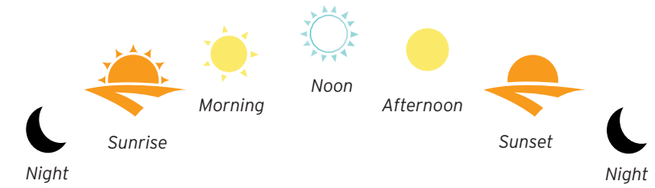
Human Centric Lighting

Lighting designed to benefit human health and well-being

lightingforpeople
CONNECTING OPPORTUNITIES FOR INNOVATION

There is a discrepancy between natural and artificial light with regard to intensity, color and dynamics of light



Natural light is dynamic from sunrise to sunset

Artificial lighting is fixed from wake-up to go-to-sleep

On a sunny day people outside get
100 000 lux

On a clouded day
10 000 lux

Indoor in offices people get
500 lux

and in schools only
300 lux

People spend
90%
of their time indoor

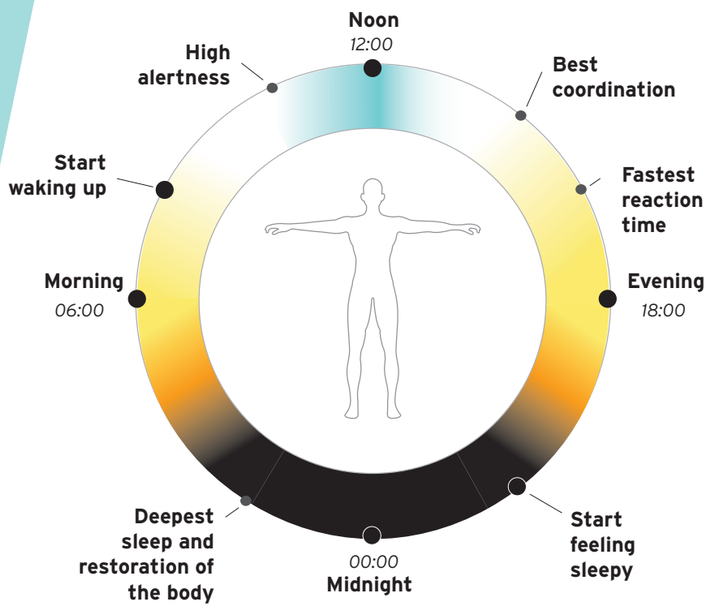
We need the right light for our activites at the right place at the right time

Morning	Afternoon	Evening	Night
Cool light, High intensity	*White light, High intensity*	*Warm light, Low intensity*	*No light*

Lighting applications

We need light and darkness

There is a period of the day when we are active and a period when we are sleeping
Light is the most important timer for our internal clock



Light has an effect on

Vision
Sight

Body
Alertness, cognitive performance and sleep/wake cycle

Emotion
Mood, energize and relaxation

Look beyond energy efficiency

Human Centric Lighting increases the vision, well-being and performance of people

Examples of benefits

Source: Report 'Quantified Benefits of Human Centric Lighting' by LightingEurope & ZVEI, April 2015