International Standard 1189

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

Cinematography — Recorded characteristic for magnetic sound records on 35 mm motion-picture film excluding striped release prints — Specifications

Cinématographie — Caractéristique d'enregistrement magnétique sur film cinématographique 35 mm *à l'exclusion des copies d'exploitation comportant une piste magnétique d'enregistrement*

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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.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 1189 was prepared by Technical Committee ISO/TC 36, *Cinematography*.

This second edition cancels and replaces the first edition (ISO 1189-1975), of which it constitutes a technical revision.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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INTERNATIONAL STANDARD ISO 1189-1986 (E)

Cinematography — Recorded characteristic for magnetic sound records on 35 mm motion-picture film excluding striped release prints — Specifications

1 Scope and field of application

This International Standard specifies the recorded characteristic for magnetic sound records on 35 mm motion-picture film excluding striped release prints when used at the nominal speed of 24 frames (45,6 cm or 18 in) per second or 25 frames (47,5 cm or 18.7 in) per second.

NOTE — This International Standard and relevant portions of Recommendation No. 265-2 of the CCIR have substantially the same technical content.

2 Recorded characteristic

2.1 With constant sine-wave signal applied to the input of the recording system, the nominal characteristic of the short circuit magnetic flux versus frequency shall fall with increasing frequency in conformity with the impedance of a parallel combination of a capacitance and resistance having a time constant $t = 35$ µs.

The curve defined above is represented by

$$L \text{ (in decibels)} = L_0 - 10 \lg (1 + 4 \pi^2 f^2 t^2)$$

where

f is the frequency, in hertz;

t is the time constant, in seconds;

L_0 is a constant calculated to make $L = 0$ at the reference frequency of 1 kHz ($L_0 = 0{,}205$).

The approximate numerical values are given in the table.

Table

Frequency Hz	L dB
40	+ 0,20
50	+ 0,20
63	+ 0,20
80	+ 0,20
100	+ 0,20
125	+ 0,20
160	+ 0,20
200	+ 0,20
250	+ 0,19
315	+ 0,18
400	+ 0,17
500	+ 0,15
630	+ 0,12
800	+ 0,07
1 000	0,00
1 250	− 0,11
1 600	− 0,30
2 000	− 0,56
2 500	− 0,94
3 150	− 1,50
4 000	− 2,28
5 000	− 3,24
6 300	− 4,45
8 000	− 5,92
10 000	− 7,46
12 500	− 9,12
14 000	− 10,00
16 000	− 11,06

2.2 The corresponding reproducing characteristic is that which gives a flat response when reproducing a sound track recorded with the relative short circuit flux levels stated in 2.1.

3 Tolerances

Magnetic sound records on 35 mm films shall be recorded to the characteristic specified in 2.1 within the tolerances given in the figure.

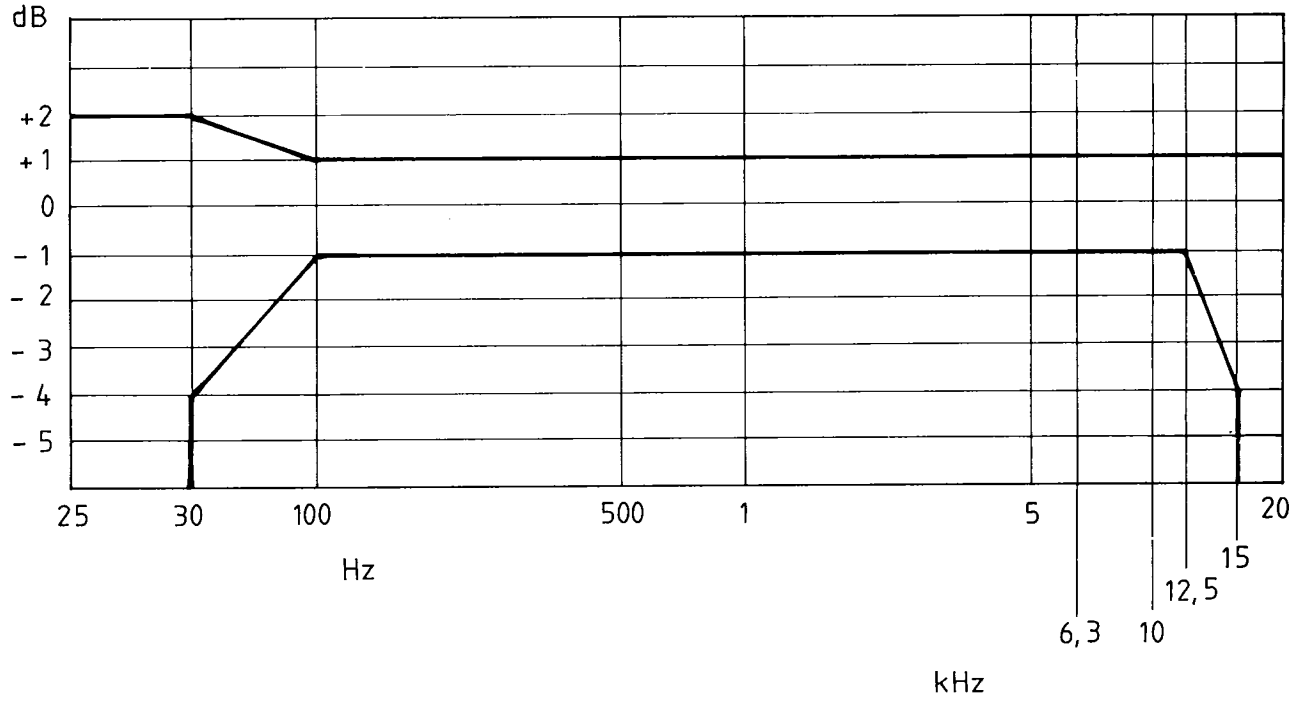

Figure — Tolerance on recorded levels