

# LIGHTING DESIGN RESEARCH GROUP



## THE LIGHTING DESIGN RESEARCH GROUP

DEPARTMENT OF ARCHITECTURE, DESIGN AND MEDIA TECHNOLOGY  
TECHNICAL FACULTY OF IT AND DESIGN, AALBORG UNIVERSITY

The Lighting Design Research Group combines architecture, engineering and media technology in a human centric approach to lighting solutions.

## RESEARCH

### KEY RESEARCH

The Lighting Design Research Group applies knowledge of dynamic lighting design to health care, schools, offices and urban spaces.

How can dynamic lighting:

- › stimulate our biological clock?
- › support staff in health environments?
- › become a tool for teachers to “set the scene” in the classroom?
- › complement daylight by responding to the sky?
- › support the waiting situation for public transportation in the city?
- › affect our way of moving and being bodily present in space?

### WHAT WE DO

Create relevant knowledge and guidelines on how to design with light to achieve specific needs and effects.

Enable lighting designers to develop dynamic lighting designs that meet people’s needs for healthy, functional and aesthetic lighting environments.

## EDUCATION

### STUDY RELATED ACTIVITIES

The Lighting Design Research Group is affiliated with the MSc programme in Lighting Design.

All researchers teach and supervise within the subjects of their research.

Students team up with the different research groups and projects in the 9<sup>th</sup> and 10<sup>th</sup> semester.

## COLLABORATION

### WHO BENEFITS FROM OUR RESEARCH

The research is of interest to the lighting industry, lighting designers and consultants, municipalities and other owners of hospitals, schools, offices and public transportation.

### EXTERNAL PARTNERS

Tridonic, Fagerhult, Zumtobel, iGuzzini, Chromaviso, Schröder, Holscher Design, Velux, Dovista, City of Albertslund, City of Roskilde, City of Copenhagen, Sweco, HLA Architects, ÅF Lighting, GXN, Rigshospitalet

## PUBLICATIONS

### IMPORTANT PUBLICATIONS

- › [Entrainment and Disruption: Lessons Learned from Implementing Circadian Lighting](#)
- › [Kvalificering af Døgnrytmelysteknologi i Plejehjem](#)
- › [Dynamic Lighting in Office Environments Creating Natural Flow of Light](#)
- › [Dynamic Lighting in Classrooms: A New Interactive Tool for Teaching](#)
- › [Experiencing the Light Through our Skin: an EEG Study of Colored Light on Blindfolded Subjects](#)
- › [The Ambience Potential of Coloured Illuminations in Architecture: A Spatial Experiment Exploring Bodily Sensations](#)



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## KEY PROJECTS

### LIGHTING METROPOLIS

Making Greater Copenhagen a metropolis of lighting research and development. Interreg project covering the Capital Region, Region Zealand and Region Skåne in Sweden.

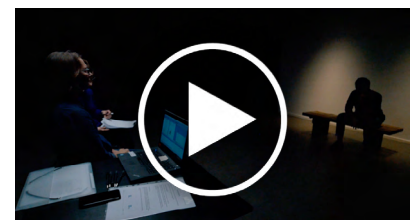
### DOUBLE DYNAMIC LIGHTING IN OFFICE ENVIRONMENTS

Project focused on bringing the qualities of dynamic daylight into the office. With the industrial partners. Tridonic, Fagerhult, Zumtobel and iGuzzini.

### LIGHTEL

The implementation of circadian lighting in healthcare: Its effects on the work environment and wellbeing of staff.

## VIDEO PRESENTATION



## CONTACT

### CONTACT PERSON

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