| | **COST OF ELECTRICITY PER YEAR** (at $0.20/hWh) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOAD | **hours on per day** | | | | | | | **minutes on per day** | | | | | |
| watts | **24** | **16** | **12** | **8** | **4** | **2** | **1** | **30** | **15** | **10** | **5** | **2** | **1** |
| 1 | $1.75 | $1.17 | $0.88 | $0.58 | $0.29 | $0.15 | $0.07 | $0.04 | $0.02 | $0.01 | $0.01 | $0.00 | $0.00 |
| 2 | $3.51 | $2.34 | $1.75 | $1.17 | $0.58 | $0.29 | $0.15 | $0.07 | $0.04 | $0.02 | $0.01 | $0.00 | $0.00 |
| 5 | $8.77 | $5.84 | $4.38 | $2.92 | $1.46 | $0.73 | $0.37 | $0.18 | $0.09 | $0.06 | $0.03 | $0.01 | $0.01 |
| 10 | $18 | $12 | $8.77 | $5.84 | $2.92 | $1.46 | $0.73 | $0.37 | $0.18 | $0.12 | $0.06 | $0.02 | $0.01 |
| 20 | $35 | $23 | $18 | $12 | $5.84 | $2.92 | $1.46 | $0.73 | $0.37 | $0.24 | $0.12 | $0.05 | $0.02 |
| 50 | $88 | $58 | $44 | $29 | $15 | $7.31 | $3.65 | $1.83 | $0.91 | $0.61 | $0.30 | $0.12 | $0.06 |
| 60 | $105 | $70 | $53 | $35 | $18 | $8.77 | $4.38 | $2.19 | $1.10 | $0.73 | $0.37 | $0.15 | $0.07 |
| 100 | $175 | $117 | $88 | $58 | $29 | $15 | $7.31 | $3.65 | $1.83 | $1.22 | $0.61 | $0.24 | $0.12 |
| 150 | $263 | $175 | $131 | $88 | $44 | $22 | $11 | $5.48 | $2.74 | $1.83 | $0.91 | $0.37 | $0.18 |
| 200 | $351 | $234 | $175 | $117 | $58 | $29 | $15 | $7.31 | $3.65 | $2.44 | $1.22 | $0.49 | $0.24 |
| 500 | $877 | $584 | $438 | $292 | $146 | $73 | $37 | $18 | $9.13 | $6.09 | $3.04 | $1.22 | $0.61 |
| 1,000 | $1,753 | $1,169 | $877 | $584 | $292 | $146 | $73 | $37 | $18 | $12 | $6.09 | $2.44 | $1.22 |
| 1,500 | $2,630 | $1,753 | $1,315 | $877 | $438 | $219 | $110 | $55 | $27 | $18 | $9.13 | $3.65 | $1.83 |
| 2,000 | $3,506 | $2,338 | $1,753 | $1,169 | $584 | $292 | $146 | $73 | $37 | $24 | $12 | $4.87 | $2.44 |
| 5,000 | $8,766 | $5,844 | $4,383 | $2,922 | $1,461 | $731 | $365 | $183 | $91 | $61 | $30 | $12 | $6.09 |

Example: 60 W incandescent bulb that is on 8 hours per day costs $35 per year (see yellow highlights).

an equally bright 10 W LED bulb costs only $5.84 per year and lasts much longer.

Note: this table is only valid for loads which consume constant power while on - such as lights.

Many appliances cycle on and off while running - for example refridgerators.

For such loads you need an average wattage - the easiest way to measure that is to use a KillAWatt meter (available at the Library) to monitor the appliance for several days. Then divide the kWh reported by the meter by the number of hours of monitoring to determine kWh per hour and multiply that by 1,000 to get the average Watts.

For example our refrigerator consumed 2.59 kWh over a 72 hour period = 2.59/72 = 0.036 kWh per hour X1000 = 36 Watts average

Since it is on 24/7, the annual cost would for 36 Watts 24 hours/day, but there isn't a row for 36 Watts.

So we interpolate by noting that 36 Watt is 36% of 100 Watts, The cost of 100 W x 24h/day is $175, 36% of that = $63 per year

To convert the annual cost to kWh consumption simply multipy the cost by 5.