TEST REPORT

REPORT NUMBER: I08GW7473-FCC-WiFi

ON

Type of Equipment: Pocket Pc

Type of Designation: 810-F

Manufacturer: ON TIM Technologies LTD

ACCORDING TO

FCC Part 15, FREQUENCY Hopping Spread Spectrum Transceiver, July 10, 2008

PART 15 subpart C 15.247

China Telecommunication Technology Labs.

Month date, year
Apr, 7, 2009

Signature

He Guili
Director

FCC ID:	W4RØØ1
Report Date:	2009-4-7

Test Firm Name:	China Telecommunication Technology Labs
Registration Number:	840587

Statement

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC Parts 15, subpart C 15.247. The sample tested was found to comply with the requirements defined in the applied rules.

CONTENTS

1 General Information

1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC Parts 15, subpart C 15.247.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviation from, additions to, or exclusions from the test specifications have been made. See Annex B.

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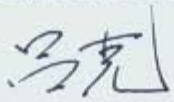
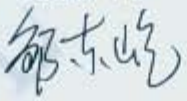
1.2 Testers

Name:	Lv Ke
Position:	Engineer
Department:	Department of EMC test
Signature:	

Editor of this test report:

Name:	Li Guoqing
Position:	Engineer
Department:	Department of EMC test
Date:	2009-4-7
Signature:	

Technical responsibility for area of testing:

Name:	Zou Dongyi
Position:	Manager
Department:	Department of EMC test
Date:	2009-4-7
Signature:	

1.3 Testing Laboratory information

1.3.1 Location

Name:	China Telecommunication Technology Labs.
Address:	No. 11, Yue Tan Nan Jie, Xi Cheng District BEIJING P. R. CHINA, 100083
Tel:	+86 10 68094053
Fax:	+86 10 68011404
Email:	emc@chinattl.com

1.3.2 Details of accreditation status

Accredited by:	China National Accreditation for Laboratory (CNAL)
Registration number:	CNAL Registration No.L0570
Standard:	ISO/IEC 17025:2005

1.3.3 Test location, where different from section 1.3.1

Name:	------
Street:	------
City:	------
Country:	------
Telephone:	------
Fax:	------
Postcode:	------

1.4 Details of applicant or manufacturer

1.4.1 Applicant

Name:	i-mate Development, Inc.
Address:	8383 158th Ave. N.E., Suite 300, Redmond, WA 98052-3871
Country:	United States
Telephone:	+1 425 558 9510
Fax:	+1 425 861 7925
Contact:	John Basacchi
Telephone:	+1 425 558 9510
Email:	john.basacchi@imate.com

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name:	ON TIM Technologies LTD
Address:	M Floor, Electric Technology Tower, No.12A, Jiu Xian Qiao Road, Chao Yang District, Beijing, China (100016)

1.4.3 Manufactory (if different from applicant in section 1.4.1)

Name:	TCL COMMUNICATION TECHNOLOGY HOLDINGS LIMITED
Address:	NO.23 Zone, ZhongKai High-Technology Development Zone,HuiZhou, GuangDong, China

2 Test Item

2.1 General Information

Manufacturer: ON TIM Technologies LTD
Name: Pocket Pc
Model Number: 810-F
Serial Number: --
Production Status: Product
Receipt date of test item: 2008-12-19

2.2 Outline of EUT

E.U.T. is a Windows® Mobile Professional device (Pocket Pc) supporting 850/1900 band GSM/GPRS/EGPRS and WCDMA FDD V/II supporting 802.11b/g.

2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

2.4 Equipment Configuration

Equipment configuration list:

Item	Generic Description	Manufacturer	Type	Serial No.	Remarks
A	handset	ON TIM Technologies LTD	810-F	--	None
B	adapter	HIHONG TECHNOLOGY CO., LTD.	PSAI05R-050QCH	--	None
C	battery	Amperex Technology Limited	PS-424462-02 Lithium-ion Polymer, rechargeable battery	--	None
D	Earphone	--	--	--	None

Cables:

Item	Cable Type	Manufacturer	Length	Shield	Quantity	Remarks
1	DC cable on Adapter	Unknown	1.8m	No	1	None

2.5 Other Information

Hardware version：P1
Software version: 810-F_WWE.6.1.1.04

3 Summary of Test Results

A brief summary of the tests carried out is shown as following.

	Name of Test	Result
1.	6dB bandwidth	Pass
2.	Maximum conducted Output Power	Pass
3.	Band edge	Pass
4.	Peak Power Spectral Density	Pass
5.	Spurious emission (conducted)	Pass
Note: none		

4 Test Results

4.1 6dB bandwidth

Specifications:	15.247 (a)(2)
Date of Tests	2009-3-10
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Operation Mode	Channel 1, 6, 11 transmit
Test Results:	Pass

Test equipment Used:

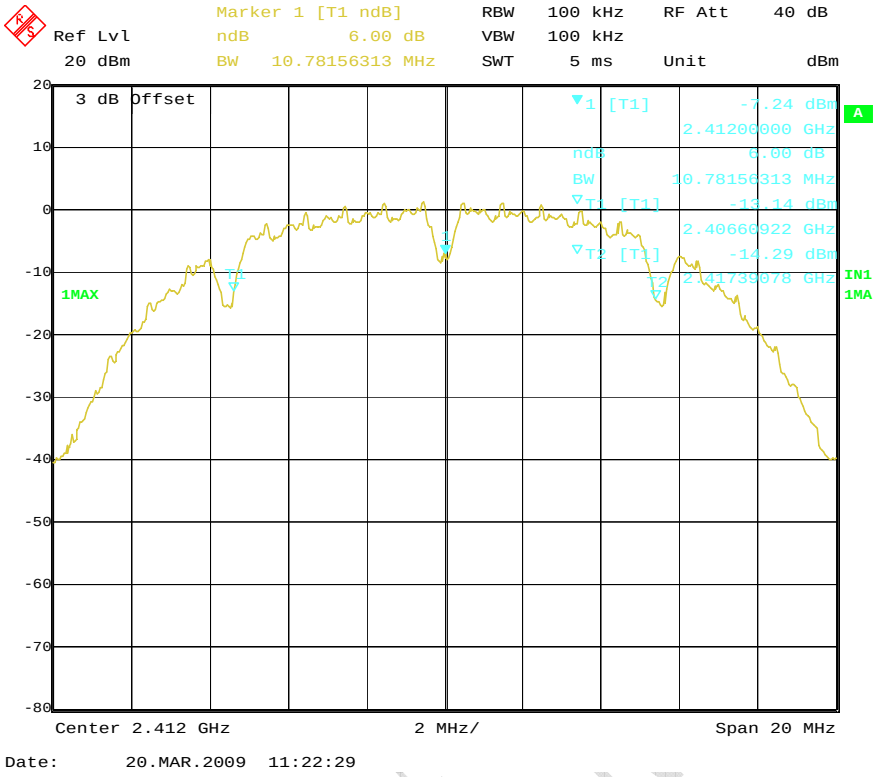
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2010-01-11	Normal

Test Setup:

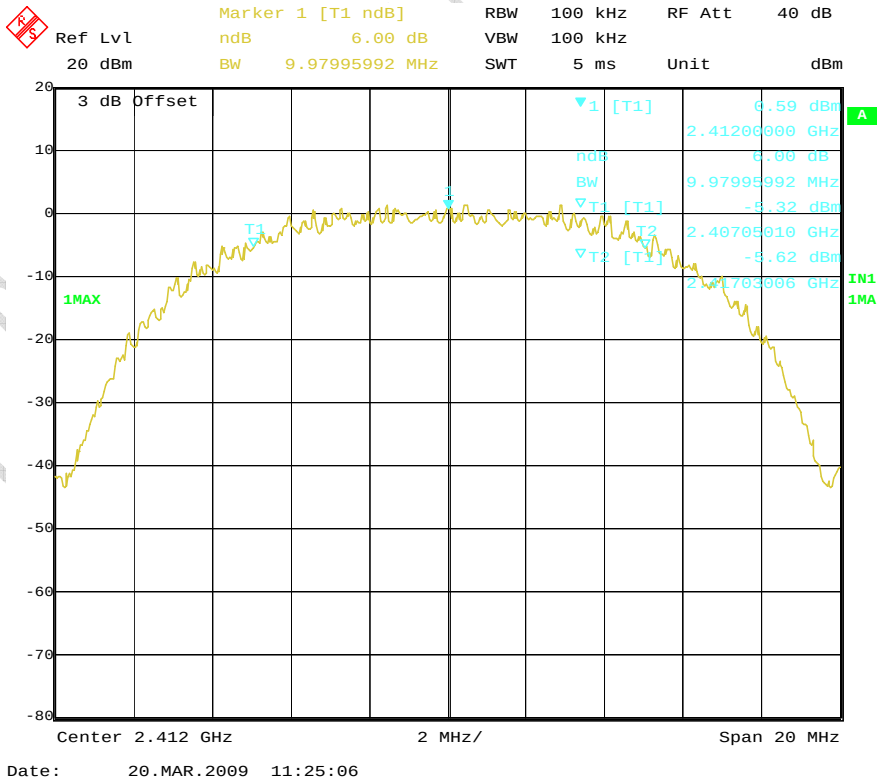
The engineering mode was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through coupling.

Test Data:

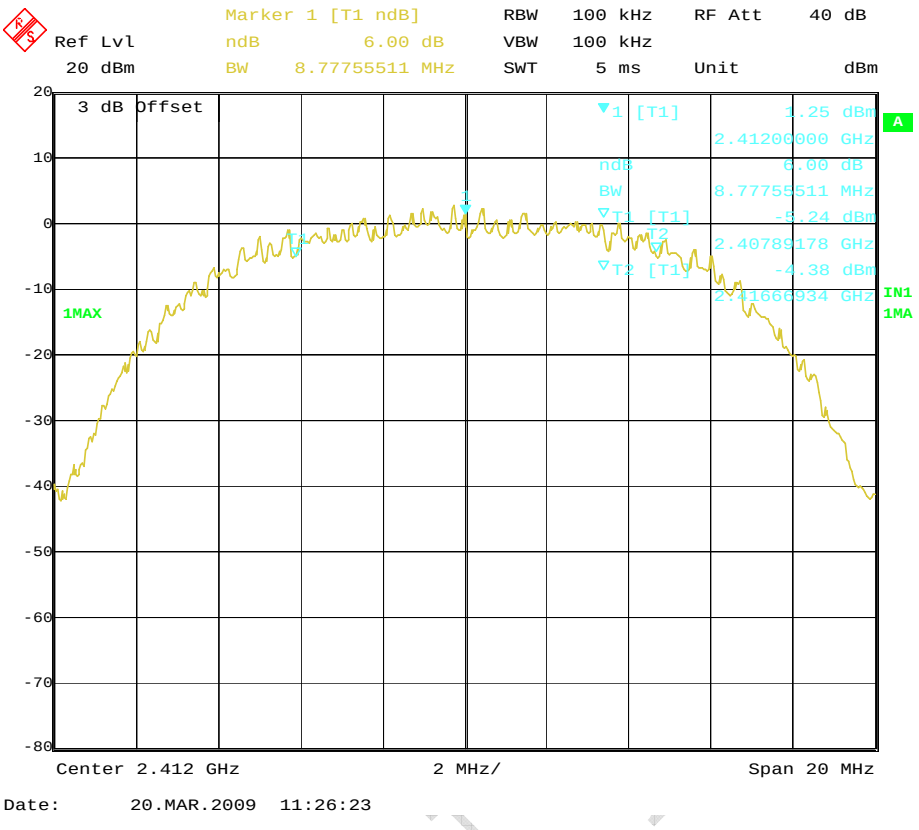
channel	mode	Data Rate (Mbps)	Limit (kHz)	Measured 6dB bandwidth (MHz)	Result
1	802.11b	1	≥500	10.78	Pass
		5.5	≥500	9.98	Pass
		11	≥500	8.78	pass
	802.11g	6	≥500	17.15	Pass
		24	≥500	16.95	Pass
		54	≥500	17.11	pass
6	802.11b	1	≥500	10.82	Pass
		5.5	≥500	10.02	Pass
		11	≥500	8.78	pass
	802.11g	6	≥500	17.11	Pass
		24	≥500	16.99	Pass
		54	≥500	16.95	pass
11	802.11b	1	≥500	10.82	Pass
		5.5	≥500	10.02	Pass
		11	≥500	8.82	pass
	802.11g	6	≥500	17.15	Pass
		24	≥500	17.03	Pass
		54	≥500	17.03	pass



802.11b, channel 1, 1Mbps



802.11b, channel 1, 5.5Mbps



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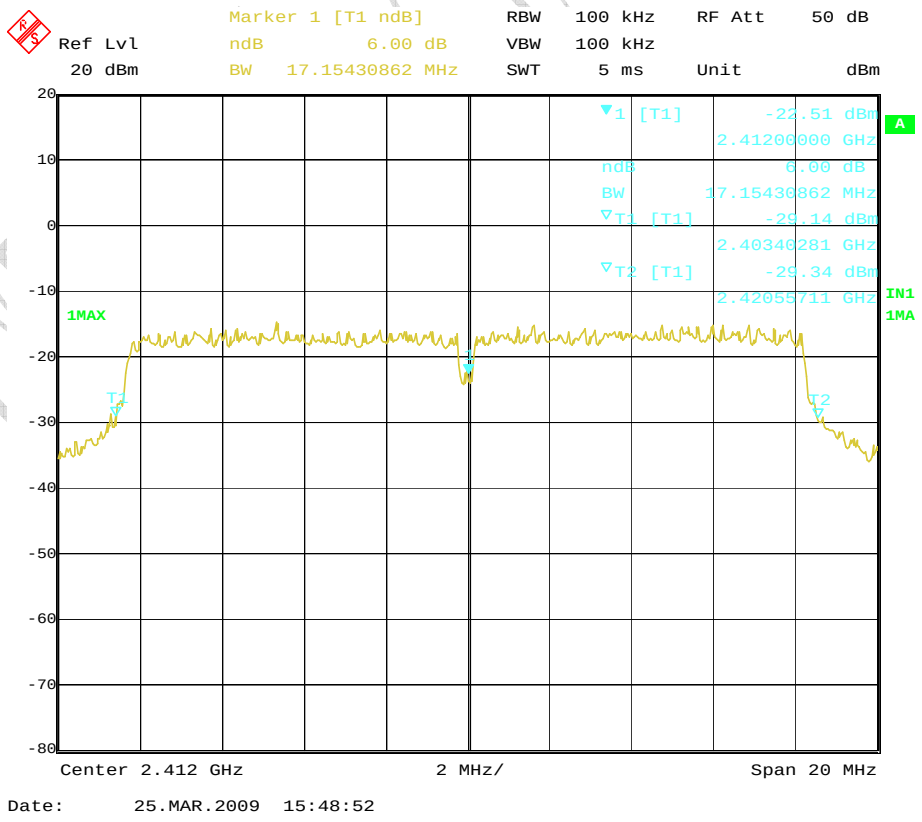
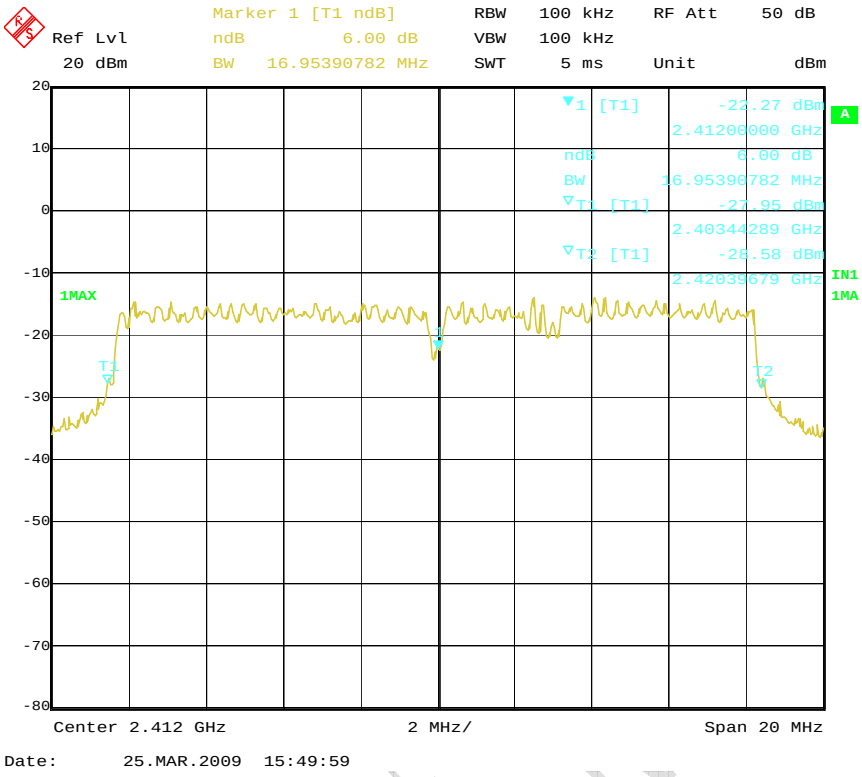
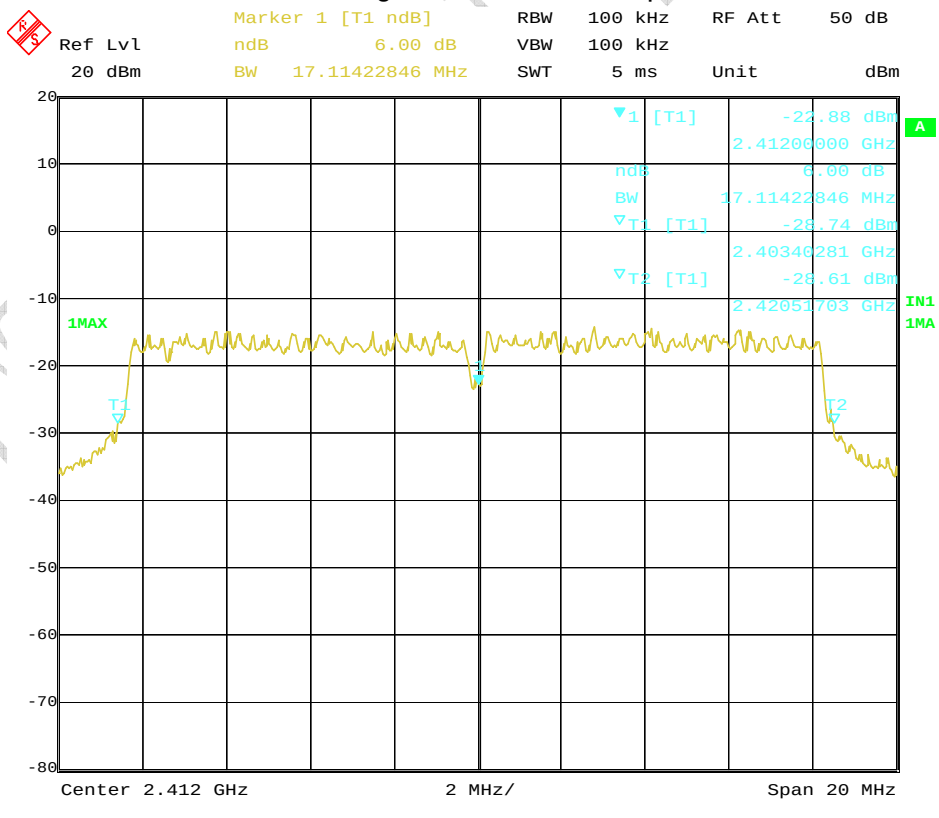


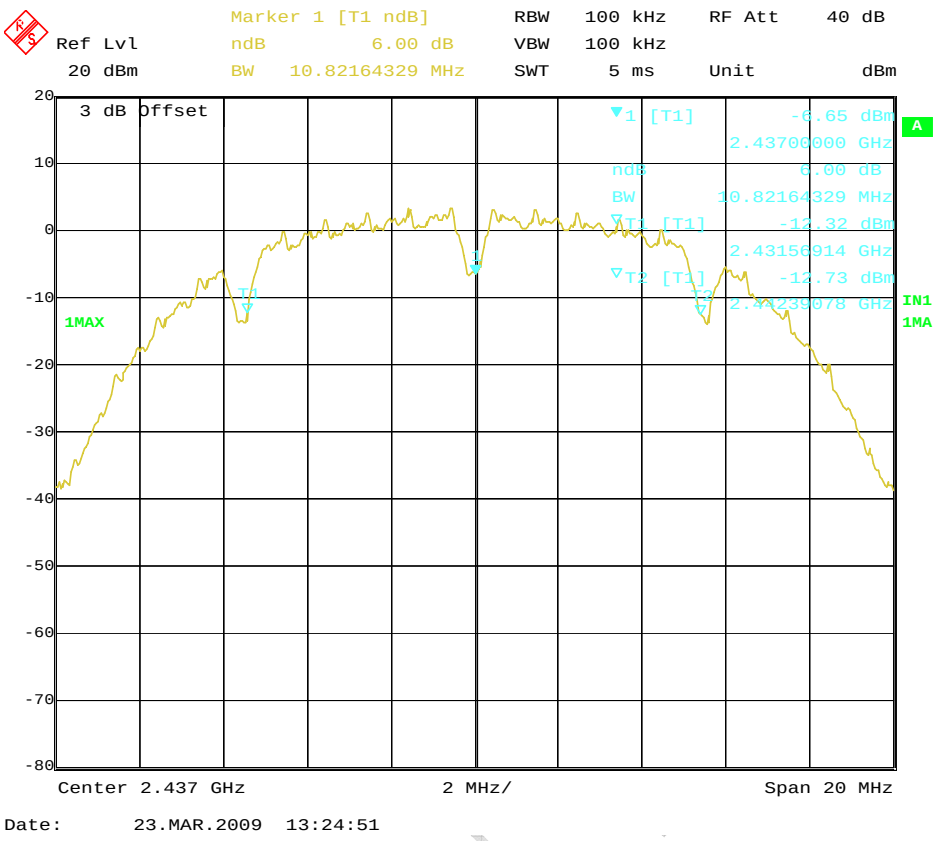
802.11g, channel 1, 6Mbps



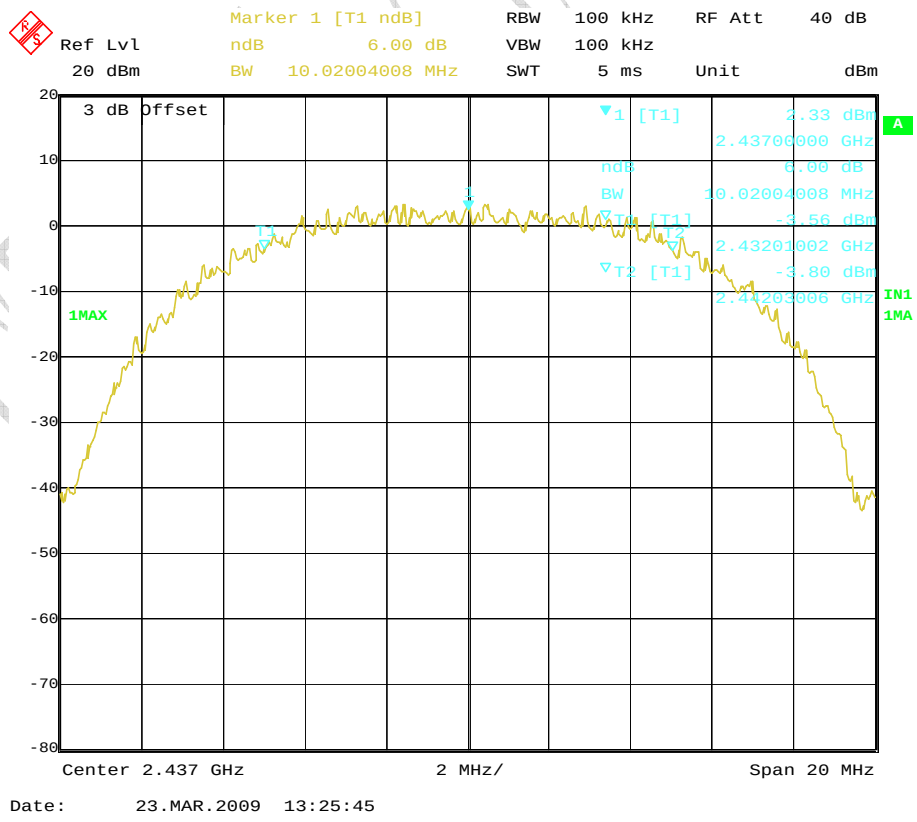
802.11g, channel 1, 24Mbps



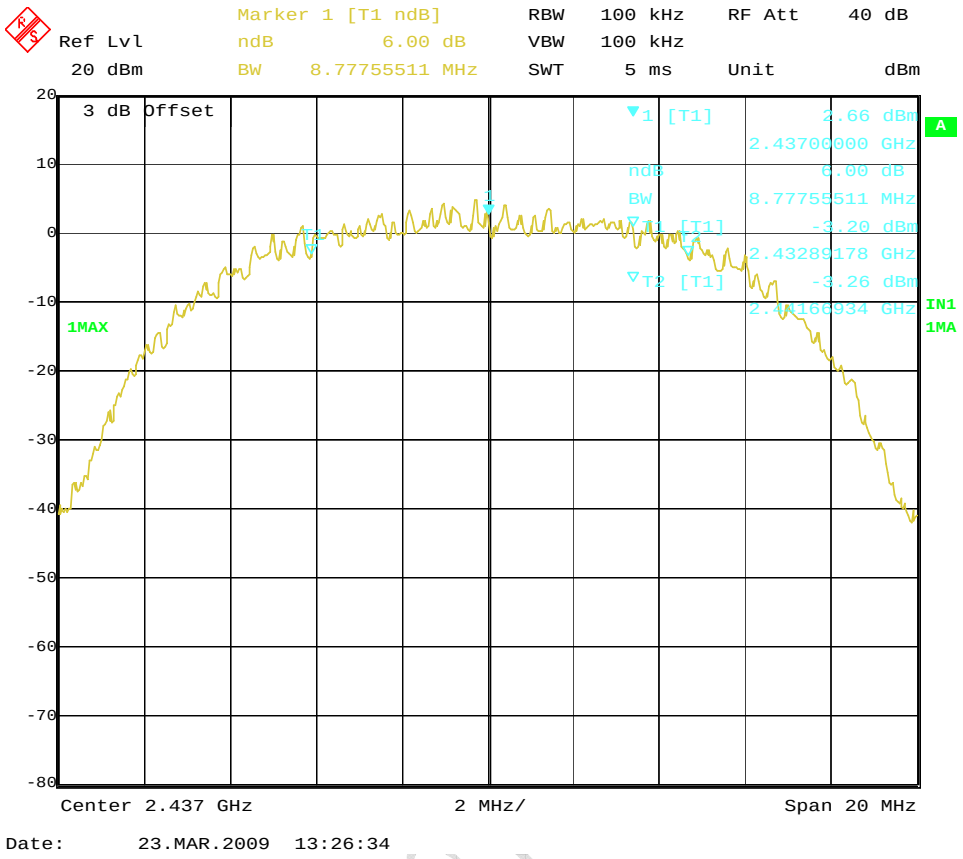
802.11g, channel 1, 54Mbps



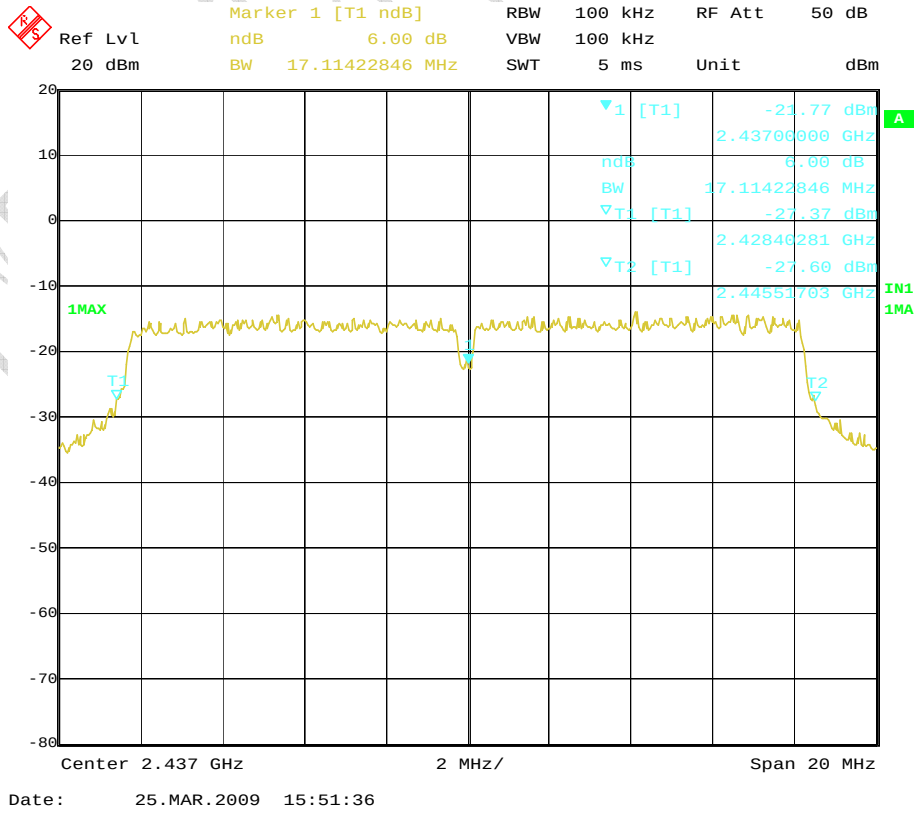
802.11b, channel 6, 1Mbps



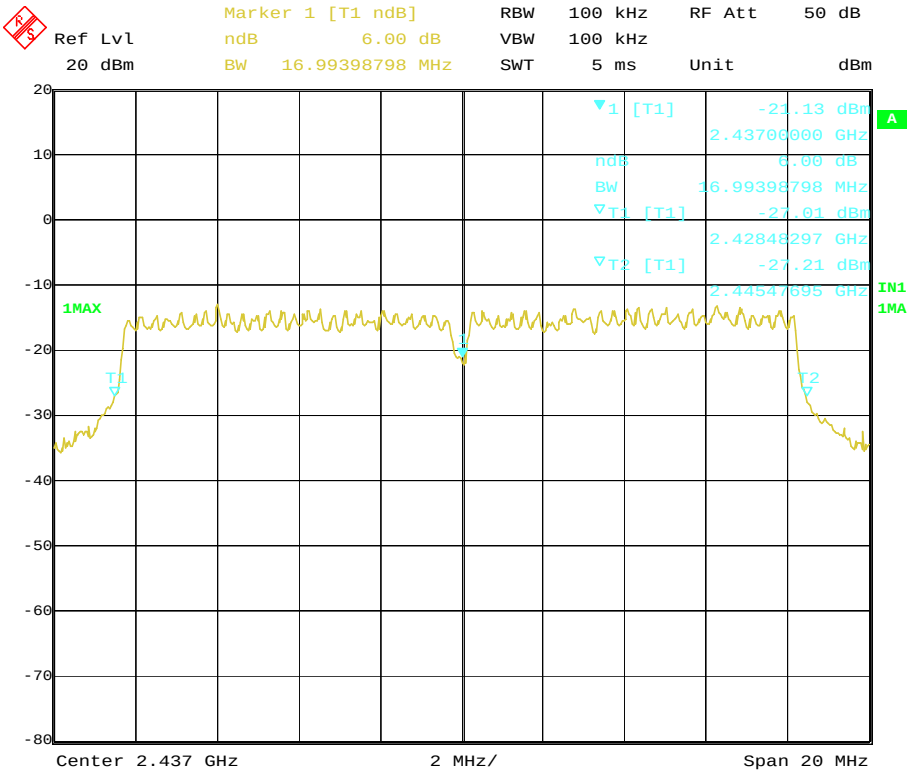
802.11b, channel 6, 5.5Mbps



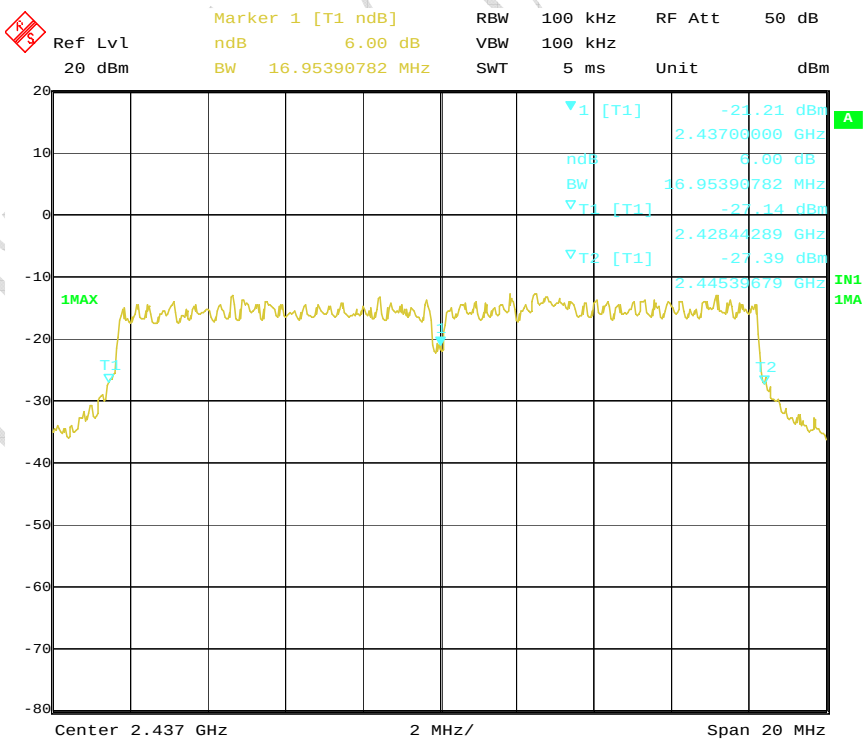
802.11b, channel 6, 11Mbps



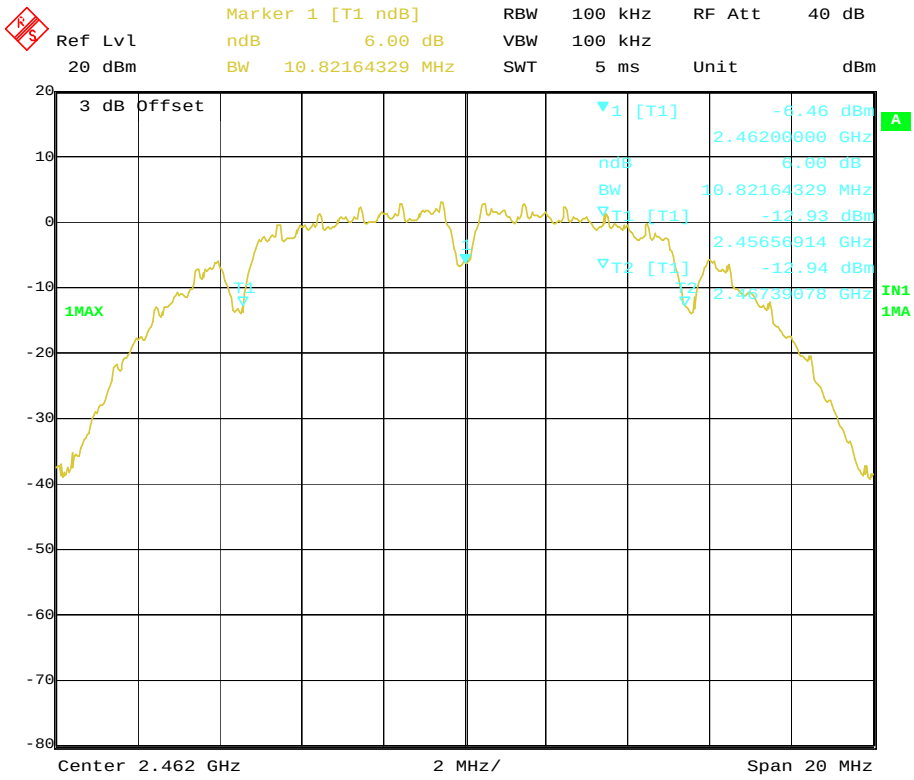
802.11g, channel 6, 6Mbps



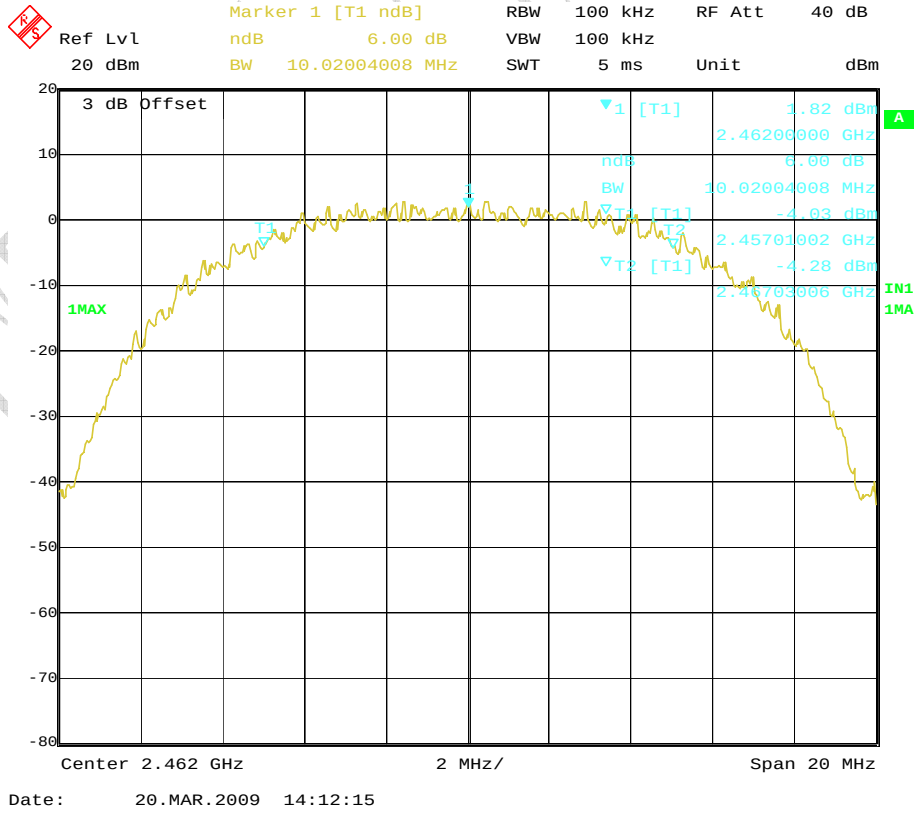
802.11g, channel 6, 24Mbps



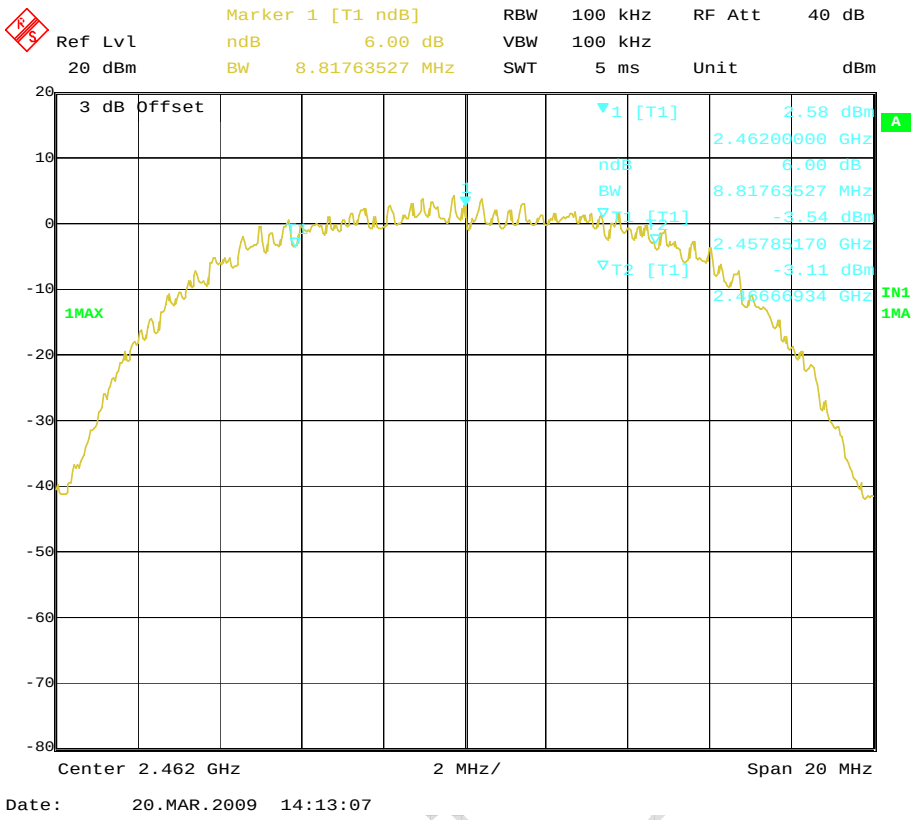
802.11g, channel 6, 54Mbps



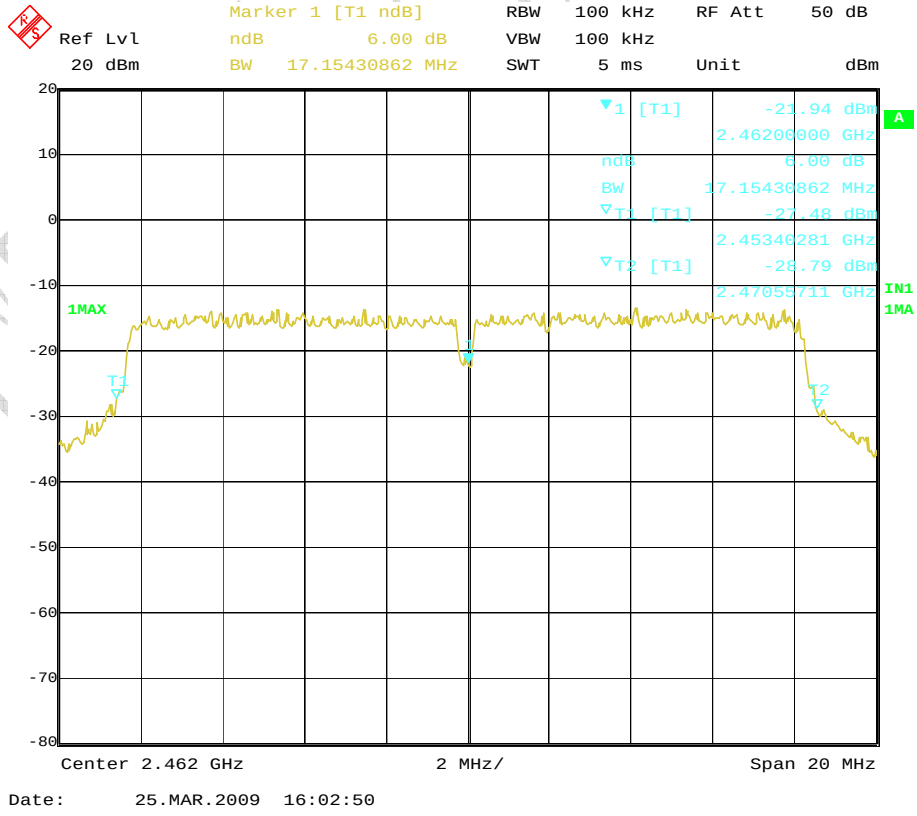
802.11b, channel 11, 1Mbps



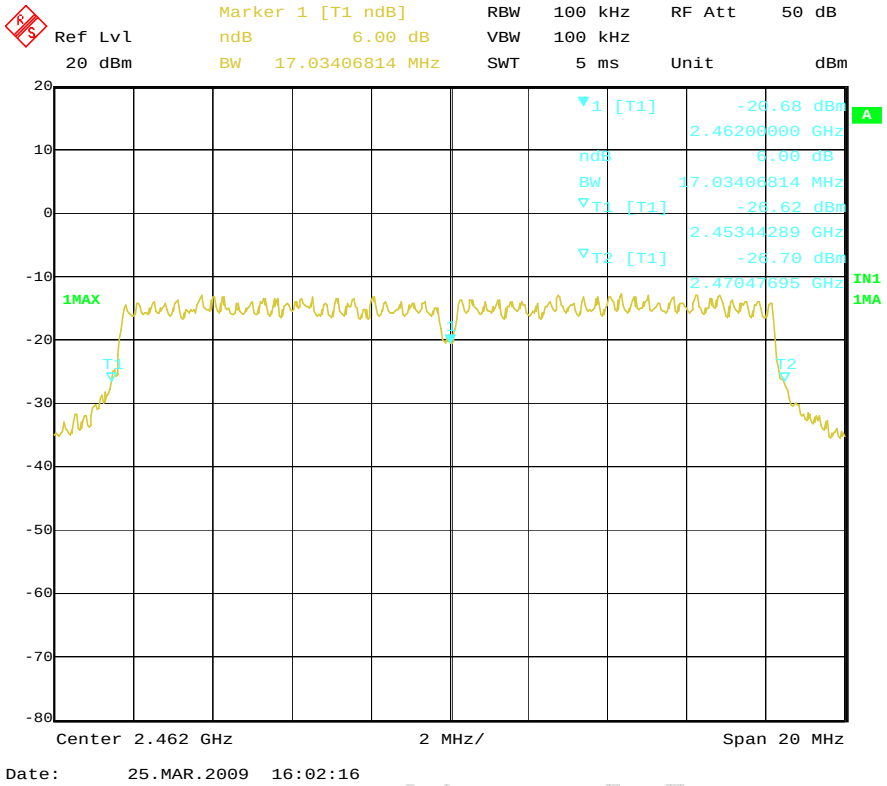
802.11b, channel 11, 5.5Mbps



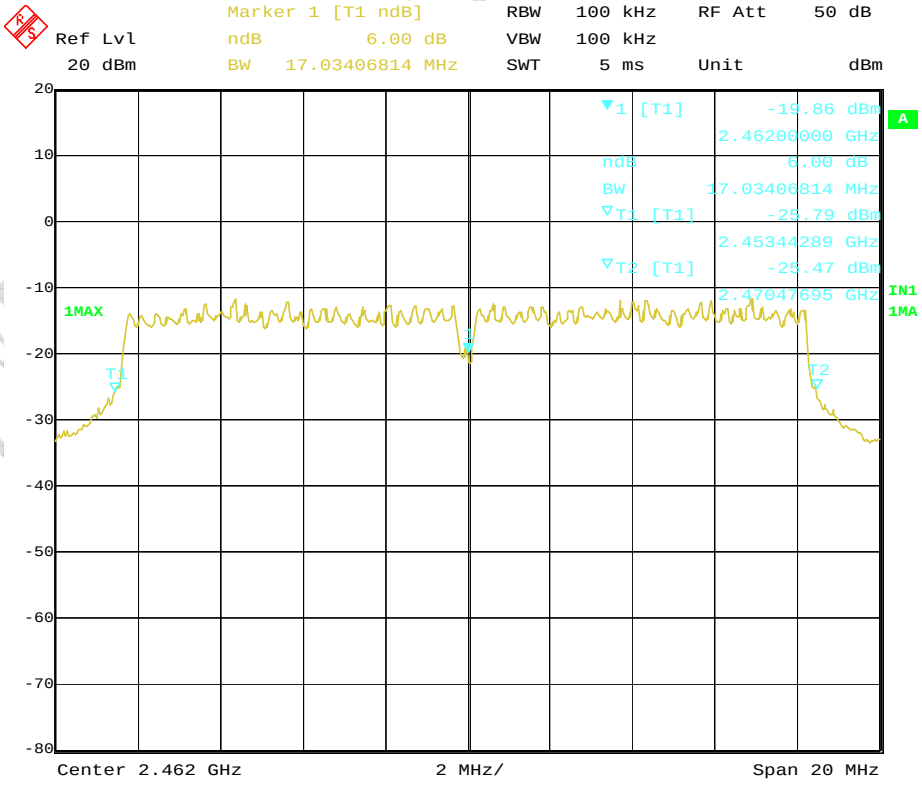
802.11b, channel 11, 11Mbps



802.11g, channel 11, 6Mbps



802.11g, channel 11, 24Mbps



802.11g, channel 11, 54Mbps

4.2 Maximum conducted Output Power

Specifications:	15.247 (b)(3)
Date of Tests	2009-3-10
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Operation Mode	Fix channel transmit
Test Results:	Pass

Test equipment Used:

Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2010-01-11	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2009-04-29	Normal
836471/003	Power meter	R/S	NRVS	1020.1809.02	2010-01-08	Normal
836471/004	Power sensor	R/S	NRV-Z32	1031.6807.05	2010-01-08	Normal

Test Setup:

The engineering mode was used to set the TX channel and power level. The transmitter output is connected to power meter.

Limits:

The EUT should meet the Power class 2 requirements, i.e., 30dBm.

Test Data:

channel	mode	Data Rate (Mbps)	Limit (dBm)	Measured output power (dBm)	Result
1	802.11b	1	≥30	12.45	Pass
		5.5	≥30	11.66	Pass
		11	≥30	12.33	pass
	802.11g	6	≥30	15.61	Pass
		24	≥30	16.64	Pass
		54	≥30	16.23	pass
6	802.11b	1	≥30	13.53	Pass
		5.5	≥30	12.66	Pass
		11	≥30	13.30	pass
	802.11g	6	≥30	16.71	Pass
		24	≥30	17.62	Pass
		54	≥30	17.21	pass
11	802.11b	1	≥30	14.32	Pass
		5.5	≥30	13.47	Pass
		11	≥30	14.08	pass
	802.11g	6	≥30	17.78	Pass
		24	≥30	17.91	Pass
		54	≥30	17.73	pass

4.3 Band edges

Specifications:	15.247 (c)
Date of Tests	2009-3-10
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Operation Mode	Fix channel transmit
Test Results:	Pass

Test equipment Used:

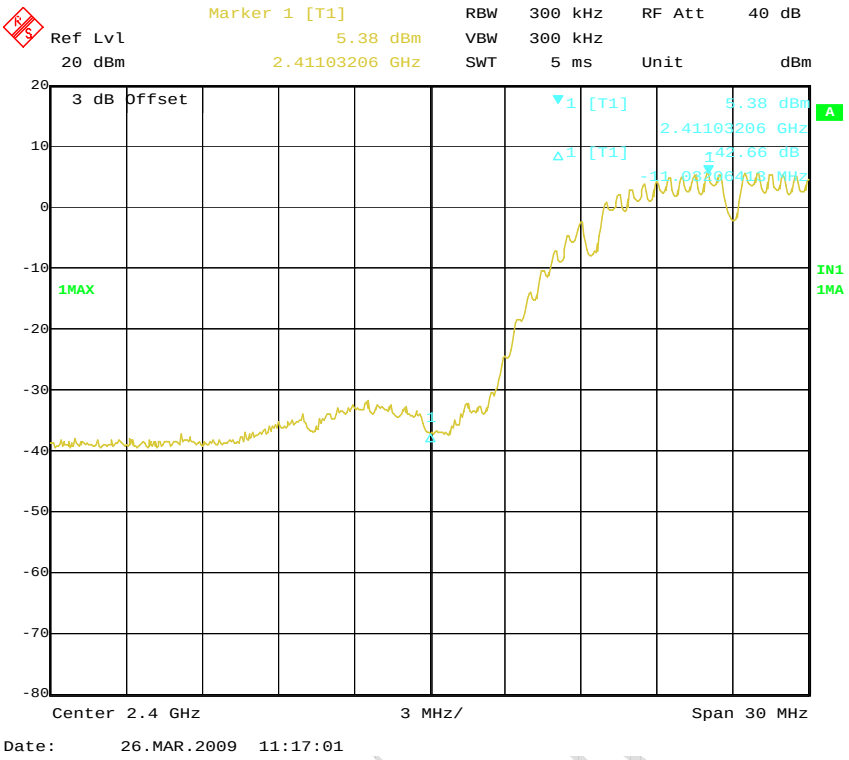
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2010-01-11	Normal

Test Setup:

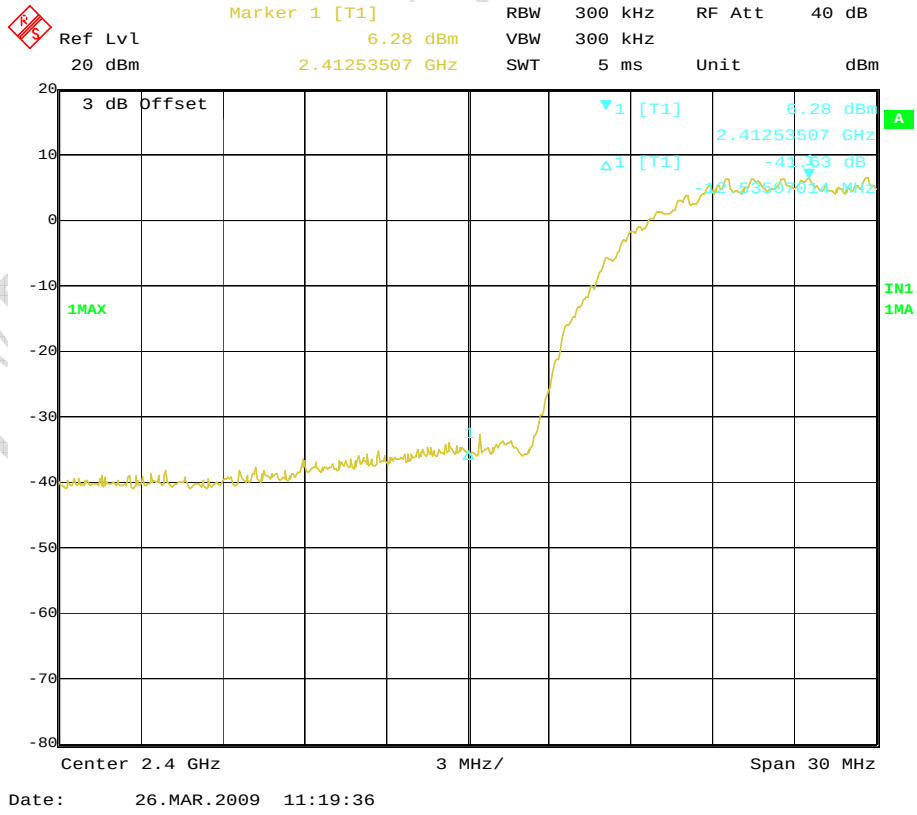
The engineering mode was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through coupling.

Test Data:

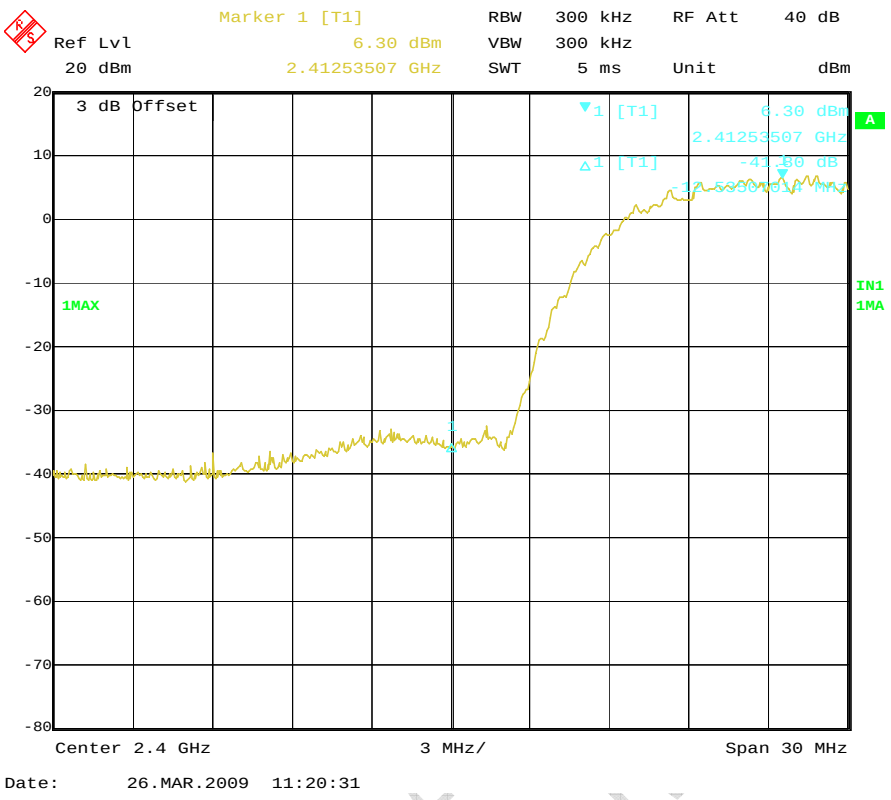
channel	mode	Data Rate (Mbps)	Limit (dBc)	Measured Level (dBc)	Result
1	802.11b	1	<-20dB	-42.66	Pass
		5.5	<-20dB	-41.63	Pass
		11	<-20dB	-41.80	pass
	802.11g	6	<-20dB	-28.46	Pass
		24	<-20dB	-30.32	Pass
		54	<-20dB	-30.44	pass
11	802.11b	1	<-20dB	-50.74	Pass
		5.5	<-20dB	-47.81	Pass
		11	<-20dB	-49.60	pass
	802.11g	6	<-20dB	-42.42	Pass
		24	<-20dB	-41.31	Pass
		54	<-20dB	-42.09	pass



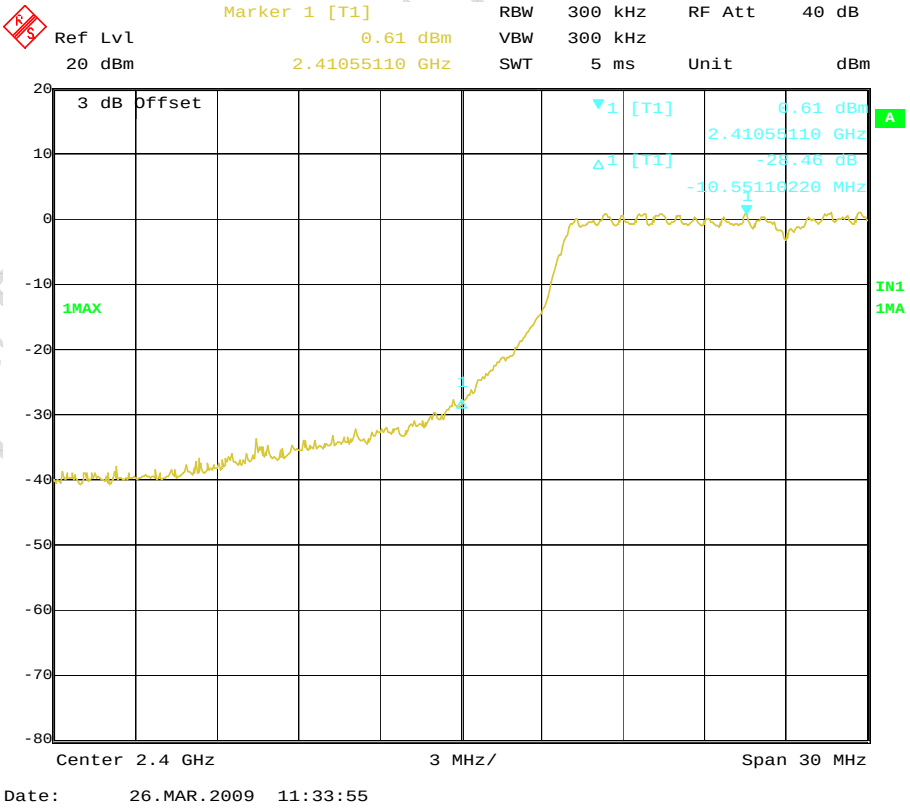
Band-edge, 802.11b, channel 1, 1Mbps



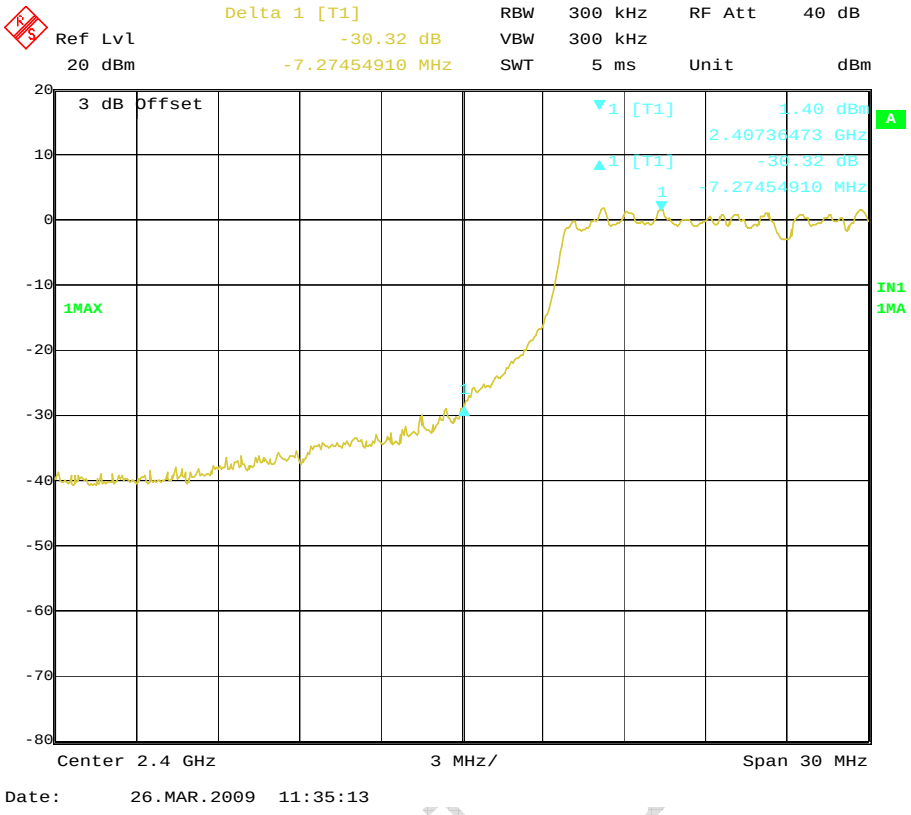
Band-edge, 802.11b, channel 1, 5.5Mbps



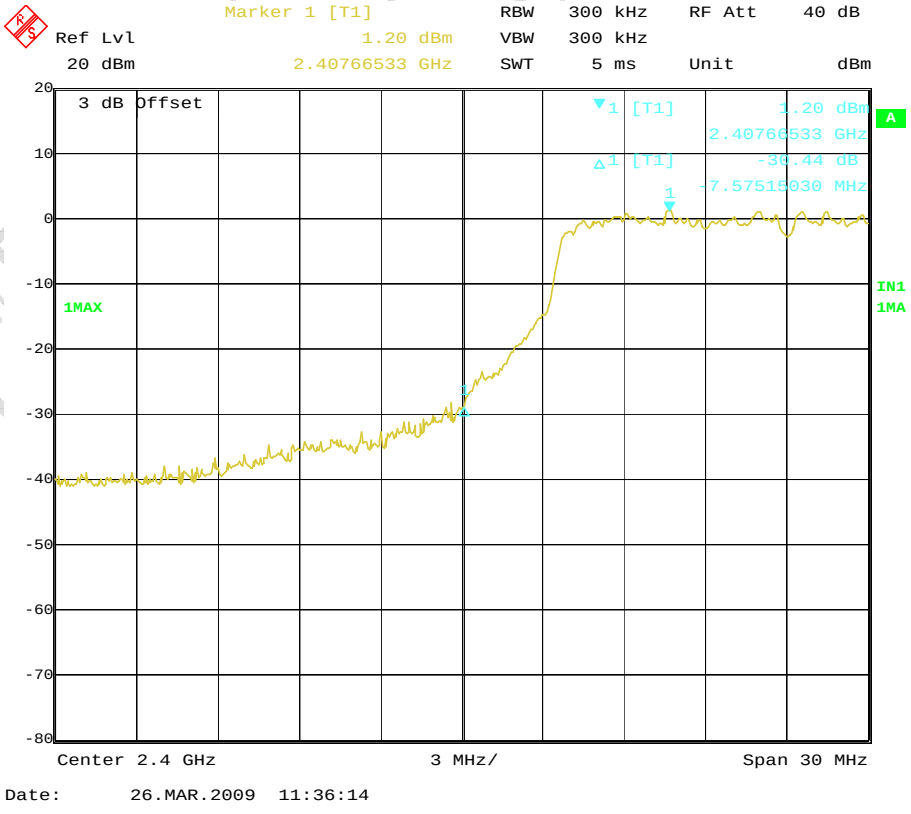
Band-edge, 802.11b, channel 1, 11Mbps



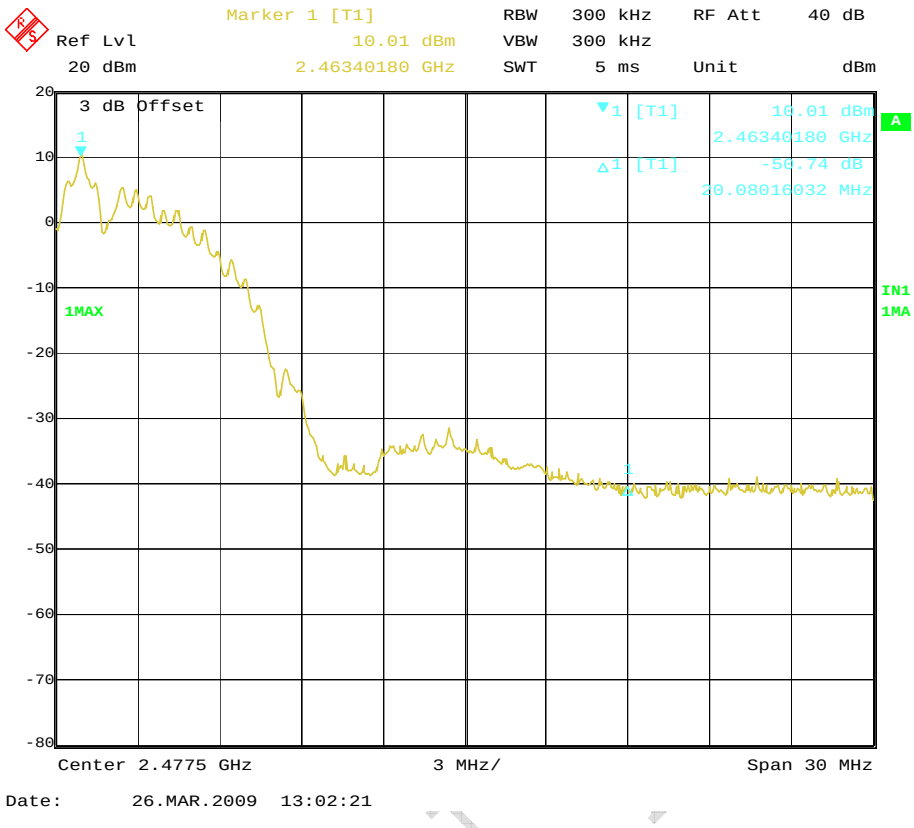
Band-edge, 802.11g, channel 1, 6Mbps



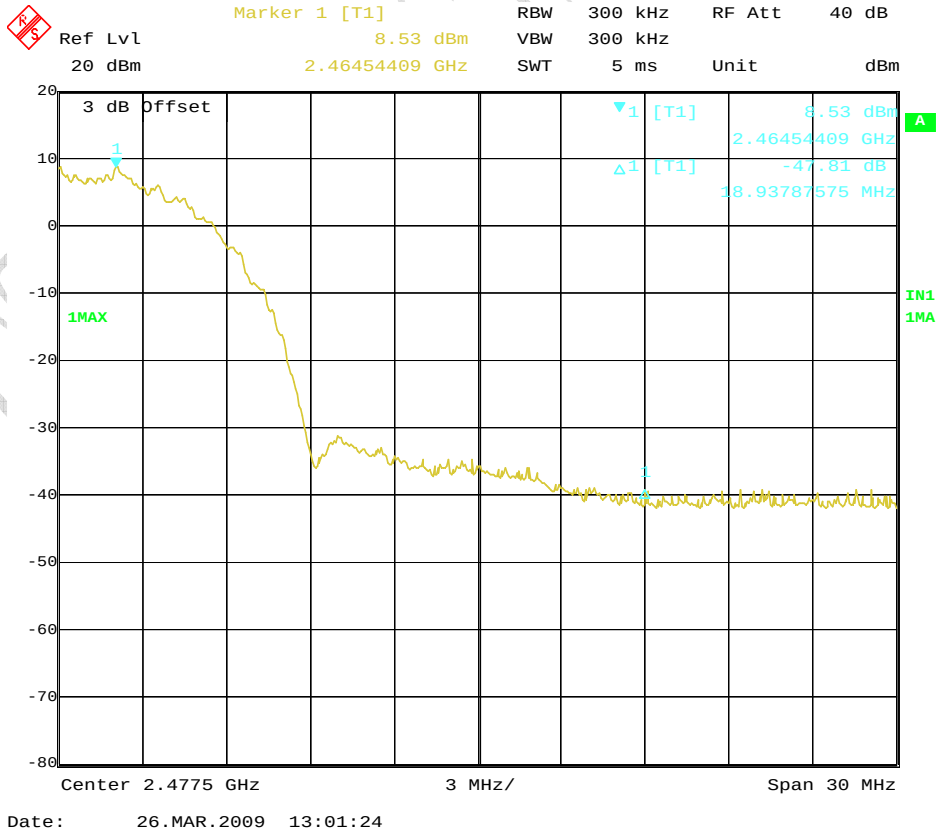
Band-edge, 802.11g, channel 1, 24Mbps



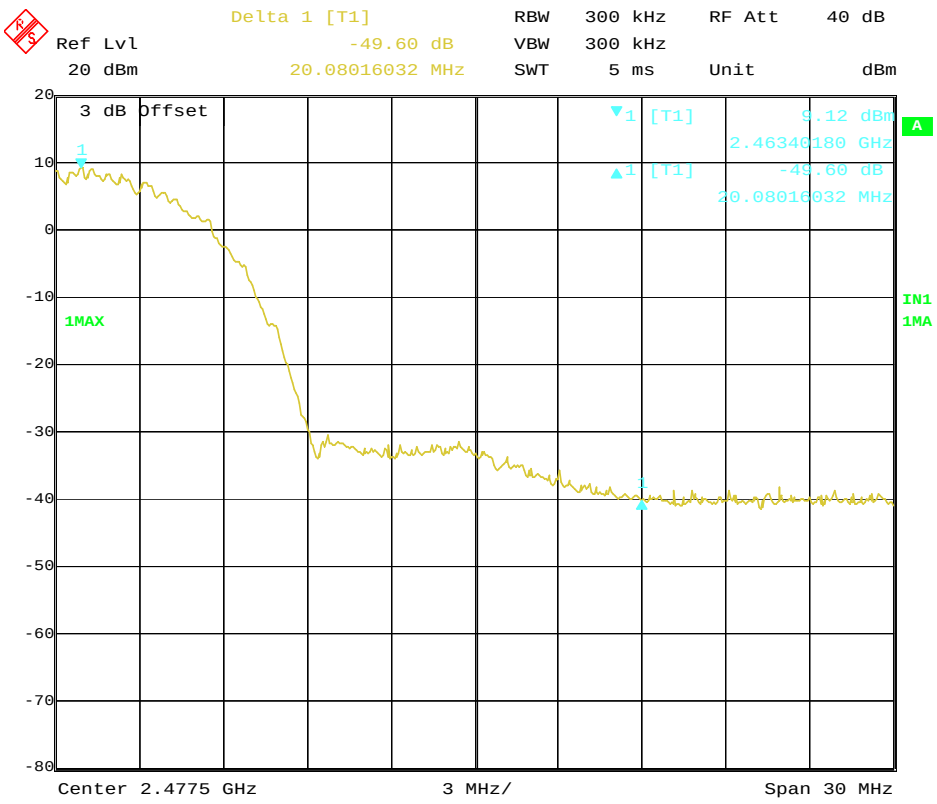
Band-edge, 802.11g, channel 1, 54Mbps



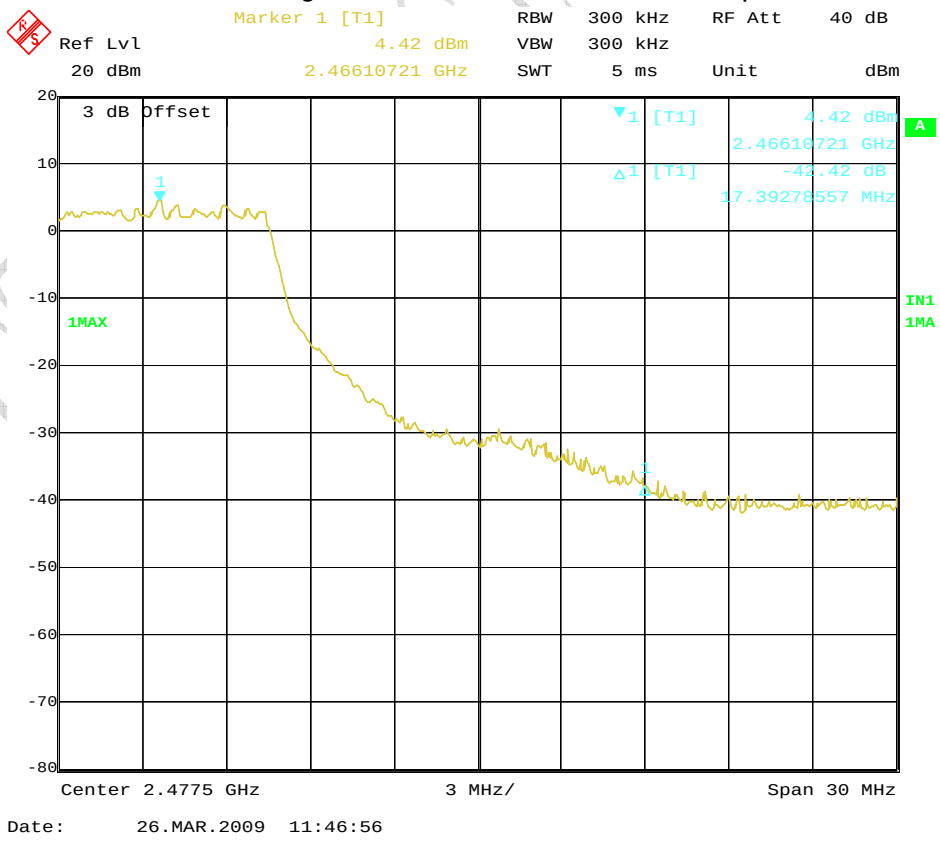
Band-edge, 802.11b, channel 11, 1Mbps



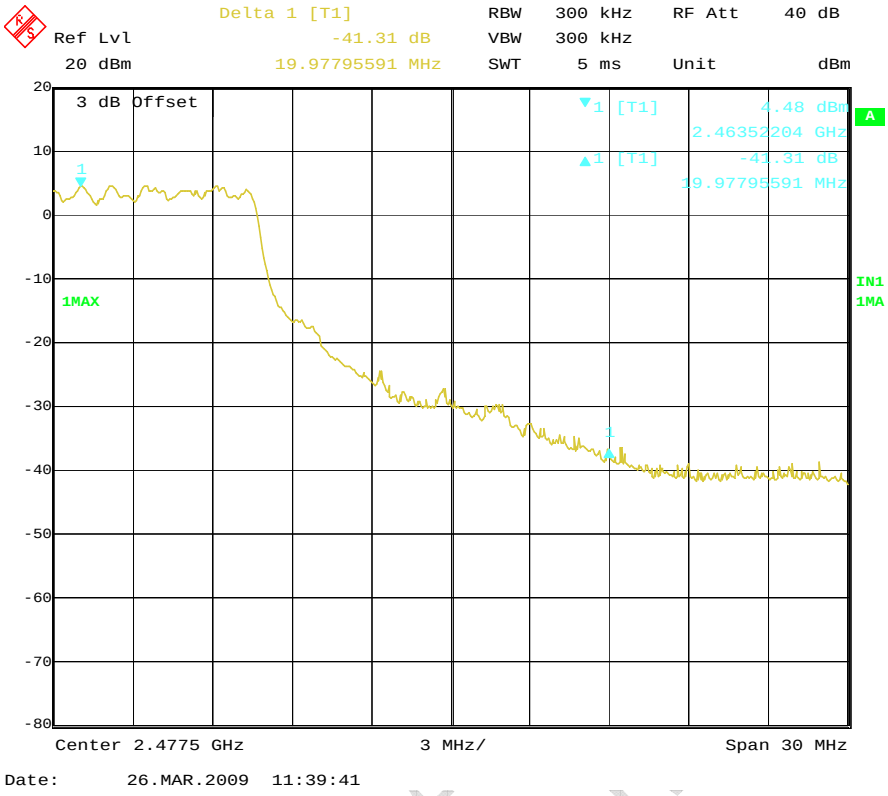
Band-edge, 802.11b, channel 11, 5.5Mbps



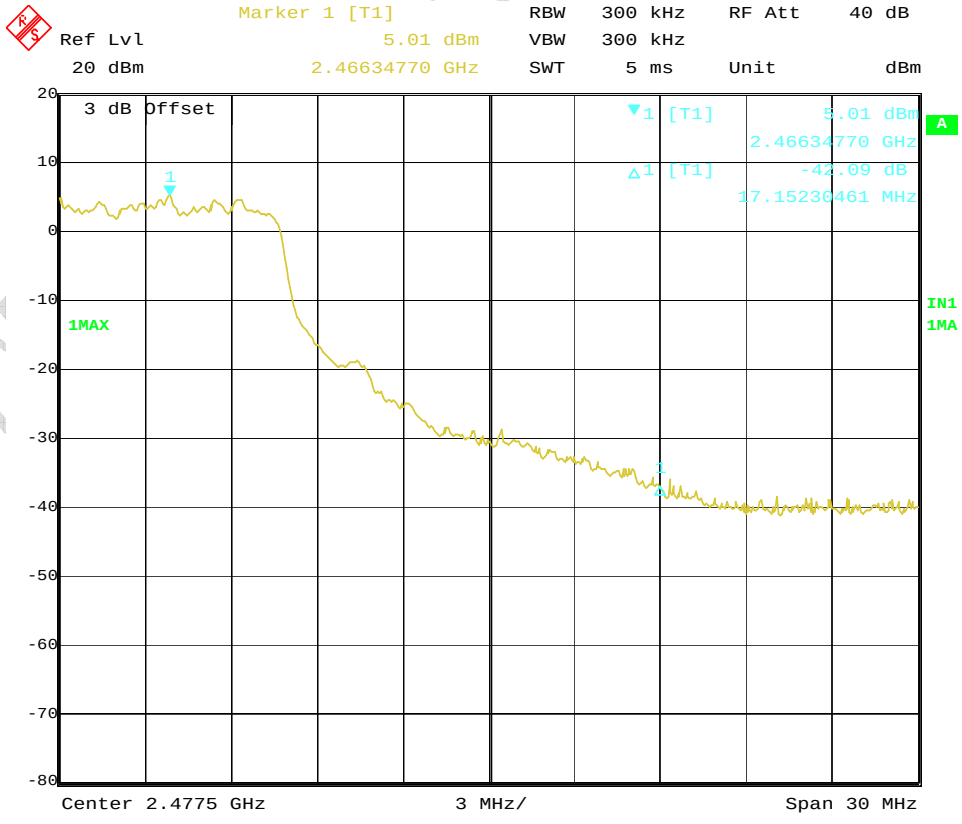
Band-edge, 802.11b, channel 11, 11Mbps



Band-edge, 802.11g, channel 11, 6Mbps



Band-edge, 802.11g, channel 11, 24Mbps



Band-edge, 802.11g, channel 11, 54Mbps

4.4 Peak Power Spectral Density

Specifications:	15.247(d)
Date of Test	2009-3-10
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Operation Mode	Fix channel transmit
Test Results:	Pass

Test equipment Used:

Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2010-01-11	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2009-04-29	Normal

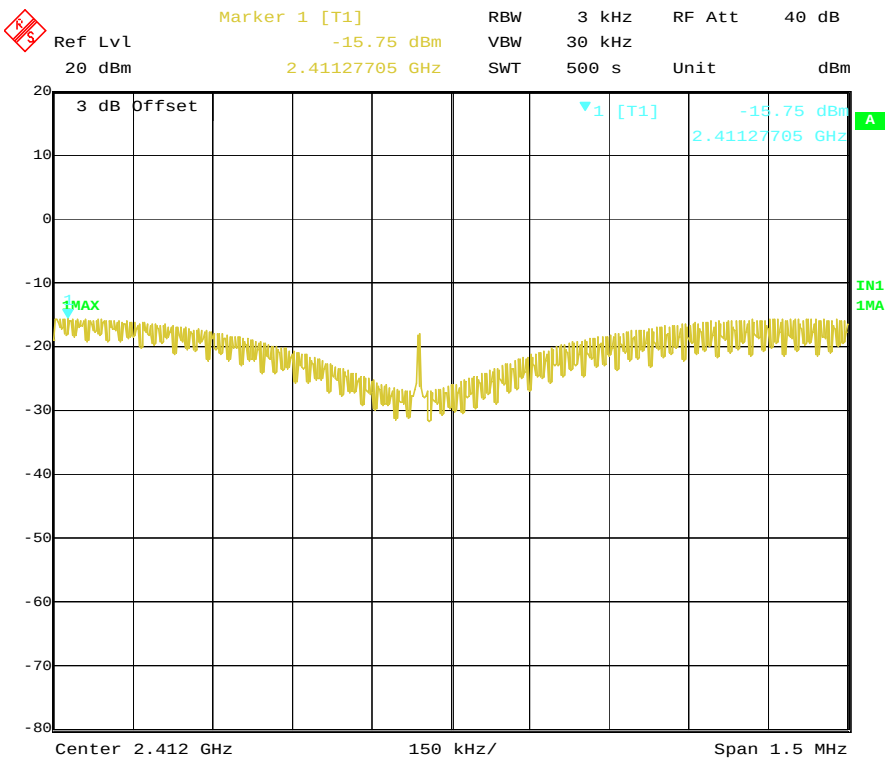
Test Setup:

The engineering mode was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through coupling.

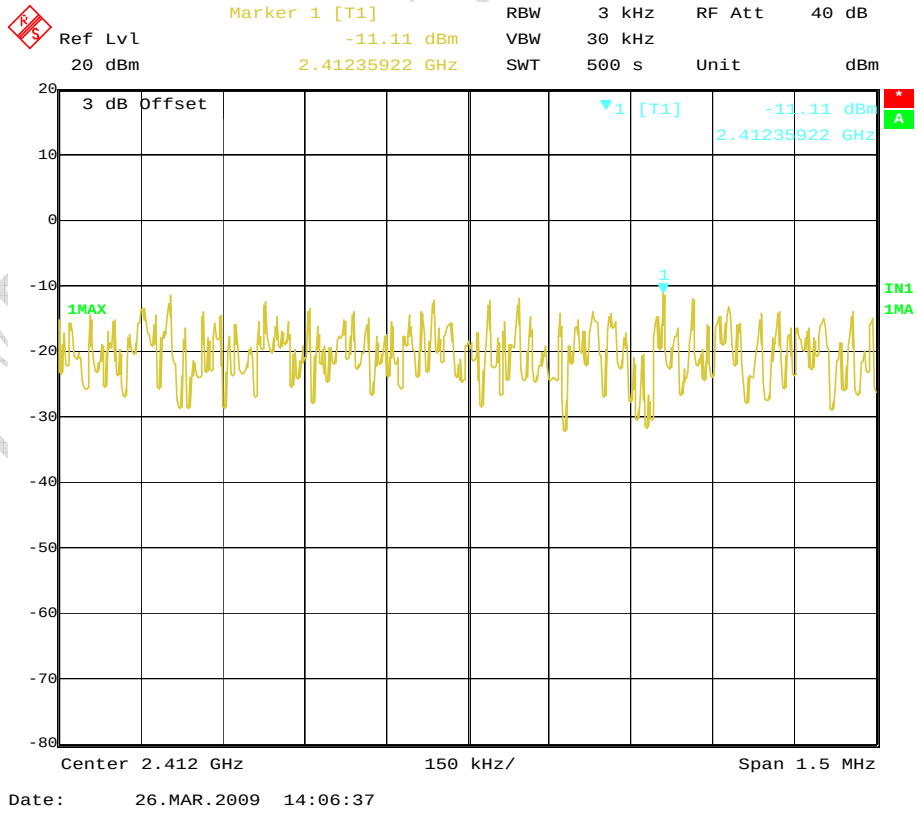
Test Data:

channel	mode	Data Rate (Mbps)	Limit (dBm)	Measured level (dBm)	Result
1	802.11b	1	<8.00	-15.75	Pass
		5.5	<8.00	-11.11	Pass
		11	<8.00	-10.54	pass
	802.11g	6	<8.00	-15.38	Pass
		24	<8.00	-15.56	Pass
		54	<8.00	-15.71	pass
6	802.11b	1	<8.00	-13.02	Pass
		5.5	<8.00	-8.45	Pass
		11	<8.00	-7.81	pass
	802.11g	6	<8.00	-14.58	Pass
		24	<8.00	-14.90	Pass
		54	<8.00	-14.95	pass
11	802.11b	1	<8.00	-17.03	Pass
		5.5	<8.00	-9.41	Pass
		11	<8.00	-8.83	pass
	802.11g	6	<8.00	-13.53	Pass
		24	<8.00	-13.74	Pass
		54	<8.00	-11.52	pass

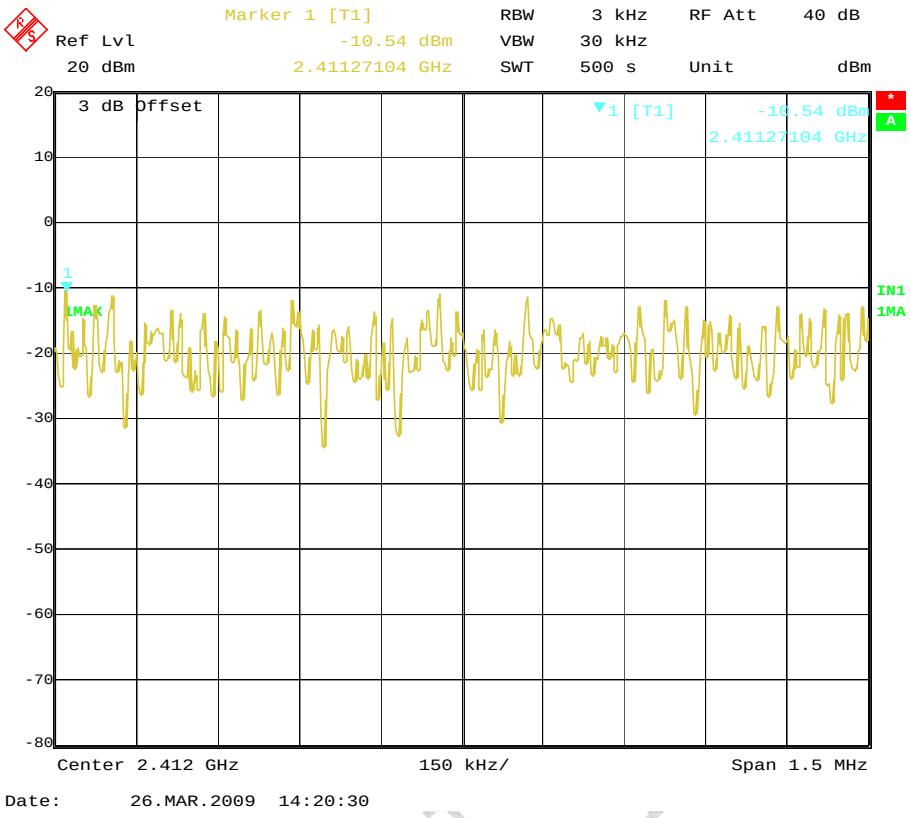
FCC Parts 15 subpart C 15.247
Equipment: 810-F **REPORT NO.: I08GW7473-FCC-WiFi**



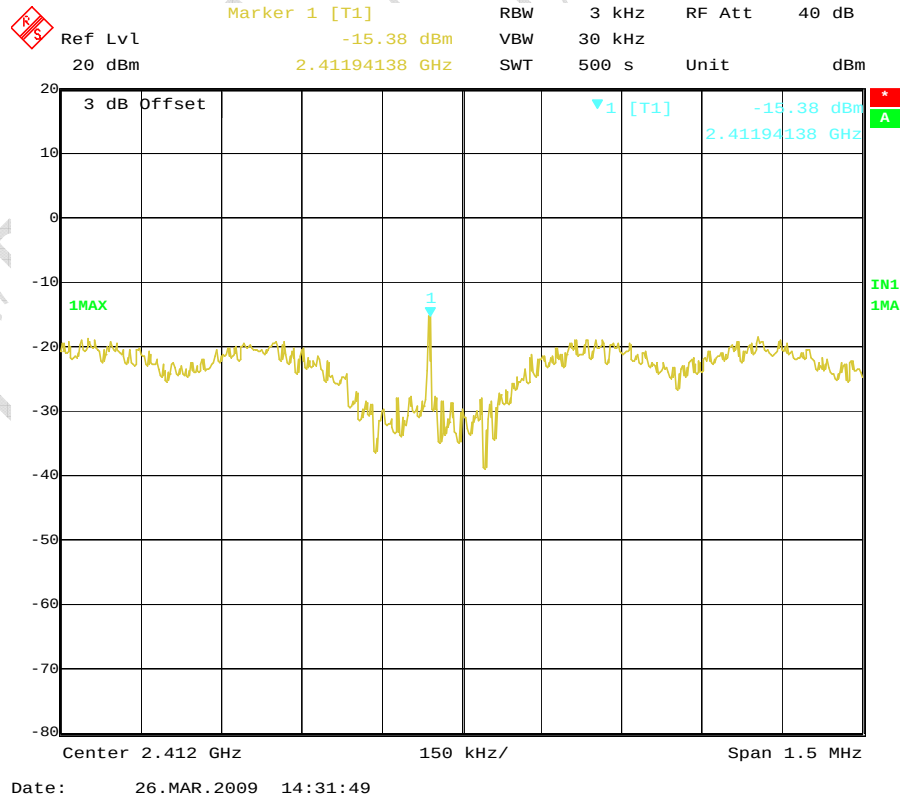
802.11b, channel 1, 1Mbps



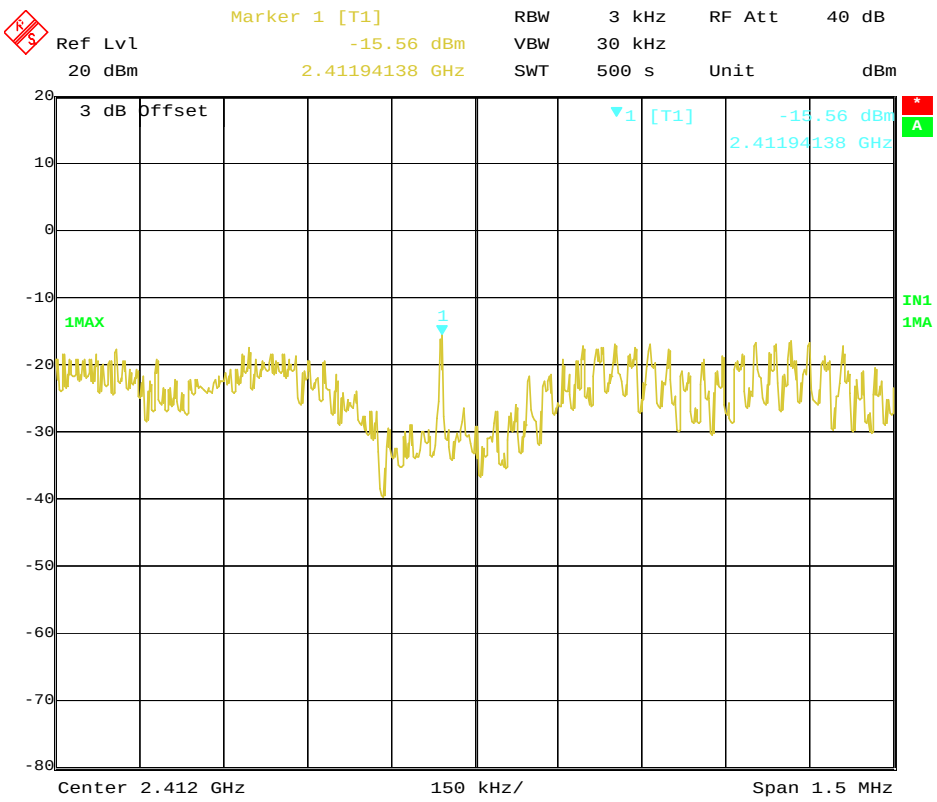
802.11b, channel 1, 5.5Mbps



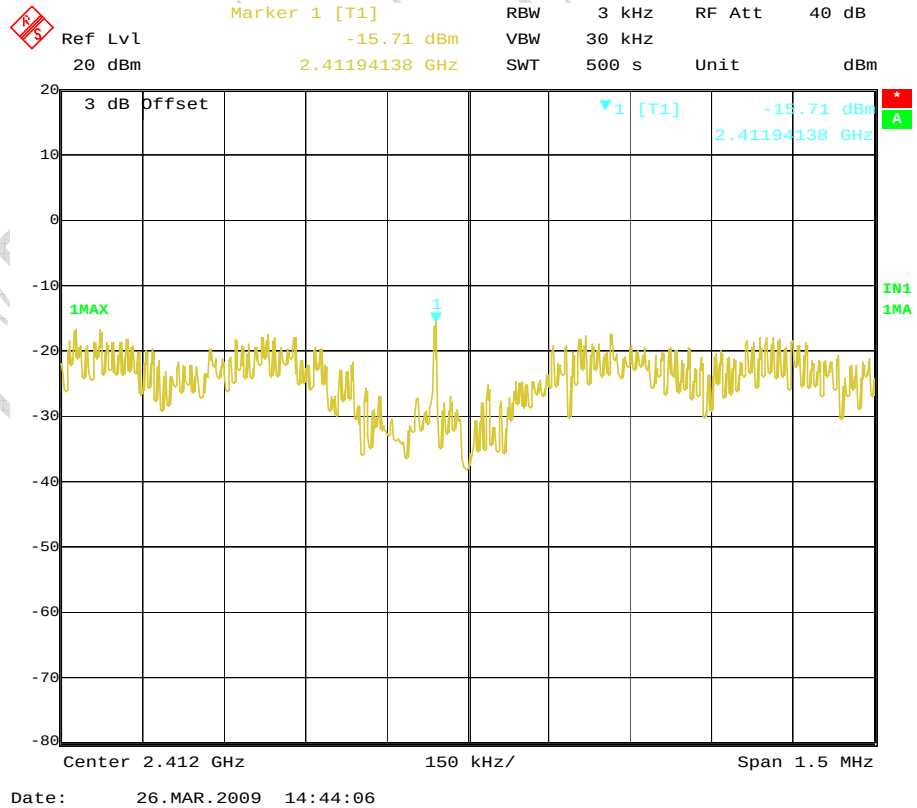
802.11b, channel 1, 11Mbps



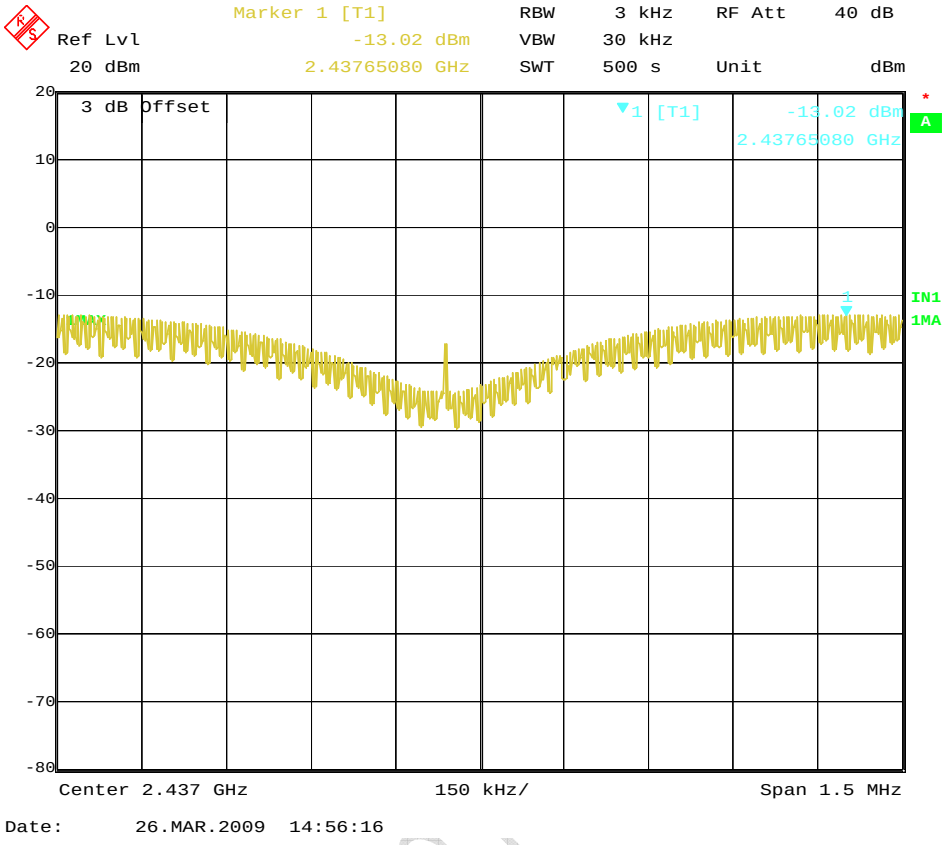
802.11g, channel 1, 6Mbps



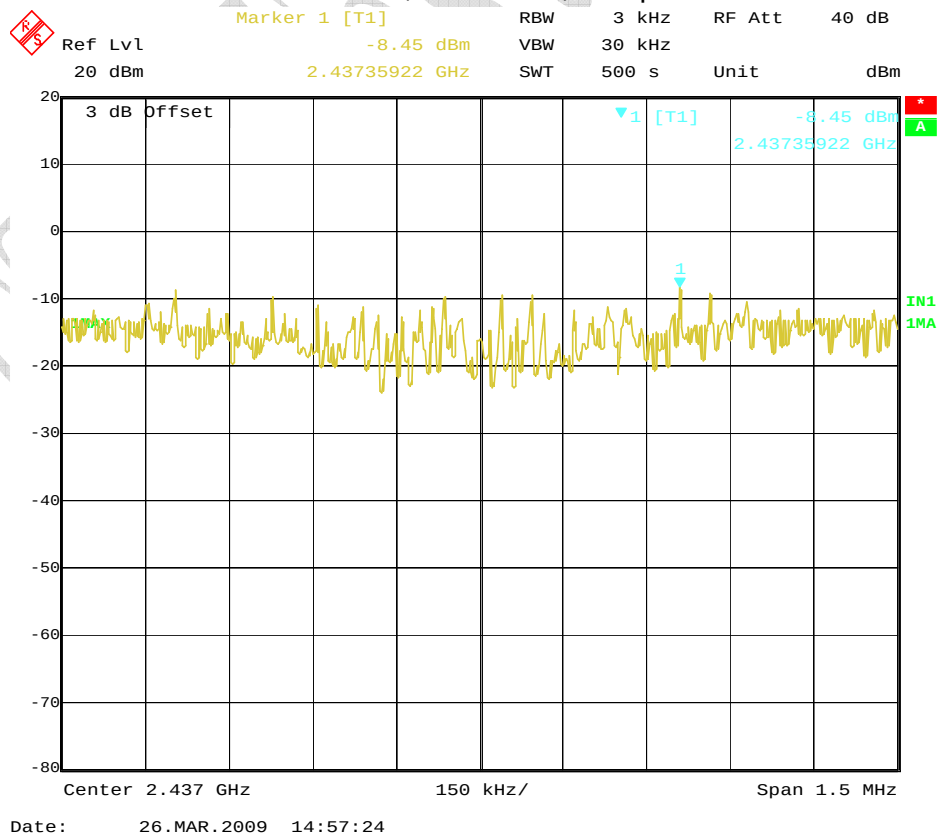
802.11g, channel 1, 24Mbps



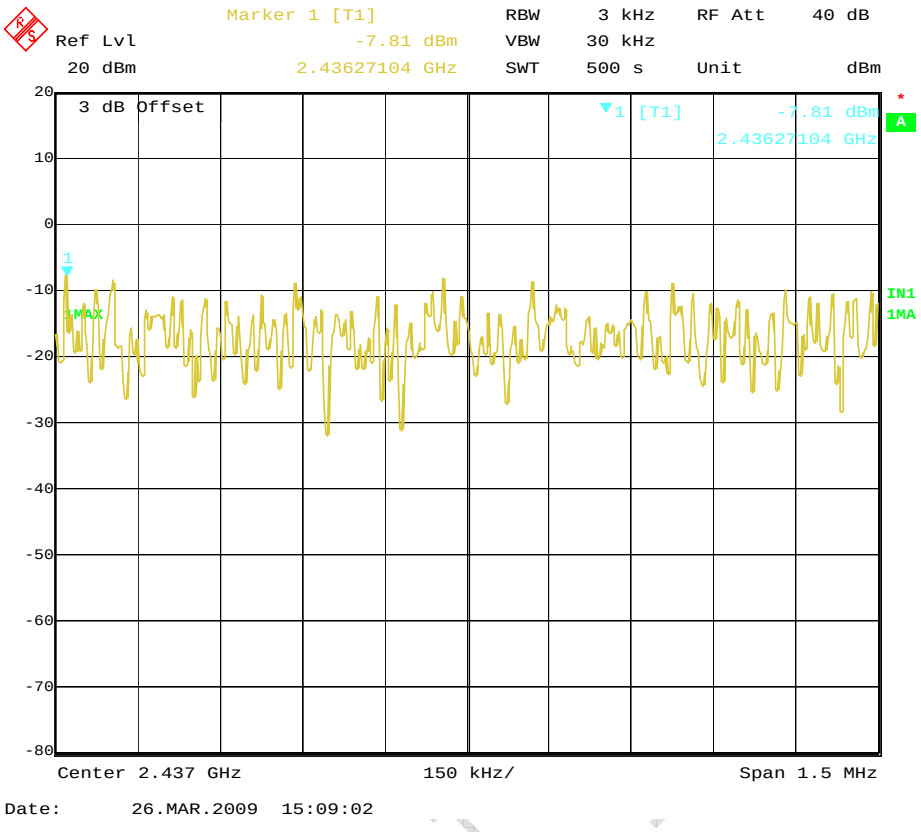
802.11g, channel 1, 54Mbps



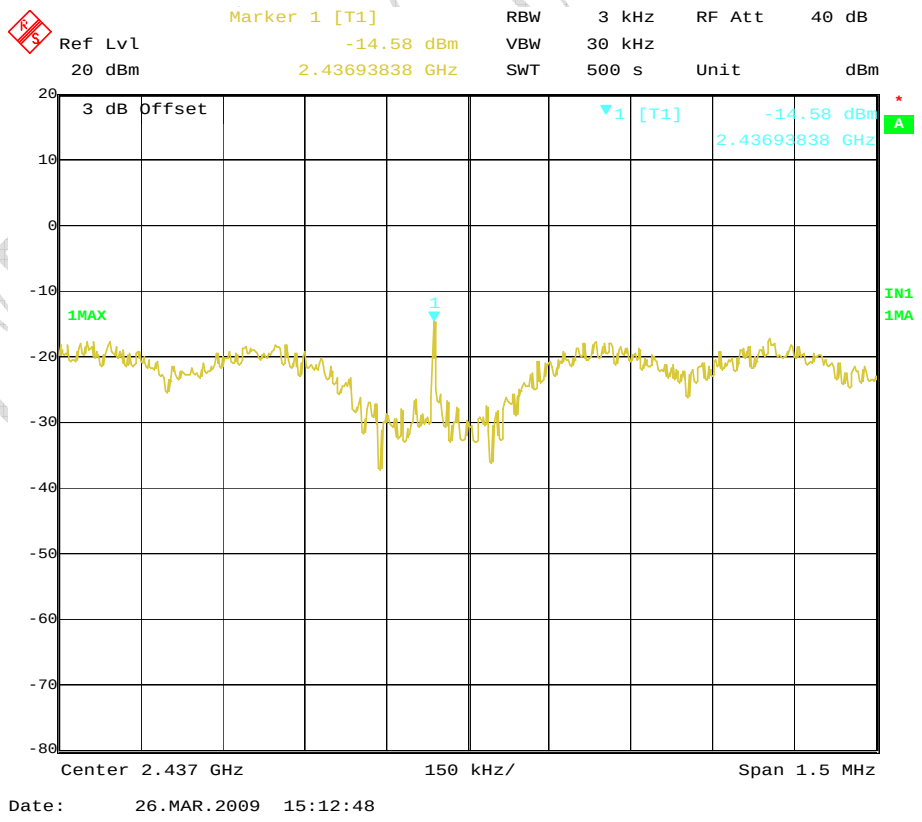
802.11b, channel 6, 1Mbps



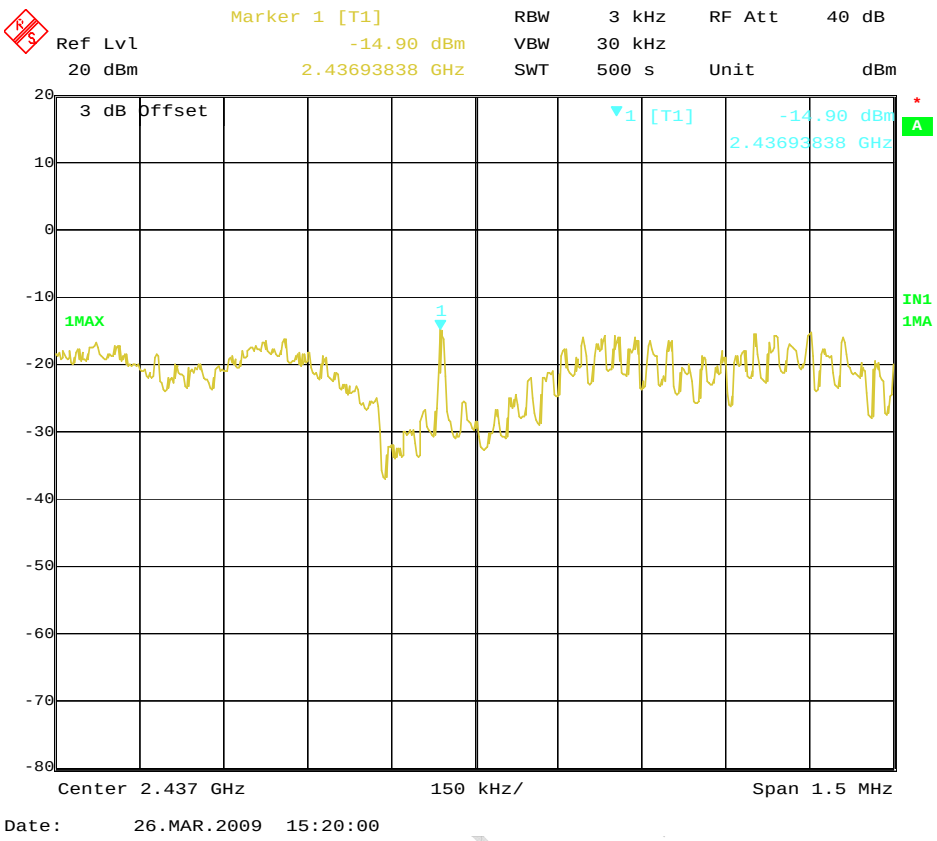
802.11b, channel 6, 5.5Mbps



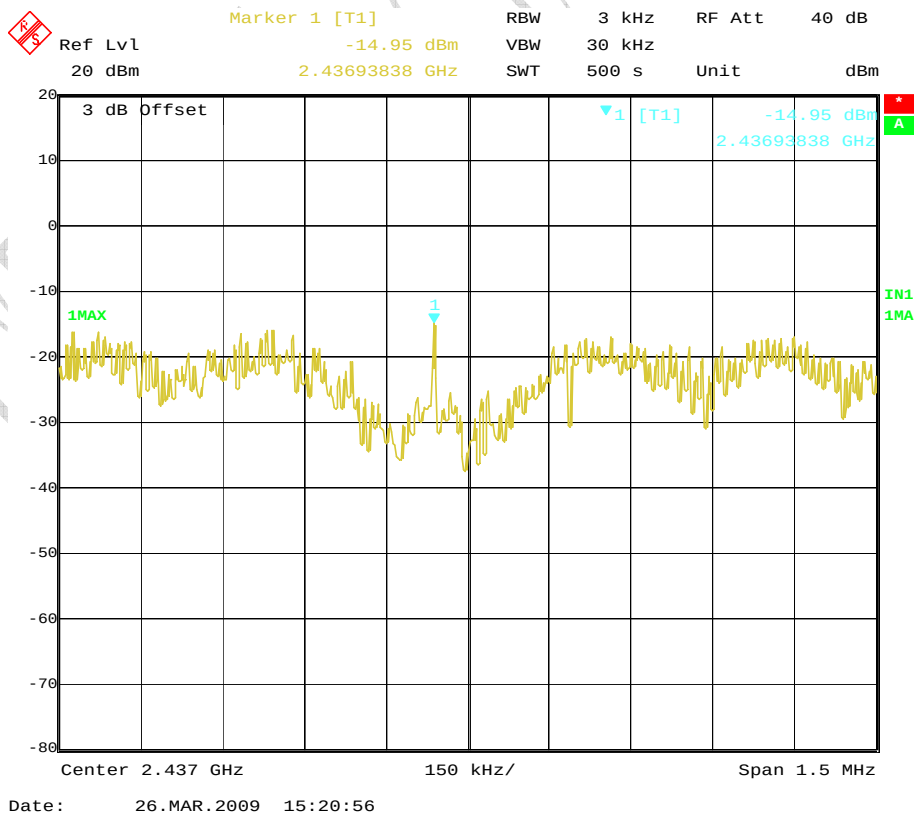
802.11b, channel 6, 11Mbps



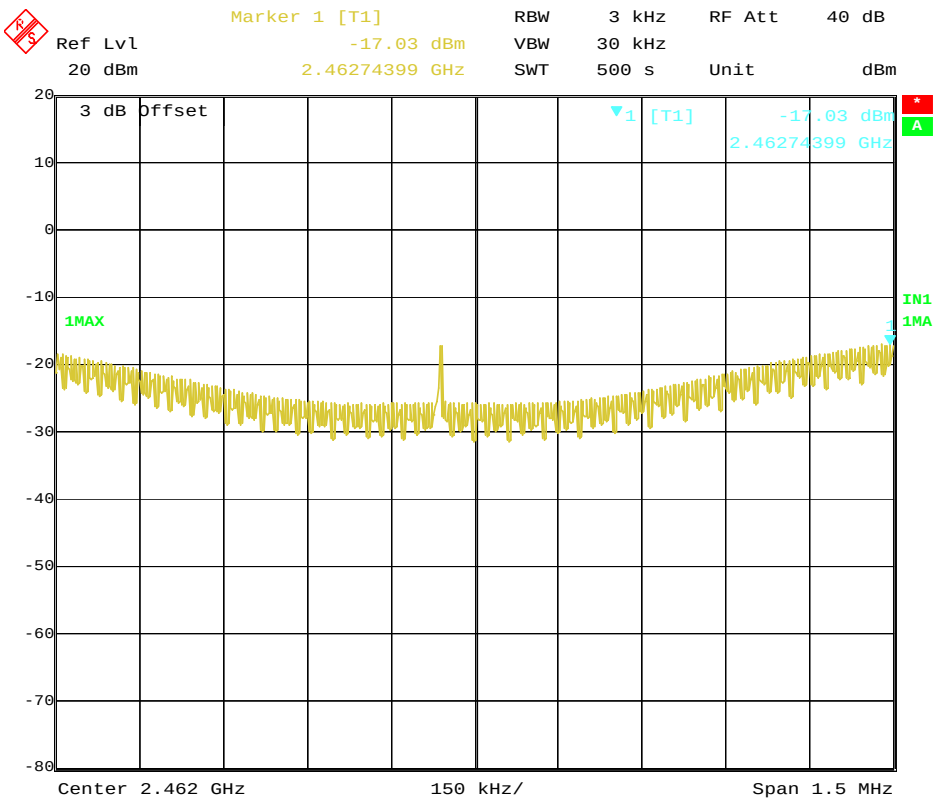
802.11g, channel 6, 6Mbps



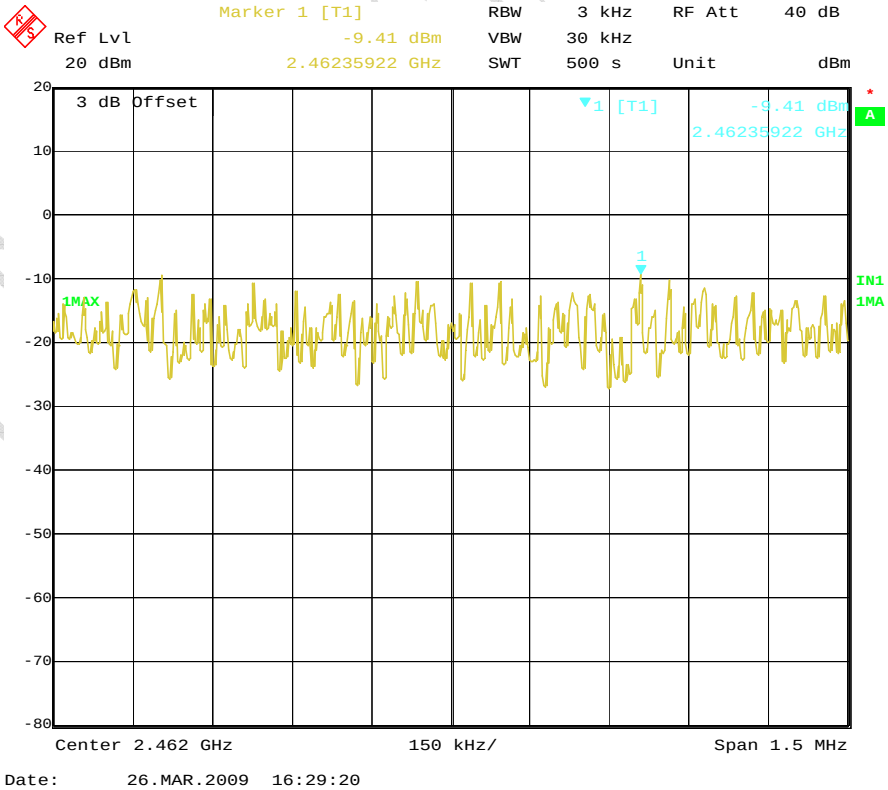
802.11g, channel 6, 24Mbps



802.11g, channel 6, 54Mbps



802.11b, channel 11, 1Mbps



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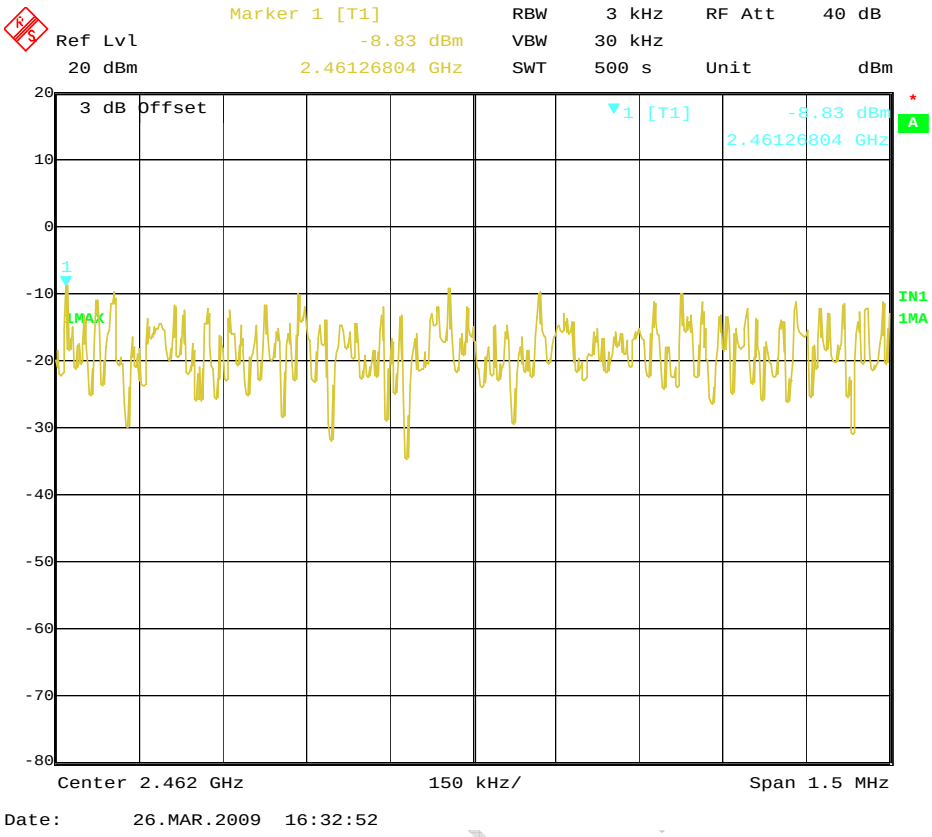
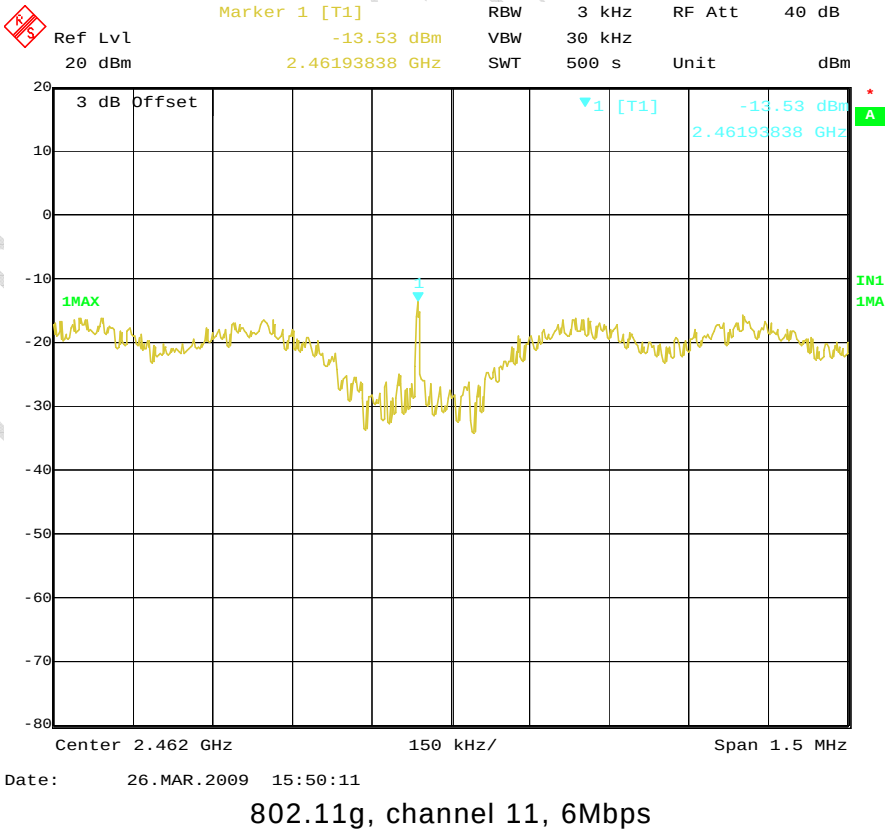
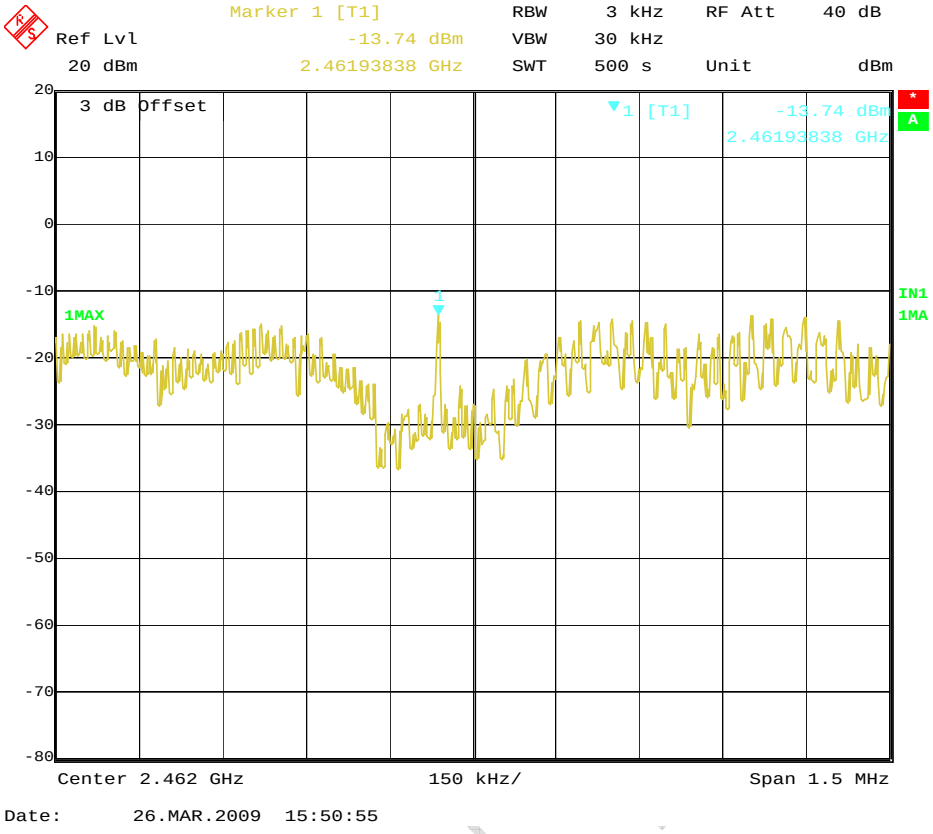


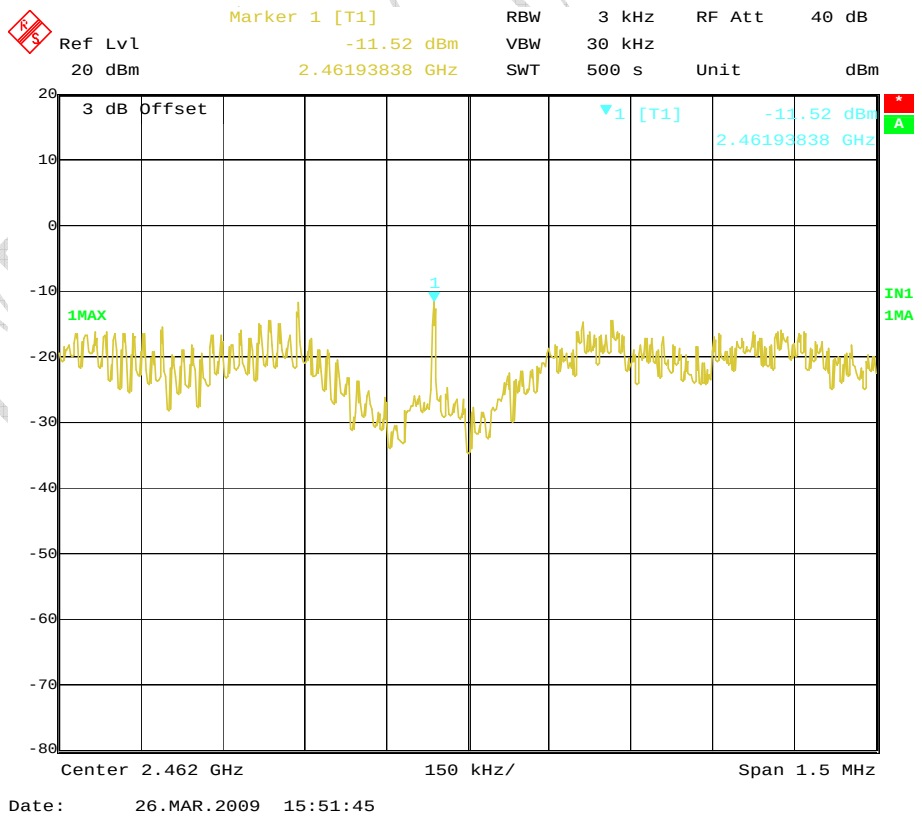
802.11b, channel 11, 11Mbps



802.11g, channel 11, 6Mbps



802.11g, channel 11, 24Mbps



802.11g, channel 11, 54Mbps

4.5 Spurious emission

Specifications:	15.247(c)
Date of Test	2009-3-10
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Operation Mode	hopping
Test Results:	Pass

Test equipment Used:

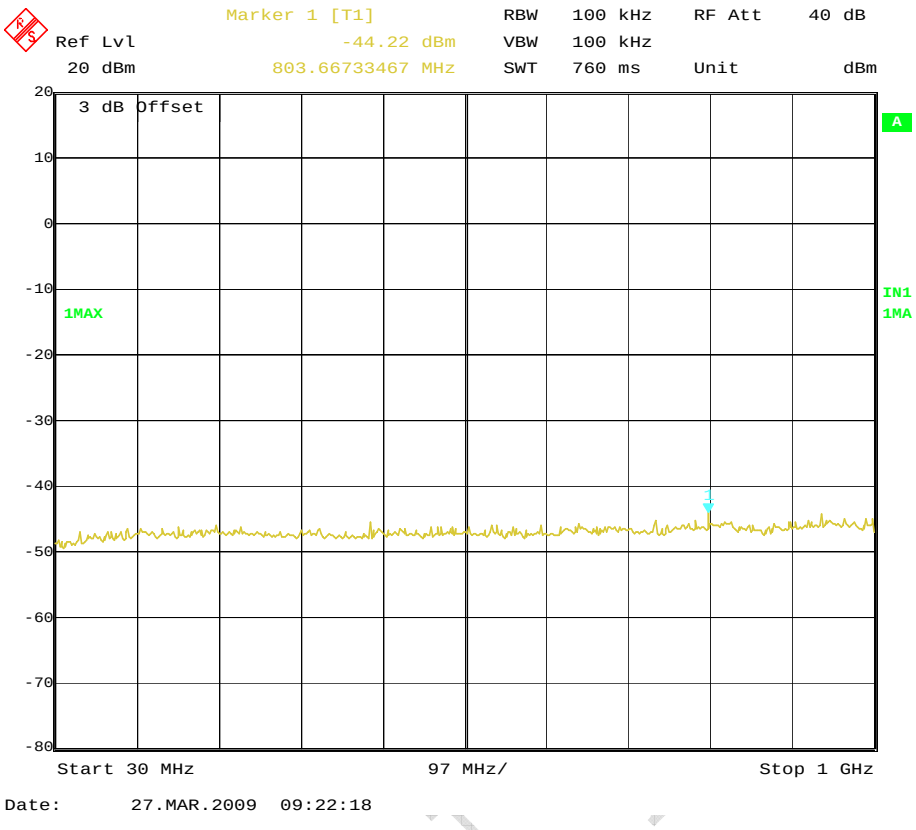
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2010-01-11	Normal

Test Setup:

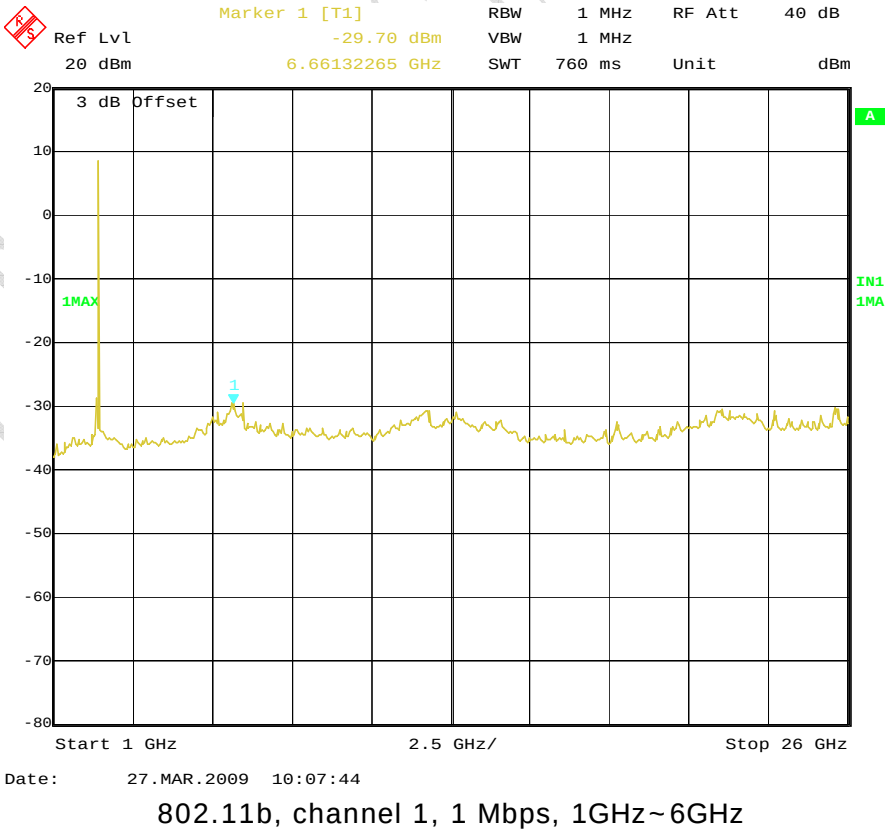
The engineering mode was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through coupling.

Test Data:

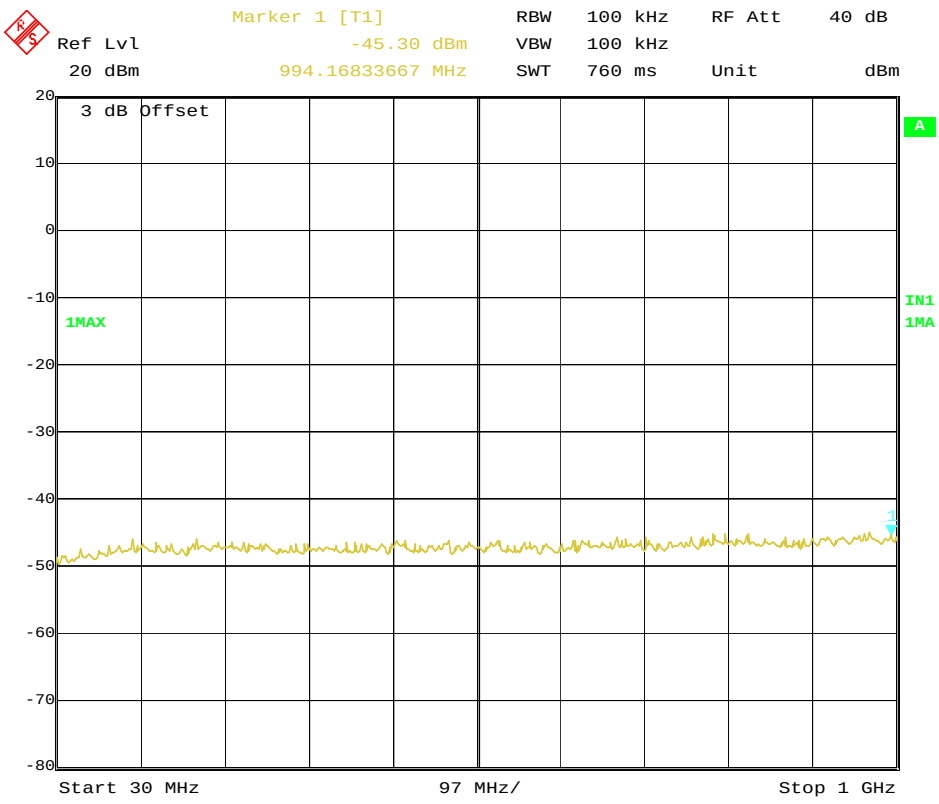
channel	mode	Data Rate (Mbps)	Limit (dBc)	Measured level (dBc)	Result
1	802.11b	1	<-20	Refer to picture	Pass
		5.5	<-20	Refer to picture	Pass
		11	<-20	Refer to picture	pass
	802.11g	6	<-20	Refer to picture	Pass
		24	<-20	Refer to picture	Pass
		54	<-20	Refer to picture	pass
6	802.11b	1	<-20	Refer to picture	Pass
		5.5	<-20	Refer to picture	Pass
		11	<-20	Refer to picture	pass
	802.11g	6	<-20	Refer to picture	Pass
		24	<-20	Refer to picture	Pass
		54	<-20	Refer to picture	pass
11	802.11b	1	<-20	Refer to picture	Pass
		5.5	<-20	Refer to picture	Pass
		11	<-20	Refer to picture	pass
	802.11g	6	<-20	Refer to picture	Pass
		24	<-20	Refer to picture	Pass
		54	<-20	Refer to picture	pass



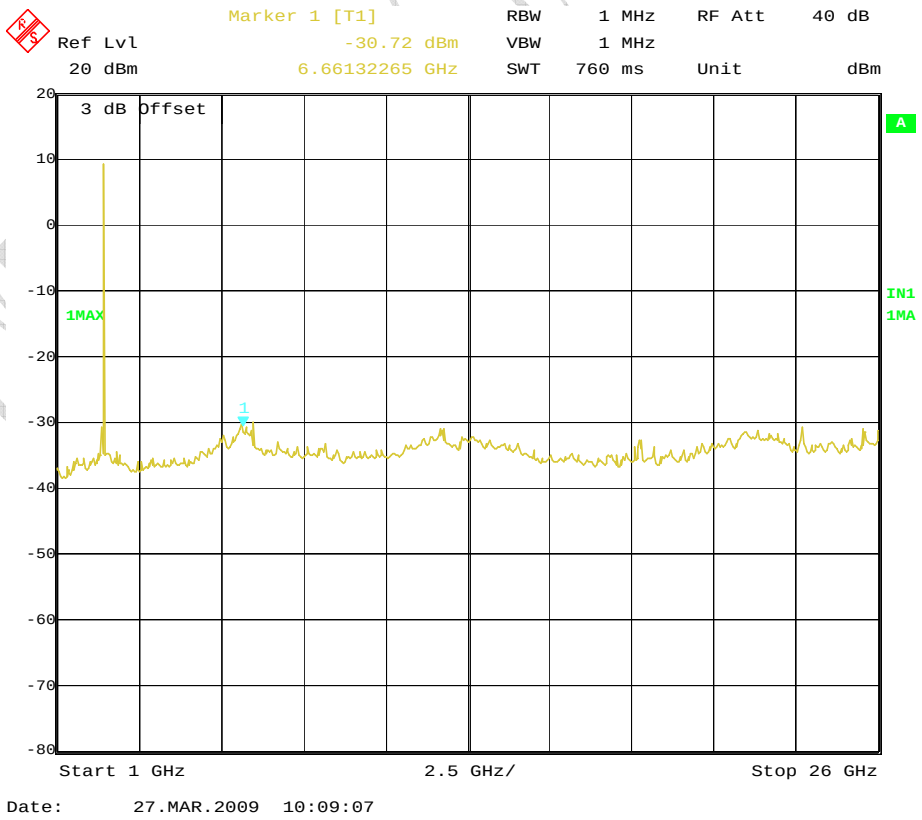
802.11b, channel 1, 1 Mbps, 30MHz~1GHz



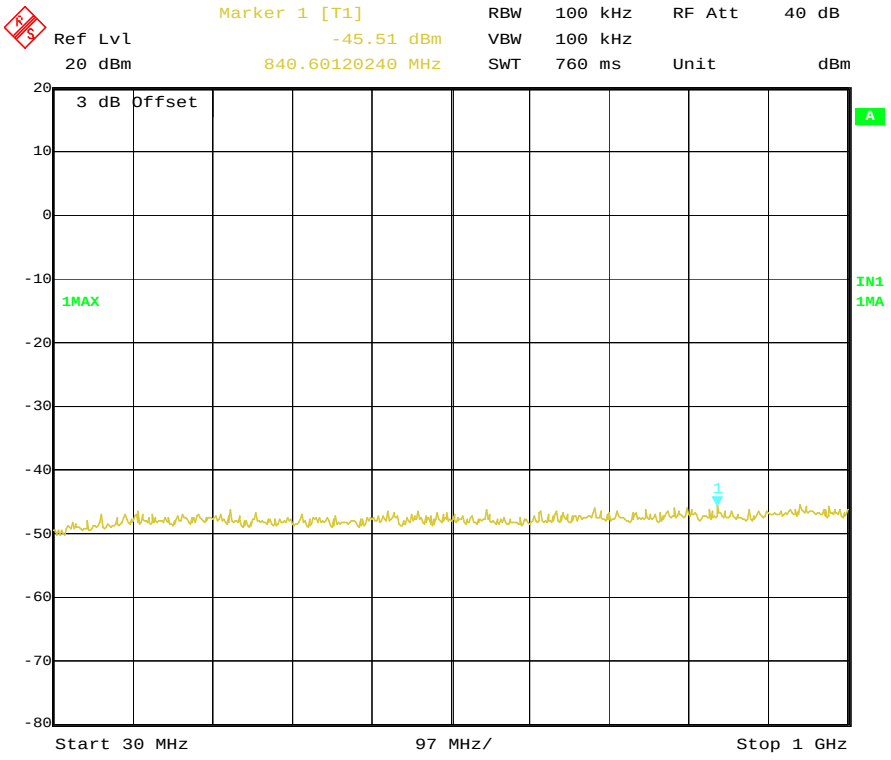
802.11b, channel 1, 1 Mbps, 1GHz~6GHz



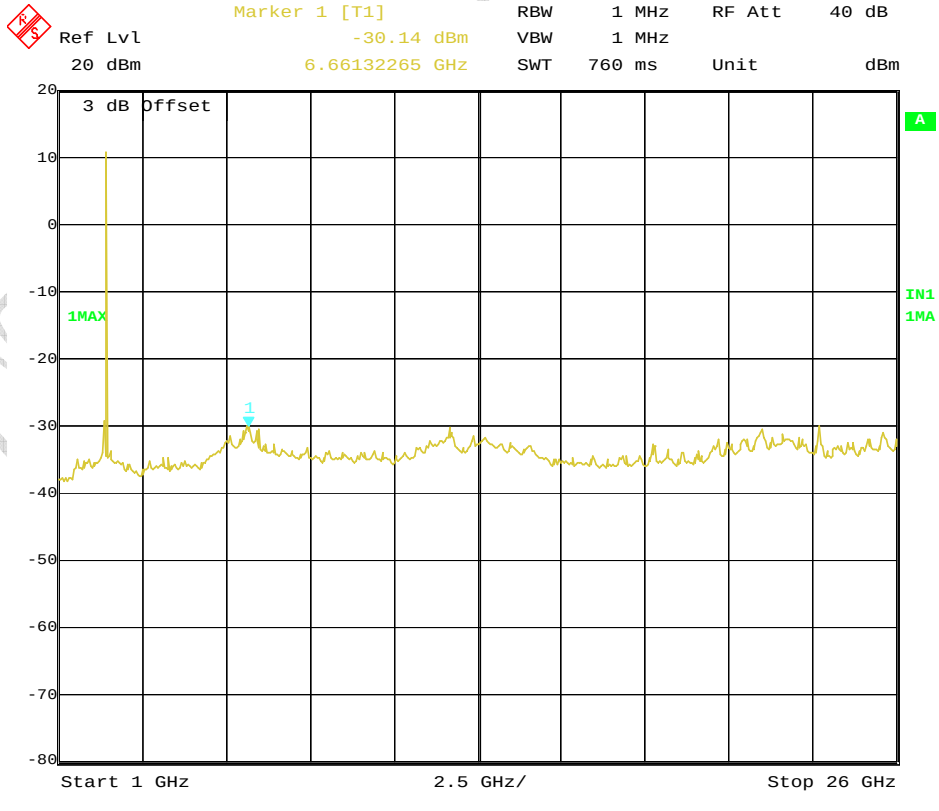
802.11b, channel 1, 5.5 Mbps, 30MHz~1GHz



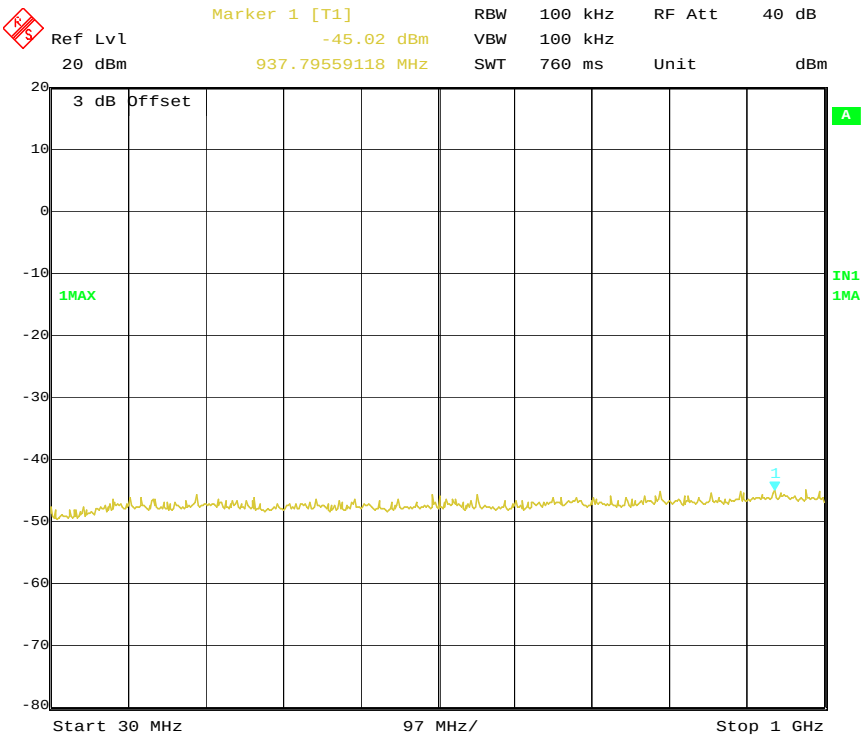
802.11b, channel 1, 5.5 Mbps, 1GHz~6GHz



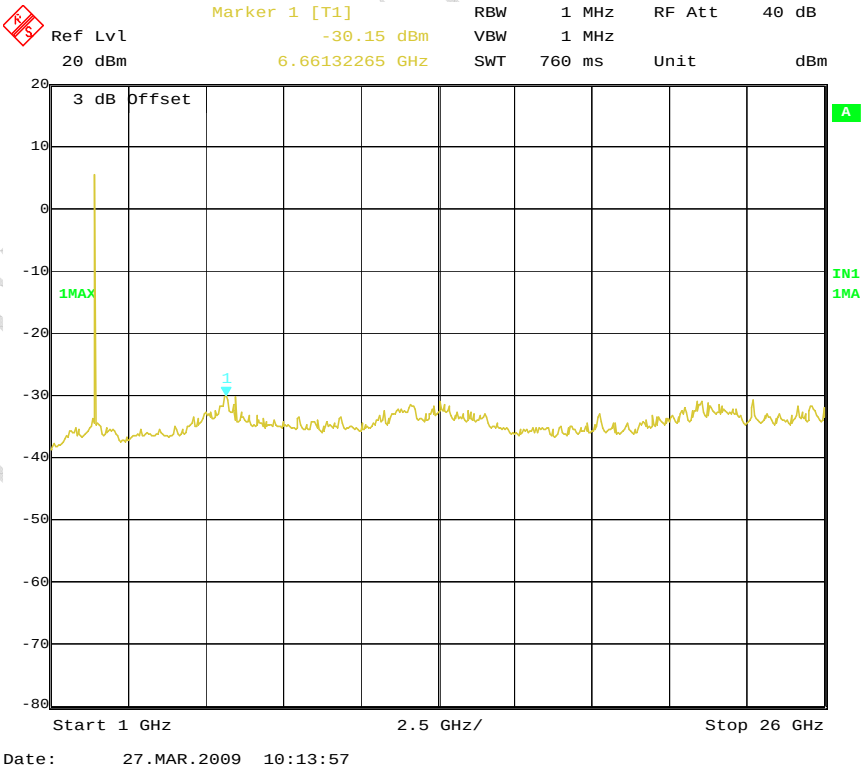
802.11b, channel 1, 11 Mbps, 30MHz~1GHz



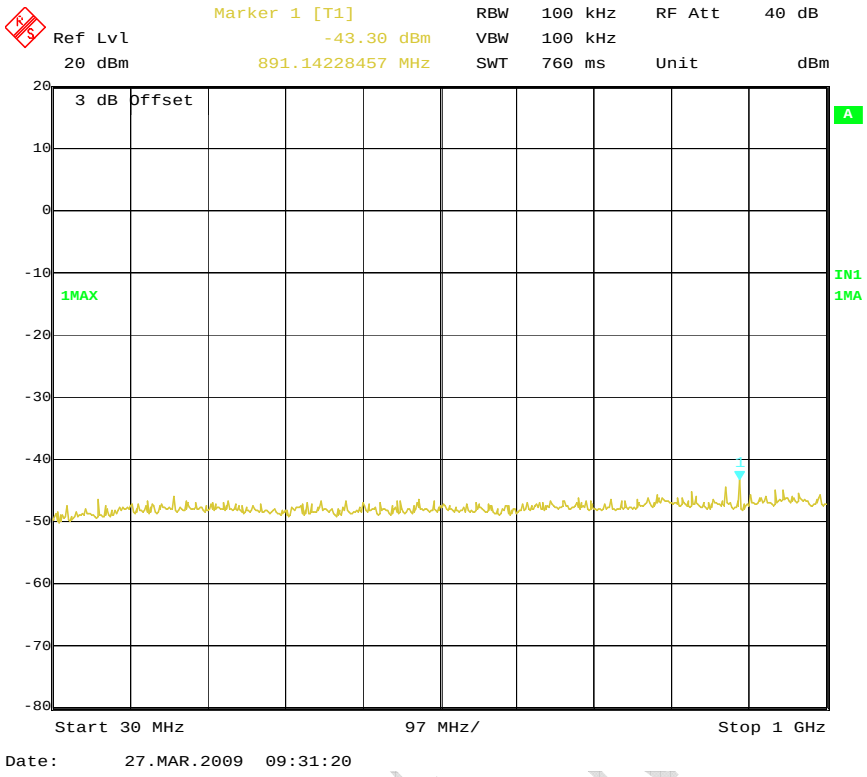
802.11b, channel 1, 11 Mbps, 1GHz~6GHz



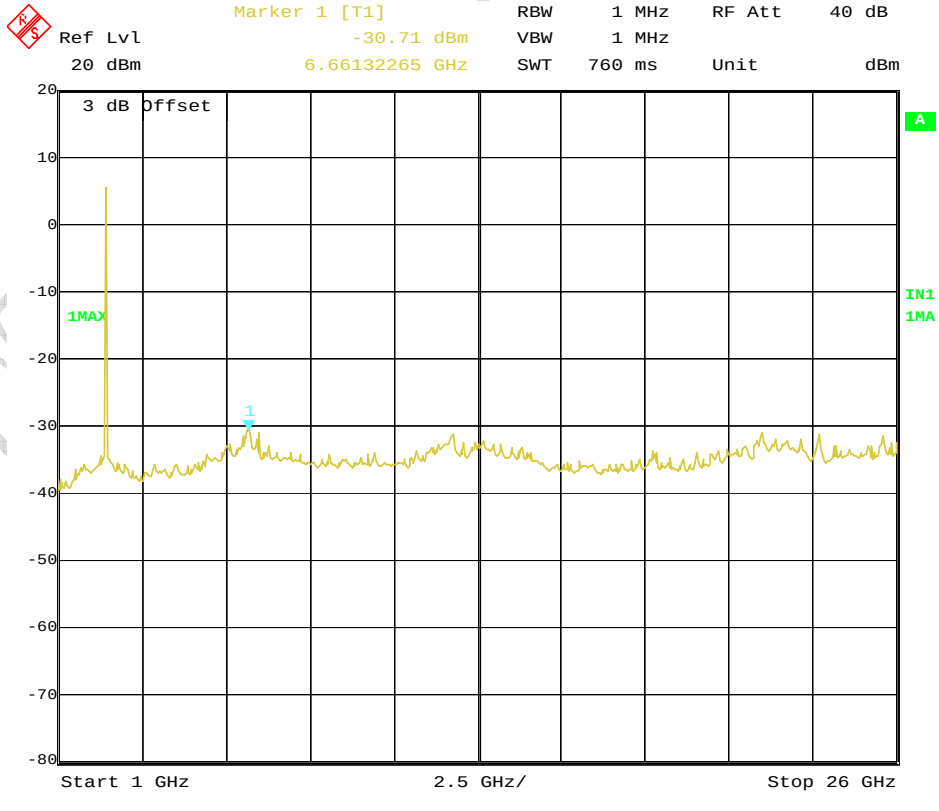
802.11g, channel 1, 6 Mbps, 30MHz~1GHz



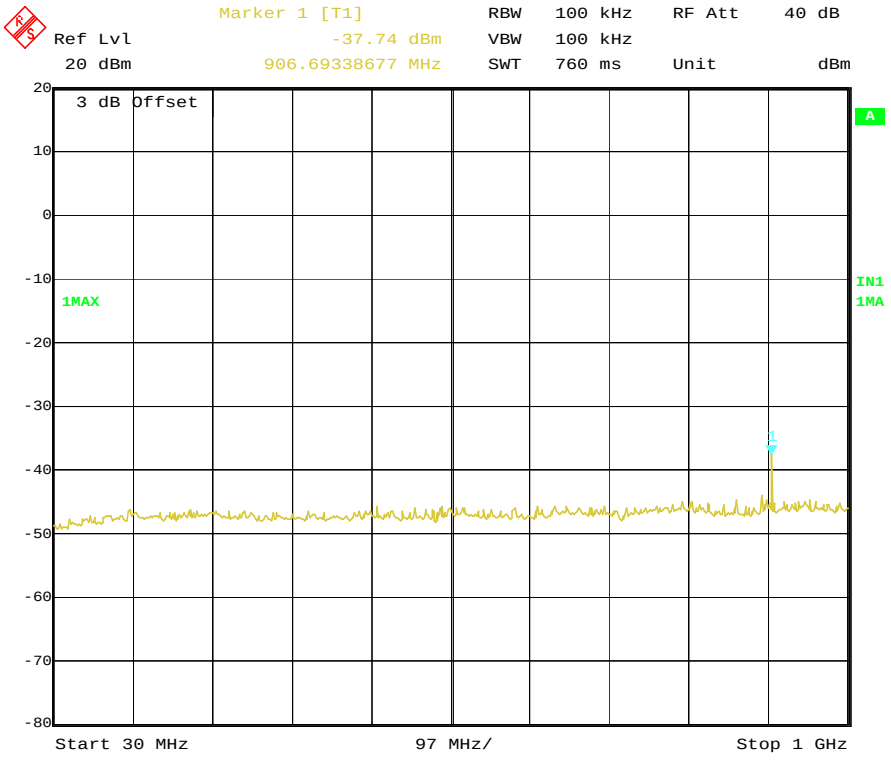
802.11g, channel 1, 6 Mbps, 1GHz~6GHz



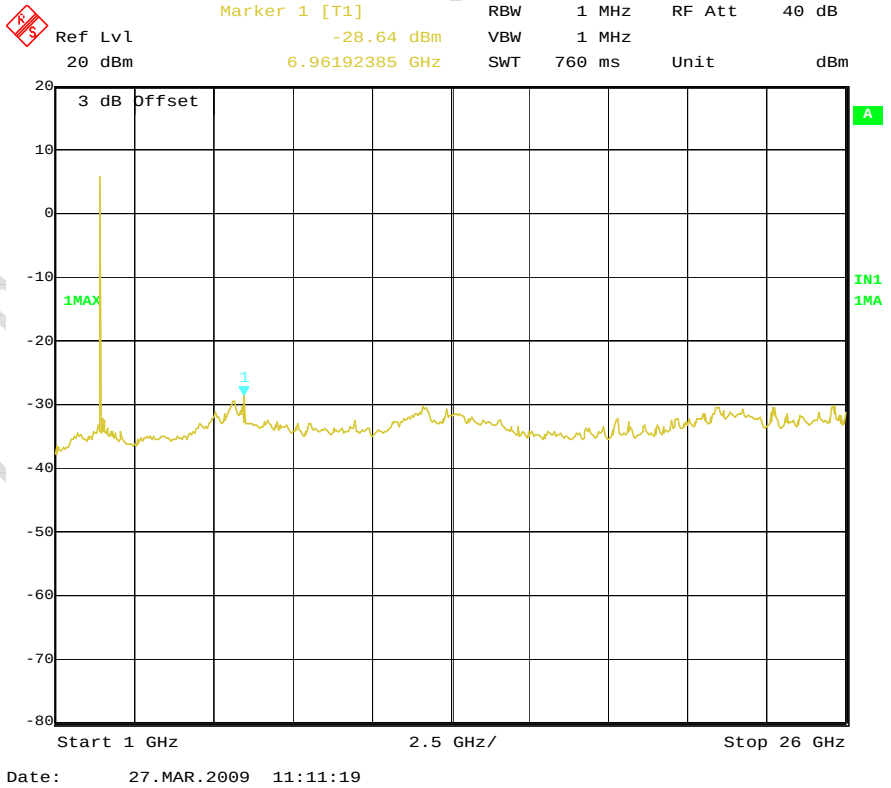
802.11g, channel 1, 24 Mbps, 30MHz~1GHz



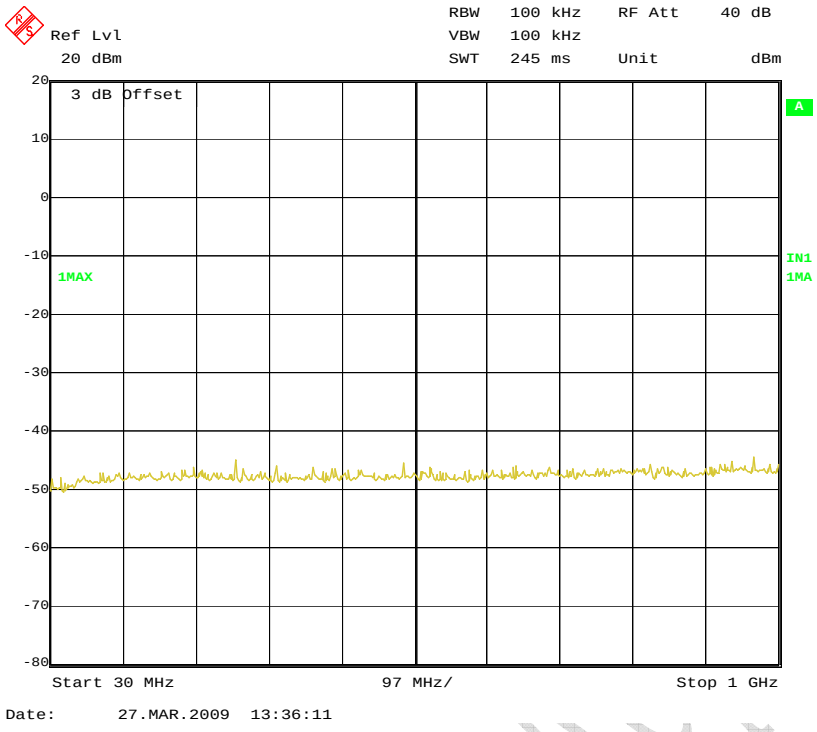
802.11g, channel 1, 24 Mbps, 1GHz~6GHz



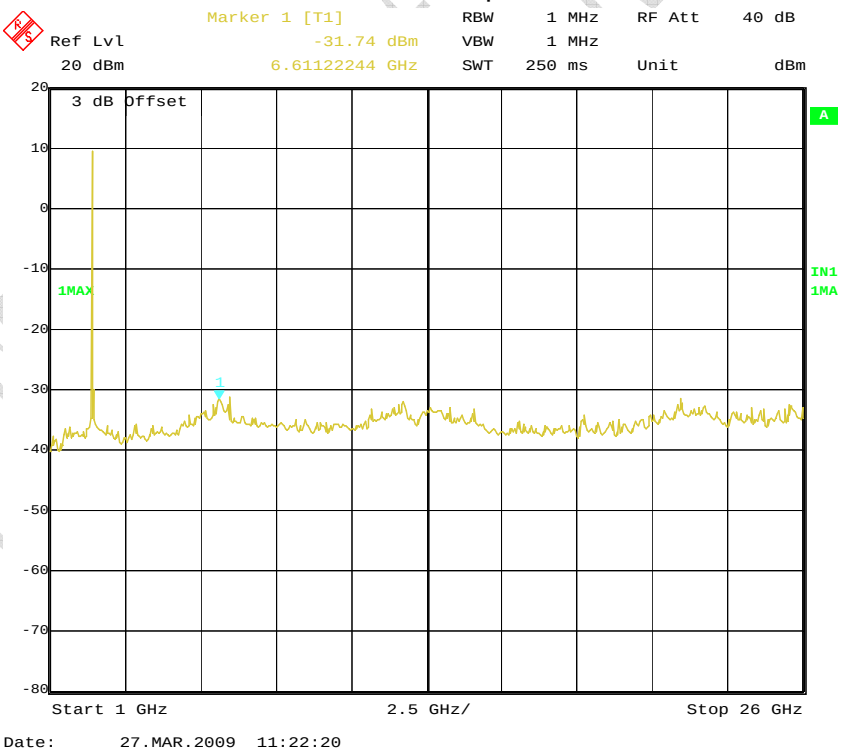
802.11g, channel 1, 54 Mbps, 30MHz~1GHz



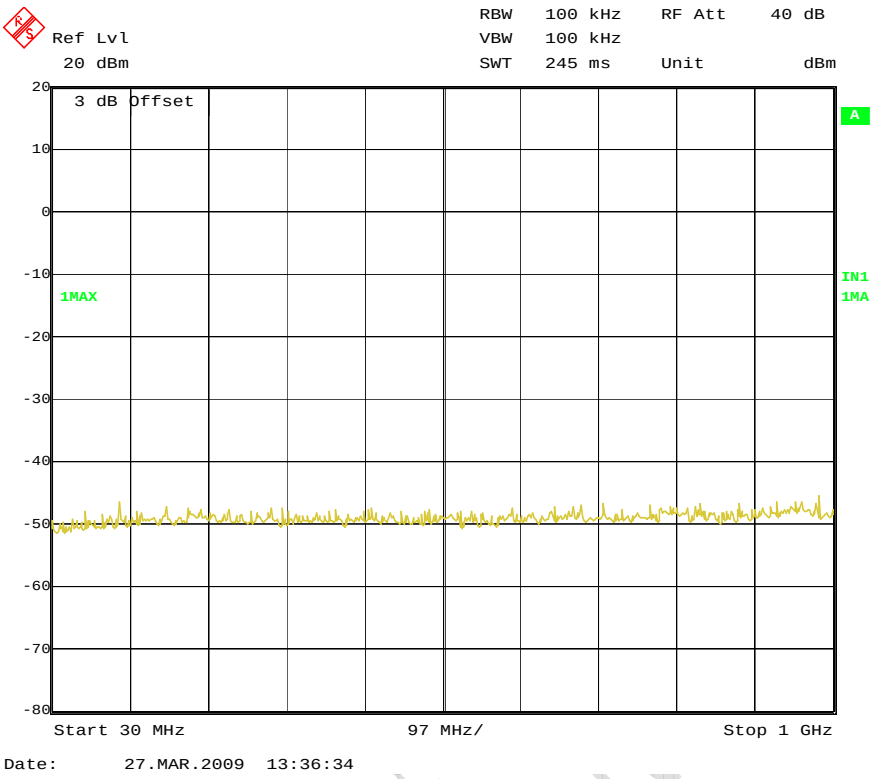
802.11g, channel 1, 54 Mbps, 1GHz~6GHz



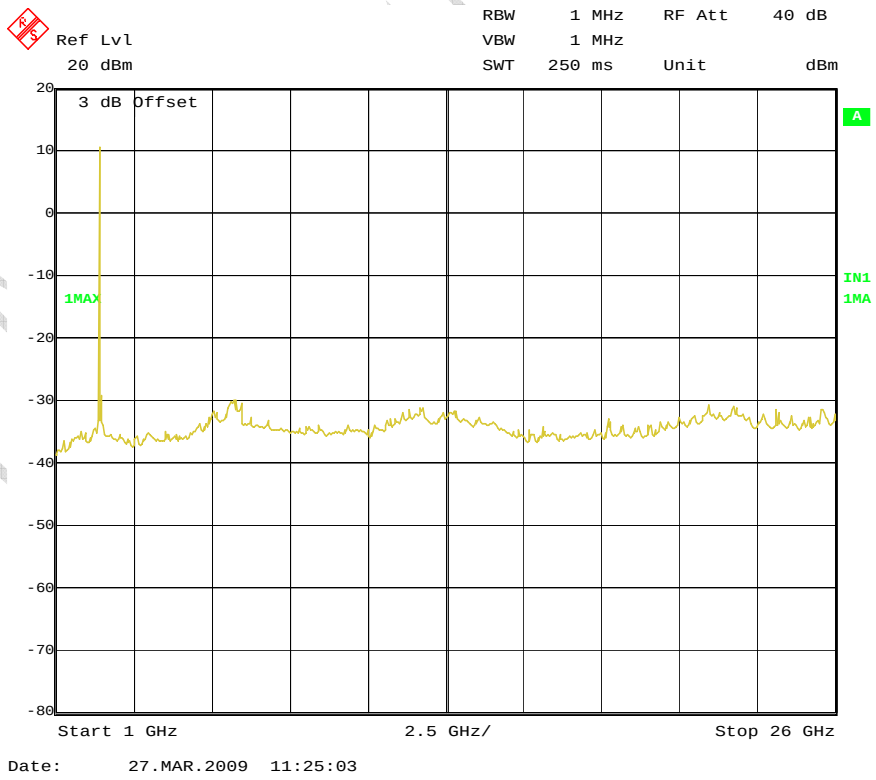
802.11b, channel 6, 1 Mbps, 30MHz~1GHz



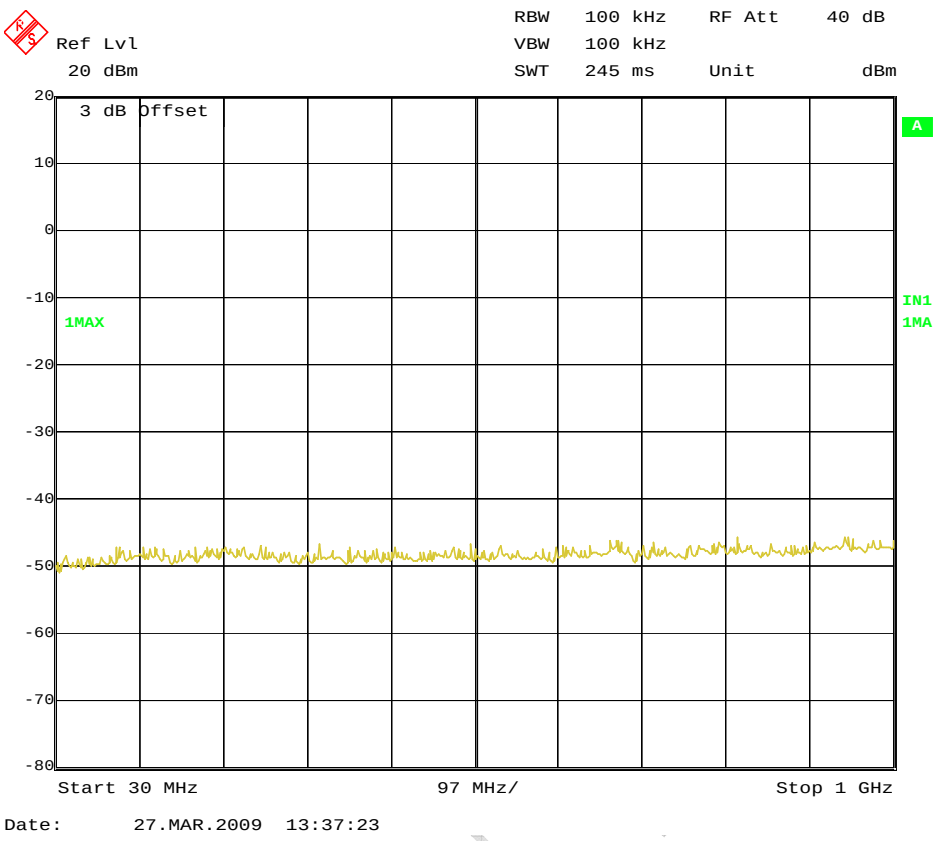
802.11b, channel 6, 1 Mbps, 1GHz~6GHz



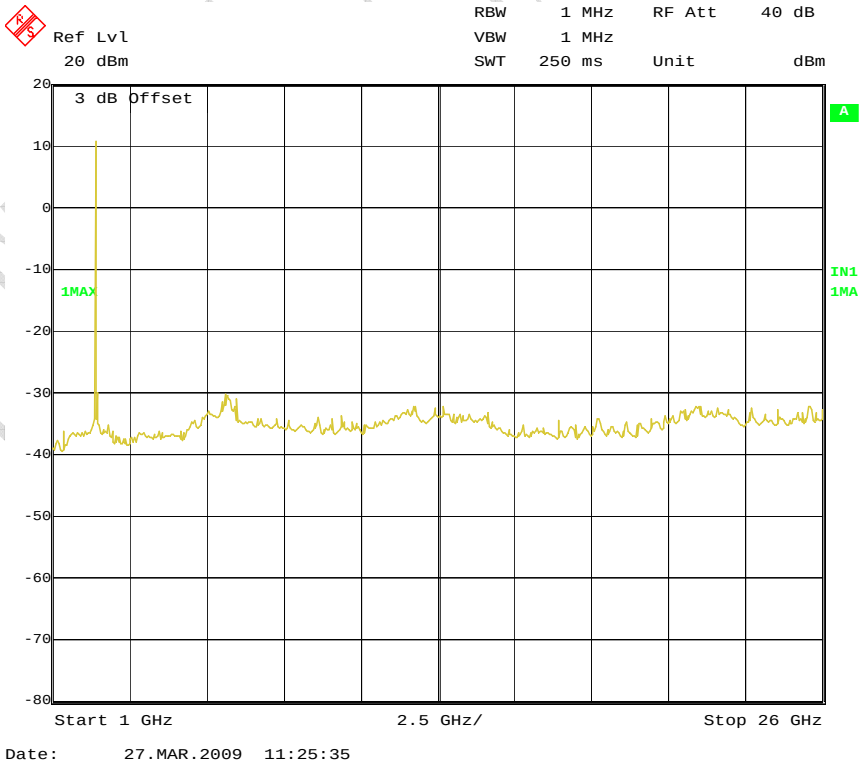
802.11b, channel 6, 5.5 Mbps, 30MHz~1GHz



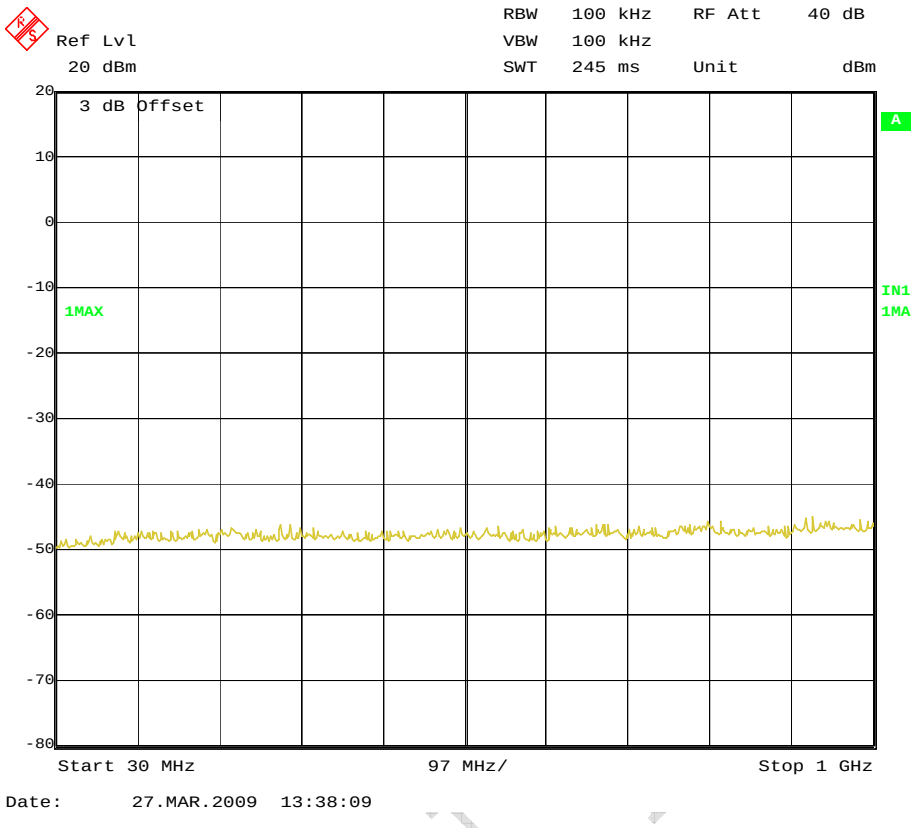
802.11b, channel 6, 5.5 Mbps, 1GHz~6GHz



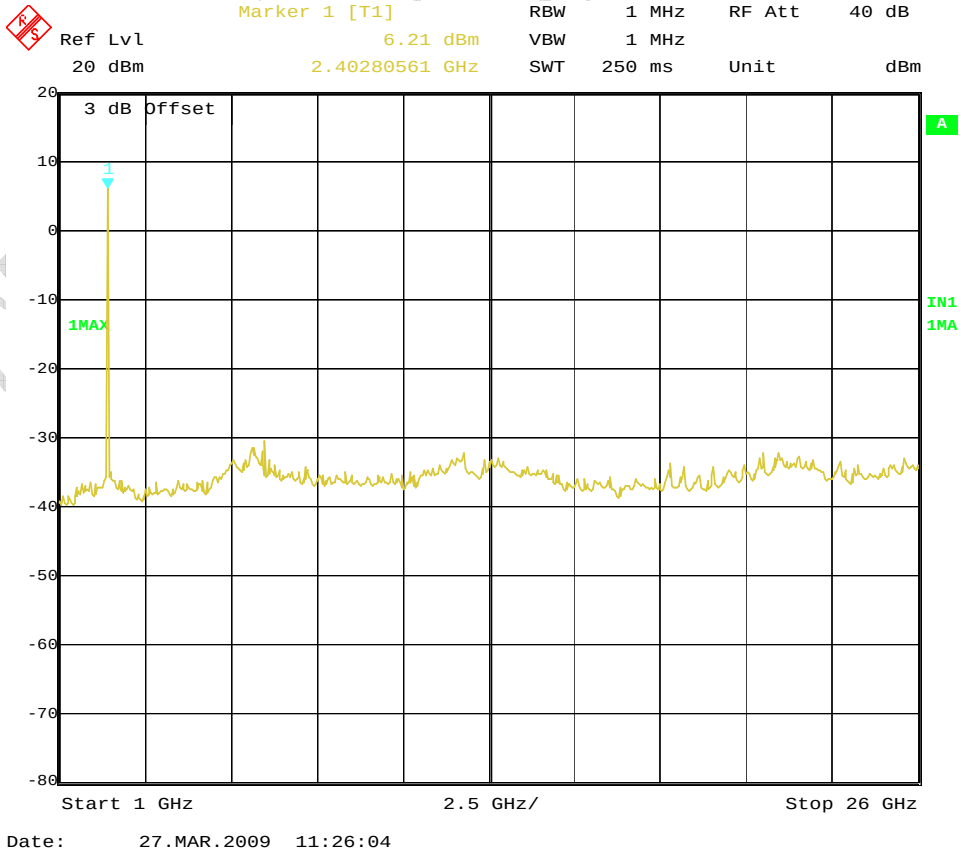
802.11b, channel 6, 11 Mbps, 30MHz~1GHz



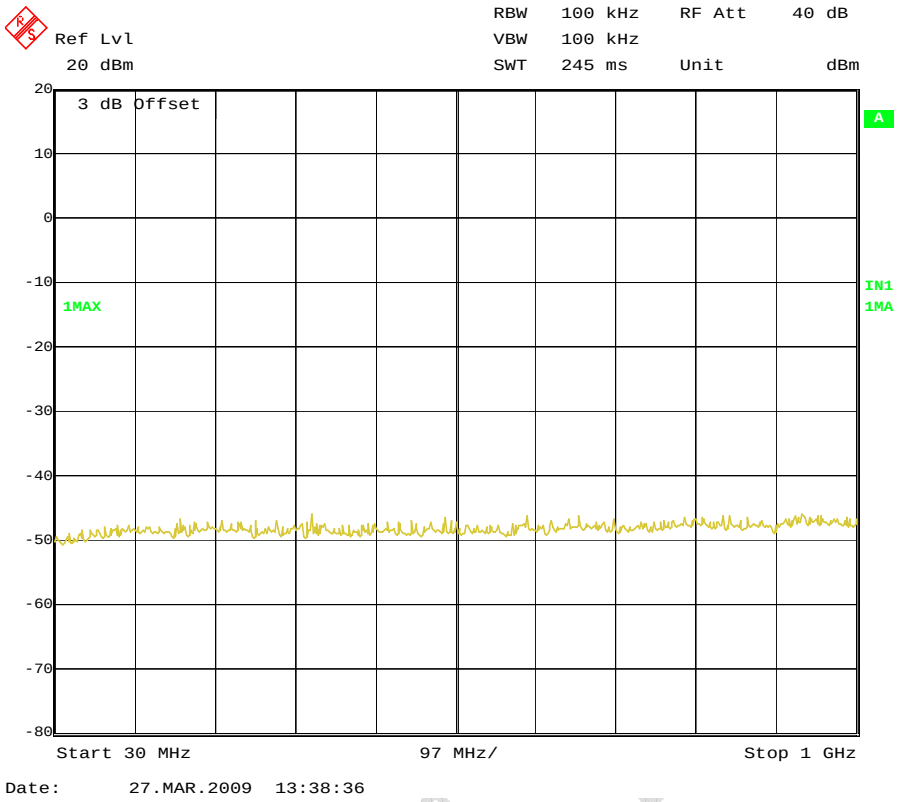
802.11b, channel 6, 11 Mbps, 1GHz~6GHz



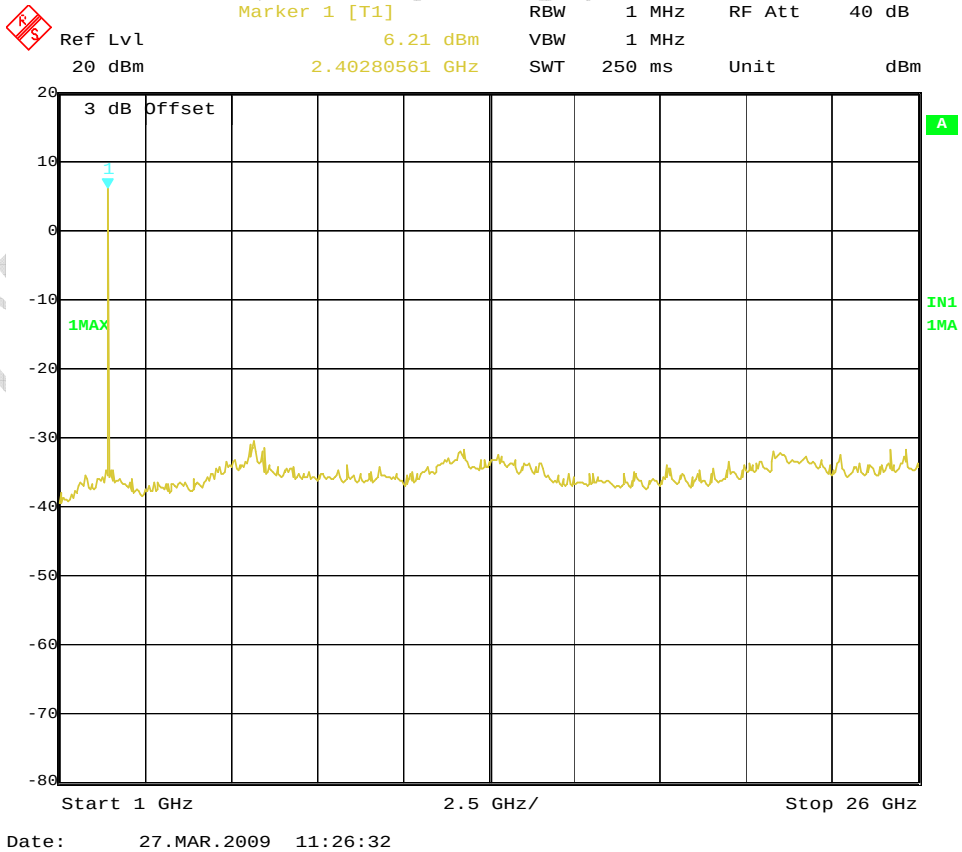
802.11g, channel 6, 6 Mbps, 30MHz~1GHz



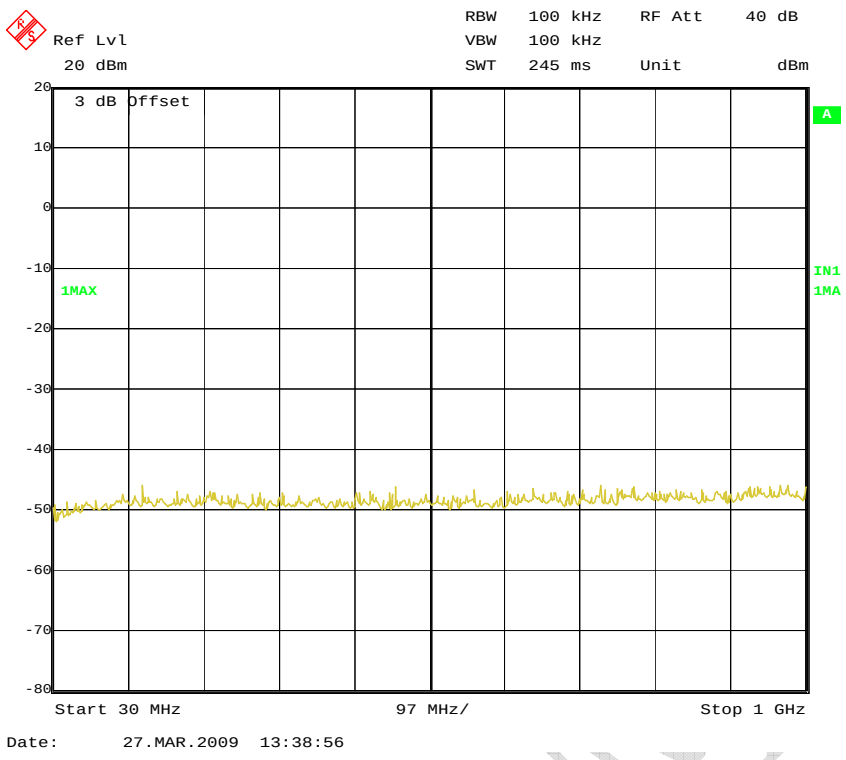
802.11g, channel 6, 6 Mbps, 1GHz~6GHz



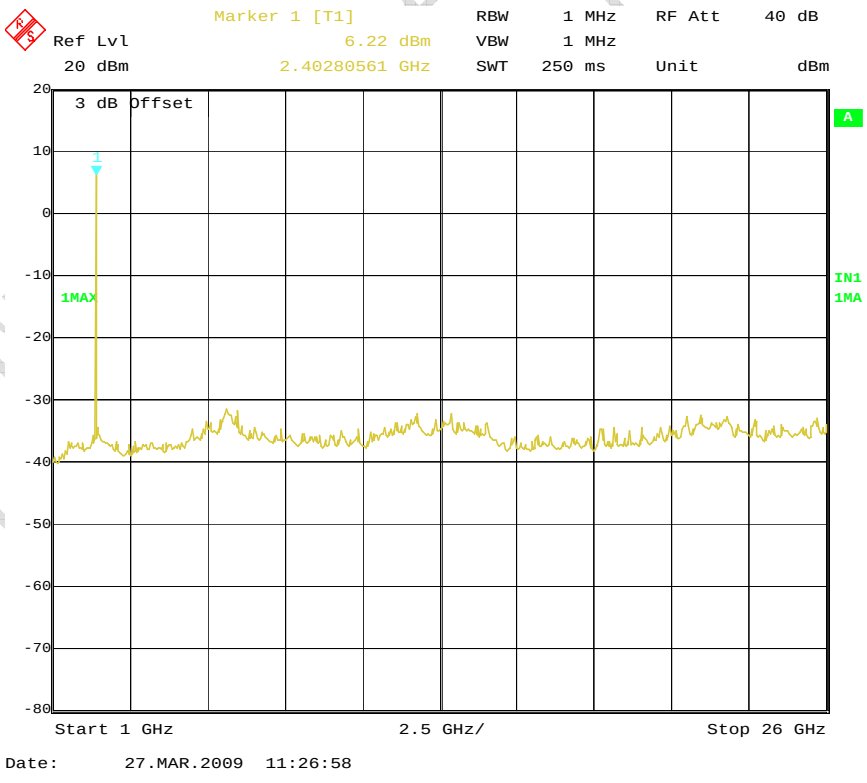
802.11g, channel 6, 24 Mbps, 30MHz~1GHz



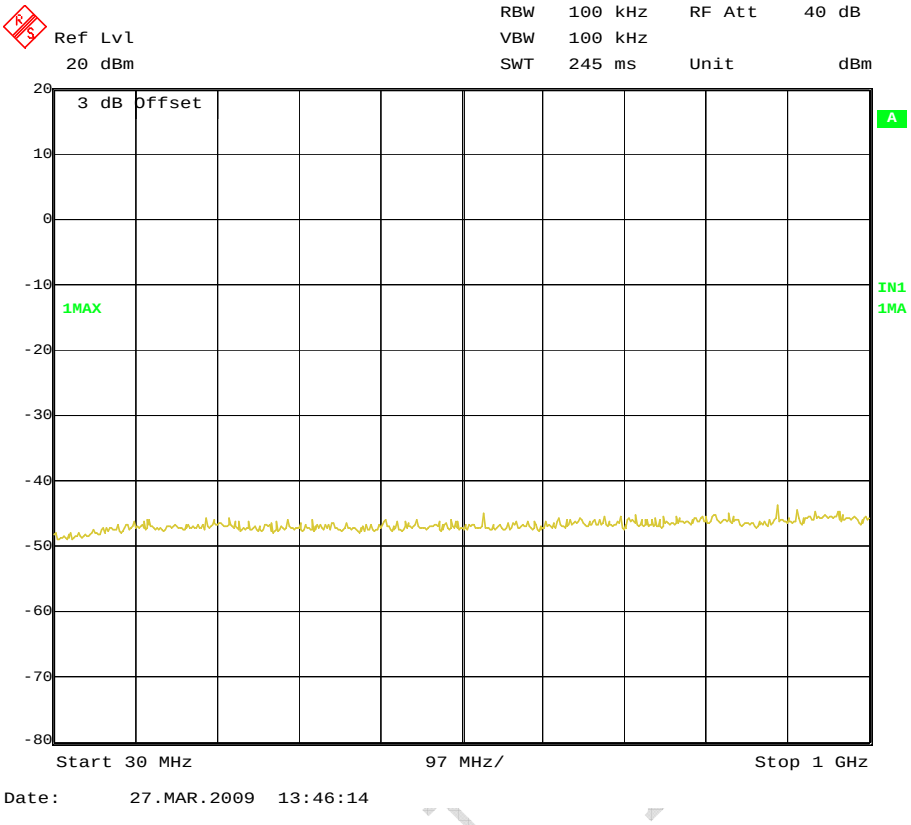
802.11g, channel 6, 24 Mbps, 1GHz~6GHz



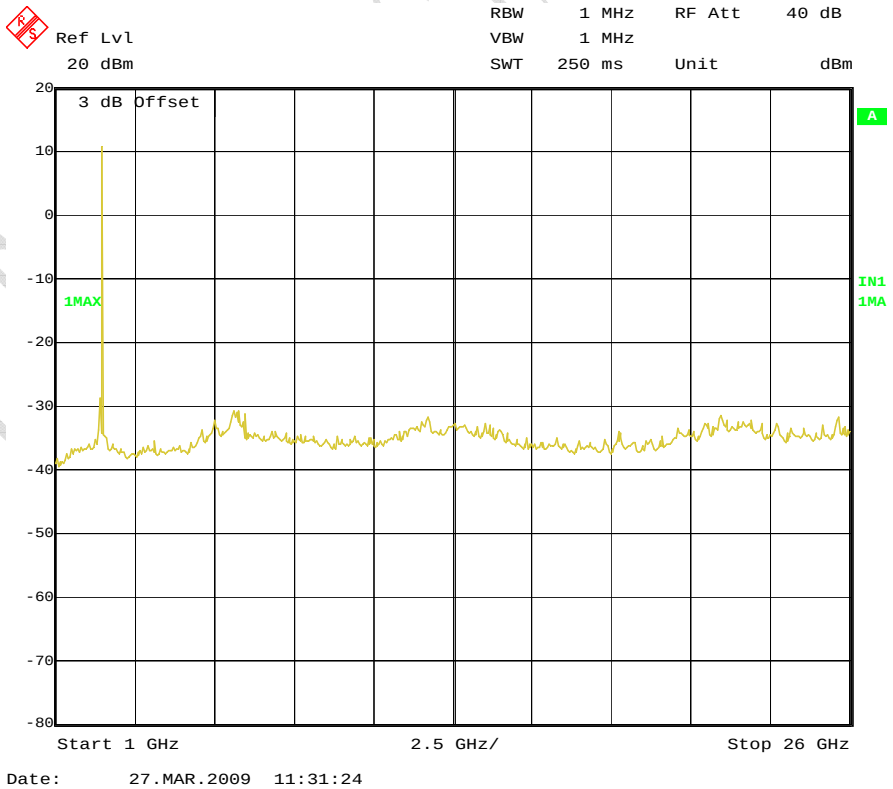
802.11g, channel 6, 54 Mbps, 30MHz~1GHz



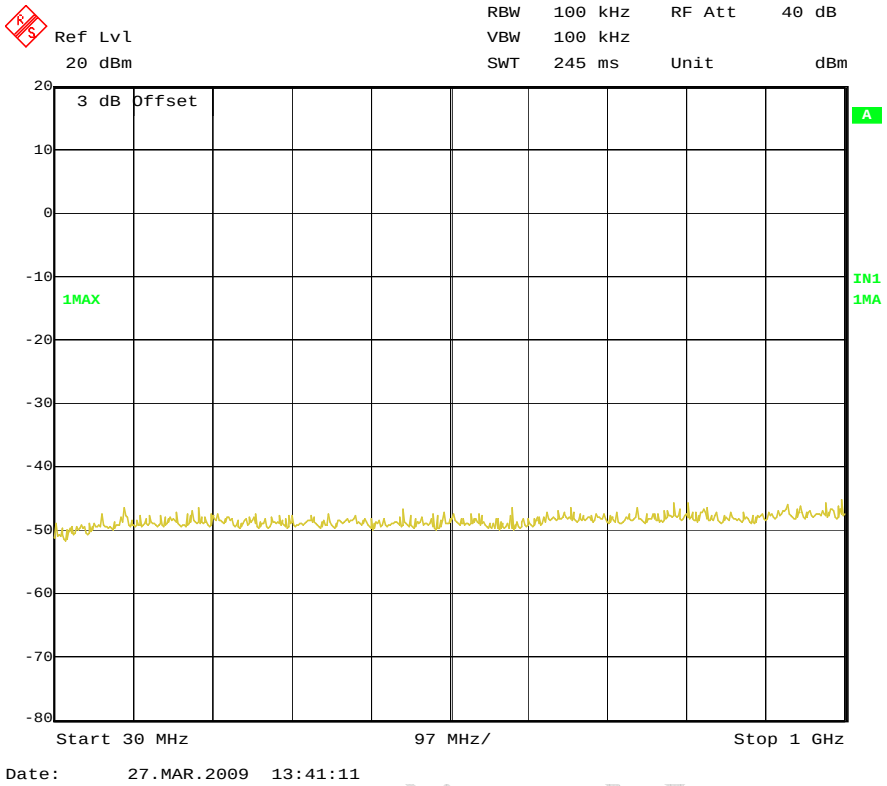
802.11g, channel 6, 54 Mbps, 1GHz~6GHz



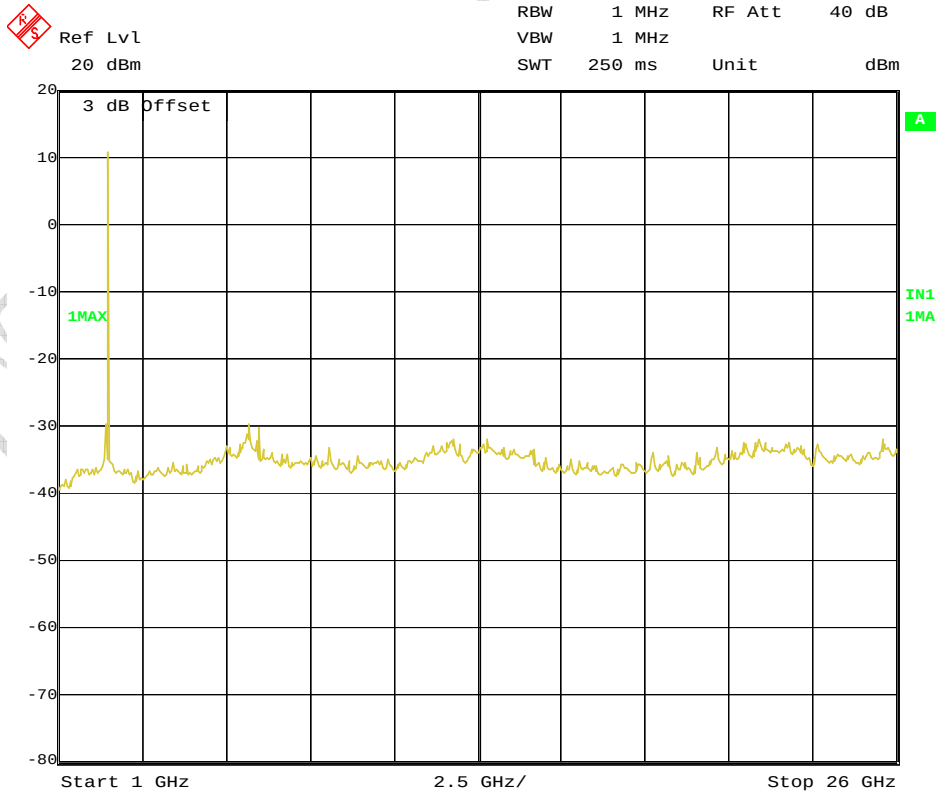
802.11b, channel 11, 1 Mbps, 30MHz~1GHz



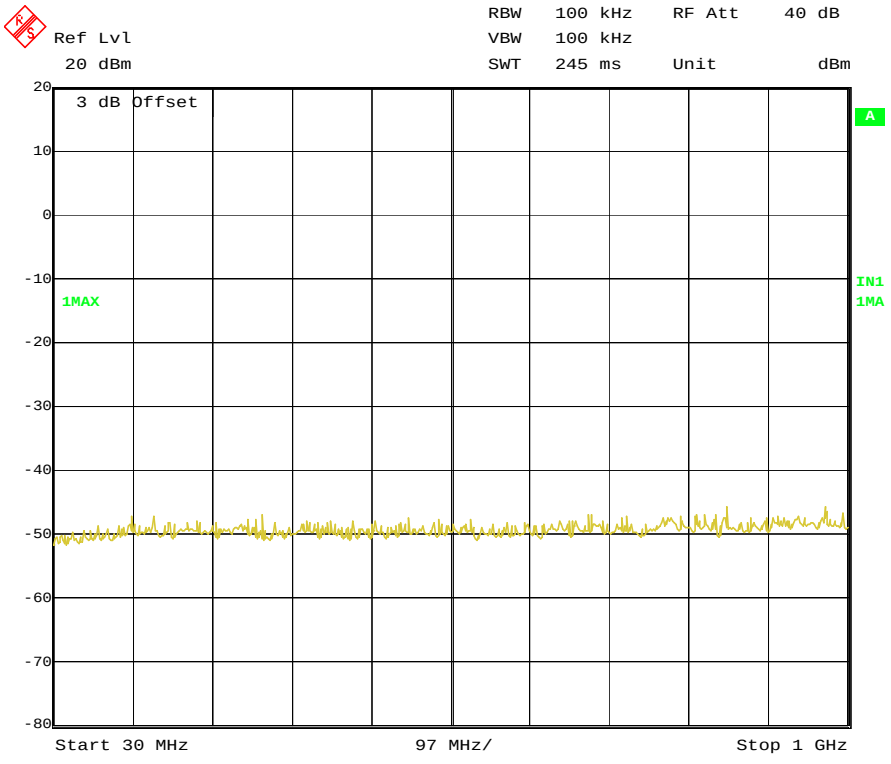
802.11b, channel 11, 1 Mbps, 1GHz~6GHz



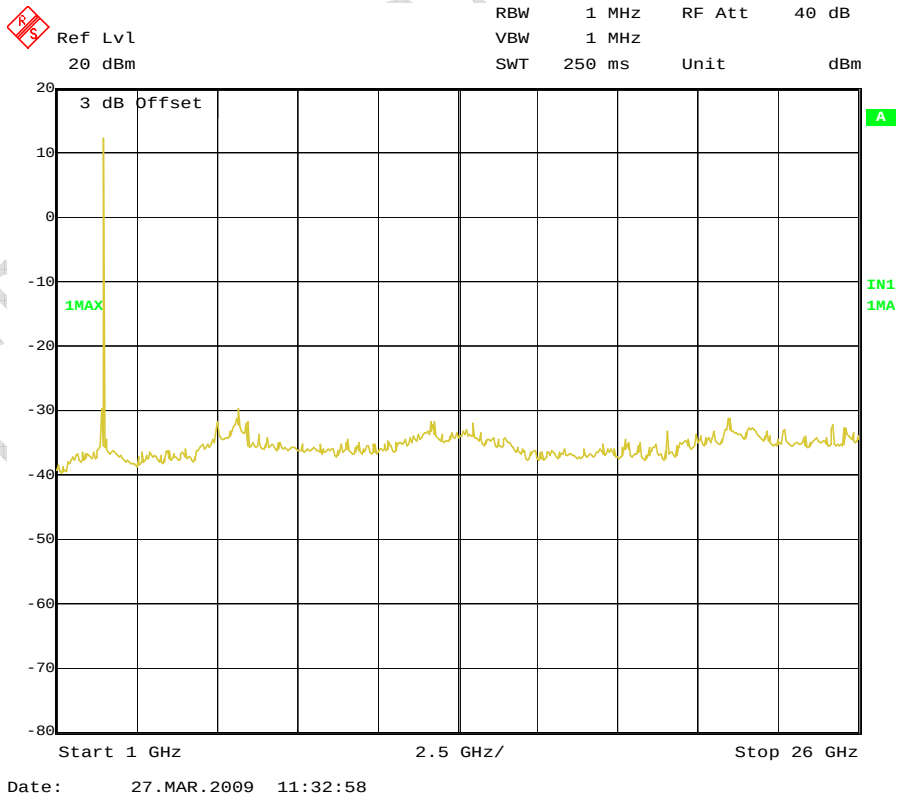
802.11b, channel 11, 5.5 Mbps, 30MHz~1GHz



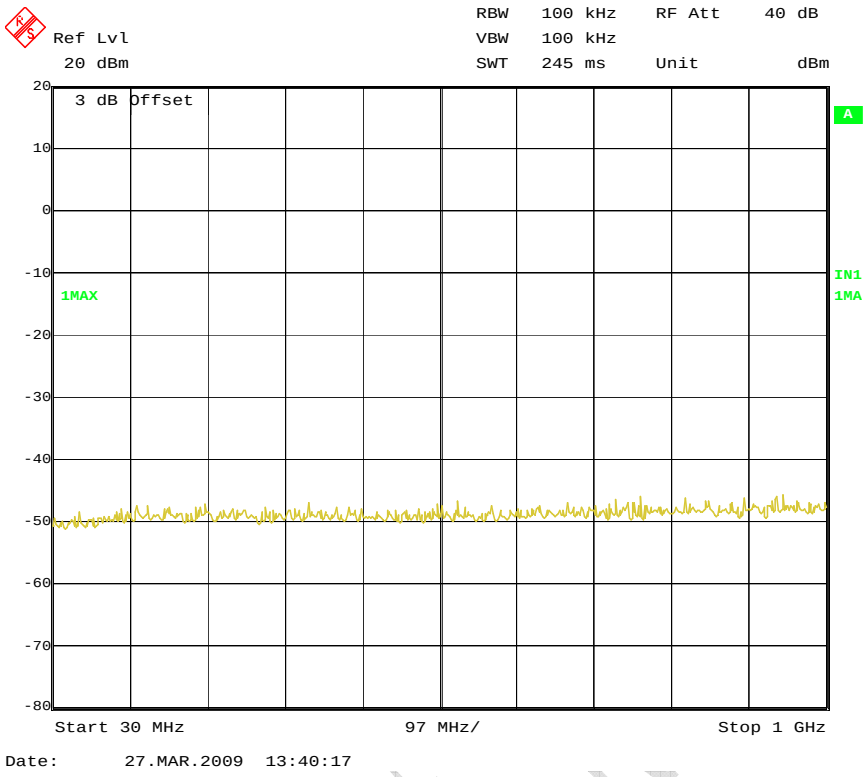
802.11b, channel 11, 5.5 Mbps, 1GHz~6GHz



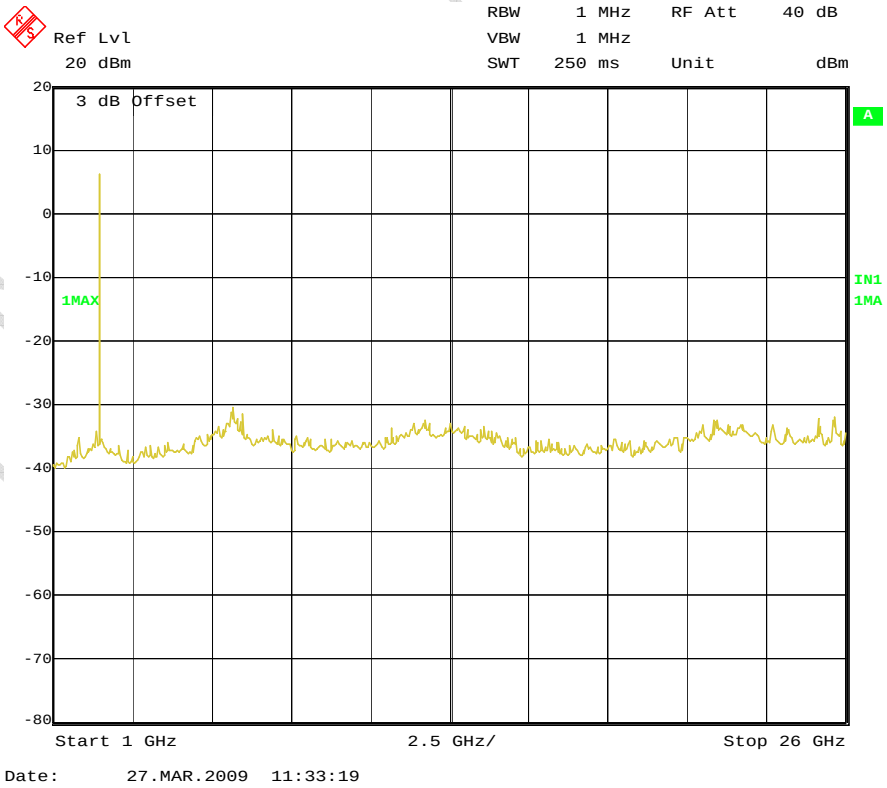
802.11b, channel 11, 11 Mbps, 30MHz~1GHz



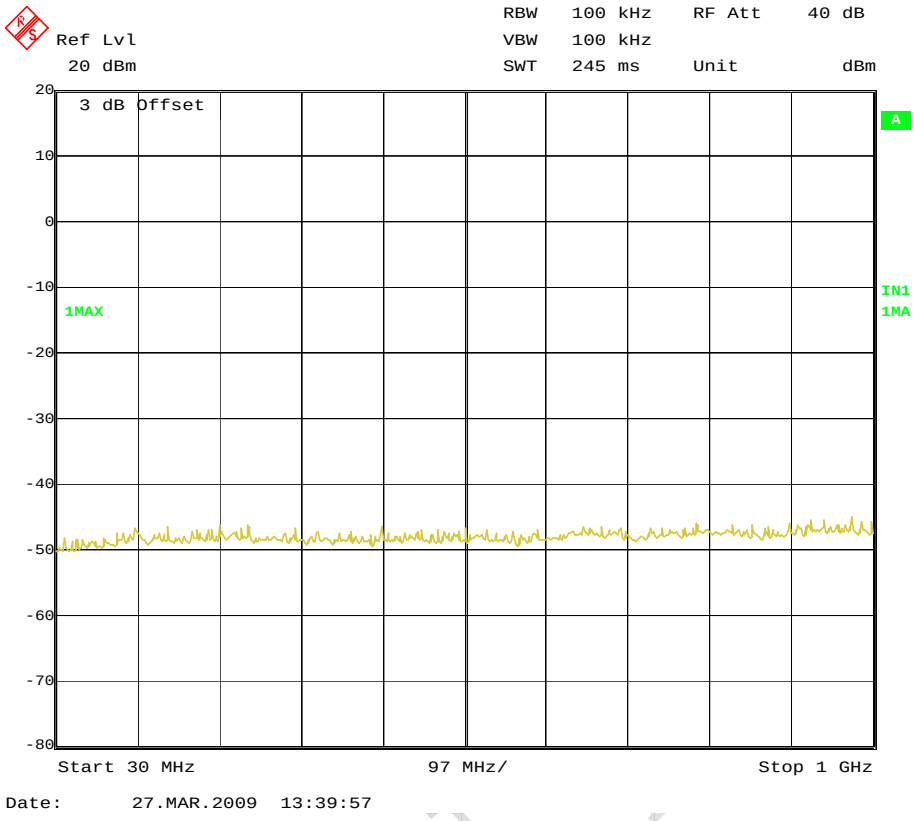
802.11b, channel 11, 11 Mbps, 1GHz~6GHz



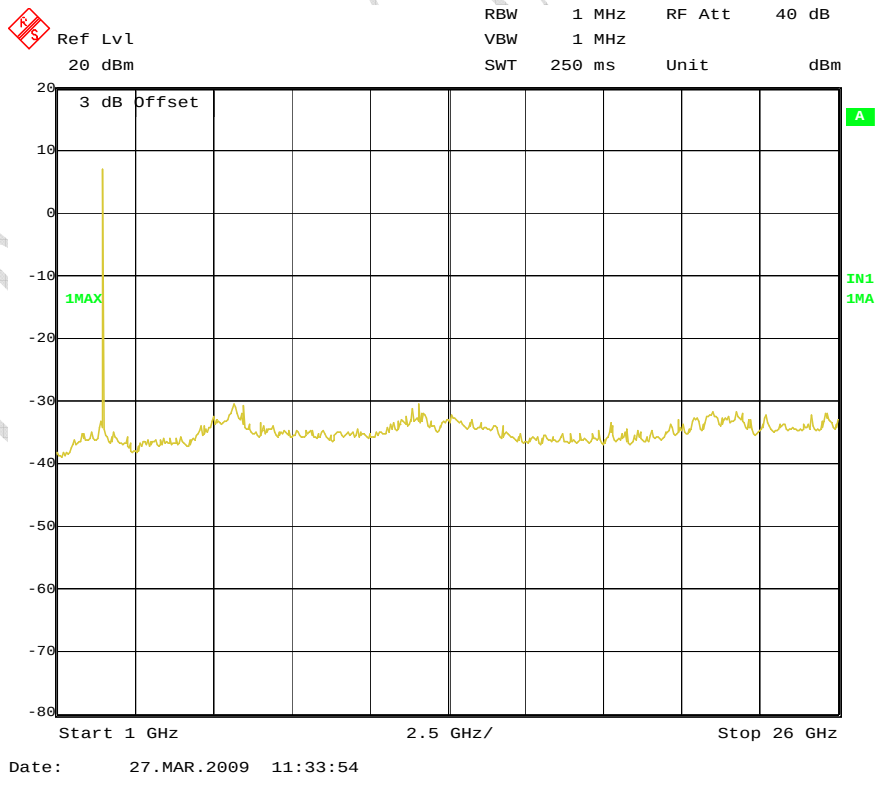
802.11g, channel 11, 6 Mbps, 30MHz~1GHz



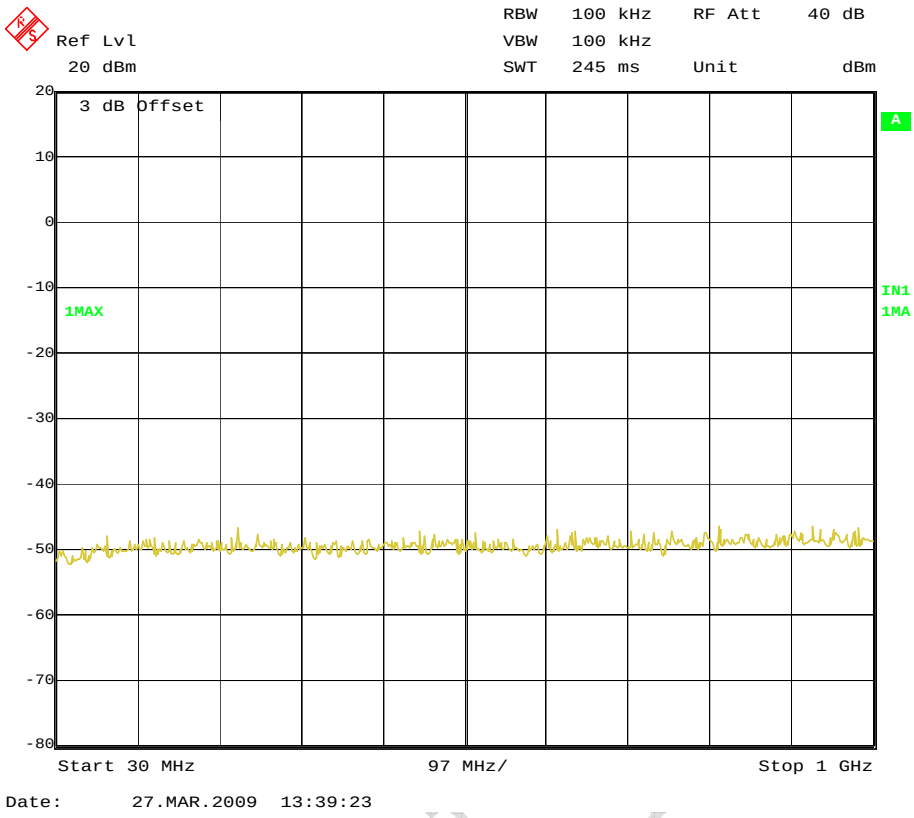
802.11g, channel 11, 6 Mbps, 1GHz~6GHz



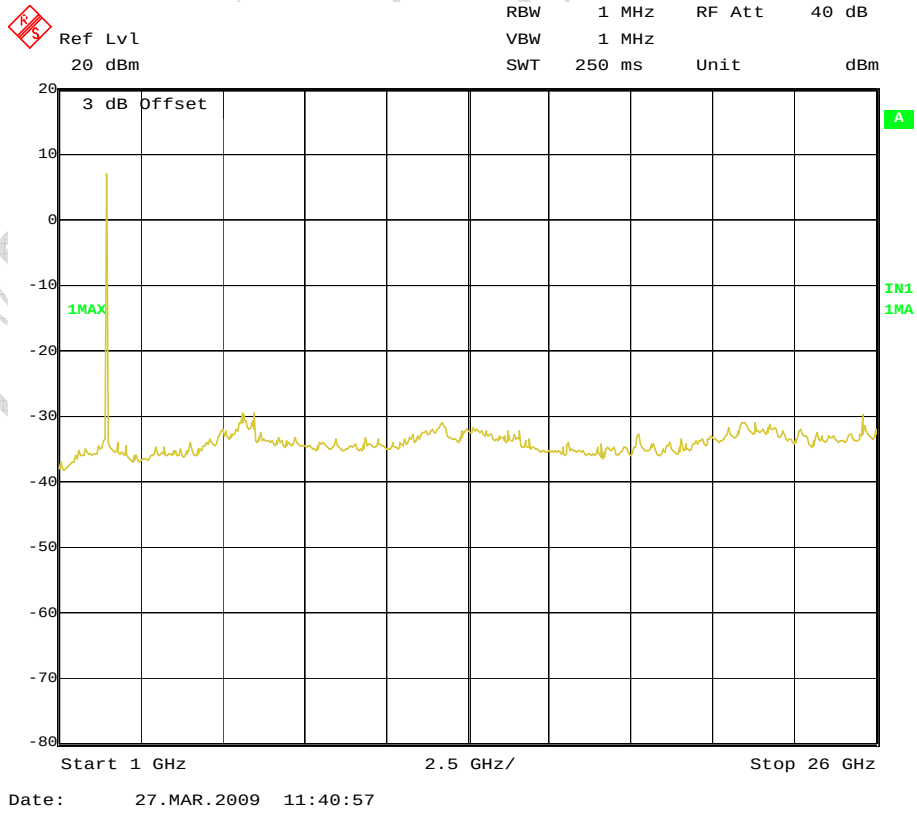
802.11g, channel 11, 24 Mbps, 30MHz~1GHz



802.11g, channel 11, 24 Mbps, 1GHz~6GHz



802.11g, channel 11, 54 Mbps, 30MHz~1GHz



802.11g, channel 11, 54 Mbps, 1GHz~6GHz

Annex A EUT Photos

Front view

Back view

Adaptor face

Adaptor back

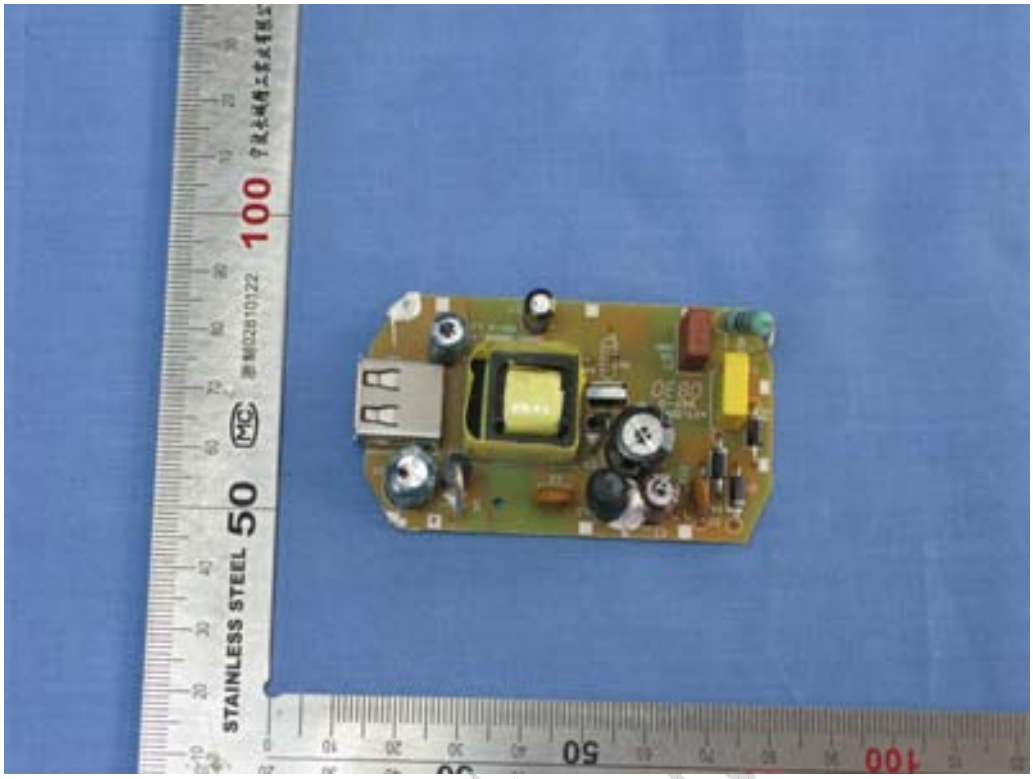
cable

Adaptor connector

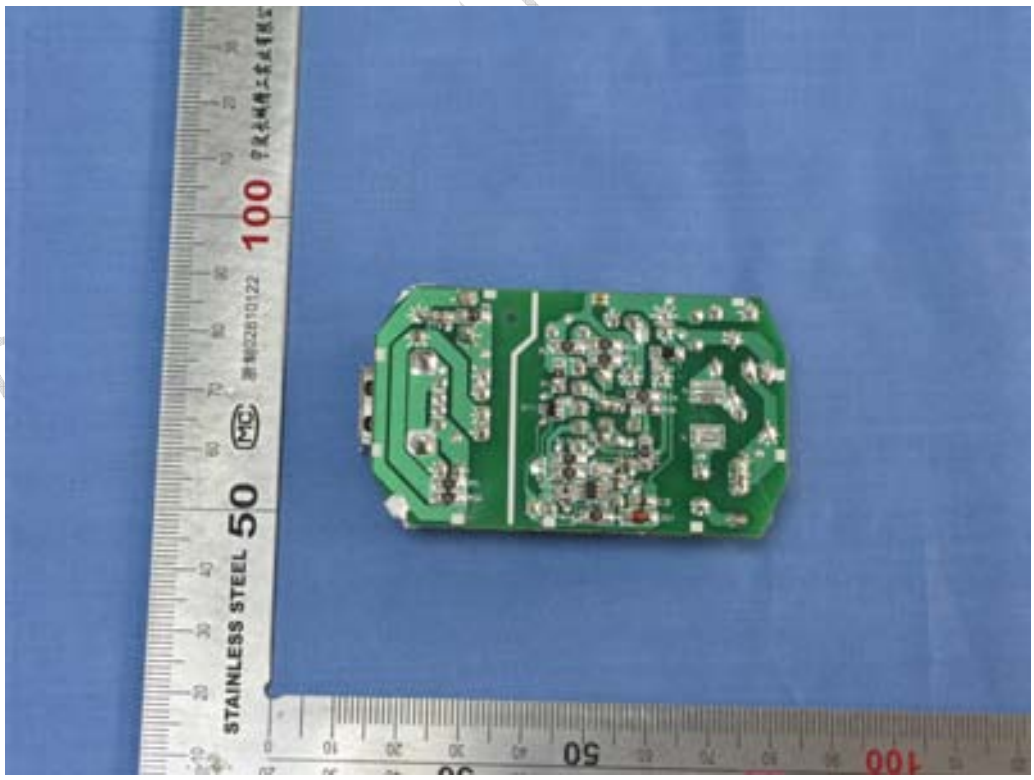
Annex B Internal Photos

Main board (face)

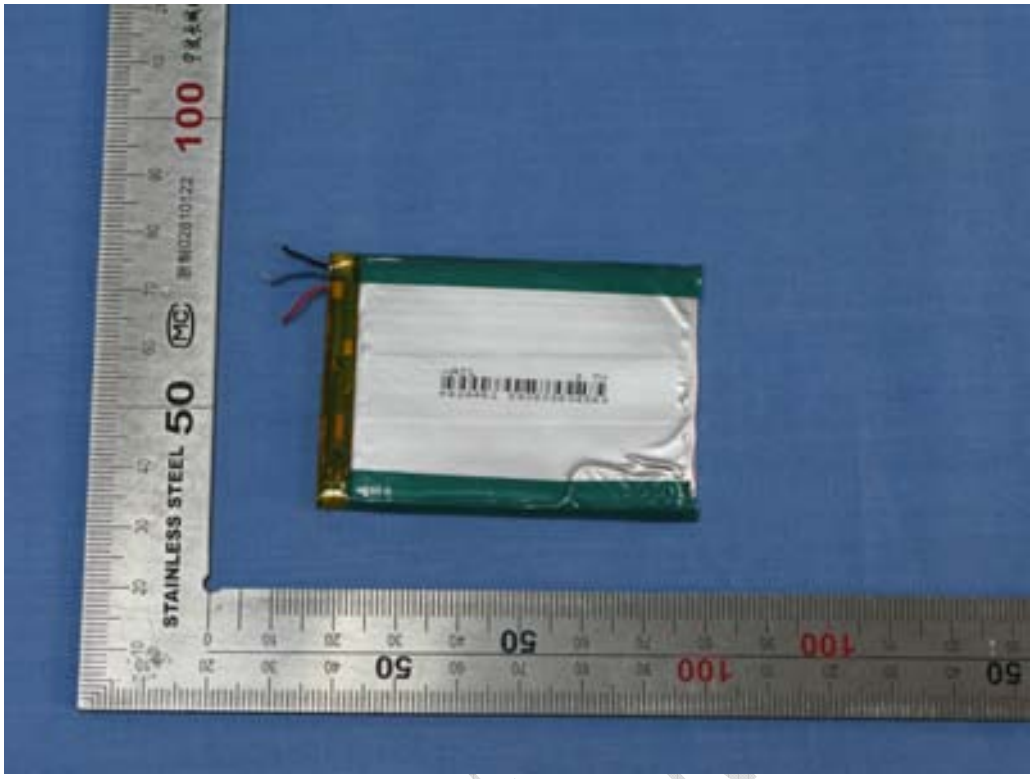
Main board (back)



Adaptor（face）



Adaptor（back）



Battery

Shell

Shell

ANNEX C Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

The End of this Report