



Chroma Zenit

Evidence-based Circadian Lighting at Rosenvang Nursing home

Improved sleep and increased energy levels

The great effect of circadian lighting

The challenge at nursing home Rosenvang in Aarhus Municipality was to deal with severely ambulatory citizens. The solution came in the form of circadian lighting from Chromaviso - funded by SATS pool funds.

Since 2015, Aarhus Municipality and Chromaviso have collaborated to develop circadian lighting as an evidence-based, non-medical alternative to address some of the major challenges in the healthcare sector, such as wandering, agitation, delirium, physical and mental restlessness, poor sleep, and to improve the working environment for staff. This solution has recently been implemented at another nursing home in the municipality, namely Rosenvang Nursing Home.

“We had difficulties with residents being awake at night. It was hard to make them understand that it was nighttime and they needed to go to sleep because it was bright in the corridors.” explained Karin Jørgensen, the manager at Rosenvang Nursing Home

“Today, we hardly have any wandering. If residents are awake at night, we can easily get them into bed and help them settle down because the Circadian Lighting signals nighttime”

Karin Jørgensen, Manager

Experience quicker sleep induction

The circadian lighting follows the natural light patterns, supporting daily activities and promoting healthy sleep habits in the evening and at night. The nighttime lighting is free of blue light, which doesn't disrupt the body's natural rhythm and instead creates a sense of security for both residents and staff.

“The evening and night staff were excited about the nighttime lighting. And after two months, most of them have experienced a positive effect. They fall asleep faster, and many no longer have sleep problems. They say that they relax in a different way in the light and find it easier to unwind when they come home” says Britt Madsen, welfare technology advisor at Rosenvang Nursing Home.

We have much more energy

Several research projects in the fields of nursing, hospitals, and psychiatry have contributed to the development and documented the effectiveness of Chromaviso's circadian lighting.



For instance, a clinical study conducted at Rigshospitalet has shown that Chromaviso's unique light protocol significantly reduces fatigue and depression.

We didn't think much about our day shifts before we started. But they have noticed a huge difference on all three floors. We receive feedback such as “We never yawn anymore”, “We have much more energy” and “We feel more refreshed.” Overall, there is a great mood and atmosphere surrounding the lighting, and the staff is very happy with it because it makes a significant difference for them, explains Britt Madsen.

More alert and focused

The residents' energy levels have also increased. “They have a clearer look in their eyes. They are more attentive, and we notice it in their daily lives and during special events. They sit up straighter and watch television - truly being present. Perhaps we also experience less anger”, Karin Jørgensen explains. The next step will be to seek approval for installing circadian lighting in the residents' homes, so they can be surrounded by light throughout the day. In selected areas, the staff also has the option to use therapeutic lighting settings to support specific activities or behaviors.

The other evening, the evening staff gathered the residents and created a cozy atmosphere with a special light. It was an attempt to keep them awake for a longer period of time, and it worked, says Britt Madsen.



Common areas, hallways, and alcoves

Chromaviso's circadian lighting has been installed throughout the hallways and common areas of Rosenvang, spanning three floors.

In specific zones, the staff has the option to utilize therapeutic lighting settings to support certain activities or behaviors. For example, if a resident is feeling agitated and needs to be calmed down.



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