# LIGHT FOR OUR WELL-BEING



## IMPACT OF LIGHT ON VISION

Blue light hazard is a hot item these days. Exposure to high intensity blue wavelengths is linked to macular degeneration. Light sources, like fluorescent light bulbs that are bright white and cool and incandescent bulbs cause the most damage to your eyes.

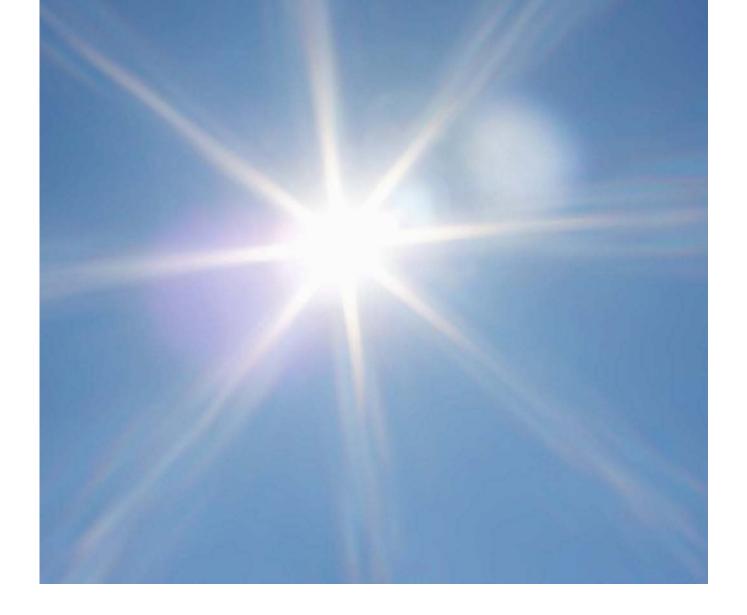
OLEDs are inherently safe in the way they deliver all wavelengths of light, including blue light. OLEDs deliver the light levels you need at intensity well below any risk for damage. OLED lights deliver the "good blue". This is validated through the IEC standard for physiological risk of blue and infrared light – our OLEDs have no risk for skin and eyes and are rated as exempt for all photo-biological risks.



If you've sat under a light's harsh glares, then you've probably also experienced their unpleasant flickering. Some flicker frequencies you can't even see, but your receptors sense them. Glares and flickering from LED and fluorescent light sources can lead to a lot of problems like migraines, headaches and eye strain, causing discomfort and distraction.

Naturally diffuse, OLED's cosine light distribution provides a glare-free experience. OLEDs light an area without dark shadows or speckled reflectance, creating a more inviting space. Studies have shown that OLED lighting, in comparison to LED standards, resulted in lower eye fatigue as measured by several biological metrics including dry eye. OLED light engines are an optimal light source for when you need to focus.





## ARTIFICIAL LIGHT AND YOUR SKIN

While small doses of ultraviolet (UV) rays from the sun provide essential health benefits, such as vitamin D conversion and an uplift in mood, excessive UV exposure damages skin with risks ranging from wrinkles to cancer. Unfortunately, staying inside will not necessarily keep you safe from UV harm. Some artificial light sources produce UV radiation and it's recommended that we keep a certain distance away from the light.

OLED lights do not emit any UV rays, thus eliminating any skin health concerns. OLED light is one of the safest options for lighting an interior space.





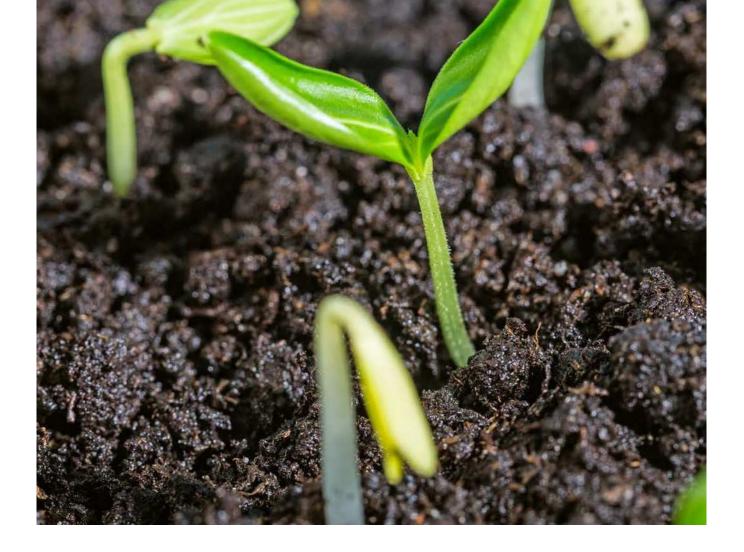
## NATURAL RHYTHM OF HUMAN BEINGS

The human circadian system controls your biological clock and is most sensitive to blue light. Consider sunlight patterns – a blue richness midday and a golden hue in the evening. Our bodies naturally respond to this cycle in a myriad of ways. During the day, especially morning, blue light boosts alertness, attention and our mood. In the evening, studies support that blue light disrupts our internal clock. Not only does this disrupt your sleep pattern, but it interrupts important processes your body undertakes while you are sleeping – processes that bolster your defenses

against cancer, diabetes and other risks. OLED light contains just the rig amount and type of blue, a blue that enriches color and mood while limiting effects on your circadian rhythm. The main advantage of OLED lighting is that it is naturally an "area light source" and the luminance (cd/m2, brightness) is significantly lower than LED lighting sources. OLED has less high energy blue light and more of the lower energy, less-damaging blue light than LED. In addition, OLED Amber does not contain any blue at all, making it ideal for night time lighting needs.







# ARTIFICIAL LIGHT SUSTAINABILITY AND OUR ENVIRONMENT

We are all stewards of our planet and work to reduce energy, use safe and recyclable materials, and reduce environmental impacts. Some light sources contain mercury, and other elements that are damaging to the environment. To operate, they also need components like heatsinks, waveguides, diffusers, lenses and phosphors, adding to the waste at the end of a product's life cycle.

OLED light engines are better for the environment because they do not contain mercury, and the panel is primarily glass, a recyclable material. OLEDs do not get hot, and though the light emitted from them is bright, it's soft, making it possible for it to sit close to humans. OLEDs are an energy efficient option that's as appealing to the human body, as it is to the environment we live in.





## EMOTIONAL LIGHTING AND MOOD

It's been proven that exposure to natural light has a positive impact on how we feel. It boosts our ability to store memories and increases our positive outlook. This is due to its full spectrum lighting, revealing true colors of the world around us.

Unfortunately, many of us are under artificial light for most of our day, and in the winter months, we may never see the sun, leading to seasonal depression.

Broad spectrum OLED light offers a full color palette while eliminating the negative attributes of most artificial lighting solutions, like UV, glare, shadows, and flickers. OLED's combination of brightness with an inimitable softness enhances your environment, providing you with light that resembles daylight even when you're stuck inside all day.







#### HUMAN-CENTRIC LIGHTING

Designers have long desired a light that is "as bright as sunlight but as soft as moonlight". OLEDs uniquely deliver this experience and have been acclaimed as the first pure and honest light.

The very nature of the light quality communicates this honesty. That honesty translates to your well-being. The response to OLED lighting is emotive, you want to touch it, and you want to be touched by it. Lighting effects your well-being in many ways, from physiological effects on eyes and skin to emotional and mood response. OLEDs deliver a positive experience for your health and well-being.

There are many other areas where lighting impacts our daily lives; home, office, transportation, medical facilities, not to mention potential impact on student learning, work performance of employees, and positive sleep habits and many more. Lighting is a now a choice - we choose OLED Lighting.











#### IN PARTNERSHIP WITH OLEDWORKS

