

**Human Centric Lighting is an example of real  
Smart Lighting**



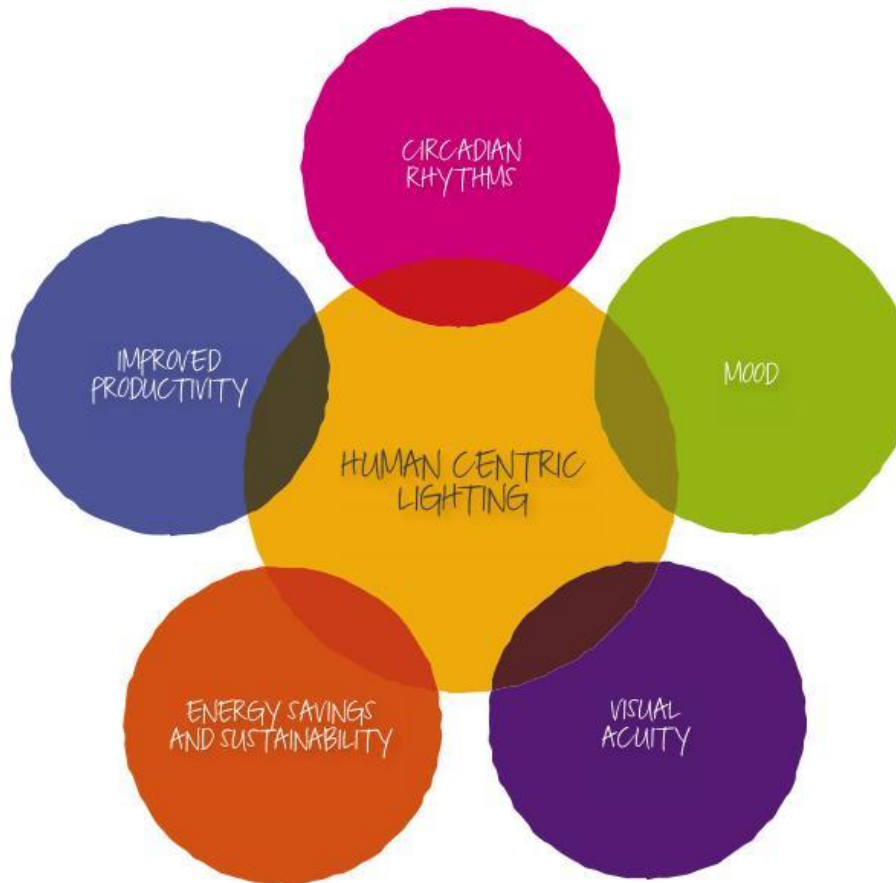


## Human Centric Lighting



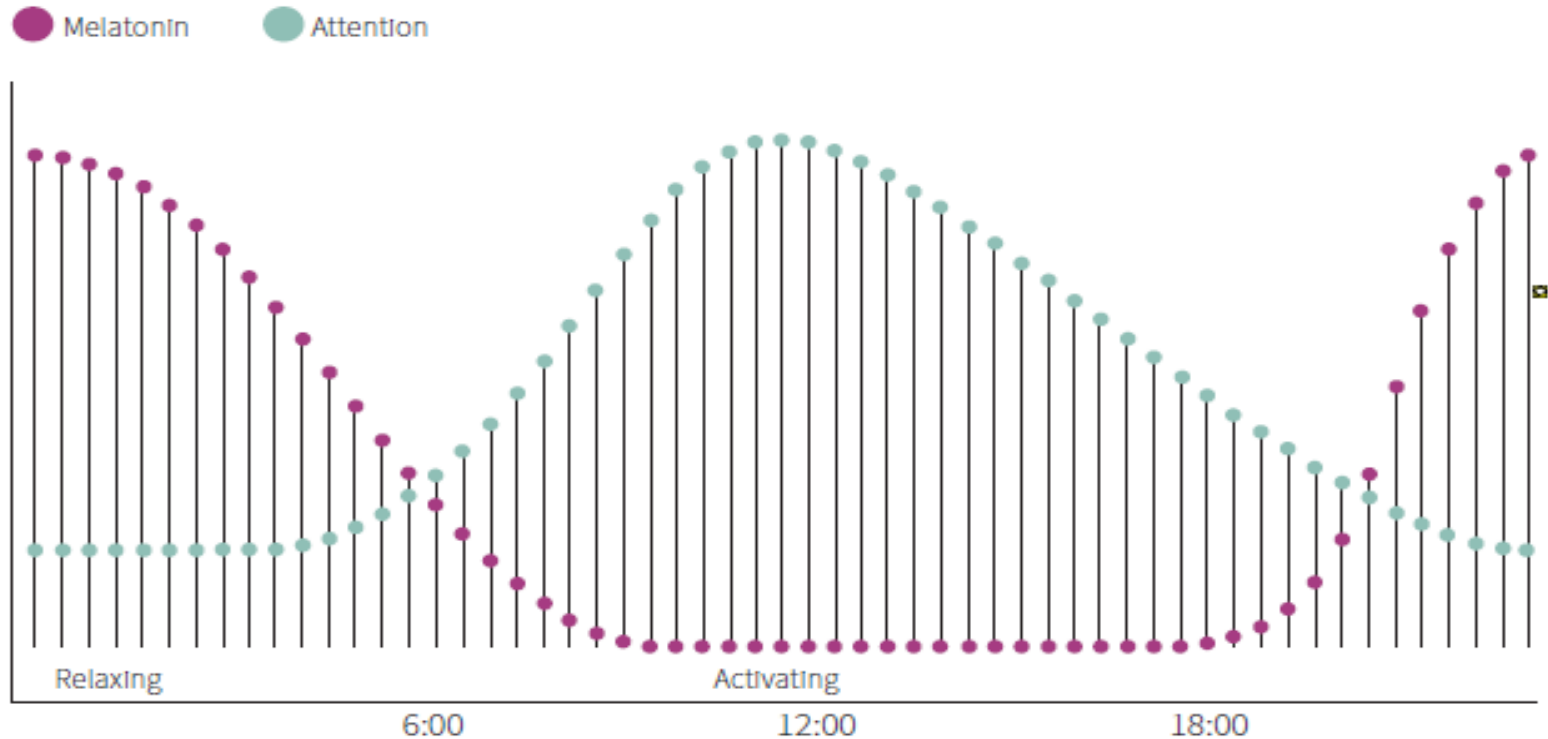


# Human Centric Lighting





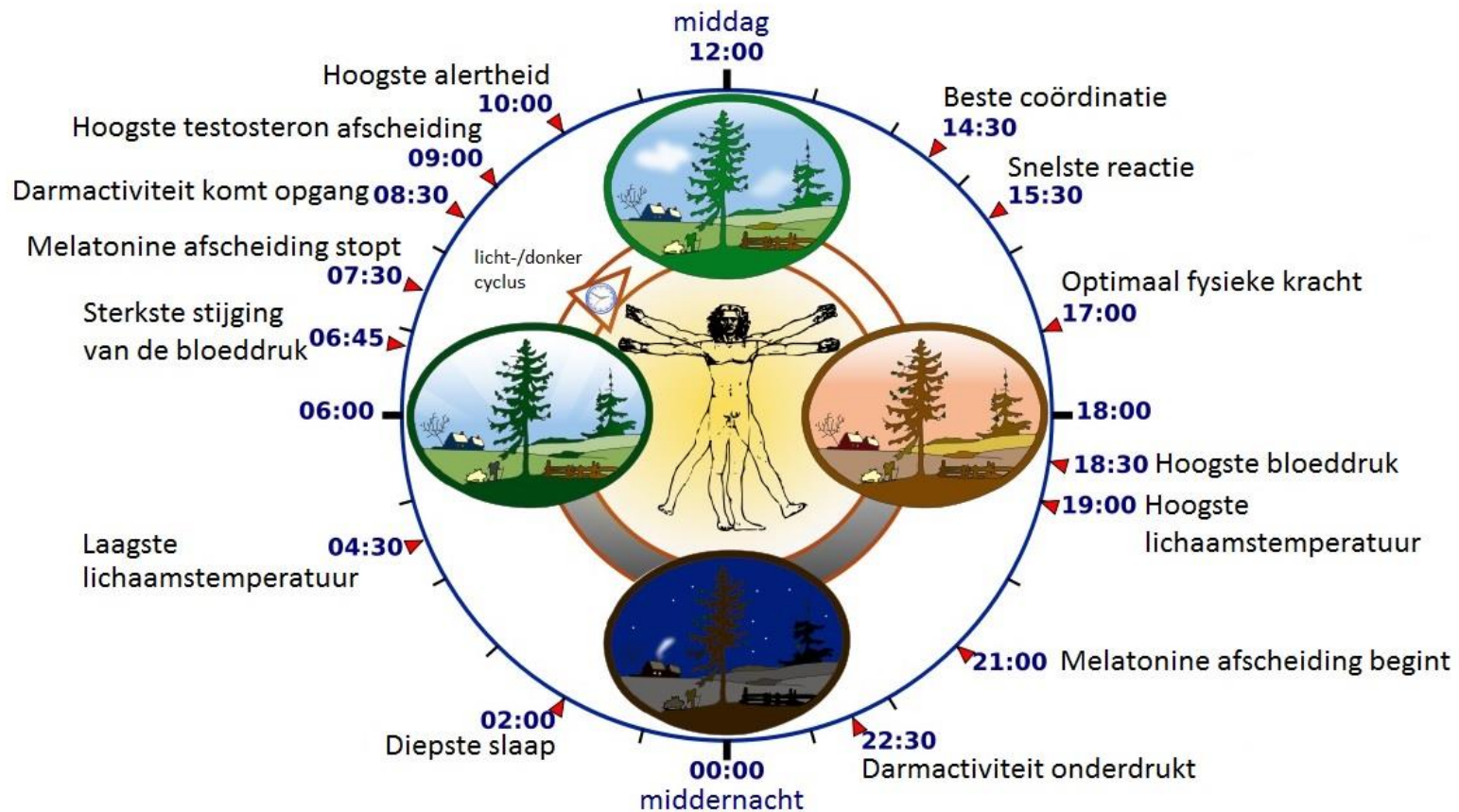
# Changes in Natural Light During the Day and the Accompanying Human Production of Melatonin







# People are the most important in Human Centric Lighting



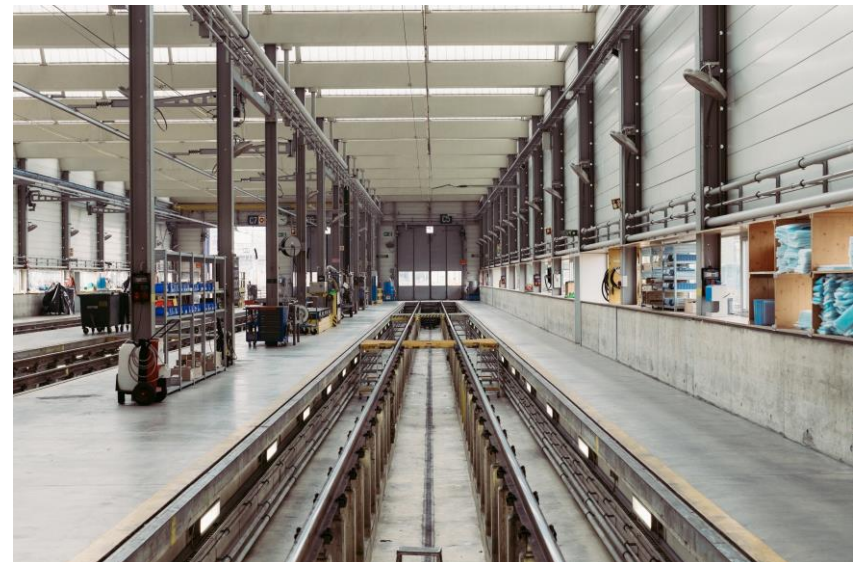


## Area's where Human Centric Lighting could be applied

Office

Education

Industry





# HCL: a buzzword or is it becoming a real trend in Lighting?

Research

Enables new disruptive business models

Creates added value to fixture manufacturers

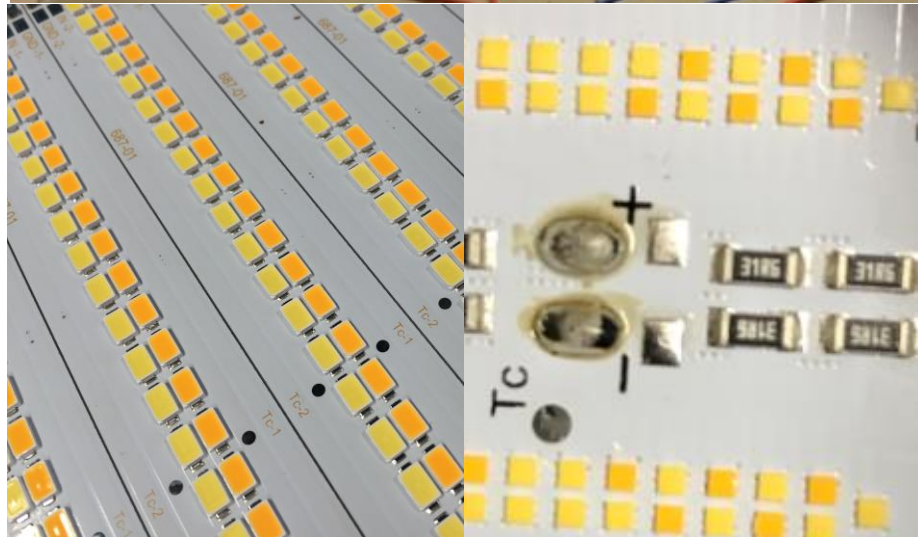
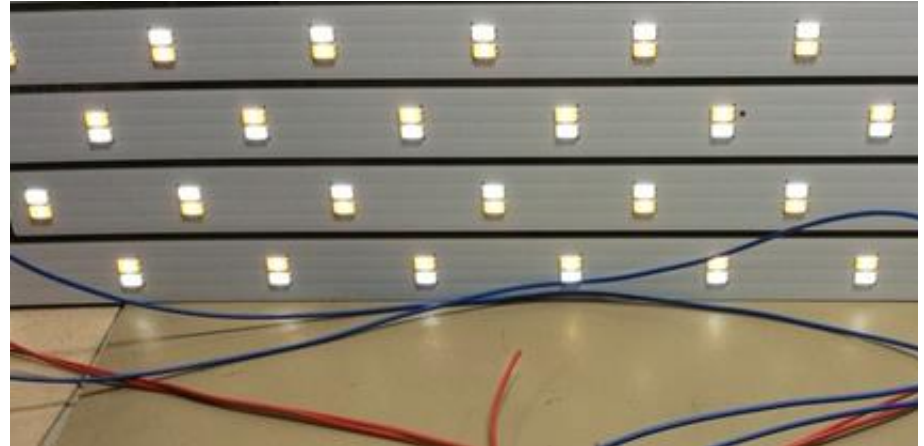






## Application examples

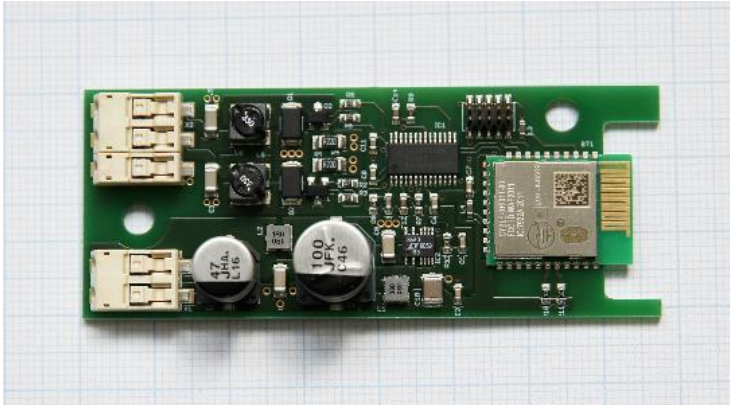
### Key parts





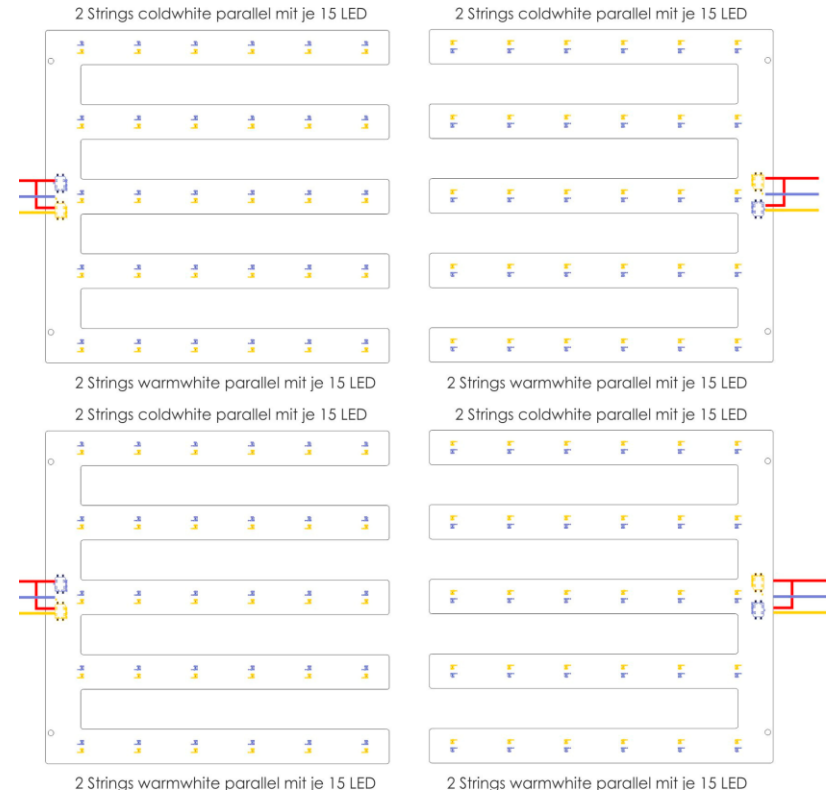
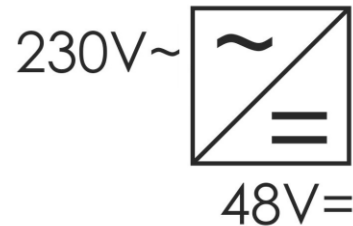


## Application examples



App running on SmartPhone

Power-Supply 48V



Finger-type modules populated with 5630 LEDs



# Questions?



**Distribution is today.  
Tomorrow is EBV!**