



# Case study

## Hereford Cathedral

Location  
Philips Lighting

Hereford, UK  
Philips LED Solutions



**PHILIPS**

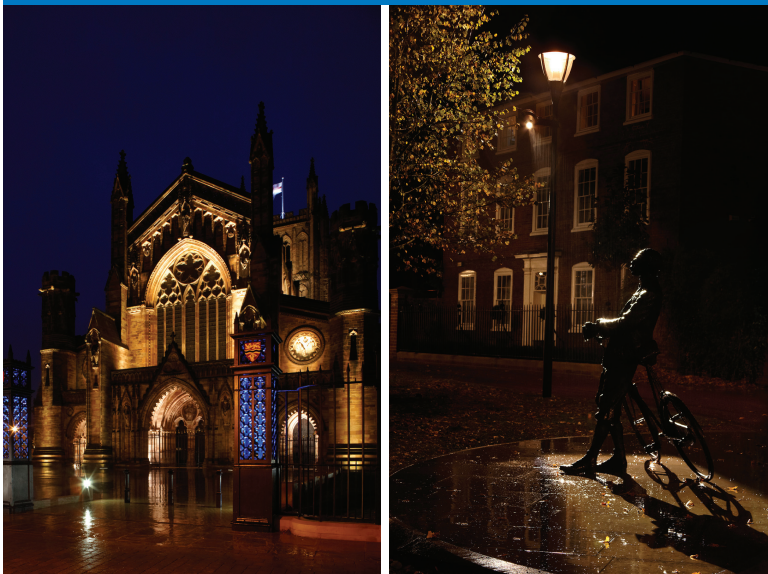


“As twilight fades into darkness at the end of each day, the new Philips lighting scheme draws attention to the cathedral’s presence in the middle of the city, enabling it to be seen from near and far. By casting light from unusual angles, everyone’s appreciation of the medieval architecture is enhanced, and the use of the latest LED technology has significantly reduced the cathedral’s carbon footprint. The subtle illumination of the building against the night sky reminds residents and visitors alike that, over 1300 years after its foundation, the cathedral continues to stand at the physical, spiritual and cultural heart of Hereford.”

Reverend Canon Andrew Piper, The Precentor of Hereford Cathedral



# The nightscape of Hereford and the grounds of Hereford Cathedral have been transformed with a range of low energy, low maintenance LED fixtures from Philips



## Fast Facts

### Customer

Hereford Cathedral

### Location

Hereford, Herefordshire, UK

### Philips Products

Philips iW Graze Powercore

iW Blast Powercore Graze

Linear

Blast fixtures

### Project in Partnership with

Robert Kilgour & Associates

LITE Ltd

## Background

When embarking on the regeneration project, the Cathedral's Chapter was keen to improve the exterior lighting, so that it would complement the other works as well as reducing energy consumption and maintenance costs. The project was partly funded by the Heritage Lottery and also had to meet strict conservation criteria.

The previous exterior lighting had used a combination of metal halide and high pressure sodium light sources, ranging in wattage from 250W to 400W. These were used to illuminate the public thoroughfare that runs through the grounds, as well as lighting the facades of the cathedral from the buttresses upwards.

## The Solution

In arriving at a new lighting scheme, Philips organised night trials so that members of the Cathedral's Fabric Commission for England could experience the lighting that was being proposed. Predominant in the new lighting scheme are Philips iW Graze Powercore and iW Blast Powercore LED fixtures, with an average wattage of 50W per fixture, thus reducing the installed electrical load significantly. For most of the building, in-ground Graze fittings are used to light lower levels, with Blast fixtures lighting upper levels.

Graze linear LED fixtures, which have also been used to illuminate balconies on the West Wing, are optimised for surface grazing and wash lighting. They have a low profile housing, which was customised for this project. Blast fixtures are particularly suited for wall washing and floodlighting. The Powercore technology of both fixtures provides accurate power control directly from line voltage, eliminating the need for external power suppliers.

Throughout, the purpose of the façade lighting is to model the Cathedral's architectural features, rather than flatten their appearance with an excess of light. This has been achieved by sitting the fittings close to the facades, providing subtle

uplighting and wall washes. In addition, the flagpole on top of the Cathedral is uplit by a Blast fitting to emphasise its white colour, while the circular window at the west end of the building is highlighted from inside using Philips MasterLED spot lamps.

All of the LED facade lighting has been equipped with controllable white LED, so the Cathedral has the ability to change the colour temperature of each lighting unit should it wish to do so. The facade lighting is also controlled by a timer, which switches the lighting off at midnight.

Another feature of the regeneration project has been the installation of new railings, in a Pacific Blue colour, around the grounds. To enhance the colour of the railings at night, Philips LED flood fittings have been incorporated into the pillars. These fittings have been specifically designed for integrating into structures to illuminate and enhance architectural details. Again, the colour of the light from these fittings can be changed if required.

## Energy and Carbon Saving

In addition to the improved visual appearance and reduced energy consumption, the Cathedral will benefit from lower maintenance costs through the life of the installation, thanks to the long life of the LEDs. Graze and Blast fixtures, for example, offer a lamp life of up to 70,000 hours, making them virtually maintenance free.

As well as LED light sources, Philips has supplied column-mounted Cosmopolis lamps and electronic gear to illuminate a public footpath running through the grounds to the standards required by Herefordshire Council. One of these columns also has a Philips PROflood fixture mounted on it to illuminate a nearby sculpture of Sir Edward Elgar.



[www.philips.co.uk/lighting](http://www.philips.co.uk/lighting)



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Date of release: April 2013