



## Murco are 'filling up' with savings!

After



Walsgrave Service Station  
Hinckley Road  
Coventry  
CV2 2QN

Before



### Project description

Murco Petroleum is a UK based oil refining company which has a network of over 450 petrol filling stations throughout England, Scotland and Wales. Murco are committed to reducing their impact on the environment, and as such have created an initiative to retrofit a number of petrol filling station canopy lights with energy efficient LED lighting.

The project at Walsgrave Service Station in Coventry involved retrofitting the existing 250W metal halide lamps within the canopy fittings with the Brackenheath LED360 54W lamp. As a result, the electrical load of the canopy lighting was reduced by 6.6kW, a saving of 82%.

Prior to the upgrade of the lighting, it was evident that some of the metal halide lamps within the canopy had lost a high percentage of their initial lumen output, and had begun to colour shift due to age, creating 'green' spots around the canopy.





Due to lumen degradation of the metal halide lamps, light levels around the canopy prior to the upgrade were varied, with dark spots at various points of the forecourt. The highest measured value prior to the upgrade was 237 lux, whilst the lowest was 69 lux. The average illuminance of the forecourt prior to the upgrade was 157 lux.

The LED360 lamp has a colour temperature of Daylight (6000K), which has a very white appearance. The upgrade ensured that the canopy lighting was much more even in colour to the naked eye, providing the petrol station with a much more modern and welcoming feel. Despite replacing 250W lamps with 54W LED lamps, the average illuminance of the forecourt was only reduced to 134 lux, however the lowest measured value was increased to 90 lux.

By using the IP64 rated LED360 lamp in the upgrade, the canopy and light fittings can be regularly cleaned using a pressure washer without any negative effects. The unique polycarbonate lens over the LEDs also ensures they are not affected by dust and dirt, ensuring maximum lumen output.



## Benefits

- Estimated over £2,600 in annual savings
- Annual energy savings of approximately 27,000kWh
- Reduced canopy lighting load by 82% (6.2kW)
- Maintenance free for over 10 years
- Reduction equivalent to 14 metric tons of CO<sub>2</sub> emissions annually

