

> CASE STUDY

EDINBURGH COLLEGE - MILTON ROAD CAMPUS BENEFITS FROM LED RETRO-FIT



- Quick Facts**
- Up to 40% energy consumption saving
 - Improved lighting across campus using PrismaLED technology
 - No upward lighting pollution

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CityMax®

LUX
AWARDS 2017
WINNER

BACKGROUND

Edinburgh College is one of Scotland's biggest Colleges with around 19,000 students across four campuses in Edinburgh and the Lothians. The College was formed in 2012 as part of the merger of Edinburgh's Jewel and Esk, Telford and Stevenson colleges.

The Milton Road campus, to the East of Edinburgh, houses the Creative Industries centre including film and music studios and several auditoria. It also houses the Health, Wellbeing and Social Sciences Centre. The site itself comprises modern buildings spread over a large area linked by footpaths and has several car parks. The setting is rural rather than urban.

CHALLENGE

The original luminaires used on the campus were from Holophane and used discharge lamps such as high pressure sodium and metal halide. Whilst these worked faultlessly over many years, new LED luminaires offered the opportunity for greater energy saving. Holophane are a trusted supplier to the College and were asked to provide an energy efficient upgrade.



CityMax® Large

THE SOLUTION

In order to reduce costs, the same column positions have been used and so only the lanterns were replaced. The wide range of optical distributions available with the new LED lanterns meant that there is now an improved quality of light whilst consuming considerably less energy.

Further energy savings are achieved by reducing the light output of the lanterns by 50% from midnight until dawn, thus maintaining safety and security for the staff and students throughout the night.

In keeping with the local environment, none of the luminaires emit any upward light.

There are four main areas: the front concourse pedestrian area, the main car park, subsidiary car park and minor access roads.

Front Concourse

As you approach the front concourse, the pedestrian area is illuminated with the award winning **CityMax**. This is an attractive circular post top lantern which emits no upward light. The lenses on the CityMax provide excellent optical control with a high degree of uniformity at ground level.



This 51W, 6,000 lm unit replaces the earlier 60W which also had a lower light output.

Main Carpark

The main car park is illuminated with the bigger 148W **CityMax Large**.

There are six optical distributions available with this lantern and this particular installation uses a square light distribution and 20,000 lumen output. It replaces the previous 250W HID unit thus giving a 40% saving in energy. Further savings are made by dimming after midnight.



Subsidiary Carpark

Another of the smaller car parks is illuminated using **D-Series 1** lanterns. This is a modern style 105W, 11,000 lm streetlight lantern. The finned thermal management system of the D-Series means that the rated life of

the LED engine is over 100,000 hours, so it is designed to last. The unique asymmetric optics placed below each LED ensure uniform lighting with minimal light pollution.



Access Roads

Access roads use the **Factor Small** streetlight. These have a long narrow distribution enabling wide spacings. It is rated at 47W and replaces the 60/90W Holophane QSS units.

The Factor Small is a very compact unit measuring just 116mm high and 330mm wide and is specifically designed for 42mm side-entry mounting. This slim unit is thus an ideal cost-effective solution for residential roads, car parks and pedestrian areas.



