

4.5.7 TEST RESULTS

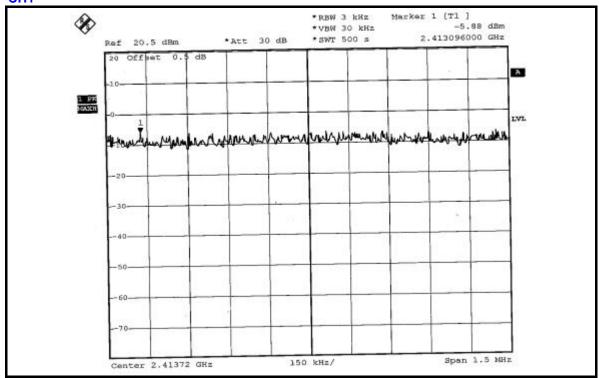
802.11b DSSS MODULATION

MODULATION TYPE	BPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz		22deg.C, 63%RH, 991hPa
TESTED BY	Long Chen		

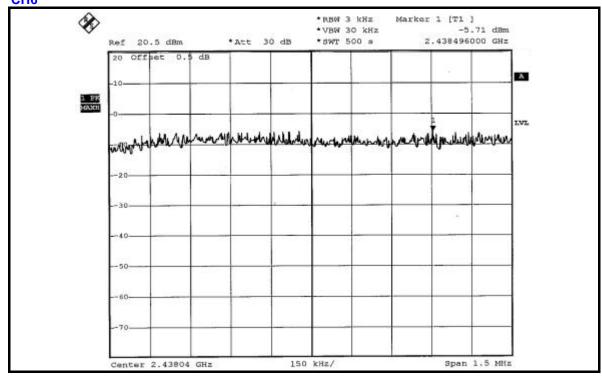
CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-5.88	8	PASS
6	2437	-5.71	8	PASS
11	2462	-5.66	8	PASS





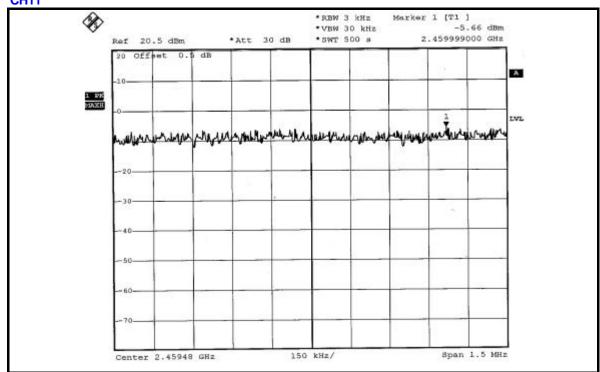


CH6











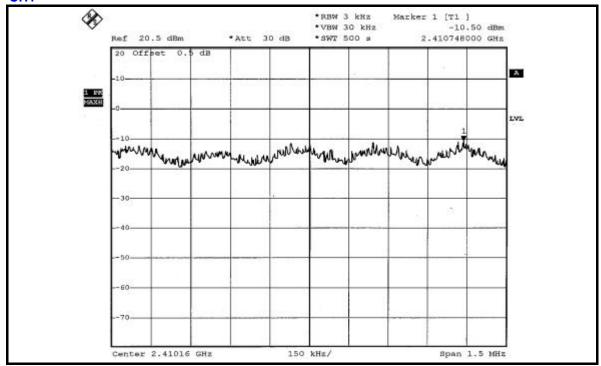
802.11g OFDM NORMAL MODULATION

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz		22deg.C, 63%RH, 991hPa
TESTED BY	Long Chen		

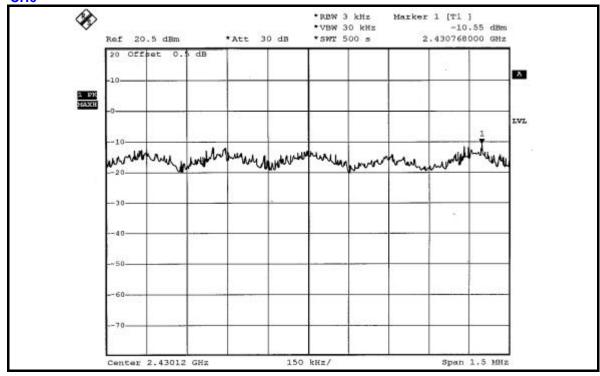
CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-10.50	8	PASS
6	2437	-10.55	8	PASS
11	2462	-10.73	8	PASS



CH1

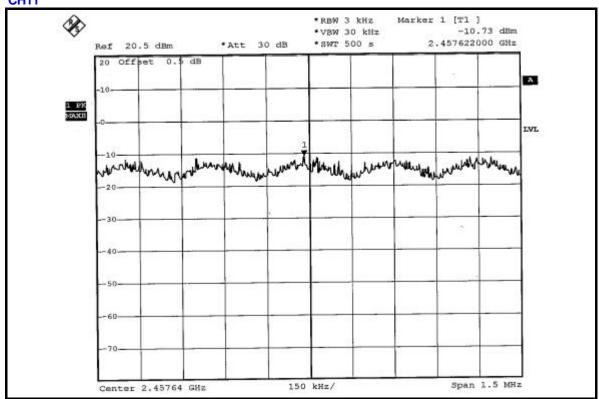


CH6











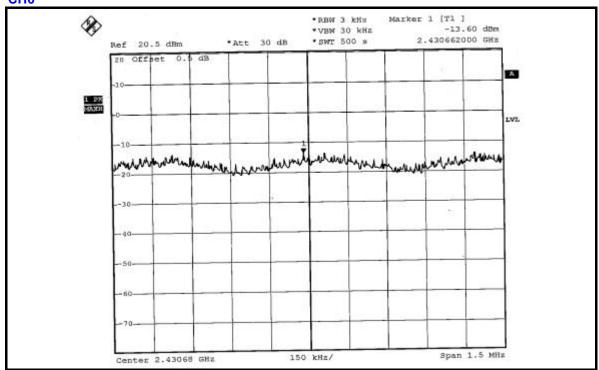
802.11g OFDM TURBO MODULATION

MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz		22deg.C, 63%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
6	2437	-13.60	8	PASS









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. 14, 2006

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. The spectrum plots (Peak RBW=VBW=100kHz; Average RBW=1MHz, VBW=10Hz) are attached on the following pages.

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 images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION

NOTE 1: The band edge emission plot of DSSS technique on the next page shows 52.37dBc between carrier maximum power and local maximum emission in restrict band (2.3201GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 112.70dBuV/m (Peak), so the maximum field strength in restrict band is 112.70-52.37=60.33dBuV/m which is under 74dBuV/m limit.

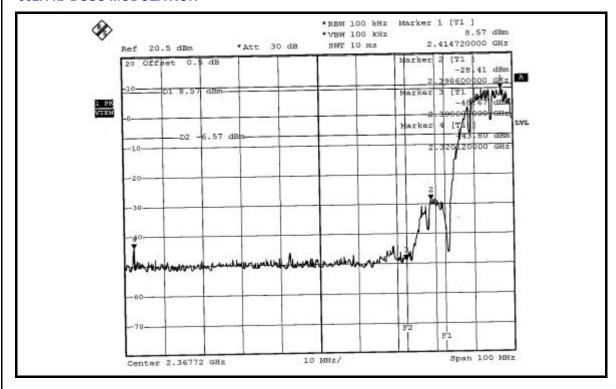
The band edge emission plot of DSSS technique on the next page shows 56.33dBc between carrier maximum power and local maximum emission in restrict band (2.3868GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 108.20dBuV/m (Average), so the maximum field strength in restrict band is 108.20-56.33=51.87dBuV/m which is under 54dBuV/m limit.

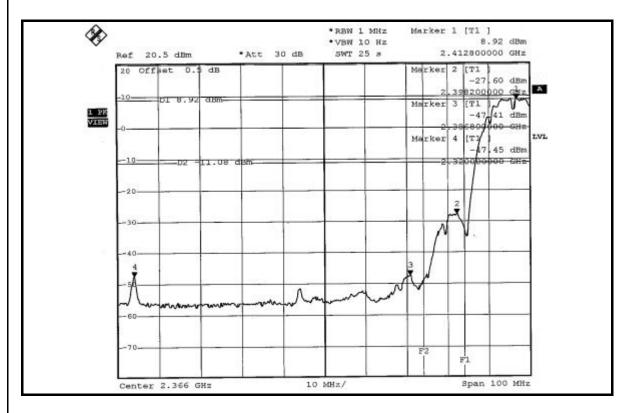
NOTE 2: The band edge emission plot of DSSS technique on the second page shows 55.22dBc between carrier maximum power and local maximum emission in restrict band (2.4989GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 112.14dBuV/m (Peak), so the maximum field strength in restrict band is 112.14-55.22=56.92dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on the third page shows 60.99dBc between carrier maximum power and local maximum emission in restrict band (2.4989GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 108.85dBuV/m (Average), so the maximum field strength in restrict band is 108.85-60.99=47.86dBuV/m which is under 54dBuV/m limit.

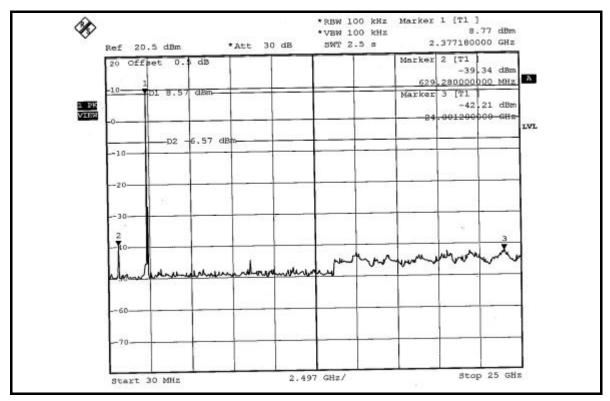


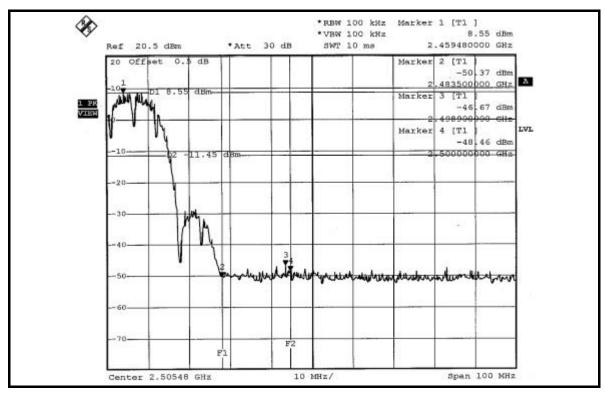
802.11b DSSS MODULATION



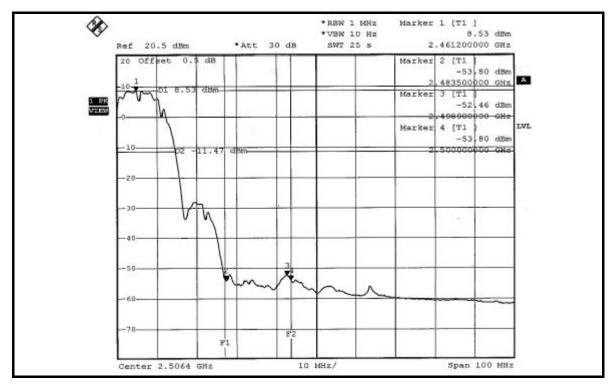


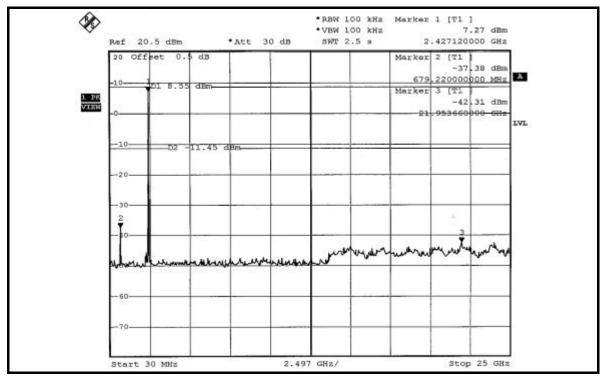














802.11g OFDM NORMAL MODULATION

NOTE 1: The band edge emission plot of OFDM technique on the next page shows 46.50dBc between carrier maximum power and local maximum emission in restrict band (2.3600GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 111.02dBuV/m (Peak), so the maximum field strength in restrict band is 111.02-46.50=64.52dBuV/m which is under 74dBuV/m limit.

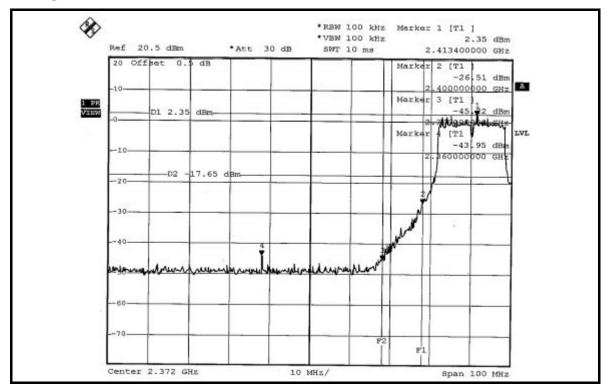
The band edge emission plot of OFDM technique on the next page shows 49.59dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 101.62dBuV/m (Average), so the maximum field strength in restrict band is 101.62-49.59=52.03dBuV/m which is under 54dBuV/m limit.

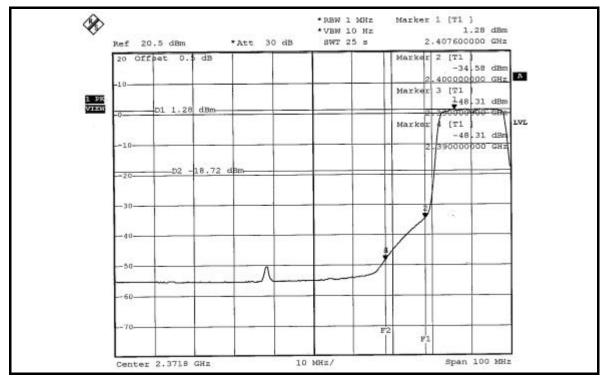
NOTE 2: The band edge emission plot of OFDM technique on the second page shows 48.27dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 110.97dBuV/m (Peak), so the maximum field strength in restrict band is 110.97-48.27=62.70dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the third page shows 49.04dBc 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 4.2.7 is 101.60dBuV/m (Average), so the maximum field strength in restrict band is 101.60-49.04=52.56dBuV/m which is under 54dBuV/m limit.

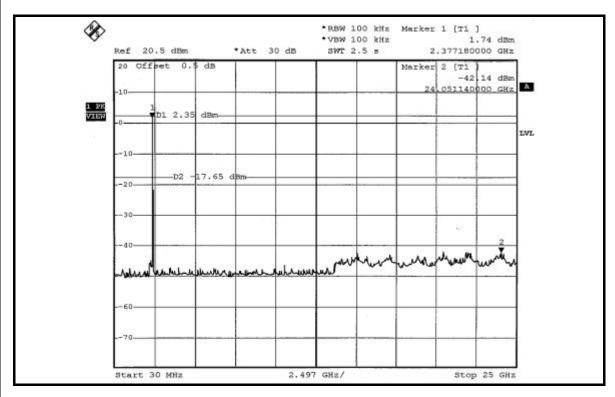


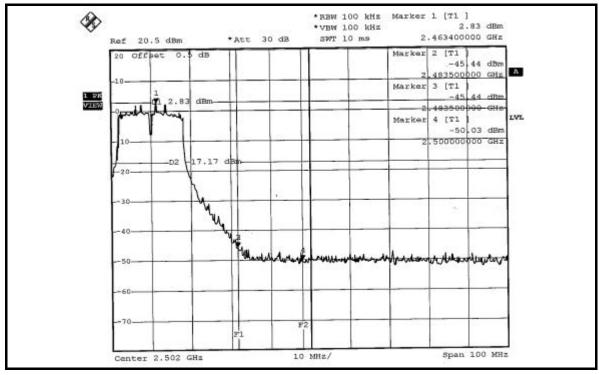
802.11g OFDM NORMAL MODULATION



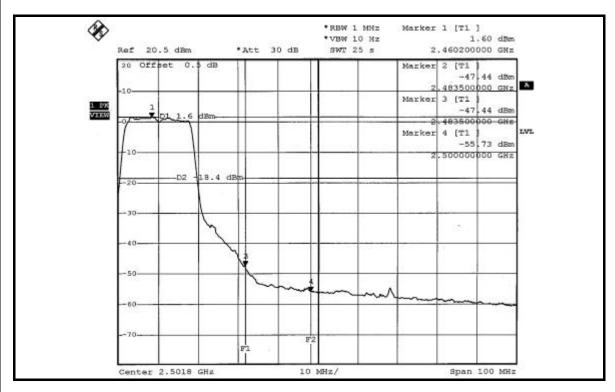


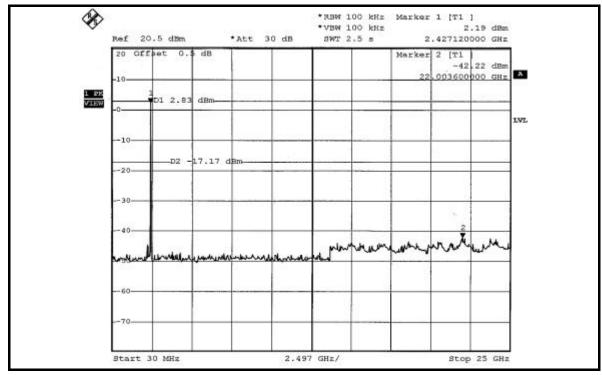














802.11g OFDM TURBO MODULATION

NOTE 1: The band edge emission plot of OFDM technique on the next page shows 46.54dBc between carrier maximum power and local maximum emission in restrict band (2.3199GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 107.31dBuV/m (Peak), so the maximum field strength in restrict band is 107.31-46.54=60.77dBuV/m which is under 74dBuV/m limit.

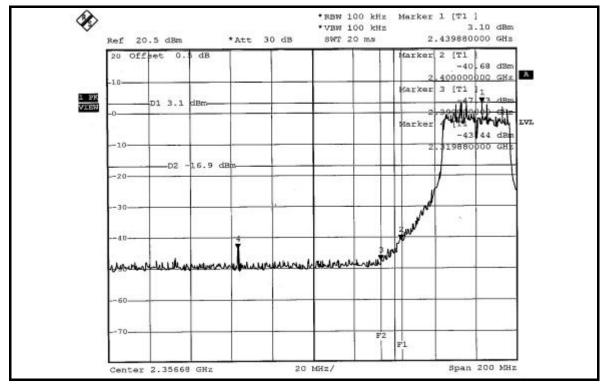
The band edge emission plot of OFDM technique on the next page shows 44.68dBc between carrier maximum power and local maximum emission in restrict band (2.3198GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 97.34dBuV/m (Average), so the maximum field strength in restrict band is 97.34-44.68=52.66dBuV/m which is under 54dBuV/m limit.

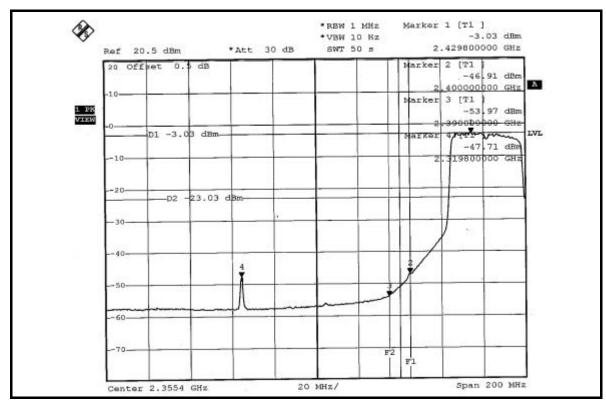
NOTE 2: The band edge emission plot of OFDM technique on the second page shows 49.69dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 107.31dBuV/m (Peak), so the maximum field strength in restrict band is 107.31-49.69=57.62dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the third page shows 52.61dBc 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 6 at the item 4.2.7 is 97.34dBuV/m (Average), so the maximum field strength in restrict band is 97.34-52.61=44.73dBuV/m which is under 54dBuV/m limit.

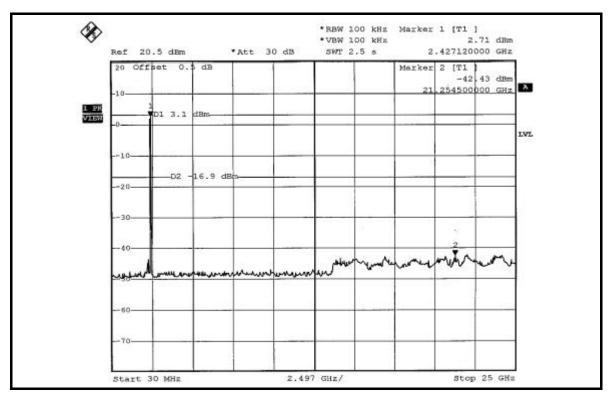


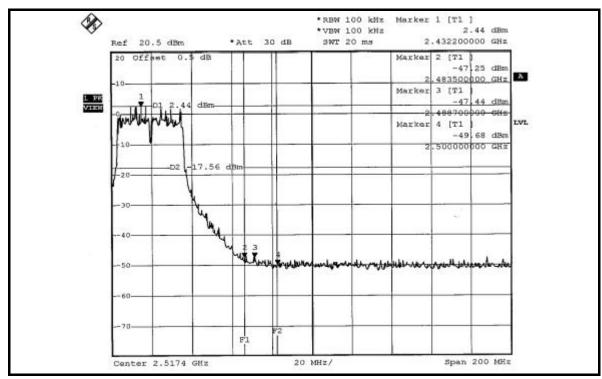
802.11g OFDM TURBO MODULATION



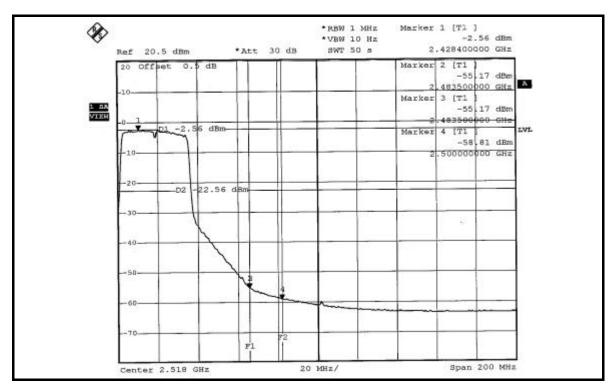


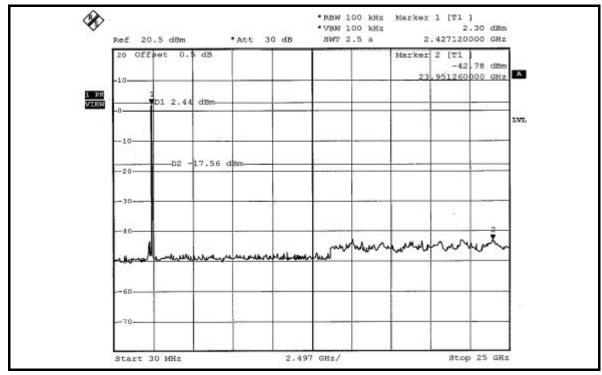














4.7 ANTENNA REQUIREMENT

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. The maximum Gain of the antenna is 2.71dBi.



5 PHOTOGRAPHS OF THE TEST CONFIGURATION

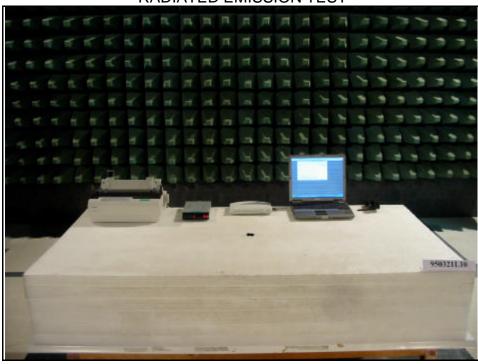


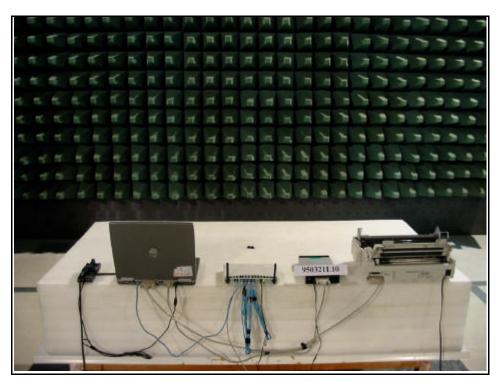






RADIATED EMISSION TEST







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

USA FCC, 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 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:
 Linko RF Lab.

 Tel: 886-3-3183232
 Tel: 886-3-3270910

 Fax: 886-3-3185050
 Fax: 886-3-3270892

Web Site: www.adt.com.tw

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



APPENDIX-A MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB No any modifications are made to the EUT by the lab during the test.