

Film & Sensor Formats

How Focal Length,
Depth of Field and
Diffraction are Affected

6x

4.8x

1.5x Digital SLR

35mm & "Full Frame" Digital SLR
(Physical size is approx. 1 x 1.5 inches)

645 Medium Format

Camera Type	Typical Crop Factor	Typical Zoom Lens	35mm Equivalent Focal Length	Typical Aperture	Depth of Field 50 ft @ f/8	Diffraction Ratio @ f/8	Diffraction Ratio @ min. aper.
Point-n-Shoot	6x	5.7 - 17.1	35 - 105	f/2.8 - 8 f/4.7 - 8	2.53 - Infinity 16.2 - Infinity	5.6 1.9	5.6 1.9
Adjustable Compact	4.8x	7.3 - 21.9	35 - 105	f/2.8 - 8 f/4.7 - 8	3.4 - Infinity 19.8 - Infinity	4.4 1.5	4.4 1.5
APS-C Digital SLR	1.5x	24 - 70	35 - 105	f/3.5 - 22 f/4.5 - 22	9.57 - Infinity 33.4 - 99.1	1.3 0.5	3.7 1.3
35mm / Full Frame	None	35 - 105	35 - 105	f/3.5 - 22 f/4.5 - 22	12.6 - Infinity 37.6 - 74.6	0.9 0.3	2.5 0.8
645 Medium Format	0.6x	55 - 110	35 - 70	f/4.5 - 32 f/5.6 - 32	17.8 - Infinity 34.5 - 90.9	0.6 0.3	2.3 1.2

Relative Print Size from Different Resolution Sensors

