

CASE STUDY

FORD MOTORS CHINA LINCOLN'S HEAD OFFICE



 LINCOLN

PROJECT SUMMARY

Name of the project

Ford Motors China
Lincoln's Head Office

Type of Building

Office

Location

Shanghai, China

The Requirement

- Lighting Upgrade
- Seamless Lighting Control
- Enhance Occupant Comfort
- Reduce Energy Consumption

Devices

- Radiar ARD32
32 Child DALI Room
Controller
- SCU WALL REMOTE
Self-powered Smart Panel
- Ldrive 32W
Constant Current Wattage
Selectable Tunable LED Driver

BACKGROUND

Meet Lincoln, the luxury vehicle division of the renowned American automobile manufacturer, Ford Motor Company. Lincoln faced a challenge at their head office in China: high energy consumption and a malfunctioning lighting timer.

The need for an innovative lighting solution to reduce energy bills and streamline lighting functionality led them to Lumos Controls. Starco Lighting Inc., a supplier for tier-one automobile manufacturers, approached Lumos Controls through their Chinese partner, Encho, to provide a smart lighting solution for Lincoln's head office.

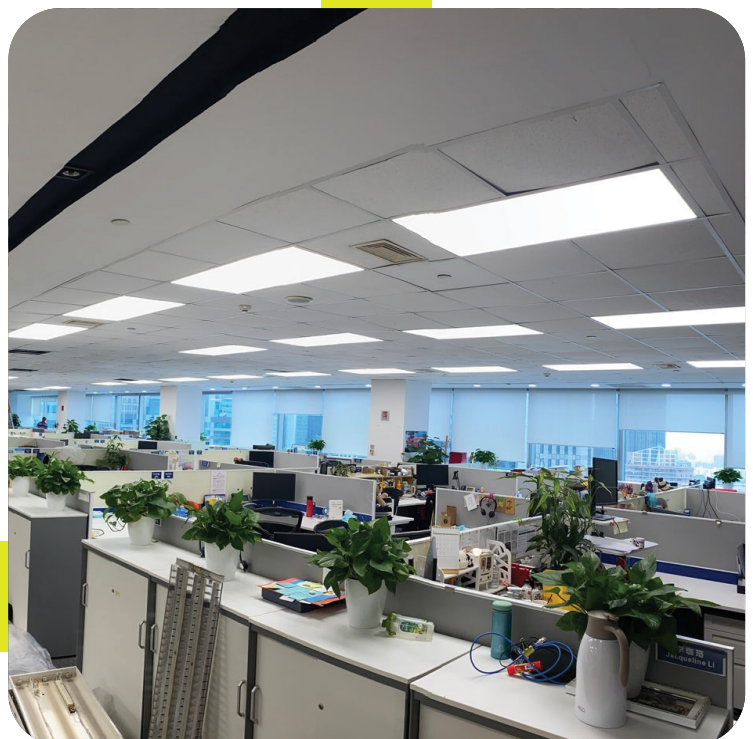
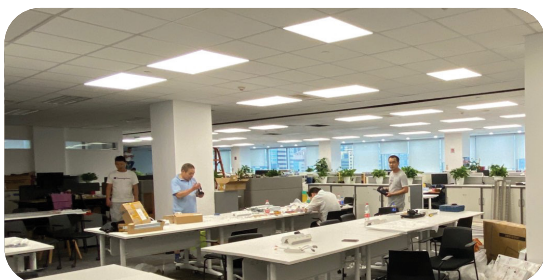
OBJECTIVE

The main objective of the project was to upgrade the lighting system at Lincoln's head office in China. They sought a solution that would not only reduce energy consumption and bills but also automate lighting functions efficiently. The initial focus was on one floor, with plans for further upgrades in subsequent phases.

CHALLENGES

We faced unique challenges during the upgrade process; first, Lumos Controls had to deal with a tight deadline. They needed the whole installation, setup, and everything had to be done in just three days.

On top of that, they wanted a lighting control system that not only worked seamlessly but also fit right into their existing infrastructure.



SOLUTION

Lumos Controls provided a tailored solution for Lincoln's specific requirements, seamlessly connecting each proposed solution to the objectives of the project:

- **Raidar ARD32 (DALI Controller)**

32 Child DALI Room Controller: Raidar AD32, a highly flexible DALI room controller, was integrated to connect with up to 32 DALI LED drivers. This allowed for efficient control of DALI lighting, meeting the objective of intelligent lighting automation.

- **Ldrive 32W (Constant Current LED Driver)**

Constant Current Wattage Selectable Tunable LED Driver: The Ldrive 32W, a dual-channel constant current LED driver, offered selectable output current features. This allowed for precise tuning of the LED drivers, ensuring smooth dimming and meeting the project's objective of enhancing overall lighting control.

- **SCU WALL REMOTE (Kinetic Switch)**

Self-Powered Smart Panel: Lumos Controls implemented the SCU Wall Remote, a self-powered wireless smart panel utilizing energy harvesting. The built-in energy harvesting module converted mechanical energy into electrical energy, powering the Bluetooth chip for seamless control. This solution not only met the advanced demand for a smart, wireless panel but also contributed to reduced energy bills, aligning with the project's objectives.

These solutions addressed Lincoln's objectives by facilitating easy lighting automation, efficient dimming, and flexible scheduling. In the open area with 145 fixtures, the use of only two kinetic switches allowed for convenient control and smooth dimming without latency. In the meeting room, Lumos Controls utilized the dimming levels of downlights and panels to craft three smart scenes for different purposes - Meeting hours, Brainstorms, and Projection time.

RESULT

The whole upgrade from installation to commissioning was completed in three days resulting in great occupant satisfaction and reduced energy usage. Lincoln's head office in China now enjoys the benefits of efficient lighting automation, cost savings, and the ability to create multiple lighting scenes for different occasions. This project serves as a significant step for Lincoln in achieving their sustainability goals. The client expressed their contentment, stating, "We configure multiple scenes with the switches, and that fantastic lighting effect is making our presentations and meetings all the more enjoyable." The result was a fantastic lighting effect that significantly enhanced presentations and meetings, fulfilling the client's satisfaction and meeting the project's overall objectives.