## Project Title: Common IoT device performance in homes at saturation

**Proposed by:** Dan Cregg (dcregg@insteon.com)

Create levels of device installations that determine usable scalability of multiple types of signaling protocols. Examples being Bluetooth, Insteon, WiFi, Zigbee.

## Learning Objectives:

- 1. Study:
  - a. Electronic and communication systems
  - b. Electromagnetic propagation principles
  - c. Interconnected devices
- 2. Analysis:
  - a. The effects of the number of devices in a home on overall performance and consumer acceptance.
- 3. Implementation:
  - a. Design a test device scale for implementation in homes, of several types of common in-home IoT devices.
  - b. Execute in-home tests, analyze data and provide conclusion on findings

## Design tool used (include but are not limited to):

• TBD as part of initial test design

## **Project Diagram:**

TBD