



EUT	Flanker Pro Dual Radio AP	MODEL	AP-AG-AT-02
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	23deg.C, 58%RH, 982 hPa
TEST MODE	Normal	TEST BY	Eric Lee

Antenna 5 (Gain 17dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
9	5745	18.89	19	PASS
11	5785	17.05	19	PASS
13	5825	15.10	19	PASS

Antenna 6 (Gain 28.2dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
9	5745	17.28	30	PASS
11	5785	17.30	30	PASS
13	5825	17.14	30	PASS

Antenna 7 + 7 dB Pad (Gain 26.4dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
9	5745	18.87	30	PASS
11	5785	17.11	30	PASS
13	5825	17.00	30	PASS

Antenna 8 (Gain 13dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
9	5745	20.28	23	PASS
11	5785	19.00	23	PASS
13	5825	17.20	23	PASS



EUT	Flanker Pro Dual Radio AP	MODEL	AP-AG-AT-02
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28deg.C, 56%RH, 982 hPa
TEST MODE	Turbo	TEST BY	Eric Lee

Antenna 1 (Gain 3.5dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
4	5760	22.31	30	PASS
5	5800	22.28	30	PASS

Antenna 2 (Gain 3dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
4	5760	22.31	30	PASS
5	5800	22.28	30	PASS

Antenna 3 (Gain 4dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
4	5760	23.28	30	PASS
5	5800	22.65	30	PASS



EUT	Flanker Pro Dual Radio AP	MODEL	AP-AG-AT-02
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28deg.C, 56%RH, 982 hPa
TEST MODE	Turbo	TEST BY	Eric Lee

Antenna 5 (Gain 17dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
4	5760	18.04	19	PASS
5	5800	17.04	19	PASS

Antenna 6 (Gain 28.2dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
4	5760	20.34	30	PASS
5	5800	20.87	30	PASS

Antenna 7 + 7 dB Pad (Gain 26.4dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
4	5760	20.74	30	PASS
5	5800	20.25	30	PASS

Antenna 8 (Gain 13dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
4	5760	21.01	23	PASS
5	5800	21.32	23	PASS



5.9.7 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

5.9.8 TEST INSTRUMENTS

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



5.9.9 TEST PROCEDURE

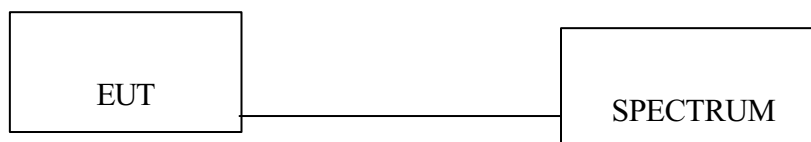
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3 kHz RBW and 30 kHz VBW, set sweep time = span/3 kHz. The power spectral density was measured and recorded.

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

5.9.10 DEVIATION FROM TEST STANDARD

No deviation

5.9.11 TEST SETUP



5.9.12 EUT OPERATING CONDITION

Same as Item 4.3.6



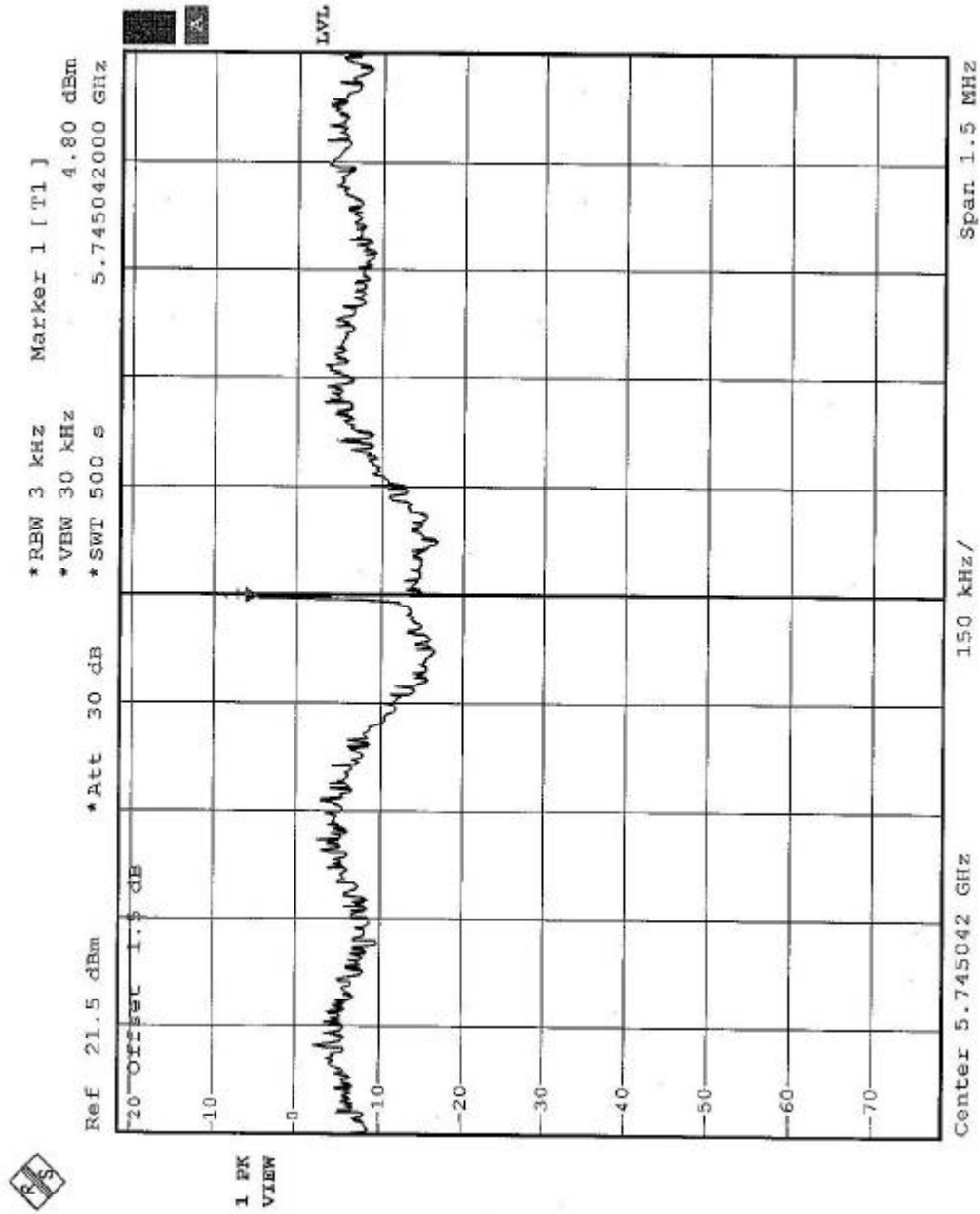
5.9.13 TEST RESULTS

EUT	Flanker Pro Dual Radio AP	MODEL	AP-AG-AT-02
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	51deg. C, 58%RH, 982 hPa
TEST MODE	Normal	TEST BY	Eric Lee

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
9	5745	4.80	8	PASS
11	5785	5.58	8	PASS
13	5825	-2.10	8	PASS

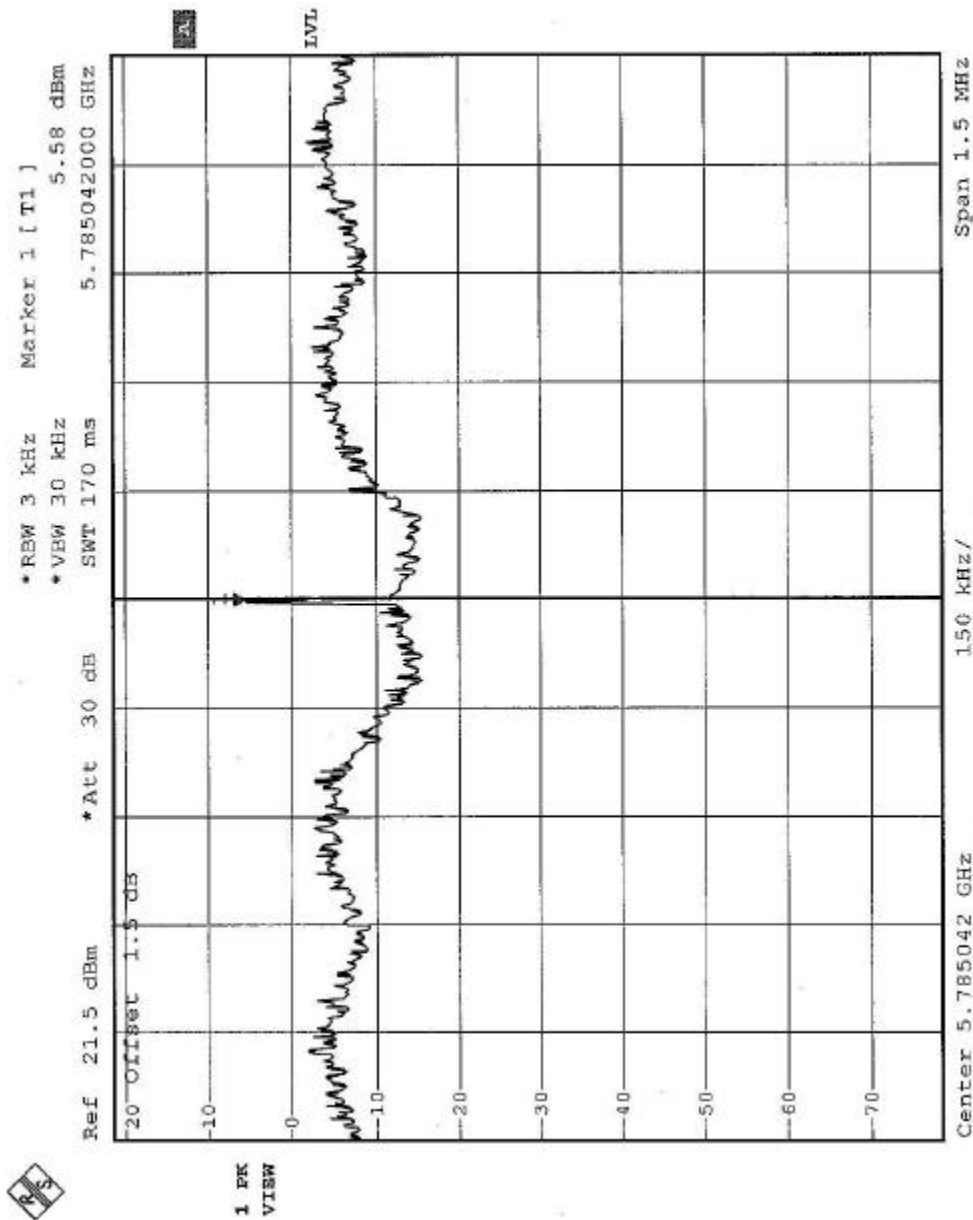


CH9



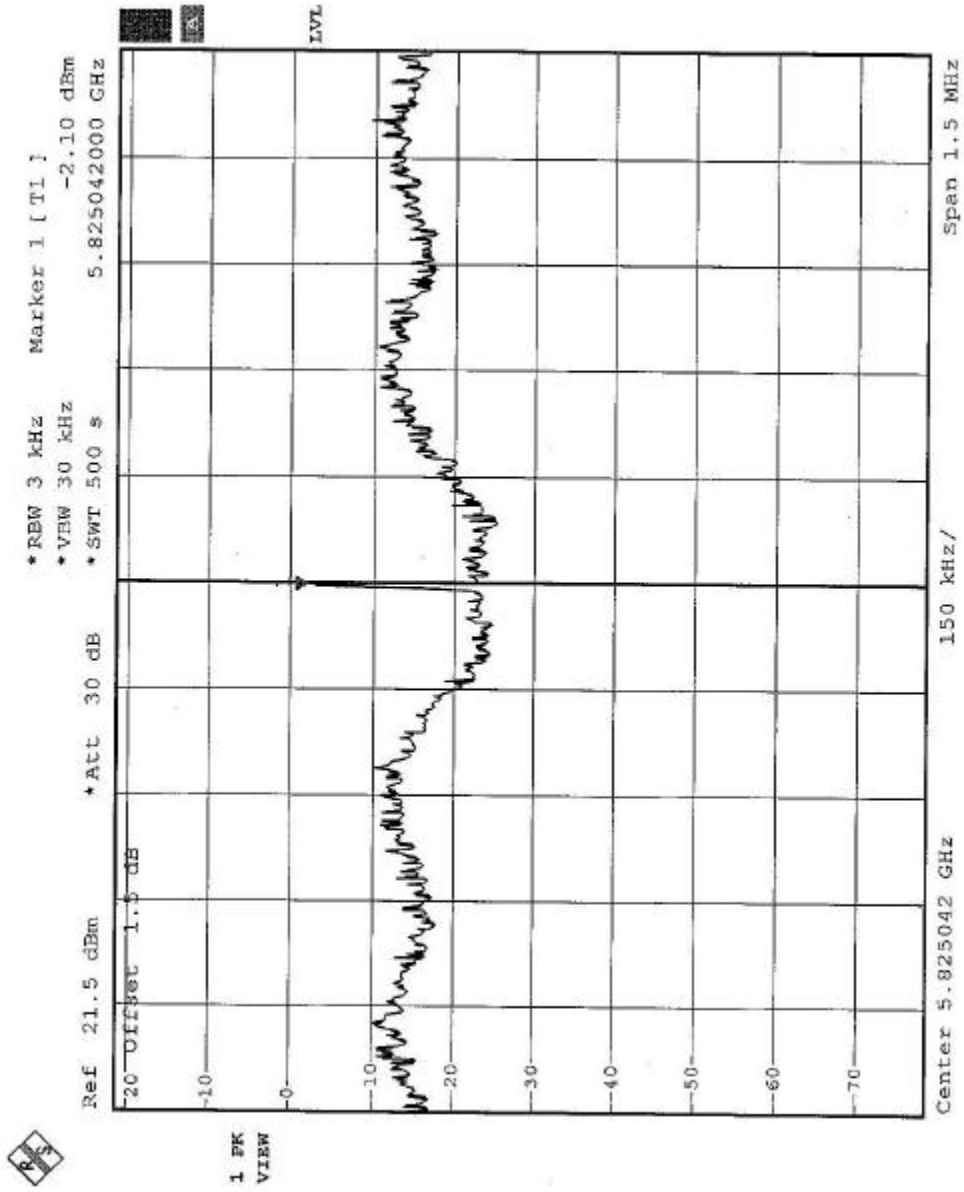


CH11





CH13



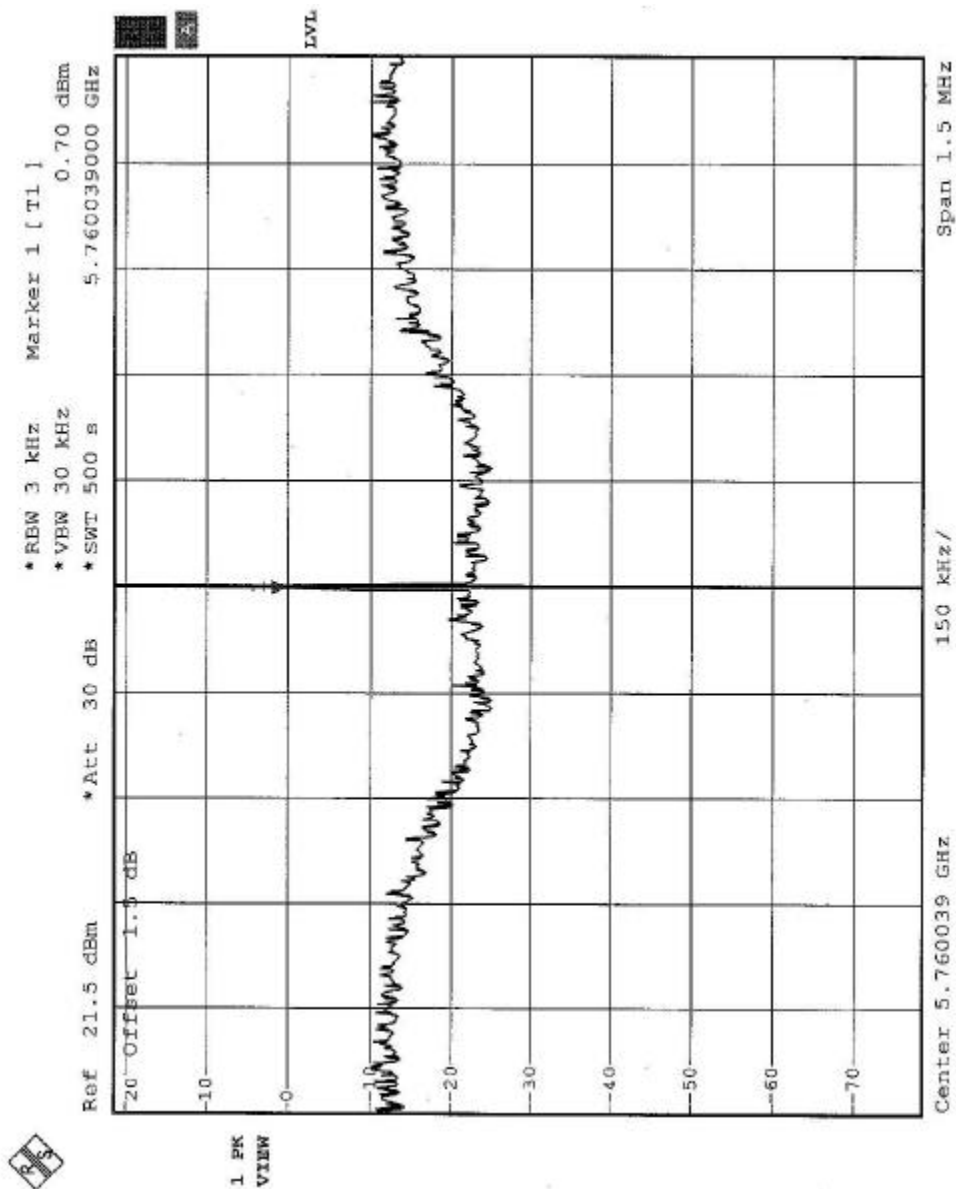


EUT	Flanker Pro Dual Radio AP	MODEL	AP-AG-AT-02
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	57deg. C, 56%RH, 982 hPa
TEST MODE	Turbo	TEST BY	Eric Lee

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
4	5760	0.70	8	PASS
5	5800	0.58	8	PASS

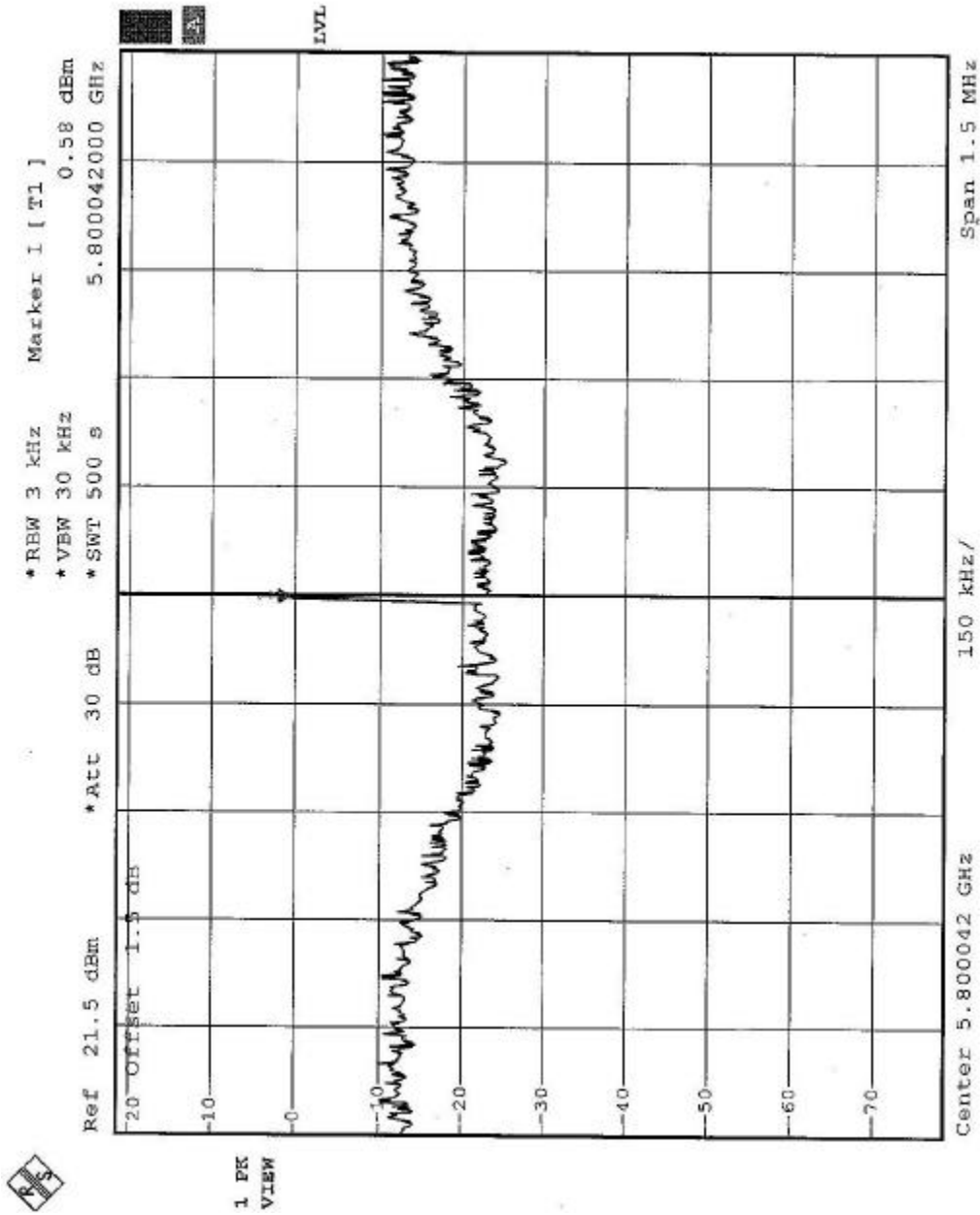


CH4





CH5





5.10 BAND EDGES MEASUREMENT

5.10.1 LIMITS OF BAND EDGES MEASUREMENT

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

5.10.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP	1093.4495.30	Dec. 19, 2004

NOTE:

- 1.The measurement uncertainty is less than $\pm 2.6\text{dB}$, 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.

5.10.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low loss 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.

5.10.4 DEVIATION FROM TEST STANDARD

No deviation



5.10.5 EUT OPERATING CONDITION

Same as Item 4.3.6

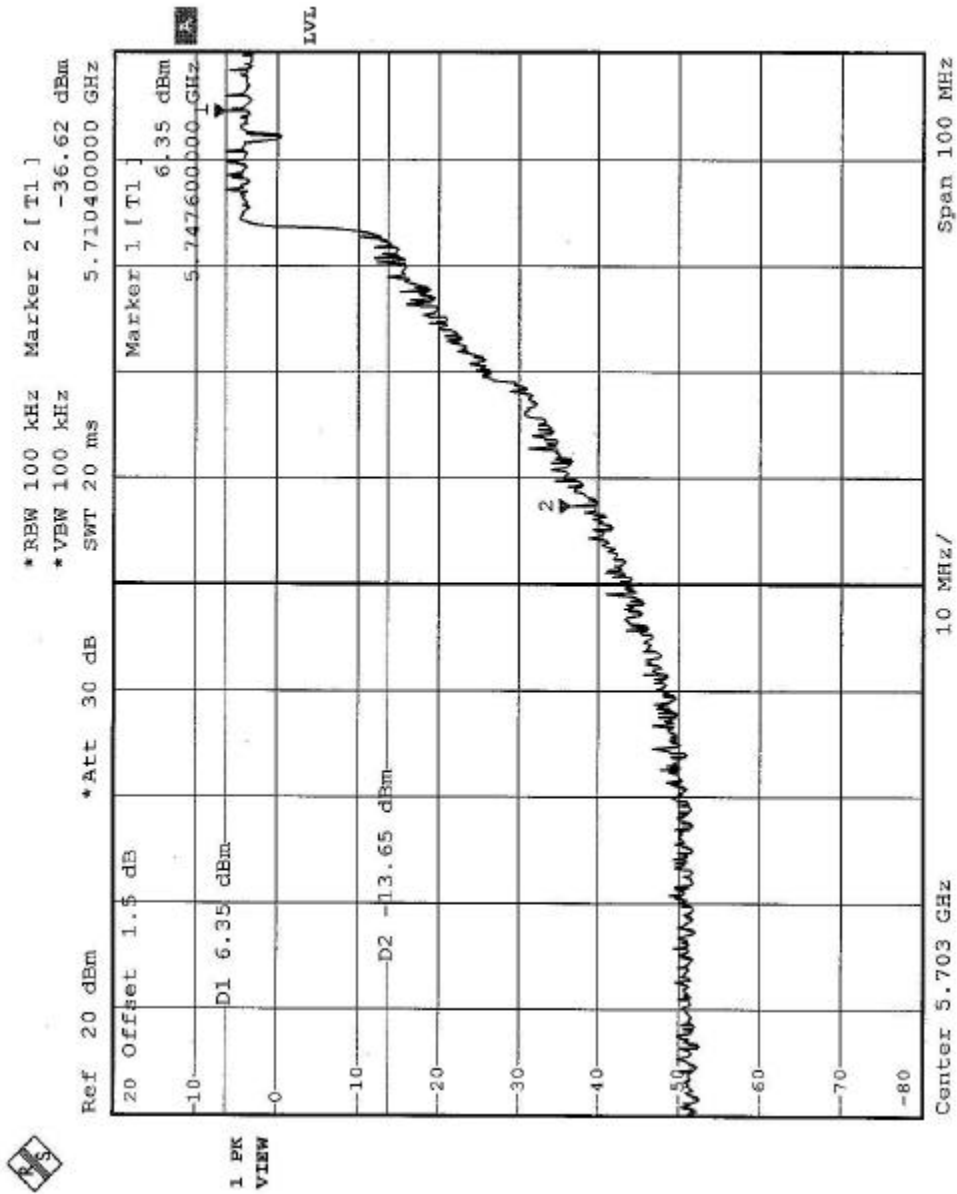
5.10.6 TEST RESULTS

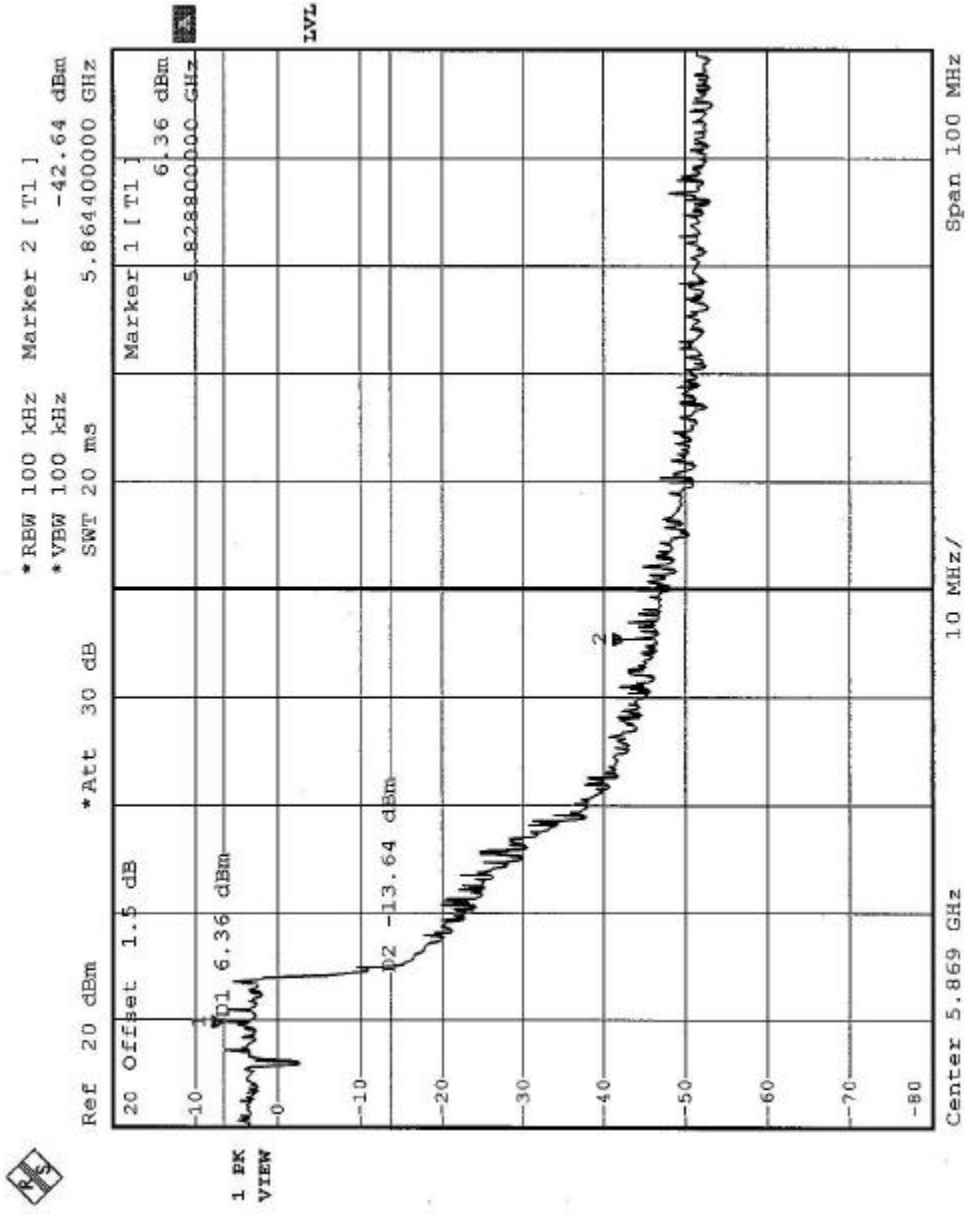
The spectrum plots are attached on the following pages. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).



Antenna 1

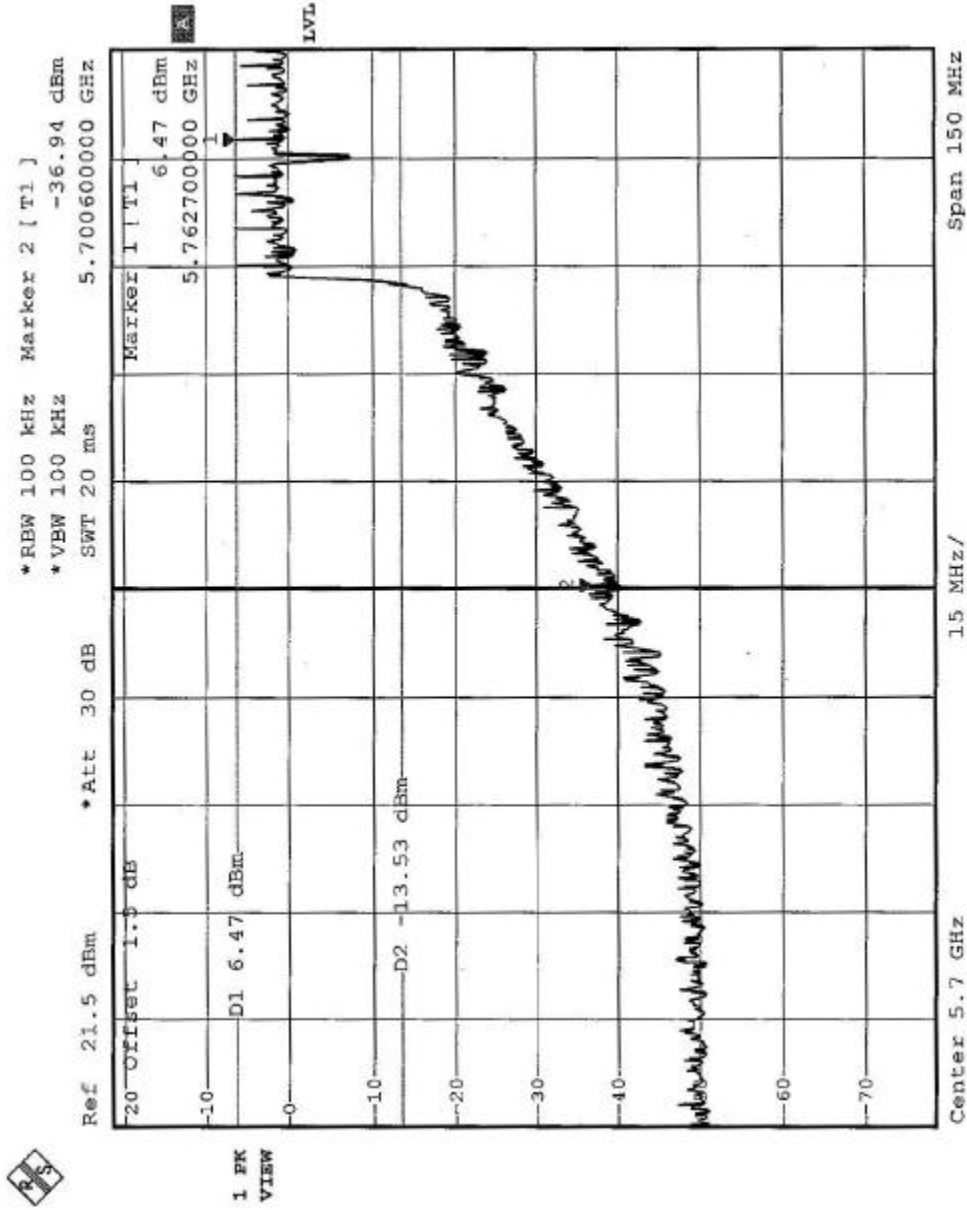
Normal Mode

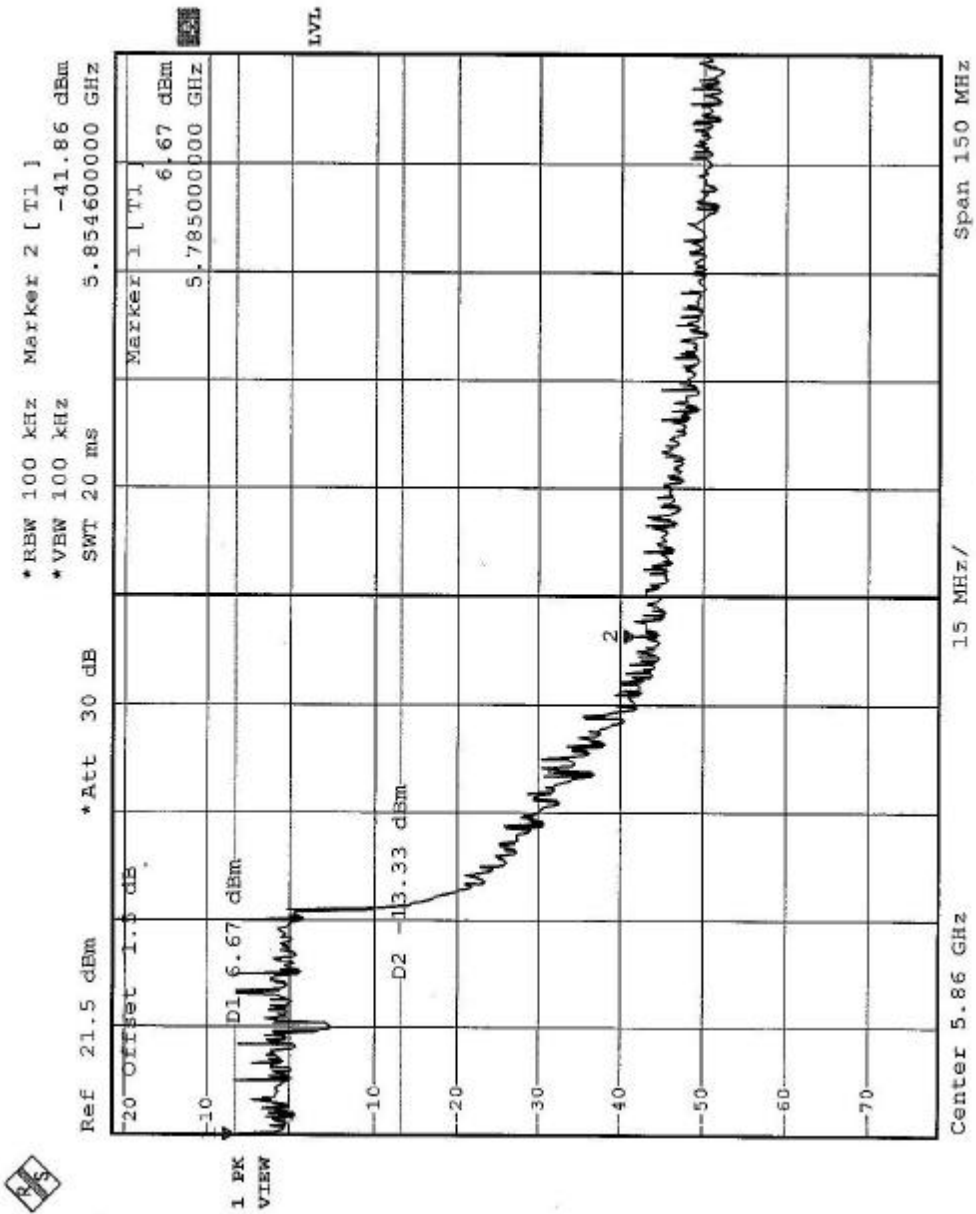






Turbo Mode

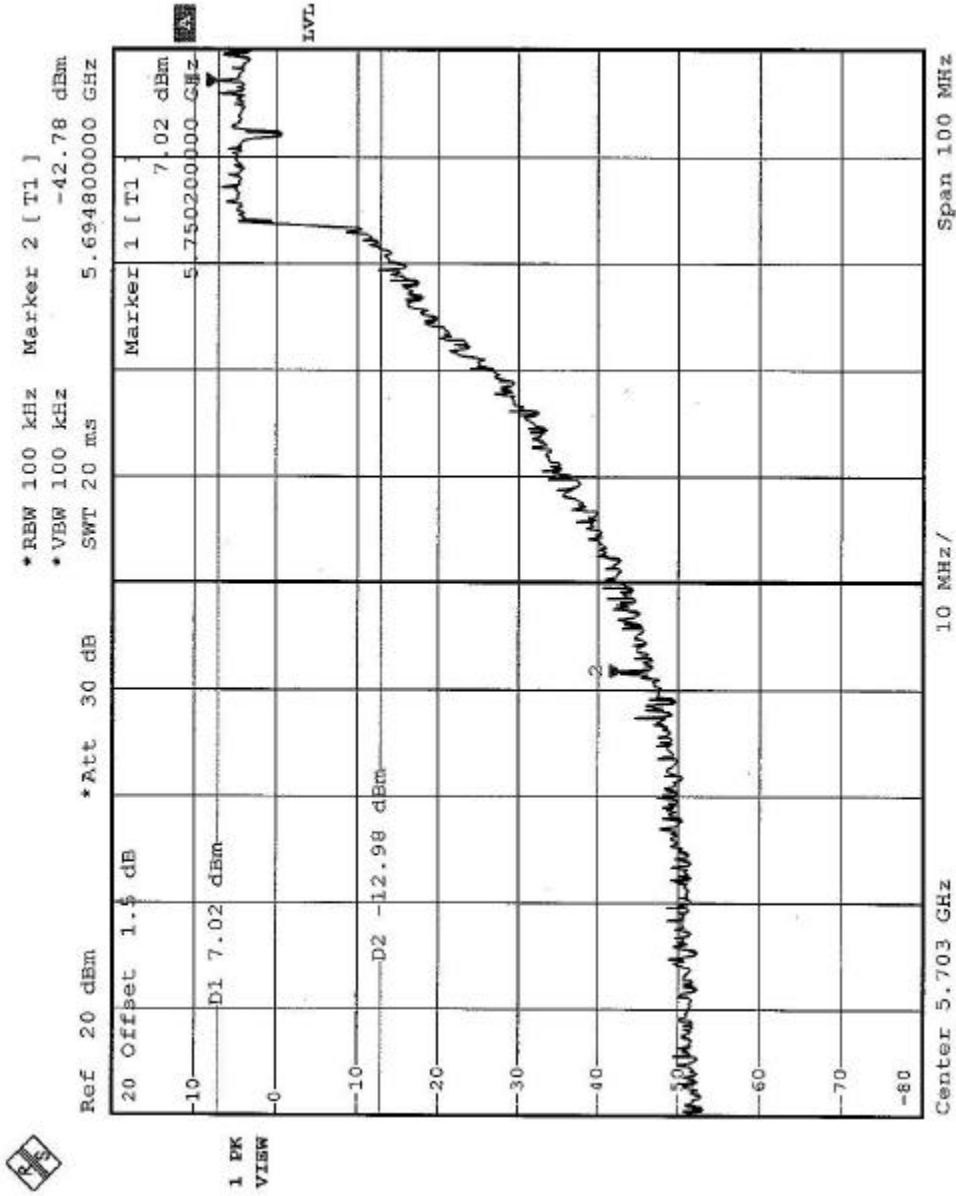


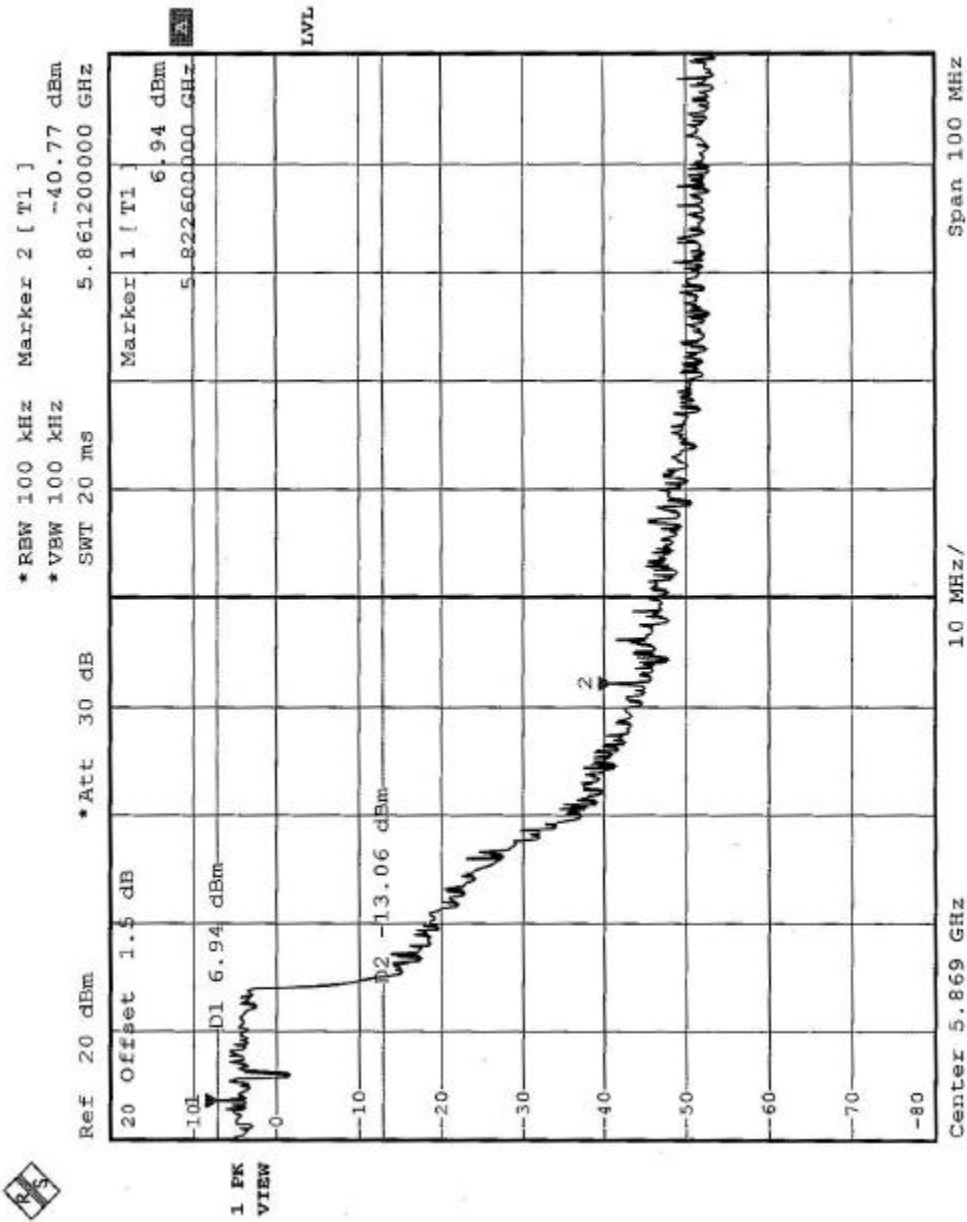




Antenna 2

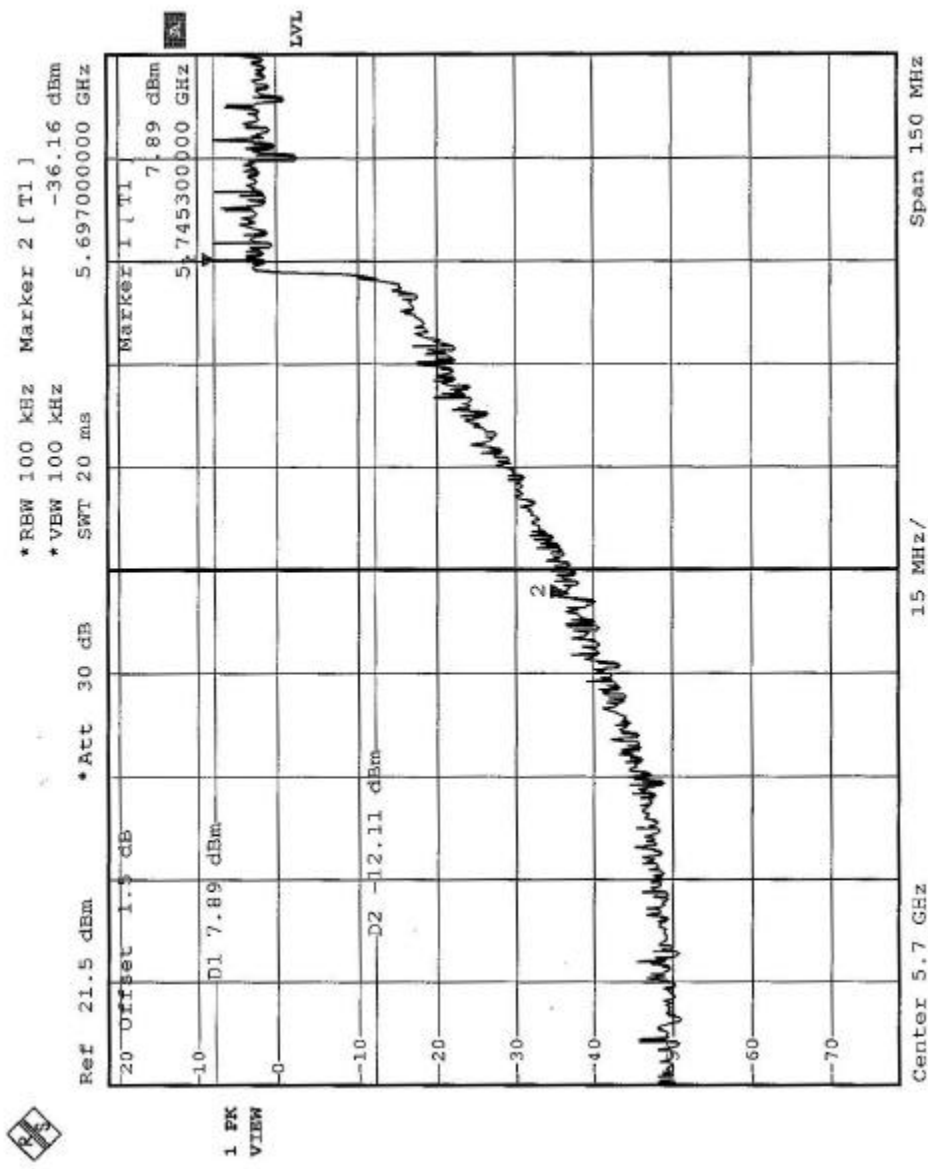
Normal Mode

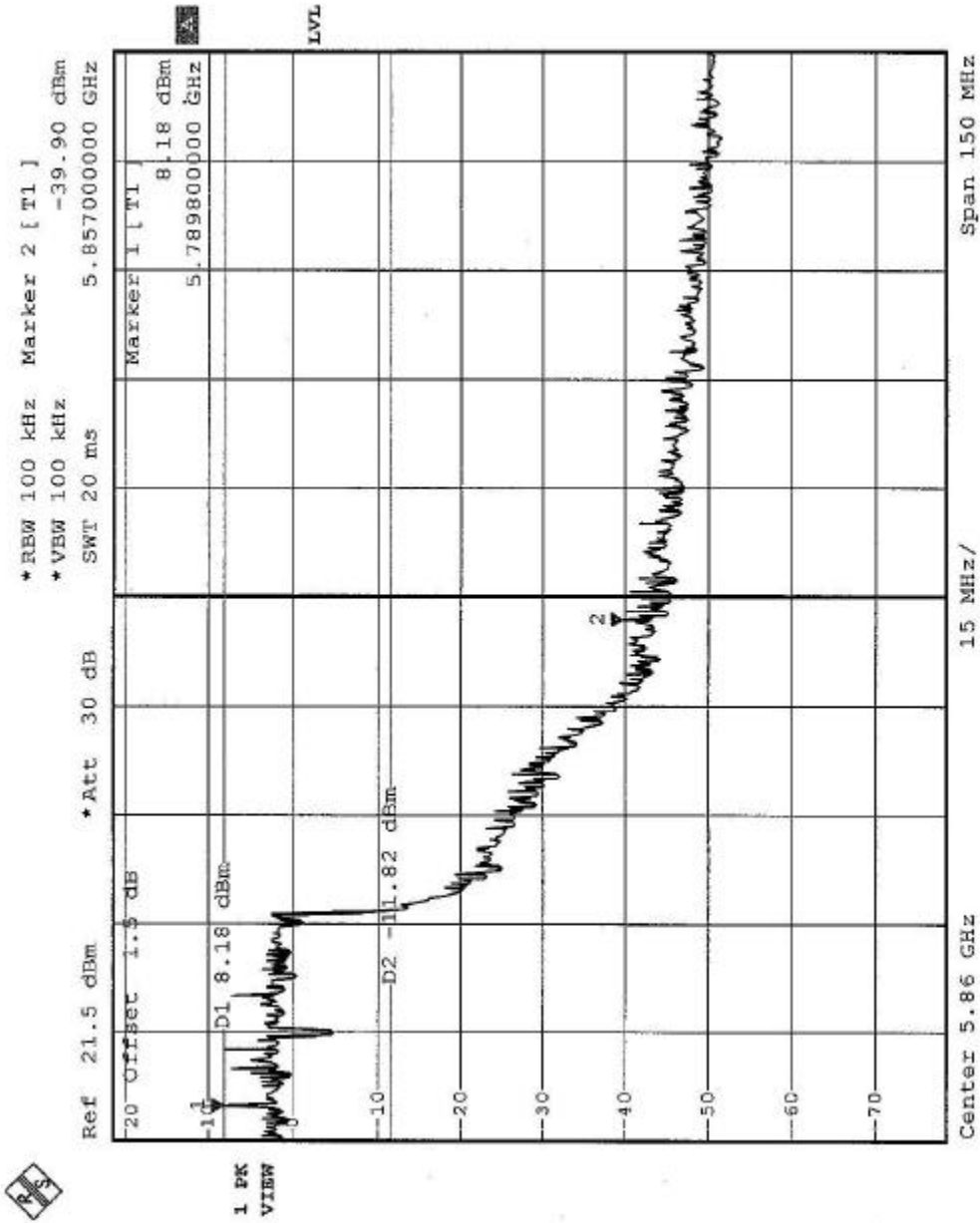






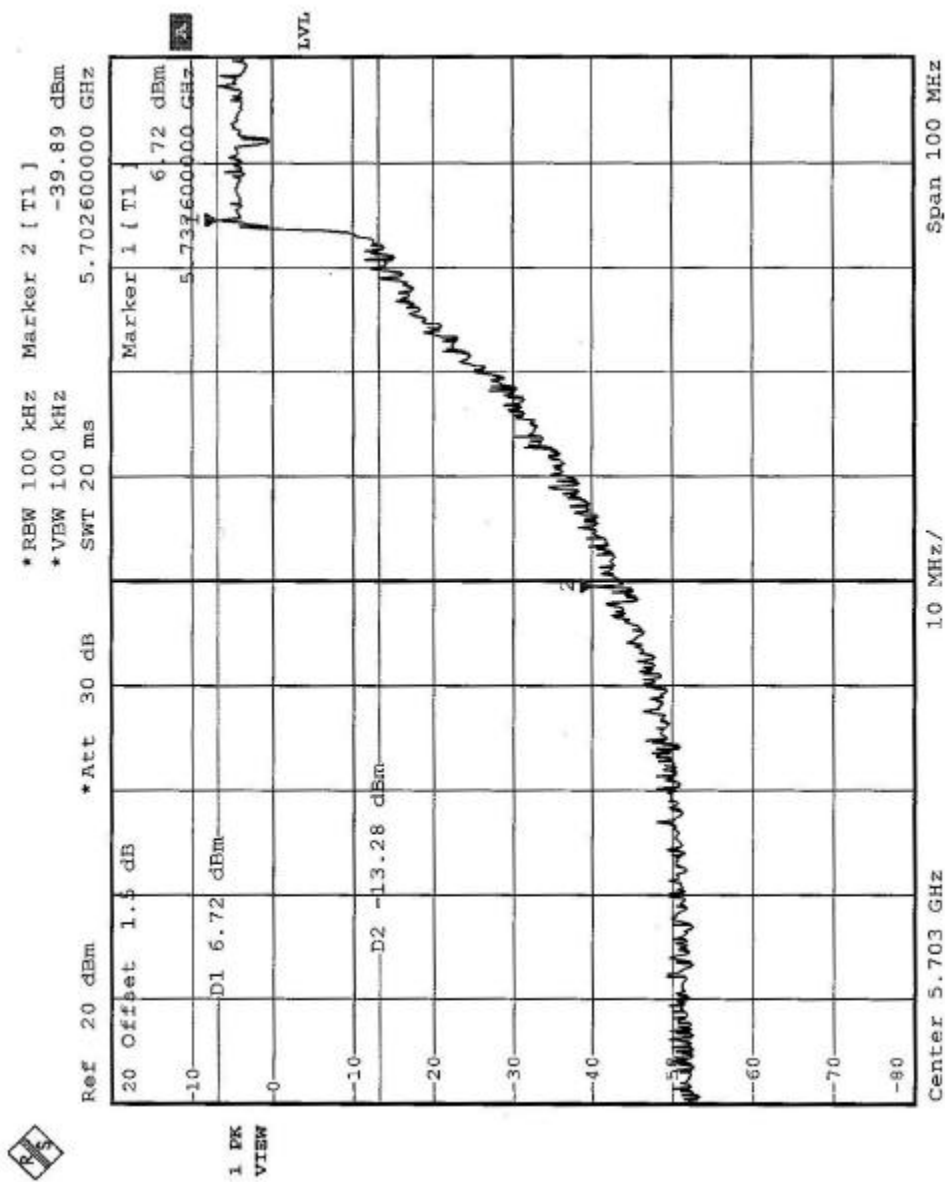
Turbo Mode

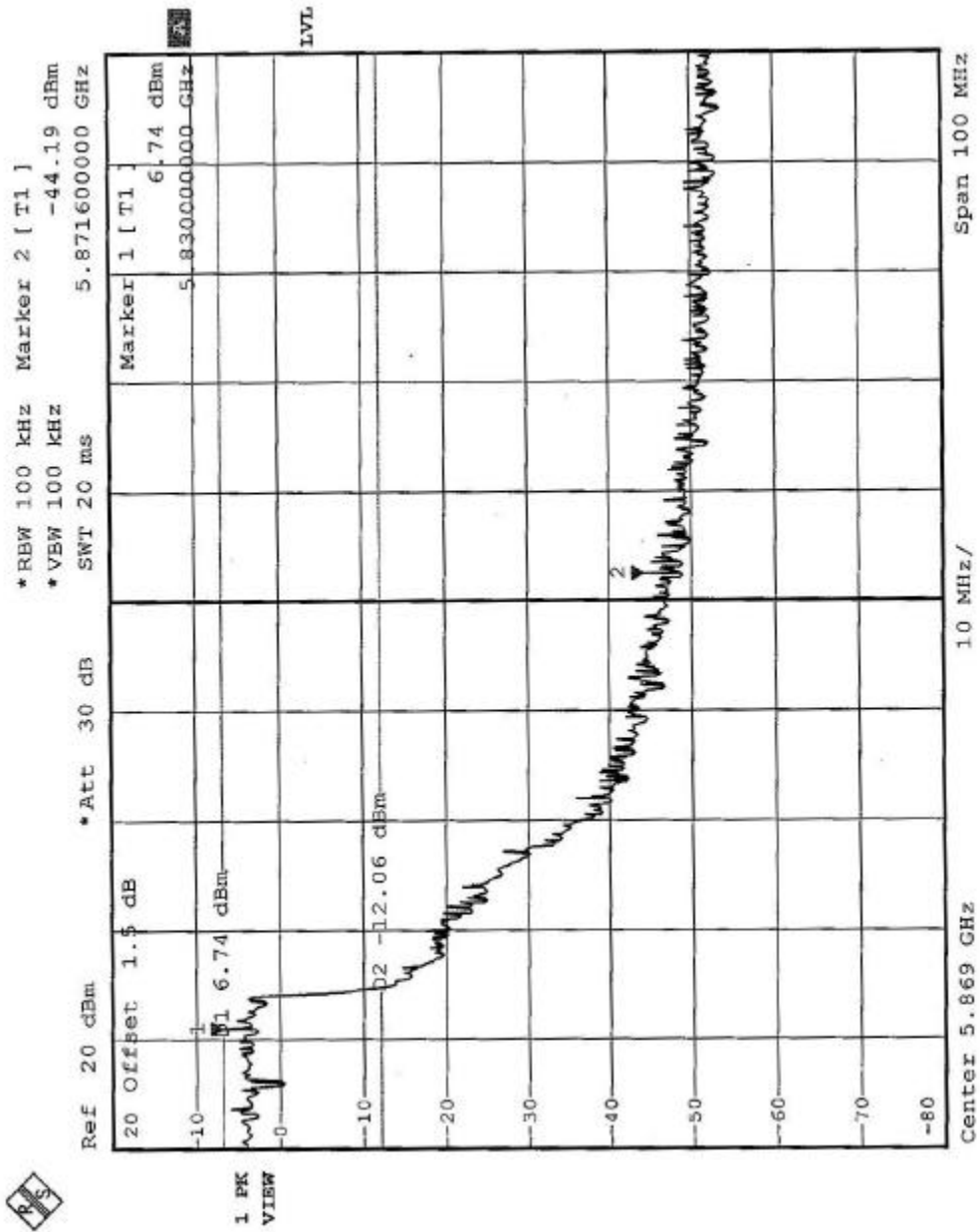






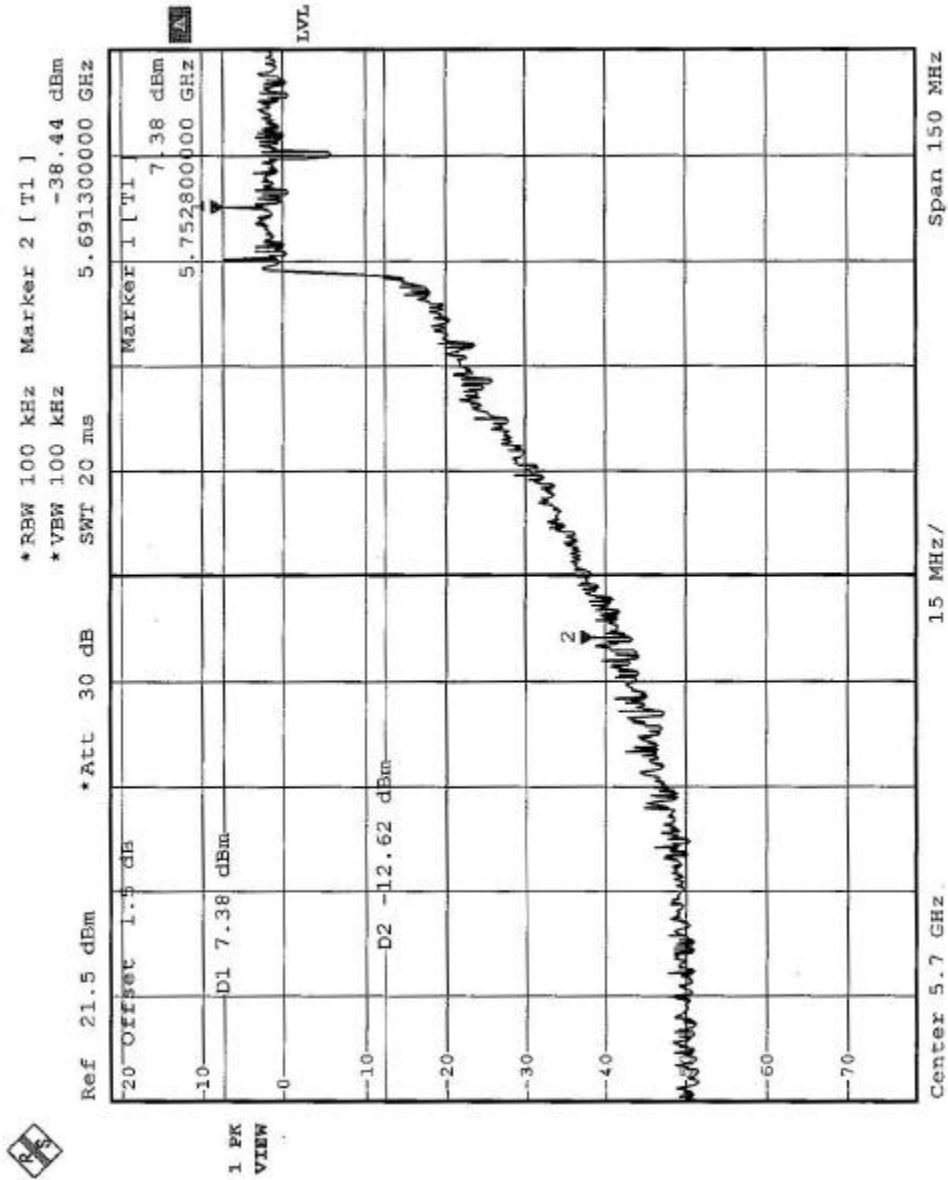
Antenna 3 Normal Mode

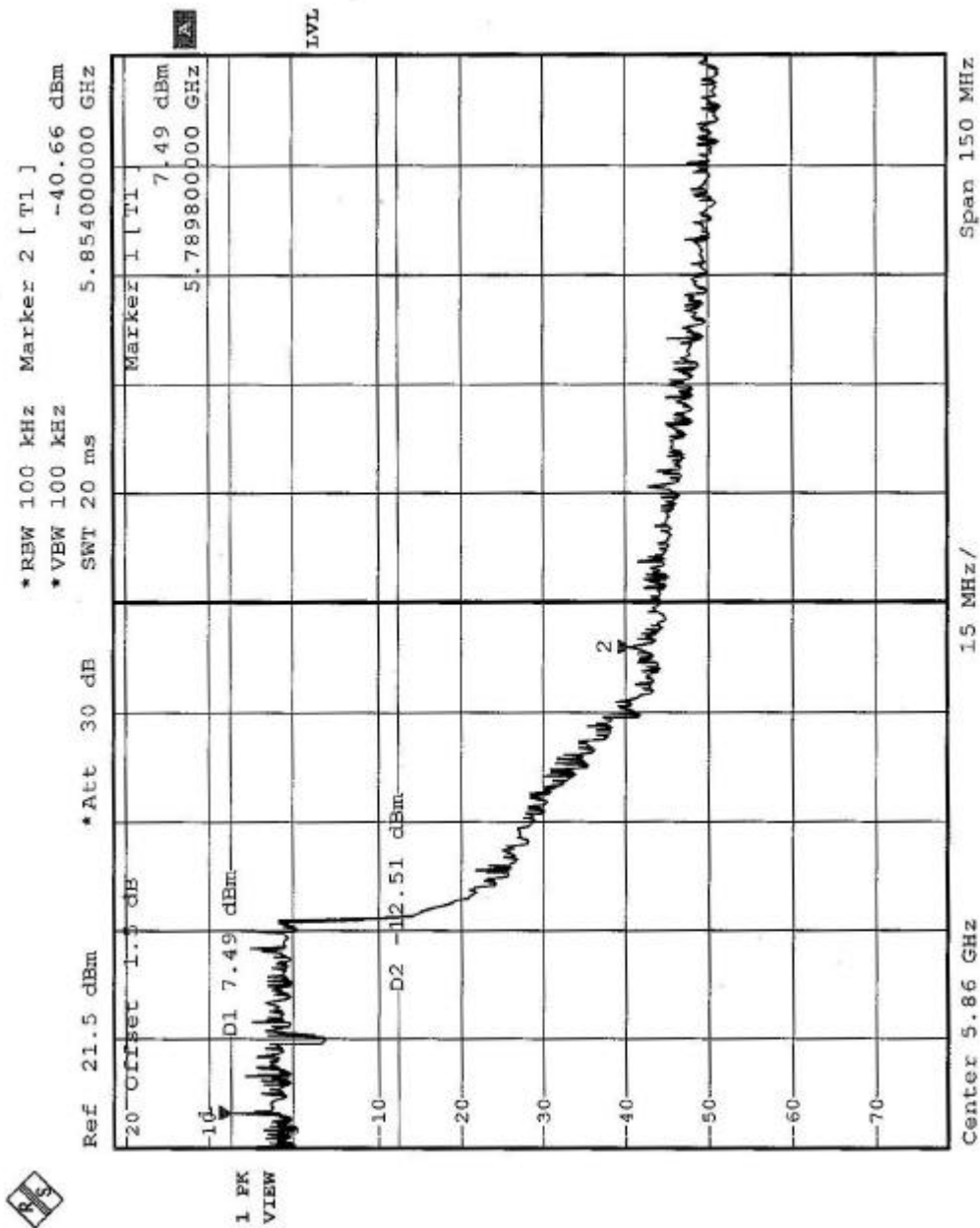






Turbo Mode

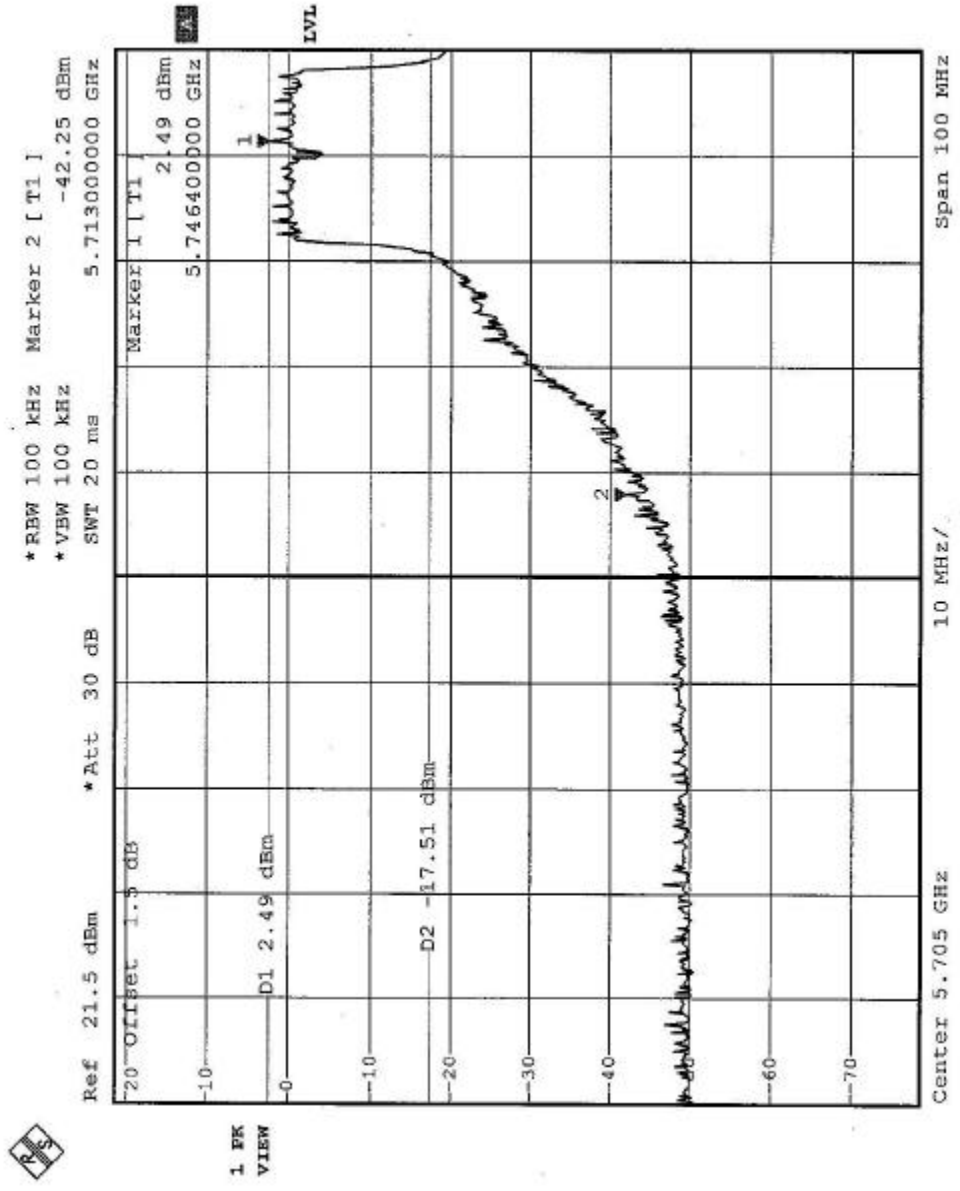


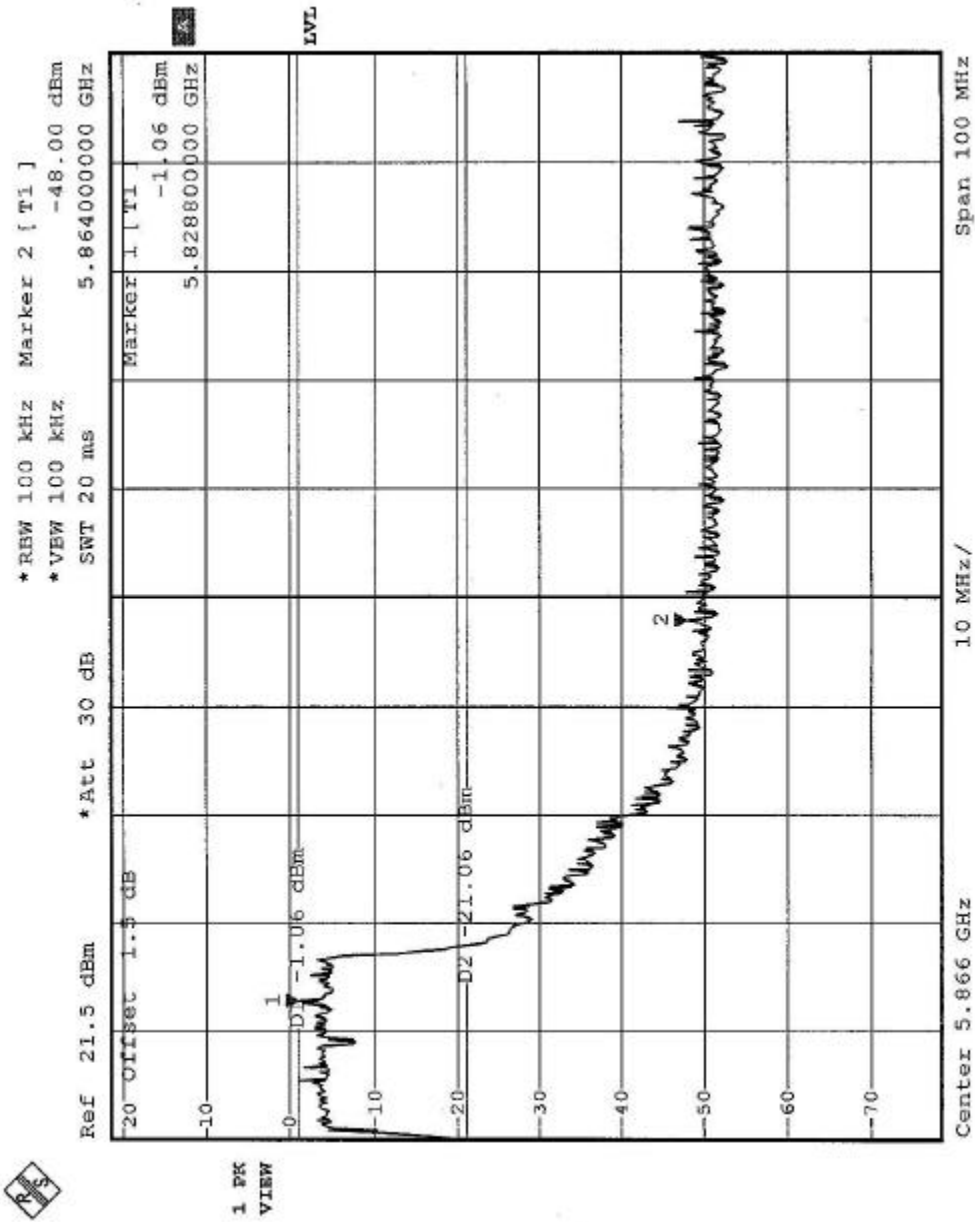




Antenna 5

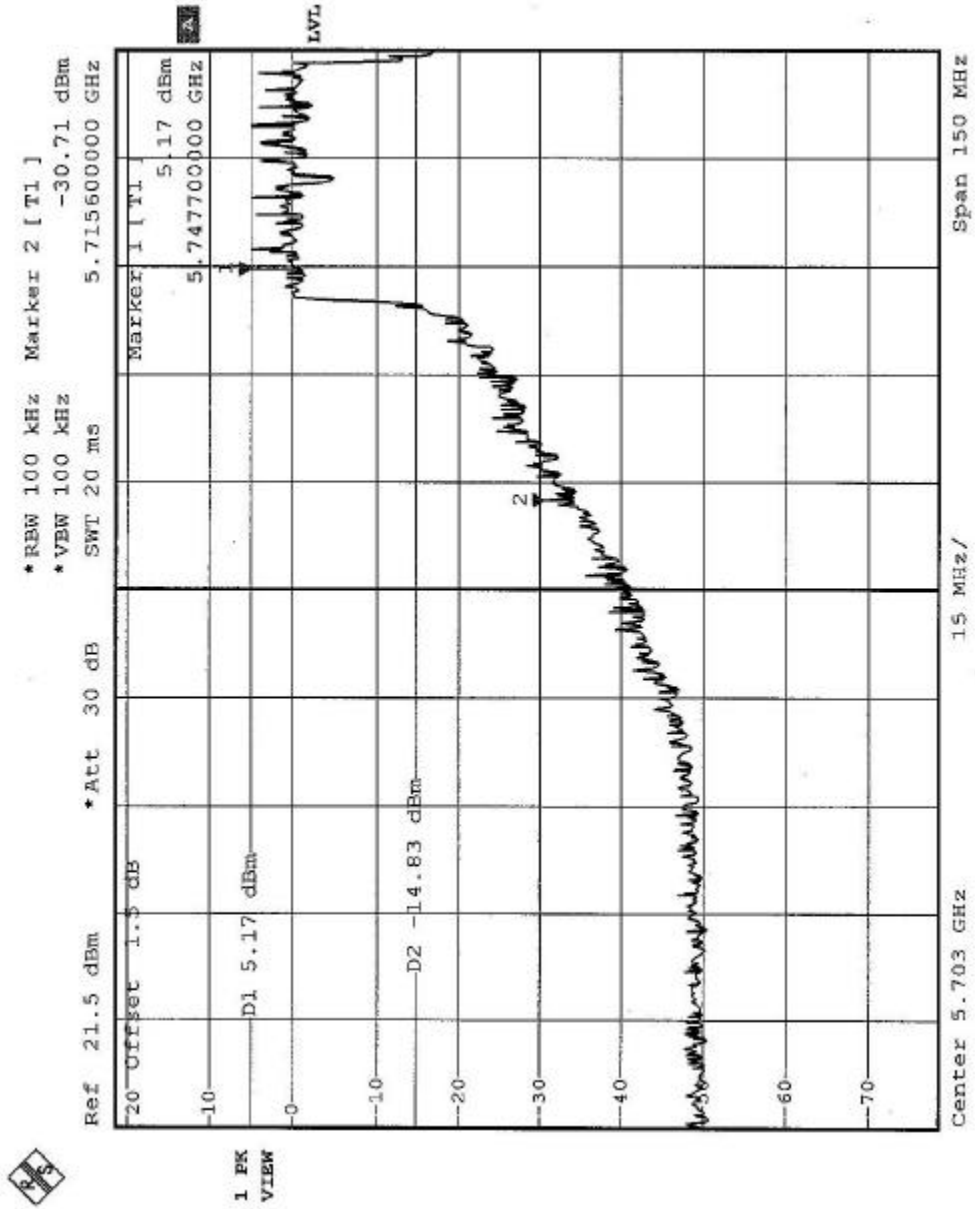
Normal Mode

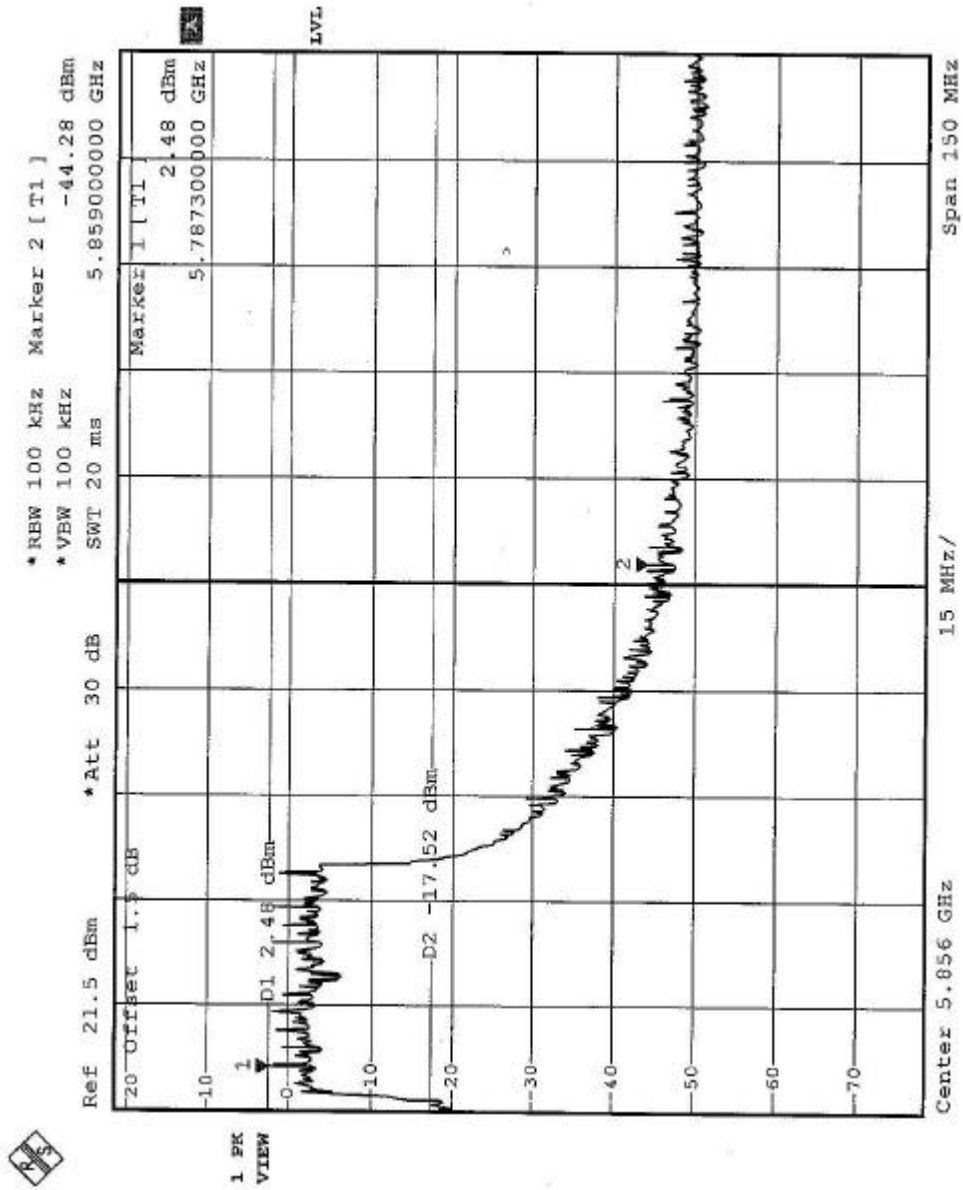






Turbo Mode

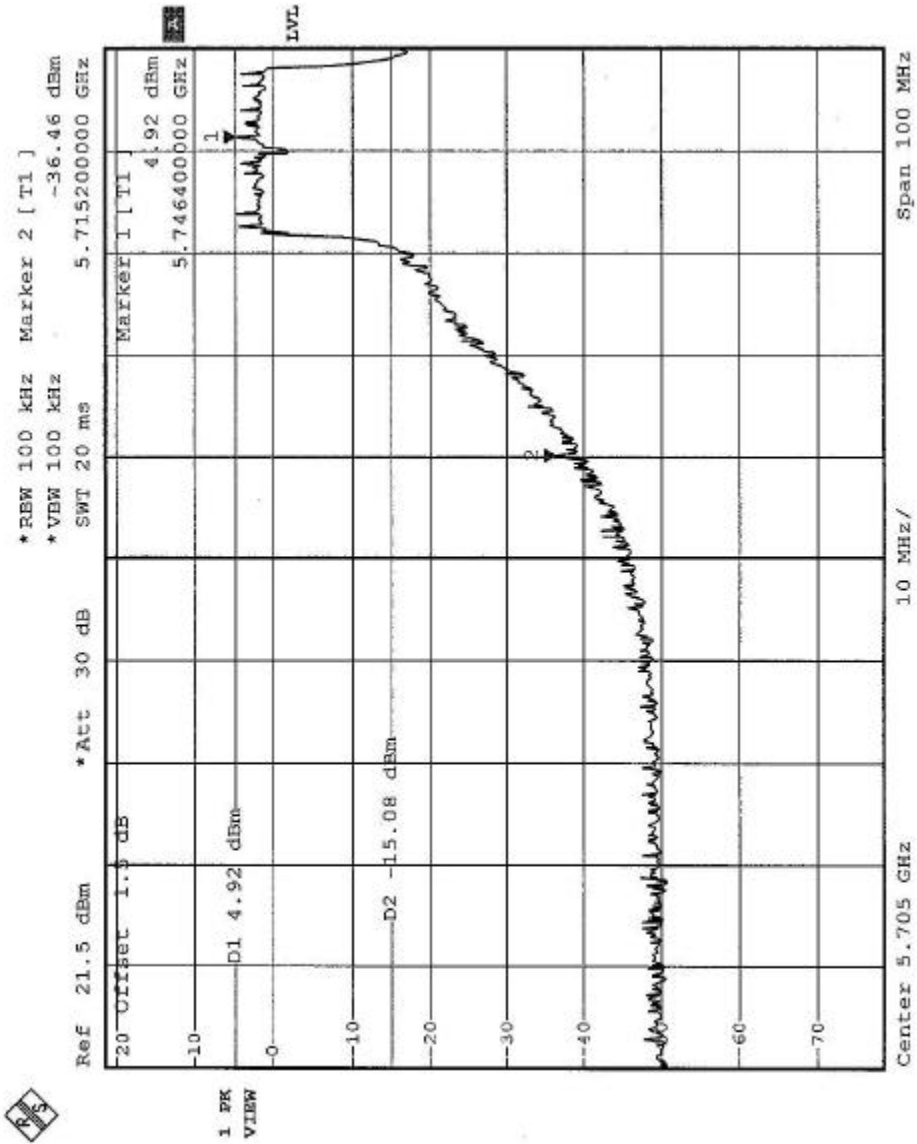


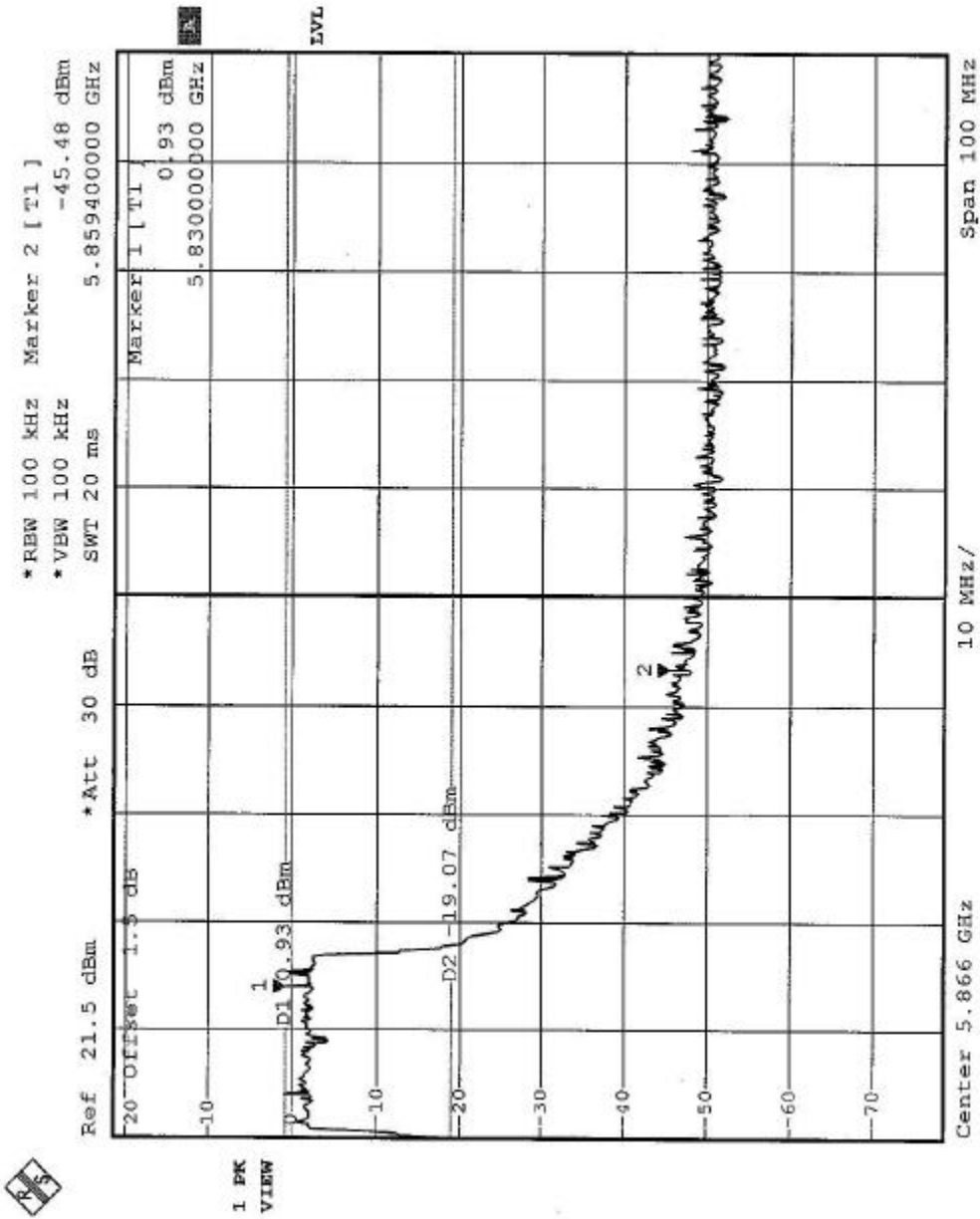




Antenna 6

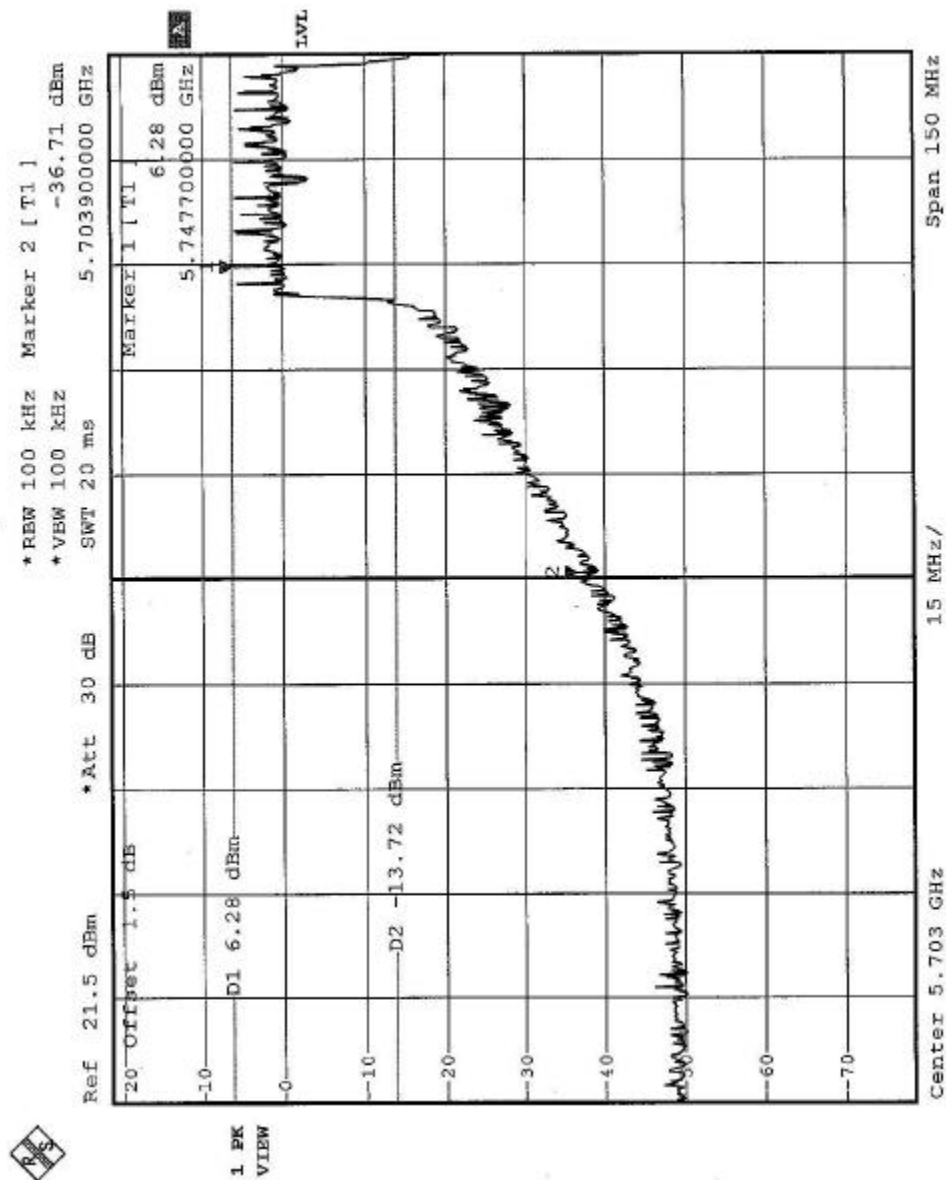
Normal Mode

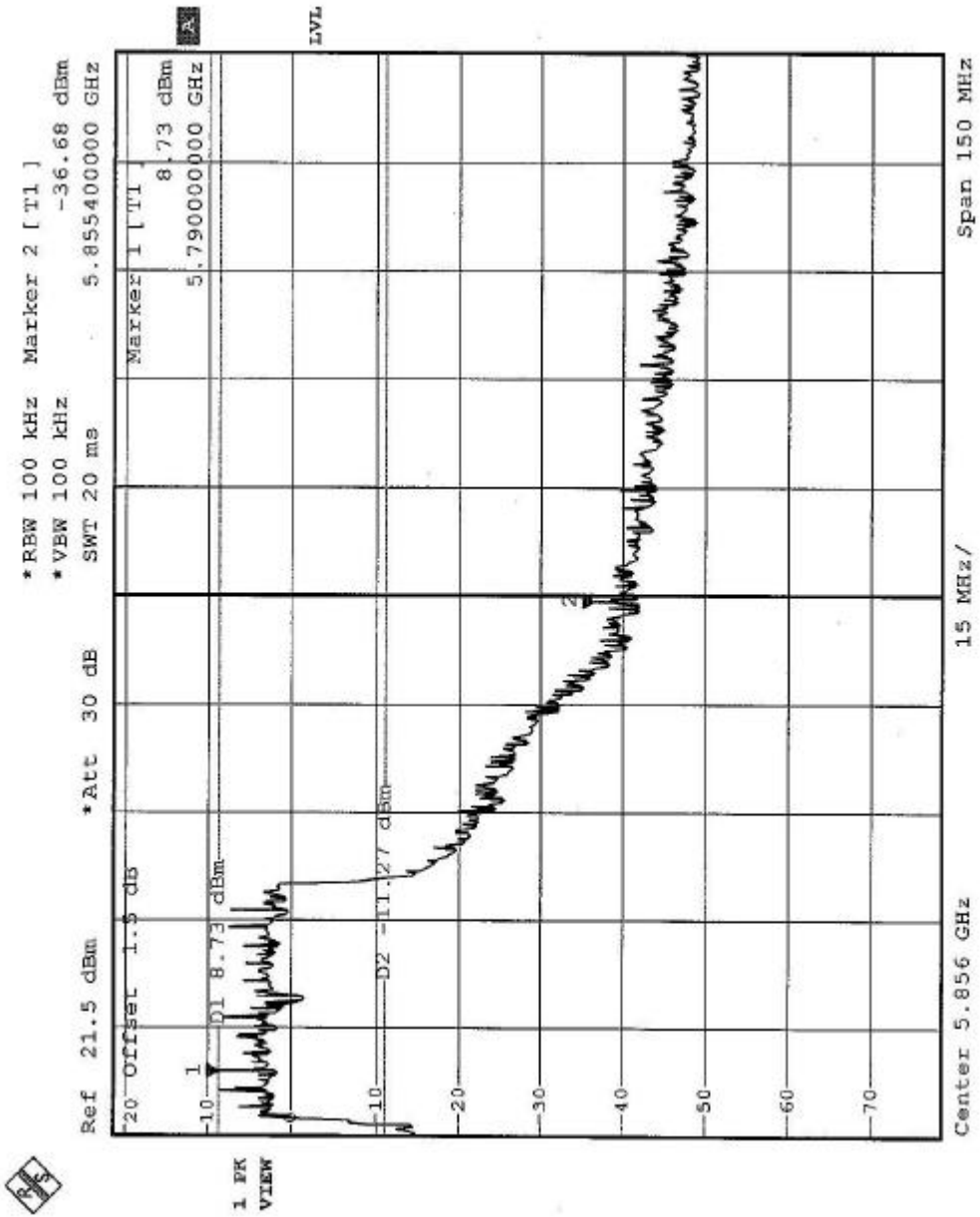






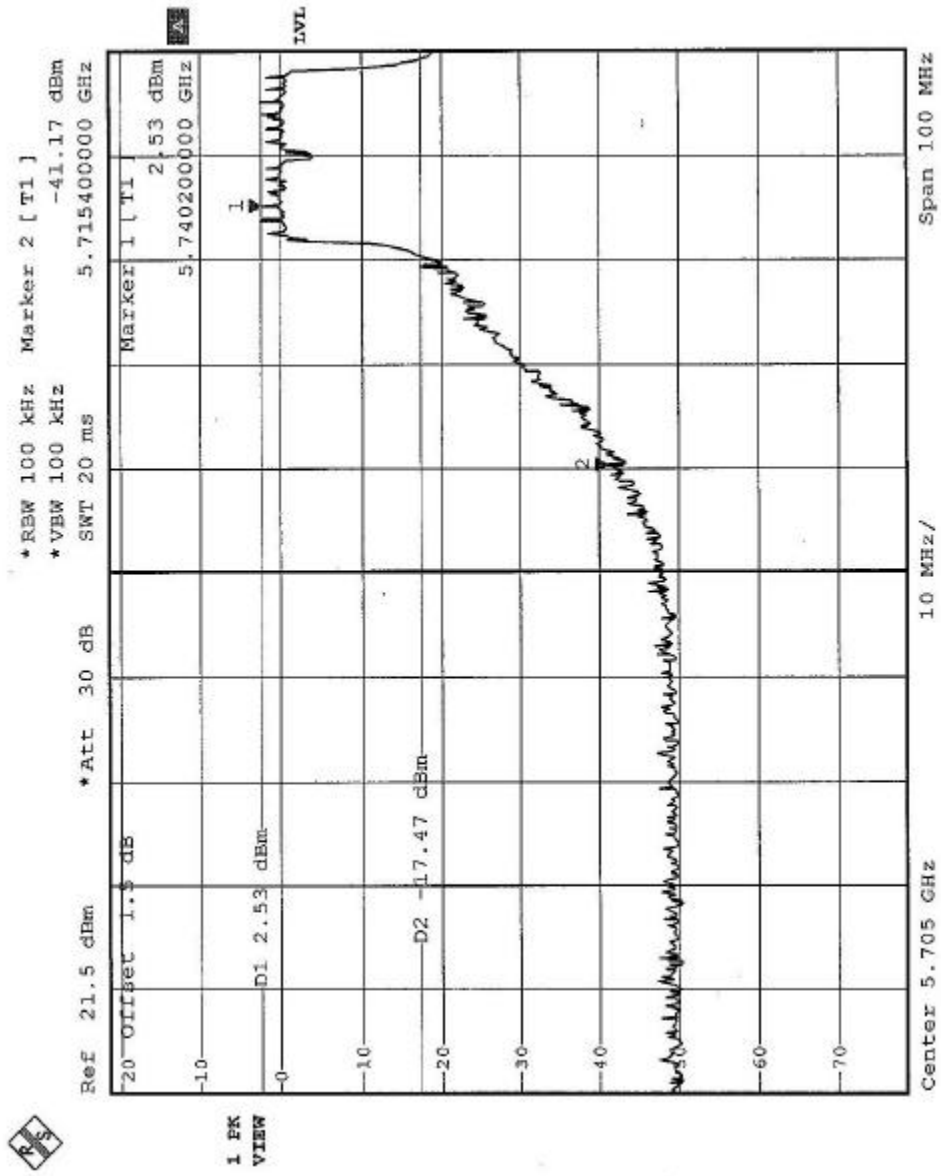
Turbo Mode

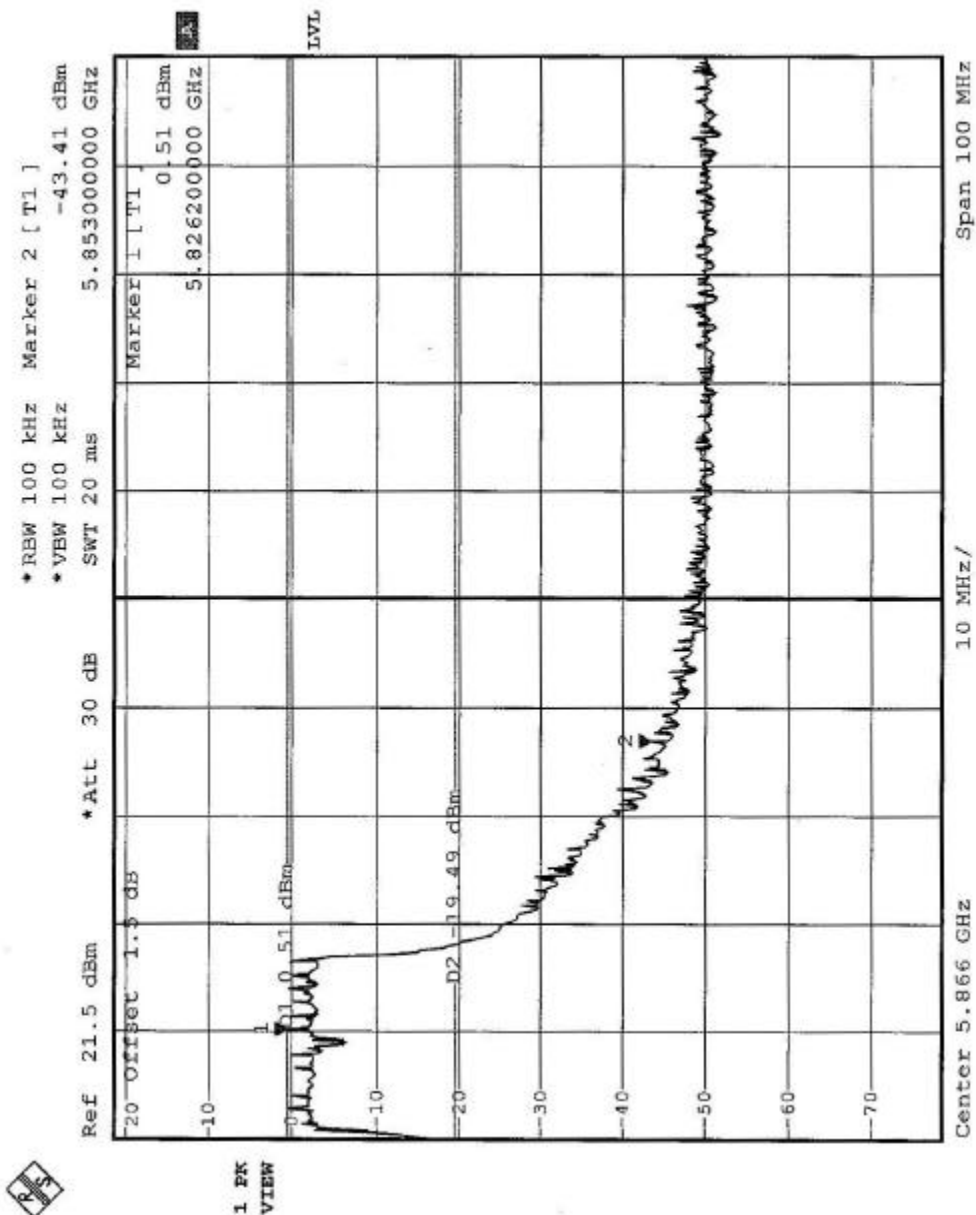






Antenna 7
Normal Mode

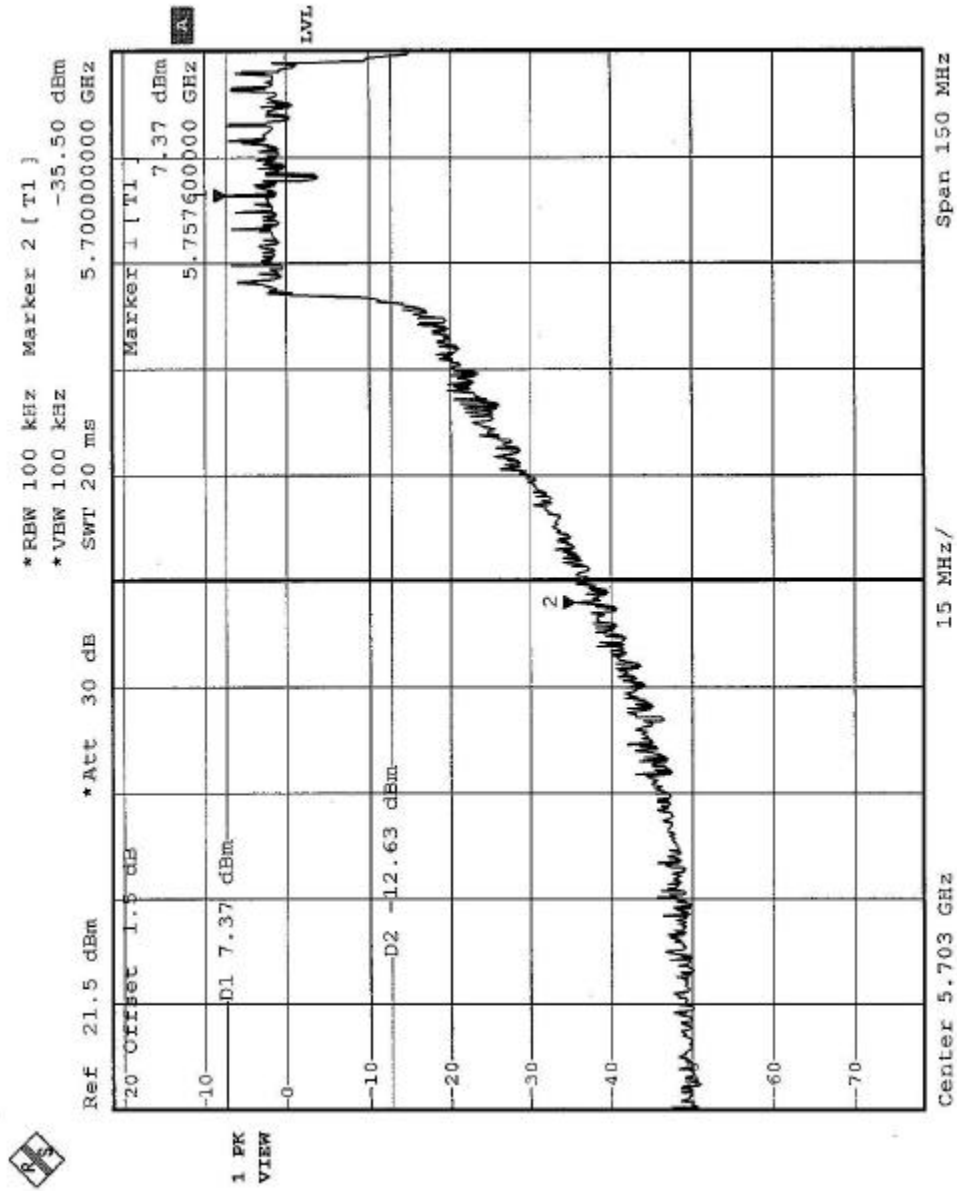


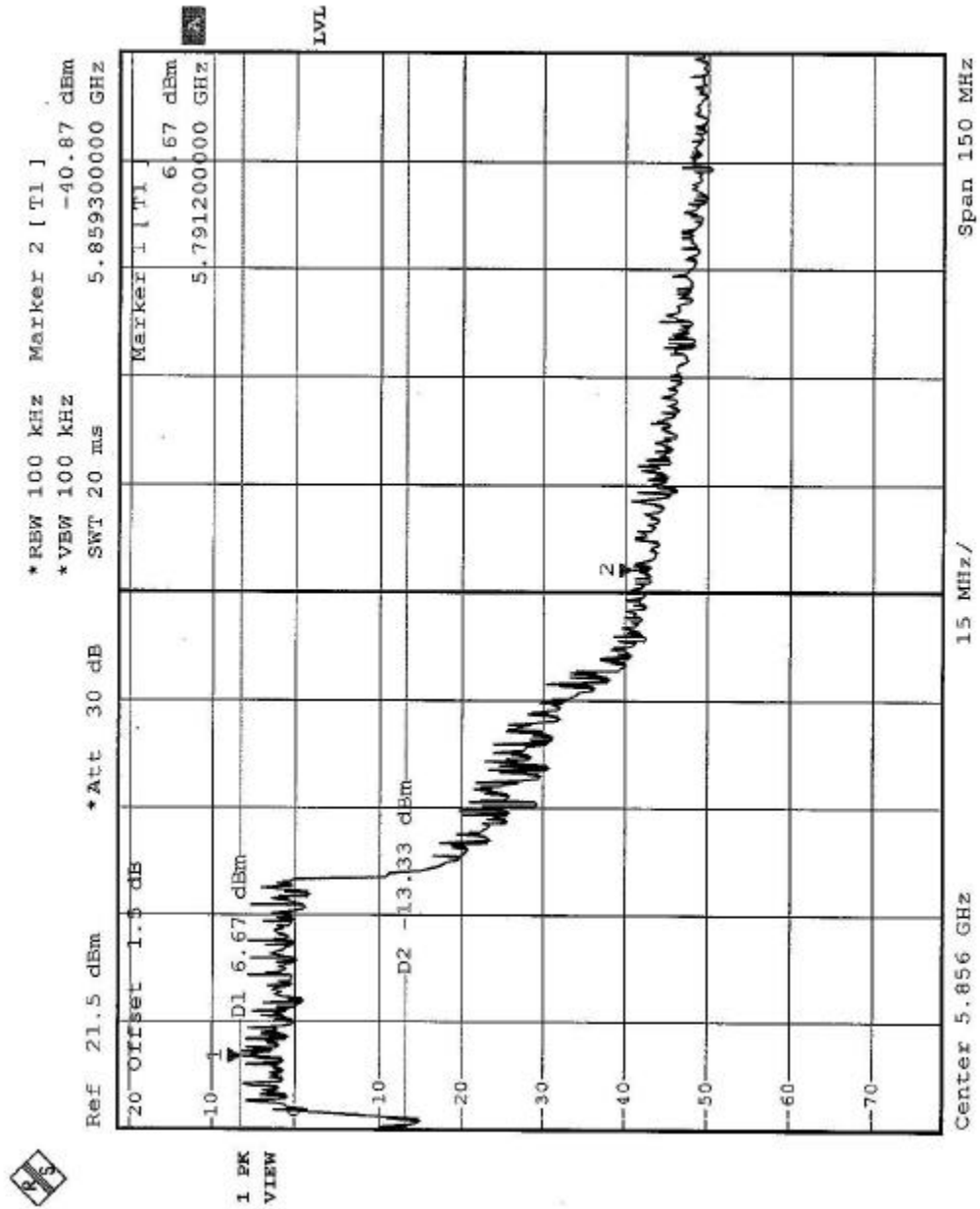


1 RBW
VIEW



Turbo Mode

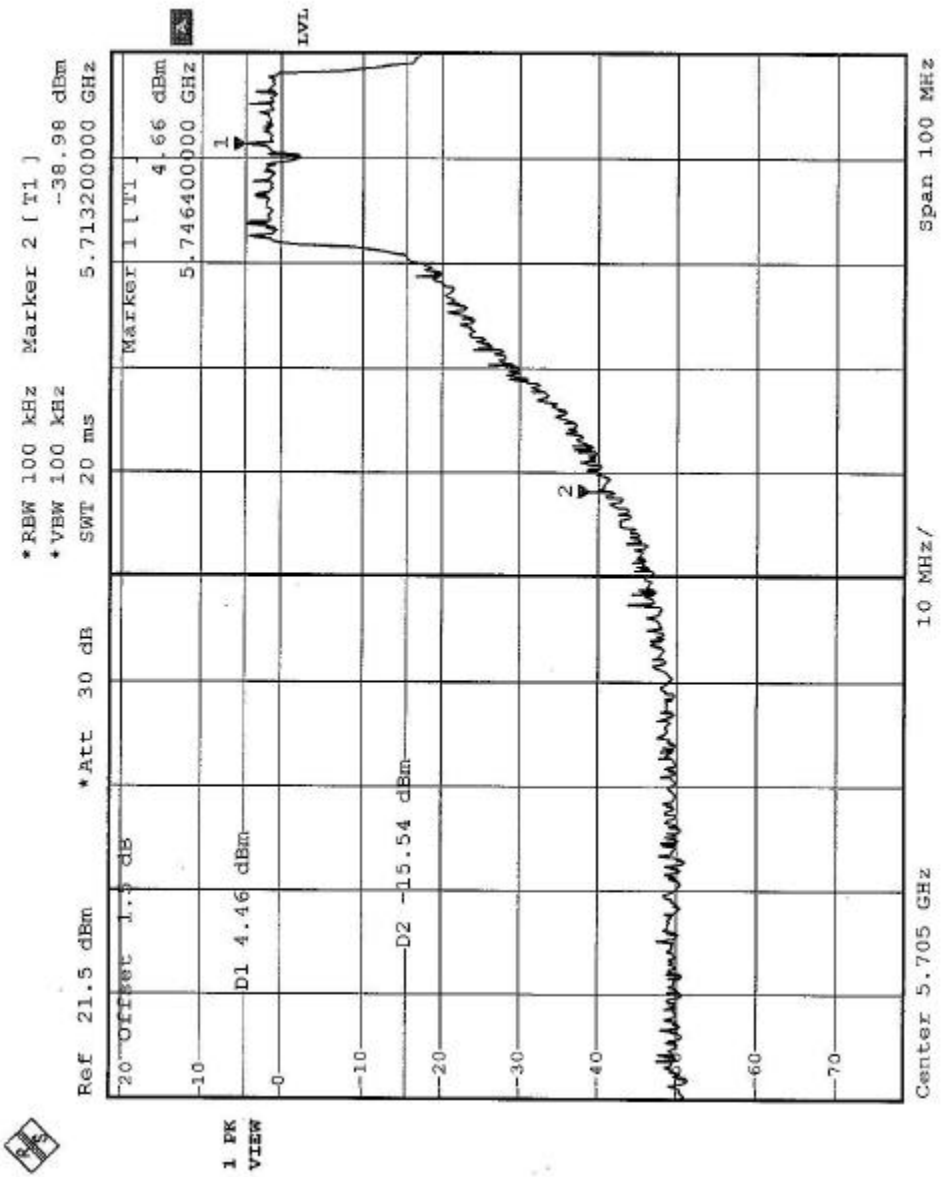


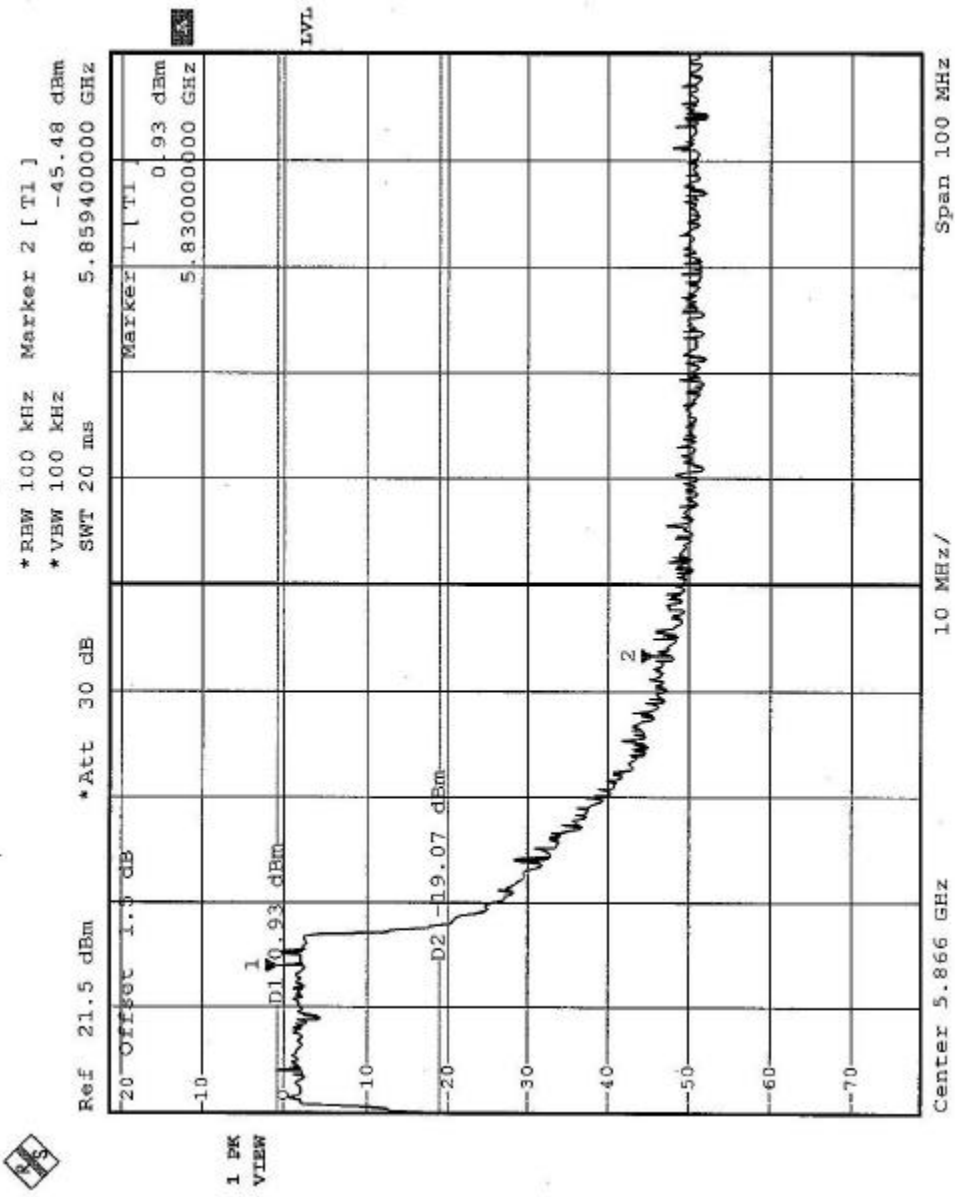




Antenna 8

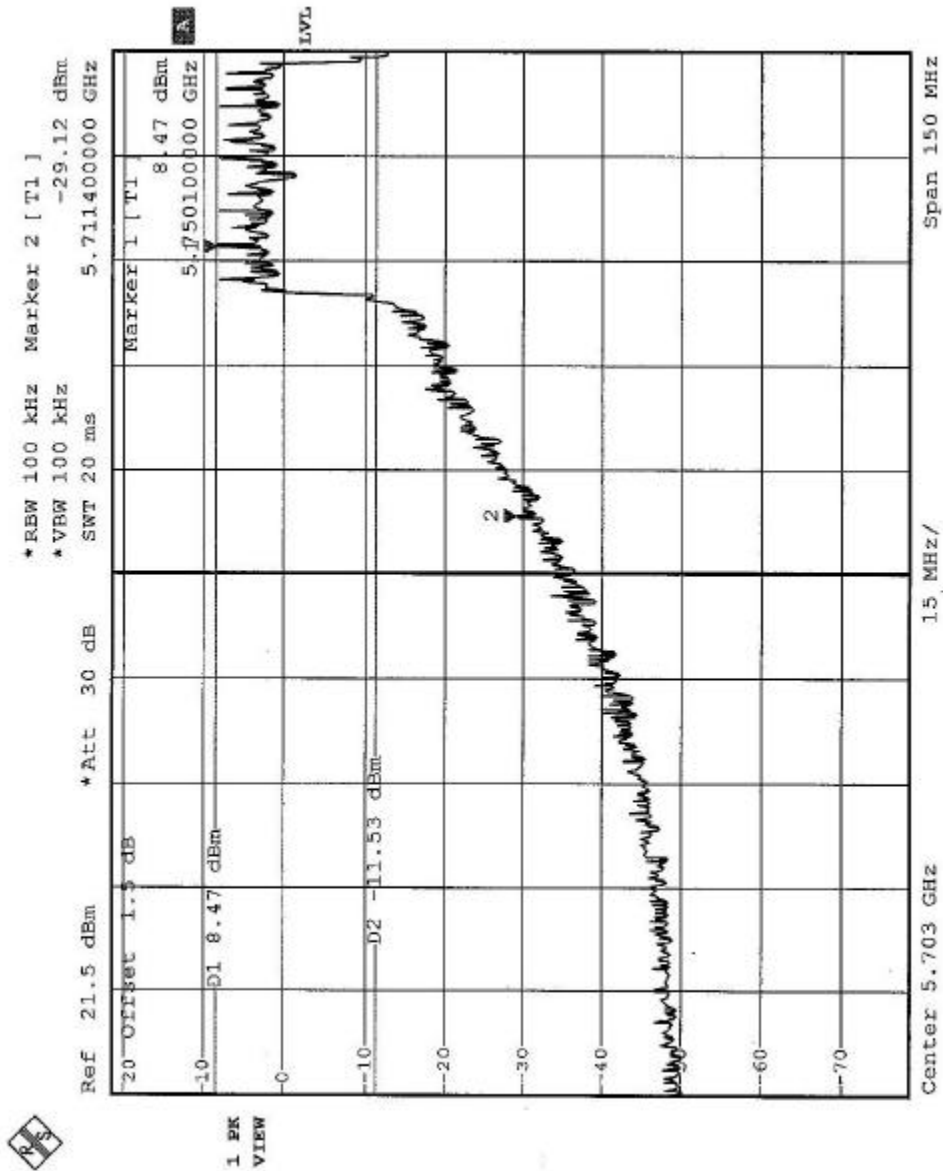
Normal Mode

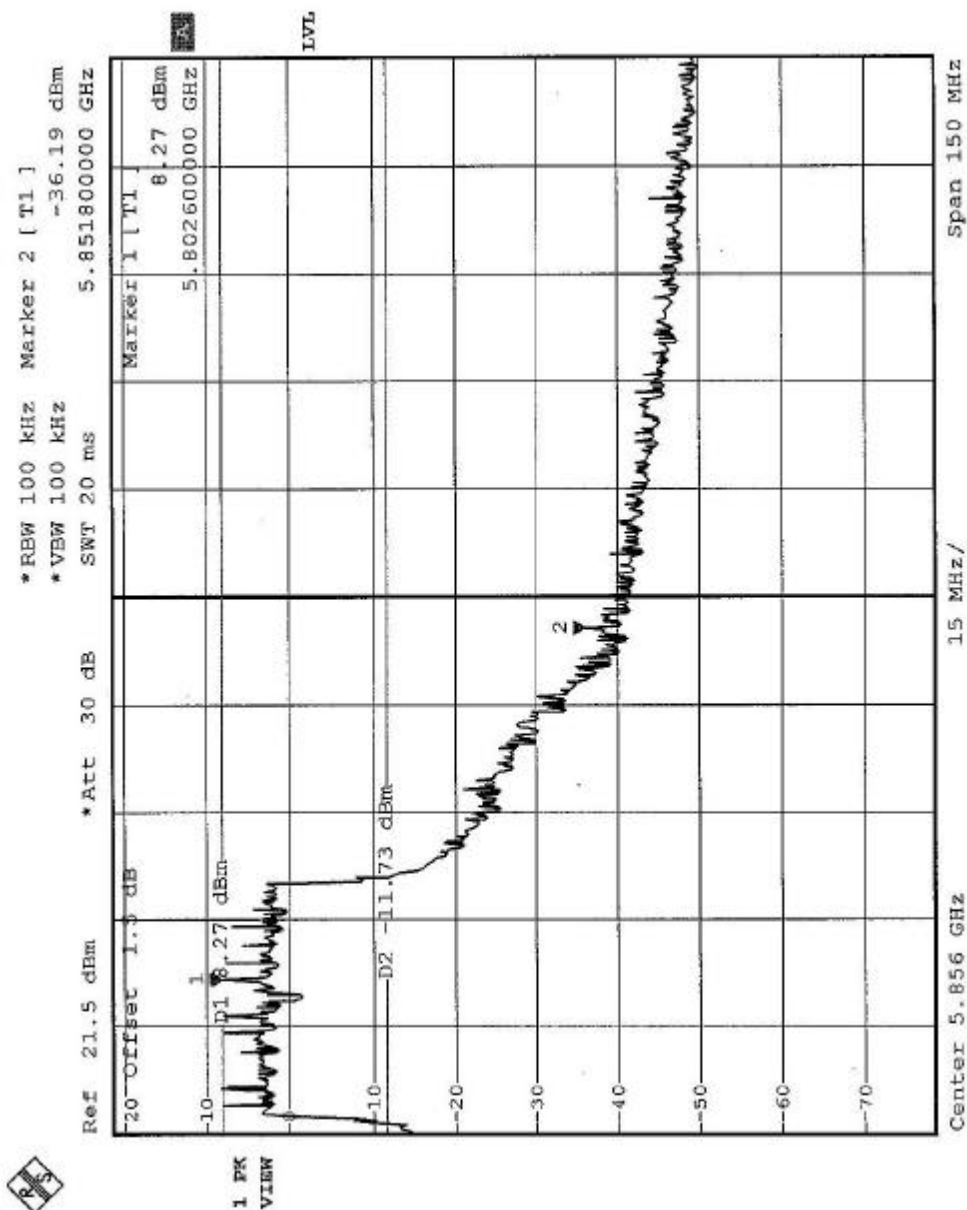






Turbo Mode







5.11 ANTENNA REQUIREMENT

5.11.1 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.

5.11.2 ANTENNA CONNECTED CONSTRUCTION

The antennas used in this product are Dual-Band Omni-Directional Antenna with Aliner 31-401A R/A plug connector and Chip Antenna without connector and Omni, Sector, Panel, Parabol Antennas with female N-type connectors.

Antenna 1: The maximum Gain of the antenna is 3.5dBi.

Antenna 2: The maximum Gain of the antenna is 3.0dBi.

Antenna 3: The maximum Gain of the antenna is 4.0dBi.

Antenna 4: The maximum Gain of the antenna is 13.0dBi.

Antenna 5: The maximum Gain of the antenna is 17.0dBi.

Antenna 6: The maximum Gain of the antenna is 28.2dBi.

Antenna 7: The maximum Gain of the antenna is 33.4dBi.

Antenna 8: The maximum Gain of the antenna is 13.0dBi.

6. PHOTOGRAPHS OF THE TEST CONFIGURATION CONDUCTED EMISSION TEST

Adapter 1



Adapter 2



POE



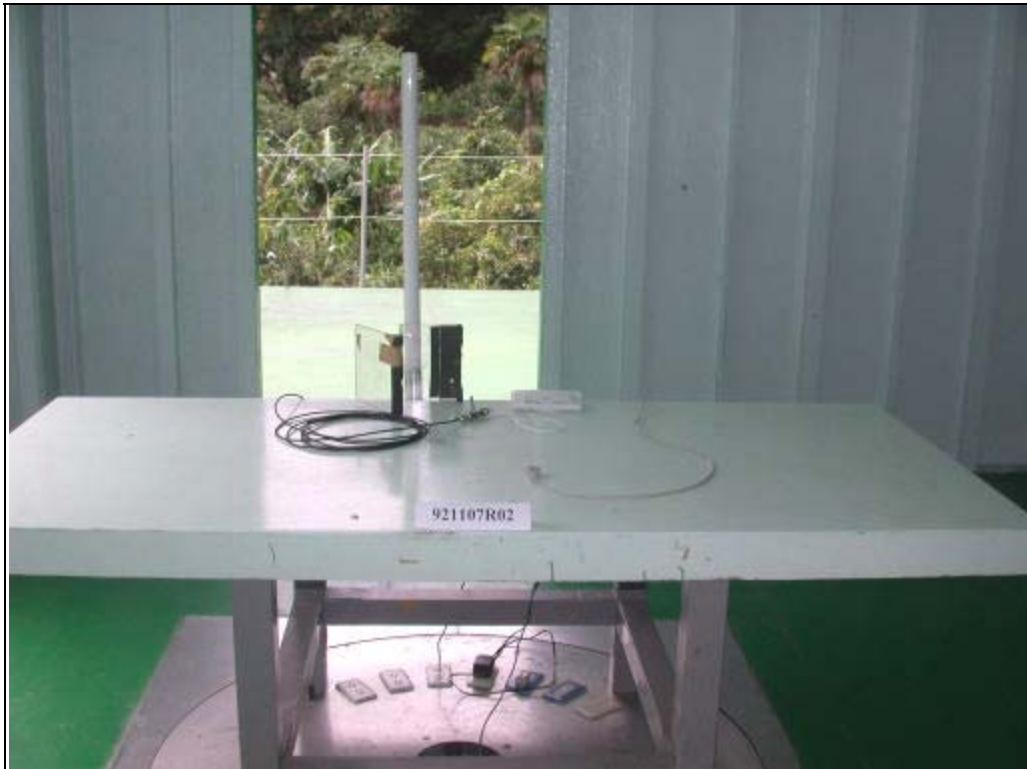
RADIATED EMISSION TEST
Antenna 1 (For 2.4GHz & 5GHz)



Antenna 2 and 3 (For 2.4GHz & 5GHz)



Antenna 4 (For 2.4GHz)



Antenna 5 (For 2.4GHz)



Antenna 6 (For 2.4GHz)



Antenna 7 (For 2.4GHz)



Antenna 4 (For 5GHz)



Antenna 5 (For 5GHz)



Antenna 7 (For 5GHz)



Antenna 8 (For 5GHz)





7. 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.

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Web Site: www.adt.com.tw

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