INTERNATIONAL STANDARD 2910

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Cinematography — Screen luminance for the projection of motion-picture films in indoor theatres

Cinématographie — Luminance des écrans de projection dans les salles d'exploitation

First edition — 1974-11-01

UDC 778.55 : 725.824.053.6 : 535.88

Ref. No. ISO 2910-1974 (E)

Descriptors : cinematography, screens (display), luminance, specification.

Price based on 1 page

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2910 was drawn up by Technical Committee ISO/TC 36, *Cinematography*, and circulated to the Member Bodies in August 1972.

It has been approved by the Member Bodies of the following countries :

Australia	India	Sweden
Austria	Italy	Switzerland
Belgium	Japan	Thailand
Czechoslovakia	Netherlands	United Kingdom
Egypt, Arab Rep. of	New Zealand	U.S.S.R.
France	Romania	
Germany	South Africa, Rep. of	

The Member Bodies of the following countries expressed disapproval of the document on technical grounds :

Canada
U.S.A.

Printed in Switzerland

Cinematography — Screen luminance for the projection of motion-picture films in indoor theatres

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the luminance and the distribution of luminance of screens for viewing projected motion-picture films in indoor theatres. It is not the intent of this International Standard to include the projection of 8 mm (Type S or Type R) motion-picture prints in indoor theatres.

2 REFERENCES

ISO 2895, *Cinematography — Screen luminance for review room projection of motion-picture films intended for indoor theatres.*[1)]

ISO . . . , *Cinematography — Stray light in motion-picture theatres and review rooms.*[2)]

3 MEASUREMENT OF LUMINANCE

3.1 The luminances specified are measured with the projector operating at normal projection speed without film in the gate.

3.2 The screen luminance shall be measured with a photometer having an acceptance angle not greater than 2° (recommended value 1,5°) and having the spectral sensitivity of a Standard Observer agreed to by the International Commission on Illumination in 1924 and adopted in 1933 by the International Committee of Weights and Measures.

3.3 The measurements shall be taken with the photometer located at approximately 1 m above the floor at two points on a transverse line across the theatre at a position two-thirds of the distance from the screen to the back row of seats (measured from the screen), and at a distance of one-half the screen width to each side of the longitudinal axis of the theatre.

4 LUMINANCE LEVEL

The luminance measured at the centre of the screen (see 3.3) shall be $40 \begin{smallmatrix} +25 \\ -10 \end{smallmatrix}$ cd/m²* ($11.7 \begin{smallmatrix} +7.3 \\ -2.9 \end{smallmatrix}$ ftL).

It is recommended that projectors in the same theatre be balanced with regard to spectral and photometric characteristics.

NOTES

1 In the case of 16 mm film, the luminance of the screen may be reduced to a minimum of 25 cd/m² (7.3 ftL).

2 In the case of 70 mm film, the luminance of the screen may be increased to a maximum of 100 cd/m² (29.2 ftL).

5 LUMINANCE DISTRIBUTION

The luminance measured on the horizontal centre line of the screen at a distance from the screen edges equal to 10 % of the width of the screen, when measured from the two points specified in 3.3, shall be at least 50 % and not more than 85 % of the luminance measured at the centre, the recommended value being 70 %.

1) At present at the stage of draft.

2) In preparation.

* The name nit has been used for this unit.