

Energy Used by Lights Audit

Current Light Bulbs	Number of Bulbs	Total Wattage (No. of bulbs x wattage)	Cost over 6000 Hours at 14c kwh (wattage/1000) x 6000 x 0.14	Compact Fluorescent Bulb	Total wattage (No. of bulbs x wattage)	Cost over 6000 Hours at 14c kwh (wattage/1000) x 6000 x 0.14
9 w CFL		w	\$		w	\$
11 w CFL		w	\$		w	\$
15 w CFL		w	\$		w	\$
20 w CFL		w	\$		w	\$
25 watt		w	\$	5 watt	w	\$
40 watt		w	\$	9 watt	w	\$
50 watt (downlight)		w	\$	10 watt (downlight)	w	\$
50 watt (downlight)		w	\$	3.3 watt (LED downlight)	w	\$
60 watt		w	\$	11 watt	w	\$
75 watt		w	\$	15 watt	w	\$
100 watt		w	\$	20 watt	w	\$
TOTALS (sum the columns)		w	\$		w	\$

How to complete the energy audit

Walk around the house and tally the number of bulbs with the different wattages

For each bulb wattage, calculate the total wattage by multiplying the no. of bulbs x the bulb wattage

Calculate the cost of running the bulbs over 6000 hours by multiplying the total wattage calculated x \$0.14 x (6000 hours/1000 watts)

Sum up all the total costs

The right hand columns are if you replaced the incandescent with compact fluorescent bulbs

For each CFL wattage, calculate the total wattage by multiplying the no. of bulbs x the CFL wattage

Calculate the cost of running the bulbs over 6000 hours by multiplying the total wattage calculated x \$0.14 x (6000 hours/1000 watts)

Sum up all the total costs

Notes:

The Aladdin Mini-Compact Fluorescent Light Bulbs are rated for 6000 hours

A normal incandescent light bulb is rated for 1000 hours

A 6000 hr light bulb would normally last 2 -3 years before changing

The LED downlights are rated for 30000 hours (about 13 years)

SAMPLE HOUSE 1

Current Light Bulbs	Number of Bulbs	Total Wattage	Cost over 6000 Hours at 14c kwh	Compact Fluorescent Bulb	Total wattage	Cost over 6000 Hours at 14c kwh
9 w CFL						
11 w CFL	4	4 x 11 = 44 w	44 x 6 x 0.14 = \$37		4 x 11 = 44 w	44 x 6 x 0.14 = \$37
15 w CFL	4	4 x 15 = 60 w	60 x 6 x 0.14 = \$50		4 x 15 = 60 w	60 x 6 x 0.14 = \$50
20 w CFL	1	1 x 20 = 20 w	20 x 6 x 0.14 = \$17		1 x 20 = 20 w	20 x 6 x 0.14 = \$17
25 watt				5 watt		
40 watt	7	7 x 40 = 280 w	280 x 6 x 0.14 = \$235	9 watt	7 x 9 = 63 w	63 x 6 x 0.14 = \$53
50 watt (downlight)				10 watt (CFL downlight)		
50 watt (downlight)				3.3 watt (LED downlight)		
60 watt	5	5 x 60 = 300 w	300 x 6 x 0.14 = \$252	11 watt	5 x 11 = 55 w	55 x 6 x 0.14 = \$46
75 watt	1	1 x 75 = 75 w	75 x 6 x 0.14 = \$63	15 watt	1 x 15 = 15 w	15 x 6 x 0.14 = \$13

100 watt				20 watt		
TOTAL	22	779 watts	\$654		257 watts	\$112