

## Sunlike LED Technology

### Back to natural light

**Human biorhythms have been attuned to the light of the sun for tens of thousands of years. While oil lamps first appeared in the 3rd century BC, the use of white LEDs for lighting is only 20 years old. LEDs are efficient, but their light greatly differs from natural sunlight. The SunLike series' LED technology generates light corresponding to the spectrum of natural light, creating lighting conditions that are significantly more pleasing and more natural. Brumberg LED units with SunLike technology are available as MR16 or QR111.**

The light from SunLike LEDs represents a revolution in recreating the natural spectrum of light. This sun-like light minimises the deficits from artificial light sources and offers all the advantages of natural light. SunLike's potential comes from the fact that its lighting technology is centred around people. Its goal is to promote healthy living under more natural lighting conditions.

### Side effects of blue light minimised

Most commercial LEDs use LED chips with a high level of blue in the lighting spectrum. New studies from Harvard and other well-known universities have demonstrated that this blue light stimulates the human eye in order to create visible light. If blue light is used during the day, it will have positive effects on concentration and mood. If, however, LEDs create this peak in the blue spectrum at night, this can have a negative influence on the human biorhythm over a longer period of use. SunLike, therefore, takes a different direction: SunLike LEDs use a violet LED together with a TRI-R phosphorus compound which allows the avoidance of typical peaks in blue light. This creates a light which is more natural, similar to the solar spectrum, and therefore healthier.

### First-class colour reproduction through SunLike

Many research facilities have determined that the human biorhythm reacts best to natural sunlight. This is because human retinal cells register light information by colour with red, blue and green cones, whereby blue receptors make up only 5.7 percent. Since our eyes can register only this limited share of blue light, it is scattered beyond this boundary. However, this scattered light distorts how the structure and colour of objects appear. In addition, too much

blue light can overstrain the retinal cells and reduce the ability to concentrate. Because the light spectrum of SunLike LEDs is nearly identical to sunlight, colour and structure appear as they do in natural light without negative effects on one's eyes or biorhythm.

## Applications

SunLike LEDs are used wherever a colour reproduction is desired that is as close as possible to natural light conditions. SunLike creates pleasant and natural lighting conditions in department stores and shops, exhibition spaces like museums and exhibit halls, but also in the area of cosmetics, in bathrooms and in fitting rooms.

### **BRUMBERG Leuchten GmbH & Co. KG**

Brumberg has been working with lighting and luminaires since 1873, with the development and production of its first products, among them oil lamps. Today, Brumberg is one of Germany's leading lighting manufacturers. This family-run business is a pioneer in providing innovative products for tomorrow. Design, versatility, state-of-the-art technology and energy efficiency – luminaires designed for indoor and outdoor use, with a focus on LED solutions.

Ceiling, wall, and floor solutions: Brumberg offers a complete spectrum of high-quality luminaires and lighting control systems for a variety of applications in professional indoor lighting, whether for industry and trade, office and communication, home and living, shop and retail or hotel and gastronomy. It has always aspired to provide exceptional products and services: Brumberg listens to its customers and heeds their wishes and needs. It is this attention to customers which enables the Sauerland-based company to find the right solutions and leads to inspiring collaboration and results. Light. For generations. You'll find more information at [www.brumberg.com](http://www.brumberg.com).

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