CASE STUDY







FACTS AT A GLANCE

BIOLOGICALLY ACTIVE LIGHT

Light that respects the natural course of daylight with an improved lighting quality, which occupies the room without needing windows.

INTUITIVE CONTROL

Possibility of adapting the lighting to a specific lighting need, from "Boost" to "Relax" mode.

LIGHT QUALITY

Uniform brightness with reduced glare of UGR \leq 14.

BIOLUX SYSTEM



A BETTER LIGHTING AT SCHOOL

MORE FLEXIBILITY AND IMPROVEMENT OF WELL-BEING OF STUDENTS AND TEACHERS IN THE SCHOOL CAFETERIA

THE CHALLENGE

The cafeteria is a room with limited daylight. This lack of daylight made it an unfriendly and unpleasant place to be. At the beginning the project consisted in the creation of a glass roof located at about six meters high to let the natural light in through the ceiling. The technical and economic constraints were too important for this project.

THE SOLUTION

The BIOLUX HCL system from LEDVANCE was the easiest solution to implement. The BIOLUX HCL system, with its intuitive adjustment of different lighting modes, makes it very easy to obtain lighting adapted to every situations and following the natural course of daylight (variation of color temperature and luminous flux at the same time).

One BIOLUX HCL CONTROL UNIT and twenty-five BIOLUX HCL PANELS were installed in the cafeteria. The LEDVANCE BIOLUX HCL PANEL luminaires and their BIOLUX HCL CONTROL UNIT communicate wireless via Zigbee 3.0. Pairing is simple and intuitive, without tools. The homogeneous illumination of the panels as well as glare reduction of UGR ≤14 and flicker-free light ensure optimum user comfort.

THE BENEFITS

The twenty-five BIOLUX HCL PANEL luminaires and the BIOLUX HCL CONTROL UNIT communicate easily and wirelessly: a perfect solution for renovation (no additional cable runs, no drilling, etc.). The HCL technology of LEDVANCE, certified by an independent body, follows the natural lighting needs of people by automatically adjusting the color temperature and luminous flux according to the natural daylight pattern of the installation location; thus, respecting the circadian rhythm of the users. This perfectly creates the "light well" effect sought by the architect.

SUMMARY

The lighting system of the ENSEGID school's cafeteria is based on twenty-five BIOLUX HCL PANEL luminaires and an associated BIOLUX HCL CONTROL UNIT that give the room a natural and comfortable lighting. The BIOLUX HCL PANEL luminaires give the impression of a glass roof through which the variations of natural light during the day can be seen: the color temperature and the luminous flux are adapted automatically to the room and time of day. Students and teachers also have the possibility to select the lighting mode corresponding to their activity and promote concentration or relaxation, while respecting the circadian rhythm.

"This lighting management system makes sense in this cafeteria. The Relax mode is particularly appreciated in this space, which is conducive to relaxation. The automatic dynamic adaptation of the artificial light during the day according to the natural light curve significantly improves well-being, especially in winter when the days are darker. The system is appreciated and used".

Alain Dupuy, school director ENSEGID school



ENSEGID Cafeteria from the inside



LEDVANCE BIOLUX HCL PANEL luminaires close up