



Specifications Sheet

Object	Internal Antenna	Page	1 of 8
Customer		Date	October 17, 2006
System	Bluetooth	Rev.	IR
Model Name	W5I - BF - LS09	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)	0.5 ± 1 (dBi)
Input Impedance	50 (Ω)
Polarization	Linear

Mechanical Specifications

Antenna Size (Width x Length x Height)	10 × 4 × 1.2 mm
Weight	N / A
Radiator Material	Copper
Operation Temperature	- 30 ~ 90 ($^{\circ}\text{C}$)
Operation Humidity	10 ~ 90 (%)

Option	
Remarks	

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)

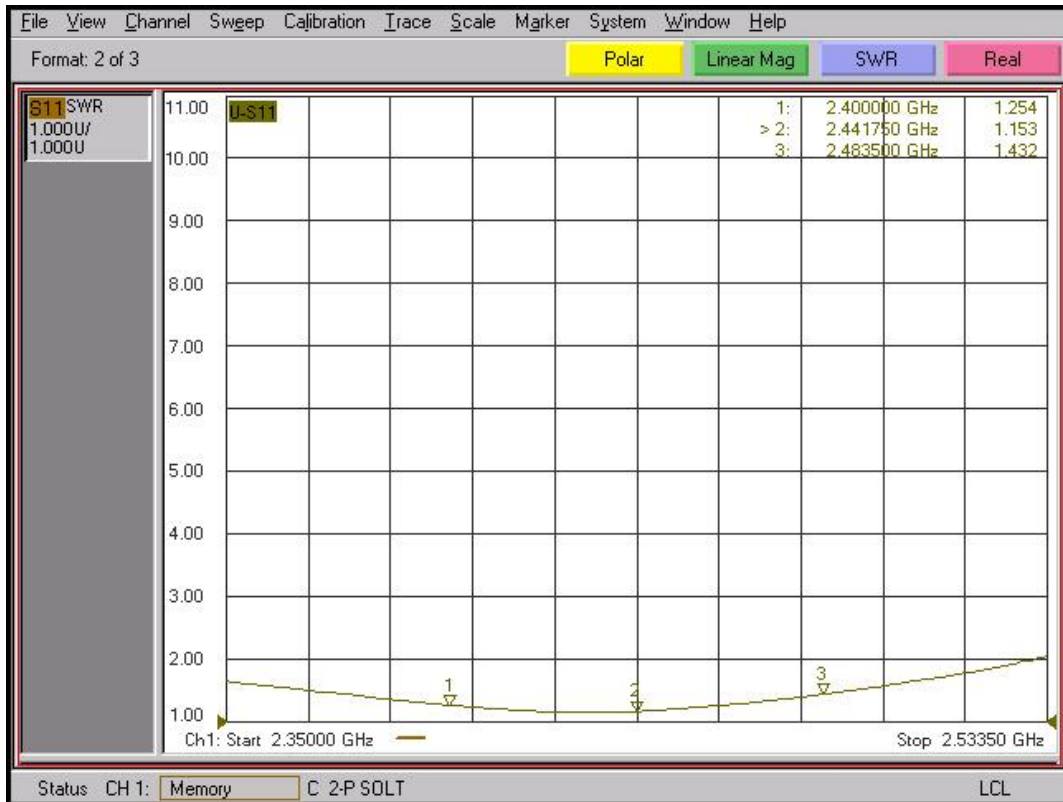


Fig 3. Smith Chart (Agilent E8357A 300KHz~6GHz PNA Series Network Analyzer)

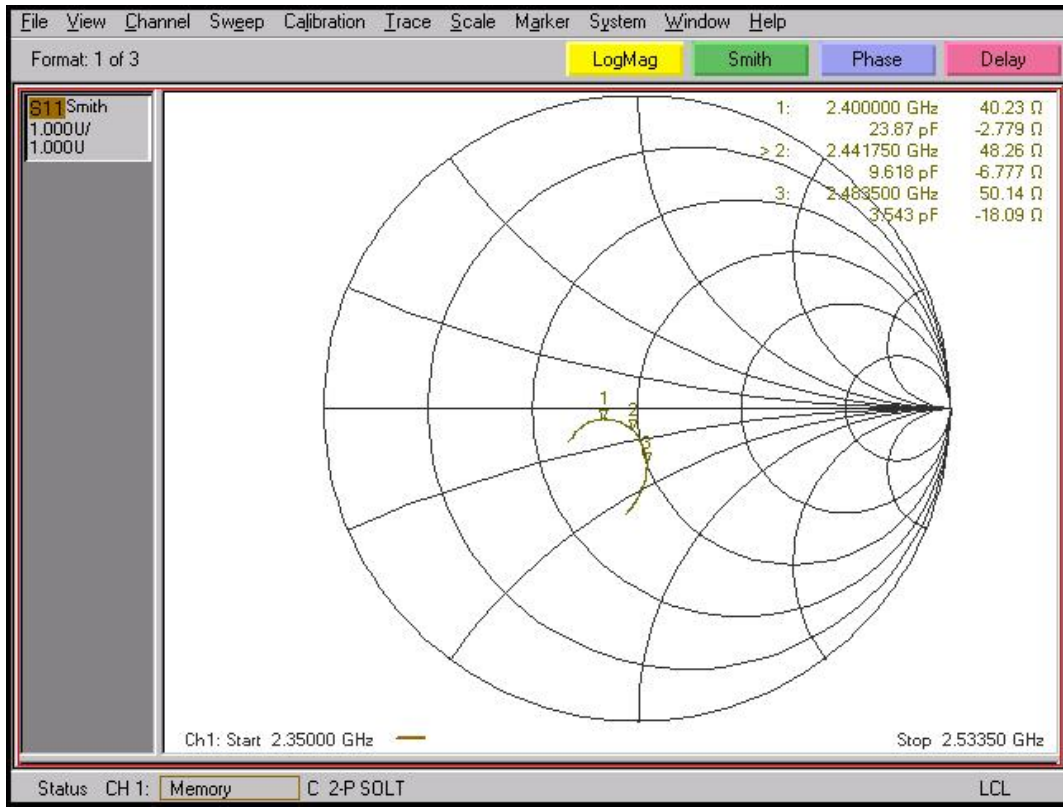


Fig 4. Measurement Configuration

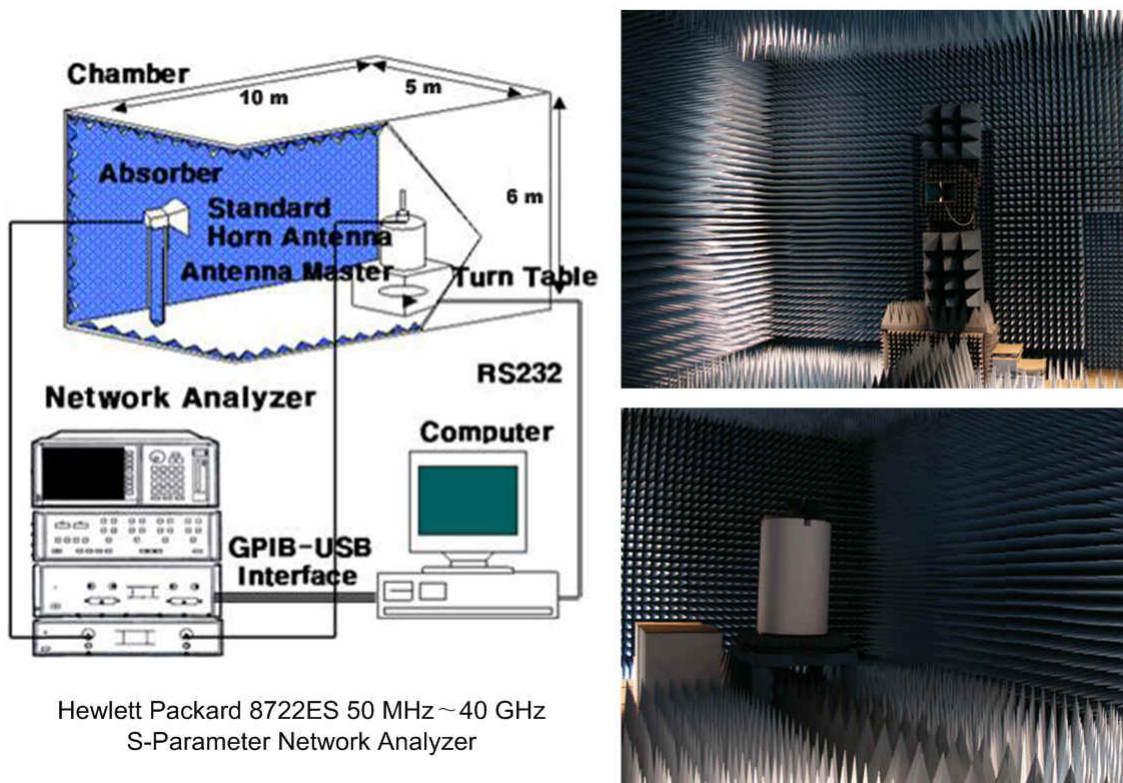


Fig 5. Axis Definitions (Antenna Center)

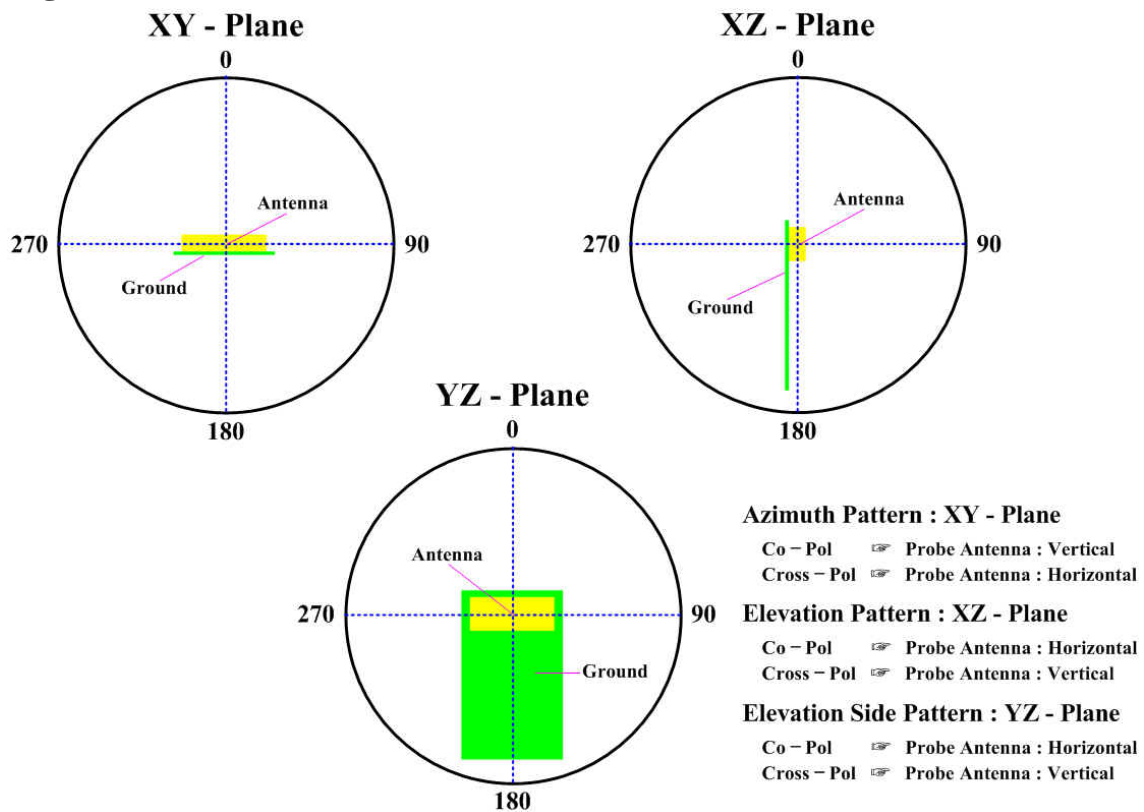
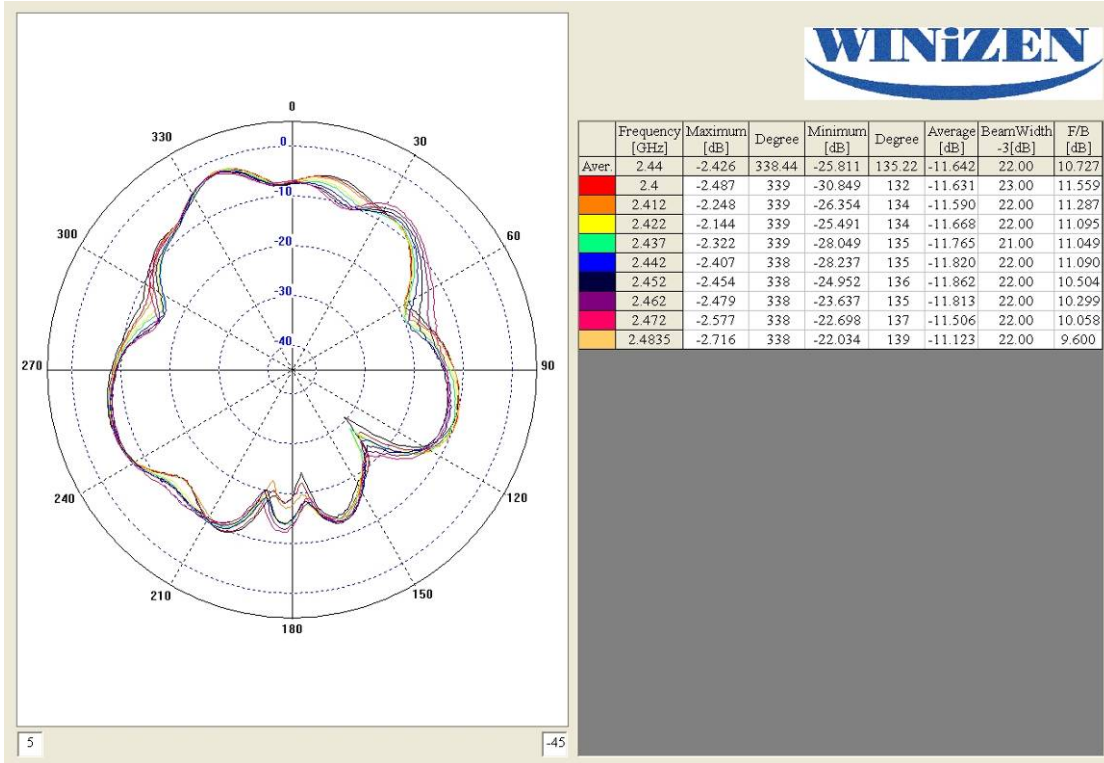


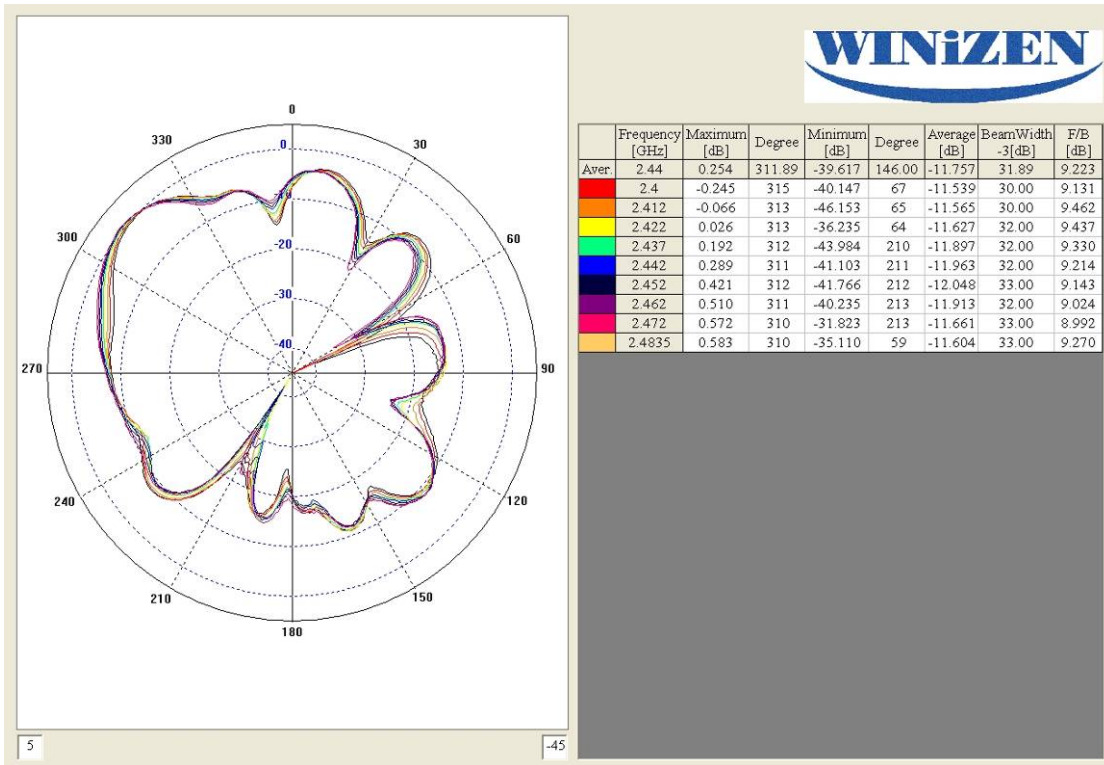
Fig 6. Gain Patterns

a. Azimuth Pattern

Co - pol

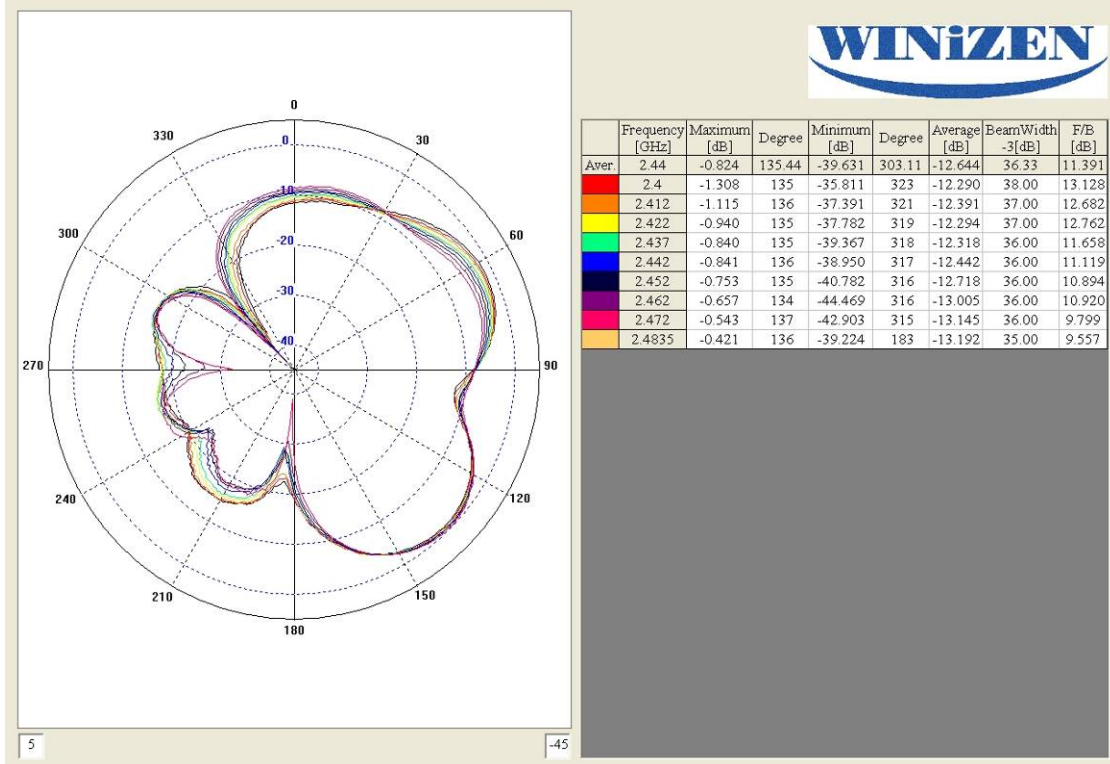


Cross - pol

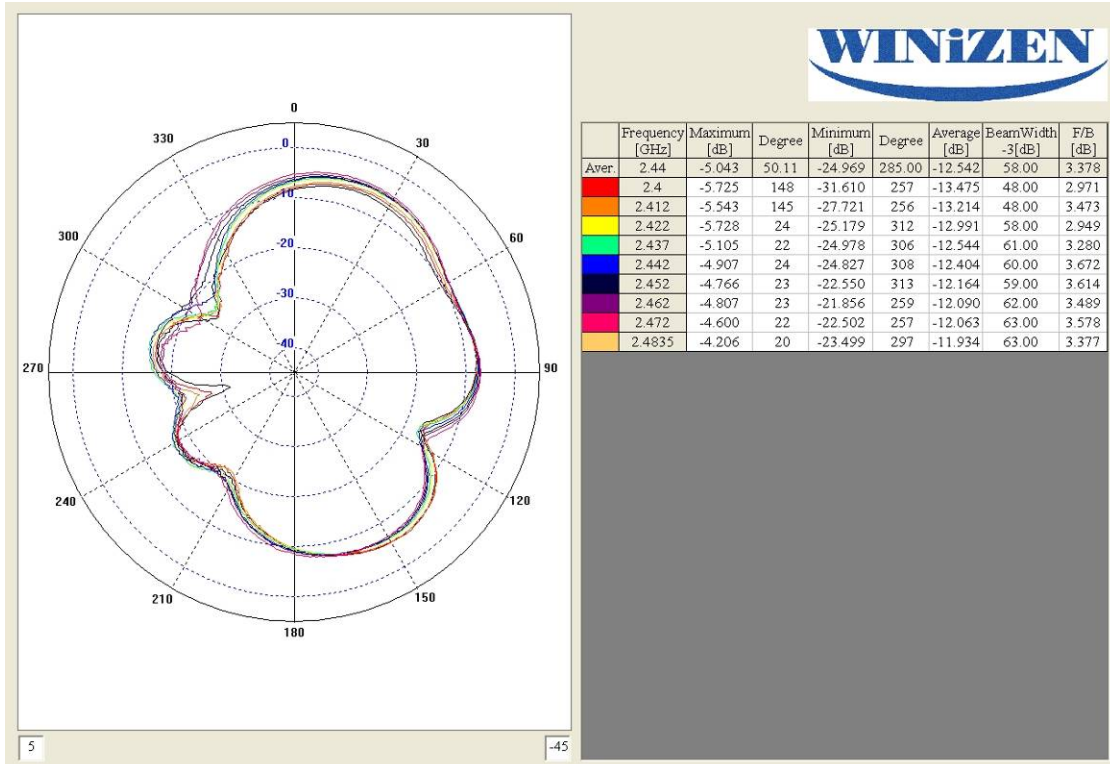


b. Elevation Pattern

Co - pol

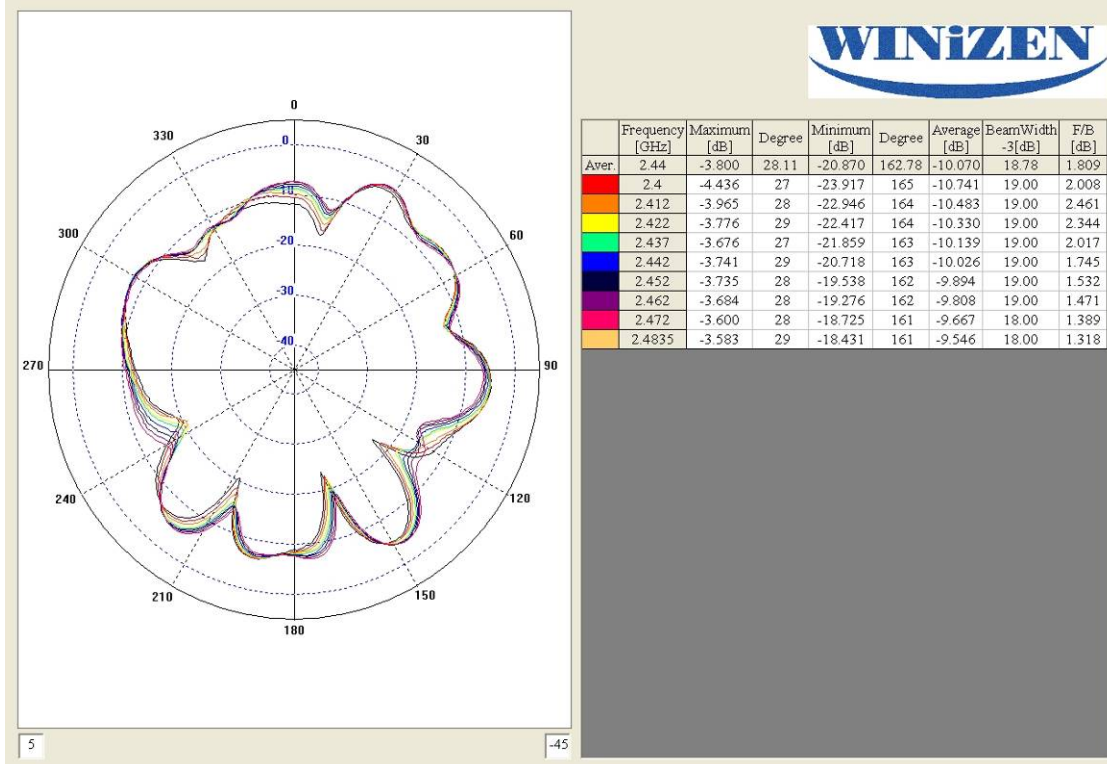


Cross - pol



c. Elevation Side Pattern

Co - pol



Cross - pol

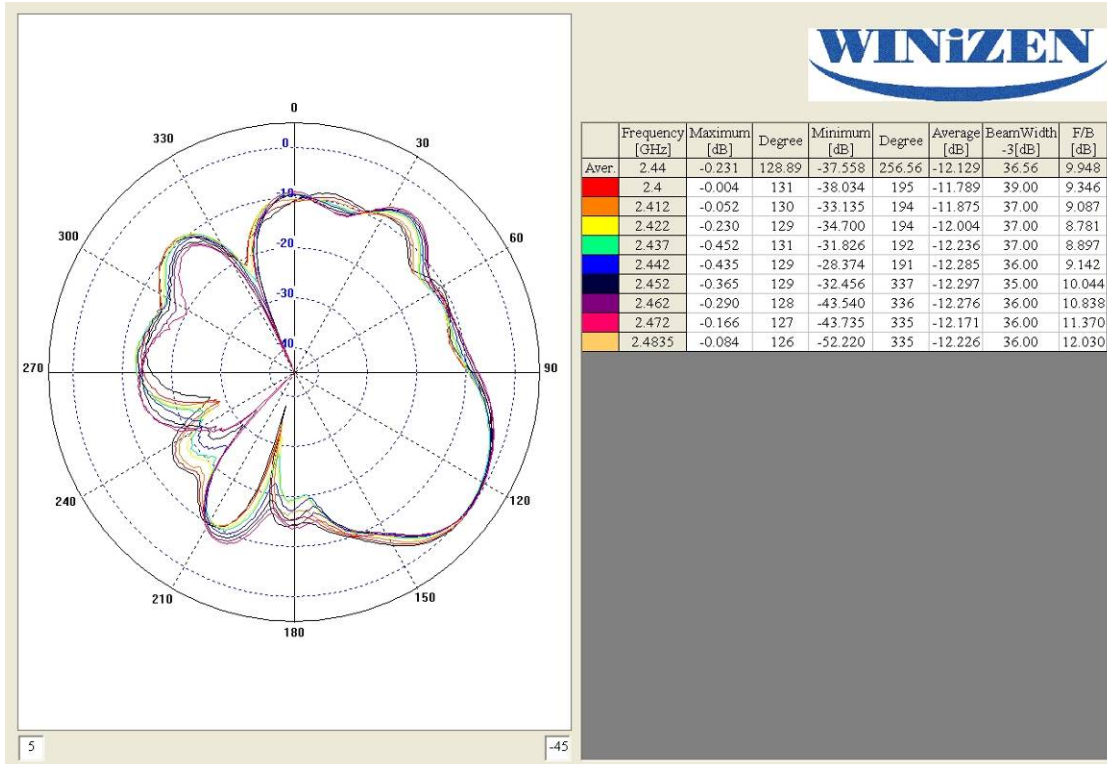


Fig 7. Circuit Matching

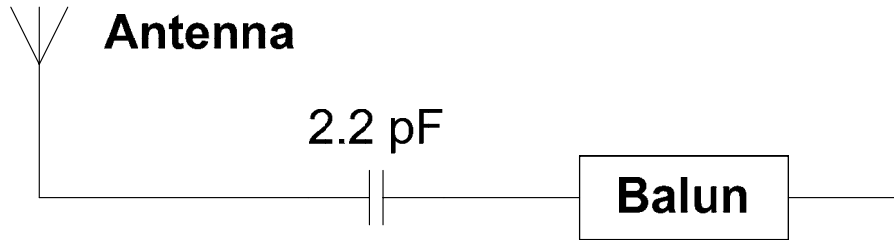


Fig 8. Photo

