

## General Lens Chart

The general lens chart give you approximate target size of three popular lens sizes based on the object distance. This is the easiest way to calculate lenses, but also the least accurate. It is good for estimating a required lens, or for applications where the target area size is flexible. For more accurate target area size, use one of the other methods that follow.

### General Lens Chart - 1/3" Camera

Wide ( <i>2x object distance</i> )	2.8mm
Standard ( <i>Equal to object distance</i> )	4mm
Narrow ( <i>1/2x object distance</i> )	8mm

Knowing the object distance (from camera to target area), you can estimate the approximate target size using any of the three popular lens focal lengths. The object distance can be multiplied by the appropriate factor to give the approximate horizontal target size. The vertical target size will be  $\frac{3}{4}$  (0.75) of the horizontal.

For example, with a 1/3" format camera viewing a target area 10 feet away, you will get approximate target sizes of:

2.8mm

$$10' \text{ (object distance)} \times "2" = 20'$$

$$20' \times 0.75 = 15'$$

$$\text{Target Size} = 15' \times 20'$$

4mm

$$10' \text{ (object distance)} \times "1" \text{ (equal to)} = 10'$$

$$10' \times 0.75 = 7.5'$$

$$\text{Target Size} = 7.5' \times 10'$$

8mm

$$10' \text{ (object distance)} \times "1/2" = 5'$$

$$5' \times 0.75 = 3.75'$$

$$\text{Target Size} = 3.75' \times 5'$$

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