

> CASE STUDY

GREGGS AND COSTA COFFEE CAR PARK AND DRIVE-THRU



Quick Facts

- Denver iD Pole lights a new build Greggs and Costa Coffee car park.
- Utilising five different types of beam distribution.
- Minimal glare is achieved for customers due to the Denver iD's patented Transition Zone.

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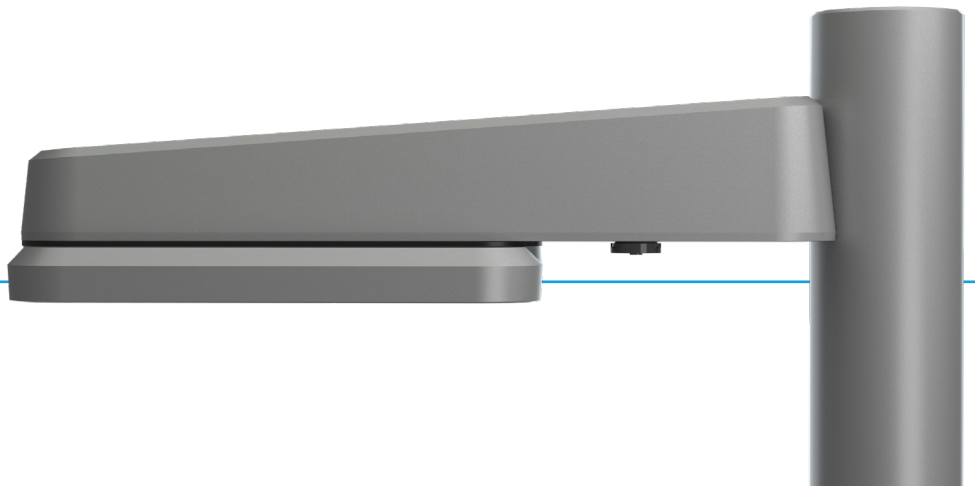
DENVER
ID POLE

BACKGROUND

A new car park and drive-thru area for Greggs and Costa Coffee has been constructed on the Southwell Road dual-carriageway on the outskirts of Mansfield. The site is close to industrial and retail parks and provides a convenient rest area for both for visitors and long-distance drivers.

CHALLENGE

Sites such as these, and there are many, often have constraints on the location of the lanterns and columns. Whilst also taking into consideration the interaction between drivers and pedestrians.



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CAR PARK AND DRIVE-THRU**



The Denver iD patented
Transition Zone in action
preventing unnecessary uplift.

THE SOLUTION

At an early stage, it was decided to use the new Denver iD Pole luminaire from Holophane. There are several key features that make the Denver iD Pole ideal for amenity and car parking areas. Particularly useful in this type of location is the option of five different beam distributions.

The majority of lanterns used here have a Long and Narrow distribution. These are used for illuminating the main drive-thru circulation routes. Asymmetric and Forward Throw versions are used in other areas. On sites where the lanterns have to be mounted in the centre of a car parking area, a totally Symmetric beam is invaluable in minimising the number of poles used.

Having a wide choice of distributions also means that it is easier to achieve the uniformity requirements such as those in BS 5489 or BS EN 13201.

Minimising glare to drivers is always an important consideration and the Denver iD Pole luminaire has a patented, optically designed Transition Zone around the LED array. This angled white surface helps produce the effect of a large luminous area or light source thus creating a smoother lit effect. This Transition Zone prevents LED dazzle which makes for a more comfortable effect in pedestrian friendly amenity spaces.

The low glare Transmission Zone also minimises the visual impact in locations where the lanterns are seen against a dark night sky.

To further maintain the comfortable appearance, the LEDs are available in 2700K, 3000K and 4000K. These Warmer versions are Dark Sky approved by the International Dark Sky Association, IDA. None of the versions emit any upward light.

Another positive advantage of the Denver iD Pole luminaire is that the flat front lens is made of hydrophilic glass. This encourages water droplets to “sheet” and run off the lens surface easily. Conversely, hydrophobic glass causes beading of water on the surface of the lens thus negatively affecting overall light output.

To suit the various size and illumination requirements of amenity car parks, the Denver iD Pole has light outputs ranging from 2,000 lm to 12,000 lm.

Holophane luminaires are renowned for their long life and thermal management and the Denver iD Pole is

no exception. It can operate in ambient temperatures from -25C to +45C. Both driver and LEDs are mounted directly on to LM6 aluminium heat sinks. Furthermore, they are located in separate compartments with an additional thermal membrane between the two.

Nowadays, whole life costs, the circular economy and the longevity of the luminaires all have to be considered. As such, the maintenance during life and recycling at the end are important aspects of the luminaire design.

The Denver iD Pole has a 2.5 rating (Excellent) as defined in the Society of Light and Lighting TM66 “Creating a Circular Economy in the Lighting Industry”. The gear housing and LED modules can easily be replaced and the major construction materials such as glass and aluminium can be recycled through recycling schemes such as Lumicom.

