

4.8 BAND EDGES MEASUREMENT

4.8.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.8.2 TEST INSTRUMENTS

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

NOTES:

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

4.8.3 TEST PROCEDURE

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

4.8.4 DEVIATION FROM TEST STANDARD

No deviation.

4.8.5 EUT OPERATING CONDITION

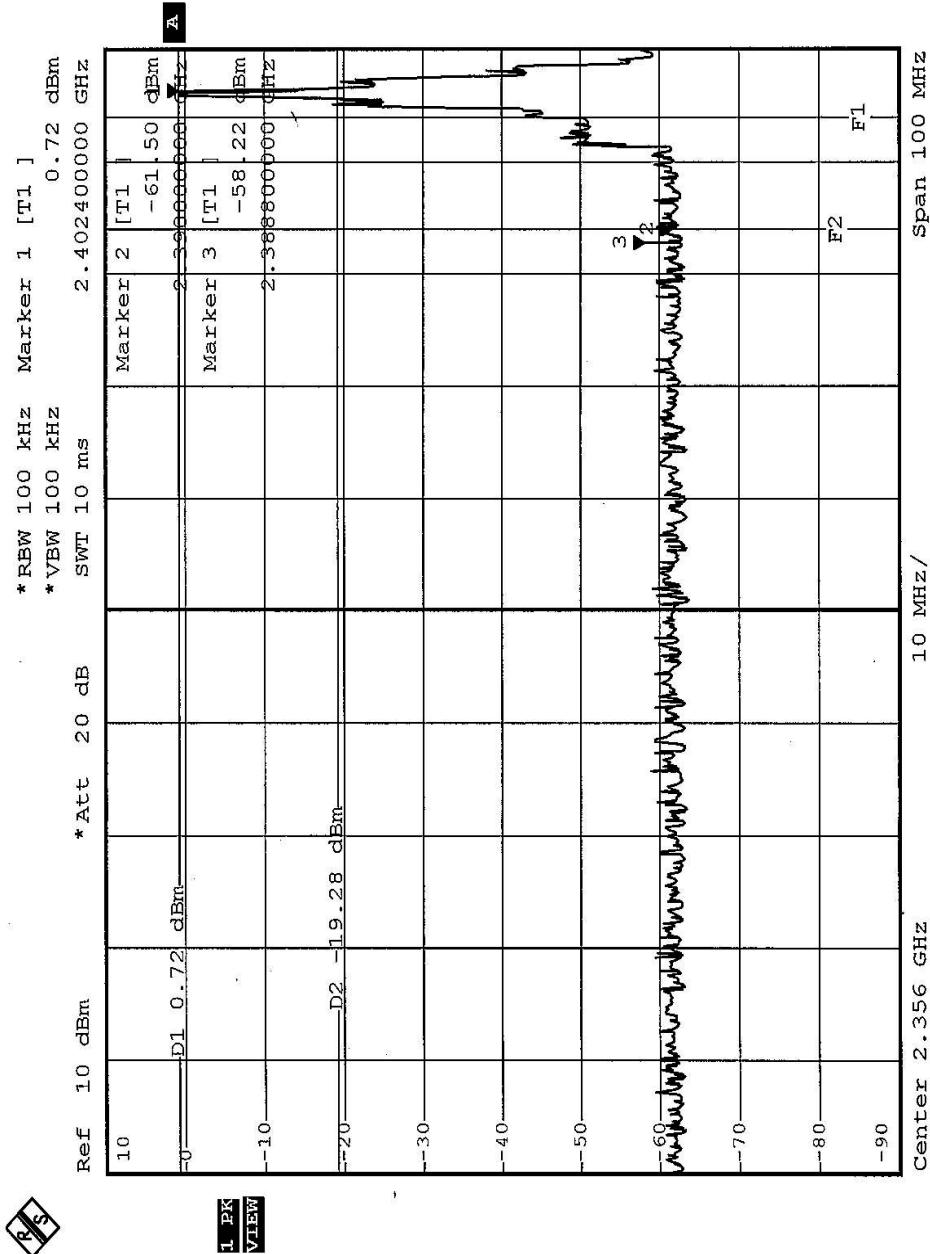
The software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel frequencies individually.

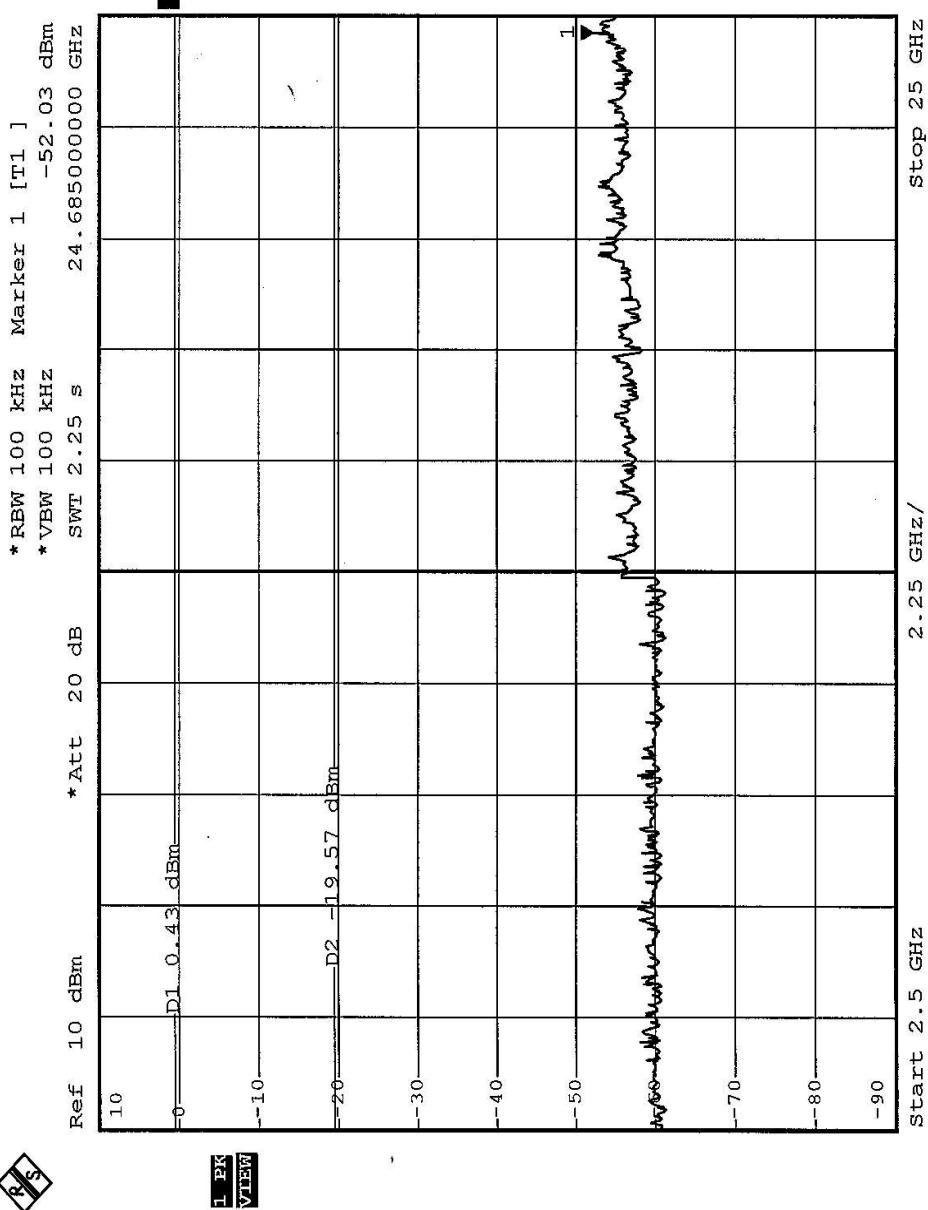
4.8.6 TEST RESULTS

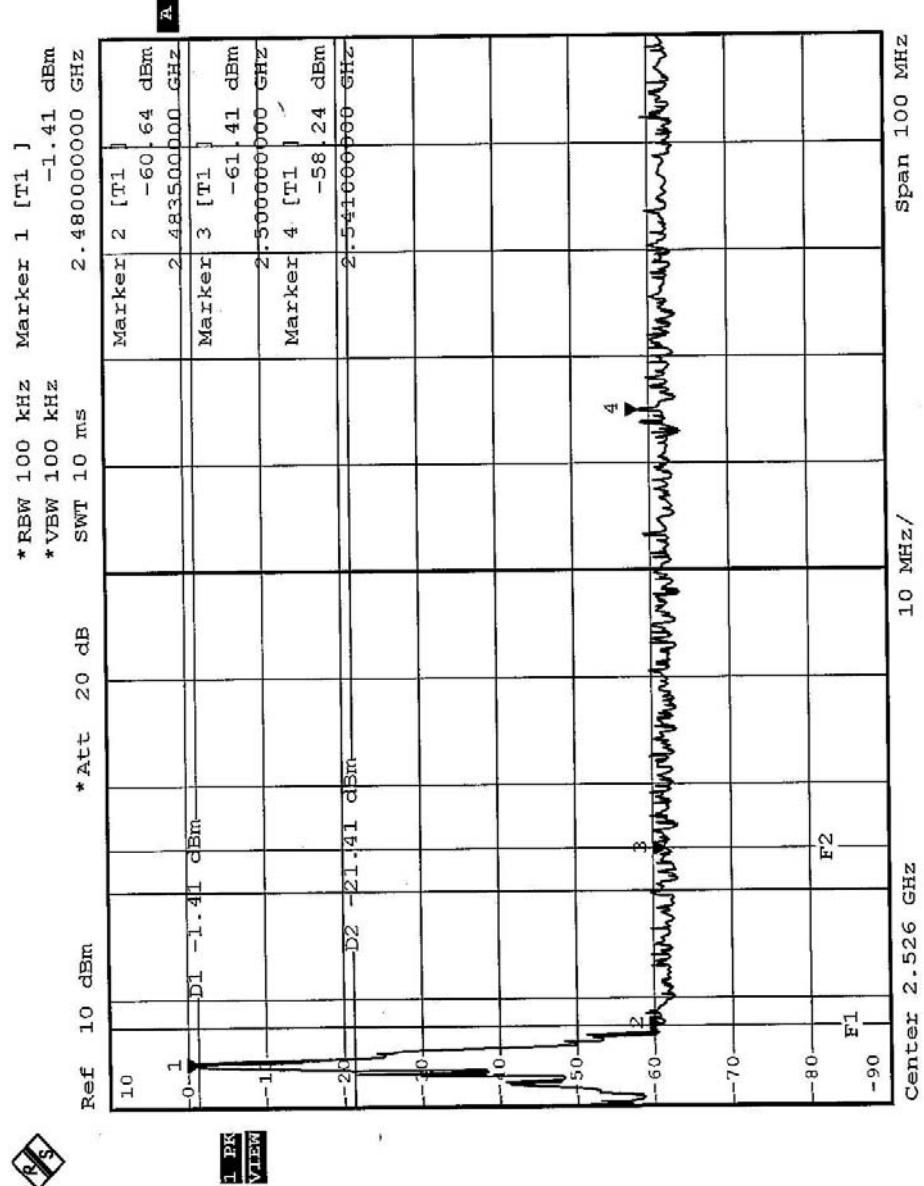
The spectrum plots are attached on the following 4 pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

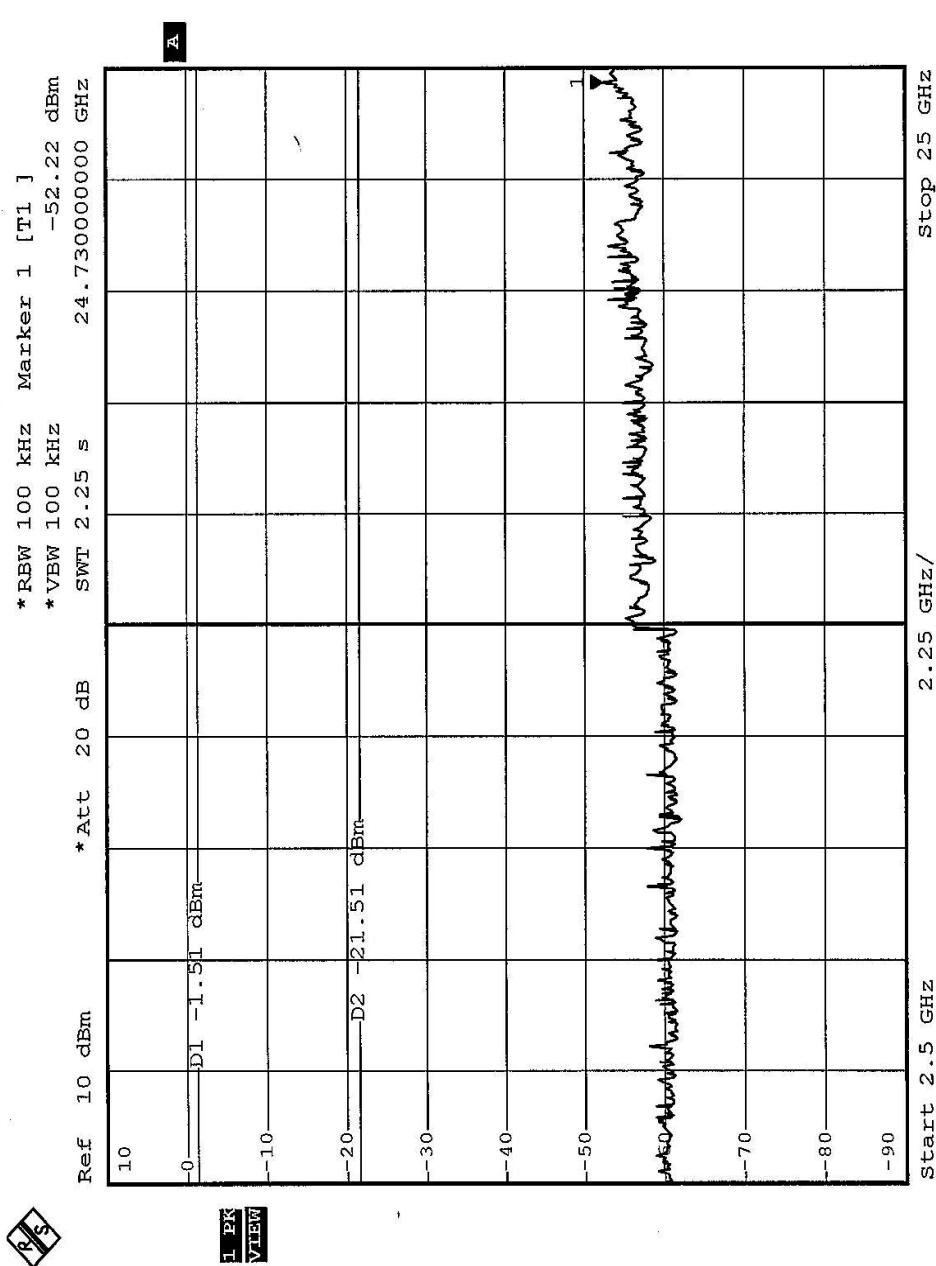
NOTE 1: The band edge emission plot on the following 1~2 pages show 58.94dB delta between carrier maximum power and local maximum emission in restrict band (2.3888GHz). The emission of carrier strength list in the test result of channel 0 at the item 4.7.13 is 65.63dB_uV/m, so the maximum field strength in restrict band is $65.63 - 58.94 = 6.69$ dB_uV/m which is under 54 dB_uV/m limit.

NOTE 2: The band edge emission plot on the following 3~4 pages show 56.83dB delta between carrier maximum power and local maximum emission in restrict band (2.5410GHz). The emission of carrier strength list in the test result of channel 78 at the item 4.7.13 is 64.16dB_uV/m, so the maximum field strength in restrict band is $64.16 - 56.83 = 7.33$ dB_uV/m which is under 54 dB_uV/m limit.









4.9 ANTENNA REQUIREMENT

4.9.1 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 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.9.2 ANTENNA CONNECTED CONSTRUCTION

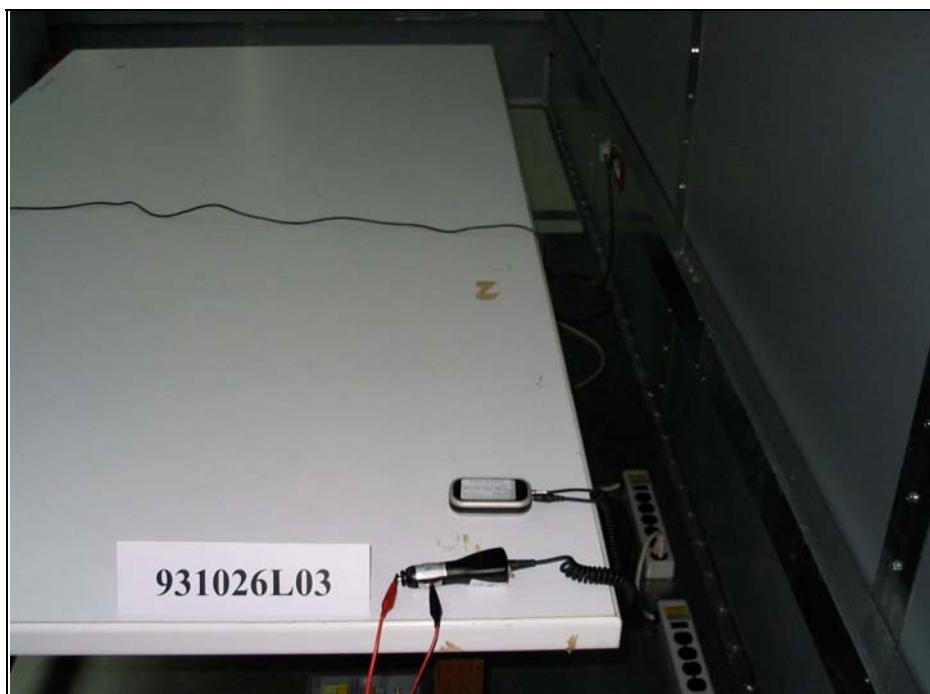
The antenna used in this product is chip antenna without antenna connector. The maximum gain of this antenna is only -2.01dBi.

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST (Test mode C)



CONDUCTED EMISSION TEST
(Test mode D)



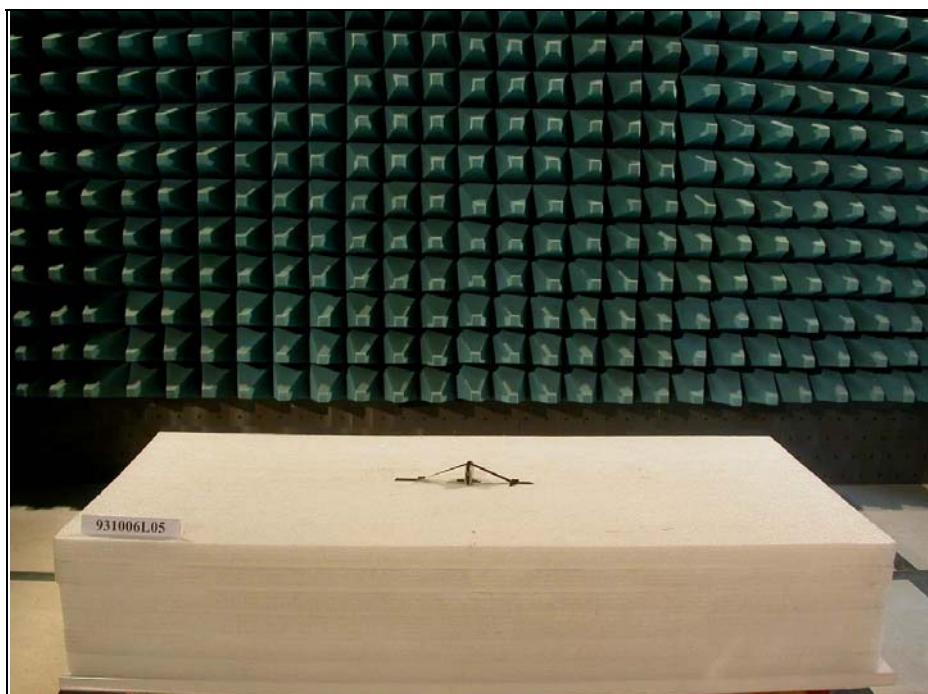
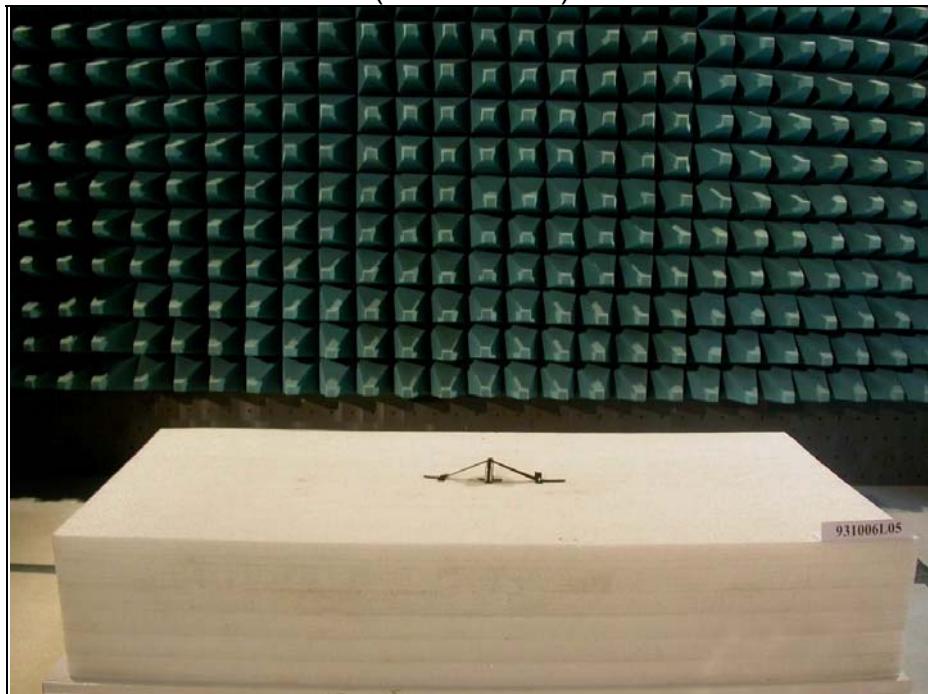
CONDUCTED EMISSION TEST
(Test mode E)



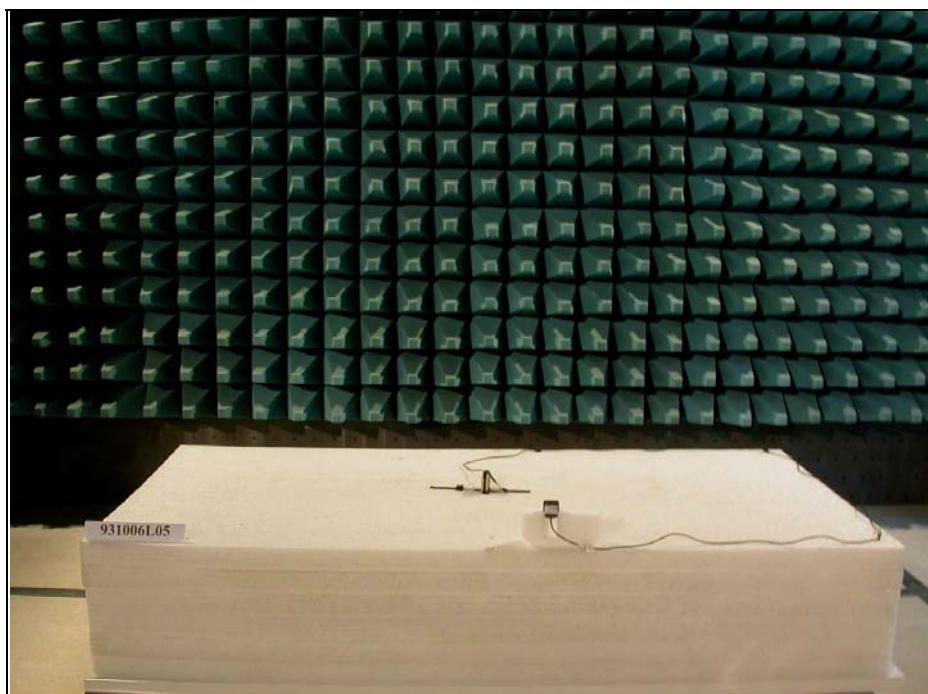
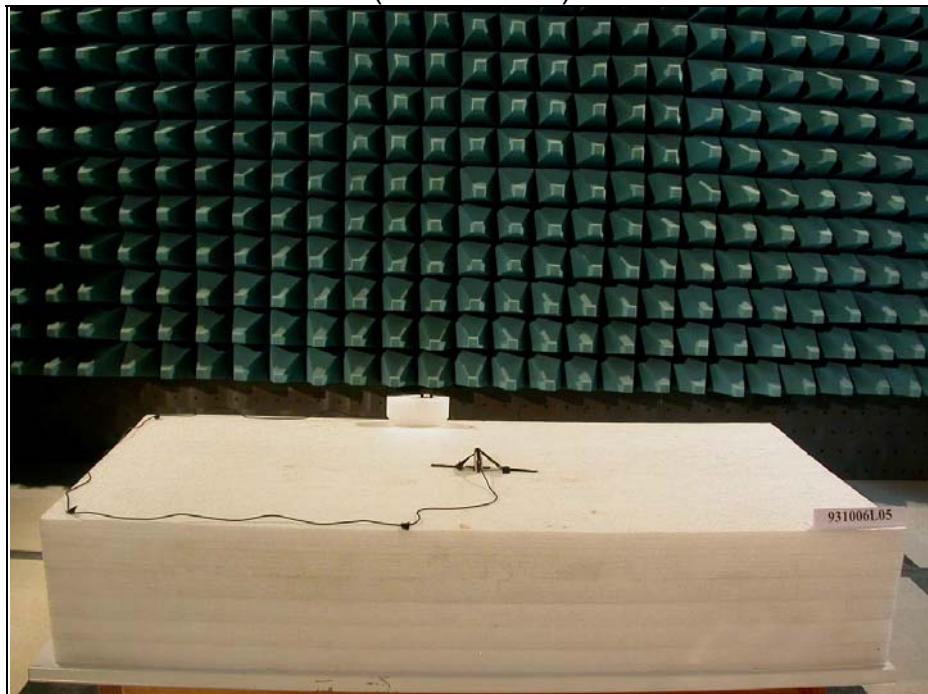
CONDUCTED EMISSION TEST
(Test mode F)



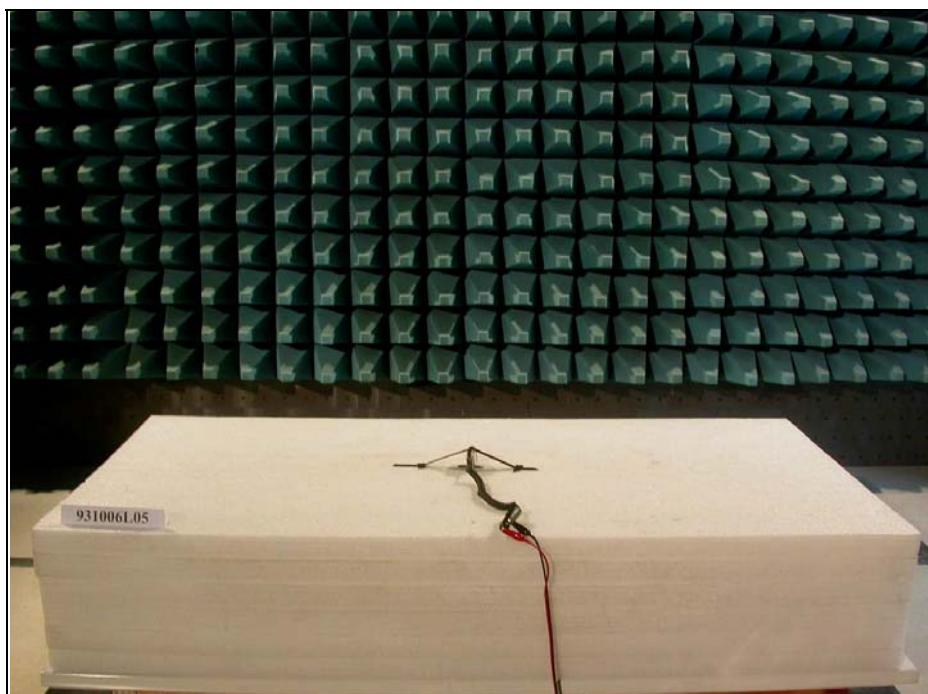
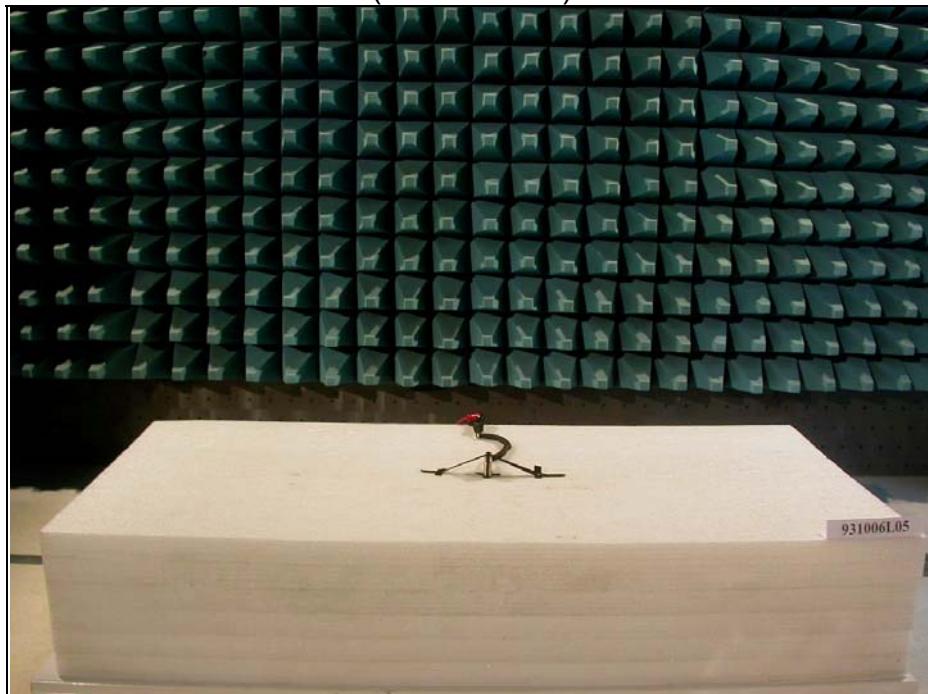
RADIATED EMISSION TEST
(Test mode A)



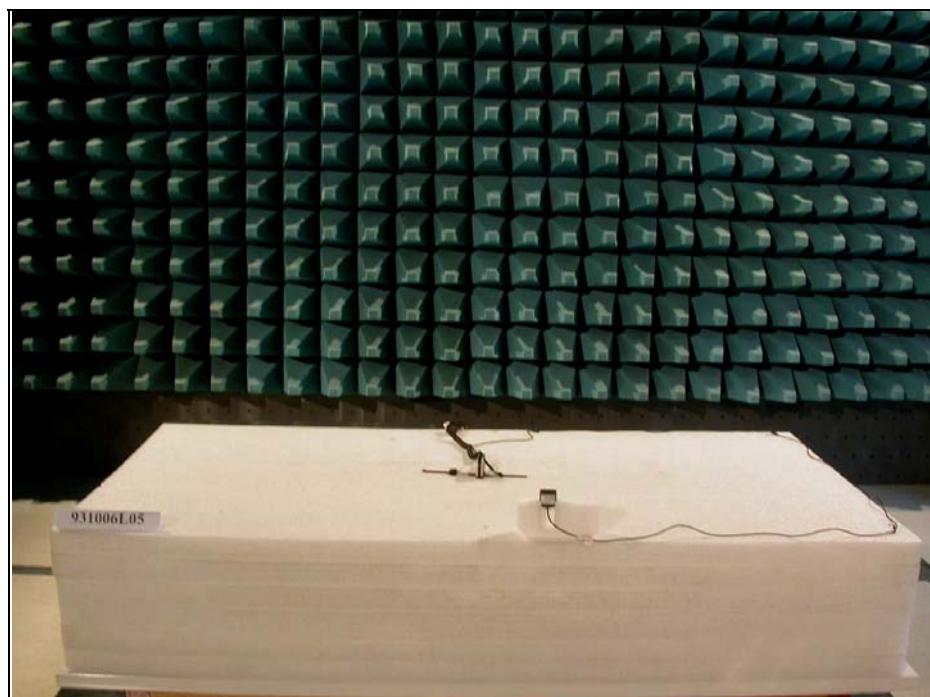
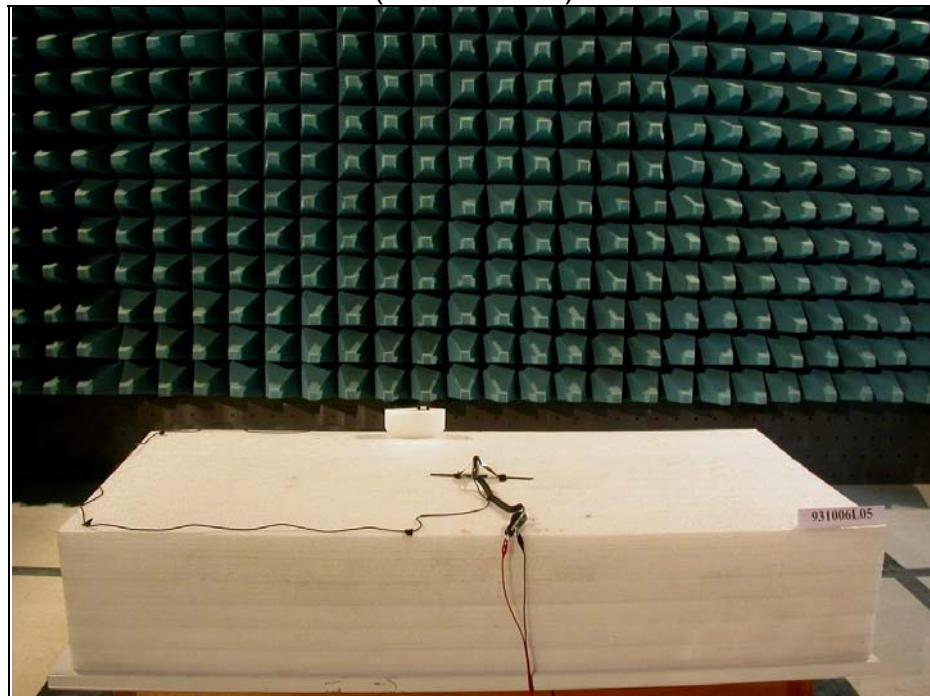
RADIATED EMISSION TEST
(Test mode B)



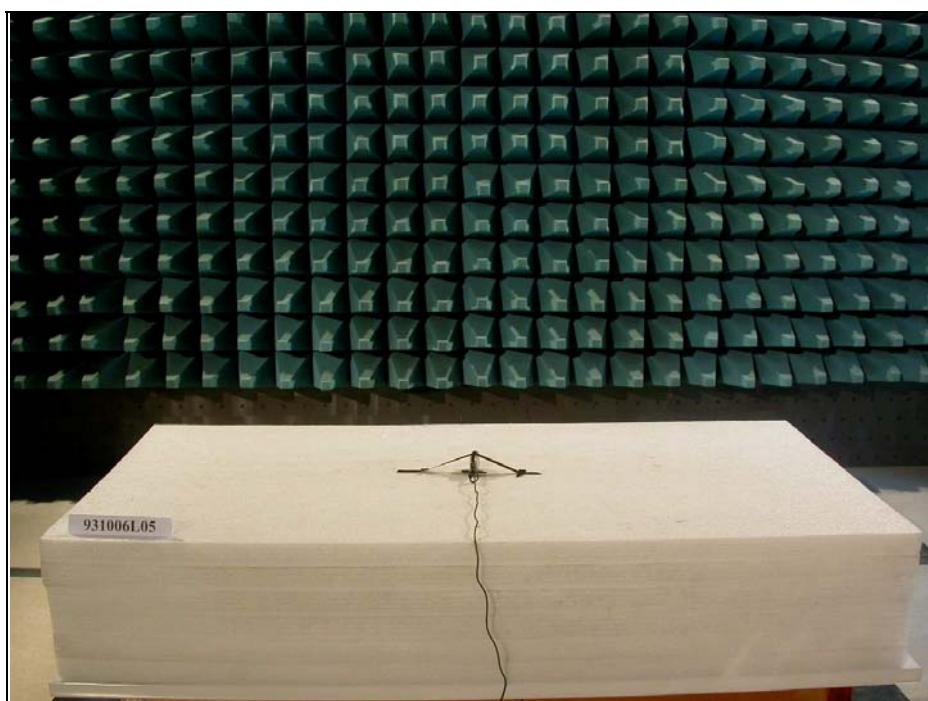
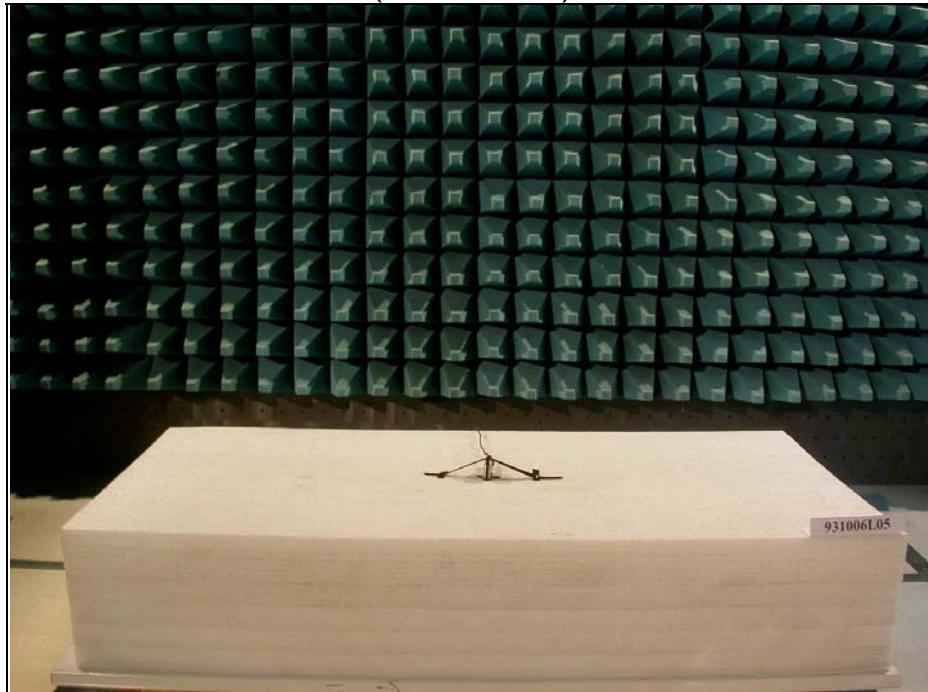
RADIATED EMISSION TEST
(Test mode C)



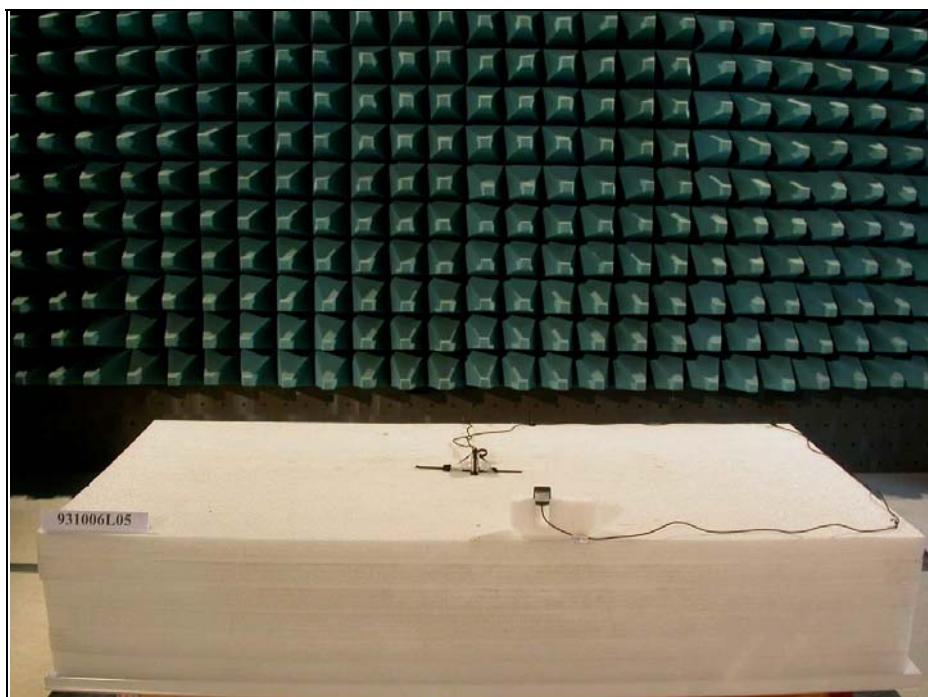
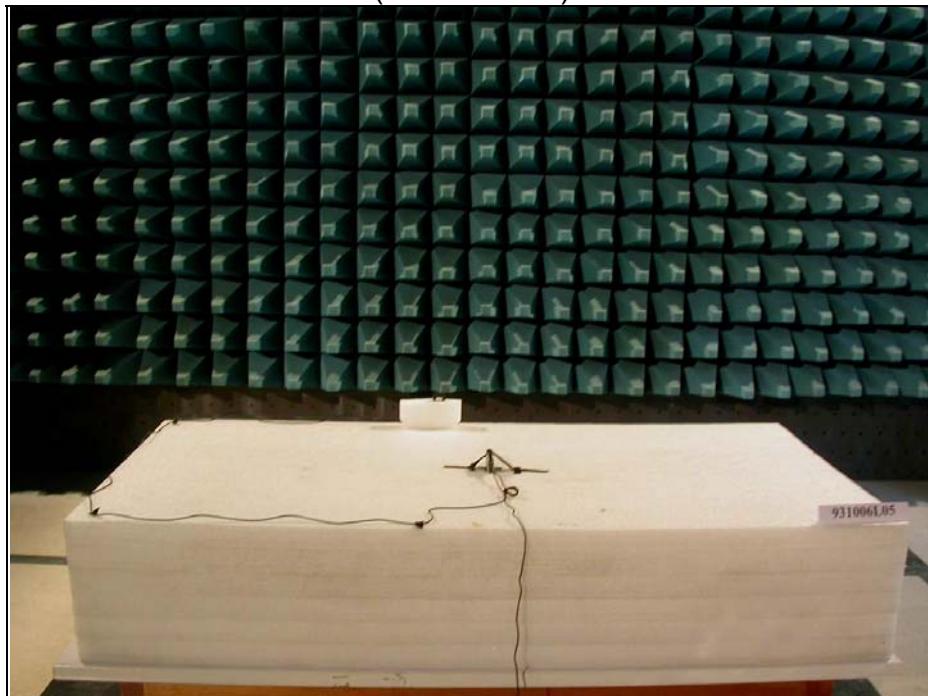
RADIATED EMISSION TEST
(Test mode D)



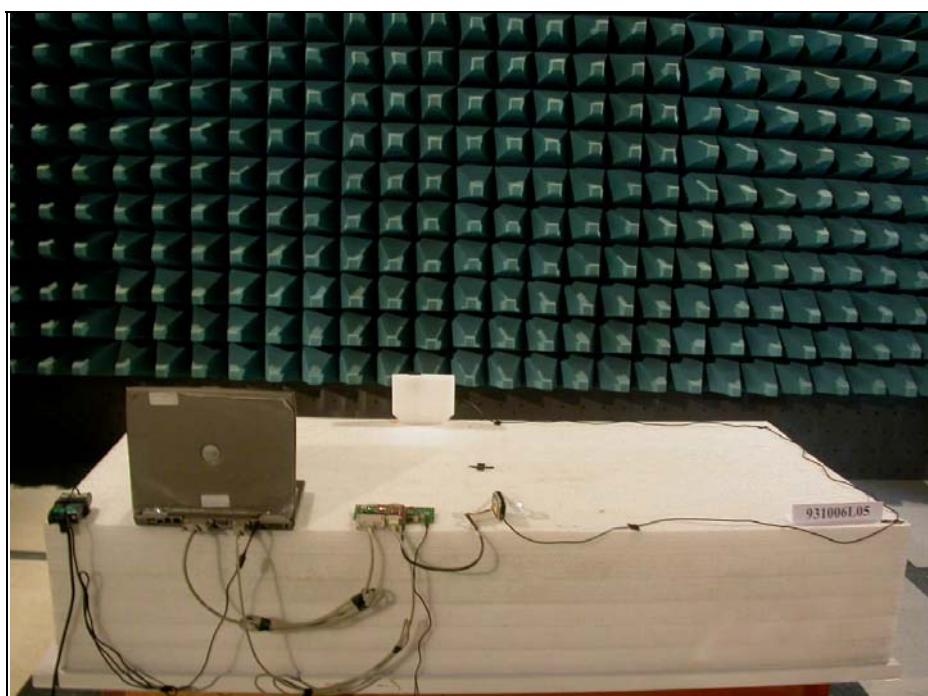
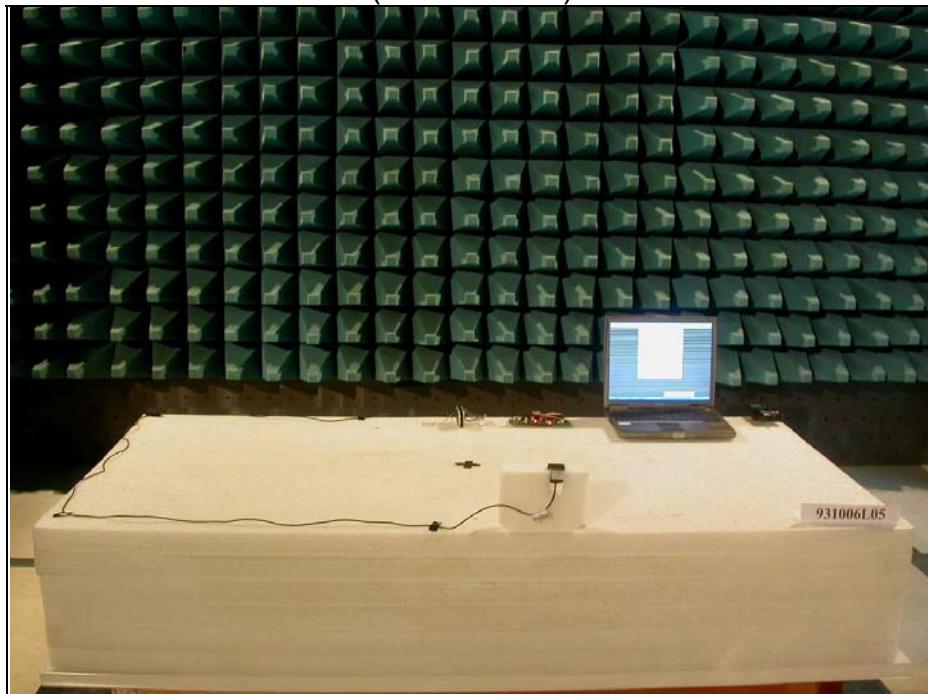
RADIATED EMISSION TEST
(Test mode E)



RADIATED EMISSION TEST
(Test mode F)



RADIATED EMISSION TEST
(Above 1GHz)



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

Linko EMC/RF Lab

Tel: 886-2-26052180
Fax: 886-2-26052943

Hsin Chu EMC/RF Lab

Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab

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

Linko RF Lab

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

Email: service@mail.adt.com.tw

Web Site: www.adt.com.tw

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

Report Format Version 1.5