

Lamp +

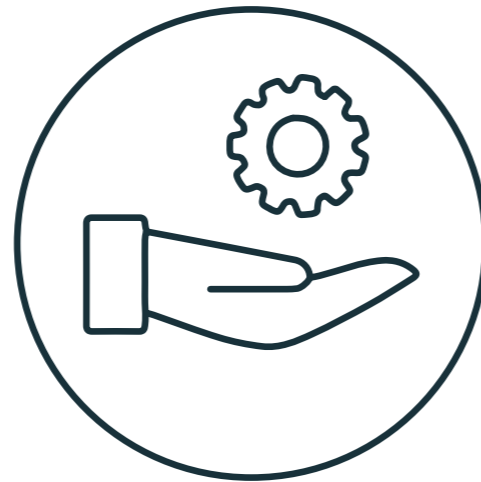
Integrative lighting service:
focusing on the **well-being**
of the end user

We contribute to people's
well-being through **lighting**

Services



STRATEGY
WELLBEING



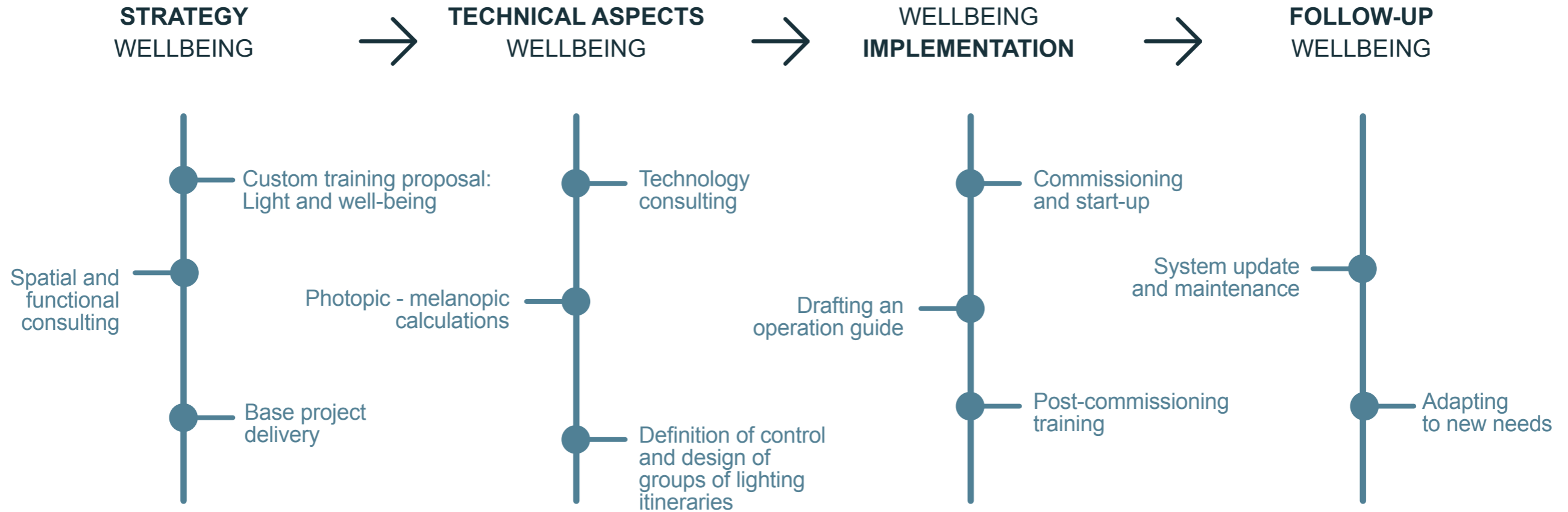
TECHNICAL ASPECTS
WELLBEING



WELLBEING
IMPLEMENTATION

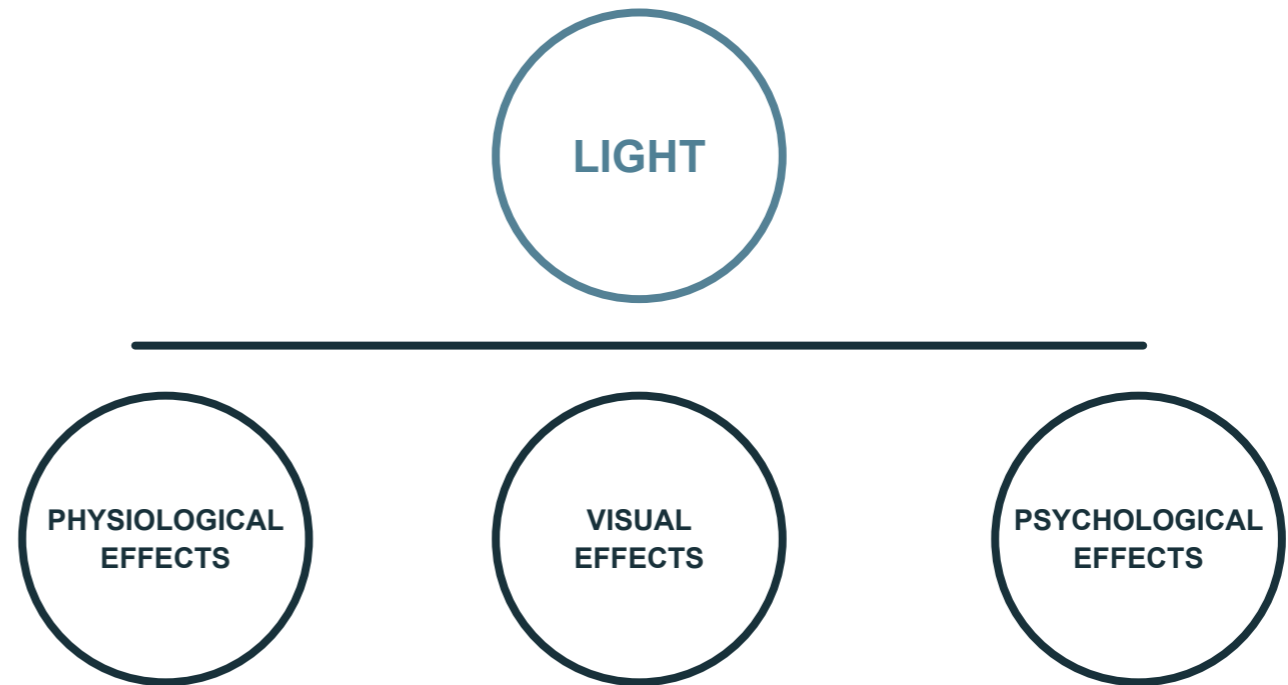


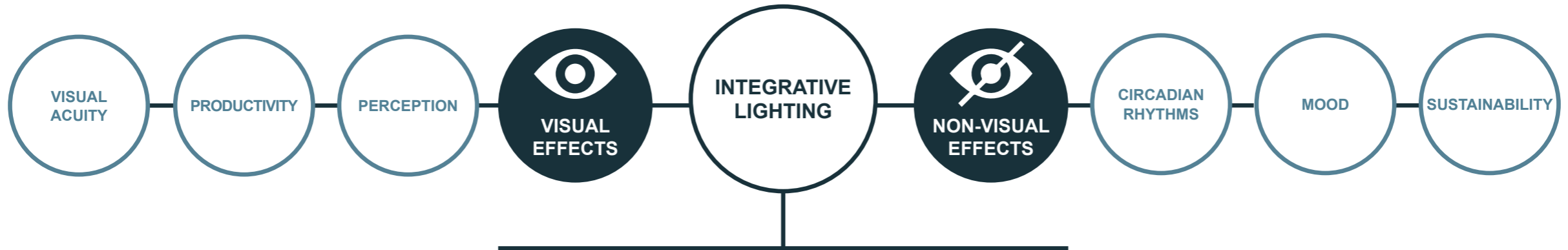
FOLLOW-UP
WELLBEING



Integrative Lighting

Design based on the biological needs of the human being, integrating the visual and non-visual effects of light:





- Physical, mental and emotional **well-being**.
- **Reconnection with nature:** Synchronise with natural cycles of the human body.
- Connect indoor areas with their surroundings by **synchronising artificial lighting with the dynamic character of natural lighting**.
- Create an atmosphere that connects with the emotions of users for a **differentiated use experience**.
- Customisable and flexible light: **A light for every moment**.
- **Harmful emissions reduction** (blue Hazard).
- Development based on the principle of ecodesign and **circular economy**.

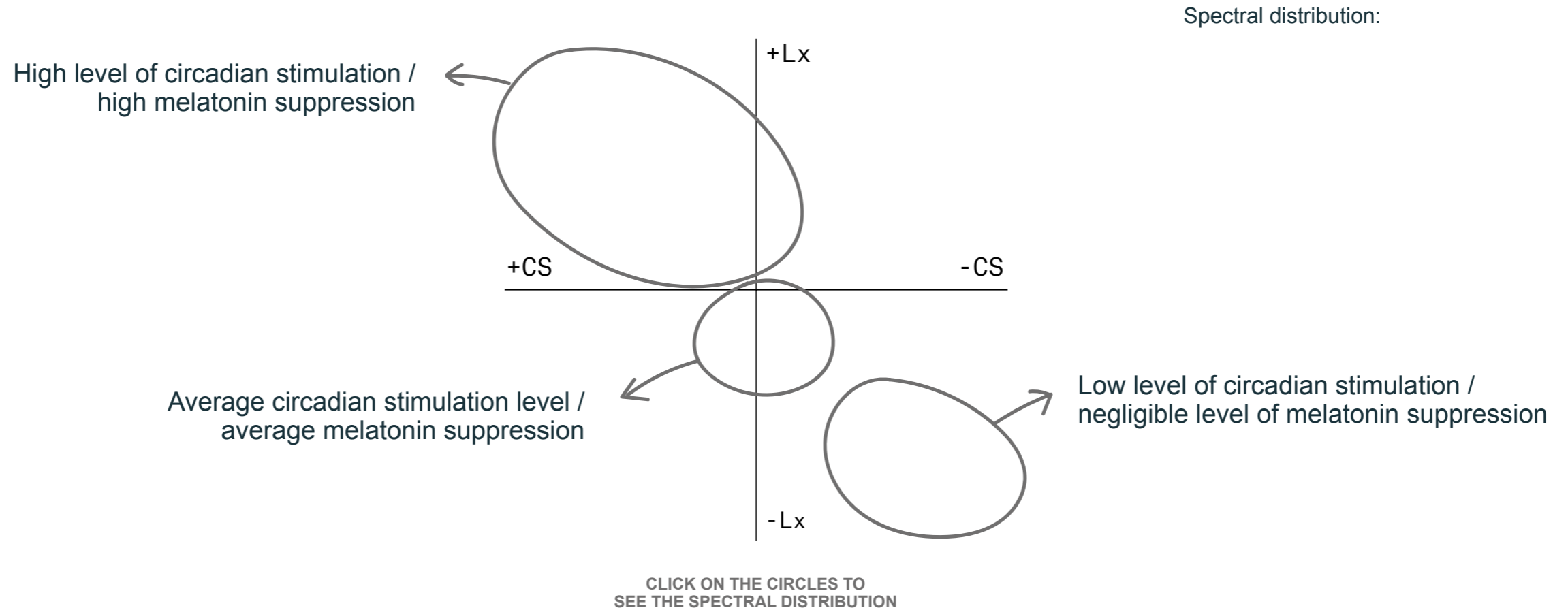


STRATEGY WELLBEING

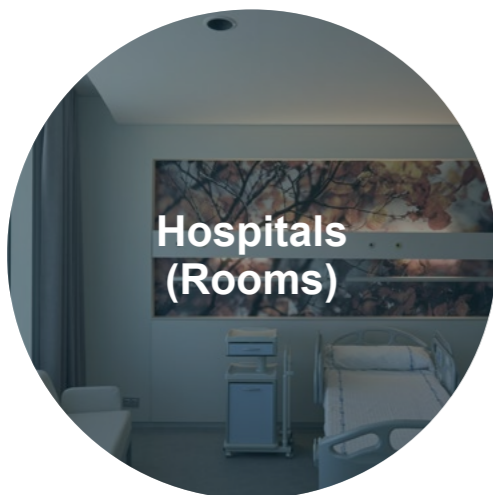
STRATEGY WELLBEING

- **Adapted training proposal:** Light and Well-being.
Discovering the importance of lighting in people's health and well-being, while under the concept of integrative lighting.
- **Spatial and functional consulting:** based on an analysis of the space, the user, and the lighting project, so as to fully understand the needs, preferences, routines and ways of using the space by the users.
- **Base project:** proposal of a customised solution including a pattern of illuminance ratios, circadian stimulation, and appropriate spectral definition.

ILLUMINANCE RATIO AND CIRCADIAN STIMULATION MATRIX



EXAMPLES OF LIGHTING ITINERARIES



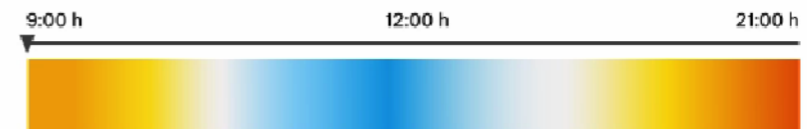
Hospitals (Rooms)

In these spaces where the user (patient) is in an indoor space during their stay, lighting is the main link to external space, improving the patient's sense of well-being by improving the synchrony of their biorhythms. In addition to proposing a very soft sequence of light scenes that replicates the natural solar cycle, it is important to have night navigation lights that enable circulation through the room, if necessary, without interrupting the sleep cycle.

EXAMPLE OF LIGHTING ITINERARY



DYNAMIC SUNLIGHT SIMULATION



Hospitals (Night shift workers)

For this type of use, a correct application of dynamic lighting is key to promote a state of alertness during working hours and during moments of rest, which in this particular case involves phases contrary to the natural light cycle.

EXAMPLE OF LIGHTING ITINERARY



DYNAMIC SUNLIGHT SIMULATION



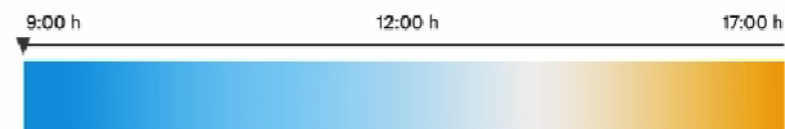
Office

Dynamic lighting varies in intensity and colour temperature to achieve greater synchrony with natural lighting cycles, favouring user performance while being respectful of their natural rest cycles.

EXAMPLE OF LIGHTING ITINERARY



DYNAMIC SUNLIGHT SIMULATION



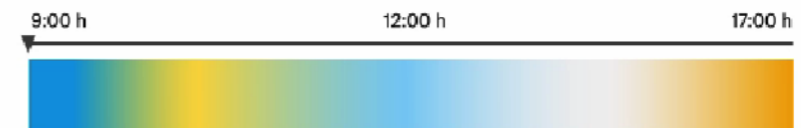
Schools

The lighting in classrooms must generate the most conducive energetic states in order to optimise teaching spaces according to the cognitive task and the level of concentration required. In addition, lighting is a factor that modulates mood, for example, using lighting that promotes relaxation after play activities involving a high level of excitement.

EXAMPLE OF LIGHTING ITINERARY

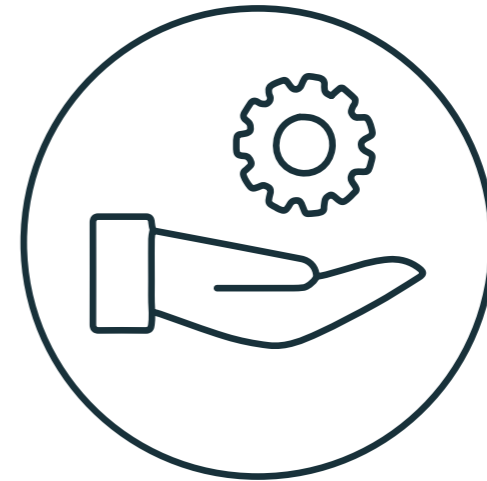


DYNAMIC SUNLIGHT SIMULATION



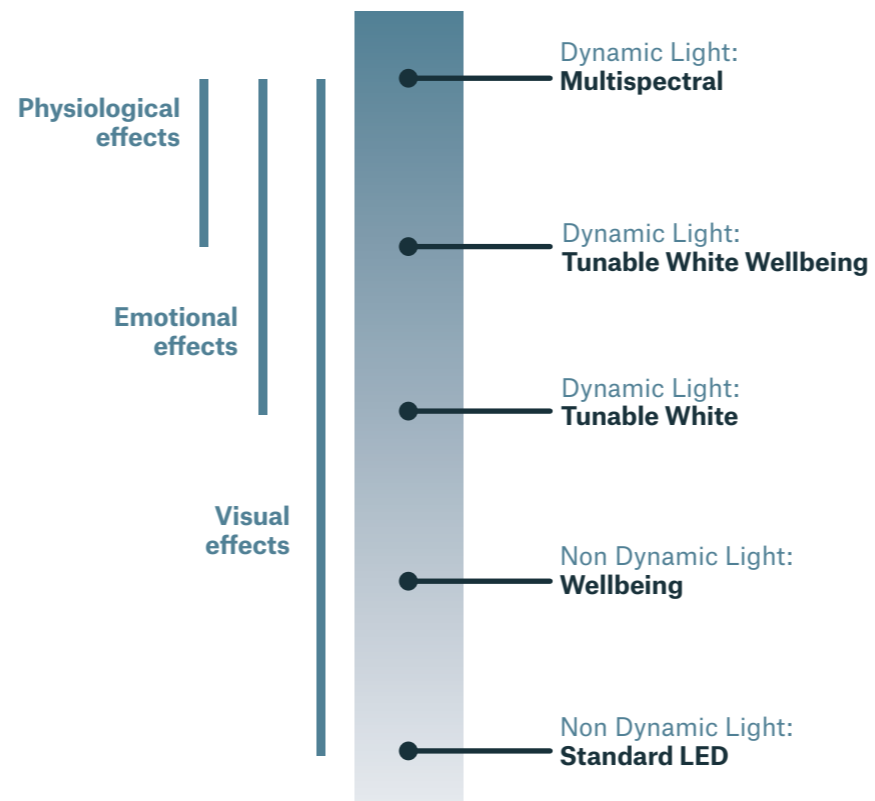
TECHNICAL ASPECTS WELLBEING

- **Technology consulting:** definition of the most appropriate technology to maximise the non-visual effects of the proposed lighting strategy: Multispectral, TW Wellbeing, TW, LED Wellbeing.
- **Application of design based on an integrative lighting concept:** performing melanopic and photopic calculations, and ensuring adequate lighting for correct circadian stimulation while complying with the latest regulations and standards.
- **Definition of the type of control system and design** of the groups according to the proposed lighting itineraries.
- **Development and delivery** of the supporting technical documentation.



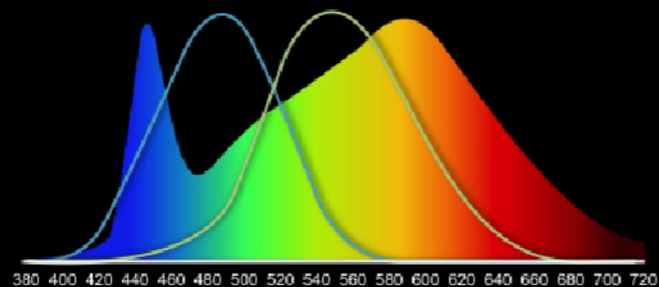
TECHNICAL ASPECTS WELLBEING

TECHNOLOGY SELECTION

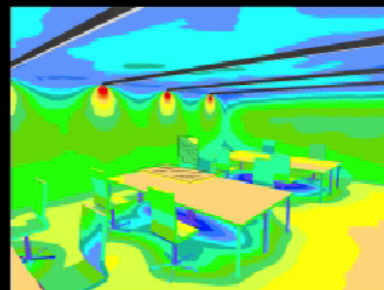


MELANOPIC CALCULATIONS

Circadian cold stimulation spectrum
Ratio: 0.860



False colours I



Transition I





WELLBEING IMPLEMENTATION

IMPLEMENTATION WELLBEING

- **Commissioning and implementation** of the technical definitions established in the definition phase of the lighting strategies.
- **Drafting of the operation guide** to enable the customer to control the system autonomously.
- **Post-commissioning.**



FOLLOW-UP WELLBEING

- **Updating and maintenance of the system:** reprogramming of itineraries to respond to possible changes in the use of spaces or to the adaptation of the system to new user needs.
- **Transporting equipment in the event of a location change** to enhance its reuse, betting and enhancing the cycle of use of the equipment.
- **Re-using equipment in new spaces.**



FOLLOW-UP
WELLBEING

Light & Well-being

In Lamp we are conscious that the lighting affects the human being, not only at visual level, but also at an emotional and biological level, we put at the service of your projects the integrative lighting solutions, putting in the center the well-being of the final user.



Lamp HEADQUARTERS

C/ Córdoba, 16

08226 Terrassa (Spain)

T. +34 93 736 68 00

lamp@lamp.es