1. Purpose

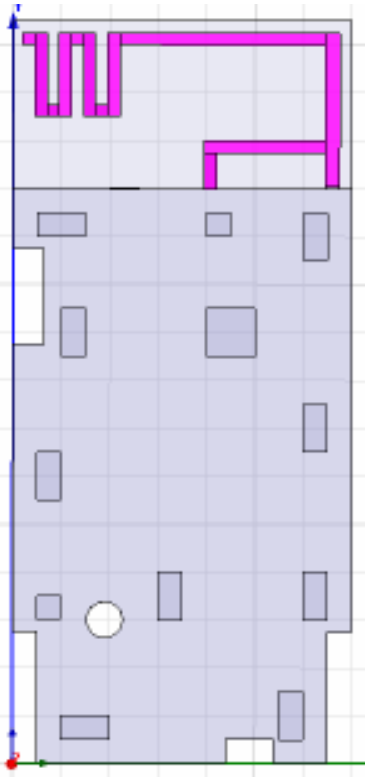
Measurement and match BTHS02 mono antenna.

2. Initial Condition

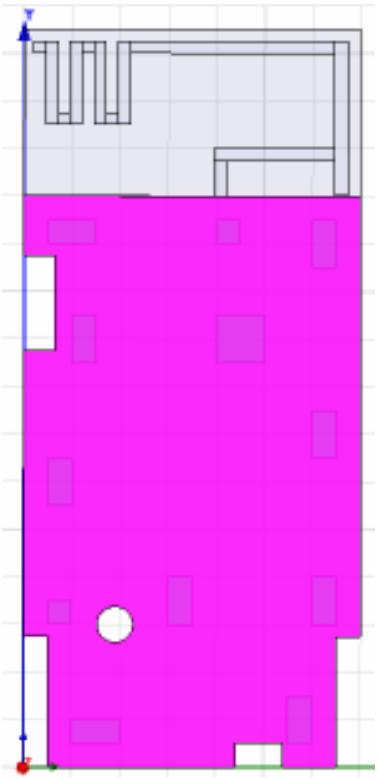
1.Pcb area : 14 mm*31 mm
2.GND area : 14 mm *24 mm
3.Antenna area :14 mm*7 mm
4.4 Layer
5.Antenna type: PIFA
6.Simulation:

PCB

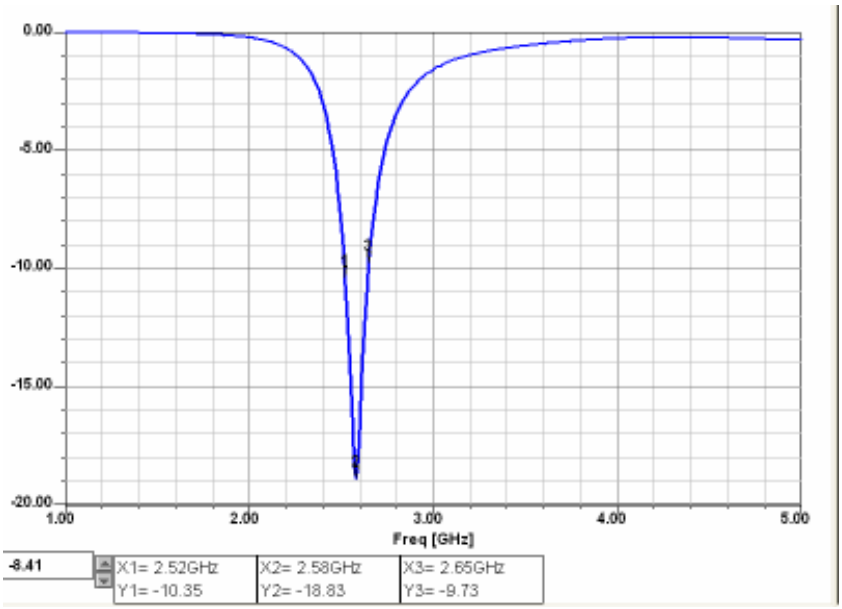
Antenna



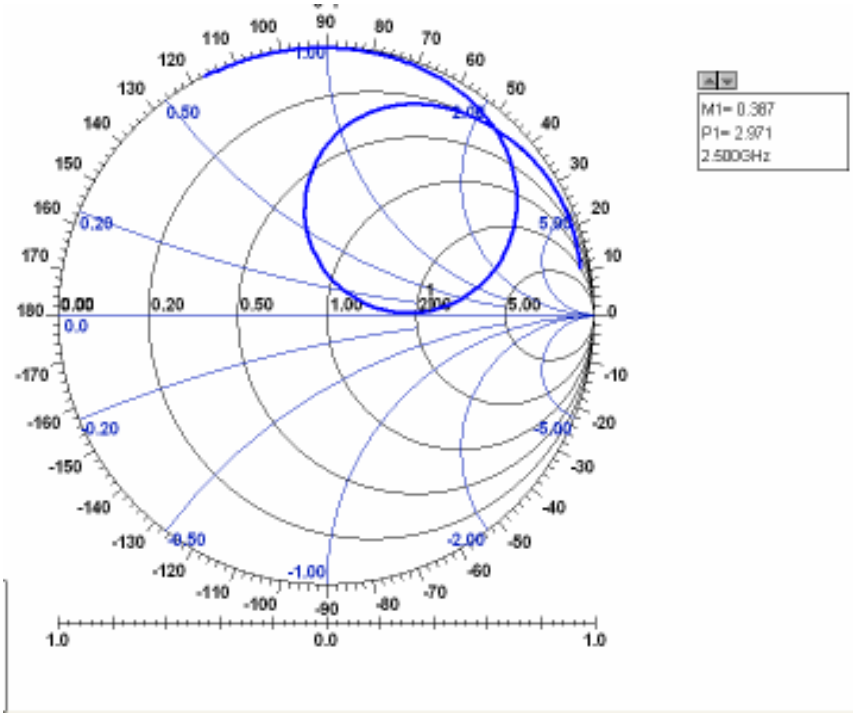
GND



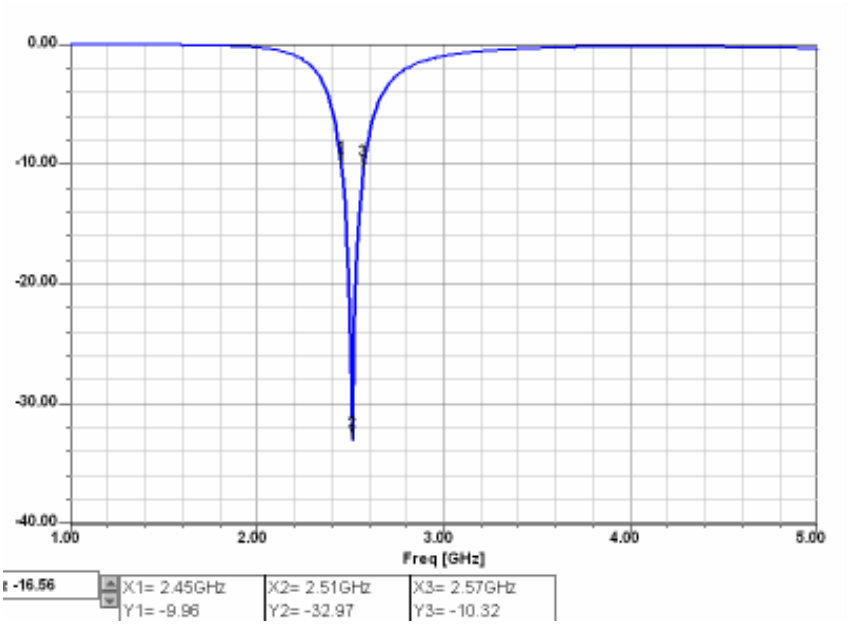
S11 PCB:



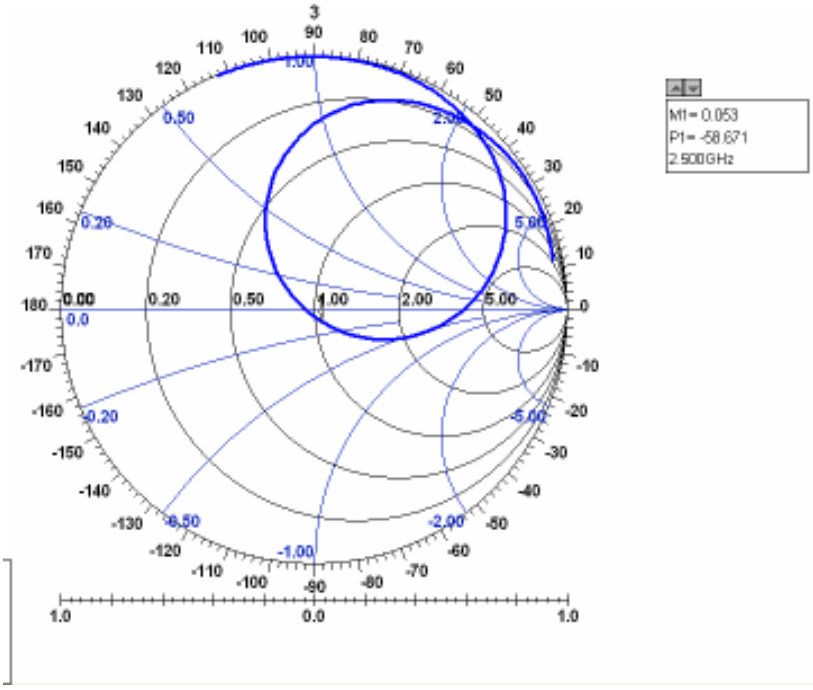

Smith PCB :



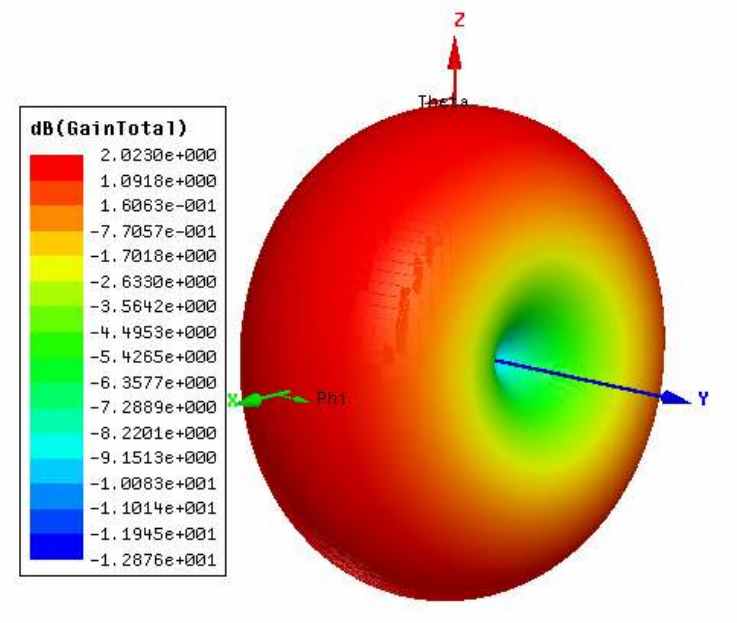
S11 PCB+battery




Smith PCB+battery



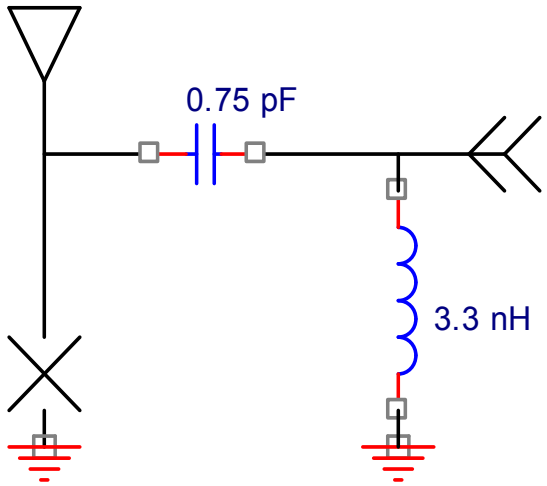
3D Pattern PCB :




3. Test Procedure

1.Match antenna to 50 Ω use L and C in T type.

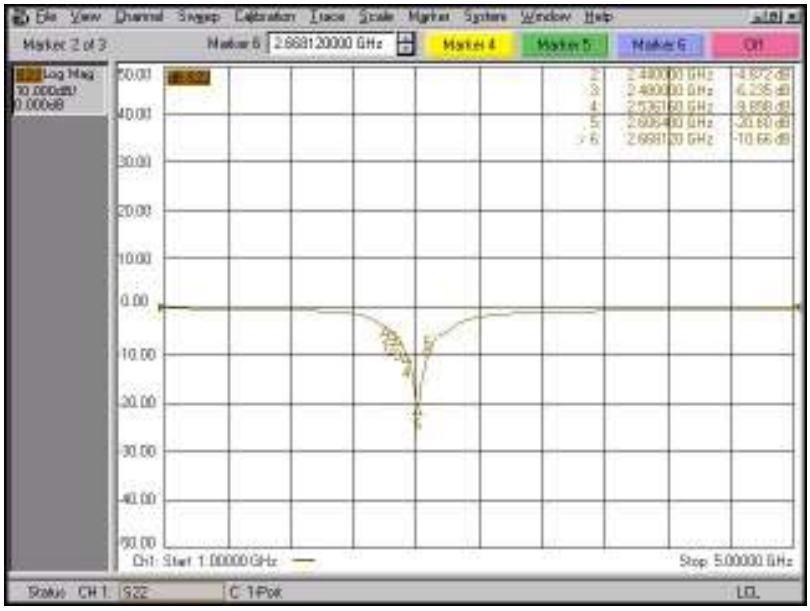
2.Finally match vaule:



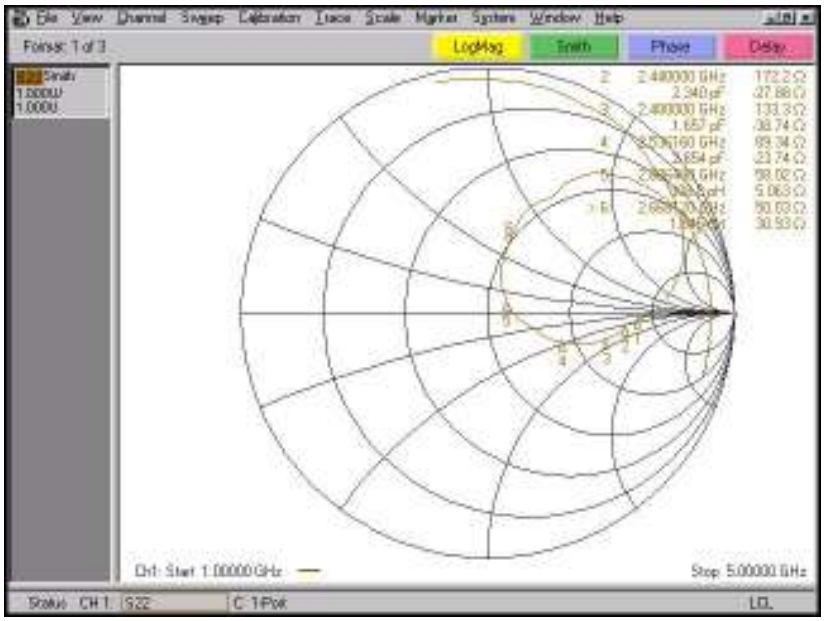
4. Test Result

Measurement:

0 ohm _s11 only pcb

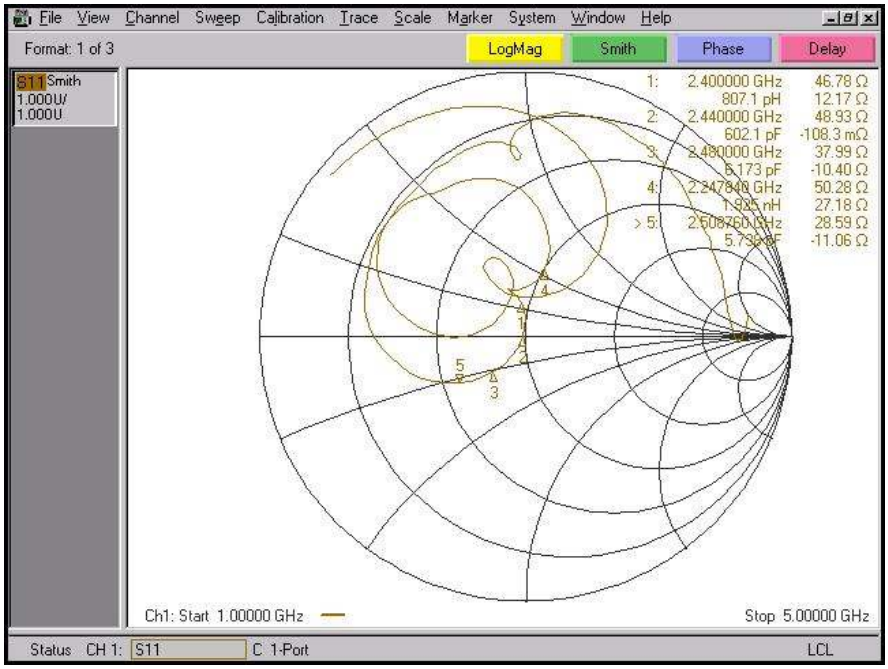


0 ohm _smith only pcb



--0.75pF---3.3nH_S11 ALL+Head


--0.75pF---3.3nH_Smith ALL+Head



5. Conclusion

After match , measurement antenna
BW:280 MHz
Freq:2.22~2.50GHz
Antenna peak gain:2.023dB