## LIST OF HOME APPLIANCES ENERGY USED:

John Avenson July 11, 2008

(WATTS = VOLTS x AMPs Example: 120v x 4.0 amps = 480 watts.)

# LIGHTING:

LIGHTING: AM	P WATTS	
Old Incandescent 60 .50		NOTE: Rated lighting watts of incandescent equals the actual watts
Old Incandescent 75 .65		measured.
Old Incandescent100 .86		
Halogen Flood 85 .41		NOTE: Halogens were the start of more lumens per amps
Halogen Flood 90 .43 Halogen Flood 100 .67		than the incandescent, but still put out the same heat in watts as an old incandescent.
Halogen Outside 190 1.4		as an old incandescent.
LED Flood 50watt .0	9 10 watts	(LED count = 134 LEDs)
$\frac{1}{2}$	 1 2 44	CE Comment Florescont Light
CFL 60 .12 CFL 90 .20		CF Compact Florescent Light CF
CFL 90 .20 CFL150 .52		CF
CFL 30 .09	2 + 2 watt 2 - 7 watt	CF
T12 Florescent 4 foot (2	bulbs) .90 amps	108 watts
T8 Florescent 4 foot (2	bulbs) .42 amps	50 watts (same/better light for less the half the amps)
Under Cabinet lights	(12  feet ):	(28  wratta)
New LED light strips T8 Fluorescent underCab	= 0.24 amps	(20  walls)
Halogen fixtures (very ho	(-1.10  amps) = 4.00  amps	(152  watts)
Amerelle Incandescent "	Night Light". Ho	me Depot .03 amps 4 watt
2.4 Dual Core Intel new	Desktop = 1.20	to 2.5 amps $(144.0 \sim 300 \text{ watts})$
3 G-Hertz Desktop Com	puter = $1.37$	to 2.0 amps $(164.0 \sim 240. \text{ watts})$
17 inch LCD display	= .01 (	off) .37 amps ( $1.2 \sim 44.$ watts)
		to .48 amps $(39.0 \sim 57. \text{ watts (charging batter7)})$
T5700 Core Duo <b>new La</b>	iptop= .1/	to .50 amps ( $20.4 \sim 60$ . watts (charging battery))
KITCHEN: STOVE:		
Small Burner	= 6.0	3 amps (723 watts)
Large Burner		4 amps (1,252 watts)
Broiler		0 amps (1,800 watts)
Bake	= 10.5	0 amps (1,260 watts)
Idle	= 0.1	1 amps ( 13 watts) (new digital display only 2 watts)
Mianawaya	_ 12.0	0  arms (1.560 watta)
Microwave Mr. Coffee maker		0 amps (1,560 watts) amps (852 watts)
Popcorn maker	= 7.1 = 7.7	
i opeoini makei	1.1	

#### AIR CONDITIONING:

Furnace Fan Blower (top speed) Air Conditioning Compressor Evaporative Cooler Fan

**REFRIGERATORS:** 

E-Star 23 cu ft. Refrig 2003= Bar, 4 cu ft. Refrigerator 1990= 17 cu ft Refrigerator 1992 = 2.0 – 3.0 amps 240~360 watts Unknown. (very high) 1.5 - 2.0 amps 180~240 watts

0.75 amps (90 watts after 4 minutes, Sears Elite, Top Freezer)
0.85 amps (old 2 cu ft pulls same as huge new 23 cu ft)
4.00 amps (480 watts GE Top Freezer)

#### LAUNDRY:

Electric Dryer	1997	=	w/heat= 23 ar	nps, cool 1 amp	(Maytag)
Washing Machine	1997	=	6.70 amps	spin= 7.0 amp	(Maytag)

#### THEATER:

DVD player	2000	=	.15	amps	Toshiba
BluRay Hi Def	2008	=	.22 to .4	amps	Panasonic
HD DVD Hi Def	2006	=	.4_ to .6	amps	Toshiba
Sirius Radio (satellite	) 2004	=	.12	amps	
13 in TV (CRT)	2000	=	.6	amps	

#### ELECTRIC BLANKETS (blankets click on/off periodically and don't pull this current all the time)

Queen Size (sample1 of 2)1.2 amp per half blanketTotal = 2.4 amps(144 watts per person)Queen Size (sample 2 of 2)0.97 amps per half blanketTotal = 1.9 amps(116 watts per person)

### MONEY PER YEAR

U.S. homes, offices, and factories acc for more greenhouse gas emissions that cars and other transportation because coal burned to generate electricity.
RESIDENTIAL
20.070
TRANSPORTATION 33.5%
COMMERCI 17.6%
INDUSTRIAL
27.8%
*Total does not equal 100 because of rounding Source: Energy Information Administration

http://www.energystar.gov/index.cfm?fuseaction=home\_energy\_yardstick.showStep1 Home energy calculator (need your utility bills to fill in blanks) http://www.energystar.gov/index.cfm?fuseaction=home\_energy\_advisor.showGetInput Another Home energy calculator http://www.fueleconomy.gov/feg/ Gas economy of cars http://www.lightingdesignlab.com/articles/halogen/halogen.htm Heat comparison of Halogen and Fluorescent http://www.mygreenlee.com/Products/main.shtml?p\_search=light+meter&greenlee\_category\_id=100 Light meters http://tristate.apogee.net/lite/ Home page, Analysis of different Lighting http://tristate.apogee.net/lite/bnocost.asp\_Low cost home energy improvements http://tristate.apogee.net/lite/bnocume.asp\_to see the following chart:

Lamp Life and Efficiency				
Life (hours)	Lamp	Efficiency (lumens per watt)		
2,000 - 5,000	Reflector incandescent	7 -19		
750 - 2,500	Standard incandescent	8 - 24		
1,000 - 3,000	Tungsten-Halogen	12 - 36		
12,000 - 24,000	Mercury vapor	20 - 63		
7,500 - 24,000	Fluorescent (tubular)	41 - 91		
7,500 - 10,000	Compact fluorescent	50 - 83		
10,000 - 20,000	Metal halide	56 - 125		
12,000 - 24,000	High pressure sodium	61 - 140		
10,000 - 18,000	Low pressure sodium	100 - 183		

http://www.nolico.com/saveenergy/23\_watt\_dimmable\_swirl.htm list of **Dimmable compact Fluorescent** bulbs. Google for "Dimmable compact florescent bulbs" http://www.oldcastleglass.com/ Education about the glass/window technology. http://www.nrel.gov/ National Renewable Energy Laboratory, Golden Colorado

U.S. News & World Report April 28<sup>th</sup>, 2008: Electric motors account for about 65% of power consumed by industry and nearly <sup>1</sup>/<sub>4</sub> of all electricity sold (in USA).

**SMART STRIP (power strip)** automatically senses when the primary device is shut off (Computer or Stereo Receiver) and then cuts the power off to all other items plugged into the strip, such as printers or VCR/DVD players. Order at Amazon.com (not available Lowes or Home Depot)

Comes in two sizes: Large \$38 Small \$28

