

LED NOMINAL LUMENS VS SYSTEM LUMENS

The difference between nominal lumens and system lumens in LED lighting refers to the amount of light that is produced by the LED light source, and the amount of light that is available for use after taking into account various losses and factors.

Nominal lumens refer to the amount of light that is produced by the LED light source when operated under ideal conditions, such as at a specific current and temperature. This number is usually specified by the manufacturer and is based on laboratory testing.

System lumens, on the other hand, take into account the various losses and factors that can reduce the amount of light available for use in a real-world lighting application. These losses can include things like

- Optical efficiency
- > Thermal losses
- Electrical losses
- Manufacturing variables

System lumens provide a more accurate representation of the amount of light that is available for use in a specific lighting application and is a useful metric for comparing different LED lighting options and determining the appropriate light level for a given space.

When comparing luminaires it is essential that a consumer understands the concept of Nominal vs system lumens together with the way in which the driver is delivering power to the LED Chips. An overdriven LED Chipset may produce more lumens but at a reduced lifetime of the LEDs if the thermal increases aren't managed.