Energy Labels Explained

INSPIRED LIGHTING

Every label of light bulbs and tubes (including incandescent light bulbs, fluorescent lamps, LED lamps) contains the following information:

- the energy efficiency category from A to G
- the luminous flux of the bulb in lumens
- the electricity consumption of the lamp in watts
- the average life length in hours

Lamp Technology	Energy Class
Sodium-vapor lamps	A+++-A
LED lamps	A++–A
Compact fluorescent lamps with bare tubes	A
Compact fluorescent lamps with bulb-shaped cover	A–B
Halogen lamps with infrared coating	B
Halogen lamps with xenon gas filling, 230 V	C
Conventional halogen lamps at 12–24 V	V
Conventional halogen lamps at 230 V	D–F
Incandescent light bulbs	E-G

Since September 2009, household light bulbs must be class A, with the exception of clear (transparent) lamps. For the latter category, lamps must be class C or better, with a transition period up to September 2012, and class B after September 2016.

According to the light bulb's electrical consumption relative to a standard (GLS or incandescent), the lightbulb is in one of the following classes:

Light bulbs; relative energy consumption						
A	B	C	D	E	F	G
<18-25%	<60%	<80%	<95%	<110%	<130%	<130%

Class A is defined in a different way; hence, the variable percentage. These lamp classes correspond roughly to the following lamp types

New Non-directional Lamps EEI						
A++	A+	A	B	C	D	E
<11%	<17%	<24%	<60%	<80%	<95%	<95%

Since 2012 [9] A+ and A++ classes are added and are introduced different classes for directional lamps and non-directional lamps

New directional Lamps EEI						
A++	A+	A	B	C	D	E
<13%	<18%	<40%	<95%	<120%	<175%	<175%

Directional lamps are defined as "having at least 80 % light output within a solid angle of π sr (corresponding to a cone with angle of 120°)"

Energy classes of light bulbs in terms of luminous flux and power consumption