



SmartAnt

Antenna Test Report

SAA05-220920

Confidential

SmartAnt
FAE Department
Daisy Tseng
2008/4/2

Outline

- **Specimen Information**

 - Antenna description & product photo**

- **VSWR Test**

 - Test configuration**

 - Test result**

- **Radiation Pattern and Gain Test**

 - Test configuration**

 - Test result**

Antenna description

Antenna Name	Dual-Band Omni-Directional Antennna
Frequency Range	2400 - 2500 MHz / 5100 - 5900 MHz
Product Number	SAA05-220920
Manufacturer	SmartAnt
Cable Length	NA
Cable Type	NA
Connector Type	N Plug

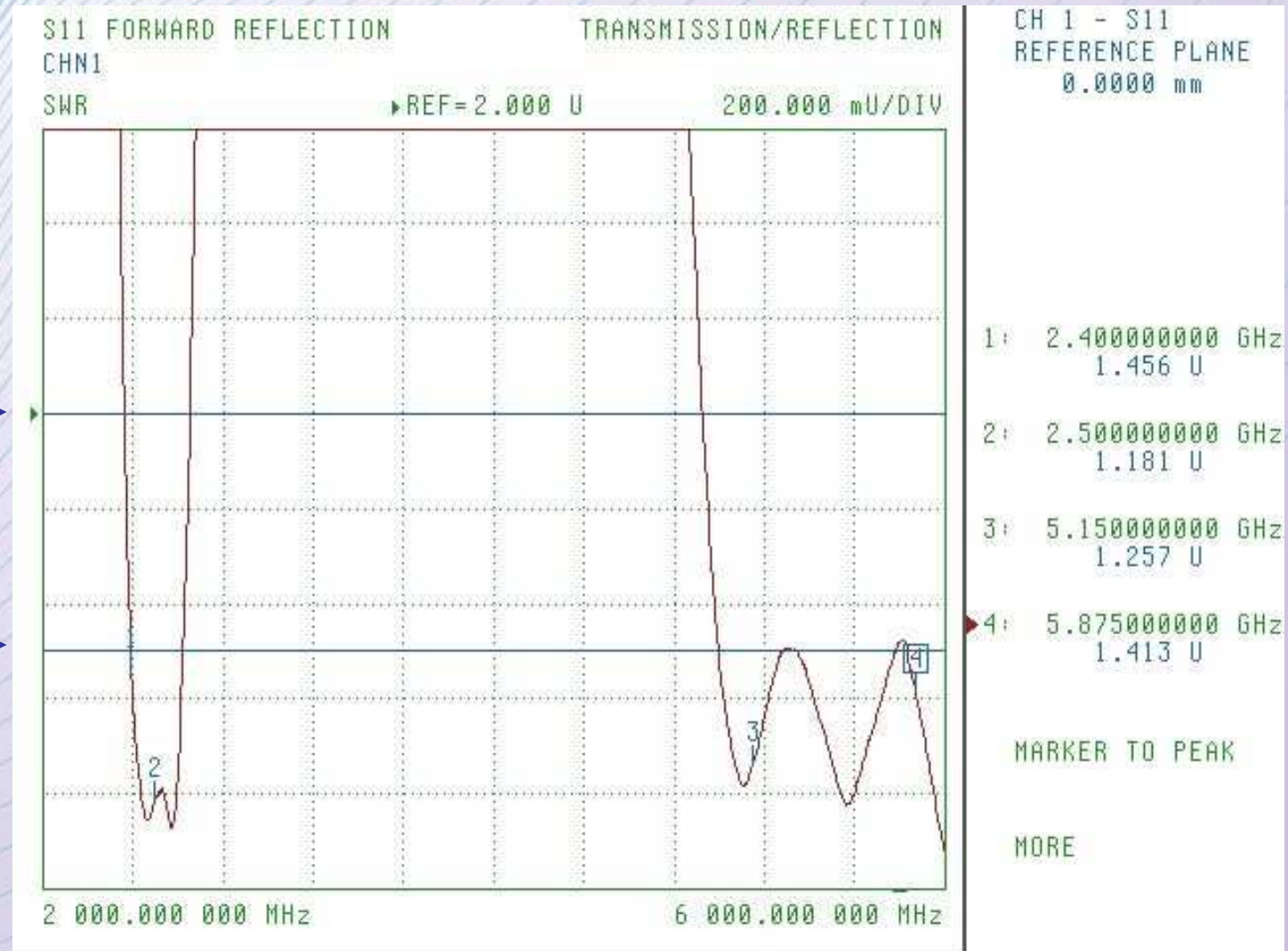
Antenna photo



VSWR Test Result

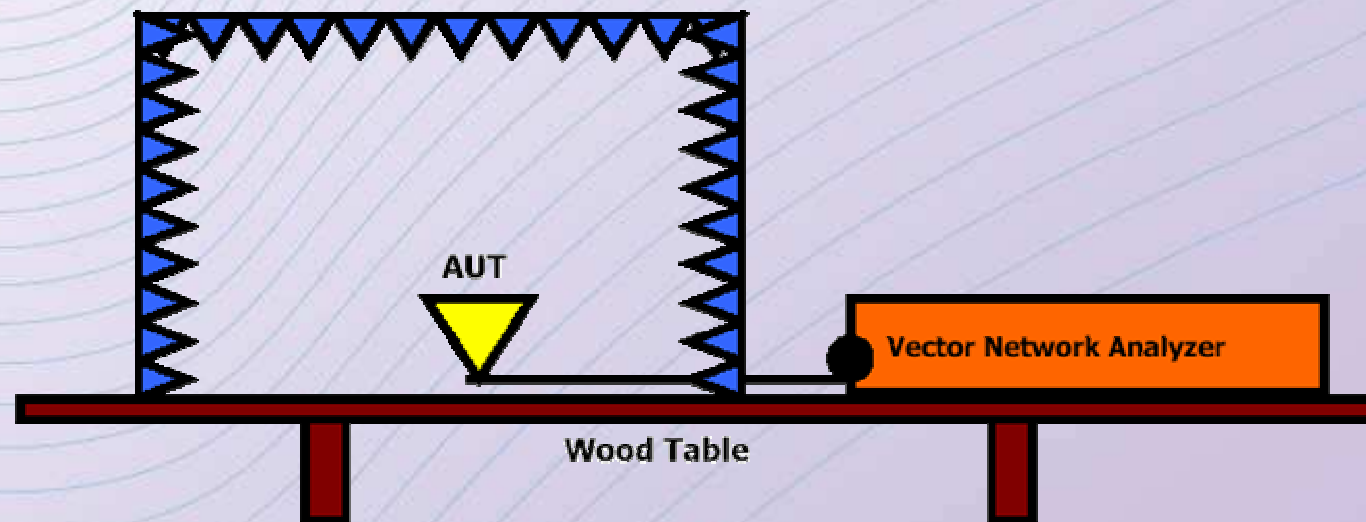
VSWR=2.0 →

VSWR=1.5 →



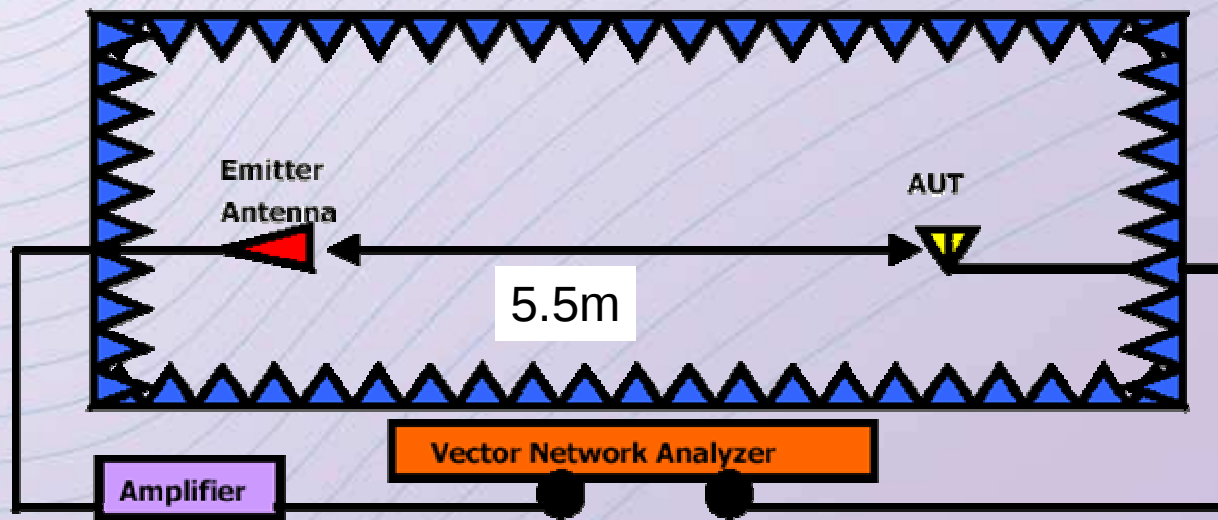
Test configuration

Adapter	Standard SMA Plug
Network Analyzer	Anritsu MS4632B
Calibration kits	Anritsu Model 3750LF



Test configuration

Vector Network analyzer	AGILEN 8722ES 40kHz ~ 40 GHz
Standard gain horn	EMCO Model 3160-04 2.6 ~ 3.95 GHz/3160-05 3.95 ~ 5.85 GHz
Emitter Antenna	EMCO Model 3115 Double Ridged Guide Antenna 1GHz ~18 GHz
Anechoic Chamber	ANTCOM NFH003 Hybrid Near/Far-field System
Height between ground & AUT	2.0 meter
Distance between probe & AUT	5.5 meter



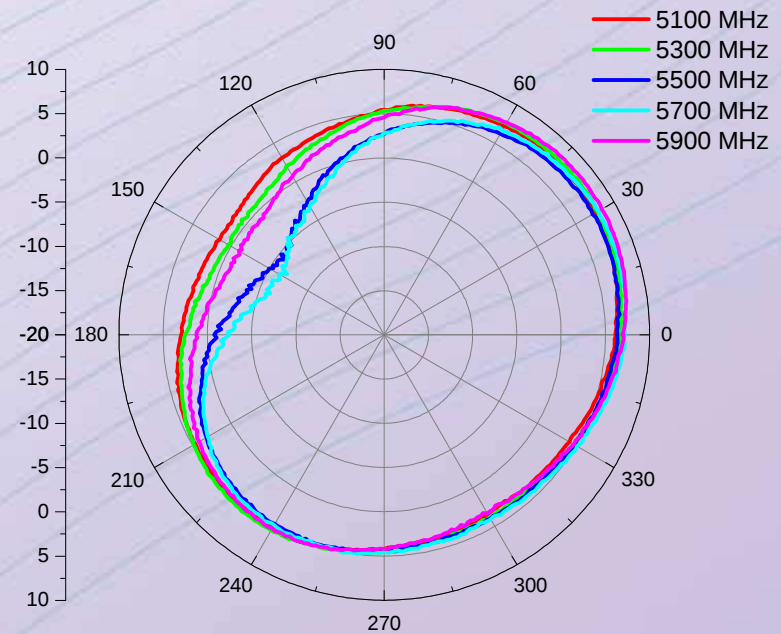
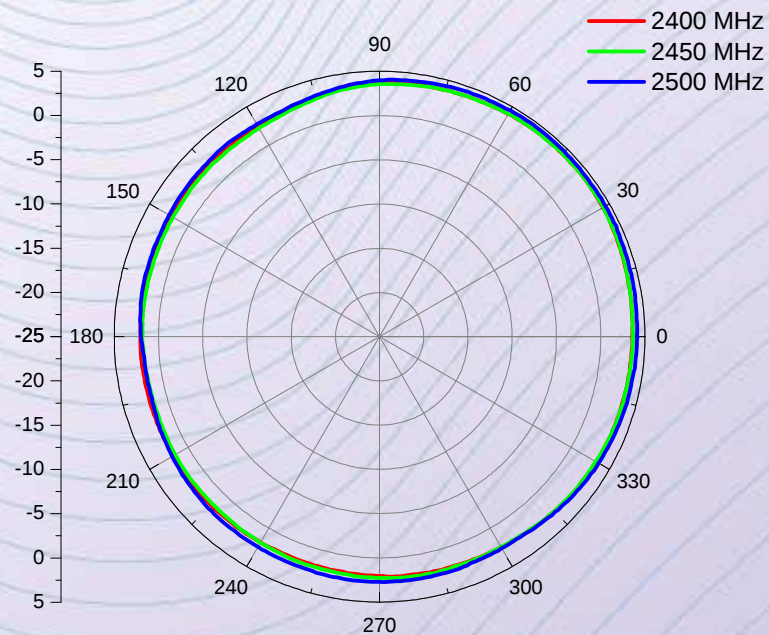
Gain Table

Unit: dBi

AUT \ Frequency (GHz)	2.4	2.45	2.5	5.1	5.3	5.5	5.7	5.9
H-plane Peak Gain (dBi)	4.25	4.24	4.58	7.70	8.03	7.38	7.96	8.48
H-plane AVG. Gain (dBi)	2.88	2.82	3.22	4.96	5.09	4.09	4.40	4.97
V-plane Peak Gain (dBi)	5.47	5.45	4.41	5.71	6.11	5.91	5.77	5.52

Test result

Radiation Pattern : H-Plane



Test result

Radiation Pattern : V-Plane

