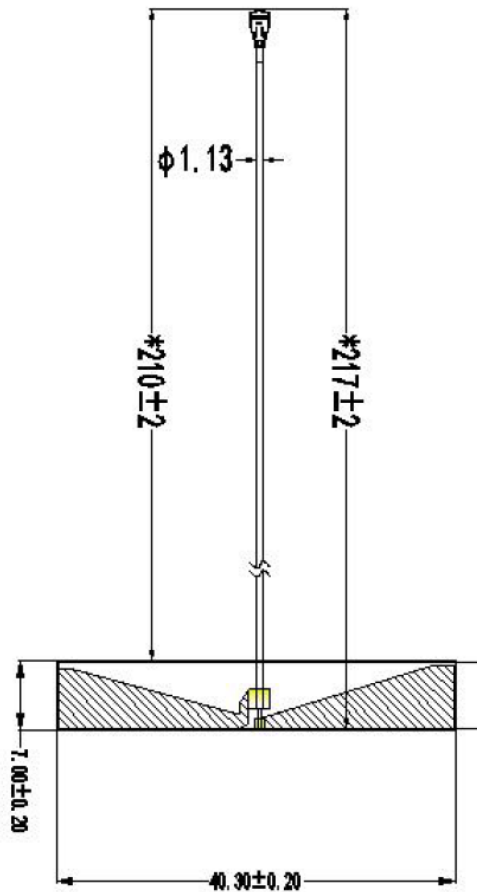


Antenna Specification

1. Antenna Describe

Antenna Manufacturer	Woan Technology (Shenzhen) Co., Ltd.
Antenna Address	Room 1101, Qiancheng Commercial Center, No.5 Haicheng Road, Mabu Community, Xixiang Sub-district, Bao'an District, Shenzhen, Guangdong, P.R.China, 518100
Antenna Model	WA-S1 Mini
Antenna Type	PCB Antenna
Antenna Gain	3.12dBi Max
Frequency Rang	2400-2500MHz
VSWR	≤ 2
Input Impedance	50 Ω

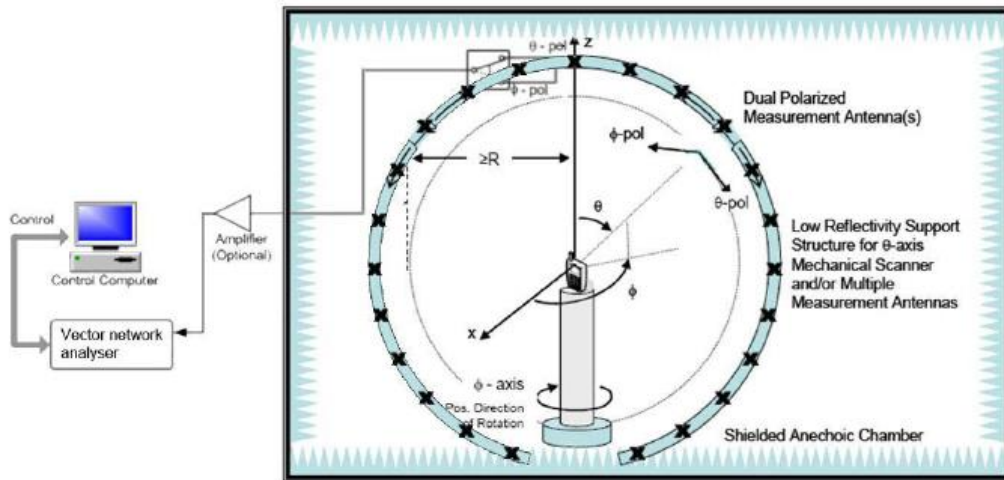
2. External View Drawing



Unit: mm

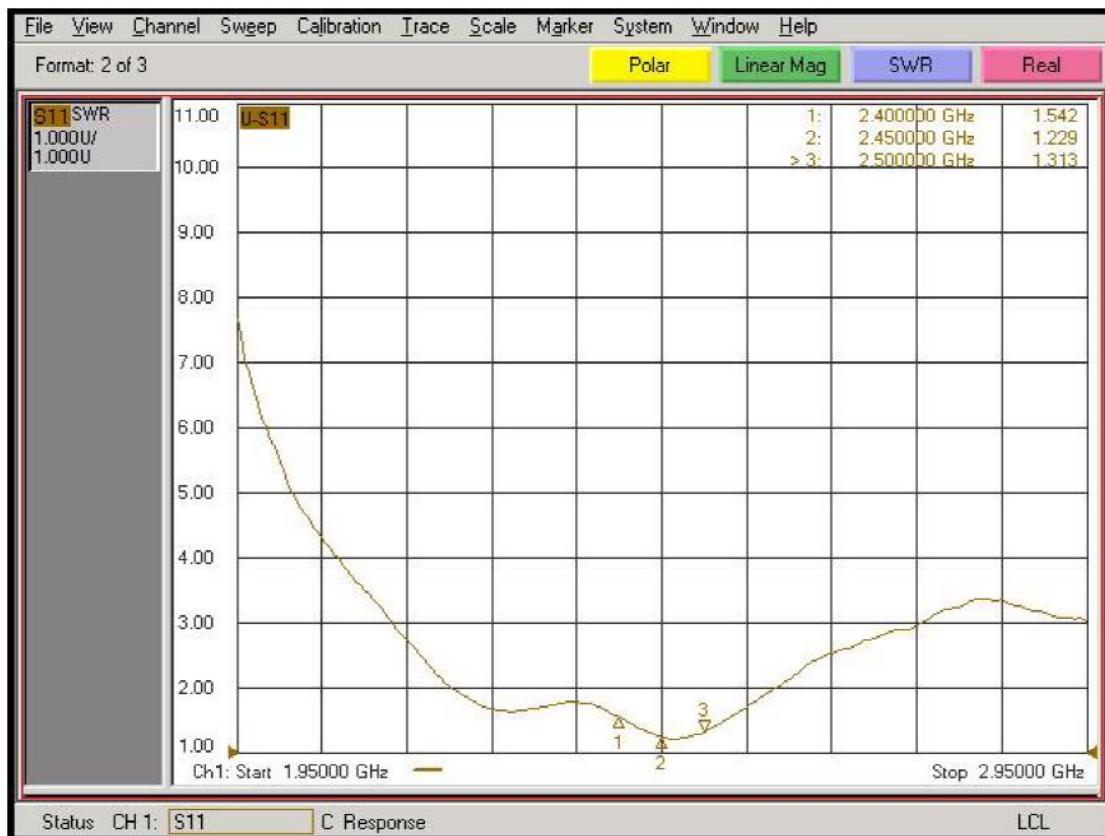
3. Measurement Result

3.1 Test Setup



3.2 S11 Diagram

Marker	2400MHz	2450MHz	2500MHz
Return loss	-13.2	-19.3	-17.0
VSWR	1.5	1.2	1.3





3.3 Antenna test data

Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400	2.69	64.1
2410	2.52	61.5
2420	2.62	63.2
2430	2.46	61.6
2440	2.63	64.5
2450	2.72	66.2
2460	3.09	71.7
2470	3.10	71.2
2480	3.12	71.6
2490	3.11	71.8
2500	3.06	71.2

3.4 Antenna test diagram

2450MHz

