

What you need to know about LED lights?

LED technology has a completely different approach and features of familiar lamp such as fluorescent, halogen and incandescent lamps.

LED lights have many new aspects in this new technology, so not every LED lamp can be used for every purpose.

If you are buying a LED lamp you need to know exactly what you want. For example, if you are buying LED lights to illuminate the tunnel you will not buy high-CRI light, because in the tunnel no one will read books. Or to get the brighter light as possible, you will not choose warm colors of light but the cold ones. All these features are related to each other and with the price of light.

Each new technology requires a new approach and mind shift in the use of it.

On this website we wish to advice you as specialist in LED lights what you need to consider when you are buying LED lights. What you should know about LED lights and what marketing tricks are used in advertising LED lights. We will present each particular property of **LED lighting**, and which features are important for a variety of **lighting application**. We hope you will enjoy learning about the new **LED technology**.

LED lights are brighter

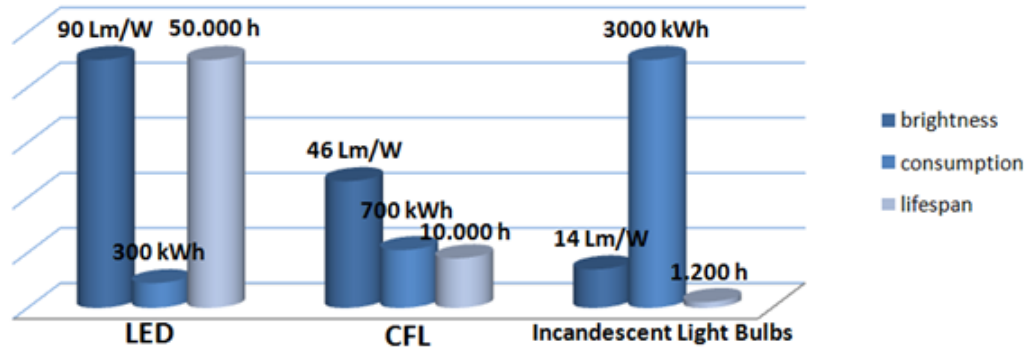
LED lights are much brighter than other lights available on the market. The comparisons are shown on the graph below. LED lights are two times brighter than CFL (Compact Fluorescent Light) and six times brighter than Incandescent Light Bulbs. Nowadays LED's can achieve up to 231lm/W. We often neglect the importance of suitable light in our working and living spaces. The Maastricht University study of lighting impact on cardiac patients proved that patients who had appropriate quality of light during the day, have slept 8% longer at night.

LED lights consumes less power

If we compare LED lights with other lights in the 50.000h of operation, we can see that LED lights consume much less power than other lights. LEDs consume 57% less power than CFLs and 90% less than incandescent light bulbs. The Japanese economic research states that if the current lights were replaced with LED lights, the total power consumption would be reduced for 92.2 TWh/yr. With such action the 36% of nuclear reactors in Japan could be shut down.

LED lights have longer lifespan

LED's life span is more than 50.000h which is equal to 12 years, if the light is turned on for a half of a day. LED's life span is 6 times longer than CFL's and 40 times longer than the life span of incandescent light bulbs. Practically in one LED light lifespan you would replace 5 CFL's and 42 incandescent light bulbs.



LED lights are environment friendly

LED lights do not contain mercury like CFL's and are full of RoHS compliant. Mercury is very toxic to your health and the environment. Because LED lights have very low power consumption we can achieve lower energy consumption and consequently the decrease of CO₂ emissions and high-level nuclear waste.

LED lights have even more advantages

- LEDs are not sensitive to low temperatures.
- LEDs are not sensitive to humidity.
- Frequent On/off switching does not decrease the lifespan of the LEDs.
- LEDs turn on instantly; they do not take time to heat up to operational temperature.
- LEDs emit much less heat than other lights. They emit nine times less heat than CFL's. You can not burn yourself by touching the light source.
- LEDs could be very colourful. RGB LEDs can shine in any colour tone you wish.
- LEDs have high durability because, unlike other lights, they do not contain any parts of glass.
- LED lighting is compatible to house and building's light automation systems like DALI. The automation of lighting with constant light and presents sensors can decrease the power consumption for at least 40%.