Specifications Sheet

Object	**E**xternal Dipole Antenna	**Page**	**1** of 6
Customer		**Date**	**J**uly 16, 2005
System	WLAN/Bluetooth	**Rev.**	IR
Model Name	WE – 2405TO	**Written by**	

Electrical Specifications

Frequency Range (MHz)	2400 ∽ 2483.5
Band Width (MHz)	83.5
V.S.W.R (Min)	1.9 : 1
Gain (Max)	4.966 (dBi)
Input Impedance	50 (Ω)
Polarization	Linear

Mechanical Specifications

Antenna Size (Width x Length x Height)	182.5 × 10 mm
Weight	N / A
Radiator Material	Copper
Operation Temperature	– 30 ∽ 70 (℃)
Operation Humidity	10 ∽ 90 (%)

Option	
Remarks	

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)

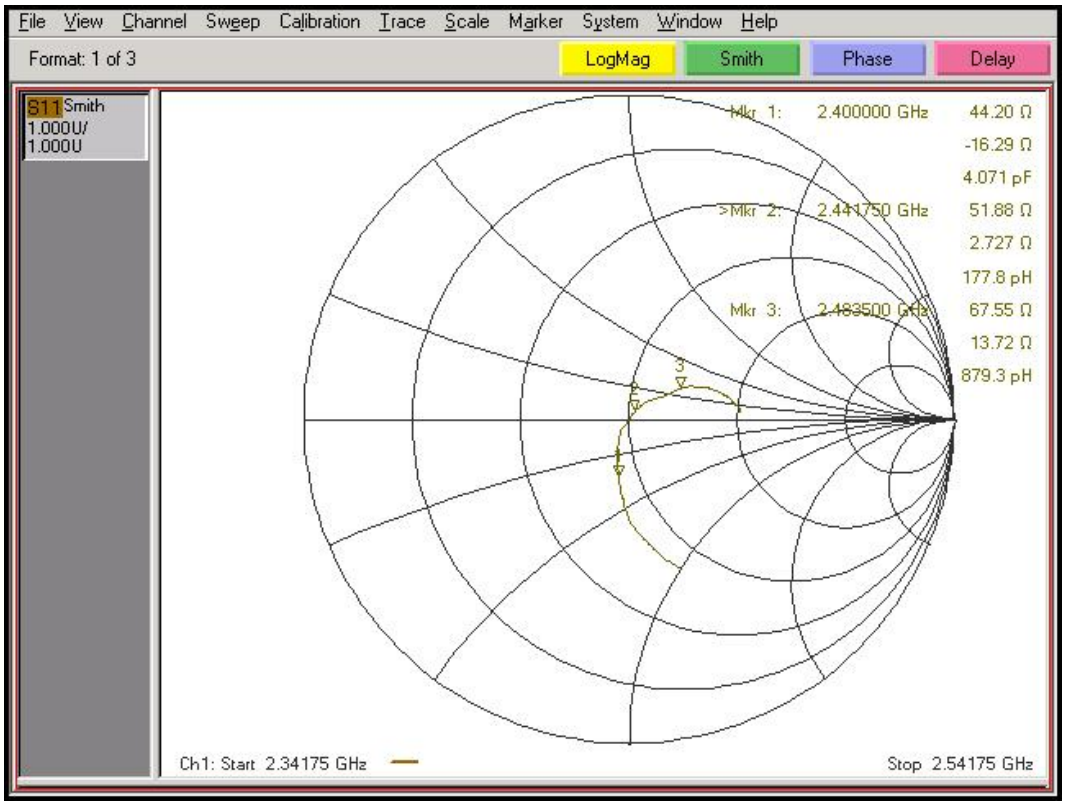


Fig 4. Measurement Configuration

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

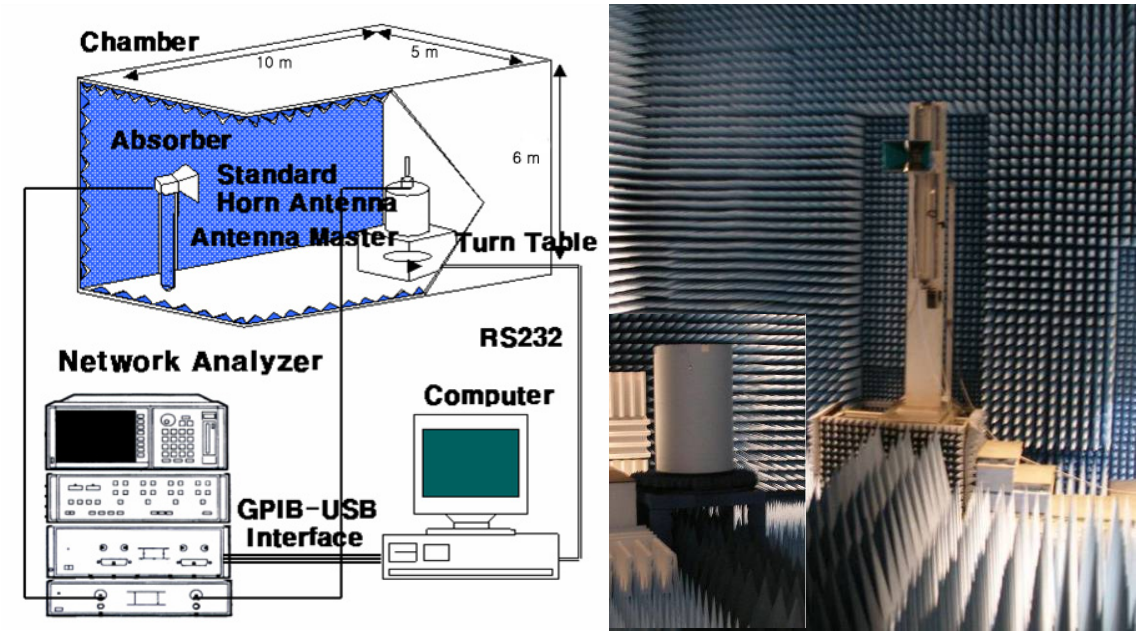
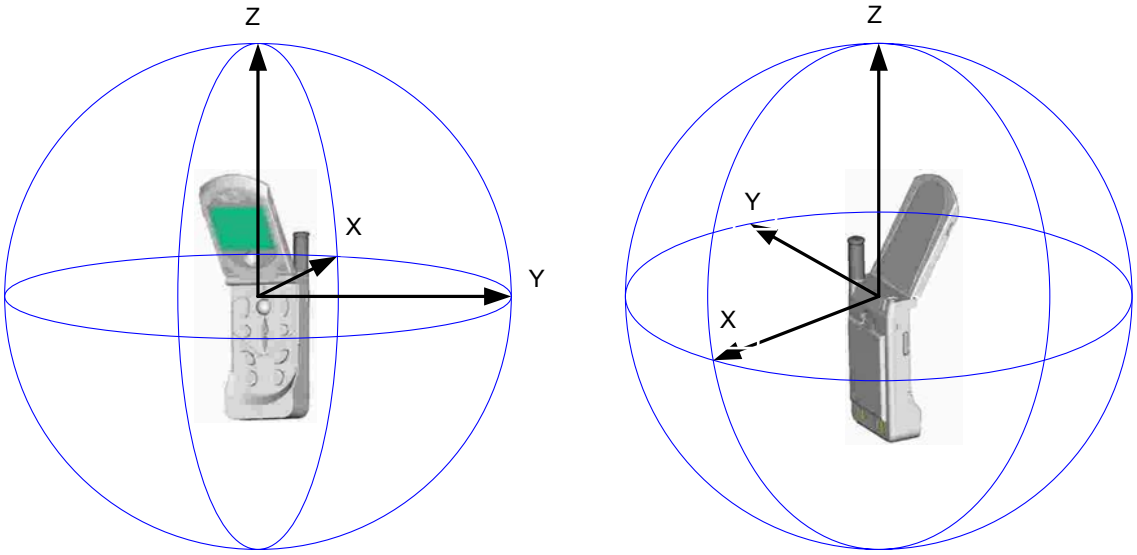


Fig 5. Axis Definitions (Antenna Center)



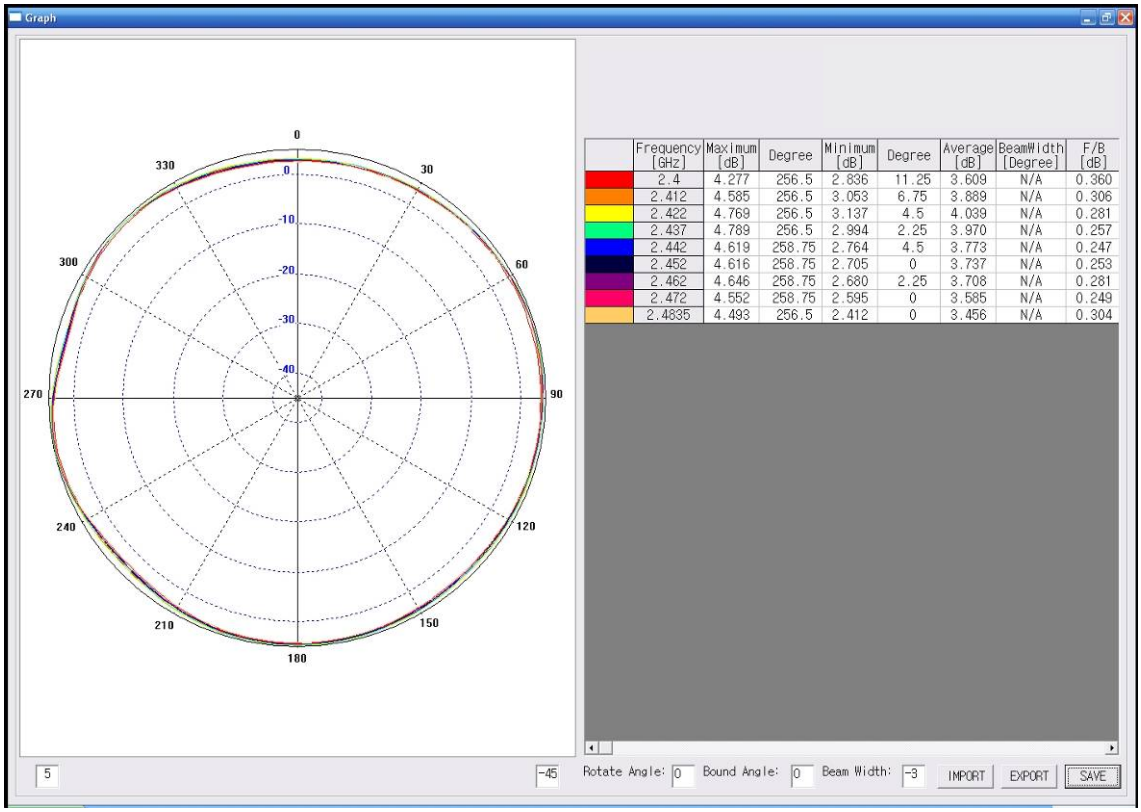
a. Azimuth Pattern (Co-pol) : XY Plane ; Horn Antenna Polarization : Vertical

b. Elevation Pattern (Co-pol) : XZ Plane ; Horn Antenna Polarization : Horizontal

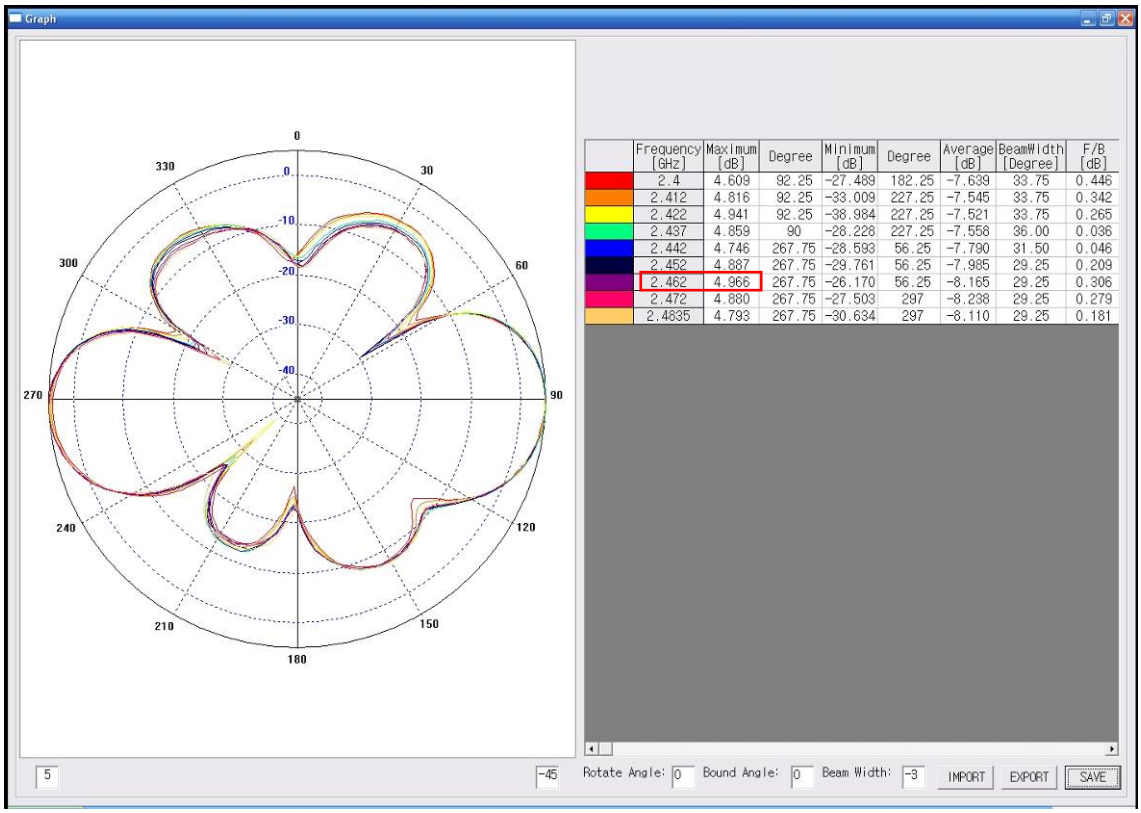
c. Elevation Side Pattern (Co-pol) : YZ Plane ; Horn Antenna Polarization : Horizontal

Fig 6. Gain Patterns

a. Azimuth Pattern

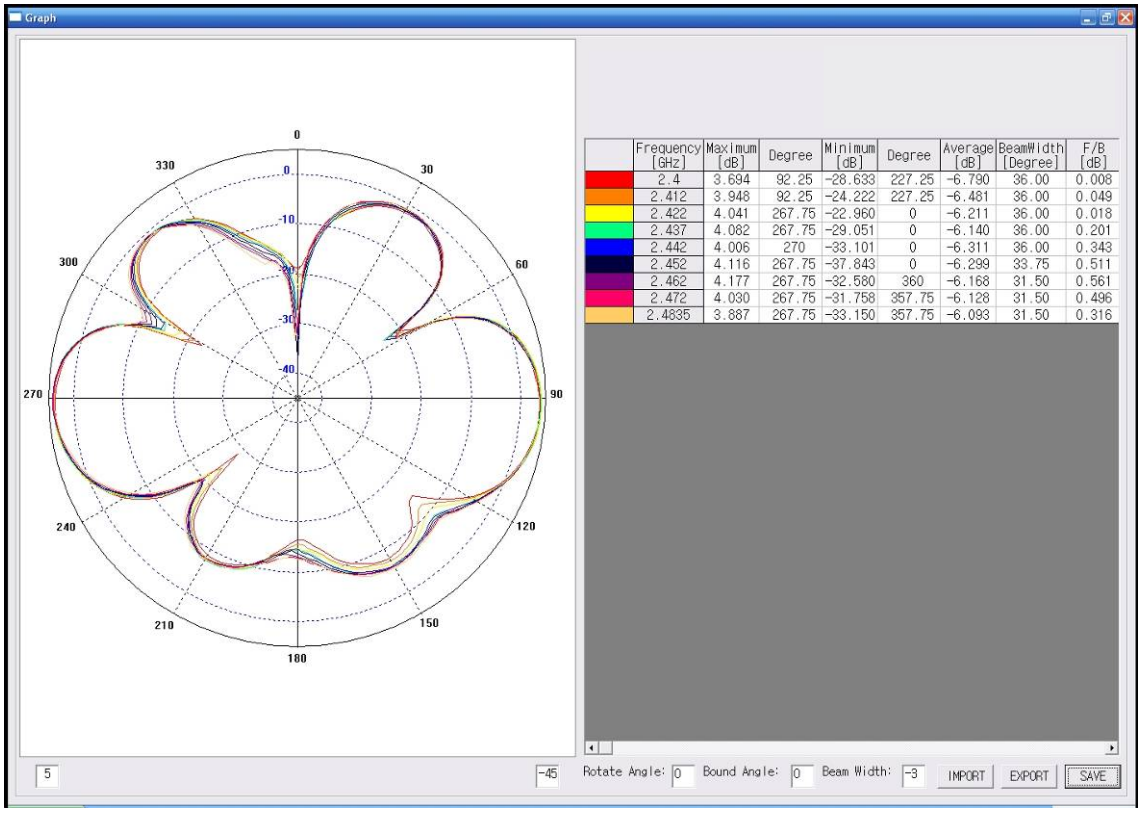


b. Elevation Pattern



	Frequency [GHz]	Maximum [dB]	Degree	Minimum [dB]	Degree	Average [dB]	BeamWidth [Degree]	F/B [dB]
	2.4	4.609	92.25	-27.489	182.25	-7.639	33.75	0.446
	2.412	4.816	92.25	-33.009	227.25	-7.545	33.75	0.342
	2.422	4.941	92.25	-38.984	227.25	-7.521	33.75	0.265
	2.437	4.859	90	-28.228	227.25	-7.558	36.00	0.036
	2.442	4.746	267.75	-28.593	56.25	-7.790	31.50	0.046
	2.452	4.887	267.75	-29.761	56.25	-7.985	29.25	0.209
	2.462	4.966	267.75	-26.170	56.25	-8.165	29.25	0.306
	2.472	4.880	267.75	-27.503	297	-8.238	29.25	0.279
	2.4835	4.793	267.75	-30.634	297	-8.110	29.25	0.181

c. Elevation Side Pattern



	Frequency [GHz]	Maximum [dB]	Degree	Minimum [dB]	Degree	Average [dB]	BeamWidth [Degree]	F/B [dB]
	2.4	3.694	92.25	-28.633	227.25	-6.790	36.00	0.008
	2.412	3.948	92.25	-24.222	227.25	-6.481	36.00	0.049
	2.422	4.041	267.75	-22.960	0	-6.211	36.00	0.018
	2.437	4.082	267.75	-29.051	0	-6.140	36.00	0.201
	2.442	4.006	270	-33.101	0	-6.311	36.00	0.343
	2.452	4.116	267.75	-37.843	0	-6.299	33.75	0.511
	2.462	4.177	267.75	-32.580	360	-6.168	31.50	0.561
	2.472	4.030	267.75	-31.758	357.75	-6.128	31.50	0.496
	2.4835	3.887	267.75	-33.150	357.75	-6.093	31.50	0.316

Fig 7. Antenna Mechanical