



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Specifications Sheet

| | | | |
|-------------------|-------------------------|-------------------|-------------------|
| Object | Internal Antenna | Page | 1 of 6 |
| Customer | | Date | February 19, 2010 |
| System | WLAN/ Bluetooth/ Zigbee | Rev. | A |
| Model Name | W5I-BO-07 | Written by | W. I. KWAK |

Electrical Specifications

| | |
|--------------------------------|-----------------|
| Frequency Range (MHz) | 2400 ~ 2483.5 |
| Band Width (MHz) | 83.5 |
| V.S.W.R (Min) | 1.9 : 1 |
| Gain (Max) | 2.5 ± 1 (dBi) |
| Input Impedance | 50 (Ω) |
| Polarization | Linear |

Mechanical Specifications

| | |
|--|------------------|
| Antenna Size (Length x Width x Height) | 48 × 8 × 1 mm |
| Weight | N / A |
| Connector | I-PEX MHF |
| Cable Length | 130 mm |
| Radiator Material | Copper |
| Operation Temperature | - 30 ~ 70 (°C) |
| Operation Humidity | 10 ~ 90 (%) |

| | |
|----------------|------------------------------|
| Option | |
| Remarks | Data measured at free-space. |

WINiZEN Co., Ltd.



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

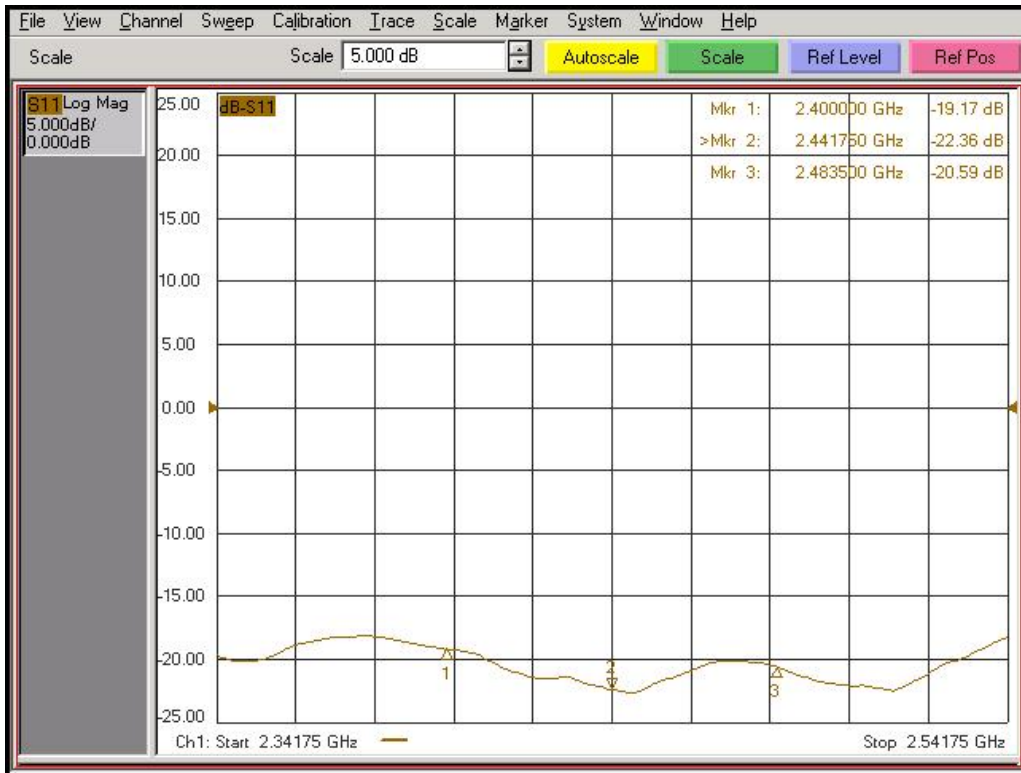


Fig 2. V.S.W.R (Agilent E8357A 300KHz~6GHz PNA Series Network Analyzer)

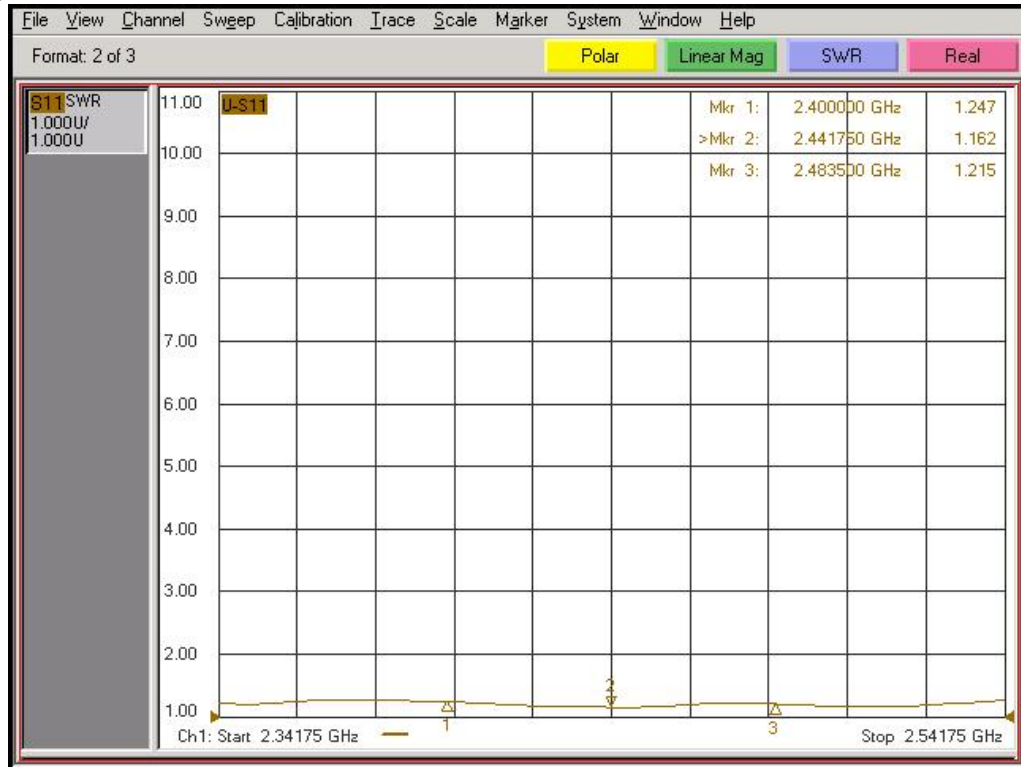


Fig 3. Smith Chart (Agilent E8357A 300KHz ~ 6GHz PNA Series Network Analyzer)

LEFT

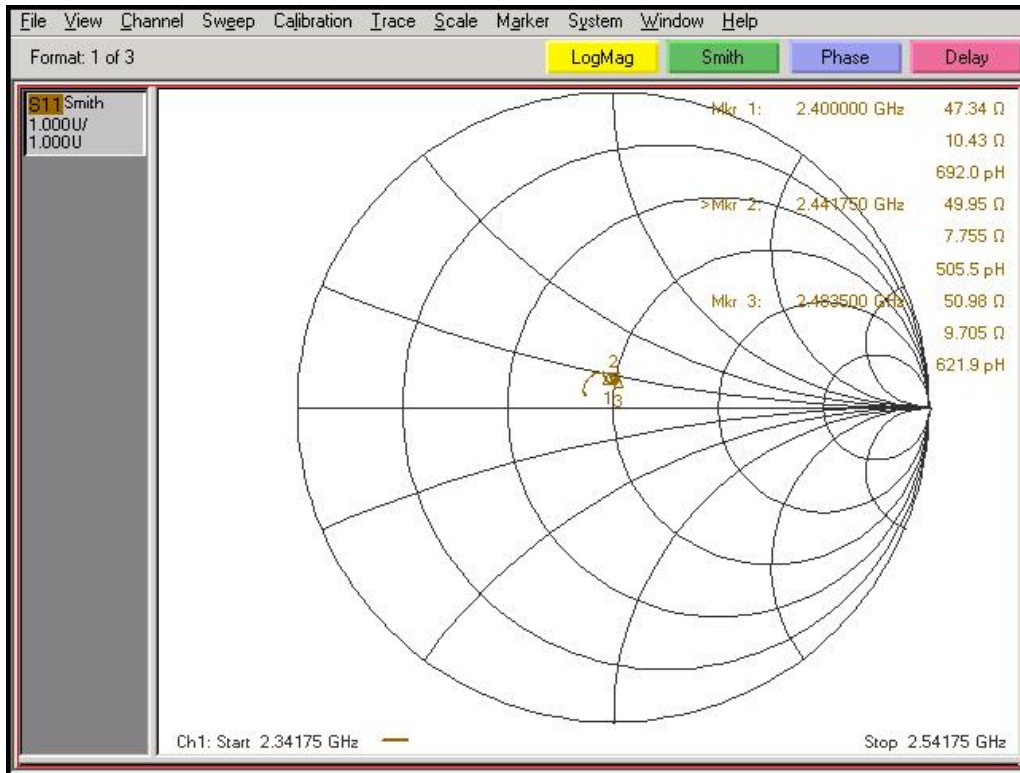


Fig 4. Measurement Configuration

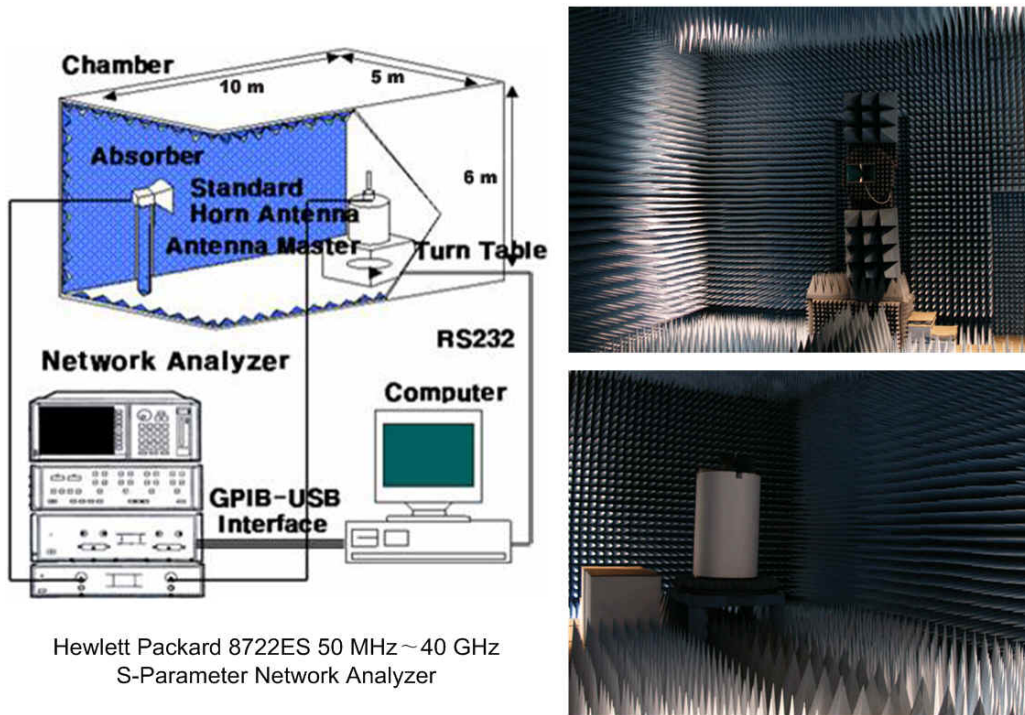
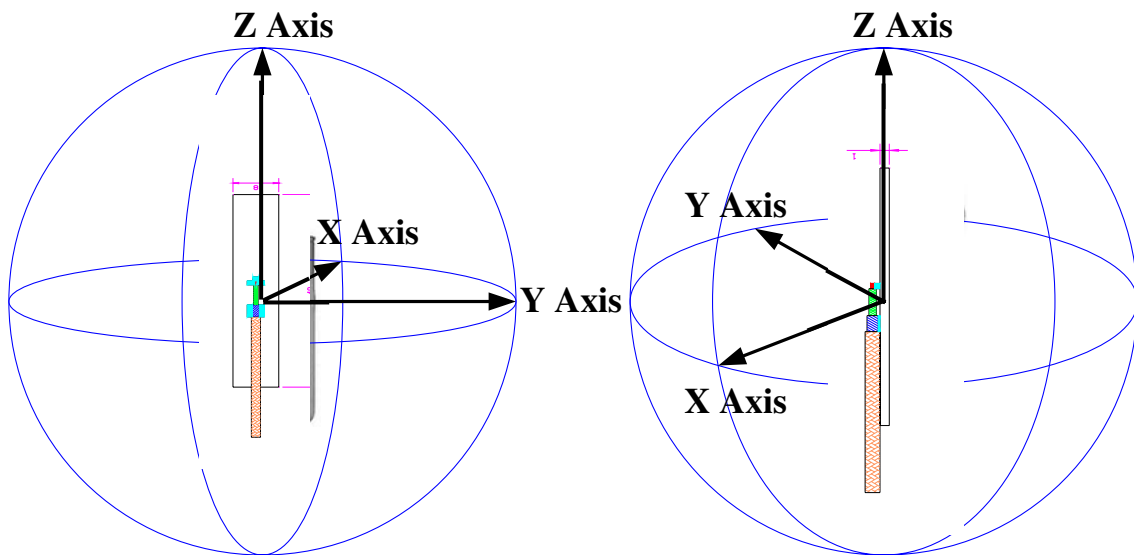


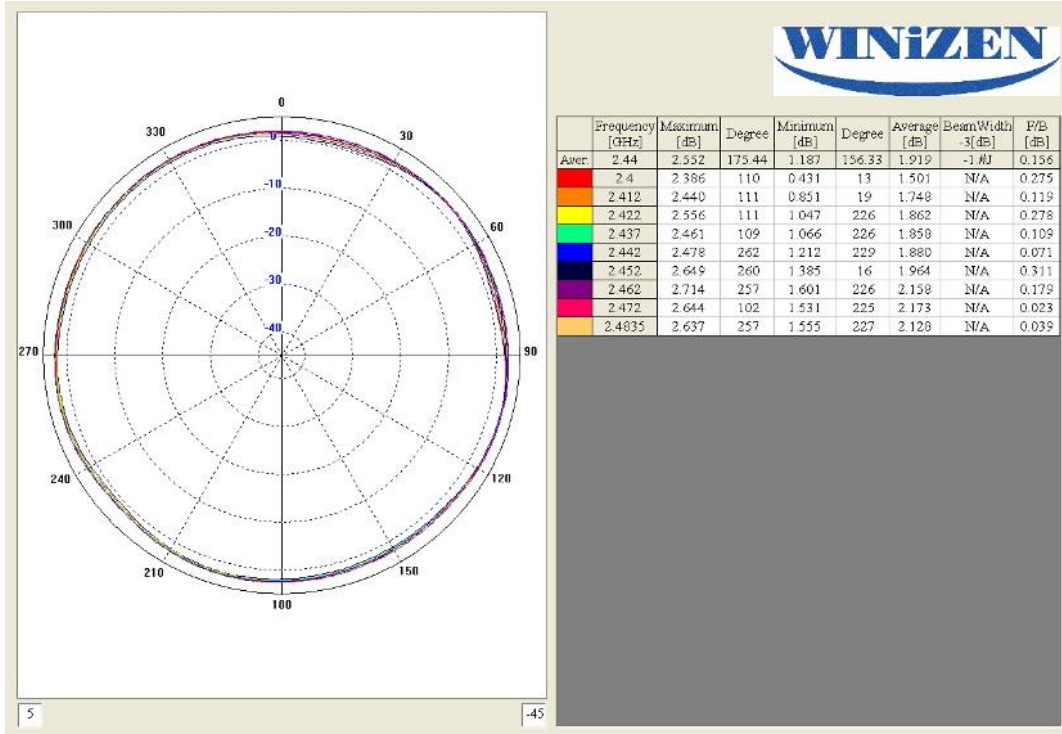
Fig 5. Axis Definitions (Antenna Center)



- a. Azimuth Pattern (Co-pol) : XY Plane ; Horn Antenna Polarization : Vertical
- b. Elevation Pattern (Co-pol) : XZ Plane ; Horn Antenna Polarization : Horizontal
- c. Elevation Side Pattern (Co-pol) : YZ Plane ; Horn Antenna Polarization : Horizontal

Fig 6. Gain Patterns

a. Azimuth Pattern



b. Elevation Pattern

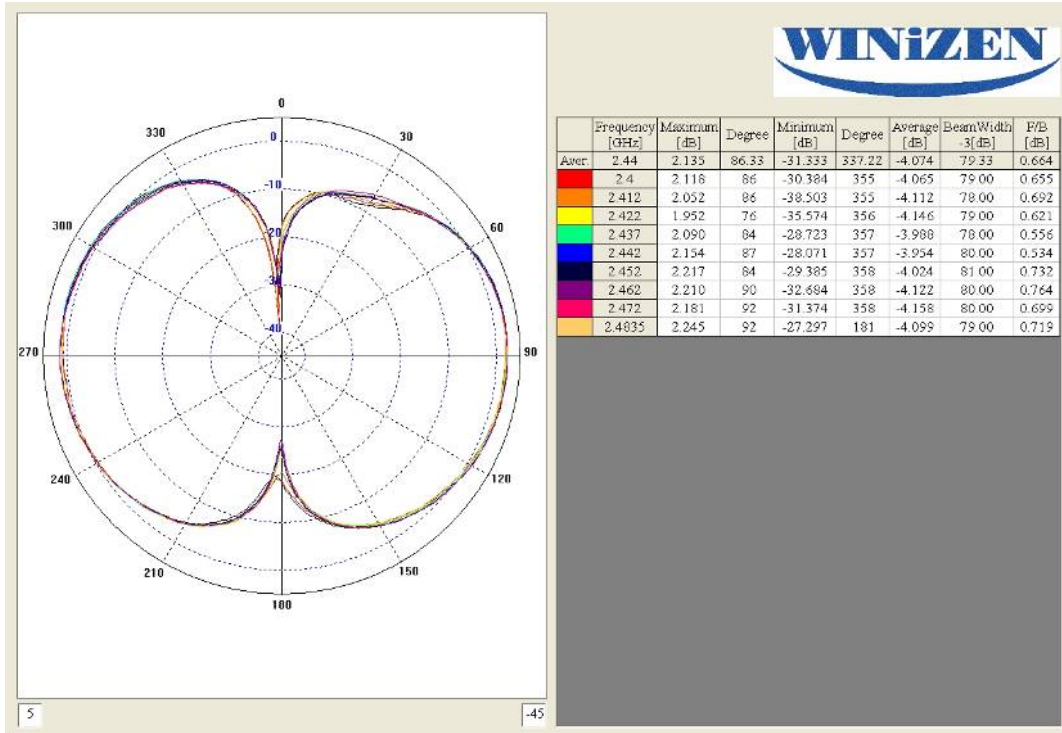




Fig 7. Antenna Mechanical

