

Warehouse Case Study

The Brief

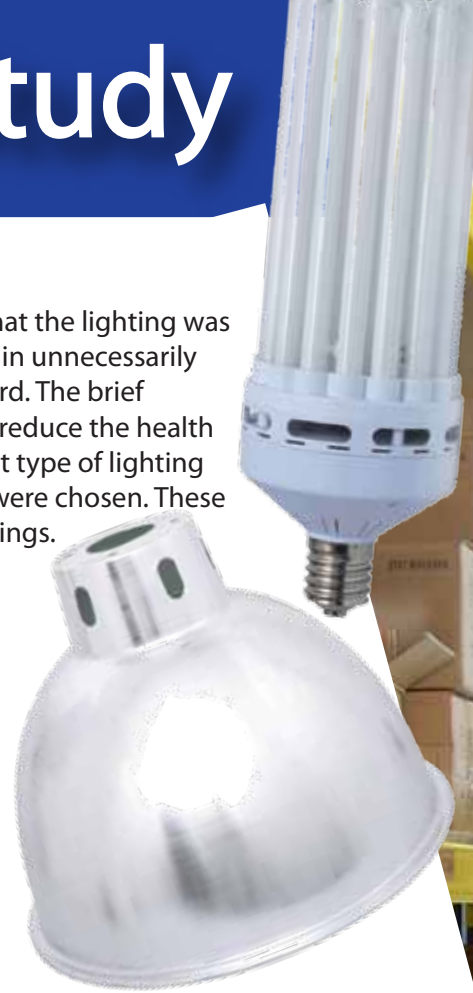
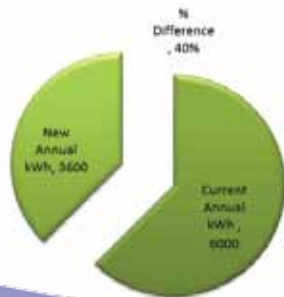
The warehouse is typical of many businesses throughout the U.K and Ireland in that the lighting was both expensive to run and over time had degraded in performance. This resulted in unnecessarily high energy bills, issues with poor lighting and a potential health and safety hazard. The brief therefore was to increase energy efficiency as well as improve lighting levels and reduce the health and safety risk. Like many businesses, cost was a major factor in determining what type of lighting to use. For this particular business, LED was considered too costly, so 150w CFL's were chosen. These compact fluorescent lamps gave the best combination of cost against energy savings.

The Benefits

The benefits were apparent almost immediately. The instant start from the new fittings meant the warehouse was correctly lit as soon as the lights were switched on, instead of the interminable wait we had to endure for the old lights to come on. The improved light levels, 450lx versus 190lx, was also of immediate benefit. After six months the energy savings were significant, in a full year we expect to save over £300 on our energy bills.

Key Figures	
Total Investment	£636.96
Savings per Annum	£336.00
Existing Energy Cost	£840.00
New Energy Cost	£504.00
Carbon Reduction (kg)	281.74
Maintenance Savings	£36.00

Return on Investment	
Return on Investment	528%
NPV	£2,088.30
Payback in Years	1.7



Existing Fittings

12 x 250w MH

Replacement Fittings

12 x LU150 (CFL)

