

INTERNATIONAL
STANDARD

ISO
6036

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**Cinematography — Colour motion-picture
prints and slides for television — Density
specifications**

*Cinématographie — Copies et diapositives cinématographiques couleur
pour la télévision — Spécifications des densités*



Reference number
ISO 6036:1996(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 6036 was prepared by Technical Committee ISO/TC 36, *Cinematography*.

Annexes A and B of this International Standard are for information only.

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Cinematography — Colour motion-picture prints and slides for television — Density specifications

1 Scope

This International Standard specifies principal density values for colour 16 mm and 35 mm motion-picture prints and slides intended for television transmission.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 5-2:1991, *Photography — Density measurements — Part 2: Geometric conditions for transmission density*.

ISO 5-3:1995, *Photography — Density measurements — Part 3: Spectral conditions*.

3 Density requirements

3.1 The method of density measurement and the spectral quality of the densitometer shall conform to ISO 5-2 and ISO 5-3 respectively for ISO standard diffuse visual density.

3.2 The density corresponding to television white level shall be equivalent to 0,25 to 0,4 neutral density, including base density. This value is not intended to apply to specular highlights and other small areas where details need not be reproduced.

NOTE 1 For films intended for direct projection, minimum densities depend upon the gray-scale characteristics of the film system used.

3.3 The maximum density of a film print is determined by the scene contrast and the film transfer characteristics. Shadow areas in which pictorial details are not present and in which the reproduction of detail is not essential to the picture may have densities in the range of 2,0 to 2,75, but it shall be recognized that, in such areas, both image gradation and colour may be distorted or lost entirely. The density range for optimum colour reproduction is expected to be between 0,4 and 2,0.

Annex A (informative)

Additional data

Television white level normally corresponds to a fully lit object in the scene, having a reflectance of about 60 % to 70 %. This results in the reproduction of fully lit human faces which have reflectances of 35 % to 15 % at film densities 0,2 to 0,5 greater than the density corresponding to television white level.

Annex B
(informative)

Bibliography

- [1] ISO 2910:1990, *Cinematography — Screen luminance for the projection of motion-picture films in indoor theatres.*
- [2] ISO 6035:1983, *Cinematography — Viewing conditions for the evaluation of films and slides for television — Colours, luminances and dimensions.*

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Descriptors: cinematography, colour television, colour photography, motion-picture film, motion-picture film 16 mm, motion-picture film 35 mm, film slides, specifications, optical density.

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