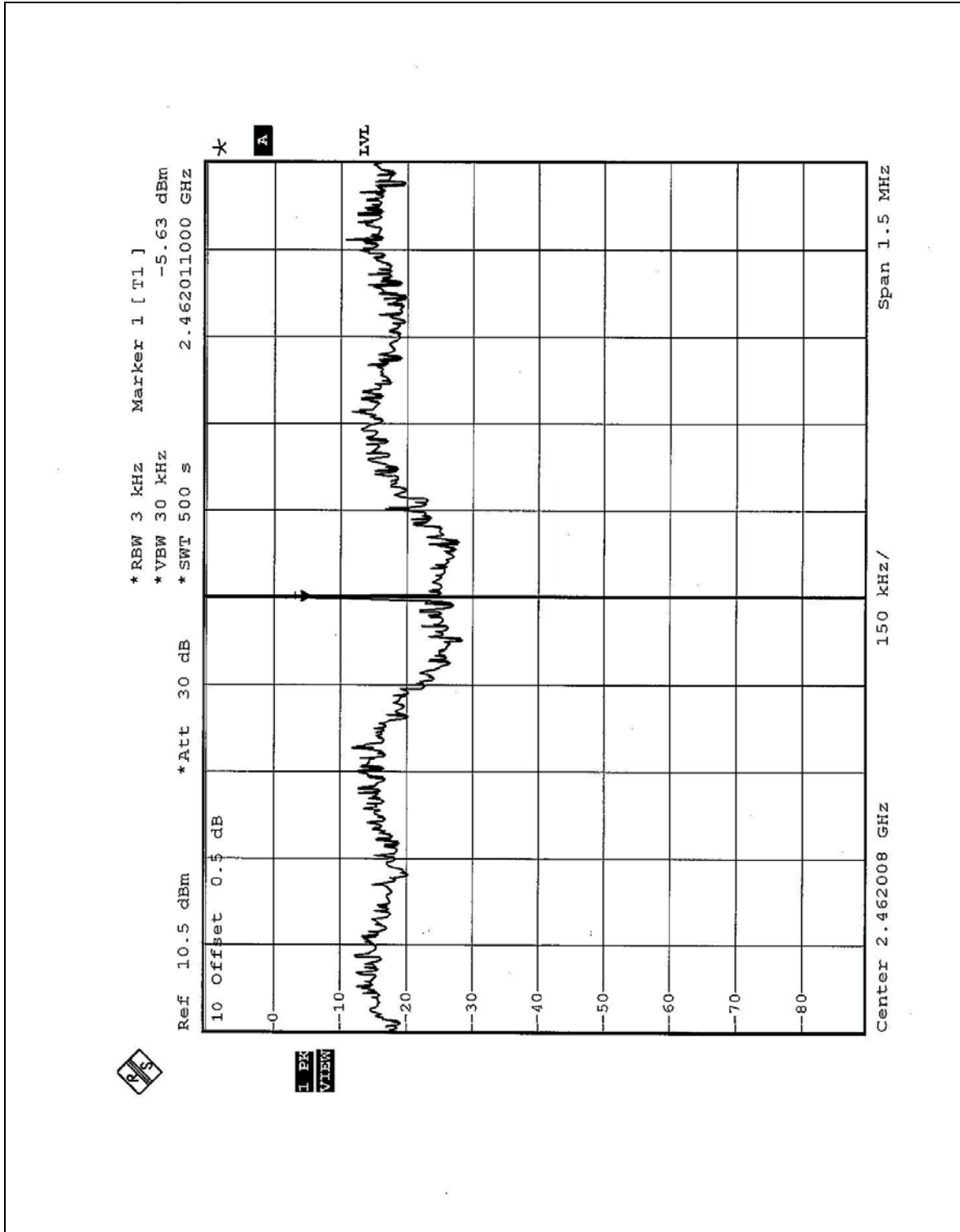




CH11





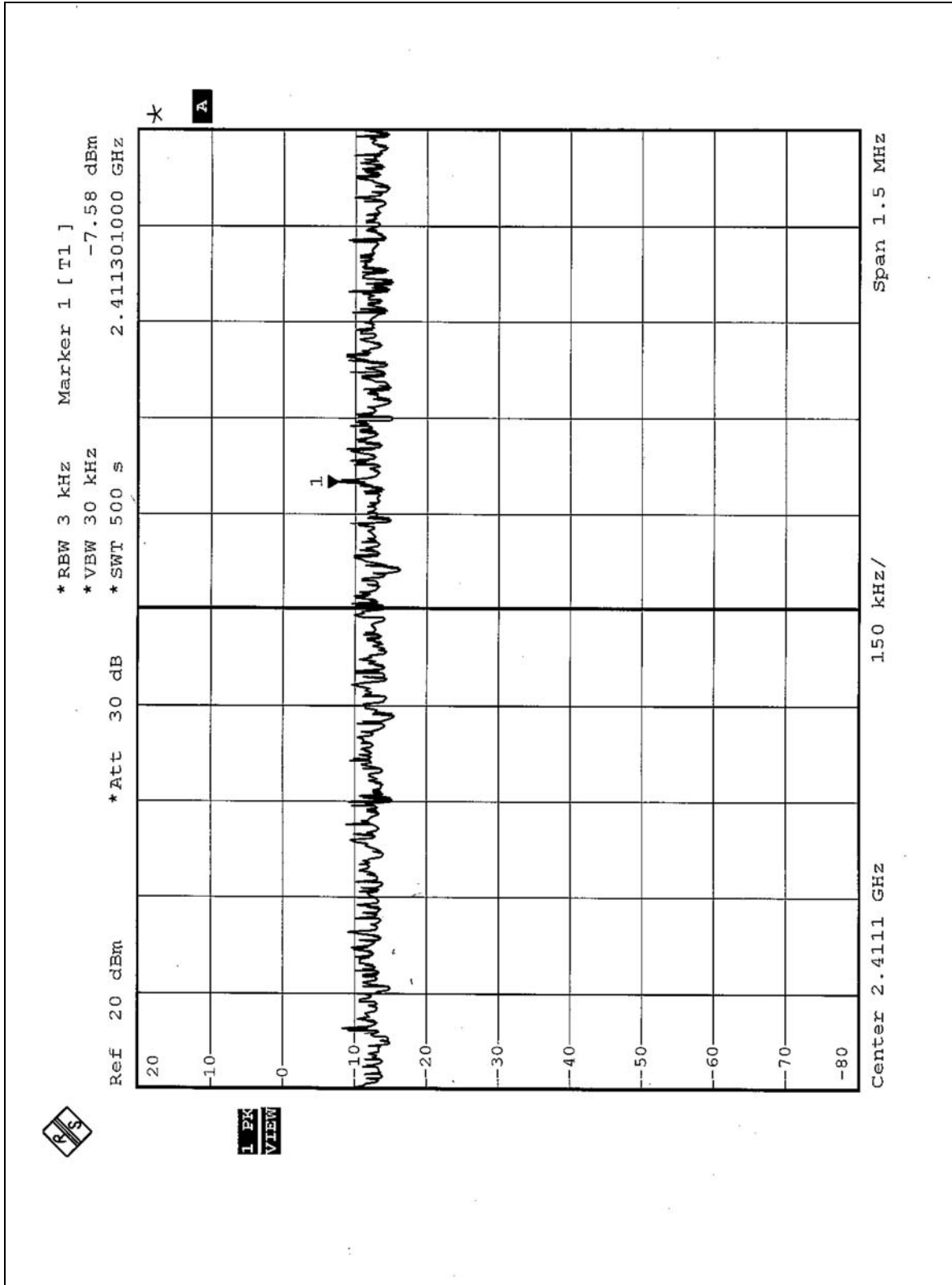
## 4.5.8 TEST RESULTS (B)

<b>EUT</b>	AT&T Plug&Share 54Mbps Wireless Router	<b>MODEL</b>	6800G
<b>MODE</b>	CCK	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz
<b>ENVIRONMENTAL CONDITIONS</b>	26deg. C, 65%RH, 991hPa	<b>TESTED BY</b>	Jamison Chan

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>RF POWER LEVEL IN 3 kHz BW (dBm)</b>	<b>MAXIMUM LIMIT (dBm)</b>	<b>PASS/FAIL</b>
1	2412	-7.58	8	PASS
6	2437	-6.68	8	PASS
11	2462	-7.08	8	PASS

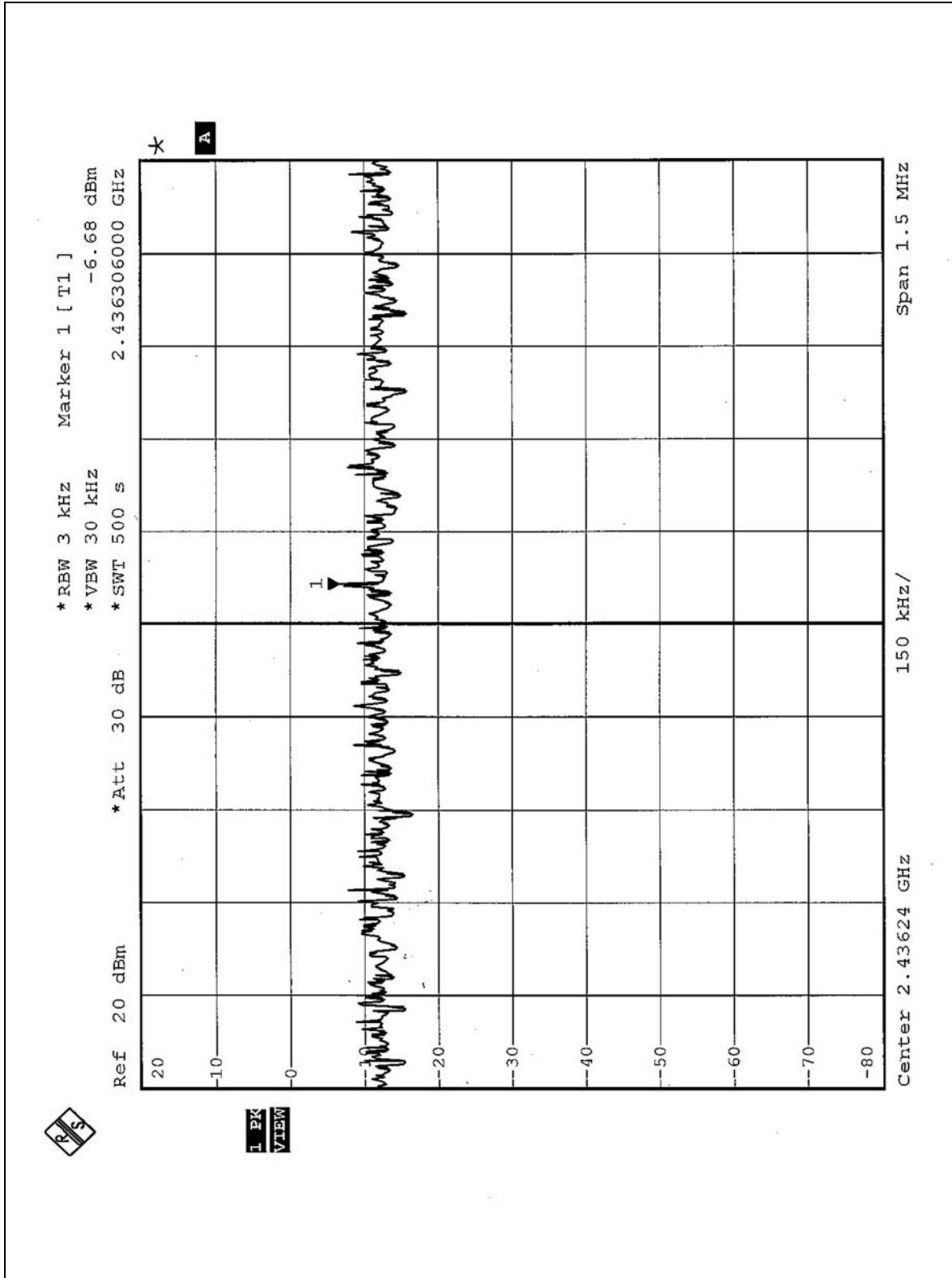


CH1



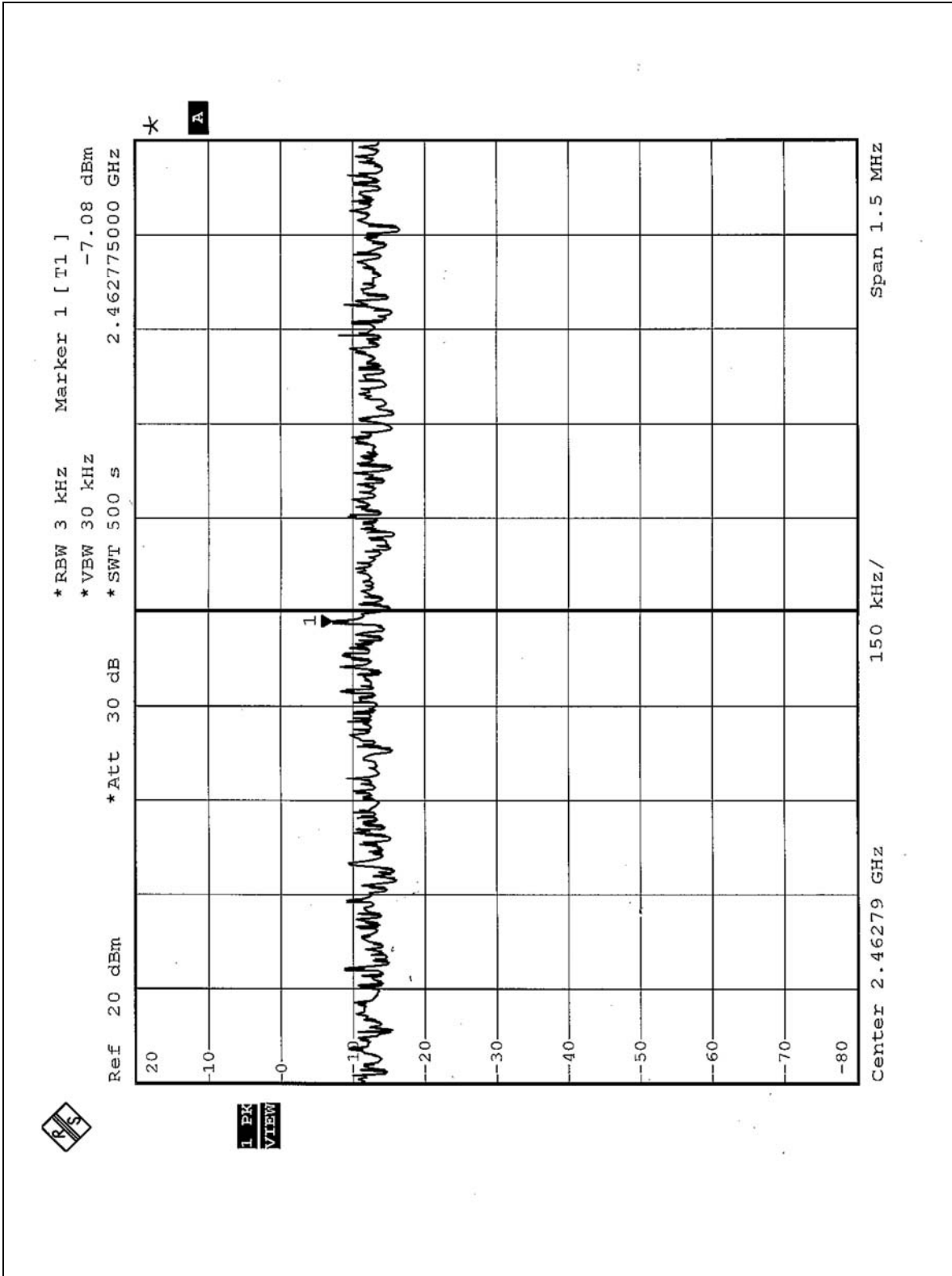


CH6





CH11



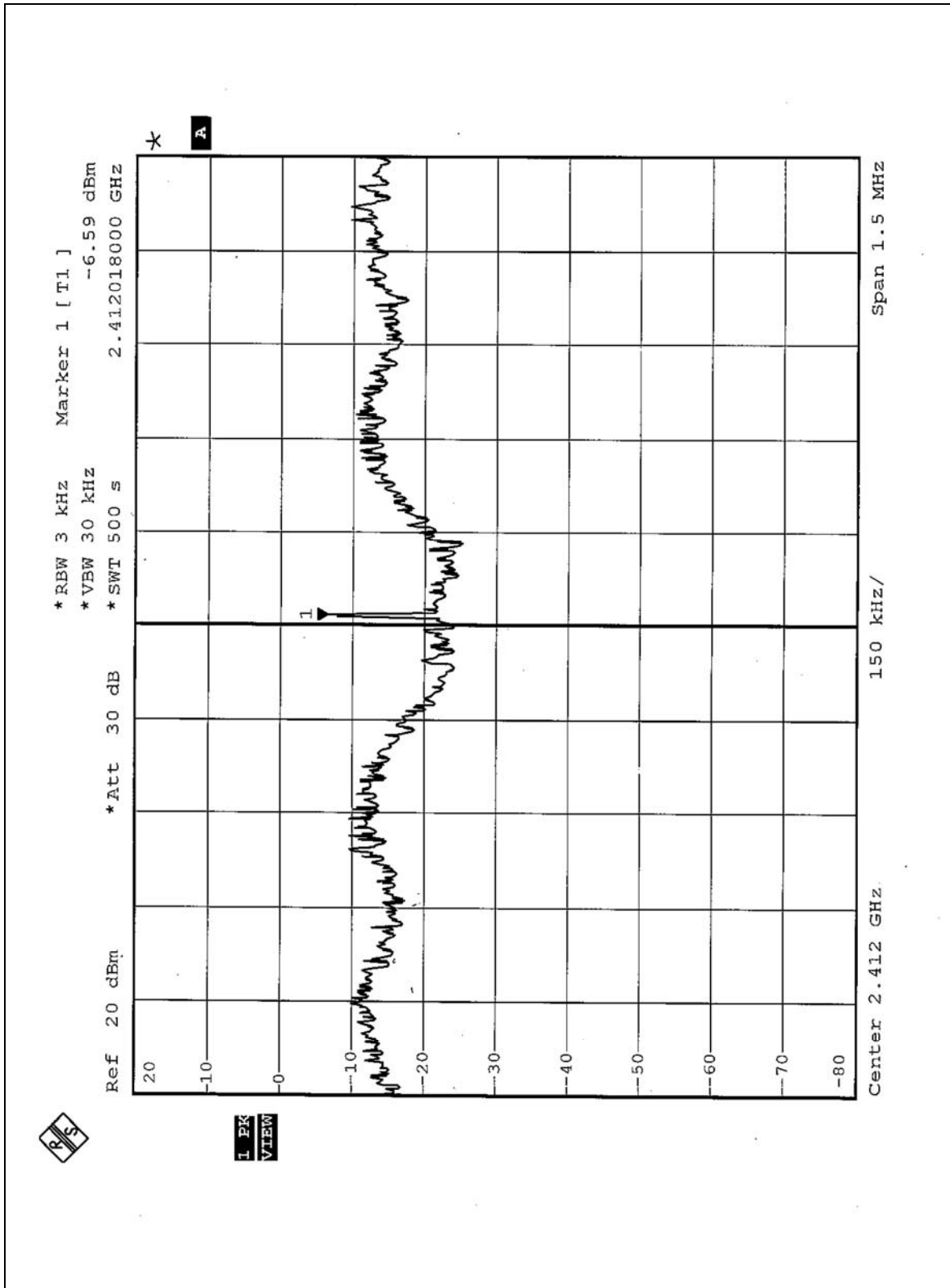


<b>EUT</b>	AT&T Plug&Share 54Mbps Wireless Router	<b>MODEL</b>	6800G
<b>MODE</b>	OFDM	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz
<b>ENVIRONMENTAL CONDITIONS</b>	26deg. C, 65%RH, 991hPa	<b>TESTED BY</b>	Jamison Chan

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz )</b>	<b>RF POWER LEVEL IN 3 kHz BW (dBm)</b>	<b>MAXIMUM LIMIT (dBm)</b>	<b>PASS/FAIL</b>
1	2412	-6.59	8	PASS
6	2437	-6.92	8	PASS
11	2462	-5.87	8	PASS

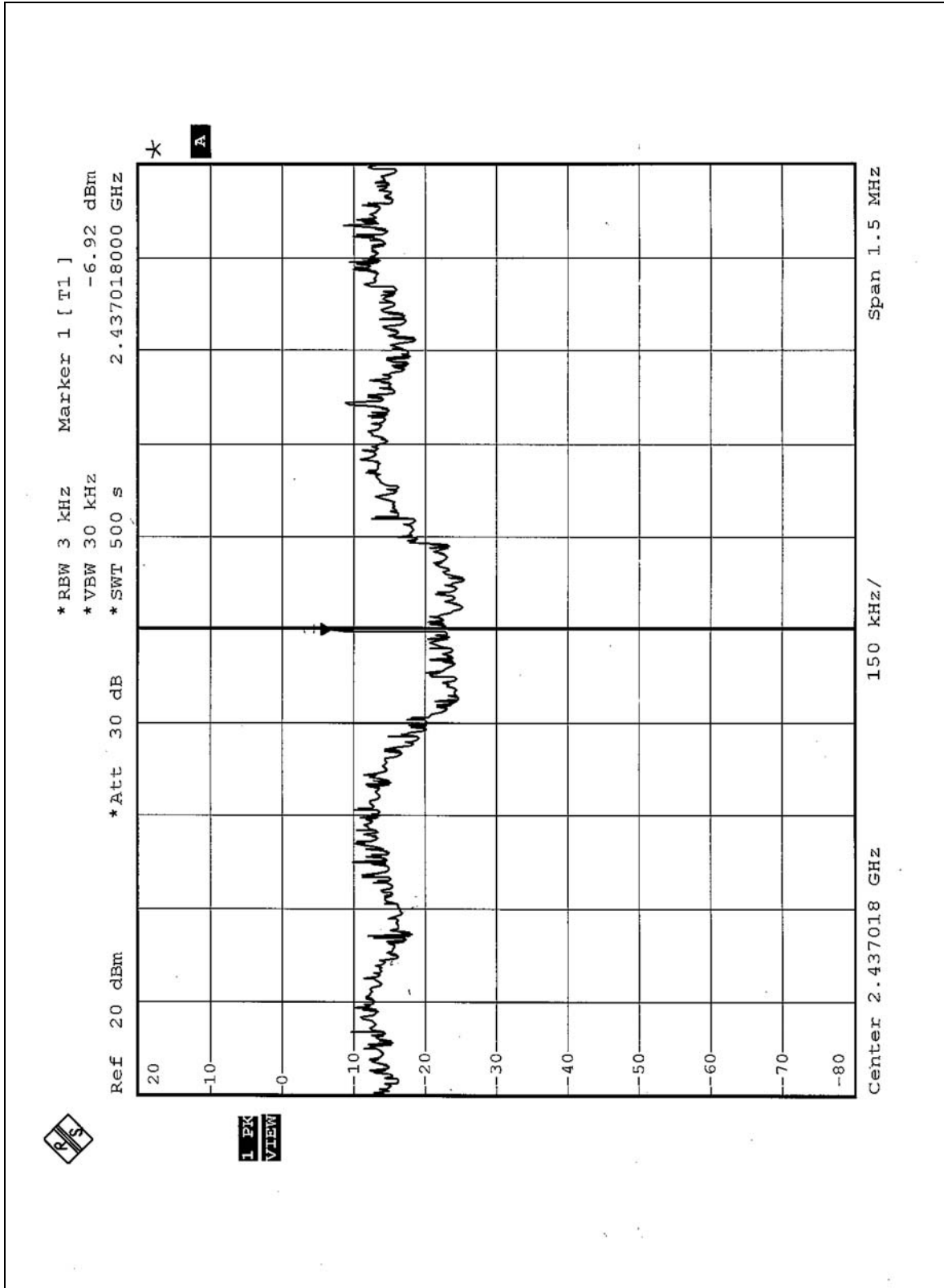


CH1





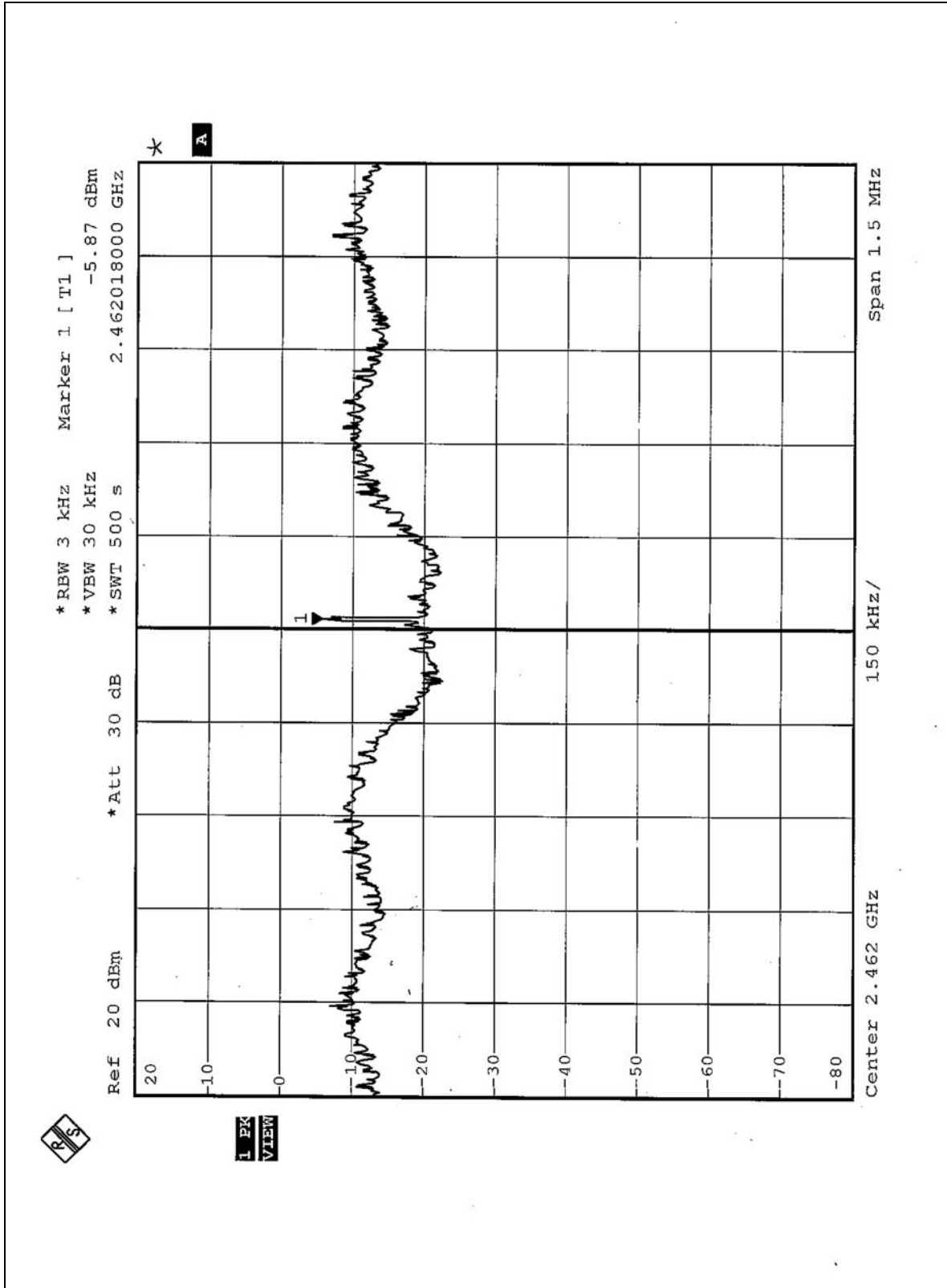
CH6







CH11





## 4.6 BAND EDGES MEASUREMENT

### 4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below  $-20\text{dB}$  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
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004

**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 (A)

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

### 4.6.4 TEST PROCEDURE (B)

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100kHz for CCK technique and RBW = 1MHz and VBW = 300Hz for OFDM technique with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

### 4.6.5 DEVIATION FROM TEST STANDARD

No deviation



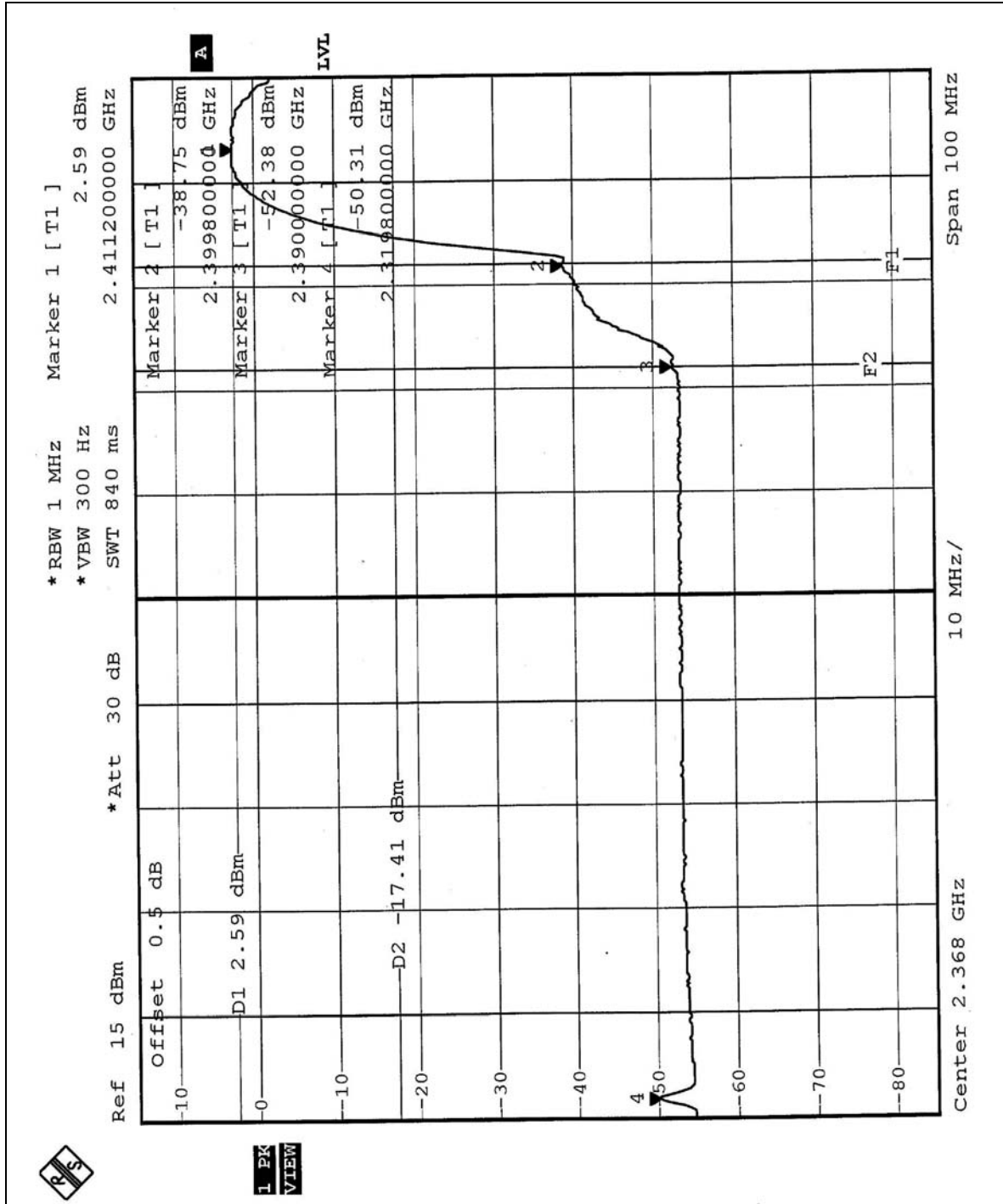
#### 4.6.6 EUT OPERATING CONDITION

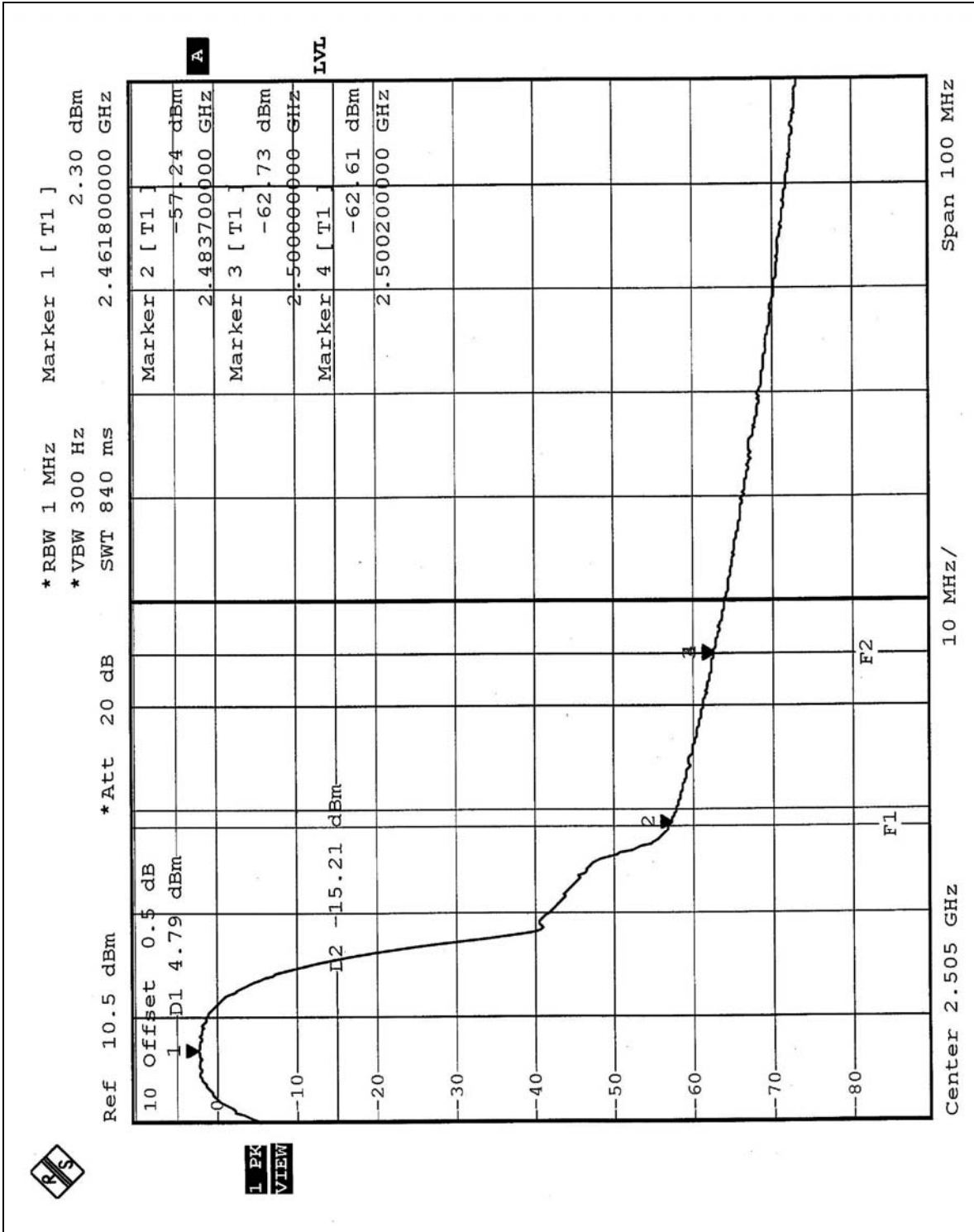
Same as Item 4.3.6

#### 4.6.7 TEST RESULTS (A)

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

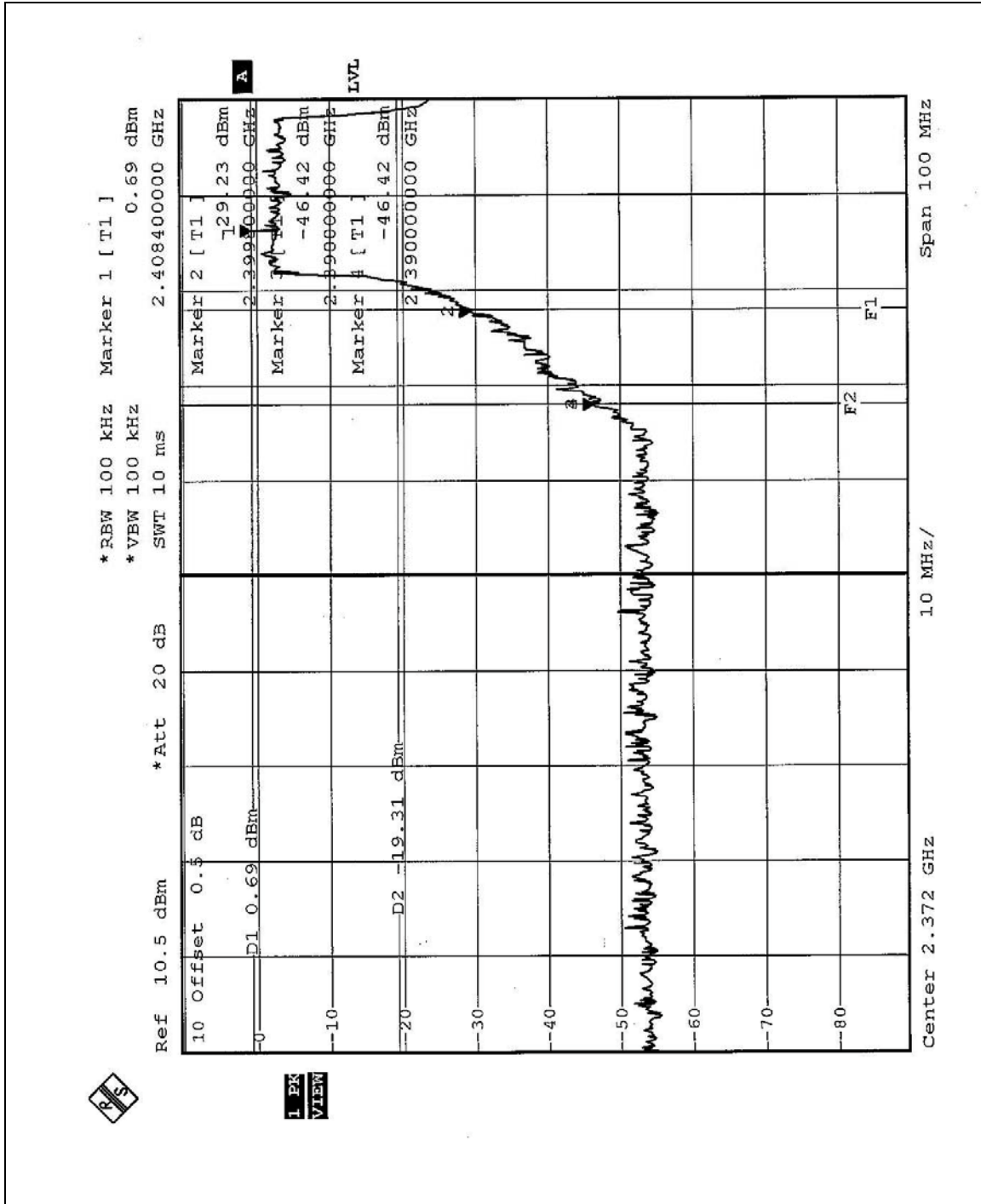
**NOTE 1:** The band edge emission plot of the CCK technique on the following two pages show 52.90dB/62.03dB delta between carrier maximum power and local maximum emission in restrict band (2.3198GHz/2.4837GHz). The emission of carrier strength list in the test result of channel 1 and 11 at the item 4.2.7 are 105.3dBuV/m and 103.6dBuV/m, so the maximum field strength in restrict band is  $105.3 - 52.90 = 52.40$  dBuV/m which is under 54dBuV/m limit.







**NOTE 2:** The band edge emission plot of the OFDM technique on the following two pages show 47.11dB/49.50dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz/2.4839GHz). The emission of carrier strength list in the test result of channel 1 and 11 at the item 4.2.7 are 99.30dBuV/m and 100.50dBuV/m, so the maximum field strength in restrict band is 99.30-47.11=52.19dBuV/m which is under 54dBuV/m limit.

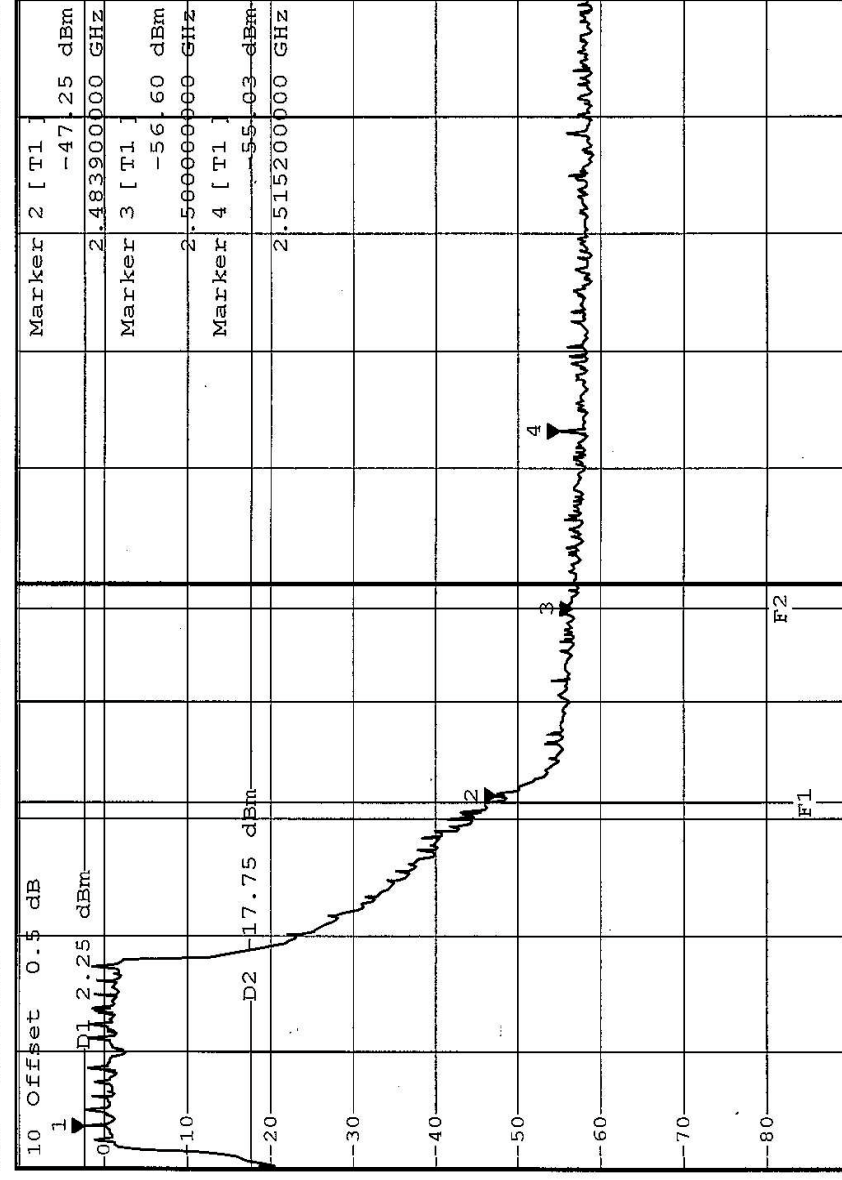




\*RBW 100 kHz  
 \*VBW 100 kHz  
 \*SWT 200 ms

Marker 1 [ T1 ]  
 2.25 dBm  
 2.455600000 GHz

Ref 10.5 dBm  
 10 Offset 0.5 dB  
 \*Att 30 dB



L PK  
 VIEW

Center 2.502 GHz  
 10 MHz/  
 Span 100 MHz

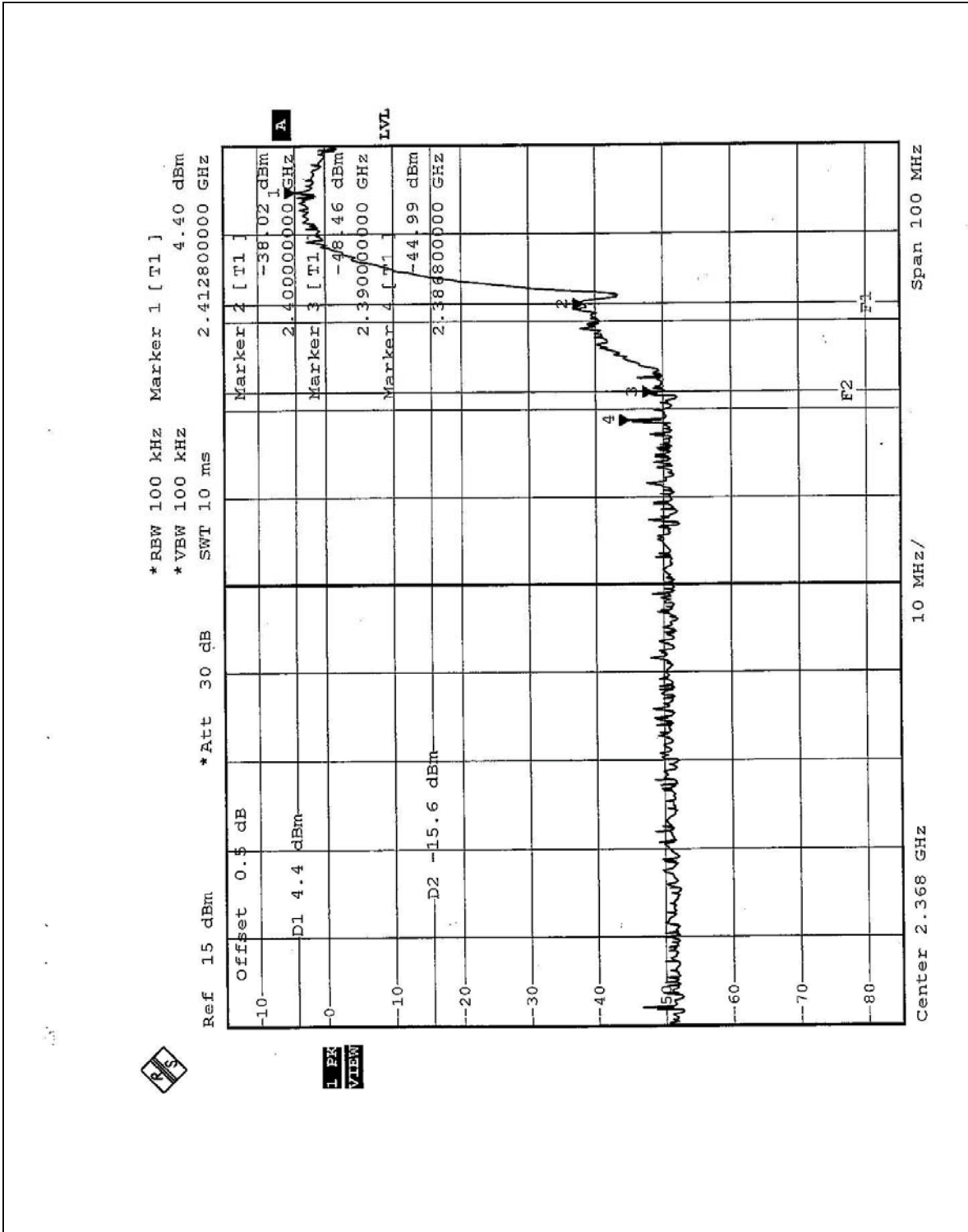


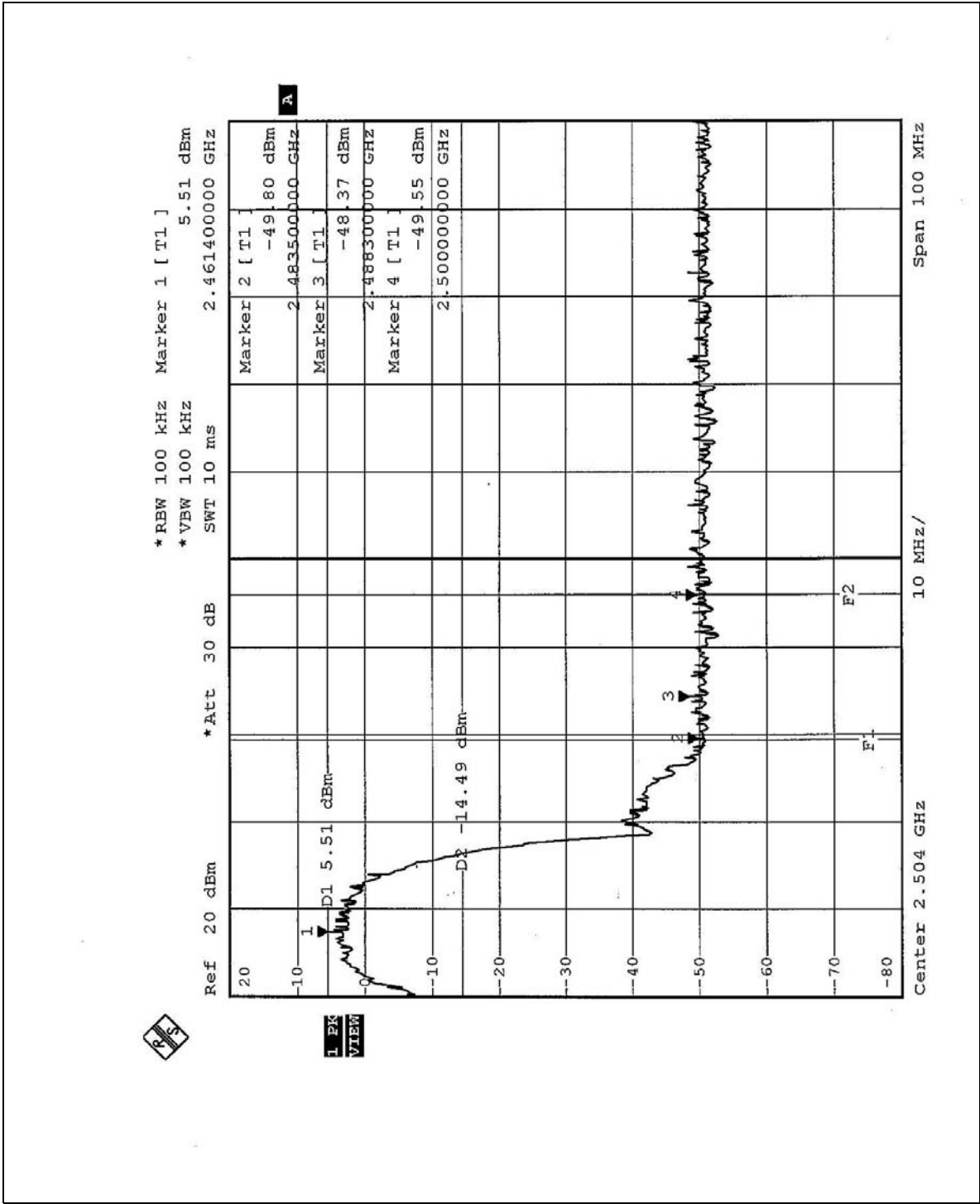
#### 4.6.8 TEST RESULTS (B)

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

**NOTE 1:** The band edge emission plot of the CCK technique on the following two pages show 49.39dB/53.88dB delta between carrier maximum power and local maximum emission in restrict band (2.3868GHz/2.4883GHz). The emission of carrier strength list in the test result of channel 1 and 11 at the item 4.2.8 are 102.20dBuV/m and 102.70dBuV/m, so the maximum field strength in restrict band is  $102.20 - 49.39 = 52.81$ dBuV/m which is under 54dBuV/m limit.



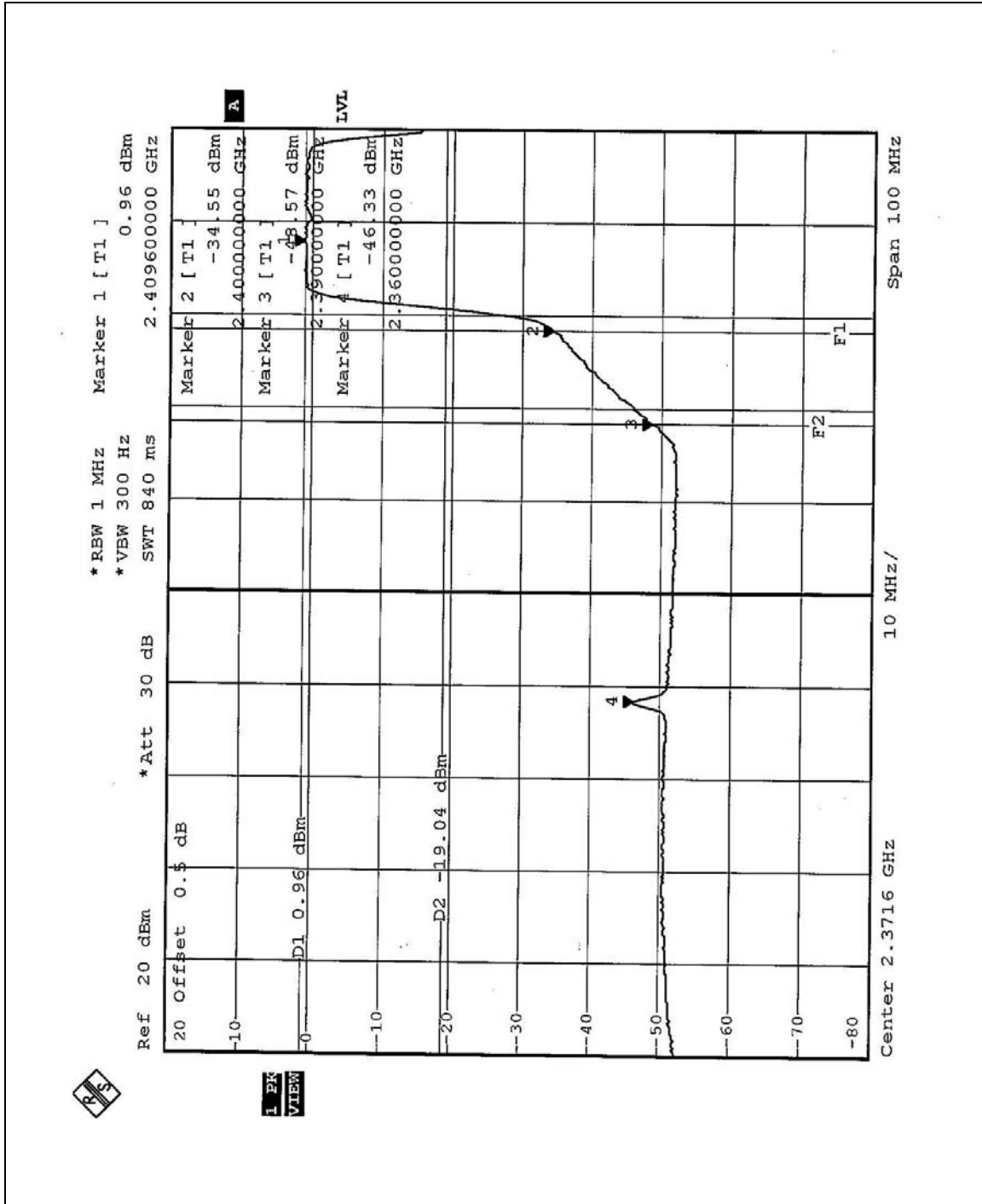


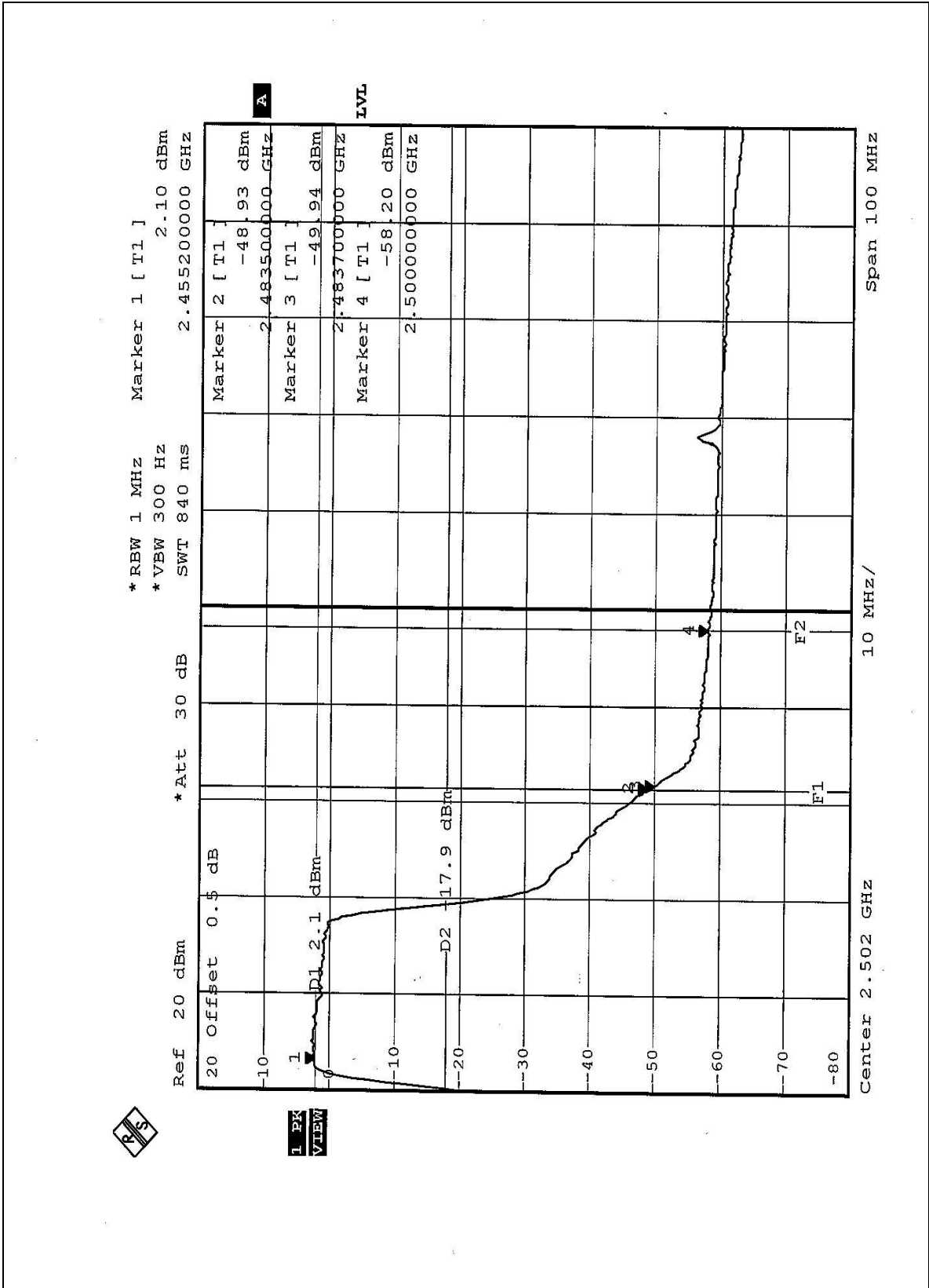


1 PK VIEW



**NOTE 2:** The band edge emission plot of the OFDM technique on the following two pages show 47.29dB/51.03dB delta between carrier maximum power and local maximum emission in restrict band (2.3600GHz/2.4835GHz). The emission of carrier strength list in the test result of channel 1 and 11 at the item 4.2.8 are 100.3dBuV/m and 101.4dBuV/m, so the maximum field strength in restrict band is 100.30—47.29=53.01dBuV/m which is under 54dBuV/m limit.







## **4.7 ANTENNA REQUIREMENT**

### **4.7.1 STANDARD APPLICABLE**

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

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

### **4.7.2 ANTENNA CONNECTED CONSTRUCTION**

The antenna type used in this product is Dipole Antenna with Reversed SMA antenna connector for model GL2454RT-QA and with UFL antenna connector for model 6800G. The maximum Gain of this antenna is only 2dBi.

## 5 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST (Model: GL2454RT-QA)



CONDUCTED EMISSION TEST (Model: 6800G)





RADIATED EMISSION TEST (Model: GL2454RT-QA)





### RADIATED EMISSION TEST (Model: 6800G)





## 6 INFORMATION ON THE TESTING LABORATORIES

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

<b>USA</b>	FCC, NVLAP
<b>Germany</b>	TUV Rheinland
<b>Japan</b>	VCCI
<b>New Zealand</b>	MoC
<b>Norway</b>	NEMKO
<b>R.O.C.</b>	BSMI, DGT, CNLA

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

[www.adt.com.tw/index.5/phtml](http://www.adt.com.tw/index.5/phtml).

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**Web Site:** [www.adt.com.tw](http://www.adt.com.tw)

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