



SLOVENSKI STANDARD

SIST EN 61966-9:2003

01-december-2003

Multimedia systems and equipment - Colour measurement and management - Part 9: Digital cameras (IEC 61966-9:2000)

Multimedia systems and equipment - Colour measurement and management -- Part 9: Digital cameras

Multimediasysteme und -geräte - Farbmessung und Farbmanagement -- Teil 9: Digitale Kameras

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Systèmes et appareils multimédia - Mesure et gestion de la couleur -- Partie 9: Appareils numériques de prise de vue

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Ta slovenski standard je istoveten z: EN 61966-9:2000

ICS:

17.180.20	Barve in merjenje svetlobe	Colours and measurement of light
33.160.40	Video sistemi	Video systems
37.040.10	Fotografska oprema. Projektorji	Photographic equipment. Projectors

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EUROPEAN STANDARD

EN 61966-9

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2000

ICS 33.160.60; 35.040; 37.040

English version

**Multimedia systems and equipment -
Colour measurement and management
Part 9: Digital cameras
(IEC 61966-9:2000)**

Systemes et appareils multimédia -
Mesure et gestion de la couleur
Partie 9: Appareils numériques de
prise de vue
(CEI 61966-9:2000)

Multimediasysteme und -geräte -
Farbmessung und Farbmanagement
Teil 9: Digitale Kameras
(IEC 61966-9:2000)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 100/130/FDIS, future edition 1 of IEC 61966-9, prepared by IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61966-9 on 2000-08-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2001-05-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2003-08-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A, D and ZA are normative and annexes B, C and E are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61966-9:2000 was approved by CENELEC as a European Standard without any modification. (standards.iteh.ai)

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-845	1987	International Electrotechnical Vocabulary (IEV) Chapter 845: Lighting	-	-
IEC 61146-1	1994	Video cameras (PAL/SECAM/NTSC) - Methods of measurement Part 1: Non-broadcast single-sensor cameras	EN 61146-1	1996
IEC 61966-2-1	1999	Multimedia systems and equipment - Colour measurement and management Part 2-1: Colour management - Default RGB colour space - sRGB	EN 61966-2-1	2000
ISO/CIE 10527	1991	CIE standard colorimetric observers	-	-
CIE 15.2	1986	Colorimetry	-	-
ISO 2813 + corr.1	1994 1997	Paints and varnishes - Determination of specular gloss of non-metallic paint films at 20 degrees, 60 degrees and 85 degrees	EN ISO 2813	1999

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**NORME
INTERNATIONALE
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STANDARD**

**CEI
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61966-9

Première édition
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2000-06

**Systèmes et appareils multimédia –
Mesure et gestion de la couleur –**

**Partie 9:
Appareils numériques de prise de vue**

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**Multimedia systems and equipment –
Colour measurement and management –**

**Part 9:
Digital cameras**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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CONTENTS

	Page
FOREWORD	7
Clause	
1 Scope	11
2 Normative references	11
3 Terms and definitions	13
4 Conditions	13
4.1 Environmental conditions	13
4.2 Conditions of measurements	15
4.2.1 Measurement arrangement	15
4.2.2 Illumination	15
4.2.3 Shooting conditions	17
4.2.4 Digital image data	17
5 Measurement equipment	17
5.1 Spectral light source	17
5.2 Colour temperature conversion filter	19
5.3 Dark box	19
5.4 Test charts	21
5.5 Radiance meter	25
5.6 Spectroradiometer	27
5.7 Luminance meter	27
6 Tone characteristics	27
6.1 Characteristics to be measured	27
6.2 Measurement conditions	27
6.3 Method of measurement	29
6.4 Presentation of results	29
7 Spectral responsivity characteristics	33
7.1 Characteristics to be measured	33
7.2 Measurement conditions	33
7.3 Method of measurement	33
7.4 Presentation of results	35
8 Spectral distribution of built-in electronic flash	39
8.1 Characteristics to be measured	39
8.2 Measurement conditions	39
8.3 Method of measurement	39
8.4 Presentation of results	39
9 Spatial non-uniformity	41
9.1 Characteristics to be measured	41
9.2 Measurement conditions	41
9.3 Method of measurement	41
9.4 Presentation of results	43

	Page
Annex A (normative) Letters and symbols	47
Annex B (informative) Procedure to calculate the inverse function.....	49
Annex C (informative) An example use of the reported results for colour management	51
C.1 Introduction	51
C.2 Colorimetric characteristics of the sRGB colour space	51
C.3 Colour control for digital cameras	51
C.3.1 Matching tone characteristics to the sRGB	51
C.3.2 Colorimetric match to the sRGB	55
C.3.3 Transformation from image data of digital cameras to the data in sRGB colour space	57
Annex D (normative) Method to compensate spectral responsivity characteristics at the neutral point	59
Annex E (informative) Automated extraction of data from the test chart image	61
E.1 Introduction	61
E.2 Horizontal image shift	63
E.3 Vertical image shift	63
E.4 Image rotation	63
E.5 Image magnification	63
Bibliography	65
Figure 1 – Equipment arrangement for measurements	15
Figure 2 – Dark box	19
Figure 3 – Test chart 1	21
Figure 4 – Test chart 2 with replaceable chip <i>i</i>	23
Figure 5 – Test chart 3	23
Figure 6 – An example plot of tone characteristics (correlated colour temperature: 5 500 K)	31
Figure 7 – An example of spectral responsivity characteristics (correlated colour temperature: 5 500 K)	37
Figure 8 – An example of the spectral distribution characteristics of a built-in electronic flash	41
Figure 9 – Equipment arrangement for measurement of spatial non-uniformity	43
Figure C.1 – Example of tuning tone characteristics to that of sRGB.	53
Figure C.2 – An example of spectral responsivity controlled to approximate the ideal sRGB characteristics superimposed as the broken curves.....	57
Figure E.1 – An example to compare a typical optical viewfinder area and the corresponding image sensible area (outer rectangle)	61
Figure E.2 – Test chart with extended orientation markers	61
Table 1 – Nominal reflectances of the grey scale section and the grey chips	25
Table 2 – An example of tone characteristics (correlated colour temperature: 5 500 K).....	31
Table 3 – An example of reporting form for spatial non-uniformity	45

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SIST EN 61966-9:2003
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MULTIMEDIA SYSTEMS AND EQUIPMENT –
COLOUR MEASUREMENT AND MANAGEMENT –

Part 9: Digital cameras

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this international standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61966-9 has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

This bilingual version (2001) replaces the English version.

The text of this standard is based on the following documents:

FDIS	Report on voting
100/130/FDIS	100/151/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

Annexes A and D form integral parts of this standard.

Annexes B, C and E are for information only.

IEC 61966 consists of the following parts, under the general title: *Multimedia systems and equipment – Colour measurement and management*:

- Part 1: General
- Part 2-0: Colour management
- Part 2-1: Colour management – Default RGB colour space – sRGB
- Part 2-2: Colour management – Extended RGB colour space – sRGB64
- Part 3: Equipment using cathode ray tubes
- Part 4: Equipment using liquid crystal display panels
- Part 5: Equipment using plasma display panels
- Part 6: Equipment for use on digital data projections
- Part 7-1: Colour printers – Reflective prints – RGB inputs
- Part 7-2: Colour printers – Reflective prints – CMYK inputs
- Part 7-3: Colour printers – Transparent prints
- Part 8: Multimedia colour scanners
- Part 9: Digital cameras
- Part 10: Quality assessment – Colour image in network systems
- Part 11: Quality assessment – Impaired video in network systems

The committee has decided that the contents of this publication will remain unchanged until 2003. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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MULTIMEDIA SYSTEMS AND EQUIPMENT – COLOUR MEASUREMENT AND MANAGEMENT –

Part 9: Digital cameras

1 Scope

This part of IEC 61966 is applicable to the assessment of colour reproduction of digital cameras used in open computer systems and similar applications.

A series of methods and parameters for colour measurements and management for use in multimedia systems and equipment is applicable to the assessment of colour reproduction.

Part 9 deals with digital cameras to capture colour still images and moving images for use in multimedia applications.

The methods of measurement standardized in this part are designed to make possible the objective performance assessment and characterization of colour reproduction of digital cameras which can capture colour still and moving images, and output colour information corresponding to red – green – blue digital image data. The measured results are intended to be used for the purpose of colour management in multimedia systems, typically in the Internet.

This part of IEC 61966 defines test charts, measurement conditions and methods of measurement, so as to make possible the colour management in open multimedia systems and comprehensive comparison of the results of measurements for assessment of digital cameras.

Colour control within digital cameras is out of the scope of this part. It does not specify limiting values for various parameters.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61966. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61966 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60050(845):1987, *International Electrotechnical Vocabulary (IEV) – Chapter 845: Lighting/*
CIE 17.4: 1987, *International lighting vocabulary.*

IEC 61146-1:1994, *Video cameras (PAL/SECAM/NTSC) – Methods of measurement – Part 1: Non-broadcast single-sensor cameras*