

Infrared thermometer test and calibration



Infrared thermometer calibrations can be accurate with the proper setup and planning. It's important to choose a calibrator with a radiometrically calibrated target that is large enough to accommodate the recommended calibration distance of common infrared thermometers, along with their various fields of view.

Common errors include pressing the infrared calibrator too close to the hot surface of the calibrator or simply moving the infrared thermometer back and forth until the desired reading is achieved.

The manufacturer will have calibrated the infrared thermometer at a specific distance with a source that meets certain size requirements and has a specific emissivity (often but not always 0.95). To have a meaningful calibration that determines whether the instrument continues to operate within its design specifications, those conditions need to be reproduced as closely as possible.

Suggested test tools



4181 Precision
Infrared Calibrator
See pg 19



4180 Precision
Infrared Calibrator
See pg 19