

## **60 GHz Experiment Proposal**

### **1 Introduction**

Qualcomm Incorporated (NASDAQ:QCOM - News) is the world leader in 3G and next-generation mobile technologies. For 30 years, Qualcomm ideas and inventions have driven the evolution of wireless communications, connecting people more closely to information, entertainment and each other. Today, Qualcomm technologies are powering the convergence of mobile communications and consumer electronics, making wireless devices and services more personal, affordable and accessible to people everywhere. For more information, please visit [www.qualcomm.com](http://www.qualcomm.com).

### **2 Experiment Description**

This experimental license request is to facilitate the exploration of the 60 GHz millimeter wave bands.

The experiments will include point to point and non-line of site operation. Part 101.103 frequency coordination will be completed to constrain operations within the worst case parameters defined in Section 2.

Initial experiments were completed under STA 0801-EX-ST-2013, call sign WH2XOW and call sign WI9XVE.

### 3 Transmitter Information

Testing is expected to occur periodically for six months from license issue date. Table 1 contains transmit power information for the test sites. Table 2 lists the site location and azimuth. Directional horn antennas will be used for the fixed sites.

The mobile transmission will occur at lower transmit power anywhere within the radius identified.

**Table 1 Transmitter Information 57.5-64 GHz**

Frequency (GHz)	Peak EIRP			Peak ERP (W)	Peak Antenna Gain (dBi)	3dB Beamwidth	Maximum Emission BW	Emissions Designator
	dBm	dBW	W					
57.5-64	30	0.02	1.01	0.61	0 (or conducted power reduced to achieve equivalent EIRP)	TBD	200 MHz	200MG7D

**Table 2 Transmitter Site Information**

Site #	Address	County	Lat	Long	Peak Antenna gain Azimuth (Deg)	Elevation	Antenna Type
3	New Brunswick Within 0.5 km: centered NL 40-29-42 WL 74-26-38	Middlesex	40° 29' 42"	74°26' 38"	TBD based on frequency coordination	<6m	Omni-directional