

INFORMATION ON LIGHT QUALITY

LED.next light quality

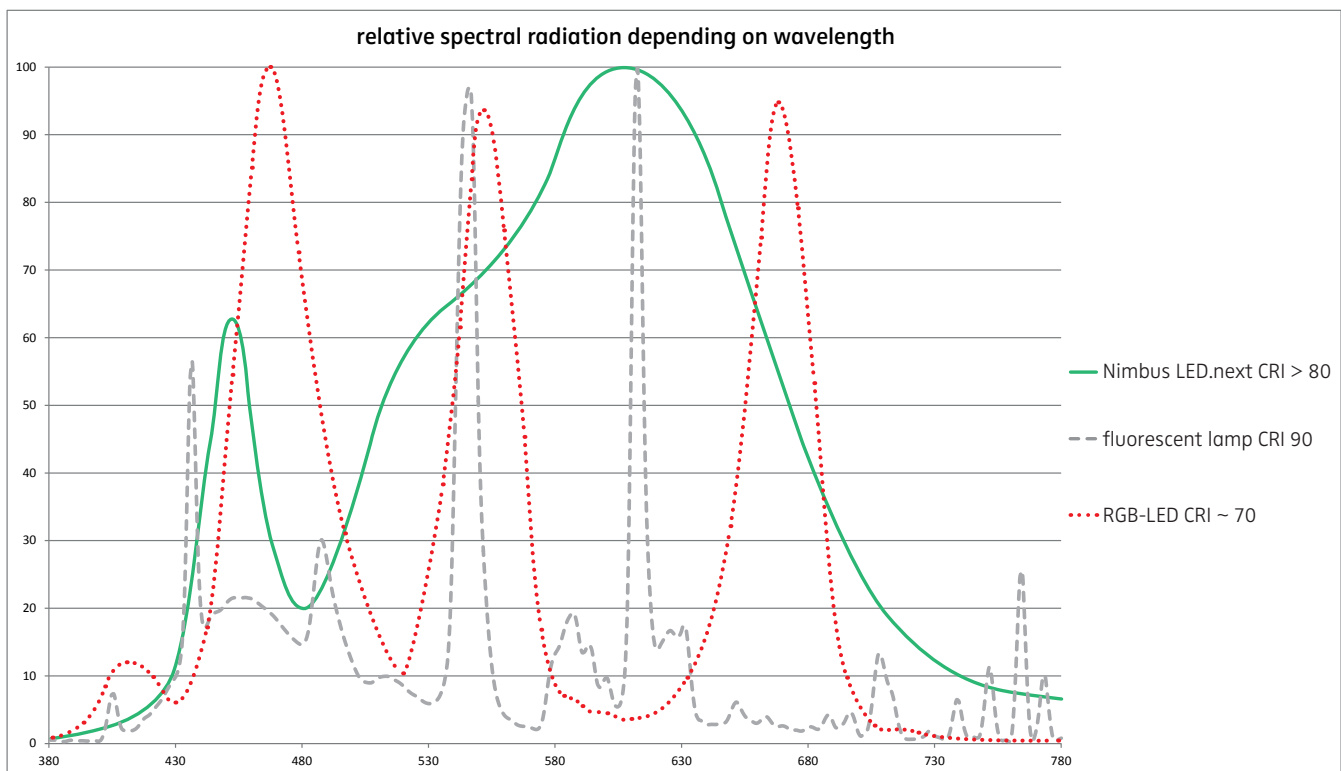
LED.next luminaires provide a modern and highly-efficient solution for all lighting tasks. An excellent lighting performance and pleasant warm, white light are combined with low power consumption and exemplary efficiency. Nimbus achieves uniform and glare-free illumination by means of wide-spread distribution from numerous 0.3 W LED systems. The spectral range of the LED.next elements excludes harmful UV and IR radiation, which means they can be used for museum or shop window lighting with no need for concern. A further plus is that the light from Nimbus LED.next luminaires does not attract insects.

light spectrum of an LED

The spectrum of a thermal radiator (e.g. a conventional light bulb or the sun) is continuous, that is to say, all wavelengths are represented in the light emitted. Unlike thermal radiators, light-emitting diodes do not radiate heat. They emit light in a limited spectral range which only contains specific wavelengths. However, a very wide emission spectrum and maximum efficiency can be achieved by combining an LED with specific phosphors.

comparison of LED.next, fluorescent lamp and RGB-LED

The graphic illustrates that a high CRI (Colour Rendering Index – an index used to describe the quality of rendering from light sources) does not necessarily mean a balanced colour spectrum: in comparison to conventional fluorescent lamps with a good CRI and unlike the RGB-LED, the values measured for the LED PCBs we use show a much better balance in the spectrum. This balance is subjectively perceived as pleasant, non-flicker light with good colour rendering properties.



summary

Lighting with LED.next luminaires is no longer simply an alternative to conventional lighting, but a modern solution based on convincing technology. The balanced spectrum which excludes UV and IR radiation is vastly superior to that of a fluorescent lamp or RGB-LED, versatile in terms of usage and pleasant to the eye, thereby providing subjective confirmation of the exceptionally good values in the Colour Rendering Index.