



Chroma Zenit

# Evidence-based Circadian Lighting

The Geriatric Psychiatric Unit  
Diakonhjemmet Hospital, Norway

# Circadian Lighting Creates More Quality Patients and Staff

As a result of renovation at Diakonhjemmet Hospital in Norway, the geriatric psychiatric unit implemented circadian lighting from Chromaviso last year. It has since shown significant benefits for staff and patients, who experience the effects of health-promoting lighting day-to-day.

The geriatric psychiatric unit at Diakonhjemmet has 12 beds, where people above 65 years are diagnosed and treated for disorders.

At the unit, patients are hospitalized with affective- and psychotic disorders, states of confusion, and cognitive failure. Common for all patients is the need for structure, calmness, rest, and care in their everyday lives, and in the unit, they experience how circadian lighting positively affects the patients.

**“The circadian lighting is a major contributor to the therapeutic experience in the unit”**

Lena Haukland-Haugen,  
Assistant Department Manager

She adds that the patients have given great feedback on the influences of the circadian lighting, and the staff expresses that the nights are more peaceful than before having the lighting implemented -especially for those who stay in the shielded areas and don't get out much. It is also here that the various lighting settings are used most deliberately, such as the soothing- and activity lighting setting. The soothing lighting settings calm the patients with significant effect.

**“It feels like everyday life is better for many of the staff”**

It is not only patients who benefit from the circadian lighting. According to Lena Haukland-Haugen, the staff also experience better sleep after an evening or night shift with circadian lighting in the workplace. “We experience how it affects both staff and patients.

The feedback from the staff tells us that they are less tired and exhausted after a day shift and that it's easier



to calm down after an evening-or night shift”, Lena Haukland-Haugen expresses.

The quality of work has also increased. The staff had previously experienced challenges with headaches, but this has been reduced after having implemented circadian lighting.

“It feels like everyday life is better for many of the staff. We are very pleased with the lighting, and it makes a major difference,” Lena Haukland-Haugen adds while highlighting the improved everyday working life as an argument for why it's relevant to have circadian lighting in the unit. Lena Haukland-Haugen also estimates that the circadian lighting has led to fewer resources and money spent on medicine and extra personnel at night.

## Requirements for the technology

Technology must be a top priority to benefit from circadian lighting. Only the right technology can produce the remarkable results of circadian lighting, supporting the body's natural circadian rhythm. The effects only occur because of so-called “biological darkness,” which requires the lighting technology to go down to 1800 Kelvin with a maximum of 1% blue light.

**“We experience how it affects both staff and patients. The feedback from the staff tells us that they are less tired and exhausted after a day shift and that it’s easier to calm down after an evening- or night shift”**

Lena Haukland-Haugen, Assistant Unit Manager



**“It feels like everyday life is better for many of the staff. We are very pleased with the lighting, and it makes a major difference”**

Lena Haukland-Haugen, Assistant Unit Manager

## 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 apply integrated and highly preferred lighting solutions with proven effectiveness.

### Learn more at

[www.chromaviso.com](http://www.chromaviso.com), [LinkedIn/Chromaviso](https://www.linkedin.com/company/chromaviso) or [X/Chromaviso](https://twitter.com/Chromaviso).



### Circadian rhythm

- Rises like sunrise at 6:30 a.m.
- Strong natural daylight when energy is needed the most
- Gentle sunset until the light gradually fades into night light at 10 p.m.
- Automatic process 24/7

### Boost

- Powerful white light with distinct blue tones creates a boost of energy
- The lighting increases smoothly like sunrise for an energy boost in 30 seconds
- 3 seconds fade out
- Works as light therapy countering depression and fatigue
- Recommended before 2 p.m. to support a good night's sleep

### Conversation

- A warm light for conversations with doctors, visitors, relatives, or difficult situations

### Full light

- Powerful white light for various activities
- Critical situations
- For light therapy against depression/need for energy
- For visually disturbed persons or reading

### Off

- Turn off the light

### Relaxation

- Warm amber light for peace in stressful situations
- Works against outwardly reacting and restless patients