FCC PART 15C
TEST REPORT
No. 2012WLN0388

for

TCT Mobile Limited

HSDPA/HSUPA/UMTS dual band / GSM quad bands mobile phone

Type: Medoc Lite US

Market Name: ONE TOUCH 983A

With

FCC ID: RAD283

Hardware Version: PIO

Software Version: V526

Issued Date: 2012-08-16

Deutscher Akkreditierungs Rat

***No.* DGA-PL-114/01-02**

DAR accreditation (DIN EN ISO/IEC 17025): No. DGA-PL-114/01-02

FCC 2.948 Listed: No.733176

IC O.A.T.S listed: No.6629A-1

Note: The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of TMC Beijing.

Test Laboratory:

TMC Beijing, Telecommunication Metrology Center of Ministry of Industry and Information Technology

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CONTENTS

1. TEST LABORATORY

1.1. Testing Location

Company Name:	TMC Beijing, Telecommunication Metrology Center of MIIT
Address:	No. 52, Huayuan Bei Road, Haidian District, Beijing, P. R. China
Postal Code:	100191
Telephone:	00861062304633
Fax:	00861062304793

1.2. Testing Environment

Normal Temperature:	15-30℃
Extreme Temperature:	-10/+55℃
Relative Humidity:	30-60%
Air Pressure	990hPa-1040hPa

Note:The climatic requirements above are general exclude the special requirements for dedicated test environments listed in section 5 and some specific test cases in other parts of this report.

1.3. Project data

Testing Start Date:	2012-07-10
Testing End Date:	2012-08-16

1.4. Signature

Sun Zhenyu

(Prepared this test report)

Gao Hong

(Reviewed this test report)

Xiao Li

Deputy Director of the laboratory

(Approved this test report)

2. CLIENT INFORMATION

2.1. Applicant Information

Company Name:	TCT Mobile Limited
Address /Post:	5F, E building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203
City:	Shanghai
Country:	China
Contact	Gong Zhizhou
Email	zhizhou.gong @jrdcom.com
Telephone:	0086-21-6146089
Fax:	0086-21-61460602

2.2. Manufacturer Information

Company Name:	TCT Mobile Limited
Address /Post:	5F, E building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203
City:	Shanghai
Country:	China
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Telephone:	0086-21-6146089
Fax:	0086-21-61460602

3. EQUIPMENT UNDER TEST(EUT) AND ANCILLARY EQUIPMENT(AE)

3.1. About EUT

Description	HSDPA/HSUPA/UMTS dual band / GSM quad bands mobile phone
Type	Medoc Lite US
Market name	ONE TOUCH 983A
FCC ID	RAD283
IC ID	/
With WLAN Function	Yes
Frequency Range	ISM 2400MHz~2483.5MHz
Type of Modulation	DSSS/CCK/OFDM
Number of Channels	11
Antenna	Integral Antenna
MAX Conducted Power	22.61dBm(CCK)
Power Supply	3.9V DC by Battery

Note: Photographs of EUT are shown in ANNEX C of this test report.

3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version
EUT1	013301000042702	PIO	V526
EUT2	013301000041506	PIO	V526

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Type	SN
AE1	Battery	CAB31P0000C1	/
AE2	Traveller Charger	CBA3002AG0C1	/
AE3	Traveller Charger	CBA3002AG0C3	/

*AE ID: is used to identify the test sample in the lab internally.

3.4. General Description

Equipment Under Test (EUT) is a model of HSDPA/HSUPA/UMTS dual band / GSM quad bands mobile phone with integrated antenna. It consists of normal options: Battery and Charger.
Manual and specifications of the EUT were provided to fulfil the test.
Samples undergoing test were selected by the Client.

4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. REFERENCE DOCUMENTS FOR TESTING

The following documents listed in this section are referred for testing.

FCC Part15	FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902-928MHz, 2400-2483.5 MHz, and 5725-5850 MHz.	Oct, 2009 Edition
ANSI C63.4	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2009
KDB558074 D01	Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247	January 18, 2012

5. LABORATORY ENVIRONMENT

Shielding Room1 (6.0 meters×3.0 meters×2.7 meters) did not exceed following limits along the conducted RF performance testing:

Temperature	Min. = 15 ℃, Max. = 30 ℃
Relative humidity	Min. = 30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Ground system resistance	< 0.5 Ω
Uniformity of field strength	Between 0 and 6 dB, from 80MHz to 3000 MHz

Control room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. =30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω

Semi-anechoic chamber (23 meters×17meters×10meters) did not exceed following limits along the EMC testing::

Temperature	Min. = 15 ℃, Max. = 30 ℃
Relative humidity	Min. = 30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω
Normalised site attenuation (NSA)	< ±3.2 dB, 10 m distance, from 30 to 1000 MHz
Uniformity of field strength	Between 0 and 6 dB, from 80MHz to 3000 MHz

Shielding Room2 (7.30 meters×4.00 meters×3.80 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 30 ℃
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω
Uniformity of field strength	Between 0 and 6 dB, from 80MHz to 3000 MHz

6. SUMMARY OF TEST RESULTS

6.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15C	Sub-clause of IC	Verdict
Maximum Peak Output Power	15.247 (a)	/	P
Peak Power Spectral Density	15.247 (d)	/	P
Occupied 6dB Bandwidth	15.247 (d)	/	P
Band Edges Compliance	15.247 (b)	/	P
Transmitter Spurious Emission - Conducted	15.247	/	P
Transmitter Spurious Emission - Radiated	15.247, 15.205, 15.209	/	P
AC Powerline Conducted Emission	15.107, 15.207	/	P

Please refer to **ANNEX A** for detail.

The measurement is made according to ANSI C63.4 and KDB558074 D01.

Terms used in Verdict column

P	Pass, The EUT complies with the essential requirements in the standard.
NP	Not Perform, The test was not performed by TMC
NA	Not Applicable, The test was not applicable
F	Fail, The EUT does not comply with the essential requirements in the standard

6.2. Statements

TMC has evaluated the test cases requested by the client/manufacturer as listed in section 6.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.1.

This report only deals with the WLAN function among the features described in section 3.

Test Conditions

T nom	Normal Temperature
T min	Low Temperature
T max	High Temperature
V nom	Normal Voltage
V min	Low Voltage
V max	High Voltage
H nom	Norm Humidity
A nom	Norm Air Pressure

For this report, all the test cases listed above are tested under Normal Temperature and Normal Voltage which is using a new battery, and also under norm humidity, the specific conditions as following:

Temperature	T nom	26℃
Voltage	V nom	3.9V(By battery)
Humidity	H nom	44%
Air Pressure	A nom	1010hPa

7. TEST EQUIPMENTS UTILIZED

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	2013-07-19
2	Spectrum Analyzer	MS2687B	6200819812	Anritsu	2012-09-22
3	Test Receiver	ESS	847151/015	Rohde & Schwarz	2012-10-30
4	LISN	ESH2-Z5	829991/012	Rohde & Schwarz	2013-08-12

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date
1	Test Receiver	ESI40	831564/002	Rohde & Schwarz	2013-08-11
2	BiLog Antenna	3142B	9908-1403	EMCO	2013-03-15
3	Dual-Ridge Waveguide Horn Antenna	3115	9906-5827	EMCO	2012-12-25
4	Dual-Ridge Waveguide Horn Antenna	3116	2661	EMCO	2013-06-30

Anechoic chamber

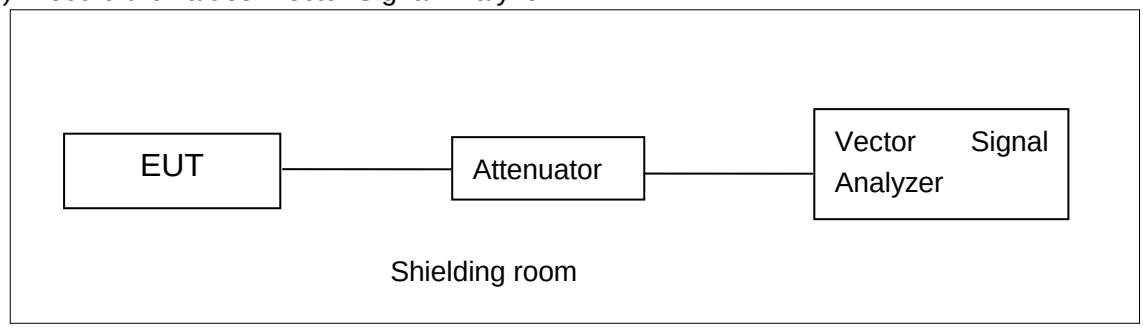
Anechoic chamber by Frankonia German.

ANNEX A: MEASUREMENT RESULTS

A.1. Measurement Method

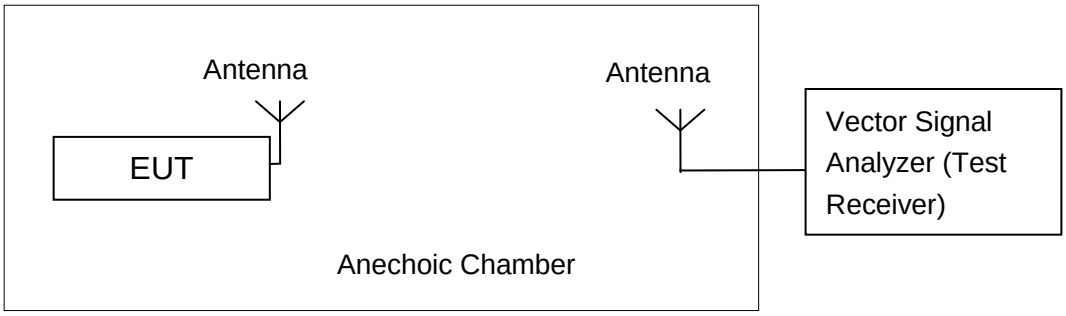
A.1.1. Conducted Measurements

1). Connect the EUT to the test system correctly.
2). Set the EUT to the required work mode.
3). Set the EUT to the required channel.
4). Set the spectrum analyzer to start measurement.
5). Record the values. Vector Signal Analyzer



A.1.2. Radiated Emission Measurements

In the case of radiated emission, the used settings are as follows,
Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz;
Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 10Hz;



The measurement is made according to ANSI C63.4 and KDB558074 D01.

A.2. Maximum Output Power

Measurement Limit and Method:

Standard	Limit (dBm)
FCC CRF Part 15.247(b)	< 30

The measurement is made according to ANSI C63.4 and KDB558074 D01, and EUT is operating in continuous transmitting mode.

Measurement Uncertainty:

Measurement Uncertainty	0.75dB

A.2.1. Maximum Peak Output Power-conducted

Measurement Results:

802.11b/g mode

Mode	Data Rate (Mbps)	Test Result (dBm)		
		2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)
802.11b	1	19.45	/	/
	2	19.72	/	/
	5.5	21.17	/	/
	11	22.58	22.58	22.61
802.11g	6	21.25	/	/
	9	21.18	/	/
	12	21.05		
	18	21.01	/	/
	24	21.53	21.55	21.65
	36	21.14	/	/
	48	21.46	/	/
	54	21.41	/	/

The data rate 11Mbps and 24Mbps are selected as worse condition, and the following cases are performed with this condition.

802.11n-HT20 mode

Mode	Data Rate (Index)	Test Result (dBm)		
		2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)
802.11n (20MHz)	MCS0	19.07	/	/
	MCS1	18.99	/	/
	MCS2	18.75	/	/
	MCS3	19.34	/	/
	MCS4	19.27	/	/
	MCS5	19.36	/	/
	MCS6	19.38	19.41	19.40

	MCS7	19.31	/	/

The data rate MCS6 is selected as worse condition, and the following cases are performed with this condition.

802.11n-HT40 mode

Mode	Data Rate (Index)	Test Result (dBm)		
		2422MHz (Ch3)	2437MHz (Ch6)	2452 MHz (Ch9)
802.11n (40MHz)	MCS0	/	/	/
	MCS1	/	/	/
	MCS2	/	/	/
	MCS3	/	/	/
	MCS4	/	/	/
	MCS5	/	/	/
	MCS6	/	/	/
	MCS7	/	/	/

A.2.2. Maximum Average Output Power-conducted

802.11b/g mode

Mode	Test Result (dBm)		
	2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)
802.11b	15.99	15.86	15.96
802.11g	12.66	12.57	12.62

802.11n-HT20 mode

Mode	Test Result (dBm)		
	2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)
802.11n (20MHz)	10.49	10.47	10.54

802.11n-HT40 mode

Mode	Test Result (dBm)		
	2422MHz (Ch3)	2437MHz (Ch6)	2452 MHz (Ch9)
802.11n (40MHz)	/	/	/

Conclusion: PASS

A.3. Peak Power Spectral Density

Measurement Limit:

Standard	Limit
FCC CRF Part 15.247(d)	< 8 dBm/3 kHz

The measurement is made according to ANSI C63.4 and KDB558074 D01.

Measurement Uncertainty:

Measurement Uncertainty	0.75dB

Measurement Results:

802.11b/g mode

Mode	Channel	Power Spectral Density (dBm/3 kHz)		Conclusion
802.11b	1	Fig.1	-6.22	P
	6	Fig.2	-6.19	P
	11	Fig.3	-6.14	P
802.11g	1	Fig.4	-12.70	P
	6	Fig.5	-12.72	P
	11	Fig.6	-12.67	P

802.11n-HT20 mode

Mode	Channel	Power Spectral Density (dBm/3 kHz)		Conclusion
802.11n (20MHz)	1	Fig.7	-14.64	P
	6	Fig.8	-14.82	P
	11	Fig.9	-14.87	P

802.11n-HT40 mode

Mode	Channel	Power Spectral Density (dBm/3 kHz)		Conclusion
802.11n (40MHz)	3	/	/	/
	6	/	/	/
	9	/	/	/

Result=PSD_{Mea}+BWCF= PSD_{Mea} -15.2dB

Conclusion: PASS

Test graphs as below:

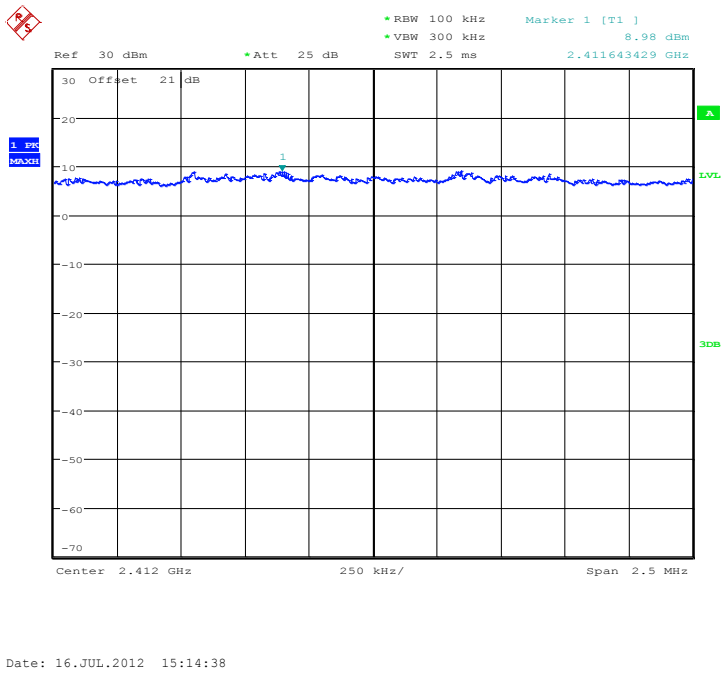


Fig. 1 Power Spectral Density (802.11b, Ch 1)

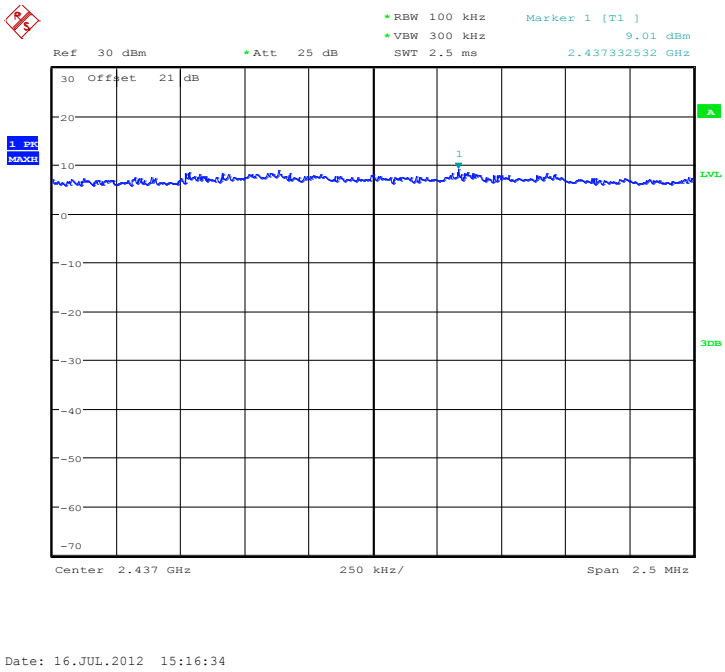


Fig. 2 Power Spectral Density (802.11b, Ch 6)

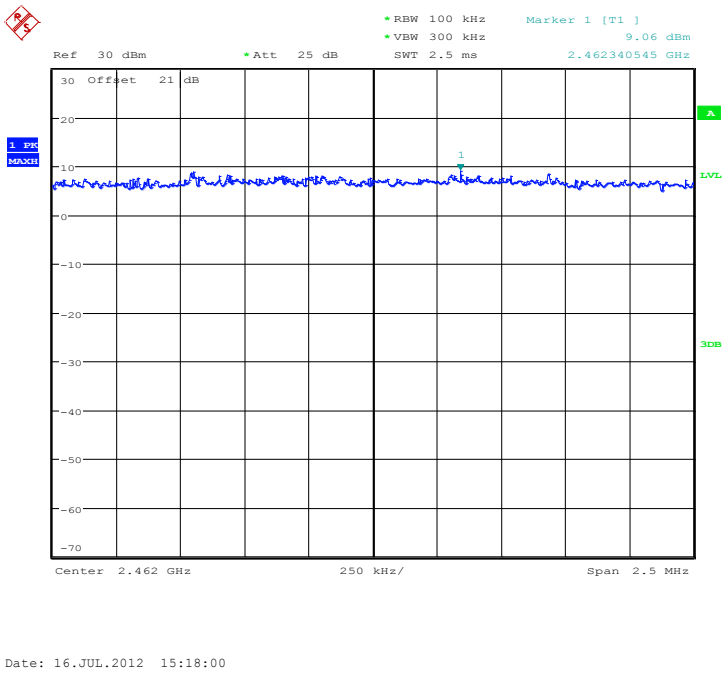


Fig. 3 Power Spectral Density (802.11b, Ch 11)

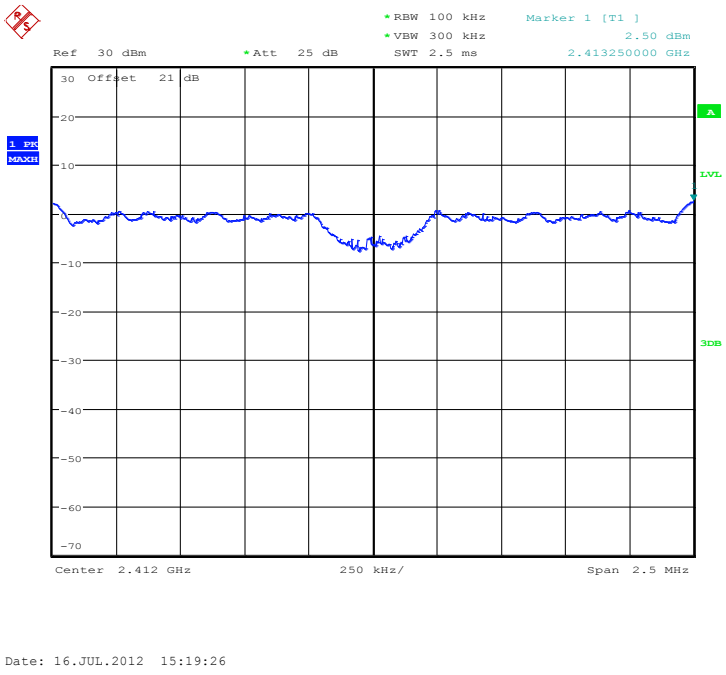


Fig. 4 Power Spectral Density (802.11g, Ch 1)

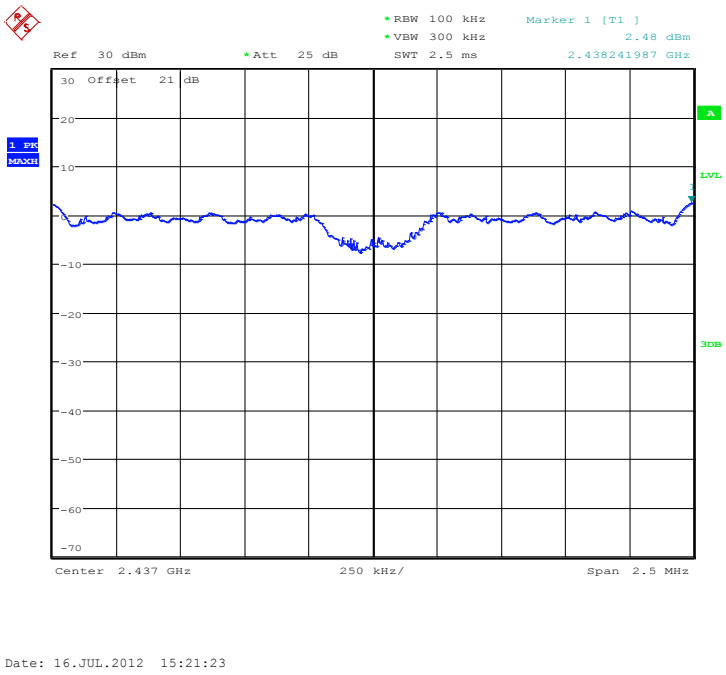


Fig. 5 Power Spectral Density (802.11g, Ch 6)

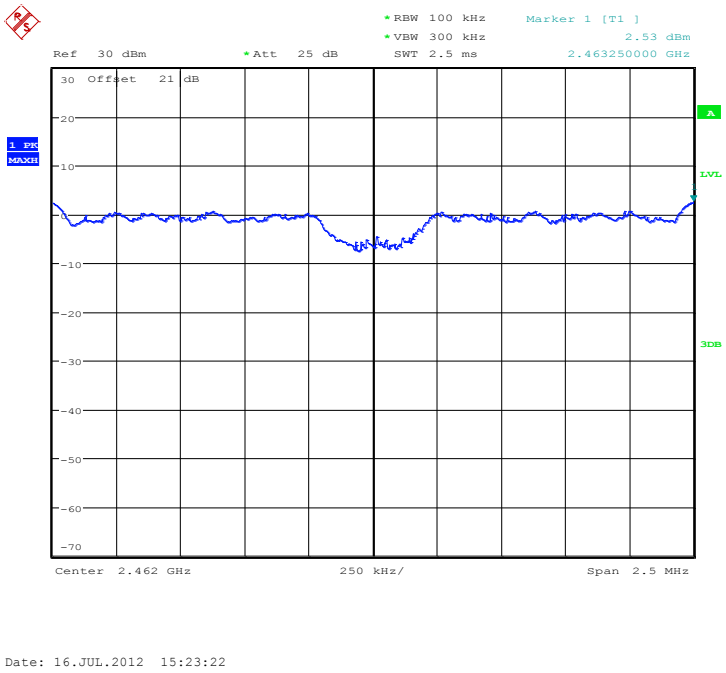


Fig. 6 Power Spectral Density (802.11g, Ch 11)

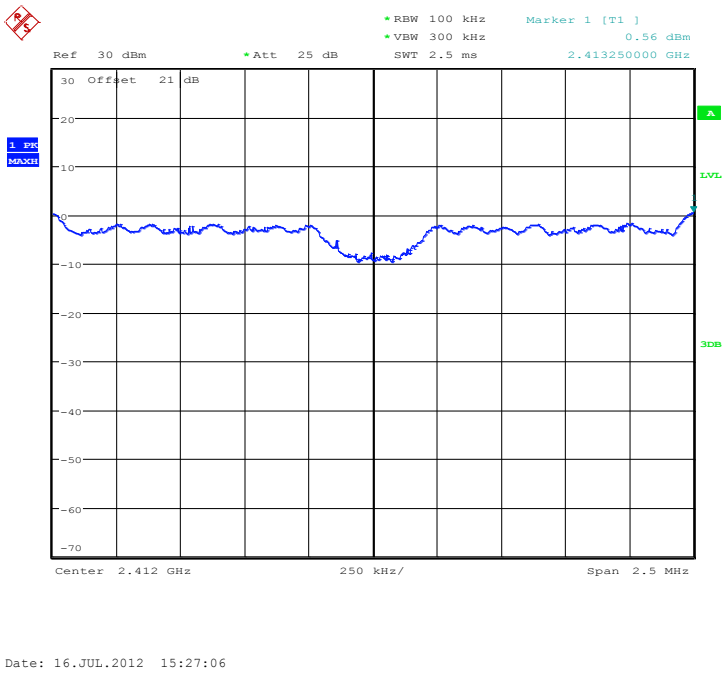


Fig. 7 Power Spectral Density (802.11n-20MHz, Ch 1)

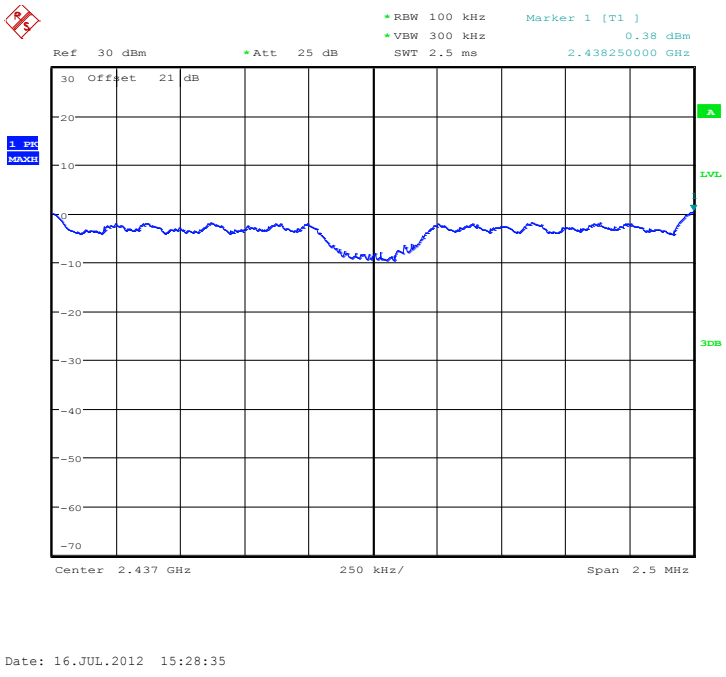


Fig. 8 Power Spectral Density (802.11n-20MHz, Ch 6)

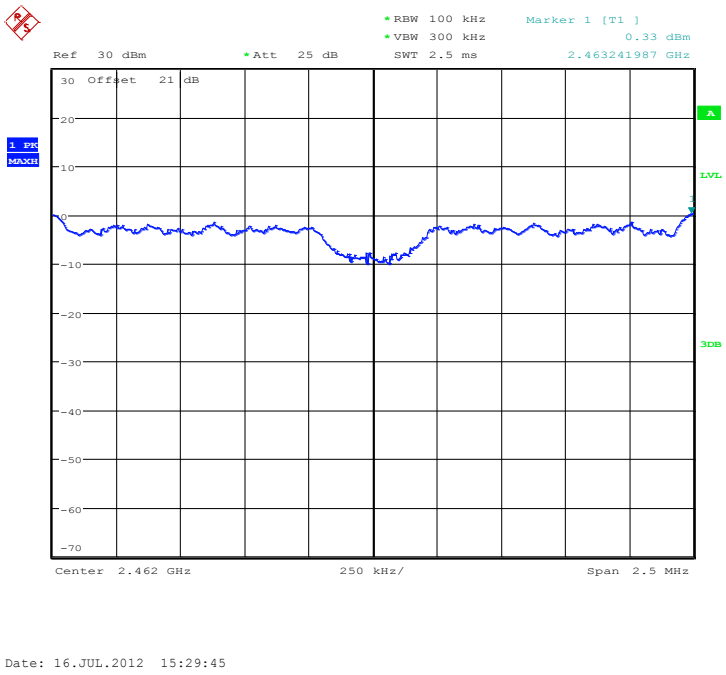


Fig. 9 Power Spectral Density (802.11n-20MHz, Ch 11)

A.4. Occupied 6dB Bandwidth

Measurement Limit:

Standard	Limit (kHz)
FCC 47 CFR Part 15.247 (a)	≥ 500

The measurement is made according to ANSI C63.4 and KDB558074 D01.

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz

Measurement Result:

802.11b/g mode

Mode	Channel	Occupied 6dB Bandwidth (kHz)		conclusion
802.11b	1	Fig.10	8654	P
	6	Fig.11	6462	P
	11	Fig.12	8526	P
802.11g	1	Fig.13	15192	P
	6	Fig.14	15385	P
	11	Fig.15	15192	P

802.11n-HT20 mode

Mode	Channel	Occupied 6dB Bandwidth (kHz)		conclusion
802.11n (20MHz)	1	Fig.16	15192	P
	6	Fig.17	15962	P
	11	Fig.18	15192	P

802.11n-HT40 mode

Mode	Channel	Occupied 6dB Bandwidth (kHz)		conclusion
802.11n (40MHz)	3	/	/	/
	6	/	/	/
	9	/	/	/

Conclusion: PASS

Test graphs as below:

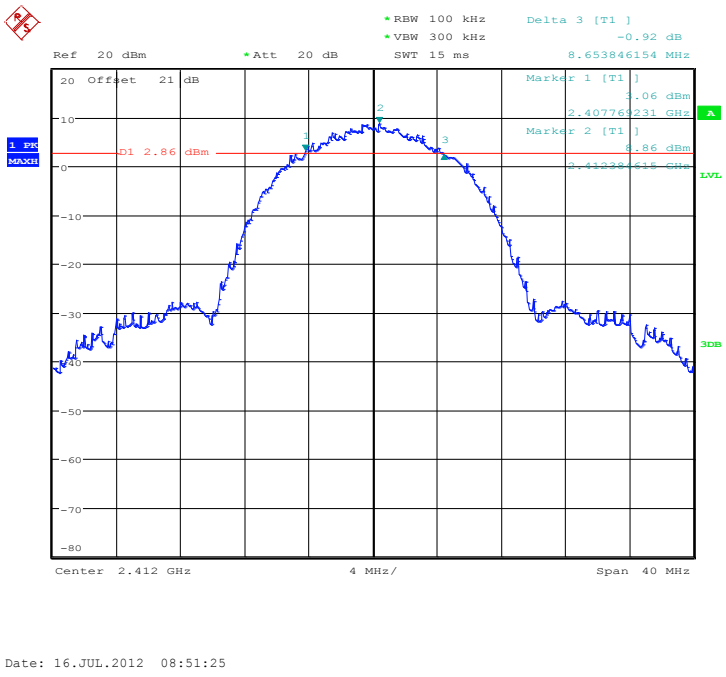


Fig. 10 Occupied 6dB Bandwidth (802.11b, Ch 1)

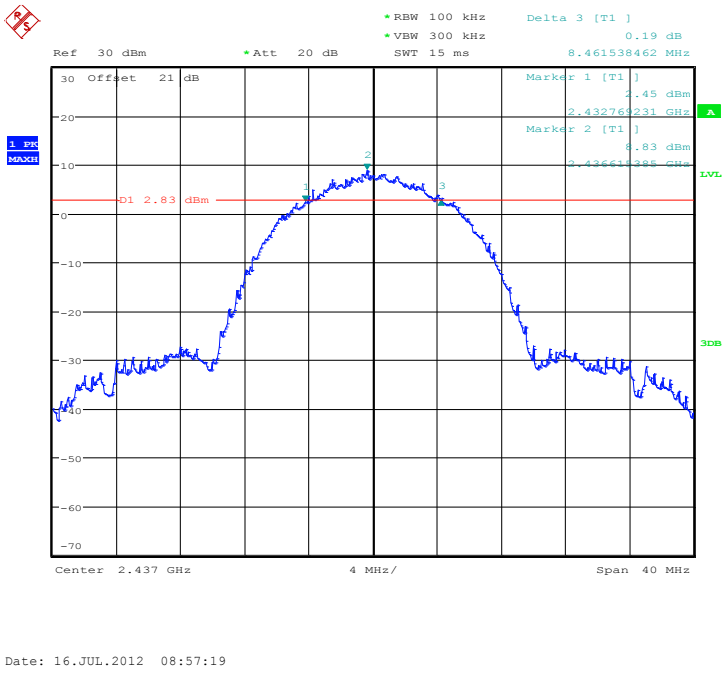


Fig. 11 Occupied 6dB Bandwidth (802.11b, Ch 6)

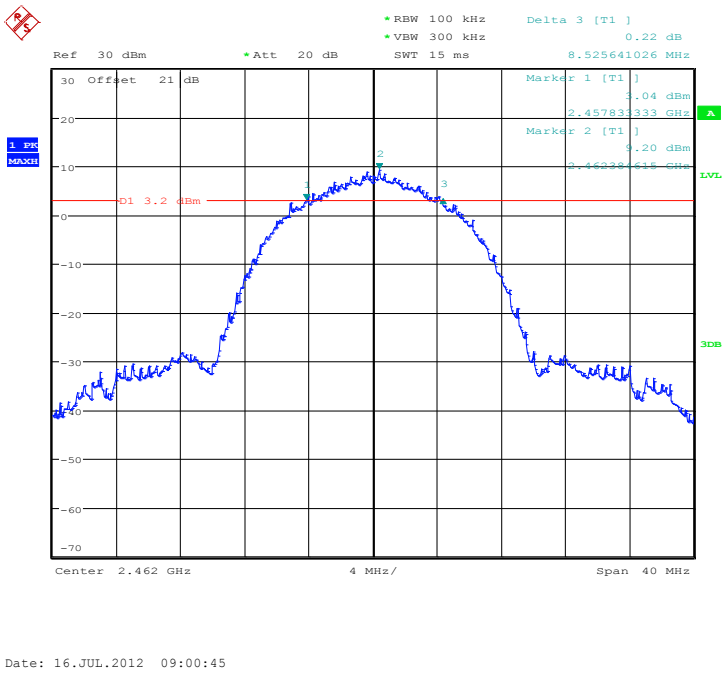


Fig. 12 Occupied 6dB Bandwidth (802.11b, Ch 11)

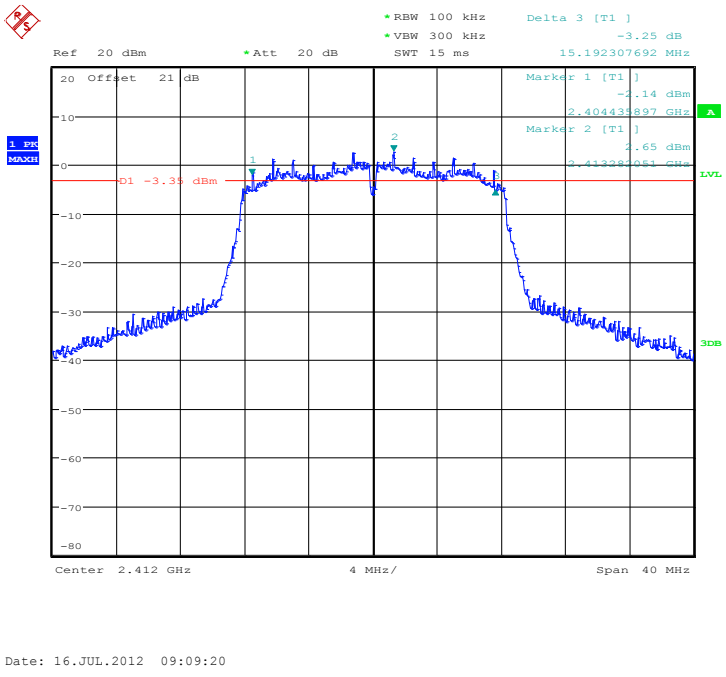


Fig. 13 Occupied 6dB Bandwidth (802.11g, Ch 1)

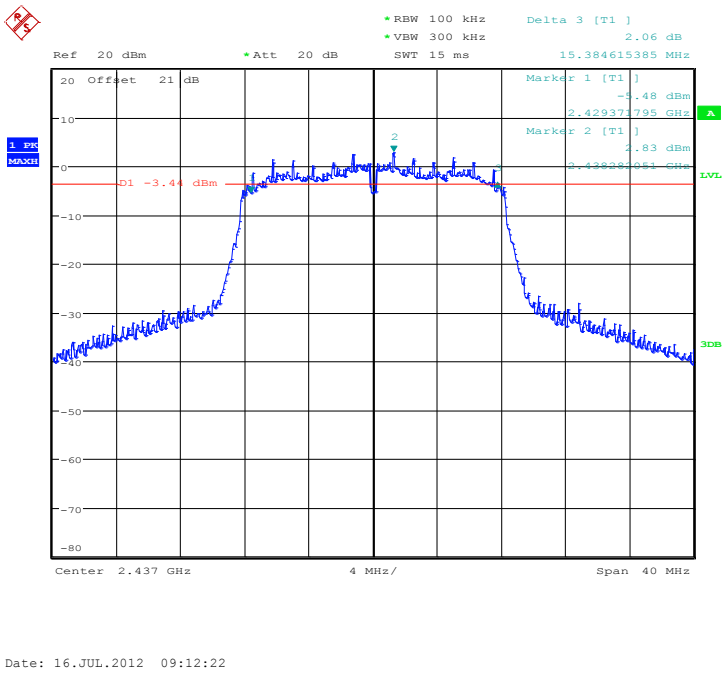


Fig. 14 Occupied 6dB Bandwidth (802.11g, Ch 6)

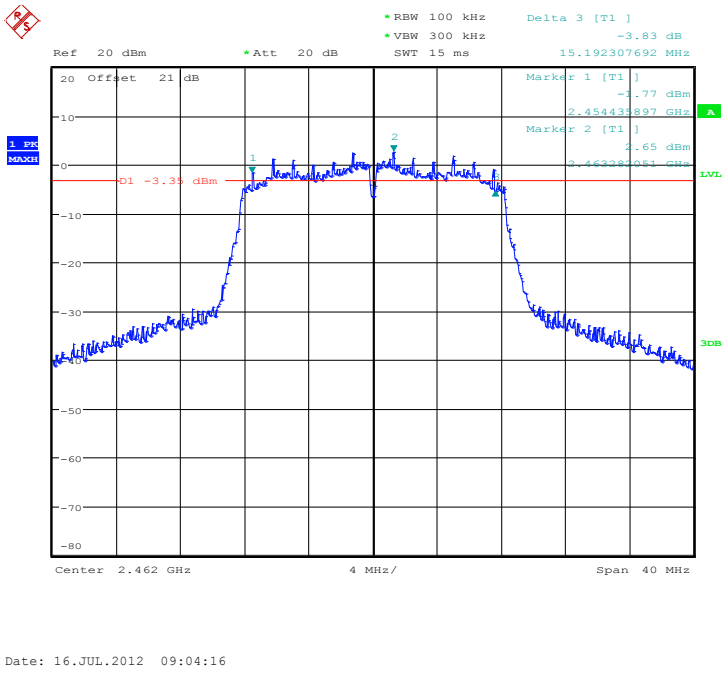


Fig. 15 Occupied 6dB Bandwidth (802.11g, Ch 11)

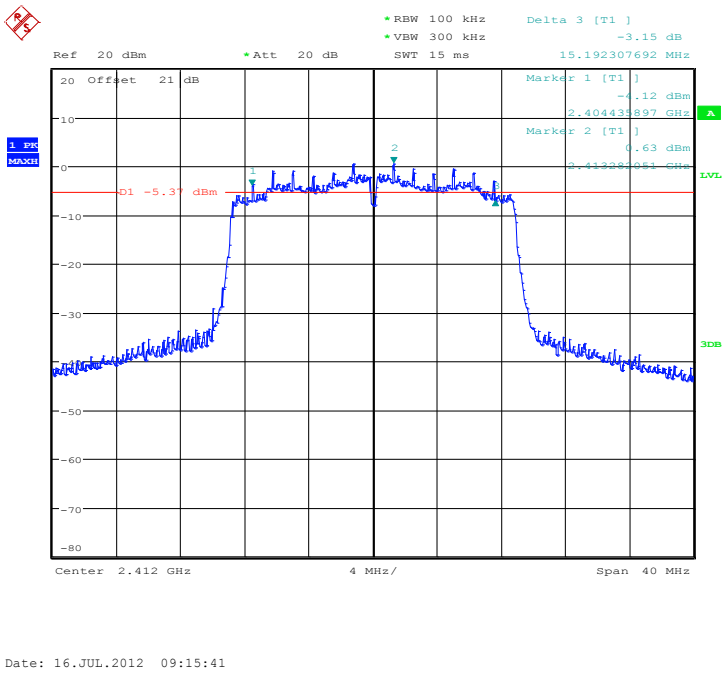


Fig. 16 Occupied 6dB Bandwidth (802.11n-20MHz, Ch 1)

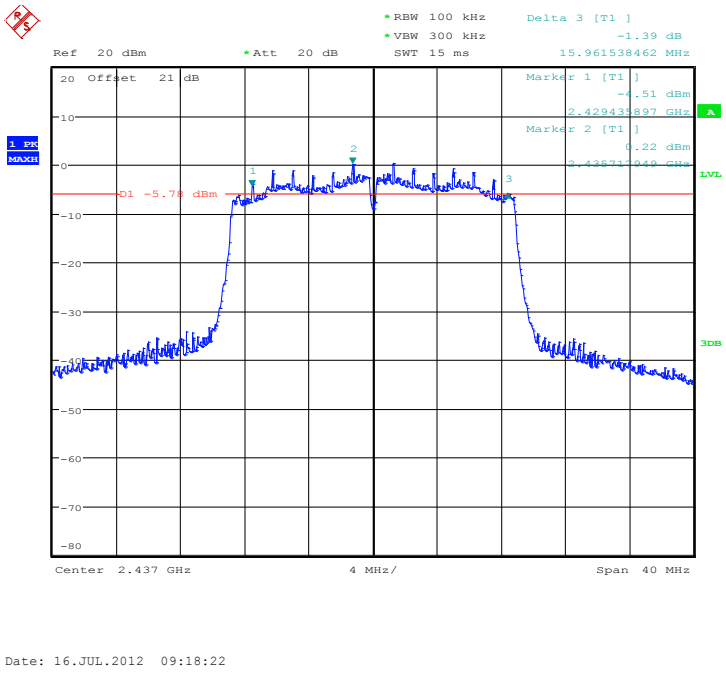


Fig. 17 Occupied 6dB Bandwidth (802.11n-20MHz, Ch 6)

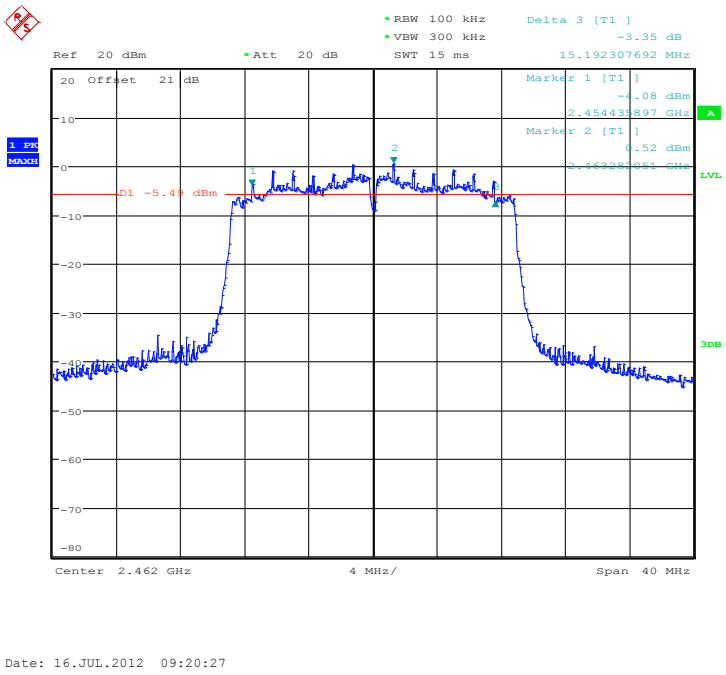


Fig. 18 Occupied 6dB Bandwidth (802.11n-20MHz, Ch 11)

A.5. Band Edges Compliance

Measurement Limit:

Standard	Limit (dBc)
FCC 47 CFR Part 15.247 (d)	> 20

The measurement is made according to ANSI C63.4 and KDB558074 D01.

Measurement Uncertainty:

Measurement Uncertainty	0.75dB

Measurement Result:

802.11b/g mode

Mode	Channel	Test Results	Conclusion
802.11b	1	Fig.19	P
	11	Fig.20	P
802.11g	1	Fig.21	P
	11	Fig.22	P

802.11n-HT20 mode

Mode	Channel	Test Results	Conclusion
802.11n (20MHz)	1	Fig.23	P
	11	Fig.24	P

802.11n-HT40 mode

Mode	Channel	Test Results	Conclusion
802.11n (40MHz)	3	/	/
	9	/	/

Conclusion: PASS

Test graphs as below:

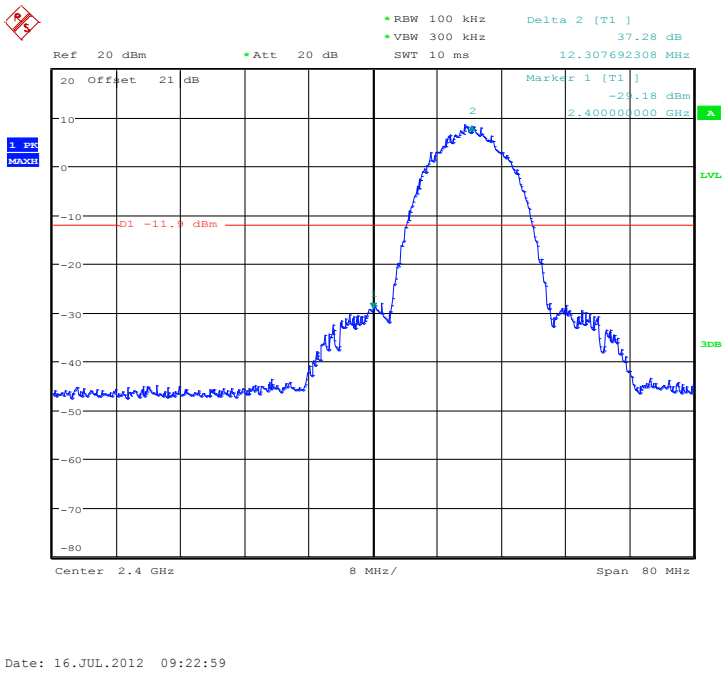


Fig. 19 Band Edges (802.11b, Ch 1)

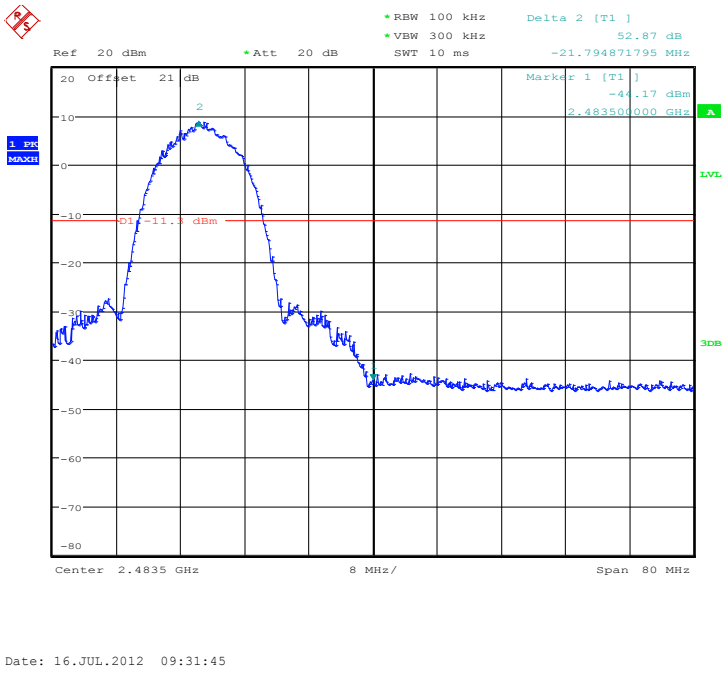


Fig. 20 Band Edges (802.11b, Ch 11)

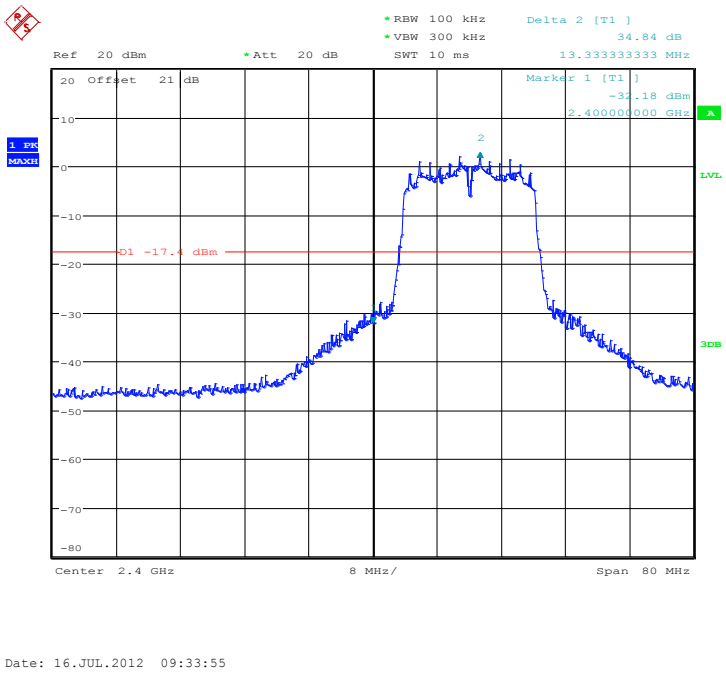


Fig. 21 Band Edges (802.11g, Ch 1)

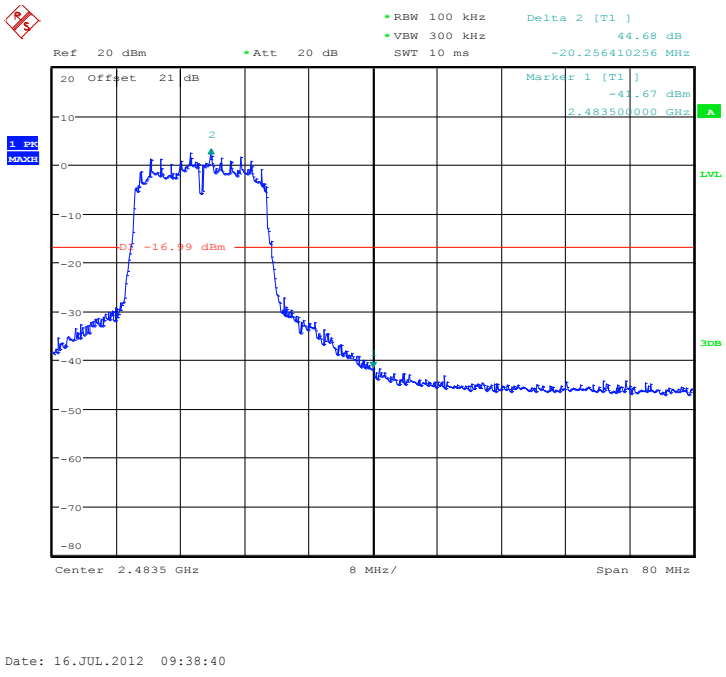


Fig. 22 Band Edges (802.11g, Ch 11)

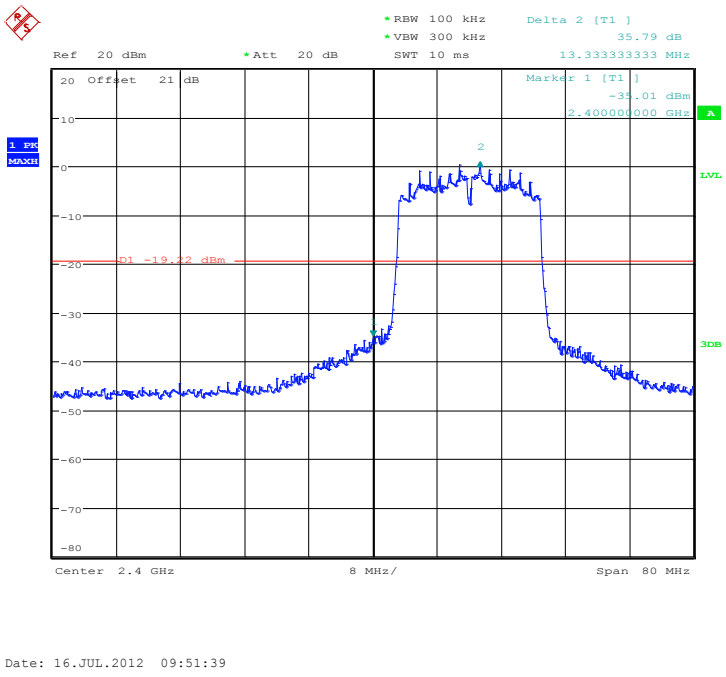


Fig. 23 Band Edges (802.11n-20MHz, Ch 1)

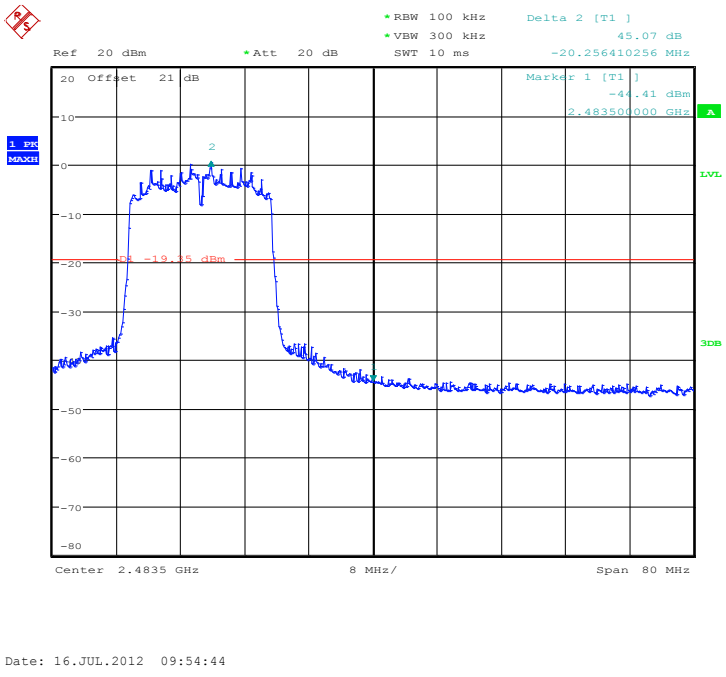


Fig. 24 Band Edges (802.11n-20MHz, Ch 11)

A.6. Transmitter Spurious Emission

A.6.1 Transmitter Spurious Emission - Conducted

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247 (d)	20dB below peak output power in 100 kHz bandwidth

The measurement is made according to ANSI C63.4 and KDB558074 D01.

Measurement Uncertainty:

Frequency Range	Uncertainty
30MHz ≤ f ≤ 2GHz	0.63
2GHz ≤ f ≤3.6GHz	0.82
3.6GHz ≤ f ≤8GHz	1.55
8GHz ≤ f ≤20GHz	1.86
20GHz ≤ f ≤22GHz	1.90
22GHz ≤ f ≤26GHz	2.20

Measurement Results:

802.11b/g mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	2.412 GHz	Fig.25	P
		30 MHz ~ 1 GHz	Fig.26	P
		1 GHz ~ 2.5 GHz	Fig.27	P
		2.5 GHz ~ 7.5 GHz	Fig.28	P
		7.5 GHz ~ 10 GHz	Fig.29	P
		10 GHz ~ 15 GHz	Fig.30	P
		15 GHz ~ 20 GHz	Fig.31	P
		20 GHz ~ 26 GHz	Fig.32	P
	6	2.437 GHz	Fig.33	P
		30 MHz ~ 1 GHz	Fig.34	P
		1 GHz ~ 2.5 GHz	Fig.35	P
		2.5 GHz ~ 7.5 GHz	Fig.36	P
		7.5 GHz ~ 10 GHz	Fig.37	P
		10 GHz ~ 15 GHz	Fig.38	P
		15 GHz ~ 20 GHz	Fig.39	P
		20 GHz ~ 26 GHz	Fig.40	P
	11	2.462 GHz	Fig.41	P
		30 MHz ~ 1 GHz	Fig.42	P
		1 GHz ~ 2.5 GHz	Fig.43	P
		2.5 GHz ~ 7.5 GHz	Fig.44	P

		7.5 GHz ~ 10 GHz	Fig.45	P
		10 GHz ~ 15 GHz	Fig.46	P
		15 GHz ~ 20 GHz	Fig.47	P
		20 GHz ~ 26 GHz	Fig.48	P
802.11g	1	2.412 GHz	Fig.49	P
		30 MHz ~ 1 GHz	Fig.50	P
		1 GHz ~ 2.5 GHz	Fig.51	P
		2.5 GHz ~ 7.5 GHz	Fig.52	P
		7.5 GHz ~ 10 GHz	Fig.53	P
		10 GHz ~ 15 GHz	Fig.54	P
		15 GHz ~ 20 GHz	Fig.55	P
		20 GHz ~ 26 GHz	Fig.56	P
	6	2.437 GHz	Fig.57	P
		30 MHz ~ 1 GHz	Fig.58	P
		1 GHz ~ 2.5 GHz	Fig.59	P
		2.5 GHz ~ 7.5 GHz	Fig.60	P
		7.5 GHz ~ 10 GHz	Fig.61	P
		10 GHz ~ 15 GHz	Fig.62	P
		15 GHz ~ 20 GHz	Fig.63	P
		20 GHz ~ 26 GHz	Fig.64	P
	11	2.462 GHz	Fig.65	P
		30 MHz ~ 1 GHz	Fig.66	P
		1 GHz ~ 2.5 GHz	Fig.67	P
		2.5 GHz ~ 7.5 GHz	Fig.68	P
		7.5 GHz ~ 10 GHz	Fig.69	P
		10 GHz ~ 15 GHz	Fig.70	P
		15 GHz ~ 20 GHz	Fig.71	P
		20 GHz ~ 26 GHz	Fig.72	P

802.11n-HT20 mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11n (20MHz)	1	2.412 GHz	Fig.73	P
		30 MHz ~ 1 GHz	Fig.74	P
		1 GHz ~ 2.5 GHz	Fig.75	P
		2.5 GHz ~ 7.5 GHz	Fig.76	P
		7.5 GHz ~ 10 GHz	Fig.77	P
		10 GHz ~ 15 GHz	Fig.78	P
		15 GHz ~ 20 GHz	Fig.79	P
		20 GHz ~ 26 GHz	Fig.80	P
	6	2.437 GHz	Fig.81	P
		30 MHz ~ 1 GHz	Fig.82	P
		1 GHz ~ 2.5 GHz	Fig.83	P
		2.5 GHz ~ 7.5 GHz	Fig.84	P
		7.5 GHz ~ 10 GHz	Fig.85	P
		10 GHz ~ 15 GHz	Fig.86	P
		15 GHz ~ 20 GHz	Fig.87	P
		20 GHz ~ 26 GHz	Fig.88	P
	11	2.462 GHz	Fig.89	P
		30 MHz ~ 1 GHz	Fig.90	P
		1 GHz ~ 2.5 GHz	Fig.91	P
		2.5 GHz ~ 7.5 GHz	Fig.92	P
		7.5 GHz ~ 10 GHz	Fig.93	P
		10 GHz ~ 15 GHz	Fig.94	P
		15 GHz ~ 20 GHz	Fig.95	P
		20 GHz ~ 26 GHz	Fig.96	P

802.11n-HT40 mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11n (40MHz)	3	2.422 GHz	/	/
		30 MHz ~ 1 GHz	/	/
		1 GHz ~ 2.5 GHz	/	/
		2.5 GHz ~ 7.5 GHz	/	/
		7.5 GHz ~ 10 GHz	/	/
		10 GHz ~ 15 GHz	/	/
		15 GHz ~ 20 GHz	/	/
		20 GHz ~ 26 GHz	/	/
	6	2.437 GHz	/	/
		30 MHz ~ 1 GHz	/	/
		1 GHz ~ 2.5 GHz	/	/
		2.5 GHz ~ 7.5 GHz	/	/
		7.5 GHz ~ 10 GHz	/	/
		10 GHz ~ 15 GHz	/	/

		15 GHz ~ 20 GHz	/	/
		20 GHz ~ 26 GHz	/	/
	9	2.452 GHz	/	/
		30 MHz ~ 1 GHz	/	/
		1 GHz ~ 2.5 GHz	/	/
		2.5 GHz ~ 7.5 GHz	/	/
		7.5 GHz ~ 10 GHz	/	/
		10 GHz ~ 15 GHz	/	/
		15 GHz ~ 20 GHz	/	/
		20 GHz ~ 26 GHz	/	/

Conclusion: PASS

Test graphs as below:

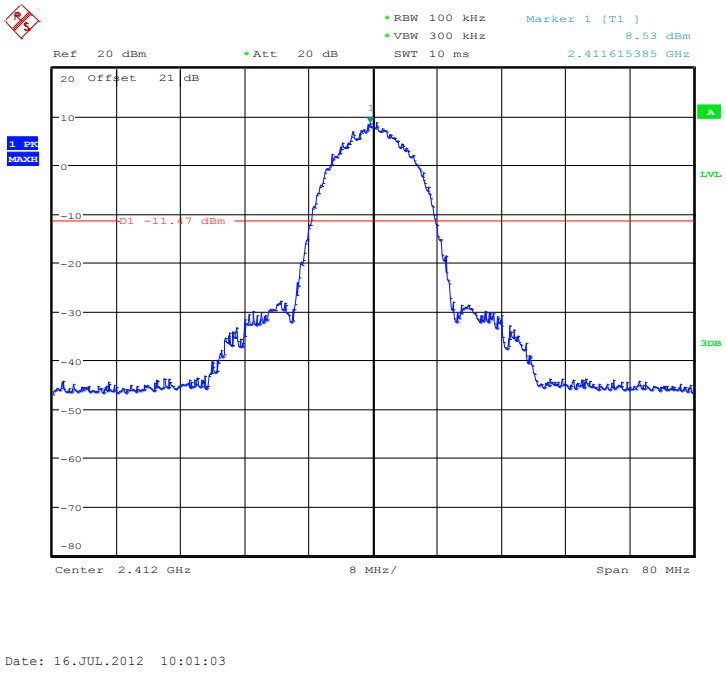


Fig. 25 Conducted Spurious Emission (802.11b, Ch1, Center Frequency)

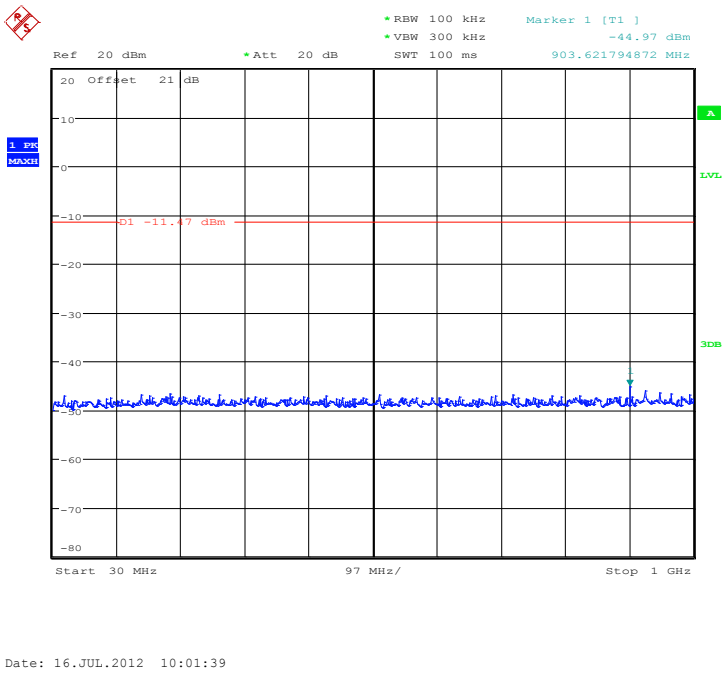


Fig. 26 Conducted Spurious Emission (802.11b, Ch1, 30 MHz-1 GHz)

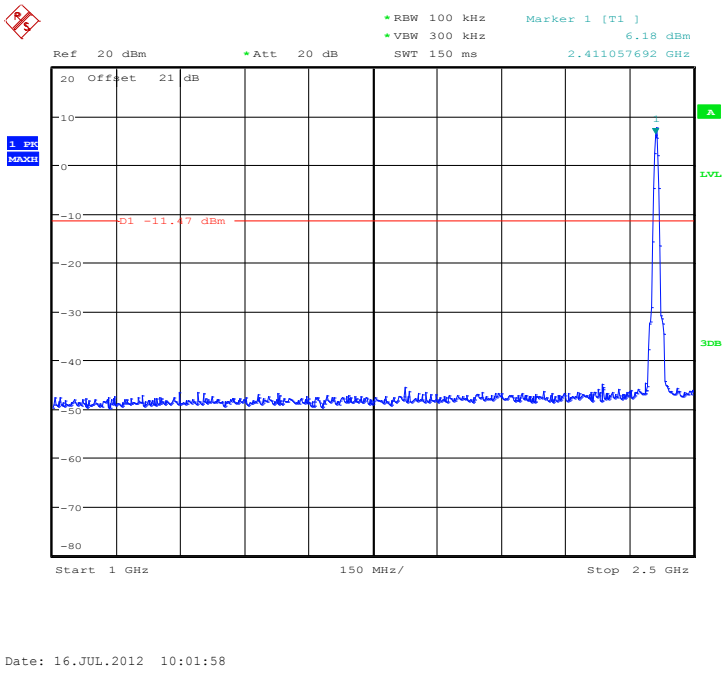


Fig. 27 Conducted Spurious Emission (802.11b, Ch1, 1 GHz-2.5 GHz)

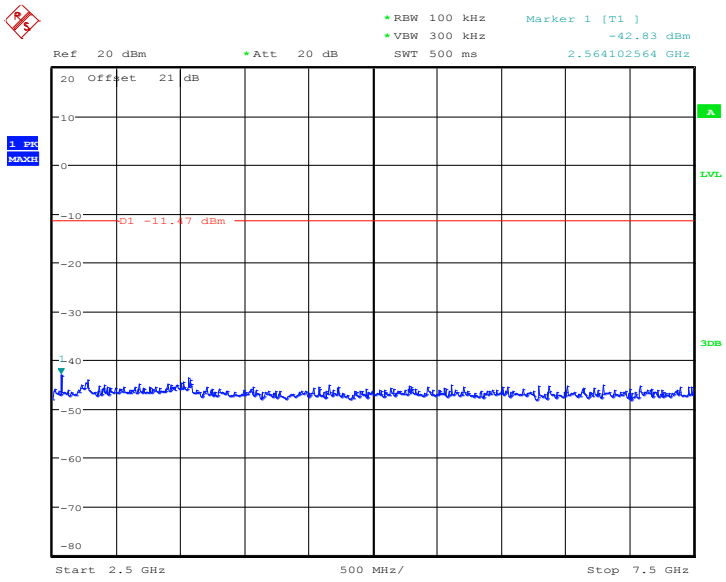


Fig. 28 Conducted Spurious Emission (802.11b, Ch1, 2.5 GHz-7.5 GHz)

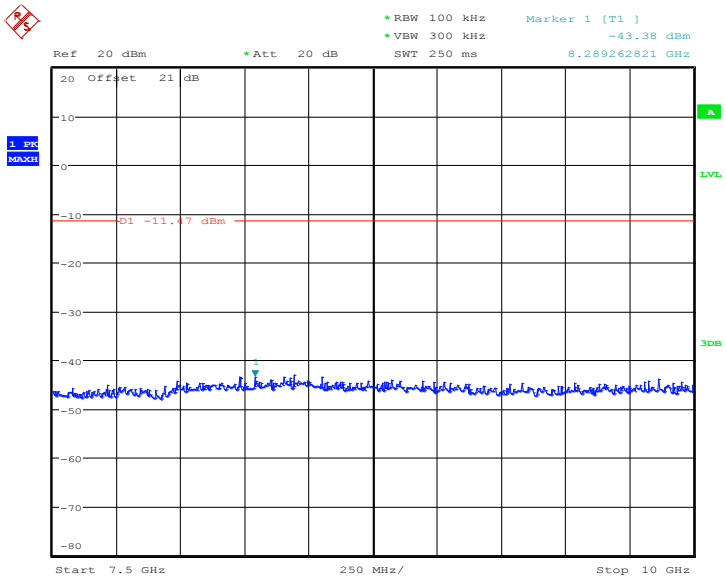


Fig. 29 Conducted Spurious Emission (802.11b, Ch1, 7.5 GHz-10 GHz)

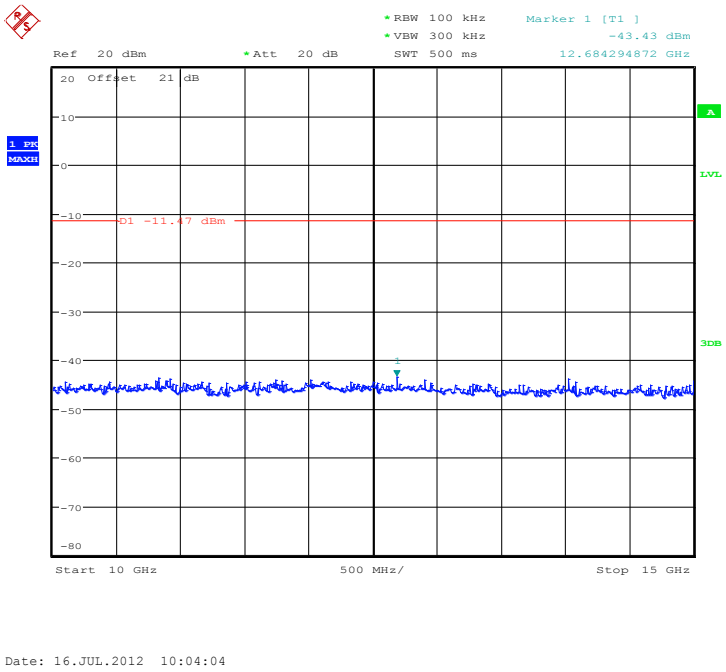


Fig. 30 Conducted Spurious Emission (802.11b, Ch1, 10 GHz-15 GHz)

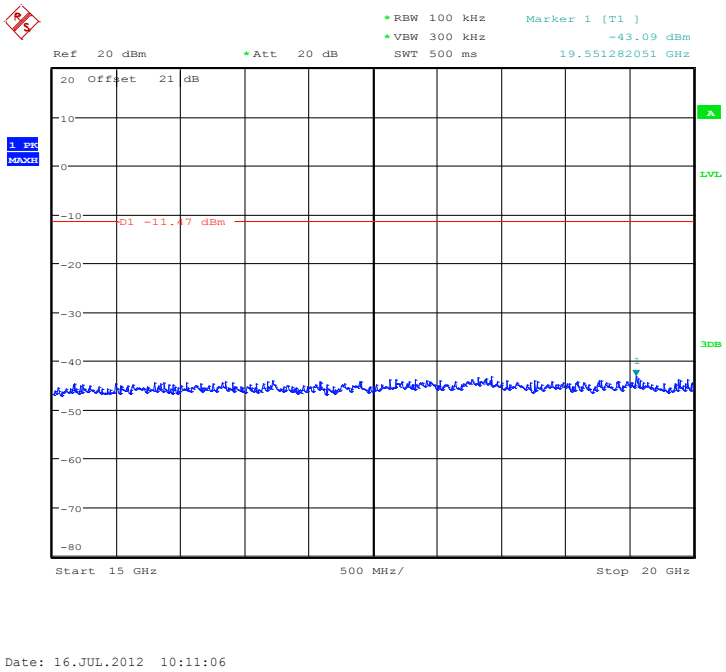


Fig. 31 Conducted Spurious Emission (802.11b, Ch1, 15 GHz-20 GHz)

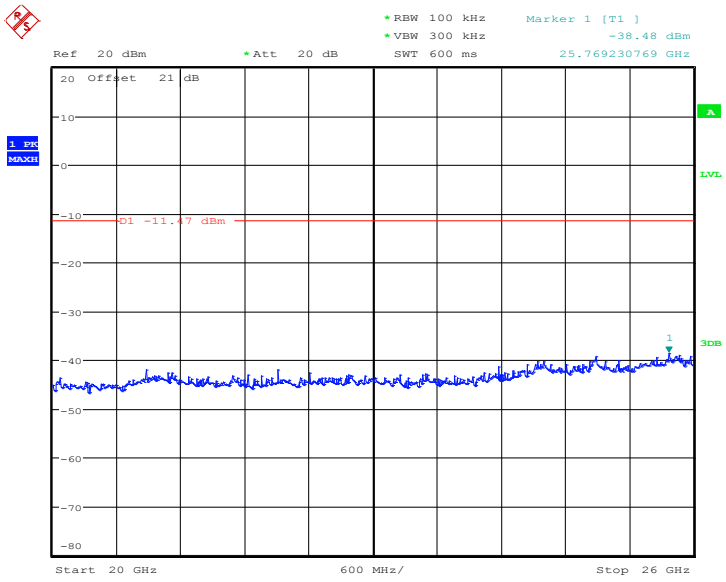


Fig. 32 Conducted Spurious Emission (802.11b, Ch1, 20 GHz-26 GHz)

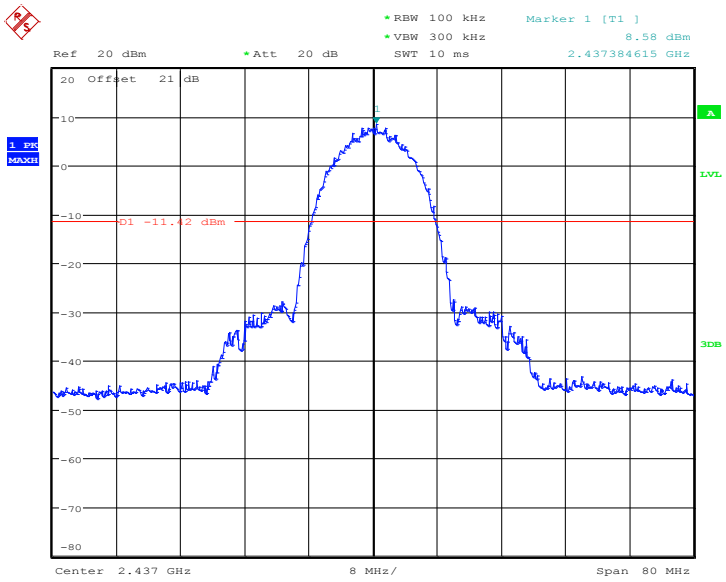


Fig. 33 Conducted Spurious Emission (802.11b, Ch6, Center Frequency)

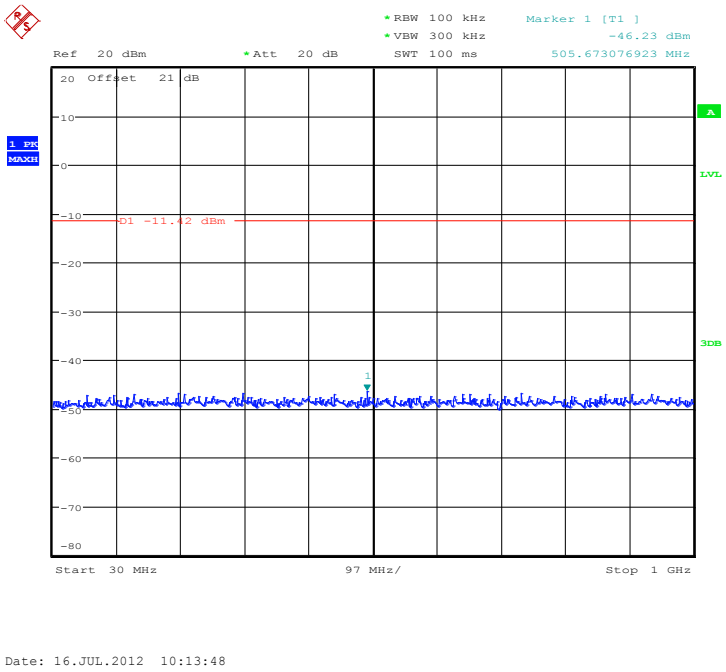


Fig. 34 Conducted Spurious Emission (802.11b, Ch6, 30 MHz-1 GHz)

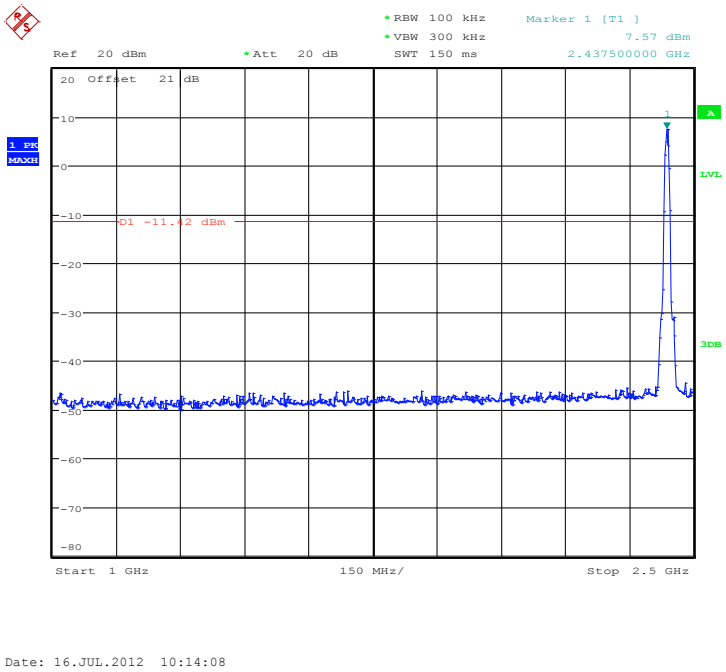


Fig. 35 Conducted Spurious Emission (802.11b, Ch6, 1 GHz-2.5 GHz)

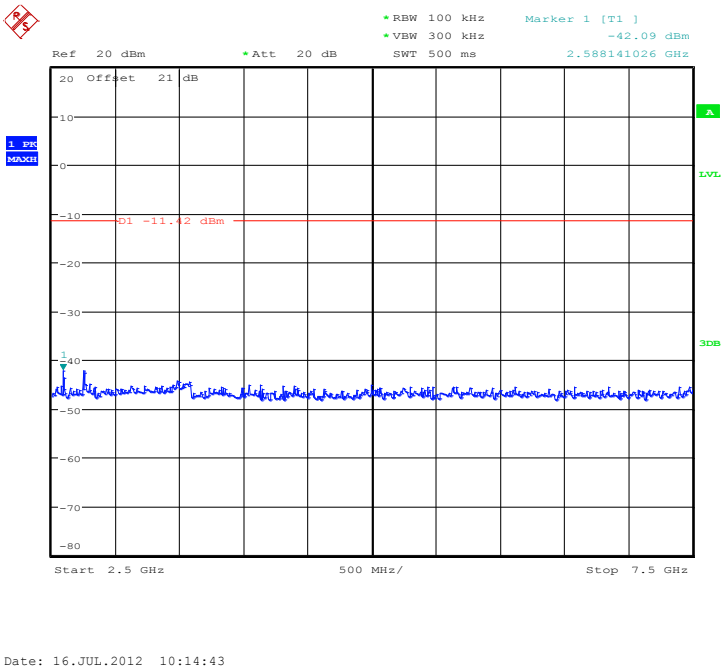


Fig. 36 Conducted Spurious Emission (802.11b, Ch6, 2.5 GHz-7.5 GHz)

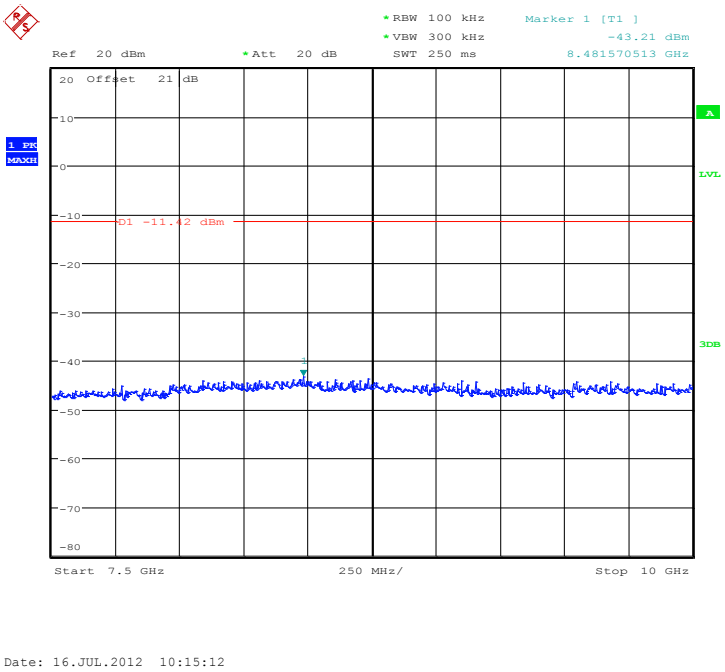


Fig. 37 Conducted Spurious Emission (802.11b, Ch6, 7.5 GHz-10 GHz)

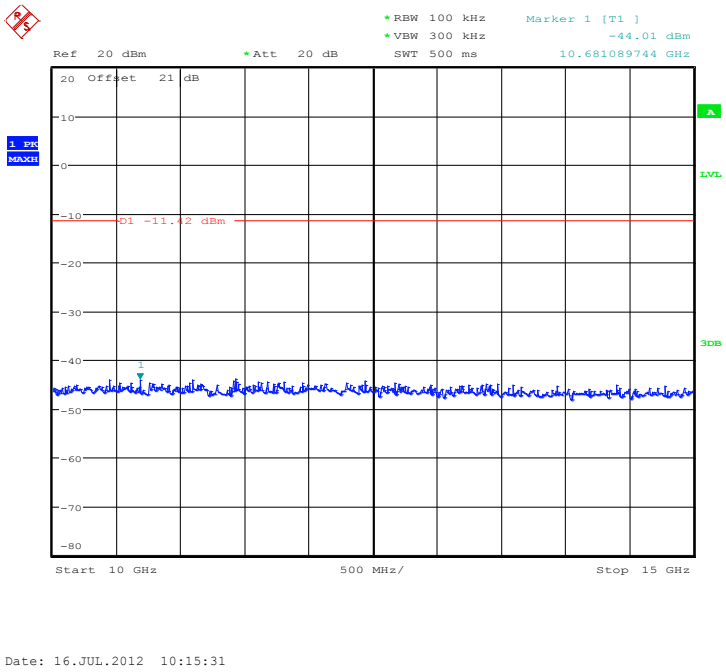


Fig. 38 Conducted Spurious Emission (802.11b, Ch6, 10 GHz-15 GHz)

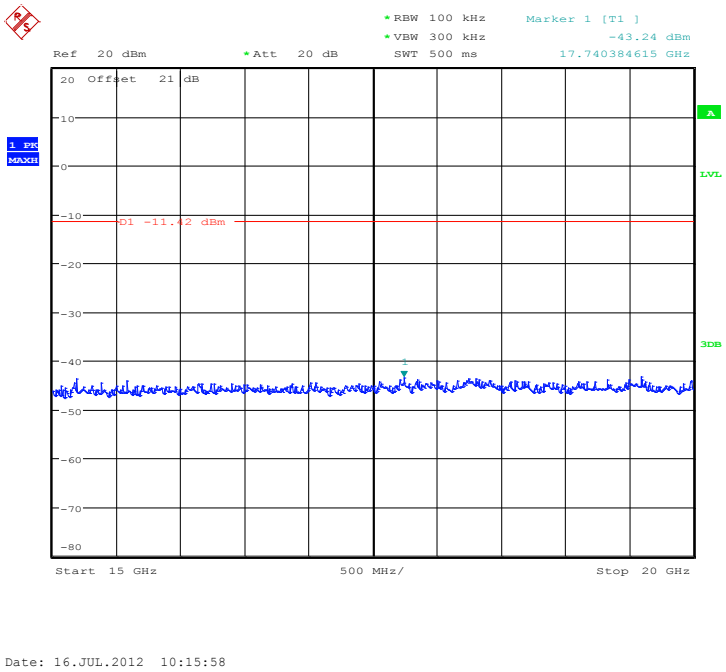


Fig. 39 Conducted Spurious Emission (802.11b, Ch6, 15 GHz-20 GHz)

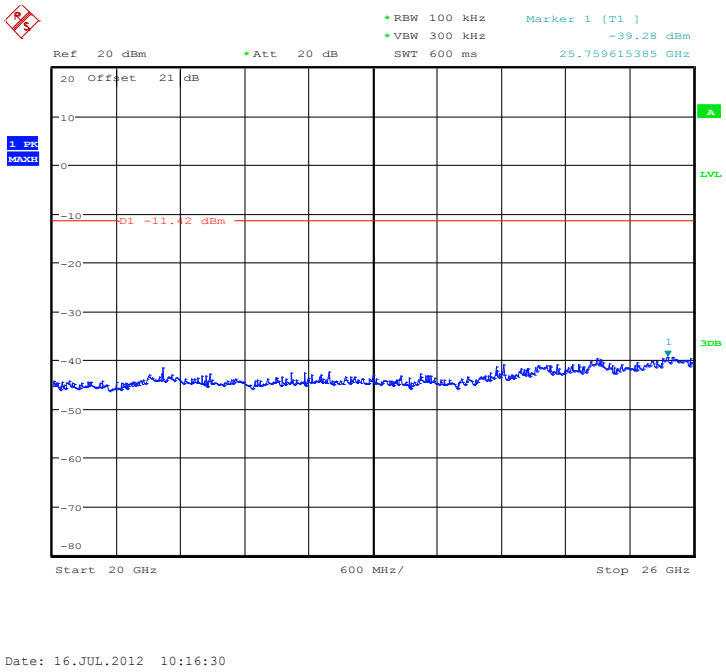


Fig. 40 Conducted Spurious Emission (802.11b, Ch6, 20 GHz-26 GHz)

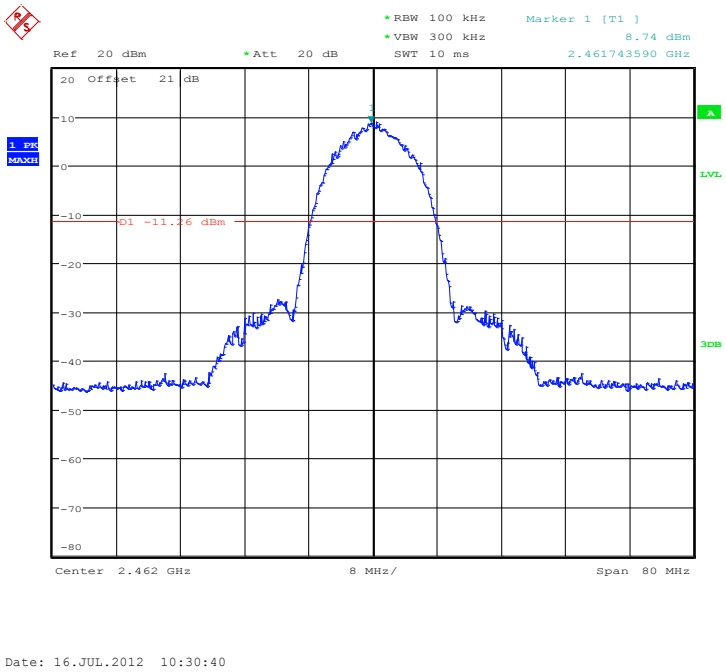


Fig. 41 Conducted Spurious Emission (802.11b, Ch11, Center Frequency)

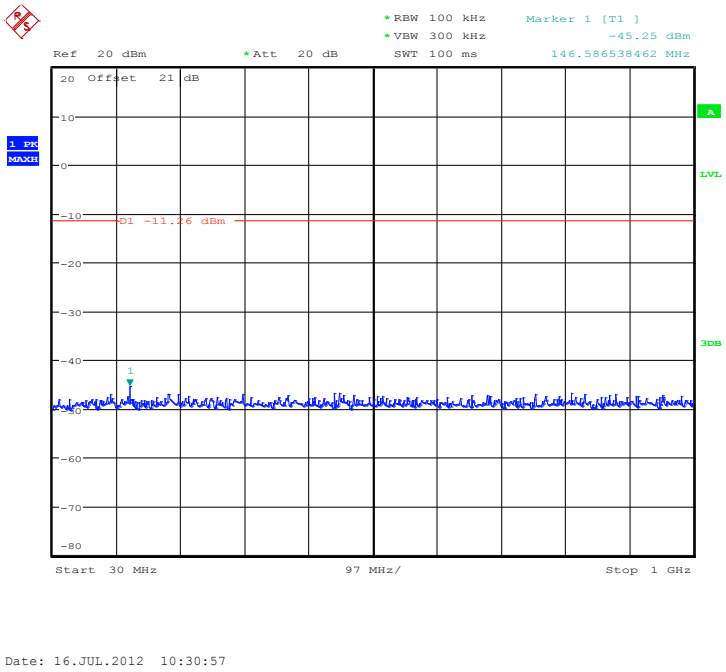


Fig. 42 Conducted Spurious Emission (802.11b, Ch11, 30 MHz-1 GHz)

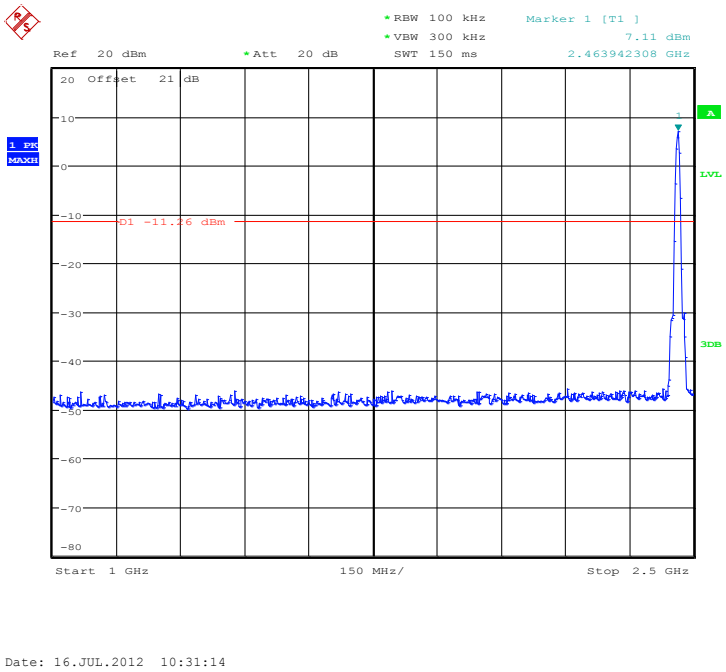


Fig. 43 Conducted Spurious Emission (802.11b, Ch11, 1 GHz-2.5 GHz)

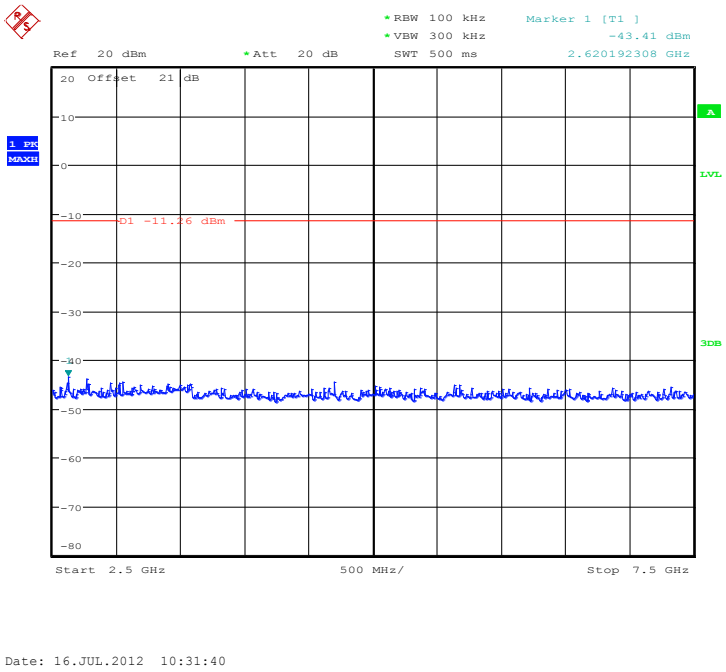


Fig. 44 Conducted Spurious Emission (802.11b, Ch11, 2.5 GHz-7.5 GHz)

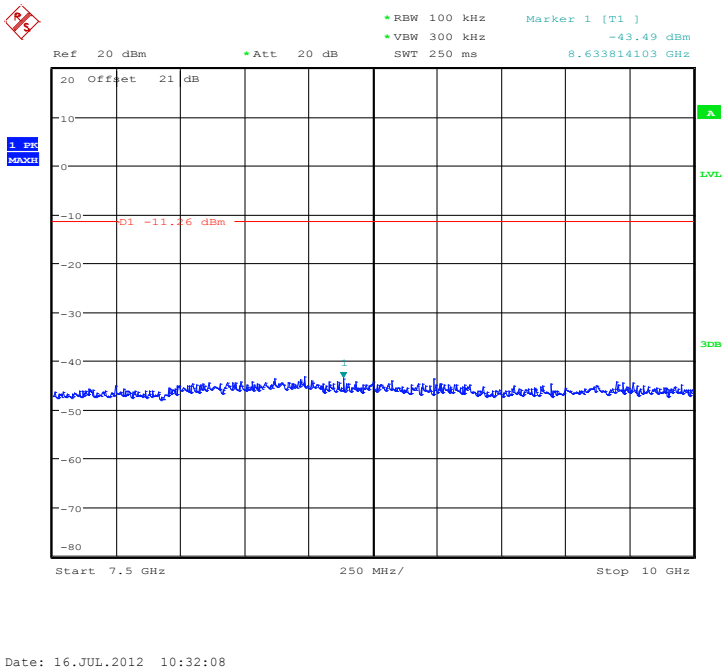


Fig. 45 Conducted Spurious Emission (802.11b, Ch11, 7.5 GHz-10 GHz)

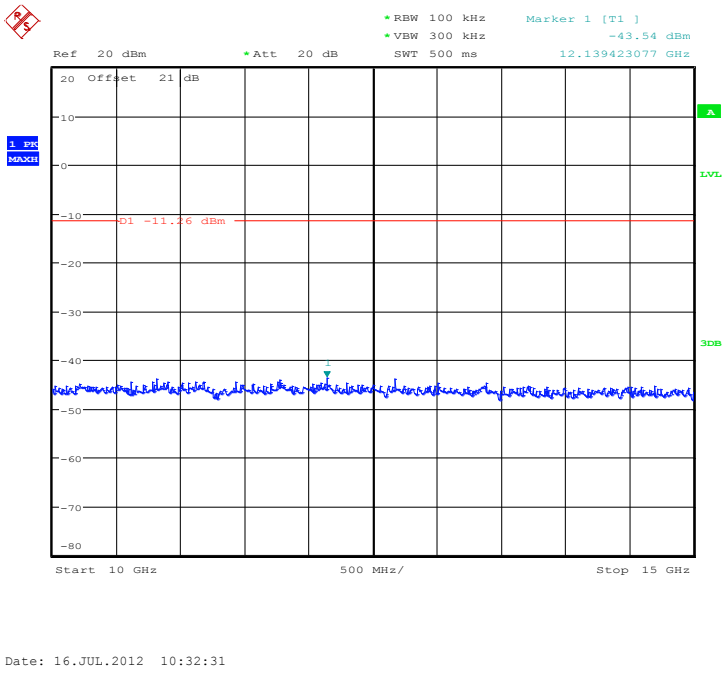


Fig. 46 Conducted Spurious Emission (802.11b, Ch11, 10 GHz-15 GHz)

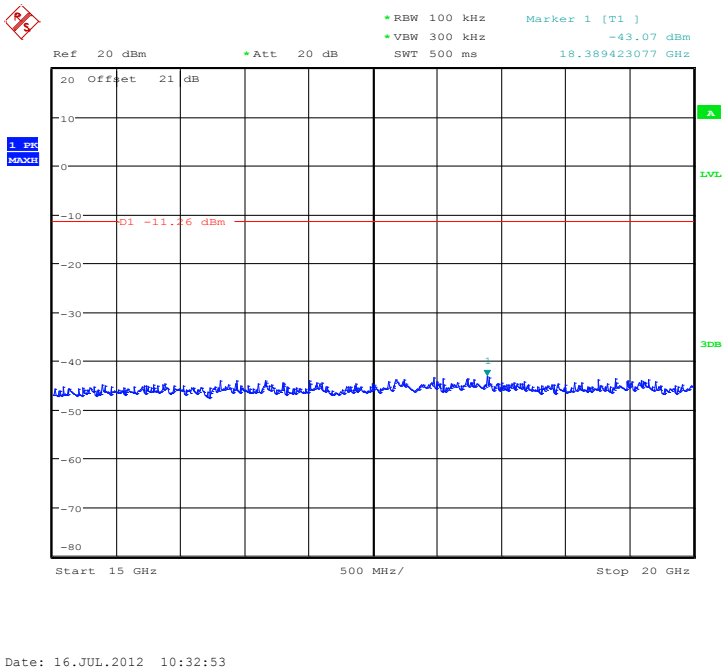


Fig. 47 Conducted Spurious Emission (802.11b, Ch11, 15 GHz-20 GHz)

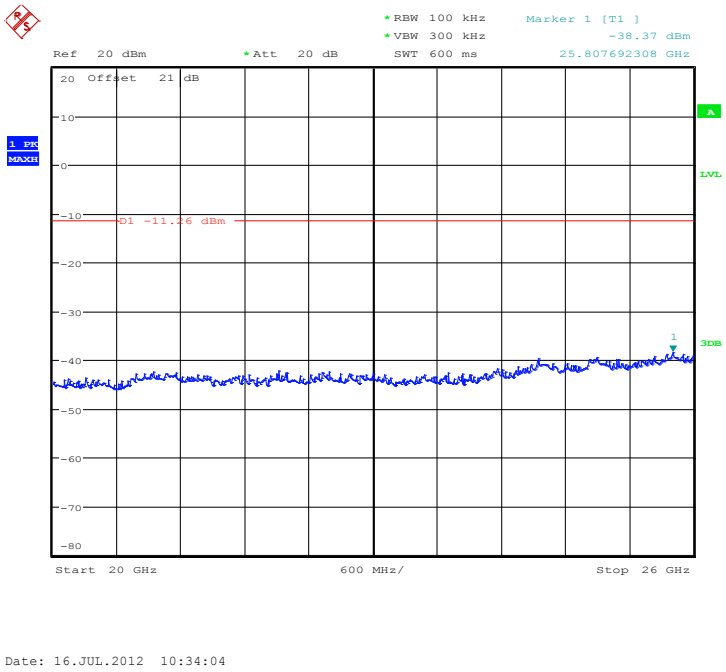


Fig. 48 Conducted Spurious Emission (802.11b, Ch11, 20 GHz-26 GHz)

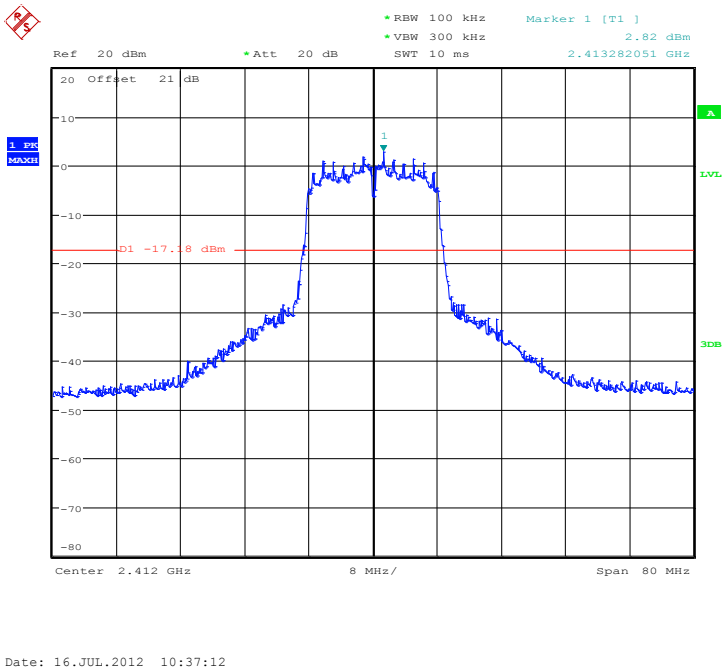


Fig. 49 Conducted Spurious Emission (802.11g, Ch1, Center Frequency)

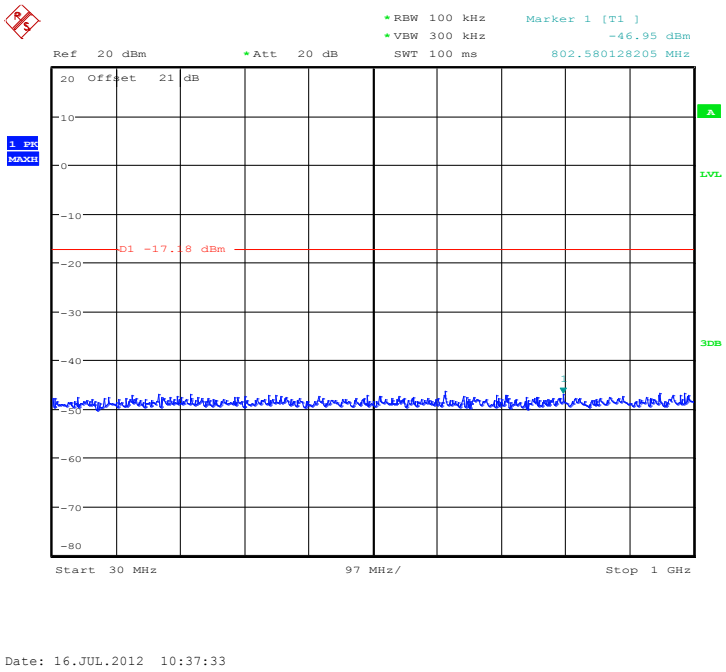


Fig. 50 Conducted Spurious Emission (802.11g, Ch1, 30 MHz-1 GHz)

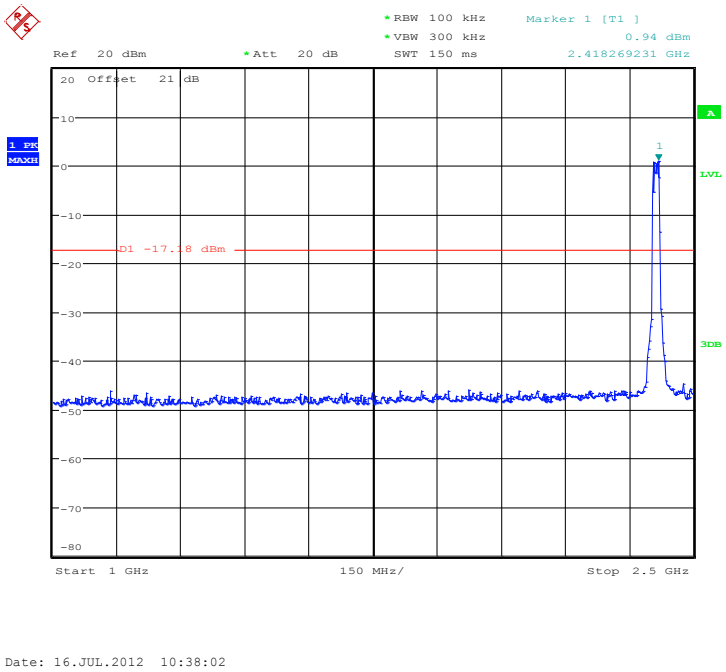


Fig. 51 Conducted Spurious Emission (802.11g, Ch1, 1 GHz-2.5 GHz)

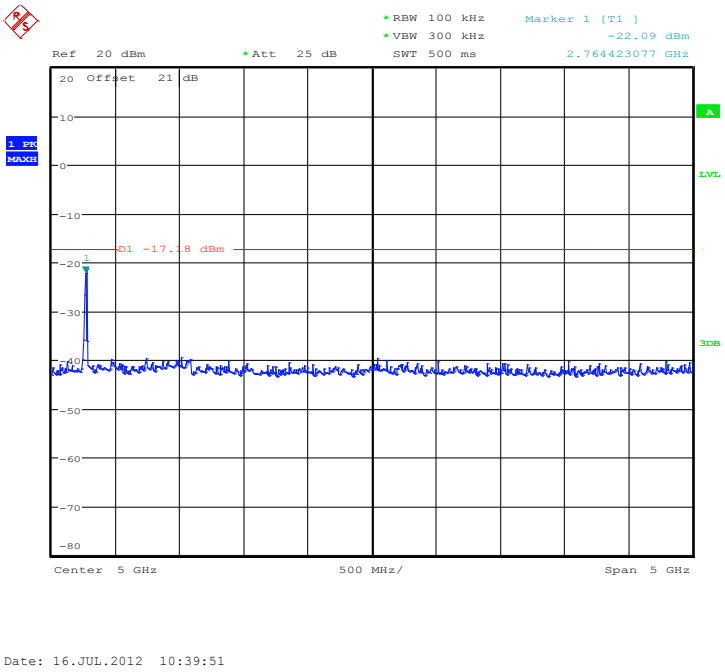


Fig. 52 Conducted Spurious Emission (802.11g, Ch1, 2.5 GHz-7.5 GHz)

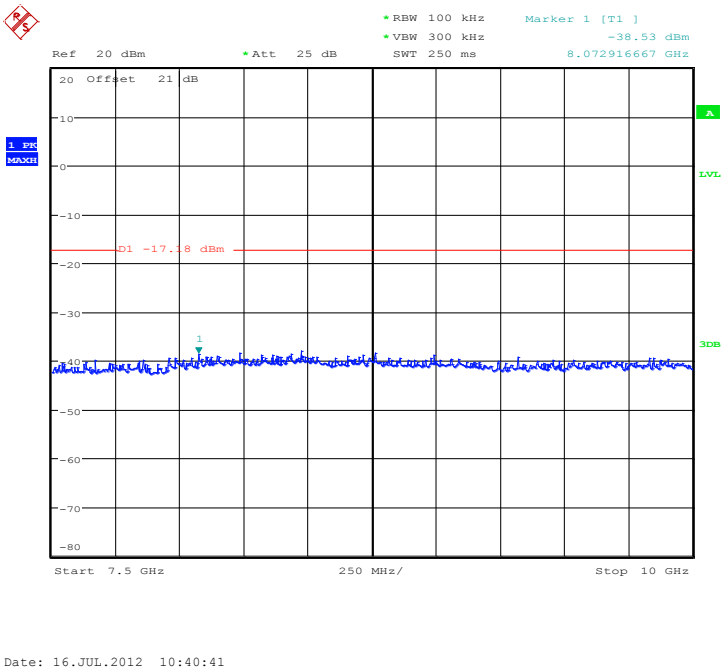


Fig. 53 Conducted Spurious Emission (802.11g, Ch1, 7.5 GHz-10 GHz)

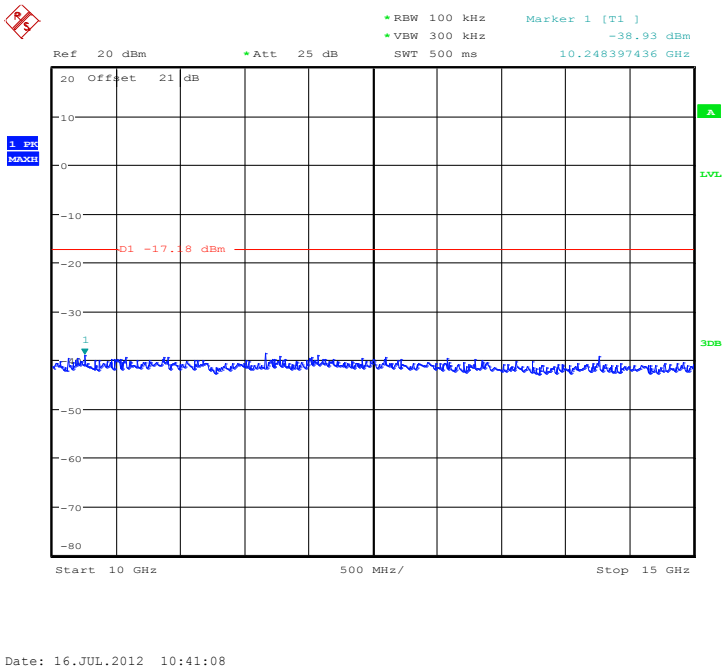


Fig. 54 Conducted Spurious Emission (802.11g, Ch1, 10 GHz-15 GHz)

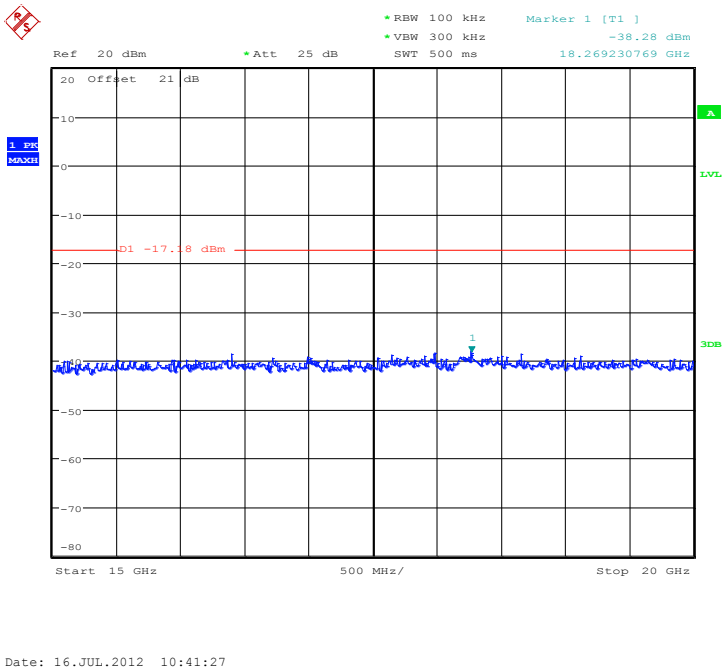


Fig. 55 Conducted Spurious Emission (802.11g, Ch1, 15 GHz-20 GHz)

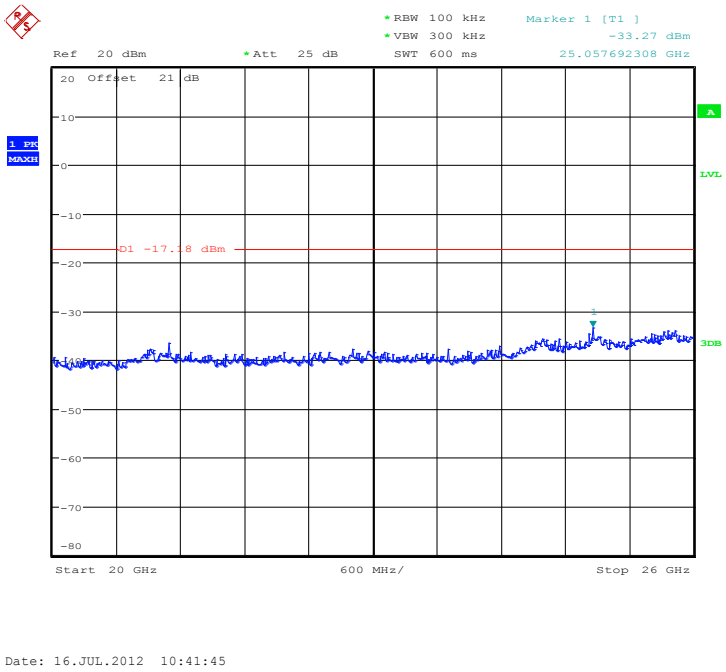


Fig. 56 Conducted Spurious Emission (802.11g, Ch1, 20 GHz-26 GHz)

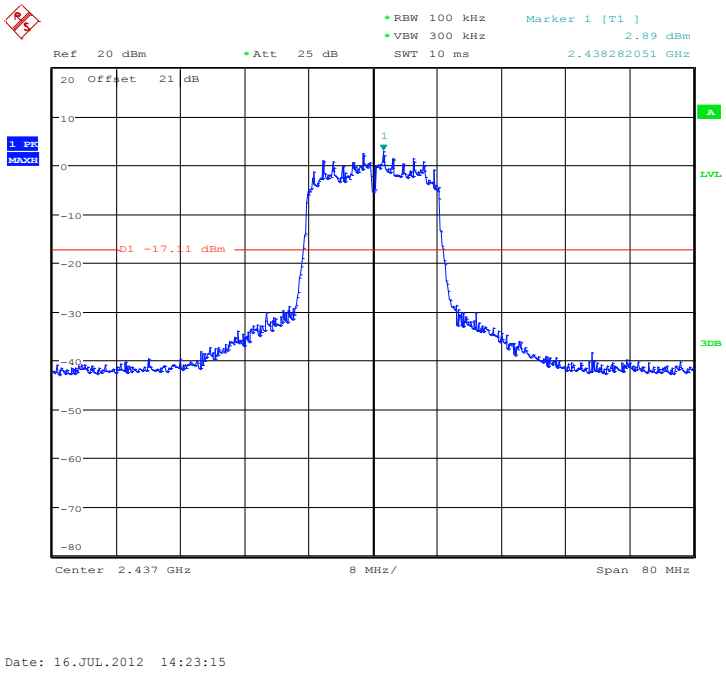


Fig. 57 Conducted Spurious Emission (802.11g, Ch6, Center Frequency)

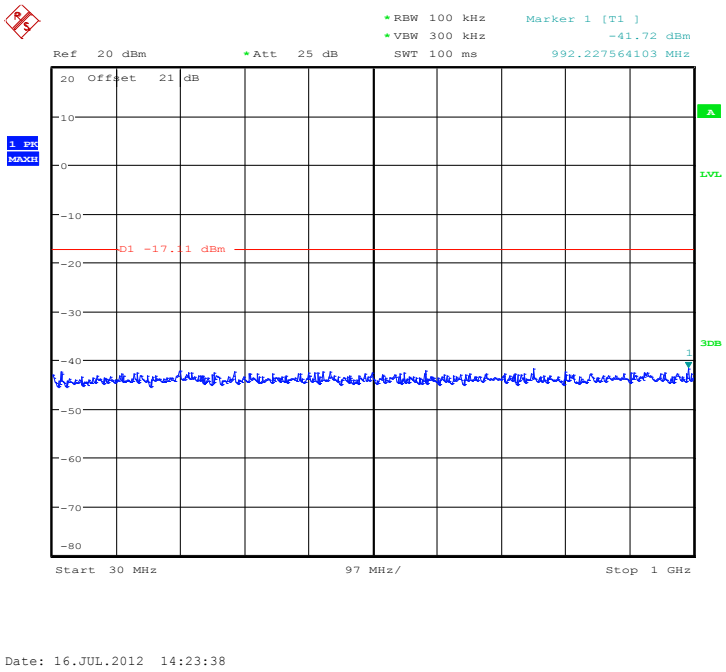


Fig. 58 Conducted Spurious Emission (802.11g, Ch6, 30 MHz-1 GHz)

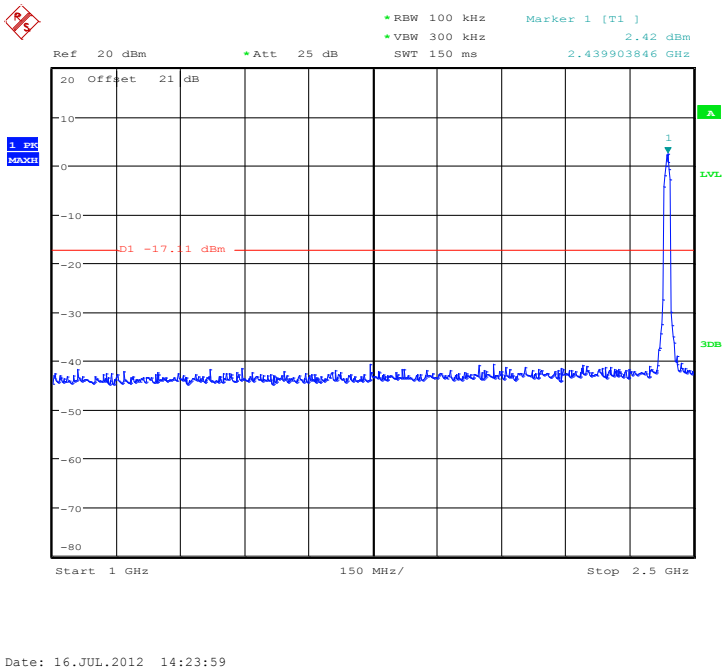


Fig. 59 Conducted Spurious Emission (802.11g, Ch6, 1 GHz-2.5 GHz)

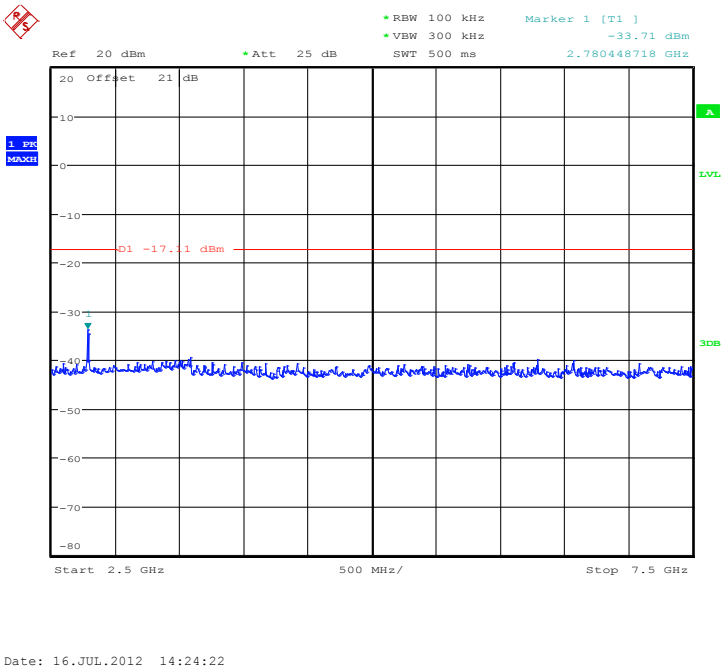


Fig. 60 Conducted Spurious Emission (802.11g, Ch6, 2.5 GHz-7.5 GHz)

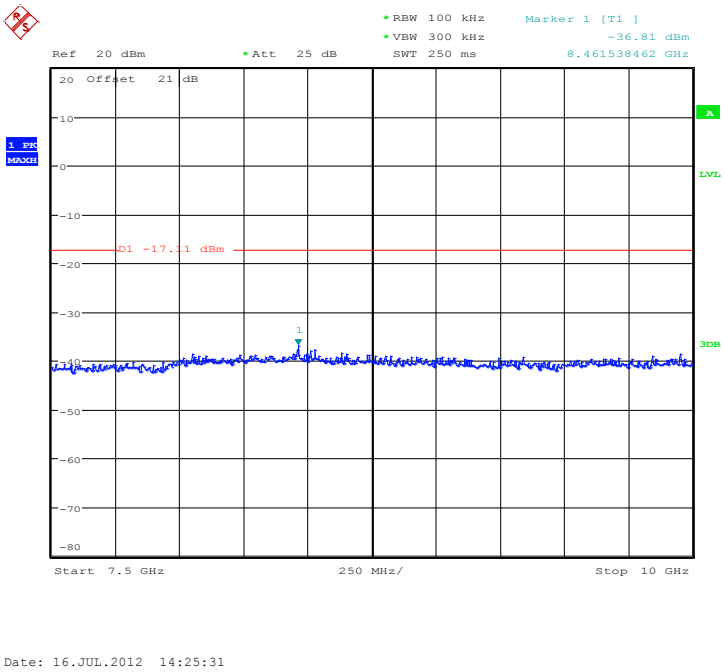


Fig. 61 Conducted Spurious Emission (802.11g, Ch6, 7.5 GHz-10 GHz)

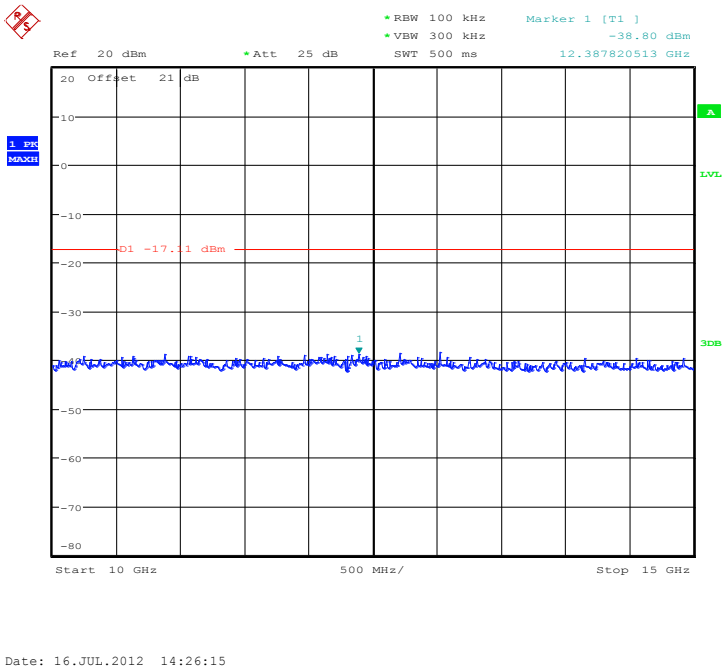


Fig. 62 Conducted Spurious Emission (802.11g, Ch6, 10 GHz-15 GHz)

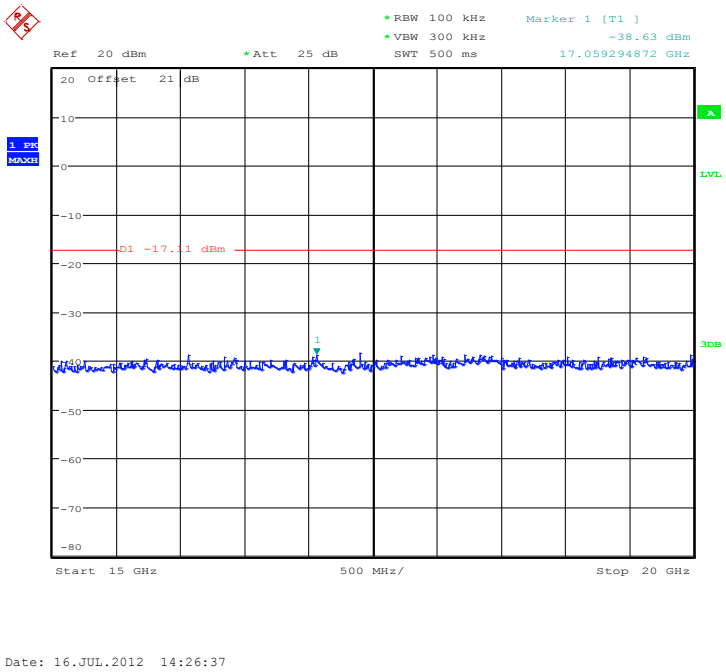


Fig. 63 Conducted Spurious Emission (802.11g, Ch6, 15 GHz-20 GHz)

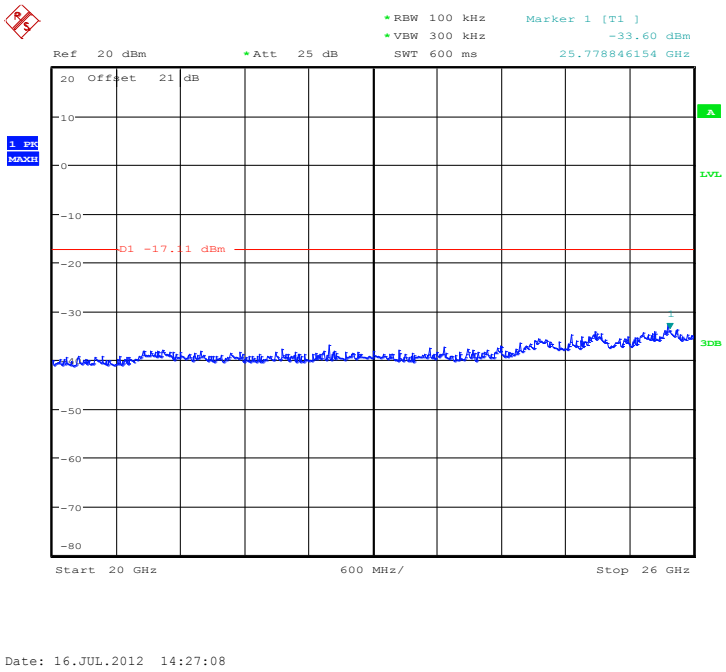


Fig. 64 Conducted Spurious Emission (802.11g, Ch6, 20 GHz-26 GHz)

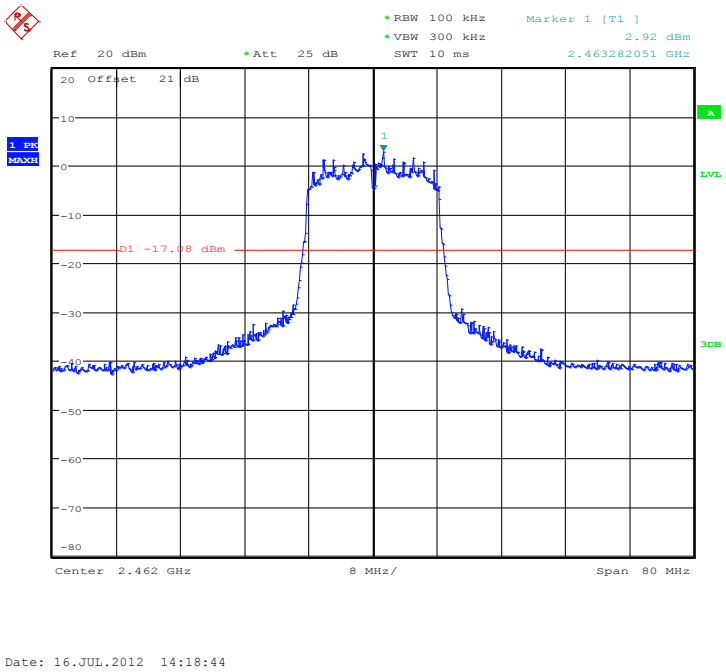


Fig. 65 Conducted Spurious Emission (802.11g, Ch11, Center Frequency)

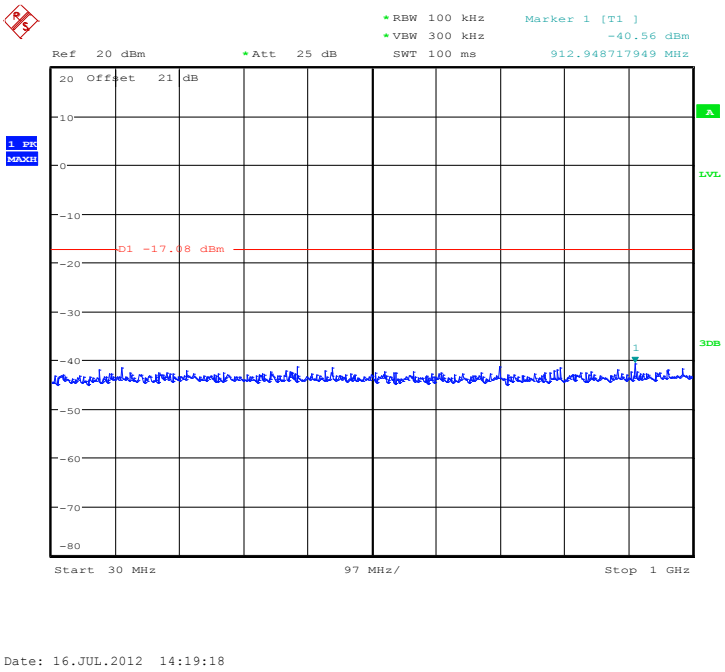


Fig. 66 Conducted Spurious Emission (802.11g, Ch11, 30 MHz-1 GHz)

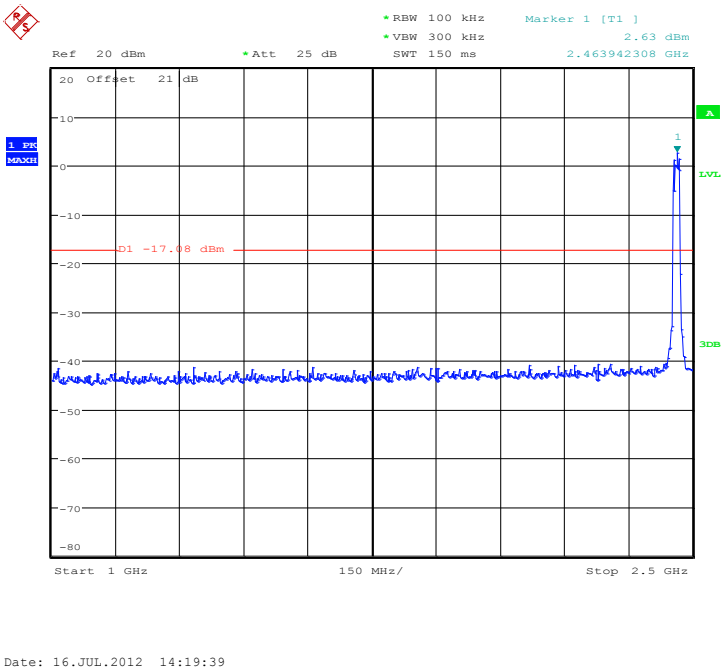


Fig. 67 Conducted Spurious Emission (802.11g, Ch11, 1 GHz-2.5 GHz)

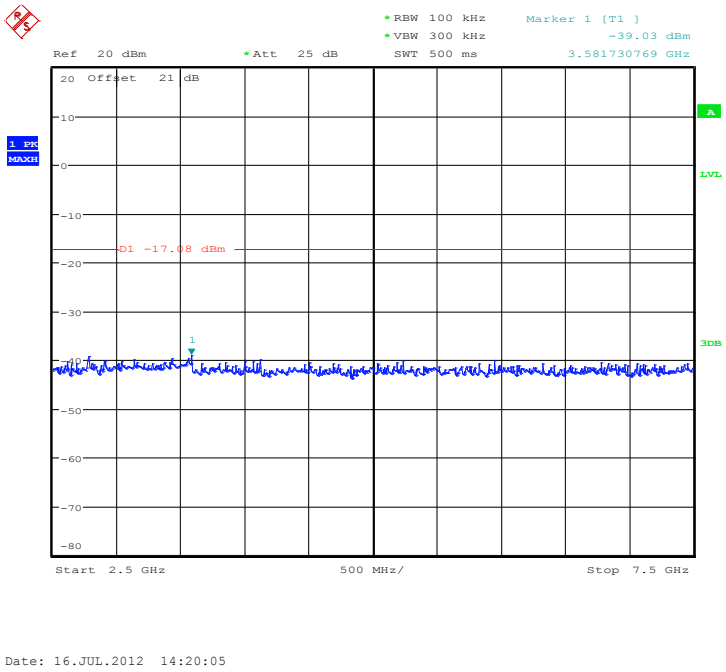


Fig. 68 Conducted Spurious Emission (802.11g, Ch11, 2.5 GHz-7.5 GHz)

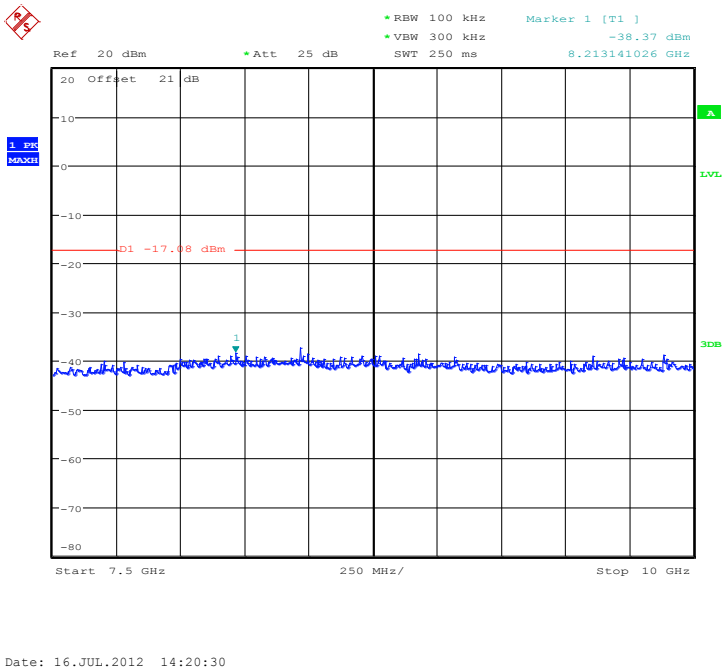


Fig. 69 Conducted Spurious Emission (802.11g, Ch11, 7.5 GHz-10 GHz)

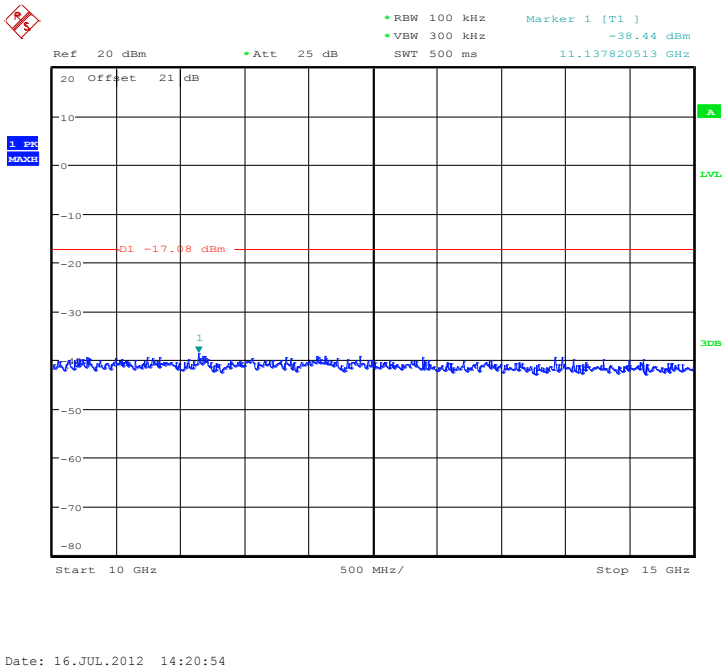


Fig. 70 Conducted Spurious Emission (802.11g, Ch11, 10 GHz-15 GHz)

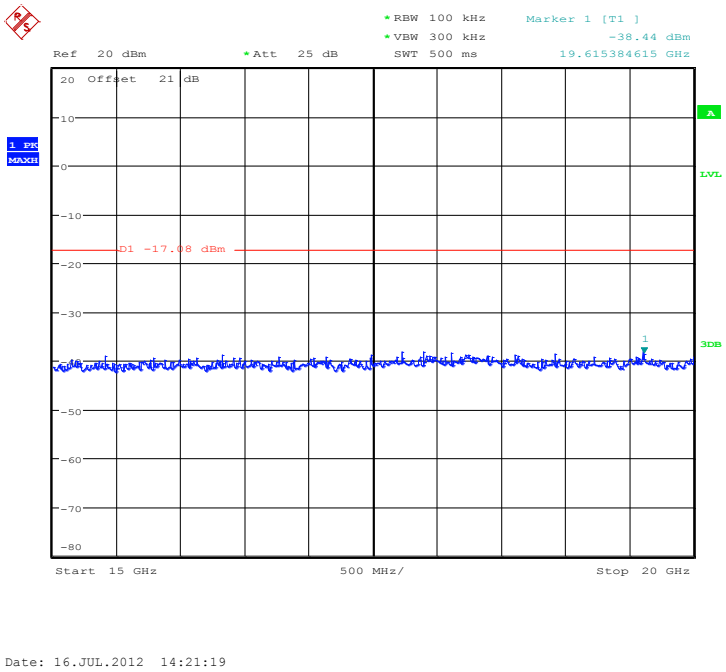


Fig. 71 Conducted Spurious Emission (802.11g, Ch11, 15 GHz-20 GHz)

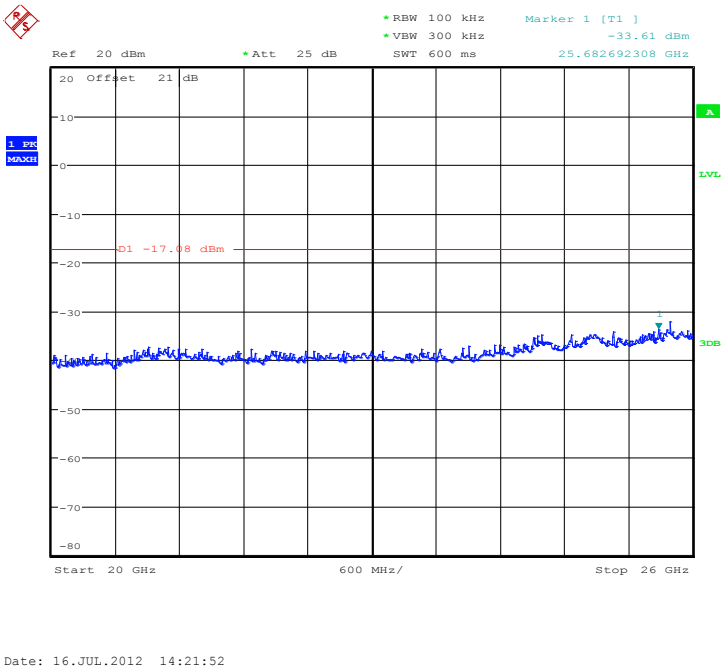


Fig. 72 Conducted Spurious Emission (802.11g, Ch11, 20 GHz-26 GHz)

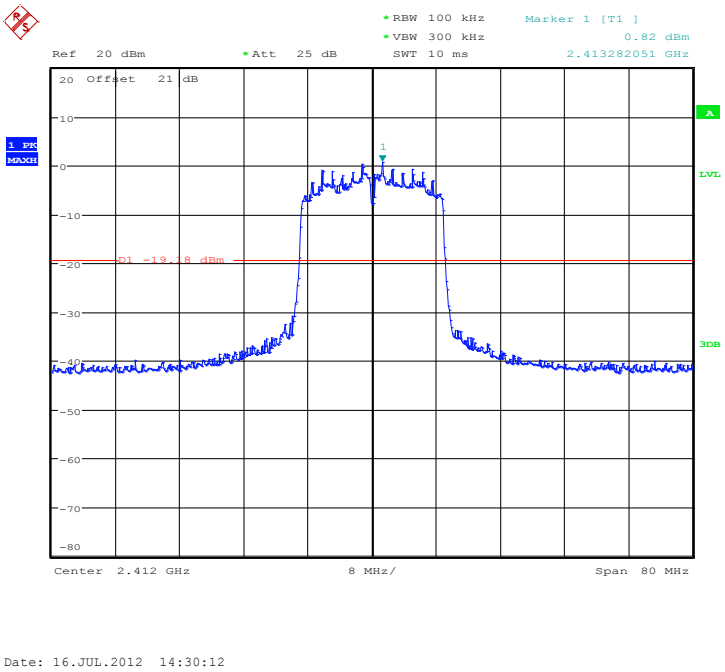


Fig. 73 Conducted Spurious Emission (802.11n-HT20, Ch1, Center Frequency)

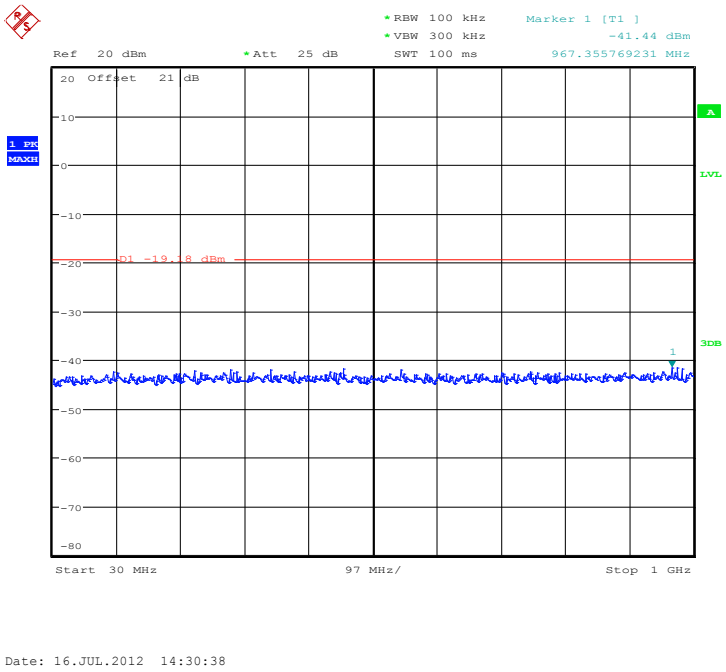


Fig. 74 Conducted Spurious Emission (802.11n-HT20, Ch1, 30 MHz-1 GHz)

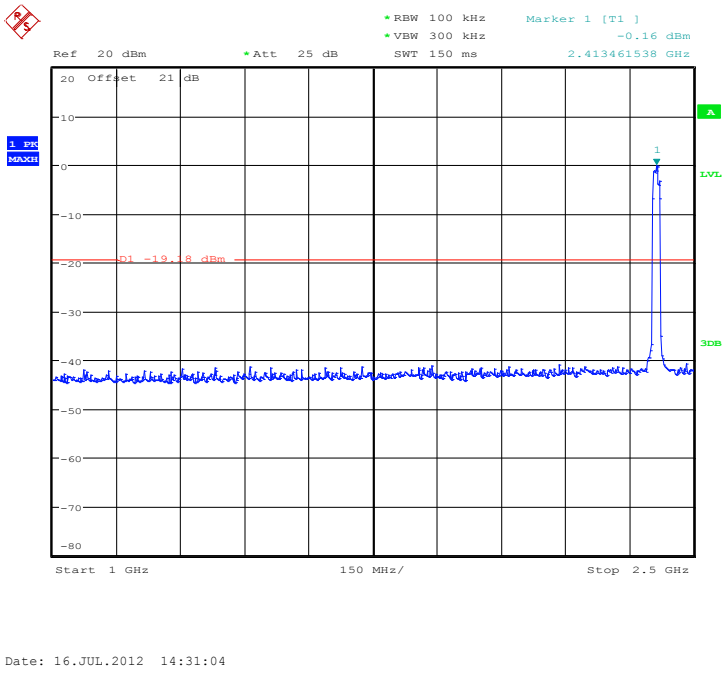


Fig. 75 Conducted Spurious Emission (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)

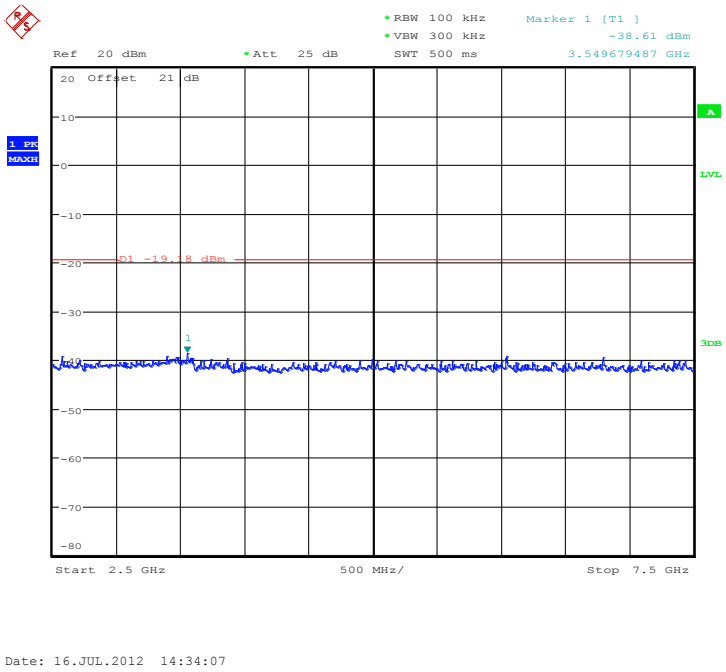


Fig. 76 Conducted Spurious Emission (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)

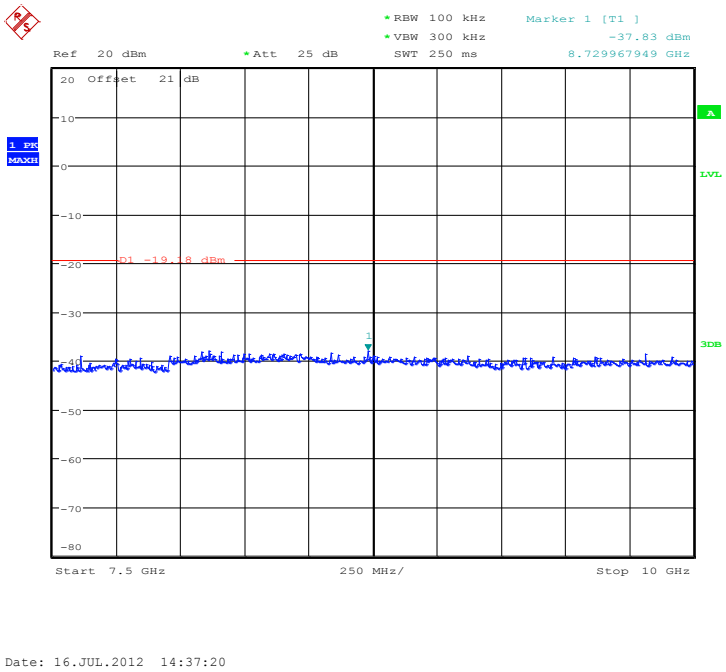


Fig. 77 Conducted Spurious Emission (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)

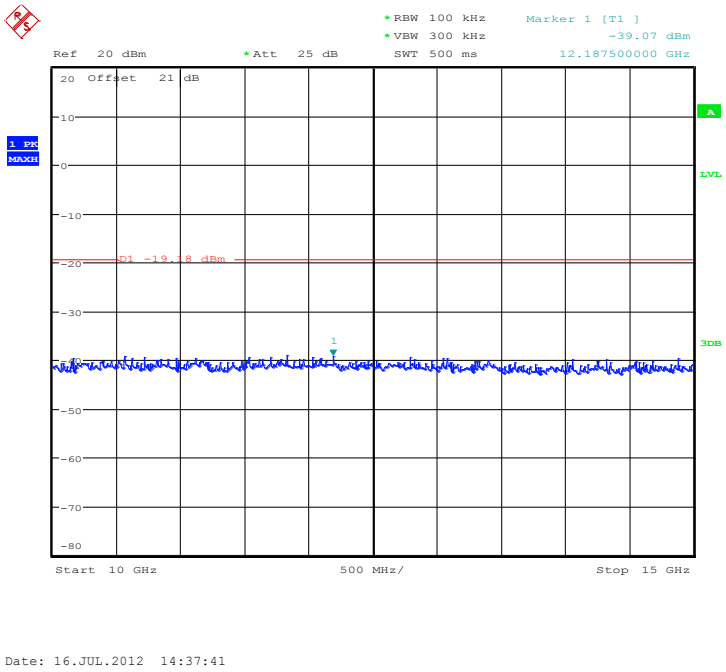


Fig. 78 Conducted Spurious Emission (802.11n-HT20, Ch1, 10 GHz-15 GHz)

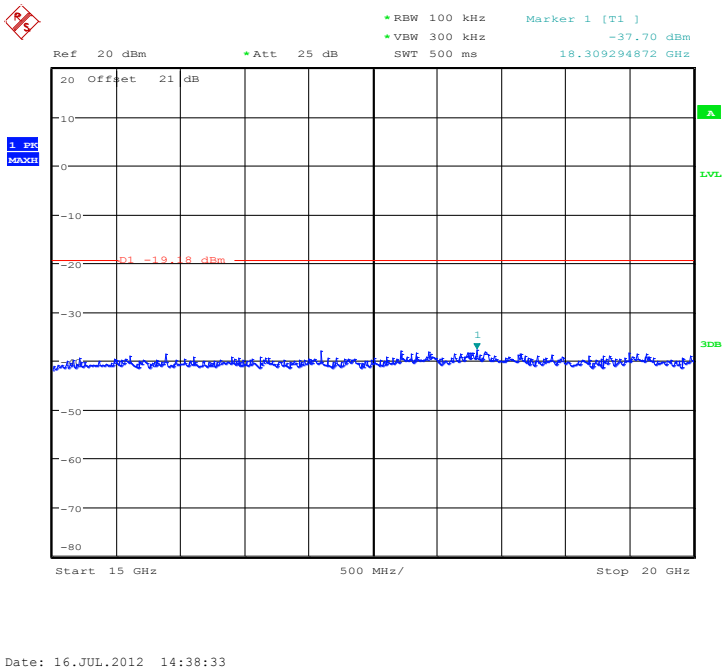


Fig. 79 Conducted Spurious Emission (802.11n-HT20, Ch1, 15 GHz-20 GHz)

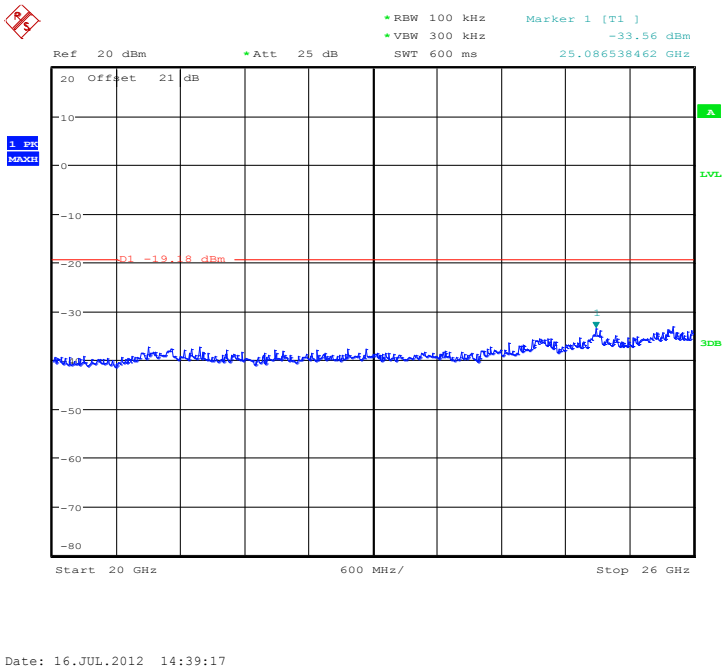


Fig. 80 Conducted Spurious Emission (802.11n-HT20, Ch1, 20 GHz-26 GHz)

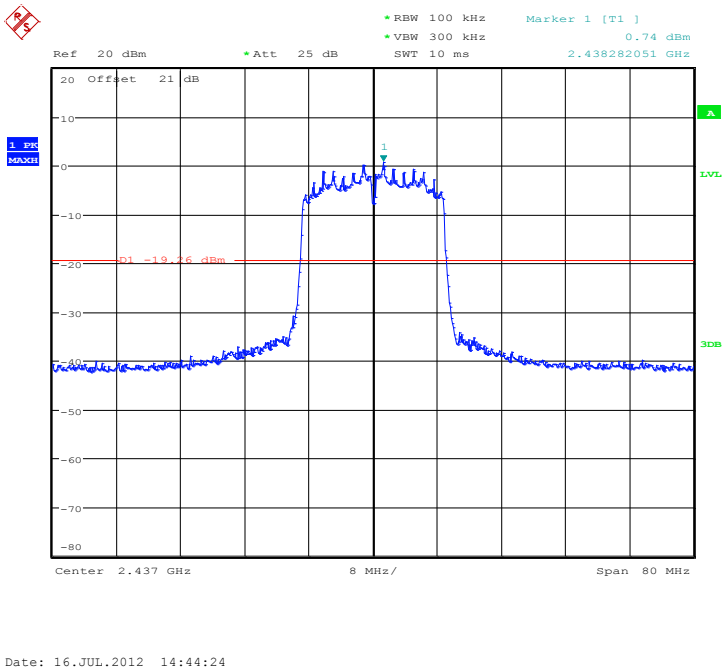


Fig. 81 Conducted Spurious Emission (802.11n-HT20, Ch6, Center Frequency)

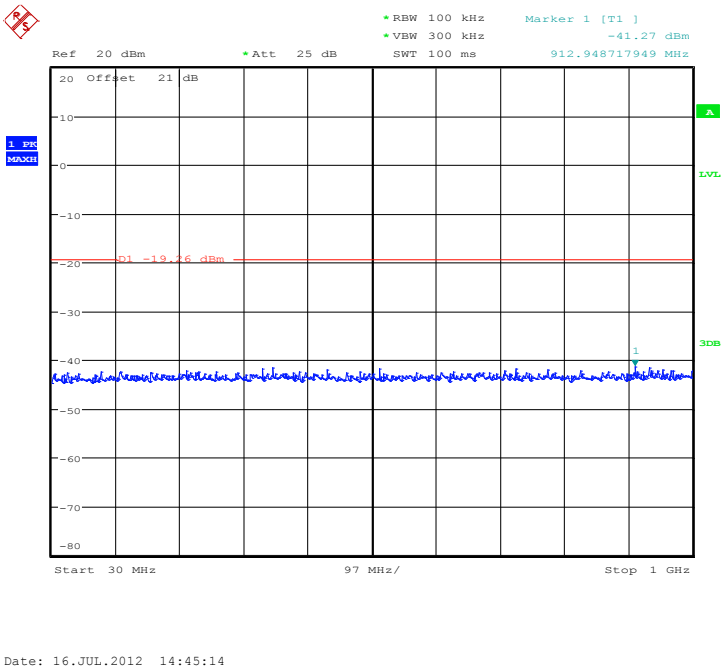


Fig. 82 Conducted Spurious Emission (802.11n-HT20, Ch6, 30 MHz-1 GHz)

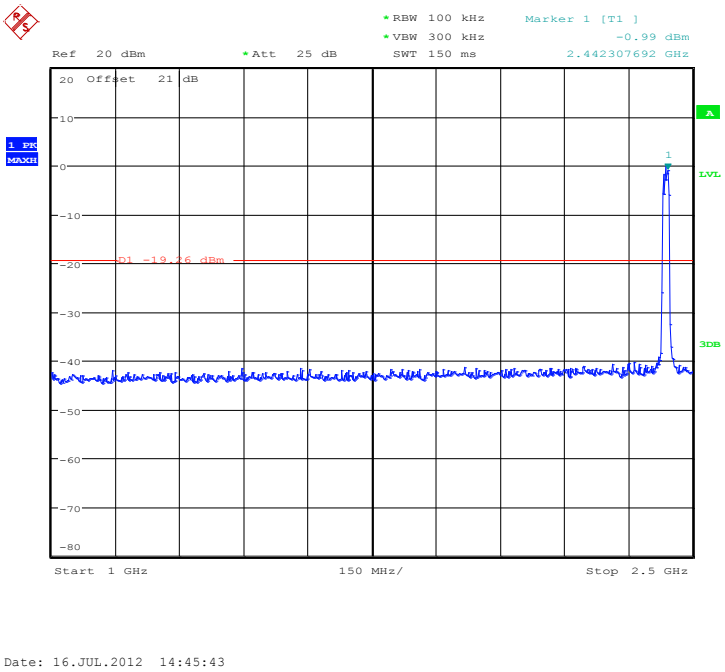


Fig. 83 Conducted Spurious Emission (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)

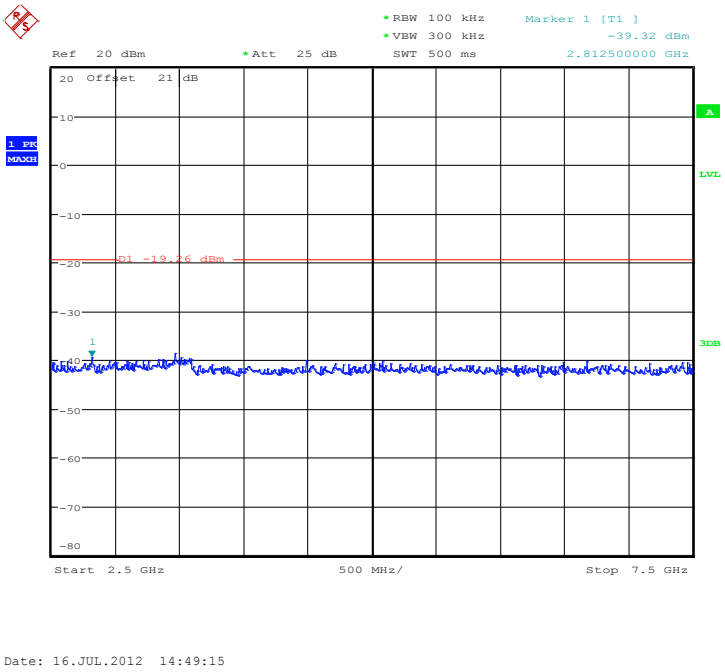


Fig. 84 Conducted Spurious Emission (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)

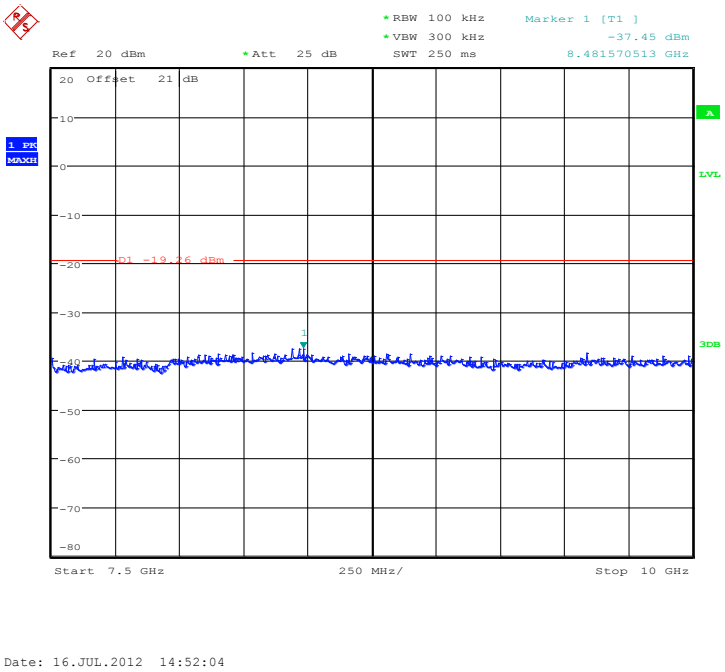


Fig. 85 Conducted Spurious Emission (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)

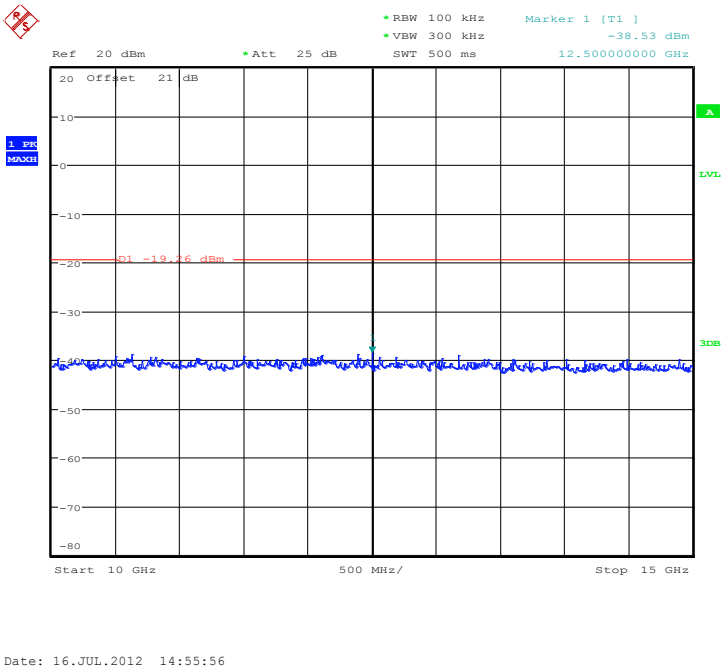


Fig. 86 Conducted Spurious Emission (802.11n-HT20, Ch6, 10 GHz-15 GHz)

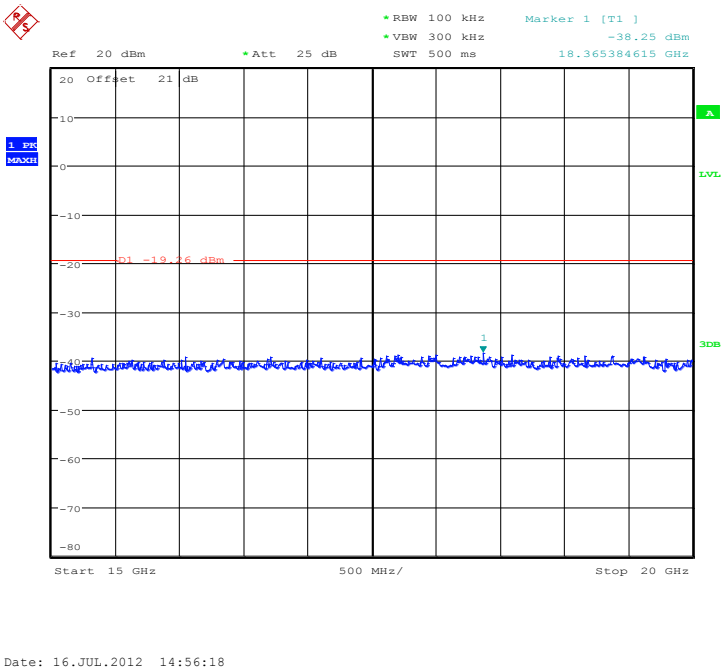


Fig. 87 Conducted Spurious Emission (802.11n-HT20, Ch6, 15 GHz-20 GHz)

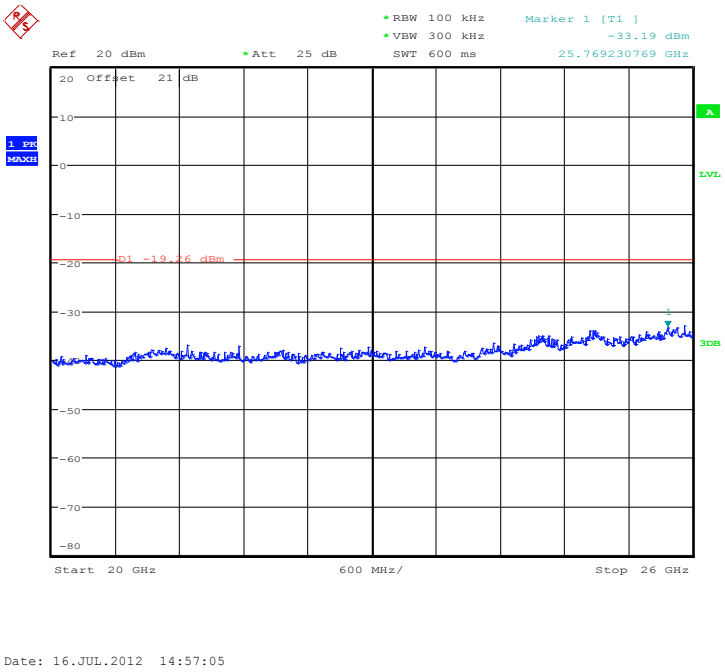


Fig. 88 Conducted Spurious Emission (802.11n-HT20, Ch6, 20 GHz-26 GHz)

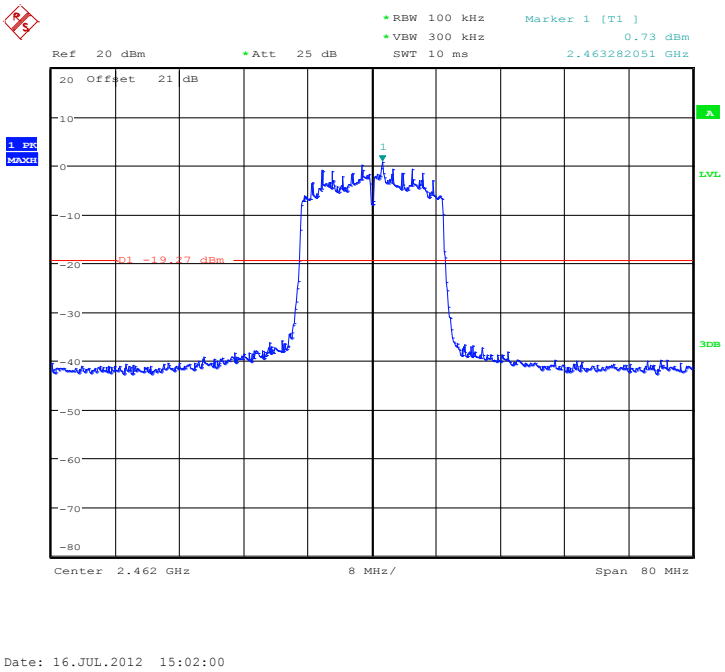


Fig. 89 Conducted Spurious Emission (802.11n-HT20, Ch11, Center Frequency)

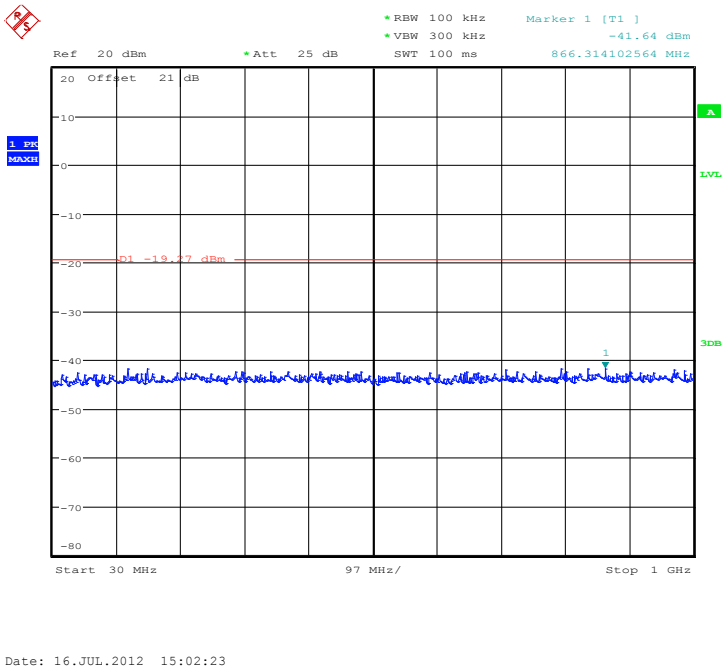


Fig. 90 Conducted Spurious Emission (802.11n-HT20, Ch11, 30 MHz-1 GHz)

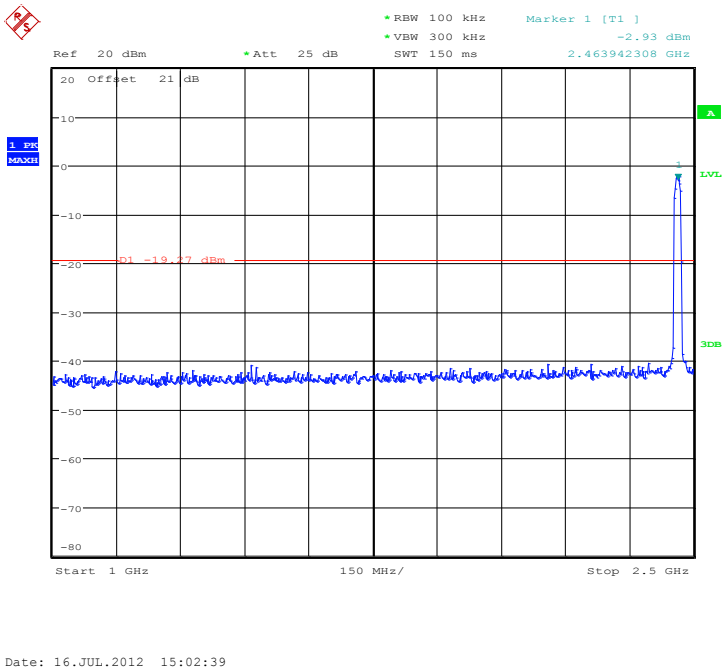


Fig. 91 Conducted Spurious Emission (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)

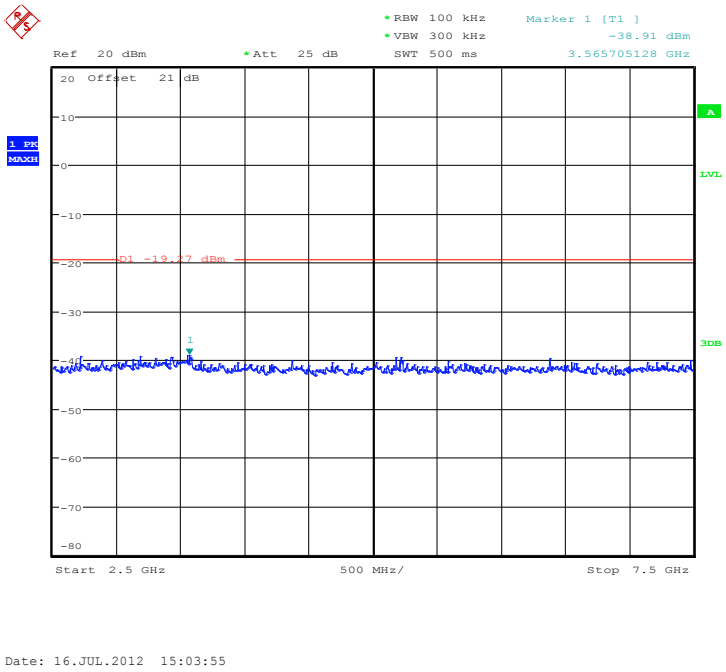


Fig. 92 Conducted Spurious Emission (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)

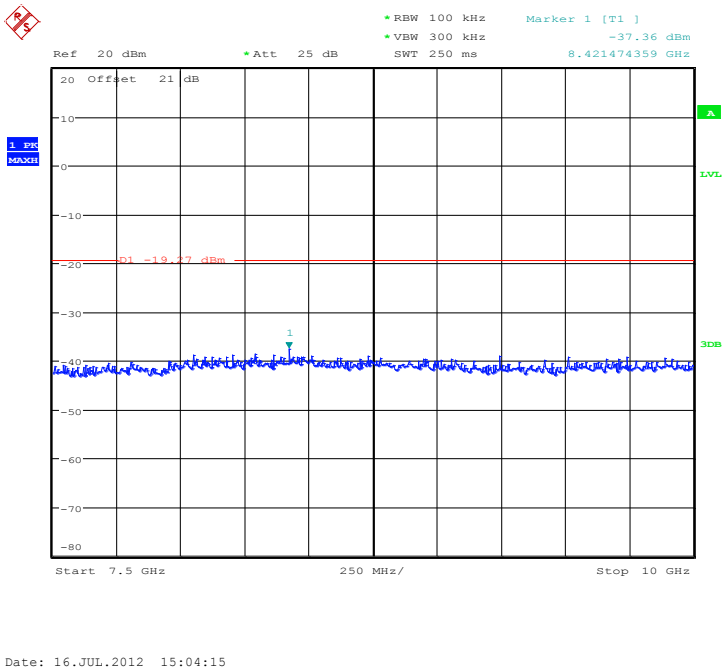


Fig. 93 Conducted Spurious Emission (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)

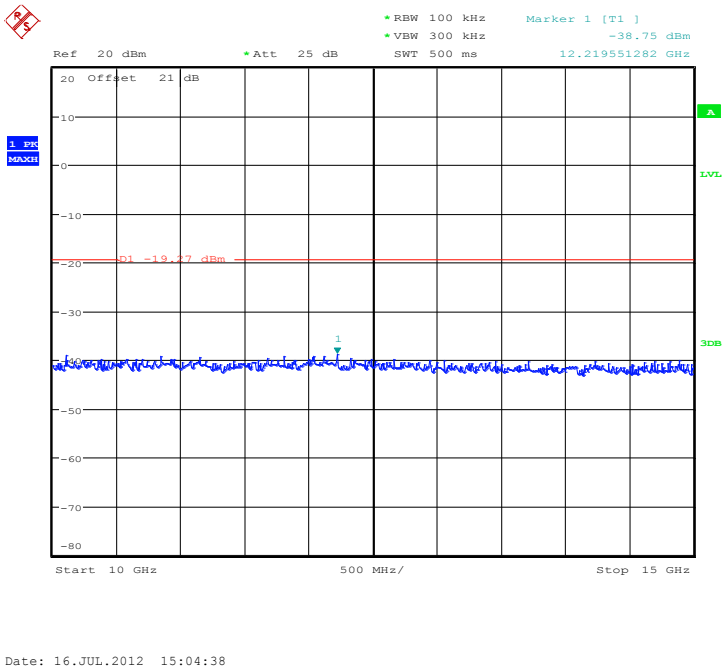


Fig. 94 Conducted Spurious Emission (802.11n-HT20, Ch11, 10 GHz-15 GHz)

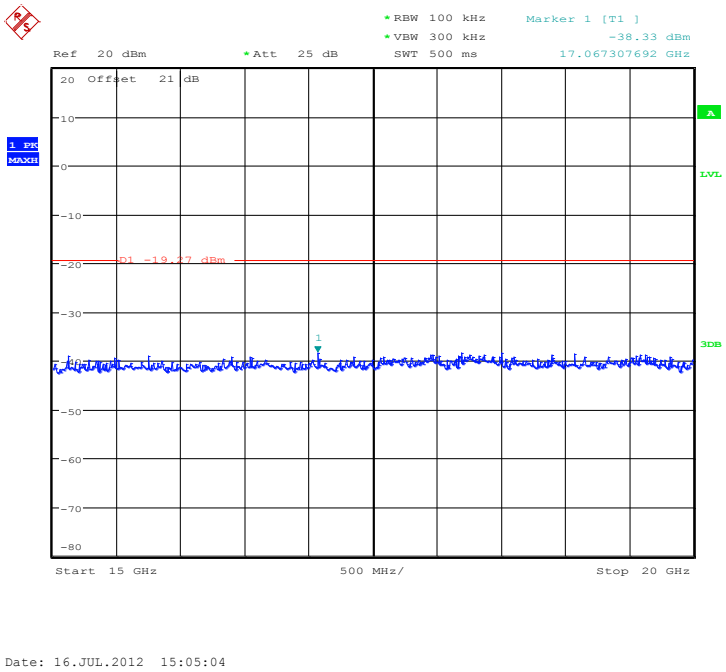


Fig. 95 Conducted Spurious Emission (802.11n-HT20, Ch11, 15 GHz-20 GHz)

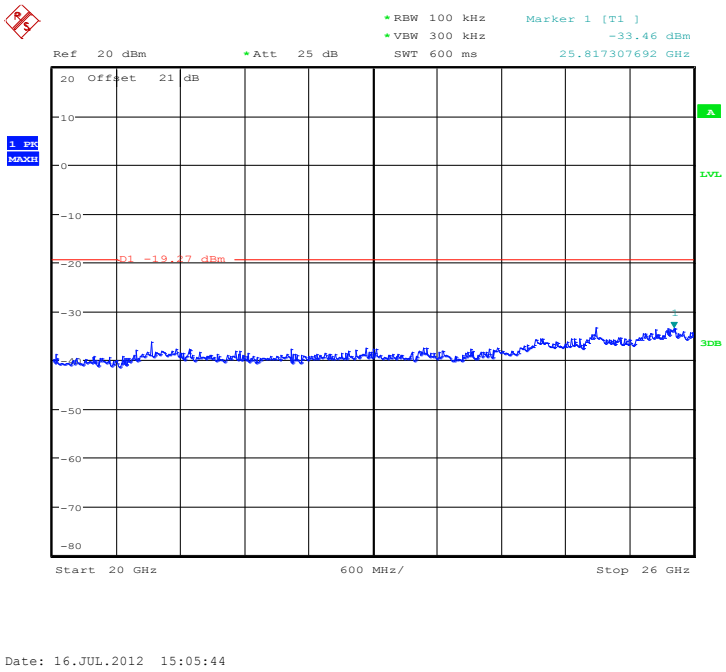


Fig. 96 Conducted Spurious Emission (802.11n-HT20, Ch11, 20 GHz-26 GHz)

A.6.2 Transmitter Spurious Emission - Radiated

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

The measurement is made according to ANSI C63.4 and KDB558074 D01.

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Test Condition

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20

Measurement Results:

802.11b/g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power	2.38GHz ~2.45GHz	Fig.97	P
	1	30 MHz ~1 GHz	Fig.98	P
		1 GHz ~ 4 GHz	Fig.99	P
		4 GHz ~ 18 GHz	Fig.100	P
	6	30 MHz ~1 GHz	Fig.101	P
		1 GHz ~ 4 GHz	Fig.102	P
		4 GHz ~ 18 GHz	Fig.103	P
	Power	2.45GHz ~2.5GHz	Fig.104	P
	11	30 MHz ~1 GHz	Fig.105	P
		1 GHz ~ 4 GHz	Fig.106	P
		4 GHz ~ 18 GHz	Fig.107	P
802.11g	Power	2.38GHz ~2.43GHz	Fig.108	P
	1	30 MHz ~1 GHz	Fig.109	P
		1 GHz ~ 4 GHz	Fig.110	P
		4 GHz ~ 18 GHz	Fig.111	P
	6	30 MHz ~1 GHz	Fig.112	P
		1 GHz ~ 4 GHz	Fig.113	P
		4 GHz ~ 18 GHz	Fig.114	P
	Power	2.45GHz ~2.5GHz	Fig.115	P
	11	30 MHz ~1 GHz	Fig.116	P
		1 GHz ~ 4 GHz	Fig.117	P
		4 GHz ~ 18 GHz	Fig.118	P

802.11n mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (20MHz)	Power	2.38GHz ~2.45GHz	Fig.119	P
	1	30 MHz ~1 GHz	Fig.120	P
		1 GHz ~ 4 GHz	Fig.121	P
		4 GHz ~ 18 GHz	Fig.122	P
	6	30 MHz ~1 GHz	Fig.123	P
		1 GHz ~ 4 GHz	Fig.124	P
		4 GHz ~ 18 GHz	Fig.125	P
	Power	2.45GHz ~2.5GHz	Fig.126	P
	11	30 MHz ~1 GHz	Fig.127	P
		1 GHz ~ 4 GHz	Fig.128	P
		4 GHz ~ 18 GHz	Fig.129	P
802.11n (40MHz)	Power	2.38GHz ~2.45GHz	/	/
	3	30 MHz ~1 GHz	/	/
		1 GHz ~ 4 GHz	/	/

		4 GHz ~ 18 GHz	/	/
	6	30 MHz ~1 GHz	/	/
		1 GHz ~ 4 GHz	/	/
		4 GHz ~ 18 GHz	/	/
	Power	2.45GHz ~2.5GHz	/	/
	9	30 MHz ~1 GHz	/	/
		1 GHz ~ 4 GHz	/	/
		4 GHz ~ 18 GHz	/	/
/	All channels	18 GHz~ 26.5 GHz	Fig.130	P

Conclusion: PASS

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result=P_{Mea}+$A_{Rpl=}$ P_{Mea}+Cable Loss+Antenna Factor

802.11b

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17529.000	42.8	-25.3	42.9	25.198	VERTICAL
17524.500	42.7	-25.3	42.8	25.248	VERTICAL
17517.750	42.7	-25.3	42.8	25.231	VERTICAL
17527.500	42.7	-25.3	42.9	25.043	VERTICAL
17520.750	42.7	-25.3	42.8	25.191	VERTICAL
17813.250	42.6	-25.2	42.9	24.904	VERTICAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17502.000	42.8	-25.3	42.8	25.375	VERTICAL
17531.250	42.8	-25.3	42.9	25.150	VERTICAL
17534.250	42.8	-25.3	42.9	25.150	HORIZONTAL
17546.250	42.7	-25.3	42.9	25.042	VERTICAL
17528.250	42.6	-25.3	42.9	25.013	HORIZONTAL
17582.250	42.6	-25.3	42.7	25.222	VERTICAL

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17522.250	42.7	-25.3	42.8	25.269	HORIZONTAL
17490.000	42.7	-25.3	43.0	24.997	VERTICAL
17484.750	42.7	-25.3	43.0	24.985	VERTICAL
17470.500	42.7	-25.3	42.6	25.385	HORIZONTAL
17508.750	42.7	-25.3	42.8	25.207	VERTICAL
17513.250	42.7	-25.3	42.8	25.183	VERTICAL

802.11g

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17526.750	42.9	-25.3	42.9	25.225	VERTICAL
17979.750	42.7	-25.2	42.3	25.716	VERTICAL
17511.000	42.7	-25.3	42.8	25.267	VERTICAL
17529.750	42.7	-25.3	42.9	25.102	HORIZONTAL
17891.250	42.7	-25.2	42.5	25.472	VERTICAL
17536.500	42.7	-25.3	42.9	25.040	HORIZONTAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17494.500	42.9	-25.3	43.0	25.125	HORIZONTAL
17520.000	42.8	-25.3	42.8	25.365	VERTICAL
17512.500	42.8	-25.3	42.8	25.305	VERTICAL
17570.250	42.7	-25.3	42.3	25.775	VERTICAL
17505.000	42.7	-25.3	42.8	25.213	VERTICAL
17541.000	42.7	-25.3	42.9	25.052	VERTICAL

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17782.500	42.9	-25.4	42.0	26.427	VERTICAL
17527.500	42.8	-25.3	42.9	25.215	VERTICAL
17502.750	42.7	-25.3	42.8	25.253	VERTICAL
17524.500	42.7	-25.3	42.8	25.230	VERTICAL
17568.750	42.7	-25.3	42.3	25.722	HORIZONTAL
17538.000	42.7	-25.3	42.9	25.044	VERTICAL

802.11n-HT20

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17515.500	42.9	-25.3	42.8	25.378	VERTICAL
17991.750	42.7	-24.7	42.3	25.154	VERTICAL
17838.750	42.7	-25.2	42.3	25.600	VERTICAL
17544.000	42.6	-25.3	42.9	25.013	HORIZONTAL
17492.250	42.6	-25.3	43.0	24.900	VERTICAL
17517.750	42.6	-25.3	42.8	25.168	HORIZONTAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17526.000	42.9	-25.3	42.9	25.301	VERTICAL
17517.750	42.8	-25.3	42.8	25.330	HORIZONTAL
17553.750	42.8	-25.3	42.3	25.809	VERTICAL
17536.500	42.7	-25.3	42.9	25.051	VERTICAL
17535.750	42.7	-25.3	42.9	25.033	VERTICAL
17493.000	42.6	-25.3	43.0	24.852	HORIZONTAL

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17518.500	43.0	-25.3	42.8	25.544	VERTICAL
17543.250	42.7	-25.3	42.9	25.094	VERTICAL
17541.000	42.7	-25.3	42.9	25.052	VERTICAL
17526.000	42.7	-25.3	42.9	25.039	VERTICAL
17499.750	42.7	-25.3	43.0	24.926	HORIZONTAL
17545.500	42.6	-25.3	42.9	24.986	VERTICAL

802.11n-HT40

Ch3

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/

Ch9

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/

Test graphs as below:

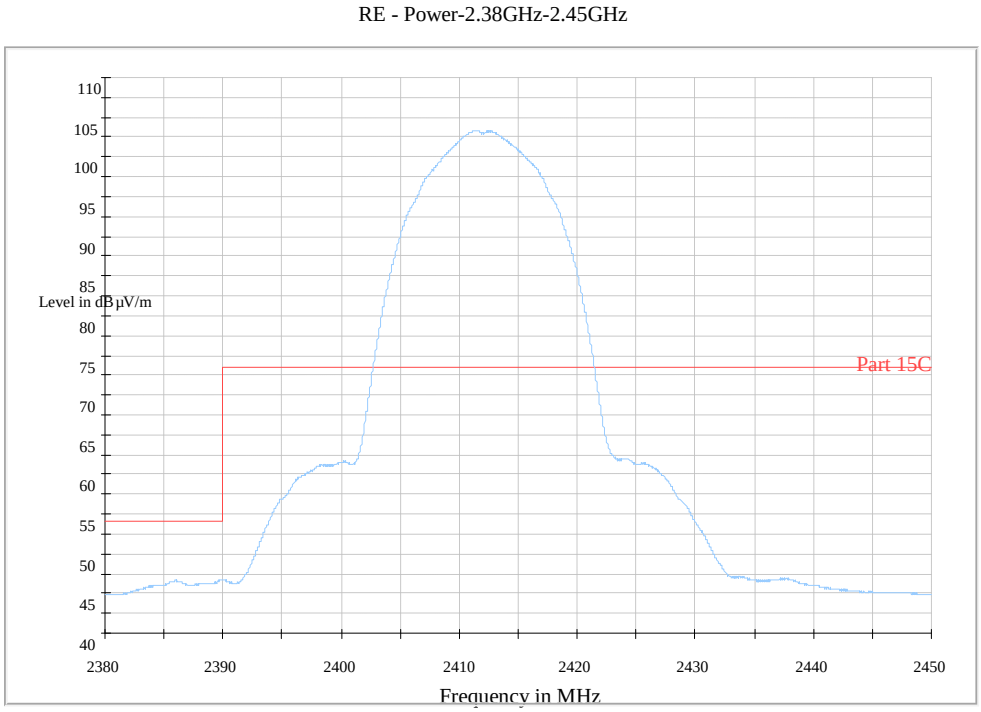


Fig. 97 Radiated Spurious Emission (Power): 802.11b, ch1, 2.38 GHz - 2.45GHz

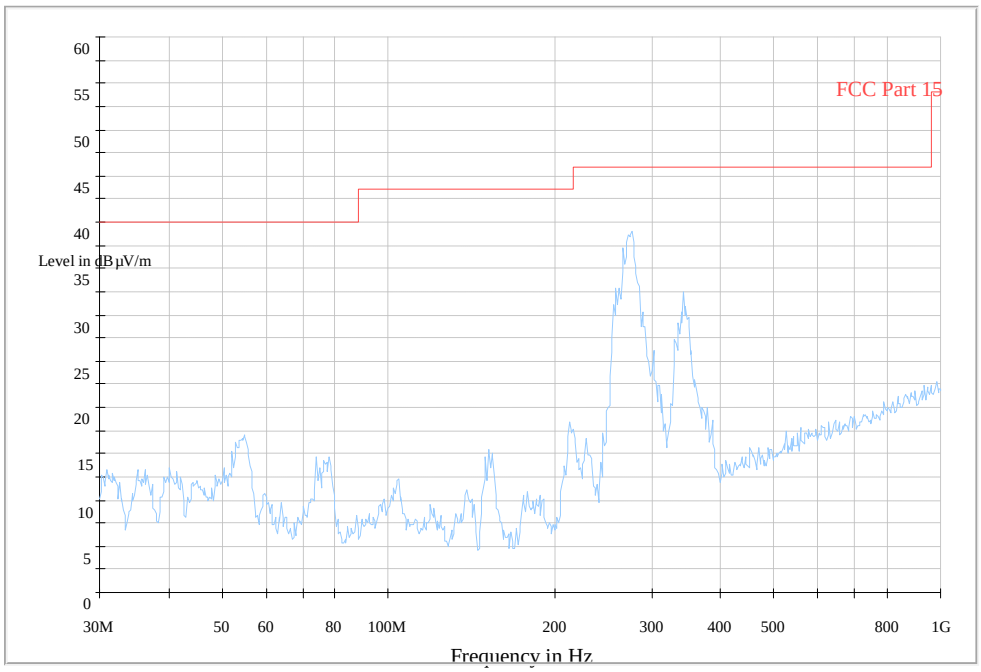


Fig. 98 Radiated Spurious Emission (802.11b, Ch1, 30 MHz-1 GHz)

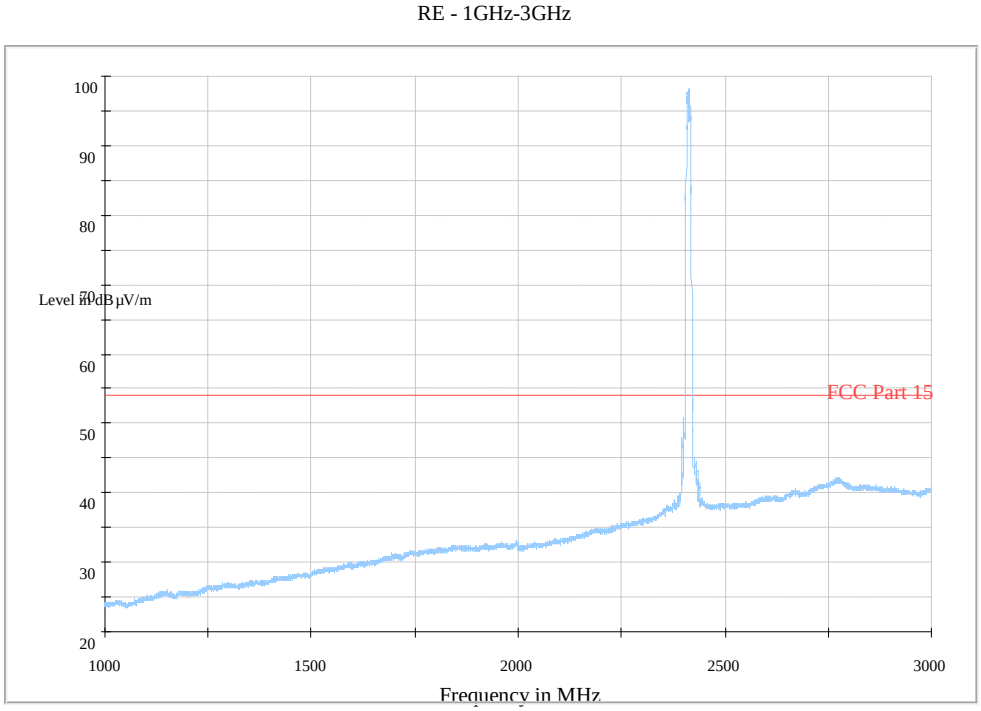


Fig. 99 Radiated Spurious Emission (802.11b, Ch1, 1 GHz-3 GHz)

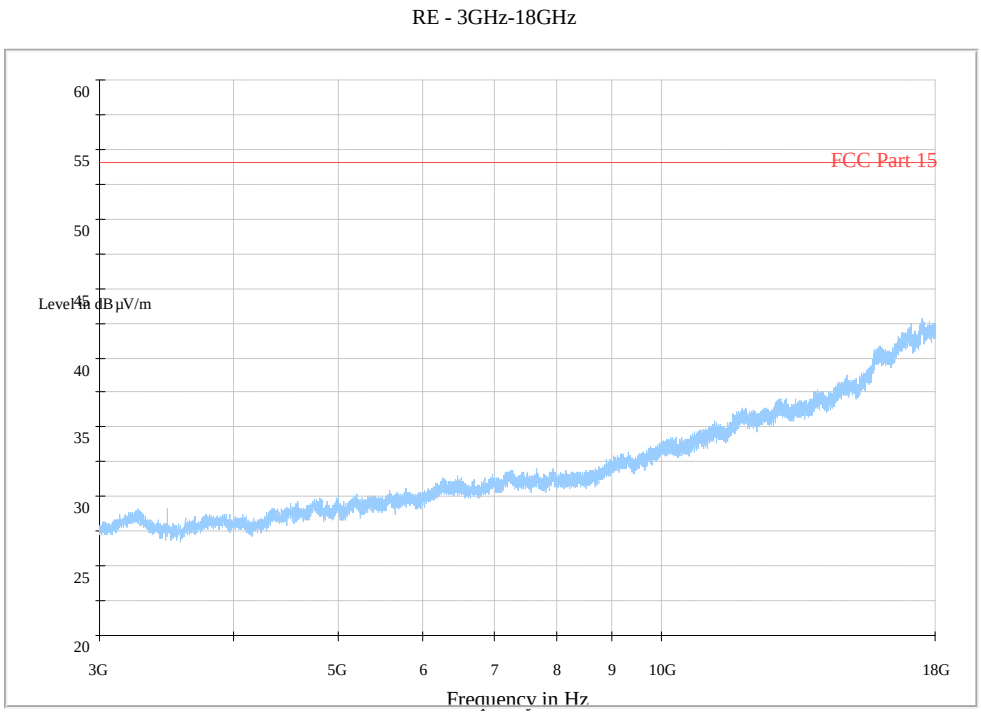


Fig. 100 Radiated Spurious Emission (802.11b, Ch1, 3 GHz-18 GHz)

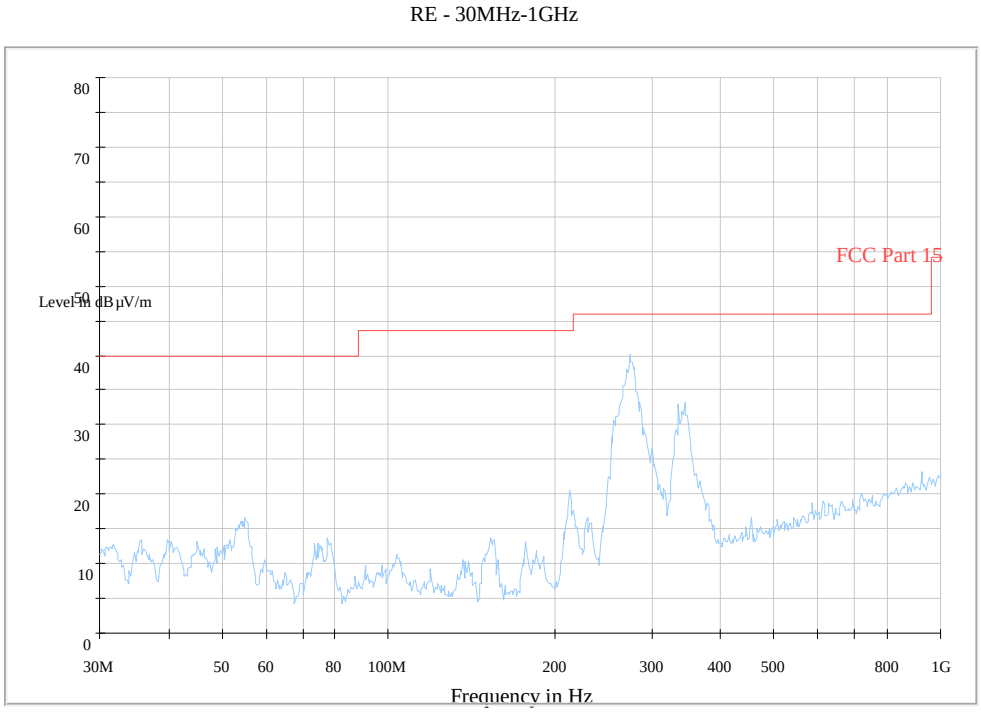


Fig. 101 Radiated Spurious Emission (802.11b, Ch6, 30 MHz-1 GHz)

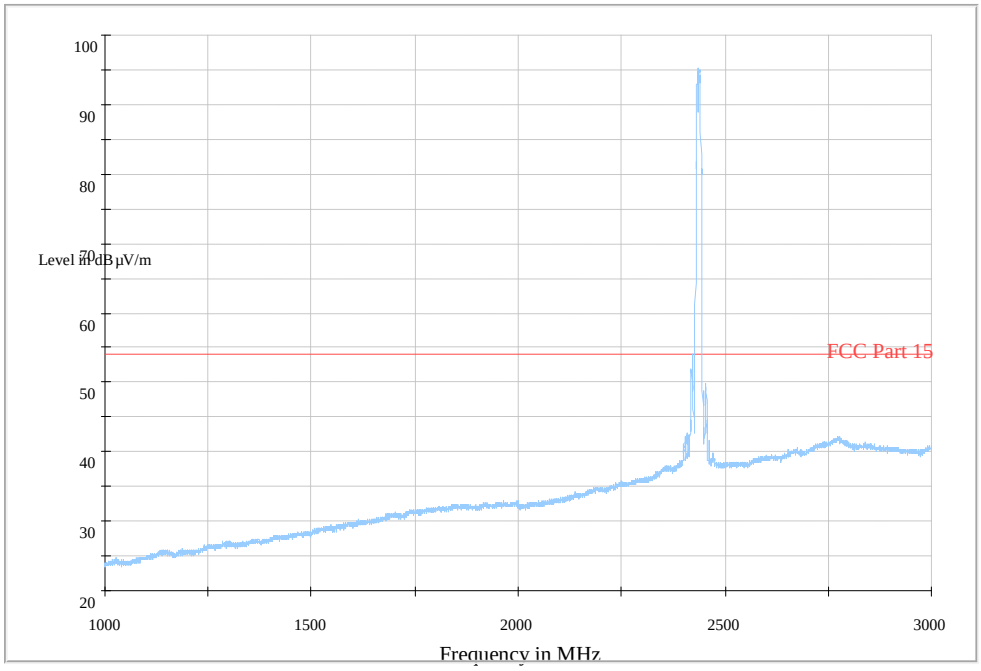


Fig. 102 Radiated Spurious Emission (802.11b, Ch6, 1 GHz-3 GHz)

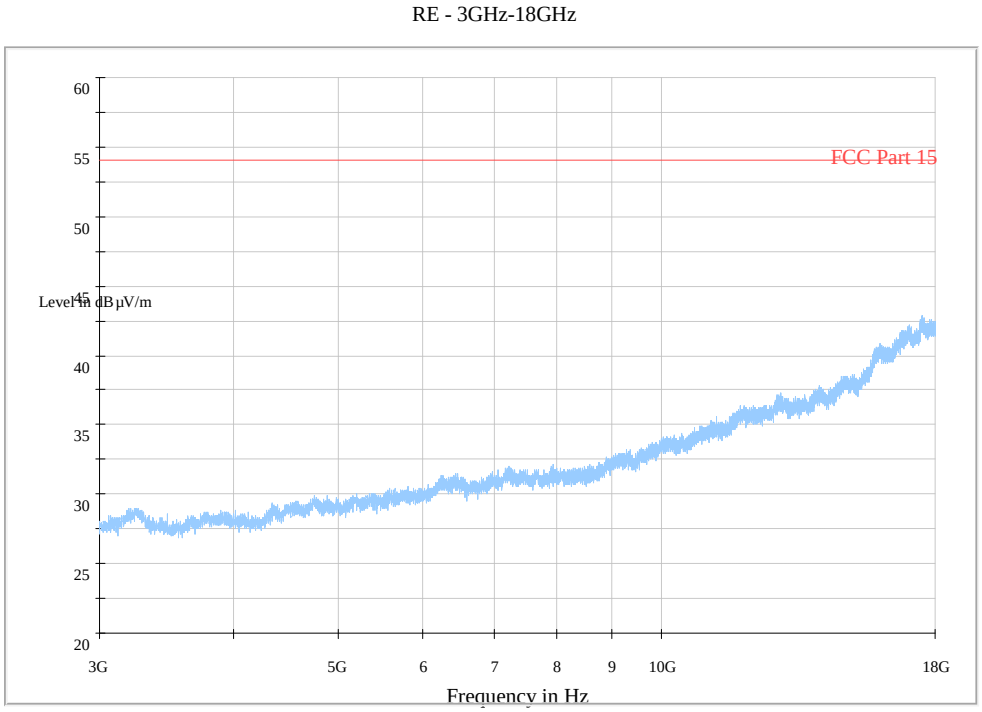


Fig. 103 Radiated Spurious Emission (802.11b, Ch6, 3 GHz-18 GHz)

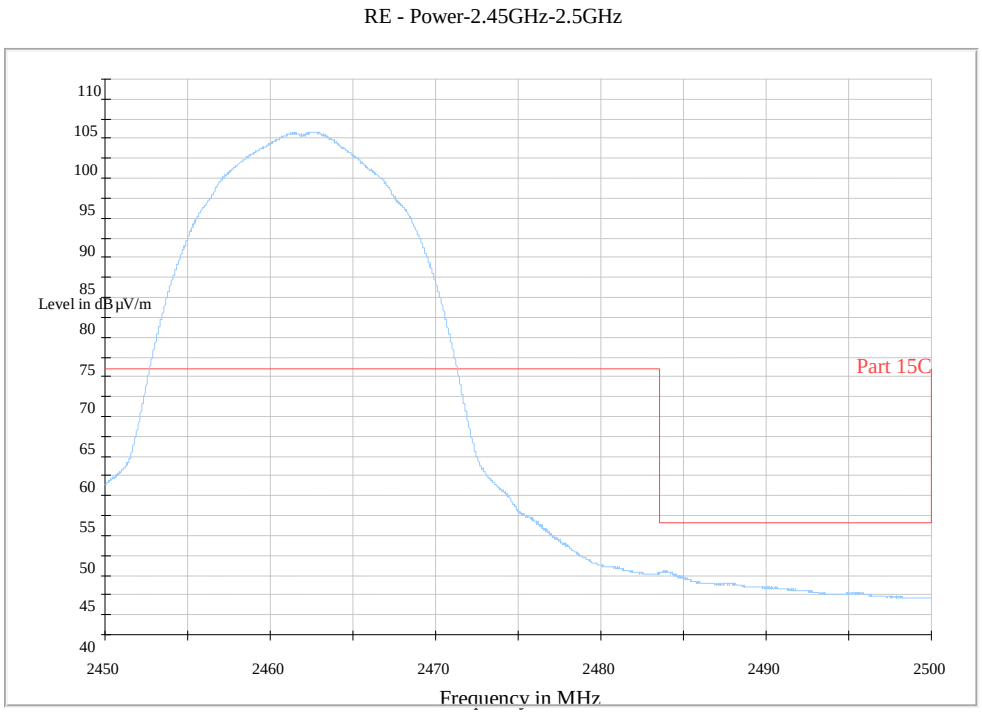


Fig. 104 Radiated Spurious Emission (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

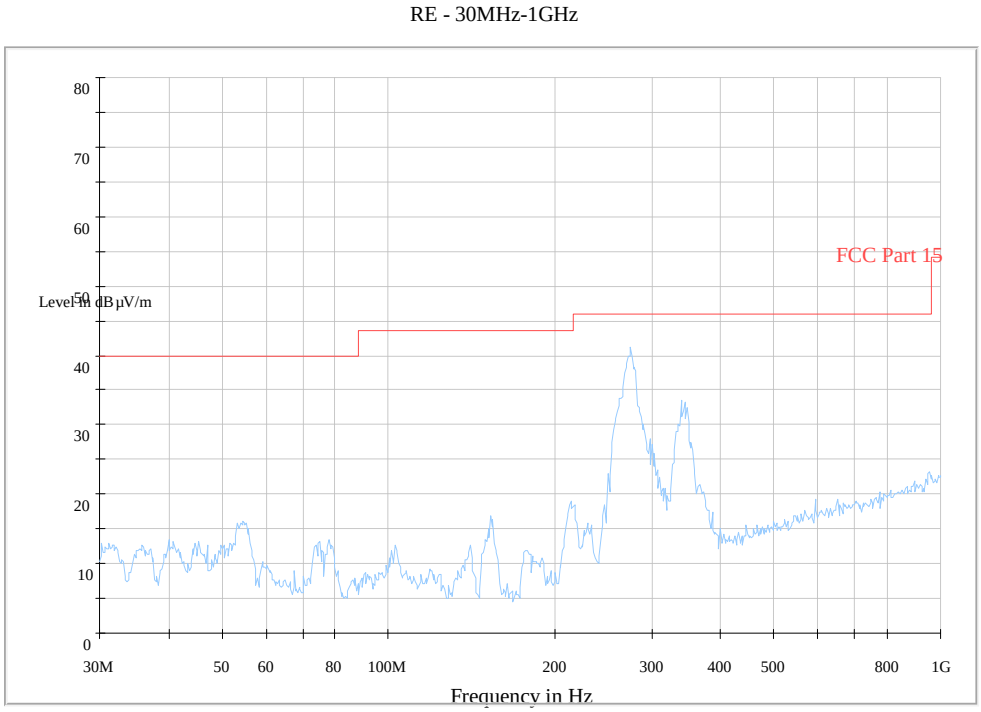


Fig. 105 Radiated Spurious Emission (802.11b, Ch11, 30 MHz-1 GHz)

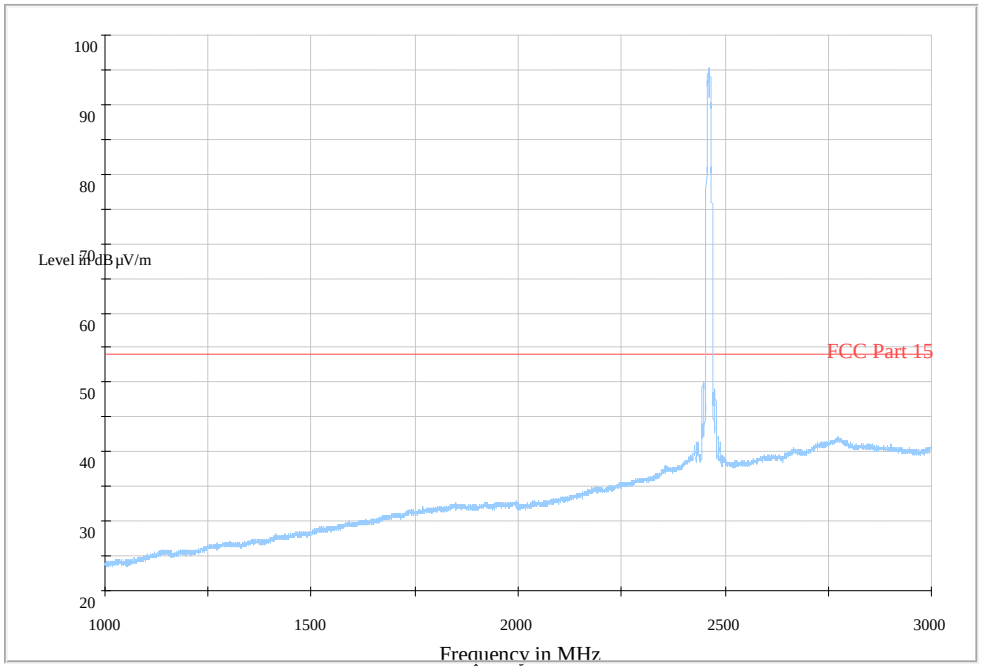


Fig. 106 Radiated Spurious Emission (802.11b, Ch11, 1 GHz-3 GHz)

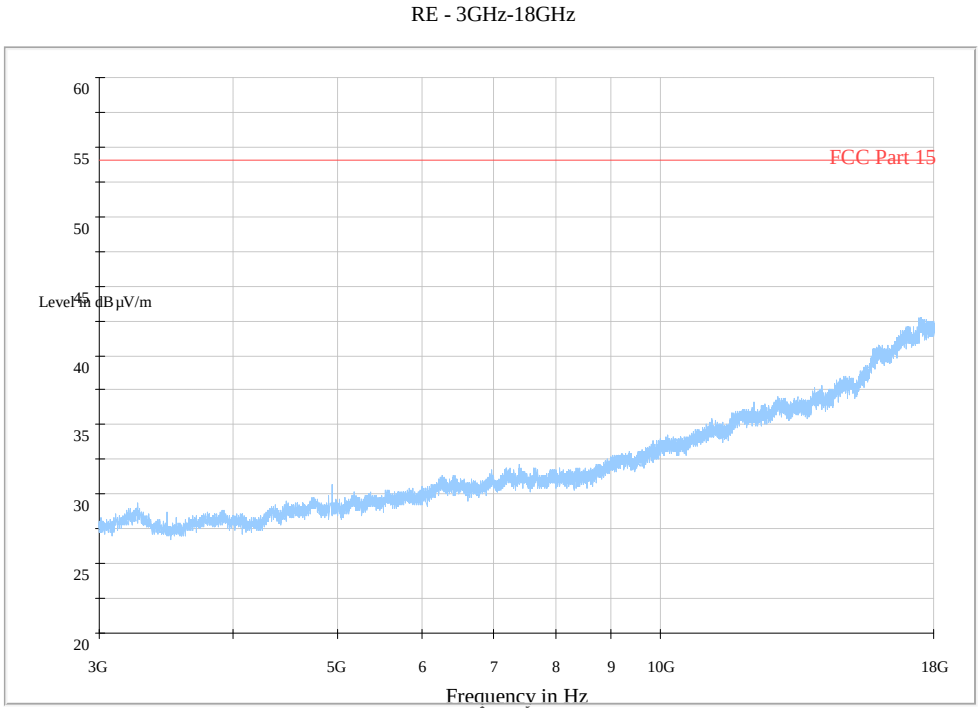


Fig. 107 Radiated Spurious Emission (802.11b, Ch11, 3 GHz-18 GHz)

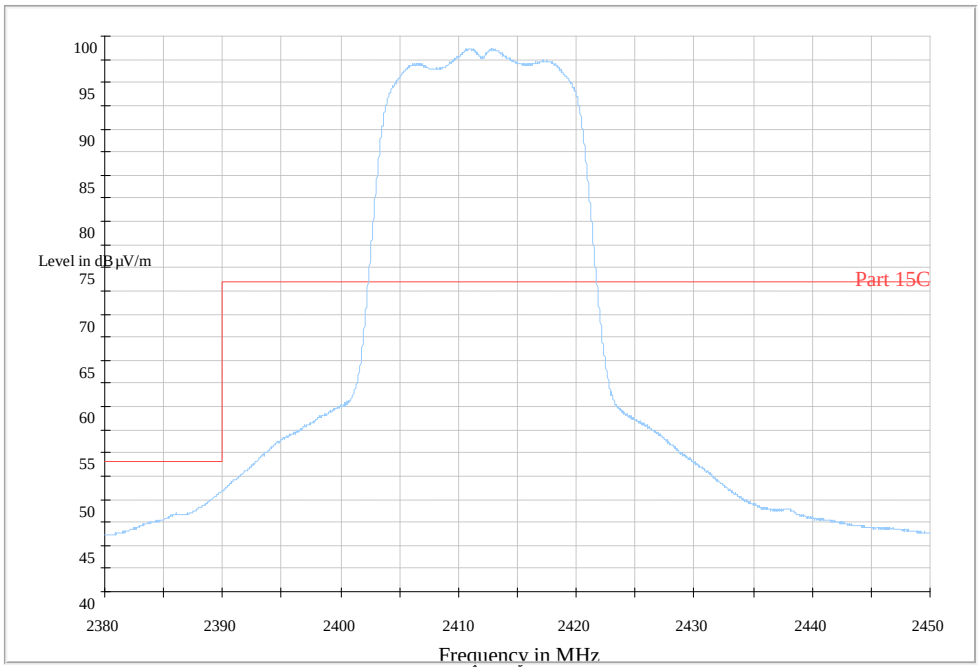


Fig. 108 Radiated Spurious Emission (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz

Fig. 109 Radiated Spurious Emission (802.11g, Ch1, 30 MHz-1 GHz)

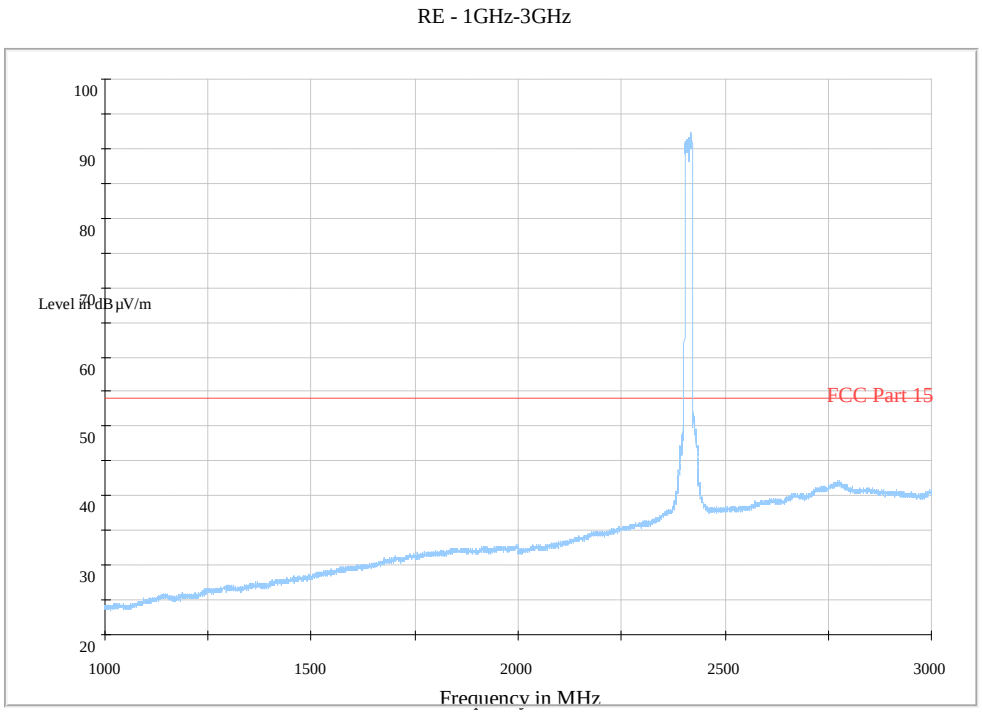


Fig. 110 Radiated Spurious Emission (802.11g, Ch1, 1 GHz-3 GHz)

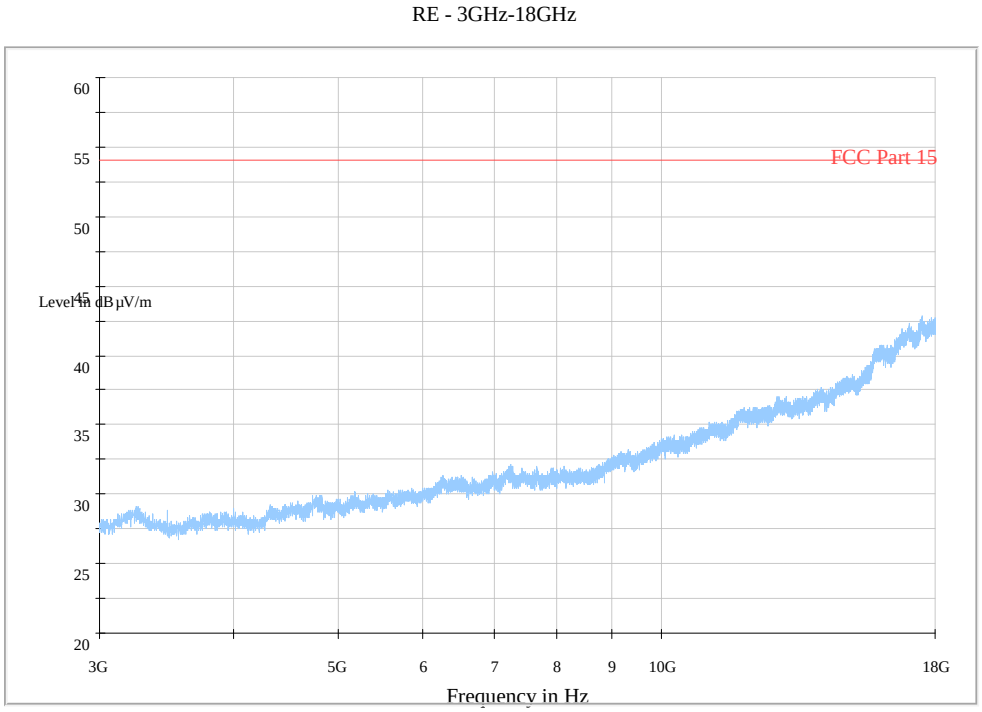


Fig. 111 Radiated Spurious Emission (802.11g, Ch1, 3 GHz-18 GHz)

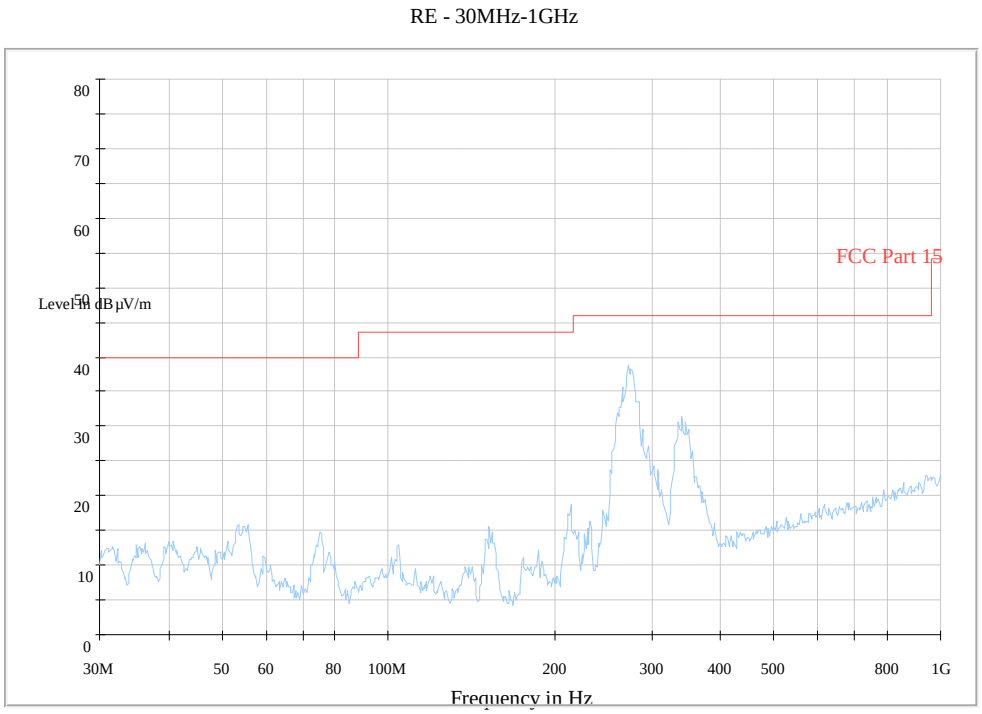


Fig. 112 Radiated Spurious Emission (802.11g, Ch6, 30 MHz-1 GHz)

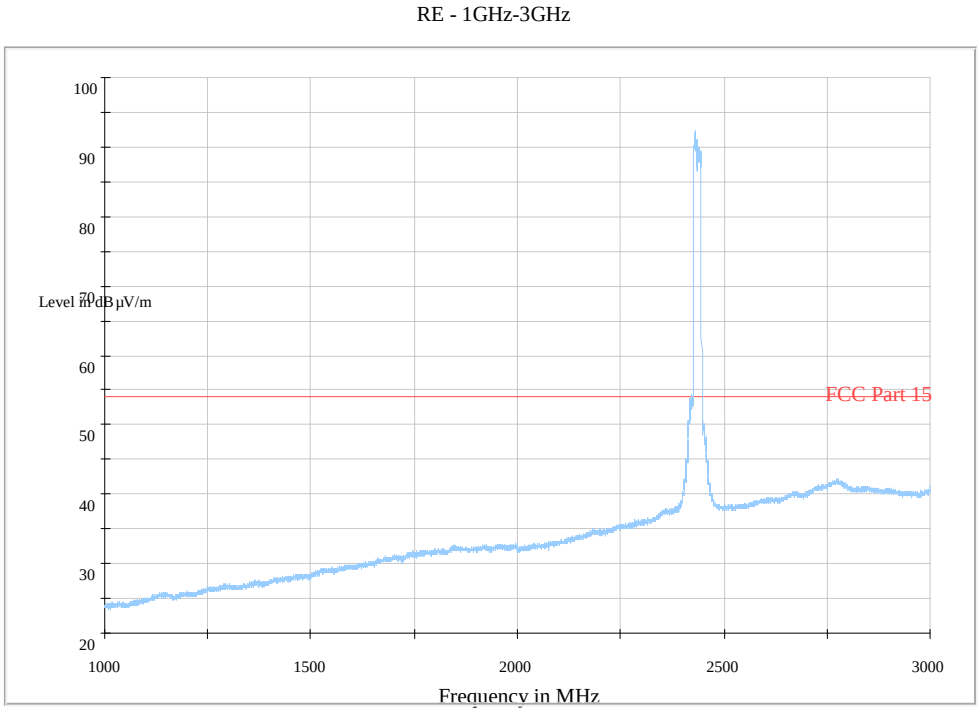


Fig. 113 Radiated Spurious Emission (802.11g, Ch6, 1 GHz-3 GHz)

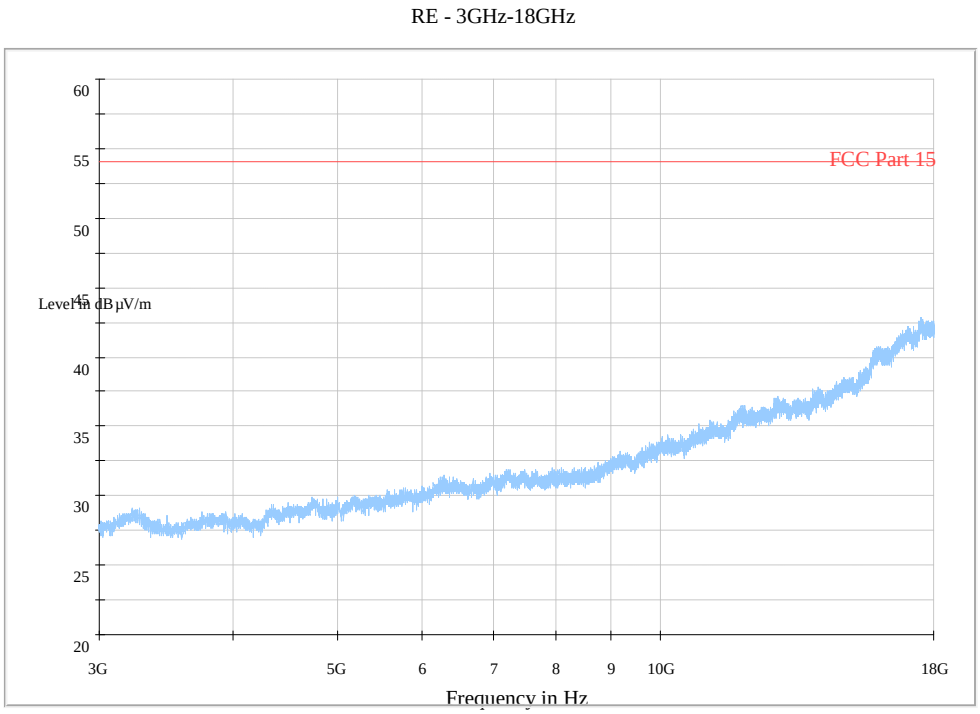


Fig. 114 Radiated Spurious Emission (802.11g, Ch6, 3 GHz-18 GHz)

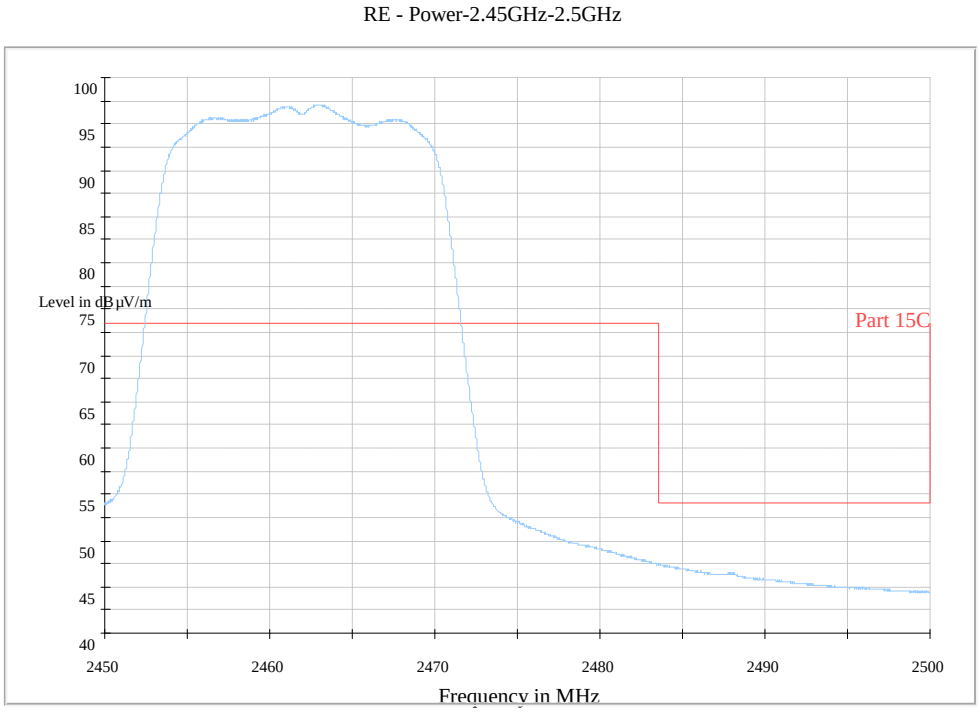


Fig. 115 Radiated Spurious Emission (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

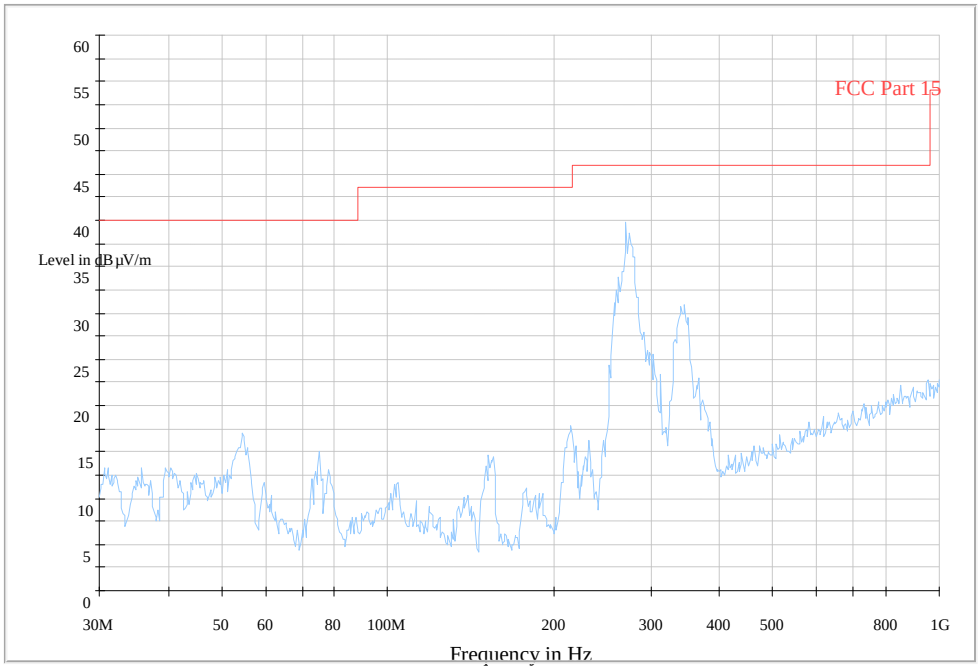


Fig. 116 Radiated Spurious Emission (802.11g, Ch11, 30 MHz-1 GHz)

RE - 1GHz-3GHz

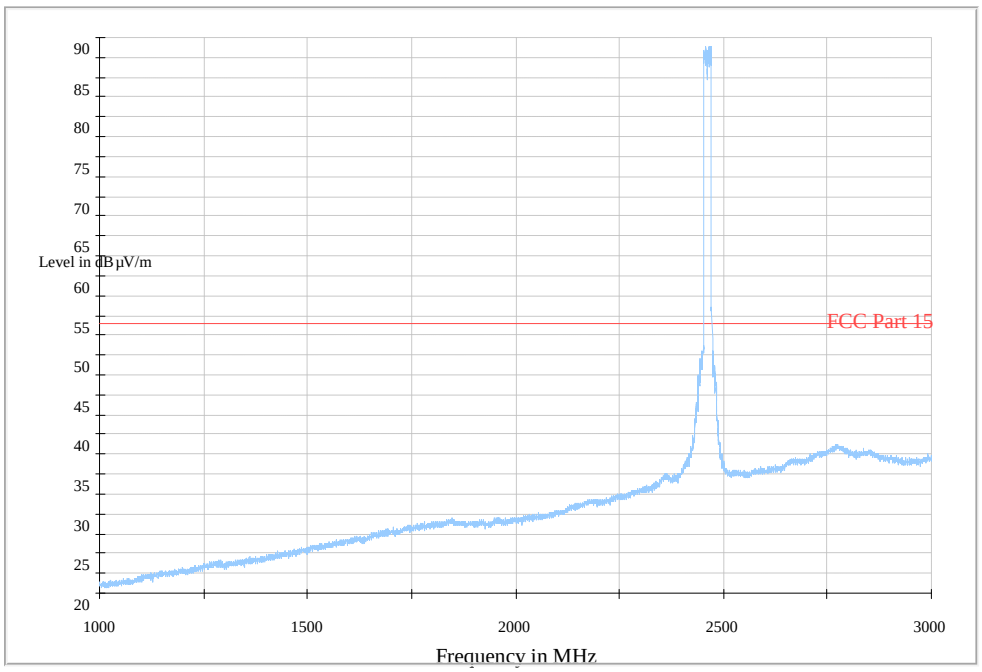


Fig. 117 Radiated Spurious Emission (802.11g, Ch11, 1 GHz-3 GHz)

RE - 3GHz-18GHz

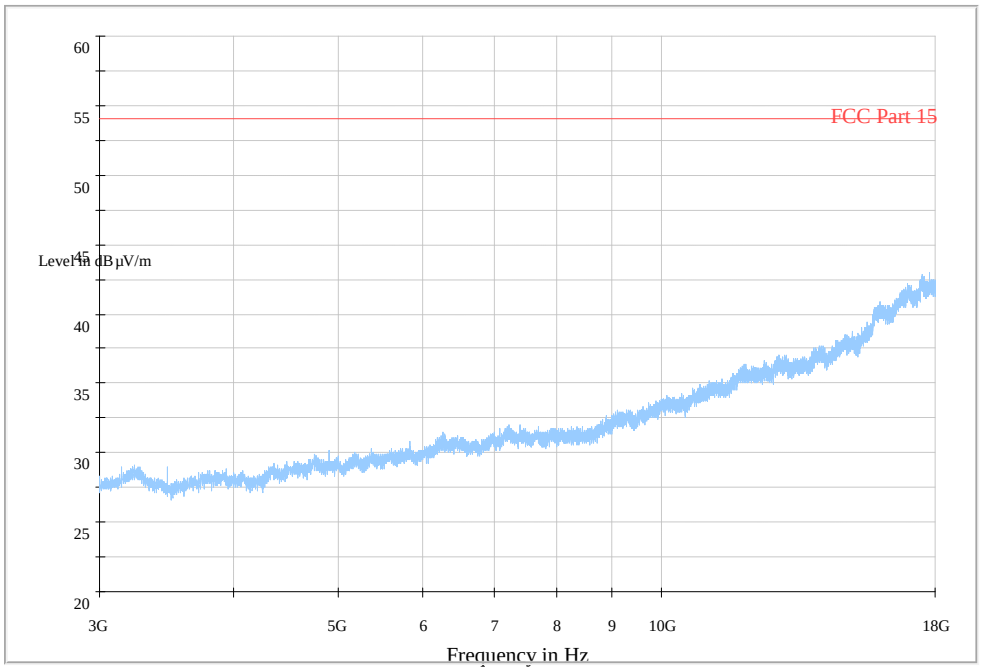


Fig. 118 Radiated Spurious Emission (802.11g, Ch11, 3 GHz-18 GHz)

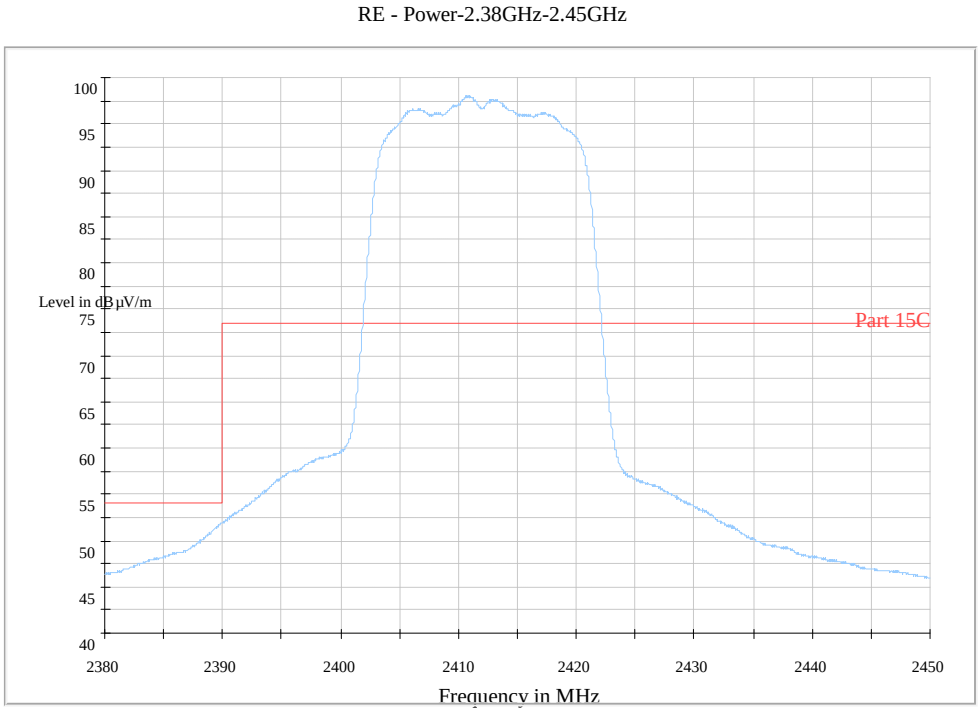


Fig. 119 Radiated Spurious Emission (Power): 802.11n-20MHz, ch1, 2.38 GHz - 2.45GHz

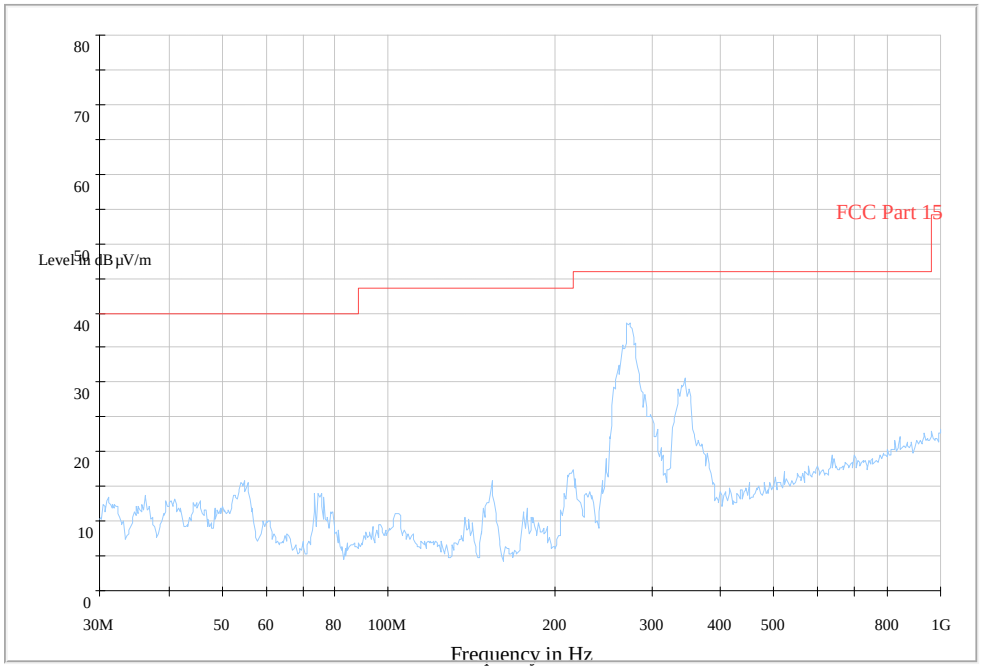


Fig. 120 Radiated Spurious Emission (802.11n-20MHz, Ch1, 30 MHz-1 GHz)

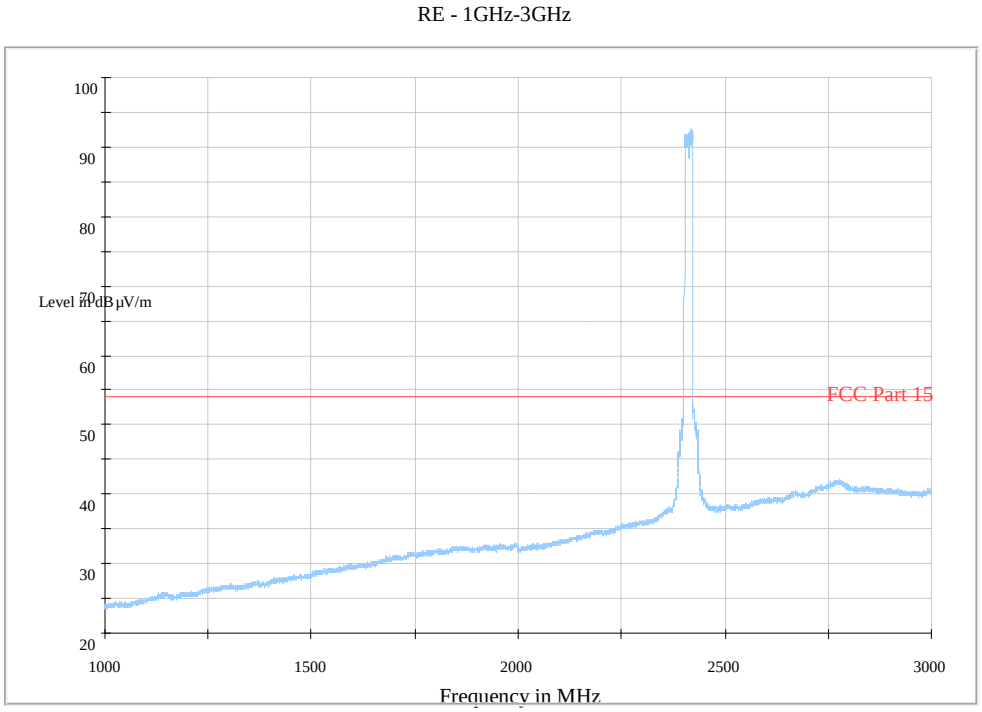


Fig. 121 Radiated Spurious Emission (802.11n-20MHz, Ch1, 1 GHz-3 GHz)

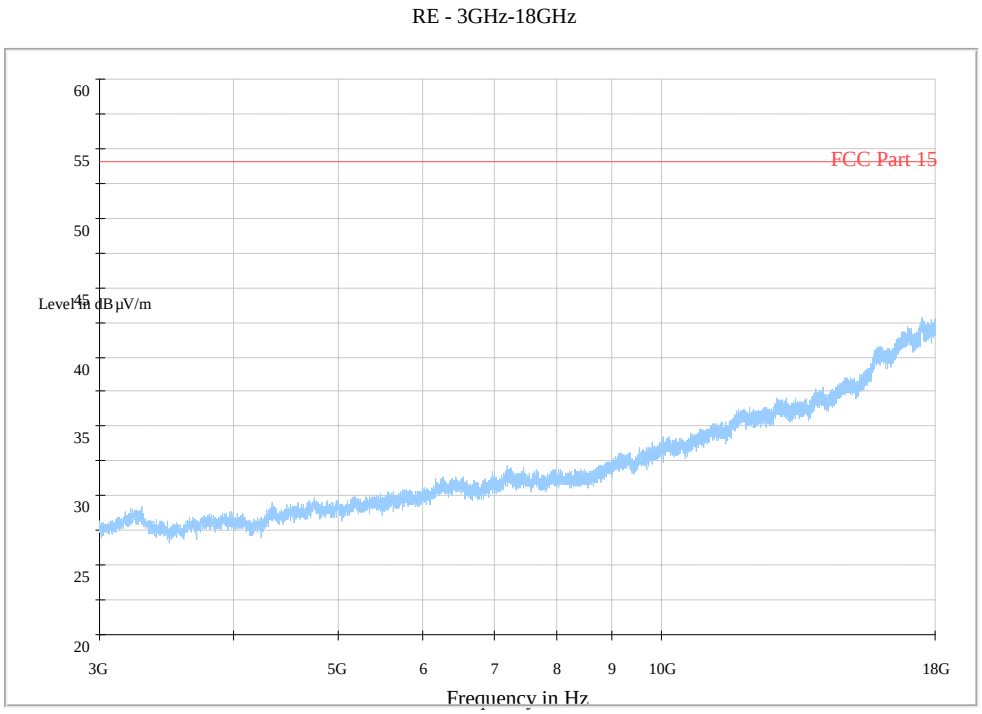


Fig. 122 Radiated Spurious Emission (802.11n-20MHz, Ch1, 3 GHz-18 GHz)

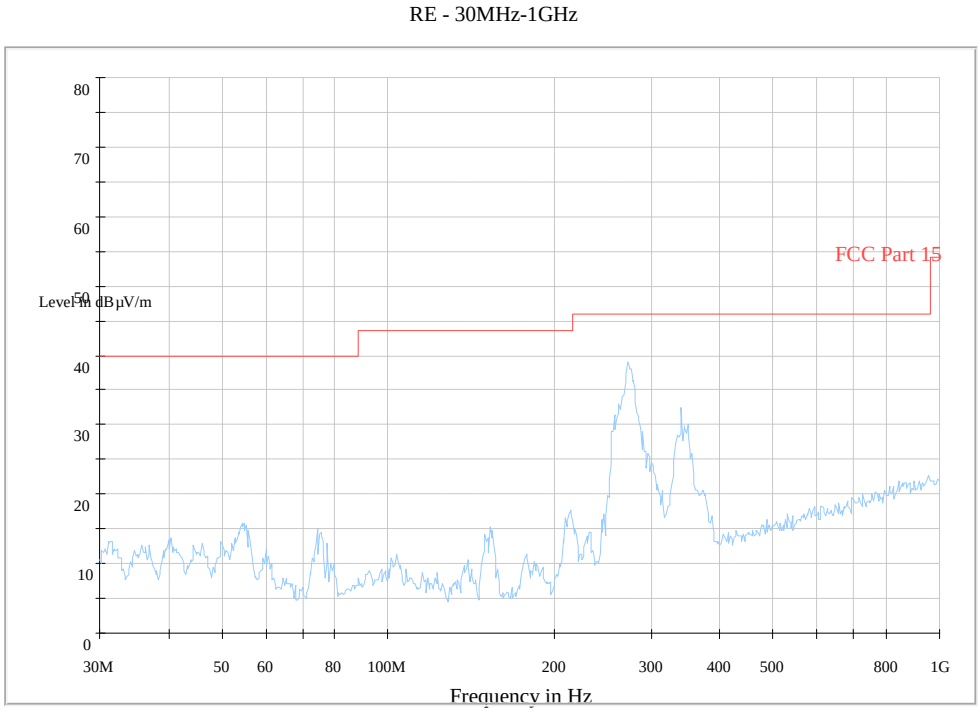


Fig. 123 Radiated Spurious Emission (802.11n-20MHz, Ch6, 30 MHz-1 GHz)

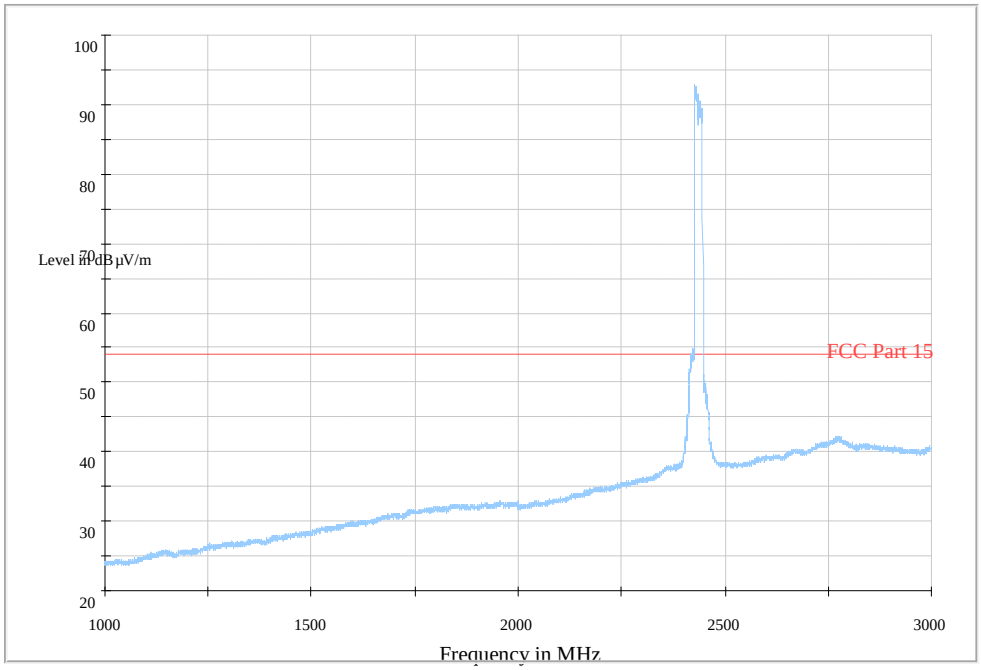


Fig. 124 Radiated Spurious Emission (802.11n-20MHz, Ch6, 1 GHz-3 GHz)

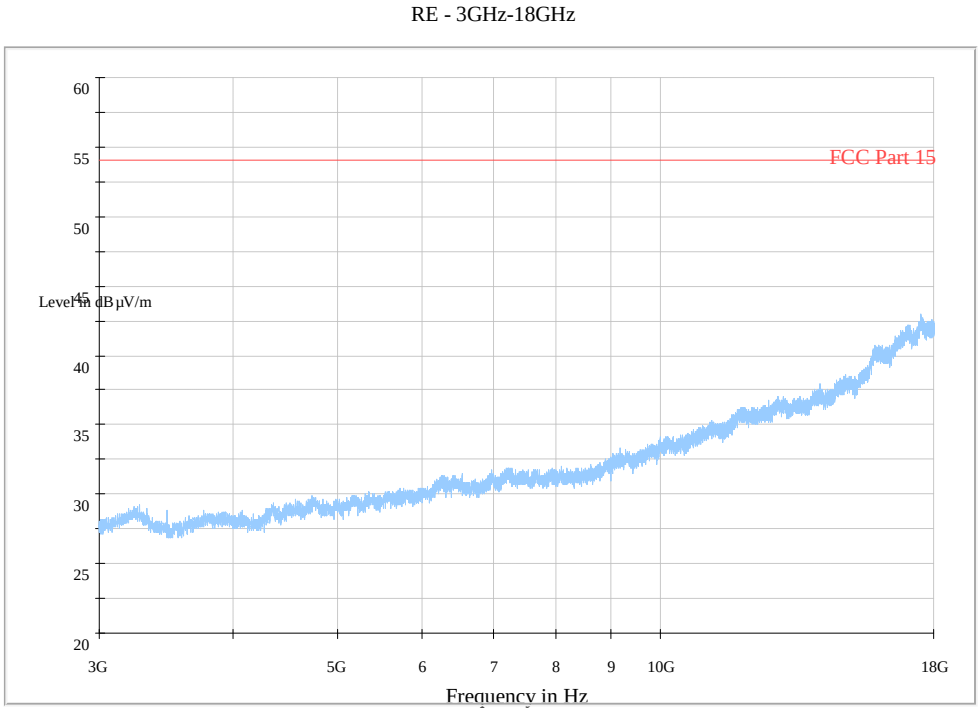


Fig. 125 Radiated Spurious Emission (802.11n-20MHz, Ch6, 3 GHz-18 GHz)

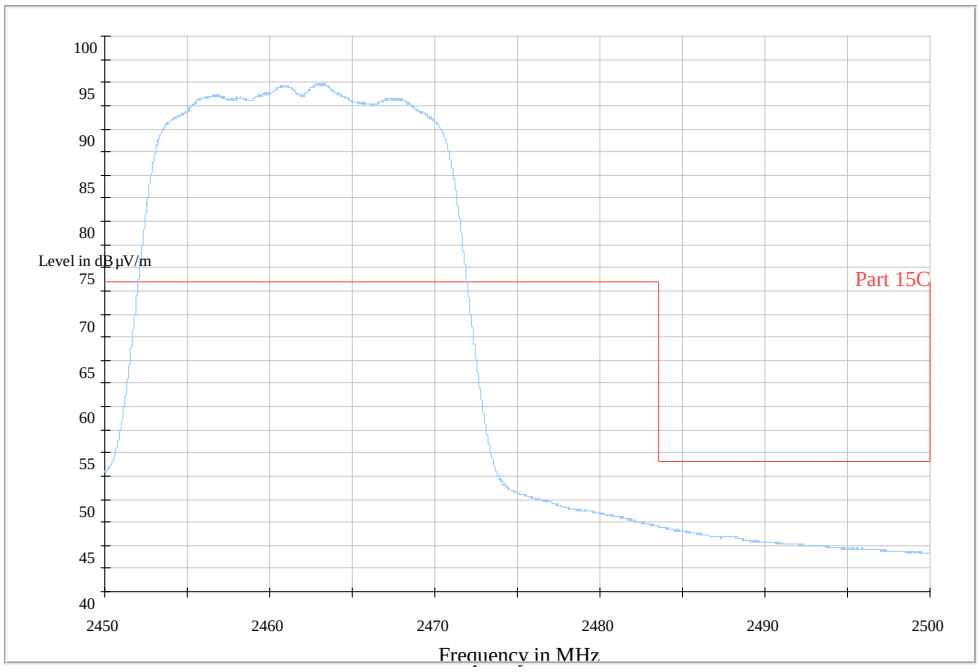


Fig. 126 Radiated Spurious Emission (Power): 802.11n-20MHz, ch11, 2.45 GHz - 2.50GHz

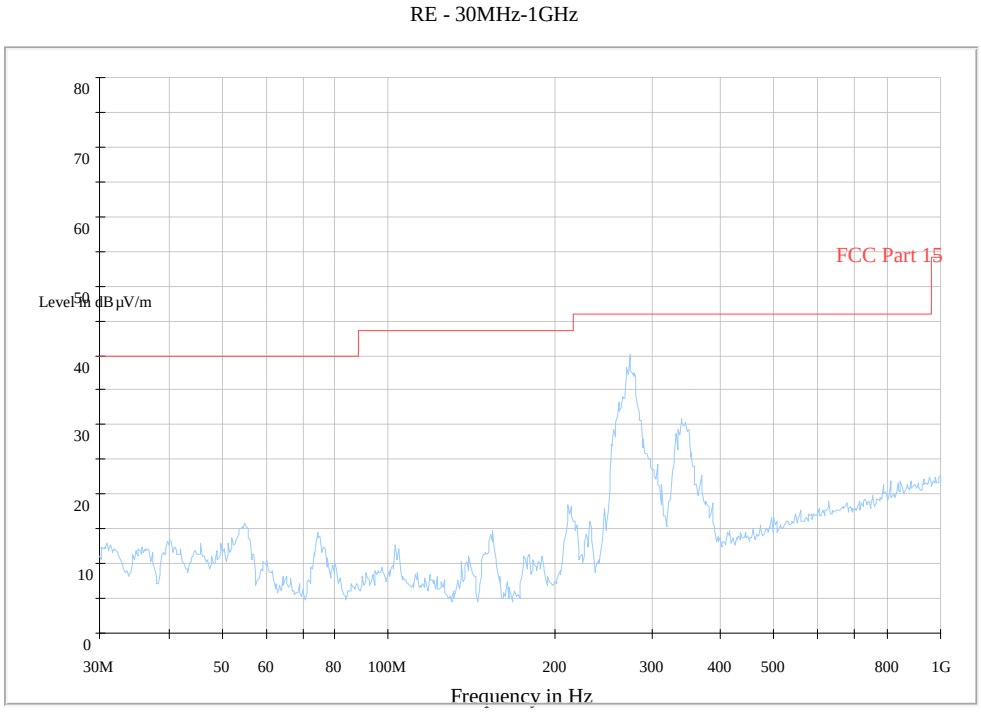


Fig. 127 Radiated Spurious Emission (802.11n-20MHz, Ch11, 30 MHz-1 GHz)

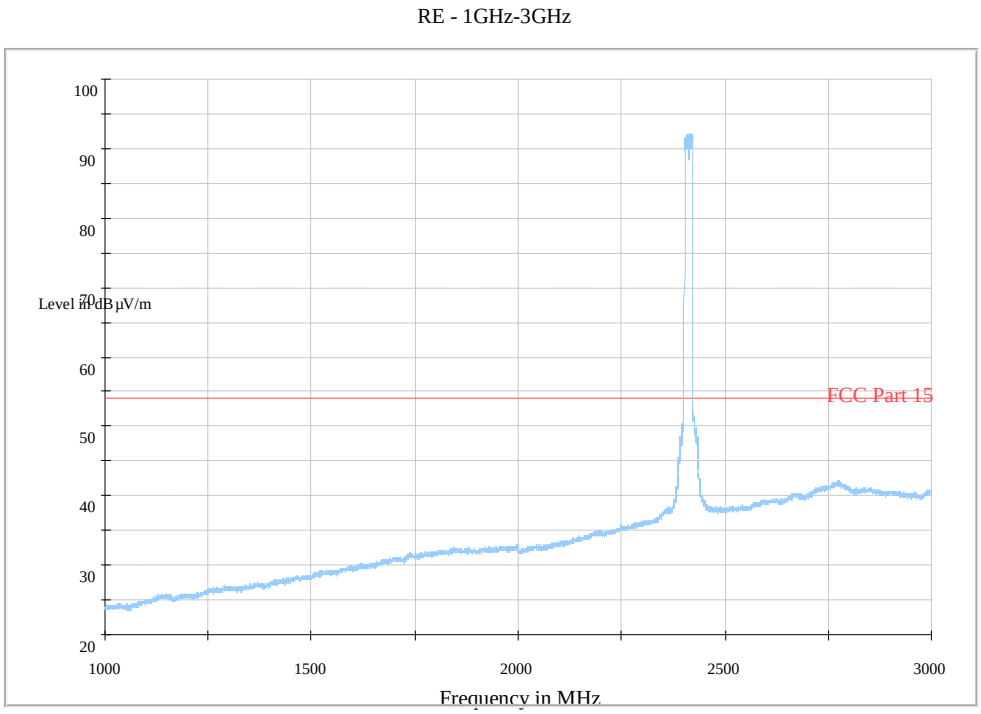


Fig. 128 Radiated Spurious Emission (802.11n-20MHz, Ch11, 1 GHz-3 GHz)

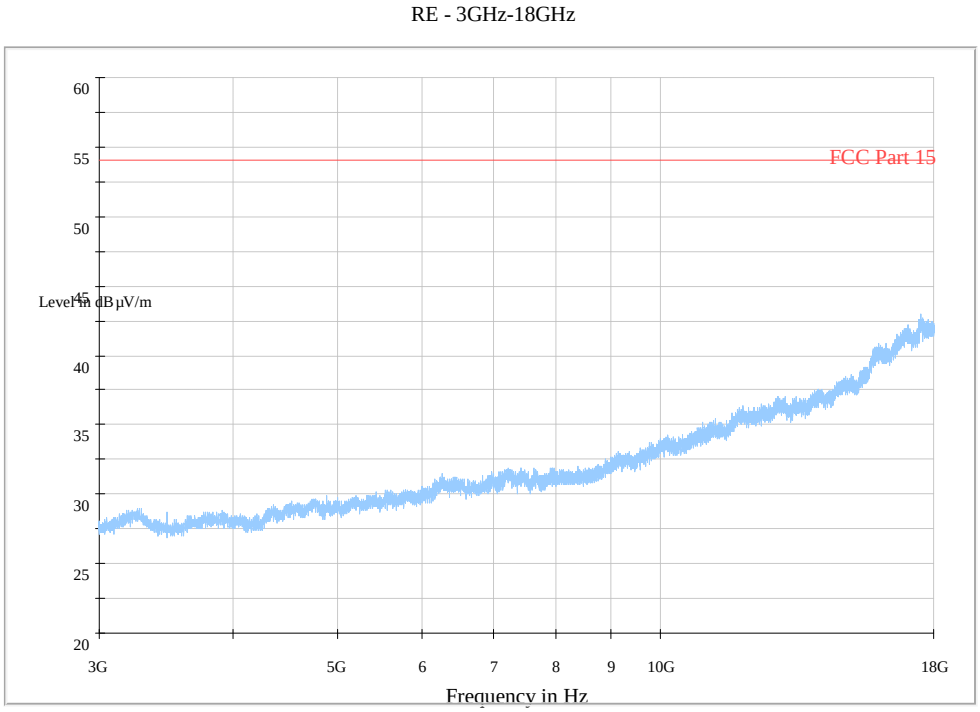


Fig. 129 Radiated Spurious Emission (802.11n-20MHz, Ch11, 3 GHz-18 GHz)

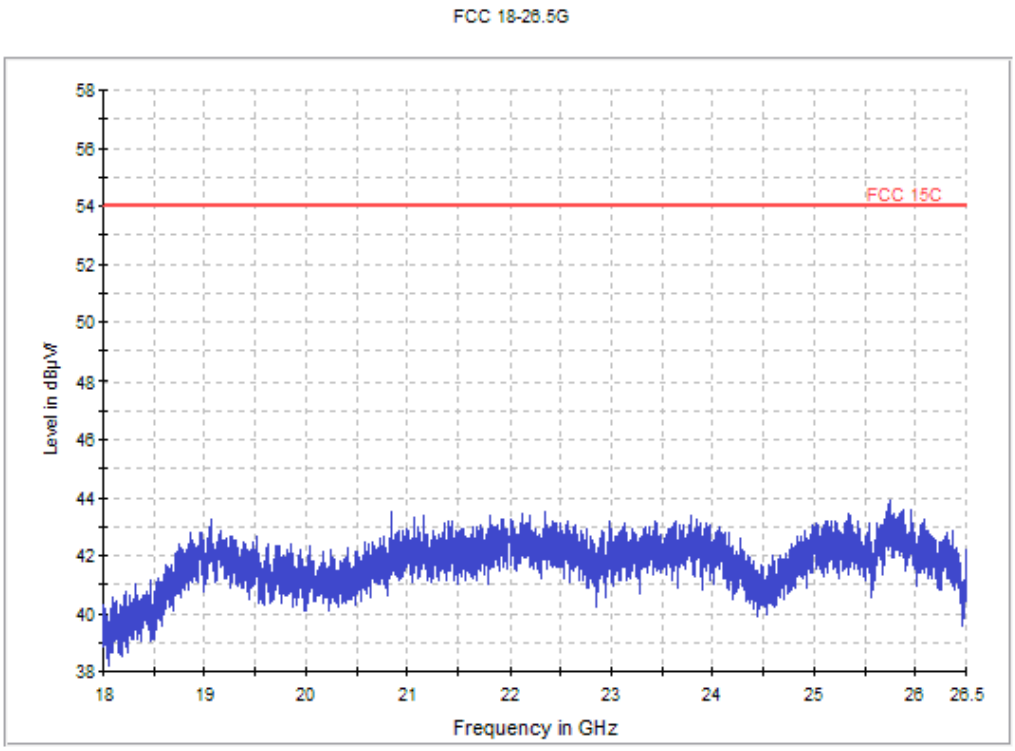


Fig. 130 Radiated Spurious Emission (All channels): 18GHz – 26.5GHz

A.7. AC Powerline Conducted Emission

Test Condition:

Voltage（V）	Frequency（Hz）
120	60

Traveller Charger 1:

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)	Conclusion
		With charger	
		802.11b	
0.15 to 0.5	66 to 56	Fig. 131	P
0.5 to 5	56		
5 to 30	60		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.			

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)	Conclusion
		With charger	
		802.11b	
0.15 to 0.5	56 to 46	Fig. 131	P
0.5 to 5	46		
5 to 30	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.			

The measurement is made according to ANSI C63.4 and KDB558074 D01.

Conclusion: PASS

Test graphs as below:

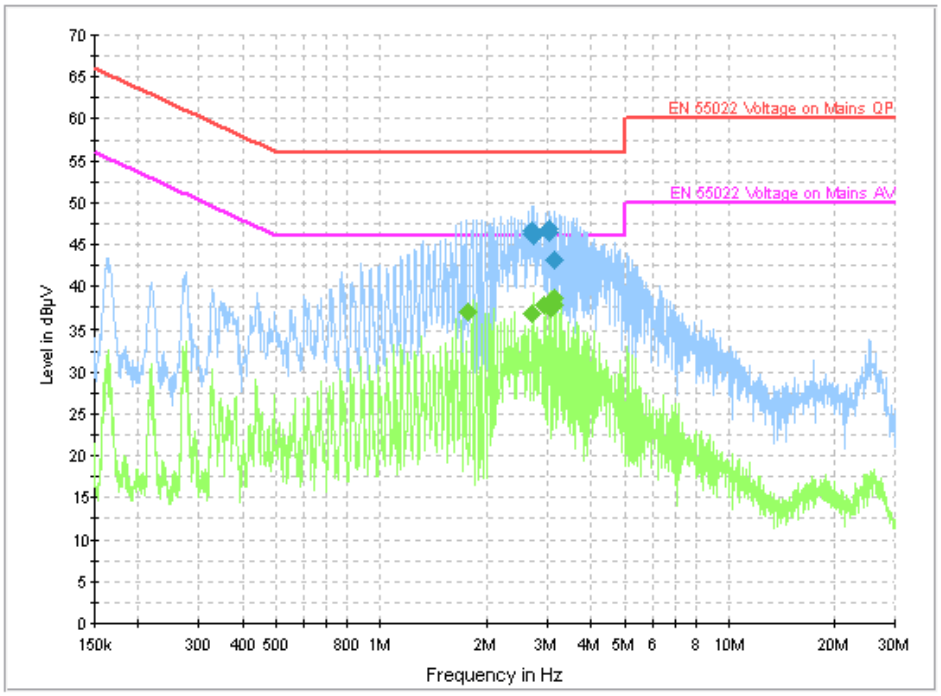


Fig. 131 AC Powerline Conducted Emission-802.11b

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
2.687935	46.7	GND	L1	10.0	9.3	56.0
2.689628	46.2	GND	L1	10.0	9.8	56.0
2.740377	46.1	GND	L1	10.0	9.9	56.0
3.014688	46.5	GND	L1	10.0	9.5	56.0
3.016369	46.9	GND	L1	10.0	9.1	56.0
3.120799	43.3	GND	L1	10.0	12.7	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.760082	37.0	GND	L1	10.0	9.0	46.0
2.691564	36.7	GND	L1	10.0	9.3	46.0
2.908246	37.8	GND	L1	10.0	8.2	46.0
3.071072	37.3	GND	L1	10.0	8.7	46.0
3.128481	38.5	GND	L1	10.0	7.5	46.0
3.130162	37.7	GND	L1	10.0	8.3	46.0

Traveller Charger 2:

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV) With charger 802.11b	Conclusion
0.15 to 0.5	67 to 56	Fig. 132	P
0.5 to 5	56		
5 to 30	60		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.			

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV) With charger 802.11b	Conclusion
0.15 to 0.5	56 to 46	Fig. 132	P
0.5 to 5	46		
5 to 30	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.			

The measurement is made according to ANSI C63.4 and KDB558074 D01.

Conclusion: PASS

Test graphs as below:

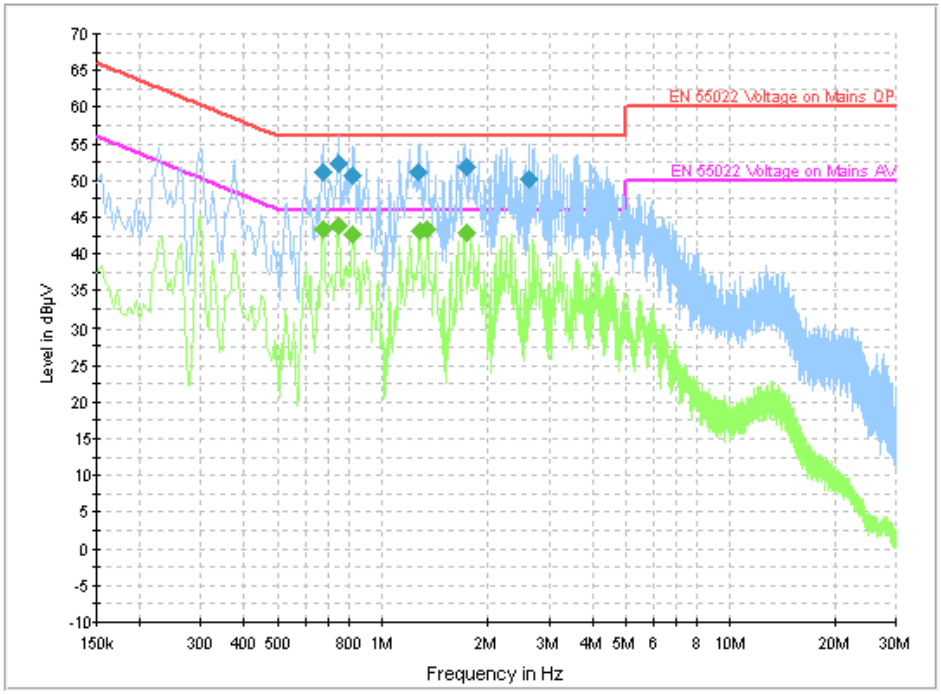


Fig. 132 AC Powerline Conducted Emission-802.11b

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.676500	51.0	GND	L1	10.0	5.0	56.0
0.748500	52.3	GND	L1	10.0	3.7	56.0
0.825000	50.6	GND	L1	10.0	5.4	56.0
1.275000	51.2	GND	L1	10.0	4.8	56.0
1.725000	51.9	GND	L1	10.0	4.1	56.0
2.625000	50.2	GND	L1	10.0	5.8	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.676500	43.2	GND	L1	10.0	2.8	46.0
0.748500	43.7	GND	L1	10.0	2.3	46.0
0.825000	42.7	GND	L1	10.0	3.3	46.0
1.279500	43.0	GND	L1	10.0	3.0	46.0
1.351500	43.4	GND	L1	10.0	2.6	46.0
1.725000	43.0	GND	L1	10.0	3.0	46.0

***** END OF REPORT BODY *****