

LIGHT COGNITIVE. DERIVED FROM NATURE.



# LC brings natural light indoors

Light Cognitive is a creative lighting company that celebrates natural light. We bring the benefits of natural light into all spaces. Our patented technology is based on a vast body of research and natural light spectral modeling.

We offer infinite resolution and unlimited colours to replicate the sky.

#### **OUR MISSION**

Our mission is to bring beautiful light and clear skies to everyone's reach.

Our inspiration comes from nature.

#### **OUR VISION**

We see a future where lighting is immersive and enhances our everyday life.

At LC we believe it is within your reach today.

Our goal is to make every windowless area as pleasant as a winter garden or a penthouse.

We can respond to the growing need of urban environments to feel connected to nature and make all spaces better for living.

#### **BENEFITS**

#### **DERIVED FROM NATURE**

LC light is generated with multiple different types of LEDs combined in a way that recreates the distribution of light spectra found in nature. In addition to having the positive spectral qualities of natural light, the visual appearance of the light field resembles a natural view into the sky or horizon. LC lighting design has been optimized for visual beauty by making the light field dynamic and continuously shifting with infinite colors and infinite resolution.

#### SUPPORTING WELLBEING

Light has a strong link to wellbeing, as it regulates our circadian (latin for approximately a day) cycle and our alertness. The right kind of light content, timed correctly, promotes recovery and a healthy sleepwake cycle. It is recommended to have bright high color temperature light in the mornings and during the day. In the evenings respectively we should avoid the light we need in the mornings and day for a few hours before sleep by shifting to warm color temperatures.

#### **AUTOMATED AND DYNAMIC**

Our lights change dynamically over the day just like in nature. The integrated Sky Player creates the day-cycle automatically for you. Simply choose the sunrise and sunset times according to your preference. The advantage of LC programs is to help control the dynamics: the right light at the right time to support your daily sleepwake rhythm. LC products can also be manually set to different light scenes such as relaxing light or energizing light to reflect your moods and needs.

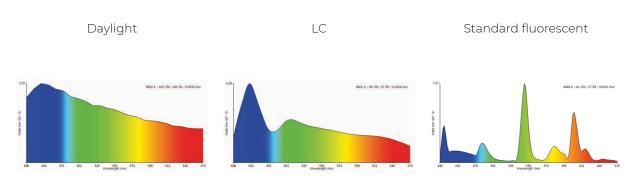
# About Natural Light

"In the absence of natural light, an electric light should try and mimic daylight as closely as possible."

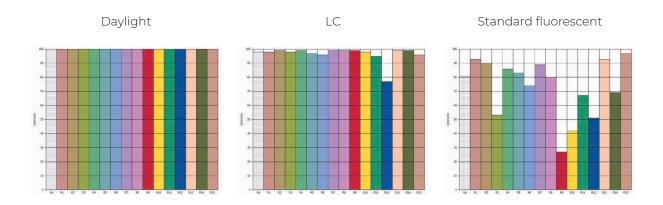
#### Dr. Steven Lockley, Harvard Medical School

Natural light is essential in the maintenance of our normal physiology and health because it keeps the body's internal 24-hour clock in time. Light Cognitive's patented technology is designed to reproduce the spectrum of natural daylight as closely as possible. This is achieved by first measuring the natural spectrum, modelling the physics of light and then transforming it into the advanced light programs that are at the core of each LC product.

## SPECTRA AT MID DAY\*

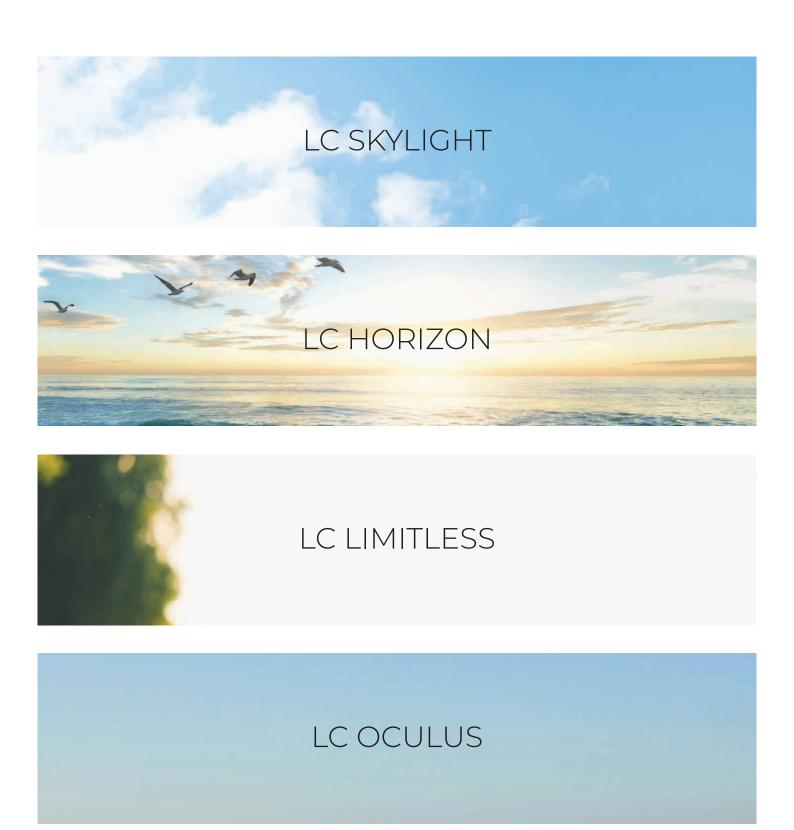


## **COLOR RENDERING**



<sup>\*</sup> Please note that the spectrum in LC lighting changes dynamically during the day, controlled by Sky Player.

# Products



## LC SKYLIGHT 60 / 120

LC Skylight is the definitive solution for creating the feeling of a window in the ceiling – without the need for a top floor room or cutting through the roof.

It is an ideal solution for underground spaces or rooms with insufficient natural light. Enjoy the sensation of space and openness that your LC Skylight brings!



## **SPECIFICATIONS SKYLIGHT 60**

**TYPE OF INSTALLATION:** General, supplemental light & virtual skylight

**MOUNTING:** Ceiling or wall mount: recessed

**WIDTH X HEIGHT:** 1200 mm x 600 mm

**DEPTH:** 300 mm with standard recess frame. Thinner recess frames available for bigger orders, minimum depth 220 mm.

WEIGHT: 20 kg

**LIGHT SOURCE:** Light Cognitive LED module (G5)

**C** € Made in Finland

CONTROL: Casambi (Bluetooth wall switch),

Dali Type 8

POWER INPUT: 100-240V AC 50/60Hz

MAXIMUM POWER CONSUMPTION: 110 W

TYPICAL POWER CONSUMPTION: 60 W

**LIGHT INTENSITY AT 1 M:** 650 lux

**IP CLASS:** IP 20

CRI: up to 98, minimum 90

**UGR VALUE:** < 19

FLICKERING FREQUENCY: 1000 Hz

## SPECIFICATIONS SKYLIGHT 120

**TYPE OF INSTALLATION:** General, supplemental light & virtual skylight

**MOUNTING:** Ceiling or wall mount: recessed

**WIDTH X HEIGHT:** 1200 mm x 1200 mm

**DEPTH:** 300 mm with standard recess frame. Thinner recess frames available for bigger orders, minimum depth 220 mm.

WEIGHT: 23 kg

**LIGHT SOURCE:** Light Cognitive LED module (G5)

**C** € Made in Finland

CONTROL: Casambi (Bluetooth wall switch),

Dali Type 8

**POWER INPUT:** 100-240V AC 50/60Hz

MAXIMUM POWER CONSUMPTION: 240 W
TYPICAL POWER CONSUMPTION: 120 W

**LIGHT INTENSITY AT 1 M:** 1300 lux

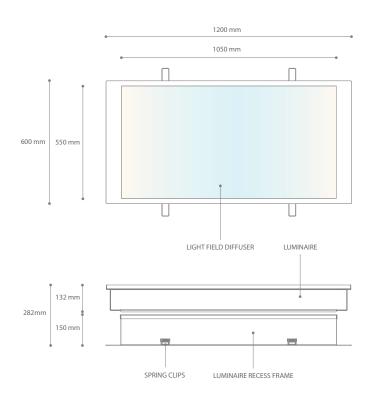
**IP CLASS:** IP 20

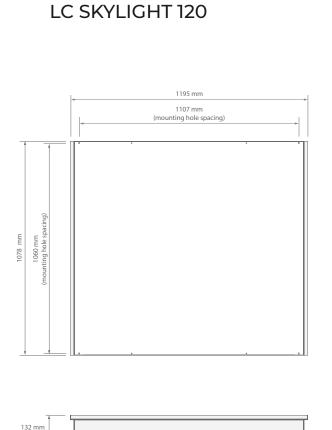
CRI: up to 98, minimum 90

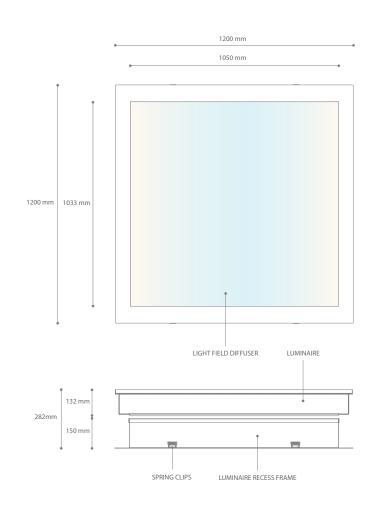
**UGR VALUE:** < 19

# 1195 mm 1107 mm (mounting hole spacing)

577 mm (mounting hole spacing)





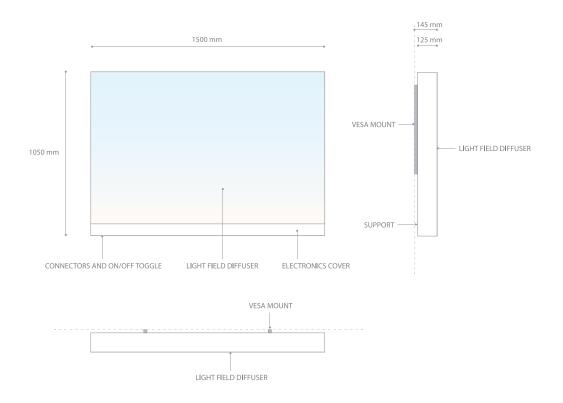


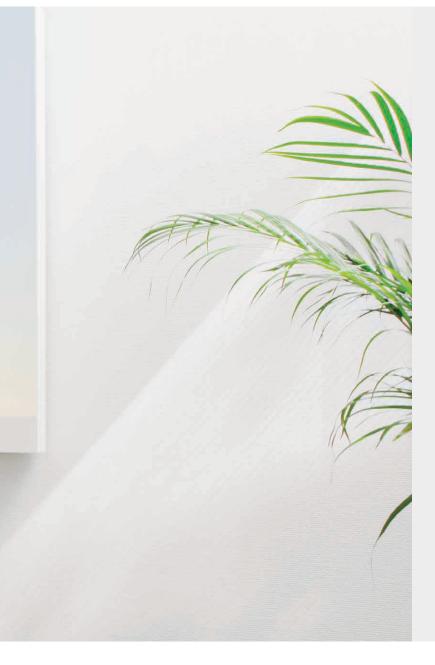
## LC HORIZON

LC Horizon is designed for surface mounting. Its aesthetically pleasing and elegant design is simple to adapt to a variety of spaces, and it creates a pleasant view into the horizon, just like looking out from a skyscraper or an airplane window.

LC Horizon will provide you with a luxury view every day. LC Horizon is optimal for spaces that need additional light which is biologically effective and close to daylight. It complements your existing lighting, and it vitalizes your day and brings a relaxing warm light towards the evening.







## **SPECIFICATIONS**

**TYPE OF INSTALLATION:** Supplemental

light & virtual window

**MOUNTING:** Wall or stand installation

with VESA mount

**WIDTH X HEIGHT:** 1500 mm x 1050 mm

**DEPTH:** 125 mm & floating 20 mm

VESA attachment

WEIGHT: 30 kg

**LIGHT SOURCE:** Light Cognitive LED module

(G5) **C M**ade in Finland

**CONTROL:** Casambi (Bluetooth wall switch),

Dali Type 8

**POWER INPUT:** 100-240V AC 50/60Hz

MAXIMUM POWER CONSUMPTION:  $320~\mathrm{W}$  TYPICAL POWER CONSUMPTION:  $180~\mathrm{W}$ 

**LIGHT INTENSITY AT 1 M: 2980 lux** 

**IP CLASS:** IP 20

CRI: up to 98, minimum 90

**UGR VALUE:** < 19

## LC LIMITLESS

LC Limitless is a custom solution that offers the widest architectural freedom. LC Limitless enables light fields of any size. Large light surfaces have minimal glare and they are immersive.

Like all Light Cognitive products, Limitless is dynamic with all hues of the sky and natural color rendering. Its multiple areas work seamlessly together.

## **SPECIFICATIONS**

**TYPE OF INSTALLATION:** General lighting &

virtual window/skylight

**MOUNTING:** Recessed ceiling or wall

WIDTH: 50 cm increments
HEIGHT: Minimum 100 cm
DEPTH: Minimum 15 cm
AREA: Starting from 6 sqm

**LIGHT SOURCE:** Light Cognitive LED module

(G5) **( €** Made in Finland

**CONTROL:** Casambi (Bluetooth wall switch),

Dali Type 8

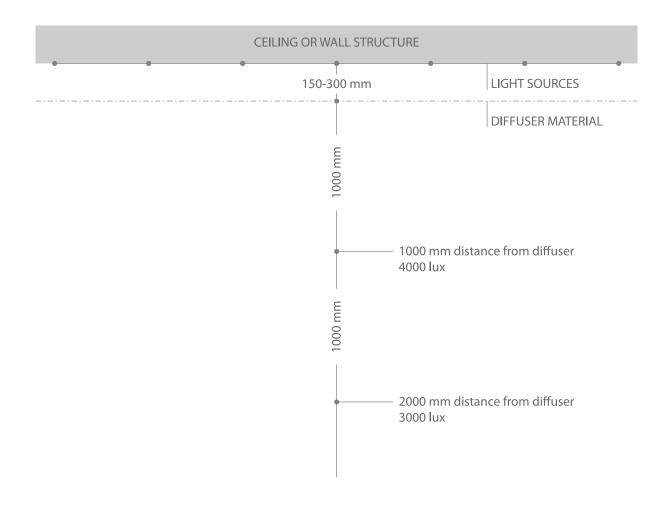
**POWER INPUT:** 100-240V AC 50/60Hz

MAXIMUM POWER CONSUMPTION: 200 W/m<sup>2</sup>
TYPICAL POWER CONSUMPTION: 100 W/m<sup>2</sup>

**IP CLASS:** IP 20

CRI: up to 98, minimum 90

**UGR VALUE:** < 19





## LC OCULUS

LC Oculus is a bespoke high-end solution that offers architectural freedom and can be designed in the size or shape the client desires. LC Oculus is dynamic and mimics natural light with unprecedented spectral accuracy.

Originating in antiquity, an oculus Is a circular opening in the center of a dome. In the Italian Renaissance, open oculi began to be replaced by light transmitting round windows. With LC Oculus, you can now recreate the sensation of openness of an oculus, adaptable to any space.

## **SPECIFICATIONS**

**TYPE OF INSTALLATION:** General lighting &

virtual round Skylight

**MOUNTING:** Recessed ceiling **RADIUS:** 1 meters and above

**DEPTH:** Minimum only 7.5 cm, typical 15 cm

**AREA:** Starting from 3 sqm

**LIGHT SOURCE:** Light Cognitive LED module

(G6) **( ( Made in Finland** 

**CONTROL:** Casambi (with intelligent Bluetooth

wall switch), Dali Type 8

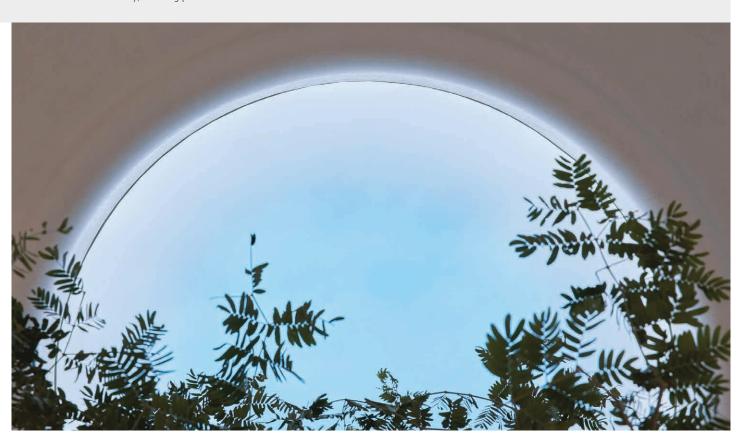
**POWER INPUT:** 100-240V AC 50/60Hz

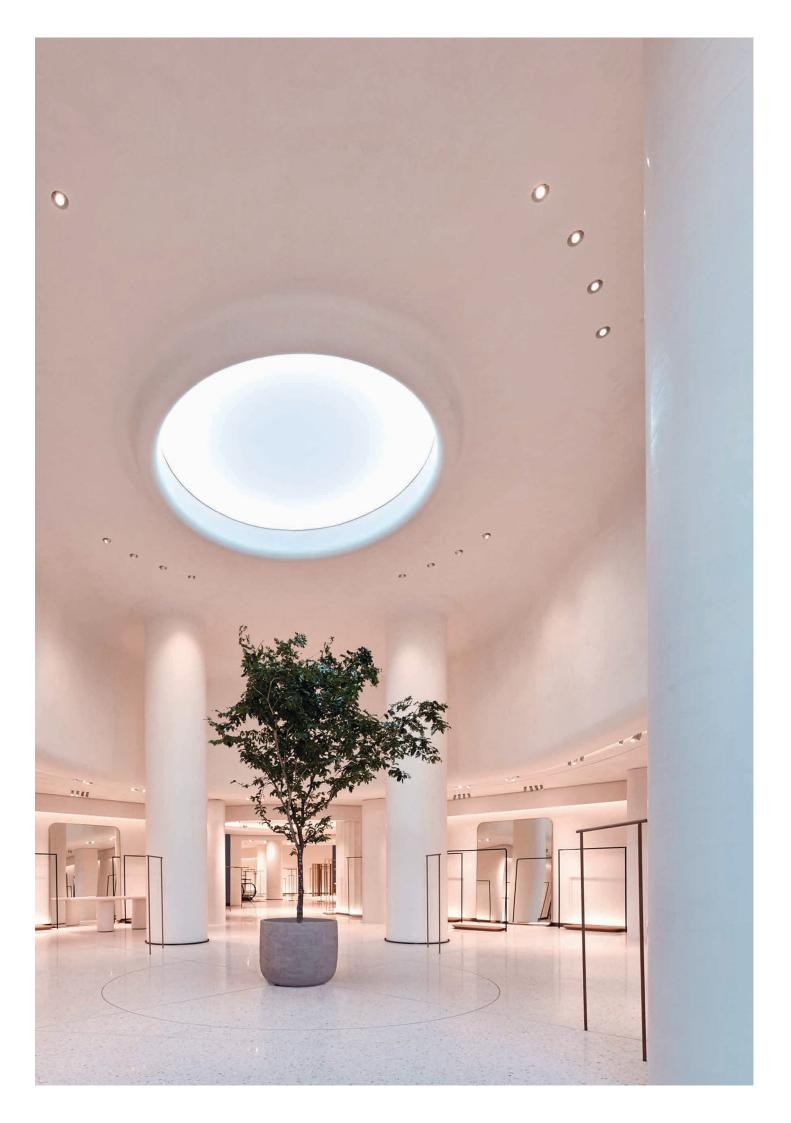
MAXIMUM POWER CONSUMPTION: 200 W/m<sup>2</sup>
TYPICAL POWER CONSUMPTION: 100 W/m<sup>2</sup>

IP CLASS: IP 20

CRI: up to 98, minimum 90

**UGR VALUE:** < 19







# New perspectives on wellbeing: LC LIMITLESS at Hotel St. George

The Hotel St. George, opened in Helsinki in 2018, comes with an ambitious concept

– expanding the customer experience to include new dimensions and

new perspectives on total wellbeing.

It is Light Cognitive's mission to help people live better, whether they need help recovering from the effects of travel or dealing with the Finnish seasons, or simply want to feel rested and refreshed every day. In the words of the team at the St. George Spa: "A moment with LC lighting is a moment with healing light".

Early in the Hotel St. George planning process it was clear that wellbeing would be in a key role.

One of the main features at St. George Care is the LC light wall which greets guests as they enter the spa. LC light is inspired by nature and clear skies, and the creation of a horizon light wall transforms the windowless space.

Light Cognitive recreates natural light in indoor spaces and the light cycle supports one's 24-hour circadian clock – a compelling idea for the hotel design team. The team was equally impressed by the premium quality of the light as well as by the renowned advisor of Light Cognitive team, Dr. Steven Lockley, an associate professor of Medicine at Harvard Medical School. LC light innovation supports the spa's ideology; St. George Care offers much more than just spa and fitness treatments – it offers an entire way of living.







# www.lightcognitive.com

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