



Case study Tesco Freezers

Location
Philips Lighting

Tesco PLC - UK
LED Lighting

PHILIPS



Annual energy savings per freezer are estimated to be the same as the entire 6 months electricity bill of an average household.



Philips revolutionary Affinium LED freezer lighting solution saves a 60% in energy costs



Fast Facts

Location

750 Tesco Stores - UK

Installed Lighting System

Affinium Freezer LED

Project in Partnership with

Tesco PLC

Philips Lighting

Background

Retailers clearly need their lighting to work hard for them, showing a return, not only in terms of increased business, but also in increased bottom-line profitability through reduced running costs; in simple terms, better lighting that costs less. Today, brand image, good merchandising and profitability are more closely linked in the minds of retailers than ever before.

Solution and Benefits

Philips has deployed Affinium LED freezer modules replacing the interior fluorescent lighting of Tesco supermarkets' freezer cabinet estate in more than 750 stores, this has reduced their freezer lighting energy by around 60% whilst at the same time ensuring excellent light quality. As Tesco stated, "we chose the Philips Affinium lighting solution as it clearly addresses our current business needs. Given the current challenging economic backdrop, the LED solution not only makes significant inroads in reducing our operating costs but it achieves this whilst supporting our own commitment to provide customers with a better place to shop."

The illumination of goods on display has also vastly improved reflecting Tesco's commitment towards its environmental responsibility and customer promise to deliver great value within a pleasant in-store environment. This was achieved by integrating the Affinium modules within both the side panels of the freezer doors as well as at the upper edge of the internal cabinet giving all round light distribution.

The Affinium LED freezer modules will offer Tesco virtual zero maintenance, and is already demonstrating its reliability effectiveness in the field as discussed recently with Ken Sturgeon of Tesco. "As any retail manager knows, store image is important, and any downtime in freezer lighting or opening hours caused by maintenance issues is disruptive for customers and directly effects turnover. Minimizing maintenance impact is therefore invaluable".

Overall, this initiative will assist in Tesco's own targets to halve carbon emissions in its existing stores by 2020. As customers now consider a company's social and environmental credentials when making their purchase decisions, providing a vast array of goods and services is not enough. Lighting accounts for almost 20% of the world's electricity consumption. Annual energy savings per freezer are estimated to be the same as the entire 6 months electricity bill of an average household which equates to more than 1 tonne of CO₂ per freezer per year.

Environmental benefits are further enhanced since each Affinium LED module is expected to have a useful life of up to 6 years in store. In comparison, fluorescent lamps are affected by factors such as continuous opening and closing of cabinet doors, and do not particularly like the freezer temperature environment which curtail useful life down to just 6 -12 months in practice. In addition, heavy duty usage sometimes means fluorescent lamps become broken inside the freezer but the Affinium LED solution means that spoilage of frozen foods and risk to customers being exposed to glass fragments is also eliminated.



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