



Evidence-based circadian lighting at Aabenraa Psychiatric Hospital

Chromaviso circadian lighting at the Psychiatric Hospital in Aabenraa

The new psychiatric hospital consists of eight departments with a total of 115 beds and shared facilities. The evidence-based circadian lighting is beneficial for both patients and staff.

Region Syddanmark has taken new approaches to lighting in the construction of the psychiatric hospital. The choice fell on Chroma Zenit circadian lighting from Chromaviso-an evidence-based development of dynamic lighting that supports the body's natural circadian rhythm and provides appropriate lighting for different functions in a building.

"The circadian lighting is a natural part of the building, and as you move around the hospital, you clearly feel the effect. At the same time, the light optimizes the possibilities for each room-from relaxation to conversations or stays-because you can adjust the ambiance and create a different atmosphere with the light. It's completely new," explains Peter Houd from White Architects, who is responsible for the construction.

"Patients receive less medication at night"

Specially developed night light

The dimmed night light contains all colors except for blue, which primarily affects the body's wakefulness at night. This means that the staff has good visual conditions without affecting the patients' circadian rhythm and sleep quality. The light uses the latest LED technology with energy-efficient light sources.

User-friendliness and safety

The operation of the light consists of both central touchscreens in the staff room and push panels in the rooms. "I like the panels. In the past, it was just on-off. Then dimmers came along, and it almost required an engineering degree to turn on the lights. With these panels, the lighting becomes user-friendly," explains architect Peter Houd.

The staff needs to have an overview of all the rooms and the ability to adjust the lighting according to the treatment, ambiance, or activity they want to support.

A reliable solution

As it is a psychiatric hospital, there have been several specific considerations that the installation must meet. "The luminaire must be vandal-proof, preventing it from being damaged, used as a weapon, or causing self-harm. Here, Chromaviso found a good solution at a reasonable price. They are professional, addressing the challenges promptly and solving them," explains Søren Busch Madsen. "We have encountered few errors during the work, and tested and documented components are used. It functions reliably today, and I expect it to be highly dependable in the future," says Søren Busch Madsen.

The effect of circadian lighting

Region Syddanmark and Colab have conducted a comprehensive evaluation and study on the effects of the lighting. The results showed that the light makes a difference for both patients and staff, with effects including improved sleep, reduced nighttime activity, and increased silence.

"Many of our patients who have had difficulty falling asleep at night have greatly benefited from circadian lighting, as the soft light helps them feel more relaxed than regular light. It has provided them with better and more restful sleep," says Chief Physician Lene Høgh.



Study of the effect

Patients – effect

Reduced nighttime activity
Improved sleep
Cozier atmosphere
Increased tranquility

Staff -effect

Better sleep
Increased energy level
Physical well-being
More tranquility

Conducted by CoLab and Region Syddanmark



“The circadian rhythm lighting is beneficial when I have night shifts because it provides a much smoother transition from day to night. I can feel that I have more energy overall - probably because I find it easier to fall asleep when I come home after a night shift.”



The benefits of Chromaviso circadian lighting include:

- Proven effect in relation to factors such as depression, reduced fatigue, sleep, well-being, and appetite.
- Specially developed blue-free night light ensures optimal lighting for the staff without disturbing the body's circadian rhythm.
- Clinically documented light protocol that takes into account patient category and department rhythm.
- With ergonomic light settings, you can actively use light in therapy, activities, and treatment.
- User-friendly control panels, such as touchscreens, push buttons, or wireless control.



About Chromaviso

Chromaviso is changing the standards of lighting to improve health, treatment quality, care, work environment, and efficiency within the healthcare sector. Through technological innovation and close collaboration with healthcare professionals, we create and implement integrated and highly preferred lighting solutions with proven effectiveness.

Learn more at

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