

INTERNATIONAL STANDARD

ISO
10526
CIE S 005

Second edition
1999-06-01

CIE standard illuminants for colorimetry

Illuminants colorimétriques normalisés CIE



Reference number
ISO 10526:1999(E)
CIE S 005:1998
© ISO 1999
AVA Documents
Document Sharing Hub

© ISO 1999

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet iso@iso.ch

Printed in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standard ISO 10526 was prepared as Standard CIE S 005 by the International Commission on Illumination, which has been recognized by the ISO Council as an international standardizing body. It was adopted by ISO under a special procedure which requires approval by at least 75 % of the member bodies casting a vote, and is published as a joint ISO/CIE edition.

The International Commission on Illumination (abbreviated as CIE from its French title) is an organization devoted to international cooperation and exchange of information among its member countries on all matters relating to the science and art of lighting.

International Standard ISO 10526 was prepared by Technical Committee 2-33 (Rationalisation of CIE Standard Illuminants A and D65) of the CIE.

This second edition cancels and replaces the first edition (ISO 10526:1991), of which it constitutes a technical revision.



ISO 10526:1999(E)

CIE S 005/E

Standard

CIE Standard Illuminants for Colorimetry

Illuminants colorimétriques normalisés CIE
CIE Normlichtarten für Farbmessung

CIE Standards are copyrighted and shall not be reproduced in any form, entirely or partly, without the explicit agreement of the CIE.

CIE Central Bureau, Vienna
Kegelgasse 27, A-1030 Vienna, Austria

S 005/E-1998

UDC: 535.65:006
535.643.2

Descriptor: Standardisation of colour measurement
Standard colorimetric system

Foreword

This CIE Standard has been prepared by CIE Technical Committee 2-33, "Rationalisation of CIE Standard Illuminants A and D65"*, and was approved by the CIE Board of Administration and the National Committees of the CIE.

The numerical values of the relative spectral distributions of standard illuminants A and D65 defined by this Standard are the same, within an accuracy of six significant digits, as those defined in earlier versions of these illuminants.

Standards produced by the CIE are concise documentation of data, defining aspects of light and lighting for which international harmony requires a unique definition. As such, CIE Standards are a primary source of internationally accepted and agreed data that can be taken, essentially unaltered, into universal standard systems.

CIE Standard Illuminants for Colorimetry

Contents

1.	Scope	1
2.	Normative references	1
3.	Definitions	2
4.	CIE standard illuminant A	3
	4.1 Definition	3
	4.2 Theoretical basis	4
	4.3 Supplementary notes	4
5.	CIE standard illuminant D65	5
	5.1 Definition	5
	5.2 Experimental basis	5
	5.3 Correlated colour temperature	5
6.	CIE standard sources for producing CIE standard illuminants	5
	6.1 CIE source A	5
	6.2 Source for CIE standard illuminant D65	6
7.	Bibliography	6
TABLE 1.	Relative spectral power distribution of CIE standard illuminants A and D65	7

*) Chairman of this TC was K. D. Mielenz (US), members were: J. J. Hsia (US), J. R. Moore (GB), A. R. Robertson (CA), H. Terstiege (DE), J. F. Verrill (GB).

© CIE, 1998