

Low Blue Light with tuneWHITE







Light is divided into visible light and non-visible light. The part where light can be perceived by human eyes is known as visible light that comprises wavelengths from 400nm to 700nm. Blue light is also known as high-energy visible (HEV) light, has the shortest wavelength in the visible light spectrum ranging from 400nm to 500nm.

Non Visible Light			Visible Spectrum Infrared	
	Ultra Violet 190-400nm	Blue Light (HEV) 400-500nm	Visible Light 500-700nm	700+nm
	Harmfu			Harmful



Light is an essential element that affects the human body circadian rhythm. With humans being indoors for extended periods of time, we often do not have adequate exposure to natural light from outdoors whereby natural light deficiencies have been known to disrupt human circadian rhythm. Furthermore, with the use of LED light sources, our exposure to blue light has increased dramatically and too much exposure of blue light especially at night has been widely associated with negative health effects and sleep disorders.

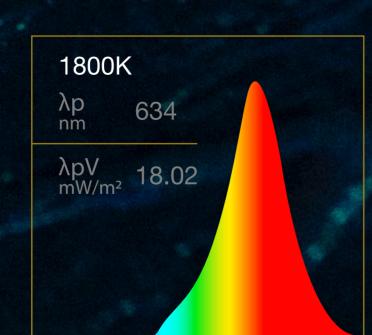


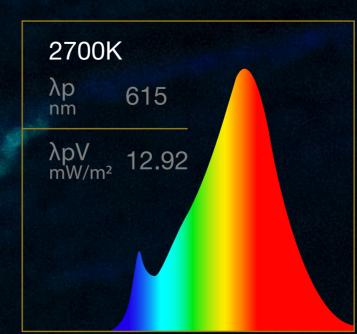
Too much exposure to blue light causes disturbances to our circadian rhythm and eye fatigue. Over time, it leads to insomnia, poor quality of sleep, obesity, depression, and other metabolic disorders. Reducing blue light, especially in the evening can greatly improve human well-being and contributes to a healthier lifestyle.



ELR tuneWHITE 1800K - 4000K LED modules

Dynamic light over time solutions can prevent disruptions in human circadian rhythm and improve human well-being. Using ELR tuneWHITE 1800K - 4000K LED modules, higher colour temperatures (3000K - 4000K) that enhance alertness and productivity can be applied for activities during the day, while lower colour temperatures (1800K - 2700K) with low blue light can be applied in the evening to help our bodies unwind and secrete melatonin hormones, allowing us to relax and improve quality of sleep.







Advanced Thermal Protection System



Low Flicker, No Risk (IEEE 1789)



Durability

Long lifetime of more than 50,000 hours L80 lamp life



Converging Optical Lens Maximising LOR

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