



LEADING THE FUTURE OF  
**LIGHTING + TECHNOLOGY**

## LED Retrofit + Controls | Retail

# Case Study

To enhance operations and tackle rising electric prices, a Fortune 500 wholesale retailer with 800+ stores sought to upgrade its high bay lighting with an advanced lighting control system. Understanding the retailer's goals, EMC proactively secured a generous rebate that would deliver significant bottom-line savings for their Roseburg, Oregon Store.



### The Project: Amplifying Incentive Impact

EMC captured a bigger incentive by leveraging its relationship with local utility Energy Trust of Oregon. The utility was actively engaged, collaborating with EMC on documentation and inquiries to ultimately deliver a rebate that covered more than 50% of the project costs.

After securing the incentive, EMC got to work upgrading 500 high bay fixtures and integrating a new lighting control system.



### The Solution: Lighting Controls

Since the incentive was based on reducing fixture wattage, the new installation involved reducing wattage by more than half, replacing old 350-watt lighting with 162-watt LEDs that met Energy Trust of Oregon's incentive program requirements and



**70%**

Annual Energy Savings



**50%+**

Incentives Project Savings

achieved the retailer's desired light levels.

Each new LED high bay fixture has a Synapse wireless control module and a communication gateway installed in the lighting control panel, allowing for wireless real-time control and monitoring of the fixtures.

The new EnFlex lighting controls system EMC installed uses schedules and photocells to dim lights according to occupancy and ambient light levels. A user interface allows warehouse managers to adjust schedules, photocell setpoints and zone overrides.



### The Results: Record Savings

With the new lighting and controls solution in place, the Roseburg store now sets the new high bay zones for a maximum power of 90% and minimum of 15% that adjust linearly with photocell readings taken from individual fixtures.

The EnFlex system directly controls the power level of each zone and tracks the overall dim average for each, which typically are 55% – 65%, including 35% for restocking times. The retailer can continue to refine how they use the system to meet energy needs and monitor sustainability goals.

The record incentives savings deliver more than 70% reduction in lighting energy consumption for the store, and the retailer is looking to replicate the project at other Oregon buildings.