consumption by more than 50%. With a lifetime of 100 000-hours for both the LED and drivers Areaflood Pro is a reliable and low-maintenance solution.

You have a choice of three sizes and multiple optics ranging from 3925 lm to 51 339 lm. The lightweight and compact design guarantee an easy installation and allow a quick replacement for existing columns and therefore reduce structural costs.



Recreational  
sport



Transportation &  
industrial areas



Swimming pools



Parking



# OPTIMISE YOUR LIGHTING

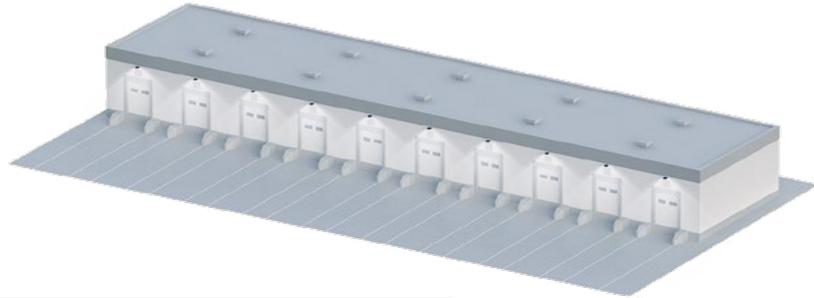
With its flexible choice of sizes and optics, Areaflood Pro offers optimum lighting across a wide range of applications.

## LOADING BAY

Mounting height: 8 m

Spacing: 9 m

Maintenance factor (MF): 0.9



EN 12464-2	Luminaire Type	Specs	Qty	Total Power of Installation	Em Maintained Illuminance	Uo Uniformity
Loading Area Short-term handling of large units	Areaflood Pro Medium 48L70	15 000 lm A6 optic 4000K	10	1020 W	50 lx	0.4

## INDOOR ARENA

Pitch dimensions: 20 x 40 m

Calculation grid: 15 x 7

Mounting height: 10 m

Maintenance factor (MF): 0.9

Glare rating (GR): < 50



EN 12193	Luminaire Type	Specs	Qty	Total Power of Installation	Em Maintained Illuminance	Uo Uniformity
Class I	Areaflood Pro Large 144L70	41 500 lm A6 optic 4000K	22	6534 W	802 lx	0.74
Class II	Areaflood Pro Large 144L70	41 500 lm A6 optic 4000 K	16	4752 W	540 lx	0.72
Class III	Areaflood Pro Large 144L70	41 500 lm A6 optic 4000 K	8	2376 W	267 lx	0.80

## SWIMMING POOL

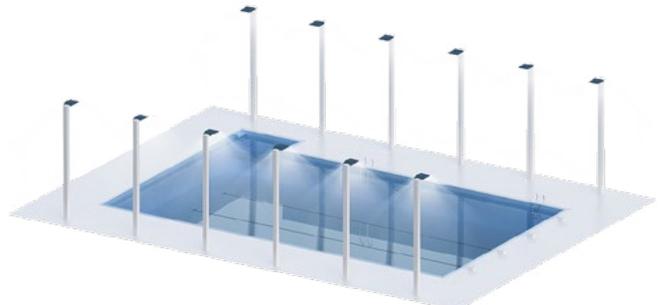
Pool dimensions: 50 x 25 m

Calculation grid: 17 x 9

Mounting height: 10 m

Maintenance factor (MF): 0.9

Glare rating (GR): < 50



EN 12193	Luminaire Type	Specs	Qty	Total Power of Installation	Em Maintained Illuminance	Uo Uniformity
Class I	Areaflood Pro Large 144L70	41 500 lm A6 optic 4000K	26	7722 W	547 lx	0.74
Class II	Areaflood Pro Large 144L70	41 500 lm A6 optic 4000K	16	4752 W	339 lx	0.75
Class III	Areaflood Pro Large 144L70	41 500 lm A6 optic 4000K	12	3564 W	256 lx	0.68

## SINGLE TENNIS COURT

Field dimensions: 18 x 38 m

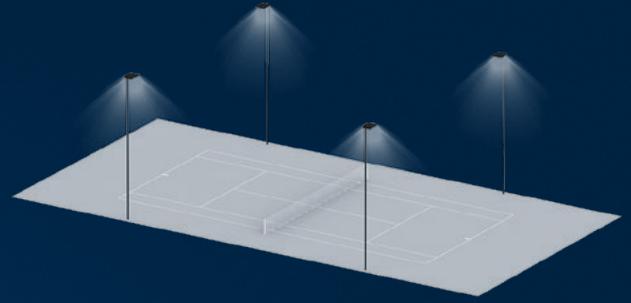
Calculation grid: 12 x 6

Mounting height: 4 masts of 10 m

Maintenance factor (MF): 0.9

Glare rating (GR): < 50

ULR: 0%

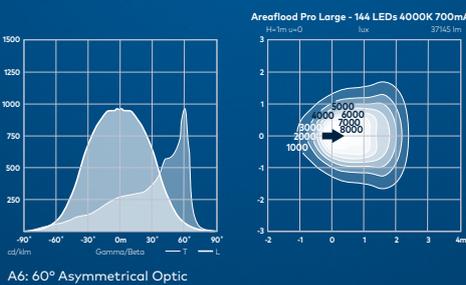
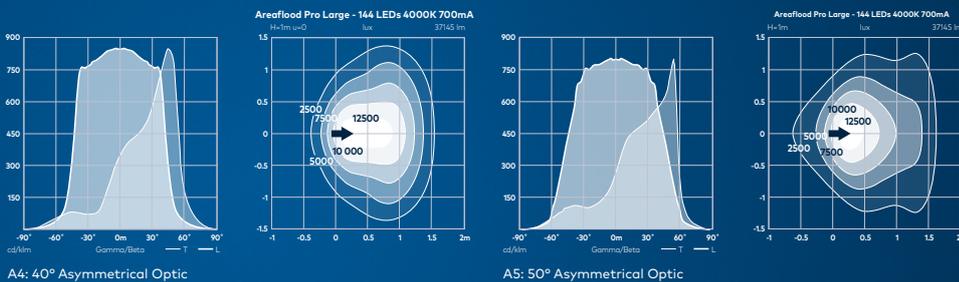


EN 12193	Luminaire Type	Specs	Qty	Total Power of Installation	Em Maintained Illuminance	Uo Uniformity
Class I	Areaflood Pro Large 144L70	41500 lm A6 optic 4000K	16	5940 W	531 lx	0.72
Class II	Areaflood Pro Large 144L70	41500 lm A6 optic 4000K	12	3564 W	315 lx	0.73
Class III	Areaflood Pro Large 144L70	41500 lm A6 optic 4000K	8	2376 W	242 lx	0.70

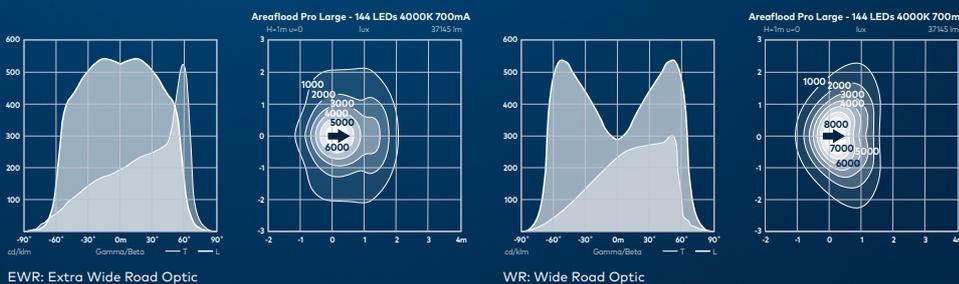
# OPTICAL CHOICE

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

## ASYMMETRICAL OPTICS



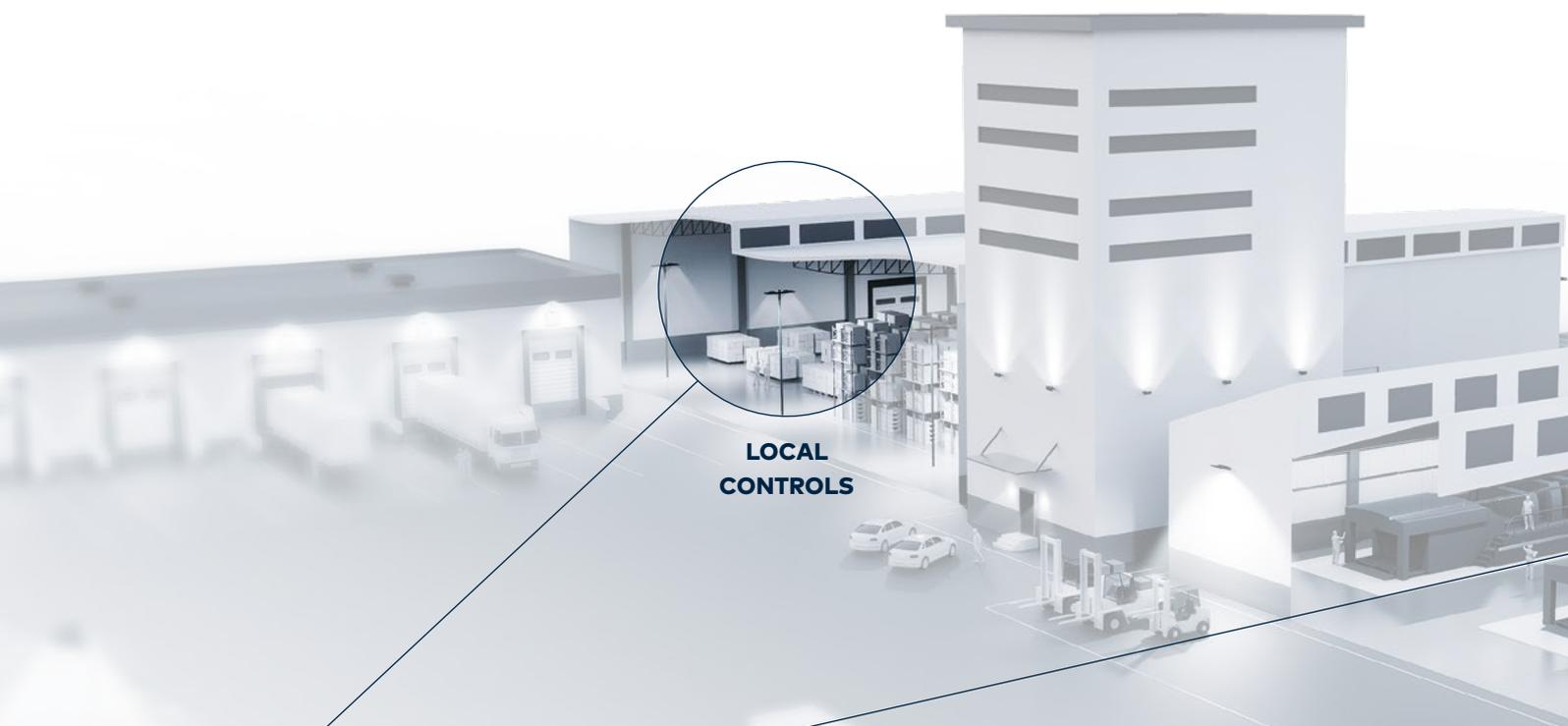
## ROAD OPTICS



# CONTROL SOLUTIONS

## ADJUSTING LIGHT TO SUIT YOUR NEEDS

Thorn offers a wide range of lighting control solutions. These are generally selected depending on the scale and complexity of the lighting management task.



**LOCAL CONTROLS**

### **LOCAL CONTROLS**

Cabinet control for a group of luminaires via control line. Using typically a local control cabinet, local controls via Bi-Power Power Line (BPL), Light Reduction Twin-Phases (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, Zhaga or Nema-based. 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.

### **SINGLE LUMINAIRE 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.

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.

**Benefits of lighting control**

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

**Local controls**

BPL / LRT / DALI

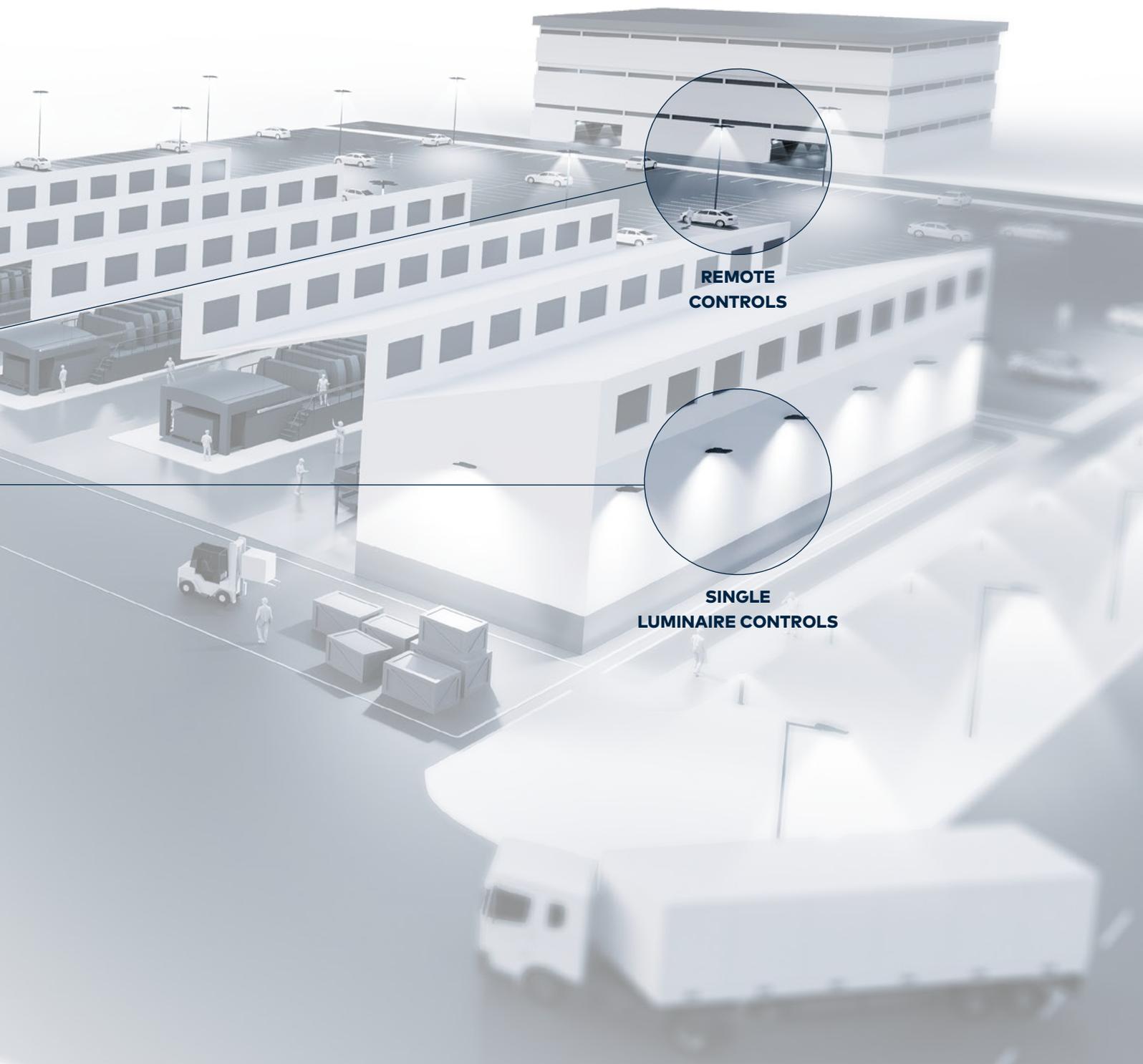
**Remote controls**

Power Line / Zhaga / Nema

**Single luminaire controls**

BPS / BPX-Y% / Minicell / Motion detection

BPS: Bi-Power Switch  
BPX-Y%: Bi-Power Customised  
(X: hours before and after midnight,  
Y%: dimming percentage)  
BPL: Bi-Power Power Line  
LRT: Light Reduction Twin-Phases



**REMOTE  
CONTROLS**

**SINGLE  
LUMINAIRE CONTROLS**

# ENERGY SAVING OPPORTUNITIES

## REDUCE ENERGY CONSUMPTION BY MORE THAN 50% WITH AREAFLLOOD PRO

- Efficient LEDs (up to 169 lm/W) can reduce energy consumption by more than 50%
- Choice of several lumen outputs from 3925 lm to 51 339 lm ensure just the right amount of light for the application
- Wide range of control options to provide light as and when needed
- Choice of seventeen 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 conventional Areaflood HID 250 W with the LED Areaflood Pro. Dimensions of area: 113 x 63 m; 841 calculation points; 8 columns (8 m high); 32 floodlights installed.

	Required	Conventional Areaflood HID 250 W	Areaflood Pro EWR 72 LEDs	Areaflood Pro EWR 96 LEDs
Power consumption	-	279 W	119 W	160 W
Luminaire lumens output	-	18 900 lm	18 335 lm	24 682 lm
Number of floodlights	-	32	32	24
Number of columns	-	8	8	8
Mechanical tilting angle	-	45°	0°	0°
Maintained average illuminance	50 lux	52 lux	56 lux	56 lux
Initial average illuminance	62 lux	65 lux	70 lux	70 lux
Uniformity (min/ave)	0.25	0.33	0.284	0.253
Energy savings			57%	57%
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 conventional Areaflood HID 400 W with the LED Areaflood Pro. Dimensions of area: 36 x 18 m; 4 columns (10 m high); 12 floodlights installed.

	Required	Conventional Areaflood HID 400 W	Areaflood Pro 120 LEDs / A5 + A4
Power consumption	-	433 W	208 W
Luminaire lumens output	-	26 700 lm	31 286 lm
Number of floodlights	-	12	8
Number of columns	-	4	4
Maintained average illuminance	200 lux	235 lux	203 lux
Uniformity (min / ave)	0.6	0.62	0.6
Energy savings			68%



# 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.



**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.

### **Future-proof, easy to maintain design**

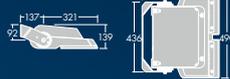
Areaflood Pro has a maintenance-free 100 000-hour lifetime (at Ta 25°C) lifetime for both the LED and drivers. A completely removable gear tray also ensures maintenance is quick and easy.



In addition to a completely removable gear tray, Areaflood Pro features a changeable brick to allow the luminaire to be easily updated with new technologies as and when they become available.

DISCOVER

# AREAFLOOD PRO



	SMALL		MEDIUM		LARGE		
*	24 LEDs	36 LEDs	48 LEDs	72 LEDs	96 LEDs	120 LEDs	144 LEDs
*	27 – 52 W	39 – 77 W	50 – 101 W	75 – 150 W	98 – 201 W	124 – 249 W	149 – 360 W
*	3925 – 7637 lm	5856 – 11263 lm	7850 – 15 275 lm	11735 – 22 672 lm	15 653 – 30 277 lm	19 502 – 37 451 lm	23 319 – 51 339 lm
	Up to 154 lm/W	Up to 160 lm/W	Up to 166 lm/W	Up to 166 lm/W	Up to 169 lm/W	Up to 167 lm/W	Up to 166 lm/W
	14 lighting distributions from R-PEC platform + 3 Area light distributions						
	Up to 100 000 h L90B10						
	3000K / 4000K / 5700K						
<b>CRI</b>	70 / 80 / 90 TLCI86 / 90 TLCI90						
**	-25°C to +50°C (with area light distributions)						
	Die cast aluminum, tempered flat glass 4 mm, galvanised steel						
	IK08						
	IP66						
	Resistant to sea side and swimming pool environment (CLASS 5 – very high)						
	Ball proof						
	CL1 and CL2						
	6,5 kg	14 kg		18,5 kg			
	Light grey close to RAL9006 (different RAL on request)						
	Fixation of the product using a stirrup with different inclination angle and fixation points (Option: Accessory for Post-top Ø 60 mm / 76 mm)						
	DALI dimmable, Bi-Power Power Line, Bi-Power Switch, Light Reduction Twin-Phases, Nema interface (minicell on request), Radio Frequency on Zhaga base						
	6 kV and 10 kV (external Surge Protection Device upon request)						
	Visors, louvres, fuses, pre-wired, DALI junction box, simple aiming device						

\* All the values for Lumen Output, Power and Efficacy are linked to the different driving current and optics available  
\*\* The temperature range depends on the number of LEDs and on the mA combination



# GET IN TOUCH

[www.thornlighting.com/AFLP](http://www.thornlighting.com/AFLP) [www.thornlighting.com/contacts](http://www.thornlighting.com/contacts)



**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](http://thornlighting.com/guarantee)

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**WE  
MAKE  
LIGHT  
WORK**