



东莞市一佳电子通讯科技有限公司

# Antenna Test Report

## *Contents:*

- 1. Device Profile*
- 2. WiFi 2.4G Antenna Test*
- 3. WiFi 5.8G/BT Antenna Test*
- 4. Assembly Picture*

---

Tester : Deng Lei

Approval : Chen Guoqiang

Date : 2022 / 02 / 18

真诚 务实 开拓 创新



# 1. Device Profile

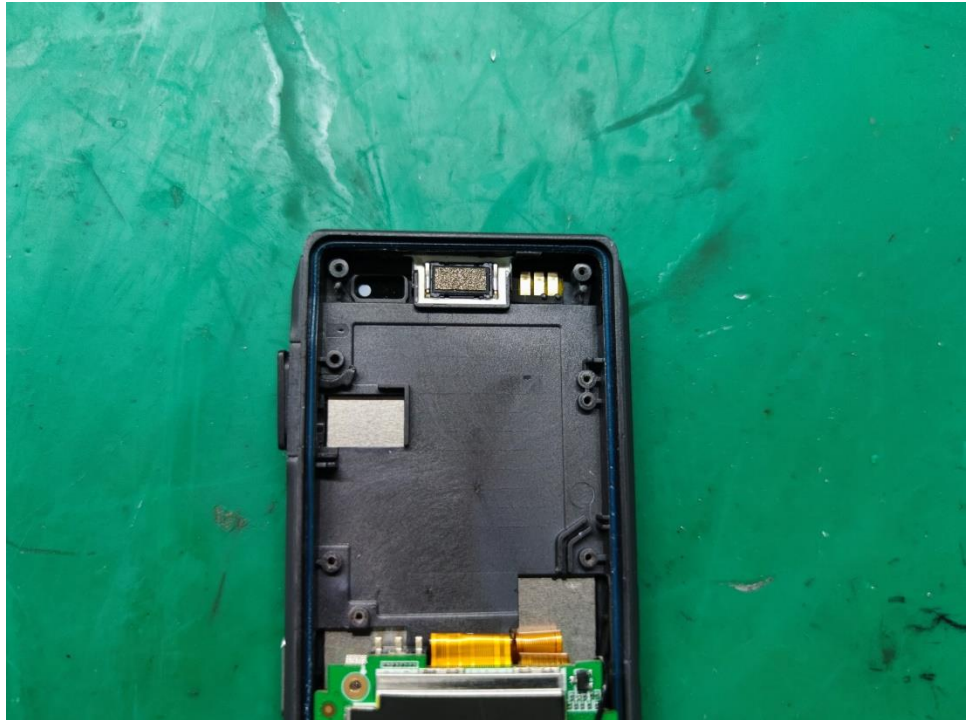
*Device*





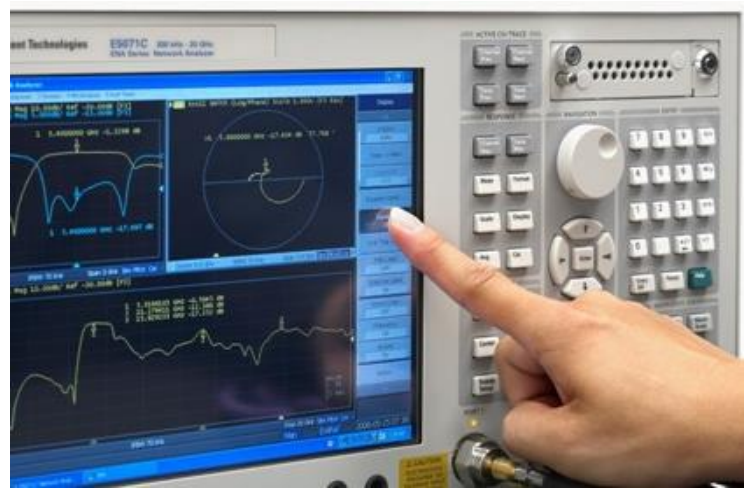
## *2. WiFi 2.4G Antenna Test*

*WiFi  
2.4G  
Antenna*

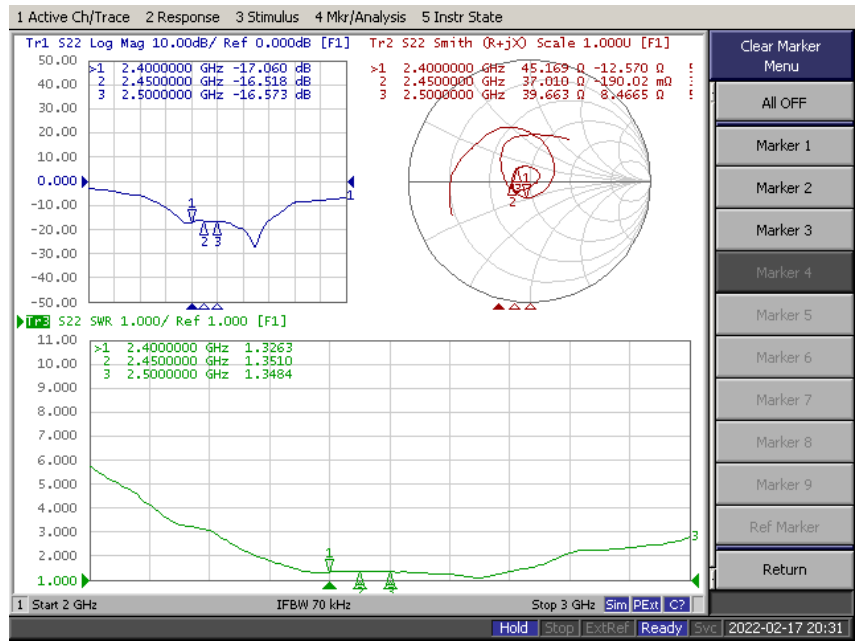




# Agilent E5071B

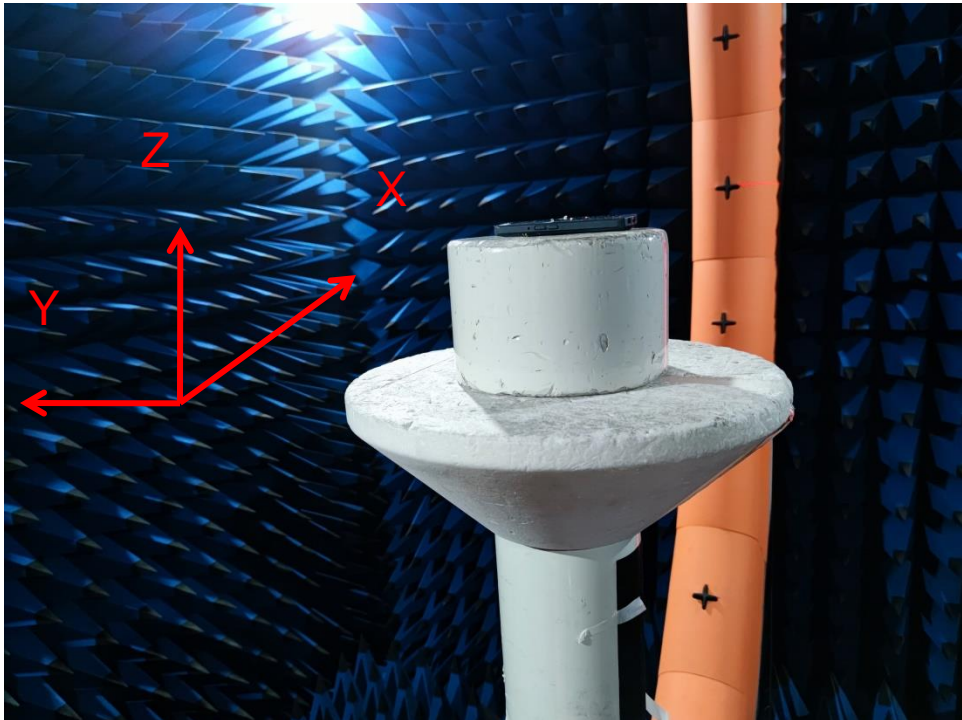
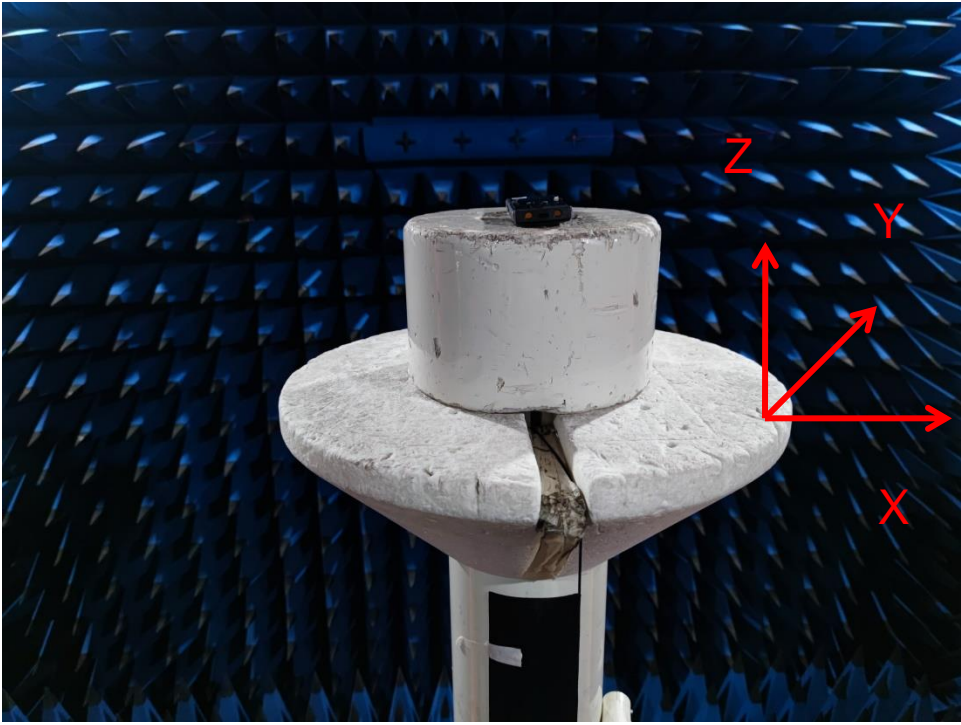


# S Parameter Test // WiFi 2.4G Antenna





# *Antenna Passive Test*

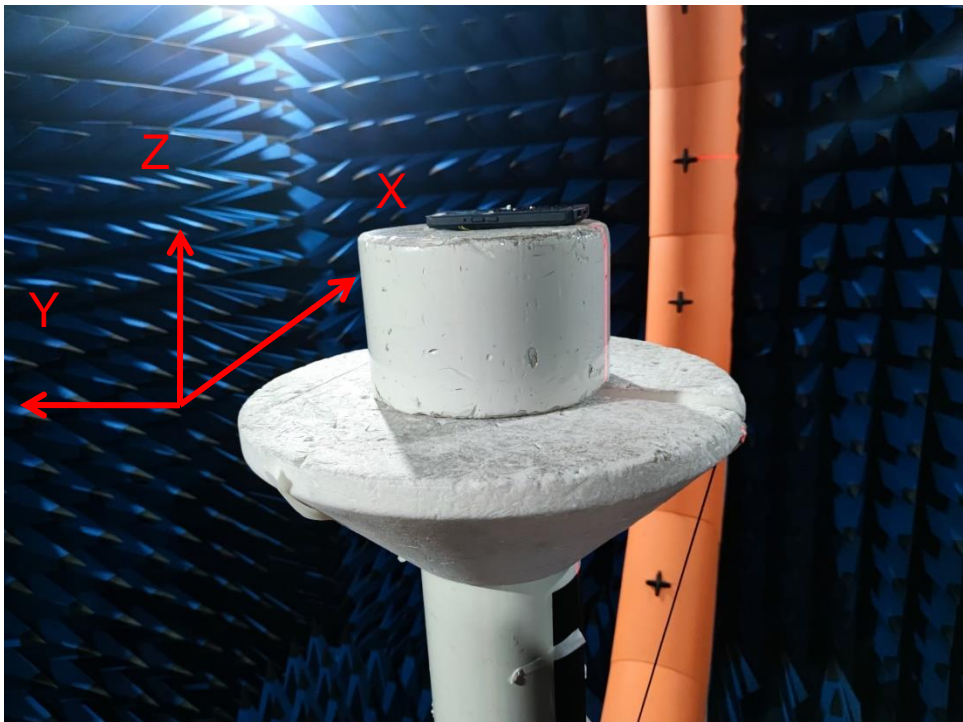
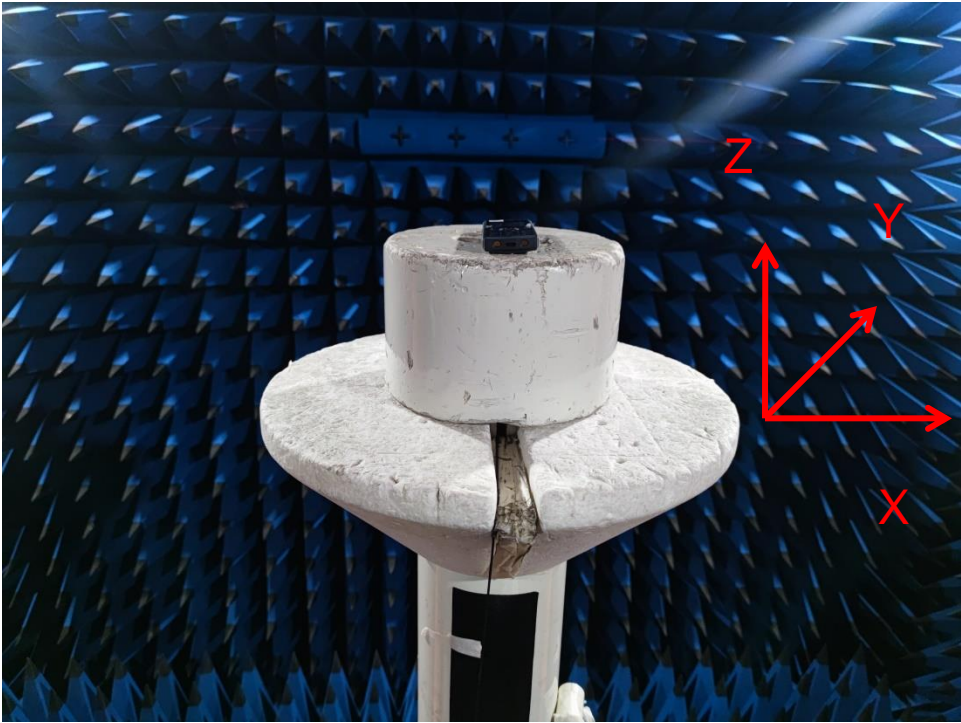




### Passive Test For WiFi Antenna(2.4G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	45.8	-3.4	4.3
2410	46.2	-3.4	4.0
2420	45.8	-3.4	3.5
2430	45.8	-3.4	3.3
2440	45.0	-3.5	2.8
2450	46.0	-3.4	2.8
2460	44.0	-3.6	2.4
2470	45.6	-3.4	3.0
2480	43.9	-3.6	2.7
2490	44.5	-3.5	3.0
2500	41.2	-3.9	2.5

# *Antenna Active Test*





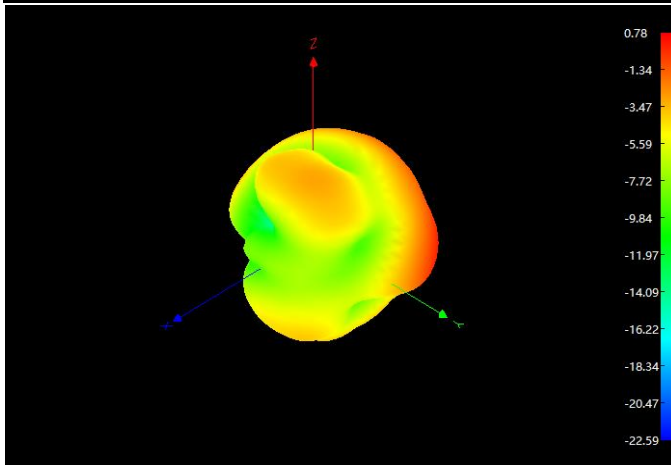
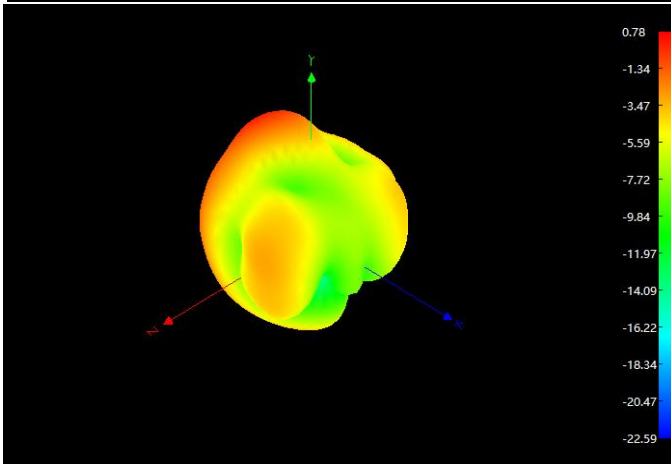
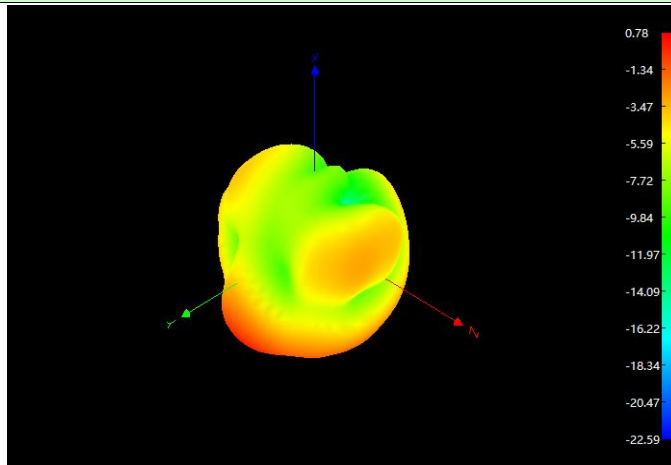
## Active Test For WIFI Antenna

Band	Channel	Data Rate	TRP	EIRP	Data Rate	TIS	EIS
WIFI 2.4G 802.11b	1	11Mbps	13.1	17.9	11Mbps	-83.8	-88.8
	7		13.2	17.8		-82.8	-87.5
	13		13.2	17.9		-83.5	-88.5





## Radiation Pattern For WiFi Antenna 2.4G





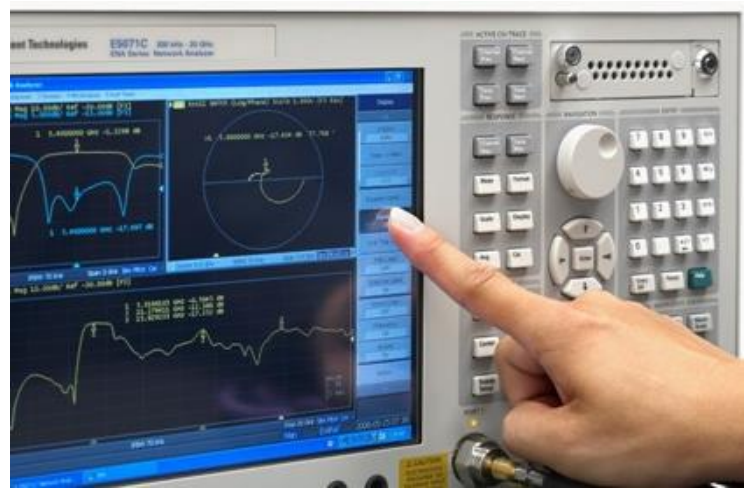
### *3. WiFi 5.8G/BT Antenna Test*

*WiFi5.8G/  
BT  
Antenna*

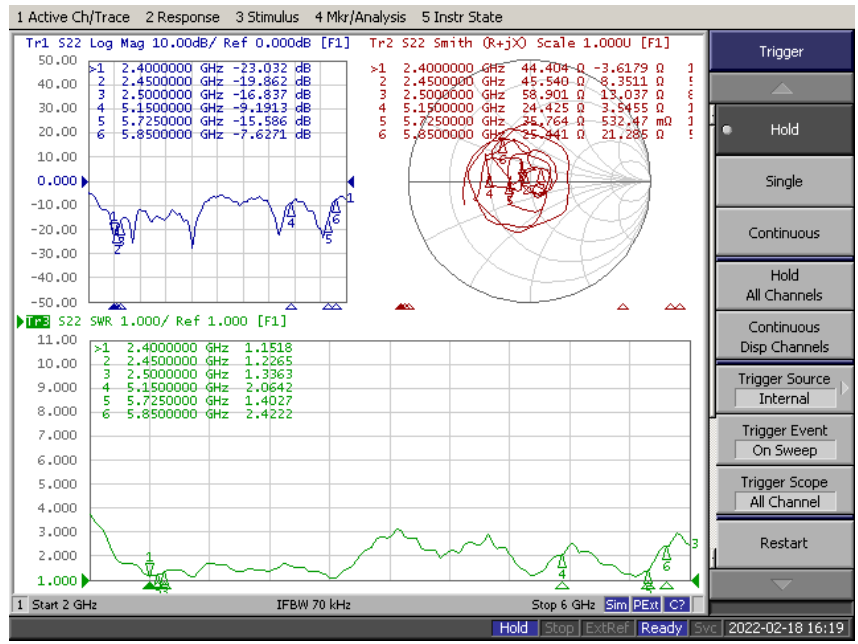




# Agilent E5071B

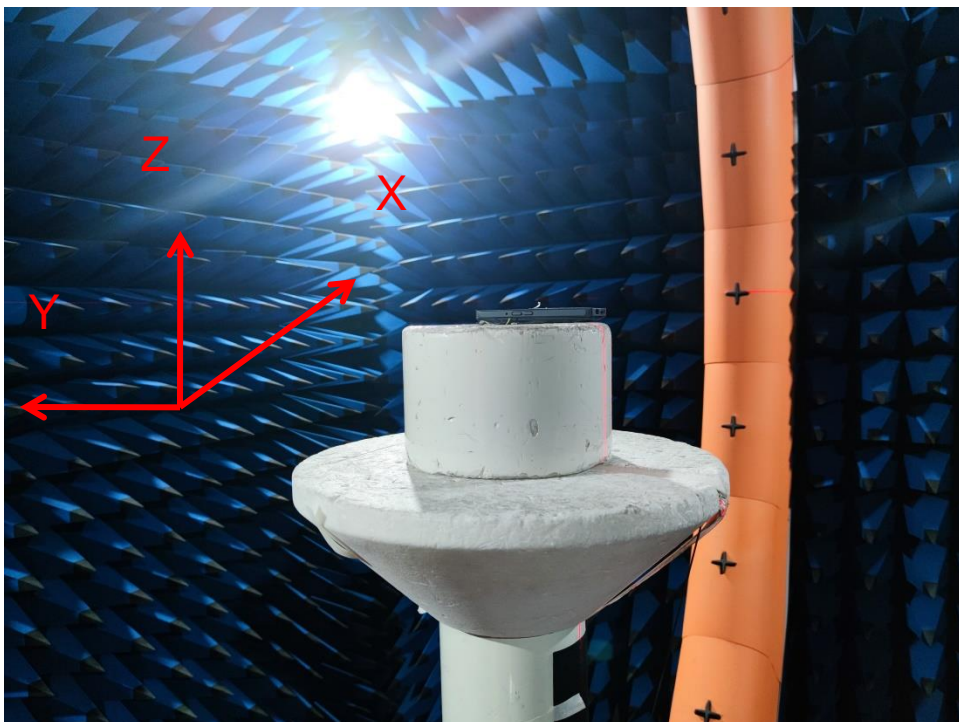
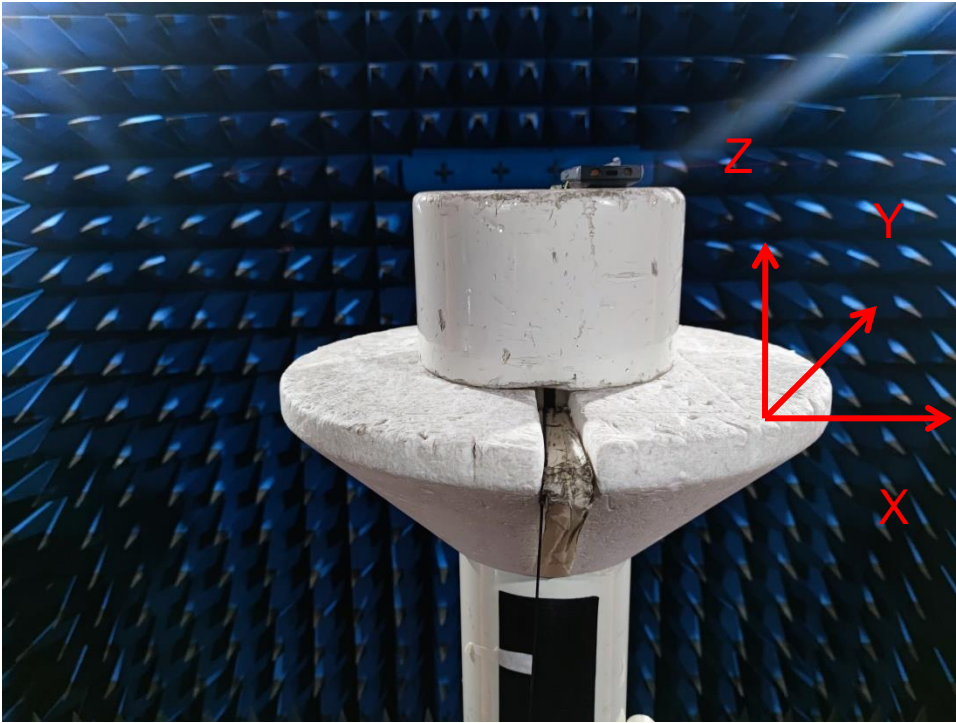


# S Parameter Test // WiFi 5.8G/BT Antenna





# *Antenna Passive Test*





### Passive Test For BT Antenna

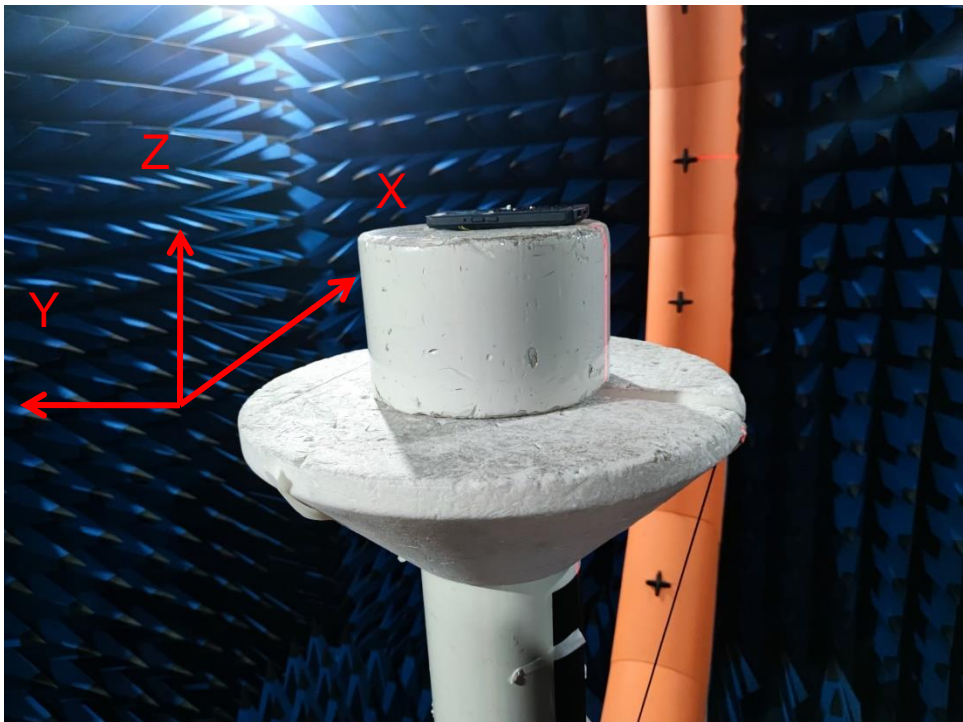
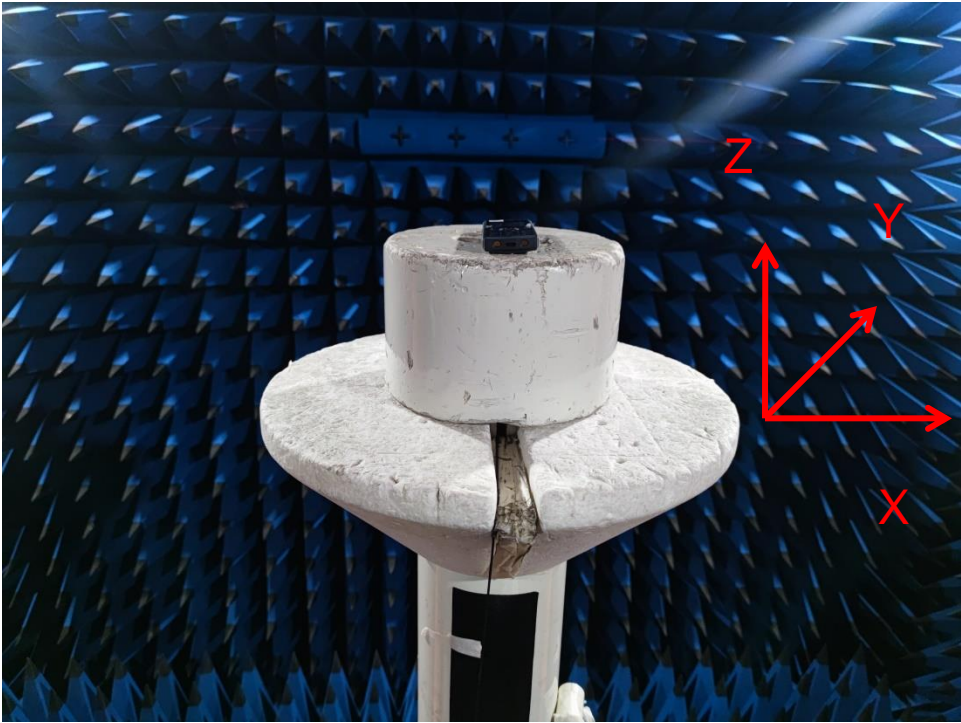
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	33.0	-4.8	0.8
2410	34.3	-4.7	0.8
2420	35.2	-4.5	0.7
2430	35.9	-4.5	0.8
2440	35.8	-4.5	0.7
2450	38.6	-4.1	1.4
2460	38.4	-4.2	1.5
2470	39.5	-4.0	1.8
2480	38.2	-4.2	1.7
2490	39.6	-4.0	1.8
2500	38.7	-4.1	1.6



## Passive Test For WiFi Antenna(5.8G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	33.6	-5.1	1.4
5200	34.3	-4.9	1.4
5250	30.2	-5.4	1.3
5300	29.4	-5.7	1.0
5350	28.7	-6.3	0.8
5400	31.4	-5.1	1.1
5450	32.5	-5.3	1.2
5500	32.5	-6.3	0.8
5550	31.7	-4.9	1.6
5600	35.3	-4.6	2.0
5650	30.2	-5.4	1.7
5700	29.6	-5.4	1.8
5750	28.5	-5.9	1.4
5800	28.7	-6.1	1.9
5850	27.5	-5.7	1.2

# *Antenna Active Test*





## Active Test For WIFI Antenna

Band	Channel	Data Rate	TRP	EIRP	Data Rate	TIS	EIS
WIFI 5G 802.11a	149	6Mbps	13.1	16.2	54Mbps	-68.2	-72.2
	157		13.3	16.2		-68.7	-72.6
	165		13.3	16.1		-68.7	-72.3



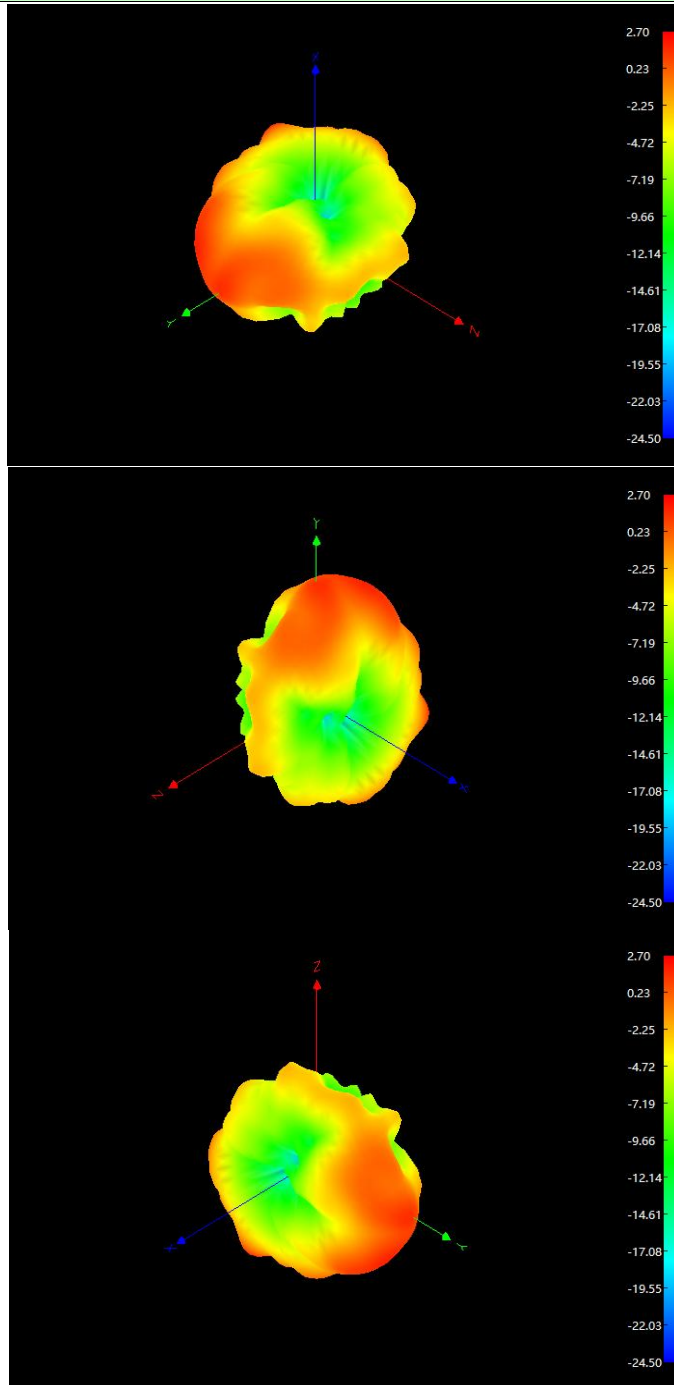


## Active Test For BT Antenna

Band	Channel	TRP	EIRP	TIS	EIS
BT	0	2.6	6.8	-86.6	-90.1
	39	2.6	6.1	-85.7	-89.4
	78	2.7	6.3	-85.1	-89.0



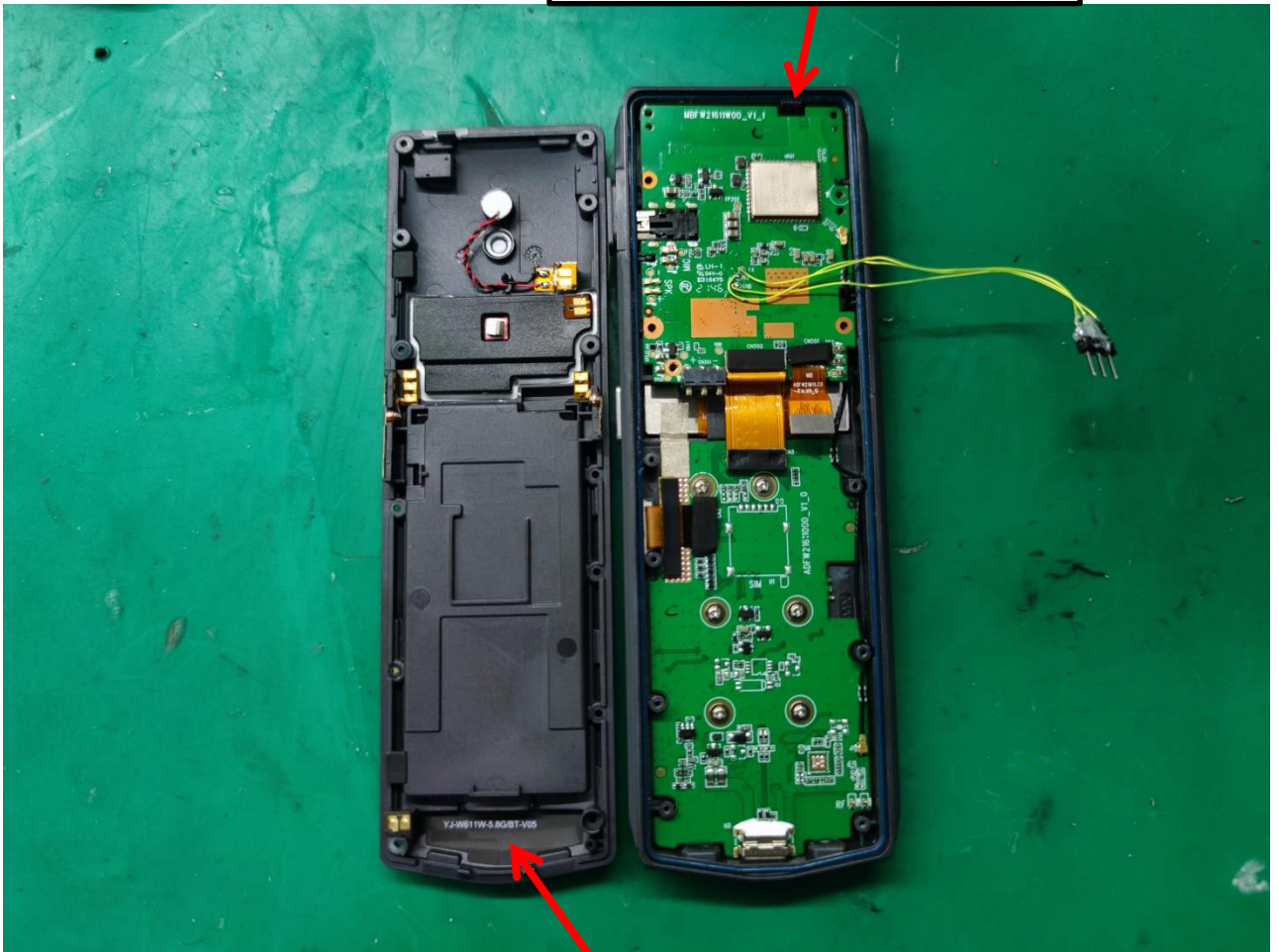
## Radiation Pattern For WiFi5.8G/BT





## 4. Assembly Picture

WiFi 2.4G Antenna



WiFi 5.8G/BT Antenna