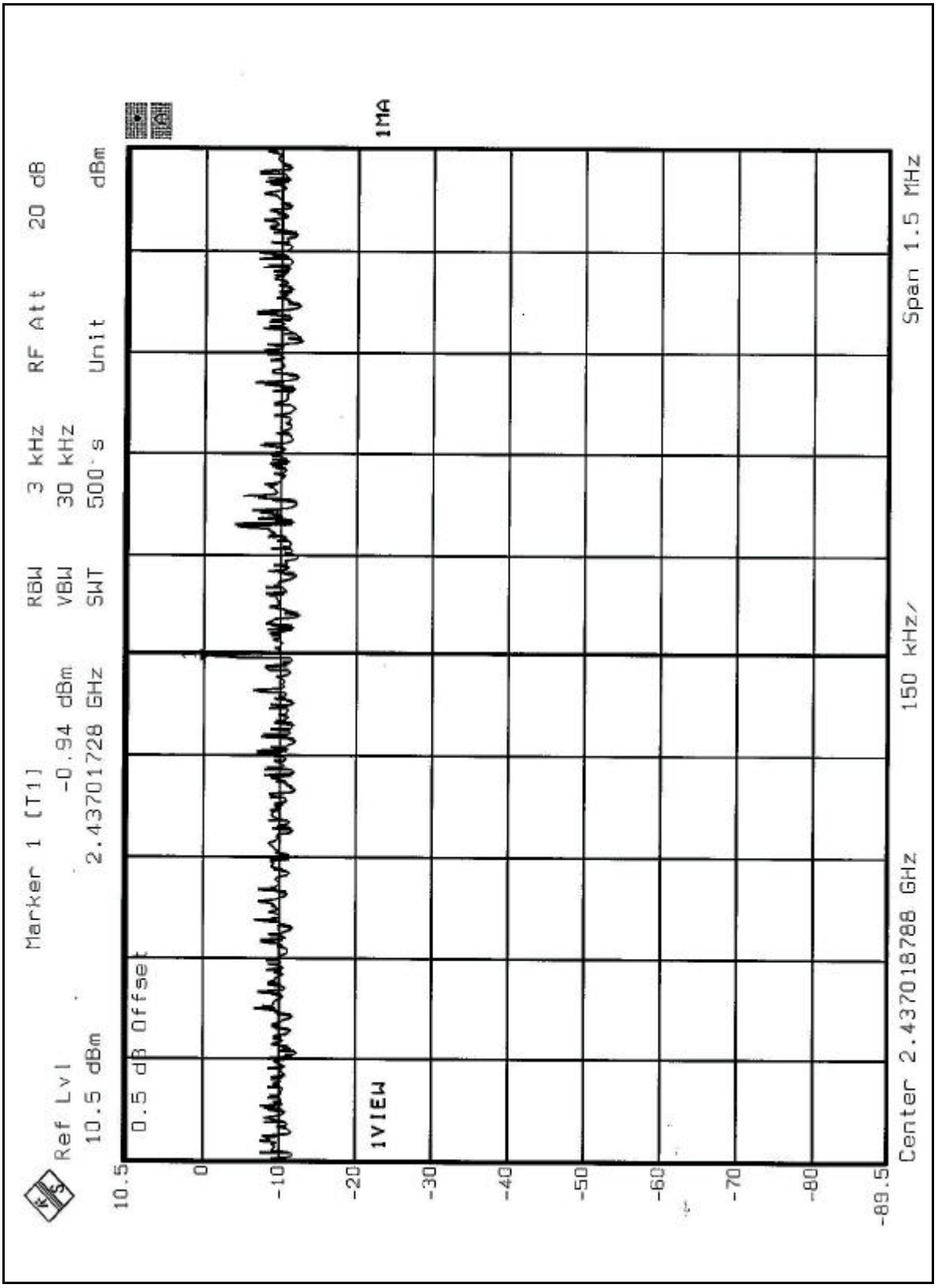
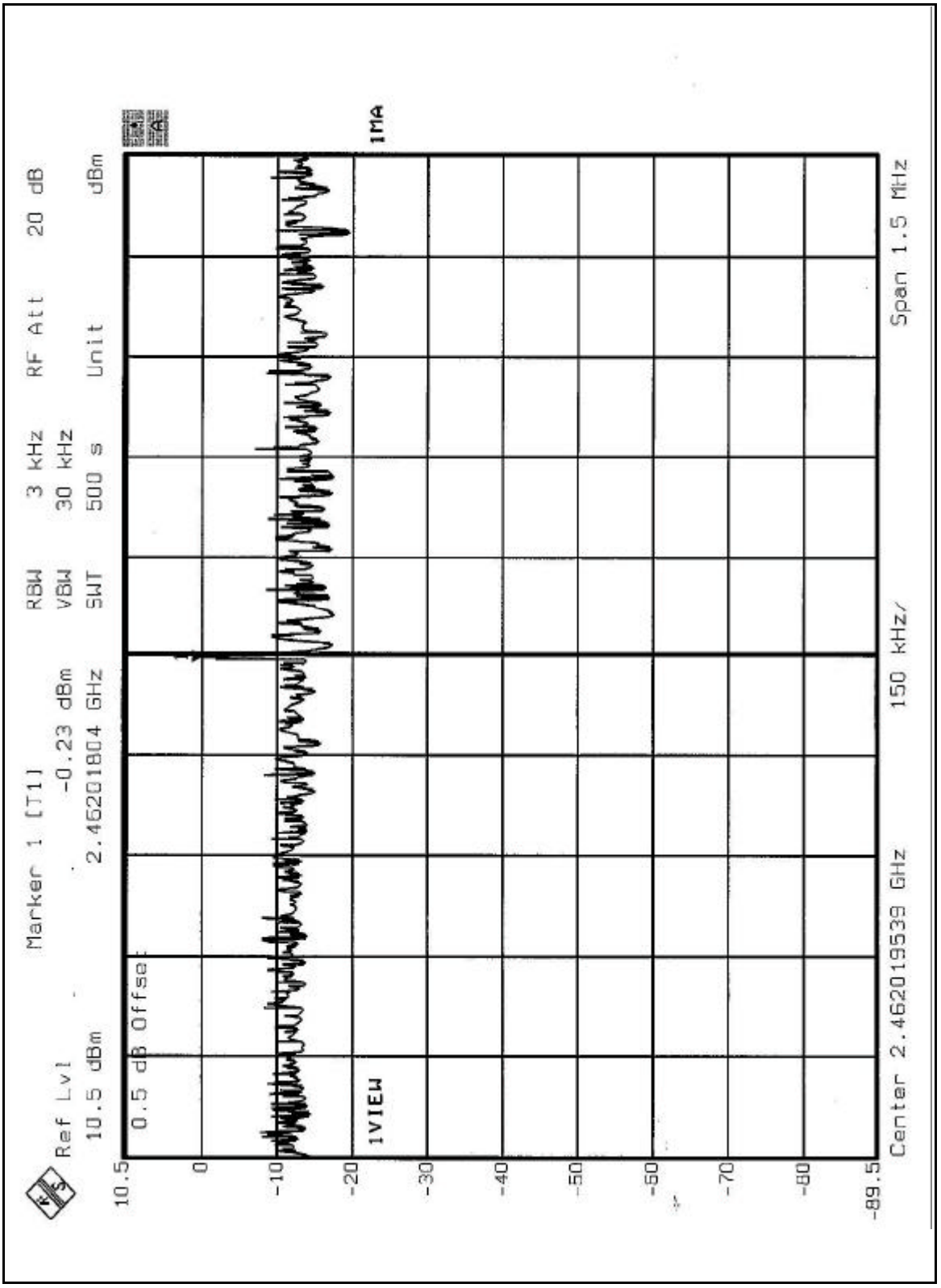
CH6


Marker 1 [T1]
-0.94 dBm
2.43701728 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
0.5 dB Offset
1VIEW
1MA
Center 2.437018788 GHz
150 kHz/
Span 1.5 MHz
10.5
0
-10
-20
-30
-40
-50
-60
-70
-80
-89.5

CH11

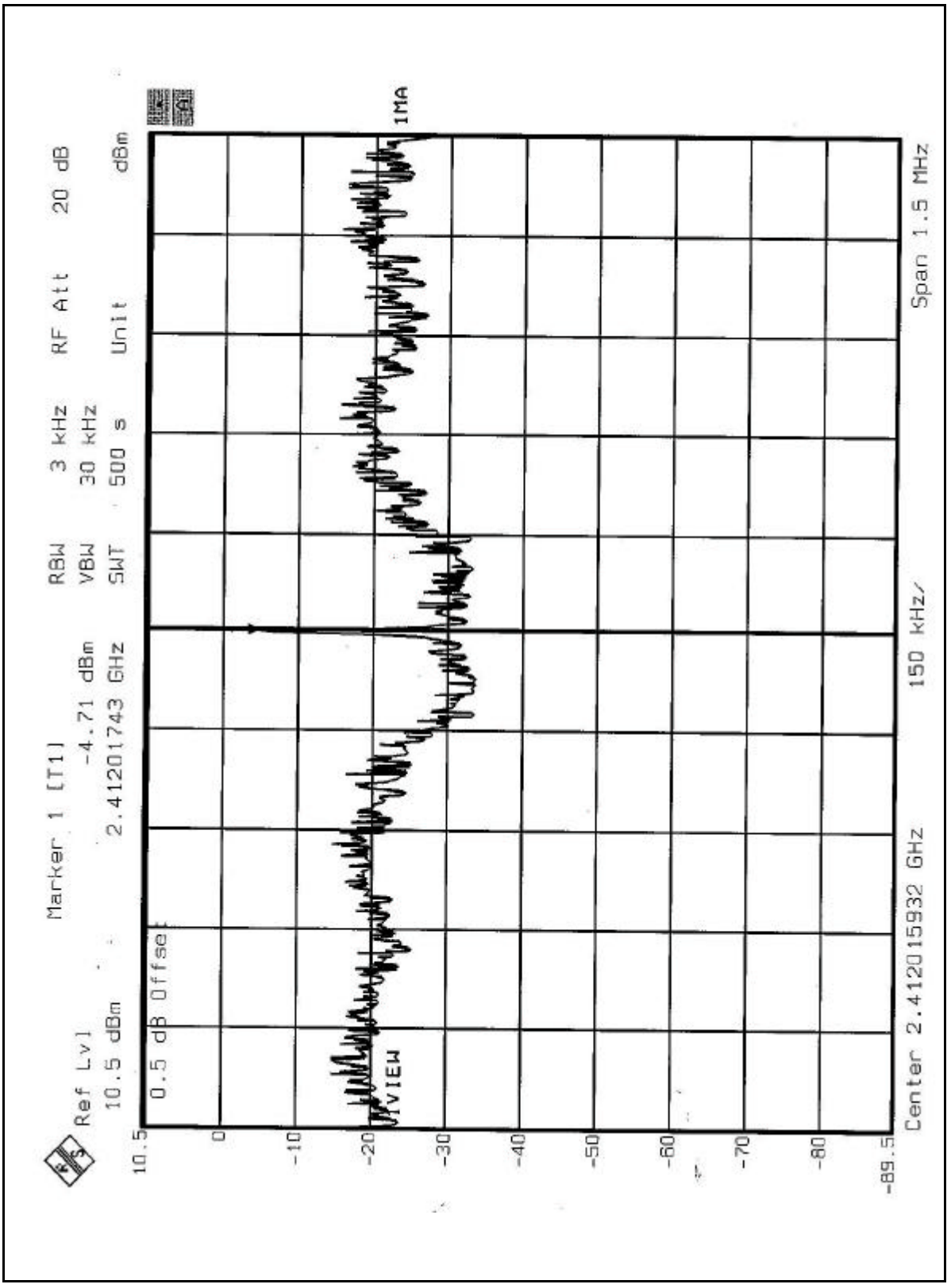

Marker 1 [T1]
-0.23 dBm
2.46201804 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
0.5 dB Offset
1VIEW
1MA
Center 2.462019539 GHz
150 kHz/
Span 1.5 MHz
10.5
0
-10
-20
-30
-40
-50
-60
-70
-80
-89.5

4.5.8 TEST RESULTS (B)

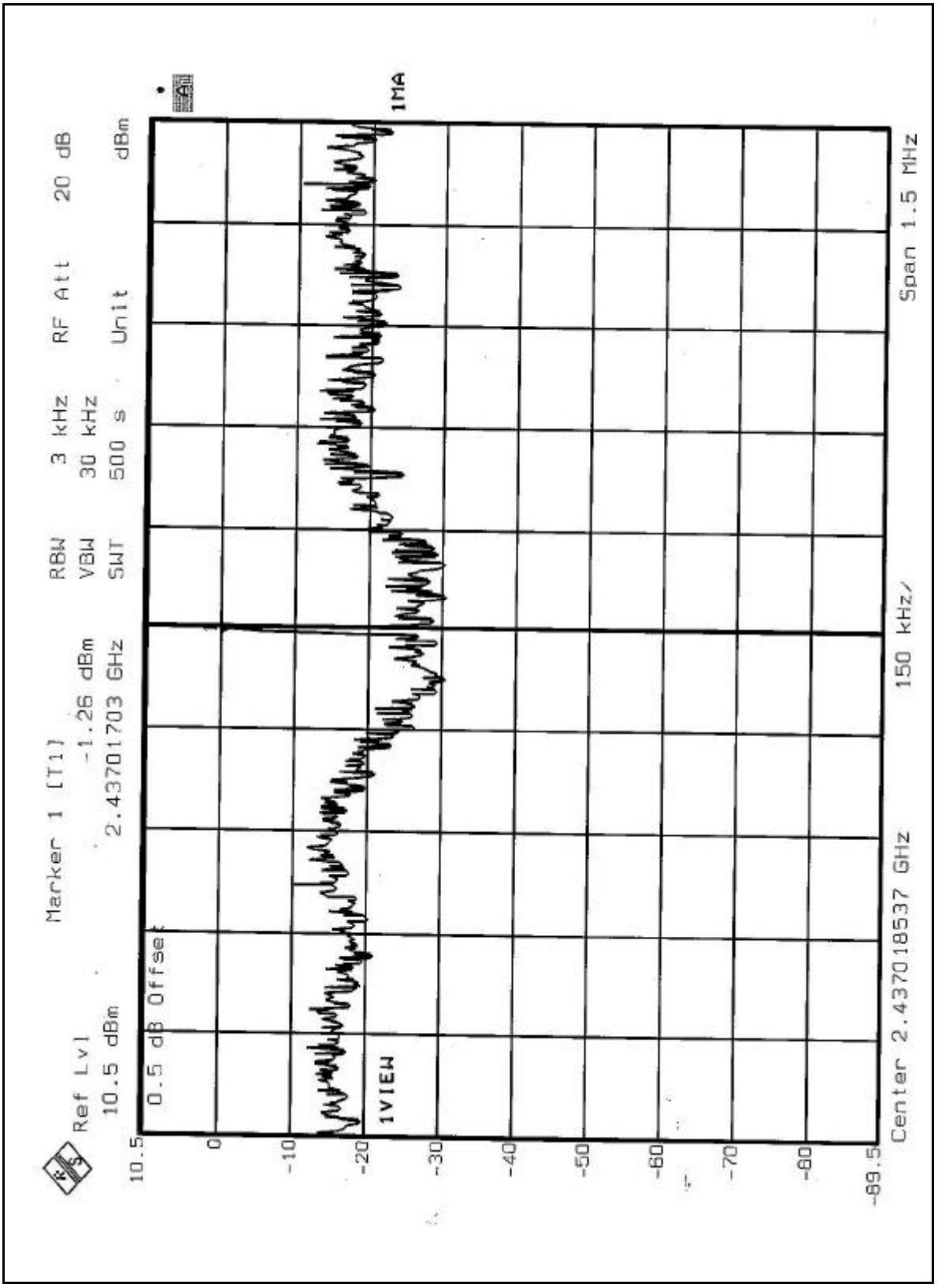
EUT	Dell Wireless 4350 Small Network Access Point	**MODEL**	WAPA-118GD
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-4.71	8	PASS
6	2437	-1.26	8	PASS
11	2462	-1.41	8	PASS

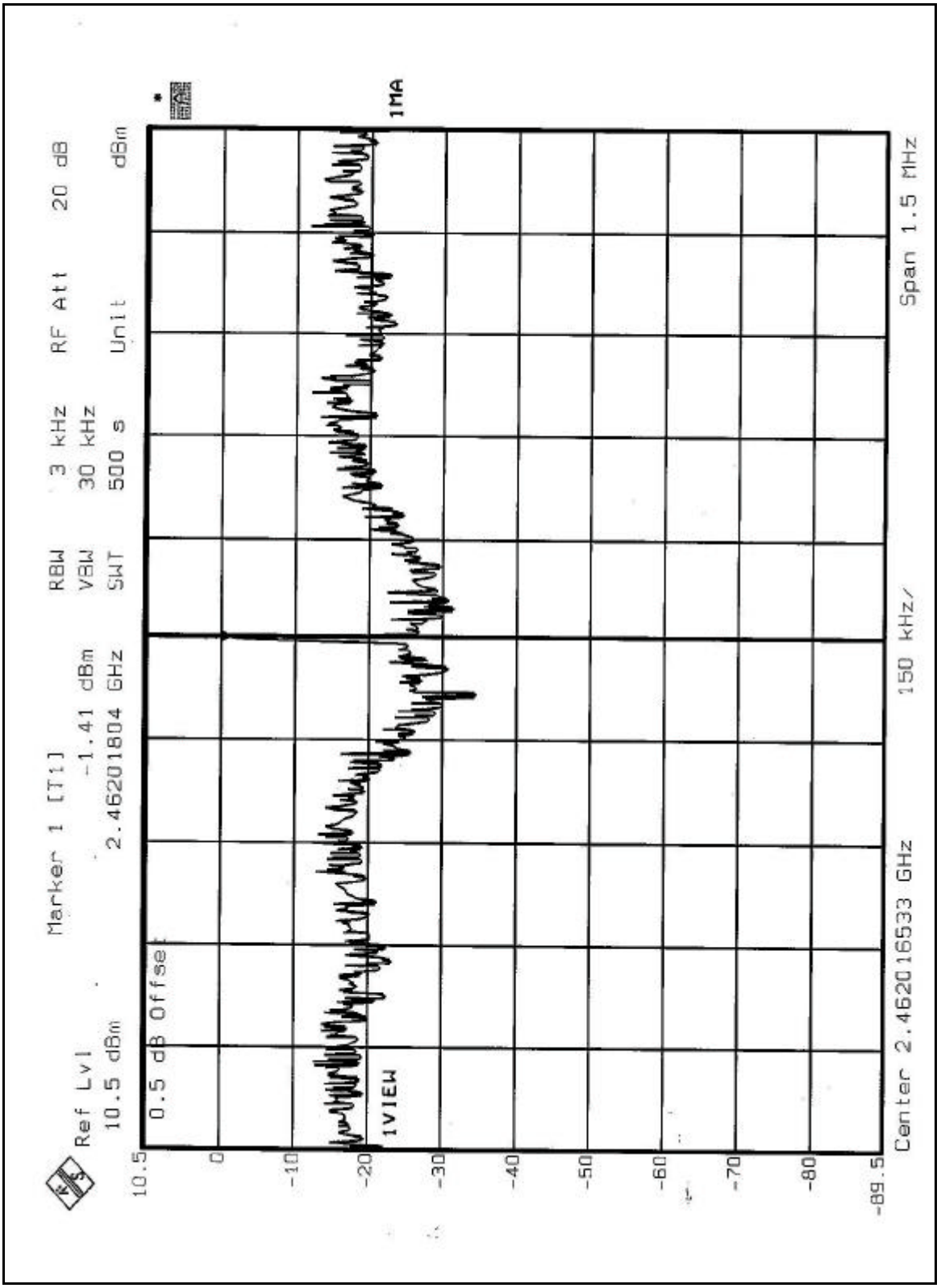
CH1


Marker 1 [T1]
-4.71 dBm
2.41201743 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
0.5 dB Offset
1MA
VIEW
10.5
0
-10
-20
-30
-40
-50
-60
-70
-80
-89.5
Center 2.412015932 GHz
150 kHz/
Span 1.5 MHz

CH6


Marker 1 [T1]
-1.26 dBm
2.43701703 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
0.5 dB Offset
1VIEW
1MA
Center 2.437018537 GHz
150 kHz/
Span 1.5 MHz
10.5
0
-10
-20
-30
-40
-50
-60
-70
-80
-89.5

CH11


Marker 1 [T1]
-1.41 dBm
2.46201804 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
0.5 dB Offset
1VIEW
1MA
Center 2.46216533 GHz
150 kHz/
Span 1.5 MHz
10.5
0
-10
-20
-30
-40
-50
-60
-70
-80
-89.5

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 100kHz with suitable frequency span including 100MHz 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

The spectrum plots are attached on the following 8 pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

4.6.7 TEST RESULTS(A)

NOTE:

The band edge emission plot of CCK technique on the following 1~2 pages show 53.21dB delta between carrier maximum power and local maximum emission in restrict band (2.3601GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 106.39dBuV/m, so the maximum field strength in restrict band is 106.39-53.21=53.18dBuV/m which is under 54dBuV/m limit.

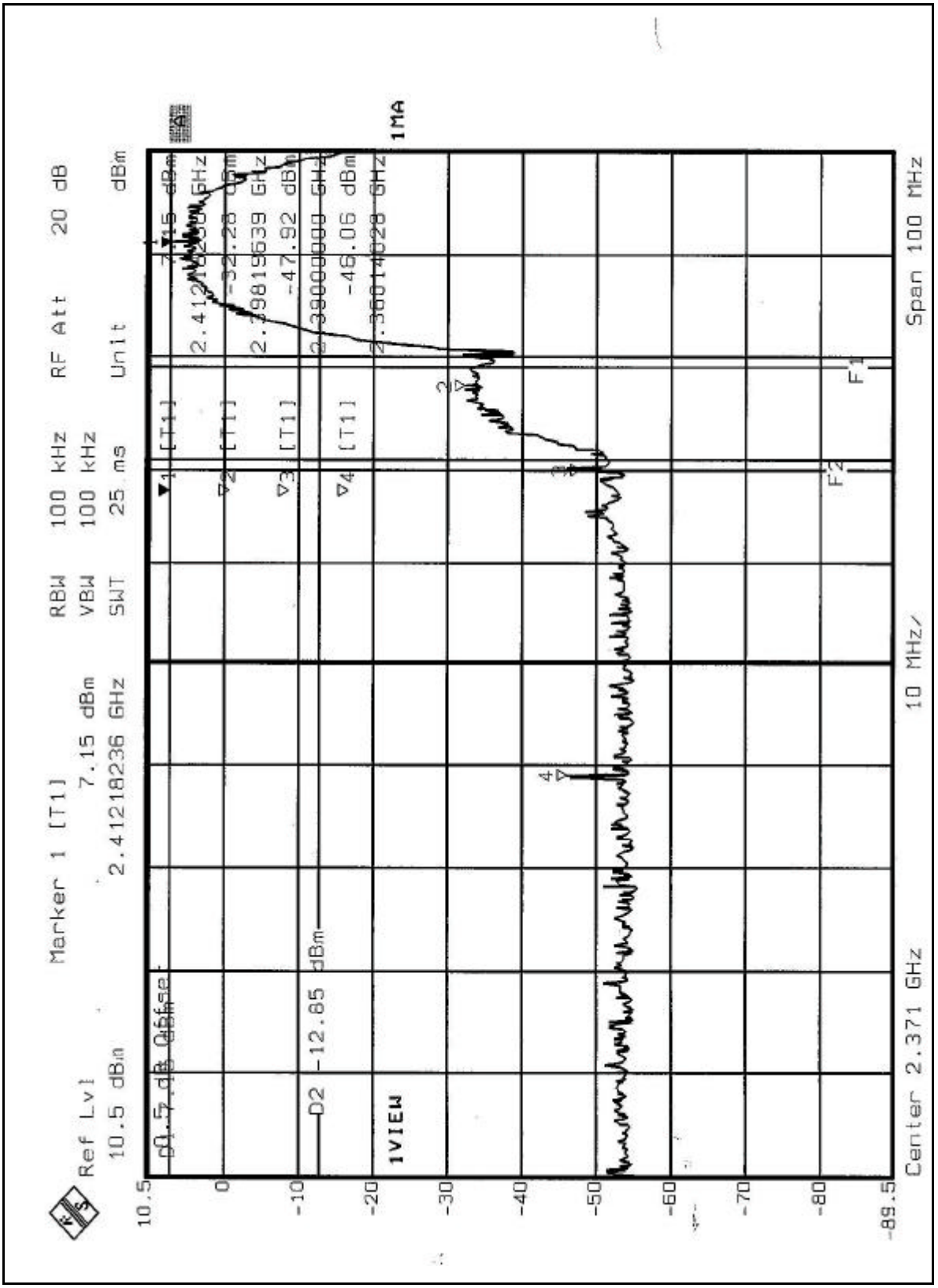
The band edge emission plot of CCK technique on the following 3~4 pages show 54.92dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 107.46dBuV/m, so the maximum field strength in restrict band is 107.46-54.92=52.54dBuV/m which is under 54dBuV/m limit.

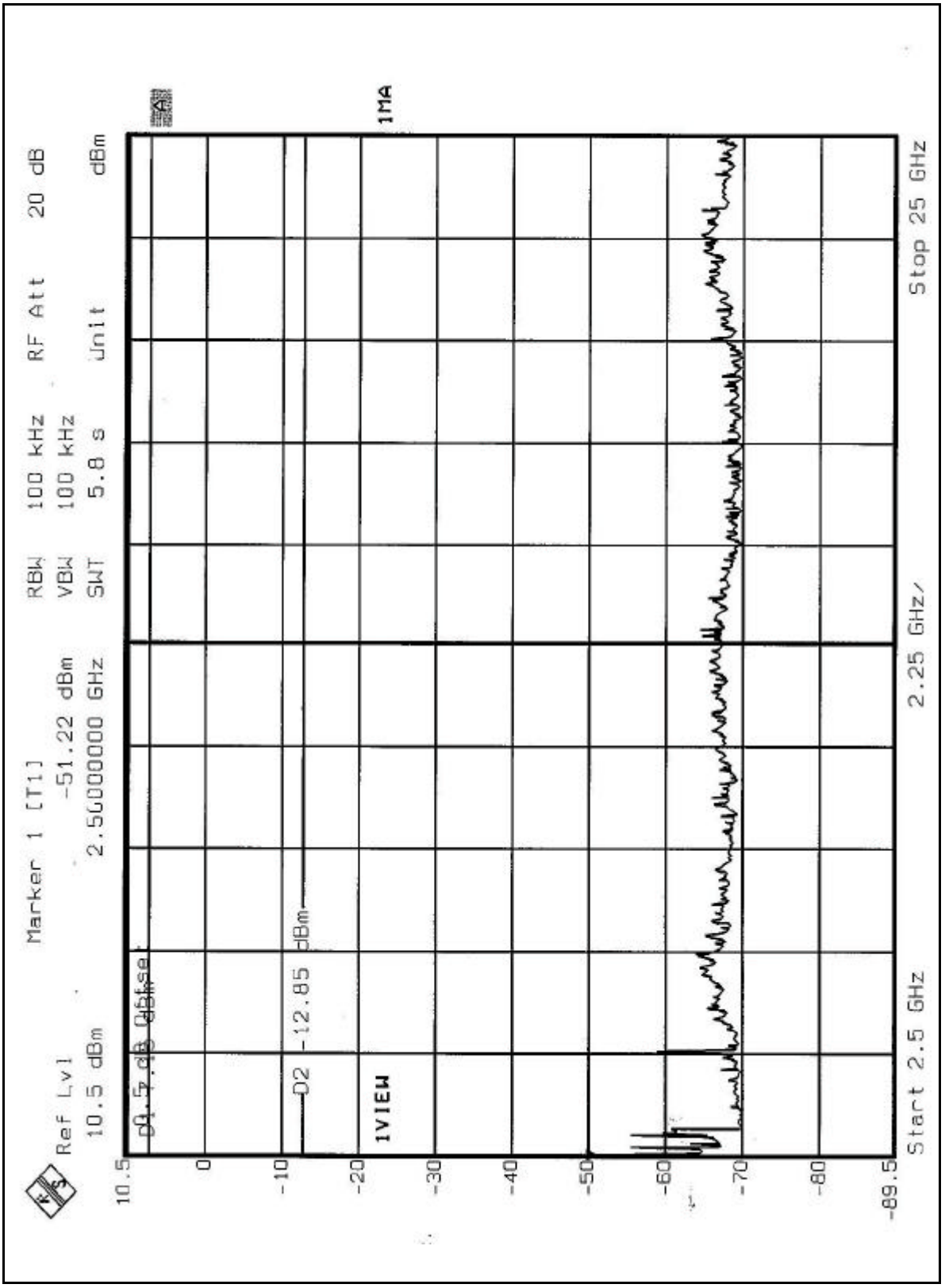
4.6.8 TEST RESULTS(B)

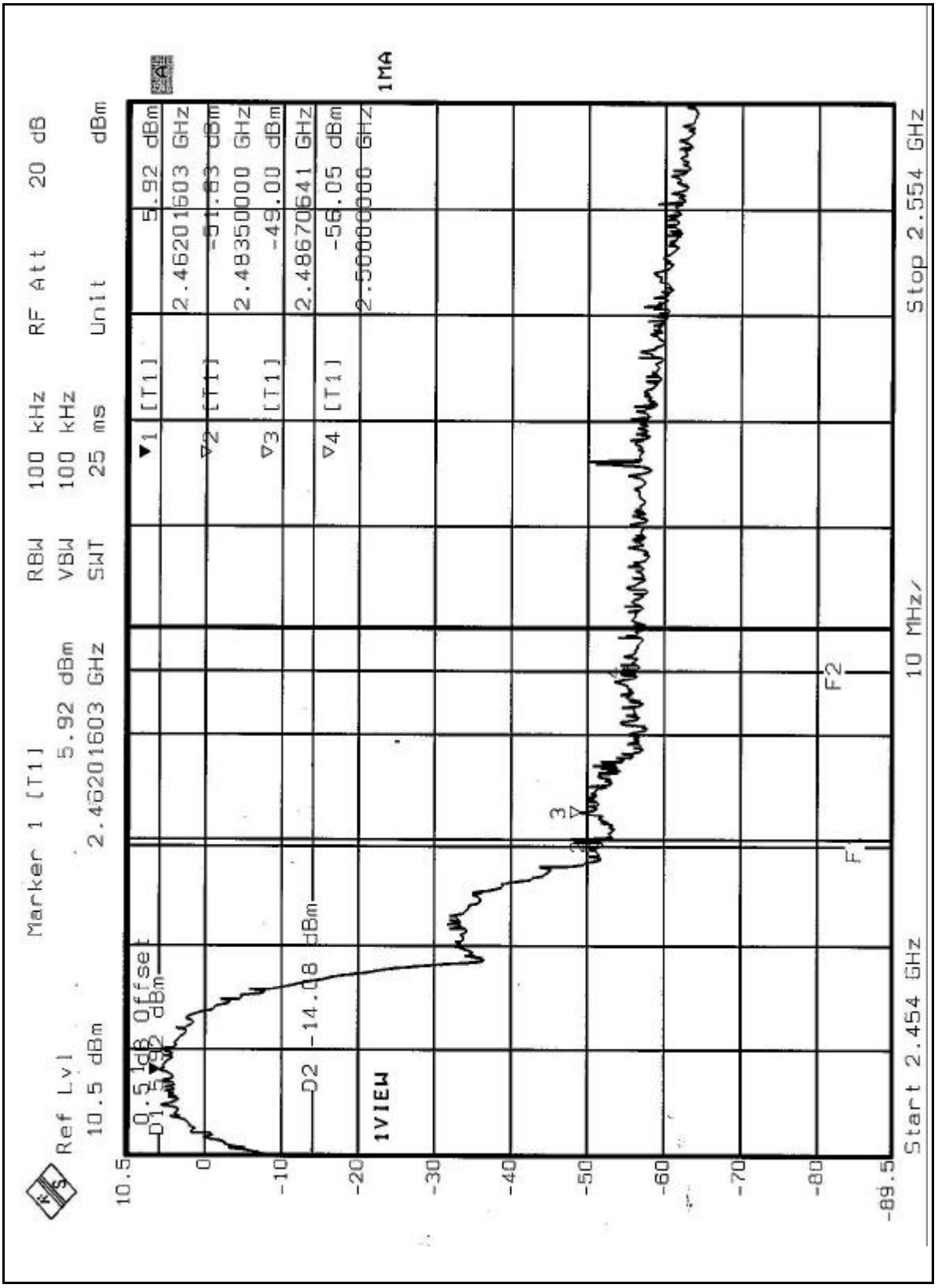
NOTE:

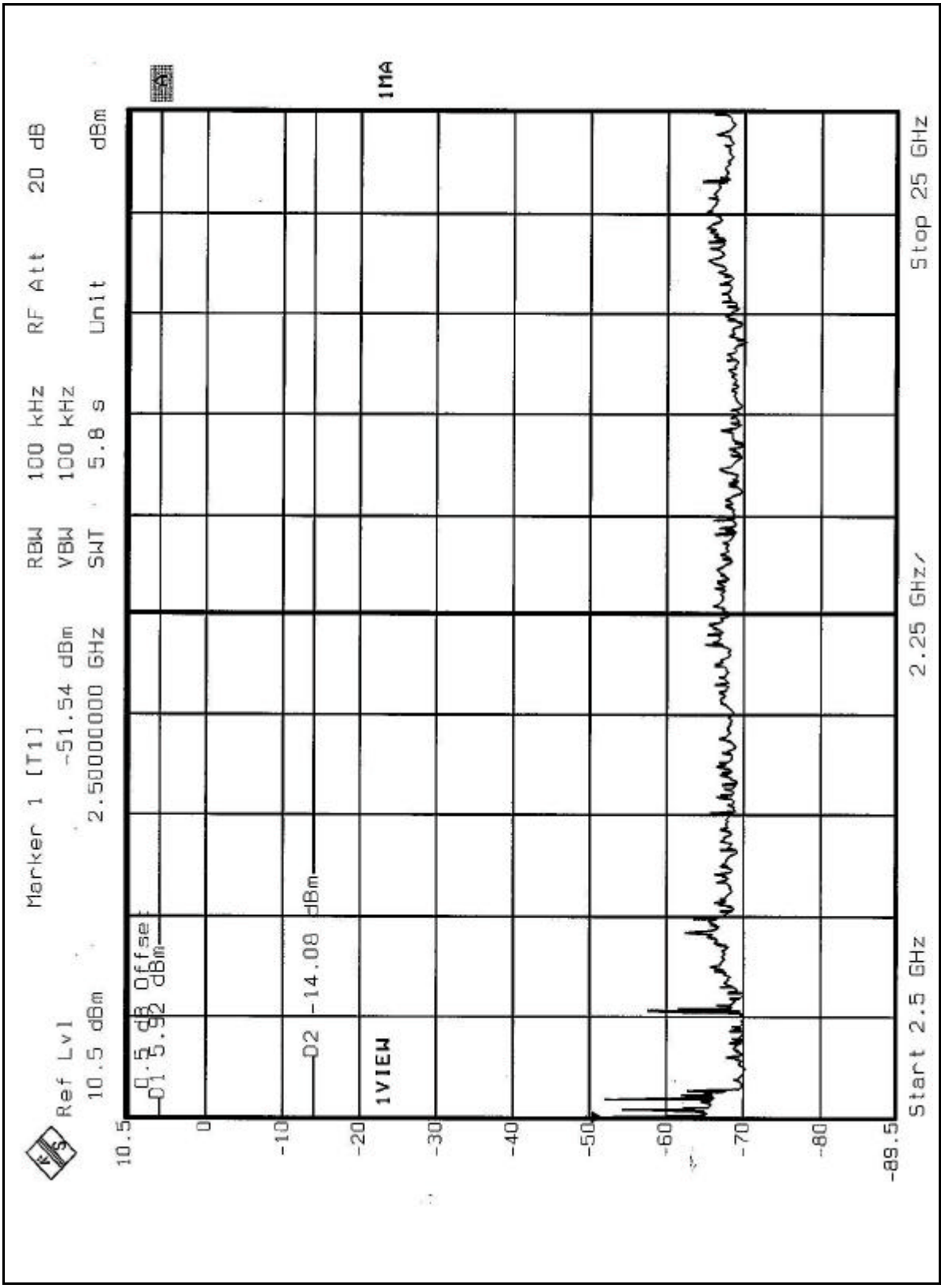
The band edge emission plot of OFDM technique on the following 5~6 pages show 45.84dB delta between carrier maximum power and local maximum emission in restrict band (2.3601GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 99.25dBuV/m, so the maximum field strength in restrict band is 99.25-45.84=53.41dBuV/m which is under 54dBuV/m limit.

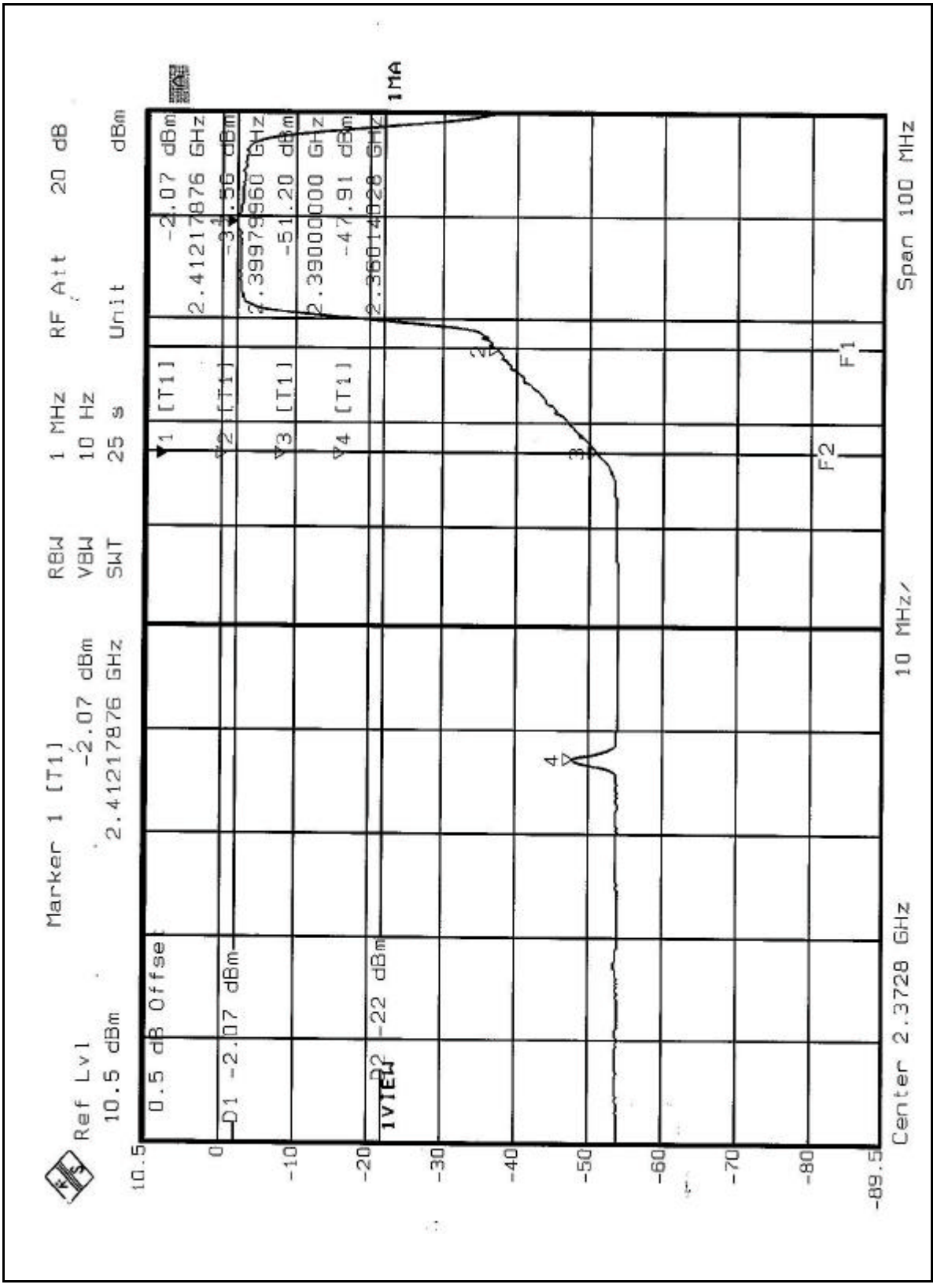
The band edge emission plot of OFDM technique on the following 7~8 pages show 48.89dB delta between carrier maximum power and local maximum emission in restrict band (2.4837GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 101.73dBuV/m, so the maximum field strength in restrict band is 101.73-48.89=52.84dBuV/m which is under 54dBuV/m limit.

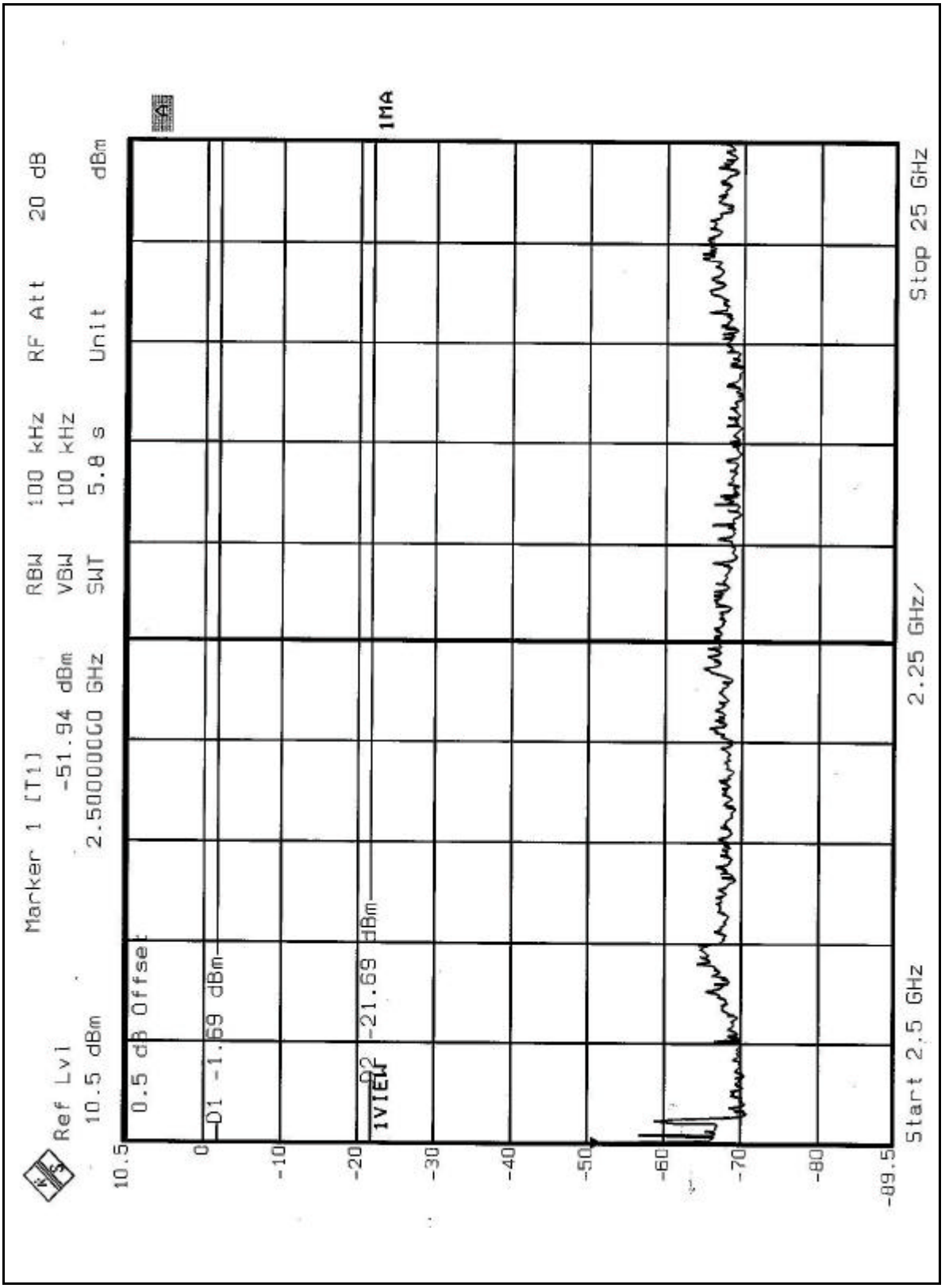

Marker 1 [T1]
7.15 dBm
2.41218236 GHz
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
-0.5 dB Offset
D2 -12.85 dBm
1VIEW
1MA
Center 2.371 GHz
10 MHz/
Span 100 MHz
F1
F2

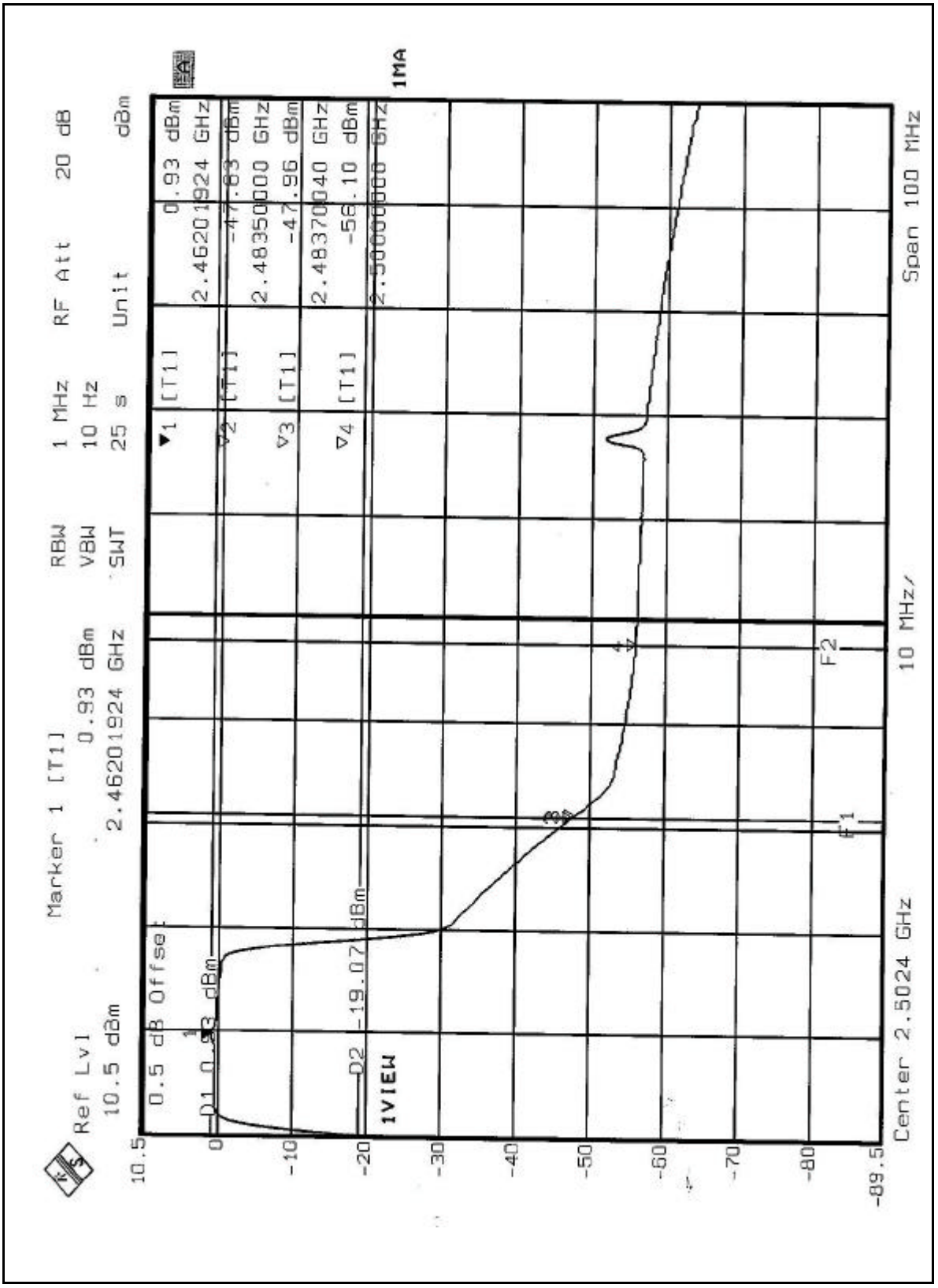

Marker 1 [T1]
-51.22 dBm
2.5000000 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
D1 -7.45 dBm
D2 -12.85 dBm
1VIEW
1MA
10.5
0
-10
-20
-30
-40
-50
-60
-70
-80
-89.5
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

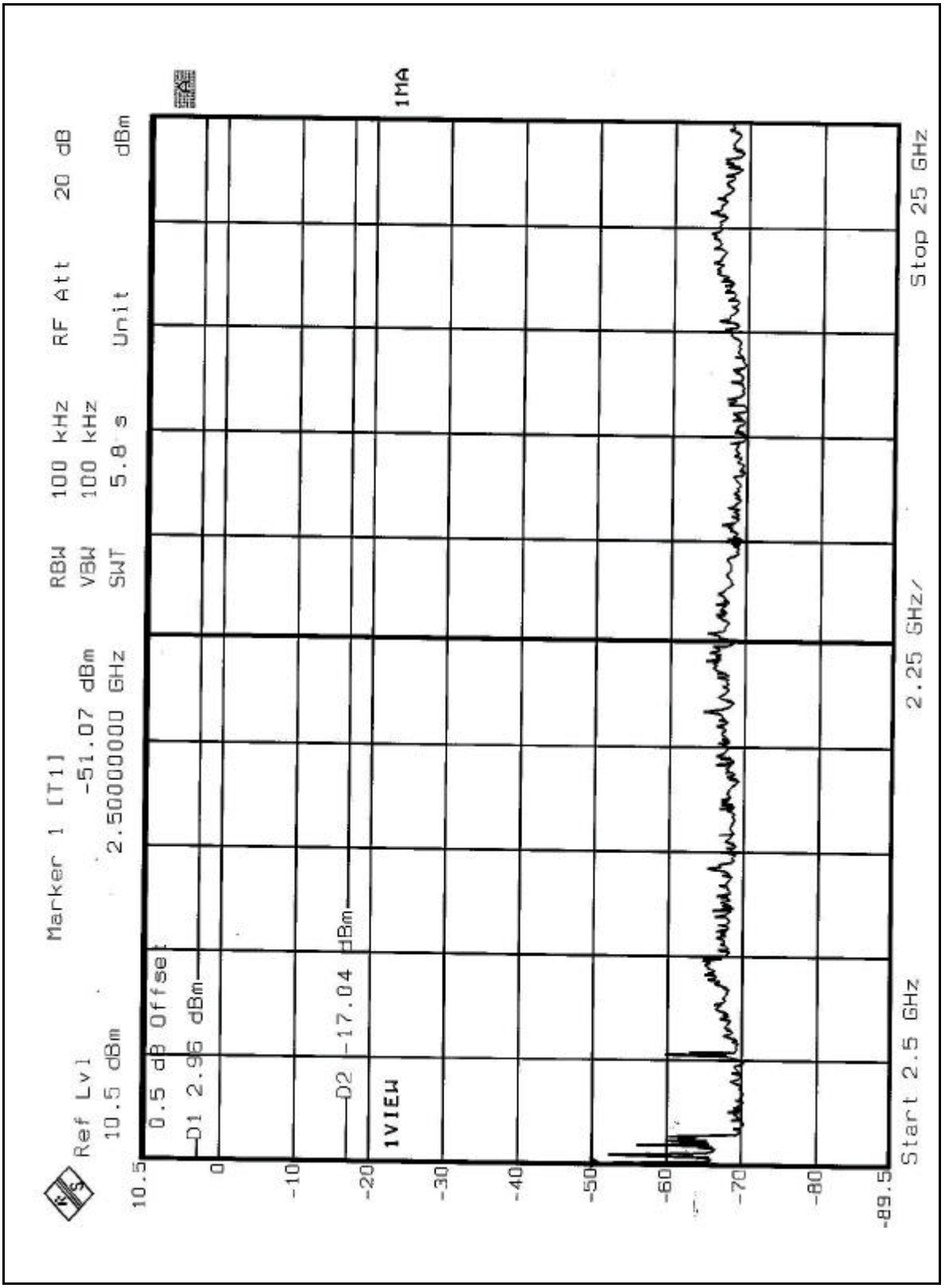

Marker 1 [T1]
5.92 dBm
2.46201603 GHz
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
0.5 dB Offset
10.5 dBm
D1
D2 -14.08 dBm
1VIEW
1MA
▼1 [T1] 5.92 dBm 2.46201603 GHz
▽2 [T1] -51.83 dBm 2.48350000 GHz
▽3 [T1] -49.00 dBm 2.48670641 GHz
▽4 [T1] -56.05 dBm 2.50000300 GHz
F1
F2
Start 2.454 GHz
10 MHz/
Stop 2.554 GHz


Marker 1 [T1]
-51.54 dBm
2.50000000 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
Offset
0.5 dB
5.92 dBm
D1
D2 -14.08 dBm
1VIEW
1MA
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz
10.5
0
-10
-20
-30
-40
-50
-60
-70
-80
-89.5


Marker 1 [T1]
-2.07 dBm
2.41217876 GHz
RBW 1 MHz
VBW 10 Hz
SWT 25 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
0.5 dB Offset
D1 -2.07 dBm
D2 -22 dBm
1VIEW
1MA
Center 2.3728 GHz
10 MHz/
Span 100 MHz
F1
F2


Marker 1 [T1]
-51.94 dBm
2.50000000 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
0.5 dB Offset
D1 -1.69 dBm
D2 -21.69 dBm
1VIEW
1MA
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz
10.5
0
-10
-20
-30
-40
-50
-60
-70
-80
-89.5


Marker 1 [T1]
0.93 dBm
2.46201924 GHz
RBW 1 MHz
VBW 10 Hz
SWT 25 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
0.5 dB Offset
D1 0.93 dBm
D2 -19.07 dBm
1VIEW
1MA
T1 0.93 dBm 2.46201924 GHz
T2 -47.83 dBm 2.48350000 GHz
T3 -47.96 dBm 2.48370040 GHz
T4 -56.10 dBm 2.50000000 GHz
F1
F2
Center 2.5024 GHz
10 MHz/
Span 100 MHz


Marker 1 [T1]
-51.07 dBm
2.50000000 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 20 dB
Unit dBm
Ref Lvl
10.5 dBm
0.5 dB Offset
D1 2.96 dBm
D2 -17.04 dBm
1VIEW
1MA
10.5
0
-10
-20
-30
-40
-50
-60
-70
-80
-89.5
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

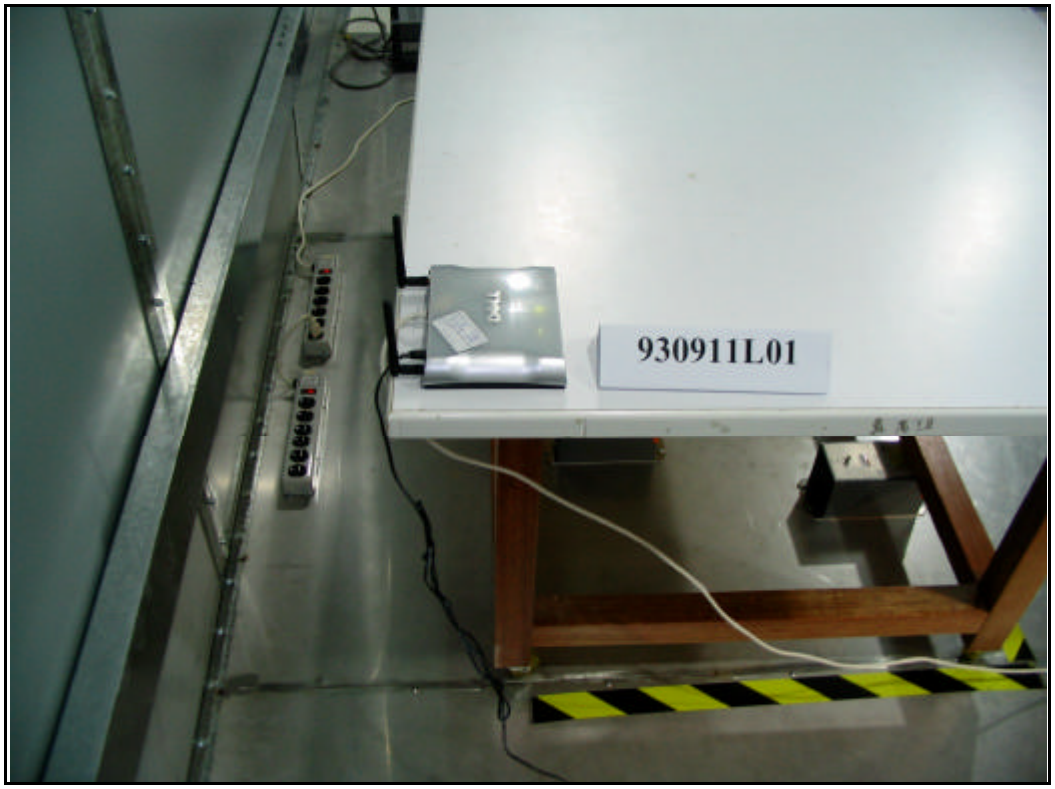
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.
And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional 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

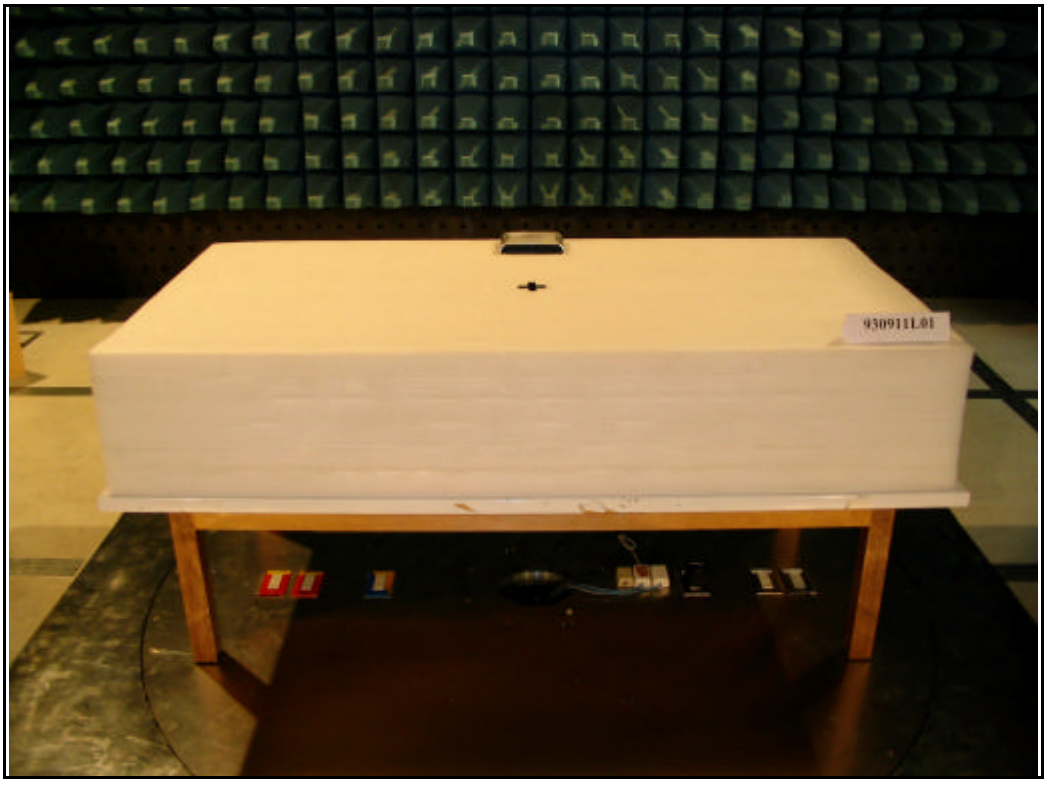
The antenna used in this product is Dipole antenna with reverse SMA connector. And the maximum Gain of this antenna is 2.0dBi.

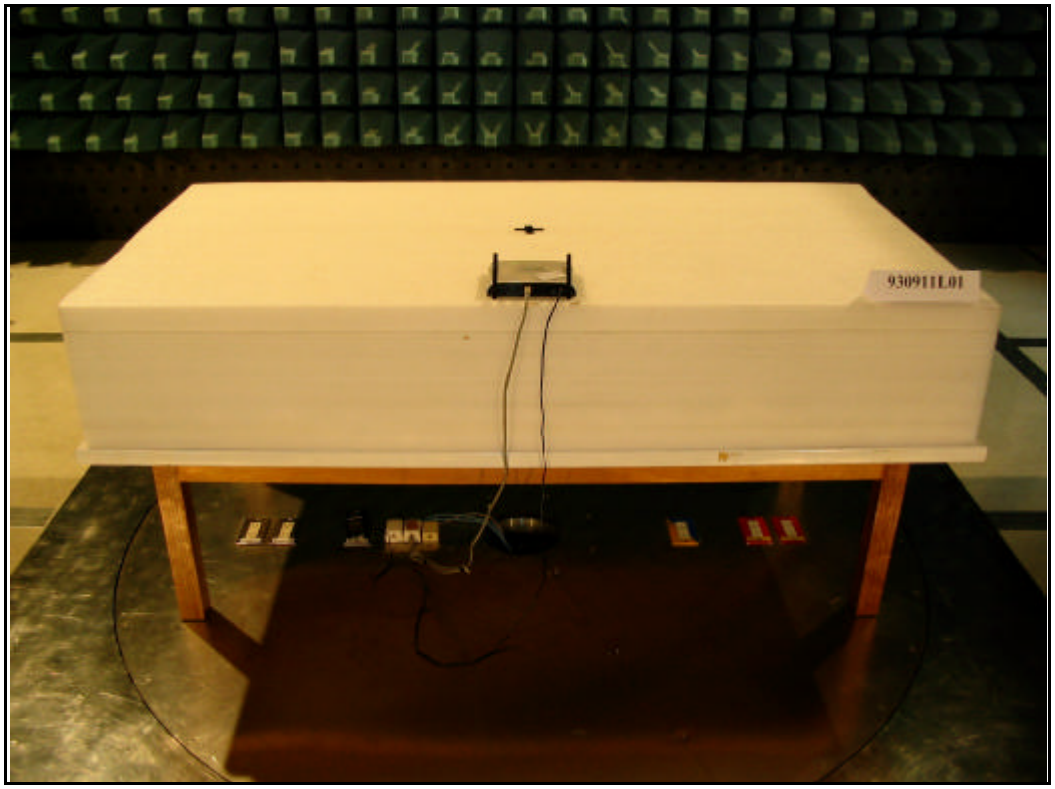
5 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST



RADIATED EMISSION TEST





6 INFORMATION ON THE TESTING LABORATORIES

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

USA	FCC, NVLAP, 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@mail.adt.com.tw
Web Site: www.adt.com.tw

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

Report Format Version 1.5