**Example Lighting Calculation Worksheet**

ES 74 De Anza Lighting Course

Building Name

Building Type

| | | | Existing System | | | | | | Proposed System | | | | | Annual Energy Savings | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** | **K** | **L** | **M** | **N** | **O** |
| Room # | Light Source | Number of Fixtures | Fixture Description | Watts per Fixture | kW | Annual Hours of Operation | Light Source | Number of Fixtures | Fixture Description | Watts per Fixture | kW | Annual Hours of Operation | kW | kWh |
| 15, 16, 17 | fl | 24 | 4L2x4 | 72 | 1.728 | 2080 | fl | 24 | 2 x 4 | **60** | 1.44 | 2080 | 0.29 | 599 |
| Lobby | inc | 20 | recessed can | 100 | 2 | 2080 | **fl** | 20 | recessed can | **15** | 0.3 | 2080 | 1.70 | 3,536 |
| 18 | fl | 8 | 4L2x4 | 72 | 0.576 | 4800 | fl | 8 | 4L2x4 | **60** | 0.48 | 4800 | 0.10 | 461 |
| 19 | fl | 8 | 4L2x4 | 72 | 0.576 | 2080 | fl | 8 | **3L2x4** | **50** | 0.4 | 2080 | 0.18 | 366 |
| 20 | fl | 8 | 4L2x5 | 72 | 0.576 | 3600 | fl | 8 | 4L2x4 | **60** | 0.48 | **2080** | 0.10 | 1,075 |
| | | | | | | | | | | | | | - | - |
| | | | | | | | | | | | | | - | - |
| | | | | | | | | | | | | | - | - |
| | | | | | | | | | | | | | - | - |
| | | | | | | | | | | | | | - | - |
| | | | | | | | | | | | | | - | - |
| | | | | | | | | | | | | | - | - |
| | | | | | | | | | | | | | - | - |
| | | | | | | | | | | | | | - | - |
| **Total** | | | | | | | | | | | | | **2.36** | **6,037** |

Project Cost $ 2,000.00

Project Savings $ 1,068.57
Electric Rate $ 0.177

Simple Payback 1.87 years

(Simple Payback = Cost/Savings)

Instructions:
(A) Group rooms with the same fixture type and annual hours of operation