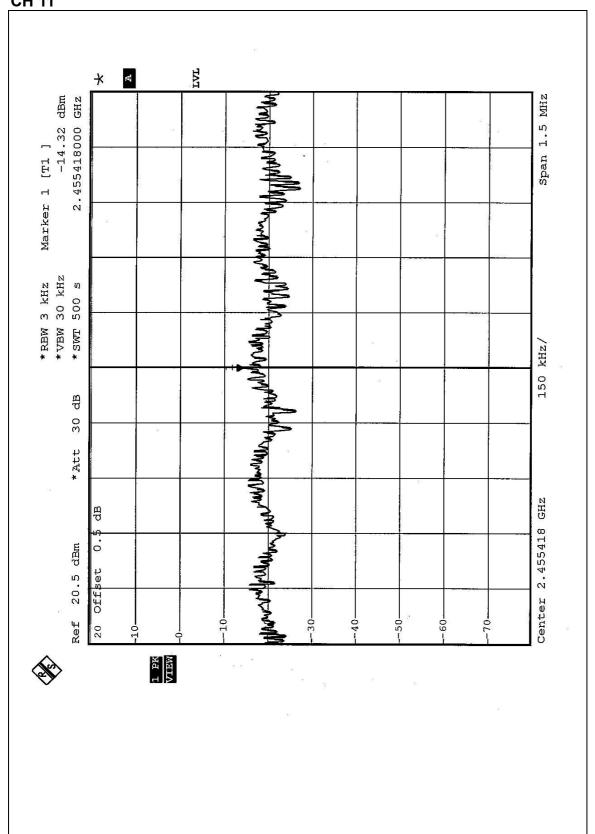


# CH 11





### 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 100 MHz 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 8 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)

#### NOTE:

The band edge emission plot of CCK technique on the following 1~2 pages show 58.36dB delta between carrier maximum power and local maximum emission in restrict band (2.3894GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 101.64dBuV/m, so the maximum field strength in restrict band is 101.64-58.36=43.28dBuV/m which is under 54dBuV/m limit.

The band edge emission plot of CCK technique on the following 3~4 pages show 60.23dB delta between carrier maximum power and local maximum emission in restrict band (2.4843GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 100.10dBuV/m, so the maximum field strength in restrict band is 100.10-60.23=39.87dBuV/m which is under 54dBuV/m limit.

## 4.6.8 TEST RESULTS(B)

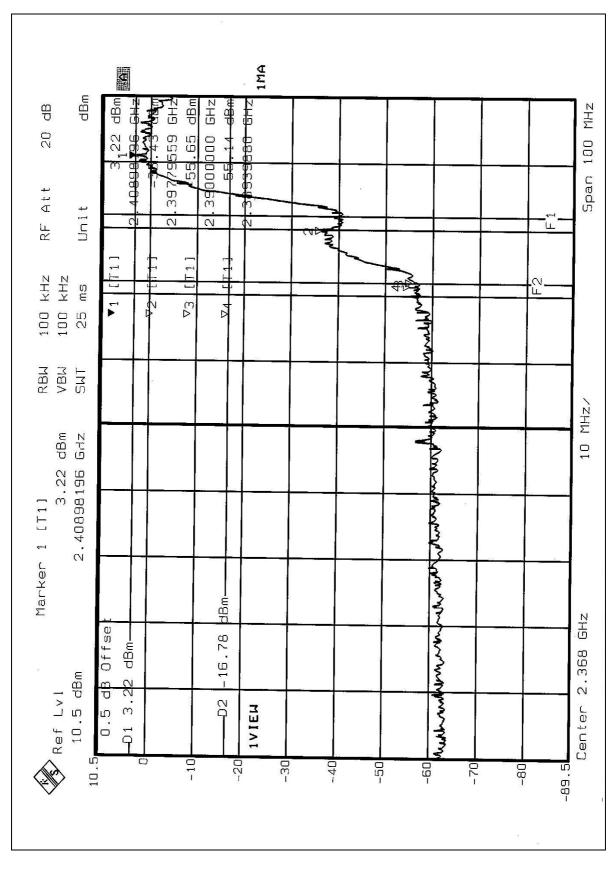
### NOTE:

The band edge emission plot of OFDM technique on the following 5~6 pages show 49.80dB 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 99.43dBuV/m, so the maximum field strength in restrict band is 99.43-49.80=49.63dBuV/m which is under 54dBuV/m limit.

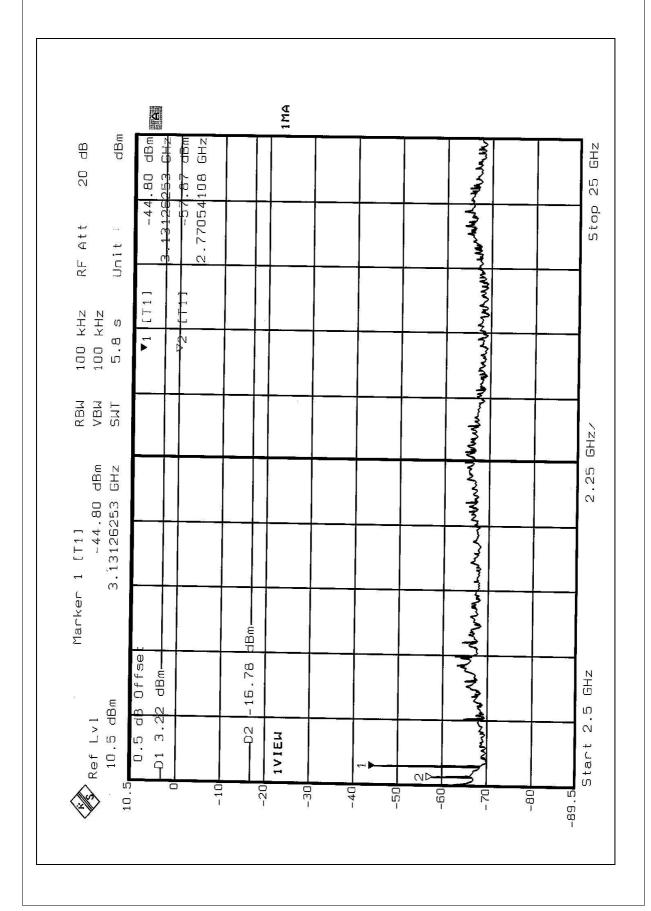
The band edge emission plot of OFDM technique on the following 7~8 pages show 51.64dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 97.06dBuV/m, so the maximum field strength in restrict band is 97.06-51.64=45.42dBuV/m which is under 54dBuV/m limit.

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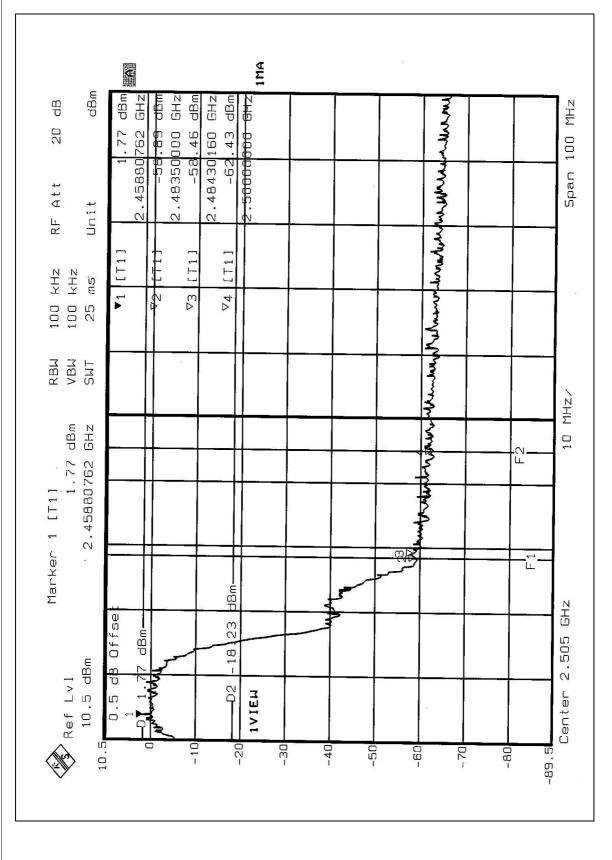




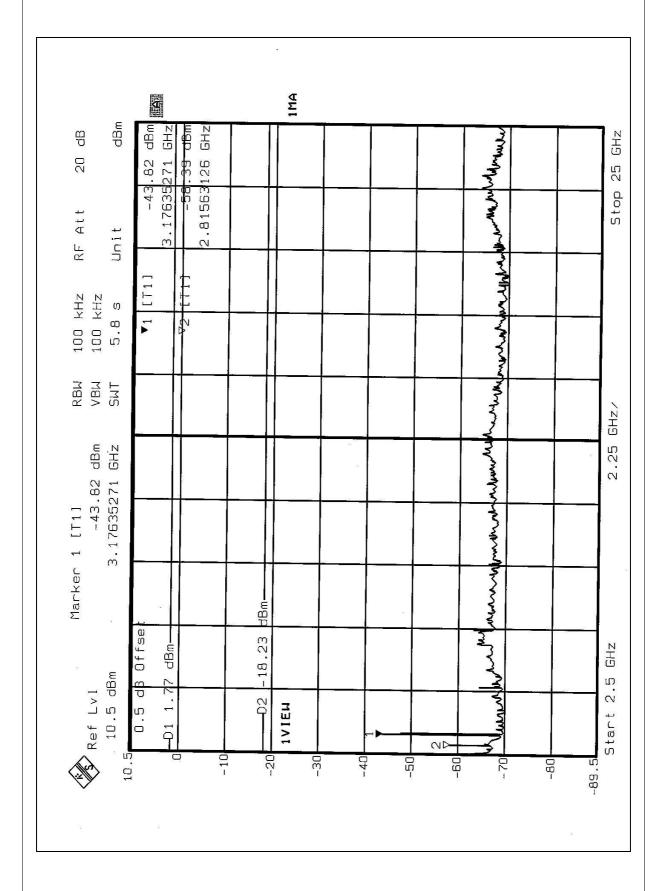




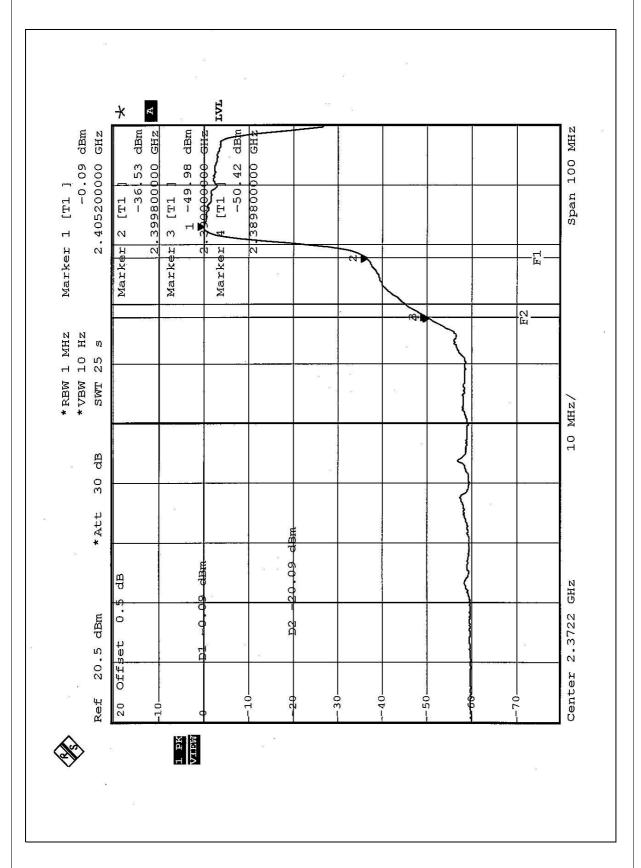




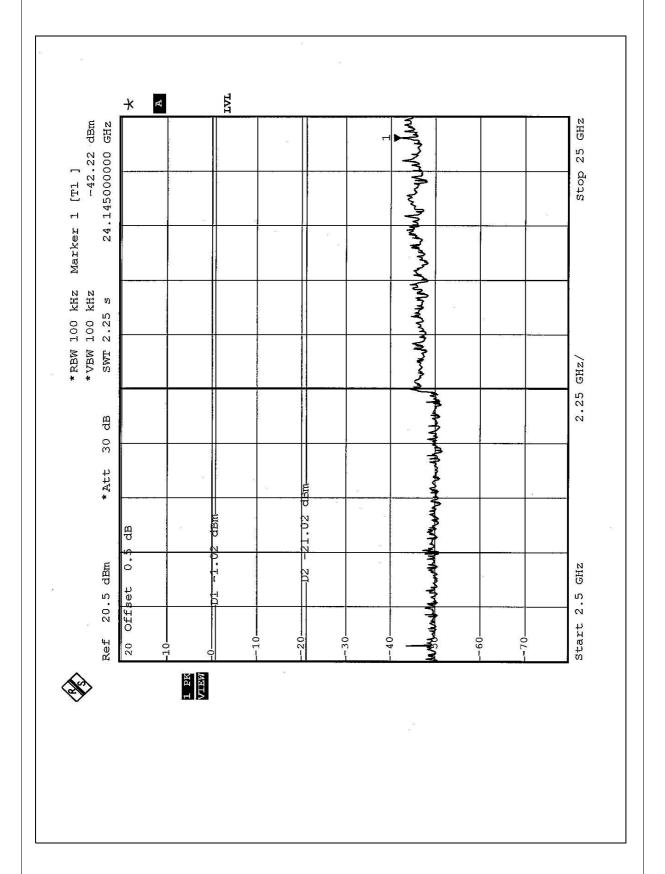




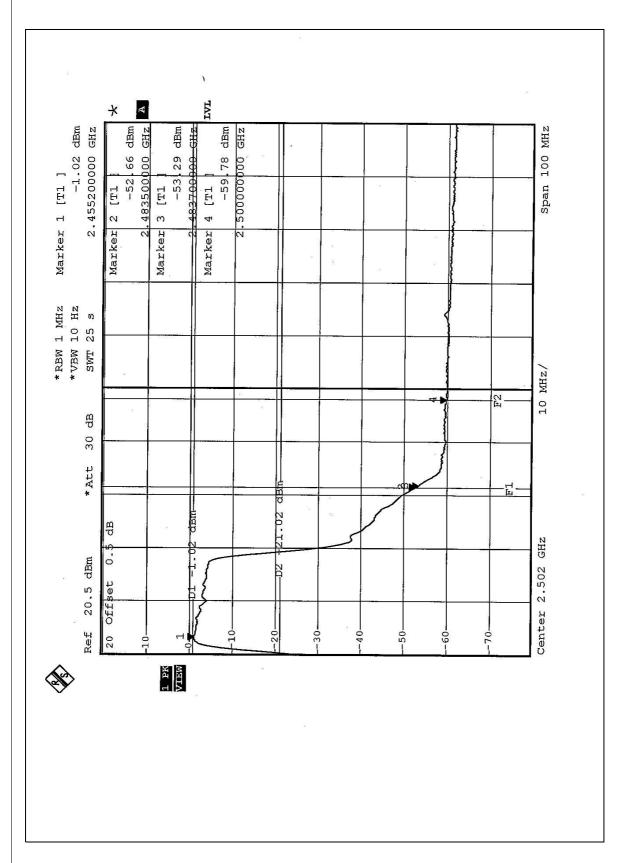




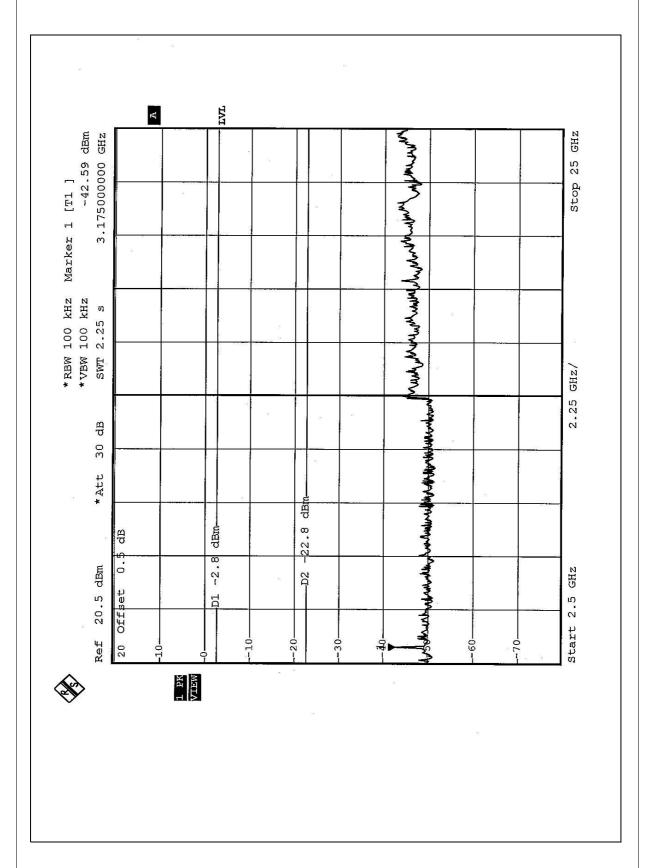














## 4.7 ANTENNA REQUIREMENT

## 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 without connector. And the maximum Gain of this antenna is 1dBi.



# 5 PHOTOGRAPHS OF THE TEST CONFIGURATION

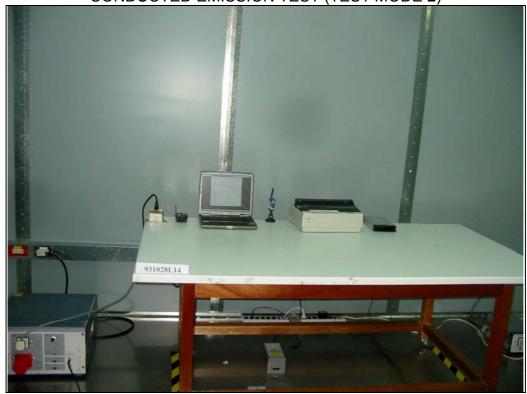
CONDUCTED EMISSION TEST (TEST MODE 1)







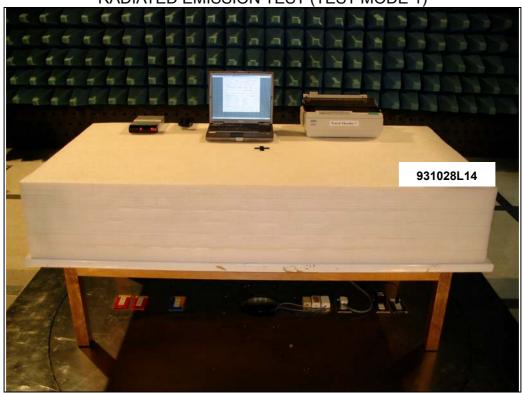
CONDUCTED EMISSION TEST (TEST MODE 2)

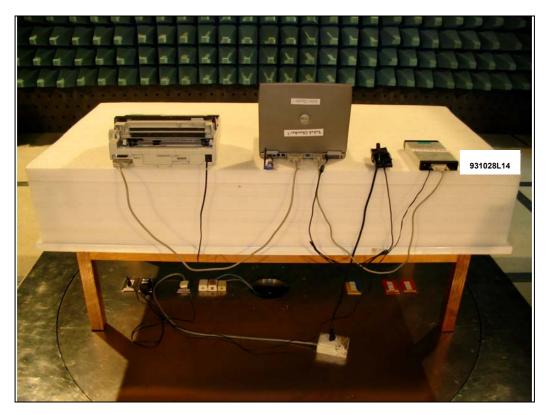






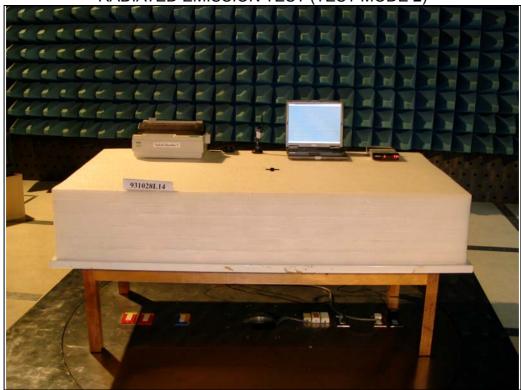
**RADIATED EMISSION TEST (TEST MODE 1)** 

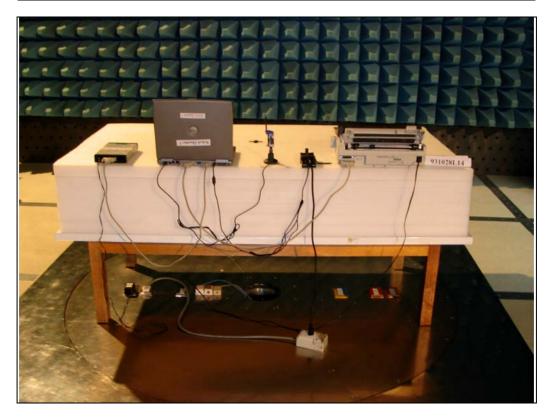






RADIATED EMISSION TEST (TEST MODE 2)







Issued: Nov. 10, 2004

## **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:

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The address and road map of all our labs can be found in our web site also.

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