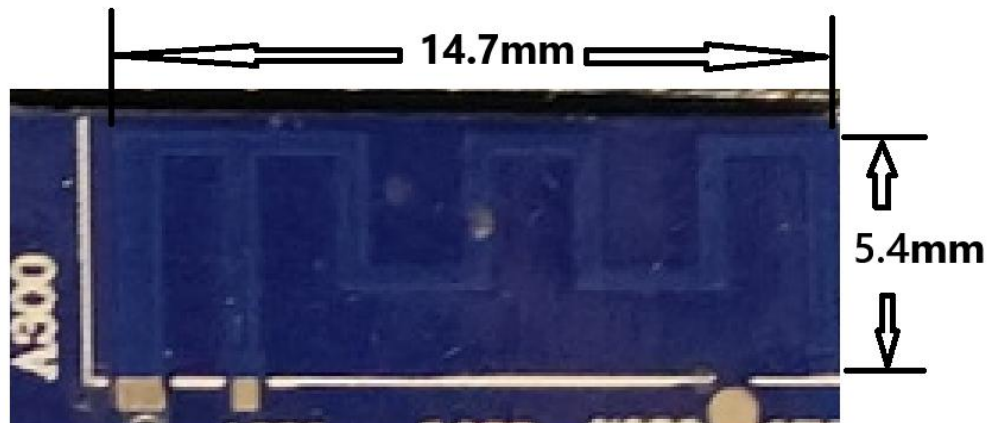


1. Antenna Description

Equipment	Digital Signal processor		
Antenna plate	Internal antenna		
Market name/Model name	i48DSP		
Manufacture	SPIRIT "LLC"		
Antenna Max. Gain	0.9 dBi		
	Frequency	E Total. dB(dB)	Efficiency()
	2402MHz	0.937002	29%
	2441MHz	-0.40394	27%
	2480MHz	-1.27924	25%
Frequency Range	2402-2480MHz		
Connect Type	PCB Antenna		

2. Picture of antenna



3. Test Setup

3.1 Microwave chamber diagram

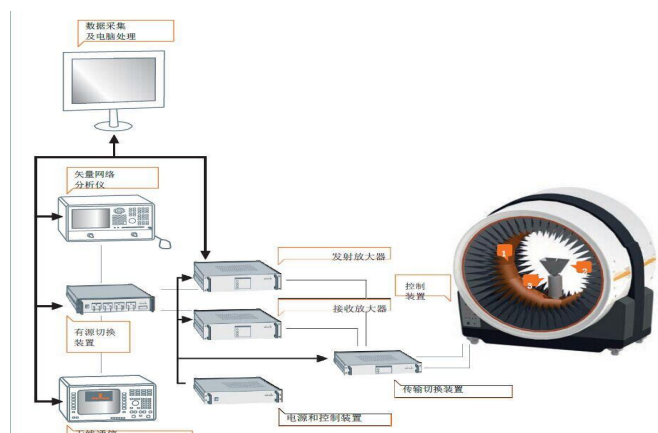


Figure 1 Wiring diagram of assembly test for microwave chamber system

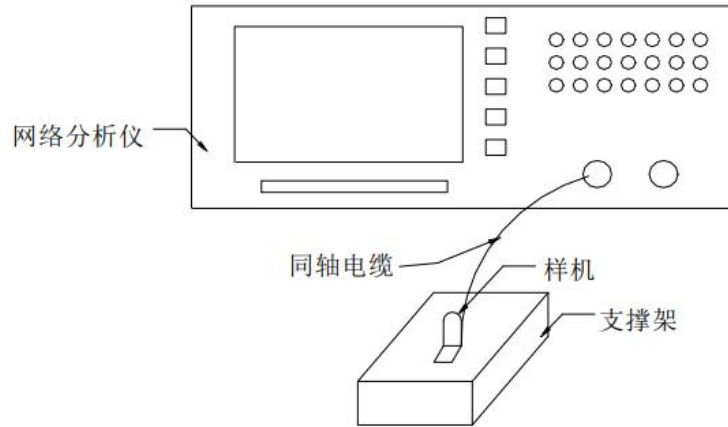


Figure 2 ANT static test connection method

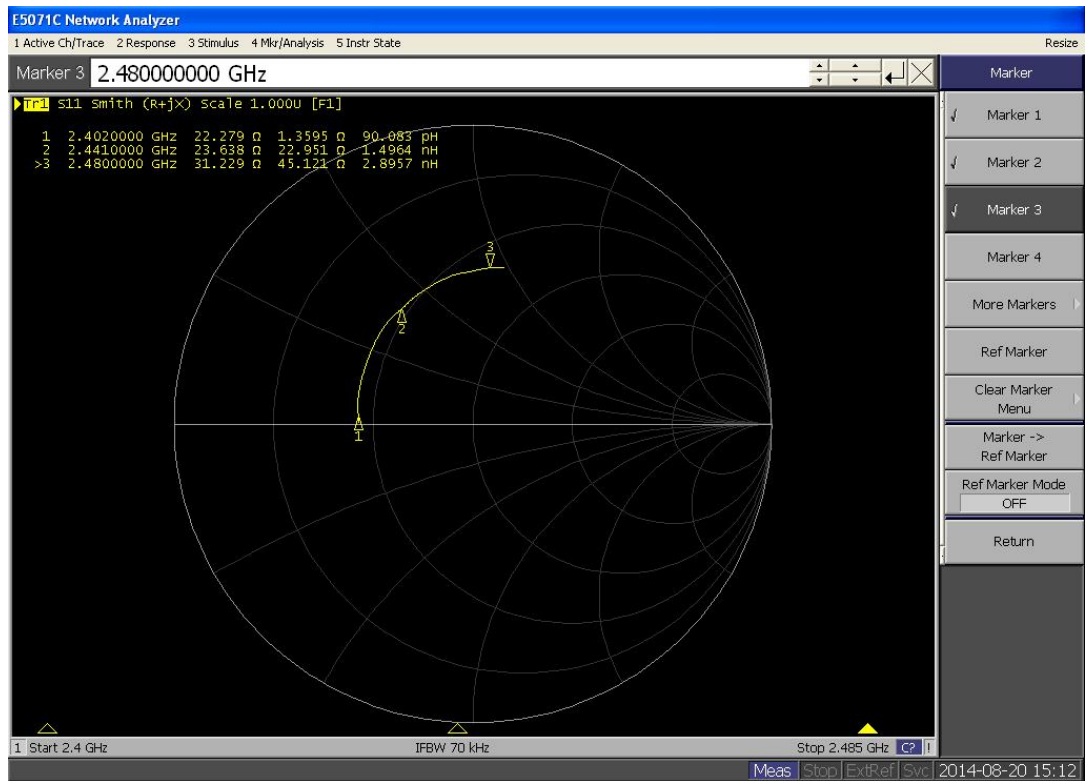
4. Antenna Radiation Pattern

4.1 VSWR



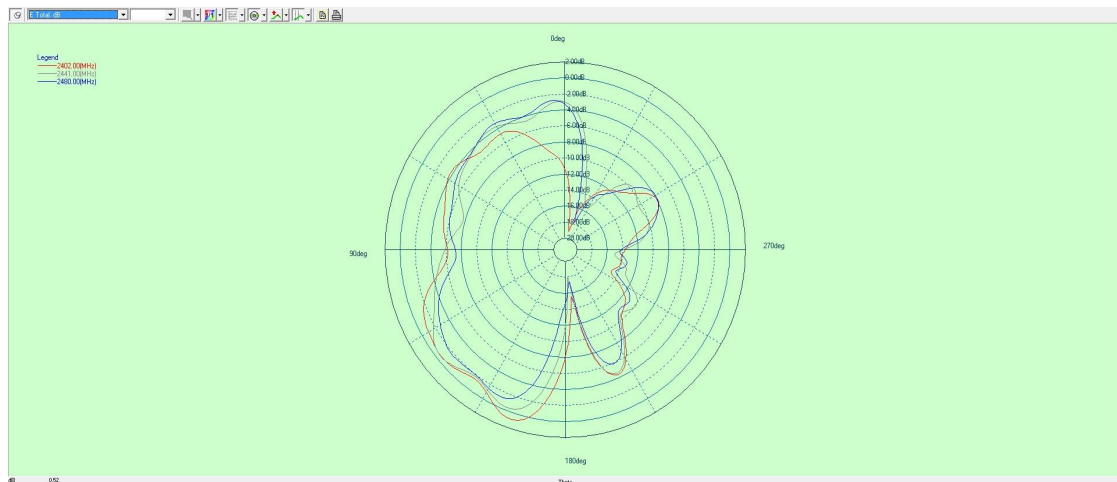
Frequency:	VSWR
2.402Ghz	2.2510
2.441Ghz	2.6813
2.480Ghz	3.2046

4.2 Input impedance:

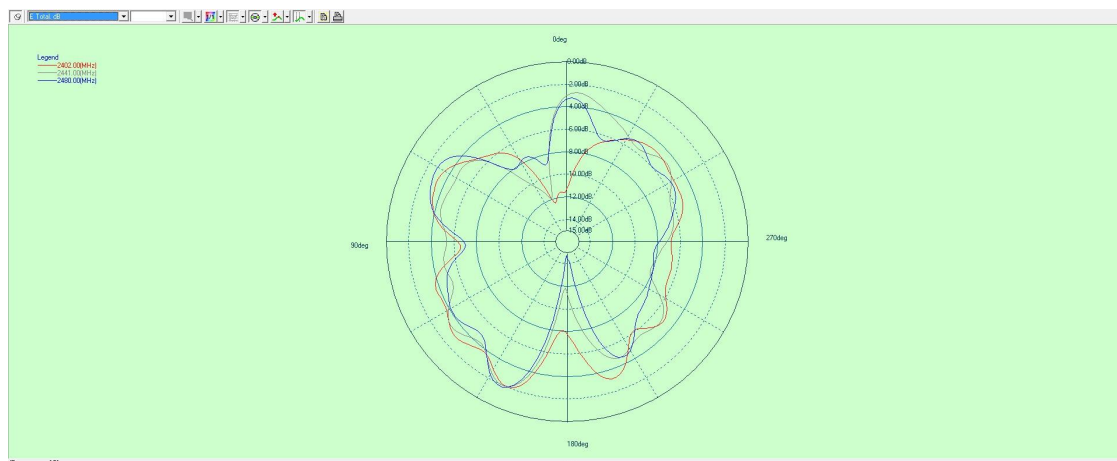


4.3 Radiation Pattern

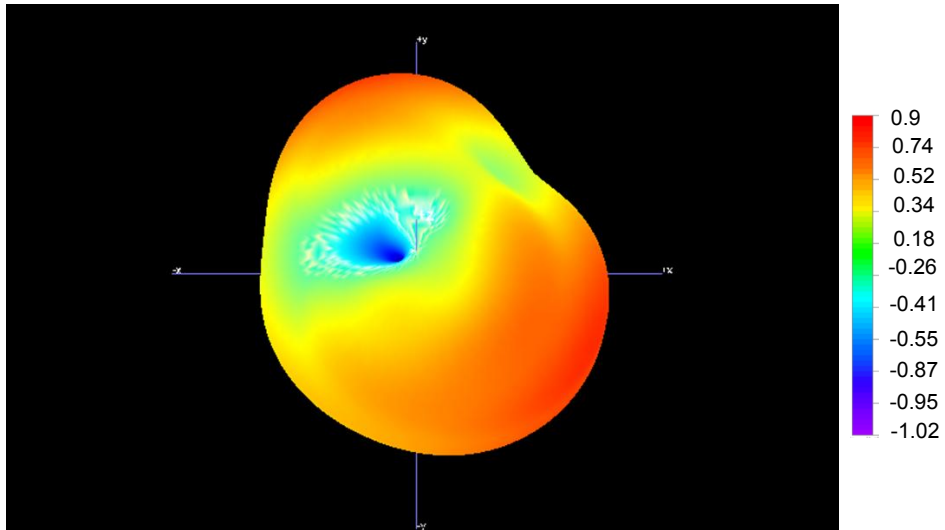
2D phi = 0:



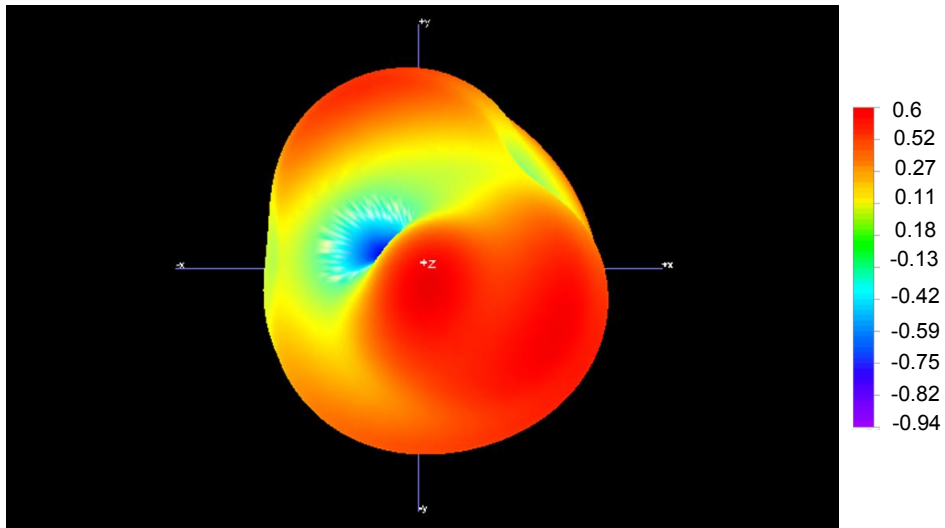
2D Phi = 90:



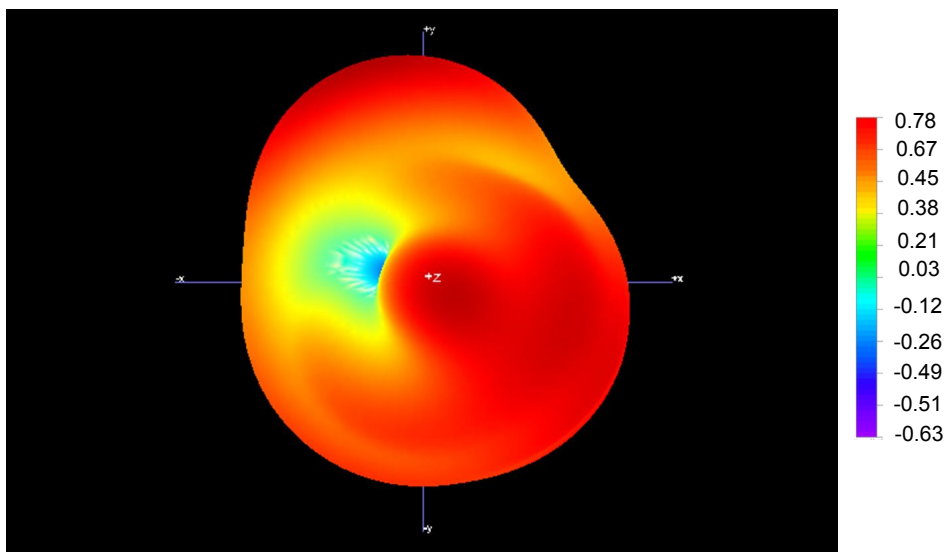
3D:



2.402G



2.441Ghz



2.480Ghz

Return Loss:



4.5 theta = 90:

