

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) substantially.

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 hours**.

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.

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.

The **7.5 watt** figure is how much electricity the bulb will consume in an hour.

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.

The most common Edison screw types in the UK are E27 ("big screw") and E14 ("little screw").

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.

7.5w - 40w - indication of what incandescent bulb the LED can replace.

IP 65 - This is the Ingress Protection Rating showing degree of protection the enclosure provides against intrusion e.g. dust, accidental contact, water.

480lm - lumen measurement (see panel left)

220-degree number confirms that the bulb delivers light over a wide area, replicating traditional incandescent types.

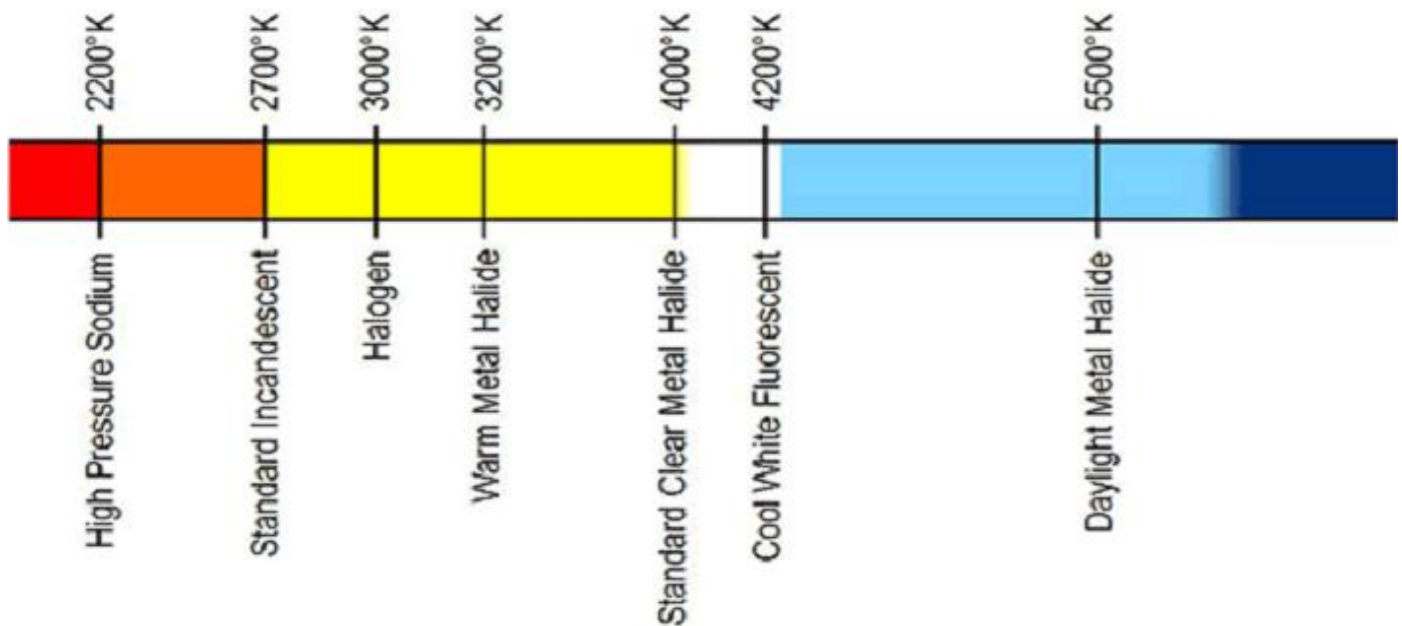
The panel repeats lumen and Kelvin info (see left). The **50,000** figure is the expected number of times the bulb can be switched on and off.

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)

<p>PHILIPS PHILIPS PHILIPS PHILIPS</p> <p>Diode LED • Philips Lighting Poland S.A., ul. Koszaka 150, Pila • LED-en fényforrás Svetelný zdroj na bázi LED • LED Burgenka LED Yarımcı Işıklar Üretimi • Turk Philips Işıklar A.Ş. Saray Mah. Dr. Adnan Büyükdere Cad. No:13 34748 Ümraniye/İstanbul T: 00900-31922510 Lampă de iluminat cu LED • Philips запатентована со светодноправним изумом Назначеніе: освещеніе. Напряжение (V/Вольт), мощность (W/Ватт), цоколь, срок службы (часов) - см. на упаковке. Храните в сухом прохладном месте. Не бросайте. Используйте лампу только на оборудовании, которому соответствует данный тип лампы. Перед установкой лампы отключите питание. Дату изготовления см. на коробе. Месяцы кодированы буквами: А-январь, В-февраль, С-март, D-апрель, Е-май, F-июнь, G-июль, H-август, J-сентябрь, K-октябрь, L-ноябрь, M-декабрь. Год кодирован по последней цифре текущего года Товар сертифицирован ООО "Юрфорация Стварад" - изготовителем под контролем Philips Lighting B.V. 3600 JM Эйндховен, 80020 Нидерланды. Импортёр: ООО "Филипс", 123022, г.Москва, ул.Сергея Малкова, д.13. Соответствие ГОСТ см. в сертификате соответствия. Сертификат оформляйте у продавца. Лампа электрична із світлодіодним випромінюванням. Призначення: освітлення. Напруга (V/Вольт), потужність (W/Ватт), цоколь, термін служби (годин) - див. на упаковці. Зберігати в сухому прохолодному місці. Не кидати. Використовуйте лампу тільки на обладданні, якому відповідає даний тип лампи. Перед встановленням лампи відключіть живлення. Дату виготовлення див. на коробі. Місяці кодуються літерами: А-січень, В-лютий, С-березень, D-квітень, Е-травень, F-червень, G-липень, H-серпень, J-вересень, K-жовтень, L-листопад, M-грудень. Рік кодується по останній цифрі поточного року. Якість Товару відповідає вимогам Технічних регламентів, встановлених законодавством України. • Виготовлено під контролем Philips Lighting B.V. 3600 JM Эйндховен, 80020 Нидерланды. Импортёр: ТОВ "Філіпс Україна", юридична адреса: 01042, м.Київ, вул.Патріарха Лумумби, 4/б, фактична адреса: 03038, м.Київ, вул.М.Григоренко, 4. Адреса заводу та відповідності стандартам див. у декларції про відповідність вимогам Технічних регламентів. Декларацію запитуйте у продавця. Світлодіодная лампа. Светодиодот излъчващ изкуств. светлина. Колориметрич. характеристики утвърдени от Philips Lighting B.V. 3600 JM Эйндховен, 80020 Нидерланды. Фабрични характеристики характеристиките ресми сертифицирани вярват. Ресми сертификати Philips'ице ресми. Дистрибуторлариман сра виме. Қазақстандағы: Филлипс Электроникс. Фабрика Қызылорда қ. 8. 050012. Алматы қаласы, Республикасының 15. 264-268 кеңселері. Тел: +7 727 250 66 17 Candela LED</p> <p>ENERGY LABEL енергия • енергетика A++ A+ A B C D E 4 kWh/1000h</p>	<p>PHILIPS PHILIPS PHILIPS PHILIPS</p> <p>MASTER LED LEDcandle 4W 25 250 lumen dimmable 20.000h clear candle</p> <p>sparkling light</p> <p>PHILIPS</p>	<p>PHILIPS PHILIPS PHILIPS PHILIPS</p> <p>20 000h ON OFF 100% 0% 50% 15w 25w 40w 60w 75w 100w 150w 2700K</p> <p>www.philips.com 02020-7441-775</p>	<p>PHILIPS PHILIPS PHILIPS PHILIPS</p> <p>20 000h ON OFF 100% 0% 50% 15w 25w 40w 60w 75w 100w 150w 2700K</p> <p>www.philips.com 02020-7441-775</p>
<p>Standard multiple language panel with basic information on the bulb</p>	<p>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. The 4 kWh/1000h figure is how much electricity the bulb would consume in 1,000 hours.</p>	<p>This panel shows: Wattage consumption (4W) and lumens (250). The candle bulb is dimmable Lifespan is on average 20,000 hours. The candle is clear glass and with a sparkling light effect (Philips speciality).</p>	<p>The three lozenges on this panel show: Lifespan - 20,000 hours. Number of times bulb can be switched on and off (50,000). Instant full light (no warm up). Fully dimmable (0 - 100%). Kelvin measurement - warm light (2700K).</p>

Typical GU10 LED (used in downlighters and spotlight settings)

[illegible]

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/>