

What?

LimeLite's tunable white option emulates blue-white daylight when the sun is at its brightest and shifts to a subtle warm white light in the hours prior to and just after night. LimeLite's LED lamps are tunable from 2700K to 6500K to replicate the varying white light throughout the day.



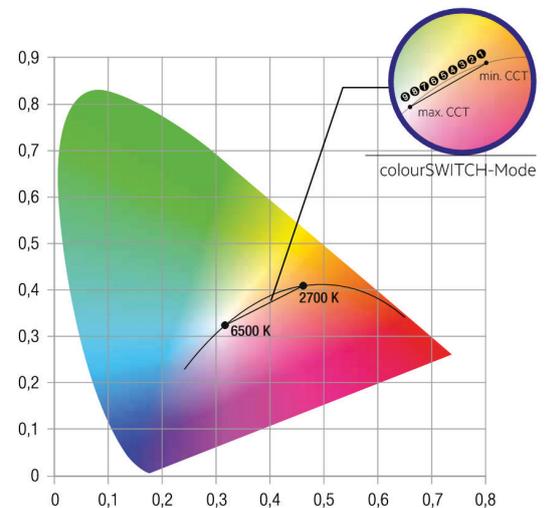
As humans, it is not uncommon for us to spend most of our day in enclosed areas. Seamlessly adjustable colour temperatures – from cool white to warm white – brings natural lighting effects, with all the associated advantages, from outside to inside, and make it possible to properly target individual needs and situations. As a result, Tunable White supports the concept of Human Centric Lighting (HCL), which puts people at the heart of lighting design. As well as perfect conditions for reading and working, HCL is primarily focused on the circadian rhythm, which controls, among other things, our body clocks. As studies have shown, cool white light with a high proportion of blue light has a stimulating effect and promotes concentration, whereas warm white light is calming. Therefore, Tunable White creates an environment that helps us in a natural way – just like daylight.

Why?

Natural daylight and its lighting dynamics lay the foundations for our well-being. However, we spend most of our lives in artificially lit rooms with exposure to many blue light sources (smart phones, tablets, laptops to big screen TVs) which is disrupting our circadian rhythm.

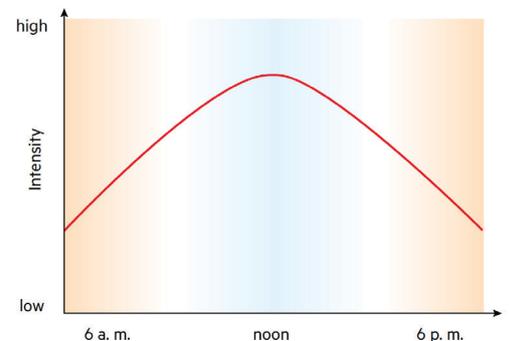
A lack of daylight has been linked with causing a shortage of information needed for the human rhythm to function properly. That is why we should not regard artificial light as a rigid and homogeneous installation, but rather as a “dynamic design of a visual indoor atmosphere”.

Optimal lighting considers different circumstances in all lighting designs, focusing on human needs and wellbeing as a priority. Light that is intelligently controlled in this way increases motivation, concentration and quality of life in such spaces as an office environment, hotel lobby, restaurant, bar, bedrooms or living spaces. In addition, Tunable White allows rooms to be lit properly at the press of a button and is therefore multifunctional.



Features

- Linear Tunable White system with adjustable colour temperature from 2,700K to 6,500K at constant luminous flux
- Precalibrated set to ensure light quality and high colour consistency
- High colour rendering index CRI > 90
- Outstanding system colour tolerance (MacAdam 3) over the full operating area
- High system efficacy up to 106 lm/W at $t_c = 65^\circ\text{C}$
- Dimming range 3% – 100% without change of colour temperature
- Long life-time of 50,000 h



Studying nature illustrates how even the slightest changes in light can influence our moods and how we perceive objects. This notion is at the heart of Tunable White Technology, which is based on the natural colour changes in the light over the course of the day.