

# Ikea joins the LED revolution

LED luminaires from Cree have helped Ikea make huge energy savings at this store in Wembley. Robert Bain reports »»



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A few months back, Ikea announced that it would only be selling LED lighting products by 2016. And the furniture giant is practicing what it preaches, with an LED car park lighting installation at its flagship Wembley store.

The upgrade includes more than 600 light fittings in the store's multi-storey and outdoor car parks, and a control system to dim lights in the multi-storey car park to 20 per cent of full output when there's nobody there.

**Three-year payback**

Ikea had already installed LED lighting from Cree at a store in Milan, cutting two-thirds off its energy bill. This time it has cut consumption by 80 per cent, and the installation is expected to pay for itself in less than three years.

The lights for the Wembley store were supplied

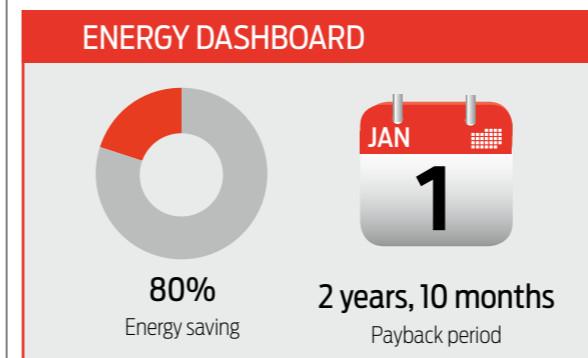


by Cree's UK agent LTSS. In the multi-storey car park, 365 of Cree's 94W 304 Series luminaires were installed, each containing 40 LEDs and microwave sensors for dimming. The average illumination in the car park is now 100 lx, with a uniformity ratio of 0.57. A further 190 of the same fittings were installed in the store at ceiling height.

**Inside and out**

In the outdoor car park, 62 Cree Ledway road luminaires with 40, 60 or 80 LEDs were installed at a height of 8m and spaced at 8-9m, each drawing between 94 and 183W. The average illumination is now up to 30lx, with a uniformity ratio of 0.25.

Nuno Costa from Ikea's sustainable development team says: 'It is great to be able to make energy savings and also to improve significantly the quality and uniformity of our store lighting. The feeling of wellbeing and safety for our customers has been improved dramatically.'



**Britain's leanest car park lighting**

**SAINSBURY'S EAST HAM**  
New and extended Sainsbury's branches will get LED car park lighting, including the Leek branch where there is also LED lighting in the store (see overleaf). The East Ham store has fitted GE's Area Lighter luminaire, equipped with GE's dimmable LED engine.



**BOURNEMOUTH AIRPORT**  
Bournemouth Airport was one of the first in the UK to achieve carbon-neutral ground operations. In its car parks, MHA Lighting replaced 150W SON luminaires with new fittings that use just 67W including ballast, slashing lighting energy costs by 72 per cent.



**ST MICHAEL'S, NORTHAMPTON**  
Northampton Council's energy company thought the sudden drop in electricity consumption at a multi-storey car park indicated a problem. In fact, the new LED lighting from Honeywell was operating well and had cut energy use by 75%.



**3i, BIRMINGHAM**  
The SON lights at this car park in Birmingham were replaced by 17 LED fittings from ArmadilloLED mounted on 5m-high posts in a point-for-point retrofit. Five LED floodlights were mounted on the walls. Light sensors on the walls make the most of the daylight.



**UNIVERSITY OF WARWICK**  
A lighting facelift in a multi-storey car park at the University of Warwick by electrical contractor Drake set replaced SON gear trays with retrofit 20 56W LED units with programmable drivers. Lighting control was achieved using batten-mounted detectors from Ex-Or.

