

£30 for a lightbulb?

This may sound ridiculous but when you look at the savings in running costs, it's a money saver. 'Which?' magazine has just reported on tests on LED replacements for 60 watt light bulbs. With LEDs, there's no delay in reaching full brightness, the bulbs give nearly the same light output as a 60 watt bulb and their 'Best Buy' only uses 10 watts. The power saving is 50 watts (= 0.05 kilowatts). Average use in the home is 3.5 hrs per day. So we can save:-



LEDON 10W GLS bulb. 600 lumens

0.05 kilowatts × 3.5hrs per day × 365 days × £0.15per unit = £9.50 per year

The bulb pays for itself just over 3 years and it is expected to last 25 years.

Annual savings of £9.50 per year for the remaining 22 years is £209.

So, £30 for a light bulb is really quite a good buy. Indeed, a better investment than money in a savings bank, which would only make £33 profit at 3%!

When buying light bulbs nowadays, look for the lumens and colour temperature. Lumens show how much light is provided by the bulb. For complex technical reasons, conventional filament bulbs do not produce a fixed number of lumens for a given wattage. Because of this it is very difficult to track down clear guidance on typical lumens for given wattages. Figures in the table give an approximate indication of the lumens produced by standard 230 volt UK filament lamps. Based on these, the 600 lumens from the LEDON is equivalent to a standard bulb of 55 Watts. However, in researching the lumens table I found figures for 60 watt bulbs as low as 620 lumens rather than the 700 in this table.

Wattage	Approximate Lumens
25	225
40	410
60	700
75	930
100	1330
150	2160

Colour temperature is, as its name suggests, an indication of the colour of the light. Ordinary filament lamps generally have a colour temperature of 2700K and the LEDON bulb is the same. Colour temperatures above 3500K feel colder and less friendly. Colour temperature 2700K to 3000K is often called warm white.

So, although expensive, LED lamps repay their initial cost in a reasonable time and make very substantial savings over their 25 year lifetime. They have the great advantage of immediate full brightness and retain full brightness throughout their life and so a really good investment.

(Kindly reproduced from John Stott of Make Henley Greener's award winning column in Henley News)