

motion-picture standards

Proposed Revision of American Standard Z22.28-1946 PH22.28, Focal Lengths and Markings of 35mm Motion-Picture Projection Lenses

A proposed revision of American Standard Z22.28-1946 is published here for a three-month period of trial and criticism.

The first draft of the proposed revision of the 1946 standard was approved by the Film Projection Practice Committee in June 1954 and by the Standards Committee in August 1954, and was published for trial and comment in the September 1954 *Journal*. Three of the previous six specifications were eliminated from that draft because they were not considered prerequisites for interchangeability. These specifications dealt with the projection angle, the lens light path and the observation port. In February 1955, that proposal went to letter ballot of ASA Sectional Committee PH22. A number of negative votes and adverse comments there led to its return to the Film Projection Practice Committee for further work.

In February 1957, a new draft was approved by the Film Projection Practice Committee. This new draft differed from the previous one as follows:

1. Addition of a section defining the scope of the standard.
2. The increments in the focal length of lenses are specified for lenses only up to 7 in.
3. Addition of an Appendix to provide information with respect to the increments in the focal length of lenses over 7 in.
4. The specification on the marking of lenses has been made more general.
5. The specification of the height of the optical axis of the lens from the floor has been deleted for these reasons:
 - (a) It is only obliquely pertinent in a standard on lenses.
 - (b) It has real significance only when a projector is at 0° tilt, a condition rarely found in motion-picture theaters.

This draft was approved by the Standards Committee in April 1957 and is the one published here for comment. All comments should be sent to the Staff Engineer prior to August 15, 1957. If no adverse comments are received, the proposal will then be submitted to ASA Sectional Committee PH22 for further processing as an American Standard.—*Staff Engineer.*

Reaffirmation of American Standard

Z22.79-1950, 16mm Sound Projector Test Film, was reviewed by the 16mm and 8mm Committee, Standards Committee, PH22, and on December 12, 1956, it was reaffirmed without change by the ASA as PH22.79-1950. Copies of this standard are available at twenty-five cents each on order from the American Standards Association, Incorporated, 70 East 45 St., New York 17.

Proposed American Standard

Focal Lengths and Markings of 35mm Motion-Picture Projection Lenses

PH22.28

Revision of Z22.28-1946

1. Scope

1.1 This standard specifies for the lenses used in 35mm motion-picture projectors:

- (a) The increments in the focal length of up to 7-in. focal length lenses (see Appendix).
- (b) The permissive tolerance between actual and designated focal length.
- (c) The marking on the lenses.

2. Focal Length

2.1 The focal length shall increase in $\frac{1}{4}$ -in. steps up to 7 in. (see Appendix for increments above 7 in.).

2.2 The actual focal length shall not differ from the value marked on the lens by more than $\pm 1\%$.

3. Marking

3.1 The focal length of the lens shall be marked on the lens barrel.

APPENDIX

Practices on lenses greater than 7 in. in focal length differ with the different manufacturers. The increments are either $\frac{1}{4}$ -in. or $\frac{1}{2}$ -in. steps, depending on the manufacturer.

NOT APPROVED