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>
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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.

SMPTE RECOMMENDED PRACTICE

RP 116-2000
Revision of RP 116-1995

Dimensions of Photographic Control and Data Record on 35-mm Motion-Picture Camera Negatives

1 Scope

This practice specifies the lateral location and dimensions of a photographic control and data record on 35-mm motion-picture camera negatives, the width scanned by the control and data recorder and reproducer, the camera aperture, and the reproducer spectral sensitivity.

2 Data record

2.1 The dimensions and lateral location of the control and data record shall be as specified in the figure and table.

2.2 The recording and reproducing slit images shall be positioned at an angle of 90° ± 1° to the reference edge of the film.

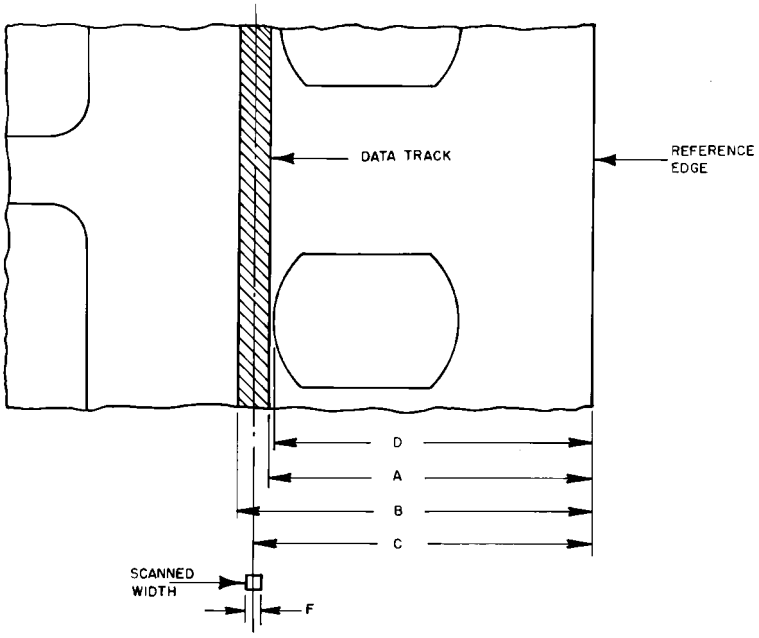

Figure 1 – Control and data record location

Table 1 – Specifications

Dimensions	Inches	Millimeters
A	0.191 ± 0.001	4.85 ± 0.03
B	0.211 ± 0.001	5.36 ± 0.03
C	0.201 ± 0.001	5.11 ± 0.03
D	0.189 ref	4.80 ref
F	0.005 ± 0.001	0.13 ± 0.03

Approved May 30, 2000

3 Camera aperture

Cameras intended for recording a control and data record must have a modified aperture which positions the picture edge next to the sound record area at 0.214 in (5.44 mm) minimum from the reference edge of the film. This is dimension D as specified in SMPTE 59.

4 Reproducer spectral sensitivity

The peak or maximum response of the combination of the control and data track reproducer, light source, filter, and receptor shall be at 550 nm + 130 nm – 0 nm. The integrated response of this combination to all wavelengths greater than 800 nm shall be less than 5% of the total integrated response measured from 400 nm to 800 nm.

Annex A (informative)
Spectral response

The spectral response specified in clause 4 is intended to ensure that the control and data track will be adequately reproduced whether the track image is formed of dyes, silver, or dyes and silver. Restriction of the infrared response is necessary because the dyes used in conventional color motion-picture films do not absorb infrared light effectively. Since dirt and scratches on the film will absorb infrared light, restriction of the infrared response will improve the signal-to-noise ratio of the system.

Annex B (informative)
Bibliography

SMPTE 59-1998, Motion-Picture Film (35-mm) — Camera Aperture Images and Usage