

## 2900-3000 MHz Experiment Description

### 1 Introduction

Qualcomm Incorporated (NASDAQ:QCOM - News) is the world leader in 3G and next-generation mobile technologies. For 25 years, Qualcomm’s 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).

This experimental license request is in support of research and development efforts for large bandwidth wireless communications systems. This initial short term testing is associated with propagation testing.

### 2 Transmitter Information

Testing is expected to occur periodically for six months from license issue date. Table 1 contains transmit power information for the one fixed site that using an omni-directional antennas. Table 2 lists the site locations and azimuth.

**Table 1 Transmitter Information**

Frequency (GHz)	Peak EIRP			Peak ERP (mW)	Peak Antenna Gain (dBi)	Maximum Emission BW	Emissions Designator
	dBm	dBW	W				
2.9-3.0	15	-15.04	.03	19	0	90 MHz	90M00G7D

The transmitted signal is a direct sequence spread spectrum - noise-like - signal (PN sequence length 1023 - 30dB spreading) spread over the band 90MHz without discernable discrete components for a power density of -10dBm/100kHz. If evaluated in a narrow-band the entire signal power can be treated as noise uniformly spread over the band. Thus, a narrowband receiver can capture only a proportionally small portion of the transmitted power.

**Table 2 Transmitter Site Information**

Site #	Address	County	Lat	Long	Peak Antenna gain Azimuth (Deg)	Elevation	Antenna Type
1	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