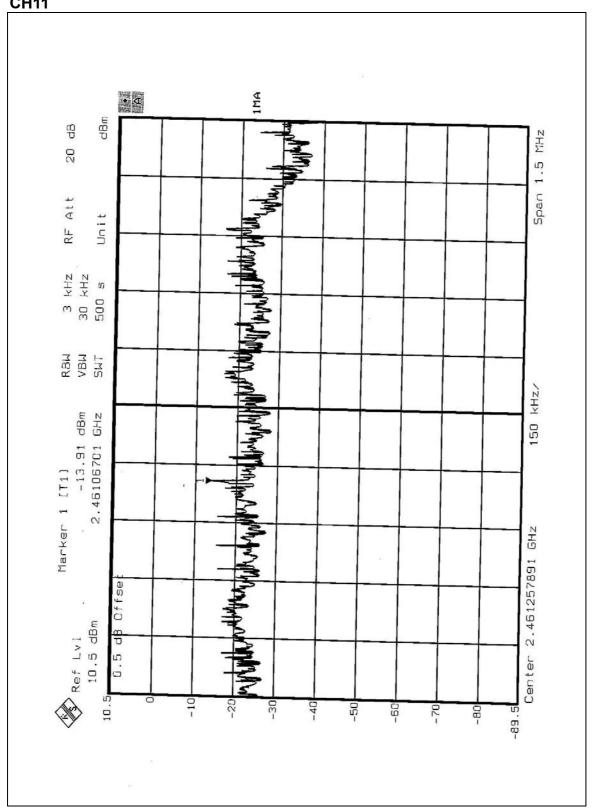


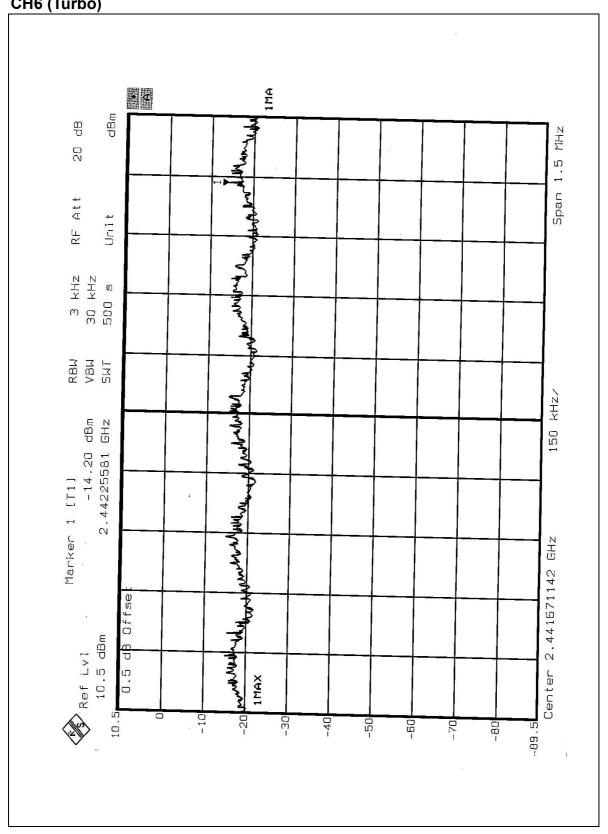


## CH11





# CH6 (Turbo)

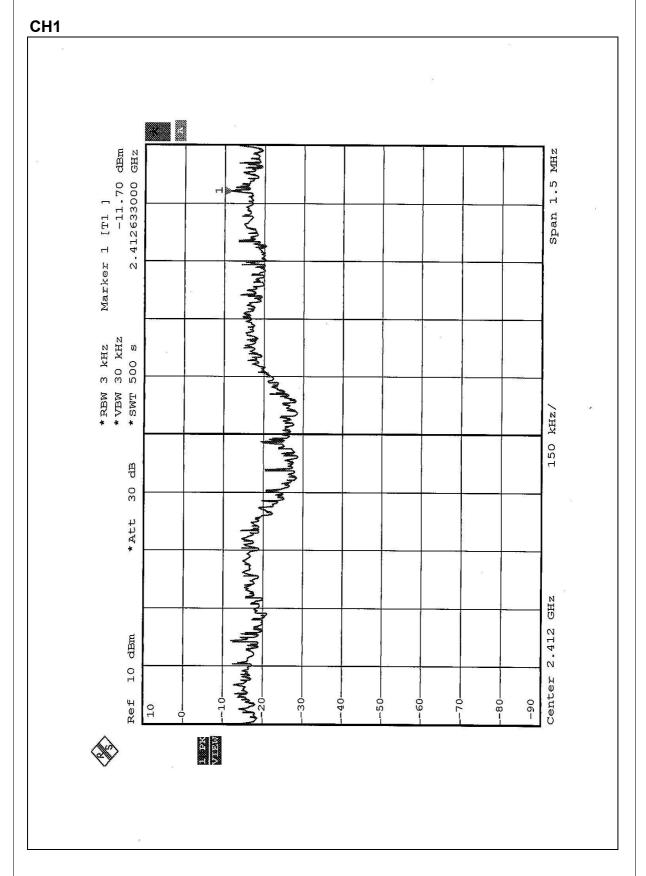




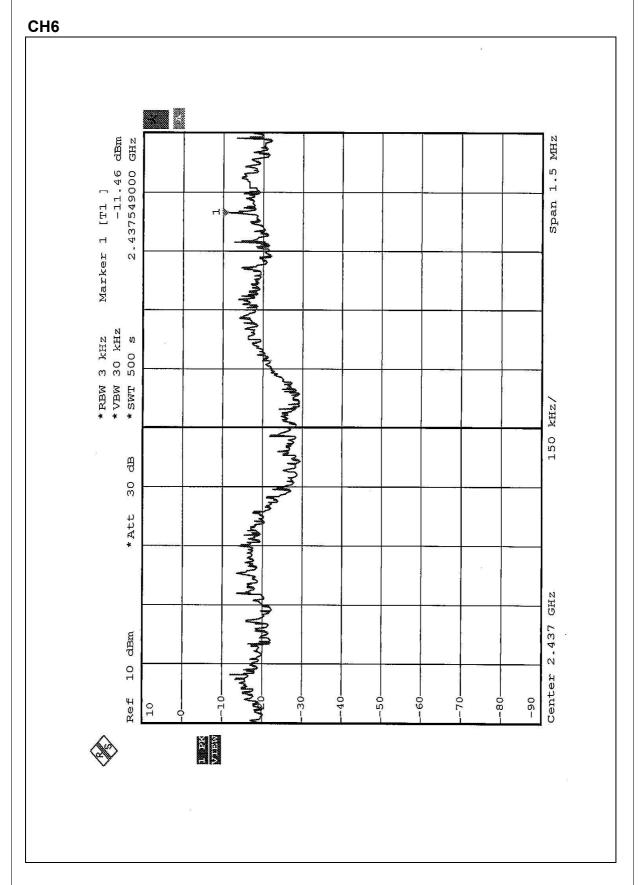
EUT	Wireless PCI Adapter	MODEL	F5D7001
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	ENVIRONMENTAL	23 deg. C, 67% RH,
		CONDITIONS	991 hPa
PA	2	TESTED BY	Leo Hung

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-11.70	8	PASS
6	2437	-11.46	8	PASS
11	2462	-11.92	8	PASS
6 (Turbo)	2437	-14.87	8	PASS

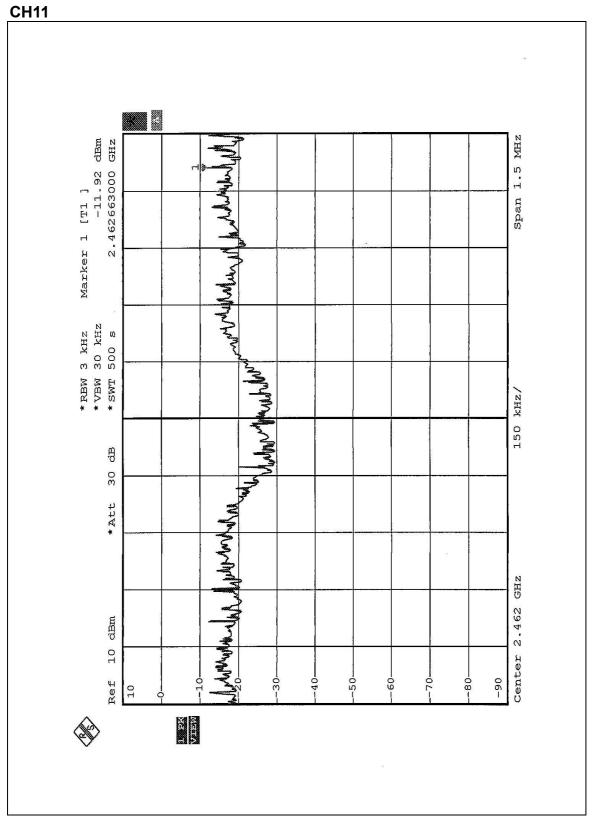






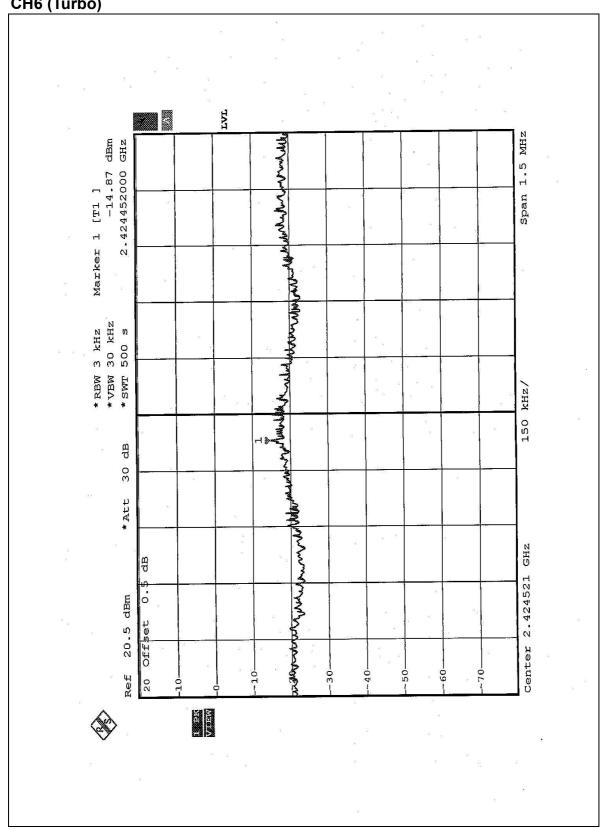








# CH6 (Turbo)





### 4.6 BAND EDGES MEASUREMENT

#### 4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

#### 4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

**NOTE:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

#### 4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

#### 4.6.4 DEVIATION FROM TEST STANDARD

No deviation.

#### 4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6.



#### 4.6.6 TEST RESULTS

The spectrum plots are attached on the following 12 pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

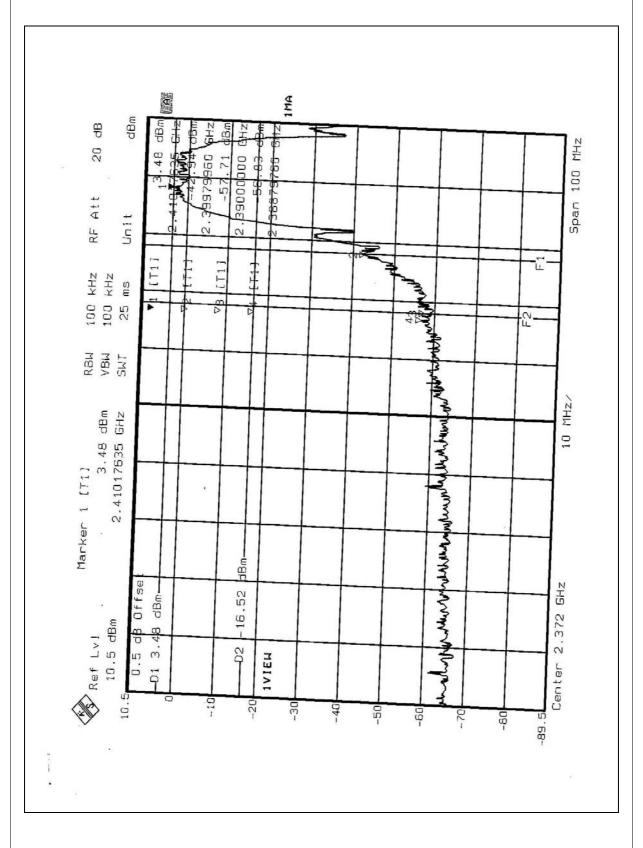
#### 4.6.7 TEST RESULTS(A)

### PA 1:

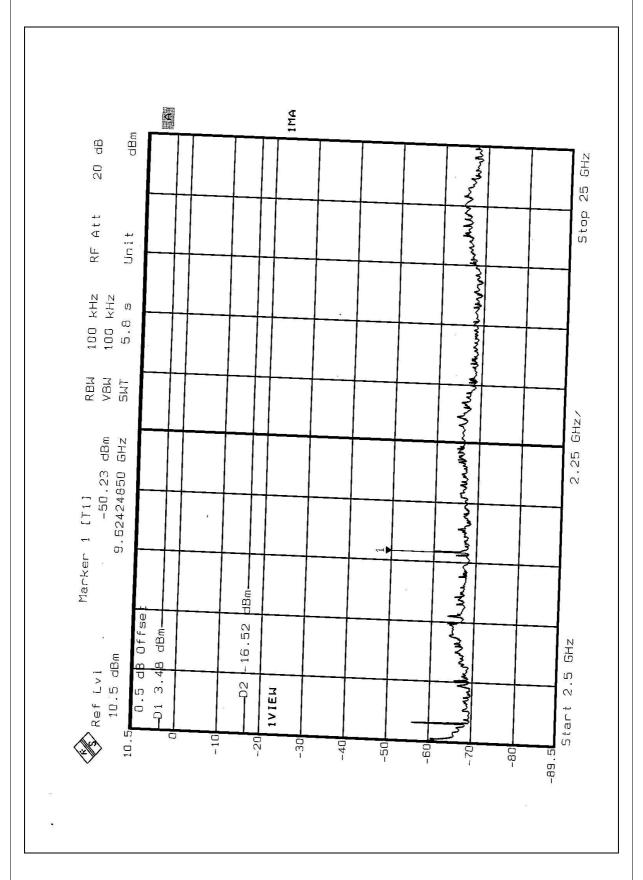
The band edge emission plot of CCK technique on the following 1~2 pages show 60.31dB delta between carrier maximum power and local maximum emission in restrict band (2.3888GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 107.42dBuV/m, so the maximum field strength in restrict band is 107.42-60.31=47.11dBuV/m which is under 54dBuV/m limit.

The band edge emission plot of CCK technique on the following 3~4 pages show 57.57dB delta between carrier maximum power and local maximum emission in restrict band (2.4839GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 106.33dBuV/m, so the maximum field strength in restrict band is 106.33-57.57=48.76dBuV/m which is under 54dBuV/m limit.

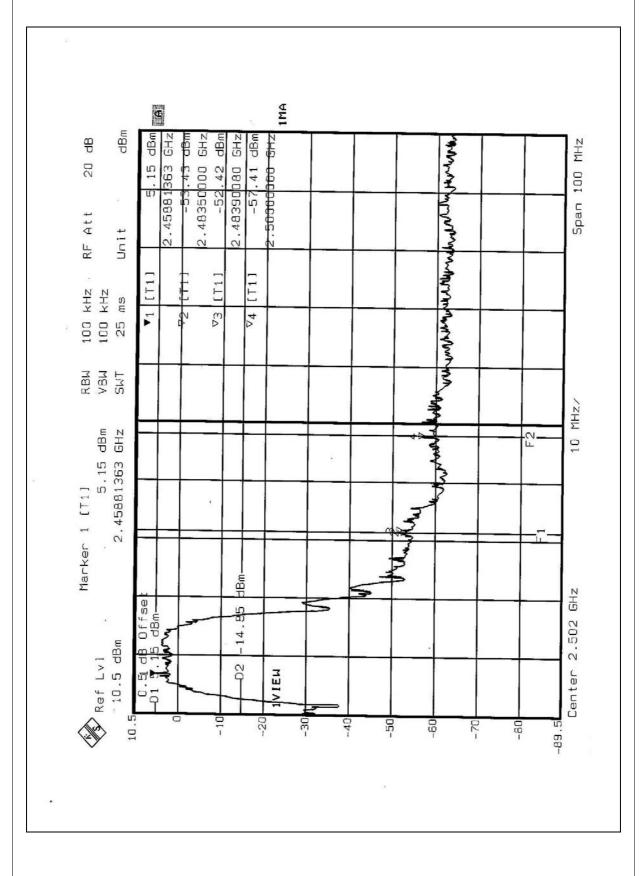




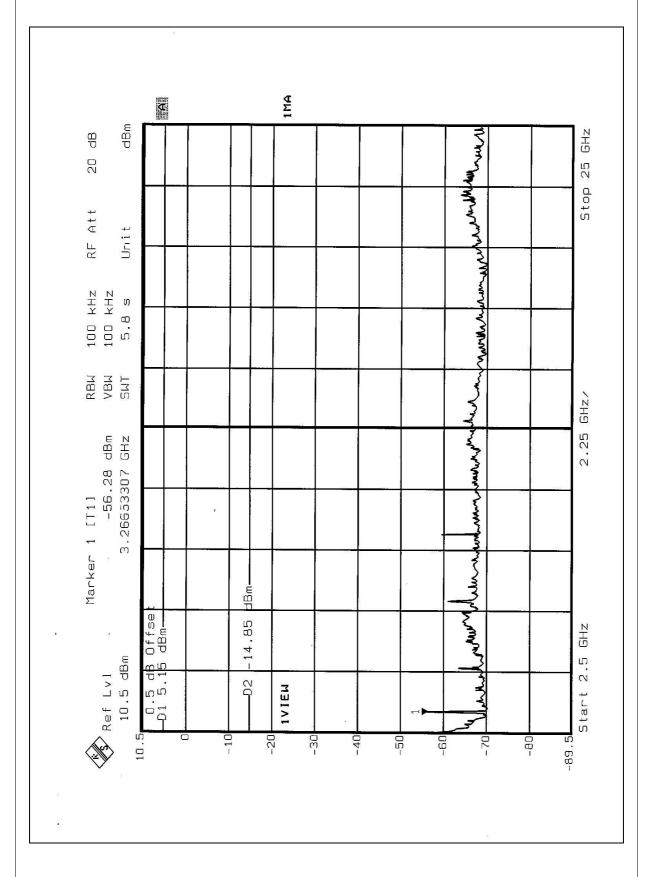












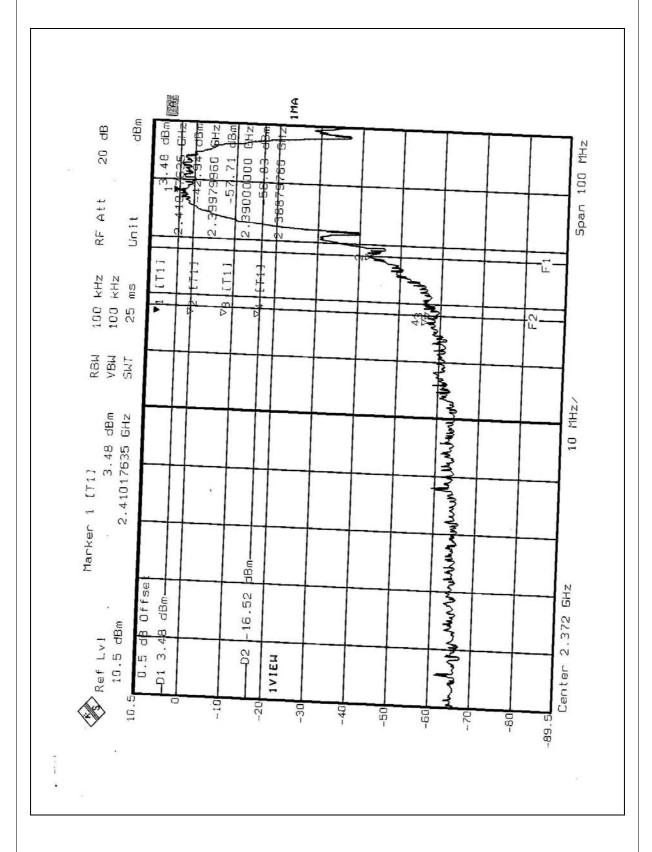


#### PA 2:

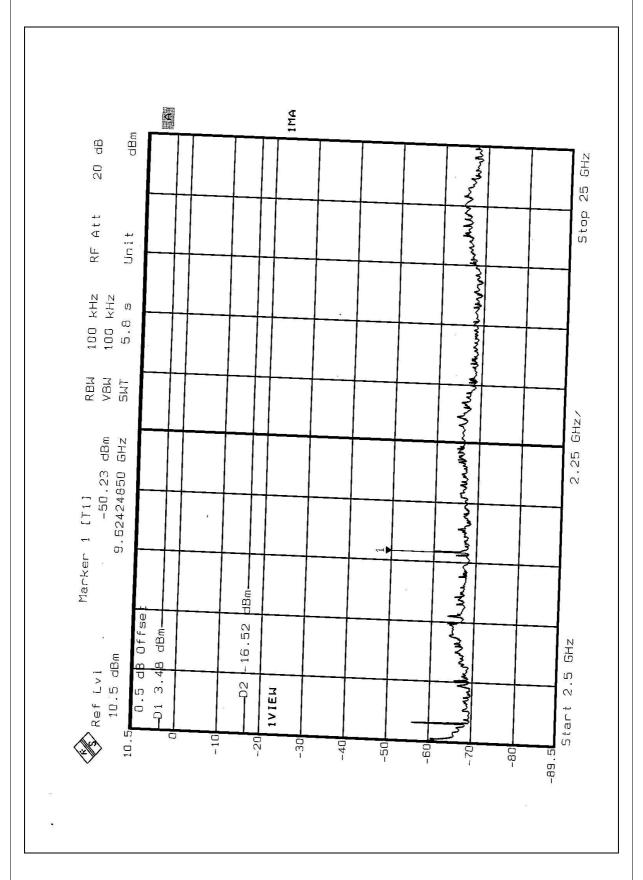
The band edge emission plot of CCK technique on the following 1~2 pages show 60.31dB delta between carrier maximum power and local maximum emission in restrict band (2.3888GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 105.52dBuV/m, so the maximum field strength in restrict band is 105.52-60.31=45.21dBuV/m which is under 54dBuV/m limit.

The band edge emission plot of CCK technique on the following 3~4 pages show 57.57dB delta between carrier maximum power and local maximum emission in restrict band (2.4839GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 104.54dBuV/m, so the maximum field strength in restrict band is 104.54-57.57=49.97dBuV/m which is under 54dBuV/m limit.

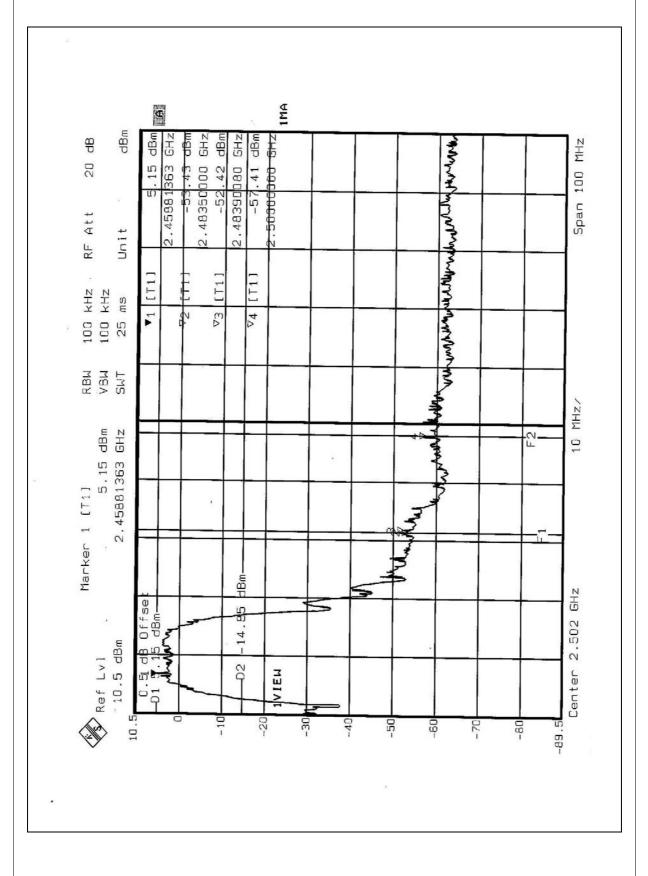




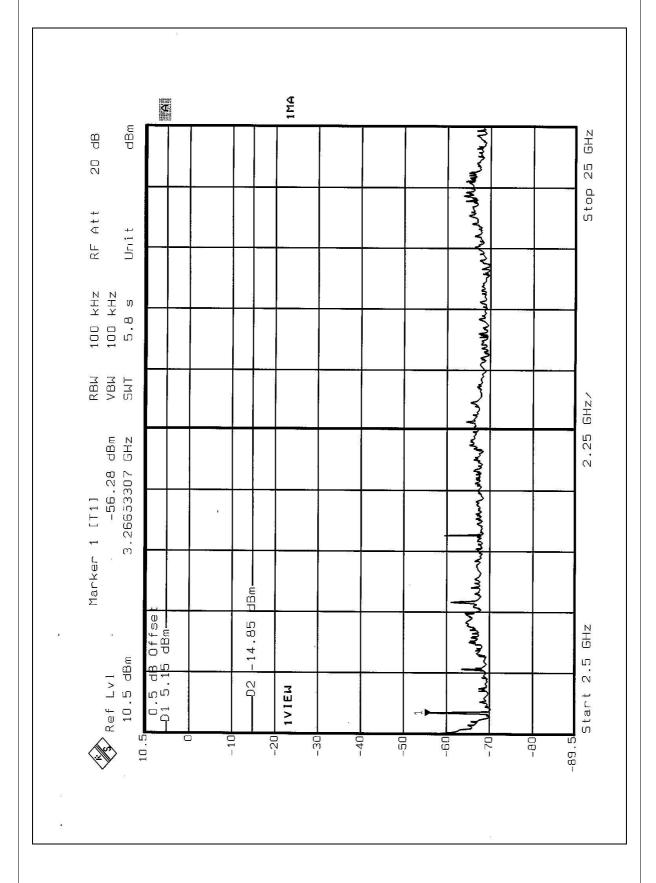














### 4.6.8 TEST RESULTS(B)

#### PA 1:

#### Normal mode

The band edge emission plot of OFDM technique on the following 1~2 pages show 54.90dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 105.34dBuV/m, so the maximum field strength in restrict band is 105.34-54.90=50.44dBuV/m which is under 54dBuV/m limit.

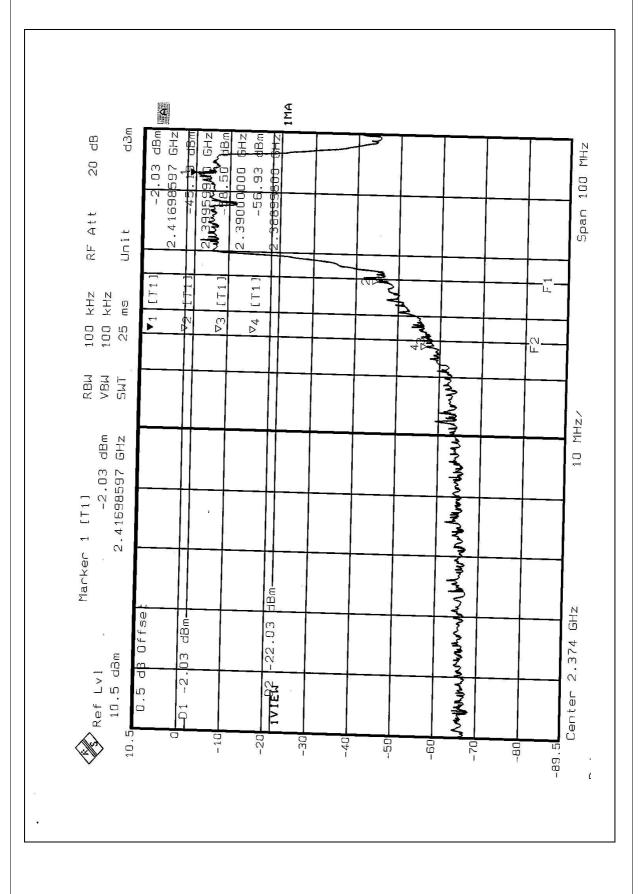
The band edge emission plot of OFDM technique on the following 3~4 pages show 54.10dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 107.07dBuV/m, so the maximum field strength in restrict band is 107.07-54.10=52.97dBuV/m which is under 54dBuV/m limit.

#### Turbo mode

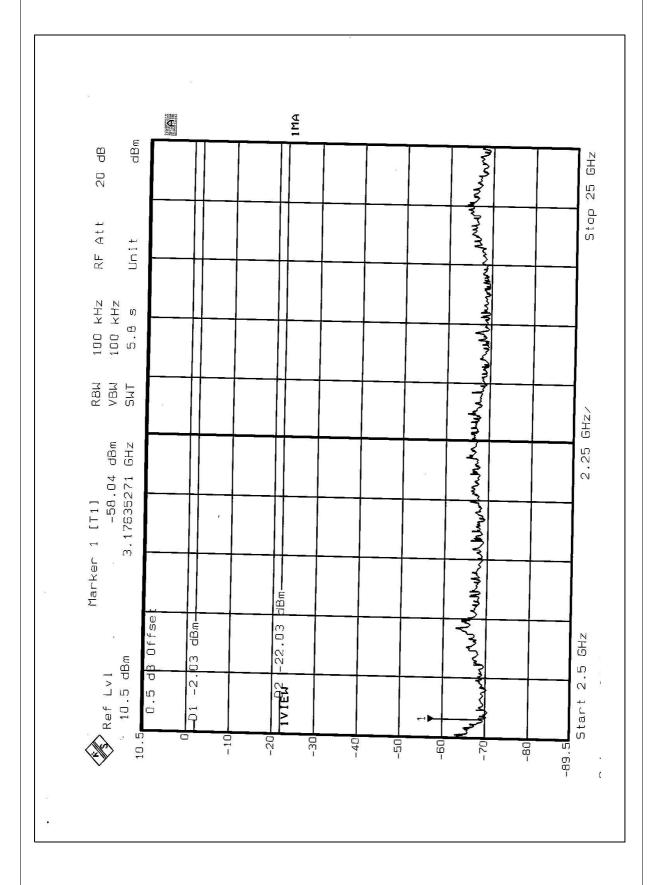
The band edge emission plot of OFDM technique on the following 5~6 pages show 58.76dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 102.08dBuV/m, so the maximum field strength in restrict band is 102.08-58.76=43.32dBuV/m which is under 54dBuV/m limit.

The band edge emission plot of OFDM technique on the following 7~8 pages show 59.25dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 102.08dBuV/m, so the maximum field strength in restrict band is 102.08-59.25=42.83dBuV/m which is under 54dBuV/m limit.

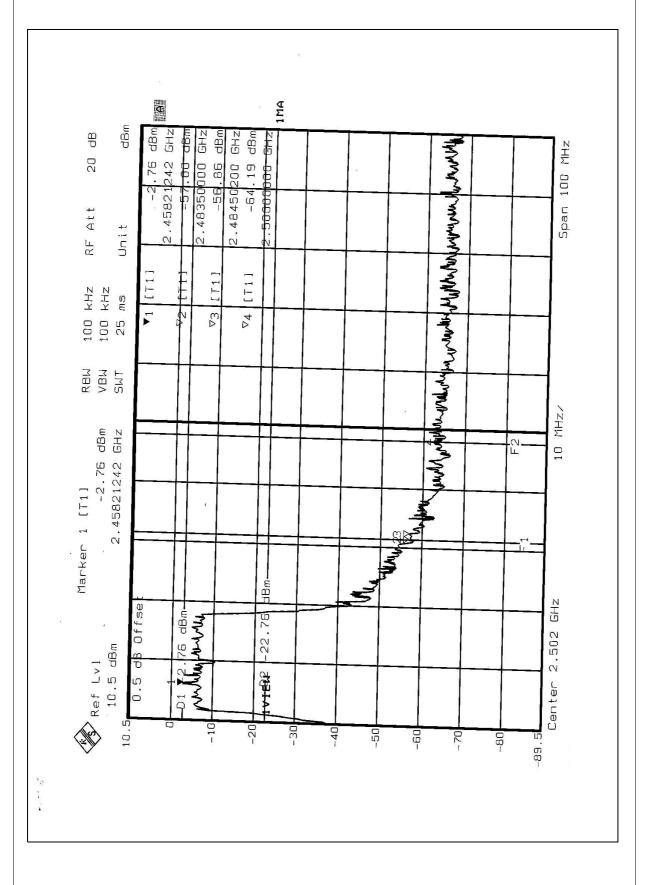




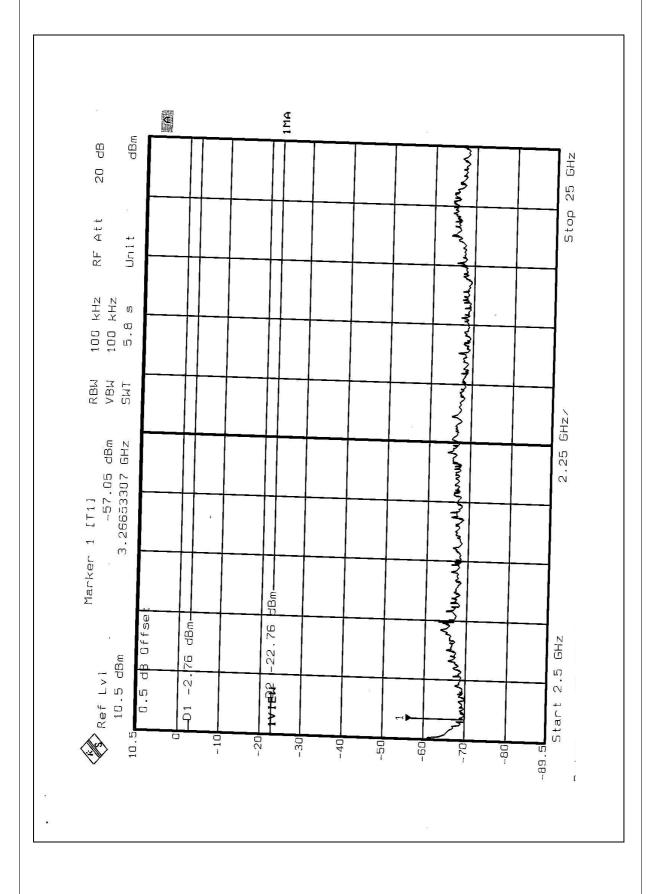




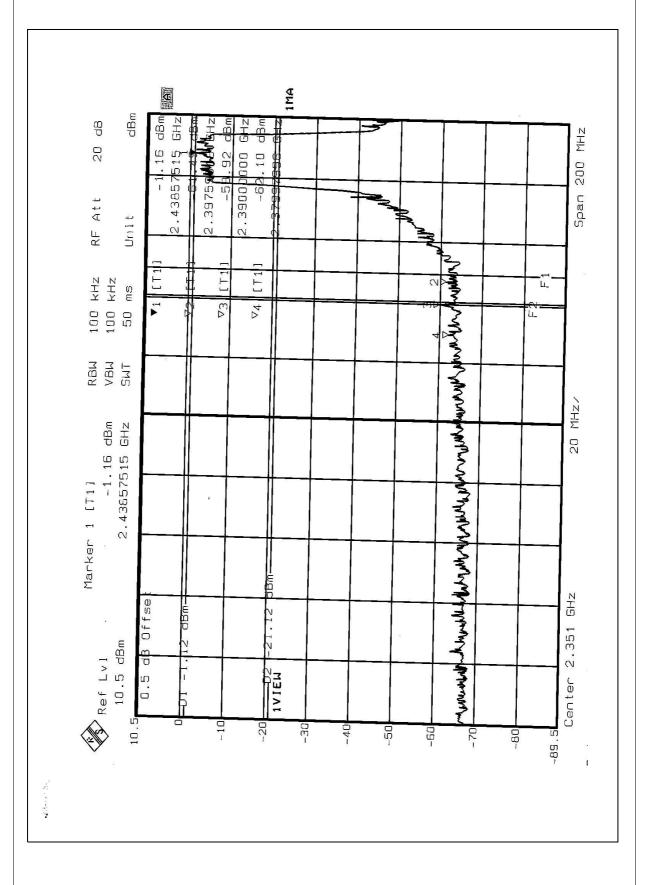




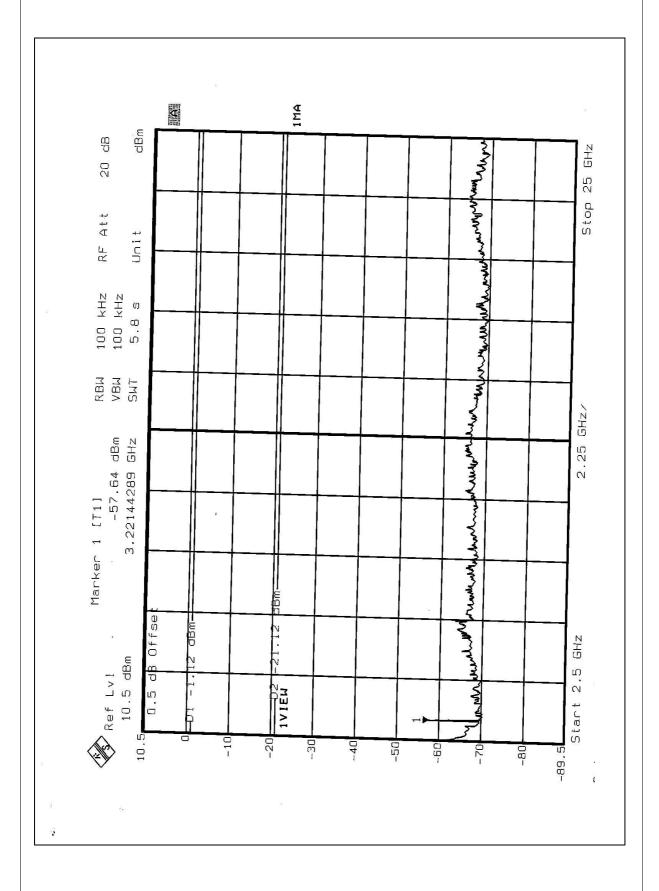




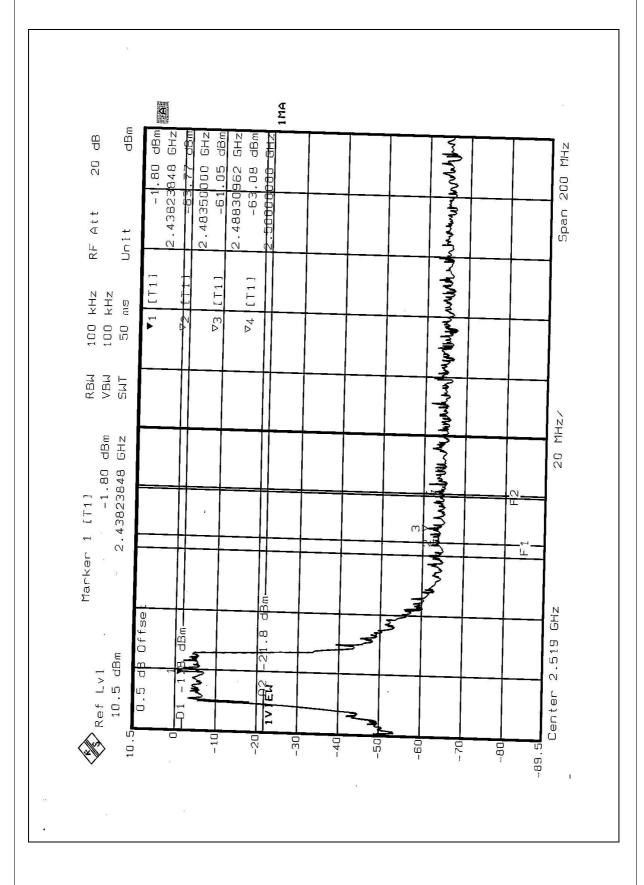




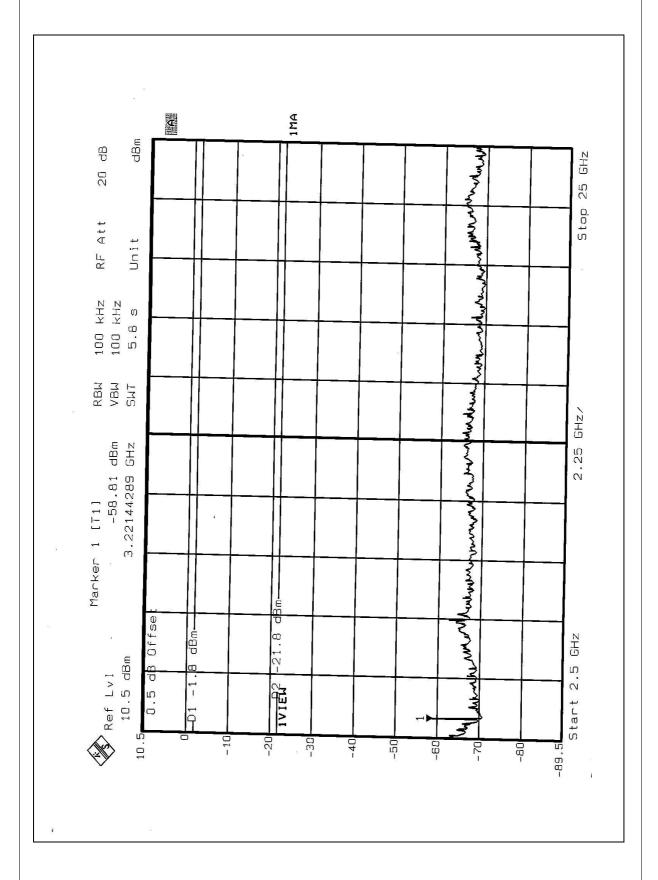














#### PA 2:

#### Normal mode

The band edge emission plot of OFDM technique on the following 1~2 pages show 54.90dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 105.66dBuV/m, so the maximum field strength in restrict band is 105.66-54.90=50.76dBuV/m which is under 54dBuV/m limit.

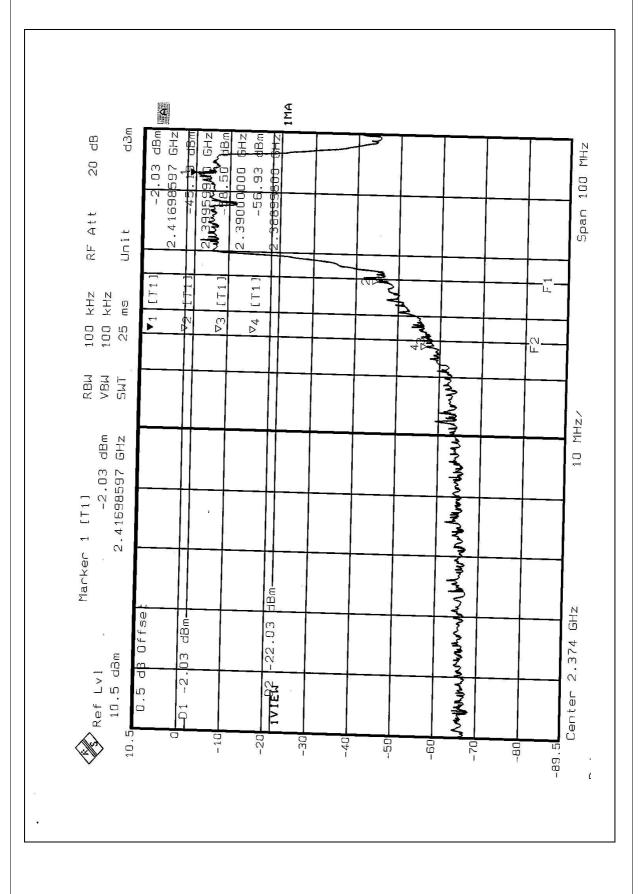
The band edge emission plot of OFDM technique on the following 3~4 pages show 54.10dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 105.43dBuV/m, so the maximum field strength in restrict band is 105.43-54.10=51.33dBuV/m which is under 54dBuV/m limit.

#### Turbo mode

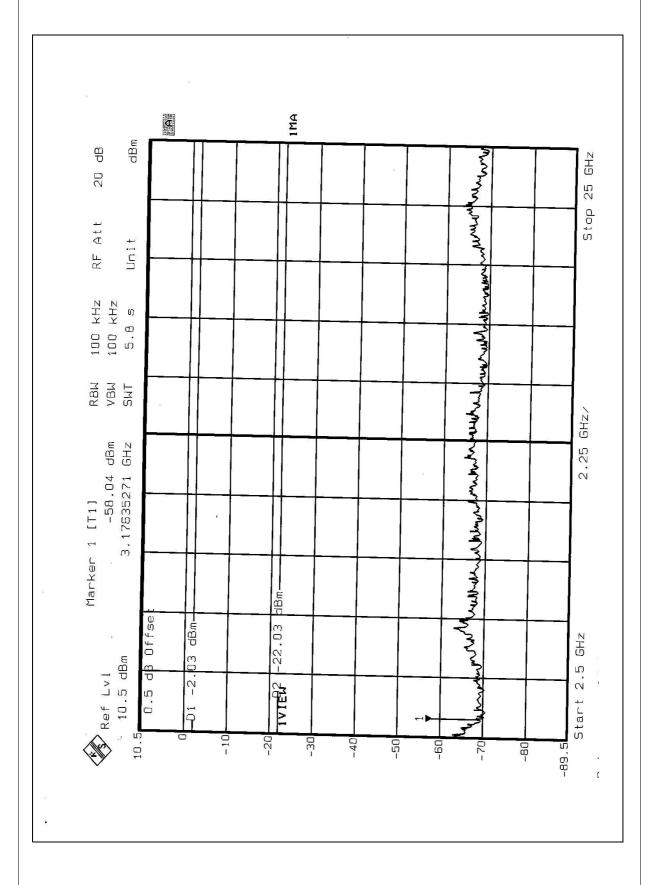
The band edge emission plot of OFDM technique on the following 5~6 pages show 58.76dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 100.83dBuV/m, so the maximum field strength in restrict band is 100.83-58.76=42.07dBuV/m which is under 54dBuV/m limit.

The band edge emission plot of OFDM technique on the following 7~8 pages show 59.25dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 100.83dBuV/m, so the maximum field strength in restrict band is 100.83-59.25=41.58dBuV/m which is under 54dBuV/m limit.

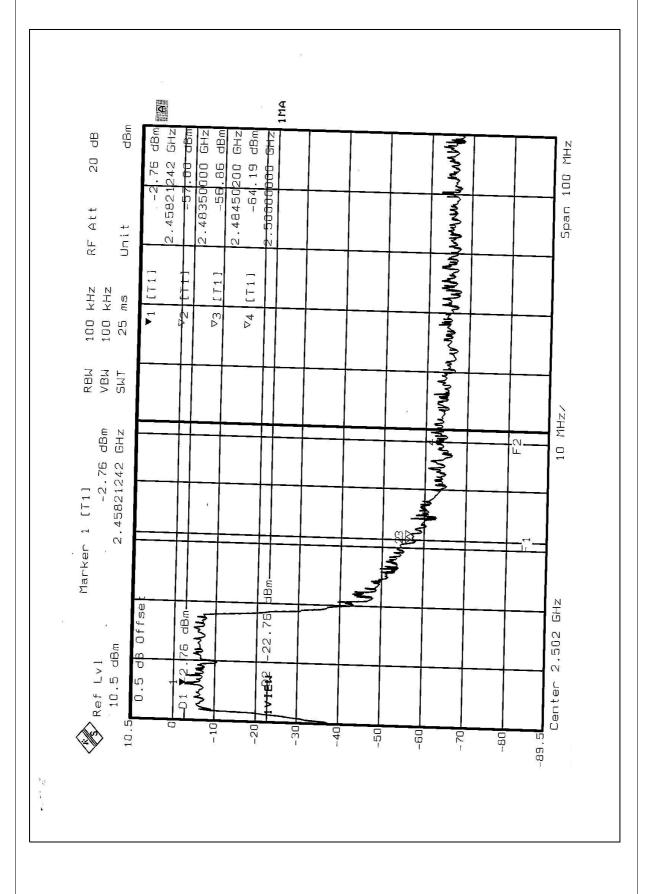




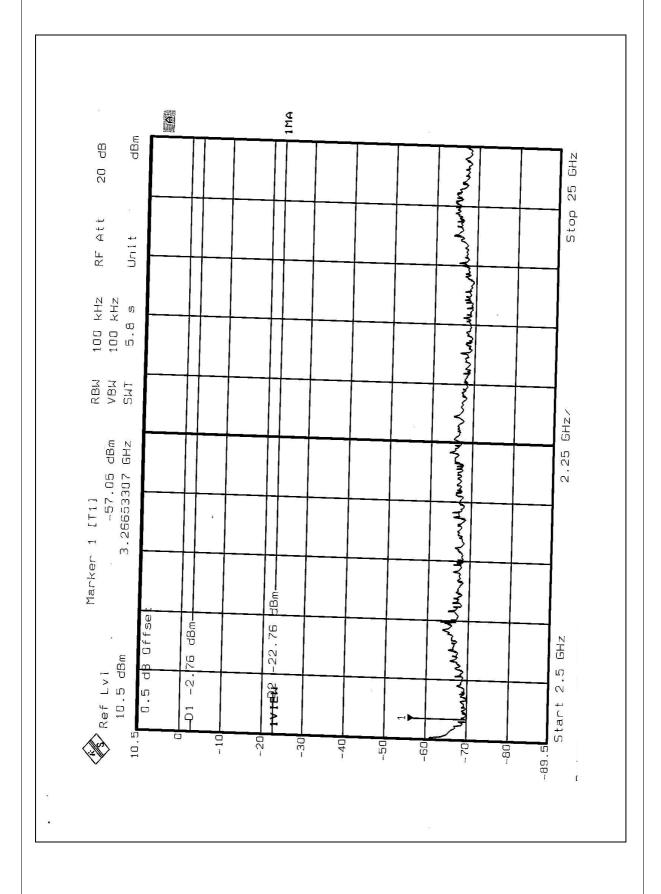




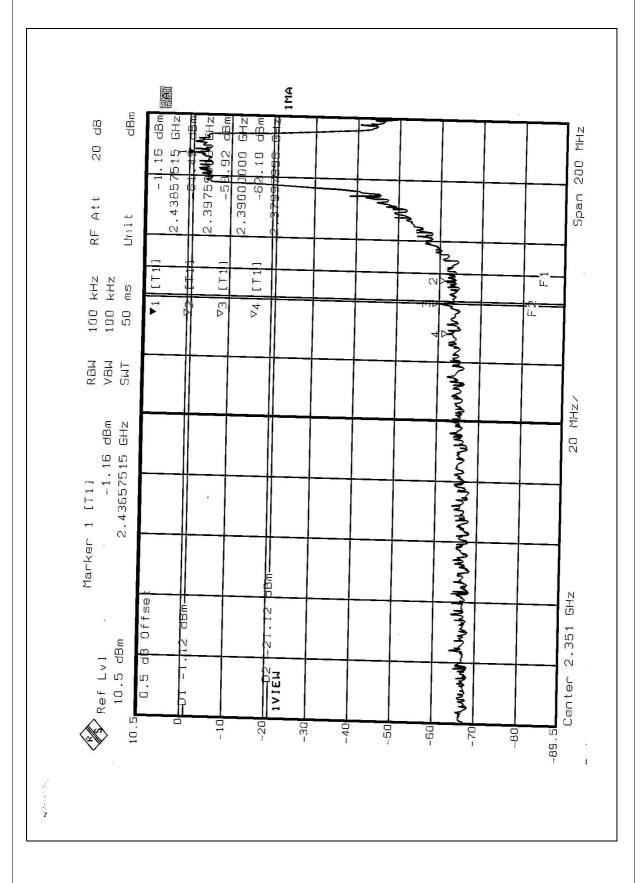




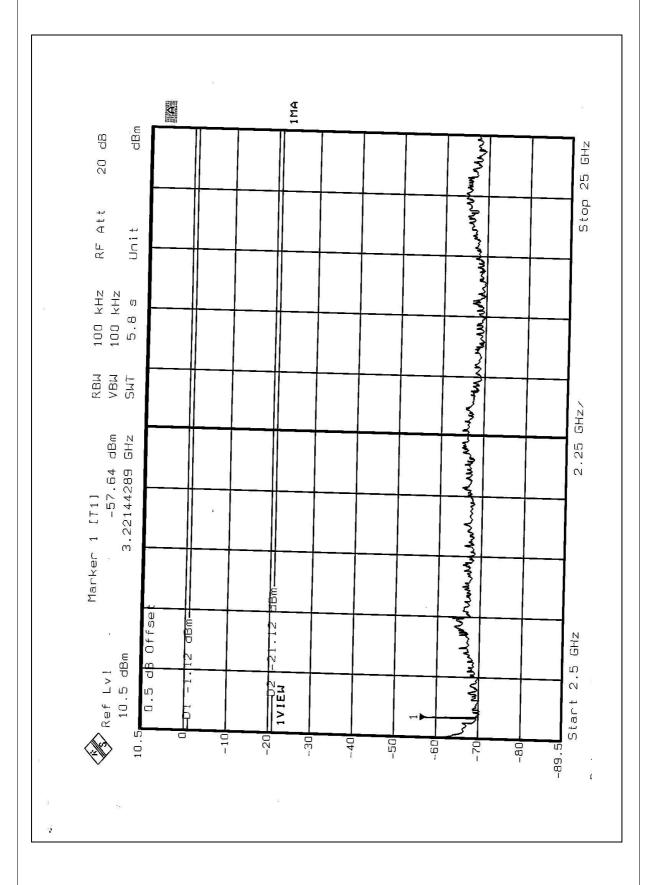




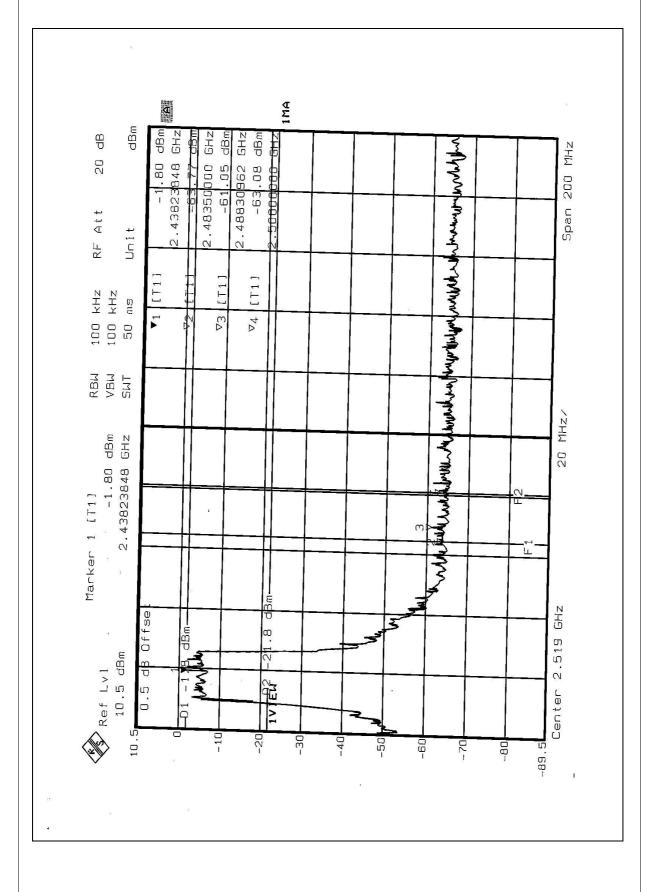




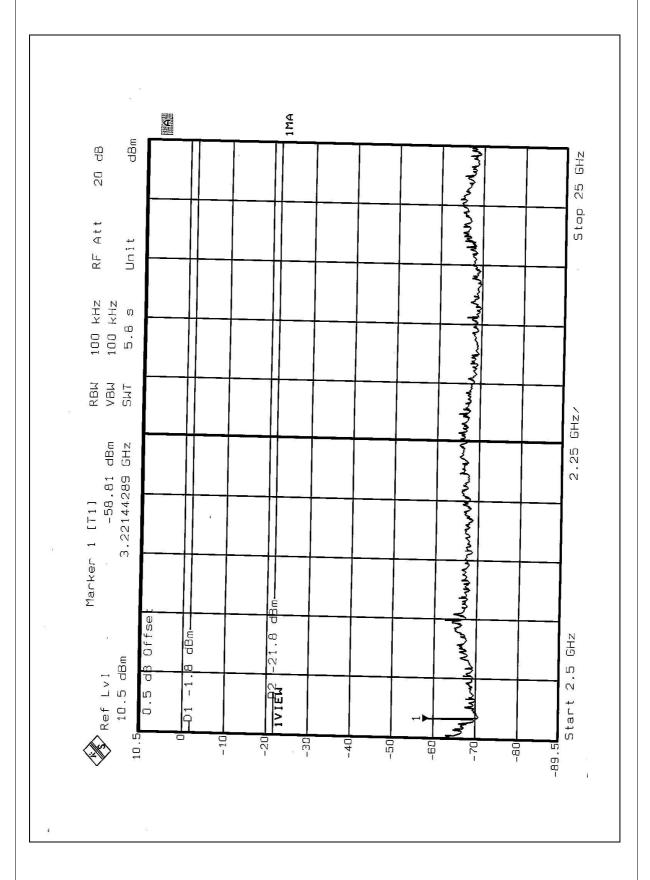














### 4.7 ANTENNA REQUIREMENT

#### 4.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### 4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product is dipole antenna with Reverse SMA connector. And the maximum Gain of this antenna is 1.8dBi.



## 5 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST







## RADIATED EMISSION TEST







#### **6 INFORMATION ON THE TESTING LABORATORIES**

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025, Guide 25 or EN 45001:

**USA** FCC, NVLAP, UL, A2LA

**Germany** TUV Rheinland

Japan VCCI Norway NEMKO

Canada INDUSTRY CANADA, CSA

R.O.C. CNLA, BSMI, DGT

**Netherlands** Telefication

**Singapore** PSB , GOST-ASIA(MOU)

Russia CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

<u>www.adt.com.tw/index.5/phtml</u>. If you have any comments, please feel free to contact us at the following:

Linko RF Lab

 Linko EMC/RF Lab
 Hsin Chu EMC/RF Lab

 Tel: 886-2-26052180
 Tel: 886-3-5935343

Fax: 886-2-26052943 Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab

Tel: 886-3-3183232 Tel: 886-3-3270910 Fax: 886-3-3185050 Fax: 886-3-3270892

Email: <a href="mail.adt.com.tw">service@mail.adt.com.tw</a>
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The address and road map of all our labs can be found in our web site also.

Report Format Version 1.5