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

PRESS RELEASE

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Joint ISO/CIE Draft International Standard
ISO/CIE DIS 11664-2:2020

Colorimetry – Part 2: CIE standard illuminants

This document was prepared by the International Commission on Illumination (CIE) in cooperation with Technical Committee ISO/TC 274, *Light and lighting*.

This Draft International Standard is a revision of ISO 11664-2:2007 | CIE S 014-2:2006. It will cancel and replace ISO 11664-2:2007 | CIE S 014-2:2006 and will become the first edition of ISO/CIE 11664-2. The document has been technically and editorially revised as per current ISO and CIE rules and the references have been updated.

You can comment on this Draft International Standard by contacting your National Committee.

The document defines the following three standard illuminants.

a) CIE standard illuminant A

CIE standard illuminant A is intended to represent typical tungsten-filament lighting. Its relative spectral power distribution is that of a Planckian radiator at a temperature of approximately 2 856 K. CIE standard illuminant A should be used in all applications of colorimetry involving the use of incandescent lighting, unless there are specific reasons for using a different illuminant. CIE standard illuminant A is used in photometry as primary reference spectrum for the calibration of photometric devices.

b) CIE standard illuminant D65

CIE standard illuminant D65 is intended to represent average daylight having a correlated colour temperature of approximately 6 500 K. CIE standard illuminant D65 should be used in all colorimetric calculations requiring representative outdoor daylight, unless there are specific reasons for using a different spectral power distribution. Variations in the relative spectral power distribution of daylight are known to occur, particularly in the ultraviolet spectral region, as a function of season, time of day, and geographic location. However, CIE standard illuminant D65 is used pending the availability of additional information on these variations.

c) CIE standard illuminant D50

CIE standard illuminant D50 is intended to represent daylight with a correlated colour temperature of approximately 5 000 K. CIE standard illuminant D50 should be used in colorimetric calculations where the use of such a correlated colour temperature is intended.

Values for the relative spectral power distribution of CIE standard illuminants A, D65 and D50 are given in this document at 1 nm intervals from 300 nm to 830 nm.

The publication is written in English. It consists of 15 pages and is readily available from the CIE Webshop or from the National Committees of the CIE.

The price of this publication is EUR 48,- (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).