

Woolworths Retrofits Multiple Facilities with Digital Lumens Intelligent LEDs and Controls, Achieves 80% Energy Savings, Maintenance and Safety Benefits

With locations across Australia and New Zealand, Woolworths Limited is one of the region's top retailers, with nearly one thousand stores and dozens of supporting distribution centres creating \$59 billion dollars in annual revenue.

FACILITY LOCATIONS:

Wyong, NSW, Australia
Minchinbury, NSW, Australia

PARTNER:

Maser Australia

ENVIRONMENT:

Distribution Centre

PREVIOUS LIGHTING:

Metal Halide

DIGITAL LUMENS SOLUTION:

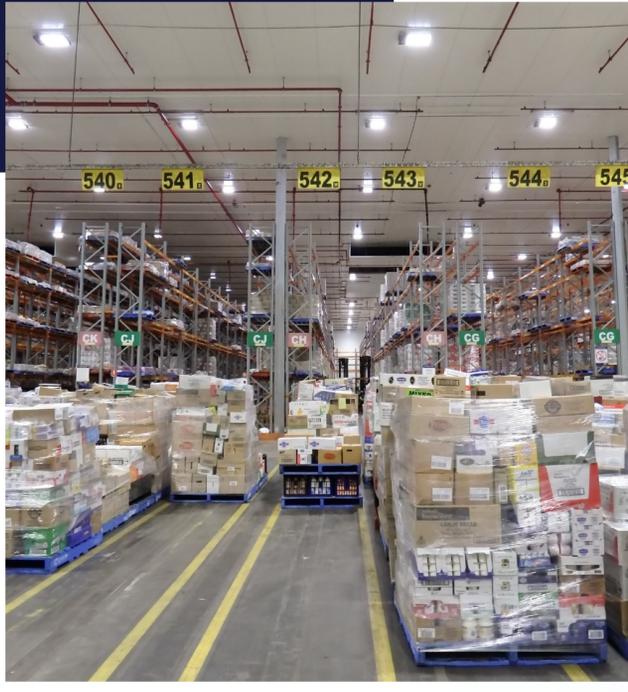
DLE intelligent LED fixtures with LightRules®
Lighting Control & Business Intelligence Software

LIGHTING-RELATED ENERGY SAVINGS:

80%

ANNUAL MAINTENANCE SAVINGS:

>75%



THE OPPORTUNITY

In addition to fostering a culture of customer-focused innovation, Woolworths Limited also recognized an opportunity to modernize and innovate within its operational network. Distribution centres run 24 hours a day, 7 days a week, thus requiring massive amounts of electricity to keep facilities properly lit, productivity humming, and employees safe. In many cases, these distribution centres operate under legacy lighting such as 400W metal halides.

The result, in some distribution centres, was excessive energy and maintenance costs. For two specific facilities, the NSW and Sydney regional distribution centres, the Woolworths team worked with Maser Communications to identify lighting alternatives that would deliver energy savings and decrease the company's carbon footprint, as well as improve maintenance costs. After comparing several alternative and smart lighting options, Woolworths determined that the Intelligent LED system from Digital Lumens offered the greatest opportunity to achieve these goals.

WHY DIGITAL LUMENS?

In addition to the obvious, energy-based benefits of LEDs, the selection of Digital Lumens intelligent lighting was attributed to the built-in sensors and connected controls, which made it possible for Woolworths to apply occupancy sensing and daylight harvesting to consistently maintain the necessary light levels and improve energy efficiency even further.

Immediate Benefit: Energy Efficiency through Intelligent Control

Within the first twelve months, the NSW regional distribution centre site realized 80% savings in lighting-related costs, and saved more than 3,970,509 kWh compared to the previous lighting system. As a result of that improvement, Woolworths then selected Digital Lumens for its Sydney distribution centre, where a similarly-sized installation resulted in 80% savings in lighting-related costs, even with 40% occupancy.

In total, more than 2,200 Digital Lumens high-bay intelligent LEDs were installed across the two locations, including both DLE fixtures for maximum flexibility, and rugged, watertight ILE fixtures.

Energy savings and reduction of Woolworths carbon footprint were achieved through Digital Lumens' precise fixture control, which allowed the on-site team to introduce progressive dimming and task tuning to automatically adjust light levels from day-to-day, hour-to-hour, and fixture-to-fixture, thereby maximizing savings and employee safety and comfort. This control also allowed for customized settings across many and varied workspaces, including freezers and chillers, ambient picking warehouses, and receiving and dispatch docks.

The Intelligence Overhead Effect: Unprecedented Insight

While Woolworths' primary goal was to achieve greater energy efficiency and reduce its carbon footprint, the team realized new, business-wide benefits through use of Digital Lumens' advanced lighting control and business intelligence platform.

In addition to controlling fixture behavior, including light levels and customized active/inactive settings, the team leveraged Digital Lumens' detailed reporting to better understand occupancy trends, and to create new rules that customized and automated lighting based on those reports.

Among the improvement opportunities that Digital Lumens building and business intelligence software introduced:

- Improved efficiency through occupancy reporting and the ability to identify facility hotspots and, as a result, optimize warehouse traffic and streamline scheduling and operations
- More accurate forecasting of facility-level energy usage through historical trend data and reporting
- Easily accessible, and customizable, snapshots of overall site operations through a combination of energy and occupancy reporting

"Digital Lumens' intelligent LEDs, lighting control, and business insight has met all of our expectations in regards to ROI, maintenance improvements, and overall system functionality and flexibility. The intelligence has made all the difference."

SALLY ANNE HEATH, FACILITIES ASSETS MANAGER

LONG-TERM VALUE:

MAINTENANCE & SAFETY

The reliability and control of Digital Lumens intelligent LEDs delivered a 75% reduction in associated maintenance costs, while less frequent maintenance reduced operational downtime, and improved on-site safety.



INSIGHT & CONTROL

Through Digital Lumens' sensor-rich intelligent LED system and customized reporting, Woolworths was able to better identify facility hotspots and traffic trends to streamline operations and drive additional savings.

80%
ENERGY SAVED

80% ENERGY SAVINGS

Digital Lumens intelligent lighting system and advanced controls saved Woolworths an average of 80% across two locations.

