



Advanced
LIGHTING TECHNOLOGIES

MAKING A SPLASH

THE PERFECT LUMINAIRE FOR INDOOR SWIMMING POOLS

CASE STUDY

KNOX LEISUREWORKS AQUATIC CENTRE
SWIMMING POOL LIGHTING



When Knox City Council decided to upgrade the swimming pool lighting in their biggest aquatic and recreational centre, they engaged a number of suppliers to quote on the project. After conducting a thorough review, Advanced Lighting Technologies were selected based on cost, product quality and warranty terms.

Advanced Lighting Technologies are experts in delivering quality lighting solutions in all sorts of environments, and have been doing so for over 25 years.

[THE CHALLENGE]

Located in Melbourne's eastern suburbs, Knox Leisureworks is a large community aquatic and fitness facility owned by Knox City Council and managed by YMCA Victoria. The existing metal halide floodlights surrounding the 50m indoor pool had reached the end of their lifespan. This presented an opportunity to significantly improve the quality of lighting around the pool.

“ In this environment, quality lighting is crucial and can help to ensure the safety and enjoyment of pool users. We required a solution that would withstand the humid conditions while providing sufficient light for lifeguards, instructors and spectators alike.

**Knox Leisureworks' Centre Manager
Patrick Boyd**

Humidity

Public swimming pools are warm, humid environments that can challenge even the highest quality electrical components. Moisture in the air can leach into electrical systems (including light fittings) often resulting in reduced performance, lowered life expectancy and even failure. A luminaire with high levels of ingress protection is essential.

Compliance

Meeting the requirements set out in Australian Standard 2560.2.5-2007 is essential when lighting a public swimming pool. There needs to be sufficient light for lifeguards to see the entire pool and all swimmers using it. Installing an appropriate lighting solution with the required brightness and uniformity is critical. Glare also needs to be minimised (both direct and reflected) to ensure a comfortable and pleasant visual experience for all pool users.

Access

Indoor swimming pools often feature high, odd-shaped ceilings that encourage natural light and help maximise ventilation, meaning that accessing existing light fittings isn't particularly easy or cheap. Maintenance often needs to be done outside of operational hours using expensive special access equipment. A light fitting that requires virtually no maintenance can save facility operators a significant amount of money over its lifetime.

Advanced Lighting Technologies' Technical Sales Representative Peter Rees worked closely on the project and is familiar with the challenges of installing lighting in such an environment:

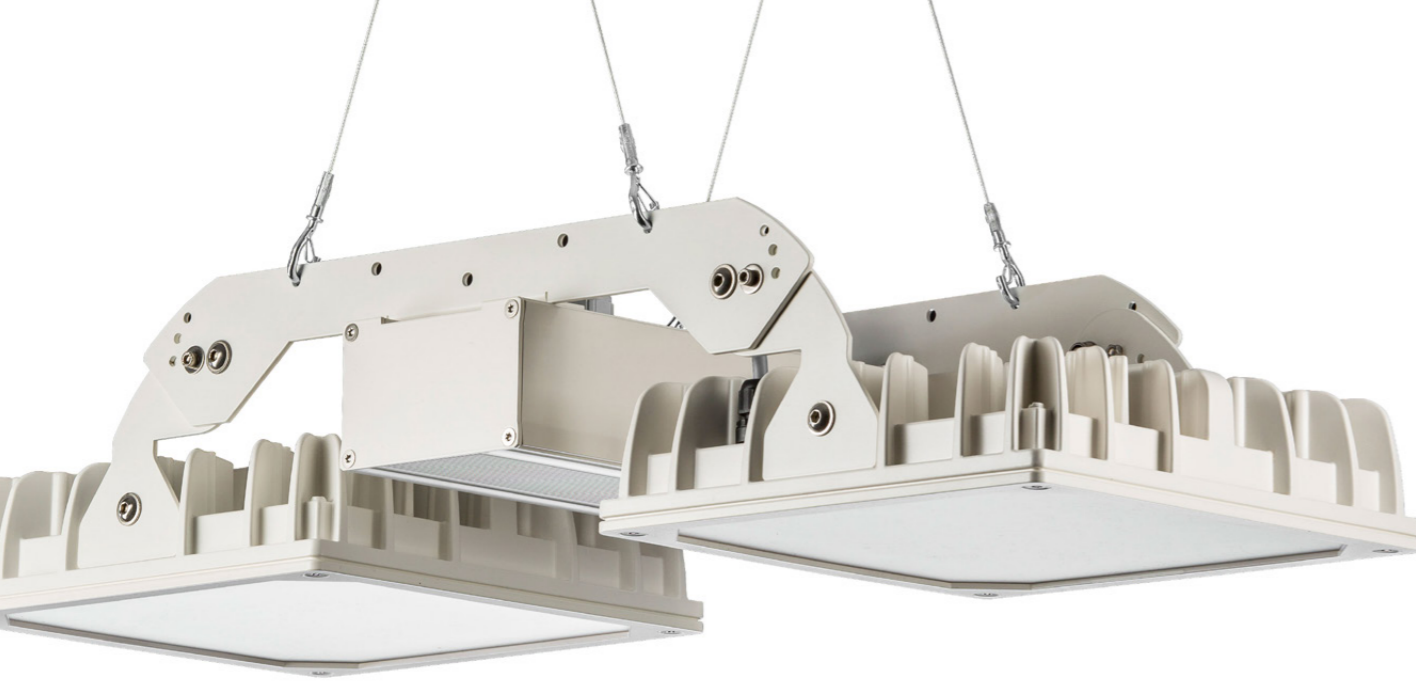
“Delivering a quality lighting solution is always important, however in harsh environments like this one, the right choice of luminaire becomes critical. Picking an appropriate product the first time around can reduce costly maintenance of luminaires, often installed in locations that can be difficult to access”.



BEFORE




AFTER




UP TO 100,000
HOURS LIFETIME

5
YEAR
WARRANTY


-40°C / +70°C
MODEL DEPENDANT

IP65
INGRESS
RATING

[THE SOLUTION]

Advanced Lighting Technologies have been providing lighting solutions to Australian organisations for decades (not just during the recent rise of LED technology). We offer lighting products from some of the world's leading manufacturers, including European innovator PRACHT.

Designed for extreme conditions, PRACHT luminaires feature precise German engineering and quality construction. Their versatile product range includes fittings that can operate in severe temperatures, and offer high levels of protection from dust, moisture, chemicals and vandalism.

PRACHT Technology

The PRACHT Quadronius is a truly unique light fitting – its futuristic, low-profile design is unlike any other LED high-bay on the market. It can be suspended, wall or ceiling mounted and is available in single or double-modules. While it's unique and visually-stunning on the outside, it's what you can't see that really sets the Quadronius apart.

Thanks to PRACHT's innovative and unique approach, the Quadronius features **age-resistant silicone seals**, shorter than usual to minimise vulnerability and increase protection. Designed to withstand moisture and vapour ingress, the Quadronius' seals offer much greater protection than a standard IP65-rated fitting, preventing the damage moisture can cause over time.

In some variants, the Quadronius' internal components also receive a **special lacquered coating** during the manufacturing process, designed to further protect the driver from moisture and aggressive chlorine vapours. This special coating is what separates the Quadronius from the competition – **there's simply nothing else on the market like it.**

[THE RESULT]

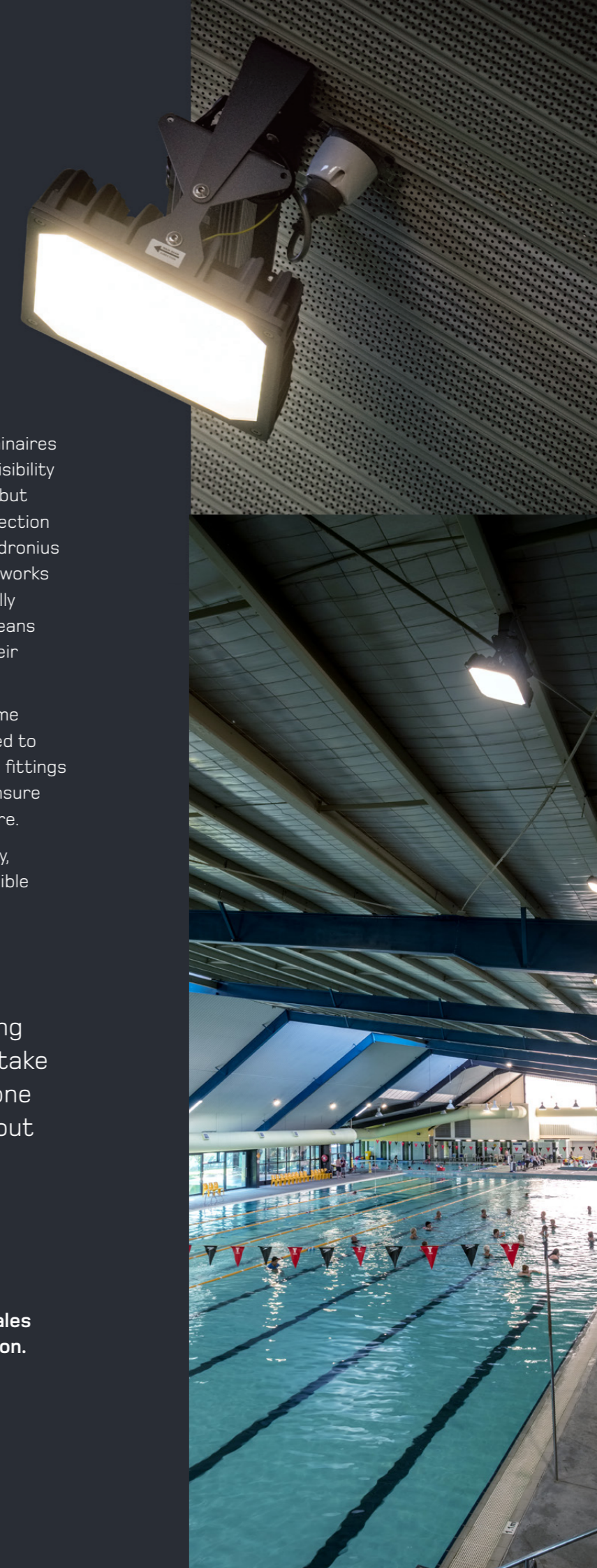
Replacing the existing, outdated 400W metal halide luminaires with the 147W LED Quadronius immediately increased visibility and reduced the centre's lighting energy consumption, but the benefits don't end there. With its high ingress protection rating and specially-designed shortened seals, the Quadronius is designed to comfortably operate within Knox Leisureworks for years to come. The extended lifetime and the virtually maintenance-free nature of LED lighting technology means the centre should also see a significant reduction in their maintenance budget.

In most cases, the new fittings were installed in the same locations as the old ones, with the 147W variant selected to ensure compliance with AS 2560.2.5-2007. The installed fittings also feature an impact-resistant PMMA Opal lens to ensure a well-lit yet comfortable environment with minimal glare.

Aside from improving visibility in the centre dramatically, Mr Boyd explains there are also some additional, intangible benefits to upgrading the lights:

“ YMCA are committed to operating a fully-compliant centre and we take comfort knowing the lighting is one thing we won't have to worry about for the foreseeable future.

Visit adlt.com.au or contact one of our friendly sales representatives in your state for more information.





Advanced Lighting Technologies are specialists in architectural, commercial and industrial lighting. **Whatever the application, whatever the budget – we'll have a solution that fits your needs.**



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