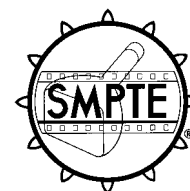


SMPTE RECOMMENDED PRACTICE

RP 110-1992

Revision of RP 110-1988

Specifications for an Alignment Test Film for Anamorphic Attachments to 35-mm Motion-Picture Projectors



Page 1 of 3 pages

1 Scope

This practice specifies a test film for the alignment of anamorphic attachments or lenses for 35-mm motion-picture projectors.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of 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 practice are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below.

ANSI/SMPTE 59-1991, Motion-Picture Film (35-mm)
— Camera Aperture Image and Usage

ANSI/SMPTE 139-1986(R1991), Motion-Picture Film
(35-mm) — Perforated KS

3 Test Pattern

3.1 A reproduction of the alignment chart is shown in figure 1.

3.2 A chart showing the dimensions as measured on the test film is shown in figure 2.

3.3 The lettering shall be bold and of a style and size shown in the figures.

3.4 The vertical lines shall be one-half as wide as the horizontal lines so that during projection they will appear to be the same width.

4 Test film

4.1 The test film shall be produced as a 35-mm print with white lines on a black background.

4.2 The test pattern shall be photographed and the center point positioned on the print as specified by style B in ANSI/SMPTE 59.

4.3 The prints shall be on motion-picture stock made in accordance with long-pitch dimensions specified in ANSI/SMPTE 139.

4.4 The emulsion position of the print shall be away from the projector lens for direct front projection.

4.5 The test film shall be supplied in an emulsion-in winding.

5 Densities

5.1 The black background shall have a neutral density greater than 1.9.

5.2 The density of the lines and lettering shall be below 0.3.

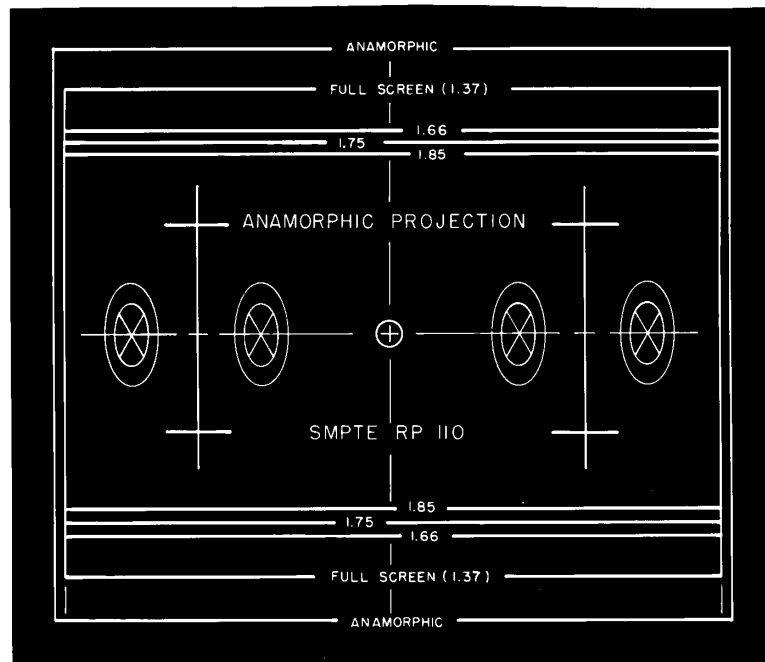


Figure 1 – Reproduction of test chart

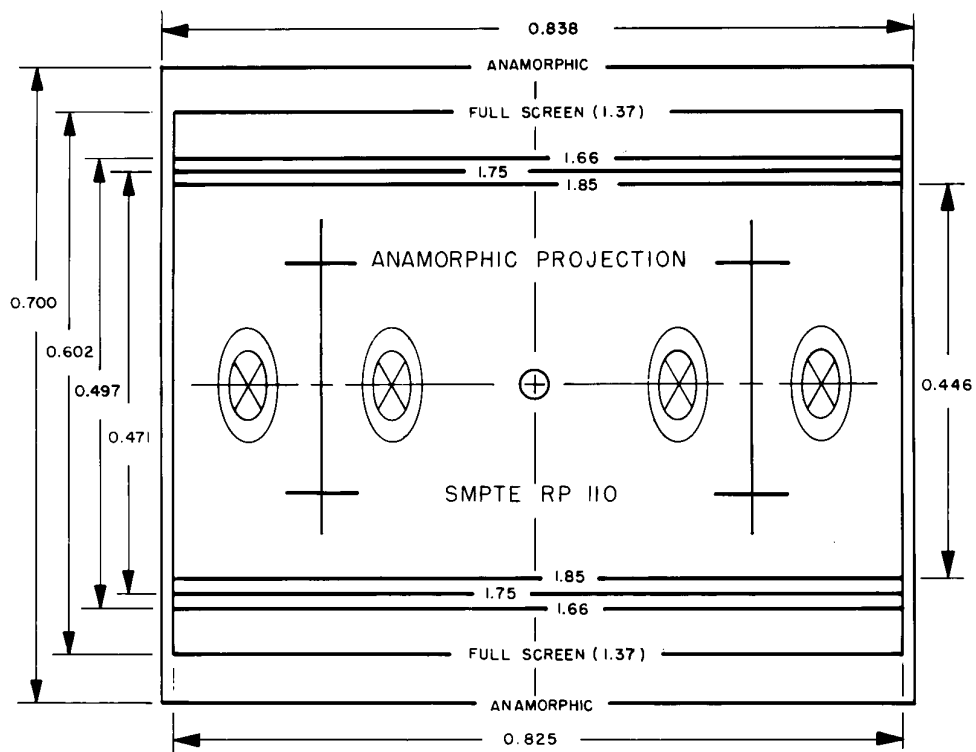


Figure 2 – Test chart dimensions

Annex A (informative)

Test pattern usage

The test pattern is used for checking:

(a) The area being projected. The horizontal lines designate the projectable image area documented in ANSI/SMPTE 195, permitting adjustment of the screen masking to the desired aspect ratio or judgment of how much image area is being lost outside the visible screen area.

(b) The alignment of the anamorphic attachment or lens. Anamorphic attachments and lenses for theatrical use are designed to expand the film image by 2X; consequently, the four circles at the sides should appear perfectly round and

the circle at the center should be an ellipse twice as wide as it is high.

By rotating the attachment, the crossed lines can be made to appear perpendicular to each other. If both the vertical and horizontal lines do not appear sharp, the projection distance scale must be adjusted. First use the focus knob so that the horizontal lines are very sharp. Then adjust the distance ring so that the vertical lines become as sharp as possible, and lock the distance ring. If the sharpness of the vertical lines changes when the distance ring is locked, repeat the sequence, starting with the focus knob.

Annex B (informative)

Bibliography

ANSI P H22.195-1984, Motion-Picture Film (35-mm) —
Projectable Image Area — Motion-Picture Prints