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The SMPTE Operations Manual for Standards states:

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>
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>
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A Stable document is "In Force", and not deprecated or withdrawn.

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Note:

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Stable documents may not adhere to the latest style and format of SMPTE documents, or to current usage of normative language. Suitable care should be taken in interpretation.

RP 97-2002
Revision of RP 97-1997

SMPTE RECOMMENDED PRACTICE

Specifications for Flutter Test Film for 35-mm Audio Reproducers, Photographic Type

1 Scope

This practice specifies a test film for determining the presence of flutter in 35-mm motion-picture photographic audio reproducers operating at 90 ft (27.4 m) per minute.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions in this practice. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below.

AES 6-1982, Method for Measurement of Weighted Peak Flutter of Sound Recording and Reproducing Equipment

ANSI/SMPTE 139-1996, Motion-Picture Film (35-mm) — Perforated KS

SMPTE 40-2002, Motion-Picture Film (35-mm) — Photographic Audio Records — Release Prints

SMPTE 223M-2001, Motion-Picture Film — Safety Film

3 Test film signal

3.1 Frequency

The audio record on the film shall reproduce at a frequency of 3150 Hz ± 25 Hz when the linear velocity of the film is 96 perforations per second or approximately 90 ft per minute (18 in or 45.7 cm per second).

3.2 Location and dimensions

The location and dimensions of the recorded audio record shall be in accordance with SMPTE 40.

3.3 Recording

The test film shall have an originally-recorded, variable-area audio track. The modulation of the recording shall be (80 ± 5)%. The output level of the film shall be constant within ± 1 dB.

3.4 Flutter

The weighted peak flutter of the audio record shall not exceed ± 0.05% when measured in accordance with AES 6.

Approved July 26, 2002

3.5 Azimuth

The azimuth of the audio record shall be 90° ± 5′ to the reference edge of the film.

4 Film stock

The film stock, preferably polyester, shall be splice-free safety type in compliance with SMPTE 223M, and cut and perforated in accordance with long-pitch dimensions specified in ANSI/SMPTE 139.

5 Identification

Each test film shall be identified by a suitable identification marking. The marking shall be printed lengthwise in the picture area and the spacing between consecutive titles shall be approximately 12 in (305 mm).