

The Telegraph

Energy saving light bulbs offer dim future

Energy saving light bulbs are not as bright as their traditional counterparts and claims about the amount of light they produce are "exaggerated", the European Union has admitted.



Light Bulb Test Photo: JULIAN SIMMONDS

By Richard Gray and Julia McWatt

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Soon they will be the only kind of light bulb allowed, but now officials in Brussels have admitted that energy-saving bulbs are not as bright as the old-fashioned kind they are replacing.

From tomorrow a Europe-wide ban on traditional incandescent bulbs will begin to be rolled out, with a ban on 100W bulbs and old-style frosted or pearled bulbs.

Buyers of the main type of energy-saving bulb, compact fluorescent lamps (CFLs), are told on the packaging that they shine as brightly as an old-fashioned bulb. For example, an 11W CFL is labelled as being the equivalent of a 60W incandescent bulb.

However, the European Commission, which was responsible for the ban, has now conceded that this is "not true" and that such claims by manufacturers are "exaggerated".

The Sunday Telegraph has conducted its own tests on level of illuminance provided by light bulbs from different manufacturers to see whether their claims stand up to scrutiny.

[New low energy light bulb works with dimmer switches - but costs £30](http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/6422926/New-low-energy-light-bulb-works-with-dimmer-switches-but-costs-30.html)

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[Energy saving light bulbs get dimmer over time](http://www.telegraph.co.uk/earth/earthnews/6600015/Energy-saving-light-bulbs-get-dimmer-over-time.html)

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[Energy saving light bulbs 'could trigger breast](http://www.telegraph.co.uk/health/healthnews/8288982/Energy-saving-light-bulbs-could-trigger-breast-cancer.html)

[cancer'](http://www.telegraph.co.uk/health/healthnews/8288982/Energy-saving-light-bulbs-could-trigger-breast-cancer.html) (<http://www.telegraph.co.uk/health/healthnews/8288982/Energy-saving-light-bulbs-could-trigger-breast-cancer.html>)

[Lightbulb ban puts fairground rides at risk](http://www.telegraph.co.uk/news/newstopics/howaboutthat/6098887/Lightbulb-ban-puts-fairground-rides-at-risk.html)

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[EU cuts vacuum cleaner power](http://www.telegraph.co.uk/news/worldnews/europe/eu/7996383/Europe-to-cut-power-of-vacuum-cleaners-to-save-energy.html) (<http://www.telegraph.co.uk/news/worldnews/europe/eu/7996383/Europe-to-cut-power-of-vacuum-cleaners-to-save-energy.html>)

[EU ban on traditional lightbulbs prompts panic buying](http://www.telegraph.co.uk/earth/energy/6082853/EU-ban-on-traditional-lightbulbs-prompts-panic-buying.html)

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We found that under normal household conditions, using a single lamp to light a room, an 11W low-energy CFL produced only 58 per cent of the illumination of an "equivalent" 60W bulb – even after a 10-minute "warm-up".

On a website intended to answer consumers' questions about the switch to energy saving bulbs, the European Commission states: "Currently, exaggerated claims are often made on the packaging about the light output of compact fluorescent lamps.

"For example, a 11-12 Watt compact fluorescent lamp would be the equivalent of a 60 Watt incandescent, which is not true. The light output of 15W compact fluorescent lamp is slightly more than the light output from a 60W incandescent."

Under the regulations which are being implemented in the UK from tomorrow, it will be illegal for retailers to import 100W, frosted or pearled incandescent light bulbs, or to sell them once their current stocks have run out. Instead consumers will have to rely upon CFLs or low-energy halogen bulbs.

From September 2011, 60W clear incandescent bulbs will be banned, followed by a ban on all remaining incandescent bulbs in September 2012.

The Department for Food, Environment and Rural Affairs has said it intends to work with retailers to begin phasing out the traditional bulbs sooner.

Many consumers complain that CFLs take time to "warm up", are too big for some lampshade fittings and are more expensive than the traditional bulbs. Special CFLs costing up to £15 each are required to work with dimmer switches.

However, the new-style bulbs use up to 80 per cent less energy than traditional bulbs and can last far longer – up to eight years.

In our test, we used a simple lamp with a light metre placed half a metre away, in an otherwise-darkened room, to measure the illumination provided by a range of clear and frosted 60W incandescent bulbs, as well as 11W CFLs said on their labels to be equivalent.

After giving each bulb 10 minutes to warm up, a reading was taken in lux, a measure of illumination.

Clear 60W bulbs provided around 120 lux of illumination while pearled 60W bulbs produced 101 lux.

By comparison, the best performing energy efficient light bulb, an 11W CFL made by General Electric and handed out free to Southern Electric customers, rated 79 lux. The worst performing 11W CFL, an Eveready, produced just 60 lux.

A Philips Softone 12W energy saving bulb also claimed to be equivalent to a 60W incandescent bulb, but it only produced 77 lux of illumination.

A spokesman for Philips said that its Softone Energy Saver bulbs met international standards and were intended to provide the equivalent light output of a frosted incandescent bulb, but our test shows it still failed to perform as well as a frosted bulb.

A spokesman for General Electric said all of their light bulbs were tested to meet international standards.

She added: "Our test results are then verified independently before our products are approved by the Energy Savings Trust."

As part of the new European regulations, manufacturers will face tough new rules on labelling, and will be required to state their light emission in lumens as well as their power in Watts.

Syed Kamall, the Conservative MEP who has campaigned against European interference in traditional measures, said the new regulations would create confusion among consumers.

He said: "While lumens measure brightness, no one I have met understands these units."

Ferran Tarradellas Espuny, energy spokesman for the European Commission, said: "The regulation is setting clear rules on how equivalence claims with incandescent bulbs can be made on the packaging of efficient lamps."

A spokesman for the Trading Standards Institute, which regulates claims made about products sold in the UK, said it was not aware of any substantiated complaints about inaccurate labelling on low-energy bulbs.

A Defra spokesman said: "The EU is reviewing low energy light bulb labelling to make sure they are easily understood by consumers and will be monitoring the accuracy of the wattage claims."

How the energy saving bulbs compared to incandescent bulbs

Traditional incandescent:

Osram 60W (700 lumens) – 126 lux

Philips 60 W (700 lumens) -114 lux

Tesco 60W (700 lumens) – 122 lux

Maxim Pearl 60W pearled (no lumen info) – 101 lux

Energy Saving (all claim to be equivalent to 60W):

Philips 12W T60 Softone (610 lumens) – 77 lux

Southern Electric/GE 11W (610 lumens) – 79 lux

Tesco Greener living stick 11W (640 lumens) – 70 lux

Eveready Energy Saver 11W (no lumen info) – 60 lux

Osram Duluxstar 11W (600 lumens) – 67 lux

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