

SHIFTING FOCUS FROM WATTS TO LUMENS

Comparison of old incandescent bulbs and halogen spots with LEDs

HALOGEN SPOT	LED SPOT 12 V	LED SPOT 230 V
20 watt	190 lm	110 lm
25 watt	–	150 lm
35 watt	350 lm	230 lm
50 watt	620 lm	350 lm

INCANDESCENT BULBS	LEDs
15 watt	140 lm
25 watt	250 lm
40 watt	470 lm
60 watt	800 lm
75 watt	1.050 lm
100 watt	1.520 lm



Light sources must be specially disposed of as electronic waste.



Do not dispose of light sources with the general waste, return products to your nearest waste collection point.

You can find further information about the rescaling of other products on www.label2020.eu

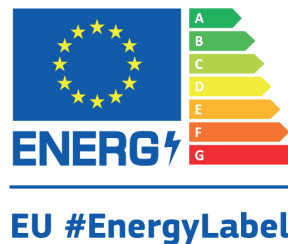


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THE NEW ENERGY LABEL FOR LIGHT SOURCES



EU #EnergyLabel

www.label2020.eu



THE NEW ENERGY LABEL FOR LIGHT SOURCES

More transparency - more efficiency

For more than 20 years the energy label has supported and guided consumers in the search of energy efficient products. However, the current "A+++ -scheme" has become less transparent and therefore the European Commission and the Member States have decided to redesign and simplify the label with a common energy efficiency scale from A to G for all product groups.

From 1st of September 2021 the new energy label will support you in the selection of energy efficient light sources and will encourage manufacturers

to develop even more energy efficient technologies in the future.

The new label is similar in design to the previous label, but also contains a QR code that links directly to the EU product database (EPREL), where you can find more information about the product.

Products already on the market, may still be sold with the old label during a transitional period.



WHAT TO CONSIDER WHEN REPLACING YOUR LIGHT SOURCES

- Make sure that the "brightness" of the lamp (luminous flux, lumens) suits your purpose. On the last page of this flyer you will find a table that converts watts to lumens.
- Check the socket type and dimensions of your luminaire to make sure that the light source fits.
- In case you need a dimmable light source, check your dimmer specifications before lamp selection, to ensure that dimming works properly.
- If you prefer "warm-white" light (typical for former incandescent lamps) choose a product with a colour temperature between 2.700-3.000 K. If you want a more neutral white light (e.g. for work places, kitchen) choose a light source with 3.500-4.000 K.
- If you want to show lifelike colours of objects in your home (e.g. of paintings etc.) select a lamp with high colour rendering (Ra-index > 90).

HOW TO READ THE PACKAGING?

Relevant information for product selection is provided on the light source packaging.

Energy consumption (kWh)

is the light source's energy consumption in kWh per 1.000 hrs.

Power (Watt/W)

The on-mode power for the light source in watts.

Luminous flux (lm)

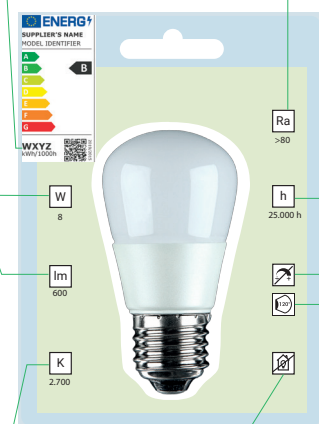
indicates the "brightness" of a light source. The appropriate luminous flux level depends on lighting purpose and room size.

Colour temperature (Kelvin, K)

indicates the light colour (e.g. 2700-3000K for warm-white, 3500-4000K for neutral white and >4500 cold white).

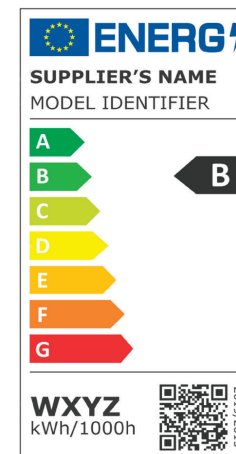
Colour rendering index (CRI)

The Ra-value indicates the light source's ability to reproduce lifelike colours of lighted objects. Day-light allows a maximum Ra-value of 100. According to EU-regulations CRI of any light source for indoor lighting must be > 80.



Outdoor use

If the CRI < 80 and the light source is intended for outdoor use, this should be noted on the packaging.



Lifetime (hours, h)

means the time in hours between the start of the use and the moment the output has degraded to a value below 70 % of the initial luminous flux.

Dimming

The dimming icon indicates whether the light source is dimmable or not.

Beam angle (degrees)

The beam angle indicates the width of the light beam (broad vs. more focussed). Selection of beam angle depends on the specific lighting purpose.

*Note that the manufacturer can either use icons or text