

## The great LED lightbulb rip-off: One in four expensive 'long-life' bulbs doesn't last anything like as long as the makers claim

- Consumer group Which? tested 46 types of light bulb for endurance
- More than a quarter did not meet claims of a 15,000-hour life
- Disappointing result comes despite claims of them lasting 25,000 hours
- Some even fell below the legal minimum of 6,000 hours

By [Daily Mail Reporter](#)

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Many energy-efficient LED light bulbs failed before their advertised lifespan, tests have found.

Some did not even reach the EU's new minimum of 6,000 hours which comes into force in March.

LED bulbs from Ikea and Technical Consumer Products (TCP) performed worst, according to Which?

The consumer watchdog and European partners tested five samples of 46 types of bulb. New EU regulations say that from March 1, 90 per cent of any batch of LED (light emitting diode) bulbs should last at least 6,000 hours.

The bulbs were switched on for 165 minutes, then switched off for 15 minutes, in a continuous cycle until they failed.

Five types of bulb, some costing more than £10, stopped working before 6,000 hours in the majority of samples tested.

Another five failed before 10,000 hours for the majority of samples tested, despite claiming lifespans of at least 25,000 hours. In total, 66 of the 230 samples failed before 10,000 hours, though all claimed to last at least 15,000.

Bulbs from TCP and Ikea were the only ones sold in the UK. Both companies said the types of bulbs tested have now been discontinued.

Ikea said the bulb had passed its own tests and those in a third-party laboratory. It said it was looking into why the bulb failed the Which? test and has removed it from sale in countries where it was still available.

TCP said it was already aware of the problem with its bulb, which is why it was withdrawn from sale. It said it no longer dealt with the bulb's supplier and now makes its LED bulbs in-house.



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**Contrast: New-style LED bulbs are supposed to save electricity by using less power and lasting longer than old-style incandescent lights, right, which are being phased out by the Government**

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It is estimated that five million LED light bulbs were sold in the UK in the past year. Which? researcher Matt Clear said: 'LED light bulbs have a tendency to make grand claims about their lifespan – it's common to see manufacturers promise bulbs will last 25,000 or even 50,000 hours. But we've found many failing well before this.'

'One of the attractions of LED light bulbs is that they're supposed to last a long time. So if you're shelling out for these bulbs – typically more expensive than other types of light bulb – you'll want to be sure that they'll live up to those claims.'

LEDs create light by passing electricity through a semiconductor. They can fail if they are made from poor quality materials, and are also more prone to burn-out from power surges.

They are also liable to fail due to over-heating if the heat from the light emitting diodes is not dissipated efficiently. Brighter LED bulbs with a greater lumen power are particularly prone to this problem.

## **And they cost up to £40**

**LIGHT emitting diodes (LEDs) have only recently been used to create household bulbs and can cost up to £40.**

**Some people dislike the blue-tinged quality of the light, but they use less energy than other bulbs – up to 90 per cent less than the old incandescent bulbs compared to 60-80 per cent less for CFLs (compact fluorescent lamps). LEDs are also reputed**

**to last longer – up to 25 years. LEDs have other advantages over CFLs. They light up quickly and don't contain poisonous mercury.**

**While LEDs are powered by semiconductors, regular energy-saving bulbs pass energy through mercury vapour to create UV light, which is absorbed by a phosphor coating inside the lamp causing it to glow.**

The Government announced in 2007 that traditional, incandescent light bulbs would be phased out by 2011, beginning with those greater than 100W.

The move away from traditional bulbs has been part of a drive to reduce energy consumption across Europe. Consumers have been told that their electricity bills will drop as a result of switching to energy-saving bulbs. The Energy Saving Trust states that fitting a single energy-saving bulb can save on average £3 a year, and that by replacing all their traditional light bulbs householders could save £55 a year. But the ban frustrated many householders who found the old-fashioned bulbs cheaper than the energy-saving variety that replaced them.

Energy-saving bulbs have also been criticised for emitting low levels of light and for the time they take to reach full brightness, and are disliked because some types cannot be dimmed.

As a result some people began to stockpile the traditional bulbs which – although officially outlawed – can still be found in some small electrical or lighting shops which have unsold stocks.

Three types of energy-efficient light bulb are available in British shops – halogen, CFLs (compact fluorescent lamps) and LEDs.

The EU target date for the next stage of the phase-out will be September 2016, when all lamps above 60 lumens will need to be at least class B – which high-efficiency halogen bulbs currently do not meet.