

Water Temperature Testing for Carafe, Reservoir and brew cycle

We can and do appreciate being on the inquisitive side of things when it comes to the brewers but when testing for temps these are the things that need to be kept in mind when doing so at home:

Thermometers

- 1) Thermometer- every thermometer has tolerances (plus/minus factors) that vary greatly between devices. Example: If your thermometer is plus/ minus 2% that says a 200 reading could be 196-204.
- 2) Calibrated thermometers- is your measuring device calibrated to your environment ? Keep track of your tolerances as even calibrated they exist
- 3) Is the measuring device intended for measuring water or coffee? Many people try to use infrared devices which are not intended for measuring clear/ clearish liquids such as coffee.

Measuring temps in the carafe:

Now that we've established the need for high quality calibrated measuring devices let's review testing procedures exactly as we used to determine temps into the carafe and SCA certifications.

- 1) Season- incubate the carafe 3 times with 200F water
- 2) Brew coffee
- 3) Swirl carafe to insure any thermal layering is minimized
- 4) Snake measuring device through the openings available or drill hole in the lid
*** removing the lid allows for heat loss and inaccurate results

Measuring the reservoir, again using exact procedures we used and were used for certifications to include using a high quality calibrated measuring device. Key here is the only way to accurately measure the temps in the reservoir that are equal to ours the reservoir lid must stay on and the measuring device must be in the same location as we measure in.

- 1) Bring the reservoir to desired temps.
- 2) With probed inserted through the drilled in the lid snake the measuring device to the same location as our calibrated measuring device
*** removing the lid allows for heat loss and inaccurate results
- 3) Your measuring device MUST be in the exact location we use as even within the area of the reservoir there exists thermal layering and zones. Closer to heat source (bottom) is different from 1" above or middle / center etc.

If you fail to incubate, use calibrated equipment, measure with lids on, mix contents in the carafe, expose liquids to ambient air and fail to match the exact location of our measuring devices our readings will vary from yours and in cases greatly.

This says nothing about the accuracy of the brewer because it's calibrated but rather the testing procedures and/or instruments used to measure temperatures along with environmental issues such as ambient air