Lighting food. Brightening faces.

Philips LED lighting for refrigeration
Find out why so many stores across Europe have switched to Philips LED lighting systems for their refrigeration cases over the last years.
Philips revolutionary new LED lighting system has been selected by supermarket giant, Sainsbury’s, to light the interior of its freezer cabinets across its stores. In all their stores Philips Affinium LED display lighting modules with Philips LUXEON LEDs have been installed resulting in a staggering energy saving of 75% per freezer. Moreover, the improvement in the lit effect has increased by in excess of 150%.

Philips LED lighting systems can:

- Reduce energy costs by up to 75% and significantly reduce maintenance costs for your refrigeration units
- Improve your product visibility and shopping experience
- Become a greener supermarket by decreasing your carbon footprint

Philips LED lighting for refrigeration cases is a more sustainable and energy efficient way to create an enjoyable shopping experience for your customers. We offer a full range of products to meet every refrigeration requirement. Whether you want to improve product visibility and presentation, lower your refrigeration costs, move to more sustainable lighting technology or meet other goals. Retailers across the world are rapidly adopting our LED solutions because of the benefits they offer.

LEDs are a significantly better alternative when it comes to sustainability, corporate responsibility and reduced environmental impact. Compared to fluorescent lamps they contain no mercury or lead, which significantly reduces CO₂ emissions. They consume much less energy as well.

**The real cost of refrigeration lighting**

Conventional fluorescent lighting and refrigeration systems typically work against each other. Lighting systems generate heat, which the refrigeration system needs to remove. At the same time, lower temperatures typically reduce the effectiveness of lighting systems.

That means more power is required to generate the desired illumination, which in turn, increases the load on the refrigeration system. This is a huge economical and environmental burden, since refrigeration equipment represents 35-50% of a supermarket’s electricity consumption and 25% of that is consumed by interior case lighting.
Improve your product visibility and shopping experience

High customer satisfaction is important for your store. You want to create a shopping experience that fits with your brand values. The right lighting can provide a consistent and pleasant brand experience for customers throughout your store. Even in hard to illuminate refrigeration cases. It’s an important way you can strengthen customer loyalty.

**Affinium Vision Plus**

Present frozen food in a better light
Switching to Philips LED display modules, for example, can offer dramatic improvements in product presentation and visibility. Traditional fluorescent lighting leaves a darker area right where it matters most – in the center of the door. Not so with Affinium LED display modules. Our expertise in optics design ensures that light is distributed uniformly over your products with no hot spots and no warm-up time.

Our unique optic system also prevents the light source from being directly visible, which reduces disturbing glare. Our LEDs have minimal output degradation and color shift so the light remains consistent throughout their long service life. The result is brighter, more uniform product illumination, both horizontally and vertically. It enhances the colors of fresh merchandise to make it look more appealing. LED lighting decreases food spoilage and fading on packaging as well.

“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.”

Tesco PLC, UK

**Affinium Value Plus**

Reduce energy costs by up to 75%
How do you keep costs down and still create an attractive shopping environment in today’s fiercely competitive economic climate? Take advantage of the most advanced LED solutions on the market. For example, our LED display modules enable you to drastically lower your energy consumption, while still providing a higher, more uniform quality of light. You can lower energy consumption by 50-75%, depending on the application.

Decrease waste and get a faster return on investment
What’s more our LED lamps generate less heat, since less than 50% of their energy consumption is converted to radiant heat, so you waste less energy too. They are virtually maintenance free thanks to their extremely long lifetime: from 6 to 10 years compared to 6 to 12 months for fluorescent lamps in harsh freezer environments.
“The fight against climate change is an enormous challenge. Our cooperation with Philips, for example reducing the energy consumption of our cooler lighting, has brought us closer to an energy efficient solution.”

Martijn Versteegh, Green Manager Ahold, The Netherlands

MASTER LEDtube SA

Replace existing lighting systems with a better, more cost-effective solution.
Our MASTER LEDtube SA, for example, is an effective energy-saving alternative to fluorescent lamps in coolers. This state of the art solution enhances the visual impression of the merchandise on display while at the same time minimizing glare for passing customers. The rotating end-cap makes it easy to direct the light precisely at the merchandise.

The product’s long lifetime and excellent lumen maintenance minimizes the hassle of re-lamping, while reducing maintenance costs. Thanks to the MASTER LEDtube SA’s refined slim aluminum form and the integrated optical system and driver, it is now easy to upgrade coolers to LED lighting. It is also compatible with standard G13 bi-pin lamp holders.

At the Edeka Group in Germany, using Philips freezer and cooling LEDs, it was possible to achieve considerable energy savings of up to 70%, a reduction in costs of 56% (including all the installation costs) and a short payback period of just 2.7 years. This was accompanied by a much lower maintenance intensity and a clear reduction in power required for refrigeration due to the lower heat emissions.
Results achieved by retailers who switched to Philips LED cooling and freezer systems

**Customer experience Sainsbury’s**

**Client** Sainsbury’s, United Kingdom  
**Project** Sainsbury’s freezer cabinets  
**Location** 350 stores across United Kingdom  
**System** Installed a lighting system with Affinium LED display modules, some 15,000 pieces in total  
**Results** Energy savings of 75% per freezer and 150% improvement in lighting effect.

**Customer experience Tesco**

**Client** Tesco PLC, United Kingdom  
**Project** Tesco freezer cabinets  
**Location** 750 Tesco stores across United Kingdom  
**System** Installed lighting system with Affinium LED display modules  
**Results** Energy savings of 60%. Assists Tesco in meeting its own targets to cut carbon emissions in half in its existing stores by 2020.

**Customer experience Edeka**

**Client** Edeka Group  
**Project** EDEKA Center, Germany  
**Location** Store in Meine, Germany  
**System** MASTER LEDtube SA1 (see left cabinet) and Affinium Vision-plus LDM421 for refrigerated cabinets  
**Results** Energy savings of up to 70%, which reduced costs by 56%, including installation costs. Short payback period of 2.7 years and lower maintenance requirements. LEDs offer optimized light distribution and contribute to an appetizing product presentation. Reduced the number of lamps by a third without any loss in lighting values.
“As a leading retailer, Sainsbury’s is committed to bringing its customers the best in food and health – that also means how they are presented. At the same time we need to respect the environment. At Sainsbury’s we launch new projects every year designed to achieve lower energy consumption. We were, therefore, particularly interested in the Affinium LED solution as it combined both of these important elements – light quality and energy reduction.”

Les Cole, Sainsbury’s

The Affinium LED display 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.”

Edeka Group

Your partner for better lighting

Every store has different needs and goals. We offer a complete portfolio of LED lighting solutions to meet your specific refrigeration lighting requirements. If you want to reduce costs, improve visibility, increase customer satisfaction or become a greener supermarket, we are the right partner to help you address the strategic and practical issues you face.

For more information about how Philips can help you improve your refrigeration lighting, please contact a local Philips Lighting representative or visit our website: www.philips.com/ledrefrigeration