

S3_2.4G BT Antenna Evaluation report _20230224

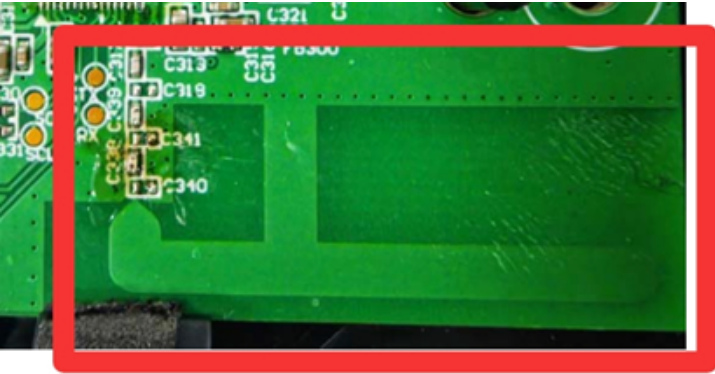
Bill.Ren
2022/02/24

Version	Time	Description
A1	2023/02/24	S3_2.4G BT first evaluation

➤ Content

1. Antenna impedance VSWR;
2. Antenna Efficiency;
3. Antenna Gain;
4. Antenna Radiation 3D;
5. Antenna Radiation 2D;

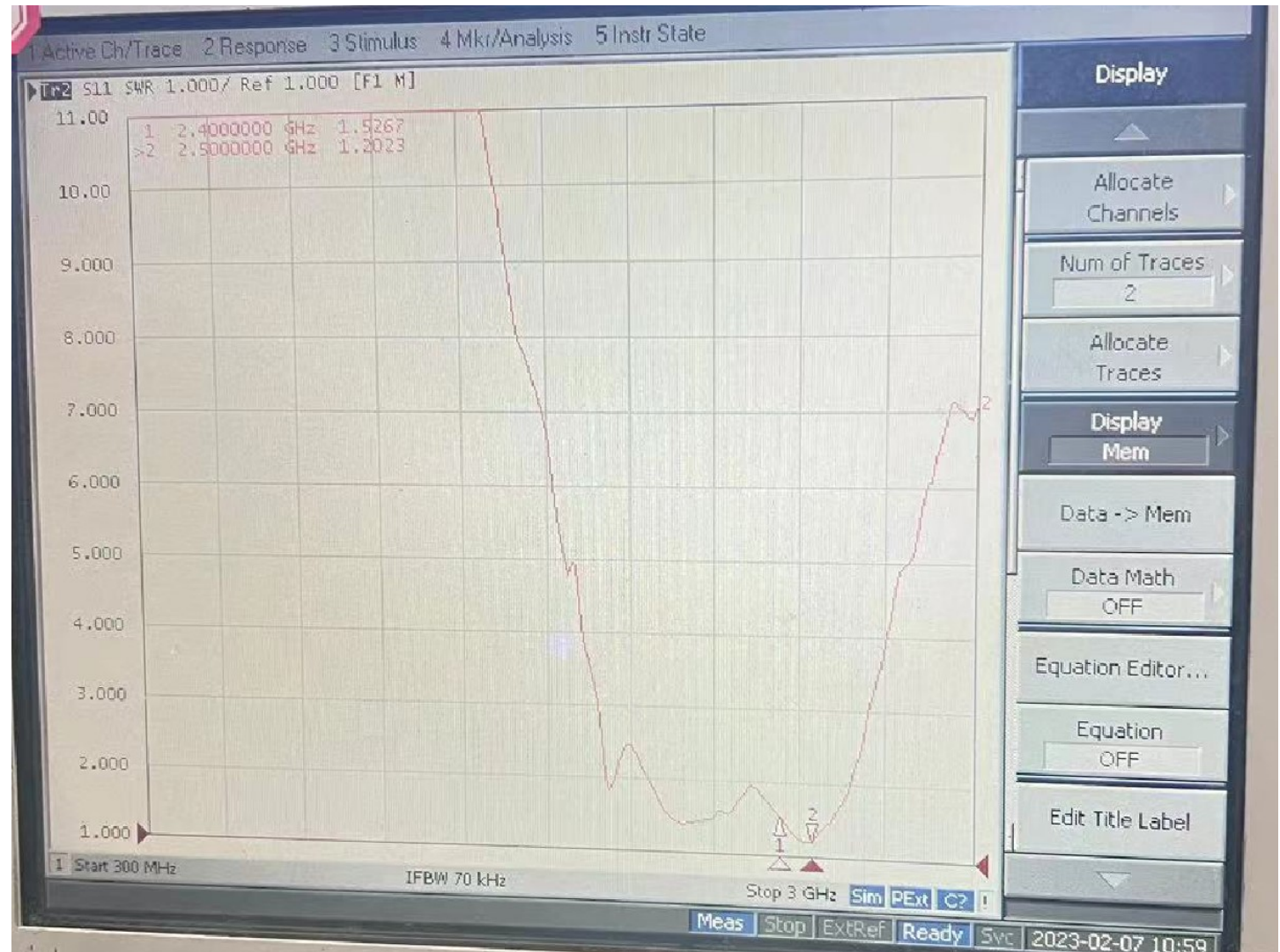
Antenna appearance



Antenna VSWR as below:

Comments

- VSWR < 2
- 2.4G: 1.5
- 2.5G: 1.2

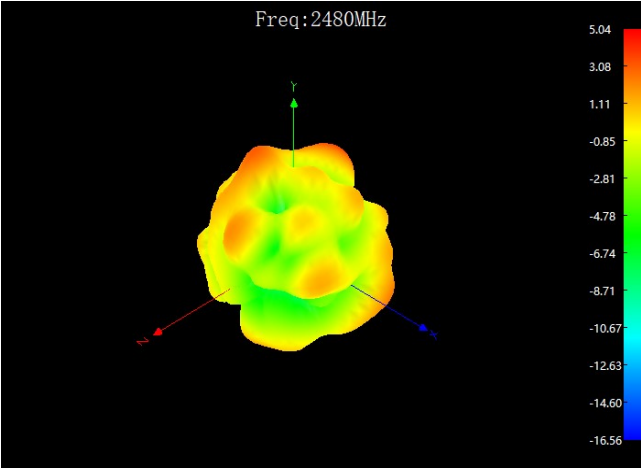
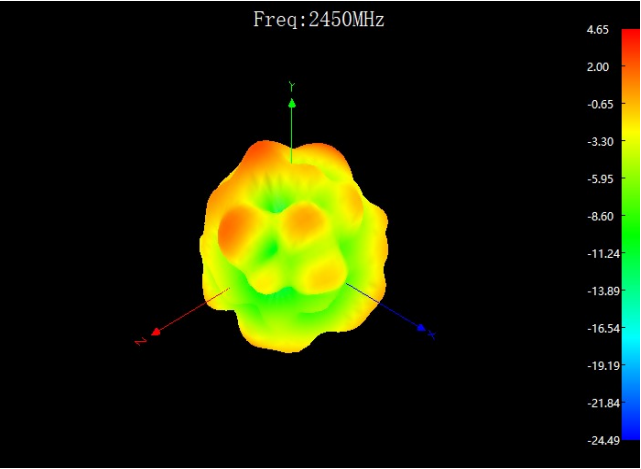
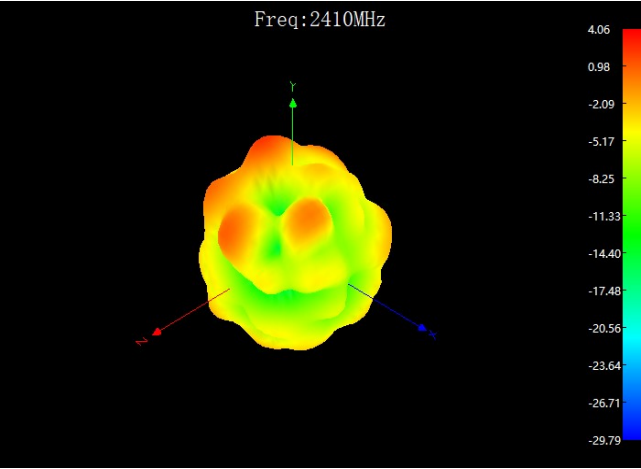


Efficiency and Gain:

Frequency/Mhz	Efficiency / dB	Efficiency / %
2400	-2.3	58.88
2410	-2.2	60.26
2420	-2.08	61.94
2430	-2.01	62.95
2440	-1.89	64.71
2450	-1.87	65.01
2460	-2.09	61.8
2470	-1.84	65.46
2480	-1.78	66.37
2490	-1.67	68.08
2500	-1.39	72.61

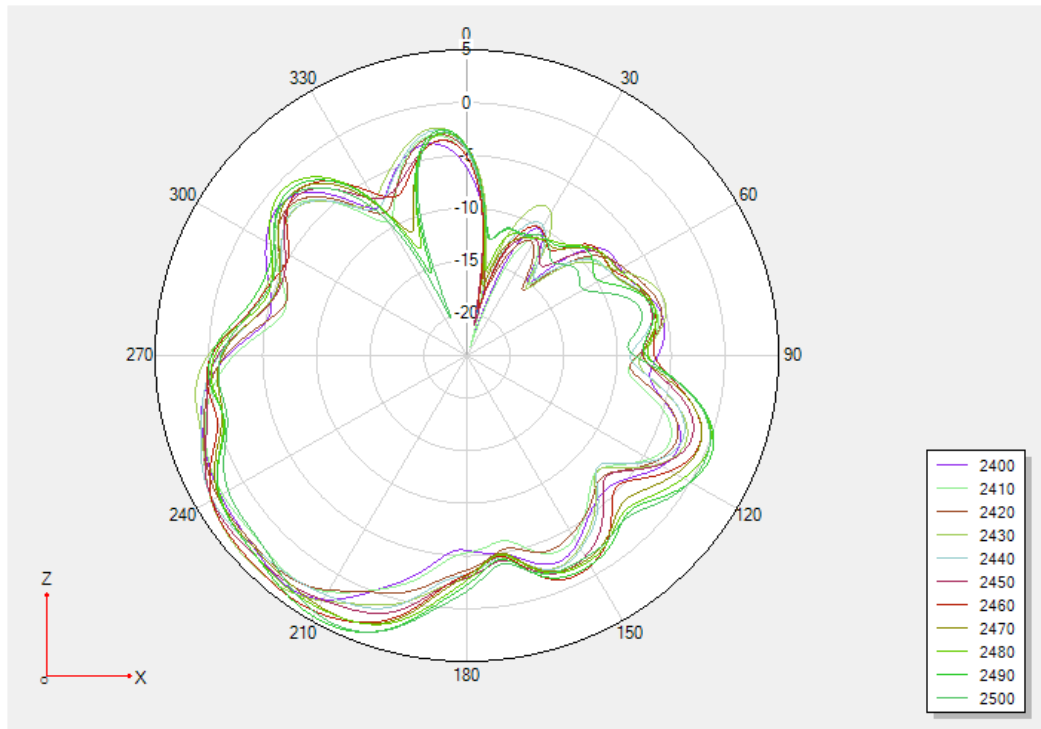
Frequency/MHz	MaxGain/dBi	AvgGain/dBi
2400	4.72	-2.3
2410	4.06	-2.2
2420	4.77	-2.08
2430	5.53	-2.01
2440	4.59	-1.89
2450	4.65	-1.87
2460	5.02	-2.09
2470	4.79	-1.84
2480	5.04	-1.78
2490	5.66	-1.67
2500	5.69	-1.39

Radiation 3D:



Radiation 2D:

$\Phi = 0^\circ$



$\Theta = 90^\circ$

