lumos CONTROLS
A WISILICA BRAND

CASE STUDY

TITLE 24 READY: LIGHTING UPGRADE AT TAIPEI CULTURAL OFFICE

PROJECT SUMMARY

Name of the project
Taipei Economic and Cultural Office

Type of building
Government Office

Location
Los Angeles, USA

Partner
ERI ELECTRICAL

Requirement
- Modern Wireless lighting control system
- Centralized scheduling and monitoring
- Occupancy-based automation
- Easy user control
- Minimal infrastructure changes
- Improve energy efficiency
- Ensure compliance with California Title 24 standards

Key Outcomes
- Lower energy consumption
- Simple, intuitive controls
- Centralized system management
- Enhanced comfort and ambience
- Scalable for future needs
- Achieved compliance with California Title 24 energy standards

Devices
- Radiar AF10
  2 channel AC powered 0-10V fixture controller
- Single channel AC powered 0-10V room controller
  PSC-WCM-450-BLE-WS
- LDCM
  Phase Dimming Control Module
- Enor E
  Gateway with RTC, Ethernet & Astronomical Clock
- 1 button mesh wall controller
  PSC-DM-WS-100-BLE-WS
- Smart 8 Button Panel
  WS-NA0-02-08W
- Cyrus AP
  PIR Motion & Light Sensor
- Cyrus AM
  Microwave Motion & Light Sensor

BACKGROUND

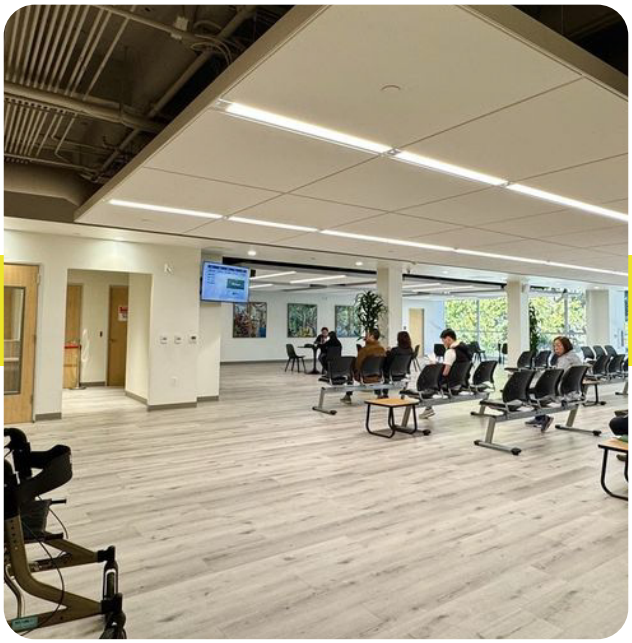
The Taipei Economic and Cultural Office in Los Angeles is a prominent establishment responsible for promoting cultural and economic ties. To keep up with its mission of modernity and sustainability, the office decided to upgrade its lighting infrastructure. The goal was to adopt an intelligent system that not only saves energy but also provides intuitive control to its staff and visitors.

OBJECTIVE

- Provide wireless lighting control with flexibility for different zones and offices.
- Achieve energy efficiency and operational simplicity.
- Ensure compliance with California Title 24 standards
- Ensure compatibility with modern devices and future expansions.
- Enable centralized monitoring and management of all lighting fixtures.

CHALLENGES

Upgrading an existing government facility always comes with a few hurdles. One of the key challenges was integrating smart lighting controls without altering the building's structure. The team also had to ensure consistent wireless connectivity across multiple floors and varied room layouts. Choosing the right mix of devices that could handle both general and task lighting needs was another crucial factor. And above all, the solution had to preserve the clean, professional look of the space without visible wiring or bulky installations.



SOLUTION

Radiar AF10 - 2 channel AC powered 0-10V fixture controller
Radiar AF10 controllers were deployed across the facility to manage both intensity and color temperature of lighting. Their dual-channel 0-10V outputs allowed fine-tuned control for various spaces, enabling energy-efficient operation and creating comfortable ambiences tailored for office zones.

1 button mesh wall controller - PSC-DM-WS-100-BLE-WS
These controllers enhanced localized lighting automation by enabling on-demand dimming and switching. Ideal for multi-use areas, they provided intuitive manual control while supporting automated schedules for better energy management.

Smart 8 Button Panel - WS-NA0-02-08W
The 8-button Bluetooth panel was configured to activate different lighting scenes for conference rooms and common areas. With a sleek design and wireless connectivity, it provided staff with easy control at their fingertips.

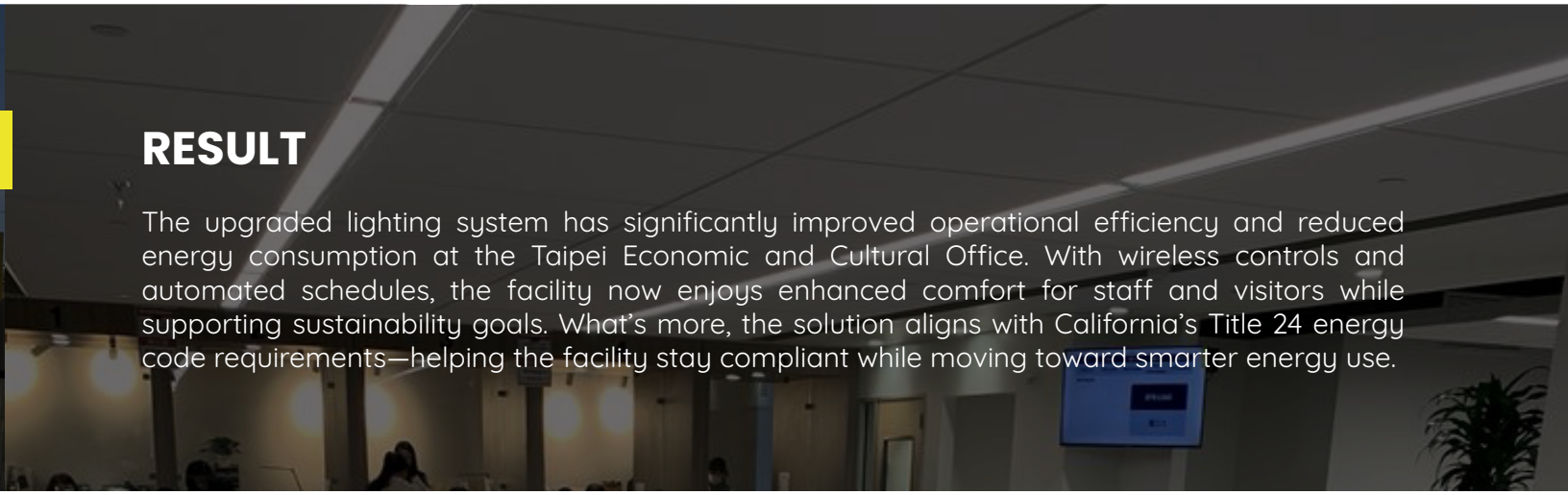
Enor E - Gateway with RTC, Ethernet & Astronomical Clock
Enor E served as the heart of the system, connecting all devices to the Lumos Controls cloud. It enabled facility managers to schedule lighting, monitor usage, and make adjustments remotely through an intuitive interface.

LDCM - Linear Dimming Control Module
Used alongside Radiar AF10, the LDCM ensured smooth and flicker-free phase dimming for decorative and linear lighting in sensitive spaces such as meeting rooms and corridors

Single channel AC powered 0-10V room controller - PSC-WCM-450-BLE-WS
Ideal for smaller zones, this controller offered reliable on/off switching and dimming for individual rooms, contributing to the overall energy savings of the facility.

Cyrus AP - PIR Motion & Light Sensor
Installed in offices and common areas, Cyrus AP sensors detected motion and daylight levels to automatically adjust lighting. This reduced energy wastage in unoccupied spaces while enhancing user comfort.

Cyrus AM - Microwave Motion & Light Sensor
Cyrus AM sensors were deployed in areas like storage rooms and corridors where PIR sensors could face limitations. Their precise detection enabled reliable automation even in enclosed spaces.



RESULT

The upgraded lighting system has significantly improved operational efficiency and reduced energy consumption at the Taipei Economic and Cultural Office. With wireless controls and automated schedules, the facility now enjoys enhanced comfort for staff and visitors while supporting sustainability goals. What's more, the solution aligns with California's Title 24 energy code requirements—helping the facility stay compliant while moving toward smarter energy use.

ABOUT OUR PARTNER ERI ELECTRICAL

ERI Electrical, our official representative in Southern California, played a key role in planning and executing this project. Their technical expertise and on-ground coordination ensured smooth implementation and timely completion.

Region:	Contact Person:	Phone:
Southern California	Anne Murrell	517 614 0452

ABOUT LUMOS CONTROLS

Lumos Controls is a smart controls solution built on WiSilica's IoT platform, ARIXA.

It combines advanced lighting control devices, an intuitive app, and a powerful analytics suite to create a future-ready intelligent lighting network for smart enterprises. With Lumos Controls controllers, businesses can achieve customizable, energy-efficient illumination tailored to their needs.

The ecosystem features controllers, sensors, switches, gateways, mobile and web apps to set up basic to advanced smart controls. Lumos Controls allows you to decide what to achieve and how to grow and step into a sustainable future.

Ready to create your intelligent space? Let's talk.

lumos CONTROLS A wisilica BRAND

20321 Lake Forest Dr D6,
Lake Forest, CA 92630

www.lumoscontrols.com
+1 949-397-9330