



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

PRESS RELEASE

December 2020

Photometry of Curved and Flexible OLED and LED Sources

CIE 242:2020

ISBN 978-3-902842-91-6

DOI: 10.25039/TR.242.2020

The development trend for high-tech products is towards the capability of flexibility, for example flexible lighting, displays, cell phones, batteries, sensors, memory, solar cells. Flexible products can be light, thin, break-resistant, and offer more creative freedom for the designer. It is not only for fun and fashion, but also because flexible products are practical. For instance, rollable displays can reduce the limitations of space and add further convenience for portable digital electronic products. As it is thin and light, flexible lighting can be integrated with clothes to increase safety at night. Flexible sources also allow greater variety in lighting design. Due to their power to enrich our life, more and more research institutes are working on developing flexible materials and products. As flexible products become more common, measurement research is needed to support the industry.

The report describes the methods of measuring photometric and colorimetric quantities for curved sources and gives guidance for the determination of measurement uncertainties. The measurement quantities include luminance, luminous flux, colour, reflectance, and viewing angle.

The publication is written in English, with a short summary in French and German. It consists of 72 pages with 47 figures and 10 tables and is readily available from the [CIE Webshop](#) or from the National Committees of the CIE.

The price of this publication is EUR 108,- (Members of a National Committee of the CIE receive a 66,7 % discount on this price – please approach your NC for information on accessing this discount).