



2. Antenna Test Equipment Introduction

Test of antenna input characteristics using Agilent E5071C and Agilent 5062A vector network analyzer; The radiation pattern of the antenna are tested using the Satimo starlab 3D near field Anechoic Chamber , and the instrument is used to agilent8960 E5515 and Agilent E4438C. The test coordinates of the darkroom are as follows:

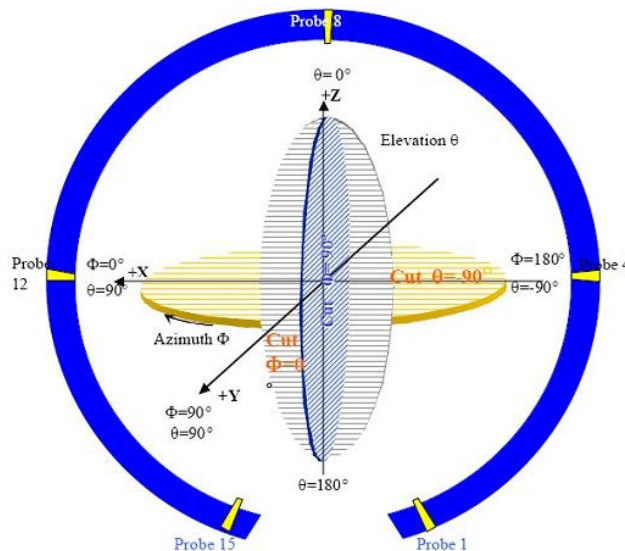


图 4 3D 微波暗室测试坐标系 (back view)

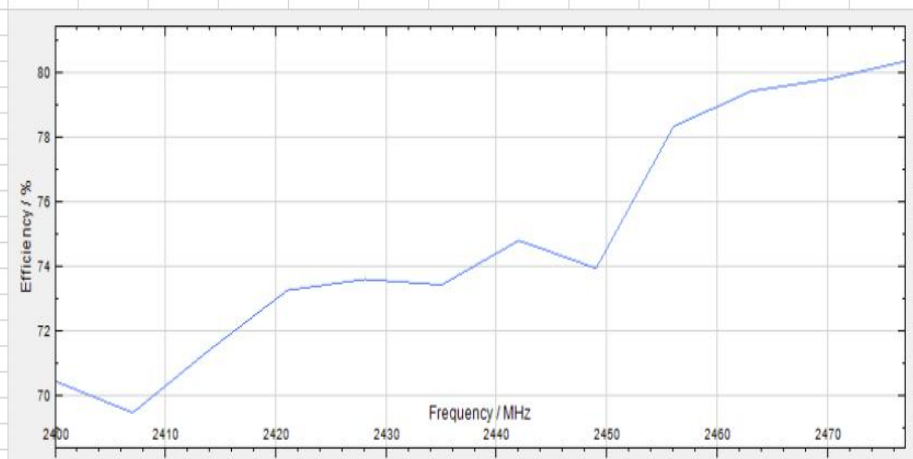
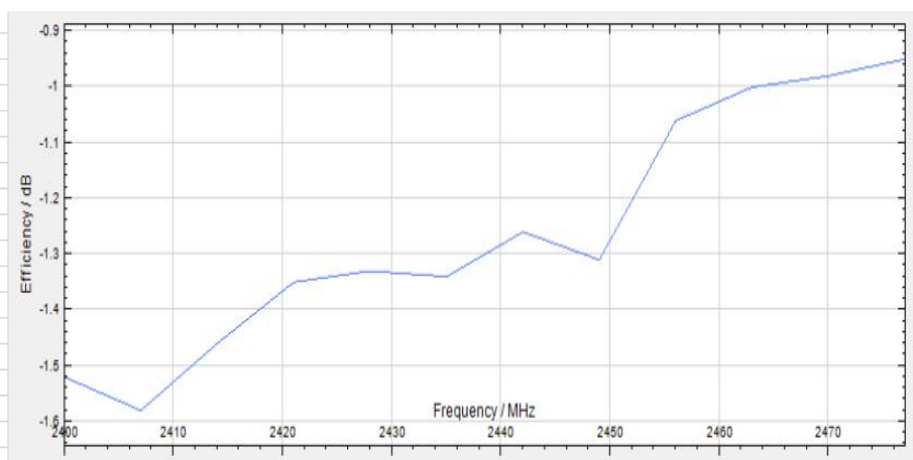
3. Electrical Specification

3-2 Passive S11 parameter

Measuring Method is a 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the S11 parameter, Keeping this fixture away from metal at least 20cm.

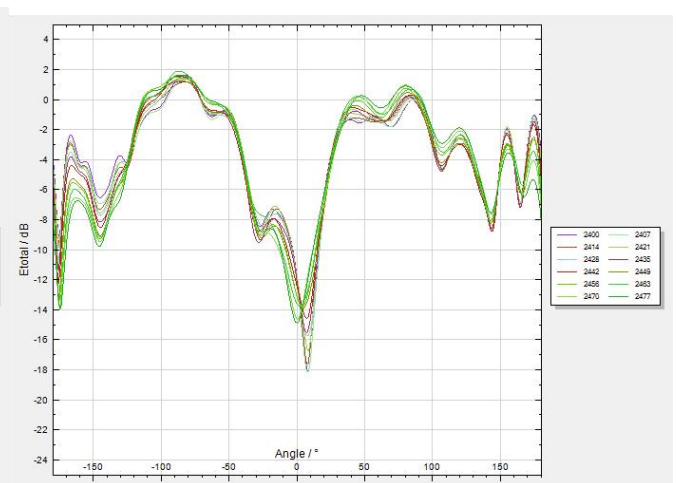
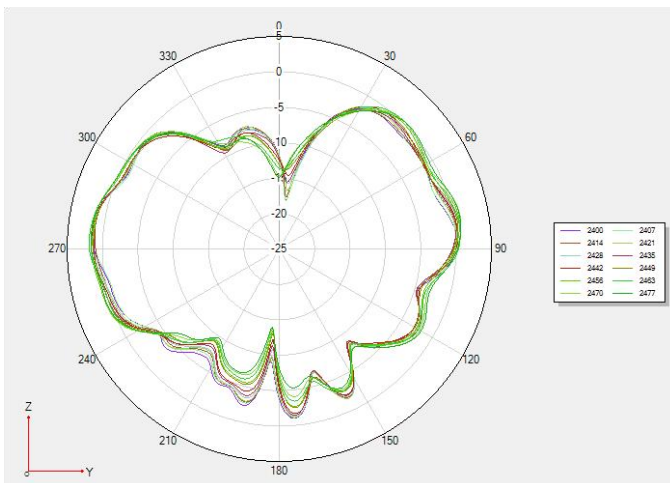
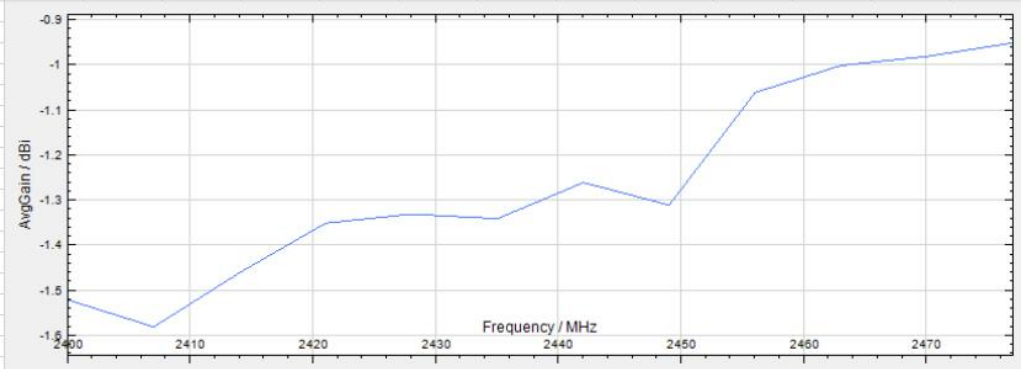
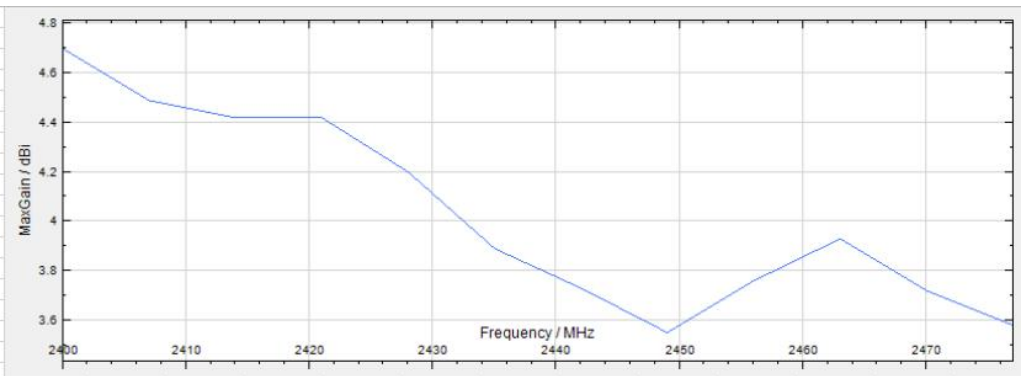
VSWR

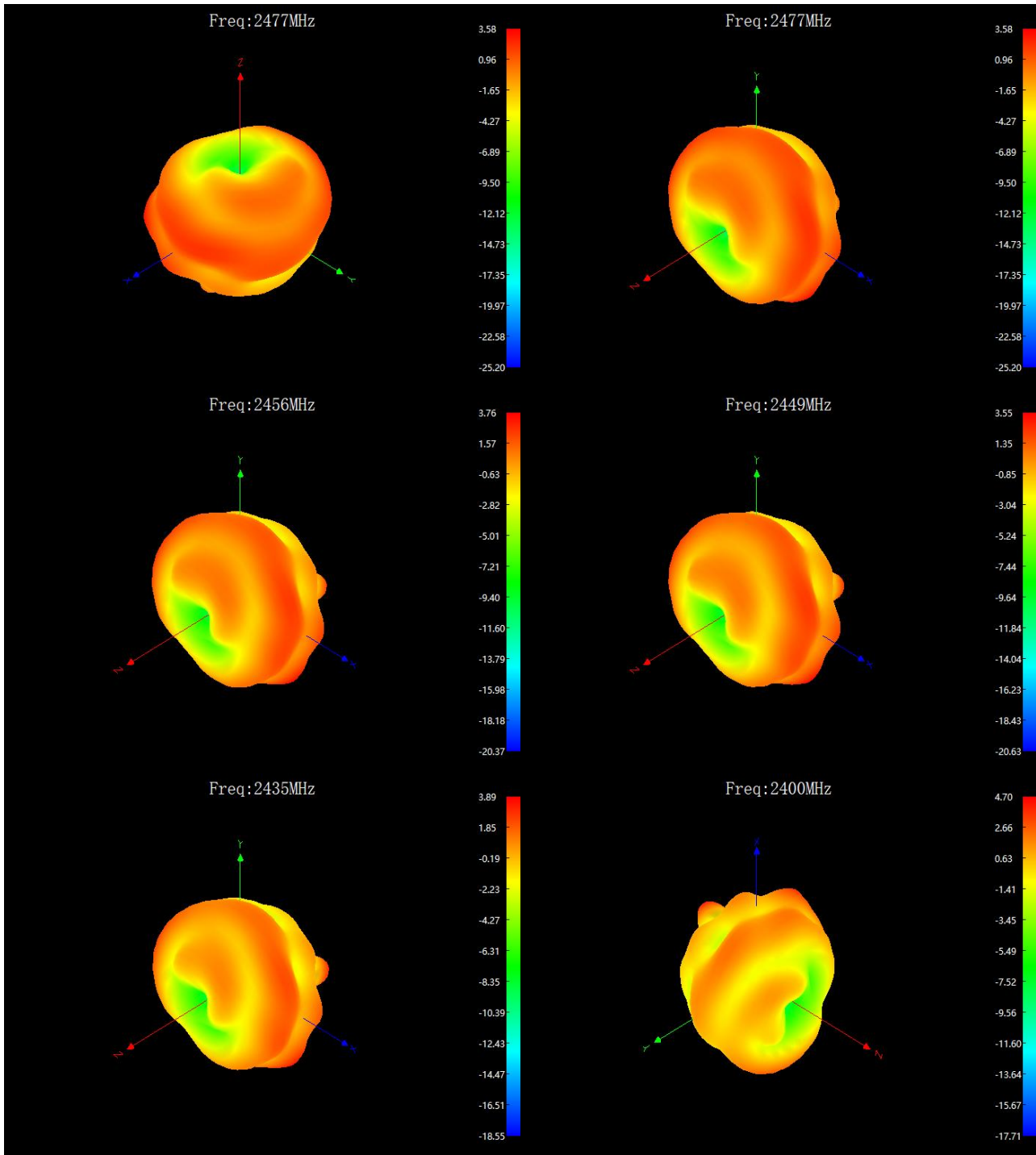
Frequency	Efficiency	Efficiency / %
2400	-1.52	70.47
2407	-1.58	69.5
2414	-1.46	71.45
2421	-1.35	73.28
2428	-1.33	73.62
2435	-1.34	73.45
2442	-1.26	74.82
2449	-1.31	73.96
2456	-1.06	78.34
2463	-1	79.43
2470	-0.98	79.8
2477	-0.95	80.35



3-3 Antenna Matching Network

Frequency	MaxGain/c	AvgGain/dBi
2400	4.7	-1.52
2407	4.49	-1.58
2414	4.42	-1.46
2421	4.42	-1.35
2428	4.2	-1.33
2435	3.89	-1.34
2442	3.73	-1.26
2449	3.55	-1.31
2456	3.76	-1.06
2463	3.93	-1
2470	3.72	-0.98
2477	3.58	-0.95





4. Mechanical Specification:

Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing Figure 8

