



# The Healthy Lighting Solution for 24-Hour Operations

## The Health Problem with LEDs

Most LED and fluorescent lights on the market today increase obesity, diabetes, heart disease risks, and reproductive problems and cause up to a 50-65% higher rate of breast cancer, prostate cancer, and gastrointestinal cancer when used in the late evening or at night. Mounting medical evidence shows they provide too much Bio-Active Blue during the night, and too little during the day, leading to circadian rhythm disruption, mood and health disorders and low productivity. This serious health problem is now recognized by the World Health Organization (WHO), American Medical Association (AMA) and the National Institutes of Health (NIH).

## The CIRCADIAN Light Solution

CIRCADIAN LED Lights deliver high quality white light with 24/7 control of the Bio-Active Blue levels to boost alertness, productivity, and health and prevent circadian rhythm disruption.

CIRCADIAN Light fixtures are autonomous, easily installed by any electrician and provide high quality white light with the optimal bio-active blue levels based on time of day, season, and location.

## CIRCADIAN Light: The Only Effective Solution

The growing awareness of Bio-Active Blue light nocturnal exposure health risks has led several companies to try to capitalize on the market opportunity by rushing to market with so-called “circadian lighting” products that do not prevent the circadian disruption by light at night. Below are the features of conventional LED, fluorescent lights and other new lighting products in comparison to the authentic CIRCADIAN Light solution.

LIGHTING PRODUCT	CONVENTIONAL	CONVENTIONAL FLUORESCENT LIGHTS	“FOLLOW THE SUN” COLOR TUNING	AESTHETIC TUNING COLOR	CIRCADIAN LED LIGHTS
Quality White Light 24/7 to Permit Productive and Safe Work	✓	✓	X	X	✓
Dimmable	✓	✓	✓	✓	✓
Provides Blue-Rich Daytime Spectrum for Alertness, Mood, Energy and Productivity	✓	X	✓	X	✓
All Night Removes the Harmful Blue Spectrum that Increases Diabetes, Cancer, Obesity, Heart Attacks & Depression Risk	X	X	X	X	✓
Prevents Circadian Disruption Identified as Harmful by WHO, AMA and HHH	X	X	X	X	✓
Intelligent Controls Ensure Optimal White Light Spectrum by Time of Day, Location and Season	X	X	X	X	✓
Includes Training on Managing	X	X	X	X	✓
EFFECTIVE SOLUTION FOR 24-HOUR OPERATIONS	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>



**CIRCADIAN Light 1x4, 2x2, and 2x4 recessed and surface mount troffers.**

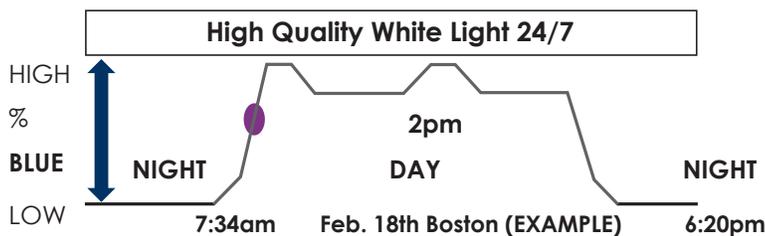
*Ready to install out of the box without special installation requirements.*

## Our Products

CIRCADIAN Light fixtures are designed to provide quality white light 24/7 with the precise wavelength spectrum day and night to optimize health and performance. They deliver the “24-Hour Spectrum of Health”.

Within each fixture are intelligent control boards pre-programmed for the life of the fixture providing the correct Bio-Active Blue light regulation for the accurate time of day, season, leap years, and geographic location for optimized circadian effectiveness. These controls provide continuous white light with a smooth, imperceptible transition from Day to Night mode.

- Lumen output maintained over each 24-hour period and meeting specific industry work space illumination standards with 3000-4000K CCT and >80 CRI. The lights can be dimmed during all phases.
- Light spectrum optimized for peak productivity, mood, and energy to reduce fatigue and errors, by using extensive human subject testing in 24/7 simulations of 12-hour day and night shifts in the CIRCADIAN Light Medical Research Center.
- Removes over 90% of harmful Bio-Active Blue emitted by conventional LED lights that causes the circadian disruption that has been identified by WHO, AMA, and NIH to increase the risk of obesity, diabetes, heart attacks, depression, breast cancer, prostate cancer, and gastrointestinal cancers.



*“The primary human concerns with nighttime lighting include... potential carcinogenic effects related to melatonin suppression, especially breast cancer. Other diseases that may be exacerbated by circadian disruption include obesity, diabetes, depression and mood disorders, and reproductive problems.”*

— American Medical Association 2012

## Aesthetic Color Tuning

Individual user controlled color choices

### Problem:

- Improves mood but does not improve health
- Does not provide Circadian timing
- Bio-Active Blue levels too high at night to correct circadian disruption

## Follow the Sun “circadian” Color Tuning

Follows the Sun—lowering CCT and dimming at night

### Problem:

- Dimming light impairs vigilance and performance
- Improves sleep and mood but not suitable for work at night
- Bio-Active Blue levels too high to correct circadian disruption

## CIRCADIAN Intelligent Control Board



### Intelligent Controls Provide:

- Correct Bio-Active Blue-Light
- Regulation by Time of Day
- Location and Season



## Complimentary Workforce Training

Since CIRCADIAN Light is designed to optimize the health, safety and performance of your workforce, an important part of the installation process is to provide 24/7 employees with education on how to take advantage of CIRCADIAN Light both at work and in their daily lives

### The CIRCADIAN Light training includes:

- The impact of blue light on sleep and health
- Managing light at home and work to get better sleep
- Tips to reduce fatigue and increase alertness
- Improving health, wellness and nutrition

**TO FIND OUT MORE ABOUT CIRCADIADN LIGHT TRAINING CALL 781.439.6333 OR VISIT [WWW.CIRCADIANLIGHT.COM](http://WWW.CIRCADIANLIGHT.COM)**