

Lens Focal Length Comparison Chart

Horizontal Angle of View in Degrees <div>(1)</div>	High Def Formats		Film Formats			
	1.78 Ratio <div>(2)</div>		1.78, 1.85 & 2.40 Ratios <div>(5)</div>		2.20 Ratio	2.40 Ratio <div>(6)</div>
	2/3" Chip <div>(3)</div>	35 mm size Chip <div>(4)</div>	Super 16 mm.	Super 35 mm.	65 mm.	35 mm. Anamorphic
100		10mm		10mm		
90	5mm		6mm		24mm	20MM
80	6mm	14.5mm		14.5mm		
70	7mm	17.5mm	8mm	17.5mm	35mm	28mm
60	8mm	21mm	10mm	21mm	40mm	35mm
50	10mm	27mm	12mm	27mm	50mm	40mm
40	12mm	35mm	16mm	35mm	75mm	50mm
30	14mm	40mm		40mm		75mm
	20mm	50mm	25mm	50mm	100mm	
20	27mm	75mm	35mm	75mm	150mm	100mm
	35mm	100mm	50mm	100mm	200mm	135mm
10	50mm		85mm			

NOTES:

1. The Vertical Angle of View is found by dividing the Horizontal angle by the specific aspect ratio, i.e. 1.78.
2. This format is sometimes referred to as 1.77. The original patent called for a 1.78 ratio although the actual ratio is 1.778.
3. This size chip is used in the Panavision® and Sony® 24P camera as well as the SI-2K™ and the Thompson Viper™. This chip is about the same size as a Super 16 film frame.
4. This chip size allows a cinematographer to use lens focal lengths similar to those for 35mm film. Cameras with this size chip include the Panavision® Genesis™, The The Arriflex® D-21™, the Sony® F35™, the Dalsa® Origin™ and the RED™ camera. Unlike the Super 35mm format, there is some cropping of the frame width when shooting for a 1.85 or 2.4 ratio.
5. Only the vertical Angle of View is different in these formats. the overall frame width remains the same.
6. This aspect ratio is variably referred to as 2.35, 2.39 or 2.4. They are all referring to the same thing. It was 2.35 until 1970 and then changed to 2.4.