

International Commission on Illumination Commission Internationale de l'Eclairage Internationale Beleuchtungskommission

# Introduction to the Special Webinar

Jennifer A. Veitch, Ph.D., FRSC - CIE President



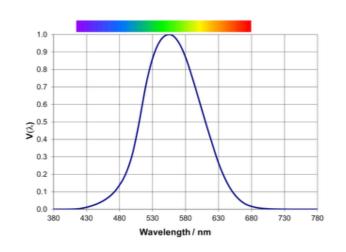


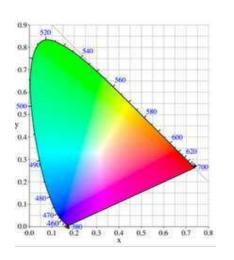
#### What is the CIE?



The International Commission on Illumination (CIE) is a **global non-profit** organization dedicated to advancing the **science**, **technology**, **and art of light and lighting**, encompassing the full range of related topics including **scientific fundamentals** such as **vision**, **colour**, the **metrology** of optical radiation, **photobiology**, and **photochemistry**, as well as lighting applications indoors, outdoors, and in image technology. The CIE provides a forum for diverse **open expert discussion** and information exchange within, between, and beyond these fields.











#### **National Committees are the heart**



#### A sample from our:

36 National Committees 2 Associate NCs 17 Affiliate Members









Korean National Committee of CIE





























Comité Español de











### **History and partnerships**



Founded in Paris in 1913; 38 member nations today

Responsible with CIPM for the foundations of practical physical photometry world-wide

- CIPM: definition of SI photometric units
- CIE: the standardization of the action spectra for photobiological and photochemical effects, including human visual response functions such as  $V(\lambda)$

#### **Publishes**

- Technical Reports and Technical Notes (consensus-based balloted documents)
- International Standards for light and lighting fundamentals

Collaborates with ISO/TC 274 to publish standards for lighting applications



## **CIE** as the Global Lighting Organization



#### CIE 2024 POSITION STATEMENT ON INTEGRATIVE LIGHTING - RECOMMENDING PROPER LIGHT AT THE PROPER TIME, 3RD EDITION

DOI: 10.25039/PS.b2twa77g

Knowledge about the effects of light on human health, behaviour, and well-being is advancing rapidly, as is interest in applying this knowledge in lighting technologies and practice.

This CIE Position Statement is the third edition on this topic, updating its 2019 predecessor to incorporate the recommendations from the Second International Workshop on Circadian and Neurophysiological Photoreception (held in Manchester, UK, in 2019). Following the 2024 publication of a CIE Technical Note documenting the workshop deliberations, this Position Statement summarizes the workshop recommendations and outlines further questions that remain before these can be fully integrated into general lighting recommendations. The CIE Position Statement reaffirms that research and application intended to consider integrative lighting should incorporate the CIE system for metrology of ipRGC-influenced effects of light (CIE S 026:2018). Finally, this updated CIE Position Statement concludes with a commitment to join an international effort to develop communications for the general public to inform individuals about how to use the currently-available knowledge about light and darkness for their personal health and well-being.

Key take-away points from this Position Statement are:

- Good lighting quality balances human well-being, health, and functioning to achieve integrative lighting, while
  also respecting energy, environmental, and architectural considerations.
- Characterizing light for integrative effects should follow CIE S 026:2018, CIE System for Metrology of Optical Radiation for ipRGC-Influenced Responses to Light.
- International experts meeting in Manchester, UK, proposed guidance for a healthy pattern of daily light
  exposure for healthy young adults that recommends a high light exposure during the day, a much lower level
  for 3 hours before bed, and near-darkness during sleep.
- Applying these recommendations in order to deliver high-quality integrative lighting will require careful
  design attention to prevent glare and manage lighting energy use, among other considerations.
- Enough is known today about lighting for health to provide general guidance to the public, which the CIE will
  provide together with other international partners in the coming months.

The full document of this CIE Position Statement can be viewed and downloaded here.

#### CIE PS 002:2025 CIE POSITION STATEMENT ON COLOUR QUALITY METRICS, 2ND EDITION

#### DOI

10.25039/PS.6qdfenyc

Characterizing white light sources for their colour rendering capabilities began in the 1960s, but both light sources and colour science have advanced considerably since then.

This CIE Position Statement (PS) is the second edition on this topic, updating its 2015 predecessor.

Key take-away points from this Position Statement are described below:

- The CIE General Colour Fidelity Index (R<sub>f</sub>) was developed in 2017 to remedy previously identified technical problems with the CIE General Colour Rendering Index (R<sub>a</sub>).
- At the time, the writers of CIE 224:2017 CIE 2017 Colour Fidelity Index for accurate scientific use recommended that the new metric be used for scientific purposes rather than industrial applications.
- The new metric,  $R_f$ , has been used extensively with no evidence emerging to contradict its use.
- The CIE recommends that the lighting community begin to adopt the CIE General Colour Fidelity Index,  $R_f$ , and to replace the CIE General Colour Rendering Index in relevant regulations, specifications, and standards.
- In the interests of an orderly transition, the CIE recommends that both metrics be reported in parallel until the new metric is widely established.
- A complete understanding of colour quality will require the development of additional new metrics for colour preference. This work is ongoing.

The full document of this CIE Position Statement can be viewed and downloaded here.

#### **Our activities**



Supporting science, promoting discussion and information exchange – conferences, workshops, symposia, tutorials

Promoting consensus within our scope with publications – technical reports, international standards – which are extensively reviewed and revised prior to approval to publish





## MIDTERM MEETING VIENNA, AUSTRIA

CIE2025 July 4-11, 2025







## UNDERSTANDING SCIENCE UNDERSTANDING LIGHT

Featuring the topics:
Light Pollution | Light and Health



Events in 2025 and 2026

Public lectures start now!

#### **Project Partners**



















## Introducing our speaker: Dr. Manuel Spitschan



Assistant Professor of Chronobiology & Health at the TUM School of Medicine and Health, Technical University of Munich

Research Group Leader at the Max Planck Institute for Biological Cybernetics, Tuebingen

Convenor of the Ladenburg Roundtable on Light and Health

Leader in scientific societies including the CIE

If you have any questions, please enter them in the Q&A rather than the chat. At the end, you can also raise your hand to ask a question.







International Commission on Illumination Commission Internationale de l'Eclairage Internationale Beleuchtungskommission

## THANK YOU!

Register for our newsletter
Follow us on LinkedIn
Visit CIE webshop



