

Re: Cost of electricity for light dimmer

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phil-news-nospam@ipal.net wrote:

> *In alt.engineering.electrical Sylvia Else <sylvia@not.at.this.address> wrote:*

>

> *| This in particular is why you shouldn't use dimmers with lamps that are*
> *| mounted so that the filament is above the socket. When such lamps burn*
> *| out it is not uncommon for a broken piece of filament to fall and*
> *| briefly short across the two thick wires that feed the ends of the filament.*

>

> *I had one bulb do that in a non-brief way, once. The filament shorted*
> *in such a way that it had about 75% of its length still working. It*
> *got brighter (in theory, from 60 watts to 80 watts if that estimate of*
> *filament length was correct. The nice thing was the light now looked*
> *a lot more "white". Unfortunately it gave out about a week later.*

>

> *Someone once suggested getting 100 volt (because that is their nominal*
> *voltage) light bulbs intended for the Japanese domestic market. That*
> *would get a brighter whiter light. Just be sure to get a lot of them*
> *as you will be changing bulbs more frequently. A 60 watt 100 volt bulb*
> *run on 120 volts will be dissipating about 86 watts (NOT figuring in the*
> *change of resistance due to the change of heat). Which could be used in*
> *place of a 100 watt bulb. Power usage goes up. Light output goes up even*
> *more. Bulb replacement goes up, too.*

>

> *Other people prefer bulbs rated for 130 volts so they don't have to change*
> *them so often. In hard to reach places that's definitely a plus.*

>

There was some correspondence in New Scientists about the impact of mains overvoltages on the life of incandescent lamps. Something along the lines of a 10% overvoltage halves the life.

It's just possible that the lamp manufacturers really have chosen an operating point that represents the best choice for the majority of people.

I use fluorescent substitutes in some places, but they're not exactly a perfect solution either. The ones I use take a significant time

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(minutes, I think) to reach their peak brightness, an effect that seems to get worse as they age. However I've yet to have to replace one.

I don't know that you can use a dimmer with them, though. I rather suspect they wouldn't like that.

Sylvia.