

MNX-2201 V5R1 Antenna  
Radiation Pattern  
Test Report  
(@RTC LAB)

**Version: 0.5**

**Project Name: MNX-2201**

**Test Date: 2009/04/02**

**HW version: V5R1**

**Test by: Johnnie Hsu**

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**Document History**

<b>Rev.</b>	<b>Date</b>	<b>Author</b>	<b>Reason for Changes</b>
0.1	2008/09/24	Peter Wen	• First Release
0.2	2008/10/01	Peter Wen	• New mechanical
0.3	2009/03/26	Johnnie Hsu	• DV1 version release
0.4	2009/04/01	Johnnie Hsu	• DV1 Verification @ Hsin-Chu LAB
0.5	2009/04/03	Johnnie Hsu	• DV1 Verification @ RTC LAB



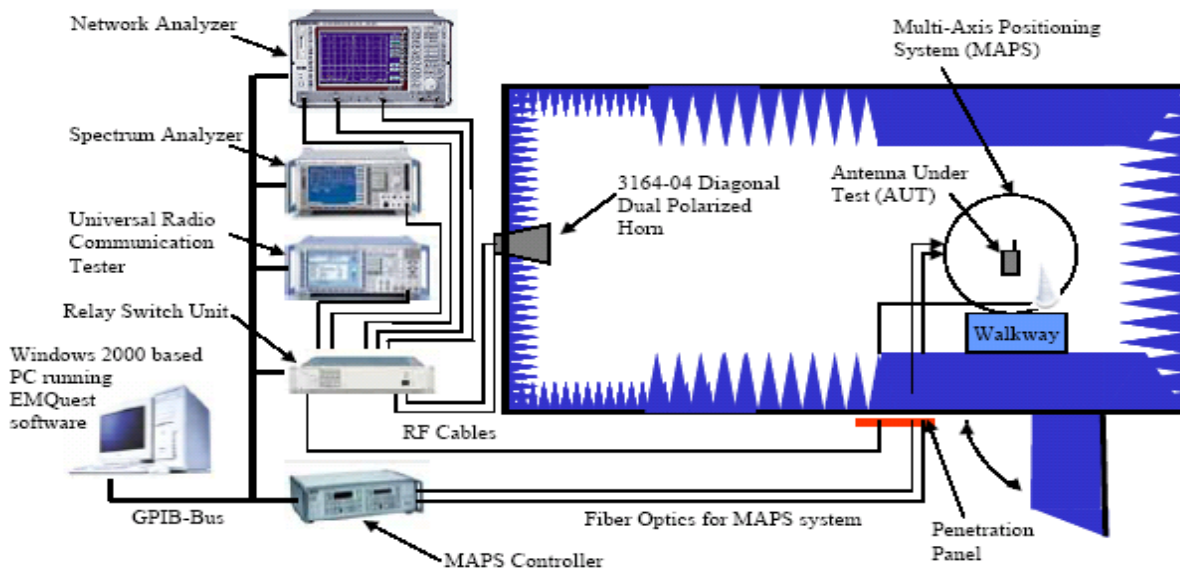
## 1 TEST SETUP

### 1.1 Test Unit

1. Sample Phase: **DV1**
2. Hardware Version: **V5R1**
3. Housing: **YELLOW & BLACK**
4. PCB: **V5R1**

### 1.1.1 Test Architecture

## Typical AMS-8500 System Schematic



## 2 TEST RESULT AND SUMMARY (PASS/FAIL)

### 2.1 Antenna Test Result Summary (PASS/FAIL)

#### Sample 1 (BDA: 001A0EEDA1D8)(Yellow)

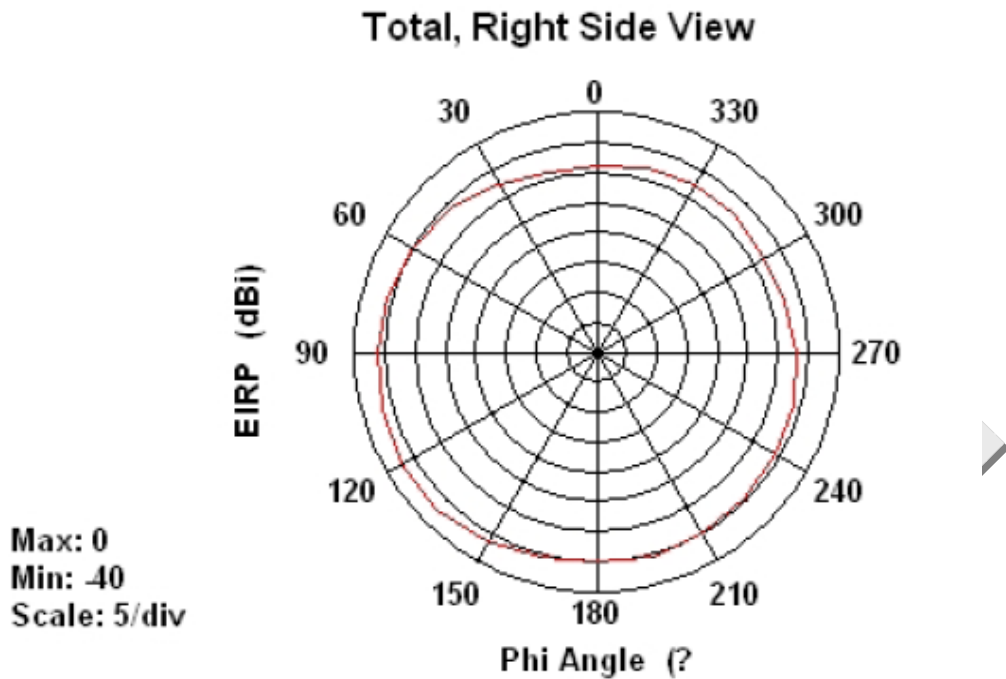
	Free Space			Talk		
	Return Loss (dB) at 2402MHz	Return Loss (dB) at 2441 MHz	Return Loss (dB) at 2480 MHz	Return Loss (dB) at 2402 MHz	Return Loss (dB) at 2441 MHz	Return Loss (dB) at 2480 MHz
Efficiency (%)	18.32	18.51	17.97	15.04	14.54	13.19
Gain (dBi)	-3.12	-2.40	-1.56	-0.88	-1.26	-1.30

#### Sample 2 (BDA: 001A0EEDA1A8) (Black)

	Free Space			Talk		
	Return Loss (dB) at 2402MHz	Return Loss (dB) at 2441 MHz	Return Loss (dB) at 2480 MHz	Return Loss (dB) at 2402 MHz	Return Loss (dB) at 2441 MHz	Return Loss (dB) at 2480 MHz
Efficiency (%)	25.62	25.59	24.66	15.68	15.34	14.48
Gain (dBi)	0.27	0.45	1.18	-1.30	-1.34	-2.19

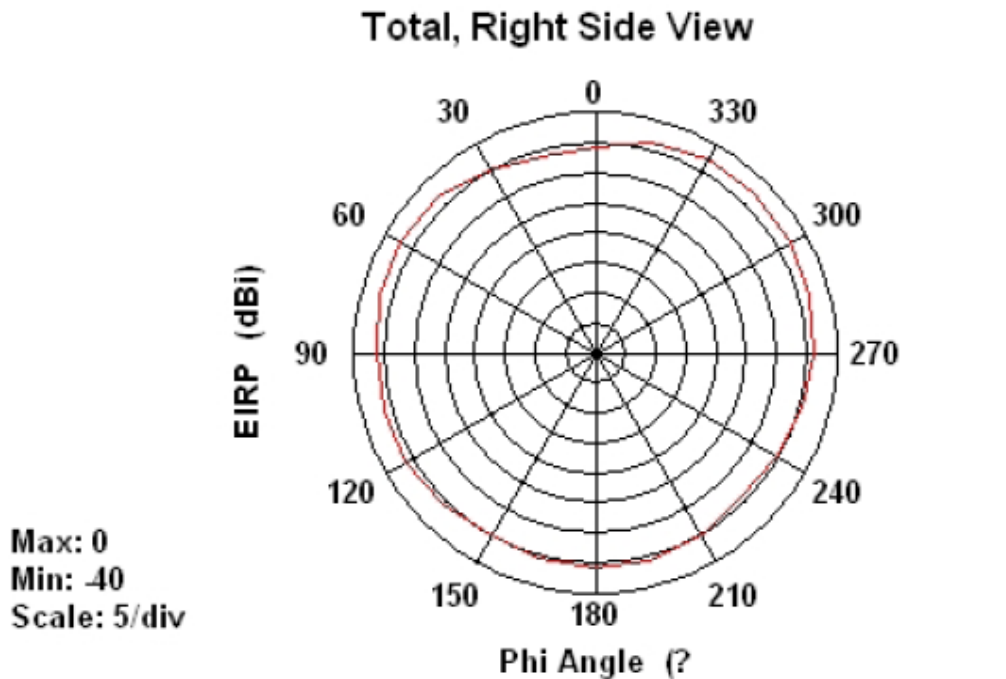
## 2.2 FREE SPACE

Sample 1 (BDA: 001A0EEDA1D8)



**Free Space Total GAIN, Right Side View, 2441MHz**

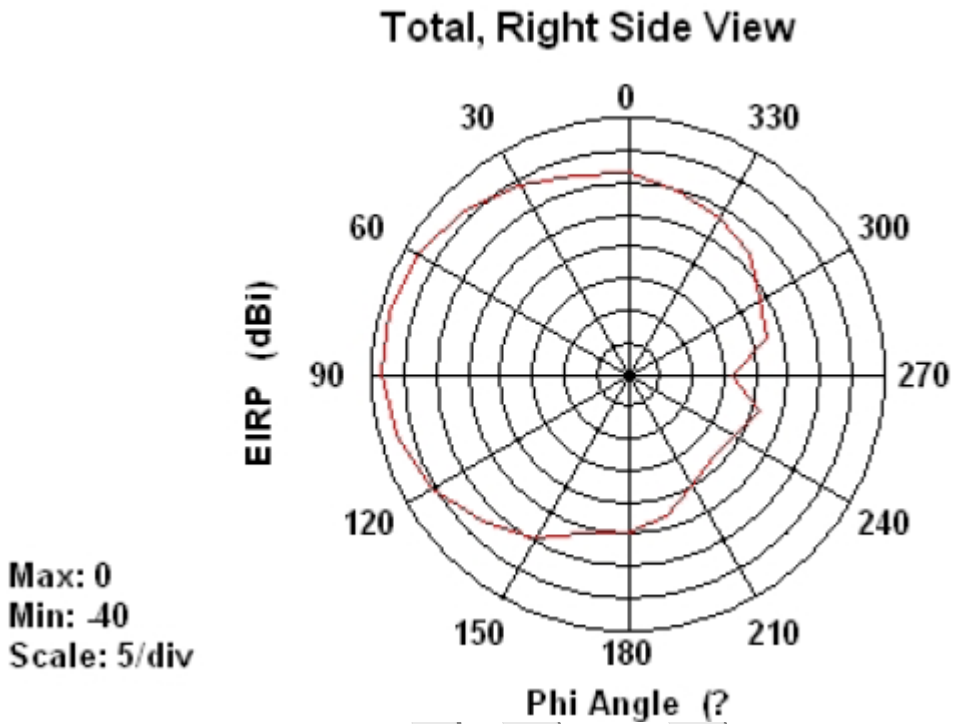
Sample 2 (BDA: 001A0EEDA1A8)



**Free Space Total GAIN, Right Side View, 2441MHz**

2.3 Talk Mode

Sample 1 (BDA: 001A0EEDA1D8)



Sample 2 (BDA: 001A0EEDA1A8)

