

EXHIBIT 1
DESCRIPTION OF THE EXPERIMENT

Rearden LLC seeks to conduct product development and market demonstration in the 3.5GHz range (using multiple 5MHz blocks between 3650-3700MHz) that will examine a new digital modulation technique for wireless networks, thereby providing important information for the development of next generation wireless communications applications for the business and consumer markets. Specifically, Rearden will install prototype base stations enabled with proprietary pCell™ wireless technology inside the Rearden Lab's location at 211 S Whisman Rd, Mountain View, California, that allows each wireless user inside the lab to use the full data rate of shared spectrum simultaneously with all other users, by eliminating interference between users sharing the same spectrum. Rearden will examine network performance, features, and functionality of pCell wireless technology and a suite of customer applications. Testing is required to determine the viability of pCell wireless technology and its ability to support a variety of applications with a high density of concurrent users. In addition, testing is necessary to verify design characteristics and performance in an indoor environment with trial users, as well as other technical parameters.

Testing will consist of short-range transmissions inside the Rearden Lab in Mountain View using indoor mounted base station antennas, which have been designed to operate at 3650-3700MHz, and commercial LTE user devices designed to operate at 3650-3700MHz. Transmit power of the base stations will be at most 100mW with 3W ERP and out-of-band emissions will meet 47 C.F.R. Part 27 limits. The base stations will be at fixed indoor locations and mounted indoor on tripods at elevation up to 20 feet AGL. Given the limited transmit power, installation of the base stations restricted to indoor locations at low AGL elevation and high pathloss of radio waves propagating at 3.5GHz through the structure of the lab, Rearden expects poor indoor-to-outdoor propagation with limited or unmeasurable RF energy being radiated outside the perimeter of Rearden Lab.

Some of the system variables to be tested include: range, capacity and customer application preferences. Rearden will conduct testing exclusively inside the Rearden Lab in Mountain View, California. Access and use of the test network, platform, and applications will be limited to employees or full-time contractors of Rearden.

The proposed wireless communications experiment and the associated evaluation and/or customization of the above-referenced technology will advance the Commission's spectrum policies to promote innovation and competition. The proposed experiments and trials have the potential to lead to more efficient and productive utilization of spectrum made available by the Commission for licensed and unlicensed operations.