



**FCC PART 15C
TEST REPORT
No. 2013WLN0760**

for

Sony Mobile Communications AB

GSM/WCDMA/LTE mobile phone

Type: PM-0610-BV

With

FCC ID: PY7PM-0610

Hardware Version: A

Software Version: 14.1.H.0.436

Issued Date: 2013-10-09



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 LATORATORY

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: +86-10-62304633-2561
Fax: +86-10-62304633-2504

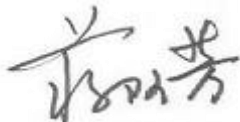
1.2. Project data

Testing Start Date: 2013-09-19
Testing End Date: 2013-09-25

1.3. Signature



Xu Zhongfei
(Prepared this test report)



Jiang Afang
(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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Country: China
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Telephone: +86-10-58656312
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2.2. Manufacturer Information

Company Name: Sony Mobile Communications AB
Address /Post: Sony Mobile R&D Center, No. 16, Guangshun South Street,
Chaoyang District
City: Beijing
Postal Code: 100102
Country: China
Contact Person: Ma, Gang
Telephone: +86-10-58656312
Fax: +86-10-58659049

3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY

EQUIPMENT(AE)

3.1. About EUT

Description	GSM 850/900/1800/1900 quad bands, GPRS, EDGE, WCDMA FDD bands 1/5/6/19, HSDPA, HSUPA, LTE FDD bands 1/3/19/21, Bluetooth (EDR and 4.0), ANT+, WLAN (802.11 a/ac/b/g/n), NFC, FM, GPS mobile phone
Type	PM-0610-BV
FCC ID	PY7PM-0610
WLAN Frequency Range	ISM Band: 2400MHz~2483.5MHz
Type of modulation	OFDM
Number of Channels	11
Antenna	Internal
MAX Conducted Power	23.95dBm(OFDM)
MAX Radiated Power	27.07dBm(OFDM)
Extreme Temperature	-30/+55°C
Extreme vol. Limits	3.6VDC to 4.2VDC (nominal: 4.2VDC)

Note: Photographs of EUT are shown in ANNEX C of this test report. Components list, please refer to documents of the manufacturer; it is also included in the original test record of Telecommunication Metrology Center of MIIT of People's Republic of China.

3.2. Internal Identification of EUT used during the test

EUT ID*	S/N	IMEI	HW Version	SW Version
EUT1	CB5A1UQQE8	004402541004895	A	14.1.H.0.436
EUT2	CB5A1UQQE1	004402541005397	A	14.1.H.0.436

*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	Travel Charger	AC-0400-EU	8512W19 200056
AE2	USB Cable	AI-0401	123307DD003654E

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

3.4. General Description

The Equipment Under Test (EUT) is a model of GSM/WCDMA/LTE mobile phone with integrated antenna and inbuilt battery.

The EUT supports GSM 850/900/1800/1900MHz bands, WCDMA FDD band 1/5/6/19 and LTE FDD bands 1/3/19/21. It supports GPRS service with multi-slots class 33 and EGPRS service with multi-slots class 33. The HSDPA and HSUPA features are also supported.

It has MP3, camera, USB memory, Mobile High-Definition Link (MHL), FM radio, GPS receiver, NFC, Bluetooth (EDR and Bluetooth 4.0), ANT+, WLAN (802.11 a/ac/b/g/n) and Wi-Fi hotspot functions. For WLAN 802.11n, it supports 20MHz bandwidth on 2.4GHz band and 20MHz/40MHz bandwidths on 5GHz/5.8GHz band. For WLAN 802.11 ac, it supports 20MHz/40MHz/80MHz bandwidths.

It consists of normal options: battery and travel 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 CFR 47, Part 15, Subpart C:	
	15.205 Restricted bands of operation;	
FCC Part15	15.209 Radiated emission limits, general requirements;	Oct,
	15.247 Operation within the bands 902–928MHz,	2012
	2400–2483.5 MHz, and 5725–5850 MHz.	
	Methods of Measurement of Radio-Noise Emissions from	
ANSI C63.10	Low-Voltage Electrical and Electronic Equipment in the	2009
	Range of 9 kHz to 40 GHz	

5. LABORATORY ENVIRONMENT

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

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 (b)	/	P
Peak Power Spectral Density	15.247 (e)	/	P
Occupied 6dB Bandwidth	15.247 (a)	/	P
Band Edges Compliance	15.247 (d)	/	P
Transmitter Spurious Emission - Conducted	15.247 (d)	/	P
Transmitter Spurious Emission - Radiated	15.247, 15.209	/	P
AC Powerline Conducted Emission	15.107, 15.207	/	P

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

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/matrix 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.

6.3. Test Conditions

For this report, all the test cases are tested under normal temperature and normal voltage, and also under norm humidity, the specific condition is shown as follows:

Temperature	26°C
Voltage	4.2V
Humidity	44%

7. TEST EQUIPMENTS UTILIZED

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Calibration Due date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	2013-07-08	2014-07-07
2	Test Receiver	ESS	847151/015	Rohde & Schwarz	2012-12-29	2013-10-30
3	LISN	ESH2-Z5	829991/012	Rohde & Schwarz	2013-4-15	2014-08-12
4	Shielding Room	S81	/	ETS-Lindgren	/	/

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Calibration Due date
1	Test Receiver	ESU26	100376	Rohde & Schwarz	2012-11-8	2013-11-7
2	BiLog Antenna	VULB9163	9163-514	Schwarzbeck	2011-11-11	2014-11-10
3	Dual-Ridge Waveguide Horn Antenna	3117	00119024	ETS-Lindgren	2011-2-2	2014-2-1
4	Dual-Ridge Waveguide Horn Antenna	3116	2661	EMCO	2011-7-1	2014-06-30
5	Loop antenna	HFH2-Z2	829324/007	Rohde & Schwarz	2011-12-21	2014-12-20
6	Semi-anechoic chamber	/	CT000332-1074	Frankonia German	/	/

ANNEX A: MEASUREMENT RESULTS

A.1. Measurement Method

A.1.1. Conducted Measurements

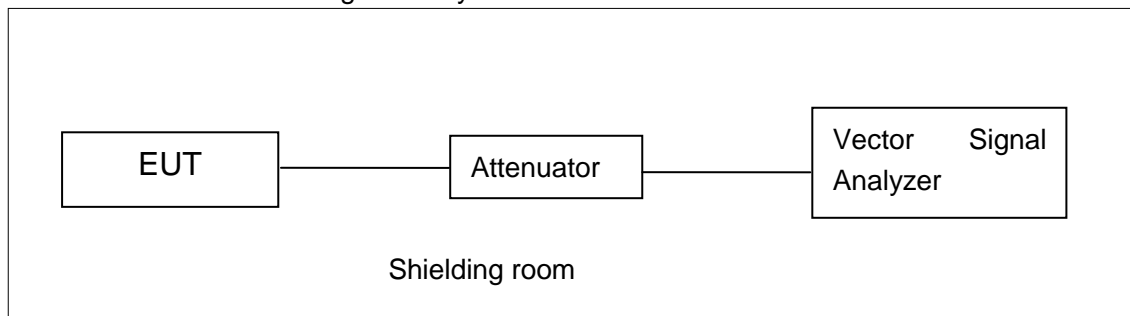
Connect the EUT to the test system as follow shows.

Set the EUT to the required work mode.

Set the EUT to the required channel.

Set the Vector Signal Analyzer and start measurement.

Record the values. Vector Signal Analyzer

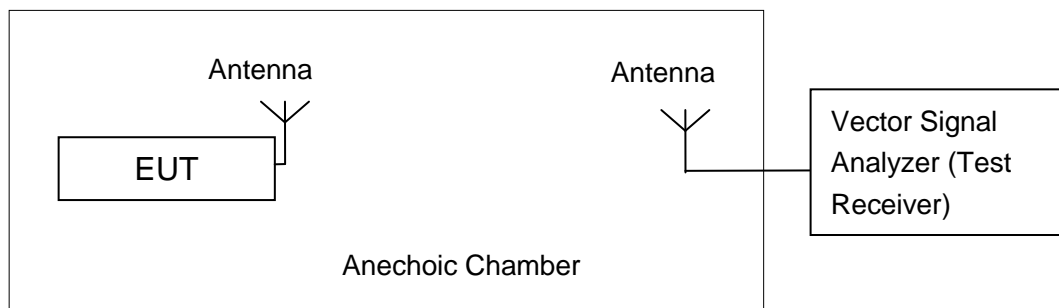


A.1.2. Radiated Emission Measurements

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 C63.10

The radiated emission test is performed in semi-anechoic chamber. The distance from the EUT to the reference point of measurement antenna is 3m. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result.

A.2. Maximum Peak Output Power

Measurement Limit and Method:

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

The measurement is made according to ANSI C63.10, and option 1 is used for peak power measurement.

Measurement Uncertainty:

Measurement Uncertainty	0.75dB
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A.2.1. Antenna Gain

The antenna gain of the complete system is calculated by the difference of radiated power and the conducted power of the EUT.

Test	Channel		
	1	6	11
Tnom,Vnom			
Conducted Power(dBm)	16.03	16.77	15.84
Radiated Power(dBm)	19.20	19.89	19.35
Gain(dBi)	3.17	3.12	3.51

Antenna Gain = Radiated value (with radiated sample) - Conducted values (with conducted samples)

A.2.2. Maximum Peak Output Power-conducted

Measurement Results:

802.11b mode

Mode	Data Rate (Mbps)	Test Result (dBm)		
		2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)
802.11b	1	18.54	/	/
	2	18.77	/	/
	5.5	19.91	/	/
	11	21.34	22.91	21.60

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

802.11g mode

Mode	Data Rate (Mbps)	Test Result (dBm)		
		2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)
802.11g	6	22.24	23.95	22.19
	9	22.23	/	/
	12	22.12	/	/
	18	22.06	/	/
	24	18.37	/	/
	36	18.39	/	/
	48	18.41	/	/
	54	18.40	/	/

The data rate 6Mbps is selected as worse condition, and the following cases are performed with this condition.

802.11n mode

Mode	Data Rate (Index)	Test Result (dBm)		
		2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)
802.11n (20MHz)	MCS0	21.87	23.06	21.78
	MCS1	21.74	/	/
	MCS2	21.73	/	/
	MCS3	17.92	/	/
	MCS4	17.90	/	/
	MCS5	17.99	/	/
	MCS6	17.98	/	/
	MCS7	18.00	/	/

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

Conclusion: PASS

A.2.3. Maximum Peak Output Power-Radiated

Measurement Results:

Mode	Test Result (dBm)					
	2412MHz (Ch1)		2437MHz (Ch6)		2462 MHz (Ch11)	
	Conducted	Radiated	Conducted	Radiated	Conducted	Radiated
802.11b	21.34	24.51	22.91	26.03	21.60	25.11
802.11g	22.24	25.41	23.95	27.07	22.19	25.70
802.11n	21.87	25.04	23.06	26.18	21.78	25.29

Radiated value = Conducted values (with conducted samples) + Antenna Gain.

Conclusion: PASS

A.3. Peak Power Spectral Density

Measurement Limit:

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

The measurement is made according to ANSI C63.10, and option 1 is used for peak power spectral density measurement.

Measurement Uncertainty:

Measurement Uncertainty	0.75dB
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Note: Configuration information to be tested as follows:

Modulation type and data rate:

802.11b	802.11g	802.11n
11Mbps(CCK)	6Mbps(OFDM)	MCS0(OFDM)

Measurement Results:

Mode	Channel	Power Spectral Density (dBm/3 kHz)	Conclusion
802.11b	1	-6.36	P
	6	-5.29	P
	11	-5.47	P
802.11g	1	-9.73	P
	6	-8.94	P
	11	-9.52	P
802.11n	1	-10.63	P
	6	-10.23	P
	11	-10.21	P

Conclusion: PASS

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 C63.10.

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz
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Note: Configuration information to be tested as follows:

Modulation type and data rate:

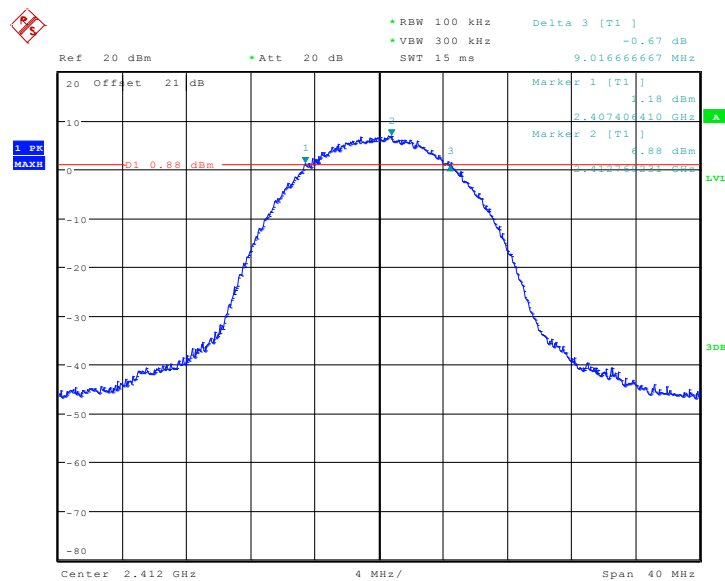
802.11b	802.11g	802.11n
11Mbps(CCK)	6Mbps(OFDM)	MCS0(OFDM)

Measurement Result:

Mode	Channel	Occupied 6dB Bandwidth (kHz)		conclusion
		Fig.	Value	
802.11b	1	Fig.1	9017	P
	6	Fig.2	8462	P
	11	Fig.3	8910	P
802.11g	1	Fig.4	16474	P
	6	Fig.5	16474	P
	11	Fig.6	16474	P
802.11n	1	Fig.7	17628	P
	6	Fig.8	17692	P
	11	Fig.9	17692	P

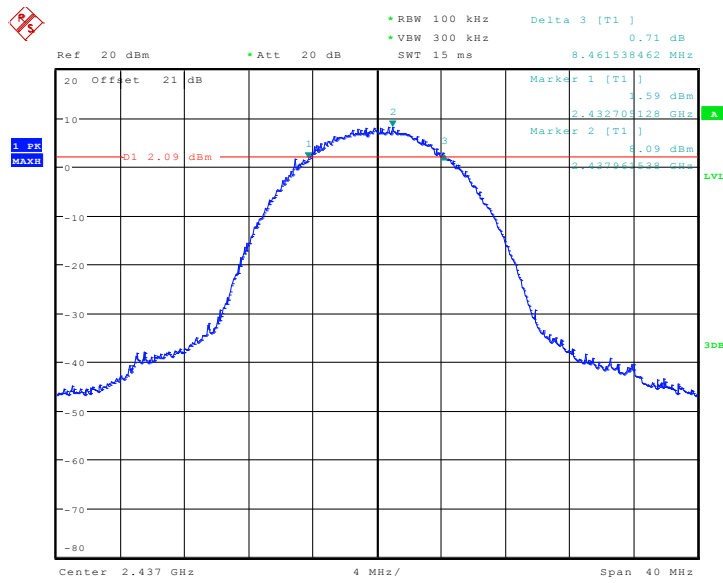
Conclusion: PASS

Test graphs as below:



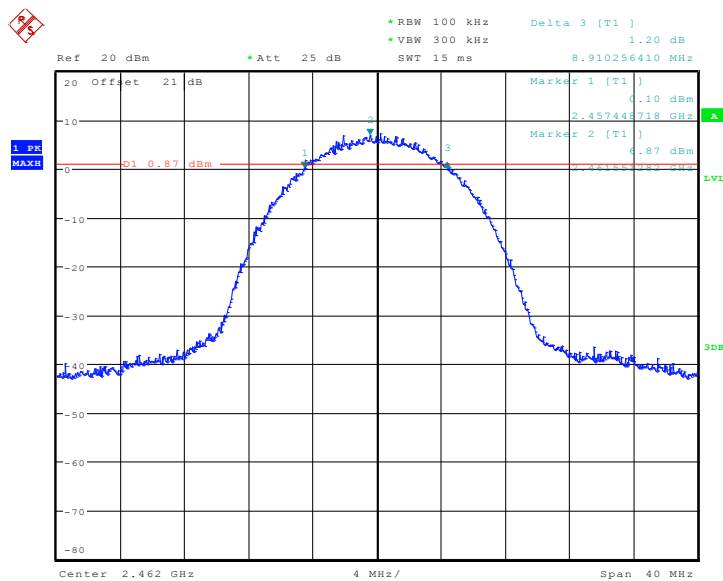
Date: 23_SRP_2013 16:51:41

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



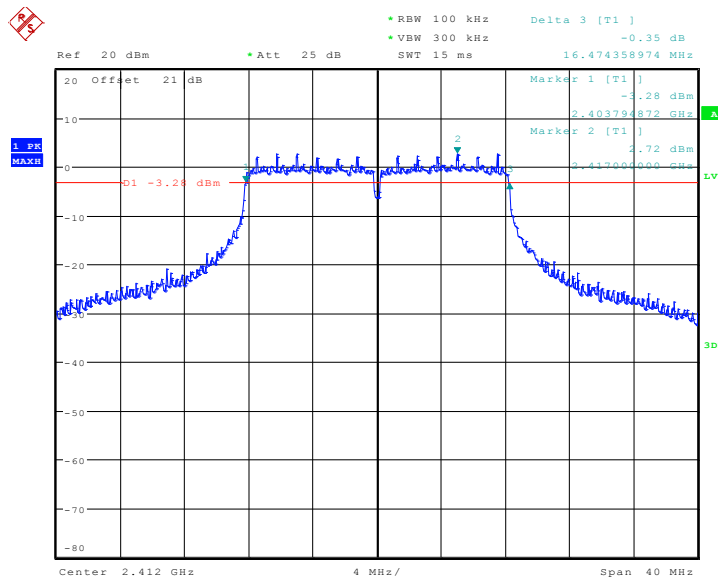
Date: 23.SEP.2013 16:57:20

Fig. 2 Occupied 6dB Bandwidth (802.11b, Ch 6)



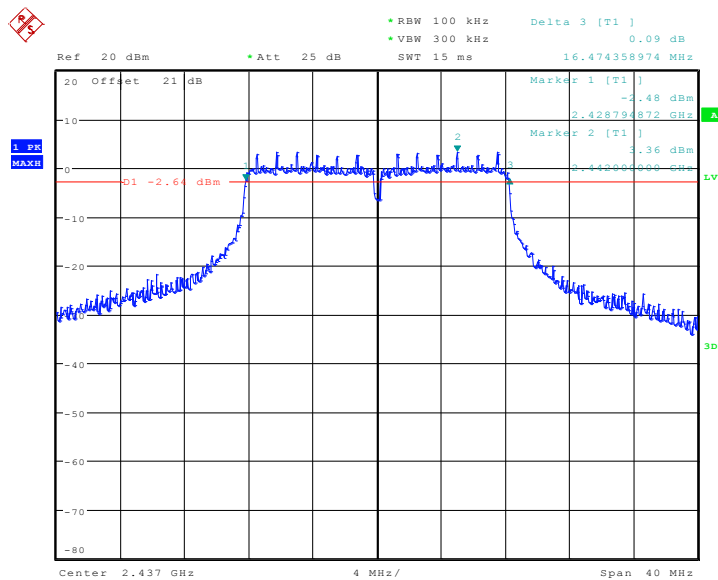
Date: 23.SEP.2013 16:59:31

Fig. 3 Occupied 6dB Bandwidth (802.11b, Ch 11)



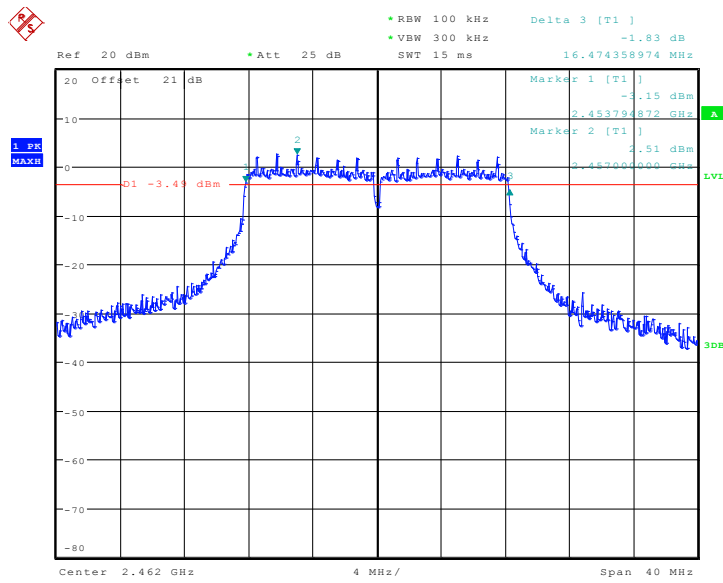
Date: 23.SEP.2013 17:47:26

Fig. 4 Occupied 6dB Bandwidth (802.11g, Ch 1)



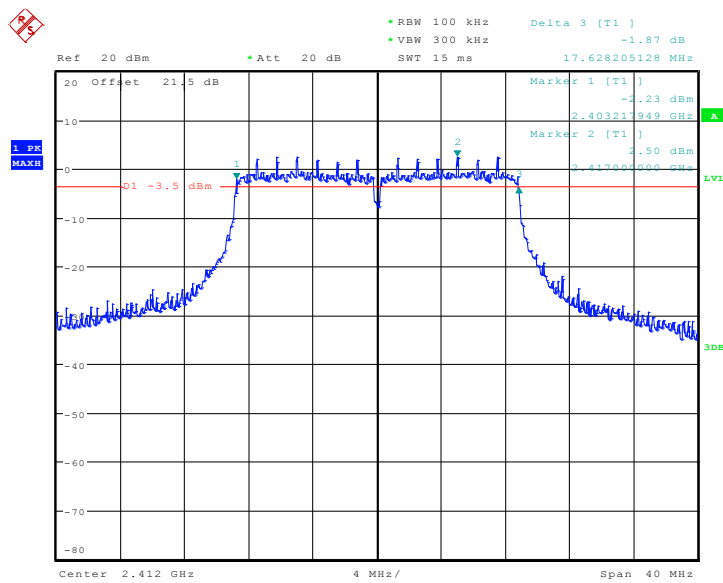
Date: 23.SEP.2013 17:49:20

Fig. 5 Occupied 6dB Bandwidth (802.11g, Ch 6)



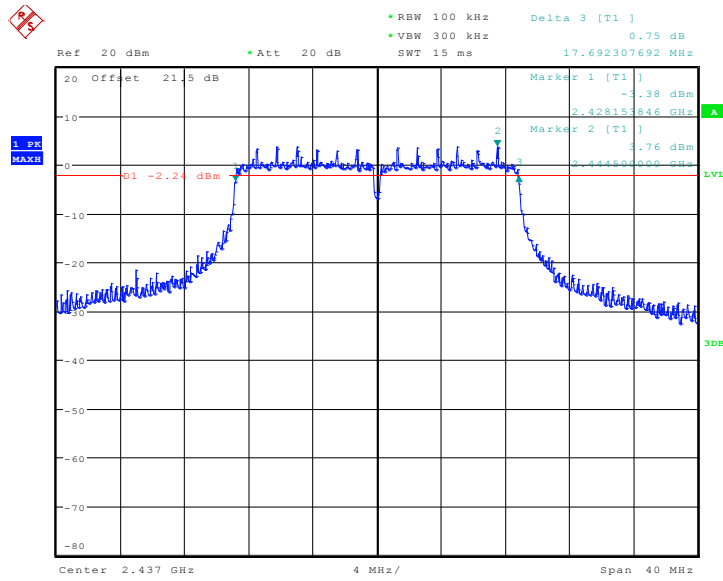
Date: 23.SEP.2013 17:50:41

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



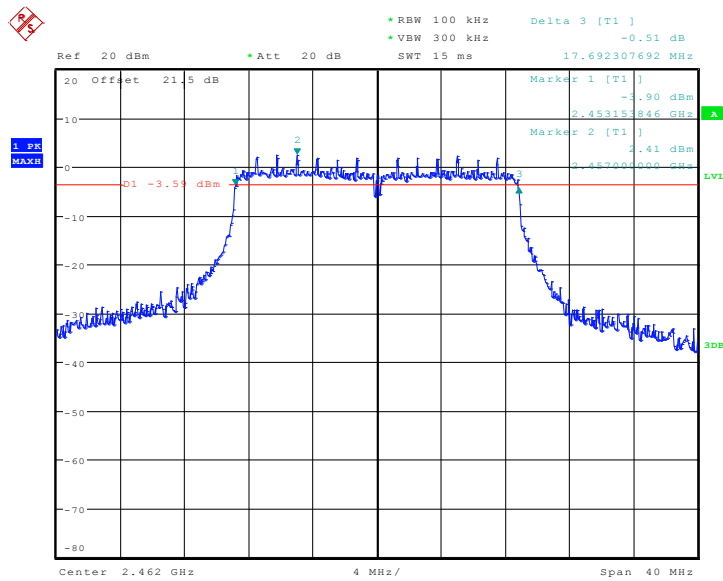
Date: 23.SEP.2013 18:37:54

Fig. 7 Occupied 6dB Bandwidth (802.11n-HT20, Ch 1)



Date: 23.SEP.2013 18:40:12

Fig. 8 Occupied 6dB Bandwidth (802.11n-HT20, Ch 6)



Date: 23.SEP.2013 18:42:07

Fig. 9 Occupied 6dB Bandwidth (802.11n-HT20, 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 C63.10

Measurement Uncertainty:

Measurement Uncertainty	0.75dB
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Note: Configuration information to be tested as follows:

Modulation type and data rate:

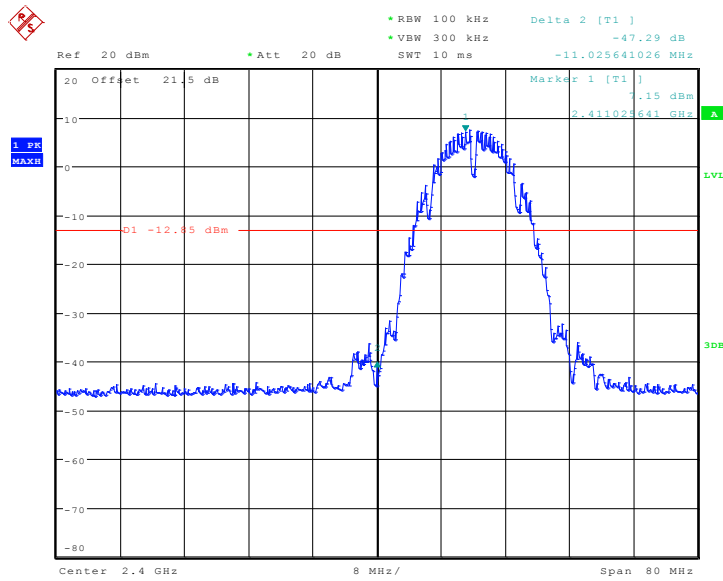
802.11b	802.11g	802.11n
11Mbps(CCK)	6Mbps(OFDM)	MCS0(OFDM)

Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11b	1	Fig.10	P
	11	Fig.11	P
802.11g	1	Fig.12	P
	11	Fig.13	P
802.11n	1	Fig.14	P
	11	Fig.15	P

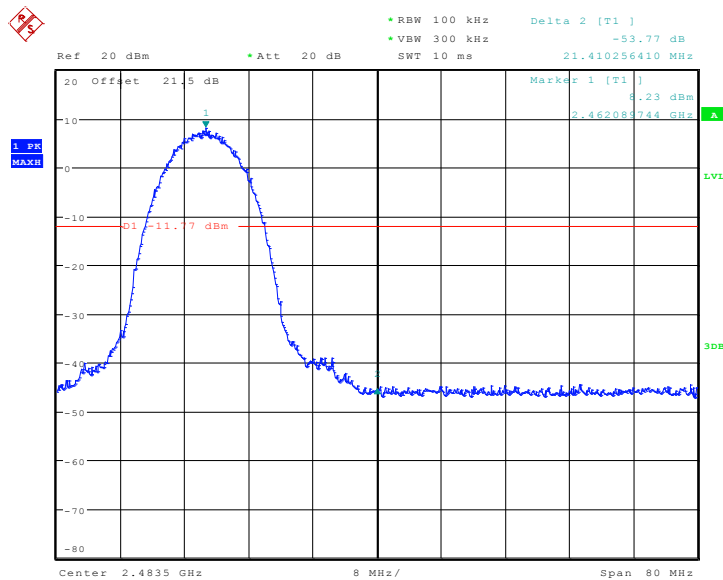
Conclusion: PASS

Test graphs as below:



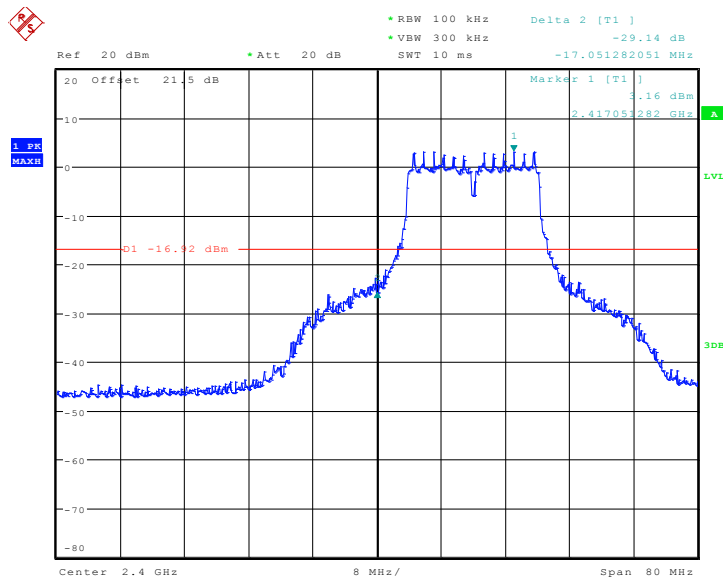
Date: 23.SEP.2013 18:46:11

Fig. 10 Band Edges (802.11b, Ch 1)



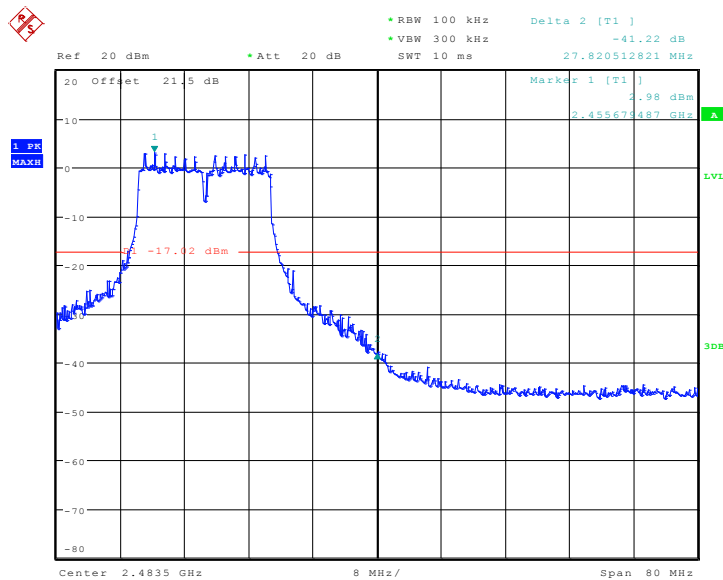
Date: 23.SEP.2013 18:49:18

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



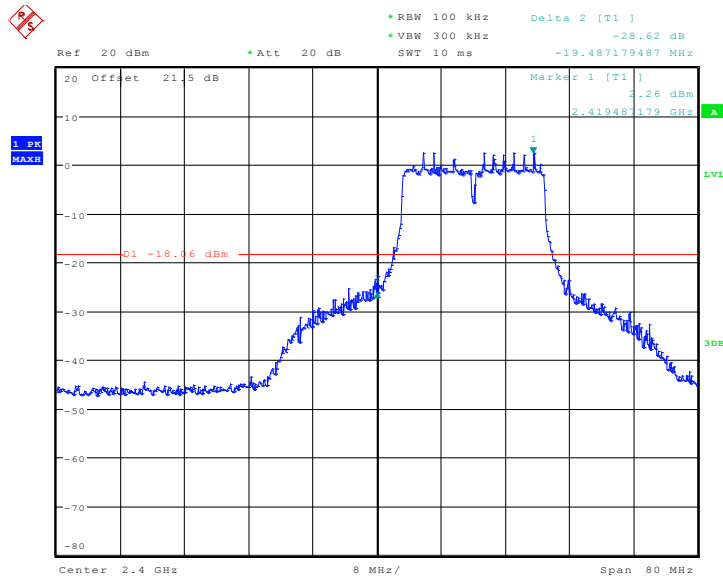
Date: 23.SEP.2013 18:51:00

Fig. 12 Band Edges (802.11g, Ch 1)



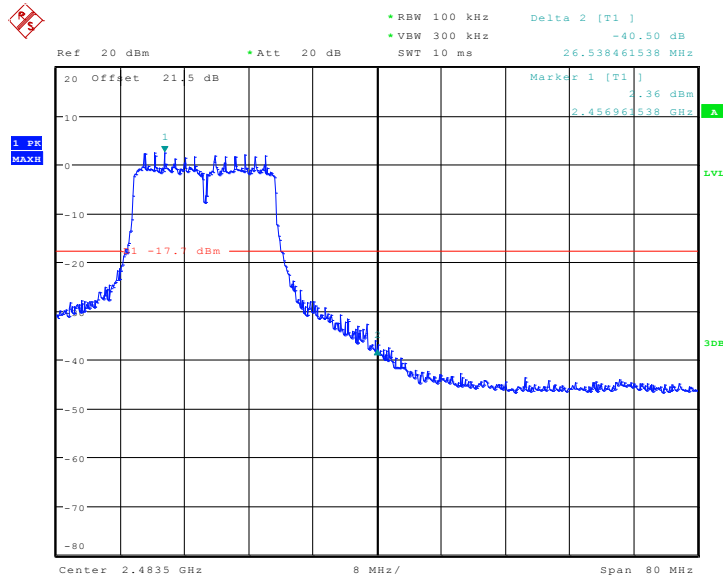
Date: 23.SEP.2013 18:52:26

Fig. 13 Band Edges (802.11g, Ch 11)



Date: 23.SEP.2013 18:54:31

Fig. 14 Band Edges (802.11n-HT20, Ch 1)



Date: 23.SEP.2013 19:03:39

Fig. 15 Band Edges (802.11n-HT20, Ch 11)

A.6. Transmitter Spurious Emission

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 C63.10.

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)).

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

Measurement Uncertainty:

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

Note: Configuration information to be tested as follows:

Modulation type and data rate:

802.11b	802.11g	802.11n
11Mbps(CCK)	6Mbps(OFDM)	MCS0(OFDM)

A.6.1 Transmitter Spurious Emission - Conducted

Measurement Results:

802.11b mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	2.412 GHz	Fig.16	P
		30 MHz ~ 1 GHz	Fig.17	P
		1 GHz ~ 2.5 GHz	Fig.18	P
		2.5 GHz ~ 7.5 GHz	Fig.19	P
		7.5 GHz ~ 10 GHz	Fig.20	P
		10 GHz ~ 15 GHz	Fig.21	P
		15 GHz ~ 20 GHz	Fig.22	P
		20 GHz ~ 26 GHz	Fig.23	P
	6	2.437 GHz	Fig.24	P
		30 MHz ~ 1 GHz	Fig.25	P
		1 GHz ~ 2.5 GHz	Fig.26	P
		2.5 GHz ~ 7.5 GHz	Fig.27	P
		7.5 GHz ~ 10 GHz	Fig.28	P
		10 GHz ~ 15 GHz	Fig.29	P
		15 GHz ~ 20 GHz	Fig.30	P
		20 GHz ~ 26 GHz	Fig.31	P
	11	2.462 GHz	Fig.32	P
		30 MHz ~ 1 GHz	Fig.33	P
		1 GHz ~ 2.5 GHz	Fig.34	P
		2.5 GHz ~ 7.5 GHz	Fig.35	P
		7.5 GHz ~ 10 GHz	Fig.36	P
		10 GHz ~ 15 GHz	Fig.37	P
		15 GHz ~ 20 GHz	Fig.38	P
		20 GHz ~ 26 GHz	Fig.39	P

802.11g mode

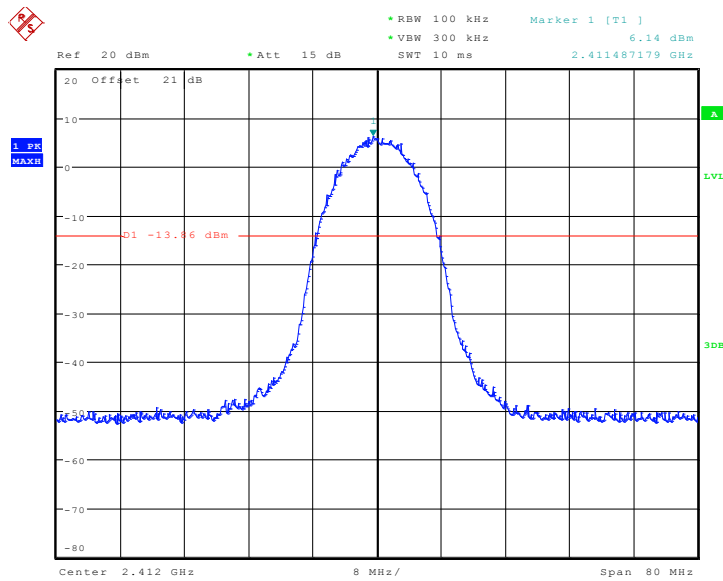
MODE	Channel	Frequency Range	Test Results	Conclusion
802.11g	1	2.412 GHz	Fig.40	P
		30 MHz ~ 1 GHz	Fig.41	P
		1 GHz ~ 2.5 GHz	Fig.42	P
		2.5 GHz ~ 7.5 GHz	Fig.43	P
		7.5 GHz ~ 10 GHz	Fig.44	P
		10 GHz ~ 15 GHz	Fig.45	P
		15 GHz ~ 20 GHz	Fig.46	P
		20 GHz ~ 26 GHz	Fig.47	P
	6	2.437 GHz	Fig.48	P
		30 MHz ~ 1 GHz	Fig.49	P
		1 GHz ~ 2.5 GHz	Fig.50	P
		2.5 GHz ~ 7.5 GHz	Fig.51	P
		7.5 GHz ~ 10 GHz	Fig.52	P
		10 GHz ~ 15 GHz	Fig.53	P
		15 GHz ~ 20 GHz	Fig.54	P
		20 GHz ~ 26 GHz	Fig.55	P
	11	2.462 GHz	Fig.56	P
		30 MHz ~ 1 GHz	Fig.57	P
		1 GHz ~ 2.5 GHz	Fig.58	P
		2.5 GHz ~ 7.5 GHz	Fig.59	P
		7.5 GHz ~ 10 GHz	Fig.60	P
		10 GHz ~ 15 GHz	Fig.61	P
		15 GHz ~ 20 GHz	Fig.62	P
		20 GHz ~ 26 GHz	Fig.63	P

802.11n-HT20 mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11n (20MHz)	1	2.412 GHz	Fig.64	P
		30 MHz ~ 1 GHz	Fig.65	P
		1 GHz ~ 2.5 GHz	Fig.66	P
		2.5 GHz ~ 7.5 GHz	Fig.67	P
		7.5 GHz ~ 10 GHz	Fig.68	P
		10 GHz ~ 15 GHz	Fig.69	P
		15 GHz ~ 20 GHz	Fig.70	P
		20 GHz ~ 26 GHz	Fig.71	P
	6	2.437 GHz	Fig.72	P
		30 MHz ~ 1 GHz	Fig.73	P
		1 GHz ~ 2.5 GHz	Fig.74	P
		2.5 GHz ~ 7.5 GHz	Fig.75	P
		7.5 GHz ~ 10 GHz	Fig.76	P
		10 GHz ~ 15 GHz	Fig.77	P
		15 GHz ~ 20 GHz	Fig.78	P
		20 GHz ~ 26 GHz	Fig.79	P
	11	2.462 GHz	Fig.80	P
		30 MHz ~ 1 GHz	Fig.81	P
		1 GHz ~ 2.5 GHz	Fig.82	P
		2.5 GHz ~ 7.5 GHz	Fig.83	P
		7.5 GHz ~ 10 GHz	Fig.84	P
		10 GHz ~ 15 GHz	Fig.85	P
		15 GHz ~ 20 GHz	Fig.86	P
		20 GHz ~ 26 GHz	Fig.87	P

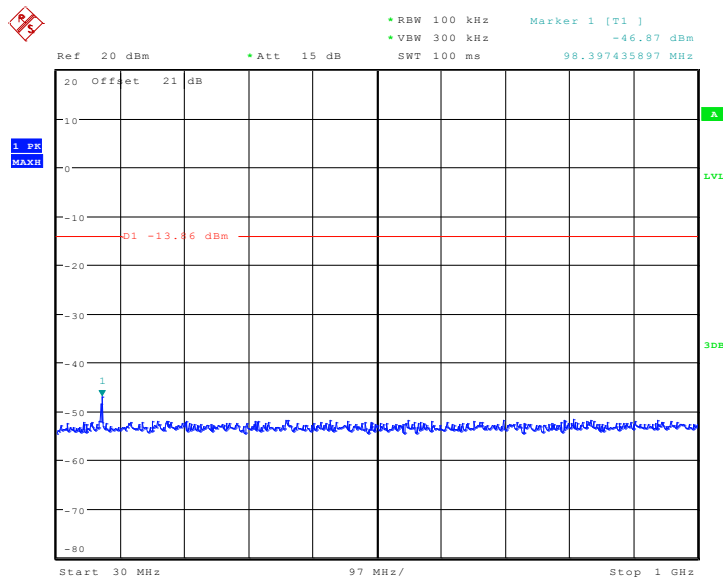
Conclusion: PASS

Test graphs as below:



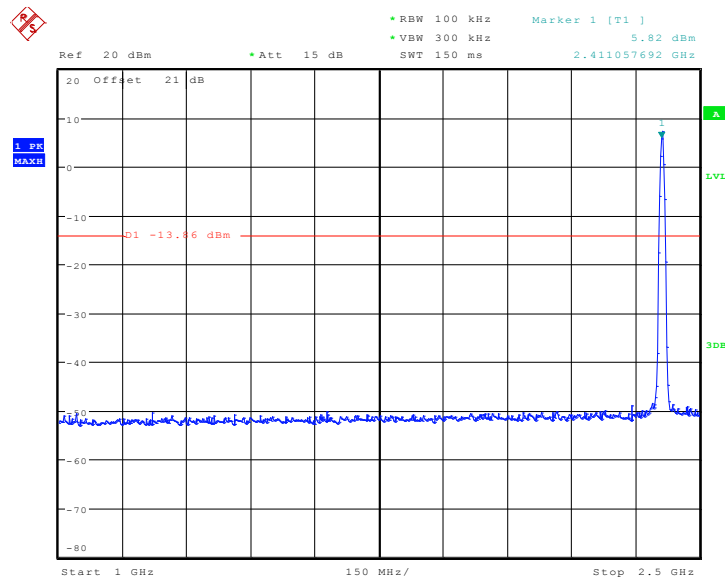
Date: 24.SEP.2013 20:09:37

Fig. 16 Conducted Spurious Emission (802.11b, Ch1, Center Frequency)



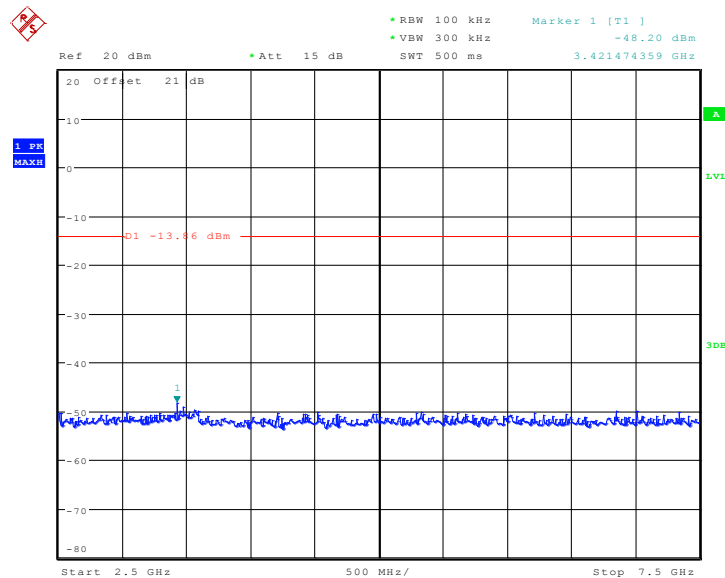
Date: 24.SEP.2013 20:10:08

Fig. 17 Conducted Spurious Emission (802.11b, Ch1, 30 MHz-1 GHz)



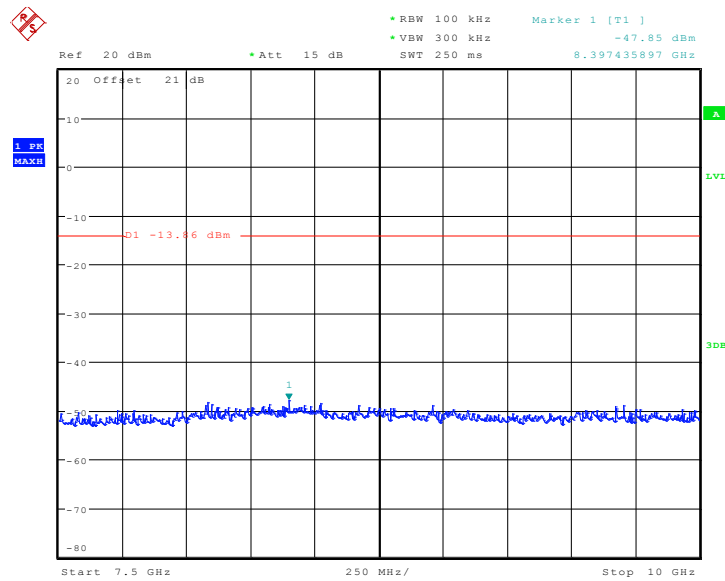
Date: 24.SEP.2013 20:12:58

Fig. 18 Conducted Spurious Emission (802.11b, Ch1, 1 GHz-2.5 GHz)



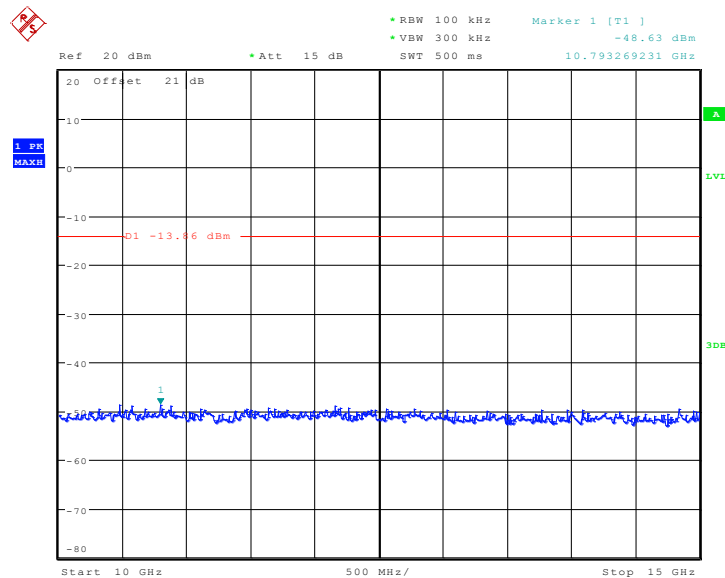
Date: 24.SEP.2013 20:13:15

Fig. 19 Conducted Spurious Emission (802.11b, Ch1, 2.5 GHz-7.5 GHz)



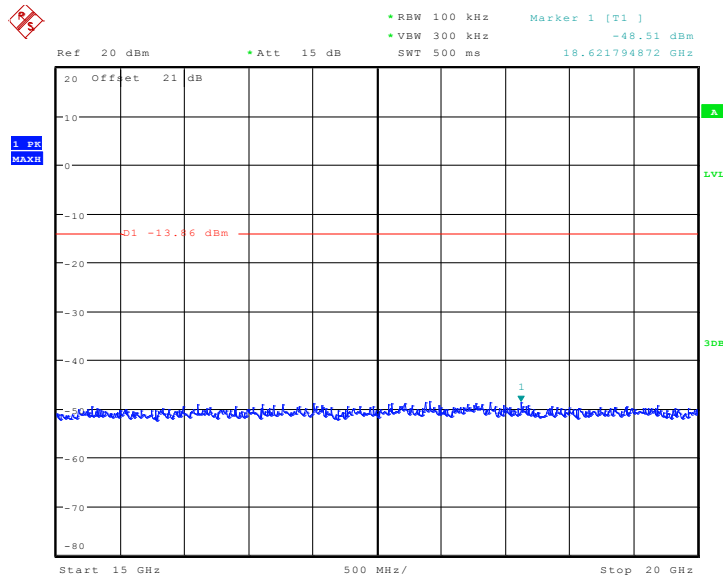
Date: 24.SEP.2013 20:13:33

Fig. 20 Conducted Spurious Emission (802.11b, Ch1, 7.5 GHz-10 GHz)



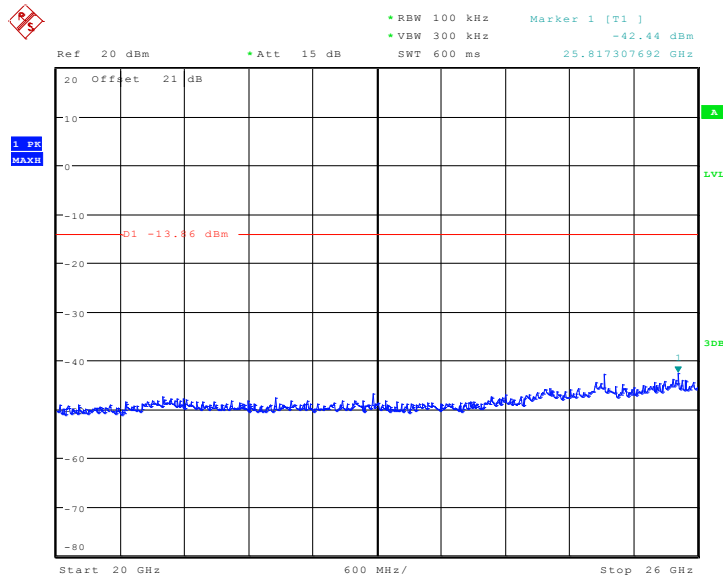
Date: 24.SEP.2013 20:13:51

Fig. 21 Conducted Spurious Emission (802.11b, Ch1, 10 GHz-15 GHz)



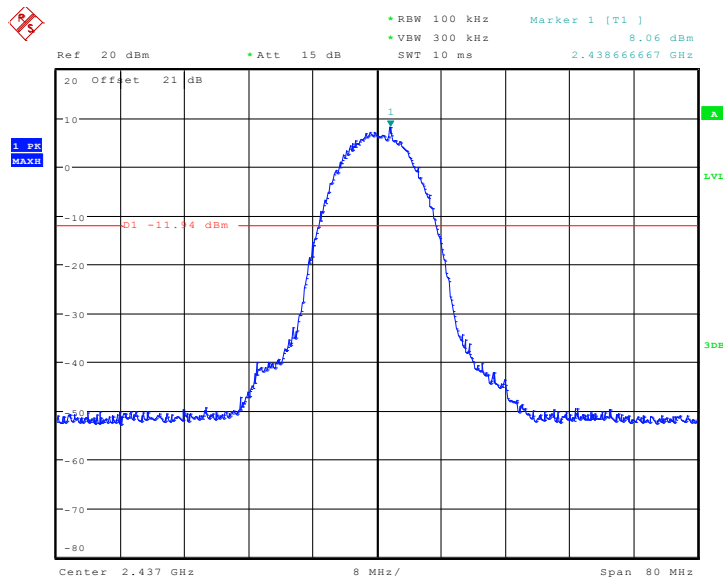
Date: 24.SEP.2013 20:14:09

Fig. 22 Conducted Spurious Emission (802.11b, Ch1, 15 GHz-20 GHz)



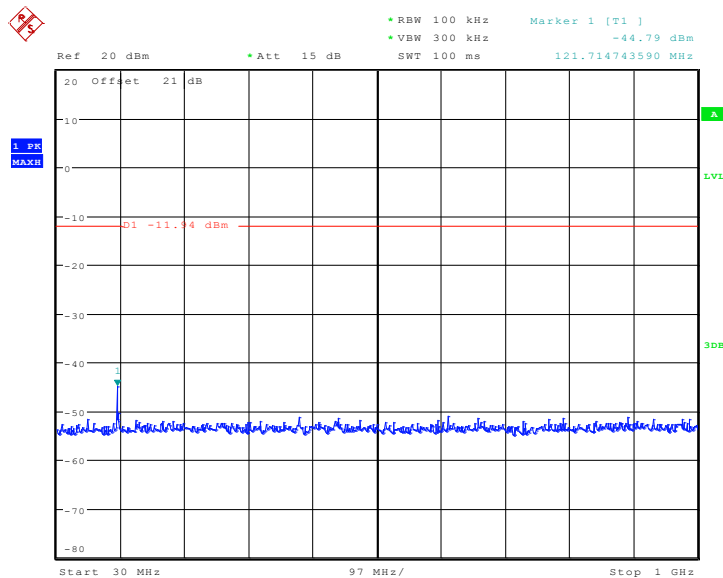
Date: 24.SEP.2013 20:14:40

Fig. 23 Conducted Spurious Emission (802.11b, Ch1, 20 GHz-26 GHz)



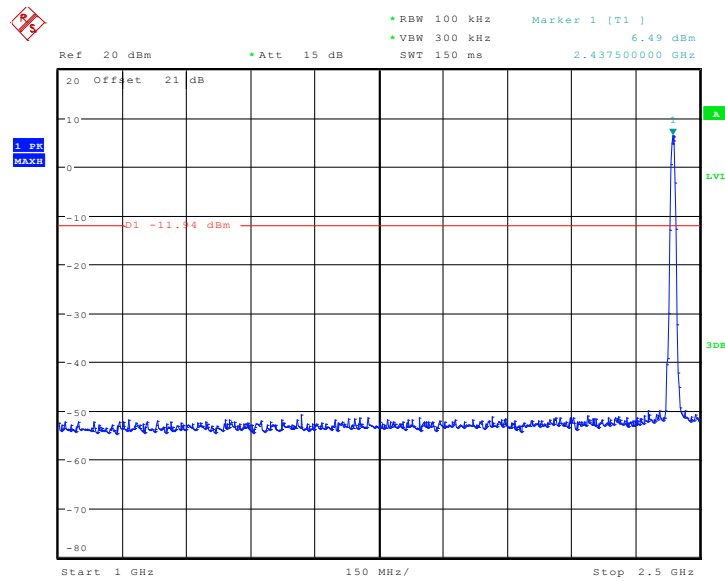
Date: 24.SEP.2013 20:24:10

Fig. 24 Conducted Spurious Emission (802.11b, Ch6, Center Frequency)



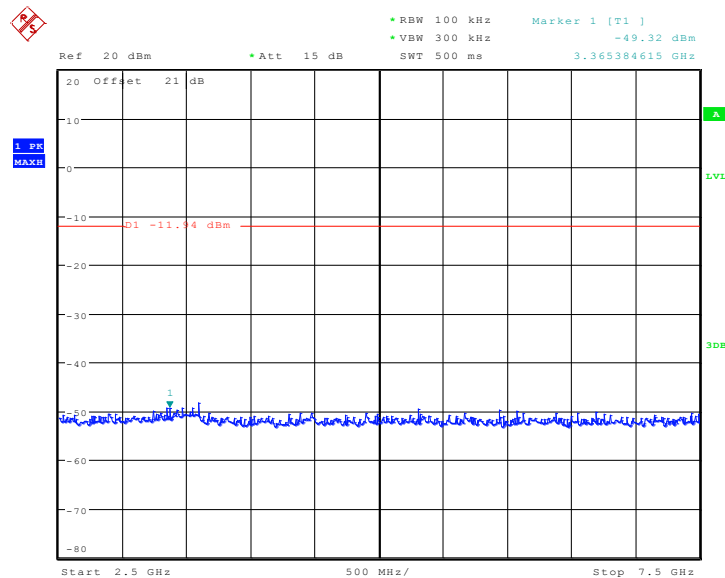
Date: 24.SEP.2013 20:24:27

Fig. 25 Conducted Spurious Emission (802.11b, Ch6, 30 MHz-1 GHz)



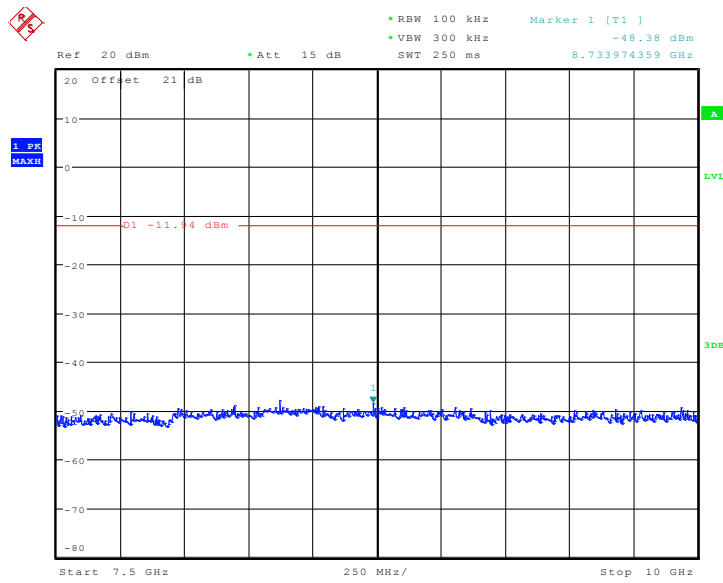
Date: 24.SEP.2013 20:24:43

Fig. 26 Conducted Spurious Emission (802.11b, Ch6, 1 GHz-2.5 GHz)



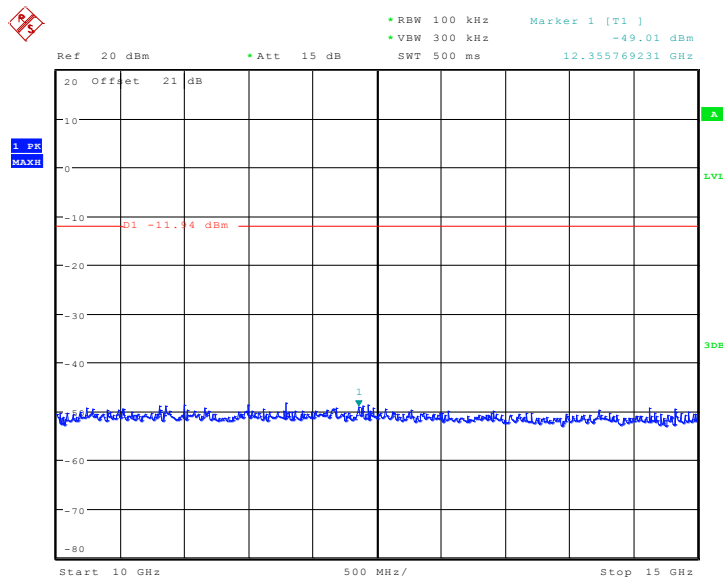
Date: 24.SEP.2013 20:25:01

Fig. 27 Conducted Spurious Emission (802.11b, Ch6, 2.5 GHz-7.5 GHz)



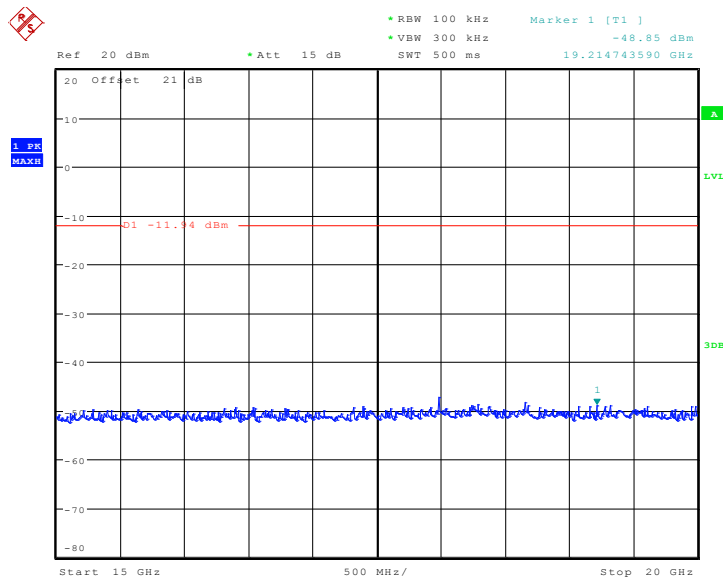
Date: 24.SEP.2013 20:25:18

Fig. 28 Conducted Spurious Emission (802.11b, Ch6, 7.5 GHz-10 GHz)



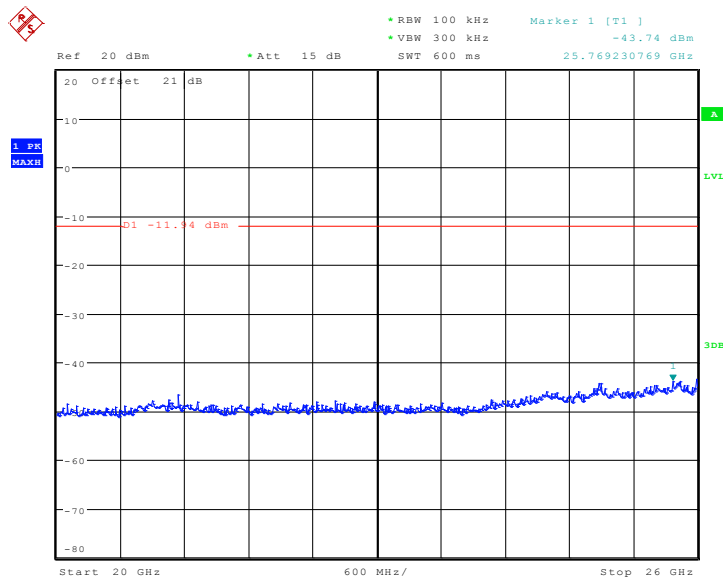
Date: 24.SEP.2013 20:25:34

Fig. 29 Conducted Spurious Emission (802.11b, Ch6, 10 GHz-15 GHz)



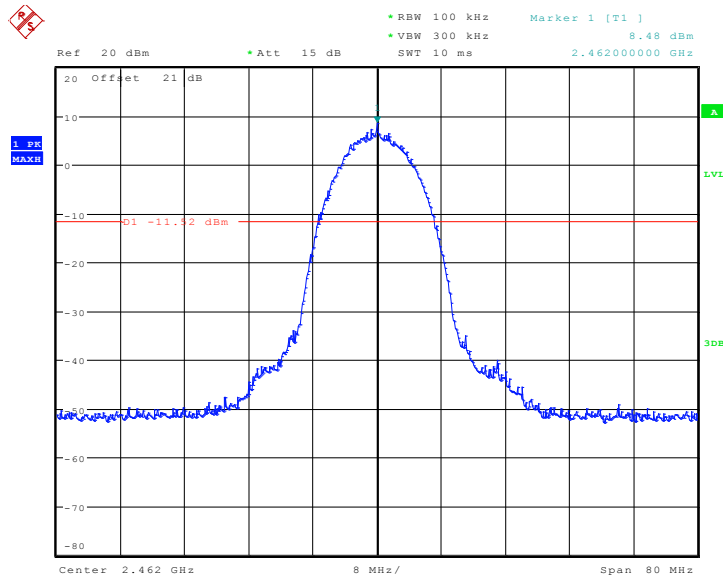
Date: 24.SEP.2013 20:25:51

Fig. 30 Conducted Spurious Emission (802.11b, Ch6, 15 GHz-20 GHz)



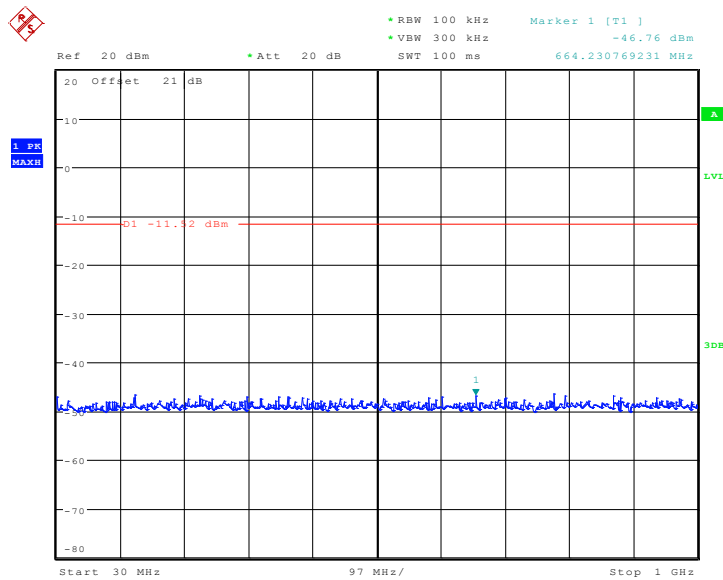
Date: 24.SEP.2013 20:26:18

Fig. 31 Conducted Spurious Emission (802.11b, Ch6, 20 GHz-26 GHz)



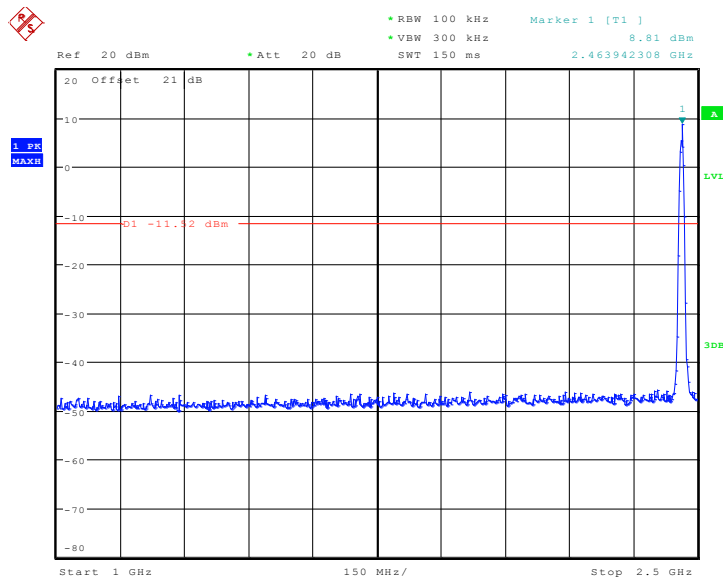
Date: 24.SEP.2013 20:27:30

Fig. 32 Conducted Spurious Emission (802.11b, Ch11, Center Frequency)



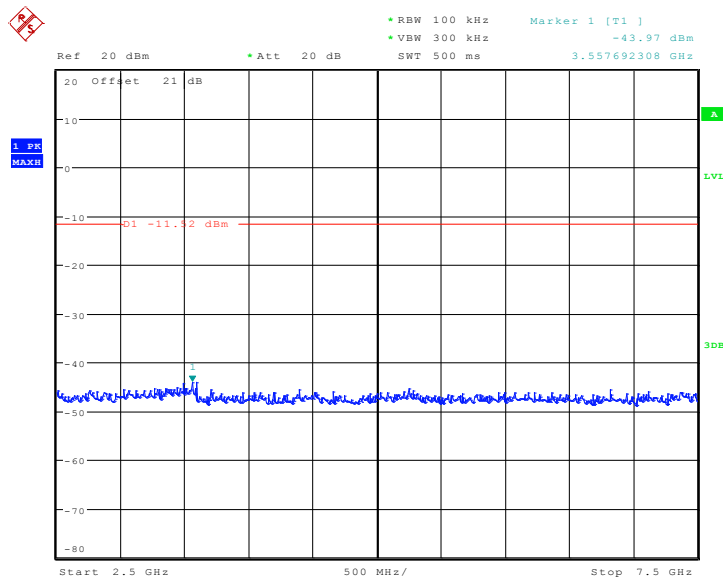
Date: 24.SEP.2013 20:27:55

Fig. 33 Conducted Spurious Emission (802.11b, Ch11, 30 MHz-1 GHz)



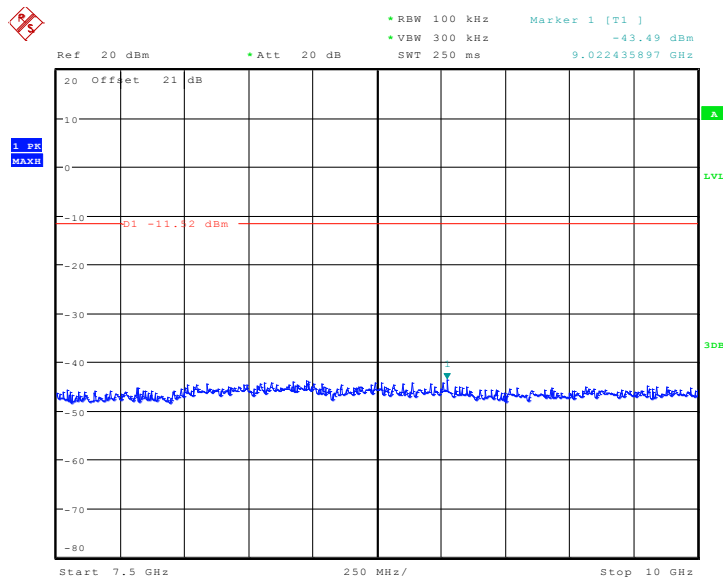
Date: 24.SEP.2013 20:28:11

Fig. 34 Conducted Spurious Emission (802.11b, Ch11, 1 GHz-2.5 GHz)



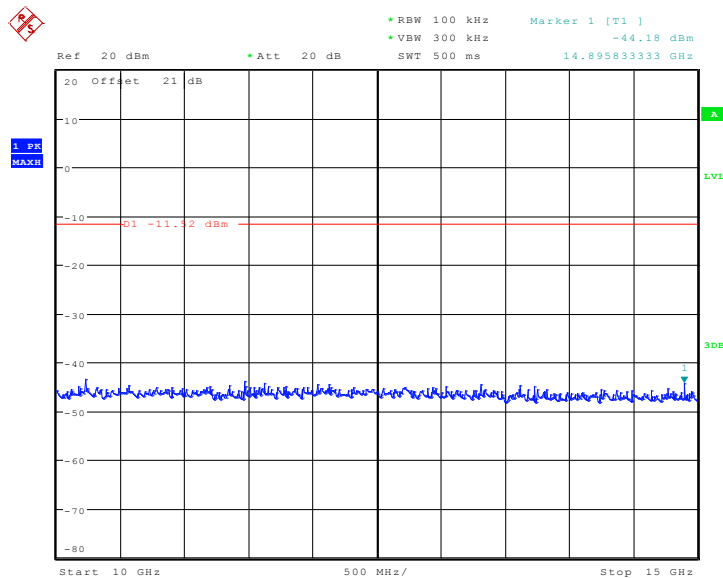
Date: 24.SEP.2013 20:28:29

Fig. 35 Conducted Spurious Emission (802.11b, Ch11, 2.5 GHz-7.5 GHz)



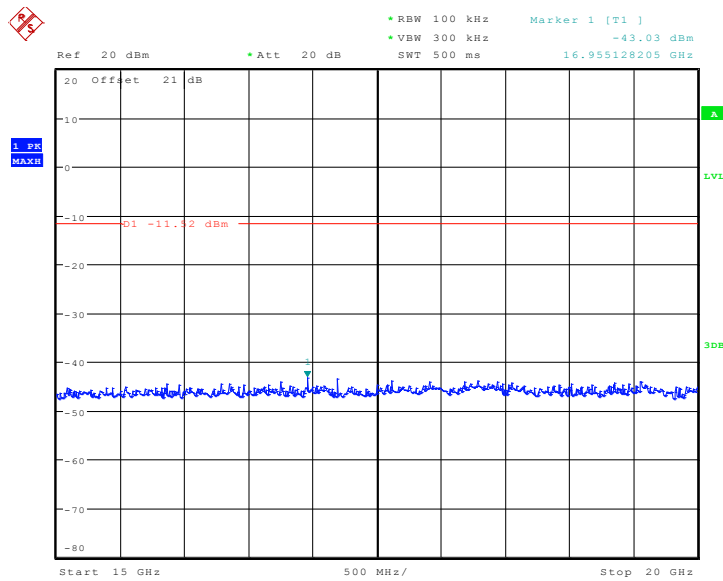
Date: 24.SEP.2013 20:28:48

Fig. 36 Conducted Spurious Emission (802.11b, Ch11, 7.5 GHz-10 GHz)



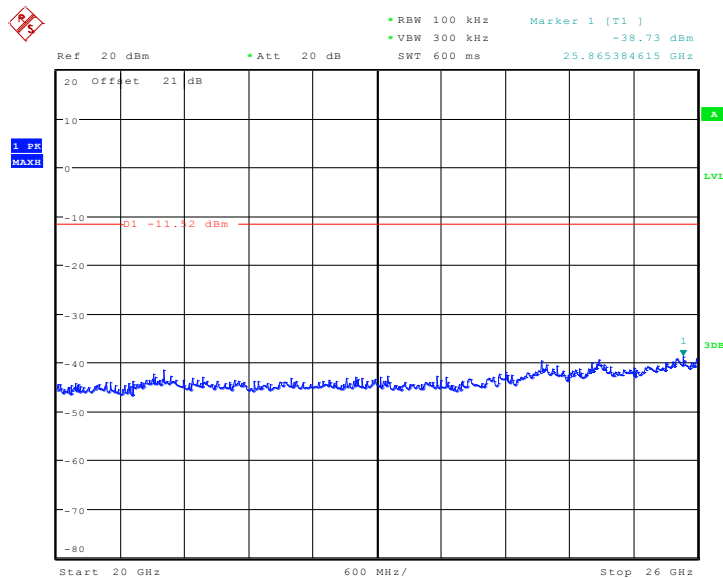
Date: 24.SEP.2013 20:29:07

Fig. 37 Conducted Spurious Emission (802.11b, Ch11, 10 GHz-15 GHz)



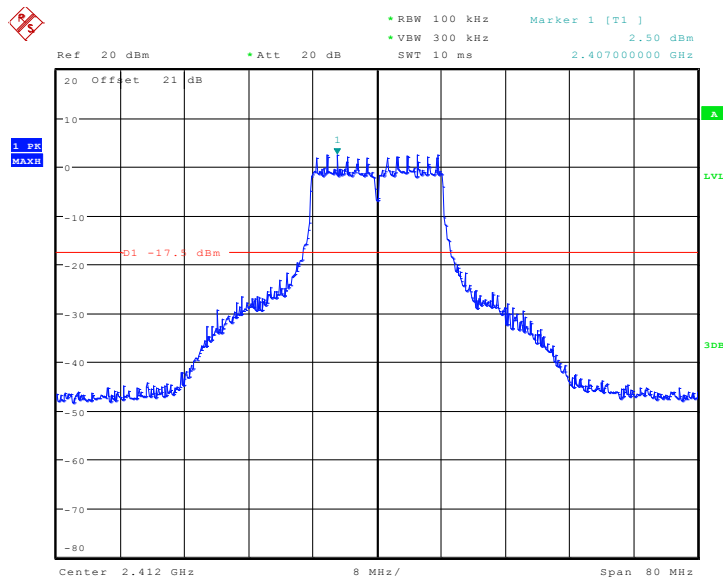
Date: 24.SEP.2013 20:29:26

Fig. 38 Conducted Spurious Emission (802.11b, Ch11, 15 GHz-20 GHz)



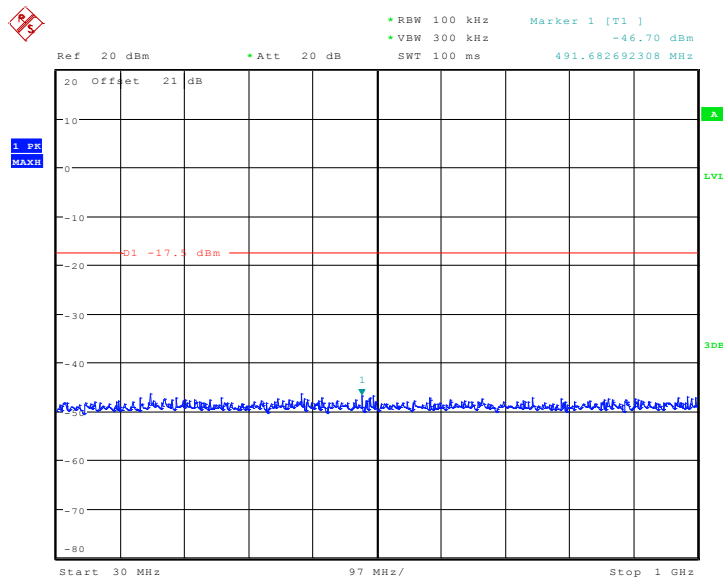
Date: 24.SEP.2013 20:29:57

Fig. 39 Conducted Spurious Emission (802.11b, Ch11, 20 GHz-26 GHz)



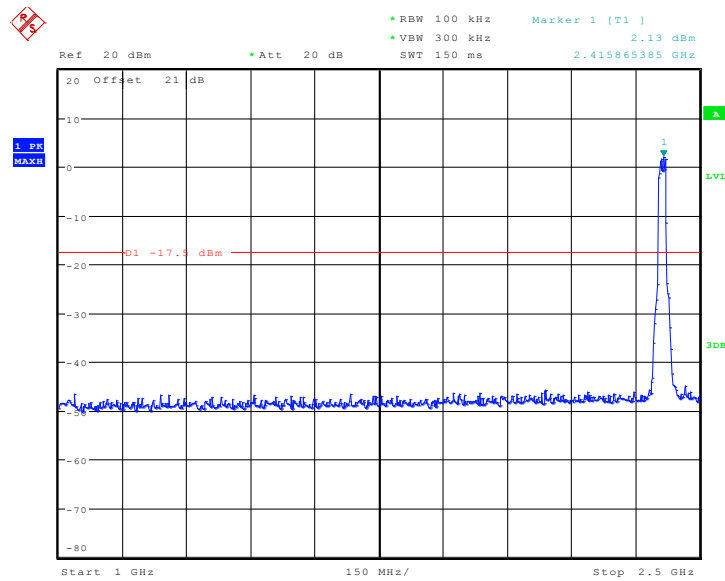
Date: 24.SEP.2013 20:32:07

Fig. 40 Conducted Spurious Emission (802.11g, Ch1, Center Frequency)



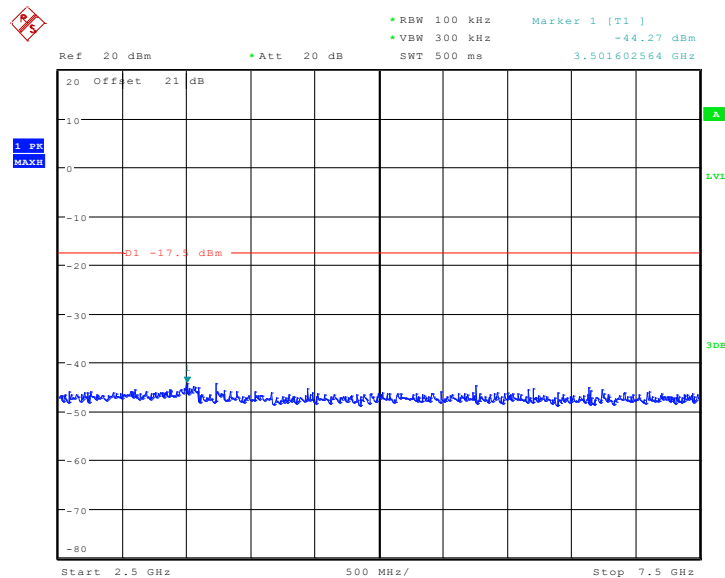
Date: 24.SEP.2013 20:32:22

Fig. 41 Conducted Spurious Emission (802.11g, Ch1, 30 MHz-1 GHz)



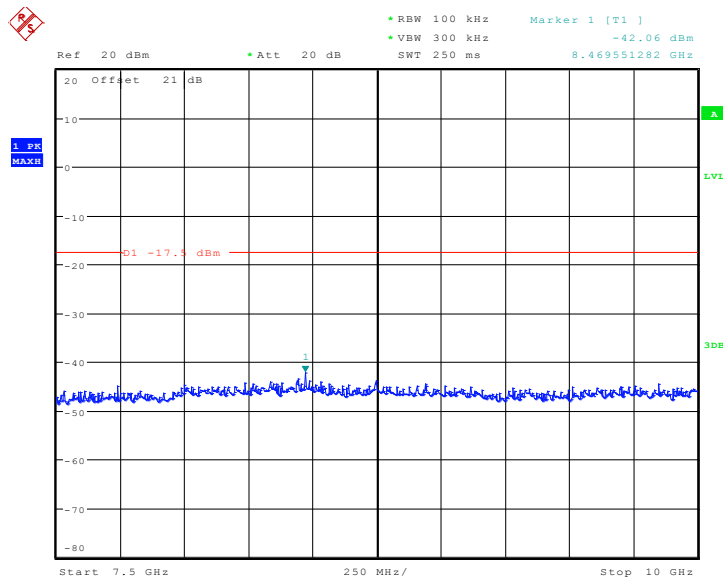
Date: 24.SEP.2013 20:32:38

Fig. 42 Conducted Spurious Emission (802.11g, Ch1, 1 GHz-2.5 GHz)



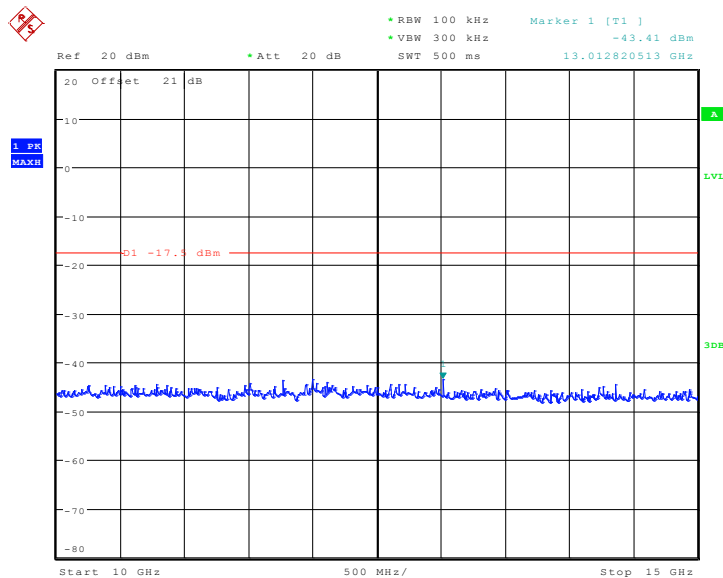
Date: 24.SEP.2013 20:32:56

Fig. 43 Conducted Spurious Emission (802.11g, Ch1, 2.5 GHz-7.5 GHz)



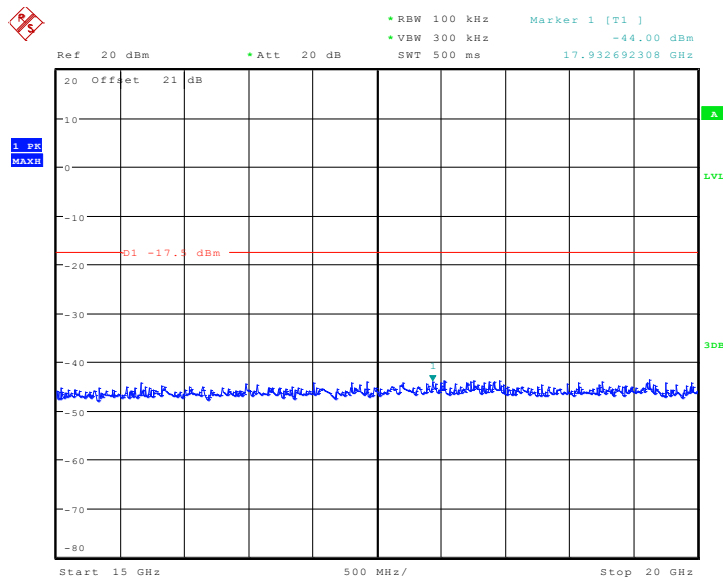
Date: 24.SEP.2013 20:33:14

Fig. 44 Conducted Spurious Emission (802.11g, Ch1, 7.5 GHz-10 GHz)



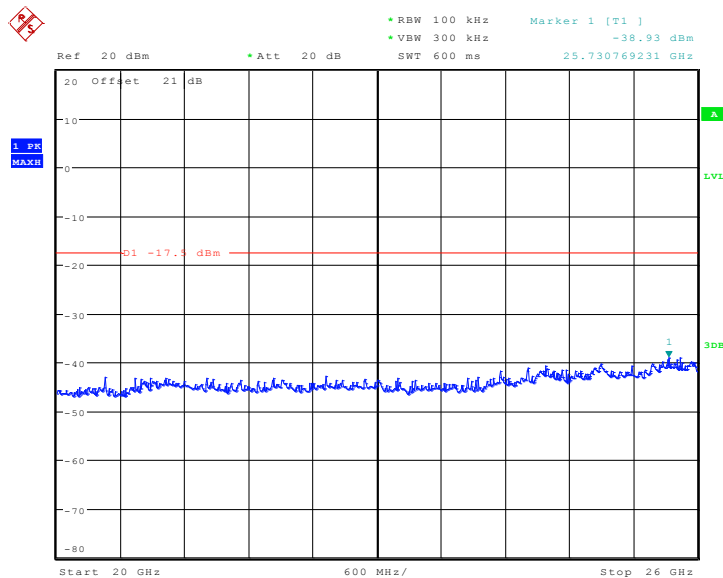
Date: 24.SEP.2013 20:33:31

Fig. 45 Conducted Spurious Emission (802.11g, Ch1, 10 GHz-15 GHz)



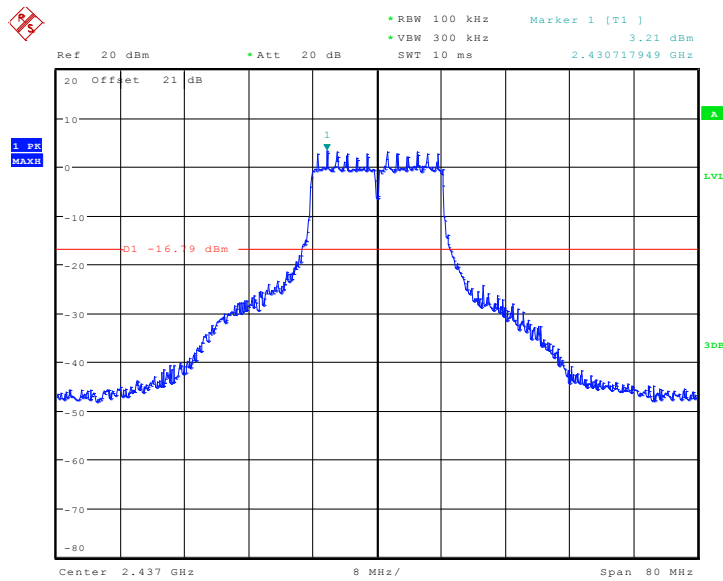
Date: 24.SEP.2013 20:33:48

Fig. 46 Conducted Spurious Emission (802.11g, Ch1, 15 GHz-20 GHz)



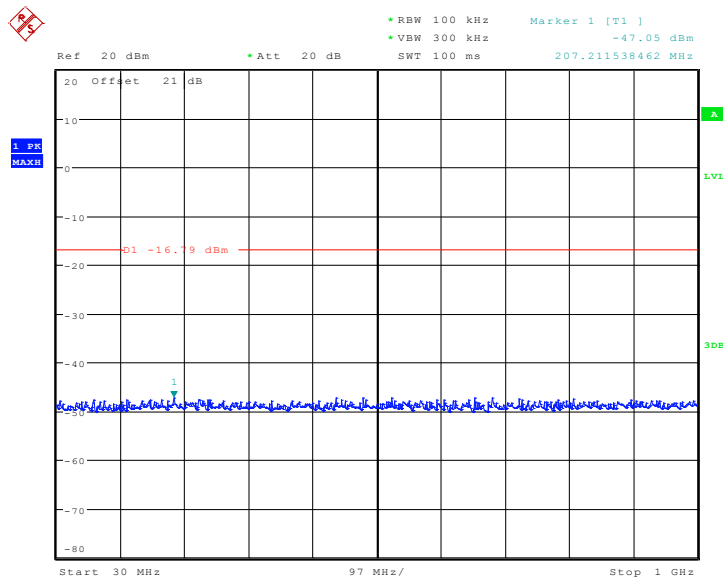
Date: 24.SEP.2013 20:34:04

Fig. 47 Conducted Spurious Emission (802.11g, Ch1, 20 GHz-26 GHz)



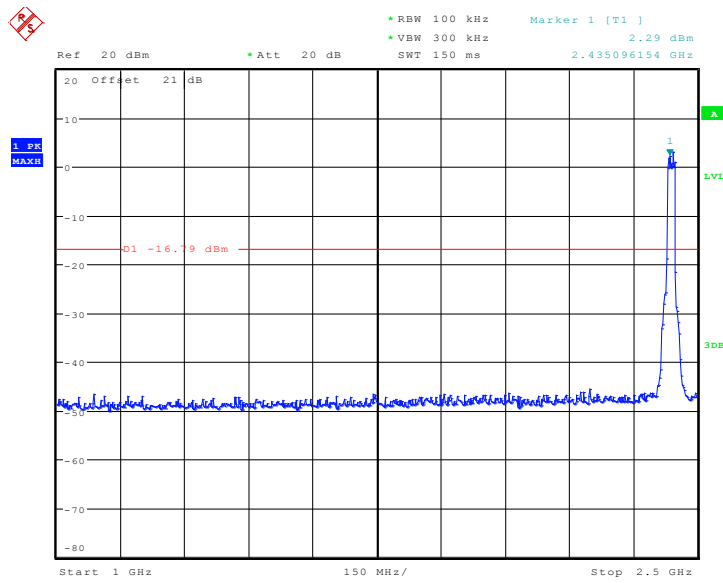
Date: 24.SEP.2013 20:34:53

Fig. 48 Conducted Spurious Emission (802.11g, Ch6, Center Frequency)



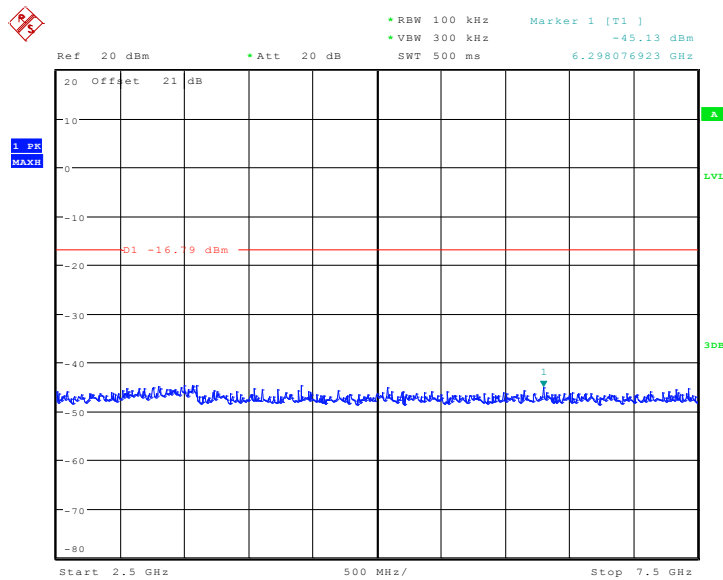
Date: 24.SEP.2013 20:35:11

Fig. 49 Conducted Spurious Emission (802.11g, Ch6, 30 MHz-1 GHz)



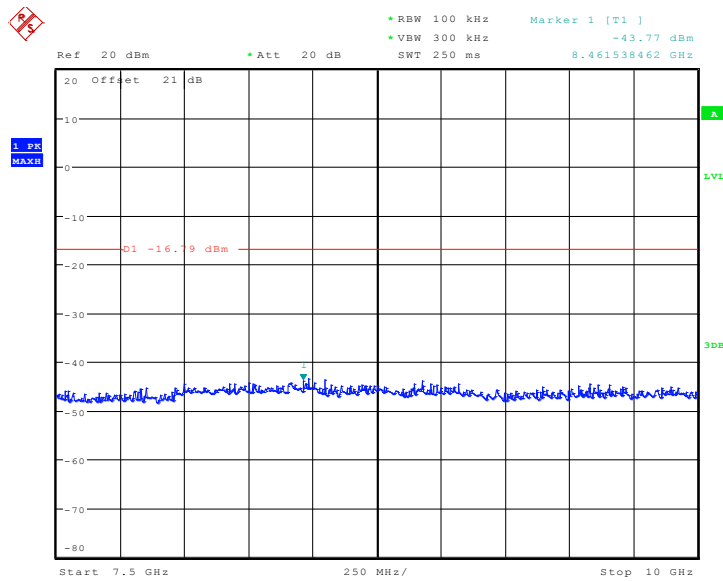
Date: 24.SEP.2013 20:35:26

Fig. 50 Conducted Spurious Emission (802.11g, Ch6, 1 GHz-2.5 GHz)



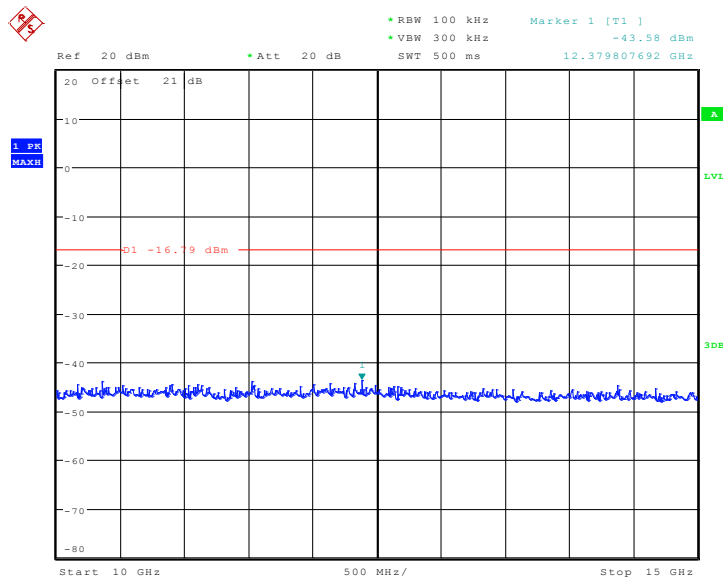
Date: 24.SEP.2013 20:35:45

Fig. 51 Conducted Spurious Emission (802.11g, Ch6, 2.5 GHz-7.5 GHz)



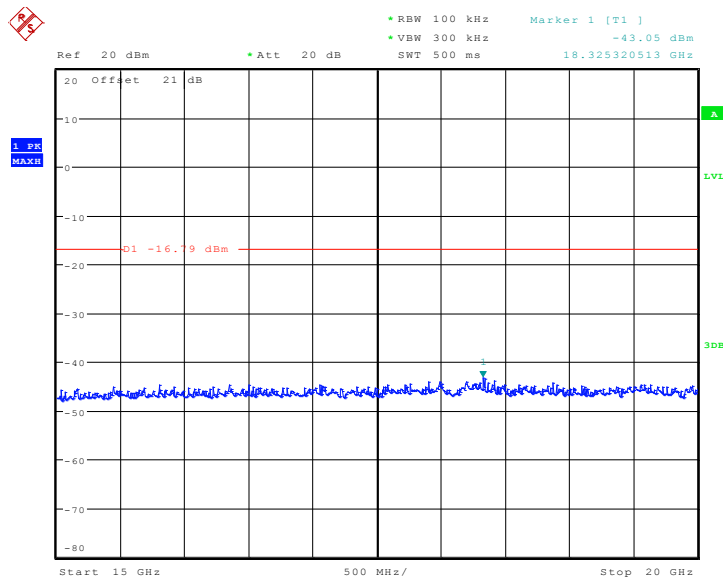
Date: 24.SEP.2013 20:36:02

Fig. 52 Conducted Spurious Emission (802.11g, Ch6, 7.5 GHz-10 GHz)



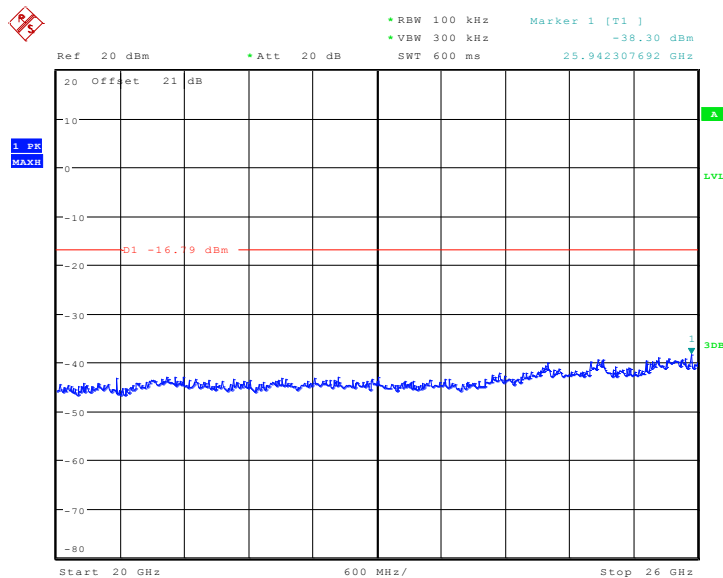
Date: 24.SEP.2013 20:36:19

Fig. 53 Conducted Spurious Emission (802.11g, Ch6, 10 GHz-15 GHz)



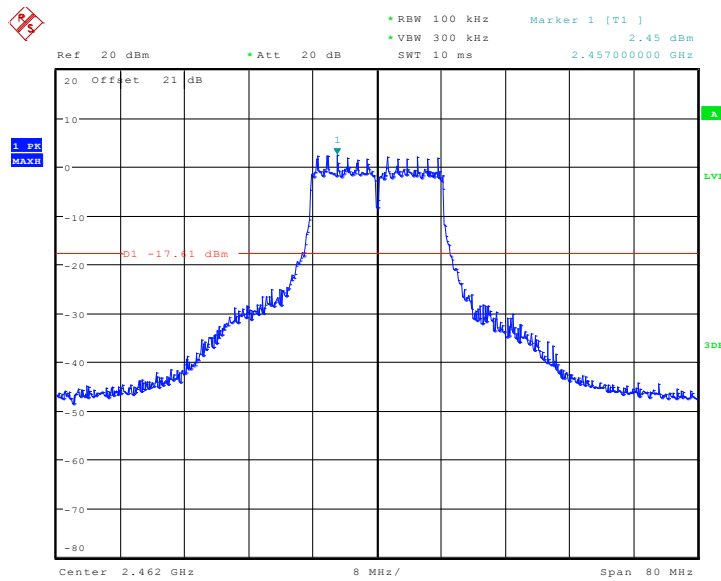
Date: 24.SEP.2013 20:36:35

Fig. 54 Conducted Spurious Emission (802.11g, Ch6, 15 GHz-20 GHz)



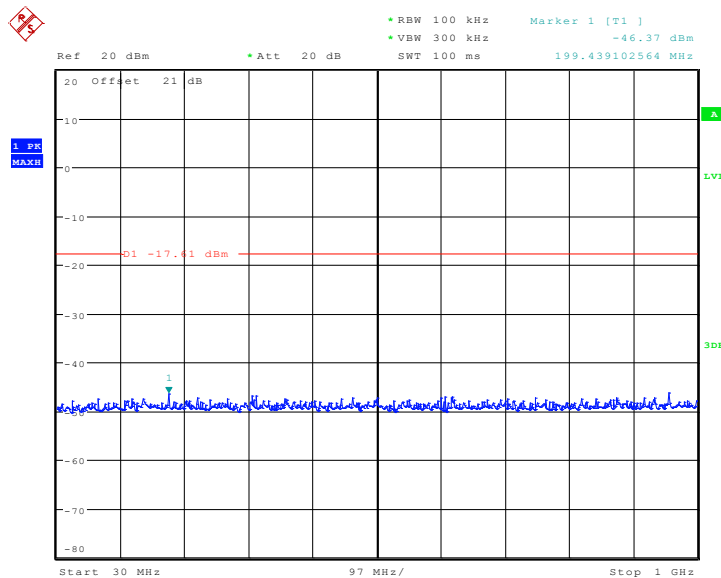
Date: 24.SEP.2013 20:37:07

Fig. 55 Conducted Spurious Emission (802.11g, Ch6, 20 GHz-26 GHz)



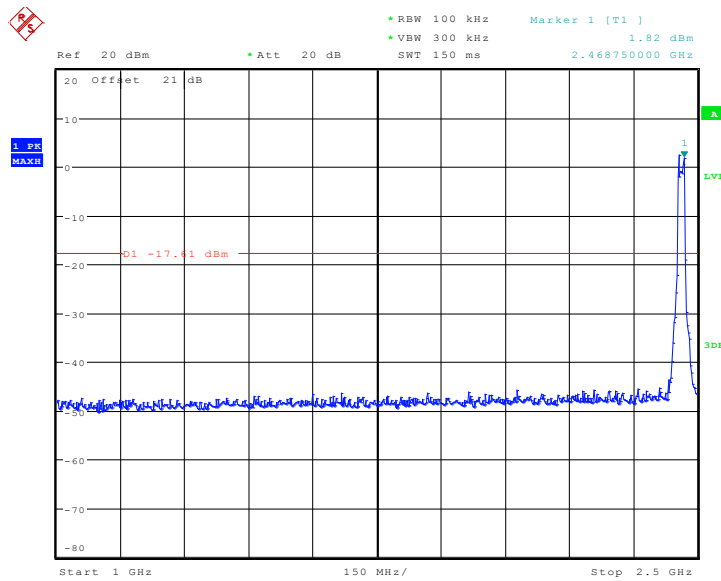
Date: 24.SEP.2013 20:37:57

Fig. 56 Conducted Spurious Emission (802.11g, Ch11, Center Frequency)



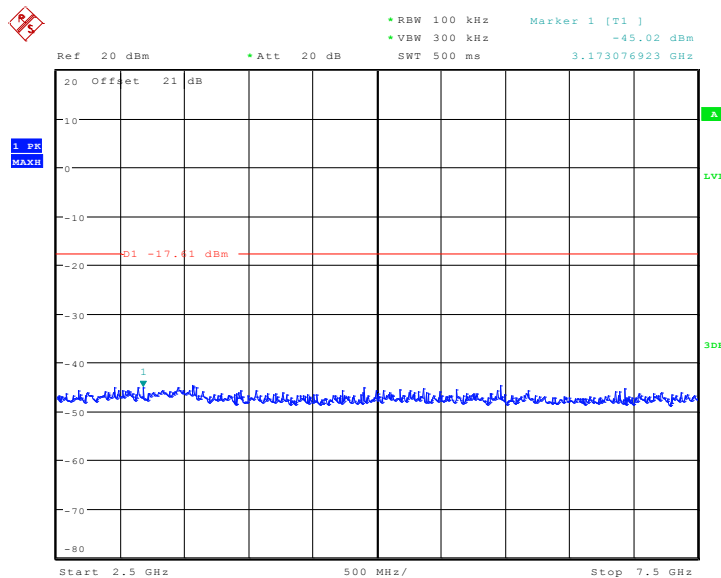
Date: 24.SEP.2013 20:38:16

Fig. 57 Conducted Spurious Emission (802.11g, Ch11, 30 MHz-1 GHz)



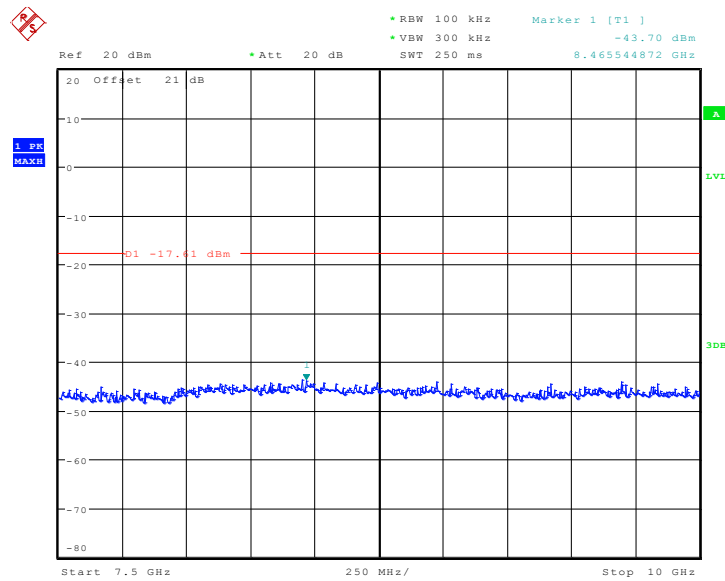
Date: 24.SEP.2013 20:38:32

Fig. 58 Conducted Spurious Emission (802.11g, Ch11, 1 GHz-2.5 GHz)



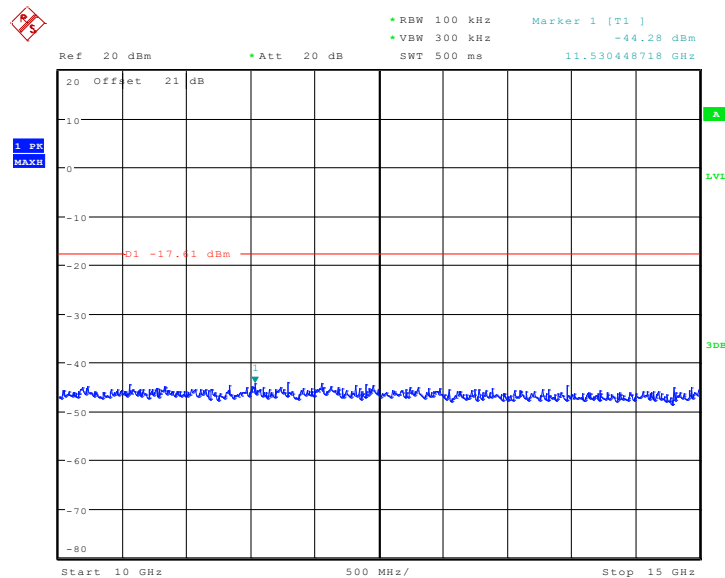
Date: 24.SEP.2013 20:38:49

Fig. 59 Conducted Spurious Emission (802.11g, Ch11, 2.5 GHz-7.5 GHz)



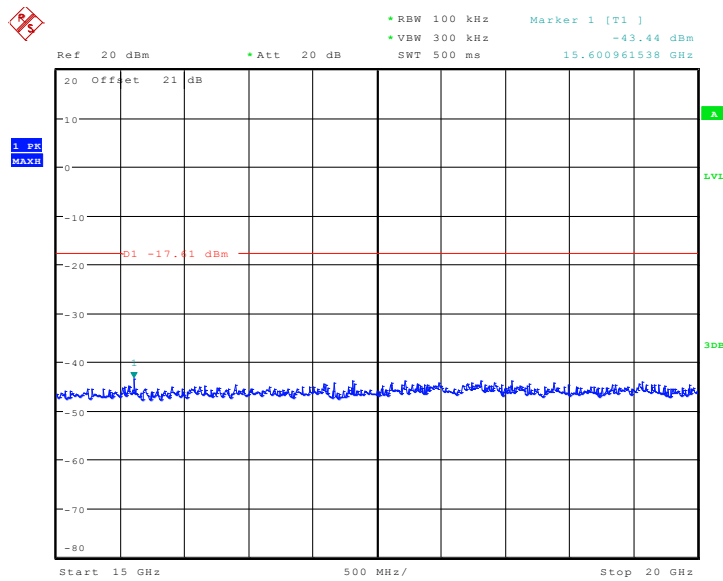
Date: 24.SEP.2013 20:39:10

Fig. 60 Conducted Spurious Emission (802.11g, Ch11, 7.5 GHz-10 GHz)



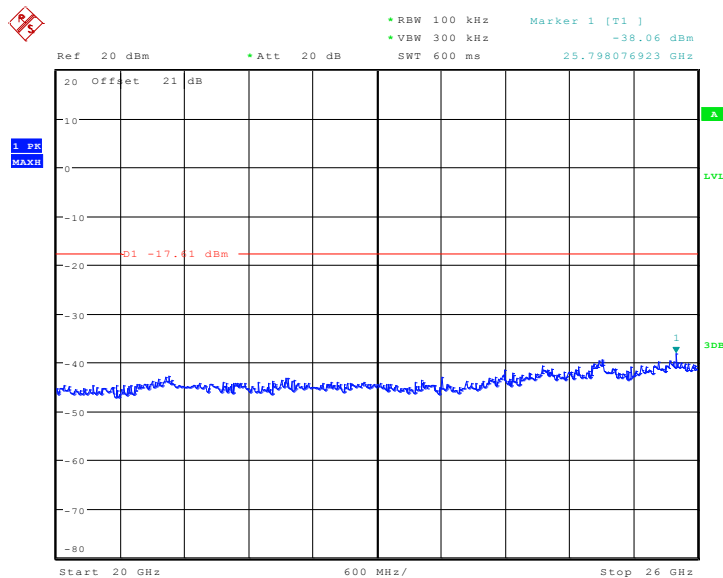
Date: 24.SEP.2013 20:39:27

Fig. 61 Conducted Spurious Emission (802.11g, Ch11, 10 GHz-15 GHz)



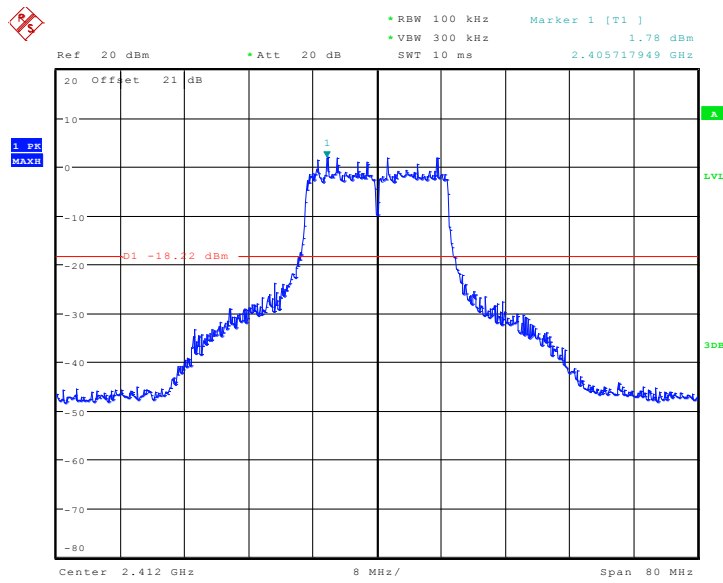
Date: 24.SEP.2013 20:39:44

Fig. 62 Conducted Spurious Emission (802.11g, Ch11, 15 GHz-20 GHz)



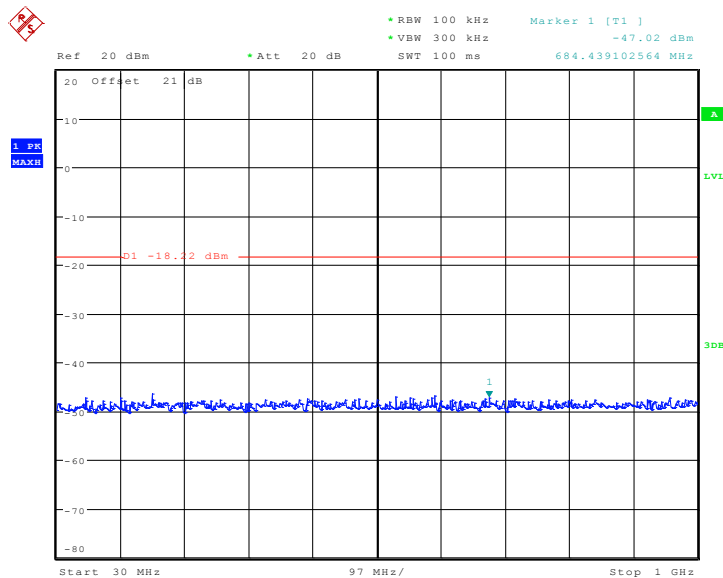
Date: 24.SEP.2013 20:40:02

Fig. 63 Conducted Spurious Emission (802.11g, Ch11, 20 GHz-26 GHz)



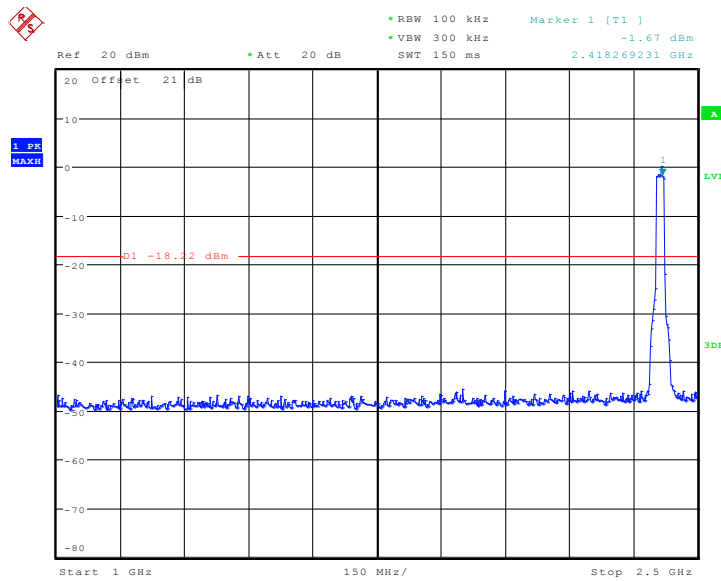
Date: 24.SEP.2013 20:40:50

Fig. 64 Conducted Spurious Emission (802.11n-HT20, Ch1, Center Frequency)



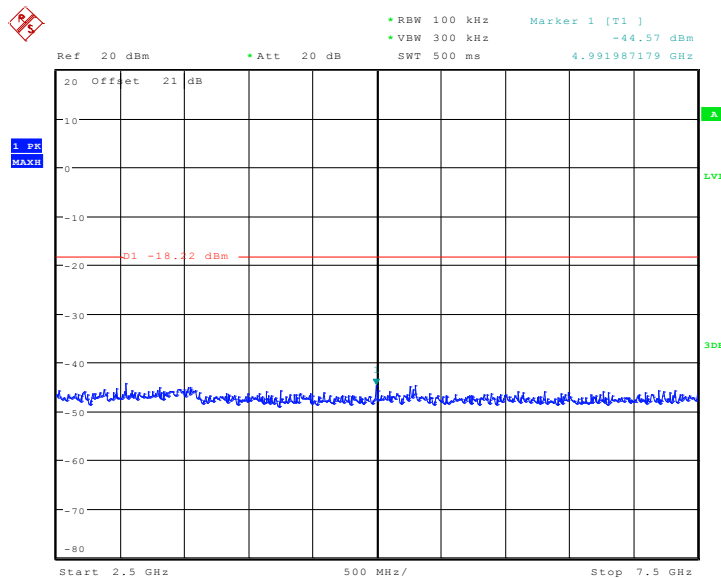
Date: 24.SEP.2013 20:41:09

Fig. 65 Conducted Spurious Emission (802.11n-HT20, Ch1, 30 MHz-1 GHz)



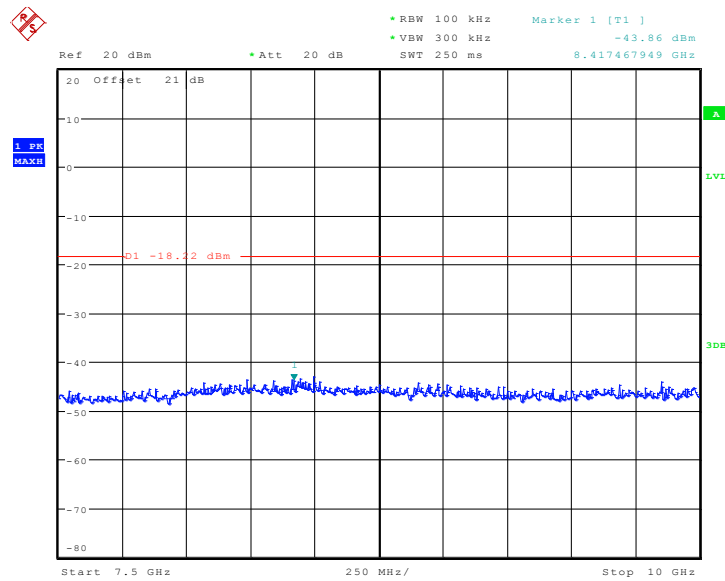
Date: 24.SEP.2013 20:41:28

Fig. 66 Conducted Spurious Emission (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)



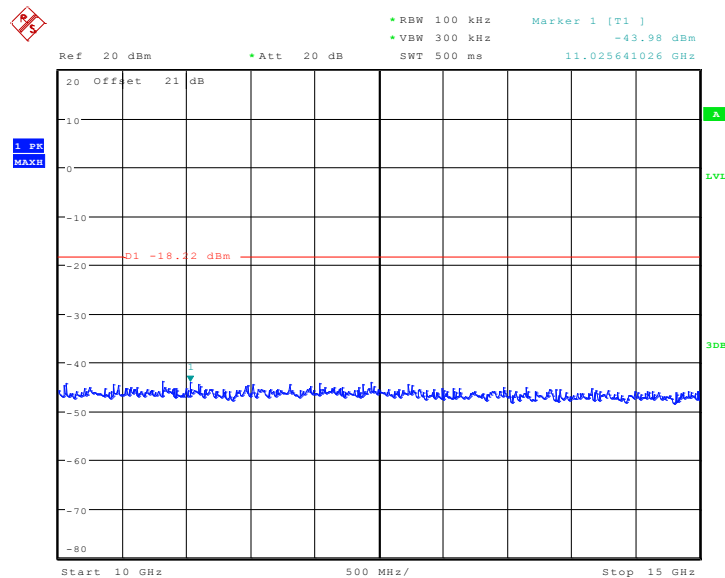
Date: 24.SEP.2013 20:41:45

Fig. 67 Conducted Spurious Emission (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)



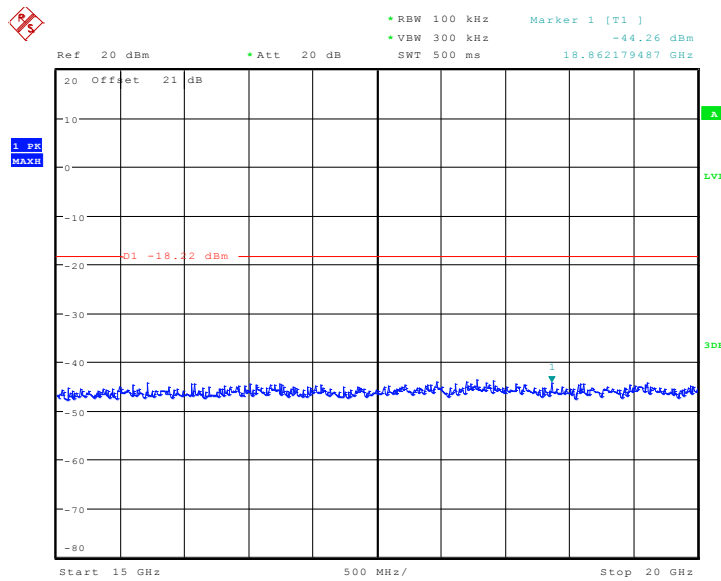
Date: 24.SEP.2013 20:42:00

Fig. 68 Conducted Spurious Emission (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)



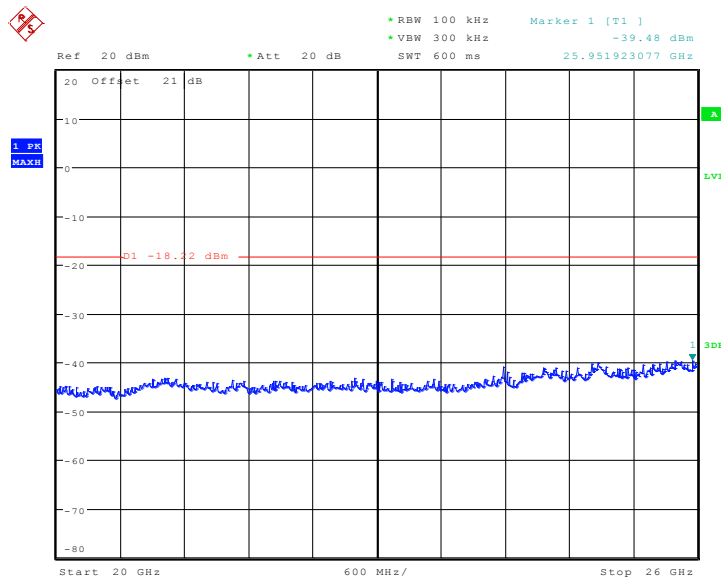
Date: 24.SEP.2013 20:42:17

Fig. 69 Conducted Spurious Emission (802.11n-HT20, Ch1, 10 GHz-15 GHz)



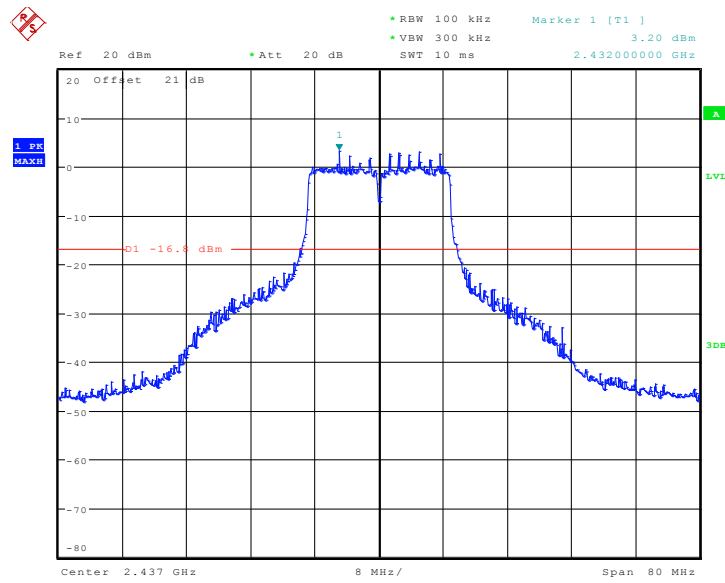
Date: 24.SEP.2013 20:42:34

Fig. 70 Conducted Spurious Emission (802.11n-HT20, Ch1, 15 GHz-20 GHz)



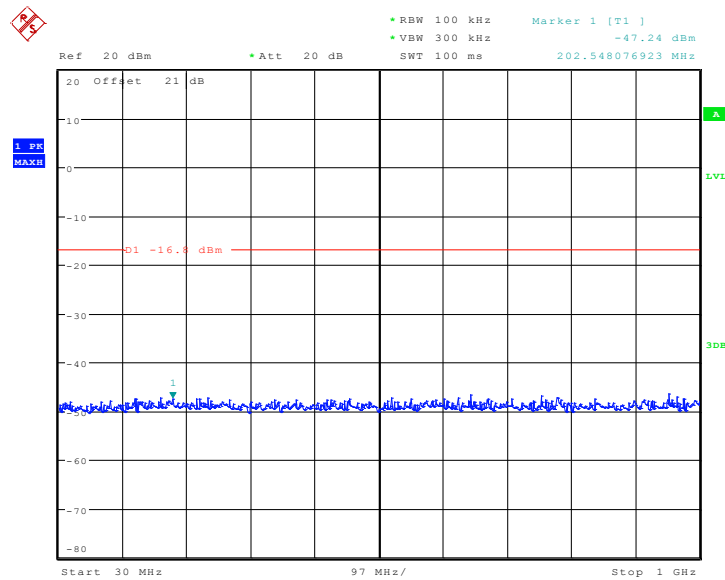
Date: 24.SEP.2013 20:42:51

Fig. 71 Conducted Spurious Emission (802.11n-HT20, Ch1, 20 GHz-26 GHz)



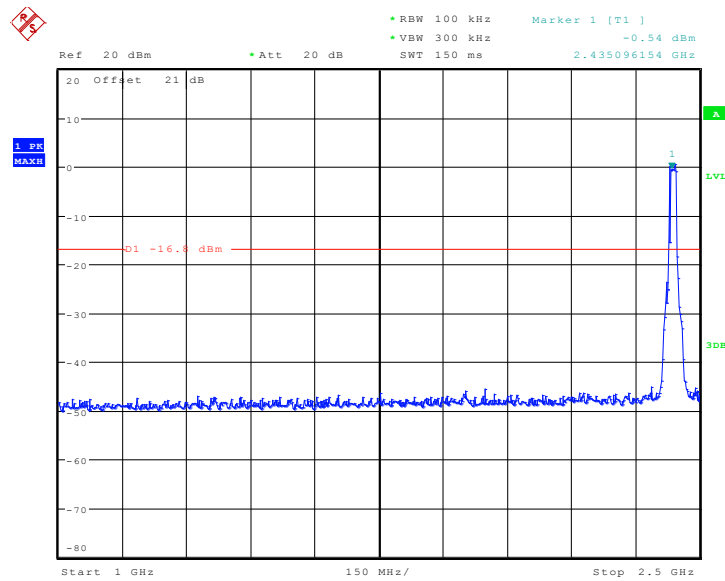
Date: 24.SEP.2013 20:43:43

Fig. 72 Conducted Spurious Emission (802.11n-HT20, Ch6, Center Frequency)



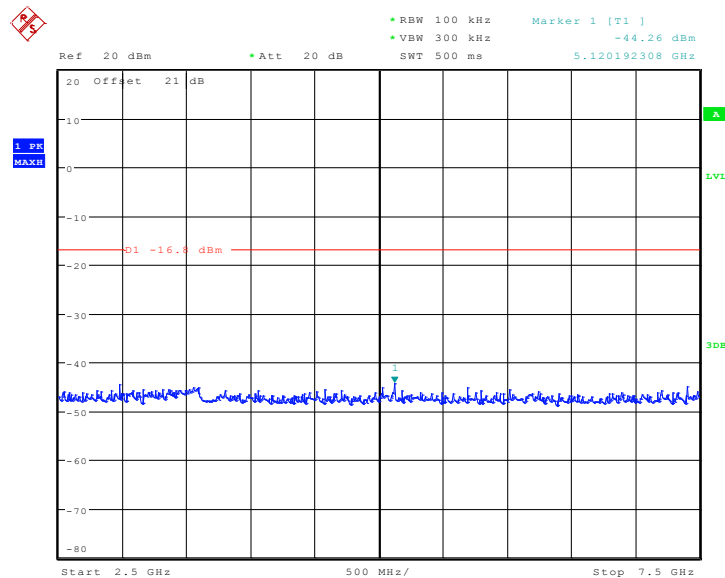
Date: 24.SEP.2013 20:43:59

Fig. 73 Conducted Spurious Emission (802.11n-HT20, Ch6, 30 MHz-1 GHz)



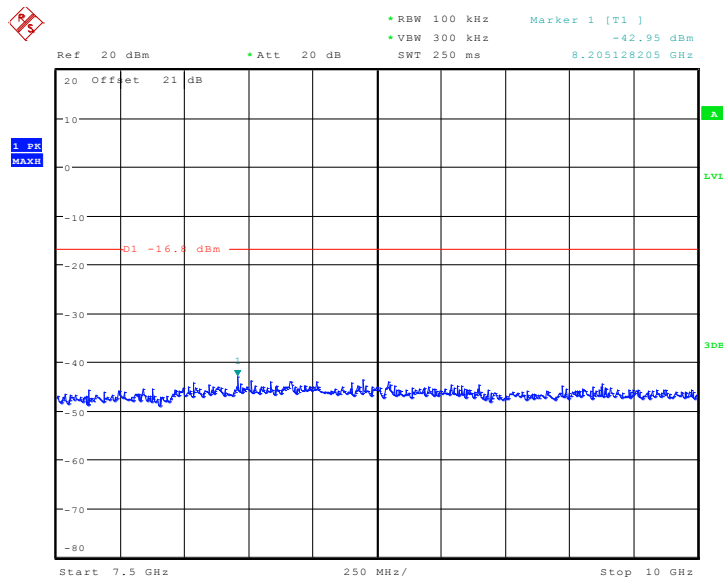
Date: 24.SEP.2013 20:44:14

Fig. 74 Conducted Spurious Emission (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)



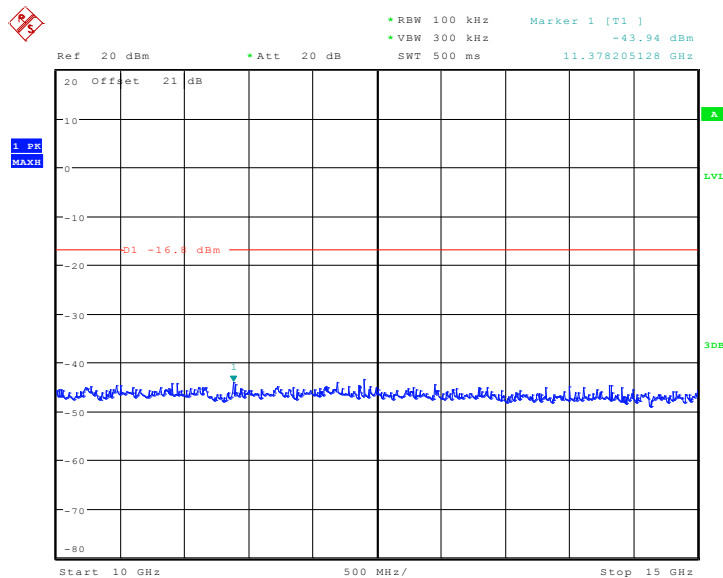
Date: 24.SEP.2013 20:44:31

Fig. 75 Conducted Spurious Emission (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)



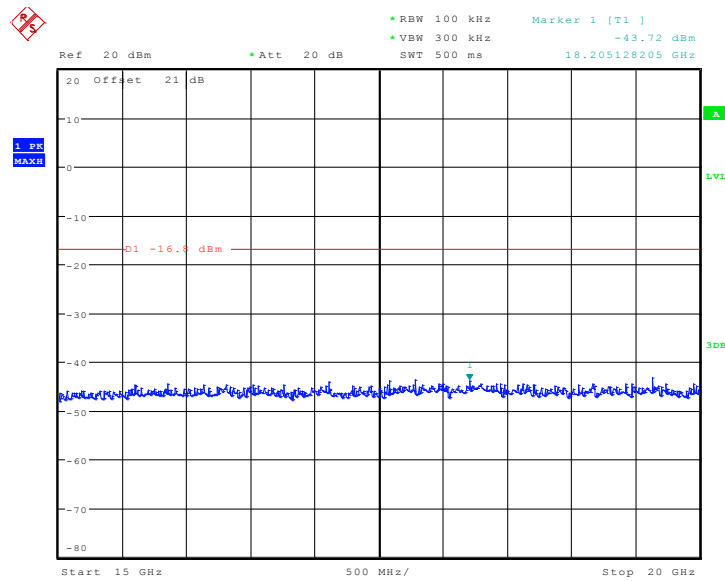
Date: 24.SEP.2013 20:44:47

Fig. 76 Conducted Spurious Emission (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)



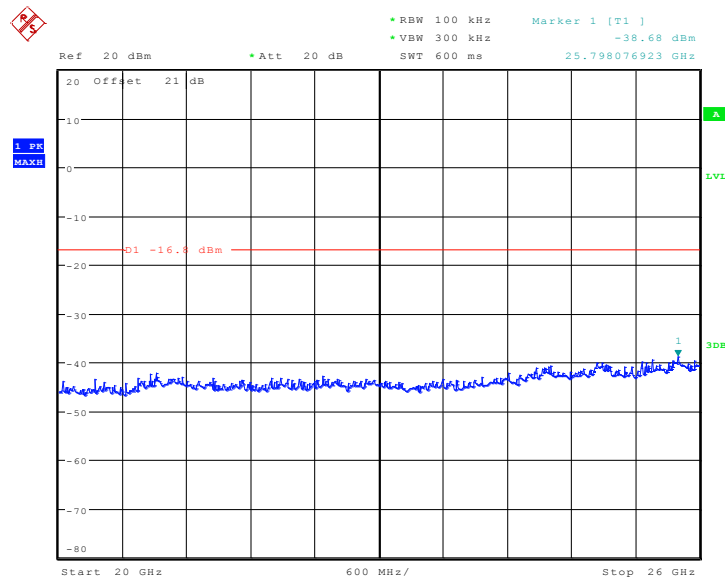
Date: 24.SEP.2013 20:45:01

Fig. 77 Conducted Spurious Emission (802.11n-HT20, Ch6, 10 GHz-15 GHz)



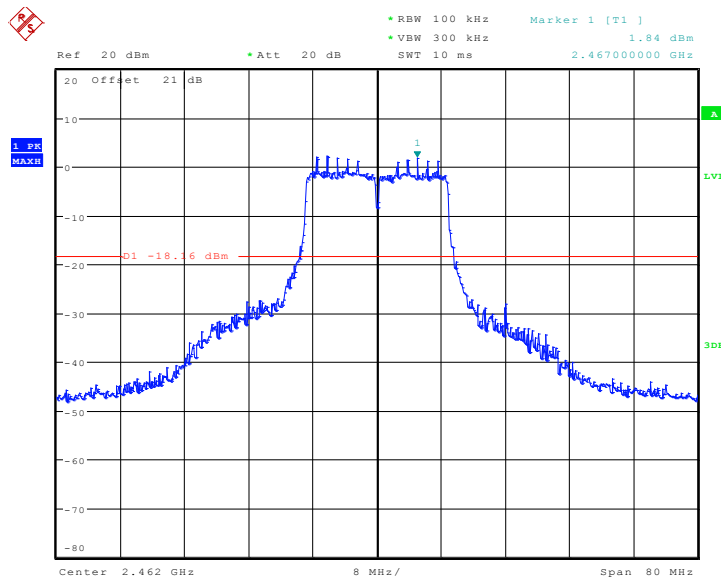
Date: 24.SEP.2013 20:45:16

Fig. 78 Conducted Spurious Emission (802.11n-HT20, Ch6, 15 GHz-20 GHz)



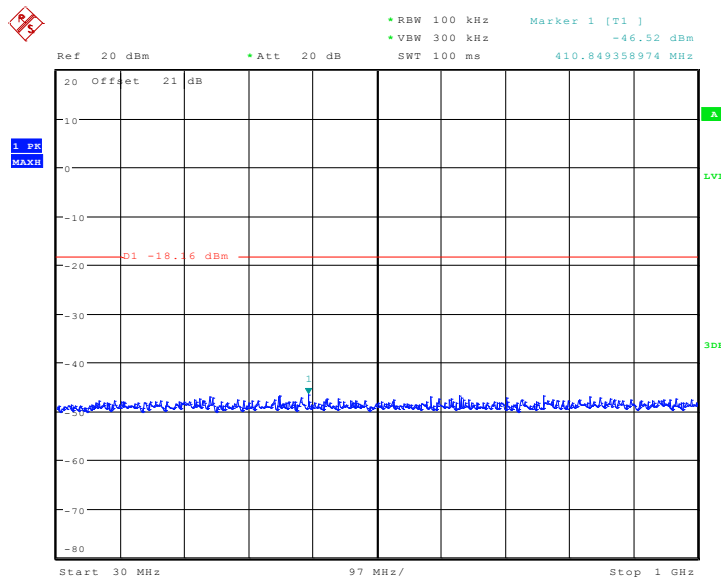
Date: 24.SEP.2013 20:45:42

Fig. 79 Conducted Spurious Emission (802.11n-HT20, Ch6, 20 GHz-26 GHz)



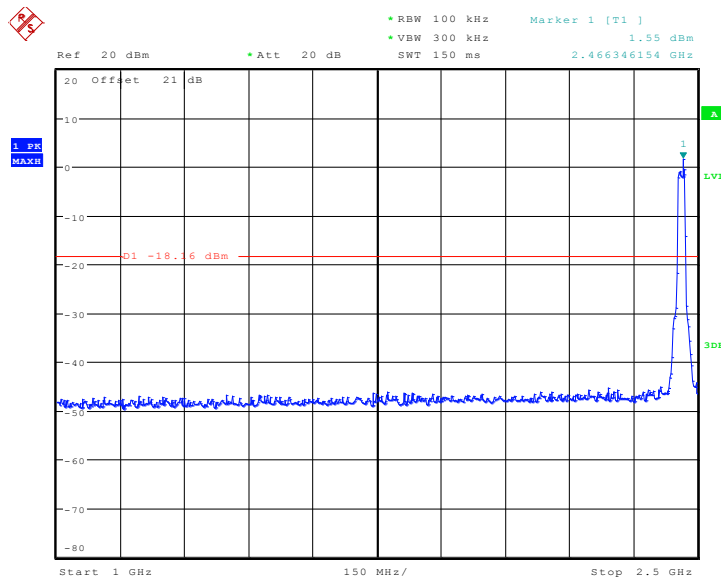
Date: 24.SEP.2013 20:46:24

Fig. 80 Conducted Spurious Emission (802.11n-HT20, Ch11, Center Frequency)



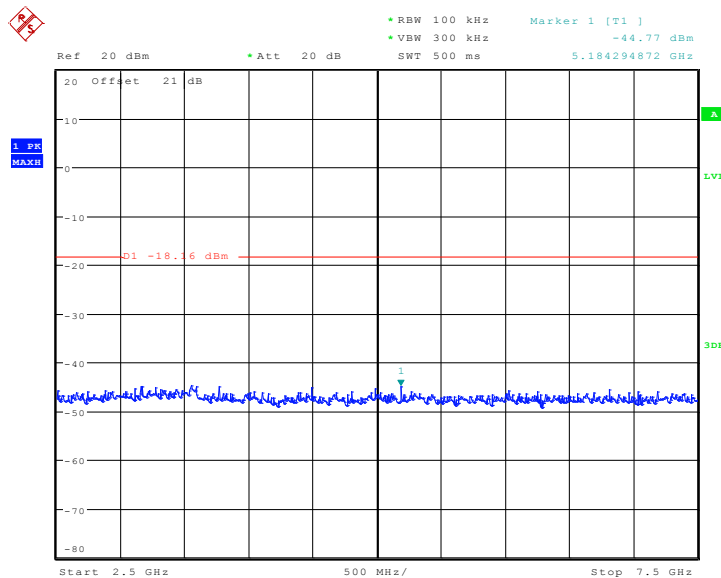
Date: 24.SEP.2013 20:46:42

Fig. 81 Conducted Spurious Emission (802.11n-HT20, Ch11, 30 MHz-1 GHz)



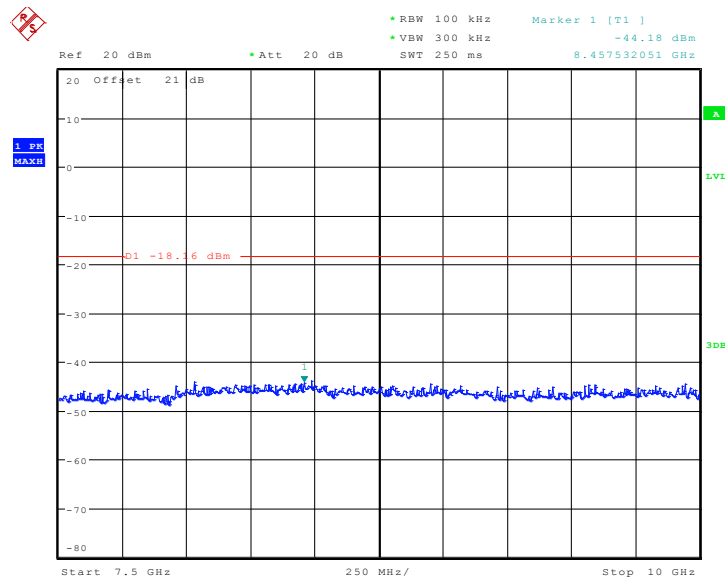
Date: 24.SEP.2013 20:47:09

Fig. 82 Conducted Spurious Emission (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)



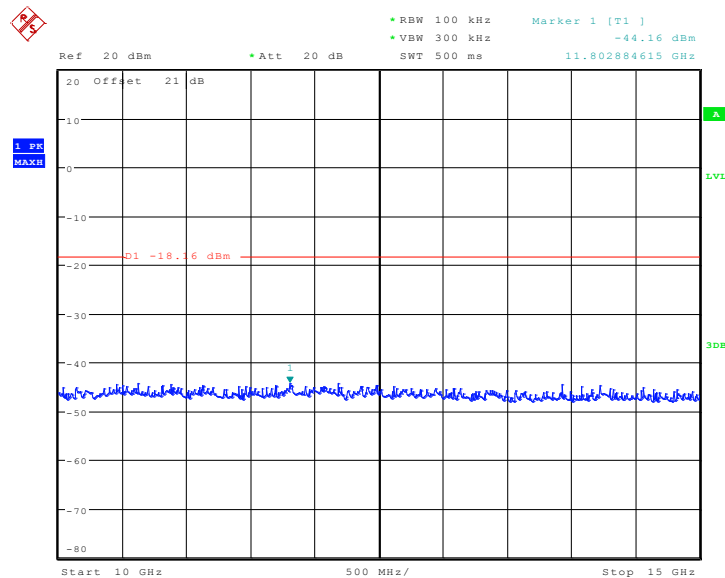
Date: 24.SEP.2013 20:47:25

Fig. 83 Conducted Spurious Emission (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)



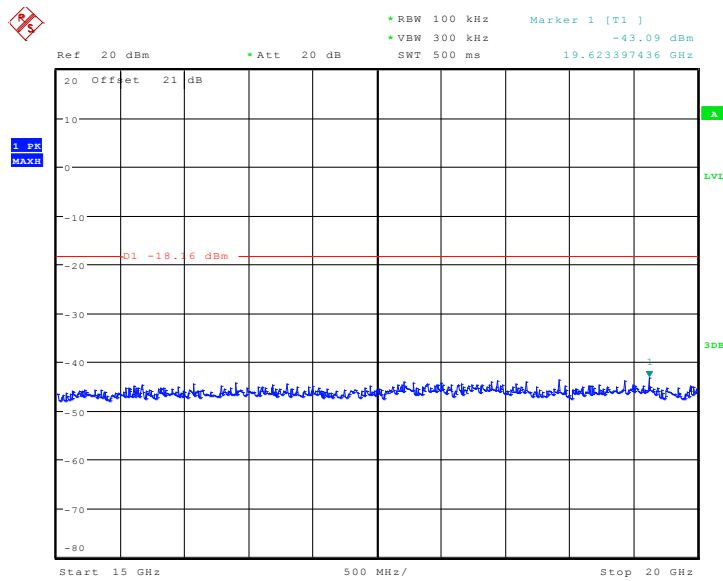
Date: 24.SEP.2013 20:47:41

Fig. 84 Conducted Spurious Emission (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)



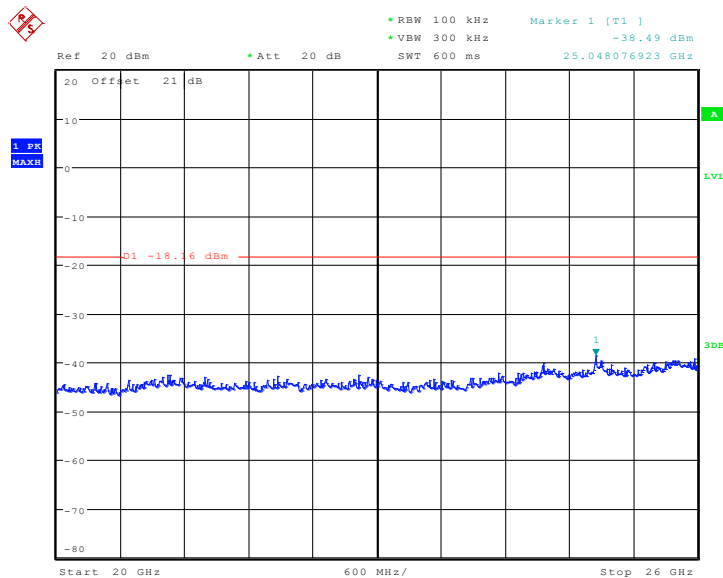
Date: 24.SEP.2013 20:47:58

Fig. 85 Conducted Spurious Emission (802.11n-HT20, Ch11, 10 GHz-15 GHz)



Date: 24.SEP.2013 20:48:18

Fig. 86 Conducted Spurious Emission (802.11n-HT20, Ch11, 15 GHz-20 GHz)



Date: 24.SEP.2013 20:48:46

Fig. 87 Conducted Spurious Emission (802.11n-HT20, Ch11, 20 GHz-26 GHz)

A.6.2 Transmitter Spurious Emission - Radiated

Limit in restricted band:

Measurement Results:

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power	2.38GHz ~2.45GHz	Fig.88	P
	1	30 MHz ~1 GHz	Fig.89	P
		1 GHz ~ 3 GHz	Fig.90	P
		3 GHz ~ 18 GHz	Fig.91	P
	6	30 MHz ~1 GHz	Fig.92	P
		1 GHz ~ 3 GHz	Fig.93	P
		3 GHz ~ 18 GHz	Fig.94	P
	Power	2.45GHz ~2.5GHz	Fig.95	P
	11	30 MHz ~1 GHz	Fig.96	P
		1 GHz ~ 3 GHz	Fig.97	P
		3 GHz ~ 18 GHz	Fig.98	P
	802.11g	Power	2.38GHz ~2.45GHz	Fig.99
1		30 MHz ~1 GHz	Fig.100	P
		1 GHz ~ 3 GHz	Fig.101	P
		3 GHz ~ 18 GHz	Fig.102	P
6		30 MHz ~1 GHz	Fig.103	P
		1 GHz ~ 3 GHz	Fig.104	P
		3 GHz ~ 18 GHz	Fig.105	P
Power		2.45GHz~2.5GHz	Fig.106	P
11		30 MHz ~1 GHz	Fig.107	P
		1 GHz ~ 3 GHz	Fig.108	P
		3 GHz ~ 18 GHz	Fig.109	P
802.11n- HT20		Power	2.38GHz ~2.45GHz	Fig.110
	1	30 MHz ~1 GHz	Fig.111	P
		1 GHz ~ 3 GHz	Fig.112	P
		3 GHz ~ 18 GHz	Fig.113	P
	6	30 MHz ~1 GHz	Fig.114	P
		1 GHz ~ 3 GHz	Fig.115	P
		3 GHz ~ 18 GHz	Fig.116	P
	Power	2.45GHz~2.5GHz	Fig.117	P
	11	30 MHz ~1 GHz	Fig.118	P
		1 GHz ~ 3 GHz	Fig.119	P
		3 GHz ~ 18 GHz	Fig.120	P
	/	All channels	18 GHz~ 26.5 GHz	Fig.121

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:

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

These recorded emissions around 21GHz are highest noise floor levels since no higher spurious emission is detected.

802.11b

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17404.500	57.6	-26.3	42.7	41.207	HORIZONTAL
17528.250	57.4	-25.3	42.9	39.767	HORIZONTAL
17470.500	57.4	-25.3	42.6	40.097	VERTICAL
17894.250	57.3	-25.2	42.5	40.038	HORIZONTAL
17525.250	57.3	-25.3	42.9	39.667	HORIZONTAL
17904.750	57.3	-25.2	42.7	39.878	VERTICAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17437.500	58.2	-26.3	42.7	41.777	VERTICAL
17538.000	57.9	-25.3	42.9	40.267	HORIZONTAL
17880.000	57.7	-25.2	42.5	40.438	HORIZONTAL
17461.500	57.5	-25.3	42.6	40.197	HORIZONTAL
17510.250	57.5	-25.3	42.8	40.027	VERTICAL
17614.500	57.5	-25.3	42.8	40.037	HORIZONTAL

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17171.250	57.9	-26.4	43.0	41.310	VERTICAL
17608.500	57.8	-25.3	42.8	40.337	VERTICAL
17999.250	57.5	-24.7	42.3	39.954	HORIZONTAL
17097.000	57.5	-25.5	42.8	40.236	VERTICAL
17436.750	57.3	-26.3	42.7	40.877	VERTICAL
16936.500	57.3	-26.4	43.3	40.321	VERTICAL

802.11g

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17478.000	57.7	-25.3	43.0	39.957	VERTICAL
17892.750	57.7	-25.2	42.5	40.438	HORIZONTAL
17721.750	57.6	-25.4	42.8	40.201	HORIZONTAL
17521.500	57.6	-25.3	42.8	40.127	VERTICAL
17496.000	57.5	-25.3	43.0	39.757	VERTICAL
17712.000	57.4	-25.4	42.8	40.001	HORIZONTAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17462.250	58.7	-25.3	42.6	41.397	HORIZONTAL
17519.250	58.0	-25.3	42.8	40.527	VERTICAL
17876.250	57.9	-25.2	42.5	40.638	VERTICAL
17953.500	57.7	-25.2	42.7	40.228	VERTICAL
17986.500	57.5	-25.2	42.3	40.468	HORIZONTAL
17716.500	57.4	-25.4	42.8	40.001	VERTICAL

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17592.000	58.1	-25.3	42.7	40.687	HORIZONTAL
17454.000	58.0	-26.3	42.6	41.717	VERTICAL
17586.750	57.7	-25.3	42.7	40.287	VERTICAL
17757.000	57.7	-25.4	42.2	40.961	HORIZONTAL
17858.250	57.6	-25.2	42.7	40.098	VERTICAL
17539.500	57.6	-25.3	42.9	39.967	VERTICAL

802.11n-HT20

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17717.250	58.0	-25.4	42.8	40.601	HORIZONTAL
17493.000	57.9	-25.3	43.0	40.157	VERTICAL
17487.750	57.7	-25.3	43.0	39.957	VERTICAL
17624.250	57.7	-25.3	42.8	40.237	VERTICAL
17468.250	57.6	-25.3	42.6	40.297	HORIZONTAL
17451.750	57.6	-26.3	42.6	41.317	HORIZONTAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17506.500	57.8	-25.3	42.8	40.327	HORIZONTAL
17440.500	57.4	-26.3	42.7	40.977	VERTICAL
17533.500	57.4	-25.3	42.9	39.767	HORIZONTAL
17559.000	57.3	-25.3	42.3	40.337	VERTICAL
17477.250	57.2	-25.3	43.0	39.457	VERTICAL
17898.000	57.1	-25.2	42.5	39.838	HORIZONTAL

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17811.000	57.8	-25.2	42.9	40.088	HORIZONTAL
17791.500	57.7	-25.4	42.0	41.181	VERTICAL
17520.750	57.5	-25.3	42.8	40.027	HORIZONTAL
17490.750	57.4	-25.3	43.0	39.657	VERTICAL
17507.250	57.4	-25.3	42.8	39.927	HORIZONTAL
17508.000	57.4	-25.3	42.8	39.927	VERTICAL

Test graphs as below:

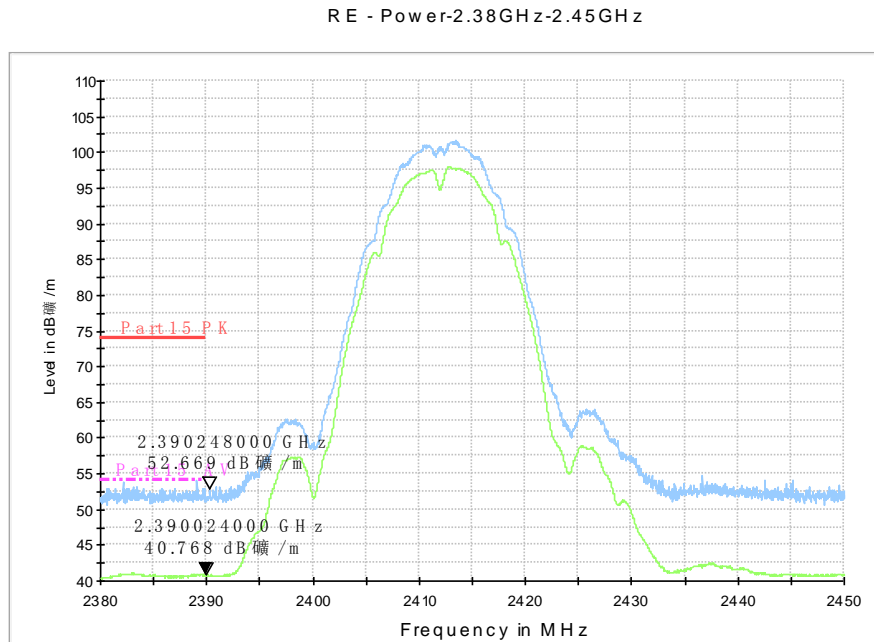


Fig. 88 Radiated Spurious Emission (Power): 802.11b, ch1, 2.38 GHz - 2.45GHz

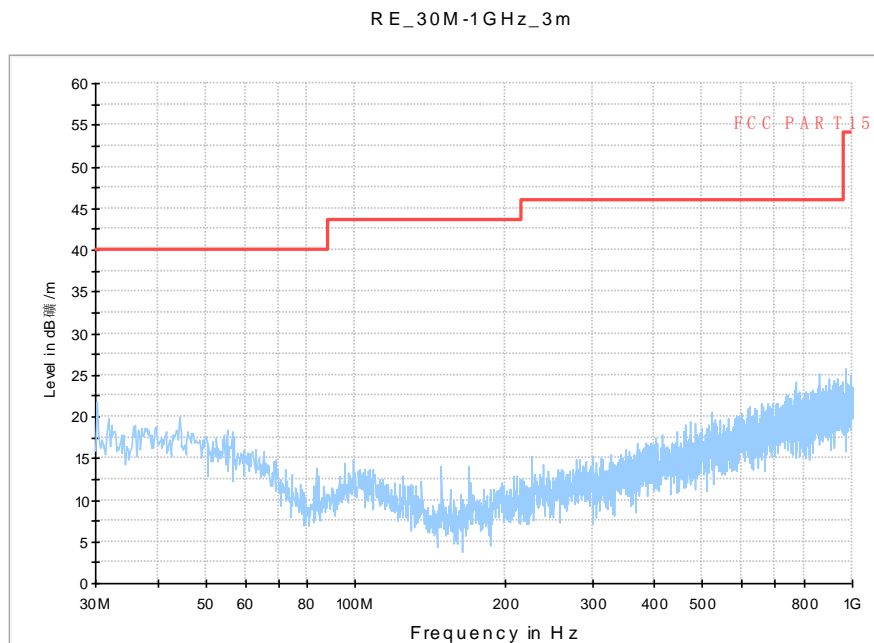


Fig. 89 Radiated Spurious Emission (802.11b, Ch1, 30 MHz-1 GHz)

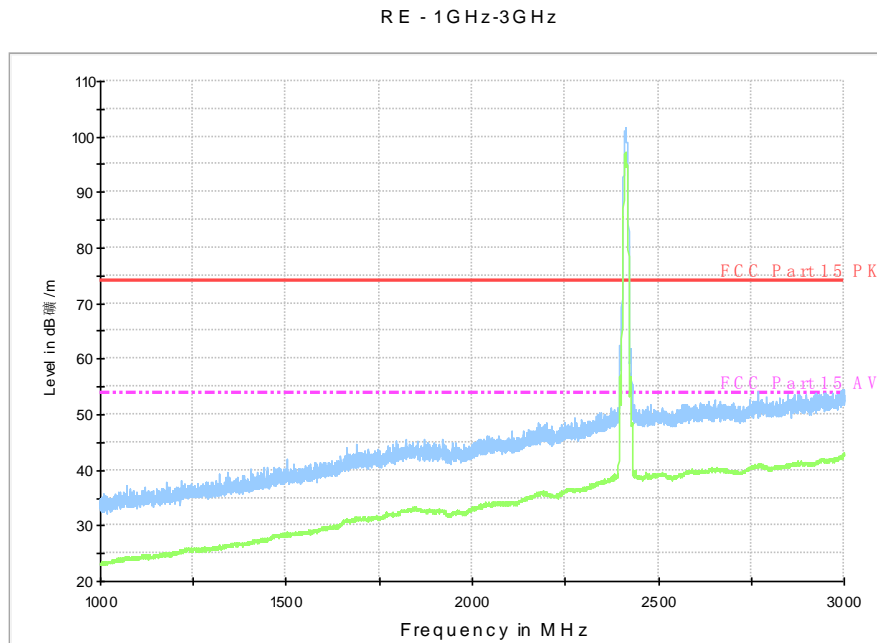


Fig. 90 Radiated Spurious Emission (802.11b, Ch1, 1 GHz-3 GHz)

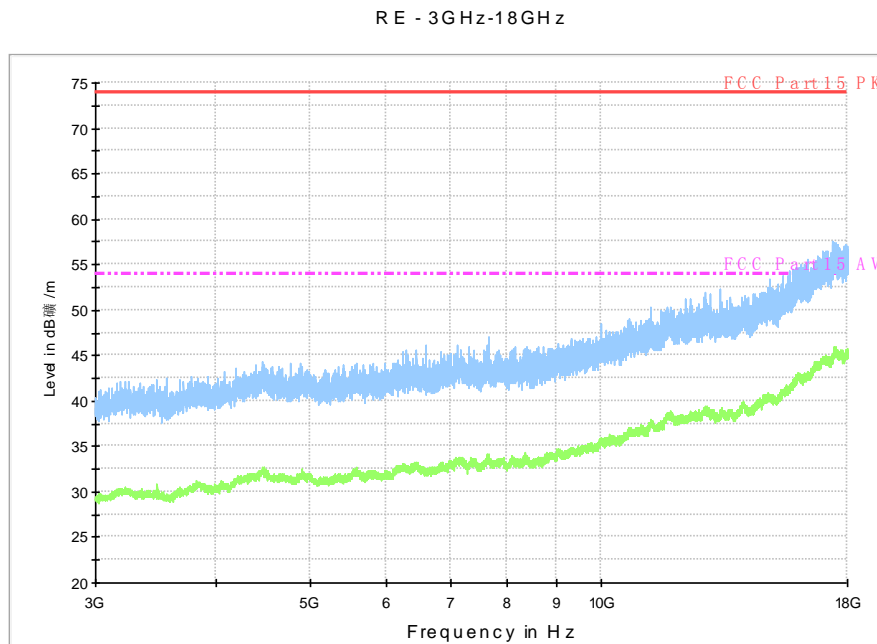


Fig. 91 Radiated Spurious Emission (802.11b, Ch1, 3 GHz-18 GHz)

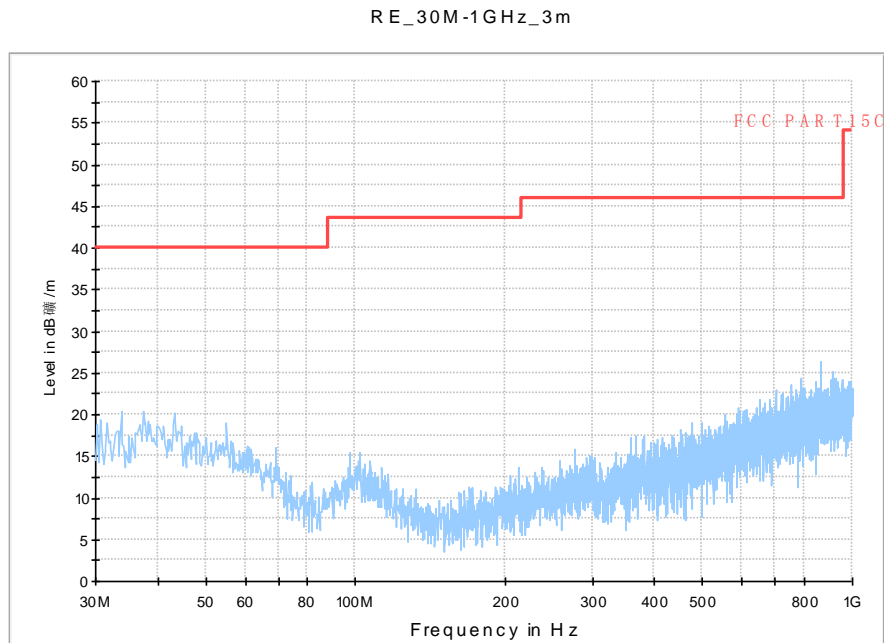


Fig. 92 Radiated Spurious Emission (802.11b, Ch6, 30 MHz-1 GHz)

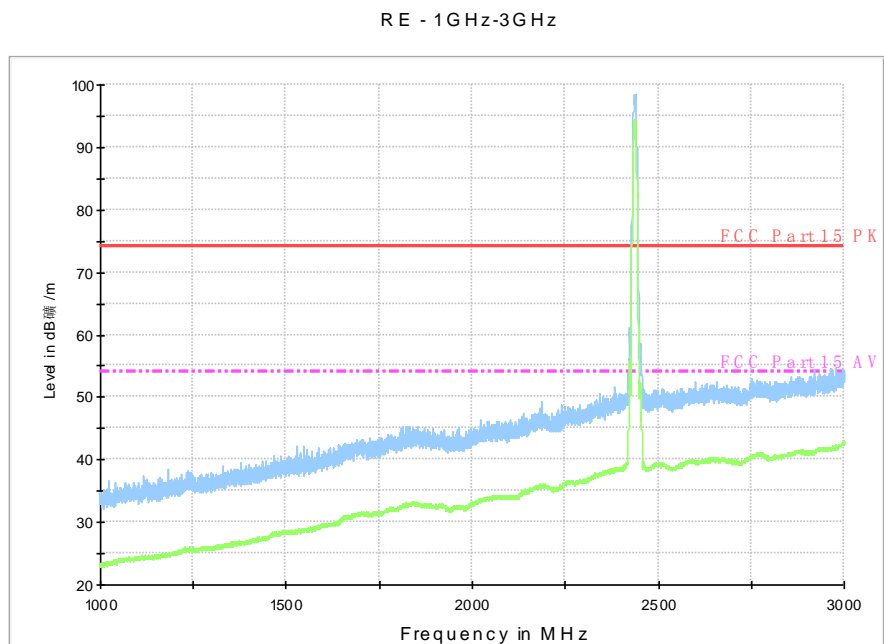


Fig. 93 Radiated Spurious Emission (802.11b, Ch6, 1 GHz-3 GHz)

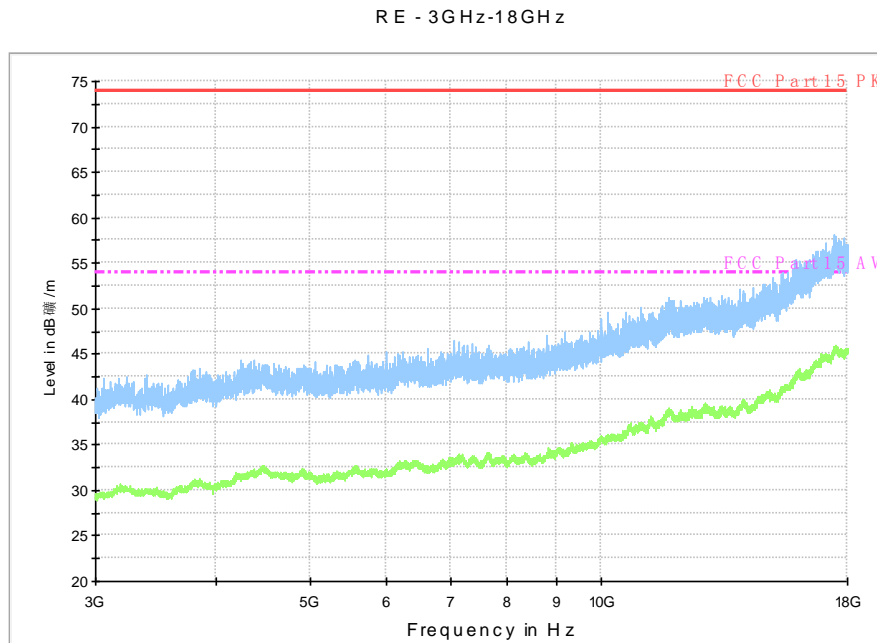


Fig. 94 Radiated Spurious Emission (802.11b, Ch6, 3 GHz-18 GHz)

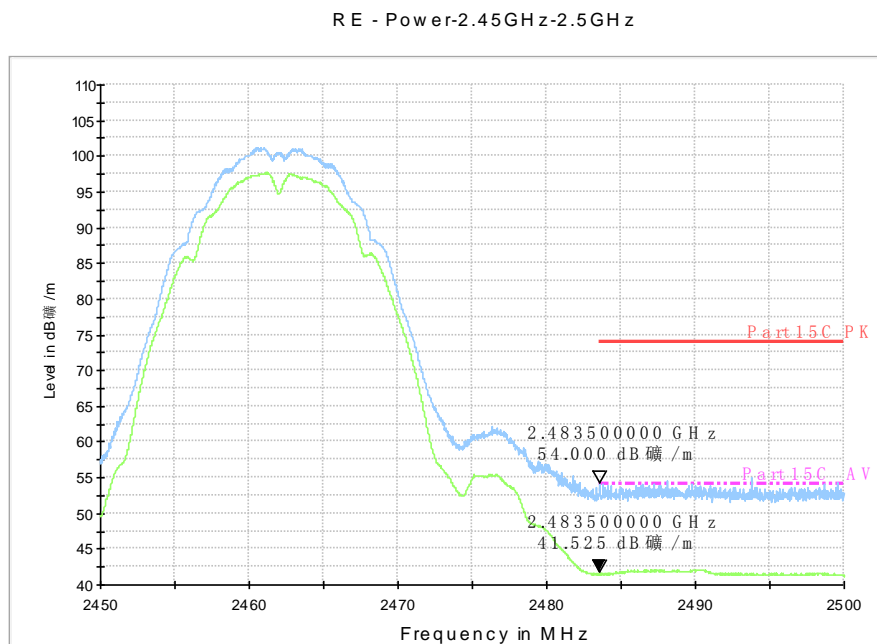


Fig. 95 Radiated Spurious Emission (Power): 802.11b, ch11, 2.45 GHz - 2.5GHz

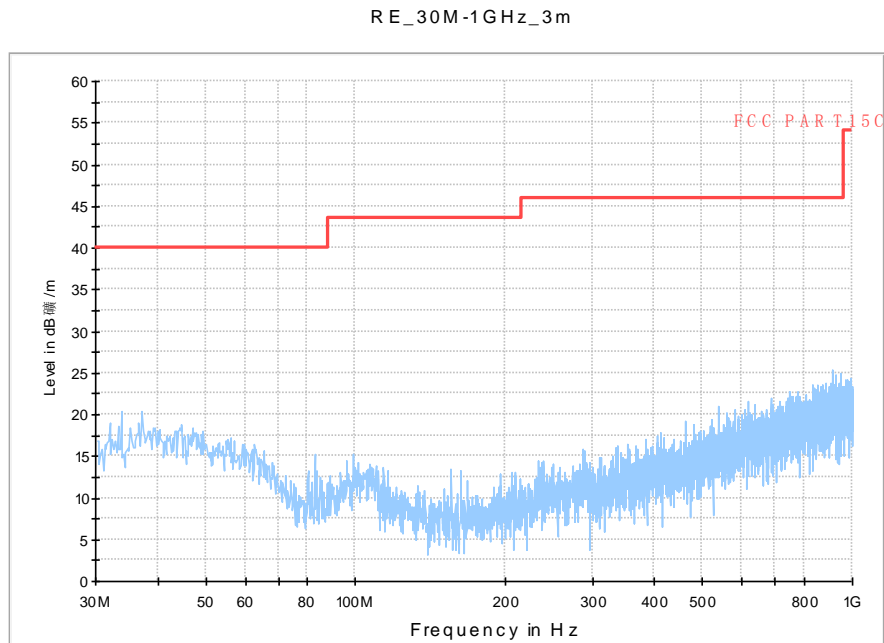


Fig. 96 Radiated Spurious Emission (802.11b, Ch11, 30 MHz-1 GHz)

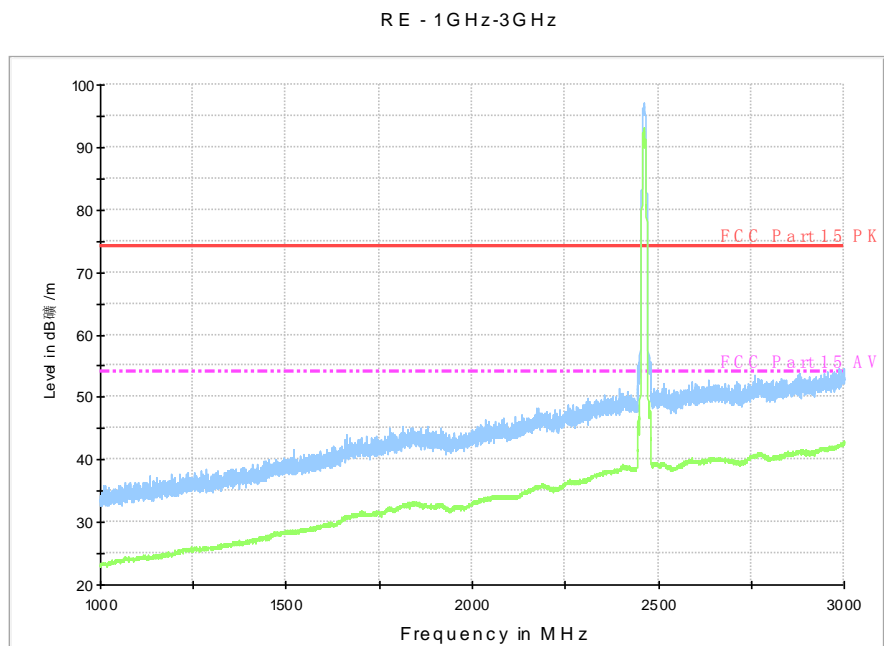


Fig. 97 Radiated Spurious Emission (802.11b, Ch11, 1 GHz-3 GHz)

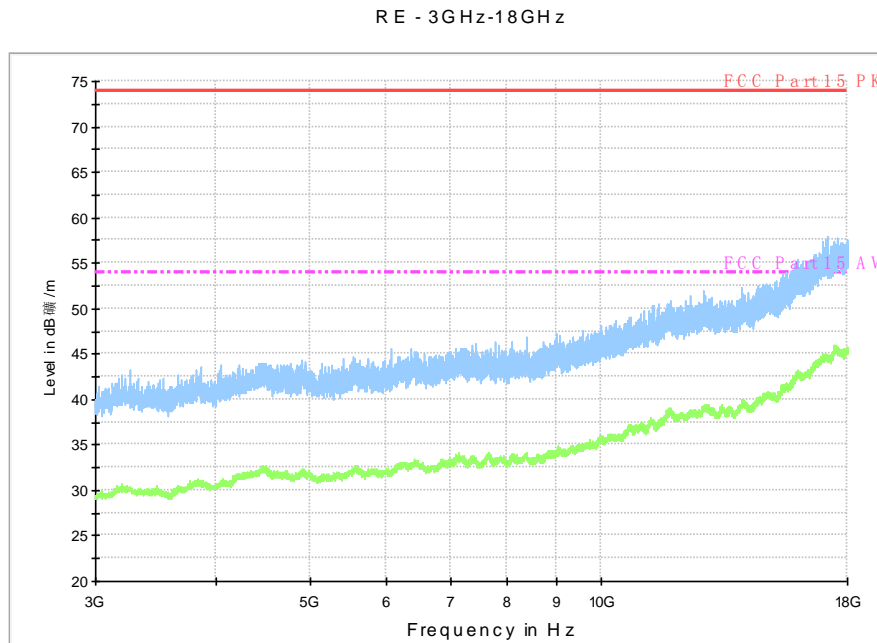


Fig. 98 Radiated Spurious Emission (802.11b, Ch11, 3 GHz-18 GHz)

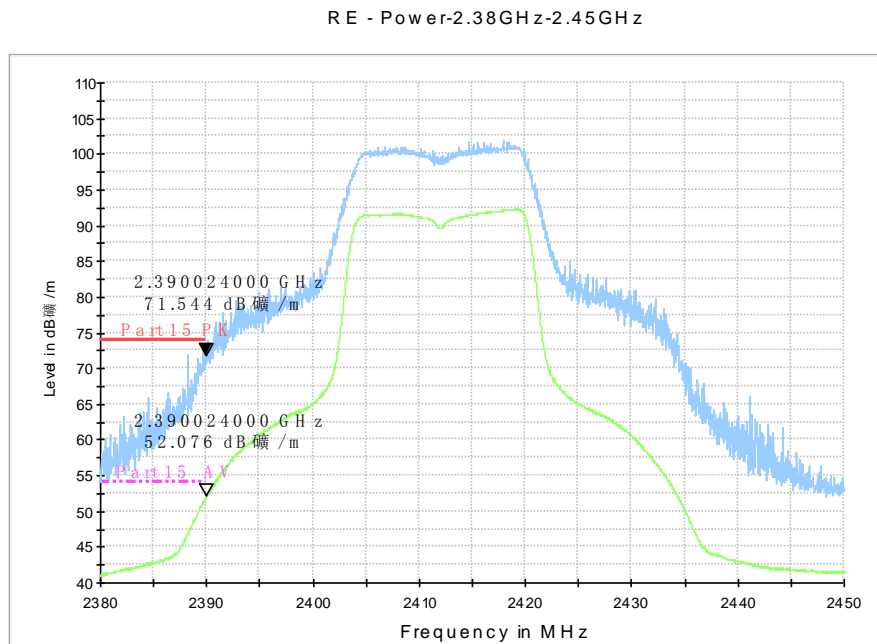


Fig. 99 Radiated Spurious Emission (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz

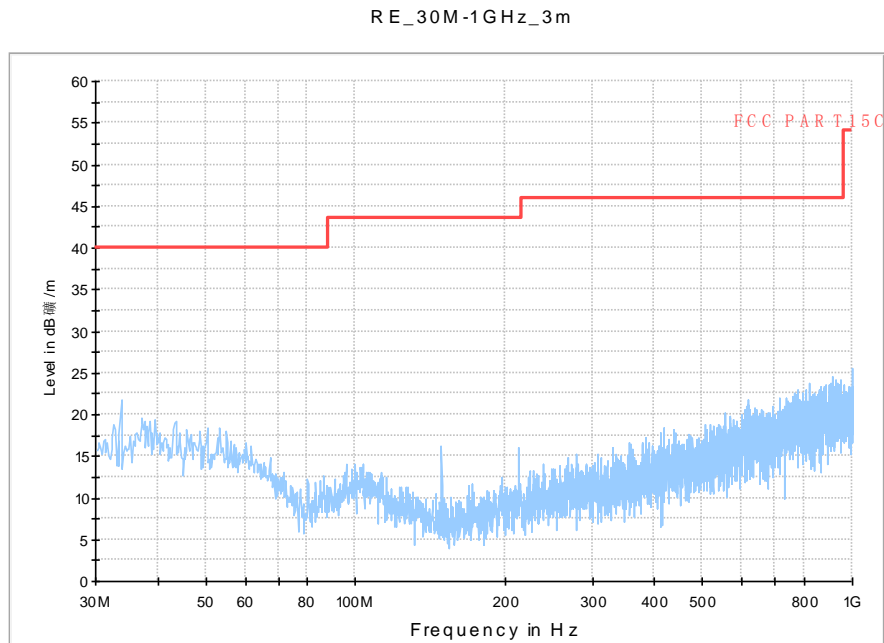


Fig. 100 Radiated Spurious Emission (802.11g, Ch1, 30 MHz-1 GHz)

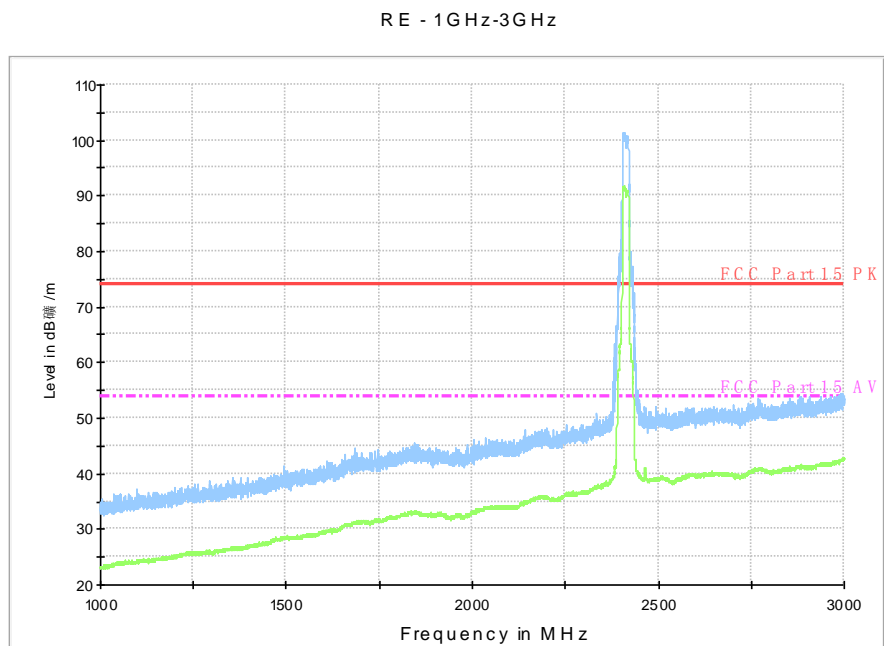


Fig. 101 Radiated Spurious Emission (802.11g, Ch1, 1 GHz-3 GHz)

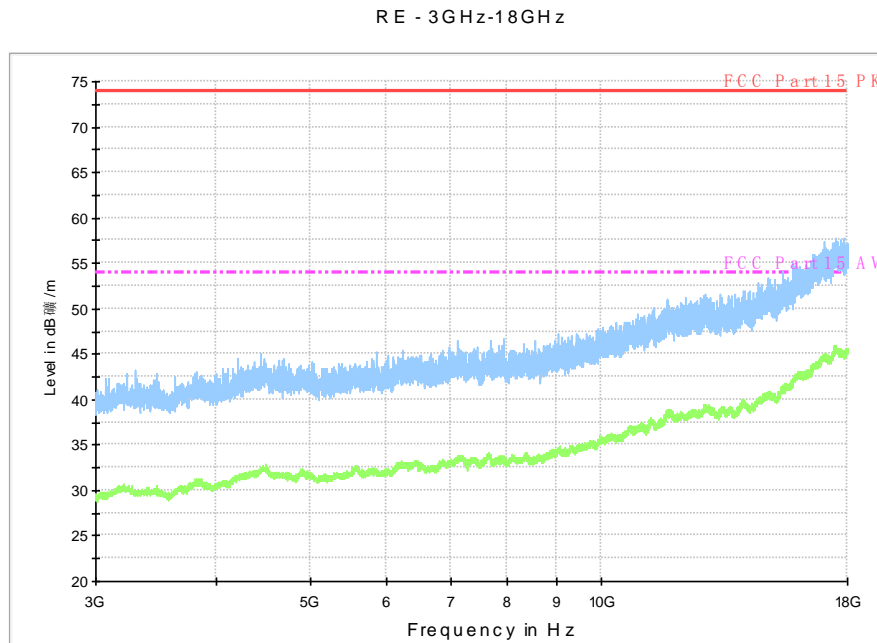


Fig. 102 Radiated Spurious Emission (802.11g, Ch1, 3 GHz-18 GHz)

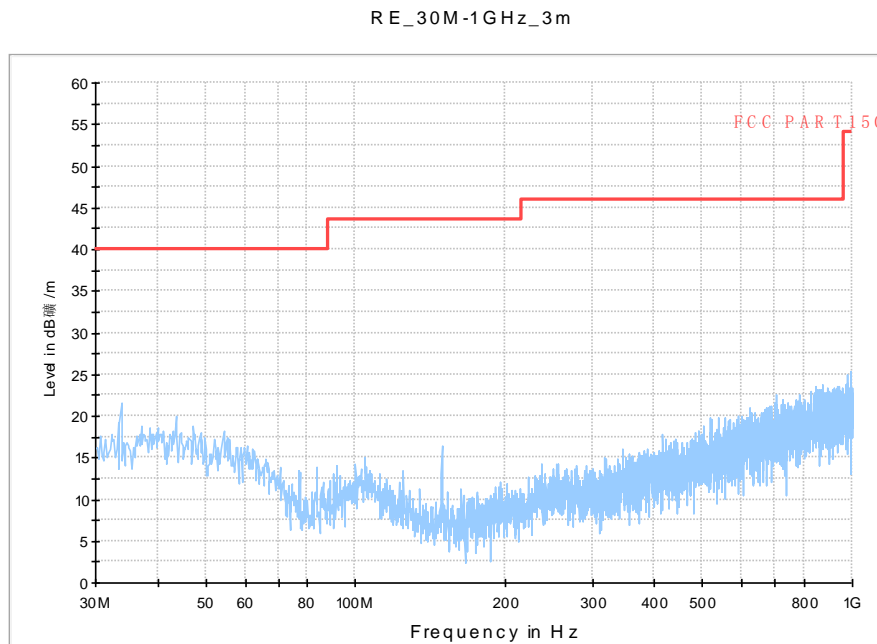


Fig. 103 Radiated Spurious Emission (802.11g, Ch6, 30 MHz-1 GHz)

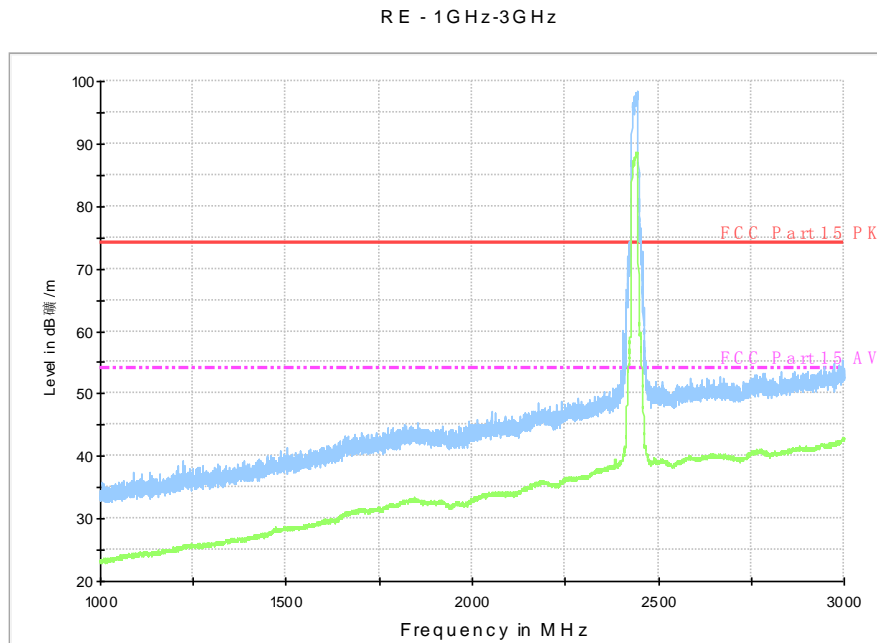


Fig. 104 Radiated Spurious Emission (802.11g, Ch6, 1 GHz-3 GHz)

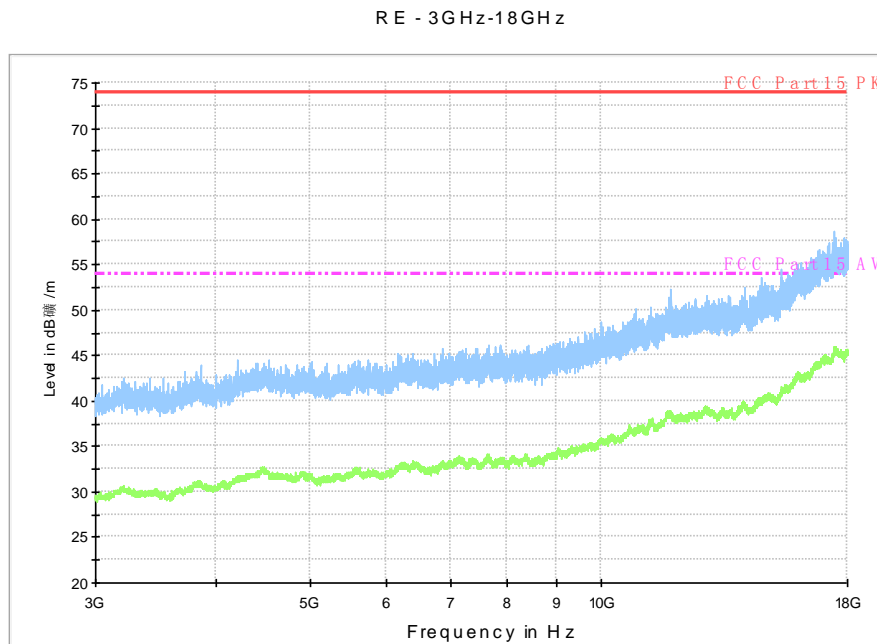


Fig. 105 Radiated Spurious Emission (802.11g, Ch6, 3 GHz-18 GHz)

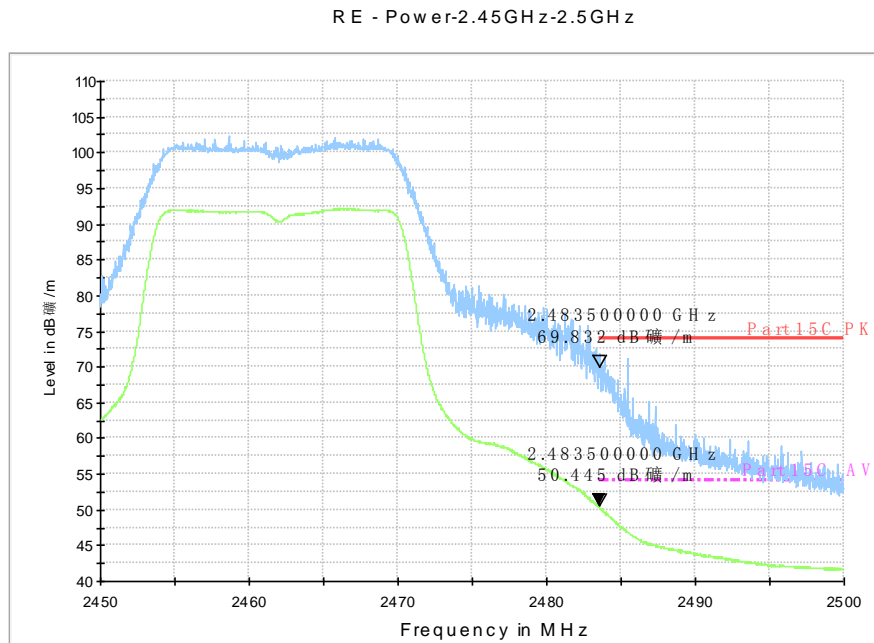


Fig. 106 Radiated Spurious Emission (Power): 802.11g, ch11, 2.45 GHz - 2.5GHz

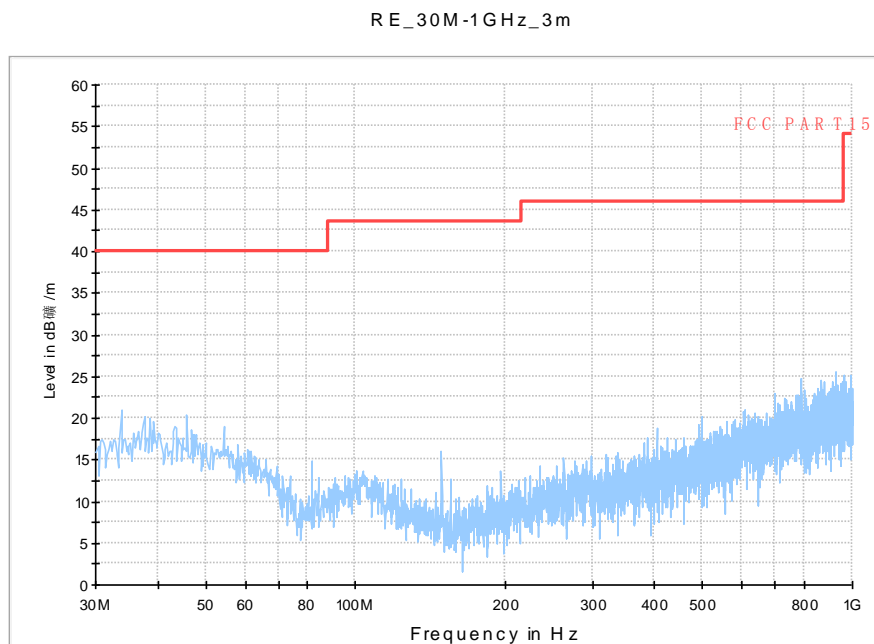


Fig. 107 Radiated Spurious Emission (802.11g, Ch11, 30 MHz-1 GHz)

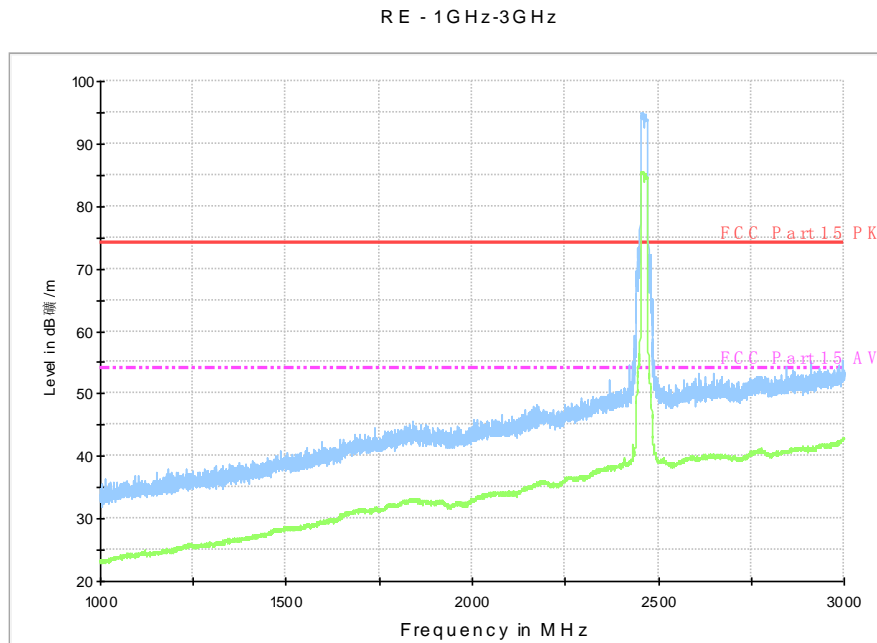


Fig. 108 Radiated Spurious Emission (802.11g, Ch11, 1 GHz-3 GHz)

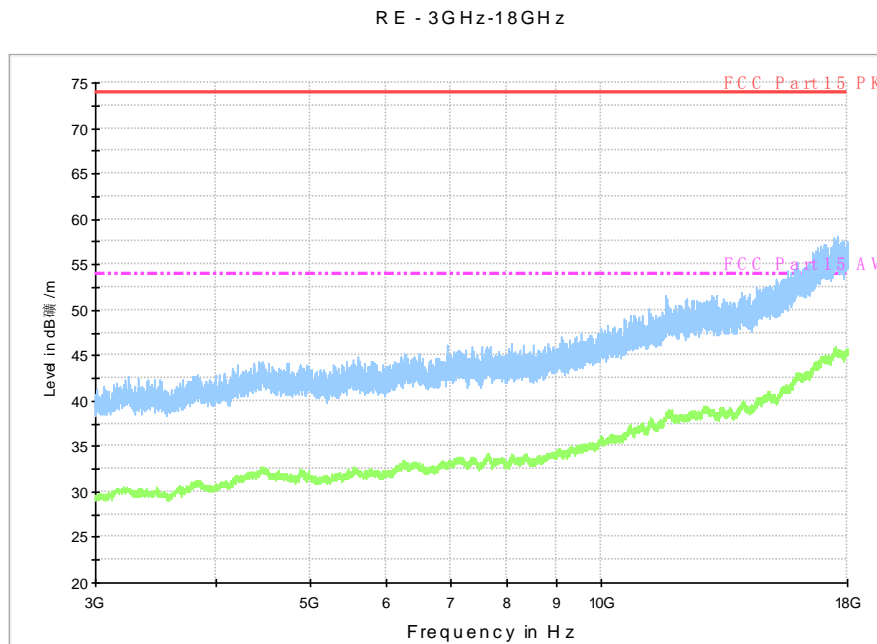


Fig. 109 Radiated Spurious Emission (802.11g, Ch11, 3 GHz-18 GHz)

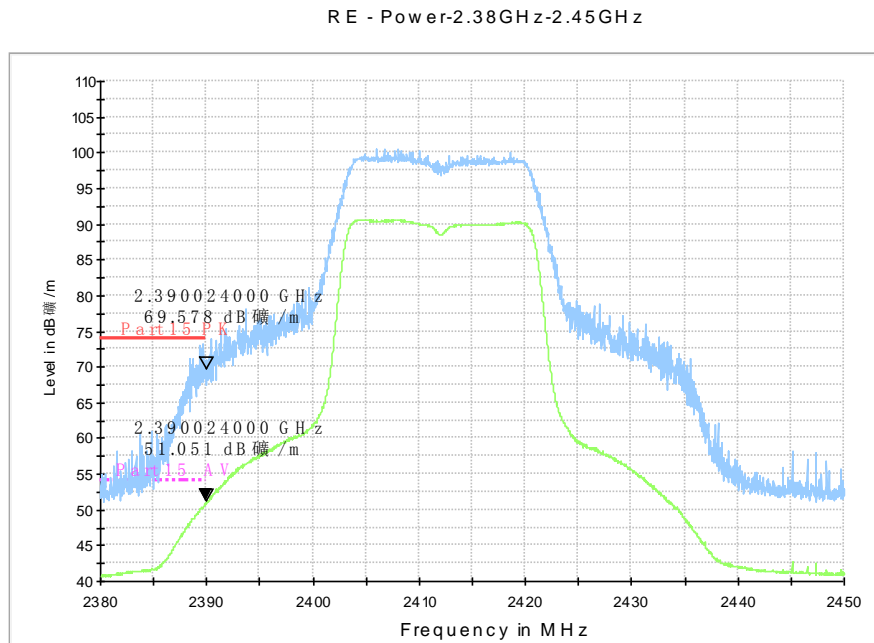


Fig. 110 Radiated Spurious Emission (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

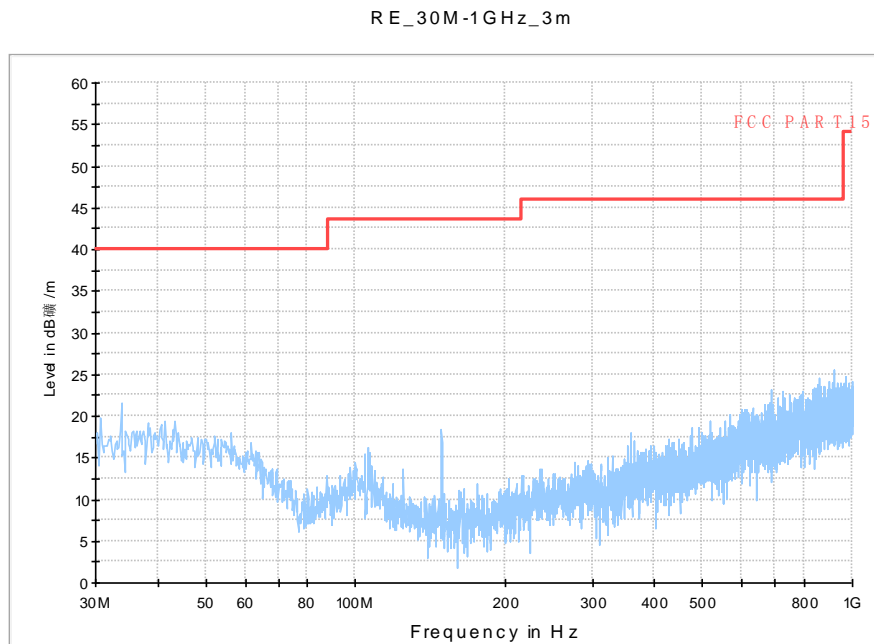


Fig. 111 Radiated Spurious Emission (802.11n-HT20, Ch1, 30 MHz-1 GHz)

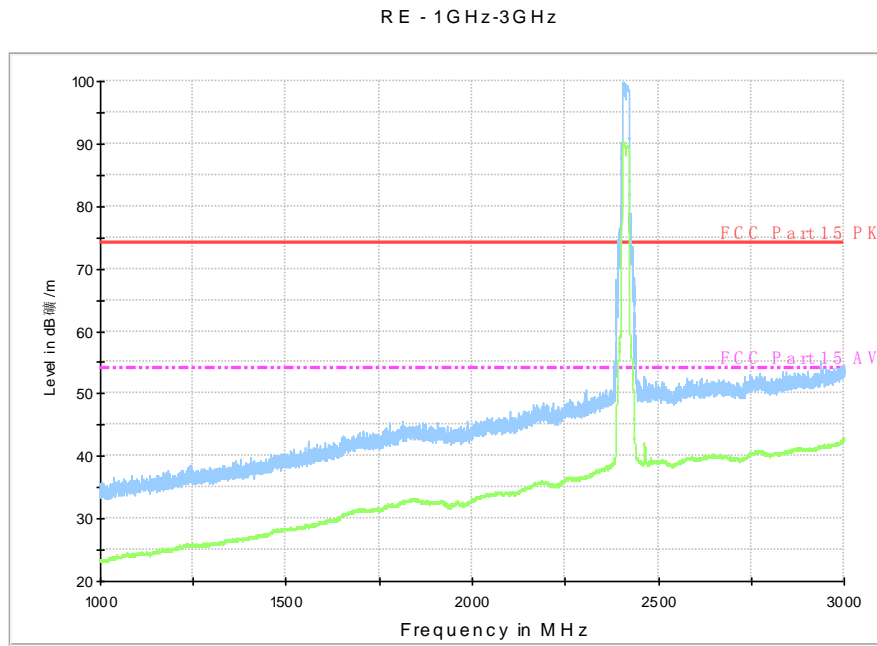


Fig. 112 Radiated Spurious Emission (802.11n-HT20, Ch1, 1 GHz-3 GHz)

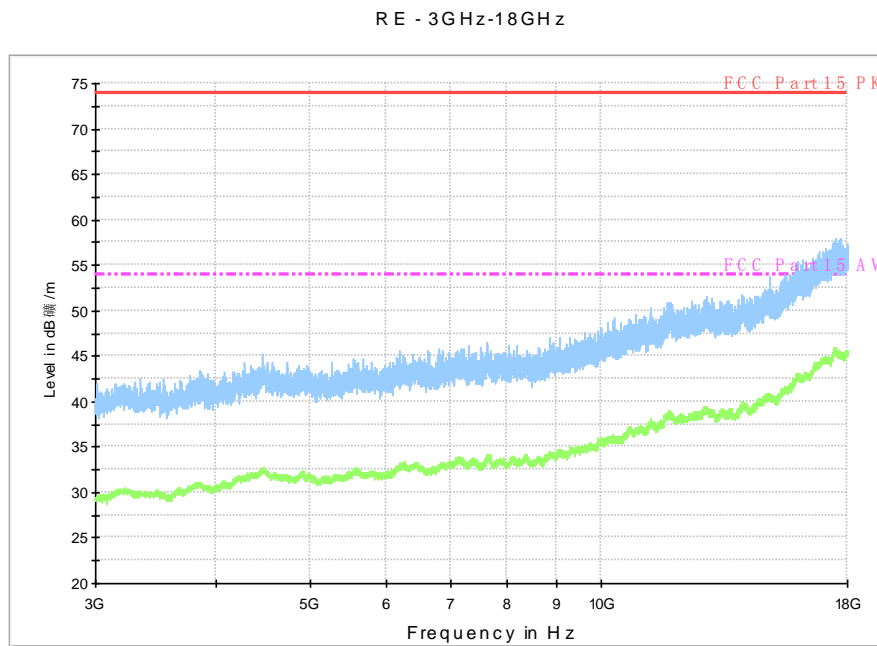


Fig. 113 Radiated Spurious Emission (802.11n-HT20, Ch1, 3 GHz-18 GHz)

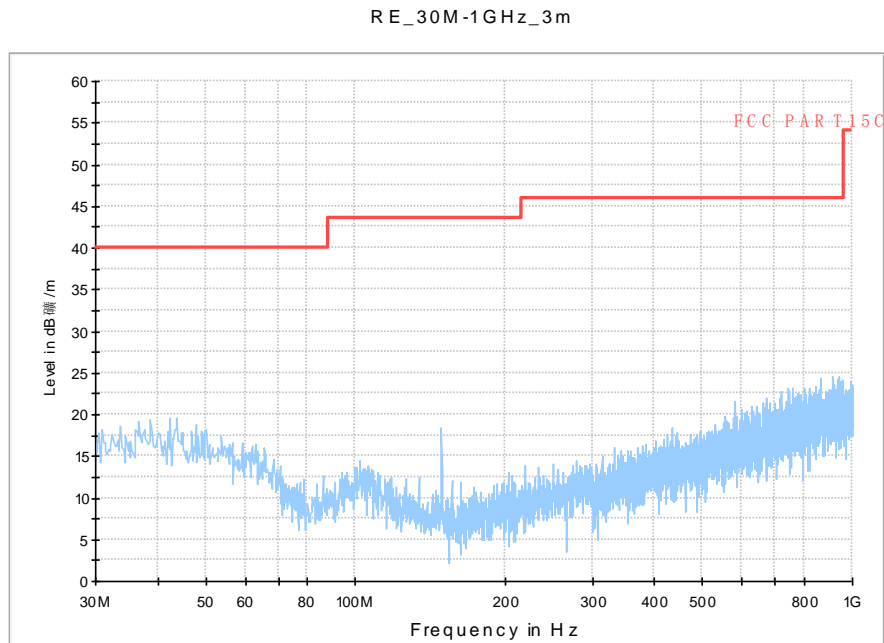


Fig. 114 Radiated Spurious Emission (802.11n-HT20, Ch6, 30 MHz-1 GHz)

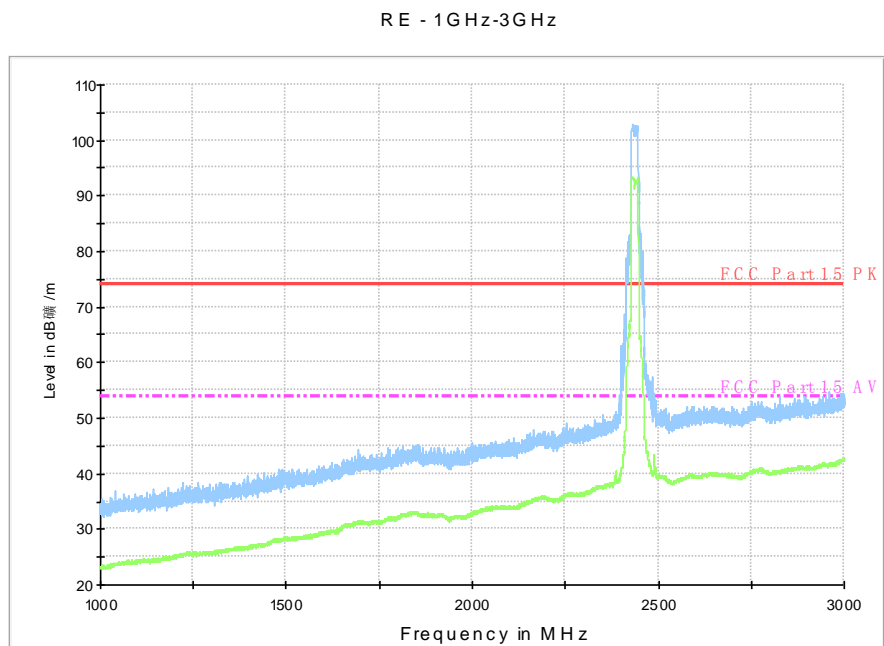


Fig. 115 Radiated Spurious Emission (802.11n-HT20, Ch6, 1 GHz-3 GHz)

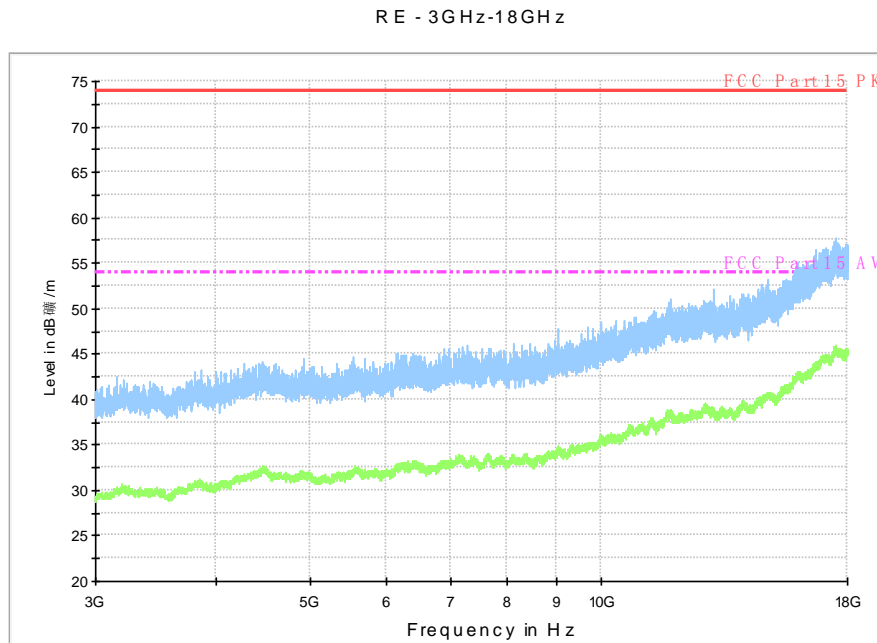


Fig. 116 Radiated Spurious Emission (802.11n-HT20, Ch6, 3 GHz-18 GHz)

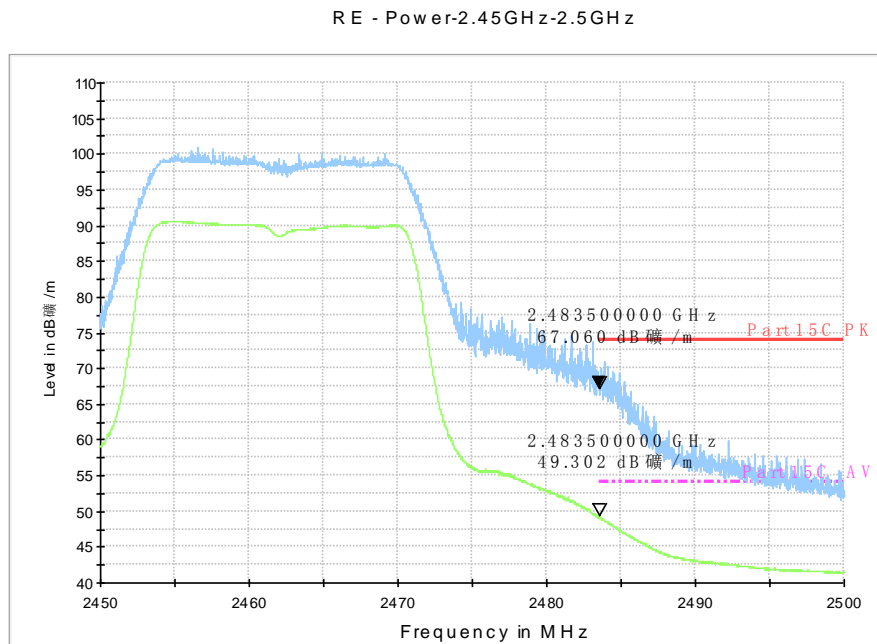


Fig. 117 Radiated Spurious Emission (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.5GHz

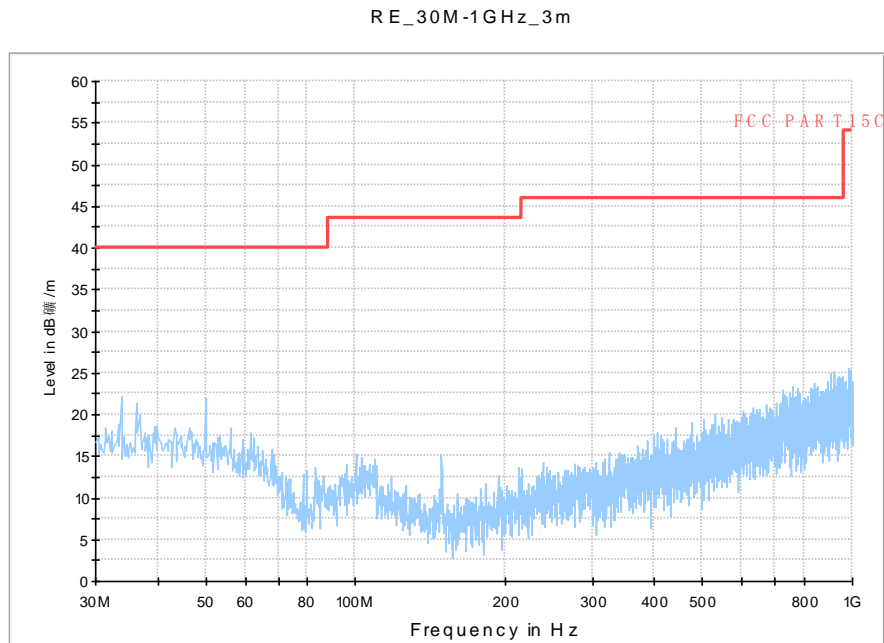


Fig. 118 Radiated Spurious Emission (802.11n-HT20, Ch11, 30 MHz-1 GHz)

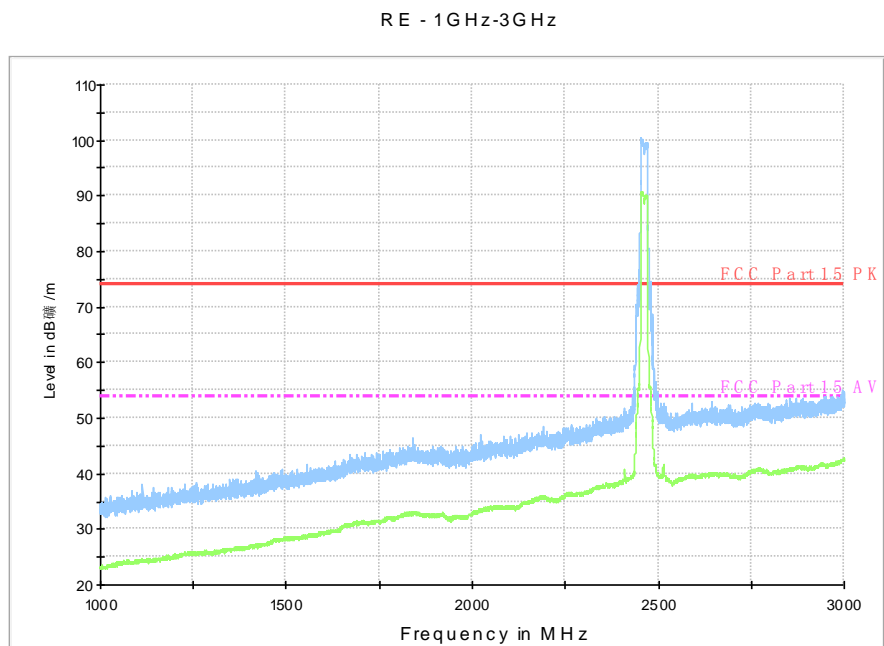


Fig. 119 Radiated Spurious Emission (802.11n-HT20, Ch11, 1 GHz-3 GHz)

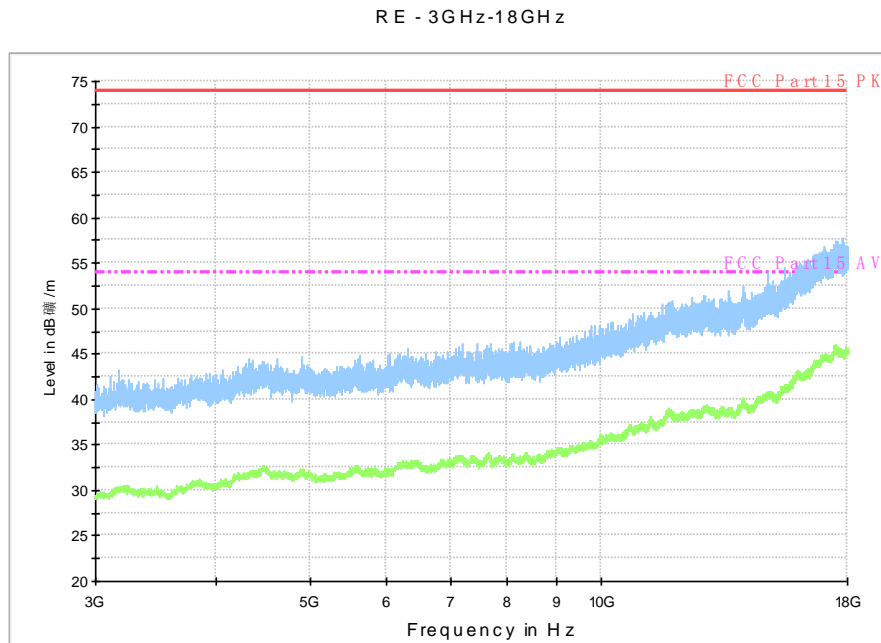


Fig. 120 Radiated Spurious Emission (802.11n-HT20, Ch11, 3 GHz-18 GHz)

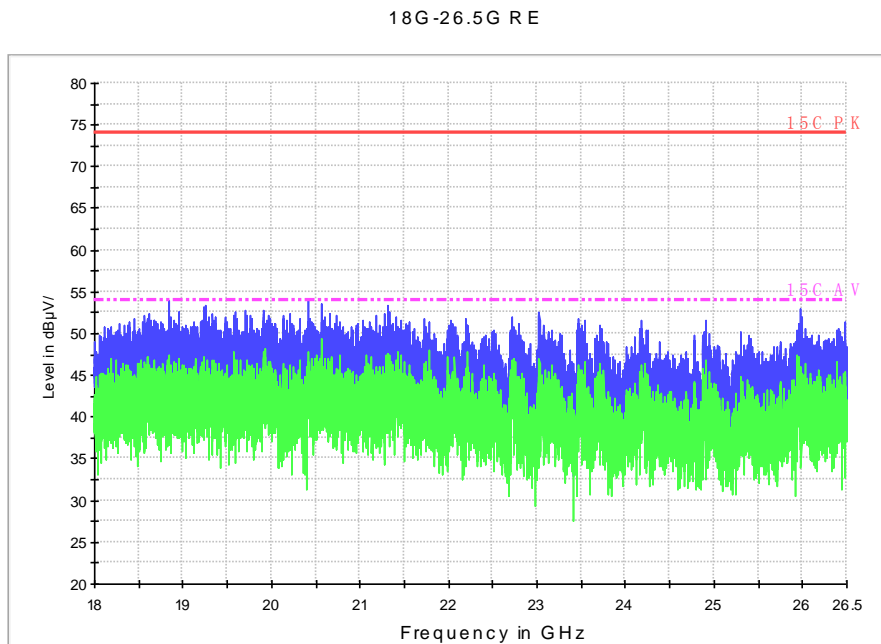


Fig. 121 Radiated emission: 18 GHz – 26.5 GHz

A.7. AC Powerline Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)
110	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	Idle	
0.15 to 0.5	66 to 56	Fig.122	Fig.123	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	Idle	
0.15 to 0.5	56 to 46	Fig.122	Fig.123	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 C63.10

Note: Expanded measurement uncertainty for this test item is $U = 3.2\text{dB}$, $k=2$.

Conclusion: PASS

Test graphs as below:

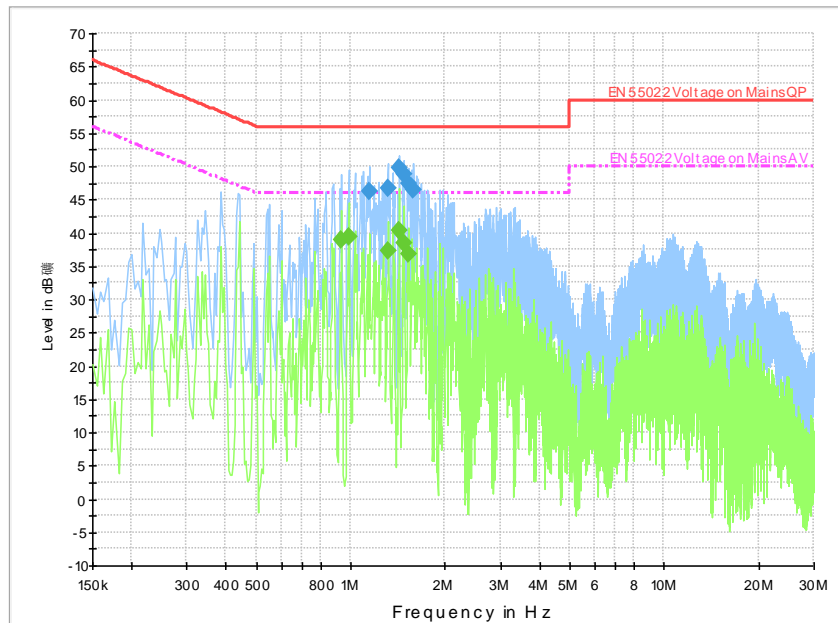


Fig. 122 AC Powerline Conducted Emission-802.11b

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Measurement Result 1:

Frequency (MHz)	QuasiPeak (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
1.149001	46.2	GND	N	9.9	9.8	56.0
1.311001	46.8	GND	N	9.9	9.2	56.0
1.423501	49.8	GND	N	9.9	6.2	56.0
1.473001	48.7	GND	N	9.9	7.3	56.0
1.522501	47.3	GND	N	9.9	8.7	56.0
1.585501	46.5	GND	N	9.9	9.5	56.0

Measurement Result 2:

Frequency (MHz)	CAverage (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.933001	38.8	GND	N	9.9	7.2	46.0
0.982501	39.4	GND	N	9.9	6.6	46.0
1.315501	37.3	GND	N	9.9	8.7	46.0
1.423501	40.3	GND	N	9.9	5.7	46.0
1.473001	38.6	GND	N	9.9	7.4	46.0
1.522501	36.8	GND	N	9.9	9.2	46.0

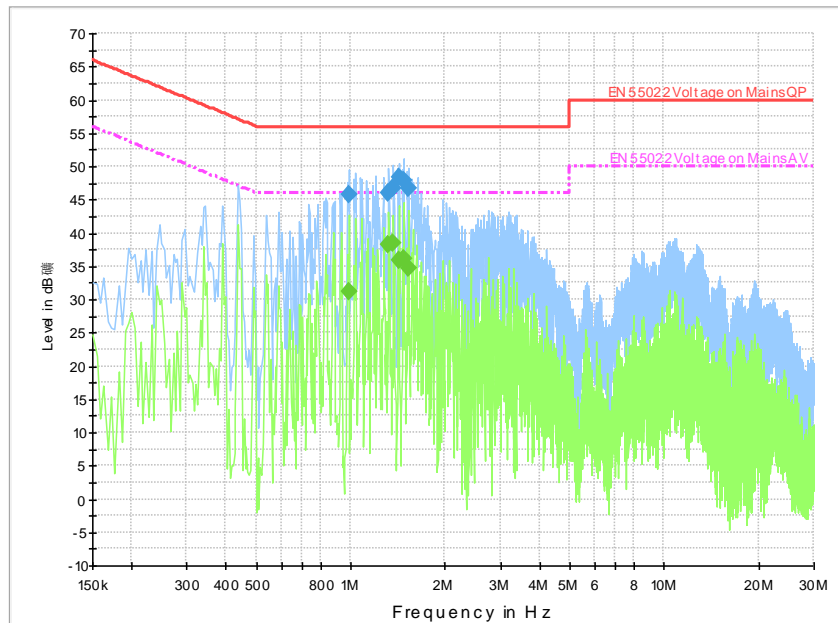


Fig. 123 AC Powerline Conducted Emission-Idle

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Measurement Result 1:

Frequency (MHz)	QuasiPeak (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.987001	45.8	GND	N	9.9	10.2	56.0
1.320001	46.1	GND	N	9.9	9.9	56.0
1.369501	46.6	GND	N	9.9	9.4	56.0
1.428001	48.3	GND	N	9.9	7.7	56.0
1.477501	47.9	GND	N	9.9	8.1	56.0
1.527001	46.7	GND	N	9.9	9.3	56.0

Measurement Result 2:

Frequency (MHz)	CAverage (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.987001	31.2	GND	N	9.9	14.8	46.0
1.320001	38.2	GND	N	9.9	7.8	46.0
1.369501	38.4	GND	N	9.9	7.6	46.0
1.428001	35.9	GND	N	9.9	10.1	46.0
1.477501	36.1	GND	N	9.9	9.9	46.0
1.527001	34.6	GND	N	9.9	11.4	46.0