

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



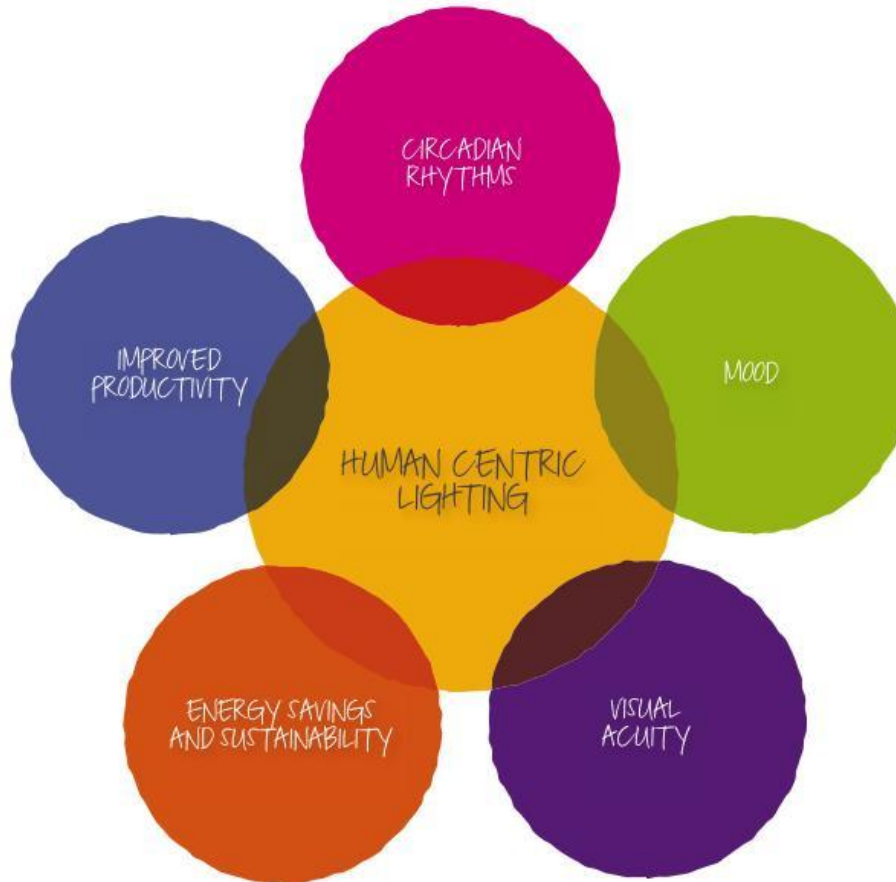


Human Centric Lighting



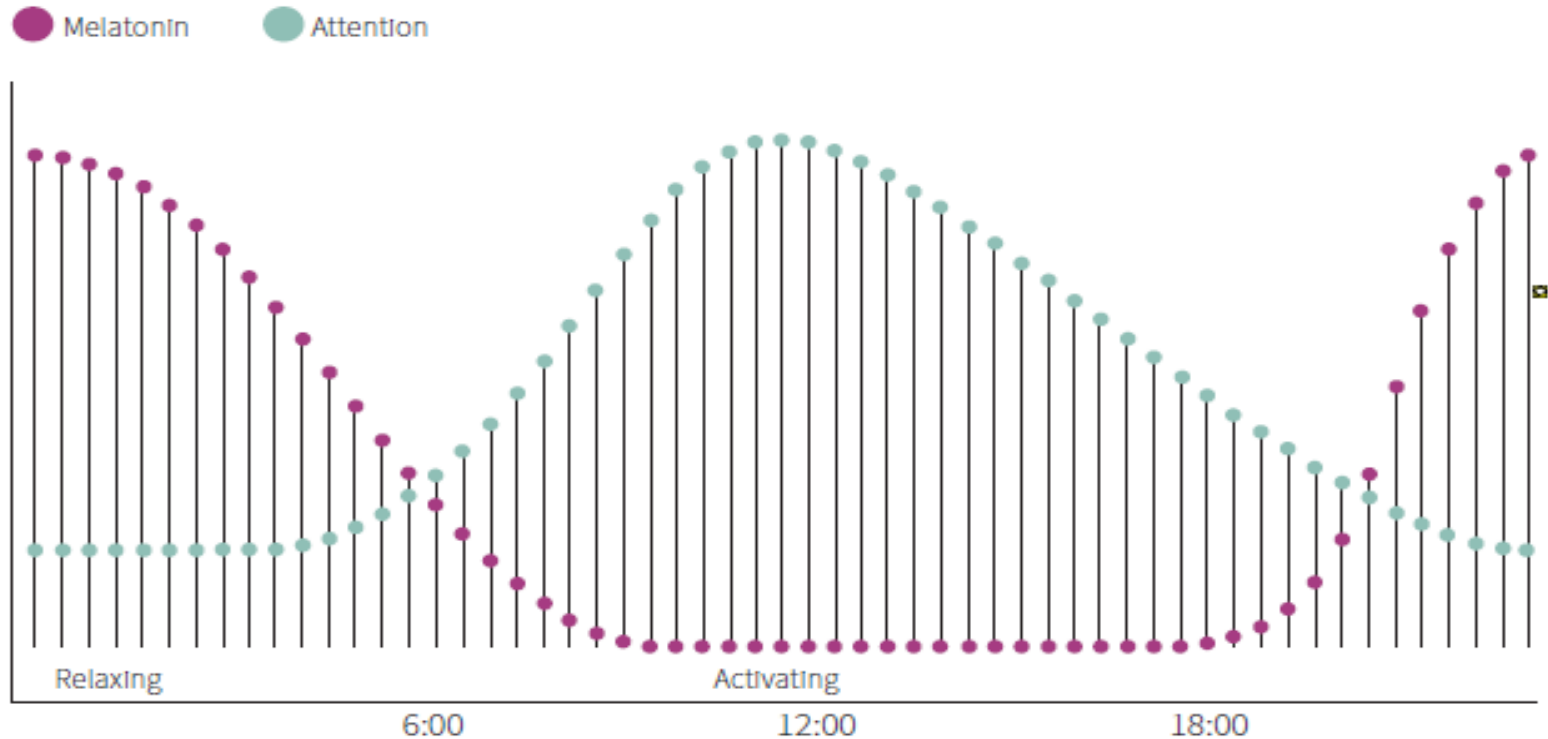


Human Centric Lighting



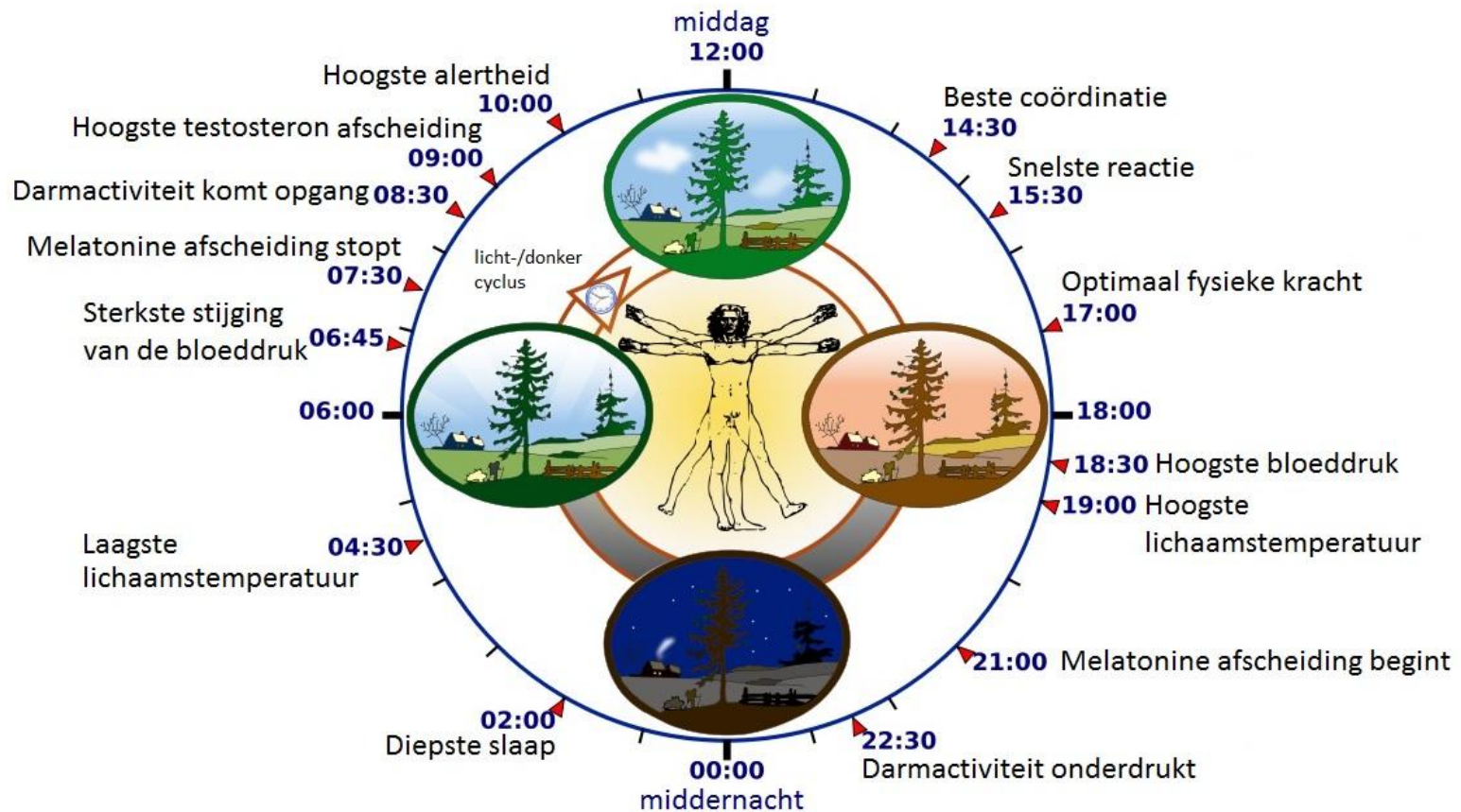


Changes in Natural Light During the Day and the Accompanying Human Production of Melatonin





People are the most important in Human Centric Lighting



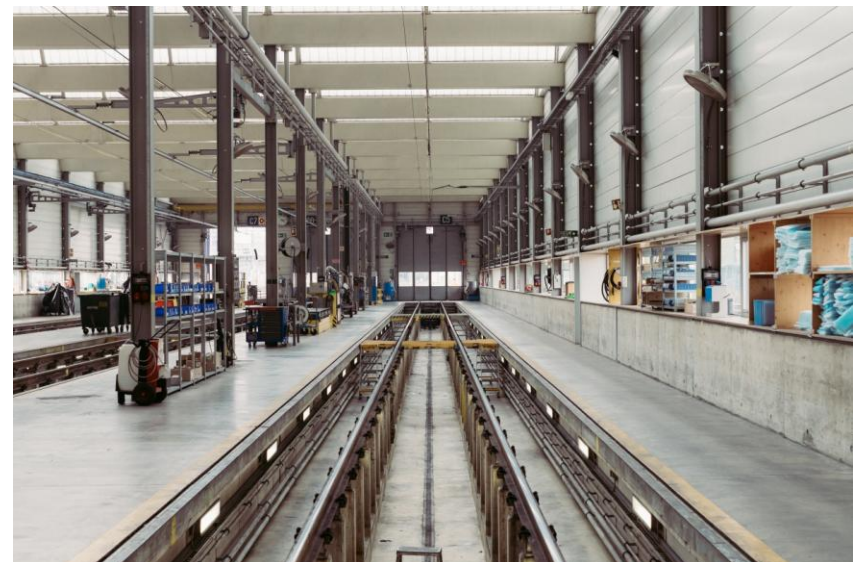


Area's where Human Centric Lighting could be applied

Office

Education

Industry





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

Research

Enables new disruptive business models

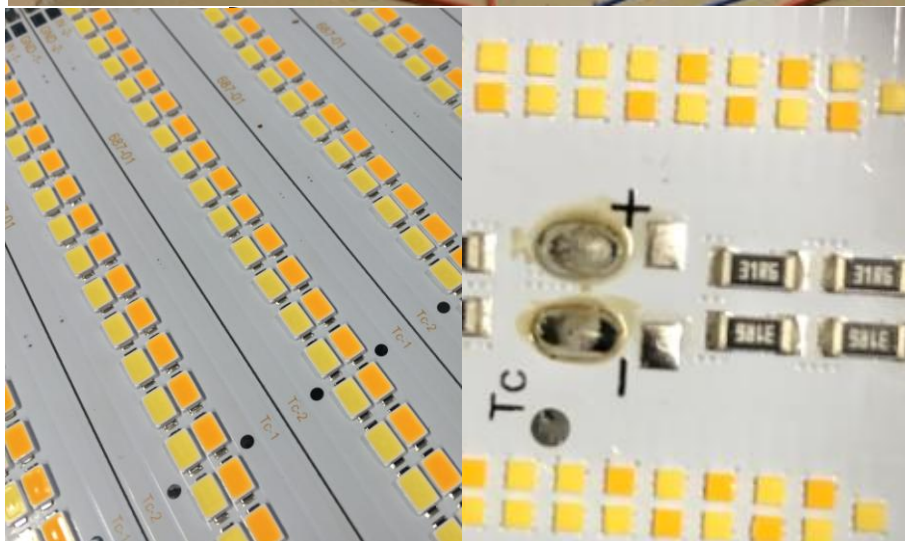
Creates added value to fixture manufacturers





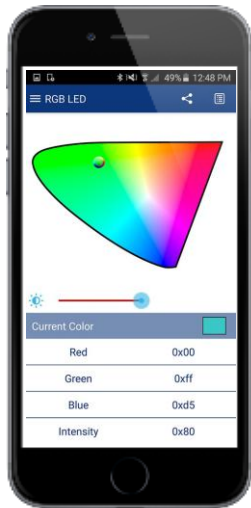
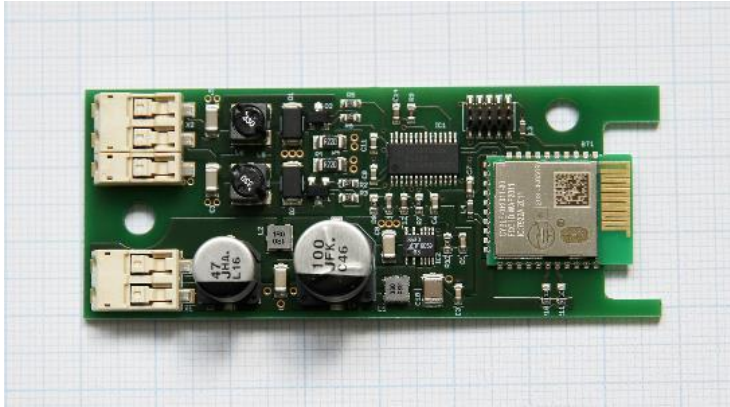
Application examples

Key parts



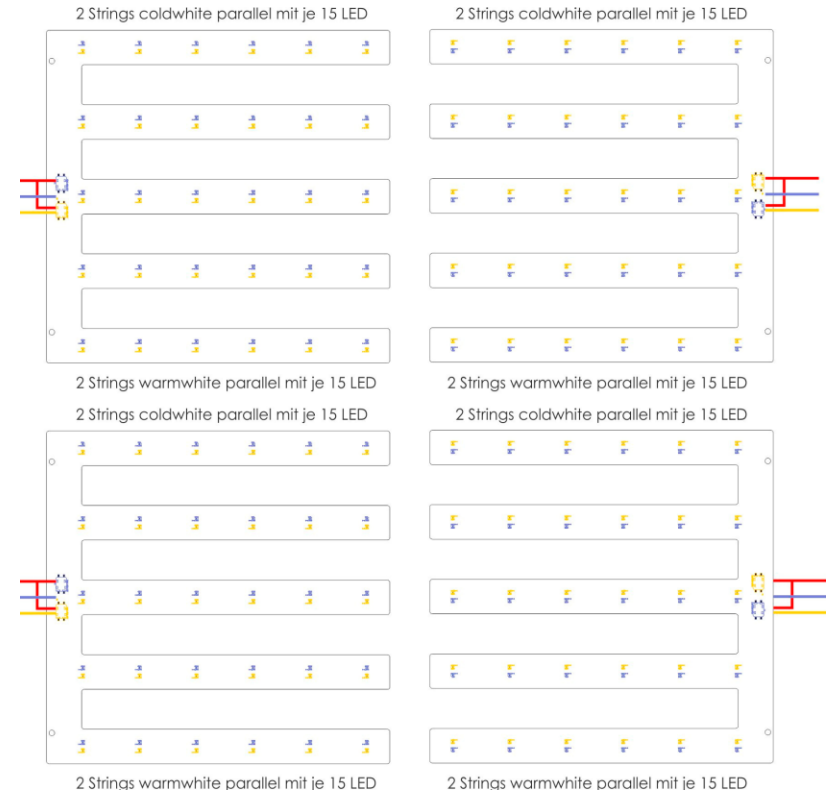
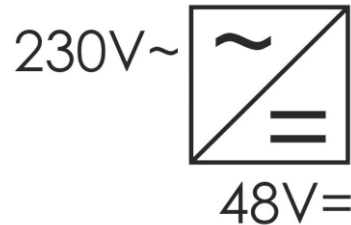


Application examples



App running on SmartPhone

Power-Supply 48V



Finger-type modules populated with 5630 LEDs



Questions?



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