**Test Cases**

Due to the nature of this project, test cases are limited. Possible inputs for temperature readings are bounded by the capability of the K type thermocouple whose range is -326 to 2300 ˚F (-200 to 1260 ˚C). These ranges are within the acceptable bounds for a floating-point variable. Likewise, the inputs for FFT audio analysis are similarly bounded within an acceptable range for floating-point values.

The only issue that could arise is when a sensor wears out and starts returning non-numeric values. When this occurs, the system does not crash but it is indicative of hardware failure. Such being the case, a general error Boolean value is sent over the air along with the other data which indicates the hardware should be serviced.