

for Television — 35- and 16-mm Motion-Picture Film — Scanned Image Area



1 Scope

This standard specifies the size and location of that portion of 35- and 16-mm motion-picture film to be captured by a scanning device for 4:3 and 16:9 aspect ratio.

2 Normative references

The following standards contain provisions which, through reference in this standard, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below.

ANSI/SMPTE 201M-1996 (R2003), Motion-Picture Film (16-mm) — Type W Camera Aperture Image

SMPTE 7-2004, Motion-Picture Film (16-mm) — Camera Aperture Image and Usage

SMPTE 59-1998 (R2003), Motion-Picture Film (35-mm) — Camera Aperture Images and Usage

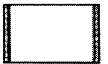
3 Television reproduction

3.1 Film prepared for television

Film prepared by conventional photographic techniques for television reproduction shall be in accordance with SMPTE 7, SMPTE 59, and ANSI/SMPTE 201M, which specify the location and size of the 16- and 35-mm camera exposed images. 3.2 Dimensions for television reproduction The telecine shall scan the areas given in tables 1 through 4. In the case of television display formats given as letterbox or sidebar, the center of the television scanned area (television production aperture), safe action area, and safe title area shall coincide with the centers given in the appropriate camera aperture documents.

In the case of television display formats given as full screen, the centers of the television scanned, safe action, and safe title areas may be jointly moved (panned) into the cropped area. Such movement shall not cause the scanned area (television production aperture) to move outside the extremes of the corresponding dimension given in the letterbox or sidebar display format for that film format.

Table 1 – 35-mm for 4:3 television
(for 4:3 nominal aspect ratio television reproduction of 35-mm motion-picture film)

Type 'A' Apertures (Academy) - Image Center 18.75mm								
Composed Aspect Ratio (See Note 5)	TV Display Mode	Intended TV Aspect Ratio	Image as mapped into 4:3	Scanned Area (mm)		Scanned Area (in.)		Notes
				Width	Height	Width	Height	
1.37	Full Screen	1.33		20.12	15.09	0.792	0.594	3
1.66	Full Screen	1.33		16.83	12.62	0.663	0.497	3
1.66	Letterbox	1.66		20.95	12.62	0.825	0.497	1,2
1.78	Full Screen	1.33		15.71	11.78	0.619	0.464	3
1.78	Letterbox	1.78		20.95	11.78	0.825	0.464	1,2
1.85	Full Screen	1.33		15.09	11.32	0.594	0.446	3
1.85	Letterbox	1.85		20.95	11.32	0.825	0.446	1,2



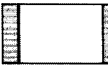
Cropped Area of the Film Image not displayed



Black area on the television display



Image Area on the Television display

Type 'B' Apertures (Academy) - Image Center 18.75mm								
Composed Aspect Ratio (See Note 5)	TV Display Mode	Intended TV Aspect Ratio	Image as mapped into 4:3	Scanned Area (mm)		Scanned Area (in.)		Notes
				Width	Height	Width	Height	
2.39	Full Screen	1.33		11.69	17.53	0.460	0.690	3,4
2.39	Letterbox	2.39		20.95	17.53	0.825	0.690	1,2,4



Cropped Area of the Film Image not displayed

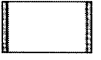
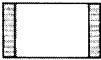


Black area on the television display



Image Area on the Television display

Table 1 (continued) – 35-mm for 4:3 television
(for 4:3 nominal aspect ratio television reproduction of 35-mm motion-picture film)

Type 'C' Apertures (Full) - Image Center 17.48mm								
Composed Aspect Ratio (See Note 5)	TV Display Mode	Intended TV Aspect Ratio	Image as mapped into 4:3	Scanned Area (mm)		Scanned Area (in.)		Notes
				Width	Height	Width	Height	
1.33	Full Screen	1.33		24.00	18.00	0.945	0.709	
1.66	Full Screen	1.33		19.28	14.46	0.759	0.569	3
1.66	Letterbox	1.66		24.00	14.46	0.945	0.569	1,2
1.78	Full Screen	1.33		18.00	13.50	0.709	0.531	3
1.78	Letterbox	1.78		24.00	13.50	0.945	0.531	1,2
1.85	Full Screen	1.33		17.29	12.97	0.680	0.511	3
1.85	Letterbox	1.85		24.00	12.97	0.945	0.511	1,2
2.39	Full Screen	1.33		13.39	10.04	0.527	0.395	3
2.39	Letterbox	2.39		24.00	10.04	0.945	0.395	1,2



Cropped Area of the Film Image not displayed



Black area on the television display



Image Area on the Television display

Type 'D' Apertures (3 Perf.) – Image Center 17.48mm								
Composed Aspect Ratio (See Note 5)	TV Display Mode	Intended TV Aspect Ratio	Image as mapped into 4:3	Scanned Area (mm)		Scanned Area (in.)		Notes
				Width	Height	Width	Height	
1.78	Full Screen	1.33		17.29	12.97	0.680	0.511	3,6
1.78	Letterbox	1.78		23.06	12.97	0.910	0.511	1,2,6



Cropped Area of the Film Image not displayed



Black area on the television display



Image Area on the Television display