

Appendix 1 Test Results



Disturbance Voltage on AC Mains

TUV Rheinland Hong Kong Ltd.

Continuous Disturbance

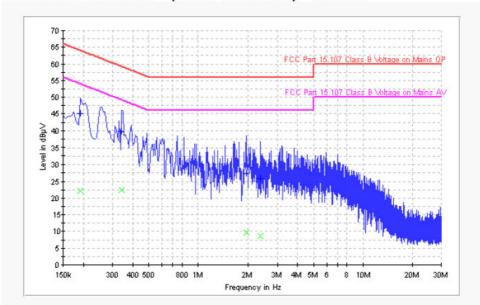
Test Information

EUT Name: Serial Number: Test Description: Operating Conditions: Operator Name: Comment:

Description

Avantwave BT Module BTR60X(00110728013-001) FCC Part 15.107 Class B Transmit Mode Cyrus Chan 120V 60Hz CE N

Conducted Emission (FCC Part 15.107) - Class B



Result Table_Single

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)
0.185000	45.1	22.3
0.372000	39.5	22.7
1.962000	27.5	9.5
2.351000	25.8	8.9

03/08/2011 16:49:27



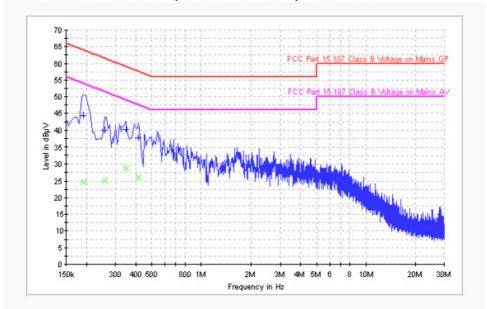
TUV Rheinland Hong Kong Ltd.

Continuous Disturbance

Test Information

EUT Name: Avantwave BT Module
Serial Number: BTR60X(00110728013-001)
Test Description: FCC Part 15.107 Class B
Operating Conditions: Transmit Mode
Operator Name: Cyrus Chan
Comment: 120V 60Hz
Description CE L1

Conducted Emission (FCC Part 15.107) - Class B



Result Table_Single

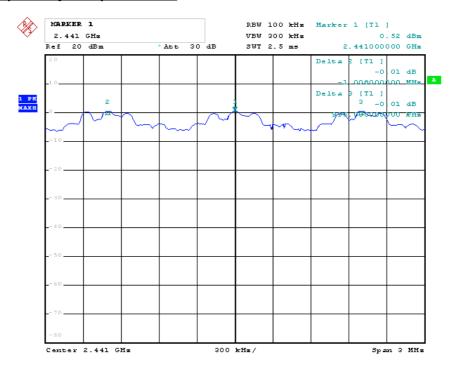
Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)
0.187000	44.2	24.9
0.268000	39.7	25.0
0.359000	40.2	28.2
0.421000	38.1	26.0

03/08/2011 16:43:32

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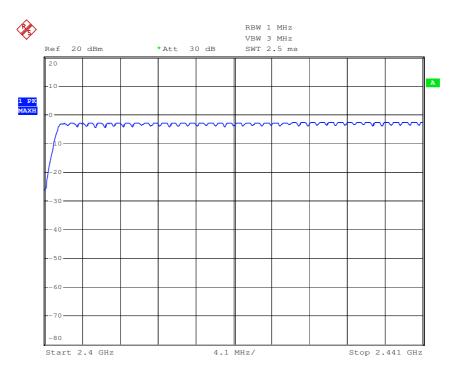
Carrier Frequency Separation



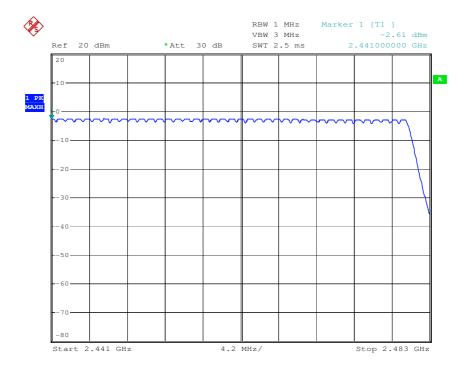
Date: 3.AUG.2011 13:37:07



Number of hopping channels



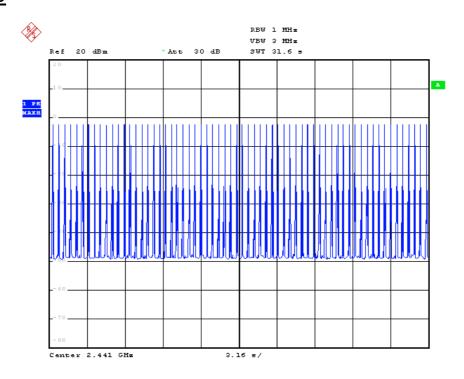
Date: 9.JUN.2011 11:56:13



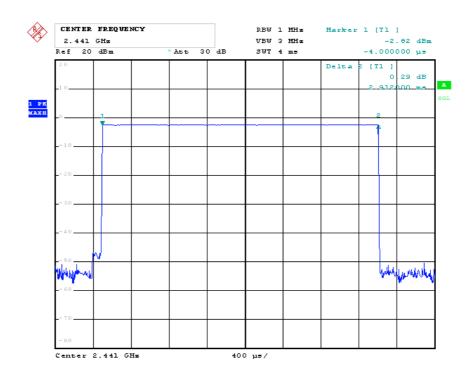
Date: 9.JUN.2011 11:57:38



Dwell Time



Date: 9.JUN.2011 12:04:13

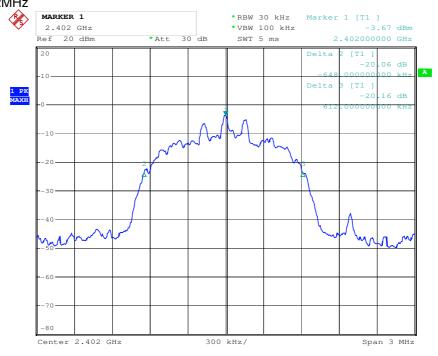


Date: 9.JUN.2011 12:06:35



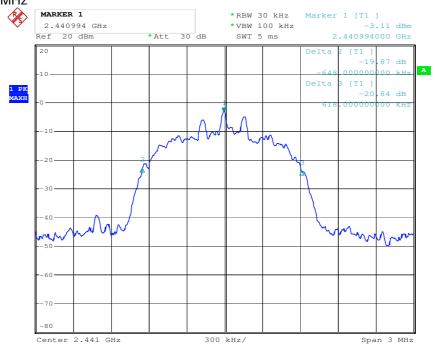
20dB Bandwidth

Modulation: 8 DPSK Tx frequency: 2402MHz



Date: 9.JUN.2011 12:17:10

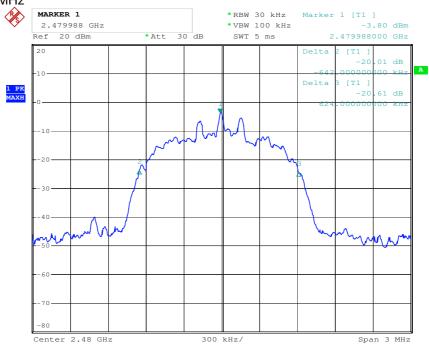
Modulation: 8 DPSK Tx frequency: 2441MHz



Date: 9.JUN.2011 12:15:21

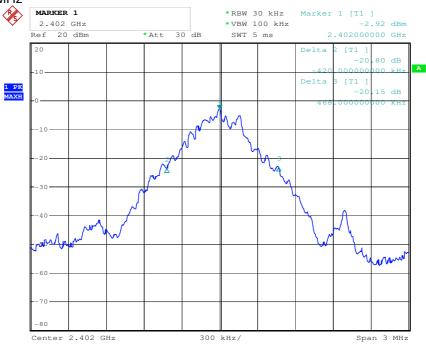


Modulation: 8 DPSK Tx frequency: 2480MHz



Date: 9.JUN.2011 12:13:34

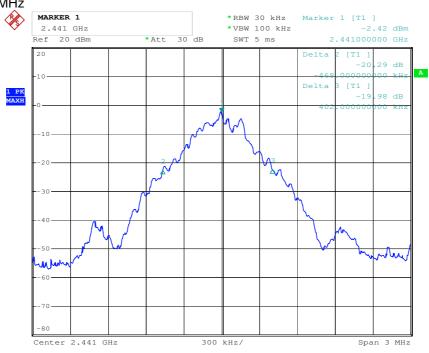
Modulation: GFSK Tx frequency: 2402MHz



Date: 9.JUN.2011 12:09:09

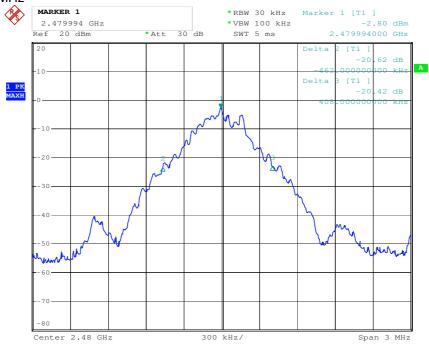


Modulation: GFSK Tx frequency: 2441MHz



Date: 9.JUN.2011 12:10:48

Modulation: GFSK Tx frequency: 2480MHz

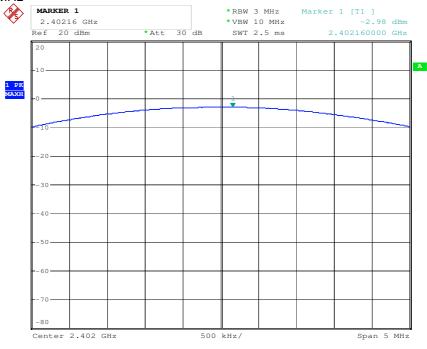


Date: 9.JUN.2011 12:12:05



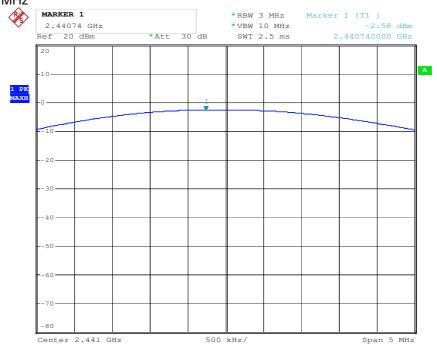
Peak Output Power Modulation: GFSK

Tx frequency: 2402MHz



9.JUN.2011 12:46:49 Date:

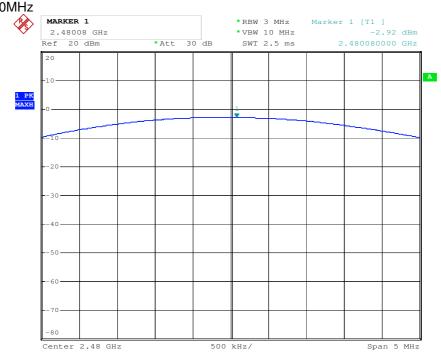
Modulation: GFSK Tx frequency: 2441MHz



Date: 9.JUN.2011 12:48:10

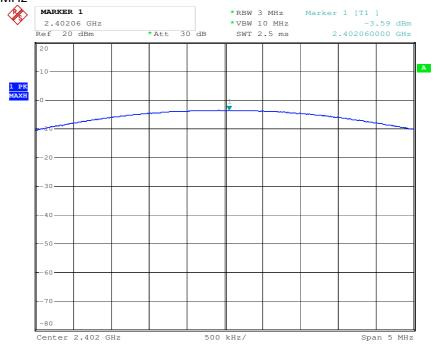


Modulation: GFSK Tx frequency: 2480MHz



Date: 9.JUN.2011 12:48:44

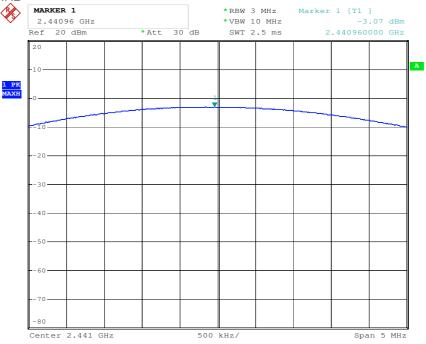
Modulation: Pi/4 DQPSK Tx frequency: 2402MHz



Date: 9.JUN.2011 12:52:36

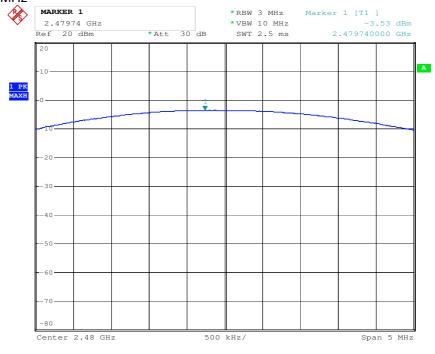


Modulation: Pi/4 DQPSK Tx frequency: 2441MHz



Date: 9.JUN.2011 12:52:01

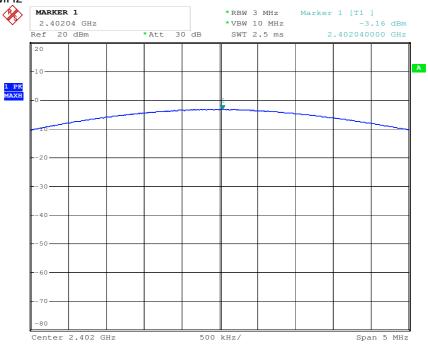
Modulation: Pi/4 DQPSK Tx frequency: 2480MHz



Date: 9.JUN.2011 12:51:20

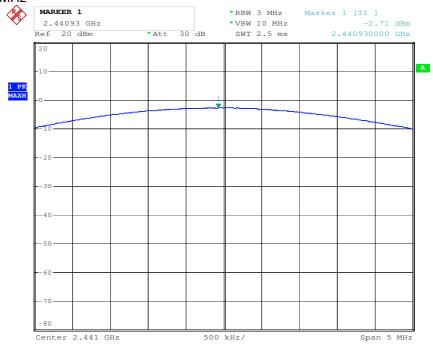


Modulation: 8 DPSK Tx frequency: 2402MHz

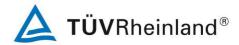


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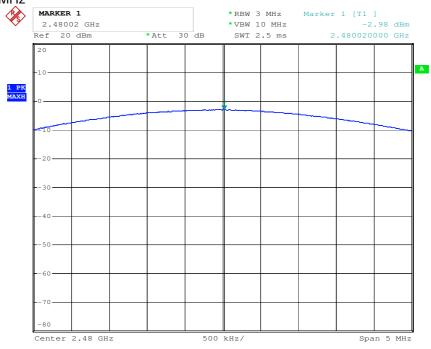
Modulation: 8 DPSK Tx frequency: 2441MHz



Date: 9.JUN.2011 12:55:10



Modulation: 8 DPSK Tx frequency: 2480MHz

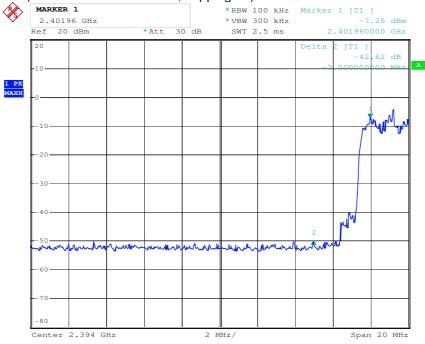


Date: 9.JUN.2011 12:55:45



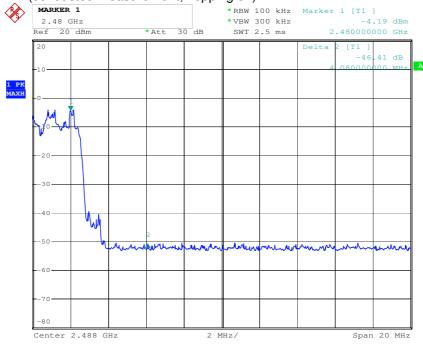
Band Edge Compliance

Tx frequency: 2402MHz (conducted measurement; hopping on)



Date: 9.JUN.2011 12:34:12

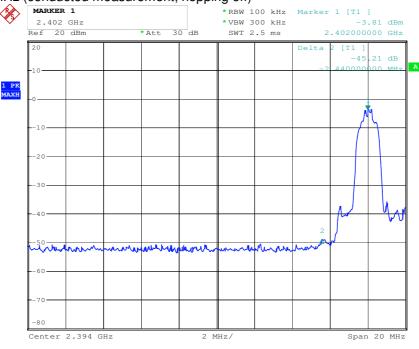
Tx frequency: 2480MHz (conducted measurement; hopping on)



Date: 9.JUN.2011 12:32:50

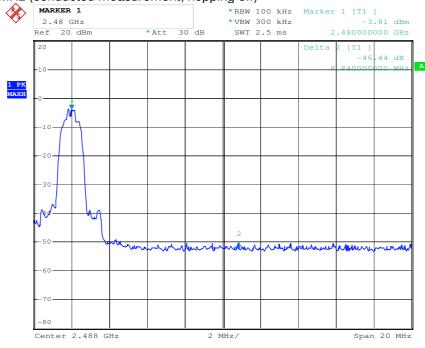


Tx frequency: 2402MHz (conducted measurement; hopping off)



Date: 9.JUN.2011 12:35:43

Tx frequency: 2480MHz (conducted measurement; hopping off)

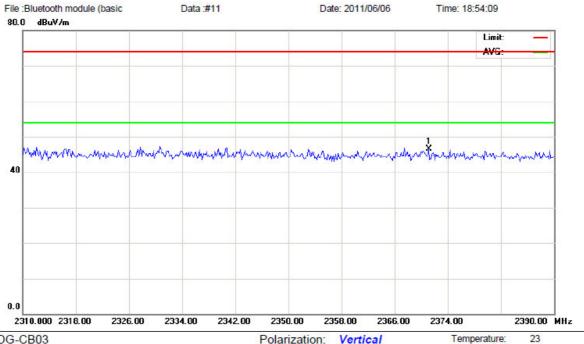


Date: 9.JUN.2011 12:38:26



Tx frequency: 2402MHz (radiated measurement)

Radiated Emission Measurement



Site DG-CB03

Limit: FCC_RF_1G-40G_(Peak)

EUT: Bluetooth module

M/N: BTR60X Mode: TX Note: 3M 2402 Polarization: Vertical

AC 120V/60Hz Humidity: 51 % Power:

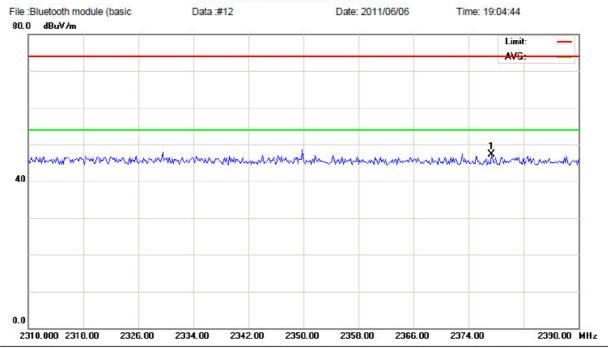
Distance: 3m

No. Mk	. Freq.		Correct Factor	Measure- ment		Over			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	2371.120	14.64	31.94	46.58	74.00	-27.42	peak		

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Radiated Emission Measurement



Site DG-CB03

Limit: FCC RF_1G-40G (Peak)

EUT: Bluetooth module

M/N: BTR60X Mode: TX Note: 3M 2402 Polarization: Horizontal Temperature: 23
Power: AC 120V/60Hz Humidity: 51 %

Distance: 3m

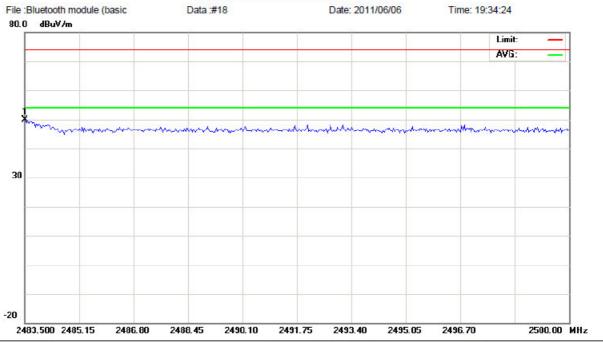
No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2377.360	15.32	31.93	47.25	74.00	-26.75	peak	

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Tx frequency: 2480MHz (radiated measurement)

Radiated Emission Measurement



Site DG-CB03

Limit: FCC_RF_1G-40G_(Peak)

EUT: Bluetooth module

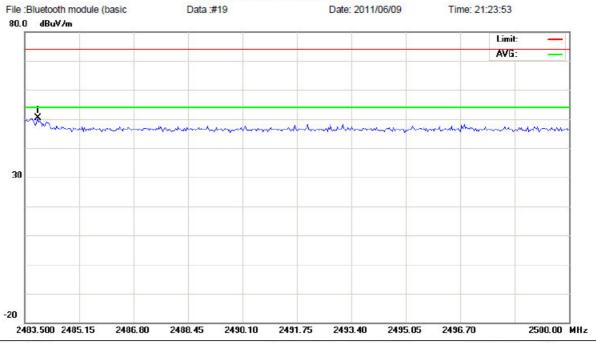
M/N: BTR60X Mode: TX Note: 3M 2480 Polarization: Vertical Temperature: 23
Power: AC 120V/60Hz Humidity: 51 %

Distance: 3m

No. M		k. Fre		Reading Level		Measure- ment	Limit	Over			
		MH	Z	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	2483.50	00	18.00	31.80	49.80	74.00	-24.20	peak		



Radiated Emission Measurement



Site DG-CB03 Polarization: Horizontal Temperature: 23
Limit: FCC_RF_1G-40G_(Peak) Power: AC 120V/60Hz Humidity: 51 %

EUT: Bluetooth module Distance: 3m

M/N: BTR60X Mode: TX

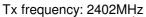
Note: 3M TX 2480

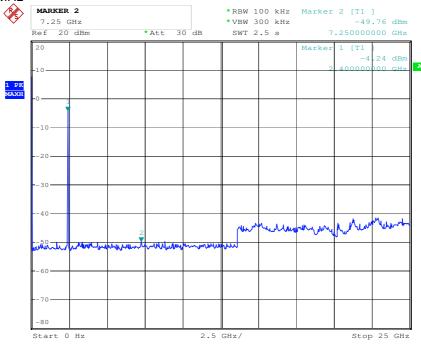
No. Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment		Over		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2483.896	18.59	31.80	50.39	74.00	-23.61	peak	

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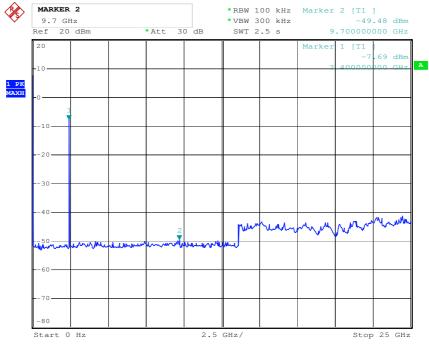
Spurious Emissions - Conducted



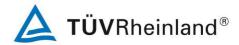


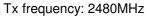
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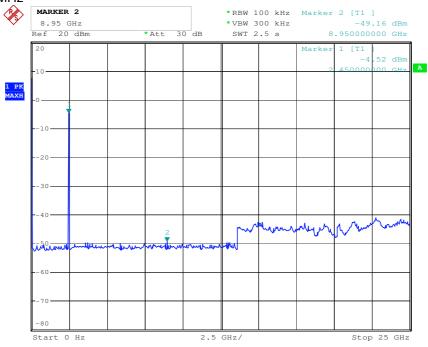
Tx frequency: 2441MHz



Date: 9.JUN.2011 12:42:44







Date: 9.JUN.2011 12:41:26