FCC TEST REPORT

REPORT NO.: RF931001A09
MODEL NO.: FJ25P21U1, FJ25C11
SERIES MODEL NO.: FJ25XXXXX (refer to the note 3 and 4 of page 7 for other models)
RECEIVED: Nov. 04, 2004
TESTED: Nov. 19 ~ Dec. 02, 2004

APPLICANT: AboCom Systems, Inc.

ADDRESS: 1F, No.21, Yanfa 2nd Rd., SBIP, Hsinchu City 300, Taiwan, R.O.C.

ISSUED BY: Advance Data Technology Corporation

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang 244, Taipei Hsien, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd., Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

This test report consists of 94 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CNLA, A2LA or any government agencies. The test results in the report only apply to the tested sample.

0528
ILAC MRA

No. 2177-01

Table of Contents

1 CERTIFICATION 4
2 SUMMARY OF TEST RESULTS 5
2.1 MEASUREMENT UNCERTAINTY 6
3 GENERAL INFORMATION 7
3.1 GENERAL DESCRIPTION OF EUT 7
3.2 DESCRIPTION OF TEST MODES 8
3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS 8
3.4 DESCRIPTION OF SUPPORT UNITS 9
3.5 CONFIGURATION OF SYSTEM UNDER TEST 9
4 TEST TYPES AND RESULTS 10
4.1 CONDUCTED EMISSION MEASUREMENT 10
4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT 10
4.1.2 TEST INSTRUMENTS 10
4.1.3 TEST PROCEDURES 11
4.1.4 DEVIATION FROM TEST STANDARD 11
4.1.5 TEST SETUP 12
4.1.6 EUT OPERATING CONDITIONS 12
4.1.7 TEST RESULTS 13
4.2 RADIATED EMISSION MEASUREMENT 25
4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT 25
4.2.2 TEST INSTRUMENTS 26
4.2.3 TEST PROCEDURES 27
4.2.4 DEVIATION FROM TEST STANDARD 27
4.2.5 TEST SETUP 28
4.2.6 EUT OPERATING CONDITIONS 28
4.2.7 TEST RESULTS 29
4.2.8 TEST RESULTS (A) 34
4.2.9 TEST RESULTS (B) 43
4.3 6dB BANDWIDTH MEASUREMENT 52
4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT 52
4.3.2 TEST INSTRUMENTS 52
4.3.3 TEST PROCEDURE 53
4.3.4 DEVIATION FROM TEST STANDARD 53
4.3.5 TEST SETUP 53
4.3.6 EUT OPERATING CONDITIONS 53
4.3.7 TEST RESULTS (A) 54
4.3.8 TEST RESULTS (B) 58
4.4 MAXIMUM PEAK OUTPUT POWER 62
4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT 62

4.4.2 TEST INSTRUMENTS 62
4.4.3 TEST PROCEDURES 63
4.4.4 DEVIATION FROM TEST STANDARD 63
4.4.5 TEST SETUP 63
4.4.6 EUT OPERATING CONDITIONS 63
4.4.7 TEST RESULTS (A) 64
4.4.8 TEST RESULTS (B) 65
4.5 POWER SPECTRAL DENSITY MEASUREMENT 66
4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT 66
4.5.2 TEST INSTRUMENTS 66
4.5.3 TEST PROCEDURE 67
4.5.4 DEVIATION FROM TEST STANDARD 67
4.5.5 TEST SETUP 67
4.5.6 EUT OPERATING CONDITIONS 67
4.5.7 TEST RESULTS (A) 68
4.5.8 TEST RESULTS (B) 72
4.6 BAND EDGES MEASUREMENT 76
4.6.1 LIMITS OF BAND EDGES MEASUREMENT 76
4.6.2 TEST INSTRUMENTS 76
4.6.3 TEST PROCEDURE 76
4.6.4 DEVIATION FROM TEST STANDARD 76
4.6.5 EUT OPERATING CONDITION 76
4.6.6 TEST RESULTS (A) 77
4.6.7 TEST RESULTS (B) 82
4.7 ANTENNA REQUIREMENT 87
4.7.1 STANDARD APPLICABLE 87
4.7.2 ANTENNA CONNECTED CONSTRUCTION 87
5 PHOTOGRAPHS OF THE TEST CONFIGURATION 88
6 INFORMATION ON THE TESTING LABORATORIES 94

1 CERTIFICATION

PRODUCT :	10.4" Portable Wireless Thin Client
BRAND NAME :	AboCom
MODEL NO. :	FJ25P21U1, FJ25C11
SERIES MODEL NO.:	FJ25XXXXX (refer to the note 3 and 4 of page 7 for other models)
APPLICANT :	AboCom Systems, Inc.
TESTED :	Nov. 19 ~ Dec. 02, 2004
TEST ITEM :	Engineering Sample
STANDARDS :	FCC Part 15, Subpart C (Section 15.247), ANSI C63.4-2003

The above equipment (Model: FJ25P21U1, FJ25C11) has been tested by **Advance Data Technology Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Windy Chou , **DATE:** Dec. 06, 2004
(Windy Chou)

TECHNICAL ACCEPTANCE : Gary Chang , **DATE:** Dec. 06, 2004
Responsible for RF
(Gary Chang)

APPROVED BY : , **DATE:** Dec. 06, 2004
(Cody Chang, Deputy Manager)

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
Standard Section	**Test Type and Limit**	**Result**	**REMARK**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is –15.24dB at 0.423MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is –4.25dB at 259.38MHz
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT:

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

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	10.4" Portable Wireless Thin Client
MODEL NO.	FJ25P21U1, FJ25C11
SERIES MODEL NO.	FJ25XXXXX (refer to the note 3 and 4 as below for other models)
POWER SUPPLY	19Vdc from AC Adapter
MODULATION TYPE	BPSK, QPSK, CCK, 16QAM, 64QAM
RADIO TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	17.906mW
ANTENNA TYPE	PIFA antenna with 0.84dBi gain
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps.
2. The EUT complies with IEEE 802.11g draft standards and backwards compatible with IEEE 802.11b products.
3. The model names could be defined as the following table:

First X	Type	P: Pad, C: Cradle, B: Battery
Second X	Paint	1: single – colured paint, 2: two-coloured paint
Third X	Color	0: black, 1: purple
Fourth X	Region	J: Japan, E: Europe, U: US
Fifth X	Flash	1: 32MB, 2: 64MB

For Example: The model: FJ25P21U1 means it is Pad, two-coloured paint, purple, sold in U.S. and 32MB.

4. If the Type are "C" or "B", then they only sort paint and color. Please refer to the table as below:

First X	Type	C: Cradle, B: Battery
Second X	Paint	1: single – colured paint, 2: two-coloured paint
Third X	Color	0: black, 1: purple

For Example: The model: FJ25C11 means it is Cradle, single-coloured paint and purple.

5. The EUT was powered by the following adapter:

Brand	HUA JUNG
Model	HASU09KA
Input	100-240Vac, 50/60Hz, 1.5A
Output	19Vdc, 3.16A

6. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided to this EUT.

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

NOTE:

1. Below 1GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11, the worst case, was chosen for final test.
2. Above 1GHz, the channel 1, 6, and 11 were tested individually.
3. From our experience and technical viewpoint, we have chosen data rates 11Mbps for CCK technique and 6Mbps for OFDM technique, as the worst cases for the test among other data rates.
4. Three test modes were pre-tested in chamber. The first test mode was for X-axis, the second test mode was for Y-axis, and the third test mode was for Z-axis.
5. For Conduction Emission and Radiation Emission below 1GHz, there are two test modes presented in the following sections. The test mode 1 is for the model: FJ25P21U1 and test mode 2 is for the model: FJ25C11.
6. There are two test results presented in the following sections: The test result A is for CCK technique and the test result B is for OFDM technique.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a 10.4” Portable Wireless Thin Client. According to the specifications of the manufacturer, it must complies with the requirements of the following standards:

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

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

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

3.4 DESCRIPTION OF SUPPORT UNITS

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

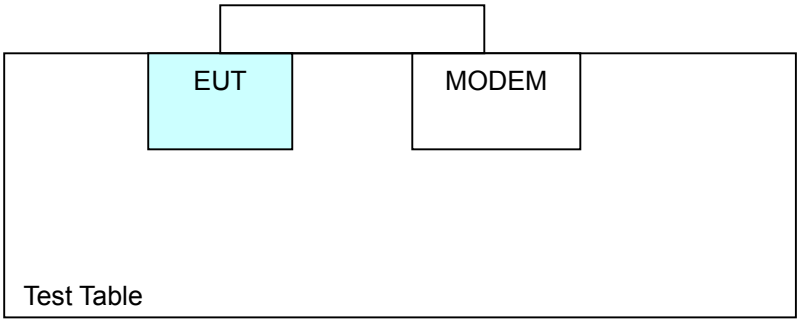
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	MODEM	ACEEX	1414V/3	0401008248	IFAXDM1414

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

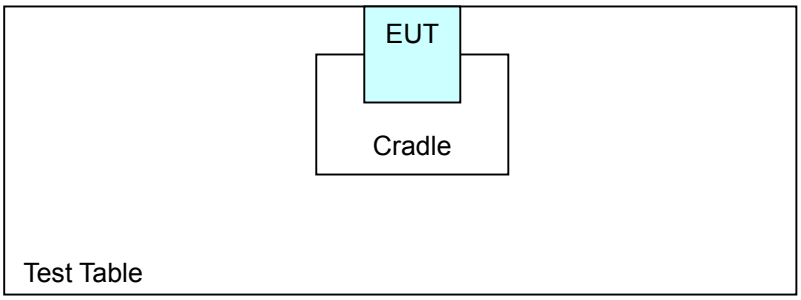
NOTE: All power cords of the above support units are non shielded (1.8m).

3.5 CONFIGURATION OF SYSTEM UNDER TEST

For Test Mode 1



For Test Mode 2



4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Nov. 16, 2005
RF signal cable Woken	5D-FB	Cable-HYC01-01	Mar. 02, 2005
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Mar. 03, 2005
LISN ROHDE & SCHWARZ	ESH2-Z5	100104	Mar. 02, 2005
Software ADT	ADT_Cond_V3	NA	NA

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

.

4.1.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

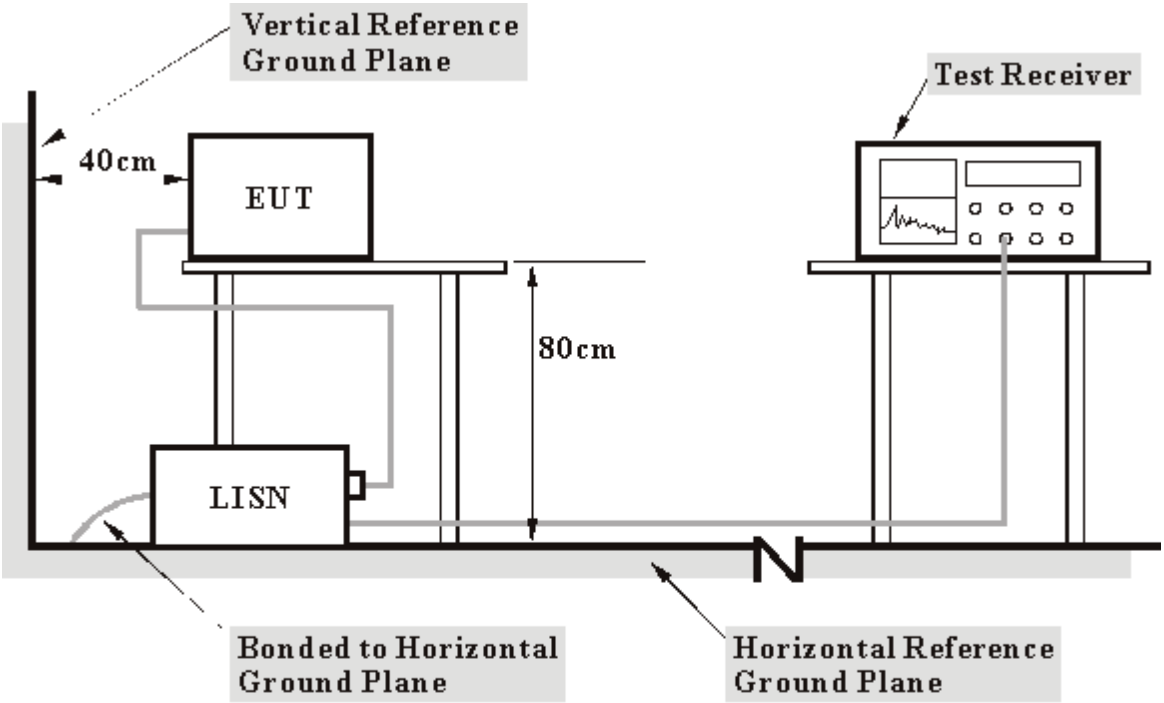
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels (Limit –20dB) was not recorded.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

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

4.1.6 EUT OPERATING CONDITIONS

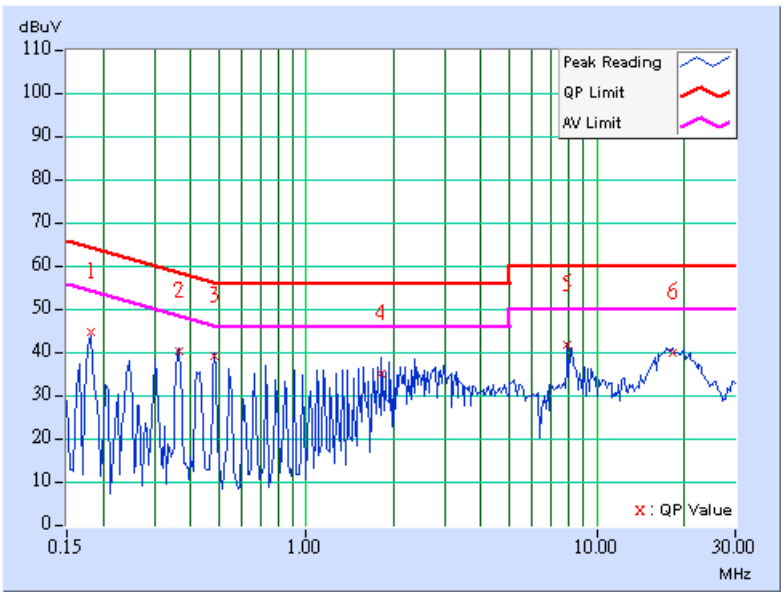
a. Turned on the power of all equipment.
b. EUT ran a test program (provided by manufacturer) to enable all functions.
c. EUT sent "H" messages to modem.

4.1.7 TEST RESULTS

EUT	10.4" Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	1
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	**PHASE**	Line (L)
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.11	43.74	-	43.85	-	64.43	54.43	-20.57	-
2	0.365	0.13	39.43	-	39.56	-	58.62	48.62	-19.06	-
3	0.482	0.13	38.20	-	38.33	-	56.30	46.30	-17.98	-
4	1.816	0.16	34.19	-	34.35	-	56.00	46.00	-21.65	-
5	7.941	0.30	40.75	-	41.05	-	60.00	50.00	-18.95	-
6	18.176	0.93	39.01	-	39.94	-	60.00	50.00	-20.06	-

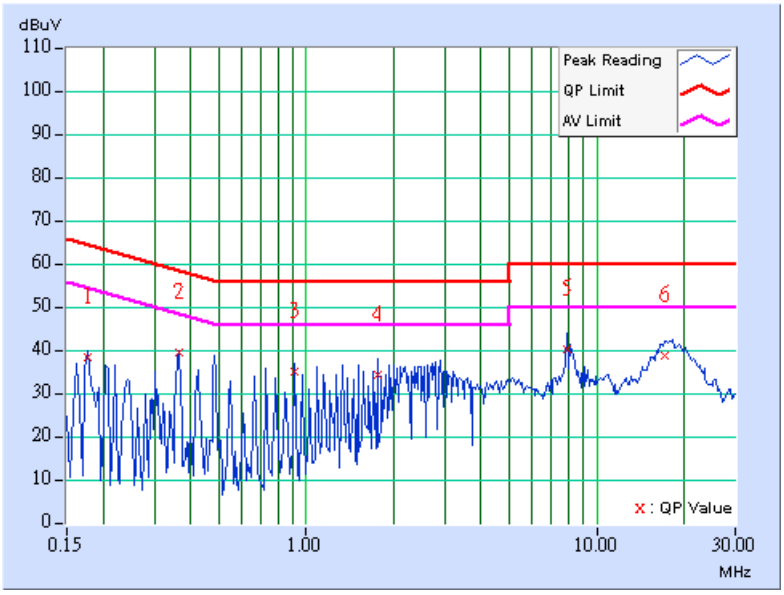
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4" Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	1
ENVIRONMENTAL CONDITIONS	25 deg. C, 70% RH, 991 hPa	**PHASE**	Neutral (N)
TESTED BY	Leo Hung		

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.177	0.11	37.97	-	38.08	-	64.61	54.61	-26.53	-
2	0.365	0.12	39.11	-	39.23	-	58.62	48.62	-19.39	-
3	0.908	0.14	34.46	-	34.60	-	56.00	46.00	-21.40	-
4	1.758	0.16	33.79	-	33.95	-	56.00	46.00	-22.05	-
5	7.938	0.28	39.77	-	40.05	-	60.00	50.00	-19.95	-
6	17.199	0.67	38.30	-	38.97	-	60.00	50.00	-21.03	-

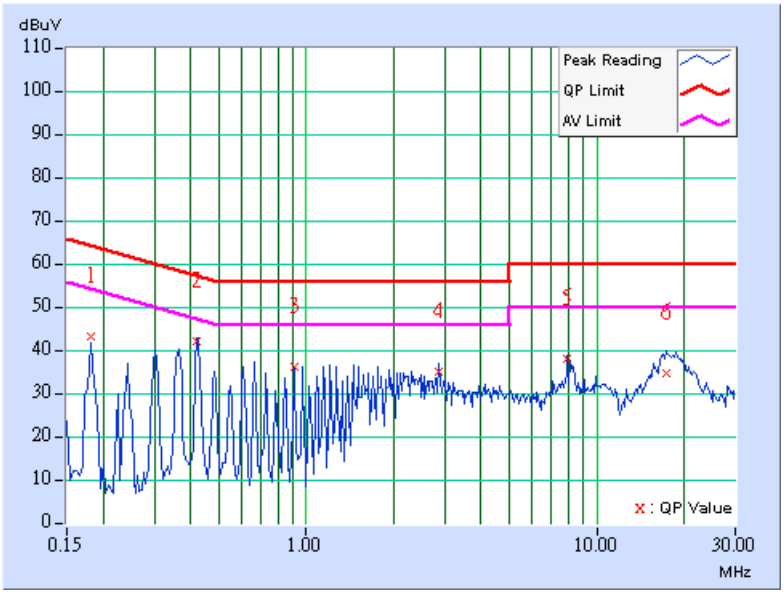
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	1
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	**PHASE**	Line (L)
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.11	42.32	-	42.43	-	64.43	54.43	-21.99	-
2	0.420	0.13	41.38	-	41.51	-	57.46	47.46	-15.95	-
3	0.908	0.15	35.25	-	35.40	-	56.00	46.00	-20.60	-
4	2.844	0.18	34.16	-	34.34	-	56.00	46.00	-21.66	-
5	7.938	0.30	37.31	-	37.61	-	60.00	50.00	-22.39	-
6	17.379	0.89	33.74	-	34.63	-	60.00	50.00	-25.37	-

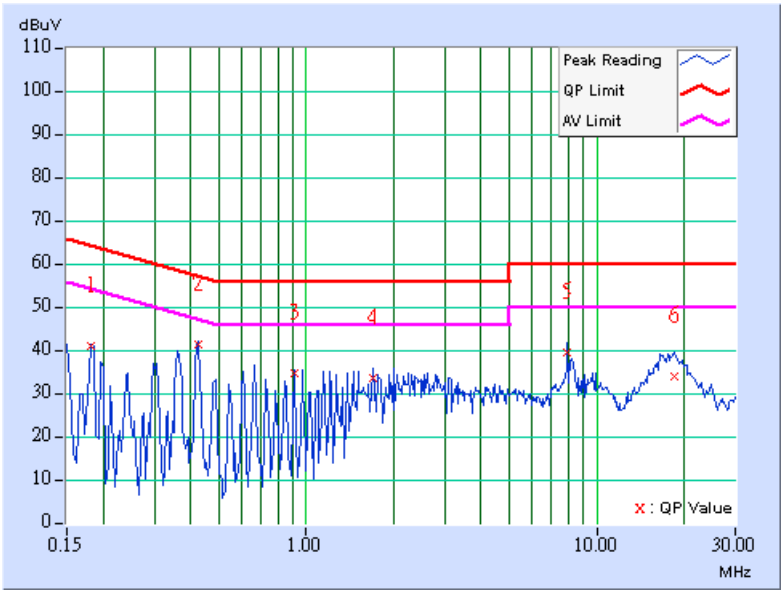
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	1
ENVIRONMENTAL CONDITIONS	25 deg. C, 70% RH, 991 hPa	**PHASE**	Neutral (N)
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.11	40.52	-	40.63	-	64.43	54.43	-23.80	-
2	0.423	0.12	40.70	-	40.82	-	57.38	47.38	-16.56	-
3	0.908	0.14	34.24	-	34.38	-	56.00	46.00	-21.62	-
4	1.695	0.16	32.97	-	33.13	-	56.00	46.00	-22.87	-
5	7.938	0.28	39.08	-	39.36	-	60.00	50.00	-20.64	-
6	18.469	0.69	33.54	-	34.23	-	60.00	50.00	-25.77	-

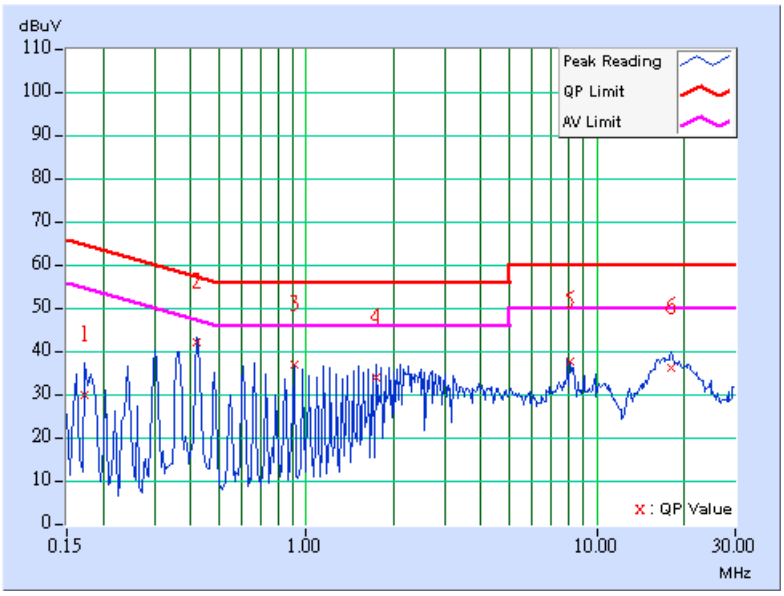
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	1
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	**PHASE**	Line (L)
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.11	29.10	-	29.21	-	64.79	54.79	-35.58	-
2	0.420	0.13	41.40	-	41.53	-	57.46	47.46	-15.93	-
3	0.908	0.15	35.98	-	36.13	-	56.00	46.00	-19.87	-
4	1.750	0.16	33.25	-	33.41	-	56.00	46.00	-22.59	-
5	8.105	0.30	36.73	-	37.03	-	60.00	50.00	-22.97	-
6	18.156	0.93	35.47	-	36.40	-	60.00	50.00	-23.60	-

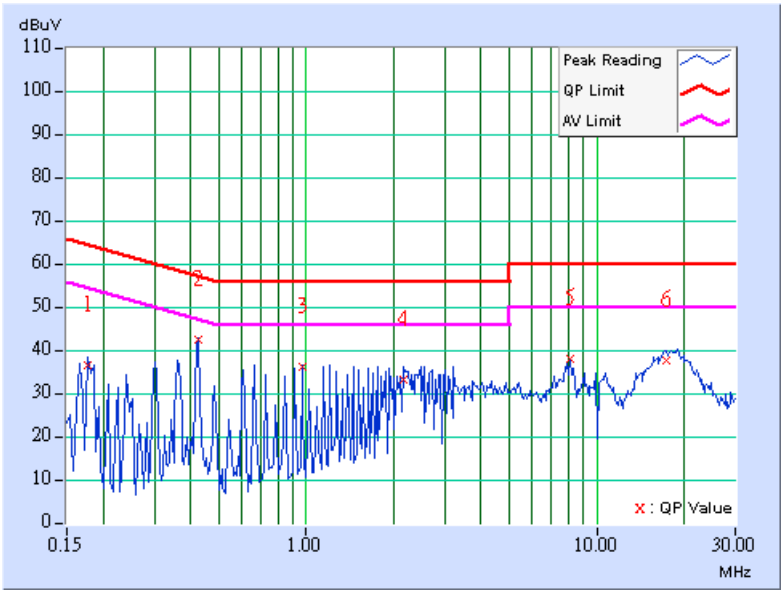
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4" Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	1
ENVIRONMENTAL CONDITIONS	25 deg. C, 70% RH, 991 hPa	**PHASE**	Neutral (N)
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.177	0.11	36.14	-	36.25	-	64.61	54.61	-28.36	-
2	**0.423**	**0.12**	**42.02**	**-**	**42.14**	**-**	**57.38**	**47.38**	**-15.24**	**-**
3	0.966	0.15	35.62	-	35.77	-	56.00	46.00	-20.23	-
4	2.176	0.16	32.81	-	32.97	-	56.00	46.00	-23.03	-
5	8.105	0.28	37.51	-	37.79	-	60.00	50.00	-22.21	-
6	17.293	0.67	37.17	-	37.84	-	60.00	50.00	-22.16	-

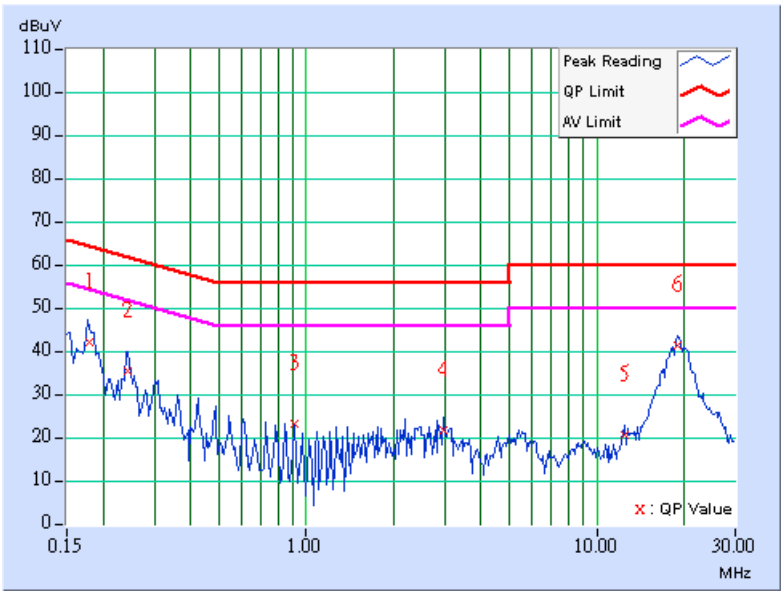
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25C11
CHANNEL	1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	2
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	**PHASE**	Line (L)
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.179	0.10	41.29	-	41.39	-	64.52	54.52	-23.12	-
2	0.244	0.10	34.84	-	34.94	-	61.97	51.97	-27.02	-
3	0.908	0.23	22.35	-	22.58	-	56.00	46.00	-33.42	-
4	2.969	0.29	21.01	-	21.30	-	56.00	46.00	-34.70	-
5	12.473	0.61	19.97	-	20.58	-	60.00	50.00	-39.42	-
6	18.940	0.87	40.71	-	41.58	-	60.00	50.00	-18.42	-

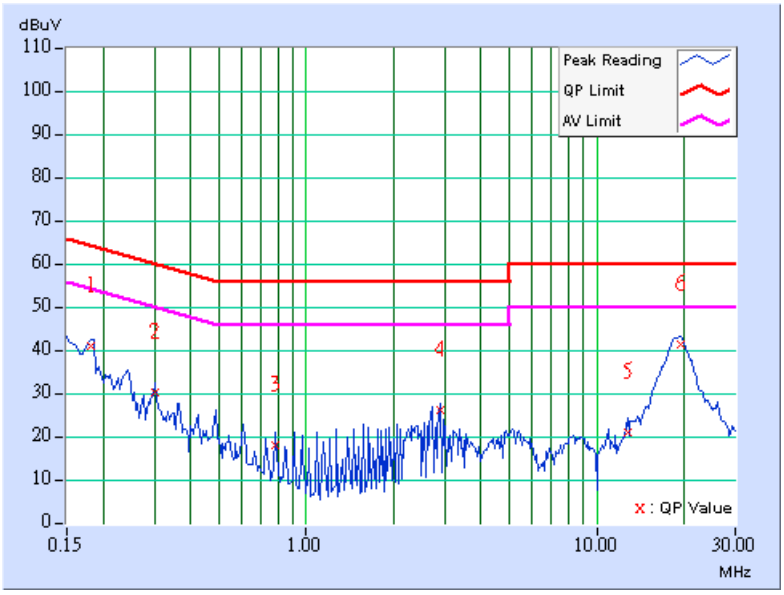
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25C11
CHANNEL	1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	2
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	**PHASE**	Neutral (N)
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.10	40.55	-	40.65	-	64.43	54.43	-23.78	-
2	0.302	0.11	29.78	-	29.89	-	60.18	50.18	-30.29	-
3	0.783	0.19	17.56	-	17.75	-	56.00	46.00	-38.25	-
4	2.902	0.27	25.60	-	25.87	-	56.00	46.00	-30.13	-
5	12.758	0.53	20.64	-	21.17	-	60.00	50.00	-38.83	-
6	19.517	0.64	40.88	-	41.52	-	60.00	50.00	-18.48	-

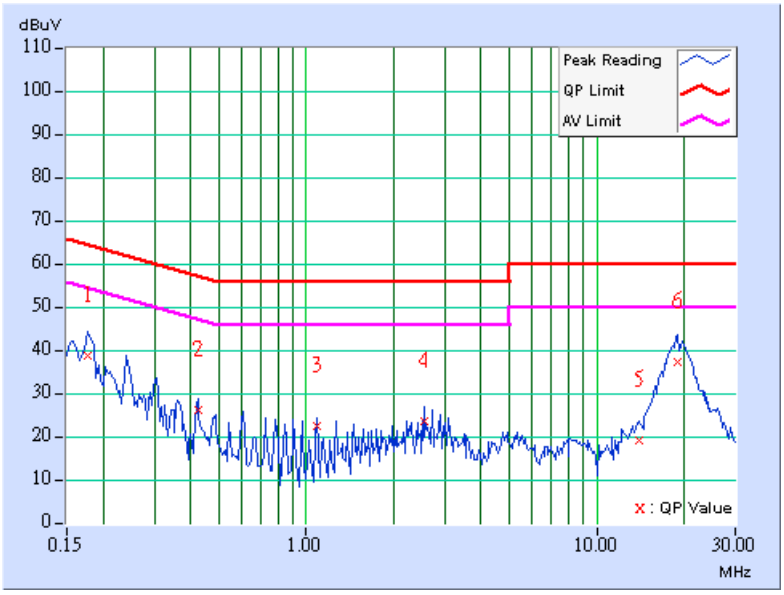
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25C11
CHANNEL	6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	2
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	**PHASE**	Line (L)
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.177	0.10	38.18	-	38.28	-	64.61	54.61	-26.33	-
2	0.423	0.12	25.26	-	25.38	-	57.38	47.38	-32.00	-
3	1.086	0.25	21.83	-	22.08	-	56.00	46.00	-33.92	-
4	2.535	0.27	22.83	-	23.10	-	56.00	46.00	-32.90	-
5	14.008	0.67	18.36	-	19.03	-	60.00	50.00	-40.97	-
6	18.961	0.87	36.52	-	37.39	-	60.00	50.00	-22.61	-

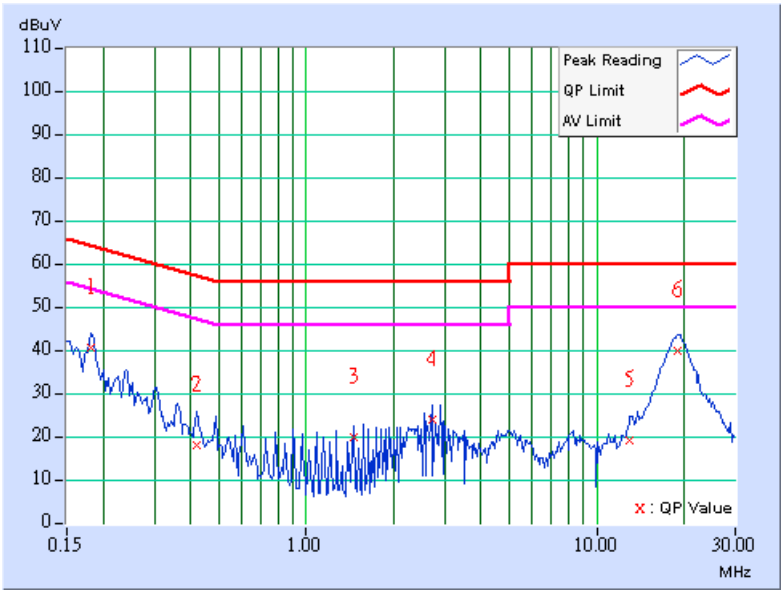
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25C11
CHANNEL	6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	2
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	**PHASE**	Neutral (N)
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.10	40.00	-	40.10	-	64.43	54.43	-24.33	-
2	0.420	0.12	17.48	-	17.60	-	57.46	47.46	-39.86	-
3	1.449	0.24	19.20	-	19.44	-	56.00	46.00	-36.56	-
4	2.719	0.27	23.33	-	23.60	-	56.00	46.00	-32.40	-
5	13.047	0.53	18.70	-	19.23	-	60.00	50.00	-40.77	-
6	18.905	0.63	39.32	-	39.95	-	60.00	50.00	-20.05	-

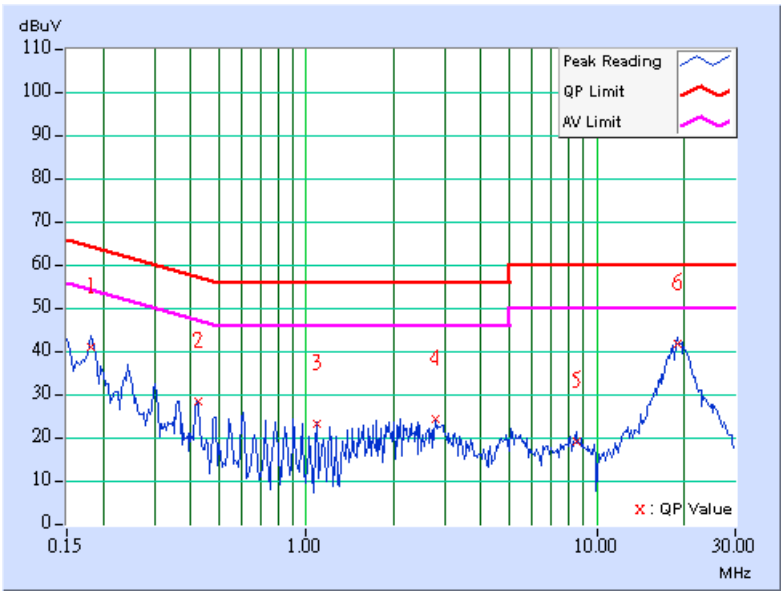
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25C11
CHANNEL	11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	2
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	**PHASE**	Line (L)
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.10	40.26	-	40.36	-	64.43	54.43	-24.07	-
2	0.423	0.12	27.82	-	27.94	-	57.38	47.38	-29.44	-
3	1.086	0.25	22.58	-	22.83	-	56.00	46.00	-33.17	-
4	2.773	0.28	23.59	-	23.87	-	56.00	46.00	-32.13	-
5	8.508	0.49	18.33	-	18.82	-	60.00	50.00	-41.18	-
6	19.063	0.88	40.99	-	41.87	-	60.00	50.00	-18.13	-

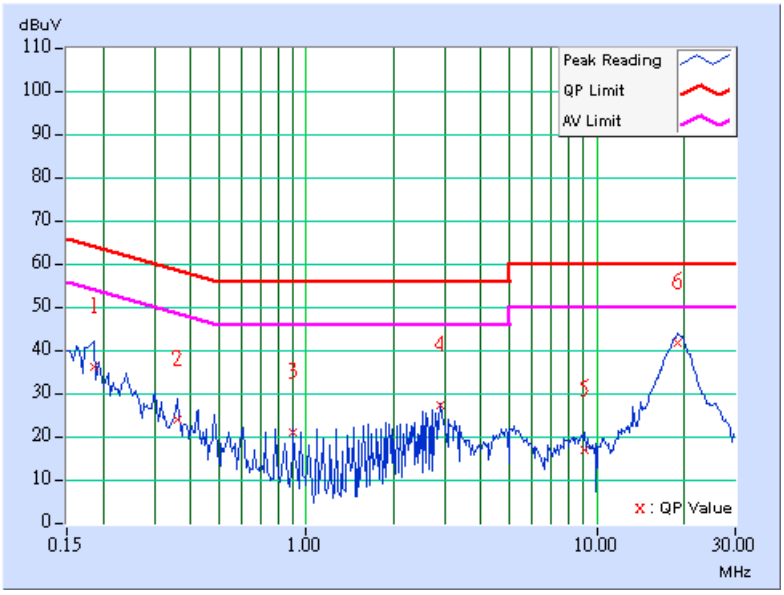
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25C11
CHANNEL	11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**TEST MODE**	2
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	**PHASE**	Neutral (N)
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.185	0.10	35.56	-	35.66	-	64.25	54.25	-28.59	-
2	0.361	0.11	23.26	-	23.37	-	58.71	48.71	-35.34	-
3	0.904	0.22	20.54	-	20.76	-	56.00	46.00	-35.24	-
4	2.895	0.27	26.70	-	26.97	-	56.00	46.00	-29.03	-
5	9.047	0.47	16.59	-	17.06	-	60.00	50.00	-42.94	-
6	18.995	0.63	41.23	-	41.86	-	60.00	50.00	-18.14	-

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



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

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

NOTE:

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESI7	100033	Jun. 08, 2005
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Jun. 03, 2005
BILOG Antenna SCHWARZBECK	VULB9168	9168-153	Feb. 03, 2005
HORN Antenna SCHWARZBECK	9120D	9120D-408	Feb. 03, 2005
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA 9170243	Feb. 23, 2005
Preamplifier Agilent	8447D	2944A10633	Nov. 09, 2005
Preamplifier Agilent	8449B	3008A01964	Nov. 06, 2005
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218183/4	Mar. 05, 2005
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218195/4	Mar. 05, 2005
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA
Turn Table ADT.	TT100.	TT93021703	NA
Turn Table Controller ADT.	SC100.	SC93021703	NA

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

2. The test was performed in HwaYa Chamber 2.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

4. The IC Site Registration No. is IC4924-3.

4.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

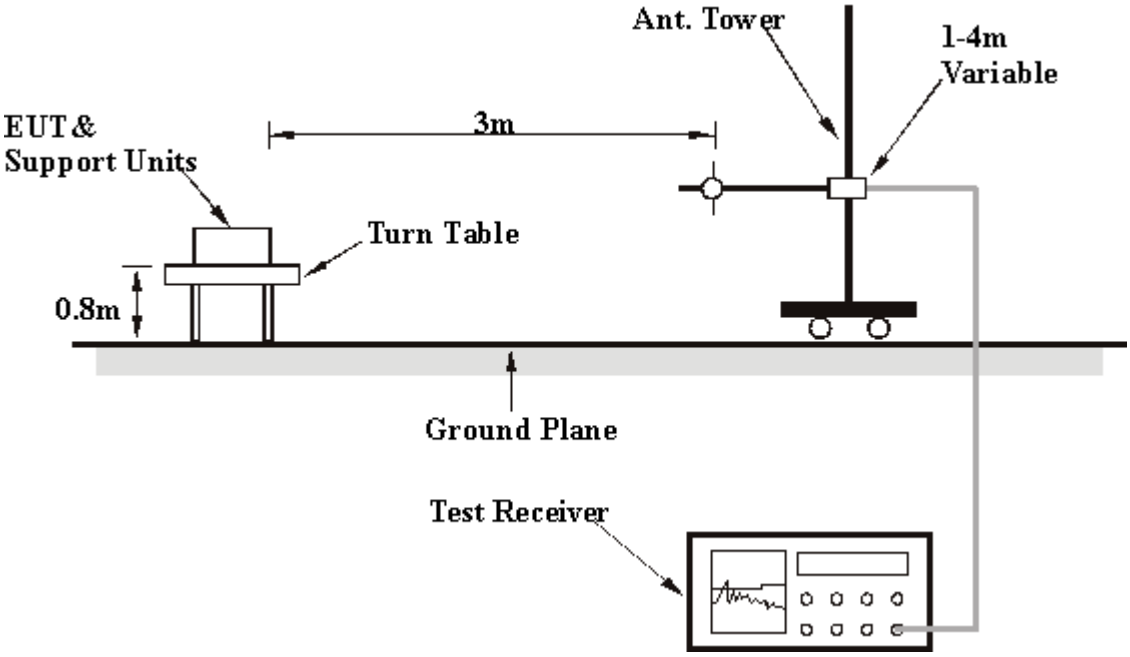
NOTE:

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS

EUT	10.4" Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
AXIS	X	**TEST MODE**	1
ENVIRONMENTAL CONDITIONS	25 deg. C, 657% RH, 991 hPa	**TESTED BY**	Long Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	296.31	34.11 QP	46.00	-11.89	1.00 H	178	19.36	14.75
2	360.46	37.41 QP	46.00	-8.59	1.00 H	127	21.32	16.09
3	395.45	34.85 QP	46.00	-11.15	2.00 H	169	17.99	16.86
4	527.64	35.20 QP	46.00	-10.80	3.00 H	166	15.88	19.32
5	593.73	34.04 QP	46.00	-11.96	1.00 H	166	12.97	21.07
6	659.82	33.24 QP	46.00	-12.76	1.00 H	238	11.19	22.05

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	78.60	30.07 QP	40.00	-9.93	1.00 V	196	19.23	10.85
2	498.48	37.08 QP	46.00	-8.92	1.00 V	88	18.39	18.69
3	552.91	35.87 QP	46.00	-10.13	1.00 V	142	15.98	19.89
4	593.73	37.94 QP	46.00	-8.06	1.00 V	139	16.88	21.07
5	924.19	34.15 QP	46.00	-11.85	2.00 V	340	8.63	25.52
6	957.23	36.49 QP	46.00	-9.51	1.00 V	178	10.63	25.85

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
AXIS	Y	**TEST MODE**	1
ENVIRONMENTAL CONDITIONS	25 deg. C, 657% RH, 991 hPa	**TESTED BY**	Long Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	296.31	34.04 QP	46.00	-11.96	1.00 H	178	19.29	14.75
2	360.46	37.29 QP	46.00	-8.71	1.00 H	94	21.20	16.09
3	395.45	34.44 QP	46.00	-11.56	2.00 H	178	17.58	16.86
4	527.64	37.94 QP	46.00	-8.06	1.50 H	157	18.62	19.32
5	601.50	33.45 QP	46.00	-12.55	1.00 H	181	12.18	21.27

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	78.60	30.86 QP	40.00	-9.14	1.50 V	163	20.02	10.85
2	298.26	34.02 QP	46.00	-11.98	1.50 V	304	19.24	14.78
3	498.48	37.22 QP	46.00	-8.78	1.00 V	103	18.53	18.69
4	552.91	35.65 QP	46.00	-10.35	1.00 V	127	15.75	19.89
5	593.73	38.07 QP	46.00	-7.93	1.00 V	133	17.00	21.07
6	957.23	36.07 QP	46.00	-9.93	1.00 V	181	10.21	25.85

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
AXIS	Z	**TEST MODE**	1
ENVIRONMENTAL CONDITIONS	25 deg. C, 657% RH, 991 hPa	**TESTED BY**	Long Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	296.31	34.29 QP	46.00	-11.71	1.00 H	208	19.54	14.75
2	360.46	37.58 QP	46.00	-8.42	1.00 H	343	21.49	16.09
3	395.45	34.59 QP	46.00	-11.41	2.00 H	151	17.73	16.86
4	428.50	33.02 QP	46.00	-12.98	2.00 H	166	15.40	17.62
5	527.64	35.12 QP	46.00	-10.88	3.00 H	148	15.80	19.32
6	601.50	33.94 QP	46.00	-12.06	1.00 H	178	12.67	21.27

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	78.60	29.94 QP	40.00	-10.06	1.00 V	181	19.10	10.85
2	498.48	37.41 QP	46.00	-8.59	1.00 V	109	18.72	18.69
3	552.91	35.88 QP	46.00	-10.12	1.00 V	136	15.99	19.89
4	593.73	37.65 QP	46.00	-8.35	1.00 V	127	16.58	21.07
5	924.19	34.70 QP	46.00	-11.30	1.00 V	328	9.18	25.52
6	957.23	36.11 QP	46.00	-9.89	1.00 V	172	10.25	25.85

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

EUT	10.4" Portable Wireless Thin Client	**MODEL**	FJ25C11
CHANNEL	11	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24 deg. C, 55% RH, 991 hPa	**TEST MODE**	2
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	57.21	26.33 QP	40.00	-13.67	1.50 H	268	12.35	13.99
2	179.68	28.78 QP	43.50	-14.72	1.25 H	166	15.79	12.99
3	**259.38**	**41.75 QP**	**46.00**	**-4.25**	**1.50 H**	**319**	**28.39**	**13.36**
4	300.20	36.45 QP	46.00	-9.55	1.00 H	169	21.95	14.50
5	339.08	38.40 QP	46.00	-7.60	1.00 H	157	23.00	15.40
6	374.07	37.24 QP	46.00	-8.76	1.25 H	172	21.06	16.18
7	397.39	37.10 QP	46.00	-8.90	1.00 H	160	20.41	16.69
8	428.50	33.00 QP	46.00	-13.00	1.50 H	133	15.50	17.50
9	500.42	33.31 QP	46.00	-12.69	1.50 H	343	14.57	18.74
10	539.30	32.89 QP	46.00	-13.11	1.50 H	130	13.40	19.48
11	580.12	32.26 QP	46.00	-13.74	1.25 H	16	11.78	20.49
12	659.82	36.44 QP	46.00	-9.56	1.25 H	136	14.64	21.80
13	725.91	35.14 QP	46.00	-10.86	1.00 H	10	12.21	22.94
14	795.89	33.95 QP	46.00	-12.05	1.00 H	130	10.15	23.80
15	858.10	30.00 QP	46.00	-16.00	1.00 H	112	5.66	24.34
16	924.19	32.64 QP	46.00	-13.36	1.00 H	25	7.27	25.37

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25C11
CHANNEL	11	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24 deg. C, 55% RH, 991 hPa	**TEST MODE**	2
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	70.82	32.96 QP	40.00	-7.04	1.25 V	172	20.59	12.37
2	121.36	31.89 QP	43.50	-11.61	1.00 V	253	18.76	13.12
3	179.68	31.96 QP	43.50	-11.54	1.00 V	31	18.97	12.99
4	259.38	34.67 QP	46.00	-11.33	1.00 V	163	21.31	13.36
5	298.26	36.20 QP	46.00	-9.80	1.00 V	13	21.73	14.47
6	335.19	34.70 QP	46.00	-11.30	1.00 V	34	19.39	15.31
7	397.39	32.00 QP	46.00	-14.00	1.00 V	280	15.31	16.69
8	428.50	35.55 QP	46.00	-10.45	1.00 V	10	18.05	17.50
9	459.60	31.13 QP	46.00	-14.87	1.00 V	22	12.94	18.20
10	494.59	33.22 QP	46.00	-12.78	1.00 V	19	14.56	18.66
11	552.91	34.58 QP	46.00	-11.42	1.00 V	199	14.81	19.77
12	601.50	31.14 QP	46.00	-14.86	1.00 V	175	10.11	21.03
13	659.82	33.73 QP	46.00	-12.27	1.00 V	166	11.93	21.80
14	725.91	30.45 QP	46.00	-15.55	1.00 V	151	7.52	22.94
15	858.10	28.23 QP	46.00	-17.77	1.00 V	214	3.89	24.34
16	947.52	32.86 QP	46.00	-13.14	1.00 V	163	7.24	25.61

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

4.2.8 TEST RESULTS (A)

EUT	10.4" Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	1	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	X
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2375.00	46.66 PK	74.00	-27.34	1.18 H	354	15.09	31.57
2	*2412.00	104.70 PK			1.18 H	354	73.00	31.70
2	*2412.00	99.11 AV			1.18 H	354	67.41	31.70
3	4824.00	45.49 PK	74.00	-28.51	1.16 H	213	7.91	37.58
4	7236.00	52.48 PK	74.00	-21.52	1.36 H	227	8.34	44.14
4	7236.00	42.19 AV	54.00	-11.81	1.36 H	227	-1.95	44.14

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2375.00	42.60 PK	74.00	-31.40	1.16 V	339	11.03	31.57
2	*2412.00	100.64 PK			1.16 V	339	68.94	31.70
2	*2412.00	94.45 AV			1.16 V	339	62.75	31.70
3	4824.00	48.95 PK	74.00	-25.05	1.00 V	124	11.37	37.58
4	7236.00	55.63 PK	74.00	-18.37	1.09 V	339	11.49	44.14
4	7236.00	45.05 AV	54.00	-8.95	1.09 V	339	0.91	44.14

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	1	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Y
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2375.00	47.52 PK	74.00	-26.48	1.12 H	88	15.95	31.57
2	*2412.00	105.56 PK			1.12 H	88	73.86	31.70
2	*2412.00	99.46 AV			1.12 H	88	67.76	31.70
3	4824.00	48.39 PK	74.00	-25.61	1.06 H	335	10.81	37.58
4	7236.00	52.65 PK	74.00	-21.35	1.15 H	276	8.51	44.14
4	7236.00	41.87 AV	54.00	-12.13	1.15 H	276	-2.27	44.14

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	47.17 PK	74.00	-26.83	1.00 V	338	15.56	31.61
2	*2412.00	101.38 PK			1.00 V	338	69.68	31.70
2	*2412.00	95.80 AV			1.00 V	338	64.10	31.70
3	4824.00	49.80 PK	74.00	-24.20	1.61 V	242	12.22	37.58
4	7236.00	57.89 PK	74.00	-16.11	1.36 V	107	13.75	44.14
4	7236.00	42.98 AV	54.00	-11.02	1.36 V	107	-1.16	44.14

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	1	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Z
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2375.00	46.24 PK	74.00	-27.76	1.31 H	353	14.67	31.57
2	*2412.00	104.28 PK			1.31 H	353	72.58	31.70
2	*2412.00	98.78 AV			1.31 H	353	67.08	31.70
3	4824.00	46.32 PK	74.00	-27.68	1.62 H	227	8.74	37.58
4	7236.00	53.48 PK	74.00	-20.52	1.48 H	249	9.34	44.14
4	7236.00	42.69 AV	54.00	-11.31	1.48 H	249	-1.45	44.14

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2375.00	43.50 PK	74.00	-30.50	1.32 V	121	11.93	31.57
2	*2412.00	101.54 PK			1.32 V	121	69.84	31.70
2	*2412.00	95.02 AV			1.32 V	121	63.32	31.70
3	4824.00	50.33 PK	74.00	-23.67	1.21 V	103	12.75	37.58
3	4824.00	41.82 AV	54.00	-12.18	1.21 V	103	4.24	37.58
4	7236.00	56.89 PK	74.00	-17.11	1.16 V	287	12.75	44.14
4	7236.00	43.90 AV	54.00	-10.10	1.16 V	287	-0.24	44.14

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	6	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	X
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	104.38 PK			1.39 H	8	72.53	31.85
1	*2437.00	98.10 AV			1.39 H	8	66.25	31.85
2	4874.00	47.18 PK	74.00	-26.82	1.02 H	232	9.52	37.66
3	7311.00	54.61 PK	74.00	-19.39	1.10 H	0	10.29	44.33
3	7311.00	41.94 AV	54.00	-12.06	1.10 H	0	-2.38	44.33

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	99.17 PK			1.78 V	56	67.32	31.85
1	*2437.00	93.11 AV			1.78 V	56	61.26	31.85
2	4874.00	51.24 PK	74.00	-22.76	1.27 V	318	13.58	37.66
2	4874.00	40.61 AV	54.00	-13.39	1.27 V	318	2.95	37.66
3	7311.00	56.82 PK	74.00	-17.18	1.03 V	26	12.49	44.33
3	7311.00	43.95 AV	54.00	-10.05	1.03 V	26	-0.38	44.33

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	6	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Y
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	104.01 PK			1.00 H	339	72.16	31.85
1	*2437.00	98.68 AV			1.00 H	339	66.83	31.85
2	4874.00	45.36 PK	74.00	-28.64	1.14 H	307	7.70	37.66
3	7311.00	53.80 PK	74.00	-20.20	1.06 H	179	9.47	44.33
3	7311.00	40.60 AV	54.00	-13.40	1.06 H	179	-3.73	44.33

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	100.29 PK			1.03 V	324	68.44	31.85
1	*2437.00	94.31 AV			1.03 V	324	62.46	31.85
2	4874.00	50.58 PK	74.00	-23.42	1.09 V	36	12.92	37.66
2	4874.00	40.30 AV	54.00	-13.70	1.09 V	36	2.64	37.66
3	7311.00	58.87 PK	74.00	-15.13	1.16 V	162	14.54	44.33
3	7311.00	43.90 AV	54.00	-10.10	1.16 V	162	-0.43	44.33

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	6	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Z
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	103.36 PK			1.17 H	124	71.51	31.85
1	*2437.00	98.57 AV			1.17 H	124	66.72	31.85
2	4874.00	45.36 PK	74.00	-28.64	1.48 H	207	7.70	37.66
3	7311.00	52.39 PK	74.00	-21.61	1.62 H	244	8.06	44.33
3	7311.00	40.28 AV	54.00	-13.72	1.62 H	244	-4.05	44.33

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	100.81 PK			1.38 V	338	68.96	31.85
1	*2437.00	94.48 AV			1.38 V	338	62.63	31.85
2	4874.00	48.90 PK	74.00	-25.10	1.23 V	208	11.24	37.66
3	7311.00	56.89 PK	74.00	-17.11	1.76 V	210	12.56	44.33
3	7311.00	43.89 AV	54.00	-10.11	1.76 V	210	-0.44	44.33

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	X
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	102.57 PK			1.45 H	10	70.57	32.00
1	*2462.00	96.95 AV			1.45 H	10	64.95	32.00
2	2483.50	43.94 PK	74.00	-30.06	1.45 H	10	11.81	32.13
3	4924.00	46.51 PK	74.00	-27.49	1.13 H	307	8.77	37.74
4	7386.00	52.89 PK	74.00	-21.11	1.63 H	34	8.32	44.57
4	7386.00	40.11 AV	54.00	-13.89	1.63 H	34	-4.46	44.57

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	100.38 PK			1.80 V	338	68.38	32.00
1	*2462.00	92.25 AV			1.80 V	338	60.25	32.00
2	2483.50	41.75 PK	74.00	-32.25	1.80 V	338	9.62	32.13
3	4824.00	49.70 PK	74.00	-24.30	1.15 V	223	12.12	37.58
4	7386.00	56.81 PK	74.00	-17.19	1.06 V	179	12.24	44.57
4	7386.00	43.96 AV	54.00	-10.04	1.06 V	179	-0.61	44.57

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Y
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	104.20 PK			1.18 H	81	72.20	32.00
1	*2462.00	98.93 AV			1.18 H	81	66.93	32.00
2	2483.50	45.57 PK	74.00	-28.43	1.18 H	81	13.44	32.13
3	4924.00	43.04 PK	74.00	-30.96	1.43 H	227	5.30	37.74
4	7386.00	52.90 PK	74.00	-21.10	1.14 H	360	8.33	44.57
4	7386.00	39.87 AV	54.00	-14.13	1.14 H	360	-4.70	44.57

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	100.47 PK			1.06 V	316	68.47	32.00
1	*2462.00	95.90 AV			1.06 V	316	63.90	32.00
2	2483.50	41.84 PK	74.00	-32.16	1.06 V	316	9.71	32.13
3	4924.00	52.95 PK	74.00	-21.05	1.61 V	247	15.21	37.74
3	4924.00	41.82 AV	54.00	-12.18	1.61 V	247	4.08	37.74
4	7386.00	58.71 PK	74.00	-15.29	1.73 V	12	14.14	44.57
4	7386.00	44.63 AV	54.00	-9.37	1.73 V	12	0.06	44.57

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Z
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	104.20 PK			1.36 H	122	72.20	32.00
1	*2462.00	98.24 AV			1.36 H	122	66.24	32.00
2	2483.50	45.57 PK	74.00	-28.43	1.36 H	122	13.44	32.13
3	4924.00	45.39 PK	74.00	-28.61	1.48 H	206	7.65	37.74
4	7386.00	52.14 PK	74.00	-21.86	1.68 H	33	7.57	44.57
4	7386.00	41.30 AV	54.00	-12.70	1.68 H	33	-3.27	44.57

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	100.49 PK			1.14 V	348	68.49	32.00
1	*2462.00	94.83 AV			1.14 V	348	62.83	32.00
2	2483.50	41.86 PK	74.00	-32.14	1.14 V	348	9.73	32.13
3	4924.00	49.33 PK	74.00	-24.67	1.13 V	210	11.59	37.74
4	7386.00	58.31 PK	74.00	-15.69	1.36 V	217	13.74	44.57
4	7386.00	43.20 AV	54.00	-10.80	1.36 V	217	-1.37	44.57

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

4.2.9 TEST RESULTS (B)

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	1	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	X
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	47.09 PK	74.00	-26.91	1.14 H	360	15.48	31.61
2	*2412.00	101.30 PK			1.14 H	358	69.60	31.70
2	*2412.00	95.01 AV			1.14 H	358	63.31	31.70
3	4824.00	48.30 PK	74.00	-25.70	1.16 H	49	10.72	37.58
4	7236.00	53.91 PK	74.00	-20.09	1.14 H	274	9.77	44.14
4	7236.00	41.63 AV	54.00	-12.37	1.14 H	274	-2.51	44.14

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	43.63 PK	74.00	-30.37	1.49 V	277	12.02	31.61
2	*2412.00	97.84 PK			1.49 V	324	66.14	31.70
2	*2412.00	91.68 AV			1.49 V	324	59.98	31.70
3	4824.00	52.33 PK	74.00	-21.67	1.49 V	277	14.75	37.58
3	4824.00	41.90 AV	54.00	-12.10	1.49 V	277	4.32	37.58
4	7236.00	56.98 PK	74.00	-17.02	1.69 V	148	12.84	44.14
4	7236.00	44.12 AV	54.00	-9.88	1.69 V	148	-0.02	44.14

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	1	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Y
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	45.95 PK	74.00	-28.05	1.33 H	79	14.34	31.61
2	*2412.00	100.16 PK			1.33 H	79	68.46	31.70
2	*2412.00	94.89 AV			1.33 H	79	63.19	31.70
3	4824.00	46.30 PK	74.00	-27.70	1.01 H	168	8.72	37.58
4	7236.00	52.96 PK	74.00	-21.04	1.16 H	211	8.82	44.14
4	7236.00	41.30 AV	54.00	-12.70	1.16 H	211	-2.84	44.14

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	41.09 PK	74.00	-32.91	1.00 V	327	9.48	31.61
2	*2412.00	95.30 PK			1.00 V	327	63.60	31.70
2	*2412.00	89.49 AV			1.00 V	327	57.79	31.70
3	4824.00	49.60 PK	74.00	-24.40	1.43 V	298	12.02	37.58
4	7236.00	56.27 PK	74.00	-17.73	1.79 V	117	12.13	44.14
4	7236.00	43.80 AV	54.00	-10.20	1.79 V	117	-0.34	44.14

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	1	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Z
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	47.42 PK	74.00	-26.58	1.62 H	114	15.81	31.61
2	*2412.00	101.63 PK			1.62 H	114	69.93	31.70
2	*2412.00	94.58 AV			1.62 H	114	62.88	31.70
3	4824.00	42.98 PK	74.00	-31.02	1.62 H	337	5.40	37.58
4	7236.00	52.69 PK	74.00	-21.31	1.49 H	231	8.55	44.14
4	7236.00	41.03 AV	54.00	-12.97	1.49 H	231	-3.11	44.14

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	42.62 PK	74.00	-31.38	1.27 V	347	11.01	31.61
2	*2412.00	96.83 PK			1.27 V	347	65.13	31.70
2	*2412.00	90.30 AV			1.27 V	347	58.60	31.70
3	4824.00	49.30 PK	74.00	-24.70	1.36 V	140	11.72	37.58
4	7236.00	57.63 PK	74.00	-16.37	1.10 V	217	13.49	44.14
4	7236.00	44.25 AV	54.00	-9.75	1.10 V	217	0.11	44.14

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	6	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	X
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	100.32 PK			1.23 H	10	68.47	31.85
1	*2437.00	94.99 AV			1.23 H	10	63.14	31.85
2	4874.00	47.39 PK	74.00	-26.61	1.06 H	263	9.73	37.66
3	7311.00	53.96 PK	74.00	-20.04	1.20 H	207	9.63	44.33
3	7311.00	40.21 AV	54.00	-13.79	1.20 H	207	-4.12	44.33

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	97.64 PK			1.06 V	314	65.79	31.85
1	*2437.00	91.33 AV			1.06 V	314	59.48	31.85
2	4874.00	51.33 PK	74.00	-22.67	1.63 V	226	13.67	37.66
2	4874.00	41.90 AV	54.00	-12.10	1.63 V	226	4.24	37.66
3	7311.00	58.83 PK	74.00	-15.17	1.42 V	107	14.50	44.33
3	7311.00	43.90 AV	54.00	-10.10	1.42 V	107	-0.43	44.33

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	6	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Y
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	100.20 PK			1.36 H	89	68.35	31.85
1	*2437.00	94.38 AV			1.36 H	89	62.53	31.85
2	4874.00	45.36 PK	74.00	-28.64	1.09 H	214	7.70	37.66
3	7311.00	52.92 PK	74.00	-21.08	1.32 H	309	8.60	44.33
3	7311.00	40.98 AV	54.00	-13.02	1.32 H	309	-3.35	44.33

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	95.61 PK			1.38 V	329	63.76	31.85
1	*2437.00	89.67 AV			1.38 V	329	57.82	31.85
2	4874.00	51.30 PK	74.00	-22.70	1.40 V	227	13.64	37.66
2	4874.00	40.63 AV	54.00	-13.37	1.40 V	227	2.97	37.66
3	7311.00	54.90 PK	74.00	-19.10	1.74 V	287	10.57	44.33
3	7311.00	42.85 AV	54.00	-11.15	1.74 V	287	-1.48	44.33

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	6	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Z
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	100.02 PK			1.16 H	122	68.17	31.85
1	*2437.00	94.32 AV			1.16 H	122	62.47	31.85
2	4874.00	43.89 PK	74.00	-30.11	1.03 H	136	6.23	37.66
3	7311.00	52.39 PK	74.00	-21.61	1.17 H	248	8.06	44.33
3	7311.00	41.03 AV	54.00	-12.97	1.17 H	248	-3.30	44.33

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	96.38 PK			1.36 V	310	64.53	31.85
1	*2437.00	90.12 AV			1.36 V	310	58.27	31.85
2	4874.00	51.33 PK	74.00	-22.67	1.62 V	274	13.67	37.66
2	4874.00	40.39 AV	54.00	-13.61	1.62 V	274	2.73	37.66
3	7311.00	57.36 PK	74.00	-16.64	1.36 V	349	13.03	44.33
3	7311.00	43.97 AV	54.00	-10.03	1.36 V	349	-0.36	44.33

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	X
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	99.85 PK			1.25 H	9	67.85	32.00
1	*2462.00	94.42 AV			1.25 H	9	62.42	32.00
2	2483.50	47.59 PK	74.00	-26.41	1.25 H	9	15.46	32.13
3	4924.00	45.50 PK	74.00	-28.50	1.09 H	248	7.76	37.74
4	7386.00	53.92 PK	74.00	-20.08	1.16 H	208	9.35	44.57
4	7386.00	40.33 AV	54.00	-13.67	1.16 H	208	-4.24	44.57

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	96.35 PK			1.18 V	314	64.35	32.00
1	*2462.00	89.56 AV			1.18 V	314	57.56	32.00
2	2483.50	44.09 PK	74.00	-29.91	1.18 V	314	11.96	32.13
3	4924.00	50.63 PK	74.00	-23.37	1.06 V	228	12.89	37.74
3	4924.00	40.95 AV	54.00	-13.05	1.06 V	228	3.21	37.74
4	7386.00	56.87 PK	74.00	-17.13	1.16 V	32	12.30	44.57
4	7386.00	43.33 AV	54.00	-10.67	1.16 V	32	-1.24	44.57

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Y
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	100.48 PK			1.31 H	95	68.48	32.00
1	*2462.00	95.86 AV			1.31 H	95	63.86	32.00
2	2483.50	48.22 PK	74.00	-25.78	1.31 H	95	16.09	32.13
3	4924.00	45.26 PK	74.00	-28.74	1.32 H	107	7.52	37.74
4	7386.00	51.90 PK	74.00	-22.10	1.04 H	176	7.33	44.57
4	7386.00	40.20 AV	54.00	-13.80	1.04 H	176	-4.37	44.57

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	95.74 PK			1.63 V	334	63.74	32.00
1	*2462.00	90.80 AV			1.63 V	334	58.80	32.00
2	2483.50	43.48 PK	74.00	-30.52	1.63 V	334	11.35	32.13
3	4924.00	49.30 PK	74.00	-24.70	1.74 V	25	11.56	37.74
4	7386.00	54.82 PK	74.00	-19.18	1.62 V	312	10.25	44.57
4	7386.00	41.30 AV	54.00	-12.70	1.62 V	312	-3.27	44.57

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

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
CHANNEL	11	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 67% RH, 991 hPa	**AXIS**	Z
TESTED BY	Long Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	99.84 PK			1.18 H	126	67.84	32.00
1	*2462.00	93.20 AV			1.18 H	126	61.20	32.00
2	2483.50	47.58 PK	74.00	-26.42	1.18 H	126	15.45	32.13
3	4924.00	45.36 PK	74.00	-28.64	1.36 H	229	7.62	37.74
4	7386.00	52.63 PK	74.00	-21.37	1.06 H	278	8.06	44.57
4	7386.00	41.80 AV	54.00	-12.20	1.06 H	278	-2.77	44.57

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	96.24 PK			1.29 V	338	64.24	32.00
1	*2462.00	89.48 AV			1.29 V	338	57.48	32.00
2	2483.50	43.98 PK	74.00	-30.02	1.29 V	338	11.85	32.13
3	4924.00	48.33 PK	74.00	-25.67	1.17 V	358	10.59	37.74
4	7386.00	55.41 PK	74.00	-18.59	1.33 V	127	10.84	44.57
4	7386.00	42.39 AV	54.00	-11.61	1.33 V	127	-2.18	44.57

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

4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

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

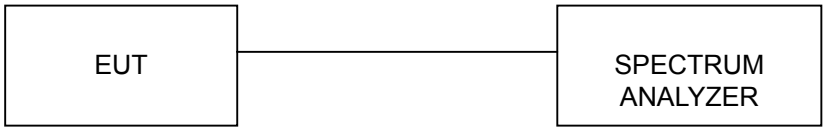
4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 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.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



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

4.3.6 EUT OPERATING CONDITIONS

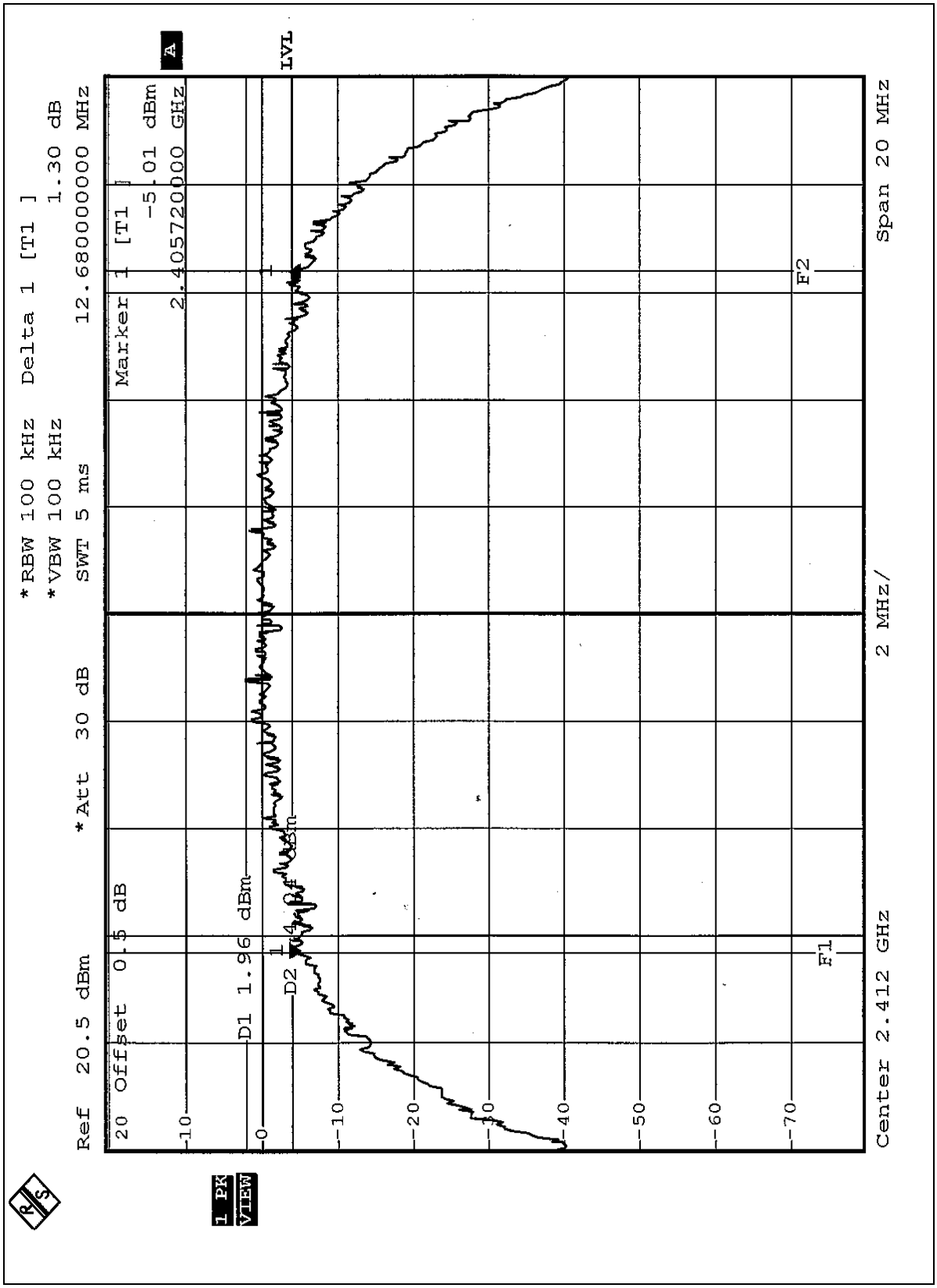
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS (A)

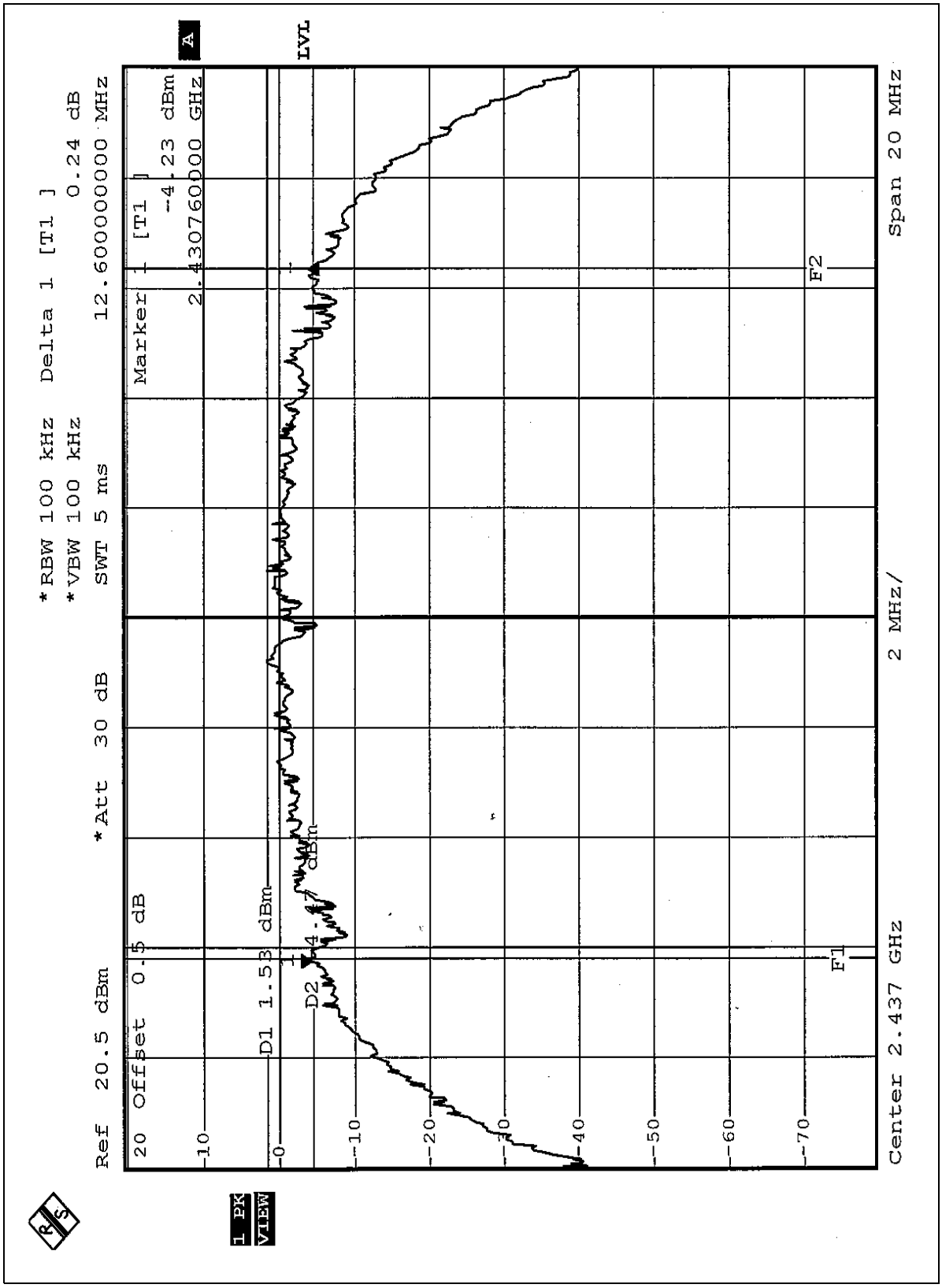
EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	12.68	0.5	PASS
6	2437	12.60	0.5	PASS
11	2462	12.64	0.5	PASS

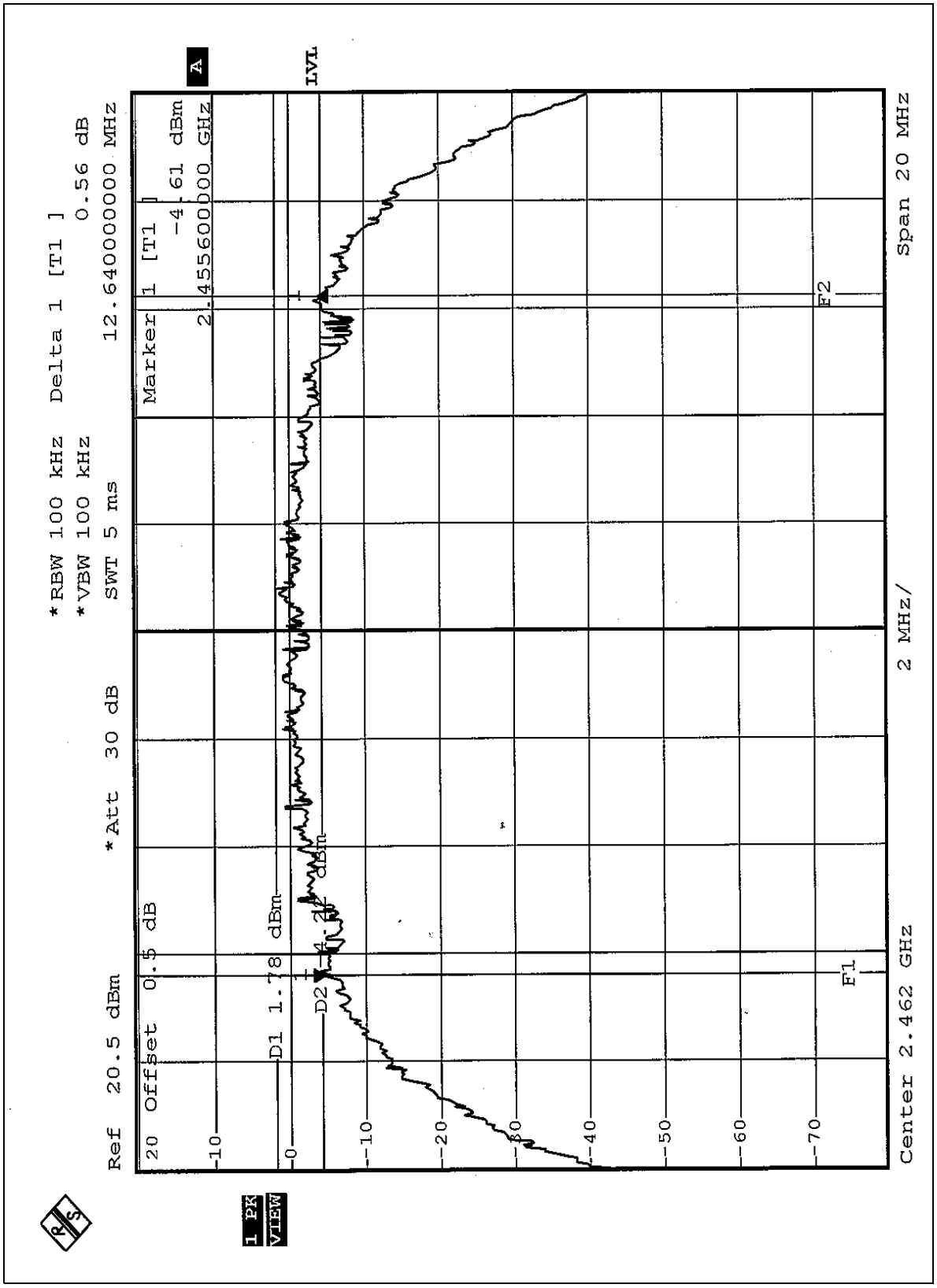
CH1


Ref 20.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
1.30 dB
12.680000000 MHz
Marker 1 [T1]
-5.01 dBm
2.405720000 GHz
D1 1.96 dBm
D2
F1
F2
LVL
A
1 PK
VIEW
Center 2.412 GHz
2 MHz/
Span 20 MHz

CH6


Ref 20.5 dBm
20 Offset 0.5 dB
D1 1.53 dBm
D2 -4.47 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1] 0.24 dB
12.60000000 MHz
Marker 1 [T1]
-4.23 dBm
2.430760000 GHz
A
LVL
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz
1 PK
VIEW

CH11

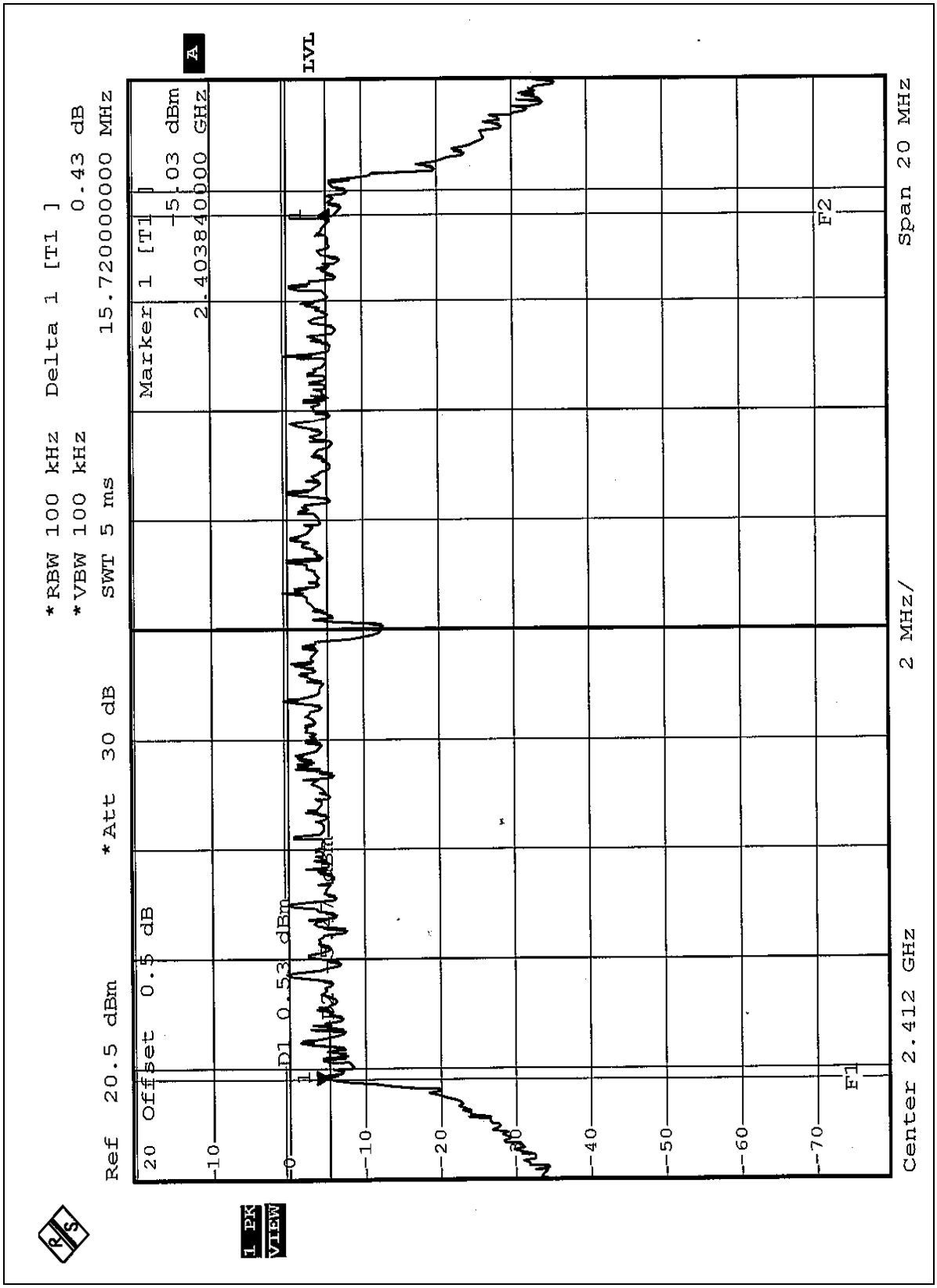

Ref 20.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
0.56 dB
12.640000000 MHz
Marker 1 [T1]
-4.61 dBm
2.455600000 GHz
D1 1.78 dBm
D2 -4.22 dBm
F1
F2
LVL
A
1 PK
VIEW
Center 2.462 GHz
2 MHz/
Span 20 MHz

4.3.8 TEST RESULTS (B)

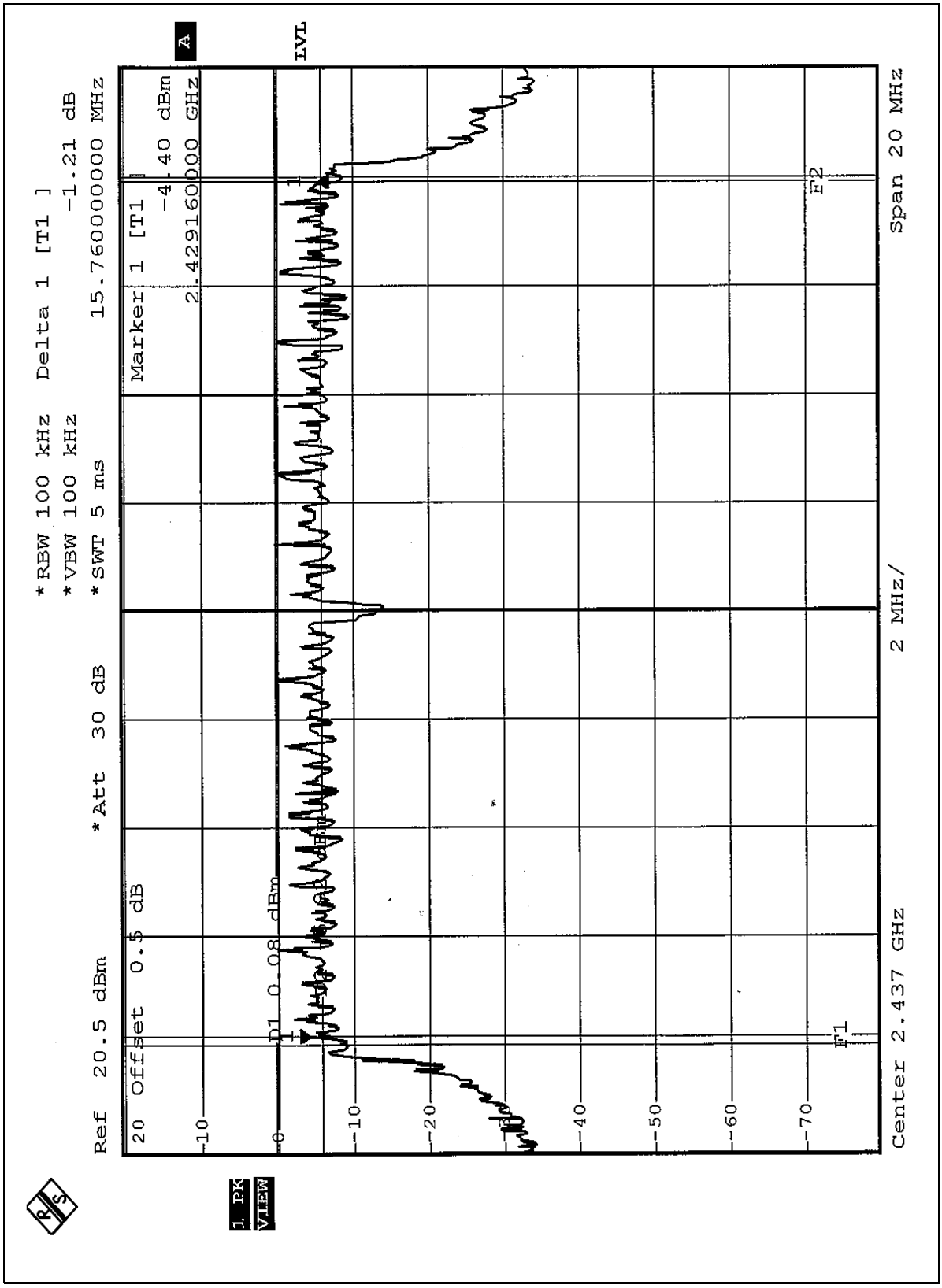
EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	15.72	0.5	PASS
6	2437	15.76	0.5	PASS
11	2462	15.76	0.5	PASS

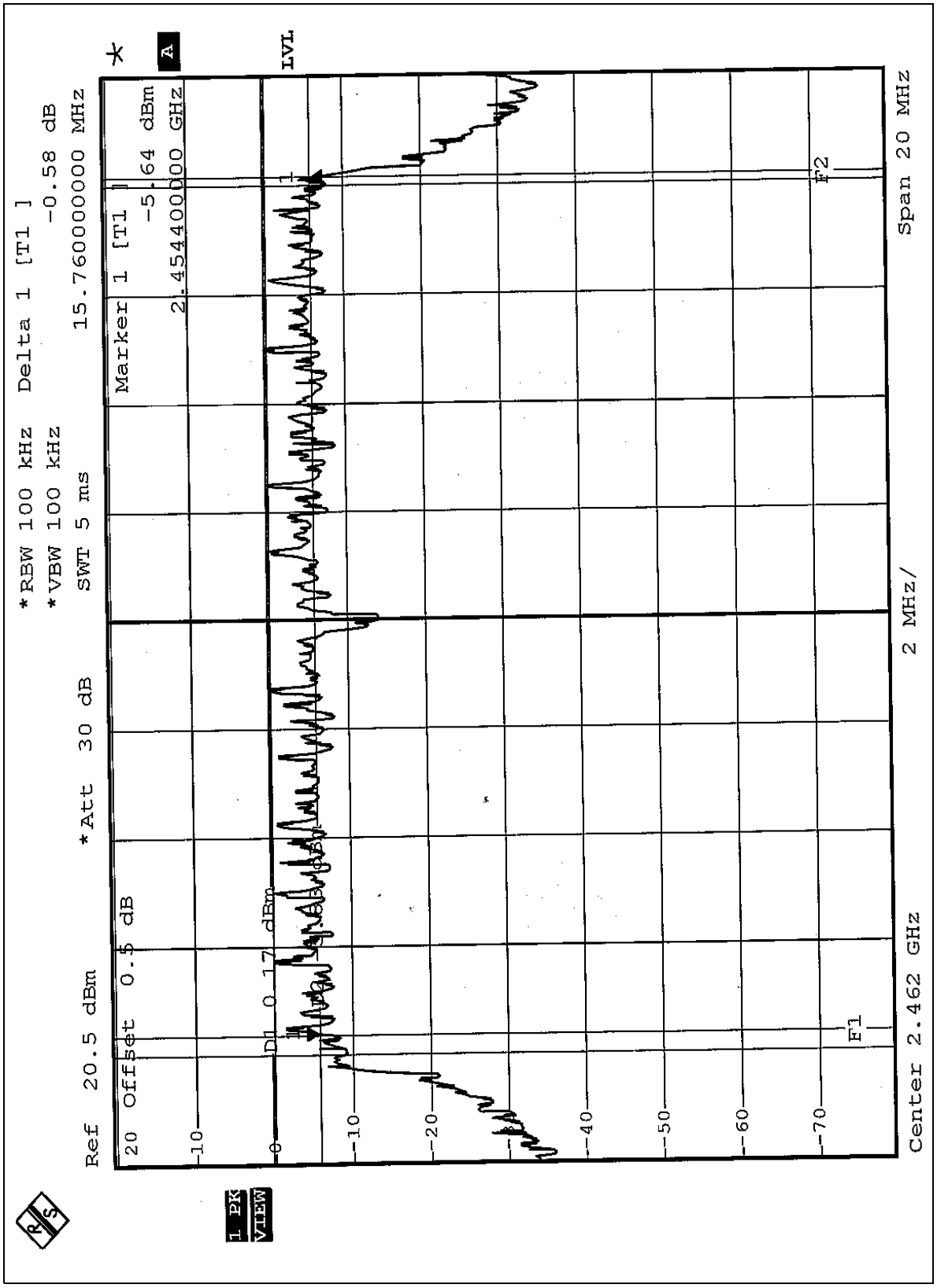
CH1


Ref 20.5 dBm
20 Offset 0.5 dB
D1 0.53 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
0.43 dB
15.720000000 MHz
Marker 1 [T1]
-5.03 dBm
2.403840000 GHz
A
LVL
1 PK
VIEW
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz

CH6


Ref 20.5 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
*SWT 5 ms
Delta 1 [T1]
-1.21 dB
15.760000000 MHz
Marker 1 [T1]
-4.40 dBm
2.429160000 GHz
20 Offset 0.5 dB
D1 0.08 dBm
IVL
A
1 PK
VIEW
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
-0.58 dB
15.760000000 MHz
Marker 1 [T1]
-5.64 dBm
2.454400000 GHz
Ref 20.5 dBm
*Att 30 dB
Offset 0.5 dB
D1 0.17 dBm
Center 2.462 GHz
2 MHz/
Span 20 MHz
F1
F2
LVL
1 PK
VIEW

4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 31, 2004
TEKTRONIX OSCILLOSCOPE	TDS 1012	C019167	Feb. 01, 2005
NARDA DETECTOR	4503A	FSCM99899	NA

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

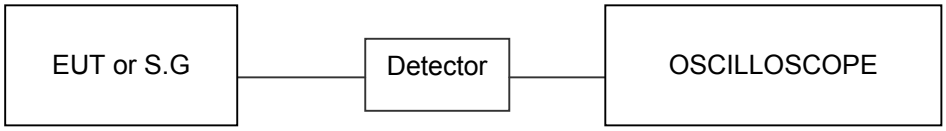
4.4.3 TEST PROCEDURES

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

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.4.7 TEST RESULTS (A)

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	17.783	12.50	30	PASS
6	2437	17.906	12.53	30	PASS
11	2462	17.824	12.51	30	PASS

4.4.8 TEST RESULTS (B)

EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	17.579	12.45	30	PASS
6	2437	17.701	12.48	30	PASS
11	2462	17.498	12.43	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

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

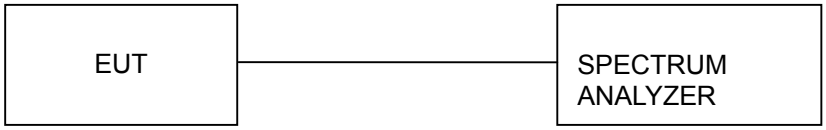
4.5.3 TEST PROCEDURE

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

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITIONS

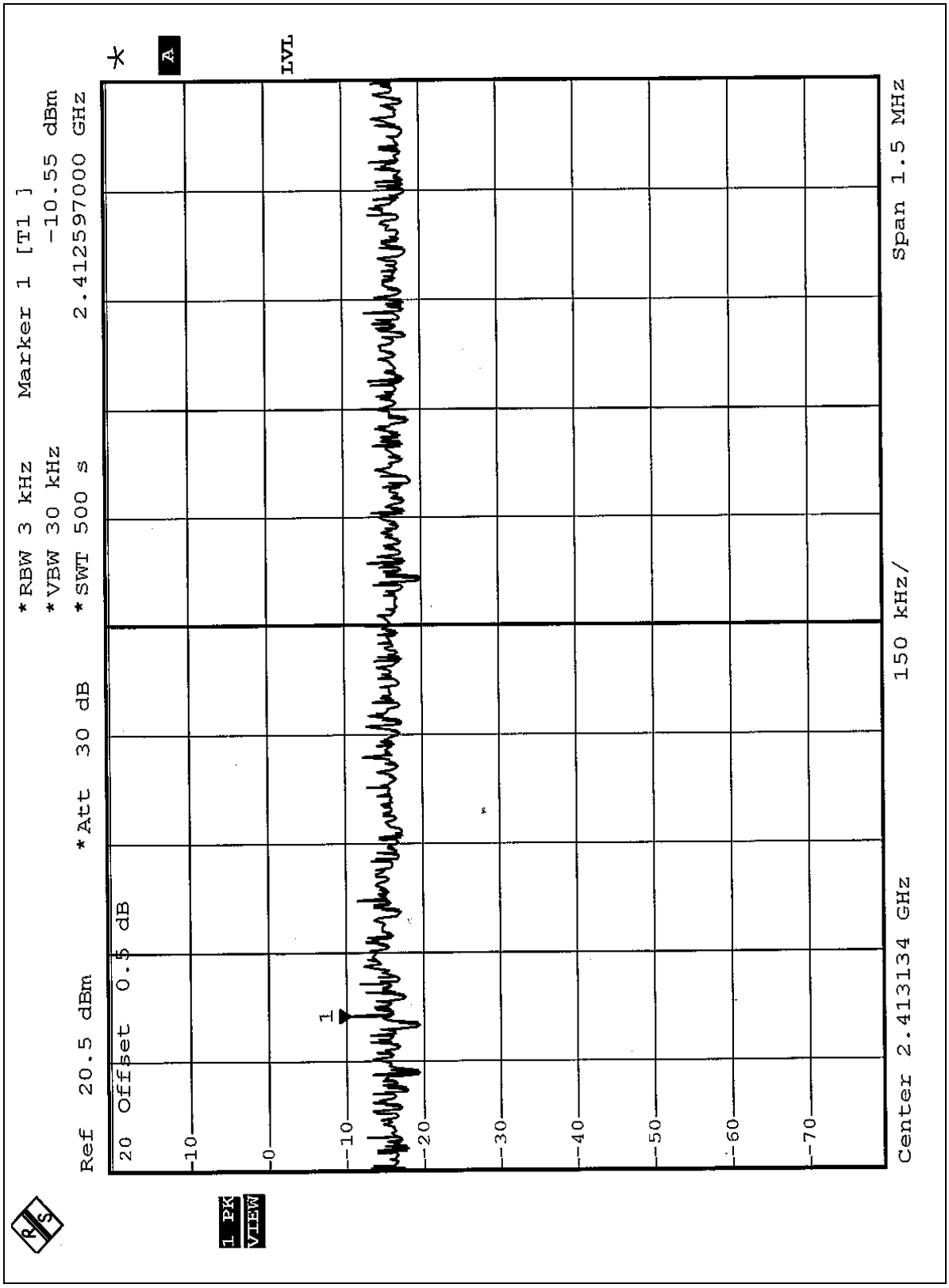
Same as 4.3.6

4.5.7 TEST RESULTS (A)

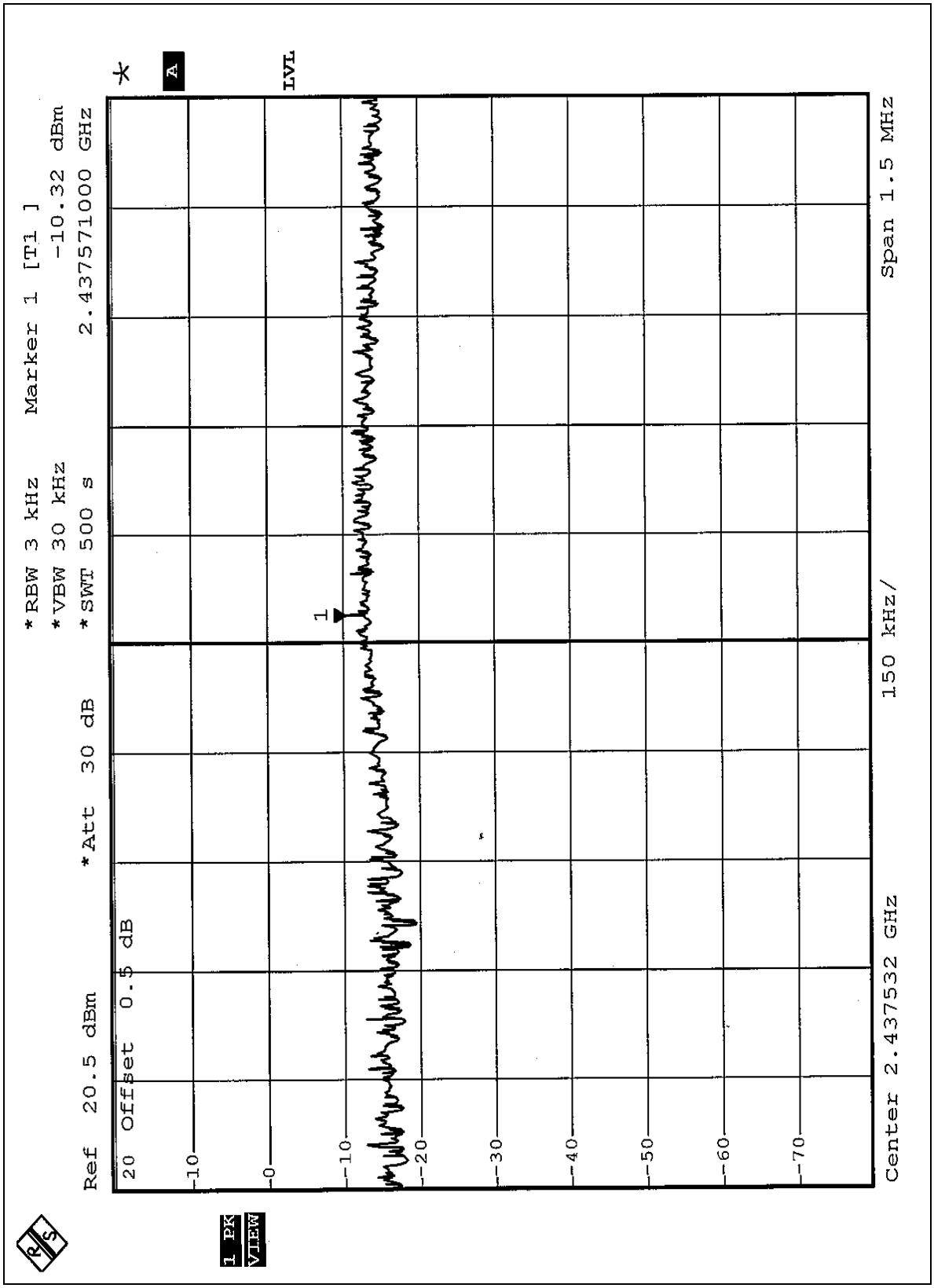
EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-10.55	8	PASS
6	2437	-10.32	8	PASS
11	2462	-10.48	8	PASS

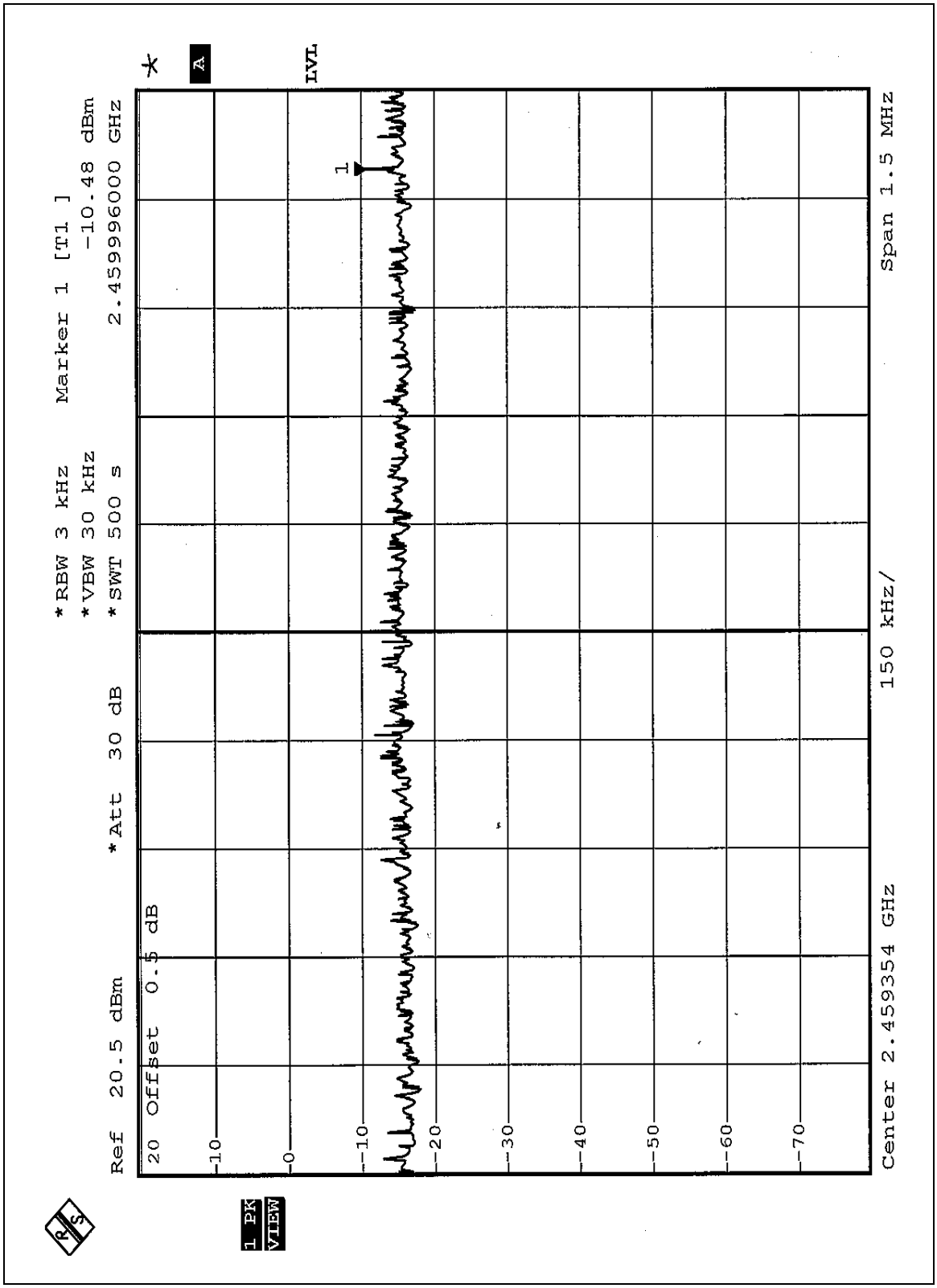
CH1


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-10.55 dBm
2.412597000 GHz
1 PK
VIEW
A
LVL
Center 2.413134 GHz
150 kHz/
Span 1.5 MHz

CH6


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-10.32 dBm
2.437571000 GHz
A
LVL
1
Center 2.437532 GHz
150 kHz/
Span 1.5 MHz
1 PK
VIEW

CH11

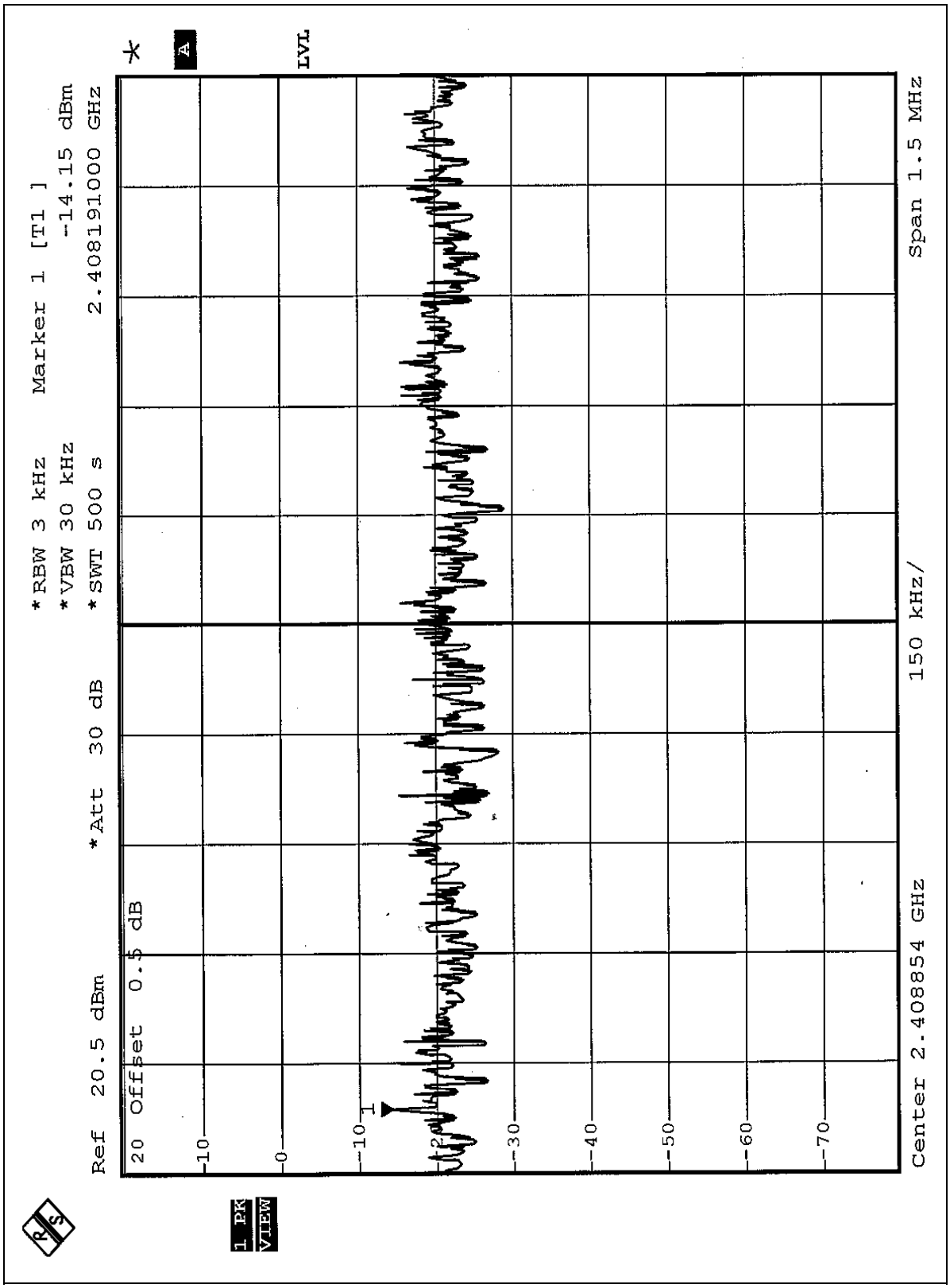

Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-10.48 dBm
2.459996000 GHz
1 PK
VIEW
A
LVL
1
Center 2.459354 GHz
150 kHz/
Span 1.5 MHz

4.5.8 TEST RESULTS (B)

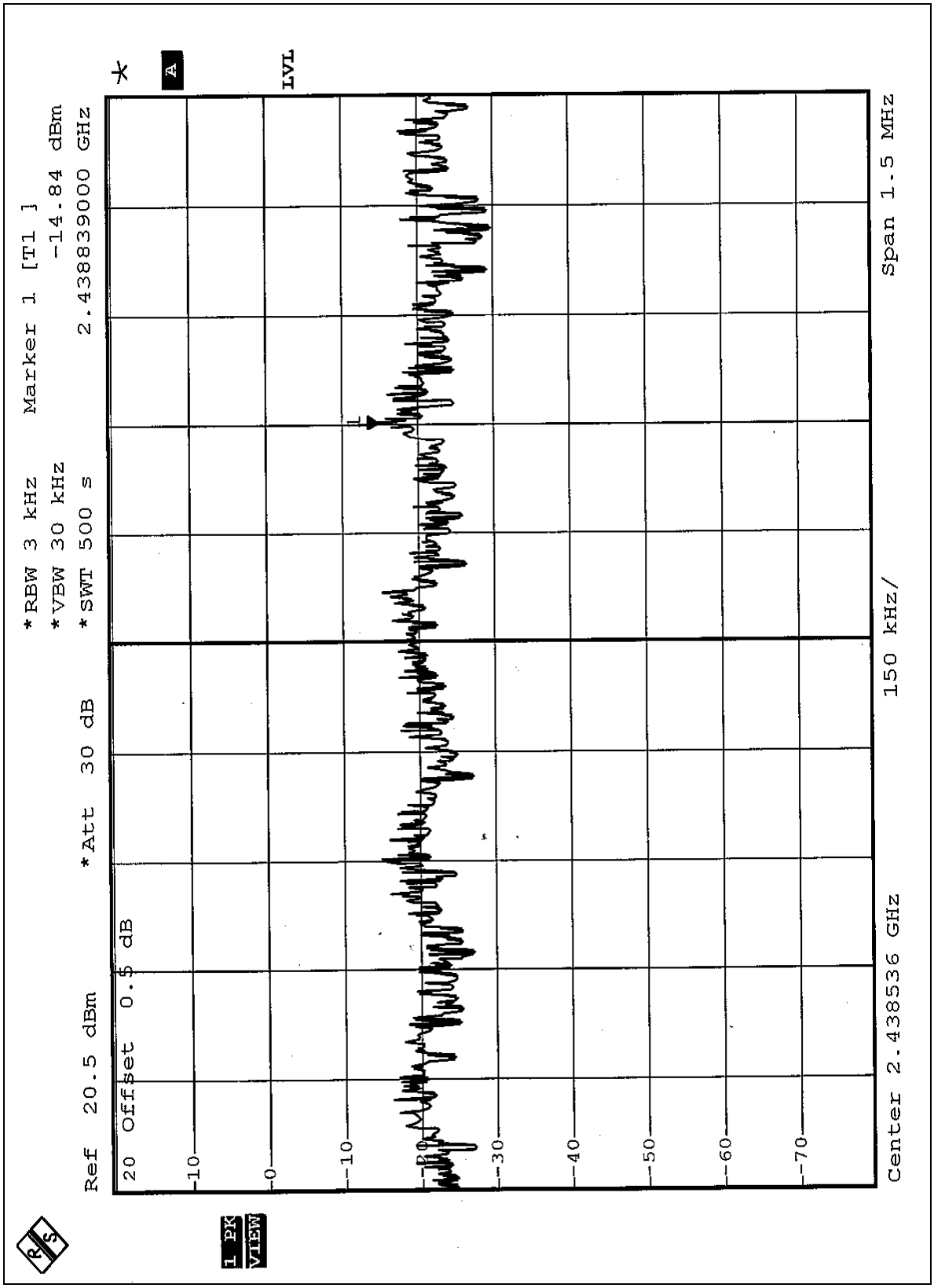
EUT	10.4” Portable Wireless Thin Client	**MODEL**	FJ25P21U1
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-14.15	8	PASS
6	2437	-14.84	8	PASS
11	2462	-14.24	8	PASS

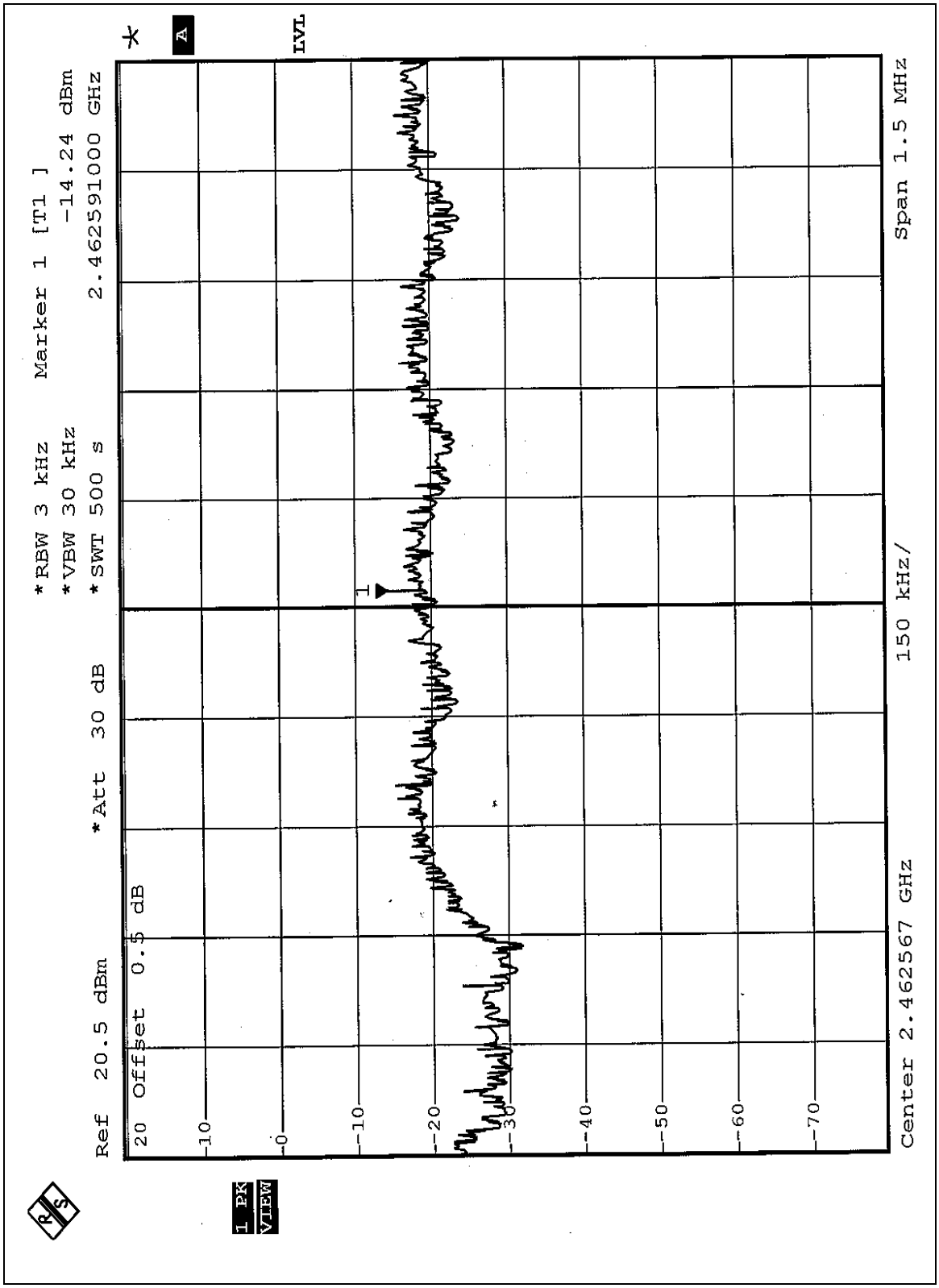
CH1


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-14.15 dBm
2.408191000 GHz
Center 2.408854 GHz
150 kHz/
Span 1.5 MHz
1 PK
VIEW
LVL
A

CH6


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-14.84 dBm
2.438839000 GHz
A
LVL
1 PK
VIEW
Center 2.438536 GHz
150 kHz/
Span 1.5 MHz

CH11


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-14.24 dBm
2.462591000 GHz
1 PK
VIEW
A
LVL
Center 2.462567 GHz
150 kHz/
Span 1.5 MHz

4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

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

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 1MHz and 10Hz with suitable frequency span including 1MHz and 10Hz bandwidth from band edge. The band edges was measured and recorded.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6

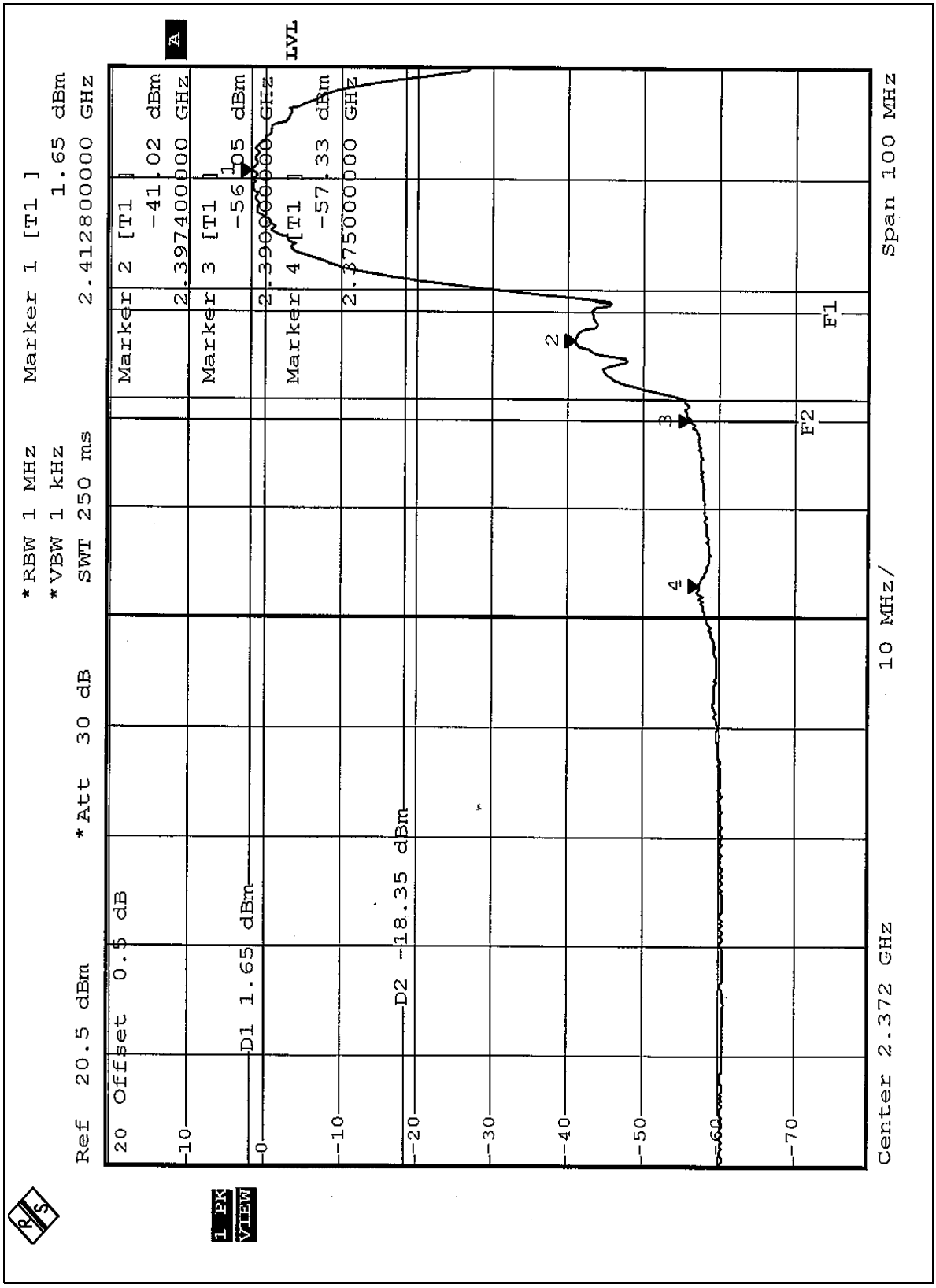
4.6.6 TEST RESULTS (A)

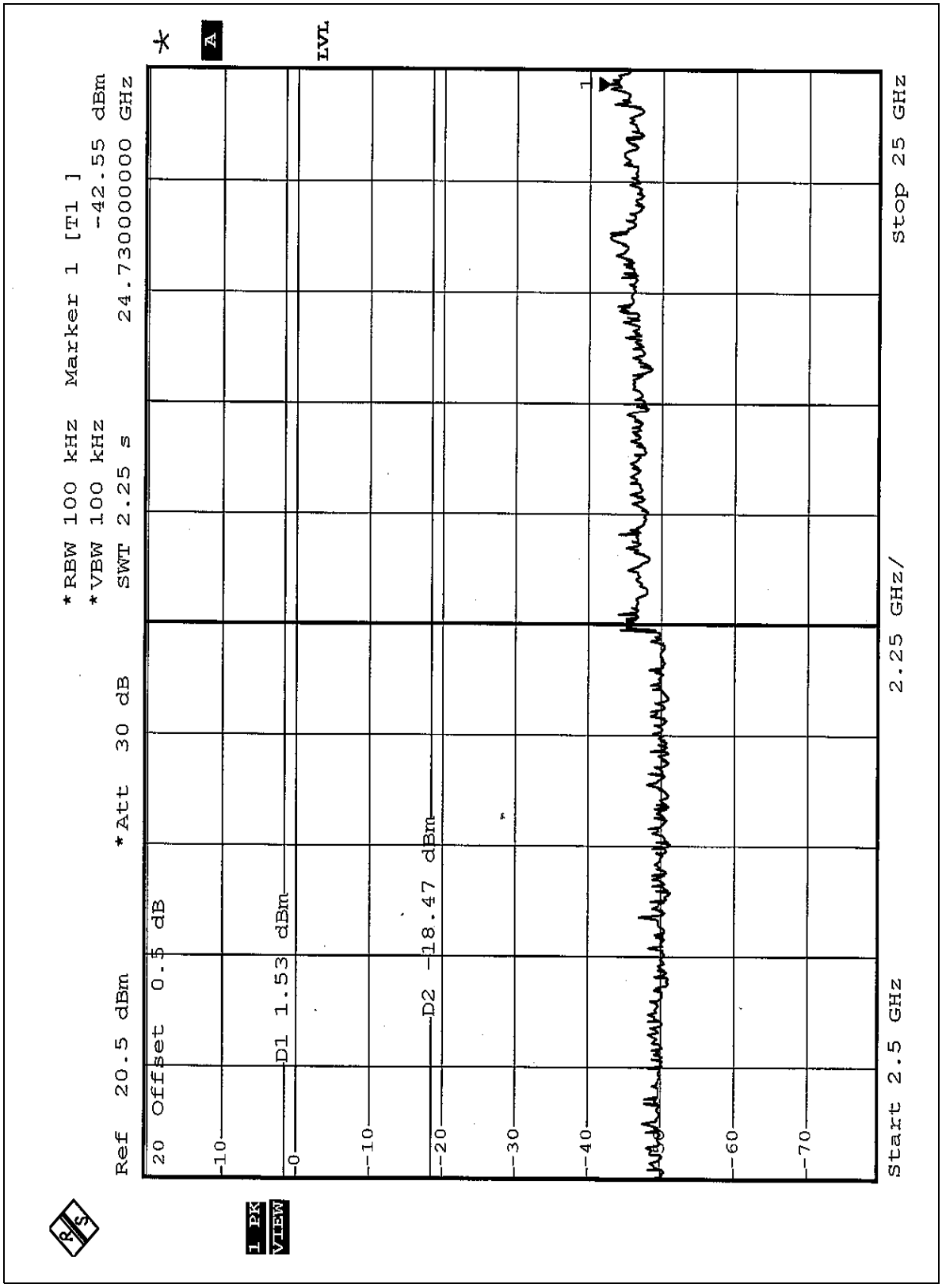
The spectrum plots are attached on the following 4 pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

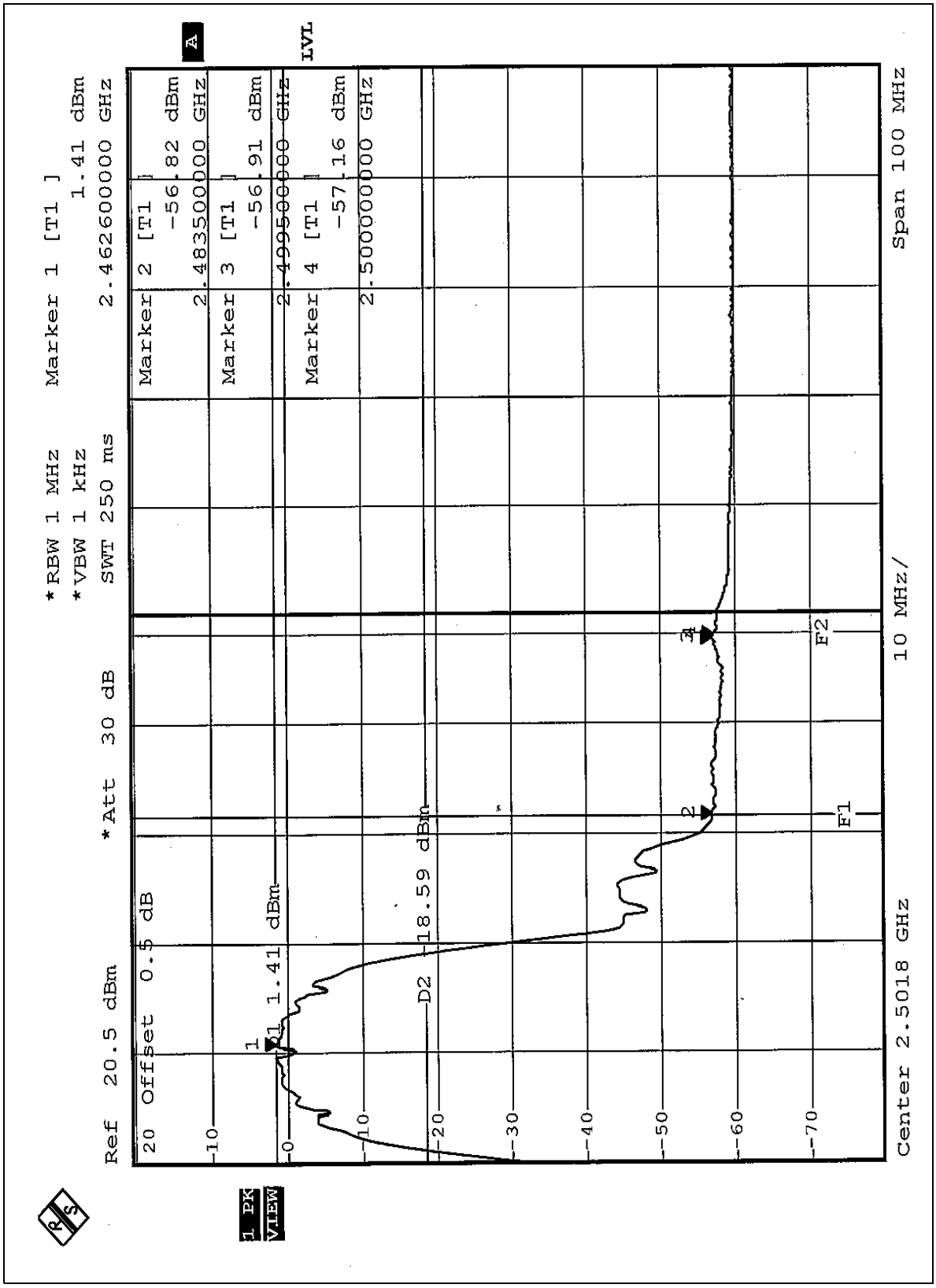
NOTE:

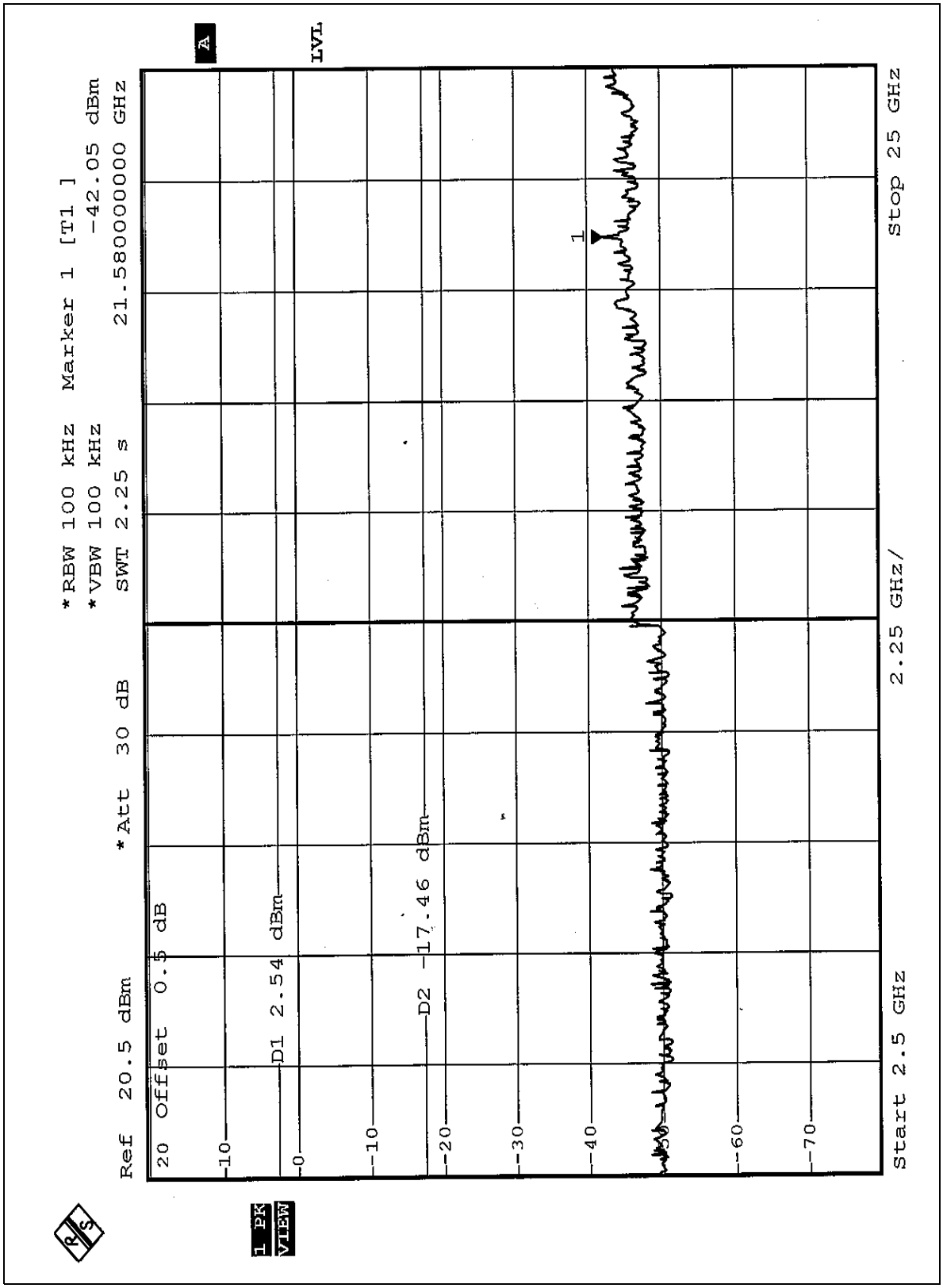
The band edge emission plot on the following 1~2 pages show 57.70dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 99.46dBuV/m, so the maximum field strength in restrict band is 99.46-57.70=41.78dBuV/m which is under 54dBuV/m limit.

The band edge emission plot on the following 3~4 pages show 58.23dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 98.93dBuV/m, so the maximum field strength in restrict band is 98.93-57.96=40.70dBuV/m which is under 54dBuV/m limit.


Ref 20.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
1.65 dBm
2.412800000 GHz
Marker 2 [T1]
-41.02 dBm
2.397400000 GHz
Marker 3 [T1]
-56.05 dBm
2.390000000 GHz
Marker 4 [T1]
-57.33 dBm
2.375000000 GHz
D1 1.65 dBm
D2 -18.35 dBm
LVL
A
1 PK
VIEW
Center 2.372 GHz
10 MHz/
Span 100 MHz
F1
F2


Ref 20.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
-42.55 dBm
24.730000000 GHz
D1 1.53 dBm
D2 -18.47 dBm
1 PK
VIEW
A
IVL
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz


Ref 20.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
1.41 dBm
2.462600000 GHz
Marker 2 [T1]
-56.82 dBm
2.483500000 GHz
Marker 3 [T1]
-56.91 dBm
2.499500000 GHz
Marker 4 [T1]
-57.16 dBm
2.500000000 GHz
1.41 dBm
D2 -18.59 dBm
F1
F2
Center 2.5018 GHz
10 MHz/
Span 100 MHz
1 PK
VIEW
LVL
A

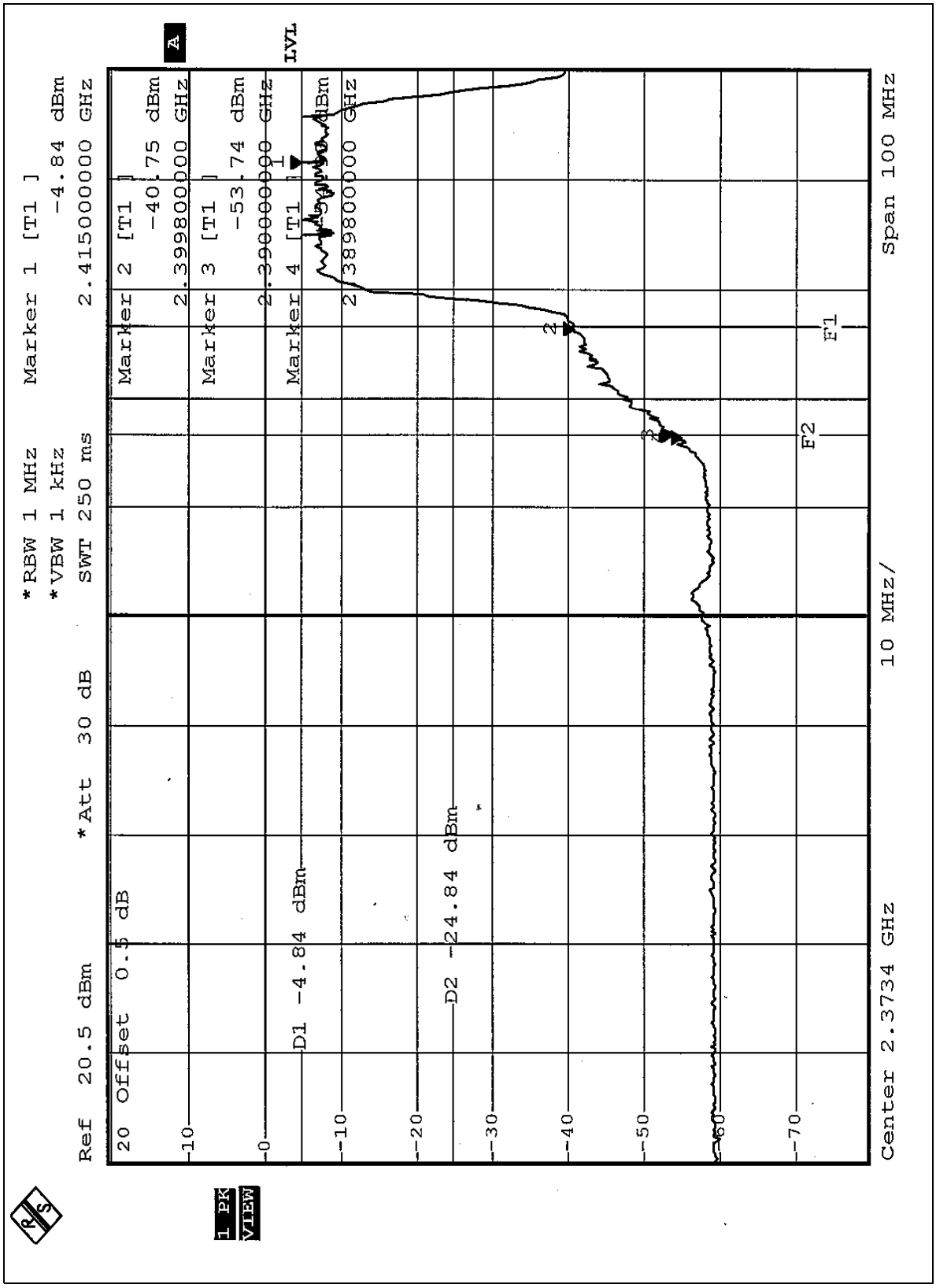

Ref 20.5 dBm
20 Offset 0.5 dB
D1 2.54 dBm
D2 -17.46 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
-42.05 dBm
21.580000000 GHz
1 PK
VIEW
A
LVL
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

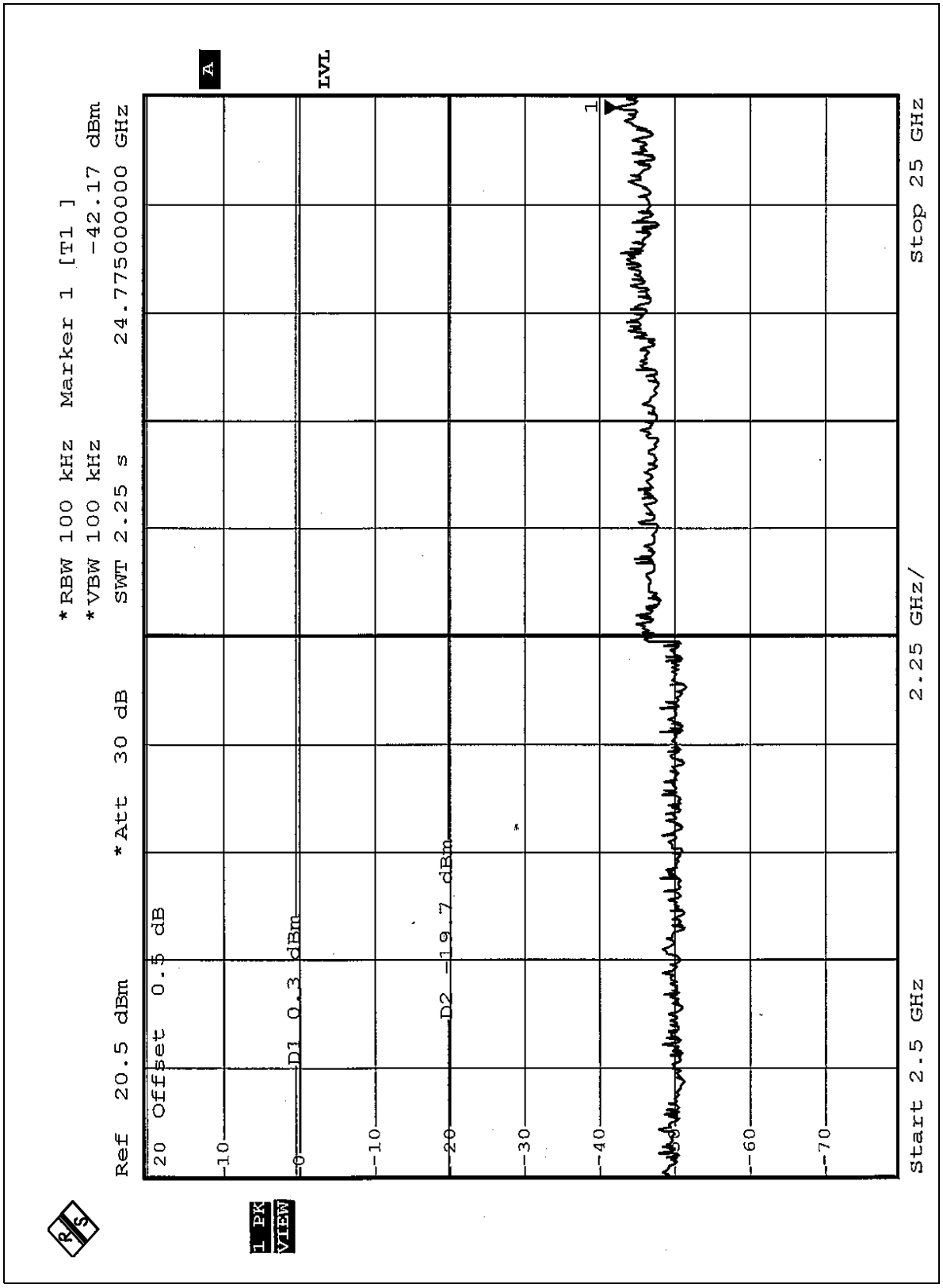
4.6.7 TEST RESULTS (B)

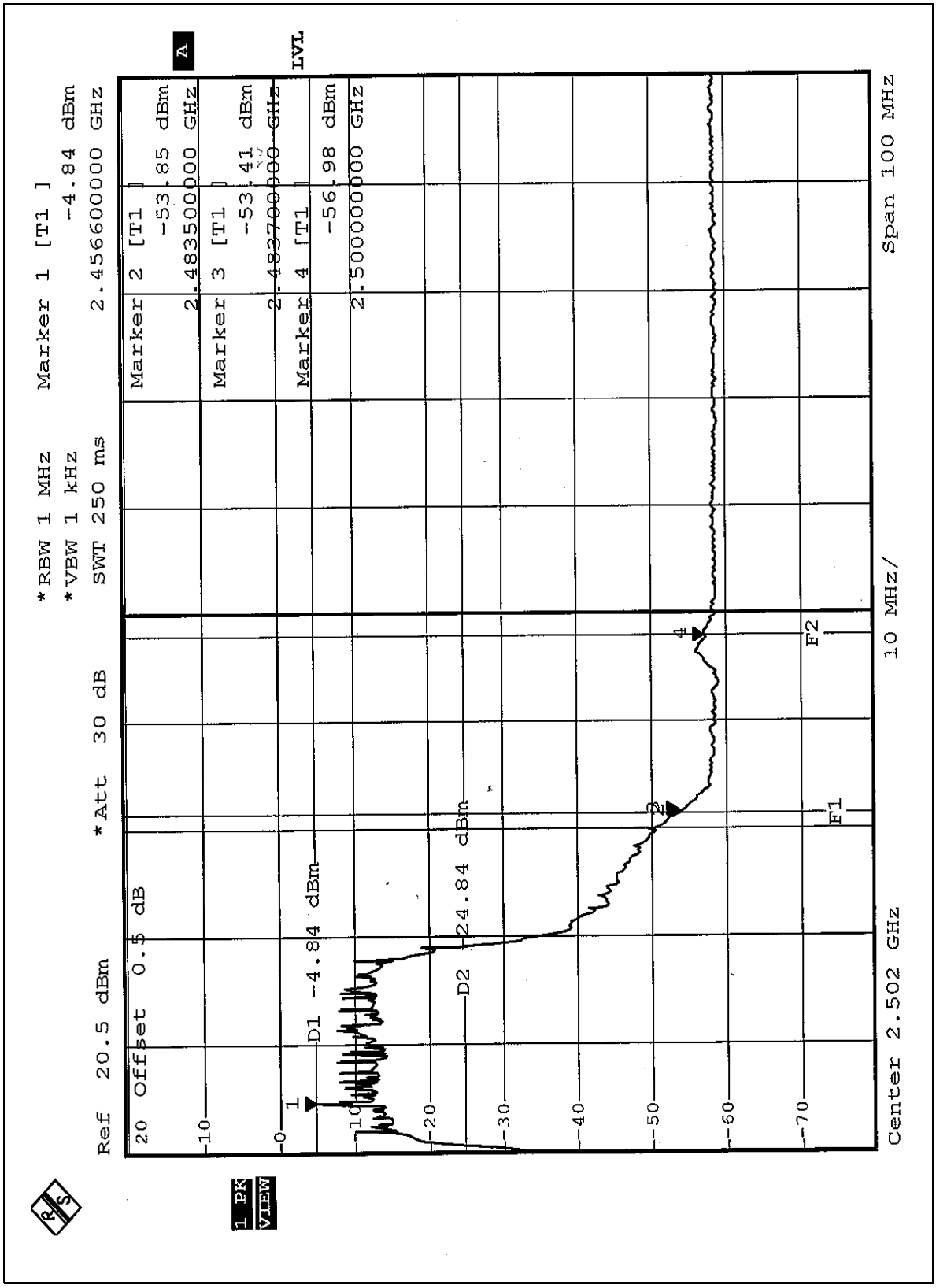
The spectrum plots are attached on the following 4 pages. D2 line indicates the highest level and D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

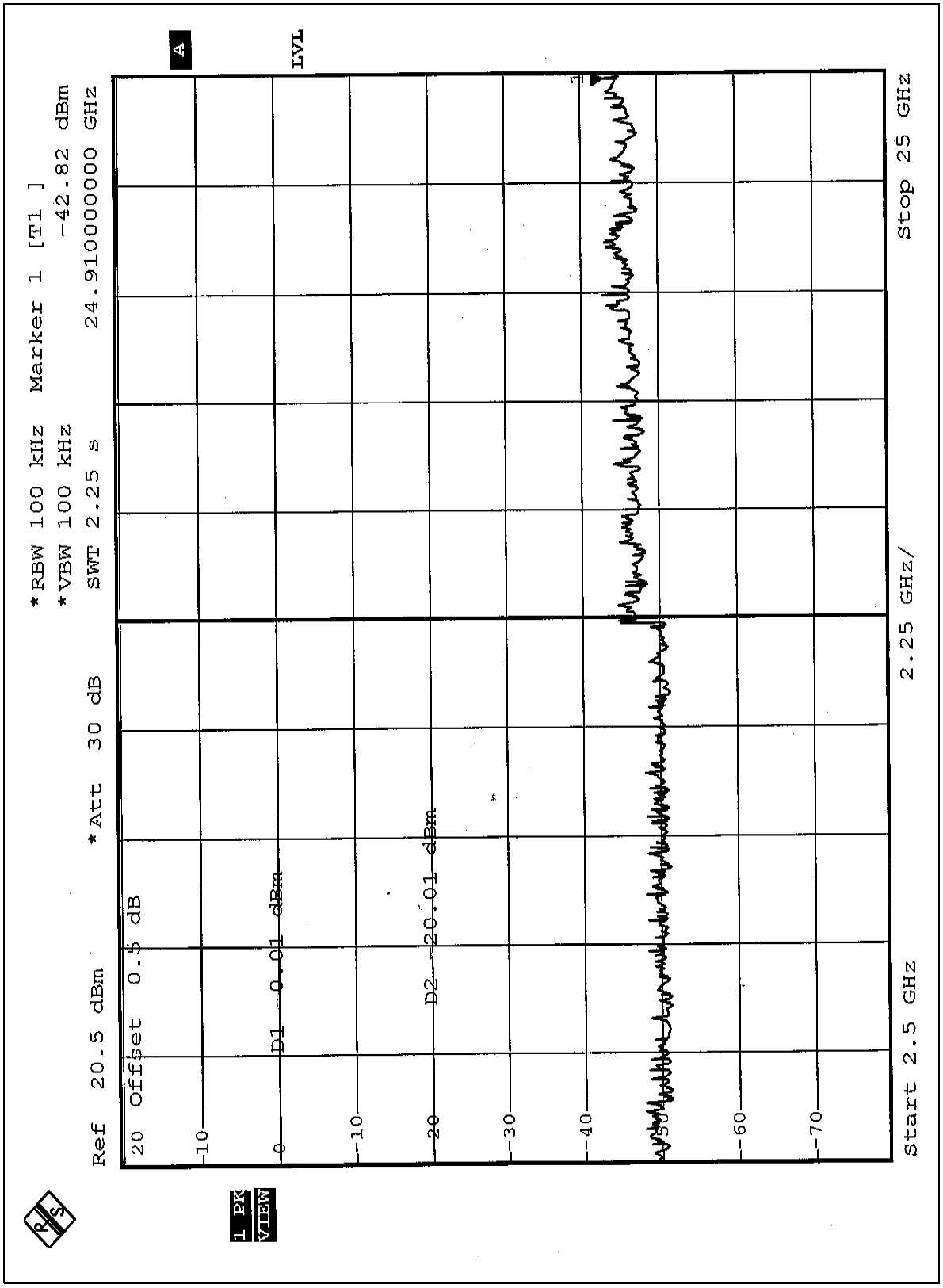
NOTE:
The band edge emission plot on the following 1~2 pages show 48.90dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 95.01dBuV/m, so the maximum field strength in restrict band is 95.01-48.90=46.11dBuV/m which is under 54dBuV/m limit.

The band edge emission plot on the following 3~4 pages show 48.57dB delta between carrier maximum power and local maximum emission in restrict band (2.4837GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 95.86dBuV/m, so the maximum field strength in restrict band is 95.86-48.57=47.29dBuV/m which is under 54dBuV/m limit.


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
-4.84 dBm
2.415000000 GHz
Marker 2 [T1]
-40.75 dBm
2.399800000 GHz
Marker 3 [T1]
-53.74 dBm
2.390000000 GHz
Marker 4 [T1]
dBm
2.389800000 GHz
D1 -4.84 dBm
D2 -24.84 dBm
LVL
A
1 PK
VIEW
F1
F2
Center 2.3734 GHz
10 MHz/
Span 100 MHz


Ref 20.5 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
-42.17 dBm
24.775000000 GHz
20 Offset 0.5 dB
D1 0.3 dBm
D2 -19.7 dBm
A
LVL
1 PK
VIEW
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
-4.84 dBm
2.456600000 GHz
Marker 2 [T1]
-53.85 dBm
2.483500000 GHz
Marker 3 [T1]
-53.41 dBm
2.483700000 GHz
Marker 4 [T1]
-56.98 dBm
2.500000000 GHz
A
LVL
D1 -4.84 dBm
D2 -24.84 dBm
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz
1 PK
VIEW


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
-42.82 dBm
24.910000000 GHz
D1 -0.01 dBm
D2 -20.01 dBm
A
LVL
1 PK
VIEW
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.
And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 ANTENNA CONNECTED CONSTRUCTION

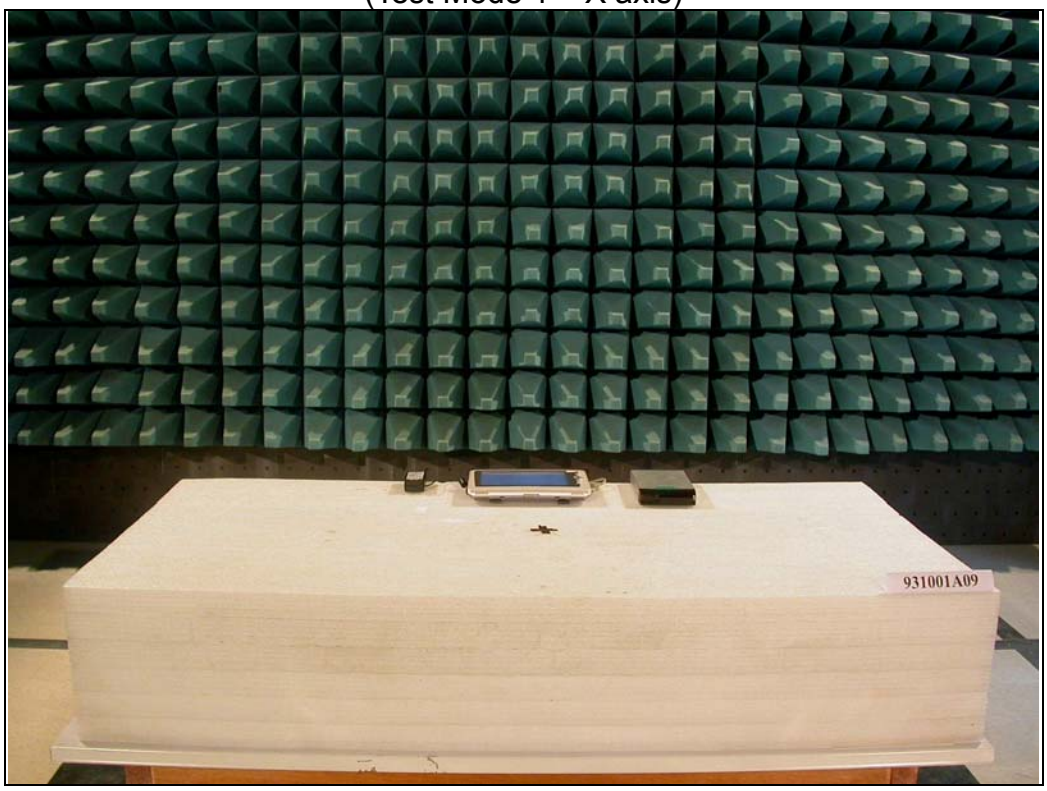
The antenna used in this product is PIFA antenna with UFL connector. And the maximum Gain of this antenna is 0.84dBi.

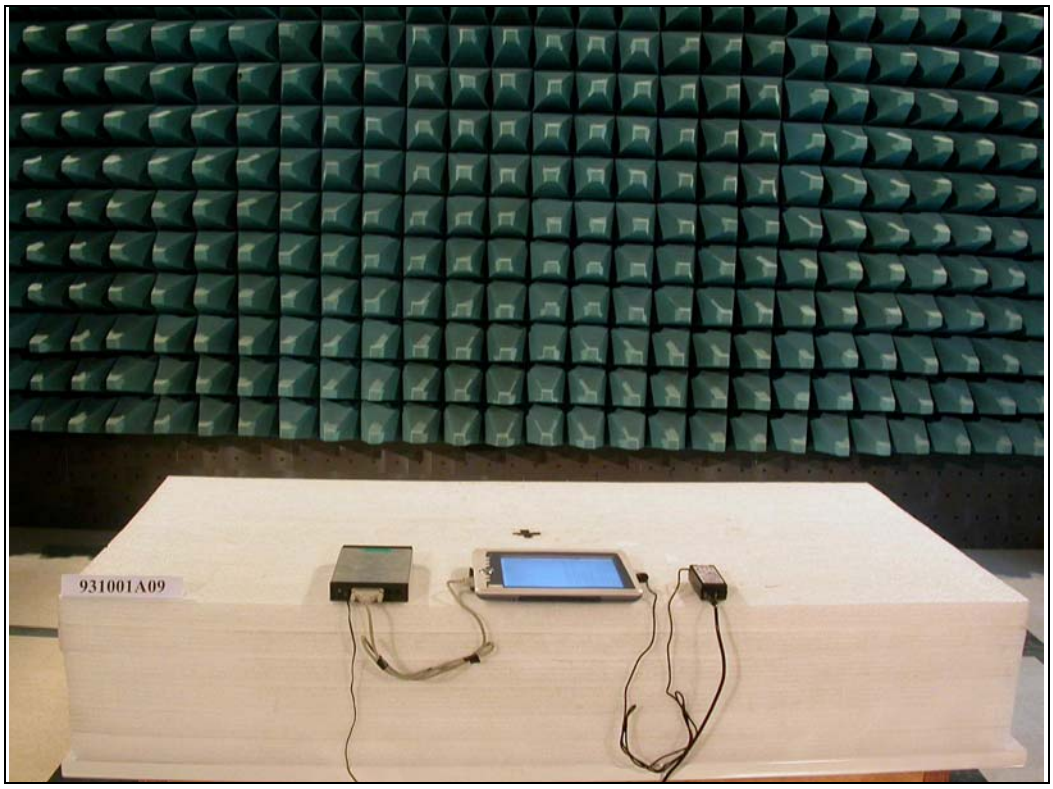
5 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST
(Test Mode 1)

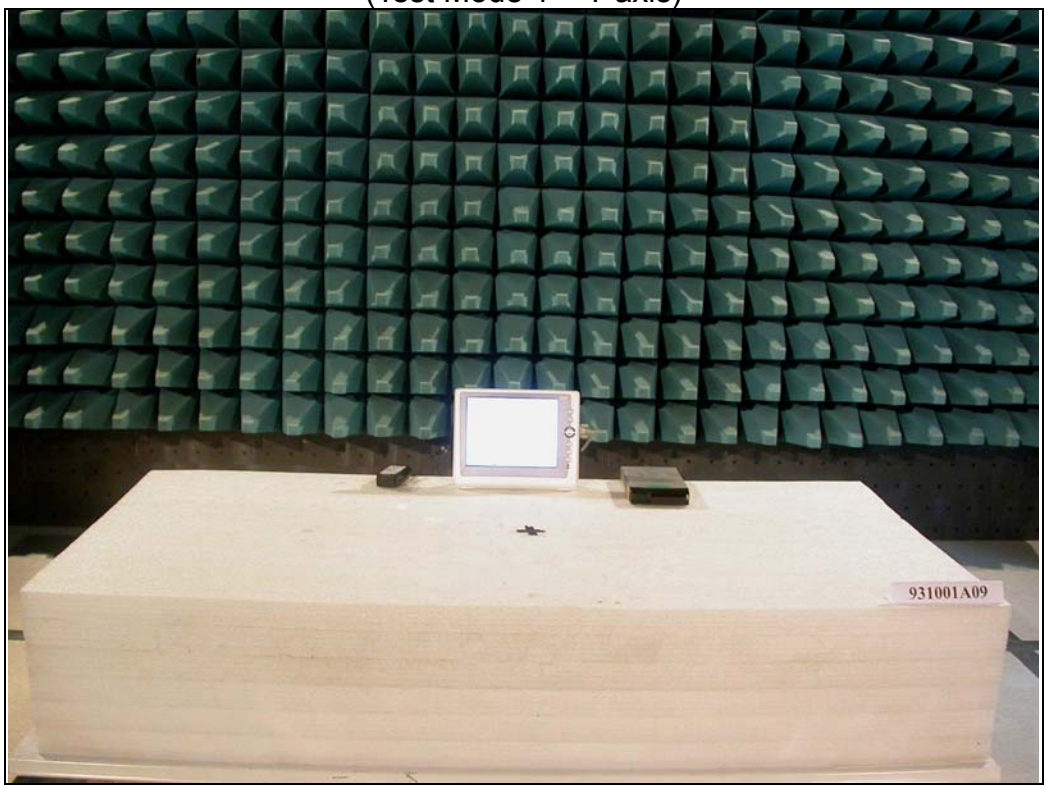
(Test Mode 2)

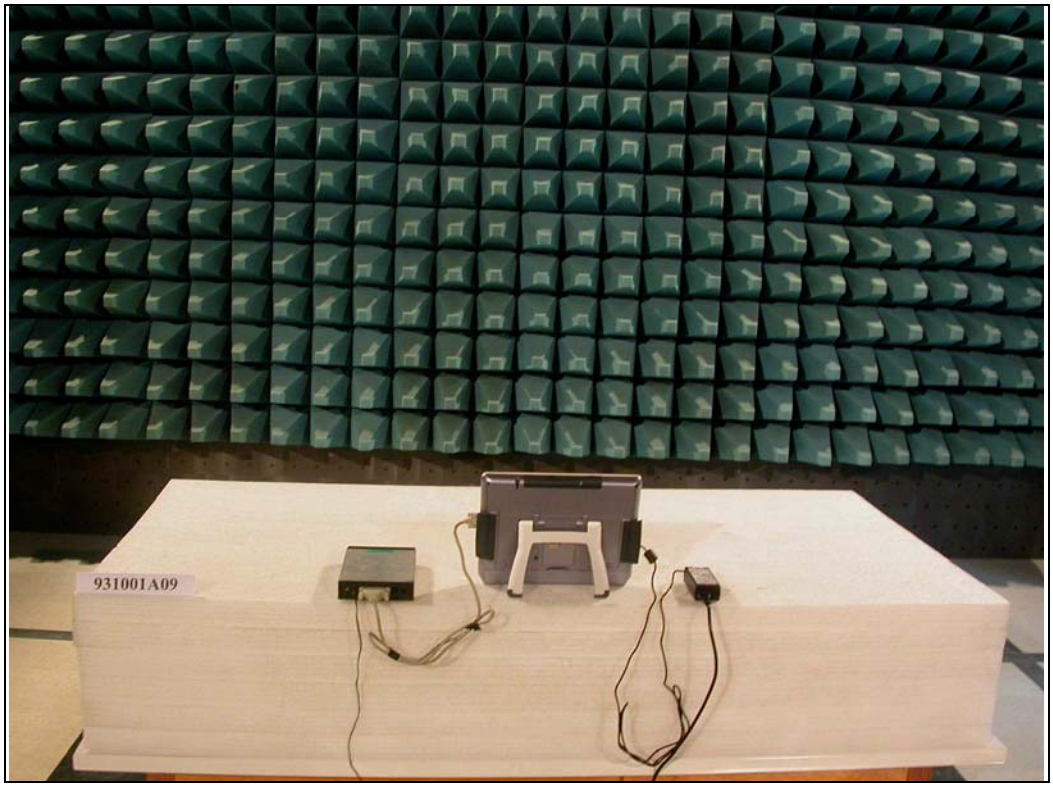
RADIATED EMISSION TEST
(Test Mode 1 – X axis)



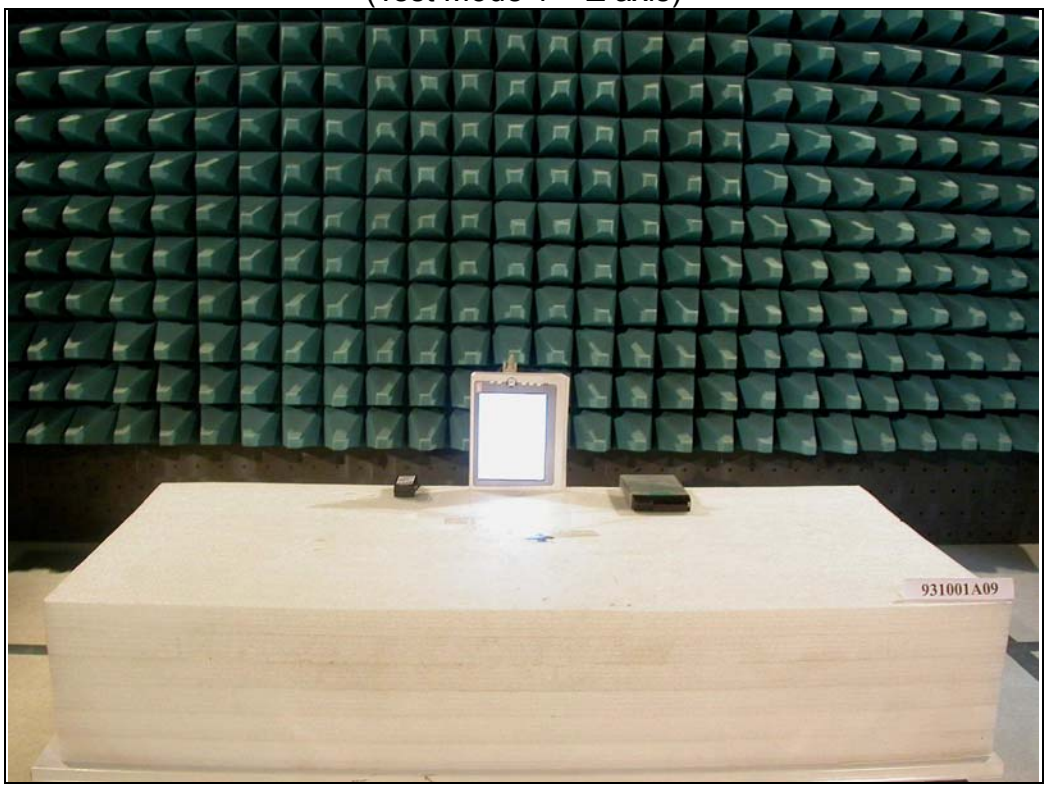


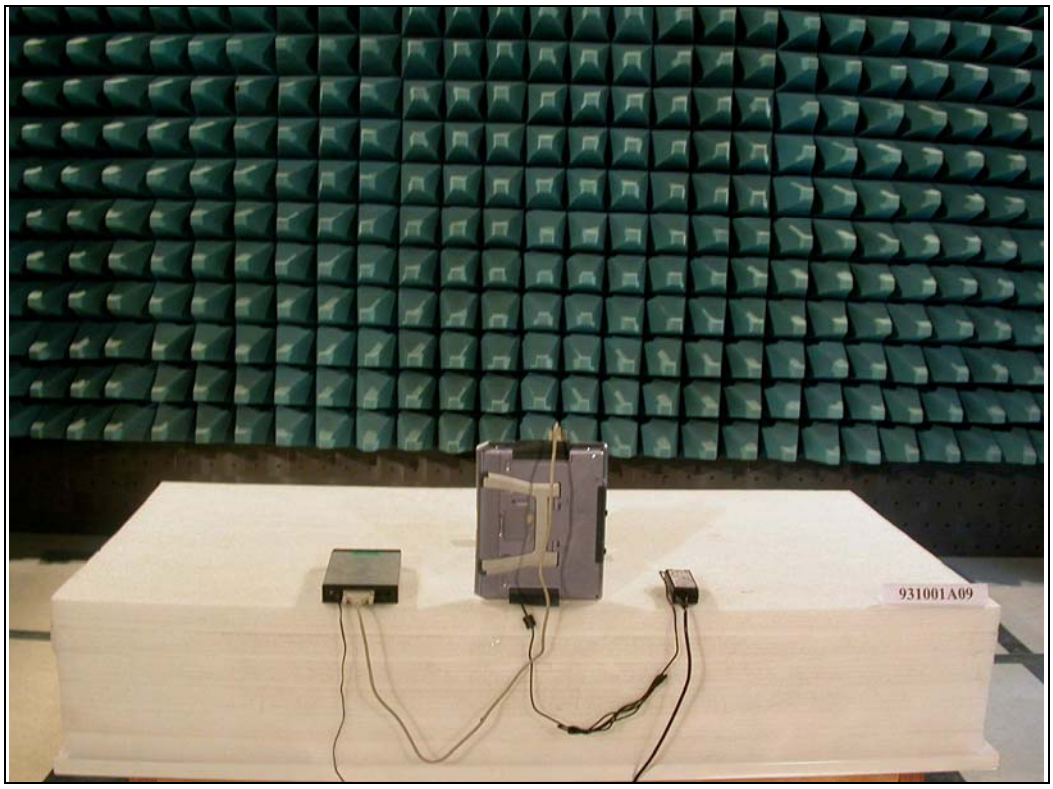
(Test Mode 1 – Y axis)



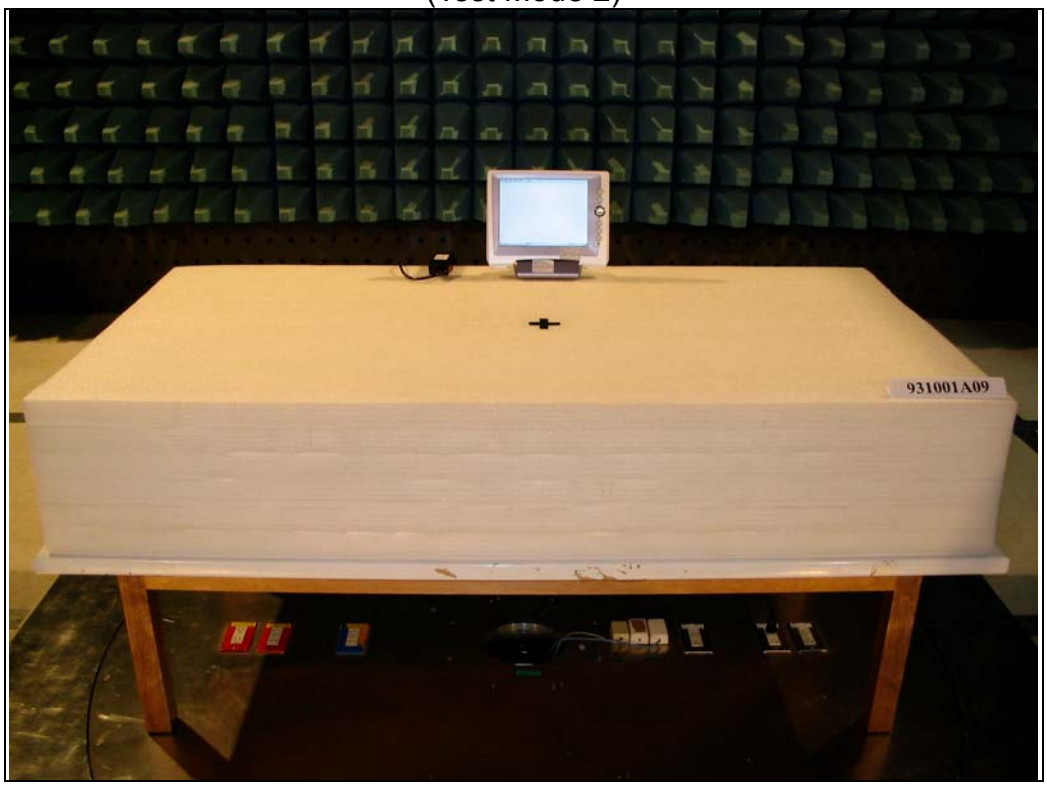


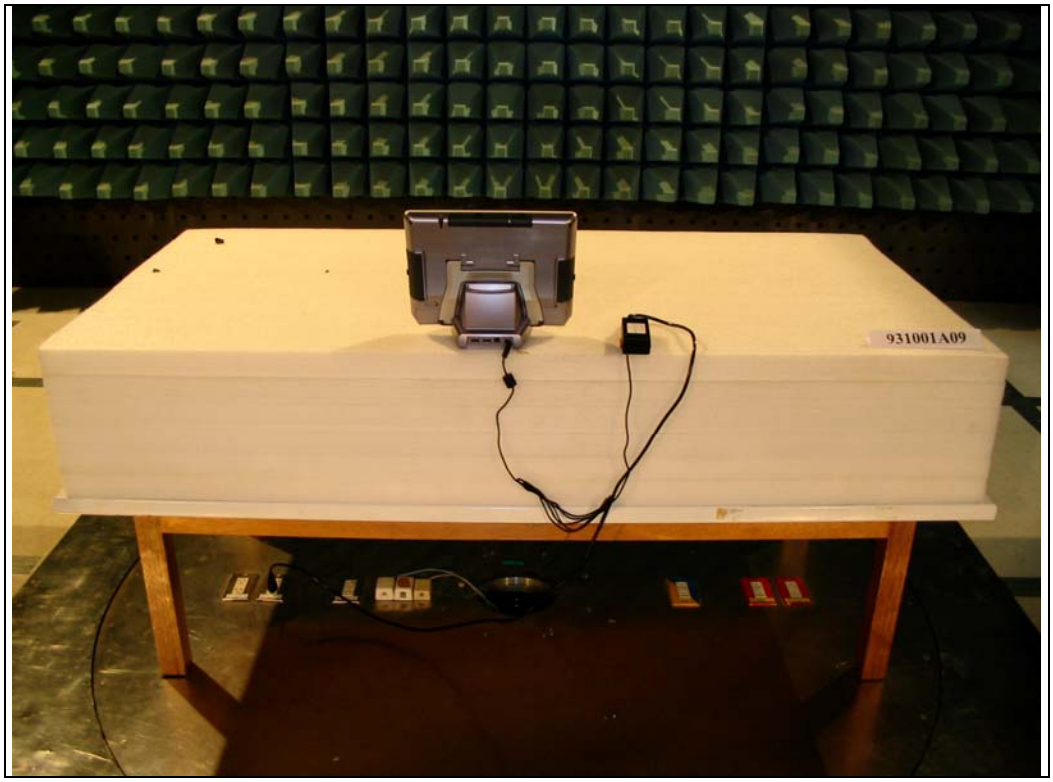
(Test Mode 1 – Z axis)





(Test Mode 2)





6 INFORMATION ON THE TESTING LABORATORIES

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

USA	FCC, NVLAP, UL, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	CNLA, BSMI, DGT
Netherlands	Telefication
Singapore	PSB , GOST-ASIA(MOU)
Russia	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab:
Tel: 886-3-3183232
Fax: 886-3-3185050

Linko RF Lab.
Tel: 886-3-3270910
Fax: 886-3-3270892

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

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

Report Format Version 1.5