



**FCC PART 15C
TEST REPORT
No. 2012WLN0396**

for

ZTE Corporation

WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone

Type: ZTE V791

With

FCC ID: Q78-V791

Hardware Version: WMAK

Software Version: CLA-UNI-QB25S-P175A40V1.0.0

Issued Date: 2012-08-14



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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.

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1. TEST LABORATORY

1.1. Testing Location

Company Name: TMC Beijing, Telecommunication Metrology Center of MIIT
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Postal Code: 100191
Telephone: 00861062304633
Fax: 00861062304793

1.2. Testing Environment

Normal Temperature: 15-30°C
Extreme Temperature: -10/+55°C
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: 2012-07-27
Testing End Date: 2012-08-14

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

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Contact /
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2.2. Manufacturer Information

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

3.1. About EUT

Description	WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone
Type	ZTE V791
FCC ID	Q78-V791
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	21.26dBm(OFDM)
Power Supply	3.7V 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	867525010001202	WMAK	CLA-UNI-QB25S-P175A40V1.0.0
EUT2	867525010001335	WMAK	CLA-UNI-QB25S-P175A40V1.0.0

*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	Li3712T42P3h654246h	/
AE2	Traveller Charger	STC-A22O50I700USBA-Z	/

*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 WCDMA/GSM (GPRS) Dual-Mode Digital 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 °C, Max. = 30 °C
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 °C, Max. = 35 °C
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 °C, Max. = 30 °C
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 °C, Max. = 30 °C
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°C
Voltage	V nom	3.7V(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

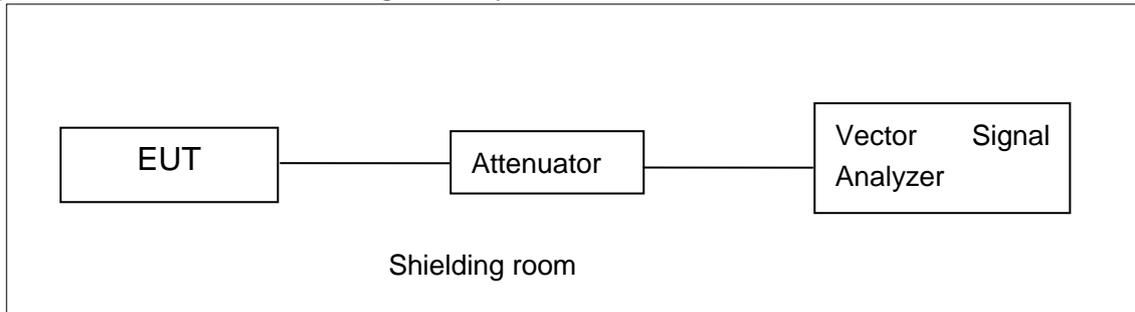
Anechoic chamber by Frankonia German.

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

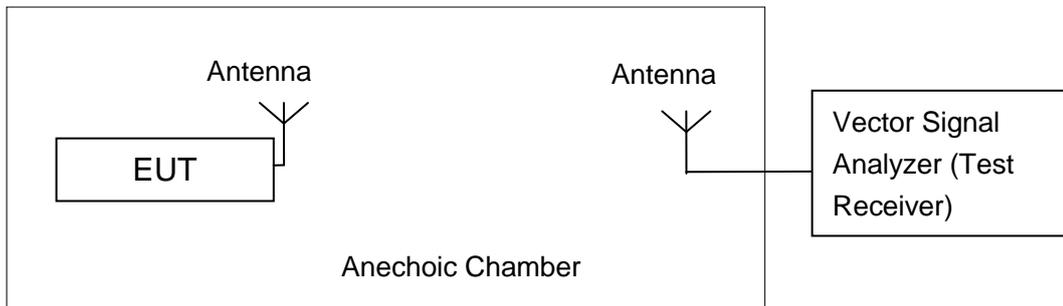


A.1.2. Radiated Emission Measurements

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
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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	16.63	/	/
	2	17.38	/	/
	5.5	18.72	/	/
	11	20.32	20.23	20.38
802.11g	6	20.56	/	/
	9	20.55	/	/
	12	20.27	/	/
	18	20.41	/	/
	24	20.87	/	/
	36	20.90	/	/
	48	21.04	/	/
	54	21.09	21.02	21.05

The data rate 11Mbps and 54Mbps 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	20.54	/	/
	MCS1	20.26	/	/
	MCS2	20.37	/	/
	MCS3	20.85	/	/
	MCS4	20.96	/	/
	MCS5	21.07	20.94	21.26
	MCS6	21.01	/	/

	MCS7	20.97	/	/
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The data rate MCS5 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	18.83	/	/
	MCS1	19.15	/	/
	MCS2	18.83	/	/
	MCS3	19.22	/	/
	MCS4	19.31	/	/
	MCS5	19.35	19.24	19.69
	MCS6	19.30	/	/
	MCS7	19.31	/	/

The data rate MCS5 is selected as worse condition, and the following cases are performed with this condition.

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	13.83	13.94	13.85
802.11g	11.74	12.01	11.79

802.11n-HT20 mode

Mode	Test Result (dBm)		
	2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)
802.11n (20MHz)	11.95	11.85	11.81

802.11n-HT40 mode

Mode	Test Result (dBm)		
	2422MHz (Ch3)	2437MHz (Ch6)	2452 MHz (Ch9)
802.11n (40MHz)	10.01	10.38	10.24

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
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Measurement Results:

802.11b/g mode

Mode	Channel	Power Spectral Density (dBm/3 kHz)		Conclusion
802.11b	1	Fig.1	-9.76	P
	6	Fig.2	-9.97	P
	11	Fig.3	-9.69	P
802.11g	1	Fig.4	-14.94	P
	6	Fig.5	-14.87	P
	11	Fig.6	-14.60	P

802.11n-HT20 mode

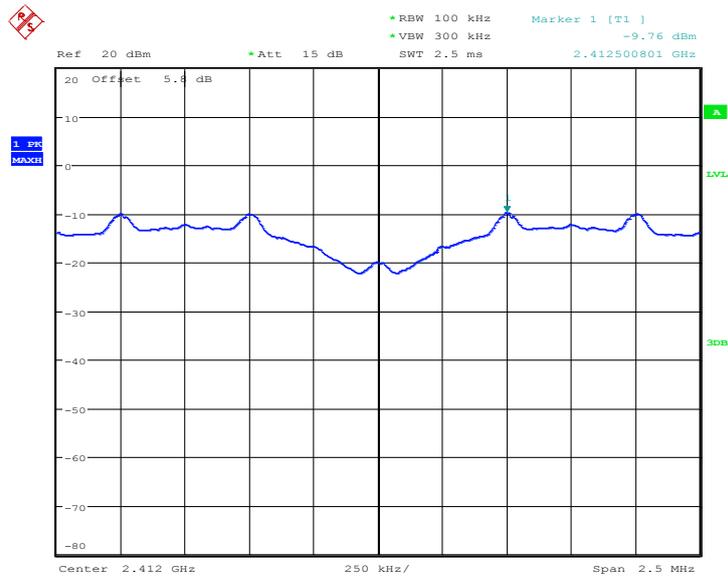
Mode	Channel	Power Spectral Density (dBm/3 kHz)		Conclusion
802.11n (20MHz)	1	Fig.7	-15.34	P
	6	Fig.8	-14.91	P
	11	Fig.9	-15.23	P

802.11n-HT40 mode

Mode	Channel	Power Spectral Density (dBm/3 kHz)		Conclusion
802.11n (40MHz)	3	Fig.10	-21.48	P
	6	Fig.11	-21.87	P
	9	Fig.12	-21.42	P

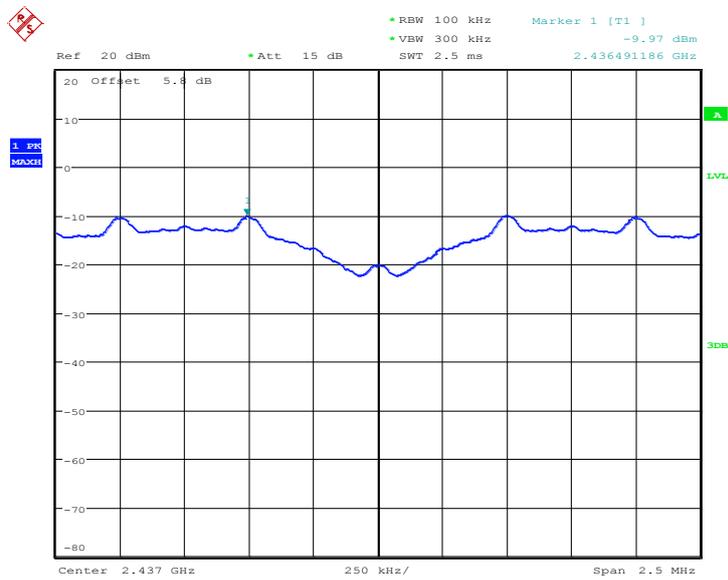
Conclusion: PASS

Test graphs as below:



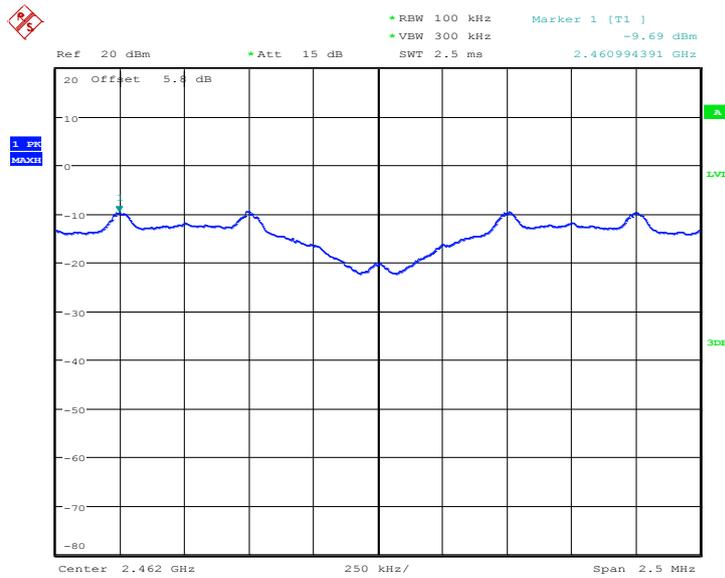
Date: 9.AUG.2012 15:31:48

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



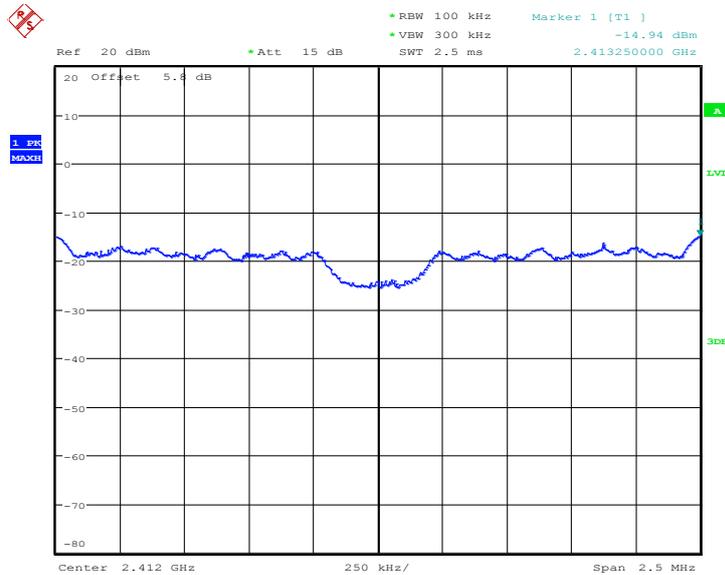
Date: 9.AUG.2012 15:32:33

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



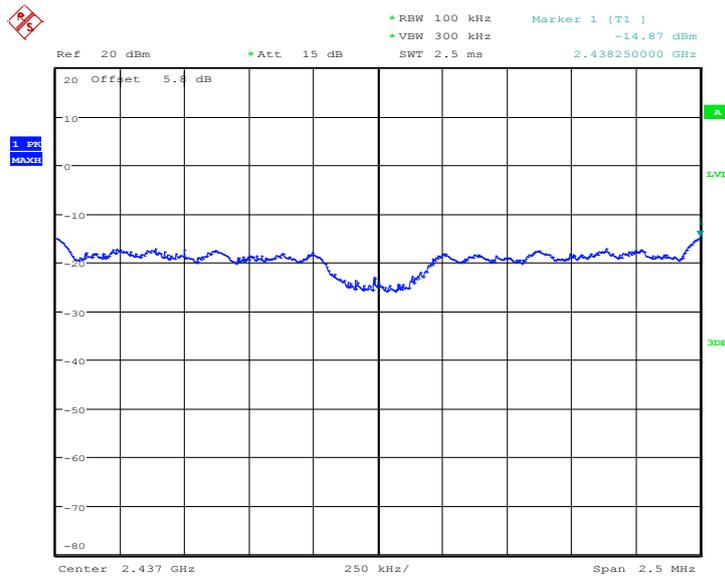
Date: 9.AUG.2012 15:33:13

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



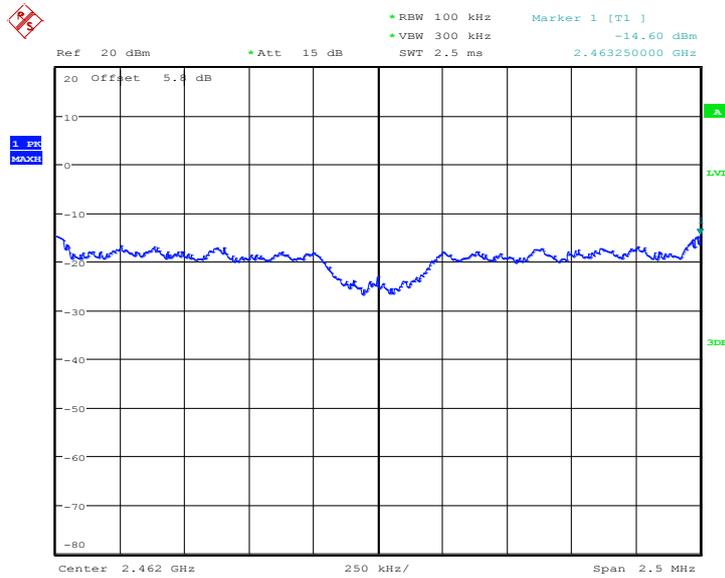
Date: 9.AUG.2012 15:34:15

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



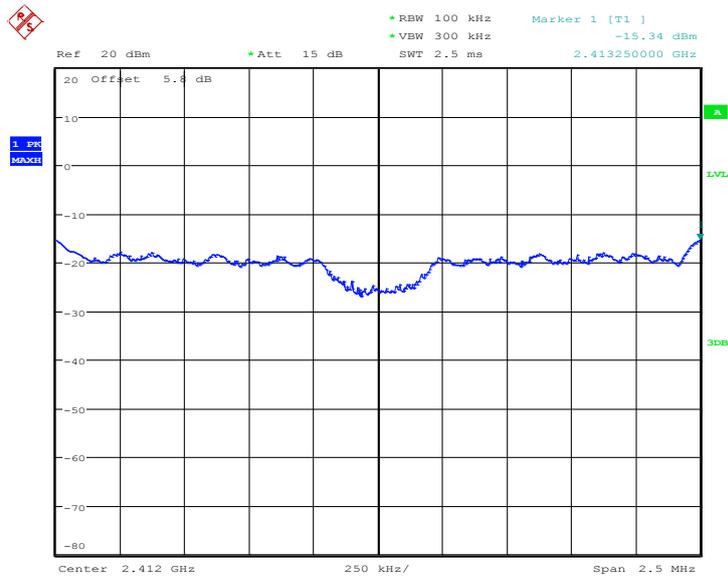
Date: 9.AUG.2012 15:34:56

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



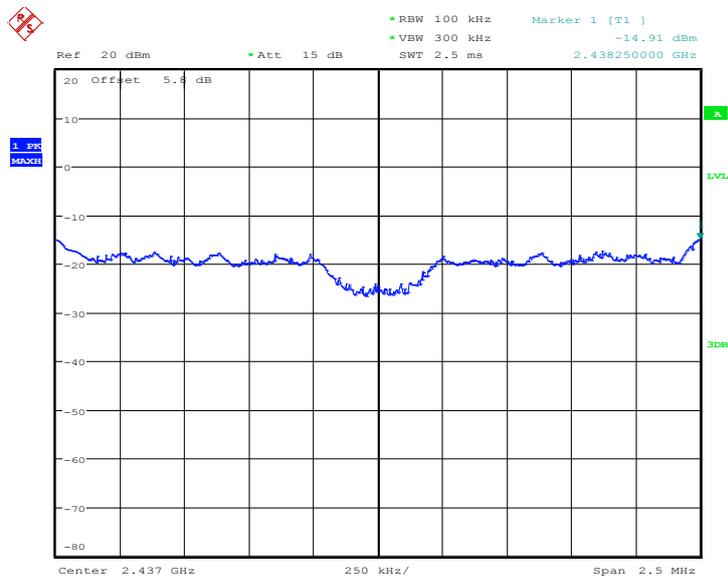
Date: 9.AUG.2012 15:35:25

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



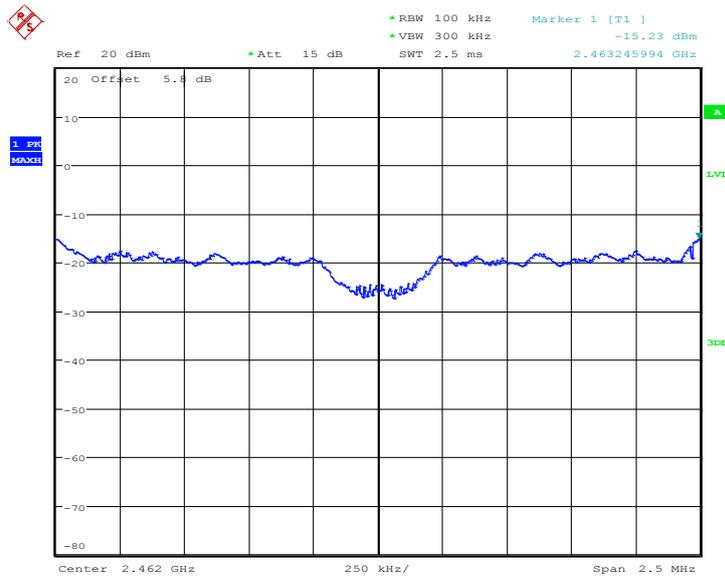
Date: 9.AUG.2012 15:36:17

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



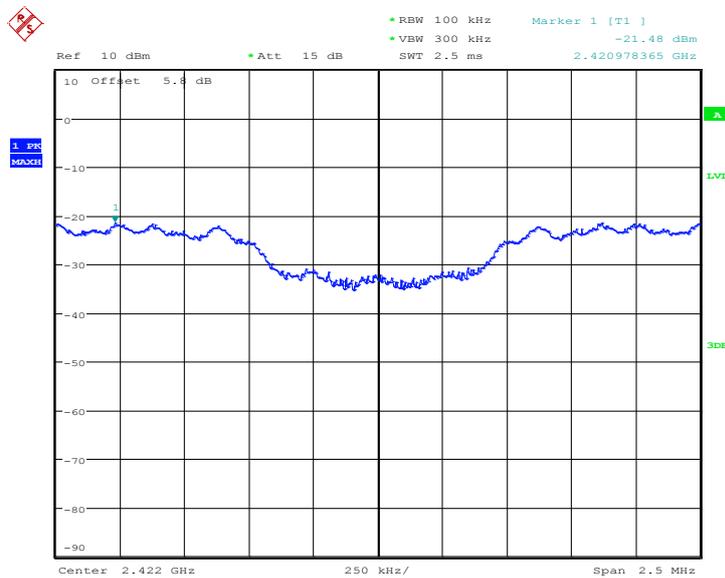
Date: 9.AUG.2012 15:37:31

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



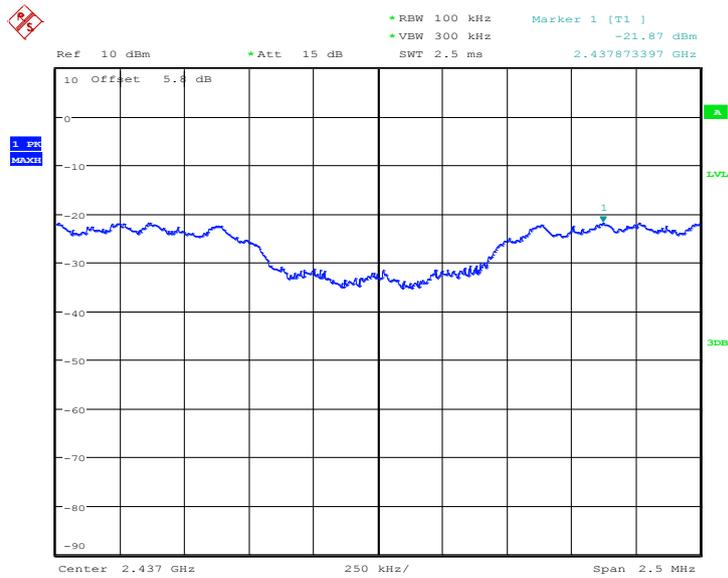
Date: 9.AUG.2012 15:38:29

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



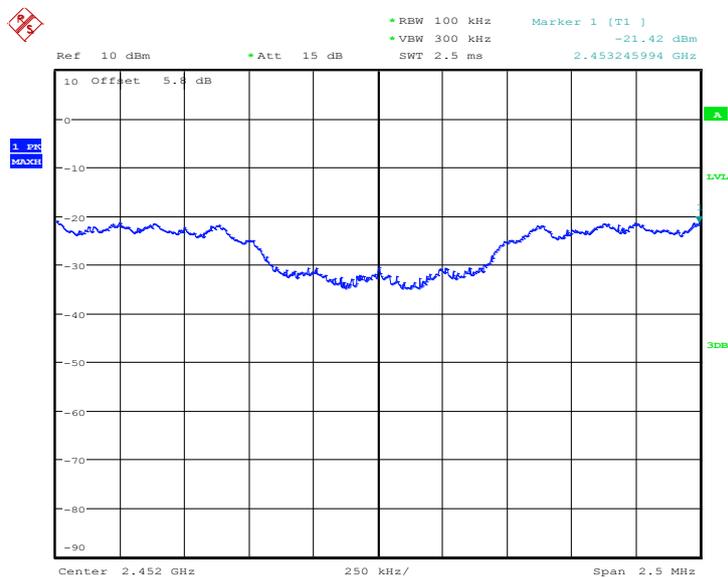
Date: 9.AUG.2012 15:39:23

Fig. 10 Power Spectral Density (802.11n-40MHz, Ch 3)



Date: 9.AUG.2012 15:39:57

Fig. 11 Power Spectral Density (802.11n-40MHz, Ch 6)



Date: 9.AUG.2012 15:40:37

Fig. 12 Power Spectral Density (802.11n-40MHz, Ch 9)

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
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Measurement Result:

802.11b/g mode

Mode	Channel	Occupied 6dB Bandwidth (kHz)		conclusion
802.11b	1	Fig.13	9103	P
	6	Fig.14	9103	P
	11	Fig.15	9038	P
802.11g	1	Fig.16	16538	P
	6	Fig.17	16538	P
	11	Fig.18	16538	P

802.11n-HT20 mode

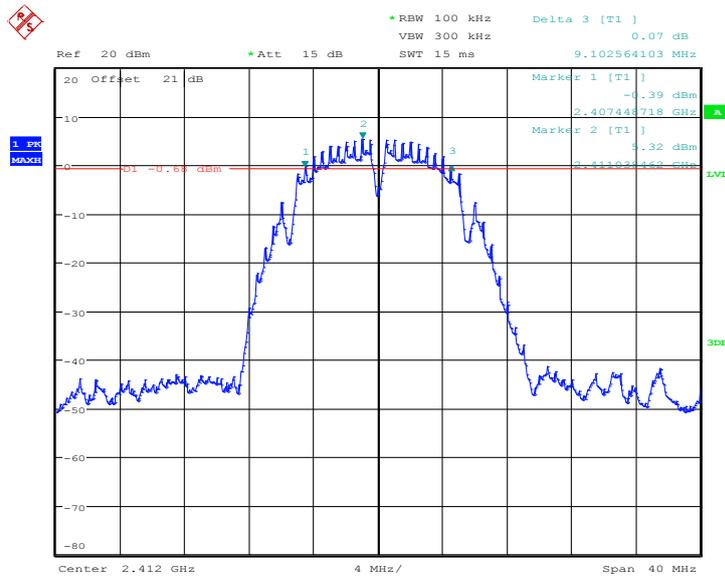
Mode	Channel	Occupied 6dB Bandwidth (kHz)		conclusion
802.11n (20MHz)	1	Fig.19	17756	P
	6	Fig.20	17756	P
	11	Fig.21	17692	P

802.11n-HT40 mode

Mode	Channel	Occupied 6dB Bandwidth (kHz)		conclusion
802.11n (40MHz)	3	Fig.22	35673	P
	6	Fig.23	35673	P
	9	Fig.24	35673	P

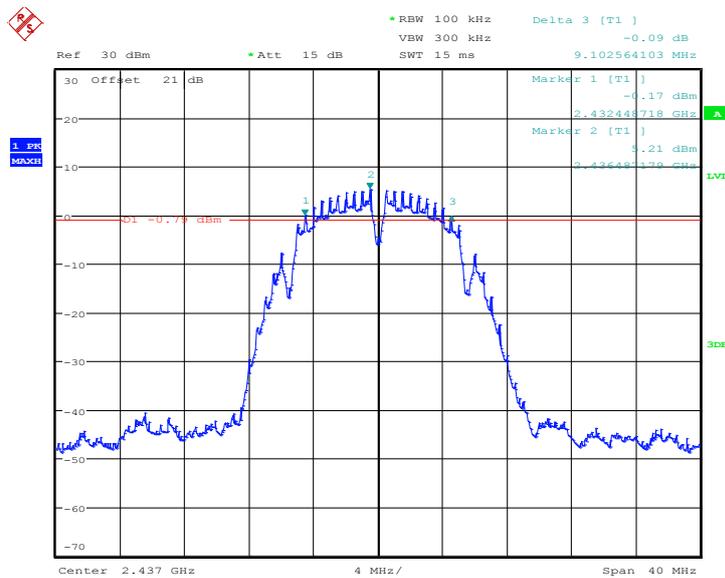
Conclusion: PASS

Test graphs as below:



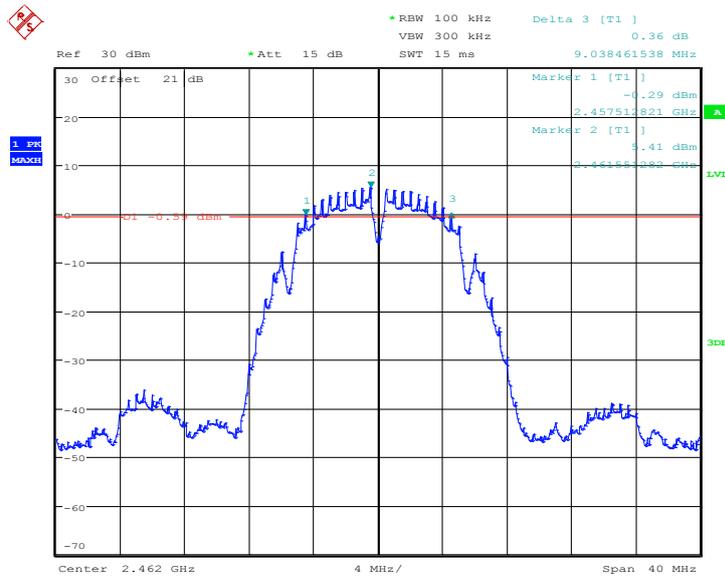
Date: 9.AUG.2012 13:48:41

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



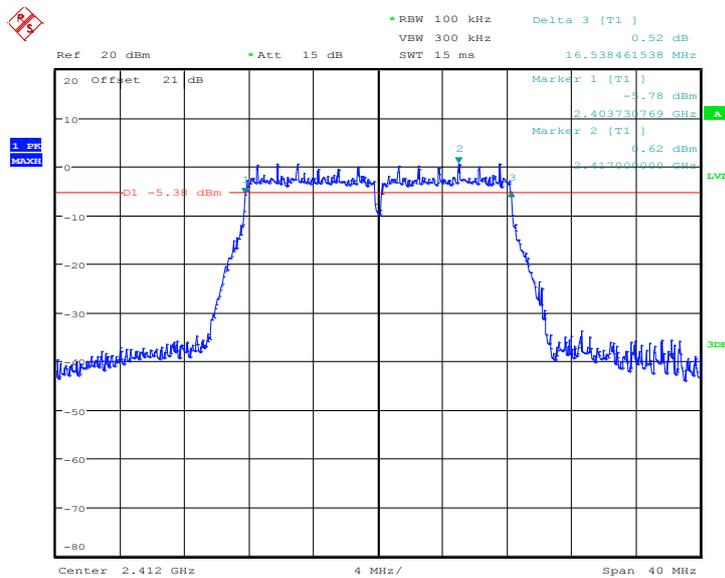
Date: 9.AUG.2012 13:50:34

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



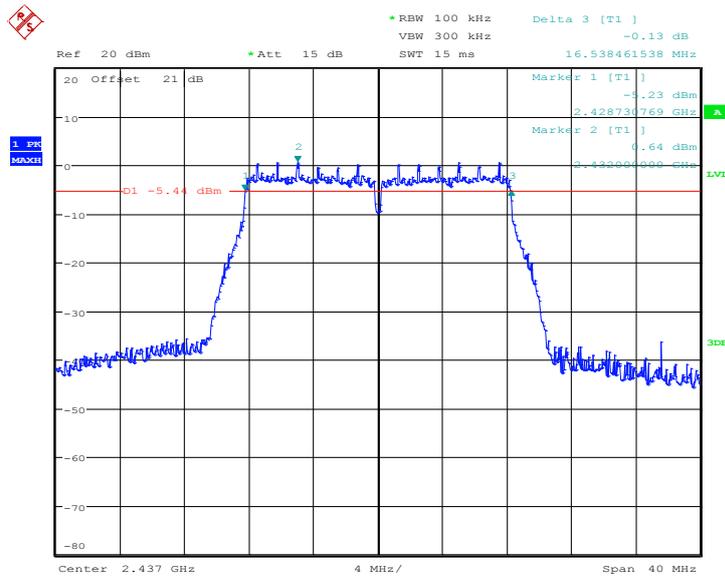
Date: 9.AUG.2012 13:52:14

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



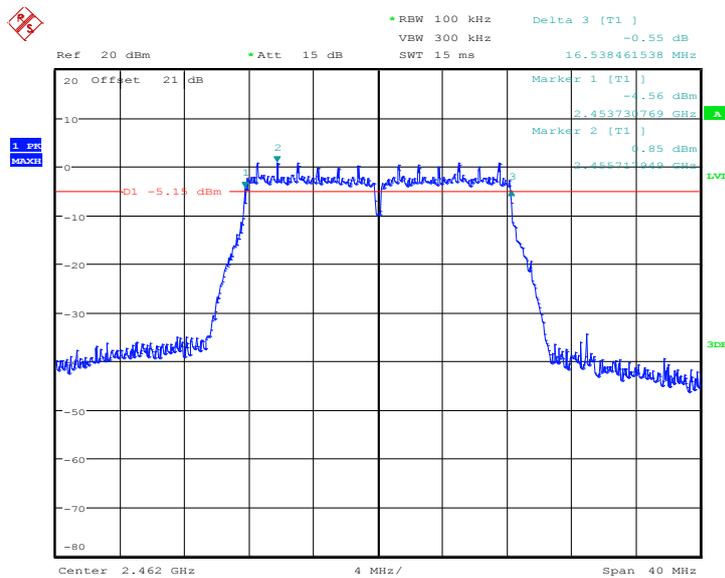
Date: 9.AUG.2012 13:54:13

Fig. 16 Occupied 6dB Bandwidth (802.11g, Ch 1)



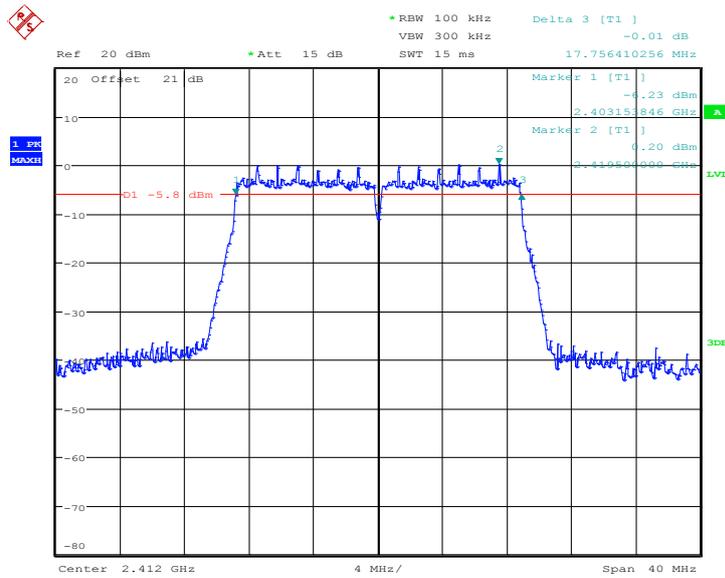
Date: 9.AUG.2012 13:55:49

Fig. 17 Occupied 6dB Bandwidth (802.11g, Ch 6)



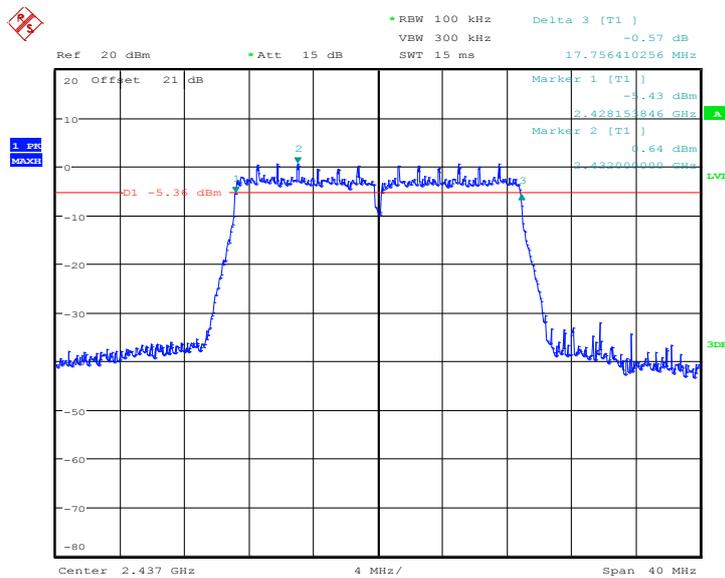
Date: 9.AUG.2012 13:57:25

Fig. 18 Occupied 6dB Bandwidth (802.11g, Ch 11)



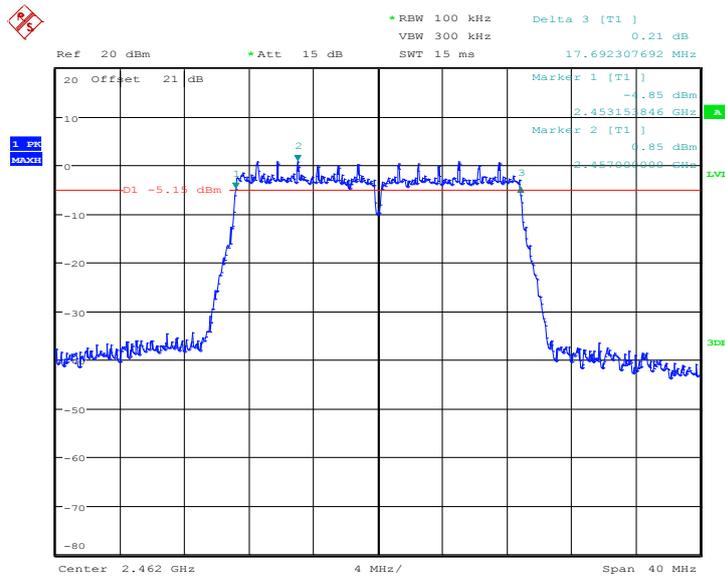
Date: 9.AUG.2012 13:59:35

Fig. 19 Occupied 6dB Bandwidth (802.11n-20MHz, Ch 1)



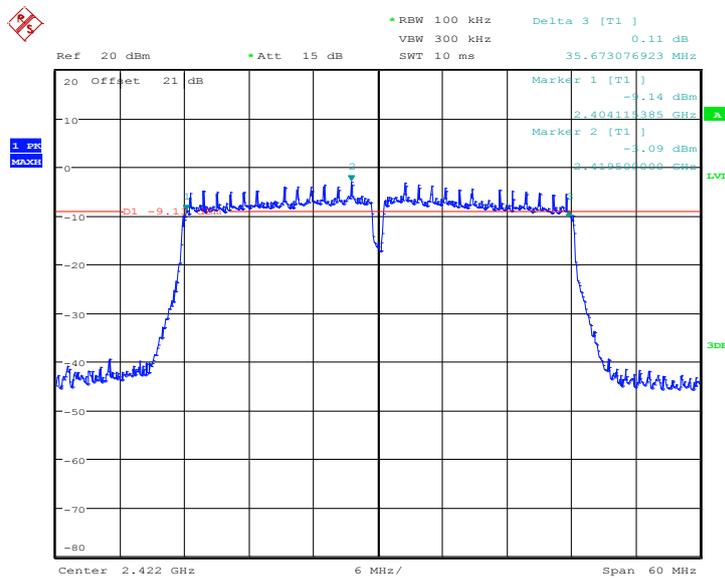
Date: 9.AUG.2012 14:02:11

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



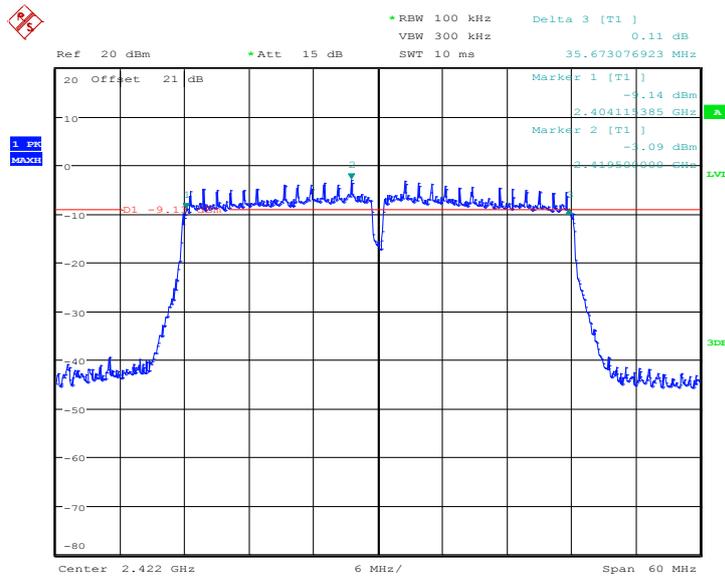
Date: 9.AUG.2012 14:03:50

Fig. 21 Occupied 6dB Bandwidth (802.11n-20MHz, Ch 11)



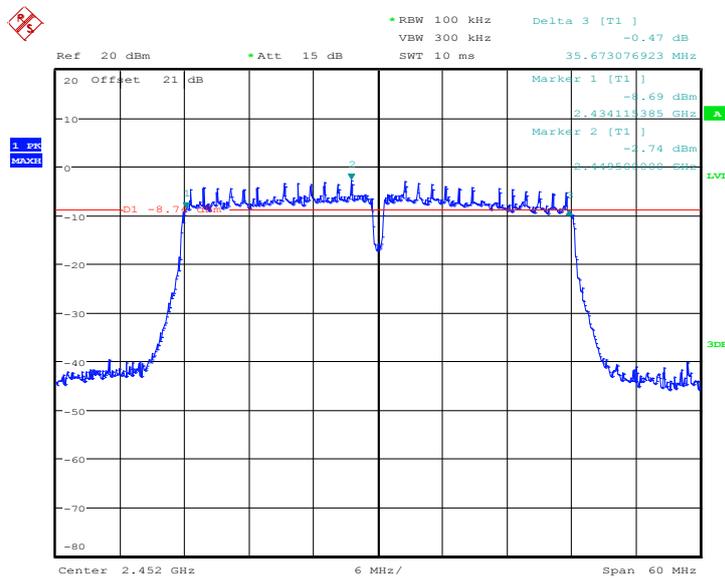
Date: 9.AUG.2012 14:06:09

Fig. 22 Occupied 6dB Bandwidth (802.11n-40MHz, Ch 3)



Date: 9.AUG.2012 14:06:09

Fig. 23 Occupied 6dB Bandwidth (802.11n-40MHz, Ch 6)



Date: 9.AUG.2012 14:10:04

Fig. 24 Occupied 6dB Bandwidth (802.11n-40MHz, Ch 9)

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
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Measurement Result:

802.11b/g mode

Mode	Channel	Test Results	Conclusion
802.11b	1	Fig.25	P
	11	Fig.26	P
802.11g	1	Fig.27	P
	11	Fig.28	P

802.11n-HT20 mode

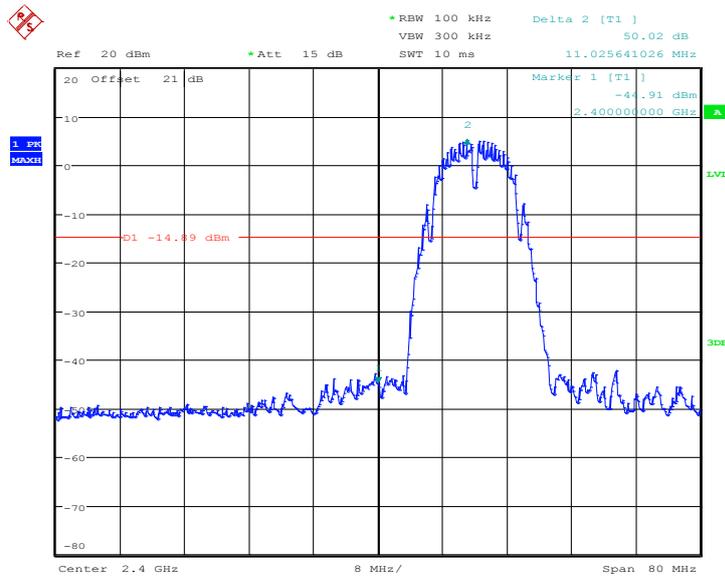
Mode	Channel	Test Results	Conclusion
802.11n (20MHz)	1	Fig.29	P
	11	Fig.30	P

802.11n-HT40 mode

Mode	Channel	Test Results	Conclusion
802.11n (40MHz)	3	Fig.31	P
	9	Fig.32	P

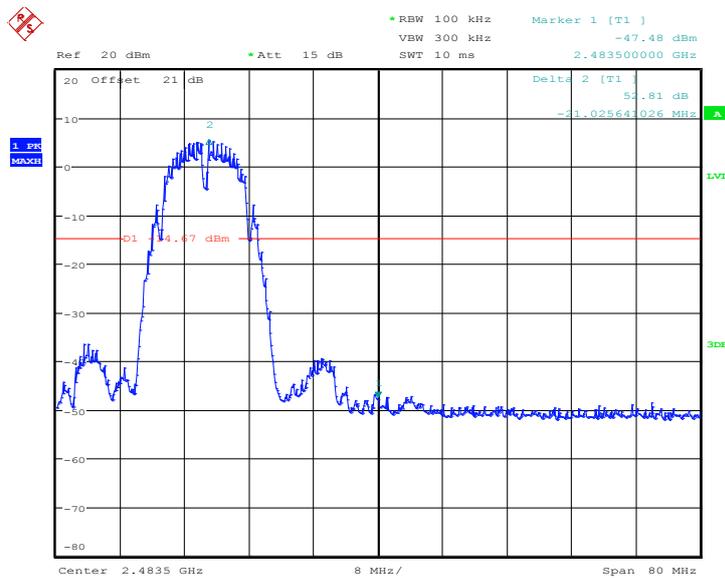
Conclusion: PASS

Test graphs as below:



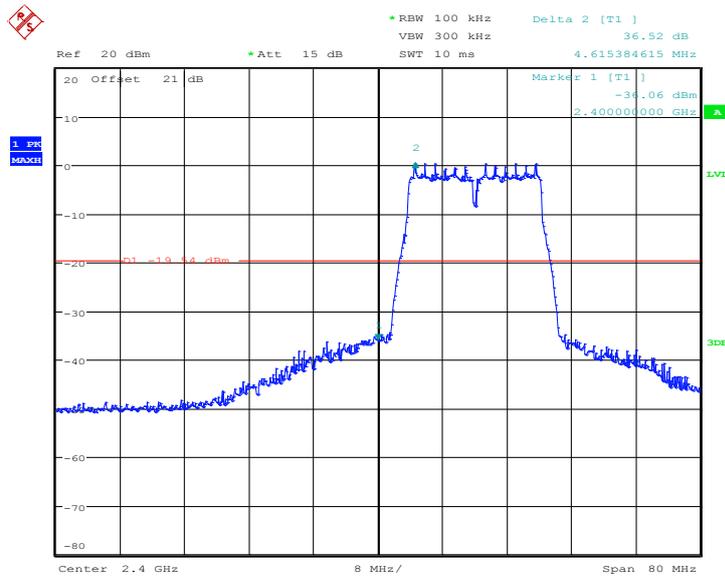
Date: 9.AUG.2012 14:13:10

Fig. 25 Band Edges (802.11b, Ch 1)



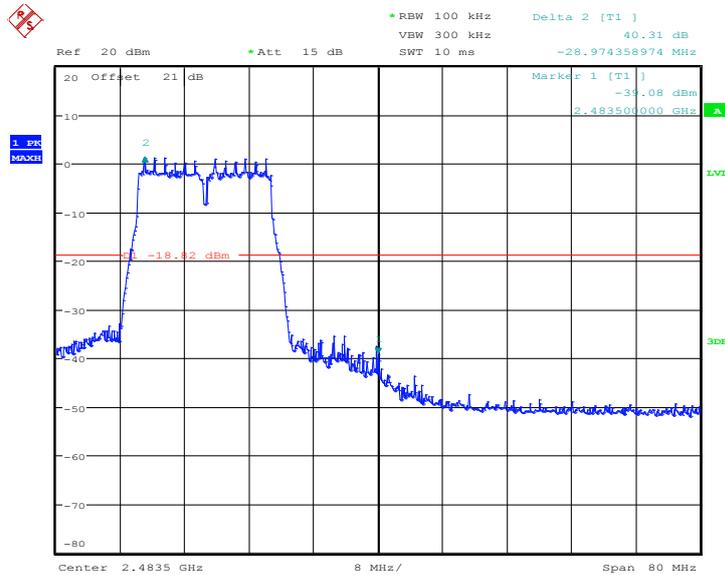
Date: 9.AUG.2012 14:15:02

Fig. 26 Band Edges (802.11b, Ch 11)



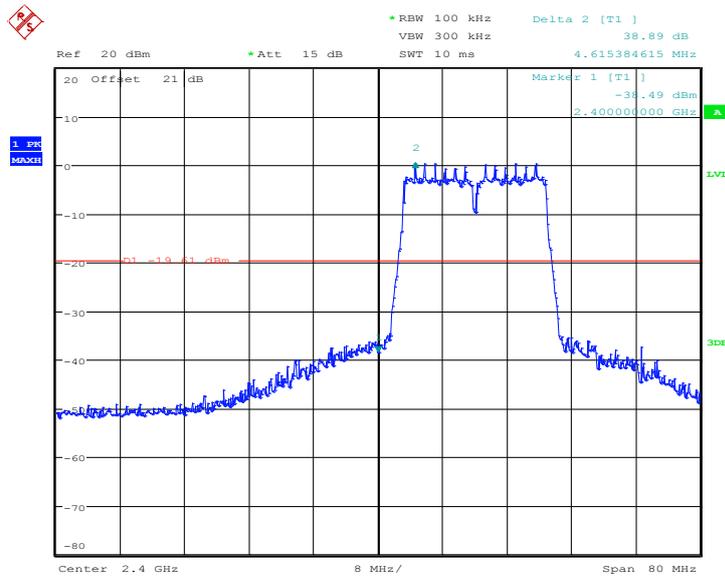
Date: 9.AUG.2012 14:26:07

Fig. 27 Band Edges (802.11g, Ch 1)



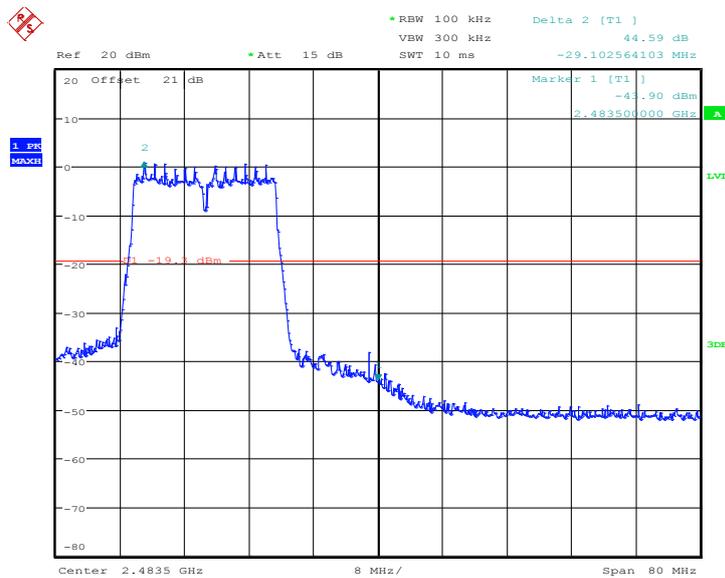
Date: 9.AUG.2012 14:27:42

Fig. 28 Band Edges (802.11g, Ch 11)



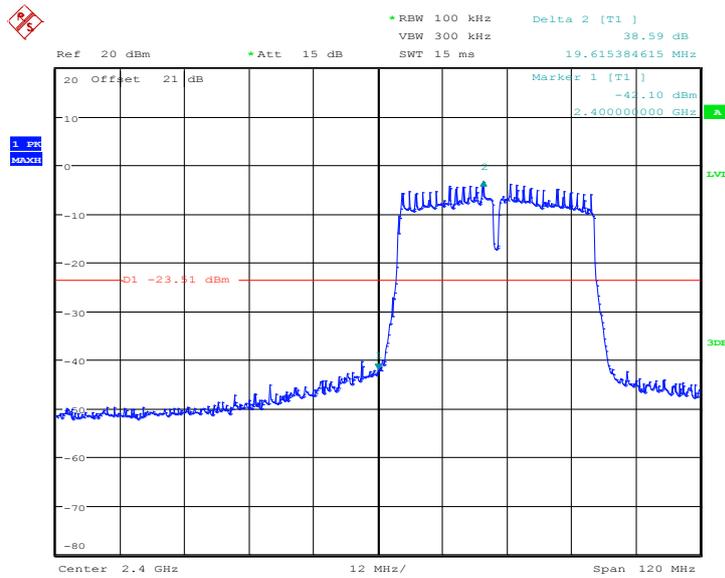
Date: 9.AUG.2012 14:29:25

Fig. 29 Band Edges (802.11n-20MHz, Ch 1)



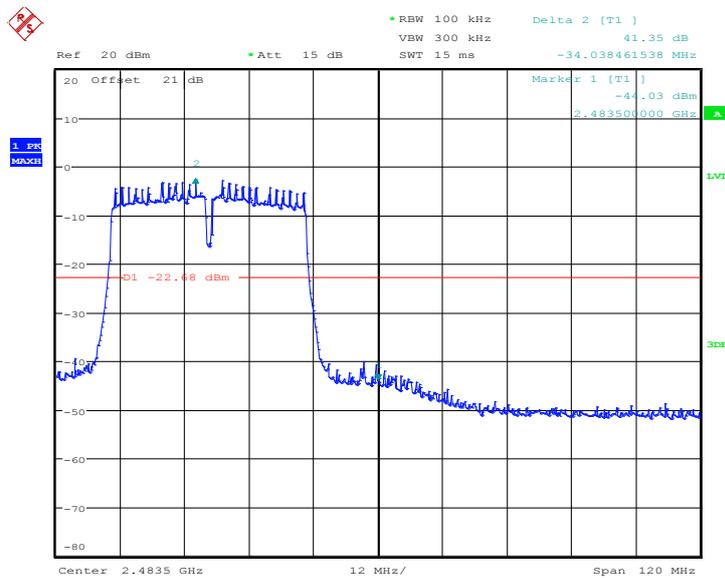
Date: 9.AUG.2012 14:30:36

Fig. 30 Band Edges (802.11n-20MHz, Ch 11)



Date: 9.AUG.2012 14:41:30

Fig. 31 Band Edges (802.11n-40MHz, Ch 3)



Date: 9.AUG.2012 14:39:41

Fig. 32 Band Edges (802.11n-40MHz, Ch 9)

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.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
	6	2.437 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
	11	2.462 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
802.11g	1	2.412 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
	6	2.437 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
	11	2.462 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

802.11n-HT20 mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11n (20MHz)	1	2.412 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
	6	2.437 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
	11	2.462 GHz	Fig.97	P
		30 MHz ~ 1 GHz	Fig.98	P
		1 GHz ~ 2.5 GHz	Fig.99	P
		2.5 GHz ~ 7.5 GHz	Fig.100	P
		7.5 GHz ~ 10 GHz	Fig.101	P
		10 GHz ~ 15 GHz	Fig.102	P
		15 GHz ~ 20 GHz	Fig.103	P
		20 GHz ~ 26 GHz	Fig.104	P

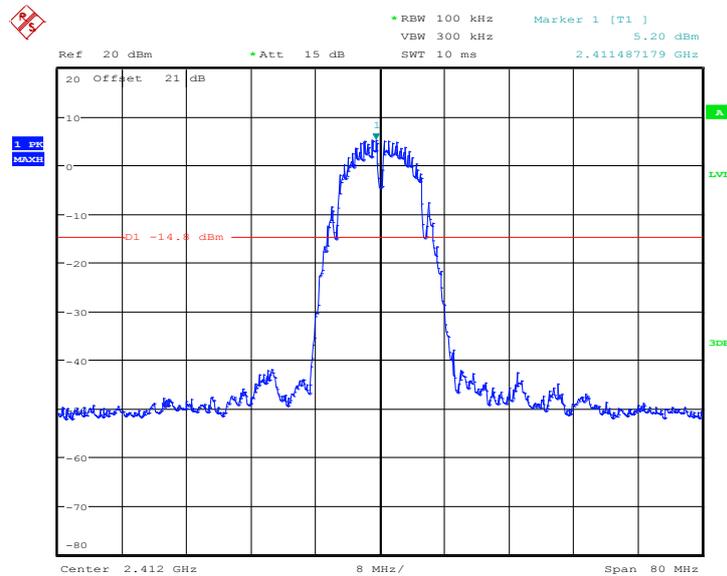
802.11n-HT40 mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11n (40MHz)	3	2.422 GHz	Fig.105	P
		30 MHz ~ 1 GHz	Fig.106	P
		1 GHz ~ 2.5 GHz	Fig.107	P
		2.5 GHz ~ 7.5 GHz	Fig.108	P
		7.5 GHz ~ 10 GHz	Fig.109	P
		10 GHz ~ 15 GHz	Fig.110	P
		15 GHz ~ 20 GHz	Fig.111	P
		20 GHz ~ 26 GHz	Fig.112	P
	6	2.437 GHz	Fig.113	P
		30 MHz ~ 1 GHz	Fig.114	P
		1 GHz ~ 2.5 GHz	Fig.115	P
		2.5 GHz ~ 7.5 GHz	Fig.116	P
		7.5 GHz ~ 10 GHz	Fig.117	P
		10 GHz ~ 15 GHz	Fig.118	P

9	15 GHz ~ 20 GHz	Fig.119	P
	20 GHz ~ 26 GHz	Fig.120	P
	2.452 GHz	Fig.121	P
	30 MHz ~ 1 GHz	Fig.122	P
	1 GHz ~ 2.5 GHz	Fig.123	P
	2.5 GHz ~ 7.5 GHz	Fig.124	P
	7.5 GHz ~ 10 GHz	Fig.125	P
	10 GHz ~ 15 GHz	Fig.126	P
	15 GHz ~ 20 GHz	Fig.127	P
	20 GHz ~ 26 GHz	Fig.128	P

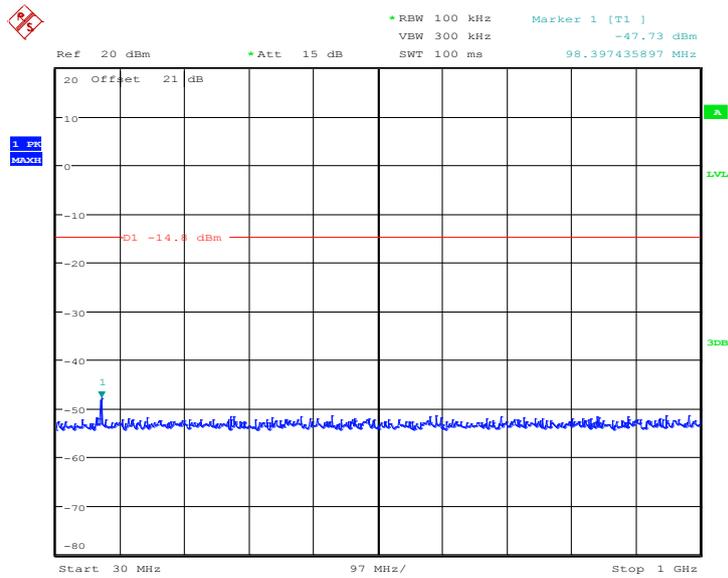
Conclusion: PASS

Test graphs as below:



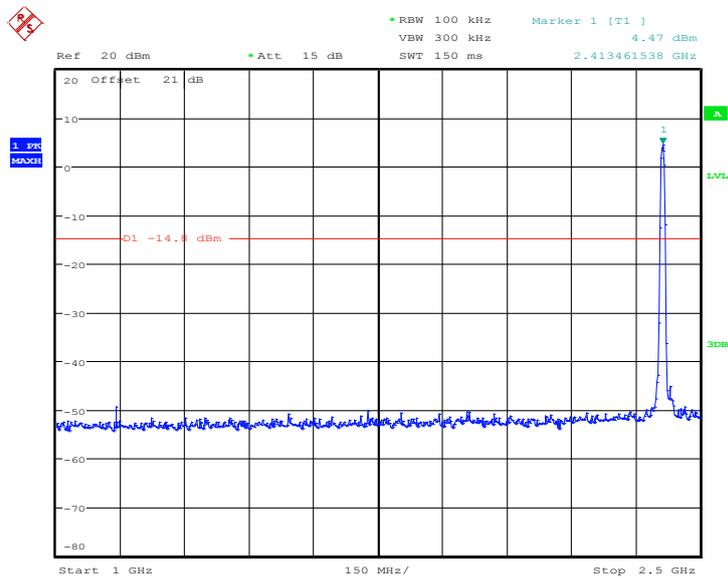
Date: 9.AUG.2012 14:44:35

Fig. 33 Conducted Spurious Emission (802.11b, Ch1, Center Frequency)



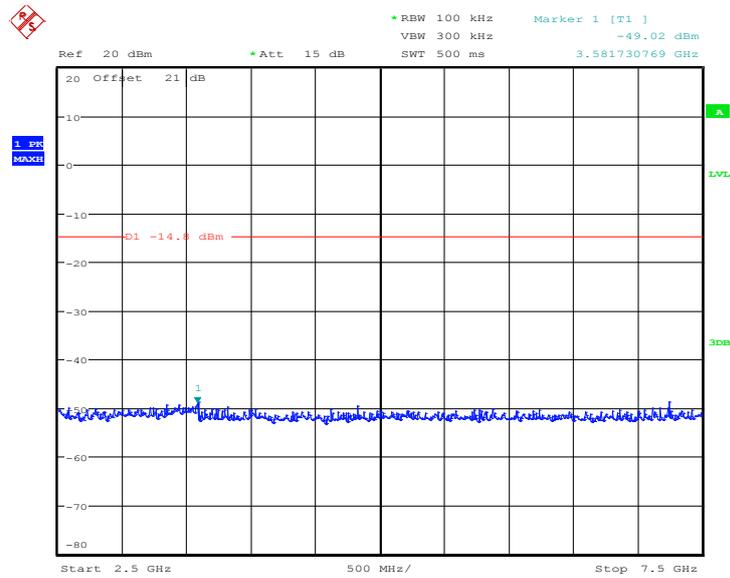
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Fig. 34 Conducted Spurious Emission (802.11b, Ch1, 30 MHz-1 GHz)



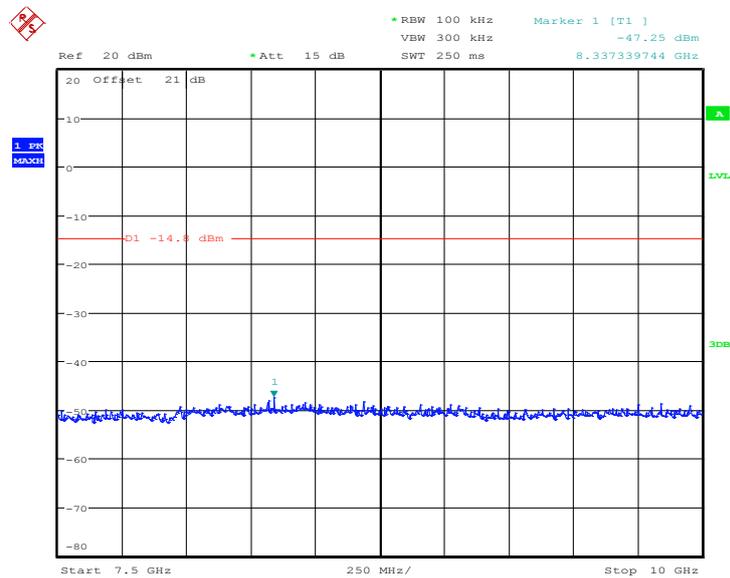
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Fig. 35 Conducted Spurious Emission (802.11b, Ch1, 1 GHz-2.5 GHz)



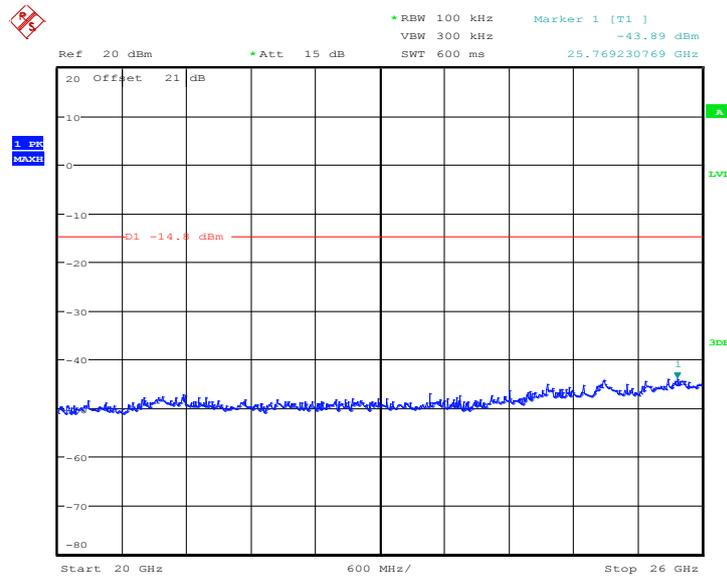
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Fig. 36 Conducted Spurious Emission (802.11b, Ch1, 2.5 GHz-7.5 GHz)



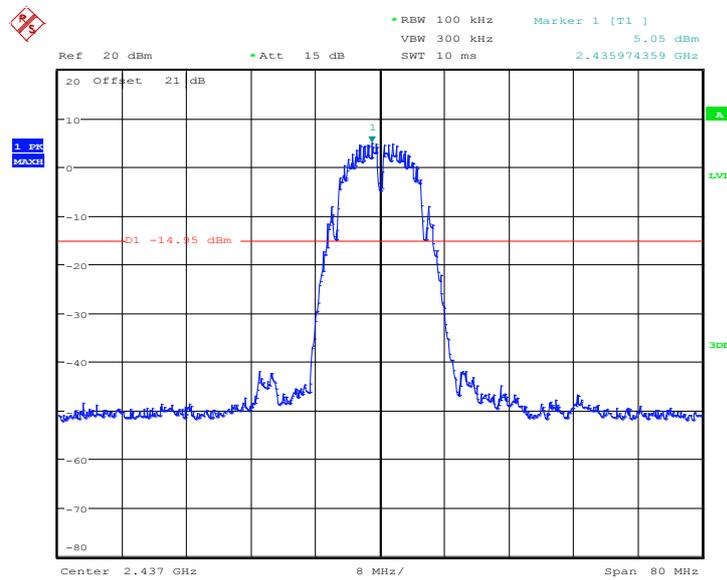
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Fig. 37 Conducted Spurious Emission (802.11b, Ch1, 7.5 GHz-10 GHz)



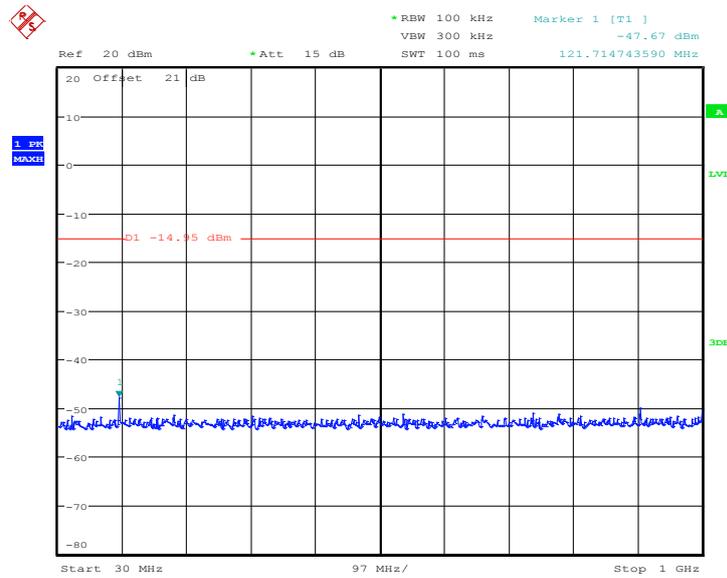
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Fig. 40 Conducted Spurious Emission (802.11b, Ch1, 20 GHz-26 GHz)



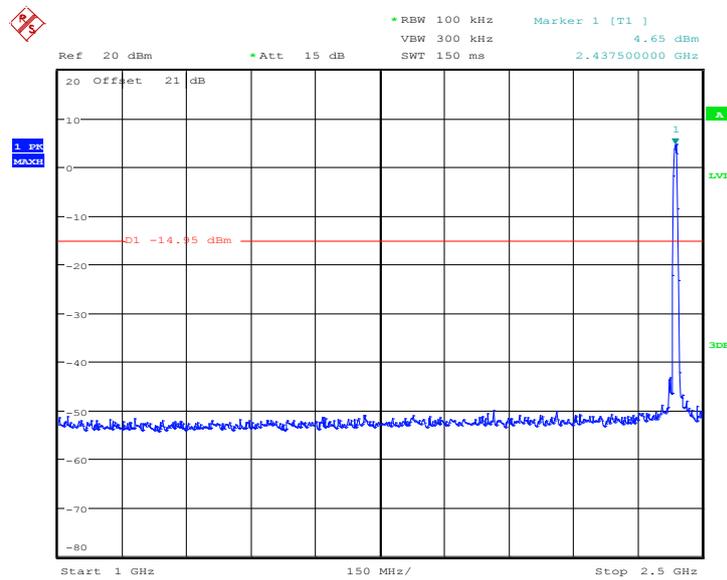
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Fig. 41 Conducted Spurious Emission (802.11b, Ch6, Center Frequency)



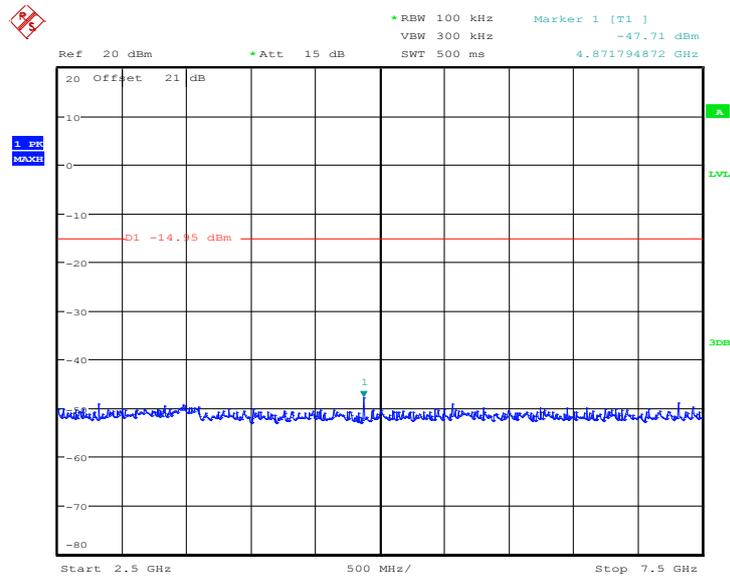
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Fig. 42 Conducted Spurious Emission (802.11b, Ch6, 30 MHz-1 GHz)



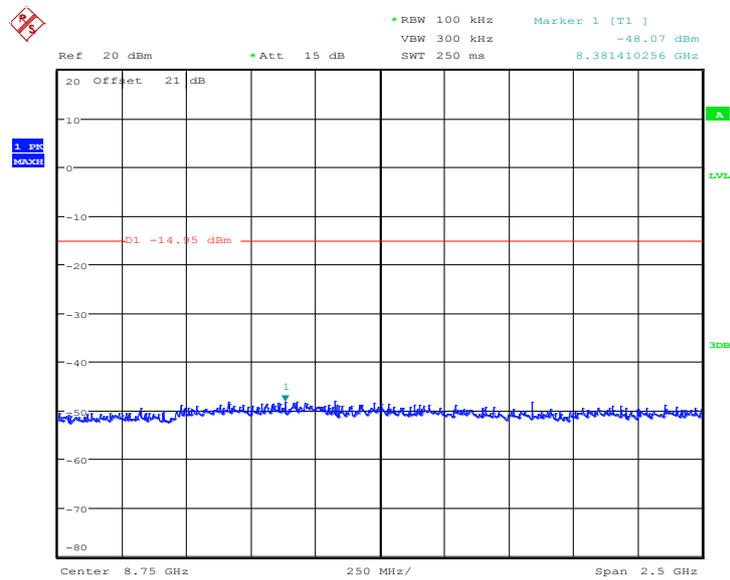
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Fig. 43 Conducted Spurious Emission (802.11b, Ch6, 1 GHz-2.5 GHz)



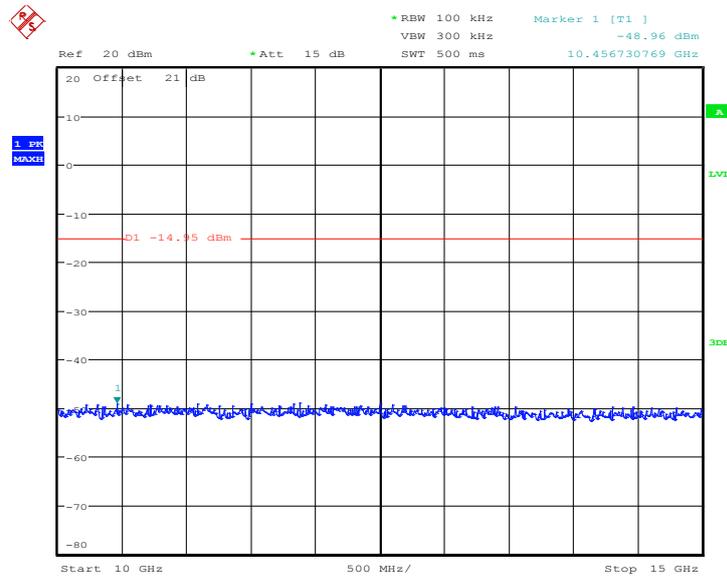
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Fig. 44 Conducted Spurious Emission (802.11b, Ch6, 2.5 GHz-7.5 GHz)



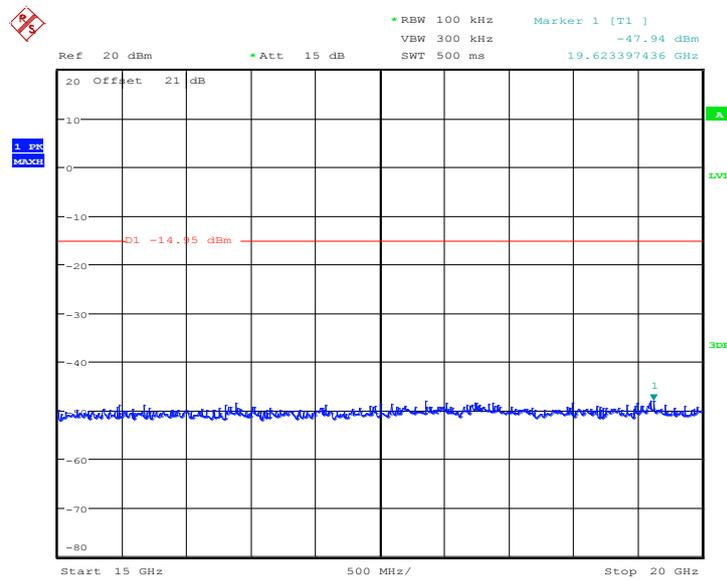
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Fig. 45 Conducted Spurious Emission (802.11b, Ch6, 7.5 GHz-10 GHz)



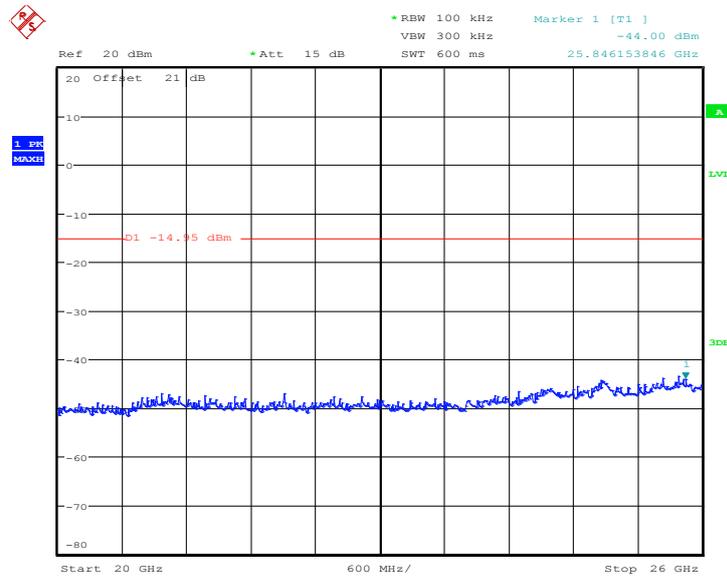
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Fig. 46 Conducted Spurious Emission (802.11b, Ch6, 10 GHz-15 GHz)



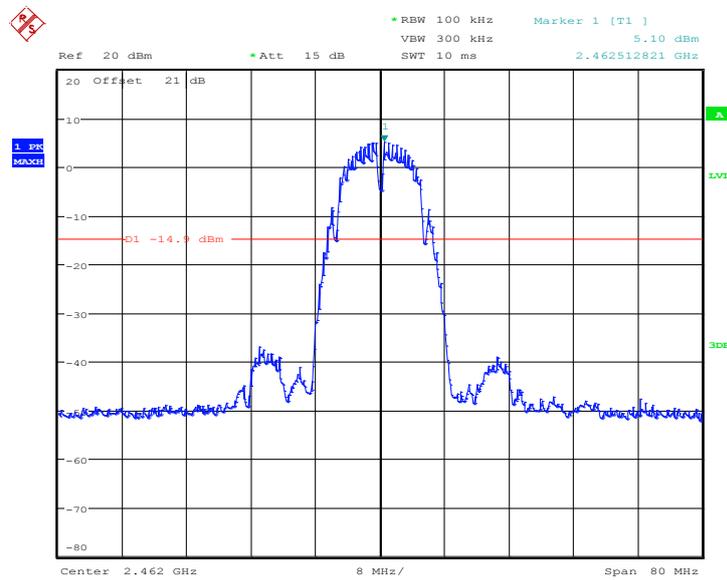
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Fig. 47 Conducted Spurious Emission (802.11b, Ch6, 15 GHz-20 GHz)



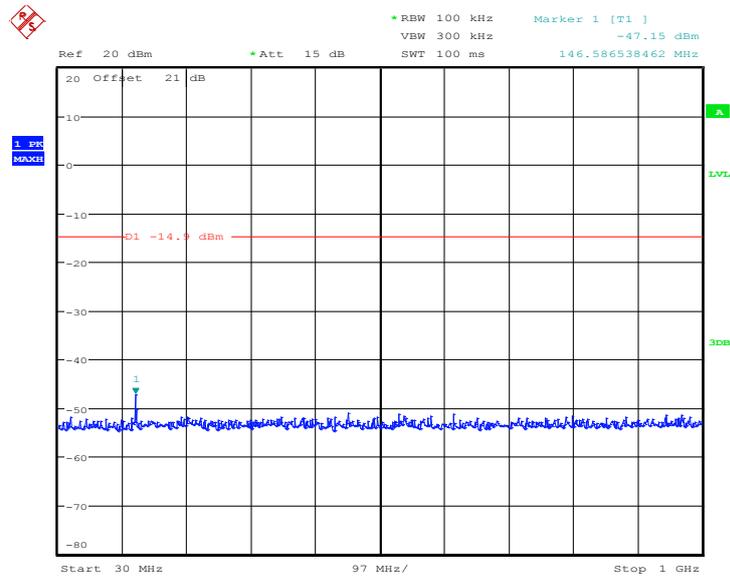
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Fig. 48 Conducted Spurious Emission (802.11b, Ch6, 20 GHz-26 GHz)



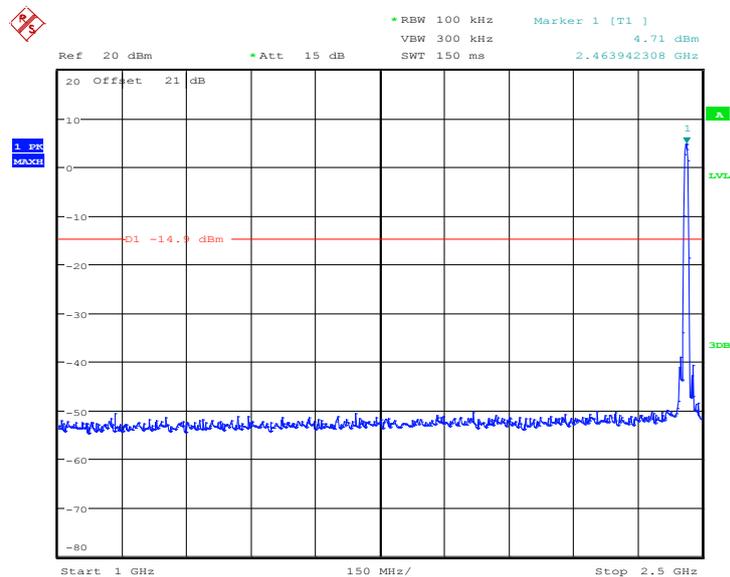
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Fig. 49 Conducted Spurious Emission (802.11b, Ch11, Center Frequency)



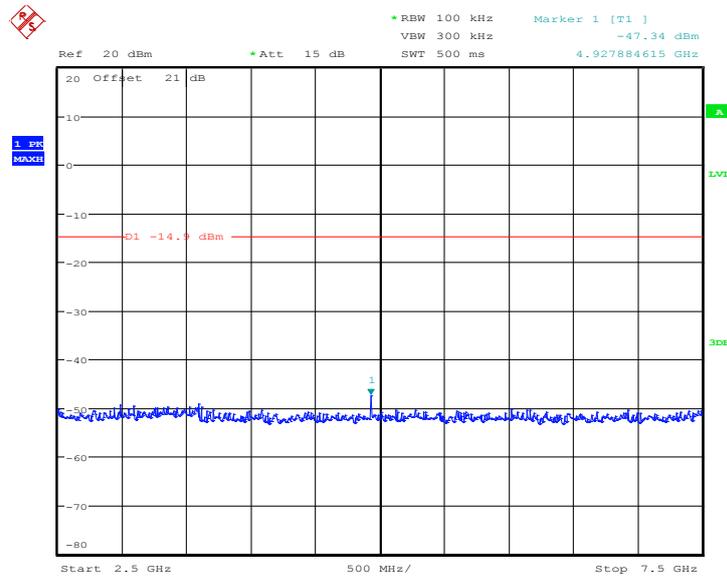
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Fig. 50 Conducted Spurious Emission (802.11b, Ch11, 30 MHz-1 GHz)



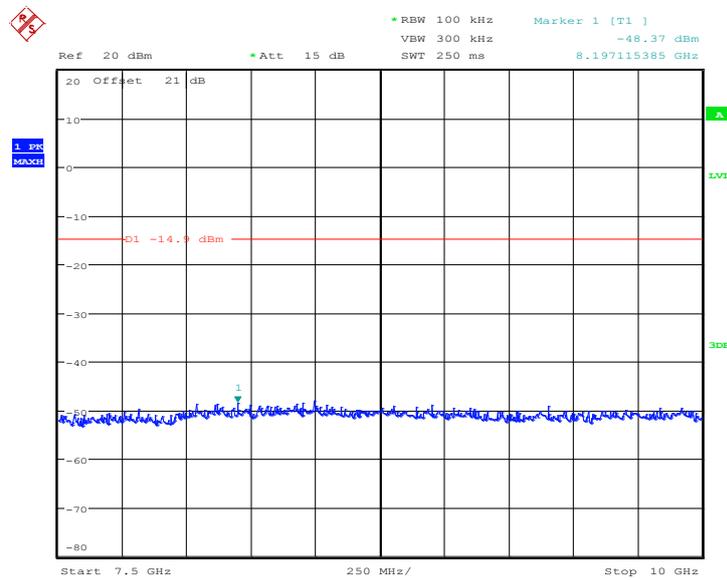
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Fig. 51 Conducted Spurious Emission (802.11b, Ch11, 1 GHz-2.5 GHz)



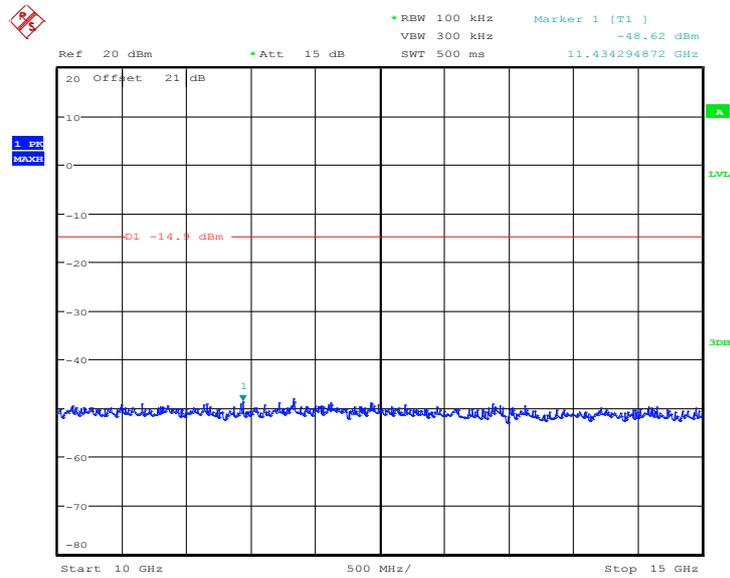
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Fig. 52 Conducted Spurious Emission (802.11b, Ch11, 2.5 GHz-7.5 GHz)



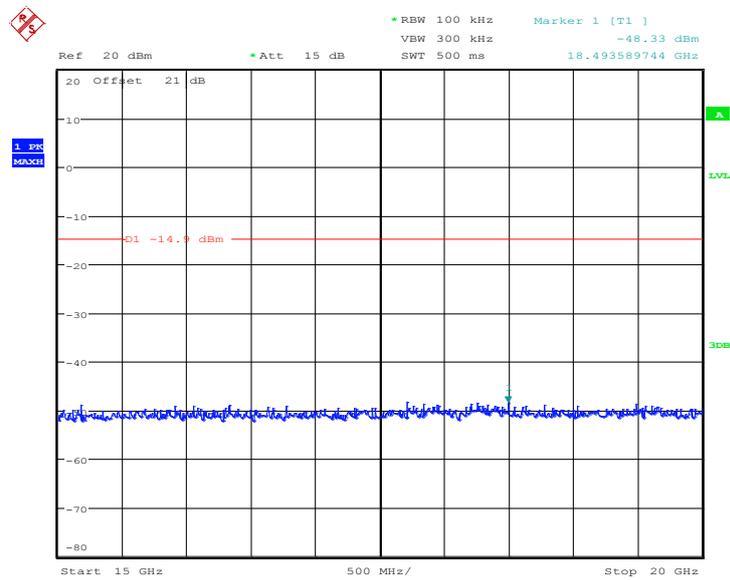
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Fig. 53 Conducted Spurious Emission (802.11b, Ch11, 7.5 GHz-10 GHz)



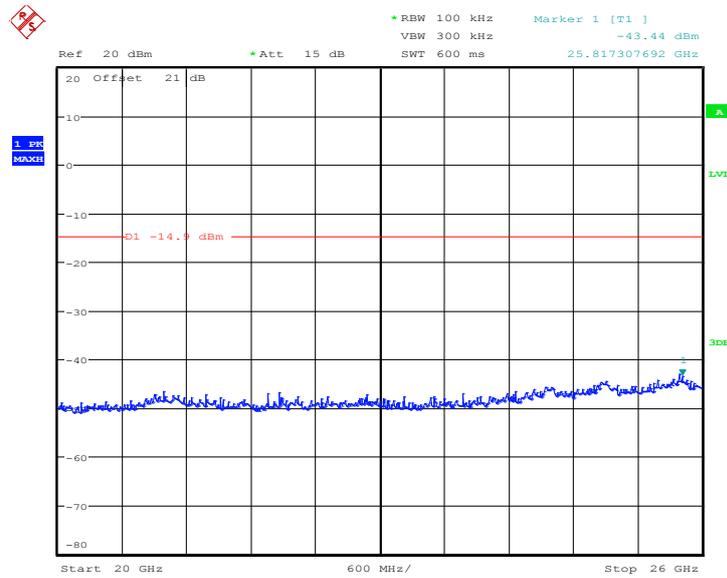
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Fig. 54 Conducted Spurious Emission (802.11b, Ch11, 10 GHz-15 GHz)



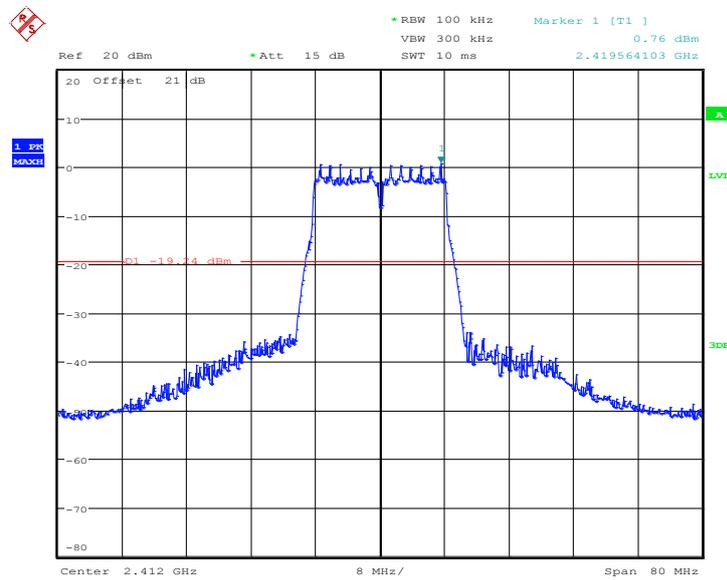
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Fig. 55 Conducted Spurious Emission (802.11b, Ch11, 15 GHz-20 GHz)



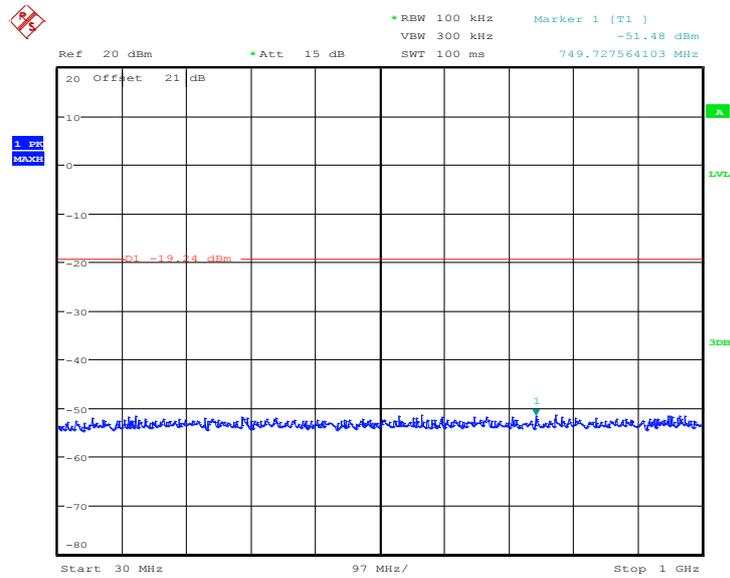
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Fig. 56 Conducted Spurious Emission (802.11b, Ch11, 20 GHz-26 GHz)



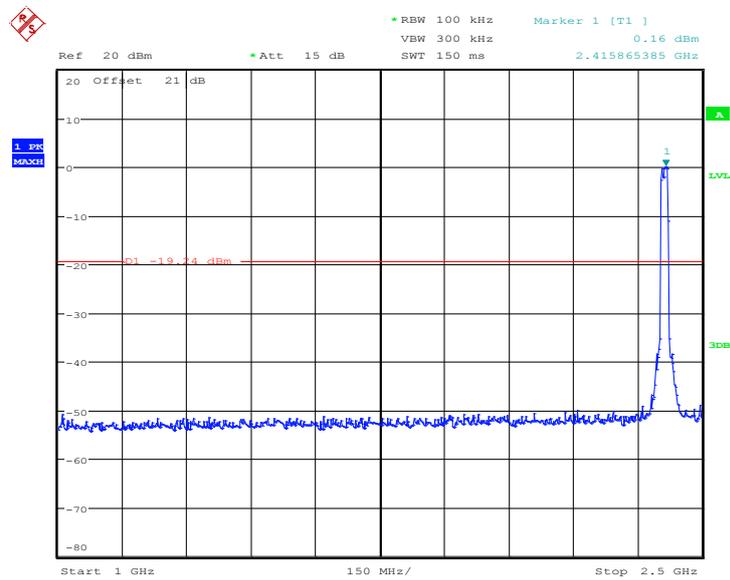
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Fig. 57 Conducted Spurious Emission (802.11g, Ch1, Center Frequency)



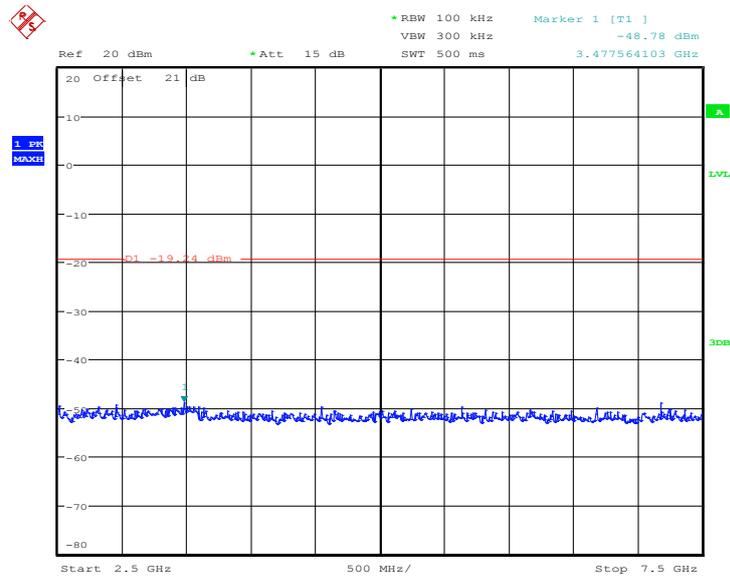
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Fig. 58 Conducted Spurious Emission (802.11g, Ch1, 30 MHz-1 GHz)



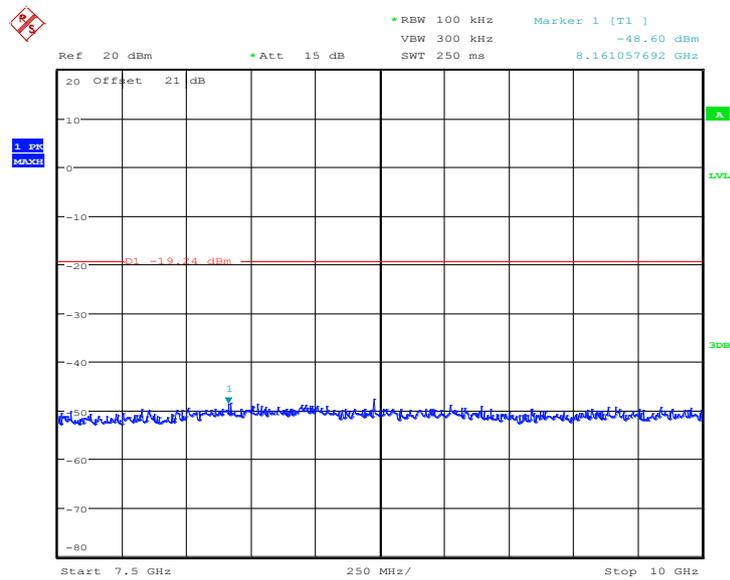
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Fig. 59 Conducted Spurious Emission (802.11g, Ch1, 1 GHz-2.5 GHz)



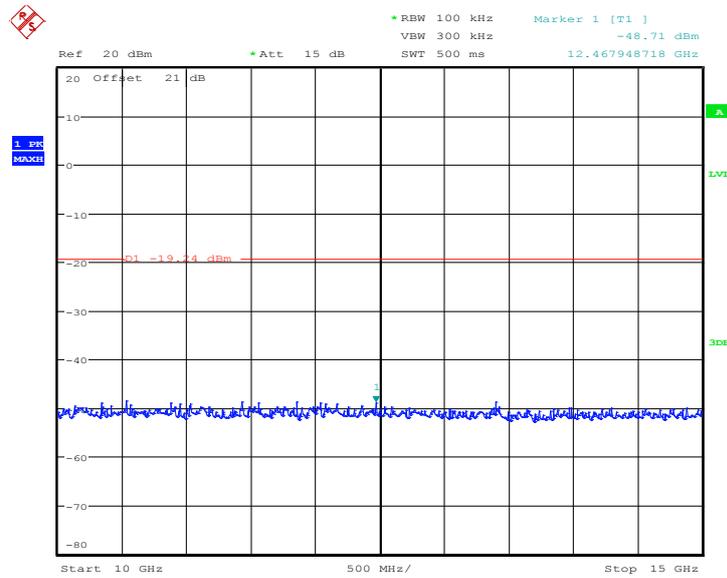
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Fig. 60 Conducted Spurious Emission (802.11g, Ch1, 2.5 GHz-7.5 GHz)



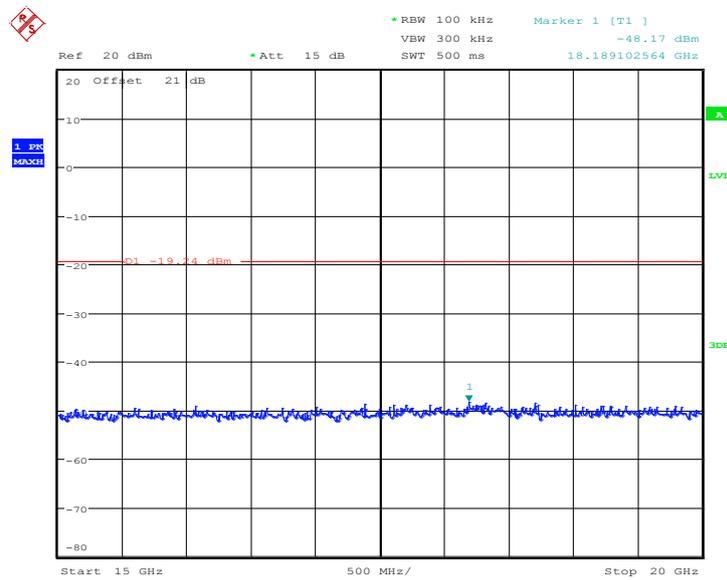
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Fig. 61 Conducted Spurious Emission (802.11g, Ch1, 7.5 GHz-10 GHz)



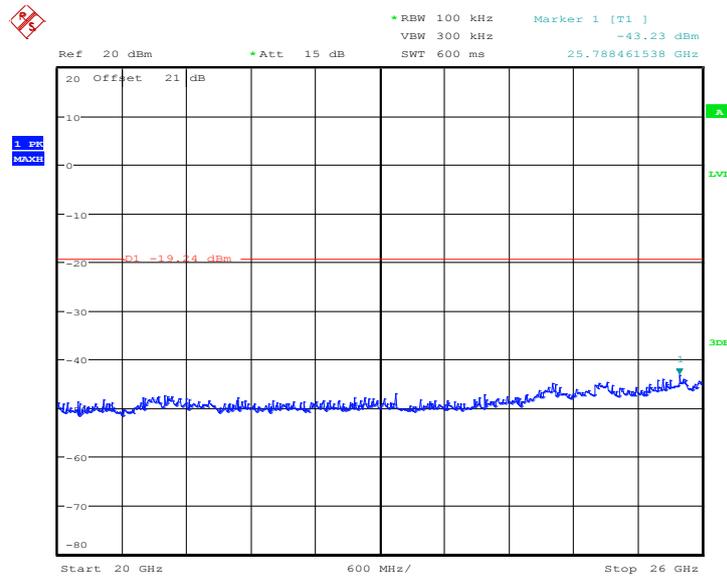
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Fig. 62 Conducted Spurious Emission (802.11g, Ch1, 10 GHz-15 GHz)



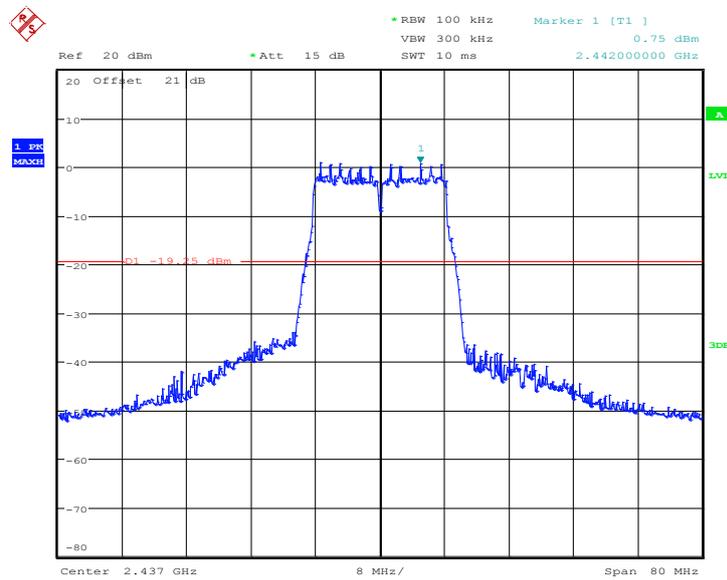
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Fig. 63 Conducted Spurious Emission (802.11g, Ch1, 15 GHz-20 GHz)



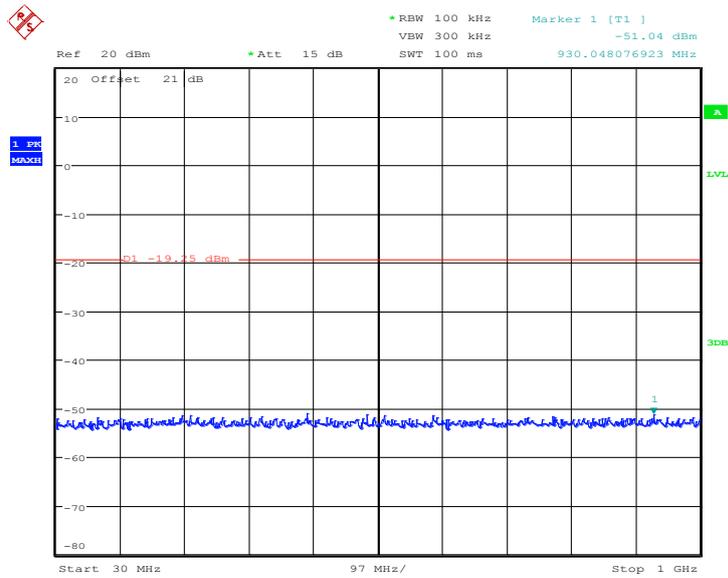
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Fig. 64 Conducted Spurious Emission (802.11g, Ch1, 20 GHz-26 GHz)



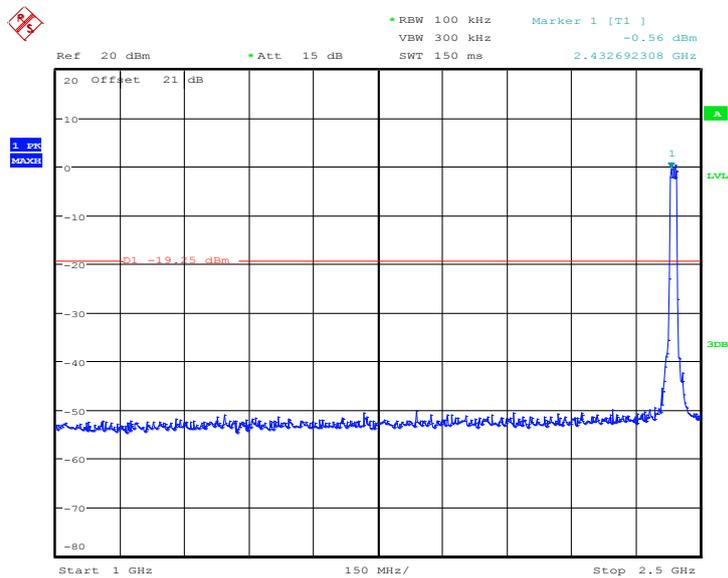
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Fig. 65 Conducted Spurious Emission (802.11g, Ch6, Center Frequency)



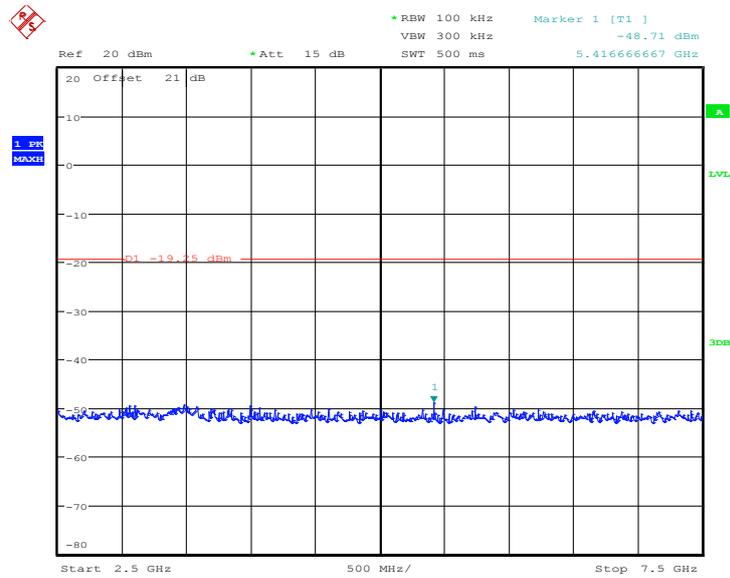
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Fig. 66 Conducted Spurious Emission (802.11g, Ch6, 30 MHz-1 GHz)



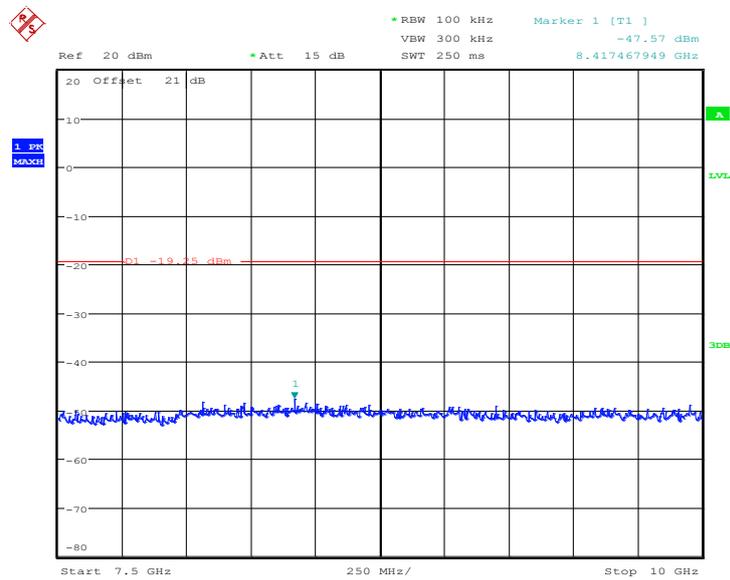
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Fig. 67 Conducted Spurious Emission (802.11g, Ch6, 1 GHz-2.5 GHz)



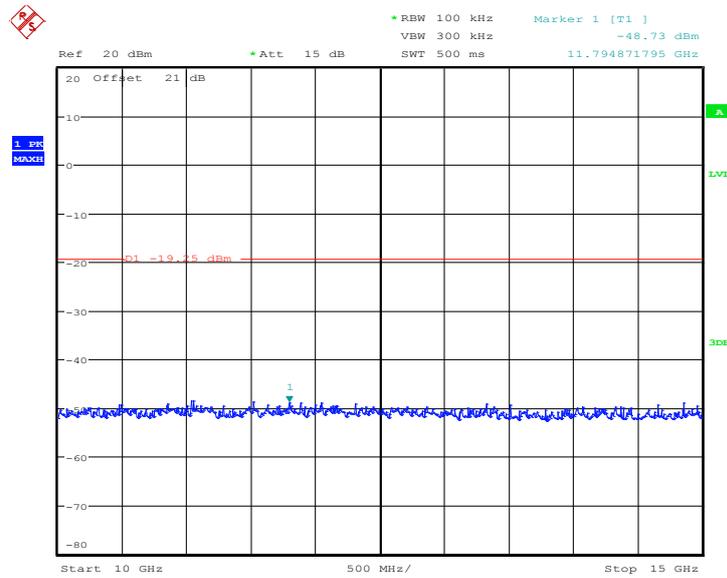
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Fig. 68 Conducted Spurious Emission (802.11g, Ch6, 2.5 GHz-7.5 GHz)



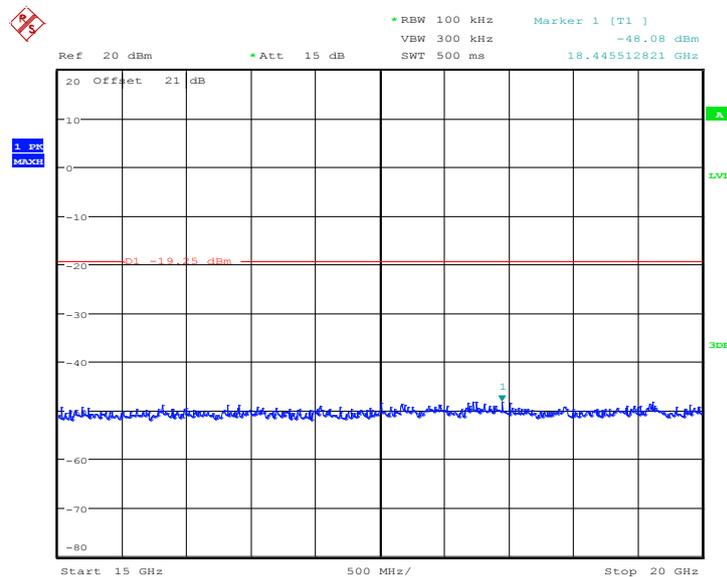
Date: 9.AUG.2012 15:00:22

Fig. 69 Conducted Spurious Emission (802.11g, Ch6, 7.5 GHz-10 GHz)



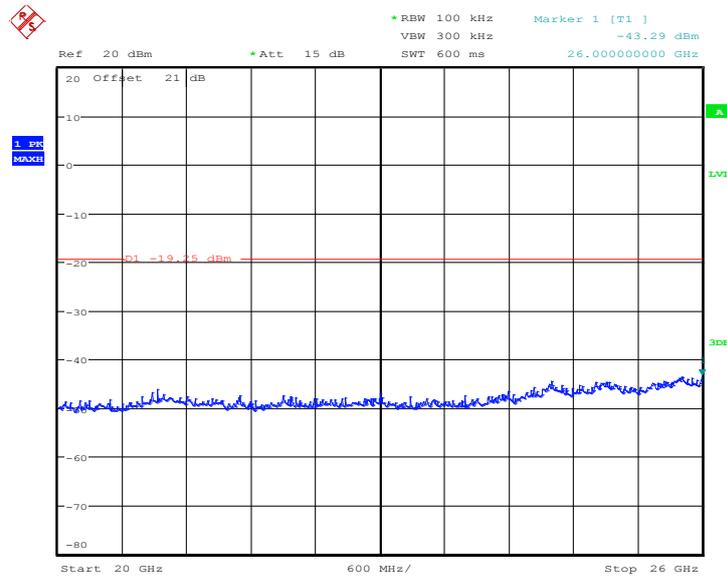
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Fig. 70 Conducted Spurious Emission (802.11g, Ch6, 10 GHz-15 GHz)



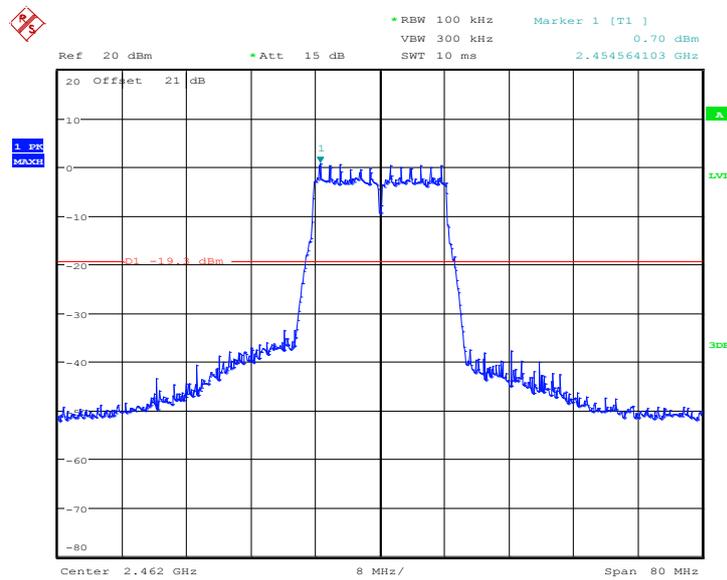
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Fig. 71 Conducted Spurious Emission (802.11g, Ch6, 15 GHz-20 GHz)



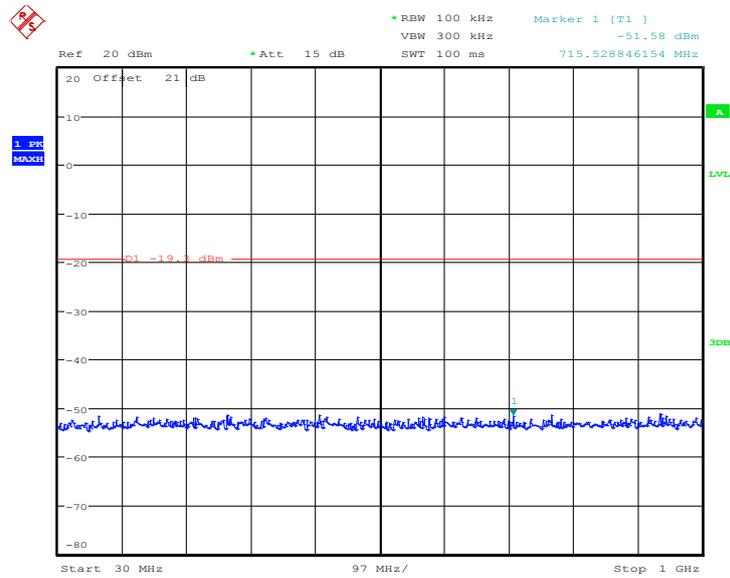
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Fig. 72 Conducted Spurious Emission (802.11g, Ch6, 20 GHz-26 GHz)



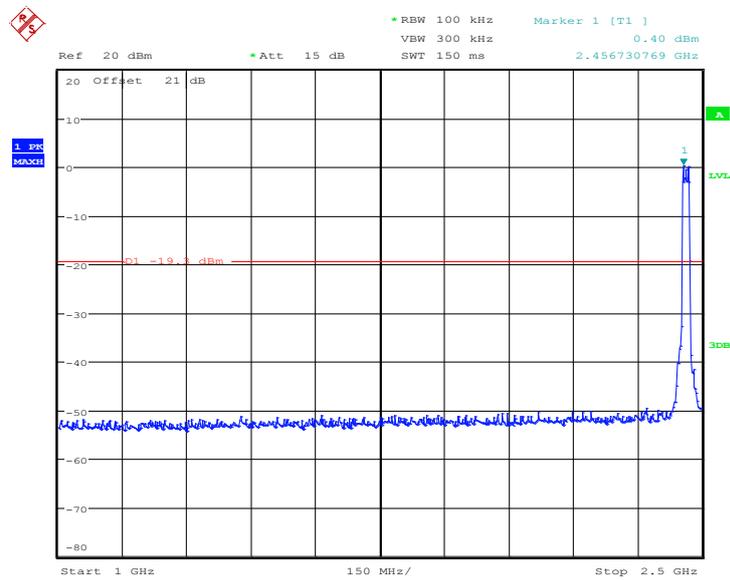
Date: 9.AUG.2012 15:02:36

Fig. 73 Conducted Spurious Emission (802.11g, Ch11, Center Frequency)



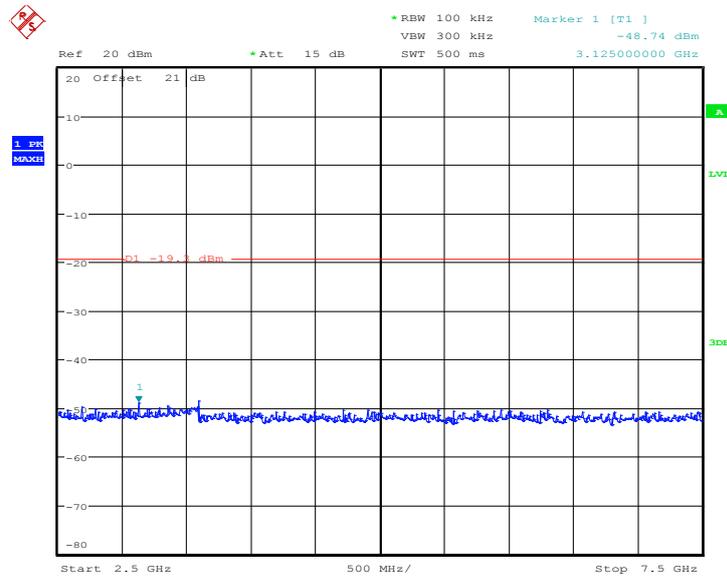
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Fig. 74 Conducted Spurious Emission (802.11g, Ch11, 30 MHz-1 GHz)



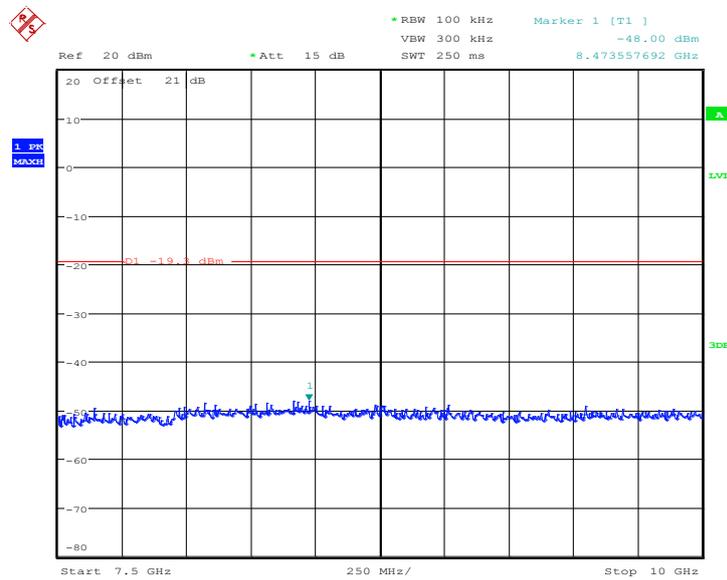
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Fig. 75 Conducted Spurious Emission (802.11g, Ch11, 1 GHz-2.5 GHz)



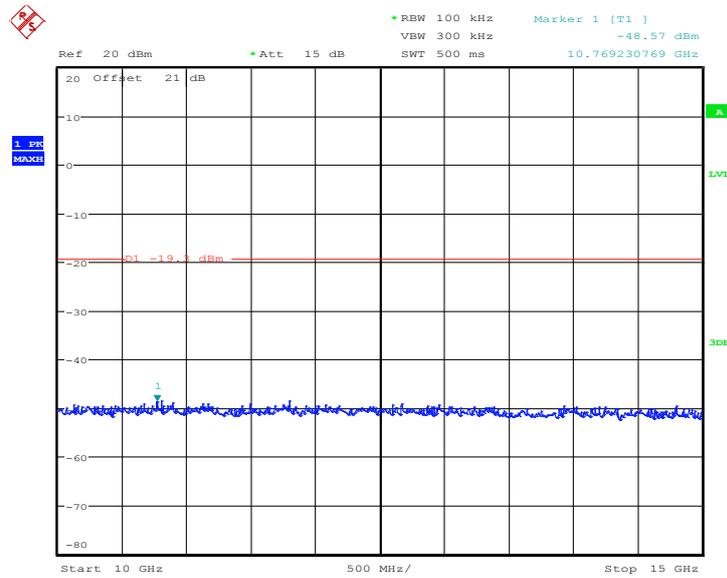
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Fig. 76 Conducted Spurious Emission (802.11g, Ch11, 2.5 GHz-7.5 GHz)



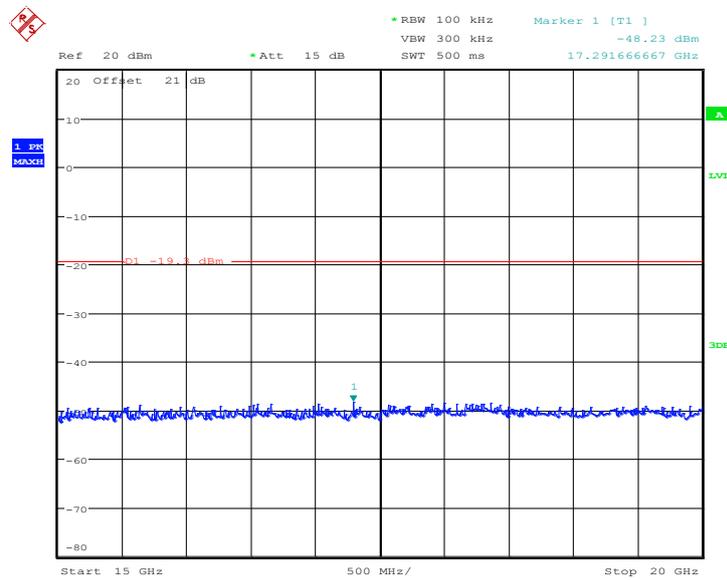
Date: 9.AUG.2012 15:03:57

Fig. 77 Conducted Spurious Emission (802.11g, Ch11, 7.5 GHz-10 GHz)



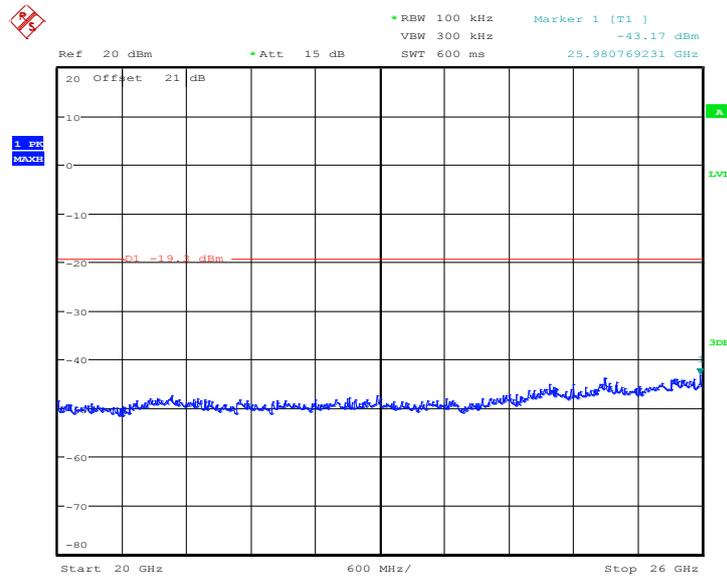
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Fig. 78 Conducted Spurious Emission (802.11g, Ch11, 10 GHz-15 GHz)



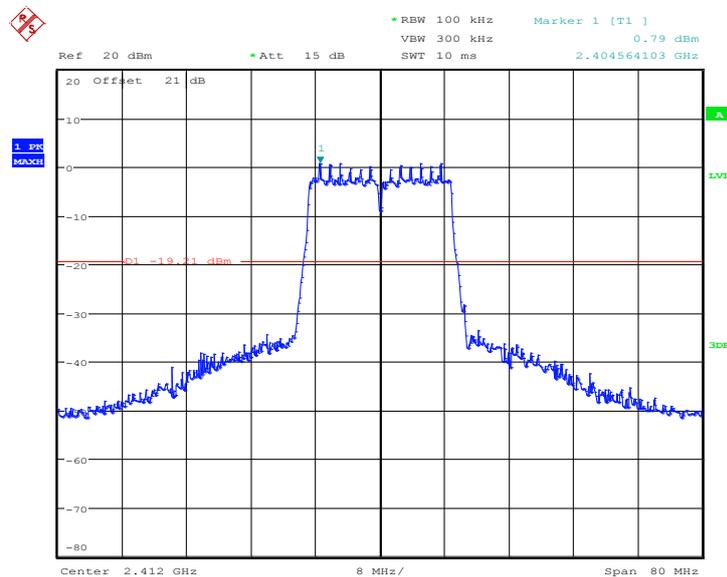
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Fig. 79 Conducted Spurious Emission (802.11g, Ch11, 15 GHz-20 GHz)



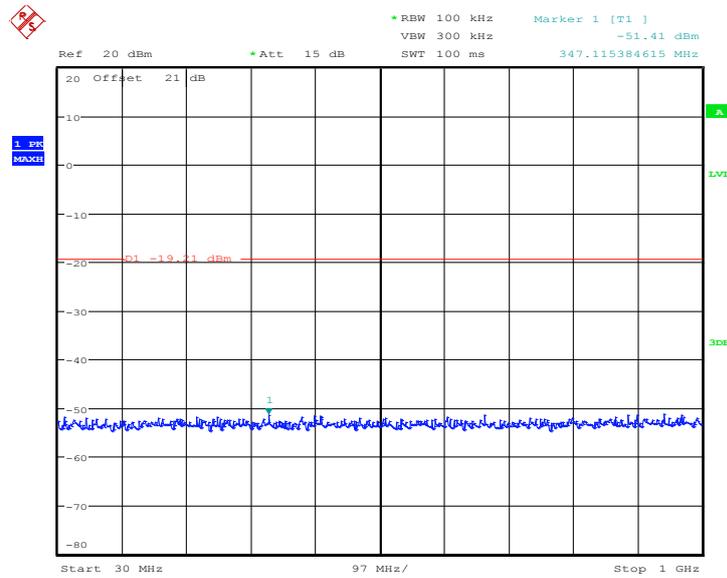
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Fig. 80 Conducted Spurious Emission (802.11g, Ch11, 20 GHz-26 GHz)



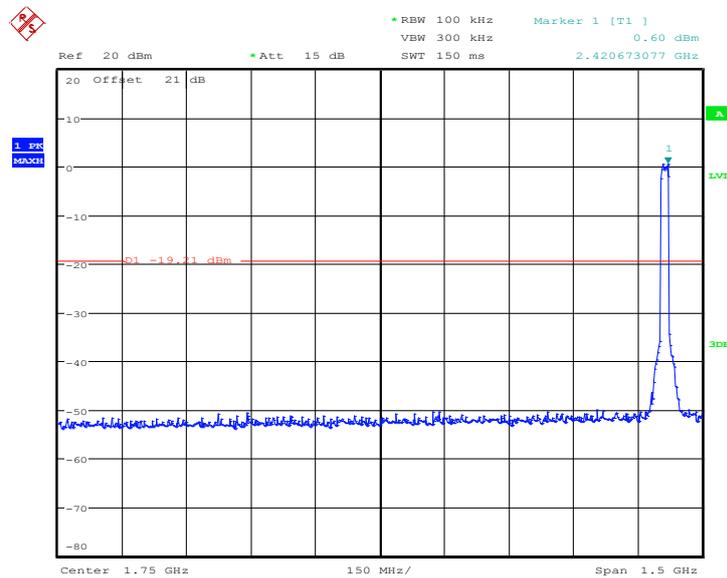
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Fig. 81 Conducted Spurious Emission (802.11n-HT20, Ch1, Center Frequency)



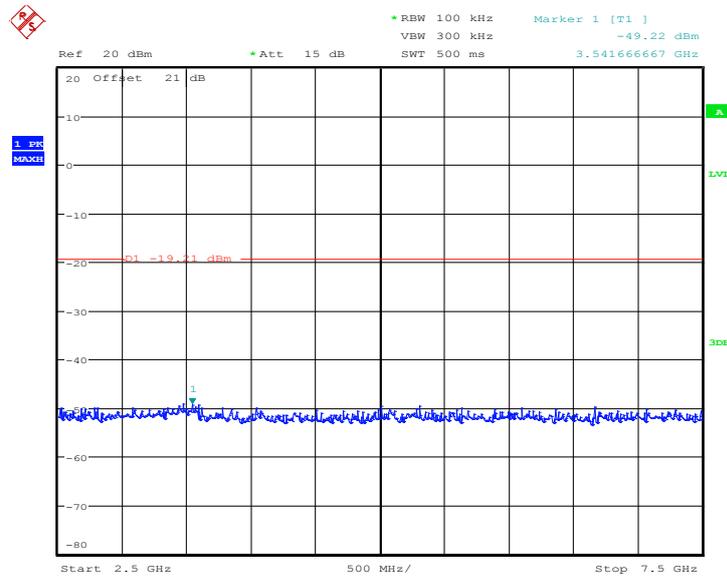
Date: 9.AUG.2012 15:06:40

Fig. 82 Conducted Spurious Emission (802.11n-HT20, Ch1, 30 MHz-1 GHz)



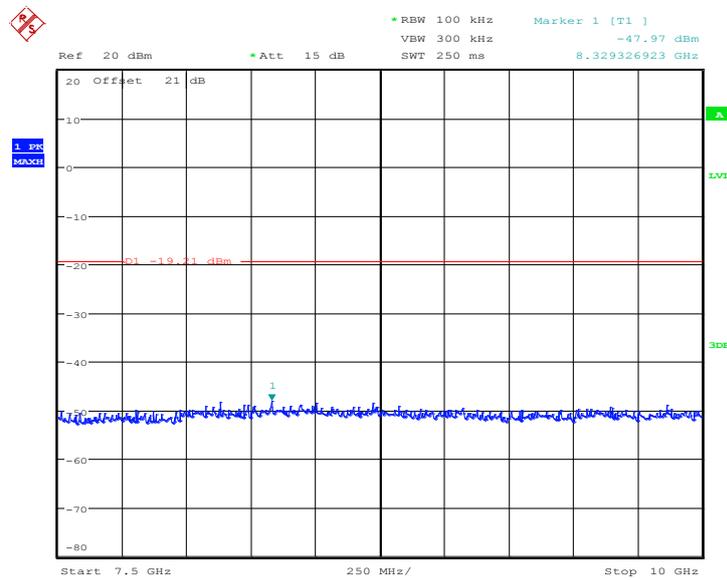
Date: 9.AUG.2012 15:07:14

Fig. 83 Conducted Spurious Emission (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)



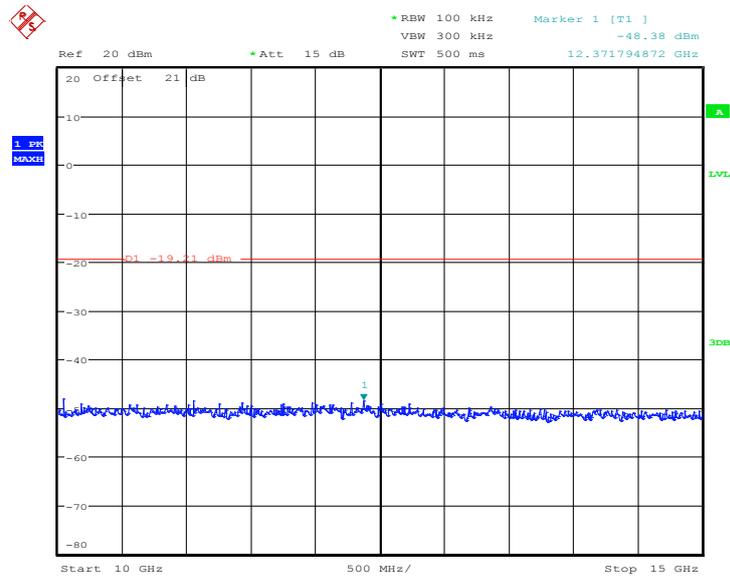
Date: 9.AUG.2012 15:07:40

Fig. 84 Conducted Spurious Emission (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)



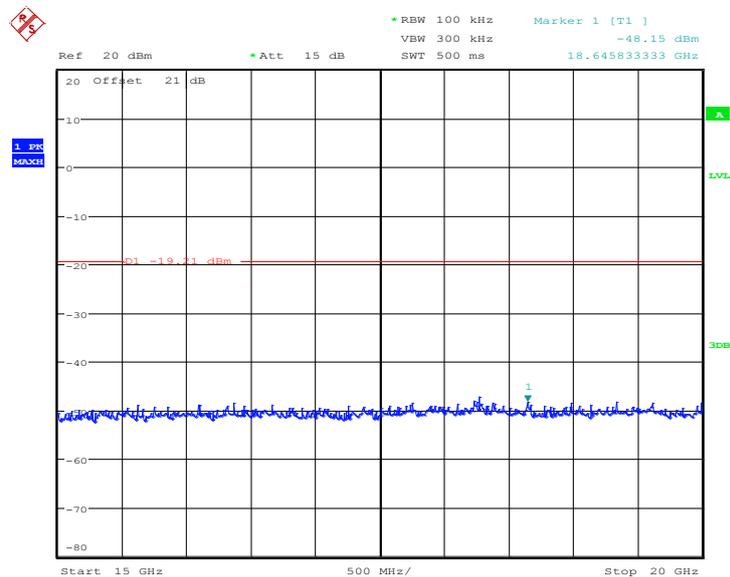
Date: 9.AUG.2012 15:08:01

Fig. 85 Conducted Spurious Emission (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)



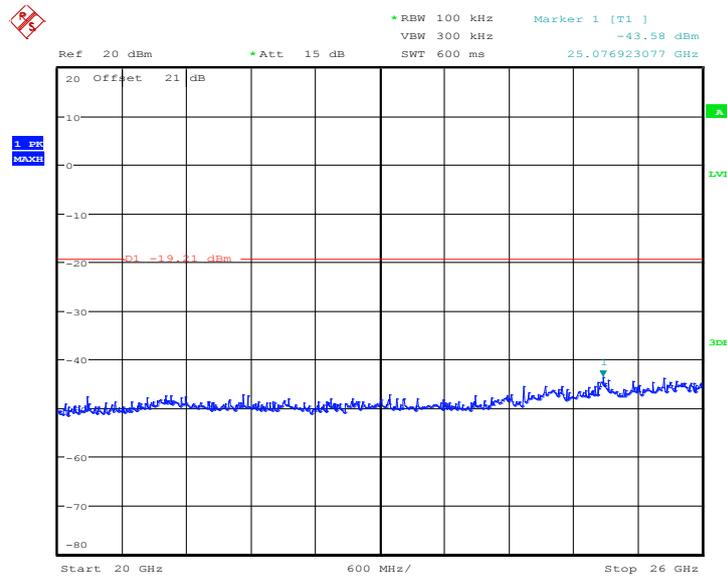
Date: 9.AUG.2012 15:08:20

Fig. 86 Conducted Spurious Emission (802.11n-HT20, Ch1, 10 GHz-15 GHz)



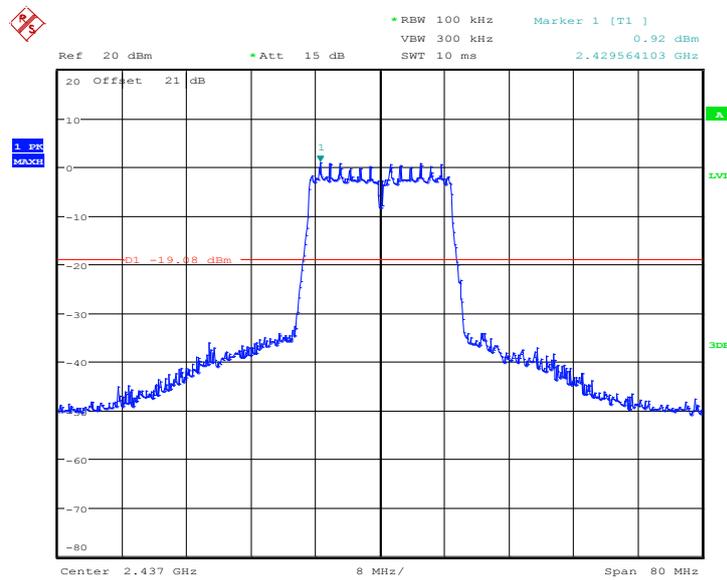
Date: 9.AUG.2012 15:08:41

Fig. 87 Conducted Spurious Emission (802.11n-HT20, Ch1, 15 GHz-20 GHz)



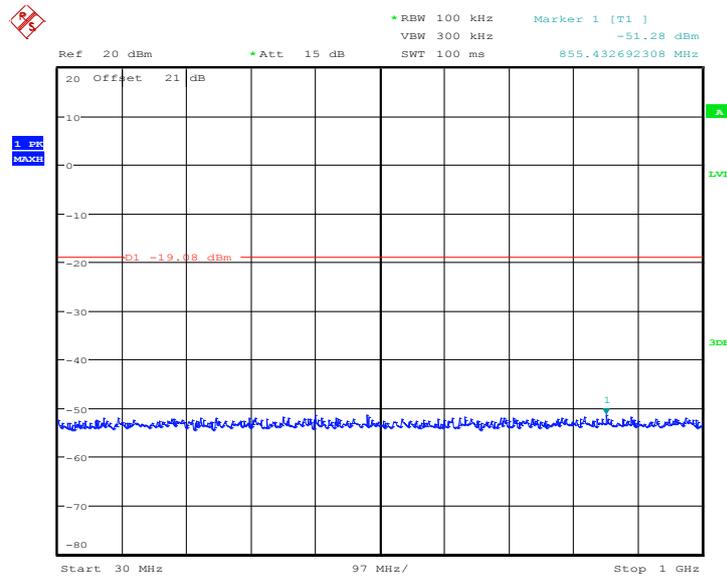
Date: 9.AUG.2012 15:09:00

Fig. 88 Conducted Spurious Emission (802.11n-HT20, Ch1, 20 GHz-26 GHz)



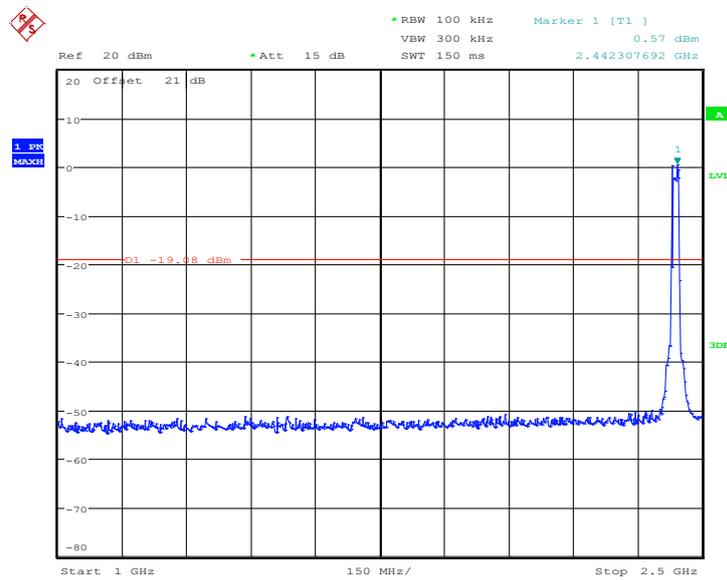
Date: 9.AUG.2012 15:11:24

Fig. 89 Conducted Spurious Emission (802.11n-HT20, Ch6, Center Frequency)



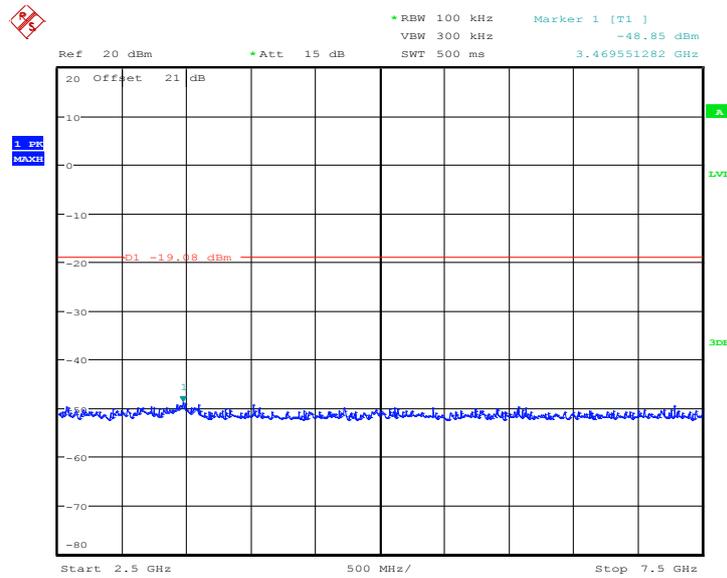
Date: 9.AUG.2012 15:11:50

Fig. 90 Conducted Spurious Emission (802.11n-HT20, Ch6, 30 MHz-1 GHz)



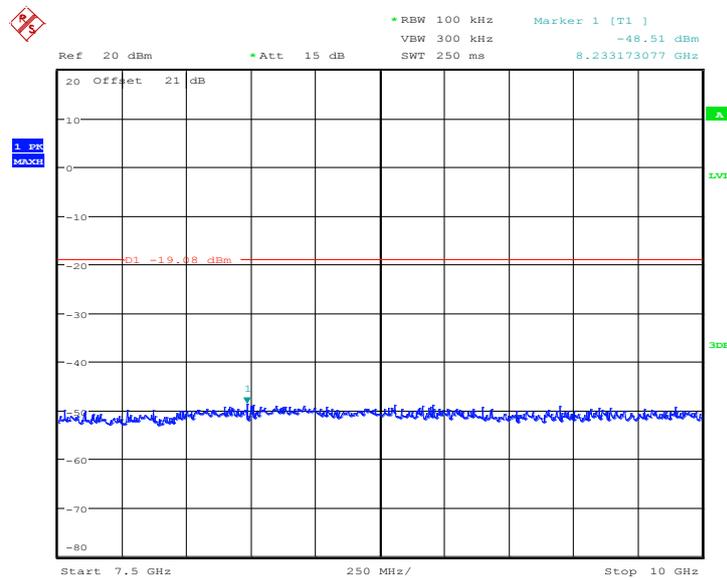
Date: 9.AUG.2012 15:12:06

Fig. 91 Conducted Spurious Emission (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)



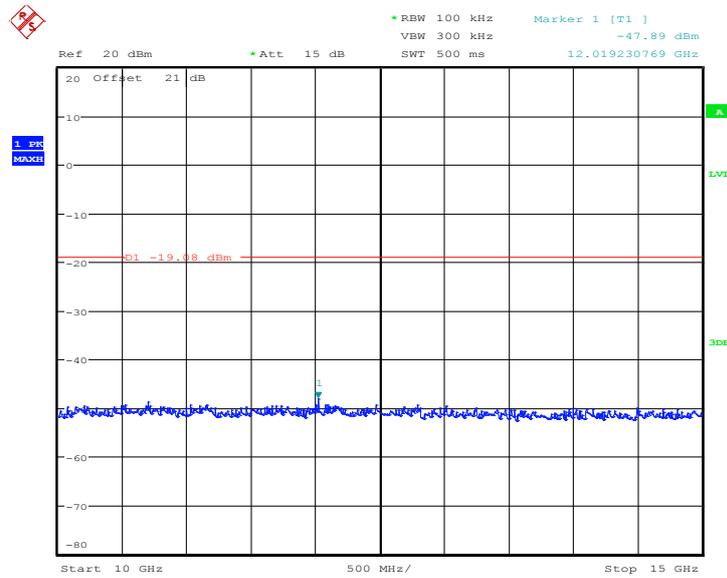
Date: 9.AUG.2012 15:12:41

Fig. 92 Conducted Spurious Emission (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)



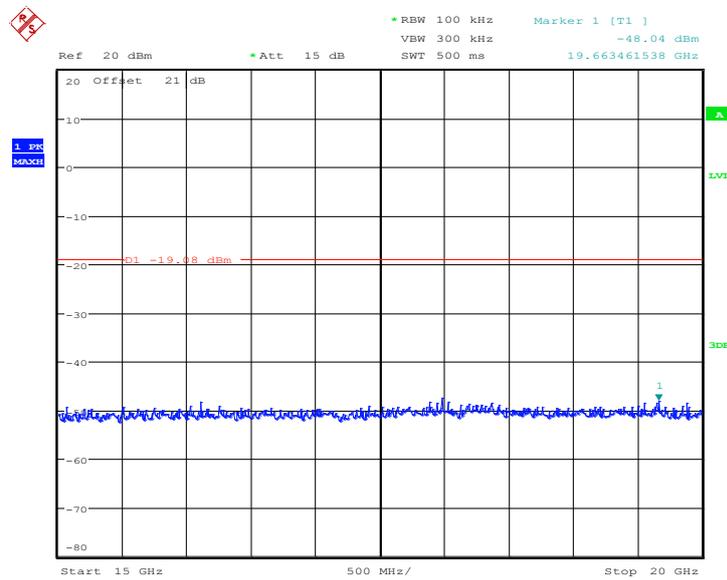
Date: 9.AUG.2012 15:12:59

Fig. 93 Conducted Spurious Emission (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)



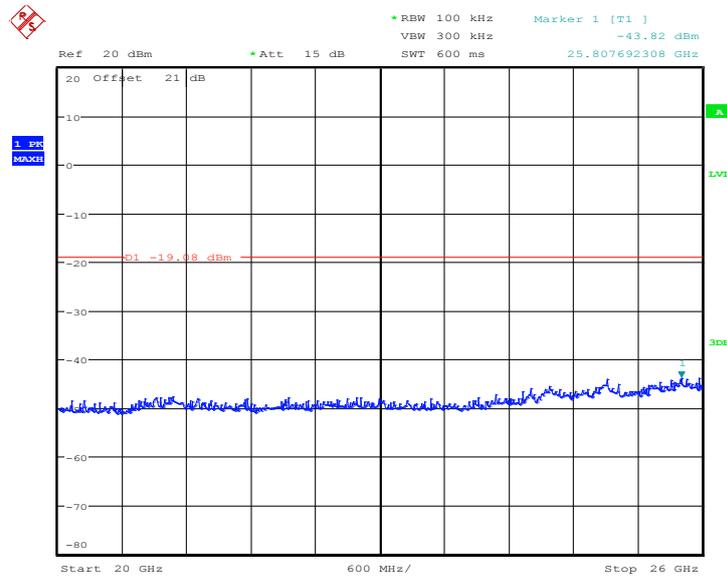
Date: 9.AUG.2012 15:13:18

Fig. 94 Conducted Spurious Emission (802.11n-HT20, Ch6, 10 GHz-15 GHz)



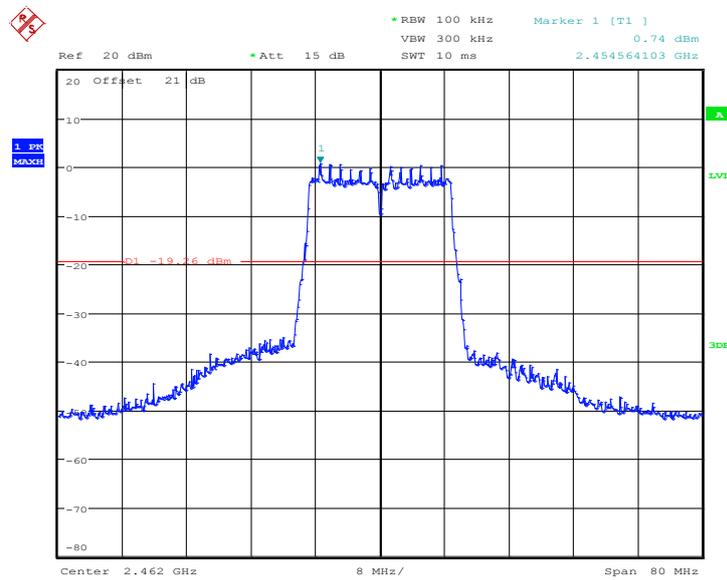
Date: 9.AUG.2012 15:13:38

Fig. 95 Conducted Spurious Emission (802.11n-HT20, Ch6, 15 GHz-20 GHz)



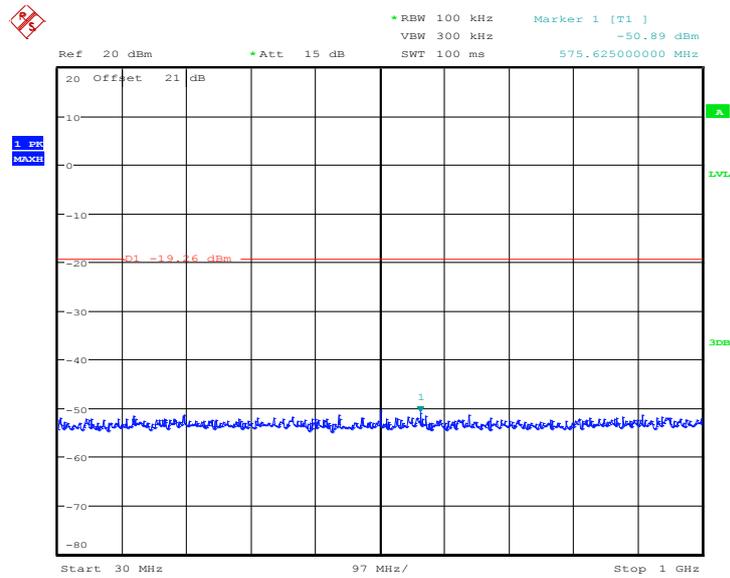
Date: 9.AUG.2012 15:13:59

Fig. 96 Conducted Spurious Emission (802.11n-HT20, Ch6, 20 GHz-26 GHz)



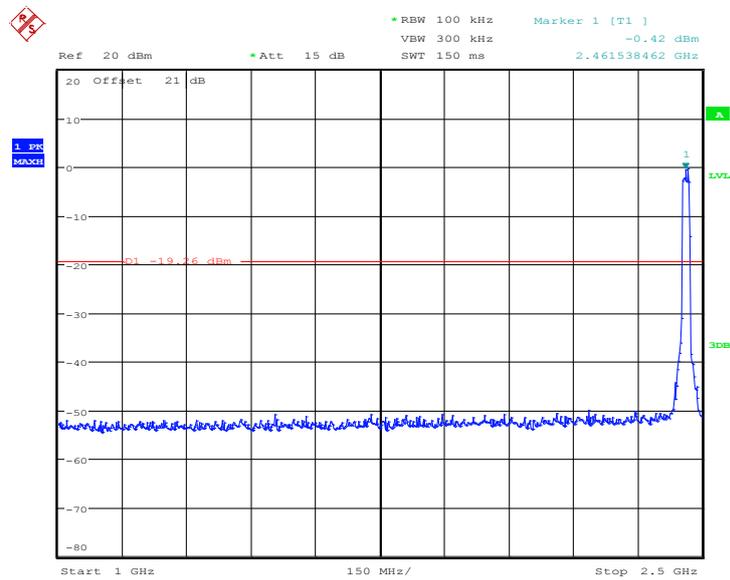
Date: 9.AUG.2012 15:14:54

Fig. 97 Conducted Spurious Emission (802.11n-HT20, Ch11, Center Frequency)



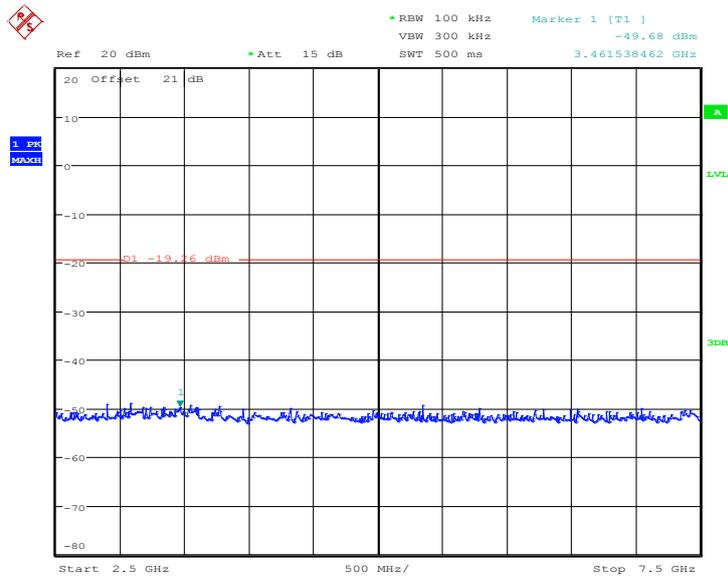
Date: 9.AUG.2012 15:15:11

Fig. 98 Conducted Spurious Emission (802.11n-HT20, Ch11, 30 MHz-1 GHz)



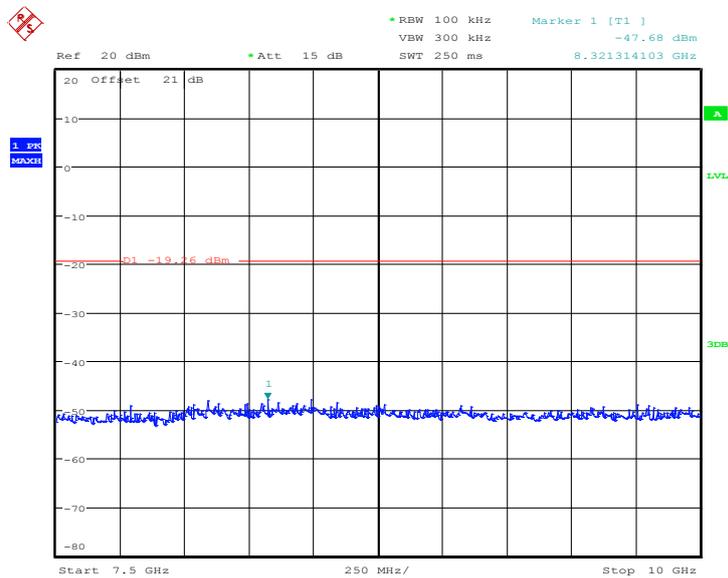
Date: 9.AUG.2012 15:15:27

Fig. 99 Conducted Spurious Emission (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)



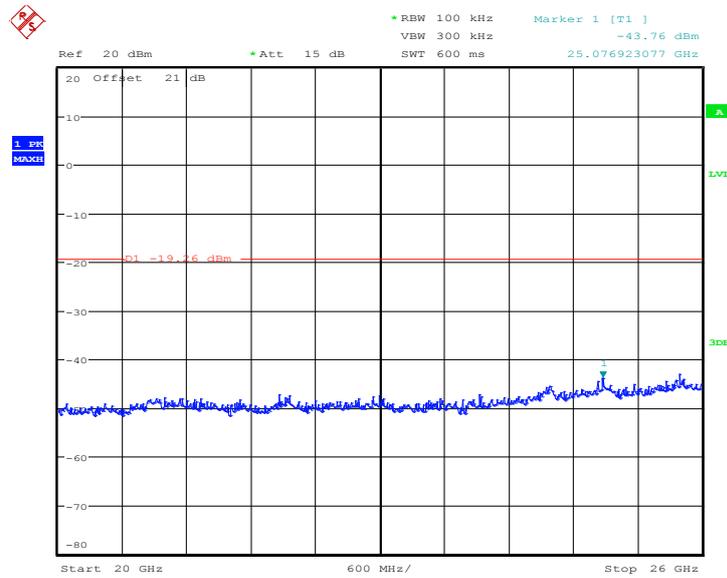
Date: 9.AUG.2012 15:15:47

Fig. 100 Conducted Spurious Emission (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)



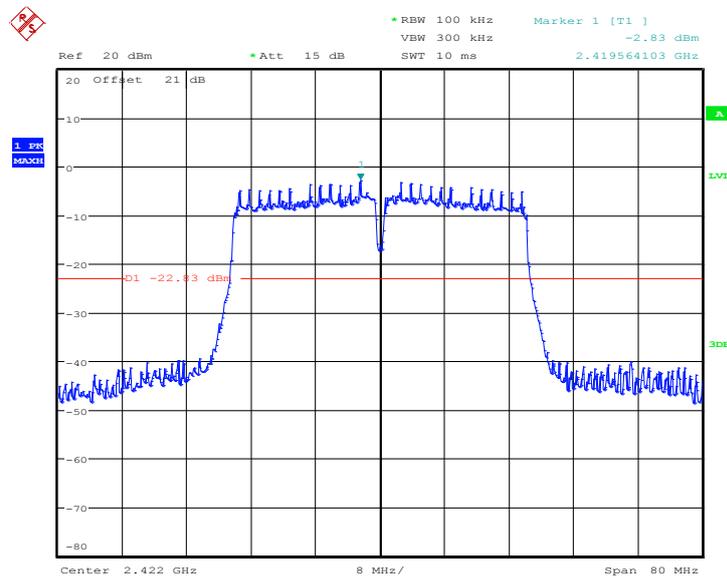
Date: 9.AUG.2012 15:16:13

Fig. 101 Conducted Spurious Emission (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)



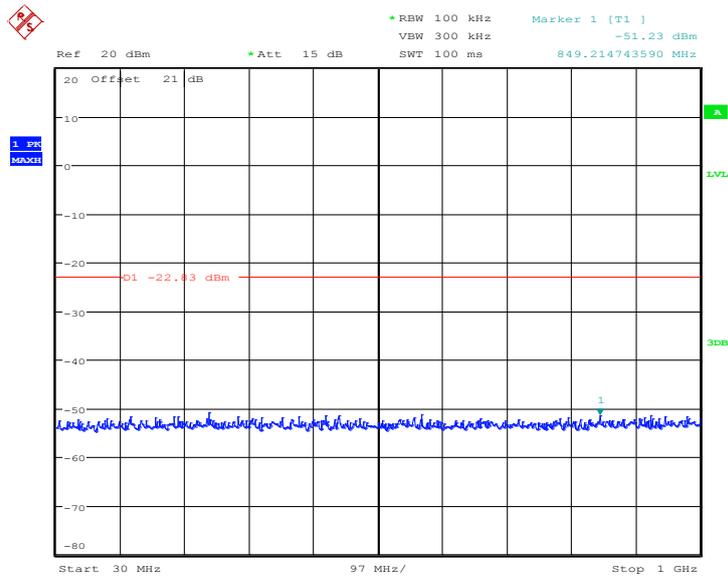
Date: 9.AUG.2012 15:17:13

Fig. 104 Conducted Spurious Emission (802.11n-HT20, Ch11, 20 GHz-26 GHz)



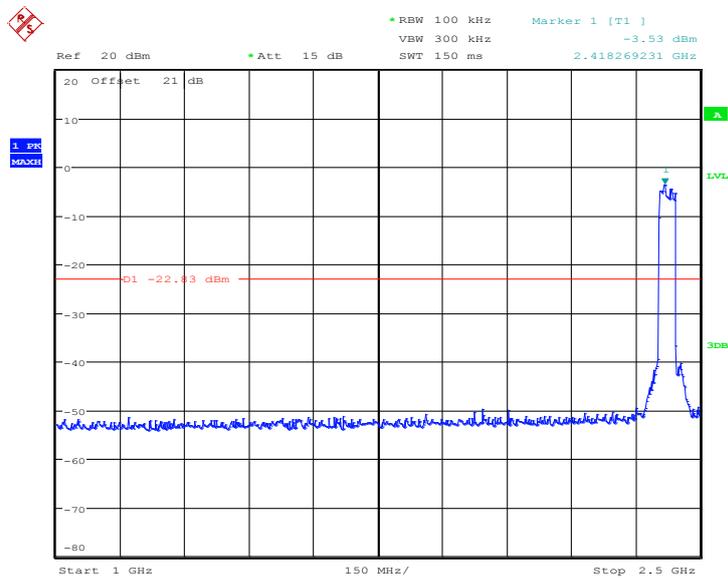
Date: 9.AUG.2012 15:18:11

Fig. 105 Conducted Spurious Emission (802.11n- HT40, Ch3, Center Frequency)



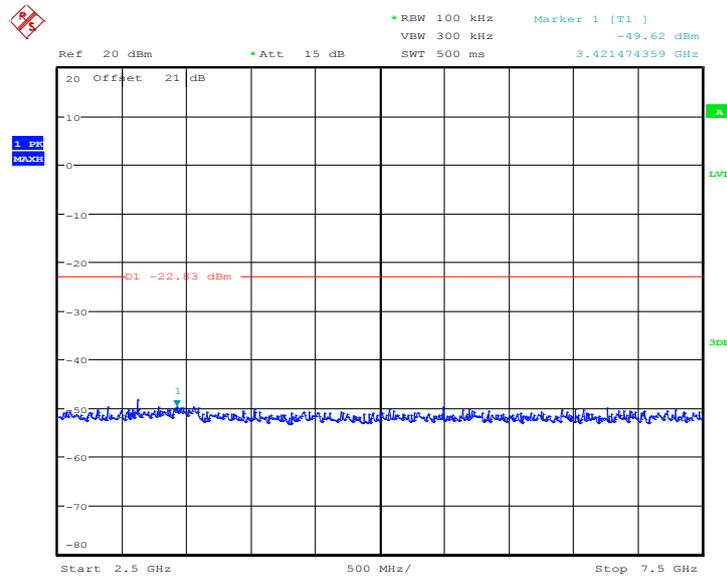
Date: 9.AUG.2012 15:18:29

Fig. 106 Conducted Spurious Emission (802.11n- HT40, Ch3, 30 MHz-1 GHz)



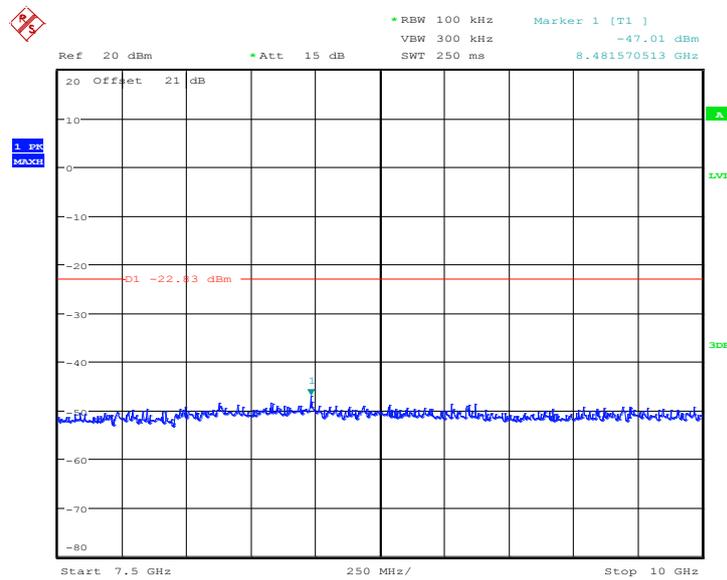
Date: 9.AUG.2012 15:18:50

Fig. 107 Conducted Spurious Emission (802.11n- HT40, Ch3, 1 GHz-2.5 GHz)



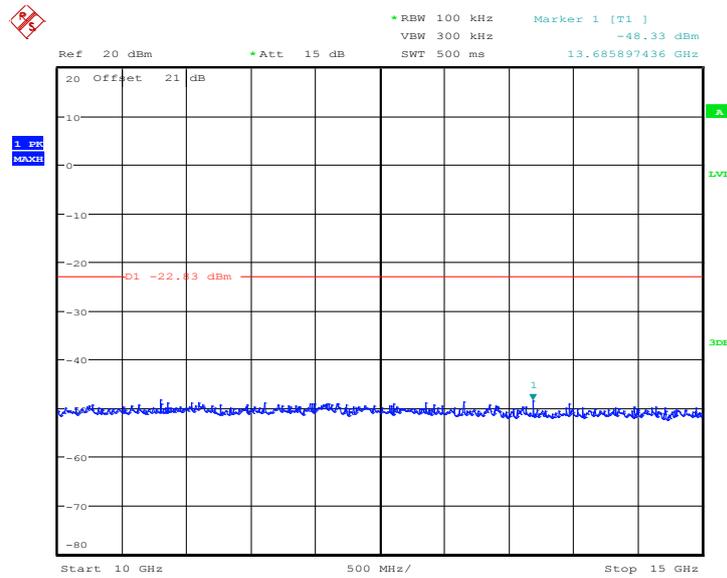
Date: 9.AUG.2012 15:19:17

Fig. 108 Conducted Spurious Emission (802.11n- HT40, Ch3, 2.5 GHz-7.5 GHz)



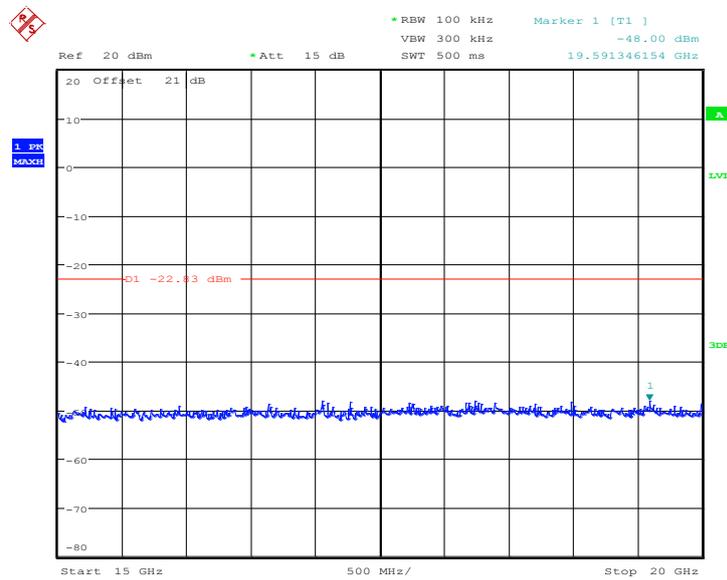
Date: 9.AUG.2012 15:19:35

Fig. 109 Conducted Spurious Emission (802.11n- HT40, Ch3, 7.5 GHz-10 GHz)



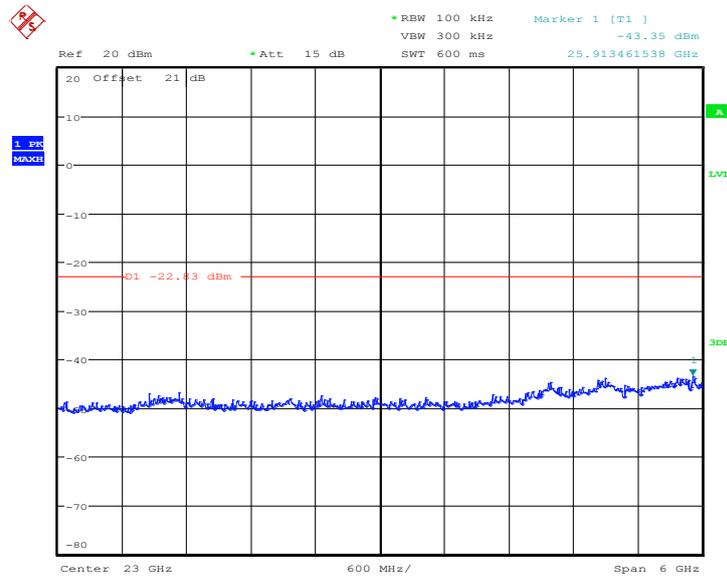
Date: 9.AUG.2012 15:20:08

Fig. 110 Conducted Spurious Emission (802.11n- HT40, Ch3, 10 GHz-15 GHz)



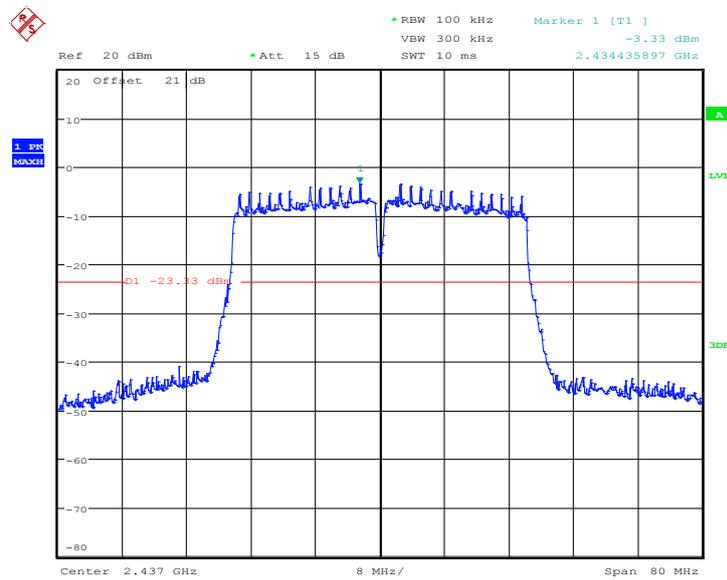
Date: 9.AUG.2012 15:20:31

Fig. 111 Conducted Spurious Emission (802.11n- HT40, Ch3, 15 GHz-20 GHz)



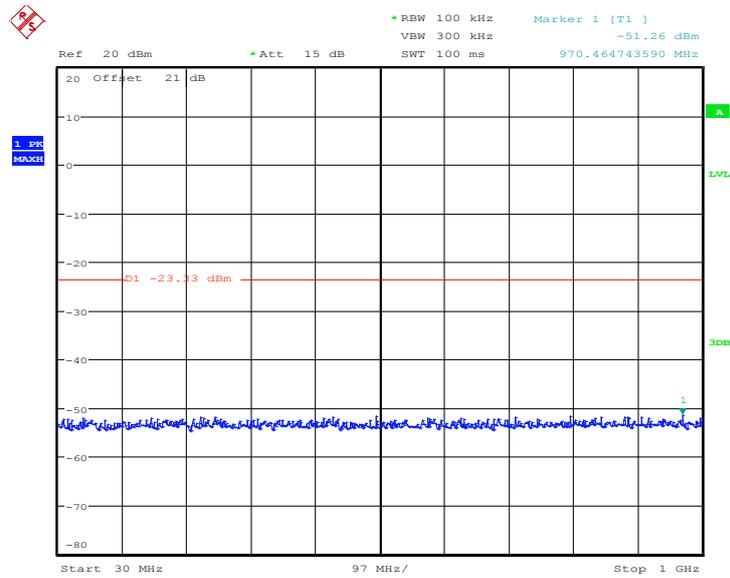
Date: 9.AUG.2012 15:21:03

Fig. 112 Conducted Spurious Emission (802.11n- HT40, Ch3, 20 GHz-26 GHz)



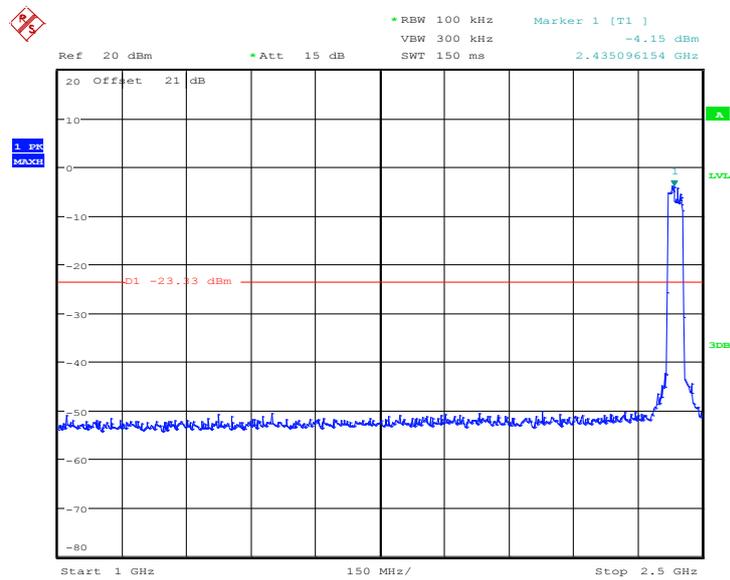
Date: 9.AUG.2012 15:21:53

Fig. 113 Conducted Spurious Emission (802.11n- HT40, Ch6, Center Frequency)



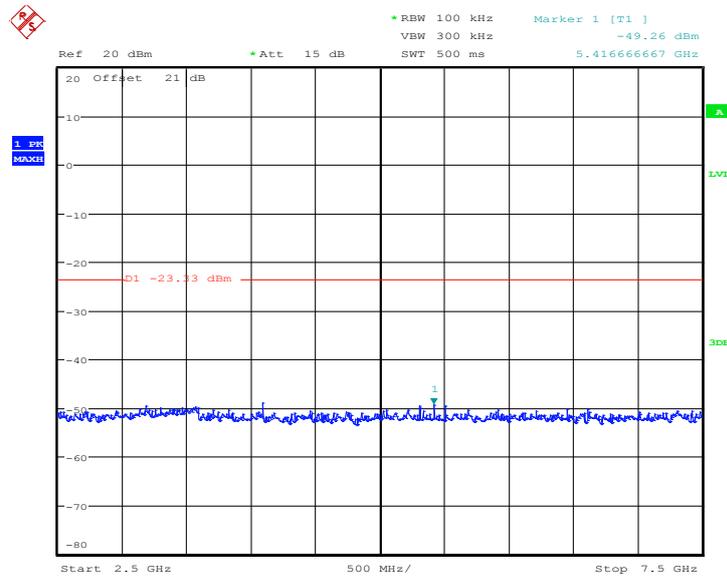
Date: 9.AUG.2012 15:22:11

Fig. 114 Conducted Spurious Emission (802.11n- HT40, Ch6, 30 MHz-1 GHz)



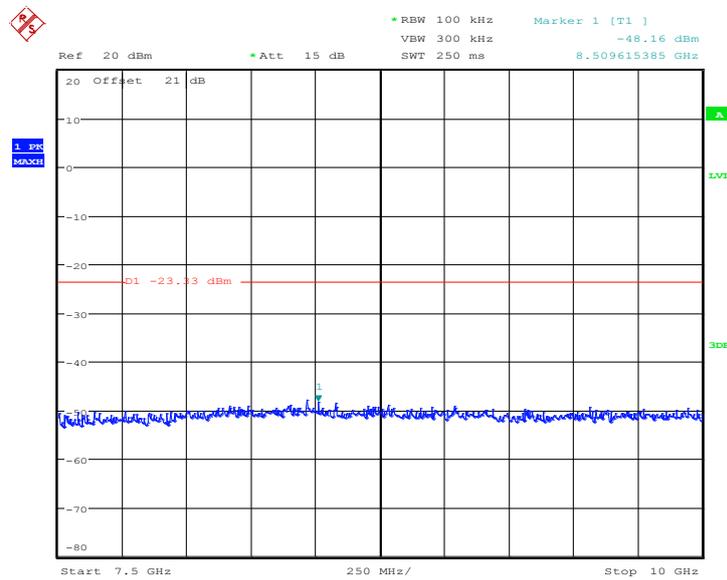
Date: 9.AUG.2012 15:22:32

Fig. 115 Conducted Spurious Emission (802.11n- HT40, Ch6, 1 GHz-2.5 GHz)



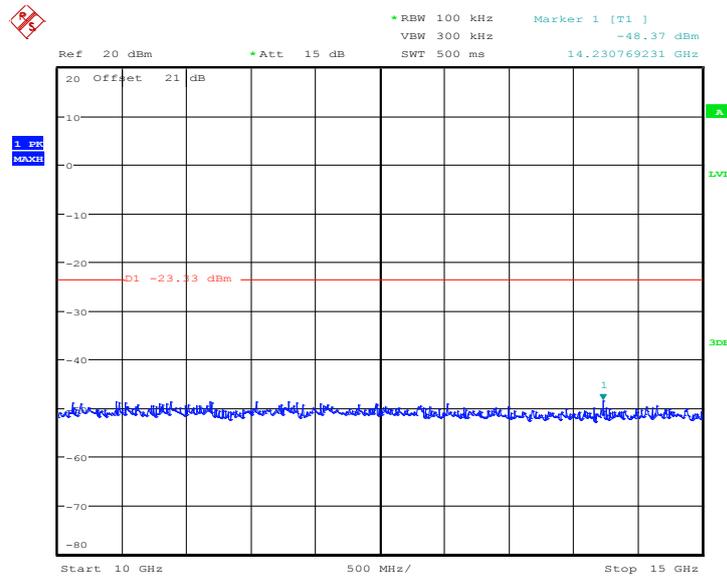
Date: 9.AUG.2012 15:22:53

Fig. 116 Conducted Spurious Emission (802.11n- HT40, Ch6, 2.5 GHz-7.5 GHz)



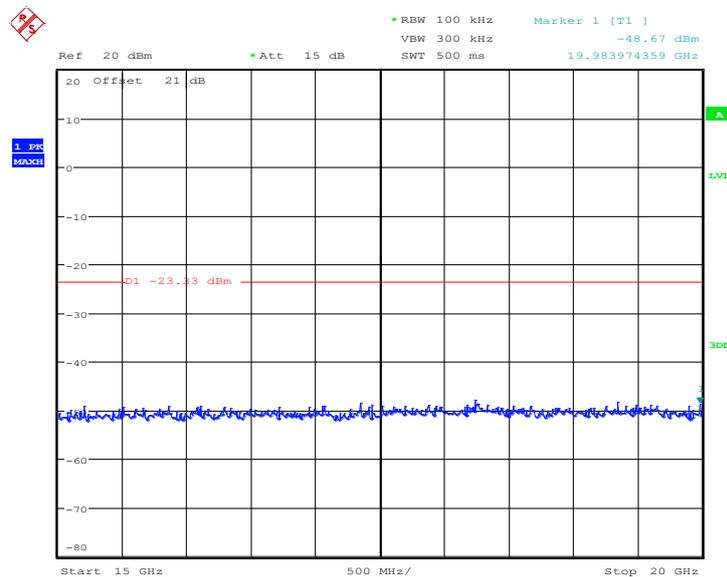
Date: 9.AUG.2012 15:23:10

Fig. 117 Conducted Spurious Emission (802.11n- HT40, Ch6, 7.5 GHz-10 GHz)



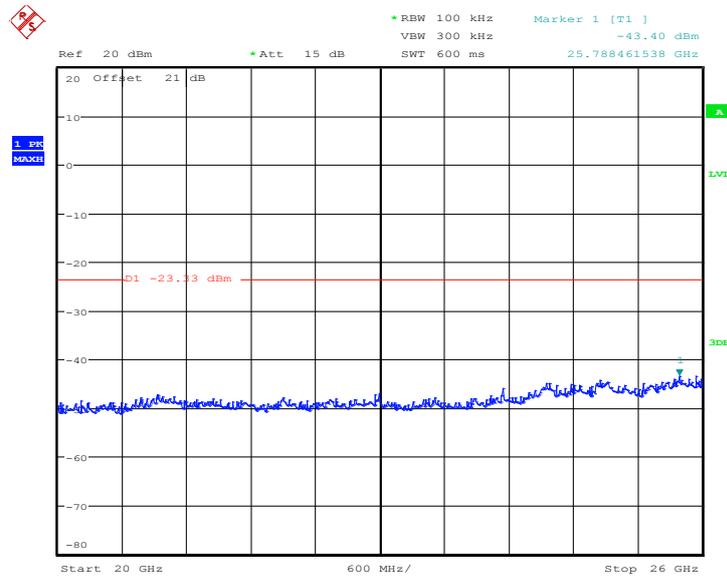
Date: 9.AUG.2012 15:23:29

Fig. 118 Conducted Spurious Emission (802.11n- HT40, Ch6, 10 GHz-15 GHz)



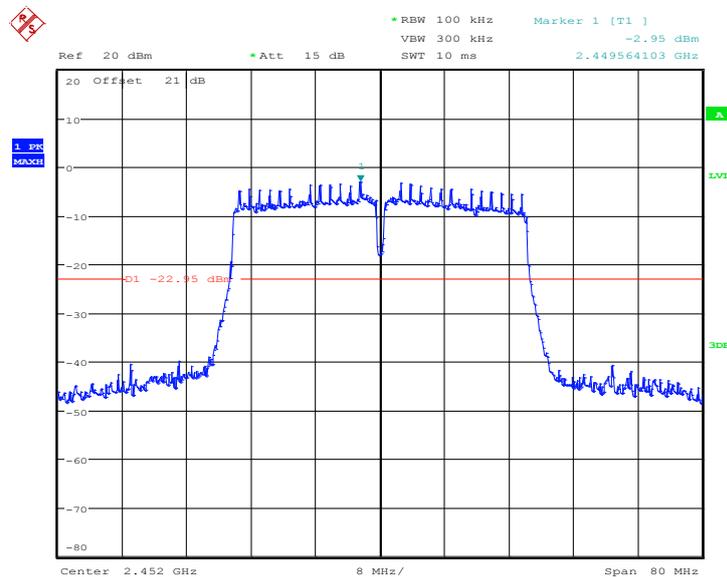
Date: 9.AUG.2012 15:23:59

Fig. 119 Conducted Spurious Emission (802.11n- HT40, Ch6, 15 GHz-20 GHz)



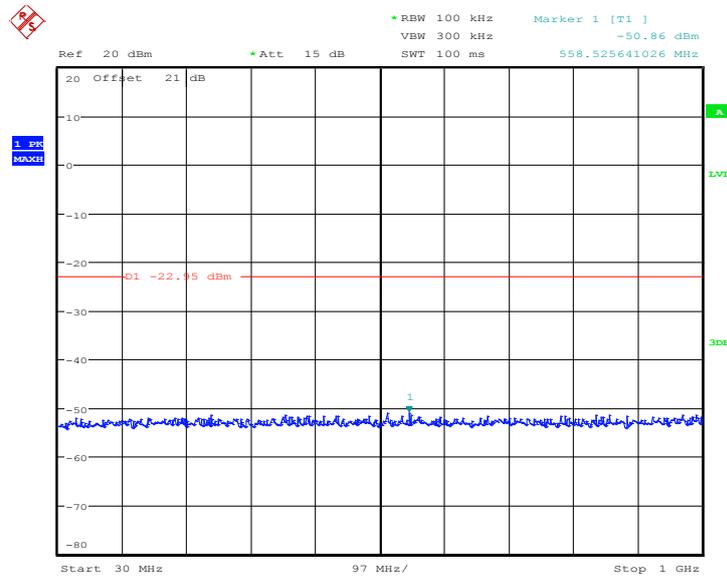
Date: 9.AUG.2012 15:24:31

Fig. 120 Conducted Spurious Emission (802.11n- HT40, Ch6, 20 GHz-26 GHz)



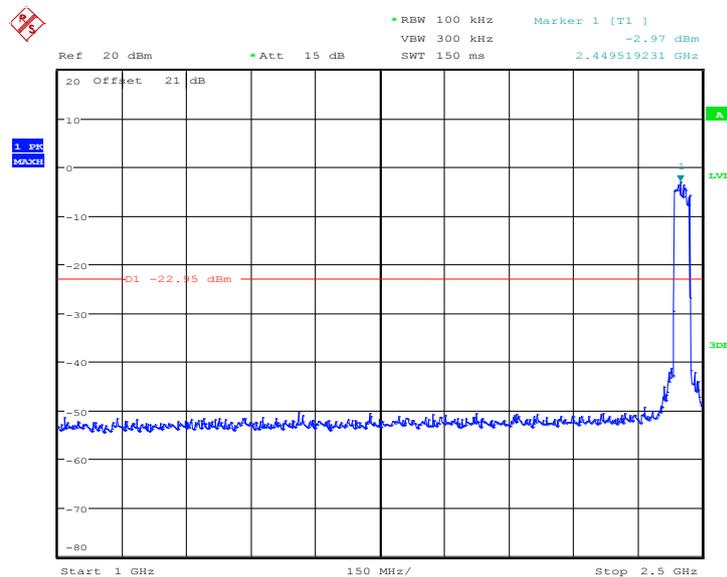
Date: 9.AUG.2012 15:25:13

Fig. 121 Conducted Spurious Emission (802.11n- HT40, Ch9, Center Frequency)



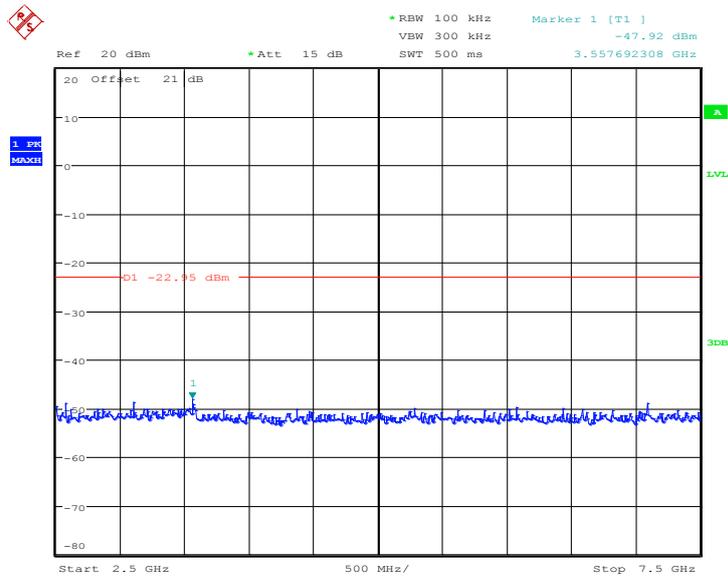
Date: 9.AUG.2012 15:25:44

Fig. 122 Conducted Spurious Emission (802.11n- HT40, Ch9, 30 MHz-1 GHz)



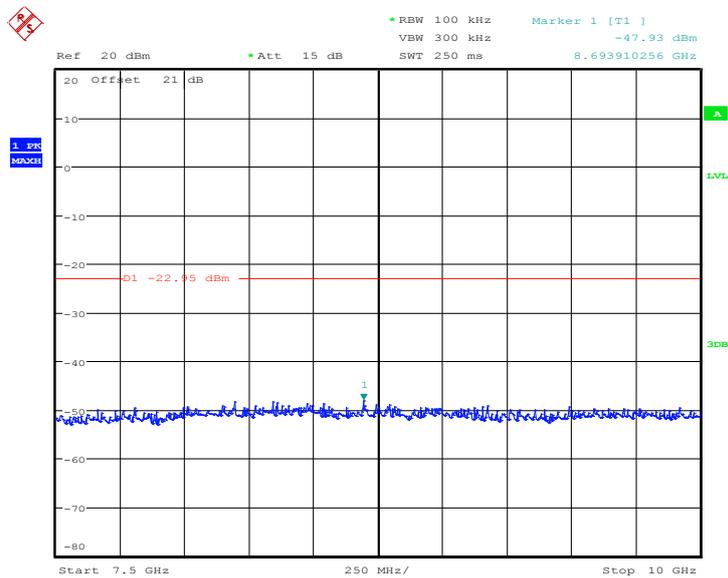
Date: 9.AUG.2012 15:26:05

Fig. 123 Conducted Spurious Emission (802.11n- HT40, Ch9, 1 GHz-2.5 GHz)



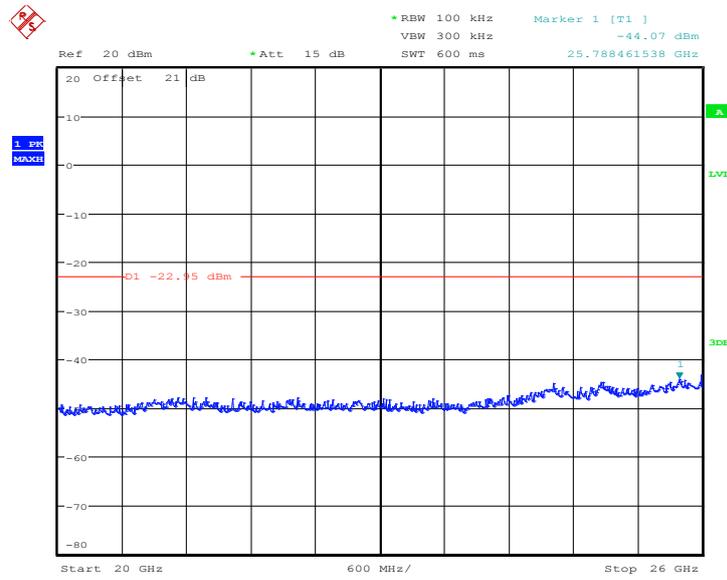
Date: 9.AUG.2012 15:26:23

Fig. 124 Conducted Spurious Emission (802.11n- HT40, Ch9, 2.5 GHz-7.5 GHz)



Date: 9.AUG.2012 15:26:42

Fig. 125 Conducted Spurious Emission (802.11n- HT40, Ch9, 7.5 GHz-10 GHz)



Date: 9.AUG.2012 15:27:35

Fig. 128 Conducted Spurious Emission (802.11n-HT40, Ch9, 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.129	P
	1	30 MHz ~1 GHz	Fig.130	P
		1 GHz ~ 3 GHz	Fig.131	P
		3 GHz ~ 18 GHz	Fig.132	P
	6	30 MHz ~1 GHz	Fig.133	P
		1 GHz ~ 3 GHz	Fig.134	P
		3 GHz ~ 18 GHz	Fig.135	P
	Power	2.45GHz ~2.5GHz	Fig.136	P
	11	30 MHz ~1 GHz	Fig.137	P
		1 GHz ~ 3 GHz	Fig.138	P
		3 GHz ~ 18 GHz	Fig.139	P
	802.11g	Power	2.38GHz ~2.43GHz	Fig.140
1		30 MHz ~1 GHz	Fig.141	P
		1 GHz ~ 3 GHz	Fig.142	P
		3 GHz ~ 18 GHz	Fig.143	P
6		30 MHz ~1 GHz	Fig.144	P
		1 GHz ~ 3 GHz	Fig.145	P
		3 GHz ~ 18 GHz	Fig.146	P
Power		2.45GHz ~2.5GHz	Fig.147	P
11		30 MHz ~1 GHz	Fig.148	P
		1 GHz ~ 3 GHz	Fig.149	P
		3 GHz ~ 18 GHz	Fig.150	P

802.11n mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (20MHz)	Power	2.38GHz ~2.45GHz	Fig.151	P
	1	30 MHz ~1 GHz	Fig.152	P
		1 GHz ~ 3 GHz	Fig.153	P
		3 GHz ~ 18 GHz	Fig.154	P
	6	30 MHz ~1 GHz	Fig.155	P
		1 GHz ~ 3 GHz	Fig.156	P
		3 GHz ~ 18 GHz	Fig.157	P
	Power	2.45GHz ~2.5GHz	Fig.158	P
	11	30 MHz ~1 GHz	Fig.159	P
		1 GHz ~ 3 GHz	Fig.160	P
		3 GHz ~ 18 GHz	Fig.161	P
	802.11n (40MHz)	Power	2.38GHz ~2.45GHz	Fig.162
3		30 MHz ~1 GHz	Fig.163	P
		1 GHz ~ 3 GHz	Fig.164	P

		3 GHz ~ 18 GHz	Fig.165	P
	6	30 MHz ~1 GHz	Fig.166	P
		1 GHz ~ 3 GHz	Fig.167	P
		3 GHz ~ 18 GHz	Fig.168	P
	Power	2.45GHz ~2.5GHz	Fig.169	P
	9	30 MHz ~1 GHz	Fig.170	P
		1 GHz ~ 3 GHz	Fig.171	P
		3 GHz ~ 18 GHz	Fig.172	P
/	All channels	18 GHz~ 26.5 GHz	Fig.173	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:

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

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	HORIZONTAL
17527.500	42.7	-25.3	42.9	25.043	VERTICAL
17520.750	42.7	-25.3	42.8	25.191	HORIZONTAL
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	VERTICAL
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	VERTICAL
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	VERTICAL
17508.750	42.7	-25.3	42.8	25.207	VERTICAL
17513.250	42.7	-25.3	42.8	25.183	HORIZONTAL

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	HORIZONTAL
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	VERTICAL
17520.000	42.8	-25.3	42.8	25.365	VERTICAL
17512.500	42.8	-25.3	42.8	25.305	HORIZONTAL
17570.250	42.7	-25.3	42.3	25.775	VERTICAL
17505.000	42.7	-25.3	42.8	25.213	HORIZONTAL
17541.000	42.7	-25.3	42.9	25.052	HORIZONTAL

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	HORIZONTAL
17502.750	42.7	-25.3	42.8	25.253	VERTICAL
17524.500	42.7	-25.3	42.8	25.230	HORIZONTAL
17568.750	42.7	-25.3	42.3	25.722	VERTICAL
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	VERTICAL
17492.250	42.6	-25.3	43.0	24.900	VERTICAL
17517.750	42.6	-25.3	42.8	25.168	VERTICAL

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	VERTICAL
17553.750	42.8	-25.3	42.3	25.809	HORIZONTAL
17536.500	42.7	-25.3	42.9	25.051	VERTICAL
17535.750	42.7	-25.3	42.9	25.033	HORIZONTAL
17493.000	42.6	-25.3	43.0	24.852	VERTICAL

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	HORIZONTAL
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	VERTICAL
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
17519.250	42.8	-25.3	42.8	25.374	HORIZONTAL
17518.500	42.8	-25.3	42.8	25.367	VERTICAL
17506.500	42.7	-25.3	42.8	25.257	VERTICAL
17763.750	42.7	-25.4	42.2	25.965	VERTICAL
17496.000	42.7	-25.3	43.0	24.928	VERTICAL
17583.000	42.6	-25.3	42.7	25.201	VERTICAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17494.500	43.1	-25.3	43.0	25.360	VERTICAL
17528.250	42.9	-25.3	42.9	25.232	VERTICAL
17506.500	42.8	-25.3	42.8	25.339	VERTICAL
17499.750	42.8	-25.3	43.0	25.045	HORIZONTAL
17524.500	42.8	-25.3	42.8	25.302	VERTICAL
17540.250	42.7	-25.3	42.9	25.099	VERTICAL

Ch9

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17520.000	42.9	-25.3	42.8	25.443	VERTICAL
17545.500	42.8	-25.3	42.9	25.127	VERTICAL
17546.250	42.7	-25.3	42.9	25.083	VERTICAL
17526.000	42.6	-25.3	42.9	25.001	VERTICAL
17530.500	42.6	-25.3	42.9	24.997	VERTICAL
17499.750	42.6	-25.3	43.0	24.875	HORIZONTAL

Test graphs as below:

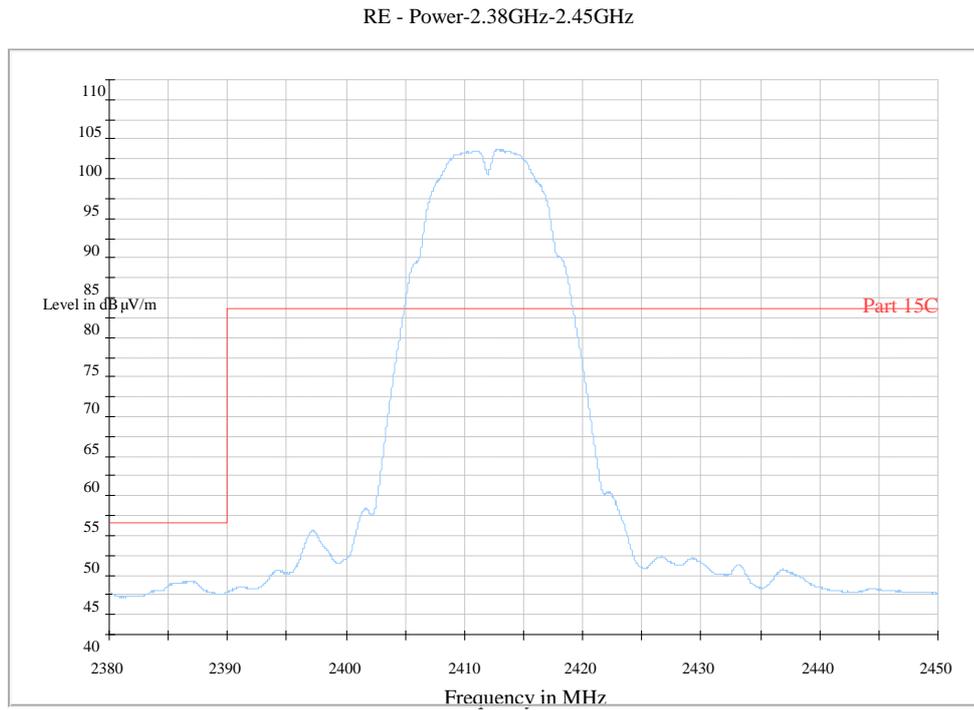


Fig. 129 Radiated Spurious Emission (Power): 802.11b, ch1, 2.38 GHz - 245GHz

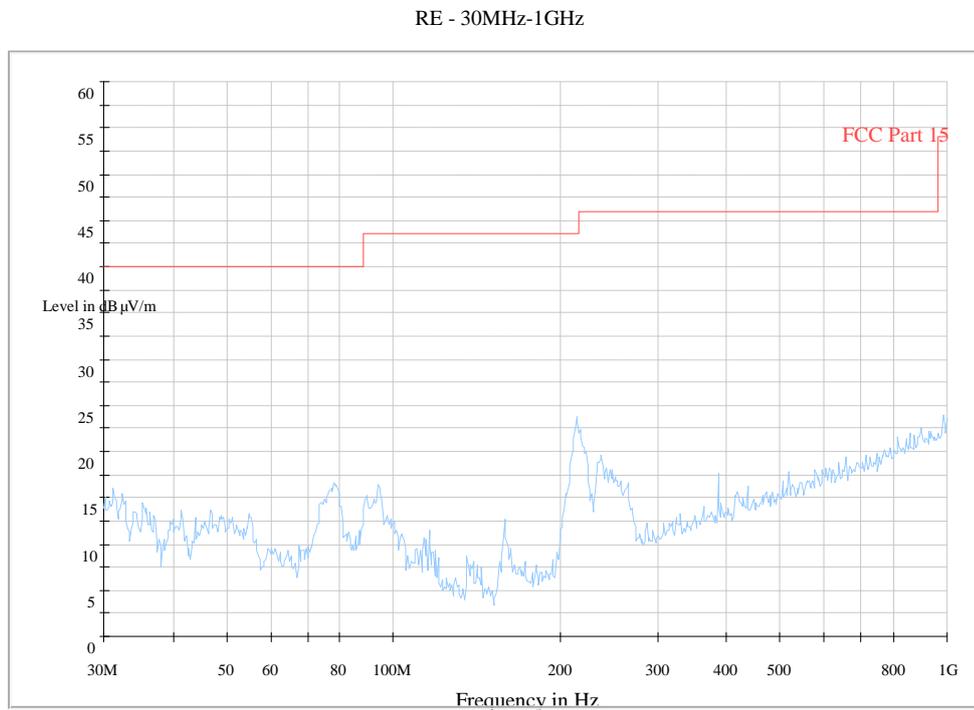


Fig. 130 Radiated Spurious Emission (802.11b, Ch1, 30 MHz-1 GHz)

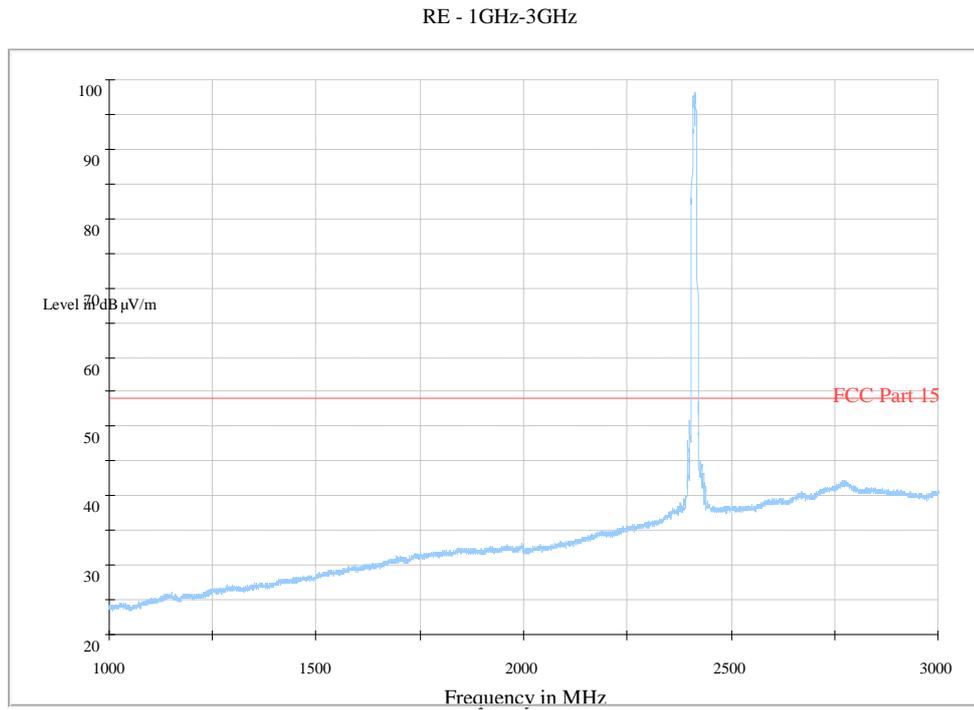


Fig. 131 Radiated Spurious Emission (802.11b, Ch1, 1 GHz-3 GHz)

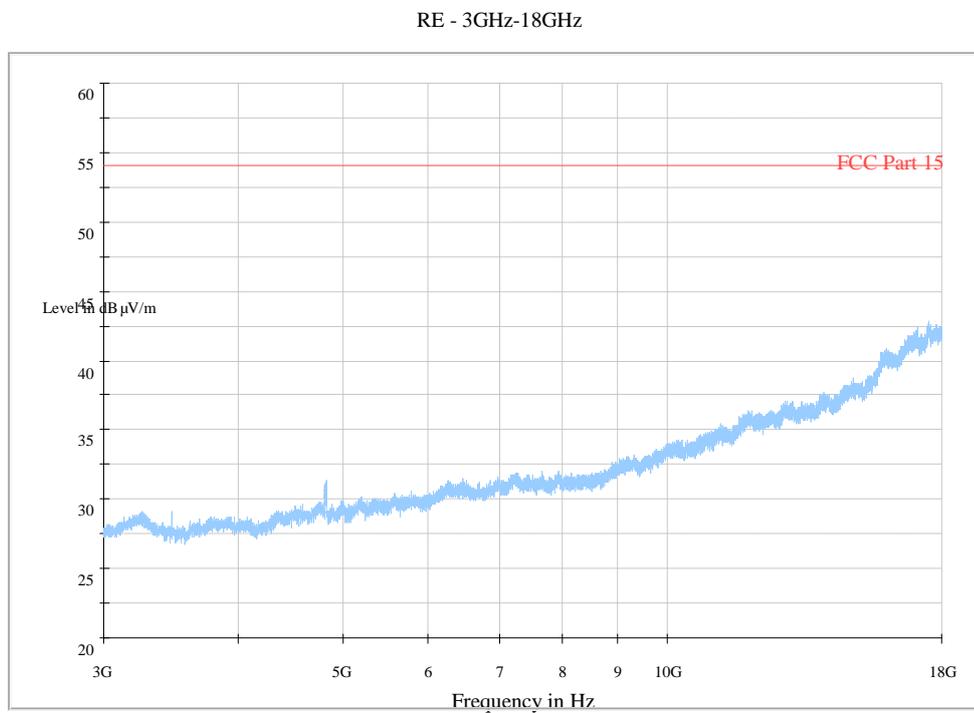


Fig. 132 Radiated Spurious Emission (802.11b, Ch1, 3 GHz-18 GHz)

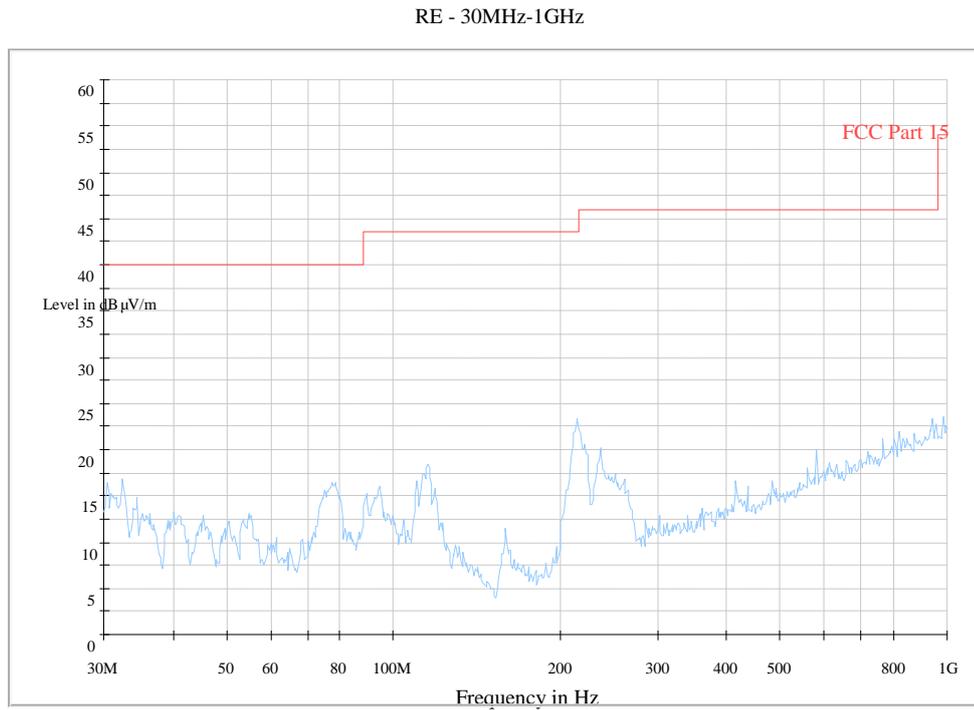


Fig. 133 Radiated Spurious Emission (802.11b, Ch6, 30 MHz-1 GHz)

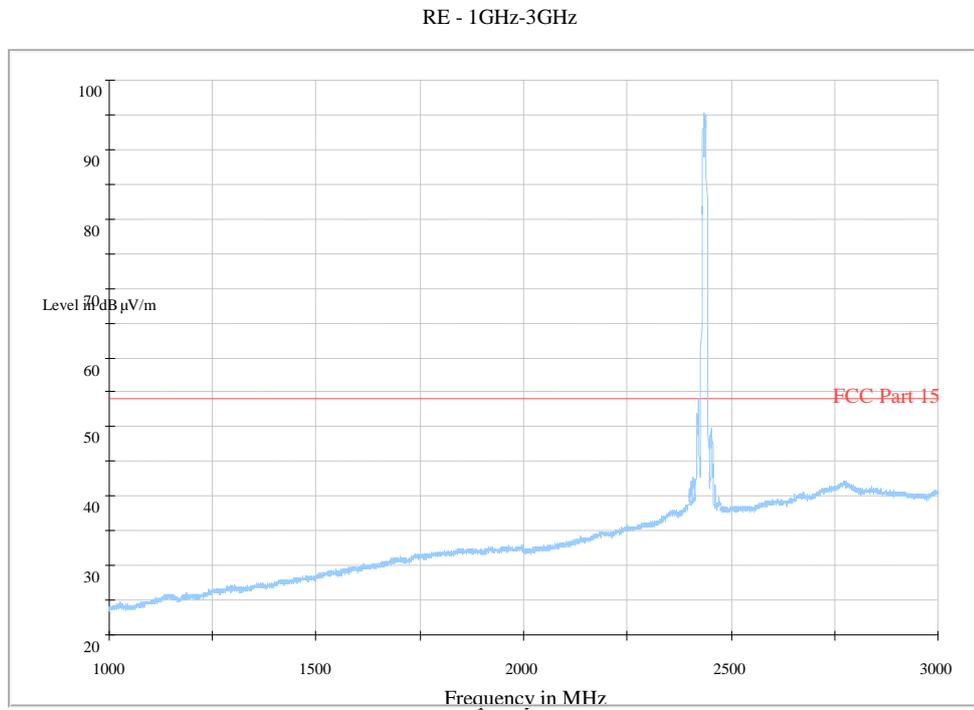


Fig. 134 Radiated Spurious Emission (802.11b, Ch6, 1 GHz-3 GHz)

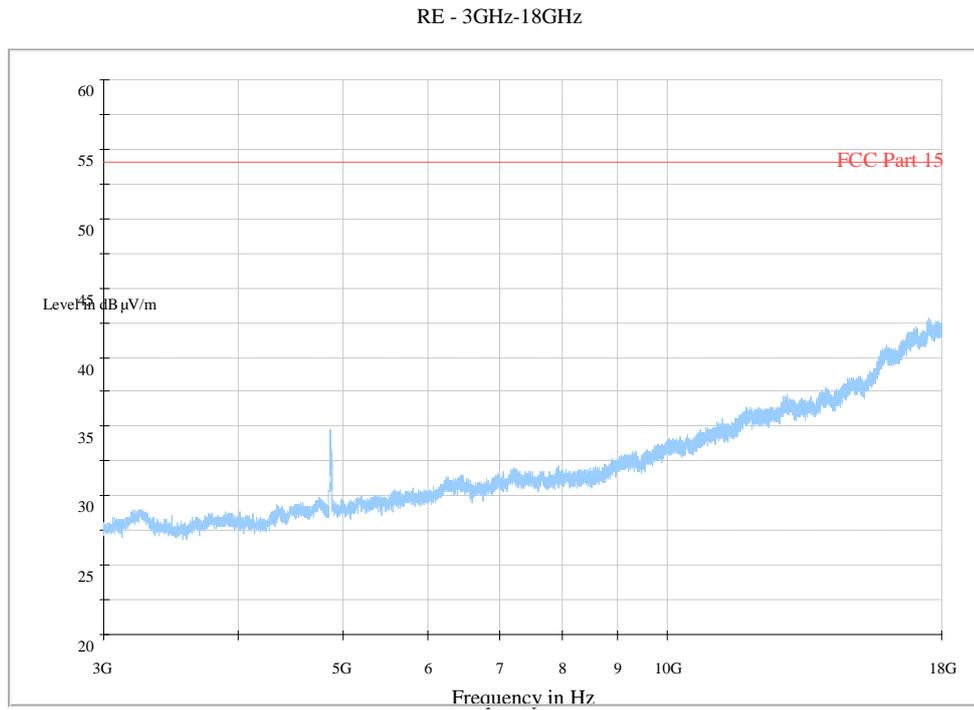


Fig. 135 Radiated Spurious Emission (802.11b, Ch6, 3 GHz-18 GHz)

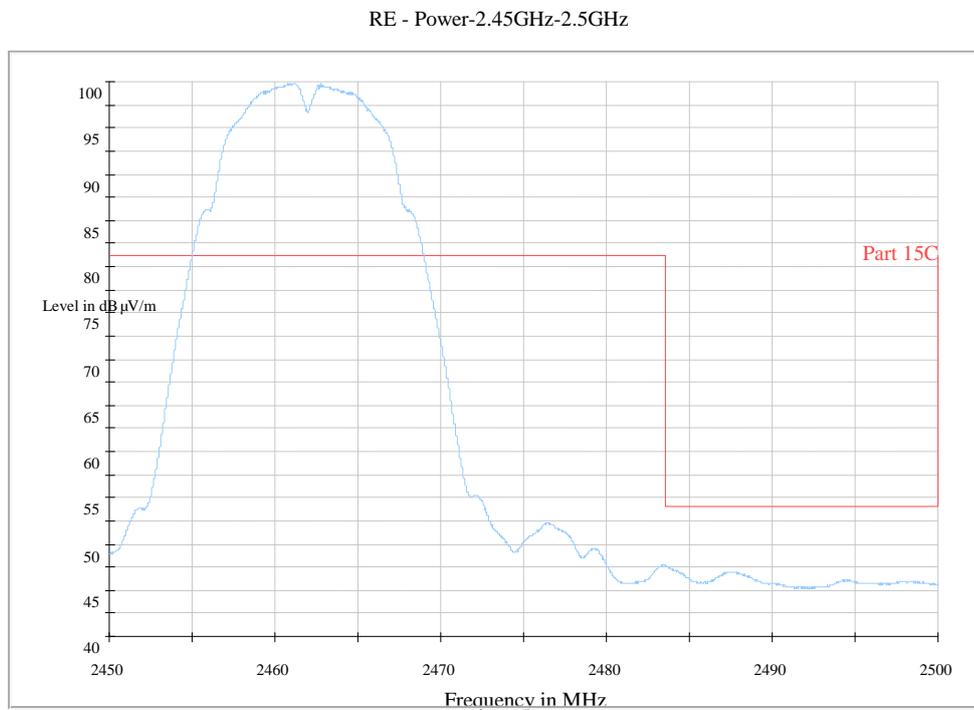


Fig. 136 Radiated Spurious Emission (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

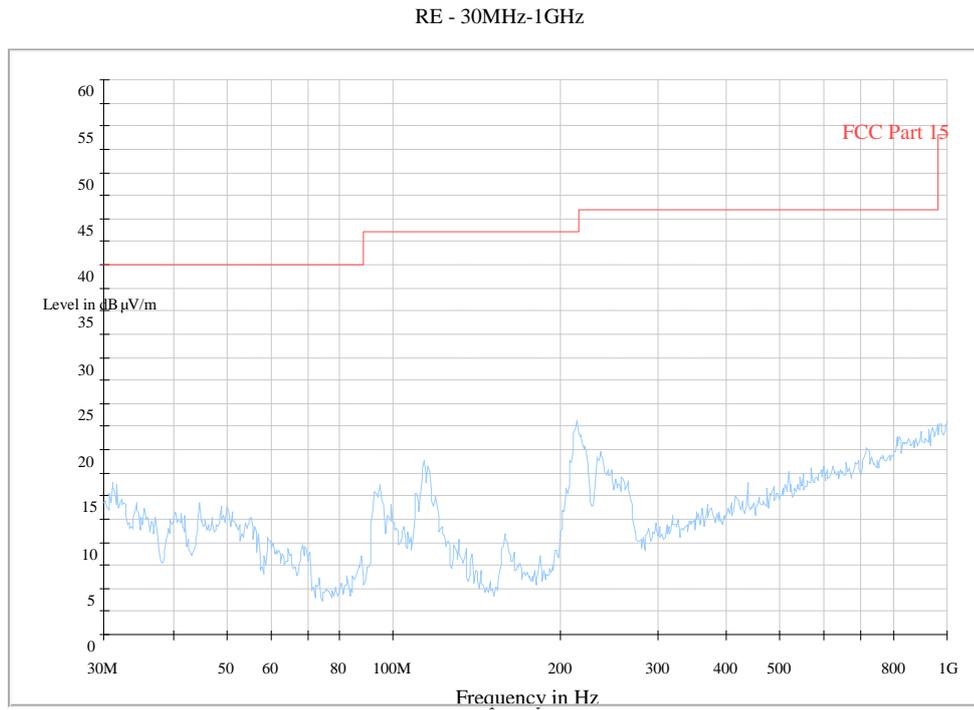


Fig. 137 Radiated Spurious Emission (802.11b, Ch11, 30 MHz-1 GHz)

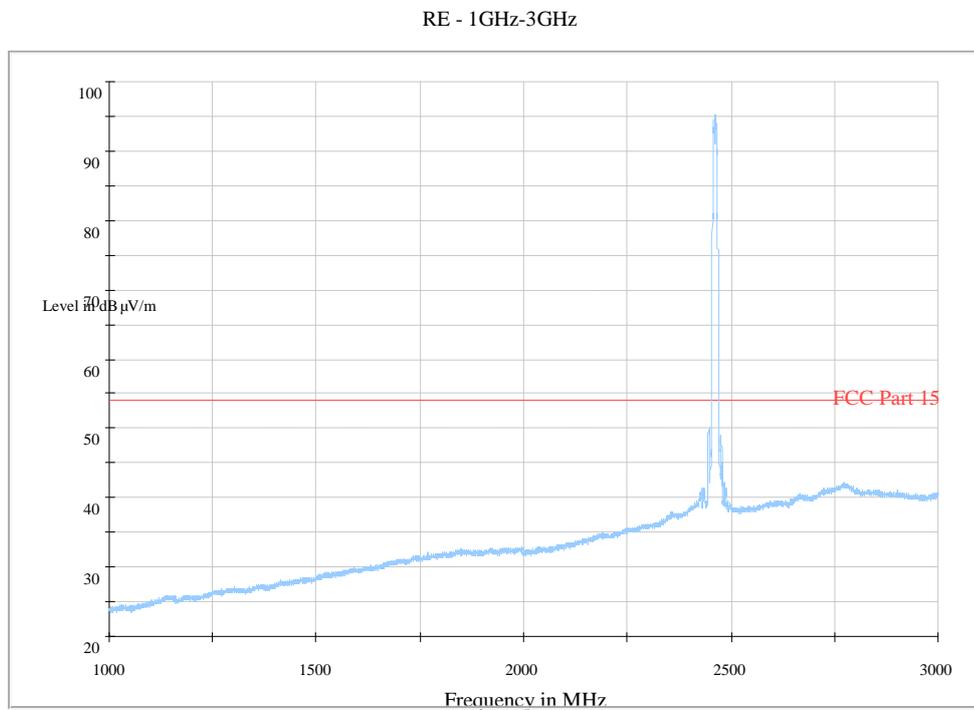


Fig. 138 Radiated Spurious Emission (802.11b, Ch11, 1 GHz-3 GHz)

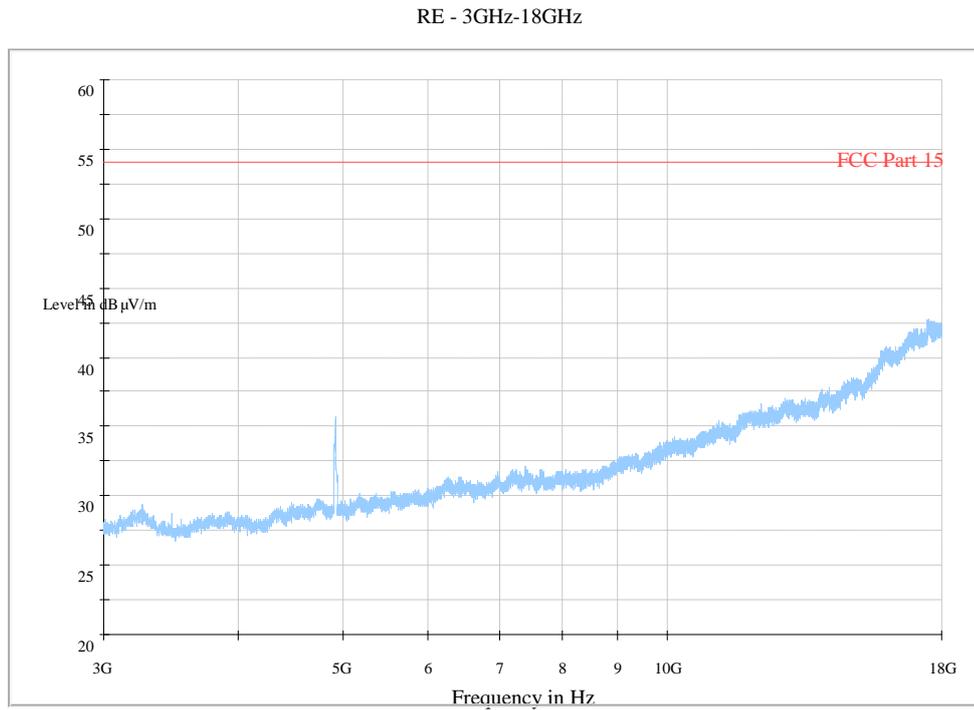


Fig. 139 Radiated Spurious Emission (802.11b, Ch11, 3 GHz-18 GHz)

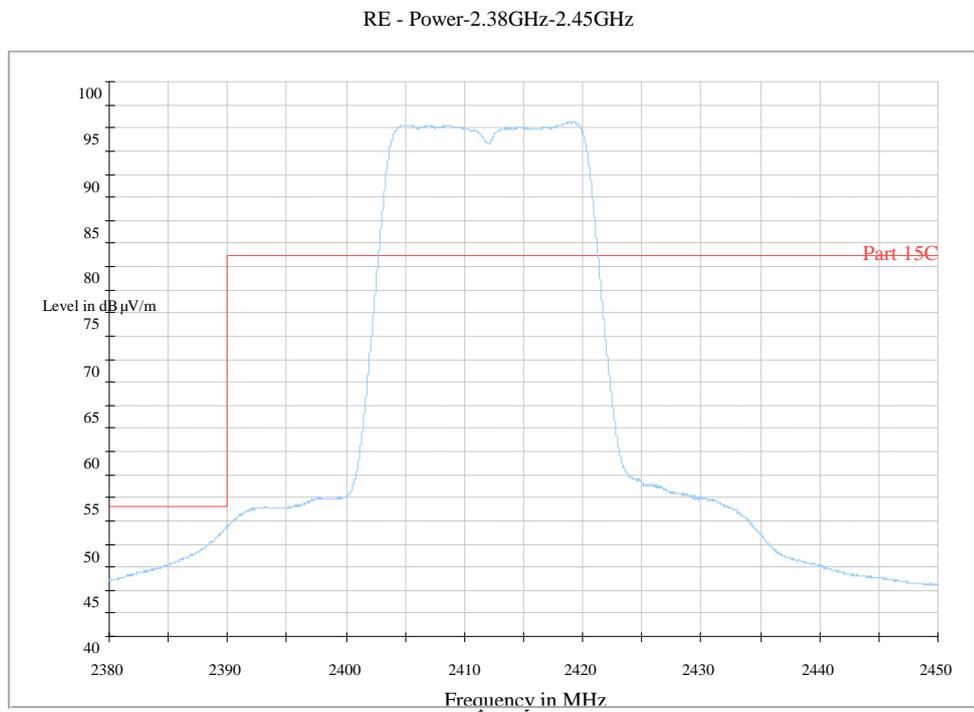


Fig. 140 Radiated Spurious Emission (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz

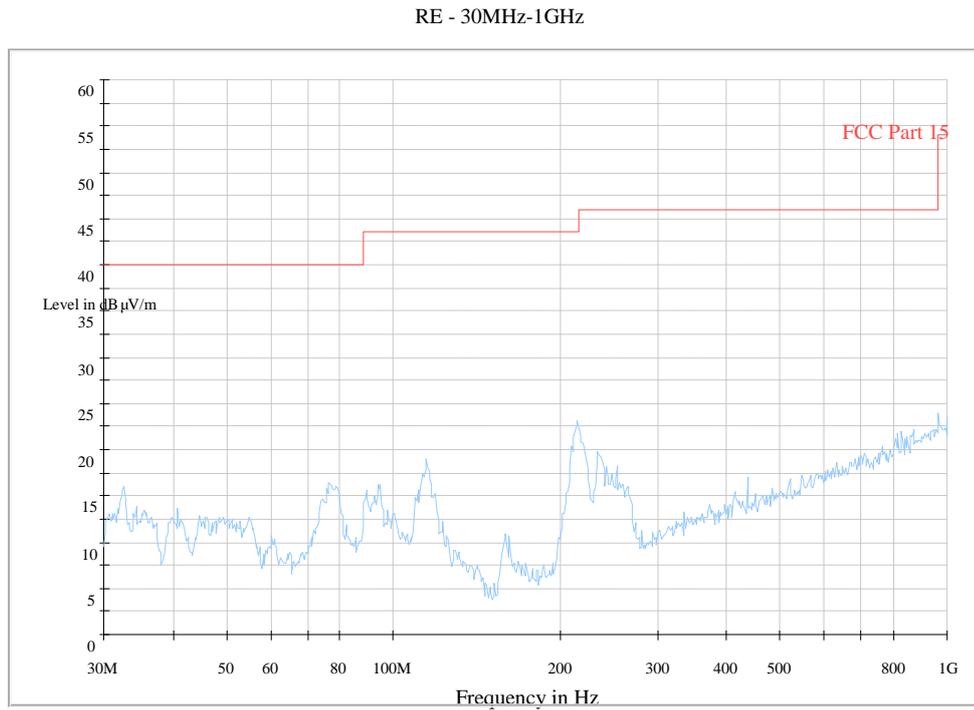


Fig. 141 Radiated Spurious Emission (802.11g, Ch1, 30 MHz-1 GHz)

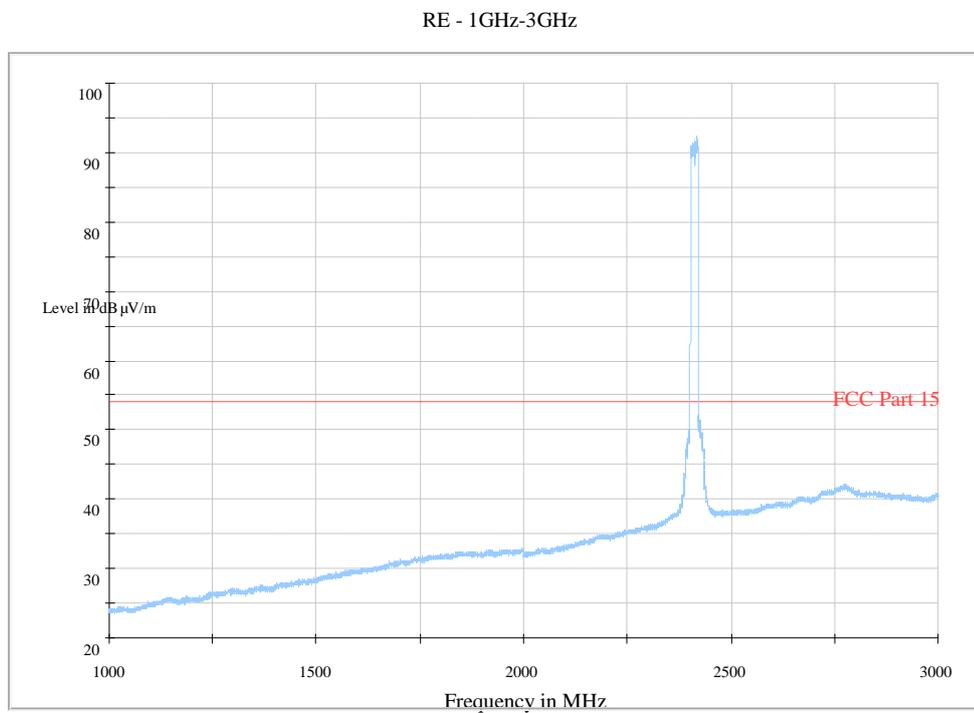


Fig. 142 Radiated Spurious Emission (802.11g, Ch1, 1 GHz-3 GHz)

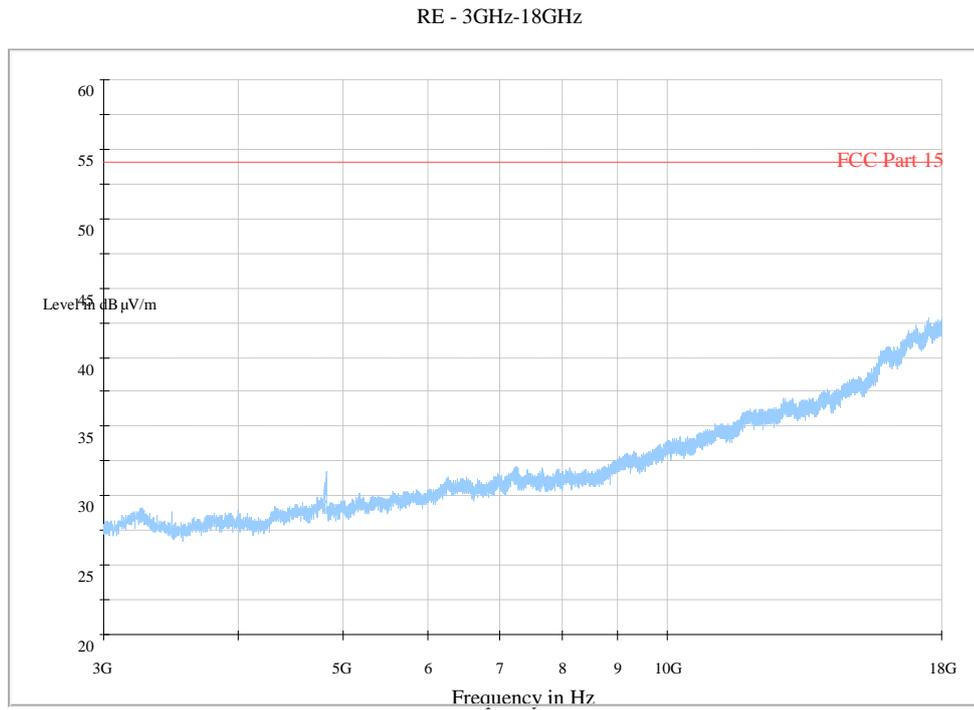


Fig. 143 Radiated Spurious Emission (802.11g, Ch1, 3 GHz-18 GHz)

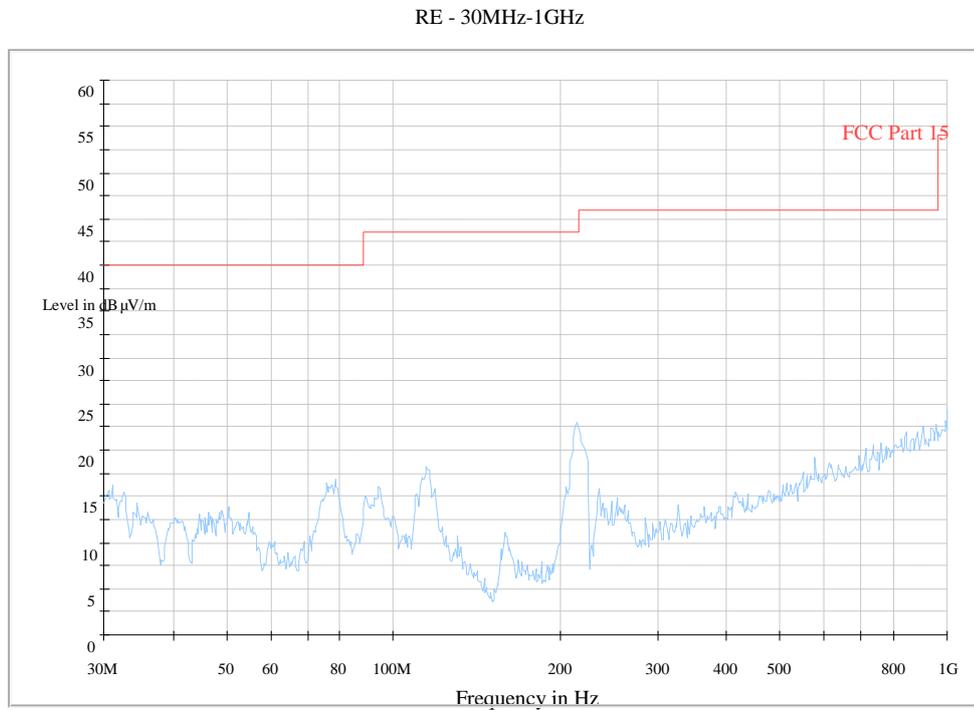


Fig. 144 Radiated Spurious Emission (802.11g, Ch6, 30 MHz-1 GHz)

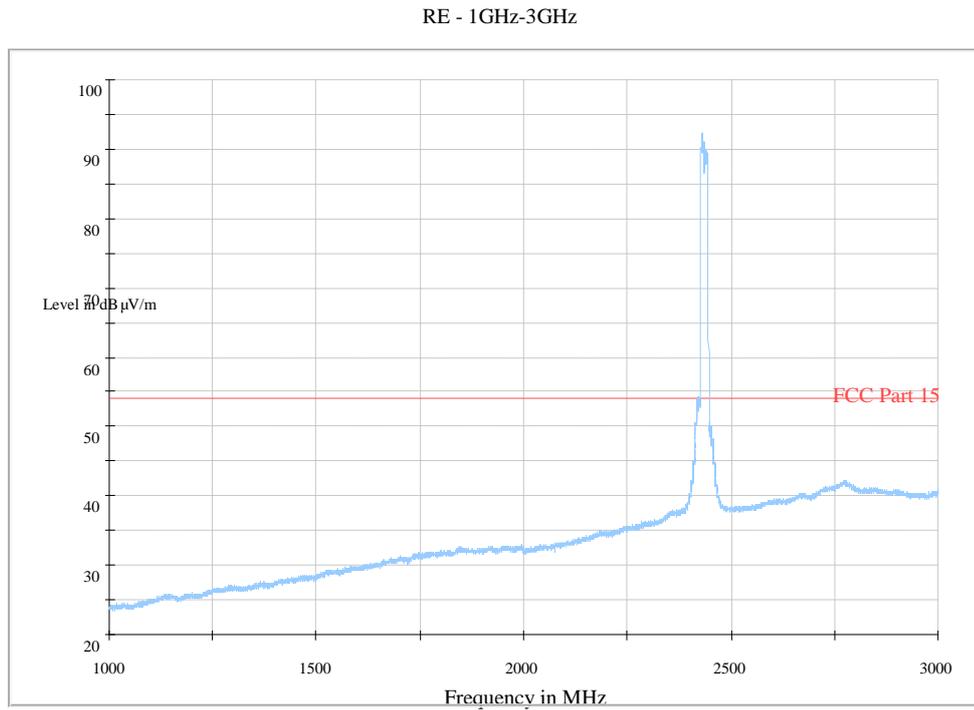


Fig. 145 Radiated Spurious Emission (802.11g, Ch6, 1 GHz-3 GHz)

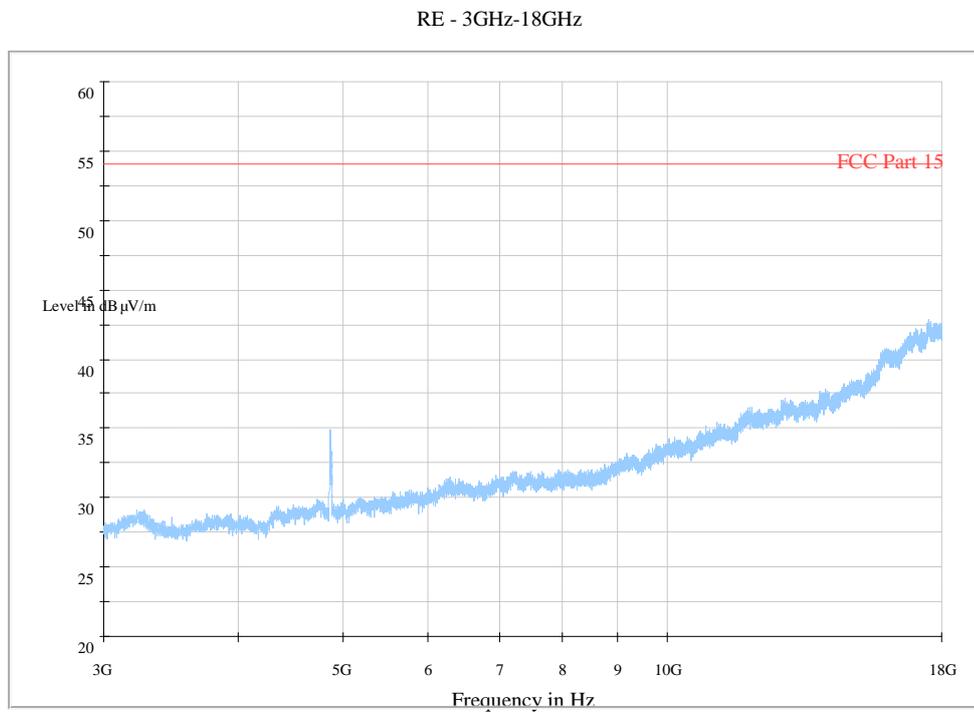


Fig. 146 Radiated Spurious Emission (802.11g, Ch6, 3 GHz-18 GHz)

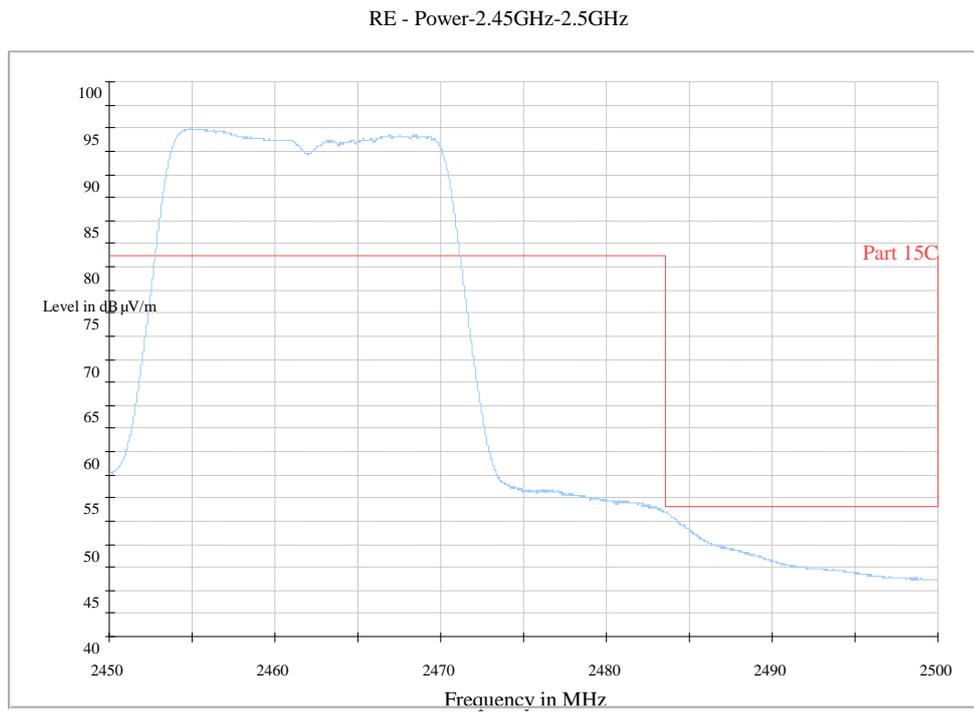


Fig. 147 Radiated Spurious Emission (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

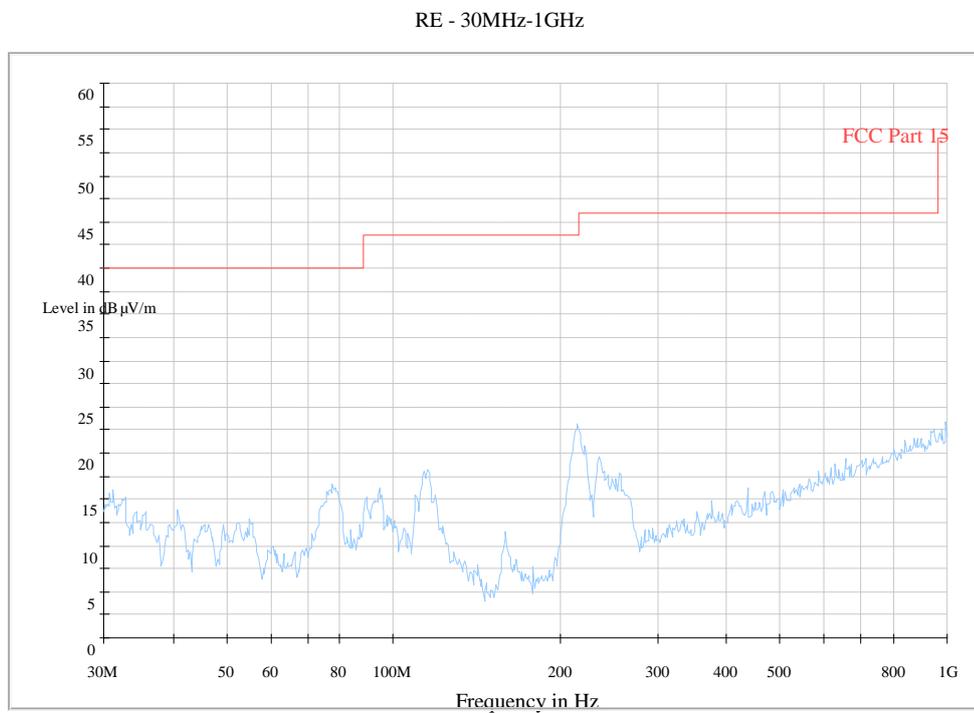


Fig. 148 Radiated Spurious Emission (802.11g, Ch11, 30 MHz-1 GHz)

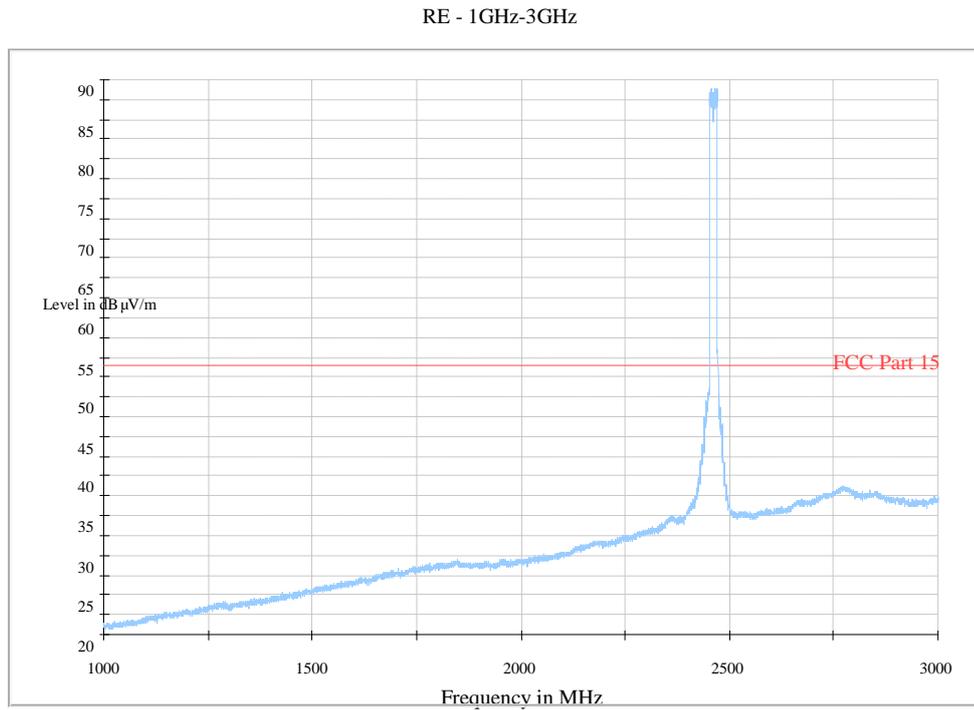


Fig. 149 Radiated Spurious Emission (802.11g, Ch11, 1 GHz-3 GHz)

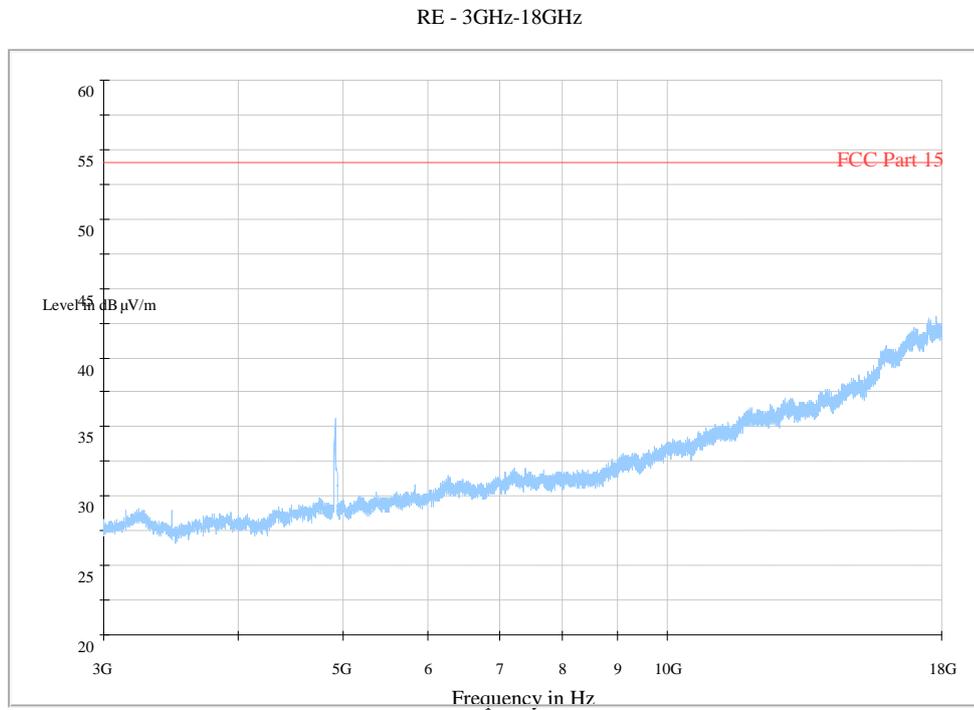


Fig. 150 Radiated Spurious Emission (802.11g, Ch11, 3 GHz-18 GHz)

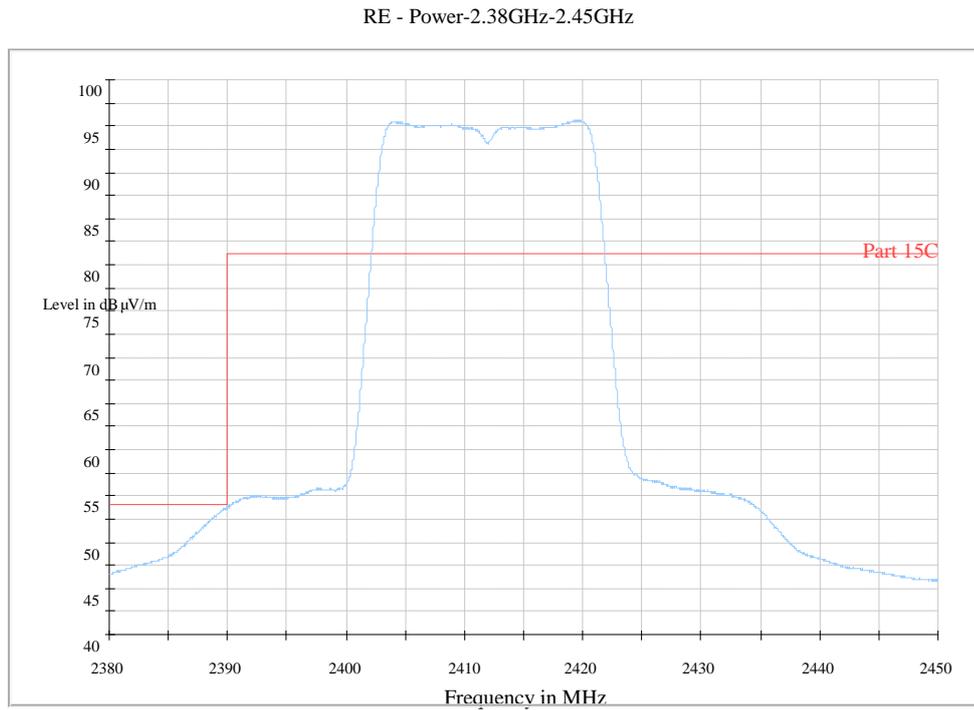


Fig. 151 Radiated Spurious Emission (Power): 802.11n-20MHz, ch1, 2.38 GHz - 2.45GHz

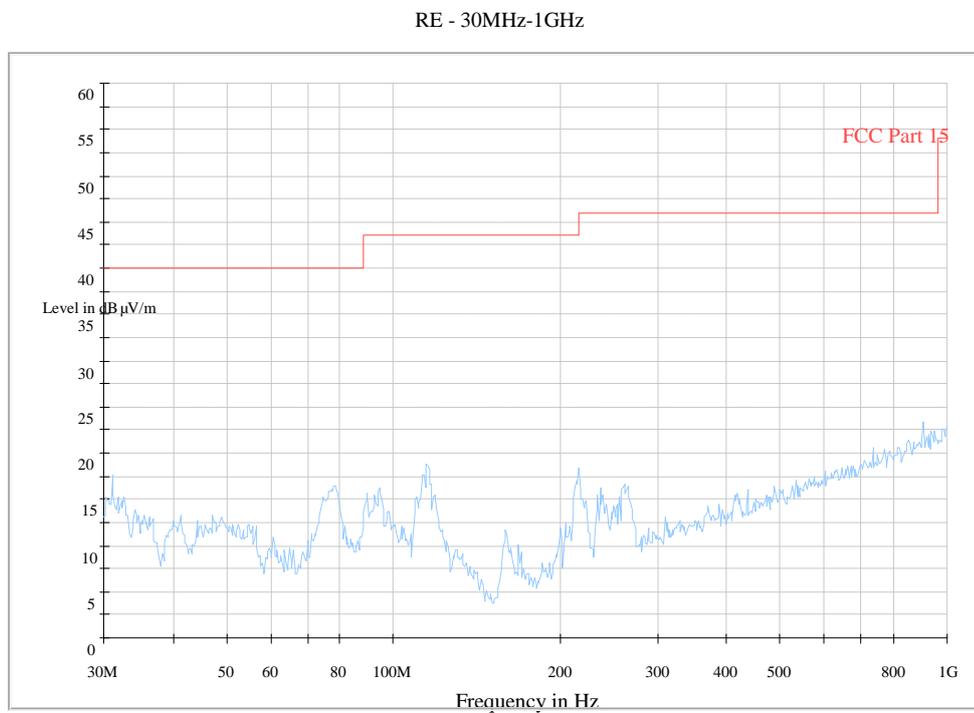


Fig. 152 Radiated Spurious Emission (802.11n-20MHz, Ch1, 30 MHz-1 GHz)

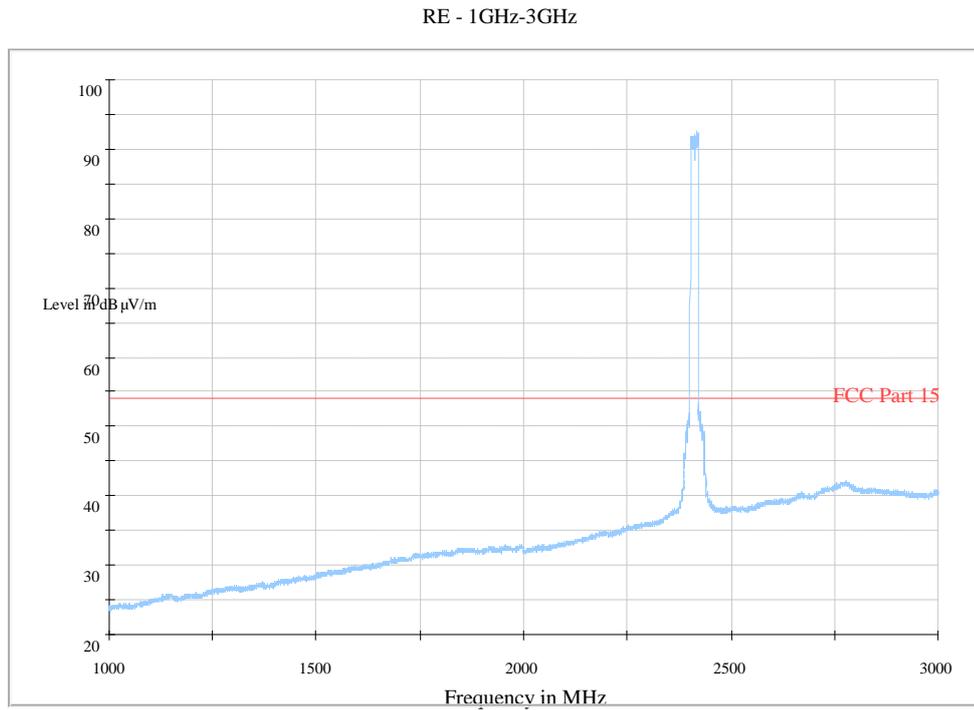


Fig. 153 Radiated Spurious Emission (802.11n-20MHz, Ch1, 1 GHz-3 GHz)

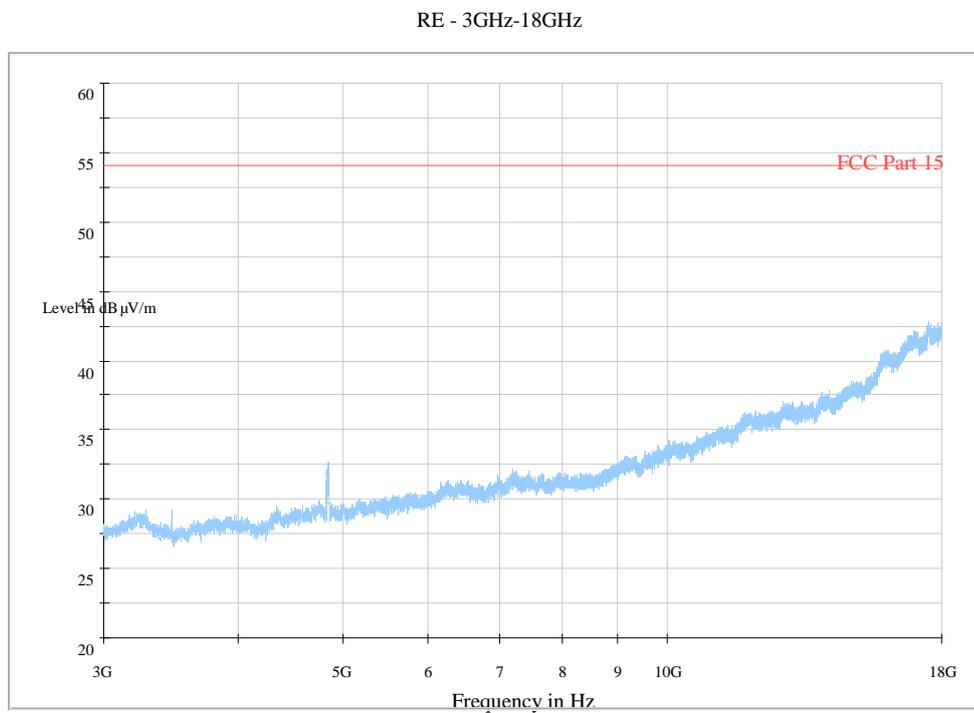


Fig. 154 Radiated Spurious Emission (802.11n-20MHz, Ch1, 3 GHz-18 GHz)

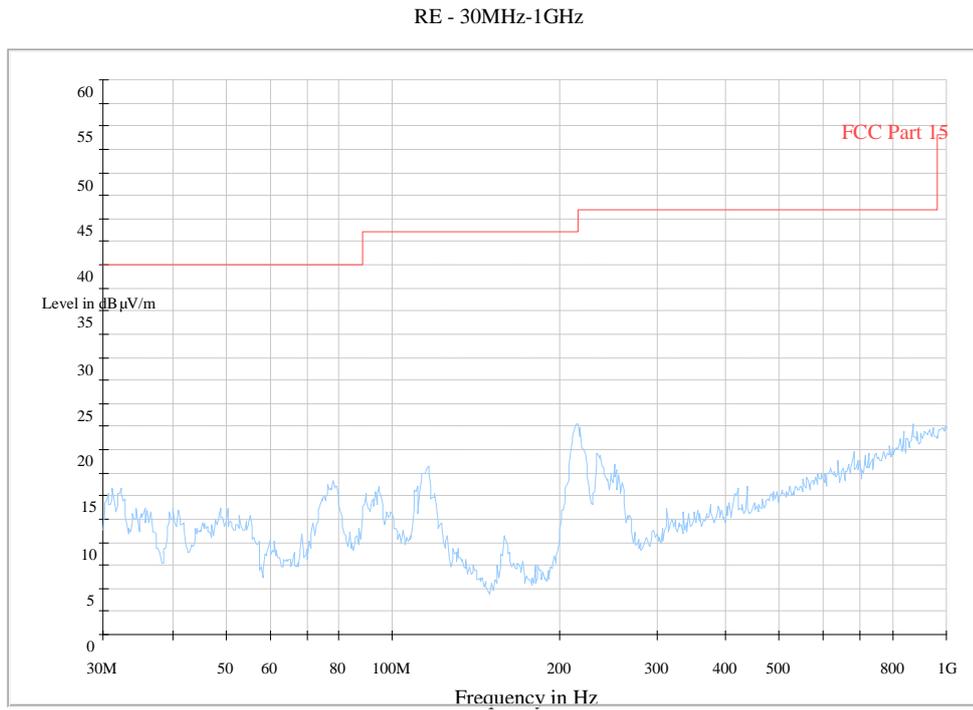


Fig. 155 Radiated Spurious Emission (802.11n-20MHz, Ch6, 30 MHz-1 GHz)

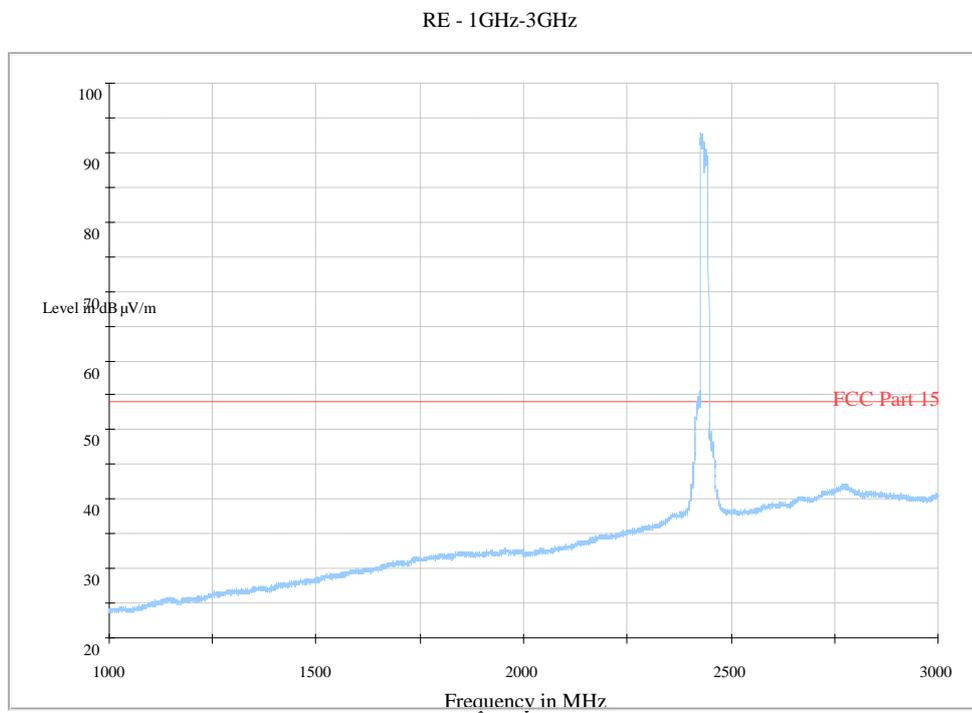


Fig. 156 Radiated Spurious Emission (802.11n-20MHz, Ch6, 1 GHz-3 GHz)

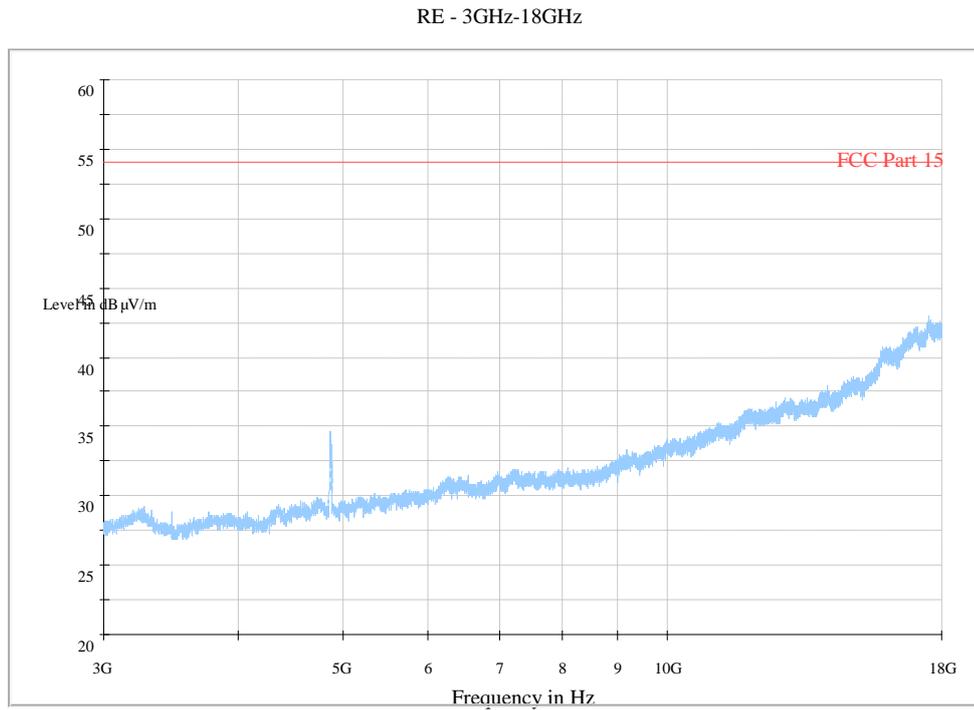


Fig. 157 Radiated Spurious Emission (802.11n-20MHz, Ch6, 3 GHz-18 GHz)

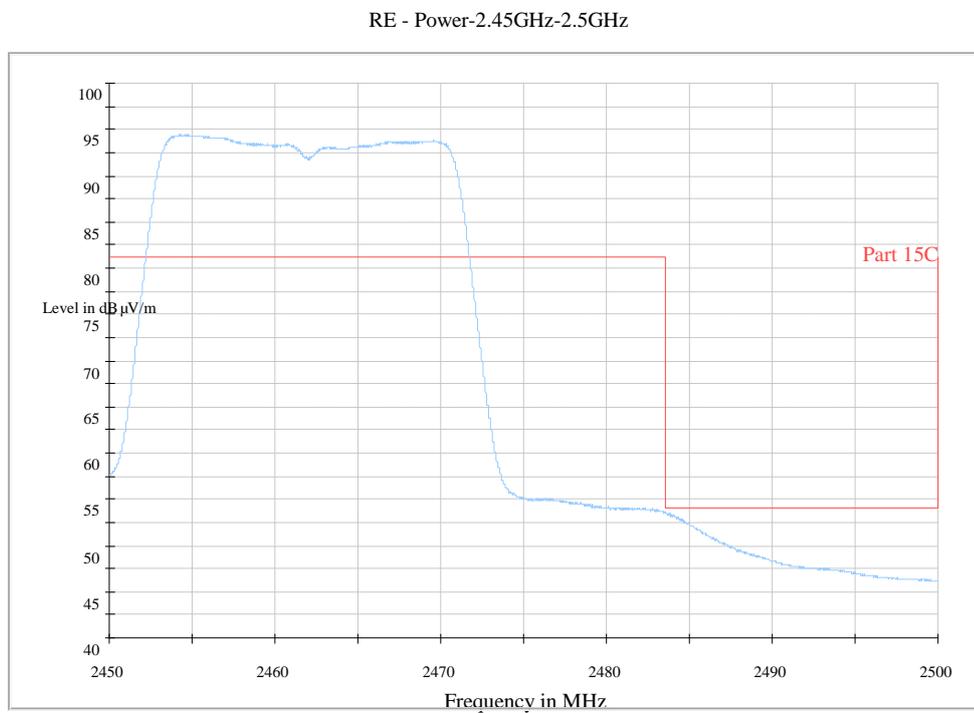


Fig. 158 Radiated Spurious Emission (Power): 802.11n-20MHz, ch11, 2.45 GHz - 2.50GHz

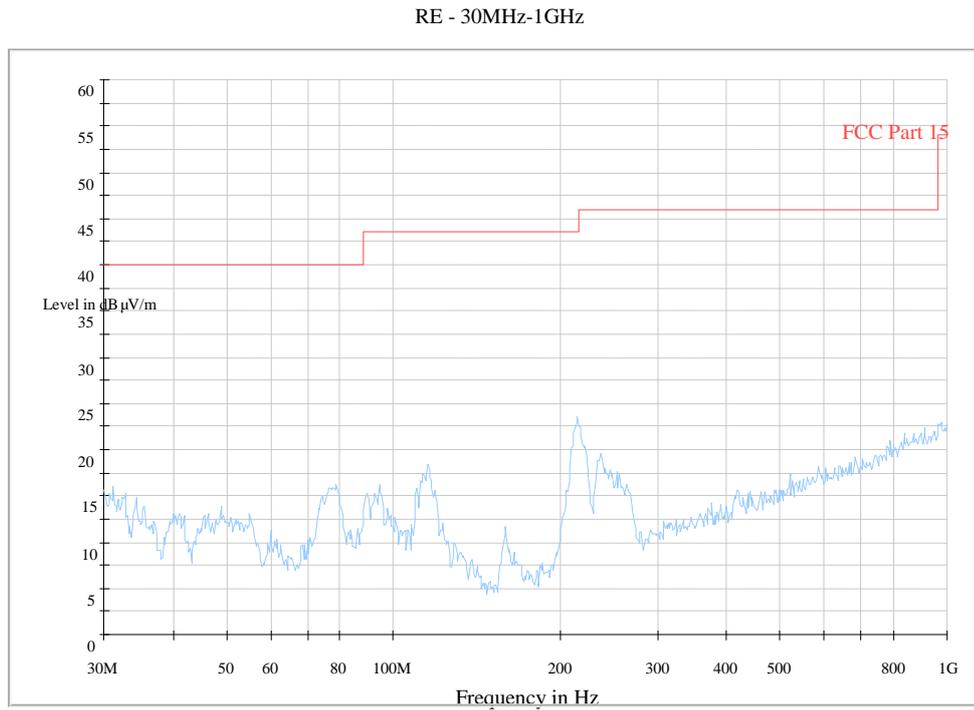


Fig. 159 Radiated Spurious Emission (802.11n-20MHz, Ch11, 30 MHz-1 GHz)

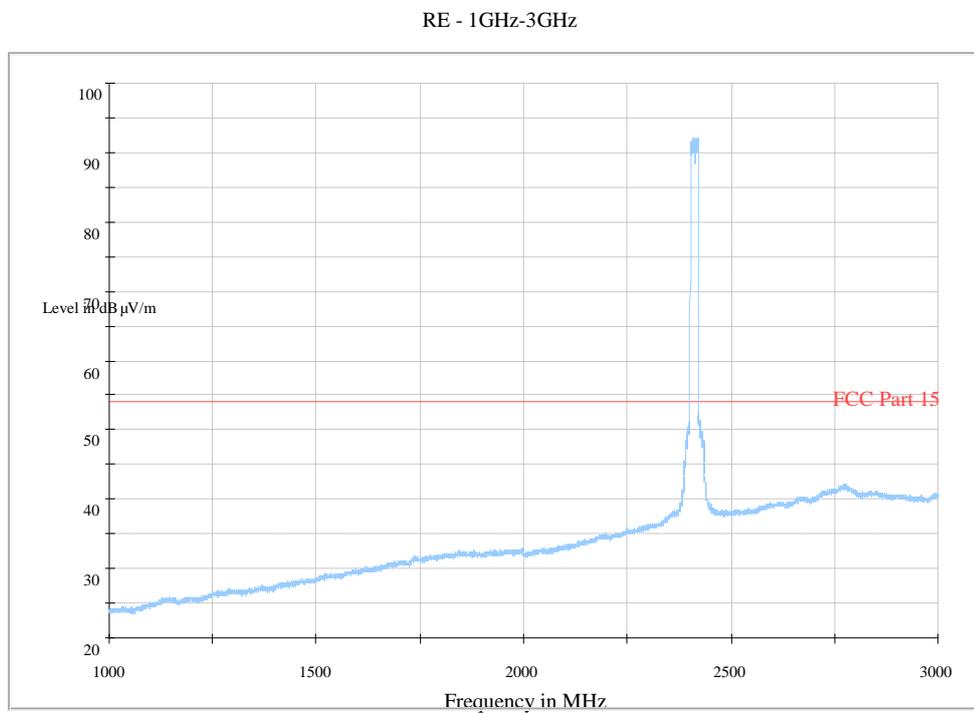


Fig. 160 Radiated Spurious Emission (802.11n-20MHz, Ch11, 1 GHz-3 GHz)

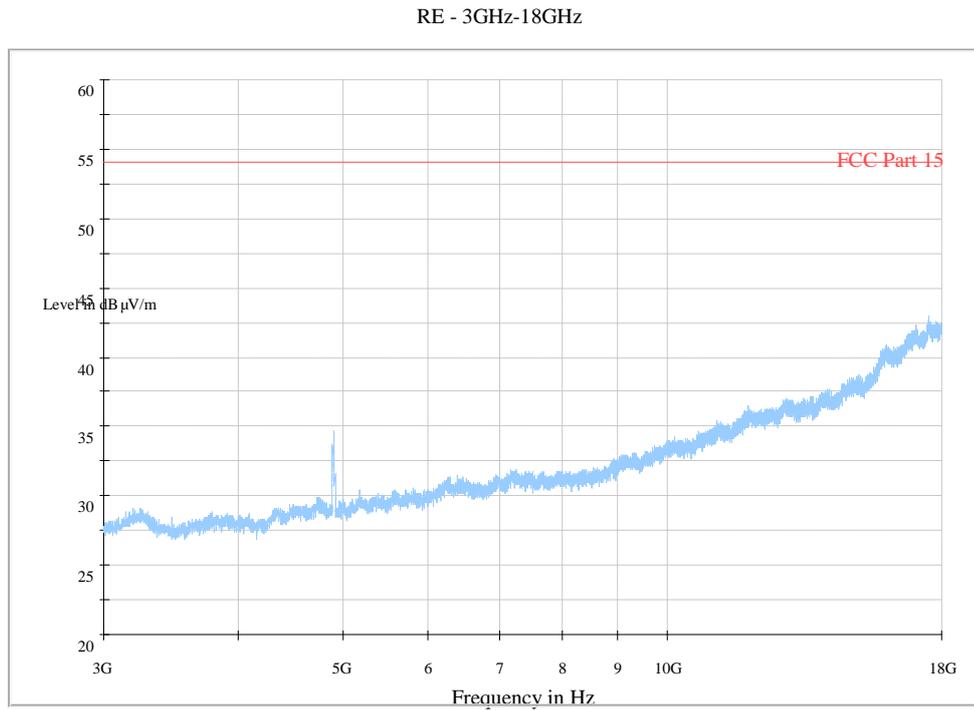


Fig. 161 Radiated Spurious Emission (802.11n-20MHz, Ch11, 3 GHz-18 GHz)

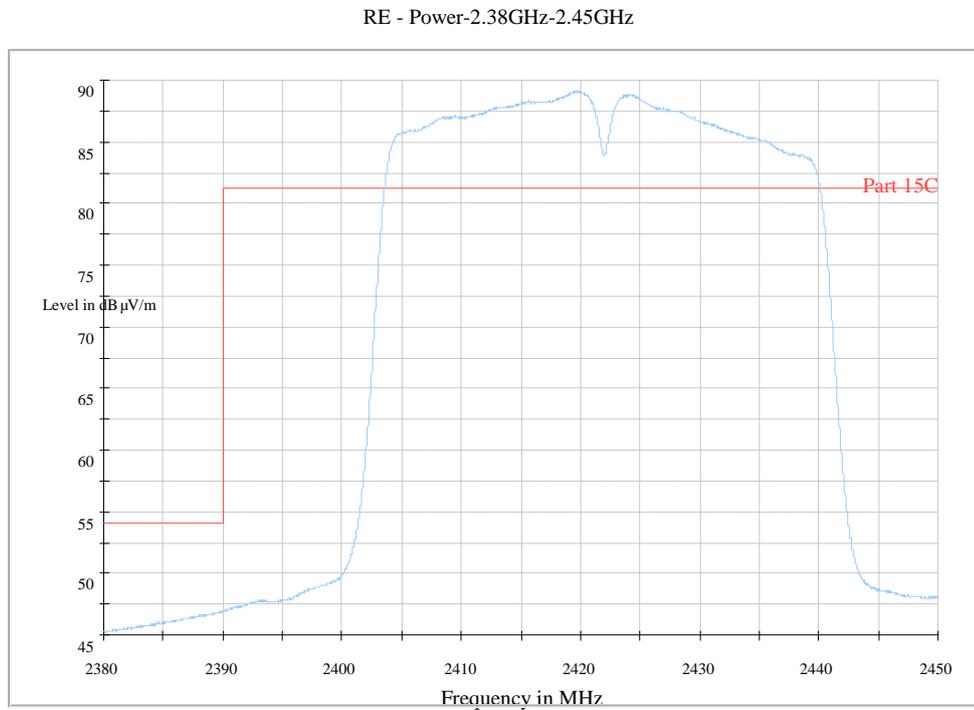


Fig. 162 Radiated Spurious Emission (Power): 802.11n-40MHz, ch3, 2.38 GHz - 2.45GHz

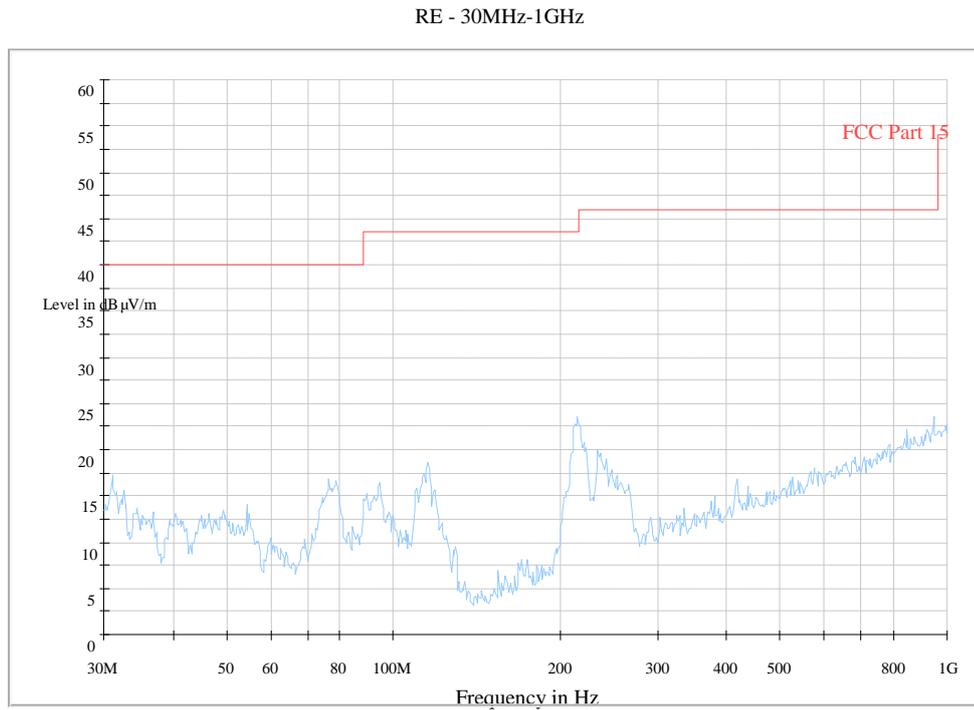


Fig. 163 Radiated Spurious Emission (802.11n-40MHz, Ch3, 30 MHz-1 GHz)

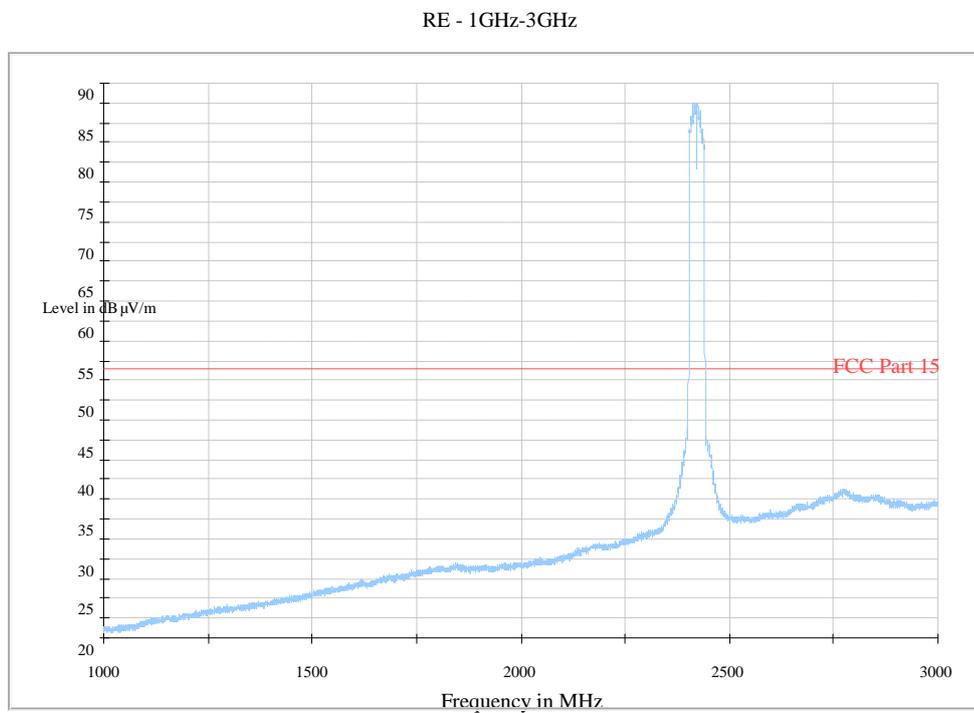


Fig. 164 Radiated Spurious Emission (802.11n-40MHz, Ch3, 1 GHz-3 GHz)

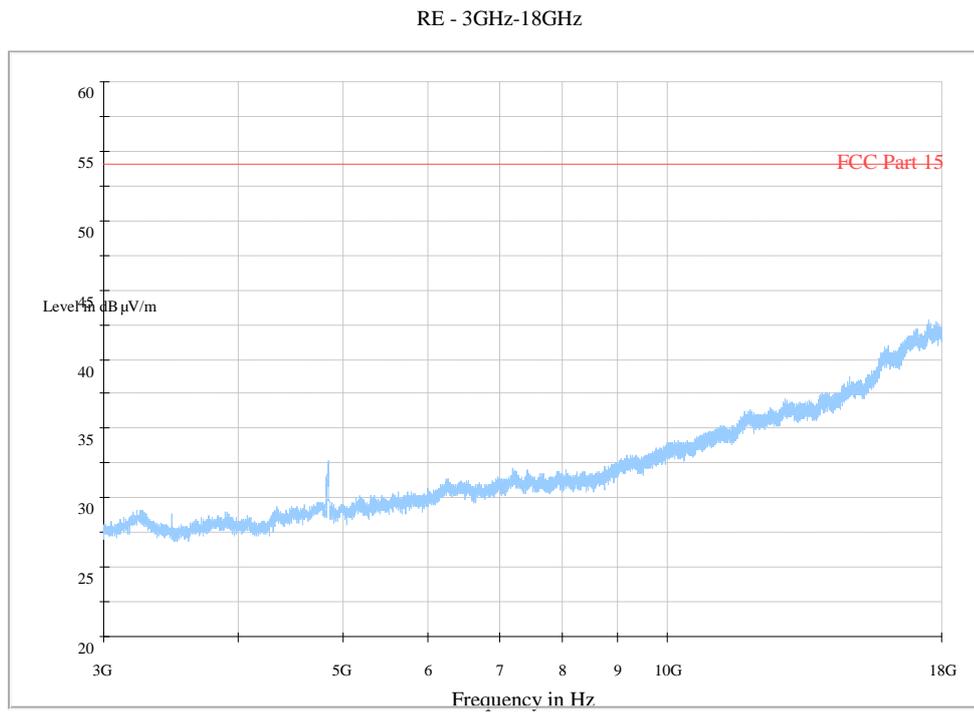


Fig. 165 Radiated Spurious Emission (802.11n-40MHz, Ch3, 3 GHz-18 GHz)

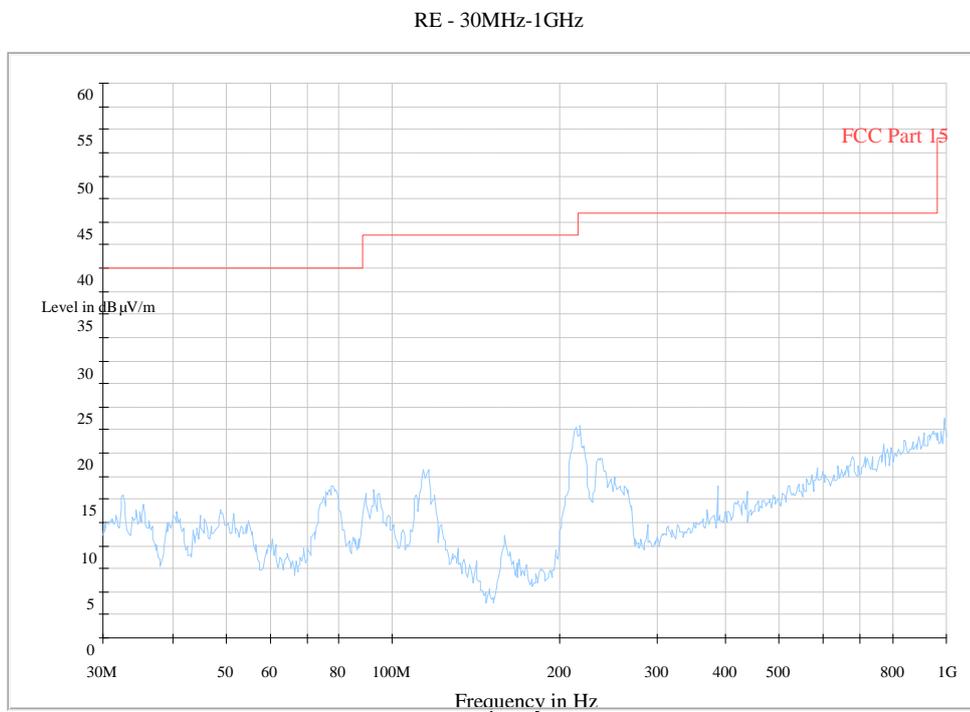


Fig. 166 Radiated Spurious Emission (802.11n-40MHz, Ch6, 30 MHz-1 GHz)

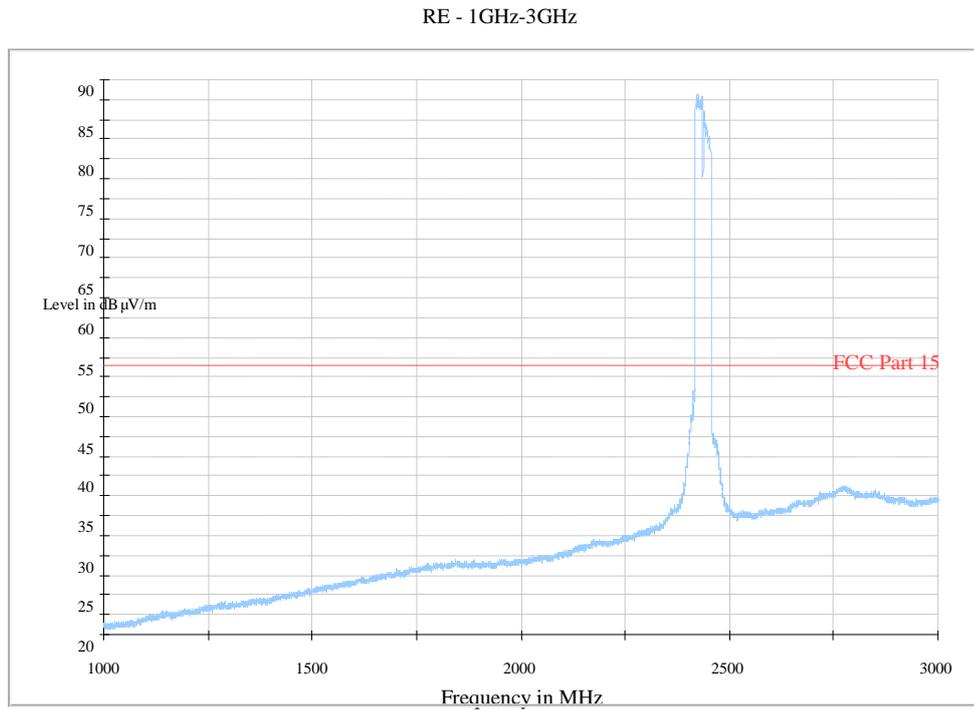


Fig. 167 Radiated Spurious Emission (802.11n-40MHz, Ch6, 1 GHz-3 GHz)

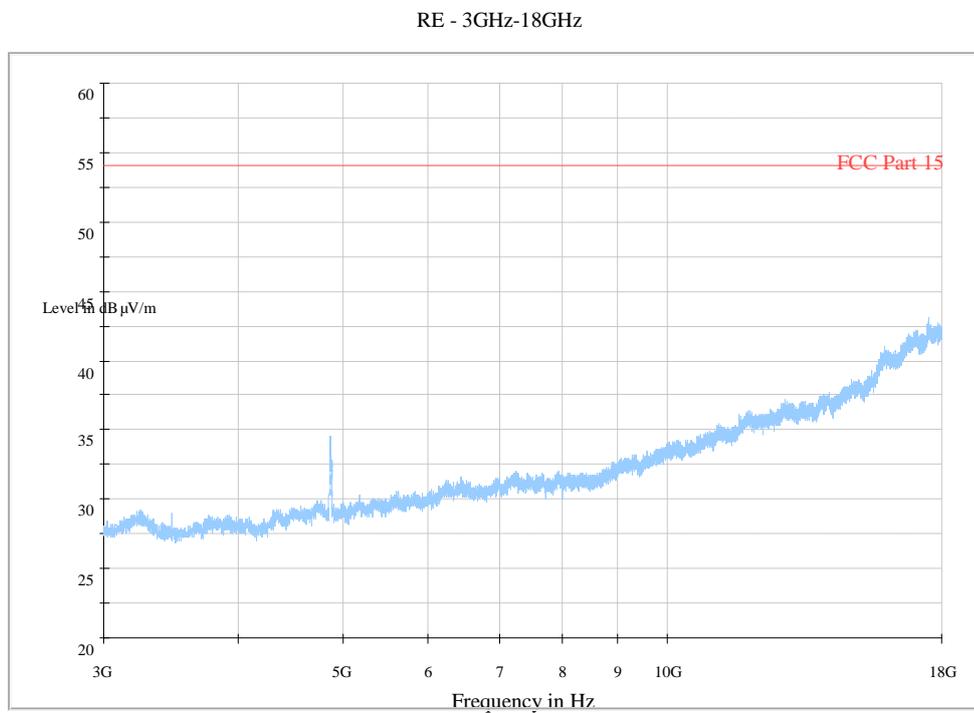


Fig. 168 Radiated Spurious Emission (802.11n-40MHz, Ch6, 3 GHz-18 GHz)

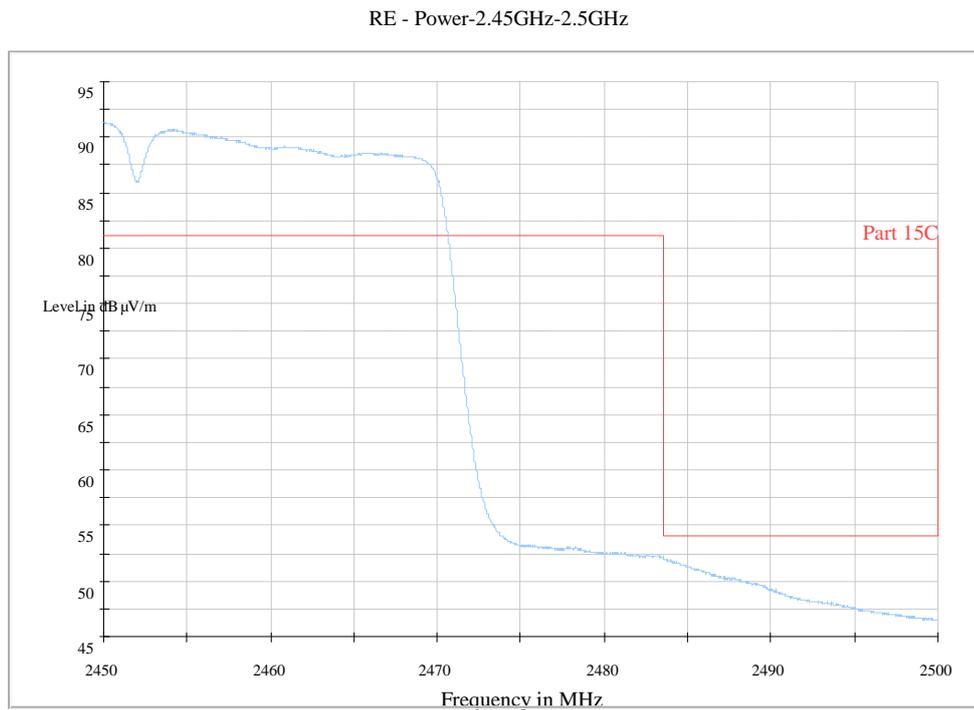


Fig. 169 Radiated Spurious Emission (Power): 802.11n-40MHz, ch9, 2.45 GHz - 2.50GHz

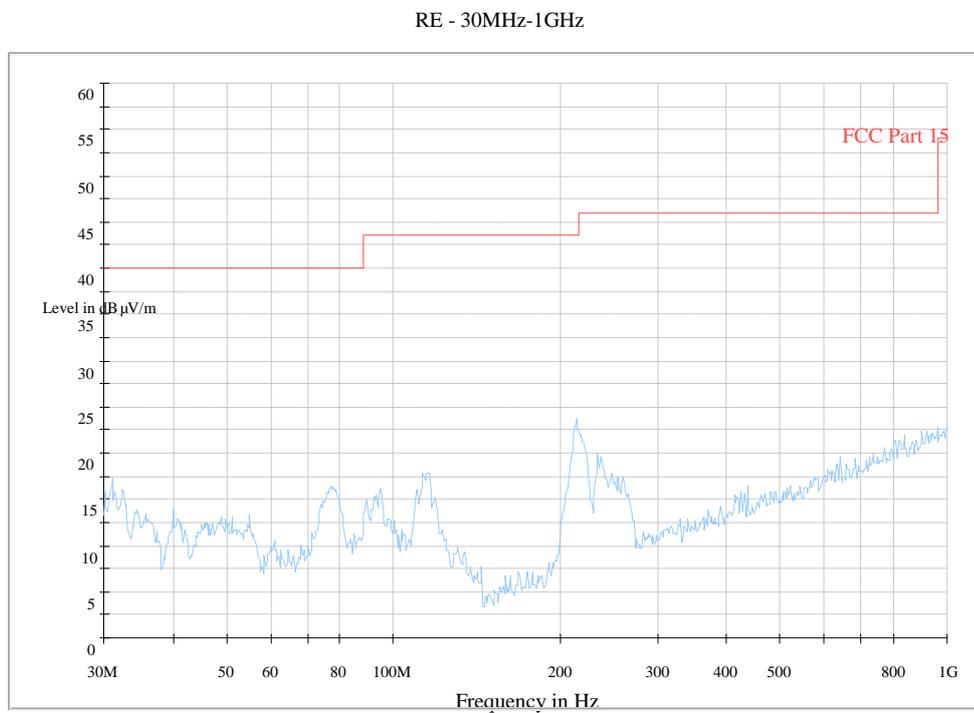


Fig. 170 Radiated Spurious Emission (802.11n-40MHz, Ch9, 30 MHz-1 GHz)

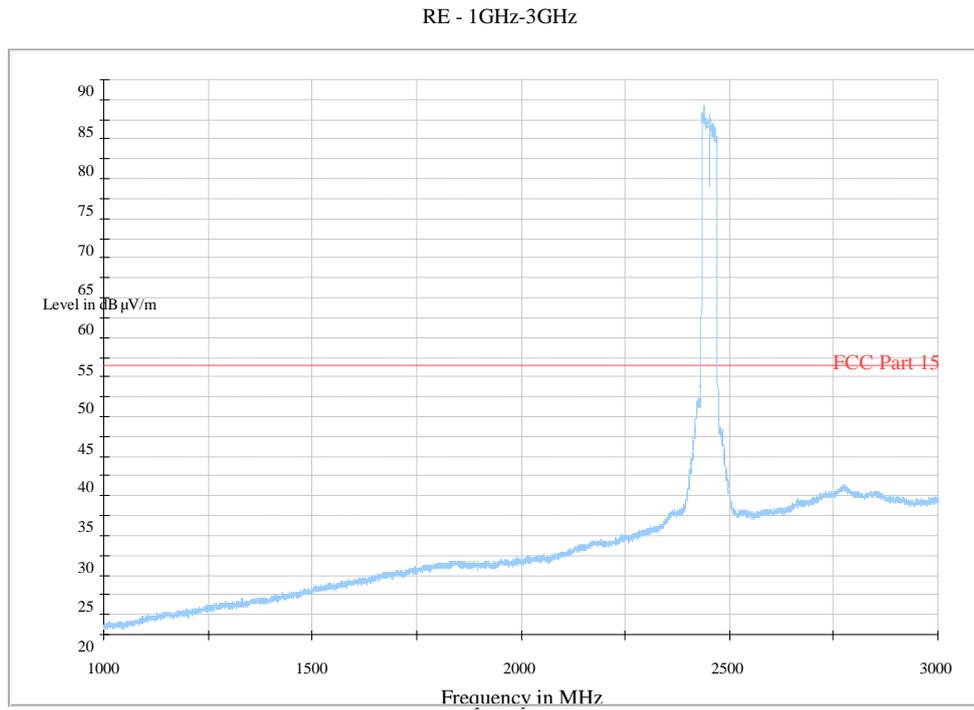


Fig. 171 Radiated Spurious Emission (802.11n-40MHz, Ch9, 1 GHz-3 GHz)

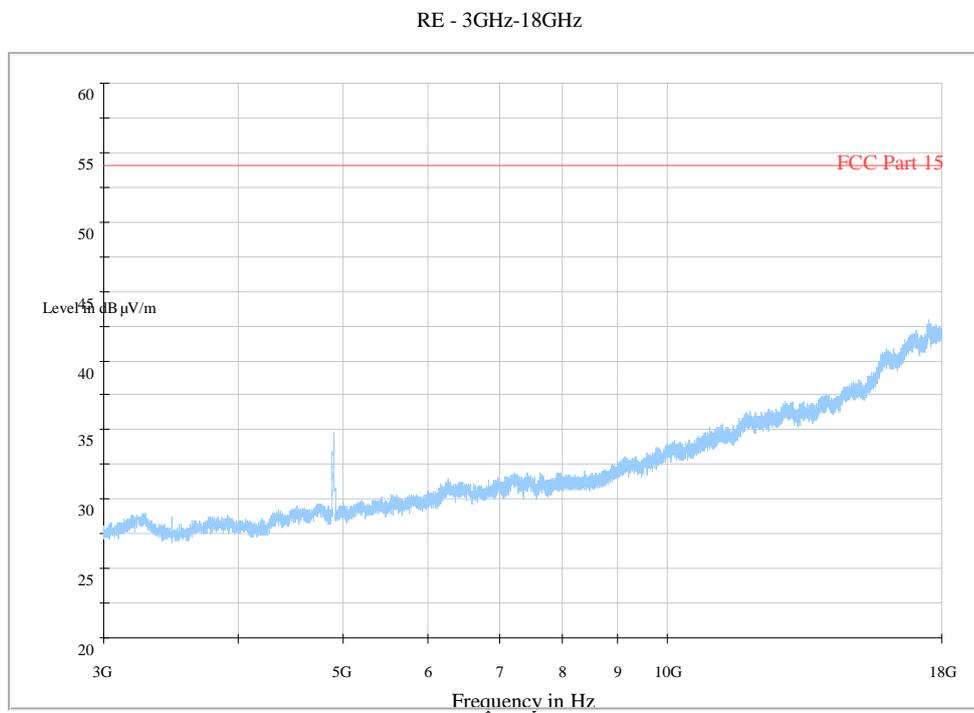


Fig. 172 Radiated Spurious Emission (802.11n-40MHz, Ch9, 3 GHz-18 GHz)

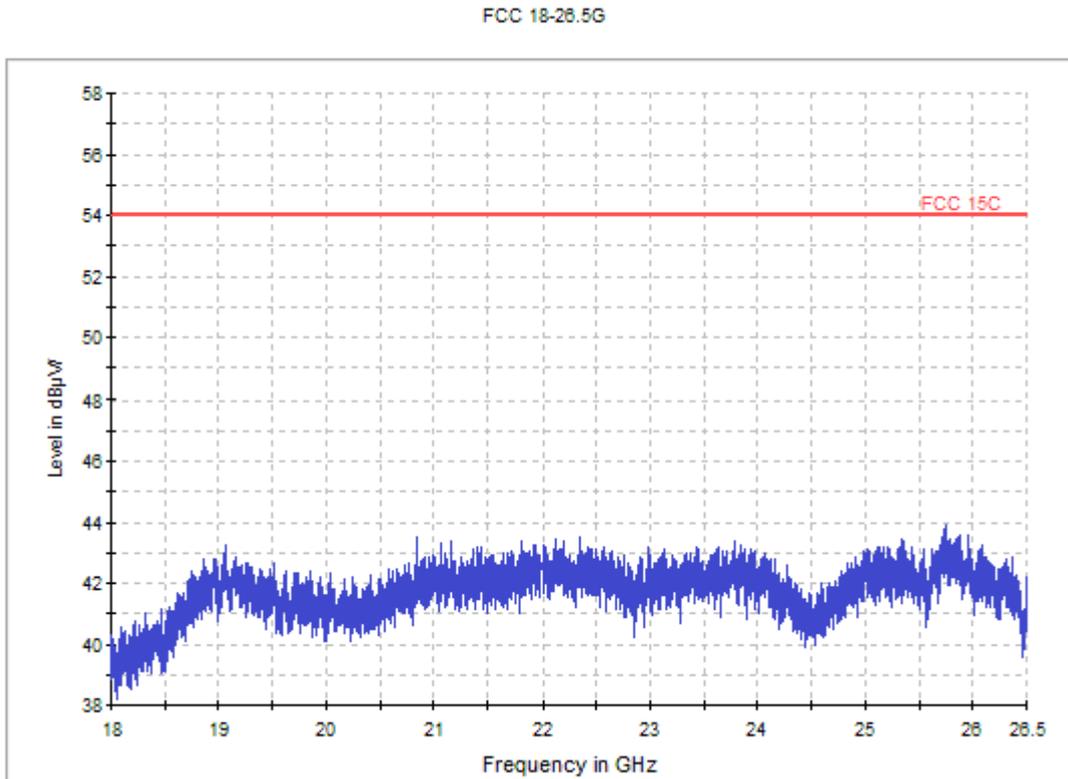


Fig. 173 Radiated Spurious Emission (All channels): 18GHz – 26.5GHz

A.7. AC Powerline Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)			Conclusion
		With charger			
		802.11b	802.11g	802.11n	
0.15 to 0.5	66 to 56	Fig. 174	Fig.175	Fig.176	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 (dB μ V)	Result (dB μ V)			Conclusion
		With charger			
		802.11b	802.11g	802.11n	
0.15 to 0.5	56 to 46	Fig.174	Fig.175	Fig.176	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:

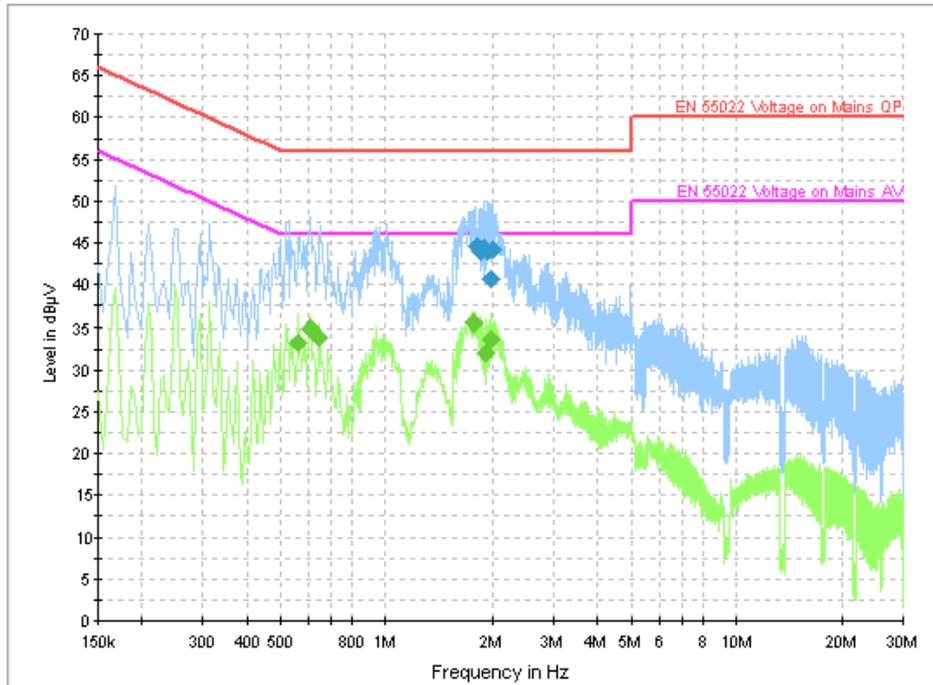


Fig. 174 AC Powerline Conducted Emission-802.11b

Final Result 1

Frequency	QuasiPeak	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.80600	44.5	GND	L1	10.0	11.5	56.0
1.85550	44.0	GND	L1	10.0	12.0	56.0
1.89150	44.5	GND	L1	10.0	11.5	56.0
1.94550	44.0	GND	L1	10.0	12.0	56.0
1.97250	40.8	GND	L1	10.0	15.2	56.0
2.01300	44.2	GND	L1	10.0	11.8	56.0

Final Result 2

Frequency	CAverage	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.56400	33.3	GND	L1	10.0	12.7	46.0
0.60450	34.8	GND	L1	10.0	11.2	46.0
0.64500	33.8	GND	L1	10.0	12.2	46.0
1.75650	35.4	GND	L1	10.0	10.6	46.0
1.90500	31.9	GND	L1	10.0	14.1	46.0
1.97250	33.7	GND	L1	10.0	12.3	46.0

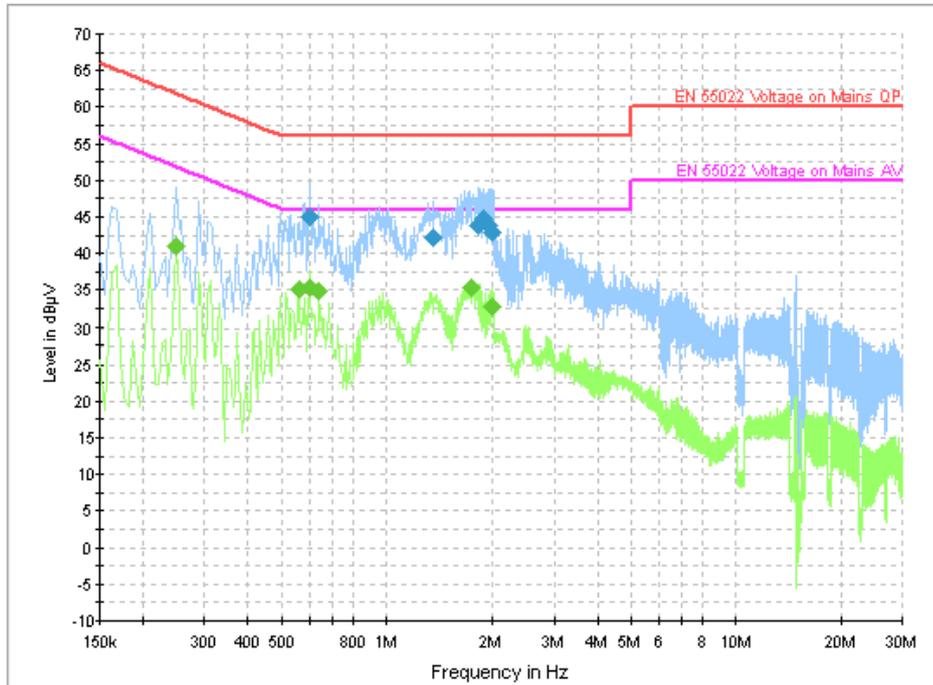


Fig. 175 AC Powerline Conducted Emission-802.11g

Final Result 1

Frequency	QuasiPeak	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.60000	45.0	GND	L1	10.0	11.0	56.0
1.36950	42.1	GND	L1	10.0	13.9	56.0
1.81050	43.8	GND	L1	10.0	12.2	56.0
1.88700	44.8	GND	L1	10.0	11.2	56.0
1.94100	43.9	GND	L1	10.0	12.1	56.0
1.99950	42.8	GND	L1	10.0	13.2	56.0

Final Result 2

Frequency	CAverage	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.24900	40.9	GND	L1	10.0	10.9	51.8
0.55950	35.0	GND	L1	10.0	11.0	46.0
0.60000	35.2	GND	L1	10.0	10.8	46.0
0.64050	34.8	GND	L1	10.0	11.2	46.0
1.74300	35.4	GND	L1	10.0	10.6	46.0
1.99950	32.8	GND	L1	10.0	13.2	46.0

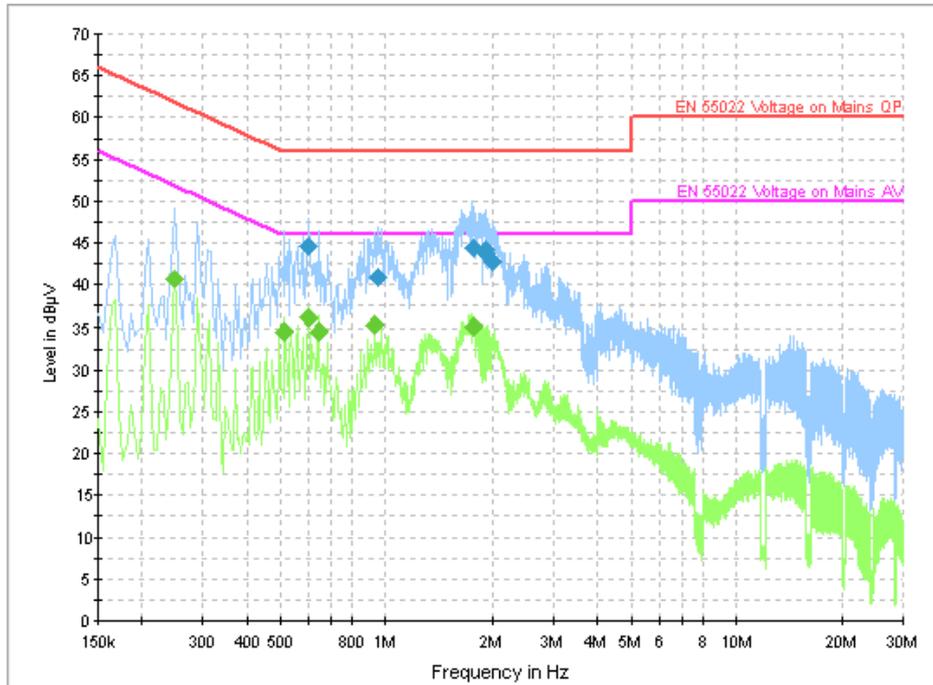


Fig. 176 AC Powerline Conducted Emission-802.11n

Final Result 1

Frequency	QuasiPeak	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.60000	44.5	GND	L1	10.0	11.5	56.0
0.95550	40.9	GND	L1	10.0	15.1	56.0
1.76100	44.5	GND	L1	10.0	11.5	56.0
1.90950	44.2	GND	L1	10.0	11.8	56.0
1.91850	43.7	GND	L1	10.0	12.3	56.0
2.01300	42.8	GND	L1	10.0	13.2	56.0

Final Result 2

Frequency	CAverage	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.24900	40.7	GND	L1	10.0	11.0	51.8
0.51450	34.4	GND	L1	10.0	11.6	46.0
0.60000	36.0	GND	L1	10.0	10.0	46.0
0.64050	34.6	GND	L1	10.0	11.4	46.0
0.92850	35.3	GND	L1	10.0	10.7	46.0
1.76100	35.1	GND	L1	10.0	10.9	46.0

*** END OF REPORT BODY ***