

Sports

Professional & Recreational



AAA-LUX®

TRIPLE A LIGHTING

SMART. FLEXIBLE. LED.



Mission

The beautiful village of Andenes, well within the Arctic Circle in the northern reaches of Norway, is a place where untamed nature shows its true beauty. Just off the coast, whales and orcas play under the tranquil Northern lights. Andenes symbolises the natural beauty we all want to protect. Fittingly, they local football club picked AAA-LUX to supply their LED pitch lighting.

We want to play our part in reducing the ecological footprint of modern society. Together we can make a real impact and that's why we've made our technology as accessible as possible. Making use of a clever design and keeping the installation process as simple as can be. We also strive to have existing masts reused and recommend using smart control systems with our high-output luminaires, using as few fixtures as possible.

Besides, high-quality light makes people happy, and neighbours love our measures against light pollution. On top of that, the general public is seeing more and more of us, because we specialise in professional sports, stadiums and TV broadcasts. You've probably seen us more often than you think.

This brochure will take you on a tour of our products, projects, and specialties, as well as giving tips and advice on purchasing and using LED lighting for sports facilities.

Together, we can make a sustainable impact.

Erik Swennen Founder







AAA-LUX has supplied its systems to clubs in major international competitions since 2010, ensuring that stadiums meet all the lighting requirements set by FIFA, UEFA, IAAF, Davis Cup, FIH, World Rugby and other international bodies. The crowd gets a clear picture of what is going on on the pitch and the cameras record it all in (HD)TV quality.

Get the most out of your stadium:

- · Make sure your stadium meets the lighting requirements for TV broadcasts
- · Increase visibility for players and crowd with maximum uniformity
- · Boost entertainment value with dynamic show lighting
- · Cut your energy consumption and lower your carbon footprint
- · Low investment thanks to high light output per fixture

Sports are entertainment

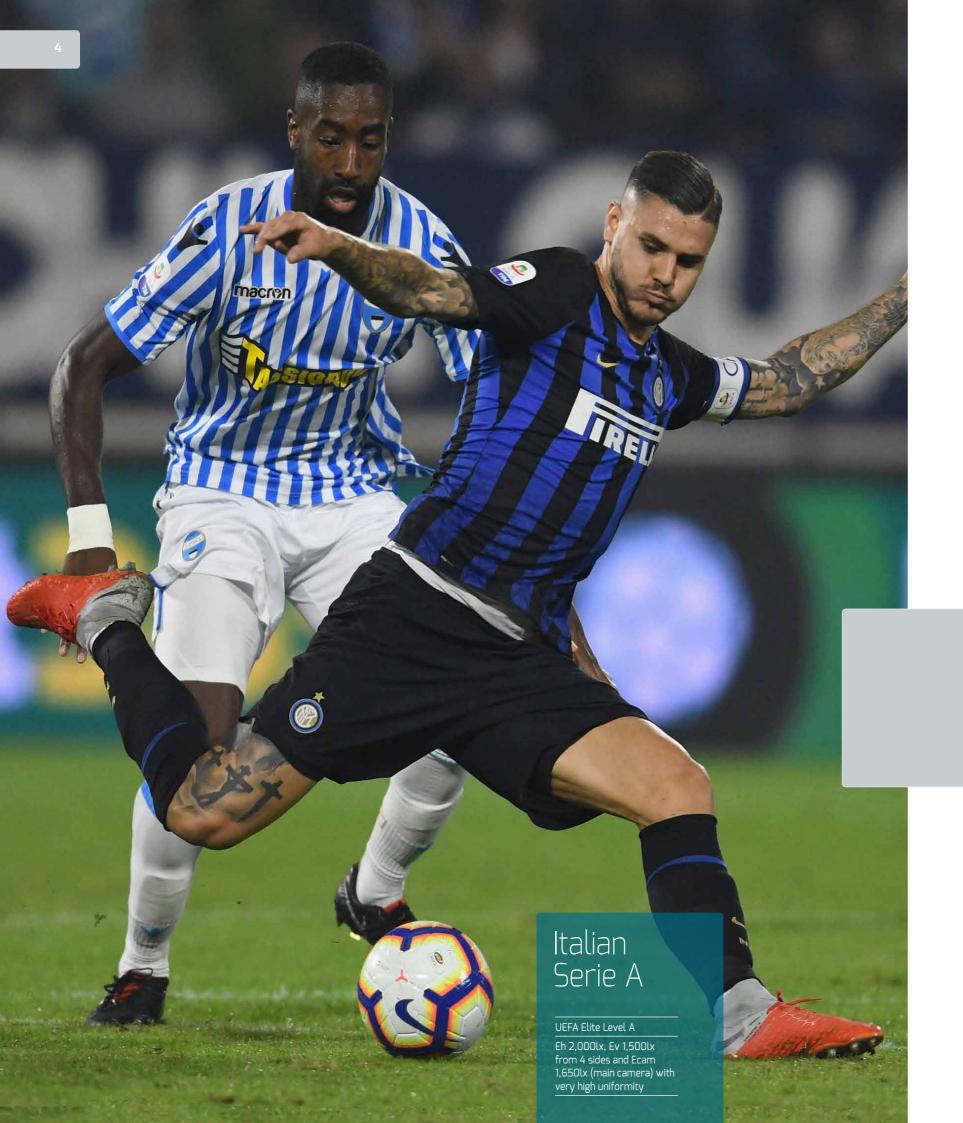
With AAA-LUX fixtures, you can also use your field lighting system for entertainment purposes. Treat everyone in attendance to a wonderful show thanks to support for internationally used communication protocols such as DMX and DALI. With the wireless version, even smaller stadiums and recreational fields can serve up high-value entertainment.

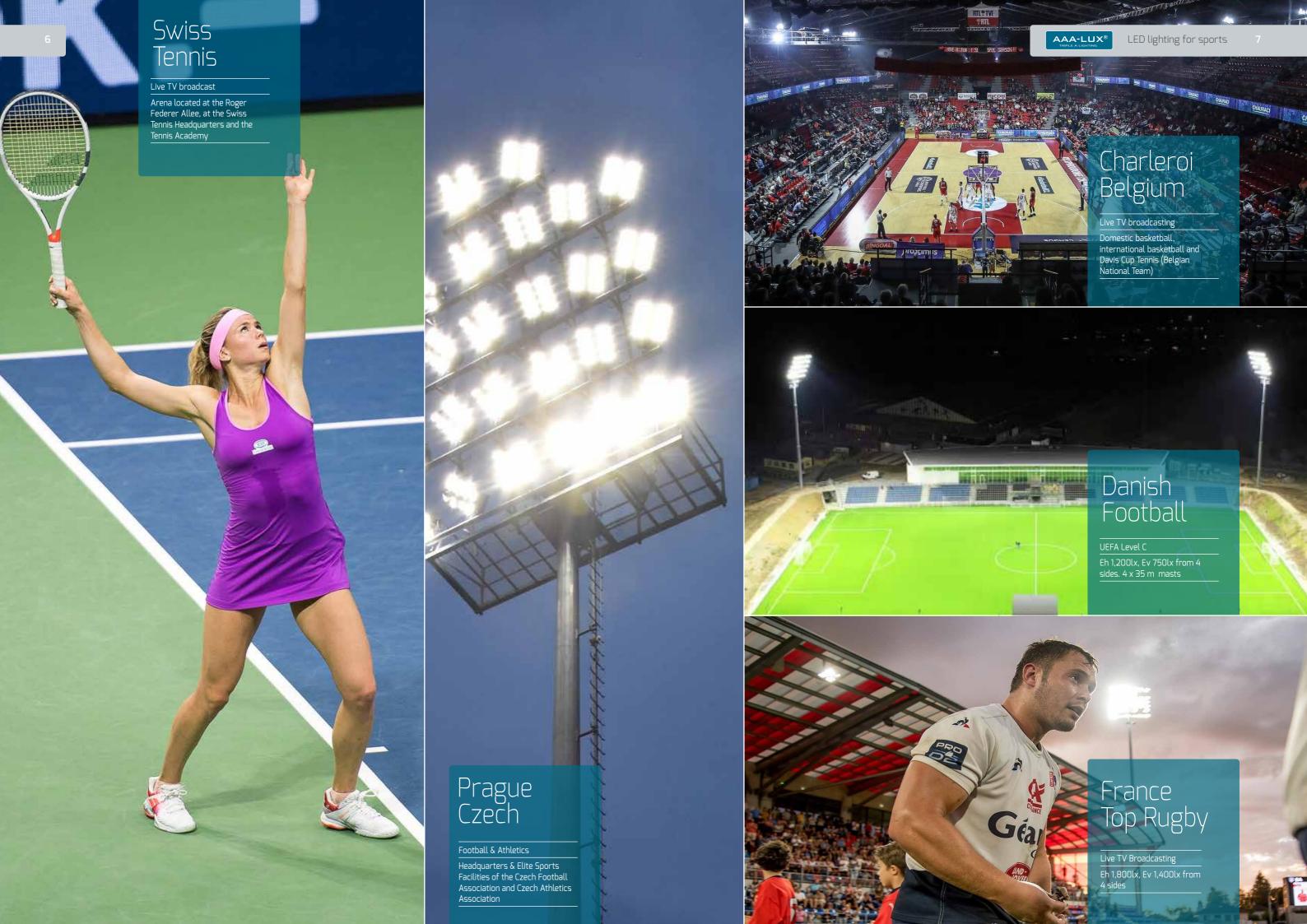
Give everyone in the stadium an experience to never forget



Low stress load

With AAA-LUX, you typically need a low number of fixtures, which helps to keep the costs down. Besides, they put a very low stress load on stadium masts and the stadium roof, the importance of which should not be underestimated.









How can you get the best overall price?

People often focus on getting their fixtures for the lowest possible price, which sometimes comes at the expense of what really matters: the best overall price.

Not all brands support the reuse of masts and cabling. Lower light output, greater weight or more windage mean you will need more fixtures and/or might even cause you to exceed mast limits. In that case, you'll need new masts and cabling, which can easily lead to a twofold increase in overall project costs.

AAA-LUX fixtures are full retrofits. The fixtures are compact and low-weight, so you can keep your old masts and cables, provided they're still mechanically sound. You'll never need more fixtures than you would with traditional lighting. In fact, AAA-LUX lighting systems often need fewer fixtures than any other traditional or LED-based solution, even with light pollution measures!

The RF communication, the need for extra infrastructure, wires and installation work, cutting costs; all these elements can have a massive influence on the overall project price.

Reusing an existing system with LOWER costs, thanks to:	
Higher light output	Fewer fixtures needed
Low weight and windage	Reusing masts & cables
No start-up (peak) voltage	More light from existing power supply
RS (Reduced Spill) Technology	Fewer fixtures needed, even with anti pollution light shields
RF controls	Easy to install, online monitoring
Driver in top	No additional cabinets, cabling and installation work required

New system, LOWER COSTS thanks to:	
Higher light output	Fewer fixtures needed
Low weight and windage	Requires slimmer masts and foundation
No start-up (peak) voltage	Smaller fuse, thinner cables, smaller connection
RS (Reduced Spill) Technology	Fewer fixtures needed, even with light pollution shields
RF controls	Easy to install, online monitoring
Driver in top	No other cabinets, cabling and installation work required
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All-round convenience

Users are "at ease" with AAA-I UX

Tennis club

Patrick van Gool, a member of tennis club Ace, relates how the entire club has been shining brightly since making the switch to LED lights. "The players are happy, that's for sure. The quality of the lighting system couldn't be higher. The board is also happy, because they were able to reuse the existing masts, which meant they didn't have to invest in new ones. This was a great surprise, because we thought that if we switched to a new LED supplier, they would also install new masts." "You can clearly tell that they took a

solution-oriented approach. AAA-LUX even advised on challenges we might encounter in the future.

"We thought that if we switched to a new LED supplier, they'd also install new masts"

They told us that light pollution standards had been tightened up considerably and gave us some tips on preventing issues with the neighbours in the future. Now, we're ready for whatever might come our

Installer

Installer Frank Janssen loves working with LED lighting from AAA-LUX. "Let me start off by saying that the fixtures are very easy to install. The fixtures can easily be swapped individually, using exactly the same cable. Besides, properly aligning the lights with the pitch isn't super sensitive, as well as being a lot quicker to do than with other suppliers."

"AAA-LUX sets me apart from the competition"

"We can use the basic framework provided by the current system and reuse the masts. AAA-LUX generates more light with the same amount of power, which means you'll need fewer fixtures. Simply put: AAA-LUX lets me achieve the same effect as other suppliers, but with lower total cost. And since Gen7 was launched, it's been easier than ever to implement measures to combat light pollution retrospectively. Overall, AAA-LUX simply sets me apart from the competition."



Marrara Cricket Ground

128 fixtures, WS-series and WS-STAD-series, on 6 masts

Athletics Reading England Palmer Stadium Cycling track, athletics track and grass field, with high uniformity



What is quality?

What do you need to know when buying LED lighting for recreational sports fields?

What is light quality and how do you measure it?

- Basic knowledge of light levels, uniformity, glare, etc.
- Standards and guidelines
- Starting points (mast positions, dimensions, etc.)
- Warranty on light plans

What is product quality and how can you tell?

- Warranty conditions
- Service
- References
- Certificates

How do I keep the required investment down?

- What determines whether I can reuse my masts and cabling?
- Total project costs

How do you recoup the investment?

- Reusing infrastructure
- Ask for realistic examples
- Optimal use, see page 17

What are light pollution standards?

- CIE150 guideline and corresponding rules
- Where is the project located, are there houses nearby?
- Neighbours' rights and the role of the municipality

What do you need to know about subsidy & grants?

- Example of subsidy conditions
- Lumen per Watt, what is it and why is it so important?
- Why do I need dynamic controls to receive subsidies?

What is the use of a control system?

- What can dynamic controls bring you?
- Being connected, what's in it for you?

Purchase and installation

- Warranty agreements, what to look out for Installation instructions for the installer
- Measuring results in accordance with EN guidelines
- Tips for maximising energy savings and carbon reduction >>> OPTIMAL USE, see page 17

Optimal use

How can I maximise my LED lights' energy savings and lifespan?



- Standards vs. usage
- The human eye vs. light quality
- Savings opportunities in a nutshell
- Lifespan

Extending lifespan with maintenance

- No-maintenance does not exist, low-maintenance does
- Maintenance contracts
- Dashboard, service page, monitoring

Get club members to

- Leaflet on "optimal usage" for club members.
- Templates and content for experience the knowledge sharing via:
 - · Club magazine
 - · Club's social media pages



Ensuring sustainable use of the light, together with club members

- Savings through dynamic use
- Ask for examples
- Don't use more light than you need ... what do you need?
- How long will it realistically take to recoup vour investment?

Control system

- Products vs. possibilities
- Dashboard / connected



www.aaa-lux-lighting.com/purchase-support

Need some help?



As urbanisation continues to ramp up, the number of homes near outdoor sports facilities is only set to increase, which means that limiting light pollution will also become increasingly important. This can be challenging, as we'll have to work to create better lighting for sports facilities whilst also reducing light pollution for neighbouring homes.

That's why AAA-LUX introduced RS Technology for maximum lighting quality and minimal obtrusive light.

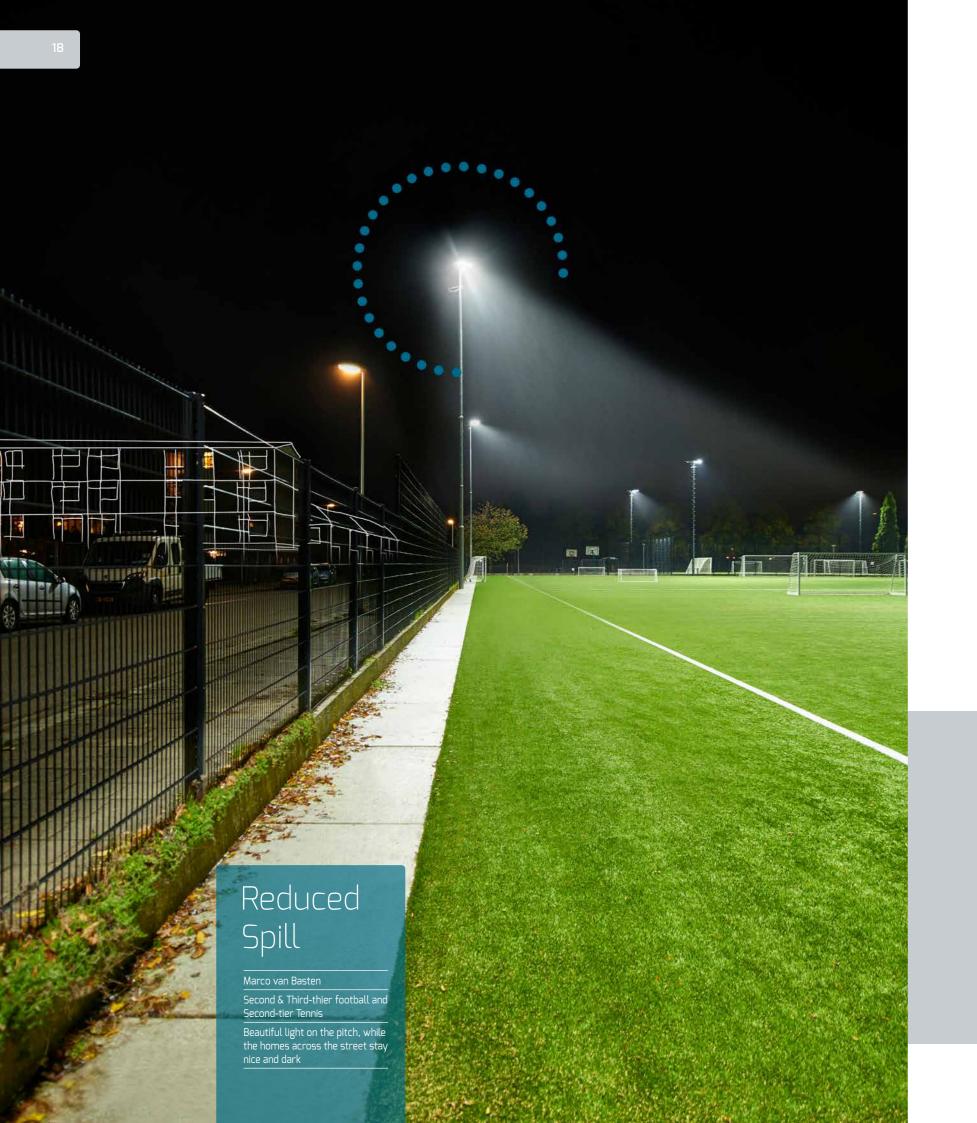
- Optimal uniformity, within the designated lighting area;
- Reduce light pollution to an absolute minimum for the immediate surroundings, usually within E2 at 50 metres;
- Light shields only have a minor effect on the light output on the pitch;
- Additional options with InControl, page 21.



How the neighbours of the sports park experience RS technology

The top photo shows how traditional floodlights can cause significant light pollution.

The photo below showcases the impact of taking the correct anti-pollution measures.



AAA-LUX, products, tools and services

AAA-LUX is proud to offer a comprehensive solution. Top-tier lighting with the right tools and services for a tremendous experience from installation to use and maintenance.







INCONTROL

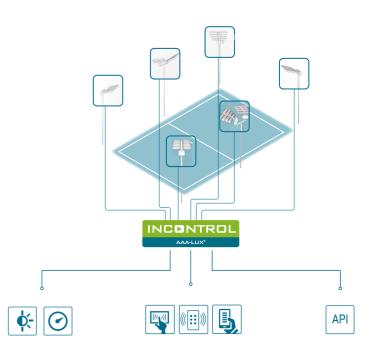
InControl is AAA-LUX's wireless control system. You can opt for local controls with physical buttons, an app, or a touchscreen, or for automatic controls with sensors, timed switches and/or an API software link.

Dashboard

You can control your lighting system with an online Dashboard, which also provides access to relevant information such as energy consumption and the technical status of your system. The dashboard can also run automatic diagnostics, allowing for accurate service and maintenance forecasting. That's what AAA-LUX means with being "connected".

Security

Online access works well when it can be done securely. That's why AAA-LUX has used a secure LEDxLINK protocol with an RF (Radio Frequency) connection since 2009. All users and installers are given their own access codes and user rights.



Wired controls: DMX and DALI

For stadiums, we can also supply DMX or DALI fixtures, which can be wired to a DMX or DALI controller to offer crowds exciting entertainment.











AAA-LUX Quality & Service

Quality and service are both paramount when it comes to flawless systems. We go beyond product design to protect our products. The environment, the infrastructure and usage, all play a crucial role. AAA-Service is a collection of services that serve to protect your system, prevent problems and, should an issue arise, to offer a quick, effective solution. Offering convenience and valuable advice in the purchase phase is part of this.

AAA-Service consists of the following:

- C3 Warranty packages
- C3 Repair & Service
- C3 Logistics
- C Remote monitoring (diagnostics)
- Advice

Sustainability

Servicing a system can lead to increased traffic of people and parts. AAA-LUX aims to minimise this impact on the environment with a two-pronged approach. First, we rely on remote diagnostics powered by an IoT application. If repairs turn out to be necessary, we typically have a CRC (Certified Repair Centre) near you. Both solutions have allowed us to significantly reduce our carbon footprint.



Together, we can make a sustainable impact

