

1. Antenna System Description

Ant1

Ant2

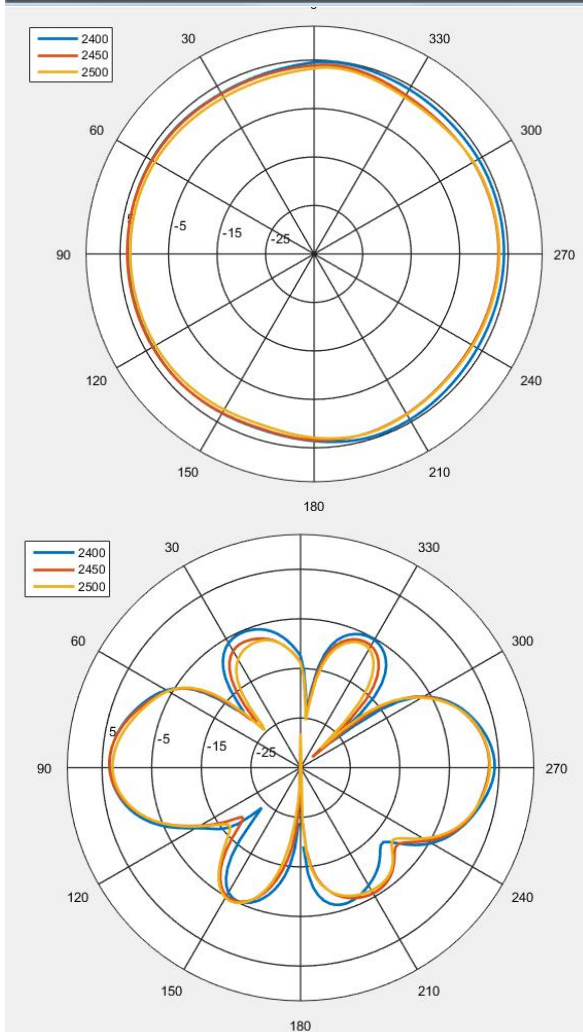
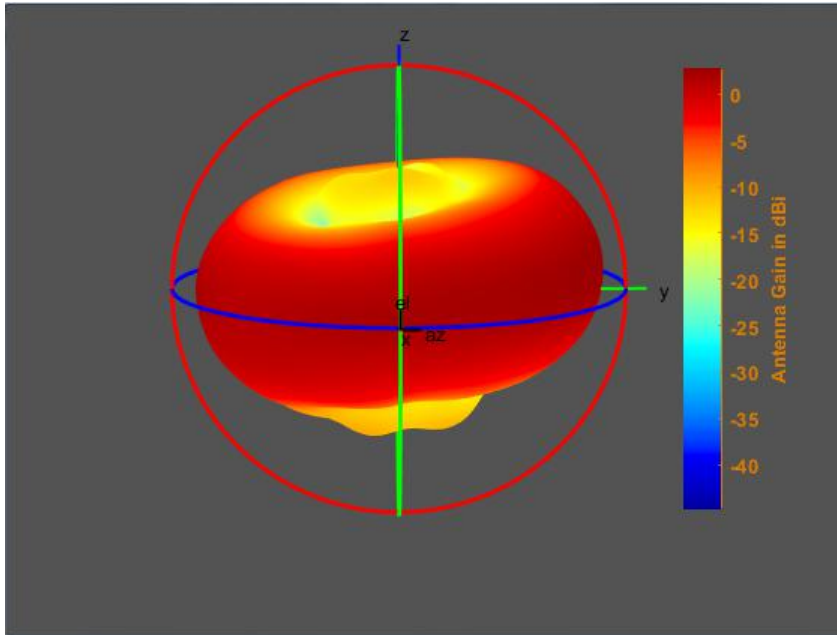
The system contains two external antennas (as shown in the figure: antenna 1 and antenna 2). Each antenna has two radiating elements in the form of dipole. Each antenna contains two feeders. The white cable is 2.4GHz, the black cable is 5GHz, and the antenna gain is 5dBi. The antenna is linearly polarized Omnidirectional antenna, The system supports beamforming mode, The system does not generate multiple beams.

2. Measurement Quantity

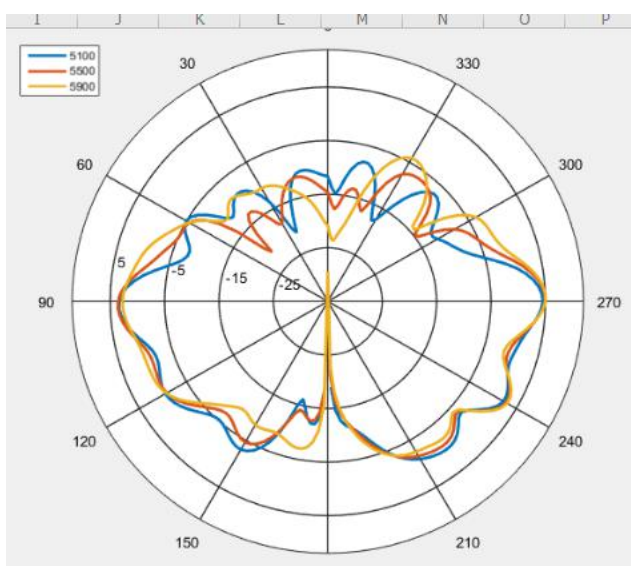
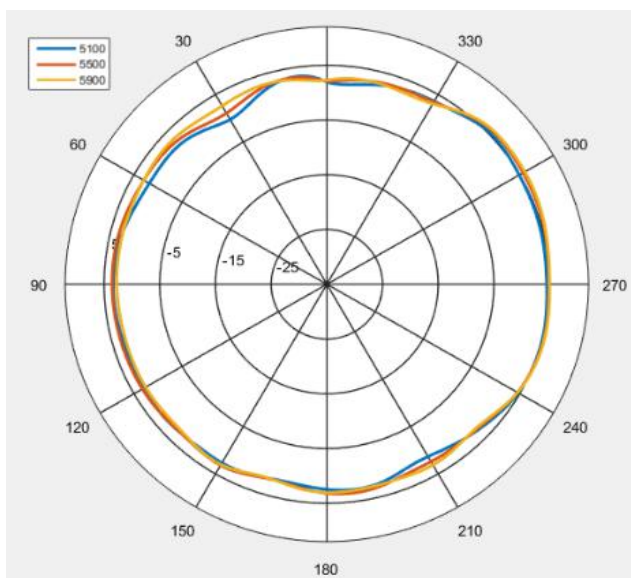
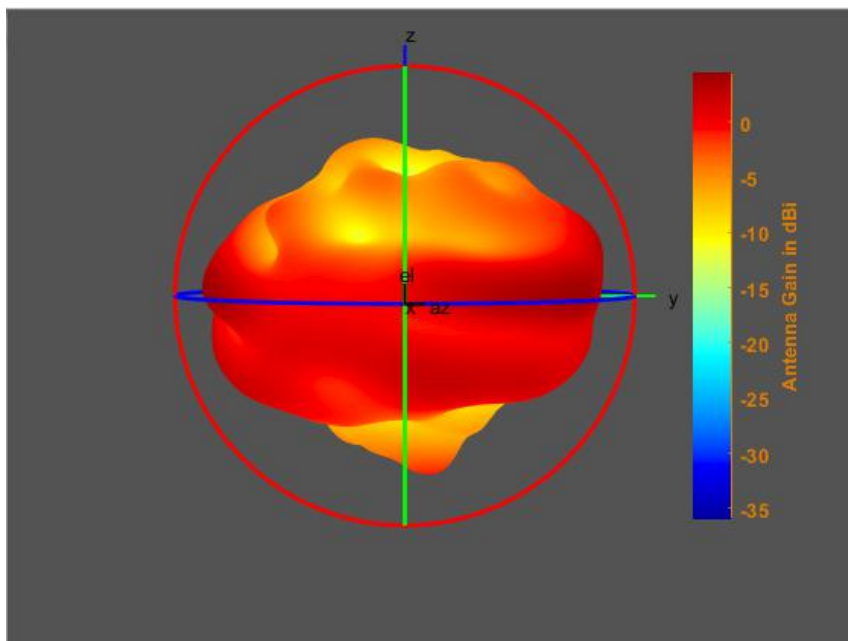
The pattern of the antenna is omnidirectional radiation of the horizontal plane. The gain of the antenna is 5dBi.

The radiation pattern of the antenna is as follows:

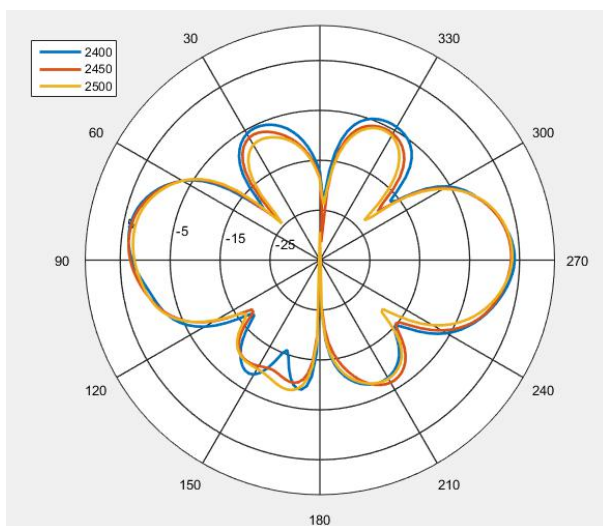
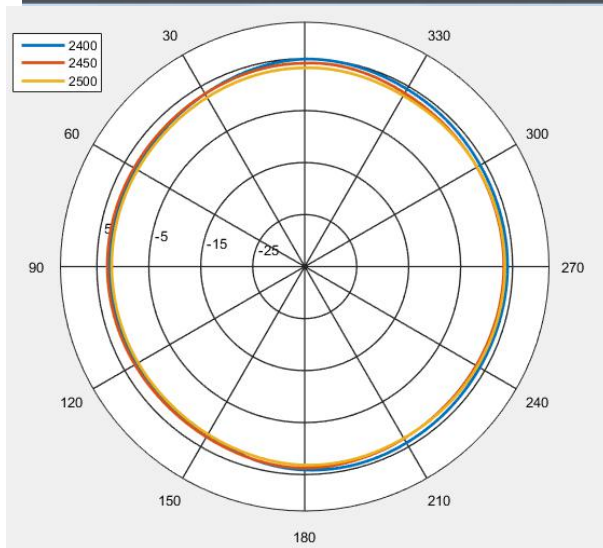
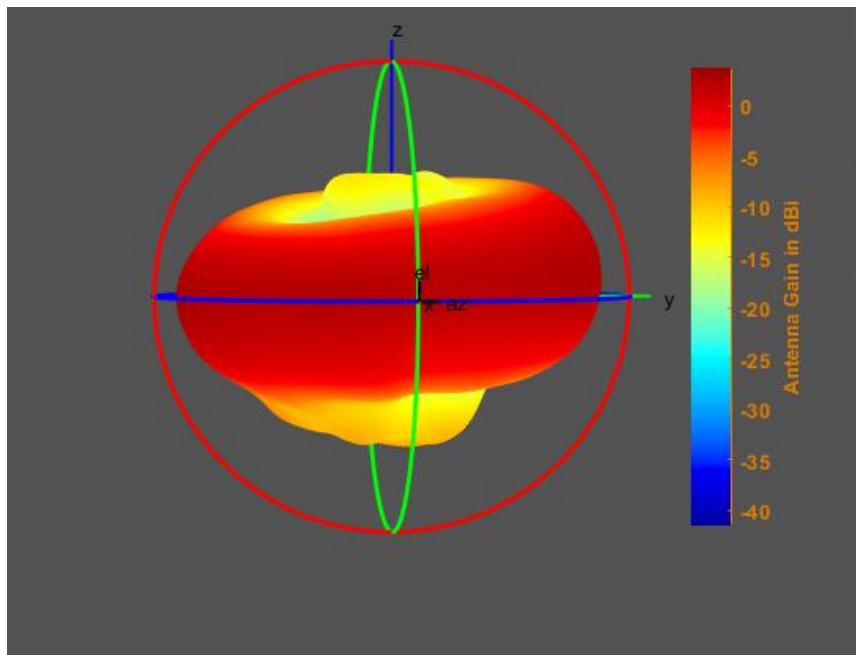
Antenna 1: 2450MHz



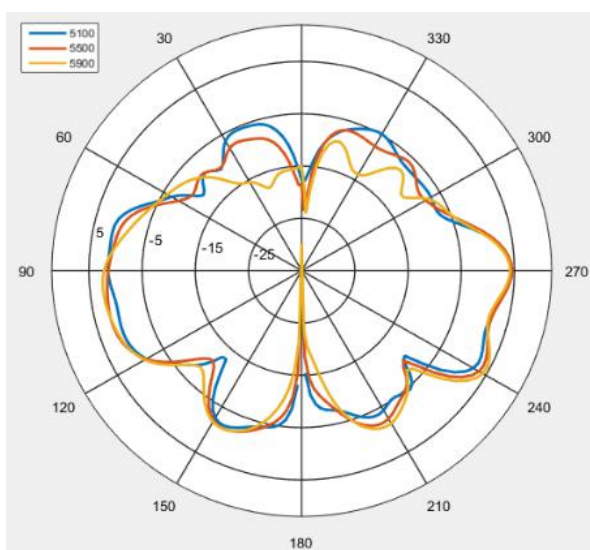
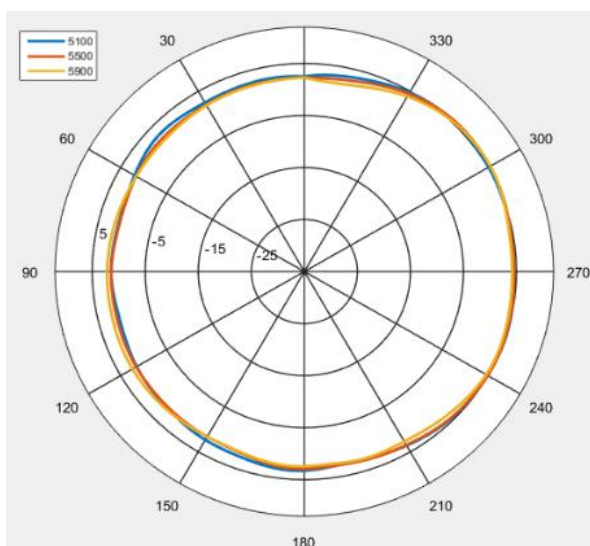
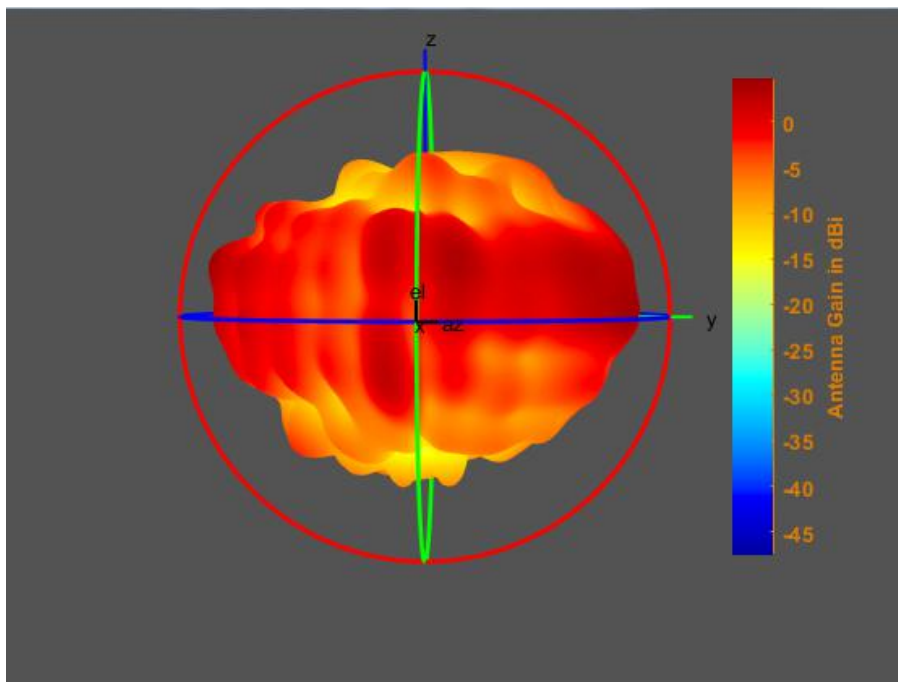
Antenna 1: 5550MHz



Antenna 2: 2450MHz



Antenna 2: 5550MHz



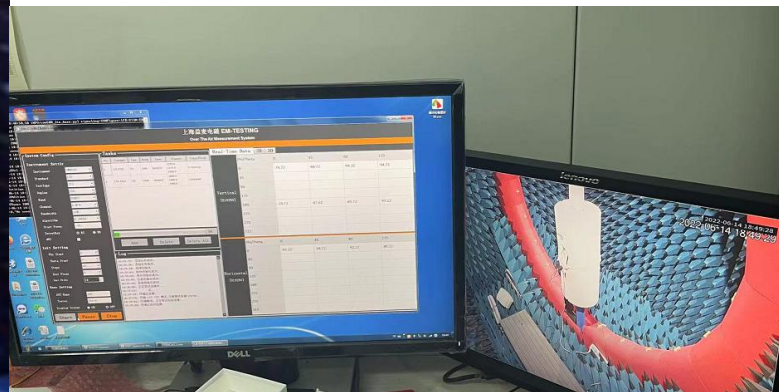
3. Measurement Method

The antenna gain measurement method is gain comparison method, Calculation of gain by comparison with standard horn antenna, The standard horn antenna has been measured in the measurement institution.

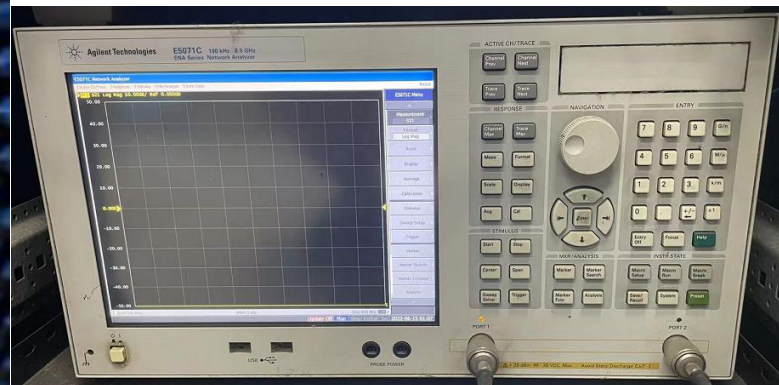
4. Measurement Environment

The gain of the antenna was measured in the anechoic chamber. The chamber provides less than -30 dB reflectivity from 400 MHz through 8 GHz. The chamber size is: $4\text{m} \times 4\text{m} \times 4\text{m}$. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.

PC



Agilent Technologies E5071C



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