

28 and 39 GHz Experiment Proposal

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.

This experimental license request is for experimentation in the 28 and 38 GHz millimeter wave bands for use in next generation wireless systems. The experiments will include point to point and non-line of site operation.

2 Transmitter Information

Testing is expected to occur periodically for two years from license issue date. Table 1 contains transmit power information for all sites. Table 2 lists the site locations and azimuth. Directional horn antennas will be used for the two fixed sites between Qualcomm buildings. The mobile transmission will occur at lower transmit power anywhere within the radius identified.

Table 1 Transmitter Information

Antenna Type	Applicable sites	Frequency (GHz)	Peak EIRP			Peak ERP (W)	Peak Antenna Gain (dBi)	3dB Beamwidth	Maximum Emission BW	Emissions Designator
			dBm	dBW	W					
Directional	1 and 2	27.5 - 30	55	25	316	192	30	8 degrees	850 MHz	850M00G7D
Omni	3	27.5 - 30	25	-5	0.316	0.192	30	8 degrees	850 MHz	850M00G7D

Table 2 Transmitter Site Information

Site #	Type	Address	County	Lat	Long	Peak Antenna gain Azimuth (Deg)	Elevation AGL	Antenna Type
1	Fixed	5775 Morehouse Dr., San Diego, CA 92121	San Diego	32 53 46 N	117 11 44 W	151 (Southwest)	Up to 60m	Horn
2	Fixed	5665 Morehouse Dr., San Diego, CA 92121	San Diego	32 53 43 N	117 11 42W	331 (Northwest)	Up to 48	Horn
3	500 foot mobile radius (0.152 km)	5665 Morehouse Dr., San Diego, CA 92121	San Diego	32 53 43 N	117 11 42W	N/A	Up to 60m	Omni