



1 Introduction

Qualcomm relentlessly innovates to deliver intelligent computing everywhere, helping the world tackle some of its most important challenges. Building on our 40 years of technology leadership in creating era-defining breakthroughs, we deliver a broad portfolio of solutions built with our leading-edge AI, high-performance, low-power computing, and unrivaled connectivity. Our Snapdragon® platforms power extraordinary consumer experiences, and our Qualcomm Dragonwing™ products empower businesses and industries to scale to new heights. Together with our ecosystem partners, we enable next-generation digital transformation to enrich lives, improve businesses, and advance societies. At Qualcomm, we are engineering human progress.

Qualcomm Incorporated includes our licensing business, QTL, and the vast majority of our patent portfolio. Qualcomm Technologies, Inc., a subsidiary of Qualcomm Incorporated, operates, along with its subsidiaries, substantially all of our engineering and research and development functions and substantially all of our products and services businesses, including our QCT semiconductor business. Snapdragon and Qualcomm branded products are products of Qualcomm Technologies, Inc. and/or its subsidiaries. Qualcomm patents are licensed by Qualcomm Incorporated.

[This experimental license application](#) supports a Qualcomm 5G and 6G R&D test network operating in the 4000-4200 MHz band at Snapdragon Stadium in San Diego, California. The network will provide limited coverage of approximately 0.5 km for testing and demonstrating next-generation 5G/6G technology. Qualcomm requests a two-year license term from January 1, 2027 through December 31, 2028.

2 Experiment Description

Qualcomm requests this experimental license to support 5G/6G R&D and engineering development in the 4000-4200 MHz band using one 100 MHz TDD channel with an FCC emission designator of 100MW7W.

The application requests up to three fixed locations with omnidirectional antennas to support up to 20 mobile devices operating within 0.5 km of the fixed sites. The fixed sites will be located on the east, west, and inside areas of Snapdragon Stadium, 2101 Stadium Way, San Diego, California 92108, as shown in Figure 1.

The network transmit level is 30 dBm EIRP for fixed transmitters and 25 dBm EIRP for mobile transmitters, as shown in Table 1. The system may use omnidirectional or directional antennas



but will remain below the defined maximum EIRP. These limits were selected to support the required test area while maintaining the emissions levels described above.

The network is designed to provide the minimum RF coverage required for engineering development while limiting the potential for interference to incumbent satellite systems in the 4-4.2 GHz range. Emissions will remain below -124 dBW/m²/MHz as measured at satellite earth stations.

Qualcomm intends to operate the network 24 hours per day, 7 days per week, during the requested authorization period.

Table 1 summarizes the transmitter parameters. The base station, or gNB, is treated as an omnidirectional source because there are no orientation constraints.

Table 1. Transmitter information in the frequency range of 4-4.2 GHz

County	Address / Area	Frequency, MHz	Latitude / Longitude	Type	Antenna	EIRP / 100 MHz, dBm	EIRP / 100 MHz, W	ERP / 100 MHz, W	Azimuth	Down tilt	3 dB BW
San Diego	Snapdragon Stadium, east	4000-4200	32 47 06 N / 117 07 17 W	Fixed	Omni	30	1.0	0.61	Omni	None	N/A
San Diego	Mobile devices operating within 0.5 km of fixed sites	4000-4200	0.5 mile radius	Mobile	Omni	25	0.3	0.19	Omni	None	N/A



Figure 1. View of the proposed fixed transmit site location at Snapdragon Stadium, San Diego, California.

2.1 3 Points of Contact to Stop Transmission

The following points of contact are available to stop transmission:

Email: transmitter.shutdown@qti.qualcomm.com, include the band and location.

Alternative contact:

John Forrester

Phone: 858-845-7428

Email: jforrest@qti.qualcomm.com