

FCC TEST REPORT

REPORT NO.: RF940316L11A

MODEL NO.: AV10

RECEIVED: NA

TESTED: Mar. 15 ~ Mar. 22, 2005

ISSUED: Jun. 28, 2005

APPLICANT: D-Link Corporation

ADDRESS: No.8,Li-Hsin VII Road Science Based
Industrial Park Hsin-Chu,Taiwan

ISSUED BY: Advance Data Technology Corporation

LAB ADDRESS: 47 14th Lin, Chiapau Tsun, Linko, Taipei,
Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd., Kueishan, Taoyuan,
Taiwan, R.O.C.

This test report consists of 174 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CNLA, A2LA or any government agencies. The test results in the report only apply to the tested sample.



Table of Contents

1	CERTIFICATION	6
2	SUMMARY OF TEST RESULTS	7
2.1	MEASUREMENT UNCERTAINTY	7
3	GENERAL INFORMATION	8
3.1	GENERAL DESCRIPTION OF EUT.....	8
3.2	DESCRIPTION OF TEST MODES.....	10
3.2.1	CONFIGURATION OF SYSTEM UNDER TEST.....	10
3.2.2	TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	11
3.3	GENERAL DESCRIPTION OF APPLIED STANDARDS.....	15
3.4	DESCRIPTION OF SUPPORT UNITS.....	15
4	TEST TYPES AND RESULTS (FOR SINGLE CHAIN (TX))	16
4.1	CONDUCTED EMISSION MEASUREMENT	16
4.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT.....	16
4.1.2	TEST INSTRUMENTS	16
4.1.3	TEST PROCEDURES	17
4.1.4	DEVIATION FROM TEST STANDARD.....	17
4.1.5	TEST SETUP	18
4.1.6	EUT OPERATING CONDITIONS.....	18
4.1.7	TEST RESULTS.....	19
4.2	RADIATED EMISSION MEASUREMENT	31
4.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT	31
4.2.2	TEST INSTRUMENTS	32
4.2.3	TEST PROCEDURES	33
4.2.4	DEVIATION FROM TEST STANDARD.....	33
4.2.5	TEST SETUP	34
4.2.6	EUT OPERATING CONDITIONS.....	34
4.2.7	TEST RESULTS.....	35
4.3	6dB BANDWIDTH MEASUREMENT	59
4.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	59
4.3.2	TEST INSTRUMENTS	59
4.3.3	TEST PROCEDURE	60
4.3.4	DEVIATION FROM TEST STANDARD.....	60
4.3.5	TEST SETUP	60
4.3.6	EUT OPERATING CONDITIONS.....	60



4.3.7	TEST RESULTS	61
4.4	MAXIMUM PEAK OUTPUT POWER	69
4.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT	69
4.4.2	TEST INSTRUMENTS	69
4.4.3	TEST PROCEDURES	70
4.4.4	DEVIATION FROM TEST STANDARD	70
4.4.5	TEST SETUP	70
4.4.6	EUT OPERATING CONDITIONS	70
4.4.7	TEST RESULTS	71
4.5	POWER SPECTRAL DENSITY MEASUREMENT	73
4.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	73
4.5.2	TEST INSTRUMENTS	73
4.5.3	TEST PROCEDURE	74
4.5.4	DEVIATION FROM TEST STANDARD	74
4.5.5	TEST SETUP	74
4.5.6	EUT OPERATING CONDITIONS	74
4.5.7	TEST RESULTS	75
4.6	BAND EDGES MEASUREMENT	83
4.6.1	LIMITS OF BAND EDGES MEASUREMENT	83
4.6.2	TEST INSTRUMENTS	83
4.6.3	TEST PROCEDURE	83
4.6.4	DEVIATION FROM TEST STANDARD	83
4.6.5	EUT OPERATING CONDITION	83
4.6.6	TEST RESULTS	84
5	TEST TYPES AND RESULTS (FOR DUAL CHAIN (TX))	99
5.1	CONDUCTED EMISSION MEASUREMENT	99
5.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	99
5.1.2	TEST INSTRUMENTS	99
5.1.3	TEST PROCEDURES	100
5.1.4	DEVIATION FROM TEST STANDARD	100
5.1.5	TEST SETUP	101
5.1.6	EUT OPERATING CONDITIONS	101
5.1.7	TEST RESULTS	102
5.2	RADIATED EMISSION MEASUREMENT	110
5.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT	110
5.2.2	TEST INSTRUMENTS	111

5.2.3	TEST PROCEDURES	112
5.2.4	DEVIATION FROM TEST STANDARD	112
5.2.5	TEST SETUP	113
5.2.6	EUT OPERATING CONDITIONS	113
5.2.7	TEST RESULTS	114
5.3	6dB BANDWIDTH MEASUREMENT	128
5.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	128
5.3.2	TEST INSTRUMENTS	128
5.3.3	TEST PROCEDURE	129
5.3.4	DEVIATION FROM TEST STANDARD	129
5.3.5	TEST SETUP	129
5.3.6	EUT OPERATING CONDITIONS	129
5.3.7	TEST RESULTS	130
5.4	MAXIMUM PEAK OUTPUT POWER	136
5.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT	136
5.4.2	TEST INSTRUMENTS	136
5.4.3	TEST PROCEDURES	137
5.4.4	DEVIATION FROM TEST STANDARD	137
5.4.5	TEST SETUP	137
5.4.6	EUT OPERATING CONDITIONS	137
5.4.7	TEST RESULTS	138
5.5	POWER SPECTRAL DENSITY MEASUREMENT	140
5.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	140
5.5.2	TEST INSTRUMENTS	140
5.5.3	TEST PROCEDURE	141
5.5.4	DEVIATION FROM TEST STANDARD	141
5.5.5	TEST SETUP	141
5.5.6	EUT OPERATING CONDITIONS	141
5.5.7	TEST RESULTS	142
5.6	BAND EDGES MEASUREMENT	148
5.6.1	LIMITS OF BAND EDGES MEASUREMENT	148
5.6.2	TEST INSTRUMENTS	148
5.6.3	TEST PROCEDURE	148
5.6.4	DEVIATION FROM TEST STANDARD	148
5.6.5	EUT OPERATING CONDITION	148
5.6.6	TEST RESULTS	149



5.7	ANTENNA REQUIREMENT	165
5.7.1	STANDARD APPLICABLE	165
5.7.2	ANTENNA CONNECTED CONSTRUCTION.....	165
6	PHOTOGRAPHS OF THE TEST CONFIGURATION	166
7	INFORMATION ON THE TESTING LABORATORIES	174

1 CERTIFICATION

PRODUCT : High Speed Wireless Network Adapter
MODEL NO.: AV10
BRAND: D-Link
APPLICANT : D-Link Corporation
TESTED: Mar. 15 ~ Mar. 22, 2005
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS : FCC Part 15, Subpart C (Section 15.247),
ANSI C63.4-2003

The above equipment has been tested by **Advance Data Technology Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Jessie Wang **DATE:** Jun. 28, 2005
Jessie Wang

TECHNICAL
ACCEPTANCE : Gary Chang **DATE:** Jun. 28, 2005
Responsible for RF Gary Chang

APPROVED BY : Cody Chang **DATE:** Jun. 28, 2005
Cody Chang
Deputy Manager

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
Standard Section	Test Type and Limit	Result	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -13.58dB at 0.158MHz.
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit : min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -0.61dB at 2016.00MHz.
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4:

Measurement	Frequency	Uncertainty
Conducted emissions	9kHz ~ 30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.73 dB
	200MHz ~ 1000MHz	3.74 dB
	1GHz ~ 18GHz	2.20 dB
	18GHz ~ 40GHz	1.88 dB

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	High Speed Wireless Network Adapter
MODEL NO.	AV10
POWER SUPPLY	3.3Vdc from host equipment
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps (Turbo mode: up to 108Mbps *see Note 10)
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
MAXIMUM OUTPUT POWER (SINGAL CHAIN)	63.826mW
MAXIMUM OUTPUT POWER (DUAL CHAIN)	128.247mW
ANTENNA TYPE	Refer to NOTE 2 below
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

Note:

1. This report is issued as a duplicate report of RF940316L11. The differences between the original report is changing the Applicant.
2. The following antennas are used in this EUT.

Item	Antenna Type	Gain (dBi)
1	Two composite dipoles in parallel	2.319
2	Two composite dipoles in line	2.319

3. The EUT is an 802.11g Wireless Network mini-PCI card module.
4. The EUT incorporates a basic beam forming capability. Physically, the card provides two complete transmit and receive chains. Each chain can be connected to one of two antenna elements via an antenna diversity switch.
5. The EUT can operate in a single chain configuration (only the chain 0 transceiver is operational) or dual chain configuration (both chain 0 and chain 1 transceivers are operational).
6. When the EUT is in the 802.11b mode, it is always in the single chain configuration.
7. When the EUT is operating in the 802.11g (including Turbo) mode, it can operate in either configuration. Switching between the single and dual chain configurations is accomplished electronically, with no hardware changes required.



8. The EUT complies with IEEE 802.11g standards and backwards compatible with IEEE 802.11b products.
9. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps.
10. This EUT is capable of providing data rates of up to 108Mbps in 802.11g Turbo Mode depending upon reception quality.
11. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

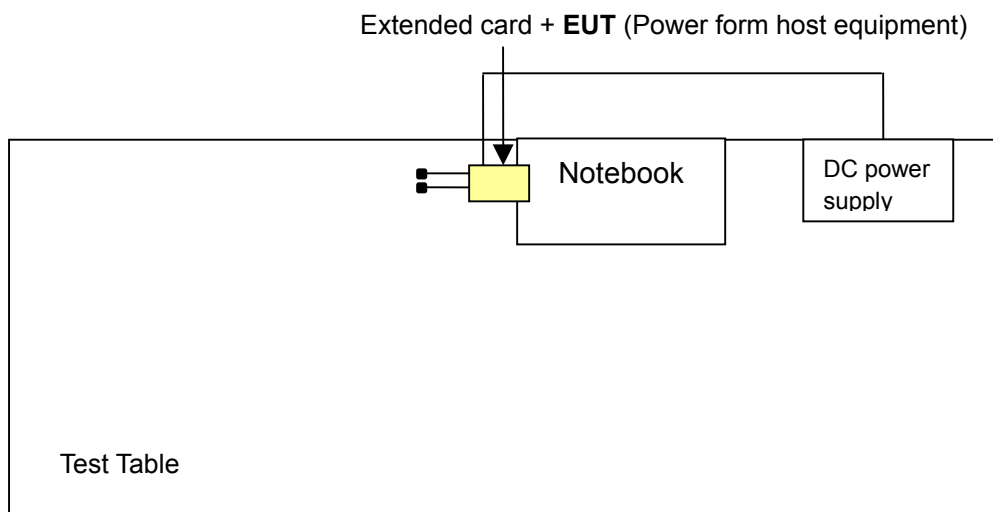
For 802.11b/g: Eleven channels are provided to this EUT for normal mode.

Channel	Frequency	Channel	Frequency
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

For 802.11g: One channel is provided to this EUT for turbo mode.

Channel	Frequency
6	2437 MHz

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

For Single Chain (TX):

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
1	Note 1	√	√	Note 2	Two composite dipoles in parallel
2	Note 1	√	√	Note 2	Two composite dipoles in line

Where PLC: Power Line Conducted Emission

RE<1G : Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz

APCM: Antenna Port Conducted Measurement

NOTE 1: No effect on Conducted Emission test.

NOTE 2: Conducted RF Measurement is independent on antenna.

Power Line Conducted Emission Test:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
2	802.11b	1 to 11	1, 6, 11	DSSS	BPSK	1
2	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

Radiated Emission Test (Below 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
1	802.11b	1 to 11	11	DSSS	BPSK	1
1	802.11g	1 to 11	11	OFDM	BPSK	6
2	802.11b	1 to 11	11	DSSS	BPSK	1
2	802.11g	1 to 11	11	OFDM	BPSK	6

**Radiated Emission Test (Above 1 GHz):**

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
1	802.11b	1 to 11	1, 6, 11	DSSS	BPSK	1
1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
1	802.11g Turbo	6	6	OFDM	BPSK	12
2	802.11b	1 to 11	1, 6, 11	DSSS	BPSK	1
2	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
2	802.11g Turbo	6	6	OFDM	BPSK	12

Bandedge Measurement:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 11	DSSS	BPSK	1
802.11g	1 to 11	1, 11	OFDM	BPSK	6
802.11g Turbo	6	6	OFDM	BPSK	12

Antenna Port Conducted Measurement:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	BPSK	1
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11g Turbo	6	6	OFDM	BPSK	12

For Dual Chain (TX):

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
1	Note 1	√	√	Note 2	Two composite dipoles in parallel
2	Note 1	√	√	Note 2	Two composite dipoles in line

Where PLC: Power Line Conducted Emission

RE<1G : Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz

APCM: Antenna Port Conducted Measurement

NOTE 1: No effect on Conducted Emission test.

NOTE 2: Conducted RF Measurement is independent on antenna.

Power Line Conducted Emission Test:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, chain 1 phase (0° ~ 360°) and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)	Chain 1 Phase
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	0°

Radiated Emission Test (Below 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, chain 1 phase (0° ~ 360°) and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)	Chain 1 Phase
1	802.11g	1 to 11	11	OFDM	BPSK	6	0°
2	802.11g	1 to 11	11	OFDM	BPSK	6	0°

**Radiated Emission Test (Above 1 GHz):**

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, chain 1 phase (0° ~ 360°) and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)	Chain 1 Phase
1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	0°
1	802.11g Turbo	6	6	OFDM	BPSK	12	0°
2	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	0°
2	802.11g Turbo	6	6	OFDM	BPSK	12	0°

Bandedge Measurement:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, chain 1 phase (0° ~ 360°) and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)	Chain 1 Phase
802.11b	1 to 11	1, 11	DSSS	CCK	11	0°
802.11g	1 to 11	1, 11	OFDM	BPSK	6	0°
802.11g Turbo	6	6	OFDM	BPSK	12	0°

Antenna Port Conducted Measurement:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, chain 1 phase (0° ~ 360°) and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)	Chain 1 Phase
802.11b	1 to 11	1, 6, 11	DSSS	CCK	11	0°
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	0°
802.11g Turbo	6	6	OFDM	BPSK	12	0°

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is an High Speed Wireless Network Adapter. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.247)
ANSI C63.4-2003

All test items have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	Compaq	N800C	470048-515	FCC DoC Approved
2	DC POWER SUPPLY // TF-6306A	TOPWARD	TF-6306A	727263	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	NA

NOTE: All power cords of the above support units are non shielded (1.8m).

4 TEST TYPES AND RESULTS (For Single Chain (TX))

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
 3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Nov. 16, 2005
RF signal cable Woken	5D-FB	Cable-HYC01-01	Jan. 09, 2006
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Feb. 15, 2006
LISN ROHDE & SCHWARZ	ESH2-Z5	100104	Feb. 15, 2006
Software ADT	ADT_Cond_V3	NA	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 1.
 3. The VCCI Site Registration No. is C-2040.



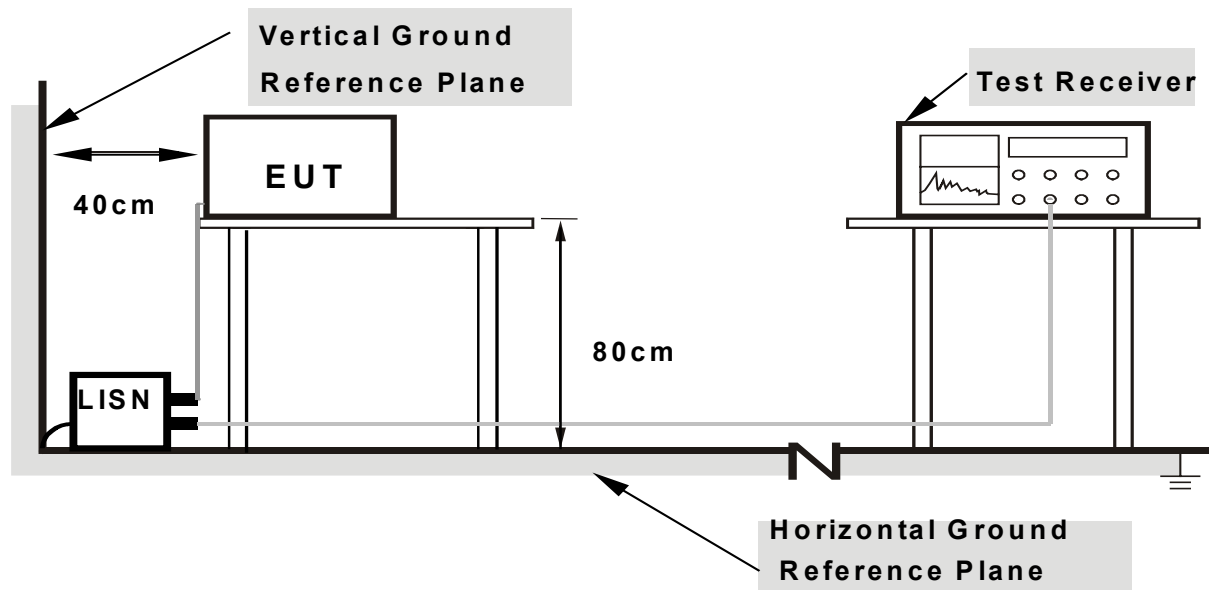
4.1.3 TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under Limit - 20dB was not recorded.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

- a. Connected the EUT with extended mini PCI card to a notebook system placed on a testing table.
- b. The notebook system ran a test program (provided by manufacturer) to enable EUT under transmission/receiving condition continuously at specific channel frequency.
- c. The notebook system show “H” messages on its screen.
- d. Repeated item c.

4.1.7 TEST RESULTS

Conducted Worst Case Data
802.11b DSSS modulation

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 1
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	48.11	5.69	48.21	5.79	66.00	56.00	-17.79	-50.21
2	0.181	0.11	47.83	8.65	47.94	8.76	64.43	54.43	-16.49	-45.67
3	0.213	0.11	45.17	32.13	45.28	32.24	63.11	53.11	-17.83	-20.87
4	1.852	0.21	29.70	-	29.91	-	56.00	46.00	-26.09	-
5	9.859	0.42	33.17	-	33.59	-	60.00	50.00	-26.41	-
6	15.848	0.68	29.09	-	29.77	-	60.00	50.00	-30.23	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

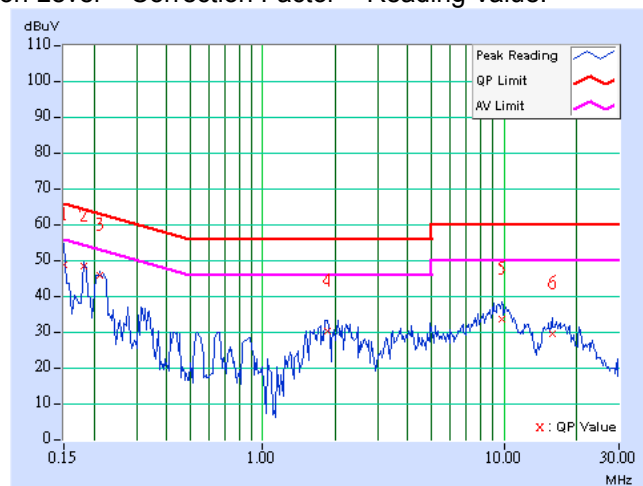
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.

3. The emission levels of other frequencies were very low against the limit.

4. Margin value = Emission level - Limit value

5. Correction factor = Insertion loss + Cable loss

6. Emission Level = Correction Factor + Reading Value.

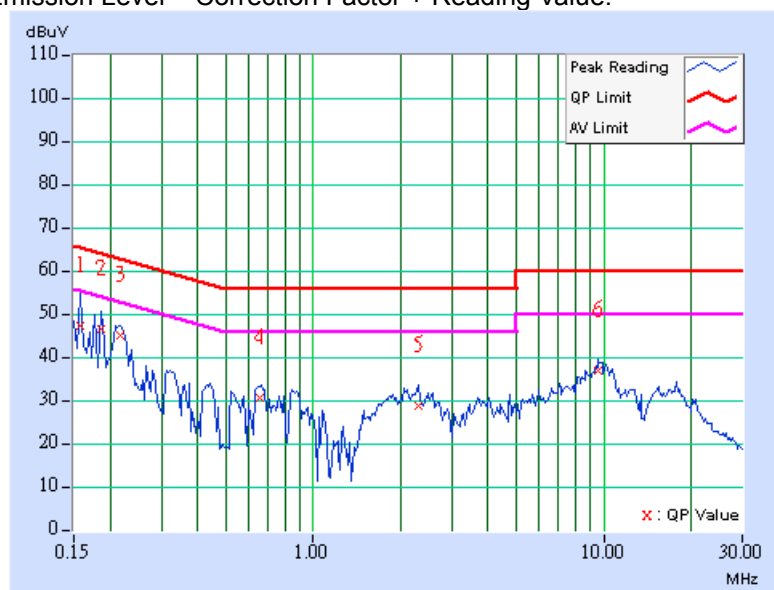


EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 2
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.10	46.96	9.25	47.06	9.35	65.58	55.58	-18.52	-46.23
2	0.185	0.10	46.23	10.97	46.33	11.07	64.25	54.25	-17.92	-43.18
3	0.216	0.10	44.61	34.35	44.71	34.45	62.96	52.96	-18.25	-18.51
4	0.654	0.13	30.33	-	30.46	-	56.00	46.00	-25.54	-
5	2.309	0.22	28.46	-	28.68	-	56.00	46.00	-27.32	-
6	9.609	0.40	36.63	-	37.03	-	60.00	50.00	-22.97	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

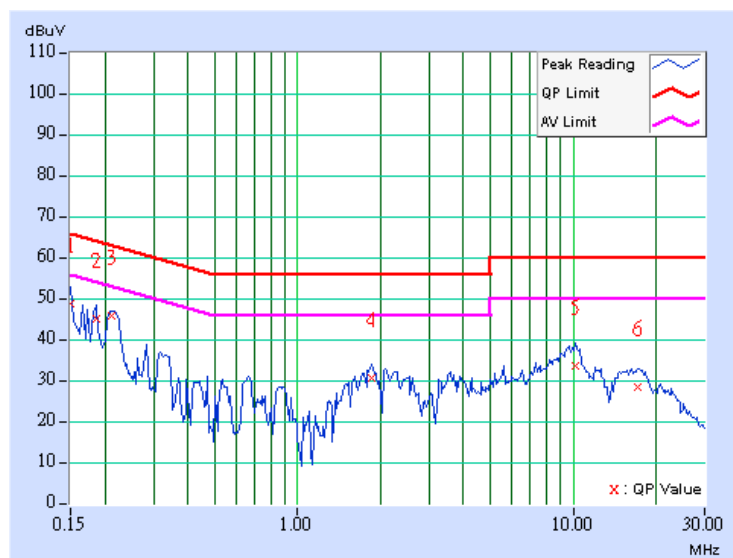


EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 1
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	48.05	7.88	48.15	7.98	66.00	56.00	-17.85	-48.02
2	0.185	0.11	44.52	11.25	44.63	11.36	64.25	54.25	-19.62	-42.89
3	0.213	0.11	45.17	32.05	45.28	32.16	63.11	53.11	-17.83	-20.95
4	1.863	0.21	30.02	-	30.23	-	56.00	46.00	-25.77	-
5	10.125	0.43	32.99	-	33.42	-	60.00	50.00	-26.58	-
6	17.148	0.76	27.61	-	28.37	-	60.00	50.00	-31.63	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

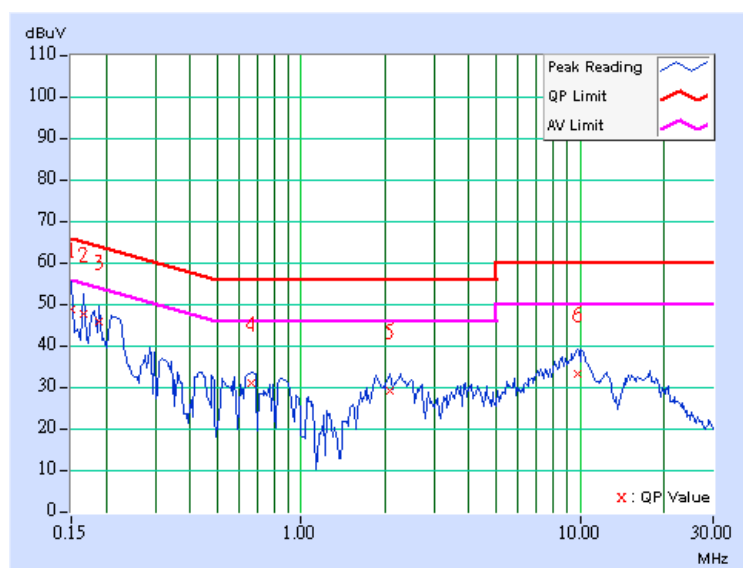


EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 2
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	48.44	8.35	48.54	8.45	66.00	56.00	-17.46	-47.55
2	0.166	0.10	47.27	6.76	47.37	6.86	65.18	55.18	-17.81	-48.32
3	0.189	0.10	45.38	11.41	45.48	11.51	64.08	54.08	-18.60	-42.57
4	0.662	0.13	30.55	-	30.68	-	56.00	46.00	-25.32	-
5	2.094	0.21	28.95	-	29.16	-	56.00	46.00	-26.84	-
6	9.777	0.40	33.12	-	33.52	-	60.00	50.00	-26.48	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.



EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 1
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.11	45.95	9.77	46.06	9.88	64.43	54.43	-18.37	-44.55
2	0.216	0.11	44.53	33.21	44.64	33.32	62.96	52.96	-18.32	-19.64
3	0.322	0.11	32.81	-	32.92	-	59.66	49.66	-26.73	-
4	2.090	0.21	29.70	-	29.91	-	56.00	46.00	-26.09	-
5	10.047	0.42	33.21	-	33.63	-	60.00	50.00	-26.37	-
6	16.887	0.75	27.38	-	28.13	-	60.00	50.00	-31.87	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

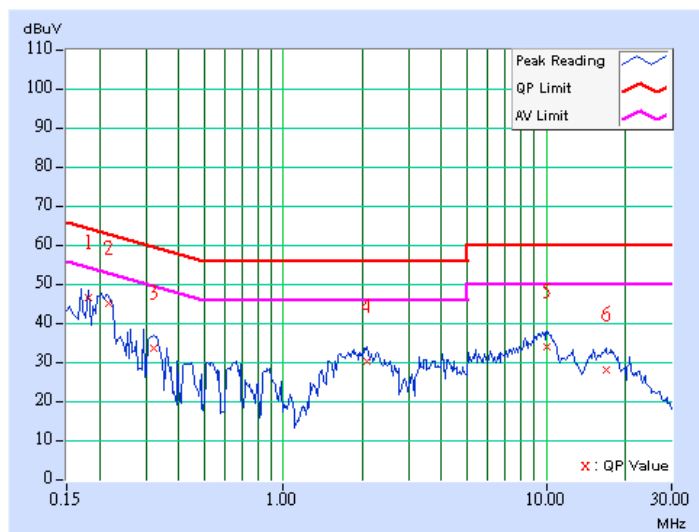
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.

3. The emission levels of other frequencies were very low against the limit.

4. Margin value = Emission level - Limit value

5. Correction factor = Insertion loss + Cable loss

6. Emission Level = Correction Factor + Reading Value.

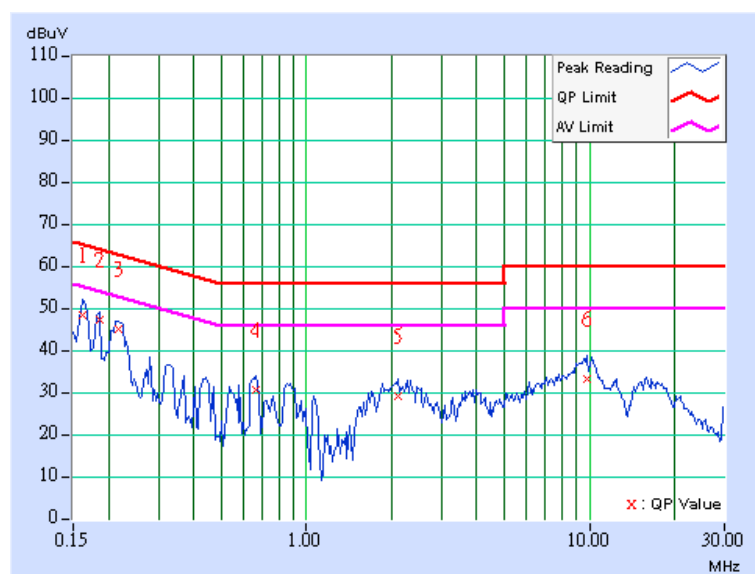


EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 2
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.10	48.12	8.66	48.22	8.76	65.38	55.38	-17.16	-46.62
2	0.185	0.10	46.91	11.61	47.01	11.71	64.25	54.25	-17.24	-42.54
3	0.216	0.10	44.73	34.95	44.83	35.05	62.96	52.96	-18.13	-17.91
4	0.662	0.13	30.45	-	30.58	-	56.00	46.00	-25.42	-
5	2.105	0.21	28.89	-	29.10	-	56.00	46.00	-26.90	-
6	9.762	0.40	33.06	-	33.46	-	60.00	50.00	-26.54	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.



Conducted Worst Case Data**802.11g OFDM modulation**

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 1
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.209	0.11	44.14	31.57	44.25	31.68	63.26	53.26	-19.01	-21.58
2	0.318	0.11	32.83	-	32.94	-	59.76	49.76	-26.82	-
3	0.525	0.13	25.80	-	25.93	-	56.00	46.00	-30.07	-
4	1.820	0.20	29.72	-	29.92	-	56.00	46.00	-26.08	-
5	3.773	0.28	28.26	-	28.54	-	56.00	46.00	-27.46	-
6	9.348	0.41	34.60	-	35.01	-	60.00	50.00	-24.99	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

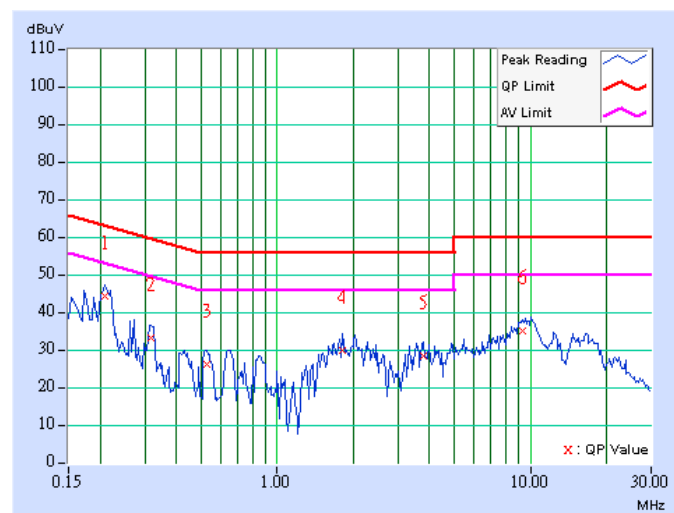
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.

3. The emission levels of other frequencies were very low against the limit.

4. Margin value = Emission level - Limit value

5. Correction factor = Insertion loss + Cable loss

6. Emission Level = Correction Factor + Reading Value.

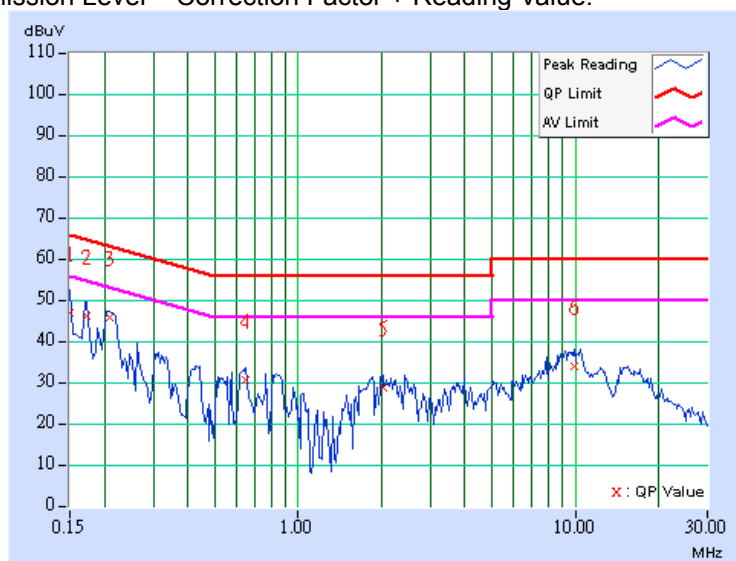


EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 2
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	46.69	6.82	46.79	6.92	66.00	56.00	-19.21	-49.08
2	0.173	0.10	46.06	9.33	46.16	9.43	64.79	54.79	-18.64	-45.37
3	0.209	0.10	45.35	33.88	45.45	33.98	63.26	53.26	-17.81	-19.28
4	0.646	0.13	30.25	-	30.38	-	56.00	46.00	-25.62	-
5	2.020	0.21	28.41	-	28.62	-	56.00	46.00	-27.38	-
6	9.906	0.40	33.75	-	34.15	-	60.00	50.00	-25.85	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

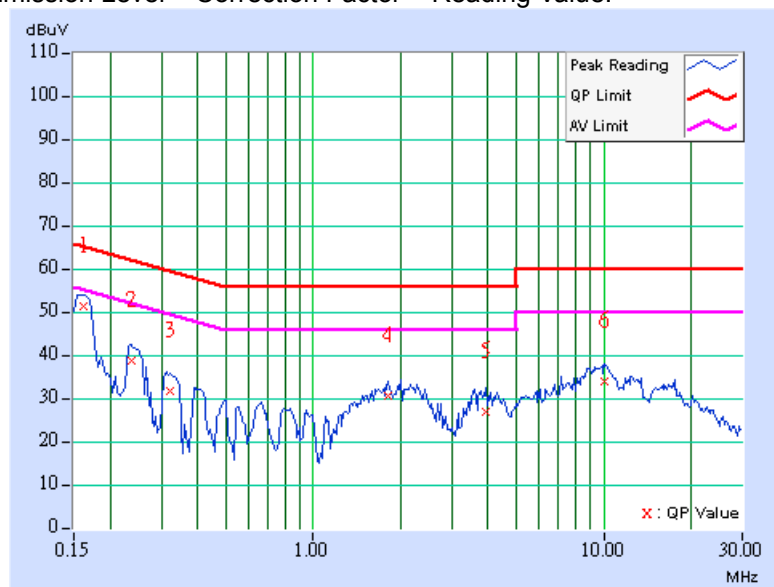


EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 1
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.10	51.05	38.23	51.15	38.33	65.38	55.38	-14.22	-17.04
2	0.238	0.11	38.60	-	38.71	-	62.15	52.15	-23.44	-
3	0.322	0.11	31.38	-	31.49	-	59.66	49.66	-28.16	-
4	1.813	0.20	30.39	-	30.59	-	56.00	46.00	-25.41	-
5	3.941	0.28	26.67	-	26.95	-	56.00	46.00	-29.05	-
6	10.090	0.42	33.53	-	33.95	-	60.00	50.00	-26.05	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

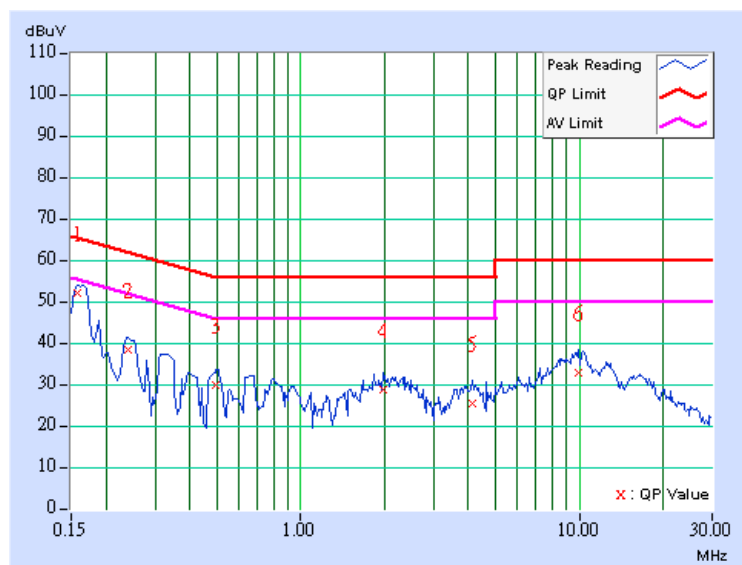


EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 2
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.10	51.90	37.72	52.00	37.82	65.58	55.58	-13.58	-17.76
2	0.240	0.10	38.24	-	38.34	-	62.10	52.10	-23.76	-
3	0.498	0.11	29.54	-	29.65	-	56.04	46.04	-26.38	-
4	1.980	0.21	28.44	-	28.65	-	56.00	46.00	-27.35	-
5	4.117	0.28	25.28	-	25.56	-	56.00	46.00	-30.44	-
6	9.918	0.40	32.53	-	32.93	-	60.00	50.00	-27.07	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

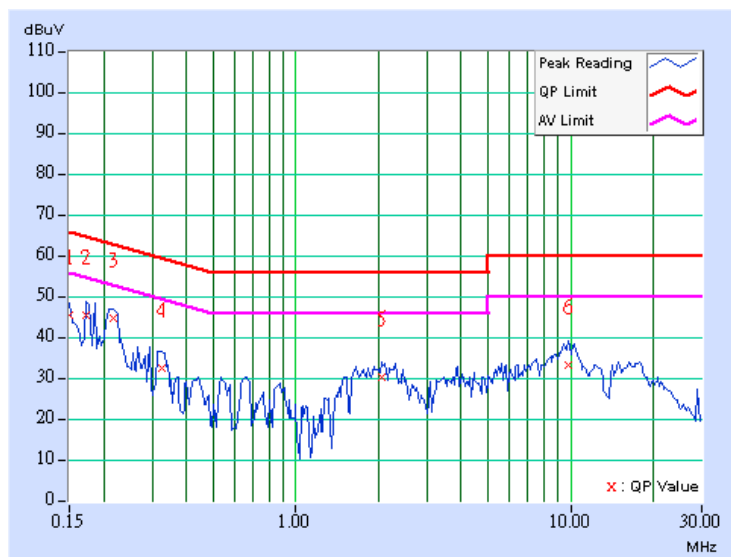


EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 1
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	45.32	-	45.42	-	66.00	56.00	-20.58	-
2	0.173	0.10	45.15	8.76	45.25	8.86	64.79	54.79	-19.54	-45.93
3	0.216	0.11	44.47	32.76	44.58	32.87	62.96	52.96	-18.38	-20.09
4	0.326	0.11	32.24	-	32.35	-	59.56	49.56	-27.20	-
5	2.063	0.21	29.80	-	30.01	-	56.00	46.00	-25.99	-
6	9.828	0.42	32.97	-	33.39	-	60.00	50.00	-26.61	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

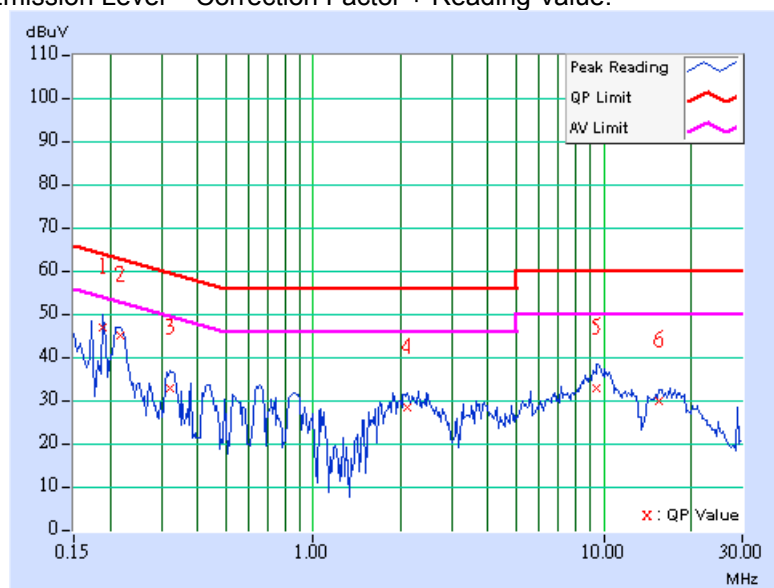


EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	PHASE	Line 2
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 74%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.10	46.52	12.41	46.62	12.51	64.08	54.08	-17.46	-41.57
2	0.216	0.10	44.61	34.18	44.71	34.28	62.96	52.96	-18.25	-18.68
3	0.322	0.10	32.63	-	32.73	-	59.66	49.66	-26.92	-
4	2.109	0.21	28.06	-	28.27	-	56.00	46.00	-27.73	-
5	9.492	0.40	32.58	-	32.98	-	60.00	50.00	-27.02	-
6	15.477	0.50	29.67	-	30.17	-	60.00	50.00	-29.83	-

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.



4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESIB7	100188	Dec. 19, 2005
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Nov. 21, 2005
BILOG Antenna SCHWARZBECK	VULB9168	9168-157	Jan. 22, 2006
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-407	Jan. 16, 2006
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA 9170241	Feb. 23, 2006
Preamplifier Agilent	8449B	3008A01961	Nov. 09, 2005
Preamplifier Agilent	8447D	2944A10629	Nov. 09, 2005
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218182/4	Feb. 17, 2006
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218194/4	Feb. 17, 2006
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower ADT.	AT100	AT93021702	NA
Turn Table ADT.	TT100.	TT93021702	NA
Controller ADT.	SC100.	SC93021702	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Chamber 1.
 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The IC Site Registration No. is IC4924-2.

4.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

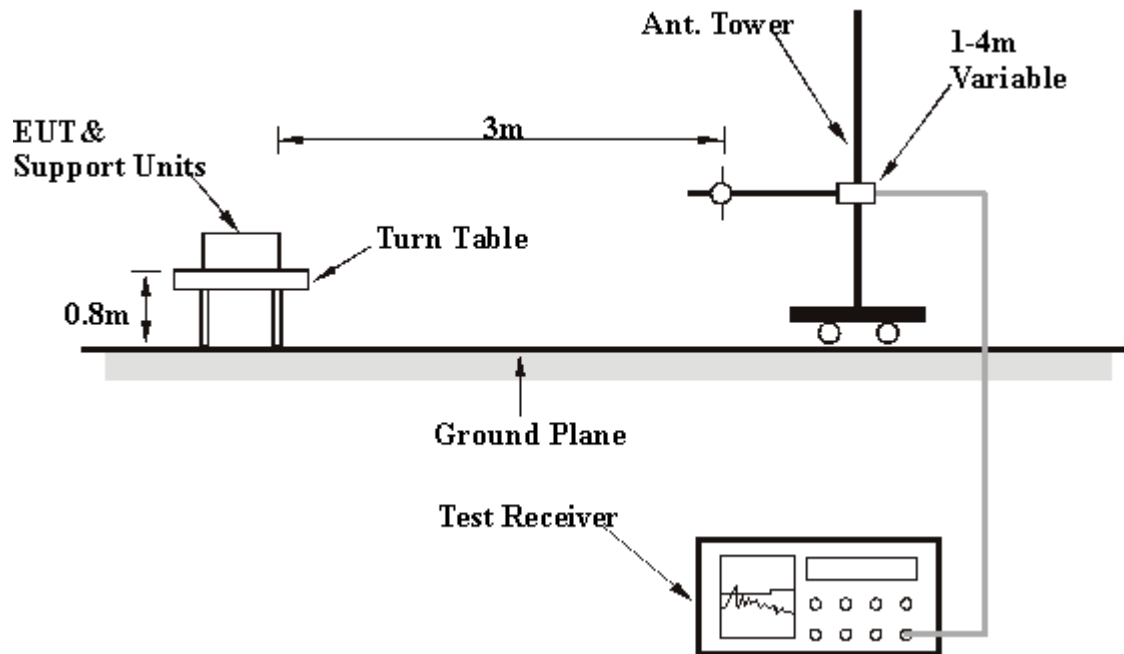
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS

802.11b DSSS modulation (Antenna 1)

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	99.98	40.20 QP	43.50	-3.30	1.75 H	133	29.46	10.74
2	131.08	40.95 QP	43.50	-2.55	2.00 H	184	27.37	13.58
3	183.57	37.86 QP	43.50	-5.64	1.50 H	178	25.43	12.43
4	236.05	40.69 QP	46.00	-5.31	1.00 H	1	28.03	12.66
5	282.71	43.09 QP	46.00	-2.91	1.00 H	124	28.99	14.09
6	335.19	35.98 QP	46.00	-10.02	1.00 H	277	20.86	15.13
7	401.28	36.35 QP	46.00	-9.65	2.00 H	292	19.68	16.67
8	453.77	40.33 QP	46.00	-5.67	1.50 H	19	22.36	17.96
9	570.40	36.14 QP	46.00	-9.86	1.50 H	7	16.01	20.13
10	624.83	34.54 QP	46.00	-11.46	1.25 H	37	13.30	21.24
11	914.47	44.01 QP	46.00	-1.99	1.00 H	277	18.76	25.25

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	66.93	31.59 QP	40.00	-8.41	1.00 V	265	18.91	12.68
2	99.98	34.34 QP	43.50	-9.16	1.50 V	61	23.60	10.74
3	195.23	31.25 QP	43.50	-12.25	1.75 V	88	19.74	11.51
4	282.71	34.52 QP	46.00	-11.48	1.25 V	37	20.43	14.09
5	360.46	31.25 QP	46.00	-14.75	1.75 V	34	15.54	15.71
6	453.77	38.19 QP	46.00	-7.81	1.00 V	52	20.23	17.96
7	570.40	34.01 QP	46.00	-11.99	1.25 V	73	13.88	20.13
8	801.72	33.71 QP	46.00	-12.29	1.25 V	160	10.00	23.72
9	920.30	36.47 QP	46.00	-9.53	1.25 V	136	11.16	25.31

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	51.25 PK	74.00	-22.75	1.14 H	321	20.55	30.70
1	2320.00	42.61 AV	54.00	-11.39	1.14 H	321	11.91	30.70
2	2390.00	53.16 PK	74.00	-20.84	1.27 H	18	22.19	30.97
2	2390.00	44.67 AV	54.00	-9.33	1.27 H	18	13.70	30.97
3	*2412.00	103.08 PK			1.27 H	18	72.02	31.06
3	*2412.00	96.46 AV			1.27 H	18	65.40	31.06
4	4824.00	52.22 PK	74.00	-21.78	1.13 H	360	15.79	36.43
4	4824.00	44.76 AV	54.00	-9.24	1.13 H	360	8.33	36.43

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2016.00	48.22 PK	74.00	-25.78	1.01 V	248	18.81	29.41
1	2016.00	46.10 AV	54.00	-7.90	1.01 V	248	16.69	29.41
2	2320.00	52.89 PK	74.00	-21.11	1.23 V	13	22.19	30.70
2	2320.00	45.42 AV	54.00	-8.58	1.23 V	13	14.72	30.70
3	2386.00	56.93 PK	74.00	-17.07	1.17 V	78	25.97	30.96
3	2386.00	46.82 AV	54.00	-7.18	1.17 V	78	15.86	30.96
4	*2412.00	108.84 PK			1.15 V	360	77.78	31.06
4	*2412.00	101.62 AV			1.15 V	360	70.56	31.06
5	4824.00	55.21 PK	74.00	-18.79	1.01 V	118	18.78	36.43
5	4824.00	52.12 AV	54.00	-1.88	1.01 V	118	15.69	36.43

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	53.03 PK	74.00	-20.97	1.35 H	22	22.33	30.70
1	2320.00	44.66 AV	54.00	-9.34	1.35 H	22	13.96	30.70
2	*2437.00	101.35 PK			1.29 H	189	70.18	31.17
2	*2437.00	94.04 AV			1.29 H	189	62.87	31.17
3	4874.00	52.14 PK	74.00	-21.86	1.12 H	348	15.60	36.54
3	4874.00	45.76 AV	54.00	-8.24	1.12 H	348	9.22	36.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2016.00	47.17 PK	74.00	-26.83	1.04 V	21	17.76	29.41
1	2016.00	44.28 AV	54.00	-9.72	1.04 V	21	14.87	29.41
2	2320.00	54.75 PK	74.00	-19.25	1.19 V	148	24.05	30.70
2	2320.00	45.97 AV	54.00	-8.03	1.19 V	148	15.27	30.70
3	*2437.00	110.47 PK			1.37 V	20	79.30	31.17
3	*2437.00	102.93 AV			1.37 V	20	71.76	31.17
4	4874.00	53.42 PK	74.00	-20.58	1.01 V	116	16.88	36.54
4	4874.00	47.40 AV	54.00	-6.60	1.01 V	116	10.86	36.54

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	51.98 PK	74.00	-22.02	1.36 H	24	21.28	30.70
1	2320.00	43.88 AV	54.00	-10.12	1.36 H	24	13.18	30.70
2	*2462.00	98.95 PK			1.19 H	150	67.67	31.28
2	*2462.00	91.65 AV			1.19 H	150	60.37	31.28
3	2483.50	51.86 PK	74.00	-22.14	1.19 H	150	20.49	31.37
3	2483.50	43.99 AV	54.00	-10.01	1.19 H	150	12.62	31.37
4	4924.00	47.09 PK	74.00	-26.91	1.08 H	322	10.43	36.66
4	4924.00	37.56 AV	54.00	-16.44	1.08 H	322	0.90	36.66

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2016.00	49.37 PK	74.00	-24.63	1.01 V	360	19.96	29.41
1	2016.00	47.50 AV	54.00	-6.50	1.01 V	360	18.09	29.41
2	2320.00	55.26 PK	74.00	-18.74	1.11 V	5	24.56	30.70
2	2320.00	47.31 AV	54.00	-6.69	1.11 V	5	16.61	30.70
3	*2462.00	109.04 PK			1.10 V	36	77.76	31.28
3	*2462.00	101.44 AV			1.10 V	36	70.16	31.28
4	2483.50	55.11 PK	74.00	-18.89	1.10 V	36	23.74	31.37
4	2483.50	45.74 AV	54.00	-8.26	1.10 V	36	14.37	31.37
5	4924.00	50.54 PK	74.00	-23.46	1.24 V	360	13.88	36.66
5	4924.00	43.04 AV	54.00	-10.96	1.24 V	360	6.38	36.66

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. " * " : Fundamental frequency.

802.11b DSSS modulation (Antenna 2)

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	66.93	29.75 QP	40.00	-10.25	2.50 H	199	17.07	12.68
2	99.98	41.25 QP	43.50	-2.25	2.50 H	337	30.51	10.74
3	134.97	41.35 QP	43.50	-2.15	1.50 H	181	27.49	13.86
4	168.02	40.59 QP	43.50	-2.91	2.00 H	187	26.71	13.88
5	228.28	37.94 QP	46.00	-8.06	1.50 H	13	25.78	12.16
6	282.71	41.32 QP	46.00	-4.68	1.00 H	115	27.23	14.09
7	331.30	35.95 QP	46.00	-10.05	1.00 H	286	20.91	15.04
8	401.28	37.04 QP	46.00	-8.96	1.00 H	358	20.37	16.67
9	453.77	40.48 QP	46.00	-5.52	1.50 H	355	22.52	17.96
10	570.40	36.76 QP	46.00	-9.24	1.50 H	10	16.62	20.13
11	673.43	34.45 QP	46.00	-11.55	1.00 H	100	12.55	21.90
12	926.13	38.31 QP	46.00	-7.69	1.00 H	292	12.94	25.37

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	66.93	32.71 QP	40.00	-7.29	1.00 V	343	20.03	12.68
2	99.98	35.90 QP	43.50	-7.60	1.00 V	274	25.16	10.74
3	134.97	33.99 QP	43.50	-9.51	2.00 V	91	20.13	13.86
4	195.23	30.37 QP	43.50	-13.13	1.50 V	61	18.86	11.51
5	282.71	32.73 QP	46.00	-13.27	2.00 V	100	18.64	14.09
6	401.28	31.16 QP	46.00	-14.84	1.50 V	151	14.49	16.67
7	401.28	31.16 QP	46.00	-14.84	1.50 V	151	14.49	16.67
8	453.77	36.71 QP	46.00	-9.29	1.50 V	217	18.75	17.96
9	570.40	34.97 QP	46.00	-11.03	1.00 V	280	14.84	20.13
10	801.72	34.70 QP	46.00	-11.30	1.50 V	151	10.98	23.72

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	49.12 PK	74.00	-24.88	1.25 H	279	18.42	30.70
1	2320.00	38.19 AV	54.00	-15.81	1.25 H	279	7.49	30.70
2	2386.00	55.50 PK	74.00	-18.50	1.44 H	251	24.54	30.96
2	2386.00	46.00 AV	54.00	-8.00	1.44 H	251	15.04	30.96
3	*2412.00	102.42 PK			1.44 H	251	71.36	31.06
3	*2412.00	95.33 AV			1.44 H	251	64.27	31.06
4	4824.00	54.40 PK	74.00	-19.60	1.07 H	80	17.97	36.43
4	4824.00	49.30 AV	54.00	-4.70	1.07 H	80	12.87	36.43

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	57.18 PK	74.00	-16.82	1.17 V	27	26.48	30.70
1	2320.00	49.07 AV	54.00	-4.93	1.17 V	27	18.37	30.70
2	2386.00	63.30 PK	74.00	-10.70	1.10 V	1	32.34	30.96
2	2386.00	52.49 AV	54.00	-1.51	1.10 V	1	21.53	30.96
3	*2412.00	111.49 PK			1.10 V	1	80.43	31.06
3	*2412.00	103.98 AV			1.10 V	1	72.92	31.06
4	4824.00	62.21 PK	74.00	-11.79	1.10 V	324	25.78	36.43
4	4824.00	52.58 AV	54.00	-1.42	1.10 V	324	16.15	36.43

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	45.86 PK	74.00	-28.14	1.14 H	310	15.16	30.70
1	2320.00	35.80 AV	54.00	-18.20	1.14 H	310	5.10	30.70
2	*2437.00	100.33 PK			1.22 H	289	69.16	31.17
2	*2437.00	92.86 AV			1.22 H	289	61.69	31.17
3	4874.00	48.91 PK	74.00	-25.09	1.10 H	43	12.37	36.54
3	4874.00	41.88 AV	54.00	-12.12	1.10 H	43	5.34	36.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	57.10 PK	74.00	-16.90	1.17 V	336	26.40	30.70
1	2320.00	47.18 AV	54.00	-6.82	1.17 V	336	16.48	30.70
2	*2437.00	111.17 PK			1.07 V	311	80.00	31.17
2	*2437.00	103.34 AV			1.07 V	311	72.17	31.17
3	4874.00	56.43 PK	74.00	-17.57	1.09 V	2	19.89	36.54
3	4874.00	49.99 AV	54.00	-4.01	1.09 V	2	13.45	36.54

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	49.38 PK	74.00	-24.62	1.01 H	249	18.68	30.70
1	2320.00	40.65 AV	54.00	-13.35	1.01 H	249	9.95	30.70
2	*2462.00	99.89 PK			1.05 H	347	68.61	31.28
2	*2462.00	92.91 AV			1.05 H	347	61.63	31.28
3	2483.50	52.58 PK	74.00	-21.42	1.05 H	347	21.21	31.37
3	2483.50	44.52 AV	54.00	-9.48	1.05 H	347	13.15	31.37
4	4924.00	45.30 PK	74.00	-28.70	1.22 H	93	8.64	36.66
4	4924.00	34.35 AV	54.00	-19.65	1.22 H	93	-2.31	36.66

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	56.71 PK	74.00	-17.29	1.16 V	31	26.01	30.70
1	2320.00	48.63 AV	54.00	-5.37	1.16 V	31	17.93	30.70
2	*2462.00	110.16 PK			1.09 V	36	78.88	31.28
2	*2462.00	102.71 AV			1.09 V	36	71.43	31.28
3	2483.50	54.47 PK	74.00	-19.53	1.09 V	36	23.10	31.37
3	2483.50	45.68 AV	54.00	-8.32	1.09 V	36	14.31	31.37
4	4924.00	53.11 PK	74.00	-20.89	1.21 V	336	16.45	36.66
4	4924.00	46.48 AV	54.00	-7.52	1.21 V	336	9.82	36.66

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

802.11g OFDM modulation (Antenna 1)

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	99.99	40.31 QP	43.50	-3.19	2.00 H	166	29.56	10.75
2	130.58	41.10 QP	43.50	-2.40	2.00 H	210	27.55	13.55
3	184.20	37.96 QP	43.50	-5.54	1.50 H	155	25.58	12.38
4	236.07	40.74 QP	46.00	-5.26	1.25 H	100	28.08	12.66
5	283.10	44.08 QP	46.00	-1.92	1.00 H	250	29.98	14.10
6	400.18	37.40 QP	46.00	-8.60	2.00 H	300	20.76	16.64
7	454.10	40.28 QP	46.00	-5.72	1.50 H	22	22.31	17.97
8	571.10	37.10 QP	46.00	-8.90	1.50 H	1	16.95	20.15
9	915.08	43.98 QP	46.00	-2.02	1.25 H	321	18.72	25.26

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	66.75	32.10 QP	40.00	-7.90	1.00 V	271	19.40	12.70
2	100.10	35.40 QP	43.50	-8.10	1.50 V	78	24.64	10.76
3	361.10	32.32 QP	46.00	-13.68	1.75 V	100	16.60	15.72
4	454.10	39.12 QP	46.00	-6.88	1.00 V	300	21.15	17.97
5	570.12	34.48 QP	46.00	-11.52	1.25 V	111	14.35	20.13
6	800.08	34.40 QP	46.00	-11.60	1.25 V	181	10.70	23.70
7	920.07	36.68 QP	46.00	-9.32	1.25 V	121	11.37	25.31

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	56.03 PK	74.00	-17.97	1.03 H	351	25.33	30.70
1	2320.00	44.64 AV	54.00	-9.36	1.03 H	351	13.94	30.70
2	2390.00	65.41 PK	74.00	-8.59	1.32 H	43	34.44	30.97
2	2390.00	48.55 AV	54.00	-5.45	1.32 H	43	17.58	30.97
3	*2412.00	103.74 PK			1.32 H	43	72.68	31.06
3	*2412.00	93.55 AV			1.32 H	43	62.49	31.06
4	4824.00	49.61 PK	74.00	-24.39	1.02 H	33	13.18	36.43
4	4824.00	36.00 AV	54.00	-18.00	1.02 H	33	-0.43	36.43

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2016.00	49.66 PK	74.00	-24.34	1.32 V	26	20.25	29.41
1	2016.00	47.58 AV	54.00	-6.42	1.32 V	26	18.17	29.41
2	2320.00	60.67 PK	74.00	-13.33	1.18 V	150	29.97	30.70
2	2320.00	48.80 AV	54.00	-5.20	1.18 V	150	18.10	30.70
3	2390.00	65.63 PK	74.00	-8.37	1.12 V	79	34.66	30.97
3	2390.00	50.62 AV	54.00	-3.38	1.12 V	79	19.65	30.97
4	*2412.00	108.00 PK			1.12 V	79	76.94	31.06
4	*2412.00	97.36 AV			1.12 V	79	66.30	31.06
5	4824.00	57.22 PK	74.00	-16.78	1.22 V	41	20.79	36.43
5	4824.00	41.76 AV	54.00	-12.24	1.22 V	41	5.33	36.43

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2016.00	42.50 PK	74.00	-31.50	1.19 H	21	13.09	29.41
1	2016.00	36.69 AV	54.00	-17.31	1.19 H	21	7.28	29.41
2	2320.00	52.74 PK	74.00	-21.26	1.27 H	354	22.04	30.70
2	2320.00	44.95 AV	54.00	-9.05	1.27 H	354	14.25	30.70
3	*2437.00	102.57 PK			1.29 H	43	71.40	31.17
3	*2437.00	92.73 AV			1.29 H	43	61.56	31.17
4	4874.00	47.54 PK	74.00	-26.46	1.20 H	350	11.00	36.54
4	4874.00	35.47 AV	54.00	-18.53	1.20 H	350	-1.07	36.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2016.00	48.92 PK	74.00	-25.08	1.04 V	20	19.51	29.41
1	2016.00	46.01 AV	54.00	-7.99	1.04 V	20	16.60	29.41
2	2320.00	56.86 PK	74.00	-17.14	1.19 V	146	26.16	30.70
2	2320.00	49.83 AV	54.00	-4.17	1.19 V	146	19.13	30.70
3	*2437.00	108.57 PK			1.17 V	78	77.40	31.17
3	*2437.00	98.12 AV			1.17 V	78	66.95	31.17
4	4874.00	54.63 PK	74.00	-19.37	1.22 V	42	18.09	36.54
4	4874.00	40.04 AV	54.00	-13.96	1.22 V	42	3.50	36.54

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	52.66 PK	74.00	-21.34	1.12 H	174	21.96	30.70
1	2320.00	44.77 AV	54.00	-9.23	1.12 H	174	14.07	30.70
2	*2462.00	104.90 PK			1.30 H	27	73.62	31.28
2	*2462.00	95.26 AV			1.30 H	27	63.98	31.28
3	2483.50	62.64 PK	74.00	-11.36	1.30 H	27	31.27	31.37
3	2483.50	48.03 AV	54.00	-5.97	1.30 H	27	16.66	31.37
4	4924.00	47.58 PK	74.00	-26.42	1.10 H	230	10.92	36.66
4	4924.00	35.53 AV	54.00	-18.47	1.10 H	230	-1.13	36.66

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2016.00	48.92 PK	74.00	-25.08	1.06 V	19	19.51	29.41
1	2016.00	46.06 AV	54.00	-7.94	1.06 V	19	16.65	29.41
2	2320.00	56.49 PK	74.00	-17.51	1.21 V	149	25.79	30.70
2	2320.00	48.77 AV	54.00	-5.23	1.21 V	149	18.07	30.70
3	*2462.00	108.38 PK			1.16 V	78	77.10	31.28
3	*2462.00	98.31 AV			1.16 V	78	67.03	31.28
4	2483.50	69.84 PK	74.00	-4.16	1.16 V	78	38.47	31.37
4	2483.50	52.05 AV	54.00	-1.95	1.16 V	78	20.68	31.37
5	4924.00	52.06 PK	74.00	-21.94	1.01 V	70	15.40	36.66
5	4924.00	38.14 AV	54.00	-15.86	1.01 V	70	1.48	36.66

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. " * " : Fundamental frequency.

802.11g Turbo OFDM modulation

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	52.39 PK	74.00	-21.61	1.10 H	360	21.69	30.70
1	2320.00	38.77 AV	54.00	-15.23	1.10 H	360	8.07	30.70
2	2390.00	59.06 PK	74.00	-14.94	1.01 H	174	28.09	30.97
2	2390.00	46.97 AV	54.00	-7.03	1.01 H	174	16.00	30.97
3	*2437.00	102.17 PK			1.01 H	174	71.00	31.17
3	*2437.00	91.97 AV			1.01 H	174	60.80	31.17
4	2483.50	54.74 PK	74.00	-19.26	1.01 H	174	23.37	31.37
4	2483.50	45.01 AV	54.00	-8.99	1.01 H	174	13.64	31.37
5	4874.00	47.89 PK	74.00	-26.11	1.07 H	163	11.35	36.54
5	4874.00	35.39 AV	54.00	-18.61	1.07 H	163	-1.15	36.54

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2016.00	47.35 PK	74.00	-26.65	1.01 V	300	17.94	29.41
1	2016.00	45.31 AV	54.00	-8.69	1.01 V	300	15.90	29.41
2	2320.00	55.83 PK	74.00	-18.17	1.15 V	38	25.13	30.70
2	2320.00	48.67 AV	54.00	-5.33	1.15 V	38	17.97	30.70
3	2390.00	64.53 PK	74.00	-9.47	1.11 V	51	33.56	30.97
3	2390.00	50.44 AV	54.00	-3.56	1.11 V	51	19.47	30.97
4	*2437.00	106.61 PK			1.11 V	51	75.44	31.17
4	*2437.00	97.19 AV			1.11 V	51	66.02	31.17
5	2483.50	59.53 PK	74.00	-14.47	1.11 V	51	28.16	31.37
5	2483.50	46.75 AV	54.00	-7.25	1.11 V	51	15.38	31.37
6	4874.00	52.57 PK	74.00	-21.43	1.06 V	53	16.03	36.54
6	4874.00	38.59 AV	54.00	-15.41	1.06 V	53	2.05	36.54

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

802.11g OFDM modulation (Antenna 2)

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	100.15	41.28 QP	43.50	-2.22	2.50 H	360	30.52	10.76
2	135.64	41.31 QP	43.50	-2.19	1.50 H	210	27.41	13.90
3	168.12	40.62 QP	43.50	-2.88	2.00 H	193	26.75	13.87
4	228.60	38.45 QP	46.00	-7.55	1.25 H	255	26.27	12.18
5	283.15	42.63 QP	46.00	-3.37	1.25 H	258	28.53	14.10
6	401.32	38.12 QP	46.00	-7.88	1.00 H	355	21.45	16.67
7	454.10	41.15 QP	46.00	-4.85	1.50 H	125	23.18	17.97
8	570.00	37.37 QP	46.00	-8.63	1.50 H	300	17.25	20.12
9	925.89	39.65 QP	46.00	-6.35	1.25 H	300	14.28	25.37

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	66.41	33.12 QP	40.00	-6.88	1.25 V	300	20.38	12.74
2	100.10	35.78 QP	43.50	-7.72	1.00 V	280	25.02	10.76
3	135.08	34.11 QP	43.50	-9.39	2.00 V	121	20.24	13.87
4	195.07	39.48 QP	43.50	-4.02	1.75 V	52	27.96	11.52
5	282.64	32.48 QP	46.00	-13.52	2.00 V	121	18.39	14.09
6	400.36	31.78 QP	46.00	-14.22	1.50 V	210	15.13	16.65
7	453.87	37.55 QP	46.00	-8.45	1.25 V	220	19.59	17.96
8	570.10	35.16 QP	46.00	-10.84	1.00 V	300	15.03	20.13
9	799.85	35.12 QP	46.00	-10.88	1.50 V	211	11.42	23.70

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	49.10 PK	74.00	-24.90	1.24 H	280	18.40	30.70
1	2320.00	41.39 AV	54.00	-12.61	1.24 H	280	10.69	30.70
2	2390.00	58.05 PK	74.00	-15.95	1.45 H	254	27.08	30.97
2	2390.00	46.55 AV	54.00	-7.45	1.45 H	254	15.58	30.97
3	*2412.00	100.51 PK			1.45 H	254	69.45	31.06
3	*2412.00	90.57 AV			1.45 H	254	59.51	31.06
4	4824.00	51.51 PK	74.00	-22.49	1.14 H	81	15.08	36.43
4	4824.00	38.36 AV	54.00	-15.64	1.14 H	81	1.93	36.43

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	58.64 PK	74.00	-15.36	1.09 V	301	27.94	30.70
1	2320.00	50.04 AV	54.00	-3.96	1.09 V	301	19.34	30.70
2	2390.00	68.83 PK	74.00	-5.17	1.09 V	322	37.86	30.97
2	2390.00	52.84 AV	54.00	-1.16	1.09 V	322	21.87	30.97
3	*2412.00	107.75 PK			1.09 V	322	76.69	31.06
3	*2412.00	98.07 AV			1.09 V	322	67.01	31.06
4	4824.00	59.72 PK	74.00	-14.28	1.10 V	323	23.29	36.43
4	4824.00	44.26 AV	54.00	-9.74	1.10 V	323	7.83	36.43

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	50.03 PK	74.00	-23.97	1.23 H	278	19.33	30.70
1	2320.00	41.25 AV	54.00	-12.75	1.23 H	278	10.55	30.70
2	*2437.00	99.35 PK			1.07 H	341	68.18	31.17
2	*2437.00	89.45 AV			1.07 H	341	58.28	31.17
3	4874.00	49.46 PK	74.00	-24.54	1.06 H	270	12.92	36.54
3	4874.00	35.24 AV	54.00	-18.76	1.06 H	270	-1.30	36.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	57.21 PK	74.00	-16.79	1.15 V	36	26.51	30.70
1	2320.00	49.87 AV	54.00	-4.13	1.15 V	36	19.17	30.70
2	*2437.00	110.46 PK			1.36 V	1	79.29	31.17
2	*2437.00	99.87 AV			1.36 V	1	68.70	31.17
3	4874.00	57.95 PK	74.00	-16.05	1.22 V	324	21.41	36.54
3	4874.00	42.64 AV	54.00	-11.36	1.22 V	324	6.10	36.54

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	47.44 PK	74.00	-26.56	1.06 H	312	16.74	30.70
1	2320.00	39.50 AV	54.00	-14.50	1.06 H	312	8.80	30.70
2	*2462.00	100.83 PK			1.61 H	346	69.55	31.28
2	*2462.00	91.27 AV			1.61 H	346	59.99	31.28
3	2483.50	60.87 PK	74.00	-13.13	1.61 H	346	29.50	31.37
3	2483.50	47.79 AV	54.00	-6.21	1.61 H	346	16.42	31.37

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	57.19 PK	74.00	-16.81	1.15 V	31	26.49	30.70
1	2320.00	49.68 AV	54.00	-4.32	1.15 V	31	18.98	30.70
2	*2462.00	108.89 PK			1.08 V	33	77.61	31.28
2	*2462.00	98.53 AV			1.08 V	33	67.25	31.28
3	2483.50	67.68 PK	74.00	-6.32	1.08 V	33	36.31	31.37
3	2483.50	50.80 AV	54.00	-3.20	1.08 V	33	19.43	31.37
4	4924.00	54.15 PK	74.00	-19.85	1.07 V	325	17.49	36.66
4	4924.00	39.08 AV	54.00	-14.92	1.07 V	325	2.42	36.66

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

802.11g Turbo OFDM modulation

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2320.00	52.14 PK	74.00	-21.86	1.10 H	300	21.44	30.70
1	2320.00	37.58 AV	54.00	-16.42	1.10 H	300	6.88	30.70
2	2390.00	58.87 PK	74.00	-15.13	1.00 H	181	27.90	30.97
2	2390.00	46.62 AV	54.00	-7.38	1.00 H	181	15.65	30.97
3	*2437.00	101.85 PK			1.00 H	181	70.68	31.17
3	*2437.00	91.72 AV			1.00 H	181	60.55	31.17
4	2483.50	54.51 PK	74.00	-19.49	1.00 H	181	23.14	31.37
4	2483.50	44.75 AV	54.00	-9.25	1.00 H	181	13.38	31.37
5	4874.00	48.21 PK	74.00	-25.79	1.05 H	181	11.67	36.54
5	4874.00	35.78 AV	54.00	-18.22	1.05 H	181	-0.76	36.54

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

EUT	High Speed Wireless Network Adapter	MEASUREMENT DETAIL	
MODEL	AV10	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 56% RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2016.00	47.22 PK	74.00	-26.78	1.00 V	310	17.81	29.41
1	2016.00	45.18 AV	54.00	-8.82	1.00 V	310	15.77	29.41
2	2320.00	55.67 PK	74.00	-18.33	1.13 V	100	24.97	30.70
2	2320.00	48.48 AV	54.00	-5.52	1.13 V	100	17.78	30.70
3	2390.00	64.41 PK	74.00	-9.59	1.10 V	66	33.44	30.97
3	2390.00	50.19 AV	54.00	-3.81	1.10 V	66	19.22	30.97
4	*2437.00	106.47 PK			1.10 V	66	75.30	31.17
4	*2437.00	97.06 AV			1.10 V	66	65.89	31.17
5	2483.50	59.31 PK	74.00	-14.69	1.10 V	66	27.94	31.37
5	2483.50	46.54 AV	54.00	-7.46	1.10 V	66	15.17	31.37
6	4874.00	52.78 PK	74.00	-21.22	1.10 V	350	16.24	36.54
6	4874.00	39.04 AV	54.00	-14.96	1.10 V	350	2.50	36.54

*(The test data is in accordance with ADT Report No.: RF940316L11.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “ * ” : Fundamental frequency.

4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 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.

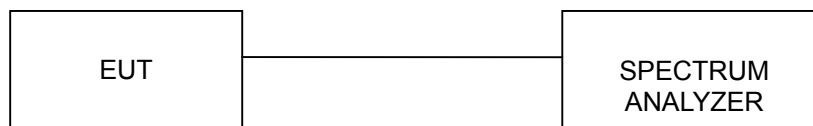
4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

4.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

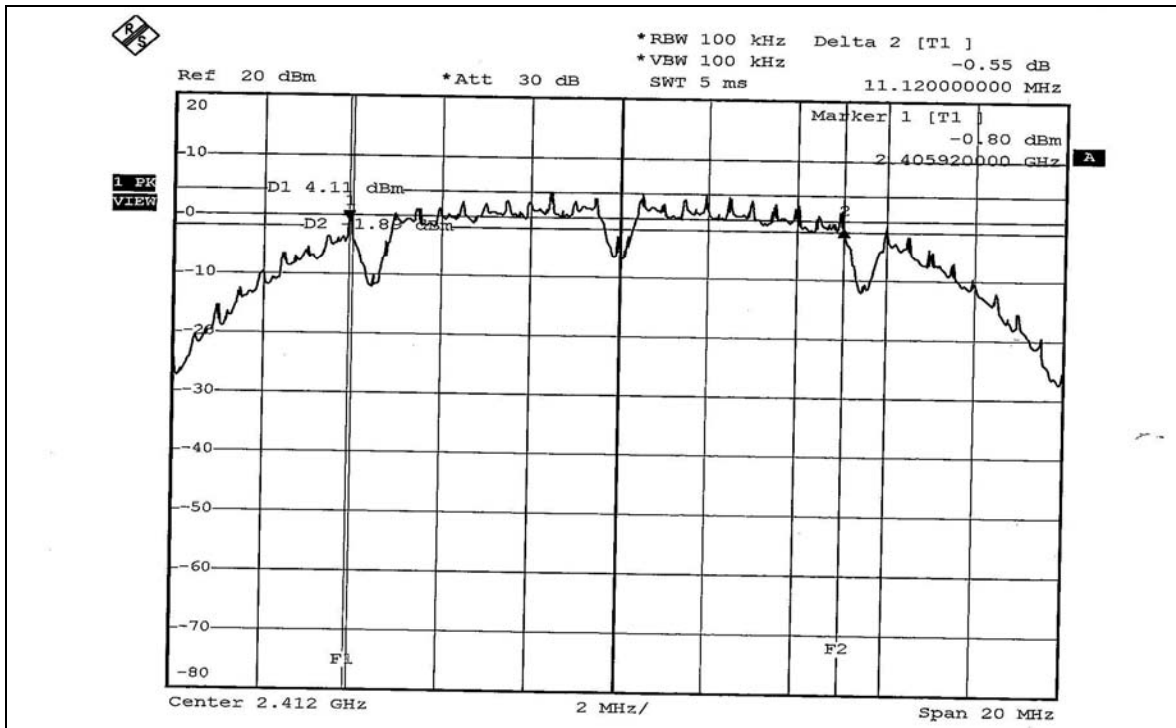
802.11b DSSS modulation

EUT	High Speed Wireless Network Adapter	MODEL	AV10
MODULATION TYPE	BPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 53%RH, 991hPa
TEST MODE	Single chain	TESTED BY	Gary Chang

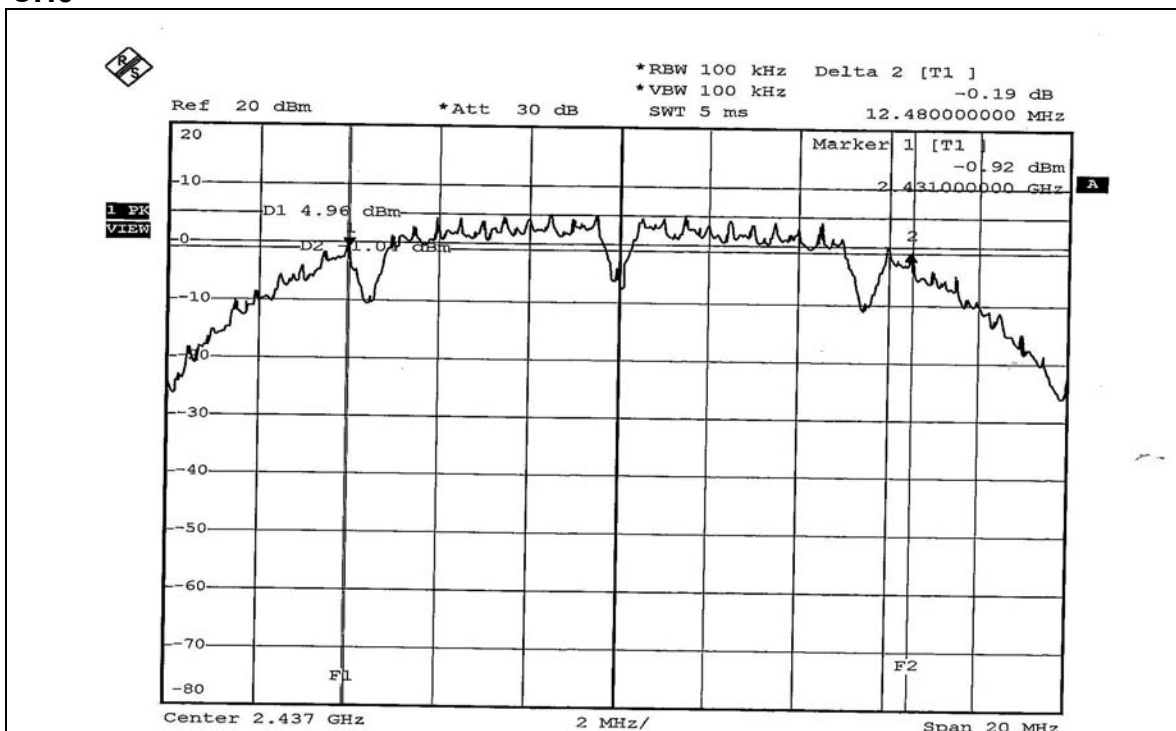
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.12	0.5	PASS
6	2437	12.48	0.5	PASS
11	2462	11.60	0.5	PASS

*(The test data is in accordance with ADT Report No.: RF940316L11.)

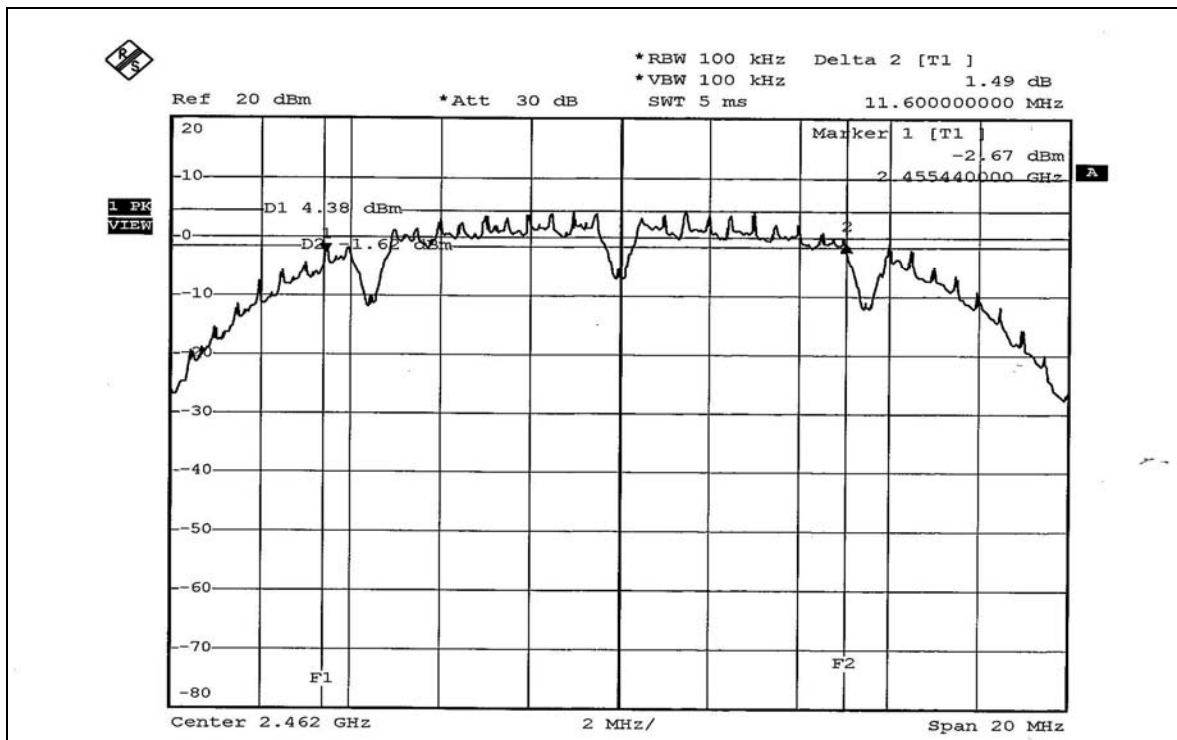
CH1



CH6



CH11



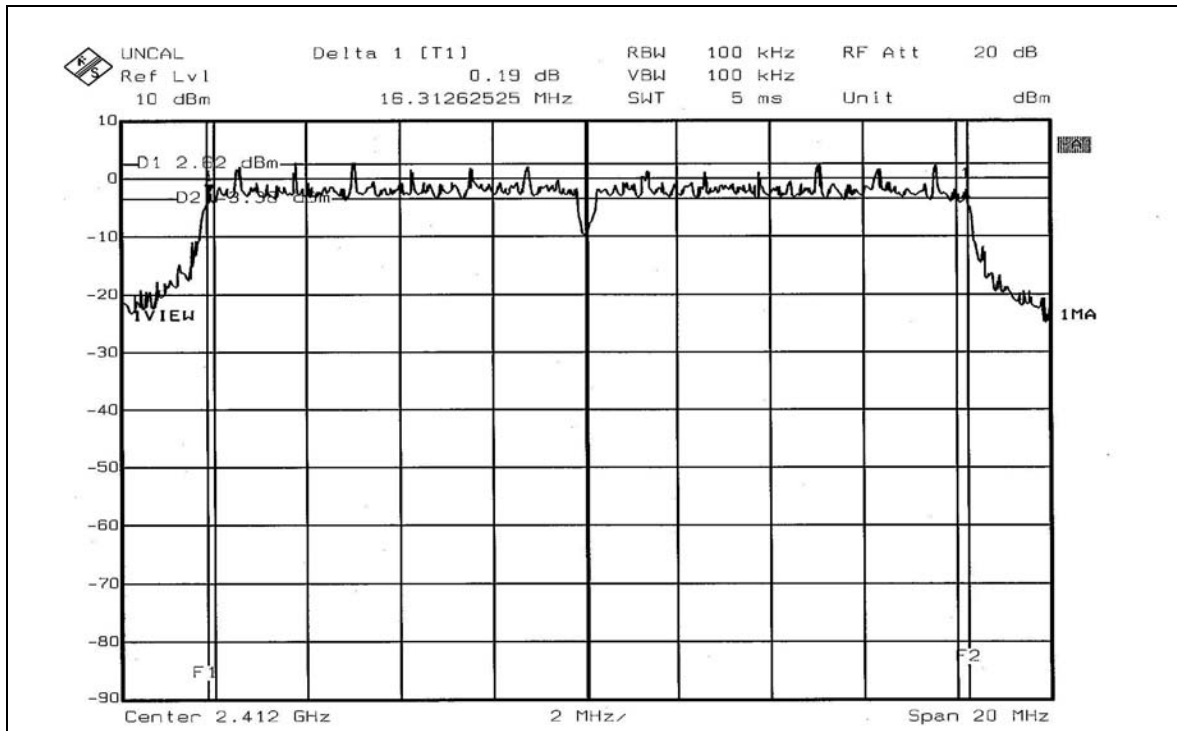
802.11g OFDM modulation

EUT	High Speed Wireless Network Adapter	MODEL	AV10
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 53%RH, 991hPa
TEST MODE	Single chain	TESTED BY	Gary Chang

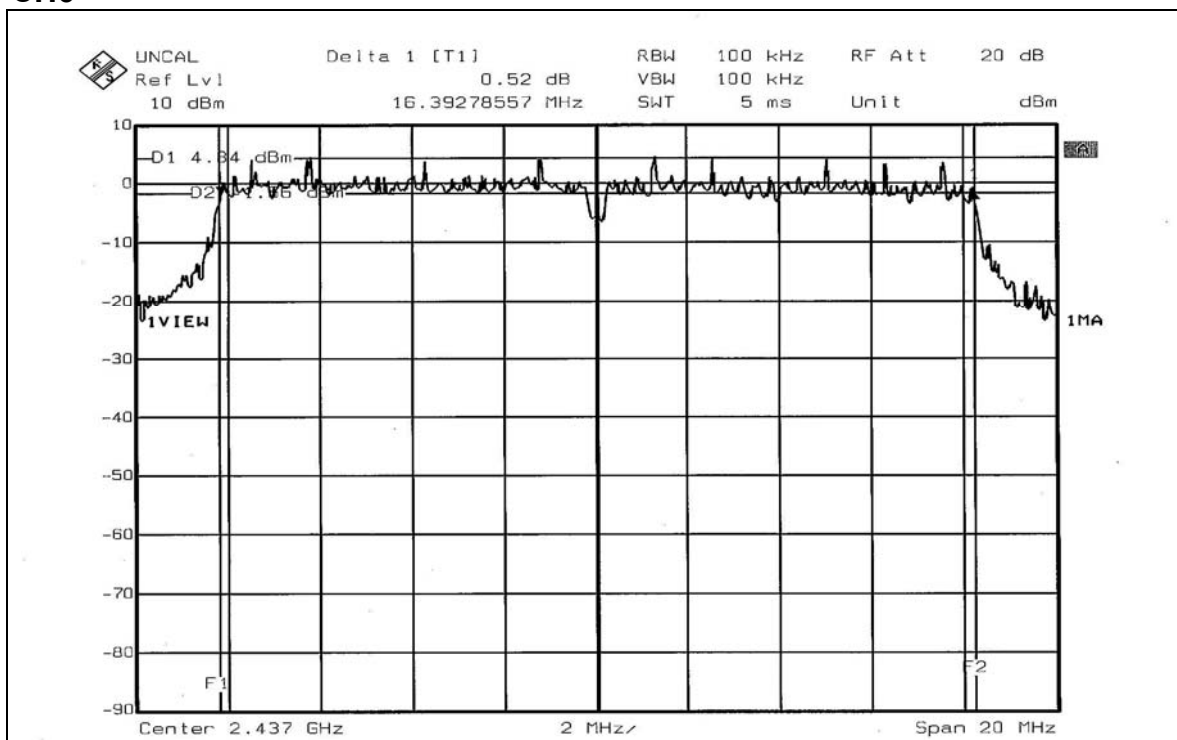
CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.31	0.5	PASS
6	2437	16.39	0.5	PASS
11	2462	16.12	0.5	PASS

*(The test data is in accordance with ADT Report No.: RF940316L11.)

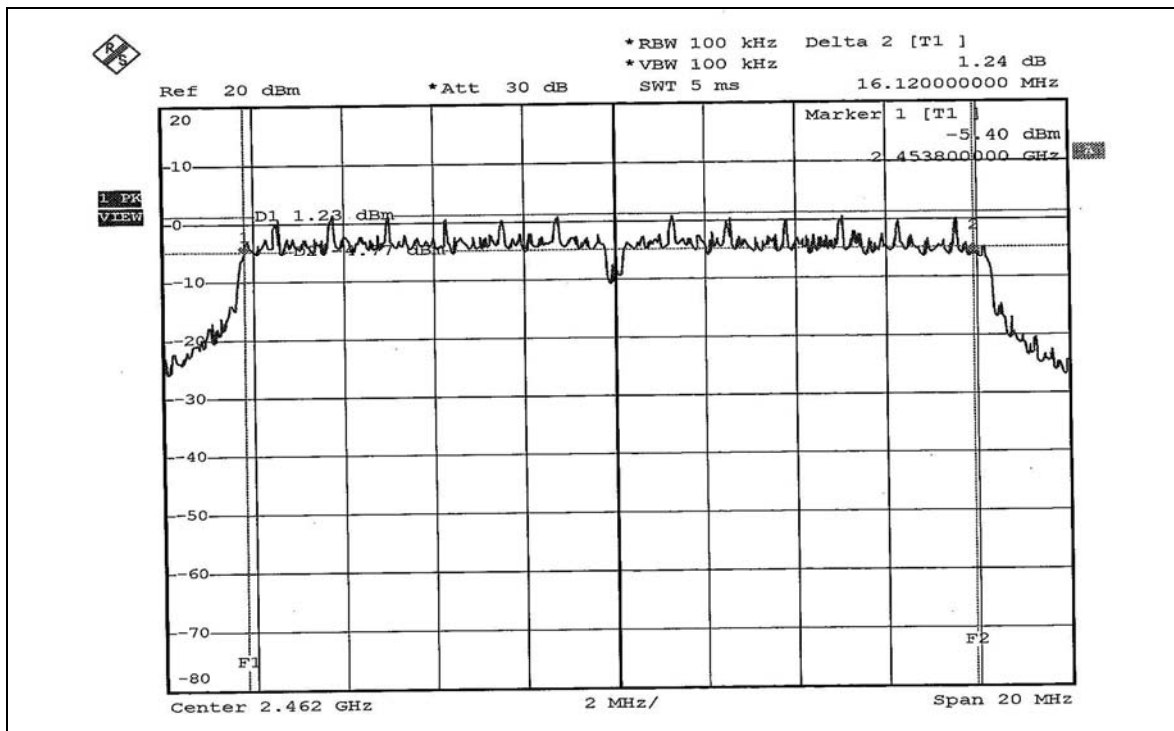
CH1



CH6



CH11



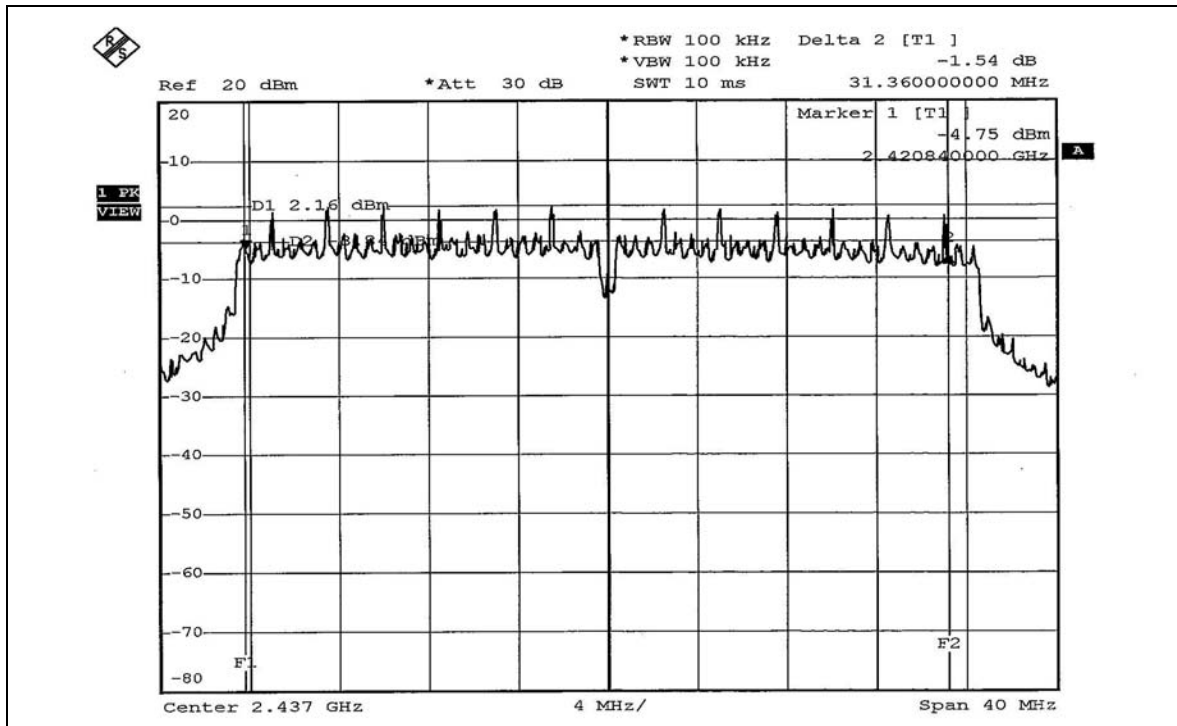
802.11g Turbo OFDM modulation

EUT	High Speed Wireless Network Adapter	MODEL	AV10
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TEST MODE	Single chain	TESTED BY	Gary Chang

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	31.36	0.5	PASS

*(The test data is in accordance with ADT Report No.: RF940316L11.)

CH6



4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm. .

4.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 06, 2005
TEKTRONIX OSCILLOSCOPE	TDS 220	C019167	Feb. 01, 2006
NARDA DETECTOR	4503A	FSCM99899	NA

NOTE:

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

4.4.3 TEST PROCEDURES

1. A detector was used on the output port of the EUT. An oscilloscope was used to peak the response of the detector.
2. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
3. Adjusted the power to have the same peak reading on oscilloscope. Record the power level.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.4.7 TEST RESULTS

802.11b DSSS modulation

EUT	High Speed Wireless Network Adapter	MODEL	AV10
MODULATION TYPE	BPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TEST MODE	Single chain	TESTED BY	Gary Chang

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	50.699	17.05	30	PASS
6	2437	63.533	18.03	30	PASS
11	2462	50.350	17.02	30	PASS

*(The test data is in accordance with ADT Report No.: RF940316L11.)

802.11g OFDM modulation

EUT	High Speed Wireless Network Adapter	MODEL	AV10
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TEST MODE	Single chain	TESTED BY	Gary Chang

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	44.875	16.52	30	PASS
6	2437	63.826	18.05	30	PASS
11	2462	45.186	16.55	30	PASS

*(The test data is in accordance with ADT Report No.: RF940316L11.)

**802.11g Turbo OFDM modulation**

EUT	High Speed Wireless Network Adapter	MODEL	AV10
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TEST MODE	Single chain	TESTED BY	Gary Chang

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
6	2437	63.680	18.04	30	PASS

*(The test data is in accordance with ADT Report No.: RF940316L11.)

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 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.

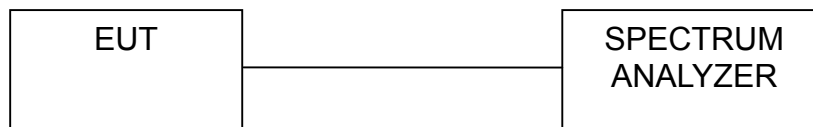
4.5.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time=span/3kHz. The power spectral density was measured and recorded. The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITIONS

Same as 4.3.6

4.5.7 TEST RESULTS

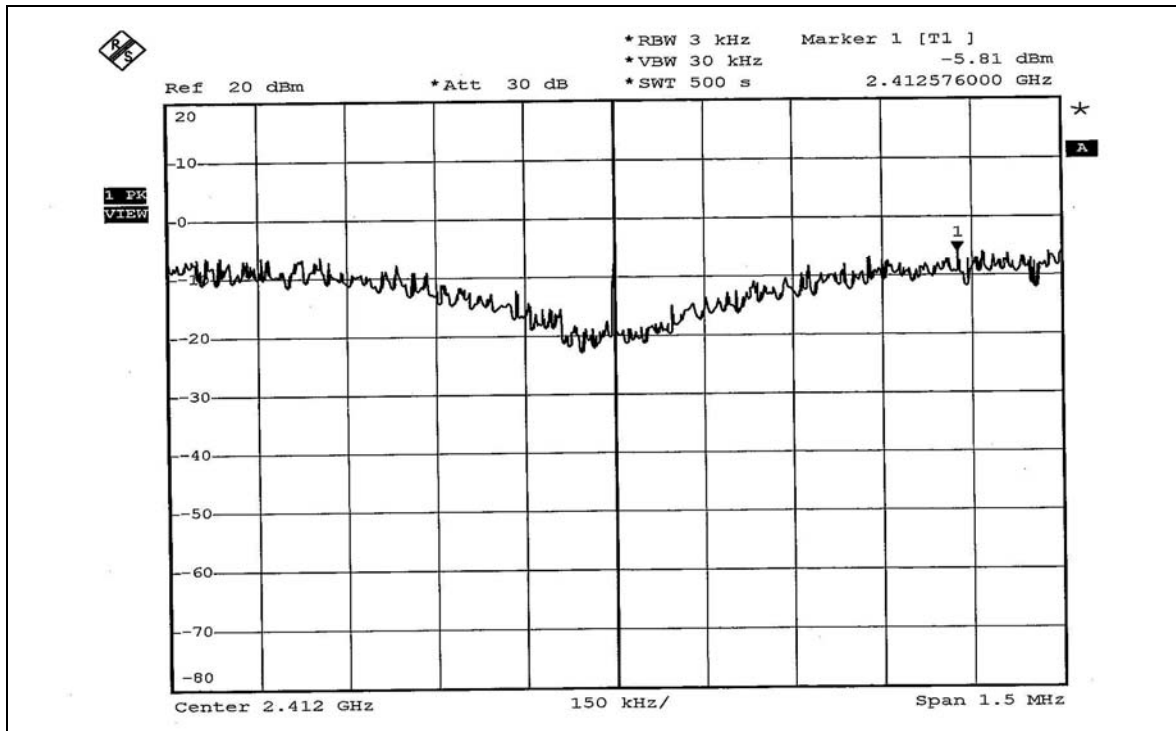
802.11b DSSS modulation

EUT	High Speed Wireless Network Adapter	MODEL	AV10
MODULATION TYPE	BPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TEST MODE	Single chain	TESTED BY	Gary Chang

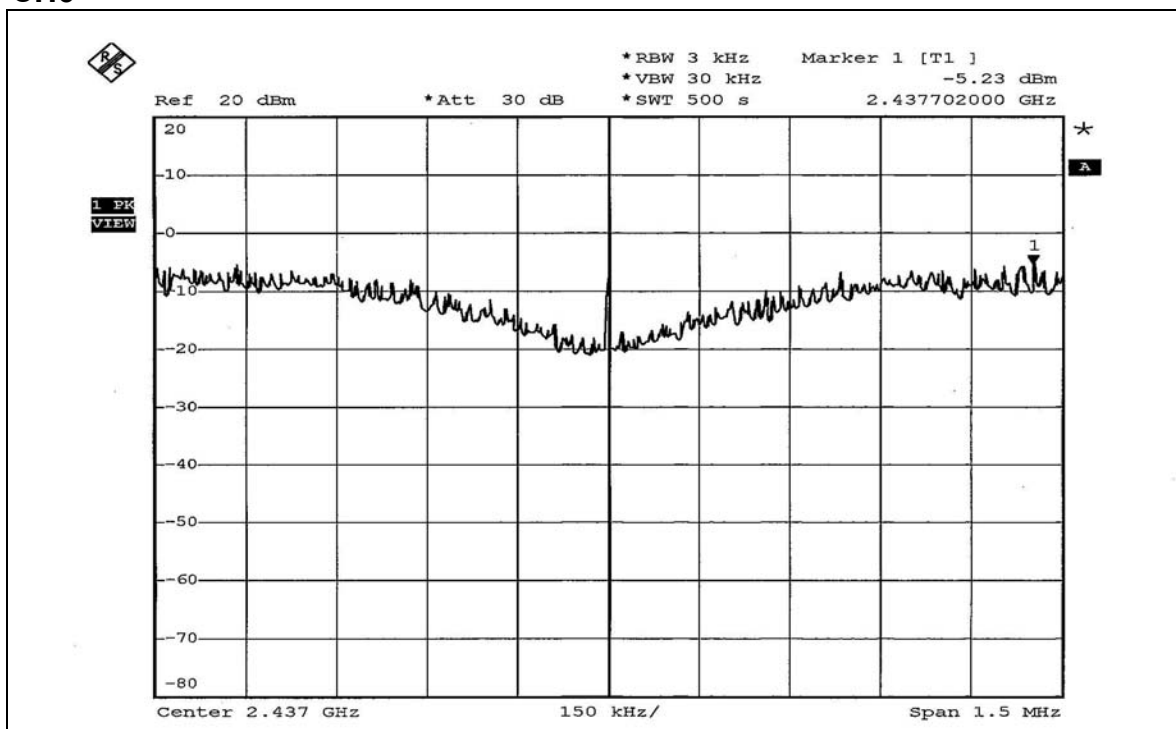
CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-5.81	8	PASS
6	2437	-5.23	8	PASS
11	2462	-6.13	8	PASS

*(The test data is in accordance with ADT Report No.: RF940316L11.)

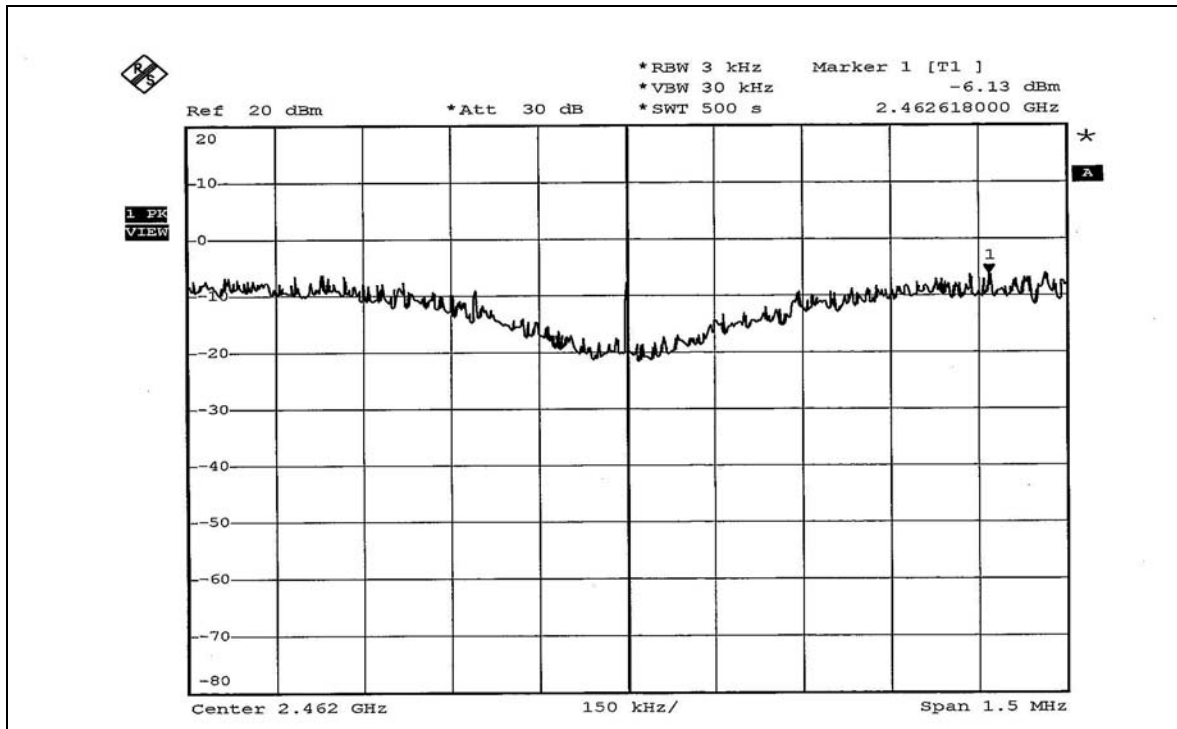
CH1



CH6



CH11



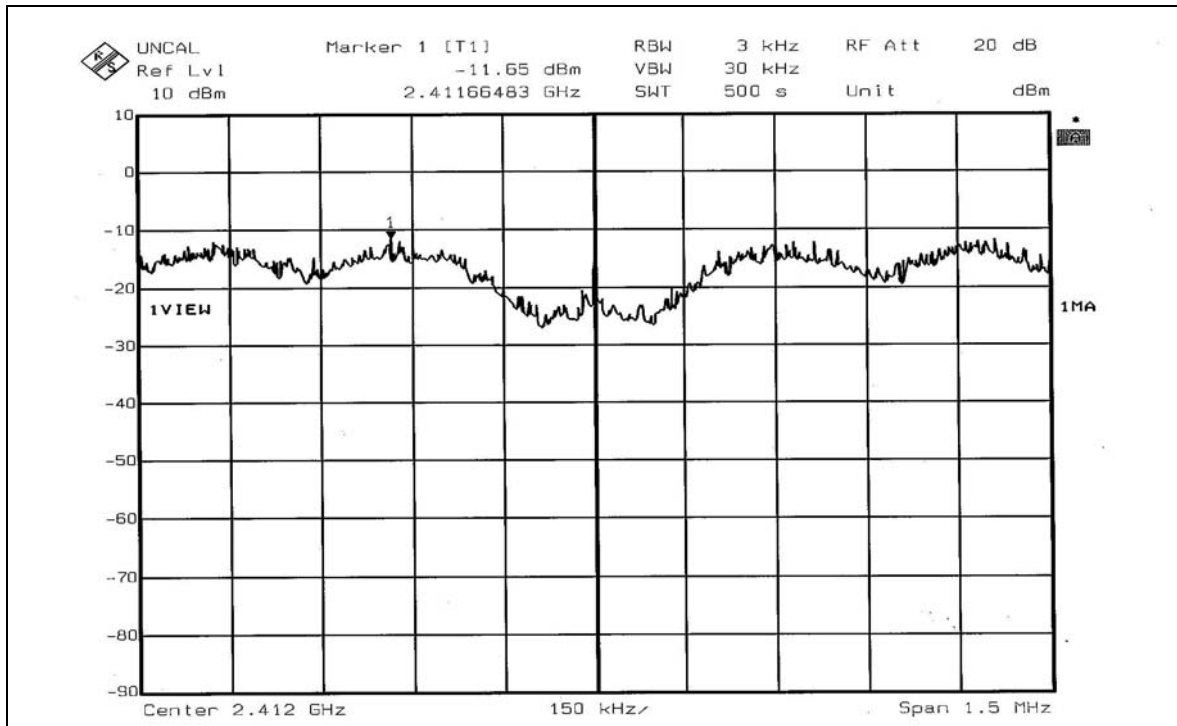
**802.11g OFDM modulation**

EUT	High Speed Wireless Network Adapter	MODEL	AV10
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TEST MODE	Single chain	TESTED BY	Gary Chang

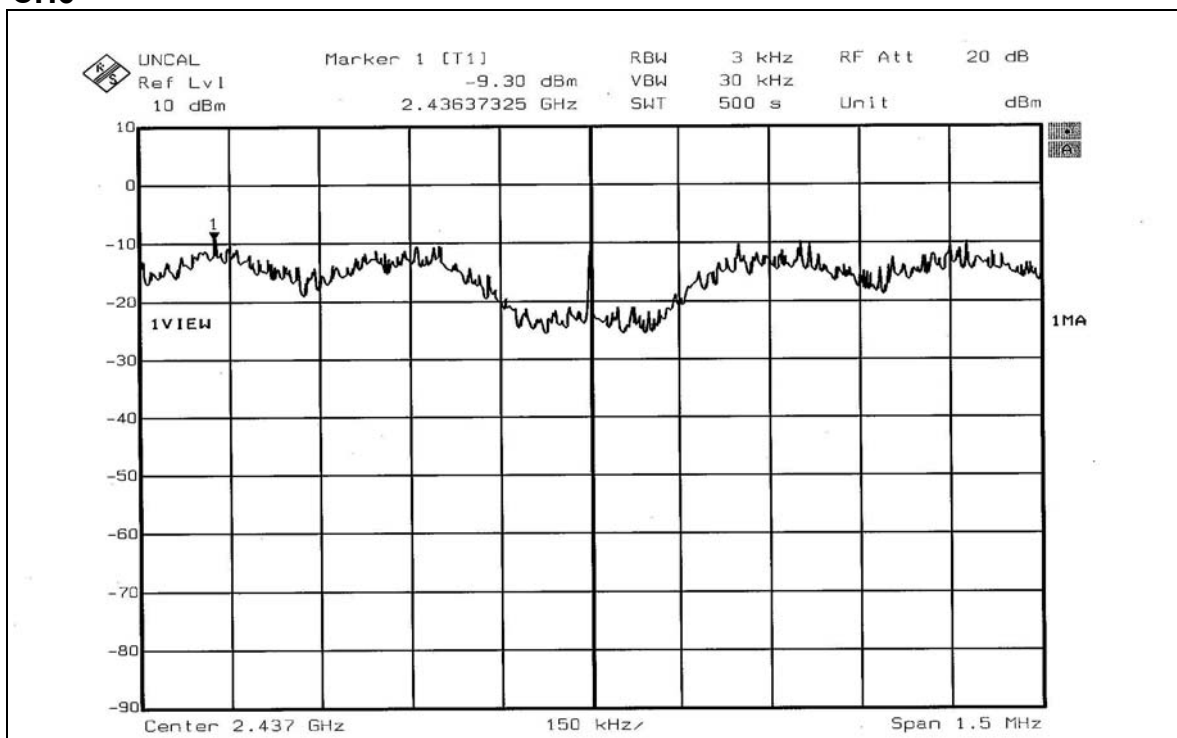
CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-11.65	8	PASS
6	2437	-9.30	8	PASS
11	2462	-11.56	8	PASS

*(The test data is in accordance with ADT Report No.: RF940316L11.)

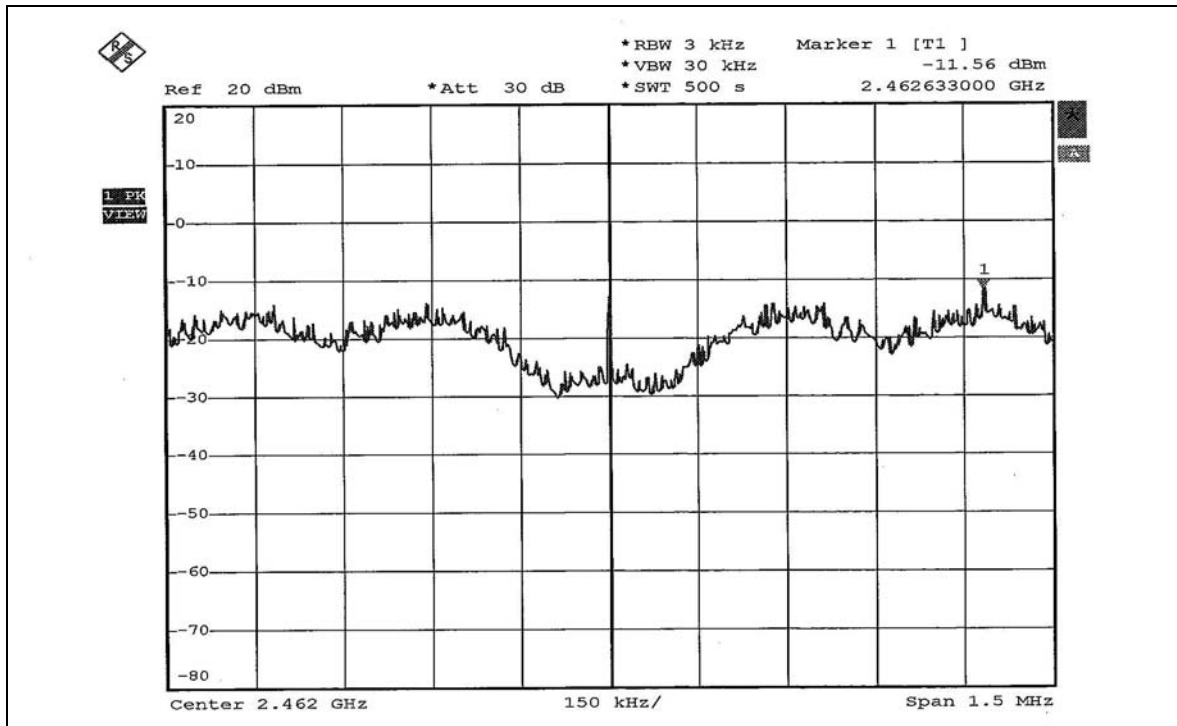
CH1



CH6



CH11



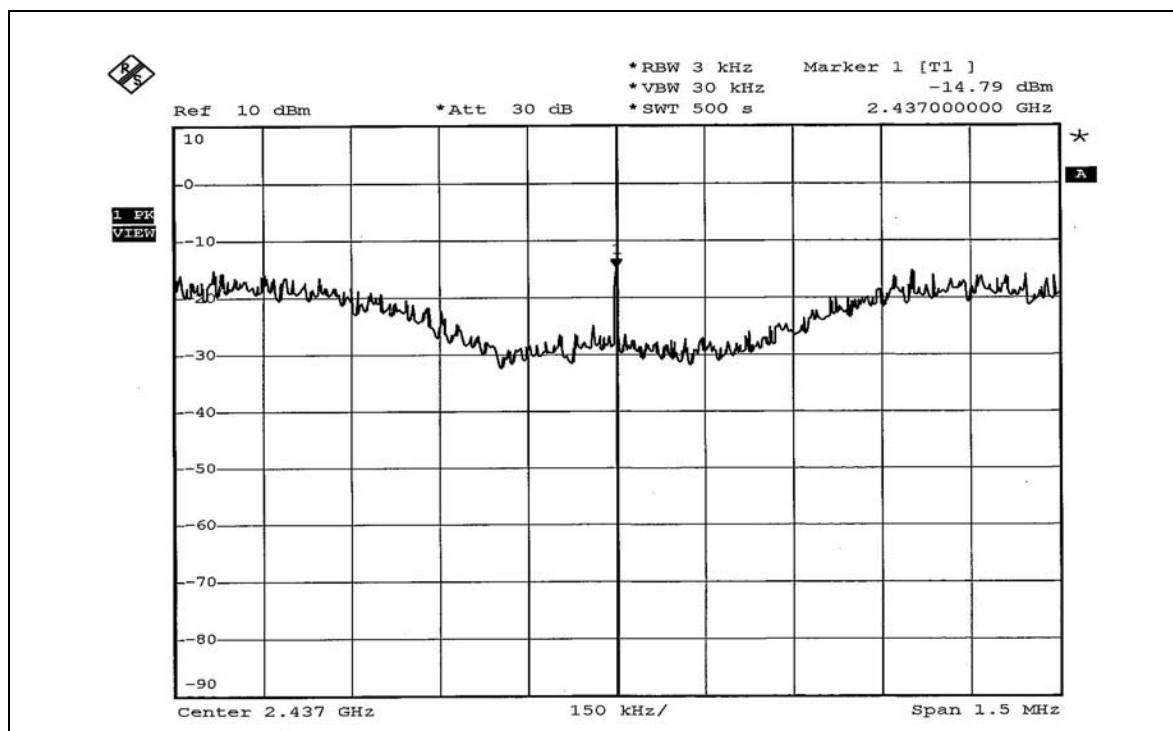
**802.11g Turbo OFDM modulation**

EUT	High Speed Wireless Network Adapter	MODEL	AV10
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TEST MODE	Single chain	TESTED BY	Gary Chang

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
6	2437	-14.79	8	PASS

*(The test data is in accordance with ADT Report No.: RF940316L11.)

CH6



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 loss cable. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges were 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 18 images. D2 line indicates the highest level, and D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS modulation

For test configure mode 1 (Antenna 1)

NOTE 1: The band edge emission plot on page 90 shows 51.03dBc 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 108.84dBuV/m (Peak), so the maximum field strength in restrict band is $108.84 - 51.03 = 57.81$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 90 shows 52.26dBc between carrier maximum power and local maximum emission in restrict band (2.3865GHz). 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 $101.62 - 52.26 = 49.36$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on page 91 shows 52.13dBc between carrier maximum power and local maximum emission in restrict band (2.4881GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 109.04dBuV/m (Peak), so the maximum field strength in restrict band is $109.04 - 52.13 = 56.91$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 92 shows 54.85dBc between carrier maximum power and local maximum emission in restrict band (2.4881GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 101.44dBuV/m (Average), so the maximum field strength in restrict band is $101.44 - 54.85 = 46.59$ dBuV/m which is under 54dBuV/m limit.

**For test configure mode 2 (Antenna 2)**

NOTE 1: The band edge emission plot on page 90 shows 51.03dBc 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 111.49dBuV/m (Peak), so the maximum field strength in restrict band is $111.49 - 51.03 = 60.46$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 90 shows 52.26dBc between carrier maximum power and local maximum emission in restrict band (2.3865GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 103.98dBuV/m (Average), so the maximum field strength in restrict band is $103.98 - 52.26 = 51.72$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on page 91 shows 52.13dBc between carrier maximum power and local maximum emission in restrict band (2.4881GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 110.16dBuV/m (Peak), so the maximum field strength in restrict band is $110.16 - 52.13 = 58.03$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 92 shows 54.85dBc between carrier maximum power and local maximum emission in restrict band (2.4881GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 102.71dBuV/m (Average), so the maximum field strength in restrict band is $102.71 - 54.85 = 47.86$ dBuV/m which is under 54dBuV/m limit.



802.11g OFDM modulation

For test configure mode 1 (Antenna 1)

NOTE 1: The band edge emission plot on page 93 shows 45.44dBc 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 108.00dBuV/m (Peak), so the maximum field strength in restrict band is $108.00 - 45.44 = 62.56$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 93 shows 45.88dBc 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 97.36dBuV/m (Average), so the maximum field strength in restrict band is $97.36 - 45.88 = 51.48$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on page 94 shows 46.13dBc 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 108.38dBuV/m (Peak), so the maximum field strength in restrict band is $108.38 - 46.13 = 62.25$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 95 shows 47.01dBc 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 98.31dBuV/m (Average), so the maximum field strength in restrict band is $98.31 - 47.01 = 51.30$ dBuV/m which is under 54dBuV/m limit.

**For test configure mode 2 (Antenna 2)**

NOTE 1: The band edge emission plot on page 93 shows 45.44dBc 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 107.75dBuV/m (Peak), so the maximum field strength in restrict band is $107.75 - 45.44 = 62.31$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 93 shows 45.88dBc 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 98.07dBuV/m (Average), so the maximum field strength in restrict band is $98.07 - 45.88 = 52.19$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on page 94 shows 46.13dBc 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 108.89dBuV/m (Peak), so the maximum field strength in restrict band is $108.89 - 46.13 = 62.76$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 95 shows 47.01dBc 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 98.53dBuV/m (Average), so the maximum field strength in restrict band is $98.53 - 47.01 = 51.52$ dBuV/m which is under 54dBuV/m limit.



802.11g Turbo OFDM modulation

For test configure mode 1 (Antenna 1)

NOTE 1: The band edge emission plot on page 96 shows 47.18dBc between carrier maximum power and local maximum emission in restrict band (2.3602GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 106.61dBuV/m (Peak), so the maximum field strength in restrict band is $106.61 - 47.18 = 59.43$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 96 shows 45.30dBc between carrier maximum power and local maximum emission in restrict band (2.3599GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 97.19dBuV/m (Average), so the maximum field strength in restrict band is $97.19 - 45.30 = 51.89$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on page 97 shows 50.19dBc between carrier maximum power and local maximum emission in restrict band (2.4842GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 106.61dBuV/m (Peak), so the maximum field strength in restrict band is $106.61 - 50.19 = 56.42$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 98 shows 48.93dBc 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 97.19dBuV/m (Average), so the maximum field strength in restrict band is $97.19 - 48.93 = 48.26$ dBuV/m which is under 54dBuV/m limit.

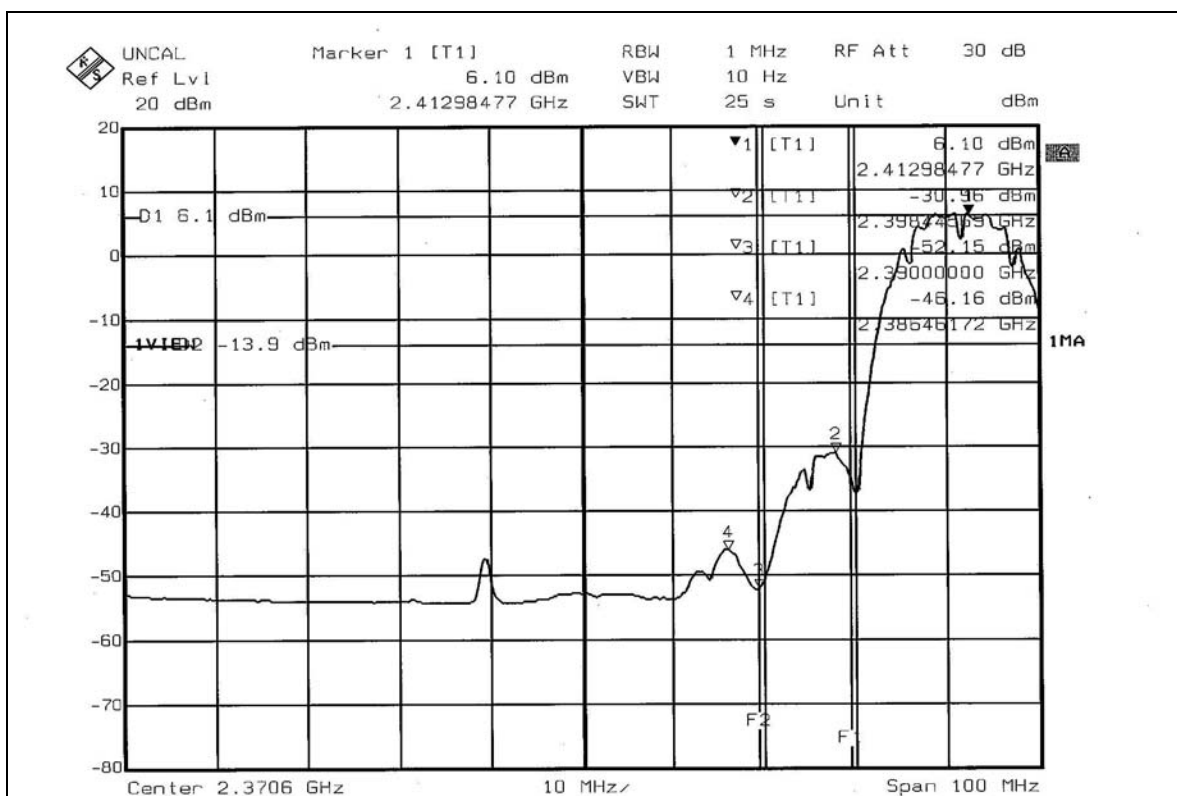
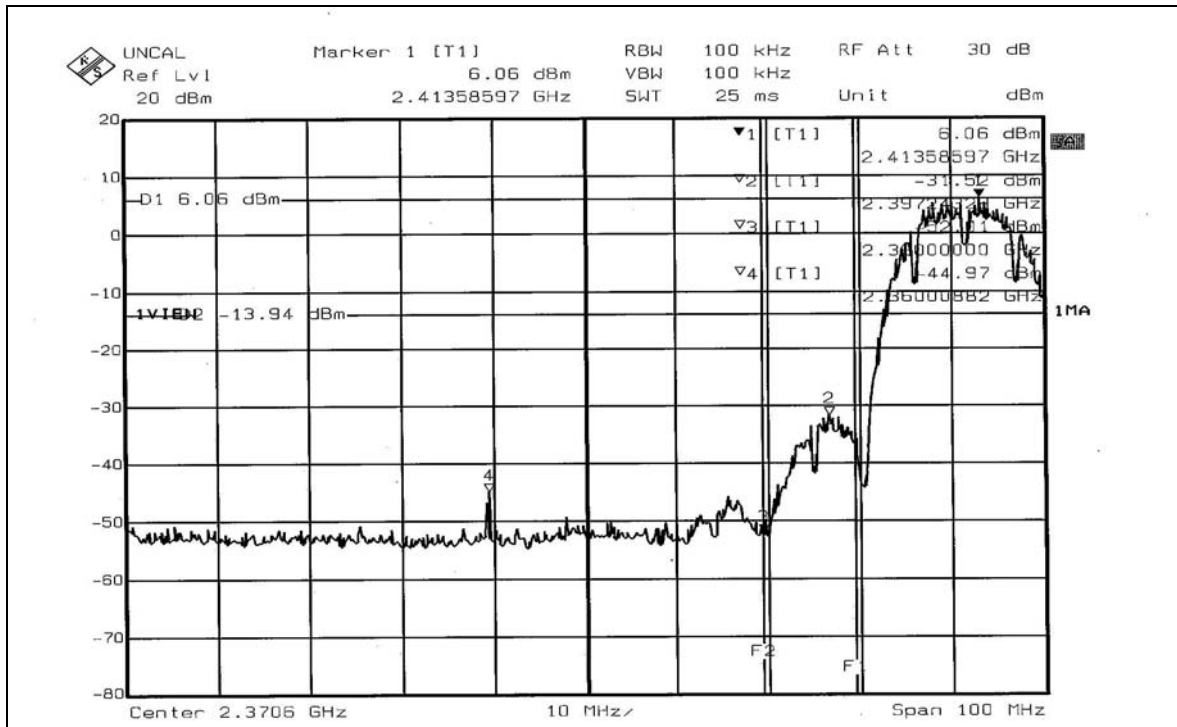
**For test configure mode 2 (Antenna 2)**

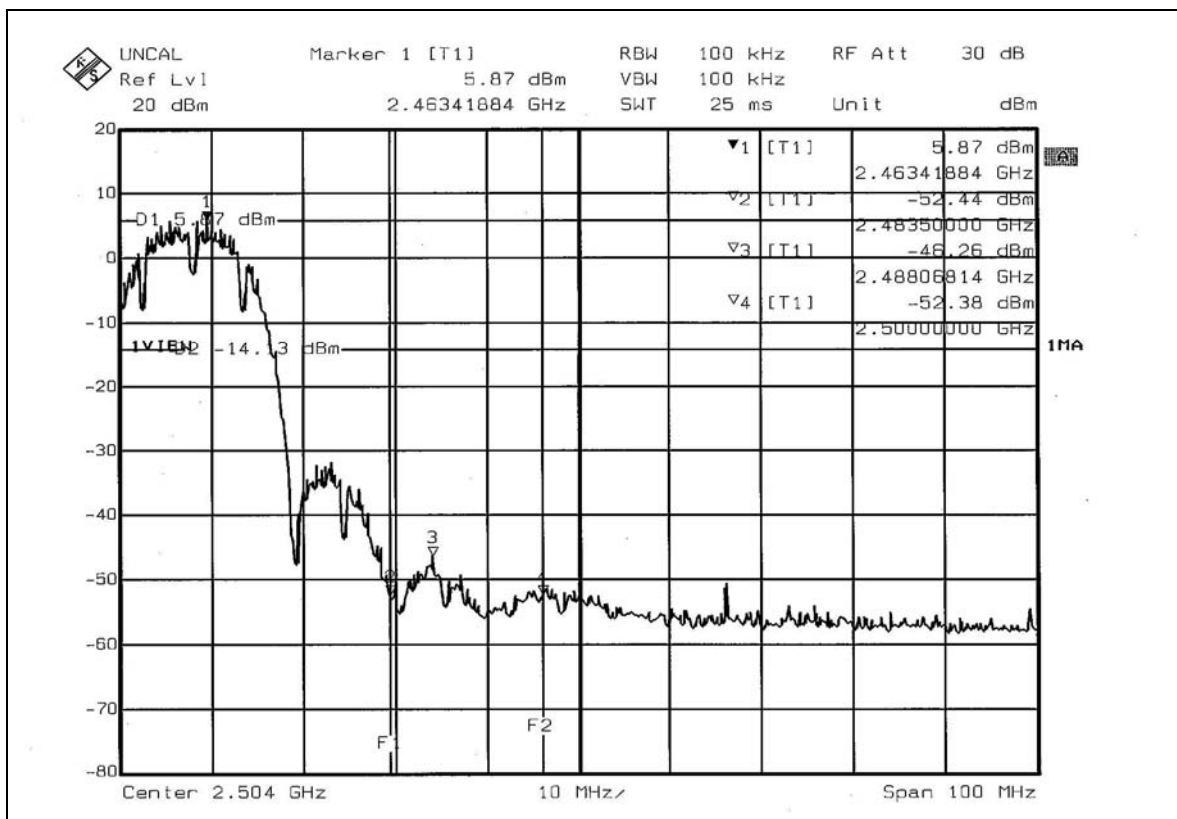
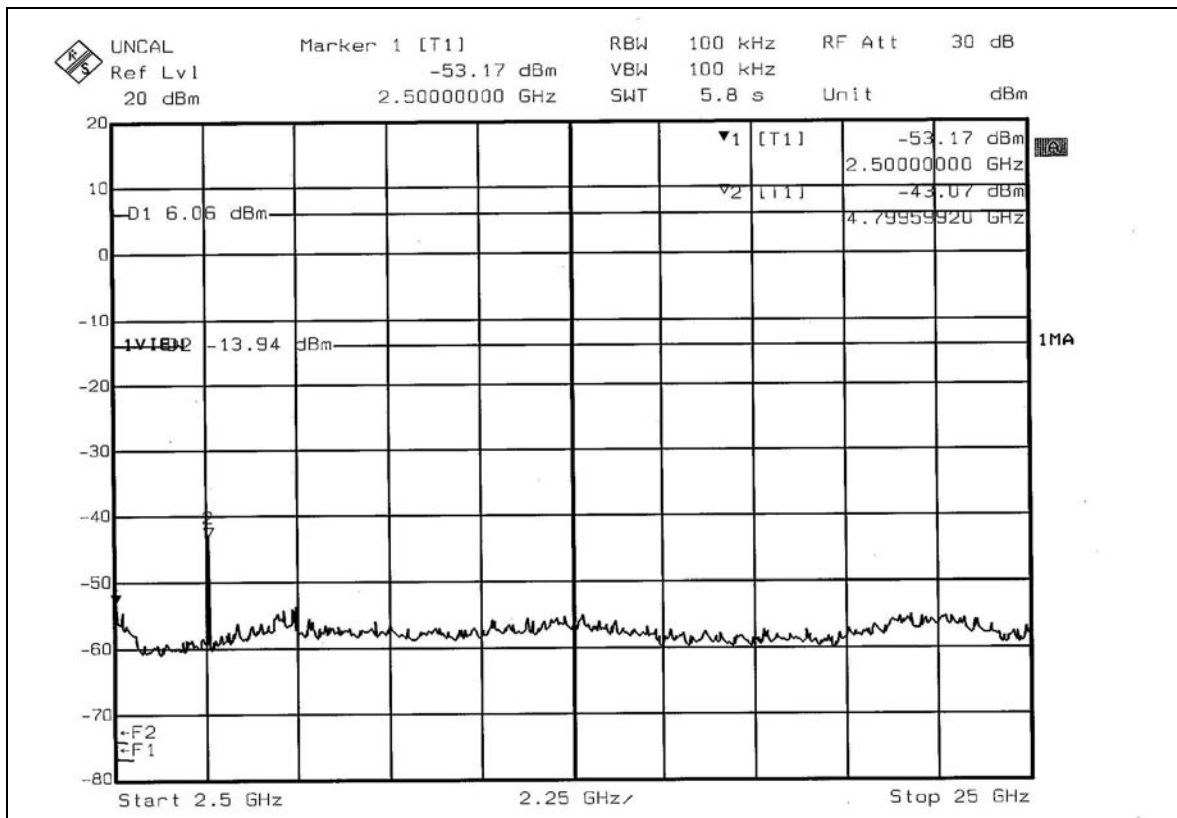
NOTE 1: The band edge emission plot on page 96 shows 47.18dBc between carrier maximum power and local maximum emission in restrict band (2.3602GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 106.47dBuV/m (Peak), so the maximum field strength in restrict band is $106.47 - 47.18 = 59.29$ dBuV/m which is under 74dBuV/m limit.

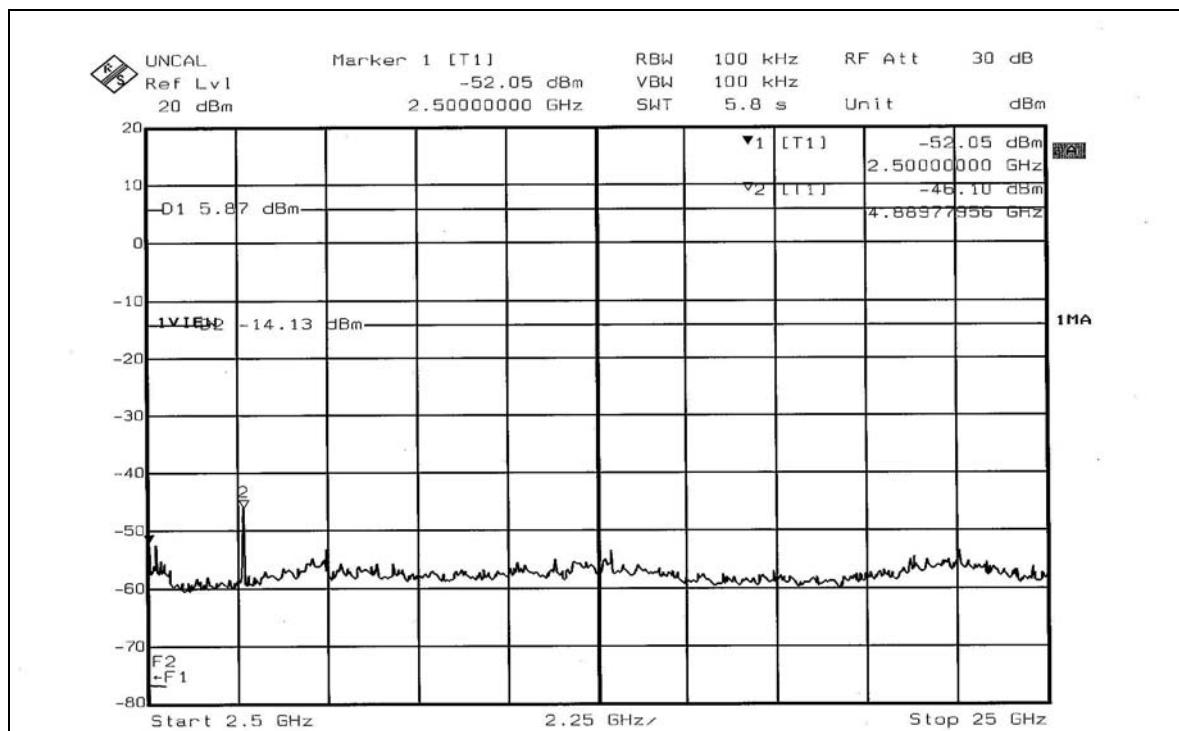
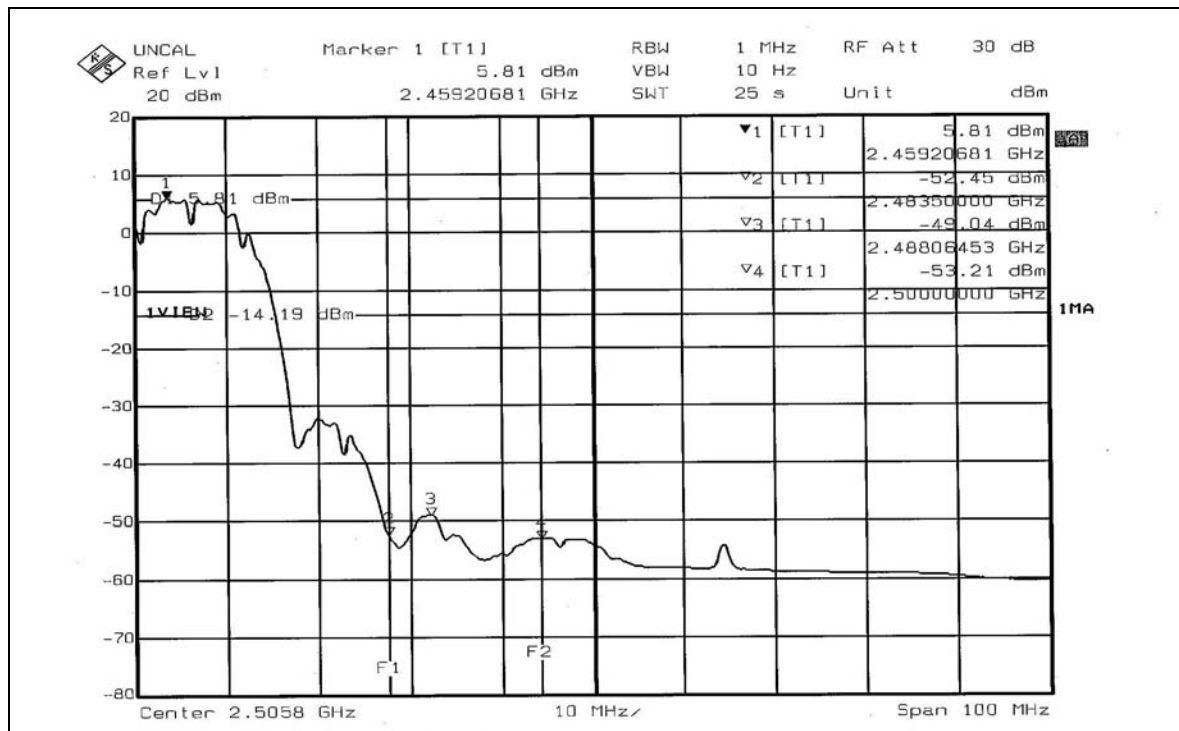
The band edge emission plot on page 96 shows 45.30dBc between carrier maximum power and local maximum emission in restrict band (2.3599GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 97.06dBuV/m (Average), so the maximum field strength in restrict band is $97.06 - 45.30 = 51.76$ dBuV/m which is under 54dBuV/m limit.

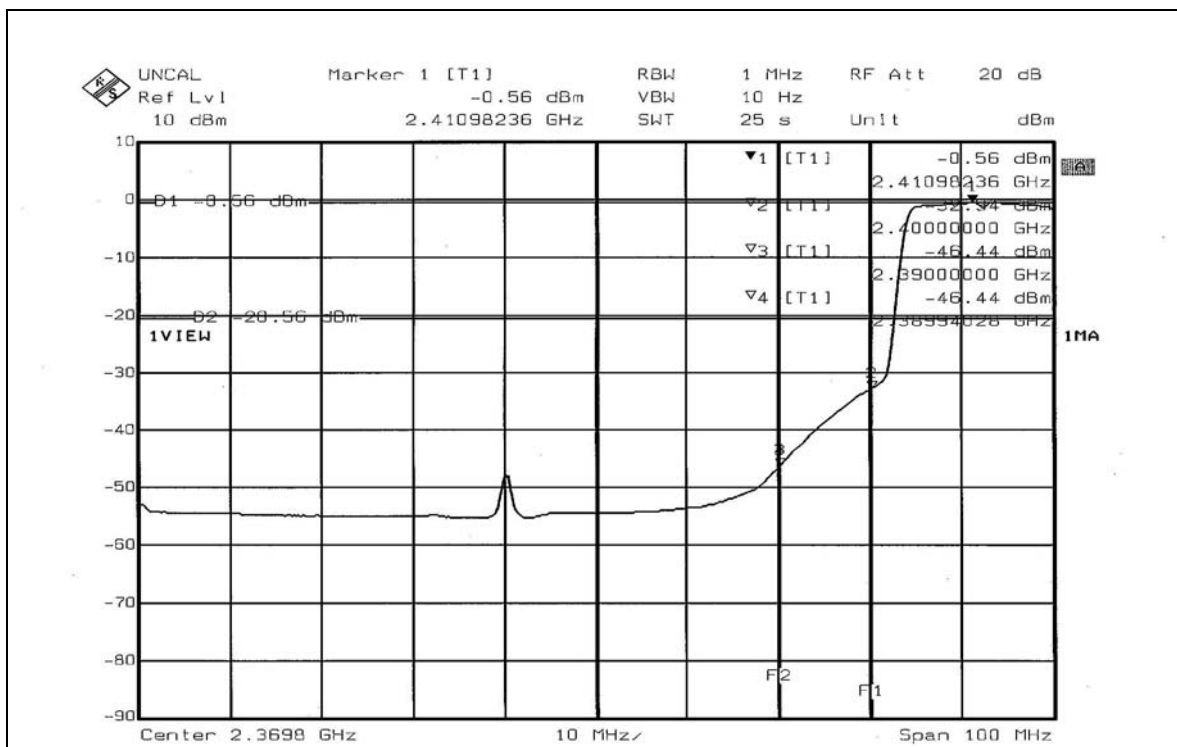
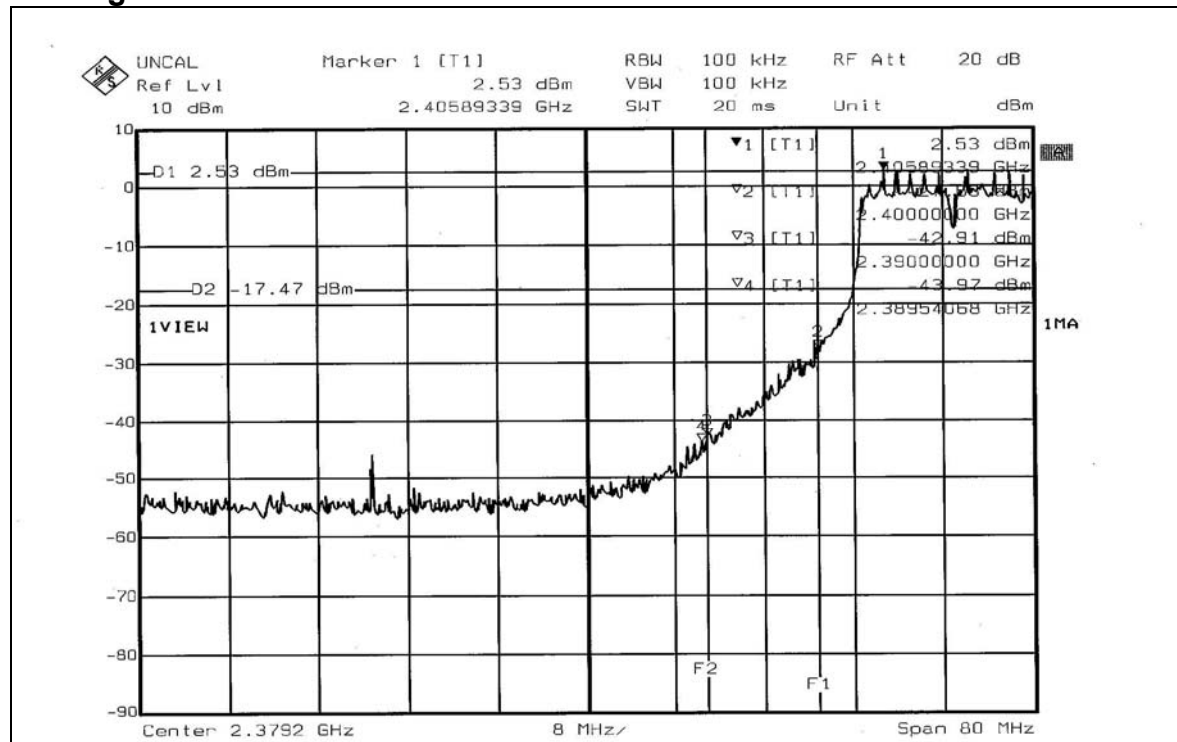
NOTE 2: The band edge emission plot on page 97 shows 50.19dBc between carrier maximum power and local maximum emission in restrict band (2.4842GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 106.47dBuV/m (Peak), so the maximum field strength in restrict band is $106.47 - 50.19 = 56.28$ dBuV/m which is under 74dBuV/m limit.

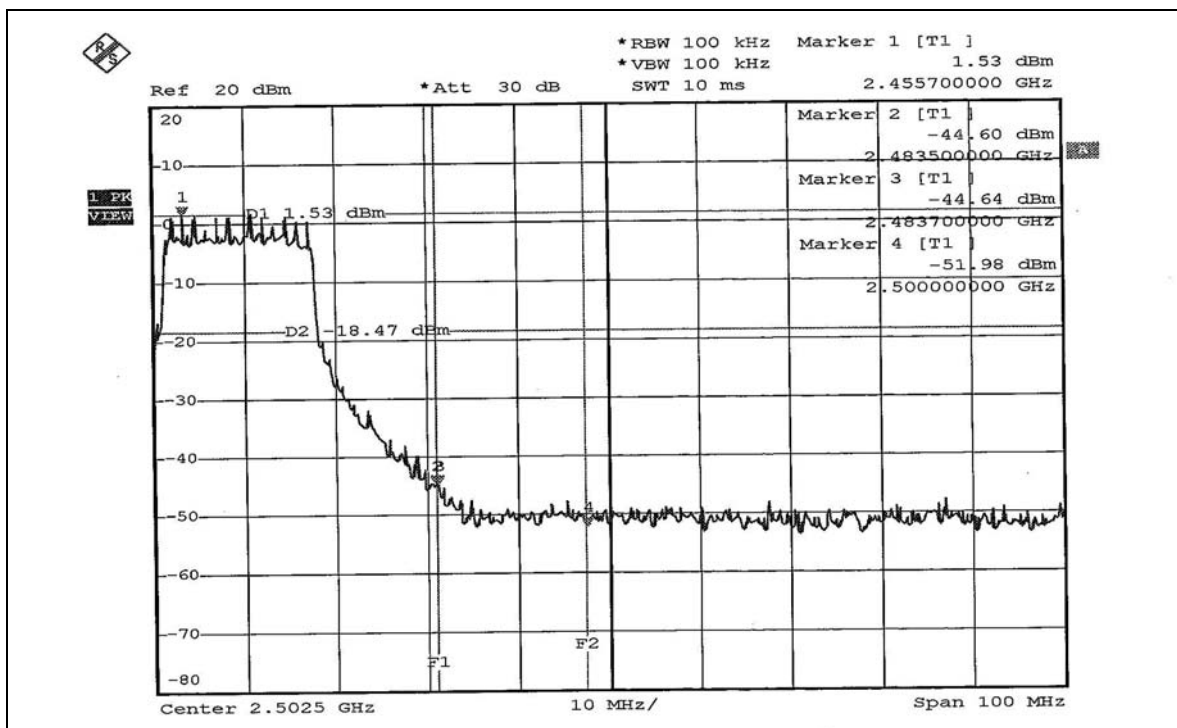
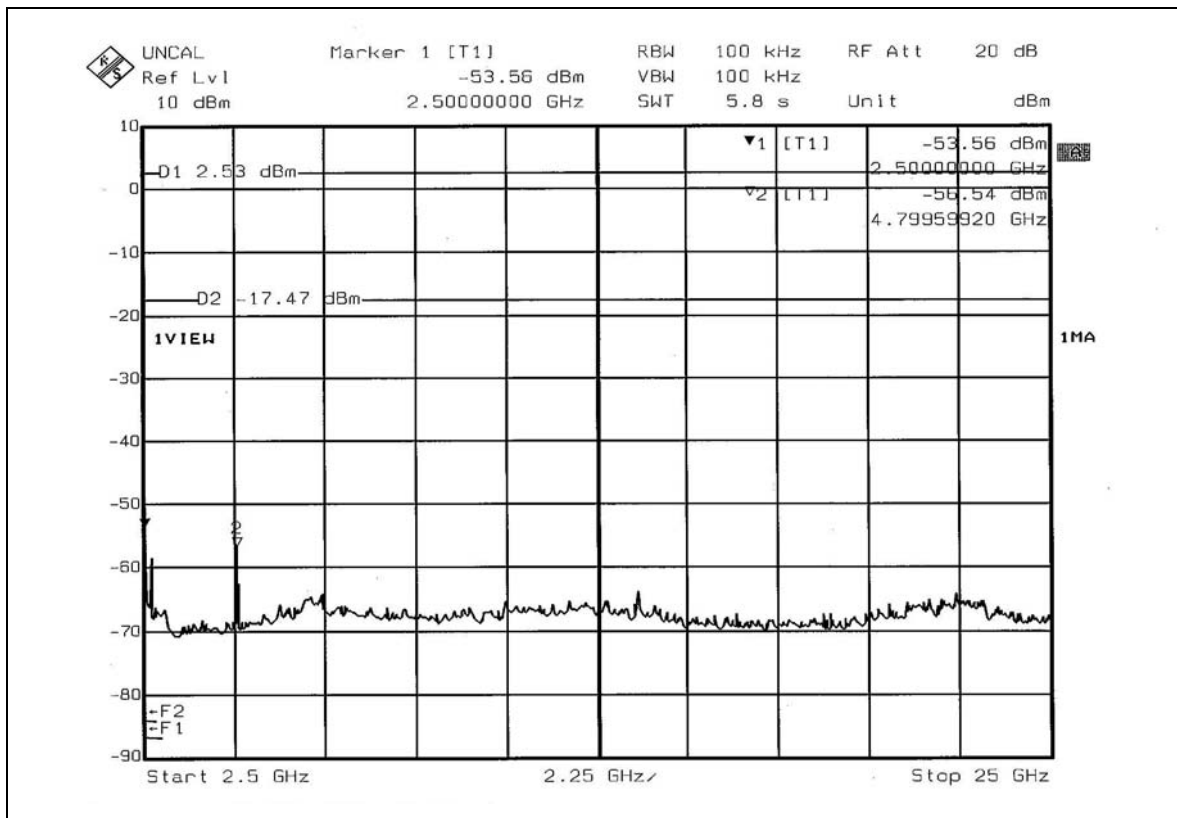
The band edge emission plot on page 98 shows 48.93dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 97.06dBuV/m (Average), so the maximum field strength in restrict band is $97.06 - 48.93 = 48.13$ dBuV/m which is under 54dBuV/m limit.

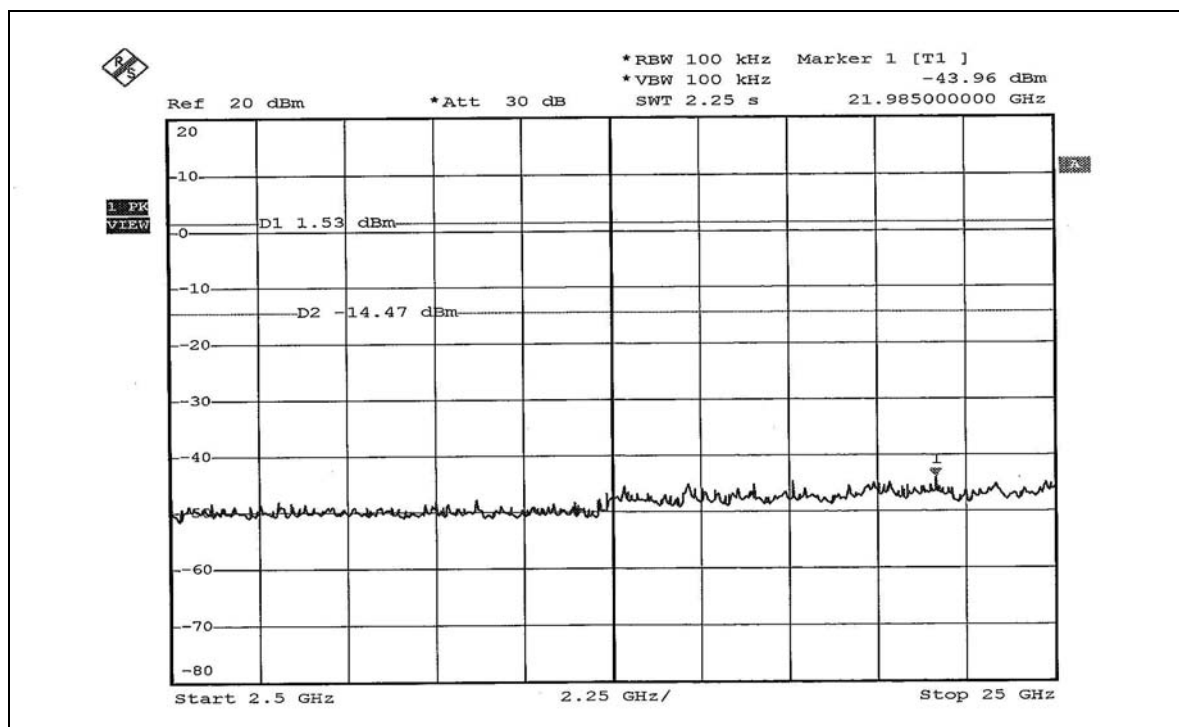
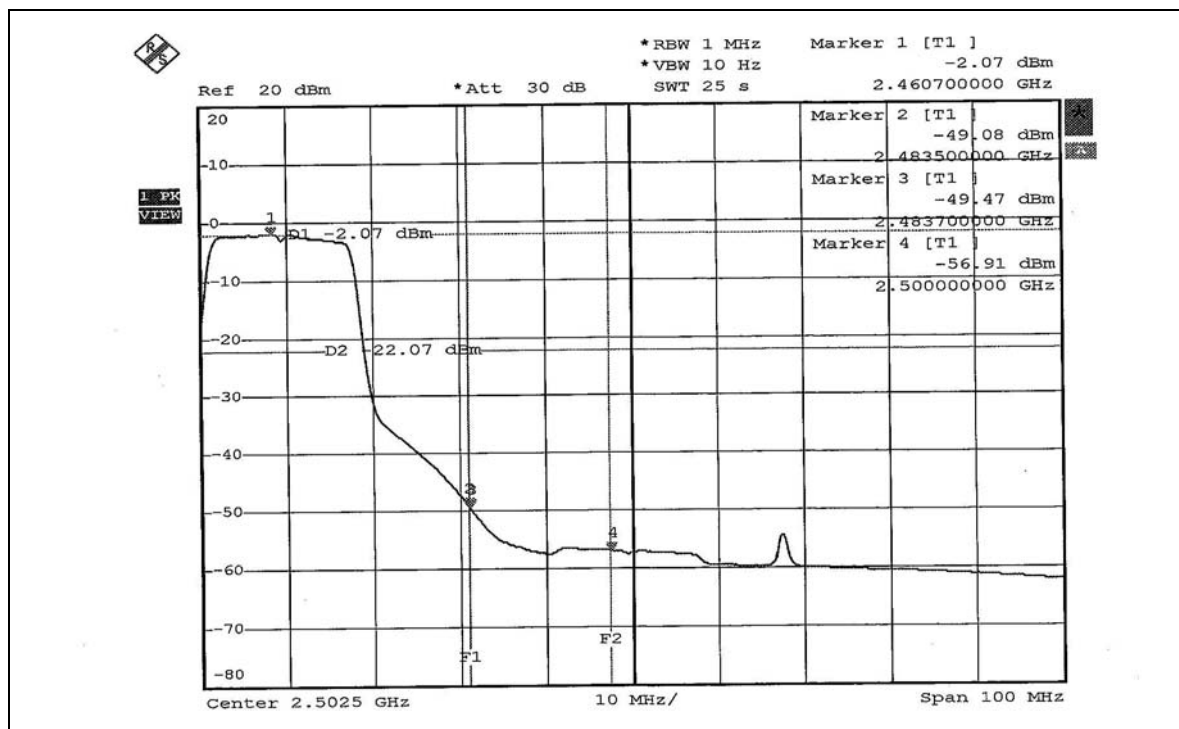
802.11b DSSS modulation





802.11g OFDM modulation





802.11g Turbo OFDM modulation

