

Proposed American Standard
16mm 400-Cycle Signal-Level Test Film
(Third Draft)

PH22.45

Revision of Z22.45-1946

1. Scope

1.1 This standard specifies a 400-cycle signal-level test film for use in testing 16mm sound motion-picture projection equipment.

2. Test Film

2.1 The test film shall have an originally recorded, direct-playback, positive variable-area sound recording at an amplitude of 0.0480 ± 0.0015 in. Each film shall be measured for amplitude and the measurements shall be made at a point approximately mid-length of the film and at points between 5 ft and 10 ft from each end.

2.2 The frequency of the recording shall be 400 ± 8 cycles per sec.

2.3 The density of the dark portion of the sound track shall be between 1.2 and 1.4. The density throughout the length of the film shall be as uniform as is consistent with the state of the art.

2.4 The combined base and fog density shall be 0.05 ± 0.01 , measured as diffuse transmission density in accordance with American Standard Z38.2.5-1946, Diffuse Transmission Density, or the latest revision thereof approved by the American Standards Association, Incorporated.

2.5 The total harmonic distortion of the recording shall not exceed 5% and the fluctua-

tion of the recorded level shall not exceed 2%.

2.6 Each film shall be run in a standard calibrated reproducer for the purpose of obtaining the level of recording; this level shall be compared with that of the standard control film and the difference shall be noted in the booklet furnished with each film.

3. Film Stock

3.1 The film stock used shall be of the low-shrinkage, safety type, cut and perforated in accordance with American Standard PH22.12-1953, Dimensions for 16mm Film, Perforated One Edge, or the latest revision thereof approved by the American Standards Association, Incorporated.

4. Identification

4.1 Each film shall be marked **SMPTE — ASA — PH22.45 — 400-Cycle Signal Level**. This marking shall be printed lengthwise in the picture area, the spacing between consecutive titles to be approximately 12 in.

5. Film Length

5.1 The film shall be supplied in 100-ft lengths.

NOTE: A test film in accordance with this standard is available from the Society of Motion Picture and Television Engineers.

NOT APPROVED