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Multimedia systems and equipment – Colour measurement and management –

Part 9: Digital cameras

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

Partie 9: Appareils numériques de prise de vue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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MULTIMEDIA SYSTEMS AND EQUIPMENT – COLOUR MEASUREMENT AND MANAGEMENT –

Part 9: Digital cameras

FOREWORD

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

This second edition cancels and replaces the first edition published in 2000. This edition includes the following significant technical changes from the previous edition.

a) In the light of issuing IEC 61966-2-2, the relevant reference IEC 61966-2-1 in Annex C has been replaced by IEC 61966-2-2 together with sRGB by scRGB.

b) The previous Annex C has been replaced by the new Annex C where the previous Figure C.1 has been deleted.

The text of this standard was submitted to the national committees for voting under the Fast Track Procedure as the following documents:

CDV	Report on voting
100/666/CDV	100/722/RVC

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 2.

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 – scRGB
– Part 3: Equipment using cathode ray tubes
– Part 4: Equipment using liquid crystal display panels
– Part 5: Equipment using plasma display panels
– Part 6: Front projection displays
– Part 7-1: Colour printers – Reflective prints – RGB inputs
– Part 7-2: Colour printers – Reflective prints – CMYK inputs
– 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 2008. At this date, the publication will be

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- withdrawn;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

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.

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

The methods of measurement standardized in this standard are designed to make possible the objective performance assessment and characterization of the 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 standard 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 outwith the scope of this part. It does not specify limiting values for various parameters.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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*

IEC 61966-2-1:1999, *Multimedia systems and equipment – Colour measurement and management – Part 2-1: Colour management – Default RGB colour space – sRGB*

ISO 2813:1994, *Paints and varnishes – Determination of specular gloss of non-metallic paint films at 20 degrees, 60 degrees and 85 degrees*

ISO/CIE 10527:1991, *CIE standard colorimetric observers*

CIE 17.4:1987, *International lighting vocabulary*