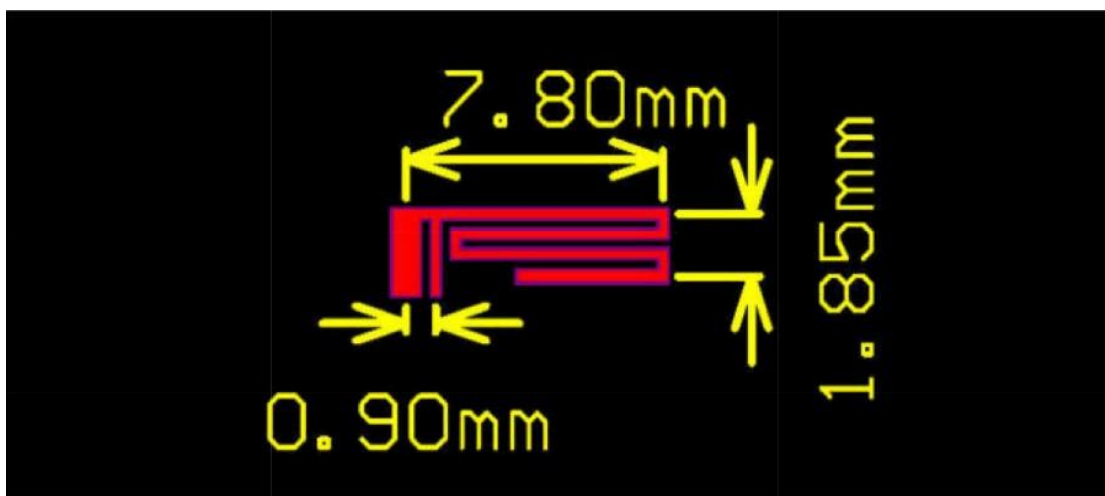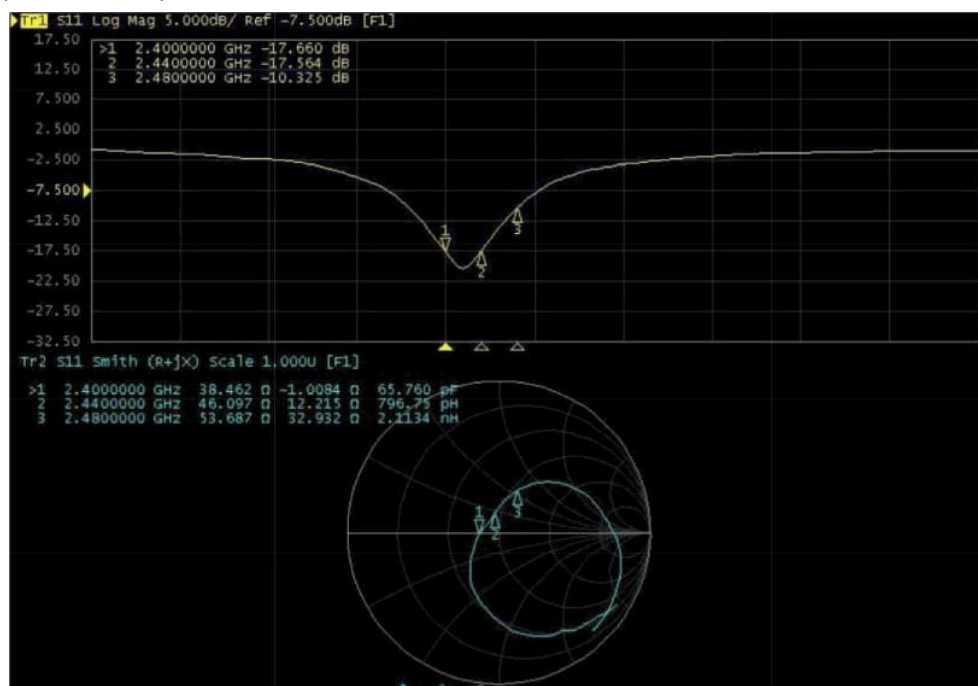| Test Ccompany	Yizhao Microelectronics (Hangzhou) Co., Ltd.
Test Address	Room 401, Building 15, No. 498, Guo Shoujing Road, Pudong New Area, Shanghai
Test Date	2018/11/07
Test Instrument	Agilent 8753ES
Antenna Type	On-board (matching impedance: 50Ω)
Frequency Range	2.40~2.48G

- Normal Module Wiggle antenna design specification:

This Wiggle antenna is used in normal module with whole layout board which size is 1.85mm*7.8mm and thickness is 1.0mm（FR4）

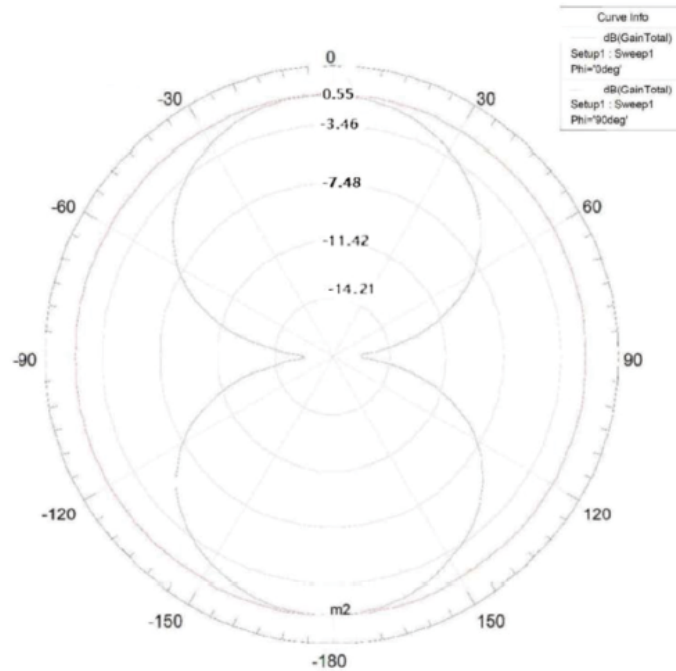3- 1 **Normal Module wiggle Antenna**

The performance of S11 as blow show and the working frequency band cover 2.4G ISM(2.40~2.48G) .

3-2 Normal Module Wiggle S11 performance

The gain of this antenna 2D and 3D as blow show and the maximum gain is about 0.55 dBi,Test Frequency point 2.44GHz.

Name	Theta	Ang	Mag
m1	0.0000	0.0000	-3.29
m2	180.0000	180.0000	-3.31

3—3 Normal Module Wiggle gain

Frequency vs antenna gain table:

Mark	Frequency	Antenna Gain
1	2400MHZ	-0.92dbi
2	2440MHZ	0.55dbi
3	2480MHZ	-0.75dbi