

FCC TEST REPORT

REPORT NO.: RF911122R03

MODEL NO.: T700

(For other models please refer to page 7)

RECEIVED: Nov. 22, 2002

TESTED: Nov. 27 ~ Dec. 9, 2002

APPLICANT: First International Computer, Inc.

ADDRESS: 122, Nan-Lin Road, Taishan Hsiang, Taipei

Hsien, Taiwan, R.O.C.

ISSUED BY: Advance Data Technology Corporation

LAB LOCATION: 47 14th Lin, Chiapau Tsun, Linko, Taipei, Taiwan,

R.O.C.

This test report consists of 50 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, NVLAP or any government agencies. The test results in the report only apply to the tested sample.





Report No.: RF911122R03 1 Issued: December 13, 2002



Table of Contents

1	CERTIFICATIONSUMMARY OF TEST RESULTS	
2	GENERAL INFORMATION	
3.1	GENERAL DESCRIPTION OF EUT	
3.2	DESCRIPTION OF TEST MODES	7
3.3	GENERAL DESCRIPTION OF APPLIED STANDARDS	7
3.4	DESCRIPTION OF SUPPORT UNITS	7
4	TEST TYPES AND RESULTS	
4.1	CONDUCTED EMISSION MEASUREMENT	
4.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	
4.1.2	TEST INSTRUMENTS	
4.1.3	TEST PROCEDURES	
4.1.4	DEVIATION FROM TEST STANDARD	9
4.1.5	TEST SETUP	9
4.1.6	EUT OPERATING CONDITIONS	10
4.1.7	TEST RESULTS	11
4.2	RADIATED EMISSION MEASUREMENT	17
4.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT	17
4.2.2	TEST INSTRUMENTS	18
4.2.3	TEST PROCEDURES	19
4.2.4	DEVIATION FROM TEST STANDARD	
4.2.5	TEST SETUP	20
4.2.6	EUT OPERATING CONDITIONS	20
4.2.7	TEST RESULTS	21
4.3	6dB BANDWIDTH MEASUREMENT	26
4.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	26
4.3.2	TEST INSTRUMENTS	26
4.3.3	TEST PROCEDURE	27
4.3.4	DEVIATION FROM TEST STANDARD	27
4.3.5	TEST SETUP	27
4.3.6	EUT OPERATING CONDITIONS	27
4.3.7	TEST RESULTS	28
4.4	MAXIMUM PEAK OUTPUT POWER	32
4.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT	32
4.4.2	TEST INSTRUMENTS	32

FCC ID: EUN-T700



4.4.3	TEST PROCEDURES	33
4.4.4	DEVIATION FROM TEST STANDARD	33
4.4.5	TEST SETUP	33
4.4.6	EUT OPERATING CONDITIONS	33
4.4.7	TEST RESULTS	
4.5	POWER SPECTRAL DENSITY MEASUREMENT	35
4.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	35
4.5.2	TEST INSTRUMENTS	35
4.5.3	TEST PROCEDURE	36
4.5.4	DEVIATION FROM TEST STANDARD	
4.5.5	TEST SETUP	36
4.5.6	EUT OPERATING CONDITIONS	36
4.5.7	TEST RESULTS	37
4.6	BAND EDGES MEASUREMENT	41
4.6.1	LIMITS OF BAND EDGES MEASUREMENT	
4.6.2	TEST INSTRUMENTS	41
4.6.3	TEST PROCEDURE	41
4.6.4	DEVIATION FROM TEST STANDARD	41
4.6.5	EUT OPERATING CONDITION	42
4.6.6	TEST RESULTS	42
4.7	ANTENNA REQUIREMENT	45
4.7.1	STANDARD APPLICABLE	45
4.7.2	ANTENNA CONNECTED CONSTRUCTION	
5 6	PHOTOGRAPHS OF THE TEST CONFIGURATIONINFORMATION ON THE TESTING LABORATORIES	
•	THE PROPERTY OF THE PROPERTY O	00



Issued: December 13, 2002

1 CERTIFICATION

PRODUCT: Tablet PC

MODEL NO.: FIC

BRAND: T700

(For other models please refer to following table)

APPLICANT: First International Computer, Inc.

STANDARDS: 47 CFR Part 15, Subpart C (Section 15.247),

ANSI C63.4-1992

We, **Advance Data Technology Corporation**, hereby certify that one sample of the designation has been tested in our facility from Nov. 27 ~ Dec. 9, 2002, The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

CHECKED BY : Pen : Dec. 13, 2002

APPROVED BY: Wis Wy for DATE: Dec. 13, 2002

Dr. Alan Lane, Manager



2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR Part 15, Subpart C							
Standard Section	Test Type and Limit	Result	REMARK				
15.207	AC Power Conducted Emission Limit: 48dBuV	PASS	Meet the requirement of limit Minimum passing margin is –19.64dBuV at 17.75MHz				
Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz		PASS	Meet the requirement of limit				
15.247(b)	b) Maximum Peak Output Power Limit: max. 30dBm PASS Meet the		Meet the requirement of limit				
15.247(c)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is -3.00dBuV at 2088.00MHz				
15.247(d) Power Spectral Density Limit: max. 8dBm		PASS	Meet the requirement of limit				
Band Edge Measurement 15.247(c) Limit: 20 dB less than the peak value of fundamental frequency		PASS	Meet the requirement of limit				



3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Tablet PC			
MODEL NO.	T700 (For other models please refer to following table)			
POWER SUPPLY	19VDC from power adapter			
MODULATION TYPE	BPSK, QPSK, CCK			
RADIO TECHNOLOGY	DSSS			
TRANSFER RATE	1/2/5.5/11Mbps			
FREQUENCY RANGE	2412MHz ~ 2462MHz			
BANDWIDTH OF EACH CHANNEL	22MHz			
NUMBER OF CHANNEL	11			
OUTPUT POWER	12.96dBm			
ANTENNA TYPE	Inverted F Antenna			
DATA CABLE	1.8m (Non-shielded)			
I/O PORTS	NA			
ASSOCIATED DEVICES	NA			

NOTE:

1. There are six OEM models provided to this EUT. They are identical to each other except for their brand name and model number due to marketing requirement.

Model No.
T700
TPM10XX
T700
T700
T700
T700

3. This EUT was operated with the following power adapter:

Brand :	LITEON
Model No. :	PA-1600-02
Input power :	100-240V1.5A 50-60Hz
Output power :	19V3.16A

4. For more detailed features description, please refer to the manufacturer's specifications or User's Manual.



3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided to this EUT.

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		

NOTE:

- 1. Below 1 GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11, worst case one, was chosen for final test.
- 2. Above 1 GHz, the channel 1, 6, and 11 were tested individually.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Table PC. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 15, Subpart C. (15.247)

ANSI C63.4: 1992

All tests 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

NA



4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTE	ED LIMIT (dBµV)
	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. All emanations from a class 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
ROHDE & SCHWARZ Test Receiver	ESCS30	847793/022	Mar. 12, 2003
ROHDE & SCHWARZ Artificial Mains	ESH2-Z5	828075/003	Jul. 23, 2003
Network (for EUT)	E3H2-23	6260757005	Jul. 23, 2003
ROHDE & SCHWARZ 200-A Four-	ENV4200	830326/018	Oct. 30, 2003
line V-Network	ENV4200	630320/016	Oct. 30, 2003
* ROHDE & SCHWARZ	ENY41	838119/028	Nov. 29, 2003
4-wire ISN	ENT41	030119/020	NOV. 29, 2003
* ROHDE & SCHWARZ	ENY22	837497/018	Nov. 29, 2003
2-wire ISN	EN122	03/49//010	NOV. 29, 2003
EMCO-L.I.S.N. (for peripheral)	3825/2	90031627	Jul. 23, 2003
Software	Cond-V2L	NA	NA
RF cable (JYEBAO)	5D-FB	Cable-C05.01	Jul. 23, 2003
LYNICS Terminator (For EMCO	0000510	E1-01-305	Fab 20 2002
LISN)	0900510	E1-01-305	Feb. 20, 2003
LYNICS Terminator (For EMCO	0000510	E4 04 206	Fab 20 2002
LISN)	0900510	E1-01-306	Feb. 20, 2003
Shielded Room	Site 5	ADT-C05	NA
VCCI Site Registration No.	Site 5	C-1093	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. "*": These equipment are used for conducted telecom port test only (if tested).
- 3. The test was performed in ADT Open Site No. 5.



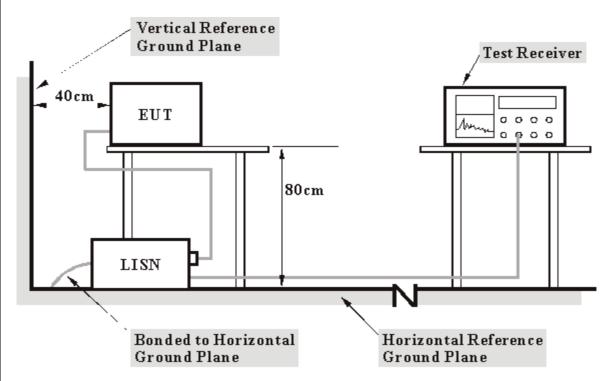
4.1.3 TEST PROCEDURES

- 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 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

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) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

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



4.1.6 EUT OPERATING CONDITIONS

a. The computer system ran a test program to enable EUT under transmission/receiving condition continuously at specific channel frequency.

b. The computer system sent "H" messages to color monitor.

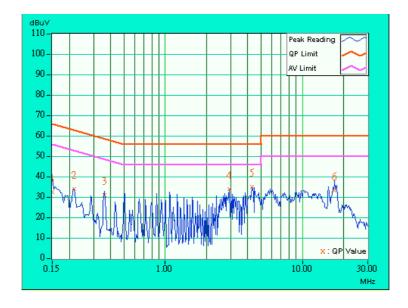


TEST RESULTS 4.1.7

EUT	Tablet PC	MODEL	T700
MODE Channel 1		6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE Line (L)	
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 1005 hPa	TESTED BY: Gary Chang	

No	Freq. Corr. Factor		Reading	_	Emission [dB (on Level (uV)]		mit (uV)]	Mar (dl	_
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	31.74	-	31.84	-	66.00	56.00	-34.16	-
2	0.216	0.10	33.16	1	33.26	-	62.96	52.96	-29.70	-
3	0.361	0.10	30.35	-	30.45	-	58.71	48.71	-28.26	-
4	2.949	0.29	33.17	ı	33.46	ı	56.00	46.00	-22.54	-
5	4.316	0.41	34.24	ı	34.65	1	56.00	46.00	-21.35	-
6	17.230	0.93	32.36	-	33.29	-	60.00	50.00	-26.71	-

- 1. QP. and AV. are abbreviations of quasi-peak and average individually.
- 2. "-": NA
- The emission levels of other frequencies were very low against the limit.
 Margin value = Emission level Limit value
 Emission Level = Reading Value + Correction Factor.

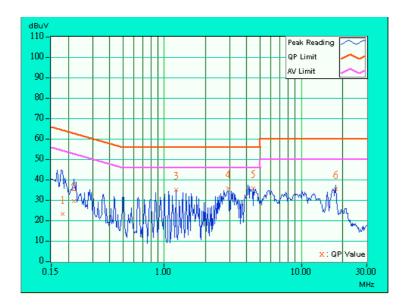




EUT	Tablet PC	MODEL	T700
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 1005 hPa	TESTED BY: Gary	Chang

No	Freq.	Corr. Factor	Reading			on Level (uV)]	Lir [dB (nit (uV)]	Mar (dl	•
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.10	22.51	-	22.61	1	64.43	54.43	-41.82	-
2	0.220	0.10	28.95	-	29.05	-	62.81	52.81	-33.76	-
3	1.223	0.20	34.45	-	34.65	ı	56.00	46.00	-21.35	-
4	2.949	0.25	35.16	-	35.41	1	56.00	46.00	-20.59	-
5	4.461	0.31	35.34	-	35.65	-	56.00	46.00	-20.35	-
6	17.758	0.67	34.89	-	35.56	-	60.00	50.00	-24.44	-

- QP. and AV. are abbreviations of quasi-peak and average individually.
 "-": NA
 The emission levels of other frequencies were very low against the limit.
 Margin value = Emission level Limit value
 Emission Level = Reading Value + Correction Factor.

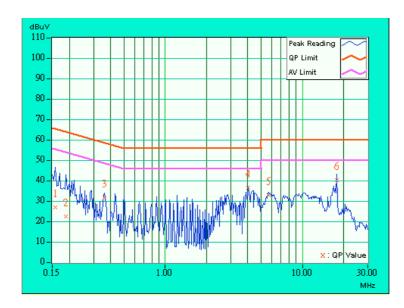




EUT	Tablet PC	MODEL	T700
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 1005 hPa	TESTED BY: Gary	Chang

No	Freq.	Corr. Factor	Reading	_	Emission [dB (nit (uV)]	Mar (dl	_
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.10	25.97	-	26.07	-	65.58	55.58	-39.51	-
2	0.189	0.10	21.79	-	21.89	-	64.08	54.08	-42.19	-
3	0.361	0.10	30.99	ı	31.09	-	58.71	48.71	-27.62	-
4	4.027	0.40	35.59	ı	35.99	1	56.00	46.00	-20.01	-
5	5.684	0.46	32.11	-	32.57	-	60.00	50.00	-27.43	-
6	17.754	0.97	39.39	ı	40.36	-	60.00	50.00	-19.64	-

- QP. and AV. are abbreviations of quasi-peak and average individually.
 "-": NA
- "-": NA
 The emission levels of other frequencies were very low against the limit.
 Margin value = Emission level Limit value
 Emission Level = Reading Value + Correction Factor.

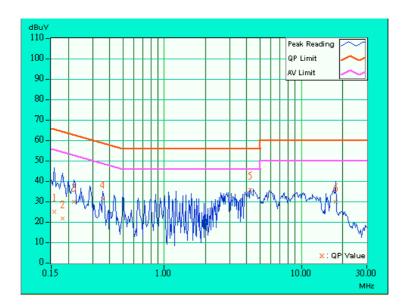




EUT	Tablet PC	MODEL	T700
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 1005 hPa	TESTED BY: Gary Cl	hang

No	Freq.	Corr. Factor	Reading			on Level (uV)]		nit (uV)]	Mar (dl	_
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.10	24.51	-	24.61	-	65.58	55.58	-40.97	-
2	0.181	0.10	21.33	-	21.43	-	64.43	54.43	-43.00	-
3	0.220	0.10	29.27	-	29.37	ı	62.81	52.81	-33.44	-
4	0.357	0.10	30.95	1	31.05	-	58.80	48.80	-27.75	-
5	4.242	0.30	35.13	-	35.43	-	56.00	46.00	-20.57	-
6	17.754	0.67	29.23	-	29.90	-	60.00	50.00	-30.10	-

- QP. and AV. are abbreviations of quasi-peak and average individually.
 "-": NA
 The emission levels of other frequencies were very low against the limit.
 Margin value = Emission level Limit value
 Emission Level = Reading Value + Correction Factor.

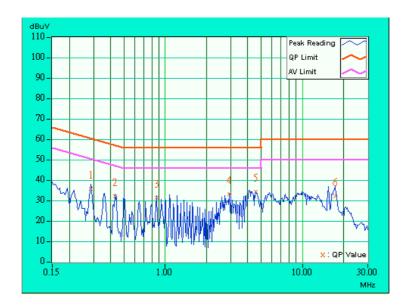




EUT	Tablet PC	MODEL	T700
MODE	Channel 11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE Line	
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 1005 hPa	TESTED BY: Gary	Chang

No	Freq.	Corr. Factor		g Value (uV)]	Emission [dB (on Level (uV)]		nit (uV)]	Mar (dl	_
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.287	0.10	34.94	-	35.04	-	60.62	50.62	-25.58	-
2	0.431	0.11	31.36	-	31.47	-	57.23	47.23	-25.76	-
3	0.861	0.18	30.66	-	30.84	ı	56.00	46.00	-25.16	-
4	2.949	0.29	32.52	-	32.81	-	56.00	46.00	-23.19	-
5	4.602	0.42	33.46	-	33.88	-	56.00	46.00	-22.12	-
6	17.285	0.94	31.37	-	32.31	-	60.00	50.00	-27.69	-

- QP. and AV. are abbreviations of quasi-peak and average individually.
 "-": NA
 The emission levels of other frequencies were very low against the limit.
 Margin value = Emission level Limit value
 Emission Level = Reading Value + Correction Factor.

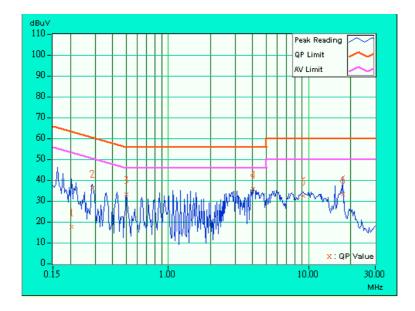




EUT	Tablet PC	MODEL	T700
MODE	Channel 11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 1005 hPa	TESTED BY: Gary	Chang

No	Freq.	Corr. Factor	Reading	_	Emission [dB (on Level (uV)]		nit (uV)]	Mar (dl	•
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.205	0.10	17.22	-	17.32	-	63.42	53.42	-46.10	-
2	0.287	0.10	35.49	-	35.59	-	60.62	50.62	-25.03	-
3	0.502	0.12	32.81	ı	32.93	ı	56.00	46.00	-23.07	-
4	4.023	0.30	35.41	1	35.71	-	56.00	46.00	-20.29	-
5	9.203	0.39	31.77	-	32.16	-	60.00	50.00	-27.84	-
6	17.625	0.66	32.53	ı	33.19	-	60.00	50.00	-26.81	-

- QP. and AV. are abbreviations of quasi-peak and average individually.
 "-": NA
 The emission levels of other frequencies were very low against the limit.
 Margin value = Emission level Limit value
 Emission Level = Reading Value + Correction Factor.





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

- 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		
* HP Spectrum Analyzer	8590L	3544A01176	May 13, 2003		
* HP Preamplifier	8447D	2944A08485	Apr. 29, 2003		
* HP Preamplifier	8449B	3008A01201	Dec. 01, 2003		
* HP Preamplifier	8449B	3008A01292	Aug. 07, 2003		
* ROHDE & SCHWARZ TEST	ESMI	839013/007	lon 27 2002		
RECEIVER	ESIVII	839379/002	Jan. 27, 2003		
SCHAFFNER Tunable Dipole					
Antenna	VHBA 9123	459	Nov. 22, 2003		
SCHWARZBECK Tunable Dipole	UHA 9105	977	NOV. 22, 2003		
Antenna					
ANTENNA (Large Biconical)	VHBA9123	449	Dec. 10, 2003		
* CHASE BILOG Antenna	CBL6112A	2221	Aug. 02, 2003		
* SCHWARZBECK Horn	BBHA9120-D1	D130	Jul. 03, 2003		
Antenna	ВВПАЭ120-D1	D130	Jul. 05, 2005		
* EMCO Horn Antenna	3115	9312-4192	Apr. 09, 2003		
* EMCO Turn Table	1060	1115	NA		
* SHOSHIN Tower	AP-4701	A6Y005	NA		
* Software	AS61D4	NA	NA		
* ANRITSU RF Switches	MP59B	M35046	Jan. 25, 2003		
* TIMES RF cable	LMR-600	CABLE-ST5-01	Jul. 12, 2003		
Open Field Test Site	Site 5	ADT-R05	Jul. 19, 2003		
VCCI Site Registration No.	Site 5	R-1039	NA		
	FCC: 90422				
Site Registration No.	Canada IC: IC 3789				
	VCCI: R-1039				

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. "*" = These equipment are used for the final measurement.
- 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 4. The test was performed in ADT Open Site No. 5.



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 10 meter open area test site. 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 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

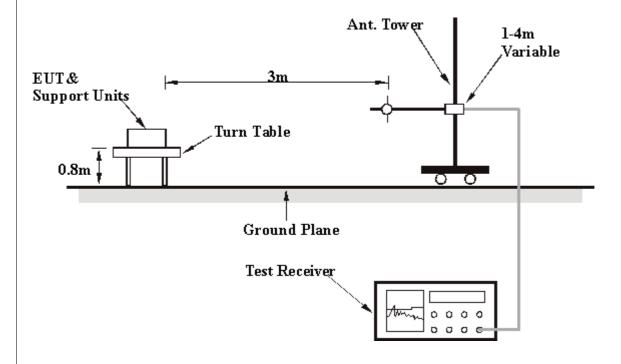
- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 300 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

EUT	Tablet PC	MODEL	T700	
MODE	Channel 11	FREQUENCY RANGE	Below 1000 MHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak	
ENVIRONMENTAL	25 deg. C, 60 % RH,	TESTED BY: Gary Chang		
CONDITIONS	1050 hPa			

	ANTENN	A POLARIT	Y & TES	ST DIST	ANCE: H	ORIZON	ITAL AT 3	S M
No.	Freq. (MHz)	Emission Level	Limit (dBuV/m)	Margin (dB)	Antenna Height	Table Angle	Raw Value	Correction Factor
	(IVII IZ)	(dBuV/m)	(aba viiii)	(GD)	(m)	(Degree)	(dBuV)	(dB/m)
1	155.00	11.2 QP	43.50	-32.30	1.22 H	324	-2.10	13.30
2	220.00	15.5 QP	46.00	-30.50	1.23 H	12	0.20	15.30
3	240.00	16.4 QP	46.00	-29.60	1.14 H	142	-1.00	17.40
4	260.00	21.5 QP	46.00	-24.50	1.53 H	260	1.70	19.80
5	266.00	19.5 QP	46.00	-26.50	1.51 H	125	0.00	19.50
6	280.60	19.5 QP	46.00	-26.50	1.42 H	152	0.00	19.50
7	396.40	21.6 QP	46.00	-24.40	1.63 H	132	-1.30	22.90
8	399.50	24.7 QP	46.00	-21.30	1.74 H	151	1.70	23.00
9	529.00	26.0 QP	46.00	-20.00	1.82 H	141	0.50	25.50
10	748.00	26.8 QP	46.00	-19.20	1.47 H	164	-2.50	29.30

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



EUT	Tablet PC	MODEL	T700	
MODE	Channel 11	FREQUENCY RANGE	Below 1000 MHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak	
ENVIRONMENTAL	25 deg. C, 60 % RH,	TESTED BY: Gary Chang		
CONDITIONS	1050 hPa			

	ANTEN	NA POLAR	ITY & TE	ST DIS	TANCE:	VERTIC	AL AT 3 N	Л
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	50.50	8.9 QP	40.00	-31.10	1.15 V	285	-2.50	11.40
2	132.00	11.0 QP	43.50	-32.50	1.03 V	331	-3.70	14.70
3	159.50	11.9 QP	43.50	-31.60	1.18 V	154	-1.00	12.90
4	220.00	13.6 QP	46.00	-32.40	1.04 V	255	-1.70	15.30
5	240.00	17.7 QP	46.00	-28.30	1.04 V	66	0.30	17.40
6	260.00	24.5 QP	46.00	-21.50	1.13 V	158	4.70	19.80
7	299.50	22.6 QP	46.00	-23.40	1.10 V	50	2.70	19.90
8	396.00	22.9 QP	46.00	-23.10	1.22 V	72	0.00	22.90
9	398.50	26.3 QP	46.00	-19.70	1.59 V	322	3.30	23.00
10	531.63	32.2 QP	46.00	-13.80	1.08 V	155	6.70	25.50
11	590.00	31.8 QP	46.00	-14.20	1.10 V	152	4.70	27.10
12	875.00	34.8 QP	46.00	-11.20	1.73 V	232	3.50	31.30

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



EUT	Tablet PC	MODEL	T700	
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang		

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq.	Emission Level	Limit	Margin	Antenna Height	Table Angle	Raw Value	Correction Factor	
140.	(MHz)	(MHz) $(dBuV/m)$ $(dBuV/m)$ $(dB$	(dB)	(m)	(Degree)	(dBuV)	(dB/m)		
1	2038.00	50.3 PK	74.00	-23.70	1.00 H	199	23.50	26.70	
1	2038.00	49.1 AV	54.00	-4.90	1.00 H	199	22.40	26.70	
2	*2412.00	106.2 PK			1.00 H	203	76.50	29.70	
2	*2412.00	99.2 AV			1.00 H	203	69.50	29.70	
3	4076.00	44.1 PK	74.00	-29.90	1.02 H	22	10.30	33.80	
4	4824.00	47.6 PK	74.00	-26.40	1.28 H	125	12.20	35.40	

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction	
No.	•	Level	(dBuV/m)	_	Height	Angle	Value	Factor	
(MHz)	(dBuV/m)	(ubuv/iii)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)		
1	2038.00	47.9 PK	74.00	-26.10	1.00 V	308	21.20	26.70	
2	2363.00	40.7 PK	74.00	-33.30	1.32 V	82	11.40	29.30	
3	*2412.00	100.7 PK			1.08 V	82	71.00	29.70	
3	*2412.00	93.7 AV			1.08 V	82	64.00	26.70	
4	4076.00	46.1 PK	74.00	-27.90	1.08 V	0	12.30	33.80	
5	4824.00	46.6 PK	74.00	-27.40	1.25 V	128	11.20	35.40	
6	8151.00	51.6 PK	74.00	-22.40	1.28 V	44	9.10	42.50	
6	8151.00	43.2 AV	54.00	-10.80	1.28 V	44	0.70	29.30	

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



EUT	Tablet PC	MODEL	T700	
MODE	Channel 6	FREQUENCY RANGE	Above 1000 MHz	
INPUT POWER	120Vac, 60 Hz	DETECTOR	Peak(PK)	
(SYSTEM)	120 vao, 00 i iz	FUNCTION	Average (AV)	
ENVIRONMENTAL	25 deg. C, 60 % RH,	TESTED BY: Gary Chang		
CONDITIONS	1050 hPa			

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	No. Freq.	Emission Level	Limit	Margin	Antenna Height	Table Angle	Raw Value	Correction Factor	
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)		
1	2063.00	51.5 PK	74.00	-22.50	1.05 H	222	24.50	26.90	
1	2063.00	49.9 AV	54.00	-4.10	1.05 H	222	23.00	26.90	
2	*2437.00	103.9 PK			1.08 H	288	74.00	29.90	
2	*2437.00	97.3 AV			1.08 H	288	67.40	29.90	
3	4126.00	46.4 PK	74.00	-27.60	1.78 H	65	12.50	33.90	
4	4874.00	46.5 PK	74.00	-27.50	1.56 H	224	11.00	35.50	

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
No.	Freq.	Emission Level	Limit	Margin	Antenna Height	Table Angle	Raw Value	Correction Factor		
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)			
1	2063.00	55.0 PK	74.00	-19.00	1.25 V	154	28.10	26.90		
1	2063.00	46.0 AV	54.00	-8.00	1.25 V	154	19.10	26.90		
2	*2437.00	101.1 PK			1.28 V	117	71.20	29.90		
2	*2437.00	94.9 AV			1.28 V	117	65.00	29.90		
3	4126.00	50.0 PK	74.00	-24.00	1.54 V	132	16.10	33.90		
3	4126.00	42.0 AV	54.00	-12.00	1.54 V	132	8.10	33.90		
4	4874.00	47.0 PK	74.00	-27.00	1.36 V	144	11.50	35.50		

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



EUT	Tablet PC	MODEL	T700	
MODE	Channel 11	FREQUENCY	Above 1000 MHz	
WODL		RANGE	Above 1000 MHz	
INPUT POWER	120Vac, 60 Hz	DETECTOR	Peak(PK)	
(SYSTEM)	120 vac, 00 112	FUNCTION	Average (AV)	
ENVIRONMENTAL	25 deg. C, 60 % RH,	TESTED BY: Gary Chang		
CONDITIONS	1050 hPa			

	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	2088.00	52.3 PK	74.00	-21.70	1.24 H	232	25.20	27.10	
1	2088.00	51.0 AV	54.00	-3.00	1.24 H	232	23.90	27.10	
2	*2463.00	106.2 PK			1.00 H	190	76.10	30.10	
2	*2463.00	99.0 AV			1.00 H	190	68.90	30.10	
3	2492.00	45.2 PK	74.00	-28.80	1.22 H	254	14.90	30.40	
4	4176.00	45.5 PK	74.00	-28.50	1.19 H	312	11.50	34.10	
5	4924.00	48.3 PK	74.00	-25.70	1.53 H	55	12.70	35.60	

	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	2088.00	51.5 PK	74.00	-22.50	1.14 V	351	24.40	27.10
1	2088.00	49.8 AV	54.00	-4.20	1.14 V	351	22.70	27.10
2	*2463.00	100.1 PK			1.01 V	188	70.00	30.10
2	*2463.00	94.0 AV			1.01 V	188	63.90	30.10
3	2491.00	43.2 PK	74.00	-30.80	1.38 V	75	12.90	30.30
4	4176.00	47.8 PK	74.00	-26.20	1.08 V	75	13.80	34.10
5	4924.00	47.3 PK	74.00	-26.70	1.46 V	135	11.70	35.60

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



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	July 24, 2003	

NOTE:

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



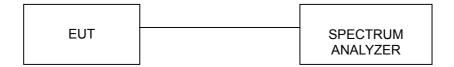
4.3.3 TEST PROCEDURE

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 100 kHz VBW. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.

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

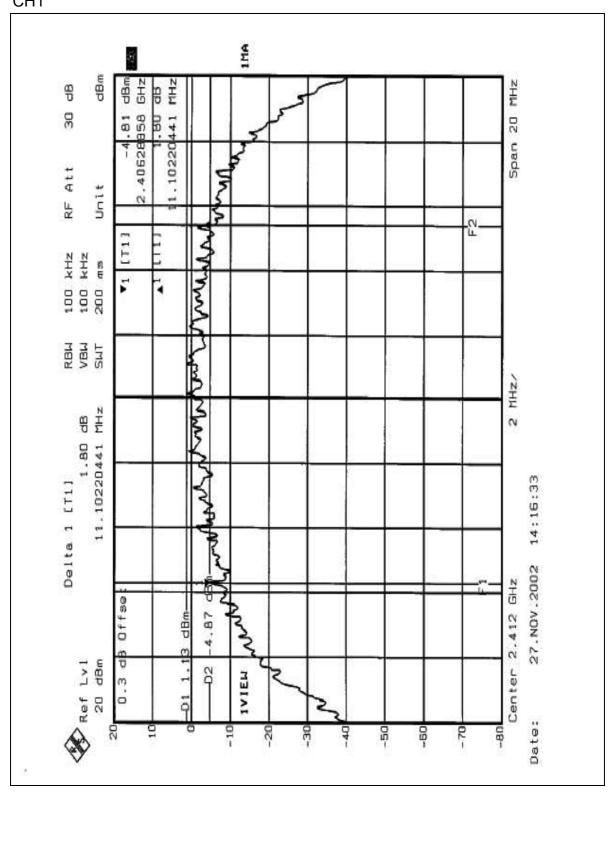
EUT	Tablet PC	MODEL	T700
INPUT POWER	120\/ac_60 Hz	ENVIRONMENTAL	19 deg. C, 56 %RH,
(SYSTEM)	120Vac, 60 Hz	CONDITIONS	1005 hPa

TESTED BY: Hardaway Lee

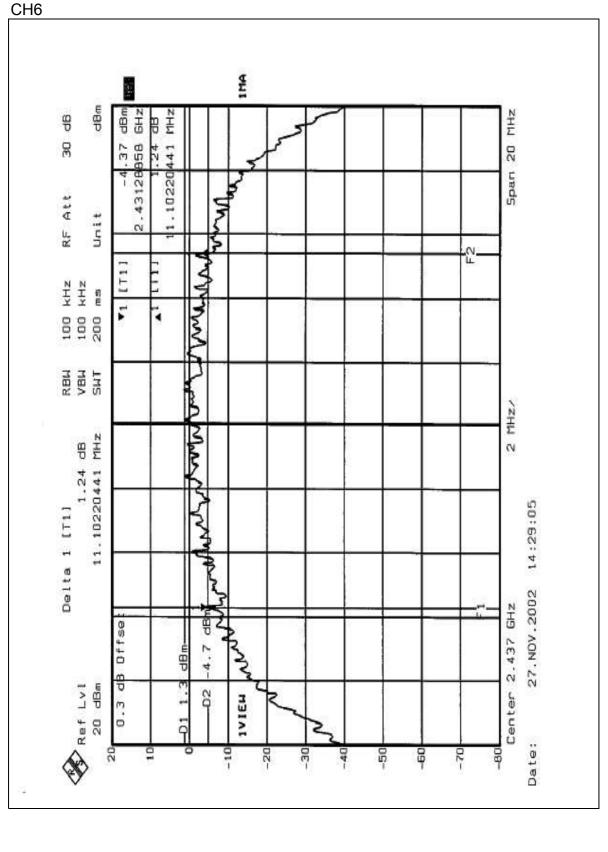
CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.10	0.5	PASS
6	2437	11.10	0.5	PASS
11	2462	11.10	0.5	PASS



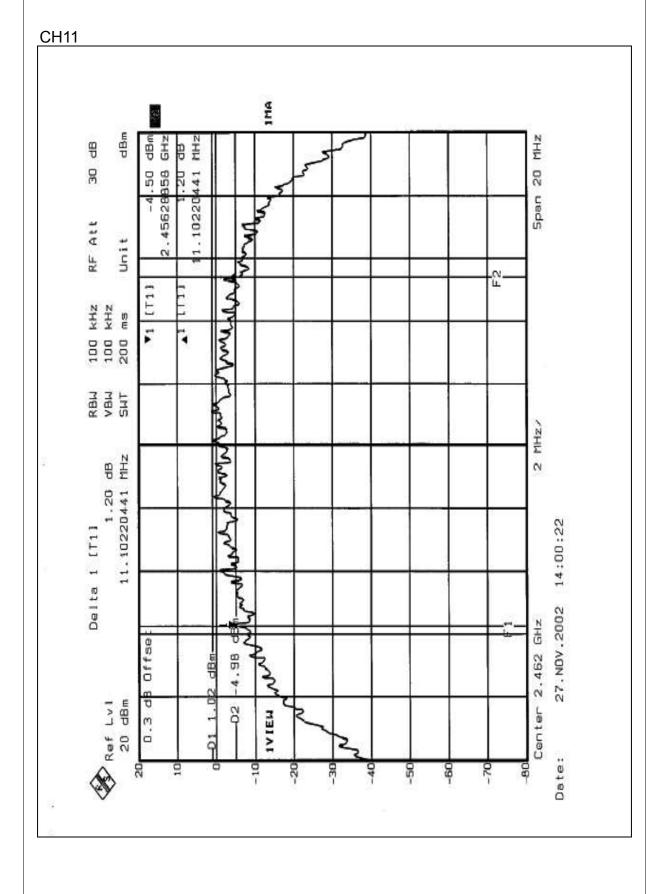
CH1













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
POWER METER	E4416A	GB41291118	Jul. 30, 2003
PEAK POWER SENSOR	E9327A	US40440722	Jul. 30, 2003

NOTE:

1. 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

The transmitter output was connected to the peak power meter.

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

EUT	Tablet PC	MODEL	T700
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL	19 deg. C, 56 %RH,
(SYSTEM)		CONDITIONS	1005 hPa

TESTED BY: Hardaway Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	12.90	30	PASS
6	2437	12.89	30	PASS
11	2462	12.96	30	PASS



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	July 24, 2003

NOTE:

1. 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 3 kHz RBW and 30 kHz 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

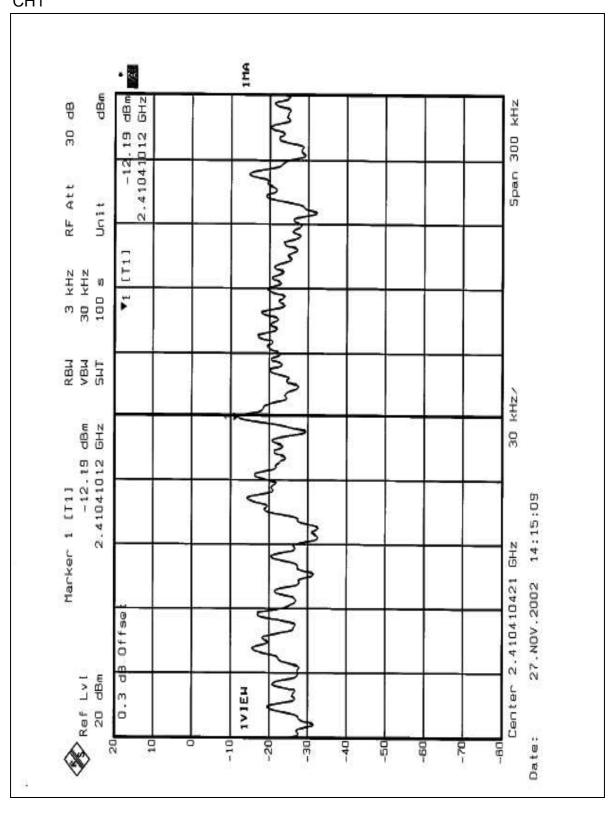
EUT	Tablet PC	MODEL	T700
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL	19 deg. C, 56 %RH,
		CONDITIONS	1005 hPa

TESTED BY: Hardaway Lee

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-12.19	8	PASS
6	2437	-11.82	8	PASS
11	2462	-11.62	8	PASS

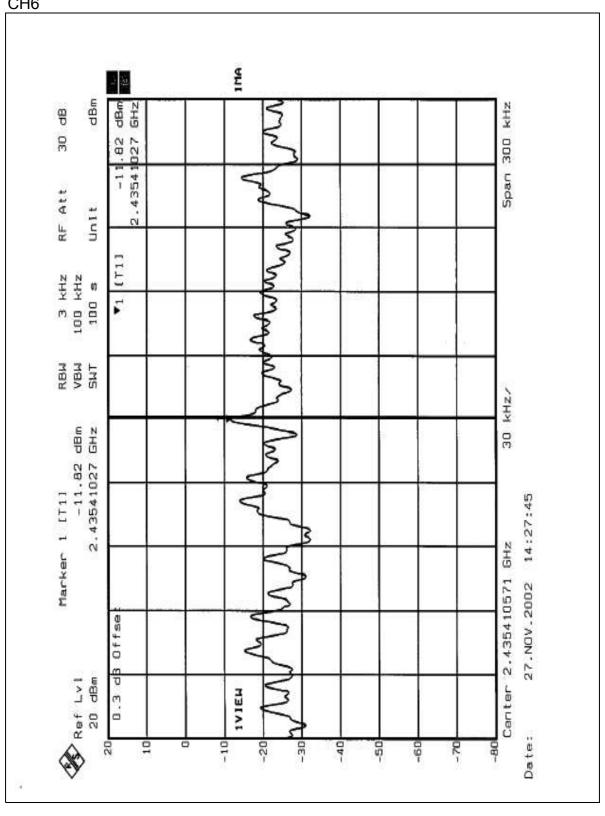


CH1



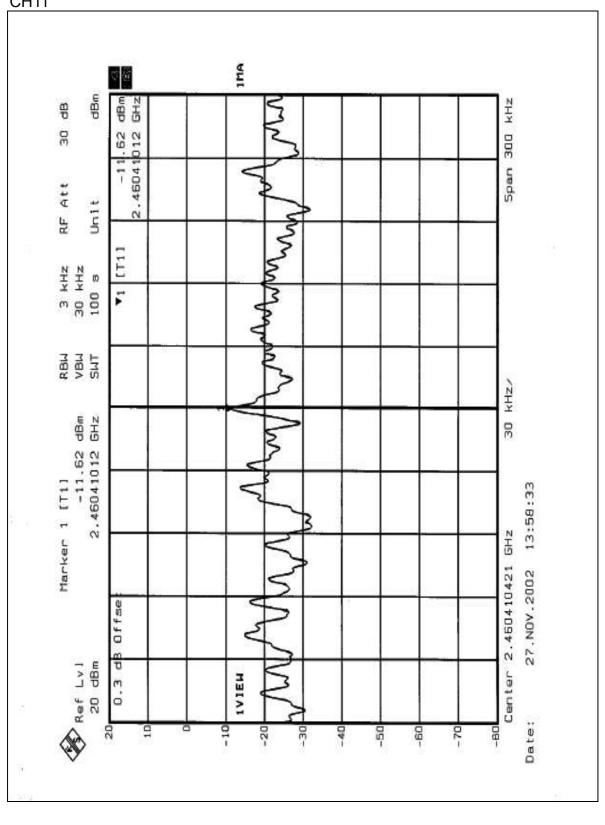


CH6





CH11





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	July 24, 2003

NOTE:

4.6.3 TEST PROCEDURE

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

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

^{1.} The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6

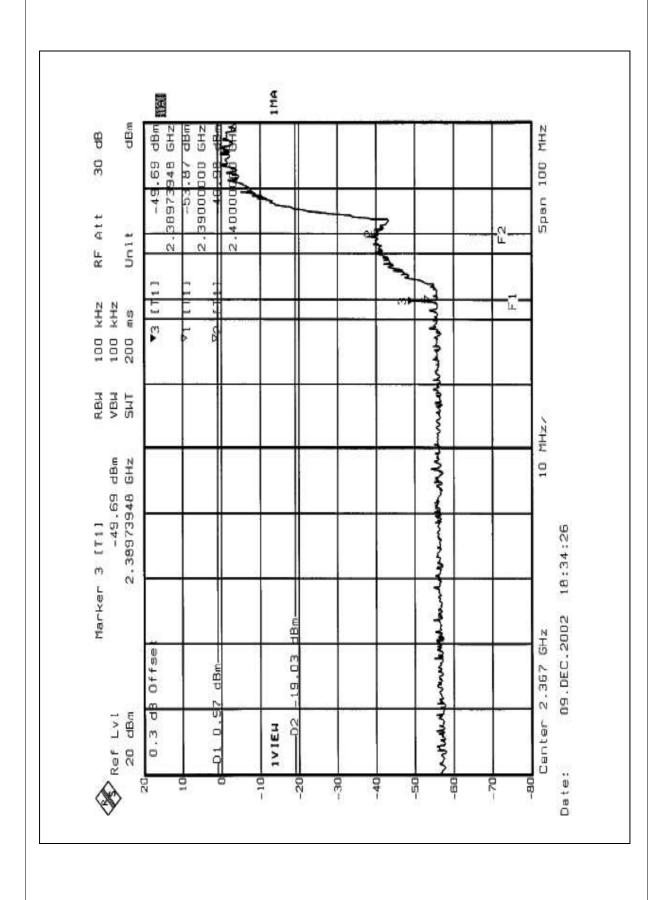
4.6.6 TEST RESULTS

The spectrum plots are attached on the following 2 pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

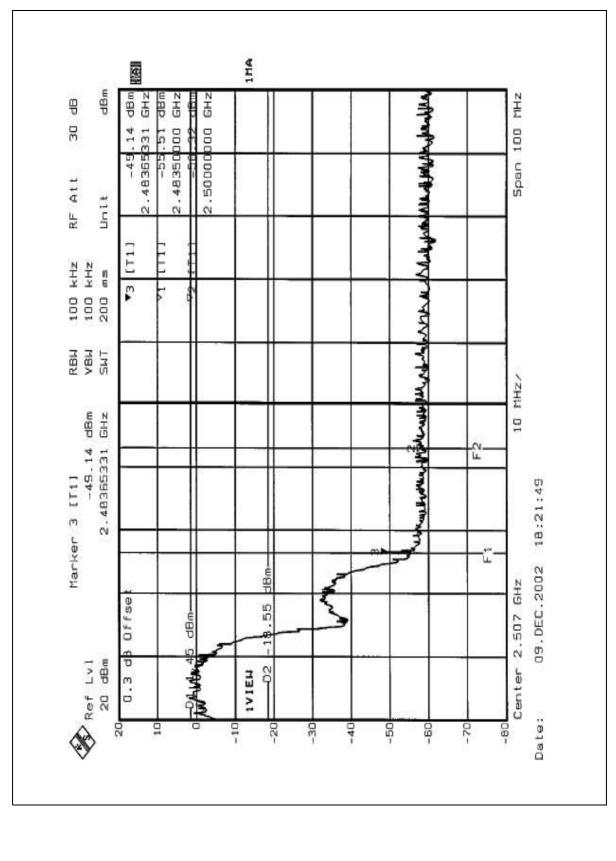
NOTE1: The band edge emission plot on the following first page shows 50.66dB delta between carrier maximum power and local maximum emission in restrict band (2.3897GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.6 (page 23) is 99.2dBuV/m, so the maximum field strength in restrict band is 99.2-50.66=48.54dBuV/m which is under 54 dBuV/m limit.

NOTE2: The band edge emission plot on the following second page shows 50.59dB delta between carrier maximum power and local maximum emission in restrict band (2.4836GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.6 (page 25) is 99.0dBuV/m, so the maximum field strength in restrict band is 99.0-50.59=48.41dBuV/m which is under 54 dBuV/m limit.











4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

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

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

4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product is Inverted F with UFL connector. And the maximum Gain of this antenna is only -1dBi.



5 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST











RADIATED EMISSION TEST











6 INFORMATION ON THE TESTING LABORATORIES

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

USA FCC, NVLAP TUV Rheinland

Japan VCCI
New Zealand MoC
Norway NEMKO

R.O.C. BSMI, DGT, CNLA

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml.

If you have any comments, please feel free to contact us at the following:

 Lin Kou EMC Lab:
 Hsin Chu EMC Lab:

 Tel: 886-2-26052180
 Tel: 886-35-935343

 Fax: 886-2-26052943
 Fax: 886-35-935342

Lin Kou Safety Lab: Lin Kou RF&Telecom Lab

Tel: 886-2-26093195 Tel: 886-3-3270910 Fax: 886-2-26093184 Fax: 886-3-3270892

Email: service@mail.adt.com.tw
Web Site: www.adt.com.tw

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