

> CASE STUDY

MORRISONS CAR PARK MILTON KEYNES



Quick Facts

- The CityMax Large provides quality, precise lighting required for large areas such as retail parks, city centres and beyond.
- Optimising the sealed, prismatic borosilicate glass pods, the CityMax Large is able to use every lumen to best effect.
- Helping to provide Morrisons with an 80% reduction in energy consumption.

BACKGROUND

Morrisons is a well-established superstore just to the west of Central Milton Keynes. The site is close to the A5 and is easily accessible from all areas of the city.

This popular venue has almost 1,000 car parking spaces on a rectangular shaped site. As part of a refurbishment and upgrade, it was decided to improve the car park lighting both aesthetically and to reduce energy consumption.

CHALLENGE

Retailers are always trying to minimise costs, from whatever source, in order to give the best value to their customers. The challenge was to illuminate the very large car park as efficiently and economically as possible.

For cost optimisation retailers require you to minimise the number of columns and lanterns used, this necessitates particular design expertise.

But equally, you need to ensure the high degree of uniformity of illumination required by BS 5489 and EN12464-2. You need effective optics, high performance, and durability.

Another challenge is that car parks in retail areas also need to be attractive – it's the first thing shoppers see when they arrive.

Both engineering skill and aesthetics are needed to achieve the optimum result.



THE SOLUTION

The solution was found in the Holophane CityMax Large. This has been specifically designed for retail parks, city centres and anywhere quality, precise lighting is required for a large area.

For this replacement installation, a total of 37 CityMax Large were used mounted on the existing 6m columns. This 148W, single head unit replaces a triple arm array each with 250W lamps. The new units thus produce an 80% reduction in energy consumption whilst giving an increase in illumination levels.

A further 31 CityMax luminaries with a unique curved bracket were used on 4m columns at the front of the store to provide higher levels of illumination.

The secret of the CityMax Large performance is found in the sealed, prismatic borosilicate glass pods housing the LEDs. These pods are recessed in the body of the lantern which means that no upward light is emitted, and the prisms direct the beam so that every lumen is used to best effect. The glass also has excellent longevity, and it minimises dirt depreciation. Both the aluminium body and glass can be recycled.

Each pod is contained within its own ventilated chamber which is additionally cooled by aluminium fins on the upper surface. The excellent thermal management means that the LEDs have a lifetime of 100,000 hours (L70B50). In order to maximise the output of the LEDs, the CityMax is available with six different optical distributions.

These range from a simple, circular symmetric distribution to various “streetlighting”, forward throw broad and narrow patterns and there is even a square beam spread available.

In this particular installation, most of the lanterns were mounted centrally in the car park and had a symmetric distribution to maximise the effectiveness of the lighting in all directions.

For existing installations, the maximum output of 40,000 lumens means the CityMax Large typically replaces 400W and 600W SON and metal halide. Light output ranges from 20,000 to 40,000 lumens, 150 – 300W. Smaller versions of the CityMax are also available.



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CityMAX[®]
LARGE

