

CASE STUDY

VENDAS NOVAS MUNICIPAL STADIUM



PROJECT SUMMARY

Name of the project

Vendas Novas Municipal Stadium

Type of building

Municipal Sports Stadium

Location

Vendas Novas, Portugal

Requirement

- Enable smart control over stadium floodlights
- Allow remote operation and scene-based lighting for different events
- Simplify management while ensuring reliability during outdoor conditions

Partner

Aron Light, Portugal

Key Outcomes

- Smart dimming and CCT tuning across sports zones
- Scene-based control activated wirelessly
- Smooth remote control of lights from a central gateway
- Lower energy consumption

Devices

- Radiar ARD32
32 DALI Driver Room Controller
- EDRPB
Battery-Free 4 Button Switch
- Senor E
Beacon & Range Extender
- Enor E
Gateway with RTC, Ethernet & Astronomical Clock

BACKGROUND

Sports venues demand lighting that's not just bright—but adaptable. At the Vendas Novas Municipal Stadium, home to various local sporting events, the need for a smarter and more flexible lighting system became evident. Whether it was a match day or a training session, lighting needed to suit the moment without manual reconfiguration each time. That's where Lumos Controls stepped in with a wireless solution that made managing stadium lights easier than ever.

OBJECTIVE

- Introduce smart control over stadium floodlights
- Provide easy access to lighting controls during different types of events
- Avoid rewiring or heavy modifications to the existing infrastructure
- Enable centralized remote management using the Lumos Controls platform
- Improve energy efficiency and reduce operational costs through intelligent lighting control

CHALLENGES

Working in an outdoor stadium setup brought a few practical hurdles. The team had to ensure all controllers stayed protected from weather while still delivering responsive control. Since the football field and water polo area were spread out, maintaining strong wireless coverage was important. And during live events, no one wants delays or complicated setups—scene changes had to be fast and reliable.

SOLUTION

To bring flexibility across the stadium, we started by placing **Radiar ARD32** DALI room controllers in weatherproof enclosures. Each controller supports up to 32 driver devices and was perfect for managing both dimming and color temperature tuning across the football and water polo lighting zones. Its ability to work in both DALI and 0-10V modes gave the stadium complete freedom in how the lights were configured.

We then introduced the **EDRPB**, a compact, wireless 4-button switch that runs without batteries. It allowed staff to switch lighting scenes instantly—whether it was full brightness for a match or toned-down lighting for cleaning or setup.

To keep the network strong, we installed **Senor E** devices at key points. These acted as range extenders and beacons, making sure every controller stayed connected no matter where it was on the field or around the pool.

All of it was managed through the **Enor E** gateway, which handled remote scheduling and real-time control. With its built-in real-time clock and astronomical scheduling, it kept everything running on time—even during network interruptions or power cuts.

RESULT

The result was a smarter, more efficient lighting system that responded to the stadium's real-time needs. Lighting scenes could be activated in seconds, reducing setup time before events. The staff now had full control over brightness and color temperature from anywhere.

And thanks to motion-free operation, dimming capability, and scene-based control, the system also delivered **impressive energy savings**, helping the stadium cut down on unnecessary power usage and reduce ongoing costs, all without sacrificing lighting quality.

ABOUT OUR PARTNER ARON LIGHT

Aron Light is our trusted partner in Portugal, known for delivering high-quality lighting solutions tailored to local infrastructure. Their on-ground expertise helped ensure smooth deployment and support at every stage of this project.

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ABOUT LUMOS CONTROLS

At Lumos Controls, we're all about **creating intelligent spaces**—and that extends to stadiums too. With reliable hardware, intuitive software, and flexible control options, we help venues stay ahead with smart lighting that adapts to every moment.

Want to simplify lighting in your sports facility? Reach out to us.

