

Antenna Specification

Antenna describe;

Antenna plate	PCB antenna
Model	HL3430SG
Antenna gain	1dBi
Frequency range	2402MHz—2480MHz
Connector type	Direct
Manufacturer	Hisense Home Appliances Group Co.,Ltd.Qingdao Branch
Address	Hisense R&D center, #399 Songling Road, Qingdao, Shandong, 266000, China

Prototype Status	HL3430SG Module
Software Version	Software: 2_all-app.bin
Hardware Version	Hardware: V1.0
Project Phase	Formal Prototype
Tester	Zhao Weibing
Review	-
Prototype Status	HL3430SG Module

1. Test Items

Test on the matching performance and passive performance of the self-developed module antenna of HL3430SG.

2. Test Conclusion

The impedance matching of the antenna is good, and the antenna matching components can be removed.

3. Test Equipment

RZ1800 Anechoic Chamber + Network Analyzer E5071C (Communication Company),
Network Analyzer E5080B

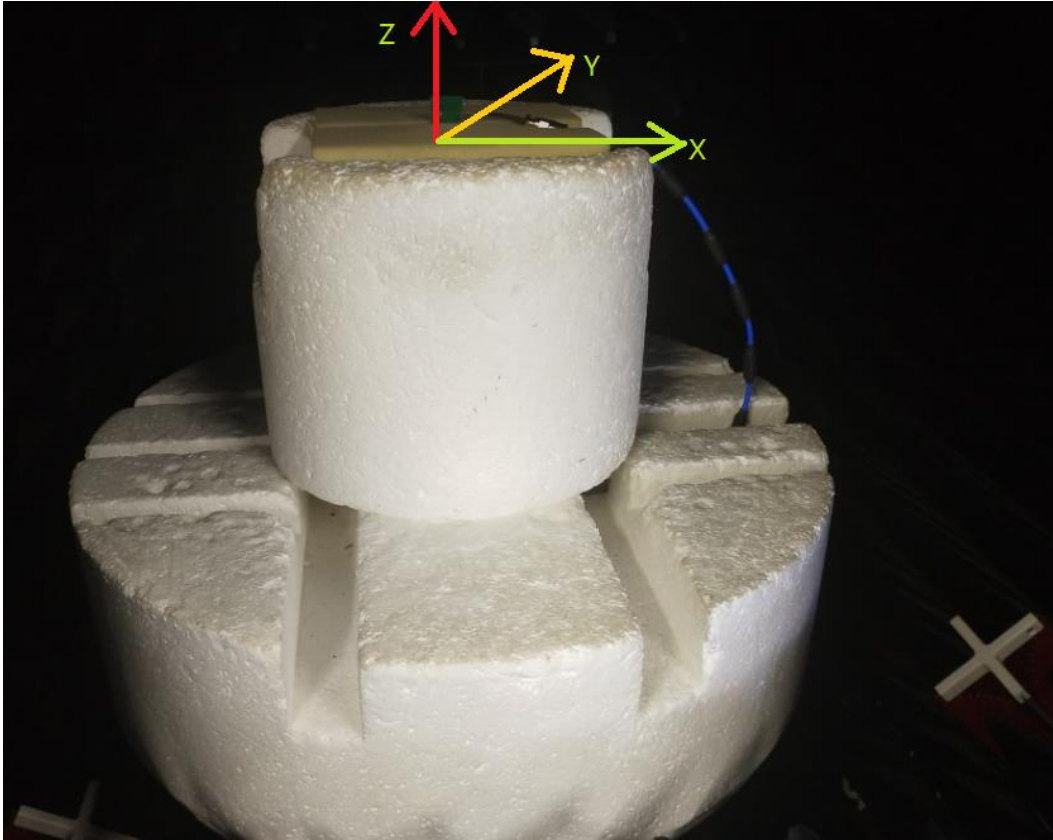


Figure 1 Anechoic Chamber Test Picture



Figure 1 Anechoic Chamber Test Picture

4. Antenna Impedance Matching Parameters

4.1 Antenna S11 Parameters

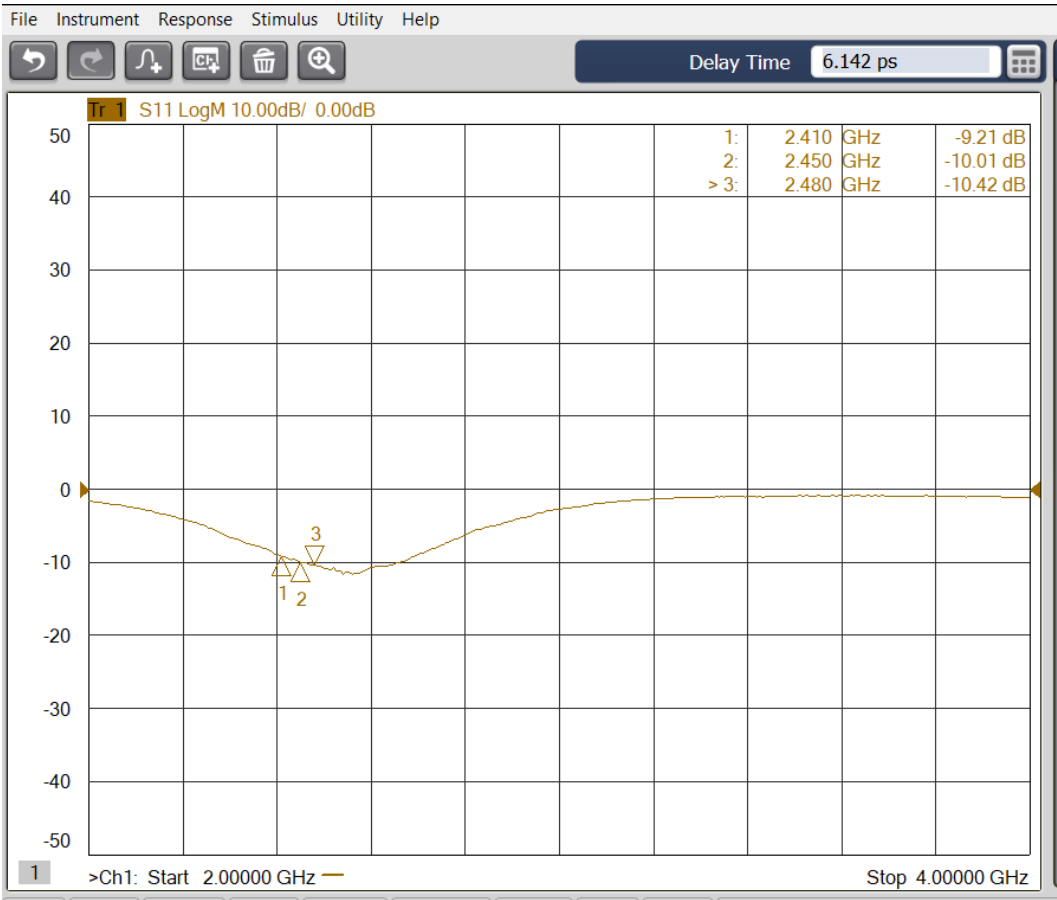


Figure 2 Antenna S11

4.2 Antenna Input Impedance

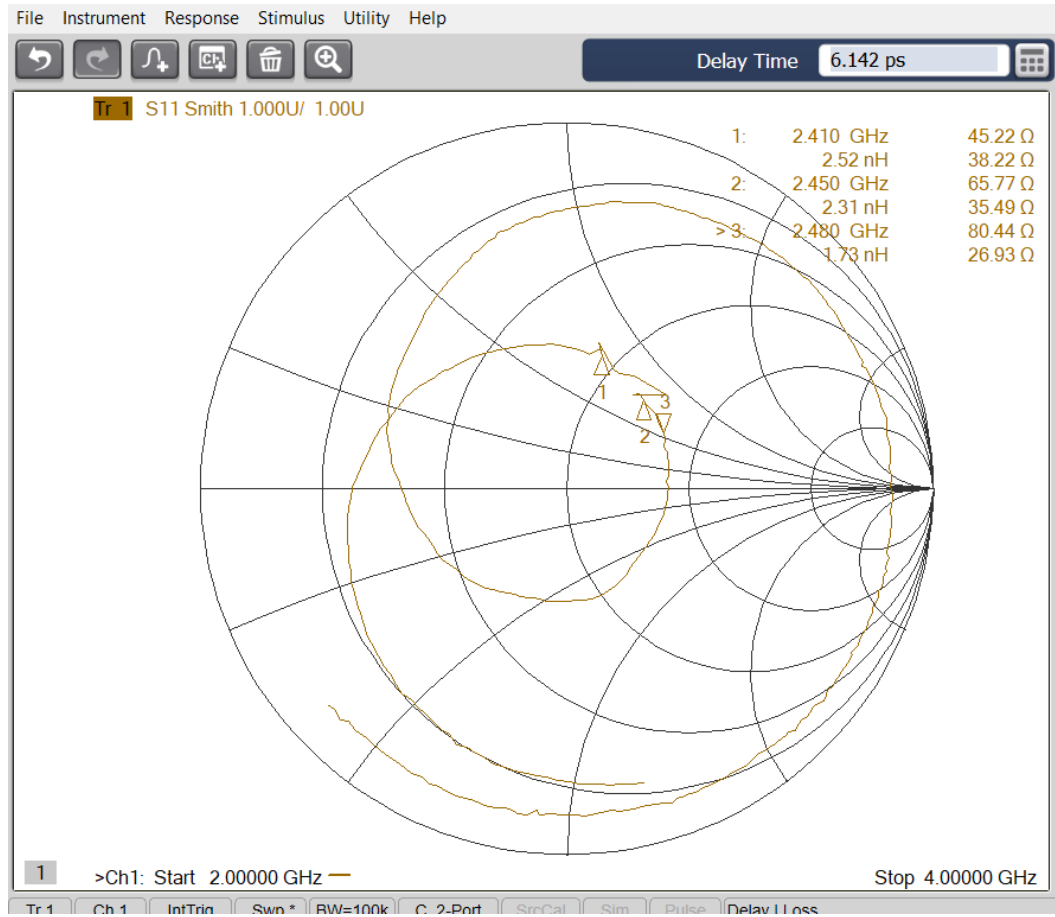


Figure 3 Antenna Input Impedance

5. Antenna Gain and Efficiency

chNo	Freq (MHz)	Efficiency_Pcent	Efficiency_dB	Max Gain (dBi)
1	2410	65.94	-1.81	1
2	2420	62.6	-2.03	1
3	2430	62.77	-2.02	1
4	2440	67.2	-1.73	1
5	2450	69.27	-1.59	1
6	2460	71.37	-1.46	1
7	2470	72.65	-1.39	1
8	2480	71.14	-1.48	1
9	2490	69.07	-1.61	1

6. Antenna 3D Radiation Pattern

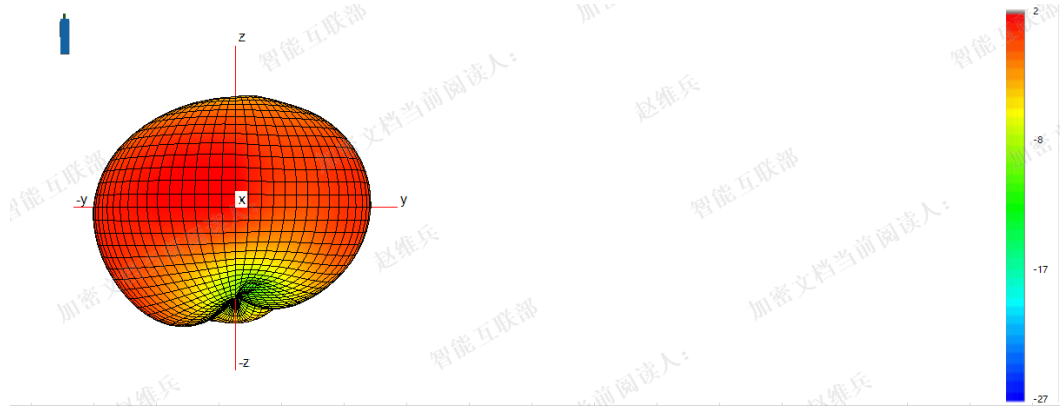


Figure 4 3D Radiation Pattern @2450MHz