

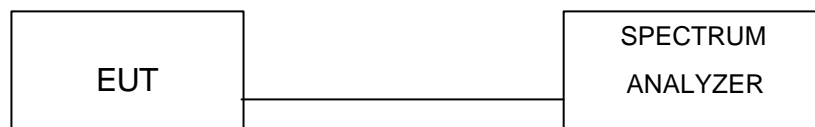
4.9.3 TEST PROCEDURE

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

4.9.4 DEVIATION FROM TEST STANDARD

No deviation

4.9.5 TEST SETUP



4.9.6 EUT OPERATING CONDITIONS

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



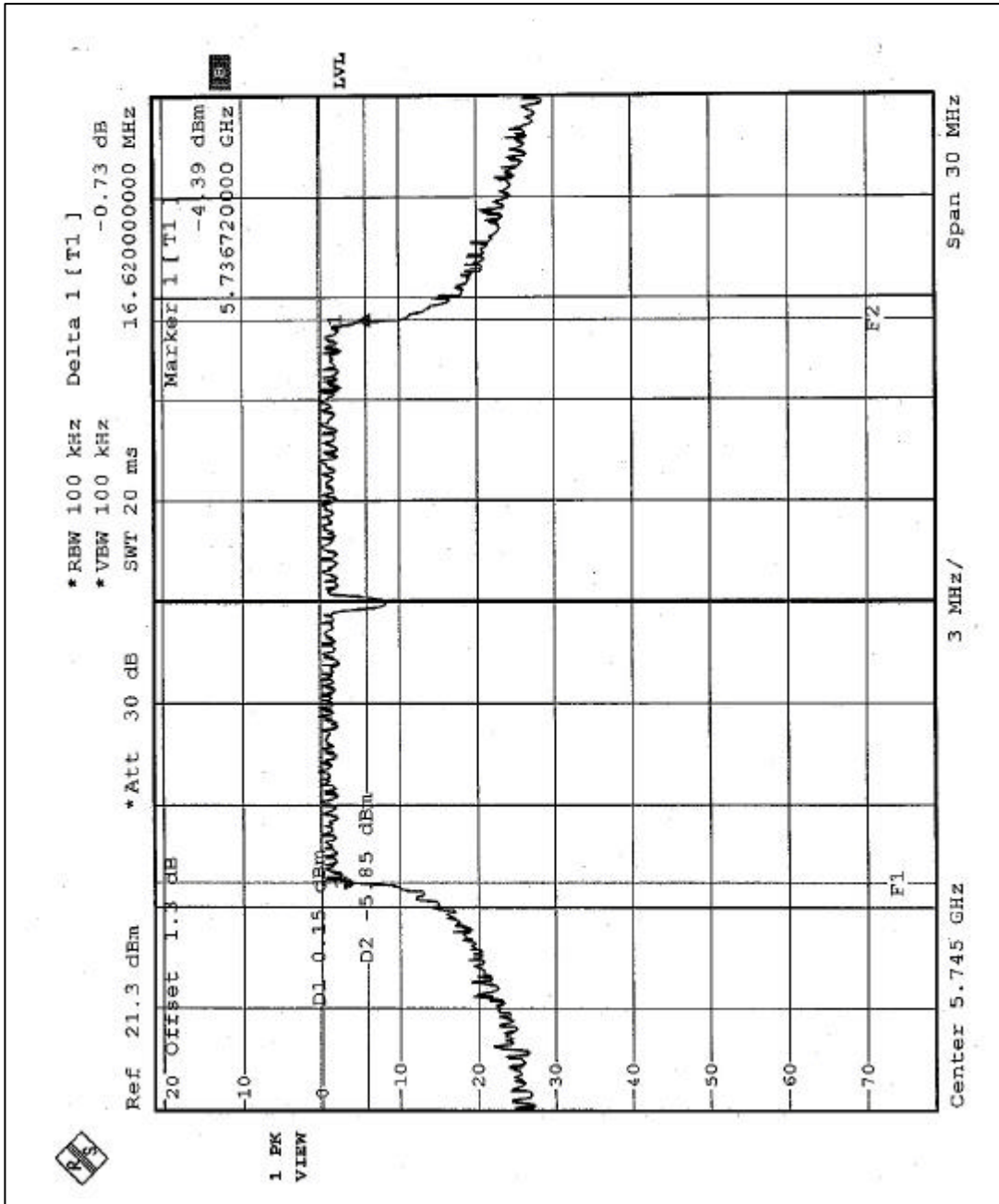
4.9.7 TEST RESULTS

EUT	802.11a Cardbus	MODEL	A13QBF-PC
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	27deg.C, 56%RH, 978 hPa
TEST MODE	Normal	TEST BY	Tony Chen

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
9	5745	16.62	0.5	PASS
11	5785	16.62	0.5	PASS
13	5825	16.62	0.5	PASS

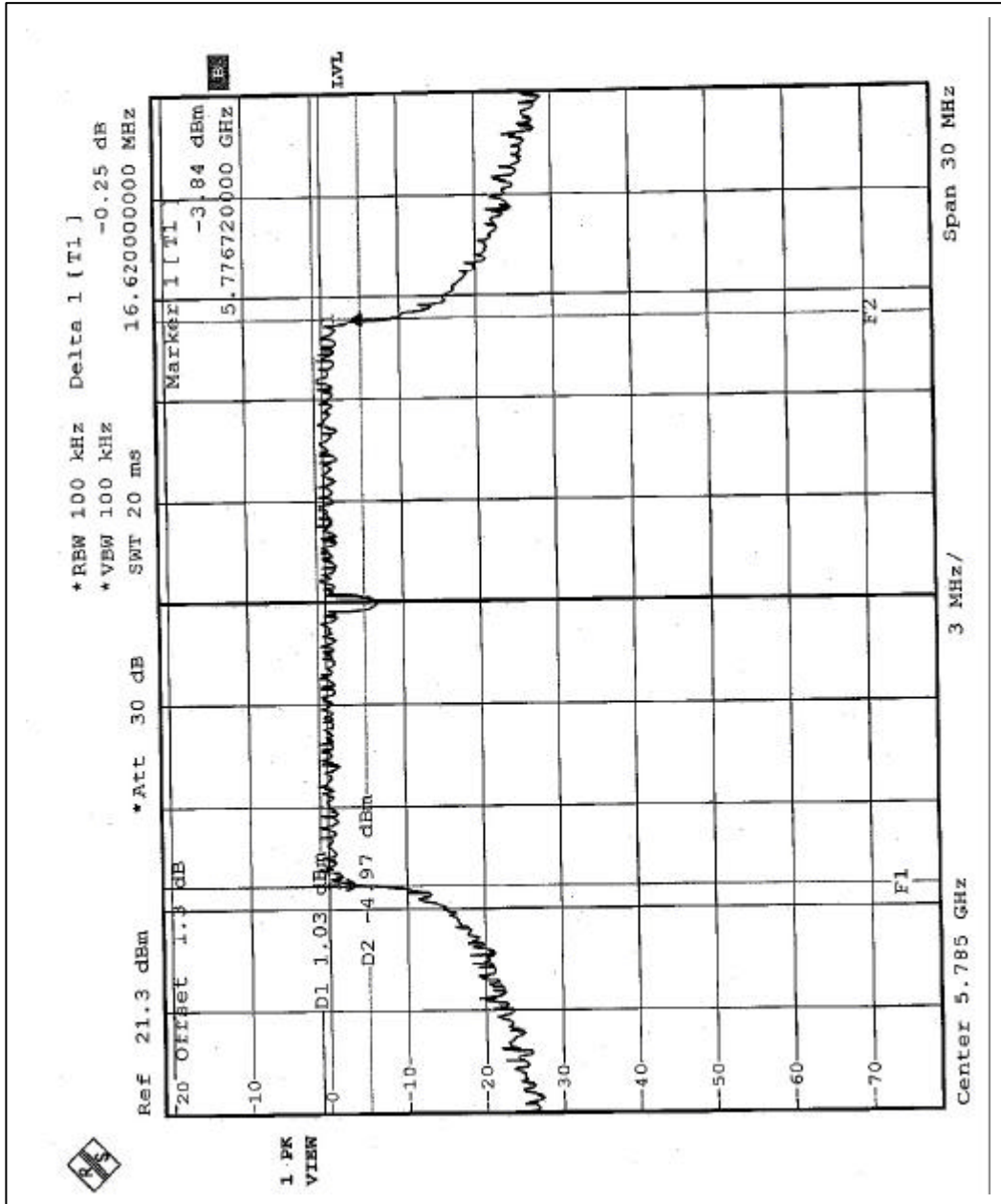


CH9



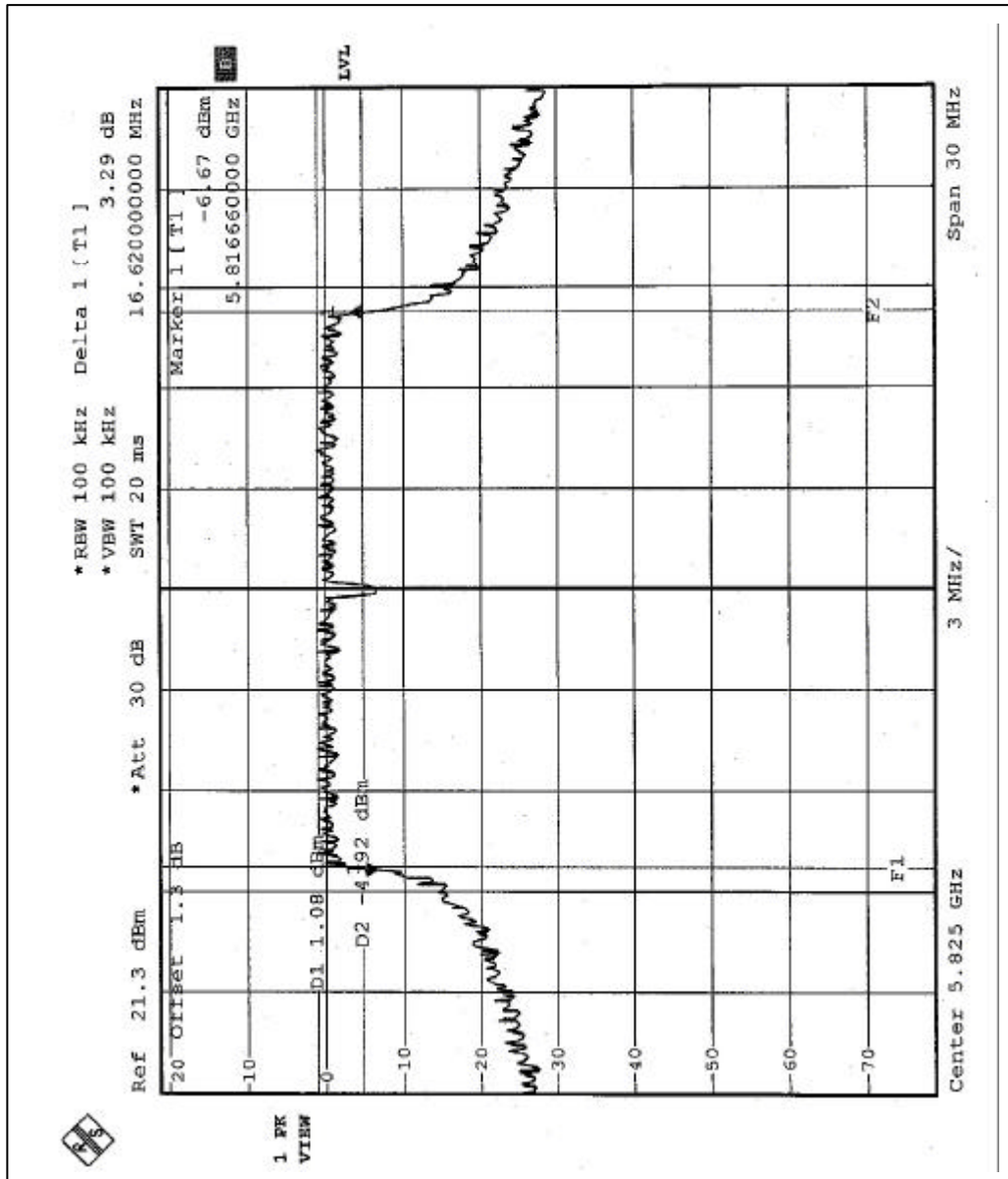


CH11





CH13



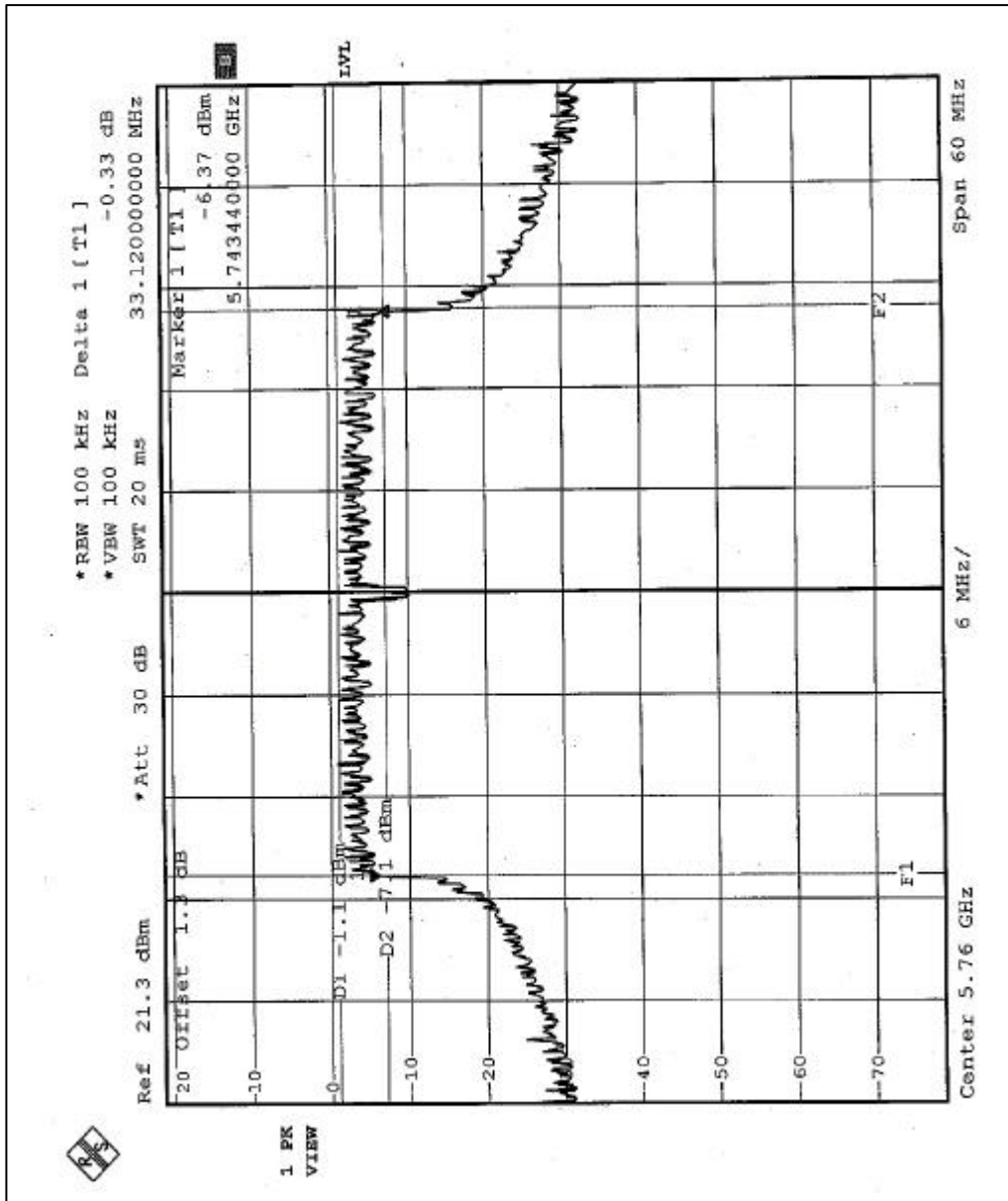


EUT	802.11a Cardbus	MODEL	A13QBF-PC
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	27deg.C, 56%RH, 978 hPa
TEST MODE	Turbo	TEST BY	Tony Chen

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
4	5760	33.12	0.5	PASS
5	5800	33.12	0.5	PASS

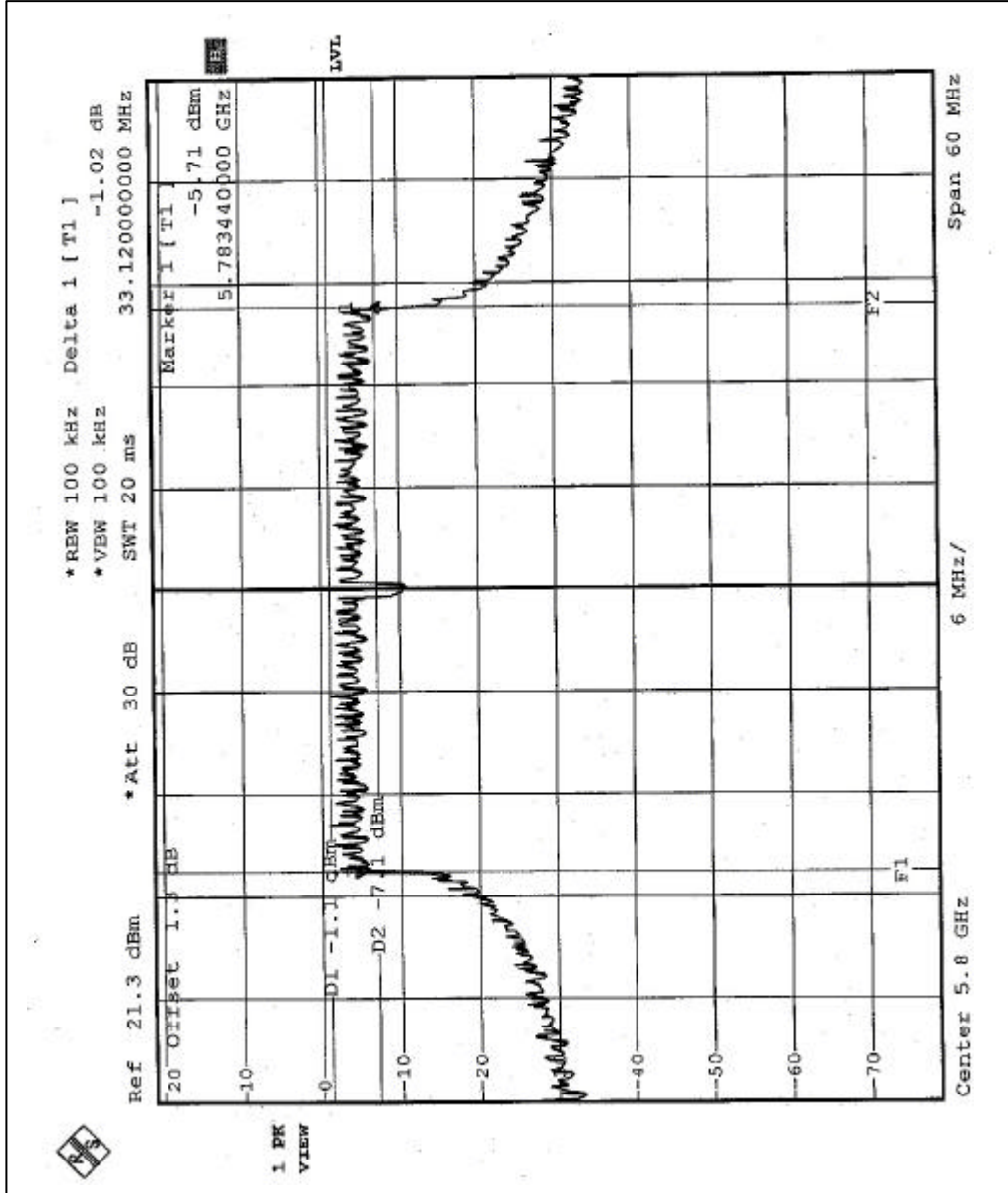


CH4





CH5





4.10 MAXIMUM PEAK OUTPUT POWER

4.10.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.10.2 INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SINGLE CHANNEL POWER METER	NRVS	100026	Mar. 06, 2004
PEAK POWER SENSOR	NRV-Z32	100013	Mar. 06, 2004

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



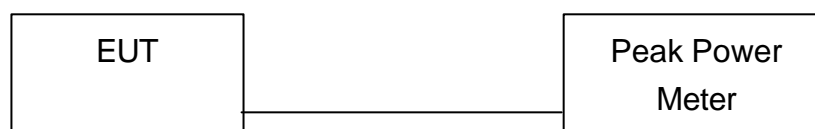
4.10.3 TEST PROCEDURES

The transmitter output was connected to the peak power meter.

4.10.4 DEVIATION FROM TEST STANDARD

No deviation

4.10.5 TEST SETUP



4.10.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6



4.10.7 TEST RESULTS

EUT	802.11a Cardbus	MODEL	A13QBF-PC
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 64%RH, 978 hPa
TEST MODE	Normal	TEST BY	Tony Chen

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
9	5745	15.86	30	PASS
11	5785	15.93	30	PASS
13	5825	15.81	30	PASS

EUT	802.11a Cardbus	MODEL	A13QBF-PC
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 64%RH, 978 hPa
TEST MODE	Turbo	TEST BY	Tony Chen

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
4	5760	15.92	30	PASS
5	5800	15.89	30	PASS



4.10.8 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.10.9 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP	1093.4495.30	Dec. 19, 2003

NOTE:

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
- 2.The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.10.10 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/3 kHz. The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span/3 kHz for a full response of the mixer in the spectrum analyzer.

4.10.11 DEVIATION FROM TEST STANDARD

No deviation

4.10.12 TEST SETUP



4.10.13 EUT OPERATING CONDITION

Same as Item 4.3.6



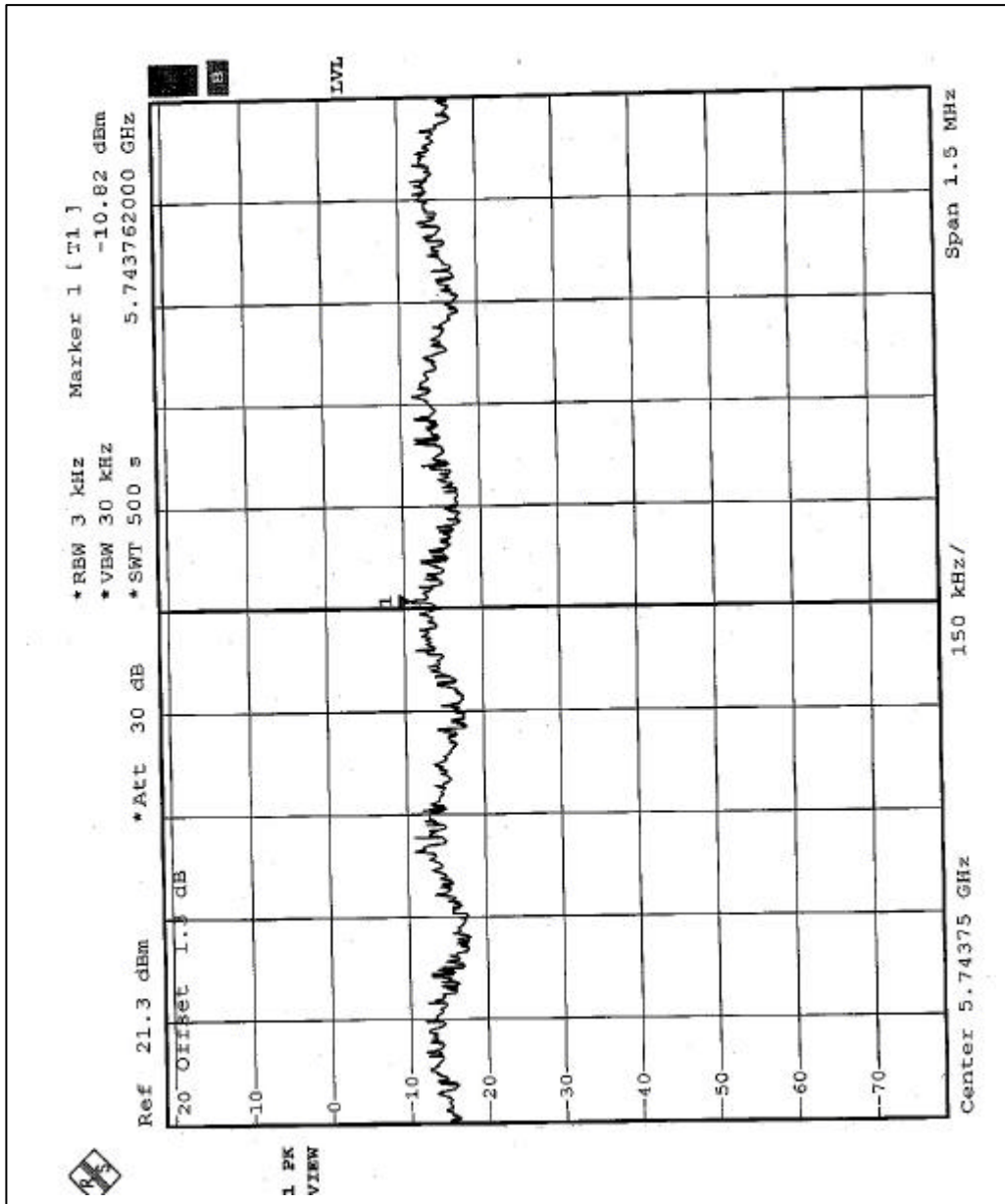
4.10.14 TEST RESULTS

EUT	802.11a Cardbus	MODEL	A13QBF-PC
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	57deg. C, 56%RH, 978 hPa
TEST MODE	Normal	TEST BY	Tony Chen

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
9	5745	-10.82	8	PASS
11	5785	-10.81	8	PASS
13	5825	-11.06	8	PASS

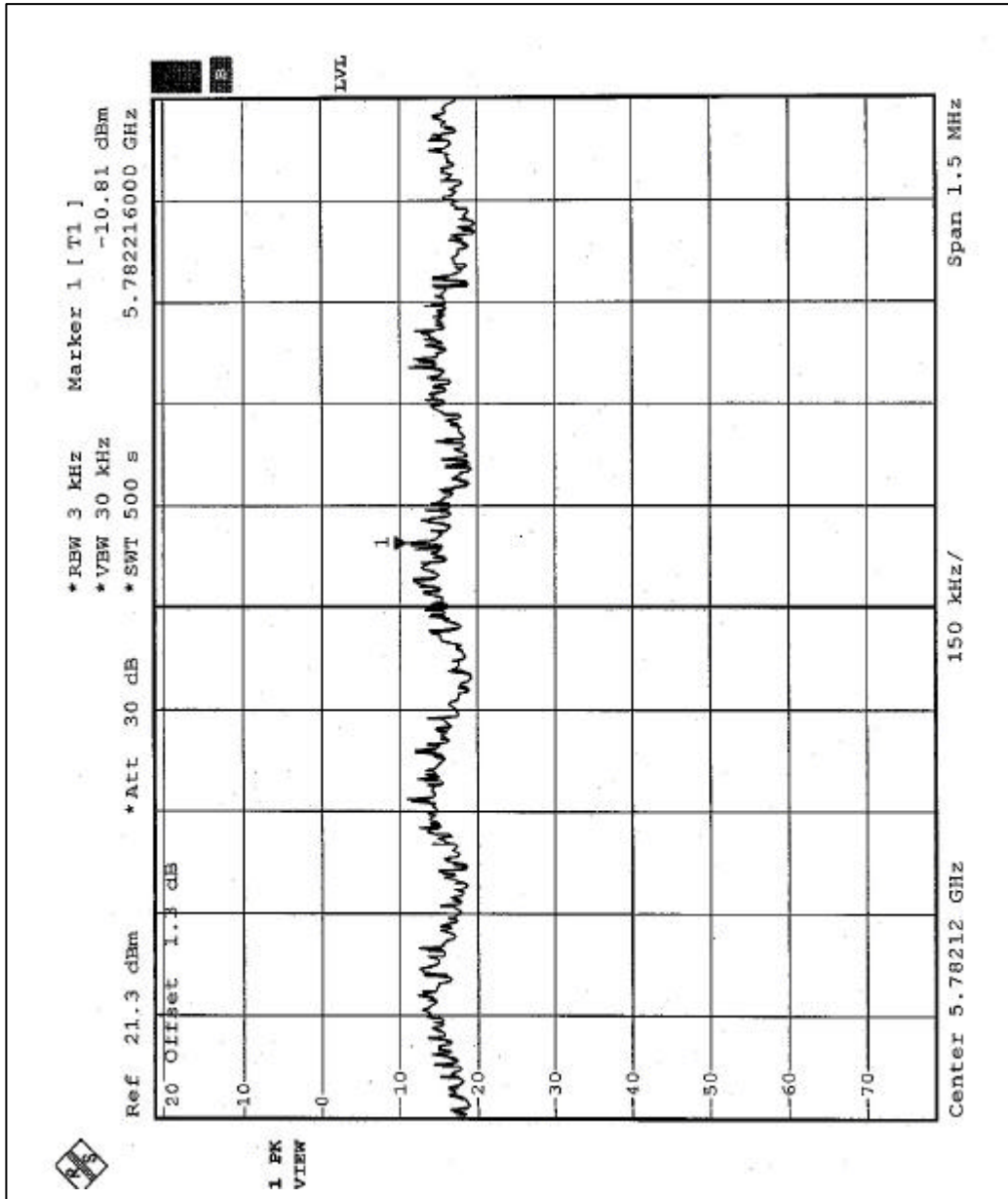


CH9



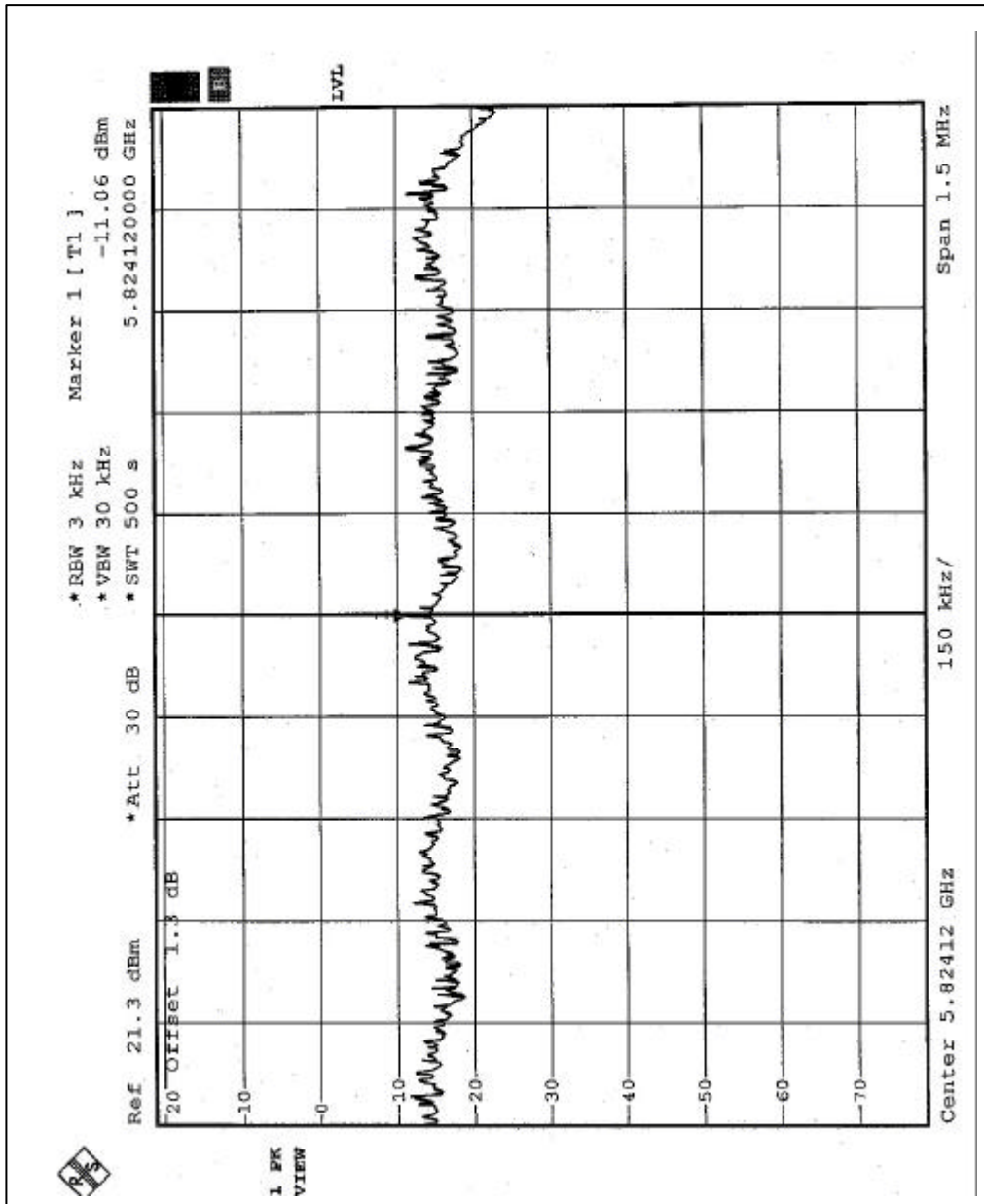


CH11





CH13



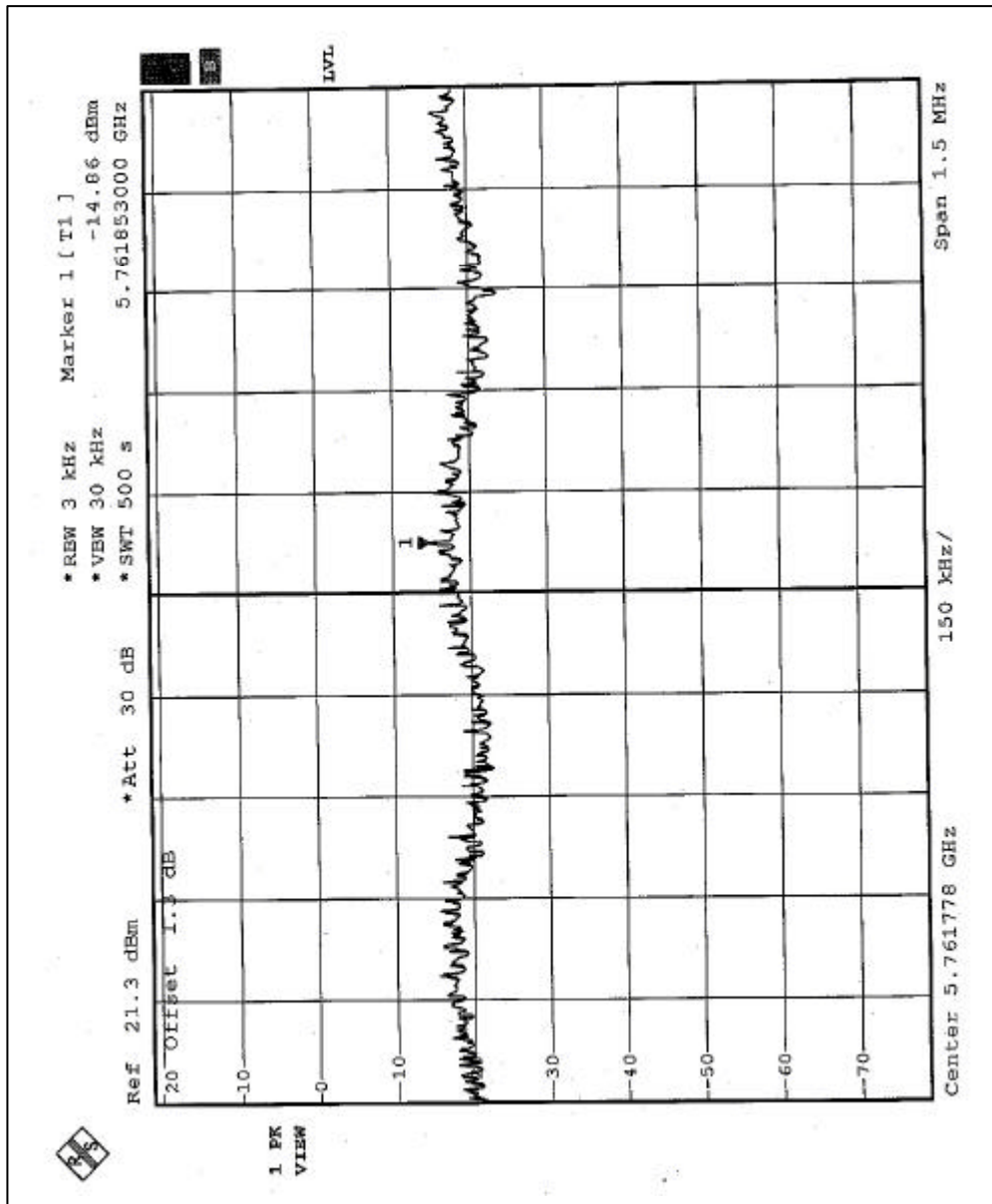


EUT	802.11a Cardbus	MODEL	A13QBF-PC
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	57deg. C, 56%RH, 978 hPa
TEST MODE	Turbo	TEST BY	Tony Chen

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
4	5760	-14.86	8	PASS
5	5800	-14.76	8	PASS

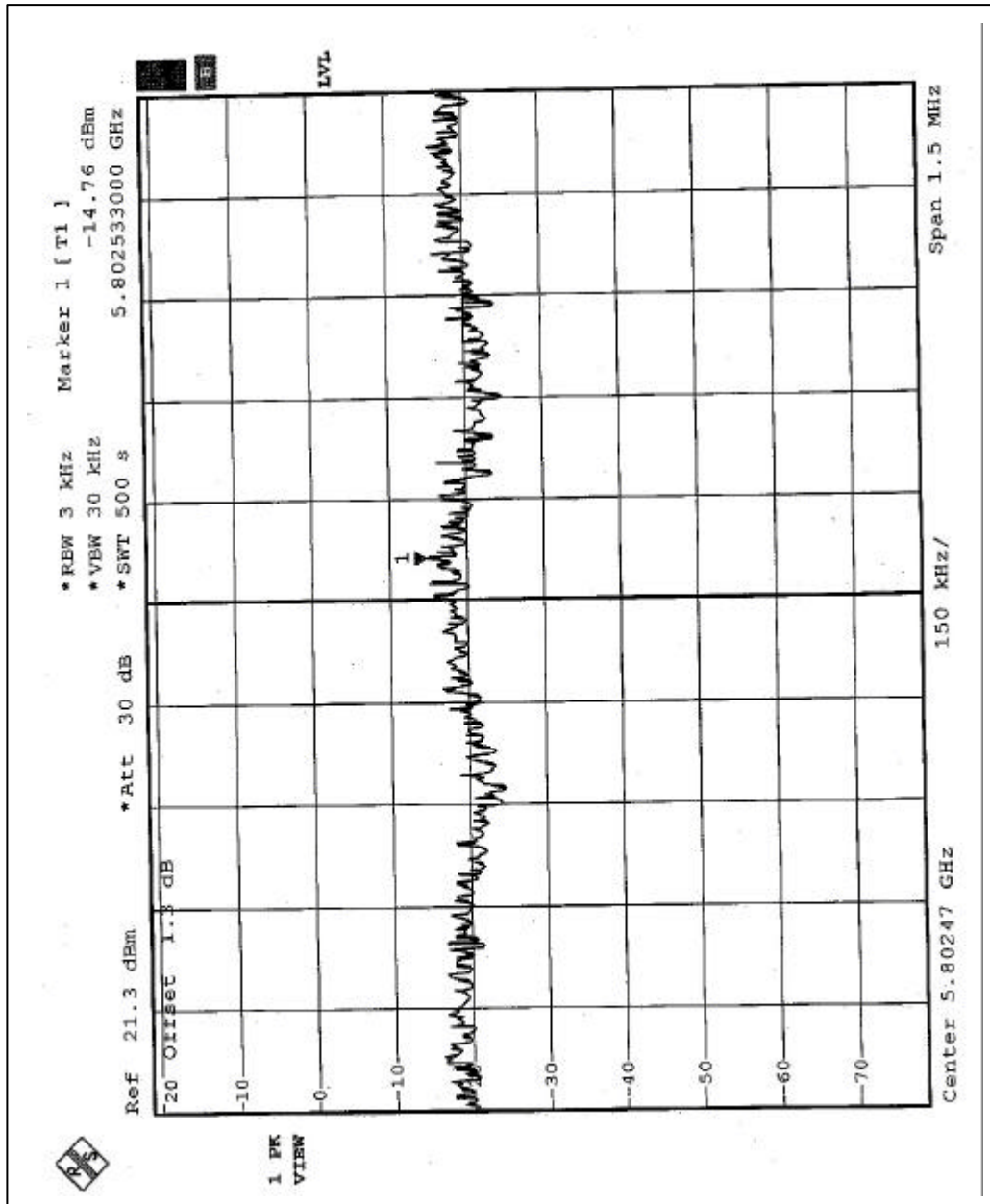


CH4





CH5



4.11 BAND EDGES MEASUREMENT

4.11.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.11.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP	1093.4495.30	Dec. 19, 2003

NOTE:

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
- 2.The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.11.3 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 100 kHz with suitable frequency span including 100 kHz bandwidth from band edge. The band edges was measured and recorded.

4.11.4 DEVIATION FROM TEST STANDARD

No deviation



4.11.5 EUT OPERATING CONDITION

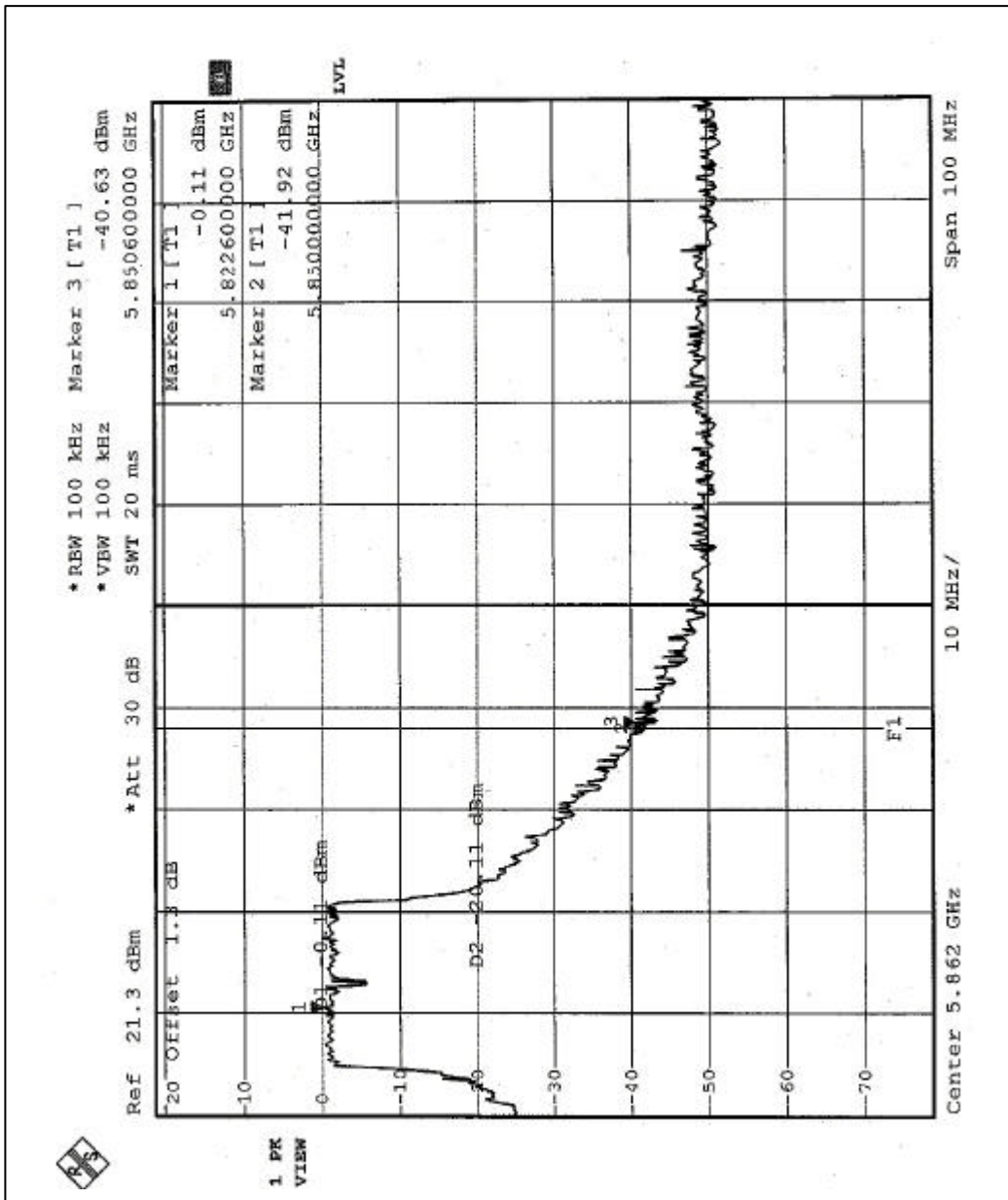
Same as Item 4.3.6

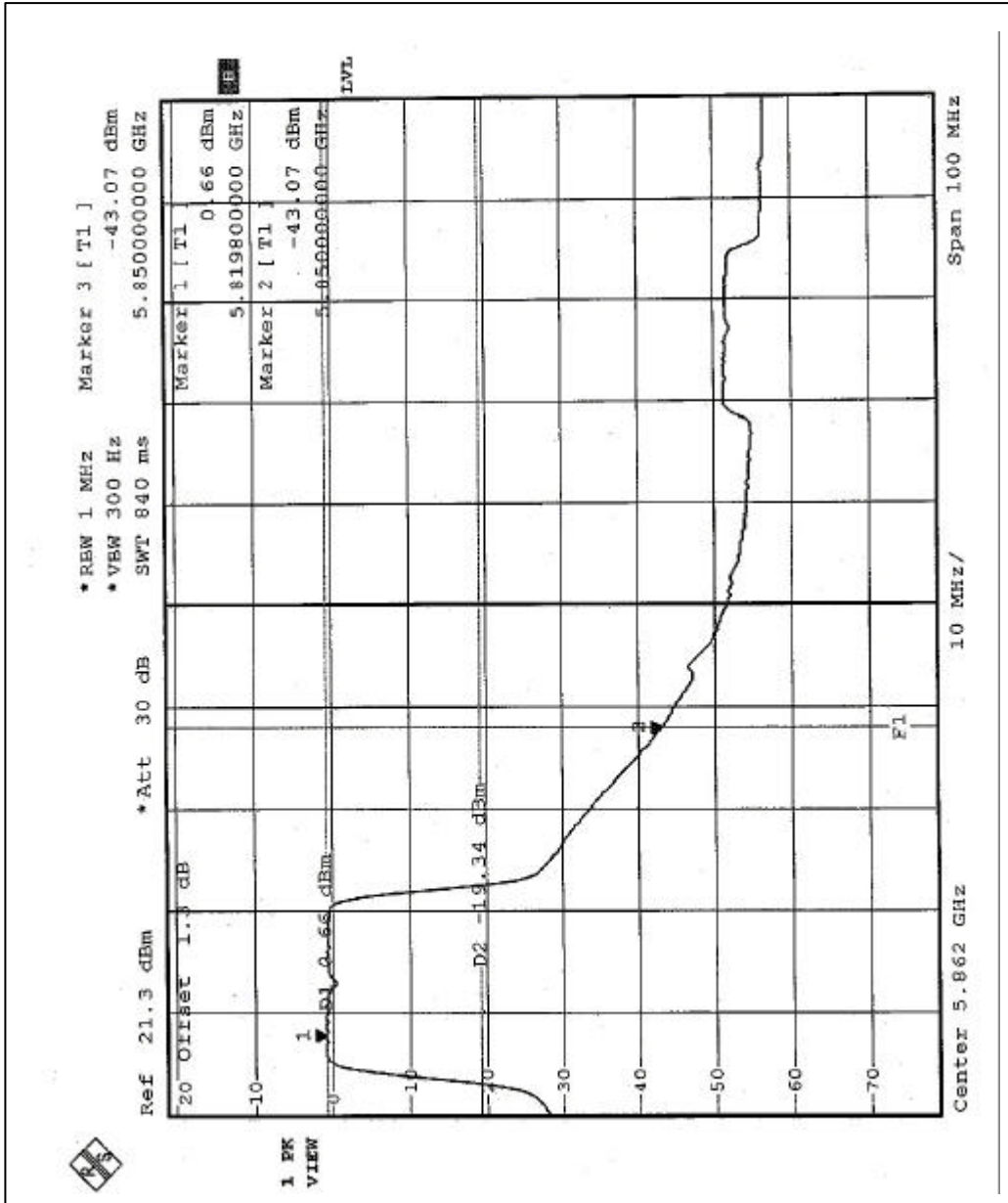
4.11.6 TEST RESULTS

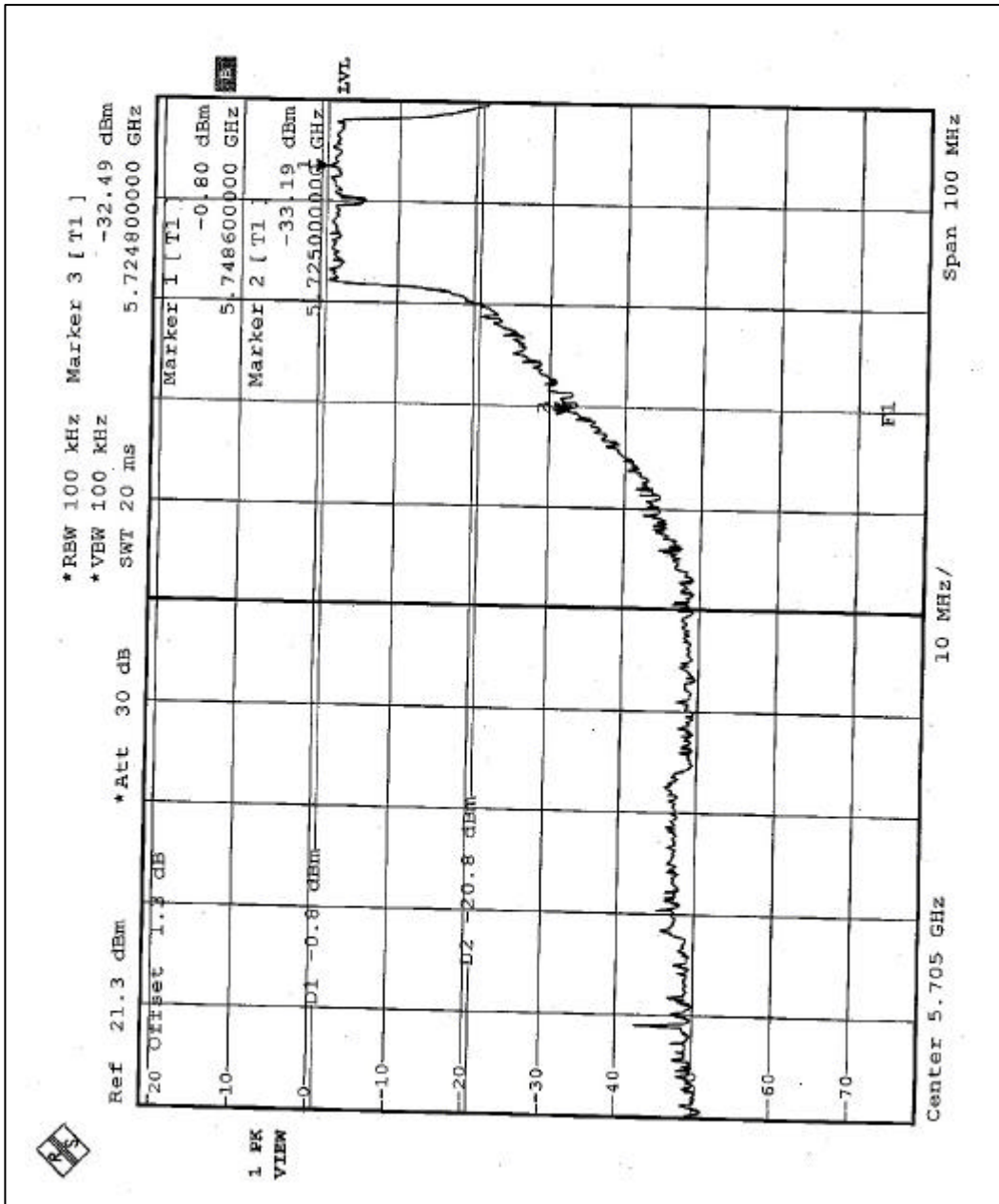
The spectrum plots are attached on the following pages. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

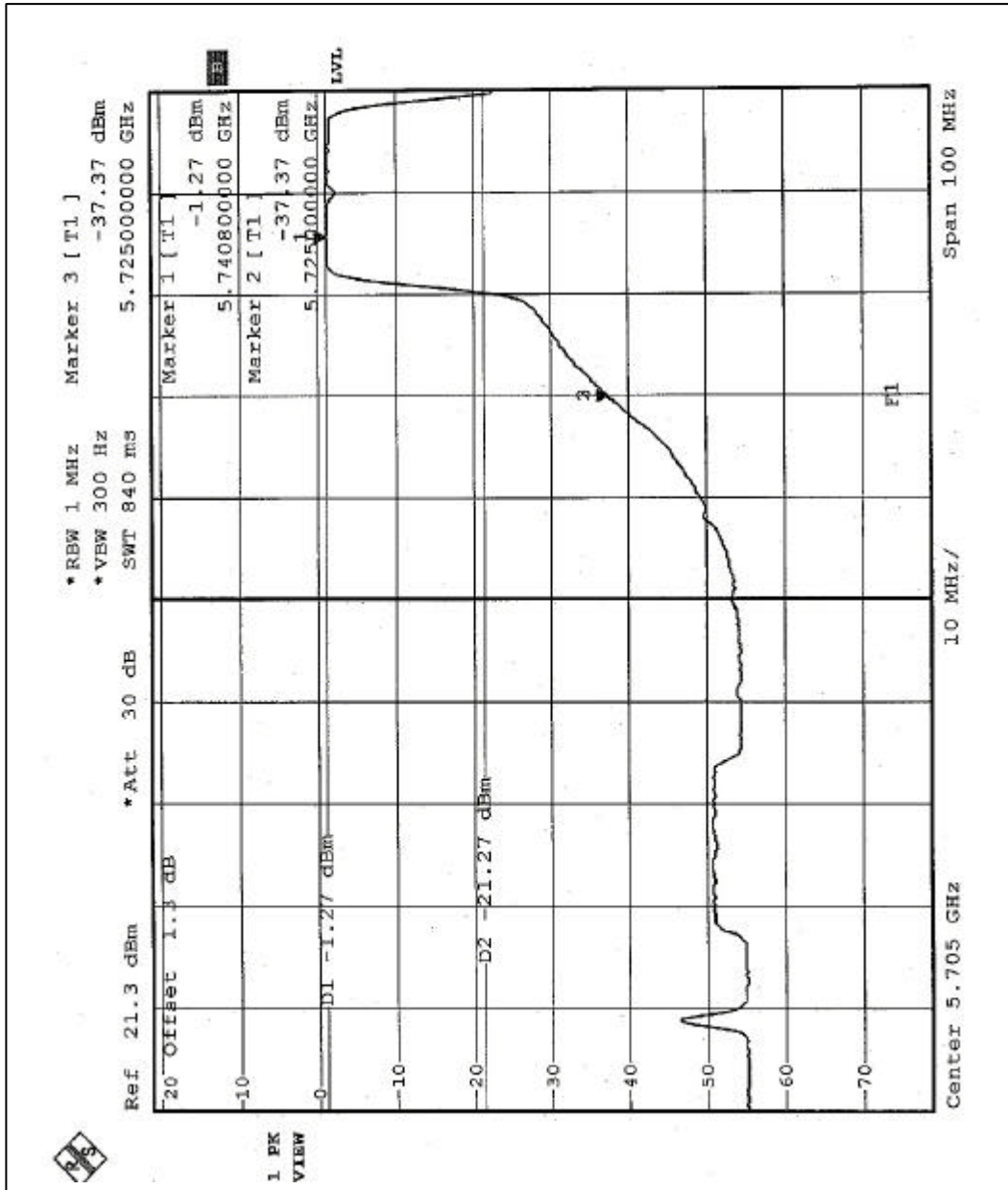


Normal Mode



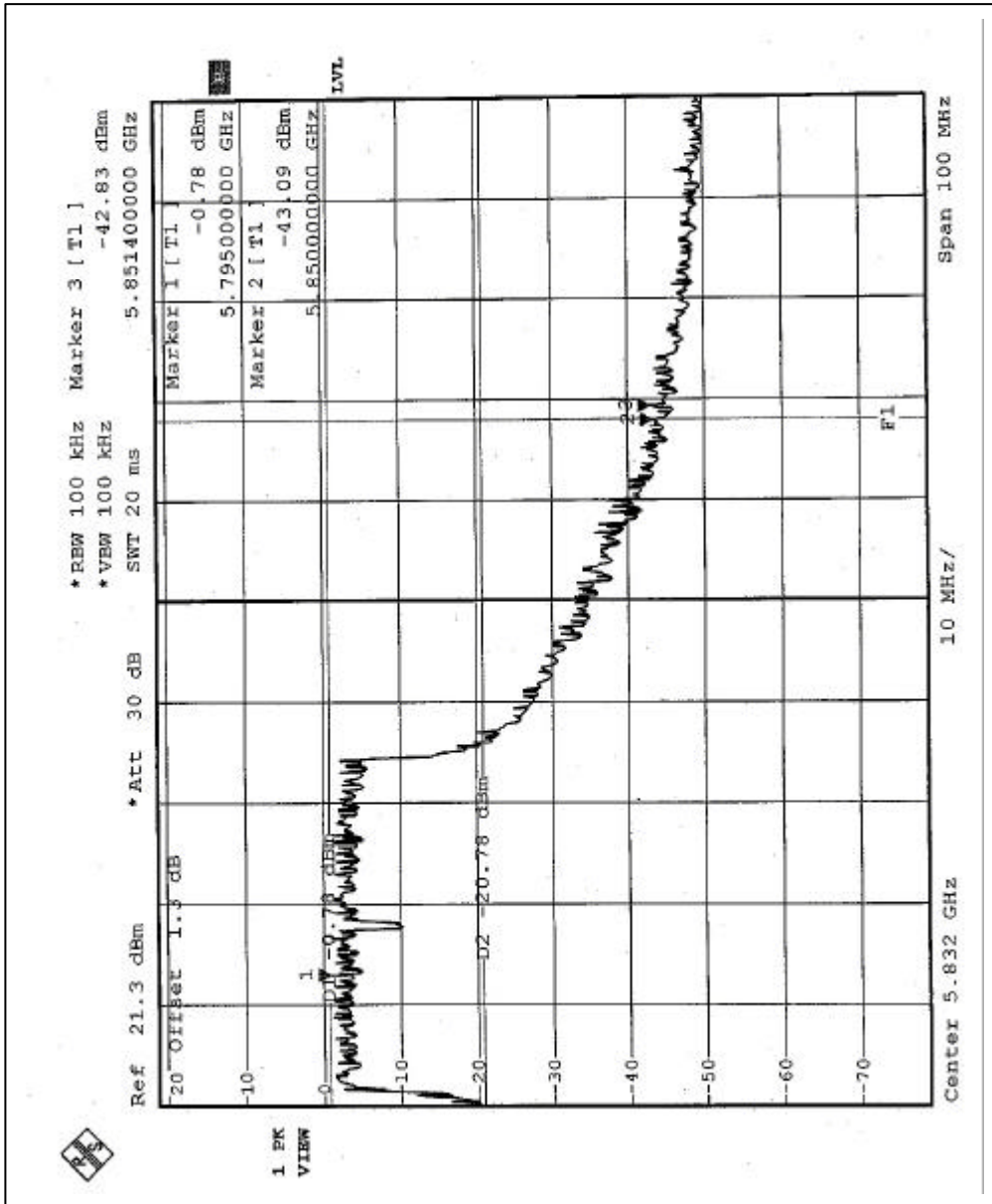


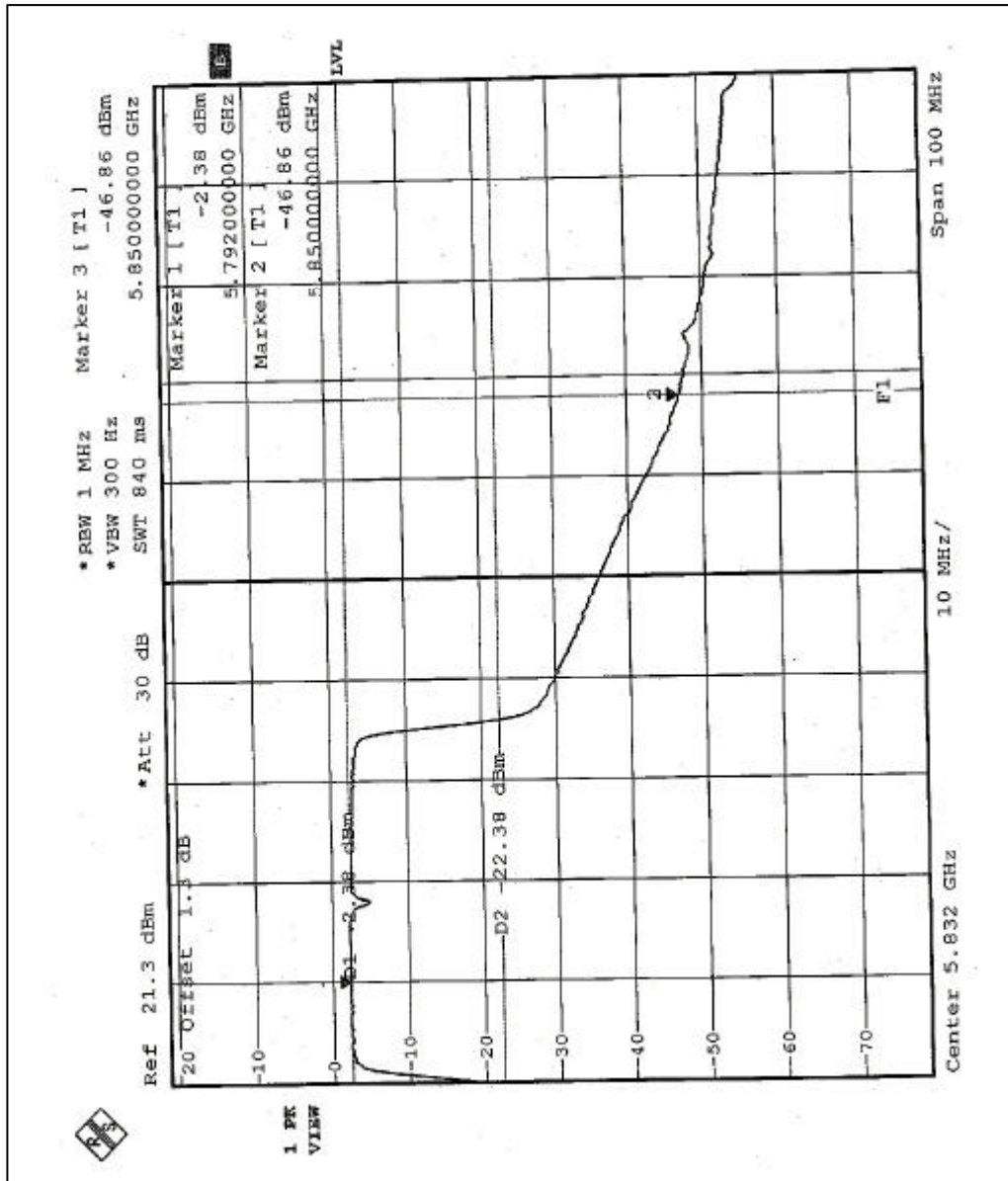


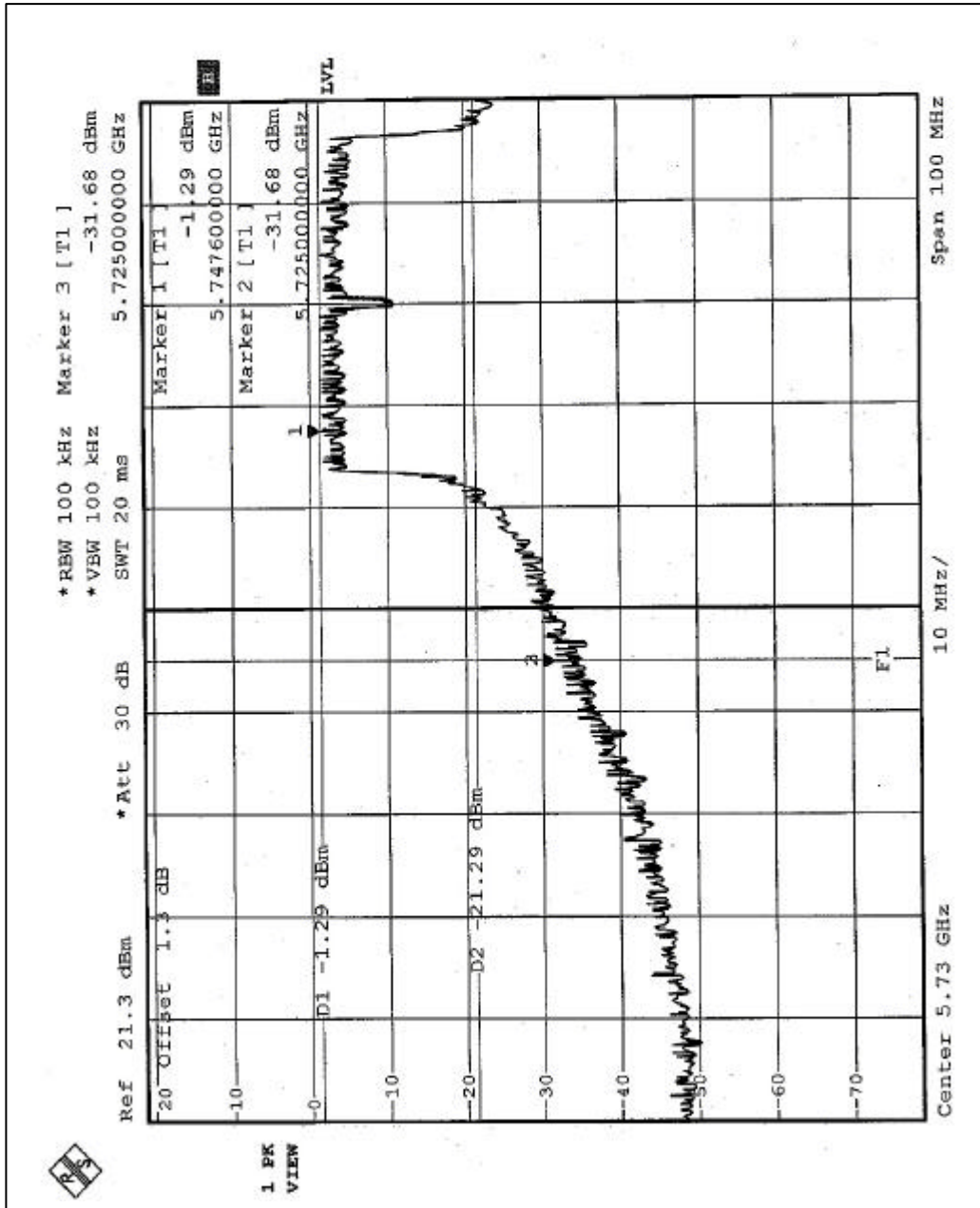


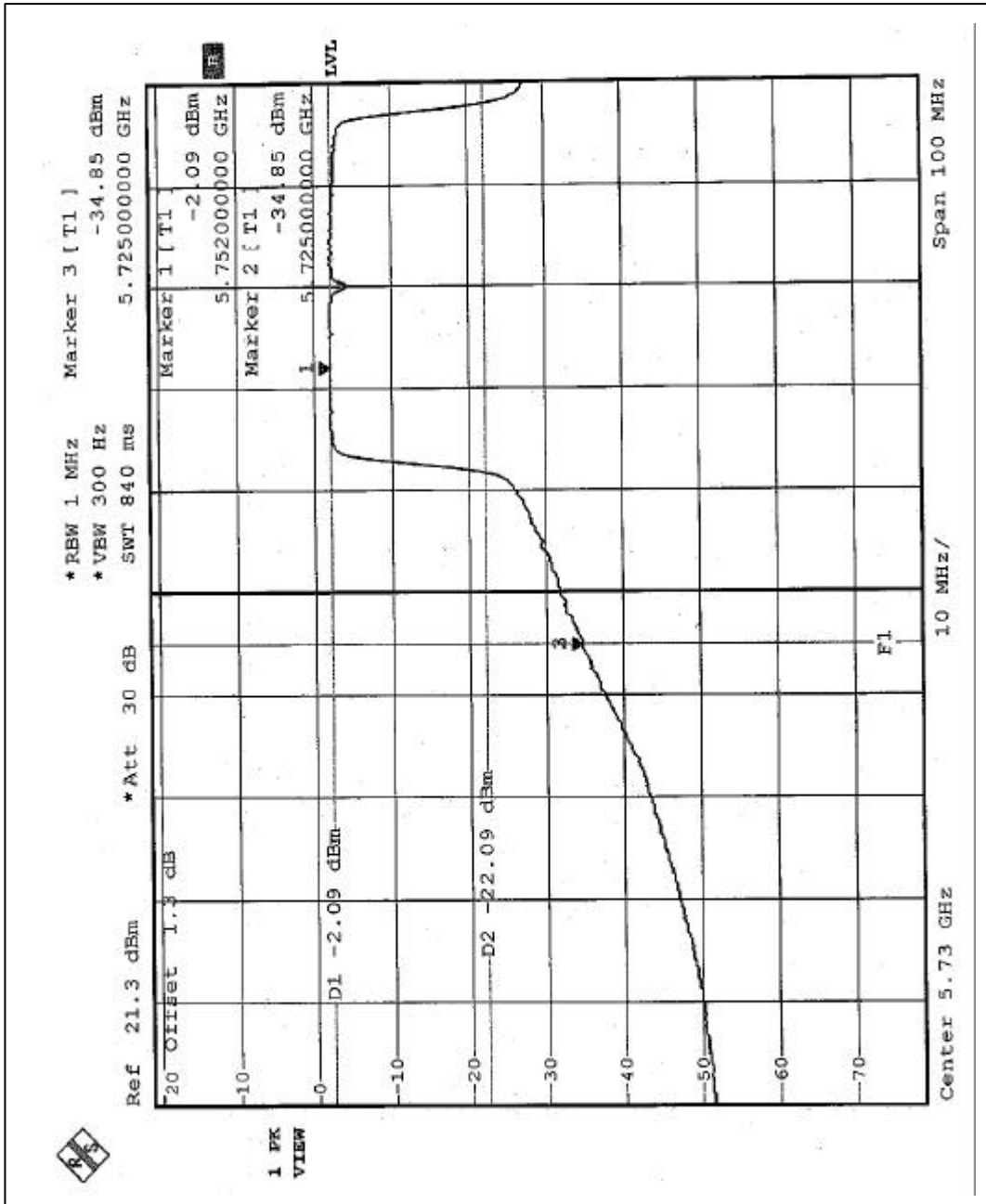


Turbo Mode











4.12 ANTENNA REQUIREMENT

4.12.1 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.

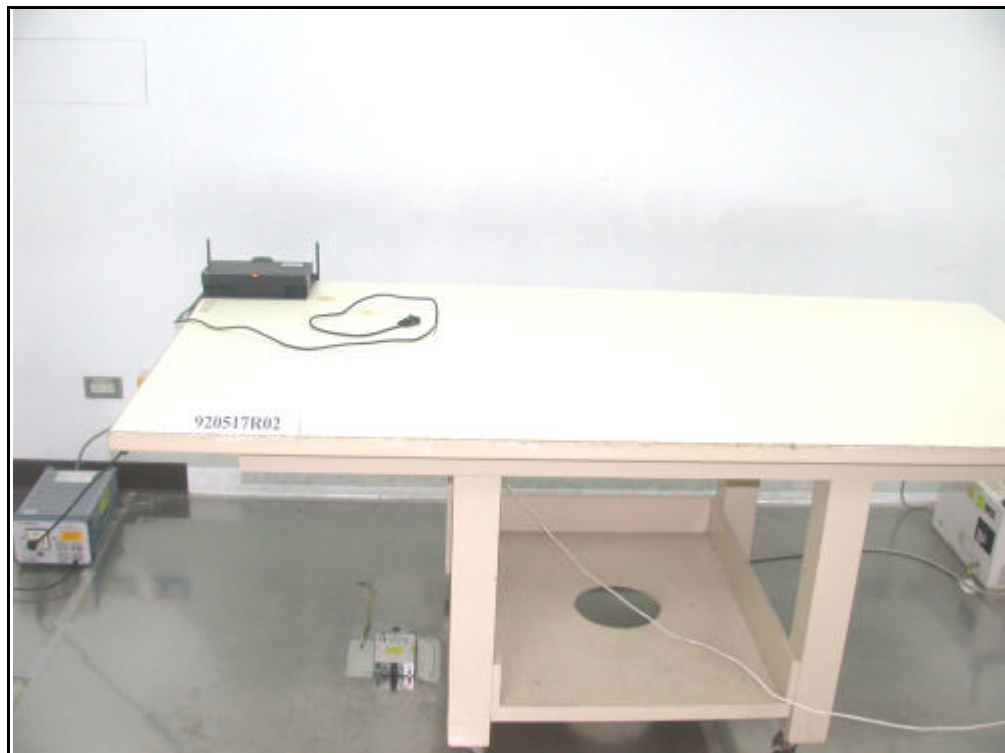
And according to FCC 47 CFR Section 15.407(a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.12.2 ANTENNA CONNECTED CONSTRUCTION

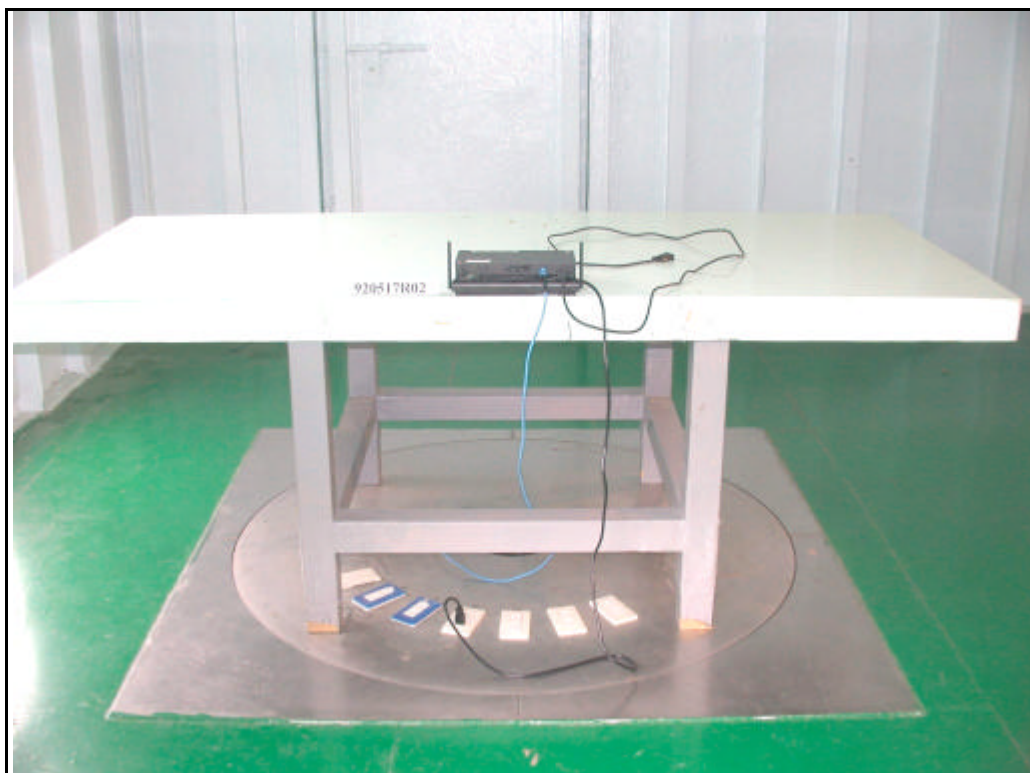
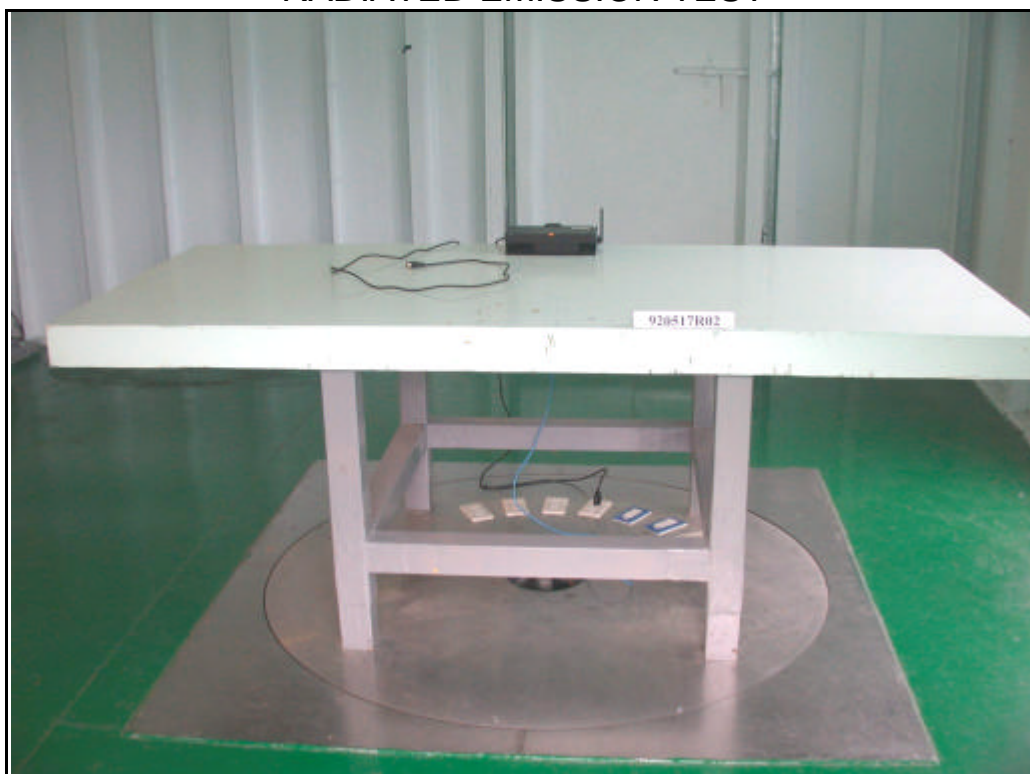
The antenna used in this product is Omni-direction antenna with MMCX connector. The maximum Gain of the antenna is 5dBi

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 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
Germany	TUV Rheinland
Japan	VCCI
New Zealand	MoC
Norway	NEMKO
R.O.C.	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.

If you have any comments, please feel free to contact us at the following:

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Tel: 886-2-26052180

Fax: 886-2-26052943

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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.