

Mood Light LED new construction

Colored light has an effect on the human mood. Although no exact science can be constructed, many hints remain accepted knowledge.

"Warm vs. cool colors

seem related to the observed contrast in landscape light, between the "warm" colors associated with daylight or sunset and the "cool" colors associated with a gray or overcast day. Warm colors are often said to be hues from red through yellow, browns and tans included; cool colors are often said to be the hues from blue green through blue violet...." wikipedia

Originally colored LED with mood improving capability.

Contrary to filtered light, where a proportion of a white light source is used, LED provide an inexpensive method making colored light of desirable spread of wavelengths. Monochromatic light has proven to have no positive effect on mood, it is perceived as artificial and aggressive. But distinct bands of similar colors have tested positive.

The most important color groups are:

RED:

the most natural illumination color known to man for 30,000 years, now in 21st century technology.

Hints of use come from the science of endocrinology.

"Light dependence

Production of melatonin by the pineal gland is inhibited by light to the retina and permitted by darkness. Its onset each evening is called the dim-light melatonin onset (DLMO). It is principally blue light, around 460 to 480 nm, that suppresses melatonin,... increasingly with increased light intensity and length of exposure. ... Wearing glasses that block blue light in the hours before bedtime may avoid melatonin loss. Kayumov et al. showed that light containing only wavelengths greater than 530 nm does not suppress melatonin in bright-light conditions. Use of blue-blocking goggles the last hours before bedtime has also been advised for people who need to adjust to an earlier bedtime, as melatonin promotes sleepiness." wikipedia.

DO USE RED LIGHT liberally in the hours after dark and before sleep.

GREEN: associated with fresh vegetation. Nearly all plants reflect green light, and it is reported to have a pleasing effect, probably because of the promise of food.

DO NOT USE GREEN as MAIN light source, only as accent color, preferably in combination with plants.

BLUE: the activating color. As mentioned above, blue color effectively reduces melatonin level, making a substantial contribution of being awake and conscious.

DO USE BLUE LIGHT liberally in the hours after waking up.

PINK PURPLE: the rarest color in nature, and therefor sometimes perceived as "precious". There is a shift in modern culture of being "girlish". In either case, it makes modern design look cool.

DO USE PINK LIGHT to be different and make a statement. Do not use to illuminate raw meat. Always check the perception.

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