



**FCC PART 15C  
TEST REPORT  
No. I14Z45356-SRD01**

**for**

**Sony Mobile Communications AB**

**GSM/WCDMA/LTE mobile phone**

**With**

**FCC ID: PY7PM-0611**

**Hardware Version: A**

**Software Version: s\_atp\_1\_32\_2\_18\_a**

**Issued Date: 2014-04-04**



**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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## CONTENTS

<b>CONTENTS .....</b>	<b>2</b>
<b>1. TEST LATORATORY .....</b>	<b>6</b>
1.1. TESTING LOCATION .....	6
1.2. PROJECT DATA .....	6
1.3. SIGNATURE.....	6
<b>2. CLIENT INFORMATION .....</b>	<b>7</b>
2.1. APPLICANT INFORMATION.....	7
2.2. MANUFACTURER INFORMATION.....	7
<b>3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT(AE).....</b>	<b>8</b>
3.1. ABOUT EUT .....	8
3.2. INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST.....	8
3.3. INTERNAL IDENTIFICATION OF AE USED DURING THE TEST.....	8
3.4. GENERAL DESCRIPTION .....	8
<b>4. REFERENCE DOCUMENTS .....</b>	<b>9</b>
4.1. DOCUMENTS SUPPLIED BY APPLICANT .....	9
4.2. REFERENCE DOCUMENTS FOR TESTING .....	9
<b>5. LABORATORY ENVIRONMENT .....</b>	<b>9</b>
<b>6. SUMMARY OF TEST RESULTS.....</b>	<b>10</b>
6.1. SUMMARY OF TEST RESULTS .....	10
6.2. STATEMENTS .....	10
6.3. TEST CONDITIONS .....	10
<b>7. TEST EQUIPMENTS UTILIZED.....</b>	<b>11</b>
<b>ANNEX A: MEASUREMENT RESULTS .....</b>	<b>12</b>
A.1. MEASUREMENT METHOD.....	12
A.2. MAXIMUM PEAK OUTPUT POWER .....	13
A.2.1. ANTENNA GAIN .....	13
A.2.2. MAXIMUM PEAK OUTPUT POWER-CONDUCTED .....	13
A.2.3. MAXIMUM PEAK OUTPUT POWER-RADIATED .....	14
A.3. PEAK POWER SPECTRAL DENSITY .....	15
A.4. OCCUPIED 6dB BANDWIDTH.....	15
FIG. 1 OCCUPIED 6dB BANDWIDTH (802.11B, CH 1) .....	16
FIG. 2 OCCUPIED 6dB BANDWIDTH (802.11B, CH 6) .....	17
FIG. 3 OCCUPIED 6dB BANDWIDTH (802.11B, CH 11) .....	17
FIG. 4 OCCUPIED 6dB BANDWIDTH (802.11G, CH 1).....	18
FIG. 5 OCCUPIED 6dB BANDWIDTH (802.11G, CH 6).....	18
FIG. 6 OCCUPIED 6dB BANDWIDTH (802.11G, CH 11).....	19
FIG. 7 OCCUPIED 6dB BANDWIDTH (802.11N-HT20, CH 1) .....	19

FIG. 8	OCCUPIED 6dB BANDWIDTH (802.11N-HT20, CH 6)	20
FIG. 9	OCCUPIED 6dB BANDWIDTH (802.11N-HT20, CH 11)	20
A.5.	BAND EDGES COMPLIANCE	21
FIG. 10	BAND EDGES (802.11B, CH 1)	22
FIG. 11	BAND EDGES (802.11B, CH 11)	22
FIG. 12	BAND EDGES (802.11G, CH 1)	23
FIG. 13	BAND EDGES (802.11G, CH 11)	23
FIG. 14	BAND EDGES (802.11N-HT20, CH 1)	24
FIG. 15	BAND EDGES (802.11N-HT20, CH 11)	24
A.6.	TRANSMITTER SPURIOUS EMISSION	25
A.6.1	TRANSMITTER SPURIOUS EMISSION - CONDUCTED	25
FIG. 16	CONDUCTED SPURIOUS EMISSION (802.11B, CH1, CENTER FREQUENCY)	29
FIG. 17	CONDUCTED SPURIOUS EMISSION (802.11B, CH1, 30 MHz-1 GHz)	29
FIG. 18	CONDUCTED SPURIOUS EMISSION (802.11B, CH1, 1 GHz-2.5 GHz)	30
FIG. 19	CONDUCTED SPURIOUS EMISSION (802.11B, CH1, 2.5 GHz-7.5 GHz)	30
FIG. 20	CONDUCTED SPURIOUS EMISSION (802.11B, CH1, 7.5 GHz-10 GHz)	31
FIG. 21	CONDUCTED SPURIOUS EMISSION (802.11B, CH1, 10 GHz-15 GHz)	31
FIG. 22	CONDUCTED SPURIOUS EMISSION (802.11B, CH1, 15 GHz-20 GHz)	32
FIG. 23	CONDUCTED SPURIOUS EMISSION (802.11B, CH1, 20 GHz-26 GHz)	32
FIG. 24	CONDUCTED SPURIOUS EMISSION (802.11B, CH6, CENTER FREQUENCY)	33
FIG. 25	CONDUCTED SPURIOUS EMISSION (802.11B, CH6, 30 MHz-1 GHz)	33
FIG. 26	CONDUCTED SPURIOUS EMISSION (802.11B, CH6, 1 GHz-2.5 GHz)	34
FIG. 27	CONDUCTED SPURIOUS EMISSION (802.11B, CH6, 2.5 GHz-7.5 GHz)	34
FIG. 28	CONDUCTED SPURIOUS EMISSION (802.11B, CH6, 7.5 GHz-10 GHz)	35
FIG. 29	CONDUCTED SPURIOUS EMISSION (802.11B, CH6, 10 GHz-15 GHz)	35
FIG. 30	CONDUCTED SPURIOUS EMISSION (802.11B, CH6, 15 GHz-20 GHz)	36
FIG. 31	CONDUCTED SPURIOUS EMISSION (802.11B, CH6, 20 GHz-26 GHz)	36
FIG. 32	CONDUCTED SPURIOUS EMISSION (802.11B, CH11, CENTER FREQUENCY)	37
FIG. 33	CONDUCTED SPURIOUS EMISSION (802.11B, CH11, 30 MHz-1 GHz)	37
FIG. 34	CONDUCTED SPURIOUS EMISSION (802.11B, CH11, 1 GHz-2.5 GHz)	38
FIG. 35	CONDUCTED SPURIOUS EMISSION (802.11B, CH11, 2.5 GHz-7.5 GHz)	38
FIG. 36	CONDUCTED SPURIOUS EMISSION (802.11B, CH11, 7.5 GHz-10 GHz)	39
FIG. 37	CONDUCTED SPURIOUS EMISSION (802.11B, CH11, 10 GHz-15 GHz)	39
FIG. 38	CONDUCTED SPURIOUS EMISSION (802.11B, CH11, 15 GHz-20 GHz)	40
FIG. 39	CONDUCTED SPURIOUS EMISSION (802.11B, CH11, 20 GHz-26 GHz)	40
FIG. 40	CONDUCTED SPURIOUS EMISSION (802.11G, CH1, CENTER FREQUENCY)	41
FIG. 41	CONDUCTED SPURIOUS EMISSION (802.11G, CH1, 30 MHz-1 GHz)	41
FIG. 42	CONDUCTED SPURIOUS EMISSION (802.11G, CH1, 1 GHz-2.5 GHz)	42
FIG. 43	CONDUCTED SPURIOUS EMISSION (802.11G, CH1, 2.5 GHz-7.5 GHz)	42
FIG. 44	CONDUCTED SPURIOUS EMISSION (802.11G, CH1, 7.5 GHz-10 GHz)	43
FIG. 45	CONDUCTED SPURIOUS EMISSION (802.11G, CH1, 10 GHz-15 GHz)	43
FIG. 46	CONDUCTED SPURIOUS EMISSION (802.11G, CH1, 15 GHz-20 GHz)	44
FIG. 47	CONDUCTED SPURIOUS EMISSION (802.11G, CH1, 20 GHz-26 GHz)	44
FIG. 48	CONDUCTED SPURIOUS EMISSION (802.11G, CH6, CENTER FREQUENCY)	45

FIG. 49	CONDUCTED SPURIOUS EMISSION (802.11G, CH6, 30 MHz-1 GHz)	45
FIG. 50	CONDUCTED SPURIOUS EMISSION (802.11G, CH6, 1 GHz-2.5 GHz)	46
FIG. 51	CONDUCTED SPURIOUS EMISSION (802.11G, CH6, 2.5 GHz-7.5 GHz)	46
FIG. 52	CONDUCTED SPURIOUS EMISSION (802.11G, CH6, 7.5 GHz-10 GHz)	47
FIG. 53	CONDUCTED SPURIOUS EMISSION (802.11G, CH6, 10 GHz-15 GHz)	47
FIG. 54	CONDUCTED SPURIOUS EMISSION (802.11G, CH6, 15 GHz-20 GHz)	48
FIG. 55	CONDUCTED SPURIOUS EMISSION (802.11G, CH6, 20 GHz-26 GHz)	48
FIG. 56	CONDUCTED SPURIOUS EMISSION (802.11G, CH11, CENTER FREQUENCY)	49
FIG. 57	CONDUCTED SPURIOUS EMISSION (802.11G, CH11, 30 MHz-1 GHz)	49
FIG. 58	CONDUCTED SPURIOUS EMISSION (802.11G, CH11, 1 GHz-2.5 GHz)	50
FIG. 59	CONDUCTED SPURIOUS EMISSION (802.11G, CH11, 2.5 GHz-7.5 GHz)	50
FIG. 60	CONDUCTED SPURIOUS EMISSION (802.11G, CH11, 7.5 GHz-10 GHz)	51
FIG. 61	CONDUCTED SPURIOUS EMISSION (802.11G, CH11, 10 GHz-15 GHz)	51
FIG. 62	CONDUCTED SPURIOUS EMISSION (802.11G, CH11, 15 GHz-20 GHz)	52
FIG. 63	CONDUCTED SPURIOUS EMISSION (802.11G, CH11, 20 GHz-26 GHz)	52
FIG. 64	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH1, CENTER FREQUENCY)	53
FIG. 65	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH1, 30 MHz-1 GHz)	53
FIG. 66	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH1, 1 GHz-2.5 GHz)	54
FIG. 67	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH1, 2.5 GHz-7.5 GHz)	54
FIG. 68	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH1, 7.5 GHz-10 GHz)	55
FIG. 69	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH1, 10 GHz-15 GHz)	55
FIG. 70	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH1, 15 GHz-20 GHz)	56
FIG. 71	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH1, 20 GHz-26 GHz)	56
FIG. 72	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH6, CENTER FREQUENCY)	57
FIG. 73	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH6, 30 MHz-1 GHz)	57
FIG. 74	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH6, 1 GHz-2.5 GHz)	58
FIG. 75	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH6, 2.5 GHz-7.5 GHz)	58
FIG. 76	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH6, 7.5 GHz-10 GHz)	59
FIG. 77	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH6, 10 GHz-15 GHz)	59
FIG. 78	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH6, 15 GHz-20 GHz)	60
FIG. 79	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH6, 20 GHz-26 GHz)	60
FIG. 80	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH11, CENTER FREQUENCY)	61
FIG. 81	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH11, 30 MHz-1 GHz)	61
FIG. 82	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH11, 1 GHz-2.5 GHz)	62
FIG. 83	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH11, 2.5 GHz-7.5 GHz)	62
FIG. 84	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH11, 7.5 GHz-10 GHz)	63
FIG. 85	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH11, 10 GHz-15 GHz)	63
FIG. 86	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH11, 15 GHz-20 GHz)	64
FIG. 87	CONDUCTED SPURIOUS EMISSION (802.11N-HT20, CH11, 20 GHz-26 GHz)	64
A.6.2	TRANSMITTER SPURIOUS EMISSION - RADIATED	65
FIG. 88	RADIATED SPURIOUS EMISSION (POWER): 802.11B, CH1, 2.38 GHz - 2.45GHz	69
FIG. 89	RADIATED SPURIOUS EMISSION (802.11B, CH1, 1 GHz-3 GHz)	69
FIG. 90	RADIATED SPURIOUS EMISSION (802.11B, CH1, 3 GHz-18 GHz)	70
FIG. 91	RADIATED SPURIOUS EMISSION (802.11B, CH6, 30 MHz-1 GHz)	70

FIG. 92	RADIATED SPURIOUS EMISSION (802.11B, CH6, 1 GHz-3 GHz) .....	71
FIG. 93	RADIATED SPURIOUS EMISSION (802.11B, CH6, 3 GHz-18 GHz) .....	71
FIG. 94	RADIATED SPURIOUS EMISSION (POWER): 802.11B, CH11, 2.45 GHz - 2.5GHz .....	72
FIG. 95	RADIATED SPURIOUS EMISSION (802.11B, CH11, 1 GHz-3 GHz) .....	72
FIG. 96	RADIATED SPURIOUS EMISSION (802.11B, CH11, 3 GHz-18 GHz) .....	73
FIG. 97	RADIATED SPURIOUS EMISSION (POWER): 802.11G, CH1, 2.38 GHz - 2.45GHz .....	73
FIG. 98	RADIATED SPURIOUS EMISSION (802.11G, CH1, 1 GHz-3 GHz) .....	74
FIG. 99	RADIATED SPURIOUS EMISSION (802.11G, CH1, 3 GHz-18 GHz) .....	74
FIG. 100	RADIATED SPURIOUS EMISSION (802.11G, CH6, 30 MHz-1 GHz) .....	75
FIG. 101	RADIATED SPURIOUS EMISSION (802.11G, CH6, 1 GHz-3 GHz).....	75
FIG. 102	RADIATED SPURIOUS EMISSION (802.11G, CH6, 3 GHz-18 GHz).....	76
FIG. 103	RADIATED SPURIOUS EMISSION (POWER): 802.11G, CH11, 2.45 GHz - 2.5GHz .....	76
FIG. 104	RADIATED SPURIOUS EMISSION (802.11G, CH11, 1 GHz-3 GHz).....	77
FIG. 105	RADIATED SPURIOUS EMISSION (802.11G, CH11, 3 GHz-18 GHz) .....	77
FIG. 106	RADIATED SPURIOUS EMISSION (POWER): 802.11N-HT20, CH1, 2.38 GHz - 2.45GHz .....	78
FIG. 107	RADIATED SPURIOUS EMISSION (802.11N-HT20, CH1, 1 GHz-3 GHz).....	78
FIG. 108	RADIATED SPURIOUS EMISSION (802.11N-HT20, CH1, 3 GHz-18 GHz).....	79
FIG. 109	RADIATED SPURIOUS EMISSION (802.11N-HT20, CH6, 30 MHz-1 GHz).....	79
FIG. 110	RADIATED SPURIOUS EMISSION (802.11N-HT20, CH6, 1 GHz-3 GHz).....	80
FIG. 111	RADIATED SPURIOUS EMISSION (802.11N-HT20, CH6, 3 GHz-18 GHz).....	80
FIG. 112	RADIATED SPURIOUS EMISSION (POWER): 802.11N-HT20, CH11, 2.45 GHz - 2.5GHz .....	81
FIG. 113	RADIATED SPURIOUS EMISSION (802.11N-HT20, CH11, 1 GHz-3 GHz) .....	81
FIG. 114	RADIATED SPURIOUS EMISSION (802.11N-HT20, CH11, 3 GHz-18 GHz) .....	82
FIG. 115	RADIATED EMISSION: 18 GHz – 26.5 GHz.....	82
A.7.	AC POWERLINE CONDUCTED EMISSION .....	83
FIG. 116	AC POWERLINE CONDUCTED EMISSION-802.11B .....	84
FIG. 117	AC POWERLINE CONDUCTED EMISSION-IDLE .....	85
<b>ANNEX B: PHOTOGRAPHS OF THE TEST SET-UP.....</b>		<b>86</b>

## 1. TEST LATORATORY

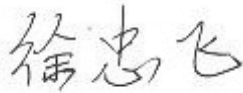
### 1.1. Testing Location

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

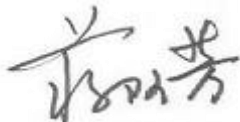
Testing Start Date: 2013-09-19  
Testing End Date: 2014-03-21

### 1.3. Signature



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Xu Zhongfei  
(Prepared this test report)



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Jiang Afang  
(Reviewed this test report)



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Xiao Li  
Deputy Director of the laboratory  
(Approved this test report)

## **2. CLIENT INFORMATION**

### **2.1. Applicant Information**

Company Name: Sony Mobile Communications (China) Co. Ltd  
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### **2.2. Manufacturer Information**

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Country: Sweden  
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Telephone: +46 703 227503  
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### 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
FCC ID	PY7PM-0611
WLAN Frequency Range	ISM Band: 2400MHz~2483.5MHz
Type of modulation	DSSS/CCK/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	CB5A1XBH3F	004402541458406	A	s_atp_1_32_2_18_a
EUT2	CB5A1UQQE1	004402541005397	A	s_atp_1_32_2_18_a

\*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.	
ANSI C63.10	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2009

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

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/manufacture 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.

This model is a variant product which type number is PM-0610-BV; all the test result has been derived from test report of PM-0610-BV besides Radiated Transmitter Spurious Emission and AC Powerline Conducted Emission.

### 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	2013-11-29	2014-11-28
3	LISN	ESH2-Z5	829991/012	Rohde & Schwarz	2013-4-15	2014-4-14
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	2013-11-6	2014-11-5
2	BiLog Antenna	VULB9163	9163-514	Schwarzbeck	2011-11-11	2014-11-10
3	Dual-Ridge Waveguide Horn Antenna	3117	00119024	ETS-Lindgren	2011-4-20	2014-4-19
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

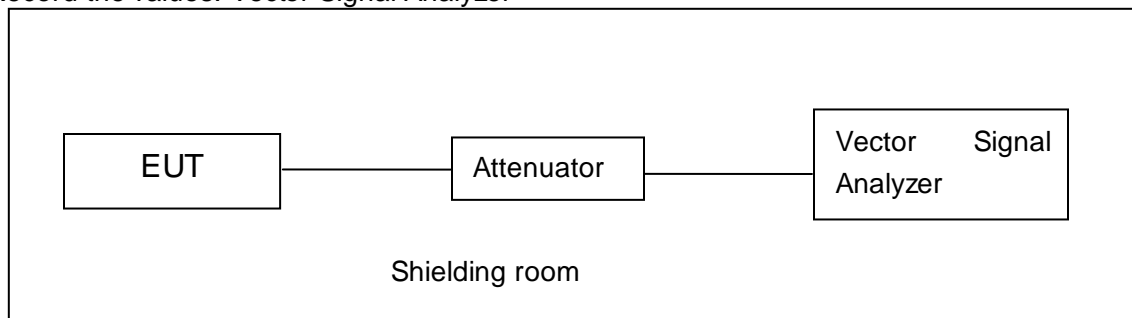
Connect the EUT to the test system as follow shows.

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

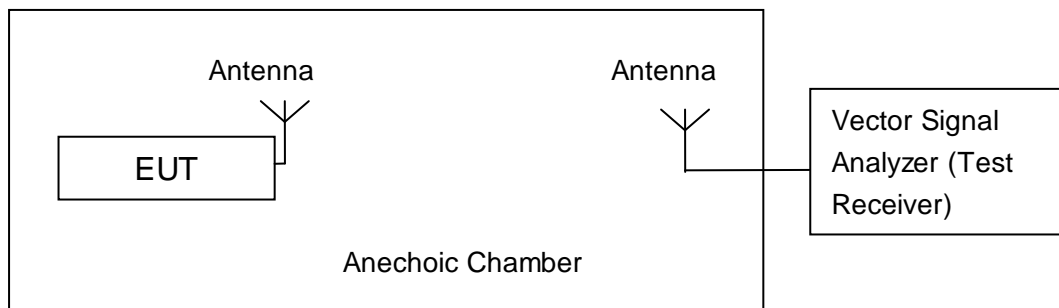


#### A.1.2. Radiated Emission Measurements

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.

### 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		
Tnom,Vnom	1	6	11
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.

**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:

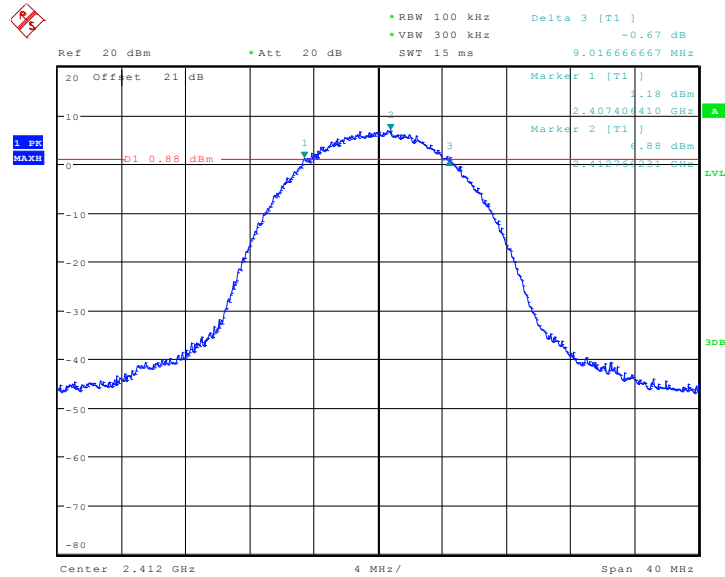
802.11b	802.11g	802.11n
11Mbps(CCK)	6Mbps(OFDM)	MCS0(OFDM)

**Measurement Result:**

Mode	Channel	Occupied 6dB Bandwidth ( kHz)		conclusion
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**

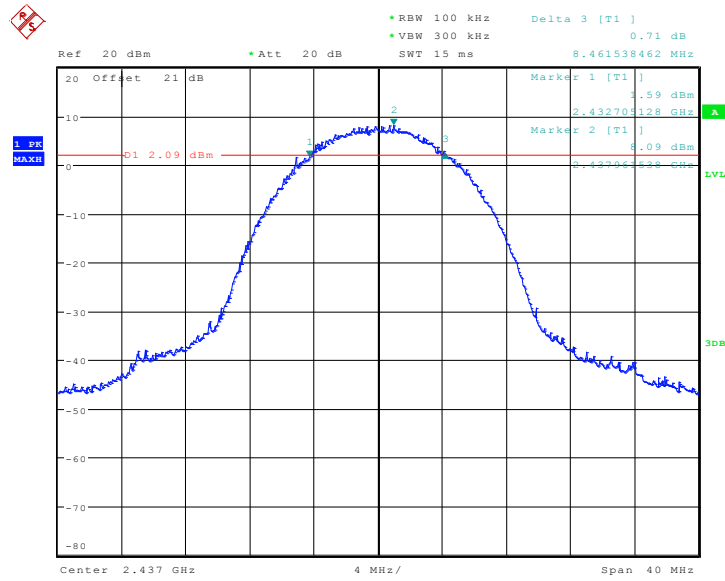
**Test graphs as below:**



Date: 23.SEP.2013 16:51:41

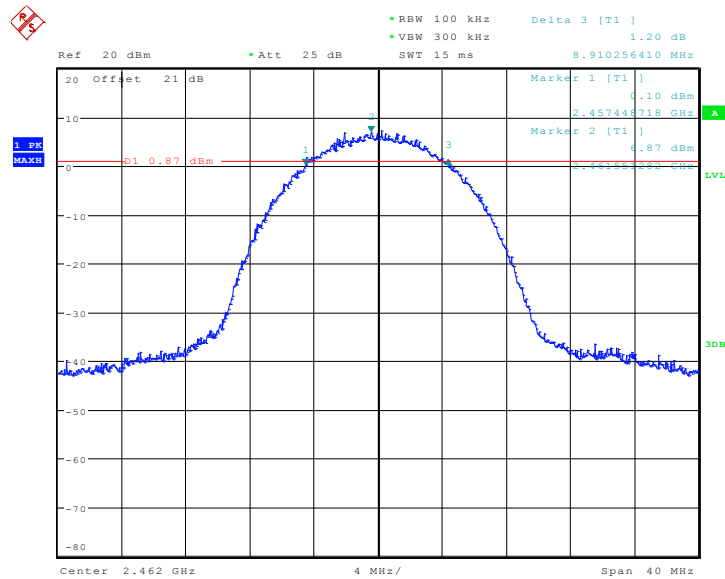
**Fig. 1 Occupied 6dB Bandwidth (802.11b, Ch 1)**





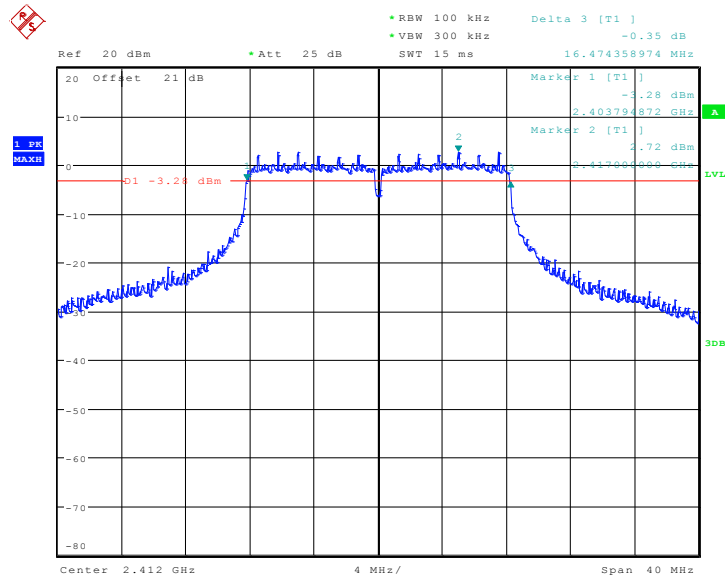
Date: 23.SEP.2013 16:57:20

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



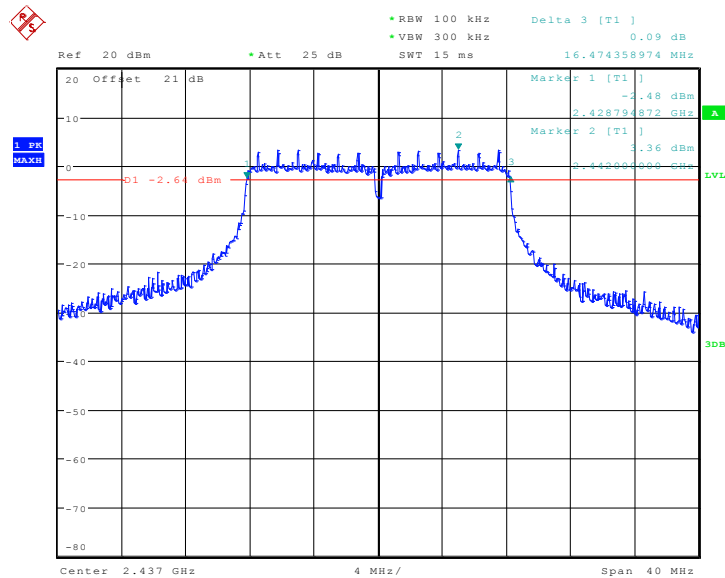
Date: 23.SEP.2013 16:59:31

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



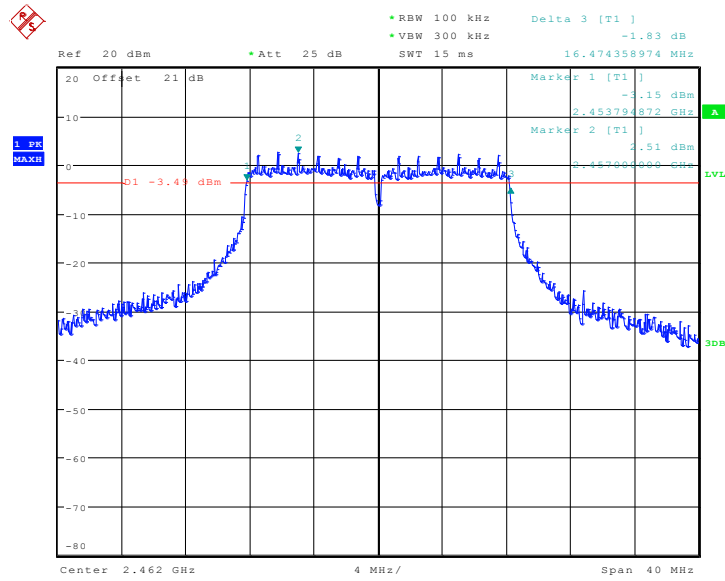
Date: 23.SEP.2013 17:47:26

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



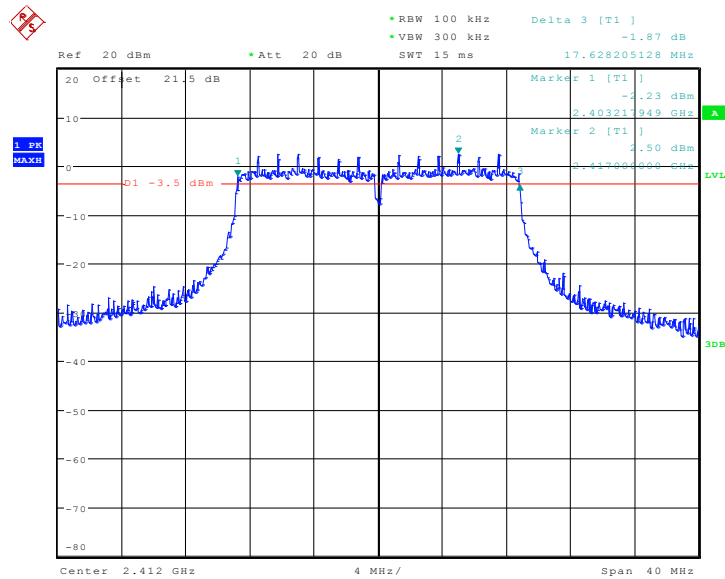
Date: 23.SEP.2013 17:49:20

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



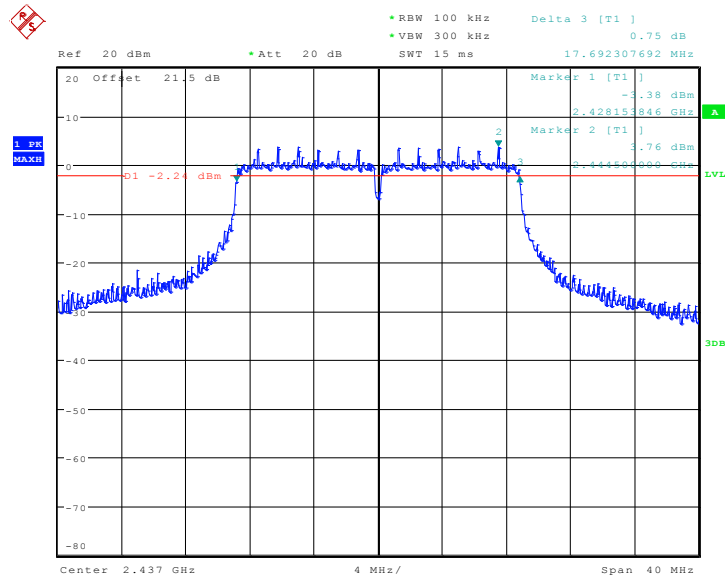
Date: 23.SEP.2013 17:50:41

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



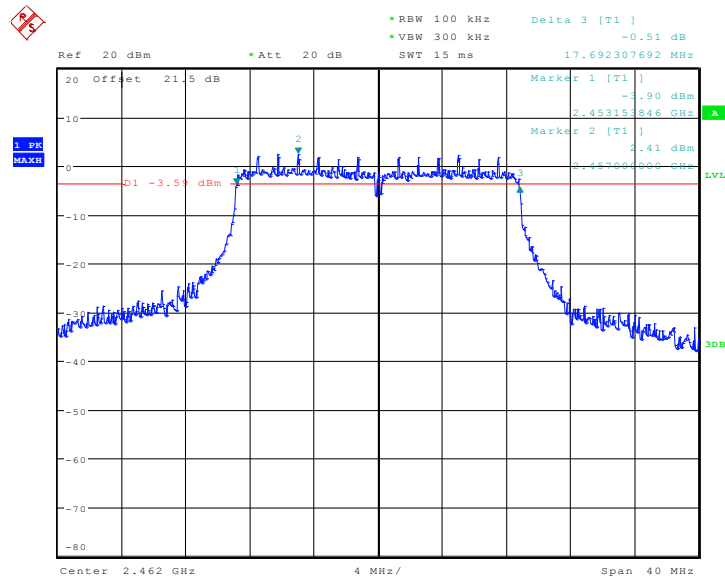
Date: 23.SEP.2013 18:37:54

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



Date: 23.SEP.2013 18:40:17

**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:

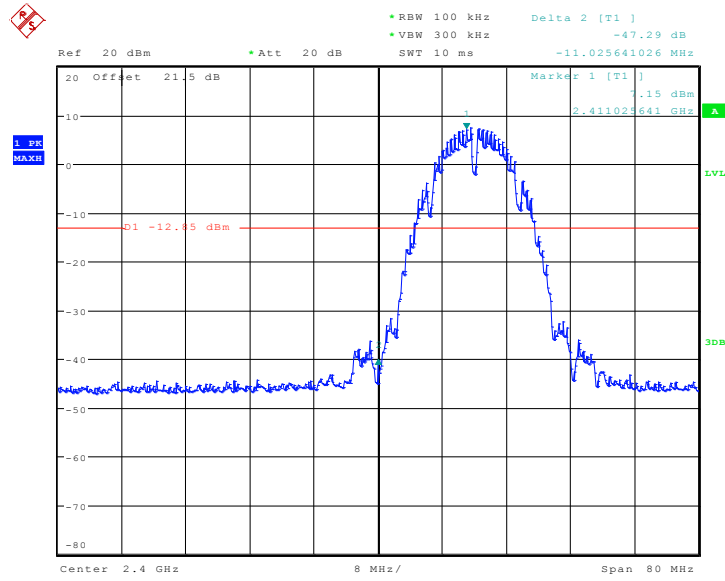
802.11b	802.11g	802.11n
11Mbps(CCK)	6Mbps(OFDM)	MCS0(OFDM)

**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

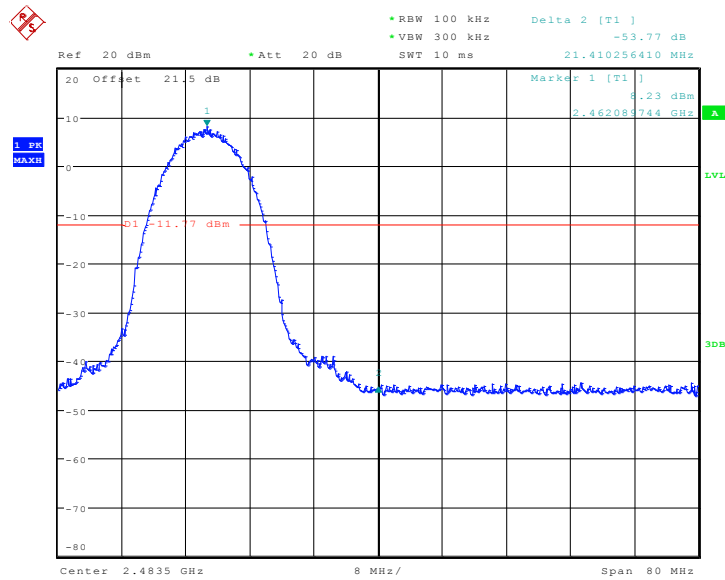
**Conclusion: PASS**

**Test graphs as below:**



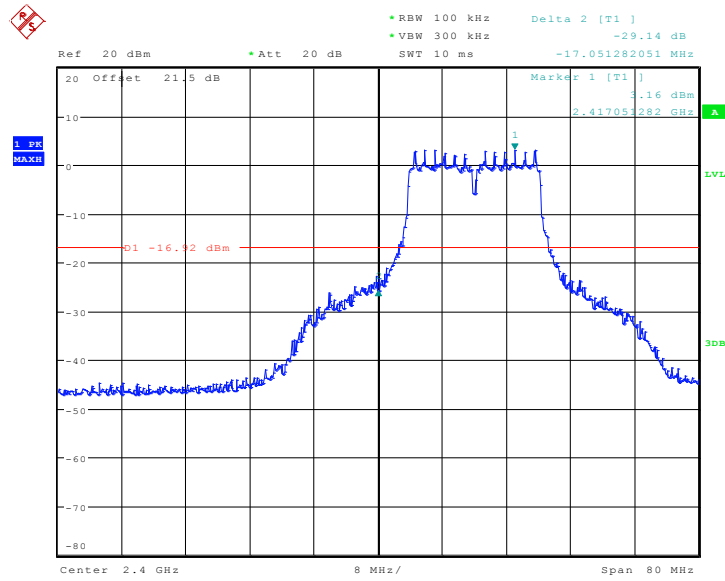
Date: 23.SEP.2013 18:46:11

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



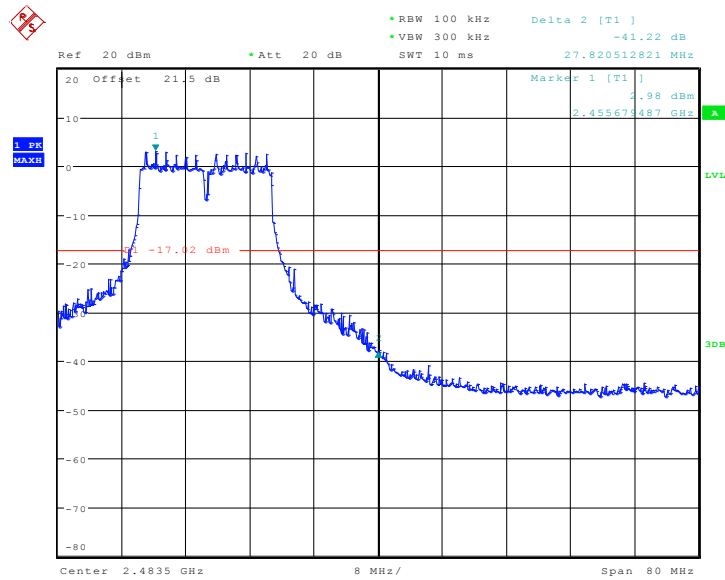
Date: 23.SEP.2013 18:49:18

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



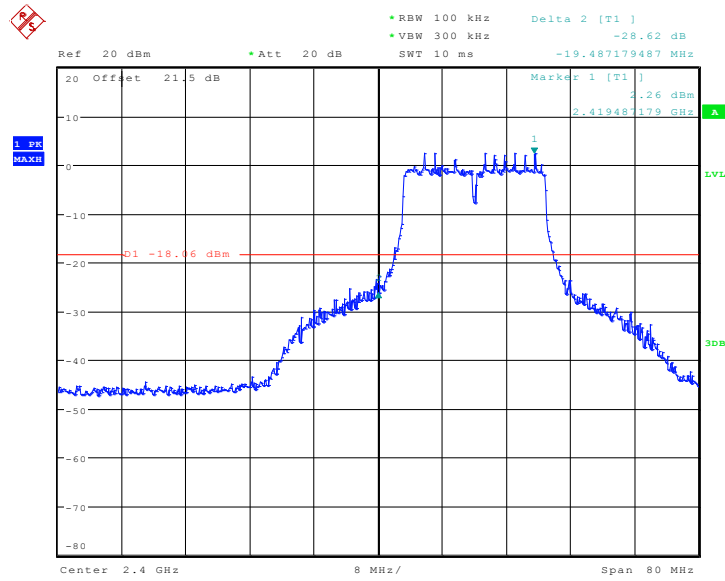
Date: 23.SEP.2013 18:51:00

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



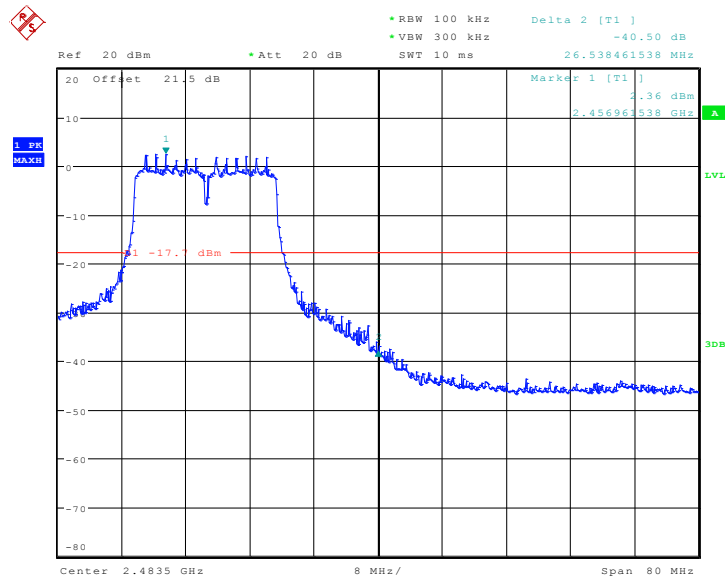
Date: 23.SEP.2013 18:52:26

**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

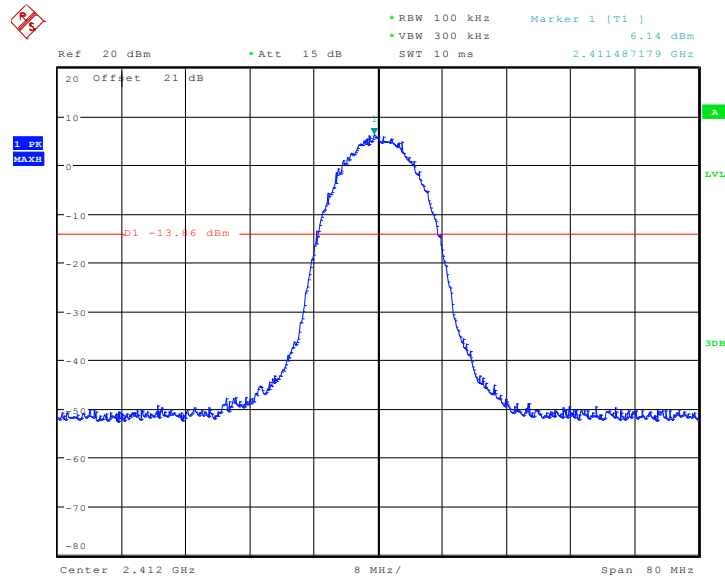
MODE	Channel	Frequency Range	Test Results	Conclusion
802.11g	1	2.412 GHz	Fig.40	P
		30 MHz ~ 1 GHz	Fig.41	P
		1 GHz ~ 2.5 GHz	Fig.42	P
		2.5 GHz ~ 7.5 GHz	Fig.43	P
		7.5 GHz ~ 10 GHz	Fig.44	P
		10 GHz ~ 15 GHz	Fig.45	P
		15 GHz ~ 20 GHz	Fig.46	P
		20 GHz ~ 26 GHz	Fig.47	P
	6	2.437 GHz	Fig.48	P
		30 MHz ~ 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

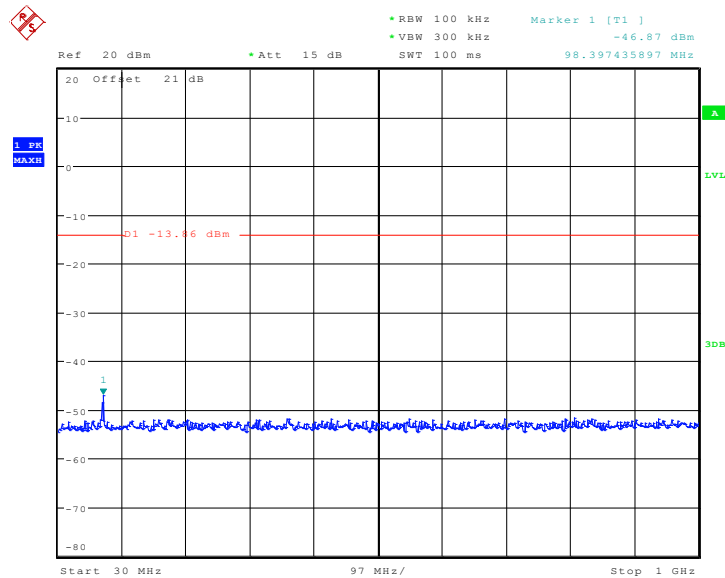
Conclusion: PASS

Test graphs as below:



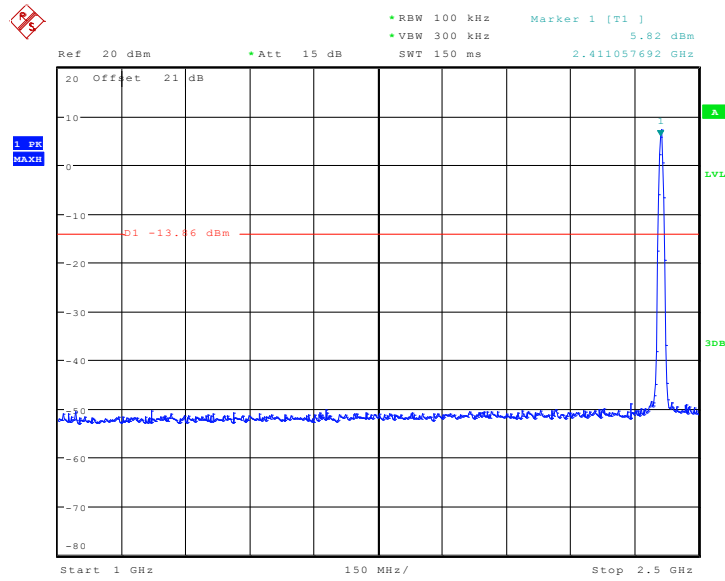
Date: 24.SEP.2013 20:09:37

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



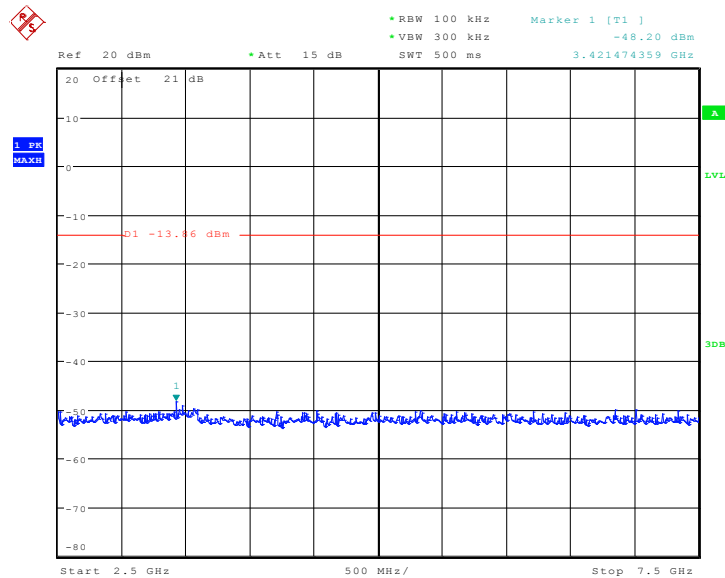
Date: 24.SEP.2013 20:10:08

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



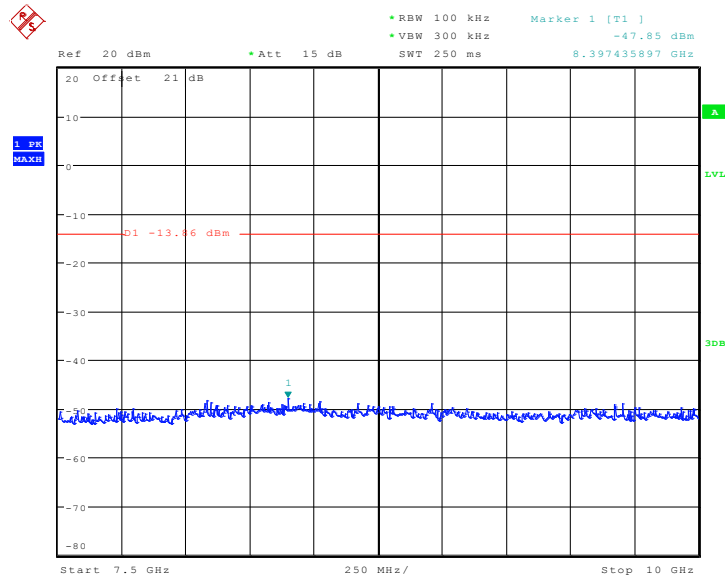
Date: 24.SEP.2013 20:12:58

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



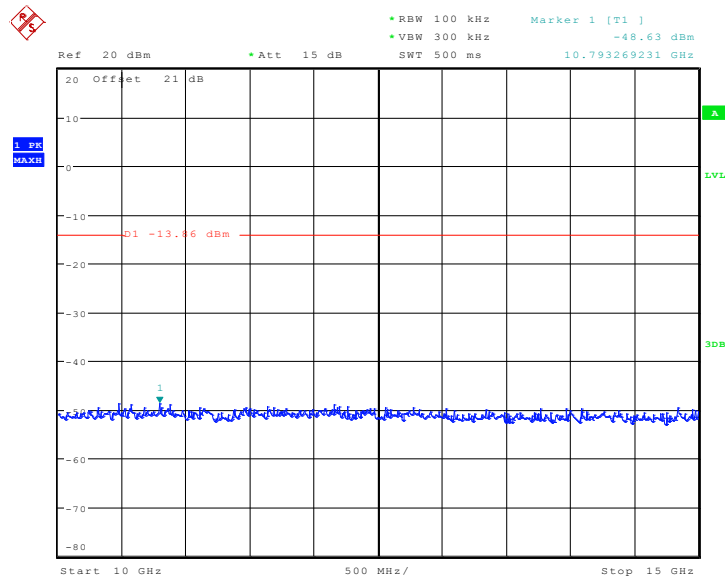
Date: 24.SEP.2013 20:13:15

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



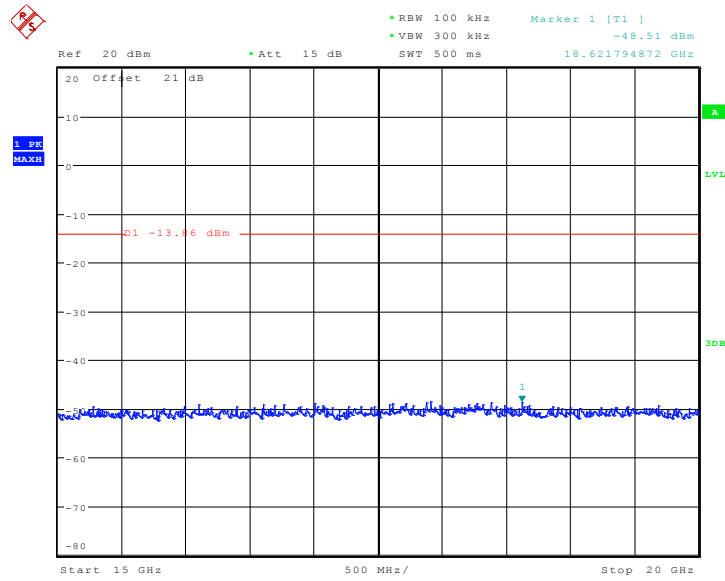
Date: 24.SEP.2013 20:13:33

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



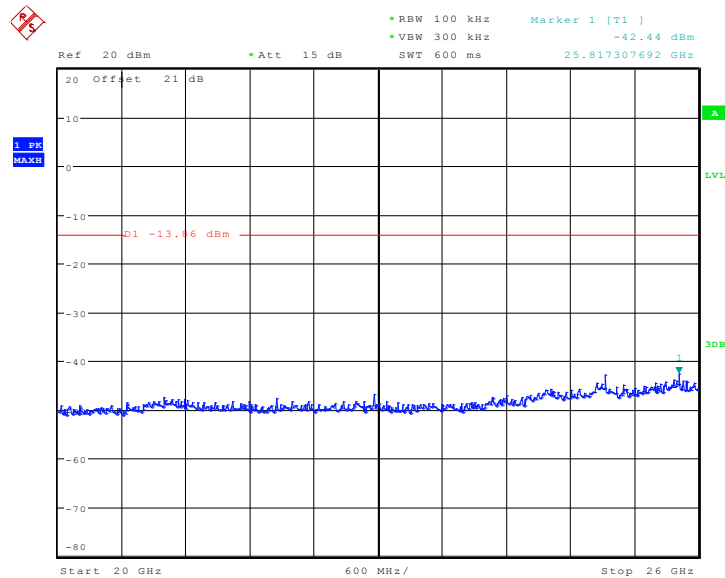
Date: 24.SEP.2013 20:13:51

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



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

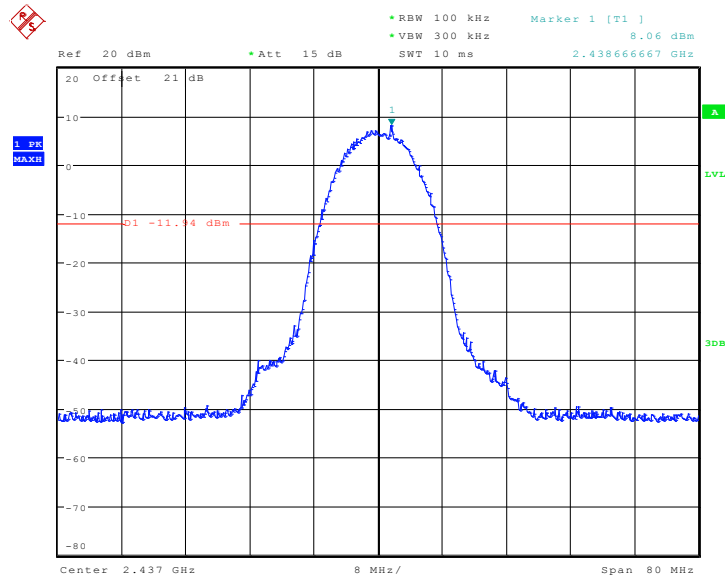
**Fig. 22 Conducted Spurious Emission (802.11b, Ch1, 15 GHz-20 GHz)**



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

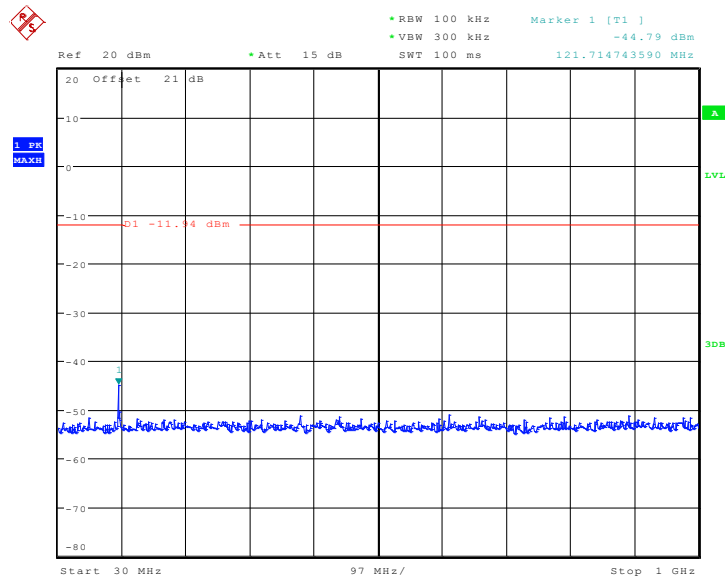
**Fig. 23 Conducted Spurious Emission (802.11b, Ch1, 20 GHz-26 GHz)**





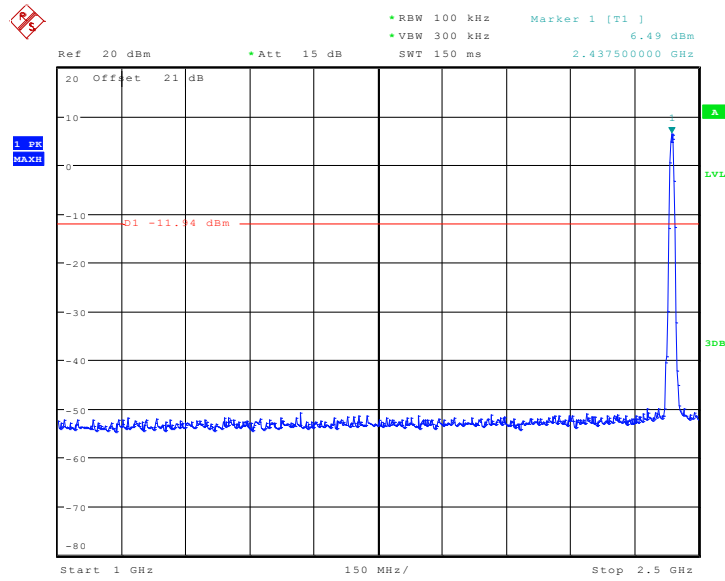
Date: 24.SEP.2013 20:24:10

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



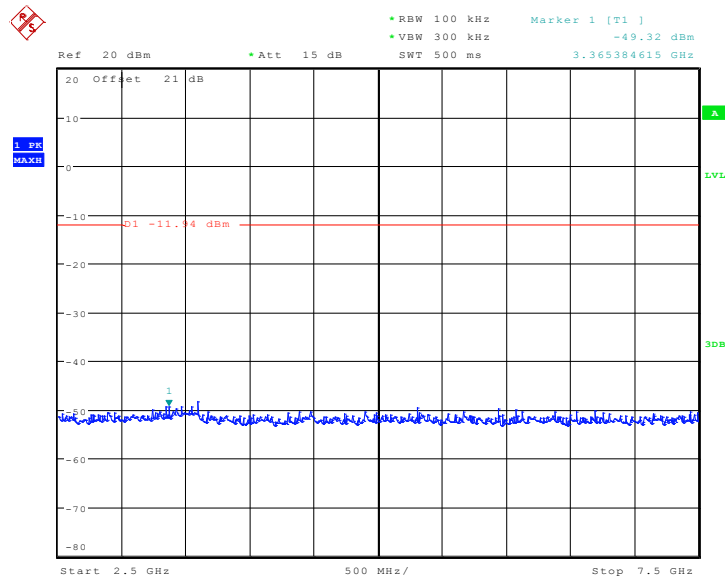
Date: 24.SEP.2013 20:24:27

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



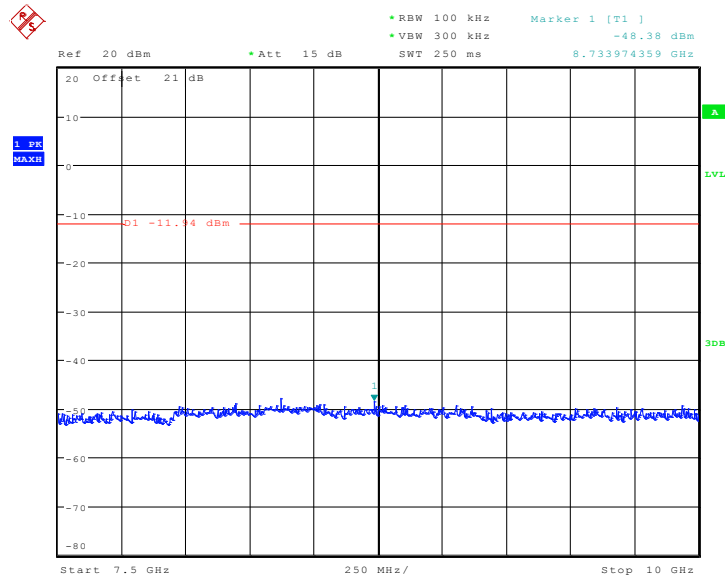
Date: 24.SEP.2013 20:24:43

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



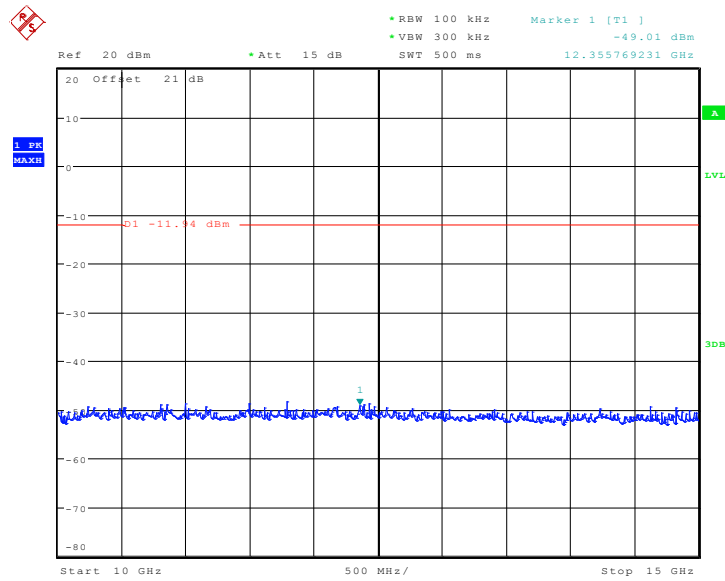
Date: 24.SEP.2013 20:25:01

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



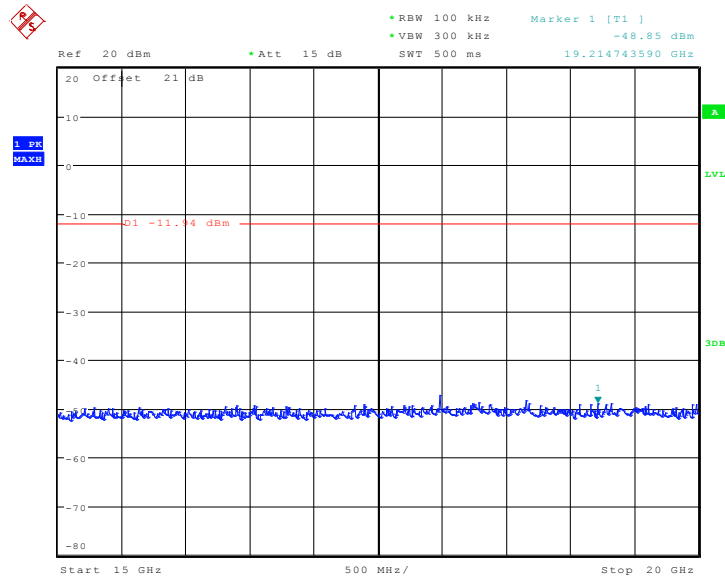
Date: 24.SEP.2013 20:25:18

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



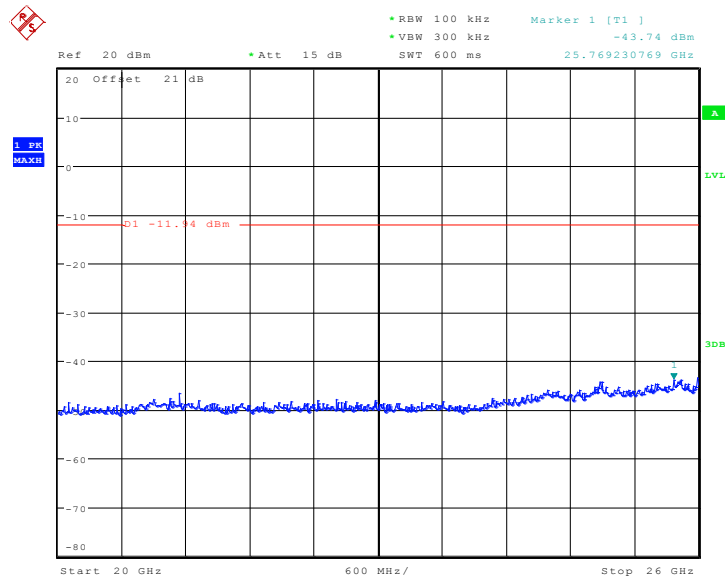
Date: 24.SEP.2013 20:25:34

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



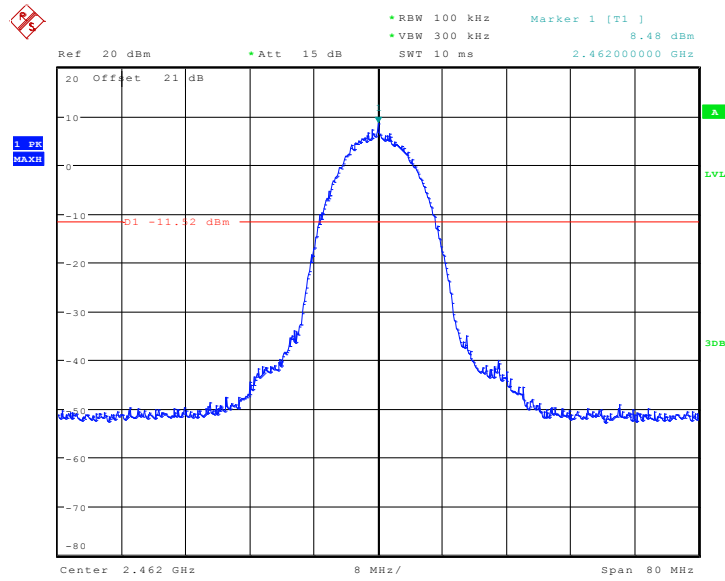
Date: 24.SEP.2013 20:25:51

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



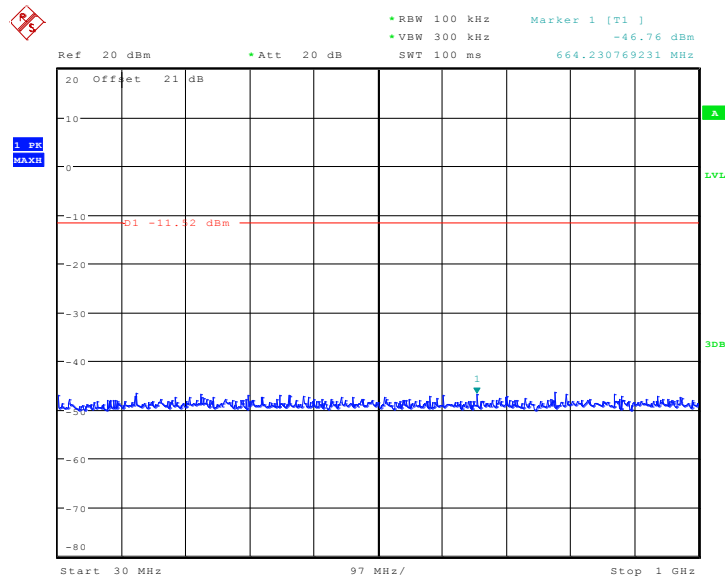
Date: 24.SEP.2013 20:26:18

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



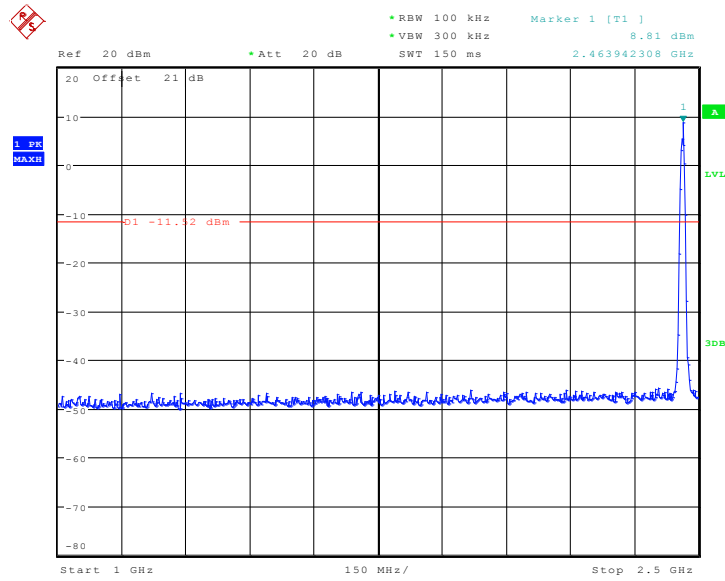
Date: 24.SEP.2013 20:27:30

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



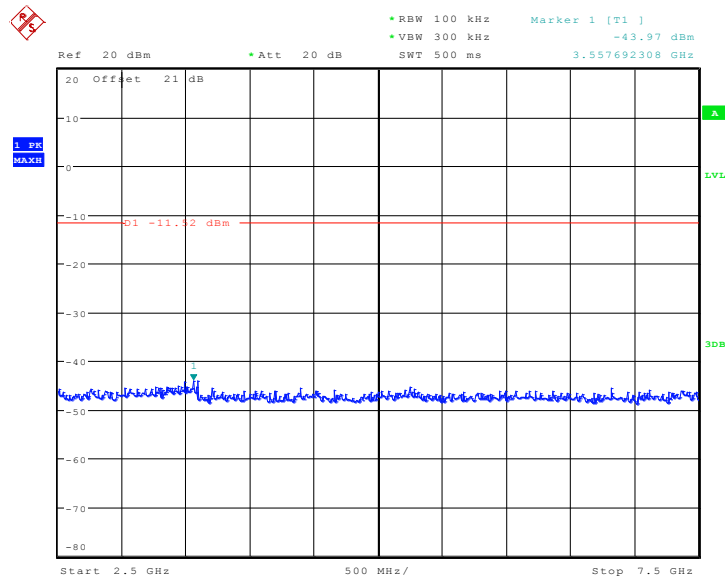
Date: 24.SEP.2013 20:27:55

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



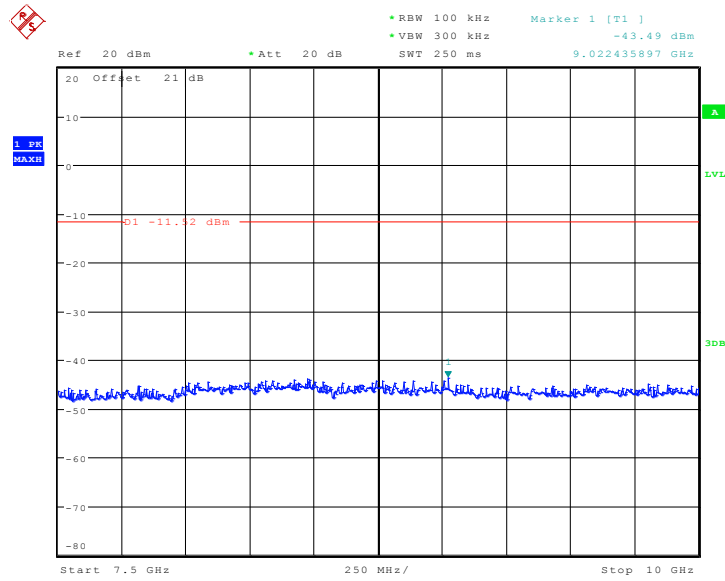
Date: 24.SEP.2013 20:28:11

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



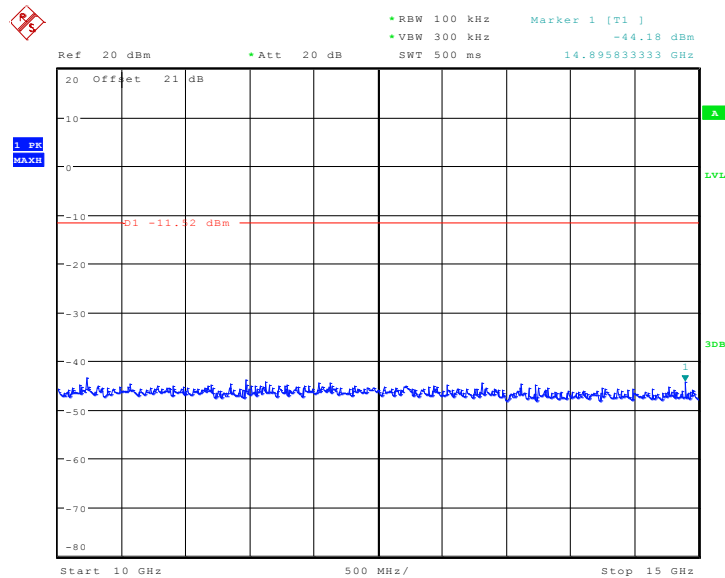
Date: 24.SEP.2013 20:28:29

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



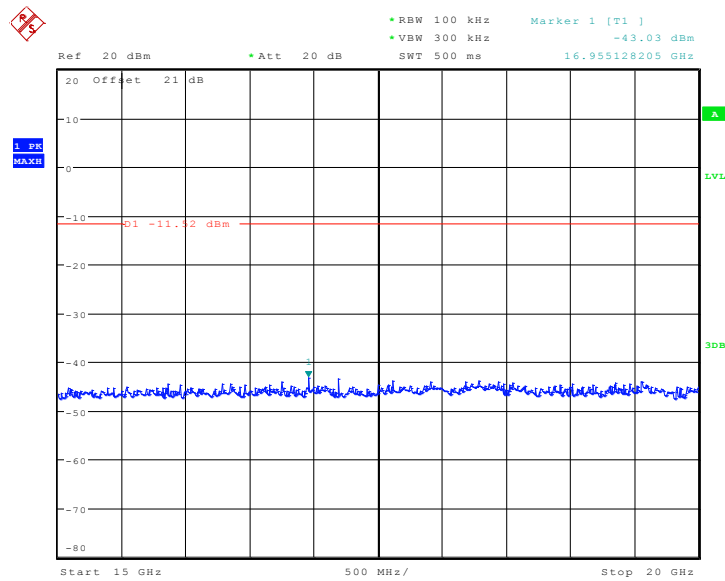
Date: 24.SEP.2013 20:28:48

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



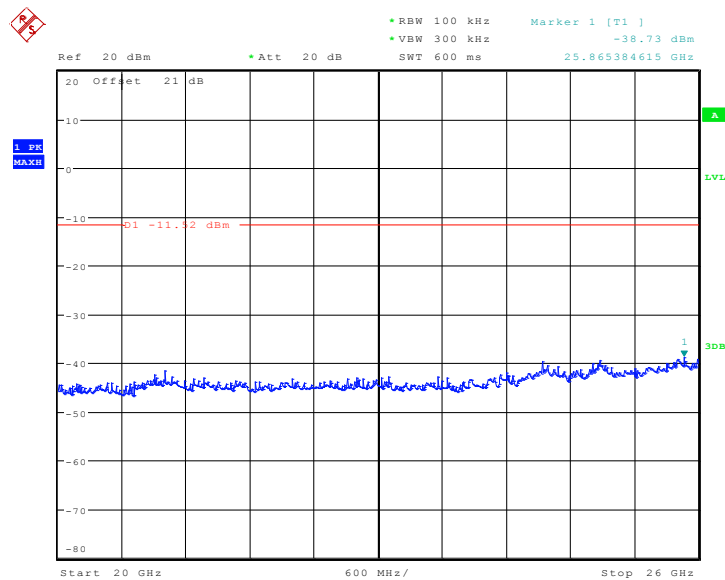
Date: 24.SEP.2013 20:29:07

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



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

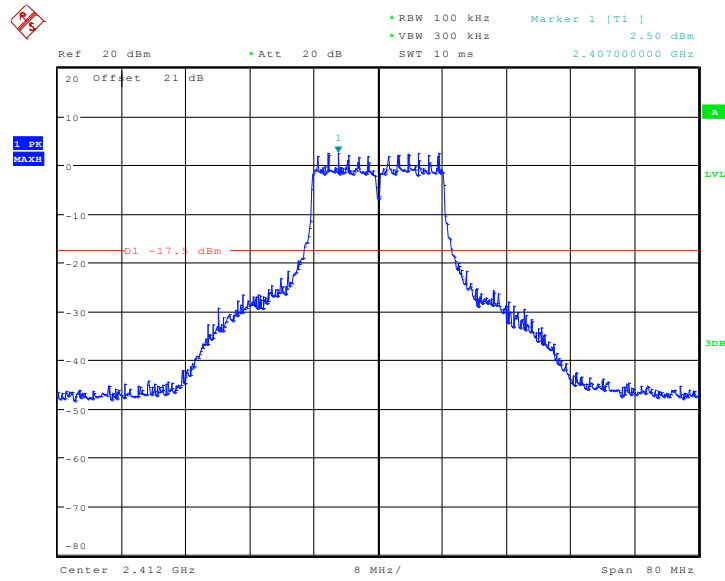
**Fig. 38 Conducted Spurious Emission (802.11b, Ch11, 15 GHz-20 GHz)**



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

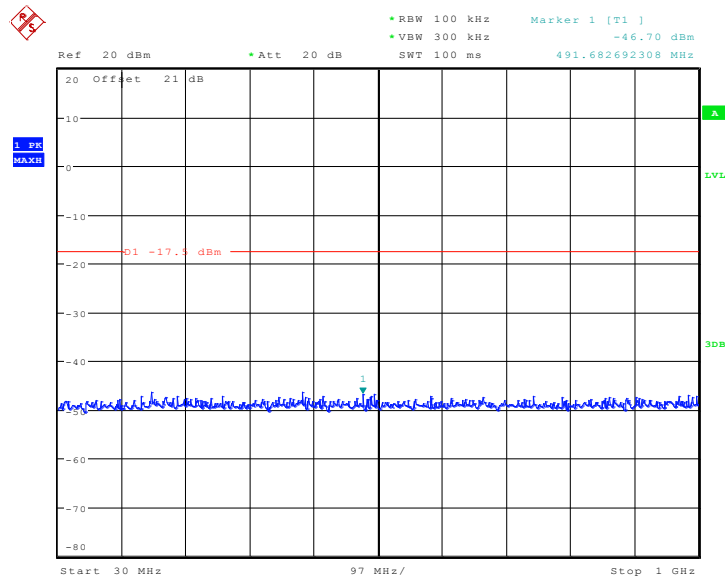
**Fig. 39 Conducted Spurious Emission (802.11b, Ch11, 20 GHz-26 GHz)**





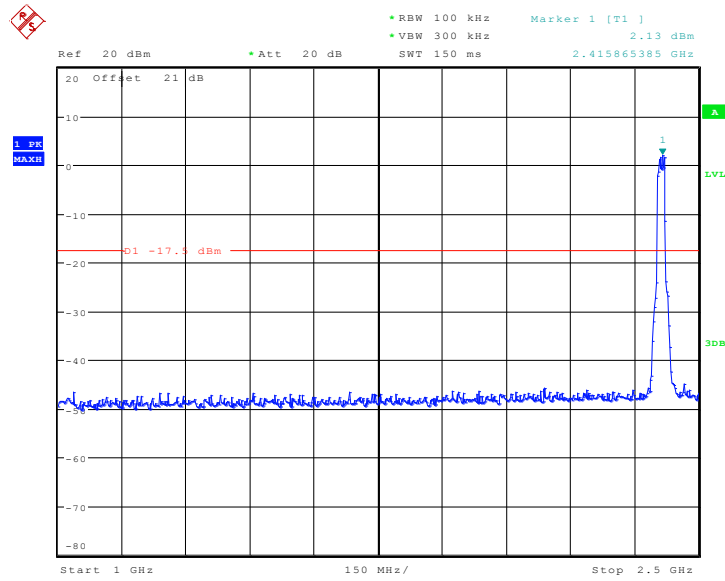
Date: 24.SEP.2013 20:32:07

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



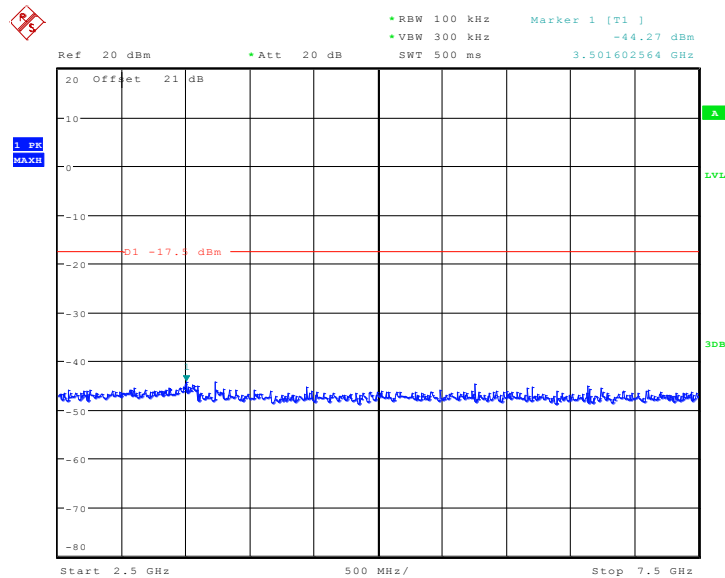
Date: 24.SEP.2013 20:32:22

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



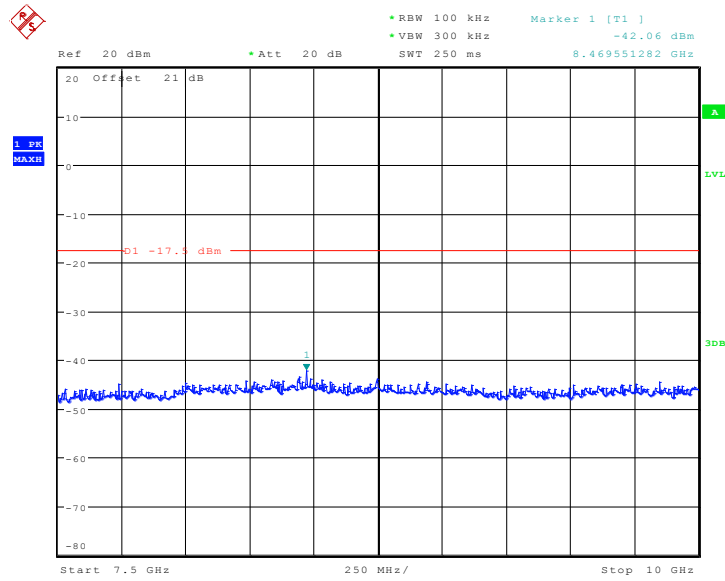
Date: 24.SEP.2013 20:32:38

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



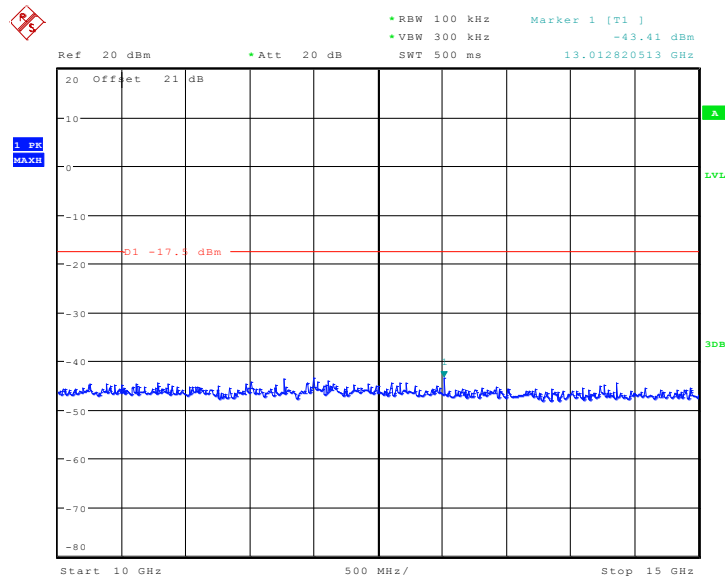
Date: 24.SEP.2013 20:32:56

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



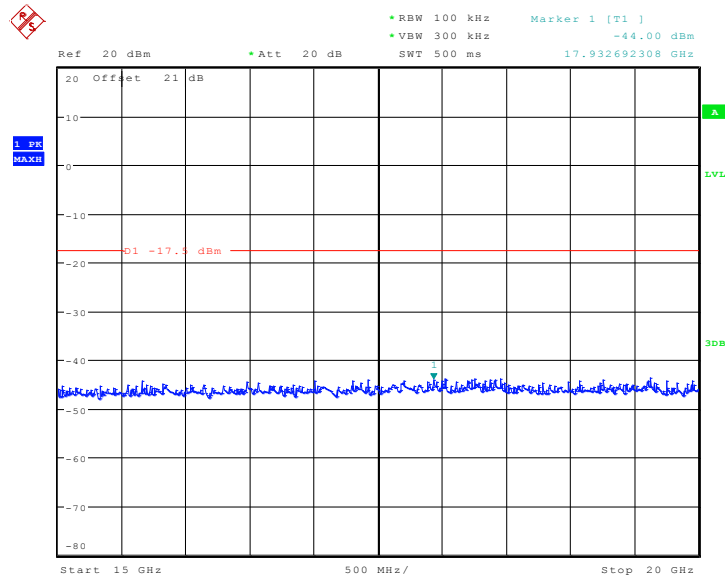
Date: 24.SEP.2013 20:33:14

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



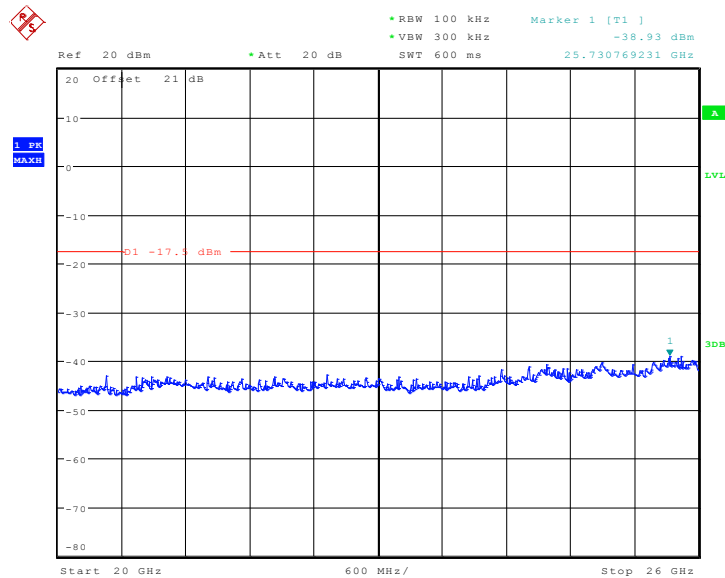
Date: 24.SEP.2013 20:33:31

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



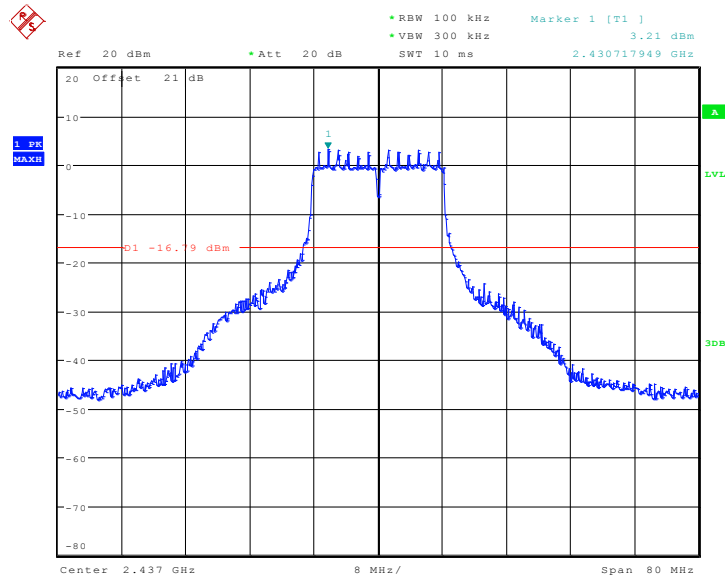
Date: 24.SEP.2013 20:33:48

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



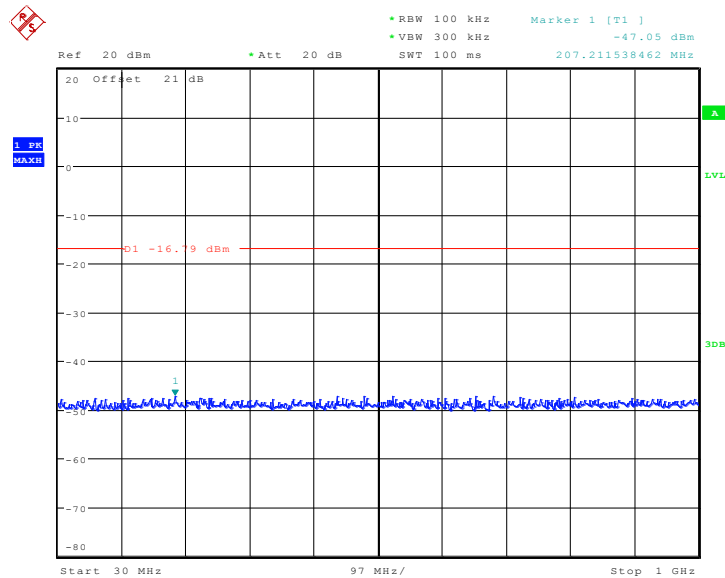
Date: 24.SEP.2013 20:34:04

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



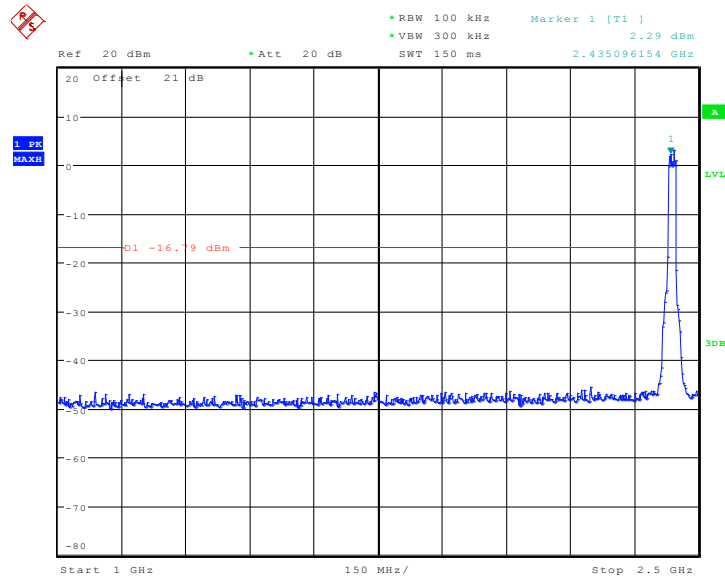
Date: 24.SEP.2013 20:34:53

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



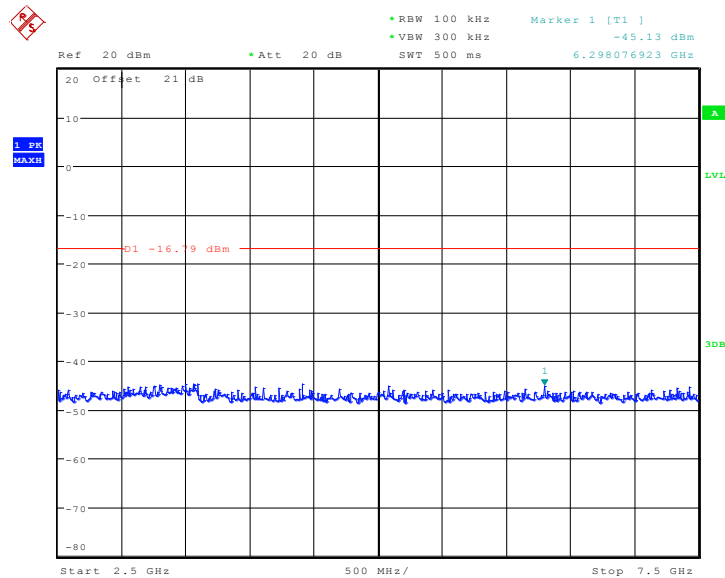
Date: 24.SEP.2013 20:35:11

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



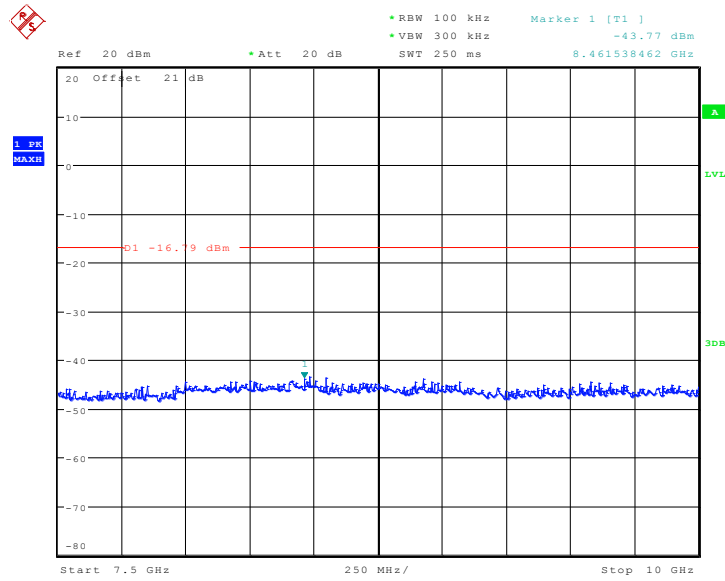
Date: 24.SEP.2013 20:35:26

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



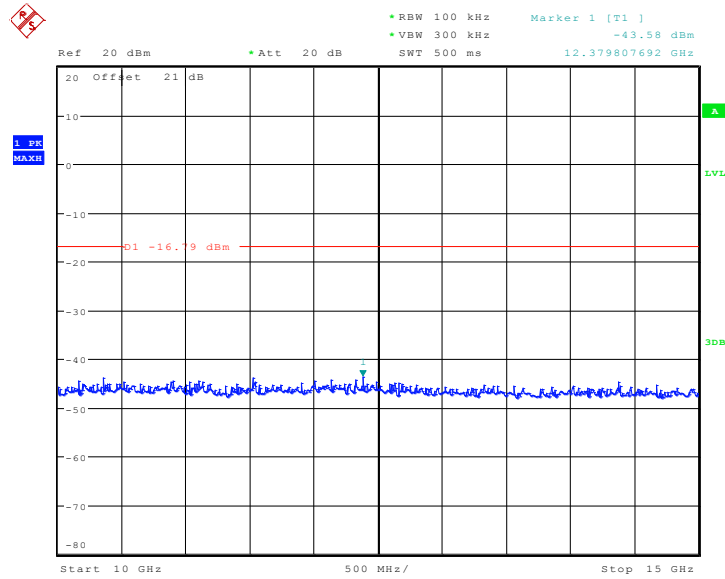
Date: 24.SEP.2013 20:35:45

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



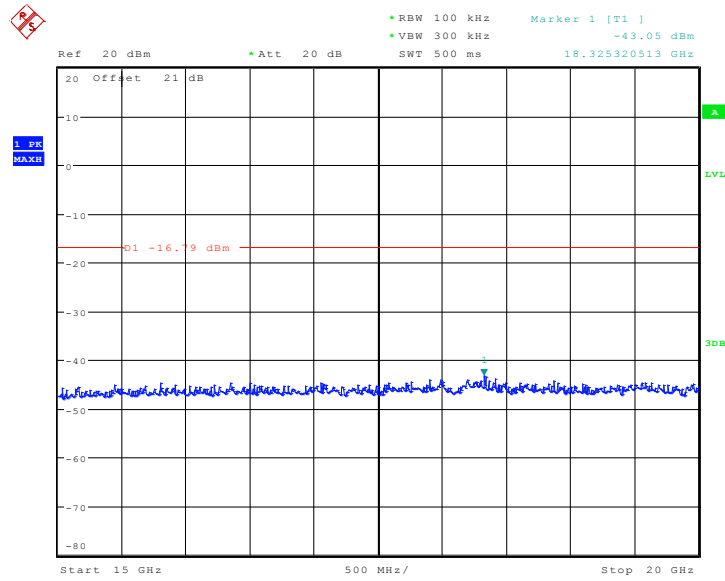
Date: 24.SEP.2013 20:36:07

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



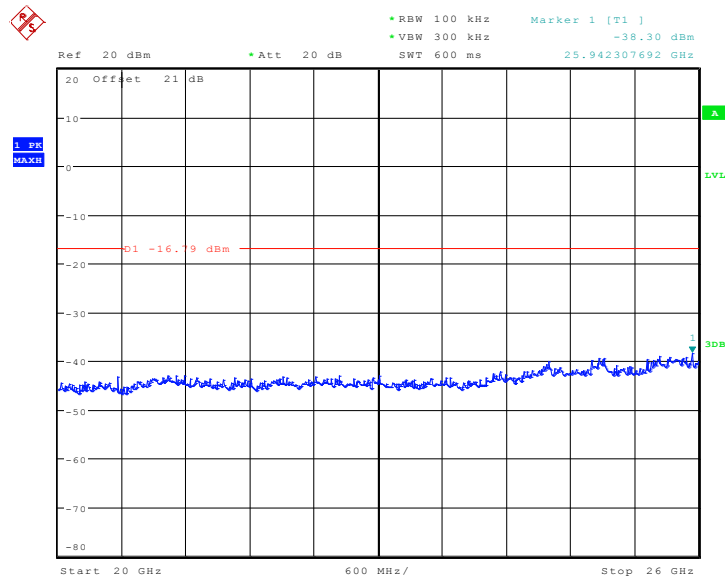
Date: 24.SEP.2013 20:36:19

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



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

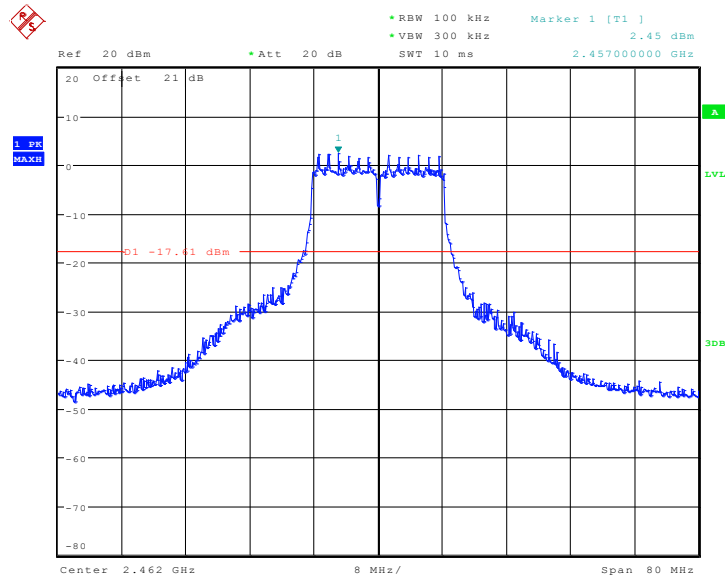
**Fig. 54 Conducted Spurious Emission (802.11g, Ch6, 15 GHz-20 GHz)**



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

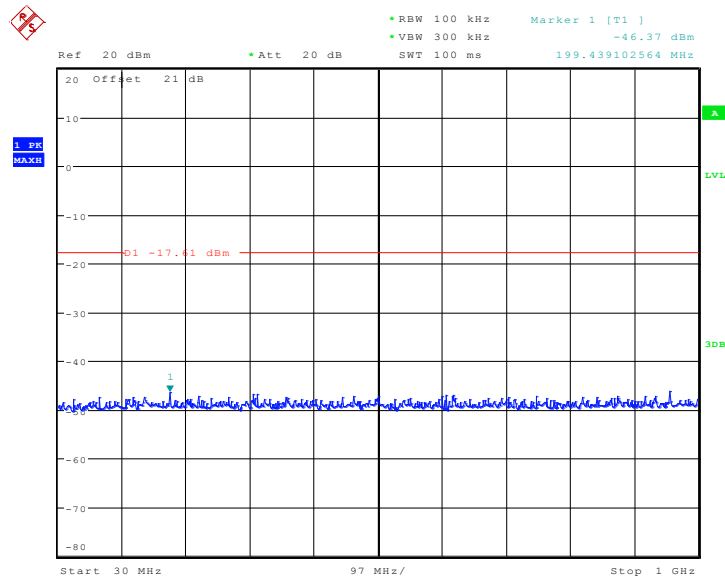
**Fig. 55 Conducted Spurious Emission (802.11g, Ch6, 20 GHz-26 GHz)**





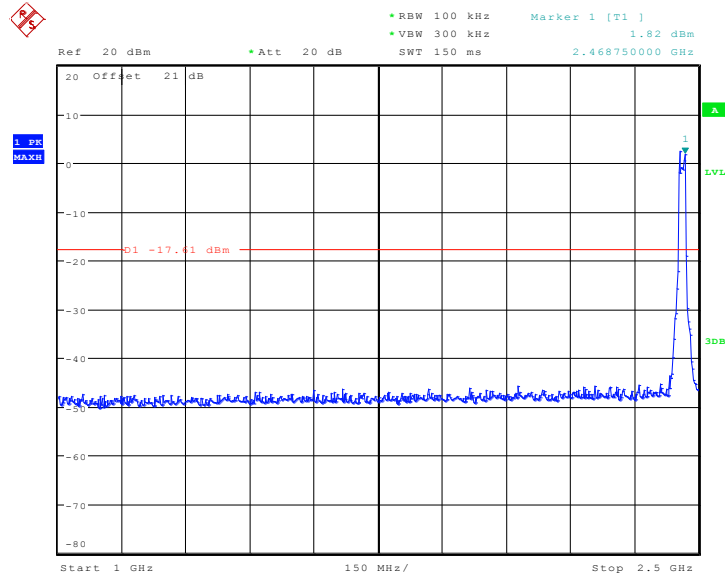
Date: 24.SEP.2013 20:37:57

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



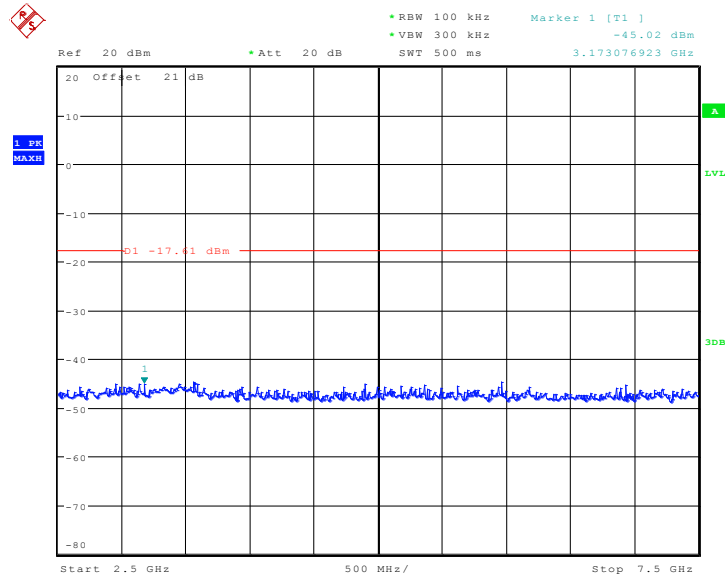
Date: 24.SEP.2013 20:38:16

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



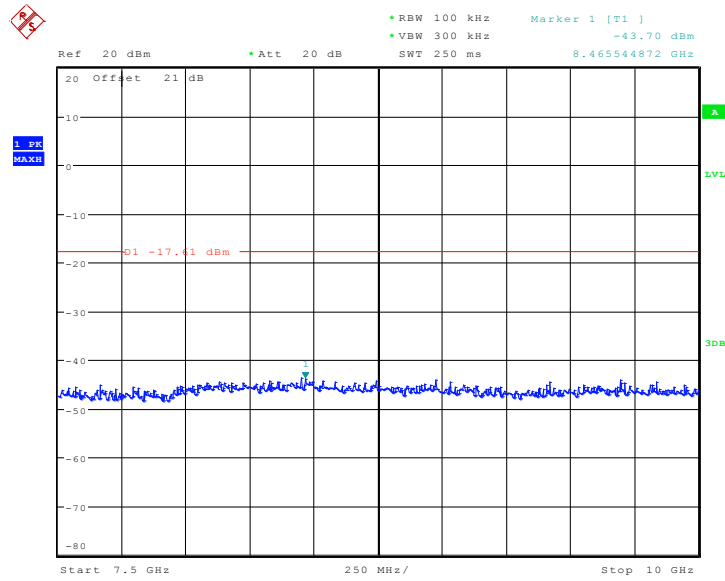
Date: 24.SEP.2013 20:38:37

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



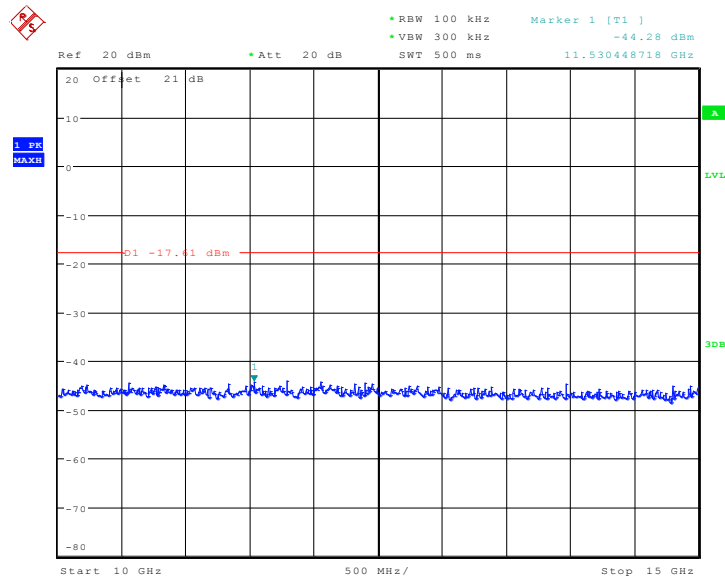
Date: 24.SEP.2013 20:38:49

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



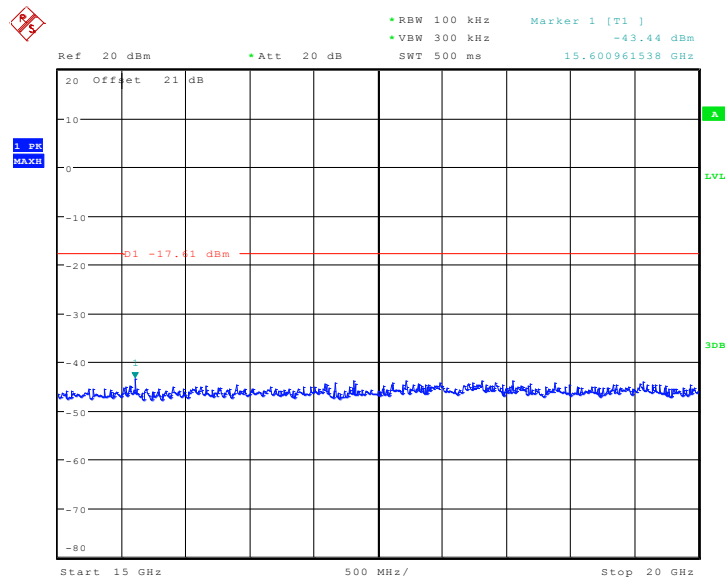
Date: 24.SEP.2013 20:39:10

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



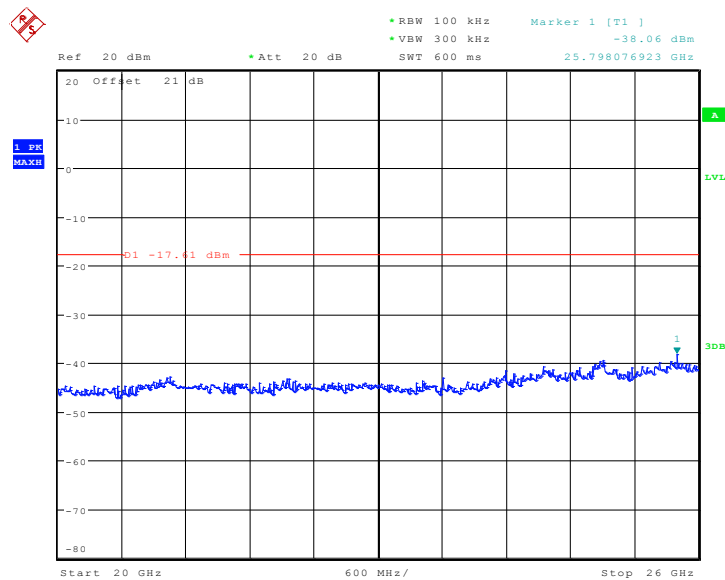
Date: 24.SEP.2013 20:39:27

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



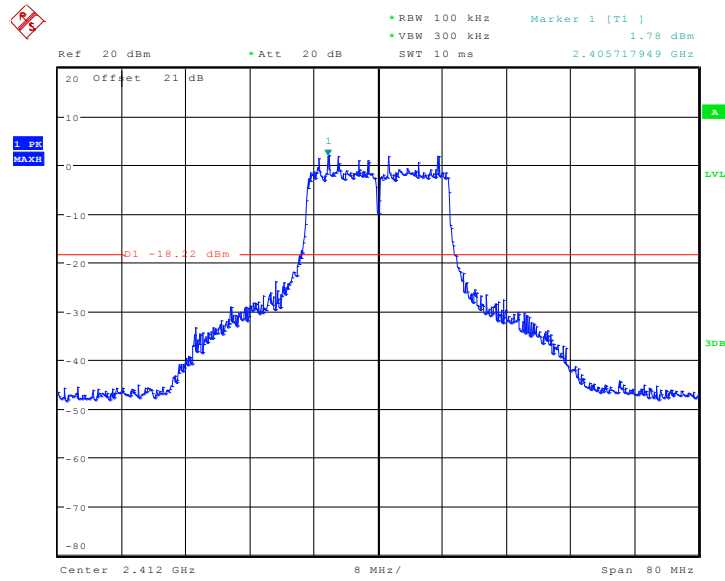
Date: 24.SEP.2013 20:39:44

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



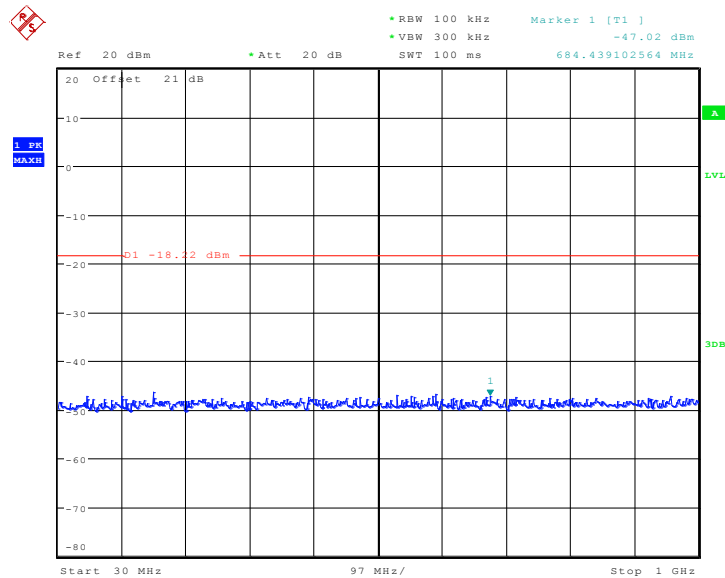
Date: 24.SEP.2013 20:40:02

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



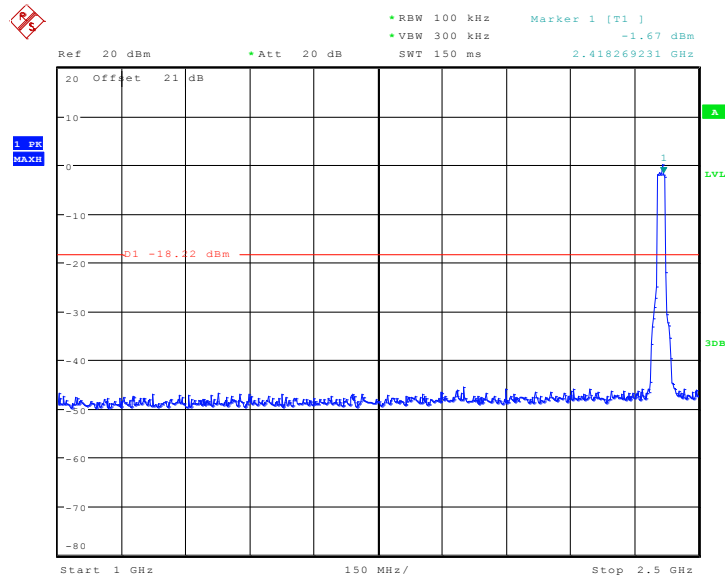
Date: 24.SEP.2013 20:40:50

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



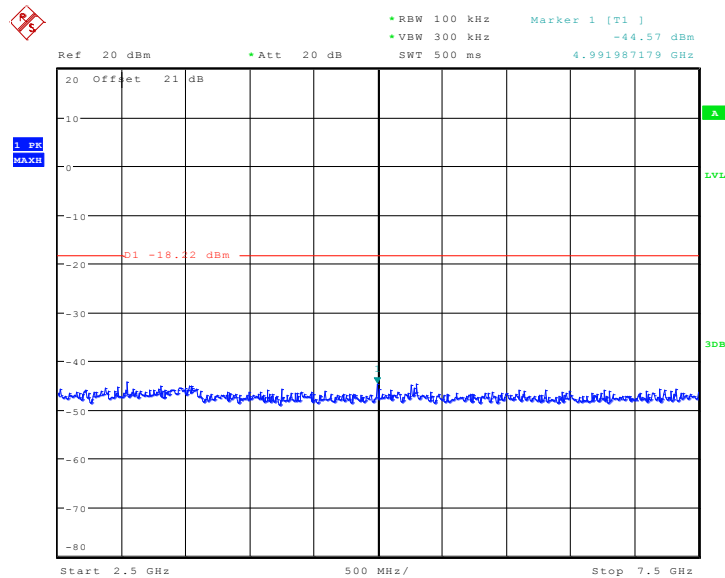
Date: 24.SEP.2013 20:41:09

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



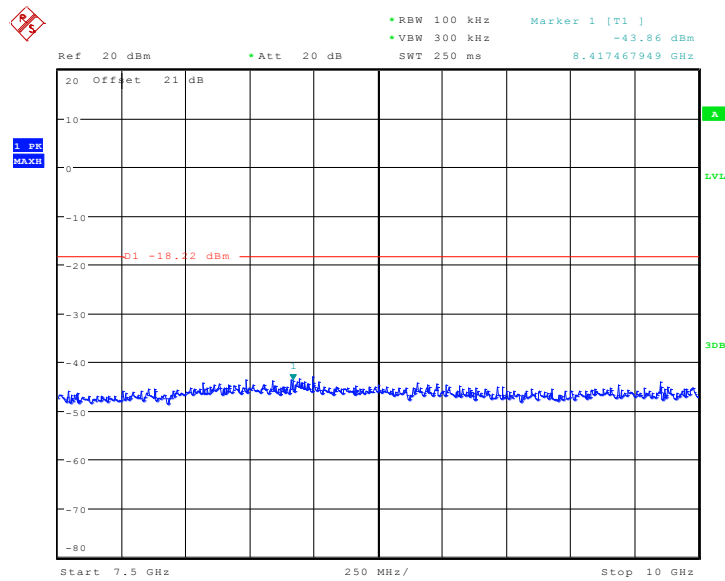
Date: 24.SEP.2013 20:41:28

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



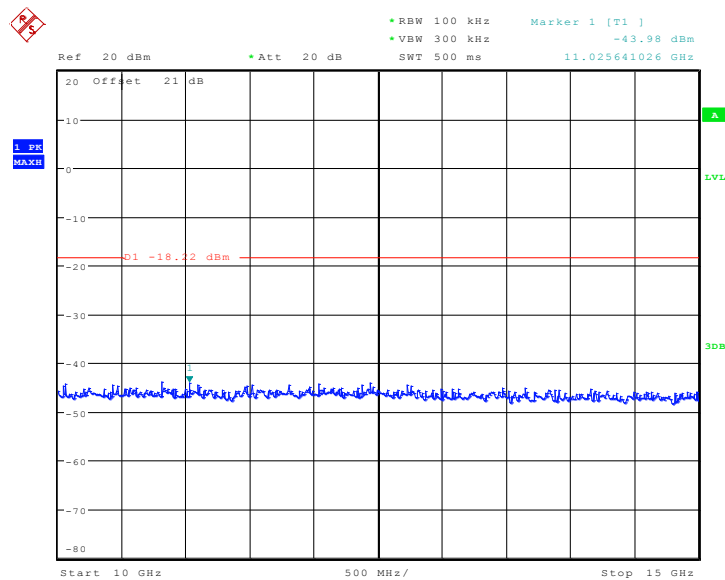
Date: 24.SEP.2013 20:41:45

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



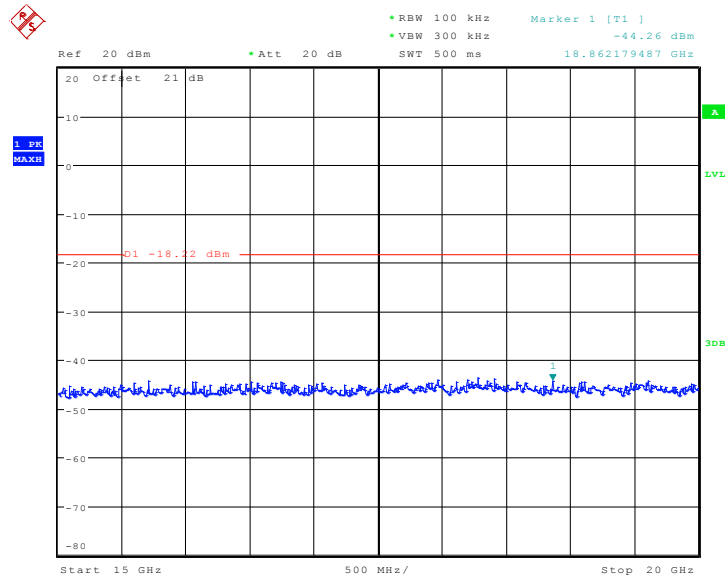
Date: 24.SEP.2013 20:42:00

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



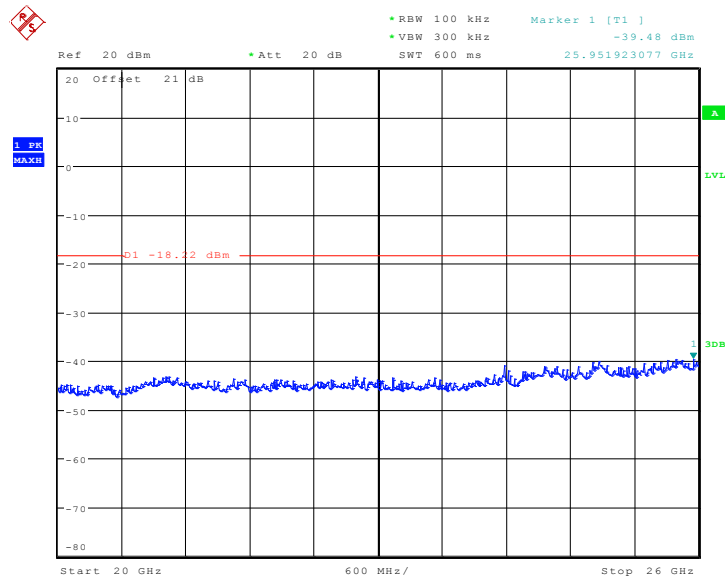
Date: 24.SEP.2013 20:42:17

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



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

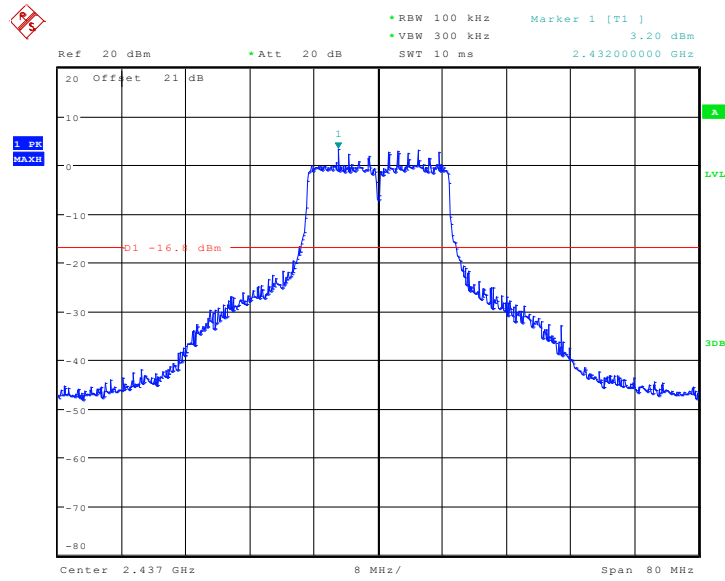
**Fig. 70 Conducted Spurious Emission (802.11n-HT20, Ch1, 15 GHz-20 GHz)**



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

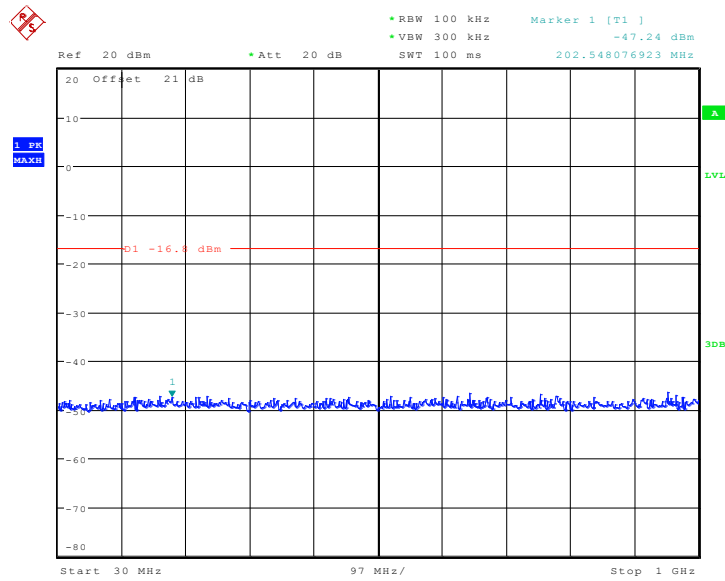
**Fig. 71 Conducted Spurious Emission (802.11n-HT20, Ch1, 20 GHz-26 GHz)**





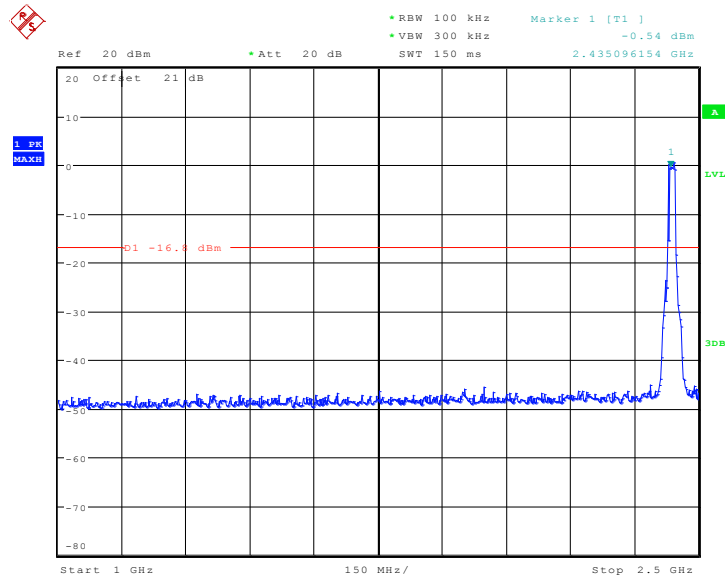
Date: 24.SEP.2013 20:43:43

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



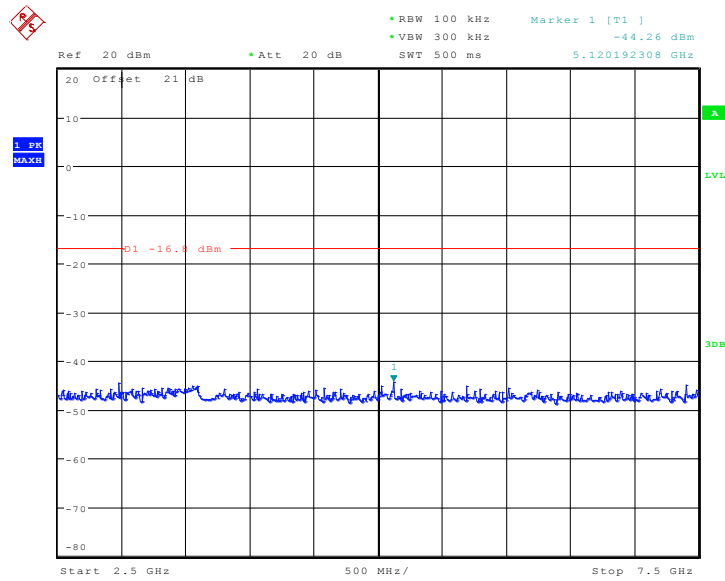
Date: 24.SEP.2013 20:43:59

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



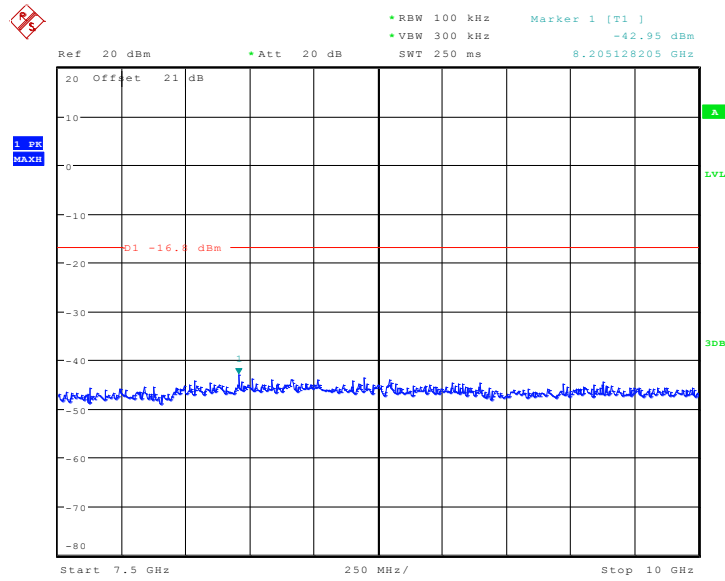
Date: 24.SEP.2013 20:44:14

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



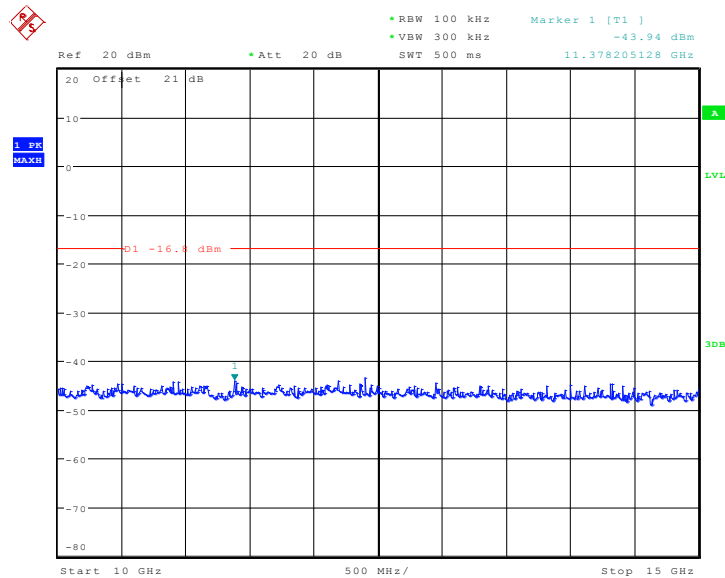
Date: 24.SEP.2013 20:44:31

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



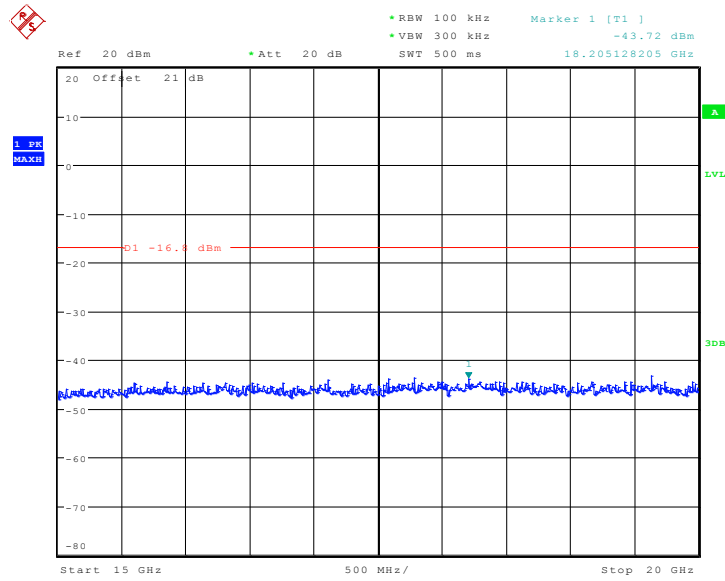
Date: 24.SEP.2013 20:44:47

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



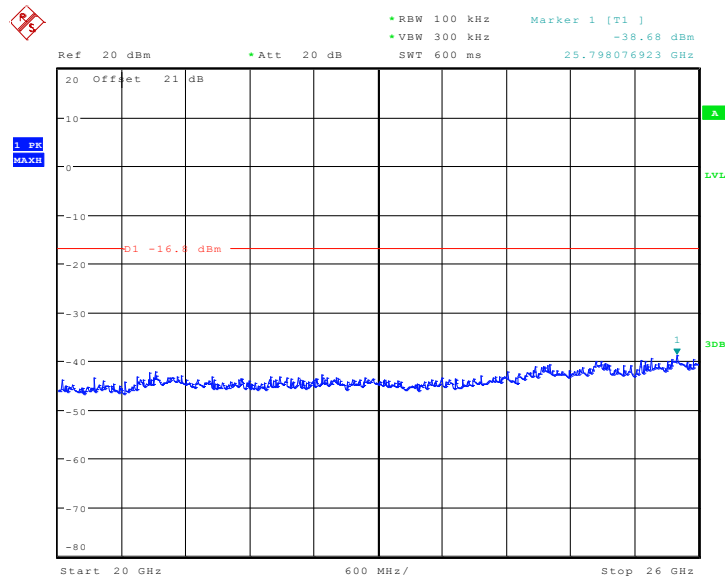
Date: 24.SEP.2013 20:45:01

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



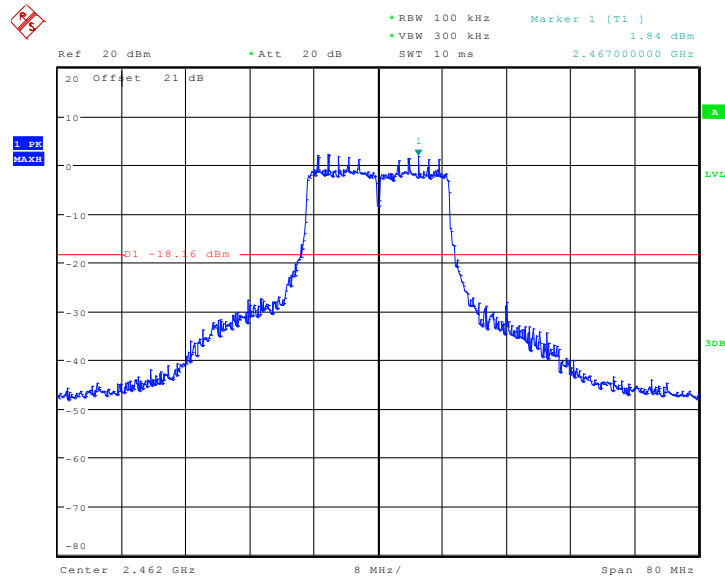
Date: 24.SEP.2013 20:45:16

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



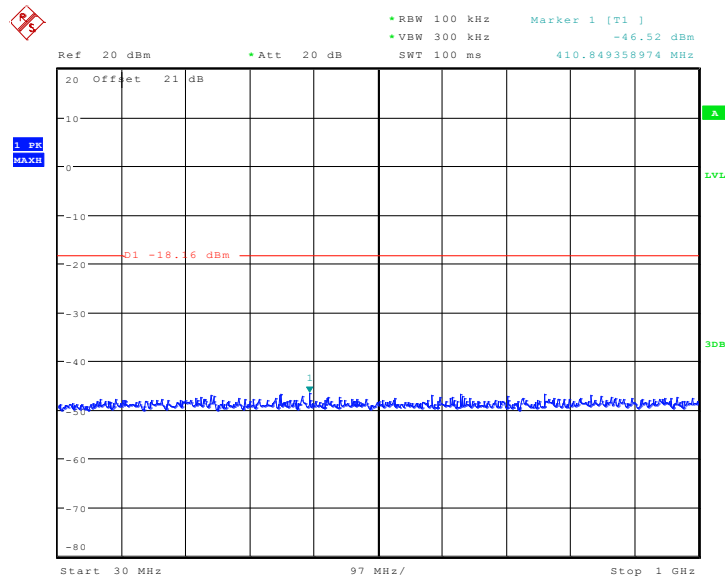
Date: 24.SEP.2013 20:45:42

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



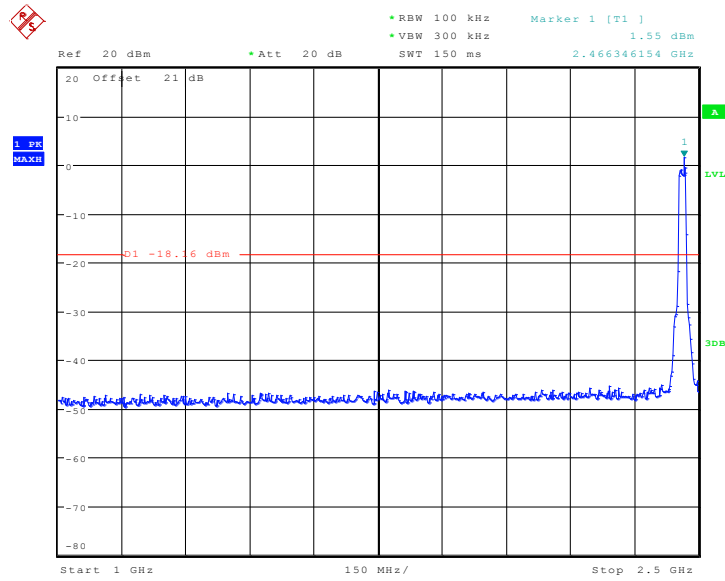
Date: 24.SEP.2013 20:46:24

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



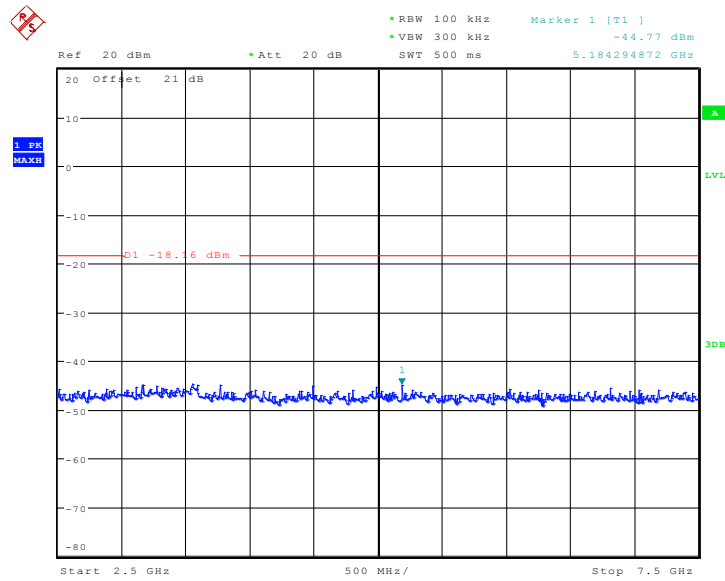
Date: 24.SEP.2013 20:46:42

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



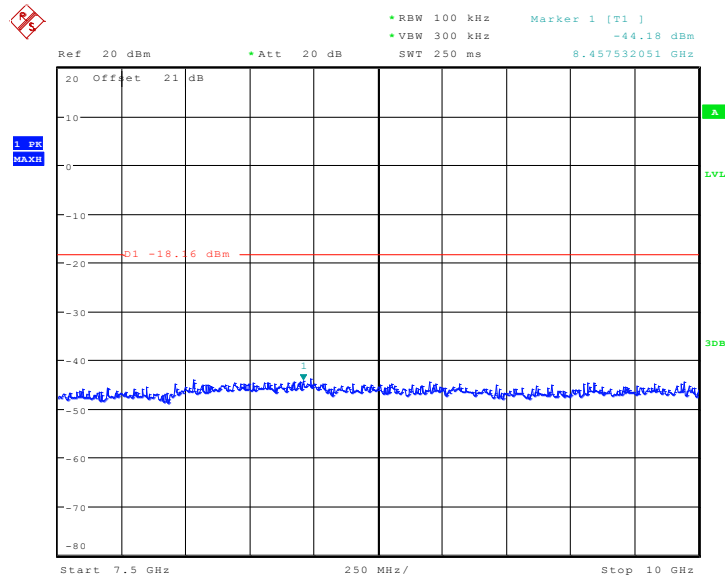
Date: 24.SEP.2013 20:47:09

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



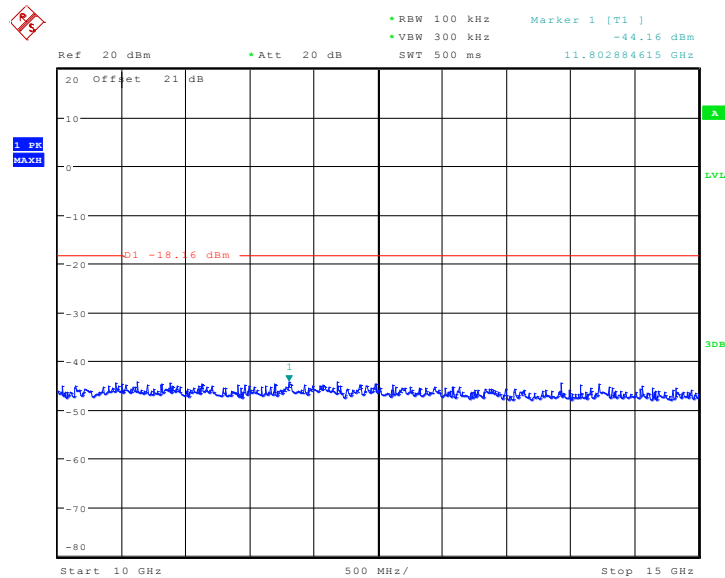
Date: 24.SEP.2013 20:47:25

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



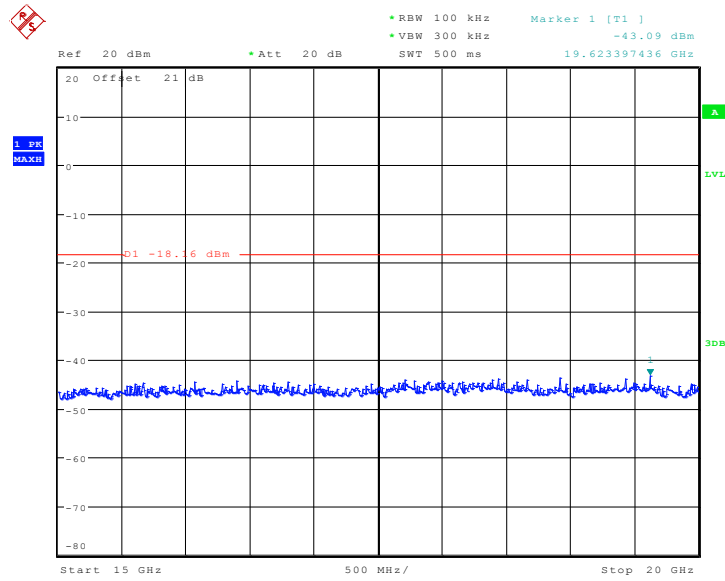
Date: 24.SEP.2013 20:47:41

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



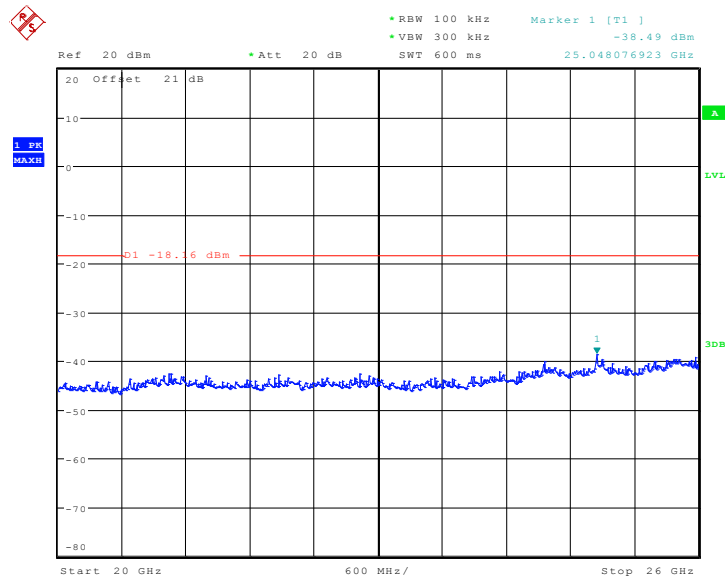
Date: 24.SEP.2013 20:47:58

**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	1 GHz ~ 3 GHz	Fig.89	P
		3 GHz ~ 18 GHz	Fig.90	P
	6	30 MHz ~1 GHz	Fig.91	P
		1 GHz ~ 3 GHz	Fig.92	P
		3 GHz ~ 18 GHz	Fig.93	P
	Power	2.45GHz ~2.5GHz	Fig.94	P
	11	1 GHz ~ 3 GHz	Fig.95	P
		3 GHz ~ 18 GHz	Fig.96	P
	802.11g	Power	2.38GHz ~2.45GHz	Fig.97
1		1 GHz ~ 3 GHz	Fig.98	P
		3 GHz ~ 18 GHz	Fig.99	P
6		30 MHz ~1 GHz	Fig.100	P
		1 GHz ~ 3 GHz	Fig.101	P
		3 GHz ~ 18 GHz	Fig.102	P
Power		2.45GHz~2.5GHz	Fig.103	P
11		1 GHz ~ 3 GHz	Fig.104	P
		3 GHz ~ 18 GHz	Fig.105	P
802.11n- HT20		Power	2.38GHz ~2.45GHz	Fig.106
	1	1 GHz ~ 3 GHz	Fig.107	P
		3 GHz ~ 18 GHz	Fig.108	P
	6	30 MHz ~1 GHz	Fig.109	P
		1 GHz ~ 3 GHz	Fig.110	P
		3 GHz ~ 18 GHz	Fig.111	P
	Power	2.45GHz~2.5GHz	Fig.112	P
	11	1 GHz ~ 3 GHz	Fig.113	P
		3 GHz ~ 18 GHz	Fig.114	P
	/	All channels	18 GHz~ 26.5 GHz	Fig.115

**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
2388.475	47.7	-38.8	27.7	58.800	V
17577.000	52.9	-18.9	45.6	26.200	V
17952.000	52.8	-17.7	45.6	24.900	V
17908.500	52.5	-18.5	45.6	25.400	H
17550.000	52.4	-19.2	45.6	26.000	H
17971.500	52.1	-17.7	45.6	24.200	V

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	$P_{Mea}$ (dBuV/m)	Polarization
17640.000	52.9	-18.9	45.6	26.200	H
17574.000	52.8	-18.9	45.6	26.100	V
17965.500	52.7	-17.7	45.6	24.800	V
17572.500	52.4	-18.9	45.6	25.700	H
17557.500	52.3	-19.2	45.6	25.900	V
17571.000	52.3	-18.9	45.6	25.600	V

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	$P_{Mea}$ (dBuV/m)	Polarization
2483.536	47.0	-38.9	27.7	58.200	H
17553.000	53.4	-19.2	45.6	27.000	V
17863.500	53.0	-18.5	45.6	25.900	H
17983.500	52.4	-17.7	45.6	24.500	H
17581.500	52.4	-18.9	45.6	25.700	H
17895.000	52.4	-18.5	45.6	25.300	V

**802.11g**

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
2389.810	58.3	-38.8	27.7	69.400	H
17992.500	52.5	-17.7	45.6	24.600	V
17559.000	52.3	-19.2	45.6	25.900	H
17611.500	52.2	-18.9	45.6	25.500	V
17577.000	52.2	-18.9	45.6	25.500	V
17887.500	52.2	-18.5	45.6	25.100	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
17526.000	53.2	-19.2	45.6	26.800	H
17571.000	52.5	-18.9	45.6	25.800	H
17581.500	52.5	-18.9	45.6	25.800	V
17550.000	52.4	-19.2	45.6	26.000	H
17946.000	52.3	-17.7	45.6	24.400	V
17763.000	52.1	-18.5	45.6	25.000	V

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
2483.630	57.3	-38.9	27.7	68.500	V
17925.000	53.1	-17.7	45.6	25.200	V
17721.000	52.7	-18.9	45.6	26.000	V
17824.500	52.5	-18.5	45.6	25.400	H
17890.500	52.5	-18.5	45.6	25.400	H
17742.000	52.2	-18.5	45.6	25.100	H

**802.11n-HT20**

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
2389.750	64.5	-38.8	27.7	75.600	V
18000.000	52.8	-17.7	44.5	26.000	H
17646.000	52.4	-18.9	45.6	25.700	H
17560.500	52.4	-19.2	45.6	26.000	V
17962.500	52.0	-17.7	45.6	24.100	V
17661.000	52.0	-18.9	45.6	25.300	H

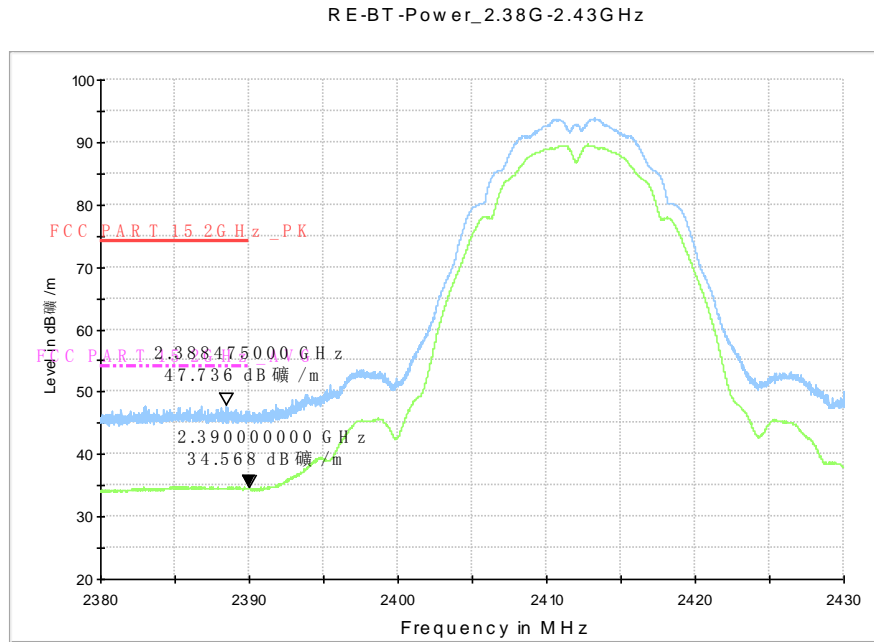
Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
17686.500	52.8	-18.9	45.6	26.100	H
17874.000	52.4	-18.5	45.6	25.300	H
17562.000	52.2	-18.9	45.6	25.500	V
17956.500	52.2	-17.7	45.6	24.300	V
17550.000	52.1	-19.2	45.6	25.700	V
17979.000	52.1	-17.7	45.6	24.200	H

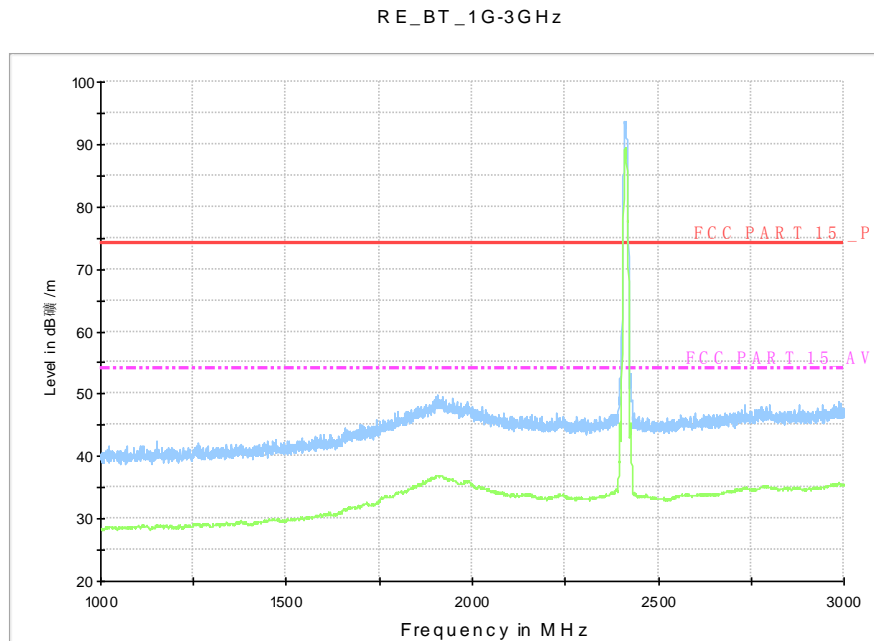
Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
2484.300	59.0	-38.9	27.7	70.200	V
17983.500	52.6	-17.7	45.6	24.700	H
17578.500	52.4	-18.9	45.6	25.700	V
17524.500	52.2	-19.2	45.6	25.800	H
17814.000	52.1	-18.5	45.6	25.000	H
17527.500	52.1	-19.2	45.6	25.700	V

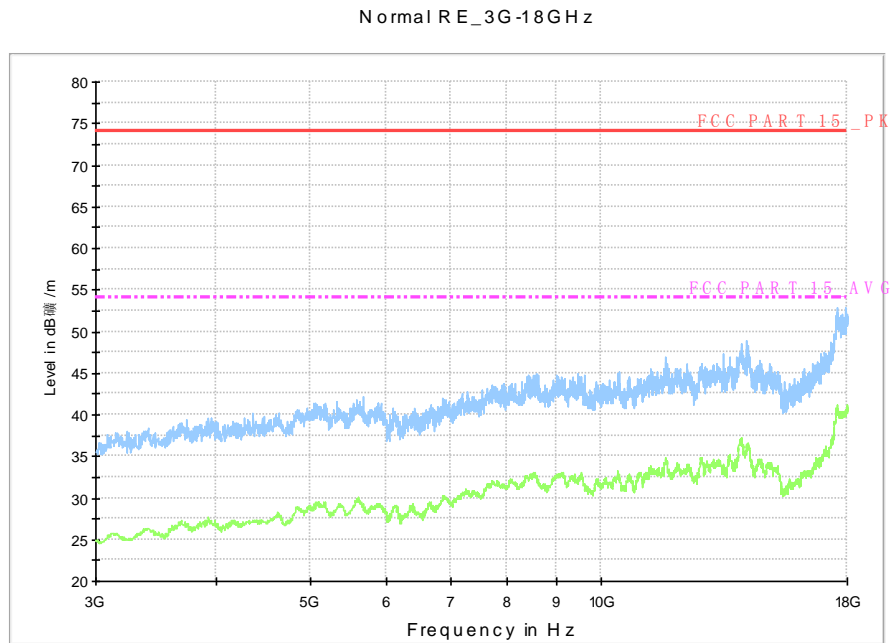
**Test graphs as below:**



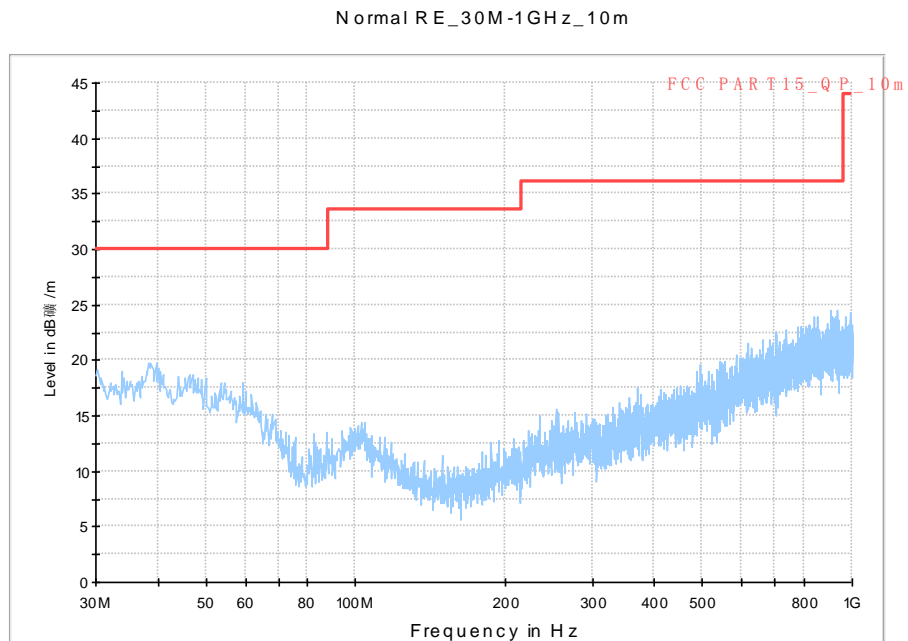
**Fig. 88 Radiated Spurious Emission (Power): 802.11b, ch1, 2.38 GHz - 2.45GHz**



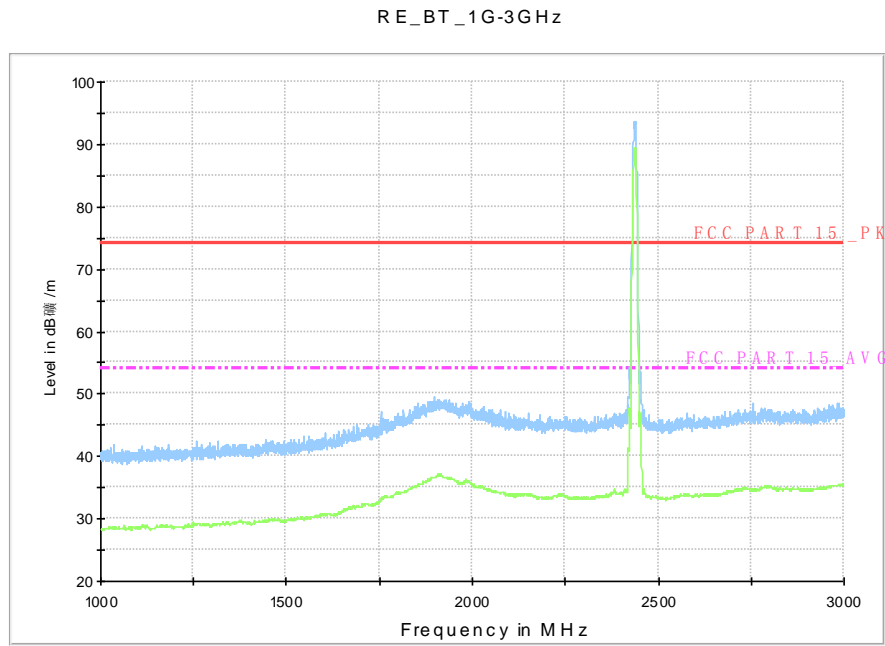
**Fig. 89 Radiated Spurious Emission (802.11b, Ch1, 1 GHz-3 GHz)**



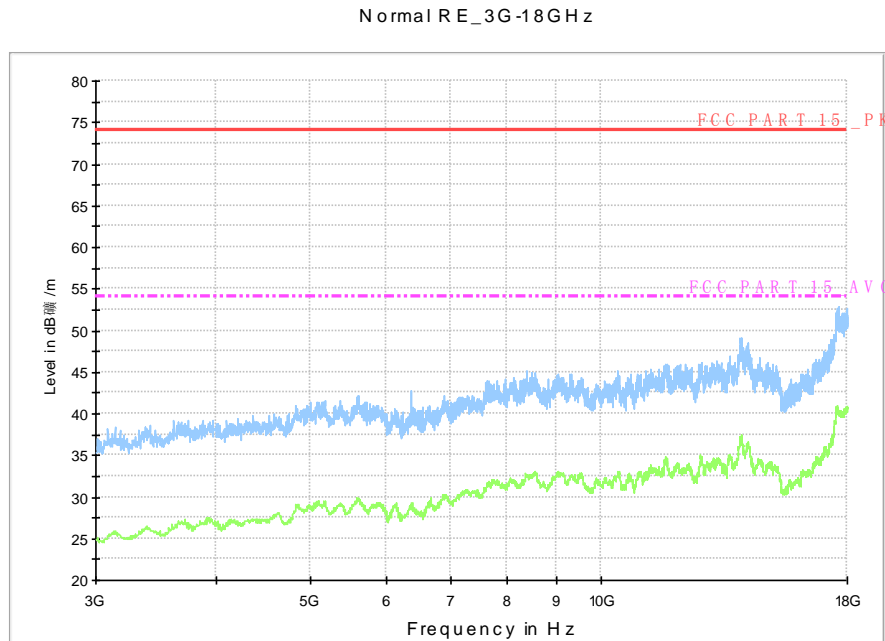
**Fig. 90 Radiated Spurious Emission (802.11b, Ch1, 3 GHz-18 GHz)**



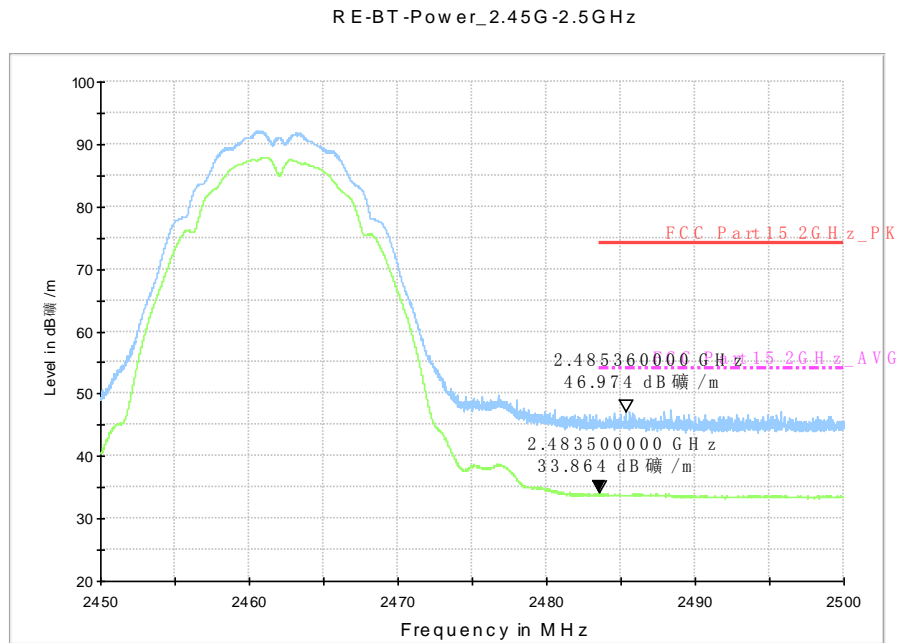
**Fig. 91 Radiated Spurious Emission (802.11b, Ch6, 30 MHz-1 GHz)**



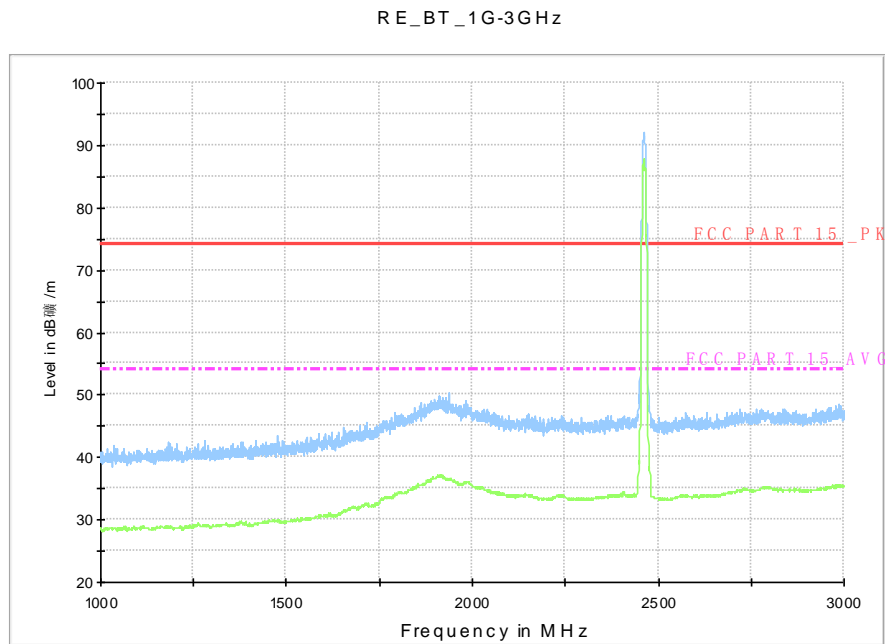
**Fig. 92 Radiated Spurious Emission (802.11b, Ch6, 1 GHz-3 GHz)**



**Fig. 93 Radiated Spurious Emission (802.11b, Ch6, 3 GHz-18 GHz)**

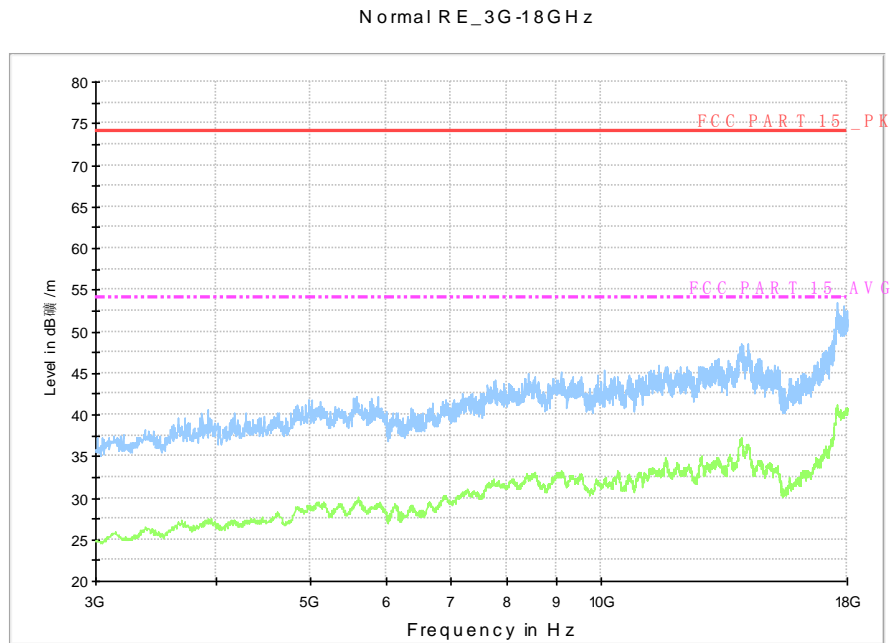


**Fig. 94 Radiated Spurious Emission (Power): 802.11b, ch11, 2.45 GHz - 2.5GHz**

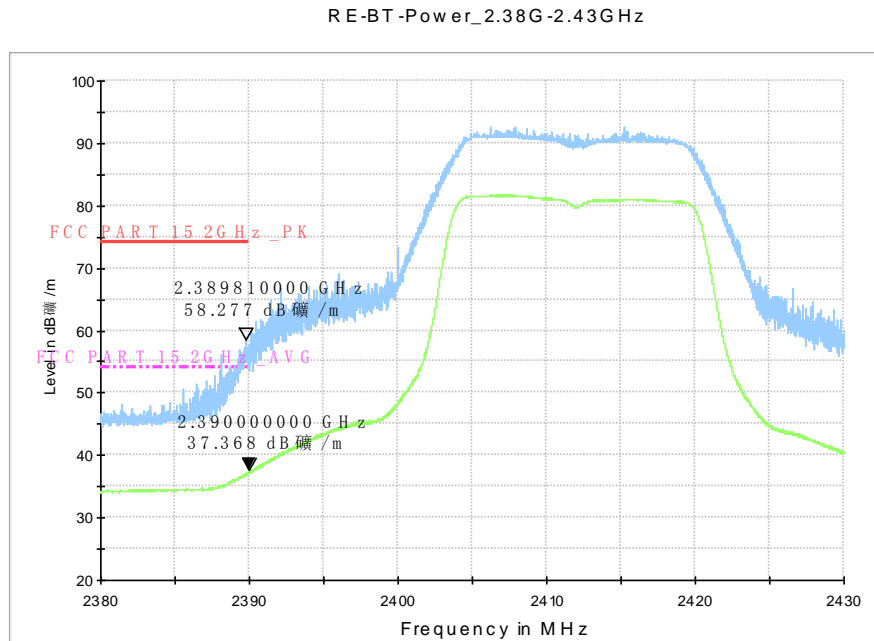


**Fig. 95 Radiated Spurious Emission (802.11b, Ch11, 1 GHz-3 GHz)**

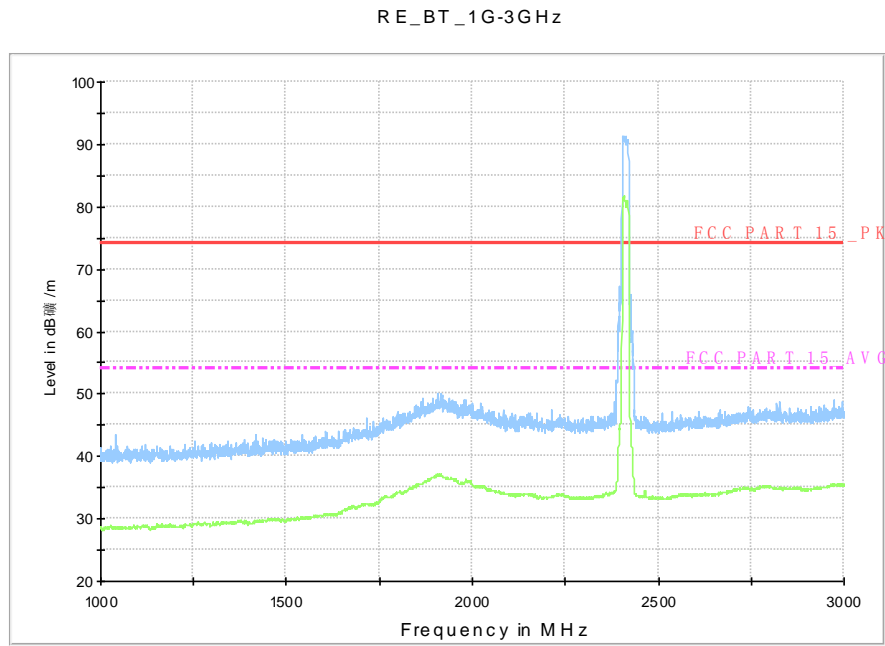




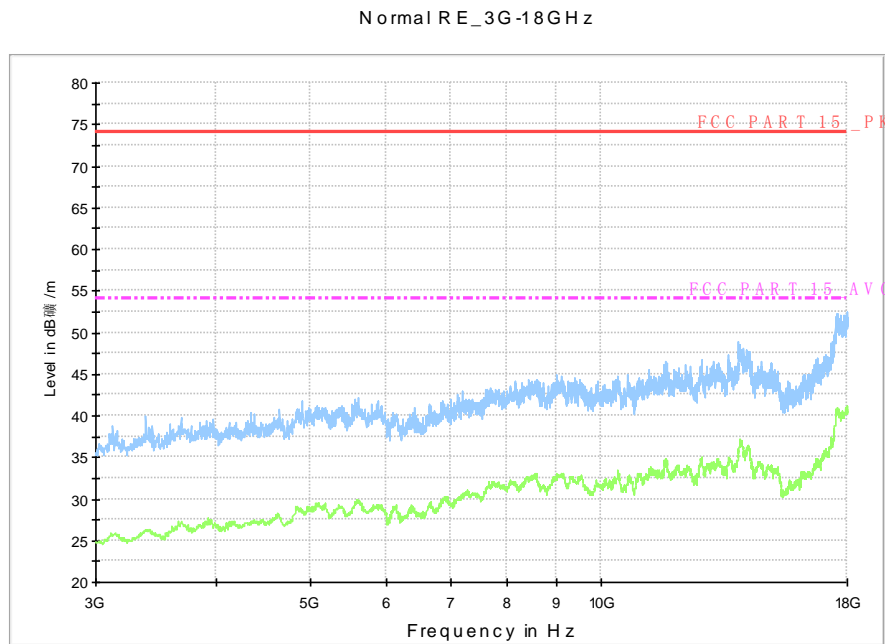
**Fig. 96 Radiated Spurious Emission (802.11b, Ch11, 3 GHz-18 GHz)**



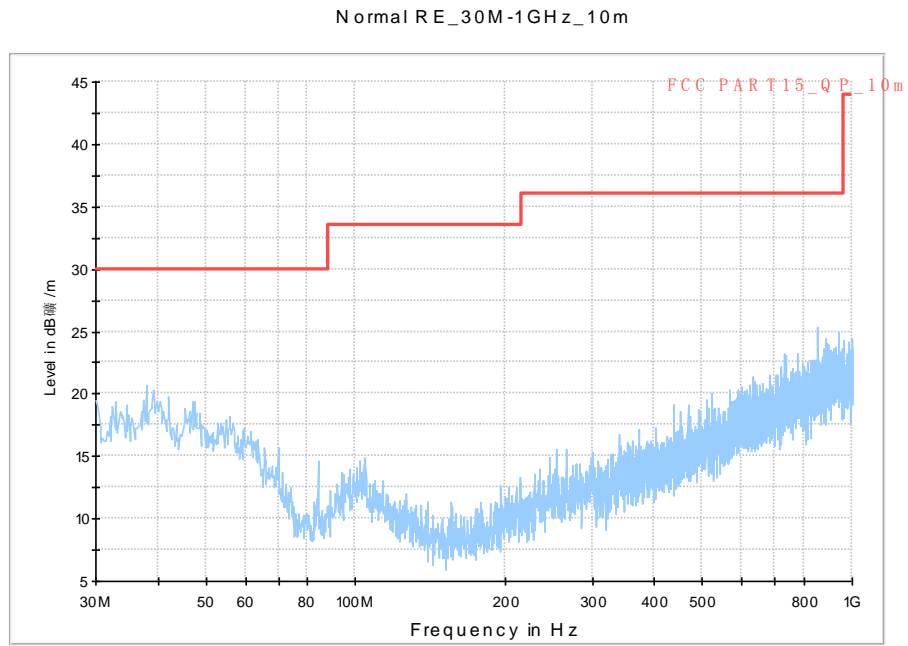
**Fig. 97 Radiated Spurious Emission (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz**



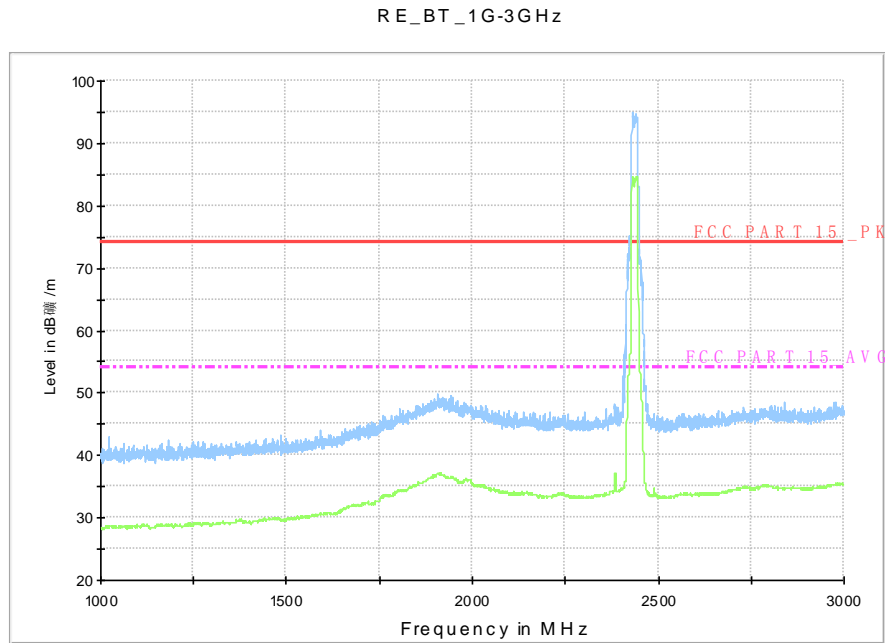
**Fig. 98 Radiated Spurious Emission (802.11g, Ch1, 1 GHz-3 GHz)**



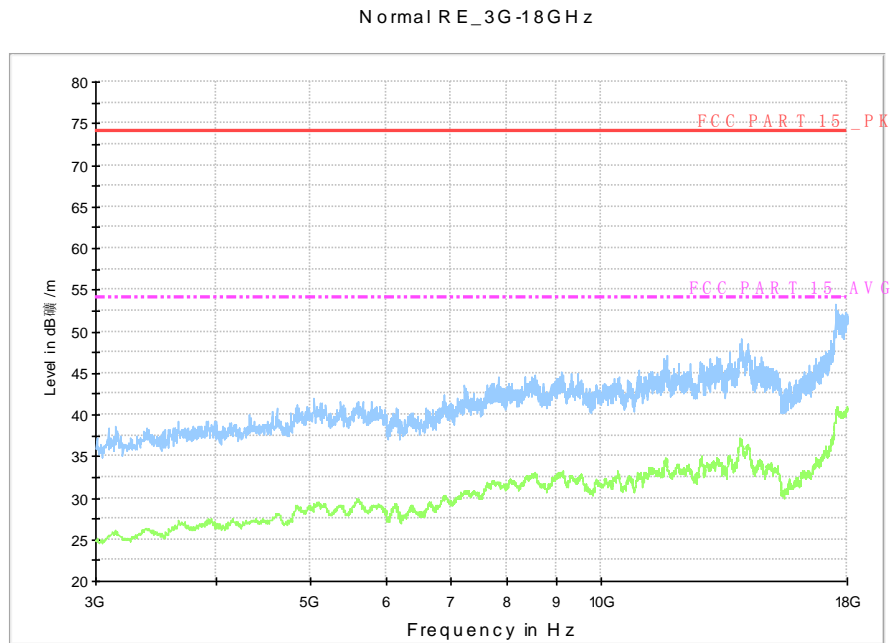
**Fig. 99 Radiated Spurious Emission (802.11g, Ch1, 3 GHz-18 GHz)**



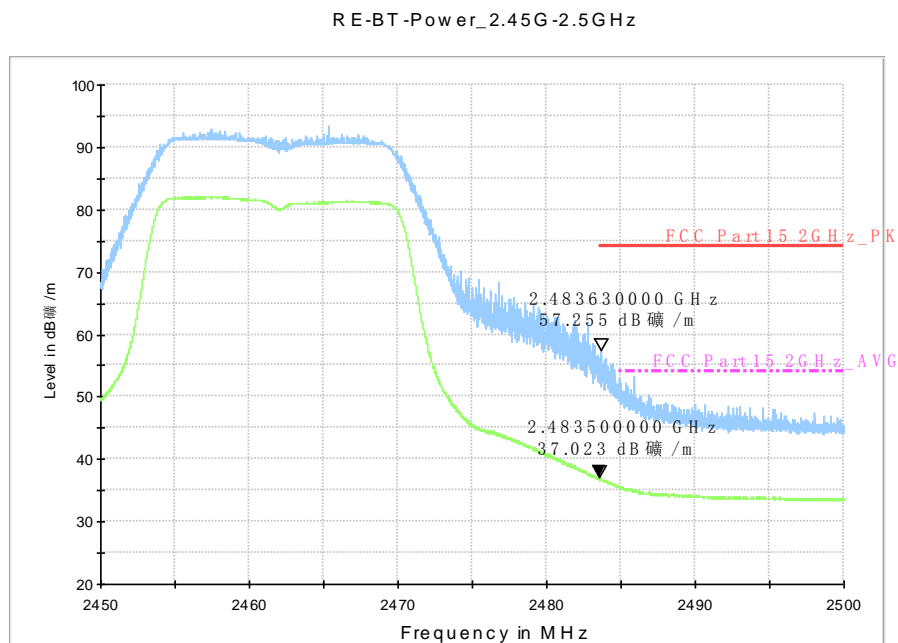
**Fig. 100 Radiated Spurious Emission (802.11g, Ch6, 30 MHz-1 GHz)**



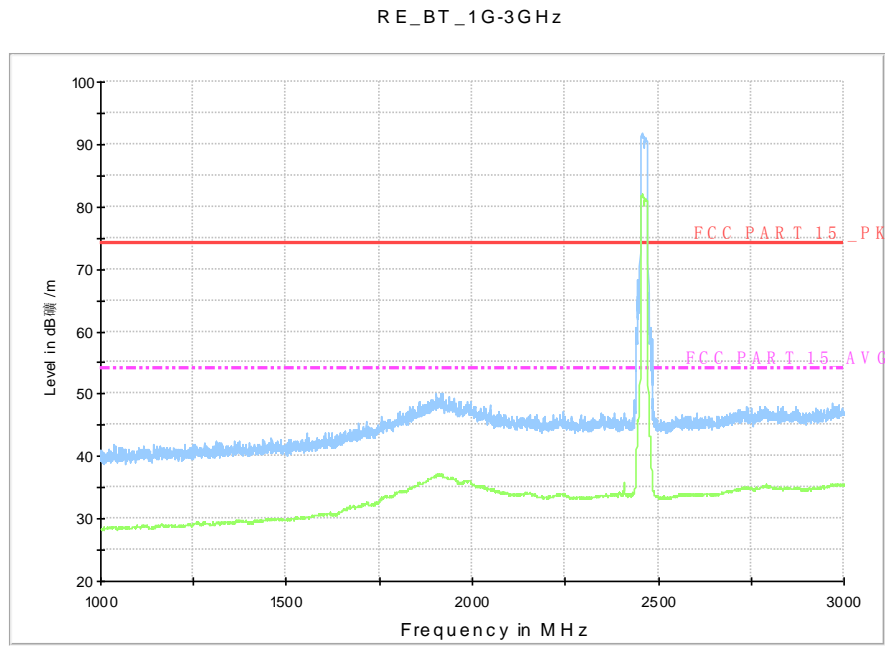
**Fig. 101 Radiated Spurious Emission (802.11g, Ch6, 1 GHz-3 GHz)**



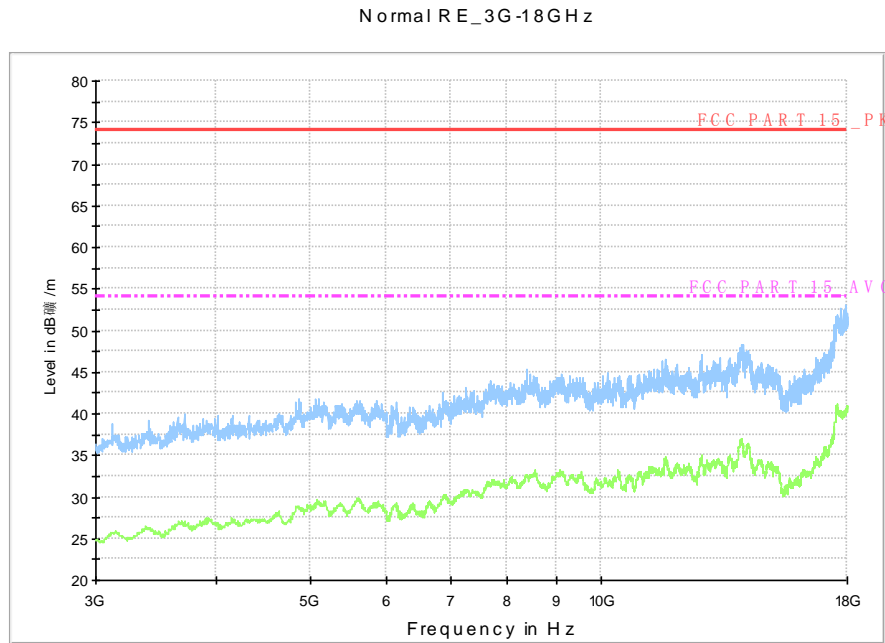
**Fig. 102 Radiated Spurious Emission (802.11g, Ch6, 3 GHz-18 GHz)**



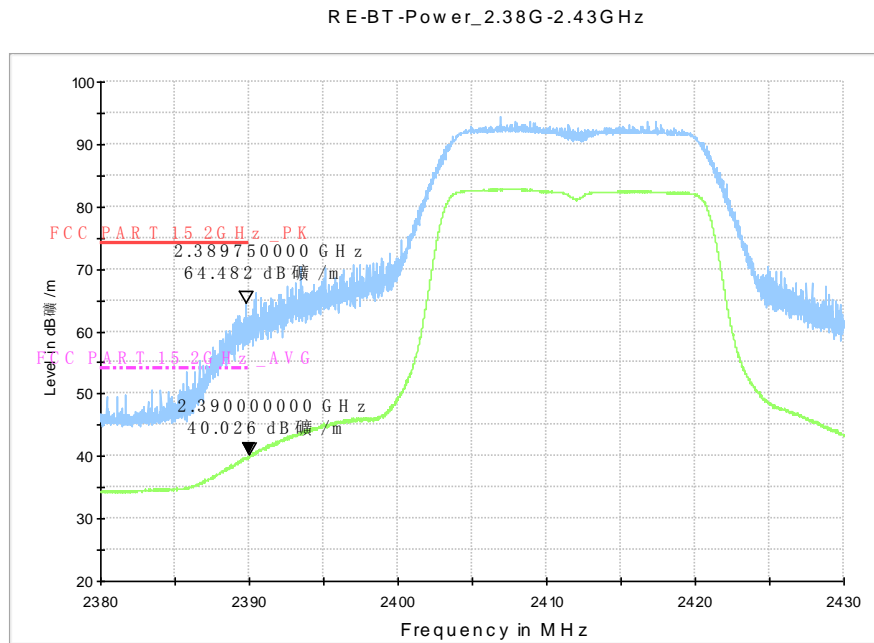
**Fig. 103 Radiated Spurious Emission (Power): 802.11g, ch11, 2.45 GHz - 2.5GHz**



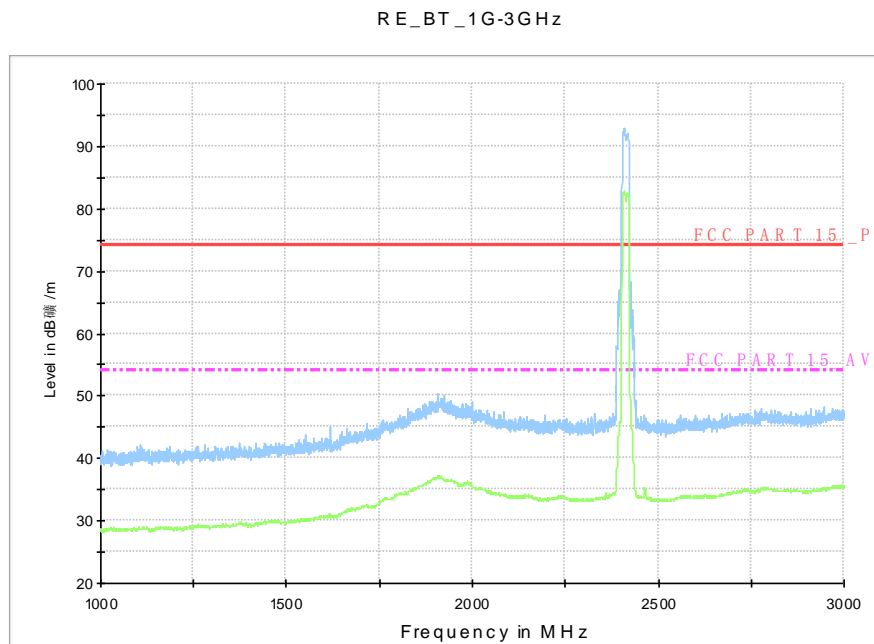
**Fig. 104 Radiated Spurious Emission (802.11g, Ch11, 1 GHz-3 GHz)**



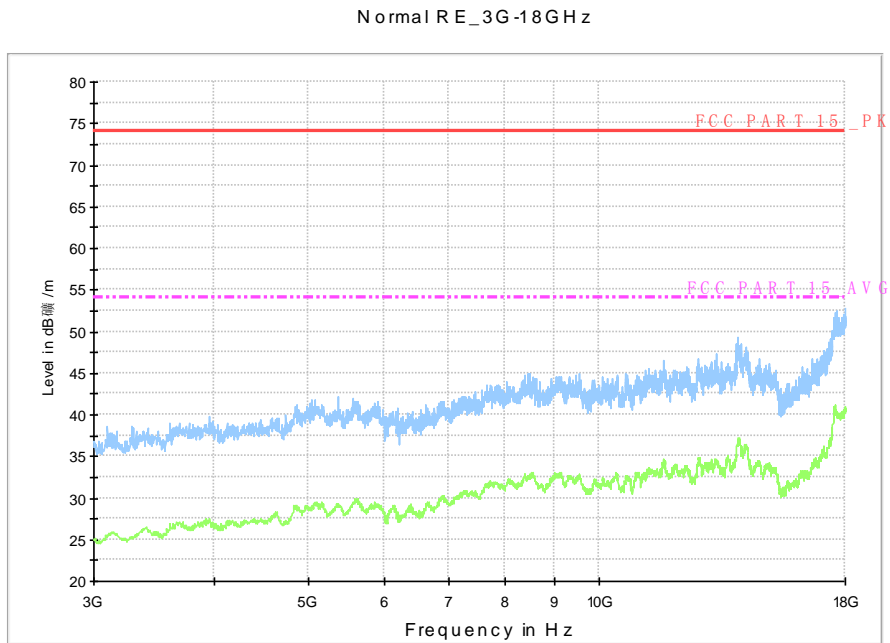
**Fig. 105 Radiated Spurious Emission (802.11g, Ch11, 3 GHz-18 GHz)**



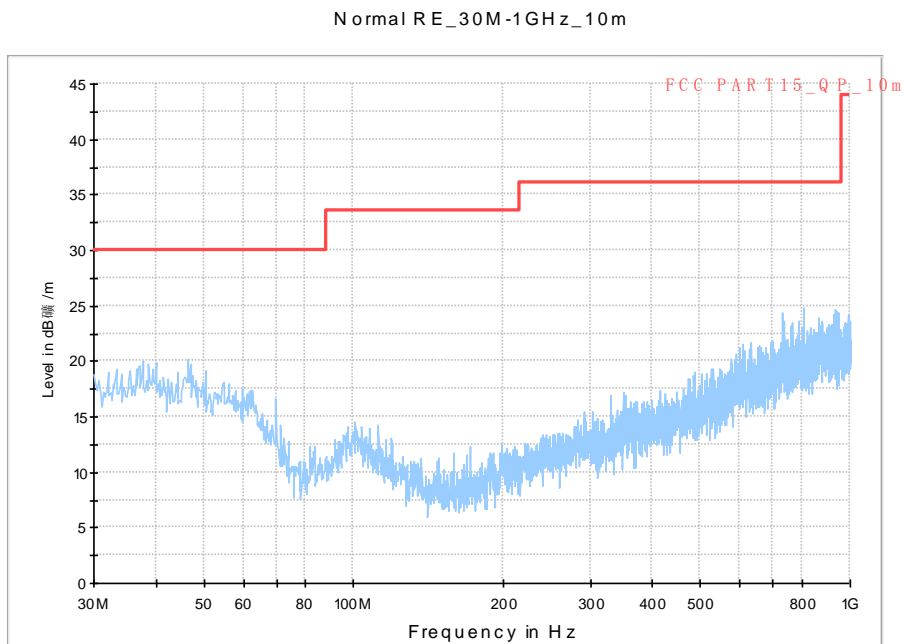
**Fig. 106 Radiated Spurious Emission (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz**



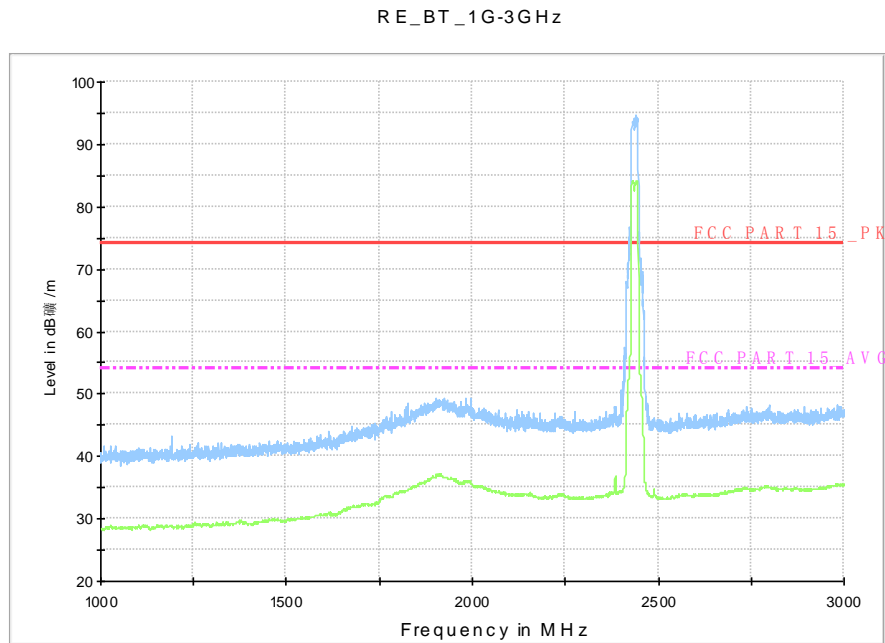
**Fig. 107 Radiated Spurious Emission (802.11n-HT20, Ch1, 1 GHz-3 GHz)**



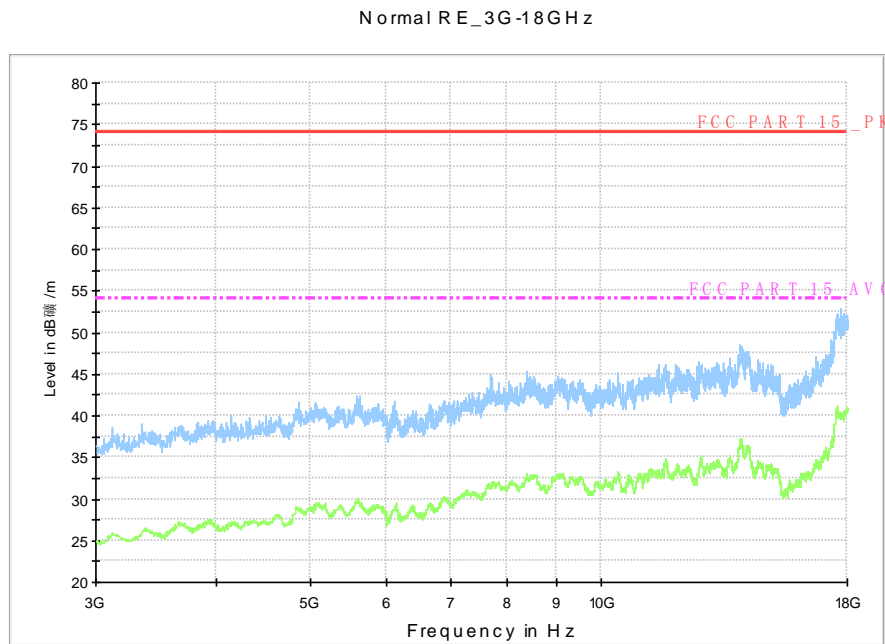
**Fig. 108 Radiated Spurious Emission (802.11n-HT20, Ch1, 3 GHz-18 GHz)**



**Fig. 109 Radiated Spurious Emission (802.11n-HT20, Ch6, 30 MHz-1 GHz)**

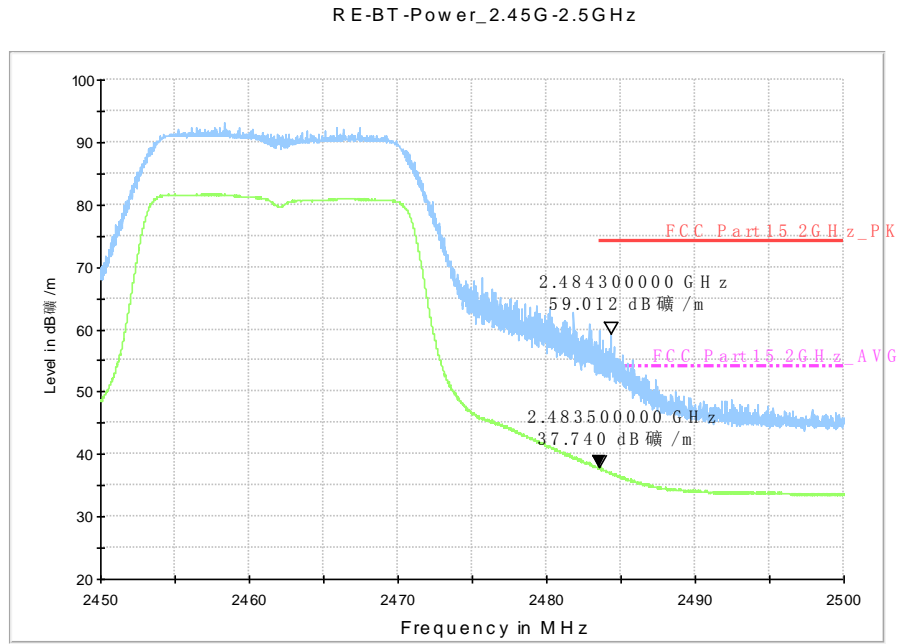


**Fig. 110 Radiated Spurious Emission (802.11n-HT20, Ch6, 1 GHz-3 GHz)**

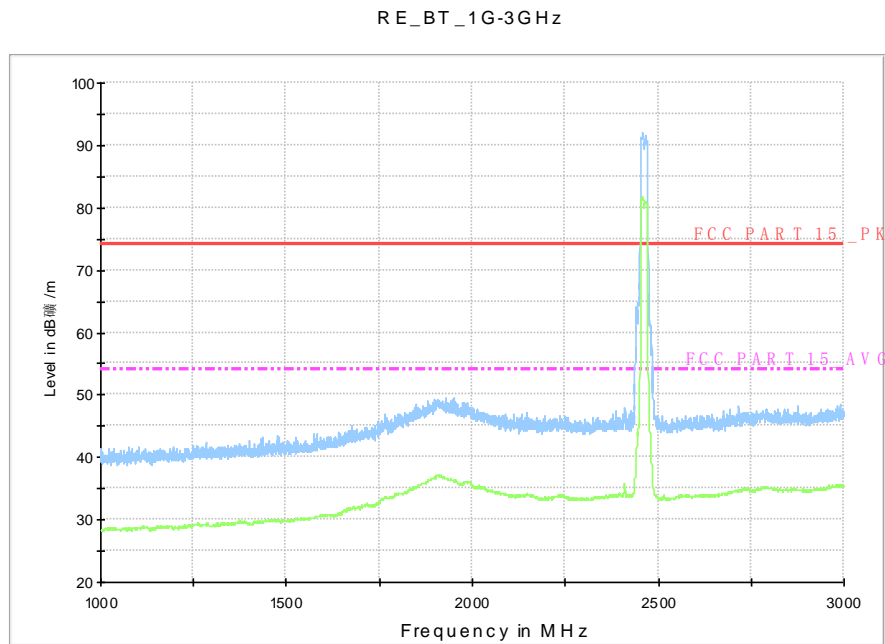


**Fig. 111 Radiated Spurious Emission (802.11n-HT20, Ch6, 3 GHz-18 GHz)**

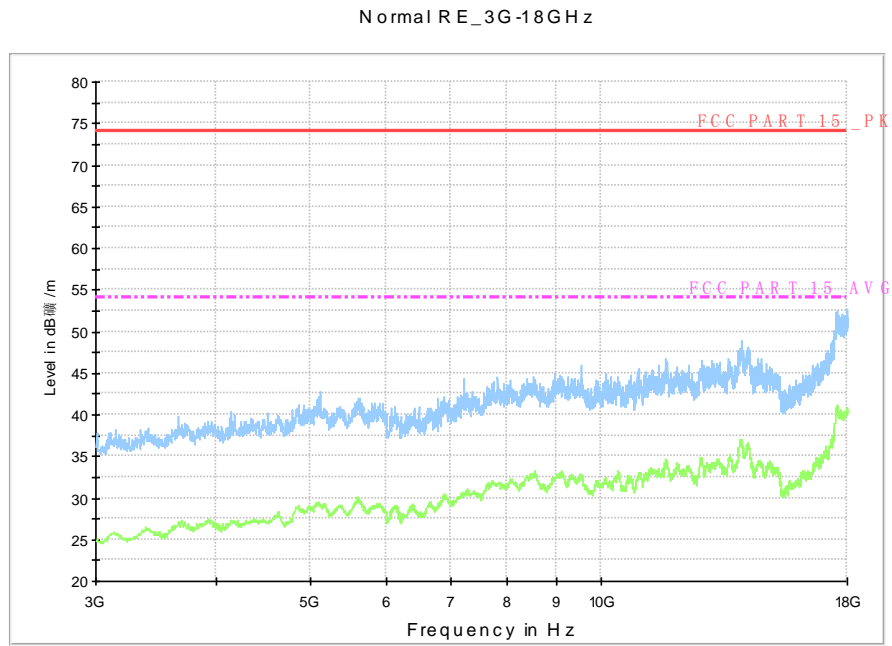




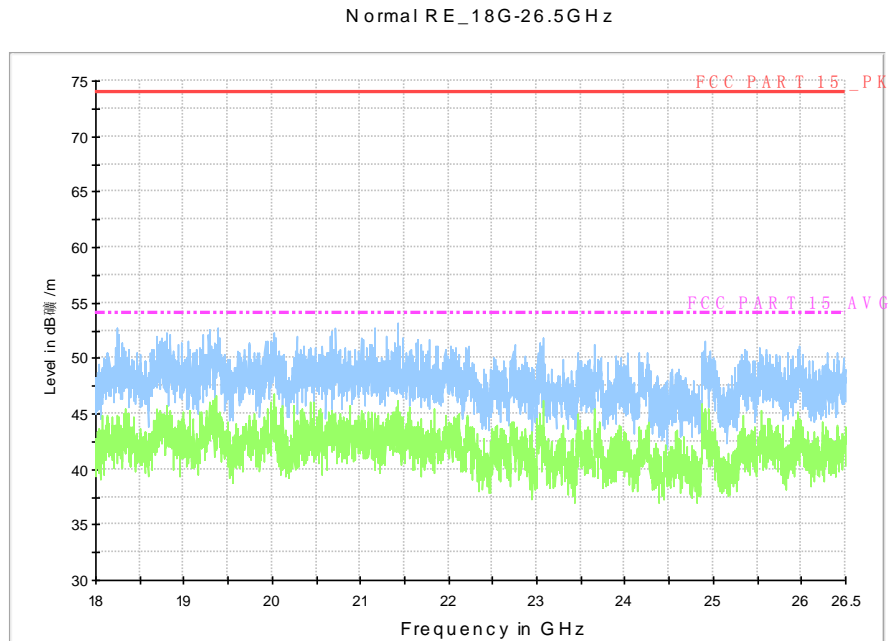
**Fig. 112 Radiated Spurious Emission (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.5GHz**



**Fig. 113 Radiated Spurious Emission (802.11n-HT20, Ch11, 1 GHz-3 GHz)**



**Fig. 114 Radiated Spurious Emission (802.11n-HT20, Ch11, 3 GHz-18 GHz)**



**Fig. 115 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 $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.116	Fig.117	<b>P</b>
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 $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.116	Fig.117	<b>P</b>
0.5 to 5	46			
5 to 30	50			

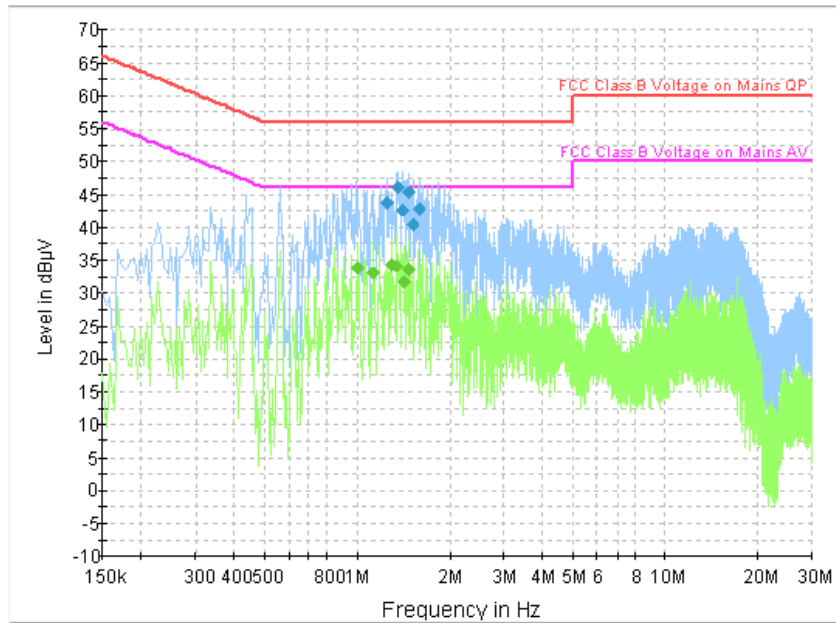
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

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. 116 AC Powerline Conducted Emission-802.11b**

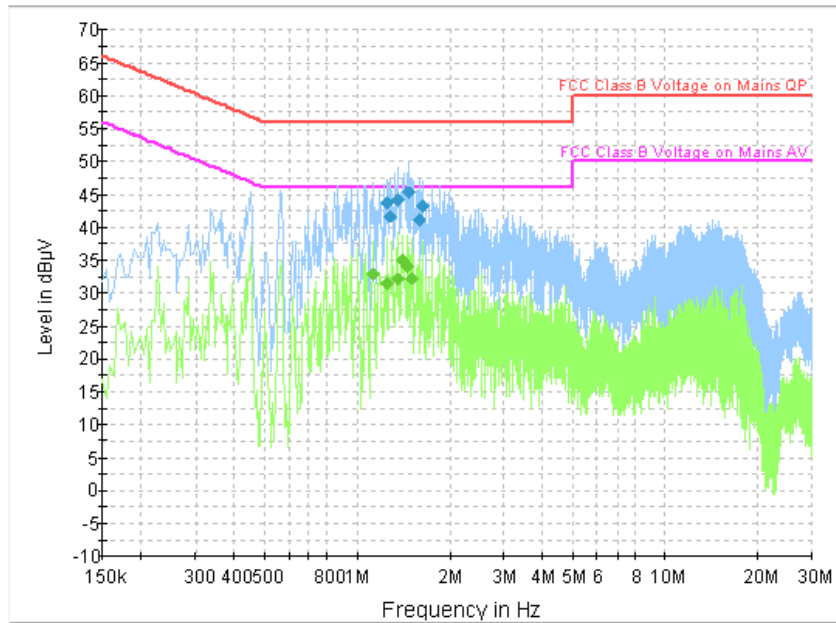
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Measurement Result 1:

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.248000	43.8	GND	L1	9.7	12.2	56.0
1.360500	46.0	GND	L1	9.7	10.0	56.0
1.405500	42.7	GND	L1	9.7	13.3	56.0
1.473000	45.3	GND	L1	9.7	10.7	56.0
1.518000	40.4	GND	N	9.7	15.6	56.0
1.590000	42.8	GND	L1	9.7	13.2	56.0

Measurement Result 2:

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.014000	33.8	GND	L1	9.7	12.2	46.0
1.131000	32.9	GND	L1	9.7	13.1	46.0
1.297500	34.3	GND	L1	9.7	11.8	46.0
1.347000	34.1	GND	L1	9.7	11.9	46.0
1.423500	31.7	GND	L1	9.7	14.3	46.0
1.473000	33.5	GND	L1	9.7	12.5	46.0



**Fig. 117 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 (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.248000	43.7	GND	L1	9.7	12.3	56.0
1.284000	41.8	GND	L1	9.7	14.2	56.0
1.365000	44.1	GND	L1	9.7	11.9	56.0
1.473000	45.3	GND	L1	9.7	10.7	56.0
1.590000	41.2	GND	L1	9.7	14.8	56.0
1.639500	43.3	GND	L1	9.7	12.7	56.0

Measurement Result 2:

Frequency (MHz)	C Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.131000	32.9	GND	L1	9.7	13.1	46.0
1.248000	31.5	GND	L1	9.7	14.5	46.0
1.365000	32.0	GND	L1	9.7	14.0	46.0
1.410000	35.1	GND	L1	9.7	10.9	46.0
1.459500	34.0	GND	L1	9.7	12.0	46.0
1.509000	32.4	GND	L1	9.7	13.6	46.0