

The Project

One-to-one retrofitting existing lighting in the warehouse to achieve energy and maintenance cost savings together with improvement in illumination for the working environment.

Existing Lighting

400w metal halide high bays were used in the warehouse. There is also heavy maintenance cost every year to change rapid lumen depreciation and short life time bulbs at 12m hanging height. The metal halide contains harmful liquid mercury and could not support immediate on-off control or could be dimmed during strong daylight when the skylight could achieve >800 lux by itself.

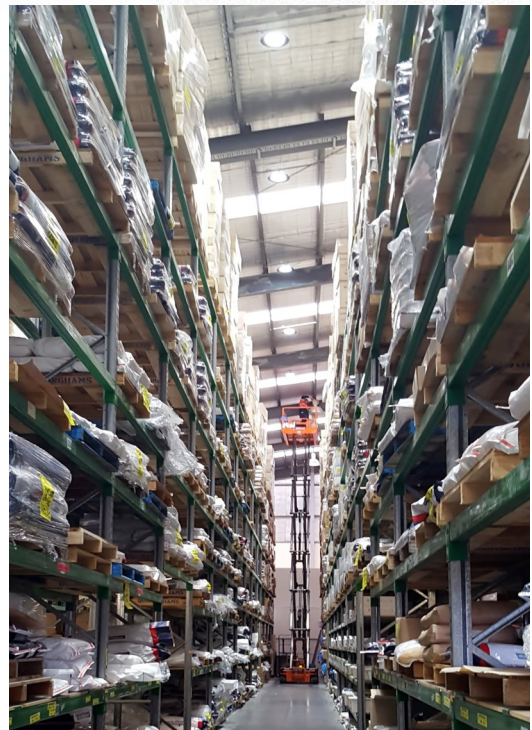
The Solution

Dimmable LED high bays with daylight and motion sensors as shown in the picture were installed in the warehouse area. The beam angle for the high bay for the narrow inter-aisle area is 50° while the open area is 120°.

While installing the lighting in a rainy day, the average lux level measured for inter-aisle space using existing high bay was 150 lux whereas those spaces having new lighting installed was 480 lux. So we could achieve >3 fold increase in brightness with only 1/3 of the previous power consumption. The light could be dimmed down during sunny day or switching off automatically when there is no activity to achieve further energy saving. This dimming and reduction in operating hours will further increase the life expectancy of the luminaire.



A New Zealand Tradition since 1921



“We are very pleased with the results of our new warehouse LED lighting. It has exceeded all our expectations.

Eco-lightech Solution are very knowledgeable, reliable and were great to partner with on this project with our electrical contractors Dalton Electrical.”

Scott Reynolds,
General Manager
DM Dunninghams Ltd.

Benefits



>60% Energy Saving before any lighting control or dimming

Remarkably reduced Maintenance Frequency & Cost

Higher Colour Rendering Index

No Light Flicker

5 Year Warranty

No mercury pollution