SaveMoneyCutCarbon.com
reducing energy water & carbon

# LED light bulb guide – what details on the packaging boxes mean

**This LED packaging guide from SaveMoneyCutCarbon unpacks the information on the boxes that your LED product comes in.**

**Recent studies show that confusion about what exactly you are buying is a strong reason why many consumers are unsure about investing in LED lighting.**

**You will find clear guidance on the many pieces of information that typical LED light packages provide, making it easier to decide which product you need.**

**We've chosen examples of clear packaging from the best LED manufacturers like Philips and Verbatim.**

**You will probably find that other low-end LEDs will not have anywhere near this level of information.**

**SaveMoneyCutCarbon.com is the No. 1 choice in the UK for households and businesses who want to cut their utility bills through big energy reductions year after year.**

**Choosing LEDs not only slashes lighting bills, it also reduces carbon footprint (CO2 emissions) susbstantially.**

**We're here to help so call us on 0845 123 5464 to discuss your energy-saving needs. You can also email us at info@savemoneycutcarbon.com.**

**www.savemoneycutcarbon.com**

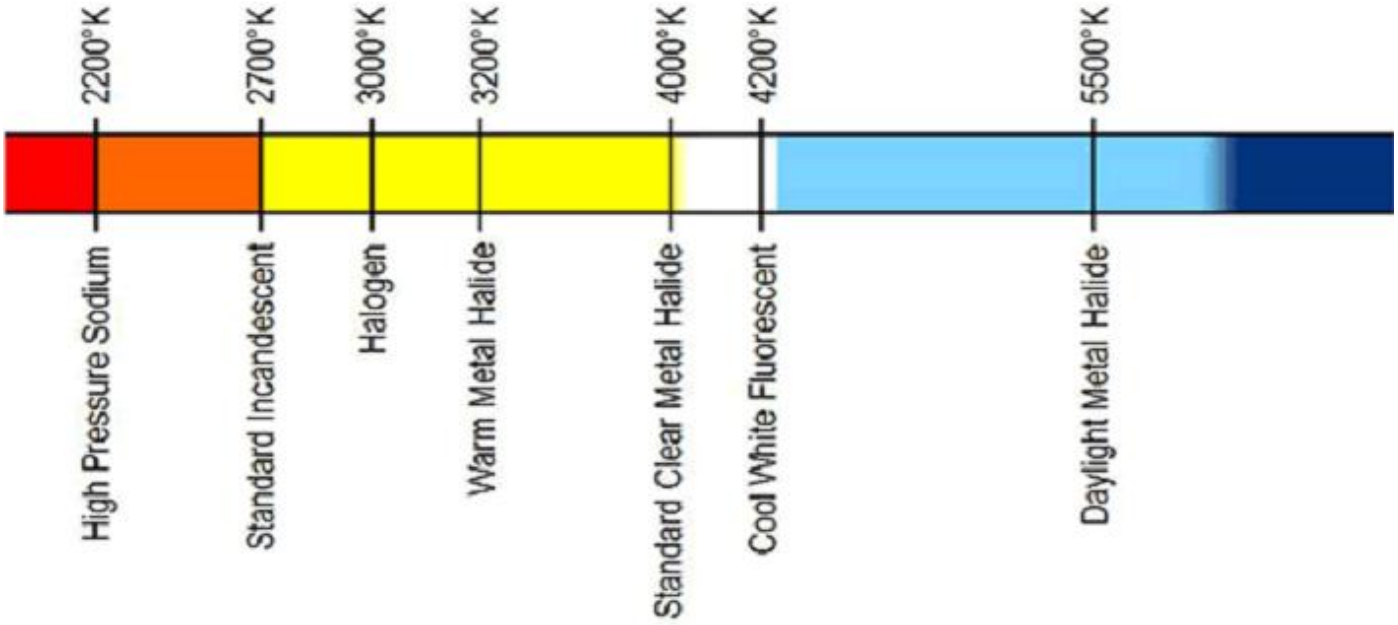
## Typical LED screwfit bulb (used in broad range of settings)


| | | | |
|---|---|---|---|
| Standard multiple language panel with basic information on the bulb: **light quality, IP rating, energy saving** etc. Excellent for informal eye tests. | The top of the panel shows **energy saving** (80%), that the bulb is **dimmable**, the **voltage** and should last for **40,000 hour**s.<br>The colourful chart shows the **EU energy rating,** required by law. Appliances are graded on their energy consumption in kWh (units of energy used per hour). So the less kWh used, the more efficient the appliance.<br>The **480 Lumen** number is an indicator of the brightness of the bulb - see the table below for a guide. At base, a lumen is a unit of standard measurement to describe how much light is contained in a certain area.<br>The **7.5 watt** figure is how much electricity the bulb will consume in an hour.<br>The **40,000** hours figure is confirmation of expected lifespan of the bulb. | **E27** - this is the type of fitting. The E stands for Edison Screw and the number is the width of the base in millimetres.<br>The most common Edison screw types in the UK are E27 ("big screw") and E14 ("little screw").<br>**2700K warm white** - The K stands for Kelvin, a measurement of the temperature of light. See the chart below but in this case, 2700K is a good match for incandescent types, giving a 'warm white' light.<br>**7.5w - 40w** - indication of what incandescent bulb the LED can replace.<br>**IP 65** - This is the Ingress Protection Rating showing degree of protection the enclosure provides against intrusion e.g. dust, accidental contact, water.<br>**480lm** - lumen measurement (see panel left) | **220-degree** number confirms that the bulb delivers light over a wide area, replicating traditional incandescent types.<br>The panel repeats lumen and Kelvin info (see left).<br>The **50,000** figure is the expected number of times the bulb can be switched on and off.<br>The panel also confirms that full light effect is instant (no wait for warm-up) with basic safe installation and measurements. |

| Lumen comparison guide | | | | | |
|---|---|---|---|---|---|
| ***Lumen range*** | ***220+*** | ***400+*** | ***700+*** | ***900+*** | ***1300+*** |
| **Incandescent** | **25W** | **40W** | **60W** | **75W** | **100W** |
| **LED** | **4W** | **6W** | **10W** | **13W** | **18W** |
| **Halogen** | **18W** | **28W** | **42W** | **53W** | **70W** |
| **CFL** | **6W** | **9W** | **12W** | **15W** | **20W** |

*Source: EU*

## Kelvin light temperature chart



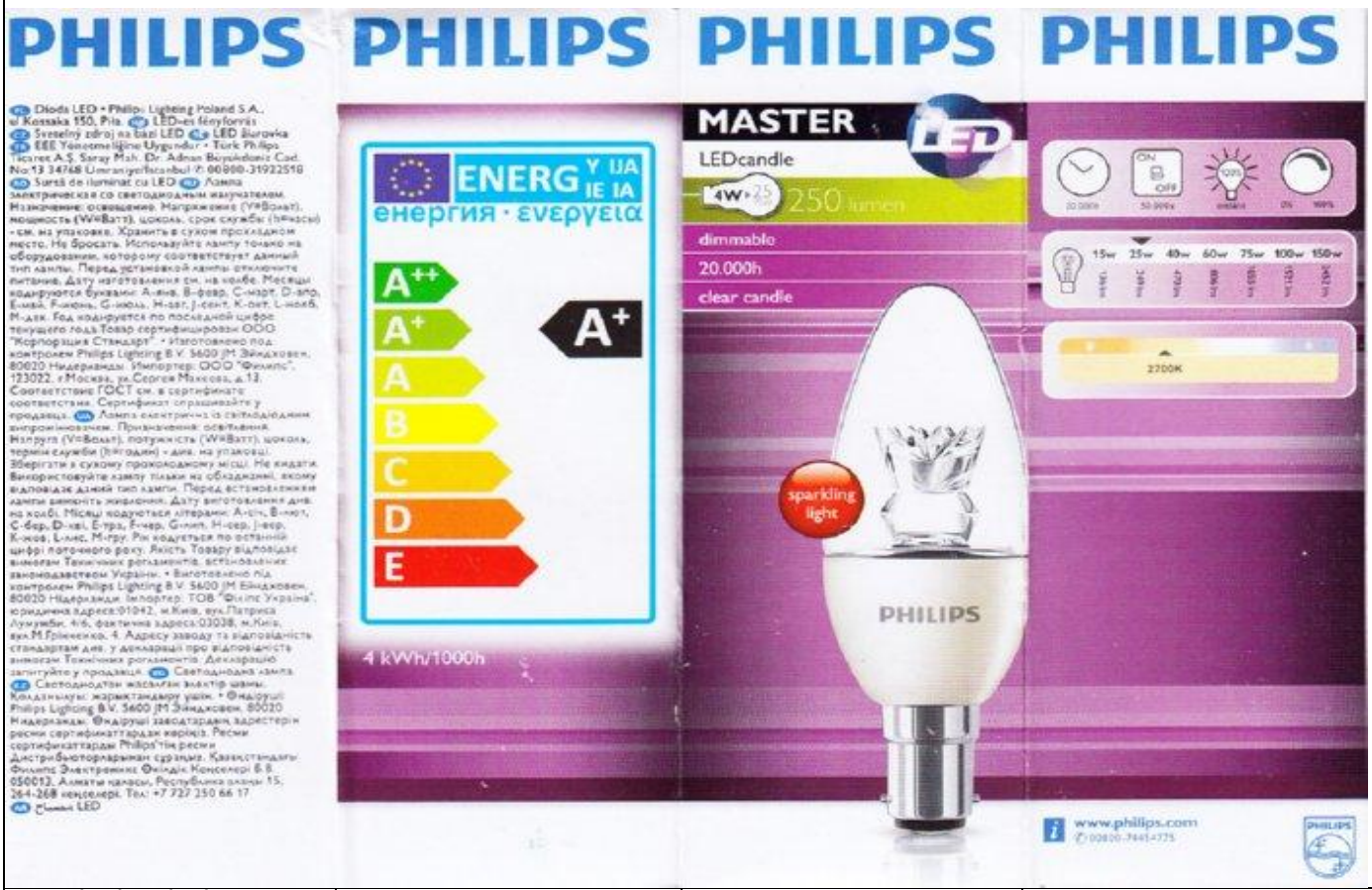

*Source: led-evolution.com*

## Ready guide to choosing LED light quality

- **Warm White**: 600 - 3500 Kelvin
- **Natural White**: 4000 - 4500 Kelvin
- **Daylight White**: 5000 - 5500 Kelvin
- **Commercial / Cool White**: above 6000 Kelvin

Lower colour temperatures have more yellow while higher temperatures progress from yellow, to pure white and blue-tinged.

## Typical LED candle bulb (decorative and multiple-bulb settings)




| | | | |
|---|---|---|---|
| Standard multiple language panel with basic information on the bulb | The colour chart shows the **EU energy rating,** required by law. Appliances are graded on their energy consumption in kWh (units of energy used per hour). So the less kWh used, the more efficient the appliance.<br>The **4 kWh/1000h** figure is how much electricity the bulb would consume in 1,000 hours. | This panel shows:<br>Wattage consumption (4W) and lumens (250).<br>The candle bulb is dimmable<br>Lifespan is on average 20,000 hours.<br>The candle is clear glass and with a sparkling light effect (Philips speciality). | The three lozenges on this panel show:<br>Lifespan - 20,000 hours.<br>Number of times bulb can be switched on and off (50,000).<br>Instant full light (no warm up).<br>Fully dimmable (0 - 100%).<br>Kelvin measurement - warm light (2700K). |

## Typical GU10 LED (used in downlighters and spotlight settings)

<table>
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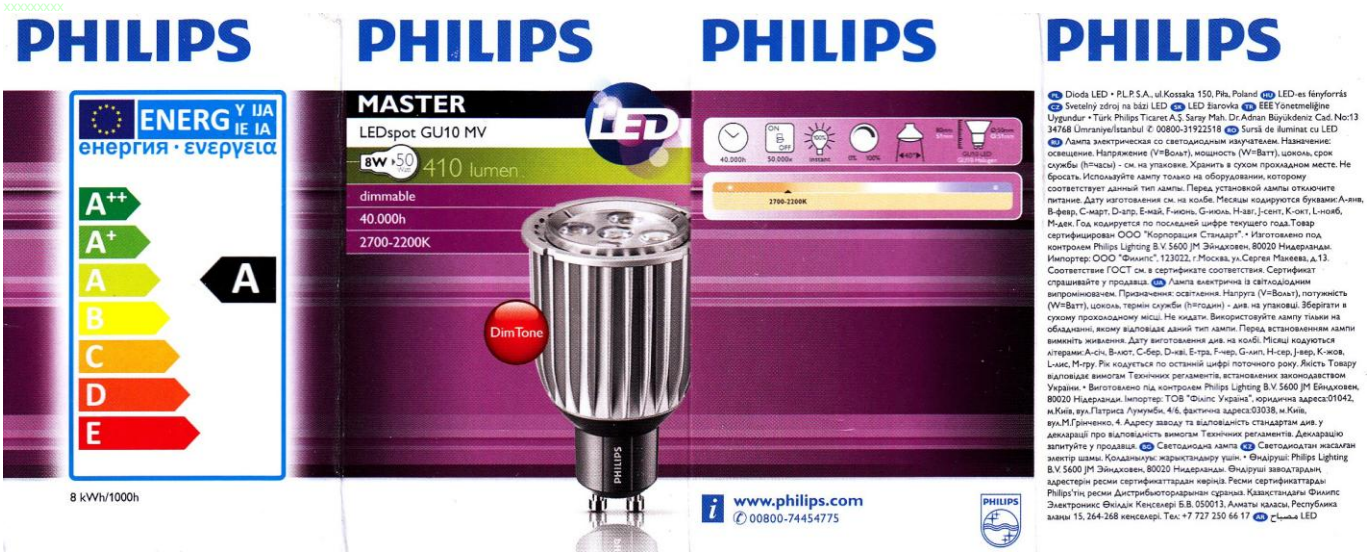
<td colspan="4"> 
</td>
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<tr>
<td>The colour chart shows the EU energy rating, required by law. Appliances are graded on their energy consumption in kWh (units of energy used per hour). So the less kWh used, the more efficient the appliance.<br>The 8 kWh/1000h figure is how much electricity the bulb would consume in 1,000 hours.</td>
<td>This panel shows:<br>Wattage consumption (8W) and lumens (410).<br>The light is dimmable<br>Lifespan is on average 40,000 hours.<br>2700-2200K is Kelvin light temperature (warm light)</td>
<td>The two lozenges on this panel show:<br>Lifespan - 40,000 hours.<br>Number of times bulb can be switched on and off (50,000).<br>Instant full light (no warm up).<br>Fully dimmable (0 - 100%).<br>Light angle (40 degrees)<br>Fitting type and measurement with equivalent halogen.<br>Kelvin measurement - warm light (2200-2700K).</td>
<td>Standard multiple language panel with basic information on the bulb</td>
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## LED before-you-buy quick list

- Check fitting type (e.g. E27, bayonet, GU10, MR16)
- Check if dimmable (if you need that)
- Check energy saving (e.g. 8 watt)
- Check lifespan
- Check quality of light: lumen, Kelvin (warm light etc.)
- Check energy rating

We're here to help so just call 0845 123 5464 to get expert advice and find your ideal LED on our website:

**http://www.savemoneycutcarbon.com/category/led-lighting/**