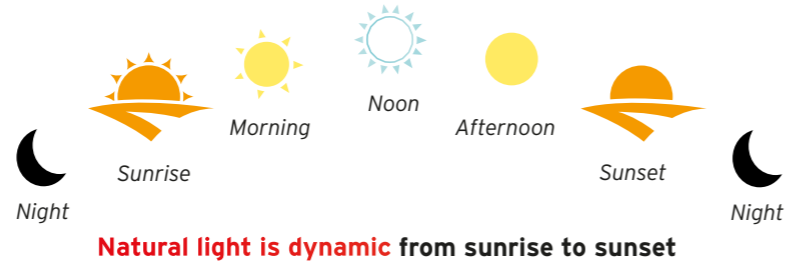


There is a discrepancy between **natural** and **artificial** light with regard to **intensity, color and dynamics of light**



On a sunny day people outside get **100 000 lux**

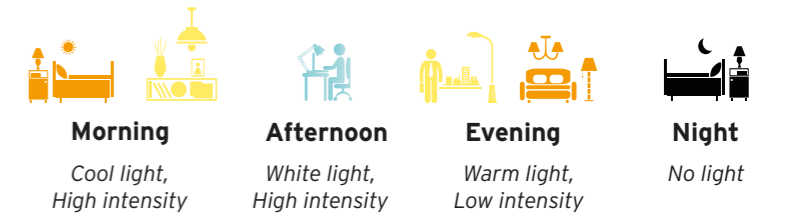
On a cloudy day **10 000 lux**

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 activities at **the right place** at **the right time**



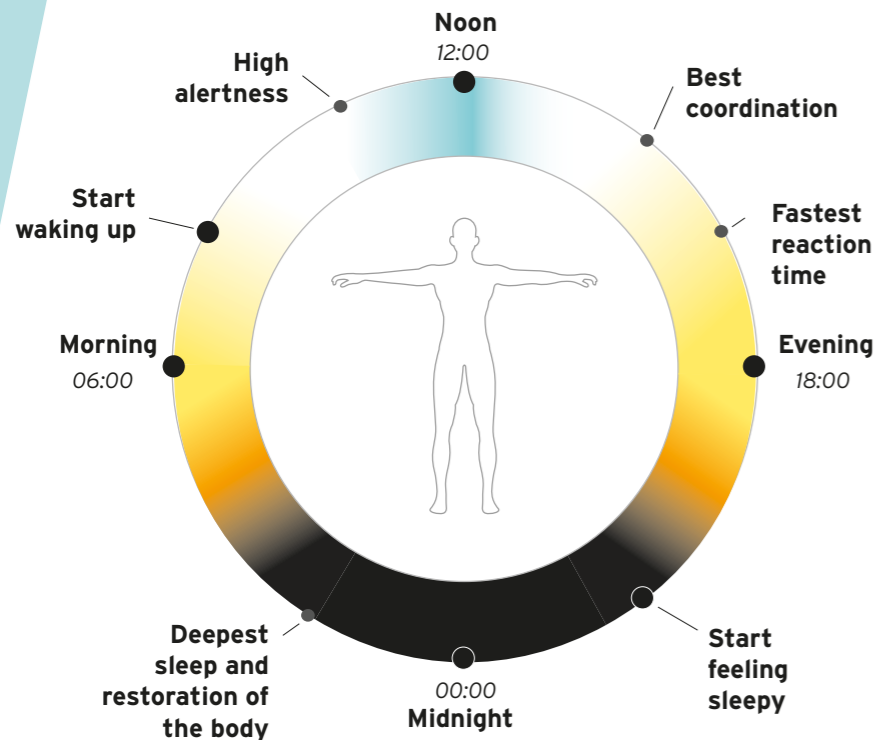
Lighting applications



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