



PANEL CRONOS

Autonomous LED Panel reproducing sunlight throughout the day

+ CONCEPT

Light intensity and color temperature vary throughout the day, allowing the synchronization of the user's circadian rhythm. Circadian lighting compensates for the lack of exposure to sunlight indoors.

+ BENEFIT

A synchronized circadian rhythm improves concentration, efficiency, and the sleeping quality and quantity. It also improves the biologic smooth operation of the human body. The circadian luminaire is made to further these benefits.

+ MATERIAL

White aluminium frame.
High performance polycarbonate diffuser to avoid glare.

INSTALLATION

+ Tool-free recessed mounting compatible with the majority of false ceiling. Safety rope included.

POWER SUPPLY

+ Separated power supply, delivered pre-connected with the automatic LED control system included.

Cronos - A Lucibel Group Brand
9, avenue Edouard Belin
92500 Rueil-Malmaison - France

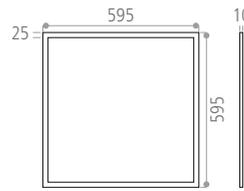


DESCRIPTION

The Panel Cronos is an autonomous LED Panel reproducing natural light throughout the day. By following a factory programmed cycle, Cronos lighting varies light intensity and color temperature minute by minute. The circadian scenario is based on photometric measurements of the sun made during the month of June under clear blue skies in Lyon. The Ores Cronos is electronically controlled and equipped with an inbuilt clock that is synchronized to the user's time zone. Several light fixtures can be synchronized to the same clock to prevent potential time shifting.

DIMENSIONS

Unit: mm



Lighting fixture **4Kg**

Electronic / Power supply **1,05Kg**

SCIENTIFIC APPROACH

Light perceived by the eye is captured by photoreceptors located in the retina which ensure the visual functions and by ganglion cells that activate hormonal secretion allowing synchronization of the biological rhythm. The light flux received can thereby be divided into visual flux and melanopic flux.

The ratio between melanopic flux and visual flux - otherwise called m-lux and lux - is a useful indicator for the impact of lighting on circadian rhythm.

The Panel Cronos has been conceived to provide the closest melanopic ratio to that of sunlight as well as a significant melanopic flux at all times.

Sun in the middle of the day	1,1	Sun at the end of the day	0,7
5400K lighting	0,9	3000K lighting	0,5

Panel Cronos corresponds to the optimal compromise between biological impact and visual comfort.

PHOTOMETRY

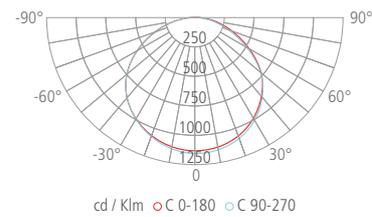
Available in:

Angle (120°)

CRI
> 90

UGR
< 19

PANEL CRONOS



In compliance with NF EN 12464-1 standard for lighting of indoor work places

TECHNICAL CHARACTERISTICS

Operating life: 50 000 h L80B10 (Ta = 25°C)
 Operating temperature: -20 ; +45°C
 Input voltage: 220-240VAC / 50-60Hz
 Power factor: > 0,9

IP40
IP44

IK02

960°

PRODUCT POSSIBILITY

Color temperature and light intensity vary throughout the day in order to respect the human body's biological needs according to the chronobiologist recommendation.

- The color rendering index is >90 all day long to get closer of the **natural light**.
- The Panel Cronos is compatible with the presence detector to allow **energy saving**.

	LUMINOUS FLUX	POWER	COLOUR TEMPERATURE	OPTICAL DISTRIBUTION	CRI (mini)	REFERENCE
CIRCADIAN MODE 	from 2000 lm to 6000 lm	Pmean = 50W Pmax = 65W	Cold 5400 K Warm 3000 K	120°	> 90	LFR1001CR.01