

4.3.2. Photographs of Radiated Emission Test

FRONT VIEW



REAR VIEW



4.4. 6dB Bandwidth Measurement Data

(1) Modulation Standard: 802.11b

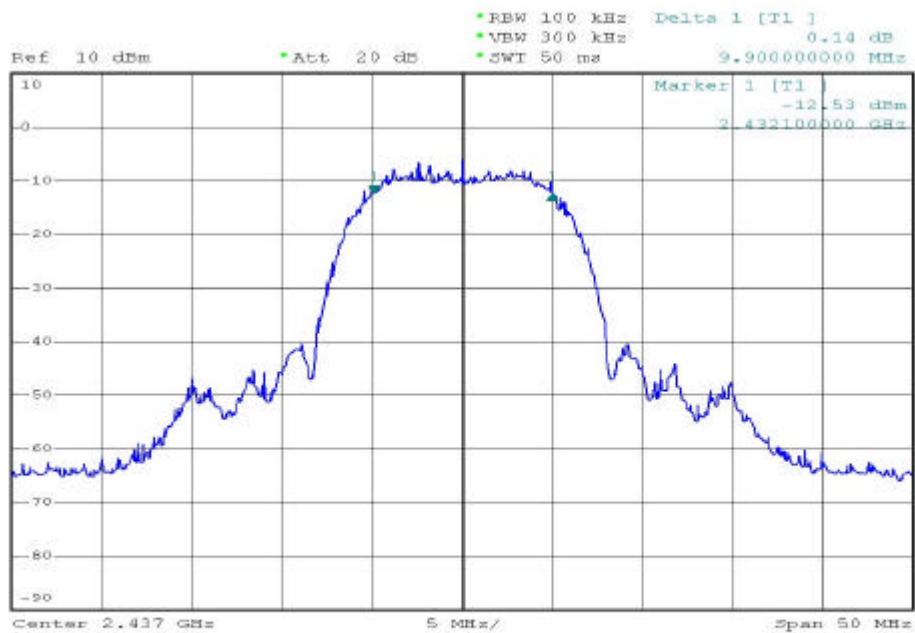
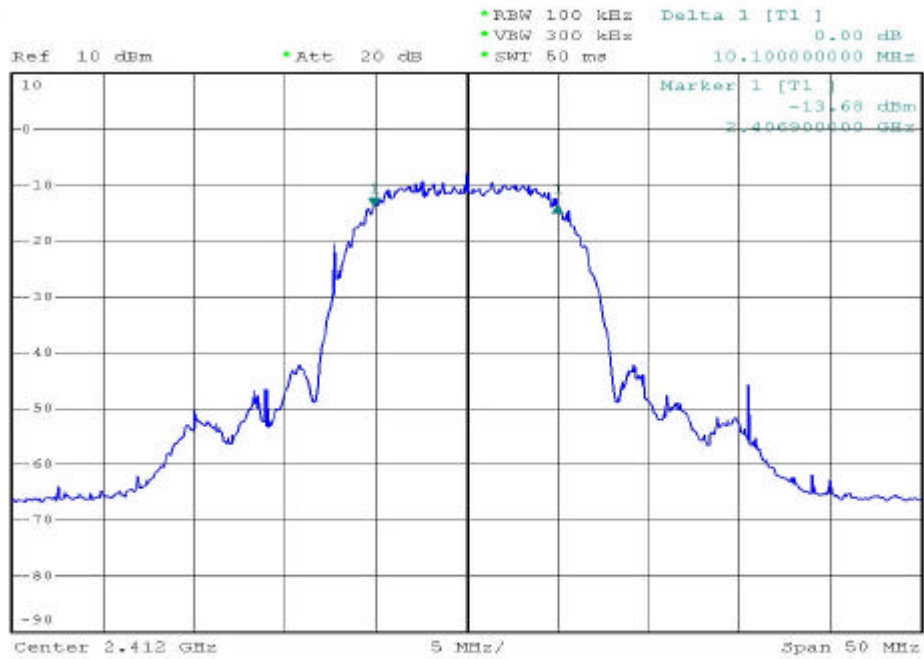
Test Date: Apr. 08. 2004 Temperature: 25 Humidity: 58%

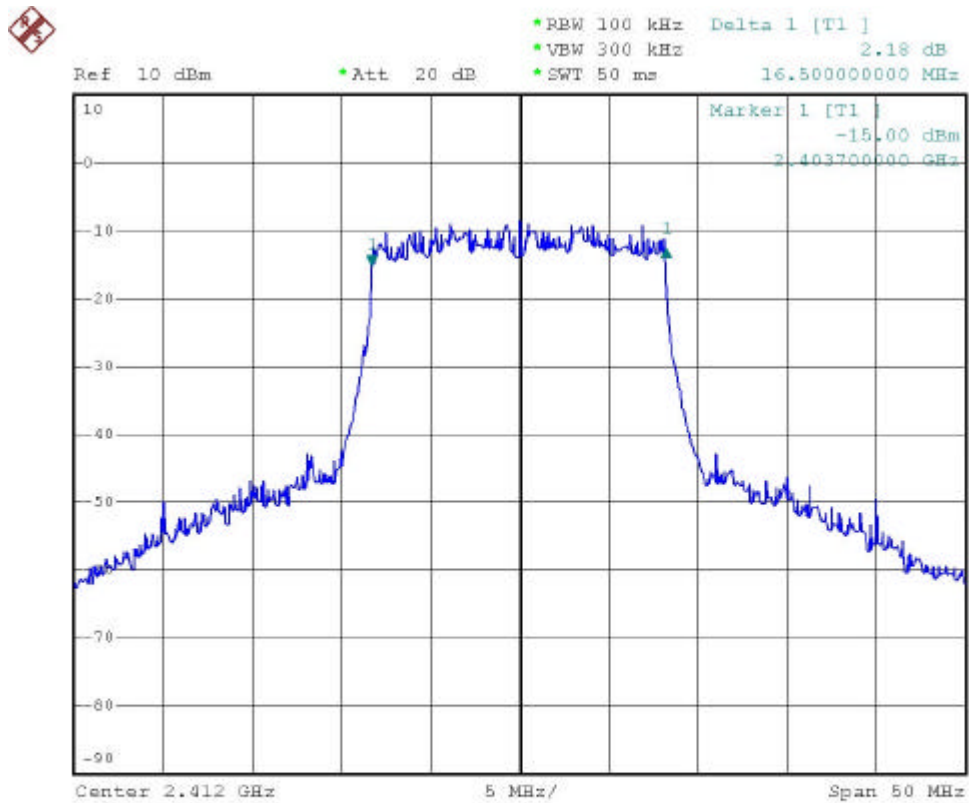
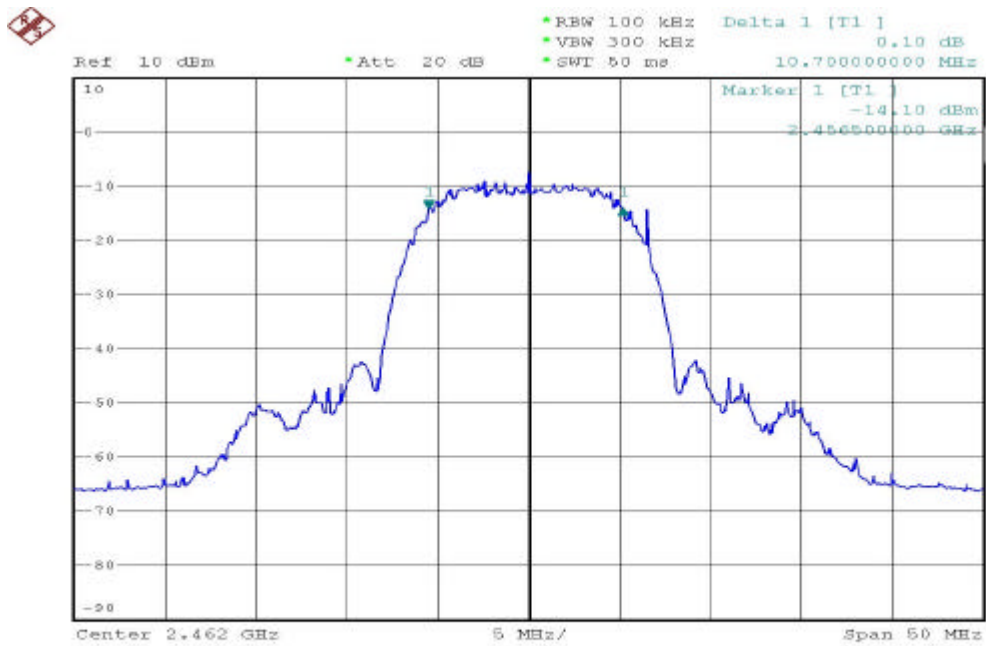
- a) Channel 01: 6dB Emission Bandwidth is 10.10 MHz
- b) Channel 06: 6dB Emission Bandwidth is 9.90 MHz
- c) Channel 11: 6dB Emission Bandwidth is 10.70 MHz

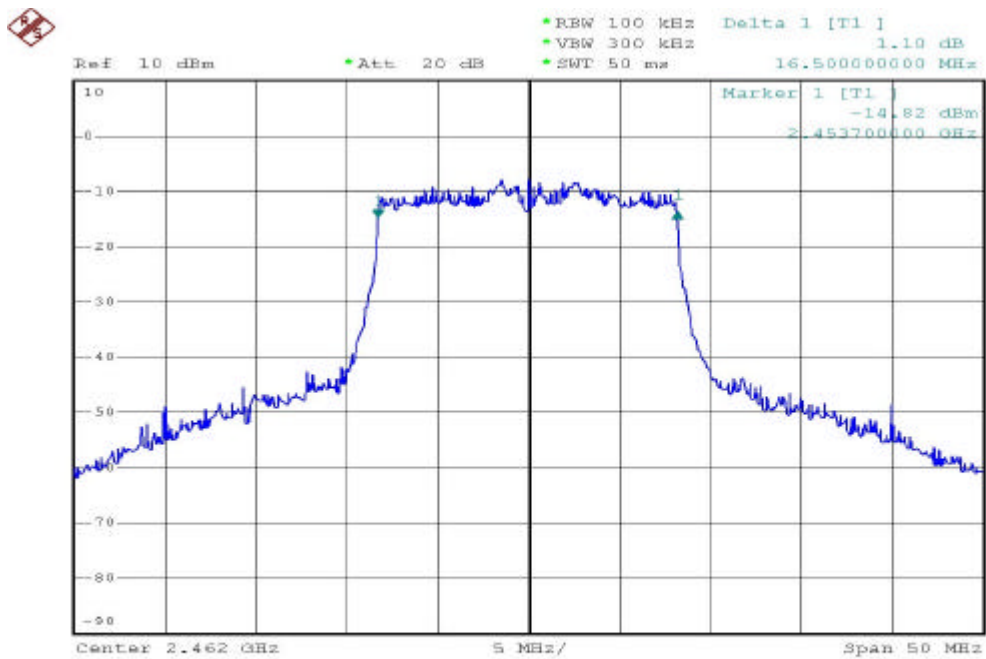
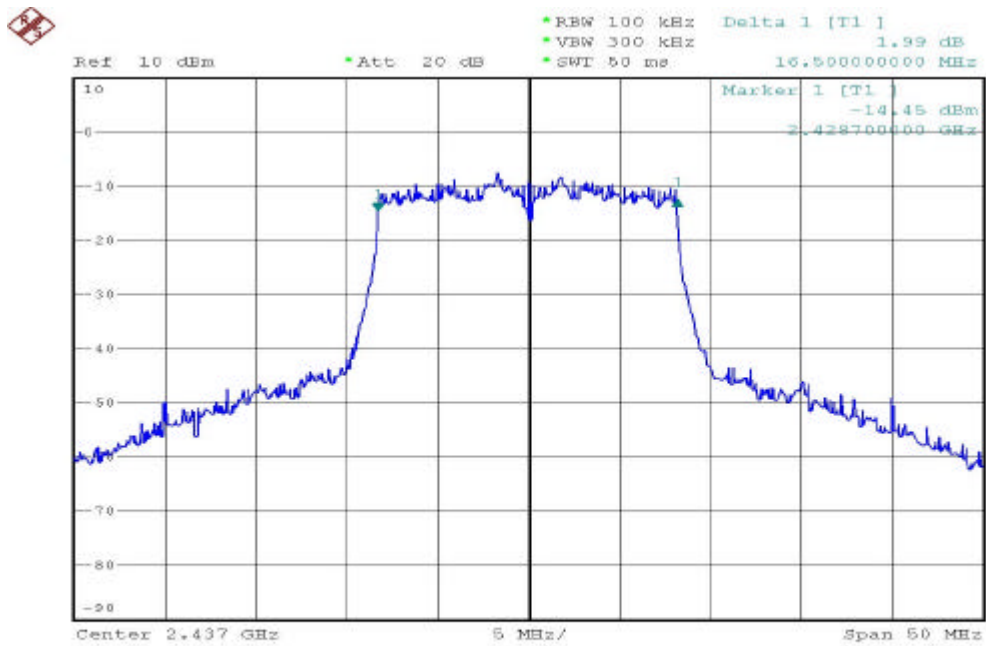
(2) Modulation Standard: 802.11g

Test Date: Apr. 28. 2004 Temperature: 24 Humidity: 58%

- a) Channel 01: 6dB Emission Bandwidth is 16.50 MHz
- b) Channel 06: 6dB Emission Bandwidth is 16.50 MHz
- c) Channel 11: 6dB Emission Bandwidth is 16.50 MHz







4.5. Peak Output Power Measurement Data

(1) Modulation Standard: 802.11b

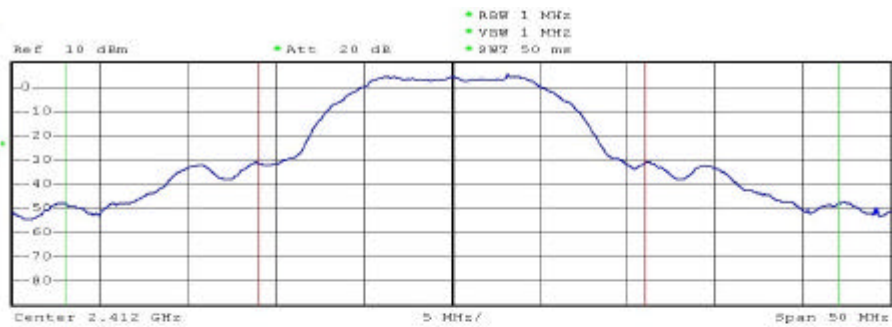
Test Date: Apr. 28. 2004 Temperature: 25 Humidity: 58%

- a) Channel 01: Output Peak Power is 12.80dBm or 19.064mW
- b) Channel 06: Output Peak Power is 12.96dBm or 19.786mW
- c) Channel 11: Output Peak Power is 12.90dBm or 19.507mW

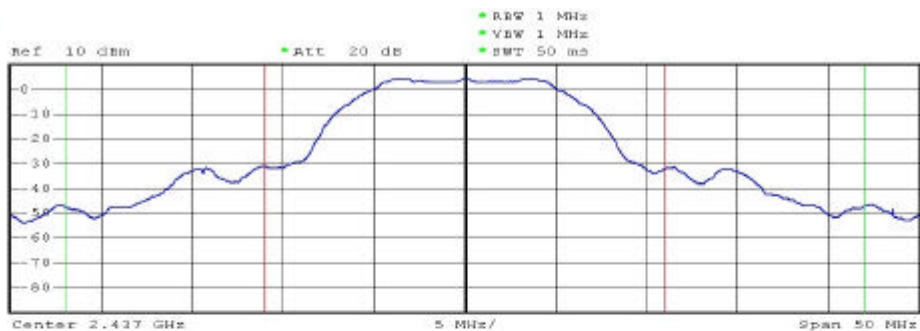
(2) Modulation Standard: 802.11g

Test Date: Apr. 28. 2004 Temperature: 25 Humidity: 58%

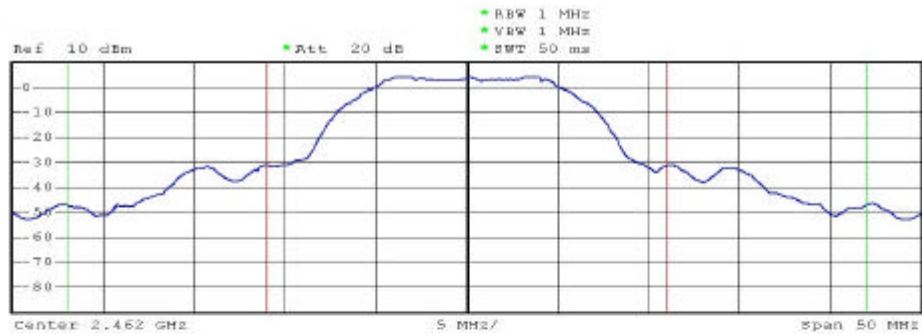
- a) Channel 01: Output Peak Power is 10.07dBm or 10.161mW
- b) Channel 06: Output Peak Power is 10.11dBm or 10.254mW
- c) Channel 11: Output Peak Power is 10.09dBm or 10.220mW



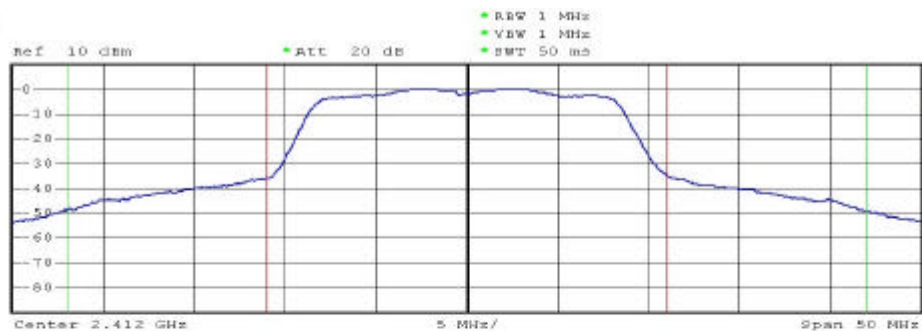
Tx Channel			
Bandwidth	22 MHz	Power	12.80 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-40.29 dB
Spacing	16.5 MHz	Upper	-40.19 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



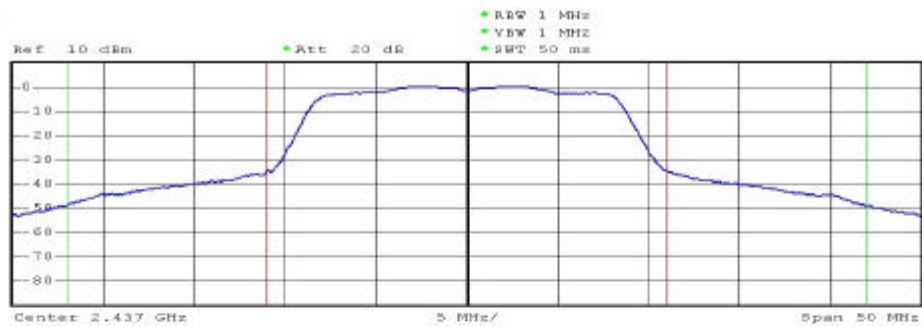
Tx Channel			
Bandwidth	22 MHz	Power	12.96 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-39.96 dB
Spacing	16.5 MHz	Upper	-40.09 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



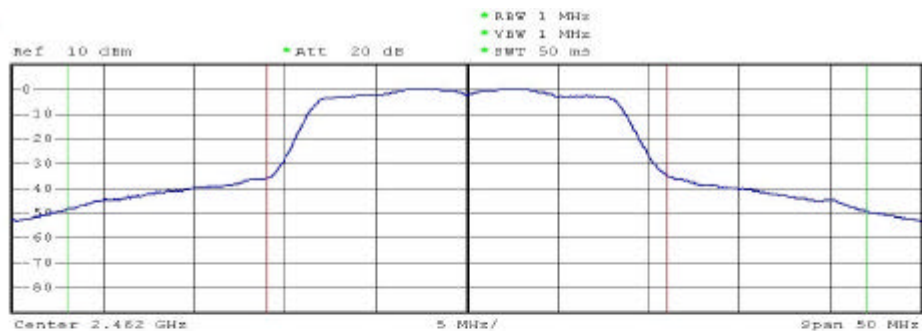
Tx Channel			
Bandwidth	22 MHz	Power	12.90 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-39.94 dB
Spacing	16.5 MHz	Upper	-39.86 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



Tx Channel			
Bandwidth	22 MHz	Power	10.07 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-40.81 dB
Spacing	16.5 MHz	Upper	-40.81 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



Tx Channel		Power	10.11 dBm
Bandwidth	22 MHz		
Adjacent Channel		Lower	-40.62 dB
Bandwidth	11 MHz	Upper	-40.75 dB
Spacing	16.5 MHz		
Alternate Channel		Lower	-----
Bandwidth	11 MHz	Upper	-----
Spacing	27.5 MHz		



Tx Channel		Power	10.09 dBm
Bandwidth	22 MHz		
Adjacent Channel		Lower	-40.65 dB
Bandwidth	11 MHz	Upper	-40.78 dB
Spacing	16.5 MHz		
Alternate Channel		Lower	-----
Bandwidth	11 MHz	Upper	-----
Spacing	27.5 MHz		

4.6. Band Edges Measurement Data

(1) Modulation Standard: 802.11b

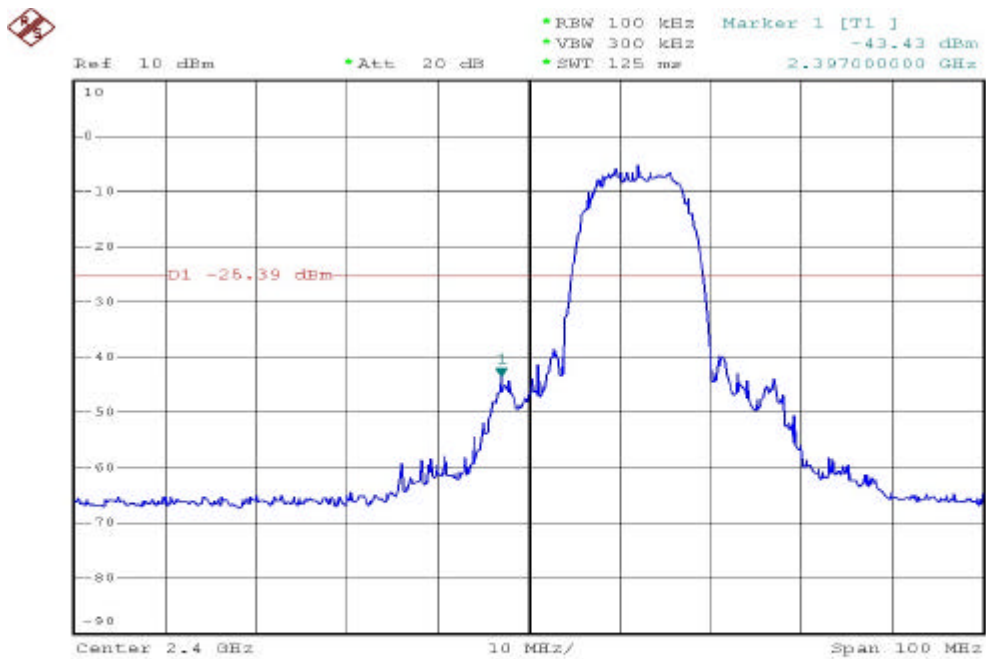
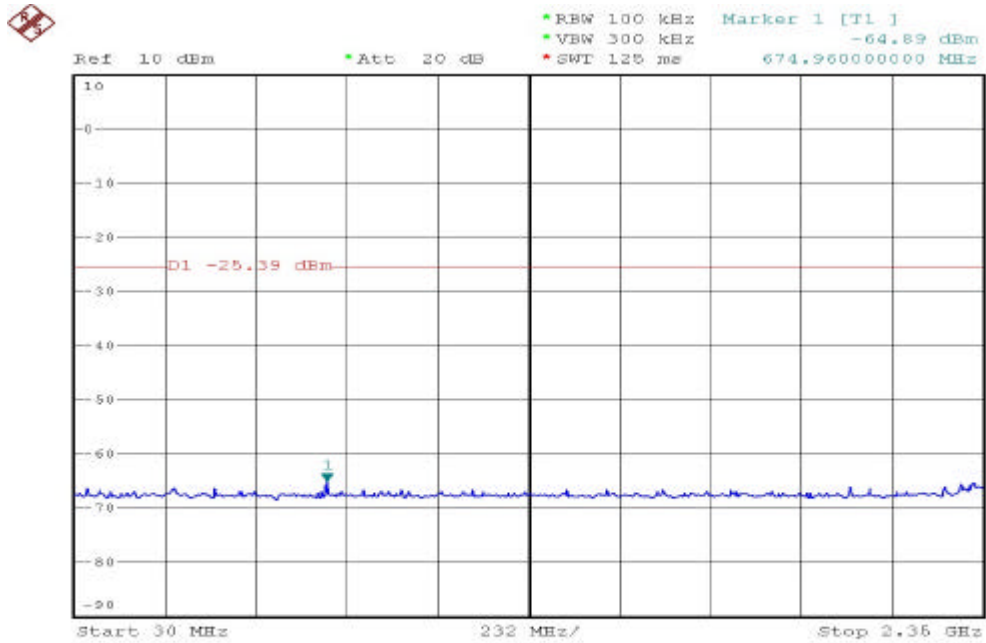
Test Date: Apr. 28. 2004 Temperature: 25 Humidity: 58%

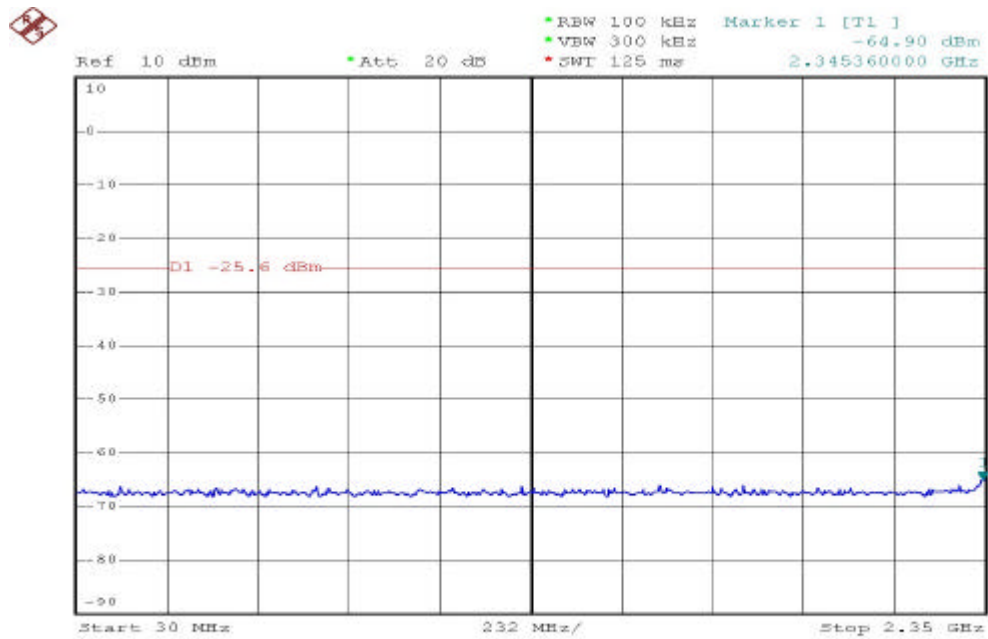
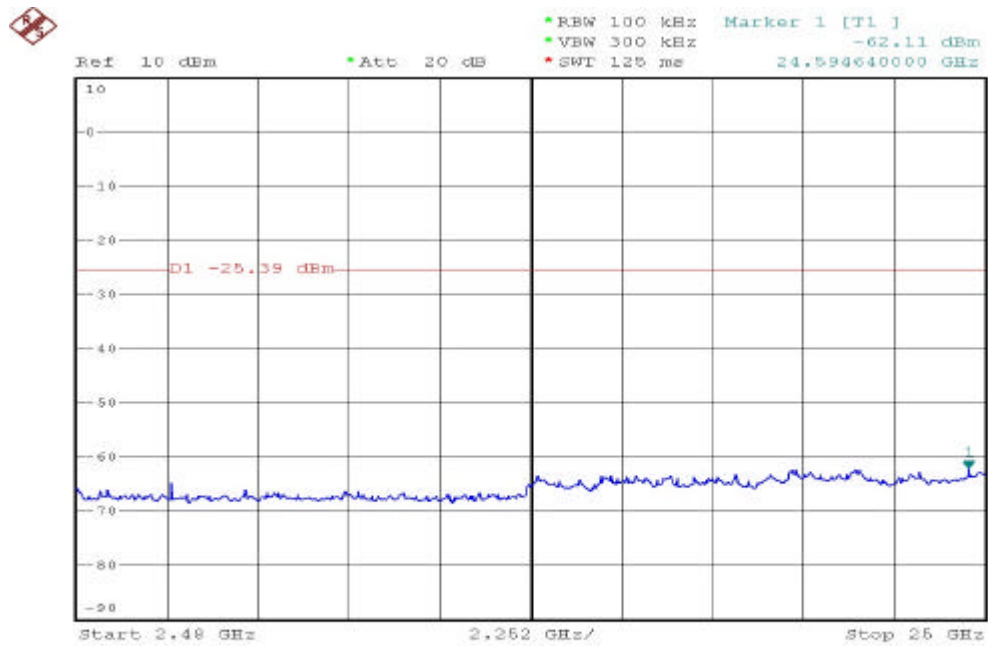
- a) Lower Band Edge: maximum value is -43.43dBm that is attenuated more than 20dB
- b) Upper Band Edge: maximum value is -58.19dBm that is attenuated more than 20dB

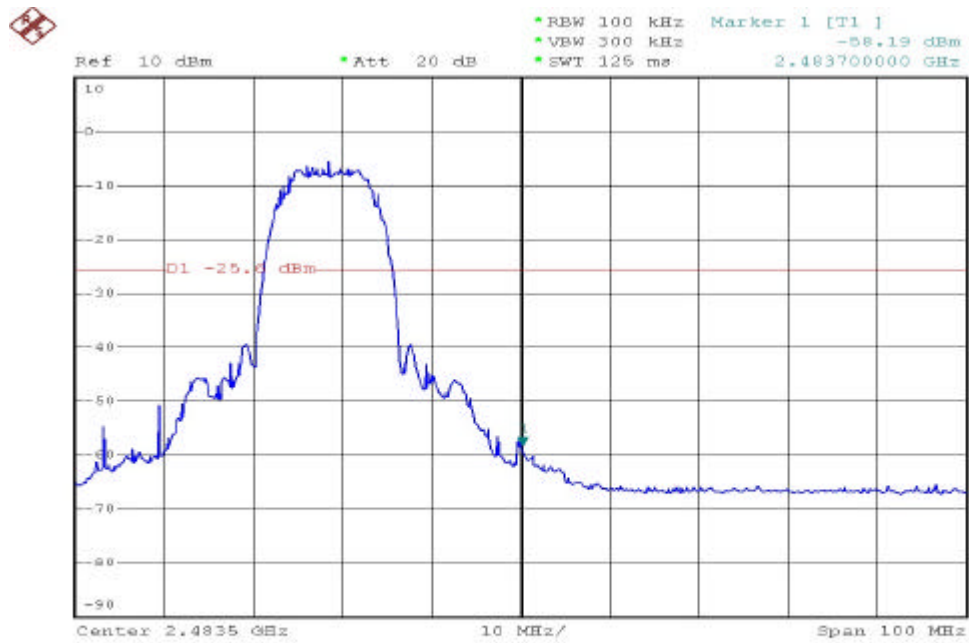
(2) Modulation Standard: 802.11g

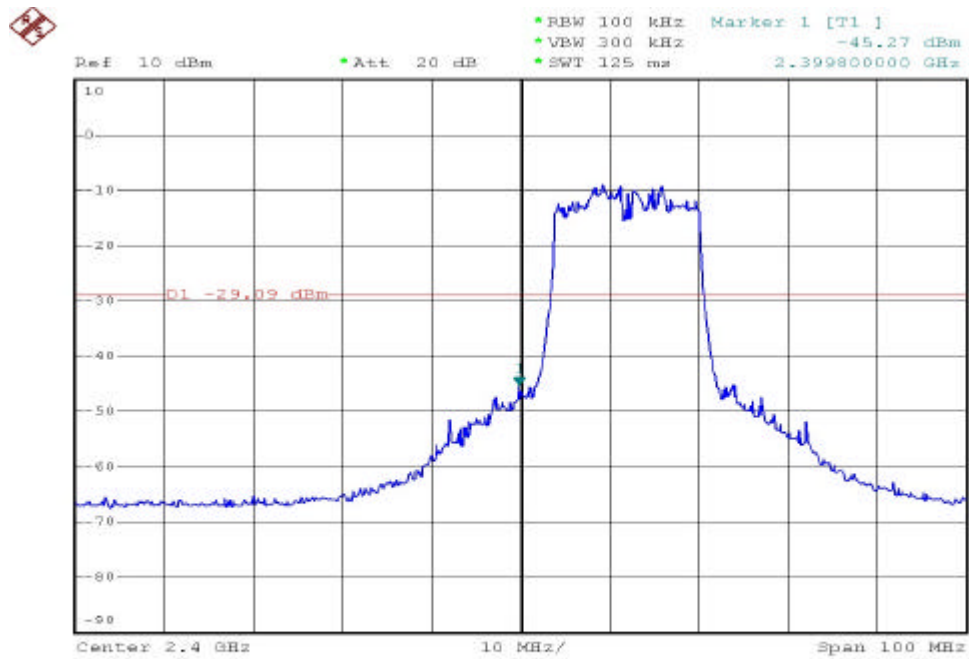
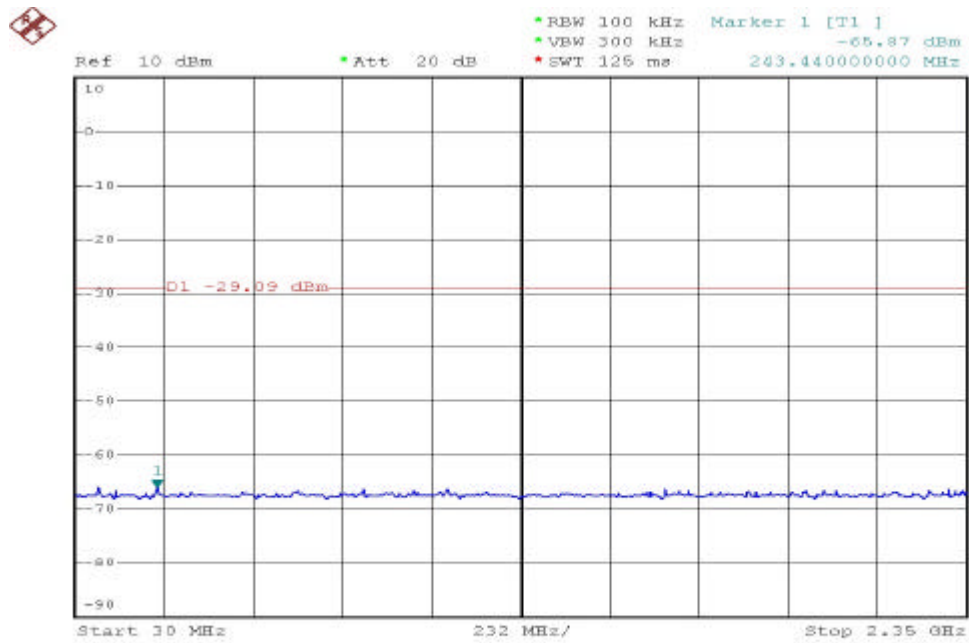
Test Date: Apr. 28. 2004 Temperature: 25 Humidity: 58%

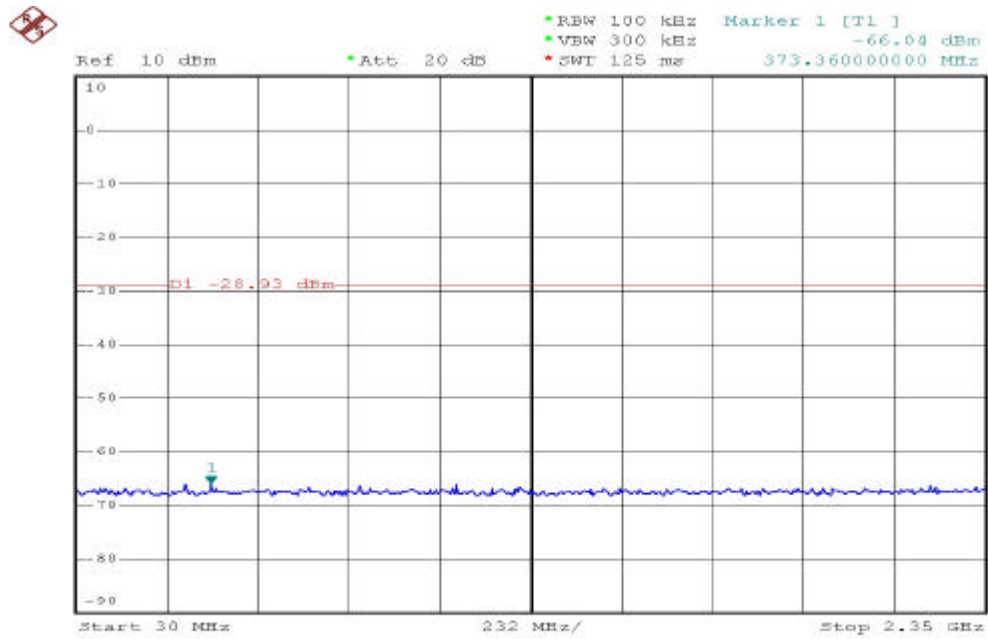
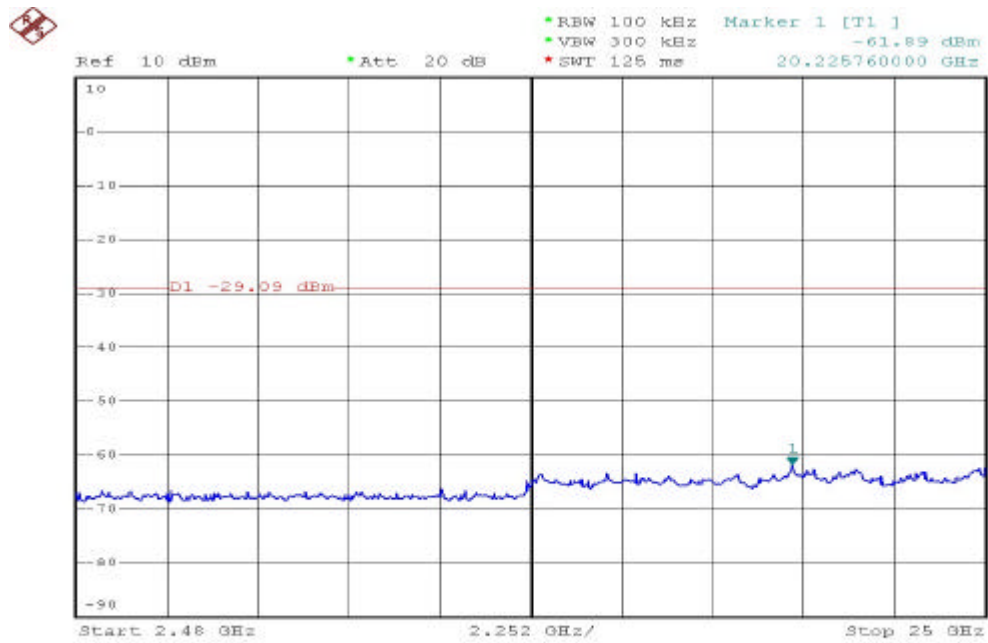
- a) Lower Band Edge: maximum value is -45.27dBm that is attenuated more than 20dB
- b) Upper Band Edge: maximum value is -58.17dBm that is attenuated more than 20dB

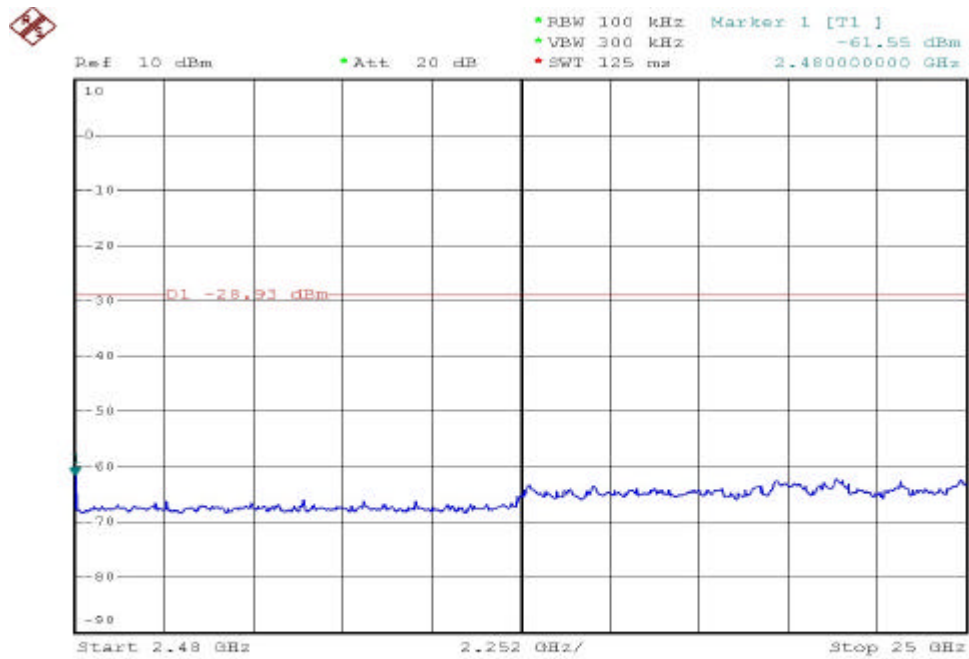
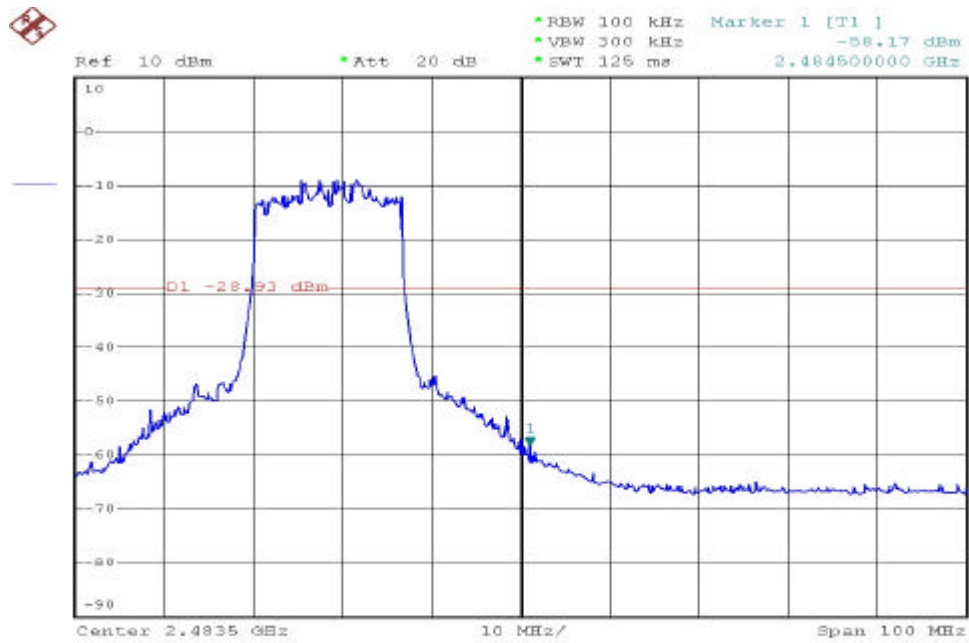












4.7. Note on Band edge Emission

Modulation Standard: 802.11b

Operation Mode: Receiving/ Transmitting

Test Date: Apr. 28, 2004 Temperature: 25 Humidity: 58%

a) Channel 1

Fundamental Frequency: 2412 MHz

Frequency (MHz)	Level(dBuV)	polarization	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant High (m)
				Peak	Ave.			
2321.934	47.14	H	Peak	74	54	-26.86	180	1.5
2312.346	36.40	H	Avg	74	54	-17.60	180	1.5
2323.158	50.25	V	Peak	74	54	-23.75	180	1.4
2311.530	39.19	V	Avg	74	54	-14.81	180	1.4

b) Channel 11

Fundamental Frequency: 2462 MHz

Frequency (MHz)	Level(dBuV)	polarization	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant High (m)
				Peak	Ave.			
2497.644	46.56	H	Peak	74	54	-27.44	185	1.5
2486.814	35.61	H	Avg	74	54	-17.60	185	1.5
2497.378	50.14	V	Peak	74	54	-23.86	190	1.4
2495.858	38.26	V	Avg	74	54	-15.74	190	1.4

Modulation Standard: 802.11g

Operation Mode: Receiving/ Transmitting

Test Date: Apr. 28, 2004 Temperature: 25 Humidity: 58%

a) Channel 1

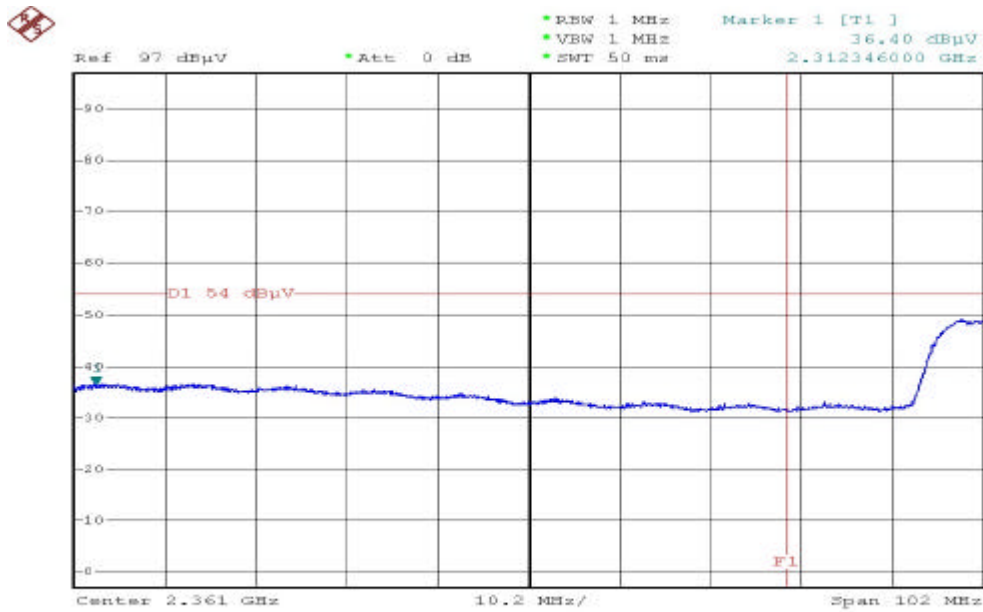
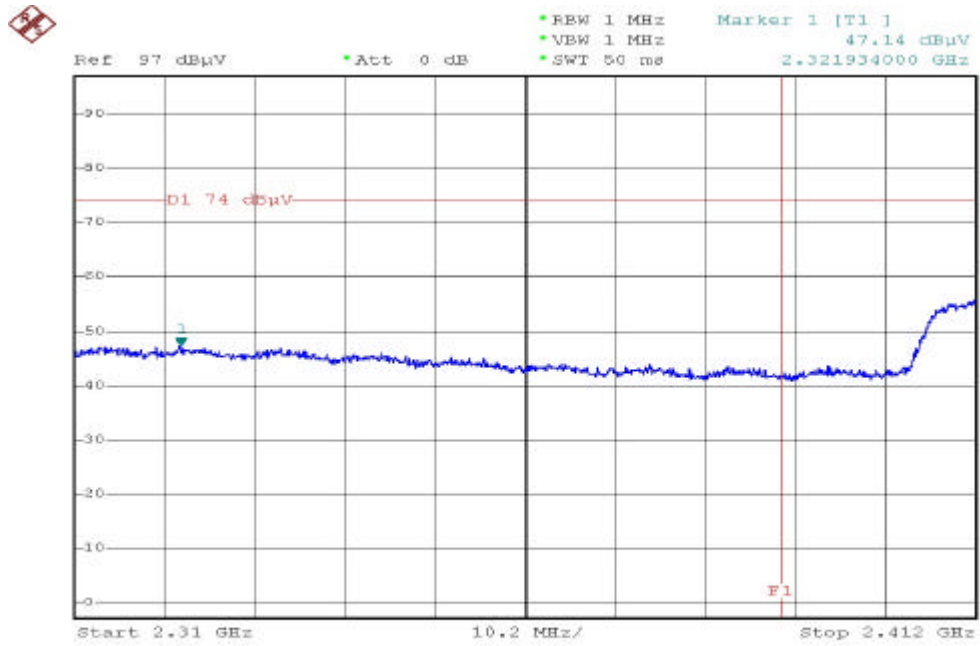
Fundamental Frequency: 2412 MHz

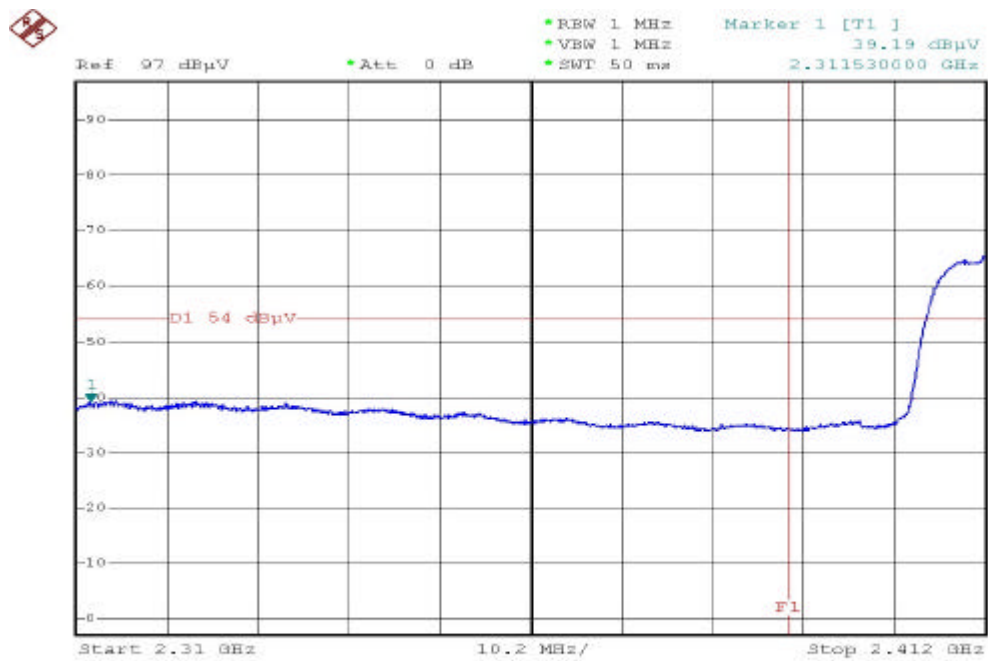
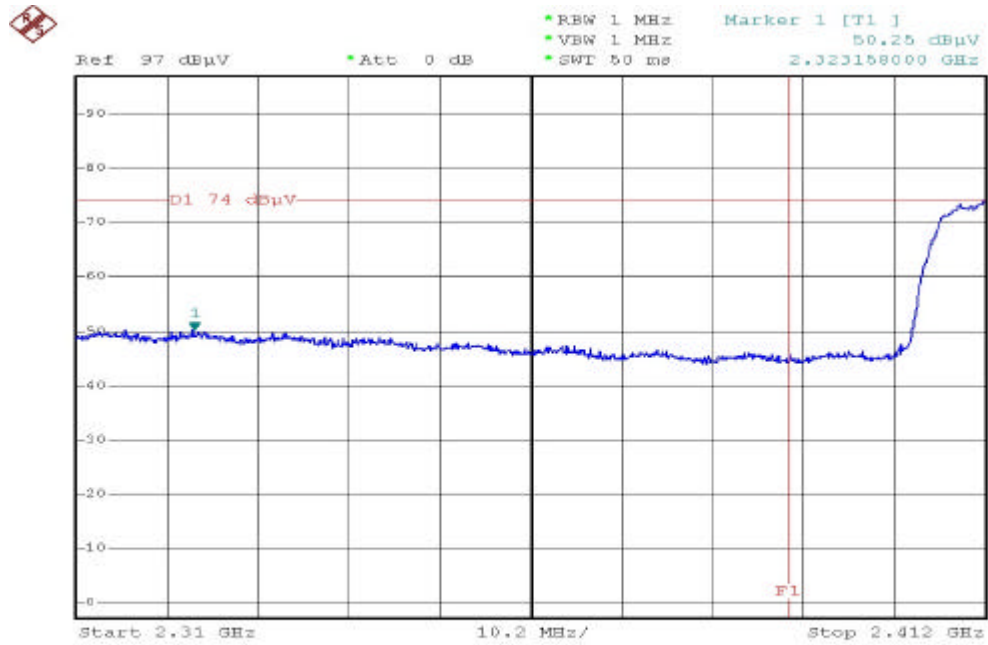
Frequency (MHz)	Level(dBuV)	polarization	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant High (m)
				Peak	Ave.			
2313.060	47.29	H	Peak	74	54	-26.71	180	1.5
2313.468	36.68	H	Avg	74	54	-17.31	180	1.5
2326.320	47.27	V	Peak	74	54	-26.73	190	1.4
2323.770	39.11	V	Avg	74	54	-14.89	190	1.4

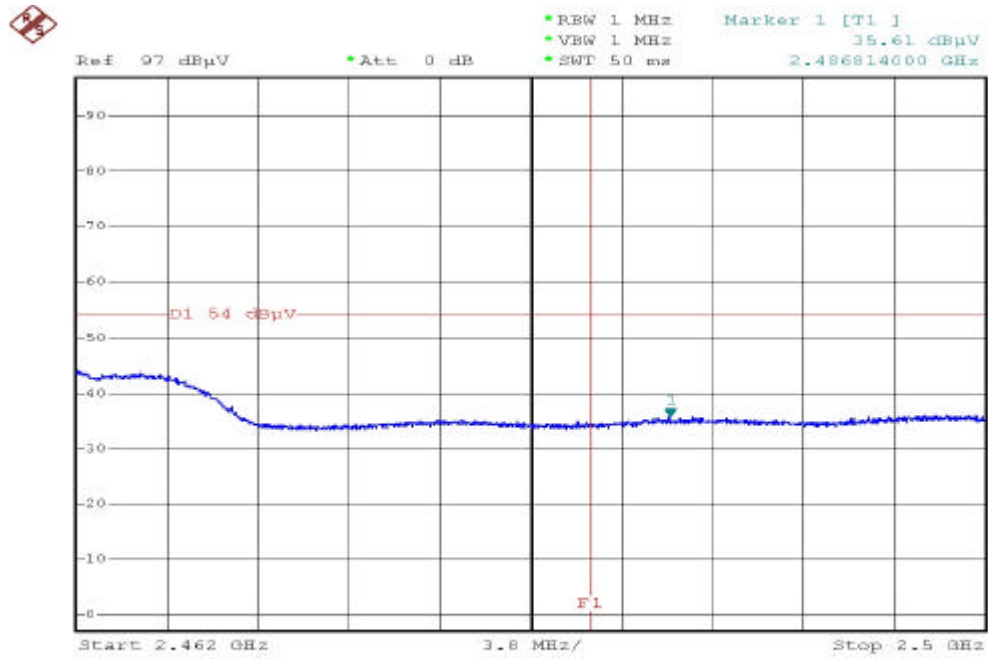
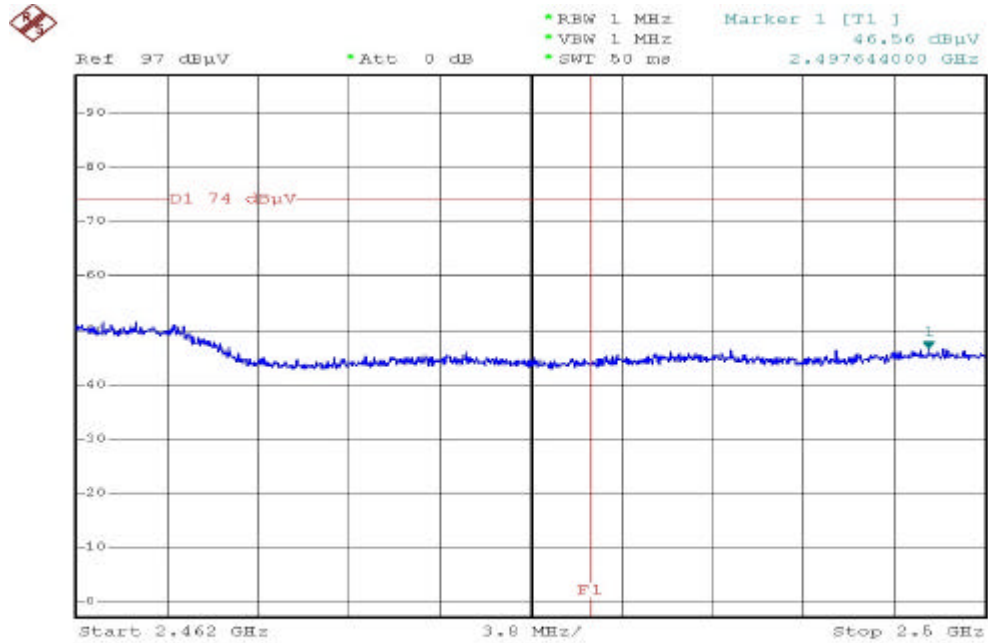
b) Channel 11

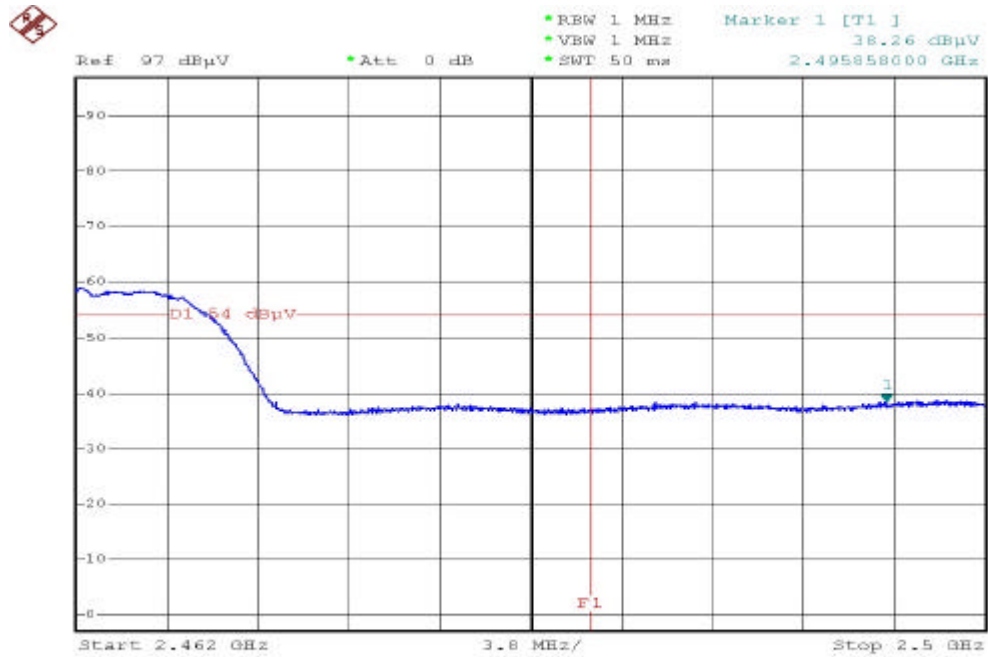
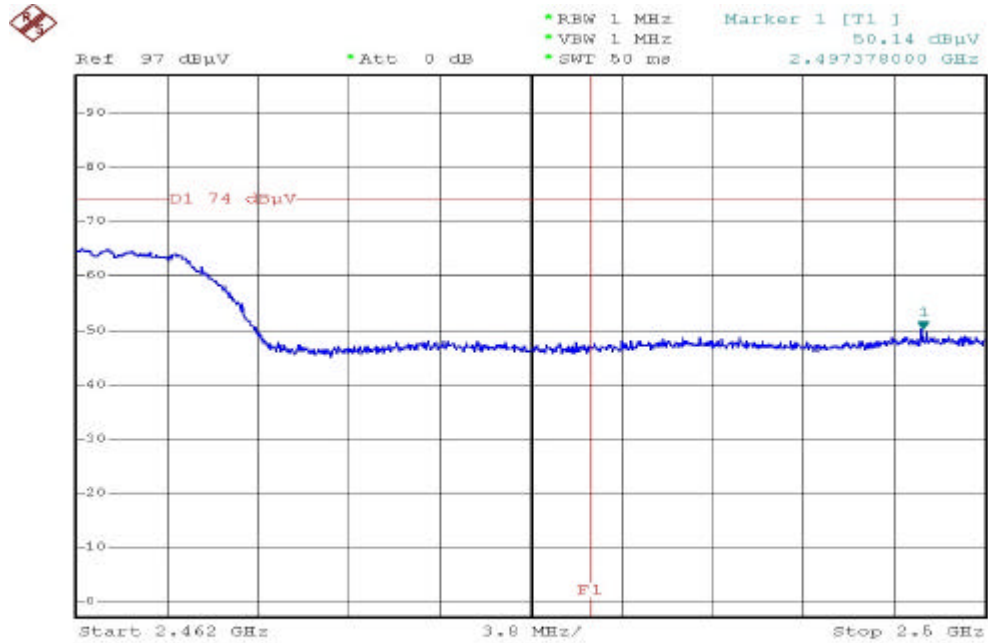
Fundamental Frequency: 2462 MHz

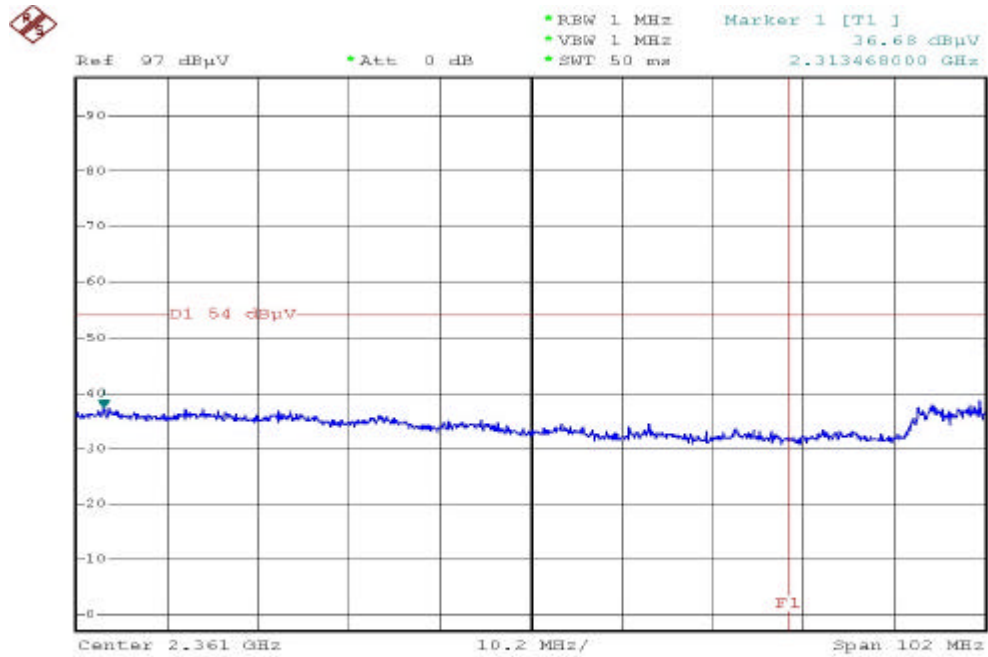
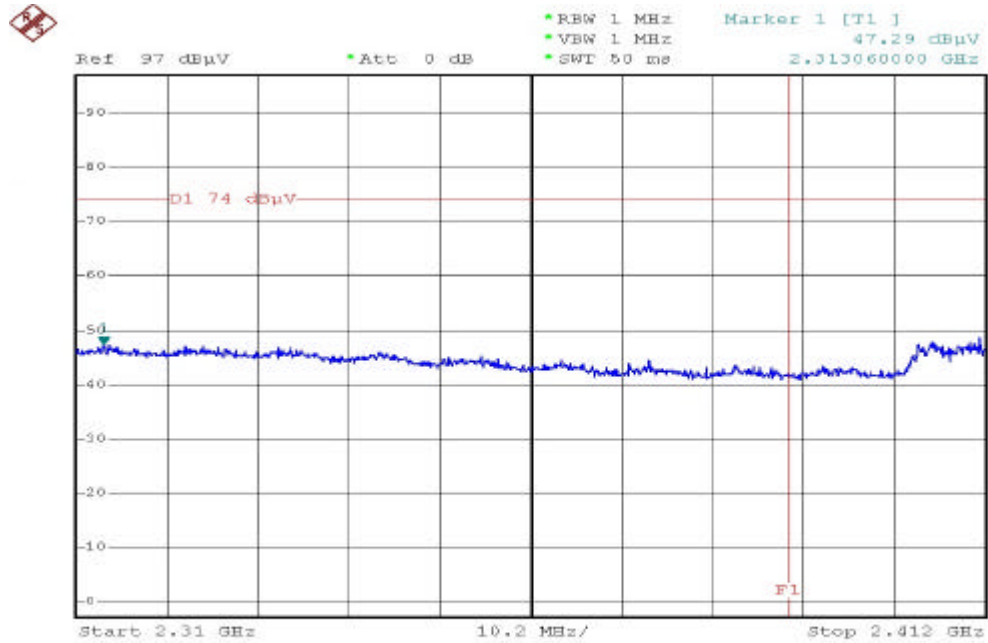
Frequency (MHz)	Level(dBuV)	polarization	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant High (m)
				Peak	Ave.			
2485.560	46.41	H	Peak	74	54	-17.59	180	1.5
2497.264	36.21	H	Avg	74	54	-17.79	180	1.5
2490.272	48.89	V	Peak	74	54	-25.11	190	1.4
2497.492	38.40	V	Avg	74	54	-15.60	190	1.4

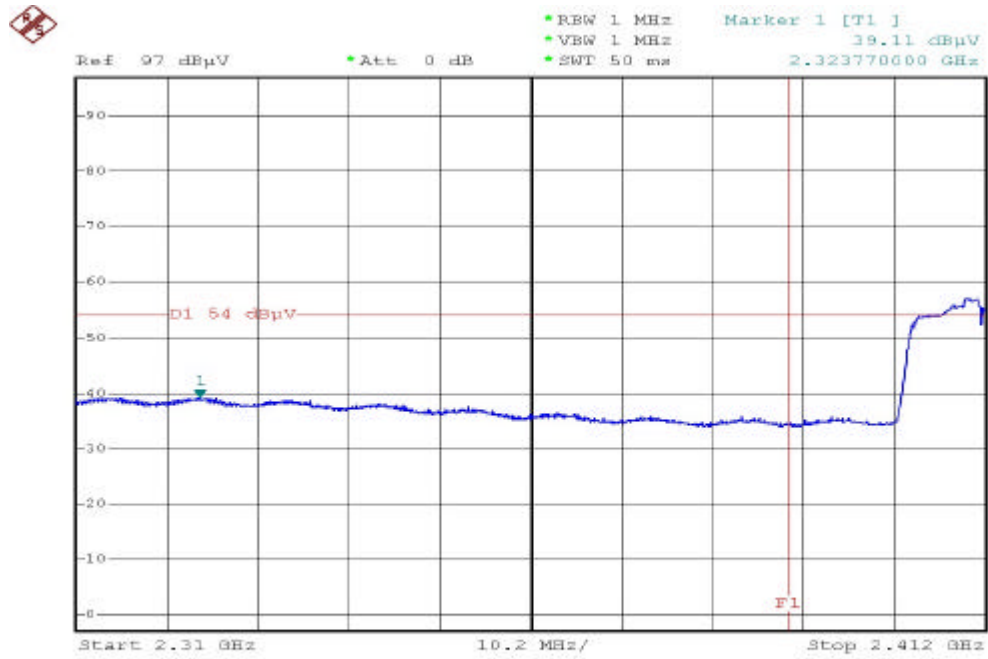
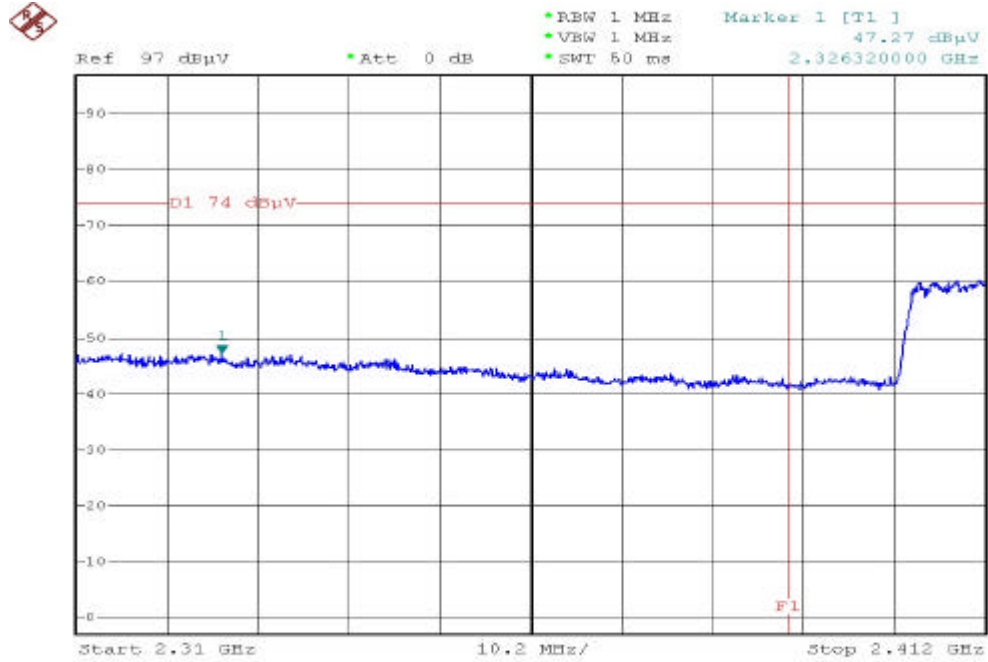


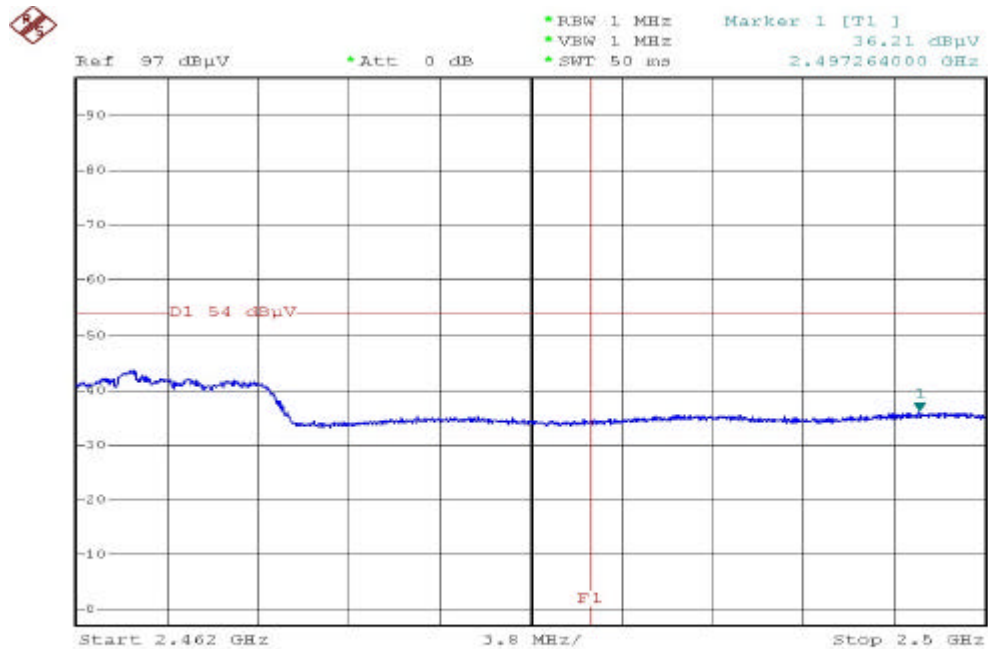
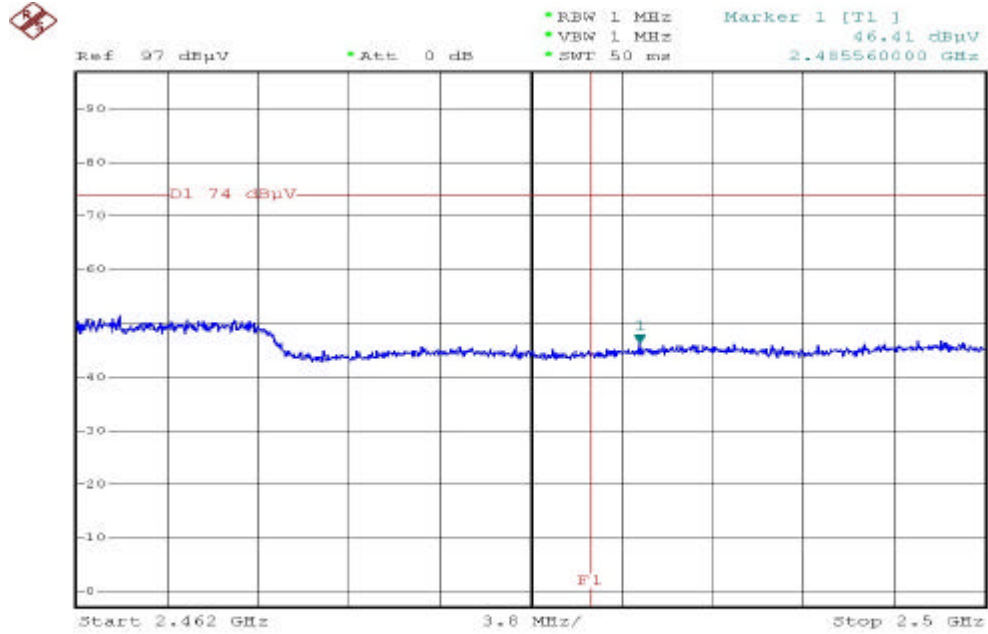


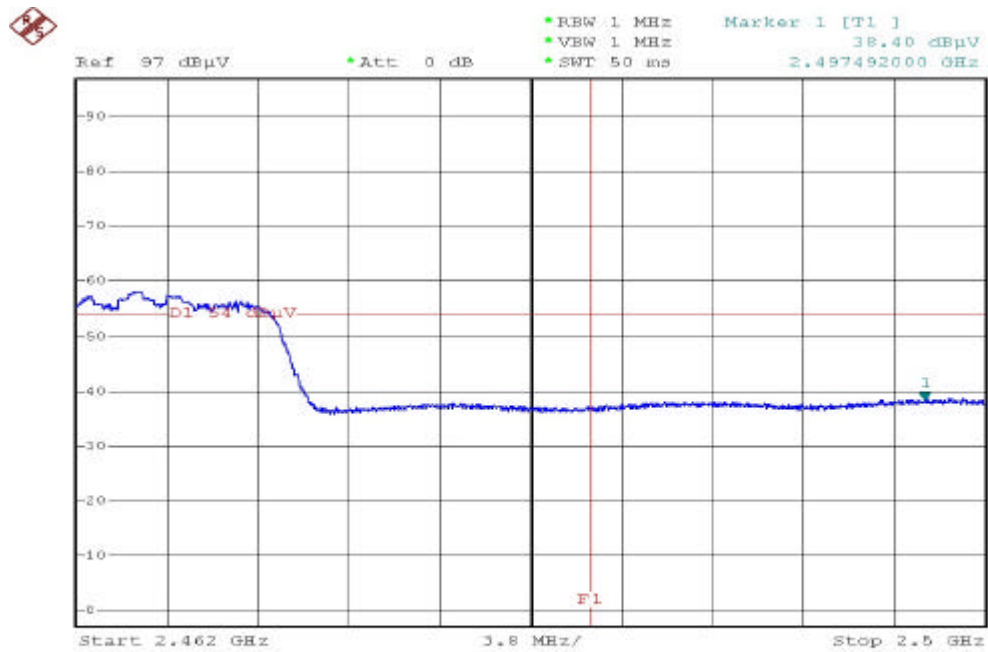
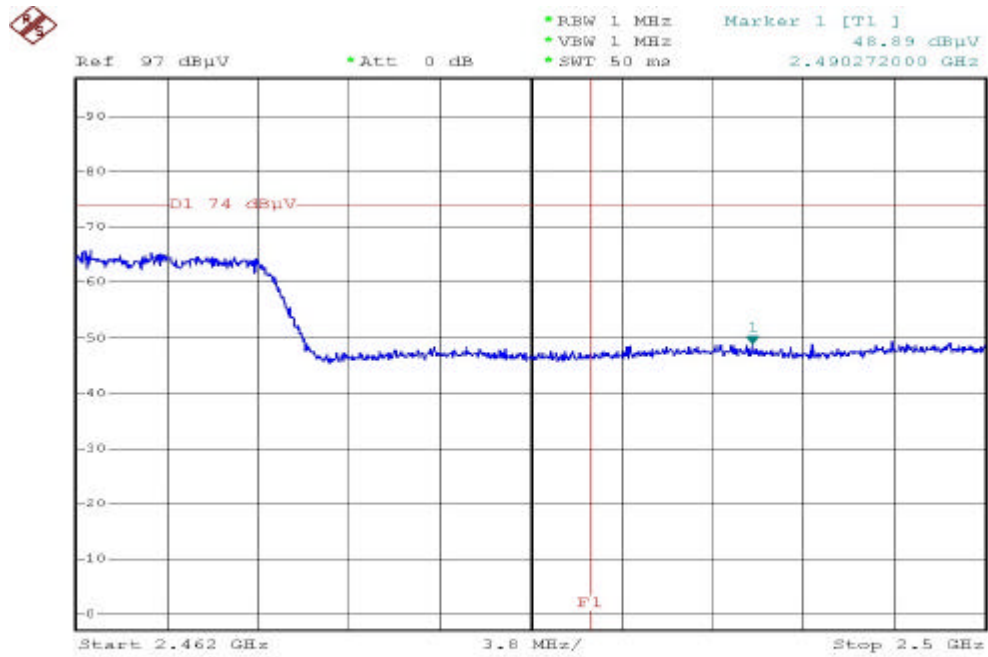












4.8. Power Spectral Density Measurement Data

(1) Modulation Standard: 802.11b

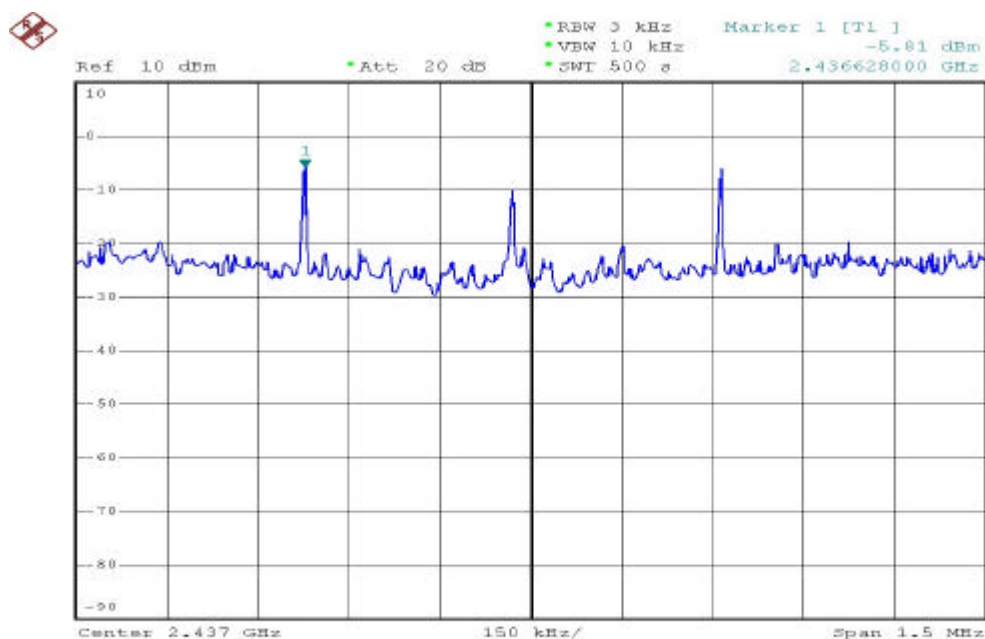
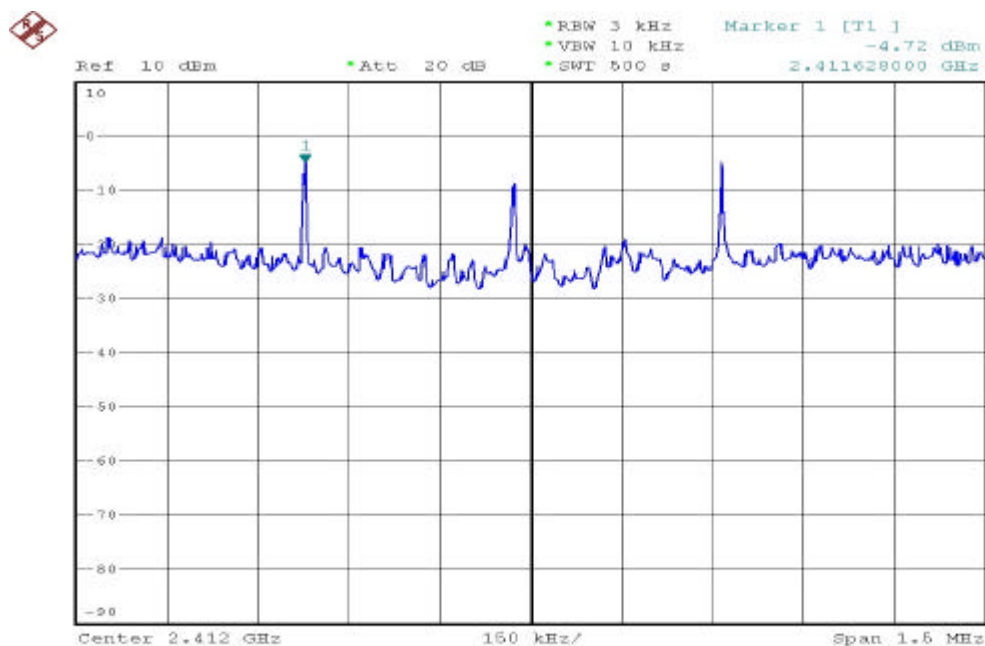
Test Date: Apr. 28, 2004 Temperature: 25 Humidity: 58%

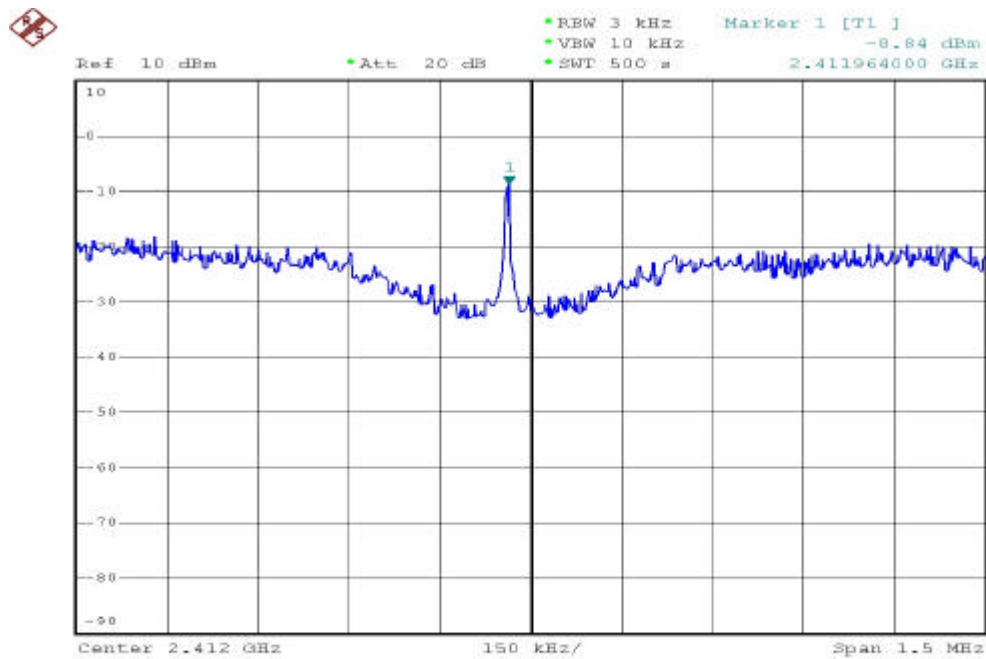
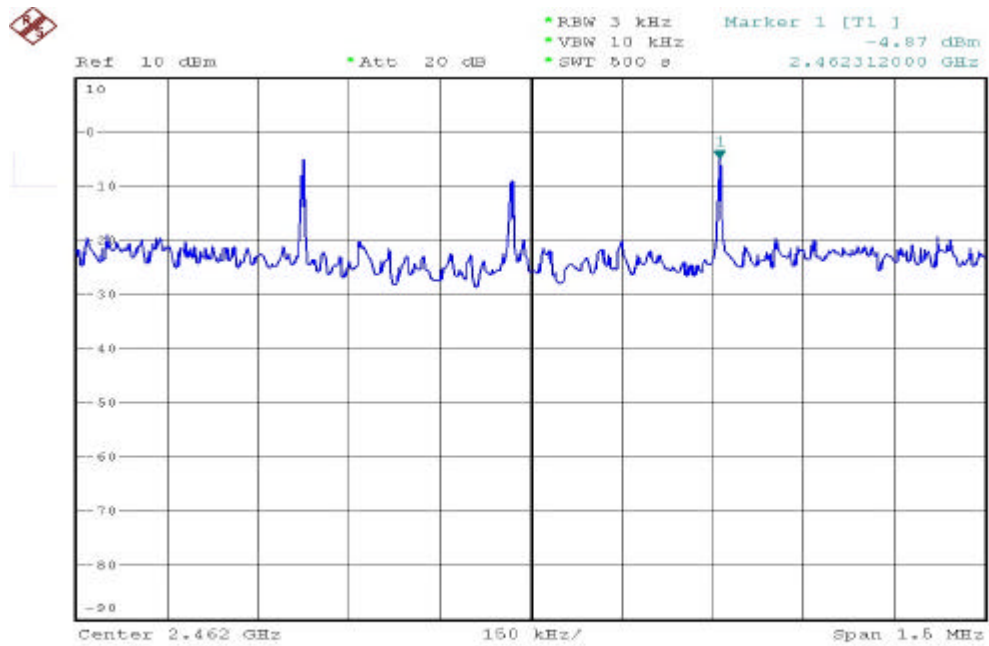
- a) Channel 01: Maximum Power Density of 3 kHz Bandwidth is -4.72dBm
- b) Channel 06: Maximum Power Density of 3 kHz Bandwidth is -5.81dBm
- c) Channel 11: Maximum Power Density of 3 kHz Bandwidth is -4.87dBm

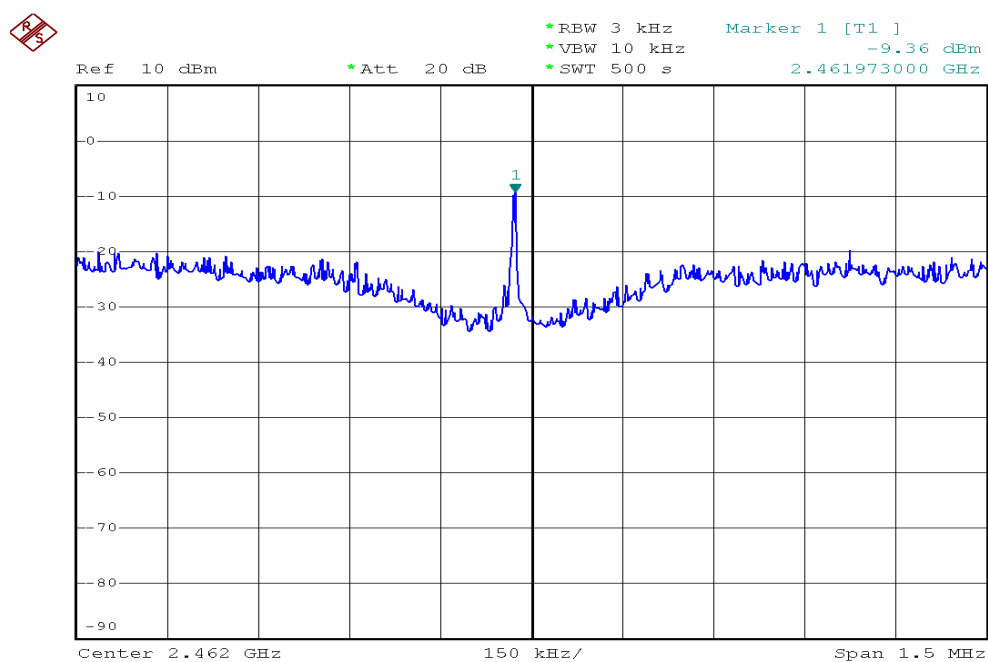
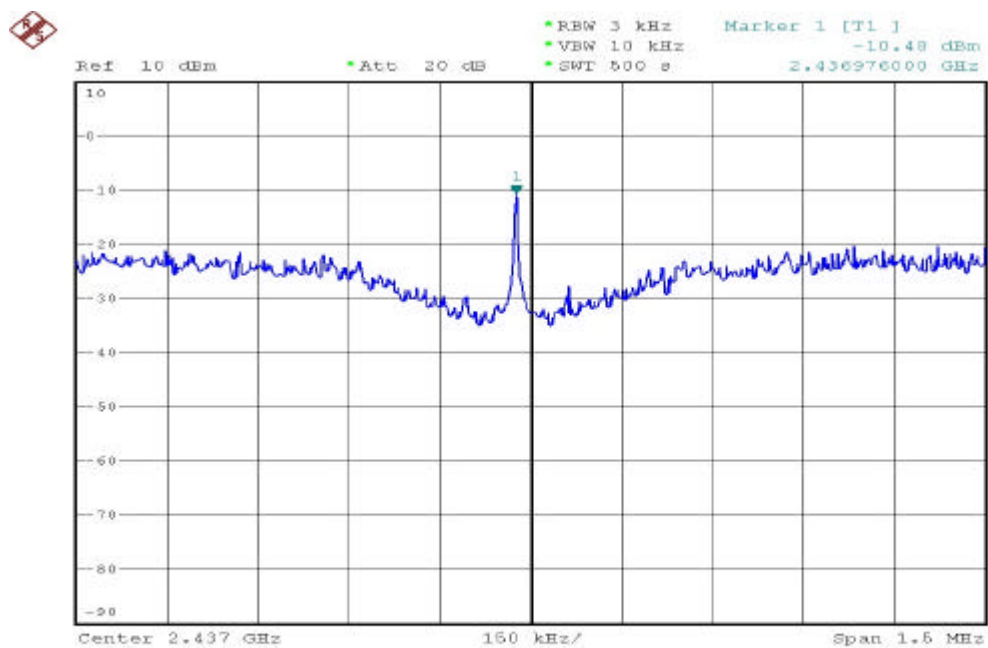
(2) Modulation Standard: 802.11g

Test Date: Apr. 28, 2004 Temperature: 25 Humidity: 58%

- a) Channel 01: Maximum Power Density of 3 kHz Bandwidth is -8.84dBm
- b) Channel 06: Maximum Power Density of 3 kHz Bandwidth is -10.48dBm
- c) Channel 11: Maximum Power Density of 3 kHz Bandwidth is -9.36dBm







5. List of Measuring Equipment Used

No	Instrument/Ancillary	Type	Manufacturer	Serial No.	Valid Date.
1	BILOG ANTENNA	CBL6111C	SCHAFFNER	2762	2004/11/03
2	PREAMPLIFIER	RFP4002	SCHAFFNER	010	2004/11/03
3	RECEIVER	SCR3501	SCHAFFNER	437	2004/11/03
4	SIGNAL GENERATOR	8648B	HP	3629U00612	2006/02/08
5	SPECTRUM ANALYZER	8594E	HP	3520A01913	2005/01/15
6	AMPLIFIER	8447D	AGILENT	2944A10593	2004/10/09
7	AMPLIFIER	8447D	AGILENT	2944A10531	2004/07/08
8	SERIES POWER METER	E4416A	AGILENT	GB41292146	2004/11/05
9	POWER SENSOR	E9327A	AGILENT	US40441392	2004/10/06
10	DIPOLE ANTENNA	AD-100	COM-POWER	721011	2004/12/02
11	DIPOLE ANTENNA	AD-100	COM-POWER	721010	2004/12/02
12	SPECTRUM ANALYZER	R3131A	ADVANTEST	131000021	2004/11/24
13	SPECTRUM ANALYZER	FSP40	R&S	100047	2004/12/16
14	PREAMPLIFIER	8449B	AGILENT	3008A01954	2005/01/04
15	HORN ANTENNA	3115	EMCO	31601	2005/01/13
16	HORN ANTENNA	3115	EMCO	31589	2005/01/14
17	HORN ANTENNA	3116	EMCO	31970	2005/01/29
18	HORN ANTENNA	3116	EMCO	31974	2005/01/29
19	EMI RECEIVER	8546A	HP	3807A00454	2005/02/12
20	RF FILTER SECTION	85460A	HP	3704A00386	2005/02/12
21	SIGNAL GENERATOR	83640A	HP	2927A00107	2006/03/16
22	ATTENUATOR	8491B	AGILENT	50703	2004/12/16
23	ATTENUATOR	8491B	AGILENT	50705	2004/12/16
24	TEMPERATURE CHAMBER	TMJ-9712	T MACHINE	T-12-040111	2005/03/05
25	HIGH PASS FILTER	84300-80038	HP	002	N/A
26	HIGH PASS FILTER	84300-80038	HP	006	N/A
27	DC Power Supply	GPD-3030	GM	7020936	N/A
28	AC POWER CONVERTER	AFC-11005	APC	F103120008	N/A