

10700-12700 Experiment Proposal

1 Introduction

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

Qualcomm is profiling antennas designed for use in the 10.7-12.7 GHz range. Qualcomm has previously completed testing, at a higher transmit power, with the defined transmitter parameters under experimental license call sign WG2XNM after coordinating with Western Area Frequency Coordinator office.

2 Transmitter Information

Testing is expected to occur periodically for one year. The transmitter will only be operational during active testing that occurs at any time during the day or week.

A single fixed site will be deployed on a Qualcomm building in San Diego with the antenna pattern profile shown in figure 1. Table 1 defines the transmitter information and Table 2 defines the site location. A CW transmission will be tested at a fixed frequency within the range of 10.7-12.7 GHz. Different fixed frequencies will be tested at different times to profile the antenna response versus frequency. The CW frequencies will be select to avoid co-channel operation with fixed point-point systems and VSAT channels.

The equipment under test is a receive antenna that is located on another building. The receive antenna's orientation is moved in a process to evaluate the antenna pattern. Different fixed frequencies will be tested at different times to profile the antenna response versus frequency.

Table 1 Transmitter Information

Type	Frequency (MHz)	Peak EIRP			W ERP	Peak Antenna Gain (dBi)	Emission BW
		dBm	dBW	W			
Fixed	10.7-12.7	60	30	1000	606	41	CW

Table 2 Transmitter Site Information

Site #	Address	County	Lat	Long	3dB Beamwidth	Azimuth	Elevation	Antenna Type
1	5745 Pacific Center Blvd San Diego, CA 92121	San Diego	32 54 14 N	117 11 47 W	+/- 1 degree	175 degrees (south) +/- 2 degrees	+/- 2 degrees above horizon	Directional

Figure 1 Fixed Site Antenna Pattern

