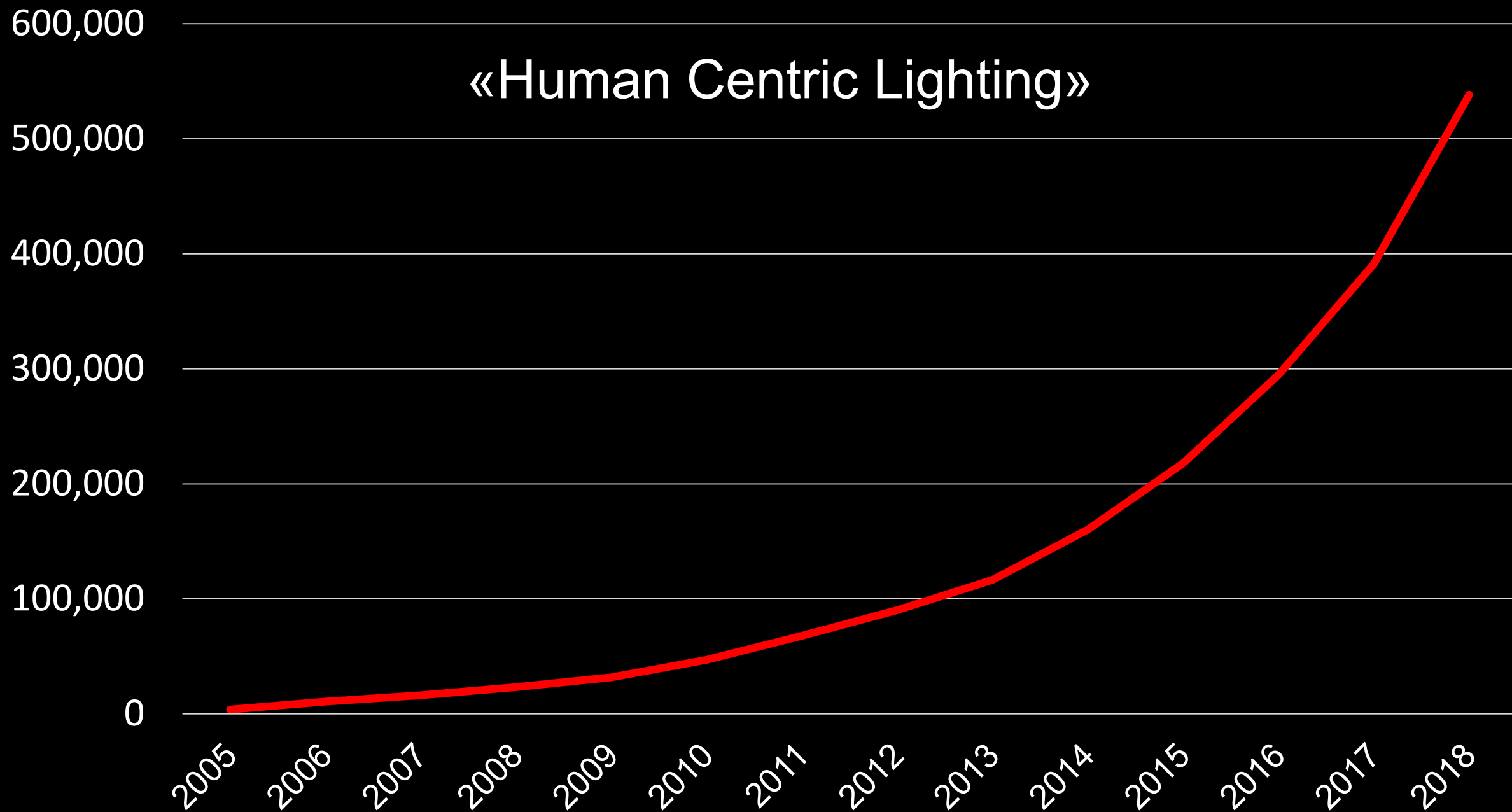


Human Centric Lighting – A practical approach

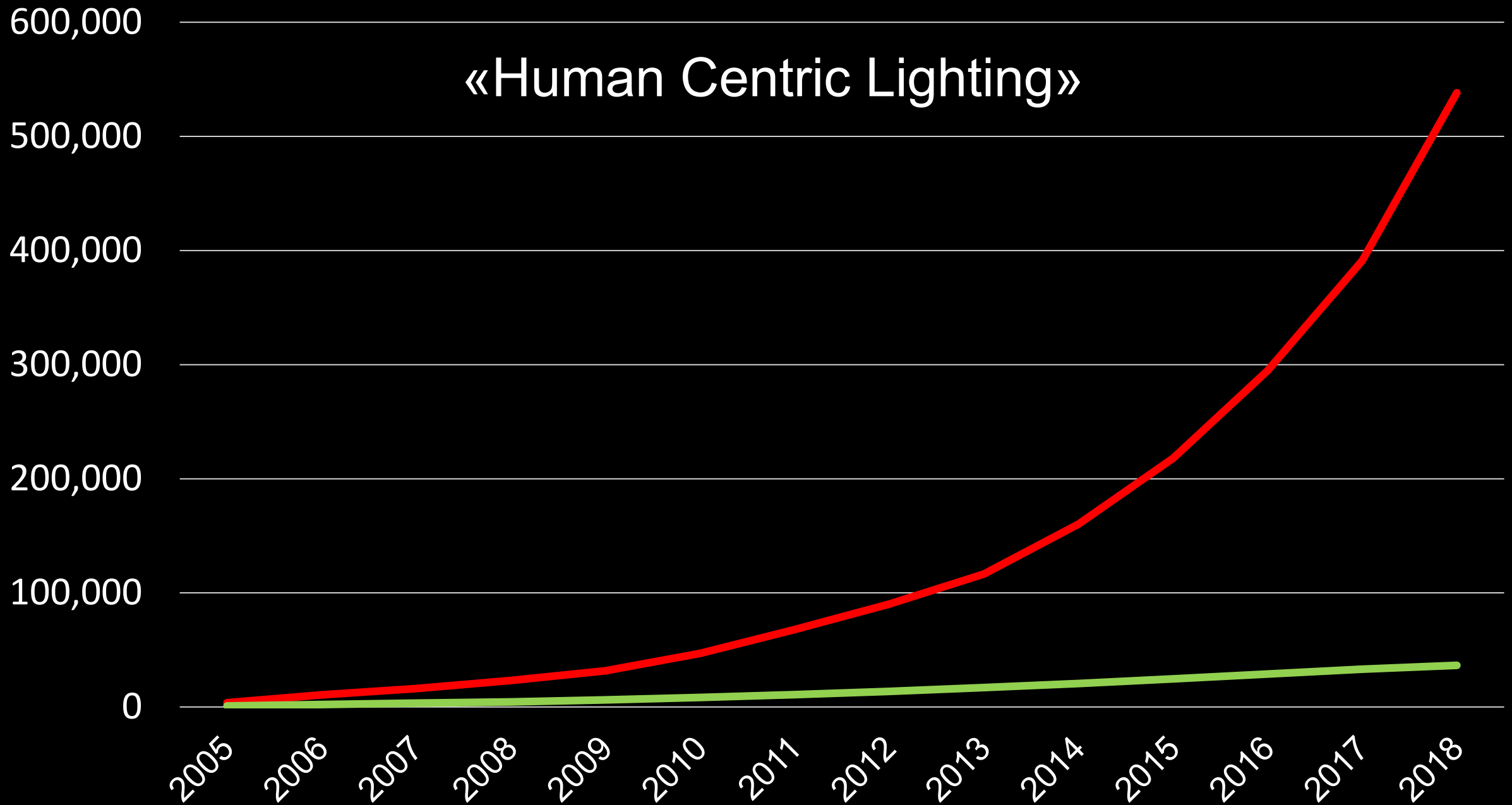
Johannes Seifermann

Head of Product Management

«Human Centric Lighting»



«Human Centric Lighting»



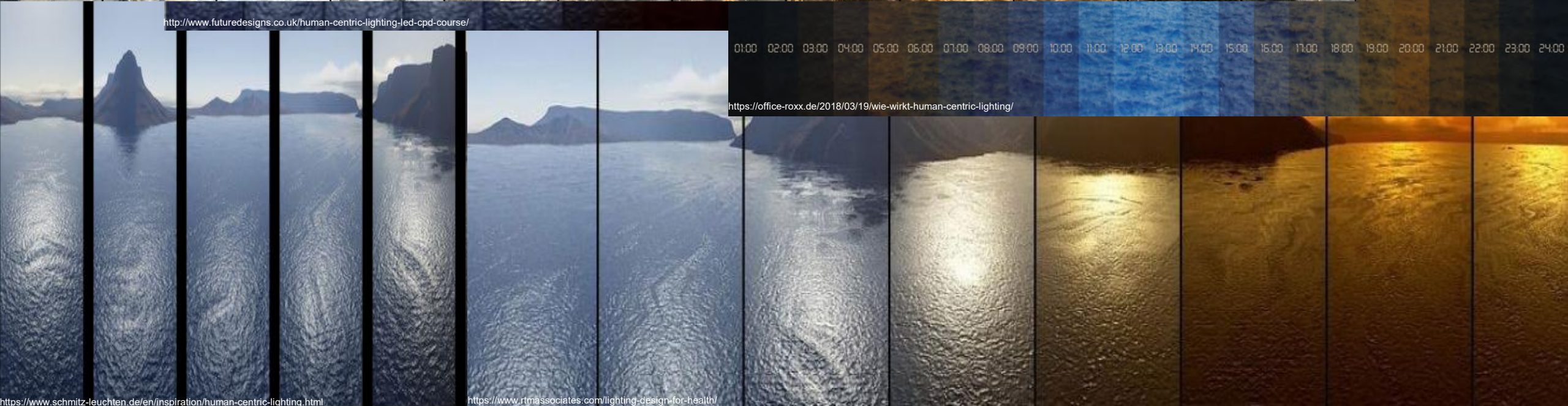


<https://iesedmonton.org/events/2017-10-25/technical-lunch-on-human-centric-lighting-update>

<http://www.futuredesigns.co.uk/human-centric-lighting-led-cpd-course/>

01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 24:00

<https://office-roxx.de/2018/03/19/wie-wirkt-human-centric-lighting/>



<https://www.schmitz-leuchten.de/en/inspiration/human-centric-lighting.html>

<https://www.rtmassociates.com/lighting-design-for-health/>

12:05 – 12:10

Bioadaptive Lighting – How a bioadaptive lighting solution can improve the well-being of employees

Catarina Buchholz

11:40 – 12:00

HCL-compliant industrial lighting - IS study with statistical lighting in terms of sleep quality, productivity and melatonin suppression in early shift operation

William Truong

11:00

Lighting design

Putting the added value of HCL into practice

11:20 – 11:40

The project NiviL – interdisciplinary research on non-visual light effects

Inga Rothert

15:15 – 15:20

Biologically effective lighting: RECOVER

Dominik Alder

15:45

Advanced Human Centric Lighting – digital HCL concepts on their way into practice

*Andreas Steinert, CEO OSRAM Lighting Services Ltd,
Head Corporate Innovation Lighting Concepts, OSRAM*

11:00 – 11:20

HCL + nursing home

Mirjam Münch

12:10 – 12:15

Premium HumanCentricLighting (PI-LED)

Peter Haumer

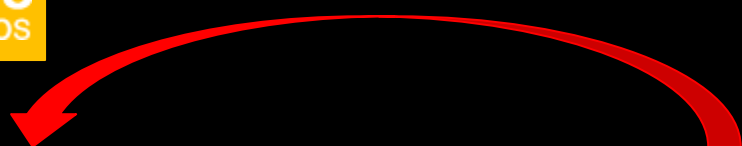
09:00

Human Centric Lighting – all clear planners?

Prof. Mathias Wambsganss, Professor for Lighting design and building technology, College Rosenheim

Lectures, 10. September 2018

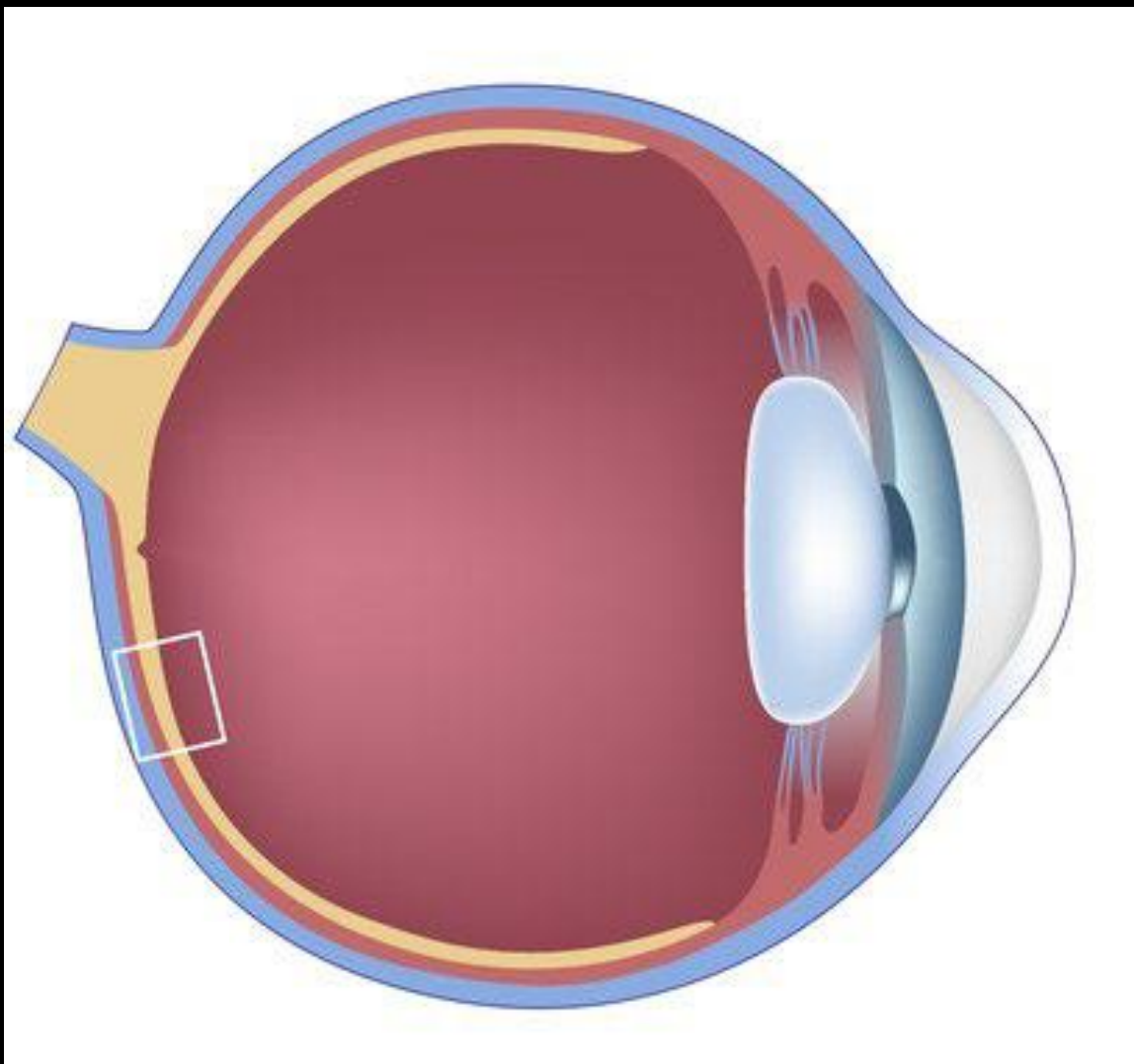
LICHT2018
+ DAVOS



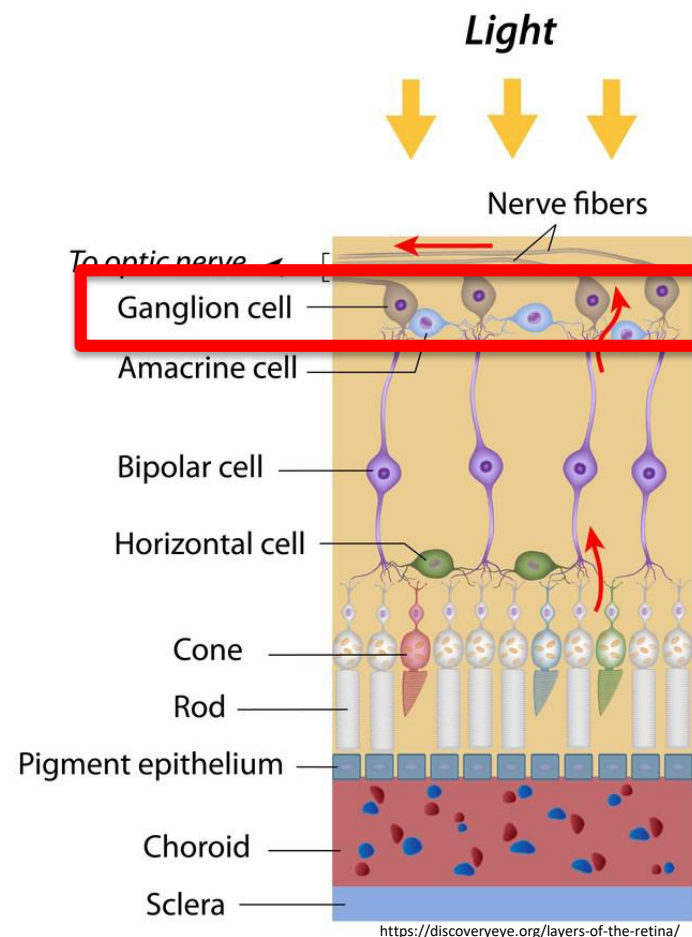
	LIGHT + ARCHITECTURE (Davos 1)	INTERIOR LIGHTING (Davos 2)	EXTERIOR LIGHTING (Sanada)	RESEARCH + DEVELOPMENT (Aspen)
09:00 – 09:30	OPENING Keynotes			
10:00 – 10:30				
11:00 – 11:30	(A1) Light, Art, Urban Space	(B1) Light Application	(C1) No digital city without light	(D1) Integrative Light Quality - HCL
12:00 – 12:30				
13:00 – 13:30				
14:00 – 14:30	(A2) Light and Space	(B2) Light Application	(C2) Smart City quite pragmatic	(D2) Integrative Light Quality - HCL
15:00 – 15:30				

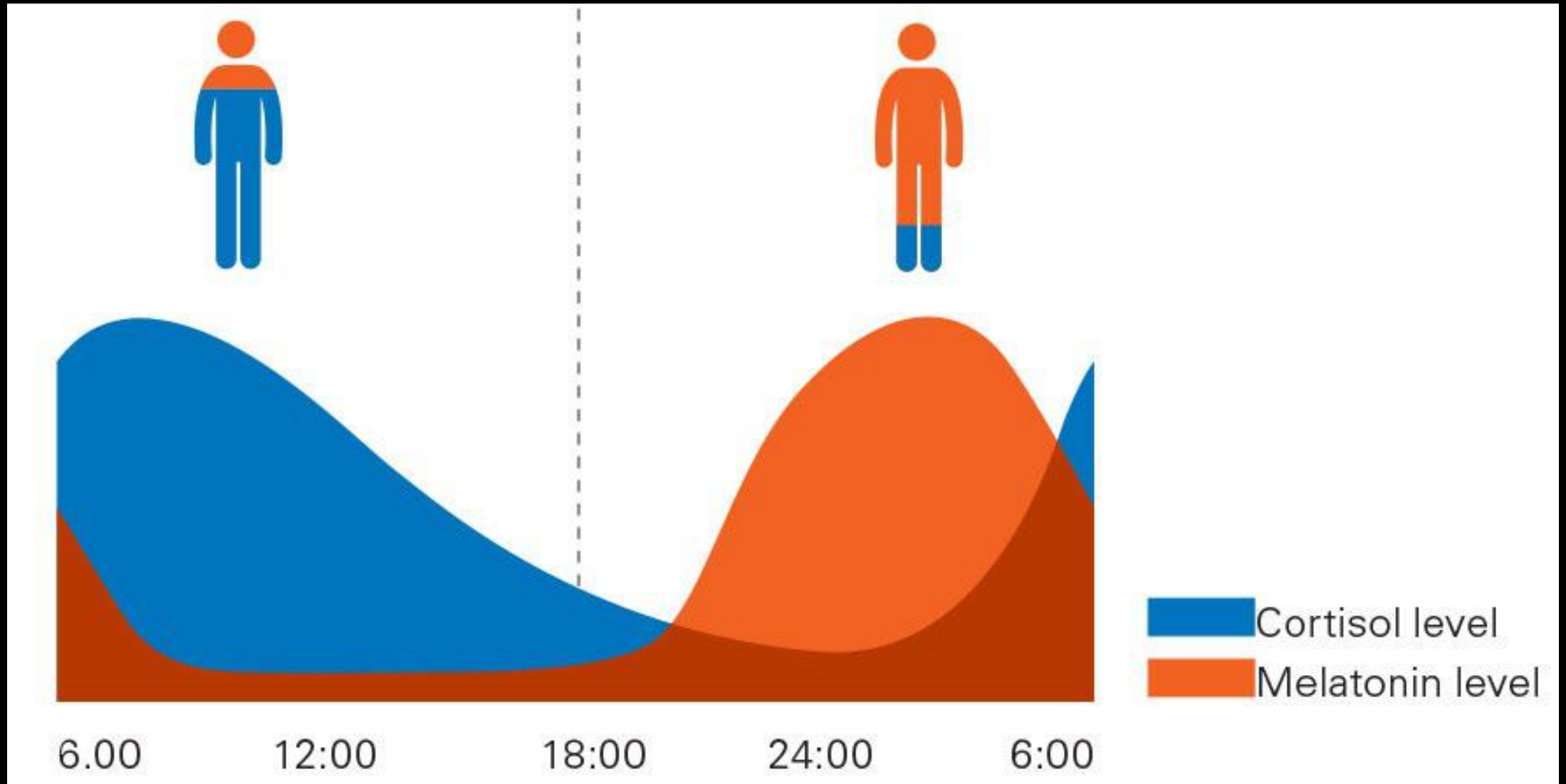






Structure of the Retina





30 October 2017 · Ray Molony · All regions · Office

Human-centric office lighting 'boosts productivity'



<http://luxreview.com/article/2017/10/human-centric-office-lighting-boosts-productivity>

26 March 2018 · Ray Molony · All regions · Healthcare

'Too early to start human-centric lighting' – top scientist



<http://luxreview.com/article/2018/03/too-early-to-implement-human-centric-lighting-top-scientist>

24/7





30 October 2017 · Ray Molony · All regions · Office

Human-centric office lighting 'boosts productivity'



■ TECHNICAL RULE | 2013-04

DIN SPEC 67600:2013-04

Biologically effective illumination - Design guidelines

German title:

Biologisch wirksame Beleuchtung - Planungsempfehlungen

Publication date:

2013-04

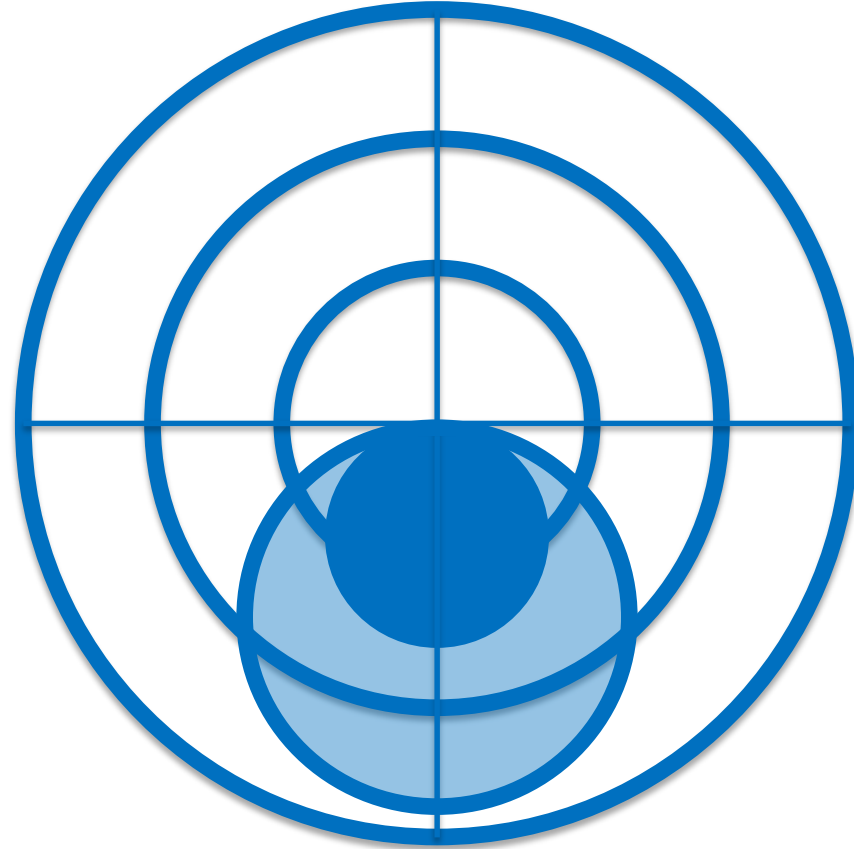
Original language:

German

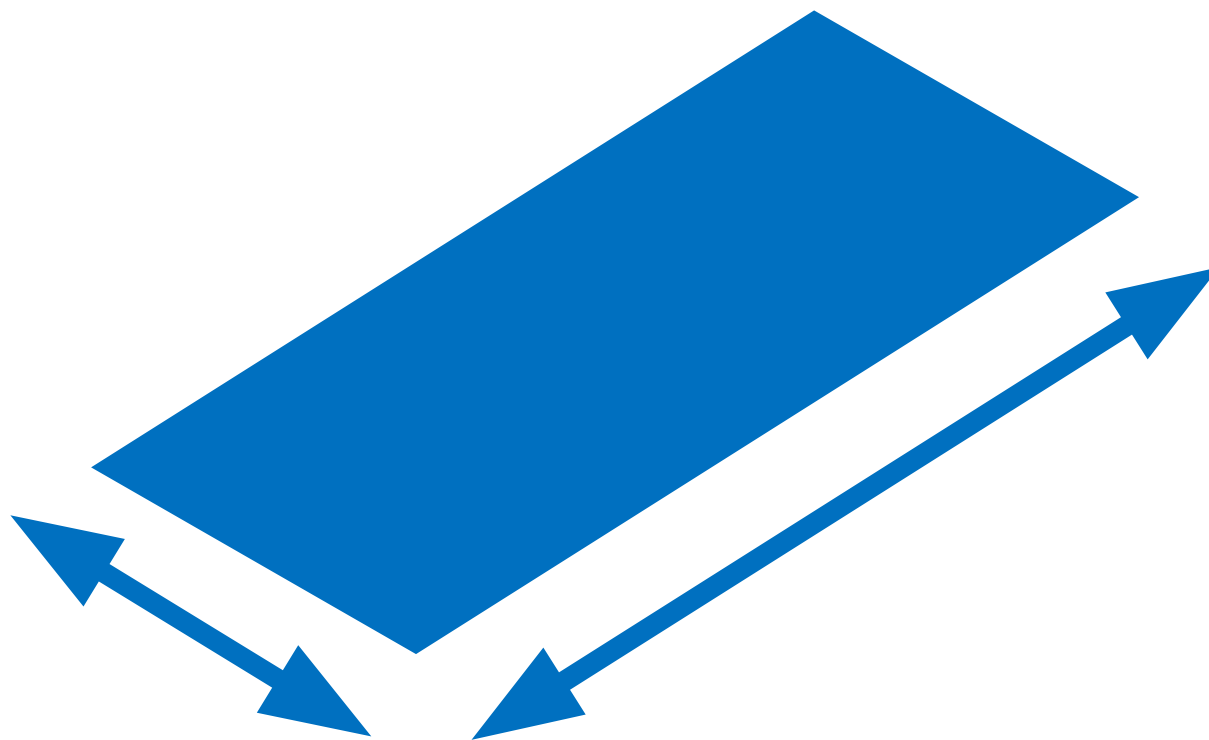
26 March 2018 · Ray Molony · All regions · Healthcare

'Too early to start human-centric lighting' – top scientist

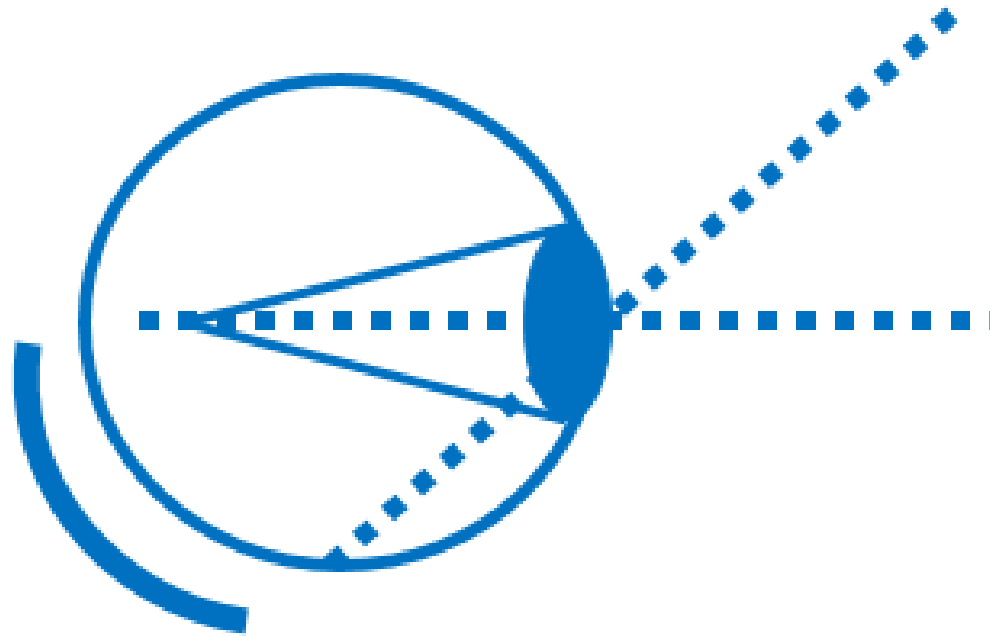




The more light reaches the eye, the higher the effect



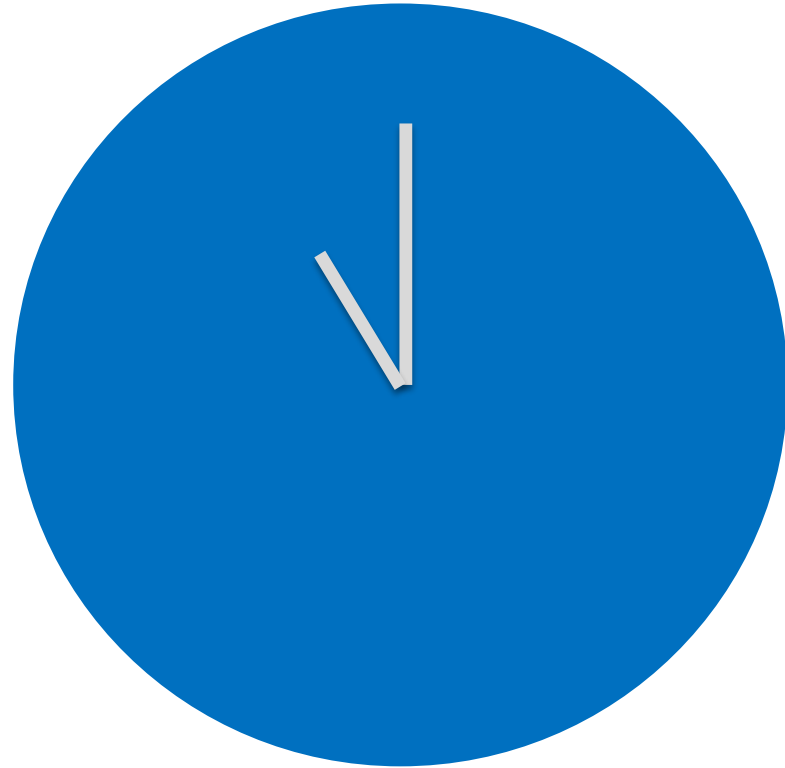
Planar light is more effective than a spotlight



Light above the viewing direction is more effective



The higher the share of blue light, the higher the effect



The longer the exposition the higher the effect











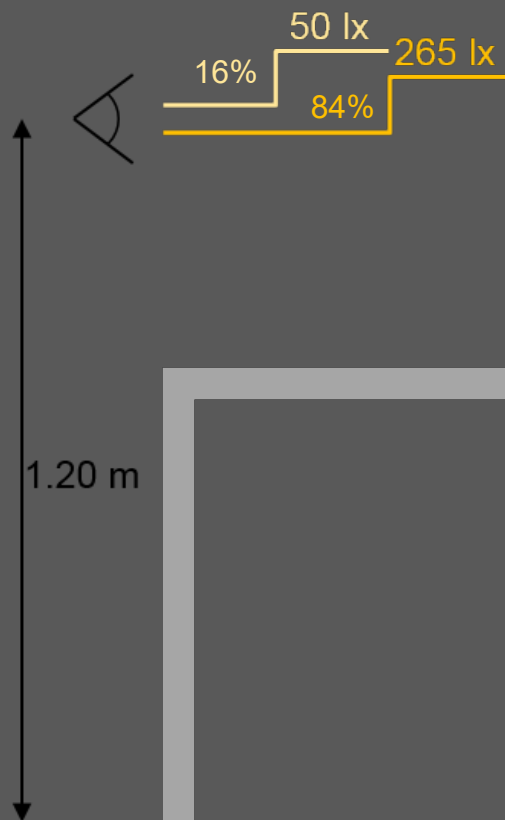
<https://arbeits-abc.de/fruehaufsteher-sind-erfolgreicher-als-langschlaefer/>



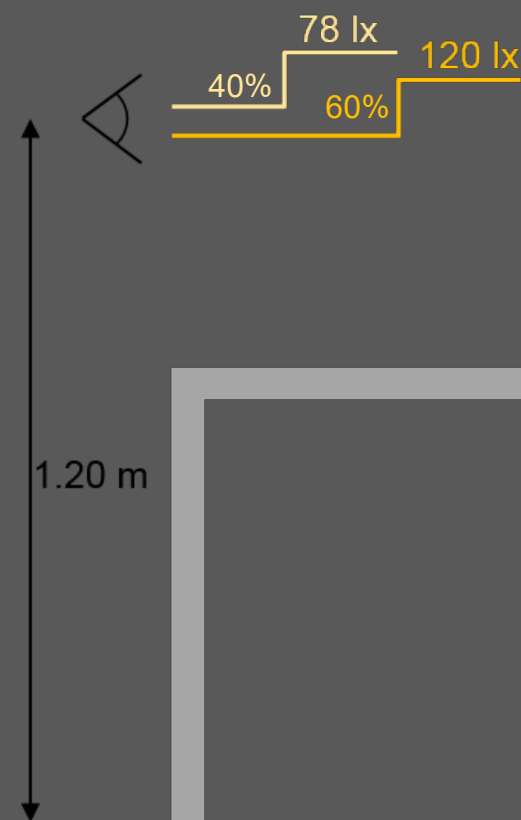
<https://fashionzone.de/morgenmuffel-so-wird-der-montag-zum-freitag/>

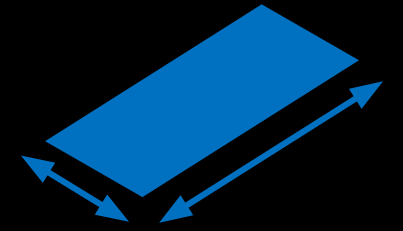


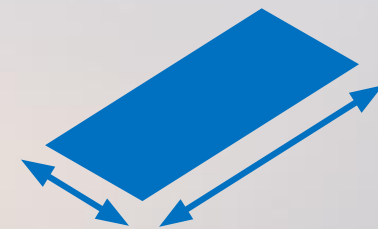
315 lx

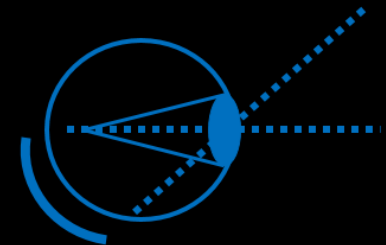
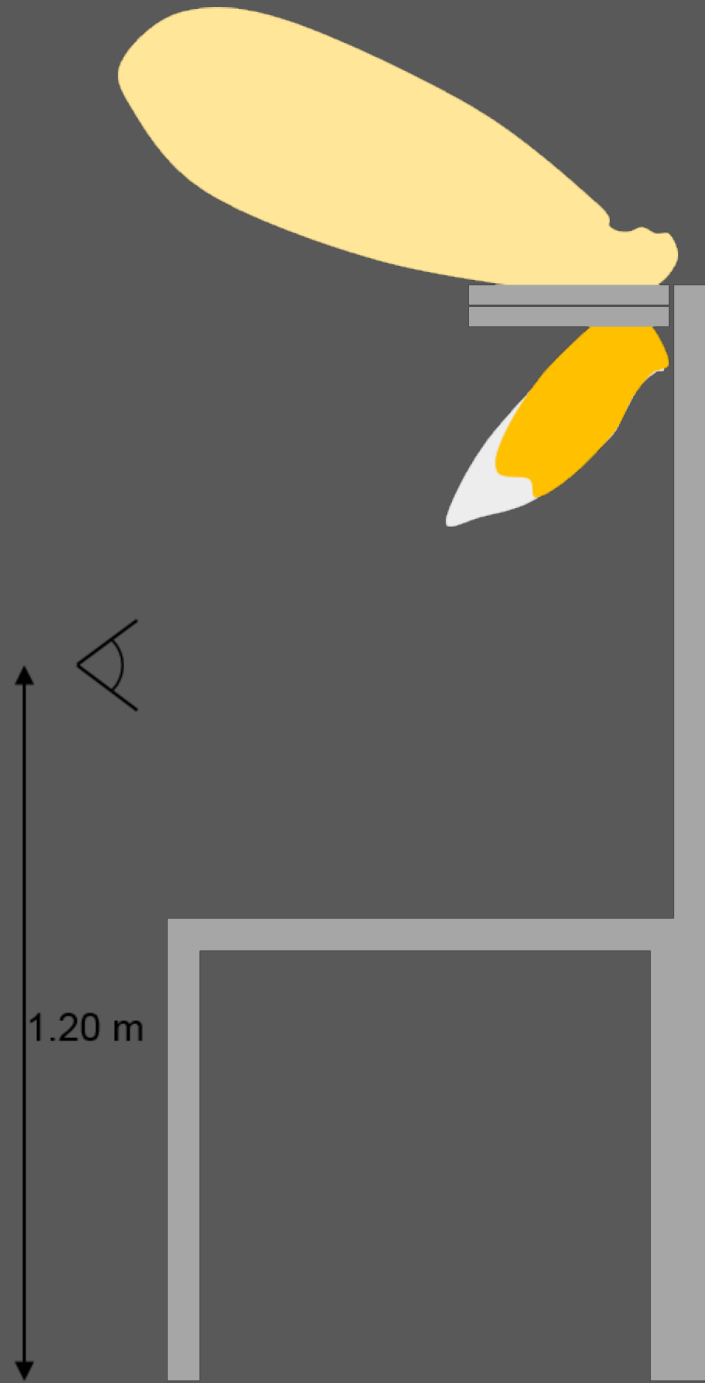


198 lx

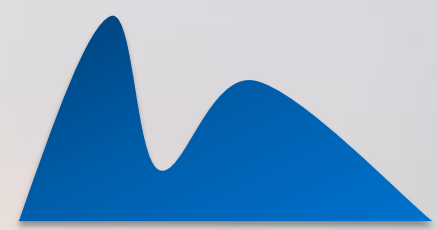








**Direct and indirect
light in the same color
temperature**





**Individual
controllable**







Licht-
Stimmung



Tages-
lichtverlauf



Persönlicher
Lichtverlauf

KONZENTRIERT

AUFMERKSAM

NEUTRAL

RUHIG

ENTSPANNT

6500

5000

4000

3200

2700



Licht-
Stimmung



Tages-
lichtverlauf



Persönlicher
Lichtverlauf

5000

4000

2700

7

9

11

13

15

17

19

4600 K

15:39 Uhr



Licht-
Stimmung



Tages-
lichtverlauf



Persönlicher
Lichtverlauf

6500

4000

2700

8

10

12

14

16

18

6250 K

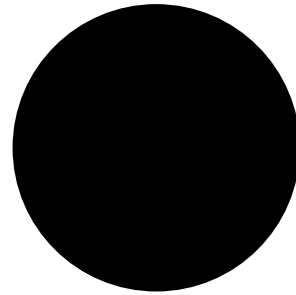
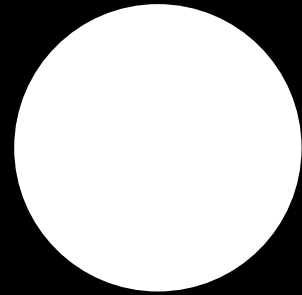
15:39 Uhr

LICHTVERLAUF ANPASSEN

LIGHTPAD TUNABLE

HUMAN CENTRIC LIGHTING MADE EASY





Thank you!
Regent Lighting

Johannes Seifermann
Head of Product Management
j.seifermann@regent.ch