Life Cycle Cost Assessment Worksheet (example)

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| Energy Use: Lighting | | | | | | 5Financial Discount Rate: | | | | | | | |
| Energy Cost: $0.07/kwh | | | Maintenance Labor Cost: $20/hr | | | | | Unit Replacement Time: 10 min. or 0.167hr | | | | | |
| Options | Energy  Consumption (Annual) | Initial Purchase Cost | | Number of Units Needed Per Year | 1Annualized Maintenance and Repair Cost | | 2Annual Energy Cost | | Expected Operating Life | Disposal Cost | 3Annualized Replacement Cost | Salvage Value | 4Life-Cycle Cost |
| A) 100W  Incandescent  Bulb | 440 kwh | $0.79 | | 4.4  (440/100)(1000)/1000 | $14.70  (.167)(4.4)(20) | | $30.80  (440)(.07) | | 1000 | $0 | $3.48  ($0.79)(4.4) | $0 | $48.98 |
| B) 23W LED | 101 kwh | $6.00 | | .44  (101/23)(1000)/  10000 | $1.47  (.167)(.44)(20) | | $7.07  (101)(.07) | | 10000 | $0 | $2.64  ($6.00)(.44) | $0 | $11.18 |
| A) |  |  | |  |  | |  | |  |  |  |  |  |
| B) |  |  | |  |  | |  | |  |  |  |  |  |
| A) |  |  | |  |  | |  | |  |  |  |  |  |
| B) |  |  | |  |  | |  | |  |  |  |  |  |

1 Annualized Maintenance and Repair Cost = (Labor cost)(# hrs)(# units)

2 Annual Energy Cost = (Annual Energy Consumption) (Energy Cost/kwh)

3 Annualized Replacement Cost= Initial Purchase Cost/Operating Life (yrs)

4 Lifecycle Cost = Annualized Maintenance and Repair Cost + Annual Energy Cost +Annualized Replacement Cost – Salvage Value

5Note: To account for time value of money, annualized costs may be discounted to present value

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| **Prepared by:** | **Date Prepared:** |