



Case study

The Co-operative Group

| Location | The Strand, London



The Co-operative Group has a strong commitment to sustainability and reducing energy consumption is a key element of its Ethical Plan. Consequently the new store features a wide range of energy-saving initiatives.



LEDs light up the Co-op's new flagship store



Project info

Customer

The Co-operative Group

Location

London, UK

Philips Products

PowerBalance

Affinium LED

MASTER LEDtube

Distributor

The LightBulb Company

Project in Partnership with

Philips Lighting & The Light

Background

The Co-operative Group's new flagship store in The Strand, London is believed to be the first convenience store in the UK to be completely illuminated by LED lighting. Reducing energy consumption by 35% compared to traditional lighting, the LED fixtures and light sources were supplied by The Lightbulb Company. Further cost savings will result from reduced maintenance costs as the LED lighting offers a life of up to 50,000 hours.

The solution

At the heart of the Philips lighting design is the company's PowerBalance direct/indirect LED luminaire, which directs light across the ceiling as well as downwards into the space to create a comfortable lit environment. PowerBalance delivers 25% energy savings over the fluorescent luminaires that would traditionally have been used to achieve the required lighting levels in this type of application.

Significant energy savings (approximately 20%) have also been achieved in the lighting of refrigerated multi-deck display cabinets.

As an alternative to the traditional fluorescent lighting solution, Philips proposed the use of its Affinium LDM422 VISION PLUS canopy LED module. Specifically designed for this type of application, the LDM422 optical design to ensure uniform light distribution uses a special button down

the cabinet. This eliminates the common problem in such cabinets where the lighting on the top shelf is too bright and creates dark patches lower down. There is also less light spillage outside the cabinet, compared to fluorescent, so that all of the light output is utilised to full effect.

The Affinium LED system is low voltage, which improves safety levels for maintenance teams, while the 50,000 hour life of the light sources ensures that less maintenance for re-lamping is required.

For the refrigerated champagne display cabinet in the store, the existing fluorescent lamp was replaced with a Philips MASTER LEDtube as a direct retrofit, reducing energy consumption by 54%.

In addition, The Lightbulb Company has supplied a number of other LED luminaires, including recessed downlighters, display lighting, surface-mounted fixtures for non-public areas and emergency lighting, plus exit

The combination of energy savings and reduced maintenance costs will provide The Co-operative Group with a return on investment of less than three years, with ongoing savings for many years beyond. Furthermore, the company will be able to take advantage of the innovative 'future-proof' design of the Philips luminaires that will enable even more efficient light sources to be quickly retrofitted when they are developed in the future.

