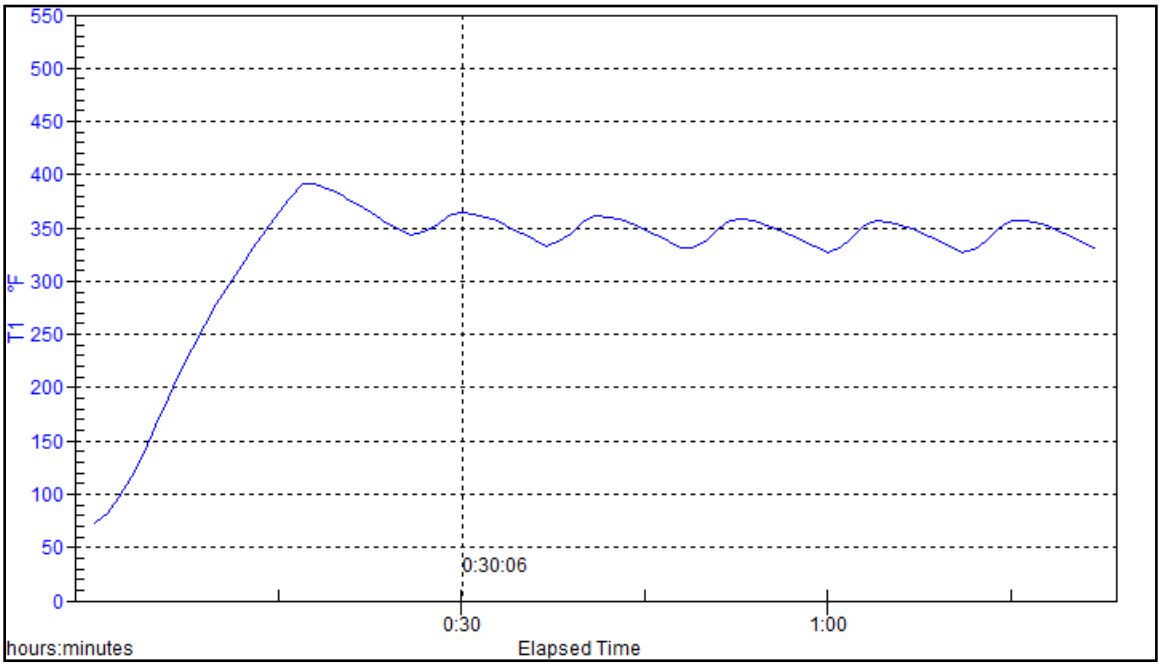
How do I know if my oven is functioning properly?

Lacanche Typical (Healthy) Electric Oven Operation

- from startup to 1:45:00 -



The example above is an actual plot line graph featuring the REAL-TIME temperature reading on a Lacanche Cluny electric oven set to 350°F.

Thermometer Used: a boil-method calibrated Fluke 54II type K

Note: this oven was tested empty – thermal mass (i.e. food) causes greater fluctuations

- **Observations:** the oven takes roughly 15 minutes to reach 350° F. Due to the fact that the metal oven box heats up much slower than the air inside, the air temperature keeps climbing until both metal and sensor reach 350°F.
- **Actual vs. Average:** the graph reveals an initial pre-heat period - before the 30:06 marking. The oven then cycles on and off in roughly 20 minute cycles. Dial setting is based upon the cycle center, or ***average***. The average temperature here is about 345°F. The average temperature should correlate to the set temperature on the dial/knob.
- ***Myth:* ovens are supposed to sustain, or flat line, a real-time temperature.** The physics of heat transfer requires heating the thermal mass in air, oven and food. The temperature average can be thought of as an imaginary flat line. Movement of this average line occurs with the adjustment of the thermostat by your Lacanche service professional.
- **Cooking Tip:** Remember that opening the door of a 350 degree oven can cause the loss of as much as **70 degrees** in temperature. Many folks who like to "check" the progress of their baking by opening the oven door don't understand how this can increase the cooking time of their prepared food. Your oven must recover to regain baking efficiencies.

References:

http://en.allexperts.com/q/Heating-Air-Conditioning-696/Electric-Oven-Temp-Control.htm

http://www.americastestkitchen.com/ibb/posts.aspx?postID=266323