

Case Study

The Background

QueensPlaza is an upmarket shopping centre located in Brisbane's Queen Street Mall, with additional frontages on Adelaide Street and Edward Street. The centre's existing wired emergency lighting system had reached end-of-life, prompting the need for a modern solution to manage emergency lighting compliance and assets efficiently as part of a major works project. The upgrade aimed to ensure **full compliance with safety standards** while simplifying maintenance for facility managers.

The Challenge

Retrofitting an advanced emergency lighting system into an established building presented several challenges and requirements:

- **Wireless Communication:** No additional cabling or hardware infrastructure could be installed in the heritage structure.
- **Aesthetic & Performance:** The luminaires had to suit various environments (luxury retail areas, back-of-house corridors, and car parks) without compromising on style or brightness.
- **Compliance & Reporting:** The system needed to automatically test emergency luminaires and generate reports in accordance with AS/NZS 2293 emergency lighting standards, while being simple for all stakeholders to use.
- **Battery Technology Transition:** The client wanted to move from older battery technology to modern lithium batteries to reduce the burden of ongoing maintenance and improve reliability.

These challenges required a solution that was not only technically advanced but also minimally invasive to install in a live shopping centre environment, with zero disruption to daily operations.

Project Name

QueensPlaza Shopping Centre
– Emergency Lighting
System Upgrade

Location

Brisbane CBD, Queensland

Commenced

2023

Completed

2024

Number of Fittings

738

Product range

LP

Testing system:

Zoneworks HIVE

Electrical Contractor:

Power Up Electrical Solutions

“Engaging Clevertronics made this project a seamless transition for the site and client.”

ZONEWORKS
HIVE

LP LITHIUM IRON
PHOSPHATE

PREMIUM

PROVEN PROJECT PERFORMANCE

Solutions Provided

To meet the project requirements, **Clevertronics Zoneworks HIVE** was proposed and ultimately selected. This wireless emergency lighting monitoring system addressed each challenge with a suite of features and benefits:

- **Wireless Connectivity:** Zoneworks HIVE enables complete wireless communication between all emergency luminaires, eliminating the need for new cabling or backbone infrastructure.
- **Customisable Testing & Reporting:** The system allows flexible scheduling of tests for all fittings or specific groups at any time, with options for recurring automatic tests. It generates easy-to-understand compliance reports aligned with AS2293 standards.
- **Versatile Luminaires:** A comprehensive range of new LED fittings was tailored to different areas of the centre. This included ARGO, Ultrablade PRO, Lifelight PRO, and Cleverfit PRO units, ensuring both high performance and aesthetic consistency across retail, back-of-house, and car park areas. Notably, ARGO fittings feature integrated sensors for onboard light control, reducing energy consumption in low-traffic areas like car parks and fire stairs.
- **Modern Lithium Battery Technology:** All new emergency lights were equipped with **Clevertronics Lithium Premium (LP)** batteries. These batteries offer a service life of over 8 years and come with a 6-year warranty, delivering a 50% maintenance savings compared to traditional Ni-Cad batteries. This transition significantly lowers long-term maintenance needs and costs.

Clevertronics provided end-to-end support during installation and commissioning. The solution was implemented with **no interruptions to shoppers or staff**, thanks to careful planning and the wireless nature of the system. Training was also provided so that the centre's facilities team can use the software confidently for ongoing testing and reporting.

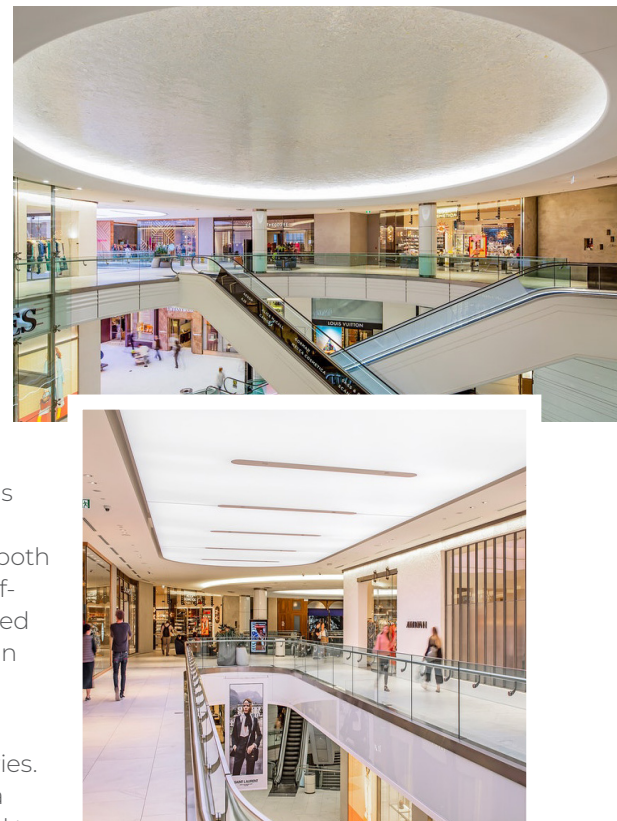
Results

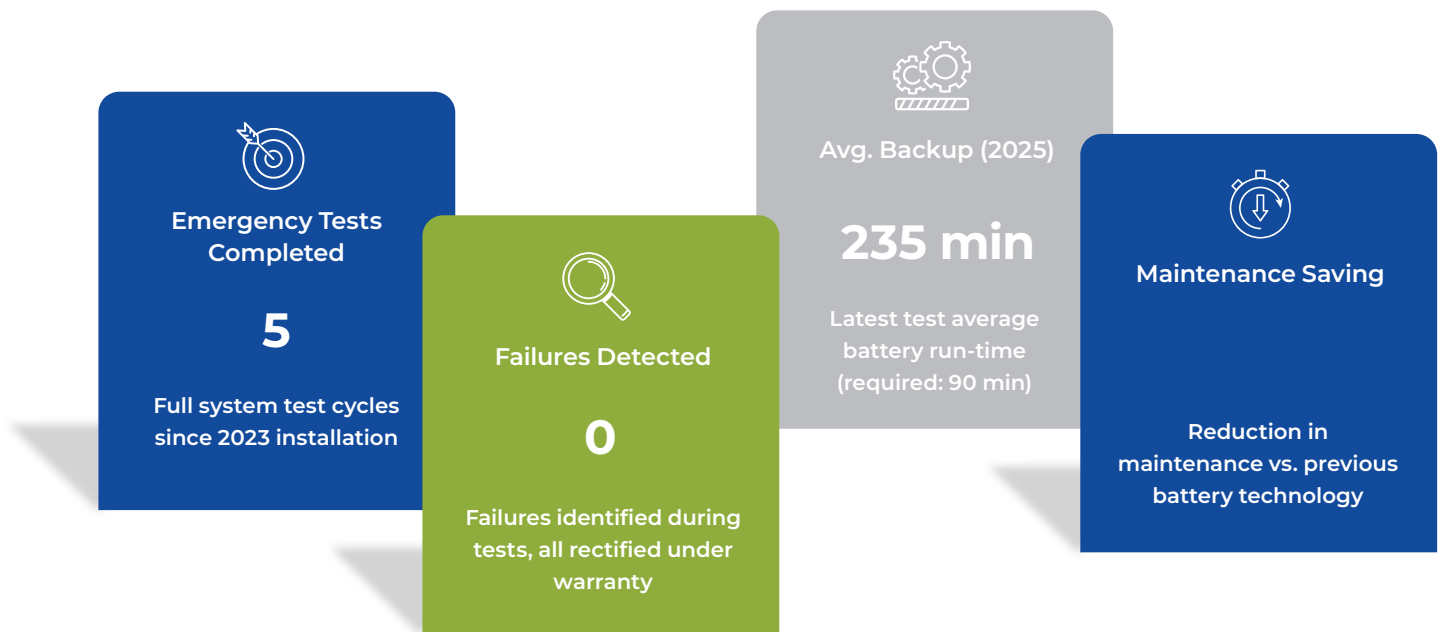
Since the system commissioning began in 2023, QueensPlaza has benefited from a fully computerised, centralised emergency lighting management system.

Key outcomes include:

- **Seamless Testing:** All required emergency lighting tests are conducted **without interruptions** to daily operations, as tests can be scheduled during off-peak hours or grouped by area.
- **Completed Test Cycles:** 5 full emergency lighting test cycles have been completed since installation, helping ensure the site remains compliant at all times.
- **Zero Failures:** 0 fitting failures were identified during these tests; any minor issues were rectified immediately under warranty, demonstrating the reliability of the new fittings.
- **Extended Battery Backup:** The **average battery run-time** measured far exceeds standards. In the initial 2023 test, the average backup duration was **238 minutes** (against a required 120 minutes). In the latest 2025 test, the average was **235 minutes** (against a required 90 minutes). This robust performance provides significant safety overhead above regulatory requirements.

The extended battery run times highlight how Zoneworks HIVE ensures full compliance while **significantly reducing the burden** of managing emergency lighting compared to manual methods or older systems. Moreover, the site's Zoneworks HIVE system is backed by Clevertronics **Lifetime Technical Support**, guaranteeing access to the latest software updates and remote technical assistance. This ongoing support gives both the facility management team and the electrical contractor peace of mind





Conclusion

The implementation of the Clevertronics Zoneworks HIVE system has delivered a **future-proof and compliant** emergency lighting solution for QueensPlaza. The project successfully addressed the challenges of retrofitting a new system within an existing structure while enhancing operational efficiency and safety for the shopping centre. By leveraging wireless technology and long-life lithium batteries, QueensPlaza's facility managers can now ensure compliance with far less effort and disruption.

Looking ahead, the centre will continue to leverage Zoneworks HIVE for **automated testing and compliance reporting**, and will maintain peak system performance through software updates under Clevertronics Lifetime Technical Support program. This project also lays the groundwork for any future expansion of the emergency lighting system as the centre evolves, knowing that additional luminaires or replacements can be integrated seamlessly.

Client Testimonial

"Engaging Clevertronics made this project a seamless transition for the site and client. As the electrical contractor managing the project, we were able to rely on Clevertronics expertise during budgeting and commissioning to deliver a turnkey emergency lighting system for our key client."

– Tom Barrett, State Manager (Queensland), Power Up Electrical Solutions

