EnergyByLight

a tasklight that follows your daylight rhythm







Giving you more focus and improved performance during work and better sleep at night.

Meet the **EnergyByLight**, an innovative bio-dynamic, human centric, lighting fixture that provides **the right task and ambient light at the right time** for your (home) workspace. The automatically changing intensity and colour temperature, similar to the sun, promotes a sense of wellbeing and productivity by supporting your bodies natural circadian daylight rhythm.

By nature your body has been adapting the sun, giving you energy throughout the day and a resting period during the night. The EnergyByLight is no different, it is not an artificial light but a bio-dynamic human centric light that recreates the colour temperature and brightness of natural daylight found at your location throughout the course of a day, controlling your so-called circadian rhythm.

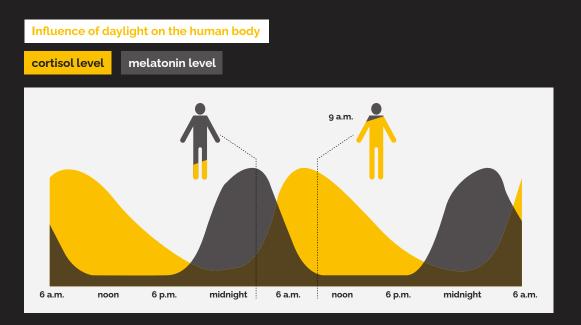
- 1. Gives you more energy, a better focus & a better sleep
- 2. Improves your health, comfort & happiness
- 3. Mimics daylight circadian rhythm at your location
- 4. Direct task lighting and ambient lighting
- 5. Makes you look better (during video calls)





Circadian Rhythm?

The circadian daylight rhythm or day-night-rhythm is your human biological rhythm. It comprises 24 hours roughly split between 16 hours wakefulness and 8 hours sleep and can therefore also be called **your sleep-wake cycle**.



The release of the hormones **cortisol and melatonin** are controlled by your circadian daylight rhythm. Cortisol secretion is at its highest in the morning making you **more productive**. While the hormone melatonin decreases steadily with increasing daylight brightness, so you **feel fit** and **well-rested** during the day and become more tired when melatonin increases as the daylight decreases helps you to **sleep better** at night.

Sunlight is described by scientist as white light, it contains all the colours of the visible spectrum we see. This light however also changes in direction,
brightness and colour temperature throughout the day. You have evolved as all animals and use these changes in daylight to synchronize your body clock.



How does bad light and sunlight affect me?

Poor lighting can have the most detrimental impact on the quality of your working day and your wellbeing in general. Most of us spent 90% of our waking time working under artifical inadequate lighting. Bad (artifical) light can lead to **eye strain, headaches, concentration problems, tiredness and even a lack of sleep...**



Biologically, sunlight controls all aspects of your waking and sleeping live, when to rest, when to be active and even when to eat. Your body clock is tied to the movement of the sun and **is crucial for your long term health.**

Right light is needed to perform your tasks, the light for working is different to that of relaxing, reading, writing, listening to music watching TV or socializing, it is important light is optimized **for your comfort.**

Emotionally, sunlight has the greatest positive impact, we all feel much better when the sun shines, many of us can feel depressed in winter and seasonal disorders associated for too little daylight **affects our Happiness.**



What light level do you need?

Lux is a standardised unit of measurement of light level intensity. Sunlight provides between many thousands of Lux to only a few hundred depending on the weather conditions and time of day.

The typically artificial lighting level in offices is only around 500-600 Lux! And can be even lower depending on the age of the installation (e.g., lamps depreciation and cleanliness of the optics)

Typical Lux

Overcast Daylight 1000 Sunset & Sunrise 400

Characteristics of good lighting according to regulations

- 1. To guarantee the right viewing environment while working with a computer screen, the lighting conditions need to be without distracting reflections, high contrast, glare and the right brightness levels. Adjusting to poor lighting conditions often result in eye strain, headaches and fatigue.
- 2. The minimum amount of light should be 500 Lux, with the ability to change the light intensity up to 1000 Lux being desirable with Individuals given the possibility to adjust the lighting level in the task area according to their specific needs.
- 3. Lighting must be matched to the respective work task, e.g., those who have to read paper documents need more light in the reading area, where 750 Lux is required.
- 4. A certain amount of daylight is desirable, due to its importance for health and well-being. As natural light changes during the day it is considered a 'trigger' for our biological rhythm.
- 5. As the colour and intensity of daylight effects people, changing light colour and brightness mimicking the sun would be ideal, light with a higher blue component similar to natural daylight during the day and a warmer reddish colour at dawn and dusk are perceived as more natural.
- 6. A mixture of diffuse and direct lighting as well as individually adjustable task area lighting is ergonomically recommended. Individual workplace lighting better enables the employee to adjust the light to his or her own needs and the respective work task.



EnergyByLight surpasses the requirements!

Although a lot of (task) lighting solutions do not meet these regulatory requirements, the EnergyByLight does and even surpasses them and even has a demo cycle to show off your cyrcadian rhythm!

Features

Cyrcadian rhythm:	yes
Adjustable colour temperature:	yes
Adjustable brightness:	yes
Task lighting:	yes
Diffuse lighting:	yes
Energy / lunchtime boost:	yes
Absence detection:	yes
Early / late person support:	yes
iOS / Android app included:	yes

Specifications

Light source	LED
Lux range:	300 - 1000 Lx
Kelvin range:	2700 - 6500 K
Lamp life:	50.000 hours
Energy consumption:	8 - 16 W

Conforms to the following standards

European Norm EN 12464-1 Well Building Standard V2 Lighting



Home



Good lighting is necessary, at home and at the office!

EnergyByLight combines perfect light distribution at the (home) desk and at the same time delivers biologically effective lighting. Aiding your concentration and allowing you to work more efficiently whether you're in the office or at home.



The all-in-one lighting solution for your surroundings and task area!

Task light opening

It is specifically designed for good task lighting and illuminates the user's desk perfectly.

Ambient light distribution

EnergyByLight combines direct lighting for the task area and indirect, ambient lighting for your surroundings. This way the EnergyByLight delivers sufficient light in the right direction, both horizontally and vertically for successful workspace illumination (task) as well face and surrounding illumination (ambient).



EnergyByLight, boosting your natural bio-rhythm

Start your day energised!

After you have set your circadian rhythm via the App according to your location, EnergyByLight starts in the morning hours, with a warm colour and light intensity of 500 Lux, and as the morning progresses changes to a cool white colour around 650-700 Lux. With the maximum light intensity during the morning hours before lunchtime reaching 800-850 Lux.

Early or late bird?

The EnergyByLight will assist you with the right brightness for your start of the day. Just set your circadian rhythm offset to + or - 2 hours and the brightness comes exactly according to your timing.

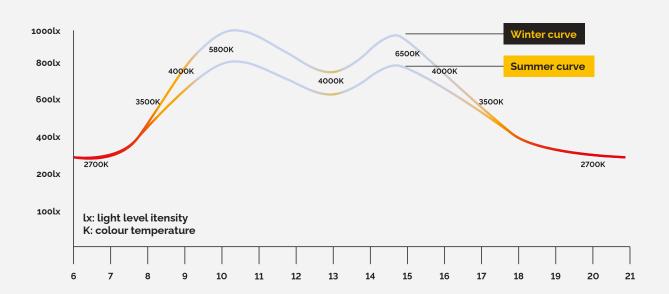
Lunchtime!

Depending on the lunchtime hours you have set in the App, EnergyByLight will automatically give a cool white light spike after lunch. This cool spike helps to counteract the dip we experience after eating lunch. The so-called 'Energy boost' will help to keep your performance at a higher level.

Afternoon winding down.

Gradually towards the afternoon, the light intensity will change to 450 Lux with a warmer reddish-white light colour, mimicking the naturally changing aspect of daylight. EnergyByLight automatically balances out the difference in the natural lighting level of summer and winter. The lack of natural sunlight in the winter is counteracted with a higher peak of brightness in the winter curve.

In short, the biodynamically adapted light of EnergyByLight follows the circadian rhythm, so that your body clock remains synchronised. Giving you the opportunity, to work healthier and happier!







Experience the difference

EnergyByLight positively influences your well-being, productivity, energy, sleep, and performance at work.

Brightness 50 Colour temperature 2800





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EnergyByLight App

You can easily set the circadian rhythm with the help of the EnergyByLight-App. Download the App via the QR code on the base of the luminaire and connect your smartphone, set your location and the EnergyByLight automatically follows the circadian rhythm for your region. EnergyByLight simply adapts to the daylight and automatically controls the colour temperature and brightness throughout the day.







Brightness and colour temperature are manually adjustable with the touch buttons of the lamp itself. To reveal the automatic circadium rhythm settings and your offset preferences it is strongly recommended to use the EnergyByLight app.



Absence sensor

EnergyByLight promises low energy consumption and a long-life cycle of approximately 50,000 hours. The EnergyByLight monitors if you are present in the room by using an absence sensor at the top of the product. If there is no movement detected for a set time, the light switches off automatically. This guarantees low energy consumption and not only reduces costs, but also makes it more sustainable and efficient.

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Rubber bottom

This way your EnergyByLight always stays firmly in place on your desk.

Positioning

The EnergyByLight is positioned on the opposite side of your mouse hand in between the front of your desk and your monitor, with its direct task light window facing in line with your keyboard and/or documentholder, providing lighting on the task area of your desk and ambient lighting on your surroundings. EnergyByLight can also completely replace the ceiling lighting and serve as the only light source on any (home) desk. akker khuizen

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Intro video

Meet Robert and his first encounter with the EnergyByLight.

Expert video

Want to learn even more about the EnergyByLight and all its features?



Taalstraat 151, 5261 BC Vught, The Netherlands www.bakkerelkhuizen.com Patent pending



