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# SMPTE STANDARD

**SMPTE 111-2001**Revision of  
ANSI/SMPTE 111-1996

## for Motion-Picture Film (35-mm) — Prints Made on Continuous Contact Printers — Exposed Areas for Picture and Audio



Page 1 of 3 pages

### 1 Scope

**1.1** This standard specifies the location and width dimensions of the exposed areas for picture and photographic audio on 35-mm motion-picture prints made on continuous contact printers.

**1.2** This standard is applicable to the printing of motion-picture raw stock which is cut and perforated in accordance with ANSI/SMPTE 139 or SMPTE 237.

**1.3** This standard refers to the adjustment of the printer, and is in accordance with ANSI/SMPTE 40.

### 2 Dimensions

The dimensions shall be as specified in the figures and tables.

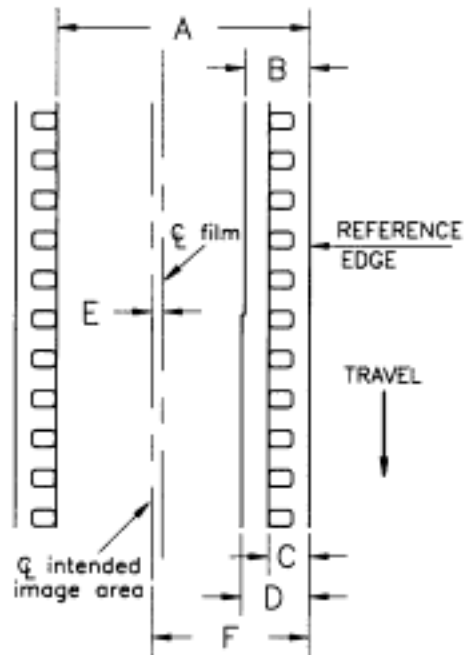
### 3 Additional exposed areas for photographic audio

It is recognized that some formats for photographic audio may require exposed areas in locations other than or in addition to those specified by dimensions C and D in figure 1 and table 1. Exposed areas for these formats are given in figure 2 and table 2.

#### NOTES

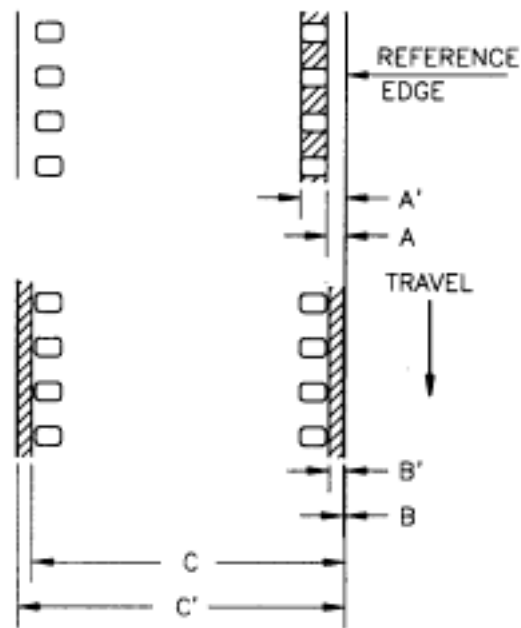
1 Dimension A minus B defines the width of the picture area exposed in accord with this standard, and dimension D minus C that of the sound track area. Thus, an overlap area ranging from 0.000 in to 0.008 in (0.00 mm to 0.20 mm) will receive exposure from both picture and sound printing apertures. In table 2, the dimensions given for a format define the width of the sound track area exposed for that format.

2 The centerline information (dimensions E and F) given in table 1 is provided as a convenient reference. These dimensions are specified in SMPTE 195.



AS SEEN FROM EMULSION SIDE OF PRINT

Figure 1 — Exposed areas for picture and sound



AS SEEN FROM EMULSION SIDE OF PRINT

Figure 2 – Additional exposed areas

Table 1 – Dimensions of exposed areas

Dimensions	Inches	Millimeters
A	1.184 ± 0.002	30.07 ± 0.05
B	0.304 ± 0.002	7.72 ± 0.05
C	0.192 ± 0.001	4.88 ± 0.03
D	0.308 ± 0.002	7.82 ± 0.05
E	0.050 nom	1.27 nom
F	0.738 nom	18.75 nom

Table 2 – Dimensions of additional exposed areas

Format	Dimensions	Inches	Millimeters
RP <sup>1)</sup>	A	0.078 ± 0.002	1.98 ± 0.05
	A'	0.188 ± 0.001	4.78 ± 0.03
RE <sup>2)</sup>	B	0.004 max	0.10 max
	B'	0.075 + 0.004 - 0.000	1.90 + 0.10 - 0.00
NRE <sup>3)</sup>	C	1.302 + 0.000 - 0.004	33.07 + 0.00 - 0.10
	C'	1.373 min	34.87 min

1)

RP = reference perforation

2)

RE = reference edge

3)

NRE = nonreference edge

**Annex A** (informative)

**Bibliography**

ANSI/SMPTE 40-1997, Motion-Picture Film (35-mm) —  
Release Prints — Photographic Audio Records

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

SMPTE 195-2000, Motion-Picture Film (35-mm) — Motion-  
Picture Prints — Projectable Image Area

SMPTE 237-1998, Motion-Picture Film (35-mm) — Perfo-  
rated DH-1870