

The real cost

The refrigerated display section of a supermarket or convenience store requires a substantial capital investment. In addition to the initial investment in display equipment, operating expenses such as electricity and maintenance pose a significant hit to the retailer's balance sheet.

Wasted electricity

A study performed by the United Nations Environment Program suggests that worldwide, refrigeration equipment represents approximately 35–50% of a supermarket's electric bill*, 25% of which is consumed by display case lighting. Traditionally, the products inside display cases have been lit with fluorescent lamps. Although considered an efficient light source under normal conditions, fluorescent lamps perform poorly in cold temperatures. In fact, these lamps only perform at 20% of their optimal light output. Additionally, most of the energy consumed by this antiquated lighting system is converted to heat within the display case. This heat requires the cooling system to work harder and to consume more energy to maintain the required temperature.

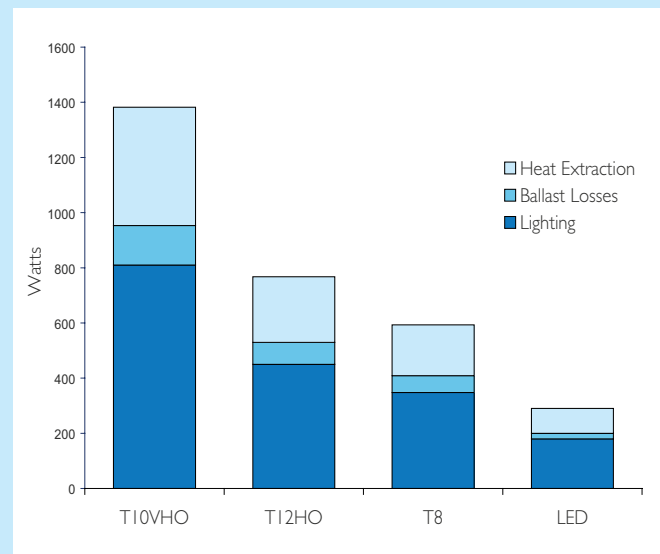
Costly maintenance

The cold and harsh environment of a cooler or freezer also has a negative effect on the lifetime of a fluorescent lamp. Lamps often have to be replaced within months of installation and this frequent re-lamping, as well as unplanned spot replacement, results in substantial maintenance costs.

A better way of lighting

Now, thanks to Philips, you can take advantage of the most advanced LEDs available in the market. Our Affinium LED modules drastically lower the energy consumption required to achieve your desired lighting levels. In fact, a 25W Affinium LED module can replace a less efficient 78W fluorescent solution and still provide a higher quality of light.

Annual lighting power consumption in a five-door refrigerated display case



Based on 100 hours operation time of refrigerated lighting per week (including restock).

Heat extraction is the additional cooling power required to extract the heat generated by the light source (typical values).

Comparison values based on Philips lamp data.