THORN
LIGHTING PEOPLE

Thorn Energy Solutions helps Centre Retail Park slash energy by 89%

Centre Retail Park in Oldham has 245,000 sq. ft. of retail space and car parking facilities, with over 1,100 parking spaces. Occupiers include national retailers and restaurant chains, including Boots, Carphone Warehouse, Next, McDonald's and Pizza Hut.

With the existing car park lighting scheme comprising 45 column-mounted 400W SON luminaires (with 52W gear losses), the site had a dull orange glow. Despite only 60% of the lighting working, it consumed 82,224 kWh per annum, with frequent lamp failures adding to the high operating costs.

In conjunction with Centre Retail Park agent, Savills, and Stroma, a leading authority in meeting energy reduction targets, an assessment was undertaken to determine a suitable replacement. As well as reducing energy consumption and improving lamp lifetime, a crisper light output was required to create an enhanced shopping experience with a greater sense of security.

LED replaces SON

Thorn Energy Solutions specified the Indra 98W road lighting luminaire with Bi power dimming to reduce energy consumption by 50 per cent during nighttime hours.

With its advanced optical performance, Indra offered the highest lumen output and also met the payback requirement of less than four years. Indra also reduces maintenance costs to practically zero, while still achieving the CIBSE requirement of 20 lux for car parks.

The 45 Indra fittings are mounted onto the existing lighting columns, using double-headed units where twin SON fittings had been previously used. The entire scheme is backed by Thorn's comprehensive 5-year product guarantee for peace of mind.

For more information about Indra, go to
www.thornlighting.com/INDR

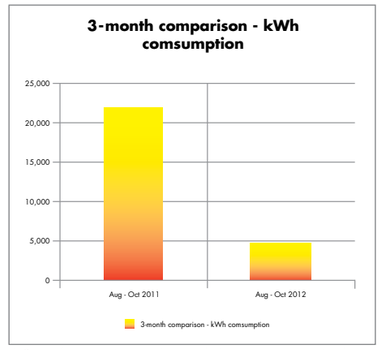
Products used

Indra

About Thorn Energy Solutions

Thorn Energy Solutions provides a comprehensive, hassle-free and commercially feasible turnkey solution for installing energy efficient lighting. Expert knowledge means you can depend on Thorn Energy Solutions for support every step of the way: from your initial energy audit, to the correct product specification to reliable long-term maintenance of your lighting system.

For more information about Thorn Energy Solutions, visit
www.thornlighting.com/econtrol



A 3-month comparison study revealed energy consumption has reduced by 78%, from 21,845 kWh to 4,722 kWh, a saving which is expected to rise to 89% over the LEDs' lifetime of 8+ years. The first three months alone saved £2,055, the equivalent of 17,123 kWh or 8.98 tonnes of CO_2.

Key Facts

Forecast year 1 savings:
- £9,421
- 80,126 kWh
- 42.03 tCO_2e

Expected lifetime:
- 8+ years

Forecast lifetime net cost savings:
- £58,883

Payback time:
- 3.5 years

eControl From Thorn's 15 ways to save energy, the following were key to minimising energy consumption:

System efficacy
Good luminaire design is more important than ever. Even two different LED luminaires can have widely differing performances. Indra LED has been carefully designed for high optical and thermal control and as a result delivers significant efficiency gains over the existing SON fittings.

Task lighting
Providing the correct amount of light for a specific set of conditions and moment in time is vital for saving energy. With a crystal clear understanding of the task application, the light at Centre Retail Park was reduced from 50 lux to an acceptable level of 20 lux.

Task/scene setting
Task/scene setting focuses on using the right amount of light for the particular time and task in hand. The use of Bi power dimming was key to reducing energy consumption at Centre Retail Park, allowing the nighttime lighting to be reduced by 50%.