



## Raphael Hotel – Lighthouse Properties Kansas City, MO

### About the Client

The Raphael Hotel is an elegant, charming boutique accommodation modeled on the finest small European hotels. This Kansas City destination hotel delivers a unique experience.



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### *Project Cost/Savings...*

*Total Cost: \$32,989*

*Rebates & Incentives: \$20,251*

*Net Price: \$12,738*

*Annual kW Savings: 38,923*

*Annual Energy Savings: \$3,845*

*Projected R.O.I.: About 3 years*

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# Raphael Hotel

325 Ward Parkway, Kansas City, Mo 64112

## Project Features...

### About the Project

Reduced fixture count

- Removal of (10) 150W Quartz, 150W metal halides, and (40) 100W metal halides
- Replaced with energy-efficient induction technology
- 61 percent of project cost paid with rebates and incentives

### Savings

- Cut demand usage in half
- Reduce more than 59,000 pounds of carbon dioxide annually
- Annual utility and maintenance savings of more than \$3,000

### About Worldwide Energy..

*As commercial energy efficiency experts, we help our clients minimize utility expenses with energy efficiency lighting, efficient heating & cooling, and building envelope solutions.*

*Our efforts focus primarily on the areas that provide the greatest utility cost savings and where financial incentives create a rapid return on investment.*

*Worldwide Energy offers a total turnkey solution; utility rebate and Federal EPCAct filing services (provided at no additional charge); complete design & installation services; recycling and project financing. Our services usually have a 2 year or less return on investment.*

### Client Concerns

The Raphael Hotel had several objectives including:

- Reducing annual operating expense
- Reducing energy consumption
- Enhancing lighting in dark parking garage
- Increased visibility for safety of guests
- Utilizing local rebates and incentives offered

### The Scope of Work

The parking garage at the Raphael Hotel had inefficient lighting that casted yellow glows to the garage, resulting in poor lighting for guests, and made the area appear unsafe.

A total of 72 lighting fixtures were replaced with energy efficient bulbs and ballasts. This included lighting in the interior parking garage as well as the exterior parking deck.

The Raphael Hotel received rebates and incentives in the amount of \$20,251, making the net cost of the project \$12,738. The ROI was about three years.

### Recommendations & Benefits

**Better Visual Acuity** – the specified lamps will result in significantly higher lumen maintenance, more uniformity of illumination, and 30% higher color rendering index (CRI), resulting in fewer errors, and improved morale and safety conditions.

**Reduced Maintenance, Repair and Replacement Expenditures** – 5-year ballast, 24-36-month\* lamp warranties, & 20,000 hour lamp life will result in lower maintenance and repair costs.

**Indirect Utility Expense Reduction** –the specified fixtures will reduce peak demand charges, and reduce the heating & cooling load further reducing utility bills.

### After Photos

