

PLATO

Quality lighting

PLATO THE SOLUTION FOR CONSISTENT LIGHT QUALITY ACROSS DIFFERENT LIGHTING SITUATIONS

People need light not only so they can see clearly. Lighting that goes beyond visual function and adapts to the daylight can help people at all times of the day and night. The person feels good and therefore performs better. The PLATO floor luminaire illuminates the work area evenly. Maximum uniformity is guaranteed even in high-ceilinged rooms thanks to the light fields, which shine direct light inwards towards the centre of the table, and indirect light centrally above the table. Functionality at the highest level.

INSPIRATION

LIGHT AND LIGHTING – A KEY FACTOR FOR HEALTH AND PERFORMANCE AT WORK



Uniformity and harmonious illumination are essential for ergonomic office lighting



Well-being also has a lot to do with lighting – good light is therefore a key factor for efficient and ergonomic work



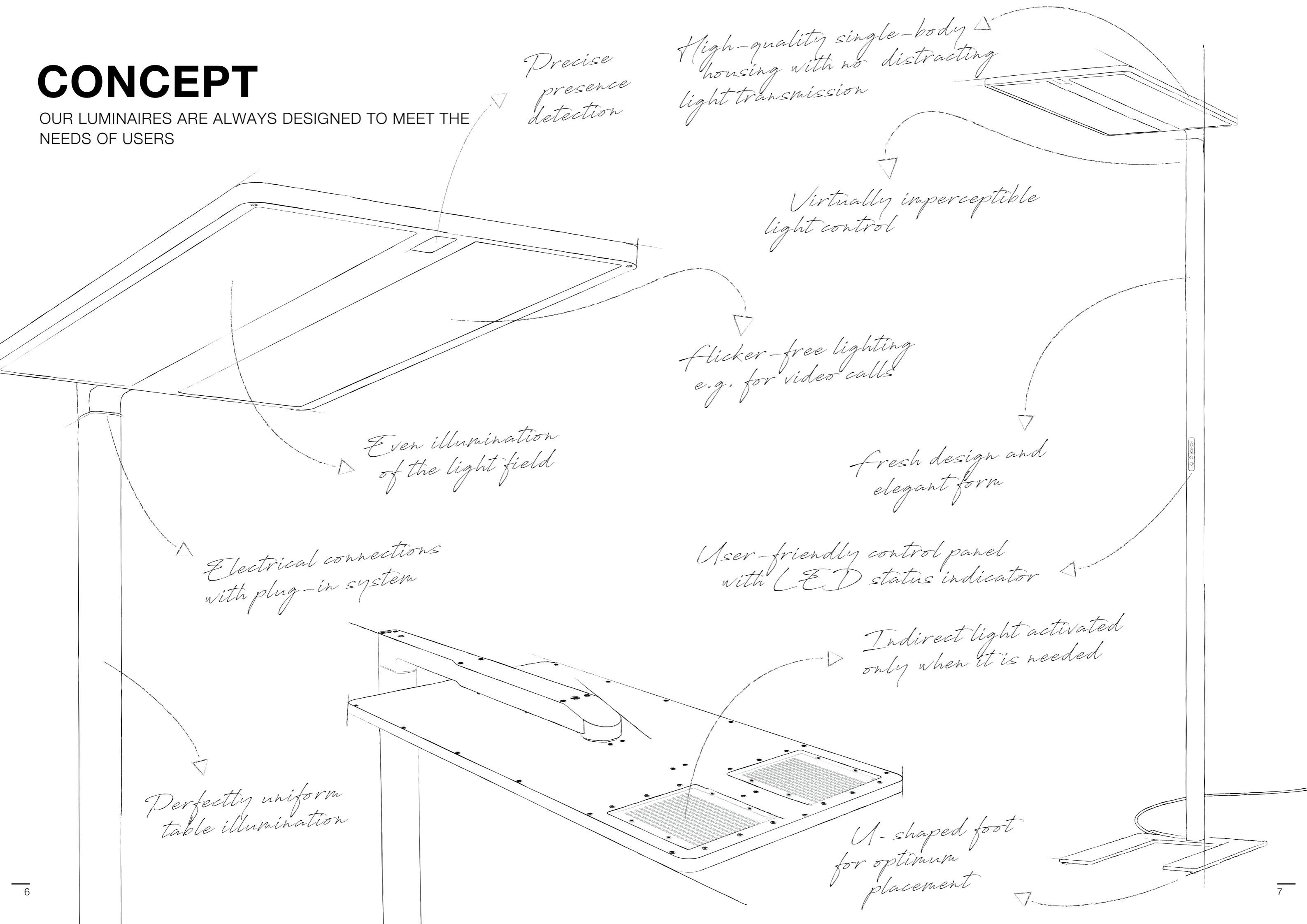
Connectivity is becoming increasingly important, including in the lighting industry – meerkats are a good example of perfected communication in nature



PLATO has a deliberately flowing and delicate luminaire design

CONCEPT

OUR LUMINAIRES ARE ALWAYS DESIGNED TO MEET THE NEEDS OF USERS



Precise presence detection

High-quality single-body housing with no distracting light transmission

Virtually imperceptible light control

flicker-free lighting e.g. for video calls

Even illumination of the light field

fresh design and elegant form

Electrical connections with plug-in system

User-friendly control panel with LED status indicator

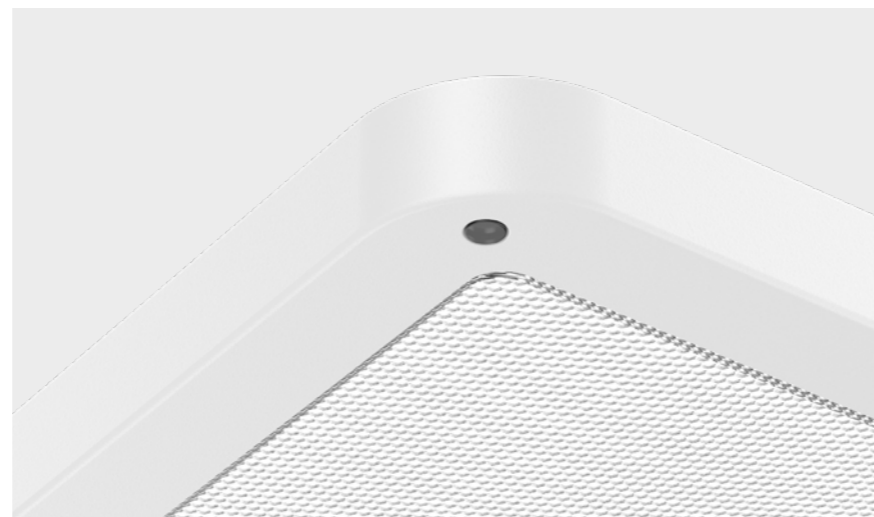
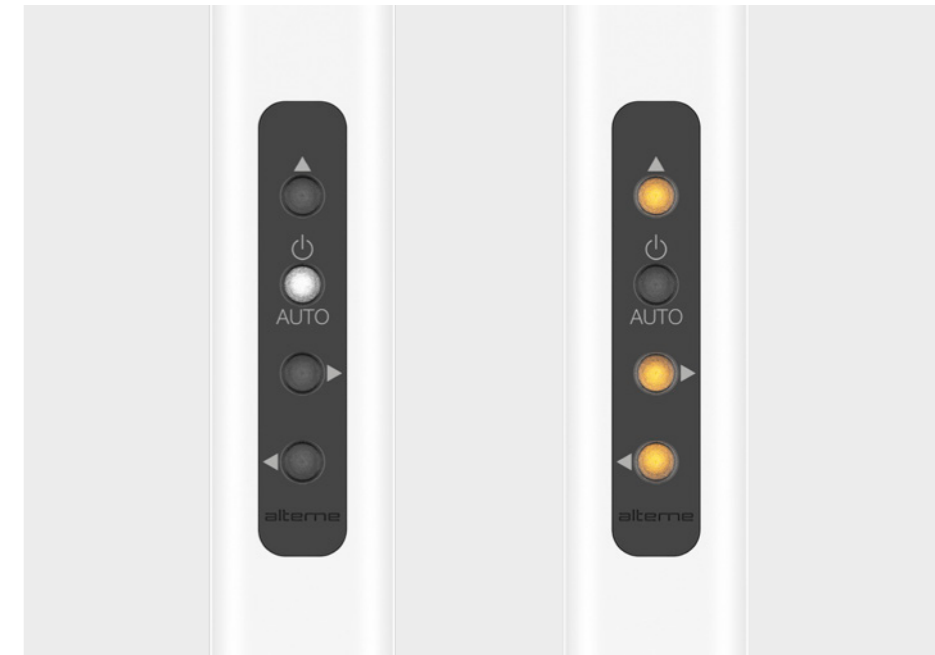
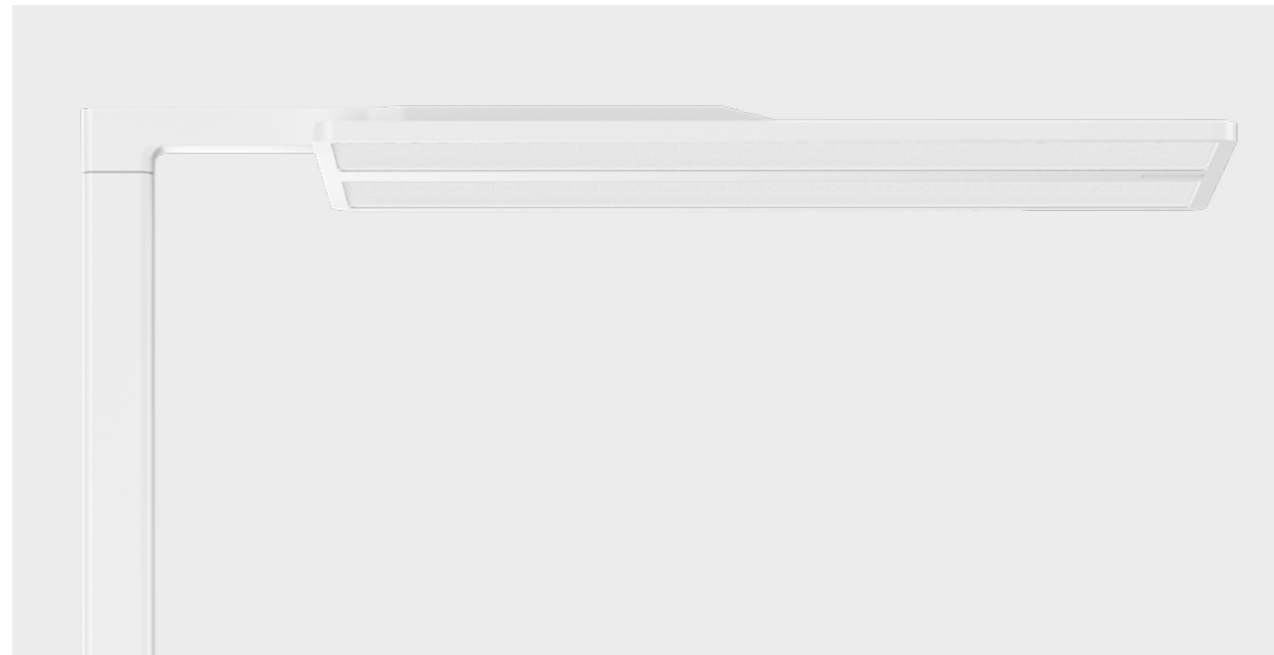
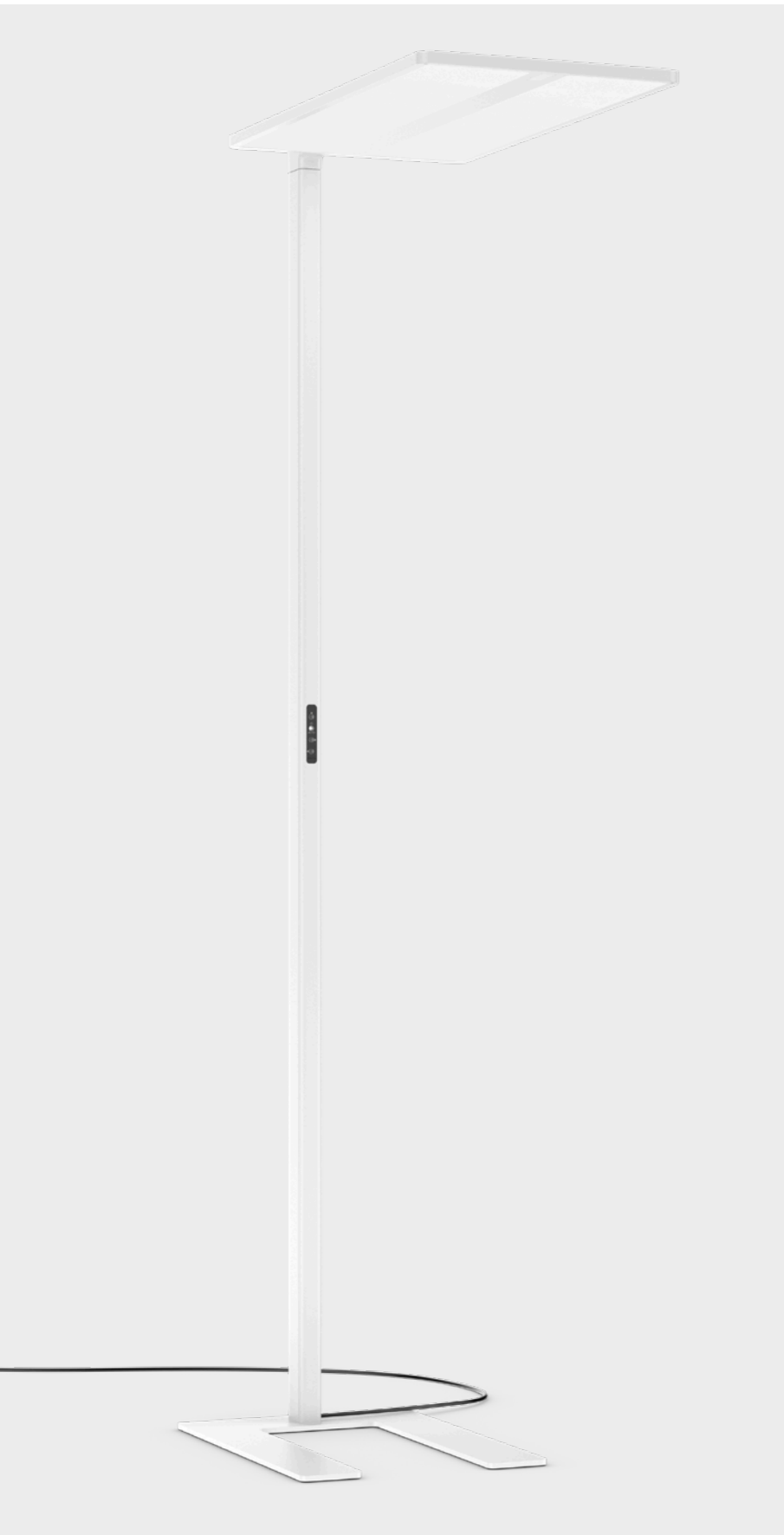
Indirect light activated only when it is needed

Perfectly uniform table illumination

U-shaped foot for optimum placement

PRESENTATION

THE PLATO FLOOR LUMINAIRE BOASTS A FRESH AND MODERN MINIMALIST DESIGN WITH MAXIMUM FUNCTIONALITY



APPLICATION

OUR FLOOR LUMINAIRES COMBINE WORK AND WELL-BEING TO ENABLE
MAXIMUM PERFORMANCE

APPLICATION EXAMPLE

Reception space with PLATO



FEATURES & BENEFITS

FUNCTIONALITY AT THE HIGHEST LEVEL

The PLATO office floor luminaire was specially designed for normative lighting solutions with the aim of providing the most uniform illumination of the workspace. Thanks to the two separate and controllable light fields featuring micro CDP optics, the PLATO automatically adjusts itself to each individual workstation. It is therefore the perfect companion for modern workspaces with adjustable standing tables. The interlocking curves and rounded edges can be described as beautiful, graceful and understated.

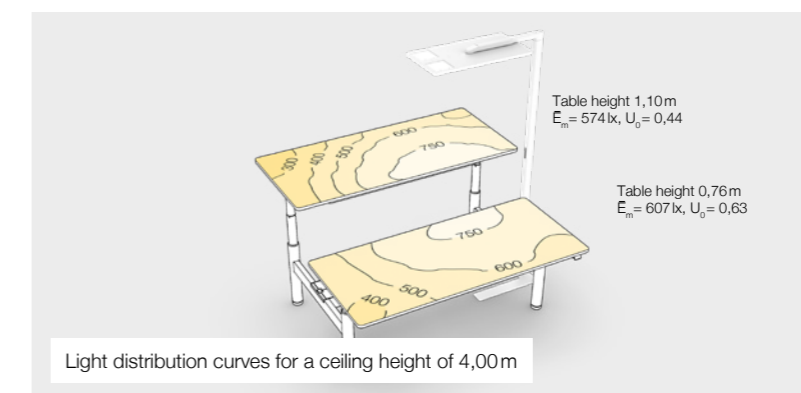
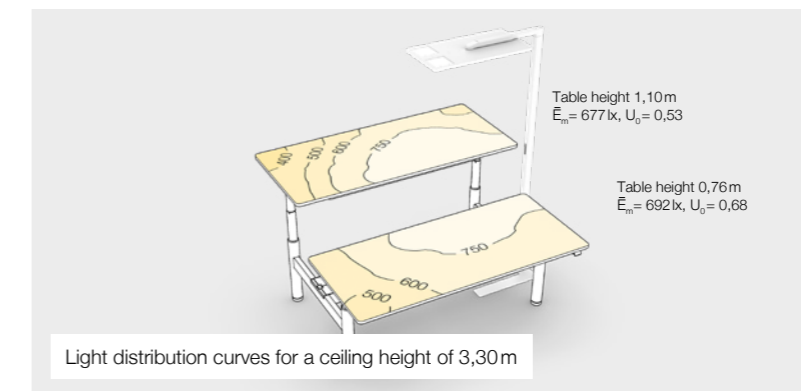
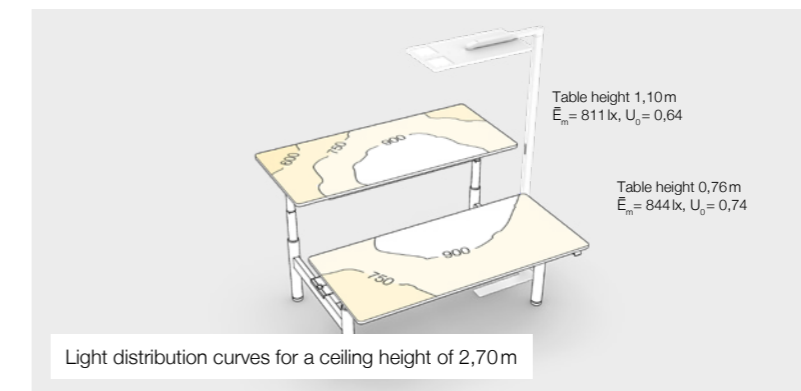


UNIFORM DISTRIBUTION OF BRIGHTNESS

Differences in brightness that are too stark make you tired and disrupt your sense of well-being, since your eyes have to constantly readjust themselves. The best solution for this is a harmoniously balanced distribution of brightness that is tailored to the room size, colour scheme and surfaces of furniture.

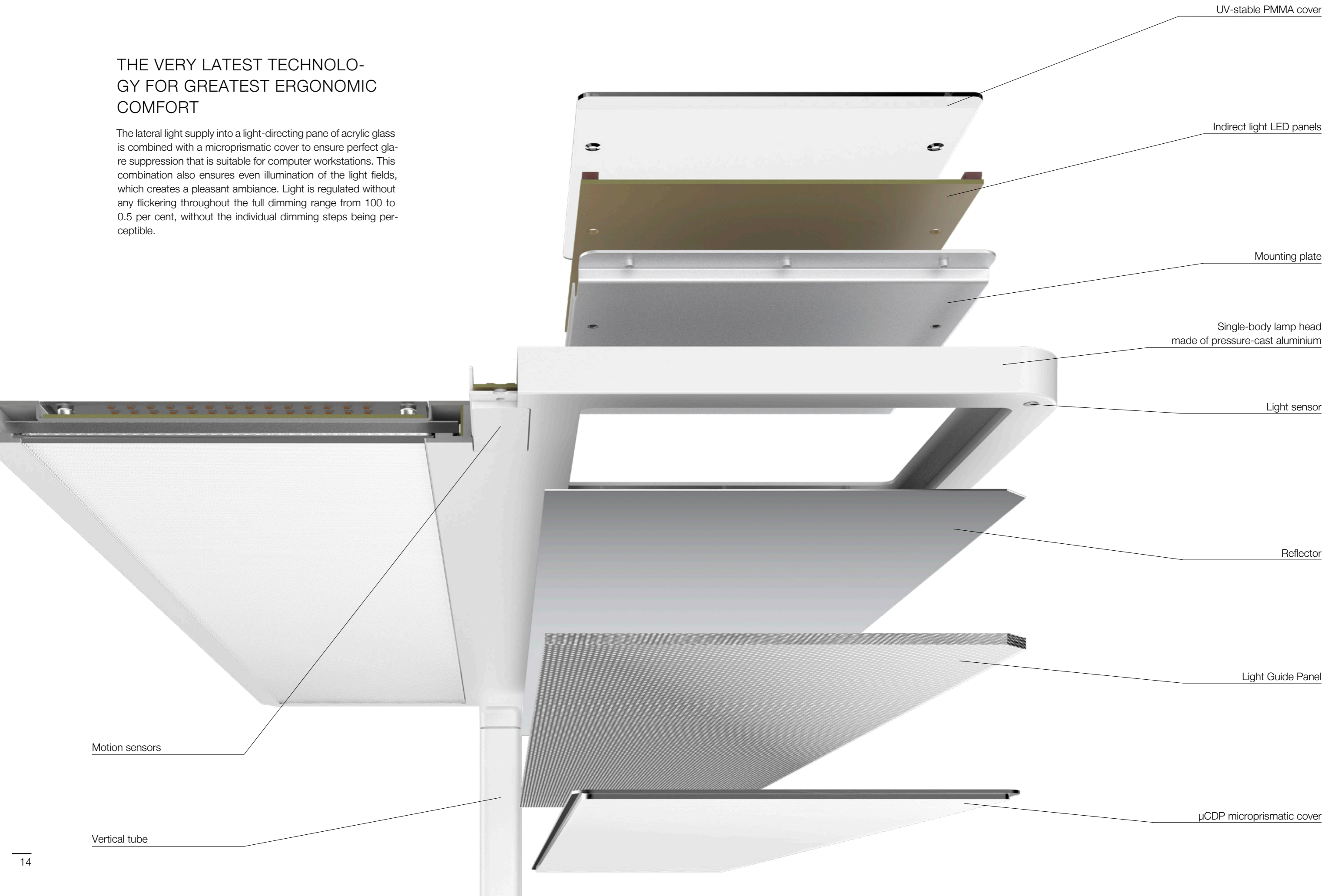
The PLATO floor luminaire is the ideal tool for achieving the right distribution of brightness and illuminance on work surfaces in a variety of workplace situations. Thanks to its high proportion of direct light and its optimised emitance features, its performance is no less in rooms with ceilings that are very high or not very reflective.

The basis for the calculation underlying the light distribution curves shown below can be found in the general information.



THE VERY LATEST TECHNOLOGY FOR GREATEST ERGONOMIC COMFORT

The lateral light supply into a light-directing pane of acrylic glass is combined with a microprismatic cover to ensure perfect glare suppression that is suitable for computer workstations. This combination also ensures even illumination of the light fields, which creates a pleasant ambiance. Light is regulated without any flickering throughout the full dimming range from 100 to 0.5 per cent, without the individual dimming steps being perceptible.



UV-stable PMMA cover

Indirect light LED panels

Mounting plate

Single-body lamp head made of pressure-cast aluminium

Light sensor

Reflector

Light Guide Panel

Motion sensors

Vertical tube

µCDP microprismatic cover

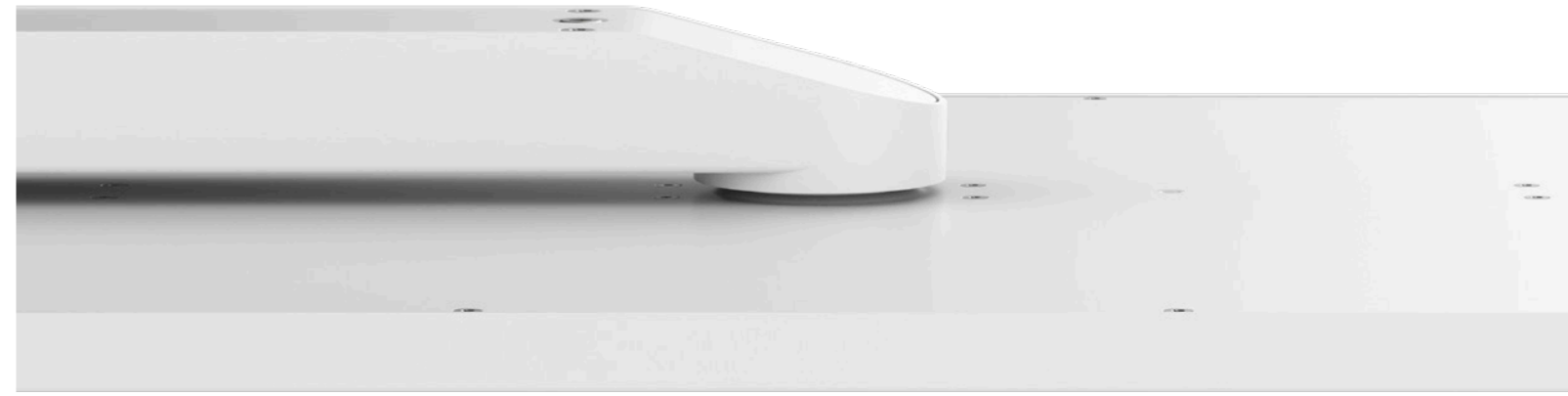
QUALITY AND EFFICIENCY

Quality standards for lighting are becoming increasingly important. This is why the main focus of the PLATO floor luminaire is on uniform illumination for each separate working area. This is achieved by the luminaire's two separately controlled direct light fields, which are directed towards the centre of the table. In addition, indirect light is directed towards the centre of the table, which uses ceiling reflection to increase the degree of illumination in the areas of the table further away from the luminaire.

This arrangement of the light fields ensures excellent uniformity of illumination over the entire work surface. At the same time, the PLATO floor luminaire remains extremely energy-efficient with up to 145 lumens per watt.



PLATO detects both work surfaces independently of one another – this is a great advantage for use with height-adjustable workstations in particular



FRESH DESIGN AND HIGH-QUALITY MATERIALS

With its interlocking curves and rounded edges, the luminaire has a beautiful, graceful and understated design and can be seamlessly integrated into any workspace.

Despite its size, the luminaire head remains discreetly in the background and disappears when your eyes scan the room due to its slim structure measuring just 16mm thick. The bracket at the top, which connects the vertical tube and the luminaire head via a ball-and-socket joint, makes the luminaire head appear to float in space, offering a fresh alternative to more commonplace luminaire shapes. The ball-and-socket joint allows the head to be rotated by 90 degrees in both directions and levelled by 2 to 3 degrees in all directions. This allows the luminaire head to be perfectly aligned to individual workstation configurations.

In addition to the standard aluminium version, which features a finely textured white powder coating, custom paint finishes are also available.



CONTROL

INTELLIGENT LIGHTING CONTROL

Daylight is the best light for people. However, as different amounts of daylight are available in rooms, the Sensonic EDR control system measures the lighting conditions on the work surface fully automatically and continuously adapts the required light intensity to the existing ambient light. The integrated motion detector ensures that the light is only switched on when there is a person at the workstation, thus ensuring energy-conscious operation.

In addition to the standard function, the control system also has a semi-automatic mode. In this case, the floor luminaire does not switch on automatically, but has to be switched on manually by the user and automatically switches off again once the switch-off time has elapsed. If you only enter a room for a short time, this prevents the system from being switched on automatically and saves additional energy.



GENTLE ADJUSTMENT OF THE LIGHT LEVEL

If the ambient light fades abruptly, the Sensonic EDR immediately adjusts the light intensity to ensure the desired brightness without any noticeable interruption. In the case of slight changes in light, the control system reacts more slowly to the lighting situation, thus ensuring optimum lighting control for the user, which is as imperceptible as possible.

The control panel on the vertical tube allows users to adjust the lighting control system manually at any time, if required.



EDR (ECONOMICAL DAYLIGHT REGULATION) ASYNCHRONOUS LIGHT CONTROL FOR MAXIMUM EFFICIENCY AND EASE OF USE

Pure direct lighting has the disadvantage that, although the work surface is bright, the ceiling remains relatively dark, creating a cave-like feeling. Luminaires with indirect light distribution brighten the room evenly and create a friendly, pleasant ambience. In rooms with high or poorly reflective ceilings, however, the indirect element has little effect on the table illumination.



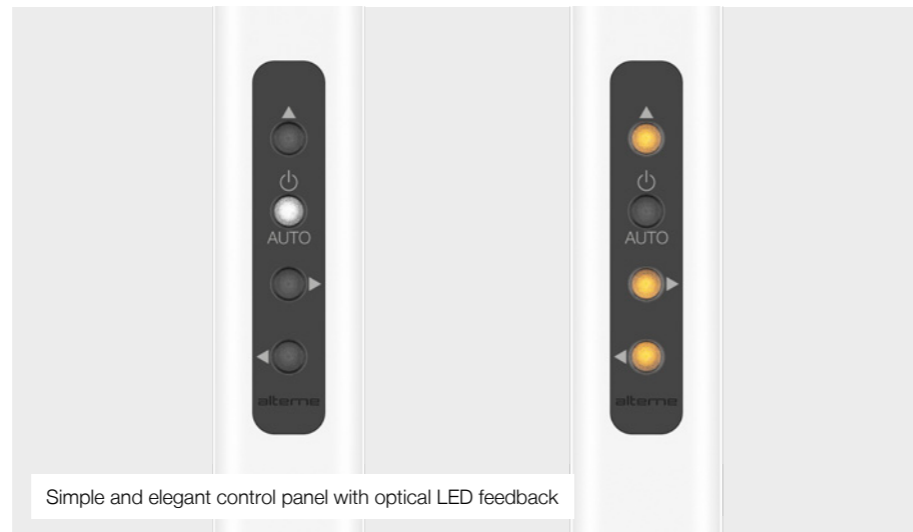
The patented EDR control system initially only regulates the indirect light when the amount of ambient light increases. Only then can the direct light also be adjusted. This asynchronous light control allows for significant energy savings compared to a light control system with synchronous control, while at the same time taking into account the effect the light regulation has on the space.

SIMPLE CONFIGURATION AND OPERATION

The design process for the PLATO placed great importance on uncomplicated and intuitive operation in order to enable easy configuration.

When the luminaire is being set up, the target brightness value is configured via the control panel once. From this point on, the luminaire automatically regulates the light and continuously adjusts its intensity to the ambient light. The lighting intensity for each workstation can be manually overridden using the buttons on the control panel. Pressing the AUTO button switches the luminaire back to its automatic mode. The lamp's status is indicated by the illuminated buttons on the control panel.

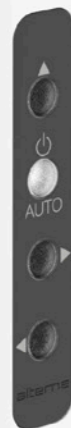
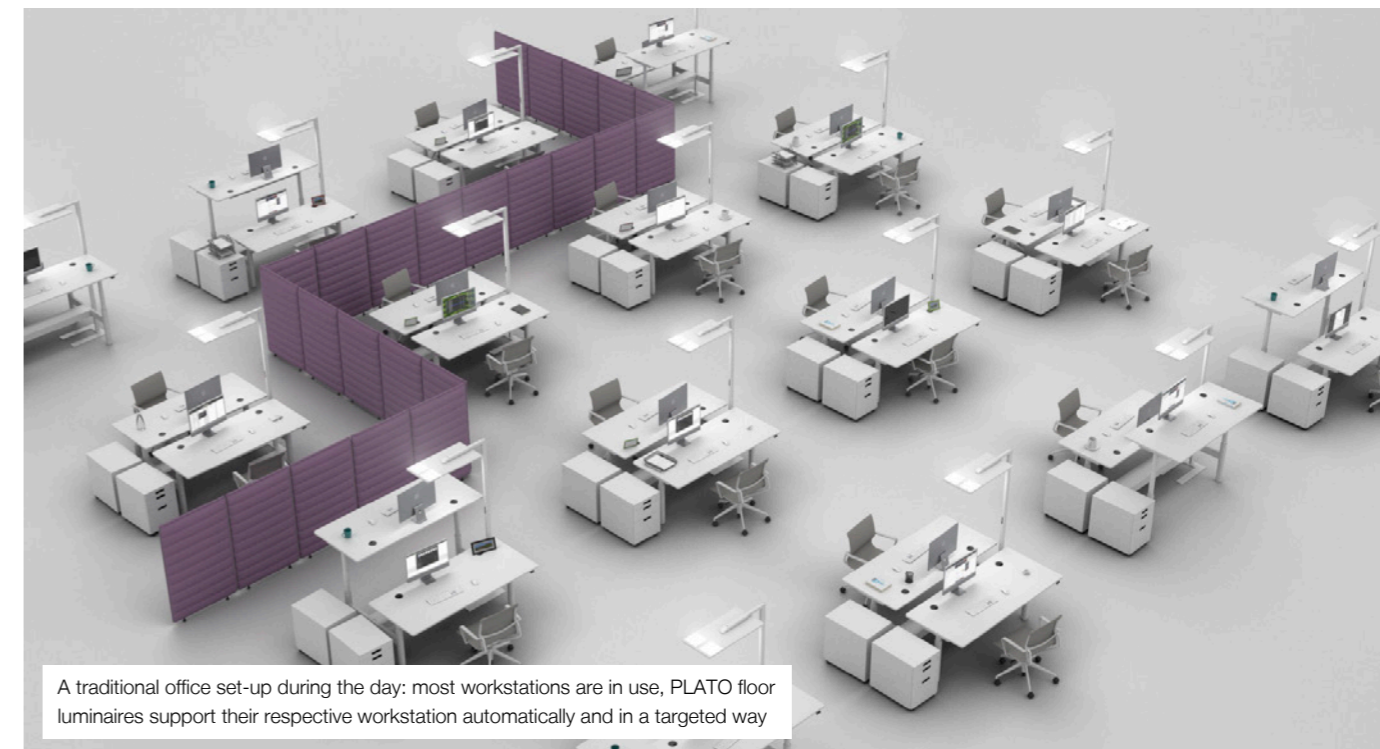
A high-frequency sensor discreetly integrated into the luminaire head acts as a motion detector. Thanks to its sensitivity, which can be individually adjusted for direct and indirect light, the indirect light of the PLATO floor luminaire switches on as soon as you approach the workstation. The direct light is only switched on when you sit down at your workstation.



NETWORKED SWARM

In a network with several Sensonic EDR luminaires with Bluetooth Low Energy (BLE) capabilities, the swarm function can be activated and configured. This prevents «islands of light» from being created in a dark open-plan office where your desk can be lit but the rest of the room is unlit, creating an unpleasant atmosphere.

When the swarm function is activated, the luminaires «communicate» with each other within the same room, the same group or within a defined radius of operation, illuminating the office environment to a pleasant level with their indirect light.



THE RIGHT LIGHT AT ALL TIMES

The integrated RTC module (real time clock) and the geographical location stored in the control system enable the tunable white circadian function (TWC) and cycle time programming.

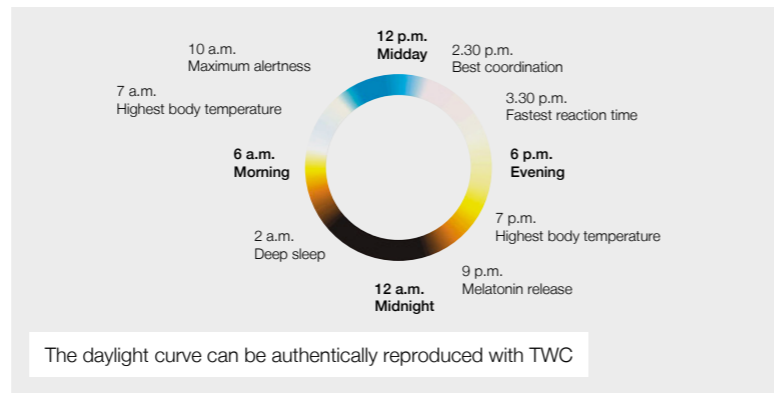
With the location definition feature, the luminaire «knows» where it is located and what time it is. This allows different scenarios to be programmed using cycle times that specify, for example, when the motion detector should be activated or deactivated or whether a stored lighting scene should be called up at a certain time.

The TWC luminaire version is a tunable white luminaire where the colour temperature follows the daylight temperature curve, making it ideal for HCL (human centric lighting) projects. This curve can be customised on request.

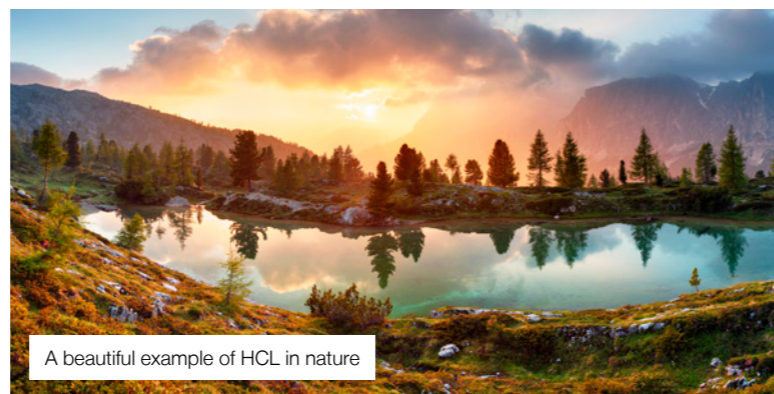
With the BLE version, both the daylight temperature curve and the cycle times can be set and adjusted on site or the time and location can be updated.



Thanks to the RTC module, the correct daylight temperature curve is automatically used wherever it is in the world



The daylight curve can be authentically reproduced with TWC



A beautiful example of HCL in nature

BLE CONTROL APP

With the optional BLE (Bluetooth Low Energy) module, the luminaire can be operated via an iOS or Android app on a smartphone. This provides a multitude of additional settings options.

The BLE module also allows several luminaires to be networked. These can be divided into rooms and/or groups so that they can be jointly controlled using an external wireless switch, for example, or a swarm function can be configured.

A gateway can also be used to establish a connection to a superordinate information or management system. For example, light settings can be transmitted from a building management system to the luminaires, or monitoring functions can be carried out.



Download on the App Store



GET IT ON Google Play

MODEL OVERVIEW

Types	Lamp height
Luminaire for 2 workplaces	2030 mm

Colour temperature	CRI	Connectivity	Page
4000 K / 2700–6500 K (TWC)	CRI ≥ 80 / CRI ≥ 90	without / with Bluetooth Low Energy (BLE)	26



PLATO

QUALITY LIGHTING

Flat luminaire head (just 16 millimetres) with rounded corners. Connection between luminaire head and vertical tube via a bracket with integrated incline levelling via a ball-and-socket joint. Aluminium vertical tube (60x38 millimetres). Steel stand base with 4 Bumpers. White (RAL9016) fine powder-coated surface. Highly homogeneous illumination of the light field thanks to lateral LED light integration in the Light Guide Panel (LGP) combined with high glare suppression thanks to form-fit μ CDP inlays. Protection of the indirect light LED panels using a transparent and UV-stable PMMA cover. Halogen-free internal wiring. Supply line in black, length = 3000 millimetres. Cable outlet on the side above base plate. Dimming range from 100% to approx. 0.5%. Flicker-free analogue dimming in the range from 100% to 7.5%. Visually imperceptible PWM dimming from 7.5% at 1500Hz. Presence-dependent Sensonic EDR daylight control with usage-optimised asynchronous regulation of direct/indirect proportions of light.



Colour temperatures	4000K, 2700–6500K TWC
Colour rendering	CRI \geq 80, CRI \geq 90
Net luminous flux	11540 to 14660lm
Proportion of direct light	2740 to 3220lm (approx. 23%)
Longitudinal glare suppression (UGR)	11,2 to 12,0
Lateral glare suppression (UGR)	12,0 to 12,8
Connected wattage	105W
Preservation of luminous flux	L90/B10 50000h
Control system	Sensonic EDR
Connectivity	Mobile app, wireless switches, gateway



Scan the QR code or click to find out more about this family of luminaires at alteme.ch

GENERAL NOTES

GENERAL INFORMATION

We reserve the right to make technical and design changes to our products owing to new technical developments. The images and descriptions reflect the products as they were when this luminaire brochure went to print. Errors are reserved. We would be happy to provide up-to-date documents on request.

SYMBOLS AND ACRONYMS



Halogen-free internal wiring



Only for use indoors



Protection against the ingress of solid foreign bodies measuring more than 12mm in diameter



Luminaires in protective class I with protective earth terminal



LED lamps can be replaced at the factory



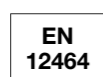
Internally developed presence-dependent control system with patented EDR technology



Connectivity via Bluetooth Low Energy



Luminaire autonomously regulates the colour temperature between 2700K and 6500K in accordance with the daylight curve of the configured location



Meets the requirements for office workspaces in accordance with the relevant standard

TECHNICAL AND ABBREVIATIONS

CRI
Colour rendering index

\bar{E}_m
Average illuminance of table surface

Light distribution calculations
Table dimensions (L x W) 2 workplaces
160 x 80 cm
Dimensions of volume (L x W x H)
6 x 6 x 2,7/3,3/4 m
Reflectances 70/50/20
Maintenance factor 0.8

lm
Luminous flux (lumen)

U_0
Uniformity of illuminance

UGR glare rating
(unified glare rating)
 $X=4H$, $Y=8H$, $S=0.25H$
Reflectances 70/50/20
Reference value in accordance with
EN 12464-1

