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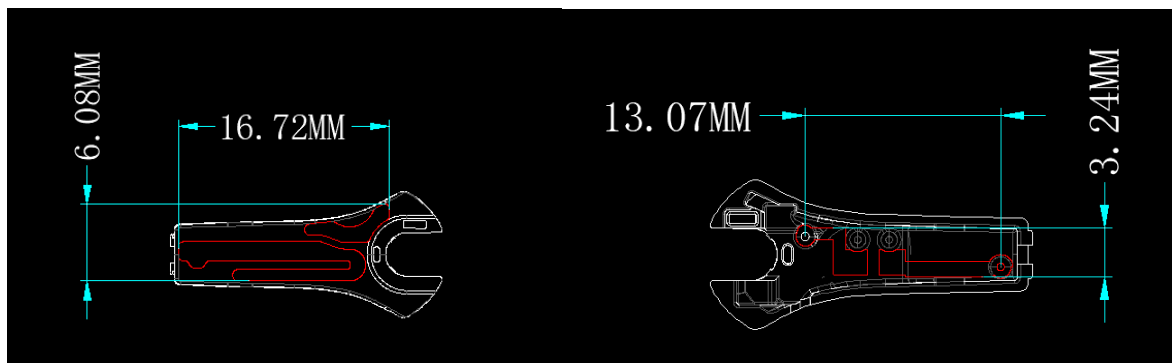
Customer		EVOIOT	
Item No.		IT93F	
Right/Left antenna code		IT93F-ANT	
Version		T05	
Date		2022.12.05	
Made by	RF checked by	PE checked by	Approved by
speed	Yingying. Tian	Vera	Xiangxiang. sun
Customer Confirmation:			

Project basic information

Antenna Type	Monopole
Antenna Material	LDS
Frequency Band	BT
OperatingFrequency(MHz)	2400-2500

1、 Project Information

1.1 Appearance and Dimensions



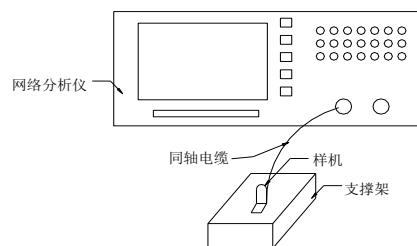
1.2 Antenna sample picture



2、 Antenna test equipment

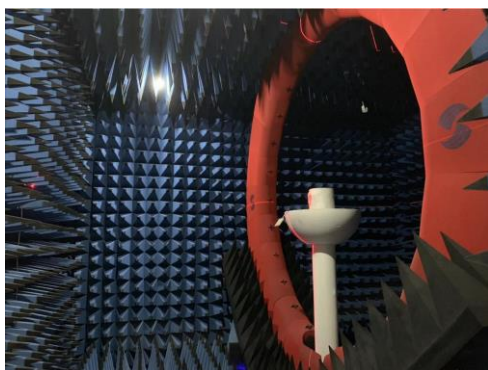
List of meters: Agilent 5071B;

2.1 The principle diagram of the ETS anechoic chamber

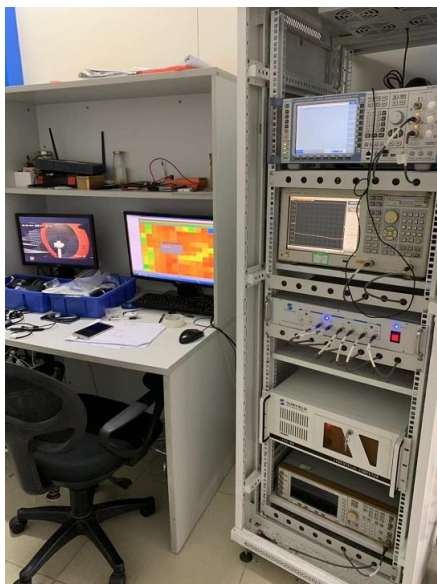


Picture1.Antenna static test connection method

2.2 Pictures of the ETS anechoic chamber



Inside the ETS anechoic chamber



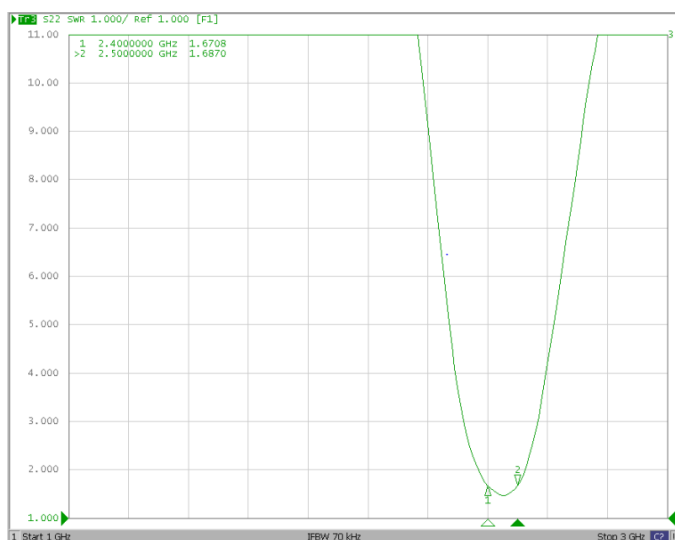
Test Machine

3、Electrical Characteristics

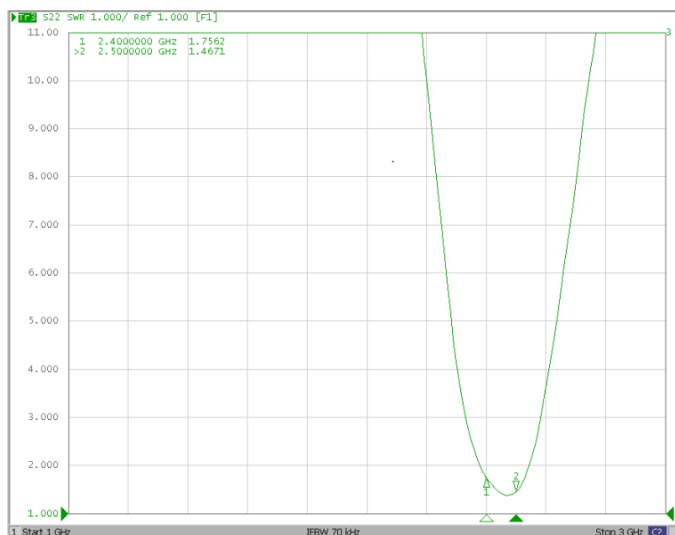
3.1 Test Environment Conditions

Temperature	Ordinary Temperature (5 to 35°C)
Humidity	Ordinary Humidity (25 to 85% RH)

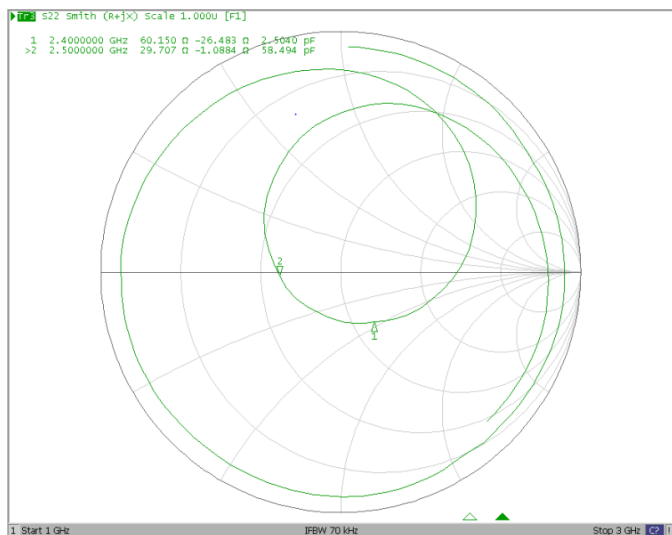
3.2 VSWR (IT93F-ant) -left



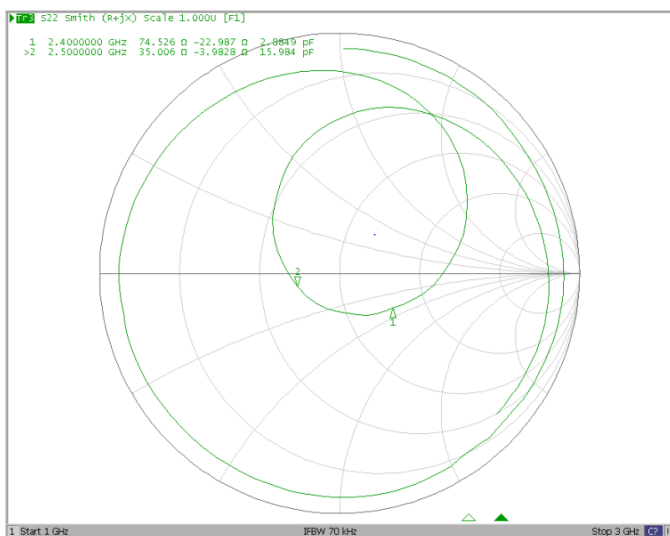
3.3 VSWR (IT93F-ant) -right



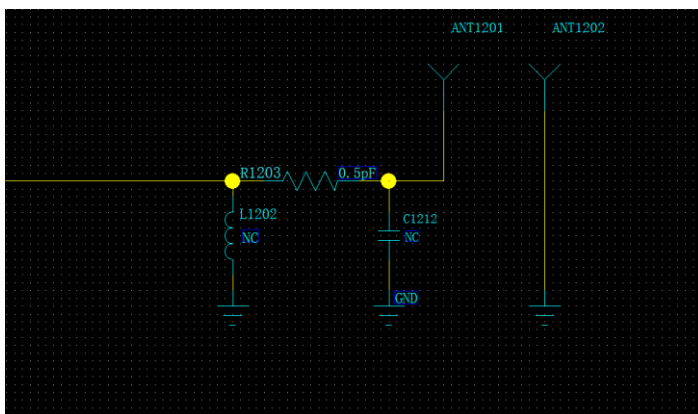
3.4 Smith Chart (IT93F-ant) -left



3.5 Smith Chart (IT93F-ant) -right



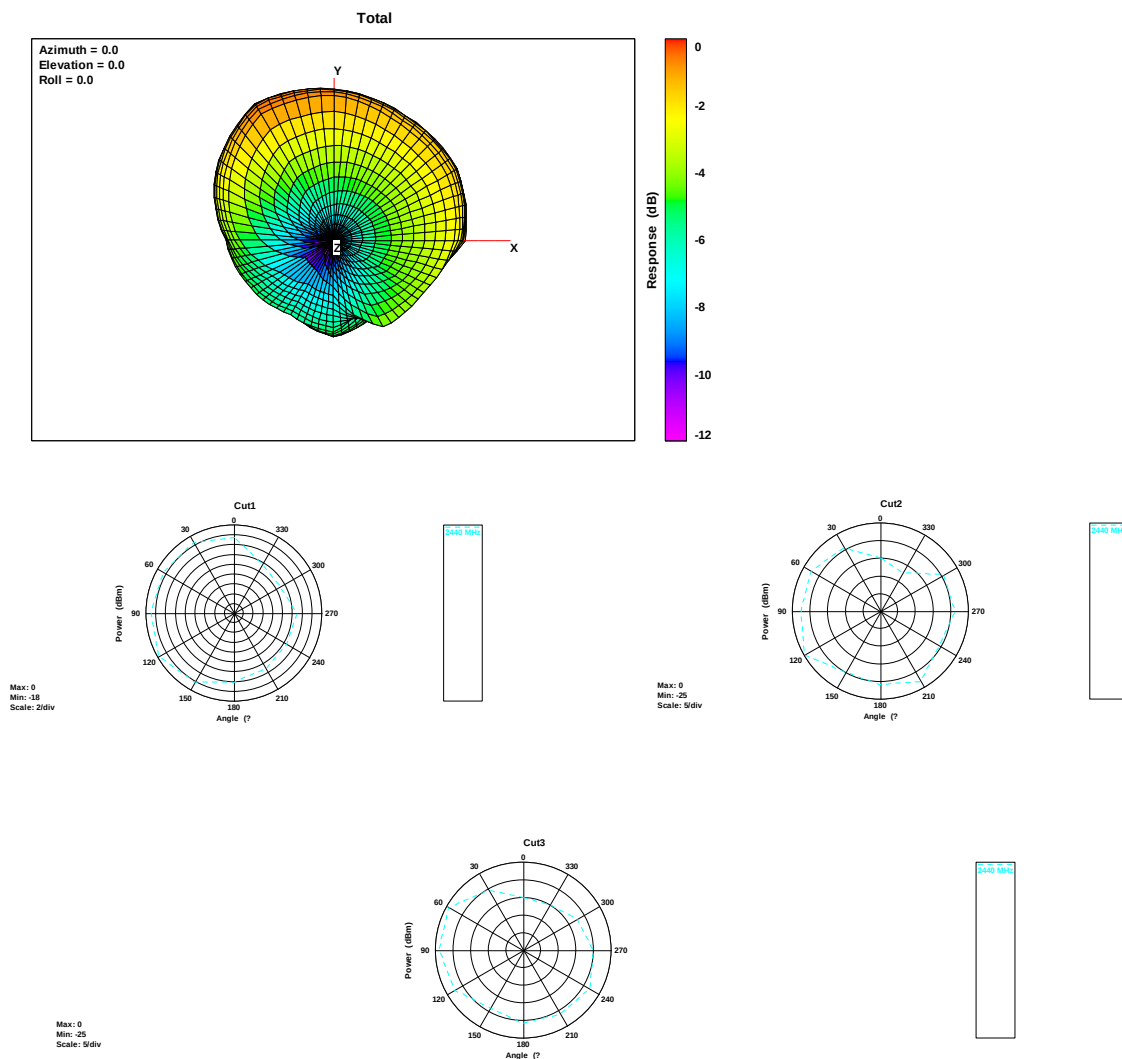
3.6 The antenna matching circuit



Number	L1202	R1203	L1212
Value	NC	0.5pf	NC

3.7 Antenna gain(IT93F-ant) -left

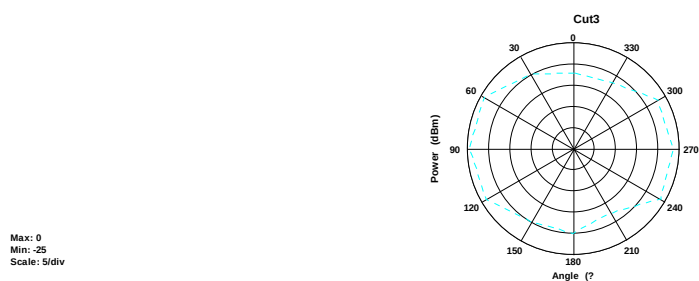
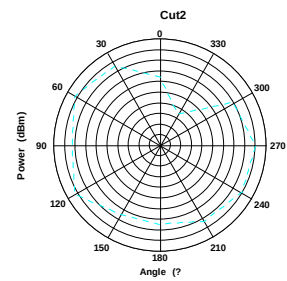
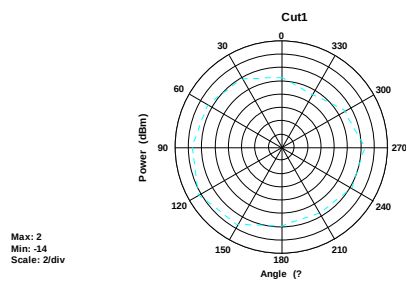
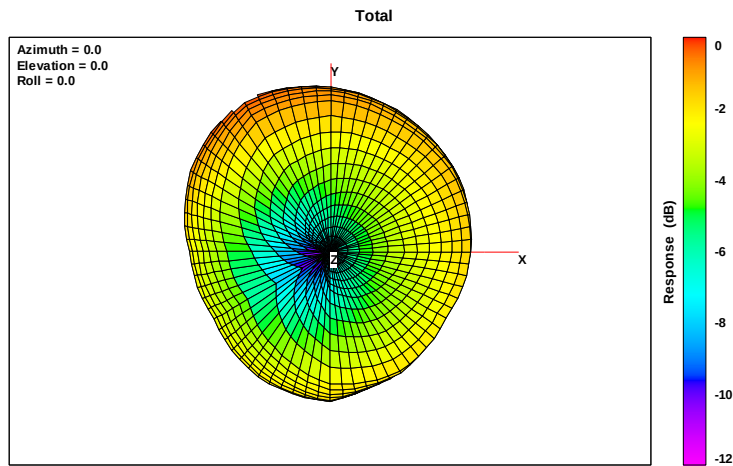
frequency(MHz)	gain (dBi)	efficiency (%)
2400	-0.46	40.7464
2410	-0.42	41.3556
2420	-0.22	42.051
2430	-0.13	42.5519
2440	0.16	44.0773
2450	0.37	45.0317
2460	0.48	45.7971
2470	0.54	46.1244
2480	0.41	44.6683
2490	0.17	42.9741
2500	0.20	40.6187



3.8 Antenna gain IT93F-ant) -right

frequency(MHz)	gain (dBi)	efficiency
2400	0.04	47.5161
2410	0.04	46.3017
2420	0.08	46.9533
2430	0.12	47.6635
2440	0.28	48.628

2450	0.37	50.8559
2460	0.49	51.8961
2470	0.54	51.4704
2480	0.48	51.111
2490	0.40	49.046
2500	0.19	48.4062



4、 Test conclusion

The index meets the BT normal antenna index

Note: This antenna is only suitable for debugging prototypes. Any motherboard version changes or RF material changes must be tested and verified by our company before it can be used.