

APPLICATION FOR CERTIFICATION
On Behalf of
Futaba Corporation
Wireless Modem with Serial Interface
Model No. : FDL01TU
FCC ID : AZP-FDL01TU

Prepared for : Futaba Corporation
1080 Yabutsuka Chosei-son Chosei-gun
Chiba, 299-4395 Japan.

Prepared by : Audix Corporation
Technical Division EMC Department
No. 53-11, Tin-Fu Tsun, Lin-Kou,
Taipei County, Taiwan, R.O.C.

Tel : (02) 2609-9301, 2609-2133
Fax: (02) 2609-9303

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Date of Test : Sep. 14 ~ Oct. 04, 2005
Date of Report : Oct. 07, 2005

TABLE OF CONTENTS

Description	Page
TEST REPORT CERTIFICATION	4
1. GENERAL INFORMATION	5
1.1. Description of Device (EUT).....	5
1.2. Tested Supporting System Details.....	6
1.3. Description of Test Facility	8
1.4. Measurement Uncertainty.....	8
2. CONDUCTED EMISSION MEASUREMENT.....	9
2.1. Test Equipment.....	9
2.2. Block Diagram of Test Setup.....	9
2.3. Conducted Emission Limits (§15.207)	9
2.4. Operating Condition of EUT	10
2.5. Test Procedure	10
2.6. Test Results.....	10
3. RADIATED EMISSION MEASUREMENT	21
3.1. Test Equipment.....	21
3.2. Test Setup	21
3.3. Radiated Emission Limits (§15.209)	22
3.4. Operating Condition of EUT	22
3.5. Test Procedure	23
3.6. Test Results.....	23
4. 6dB BANDWIDTH MEASUREMENT	105
4.1. Test Equipment.....	105
4.2. Block Diagram of Test Setup.....	105
4.3. Specification Limits (§15.247(a)(2))	105
4.4. Operating Condition of EUT	105
4.5. Test Procedure	105
4.6. Test Results.....	106
5. MAXIMUM PEAK OUTPUT POWER MEASUREMENT	109
5.1. Test Equipment.....	109
5.2. Block Diagram of Test Setup.....	109
5.3. Specification Limits (§15.247(b)-(3)).....	109
5.4. Operating Condition of EUT	109
5.5. Test Procedure	109
5.6. Test Results.....	110
6. EMISSION LIMITATIONS MEASUREMENT	111
6.1. Test Equipment.....	111
6.2. Block Diagram of Test Setup.....	111
6.3. Specification Limits (§15.247(c)).....	111
6.4. Operating Condition of EUT	111
6.5. Test Procedure	111
6.6. Test Results.....	112
7. BAND EDGES MEASUREMENT.....	115
7.1. Test Equipment.....	115
7.2. Block Diagram of Test Setup.....	115
7.3. Specification Limits (§15.247(c)).....	115
7.4. Operating Condition of EUT	115
7.5. Test Procedure	115
7.6. Test Results.....	115

8. POWER SPECTRAL DENSITY MEASUREMENT117

8.1. Test Equipment..... 117

8.2. Block Diagram of Test Setup..... 117

8.3. Specification Limits (§15.247(d))..... 117

8.4. Operating Condition of EUT 117

8.5. Test Procedure 117

8.6. Test Results..... 117

9. OCCUPIED BANDWIDTH 99% POWER MEASUREMENT.....120

9.1. Test Equipment..... 120

9.2. Block Diagram of Test Setup..... 120

9.3. Specification 120

9.4. Operating Condition of EUT 120

9.5. Test Procedure 120

9.6. Test Results..... 120

10.DEVIATION TO TEST SPECIFICATIONS123

11.PHOTOGRAPHS124

11.1. Photos of Conducted Emission Measurement 124

11.2. Photos of Radiated Measurement at Semi-Anechoic Chamber 129

11.3. Photo of 6dB Bandwidth Measurement..... 139

11.4. Photo of Maximum Peak Output Measurement..... 139

11.5. Photo of Emission Limitations Measurement..... 140

11.6. Photo of Band Edges Measurement..... 140

11.7. Photo of Power Spectral Density Measurement 141

11.8. Photo of Occupied Bandwidth 99% Power Measurement..... 141

TEST REPORT CERTIFICATION

Applicant : Futaba Corporation
 Manufacturer : Futaba Corporation
 EUT Description : Wireless Modem with Serial Interface
 FCC ID : AZP-FDL01TU
 (A) MODEL NO. : FDL01TU
 (B) SERIAL NO. : N/A
 (C) POWER SUPPLY : DC 3.5 ~ 7V
 (D) TEST VOLTAGE : AC 120V, 60Hz (Via PC System) or
 DC 6V (DC Power Supply)

Measurement Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART C, JANUARY 2005
 AND ANSI C63.4/2003

(FCC CFR 47 Part 15C, §15.205, §15.207, §15.209 and §15.247)

The device described above was tested by AUDIX COPORATION to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 subpart C limits.

The measurement results are contained in this test report and AUDIX CORPORATION is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC official limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX CORPORATION.

Date of Test: Sep. 14 ~ Oct. 04, 2005

Prepared by: Monica Chang Oct. 14, 2005
 (Monica Chang/Administrator)

Test Engineer: Ben Cheng Oct. 14, 2005
 (Ben Cheng/Section Manager)

Approved & Authorized Signer: Leon Liu Oct. 14, 2005
 (Leon Liu/Senior Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Wireless Modem with Serial Interface
Model Number	:	FDL01TU
FCC ID	:	AZP-FDL01TU
Applicant	:	Futaba Corporation 1080 Yabutsuka Chosei-son Chosei-gun Chiba, 299-4395 Japan.
Manufacturer	:	Futaba Corporation 1080 Yabutsuka Chosei-son Chosei-gun Chiba, 299-4395 Japan.
Radio Technology	:	DSSS Modulation
Frequency Band	:	2403.328MHz ~ 2480.128MHz In 1.024MHz Separation
Tested Frequency	:	2403MHz (Channel 0) 2441MHz (Channel 37) 2480MHz (Channel 75)
Frequency Channel	:	76 channels (26 channels available for simultaneous communication in one area)
Antenna (Option)	:	(1) Printed Antenna (FAJ01EJ010) (2) Pencil Type Antenna (Part No. 1M38A03301) (3) Pedestal Antenna (Part No. 1M38A05801) (4) Flat Antenna (Single Type) (Part No. 1M38A09202) (5) Flat Antenna (Double Type) (Part No. 1M38A09201)
Antenna Gain	:	Printed Antenna: 2.14dBi Pencil Type Antenna: 2.14dBi Pedestal Antenna: 0dBi Flat Antenna (Single Type): 2.14dBi Flat Antenna (Double Type): 2.14dBi
Communication Cable (Option)	:	Non-Shielded, Detachable, 0.15m

Conversion Cable *2 : Non-Shielded, Detachable, 0.14m
(Option- Used for Pencil Type Antenna, Pedestal Antenna, Flat Antenna (Single Type) and Flat Antenna (Double Type))

Extension Cable : Shielded, Detachable, 2.0m
(Option- Used for Pedestal Antenna, Flat Antenna (Single Type) and Flat Antenna (Double Type))

Date of Receipt of Sample : Sep. 12, 2005

Date of Test : Sep. 14 ~ Oct. 04, 2005

Remark:

This EUT has five different antennas (RF Connector: Hirose U.FL-R-SMT), inform user that any change and modify is prohibited.

1.2. Tested Supporting System Details

1.2.1. PC SYSTEM

Model Number : D220 MT
Serial Number : SGH40709F2
FCC ID : By DoC
BSMI ID : R33001
Brand : HP
Manufacturer : First International Computer, Inc.
Power Cord : Non-Shielded, Detachable, 1.8m

1.2.2. 15" LCD MONITOR

Model Number : D5063M
Serial Number : CN206A7026
FCC ID : ARSLM562H
BSMI ID : R33037
Manufacturer : Top Victory Electronics (Fujian) Co., Ltd.
D-Sub Cable : Shielded, Detachable, 1.8m
Bonded two ferrite cores
AC Adapter : Delta, M/N ADP-40TB
BSMI ID 3892D142
Cord: Shielded, Undetachable, 1.8m
Bonded a ferrite core
Power Cord : Non-Shielded, Detachable, 1.8m

1.2.3. KEYBOARD

Model Number : 335192-AB1
Serial Number : M0401000824
FCC ID : GYUR84SK
BSMI ID : T3A002
Manufacturer : Silitek (Brand: HP)
Data Cable : Non-Shielded, Undetachable, 1.8m

1.2.4. DOT MATRIX PRINTER (USED FOR CONDUCTED EMISSION AND RADIATED EMISSION TESTS ONLY)

Model Number : KX-P2135
 Serial Number : 8DMCN02139
 FCC ID : ACJ5Z6KX-P2135
 BSMI ID : 3872A371
 Manufacturer : Matsushita (Brand: Panasonic)
 Data Cable : Shielded, Detachable, 1.5m
 Power Cord : Non-Shielded, Detachable, 1.8m

1.2.5. MOUSE

Model Number : M-S69
 Serial Number : F6AB70S5BOY1NWZ
 FCC ID : JNZ211443
 BSMI ID : R41126
 Manufacturer : Logitech (Brand: HP)
 Data Cable : Non-Shielded, Undetachable, 1.8m

1.2.6. DC POWER SUPPLY (TO CONVERSION BOARD)

Model Number : 3303A
 Serial Number : 721773
 Manufacturer : TOP WARD
 DC Power Cable *2 : Non-Shielded, Detachable, 0.9m
 AC Power Cord : Non-Shielded, Detachable, 1.8m

1.2.7. CONVERSION BOARD (RS-232C LEVEL CONVERSION CIRCUIT)

Part Number : 050200008
 Serial Number : N/A
 Manufacturer : FUTABA
 RS-232 Cable : Shielded, Detachable, 1.5m (To PC System)
 Power Cable : Non-Shielded, Detachable, 1m (To DC Power Supply)

1.3. Description of Test Facility

Name of Firm : **Audix Corporation**
Technical Division EMC Department
 No. 53-11, Tin-Fu Tsun, Lin-Kou Hsiang,
 Taipei County 24443, Taiwan, R.O.C.

Test Location & Facility (C2/AC) : **No. 2 Shielded Room**
 No. 53-11, Tin-Fu Tsun, Lin-Kou Hsiang,
 Taipei County 24443, Taiwan, R.O.C.

Semi-Anechoic Chamber
 No. 53-11, Tin-Fu Tsun, Lin-Kou Hsiang,
 Taipei County 24443, Taiwan, R.O.C.

May. 16, 2003 File on
 Federal Communication Commission
 Registration Number: 90993

NVLAP Lab. Code : 200077-0
 (NVLAP is a NATA accredited body under Mutual Recognition Agreement)

1.4. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB), (V/m)
Conduction Test	150kHz~30MHz	± 1.73dB
Radiation Test (Distance: 3m)	30MHz~300MHz	± 2.91dB
	300MHz~1000MHz	± 2.74dB
	Above 1GHz	± 5.02dB

Remark : Uncertainty = $ku_c(y)$

Test Item	Uncertainty
6dB Bandwidth	± 0.05kHz
Emission Limitations	± 0.13dB
Maximum peak output power	± 0.33dBm
Band edges	± 0.13dB
Power spectral density	± 0.13dB
Occupied Bandwidth 99% Power	± 0.05kHz

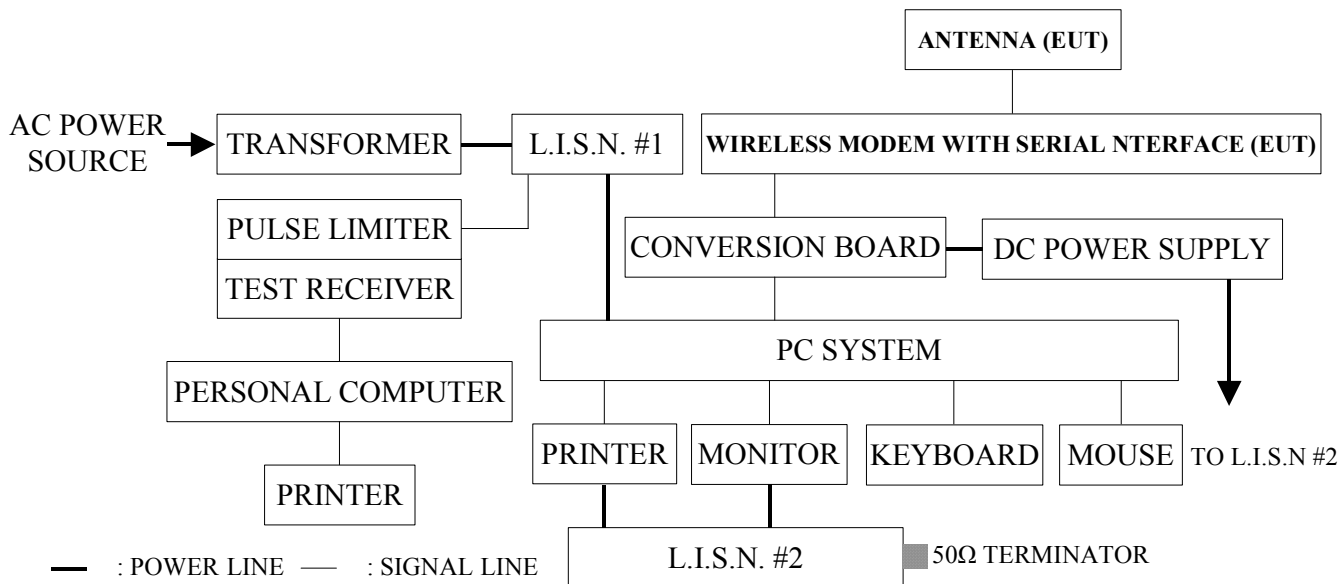
2. CONDUCTED EMISSION MEASUREMENT

2.1. Test Equipment

The following test equipment was used during the conducted emission measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R & S	ESCS30	100265	Sep. 27, 05'	Sep. 26, 06'
2.	L.I.S.N. #1	Kyoritsu	KNW-407	8-855-9	Apr. 20, 05'	Apr. 19, 06'
3.	L.I.S.N. #2	Kyoritsu	KNW-407	8-881-13	Apr. 20, 05'	Apr. 19, 06'
4.	Pulse Limiter	R & S	ESH3Z2	001	Apr. 09, 05'	Apr. 08, 06'

2.2. Block Diagram of Test Setup



2.3. Conducted Emission Limits (§15.207)

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level	Average Level
150kHz ~ 500kHz	66 ~ 56 dB μ V	56 ~ 46 dB μ V
500kHz ~ 5MHz	56 dB μ V	46 dB μ V
5MHz ~ 30MHz	60 dB μ V	50 dB μ V

2.4. Operating Condition of EUT

- 2.4.1. Setup the EUT and simulator as shown on 2.2.
- 2.4.2. Turned on the power of all equipment.
- 2.4.3. The PC system running the test program “Futaba Term” was used to enable the EUT to transmit and receive data at frequency 2441MHz during all testing.

2.5. Test Procedure

The EUT and simulator was put on table which was above the ground by 80cm, the EUT was powered via conversion board. The conversion board was connected to the DC Power Supply and PC system, the PC’s power cord was connected to the power mains through a line impedance stabilization network (L.I.S.N. #1) and the other peripheral devices power cord were connected to the power mains through a line impedance stabilization network (L.I.S.N. #2) This provided a 50 ohm coupling impedance for the measuring equipment. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to FCC ANSI C63.4-2003 on conducted measurement.

The bandwidth of the R&S Test Receiver ESCS30 was set at 9kHz.

The frequency range from 150kHz to 30MHz was checked.

All the final readings from Test Receiver were measured with the Quasi-Peak detector and Average detector. (Remark: If the Average limit is met when using a Quasi-Peak detector, the Average detector is unnecessary)

2.6. Test Results

PASSED. (All the emissions not reported below are too low against the prescribed limits.)

The EUT was tested with five different antennas during the testing and all the test results are listed in the next pages.

EUT : Wireless Modem with Serial Interface M/N : FDL01TU

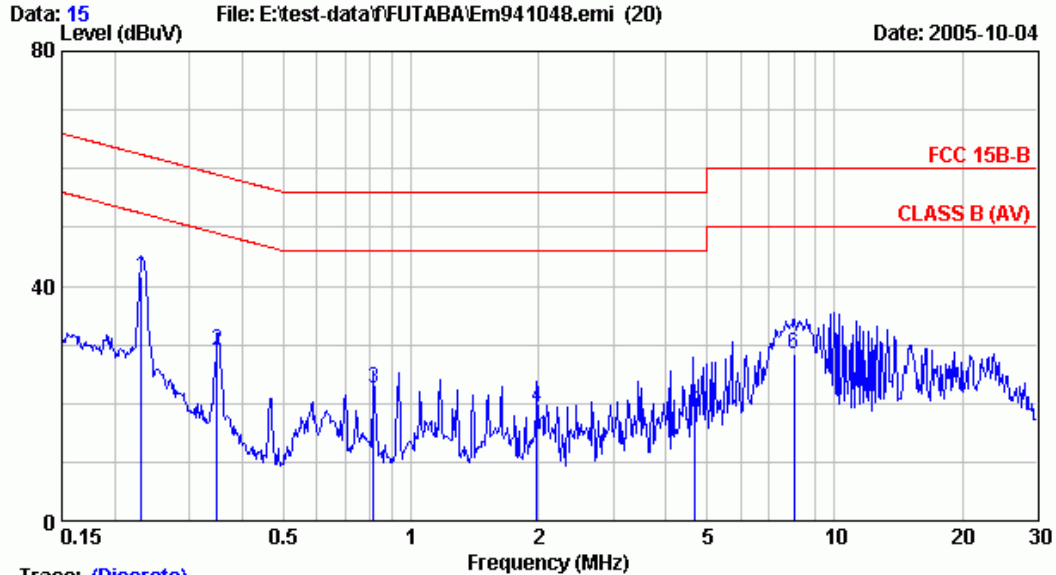
Test Date : Oct. 04, 2005 Temperature : 24°C Humidity : 50%

The details of test modes and reference test data are as follows:

Mode	Antenna	Reference Data No.	
		Neutral	Line
1.	Printed Antenna	15	16
2.	Pencil Type Antenna	20	19
3.	Pedestal Antenna	17	18
4.	Flat Antenna (Single Type)	13	14
5.	Flat Antenna (Double Type)	11	12



AUDIX Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:02-26092133 Fax:02-26099303
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

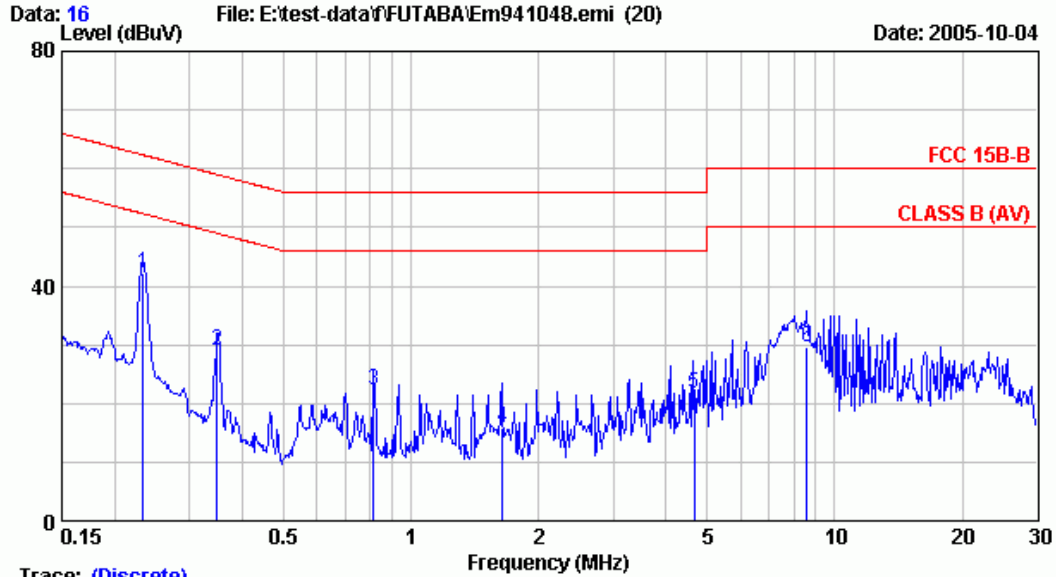
Site	: No.2 Shielded room	Data	: 15
Condition	: KNW-407	Phase	: NEUTRAL
Limit	: FCC 15B-B		
Env. / Ins.	: 24°C,50% / ESCS 30	Engineer:	Cater Chou
EUT	: Wireless Modem with Serial Interface		
Power Rating	: 120Vac/60Hz	M/N:	FDL01TU
Test Mode	: Printed		

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dB μ V)	Emission Level (dB μ V)	Limits (dB μ V)	Margin (dB)	Remark
1	0.232	0.10	0.27	41.26	41.63	62.39	20.76	QP
2	0.348	0.10	0.31	28.71	29.12	59.00	29.88	QP
3	0.817	0.18	0.38	22.12	22.68	56.00	33.32	QP
4	1.983	0.20	0.40	18.70	19.30	56.00	36.70	QP
5	4.654	0.22	0.45	17.68	18.34	56.00	37.66	QP
6	8.025	0.28	0.63	27.59	28.49	60.00	31.51	QP

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.
 2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



AUDIX Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:02-26092133 Fax:02-26099303
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

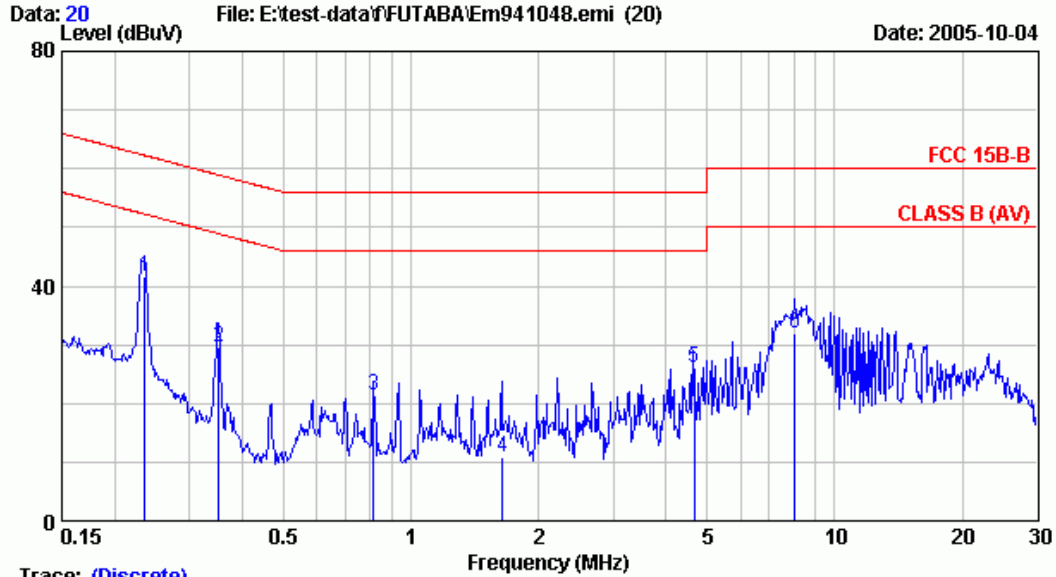
Site : No.2 Shielded room Data : 16
 Condition : KNW-407 Phase : LINE
 Limit : FCC 15B-B
 Env. / Ins. : 24°C,50% / ESCS 30 Engineer: Cater Chou
 EUT : Wireless Modem with Serial Interface
 Power Rating : 120Vac/60Hz M/N:FDL01TU
 Test Mode : printed

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dB μV)	Emission Level (dB μV)	Limits (dB μV)	Margin (dB)	Remark
1	0.233	0.10	0.27	41.72	42.09	62.35	20.26	QP
2	0.348	0.10	0.31	28.49	28.90	59.00	30.10	QP
3	0.817	0.18	0.38	21.66	22.22	56.00	33.78	QP
4	1.641	0.20	0.40	15.19	15.79	56.00	40.21	QP
5	4.653	0.22	0.45	20.98	21.64	56.00	34.36	QP
6	8.593	0.28	0.65	28.57	29.50	60.00	30.50	QP

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.
 2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



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Trace: (Discrete)

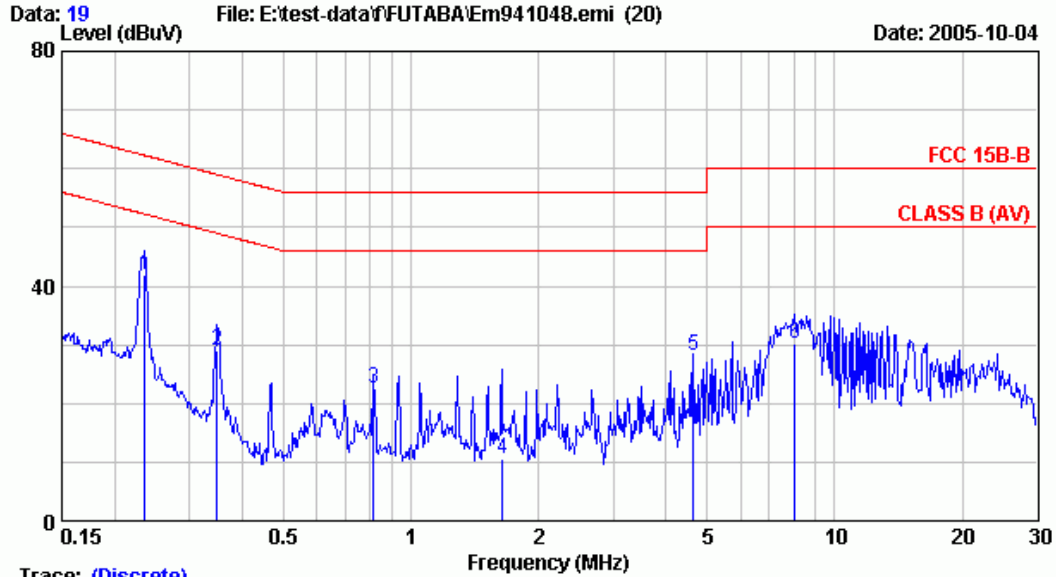
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Condition	: KNW-407	Phase	: NEUTRAL
Limit	: FCC 15B-B		
Env. / Ins.	: 24°C,50% / ESCS 30	Engineer:	: Cater Chou
EUT	: Wireless Modem with Serial Interface		
Power Rating	: 120Vac/60Hz	M/N:	: FDL01TU
Test Mode	: pencil type		

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dB μ V)	Emission Level (dB μ V)	Limits (dB μ V)	Margin (dB)	Remark
1	0.235	0.10	0.27	41.24	41.61	62.26	20.65	QP
2	0.352	0.10	0.31	29.32	29.73	58.92	29.19	QP
3	0.817	0.18	0.38	20.80	21.36	56.00	34.64	QP
4	1.644	0.20	0.40	10.25	10.85	56.00	45.15	QP
5	4.651	0.22	0.45	25.45	26.11	56.00	29.89	QP
6	8.063	0.28	0.63	31.01	31.91	60.00	28.09	QP

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.
 2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



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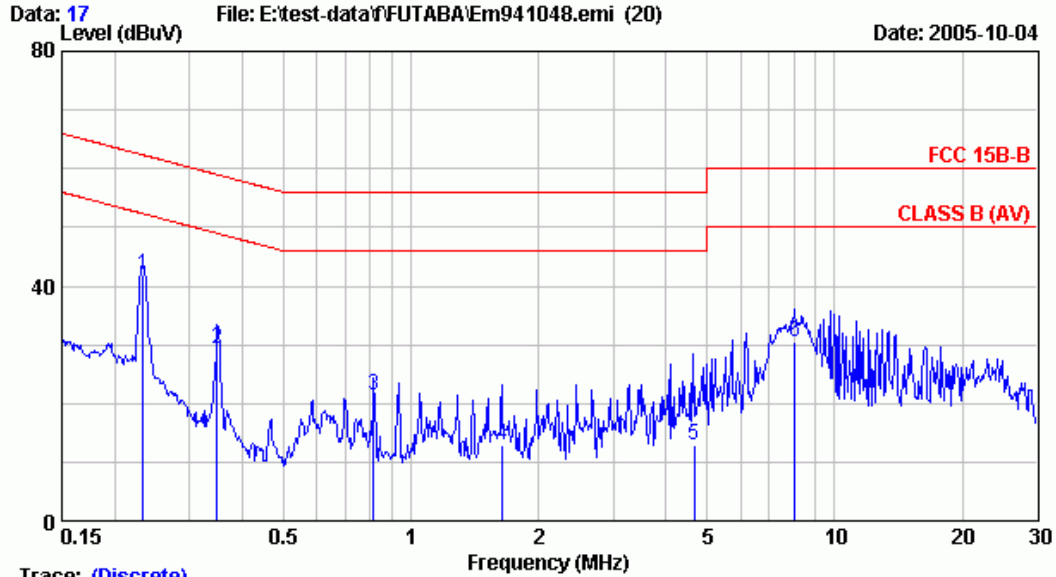
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Condition	: KNW-407	Phase	: LINE
Limit	: FCC 15B-B		
Env. / Ins.	: 24°C,50% / ESCS 30	Engineer:	Cater Chou
EUT	: Wireless Modem with Serial Interface		
Power Rating	: 120Vac/60Hz	M/N:	FDL01TU
Test Mode	: Pencil type		

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dB μV)	Emission Level (dB μV)	Limits (dB μV)	Margin (dB)	Remark
1	0.235	0.10	0.27	41.40	41.77	62.26	20.49	QP
2	0.348	0.10	0.31	28.71	29.12	59.00	29.88	QP
3	0.818	0.18	0.38	22.04	22.60	56.00	33.40	QP
4	1.644	0.20	0.40	9.81	10.41	56.00	45.59	QP
5	4.649	0.22	0.45	27.42	28.08	56.00	27.92	QP
6	8.057	0.28	0.63	29.27	30.17	60.00	29.83	QP

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.
 2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



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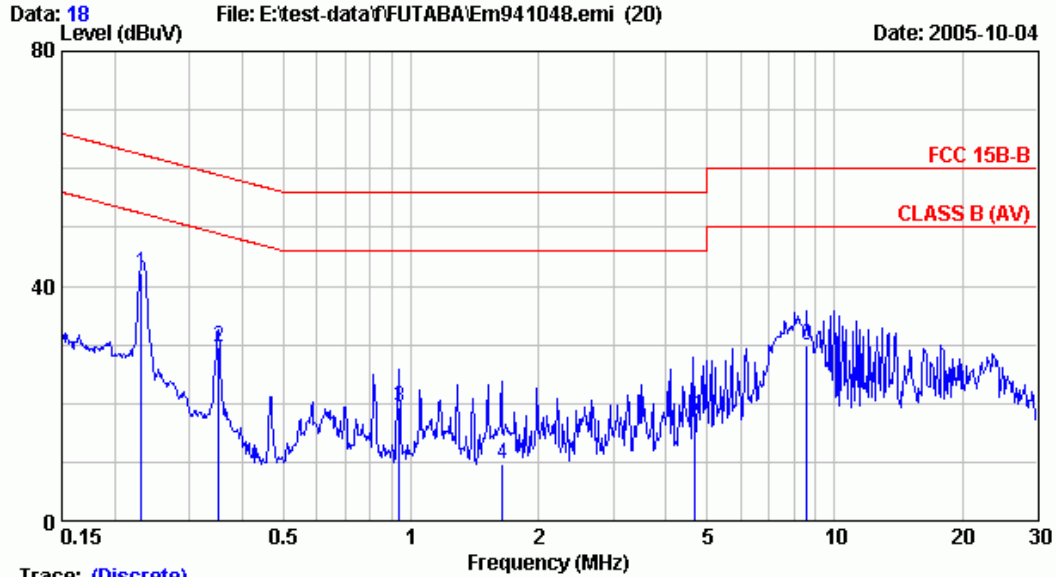
Site	: No.2 Shielded room	Data	: 17
Condition	: KNW-407	Phase	: NEUTRAL
Limit	: FCC 15B-B		
Env. / Ins.	: 24*C,50% / ESCS 30	Engineer:	: Cater Chou
EUT	: Wireless Modem with Serial Interface		
Power Rating	: 120Vac/60Hz	M/N:	: FDL01TU
Test Mode	: Pedstal		

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dB μ V)	Emission Level (dB μ V)	Limits (dB μ V)	Margin (dB)	Remark
1	0.233	0.10	0.27	41.60	41.97	62.35	20.38	QP
2	0.348	0.10	0.31	28.79	29.20	59.00	29.80	QP
3	0.817	0.18	0.38	20.86	21.42	56.00	34.58	QP
4	1.643	0.20	0.40	12.39	12.99	56.00	43.01	QP
5	4.656	0.22	0.45	12.18	12.84	56.00	43.16	QP
6	8.064	0.28	0.63	29.59	30.49	60.00	29.51	QP

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.
 2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



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Trace: (Discrete)

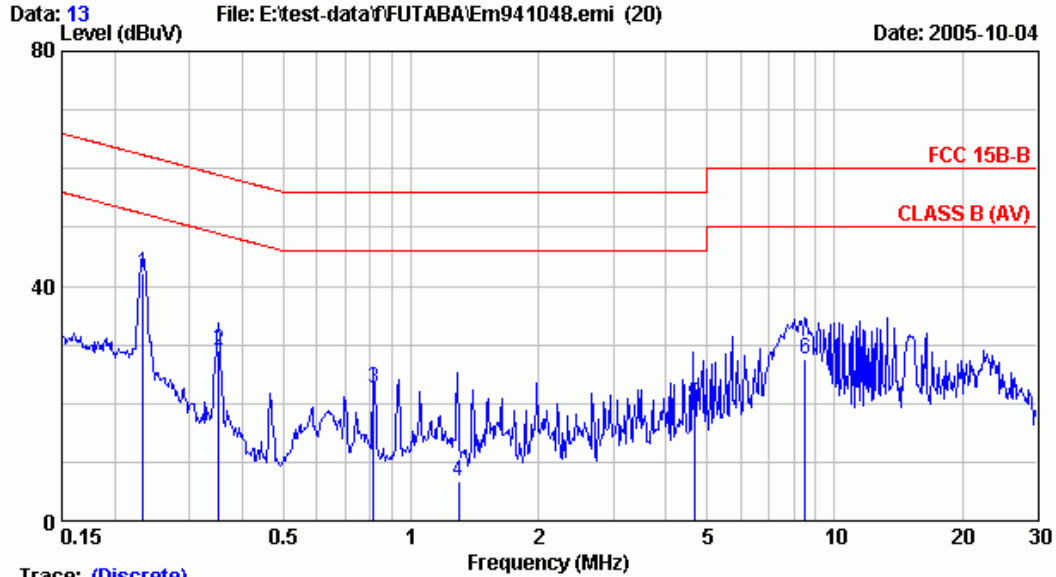
Site : No.2 Shielded room Data : 18
 Condition : KNW-407 Phase : LINE
 Limit : FCC 15B-B
 Env. / Ins. : 24°C,50% / ESCS 30 Engineer: Cater Chou
 EUT : Wireless Modem with Serial Interface
 Power Rating : 120Vac/60Hz M/N:FDL01TU
 Test Mode : Pedstal

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dB μV)	Emission Level (dB μV)	Limits (dB μV)	Margin (dB)	Remark
1	0.232	0.10	0.27	41.68	42.05	62.39	20.34	QP
2	0.352	0.10	0.31	29.26	29.67	58.92	29.25	QP
3	0.939	0.19	0.39	18.64	19.23	56.00	36.77	QP
4	1.645	0.20	0.40	9.07	9.67	56.00	46.33	QP
5	4.654	0.22	0.45	17.02	17.68	56.00	38.32	QP
6	8.593	0.28	0.65	29.05	29.98	60.00	30.02	QP

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.
 2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



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 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

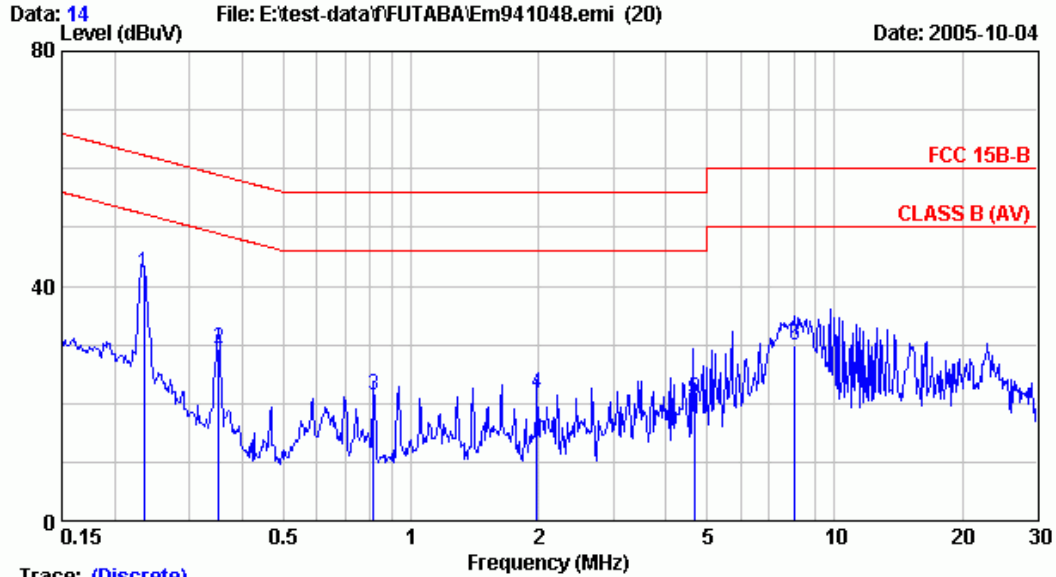
Site	: No.2 Shielded room	Data	: 13
Condition	: KNW-407	Phase	: NEUTRAL
Limit	: FCC 15B-B		
Env. / Ins.	: 24°C,50% / ESCS 30	Engineer:	Cater Chou
EUT	: Wireless Modem with Serial Interface		
Power Rating	: 120Vac/60Hz	M/N:	FDL01TU
Test Mode	: Flat (single)		

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dB μ V)	Emission Level (dB μ V)	Limits (dB μ V)	Margin (dB)	Remark
1	0.233	0.10	0.27	41.76	42.13	62.35	20.21	QP
2	0.352	0.10	0.31	28.54	28.95	58.91	29.97	QP
3	0.817	0.18	0.38	22.12	22.68	56.00	33.32	QP
4	1.295	0.20	0.40	6.26	6.86	56.00	49.14	QP
5	4.654	0.22	0.45	19.20	19.86	56.00	36.14	QP
6	8.509	0.28	0.65	26.72	27.65	60.00	32.35	QP

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.
 2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



AUDIX Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:02-26092133 Fax:02-26099303
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

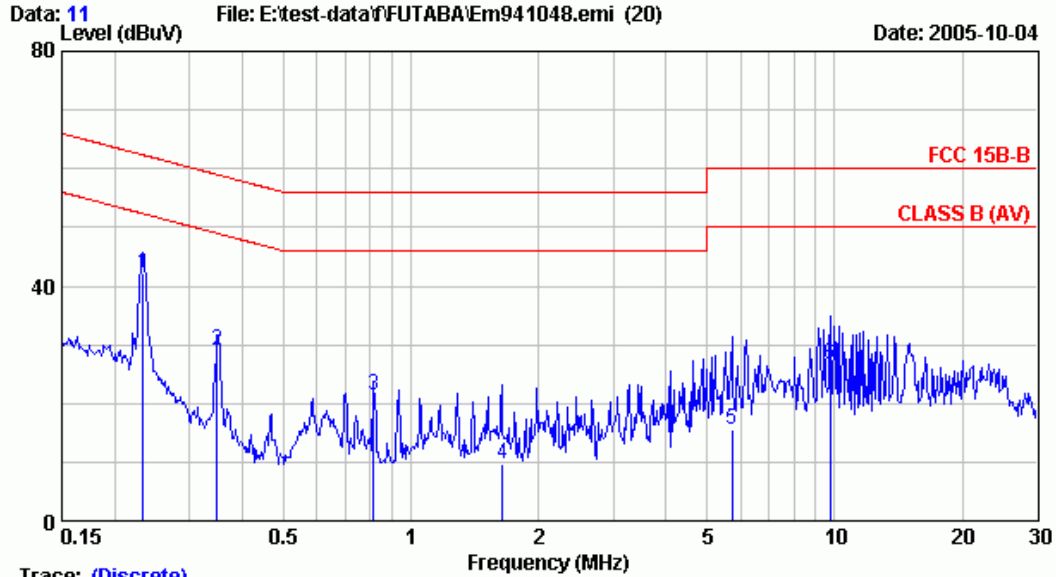
Site : No.2 Shielded room Data : 14
 Condition : KNW-407 Phase : LINE
 Limit : FCC 15B-B
 Env. / Ins. : 24°C,50% / ESCS 30 Engineer: Cater Chou
 EUT : Wireless Modem with Serial Interface
 Power Rating : 120Vac/60Hz M/N:FDL01TU
 Test Mode : Flat (single)

	LISN		Cable		Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB)	Loss (dB)	Reading (dB μV)	Level (dB μV)	(dB μV)	(dB)			
1	0.234	0.10	0.27	41.68	42.05	62.31	20.25	QP	
2	0.352	0.10	0.31	29.04	29.45	58.92	29.47	QP	
3	0.817	0.18	0.38	20.90	21.46	56.00	34.54	QP	
4	1.984	0.20	0.40	21.02	21.62	56.00	34.38	QP	
5	4.654	0.22	0.45	20.22	20.88	56.00	35.12	QP	
6	8.060	0.28	0.63	28.99	29.89	60.00	30.11	QP	

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.
 2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:02-26092133 Fax:02-26099303
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

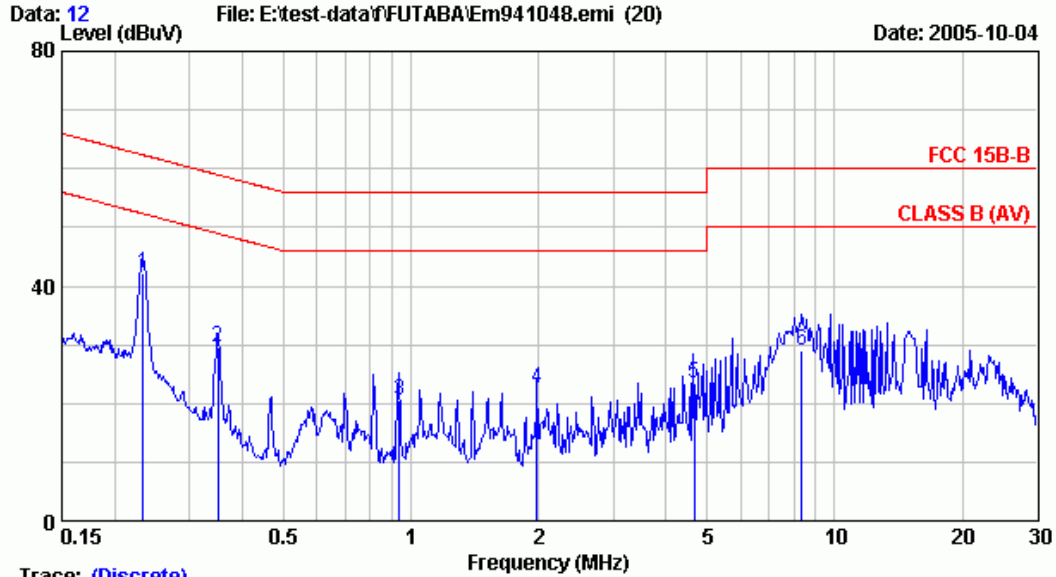
Site	: No.2 Shielded room	Data	: 11
Condition	: KNW-407	Phase	: NEUTRAL
Limit	: FCC 15B-B		
Env. / Ins.	: 24*C,50% / ESCS 30	Engineer:	: Cater Chou
EUT	: Wireless Modem with Serial Interface		
Power Rating	: 120Vac/60Hz	M/N:	: FDL01TU
Test Mode	: Flat (double)		

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dB μ V)	Emission Level (dB μ V)	Limits (dB μ V)	Margin (dB)	Remark
1	0.233	0.10	0.27	41.72	42.09	62.35	20.25	QP
2	0.348	0.10	0.31	28.65	29.06	59.00	29.94	QP
3	0.817	0.18	0.38	20.86	21.42	56.00	34.58	QP
4	1.645	0.20	0.40	9.13	9.73	56.00	46.27	QP
5	5.713	0.24	0.52	14.91	15.67	60.00	44.33	QP
6	9.764	0.30	0.69	25.75	26.74	60.00	33.26	QP

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.
 2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



AUDIX Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:02-26092133 Fax:02-26099303
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

Site : No.2 Shielded room Data : 12
 Condition : KNW-407 Phase : LINE
 Limit : FCC 15B-B
 Env. / Ins. : 24°C,50% / ESCS 30 Engineer: Cater Chou
 EUT : Wireless Modem with Serial Interface
 Power Rating : 120Vac/60Hz M/N:FDL01TU
 Test Mode : Flat (double)

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dB μV)	Emission Level (dB μV)	Limits (dB μV)	Margin (dB)	Remark
1	0.233	0.10	0.27	41.86	42.23	62.35	20.12	QP
2	0.350	0.10	0.31	29.06	29.47	58.96	29.49	QP
3	0.938	0.19	0.39	20.00	20.59	56.00	35.41	QP
4	1.984	0.20	0.40	21.94	22.54	56.00	33.46	QP
5	4.653	0.22	0.45	22.64	23.30	56.00	32.70	QP
6	8.374	0.28	0.64	27.95	28.87	60.00	31.13	QP

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.
 2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

3. RADIATED EMISSION MEASUREMENT

3.1. Test Equipment

The following test equipment was used during the radiated emission measurement:

3.1.1. For Frequency 30MHz~1000MHz (at Semi-Anechoic Chamber)

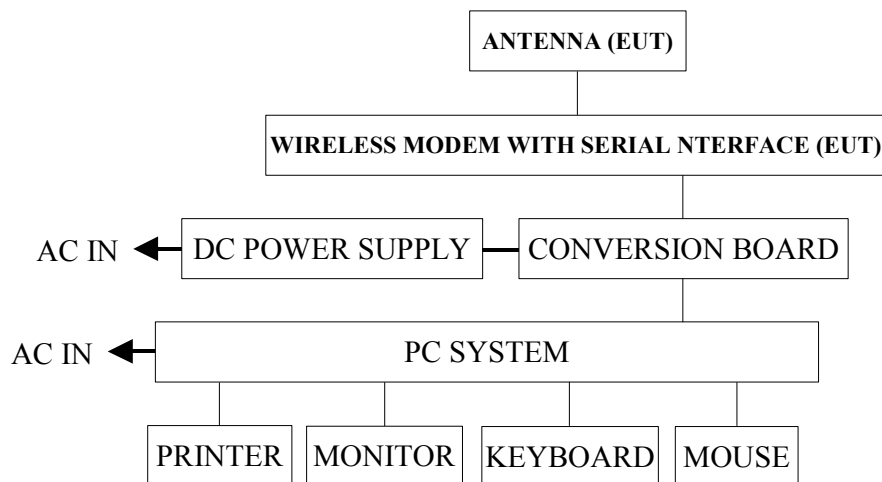
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8593EM	3826A00248	Oct. 04, 04'	Oct. 03, 05'
2.	Test Receiver	R&S	ESCS30	100265	Oct. 05, 04'	Oct. 04, 05'
3.	Pre-Amplifier	HP	8447D	2944A06305	Mar. 10, 05'	Mar. 09, 06'
4.	Broadband Antenna	Schwarzbeck	BBA 9106	A3L	Feb. 18, 05'	Feb. 17, 06'
5.	Broadband Antenna	Schwarzbeck	UHALP9108-A	0139	Dec. 14, 04'	Dec. 13, 05'

3.1.2. For Frequency Above 1GHz (at Semi-Anechoic Chamber)

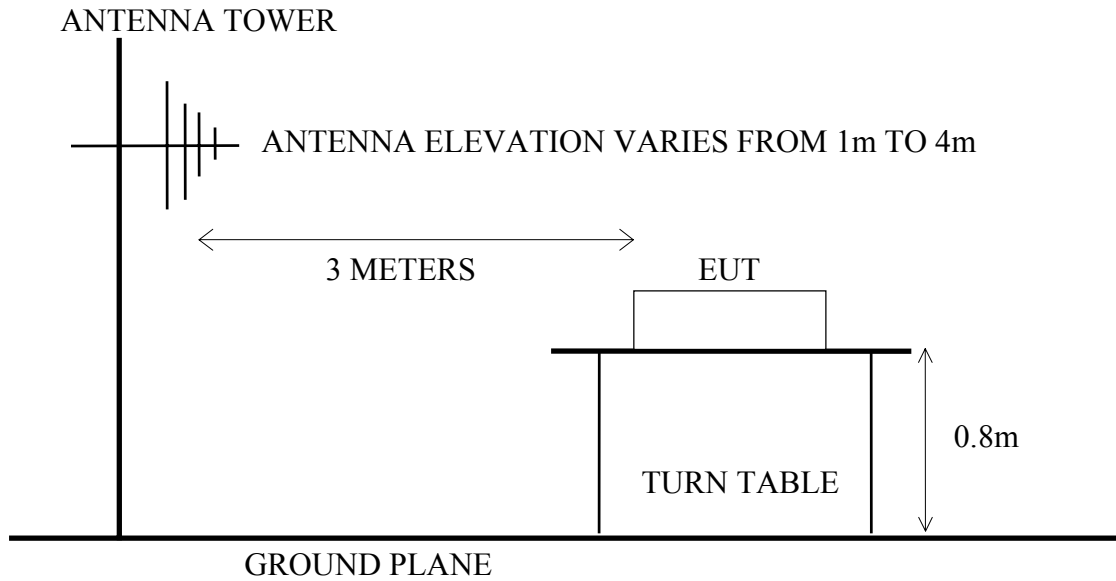
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer (For below 18GHz)	HP	8593EM	3826A00248	Oct. 04, 04'	Oct. 03, 05'
2.	Spectrum Analyzer (For above 18GHz)	Agilent	E7405A	MY42000134	Jun. 25, 05'	Jun. 24, 06'
3.	Test Receiver	R&S	ESCS30	100265	Oct. 05, 04'	Oct. 04, 05'
4.	Amplifier	HP	8449B	3008A00529	Jan. 14, 05'	Jan. 13, 06'
5.	Horn Antenna	EMCO	3115	9112-3775	May 04, 05'	May 03, 06'
6.	Horn Antenna	EMCO	3116	2653	Nov. 03, 04'	Nov. 02, 05'

3.2. Test Setup

3.2.1. Block Diagram of connection between EUT and simulators



3.2.2. Semi-Anechoic Chamber (3m) Setup Diagram



3.3. Radiated Emission Limits (§15.209)

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMITS	
		$\mu\text{V/m}$	$\text{dB}\mu\text{V/m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0
Above 1000	3	74.0 $\text{dB}\mu\text{V/m}$ (Peak) 54.0 $\text{dB}\mu\text{V/m}$ (Average)	

- Remark :
- (1) Emission level ($\text{dB}\mu\text{V/m}$) = $20 \log$ Emission level ($\mu\text{V/m}$)
 - (2) The tighter limit applies at the edge between two frequency bands.
 - (3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
 - (4) The limits in this table are based on CFR 47 Part 15.205(a)(b) and Part 15.209 (a).
 - (5) The over 1GHz limit, FCC limit is used based on CFR 47 Part 15.35 (b) and Part 15.205(b) & Part 15.209(e) and Part 15.207(c).

3.4. Operating Condition of EUT

- 3.4.1. Setup the EUT and simulator as shown on 3.2.
- 3.4.2. Turned on the power of all equipment.
- 3.4.3. The PC system running the test program “Futaba Term” was used to enable the EUT to transmit and receive data at three frequencies 2403, 2441 and 2480MHz during all testing.

3.5. Test Procedure

The EUT and its simulators were placed on a turn table which was 0.8 meter above the ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT was set 3 meters away from the receiving antenna which was mounted on a antenna tower. The antenna moved up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna such as calibrated biconical and log- periodical antenna or horn antenna were used as a receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC ANSI C63.4-2003 regulation.

The bandwidth of the R&S Test Receiver ESCS30 was set at 120kHz.

The bandwidth of the Spectrum Analyzer was set at 1MHz.

The frequency range from 30MHz to 25GHz (Up to 10th harmonics from fundamental frequency) was checked.

3.6. Test Results

PASSED. All the emissions not reported below are too low against the official limits.

For Frequency Range 30MHz~1000MHz:

The EUT was tested with the following test modes in frequency range of 30MHz~1000MHz and all the test results are listed in section 3.6.1.

Mode	Antenna	Operation	Channel	Frequency	Reference Test Data #	
					Horizontal	Vertical
1.	Printed Antenna	Transmitting	0	2403MHz	# 7	# 8
2.			37	2441MHz	# 8	# 7
3.			75	2480MHz	# 7	# 8
4.		Receiving	37	2441MHz	# 8	# 7
5.	Pencil Type Antenna	Transmitting	0	2403MHz	# 7	# 8
6.			37	2441MHz	# 8	# 7
7.			75	2480MHz	# 7	# 8
8.		Receiving	37	2441MHz	# 8	# 7
9.	Pedestal Antenna	Transmitting	0	2403MHz	# 12	# 11
10.			37	2441MHz	# 11	# 12
11.			75	2480MHz	# 12	# 11
12.		Receiving	37	2441MHz	# 11	# 12
13.	Flat Antenna (Single Type)	Transmitting	0	2403MHz	# 9	# 10
14.			37	2441MHz	# 11	# 12
15.			75	2480MHz	# 12	# 11
16.		Receiving	37	2441MHz	# 9	# 10
17.	Flat Antenna (Double Type)	Transmitting	0	2403MHz	# 10	# 9
18.			37	2441MHz	# 9	# 10
19.			75	2480MHz	# 10	# 9
20.		Receiving	37	2441MHz	# 9	# 10

* Above all final readings were measured with **Quasi-Peak detector.**

For Frequency Range 30MHz~1000MHz:

The EUT was tested with the following test modes in frequency range above 1GHz and all the test results are listed in section 3.6.2.

Mode	Antenna	Operation	Channel	Frequency
1.	Printed Antenna	Transmitting	0	2403MHz
2.			37	2441MHz
3.			75	2480MHz
4.		Receiving	37	2441MHz
5.	Pencil Type Antenna	Transmitting	0	2403MHz
6.			37	2441MHz
7.			75	2480MHz
8.		Receiving	37	2441MHz
9.	Pedestal Antenna	Transmitting	0	2403MHz
10.			37	2441MHz
11.			75	2480MHz
12.		Receiving	37	2441MHz
13.	Flat Antenna (Single Type)	Transmitting	0	2403MHz
14.			37	2441MHz
15.			75	2480MHz
16.		Receiving	37	2441MHz
17.	Flat Antenna (Double Type)	Transmitting	0	2403MHz
18.			37	2441MHz
19.			75	2480MHz
20.		Receiving	37	2441MHz

* Above all final readings were measured with **Peak detector and Average detector**.

For Restricted Bands:

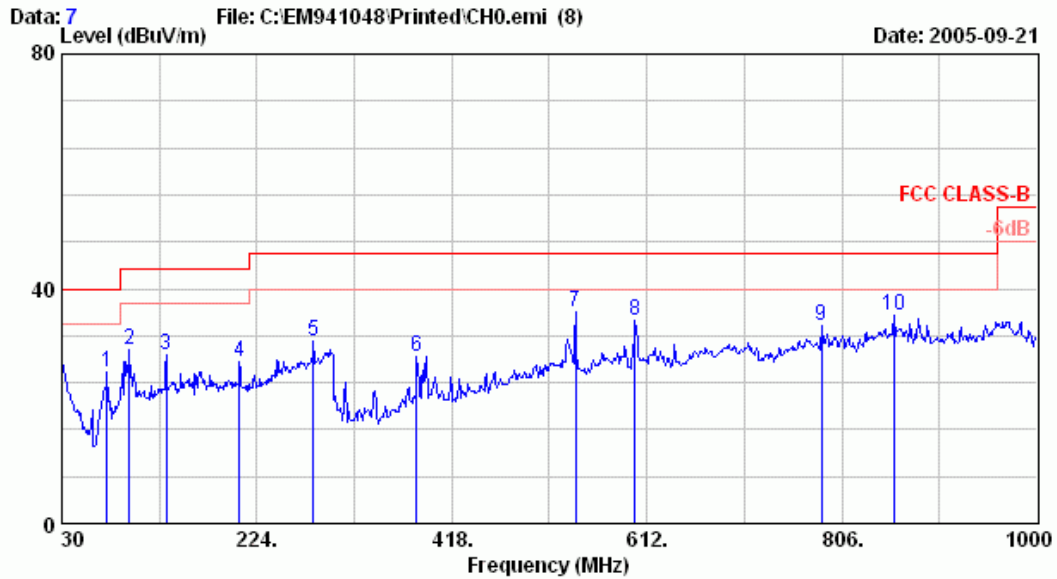
The EUT was tested in restricted bands and all the test results are listed in section 3.6.3. (The restricted bands defined in part 15.205(a))

Mode	Antenna	Channel and Frequency
1.	Printed Antenna	(1)Channel 0, 2403MHz (2)Channel 75, 2480MHz
2.	Pencil Type Antenna	
3.	Pedestal Antenna	
4.	Flat Antenna (Single Type)	
5.	Flat Antenna (Double Type)	

3.6.1. Frequency Range 30-1000MHz



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



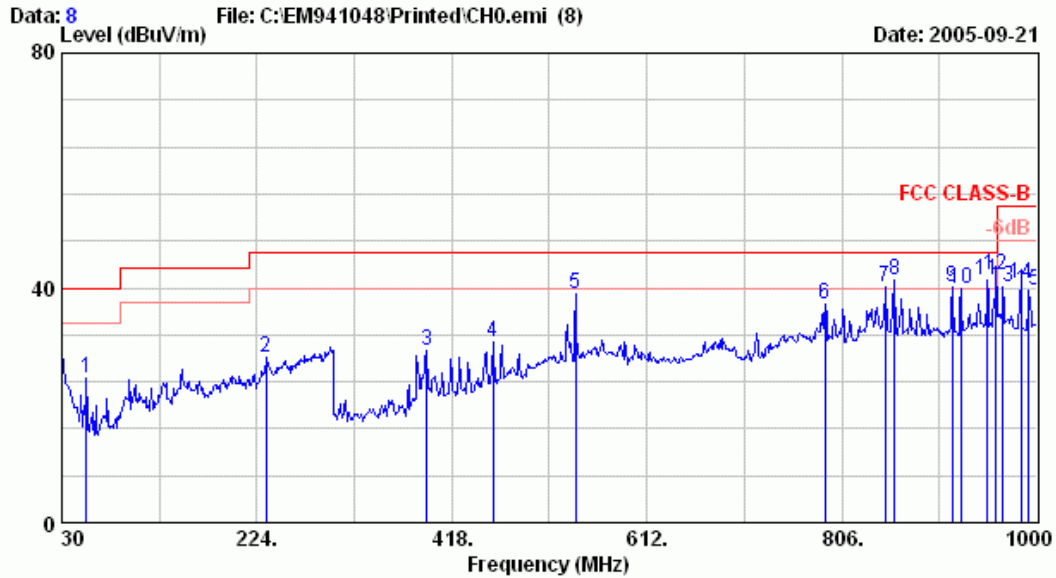
Site : A/C Chamber Date : 7
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH0+Printed Antenna

Freq. (MHz)	Ant. Cable		Emission				Margin (dB)	Remark
	Factor (dB/m)	Loss (dB)	Reading (dBµV)	Level (dBµV/m)	Limits (dBµV/m)			
1	74.620	12.72	1.80	11.40	25.91	40.00	14.09	
2	96.930	16.75	2.05	10.87	29.67	43.50	13.83	
3	133.790	19.89	2.40	6.45	28.75	43.50	14.75	
4	206.540	21.91	3.10	2.55	27.57	43.50	15.93	
5	280.260	25.30	3.80	1.97	31.06	46.00	14.94	
6	383.080	17.33	4.62	6.45	28.41	46.00	17.59	
7	541.190	19.25	7.01	9.65	35.91	46.00	10.09	
8	600.360	21.31	6.30	6.93	34.55	46.00	11.45	
9	785.630	23.83	6.90	2.90	33.63	46.00	12.37	
10	858.380	25.98	7.20	2.35	35.53	46.00	10.47	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



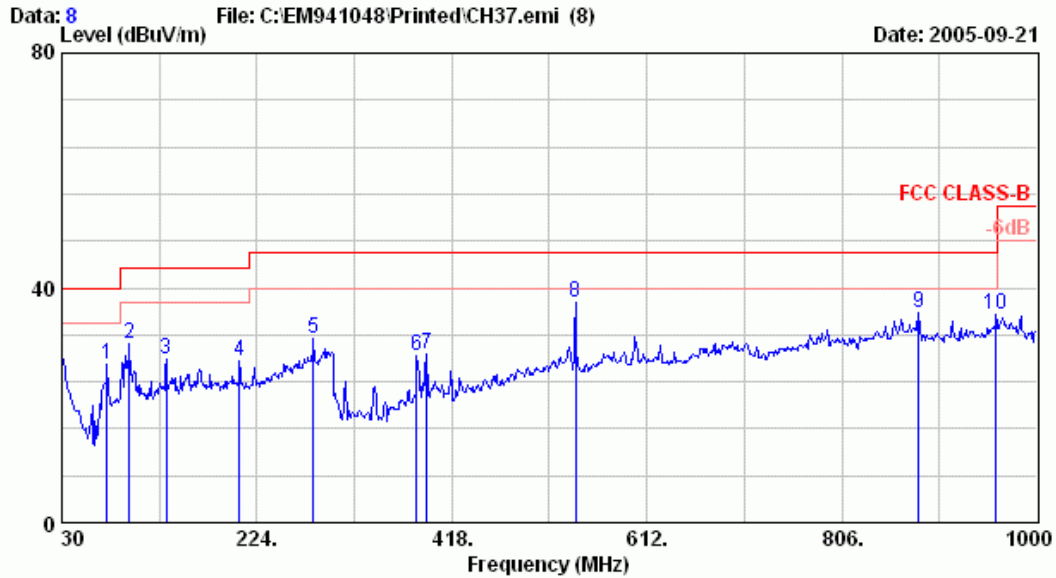
Site : A/C Chamber Date : 8
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CHO+Printed Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	54.250	14.76	1.50	8.33	24.59	40.00	15.41	
2	232.730	24.76	3.30	0.17	28.23	46.00	17.77	
3	392.780	17.73	4.70	6.83	29.26	46.00	16.74	
4	458.740	18.68	5.60	6.42	30.70	46.00	15.30	
5	541.190	20.48	7.01	11.62	39.11	46.00	6.89	
6	789.510	25.46	6.90	4.95	37.31	46.00	8.69	
7	848.680	26.54	7.10	6.54	40.19	46.00	5.81	
8	858.380	25.75	7.20	8.51	41.46	46.00	4.54	
9	915.610	25.68	7.40	7.05	40.13	46.00	5.87	
10	924.340	25.76	7.40	6.77	39.93	46.00	6.07	
11	950.530	27.12	7.55	6.52	41.20	46.00	4.80	
12	959.260	27.16	7.60	7.39	42.15	46.00	3.85	
13	966.050	27.07	7.70	5.24	40.01	54.00	13.99	
14	984.480	26.12	7.75	6.80	40.66	54.00	13.34	
15	992.240	26.06	7.73	5.83	39.62	54.00	14.38	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



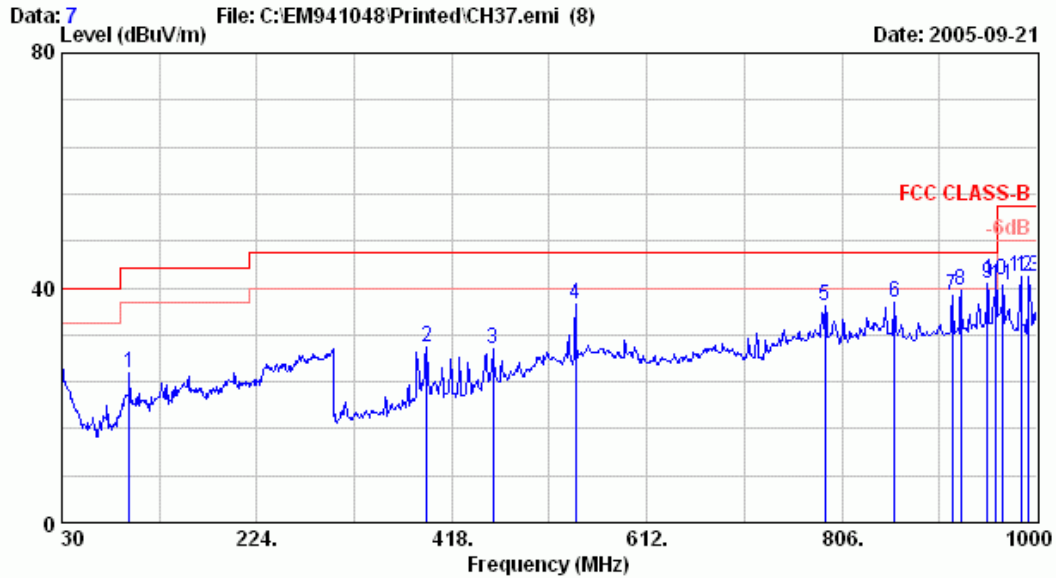
Site : A/C Chamber Date : 8
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23°C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH37+Printed Antenna

	Ant. Cable			Emission			
	Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBµV)	Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)
1	74.620	12.72	1.80	12.56	27.07	40.00	12.93
2	96.930	16.75	2.05	11.70	30.50	43.50	13.00
3	133.790	19.89	2.40	5.56	27.86	43.50	15.64
4	206.540	21.91	3.10	2.43	27.45	43.50	16.05
5	280.260	25.30	3.80	2.15	31.24	46.00	14.76
6	383.080	17.33	4.62	6.60	28.56	46.00	17.44
7	392.780	17.54	4.70	6.35	28.59	46.00	17.41
8	541.190	19.25	7.01	11.36	37.62	46.00	8.38
9	882.630	25.28	7.30	3.06	35.64	46.00	10.36
10	959.260	26.38	7.60	1.62	35.60	46.00	10.40

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



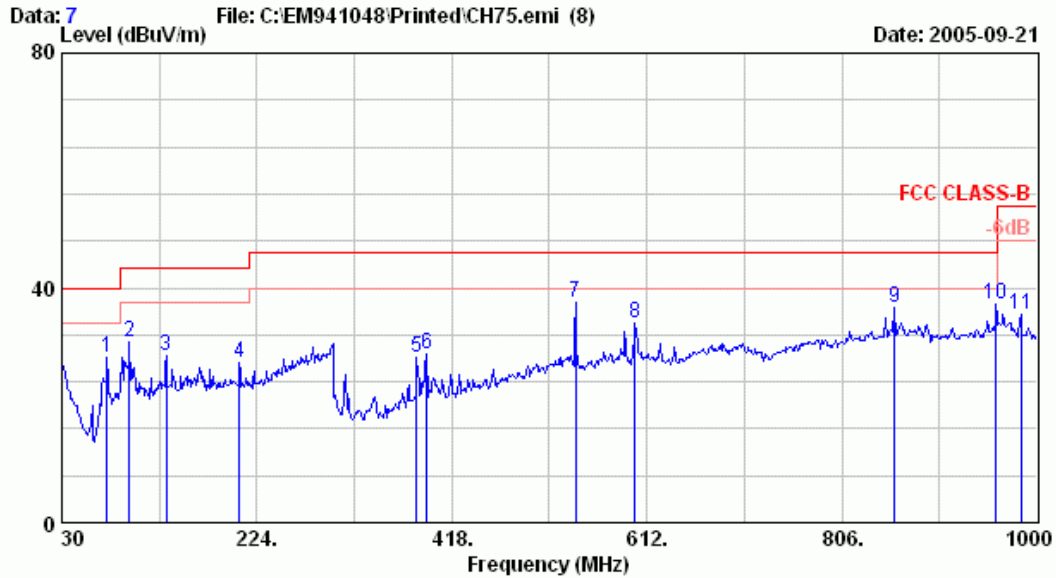
Site : A/C Chamber Date : 7
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH37+Printed Antenna

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission		Margin (dB)	Remark
				Level (dBuV/m)	Limits (dBuV/m)		
1	96.930	17.38	2.05	5.98	25.41	43.50	18.09
2	392.780	17.73	4.70	7.43	29.86	46.00	16.14
3	458.740	18.68	5.60	5.27	29.55	46.00	16.45
4	541.190	20.48	7.01	9.59	37.08	46.00	8.92
5	789.510	25.46	6.90	4.45	36.81	46.00	9.19
6	858.380	25.75	7.20	4.51	37.46	46.00	8.54
7	915.610	25.68	7.40	5.54	38.62	46.00	7.38
8	924.340	25.76	7.40	6.30	39.46	46.00	6.54
9	950.530	27.12	7.55	6.17	40.85	46.00	5.15
10	959.260	27.16	7.60	6.62	41.38	46.00	4.62
11	966.050	27.07	7.70	5.68	40.45	54.00	13.55
12	984.480	26.12	7.75	7.99	41.85	54.00	12.15
13	992.240	26.06	7.73	8.11	41.90	54.00	12.10

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



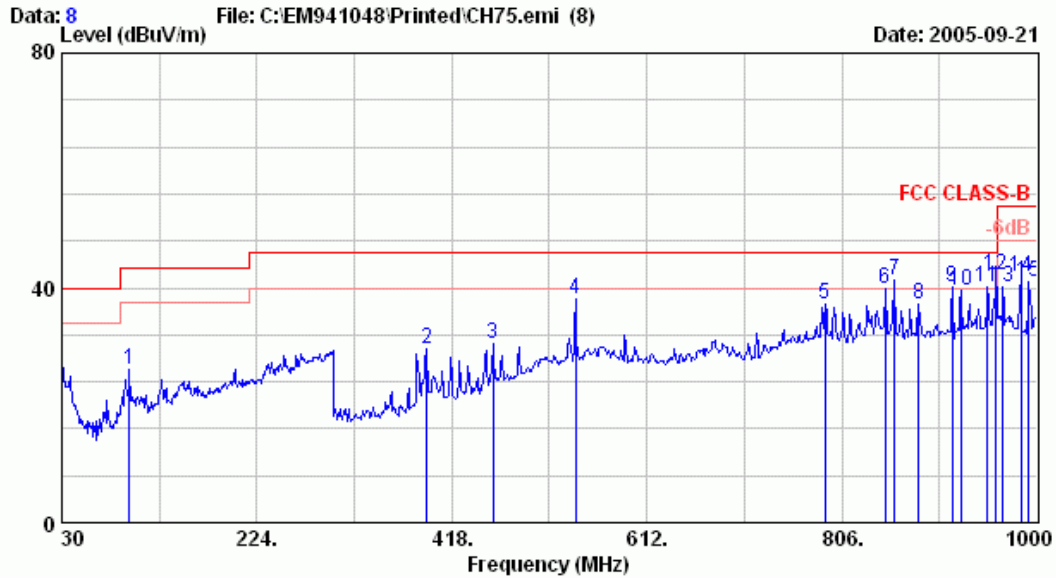
Site : A/C Chamber Date : 7
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH75+Printed Antenna

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Margin (dB)	Remark
				Level (dBuV/m)	Limits (dBuV/m)			
1	74.620	12.72	1.80	13.54	28.05	40.00	11.95	
2	96.930	16.75	2.05	11.82	30.62	43.50	12.88	
3	133.790	19.89	2.40	6.15	28.45	43.50	15.05	
4	206.540	21.91	3.10	2.32	27.34	43.50	16.16	
5	383.080	17.33	4.62	6.03	27.99	46.00	18.01	
6	392.780	17.54	4.70	6.45	28.69	46.00	17.31	
7	541.190	19.25	7.01	11.24	37.50	46.00	8.50	
8	600.360	21.31	6.30	6.41	34.03	46.00	11.97	
9	858.380	25.98	7.20	3.54	36.72	46.00	9.28	
10	959.260	26.38	7.60	3.38	37.36	46.00	8.64	
11	984.480	25.46	7.75	2.37	35.58	54.00	18.42	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



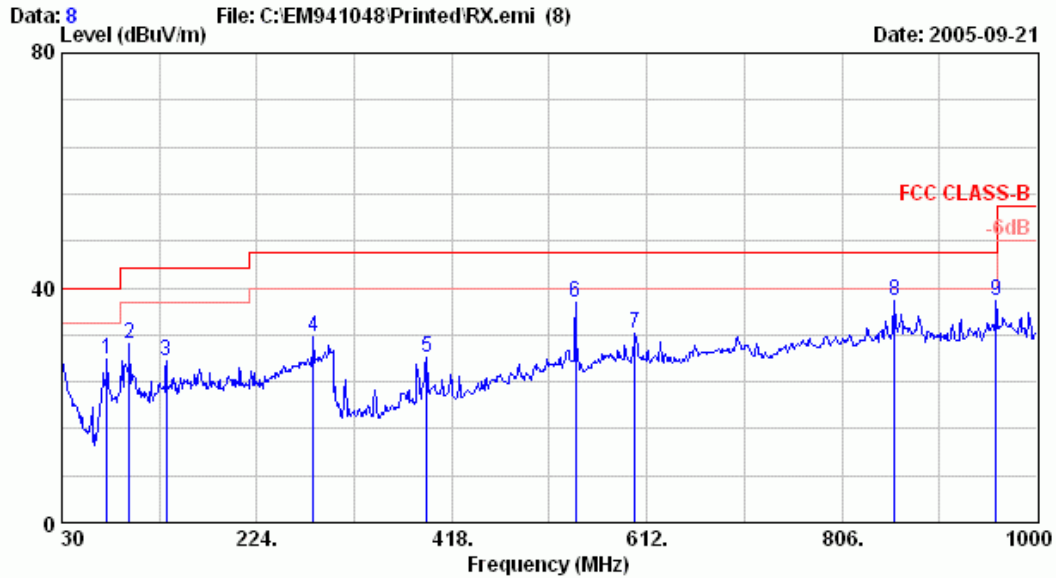
Site : A/C Chamber Date : 8
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH75+Printed Antenna

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission		Margin (dB)	Remark
				Level (dBuV/m)	Limits (dBuV/m)		
1	96.930	17.38	2.05	6.59	26.02	43.50	17.48
2	392.780	17.73	4.70	7.31	29.74	46.00	16.26
3	458.740	18.68	5.60	6.31	30.59	46.00	15.41
4	541.190	20.48	7.01	10.54	38.03	46.00	7.97
5	789.510	25.46	6.90	5.00	37.36	46.00	8.64
6	848.680	26.54	7.10	6.30	39.95	46.00	6.05
7	858.380	25.75	7.20	8.34	41.29	46.00	4.71
8	882.630	25.42	7.30	4.50	37.21	46.00	8.79
9	915.610	25.68	7.40	7.00	40.08	46.00	5.92
10	924.340	25.76	7.40	6.53	39.69	46.00	6.31
11	950.530	27.12	7.55	5.55	40.23	46.00	5.77
12	959.260	27.16	7.60	7.48	42.24	46.00	3.76
13	966.050	27.07	7.70	5.50	40.27	54.00	13.73
14	984.480	26.12	7.75	8.01	41.87	54.00	12.13
15	992.240	26.06	7.73	7.35	41.14	54.00	12.86

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



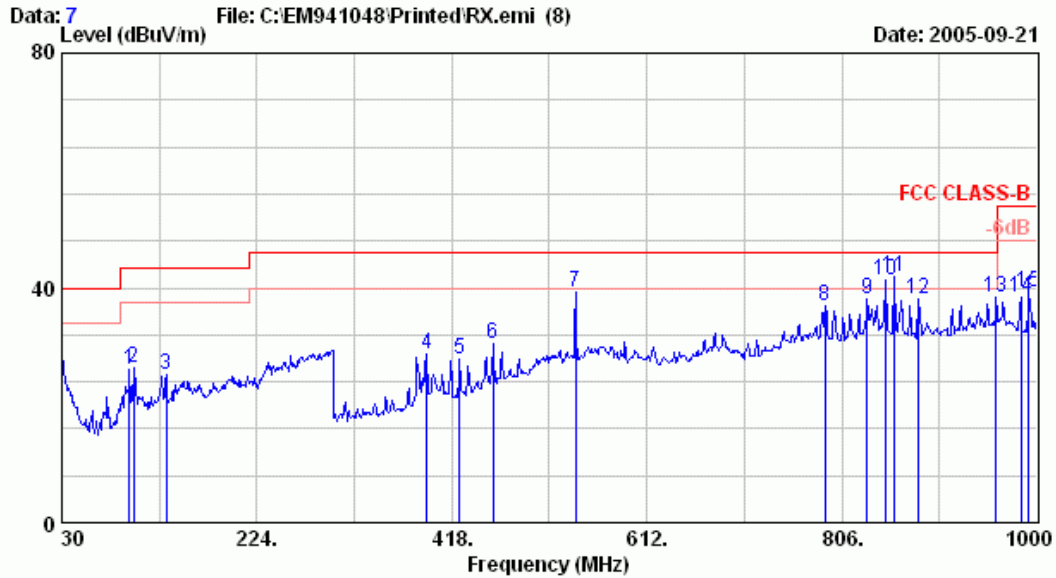
Site : A/C Chamber Date : 8
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V
 Test Mode : RX+Printed Antenna

	Ant. Cable		Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	12.72	1.80	13.31	27.82	40.00	12.18	
2	16.75	2.05	11.75	30.55	43.50	12.95	
3	19.89	2.40	5.34	27.64	43.50	15.86	
4	25.30	3.80	2.57	31.66	46.00	14.34	
5	17.54	4.70	5.93	28.17	46.00	17.83	
6	19.25	7.01	11.38	37.64	46.00	8.36	
7	21.31	6.30	4.73	32.35	46.00	13.65	
8	25.98	7.20	4.60	37.78	46.00	8.22	
9	26.38	7.60	3.96	37.94	46.00	8.06	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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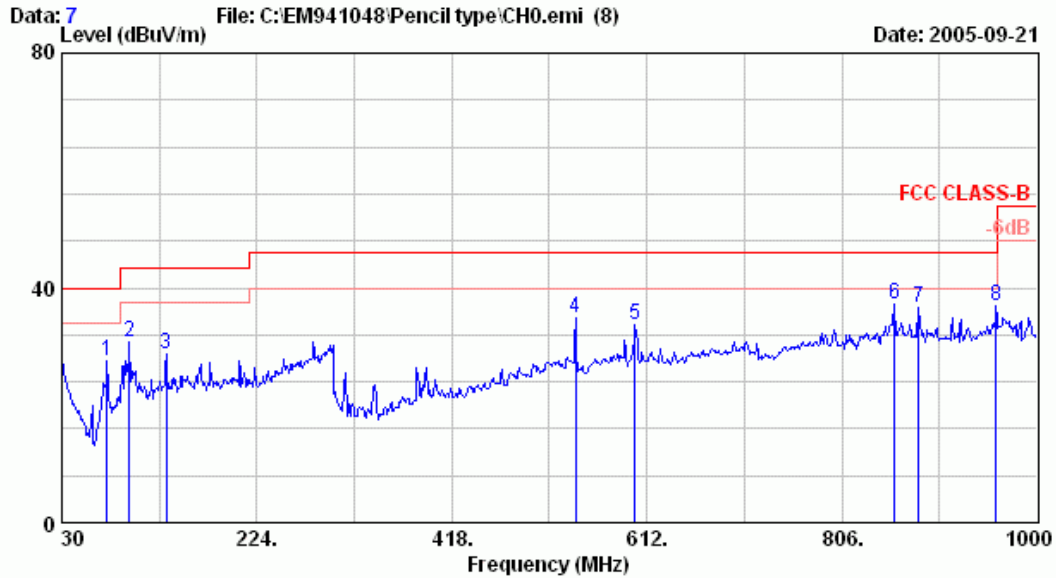
Site : A/C Chamber Date : 7
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V
 Test Mode : RX+Printed Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	96.930	17.38	2.05	6.78	26.21	43.50	17.29	
2	101.780	17.58	2.10	6.58	26.26	43.50	17.24	
3	133.790	19.23	2.40	3.72	25.34	43.50	18.16	
4	392.780	17.73	4.70	6.24	28.67	46.00	17.33	
5	425.760	17.22	5.10	5.50	27.82	46.00	18.18	
6	458.740	18.68	5.60	6.14	30.42	46.00	15.58	
7	541.190	20.48	7.01	11.81	39.30	46.00	6.70	
8	789.510	25.46	6.90	4.66	37.02	46.00	8.98	
9	831.220	26.07	7.10	4.83	38.00	46.00	8.00	
10	848.680	26.54	7.10	7.64	41.29	46.00	4.71	
11	858.380	25.75	7.20	9.07	42.02	46.00	3.98	
12	882.630	25.42	7.30	5.38	38.09	46.00	7.91	
13	959.260	27.16	7.60	3.61	38.37	46.00	7.63	
14	984.480	26.12	7.75	4.55	38.41	54.00	15.59	
15	992.240	26.06	7.73	5.42	39.21	54.00	14.79	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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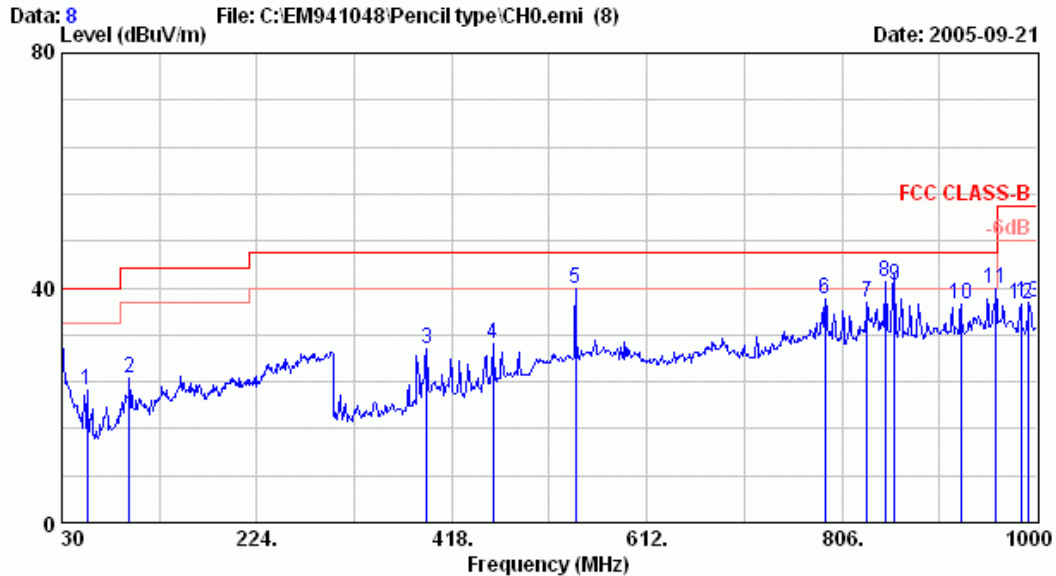
Site : A/C Chamber Date : 7
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CHO+Pencil type Antenna

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Margin (dB)	Remark
				Level (dBuV/m)	Limits (dBuV/m)	Margin		
1	74.620	12.72	1.80	13.03	27.54	40.00	12.46	
2	96.930	16.75	2.05	11.91	30.71	43.50	12.79	
3	133.790	19.89	2.40	6.48	28.78	43.50	14.72	
4	541.190	19.25	7.01	8.65	34.91	46.00	11.09	
5	600.360	21.31	6.30	6.07	33.69	46.00	12.31	
6	858.380	25.98	7.20	3.96	37.14	46.00	8.86	
7	882.630	25.28	7.30	3.91	36.49	46.00	9.51	
8	959.260	26.38	7.60	3.02	37.00	46.00	9.00	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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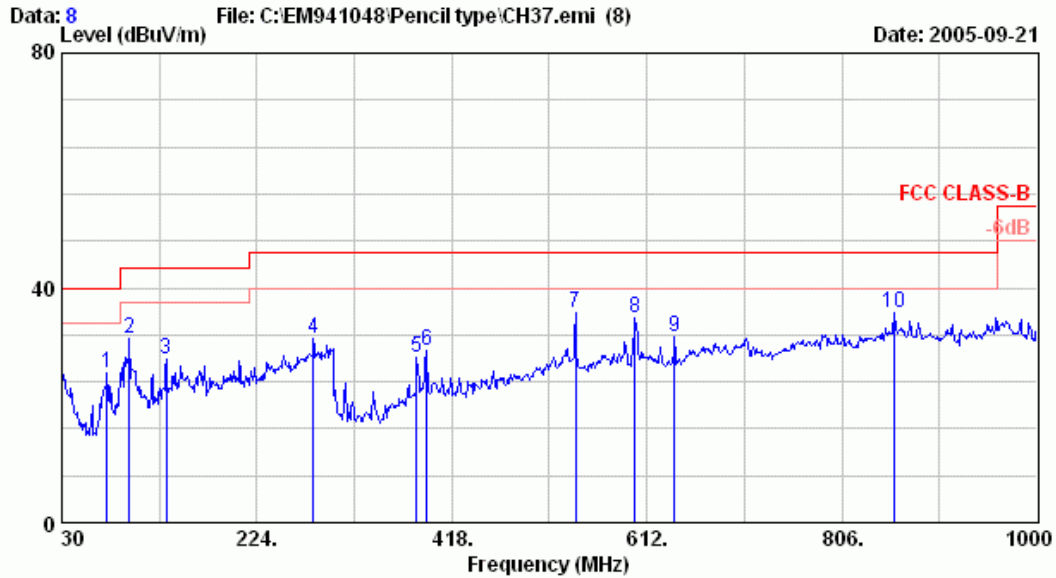
Site : A/C Chamber Date : 8
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CHO+Pencil type Antenna

	Ant. Cable		Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	14.36	1.50	6.84	22.71	40.00	17.29	
2	17.38	2.05	5.08	24.51	43.50	18.99	
3	17.73	4.70	7.13	29.56	46.00	16.44	
4	18.68	5.60	6.14	30.42	46.00	15.58	
5	20.48	7.01	12.41	39.90	46.00	6.10	
6	25.46	6.90	5.66	38.02	46.00	7.98	
7	26.07	7.10	4.25	37.42	46.00	8.58	
8	26.54	7.10	7.31	40.96	46.00	5.04	
9	25.75	7.20	7.44	40.39	46.00	5.61	
10	25.76	7.40	4.15	37.31	46.00	8.69	
11	27.16	7.60	5.08	39.84	46.00	6.16	
12	26.12	7.75	3.49	37.35	54.00	16.65	
13	26.06	7.73	3.80	37.59	54.00	16.41	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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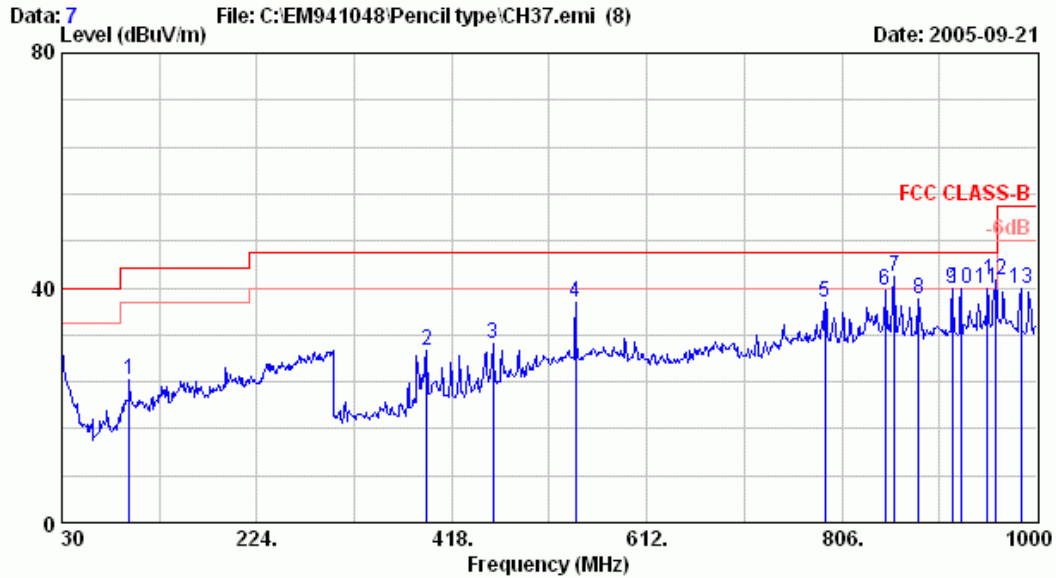
Site : A/C Chamber Date : 8
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH37+Pencil type Antenna

	Ant. Cable			Emission				
	Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	74.620	12.72	1.80	10.95	25.46	40.00	14.54	
2	96.930	16.75	2.05	12.43	31.23	43.50	12.27	
3	133.790	19.89	2.40	5.46	27.75	43.50	15.75	
4	280.260	25.30	3.80	2.30	31.40	46.00	14.60	
5	383.080	17.33	4.62	6.10	28.06	46.00	17.94	
6	392.780	17.54	4.70	7.17	29.41	46.00	16.59	
7	541.190	19.25	7.01	9.58	35.84	46.00	10.16	
8	600.360	21.31	6.30	7.16	34.78	46.00	11.22	
9	639.160	20.95	6.28	4.31	31.54	46.00	14.46	
10	858.380	25.98	7.20	2.51	35.69	46.00	10.31	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



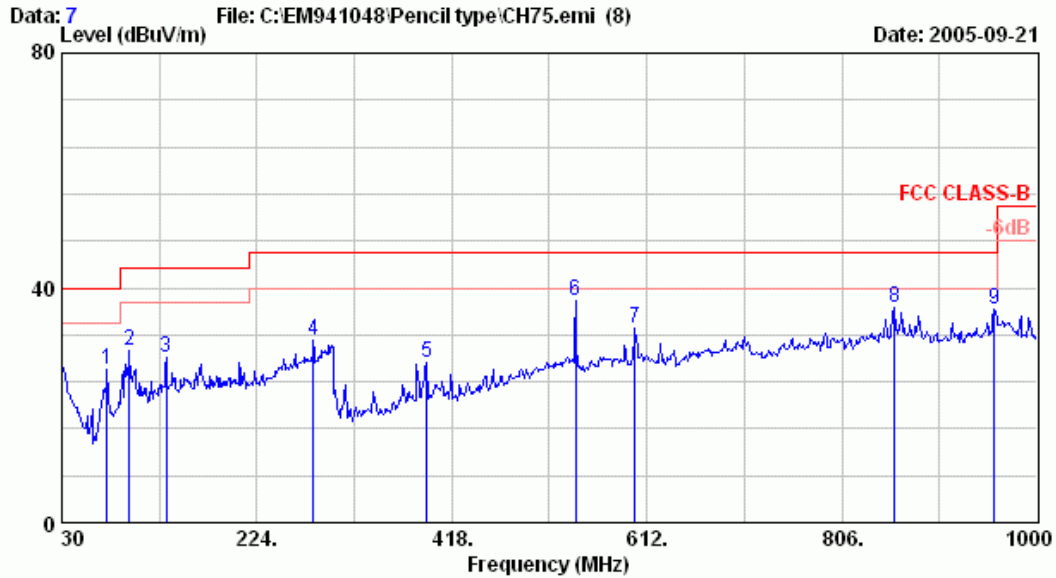
Site : A/C Chamber Date : 7
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH37+Pencil type Antenna

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission		
					Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)
1	96.930	17.38	2.05	4.96	24.39	43.50	19.11
2	392.780	17.73	4.70	6.90	29.33	46.00	16.67
3	458.740	18.68	5.60	6.19	30.47	46.00	15.53
4	541.190	20.48	7.01	10.11	37.60	46.00	8.40
5	789.510	25.46	6.90	5.26	37.62	46.00	8.38
6	848.680	26.54	7.10	6.04	39.69	46.00	6.31
7	858.380	25.75	7.20	9.09	42.04	46.00	3.96
8	882.630	25.42	7.30	5.48	38.19	46.00	7.81
9	915.610	25.68	7.40	6.72	39.80	46.00	6.20
10	924.340	25.76	7.40	6.58	39.74	46.00	6.26
11	950.530	27.12	7.55	5.15	39.83	46.00	6.17
12	959.260	27.16	7.60	6.62	41.38	46.00	4.62
13	984.480	26.12	7.75	6.12	39.98	54.00	14.02

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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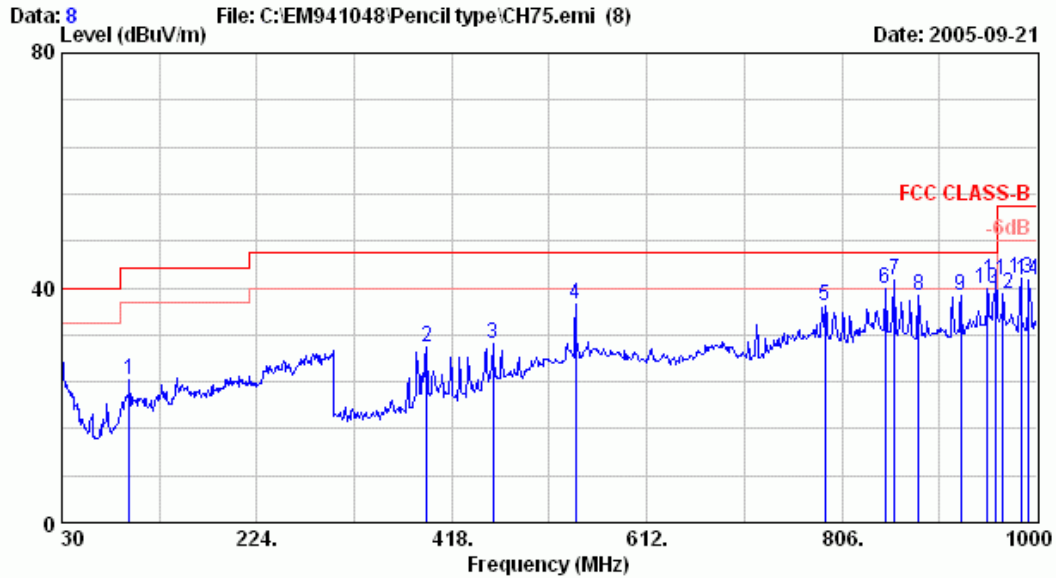
Site : A/C Chamber Date : 7
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH75+Pencil Antenna

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission			Margin (dB)	Remark
				Level (dBµV/m)	Limits (dBµV/m)			
1	74.620	12.72	1.80	11.62	26.13	40.00	13.87	
2	96.930	16.75	2.05	10.60	29.40	43.50	14.10	
3	133.790	19.89	2.40	5.94	28.24	43.50	15.26	
4	280.260	25.30	3.80	1.88	30.98	46.00	15.02	
5	392.780	17.54	4.70	5.03	27.27	46.00	18.73	
6	541.190	19.25	7.01	11.55	37.81	46.00	8.19	
7	600.360	21.31	6.30	5.37	32.99	46.00	13.01	
8	858.380	25.98	7.20	3.32	36.50	46.00	9.50	
9	957.320	26.33	7.60	2.40	36.33	46.00	9.67	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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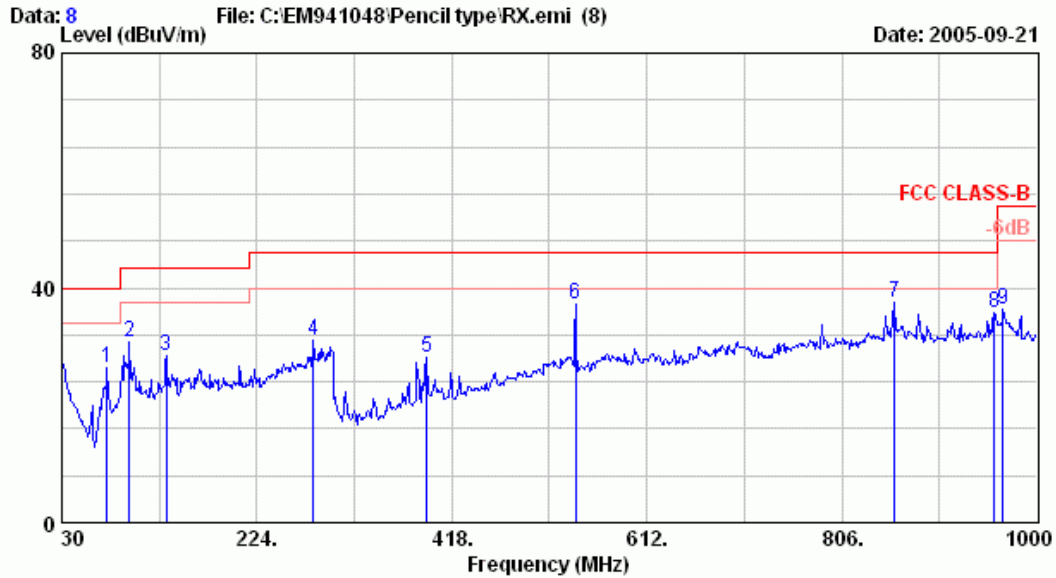
Site : A/C Chamber Date : 8
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 23*C/51% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH75+Pencil Antenna

No.	Ant. Cable			Emission			
	Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	96.930	17.38	2.05	4.75	24.18	43.50	19.32
2	392.780	17.73	4.70	7.52	29.95	46.00	16.05
3	458.740	18.68	5.60	6.07	30.35	46.00	15.65
4	541.190	20.48	7.01	9.81	37.30	46.00	8.70
5	789.510	25.46	6.90	4.59	36.95	46.00	9.05
6	848.680	26.54	7.10	6.30	39.95	46.00	6.05
7	858.380	25.75	7.20	8.41	41.36	46.00	4.64
8	882.630	25.42	7.30	6.09	38.80	46.00	7.20
9	924.340	25.76	7.40	5.54	38.70	46.00	7.30
10	950.530	27.12	7.55	5.04	39.72	46.00	6.28
11	959.260	27.16	7.60	6.62	41.38	46.00	4.62
12	966.050	27.07	7.70	4.15	38.92	54.00	15.08
13	984.480	26.12	7.75	7.64	41.50	54.00	12.50
14	992.240	26.06	7.73	7.56	41.35	54.00	12.65

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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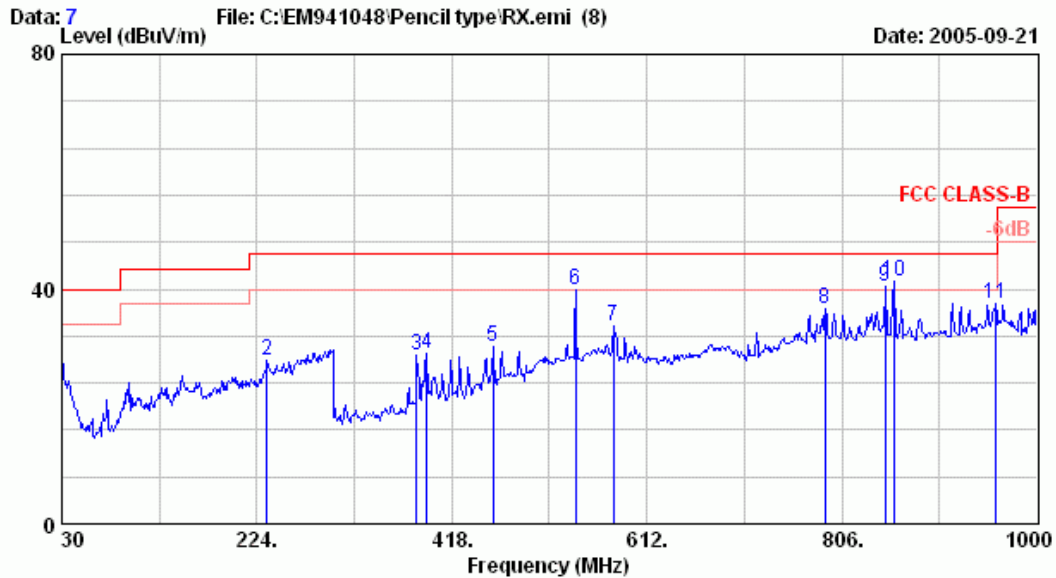
Site : A/C Chamber Date : 8
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : RX+Pencil type Antenna

	Ant.	Cable	Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	74.620	12.72	1.80	11.83	26.34	40.00	13.66
2	96.930	16.75	2.05	12.08	30.88	43.50	12.62
3	133.790	19.89	2.40	6.20	28.50	43.50	15.00
4	280.260	25.30	3.80	1.96	31.05	46.00	14.95
5	392.780	17.54	4.70	5.91	28.15	46.00	17.85
6	541.190	19.25	7.01	11.04	37.30	46.00	8.70
7	858.380	25.98	7.20	4.32	37.50	46.00	8.50
8	957.320	26.33	7.60	1.80	35.73	46.00	10.27
9	966.050	26.89	7.70	1.85	36.44	54.00	17.56

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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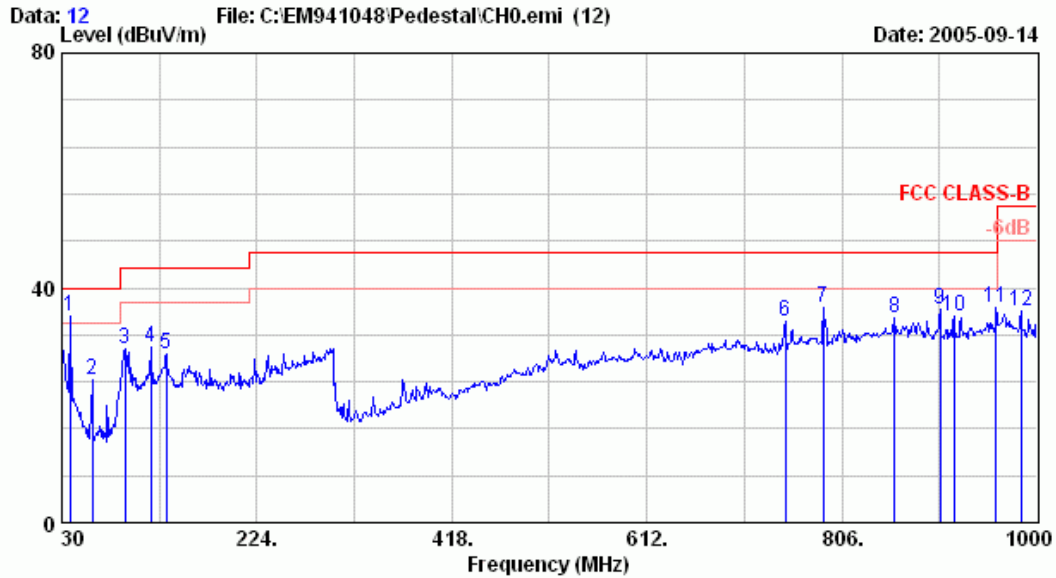
Site : A/C Chamber Date : 7
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : RX+Pencil type Antenna

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	23.60	1.10	3.40	28.10	40.00	11.90	
2	233.700	24.84	3.38	-0.30	27.92	46.00	18.08	
3	383.080	17.08	4.62	7.08	28.78	46.00	17.22	
4	392.780	17.73	4.70	6.52	28.95	46.00	17.05	
5	458.740	18.68	5.60	5.96	30.24	46.00	15.76	
6	541.190	20.48	7.01	12.29	39.78	46.00	6.22	
7	579.020	21.79	6.40	5.60	33.79	46.00	12.21	
8	789.510	25.46	6.90	4.38	36.74	46.00	9.26	
9	848.680	26.54	7.10	6.82	40.47	46.00	5.53	
10	858.380	25.75	7.20	8.37	41.32	46.00	4.68	
11	959.260	27.16	7.60	2.81	37.57	46.00	8.43	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



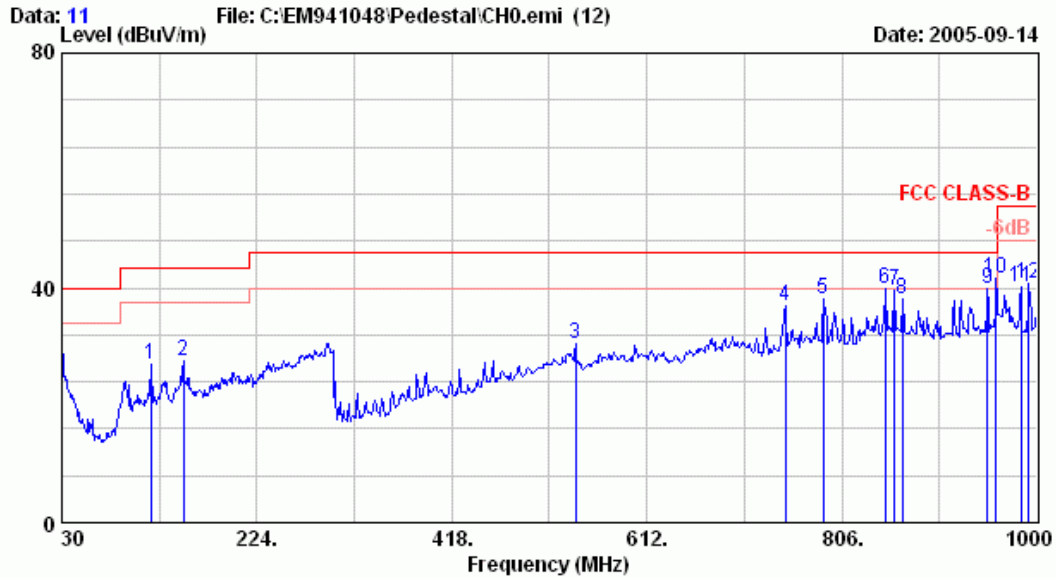
Site : A/C Chamber Date : 12
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CHO+Pedestal Antenna

	Ant.	Cable	Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	37.760	21.58	1.20	12.27	35.05	40.00	4.95
2	60.070	12.80	1.60	9.84	24.23	40.00	15.77
3	93.050	16.25	2.00	11.21	29.46	43.50	14.04
4	118.270	18.94	2.30	8.60	29.84	43.50	13.66
5	133.790	19.89	2.40	6.41	28.71	43.50	14.79
6	749.740	23.25	6.70	4.35	34.30	46.00	11.70
7	787.570	23.78	6.90	5.90	36.57	46.00	9.43
8	858.380	25.98	7.20	1.82	35.00	46.00	11.00
9	903.970	24.88	7.40	4.03	36.31	46.00	9.69
10	917.550	24.84	7.40	2.89	35.13	46.00	10.87
11	959.260	26.38	7.60	2.65	36.63	46.00	9.37
12	984.480	25.46	7.75	2.85	36.06	54.00	17.94

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



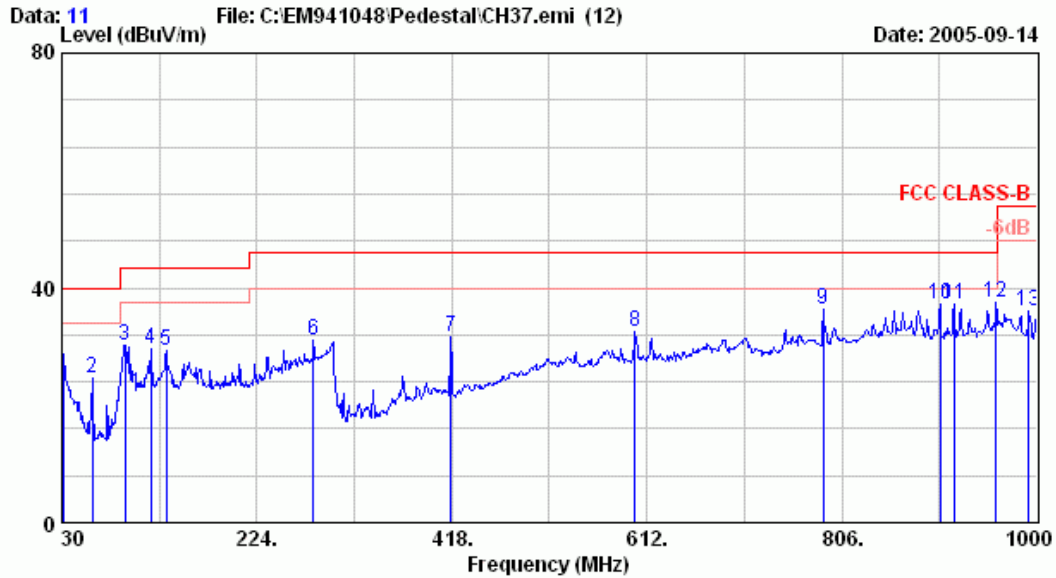
Site : A/C Chamber Date : 11
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH0+Pedestal Antenna

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Margin (dB)	Remark
				Level (dBuV/m)	Limits (dBuV/m)			
1	118.270	17.48	2.30	7.18	26.96	43.50	16.54	
2	151.250	21.87	2.60	3.12	27.59	43.50	15.91	
3	541.190	20.48	7.01	2.97	30.46	46.00	15.54	
4	749.740	24.38	6.70	5.82	36.90	46.00	9.10	
5	787.570	25.44	6.90	5.86	38.20	46.00	7.80	
6	848.680	26.54	7.10	6.30	39.95	46.00	6.05	
7	858.380	25.75	7.20	6.76	39.70	46.00	6.30	
8	866.140	25.35	7.20	5.52	38.07	46.00	7.93	
9	950.530	27.12	7.55	5.26	39.94	46.00	6.06	
10	959.260	27.16	7.60	6.92	41.67	46.00	4.33	
11	984.480	26.12	7.75	6.21	40.08	54.00	13.92	
12	992.240	26.06	7.73	6.86	40.66	54.00	13.34	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



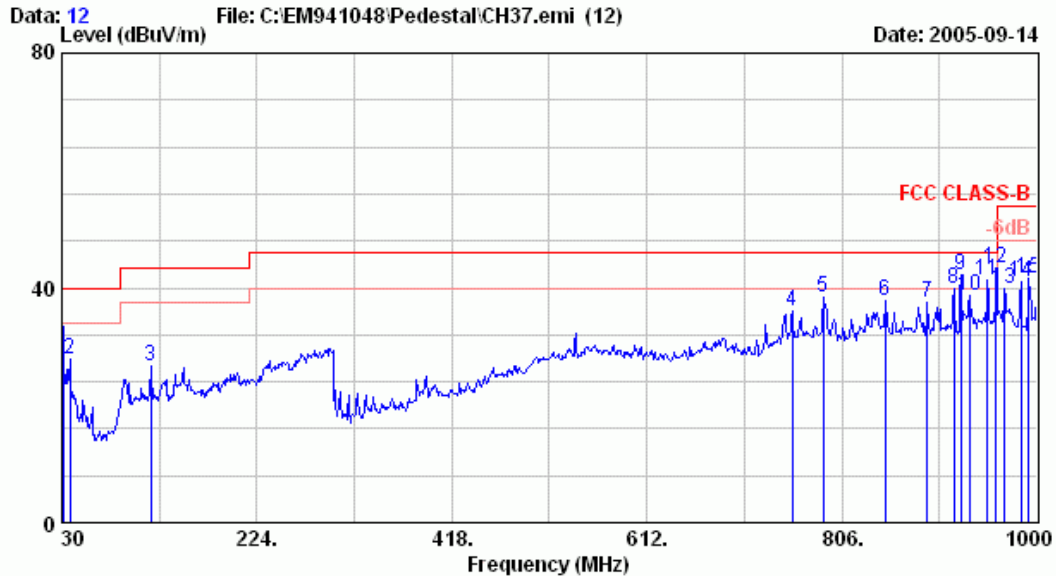
Site : A/C Chamber Date : 11
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH37+Pedestal Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	30.970	24.81	1.10	2.74	28.65	40.00	11.35	
2	60.070	12.80	1.60	10.16	24.55	40.00	15.45	
3	93.050	16.25	2.00	12.05	30.30	43.50	13.20	
4	118.270	18.94	2.30	8.27	29.51	43.50	13.99	
5	133.790	19.89	2.40	6.95	29.25	43.50	14.25	
6	280.260	25.30	3.80	1.83	30.93	46.00	15.07	
7	417.030	16.95	5.08	9.58	31.61	46.00	14.39	
8	600.360	21.31	6.30	4.91	32.53	46.00	13.47	
9	787.570	23.78	6.90	5.62	36.29	46.00	9.71	
10	903.970	24.88	7.40	4.82	37.10	46.00	8.90	
11	917.550	24.84	7.40	5.12	37.36	46.00	8.64	
12	959.260	26.38	7.60	3.47	37.45	46.00	8.55	
13	992.240	24.81	7.73	3.57	36.12	54.00	17.88	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Email:ttenc@ttenc.com.tw



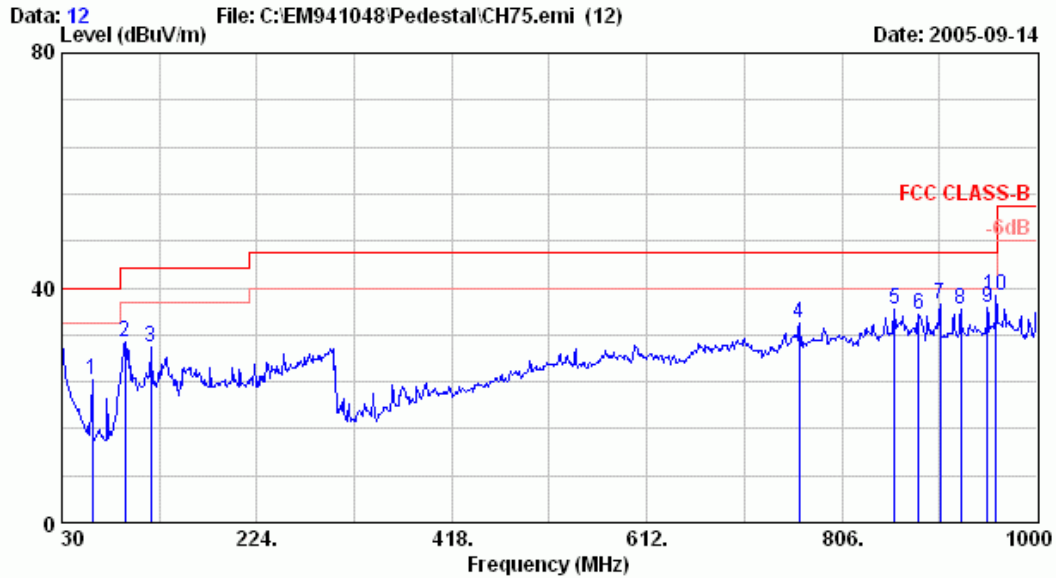
Site : A/C Chamber Date : 12
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH37+Pedestal Antenna

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission		
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	30.970	23.39	1.10	8.93	33.42	40.00	6.58
2	37.760	21.49	1.20	5.27	27.96	40.00	12.04
3	118.270	17.48	2.30	6.93	26.71	43.50	16.79
4	756.530	24.76	6.73	4.63	36.12	46.00	9.88
5	787.570	25.44	6.90	6.18	38.52	46.00	7.48
6	848.680	26.54	7.10	4.15	37.80	46.00	8.20
7	891.360	25.79	7.30	4.33	37.42	46.00	8.58
8	917.550	25.67	7.40	6.70	39.77	46.00	6.23
9	924.340	25.76	7.40	9.10	42.26	46.00	3.74
10	933.070	26.27	7.50	4.86	38.63	46.00	7.37
11	950.530	27.12	7.55	6.62	41.30	46.00	4.70
12	959.260	27.16	7.60	8.55	43.31	46.00	2.69
13	967.990	26.97	7.69	5.29	39.96	54.00	14.04
14	984.480	26.12	7.75	7.15	41.01	54.00	12.99
15	992.240	26.06	7.73	7.93	41.72	54.00	12.28

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
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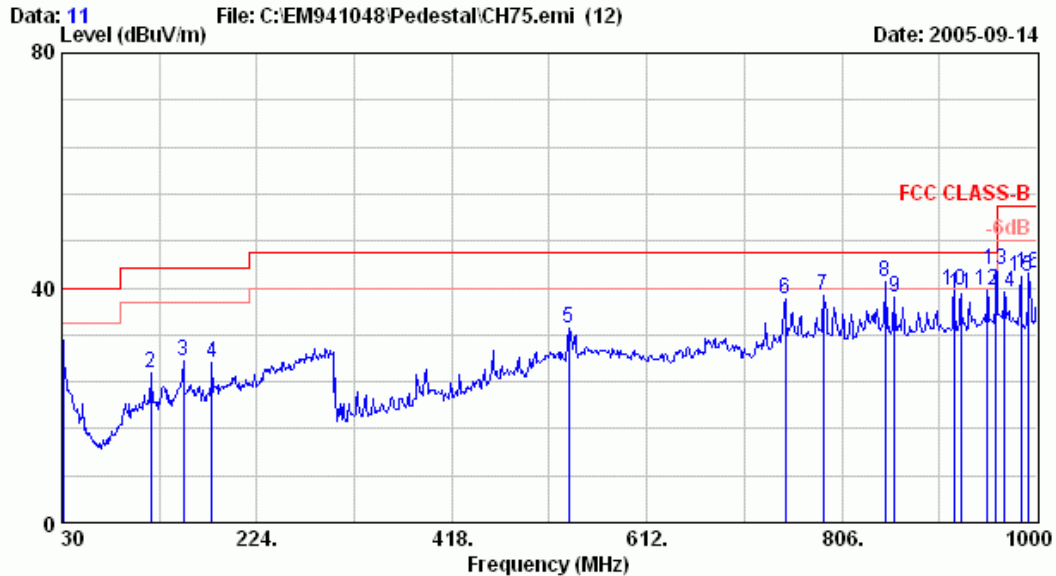
Site : A/C Chamber Date : 12
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH75+Pedestal Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	60.070	12.80	1.60	9.91	24.30	40.00	15.70	
2	93.050	16.25	2.00	12.49	30.74	43.50	12.76	
3	118.270	18.94	2.30	8.79	30.03	43.50	13.47	
4	763.320	23.75	6.74	3.43	33.93	46.00	12.07	
5	858.380	25.98	7.20	3.22	36.40	46.00	9.60	
6	882.630	25.28	7.30	2.96	35.54	46.00	10.46	
7	903.970	24.88	7.40	4.85	37.13	46.00	8.87	
8	924.340	24.48	7.40	4.43	36.31	46.00	9.69	
9	950.530	25.93	7.55	3.09	36.58	46.00	9.42	
10	959.260	26.38	7.60	4.71	38.69	46.00	7.31	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



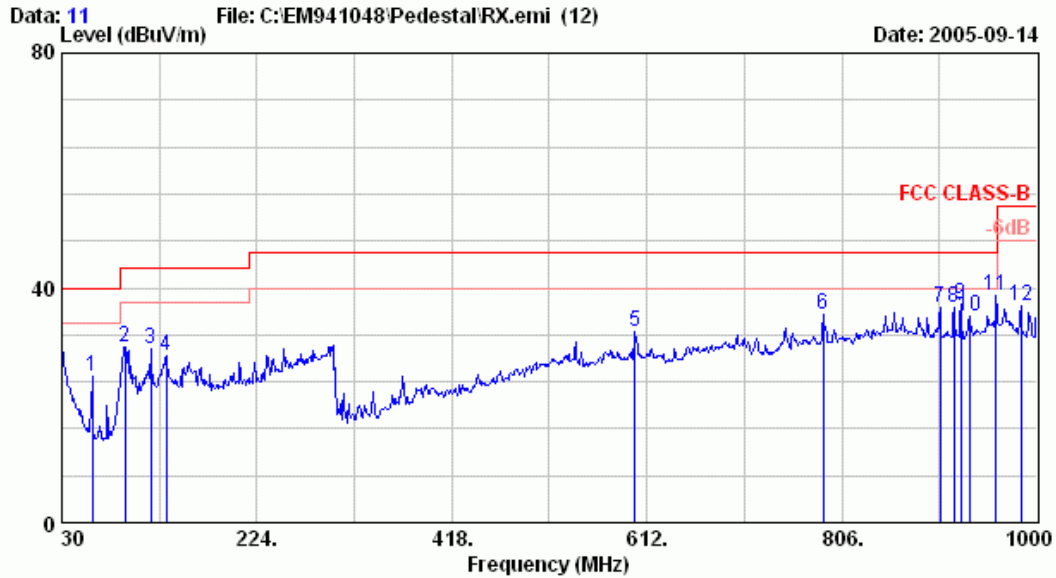
Site : A/C Chamber Date : 11
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH75+Pedestal Antenna

	Ant.	Cable	Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	(dBuV/m)	(dB)	
1	30.970	23.39	1.10	6.67	31.16	40.00	8.84
2	118.270	17.48	2.30	5.85	25.63	43.50	17.87
3	151.250	21.87	2.60	3.17	27.64	43.50	15.86
4	179.380	21.10	2.90	3.27	27.28	43.50	16.22
5	534.400	20.13	7.00	6.02	33.16	46.00	12.84
6	749.740	24.38	6.70	6.88	37.96	46.00	8.04
7	787.570	25.44	6.90	6.34	38.68	46.00	7.32
8	848.680	26.54	7.10	7.31	40.96	46.00	5.04
9	858.380	25.75	7.20	5.46	38.41	46.00	7.59
10	917.550	25.67	7.40	6.51	39.58	46.00	6.42
11	924.340	25.76	7.40	5.79	38.95	46.00	7.05
12	950.530	27.12	7.55	4.94	39.62	46.00	6.38
13	959.260	27.16	7.60	8.27	43.03	46.00	2.97
14	967.990	26.97	7.69	4.59	39.26	54.00	14.74
15	984.480	26.12	7.75	8.15	42.01	54.00	11.99
16	992.240	26.06	7.73	8.72	42.51	54.00	11.49

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



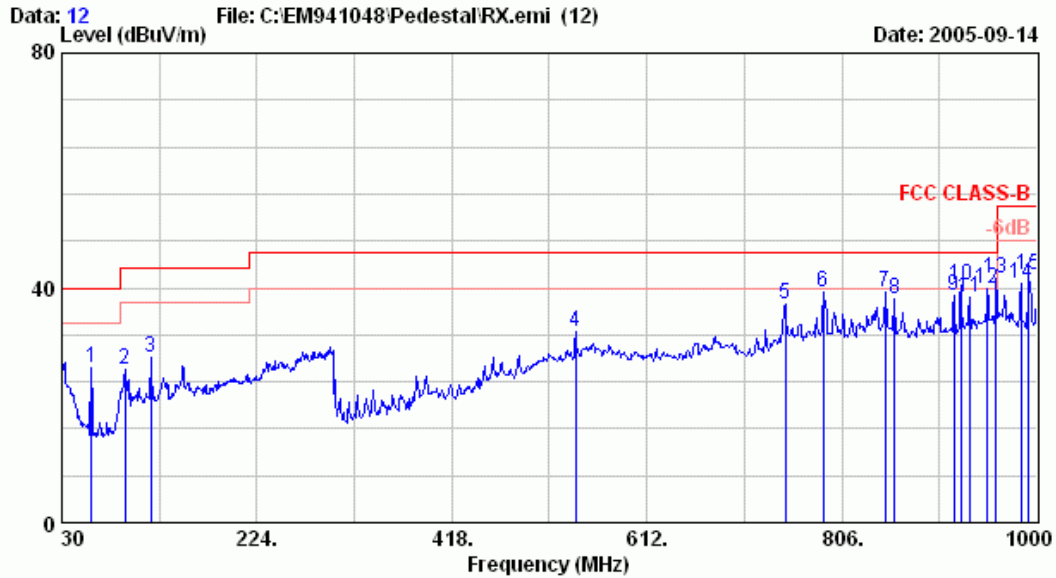
Site : A/C Chamber Date : 11
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : RX+Pedestal Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	60.070	12.80	1.60	10.44	24.83	40.00	15.17	
2	93.050	16.25	2.00	11.70	29.95	43.50	13.55	
3	118.270	18.94	2.30	8.48	29.72	43.50	13.78	
4	133.790	19.89	2.40	6.10	28.40	43.50	15.10	
5	600.360	21.31	6.30	5.04	32.66	46.00	13.34	
6	787.570	23.78	6.90	4.71	35.38	46.00	10.62	
7	903.970	24.88	7.40	4.48	36.76	46.00	9.24	
8	917.550	24.84	7.40	4.33	36.57	46.00	9.43	
9	924.340	24.48	7.40	5.26	37.14	46.00	8.86	
10	933.070	25.23	7.50	2.45	35.18	46.00	10.82	
11	959.260	26.38	7.60	4.69	38.67	46.00	7.33	
12	984.480	25.46	7.75	3.70	36.91	54.00	17.09	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



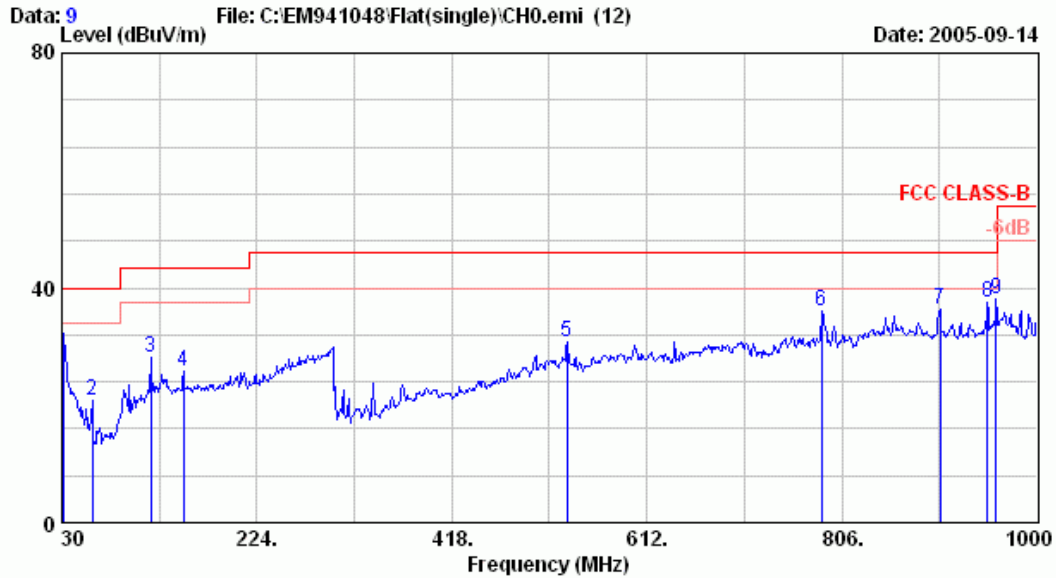
Site : A/C Chamber Date : 12
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : RX+Pedestal Antenna

	Ant. Cable		Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	59.100	13.64	1.60	11.15	26.39	40.00	13.61
2	93.050	16.92	2.00	7.02	25.94	43.50	17.56
3	118.270	17.48	2.30	8.34	28.12	43.50	15.38
4	541.190	20.48	7.01	4.91	32.40	46.00	13.60
5	749.740	24.38	6.70	6.22	37.30	46.00	8.70
6	787.570	25.44	6.90	6.86	39.20	46.00	6.80
7	848.680	26.54	7.10	5.75	39.40	46.00	6.60
8	858.380	25.75	7.20	5.06	38.01	46.00	7.99
9	917.550	25.67	7.40	5.61	38.68	46.00	7.32
10	924.340	25.76	7.40	7.31	40.47	46.00	5.53
11	933.070	26.27	7.50	4.59	38.36	46.00	7.64
12	950.530	27.12	7.55	5.25	39.93	46.00	6.07
13	959.260	27.16	7.60	6.97	41.73	46.00	4.27
14	984.480	26.12	7.75	6.82	40.68	54.00	13.32
15	992.240	26.06	7.73	8.48	42.27	54.00	11.73

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
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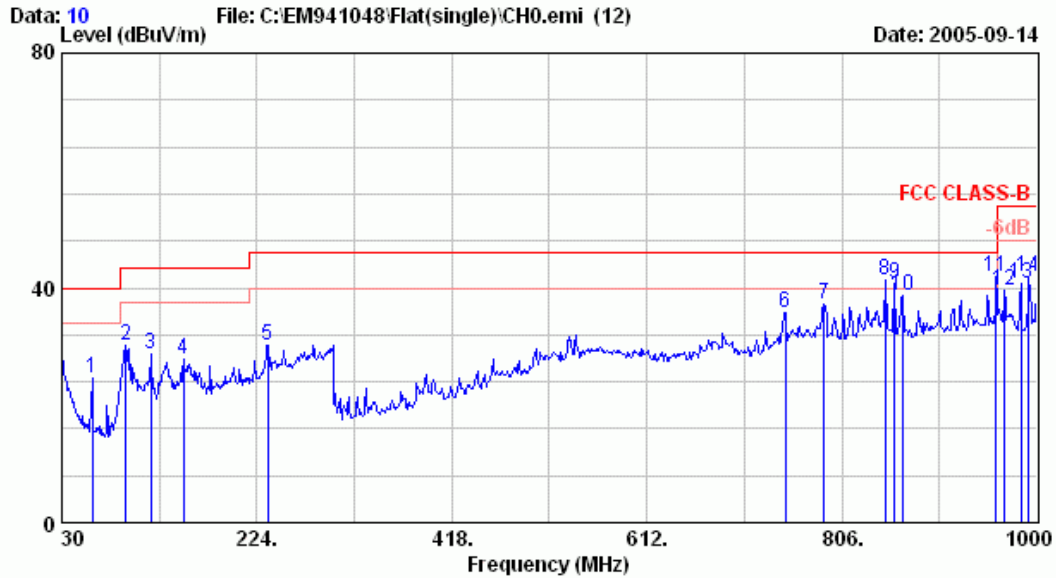
Site : A/C Chamber Date : 9
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CHO+Flat(single) Antenna

	Ant.	Cable	Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.970	24.81	1.10	6.17	32.08	40.00	7.92
2	60.070	12.80	1.60	6.28	20.67	40.00	19.33
3	118.270	18.94	2.30	6.83	28.07	43.50	15.43
4	151.250	20.65	2.60	2.51	25.76	43.50	17.74
5	532.460	19.64	7.00	4.08	30.71	46.00	15.29
6	785.630	23.83	6.90	5.20	35.93	46.00	10.07
7	903.970	24.88	7.40	4.18	36.46	46.00	9.54
8	950.530	25.93	7.55	4.04	37.53	46.00	8.47
9	959.260	26.38	7.60	4.04	38.02	46.00	7.98

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
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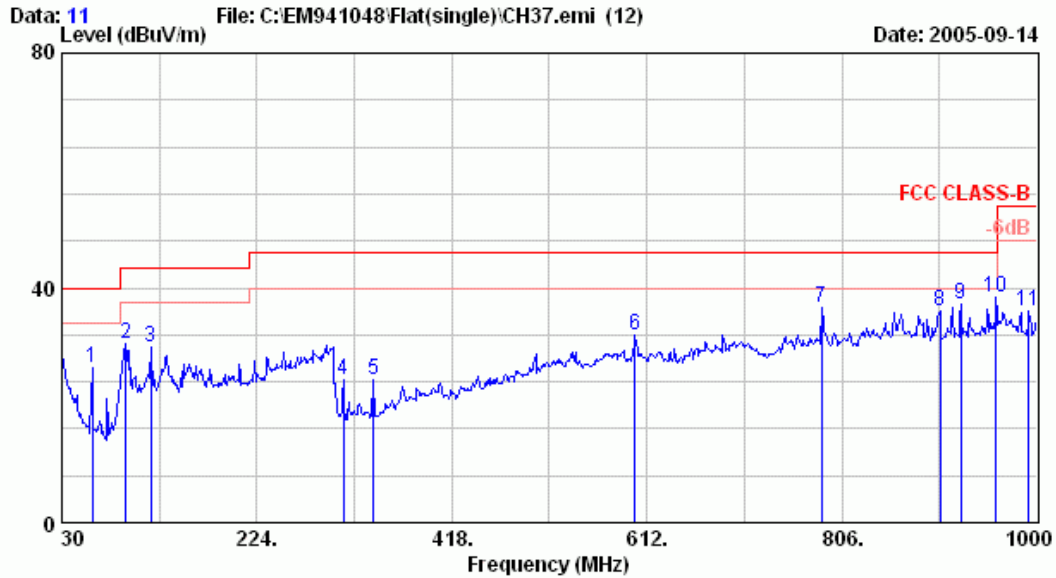
Site : A/C Chamber Date : 10
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CHO+Flat(single) Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	60.070	13.44	1.60	9.63	24.67	40.00	15.33	
2	94.020	17.01	2.00	11.27	30.28	43.50	13.22	
3	118.270	17.48	2.30	9.07	28.85	43.50	14.65	
4	151.250	21.87	2.60	3.40	27.87	43.50	15.63	
5	234.670	24.80	3.40	1.95	30.15	46.00	15.85	
6	749.740	24.38	6.70	4.79	35.87	46.00	10.13	
7	788.540	25.45	6.90	4.74	37.09	46.00	8.91	
8	848.680	26.54	7.10	7.75	41.40	46.00	4.60	
9	858.380	25.75	7.20	7.67	40.62	46.00	5.38	
10	866.140	25.35	7.20	6.11	38.65	46.00	7.35	
11	959.260	27.16	7.60	7.11	41.87	46.00	4.13	
12	967.990	26.97	7.69	4.79	39.46	54.00	14.54	
13	984.480	26.12	7.75	6.89	40.75	54.00	13.25	
14	992.240	26.06	7.73	8.16	41.95	54.00	12.05	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttemc@ttemc.com.tw



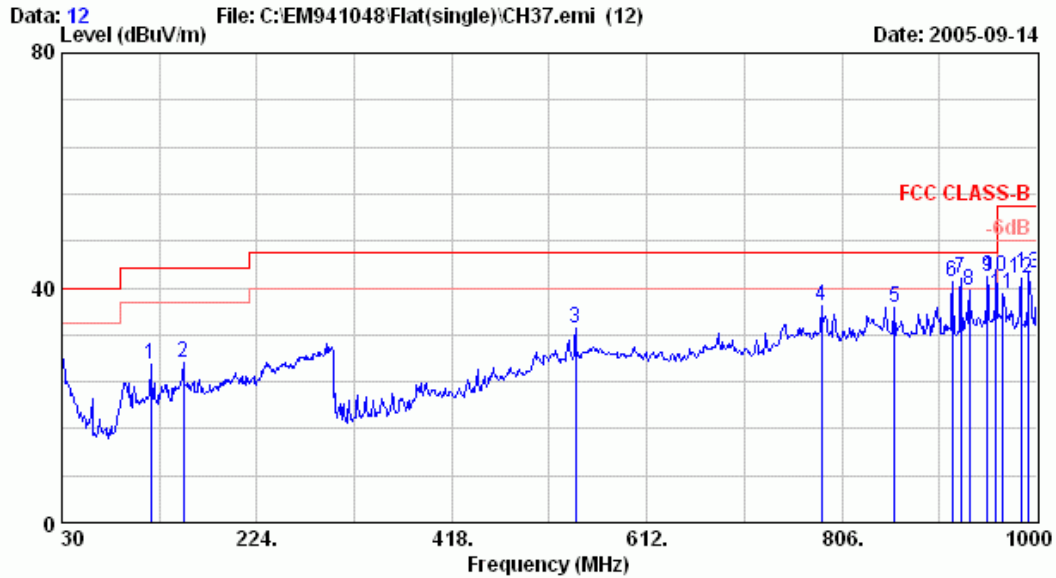
Site : A/C Chamber Date : 11
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH37+Flat(single) Antenna

	Ant.	Cable	Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	60.070	12.80	1.60	12.01	26.40	40.00	13.60
2	94.020	16.37	2.00	12.06	30.43	43.50	13.07
3	118.270	18.94	2.30	8.67	29.91	43.50	13.59
4	310.330	14.93	4.00	5.28	24.21	46.00	21.79
5	340.400	15.08	4.30	4.83	24.21	46.00	21.79
6	600.360	21.31	6.30	4.40	32.02	46.00	13.98
7	785.630	23.83	6.90	6.03	36.76	46.00	9.24
8	903.970	24.88	7.40	3.77	36.05	46.00	9.95
9	924.340	24.48	7.40	5.23	37.11	46.00	8.89
10	959.260	26.38	7.60	4.51	38.49	46.00	7.51
11	992.240	24.81	7.73	3.57	36.12	54.00	17.88

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



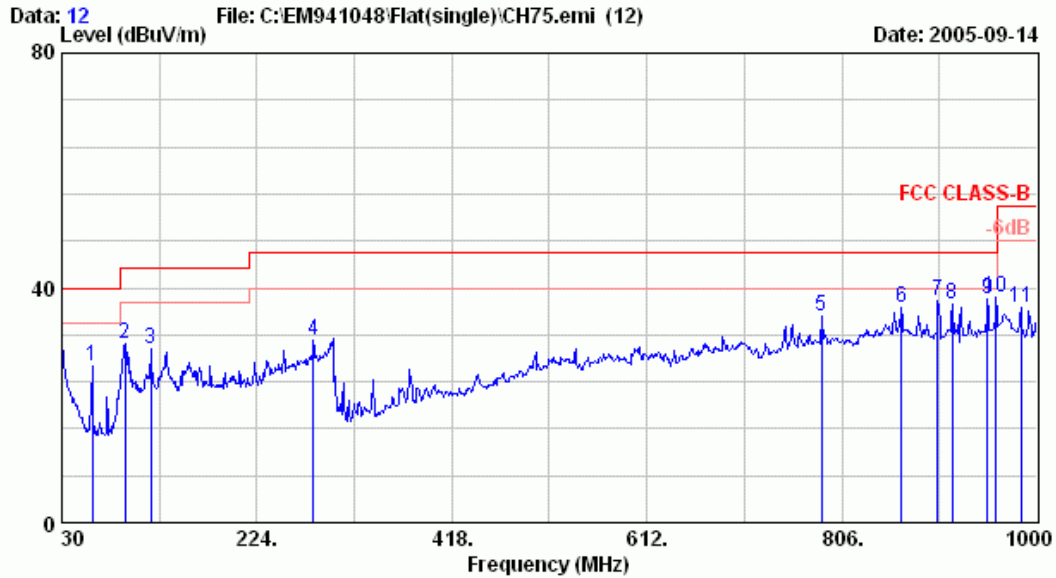
Site : A/C Chamber Date : 12
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH37+Flat(single) Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	118.270	17.48	2.30	7.18	26.96	43.50	16.54	
2	151.250	21.87	2.60	2.87	27.34	43.50	16.16	
3	541.190	20.48	7.01	5.54	33.03	46.00	12.97	
4	785.630	25.42	6.90	4.67	36.99	46.00	9.01	
5	858.380	25.75	7.20	3.78	36.73	46.00	9.27	
6	915.610	25.68	7.40	7.86	40.94	46.00	5.06	
7	924.340	25.76	7.40	8.42	41.58	46.00	4.42	
8	933.070	26.27	7.50	5.77	39.54	46.00	6.46	
9	950.530	27.12	7.55	7.37	42.05	46.00	3.95	
10	959.260	27.16	7.60	7.24	41.99	46.00	4.01	
11	966.050	27.07	7.70	4.22	38.99	54.00	15.01	
12	984.480	26.12	7.75	7.75	41.61	54.00	12.39	
13	992.240	26.06	7.73	8.72	42.51	54.00	11.49	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



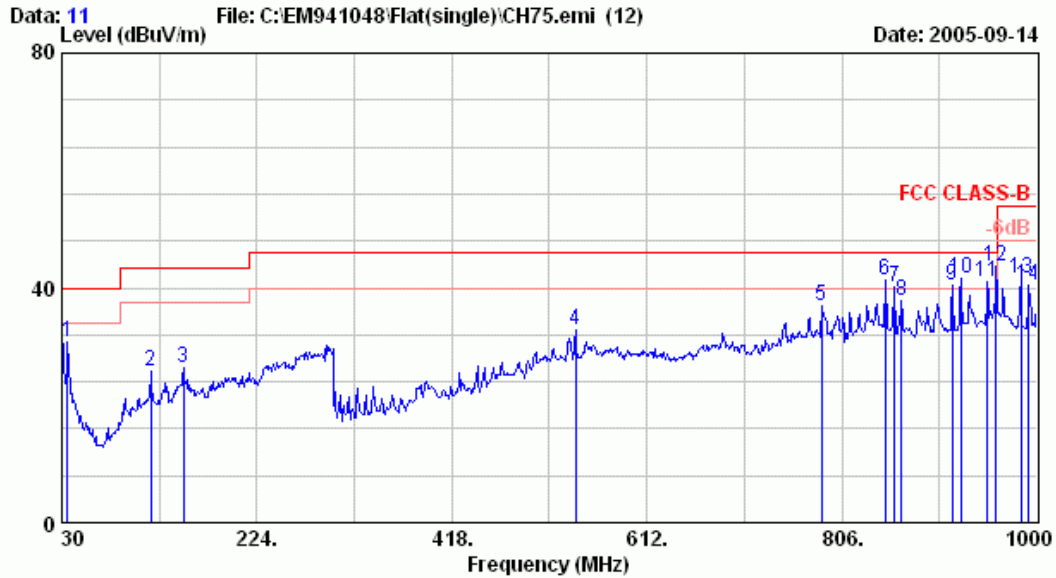
Site : A/C Chamber Date : 12
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH75+Flat(single) Antenna

	Ant.	Cable	Emission				Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	(dB)		
1	60.070	12.80	1.60	12.41	26.80	40.00	13.20	
2	93.050	16.25	2.00	12.17	30.42	43.50	13.08	
3	118.270	18.94	2.30	8.48	29.72	43.50	13.78	
4	280.260	25.30	3.80	1.97	31.07	46.00	14.93	
5	785.630	23.83	6.90	4.58	35.31	46.00	10.69	
6	865.170	26.00	7.20	3.50	36.71	46.00	9.29	
7	901.060	24.95	7.40	5.56	37.91	46.00	8.09	
8	915.610	24.90	7.40	4.93	37.23	46.00	8.77	
9	950.530	25.93	7.55	4.49	37.98	46.00	8.02	
10	959.260	26.38	7.60	4.53	38.51	46.00	7.49	
11	984.480	25.46	7.75	3.54	36.75	54.00	17.25	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



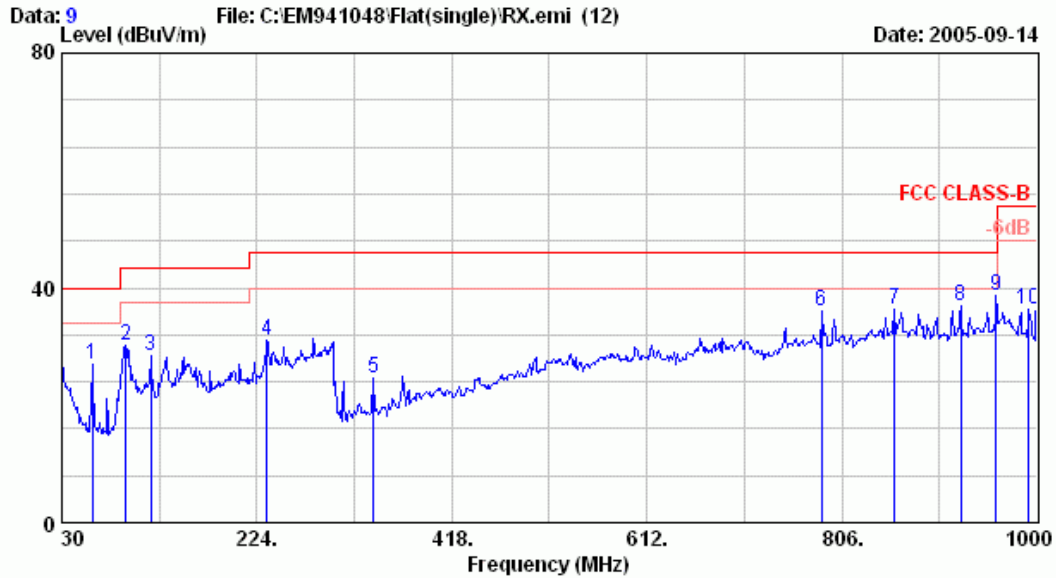
Site : A/C Chamber Date : 11
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH75+Flat(single) Antenna

	Ant.	Cable	Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	35.820	21.79	1.20	7.79	30.78	40.00	9.22
2	118.270	17.48	2.30	5.99	25.77	43.50	17.73
3	151.250	21.87	2.60	1.93	26.40	43.50	17.10
4	541.190	20.48	7.01	5.28	32.77	46.00	13.23
5	785.630	25.42	6.90	4.55	36.87	46.00	9.13
6	848.680	26.54	7.10	7.57	41.22	46.00	4.78
7	858.380	25.75	7.20	7.28	40.23	46.00	5.77
8	865.170	25.38	7.20	5.32	37.90	46.00	8.10
9	915.610	25.68	7.40	7.26	40.34	46.00	5.66
10	924.340	25.76	7.40	8.47	41.63	46.00	4.37
11	950.530	27.12	7.55	6.24	40.92	46.00	5.08
12	959.260	27.16	7.60	8.81	43.57	46.00	2.43
13	984.480	26.12	7.75	7.62	41.48	54.00	12.52
14	992.240	26.06	7.73	6.74	40.53	54.00	13.47

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



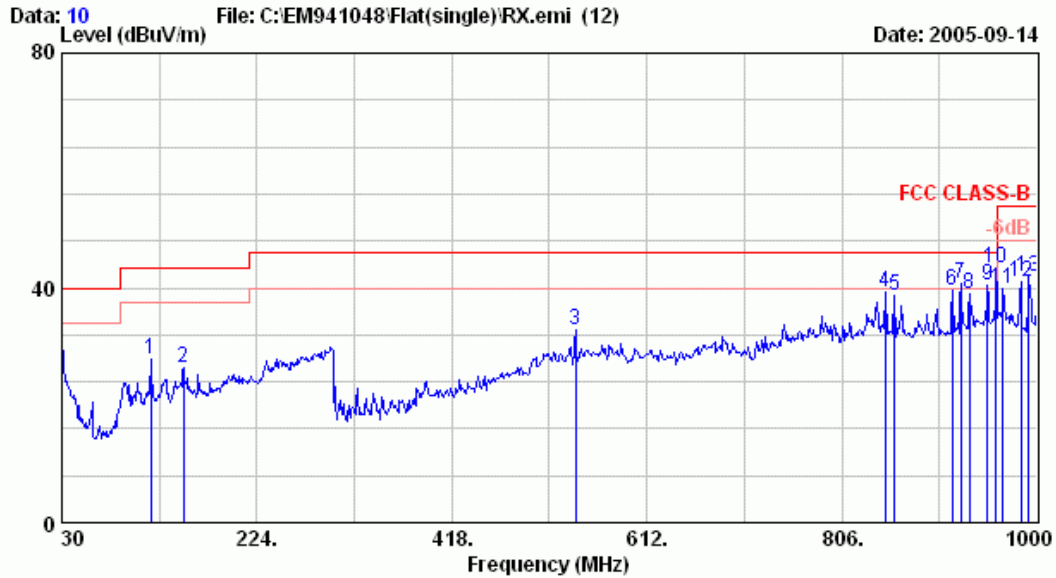
Site : A/C Chamber Date : 9
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : RX+Flat(single) Antenna

	Ant. Cable		Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	60.070	12.80	1.60	12.48	26.88	40.00	13.12
2	94.020	16.37	2.00	11.89	30.26	43.50	13.24
3	118.270	18.94	2.30	7.21	28.45	43.50	15.05
4	233.700	22.46	3.38	5.17	31.01	46.00	14.99
5	340.400	15.08	4.30	5.13	24.51	46.00	21.49
6	785.630	23.83	6.90	5.25	35.98	46.00	10.02
7	858.380	25.98	7.20	3.11	36.29	46.00	9.71
8	924.340	24.48	7.40	4.91	36.79	46.00	9.21
9	959.260	26.38	7.60	4.73	38.71	46.00	7.29
10	992.240	24.81	7.73	3.83	36.38	54.00	17.62

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



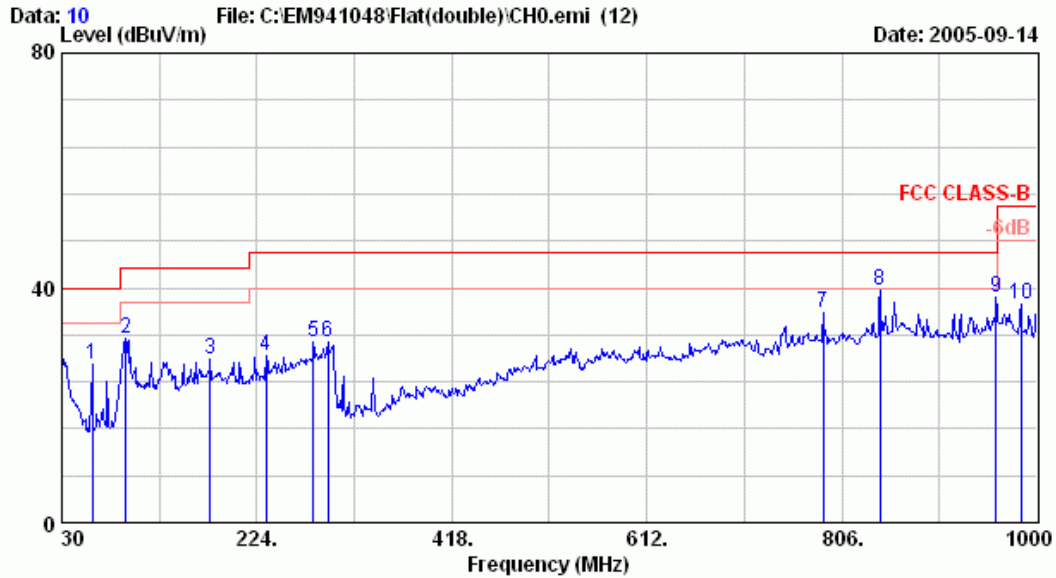
Site : A/C Chamber Date : 10
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : RX+Flat(single) Antenna

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission Reading (dBuV)	Emission		
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	118.270	17.48	2.30	8.20	27.98	43.50	15.52
2	151.250	21.87	2.60	1.81	26.28	43.50	17.22
3	541.190	20.48	7.01	5.45	32.94	46.00	13.06
4	848.680	26.54	7.10	5.73	39.38	46.00	6.62
5	858.380	25.75	7.20	5.74	38.69	46.00	7.31
6	915.610	25.68	7.40	6.46	39.54	46.00	6.46
7	924.340	25.76	7.40	7.49	40.65	46.00	5.35
8	933.070	26.27	7.50	5.28	39.05	46.00	6.95
9	950.530	27.12	7.55	5.78	40.46	46.00	5.54
10	959.260	27.16	7.60	8.53	43.29	46.00	2.71
11	966.050	27.07	7.70	4.98	39.75	54.00	14.25
12	984.480	26.12	7.75	7.29	41.15	54.00	12.85
13	992.240	26.06	7.73	8.02	41.81	54.00	12.19

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



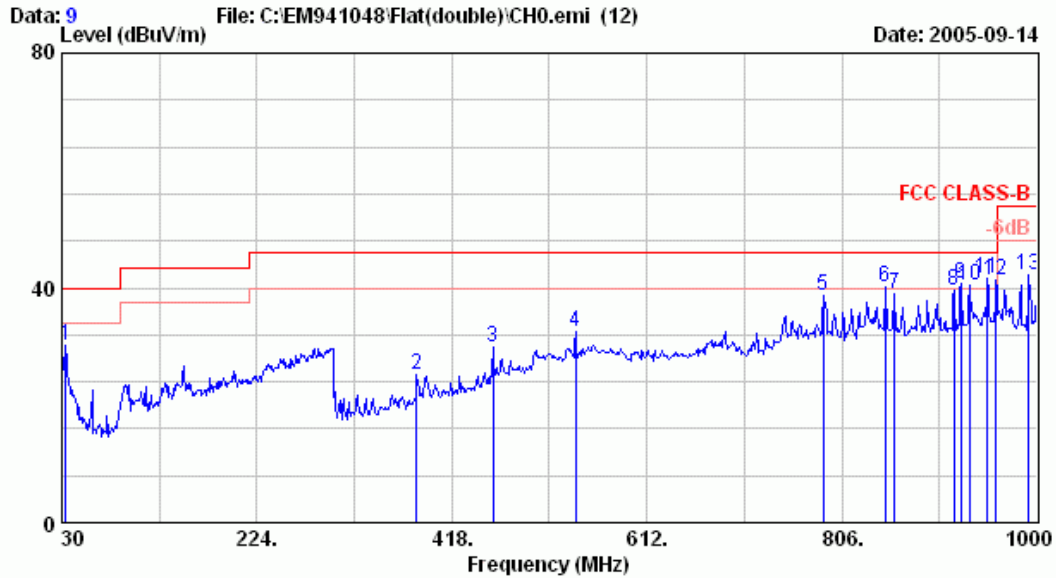
Site : A/C Chamber Date : 10
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CHO+Flat(double) Antenna

No.	Freq. (MHz)	Ant. Cable		Emission			Margin (dB)	Remark
		Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)		
1	60.070	12.80	1.60	12.52	26.91	40.00	13.09	
2	94.020	16.37	2.00	13.07	31.44	43.50	12.06	
3	177.440	21.24	2.90	3.63	27.77	43.50	15.73	
4	232.730	22.36	3.30	2.76	28.43	46.00	17.57	
5	280.260	25.30	3.80	1.60	30.70	46.00	15.30	
6	294.810	26.43	3.99	0.49	30.91	46.00	15.09	
7	787.570	23.78	6.90	5.01	35.68	46.00	10.32	
8	843.830	25.23	7.10	7.35	39.67	46.00	6.33	
9	959.260	26.38	7.60	4.32	38.30	46.00	7.70	
10	984.480	25.46	7.75	4.06	37.27	54.00	16.73	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



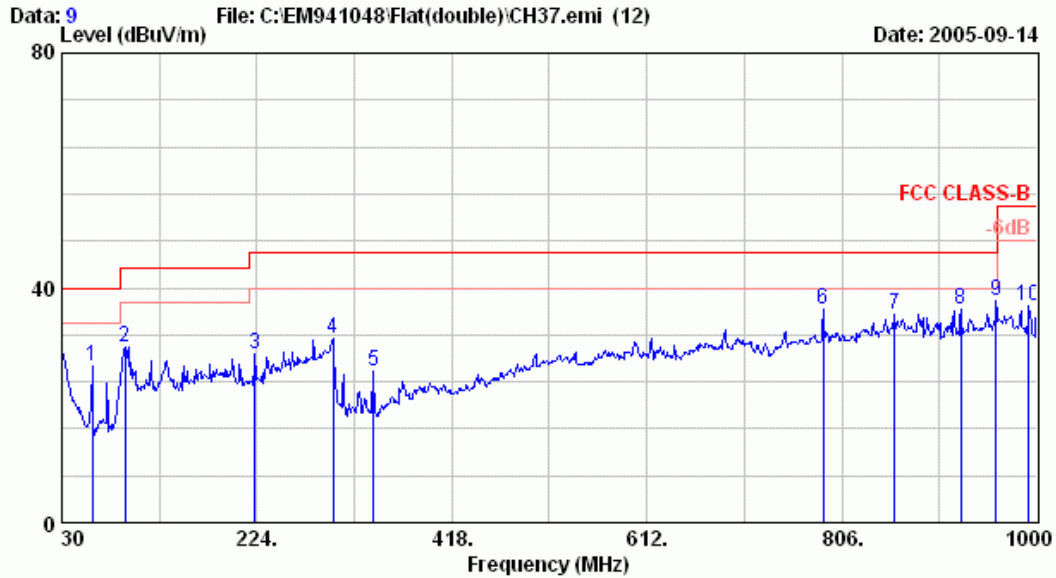
Site : A/C Chamber Date : 9
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CHO+Flat(double) Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	33.880	21.97	1.10	7.22	30.29	40.00	9.71	
2	383.080	17.08	4.62	3.42	25.12	46.00	20.88	
3	458.740	18.68	5.60	5.64	29.92	46.00	16.08	
4	541.190	20.48	7.01	5.05	32.54	46.00	13.46	
5	787.570	25.44	6.90	6.34	38.68	46.00	7.32	
6	848.680	26.54	7.10	6.58	40.23	46.00	5.77	
7	858.380	25.75	7.20	6.17	39.12	46.00	6.88	
8	917.550	25.67	7.40	6.56	39.63	46.00	6.37	
9	924.340	25.76	7.40	7.64	40.80	46.00	5.20	
10	933.070	26.27	7.50	6.53	40.30	46.00	5.70	
11	950.530	27.12	7.55	7.08	41.76	46.00	4.24	
12	959.260	27.16	7.60	6.49	41.25	46.00	4.75	
13	992.240	26.06	7.73	8.30	42.09	54.00	11.91	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



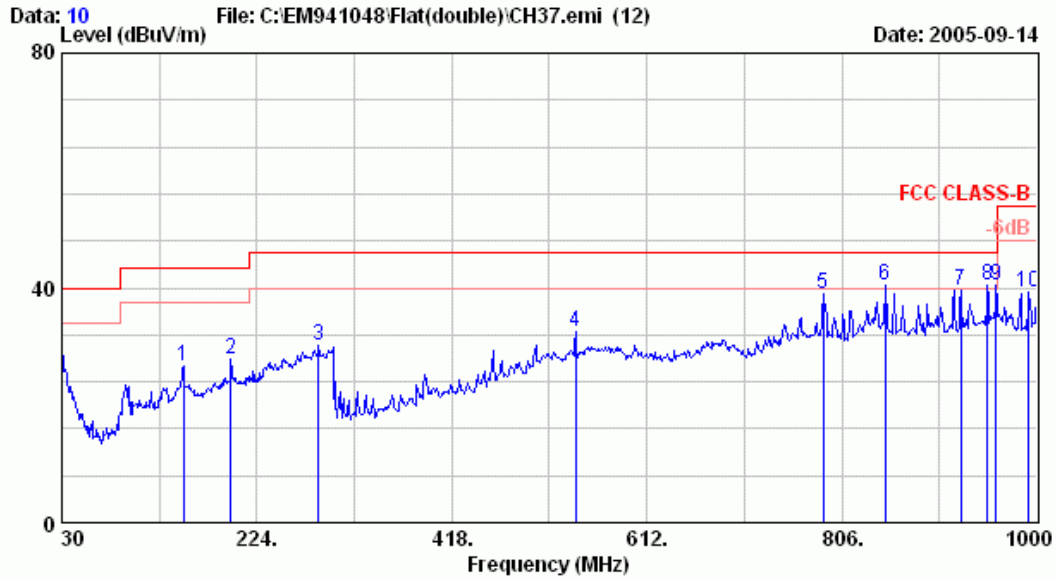
Site : A/C Chamber Date : 9
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH37+Flat(double) Antenna

	Ant.	Cable	Emission				Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	(dB)		
1	60.070	12.80	1.60	12.24	26.63	40.00	13.37	
2	93.050	16.25	2.00	11.65	29.90	43.50	13.60	
3	222.060	21.90	3.30	3.62	28.83	46.00	17.17	
4	299.660	26.77	3.90	0.69	31.36	46.00	14.64	
5	340.400	15.08	4.30	6.28	25.66	46.00	20.34	
6	787.570	23.78	6.90	5.74	36.41	46.00	9.59	
7	858.380	25.98	7.20	2.25	35.43	46.00	10.57	
8	924.340	24.48	7.40	4.45	36.33	46.00	9.67	
9	959.260	26.38	7.60	3.92	37.90	46.00	8.10	
10	992.240	24.81	7.73	4.28	36.83	54.00	17.17	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
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 Tel:+886-2-26092133 Fax:+886-2-26099303
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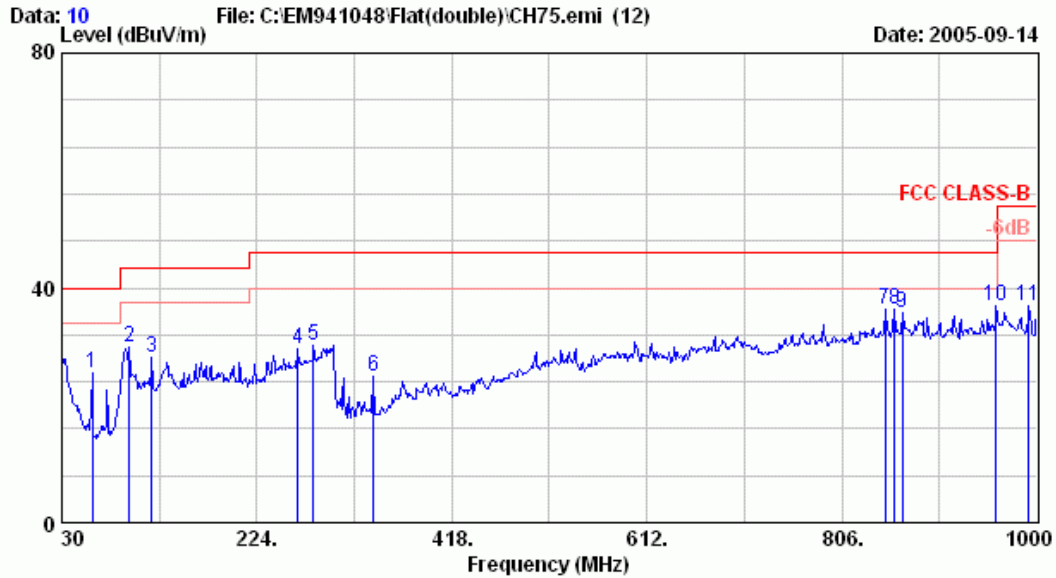
Site : A/C Chamber Date : 10
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22°C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH37+Flat(double) Antenna

	Ant. Cable		Emission				
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	21.87	2.60	2.28	26.75	43.50	16.75	
2	22.65	3.00	2.06	27.71	43.50	15.79	
3	26.17	3.80	0.31	30.28	46.00	15.72	
4	20.48	7.01	5.05	32.54	46.00	13.46	
5	25.44	6.90	6.72	39.06	46.00	6.94	
6	26.54	7.10	6.93	40.58	46.00	5.42	
7	25.76	7.40	6.39	39.55	46.00	6.45	
8	27.12	7.55	5.78	40.46	46.00	5.54	
9	27.16	7.60	5.83	40.59	46.00	5.41	
10	26.06	7.73	5.60	39.39	54.00	14.61	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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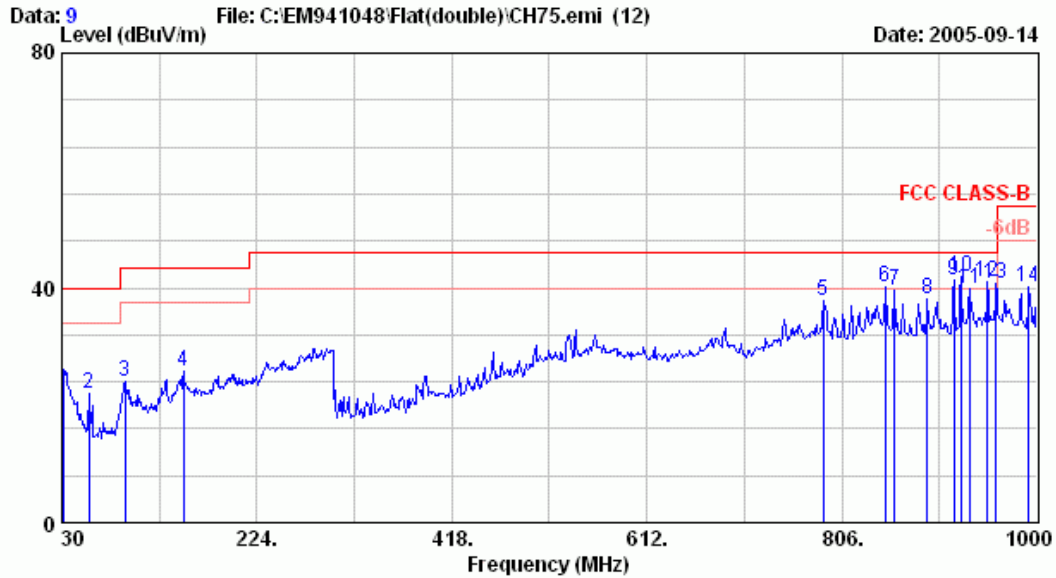
Site : A/C Chamber Date : 10
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH75+Flat(double) Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	60.070	12.80	1.60	11.15	25.54	40.00	14.46	
2	96.930	16.75	2.05	11.10	29.90	43.50	13.60	
3	119.240	19.02	2.30	6.84	28.16	43.50	15.34	
4	264.740	24.62	3.70	1.18	29.50	46.00	16.50	
5	280.260	25.30	3.80	0.98	30.08	46.00	15.92	
6	340.400	15.08	4.30	5.59	24.97	46.00	21.03	
7	848.680	25.51	7.10	3.63	36.24	46.00	9.76	
8	858.380	25.98	7.20	3.20	36.38	46.00	9.62	
9	866.140	25.97	7.20	2.70	35.88	46.00	10.12	
10	959.260	26.38	7.60	2.99	36.97	46.00	9.03	
11	992.240	24.81	7.73	4.26	36.81	54.00	17.19	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



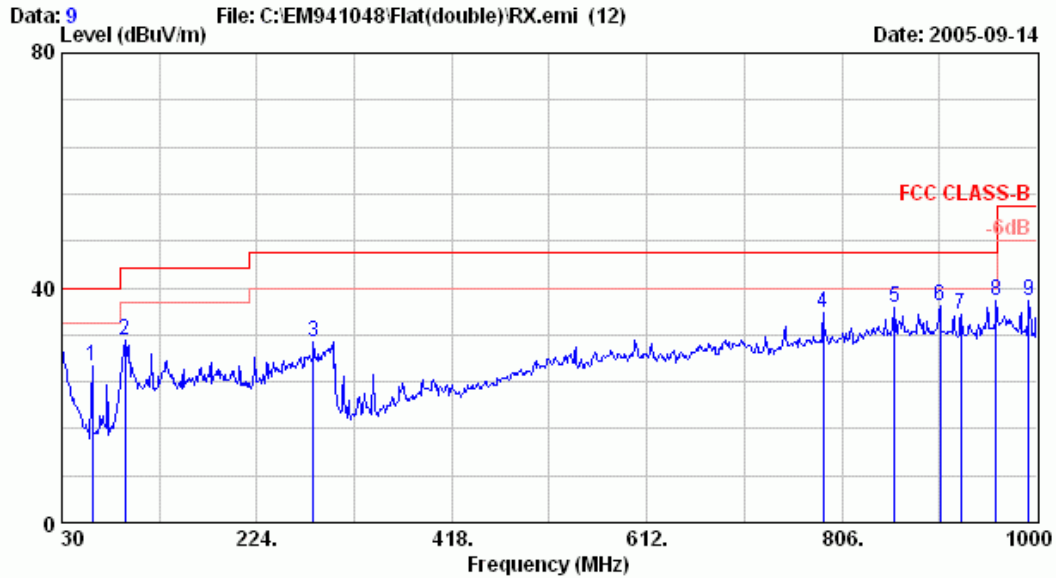
Site : A/C Chamber Date : 9
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : Wireless Modem with Serial Interface
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : CH75+Flat(double) Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	30.970	23.39	1.10	1.72	26.21	40.00	13.79	
2	57.160	14.00	1.60	6.27	21.87	40.00	18.13	
3	93.050	16.92	2.00	5.25	24.17	43.50	19.33	
4	151.250	21.87	2.60	1.29	25.76	43.50	17.74	
5	787.570	25.44	6.90	5.33	37.67	46.00	8.33	
6	848.680	26.54	7.10	6.37	40.02	46.00	5.98	
7	858.380	25.75	7.20	6.57	39.52	46.00	6.48	
8	891.360	25.79	7.30	4.98	38.07	46.00	7.93	
9	917.550	25.67	7.40	8.31	41.38	46.00	4.62	
10	924.340	25.76	7.40	8.84	42.00	46.00	4.00	
11	933.070	26.27	7.50	6.09	39.86	46.00	6.14	
12	950.530	27.12	7.55	6.31	40.99	46.00	5.01	
13	959.260	27.16	7.60	6.04	40.80	46.00	5.20	
14	992.240	26.06	7.73	6.50	40.29	54.00	13.71	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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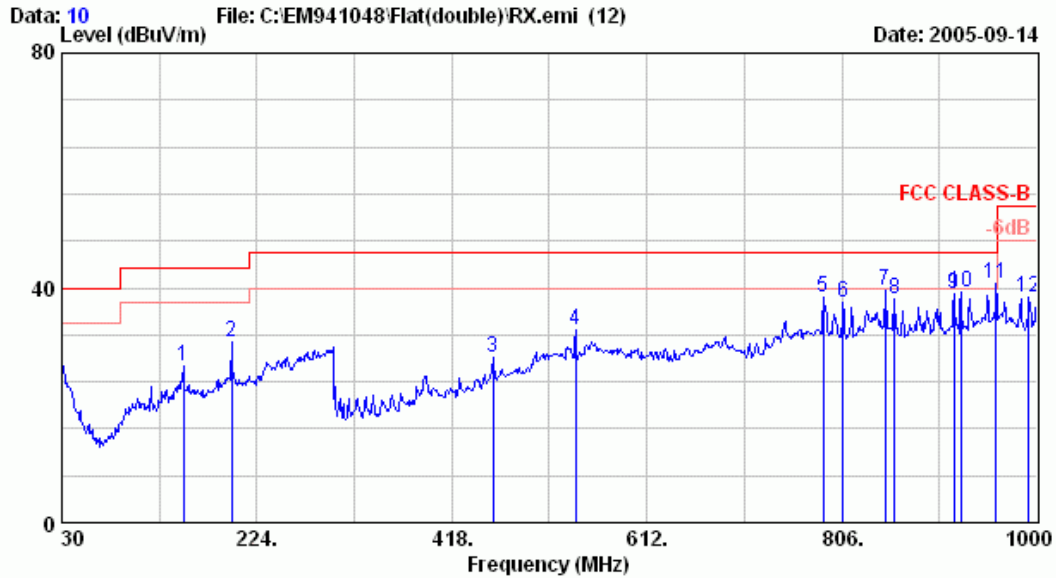
Site : A/C Chamber Date : 9
 Condition : 3m BBA9106/UHALP9108-A Polarity: HORIZONTAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22°C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : RX+Flat(double) Antenna

	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBµV)	Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	60.070	12.80	1.60	12.27	26.66	40.00	13.34	
2	93.050	16.25	2.00	12.70	30.95	43.50	12.55	
3	280.260	25.30	3.80	1.53	30.63	46.00	15.37	
4	787.570	23.78	6.90	5.20	35.87	46.00	10.13	
5	858.380	25.98	7.20	3.34	36.52	46.00	9.48	
6	903.970	24.88	7.40	4.55	36.83	46.00	9.17	
7	924.340	24.48	7.40	3.72	35.60	46.00	10.40	
8	959.260	26.38	7.60	3.78	37.76	46.00	8.24	
9	992.240	24.81	7.73	5.28	37.83	54.00	16.17	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Site : A/C Chamber Date : 10
 Condition : 3m BBA9106/UHALP9108-A Polarity: VERTICAL
 Limit : FCC CLASS-B
 Env. / Ins. : 8593EM 22*C/53% Engineer: Jarwei Wang
 EUT : RF-Modem using digital modulation
 Power Rating : DC 6V M/N:FDL01TU
 Test Mode : RX+Flat(double) Antenna

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Margin (dB)	Remark
				Level (dBuV/m)	Limits (dBuV/m)			
1	21.87	2.60	2.32	26.79	43.50	16.71		
2	22.74	3.00	5.17	30.91	43.50	12.59		
3	18.68	5.60	3.89	28.17	46.00	17.83		
4	20.48	7.01	5.21	32.70	46.00	13.30		
5	25.44	6.90	6.04	38.38	46.00	7.62		
6	24.51	7.00	5.96	37.47	46.00	8.53		
7	26.54	7.10	6.00	39.65	46.00	6.35		
8	25.75	7.20	5.27	38.22	46.00	7.78		
9	25.67	7.40	5.77	38.84	46.00	7.16		
10	25.76	7.40	6.11	39.27	46.00	6.73		
11	27.16	7.60	5.96	40.72	46.00	5.28		
12	26.06	7.73	4.67	38.46	54.00	15.54		

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

3.6.2. Frequency Range Above 1GHz

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Printed Antenna

Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1011.746	25.21	4.21	11.48	40.89	74.00	33.11	Peak
	2	1573.876	25.81	5.94	11.11	42.86	74.00	31.14	
	3	1674.556	26.31	6.65	8.94	41.90	74.00	32.10	
	4	1770.202	26.79	7.07	10.32	44.18	74.00	29.82	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1011.746	25.21	4.21	8.74	38.15	54.00	15.85	Average
	2	1573.876	25.81	5.94	6.40	38.15	54.00	15.85	
	3	1674.556	26.31	6.65	4.33	37.29	54.00	16.71	
	4	1770.202	26.79	7.07	6.31	40.17	54.00	13.83	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Vertical	1	1082.222	25.24	4.35	12.21	41.80	74.00	32.20	Peak
	2	1208.072	25.29	4.60	13.54	43.43	74.00	30.57	
	3	1280.226	25.32	4.77	11.81	41.89	74.00	32.11	
	4	1305.396	25.33	4.85	11.33	41.52	74.00	32.48	
	5	1380.906	25.36	5.08	13.58	44.02	74.00	29.98	
	6	1476.552	25.39	5.36	15.95	46.69	74.00	27.31	
	7	1526.892	25.54	5.61	16.85	48.01	74.00	25.99	
	8	1573.876	25.81	5.94	18.36	50.11	74.00	23.89	
	9	1624.216	26.07	6.32	12.44	44.84	74.00	29.16	
	10	1674.556	26.31	6.65	14.14	47.10	74.00	26.90	
	11	1770.202	26.79	7.07	13.98	47.84	74.00	26.16	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Vertical	1	1082.222	25.24	4.35	8.66	38.26	54.00	15.74	Average
	2	1208.072	25.29	4.60	10.20	40.09	54.00	13.91	
	3	1280.226	25.32	4.77	7.17	37.26	54.00	16.74	
	4	1305.396	25.33	4.85	6.66	36.85	54.00	17.16	
	5	1380.906	25.36	5.08	9.74	40.19	54.00	13.81	
	6	1476.552	25.39	5.36	12.54	43.29	54.00	10.71	
	7	1526.892	25.54	5.61	14.60	45.76	54.00	8.24	
	8	1573.876	25.81	5.94	15.20	46.95	54.00	7.05	
	9	1624.216	26.07	6.32	8.88	41.28	54.00	12.72	
	10	1674.556	26.31	6.65	10.15	43.12	54.00	10.88	
	11	1770.202	26.79	7.07	9.32	43.18	54.00	10.82	

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Printed Antenna

Test Mode : Transmitting Mode, Channel: 37, Frequency: 2441MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
Horizontal	1	1011.746	25.21	4.21	10.70	40.11	74.00	33.89	Peak
	2	1674.556	26.31	6.65	12.03	44.99	74.00	29.01	
	3	1770.202	26.79	7.07	11.55	45.41	74.00	28.59	

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
Horizontal	1	1011.746	25.21	4.21	7.89	37.30	54.00	16.70	Average
	2	1674.556	26.31	6.65	7.59	40.55	54.00	13.45	
	3	1770.202	26.79	7.07	6.54	40.40	54.00	13.60	

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
Vertical	1	1082.222	25.24	4.35	12.35	41.94	74.00	32.06	Peak
	2	1208.072	25.29	4.60	14.16	44.05	74.00	29.95	
	3	1280.226	25.32	4.77	13.33	43.41	74.00	30.59	
	4	1380.906	25.36	5.08	11.80	42.24	74.00	31.76	
	5	1476.552	25.39	5.36	16.05	46.79	74.00	27.21	
	6	1526.892	25.54	5.61	17.13	48.29	74.00	25.71	
	7	1573.876	25.81	5.94	18.66	50.41	74.00	23.59	
	8	1624.216	26.07	6.32	13.32	45.72	74.00	28.28	
	9	1674.556	26.31	6.65	16.86	49.82	74.00	24.18	
	10	1770.202	26.79	7.07	13.05	46.91	74.00	27.09	
	11	1820.542	27.01	6.80	11.80	45.61	74.00	28.39	

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
Vertical	1	1082.222	25.24	4.35	8.56	38.16	54.00	15.84	Average
	2	1208.072	25.29	4.60	10.51	40.39	54.00	13.61	
	3	1280.226	25.32	4.77	10.70	40.79	54.00	13.21	
	4	1380.906	25.36	5.08	8.00	38.44	54.00	15.56	
	5	1476.552	25.39	5.36	12.05	42.80	54.00	11.20	
	6	1526.892	25.54	5.61	14.44	45.60	54.00	8.40	
	7	1573.876	25.81	5.94	15.05	46.80	54.00	7.20	
	8	1624.216	26.07	6.32	7.79	40.19	54.00	13.81	
	9	1674.556	26.31	6.65	12.33	45.30	54.00	8.70	
	10	1770.202	26.79	7.07	6.83	40.69	54.00	13.31	
	11	1820.542	27.01	6.80	6.61	40.43	54.00	13.57	

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Pencil Type Antenna

Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1011.746	25.21	4.21	12.28	41.69	74.00	32.31	Peak

Horizontal	1	1011.746	25.21	4.21	8.52	37.94	54.00	16.06	Average

Vertical	1	1015.102	25.21	4.21	15.86	45.27	74.00	28.73	Peak
	2	1048.662	25.22	4.28	11.73	41.23	74.00	32.77	
	3	1187.936	25.29	4.56	11.78	41.62	74.00	32.38	

Vertical	1	1015.102	25.21	4.21	12.60	42.02	54.00	11.98	Average
	2	1048.662	25.22	4.28	8.19	37.70	54.00	16.30	
	3	1187.936	25.29	4.56	8.08	37.93	54.00	16.07	

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Pencil Type Antenna

Test Mode : Transmitting Mode, Channel: 37, Frequency: 2441MHz

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1015.102	25.21	4.21	10.52	39.93	74.00	34.07	Peak

Horizontal	1	1015.102	25.21	4.21	7.79	37.20	54.00	16.80	Average

Vertical	1	1015.102	25.21	4.21	17.57	46.98	74.00	27.02	Peak
	2	1070.476	25.23	4.33	13.73	43.29	74.00	30.71	
	3	1124.172	25.26	4.44	10.86	40.55	74.00	33.45	

Vertical	1	1015.102	25.21	4.21	12.87	42.29	54.00	11.71	Average
	2	1070.476	25.23	4.33	9.77	39.34	54.00	14.66	
	3	1124.172	25.26	4.44	6.97	36.67	54.00	17.34	

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Pencil Type Antenna

Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
Horizontal	1	1015.102	25.21	4.21	12.01	41.42	74.00	32.58	Peak
Horizontal	1	1015.102	25.21	4.21	9.00	38.42	54.00	15.58	Average
Vertical	1	1015.102	25.21	4.21	16.81	46.22	74.00	27.78	Peak
	2	1036.916	25.22	4.26	15.07	44.54	74.00	29.46	
	3	1104.036	25.25	4.40	13.67	43.32	74.00	30.68	
	4	1179.546	25.28	4.55	12.11	41.94	74.00	32.06	
	5	1761.812	26.74	7.12	11.24	45.10	74.00	28.90	
	6	1833.966	27.08	6.74	12.45	46.27	74.00	27.73	
	7	2639.406	29.40	6.69	11.52	47.61	74.00	26.39	
Vertical	1	1015.102	25.21	4.21	13.14	42.55	54.00	11.45	Average
	2	1036.916	25.22	4.26	10.81	40.29	54.00	13.71	
	3	1104.036	25.25	4.40	10.16	39.81	54.00	14.19	
	4	1179.546	25.28	4.55	8.66	38.49	54.00	15.51	
	5	1761.812	26.74	7.12	7.85	41.71	54.00	12.29	
	6	1833.966	27.08	6.74	8.36	42.18	54.00	11.82	
	7	2639.406	29.40	6.69	7.18	43.28	54.00	10.72	

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Pencil Type Antenna

Test Mode : Receiving Mode, Channel: 37, Frequency: 2441MHz

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1015.102	25.21	4.21	11.00	40.41	74.00	33.59	Peak
Horizontal	1	1015.102	25.21	4.21	5.60	35.01	54.00	18.99	Average
Vertical	1	1015.102	25.21	4.21	15.64	45.05	74.00	28.95	Peak
Vertical	1	1015.102	25.21	4.21	9.22	38.63	54.00	15.37	Average

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Pedestal Antenna

Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
Horizontal	1	1573.876	25.81	5.94	10.72	42.47	74.00	31.53	Peak
	2	1674.556	26.31	6.65	11.17	44.13	74.00	29.87	
	3	1770.202	26.79	7.07	11.53	45.39	74.00	28.61	

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
Horizontal	1	1573.876	25.81	5.94	6.90	38.65	54.00	15.35	Average
	2	1674.556	26.31	6.65	7.73	40.70	54.00	13.30	
	3	1770.202	26.79	7.07	6.78	40.64	54.00	13.36	

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
Vertical	1	1082.222	25.24	4.35	13.48	43.07	74.00	30.93	Peak
	2	1208.072	25.29	4.60	15.32	45.21	74.00	28.79	
	3	1233.242	25.30	4.64	14.95	44.90	74.00	29.10	
	4	1280.226	25.32	4.77	13.84	43.92	74.00	30.08	
	5	1305.396	25.33	4.85	13.27	43.46	74.00	30.54	
	6	1380.906	25.36	5.08	12.59	43.03	74.00	30.97	
	7	1476.552	25.39	5.36	16.89	47.63	74.00	26.37	
	8	1526.892	25.54	5.61	18.03	49.19	74.00	24.81	
	9	1573.876	25.81	5.94	20.35	52.10	74.00	21.90	
	10	1624.216	26.07	6.32	15.16	47.56	74.00	26.44	
	11	1674.556	26.31	6.65	19.46	52.42	74.00	21.58	
	12	1770.202	26.79	7.07	16.16	50.02	74.00	23.98	

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
Vertical	1	1082.222	25.24	4.35	10.27	39.86	54.00	14.14	Average
	2	1208.072	25.29	4.60	11.33	41.22	54.00	12.78	
	3	1233.242	25.30	4.64	10.41	40.36	54.00	13.64	
	4	1280.226	25.32	4.77	8.57	38.66	54.00	15.34	
	5	1305.396	25.33	4.85	10.10	40.29	54.00	13.71	
	6	1380.906	25.36	5.08	10.56	41.00	54.00	13.00	
	7	1476.552	25.39	5.36	13.00	43.75	54.00	10.25	
	8	1526.892	25.54	5.61	14.60	45.76	54.00	8.24	
	9	1573.876	25.81	5.94	15.61	47.36	54.00	6.64	
	10	1624.216	26.07	6.32	11.36	43.75	54.00	10.25	
	11	1674.556	26.31	6.65	15.31	48.27	54.00	5.73	
	12	1770.202	26.79	7.07	12.52	46.38	54.00	7.62	

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Flat Antenna (Single Type)

Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

		Ant.	Cable	Emission					
	Freq.	Factor	Loss	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	(dB)		
Horizontal	1	1573.876	25.81	5.94	10.51	42.26	74.00	31.74	Peak
	2	1674.556	26.31	6.65	10.10	43.06	74.00	30.94	
	3	1770.202	26.79	7.07	11.02	44.88	74.00	29.12	

		Ant.	Cable	Emission					
	Freq.	Factor	Loss	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	(dB)		
Horizontal	1	1573.876	25.81	5.94	6.53	38.28	54.00	15.72	Average
	2	1674.556	26.31	6.65	6.49	39.45	54.00	14.55	
	3	1770.202	26.79	7.07	7.01	40.87	54.00	13.13	

		Ant.	Cable	Emission					
	Freq.	Factor	Loss	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	(dB)		
Vertical	1	1082.222	25.24	4.35	12.49	42.08	74.00	31.92	Peak
	2	1280.226	25.32	4.77	12.62	42.70	74.00	31.30	
	3	1380.906	25.36	5.08	12.04	42.48	74.00	31.52	
	4	1476.552	25.39	5.36	15.79	46.53	74.00	27.47	
	5	1526.892	25.54	5.61	17.17	48.33	74.00	25.67	
	6	1573.876	25.81	5.94	19.11	50.86	74.00	23.14	
	7	1624.216	26.07	6.32	13.53	45.93	74.00	28.07	
	8	1674.556	26.31	6.65	16.32	49.28	74.00	24.72	
	9	1770.202	26.79	7.07	15.91	49.77	74.00	24.23	

		Ant.	Cable	Emission					
	Freq.	Factor	Loss	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	(dB)		
Vertical	1	1082.222	25.24	4.35	7.97	37.56	54.00	16.44	Average
	2	1280.226	25.32	4.77	8.18	38.27	54.00	15.73	
	3	1380.906	25.36	5.08	8.05	38.49	54.00	15.51	
	4	1476.552	25.39	5.36	10.63	41.38	54.00	12.63	
	5	1526.892	25.54	5.61	11.47	42.63	54.00	11.38	
	6	1573.876	25.81	5.94	14.53	46.28	54.00	7.72	
	7	1624.216	26.07	6.32	9.48	41.87	54.00	12.13	
	8	1674.556	26.31	6.65	11.31	44.28	54.00	9.72	
	9	1770.202	26.79	7.07	11.81	45.67	54.00	8.33	

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Flat Antenna (Single Type)

Test Mode : Transmitting Mode, Channel: 37, Frequency: 2441MHz

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1573.876	25.81	5.94	11.02	42.77	74.00	31.23	Peak
	2	1674.556	26.31	6.65	11.59	44.55	74.00	29.45	
	3	1770.202	26.79	7.07	11.95	45.81	74.00	28.19	
Horizontal	1	1573.876	25.81	5.94	6.66	38.41	54.00	15.59	Average
	2	1674.556	26.31	6.65	7.96	40.92	54.00	13.08	
	3	1770.202	26.79	7.07	7.44	41.30	54.00	12.70	
Vertical	1	1104.036	25.25	4.40	13.90	43.55	74.00	30.45	Peak
	2	1208.072	25.29	4.60	11.91	41.80	74.00	32.20	
	3	1280.226	25.32	4.77	13.91	43.99	74.00	30.01	
	4	1305.396	25.33	4.85	13.22	43.41	74.00	30.59	
	5	1380.906	25.36	5.08	12.80	43.24	74.00	30.76	
	6	1476.552	25.39	5.36	13.54	44.28	74.00	29.72	
	7	1526.892	25.54	5.61	13.52	44.68	74.00	29.32	
	8	1573.876	25.81	5.94	14.80	46.55	74.00	27.45	
	9	1624.216	26.07	6.32	11.93	44.33	74.00	29.67	
	10	1674.556	26.31	6.65	17.50	50.46	74.00	23.54	
	11	1770.202	26.79	7.07	16.21	50.07	74.00	23.93	
Vertical	1	1104.036	25.25	4.40	9.80	39.45	54.00	14.55	Average
	2	1208.072	25.29	4.60	8.28	38.17	54.00	15.83	
	3	1280.226	25.32	4.77	9.51	39.60	54.00	14.40	
	4	1305.396	25.33	4.85	9.24	39.43	54.00	14.57	
	5	1380.906	25.36	5.08	9.66	40.10	54.00	13.90	
	6	1476.552	25.39	5.36	9.63	40.37	54.00	13.63	
	7	1526.892	25.54	5.61	9.87	41.03	54.00	12.97	
	8	1573.876	25.81	5.94	10.73	42.48	54.00	11.52	
	9	1624.216	26.07	6.32	8.69	41.09	54.00	12.91	
	10	1674.556	26.31	6.65	12.70	45.66	54.00	8.34	
	11	1770.202	26.79	7.07	11.45	45.31	54.00	8.69	

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Flat Antenna (Single Type)

Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

	Freq. (MHz)	Ant. Cable		Reading (dBµV)	Emission			Remark	
		Factor (dB/m)	Loss (dB)		Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)		
Horizontal	1	1082.222	25.24	4.35	10.68	40.27	74.00	33.73	Peak
	2	1280.226	25.32	4.77	11.23	41.31	74.00	32.69	
	3	1300.362	25.33	4.84	10.47	40.64	74.00	33.36	
	4	1380.906	25.36	5.08	11.97	42.41	74.00	31.59	
	5	1476.552	25.39	5.36	13.13	43.87	74.00	30.13	
	6	1526.892	25.54	5.61	14.38	45.54	74.00	28.46	
	7	1573.876	25.81	5.94	15.77	47.52	74.00	26.48	
	8	1624.216	26.07	6.32	10.40	42.80	74.00	31.20	
	9	1674.556	26.31	6.65	13.52	46.48	74.00	27.52	
	10	1770.202	26.79	7.07	13.53	47.39	74.00	26.61	

	Freq. (MHz)	Ant. Cable		Reading (dBµV)	Emission			Remark	
		Factor (dB/m)	Loss (dB)		Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)		
Horizontal	1	1082.222	25.24	4.35	7.52	37.11	54.00	16.89	Average
	2	1280.226	25.32	4.77	8.58	38.67	54.00	15.33	
	3	1300.362	25.33	4.84	5.75	35.92	54.00	18.08	
	4	1380.906	25.36	5.08	7.90	38.34	54.00	15.66	
	5	1476.552	25.39	5.36	8.37	39.11	54.00	14.89	
	6	1526.892	25.54	5.61	10.58	41.74	54.00	12.26	
	7	1573.876	25.81	5.94	10.45	42.20	54.00	11.80	
	8	1624.216	26.07	6.32	6.57	38.97	54.00	15.03	
	9	1674.556	26.31	6.65	9.81	42.77	54.00	11.23	
	10	1770.202	26.79	7.07	9.93	43.79	54.00	10.21	

	Freq. (MHz)	Ant. Cable		Reading (dBµV)	Emission			Remark	
		Factor (dB/m)	Loss (dB)		Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)		
Vertical	1	1082.222	25.24	4.35	12.26	41.85	74.00	32.15	Peak
	2	1199.682	25.29	4.59	13.49	43.37	74.00	30.63	
	3	1280.226	25.32	4.77	13.70	43.78	74.00	30.22	
	4	1300.362	25.33	4.84	11.70	41.87	74.00	32.13	
	5	1380.906	25.36	5.08	11.52	41.96	74.00	32.04	
	6	1476.552	25.39	5.36	15.81	46.55	74.00	27.45	
	7	1526.892	25.54	5.61	17.30	48.46	74.00	25.54	
	8	1573.876	25.81	5.94	19.45	51.20	74.00	22.80	
	9	1624.216	26.07	6.32	13.55	45.95	74.00	28.05	
	10	1674.556	26.31	6.65	17.64	50.60	74.00	23.40	
	11	1770.202	26.79	7.07	15.30	49.16	74.00	24.84	

	Freq. (MHz)	Ant. Cable		Reading (dBµV)	Emission			Remark	
		Factor (dB/m)	Loss (dB)		Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)		
Vertical	1	1082.222	25.24	4.35	8.83	38.42	54.00	15.58	Average
	2	1199.682	25.29	4.59	9.87	39.75	54.00	14.25	
	3	1280.226	25.32	4.77	8.18	38.27	54.00	15.73	
	4	1300.362	25.33	4.84	7.09	37.26	54.00	16.74	
	5	1380.906	25.36	5.08	8.01	38.45	54.00	15.55	
	6	1476.552	25.39	5.36	12.01	42.75	54.00	11.25	
	7	1526.892	25.54	5.61	14.96	46.12	54.00	7.88	
	8	1573.876	25.81	5.94	15.87	47.62	54.00	6.38	
	9	1624.216	26.07	6.32	10.34	42.74	54.00	11.26	
	10	1674.556	26.31	6.65	13.79	46.75	54.00	7.25	
	11	1770.202	26.79	7.07	11.87	45.73	54.00	8.27	

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Flat Antenna (Single Type)

Test Mode : Receiving Mode, Channel: 37, Frequency: 2441MHz

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1817.186	27.01	6.84	7.30	41.14	74.00	32.86	Peak
Horizontal	1	1817.186	27.01	6.84	4.54	38.39	54.00	15.61	Average
Vertical	1	1015.102	25.21	4.21	12.43	41.84	74.00	32.16	Peak
Vertical	1	1015.102	25.21	4.21	8.85	38.27	54.00	15.73	Average

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Flat Antenna (Double Type)

Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1011.746	25.21	4.21	10.67	40.08	74.00	33.92	Peak
	2	1573.876	25.81	5.94	11.02	42.77	74.00	31.23	
	3	1674.556	26.31	6.65	11.45	44.41	74.00	29.59	
	4	1770.202	26.79	7.07	11.34	45.20	74.00	28.80	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1011.746	25.21	4.21	6.74	36.15	54.00	17.85	Average
	2	1573.876	25.81	5.94	6.88	38.63	54.00	15.37	
	3	1674.556	26.31	6.65	6.61	39.57	54.00	14.43	
	4	1770.202	26.79	7.07	7.51	41.37	54.00	12.63	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Vertical	1	1023.492	25.21	4.23	16.30	45.74	74.00	28.26	Peak
	2	1120.816	25.26	4.43	14.97	44.66	74.00	29.34	
	3	1280.226	25.32	4.77	13.12	43.20	74.00	30.80	
	4	1305.396	25.33	4.85	12.60	42.79	74.00	31.21	
	5	1379.228	25.36	5.07	13.60	44.03	74.00	29.97	
	6	1476.552	25.39	5.36	15.95	46.69	74.00	27.31	
	7	1526.892	25.54	5.61	16.17	47.33	74.00	26.67	
	8	1573.876	25.81	5.94	16.00	47.75	74.00	26.25	
	9	1674.556	26.31	6.65	13.52	46.48	74.00	27.52	
	10	1770.202	26.79	7.07	14.70	48.56	74.00	25.44	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Vertical	1	1023.492	25.21	4.23	11.25	40.69	54.00	13.31	Average
	2	1120.816	25.26	4.43	10.49	40.18	54.00	13.82	
	3	1280.226	25.32	4.77	8.61	38.70	54.00	15.30	
	4	1305.396	25.33	4.85	8.18	38.36	54.00	15.64	
	5	1379.228	25.36	5.07	10.02	40.45	54.00	13.55	
	6	1476.552	25.39	5.36	10.99	41.74	54.00	12.26	
	7	1526.892	25.54	5.61	13.12	44.27	54.00	9.73	
	8	1573.876	25.81	5.94	13.99	45.74	54.00	8.26	
	9	1674.556	26.31	6.65	9.83	42.79	54.00	11.21	
	10	1770.202	26.79	7.07	10.43	44.29	54.00	9.71	

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Flat Antenna (Double Type)

Test Mode : Transmitting Mode, Channel: 37, Frequency: 2441MHz

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1196.326	25.29	4.58	10.83	40.70	74.00	33.30	Peak
	2	1573.876	25.81	5.94	11.07	42.82	74.00	31.18	
	3	1674.556	26.31	6.65	10.31	43.27	74.00	30.73	
	4	1770.202	26.79	7.07	10.41	44.27	74.00	29.73	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1196.326	25.29	4.58	7.00	36.87	54.00	17.13	Average
	2	1573.876	25.81	5.94	6.73	38.48	54.00	15.52	
	3	1674.556	26.31	6.65	6.31	39.28	54.00	14.72	
	4	1770.202	26.79	7.07	6.52	40.38	54.00	13.63	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Vertical	1	1082.222	25.24	4.35	12.56	42.15	74.00	31.85	Peak
	2	1208.072	25.29	4.60	13.95	43.84	74.00	30.16	
	3	1280.226	25.32	4.77	11.58	41.66	74.00	32.34	
	4	1380.906	25.36	5.08	12.84	43.28	74.00	30.72	
	5	1476.552	25.39	5.36	16.44	47.18	74.00	26.82	
	6	1526.892	25.54	5.61	17.40	48.56	74.00	25.44	
	7	1573.876	25.81	5.94	18.59	50.34	74.00	23.66	
	8	1624.216	26.07	6.32	12.85	45.25	74.00	28.75	
	9	1674.556	26.31	6.65	15.45	48.41	74.00	25.59	
	10	1770.202	26.79	7.07	12.58	46.44	74.00	27.56	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Vertical	1	1082.222	25.24	4.35	9.08	38.67	54.00	15.33	Average
	2	1208.072	25.29	4.60	9.59	39.48	54.00	14.53	
	3	1280.226	25.32	4.77	7.60	37.69	54.00	16.32	
	4	1380.906	25.36	5.08	8.25	38.69	54.00	15.31	
	5	1476.552	25.39	5.36	13.98	44.72	54.00	9.28	
	6	1526.892	25.54	5.61	14.06	45.22	54.00	8.78	
	7	1573.876	25.81	5.94	13.92	45.67	54.00	8.33	
	8	1624.216	26.07	6.32	9.71	42.10	54.00	11.90	
	9	1674.556	26.31	6.65	11.90	44.86	54.00	9.14	
	10	1770.202	26.79	7.07	8.82	42.68	54.00	11.32	

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Flat Antenna (Double Type)

Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1224.852	25.30	4.63	9.70	39.64	74.00	34.36	Peak
	2	1573.876	25.81	5.94	10.56	42.31	74.00	31.69	
	3	1674.556	26.31	6.65	11.94	44.90	74.00	29.10	
	4	1770.202	26.79	7.07	12.46	46.32	74.00	27.68	
Horizontal	1	1224.852	25.30	4.63	6.88	36.81	54.00	17.19	Average
	2	1573.876	25.81	5.94	6.89	38.64	54.00	15.36	
	3	1674.556	26.31	6.65	7.22	40.19	54.00	13.82	
	4	1770.202	26.79	7.07	8.88	42.74	54.00	11.26	
Vertical	1	1015.102	25.21	4.21	12.65	42.06	74.00	31.94	Peak
	2	1082.222	25.24	4.35	12.85	42.44	74.00	31.56	
	3	1280.226	25.32	4.77	12.64	42.72	74.00	31.28	
	4	1380.906	25.36	5.08	12.61	43.05	74.00	30.95	
	5	1476.552	25.39	5.36	14.83	45.57	74.00	28.43	
	6	1526.892	25.54	5.61	15.49	46.65	74.00	27.35	
	7	1573.876	25.81	5.94	15.61	47.36	74.00	26.64	
	8	1624.216	26.07	6.32	11.23	43.63	74.00	30.37	
	9	1674.556	26.31	6.65	15.94	48.90	74.00	25.10	
	10	1770.202	26.79	7.07	16.49	50.35	74.00	23.65	
Vertical	1	1015.102	25.21	4.21	9.22	38.63	54.00	15.37	Average
	2	1082.222	25.24	4.35	8.59	38.18	54.00	15.82	
	3	1280.226	25.32	4.77	8.66	38.75	54.00	15.25	
	4	1380.906	25.36	5.08	7.18	37.62	54.00	16.38	
	5	1476.552	25.39	5.36	10.49	41.24	54.00	12.76	
	6	1526.892	25.54	5.61	10.22	41.37	54.00	12.63	
	7	1573.876	25.81	5.94	12.53	44.28	54.00	9.72	
	8	1624.216	26.07	6.32	7.06	39.46	54.00	14.54	
	9	1674.556	26.31	6.65	11.34	44.30	54.00	9.70	
	10	1770.202	26.79	7.07	12.97	46.83	54.00	7.17	

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Flat Antenna (Double Type)

Test Mode : Receiving Mode, Channel: 37, Frequency: 2441MHz

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1011.746	25.21	4.21	10.28	39.69	74.00	34.31	Peak
	2	1417.822	25.37	5.20	8.31	38.88	74.00	35.12	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Horizontal	1	1011.746	25.21	4.21	8.18	37.59	54.00	16.41	Average
	2	1417.822	25.37	5.20	4.82	35.39	54.00	18.61	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Vertical	1	1011.746	25.21	4.21	11.17	40.58	74.00	33.42	Peak
	2	1682.946	26.36	6.73	8.84	41.93	74.00	32.07	

		Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
Vertical	1	1011.746	25.21	4.21	6.77	36.19	54.00	17.81	Average
	2	1682.946	26.36	6.73	6.09	39.18	54.00	14.82	

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
2. Measurement was up to 25GHz, but the emission levels were too low against the official limit and not reported.

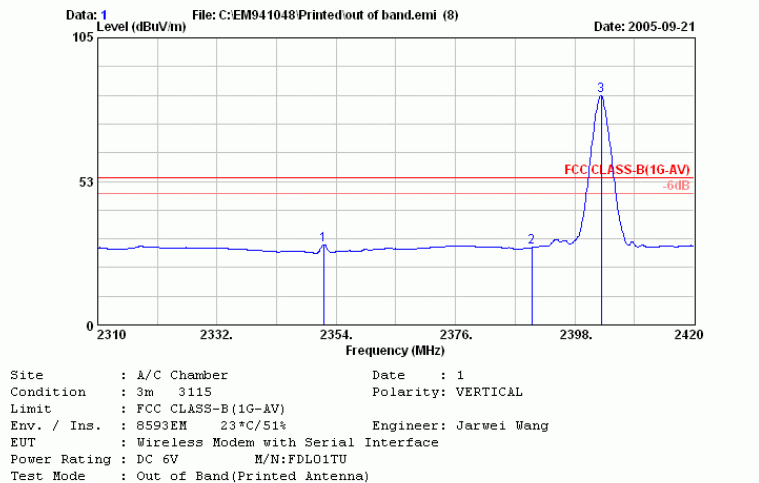
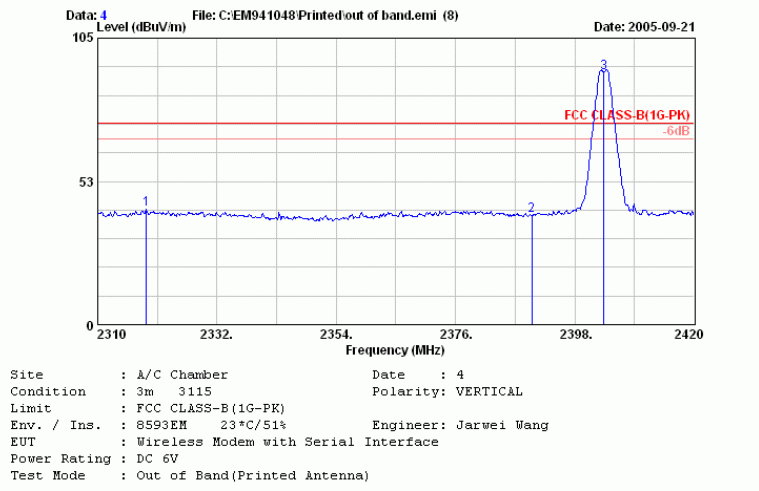
Date of Test : Sep. 21, 2005 Temperature : 23°C
 EUT : Wireless Modem with Serial Interface Humidity : 51%
with Printed Antenna
 Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2319.020	28.46	6.25	7.66	42.37	74.00	31.63
Average *	2351.690	28.53	6.29	-5.41	29.41	54.00	24.59

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. ‘*’ The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Printed Antenna

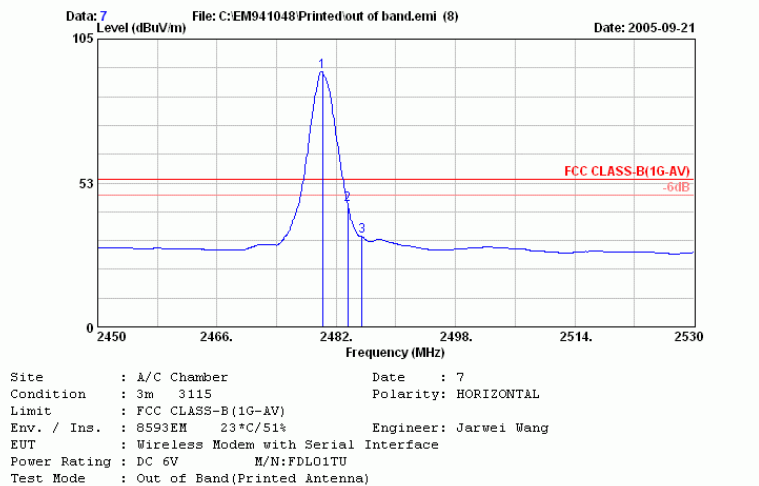
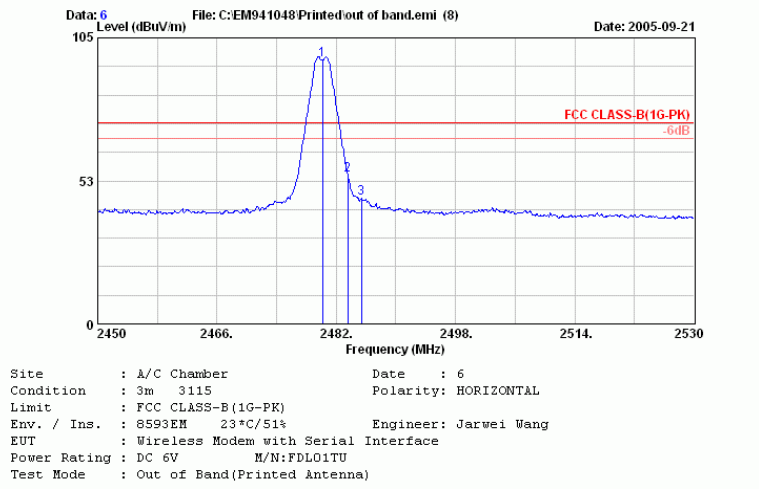
Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak *	2483.520	28.77	6.45	19.45	54.67	74.00	19.33
Average *	2483.520	28.77	6.45	9.38	44.60	54.00	9.40

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. High frequency section (spurious in the restricted band 2483.5-2500MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Pencil Type Antenna

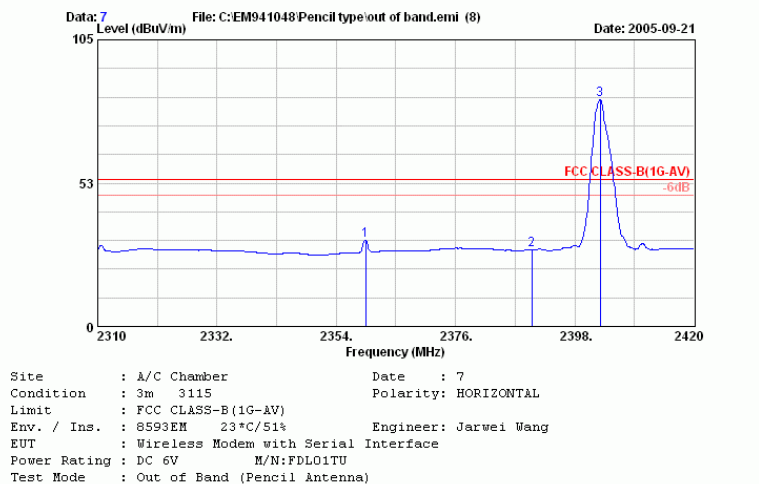
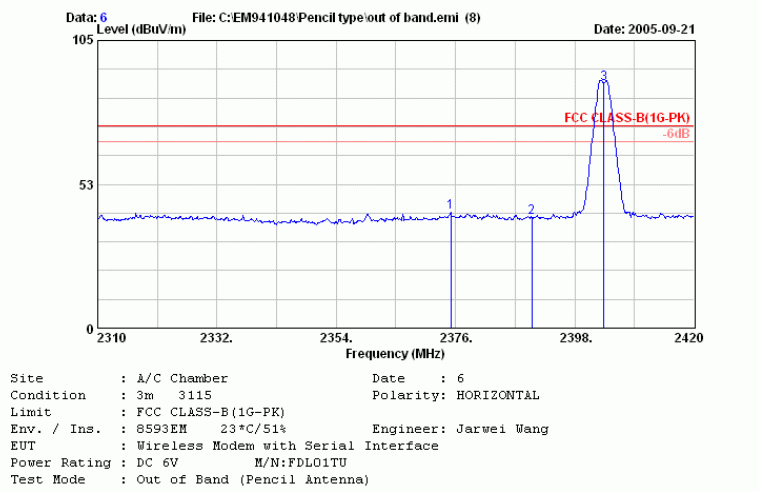
Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak *	2375.120	28.57	6.32	7.31	42.20	74.00	31.80
Average *	2359.390	28.54	6.30	-3.26	31.58	54.00	22.42

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. ‘*’ The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



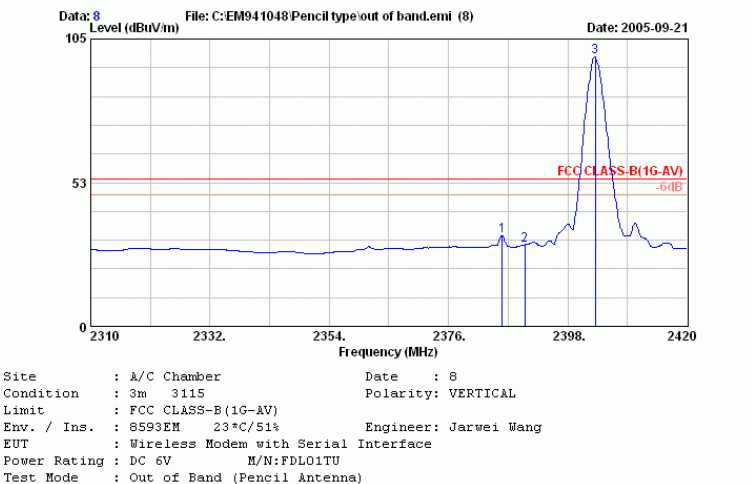
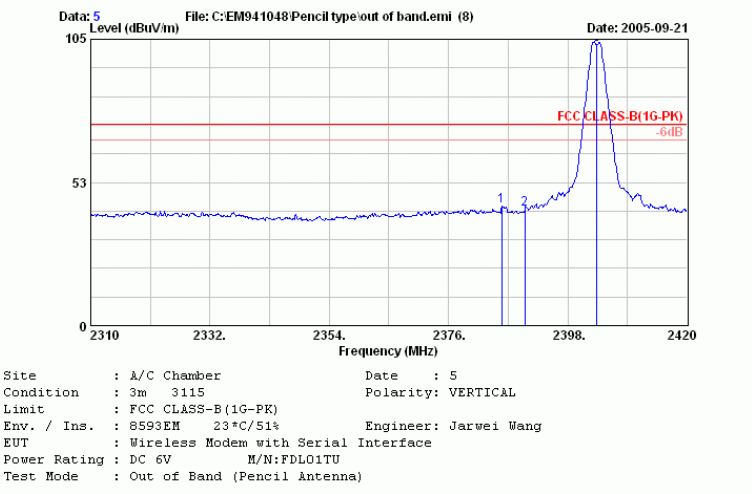
Date of Test : Sep. 21, 2005 Temperature : 23°C
 EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Pencil Type Antenna
 Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2385.790	28.59	6.33	8.84	43.76	74.00	30.24
Average *	2385.900	28.59	6.33	-1.76	33.16	54.00	20.84

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. ‘*’ The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Pencil Type Antenna

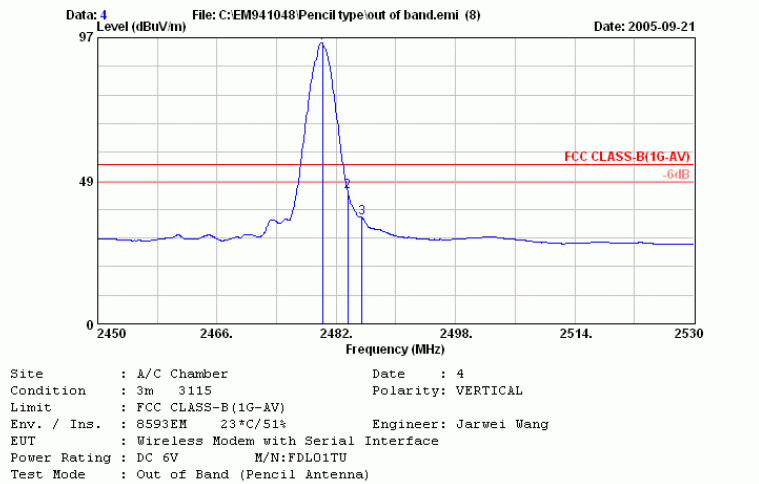
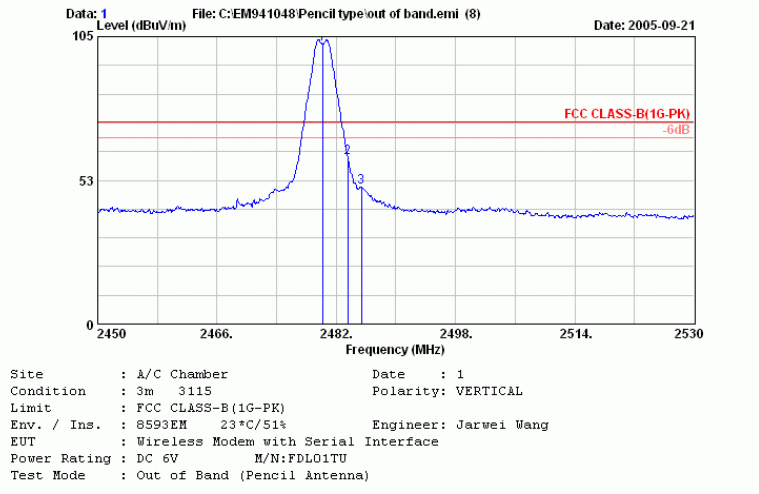
Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2483.520	28.77	6.45	25.65	60.87	74.00	13.13
Average *	2483.520	28.77	6.45	9.57	44.79	54.00	9.21

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. High frequency section (spurious in the restricted band 2483.5-2500MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
 with Pedestal Antenna

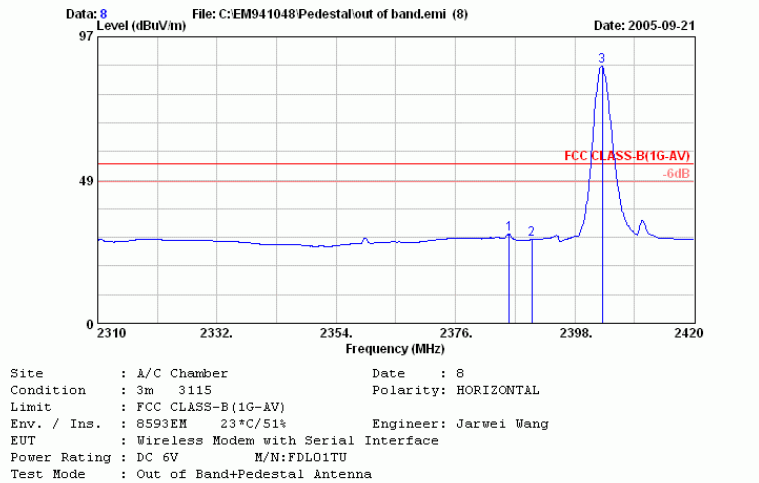
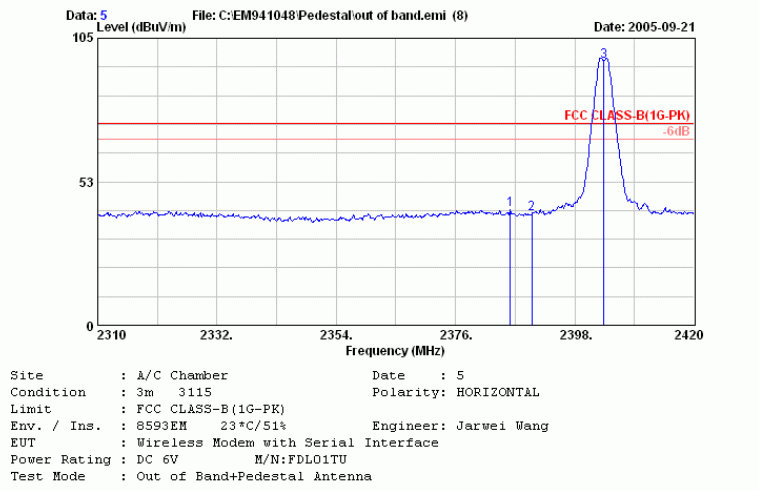
Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak *	2386.120	28.59	6.33	7.52	42.44	74.00	31.56
Average *	2385.900	28.59	6.33	-4.74	30.18	54.00	23.82

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. ‘*’ The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Pedestal Antenna

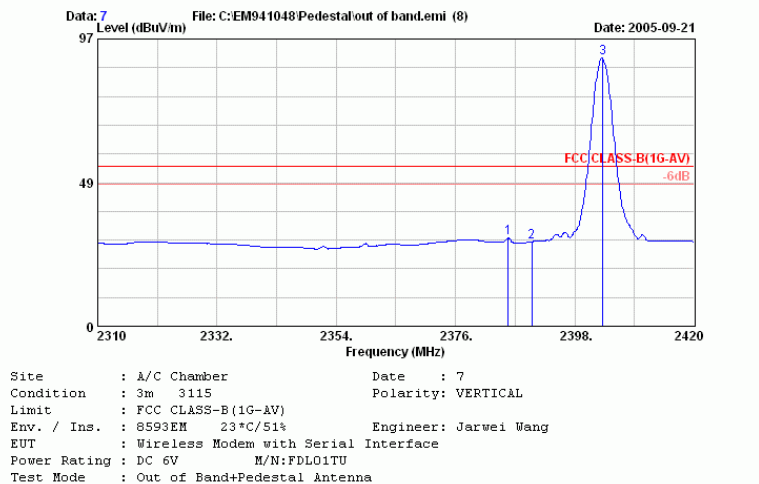
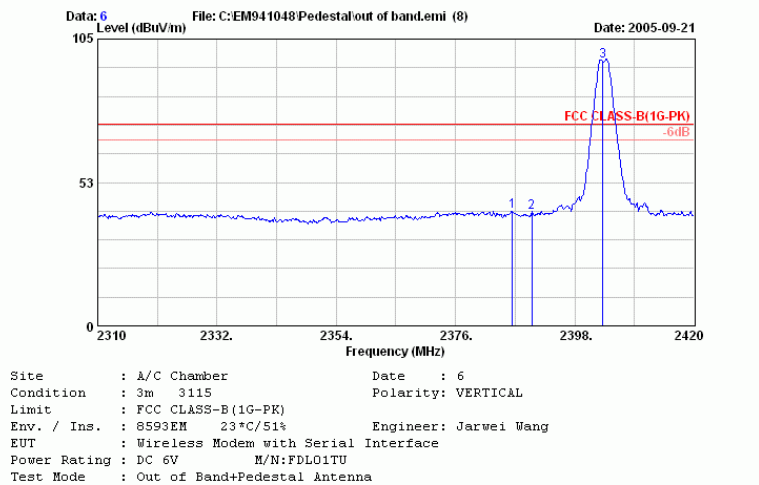
Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2386.450	28.59	6.33	6.94	41.86	74.00	32.14
Average *	2385.680	28.59	6.33	-5.15	29.77	54.00	24.23

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Pedestal Antenna

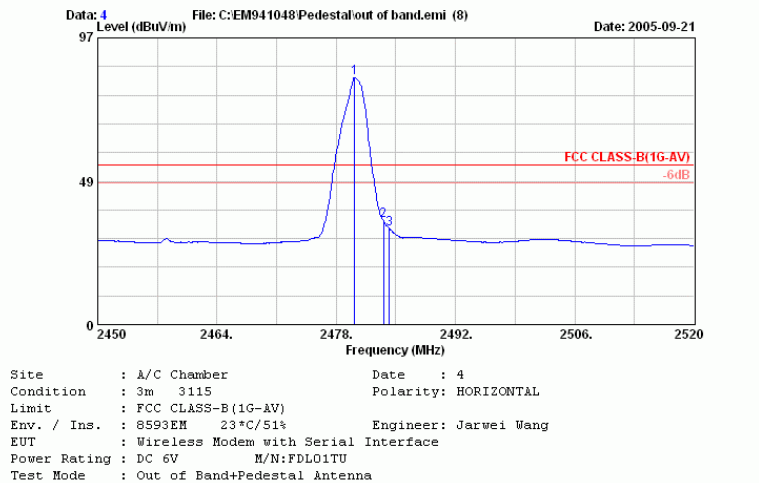
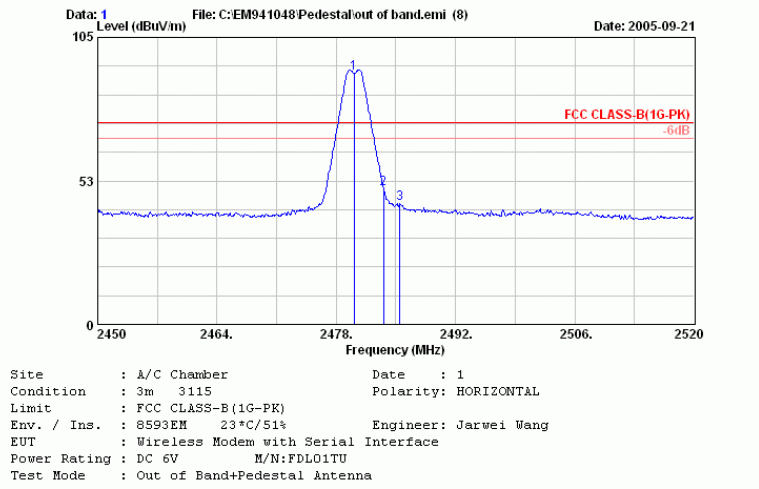
Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak *	2483.530	28.77	6.45	14.58	49.80	74.00	24.20
Average *	2483.530	28.77	6.45	-0.16	35.06	54.00	18.94

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. High frequency section (spurious in the restricted band 2483.5-2500MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Pedestal Antenna

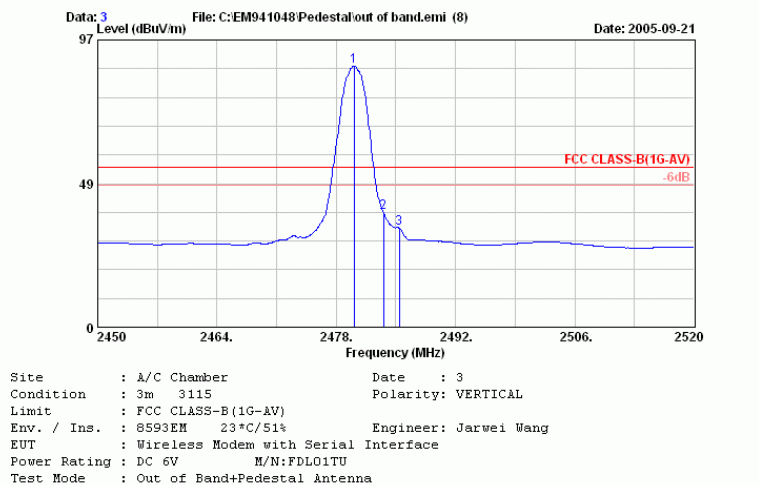
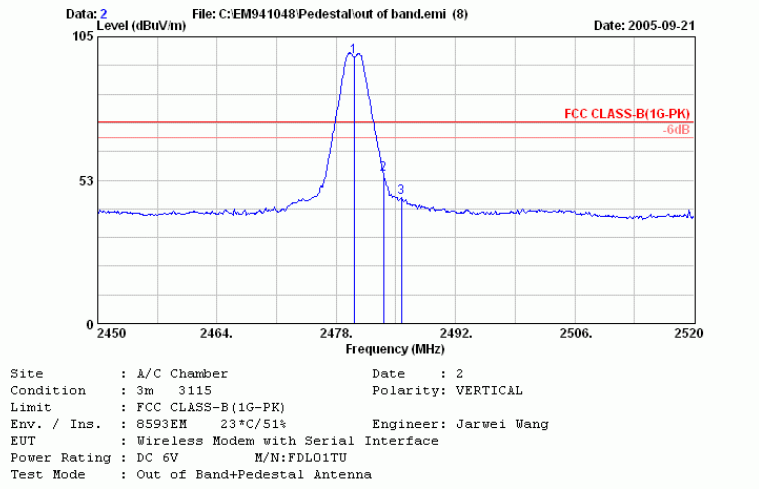
Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2483.530	28.77	6.45	19.57	54.79	74.00	19.21
Average *	2483.530	28.77	6.45	3.48	38.70	54.00	15.30

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. High frequency section (spurious in the restricted band 2483.5-2500MHz).
 3. ‘*’ The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttmc@ttmc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Flat Antenna (Single Type)

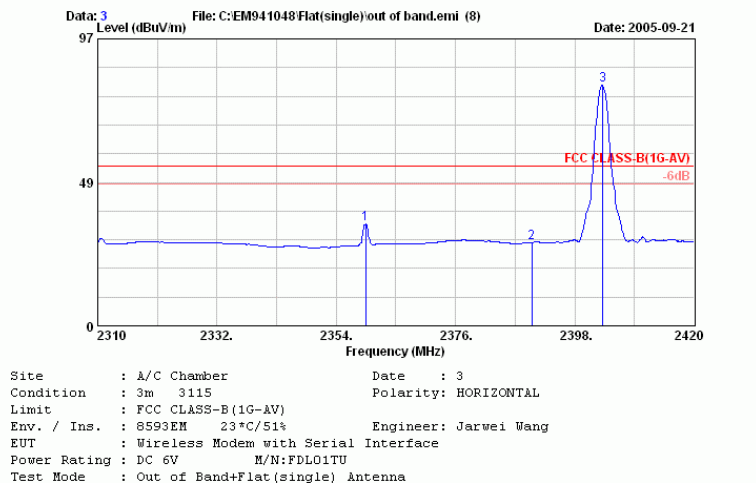
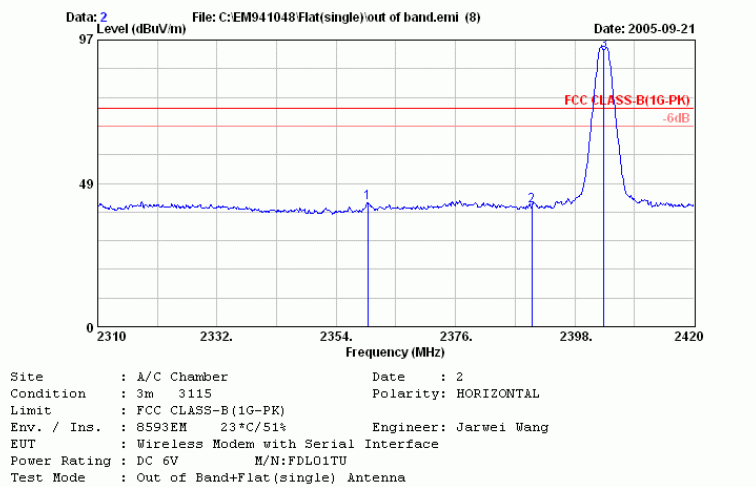
Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak *	2359.830	28.54	6.30	7.10	41.94	74.00	32.06
Average *	2359.390	28.54	6.30	-0.39	34.45	54.00	19.55

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Flat Antenna (Single Type)

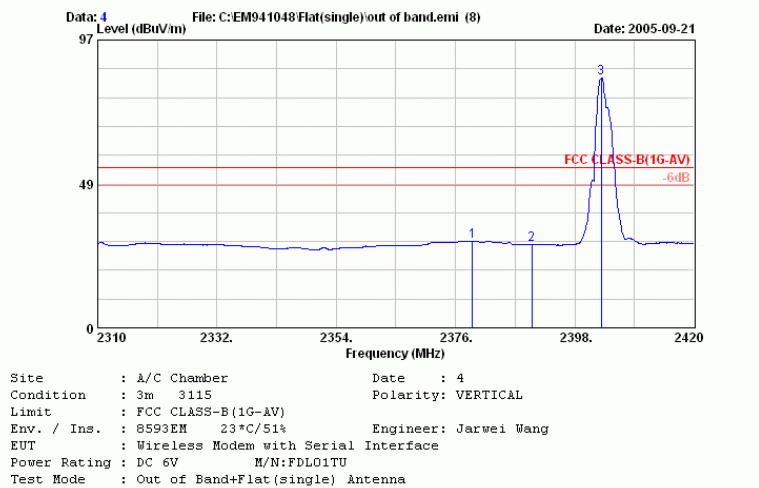
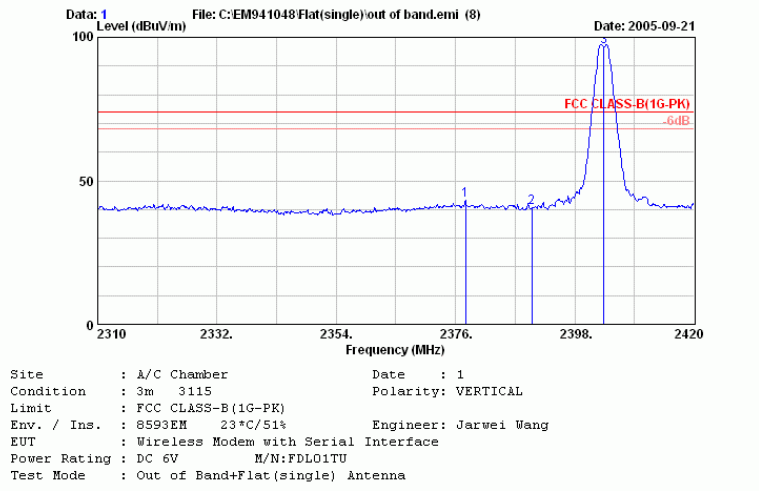
Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2377.870	28.58	6.32	8.31	43.21	74.00	30.79
Average *	2379.080	28.58	6.32	-5.76	29.14	54.00	24.86

- Remark :
1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email: ttemc@ttemc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Flat Antenna (Single Type)

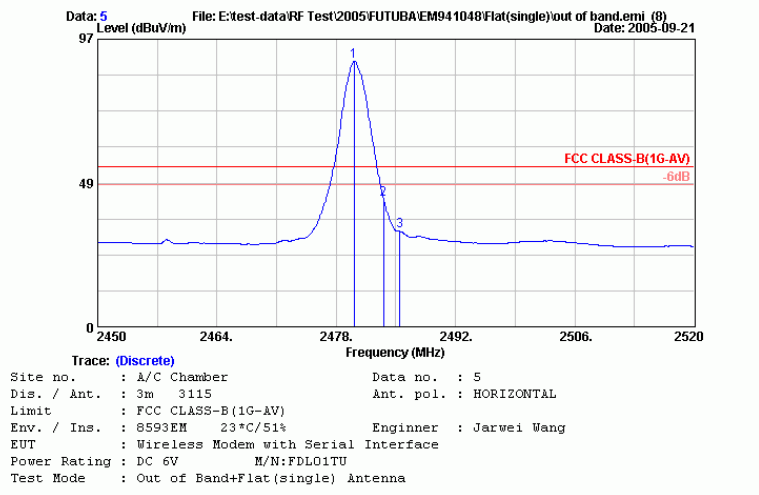
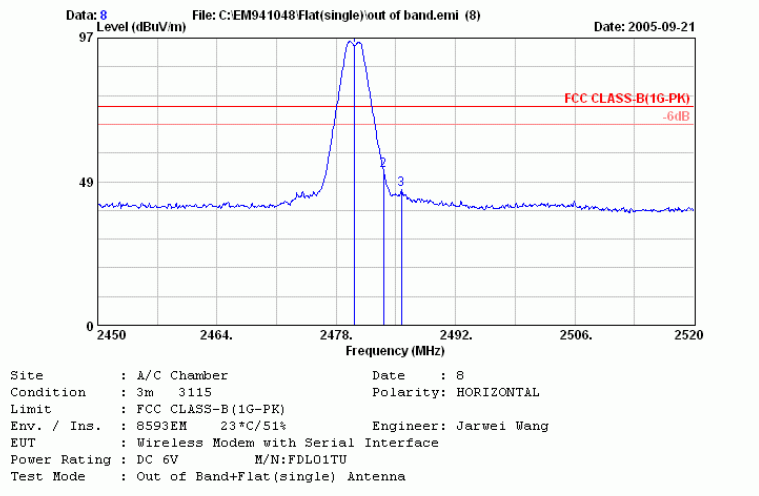
Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak *	2483.530	28.77	6.45	17.07	52.29	74.00	21.71
Average *	2483.530	28.77	6.45	7.9	43.12	54.00	10.88

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. High frequency section (spurious in the restricted band 2483.5-2500MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Flat Antenna (Single Type)

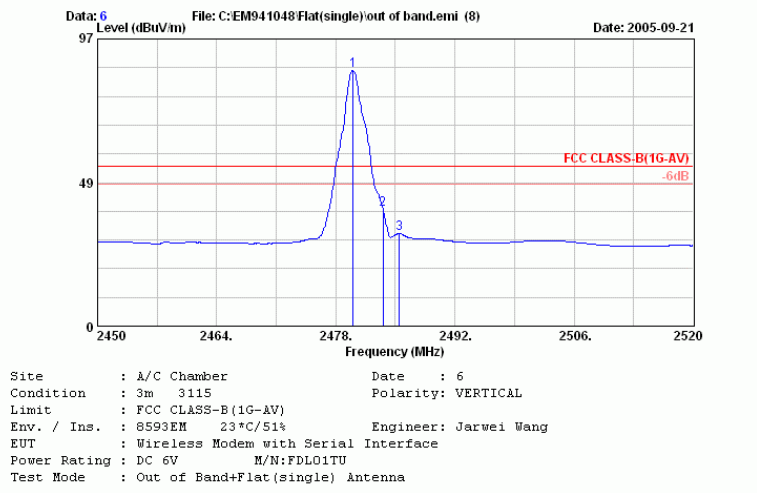
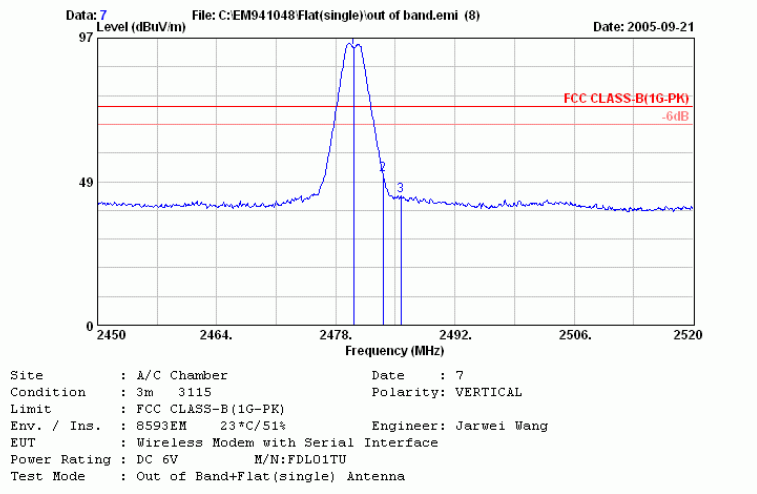
Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2483.530	28.77	6.45	15.58	50.80	74.00	23.20
Average *	2483.530	28.77	6.45	4.14	39.36	54.00	14.64

- Remark :
1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. High frequency section (spurious in the restricted band 2483.5-2500MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Flat Antenna (Double Type)

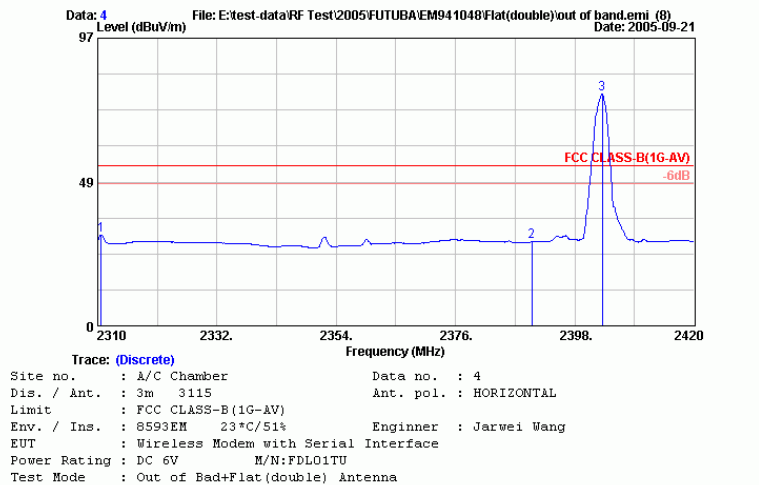
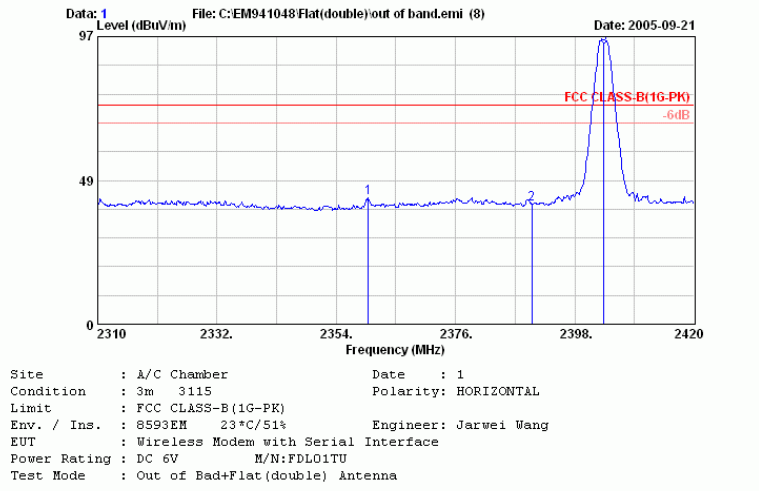
Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak *	2359.940	28.54	6.30	7.68	42.52	74.00	31.48
Average *	2310.660	28.45	6.24	-4.07	30.62	54.00	23.38

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code: 24443
 Tel: +886-2-26092133 Fax: +886-2-26099303
 Email: ttemc@ttemc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Flat Antenna (Double Type)

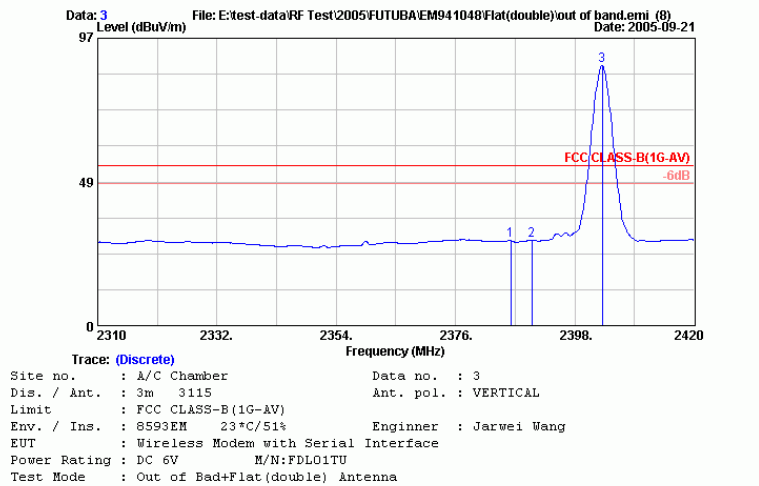
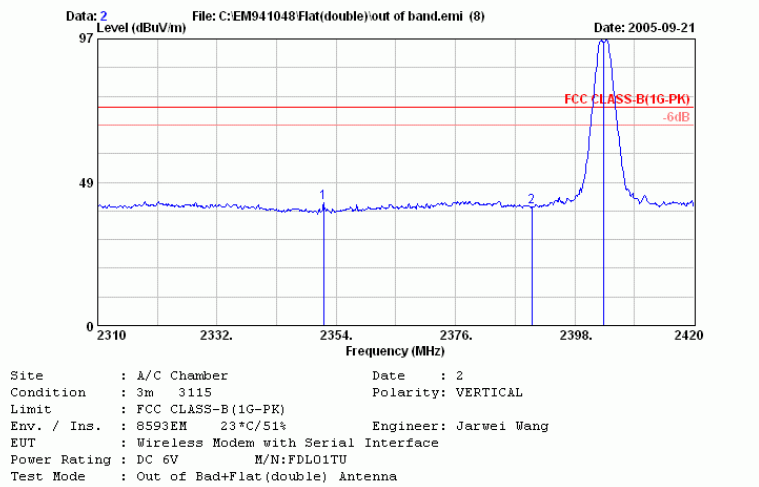
Test Mode : Transmitting Mode, Channel: 0, Frequency: 2403MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2351.690	28.53	6.29	6.59	41.41	74.00	32.59
Average *	2386.230	28.59	6.33	6.15	41.07	54.00	12.93

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).
 3. '*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:+886-2-26092133 Fax:+886-2-26099303
 Email:ttenc@ttenc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Flat Antenna (Double Type)

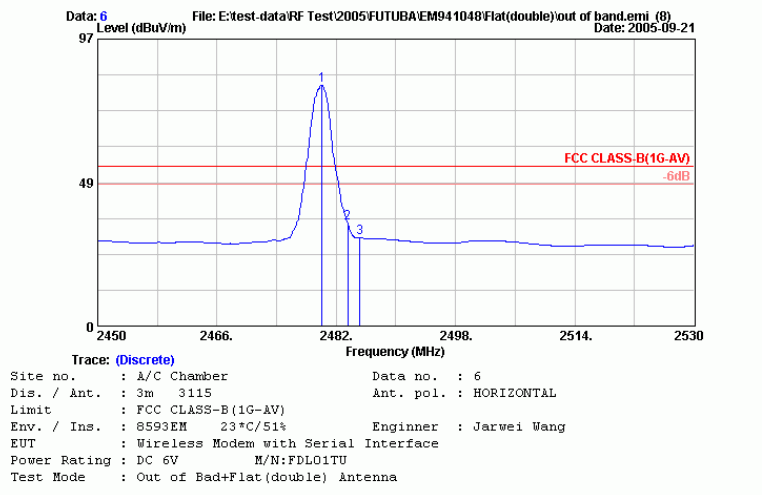
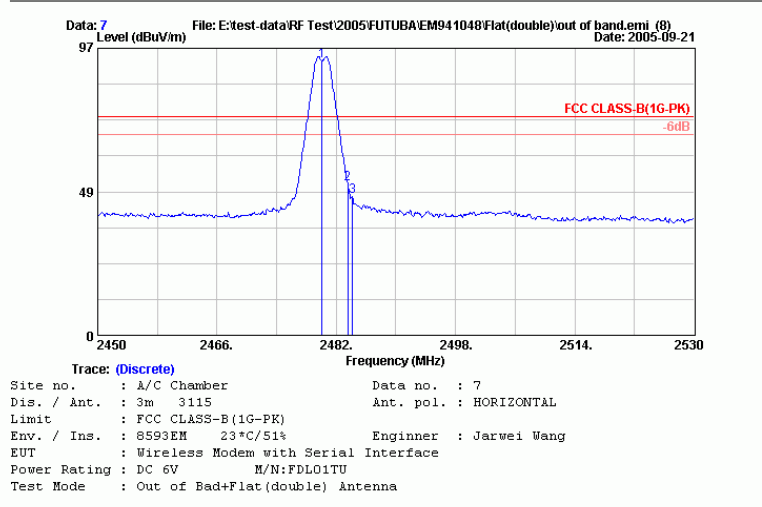
Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak *	2483.520	28.77	6.45	15.81	51.03	74.00	22.97
Average *	2483.520	28.77	6.45	-0.52	34.70	54.00	19.30

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. High frequency section (spurious in the restricted band 2483.5-2500MHz).
 3. ‘*’ The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



AUDIX Corp. EMC Laboratory
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:02-26092133 Fax:02-26099303
 Email:temc@itemc.com.tw



Date of Test : Sep. 21, 2005 Temperature : 23°C

EUT : Wireless Modem with Serial Interface Humidity : 51%
with Flat Antenna (Double Type)

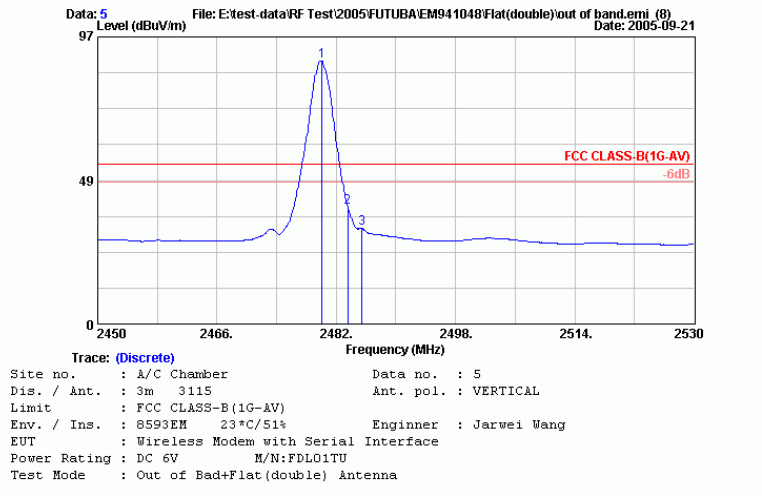
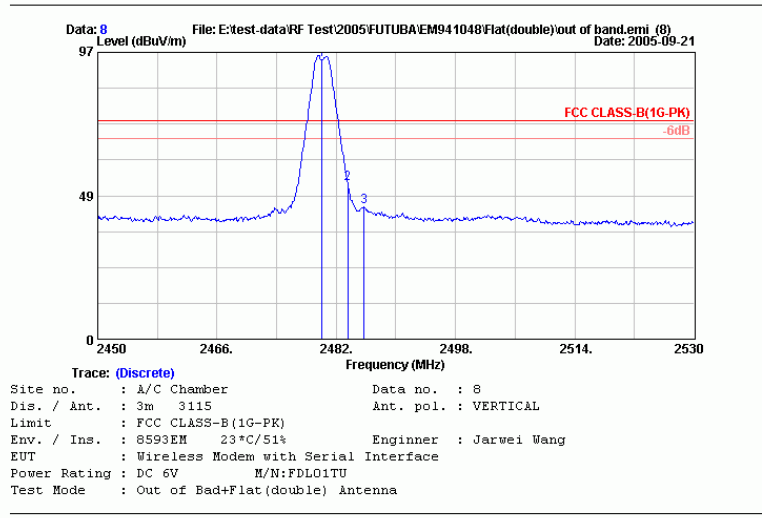
Test Mode : Transmitting Mode, Channel: 75, Frequency: 2480MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2483.520	28.77	6.45	17.23	52.45	74.00	21.55
Average *	2483.520	28.77	6.45	4.27	39.49	54.00	14.51

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
 2. High frequency section (spurious in the restricted band 2483.5-2500MHz).
 3. ‘*’ The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



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 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
 County, Taiwan R.O.C. Post Code:24443
 Tel:02-26092133 Fax:02-26099303
 Email:ttemc@itemc.com.tw



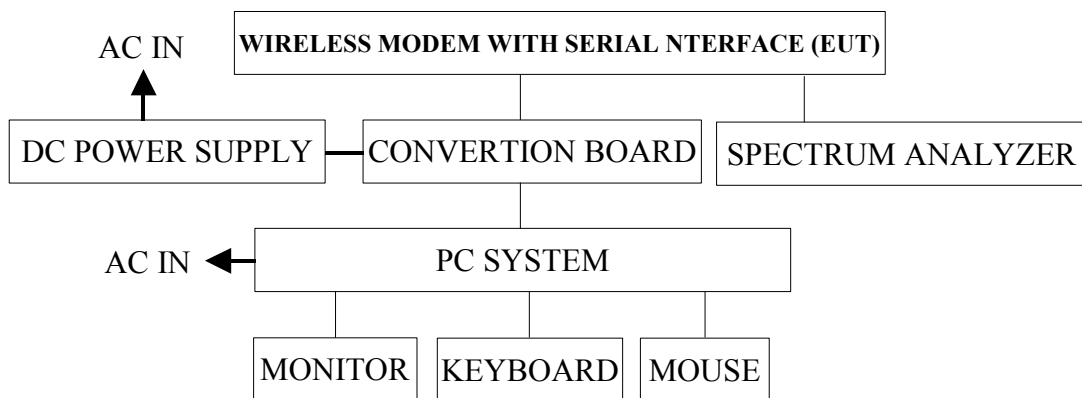
4. 6dB BANDWIDTH MEASUREMENT

4.1. Test Equipment

The following test equipment was used during the Emission Bandwidth measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 23, 05'	Aug. 22, 06'

4.2. Block Diagram of Test Setup



4.3. Specification Limits (§15.247(a)(2))

The minimum 6dB bandwidth shall be at least 500kHz.

4.4. Operating Condition of EUT

The test program “Futaba Term” was used to enable the EUT to transmit and receive data at different channel frequency individually.

4.5. Test Procedure

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

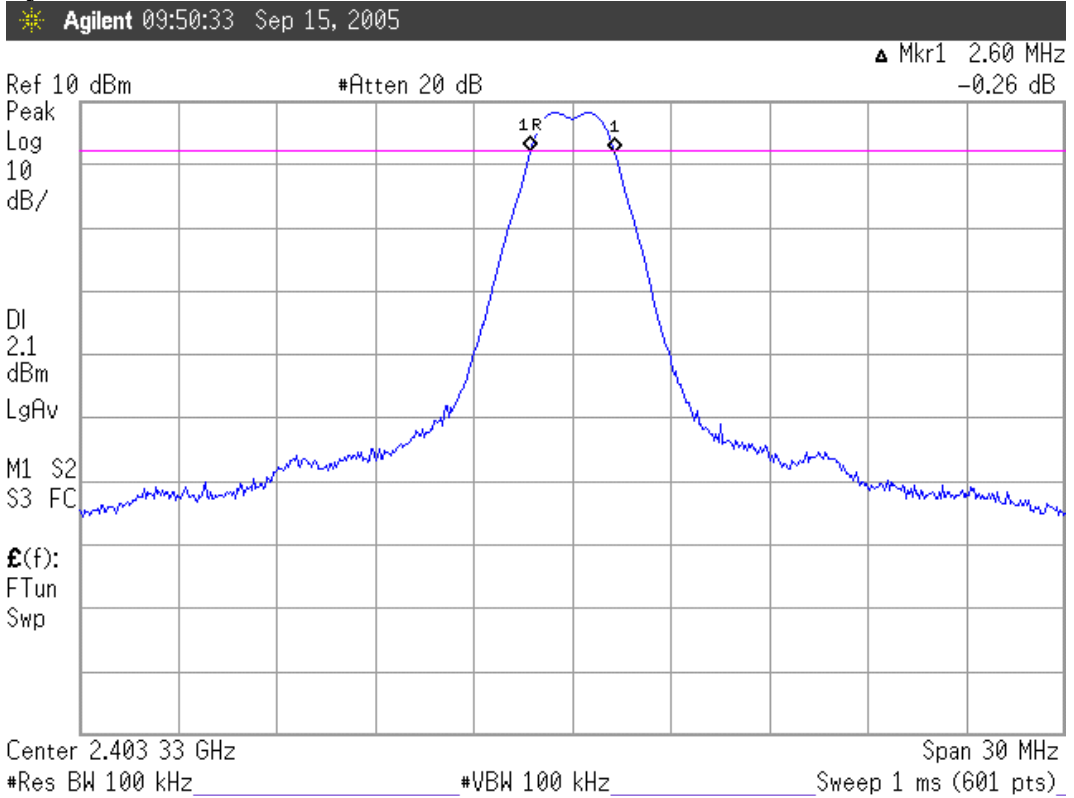
4.6. Test Results

PASSED. All the test results are attached in next pages.

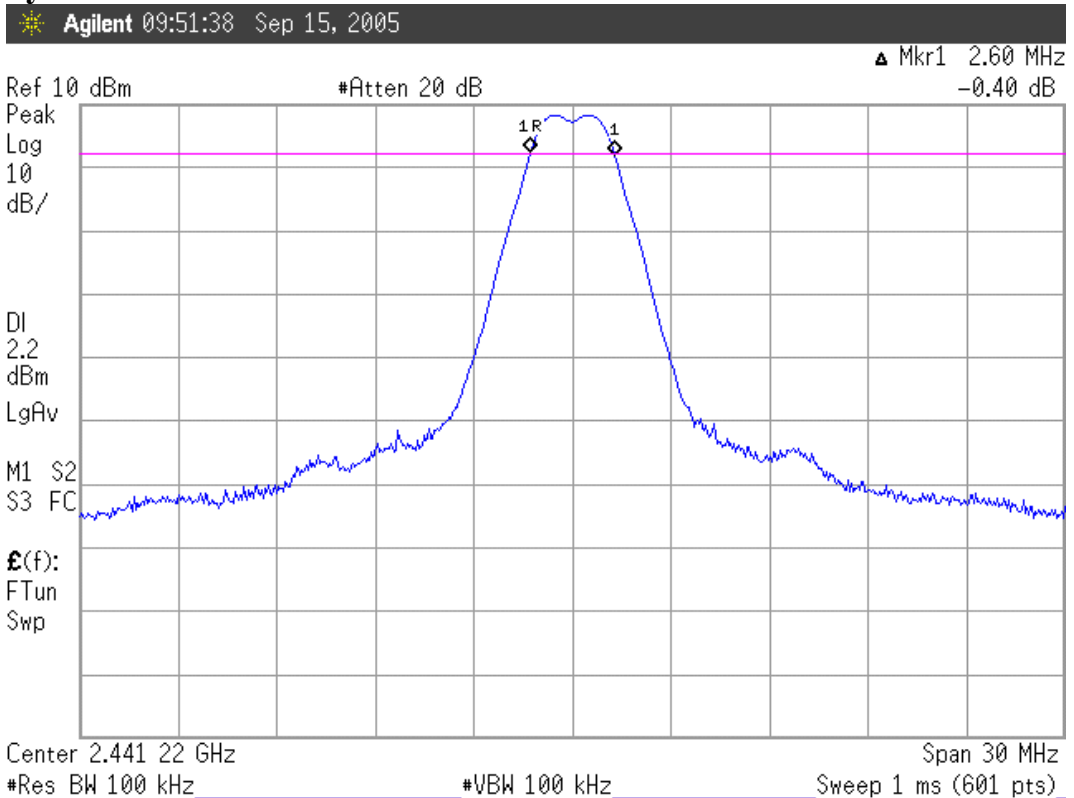
(Test Date : Sep. 15, 2005 Temperature : 23°C Humidity : 51 %)

Channel	Frequency	6dB Bandwidth
0	2403MHz	2.60MHz
37	2441MHz	2.60MHz
75	2480MHz	2.70MHz

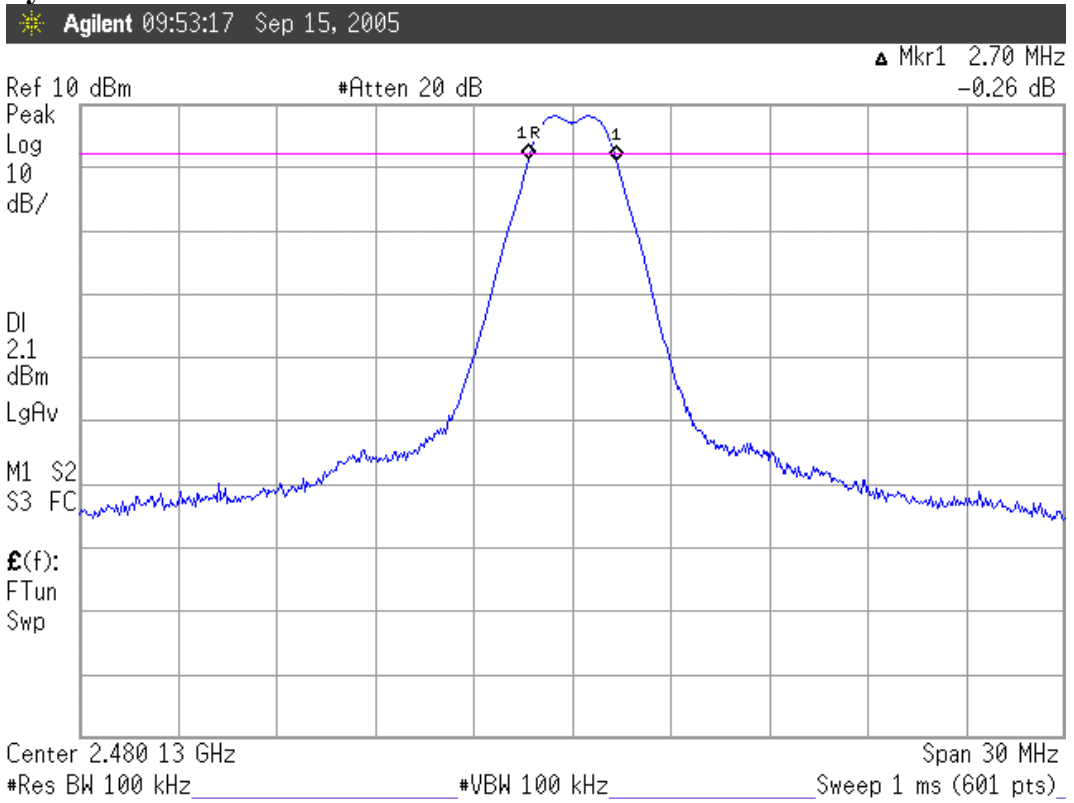
Frequency : 2403MHz



Frequency : 2441MHz



Frequency : 2480MHz



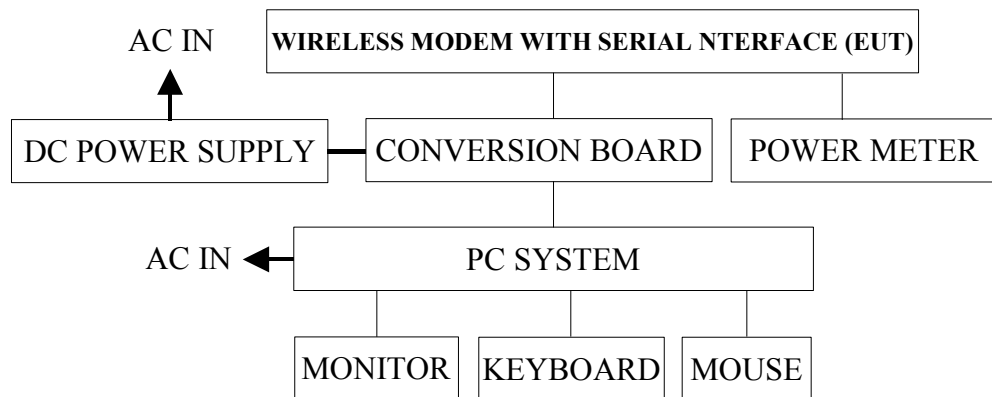
5. MAXIMUM PEAK OUTPUT POWER MEASUREMENT

5.1. Test Equipment

The following test equipment was used during the maximum peak output power measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Power Meter	Anritsu	ML2487A	6K000001563	Jan. 15, 05'	Jan. 14. 06'
2.	Power Sensor	Anritsu	MA2491A	030873	Jan. 15, 05'	Jan. 14. 06'

5.2. Block Diagram of Test Setup



5.3. Specification Limits (§15.247(b)-(3))

The Limits of maximum Peak Output Power for digital modulation in 2400-2483.5MHz is : 1Watt. (30dBm)

5.4. Operating Condition of EUT

The test program “Futaba Term” was used to enable the EUT to transmit and receive data at different channel frequency individually.

5.5. Test Procedure

The transmitter output was connected to the power meter that was designed to detect peak value automatically.

5.6. Test Results

PASSED. All the test results are listed below.

(Test Date : Sep. 21, 2005 Temperature : 23°C Humidity : 48 %)

Channel	Frequency	Peak Output Power	Limit
0	2403MHz	8.00dBm	30dBm
37	2441MHz	8.04dBm	30dBm
75	2480MHz	8.22dBm	30dBm

6. EMISSION LIMITATIONS MEASUREMENT

6.1. Test Equipment

The following test equipment was used during the emission limitations test :

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 23, 05'	Aug. 22, 06'

6.2. Block Diagram of Test Setup

The same as section.4.2.

6.3. Specification Limits (§15.247(c))

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (See Section 15.205(c)).(※ This test result attaching to §3.6.3)

6.4. Operating Condition of EUT

The test program “Futaba Term” was used to enable the EUT to transmit and receive data at different channel frequency individually.

6.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW.

6.6. Test Results

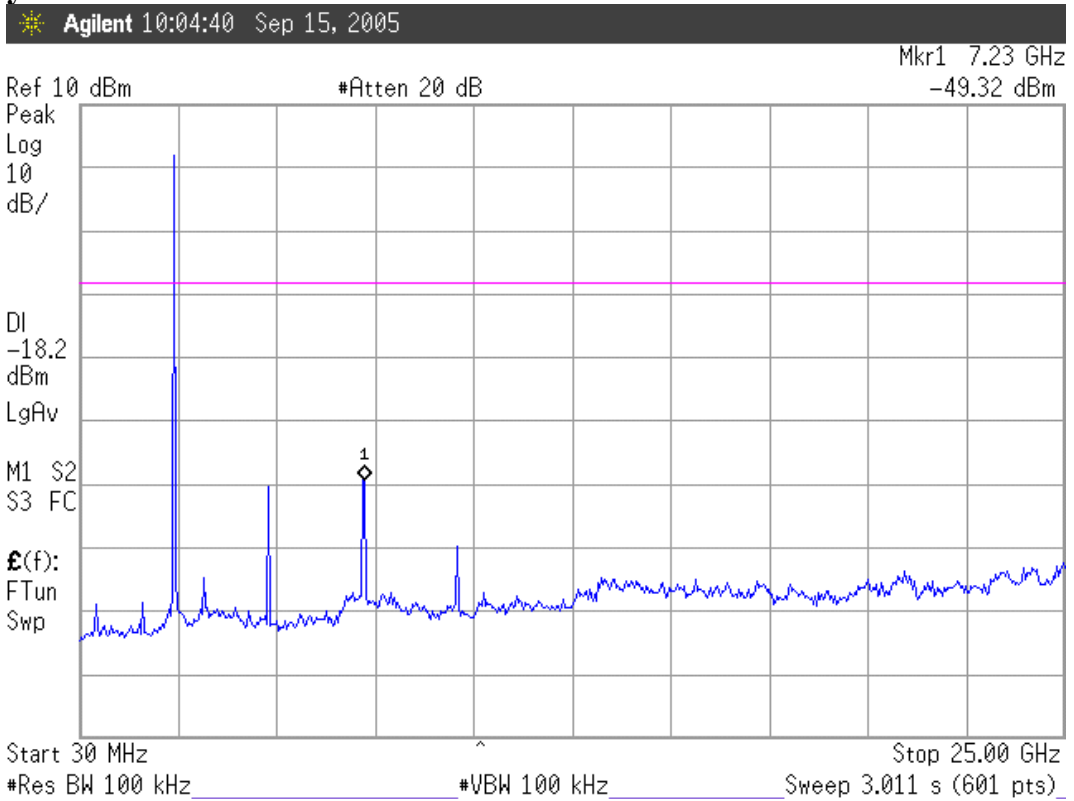
PASSED. The testing data was attached in the next pages.

(Test Date : Sep. 15, 2005 Temperature : 23°C Humidity : 51 %)

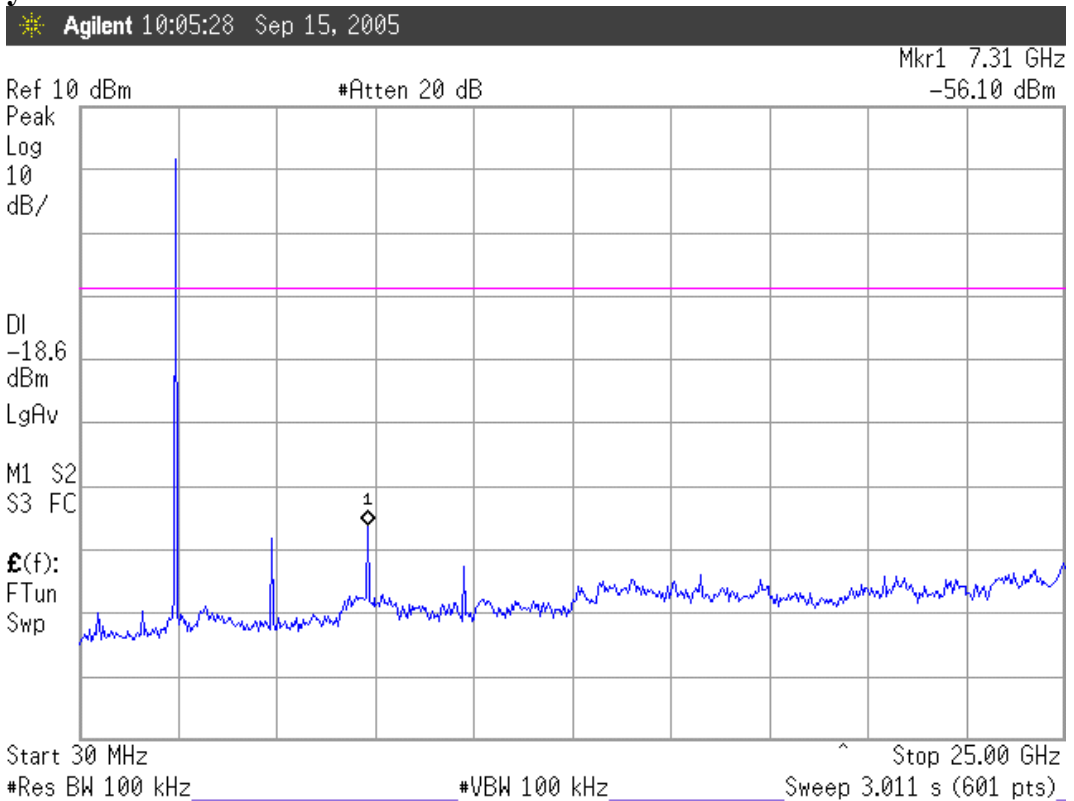
1. 2403MHz: During 30MHz~25GHz bandwidth. In the 7.23GHz, the -49.32dBm is max value that is lower than 20dB of primary channel.
2. 2441MHz: During 30MHz~25GHz bandwidth. In the 7.31GHz, the -56.10dBm is max value that is lower than 20dB of primary channel.
3. 2480MHz: During 30MHz~25GHz bandwidth. In the 4.94GHz, the -51.61dBm is max value that is lower than 20dB of primary channel.

Note: The peak above the limit line is the carrier frequency.

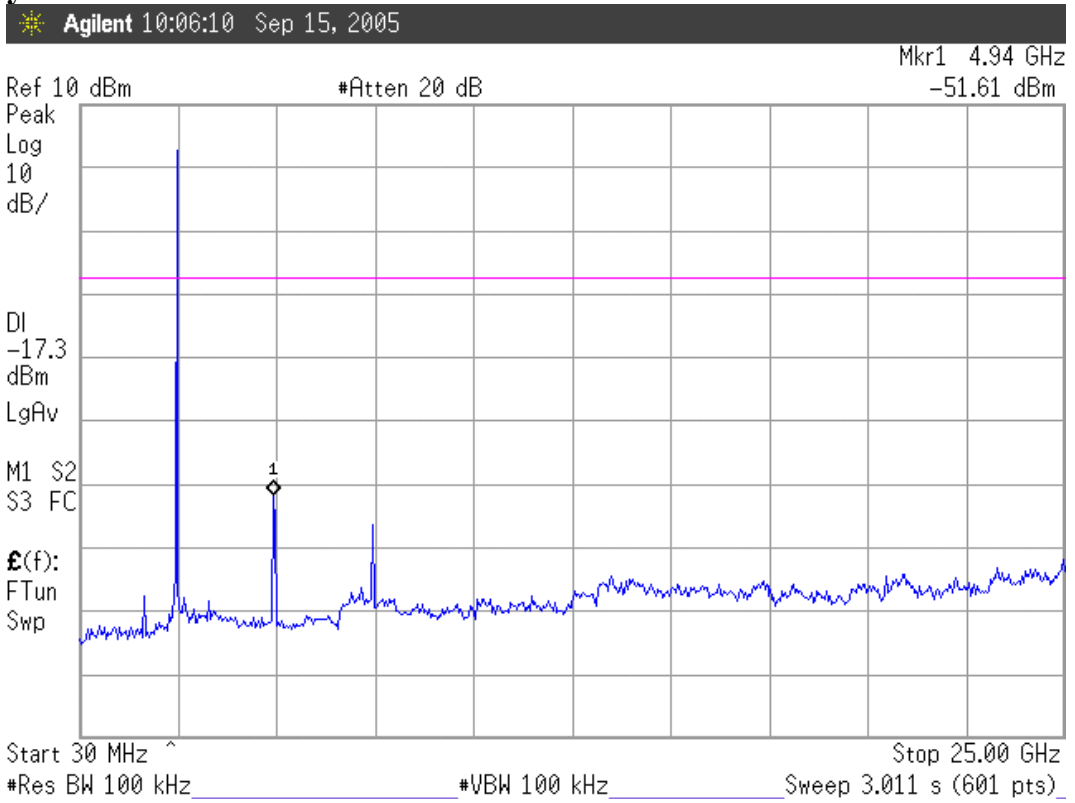
Frequency : 2403MHz



Frequency : 2441MHz



Frequency : 2480MHz



7. BAND EDGES MEASUREMENT

7.1. Test Equipment

The following test equipment was used during the band edges measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 23, 05'	Aug. 22, 06'

7.2. Block Diagram of Test Setup

The same as section.4.2.

7.3. Specification Limits (§15.247(c))

The highest level should be at least 20 dB below that in the 100kHz bandwidth.

7.4. Operating Condition of EUT

The test program “Futaba Term” was used to enable the EUT to transmit and receive data at different channel frequency individually.

7.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100kHz bandwidth from band edge.

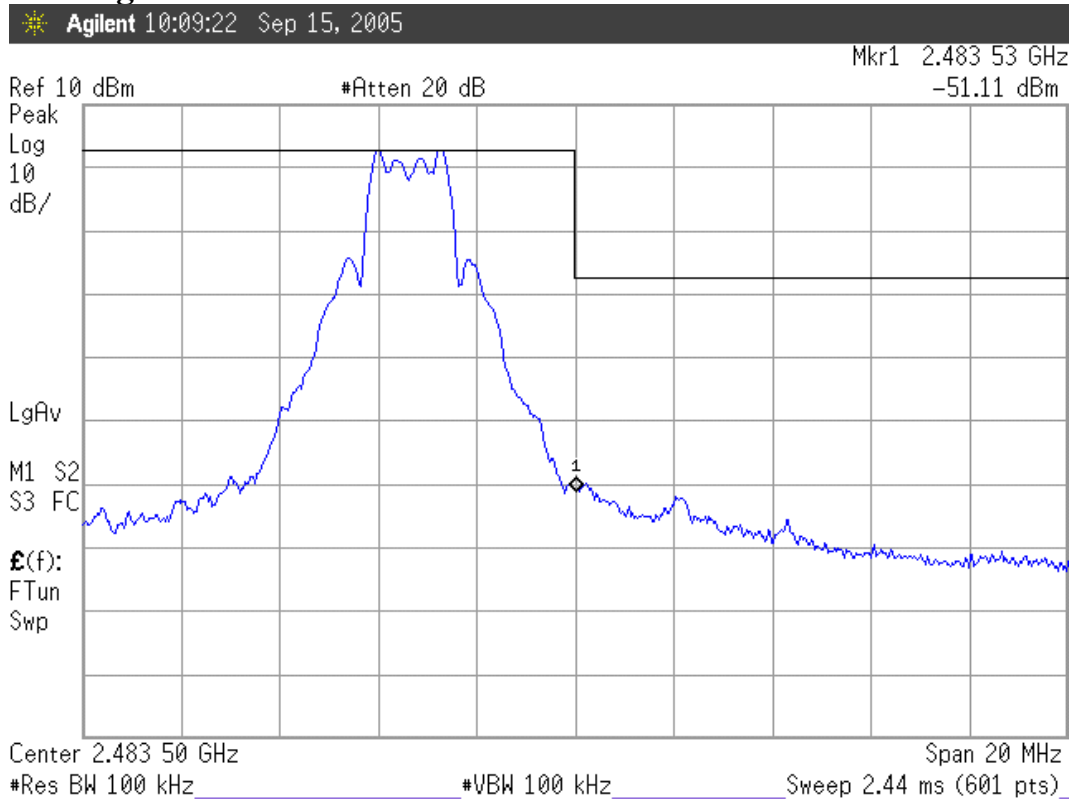
7.6. Test Results

PASSED. All the test results are attached in next pages.

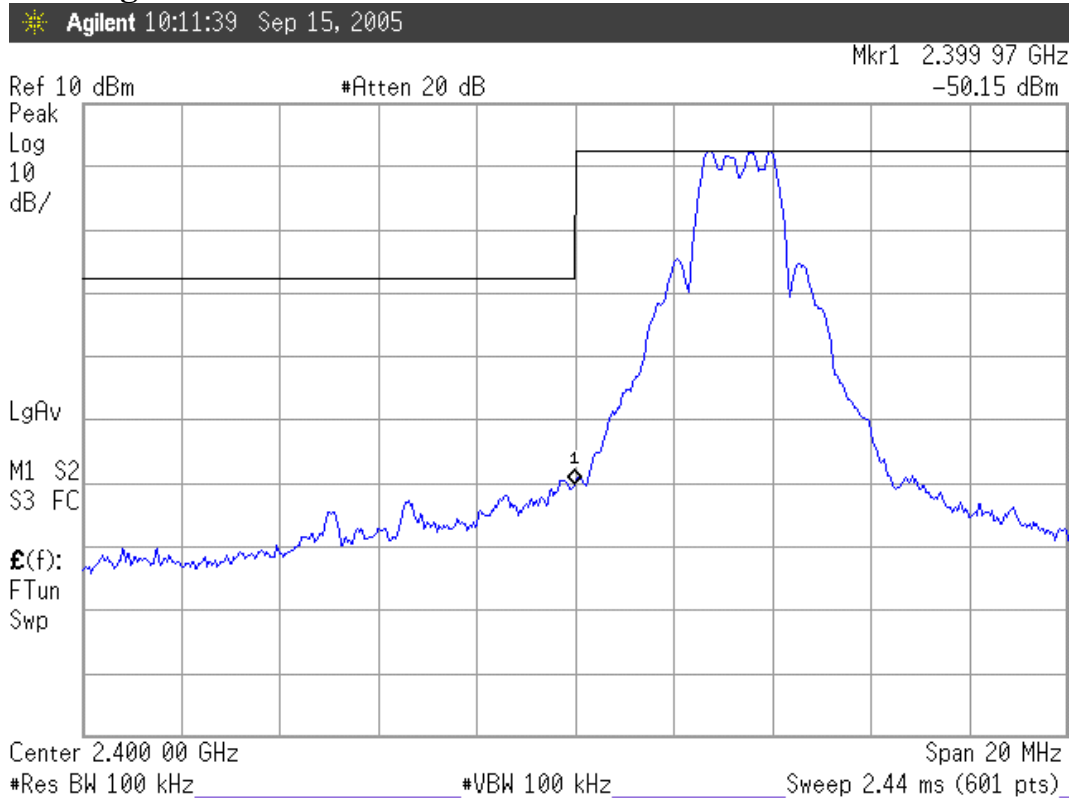
(Test Date : Sep. 15, 2005 Temperature : 23°C Humidity : 51 %)

1. Below Band edge: The highest emission level is – 51.11dBm on 2.48353GHz ◦
2. Upper Band edge : The highest emission level is – 50.15dBm on 2.39997GHz ◦

Below Band edge



Upper Band edge



8. POWER SPECTRAL DENSITY MEASUREMENT

8.1. Test Equipment

The following test equipment was used during the power spectral density measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 23, 05'	Aug. 22, 06'

8.2. Block Diagram of Test Setup

The same as section.4.2.

8.3. Specification Limits (§15.247(d))

The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band.

8.4. Operating Condition of EUT

The test program "Futaba Term" was used to enable the EUT to transmit and receive data at different channel frequency individually.

8.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz.

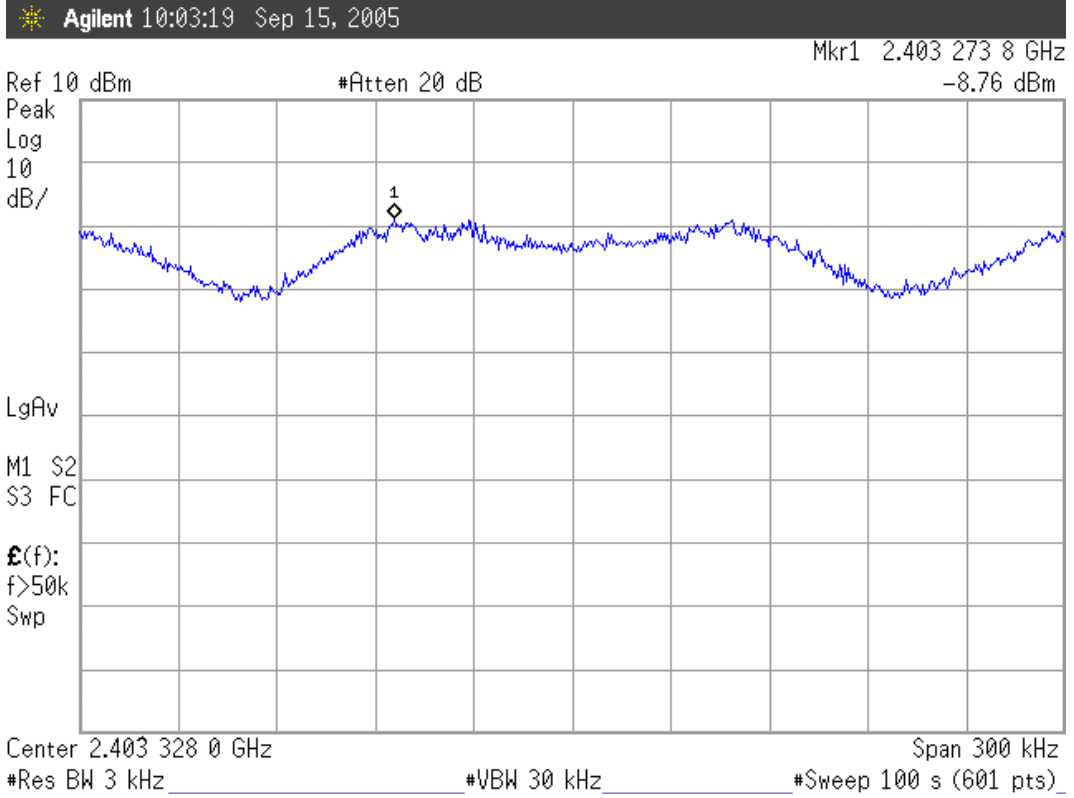
8.6. Test Results

PASSED. All the test results are attached in next pages.

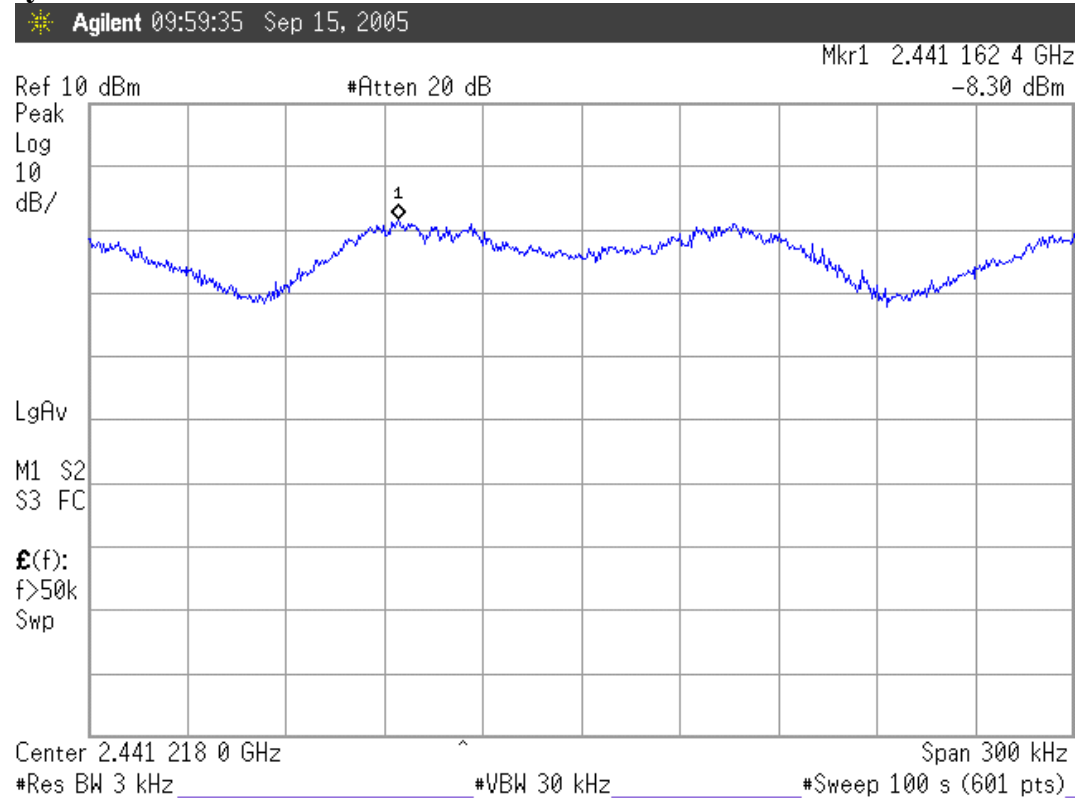
(Test Date : Sep. 15, 2005 Temperature : 23°C Humidity : 51 %)

Channel	Frequency	Power Spectral Density	Limit
0	2403MHz	-8.76dBm	8dBm
37	2441MHz	-8.30dBm	8dBm
75	2480MHz	-8.72dBm	8dBm

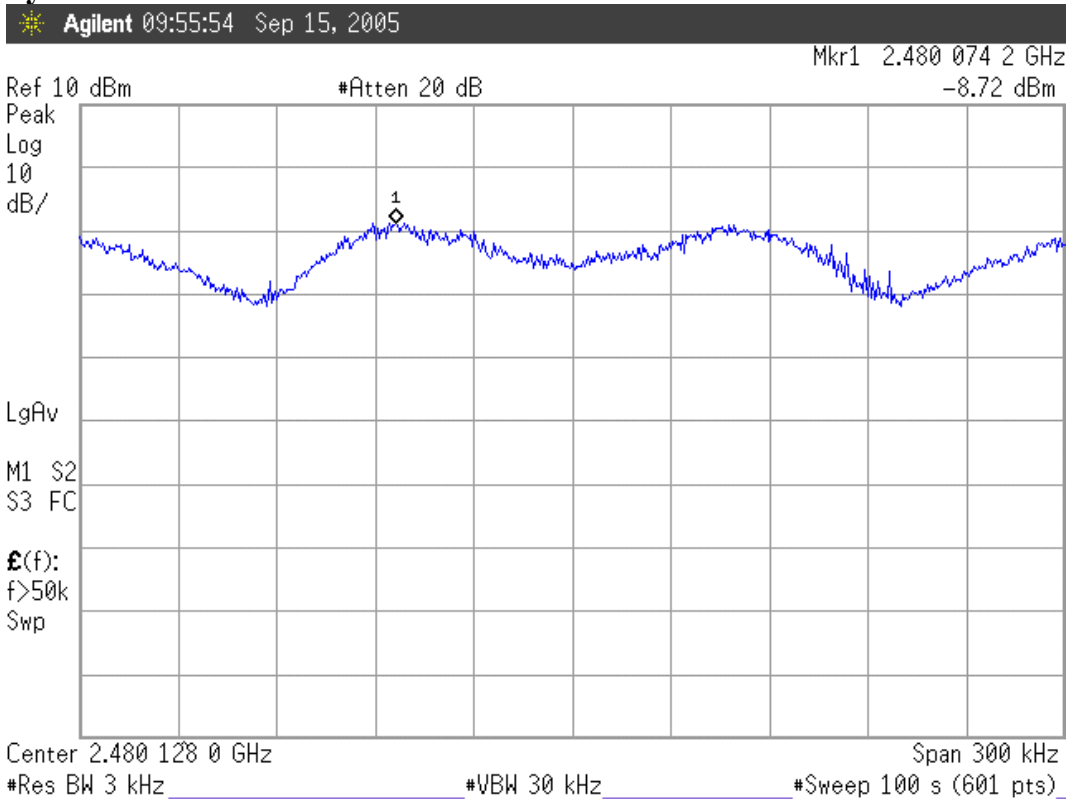
Frequency : 2403MHz



Frequency : 2441MHz



Frequency : 2480MHz



9. OCCUPIED BANDWIDTH 99% POWER MEASUREMENT

9.1. Test Equipment

The following test equipment was used during the occupied bandwidth 99% power measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 23, 05'	Aug. 22, 06'

9.2. Block Diagram of Test Setup

The same as section.4.2.

9.3. Specification

The emission bandwidth may be taken as the bandwidth within which is 99% of the transmitter output power. The 20 dB bandwidth may also be used instead, when the spectral density has decreased by 20 dB from the inband spectral density. For the determination of the 20 dB bandwidth, the measurement bandwidth should be in the order of 1.0% of the emission bandwidth.

9.4. Operating Condition of EUT

The test program “Futaba Term” was used to enable the EUT to transmit and receive data at different channel frequency individually.

9.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using 120kHz RBW and 300kHz VBW, set span = 40MHz and sweep time = auto.

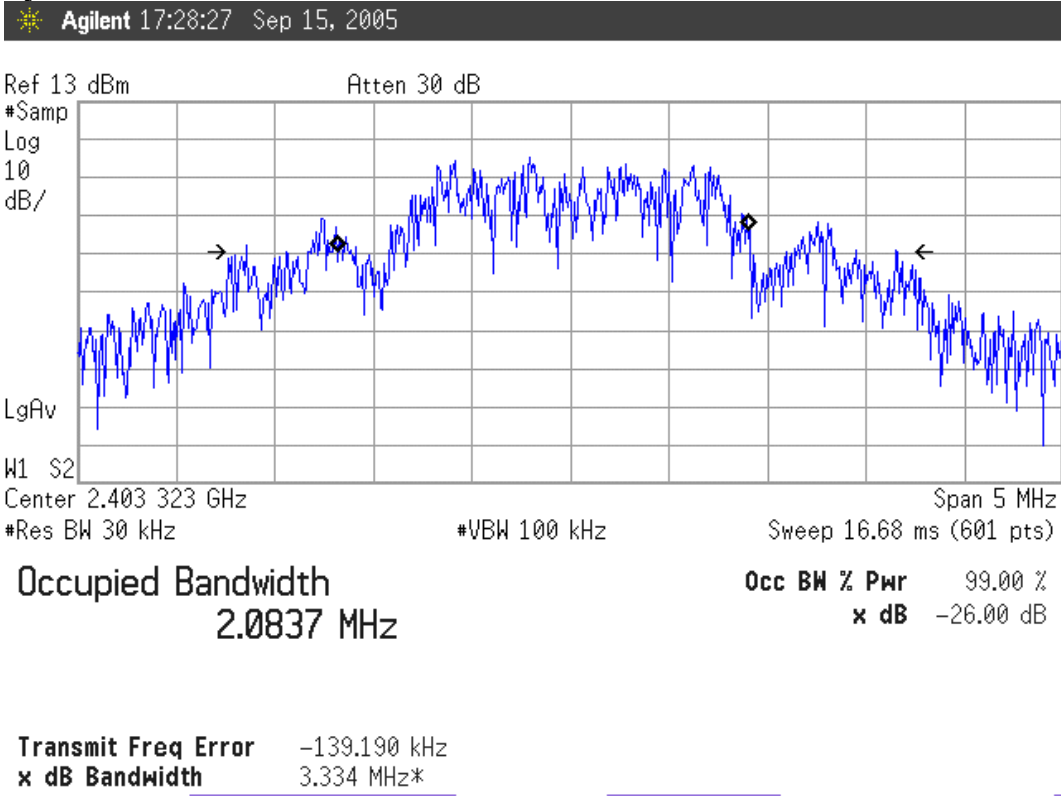
9.6. Test Results

PASSED. All the test results are attached in next pages.

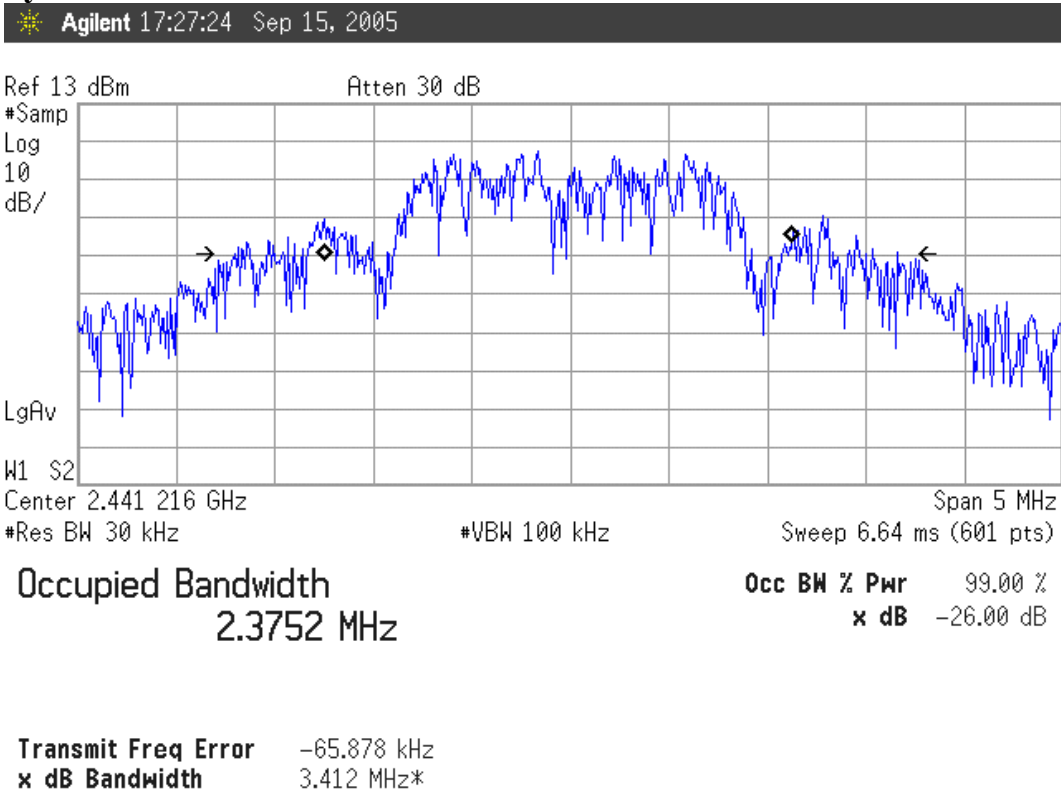
(Test Date : Sep. 15, 2005 Temperature : 23°C Humidity : 51 %)

Channel	Frequency	Occupied Bandwidth
0	2403MHz	2.0837MHz
37	2441MHz	2.3752MHz
75	2480MHz	2.3723MHz

Frequency : 2403MHz

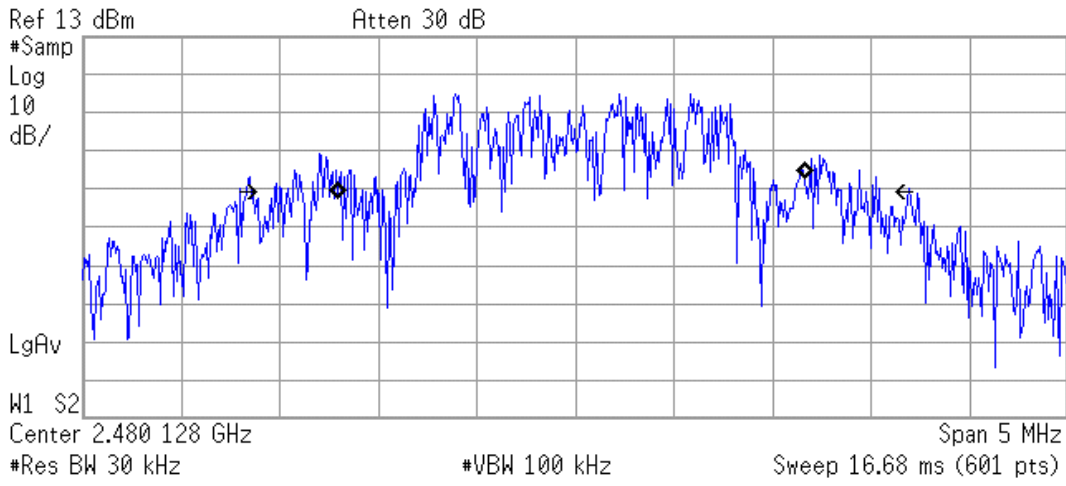


Frequency : 2441MHz



Frequency : 2480MHz

Agilent 17:29:52 Sep 15, 2005



Occupied Bandwidth
2.3723 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -18.225 kHz
x dB Bandwidth 3.077 MHz*

10.DEVIATION TO TEST SPECIFICATIONS

【NONE】