**Project Name: Pool Lighting**

**Project Completion Date: 8/24/10**

**Project Description:** The project includes replacement of the light fixtures currently installed in the Warner Palaestra Pool.

Project Costs:

***Costs: $15937.38  
Rebates: $2610***

***Total Cost = $13,327***

**Please detail the cost savings here (include where and how data was obtained):**

*The following data was previous maintenance records, based on product data, utility charge outs at Saint John’s:*

Wattages of old vs. new fixtures are 465 watts and 254 watts, respectively, resulting in 211 watts saved in each of the 25 fixtures. This results in a savings of 5.275 kilowatts for each hour that all fixtures are in operation. The lights have a meter on them which gives us the numbers of hours in use. As of June 13th, 2013 there were 5811 hours of use for an average of 5.68 hours of use per day (using all 365 days of the year), averaging $764 annually. Using previous maintenance records, an average of $325 in labor costs have been realized monthly equaling $3,895 annually.

10926 (KWh) per year = $764, based on a cost of $0.07/KWh.

 A summary of cost savings is included below:

Estimated Energy Savings per Year: $764

Estimated Material Savings per Year (average over 3 years): $3895

Estimated One Time Rebate from Xcel Energy: $2610

Estimated Payback Period (including rebate): ~3.1

**How is this project sustainable:**

Changing the light fixtures in the lounges would result in an annual energy savings of 10,926 kilowatts. The environmental impact of this savings is listed below:

CO2 Reduction: 7.06 Tons/Yr

**Contact Information**

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