### 2/27/20 Amendment Request to Existing License: WI2XWI Request for Experimental License Exhibit: 2900 W. Plano Parkway, Plano, Texas 75075

# Purpose:

AT&T Laboratories wishes to conduct tests with multiple new indoor radio systems with integrated adaptive antennas to evaluate the performance of a CBRS spectrum with an LTE system. We intend to evaluate various performance characteristics of the system in a real world rural/suburban indoor environment, including data throughput, latency, error rates, availability, susceptibility, SAS integration, and interference considerations.

#### **Radio Systems:**

Radios will be installed and tested by AT&T Laboratories personnel using digital communications test equipment. Each radio access point consists of a transmitter, a receiver and an antenna, with a maximum transmit power of 30 dBm EIRP, with 2x2 or 4x4 TX/RX diversity.

### **Equipment Deployment:**

The radios will be deployed within the AT&T Facility at 2900 W Plano Parkway, Plano TX, 75075:

- 33°00'29.2"N 96°45'05.4"W
- 33.008111, -96.751500

https://www.google.com/maps/place/33°00'29.2%22N+96°45'05.4%22W/@33.0081111,-96.7525943,18z/data=!3m1!4b1!4m5!3m4!1s0x0:0x0!8m2!3d33.0081!4d-96.7515

No more than 8 radio transmitters will be operated simultaneously. Radios will be mounted indoors within the lab environment a minimum of 8 feet above the floor level. See the diagram in Figure 1 for a depiction of the building deployment.

#### Spectrum Use:

The radio transmitters may occupy spectrum from 3550 to 3700 MHz. Depending on how it is configured, each radio will use from 1 to 4 digitally modulated 5, 10, 15, 20 MHz channels in this band. Different transmitters may use the same or different channels as each other.



# Figure 1 - Possible Radio Mount 2900 W. Plano Parkway, Plano, TX