

case study  
London Heathrow Marriott

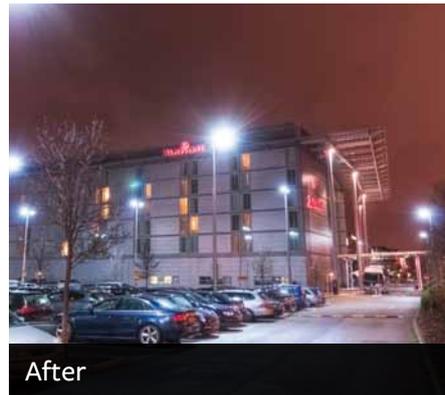
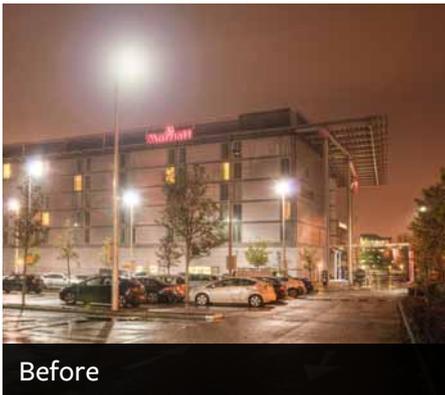


over

**85** %

annual savings

# London Heathrow Marriott Hotel works with Gemma Lighting to enhance lighting levels and save energy.



## Summary

- 17 tonnes of carbon saved annually
- Energy consumption reduced by 69%
- Excellent feedback from hotel guests
- A tailored solution by a UK manufacturer
- The success of the trial has led to Gemma Lighting working with other Marriott hotels across London

## The challenge

### **The challenge to improve visibility whilst lowering energy costs.**

Boasting 393 rooms across 5 floors the London Heathrow Marriott is one of the leading Heathrow hotels and a flag ship property in the Marriott UK portfolio.

In an effort to provide the hotels guests with a better visual experience, whilst enhancing the hotels green credentials, the London Heathrow Marriott contacted UK LED lighting manufacture Gemma Lighting to carry out a review of their car park lighting.

The initial car park lighting consisted of 32 sodium street lights, each consuming a substantial 300 circuit watts and generating 24 tonnes of carbon annually. When working, the sodium street lights provided the hotel with an adequate level of illumination. However, they were expensive to run and difficult to maintain.

## The solution

### **Gemma Lighting's tailored solution.**

Understanding just how important this project was to the hotel chain, an account manager visited and discussed in detail the requirements for the new LED lighting scheme. During this meeting a full lighting survey was carried out in order to provide lighting plans and a detailed energy and carbon reduction report. The report was created to show how Gemma's LED lighting would significantly reduce the hotel's energy consumption which in turn offered an extremely good return on investment period.

The Jupiter 72 LED street and car park luminaire was selected for this project. The Jupiter 72 is the most powerful luminaire in this range of LED lighting, offering high LUX levels with a pure white light close to day light, ideal for meeting the hotel's requirement for an enhanced visual experience.

The Jupiter 72 consumes less than 100 circuit watts, meaning that when compared to the original sodium lighting scheme, the new LED lighting would provide a 69% energy saving and a reduction in carbon emissions of 17 tonnes annually.

Gemma's LED lighting has a service life of over 10 years which has been greatly received by the hotel, as this will result in a huge reduction in maintenance bills and also eliminate the need to change difficult to reach lighting fixtures.



### **The Green Tourism Business Scheme**

The London Heathrow Marriott are proud partners of the Green Tourism Business Scheme.

The Green Tourism Business Scheme provides a framework that support efforts to reduce carbon footprint and is a valuable tool in developing sustainability.

[www.green-business.co.uk](http://www.green-business.co.uk)

over

# 85



annual savings



## Carbon Usage per annum (tonnes)



Before = 24

After = 7

## Energy Usage per annum (KW)



Before = 41,993

After = 12,859

## Annual costs energy and maintenance



Before = £8,908

After = £1,157

## The future

### Impressive results lead to further projects.

The new lighting was installed successfully and the hotel received immediate and positive feedback from the hotel guests and employees.

“The feedback we have received from our customers has been most pleasing and has exceeded our expectations. I have no doubt that this new LED lighting scheme will really enhance our guests overall hotel experience

**Hotel Manager - Ron Vos**

“The new LED lighting looks great and is achieving exactly what I had envisaged. Gemma Lighting took the time to really understand our requirements and this has delivered a fantastic lighting scheme. The new LED lighting will reduce our energy and maintenance costs considerably and will save the hotel somewhere in the region of £7,500 a year. Our carbon footprint will also be greatly reduced by some 17 tonnes annually

**Director of Engineering - Jim Shields**

Based on the success of this flag ship hotel, Gemma Lighting have been invited to tender for further projects within the Marriott Hotel network. Gemma Lighting will continue to offer similar energy, carbon and maintenance savings on similar and new Marriott Hotel lighting schemes.



## Advantages of LED lights

1. More power to light not power to heat = **save on energy bills by up to 90% and reduce carbon emissions.**
2. LED has at least 10 years life = **save on lighting maintenance costs**
3. Zero light overspill = **no light pollution to surrounding areas**
4. Pure white light (close to daylight) = **excellent visual acuity for CCTV**
5. Instant light (100ms switch on time) = **perfect for motion sensors/saving energy when not in use**
6. Impact resistant casing = **safe from vandalism**

# About Gemma

Gemma Lighting LTD was formed to create an innovative concept for everyday lighting requirements. Drawing on 25 years of experience in LED technology, the team at Gemma Lighting LTD continues to design, develop and manufacture a new generation of environmentally friendly LED lighting suited for their customer's individual needs.

LED lighting is Gemma Lighting's only product – giving them a specific knowledge and interest in developing new ideas. Gemma Lighting design and manufacture their LED lights in the UK and can proudly say that they adhere to the high UK standards of manufacturing. Gemma's area account managers provide full project support for end users, wholesalers and distributors alike.

For more information on Gemma Lighting's products please contact the sales team  
**0844 8565201, [info@gemmalighting.com](mailto:info@gemmalighting.com) or [www.gemmalighting.com](http://www.gemmalighting.com)**