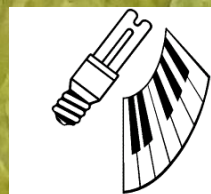




Country Update: Denmark



Silk-tail in the garden



Energy piano

Foto: Casper Kofod

Casper Kofod
Carsten Dam-Hansen

29th March 2023



Agenda

1. CIE S 025 revision news
2. National SSL Seminar
3. Phasing out FL and CFLni
4. Danish Lighting Award 2022



Revision of CIE S 025:E2015

News from Anders Thorseth

Sep. 2021, CIE Division 2 initiated **revision of CIE S 025:E2015*** based on a Proposal drafted by Anders Thorseth (DTU, Denmark) and Tony Bergen (CIE Division 2 Director). This work is managed by Anders Thorseth, DTU, Denmark, andt@fotonik.dtu.dk

New standard **spectral distribution for calibration with LED** instead of heat beams: CIE 251
<https://cie.co.at/publications/led-reference-spectrum-photometer-calibration>

A **Joint Technical Committee 20** is underway on **wearable sensors** between Division 2 and Division 6

There is **progress on TC 2-97** around CIE S 025

ISO/DTS 7127 Light and lighting — **BIM Properties** for Lighting — Lighting Systems **is still ongoing**

** CIE S 025:E2015, was prepared by CIE TC 2-71, with support from IEA 4E SSL Annex especially through IC 2013*

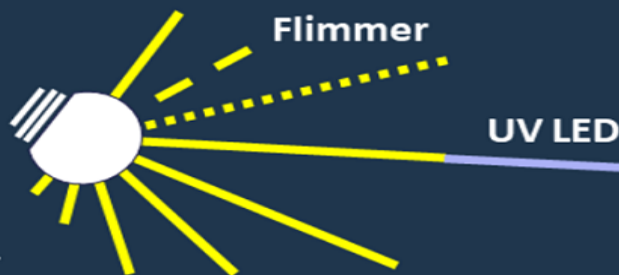


LED Temadag 2023

Smart lighting



Holdbarhed



Flimmer

UV LED



DTU Risø

28.2 2023

Arrangementet

Program

Tilmelding

Program

Registrering og frokost

Velkomst | Carsten Dam-Hansen, DTU Electro

Lifetime testing, standards and methods | Steve Coyne, SSL Annex (Online)

DoLEDlast resultater | Dennis Dan Corell, DTU Electro

Smart lyskilder er ikke altid energi-smarte | Casper Kofod, Energypiano

Lysmåleteknik og indflydelsen på nøgleparametre – Eksempel flimmer og smart lighting | Anders Thorseth, DTU Electro

Kaffe og Kage

UVC hos LED iBond | Martin Løbel, LEDiBond

Goniospektrometer systemer til UV og smart lighting | Anne Bay, Viso Systems

UVC-LED effektivitet og simulering af systemer | Carsten Dam-Hansen, DTU Electro

Laboratorie rundvisning

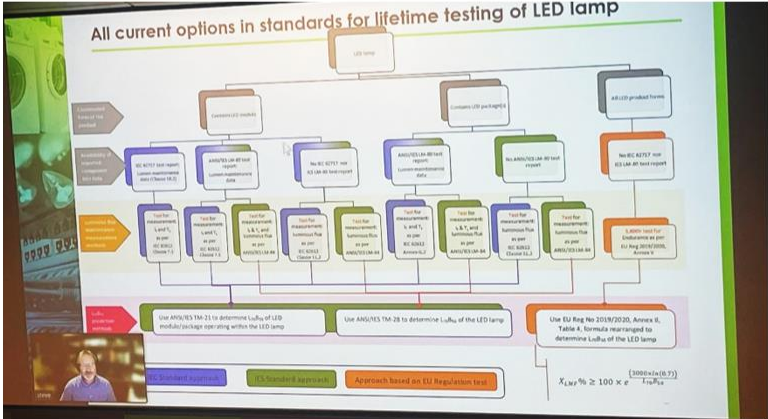
National LED Seminar 2023

Talks on

- LED lifetime standards and test
- Smart lighting
- Lighting metrology
- UVC - LED
- Goniospectroradiometry

SSL Annex represented with presentations by

- Steve Coyne
- Casper Kofod
- Carsten Dam-Hansen



National LED Seminar 2023

85 participants

- Lighting industry,
- Lighting designers
- Energy consultants
- researchers
- students



National LED Seminar 2023

30 on lab tour

- Goniospectroradiometry
- TLM measurement
- Integrating sphereradiometry



Phasing out T8-, T5- and CFLni before 2023/9

- Major problem for municipalities
- In Copenhagen alone, 300.000 light points
- LED Replacement?
 - CFL 120 types/17 sockets -> 25 types of LED replacements for CLFs
 - FL 250 types -> 100 types of LED replacements
 - LED retrofit systems
- Problems: LID form fixtures, efficacy, TLM, EMC, safety
- Preparing advice for building responsables
- Project application.



Danish Lighting Award 2022

**Presentation of the four candidates selected
by the jury behind the Danish Lighting Award**

Amagerværket Heat/Power plant 4

The facade is hung with logs because wood chips are the fuel of the power plant. In the night, the facade light illustrates this visually.





Foto: Laura Stamer



DTU Auditorium 116

The building is renewed in a way where daylight and artificial lighting together create a welcoming study environment.

Hanging textiles captures and retains sunlight providing a gentle and natural light in the room. The brick core is illuminated with wallwash.

Emdrupgaard New Exhibition halls

The new underground exhibition halls with gentle wallwashing of the walls and focused lighting of the works of art. From these new exhibition halls, visitors emerge into a narrow and tall space, where the vertically warm LED lighting draws the eye upwards towards the daylight opening - a portal to another world.

New Entrance to Bispegård Church Cemetery



Understated, safe and welcoming lighting connects the quiet cemetery with the lively urban space. From the wall warm rays of stray light rise up. Beautiful perforations in the wall provide access for views and light.

A close-up photograph of a red squirrel with a large, bushy tail, sitting on a snow-covered tree branch. The squirrel is holding a piece of wood in its mouth. The background consists of bare, light-colored tree branches against a clear blue sky.

**and the Winner of
Danish Lighting Award 2022
is ?**

DTU Auditorium 116



Thank you



Foto: Eukan Kofod