

Feeling the Heat... From My TV Set

Energy Savers Blog

How many light bulbs does it take to equal the power output of a TV set? Or is it the other way around?

The answer: It depends on the bulb and the TV. There are a few factors that determine the answer such as the wattage of the standard light bulb and the wattage of the TV.

I was curious about the energy usage of my 48" LCD flat screen TV, since I can feel the heat coming off of it when it's on (which doesn't help me to [feel cooler in the summer](#) [1]). I figured it must be using a ton of power!

Older color TV sets with cathode ray tubes (CRTs) have an energy use range of 65-133 watts, depending on size: See the Typical Wattages of Various Appliances at the bottom of [Estimating Appliance and Home Electronic Energy Use](#) [2]. So, if you were comparing a 100W light bulb to a television set that uses 100W, they would obviously use the same amount of energy.

Newer flat-screen technologies, such as [liquid crystal display \(LCD\) or plasma](#) [3], offer additional benefits such as lighter weight, thinner size and better quality picture, in addition to energy savings, when compared by size. [ENERGY STAR](#) [4] provides a [list](#) [5] and [searchable database](#) [6] of qualifying, energy-saving televisions.

ENERGY STAR's list of LCD TVs includes models with screen sizes ranging from 16-65 inches, with a range of 18.5W-198W when the TV is on. Plasma TVs ranging from 42-65 inches use 90W-214W when powered on.

Now, if you compare a 32-inch LCD TV that uses 50 watts when powered on to that of a 100-watt light bulb, you'd need two TVs to equal the bulb's output.

As it turns out, my TV uses less than 20W – a figure I found pretty quickly by looking up my model on the manufacturer's website.

The best idea is to turn off your TV and lights when they're not being used. Or take it one step further by using a smart power strip to [limit the vampire power](#) [7] of all the devices in your entertainment center or home office.

For more tips, see the [Tips](#) [8] section of the Energy Savers website.

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[1] <http://www.energysavers.gov/seasonal/>

[2] http://www.energysavers.gov/your_home/appliances/index.cfm/mytopic=10040

[3] http://www.energystar.gov/index.cfm?c=home_elec_details.fap_tv_whatelse#Display

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