

case study



Portsmouth Marriott

gemma
lighting



over

79



annual savings



Gemma Lighting's work with the Marriott Hotel chain continues with LED Globe Lights for hotel car park



From left to right: Gemma Lighting Sales Director Mark Major with the Portsmouth Marriott Hotel General Manager Barend Jan Schreuder and Chief Engineer Craig Rawding

Summary

- Gemma Lighting and Marriott Hotels work together once again to save on energy
- 32 Jaguar LED Globe Lights improve lighting and cut costs
- Energy consumption cut by more than half
- Maintenance costs eliminated with scheme estimated to last for over 18 years
- Tailor made solution from a UK manufacturer



The challenge

To reduce energy consumption, improve safety and eliminate maintenance costs

Based on Southampton Road, the Portsmouth Marriott welcomes visitors from all over the world to the south coast, with 173 rooms spread across seven floors. Looking to change out their initial lighting setup in the car park area, the Portsmouth Marriott wanted to replace their 70W Globe lights that were identified as being one of the largest consumers of energy for the hotel site. Customers using the car park also had made various complaints about the previous lighting setup with regards to its light output and coverage.

With this in mind the Marriott chose Gemma's LED lighting solutions after assessing the options available, knowing from previous experience with other Marriott hotels the savings in energy bills and carbon reduction that could be made. The network's flagship property at London Heathrow saved 17 tonnes of carbon usage per year, as well as making 85% of savings annually after purchasing Gemma's LED lighting. Similar savings have been made at three other sites, including the Cheshunt and Waltham Abbey Marriott hotels.

At the heart of every decision the Portsmouth Marriott makes is the impact on the environment, and the Green Tourism Business Scheme gold award, coupled with the Carbon Trust Standard, are signs of the hotel's commitment to reducing their carbon emissions.

The solution

Gemma Lighting's tailored solution.

The Jaguar 24 was selected as the ideal product to replace the Hotel's previous lighting setup, after an account manager visited the Marriott site and assessed their needs. Utilising the effective light distribution and life span of up to 100,000 hours the Jaguar 24 provides, it was put forward that this was the best product for the hotel in order to achieve its goals of improving light quality and reducing energy consumption. Users of the hotel car park would benefit from the brighter white light given off by Gemma's LED lights, which also aid the use of CCTV security camera systems through improved picture clarity.

Gemma's LED lighting products are much more efficient than traditional methods of lighting, due to the fact that they convert more power to light as opposed to heat, meaning they are also less prone to failures and outages. The Jaguar 24 LED Globe Light is part of Gemma's high quality street and car park lighting range that is designed and manufactured here in the UK. The high quality of production and testing ensures the light fixture is durable, and with a protection rating of IP65 the light can stand up to both vandalism and the elements.

On average the Jaguar saves more than two thirds in energy consumption when compared to similar, more traditional light fixtures. With the directional light source of LED it has effective light distribution and low CO₂ emissions – another target of the hotel's that the Jaguar could help to achieve. The Jaguar is topped off with a capped black sphere – further ensuring that light pollution is kept to a minimum.

The future

LED lighting provides environmental and financial benefits

The lights were a big hit with the hotel and customers alike. The longevity and durability of Gemma's high quality products at the Portsmouth Marriott are estimated to have a lifespan of over 18 years, and the installation satisfied one of the key aims to reduce maintenance costs by removing over £1,000 worth of costs every year.

Having reduced the carbon emissions of the car park lighting to just three carbon tonnes per annum, energy consumption with the new Jaguars fell by 62% - reduced from over eleven thousand kilowatt hours every year to just over four thousand. The cost of the hotel's energy bill for the car park lighting was cut by more than 50%, saving over seven hundred pounds every year from the point of installation - a saving that will only grow as the cost of energy continues to soar. This also means that the total cost of the Hotel's car park lighting in energy and maintenance bills was reduced by 79%.

“The whole of Marriott internationally set about a plan to reduce energy consumption two years ago, and we have done several things to achieve this such as joining the Green Tourism Scheme and switching to LED signage. We looked at our energy usage and identified one of the largest portions of our energy consumption as the car park, so Craig began looking into options for this and we selected Gemma Lighting. I like the lights because the black portion on top looks good and ensures minimal light pollution, the lights are better for us and our security, and provide better safety for users walking around the car park. **Barend Jan Schreuder, General Manager - Portsmouth Marriott Hotel**

over

79%

annual savings

Carbon Usage per annum (tonnes)



Energy Usage per annum (KW)



Annual costs energy and maintenance





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
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