

A more natural
way to interact
with light



saL^UZ[®]

Technology inspired by the sun

NORMALIT
by Normagrup





SaLuz®

Technology inspired by the sun

SaLuz® is the technology
from Normalit that creates
healthy, comfortable and
efficient environments

SaLuz® luminaires have been
inspired by the sun to adapt
to the biological cycles. No
network or external device
connection is required.



SaLuz® video



Why some lighting makes us feel good while others create stress?

Light does have an impact on our vital rhythms, as well as on our physiological processes, our mood, our capacity to focus, our emotions and of course, our health.

And, even though artificial lighting is quite useful, our biology is still programmed to adapt to natural lighting, to its cycles and its features.

SaLuz® technology is inspired by natural light.

Thanks to its features, luminaires with SaLuz® technology offer important advantages:

- They adapt to our vital natural rhythms.
- They prevent damages to eyes and skin.
- They prevent headaches, nausea and dizziness.

How does SALUZ® technology work?

SALUZ® is a technology that influences several aspects of the light.



Adapts to the circadian rhythm.

SaLuz® modifies the temperature colour of light through the day, to match our natural biological rhythms, improving the activation level, the mood and the sleep / awake cycle.



Flickering control (risk free).

Flickering are small brightness fluctuations in the artificial lighting that can be perceived as blinks. Prolonged exposure to lights with high flickering can cause headaches, even migraines and nausea. SaLuz® guarantees a flickering risk free.

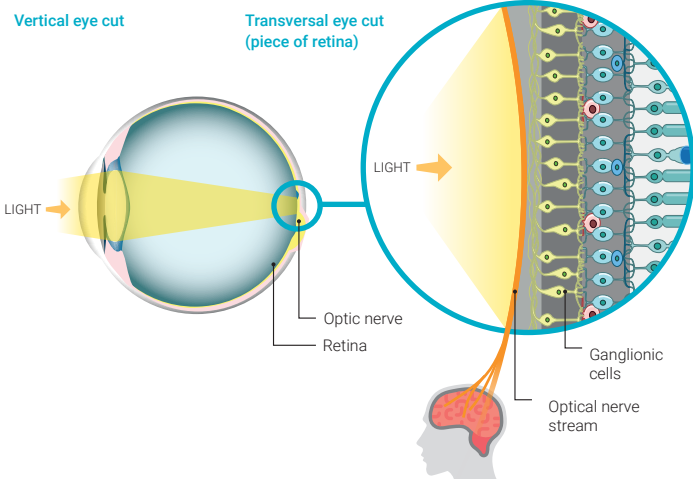


Controls the photobiological safety.

Luminaires equipped with SaLuz® technology are considered to be risk free for the eye and the skin, according to the European Norm about photobiological safety (EN 62471).



THE INFLUENCE OF LIGHT IN OUR BRAIN



The axons of the ganglionic cells form together the optic nerve, used to provide information to the brain. This information arrives to visual areas forming images, but also to different areas of the brain (non visual) that have to do with other functions, such as regulate the biological clock, hormone production and sleep function, amongst others.

Light with a high predominance of blue stimulates the ganglionic cells in charge of producing the following hormones:

- Dopamine: involved in the muscular coordination, attention and pleasure.
- Serotonine: stimulant and motivator, increasing the levels of energy.
- Cortisol: (Stress hormone), stimulates the metabolism and prepares the body for the day.

This type of light rich in blue content also suppresses the production of melatonin, the hormone that causes tiredness, slows down the activity of the body and reduces activity for a better rest.



Do you know what Circadian Rythm is and how does it affect your life?

People are naturally synchronized with the sun.

SaLuz® synchronizes with our natural rhythms and automatically modifies the colour temperature during the day.

In indoors atmospheres where we usually spend most of our day (offices, schools, etc.), artificial light does not change its tone or its intensity and there is a desynchronization from our vital rhythms.

Science has proven that this directly affects our performance, our mood and our sleep.

SaLuz® luminaires reproduce by themselves the luminic cycle of the sun. To do this, we have considered as a reference the sunrise and sunset of Madrid each day of the year, and this has been associated to a light spectrum for each time of the day. This variation of spectra takes place continuously, but is imperceptible with the naked eye. Out of the day cycle, the luminaires emit a spectrum that has been designed to minimize the melatonin inhibition.





WARM WHITE
RELAX



NEUTRAL WHITE



COLD WHITE
ACTIVE

Areas of installation

SaLuz® technology has been specially thought for indoor atmospheres where there is a constant artificial light all over the day.



Hospitals

There are patients with a limited movility that have little exposure to natural light and, hence, to the stimulus that help them synchronize their internal clocks.

SaLuz® technology stabilizes their circadian rythm. It relaxes or activates them as the sunlight would do, according to the time of the day, and also helps them to improve their sleep.

The professionals looking after them will also improve their performance and well-being.

Schools

There are many kids that are exposed to unhealthy lighting. Even in places where photobiological risks, flickering and UGR have been considered, they are still exposed to an unsuitable and/or constant colour temperature that makes them loose biological rythm.

This affects their attention capacity, alters their coordination, their reaction capacity, etc.



In the mornings, the intensity of the light and the proportion of blue light shades help us to be more active. In the evenings, the intensity and the proportion of the blue light shades decreases, which helps us to relax and get ready to rest.

Easy installation and control

SaLuz® technology is characterized by its easy installation and control, without the need for additional wiring or home automation systems.

The integration of Bluetooth technology allows managing the system from any mobile device in an easy, fast and flexible way. Enjoy automatic and immediate tuning, with significant savings in installation and maintenance costs, as well as a personalized, agile and comfortable control experience using the new SaLuz® *Easy* app.

Automatic configuration

SaLuz® is the first system available in the market that simulates the circadian rhythm without the need to connect to other equipment.

The luminaires incorporate a clock and a calendar with the date, time and season of the year. Just connect them to the electrical network to implement the solar cycle automatically anywhere in the world.



Direct installation to the electrical network

No additional wiring.
No control elements.
No start up.
No setup.



Automatic synchronization with the sun

Dynamic simulation of the circadian rhythm.



Luminaires connected by Bluetooth

Simple and centralized mobile control.



Control up to 20 luminaires

The Bluetooth control module allows you to manage between 15-20 luminaires at the same time.



Simple and intuitive management

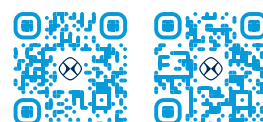
The SaLuz® *Easy* app allows you to manage the SaLuz® system from mobile devices in a simple way and connected via Bluetooth.

A new tool with an intuitive and minimalist design with the latest technology to manage lighting intelligently and dynamically through three control modes, allowing automatic synchronization with the solar cycle in any location, customization of environments, and programming of sequences of daily lighting.



FREE APP

Available for iOS and Android



Manual mode:

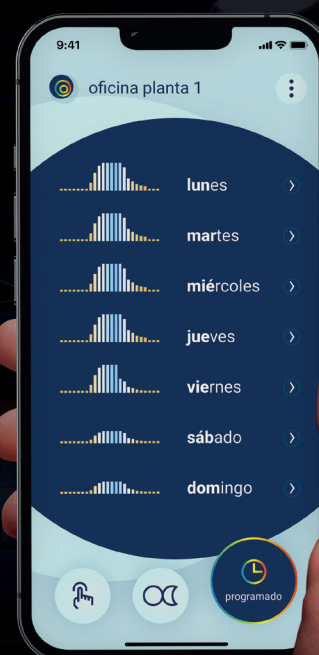
Create personalized atmospheres by changing the color temperature and light intensity to adapt the lighting to different spaces, activities and needs, from spaces of maximum concentration to contexts of relaxation.

Circadian cycle mode:

Enter the location of the mobile device to synchronize SaLuz® with the natural cycle of light instead of where the installation is located and adapt the system to the local circadian cycle automatically and instantly.

Scheduled mode:

Program daily lighting cycles and sequences in a simple way to configure a personalized system adapted to any space, displaying the programmed routines on a calendar.



saLUZ®

Luminaires

Trazzo Avant saLUZ®

IP
30



Ceiling
surface
mounted



Ceiling
suspended
mounted

Photobiological safety **0**

Flickering **risk free**

UGR **16**

[More information](#)

Hat HR saLUZ®

IP
54



Recessed
in the ceiling

Photobiological safety **0**

Flickering **risk free**

UGR **21**

[More information](#)

Polart saLUZ®

IP
20-54



Recessed
in the
ceiling

Photobiological safety **0**

Flickering **risk free**

UGR **22**

AVAILABLE SALUZ VERSION
PLEASE CONTACT US

Nassel Avant saLUZ®

IP
44



Recessed
in the ceiling

Photobiological safety **0**

Flickering **risk free**

UGR **16**

More information



Luzerna Avant saLUZ®

IP
20-54



Recessed
in the
ceiling

Photobiological safety **0**

Flickering **risk free**

UGR **16-19**

More information



SeaLED saLUZ®

IP
20-65



Recessed
in the
ceiling

Photobiological safety **0**

Flickering **risk free**

UGR **16-19**

More information



NORMALIT

Technical and architectural lighting
normalit.com



100%

Diseñado y fabricado
íntegramente en España

*Entirely designed and
manufactured in Spain*

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