



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

---

**PRESS RELEASE**

**December 2018**

---

**CIE International Standard  
S 026/E:2018**

**CIE System for Metrology of Optical Radiation  
for ipRGC-Influenced Responses to Light**

**Système CIE de métrologie des rayonnements optiques dédié à la réponse à la  
lumière des cellules ganglionnaires photosensibles de la rétine (ipRGC)**

**CIE-System für die Metrologie optischer Strahlung für ipRGC-beeinflusste Antworten  
auf Licht**

This International Standard defines spectral sensitivity functions, quantities and metrics to describe the ability of optical radiation to stimulate each of the five photoreceptor types that can contribute, via the melanopsin-containing intrinsically-photosensitive retinal ganglion cells (ipRGCs), to retina-mediated non-visual effects of light in humans. The document is applicable to visible optical radiation in the wavelength range from 380 nm to 780 nm. In addition, the document includes information concerning the effects of age and field of view (FOV) when quantifying retinal photoreceptor stimulation for ipRGC-influenced responses to light (IIL responses).

The document does not give complete information for particular lighting applications, or for the quantitative prediction of IIL responses.

The document is not intended for colorimetric contexts, nor does it address health or safety issues such as those resulting from light treatment, flicker or photobiological safety and only relates to retinal photoreception.

Tables of the data of the action spectra of the five photoreceptor types defined in this document are made electronically available for purchasers of this publication via a respective download link.

This International Standard has been approved by the CIE National Committees. The document is readily available from the [CIE Webshop](#) or from the National Committees of the CIE.

The price of this publication is EUR 162,- (Members of the National Committees of the CIE receive a 66,7 % discount on this price).