



BWI AIRPORT MARRIOTT HOTEL



LED LIGHTING CASE STUDY

BWI Airport Marriott Hotel

Marriott has grown to be a leading lodging company with more than 3,700 properties in 73 countries and territories worldwide.

The BWI Airport Marriott is located near Hanover, MD and is adjacent to the Baltimore Washington International Thurgood Marshall Airport. Recent renovations of the 18,000 square foot hotel included a new fresh design of the meeting and guest rooms, as well as a complete lobby and updating of the Chesapeake Restaurant. Upon completion of the makeover, it became evident that the existing lighting would no longer meet the needs of the hotel.

The lighting at the BWI Airport Marriott had several problems. Many of the conventional bulbs were failing and with the main lobby ceiling at 25 feet high, it required special equipment and maintenance personnel to change a single light bulb. Additionally, rising maintenance costs were also a concern.

The hotel operates their lobby lighting 24 hours per day, 365 days per year. Prior to the LED retrofit, the lobby was using 230 MR16 halogen bulbs at 50 Watts each and 90 PAR38 incandescent bulbs at 90 Watts each. These bulbs required constant maintenance and increased room temperatures due to their heat output. The management felt it was imperative that a solution was found and LED lighting was the clear choice.



In today's hyper competitive environment, hotel owners are consistently challenged with the ongoing demand of providing their customers with an exceptional experience that encourages loyalty and increases occupancy while maintaining tight controls on costs.

With over 51,000 hotels in the US comprising more than 4.8 million rooms, the hotel and lodging industry provides one of the best opportunities for successful adoption of LED lighting technology. Hoteliers must find

ways to cut overhead and operational costs while creating an excellent customer experience in order to maintain profitability. With most hotels staying open 24/7/365, energy use is one of the easiest expenditures to target allowing for a short payback period and immediate savings.

Lighting Science offers a suite of high performance LED solutions that can retrofit into existing applications seamlessly to melt away energy costs and maintenance expenditures.





\$21,078
*Estimated
Annual
Savings*



Check out the SAVINGS

Lighting Energy \$15,744
Maintenance \$2,810
Air Conditioning \$2,494
Total Annual \$21,078

LED Source® provided several solutions to the Marriott. All of the 320 conventional and inefficient bulbs were replaced with state-of-the-art Lighting Science LED lamps - PAR38 at 18 Watts and MR16 at 6 Watts. This provided an estimated 84% savings in energy consumption. In addition, the retrofit improved light levels and also reduced both maintenance and air conditioning costs.

The Results

It is estimated that the BWI Airport Marriott Hotel annual savings will be \$15,774 in lighting energy, \$2,810 in maintenance and \$2,494 in air conditioning. Total annual savings is projected at \$21,078. The Return On Investment (ROI) for this project is anticipated to be within 9 months.

