

# Human Centric Lighting

## An Overview

### The Benefits of Human Centric Lighting

Human Centric Lighting (HCL) improves overall well-being and productivity of building occupants by providing the right light, at the right time, for the right task. HCL adjusts intensity and color temperature to support circadian rhythm, enhance concentration, or to simply help relax.

Imagine a workspace that inspires greater productivity, a classroom that sparks attentive learning, or a healthcare environment that promotes well-being – all through the power of HCL.

### Enlighted's Human Centric Lighting

Enlighted provides a simple method for controlling the intensity and color temperature of white LED lighting, creating lighting scenes and experiences that are task-specific, and appropriate for different times of the day.

By adjusting the Correlated Color Temperature (CCT) the system can create a range of hues – from warm-looking yellowish white light (2,700 Kelvin) to cooler-looking blueish ones (up to 6,500 Kelvin).

Enlighted's sensors can tune intensity and color temperature of tunable white light created using any lighting configuration including a single driver with analog or digital I/C inputs; driver and splitter arrangements, or dual Warm Cool (W/C) drivers.



# How Enlighted Controls White Light

Enlighted sensors are integrated into tunable white light sources, and Enlighted's Energy Manager console is used to adjust the color temperature and intensity of light to fit any setting or use case.

Additionally, the system's astronomical clock implements sunrise/sunset settings, following natural daylight patterns. It can also integrate time-of-day calculations to match, or enhance, occupants' circadian rhythm patterns.

Specific color temperature scenes can also be pre-programmed to a wall switch to create ideal lighting for optimal performance, and occupant comfort, in offices, healthcare, education, and more.

## Use Cases

### Manufacturing

- Promote alertness for shift work
- Facilitate task accuracy
- Decrease human error

### Office

- Promote creativity and alertness
- Enhance meeting room spaces
- Reduce visual fatigue

### Education

- Create optimal lighting for studying
- Enhance alertness for learning, relaxation for recess
- Help students adapt to fixed schedules

### Architectural Spaces

- Create vivid and natural settings
- Enhance architectural details
- Adjust for ambient light, mood, facility use

### Retail

- Accurately showcase product color
- Create specific moods
- Enhance customer experience and engagement

### Healthcare

- Provide treatment room and operating theater lighting for alertness
- Adjust patient room lighting intensity for rest and recovery
- Mitigate weariness in shift work