



# ORES CRONOS

Autonomous downlight 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 sleep quality, mood disorders and allows proper functioning of the human body.
- + MATERIAL**  
99,5% pure black anodised aluminium Pin Block moulded body and protected by perforated steel plate. Trim made of sheet steel and painted with high-quality powder coating. High efficiency faceted aluminium reflector. Optical compartment sealed with opal glass.
- + INSTALLATION**  
Tool-free recessed mounting using spring system. 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

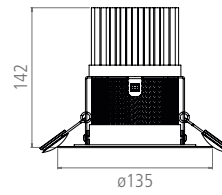


**DESCRIPTION**

The Ores Cronos is an autonomous downlight 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 **125**  
**0,7Kg**

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 Ores 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	<b>1,1</b>	Sun at the end of the day	<b>0,7</b>
5400K lighting	<b>0,9</b>	3000K lighting	<b>0,5</b>

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

**PHOTOMETRY**

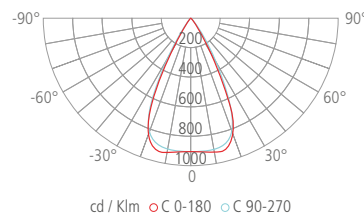
Available in:

Opal glass diffuser: Wide Flood (66°)

**IRC**  
 > 90

**UGR**  
 < 19

ORES CRONOS



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

**FINISH**



Trim colours (fine texture paint):  
 White RAL 9016 (Traffic white)  
 Grey RAL 9006 (White aluminium)  
 Black RAL 9005 (Jet black)



Customized sizes, shapes and RAL are available upon request, please contact us

**TECHNICAL CHARACTERISTICS**

Operating life: 50 000 h L80B10 (Ta = 25°C)  
 Operating temperature: -20 ; +45°C  
 Input voltage: 198-264VAC / 50-60Hz  
 Power factor: > 0,9 (> 15W)

**IP20**  
**IP44**

**IK02**

**850°**

**PRODUCT POSSIBILITY**

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

- The color rendering index is >90 all day long.
- The Ores Cronos is compatible with occupancy sensors.
- Available as an option: **a back up kit** including a control system and a push button to switch from circadian mode to static mode (4000K) and vice versa.

	LUMINOUS FLUX	POWER	COLOUR TEMPERATURE	OPTICAL DISTRIBUTION	CRI (mini)	REFERENCE
<b>OPTICAL CHARACTERISTICS</b>	from 1000 lm  to 3500 lm	Average power = 45W	Warm 3000 K Cold 5400 K	66° opal	> 90	<b>C1001CR.01</b>