

Specifications Sheet

Object	Internal Antenna	Page	
Customer		Date	May 16 2016
System	WLAN/ Bluetooth/ Zigbee	Rev.	1 of 6
Model Name	LeWei Technology Co., Ltd.	Written by	W. I. KWAK

Electrical Specifications

Band Width (MHz)	100
Frequency Range (MHz)	V.S.W.R (Min) 2400 ~ 2500
Gain (Max)	2.5 ± 1 (dBi)
Input Impedance	50 (Ω)
Efficiency	40~55%

Mechanical Specifications

Antenna Size (Length x Width x Height)	21.9*16.8*0.12 mm (optional)
Weight	N / A
Connector	NC
Cable Length	202 mm (optional)
Radiator Material	Copper
Operation Temperature	-40 ~ 85 (°C)
Storage Temperature	--30 ~ 80 (°C)

Option	
Remarks	Data measured at free-space.

1、 Specifications

The report provides a test of the electrical performance parameters of the antenna, which is a science and technology model. TYY-TX3010 天线为 WIFI Built in antenna, WIFI Antenna is made by copper pipe+RF Line composition. (As follows 1 Shown)

chart 1 TYY-TX3010 antenna WIFI antenna



chart 2 TYY-TX3010 Antenna finished



Max Outside Diameter 5.5mm+/-0.1mm, The exposed heat shrinkable tube 3mm+/-1mm

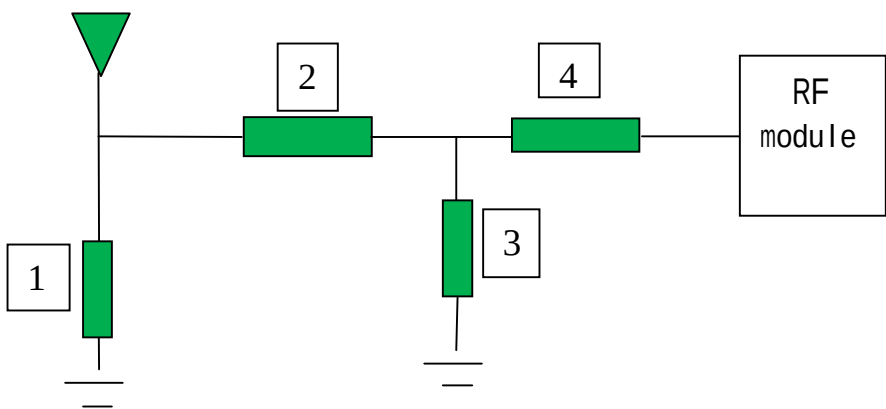
chart 3 TYY-TX3010 antenna (Line length 103mm)



2. Electrical properties

2.1WIFI Antenna matching circuit

This item matching circuit is provided by the customer.



Element number	1	2	3	4
WIFI optimum	NC	0 Ohm	NC	
Original (spare)	50 ohm matching (inductance capacitance / sunlord Darfon)			

Efficiency

40~55%

Fig 1. Return Loss (Agilent E8357A 300KHz 6GHz PNA Series Network Analyzer)

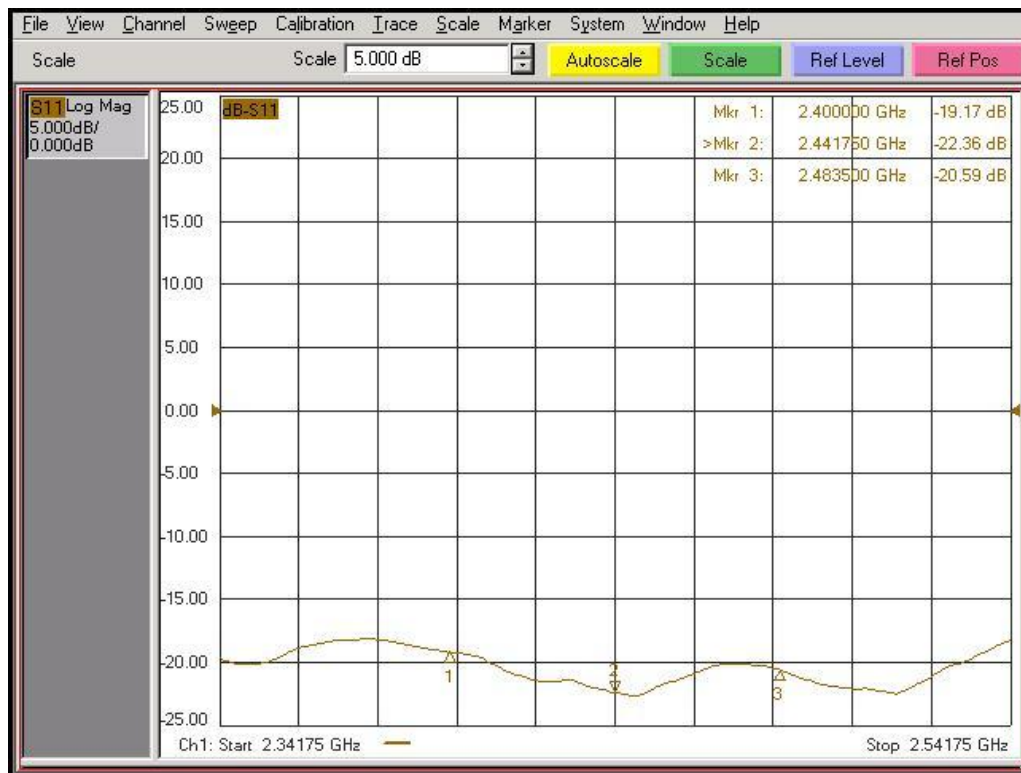
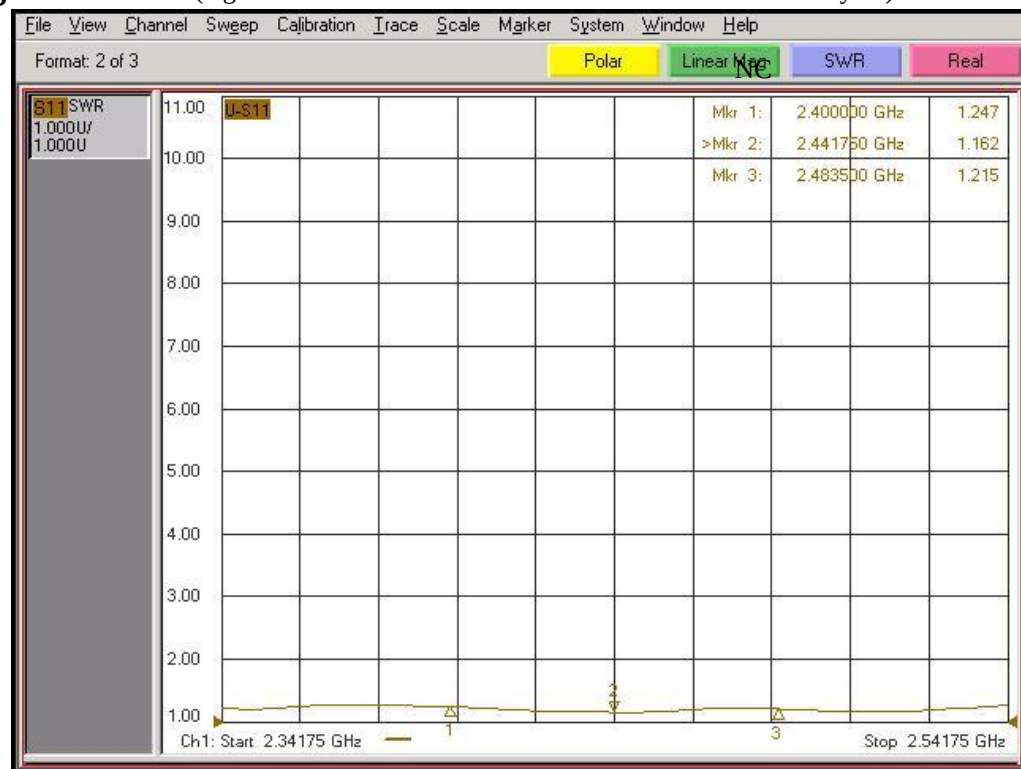


Fig 2. V.S.W.R (Agilent E8357A 300KHz 6GHz PNA Series Network Analyzer)



Sale: : Miss bear: 13530628515

Technical support telephone: Mr. Tang 13538032086

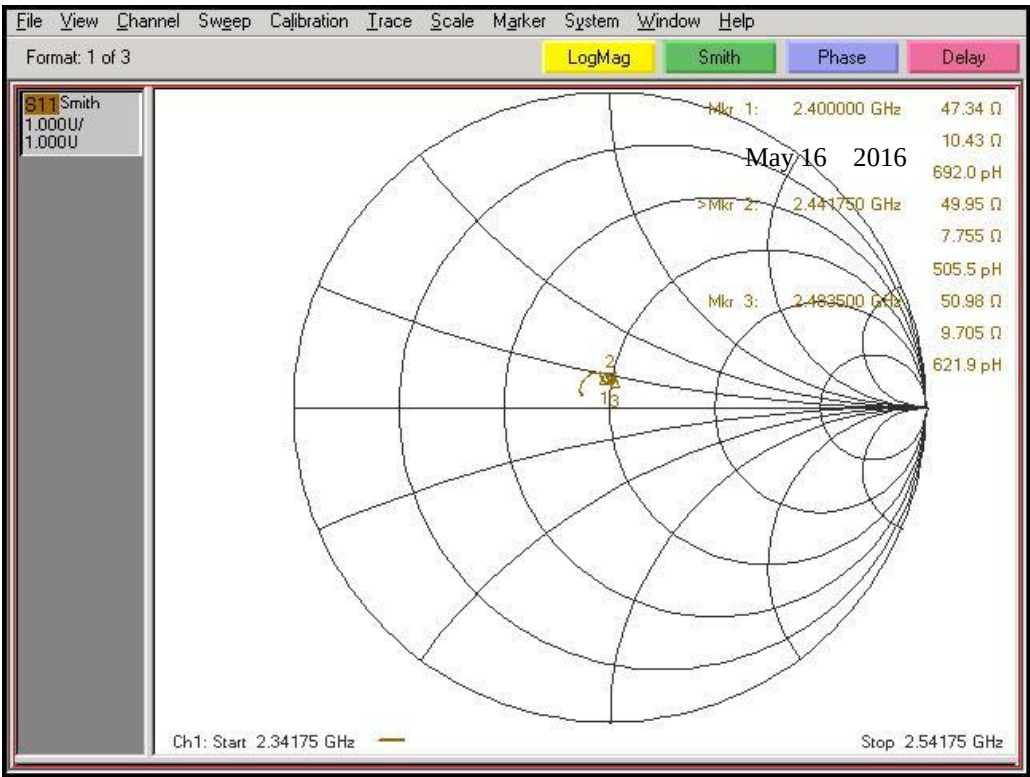
Technical supportQQ:719926122

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Fig 3. Smith Chart (Agilent E8357A 300KHz 6GHz PNA Series Network Analyzer)

LEFT



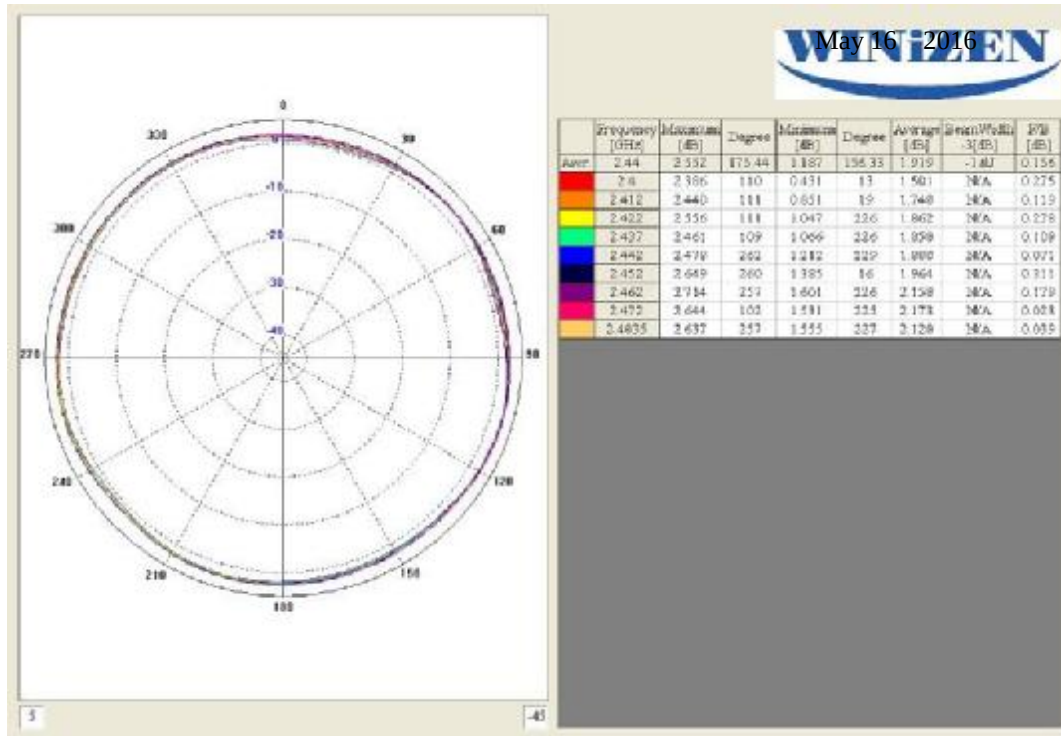
NC

Storage Temperature

--30 ~ 80 (°C)

Fig 6. Gain Patterns

a. Azimuth Pattern



b. Elevation Pattern

2.3.1. Test setup

Storage Temperature

--30 ~ 80(°C)

Connect the VSWR test device are: Agilent E5071B network analyzer from 50 ohm coaxial Cab 120mm long
Brass & test fixture

Processing test fixture: 50 ohm antenna leads to SMA-J connector from the test point on the plate PCB with a rigid cable, and a
Connect the choke tube, and then sequentially connected with other devices.

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