



FCC TEST REPORT

REPORT NO.: RF930903L05

MODEL NO.: F5D7011

RECEIVED: Aug. 20, 2004

TESTED: Aug. 20 ~ Sep. 29, 2004

APPLICANT: Belkin Corporation

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U.S.A.

ISSUED BY: Advance Data Technology Corporation

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R.O.C.

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NO. 2177-01



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ILAC MRA

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1 CERTIFICATION

PRODUCT : Wireless PCMCIA Card
MODEL NO. : F5D7011
BRAND : BELKIN
APPLICANT : Belkin Corporation
TESTED : Aug. 20 ~ Sep. 29, 2004
TEST SAMPLE : ENGINEERING SAMPLE
STANDARDS : FCC Part 15, Subpart C (Section 15.247),
ANSI C63.4-2001

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 : Windy Chou , **DATE:** Oct. 01, 2004
(Windy Chou)

TECHNICAL
ACCEPTANCE : Gary Chang , **DATE:** Oct. 01, 2004
Responsible for RF (Gary Chang)

APPROVED BY : Cody Chang , **DATE:** Oct. 01, 2004
(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 -13.65dB at 0.170MHz.
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(c)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -2.28dB at 4824.00MHz.
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(c)	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	9k~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.63 dB
	200MHz ~1000MHz	3.65 dB
	1GHz ~ 18GHz	2.20 dB
	18GHz ~ 40GHz	1.88 dB

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless PCMCIA Card
MODEL NO.	F5D7011
POWER SUPPLY	3.3Vdc from host equipment
MODULATION	BPSK, QPSK, CCK, 16QAM, 64QAM
RADIO TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
CHANNEL SPACING	5MHz
NUMBER OF CHANNEL	11
MAXIMUM OUTPUT POWER	51.29mW
ANTENNA TYPE	Printed with 2.21dBi gain for right antenna Printed with 1.69dBi gain for left antenna
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. There are 2 pre-amplifiers provided to the EUT as below.

PA	Model	Brand
1	SE2521A	Sige
2	SKY65206	Skywork

2. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps.
3. The EUT complies with IEEE 802.11g standards and backwards compatible with IEEE 802.11b products.
4. 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

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. From our experience and technical viewpoint, we have chosen data rates 11Mbps for CCK technique and 6Mbps for OFDM technique, as the worst cases for the test among other data rates.
4. For Radiated Emission Test, there are two test modes present in following sections. The test mode 1 is for PA1: SE2521A and the test mode 2 is for PA2: SKY65206.
5. There are two test results presented in the following sections: The test result A was for CCK technique and the test result B was for OFDM technique.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Wireless PCMCIA Card. 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 C63.4-2001

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

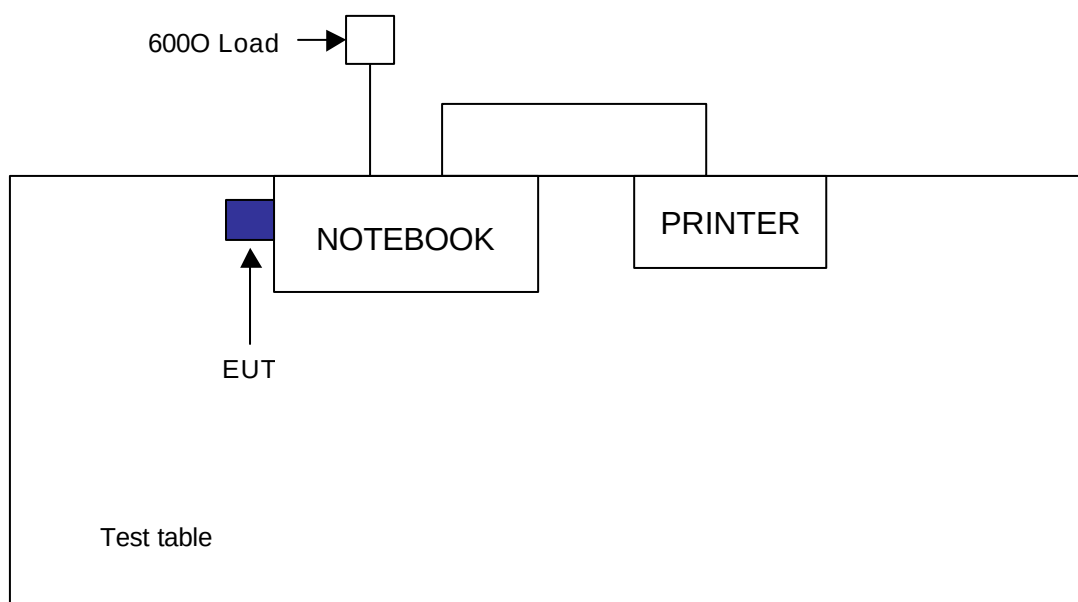
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	Compaq	N800C	470048-515	FCC DoC Approved
2	PRINTER	EPSON	LQ-300+	DCGY047265	FCC DoC Approved
3	6000 Load	NA	NA	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	1.2m shielded cable without core
3	NA

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

3.5 CONFIGURATION OF SYSTEM UNDER TEST



4 TEST TYPES AND RESULTS

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	Dec. 12, 2004
RF signal cable Woken	5D-FB	Cable-HYC01-01	Mar. 02, 2005
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Mar. 03, 2005
LISN ROHDE & SCHWARZ	ESH2-Z5	100104	Mar. 02, 2005
Software ADT	ADT_Conc_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.



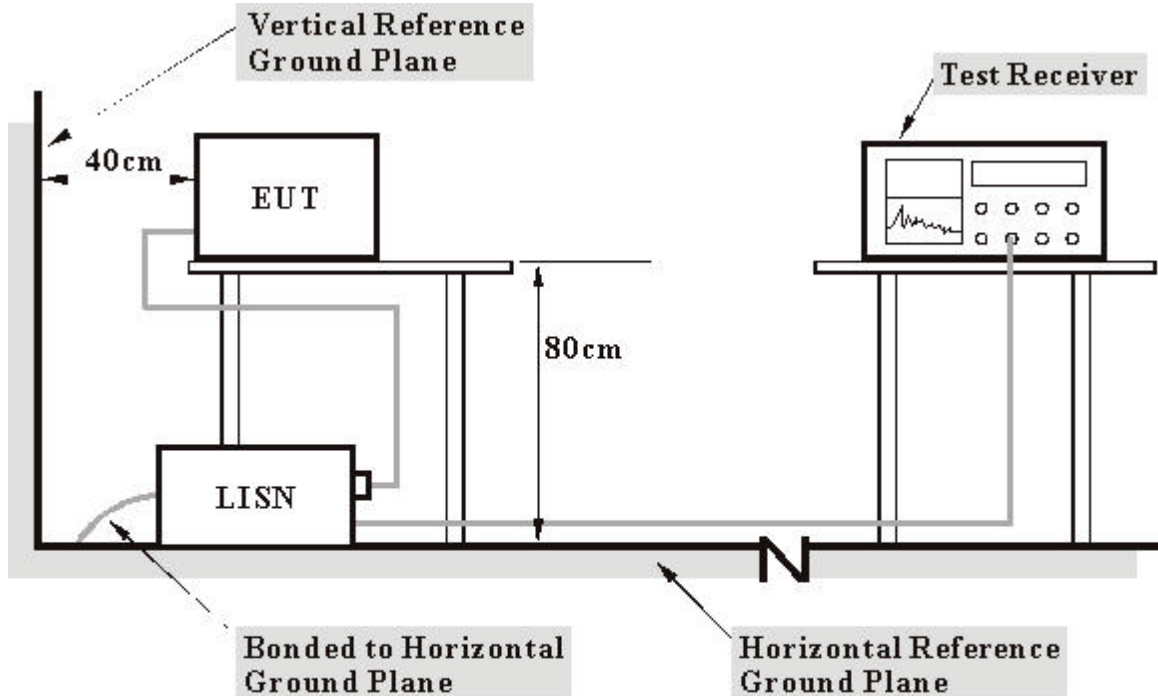
4.1.3 TEST PROCEDURES

- 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) 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

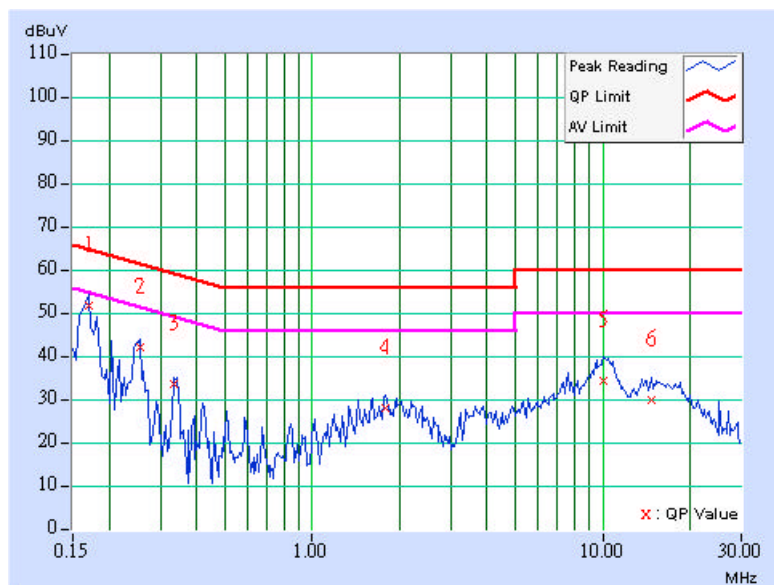
- Plug the EUT to a notebook system placed on a testing table.
- The notebook system ran a test program (provided by manufacturer) to enable EUT under transmission/receiving condition continuously at specific channel frequency.
- The computer system sent "H" messages to its screen.
- The computer system sent "H" messages to printer, and the printer prints them on paper.
- Repeated item c ~ d.

4.1.7 TEST RESULTS

EUT	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	25 deg. C, 77% RH, 991 hPa	TESTED BY: Leo Hung	

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	0.170	0.11	51.22	-	51.33	-	64.98	54.98	-13.65	-
2	0.255	0.12	41.61	-	41.73	-	61.58	51.58	-19.85	-
3	0.335	0.12	32.80	-	32.92	-	59.33	49.33	-26.41	-
4	1.781	0.16	27.37	-	27.53	-	56.00	46.00	-28.47	-
5	10.121	0.31	33.72	-	34.03	-	60.00	50.00	-25.97	-
6	14.691	0.75	29.16	-	29.91	-	60.00	50.00	-30.09	-

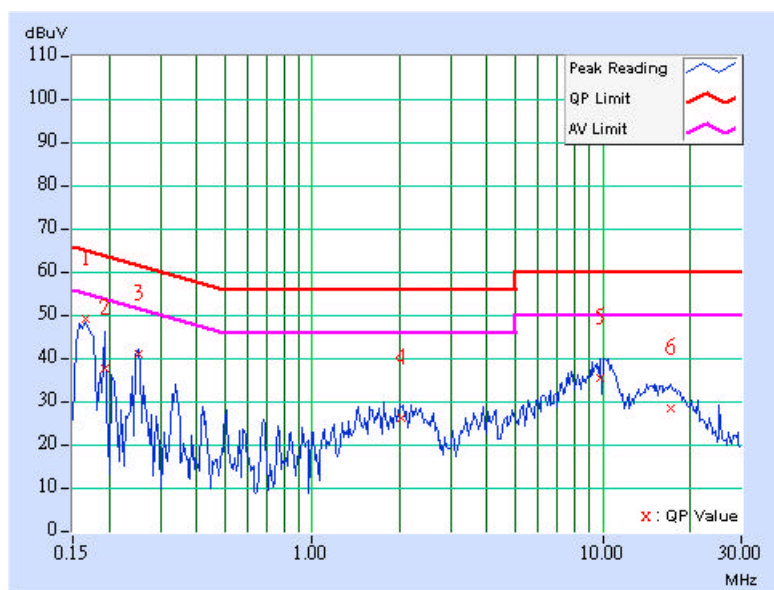
- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value =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



EUT	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 77% RH, 991 hPa	TESTED BY: Leo Hung	

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	0.167	0.10	48.57	-	48.67	-	65.11	55.11	-16.44	-
2	0.193	0.11	37.10	-	37.21	-	63.91	53.91	-26.70	-
3	0.253	0.11	40.58	-	40.69	-	61.66	51.66	-20.97	-
4	2.023	0.16	25.63	-	25.79	-	56.00	46.00	-30.21	-
5	9.855	0.28	34.71	-	34.99	-	60.00	50.00	-25.01	-
6	17.063	0.67	27.88	-	28.55	-	60.00	50.00	-31.45	-

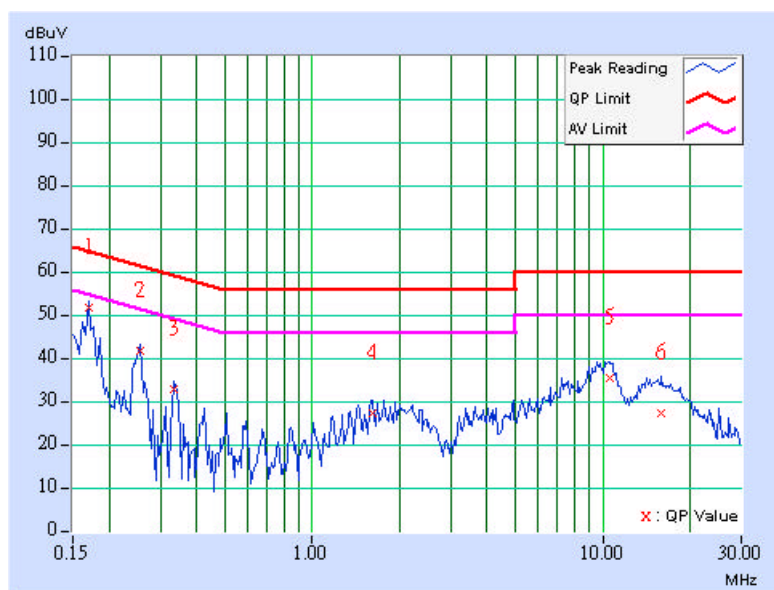
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	25 deg. C, 77% RH, 991 hPa	TESTED BY: Leo Hung	

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	0.170	0.11	50.92	-	51.03	-	64.98	54.98	-13.95	-
2	0.255	0.12	40.96	-	41.08	-	61.58	51.58	-20.50	-
3	0.335	0.12	32.21	-	32.33	-	59.33	49.33	-27.00	-
4	1.608	0.16	26.68	-	26.84	-	56.00	46.00	-29.16	-
5	10.520	0.35	34.59	-	34.94	-	60.00	50.00	-25.06	-
6	15.938	0.83	26.55	-	27.38	-	60.00	50.00	-32.62	-

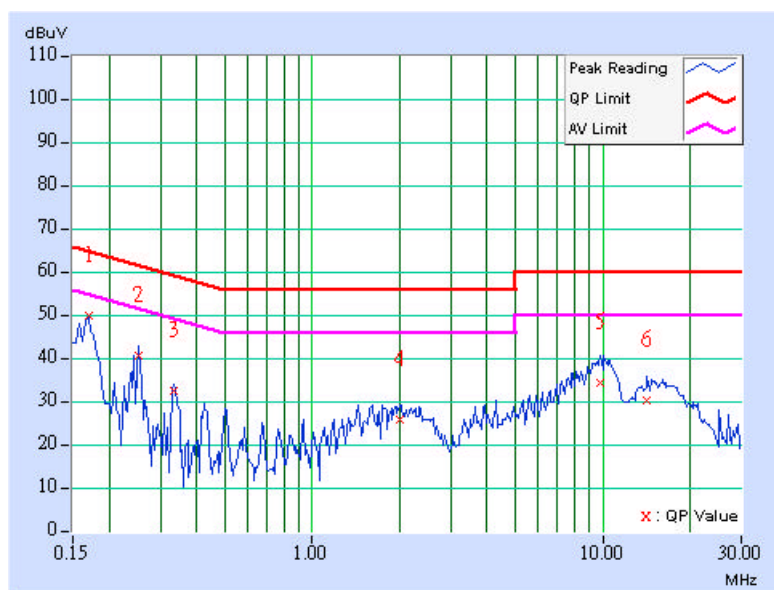
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 77% RH, 991 hPa	TESTED BY: Leo Hung	

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	0.170	0.10	49.32	-	49.42	-	64.98	54.98	-15.56	-
2	0.252	0.11	40.29	-	40.40	-	61.71	51.71	-21.30	-
3	0.334	0.11	32.11	-	32.22	-	59.36	49.36	-27.14	-
4	2.010	0.16	25.52	-	25.68	-	56.00	46.00	-30.32	-
5	9.766	0.28	33.74	-	34.02	-	60.00	50.00	-25.98	-
6	14.152	0.58	29.77	-	30.35	-	60.00	50.00	-29.65	-

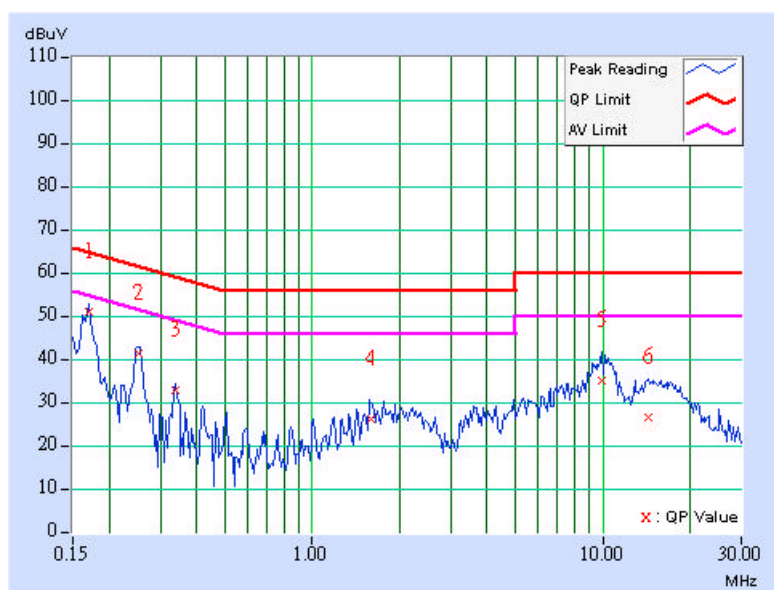
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	25 deg. C, 77% RH, 991 hPa	TESTED BY: Leo Hung	

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	0.170	0.11	50.34	-	50.45	-	64.98	54.98	-14.53	-
2	0.252	0.12	40.74	-	40.86	-	61.71	51.71	-20.84	-
3	0.338	0.12	32.34	-	32.46	-	59.26	49.26	-26.80	-
4	1.587	0.16	25.62	-	25.78	-	56.00	46.00	-30.22	-
5	9.871	0.30	34.46	-	34.76	-	60.00	50.00	-25.24	-
6	14.374	0.72	26.12	-	26.84	-	60.00	50.00	-33.16	-

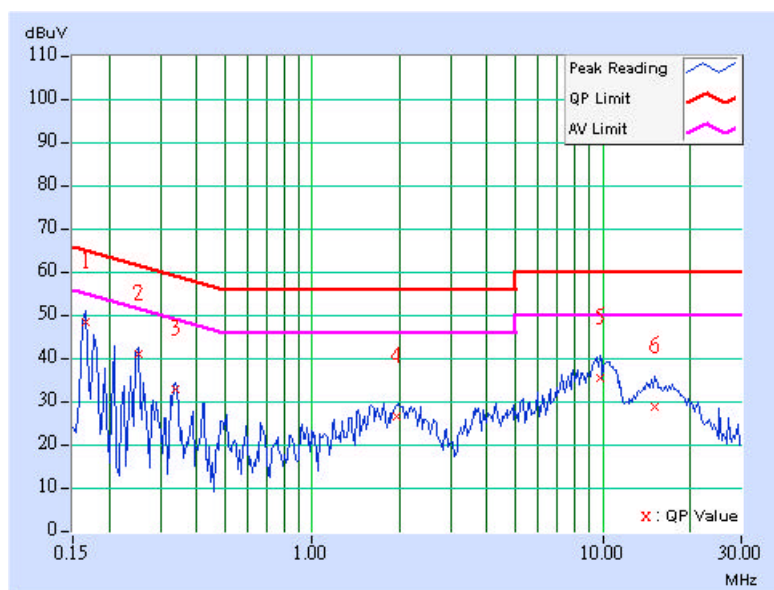
- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value =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



EUT	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Netural (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 77% RH, 991 hPa	TESTED BY: Leo Hung	

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	0.166	0.10	48.02	-	48.12	-	65.18	55.18	-17.05	-
2	0.252	0.11	40.55	-	40.66	-	61.71	51.71	-21.04	-
3	0.338	0.11	32.46	-	32.57	-	59.26	49.26	-26.69	-
4	1.942	0.16	25.94	-	26.10	-	56.00	46.00	-29.90	-
5	9.855	0.28	34.73	-	35.01	-	60.00	50.00	-24.99	-
6	15.070	0.64	28.09	-	28.73	-	60.00	50.00	-31.27	-

- 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	$2400/F(\text{kHz})$	300
0.490-1.705	$24000/F(\text{kHz})$	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	ESI7	838496/016	Feb. 09, 2005
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Dec. 15, 2004
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Feb. 03, 2005
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-404	Feb. 03, 2005
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA 9170242	Feb. 23, 2005
Preamplifier Agilent	8447D	2944A10631	Jan. 15, 2005
Preamplifier Agilent	8449B	3008A01960	Jan. 22, 2005
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	219272/4	Mar. 04, 2005
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	219275/4	Mar. 04, 2005
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA
Turn Table ADT.	TT100.	TT93021704	NA
Turn Table Controller ADT.	SC100.	SC93021704	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 3.
 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 IC4924-4.

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 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.

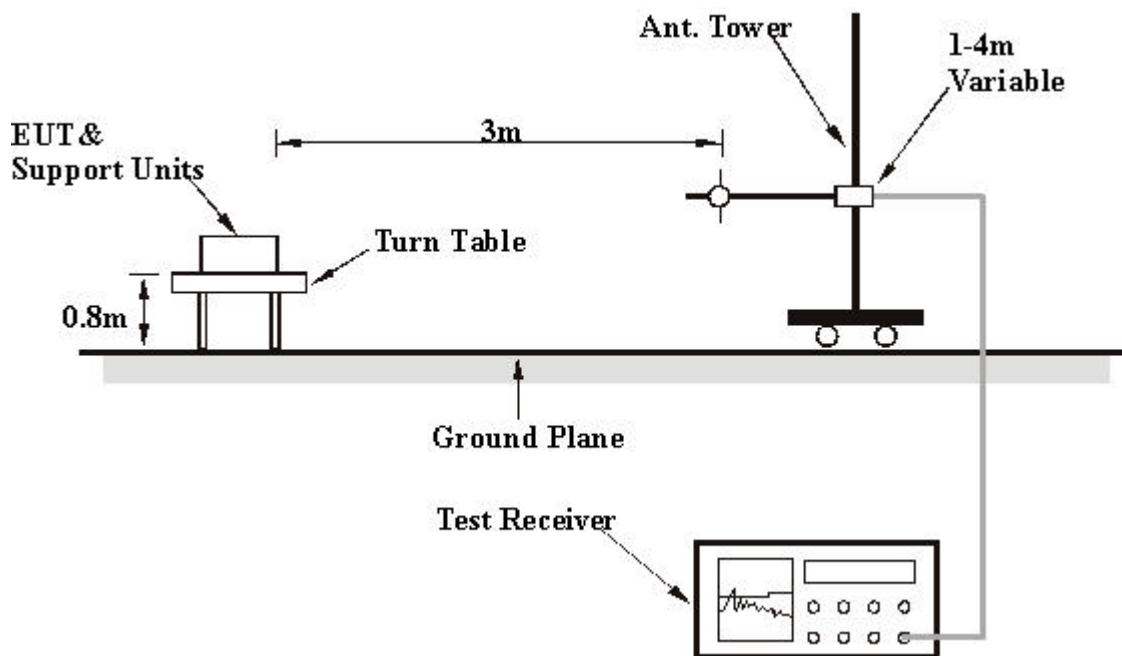
NOTE:

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 1kHz 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 (A)

EUT	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	11	FREQUENCY RANGE	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	TEST MODE	Test Mode 1
TESTED BY	Leo Hung		

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	117.47	36.67 QP	43.50	-6.83	1.50 H	268	24.05	12.61
2	164.13	31.11 QP	43.50	-12.39	1.50 H	181	16.59	14.52
3	199.12	33.02 QP	43.50	-10.48	1.25 H	70	21.68	11.34
4	249.66	34.69 QP	46.00	-11.31	1.00 H	247	21.58	13.11
5	333.25	38.69 QP	46.00	-7.31	1.00 H	322	23.54	15.15
6	465.43	32.41 QP	46.00	-13.59	1.50 H	145	14.24	18.18
7	531.52	26.15 QP	46.00	-19.85	1.50 H	178	7.02	19.13
8	591.78	33.75 QP	46.00	-12.25	1.50 H	52	13.15	20.60
9	768.68	29.04 QP	46.00	-16.96	1.00 H	70	5.72	23.32
10	809.50	27.50 QP	46.00	-18.50	1.00 H	154	3.96	23.55

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	117.47	29.75 QP	43.50	-13.75	1.00 V	265	17.14	12.61
2	152.46	30.06 QP	43.50	-13.44	1.00 V	211	15.30	14.75
3	199.12	31.80 QP	43.50	-11.70	1.00 V	142	20.46	11.34
4	249.66	33.49 QP	46.00	-12.51	2.00 V	346	20.39	13.11
5	333.25	35.91 QP	46.00	-10.09	1.50 V	211	20.76	15.15
6	403.23	31.51 QP	46.00	-14.49	1.00 V	298	14.69	16.81
7	465.43	32.03 QP	46.00	-13.97	1.00 V	202	13.85	18.18
8	601.50	30.55 QP	46.00	-15.45	2.50 V	133	9.71	20.85
9	768.68	28.88 QP	46.00	-17.12	1.50 V	175	5.56	23.32

- 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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	1	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 1
TESTED BY	Rush Kao		

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	2390.00	55.91 PK	74.00	-18.09	1.26 H	233	22.08	33.83
1	2390.00	48.93 AV	54.00	-5.07	1.26 H	233	15.10	33.83
2	*2412.00	112.58 PK			1.26 H	233	78.65	33.93
2	*2412.00	105.60 AV			1.26 H	233	71.67	33.93
3	4824.00	56.99 PK	74.00	-17.01	1.04 H	203	16.33	40.66
3	4824.00	51.72 AV	54.00	-2.28	1.04 H	203	11.06	40.66
4	7236.00	59.28 PK	74.00	-14.72	1.00 H	166	11.44	47.84
4	7236.00	46.56 AV	54.00	-7.44	1.00 H	166	-1.28	47.84

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	2390.00	45.63 PK	74.00	-28.37	1.95 V	351	11.80	33.83
1	2390.00	38.22 AV	54.00	-15.78	1.95 V	351	4.39	33.83
2	*2412.00	105.30 PK			1.95 V	351	71.37	33.93
2	*2412.00	97.89 AV			1.95 V	351	63.96	33.93
3	4824.00	54.75 PK	74.00	-19.25	1.64 V	27	14.09	40.66
3	4824.00	45.63 AV	54.00	-8.37	1.64 V	27	4.97	40.66
4	7236.00	59.20 PK	74.00	-14.80	1.64 V	354	11.36	47.84
4	7236.00	47.17 AV	54.00	-6.83	1.64 V	354	-0.67	47.84

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) +CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	6	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 1
TESTED BY	Rush Kao		

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	*2437.00	112.08 PK			1.00 H	172	78.03	34.05
1	*2437.00	106.24 AV			1.00 H	172	72.19	34.05
2	4874.00	51.55 PK	74.00	-22.45	1.27 H	16	10.86	40.69
2	4874.00	39.28 AV	54.00	-14.72	1.27 H	16	-1.41	40.69
3	7311.00	59.19 PK	74.00	-14.81	1.27 H	243	11.16	48.03
3	7311.00	46.35 AV	54.00	-7.65	1.27 H	243	-1.68	48.03

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	*2437.00	102.93 PK			1.00 V	78	68.88	34.05
1	*2437.00	96.92 AV			1.00 V	78	62.87	34.05
2	4874.00	52.34 PK	74.00	-21.66	1.84 V	6	11.65	40.69
2	4874.00	44.11 AV	54.00	-9.89	1.84 V	6	3.42	40.69
3	7311.00	59.04 PK	74.00	-14.96	1.72 V	357	11.01	48.03
3	7311.00	46.37 AV	54.00	-7.63	1.72 V	357	-1.66	48.03

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV)+ CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	11	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 1
TESTED BY	Rush Kao		

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	*2462.00	112.08 PK			1.00 H	222	77.92	34.16
1	*2462.00	104.65 AV			1.00 H	222	70.49	34.16
2	2462.00	55.51 PK	74.00	-18.49	1.00 H	222	21.35	34.16
2	2462.00	48.08 AV	54.00	-5.92	1.00 H	222	13.92	34.16
3	4924.00	52.53 PK	74.00	-21.47	1.00 H	143	11.67	40.86
3	4924.00	41.62 AV	54.00	-12.38	1.00 H	143	0.76	40.86
4	7386.00	57.91 PK	74.00	-16.09	1.65 H	0	9.74	48.17
4	7386.00	46.21 AV	54.00	-7.79	1.65 H	0	-1.96	48.17

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	*2462.00	104.59 PK			1.00 V	281	70.43	34.16
1	*2462.00	97.75 AV			1.00 V	281	63.59	34.16
2	2483.50	48.02 PK	74.00	-25.98	1.00 V	281	13.76	34.26
2	248350	41.18 AV	54.00	-12.82	1.00 V	281	6.18	34.26
3	4924.00	54.44 PK	74.00	-19.56	1.12 V	52	13.58	40.86
3	4924.00	47.04 AV	54.00	-6.96	1.12 V	52	6.18	40.86
4	7386.00	59.27 PK	74.00	-14.73	1.77 V	15	11.10	48.17
4	7386.00	48.02 AV	54.00	-5.98	1.77 V	15	-0.15	48.17

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV)+ CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	11	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 2
TESTED BY	Rush Kao		

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	146.63	29.73 QP	43.50	-13.77	1.75 H	265	15.12	14.61
2	265.21	31.24 QP	46.00	-14.76	1.25 H	184	17.77	13.47
3	397.39	36.71 QP	46.00	-9.29	1.00 H	94	20.04	16.67
4	432.38	31.33 QP	46.00	-14.67	1.00 H	88	13.77	17.55
5	500.42	33.99 QP	46.00	-12.01	1.75 H	175	15.41	18.58
6	584.01	31.62 QP	46.00	-14.38	1.25 H	217	11.23	20.39
7	665.65	32.50 QP	46.00	-13.50	1.25 H	61	10.86	21.64
8	702.59	37.73 QP	46.00	-8.27	1.25 H	76	15.66	22.07
9	799.78	30.18 QP	46.00	-15.82	1.75 H	259	6.72	23.46
10	898.92	31.25 QP	46.00	-14.75	1.50 H	259	6.46	24.79

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	37.78	27.82 QP	40.00	-12.18	1.50 V	211	12.86	14.96
2	119.42	34.22 QP	43.50	-9.28	1.25 V	250	21.42	12.80
3	265.21	29.35 QP	46.00	-16.65	1.75 V	271	15.88	13.47
4	397.39	34.58 QP	46.00	-11.42	1.00 V	58	17.91	16.67
5	465.43	31.13 QP	46.00	-14.87	1.00 V	82	12.96	18.18
6	584.01	32.81 QP	46.00	-13.19	1.00 V	328	12.42	20.39
7	665.65	34.23 QP	46.00	-11.77	1.00 V	103	12.60	21.64
8	702.59	35.03 QP	46.00	-10.97	1.75 V	307	12.96	22.07
9	799.78	31.39 QP	46.00	-14.61	1.25 V	361	7.93	23.46

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	1	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 2
TESTED BY	Rush Kao		

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	1608.00	42.24 PK	74.00	-31.76	1.17 H	204	12.11	30.13
1	1608.00	31.80 AV	54.00	-22.20	1.17 H	204	1.67	30.13
2	2390.00	46.80 PK	74.00	-27.20	1.46 H	324	12.97	33.83
2	2390.00	39.92 AV	54.00	-14.08	1.46 H	324	6.09	33.83
3	*2412.00	111.89 PK			1.46 H	324	77.96	33.93
3	*2412.00	105.01 AV			1.46 H	324	71.08	33.93
4	3216.00	51.21 PK	74.00	-22.79	1.12 H	251	14.87	36.33
4	3216.00	45.51 AV	54.00	-8.49	1.12 H	251	9.17	36.33
5	4824.00	51.34 PK	74.00	-22.66	1.54 H	294	10.68	40.66
5	4824.00	43.31 AV	54.00	-10.69	1.54 H	294	2.65	40.66

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	1608.00	42.12 PK	74.00	-31.88	1.00 V	255	11.99	30.13
1	1608.00	32.49 AV	54.00	-21.51	1.00 V	255	2.36	30.13
2	2390.00	38.70 PK	74.00	-35.30	1.39 V	11	4.87	33.83
2	2390.00	32.26 AV	54.00	-21.74	1.39 V	11	-1.57	33.83
3	*2412.00	100.79 PK			1.00 V	203	66.86	33.93
3	*2412.00	94.35 AV			1.00 V	203	60.42	33.93
4	3216.00	48.51 PK	74.00	-25.49	1.00 V	242	12.17	36.33
4	3216.00	39.73 AV	54.00	-14.27	1.00 V	242	3.39	36.33
5	4824.00	51.72 PK	74.00	-22.28	1.39 V	11	11.06	40.66
5	4824.00	41.40 AV	54.00	-12.60	1.39 V	11	0.74	40.66

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) +CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	6	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 2
TESTED BY	Rush Kao		

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	1624.00	42.15 PK	74.00	-31.85	1.13 H	74	11.99	30.16
1	1624.00	33.86 AV	54.00	-20.14	1.13 H	74	3.70	30.16
2	*2437.00	112.41 PK			1.22 H	7	78.36	34.05
2	*2437.00	104.46 AV			1.22 H	7	70.41	34.05
3	3248.00	46.46 PK	74.00	-27.54	1.42 H	147	10.10	36.36
3	3248.00	36.46 AV	54.00	-17.54	1.42 H	147	0.10	36.36
4	7311.00	59.19 PK	74.00	-14.81	1.26 H	104	11.16	48.03
4	7311.00	45.99 AV	54.00	-8.01	1.26 H	104	-2.04	48.03

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	1624.00	42.15 PK	74.00	-31.85	1.13 V	74	11.99	30.16
1	1624.00	33.86 AV	54.00	-20.14	1.13 V	74	3.70	30.16
2	*2437.00	102.76 PK			1.22 V	7	68.71	34.05
2	*2437.00	95.95 AV			1.22 V	7	61.90	34.05
3	3248.00	46.46 PK	74.00	-27.54	1.42 V	147	10.10	36.36
3	3248.00	36.46 AV	54.00	-17.54	1.42 V	147	0.10	36.36
4	7311.00	59.31 PK	74.00	-14.69	1.26 V	104	11.28	48.03
4	7311.00	47.47 AV	54.00	-6.53	1.26 V	104	-0.56	48.03

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV)+CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	11	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 2
TESTED BY	Rush Kao		

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	1641.00	41.12 PK	74.00	-32.88	1.00 H	339	10.94	30.18
1	1641.00	31.20 AV	54.00	-22.80	1.00 H	339	1.02	30.18
2	*2462.00	112.73 PK			1.30 H	276	78.57	34.16
2	*2462.00	105.43 AV			1.30 H	276	71.27	34.16
3	2483.50	54.62 PK	74.00	-19.38	1.30 H	276	20.36	34.26
3	2483.50	47.32 AV	54.00	-6.68	1.30 H	276	13.06	34.26
4	3282.00	49.25 PK	74.00	-24.75	1.05 H	328	12.86	36.40
4	3282.00	37.23 AV	54.00	-16.77	1.05 H	328	0.84	36.40
5	4920.00	50.88 PK	74.00	-23.12	1.43 H	233	10.04	40.84
5	4920.00	38.42 AV	54.00	-15.58	1.43 H	233	-2.42	40.84

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	1641.00	40.63 PK	74.00	-33.37	1.20 V	279	10.45	30.18
1	1641.00	29.44 AV	54.00	-24.56	1.20 V	279	-0.74	30.18
2	*2462.00	105.06 PK			1.87 V	0	70.90	34.16
2	*2462.00	98.14 AV			1.87 V	0	63.98	34.16
3	2483.50	46.95 PK	74.00	-27.05	1.87 V	0	12.69	34.26
3	2483.50	40.03 AV	54.00	-13.97	1.87 V	0	5.77	34.26
4	3282.00	46.97 PK	74.00	-27.03	1.57 V	54	10.58	36.40
4	3282.00	35.09 AV	54.00	-18.91	1.57 V	54	-1.30	36.40
5	4920.00	50.33 PK	74.00	-23.67	1.20 V	272	9.49	40.84
5	4920.00	36.87 AV	54.00	-17.13	1.20 V	272	-3.97	40.84

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + CorrectionFactor(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.

4.2.8 TEST RESULTS (B)

Normal mode

EUT	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	11	FREQUENCY RANGE	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	TEST MODE	Test Mode 1
TESTED BY	Leo Hung		

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	117.47	36.67 QP	43.50	-6.83	1.50 H	268	24.05	12.61
2	164.13	31.11 QP	43.50	-12.39	1.50 H	181	16.59	14.52
3	199.12	33.02 QP	43.50	-10.48	1.25 H	70	21.68	11.34
4	249.66	34.69 QP	46.00	-11.31	1.00 H	247	21.58	13.11
5	333.25	38.69 QP	46.00	-7.31	1.00 H	322	23.54	15.15
6	465.43	32.41 QP	46.00	-13.59	1.50 H	145	14.24	18.18
7	531.52	26.15 QP	46.00	-19.85	1.50 H	178	7.02	19.13
8	591.78	33.75 QP	46.00	-12.25	1.50 H	52	13.15	20.60
9	768.68	29.04 QP	46.00	-16.96	1.00 H	70	5.72	23.32
10	809.50	27.50 QP	46.00	-18.50	1.00 H	154	3.96	23.55

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	117.47	29.75 QP	43.50	-13.75	1.00 V	265	17.14	12.61
2	152.46	30.06 QP	43.50	-13.44	1.00 V	211	15.30	14.75
3	199.12	31.80 QP	43.50	-11.70	1.00 V	142	20.46	11.34
4	249.66	33.49 QP	46.00	-12.51	2.00 V	346	20.39	13.11
5	333.25	35.91 QP	46.00	-10.09	1.50 V	211	20.76	15.15
6	403.23	31.51 QP	46.00	-14.49	1.00 V	298	14.69	16.81
7	465.43	32.03 QP	46.00	-13.97	1.00 V	202	13.85	18.18
8	601.50	30.55 QP	46.00	-15.45	2.50 V	133	9.71	20.85
9	768.68	28.88 QP	46.00	-17.12	1.50 V	175	5.56	23.32

- 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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	1	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 1
TESTED BY	Rush Kao		

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	2390.00	56.20 PK	74.00	-17.80	1.06 H	62	22.37	33.83
1	2390.00	51.40 AV	54.00	-2.60	1.06 H	62	17.57	33.83
2	*2412.00	107.00 PK			1.06 H	62	73.07	33.93
2	*2412.00	100.50 AV			1.06 H	62	66.57	33.93
3	4824.00	54.42 PK	74.00	-19.58	1.52 H	296	13.76	40.66
3	4824.00	48.88 AV	54.00	-5.12	1.52 H	296	8.22	40.66
4	7236.00	61.71 PK	74.00	-12.29	1.62 H	244	13.86	47.84
4	7236.00	48.49 AV	54.00	-5.51	1.62 H	244	0.64	47.84

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	2390.00	54.21 PK	74.00	-19.79	1.06 V	62	20.38	33.83
1	2390.00	49.73 AV	54.00	-4.27	1.06 V	62	15.90	33.83
2	*2412.00	100.43 PK			1.06 V	62	66.50	33.93
2	*2412.00	95.95 AV			1.06 V	62	62.02	33.93
3	4824.00	54.01 PK	74.00	-19.99	1.29 V	53	13.35	40.66
3	4824.00	45.84 AV	54.00	-8.16	1.29 V	53	5.18	40.66
4	7386.00	60.32 PK	74.00	-13.68	1.08 V	44	12.15	48.17
4	7386.00	47.83 AV	54.00	-6.17	1.08 V	44	-0.34	48.17

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	6	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 1
TESTED BY	Rush Kao		

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	*2437.00	108.44 PK			1.27 H	234	74.39	34.05
1	*2437.00	100.17 AV			1.27 H	234	66.12	34.05
2	4874.00	51.40 PK	74.00	-22.60	1.13 H	304	10.71	40.69
2	4874.00	45.20 AV	54.00	-8.80	1.13 H	304	4.51	40.69
3	7311.00	61.58 PK	74.00	-12.42	1.51 H	239	13.55	48.03
3	7311.00	47.86 AV	54.00	-6.14	1.51 H	239	-0.17	48.03

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	*2437.00	101.50 PK			1.08 V	52	67.45	34.05
1	*2437.00	95.12 AV			1.08 V	52	61.07	34.05
2	4874.00	52.26 PK	74.00	-21.74	1.32 V	31	11.56	40.69
2	4874.00	44.26 AV	54.00	-9.74	1.32 V	31	3.56	40.69
3	7311.00	60.10 PK	74.00	-13.90	1.62 V	357	12.07	48.03
3	7311.00	47.27 AV	54.00	-6.73	1.62 V	357	-0.76	48.03

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	11	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 1
TESTED BY	Rush Kao		

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	*2462.00	108.29 PK			1.22 H	227	74.13	34.16
1	*2462.00	101.90 AV			1.22 H	227	67.74	34.16
2	2483.50	53.76 PK	74.00	-20.24	1.22 H	227	19.50	34.26
2	2483.50	51.37 AV	54.00	-2.63	1.22 H	227	17.11	34.26
3	4924.00	55.59 PK	74.00	-18.41	1.18 H	220	14.73	40.86
3	4924.00	50.09 AV	54.00	-3.91	1.18 H	220	9.23	40.86
4	7386.00	60.52 PK	74.00	-13.48	1.00 H	180	12.35	48.17
4	7386.00	45.86 AV	54.00	-8.14	1.00 H	180	-2.31	48.17

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	*2462.00	101.14 PK			1.00 V	276	66.98	34.16
1	*2462.00	99.06 AV			1.00 V	276	64.90	34.16
2	2483.50	50.89 PK	74.00	-23.11	1.00 V	276	16.63	34.26
2	2483.50	48.81 AV	54.00	-5.19	1.00 V	276	14.55	34.26
3	4924.00	52.33 PK	74.00	-21.67	1.00 V	36	11.47	40.86
3	4924.00	44.04 AV	54.00	-9.96	1.00 V	36	3.18	40.86
4	7386.00	61.32 PK	74.00	-12.68	1.52 V	46	13.15	48.17
4	7386.00	48.32 AV	54.00	-5.68	1.52 V	46	0.15	48.17

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	11	FREQUENCY RANGE	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	TEST MODE	Test Mode 2
TESTED BY	Leo Hung		

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	146.63	29.73 QP	43.50	-13.77	1.75 H	265	15.12	14.61
2	265.21	31.24 QP	46.00	-14.76	1.25 H	184	17.77	13.47
3	397.39	36.71 QP	46.00	-9.29	1.00 H	94	20.04	16.67
4	432.38	31.33 QP	46.00	-14.67	1.00 H	88	13.77	17.55
5	500.42	33.99 QP	46.00	-12.01	1.75 H	175	15.41	18.58
6	584.01	31.62 QP	46.00	-14.38	1.25 H	217	11.23	20.39
7	665.65	32.50 QP	46.00	-13.50	1.25 H	61	10.86	21.64
8	702.59	37.73 QP	46.00	-8.27	1.25 H	76	15.66	22.07
9	799.78	30.18 QP	46.00	-15.82	1.75 H	259	6.72	23.46
10	898.92	31.25 QP	46.00	-14.75	1.50 H	259	6.46	24.79

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	37.78	27.82 QP	40.00	-12.18	1.50 V	211	12.86	14.96
2	119.42	34.22 QP	43.50	-9.28	1.25 V	250	21.42	12.80
3	265.21	29.35 QP	46.00	-16.65	1.75 V	271	15.88	13.47
4	397.39	34.58 QP	46.00	-11.42	1.00 V	58	17.91	16.67
5	465.43	31.13 QP	46.00	-14.87	1.00 V	82	12.96	18.18
6	584.01	32.81 QP	46.00	-13.19	1.00 V	328	12.42	20.39
7	665.65	34.23 QP	46.00	-11.77	1.00 V	103	12.60	21.64
8	702.59	35.03 QP	46.00	-10.97	1.75 V	307	12.96	22.07
9	799.78	31.39 QP	46.00	-14.61	1.25 V	1	7.93	23.46

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	1	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 2
TESTED BY	Rush Kao		

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	1608.00	42.44 PK	74.00	-31.56	1.27 H	129	12.31	30.13
1	1608.00	31.89 AV	54.00	-22.11	1.27 H	129	1.76	30.13
2	2390.00	48.96 PK	74.00	-25.04	1.44 H	332	15.13	33.83
2	2390.00	44.96 AV	54.00	-9.04	1.44 H	332	11.13	38.83
3	*2412.00	107.04 PK			1.44 H	332	73.11	33.93
3	*2412.00	103.27 AV			1.44 H	332	69.34	33.93
4	3216.00	51.32 PK	74.00	-22.68	1.00 H	253	14.98	36.33
4	3216.00	44.90 AV	54.00	-9.10	1.00 H	253	8.56	36.33
5	4824.00	50.88 PK	74.00	-23.12	1.22 H	218	10.22	40.66
5	4824.00	40.93 AV	54.00	-13.07	1.22 H	218	0.27	40.66
6	7326.00	58.27 PK	74.00	-15.73	1.09 H	178	10.21	48.06
6	7326.00	47.62 AV	54.00	-6.38	1.09 H	178	-0.44	48.06

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	1608.00	42.86 PK	74.00	-31.14	1.00 V	251	12.73	30.13
1	1608.00	32.71 AV	54.00	-21.29	1.00 V	251	2.58	30.13
2	2390.00	43.03 PK	74.00	-30.97	1.18 V	344	9.20	33.83
2	2390.00	39.47 AV	54.00	-14.53	1.18 V	344	5.64	33.83
3	*2412.00	101.34 PK			1.18 V	344	67.41	33.93
3	*2412.00	97.78 AV			1.18 V	344	63.85	33.93
4	3216.00	49.10 PK	74.00	-24.90	1.00 V	213	12.76	36.33
4	3216.00	39.90 AV	54.00	-14.10	1.00 V	213	3.56	36.33
5	4824.00	51.00 PK	74.00	-23.00	1.22 V	230	10.34	40.66
5	4824.00	39.56 AV	54.00	-14.44	1.22 V	230	-1.10	40.66
6	7236.00	58.37 PK	74.00	-15.63	1.45 V	272	10.53	47.84
6	7236.00	46.48 AV	54.00	-7.52	1.45 V	272	-1.36	47.84

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) +CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	6	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 2
TESTED BY	Rush Kao		

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	1624.00	41.06 PK	74.00	-32.94	1.00 H	347	10.90	30.16
1	1624.00	30.31 AV	54.00	-23.69	1.00 H	347	0.15	30.16
2	*2437.00	108.08 PK			1.00 H	225	74.03	34.05
2	*2437.00	102.34 AV			1.00 H	225	68.29	34.05
3	3248.00	50.18 PK	74.00	-23.82	1.09 H	233	13.82	36.36
3	3248.00	43.37 AV	54.00	-10.63	1.09 H	233	7.01	36.36
4	7311.00	58.34 PK	74.00	-15.66	1.38 H	288	10.31	48.03
4	7311.00	44.92 AV	54.00	-9.08	1.38 H	288	-3.11	48.03

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	1624.00	42.56 PK	74.00	-31.44	1.12 V	75	12.40	30.16
1	1624.00	34.80 AV	54.00	-19.20	1.12 V	75	4.64	30.16
2	*2437.00	98.87 PK			1.16 V	3	64.82	34.05
2	*2437.00	95.42 AV			1.16 V	3	61.37	34.05
3	3248.00	49.42 PK	74.00	-24.58	1.00 V	244	13.06	36.36
3	3248.00	38.76 AV	54.00	-15.24	1.00 V	244	2.40	36.36
4	7311.00	57.23 PK	74.00	-16.77	1.00 V	54	9.20	48.03
4	7311.00	44.81 AV	54.00	-9.19	1.00 V	54	-3.22	48.03

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV)+CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	11	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65 % RH, 991 hPa	TEST MODE	Test Mode 2
TESTED BY	Rush Kao		

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	1641.00	40.82 PK	74.00	-33.18	1.16 H	151	10.64	30.18
1	1641.00	31.39 AV	54.00	-22.61	1.16 H	151	1.21	30.18
2	*2462.00	107.68 PK			1.25 H	239	73.52	34.16
2	*2462.00	101.95 AV			1.25 H	239	67.79	34.16
3	2483.50	48.24 PK	74.00	-25.76	1.25 H	239	13.98	34.26
3	2483.50	44.51 AV	54.00	-9.49	1.25 H	239	10.25	34.26
4	3282.00	51.77 PK	74.00	-22.23	1.12 H	253	15.38	36.40
4	3282.00	46.21 AV	54.00	-7.79	1.12 H	253	9.82	36.40
5	4924.00	50.33 PK	74.00	-23.67	1.15 H	346	9.47	40.86
5	4924.00	38.64 AV	54.00	-15.36	1.15 H	346	-2.22	40.86
6	7386.00	58.05 PK	74.00	-15.95	1.00 H	329	9.88	48.17
6	7386.00	44.86 AV	54.00	-9.14	1.00 H	329	-3.31	48.17

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	1641.00	42.38 PK	74.00	-31.62	1.09 V	71	12.20	30.18
1	1641.00	34.16 AV	54.00	-19.84	1.09 V	71	3.98	30.18
2	*2462.00	97.96 PK			1.15 V	8	63.80	34.16
2	*2462.00	94.06 AV			1.15 V	8	59.90	34.16
3	2483.50	38.52 PK	74.00	-35.48	1.15 V	8	4.26	34.26
3	2483.50	34.62 AV	54.00	-19.38	1.15 V	8	0.36	34.26
4	3282.00	47.86 PK	74.00	-26.14	1.14 V	43	11.47	36.40
4	3282.00	36.91 AV	54.00	-17.09	1.14 V	43	0.52	36.40
5	4924.00	50.45 PK	74.00	-23.55	1.49 V	301	9.59	40.86
5	4924.00	37.85 AV	54.00	-16.15	1.49 V	301	-3.01	40.86
6	7386.00	57.31 PK	74.00	-16.69	1.25 V	118	9.14	48.17
6	7386.00	44.90 AV	54.00	-9.10	1.25 V	118	-3.27	48.17

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + CorrectionFactor(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.

Turbo mode

EUT	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	6	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24 deg. C, 64 % RH, 991 hPa	TEST MODE	Test Mode 1
TESTED BY	Rush Kao		

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	1066.00	41.43 PK	74.00	-32.57	1.42 H	195	12.68	28.75
1	1066.00	32.28 AV	54.00	-21.72	1.42 H	195	3.53	28.75
2	2390.00	49.42 PK	74.00	-24.58	1.42 H	195	15.59	33.83
2	2390.00	34.93 AV	54.00	-19.06	1.42 H	195	1.11	33.83
3	*2437.00	109.05 PK			1.34 H	186	75.00	34.05
3	*2437.00	97.62 AV			1.34 H	186	63.57	34.05
4	2483.50	48.37 PK	74.00	-25.63	1.34 H	186	14.11	34.26
4	2483.50	34.94 AV	54.00	-19.06	1.34 H	186	0.68	34.26
5	4874.00	53.21 PK	74.00	-20.79	1.42 H	195	12.52	40.69
5	4874.00	42.18 AV	54.00	-11.82	1.42 H	195	1.49	40.69

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	1066.00	42.54 PK	74.00	-31.46	1.00 V	193	13.79	28.75
1	1066.00	33.68 AV	54.00	-20.32	1.00 V	193	4.93	28.75
2	2390.00	42.89 PK	74.00	-31.11	1.00 V	360	9.06	33.83
2	2390.00	34.15 AV	54.00	-19.85	1.00 V	360	0.32	33.83
3	*2437.00	104.52 PK			1.00 V	360	70.47	34.05
3	*2437.00	95.78 AV			1.00 V	360	61.73	34.05
4	2483.50	41.84 PK	74.00	-32.16	1.00 V	360	7.58	34.26
4	2483.50	33.10 AV	54.00	-20.90	1.00 V	360	-1.16	34.26
5	4874.00	56.84 PK	74.00	-17.16	1.00 V	35	16.15	40.69
5	4874.00	48.60 AV	54.00	-5.40	1.00 V	35	7.91	40.69

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + CorrectionFactor(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	Wireless PCMCIA Card	MODEL	F5D7011
CHANNEL	6	FREQUENCY RANGE	1 ~ 25 GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24 deg. C, 64 % RH, 991 hPa	TEST MODE	Test Mode 2
TESTED BY	Rush Kao		

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	1066.00	40.80 PK	74.00	-33.20	1.42 H	195	12.05	28.75
2	2390.00	48.50 PK	74.00	-25.50	1.42 H	195	14.67	33.83
3	*2437.00	108.20 PK			1.34 H	186	74.15	34.05
3	*2437.00	96.80 AV			1.34 H	186	62.75	34.05
4	2483.50	47.50 PK	74.00	-26.50	1.34 H	186	13.24	34.26
4	2483.50	34.94 AV	54.00	-19.06	1.34 H	186	0.68	34.26
5	4874.00	52.40 PK	74.00	-21.60	1.42 H	195	11.71	40.69
5	4874.00	41.70 AV	54.00	-12.30	1.42 H	195	1.01	40.69

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	1066.00	41.60 PK	74.00	-32.40	1.00 V	193	12.85	28.75
2	2390.00	41.50 PK	74.00	-32.50	1.00 V	360	7.67	33.83
3	*2437.00	103.40 PK			1.00 V	360	69.35	34.05
3	*2437.00	95.20 AV			1.00 V	360	61.15	34.05
4	2483.50	40.70 PK	74.00	-33.30	1.00 V	360	6.44	34.26
5	4874.00	56.40 PK	74.00	-17.60	1.00 V	35	15.71	40.69
5	4874.00	46.50 AV	54.00	-7.50	1.00 V	35	5.81	40.69

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + CorrectionFactor(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.

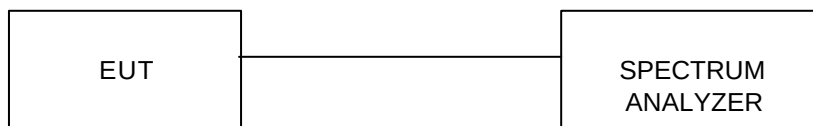
4.3.3 TEST PROCEDURE

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 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

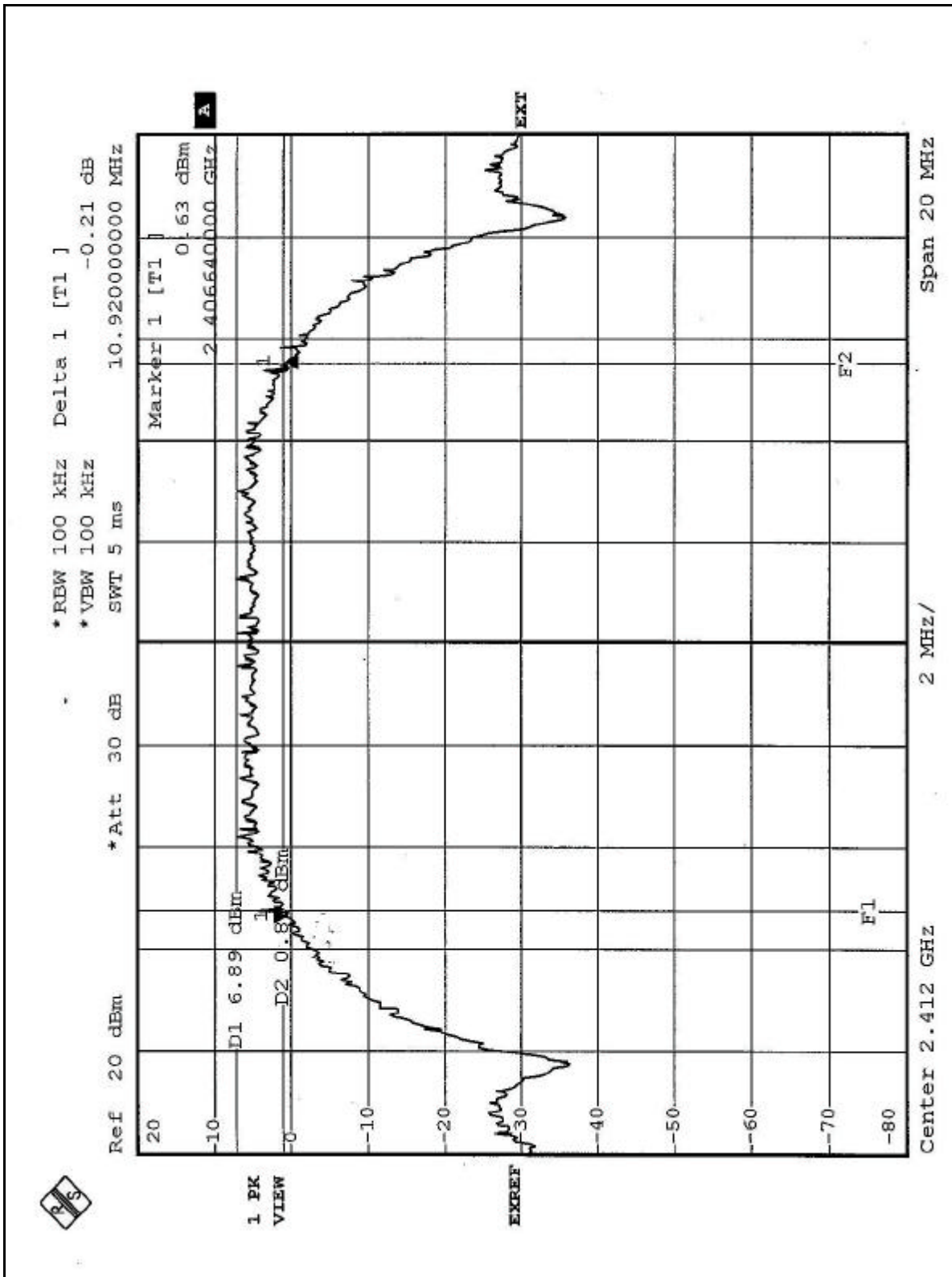
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS (A)

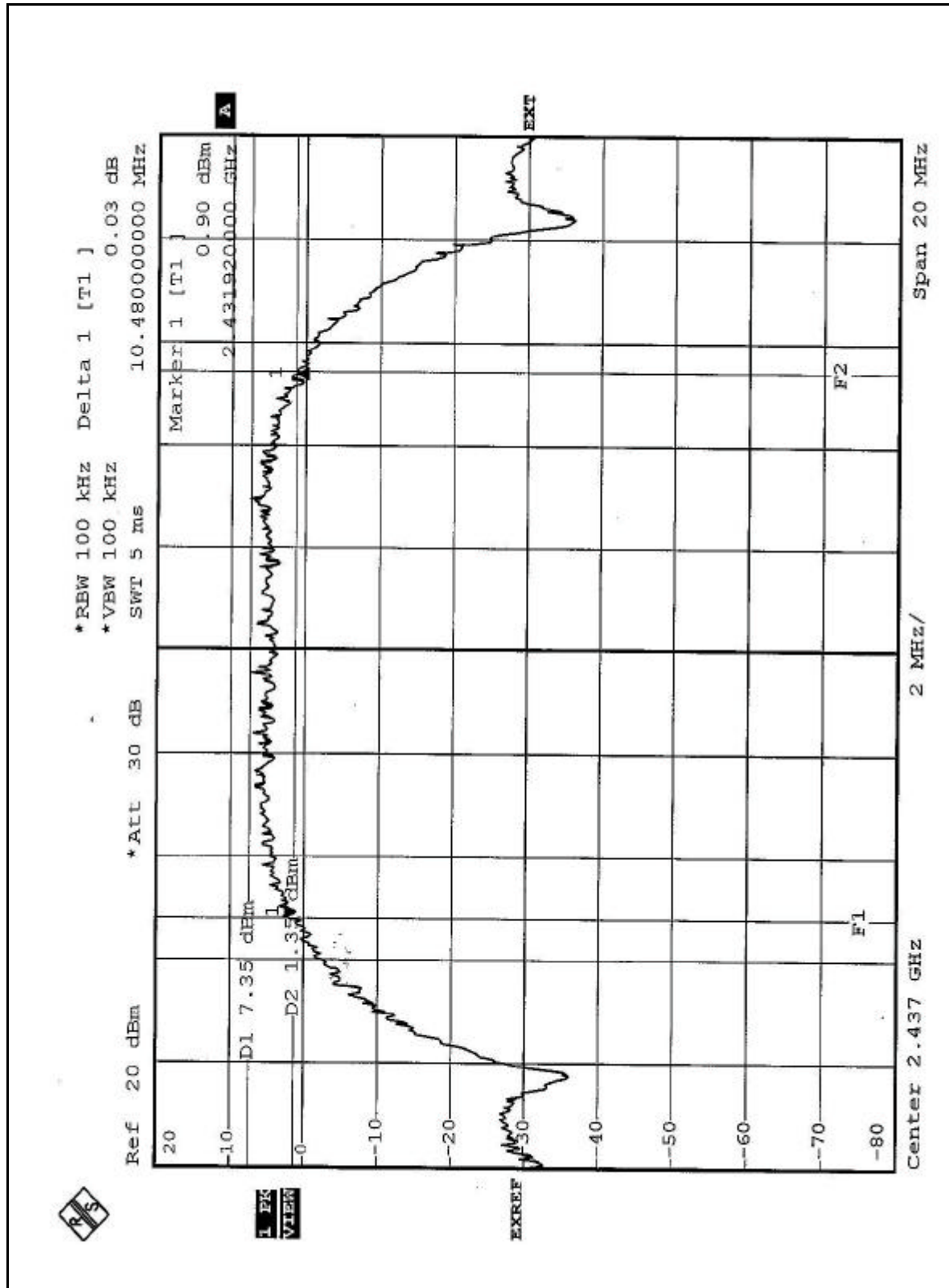
EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991 hPa
TESTED BY	Match Tsui	TEST MODE	Test Mode 1

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	10.92	0.5	PASS
6	2437	10.48	0.5	PASS
11	2462	10.88	0.5	PASS

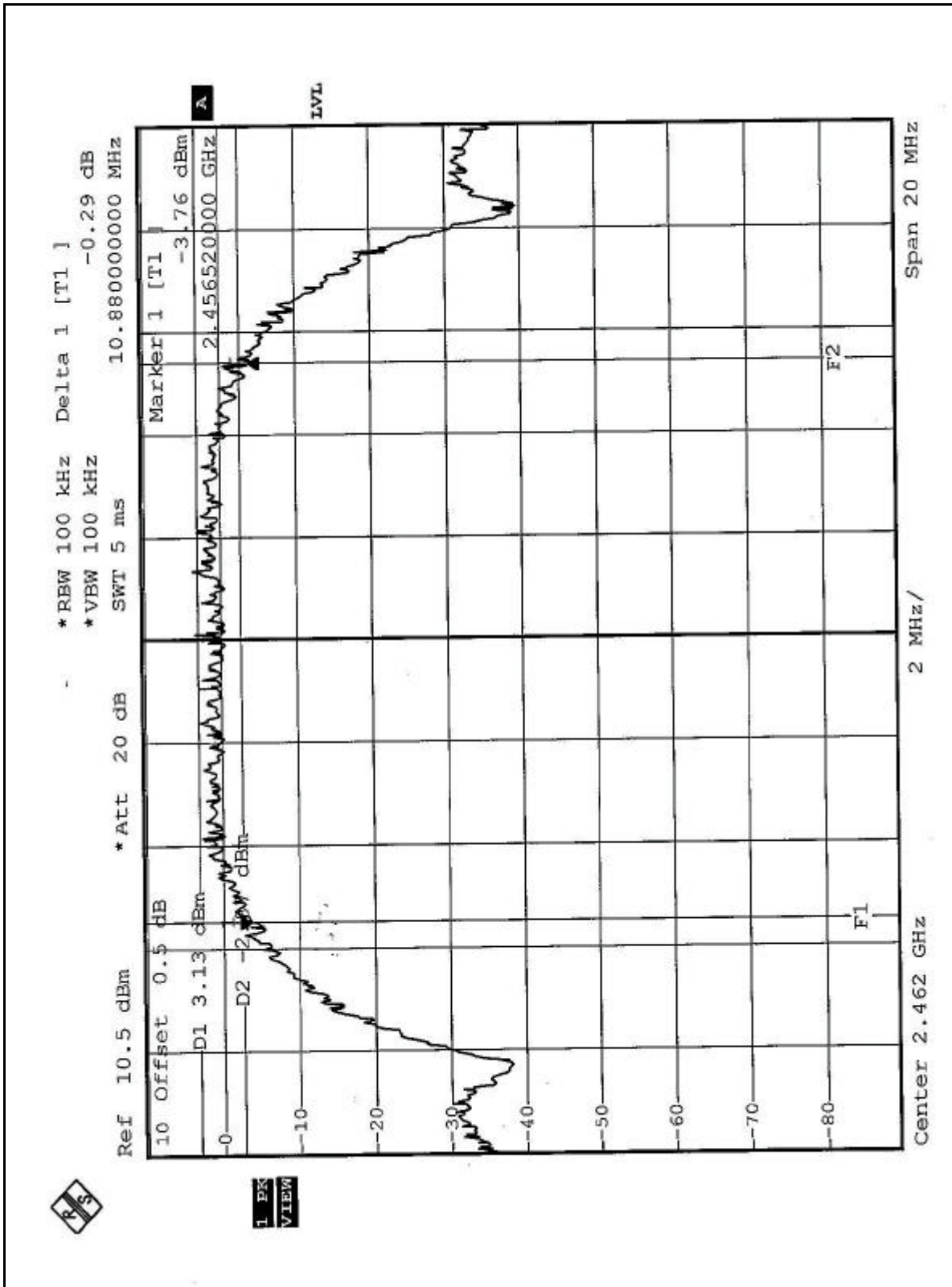
CH1



CH6



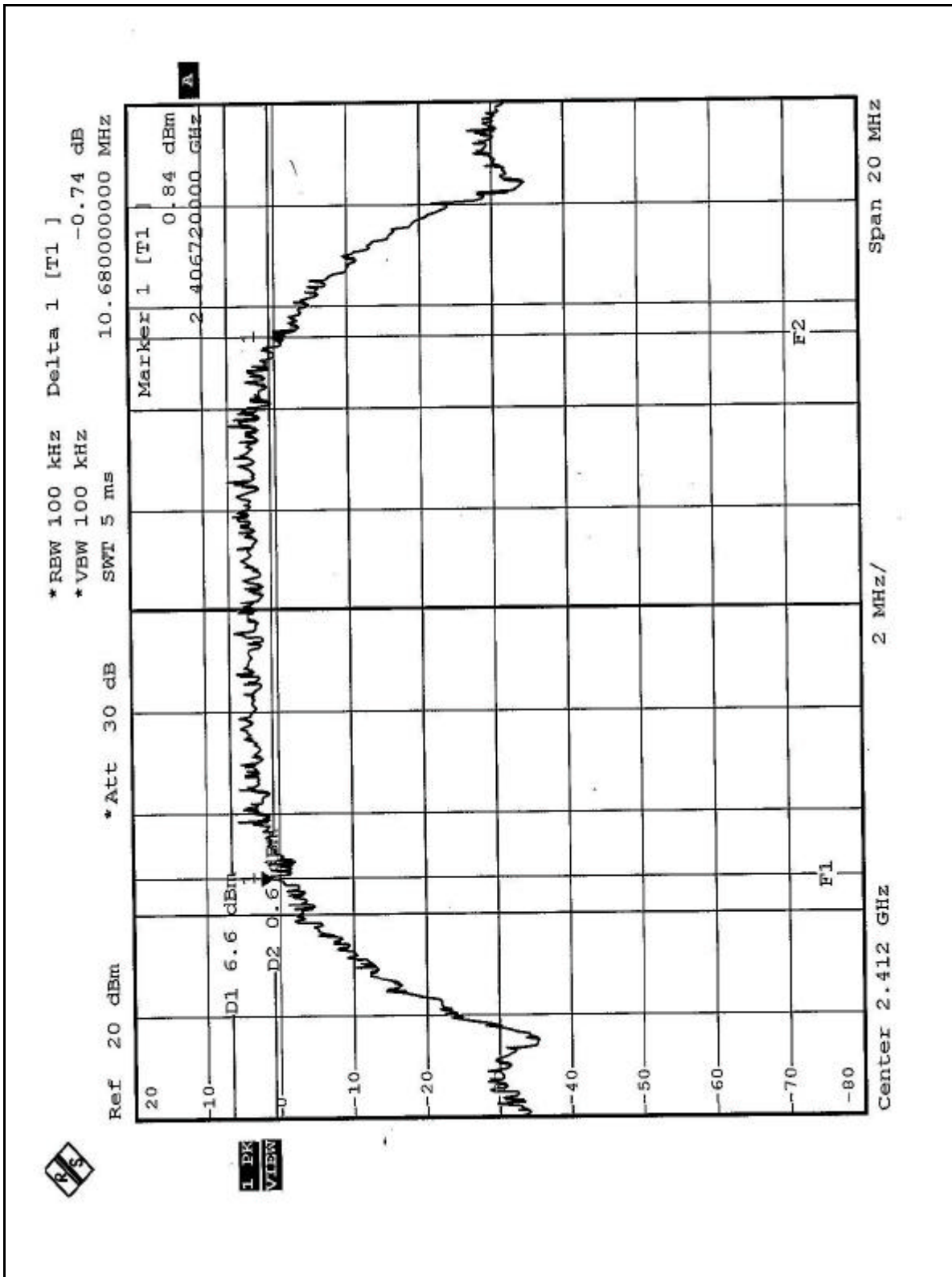
CH11



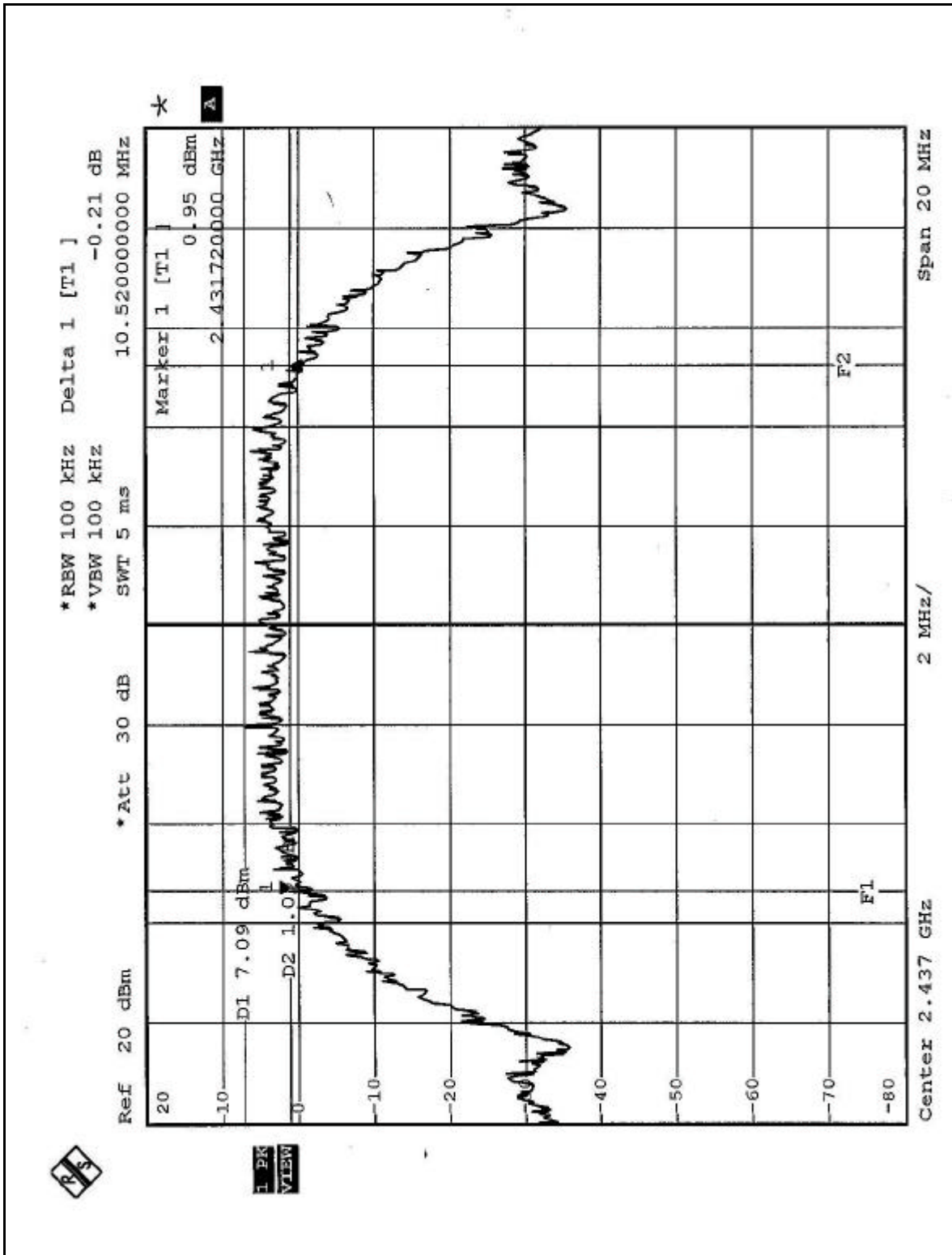
EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991 hPa
TESTED BY	Leo Hung	TEST MODE	Test Mode 2

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	10.68	0.5	PASS
6	2437	10.52	0.5	PASS
11	2462	10.52	0.5	PASS

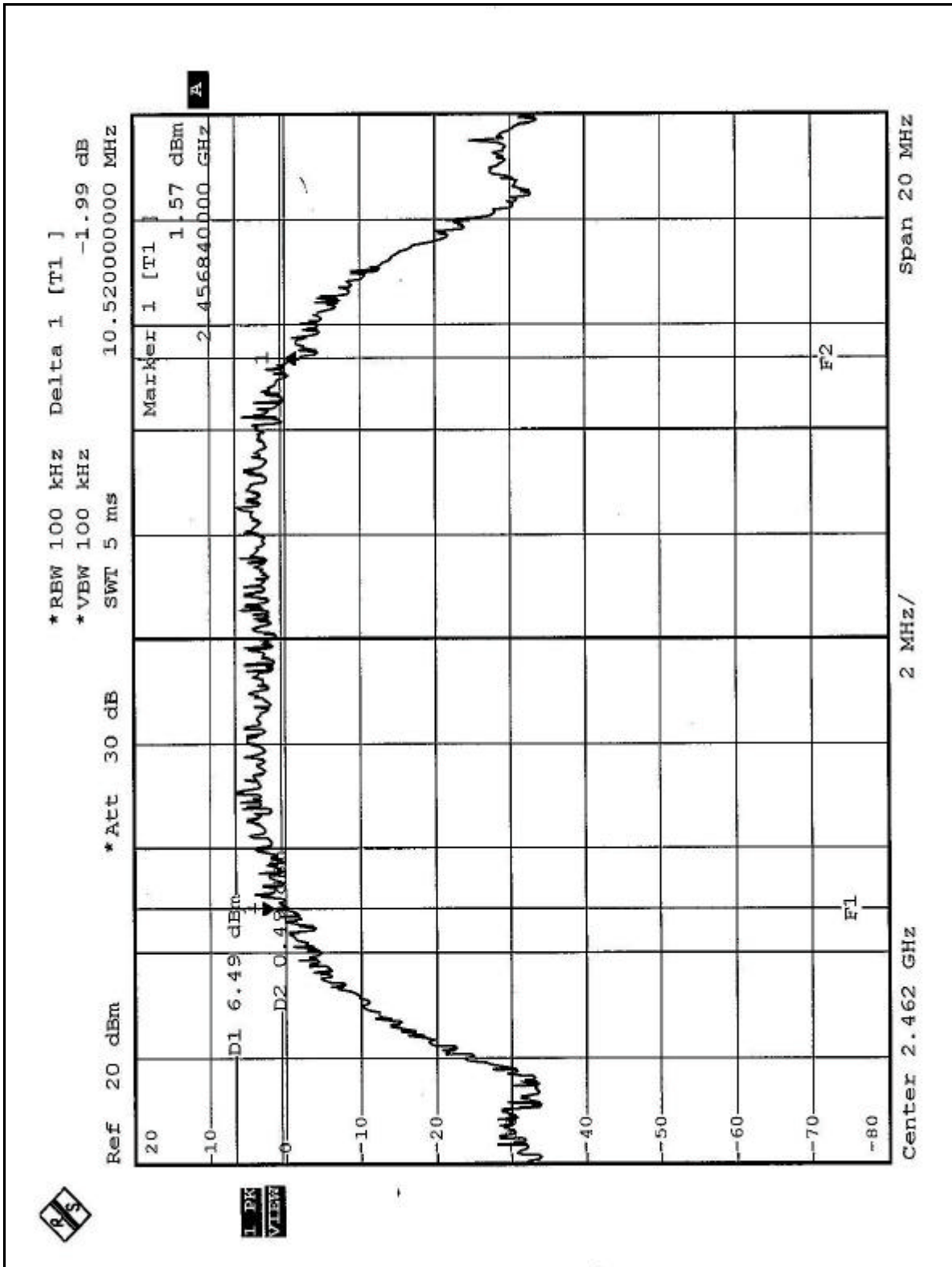
CH1



CH6



CH11



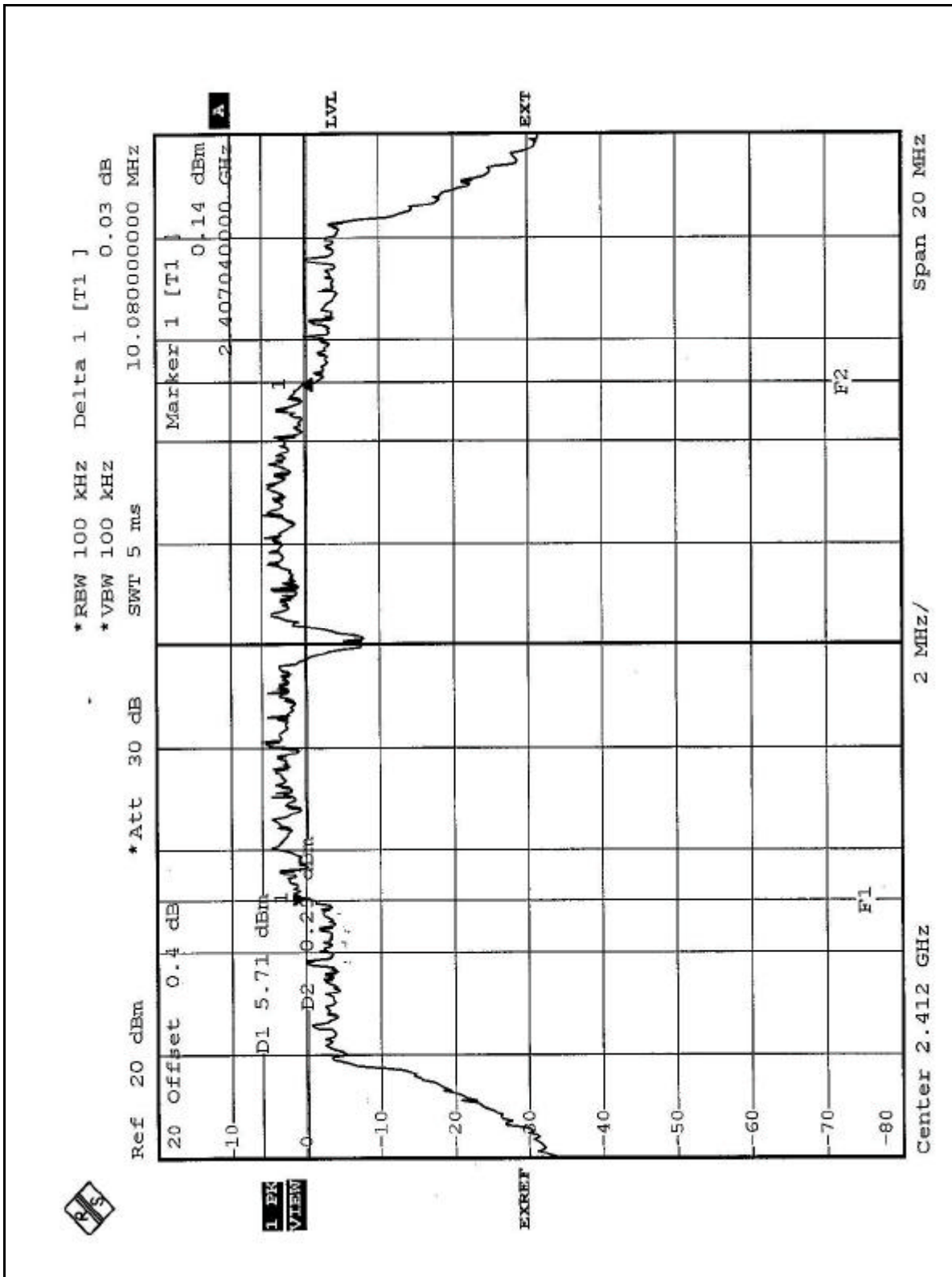
4.3.8 TEST RESULTS (B)

Normal mode

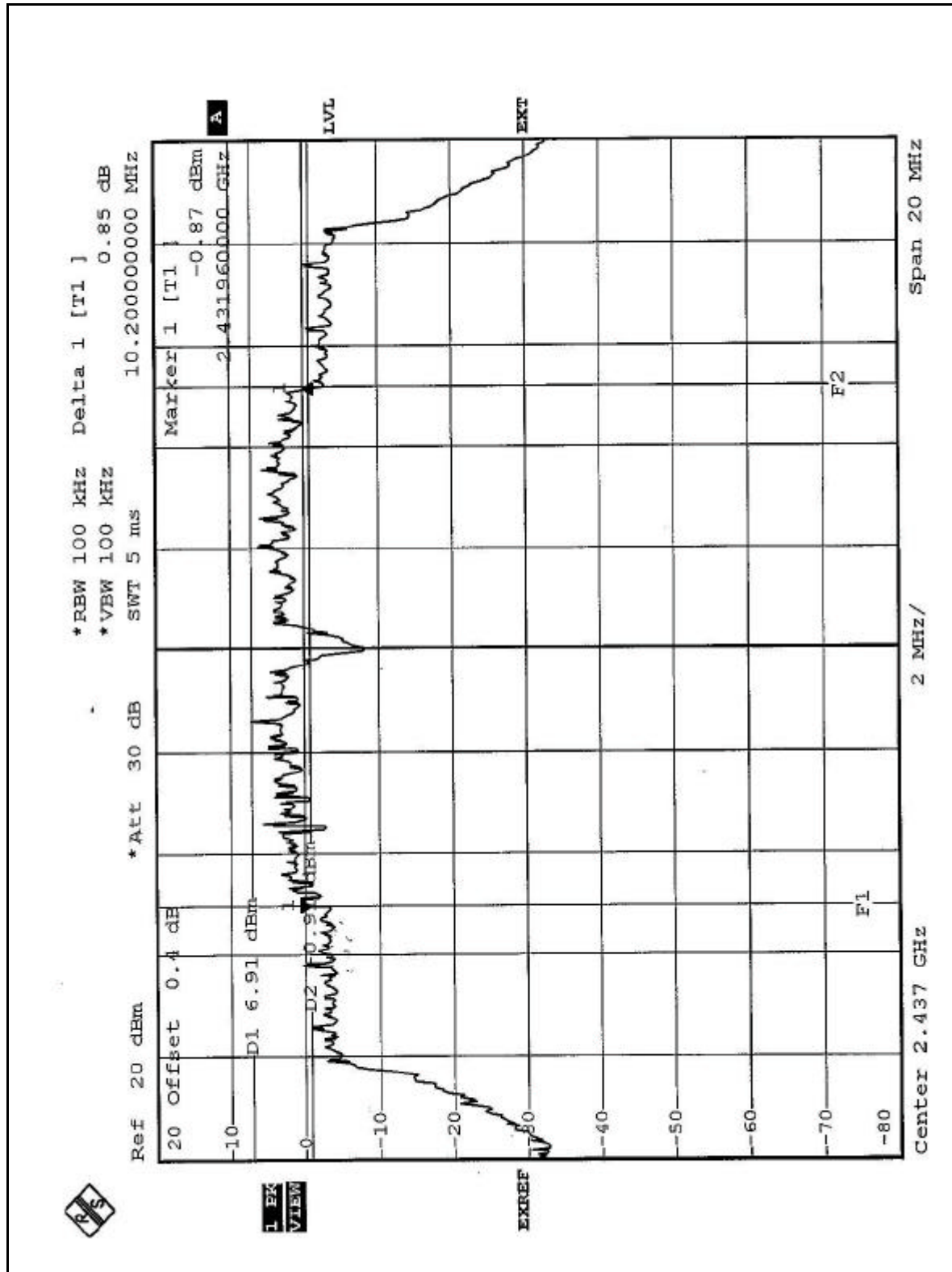
EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991 hPa
TESTED BY	Match Tsui	TEST MODE	Test Mode 1

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	10.08	0.5	PASS
6	2437	10.20	0.5	PASS
11	2462	10.20	0.5	PASS

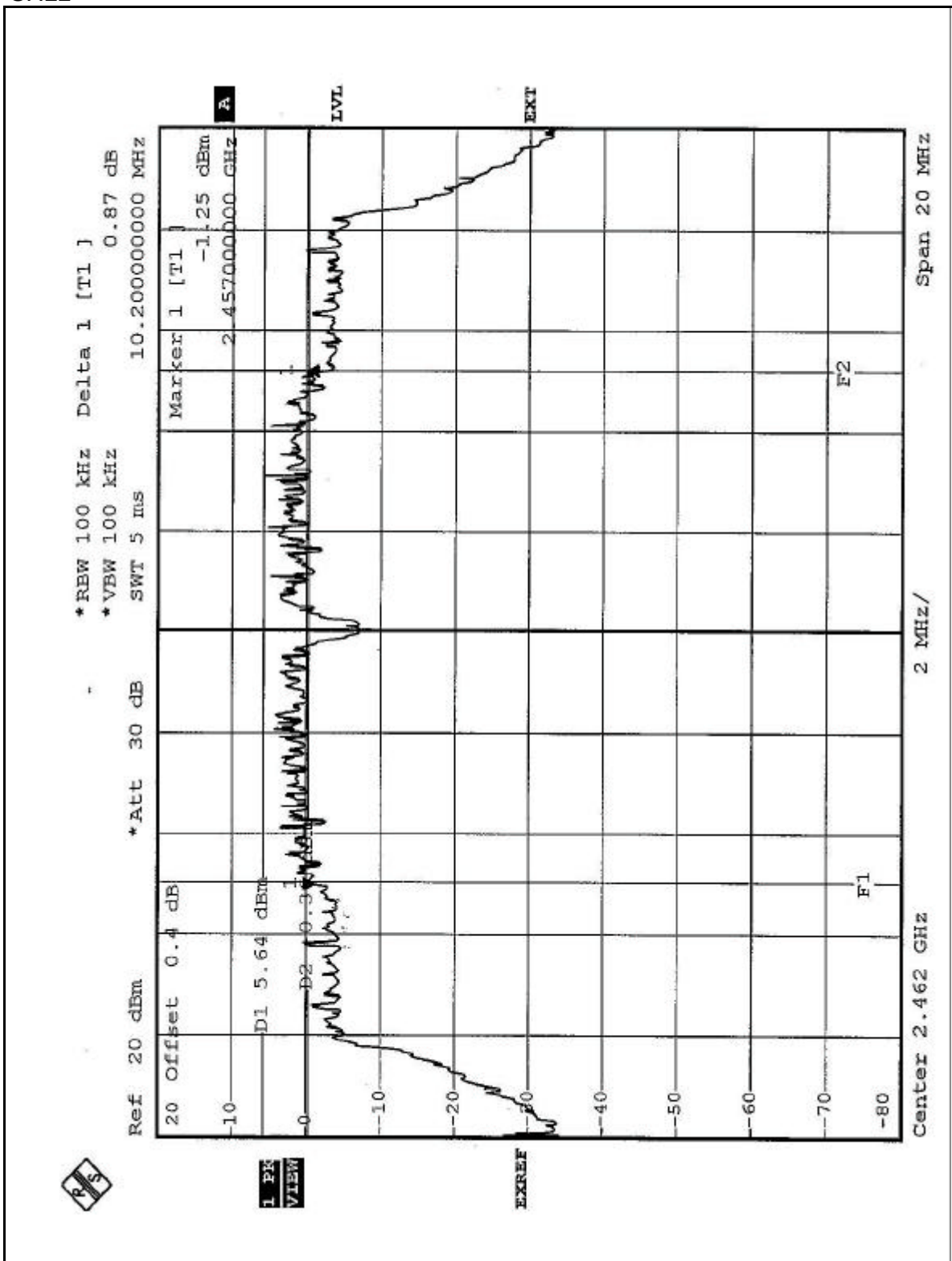
CH1



CH6



CH11

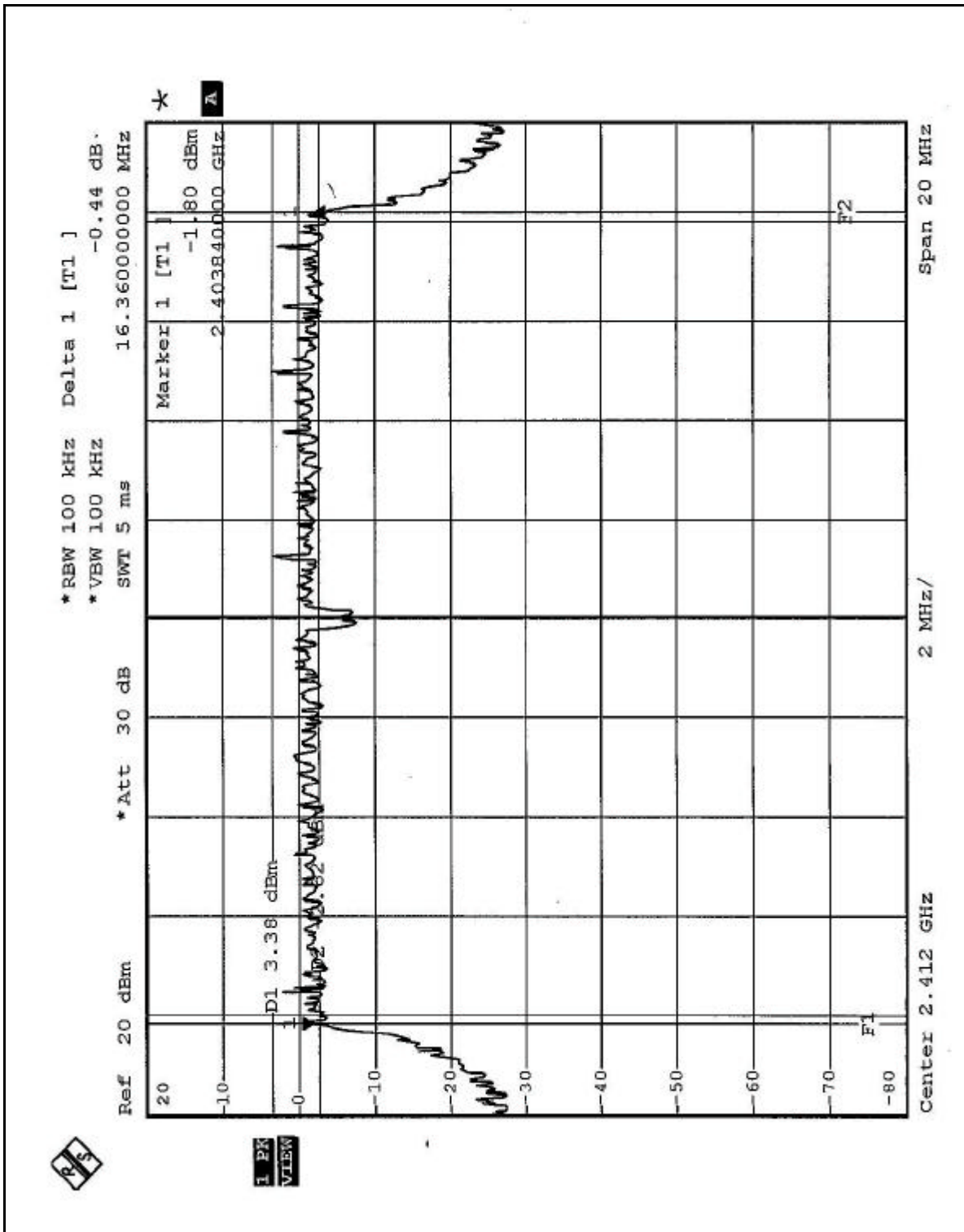




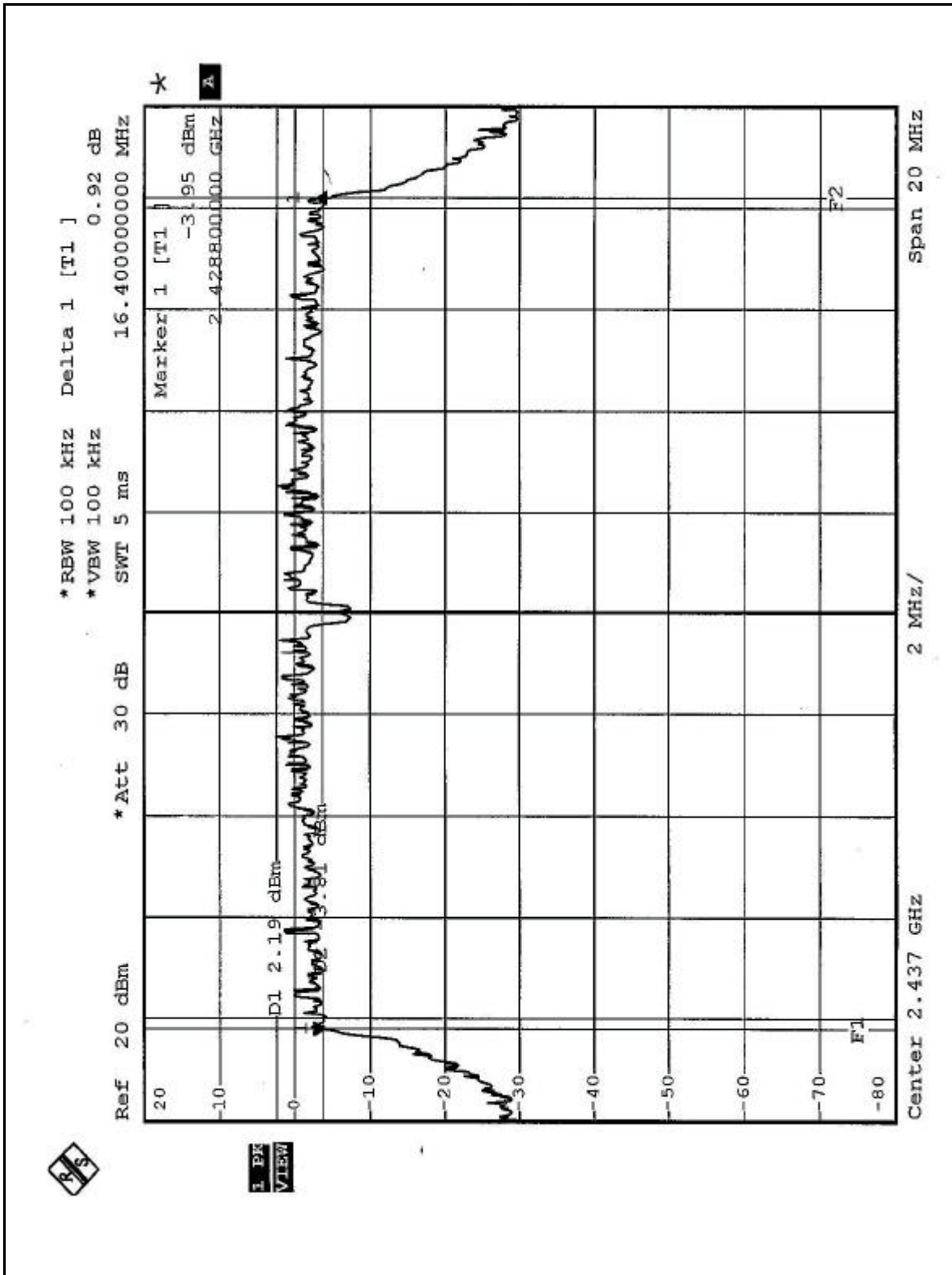
EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991 hPa
TESTED BY	Leo Hung	TEST MODE	Test Mode 2

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.36	0.5	PASS
6	2437	16.40	0.5	PASS
11	2462	16.32	0.5	PASS

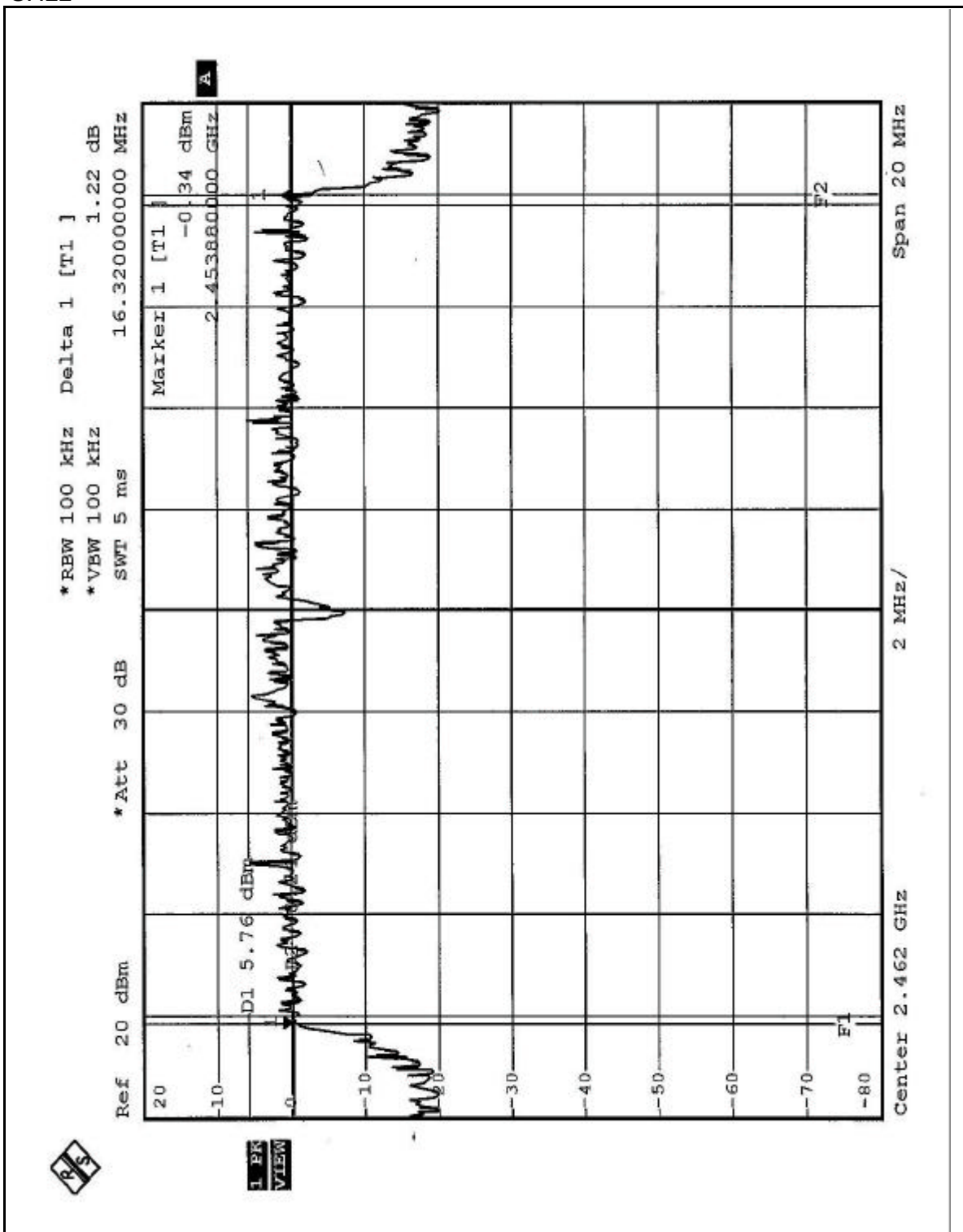
CH1



CH6



CH11

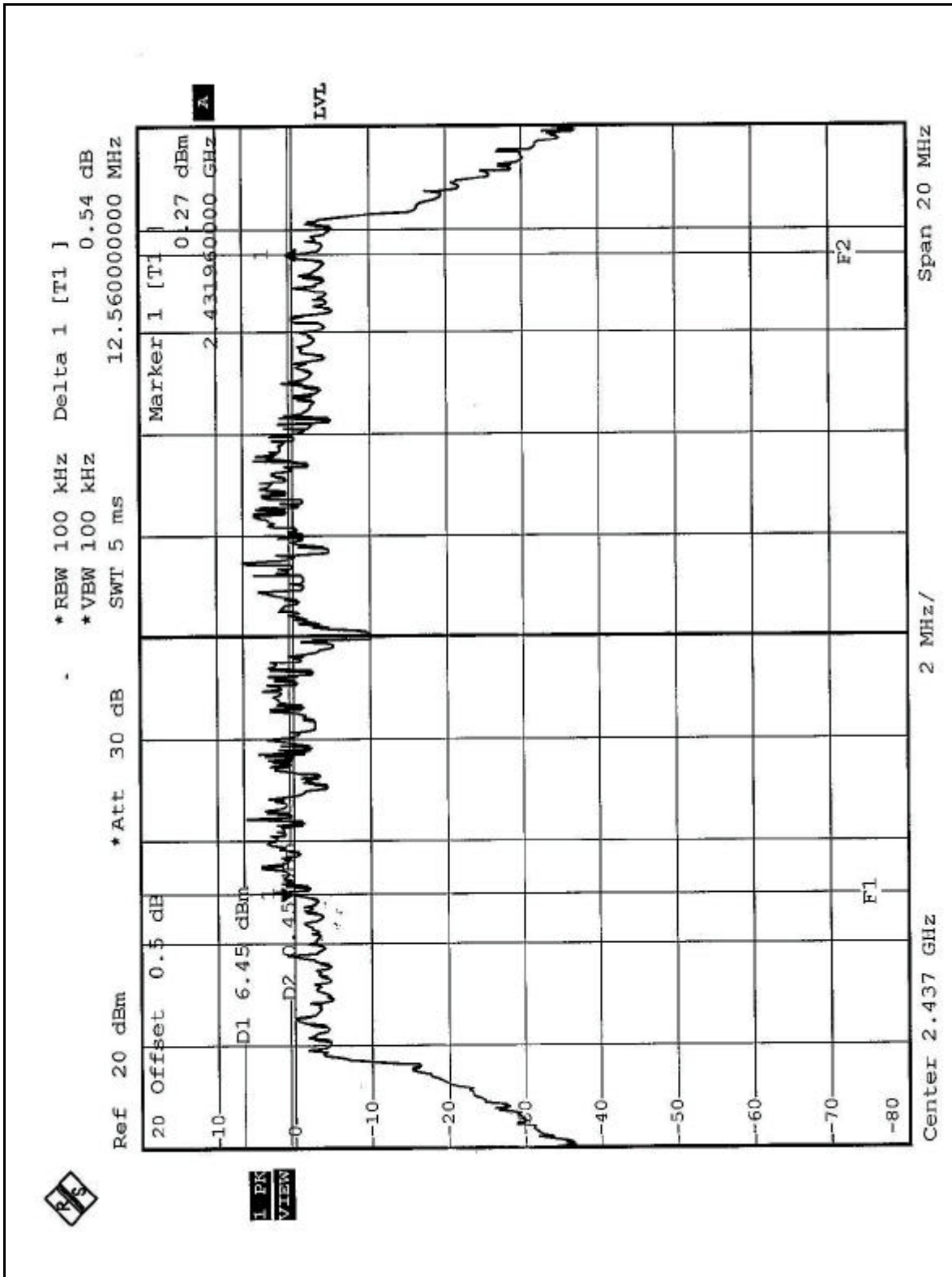


**Turbo mode**

EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991 hPa
TESTED BY	Match Tsui	TEST MODE	Test Mode 1

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	12.56	0.5	PASS

CH6

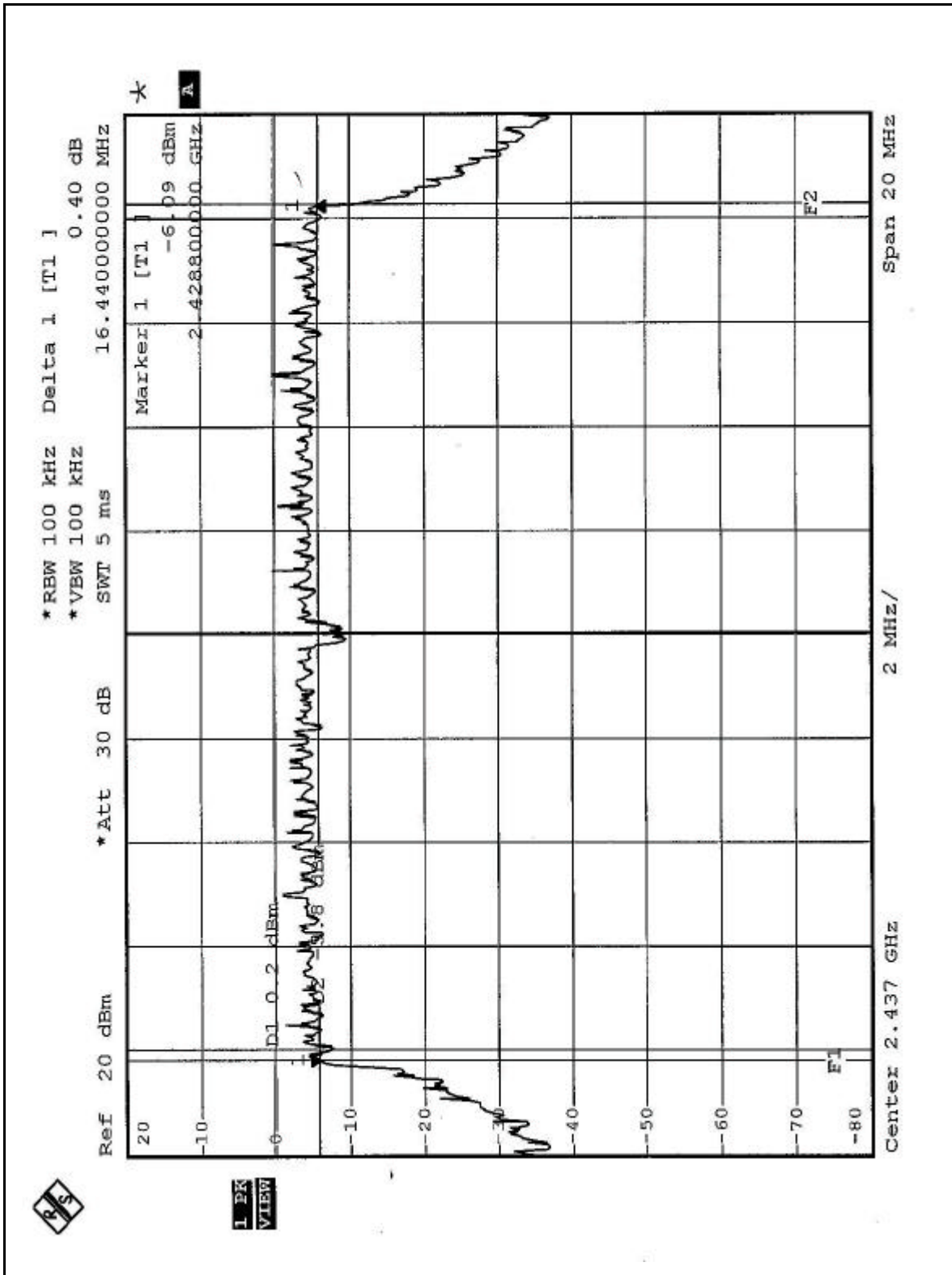




EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991 hPa
TESTED BY	Leo Hung	TEST MODE	Test Mode 2

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	16.44	0.5	PASS

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. 31, 2004
TEKTRONIX OSCILLOSCOPE	TDS 220	C019167	Feb. 01, 2005
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 read 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 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 (A)

EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991 hPa
TESTED BY	Match Tsui	TEST MODE	Test Mode 1

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	50.350	17.02	30	PASS
6	2437	51.286	17.10	30	PASS
11	2462	51.050	17.08	30	PASS

EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	23deg. C, 64%RH, 991 hPa
TESTED BY	Leo Hung	TEST MODE	Test Mode 2

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	49.204	16.92	30	PASS
6	2437	49.888	16.98	30	PASS
11	2462	50.234	17.01	30	PASS

4.4.8 TEST RESULTS (B)

Normal mode

EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991 hPa
TESTED BY	Match Tsui	TEST MODE	Test Mode 1

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	30.200	14.80	30	PASS
6	2437	30.903	14.90	30	PASS
11	2462	29.648	14.72	30	PASS

EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	23deg. C, 64%RH, 991 hPa
TESTED BY	Leo Hung	TEST MODE	Test Mode 2

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	28.840	14.60	30	PASS
6	2437	29.510	14.70	30	PASS
11	2462	28.379	14.53	30	PASS

**Turbo mode**

EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991 hPa
TESTED BY	Match Tsui	TEST MODE	Test Mode 1

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
6	2437	30.200	14.80	30	PASS

EUT	Wireless PCMCIA Card	MODEL	F5D7011
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	23deg. C, 64%RH, 991 hPa
TESTED BY	Leo Hung	TEST MODE	Test Mode 2

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
6	2437	28.184	14.50	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	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.