

Measurement Report

CUSTOMER: TomTom

PROJECT: xxx

PRODUCT: ACA-5320A1-S

REVISION: A0

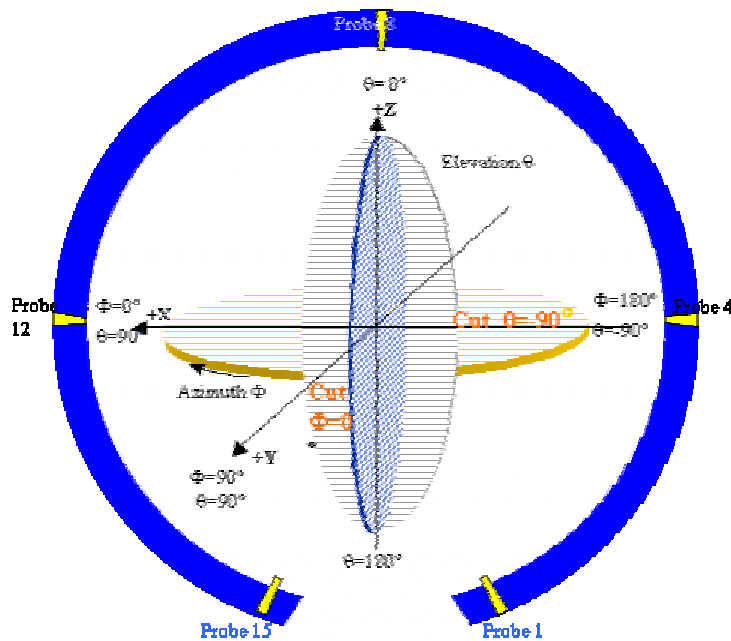
DATE: 2006/5/12

Prepared by : Jacky Cheng

Checked by : George Chang

Approved by : C.K. Hsu

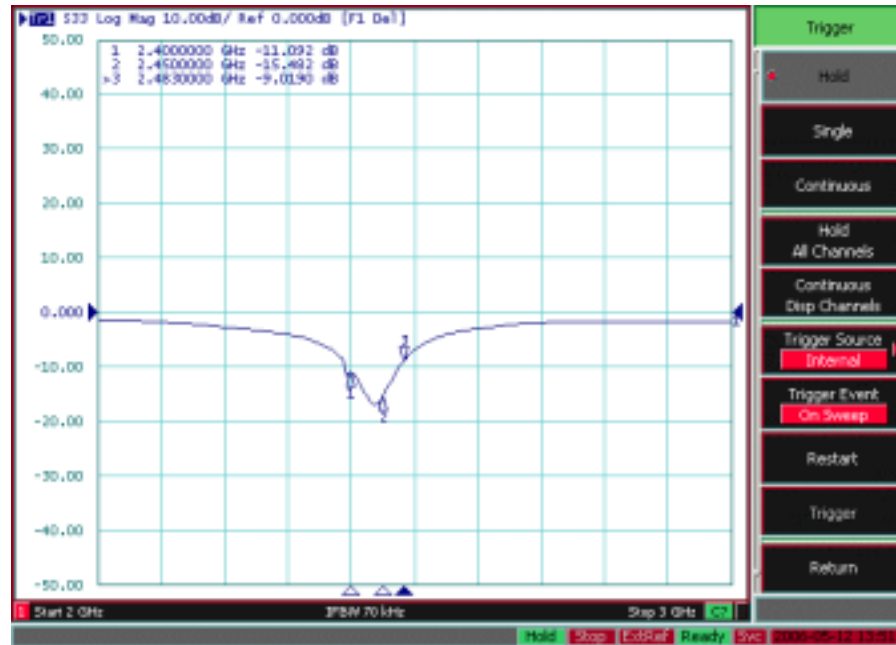
1. Experimental Setup



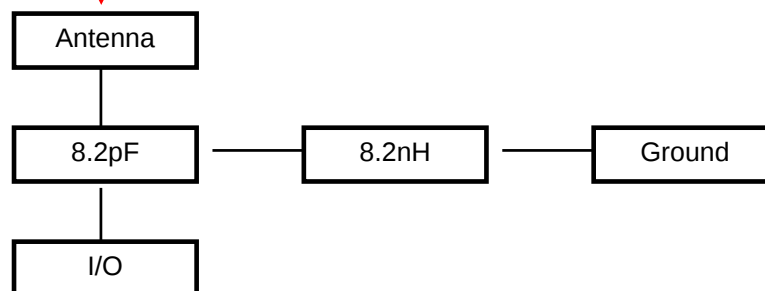
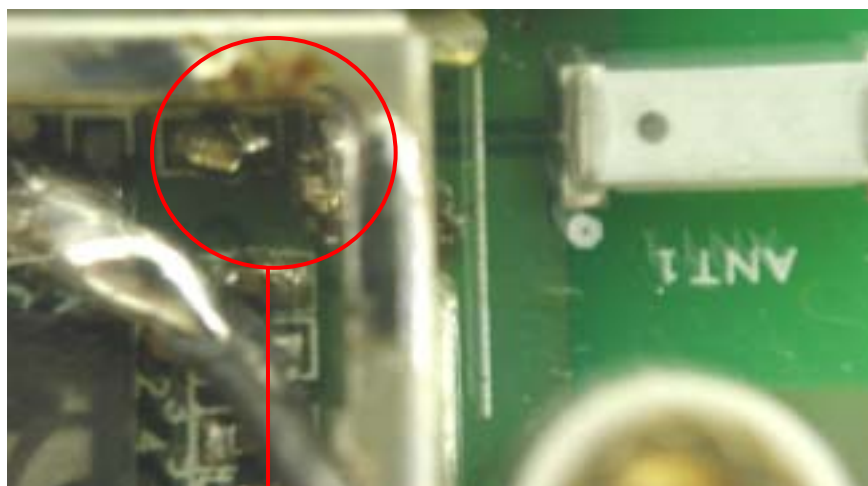
- **Measurement Item :**
 - a. Return loss
 - b. Radiation pattern
- **Return Loss :**
 - a. Instrument : vector network analyzer – Agilent N5230A
 - b. Calibration method : SOLT
- **3D Radiation Pattern :**
 - a. Instrument: Satimo StarLab

2. Measurement Results

● Return Loss :

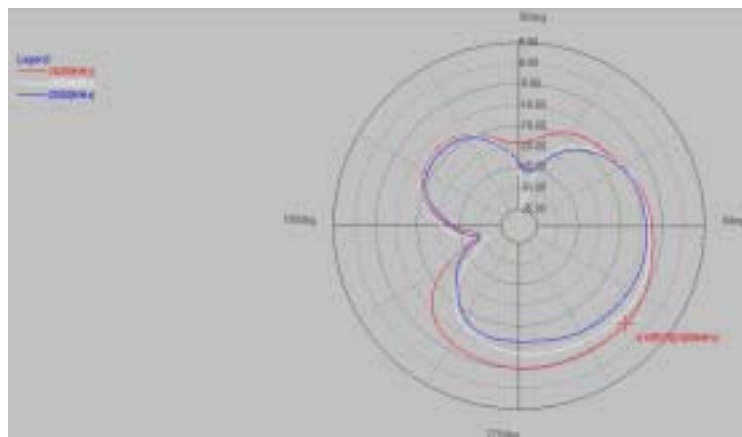


3. Antenna Matching Circuit Diagram



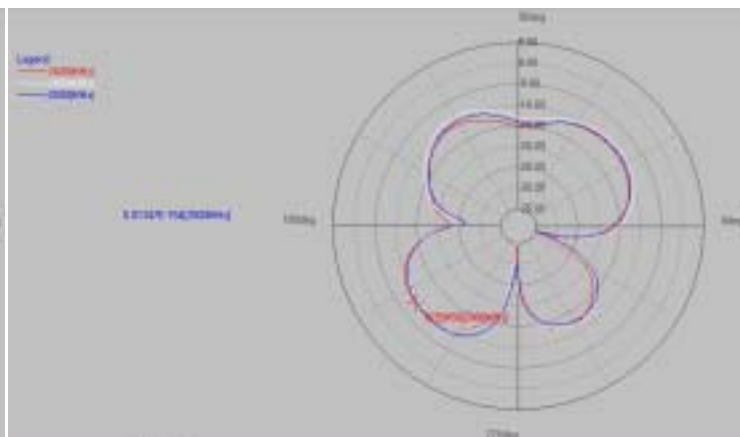
Y-Z Plane

Horizontal Polarization



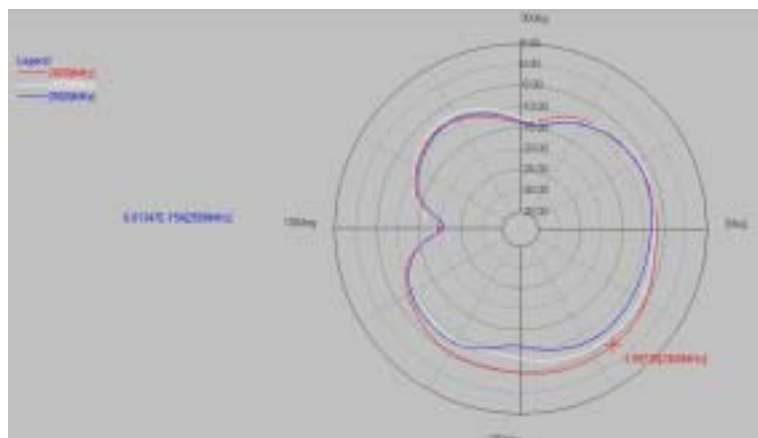
Frequency (GHz)	Max Value (dBi)	Average (dBi)
2.4	-4.5	-8.76
2.45	-6.44	-10.97
2.5	-8.45	-12.63

Vertical Polarization



Frequency (GHz)	Max Value (dBi)	Average (dBi)
2.4	-8.59	-12.86
2.45	-8.94	-12.12
2.5	-8.46	-12.51

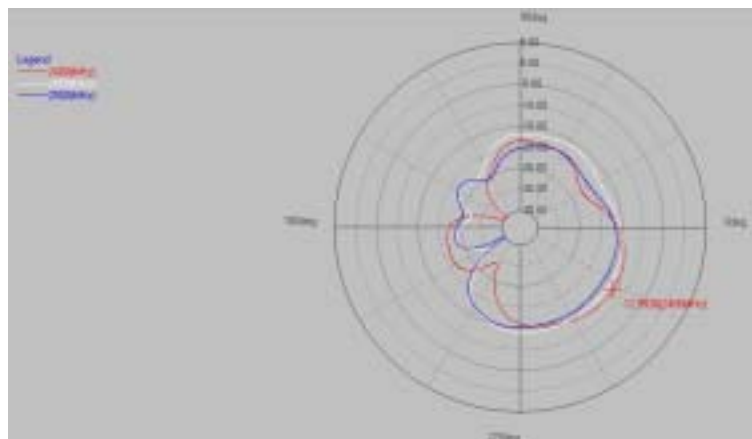
TOTAL



Frequency (GHz)	Max Value (dBi)	Average (dBi)
2.4	-4	-7.33
2.45	-5.93	-8.49
2.5	-7.29	-9.56

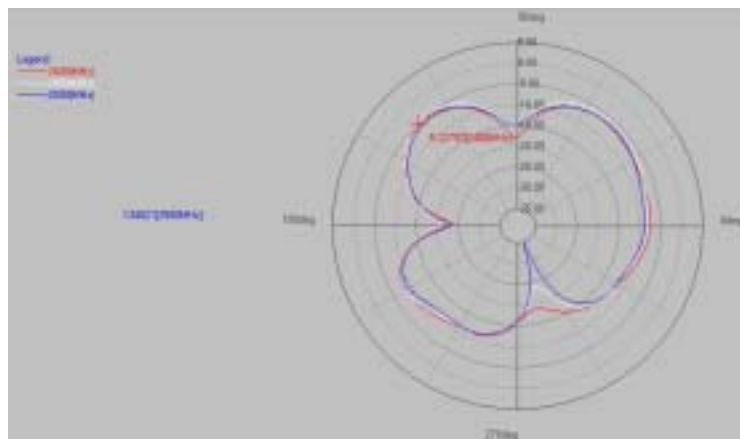
X-Z Plane

Horizontal Polarization



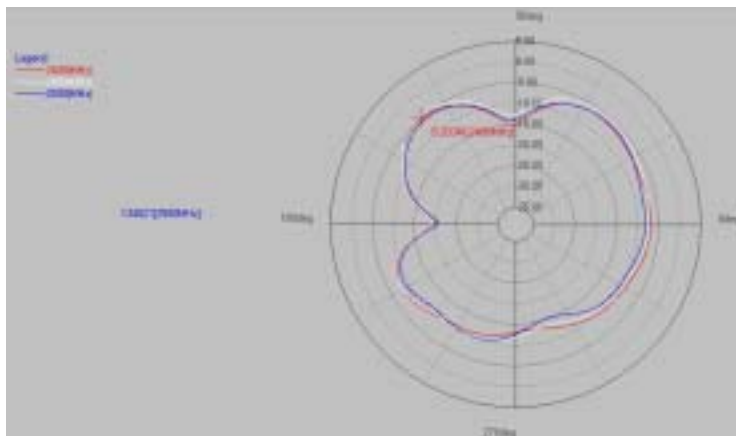
Frequency (GHz)	Max Value (dBi)	Average (dBi)
2.4	-12.55	-17.91
2.45	-14.01	-17.04
2.5	-15.41	-18.55

Vertical Polarization



Frequency (GHz)	Max Value (dBi)	Average (dBi)
2.4	-5.23	-9.58
2.45	-4.78	-9.24
2.5	-5.95	-10.24

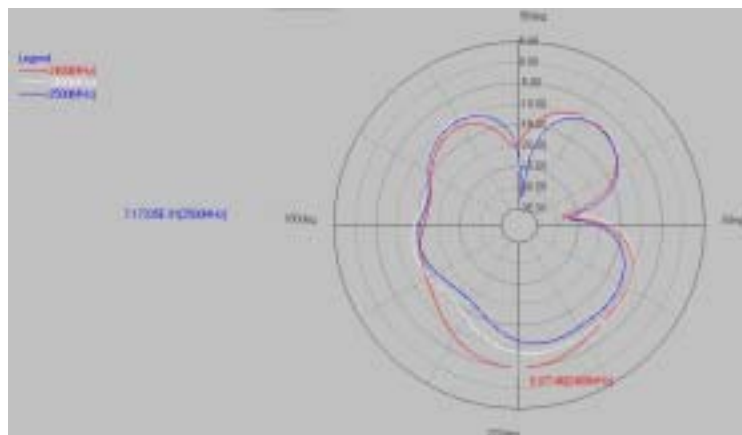
TOTAL



Frequency (GHz)	Max Value (dBi)	Average (dBi)
2.4	-5.2	-8.98
2.45	-4.73	-8.57
2.5	-5.89	-9.55

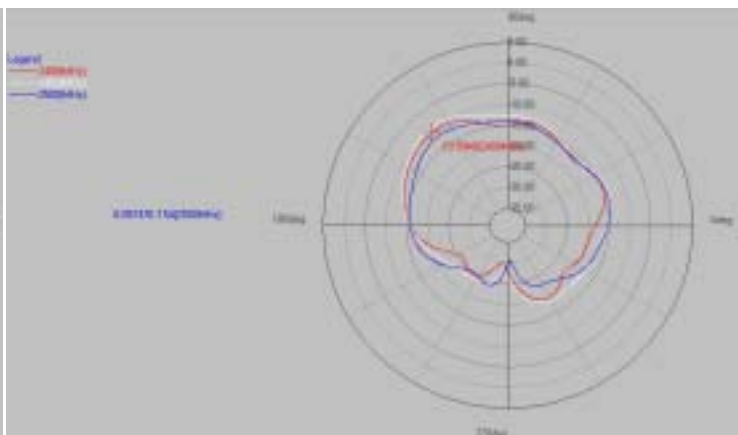
X-Y Plane

Horizontal Polarization



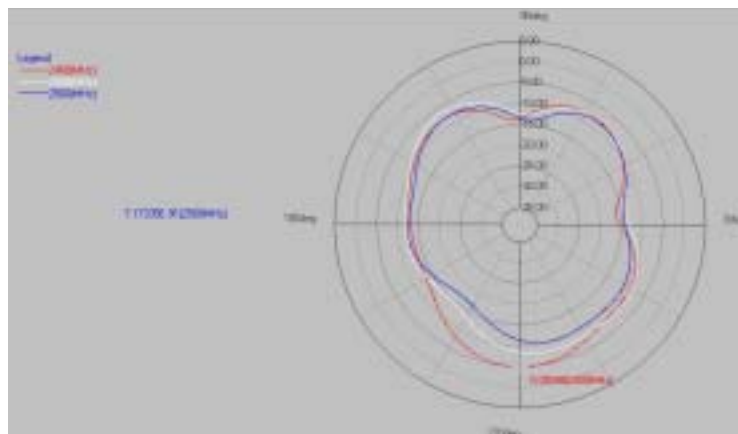
Frequency (GHz)	Max Value (dBi)	Average (dBi)
2.4	-5.07	-10.27
2.45	-8.23	-11.4
2.5	-9.08	-12.95

Vertical Polarization



Frequency (GHz)	Max Value (dBi)	Average (dBi)
2.4	-10.59	-16
2.45	-9.49	-14.79
2.5	-12.13	-16.33

TOTAL



Frequency (GHz)	Max Value (dBi)	Average (dBi)
2.4	-5.05	-9.24
2.45	-6.69	-9.76
2.5	-8.13	-11.3