

LED Life Time Considerations for the NucleoCounter[®] NC-3000[™]

LEDs are now widely used in many household applications. For years they have been used as indicators on electronics e.g. power indicators, car dashboard illumination, cycle lights etc. The development of intense and highly efficient white LEDs has placed the LED lamps in interior lightning applications.

LEDs are characterized as very stable light sources with excellent lifetime properties. In the past years a new era of LEDs (Power LEDs) has been developed to be used in e.g. SSL (Solid State Lightning) applications, such as normal interior lightning in houses and buildings. This has increased the lifetime of the LEDs.

A typical lifetime for an LED to be used in SSL applications is 50,000 to 100,000 hours when tested to an output level of 70% of the initial intensity.

The LEDs in NC-3000[™] has a lifetime that corresponds to >6,000 hours before the intensity drops to less than 95% of its initial value. 6,000 hours of operation will in the NC-3000[™] correspond to more than 5,000,000 analysis.