Specifications Sheet Object 1 of 6 External Dipole Antenna Page July 16, 2005 Customer **Date System** WLAN/Bluetooth Rev. IR **Model Name** WE - 2405TOWritten by **Electrical Specifications** Frequency Range (MHz) 2400 ~ 2483.5 83.5 Band Width (MHz) 1.9:1 V.S.W.R (Min) Gain (Max) 4.5 (dBi) **Input Impedance** $50(\Omega)$ **Polarization** Linear **Mechanical Specifications** $182.5 \times 10 \text{ mm}$ Antenna Size (Width x Length x Height) Weight N/A**Radiator Material** Copper -30 ∽ 70 (°C) **Operation Temperature** 10 ~ 90 (%) **Operation Humidity Option** Remarks

<u>File View Channel Sweep Calibration Trace Scale Marker System Window Help</u> Scale 5.000 dB Scale Autoscale Ref Level Ref Pos <mark>811</mark>Log Mag 5.000dB/ 0.000dB 25.00 BB-MEMORY 2.400000 GHz -14.85 dB Mkr 1: >Mkr 2: 2.441750 GHz -29.77 dB 20.00 2.483500 GHz -14.51 dB 15.00 10.00 5.00 0.00 5.00 -10.00 -15.00 -20.00 -25.00 Stop 2.54175 GHz Ch1: Start 2.34175 GHz

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)



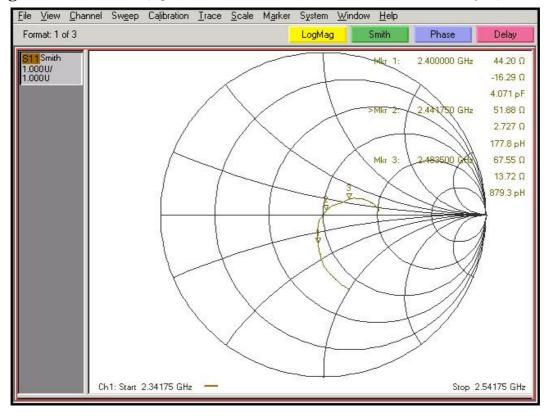


Fig 3. Smith Chart (Agilent E8357A 300KHz~6GHz PNA Series Network Analyzer)

Fig 4. Measurement Configuration

(Hewlett Packard 8722ES 50 MHz~40 GHz S-Parameter Network Analyzer)

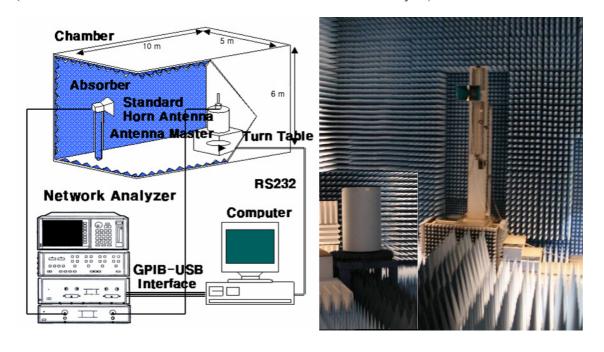
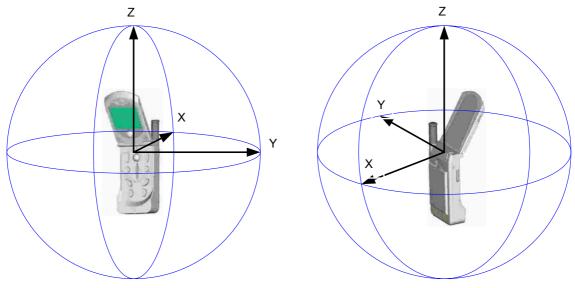


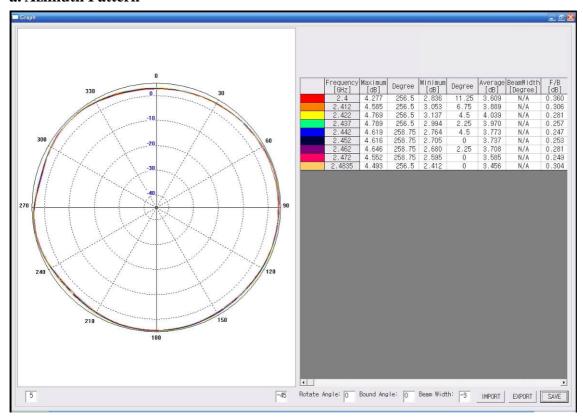
Fig 5. Axis Definitions (Antenna Center)



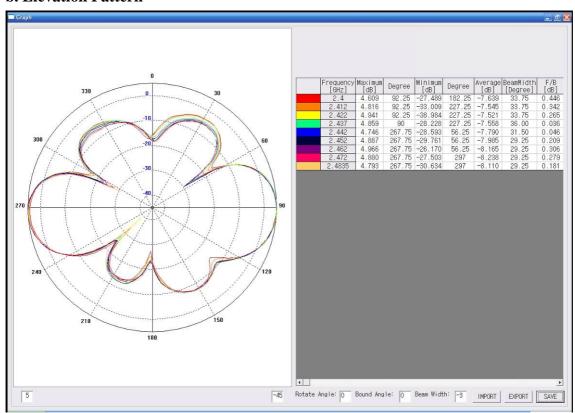
- a. Azimuth Pattern (Co-pol) : XY Plane
- b. Elevation Pattern (Co-pol) : XZ Plane
- ; Horn Antenna Polarization : Vertical
- ; Horn Antenna Polarization : Horizontal
- c. Elevation Side Pattern (Co-pol) : YZ Plane ; Horn Antenna Polarization : Horizontal

Fig 6. Gain Patterns

a. Azimuth Pattern



b. Elevation Pattern



c. Elevation Side Pattern

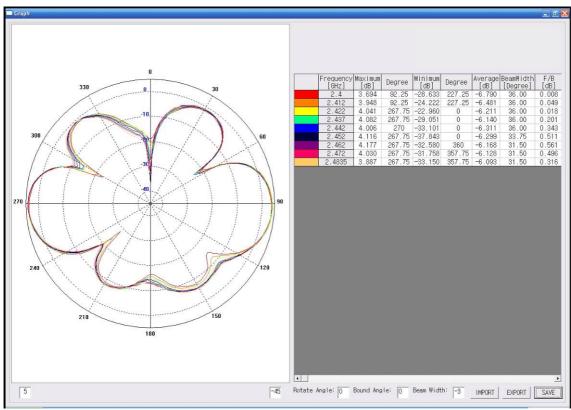


Fig 7. Antenna Mechanical

