

#### 4.6.7 TEST RESULTS (B)

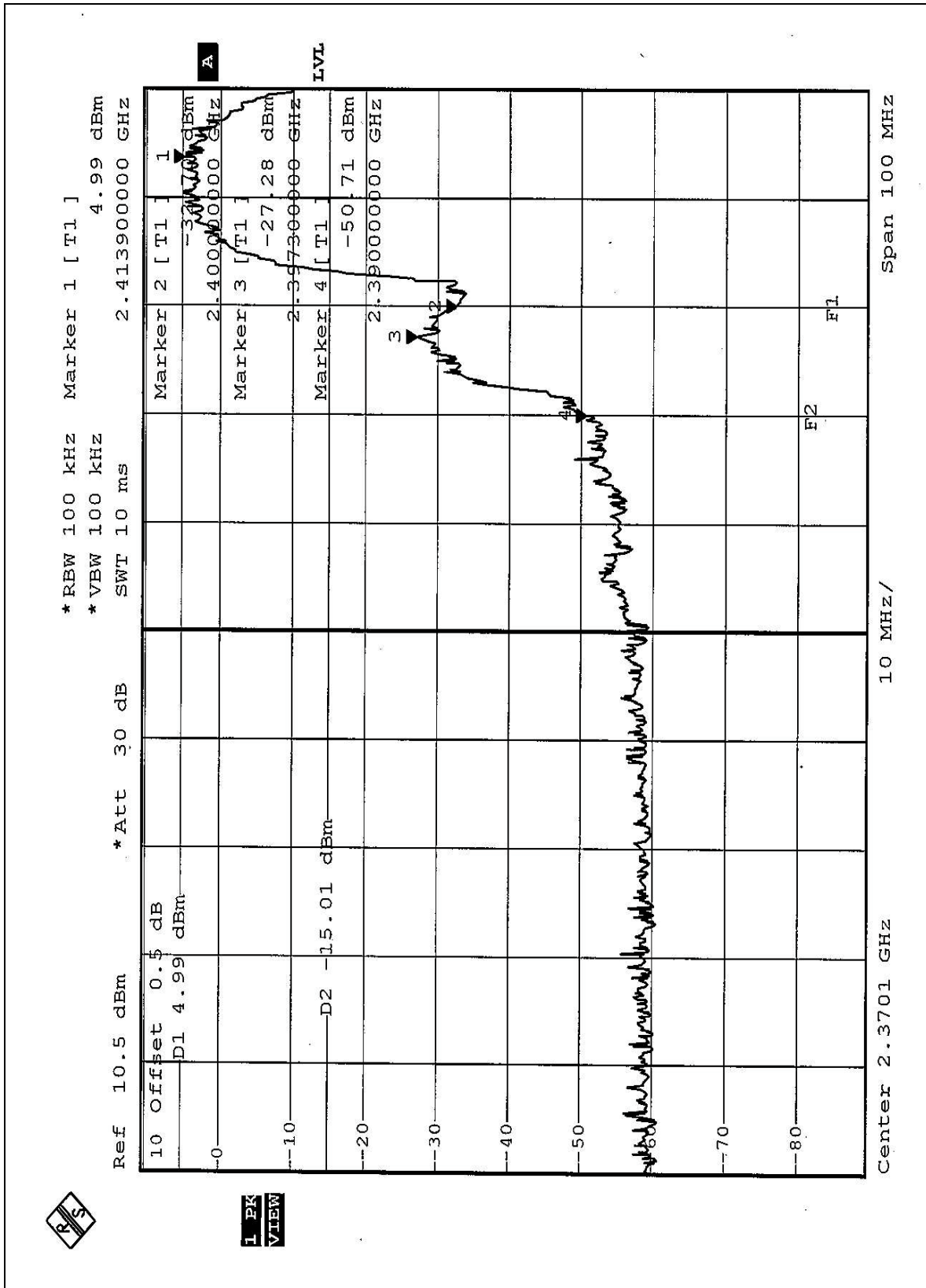
The spectrum plots are attached on the following 8 pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

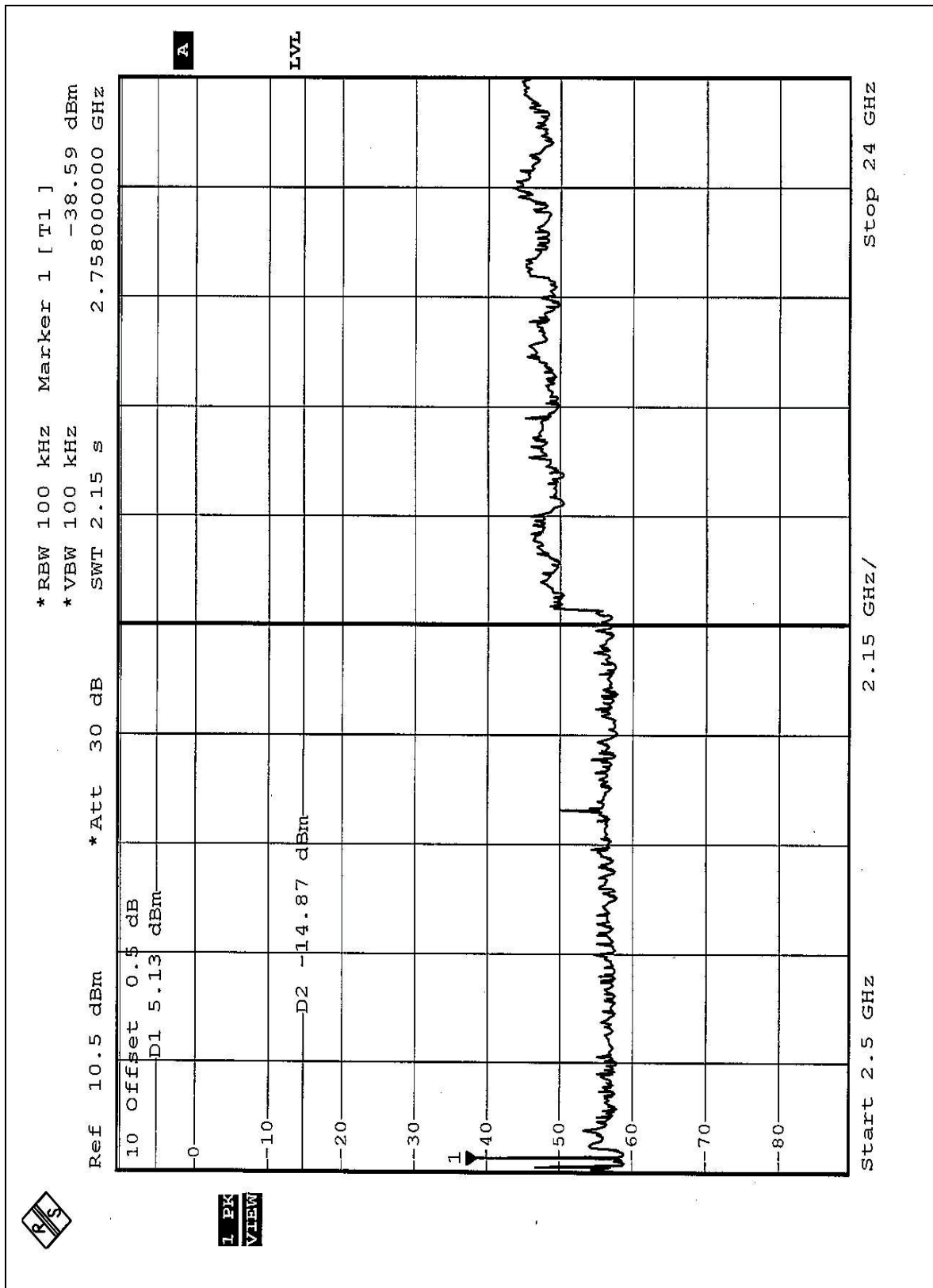
**NOTE1:** The band edge emission plot of CCK technique on the 1 ~2 page shows 55.70dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 (Page 30) is 101.16dBuV/m, so the maximum field strength in restrict band is  $101.16 - 55.70 = 45.46$ dBuV/m which is under 54dBuV/m limit.

**NOTE2:** The band edge emission plot of CCK technique on the 3 ~ 4 page shows 51.83dB delta between carrier maximum power and local maximum emission in restrict band (2.4841GHz ). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 (Page 32) is 100.18dBuV/m, so the maximum field strength in restrict band is  $100.18 - 51.83 = 48.35$ dBuV/m which is under 54 dBuV/m limit.

**NOTE3:** The band edge emission plot of OFDM technique on the 5 ~ 6 page shows 48.36dB 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 (Page 34) is 97.33dBuV/m, so the maximum field strength in restrict band is  $97.33 - 48.36 = 48.97$ dBuV/m which is under 54 dBuV/m limit.

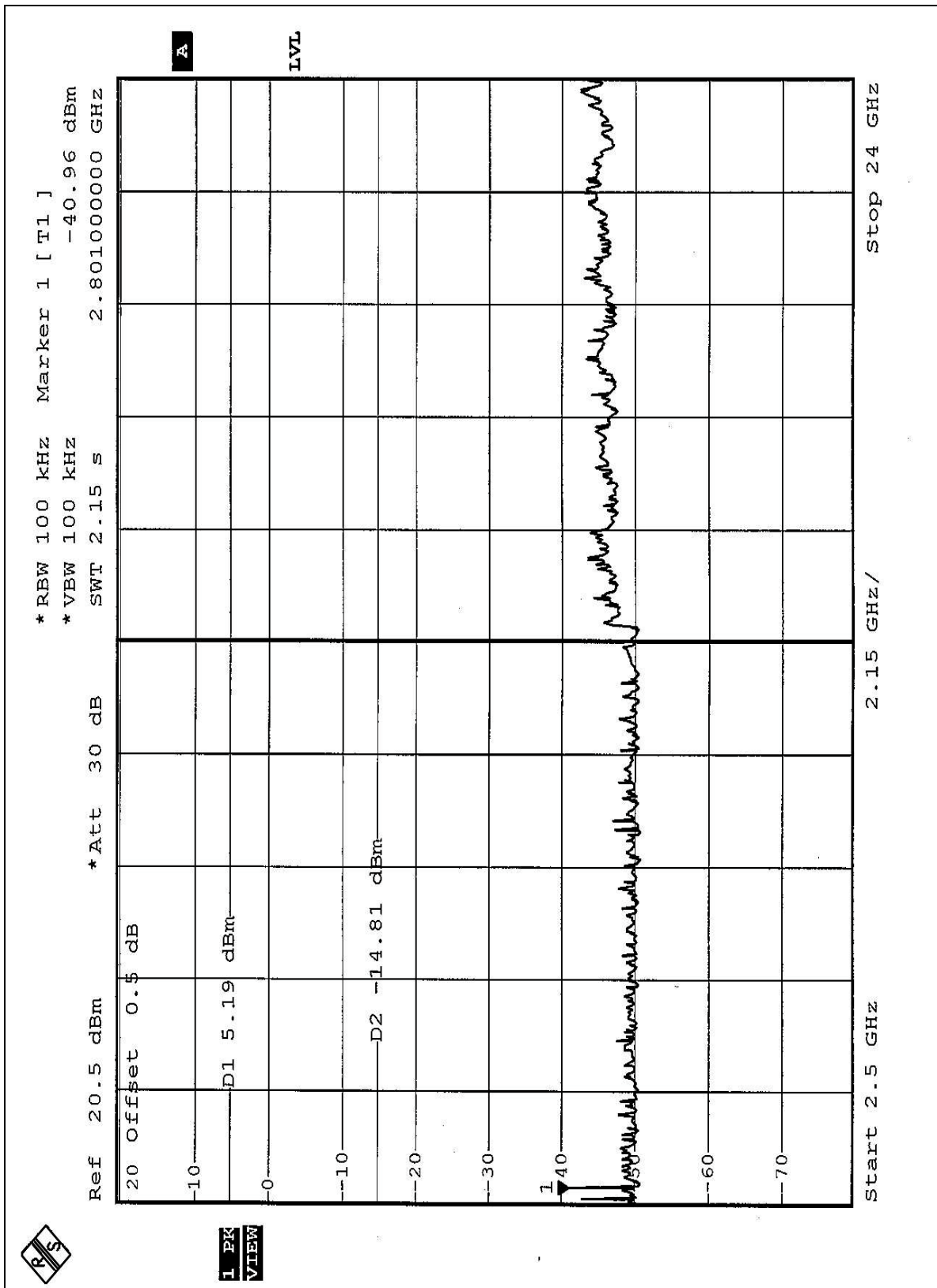
**NOTE4:** The band edge emission plot of OFDM technique on the 7 ~ 8 page shows 43.46dB delta between carrier maximum power and local maximum emission in restrict band (2.4839GHz ). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 (Page 35) is 94.18dBuV/m, so the maximum field strength in restrict band is  $94.18 - 43.46 = 50.72$ dBuV/m which is under 54dBuV/m limit.

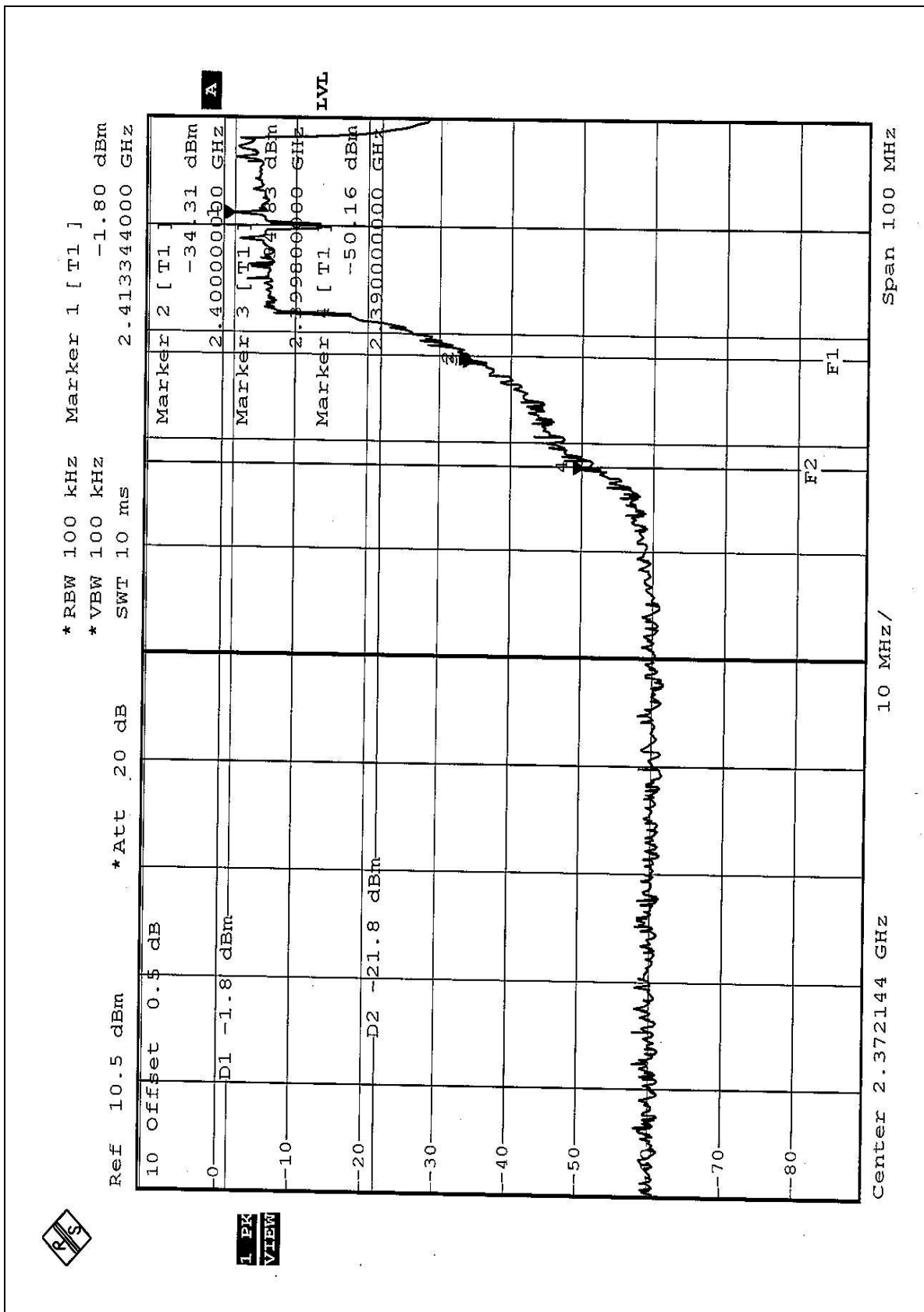


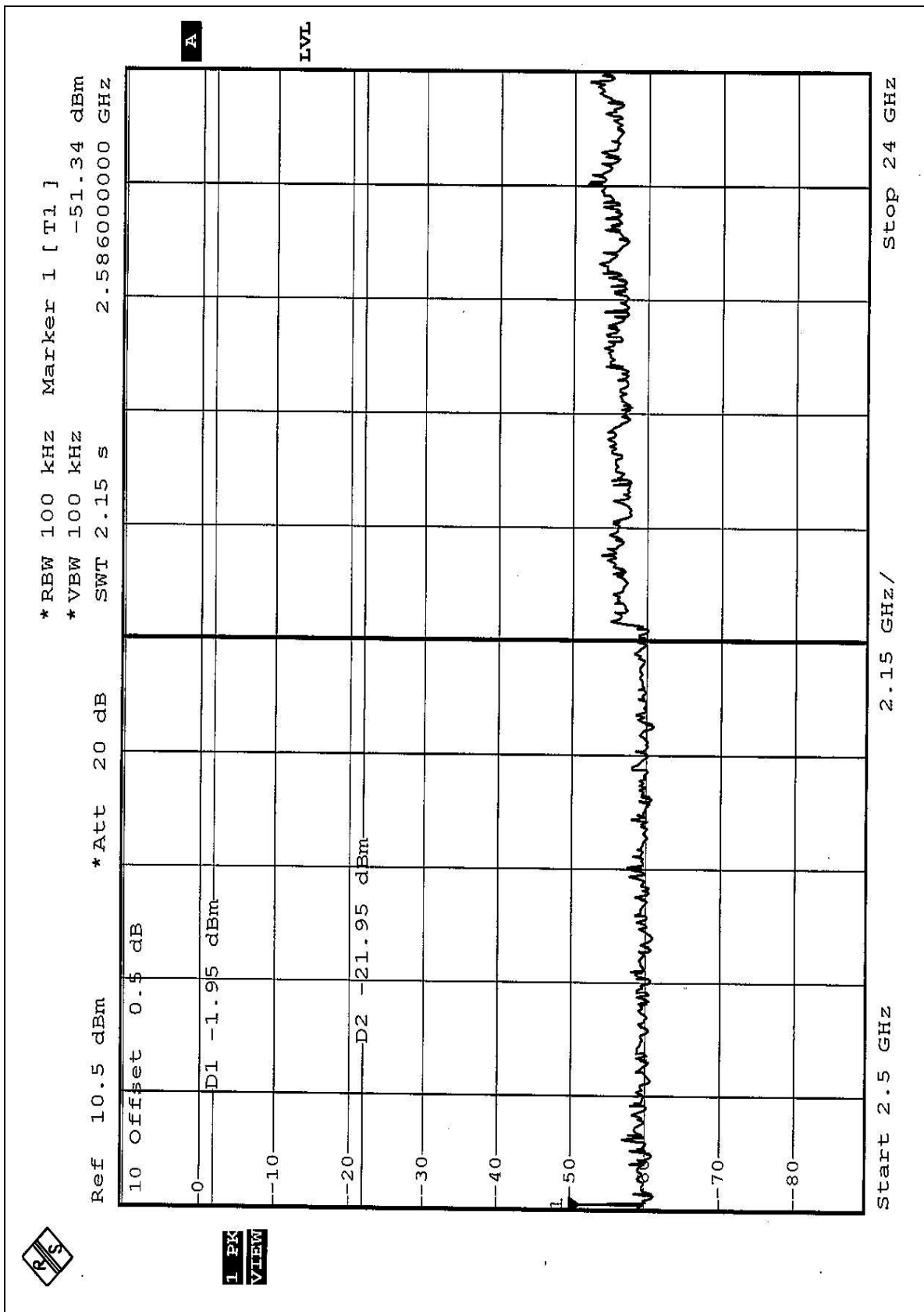


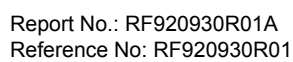


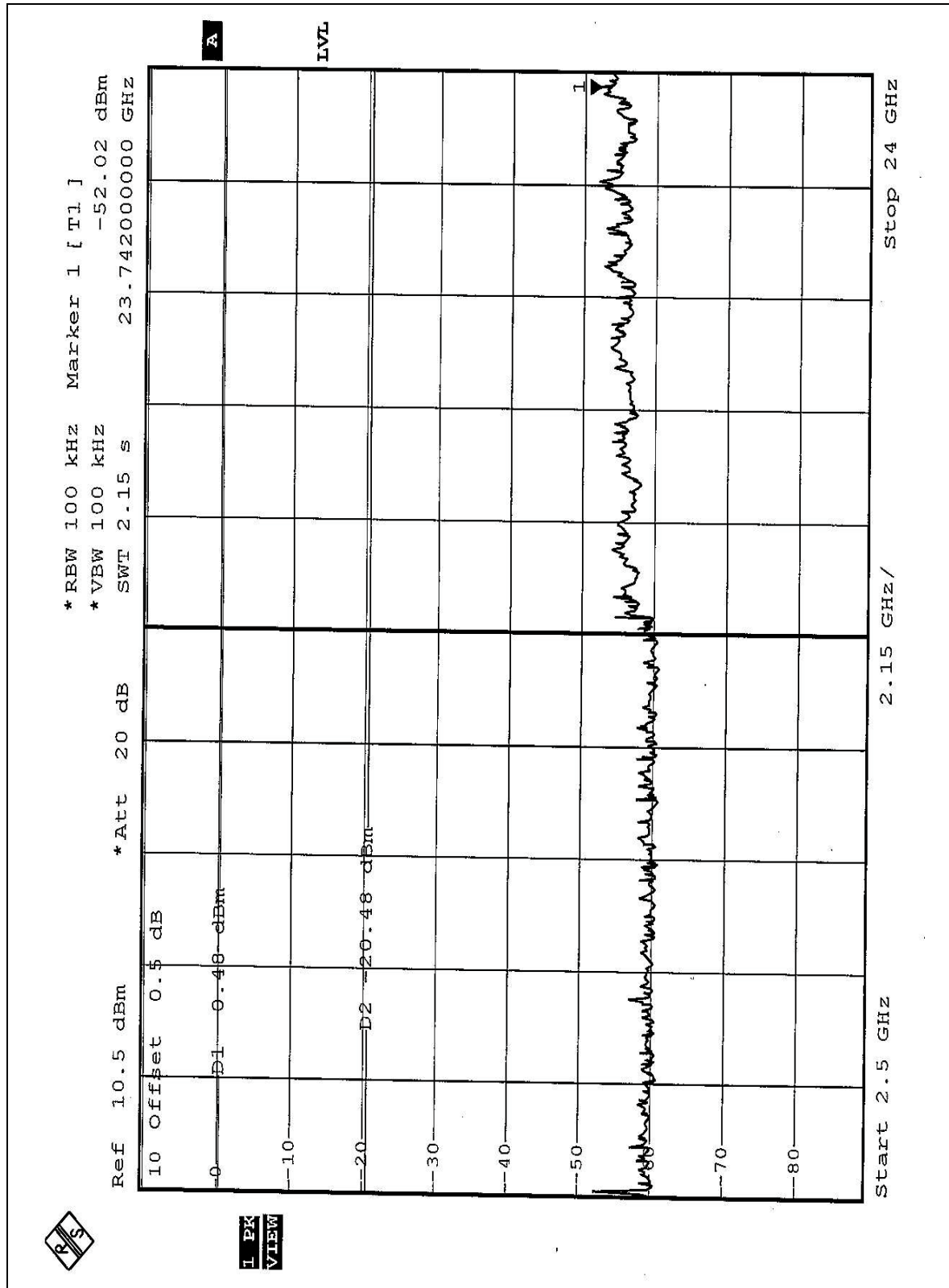












#### 4.6.8 TEST RESULTS (C)

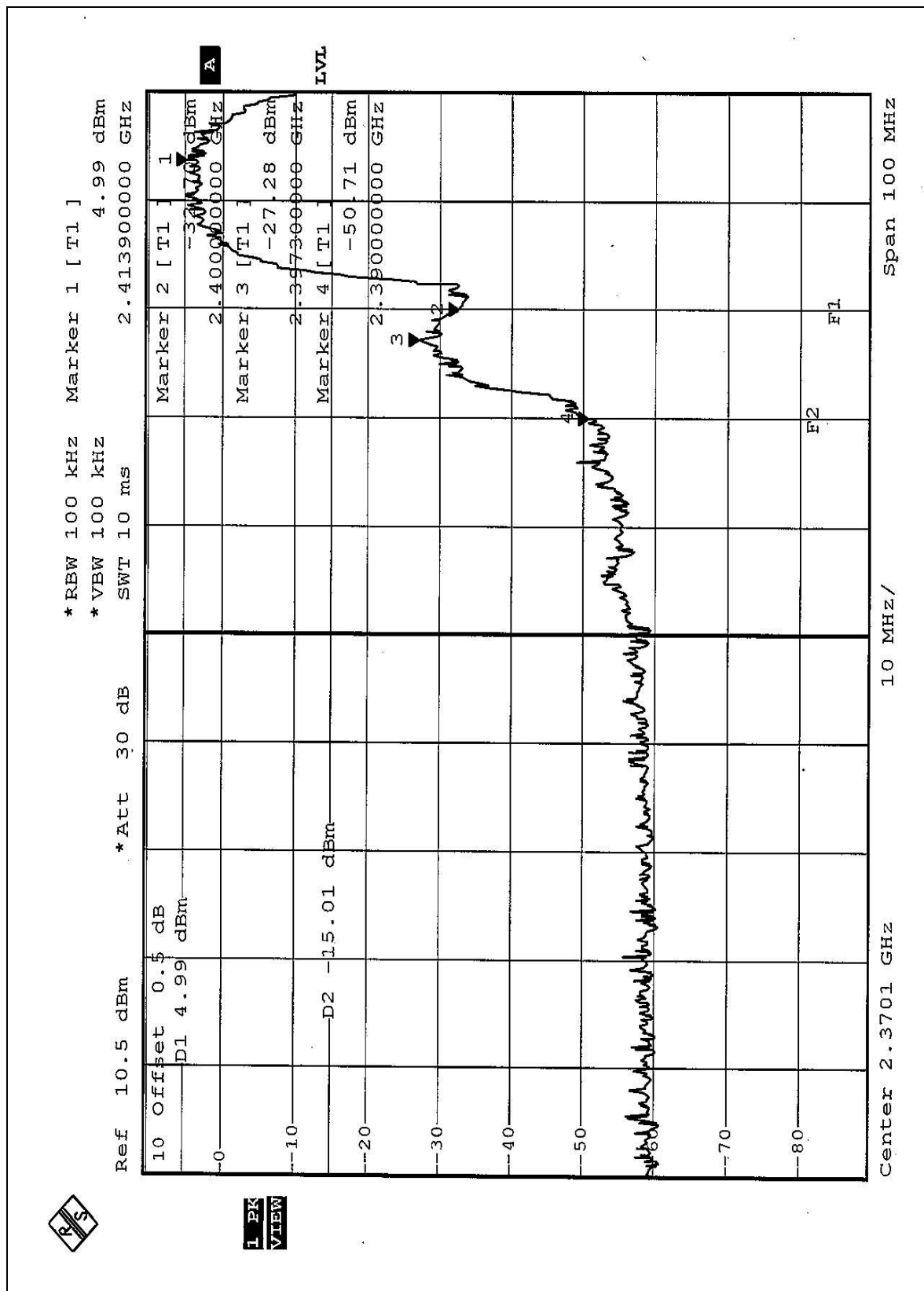
The spectrum plots are attached on the following 8 pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

**NOTE1:** The band edge emission plot of CCK technique on the 1 ~2 page shows 55.70dB 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 4.2.9 (Page 37) is 95.28dBuV/m, so the maximum field strength in restrict band is  $95.28-55.70=39.58\text{dBuV/m}$  which is under 54dBuV/m limit.

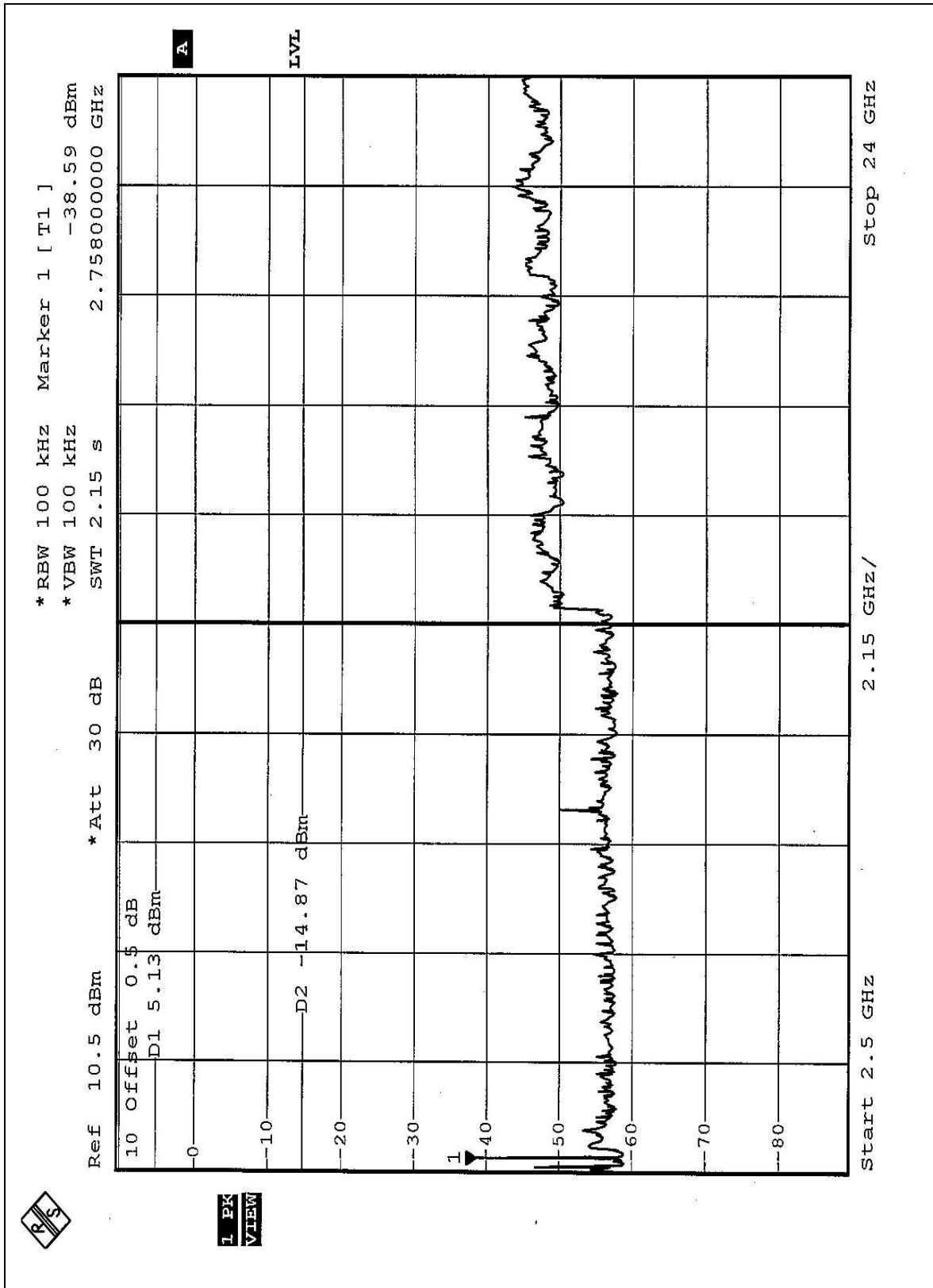
**NOTE2:** The band edge emission plot of CCK technique on the 3 ~ 4 page shows 51.83dB delta between carrier maximum power and local maximum emission in restrict band (2.4841GHz ). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 (Page 39) is 104.26dBuV/m, so the maximum field strength in restrict band is  $104.26-51.83=52.43\text{dBuV/m}$  which is under 54 dBuV/m limit.

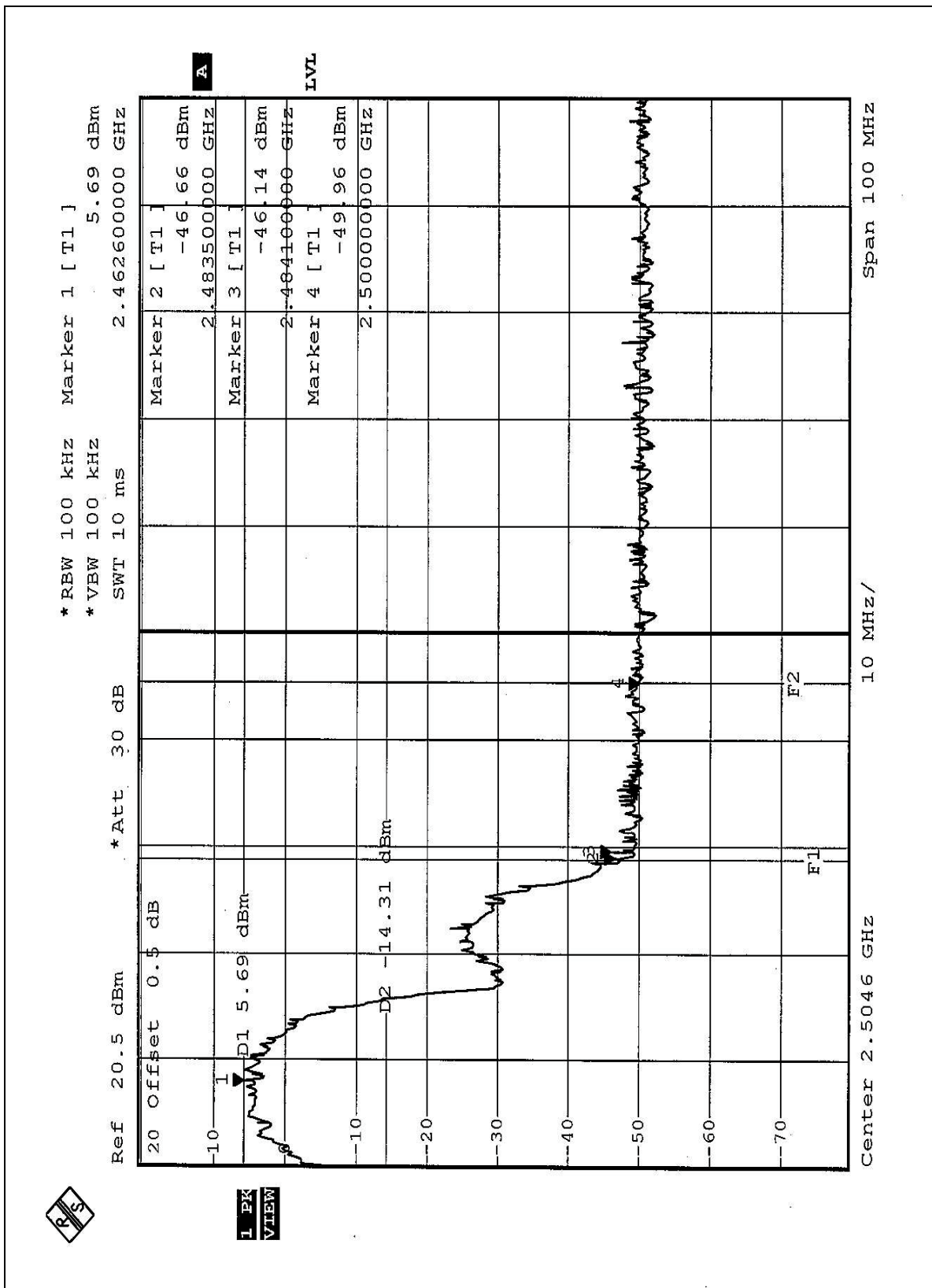
**NOTE3:** The band edge emission plot of OFDM technique on the 5 ~ 6 page shows 48.36dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 (Page 40) is 92.10dBuV/m, so the maximum field strength in restrict band is  $92.10-48.36=43.74\text{dBuV/m}$  which is under 54 dBuV/m limit.

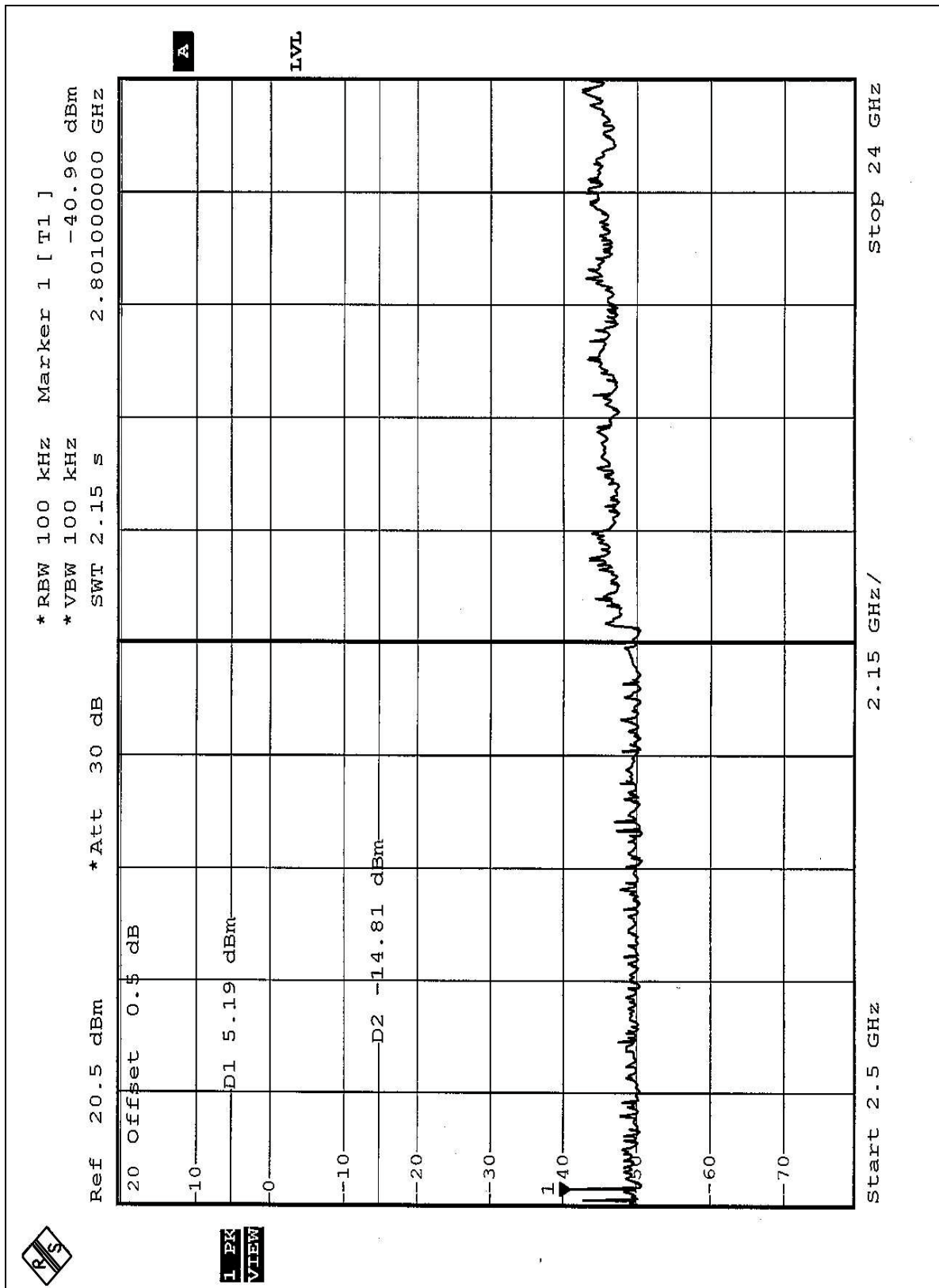
**NOTE4:** The band edge emission plot of OFDM technique on the 7 ~ 8 page shows 43.46dB delta between carrier maximum power and local maximum emission in restrict band (2.4839GHz ). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 (Page 42) is 92.54dBuV/m, so the maximum field strength in restrict band is  $92.54-43.46=49.08\text{dBuV/m}$  which is under 54dBuV/m limit.

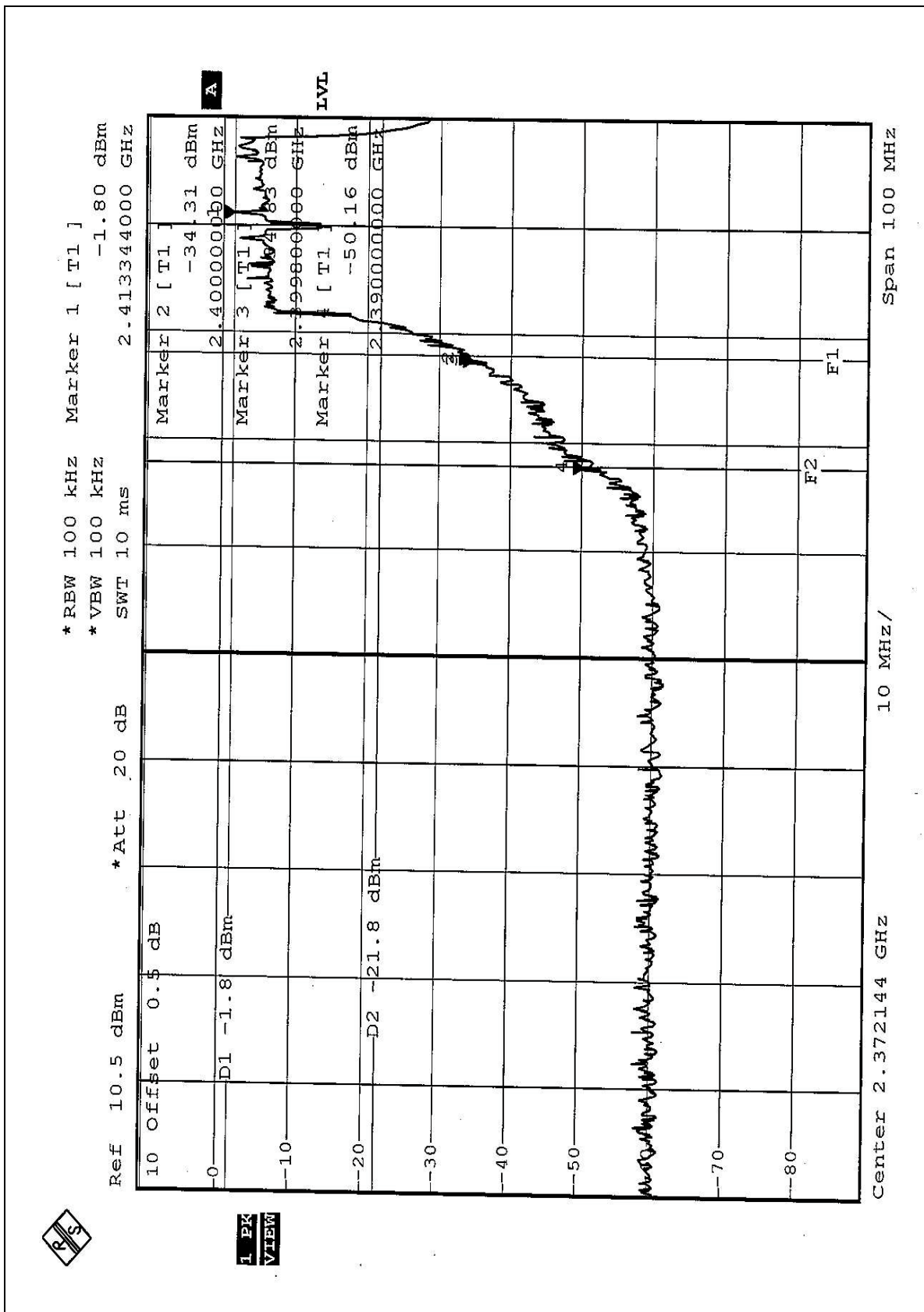


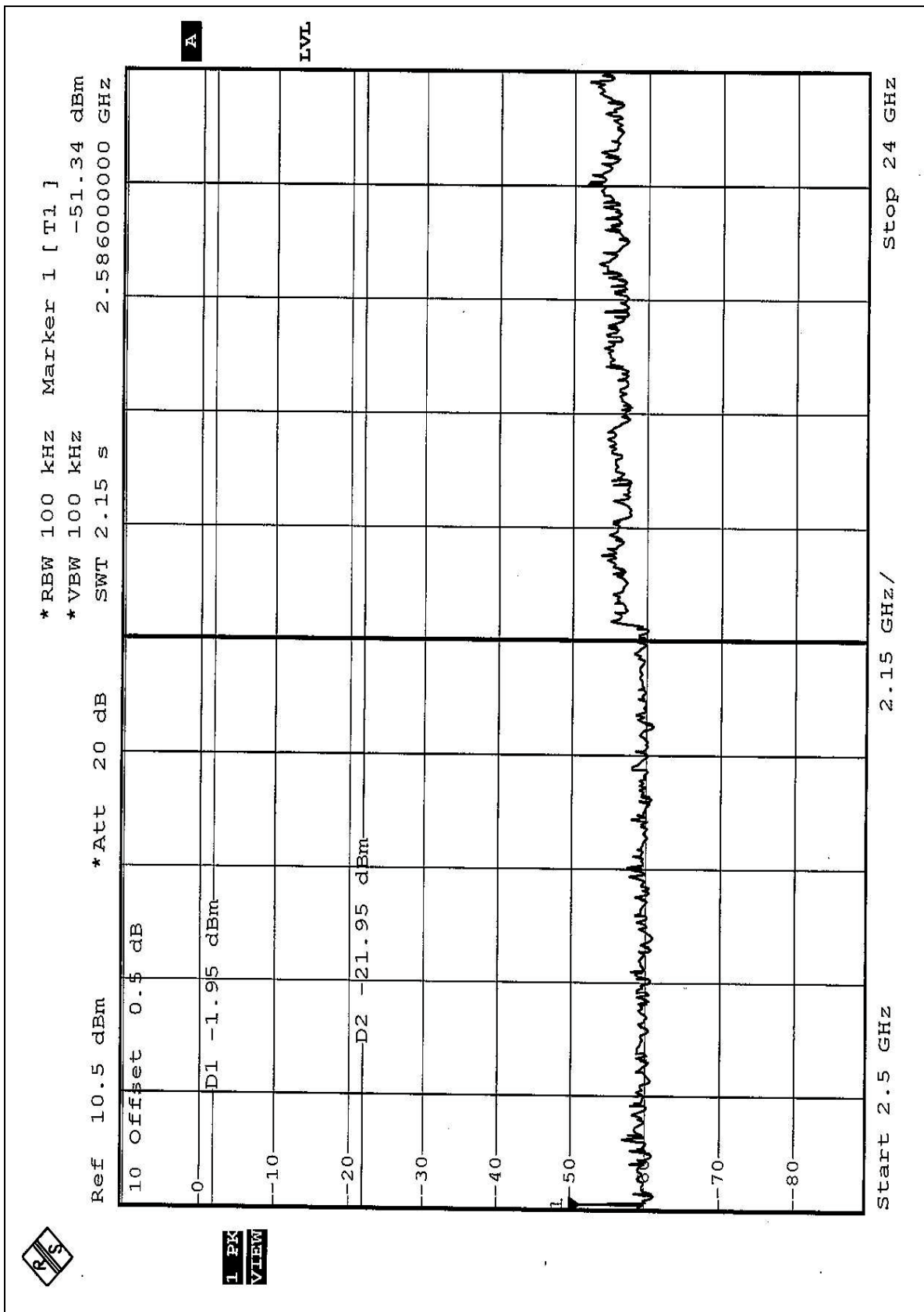


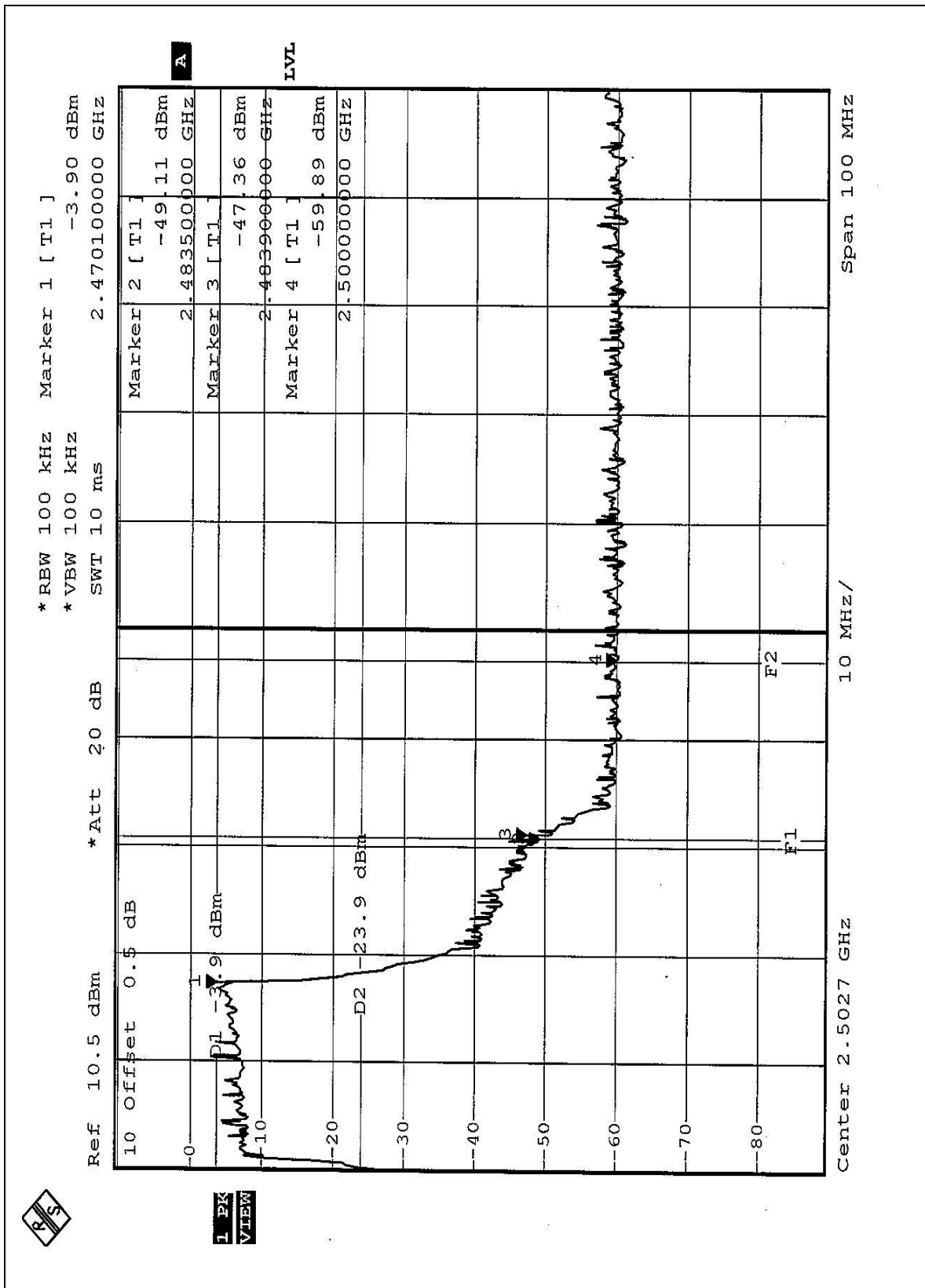


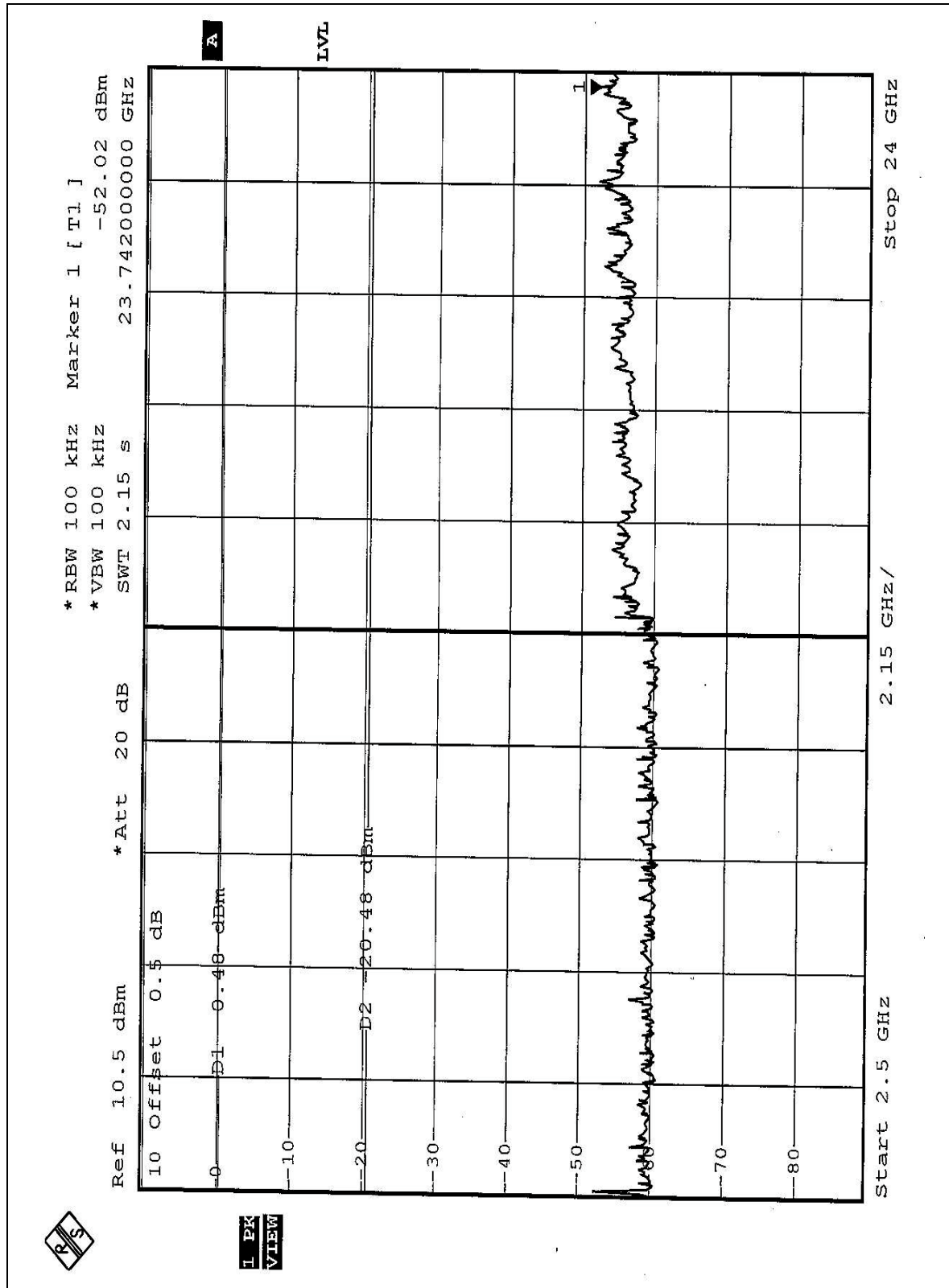














## **4.7 ANTENNA REQUIREMENT**

### **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 types used in this product are Dipole Antenna and Inverted F. The maximum Gain of this antenna is 5dBi.



## 5 PHOTOGRAPHS OF THE TEST CONFIGURATION

### CONDUCTED EMISSION TEST (Mode 1)





(Mode 2)





(Mode 3)





# RADIATED EMISSION TEST (Mode 1)







(Mode 2)







(Mode 3)







## 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:

<b>USA</b>	FCC, NVLAP, UL
<b>Germany</b>	TUV Rheinland
<b>Japan</b>	VCCI
<b>Norway</b>	NEMKO
<b>Canada</b>	INDUSTRY CANADA , CSA
<b>R.O.C.</b>	CNLA, BSMI, DGT
<b>Netherlands</b>	Telefication
<b>Singapore</b>	PSB , GOST-ASIA(MOU)
<b>Russia</b>	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](http://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 Lab:**

Tel: 886-3-3183232

Fax: 886-3-3185050

**Linko RF & Telecom Lab.**

Tel: 886-3-3270910

Fax: 886-3-3270892

**Email:** [service@mail.adt.com.tw](mailto:service@mail.adt.com.tw)

**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.