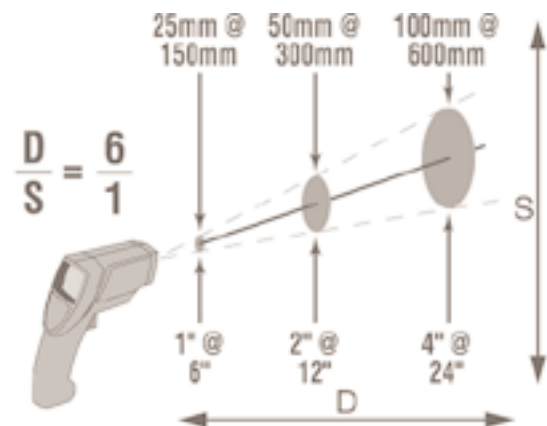




# Distance to Target Diagrams for Cole-Parmer® Infrared Thermometers

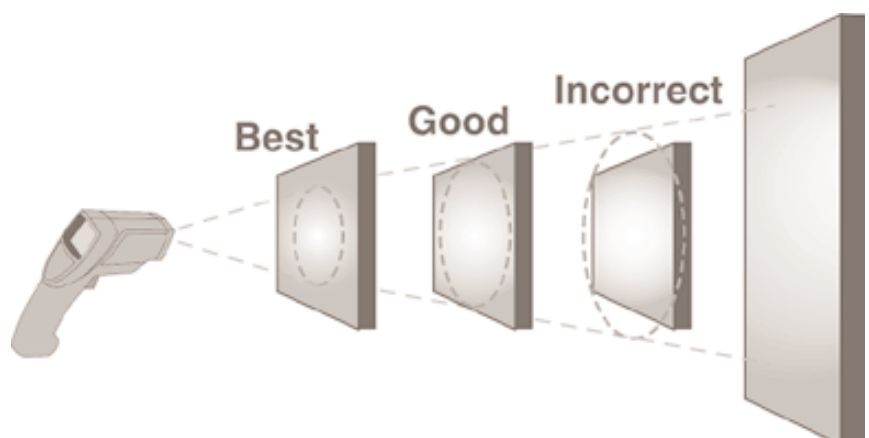
## Distance-to-spot ratio.

The optical system of an infrared thermometer collects the infrared energy from a circular measurement spot and focuses it on the detector. Optical resolution is defined by the ratio of the distance from instrument to the object compared to the size of the spot being measured (D:S ratio). The larger the ratio number the better the instrument's resolution, and the smaller the spot size that can be measured. The laser sighting included in some instruments only helps to aim at the measured spot. A recent innovation in infrared optics is the addition of a Close Focus feature, which provides accurate measurement of small target areas without including unwanted background temperatures.

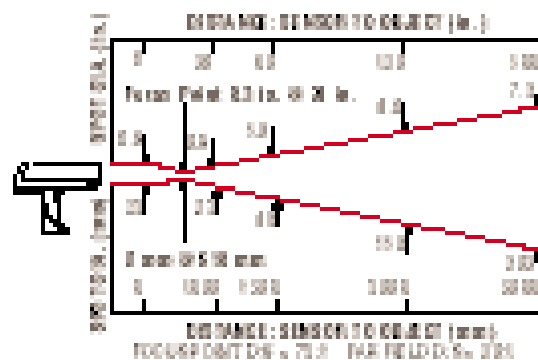


## Field-of-view.

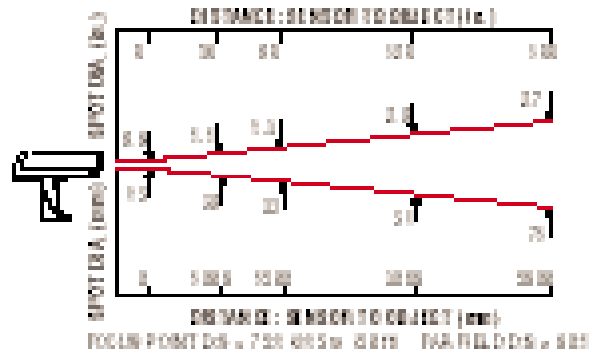
Make sure that the target is larger than the spot size the unit is measuring. The smaller the target, the closer you should be to it. When accuracy is critical make sure that the target is at least twice as large as the spot size.



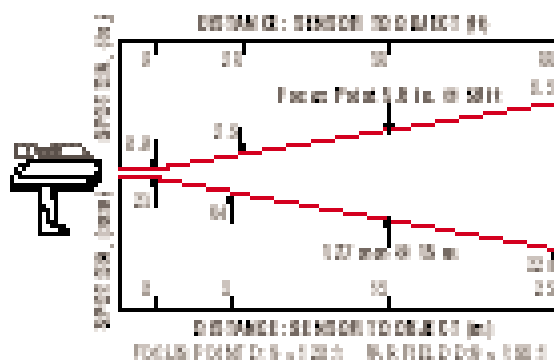
Models 39800-22 and -23



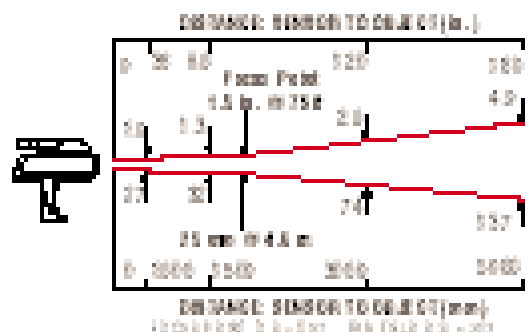
Models 39800-02, and -03



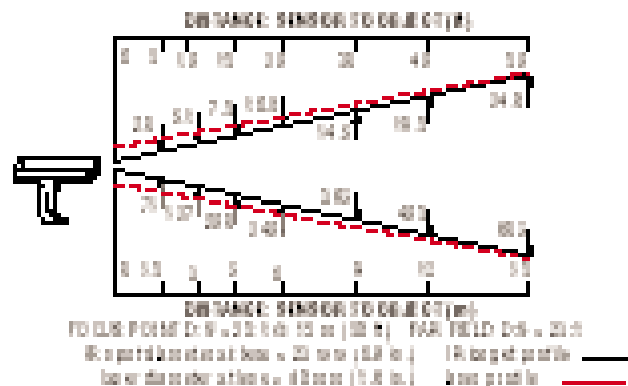
Models 39800-30, -32, -33, -35



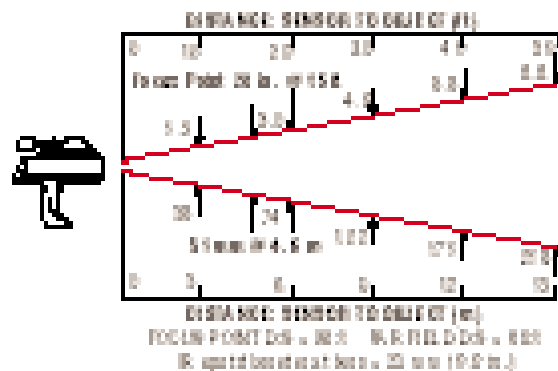
Model 39800-40



Models 39800-42 and -43



Models 39800-46, -47, and -48



Model 39800-00

