# FCC PART 15C
# TEST REPORT
# No. I14N00603-WLAN

**For**

**ZTE Corporation**

**WCDMA/GSM digital mobile phone**

**Model Name: ZTE V815W**

**Marketing Name: /**

**With**

**Hardware Version: TMBI**

**Software Version: ZTE-CN-QB18S-P172R10V1.0.0**

**FCC ID: SRQ-ZTEV815W**

**Issued Date: June 24th, 2014**

**Test Laboratory:**

***FCC 2.948 Listed: No.310359***

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

**Note:**

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

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# 1. Test Laboratory

## 1.1. Testing Location

| | |
|---|---|
| Company Name: | TMC Shenzhen, Telecommunication Metrology Center of MIIT |
| Address: | No. 12 Building, Shangsha Innovation and Technology Park, Futian District, Shenzhen, P. R. China |
| Postal Code: | 518048 |
| Telephone: | +86(0)755-33322000 |
| Fax: | +86(0)755-33322001 |

## 1.2. Testing Environment

| | |
|---|---|
| Normal Temperature: | 15℃-30℃ |
| Extreme Temperature: | -20℃/+55℃ |
| Relative Humidity: | 30%-60% |

## 1.3. Project data

| | |
|---|---|
| Project Leader: | Zhang Bojun |
| Test Engineer: | Tang Weisheng |
| Testing Start Date: | June 10th, 2014 |
| Testing End Date: | June 24th, 2014 |

## 1.4. Signature

**Tang Weisheng**

**(Prepared this test report)**

**Zhang Bojun**

**(Reviewed this test report)**

**Lu Minniu**

**Director of the laboratory**

**(Approved this test report)**

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# 2. Client Information

## 2.1. Applicant Information

| | |
|---|---|
| Company Name: | ZTE Corporation |
| Address /Post: | ZTE Plaza, Keji Road South , Shenzhen,China |
| City: | Shenzhen |
| Country: | China |
| Telephone: | / |
| Fax: | / |

## 2.2. Manufacturer Information

| | |
|---|---|
| Company Name: | ZTE Corporation |
| Address /Post: | ZTE R&D Center(Nanjing),No.6 Huasheng Avenue, Yuhua District,Nanjing,China |
| City: | Nanjing |
| Country: | China |
| E-mail: | yang.man@zte.com.cn |
| Telephone: | +86 18951808033 |
| Fax: | / |

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# 3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

## 3.1. About EUT

| | |
|---|---|
| Description | WCDMA/GSM digital mobile phone |
| Model Name | ZTE V815W |
| Market Name | / |
| RF Protocol | IEEE 802.11b/g/n20/n40 |
| Operating Frequency | 2412MHz~2462MHz |
| FCC ID | SRQ-ZTEV815W |

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

## 3.2. Internal Identification of EUT used during the test

| EUT ID* | IMEI | HW Version | SW Version |
|---|---|---|---|
| EUT1 | / | TMBI | ZTE-CN-QB18S-P172R10V1.0.0 |

## 3.3. Internal Identification of AE used during the test

| AE ID* | Description | Type | SN |
|---|---|---|---|
| AE1 | Li-ion Battery | Li3712T42P3h634445 | / |
| AE2 | Charger | STC-A22O501700USBA-Z | / |

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

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# 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.

| Reference | Title | Version |
|---|---|---|
| FCC Part15 | FCC CFR 47, Part 15, Subpart C:<br>15.205 Restricted bands of operation;<br>15.209 Radiated emission limits, general requirements;<br>15.247 Operation within the bands 902–928MHz, 2400–2483.5 MHz, and 5725–5850 MHz. | Oct, 2012 Edition |
| ANSI C63.4 | Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz | 2009 |
| KDB558074 | Measurement of Digital Transmission Systems Operating under Section 15.247 | June, 2014 |

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## 5. Laboratory Environment

**Half-anechoic chamber** (11.20 meters×6.10 meters×5.60 meters) did not exceed following limits:

| | |
|---|---|
| Temperature | Min. = 15 ℃, Max. = 30 ℃ |
| Relative humidity | Min. = 30 %, Max. = 60 % |
| Shielding effectiveness | > 110 dB |
| Electrical insulation | > 2M Ω |
| Ground system resistance | < 0.5 Ω |
| Normalized Site Attenuation (NSA) | < ±3.5dB, with 3m of Measuring distance, 30MHz 1000MHz |
| Uniformity of field strength | Between 0 and 6 dB, from 80MHz to 3000 MHz |

**Fully-anechoic chamber** (11.20 meters×6.10 meters×6.60 meters) did not exceed following limits:

| | |
|---|---|
| Temperature | Min. = 15 ℃, Max. = 30 ℃ |
| Relative humidity | Min. = 30 %, Max. = 60 % |
| Shielding effectiveness | > 110 dB |
| Electrical insulation | > 2M Ω |
| Ground system resistance | < 0.5 Ω |
| VSWR | Between 0 and 6 dB, from 30MHz to 18 000 MHz |

**Conduction Lab** did not exceed following limits:

| | |
|---|---|
| Temperature | Min.=15 ℃, Max.=30 ℃ |
| Relative humidity | Min.=30 %, Max.= 60 % |
| Shielding effectiveness | > 80 dB |
| Electrical insulation | > 2M Ω |
| Ground system resistance | < 0.5 Ω |

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# 6. Summary of Test Results

## 6.1. Summary of Test Results

| No | Test cases | Sub-clause of Part15C | Verdict |
|---|---|---|---|
| **0** | Antenna Requirement | 15.203 | **P** |
| 1 | Maximum Peak Output Power | 15.247 (b) | **P** |
| 2 | Peak Power Spectral Density | 15.247 (e) | **P** |
| 3 | Occupied 6dB Bandwidth | 15.247 (a) | **P** |
| 4 | Band Edges Compliance | 15.247 (d) | **P** |
| 5 | Transmitter Spurious Emission - Conducted | 15.247 (d) | **P** |
| 6 | Transmitter Spurious Emission - Radiated | 15.247, 15.205, 15.209 | **P** |
| **7** | AC Powerline Conducted Emission | 15.107, 15.207 | **P** |

## 6.2. Statements

TMC has evaluated the test cases requested by the applicant/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 4.2

## 6.3. Terms used in the result table

Terms used in Verdict column

| | |
|---|---|
| P | Pass |
| NA | Not Available |
| F | Fail |

Abbreviations

| | |
|---|---|
| AC | Alternating Current |
| AFH | Adaptive Frequency Hopping |
| BW | Band Width |
| E.I.R.P. | equivalent isotropical radiated power |
| ISM | Industrial, Scientific and Medical |
| R&TTE | Radio and Telecommunications Terminal Equipment |
| RF | Radio Frequency |
| Tx | Transmitter |

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## 7. Test Equipments Utilized

### Conducted test system

| No. | Equipment | Model | Serial Number | Manufacturer | Calibration Due date | Calibration Period |
|---|---|---|---|---|---|---|
| 1 | Vector Signal Analyzer | FSV40 | 100903 | Rohde & Schwarz | 2015-04-22 | 1 year |

### Radiated emission test system

| No. | Equipment | Model | Serial Number | Manufacturer | Calibration Due date | Calibration Period |
|---|---|---|---|---|---|---|
| 1 | Chamber | FACT5-2.0 | 4166 | ETS-Lindgren | 2016-05-29 | 3 years |
| 2 | Test Receiver | ESCI | 100701 | Rohde & Schwarz | 2014-07-31 | 1 year |
| 3 | Spectrum Analyzer | FSP40 | 100378 | Rohde & Schwarz | 2014-12-20 | 1 year |
| 4 | BiLog Antenna | VULB9163 | 9163-329 | Schwarzbeck | 2017-01-20 | 3 years |
| 5 | Test Receiver | ESCI | 100702 | Rohde & Schwarz | 2014-07-31 | 1 year |
| 6 | LISN | ESH2-Z5 | 100196 | Rohde & Schwarz | 2015-01-14 | 1 year |
| 7 | Signal Generator | SMR40 | 100541 | Rohde & Schwarz | 2014-12-26 | 1 year |
| 8 | Dual-Ridge Waveguide Horn Antenna | 3117 | 00066577 | ETS-Lindgren | 2016-04-01 | 3 years |
| 9 | Loop Antenna | HLA6120 | 35779 | TESEQ | 2016-02-25 | 3 years |
| 10 | EMI Antenna | 3160-09 | 00118383 | ETS-Lindgren | 2015-09-05 | 3 years |

### Anechoic chamber

Fully anechoic chamber by ETS-Lindgren.

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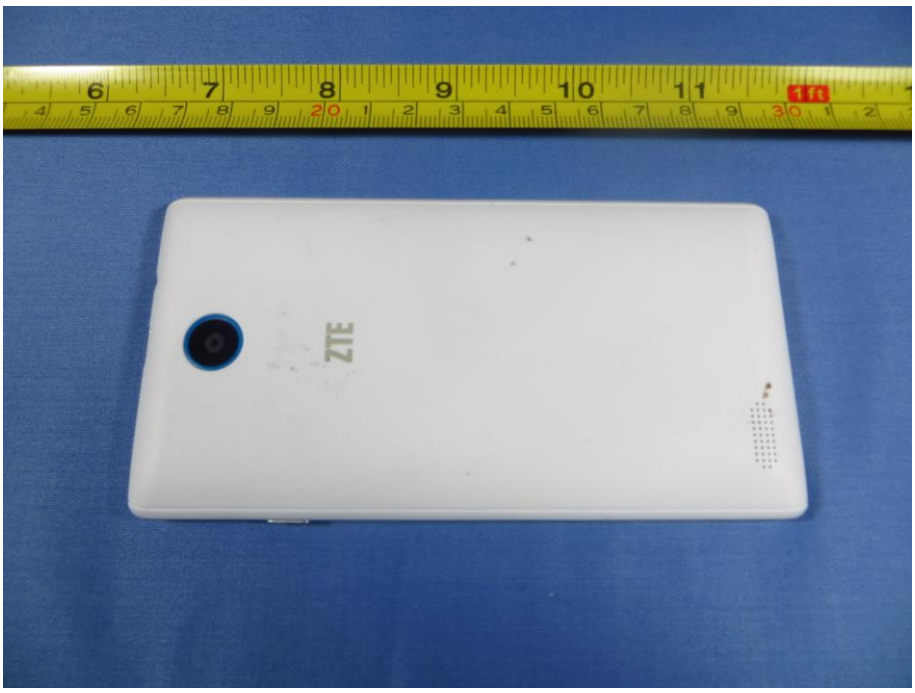
## ANNEX A: EUT photograph

**Pic A-1 Mobile phone**




**Pic A-2 Mobile phone**

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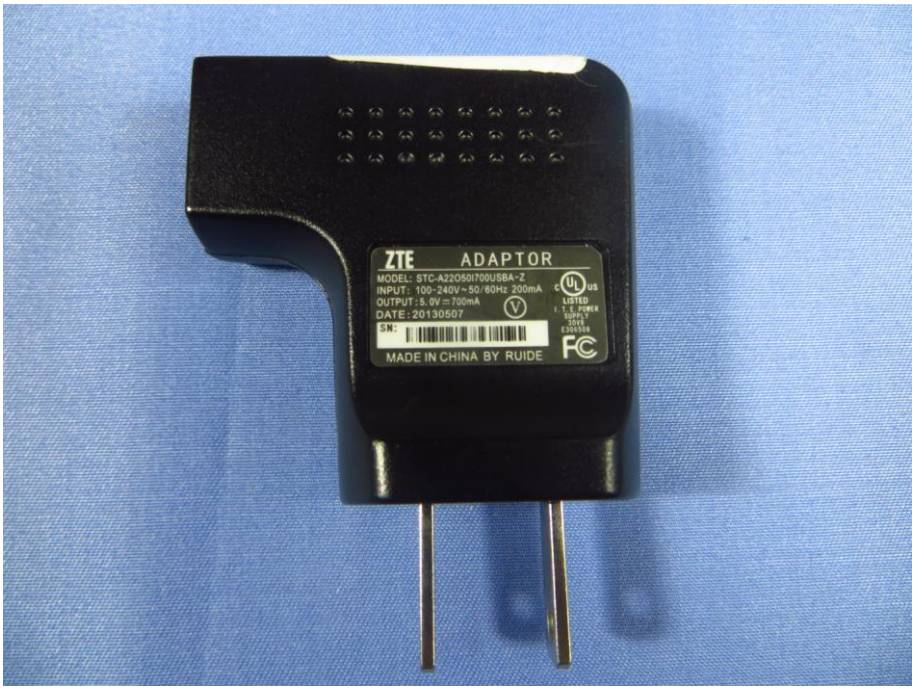
**Pic A-3 Battery**




**Pic A-4 Charger**

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# ANNEX B: MEASUREMENT RESULTS

## B.0 Antenna requirement

**Measurement Limit:**

| Standard | Requirement |
|---|---|
| FCC CRF Part 15.203 | An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, § 15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded. |

**Conclusion: The Directional gains of antenna used for transmitting is -3.88 dBi.**
**The RF transmitter uses an integrate antenna without connector.**

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## B.1 Maximum Average Output Power

**Measurement Limit and Method:**

| Standard | Limit (dBm) |
|---|---|
| FCC CRF Part 15.247(b)(1) | < 30 |

**Test Condition:**

| RF Protocol | RBW | VBW | SPAN | Sweeptime |
|---|---|---|---|---|
| IEEE 802.11b/g/n20 | 1MHz | 3MHz | 30MHz | Auto |
| IEEE 802.11n40 | 1MHz | 3MHz | 60MHz | Auto |

**Measurement Results:**

**802.11b/g mode**

| Mode | Data Rate (Mbps) | Test Result (dBm) | | |
|---|---|---|---|---|
| | | 2412MHz (Ch1) | 2437MHz (Ch6) | 2462 MHz (Ch11) |
| 802.11b | 1 | 10.11 | 10.38 | 10.29 |
| | 2 | 9.91 | 10.37 | 10.33 |
| | 5.5 | 9.23 | 9.98 | 10.08 |
| | 11 | 8.46 | 9.68 | 9.61 |
| 802.11g | 6 | 10.60 | 10.33 | 10.18 |
| | 9 | 9.67 | 10.14 | 10.05 |
| | 12 | 9.48 | 9.94 | 9.67 |
| | 18 | 9.18 | 9.65 | 9.32 |
| | 24 | 8.86 | 9.28 | 8.99 |
| | 36 | 8.36 | 8.34 | 8.48 |
| | 48 | 9.66 | 7.84 | 8.01 |
| | 54 | 7.42 | 7.67 | 7.87 |

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**802.11n mode**

| Mode | Data Rate (MCS Index) | Test Result (dBm) | | |
|---|---|---|---|---|
| | | 2412MHz (Ch1) | 2437MHz (Ch6) | 2462 MHz (Ch11) |
| 802.11n (20MHz BW) | MCS0 | 9.88 | 10.31 | 10.27 |
| | MCS1 | 9.50 | 9.94 | 9.68 |
| | MCS2 | 9.17 | 9.58 | 9.33 |
| | MCS3 | 8.79 | 8.85 | 9.02 |
| | MCS4 | 8.36 | 8.34 | 8.53 |
| | MCS5 | 7.66 | 7.91 | 8.11 |
| | MCS6 | 7.52 | 7.73 | 7.94 |
| | MCS7 | 7.30 | 7.53 | 7.78 |

| Mode | Data Rate (MCS Index) | Test Result (dBm) | | |
|---|---|---|---|---|
| | | 2422MHz (Ch3) | 2437MHz (Ch6) | 2452 MHz (Ch9) |
| 802.11n (40MHz BW) | MCS0 | 9.78 | 9.49 | 9.77 |
| | MCS1 | 8.70 | 8.82 | 8.91 |
| | MCS2 | 8.30 | 8.29 | 8.38 |
| | MCS3 | 7.79 | 7.91 | 7.94 |
| | MCS4 | 7.17 | 7.04 | 7.28 |
| | MCS5 | 6.45 | 6.58 | 6.82 |
| | MCS6 | 6.23 | 6.36 | 6.60 |
| | MCS7 | 6.16 | 6.28 | 6.48 |

**Conclusion: Pass**

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## B.2 Peak Power Spectral Density

**Measurement Limit:**

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

**Measurement Results:**

**802.11b/g mode**

| Mode | Channel | Peak Power Spectral Density（dBm） | | Conclusion |
|---|---|---|---|---|
| 802.11b | 1 | Fig.1 | -11.33 | P |
| | 6 | Fig.2 | -12.04 | P |
| | 11 | Fig.3 | -12.26 | P |
| 802.11g | 1 | Fig.4 | -14.33 | P |
| | 6 | Fig.5 | -13.72 | P |
| | 11 | Fig.6 | -14.28 | P |

**802.11n mode**

| Mode | Channel | Peak Power Spectral Density(dBm) | | Conclusion |
|---|---|---|---|---|
| 802.11n-20M | 1 | Fig.7 | -14.13 | P |
| | 6 | Fig.8 | -14.91 | P |
| | 11 | Fig.9 | -14.92 | P |
| 802.11n-40M | 3 | Fig.10 | -18.02 | P |
| | 6 | Fig.11 | -14.58 | P |
| | 9 | Fig.12 | -18.26 | P |

**See ANNEX C for test graphs.**

**Conclusion: Pass**

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## B.3 Occupied 6dB Bandwidth

**Measurement Limit:**

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

**Measurement Result:**

**802.11b/g mode**

| Mode | Channel | Test Results ( kHz) | | conclusion |
|---|---|---|---|---|
| 802.11b | 1 | Fig.13 | 7988 | P |
| | 6 | Fig.14 | 7988 | P |
| | 11 | Fig.15 | 7988 | P |
| 802.11g | 1 | Fig.16 | 16498 | P |
| | 6 | Fig.17 | 16411 | P |
| | 11 | Fig.18 | 16324 | P |

**802.11n mode**

| Mode | Channel | Test Results ( kHz) | | conclusion |
|---|---|---|---|---|
| 802.11n (20MHz) | 1 | Fig.19 | 17496 | P |
| | 6 | Fig.20 | 17496 | P |
| | 11 | Fig.21 | 17627 | P |
| 802.11n (40MHz) | 3 | Fig.22 | 35080 | P |
| | 6 | Fig.23 | 34038 | P |
| | 9 | Fig.24 | 34993 | P |

**See ANNEX C for test graphs.**

**Conclusion: Pass**

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## B.4 Band Edges Compliance

**Measurement Limit:**

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

**Measurement Result:**

**802.11b/g mode**

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

**802.11n mode**

| Mode | Channel | Test Results | Conclusion |
|---|---|---|---|
| 802.11n (20MHz) | 1 | Fig.29 | P |
| | 11 | Fig.30 | P |
| 802.11n (40MHz) | 3 | Fig.31 | P |
| | 9 | Fig.32 | P |

**See ANNEX C for test graphs.**

**Conclusion: Pass**

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## B.5 Transmitter Spurious Emission

### B.5.1 Transmitter Spurious Emission - Conducted

**Measurement Limit:**

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

**Measurement Results:**

**802.11b/g mode**

| MODE | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11b | 1 | 2.412 GHz | Fig.33 | P |
| | | 30 MHz-3 GHz | Fig.34 | P |
| | | 3GHz-18GHz | Fig.35 | P |
| | 6 | 2.437 GHz | Fig.36 | P |
| | | 30 MHz-3 GHz | Fig.37 | P |
| | | 3GHz-18GHz | Fig.38 | P |
| | 11 | 2.462 GHz | Fig.39 | P |
| | | 30 MHz-3 GHz | Fig.40 | P |
| | | 3GHz-18GHz | Fig.41 | P |
| 802.11g | 1 | 2.412 GHz | Fig.42 | P |
| | | 30 MHz-3 GHz | Fig.43 | P |
| | | 3GHz-18GHz | Fig.44 | P |
| | 6 | 2.437 GHz | Fig.45 | P |
| | | 30 MHz-3 GHz | Fig.46 | P |
| | | 3GHz-18GHz | Fig.47 | P |
| | 11 | 2.462 GHz | Fig.48 | P |
| | | 30 MHz-3 GHz | Fig.49 | P |
| | | 3GHz-18GHz | Fig.50 | P |

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**802.11n mode**

| | | | | |
|---|---|---|---|---|
| 802.11n (20MHz) | 1 | 2.412 GHz | Fig.51 | P |
| | | 30 MHz-3 GHz | Fig.52 | P |
| | | 3GHz-18GHz | Fig.53 | P |
| | 6 | 2.437 GHz | Fig.54 | P |
| | | 30 MHz-3 GHz | Fig.55 | P |
| | | 3GHz-18GHz | Fig.56 | P |
| | 11 | 2.462 GHz | Fig.57 | P |
| | | 30 MHz-3 GHz | Fig.58 | P |
| | | 3GHz-18GHz | Fig.59 | P |
| 802.11n (40MHz) | 3 | 2.422 GHz | Fig.60 | P |
| | | 30 MHz-3 GHz | Fig.61 | P |
| | | 3GHz-18GHz | Fig.62 | P |
| | 6 | 2.437 GHz | Fig.63 | P |
| | | 30 MHz-3 GHz | Fig.64 | P |
| | | 3GHz-18GHz | Fig.65 | P |
| | 9 | 2.452 GHz | Fig.66 | P |
| | | 30 MHz-3 GHz | Fig.67 | P |
| | | 3GHz-18GHz | Fig.68 | P |
| / | All channels | 18GHz-26GHz | Fig.69 | P |

**See ANNEX C for test graphs.**

**Conclusion: Pass**

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**B.5.2 Transmitter Spurious Emission - Radiated**

**Measurement Limit:**

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

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

**Limit in restricted band:**

| Frequency of emission (MHz) | Field strength(μV/m) | Measurement distance(meters) |
|---|---|---|
| 0.009-0.490 | 2400/F(kHz) | 300 |
| 0.490-1.705 | 24000/F(kHz) | 30 |
| 1.705-30.0 | 30 | 30 |
| 30-88 | 100 | 3 |
| 88-216 | 150 | 3 |
| 216-960 | 200 | 3 |
| Above 960 | 500 | 3 |

**Test Condition**

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

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

**Note**:

According to the performance evaluation, the radiated emission margin of EUT is over 20dB in the band below 30MHz. Therefore, the measurement starts from 30MHz to tenth harmonic.

The measurement results include the horizontal polarization and vertical polarization measurements.

**Measurement Results:**

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**802.11b/g mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11b | 1 | 30 MHz ~1 GHz | Fig.70 | P |
| | | 1 GHz ~ 18 GHz | Fig.71 | P |
| | 6 | 30 MHz ~1 GHz | Fig.72 | P |
| | | 1 GHz ~ 18 GHz | Fig.73 | P |
| | 11 | 30 MHz ~1 GHz | Fig.74 | P |
| | | 1 GHz ~ 18 GHz | Fig.75 | P |
| | Power(CH1) | 2.38 GHz ~ 2.45 GHz | Fig.76 | P |
| | Power(CH11) | 2.45 GHz ~ 2.5 GHz | Fig.77 | P |
| 802.11g | 1 | 30 MHz ~1 GHz | Fig.78 | P |
| | | 1 GHz ~ 18 GHz | Fig.79 | P |
| | 6 | 30 MHz ~1 GHz | Fig.80 | P |
| | | 1 GHz ~ 18 GHz | Fig.81 | P |
| | 11 | 30 MHz ~1 GHz | Fig.82 | P |
| | | 1 GHz ~ 18 GHz | Fig.83 | P |
| | Power(CH1) | 2.38 GHz ~ 2.45 GHz | Fig.84 | P |
| | Power(CH11) | 2.45 GHz ~ 2.5 GHz | Fig.85 | P |

**802.11n mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11n (20M) | 1 | 30 MHz ~1 GHz | Fig.86 | P |
| | | 1 GHz ~ 18 GHz | Fig.87 | P |
| | 6 | 30 MHz ~1 GHz | Fig.88 | P |
| | | 1 GHz ~ 18 GHz | Fig.89 | P |
| | 11 | 30 MHz ~1 GHz | Fig.90 | P |
| | | 1 GHz ~ 18 GHz | Fig.91 | P |
| | Power(CH1) | 2.38 GHz ~ 2.45 GHz | Fig.92 | P |
| | Power(CH11) | 2.45 GHz ~ 2.5 GHz | Fig.93 | P |
| 802.11n (40M) | 3 | 30 MHz ~1 GHz | Fig.94 | P |
| | | 1 GHz ~ 18 GHz | Fig.95 | P |
| | 6 | 30 MHz ~1 GHz | Fig.96 | P |
| | | 1 GHz ~ 18 GHz | Fig.97 | P |
| | 9 | 30 MHz ~1 GHz | Fig.98 | P |
| | | 1 GHz ~ 18 GHz | Fig.99 | P |
| | Power(CH3) | 2.38 GHz ~ 2.45 GHz | Fig.100 | P |
| | Power(CH9) | 2.45 GHz ~ 2.5 GHz | Fig.101 | P |
| / | All channels | 18 GHz~ 26.5 GHz | Fig.102 | P |

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**802.11b CH1 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14343.000 | 57.9 | V | 13.3 | 16.1 | 74.0 |
| 14966.000 | 57.9 | H | 13.7 | 16.1 | 74.0 |
| 15789.000 | 59.5 | H | 14.2 | 14.5 | 74.0 |
| 16308.000 | 60.1 | V | 14.9 | 13.9 | 74.0 |
| 16804.000 | 60.4 | V | 15.4 | 13.6 | 74.0 |
| 17845.000 | 60.8 | H | 15.8 | 13.2 | 74.0 |

| Frequency (MHz) | Average (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14973.000 | 45.9 | V | 13.8 | 8.1 | 54.0 |
| 4823.5000 | 47.1 | H | 5.4 | 6.9 | 54.0 |
| 15777.000 | 47.5 | H | 14.2 | 6.5 | 54.0 |
| 16313.000 | 47.6 | V | 14.9 | 6.4 | 54.0 |
| 17370.000 | 48.1 | H | 15.5 | 5.9 | 54.0 |
| 16835.000 | 48.3 | H | 15.5 | 5.7 | 54.0 |

**802.11b CH 6(1-18GHz)**

| Frequency (MHz) | MaxPeak (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14024.000 | 57.7 | H | 12.0 | 16.3 | 74.0 |
| 15184.000 | 57.7 | V | 13.1 | 16.3 | 74.0 |
| 15830.000 | 59.3 | H | 14.4 | 14.7 | 74.0 |
| 16192.000 | 60.7 | V | 14.4 | 13.3 | 74.0 |
| 16747.000 | 60.4 | H | 15.0 | 13.6 | 74.0 |
| 17323.000 | 60.7 | H | 15.4 | 13.3 | 74.0 |

| Frequency (MHz) | Average (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14457.000 | 45.3 | V | 13.1 | 8.7 | 54.0 |
| 14981.000 | 46.0 | H | 13.7 | 8.0 | 54.0 |
| 15765.000 | 47.6 | H | 14.1 | 6.4 | 54.0 |
| 16207.000 | 47.6 | H | 14.4 | 6.4 | 54.0 |

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| | | | | | |
|---|---|---|---|---|---|
| 16833.000 | 48.4 | H | 15.5 | 5.6 | 54.0 |
| 17319.000 | 48.3 | H | 15.4 | 5.7 | 54.0 |

**802.11b CH11 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14512.000 | 58.1 | H | 12.8 | 15.9 | 74.0 |
| 15017.000 | 58.4 | H | 13.5 | 15.6 | 74.0 |
| 15827.000 | 59.9 | V | 14.4 | 14.1 | 74.0 |
| 16233.000 | 60.1 | V | 14.5 | 13.9 | 74.0 |
| 16751.000 | 60.5 | V | 15.1 | 13.5 | 74.0 |
| 17425.000 | 61.3 | V | 15.6 | 12.7 | 74.0 |

| Frequency (MHz) | Average (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14451.000 | 45.3 | H | 13.1 | 8.7 | 54.0 |
| 14992.000 | 46.0 | H | 13.7 | 8.0 | 54.0 |
| 15769.000 | 47.7 | H | 14.1 | 6.3 | 54.0 |
| 16202.000 | 47.7 | H | 14.4 | 6.3 | 54.0 |
| 16823.000 | 48.4 | H | 15.5 | 5.6 | 54.0 |
| 17342.000 | 48.2 | H | 15.5 | 5.8 | 54.0 |

**802.11g CH1 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 4828.7500 | 59.5 | H | 5.4 | 14.5 | 74.0 |
| 15067.000 | 58.2 | H | 13.2 | 15.8 | 74.0 |
| 15719.000 | 59.4 | V | 14.0 | 14.6 | 74.0 |
| 16361.000 | 59.9 | V | 15.2 | 14.1 | 74.0 |
| 16827.000 | 60.2 | H | 15.5 | 13.8 | 74.0 |
| 17794.000 | 60.5 | V | 15.7 | 13.5 | 74.0 |

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| Frequency (MHz) | Average (dBμV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|---|---|---|---|---|---|
| 14448.000 | 45.2 | H | 13.1 | 8.8 | 54.0 |
| 15050.000 | 46.0 | H | 13.3 | 8.0 | 54.0 |
| 15775.000 | 47.6 | V | 14.2 | 6.4 | 54.0 |
| 16189.000 | 47.7 | V | 14.4 | 6.3 | 54.0 |
| 16835.000 | 48.4 | V | 15.5 | 5.6 | 54.0 |
| 17285.000 | 48.1 | H | 15.4 | 5.9 | 54.0 |

**802.11g CH6 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBμV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|---|---|---|---|---|---|
| 14159.000 | 57.8 | V | 12.4 | 16.2 | 74.0 |
| 14814.000 | 58.2 | H | 13.4 | 15.8 | 74.0 |
| 15689.000 | 59.4 | H | 13.9 | 14.6 | 74.0 |
| 16272.000 | 59.4 | V | 14.7 | 14.6 | 74.0 |
| 16789.000 | 60.7 | V | 15.3 | 13.3 | 74.0 |
| 17305.000 | 60.1 | V | 15.4 | 13.9 | 74.0 |

| Frequency (MHz) | Average (dBμV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|---|---|---|---|---|---|
| 14458.000 | 45.3 | V | 13.1 | 8.7 | 54.0 |
| 15049.000 | 46.1 | V | 13.3 | 7.9 | 54.0 |
| 15769.000 | 47.7 | V | 14.1 | 6.3 | 54.0 |
| 16274.000 | 47.8 | V | 14.7 | 6.2 | 54.0 |
| 16835.000 | 48.4 | V | 15.5 | 5.6 | 54.0 |
| 17316.000 | 48.1 | V | 15.4 | 5.9 | 54.0 |

**802.11g CH11 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBμV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|---|---|---|---|---|---|
| 14444.000 | 57.4 | V | 13.1 | 16.6 | 74.0 |
| 14962.000 | 59.3 | H | 13.7 | 14.7 | 74.0 |
| 15818.000 | 59.9 | H | 14.3 | 14.1 | 74.0 |
| 16258.000 | 59.8 | V | 14.6 | 14.2 | 74.0 |

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| | | | | | |
|---|---|---|---|---|---|
| 16777.000 | 61.5 | H | 15.2 | 12.5 | 74.0 |
| 17285.000 | 60.6 | V | 15.4 | 13.4 | 74.0 |

| Frequency (MHz) | Average (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14441.000 | 45.3 | H | 13.2 | 8.7 | 54.0 |
| 15050.000 | 46.1 | H | 13.3 | 7.9 | 54.0 |
| 15789.000 | 47.6 | V | 14.2 | 6.4 | 54.0 |
| 16328.000 | 47.9 | V | 15.0 | 6.1 | 54.0 |
| 16830.000 | 48.5 | H | 15.5 | 5.5 | 54.0 |
| 17347.000 | 48.5 | H | 15.5 | 5.5 | 54.0 |

**802.11n-20MHz CH1 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14351.000 | 57.6 | H | 13.3 | 16.4 | 74.0 |
| 14983.000 | 58.7 | H | 13.7 | 15.3 | 74.0 |
| 15702.000 | 59.9 | H | 13.9 | 14.1 | 74.0 |
| 16275.000 | 60.2 | V | 14.7 | 13.8 | 74.0 |
| 16822.000 | 60.6 | V | 15.5 | 13.4 | 74.0 |
| 17898.000 | 60.6 | V | 15.8 | 13.4 | 74.0 |

| Frequency (MHz) | Average (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14504.000 | 45.4 | V | 12.8 | 8.6 | 54.0 |
| 15165.000 | 46.0 | H | 13.0 | 8.0 | 54.0 |
| 15768.000 | 47.7 | H | 14.1 | 6.3 | 54.0 |
| 16207.000 | 48.2 | H | 14.4 | 5.8 | 54.0 |
| 16827.000 | 48.7 | V | 15.5 | 5.3 | 54.0 |
| 17353.000 | 48.5 | H | 15.5 | 5.5 | 54.0 |

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**802.11n-20MHz CH6 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14368.000 | 57.5 | V | 13.4 | 16.5 | 74.0 |
| 14763.000 | 58.4 | V | 13.1 | 15.6 | 74.0 |
| 15686.000 | 59.8 | V | 13.9 | 14.2 | 74.0 |
| 16215.000 | 60.8 | V | 14.4 | 13.2 | 74.0 |
| 16732.000 | 60.8 | H | 15.0 | 13.2 | 74.0 |
| 17986.000 | 60.8 | H | 15.8 | 13.2 | 74.0 |

| Frequency (MHz) | Average (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14532.000 | 45.4 | H | 12.6 | 8.6 | 54.0 |
| 15055.000 | 46.1 | H | 13.2 | 7.9 | 54.0 |
| 15774.000 | 47.7 | H | 14.2 | 6.3 | 54.0 |
| 16277.000 | 48.0 | H | 14.7 | 6.0 | 54.0 |
| 16781.000 | 48.6 | H | 15.2 | 5.4 | 54.0 |
| 17370.000 | 48.4 | H | 15.5 | 5.6 | 54.0 |

**802.11n-20MHz CH11 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14354.000 | 57.6 | V | 13.3 | 16.4 | 74.0 |
| 15072.000 | 59.0 | V | 13.1 | 15.0 | 74.0 |
| 15814.000 | 59.8 | V | 14.3 | 14.2 | 74.0 |
| 16274.000 | 60.2 | H | 14.7 | 13.8 | 74.0 |
| 16855.000 | 60.5 | H | 15.7 | 13.5 | 74.0 |
| 17768.000 | 61.3 | H | 15.7 | 12.7 | 74.0 |

| Frequency (MHz) | Average (dBµV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|---|---|---|---|---|---|
| 14482.000 | 45.4 | V | 12.9 | 8.6 | 54.0 |
| 15051.000 | 46.1 | H | 13.3 | 7.9 | 54.0 |
| 15777.000 | 47.7 | V | 14.2 | 6.3 | 54.0 |
| 16228.000 | 47.8 | H | 14.5 | 6.2 | 54.0 |

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| | | | | | |
|---|---|---|---|---|---|
| 16843.000 | 48.6 | H | 15.6 | 5.4 | 54.0 |
| 17288.000 | 48.3 | H | 15.4 | 5.7 | 54.0 |

**802.11n-40MHz CH3 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBμV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|---|---|---|---|---|---|
| 14547.000 | 57.5 | H | 12.6 | 16.5 | 74.0 |
| 15096.000 | 58.7 | H | 13.0 | 15.3 | 74.0 |
| 15673.000 | 60.0 | V | 13.8 | 14.0 | 74.0 |
| 16309.000 | 60.5 | H | 14.9 | 13.5 | 74.0 |
| 16779.000 | 61.1 | V | 15.2 | 12.9 | 74.0 |
| 17330.00 | 60.8 | H | 15.5 | 13.2 | 74.0 |

| Frequency (MHz) | Average (dBμV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|---|---|---|---|---|---|
| 14537.000 | 45.3 | V | 12.6 | 8.7 | 54.0 |
| 15179.000 | 46.2 | H | 13.1 | 7.8 | 54.0 |
| 15683.000 | 48.0 | H | 13.9 | 6.0 | 54.0 |
| 16199.000 | 48.3 | H | 14.4 | 5.7 | 54.0 |
| 16833.000 | 49.0 | H | 15.5 | 5.0 | 54.0 |
| 17330.000 | 48.7 | H | 15.5 | 5.3 | 54.0 |

**802.11n-40MHz CH6 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBμV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|---|---|---|---|---|---|
| 14394.000 | 57.4 | V | 13.4 | 16.6 | 74.0 |
| 15166.000 | 58.0 | V | 13.0 | 16.0 | 74.0 |
| 15745.000 | 60.2 | H | 14.0 | 13.8 | 74.0 |
| 16231.000 | 60.1 | H | 14.5 | 13.9 | 74.0 |
| 16766.000 | 61.2 | H | 15.2 | 12.8 | 74.0 |
| 17301.000 | 61.0 | H | 15.4 | 13.0 | 74.0 |

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| Frequency (MHz) | Average (dBμV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|---|---|---|---|---|---|
| 14529.000 | 45.5 | H | 12.6 | 8.5 | 54.0 |
| 15057.000 | 46.1 | H | 13.2 | 7.9 | 54.0 |
| 15782.000 | 47.8 | H | 14.2 | 6.2 | 54.0 |
| 16197.000 | 48.2 | H | 14.4 | 5.8 | 54.0 |
| 16815.000 | 48.9 | H | 15.4 | 5.1 | 54.0 |
| 17309.000 | 48.5 | V | 15.4 | 5.5 | 54.0 |

**802.11n-40MHz CH9 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dBμV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|---|---|---|---|---|---|
| 14401.000 | 58.0 | H | 13.4 | 16.0 | 74.0 |
| 15177.000 | 58.2 | H | 13.1 | 15.8 | 74.0 |
| 15721.000 | 59.7 | H | 14.0 | 14.3 | 74.0 |
| 16421.000 | 60.0 | H | 15.3 | 14.0 | 74.0 |
| 16823.000 | 61.3 | H | 15.5 | 12.7 | 74.0 |
| 17474.000 | 60.7 | V | 15.6 | 13.3 | 74.0 |

| Frequency (MHz) | Average (dBμV/m) | Polarization | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|---|---|---|---|---|---|
| 14234.000 | 45.3 | V | 12.9 | 8.7 | 54.0 |
| 15167.000 | 45.9 | V | 13.0 | 8.1 | 54.0 |
| 15709.000 | 47.8 | V | 13.9 | 6.2 | 54.0 |
| 16230.000 | 48.3 | V | 14.5 | 5.7 | 54.0 |
| 16783.000 | 49.1 | V | 15.3 | 4.9 | 54.0 |
| 17290.000 | 48.5 | V | 15.4 | 5.5 | 54.0 |

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**See ANNEX C for test graphs.**

**Conclusion: Pass**

**Note:**

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

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

The measurement results are obtained as described below:

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

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## B.6 AC Powerline Conducted Emission

**Test Condition:**

| Voltage（V） | Frequency（Hz） |
|---|---|
| 120 | 60 |

**Measurement Result and limit:**

WLAN (Quasi-peak Limit)

| Frequency range (MHz) | Quasi-peak Limit (dBμV) | Result (dBμV) | | Conclusion |
|---|---|---|---|---|
| | | Traffic | Idle | |
| 0.15 to 0.5 | 66 to 56 | Fig.103 | Fig.104 | 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-peak Limit (dBμV) | Result (dBμV) | | Conclusion |
|---|---|---|---|---|
| | | Traffic | Idle | |
| 0.15 to 0.5 | 56 to 46 | Fig.103 | Fig.104 | 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. | | | | |

**See ANNEX C for test graphs.**

**Conclusion: Pass**

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# ANNEX C: TEST FIGURE LIST

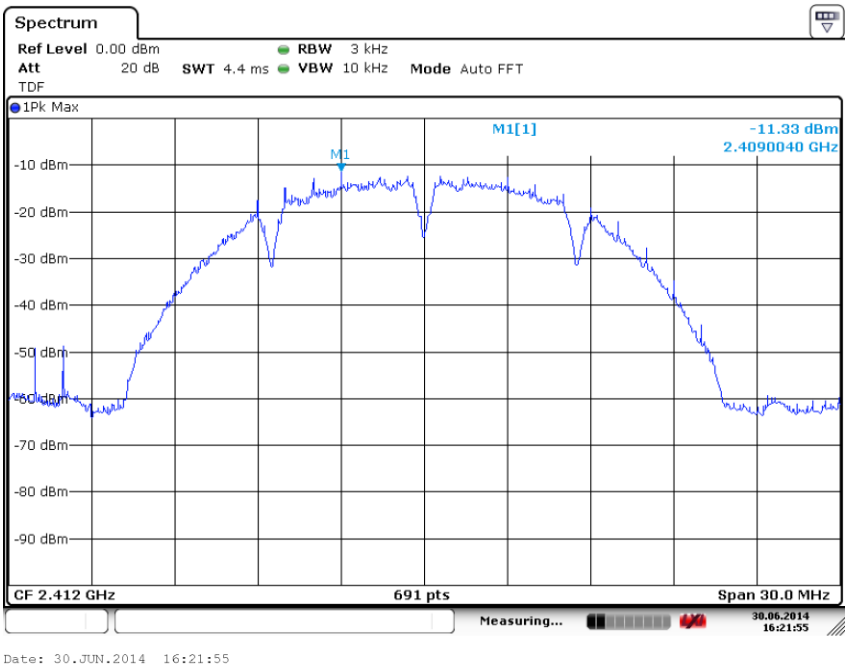


**Fig. 1 Power Spectral Density (802.11b, Ch 1)**

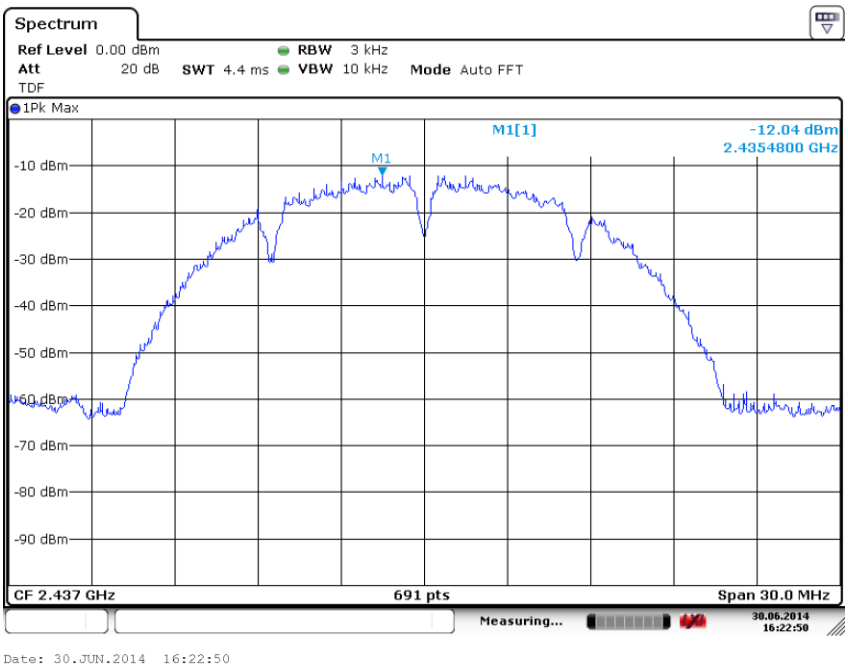


**Fig. 2 Power Spectral Density (802.11b, Ch 6)**

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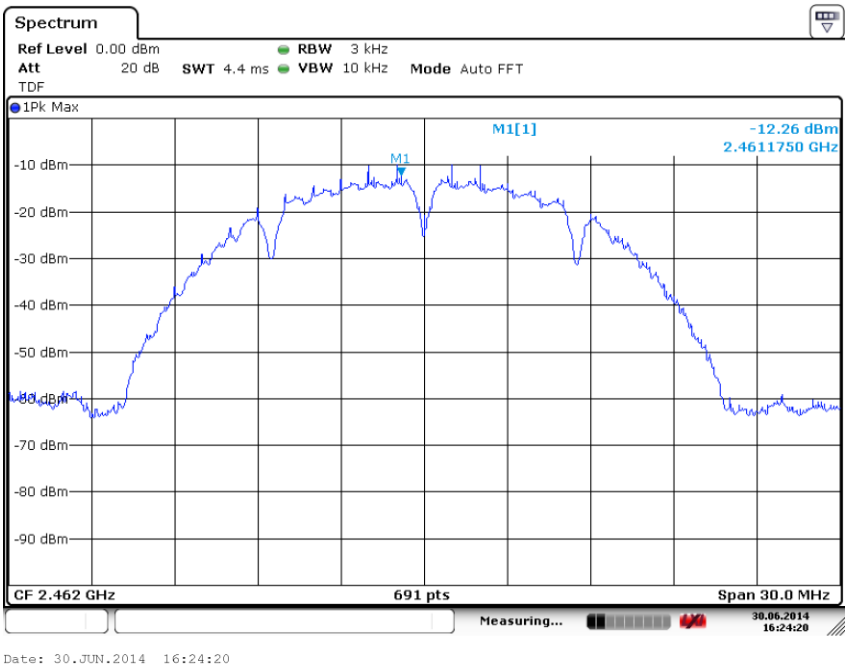


**Fig. 3 Power Spectral Density (802.11b, Ch 11)**

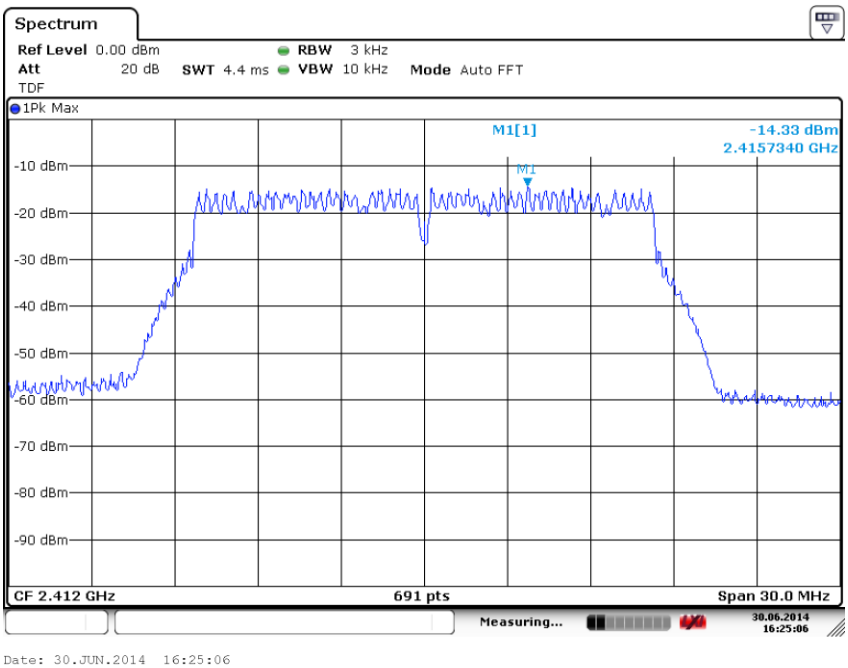


**Fig. 4 Power Spectral Density (802.11g, Ch 1)**

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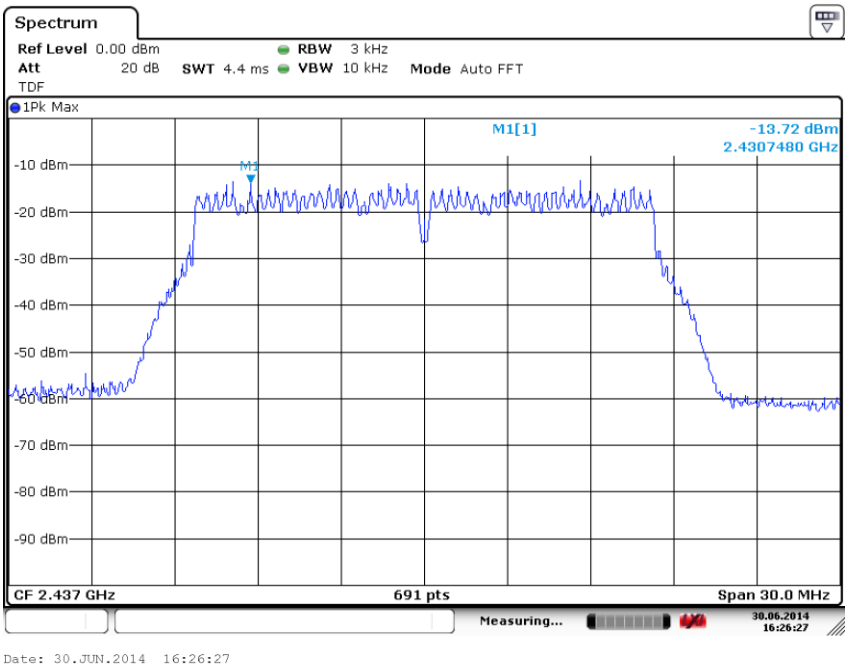


**Fig. 5 Power Spectral Density (802.11g, Ch 6)**

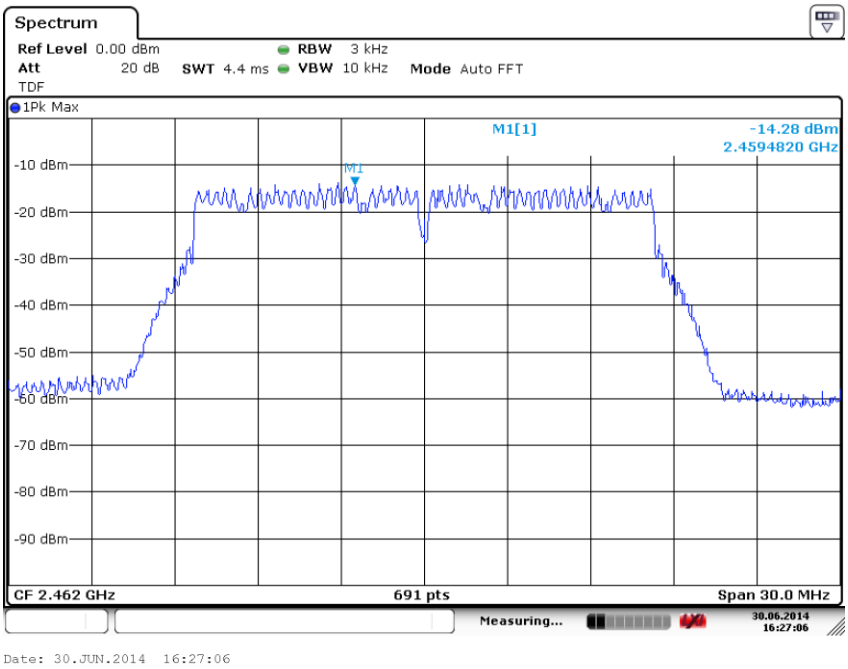


**Fig. 6 Power Spectral Density (802.11g, Ch 11)**

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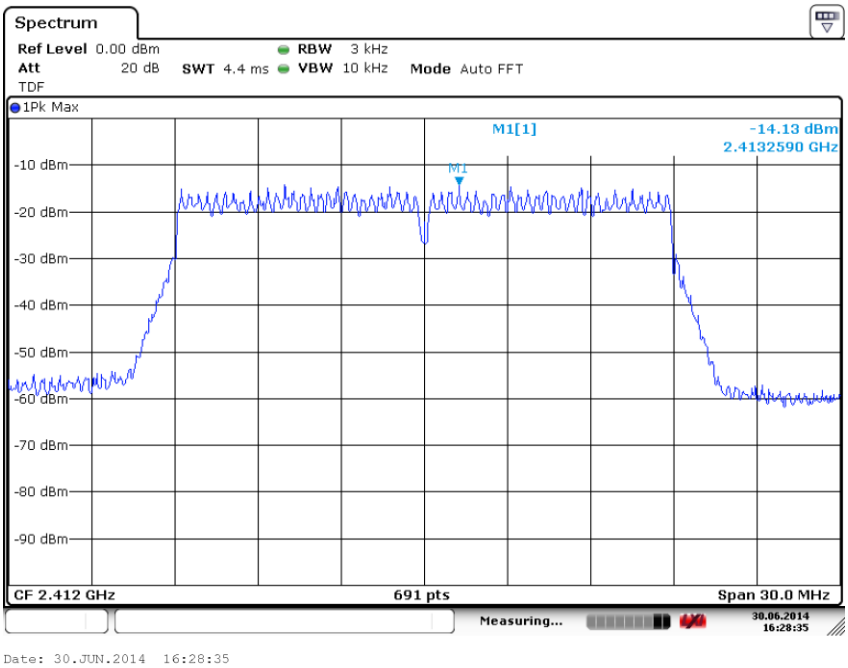


**Fig. 7 Power Spectral Density (802.11n-20MHz, Ch 1)**

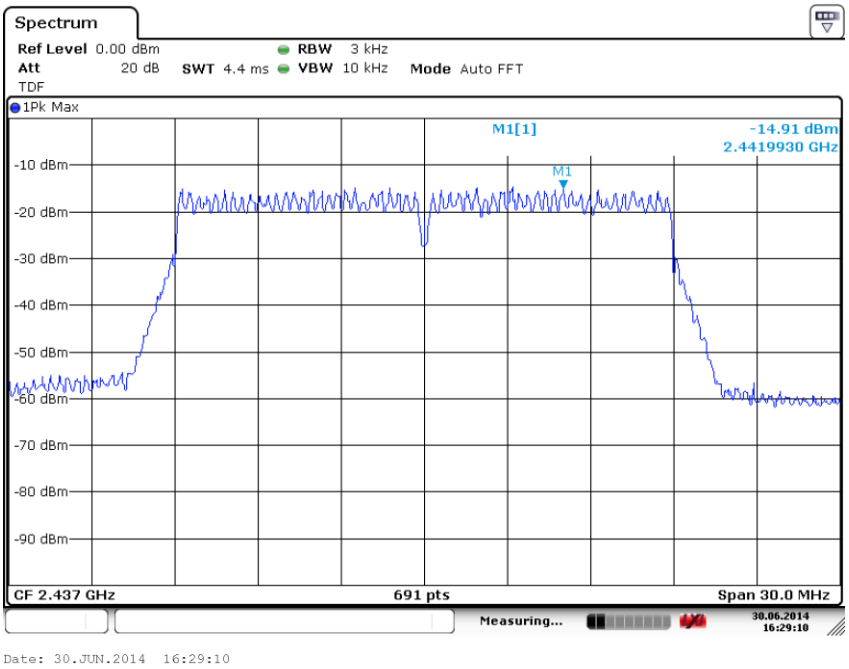


**Fig. 8 Power Spectral Density (802.11n-20MHz, Ch 6)**

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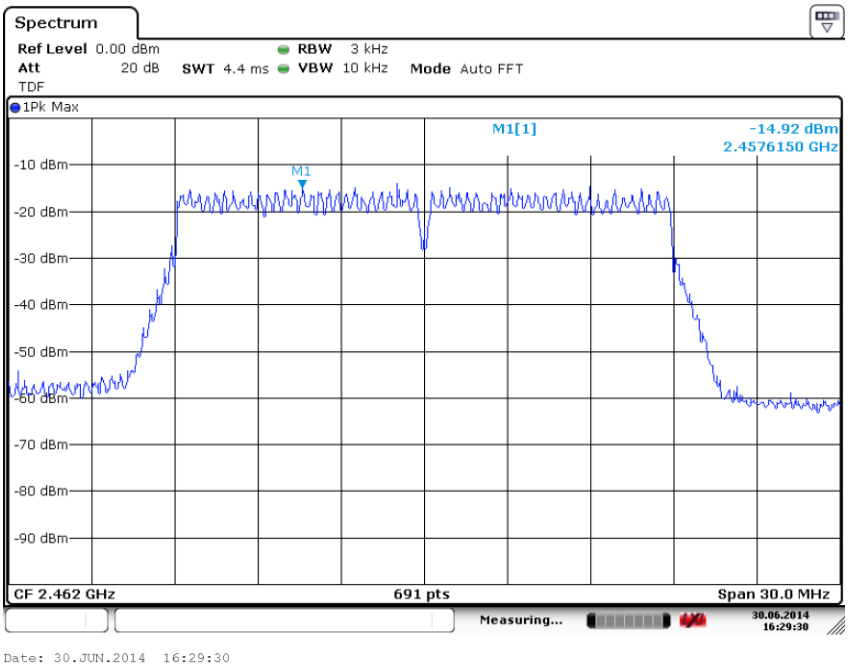


**Fig. 9 Power Spectral Density (802.11n-20MHz, Ch 11)**

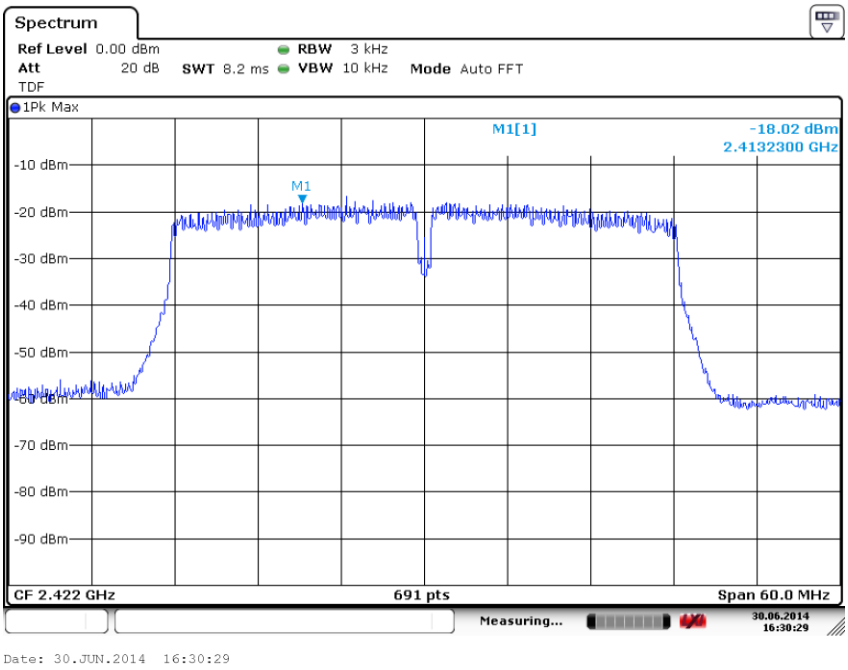


**Fig. 10 Power Spectral Density (802.11n-40MHz, Ch 3)**

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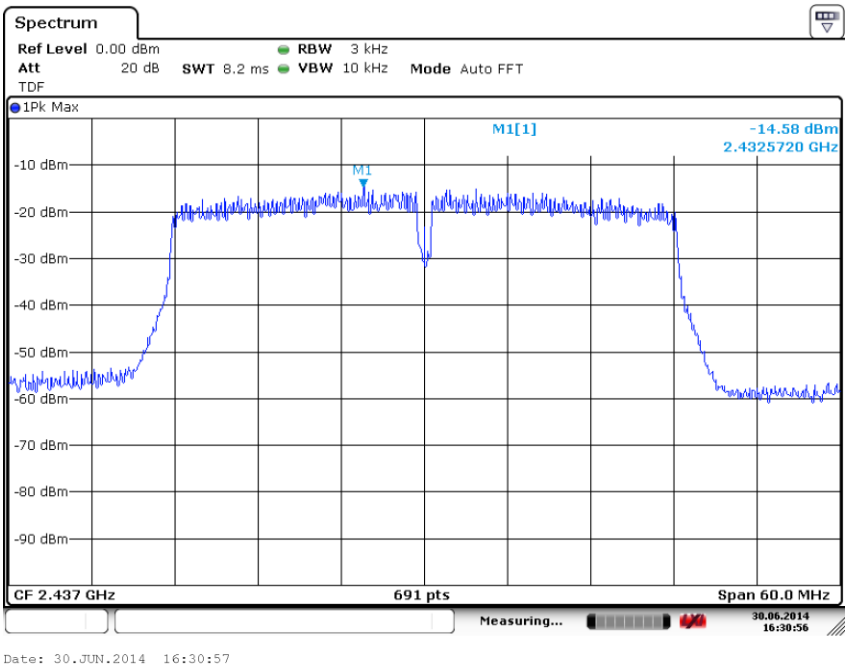


**Fig. 11 Power Spectral Density (802.11n-40MHz, Ch 6)**

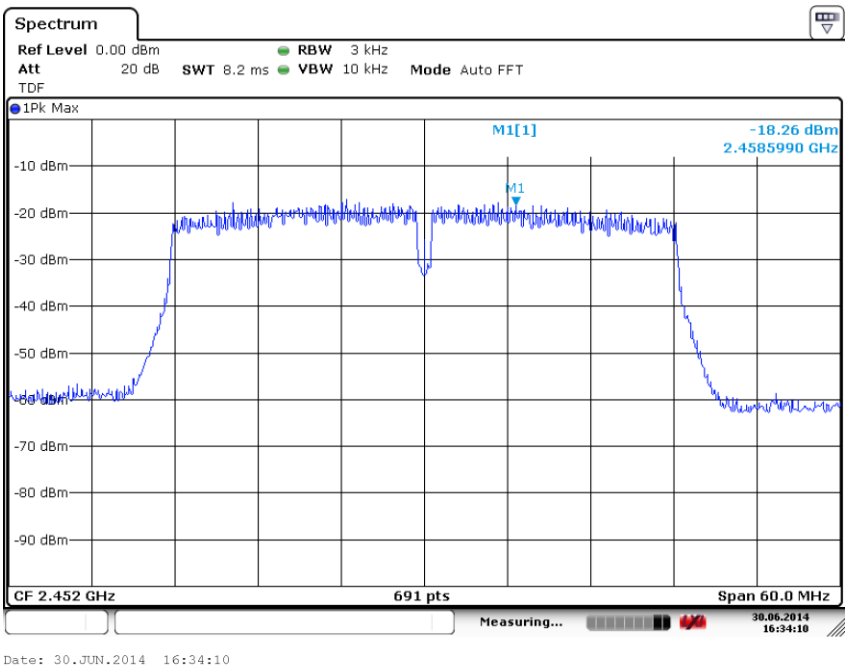


**Fig. 12 Power Spectral Density (802.11n-40MHz, Ch 9)**

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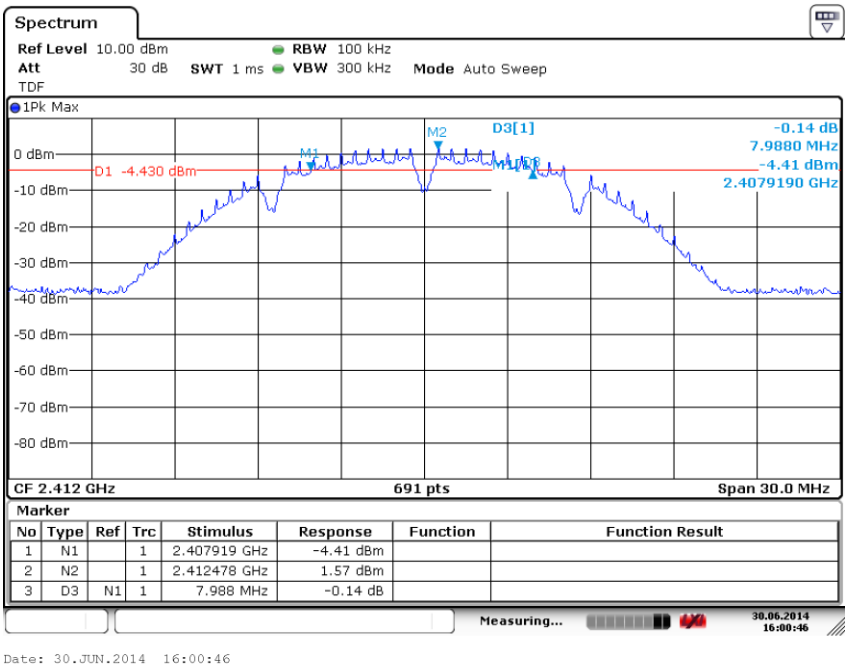


**Fig. 13 Occupied 6dB Bandwidth (802.11b, Ch 1)**

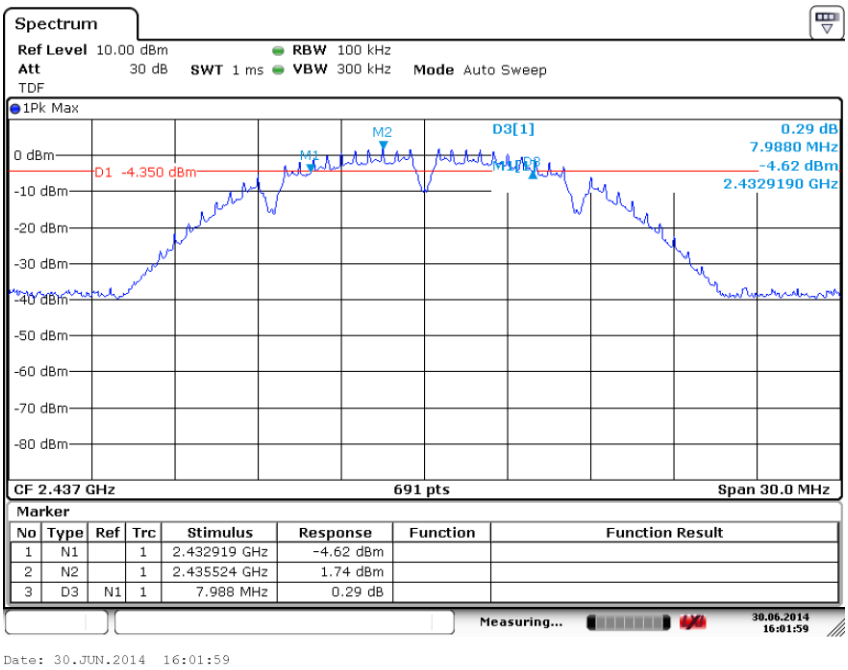


**Fig. 14 Occupied 6dB Bandwidth (802.11b, Ch 6)**

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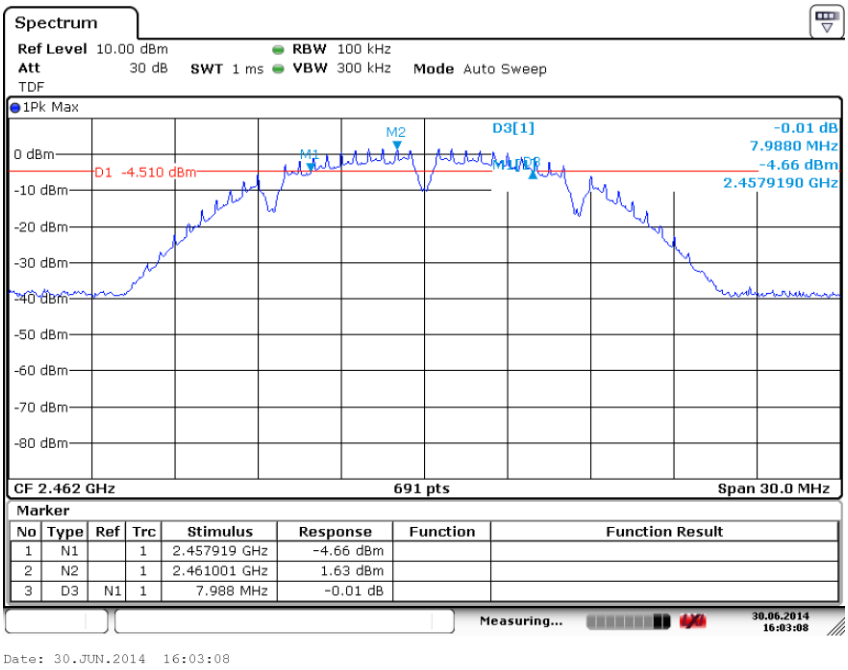


**Fig. 15 Occupied 6dB Bandwidth (802.11b, Ch 11)**

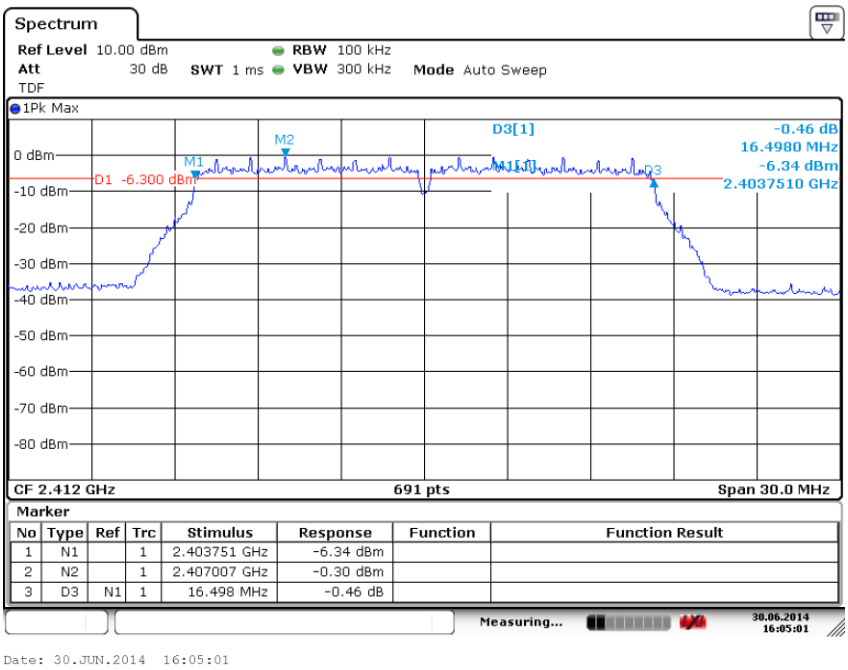


**Fig. 16 Occupied 6dB Bandwidth (802.11g, Ch 1)**

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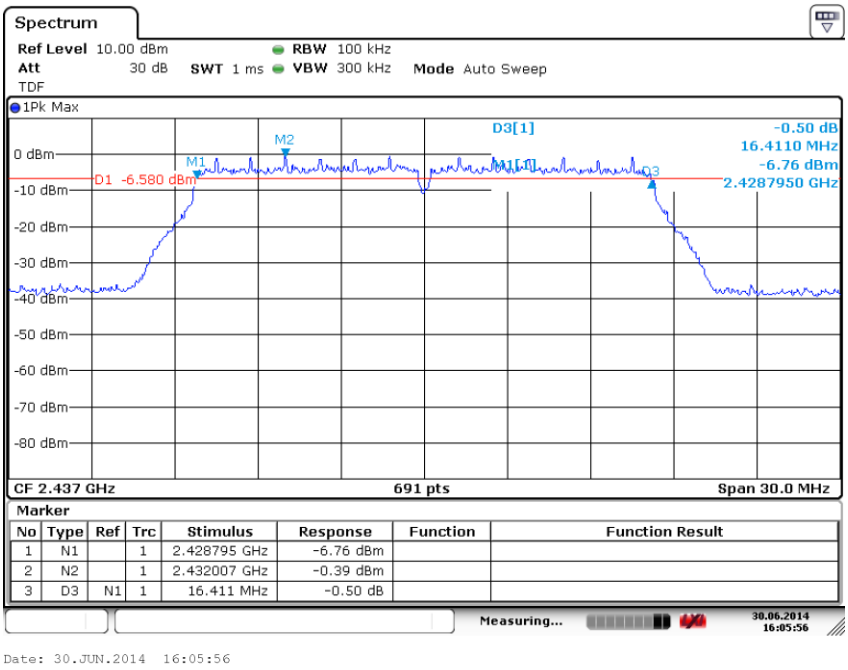


**Fig. 17 Occupied 6dB Bandwidth (802.11g, Ch 6)**

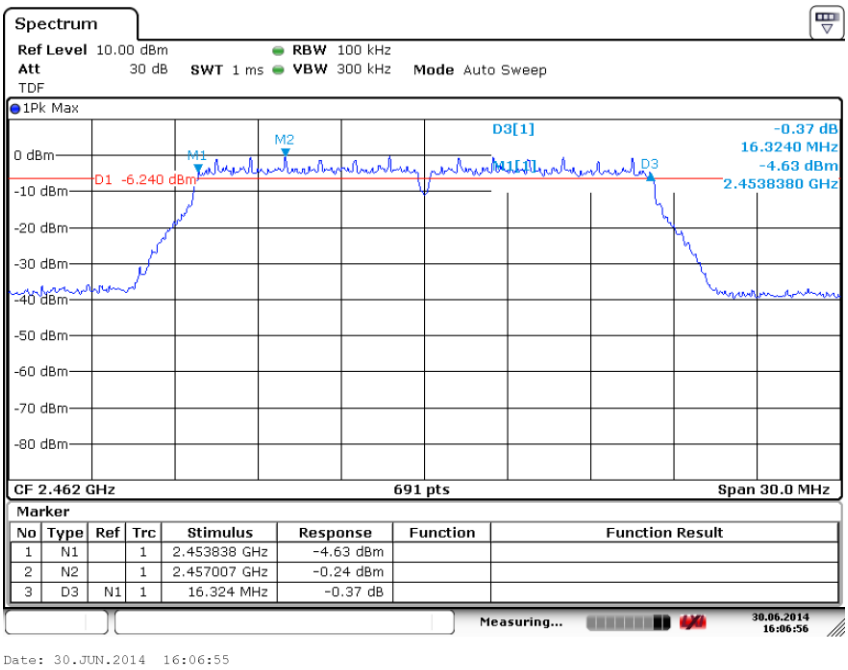


**Fig. 18 Occupied 6dB Bandwidth (802.11g, Ch 11)**

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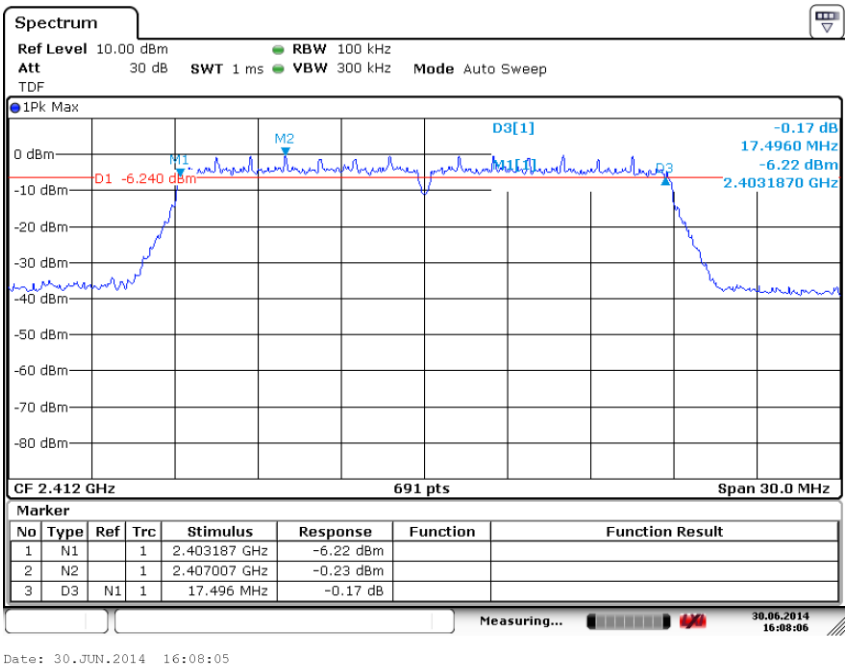


**Fig. 19 Occupied 6dB Bandwidth (802.11 n-20MHz, Ch 1)**

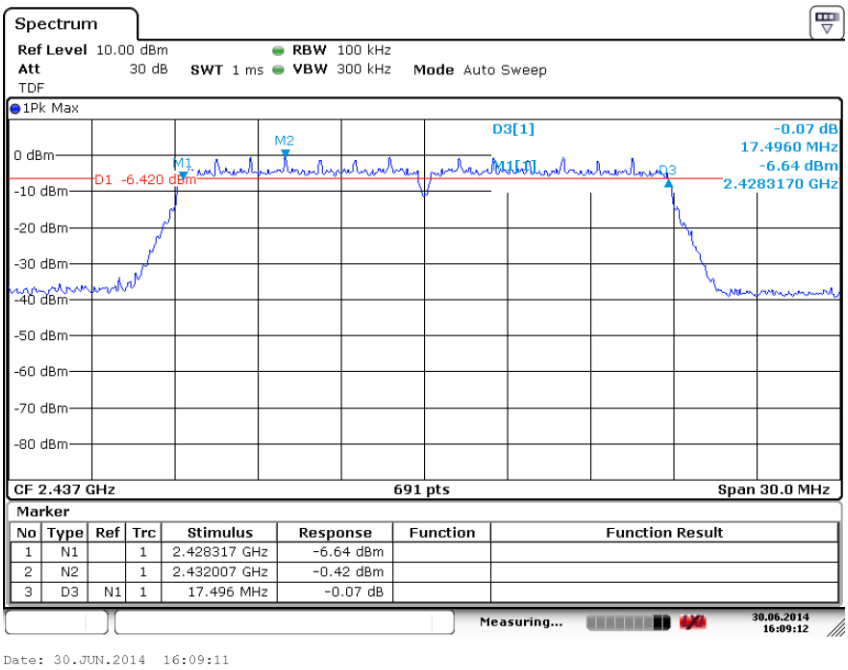


**Fig. 20 Occupied 6dB Bandwidth (802.11 n-20MHz, Ch 6)**

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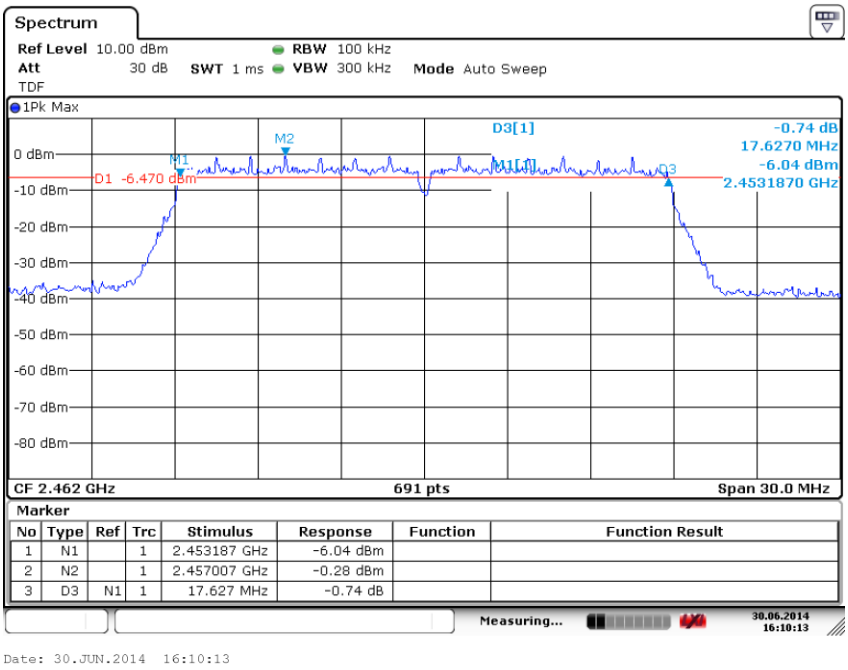


**Fig. 21 Occupied 6dB Bandwidth (802.11n-20MHz, Ch 11)**

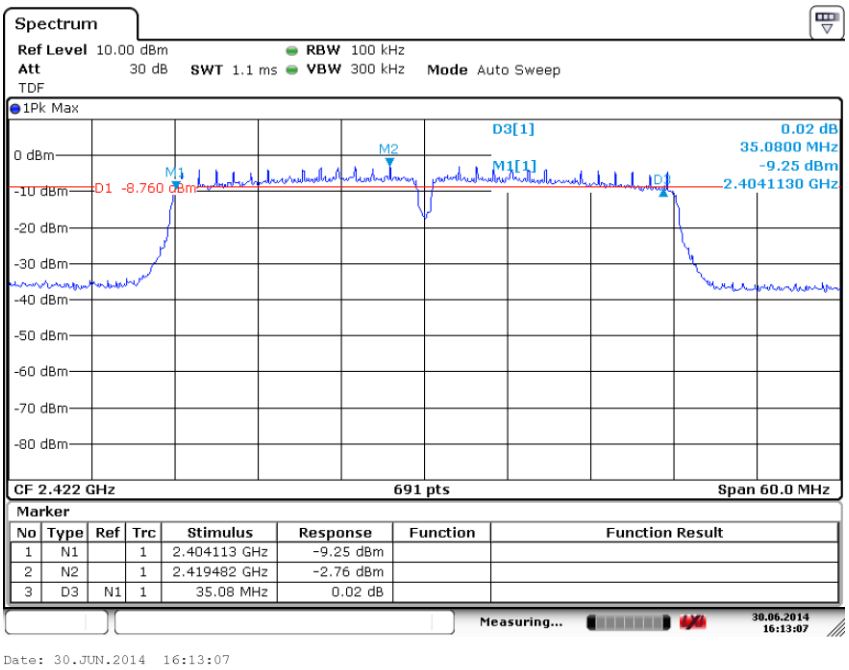


**Fig. 22 Occupied 6dB Bandwidth (802.11n-40MHz, Ch 3)**

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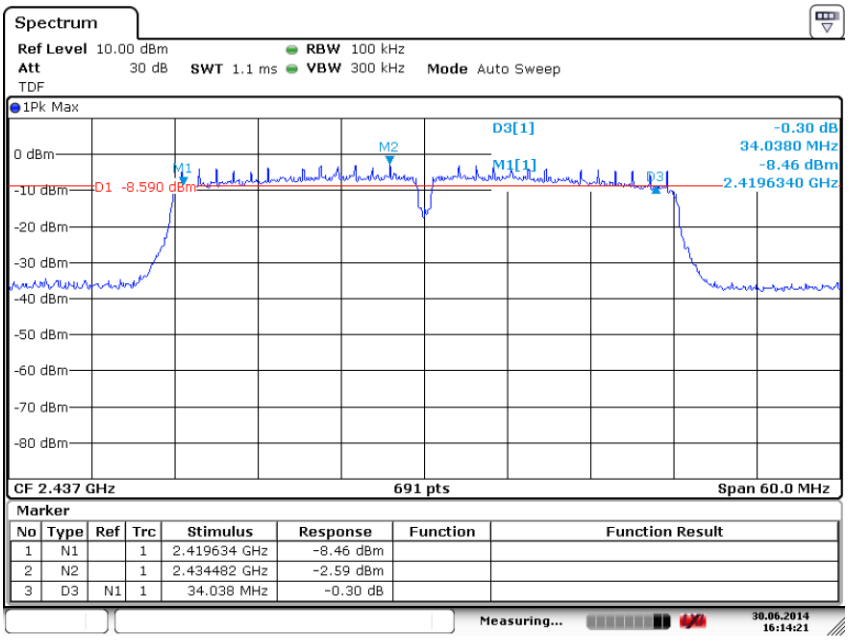
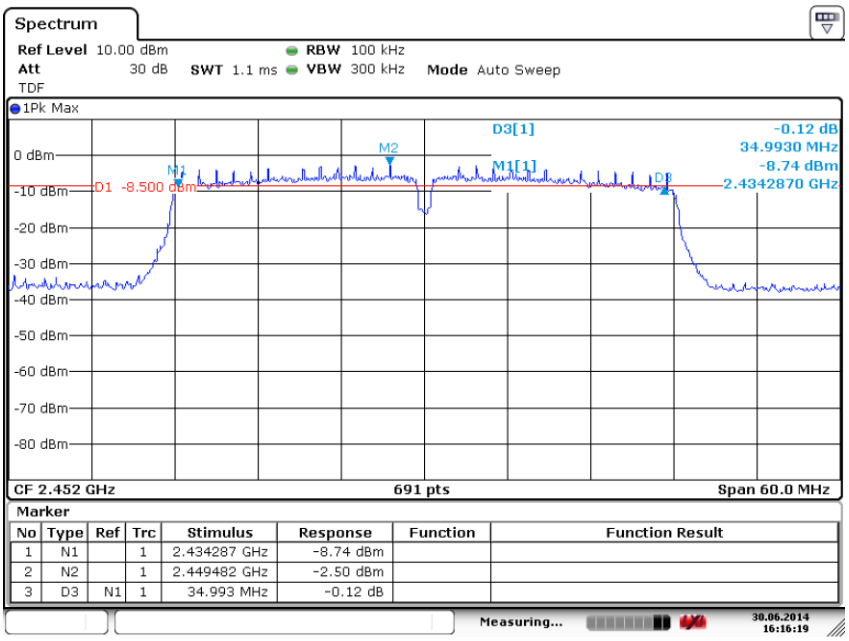



Date: 30.JUN.2014 16:14:21

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




Date: 30.JUN.2014 16:16:18

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

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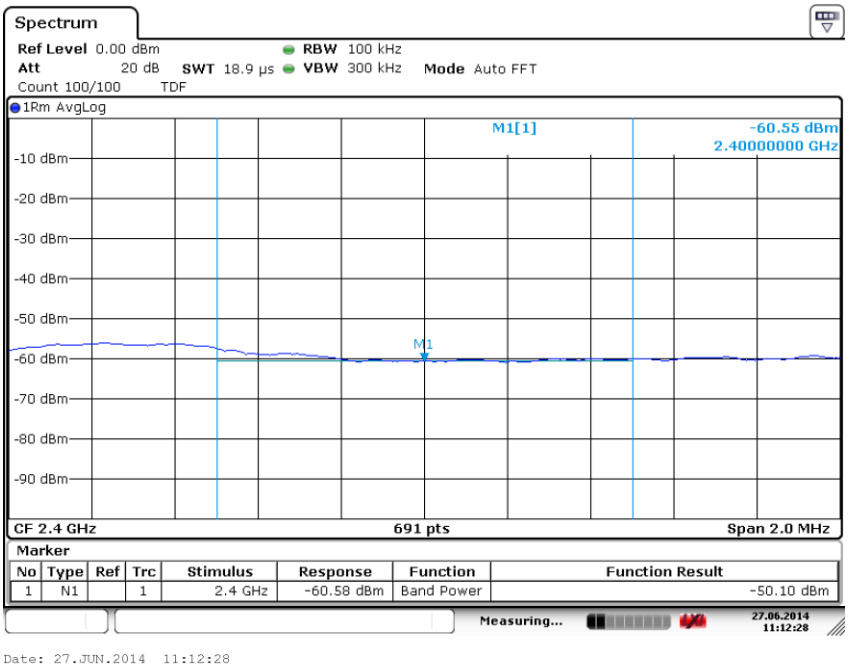


**Fig. 25 Band Edges (802.11b, Ch 1)**

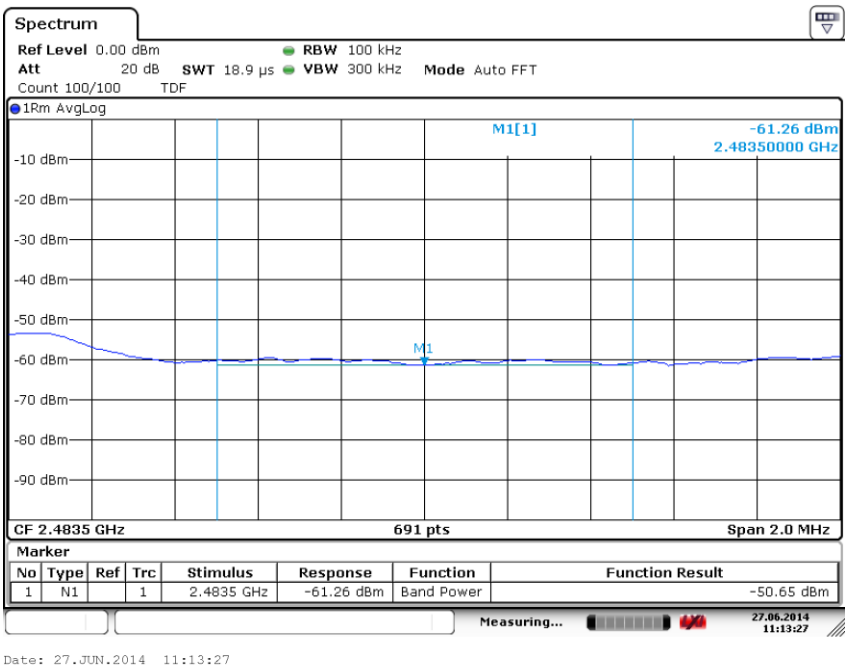


**Fig. 26 Band Edges (802.11b, Ch 11)**

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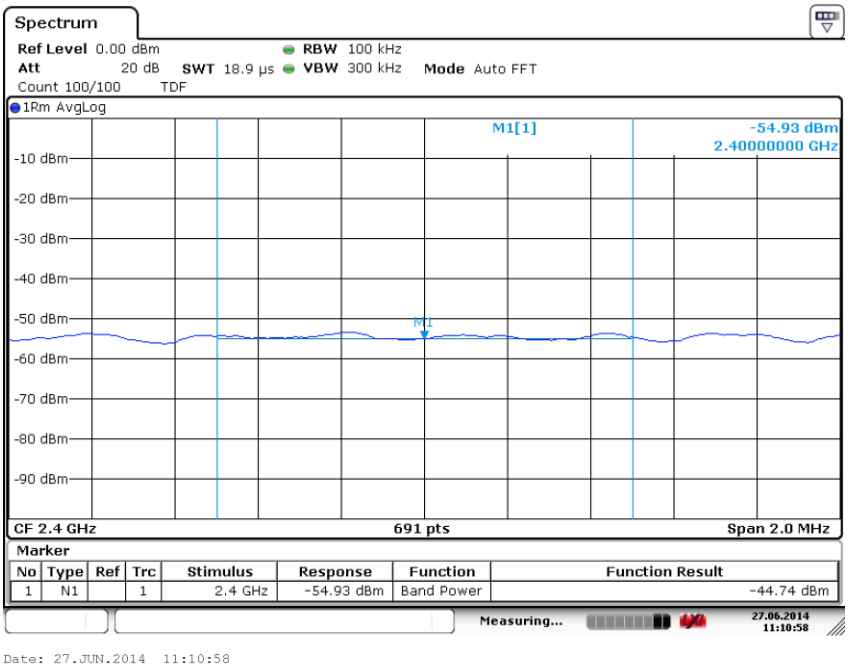


**Fig. 27 Band Edges (802.11g, Ch 1)**

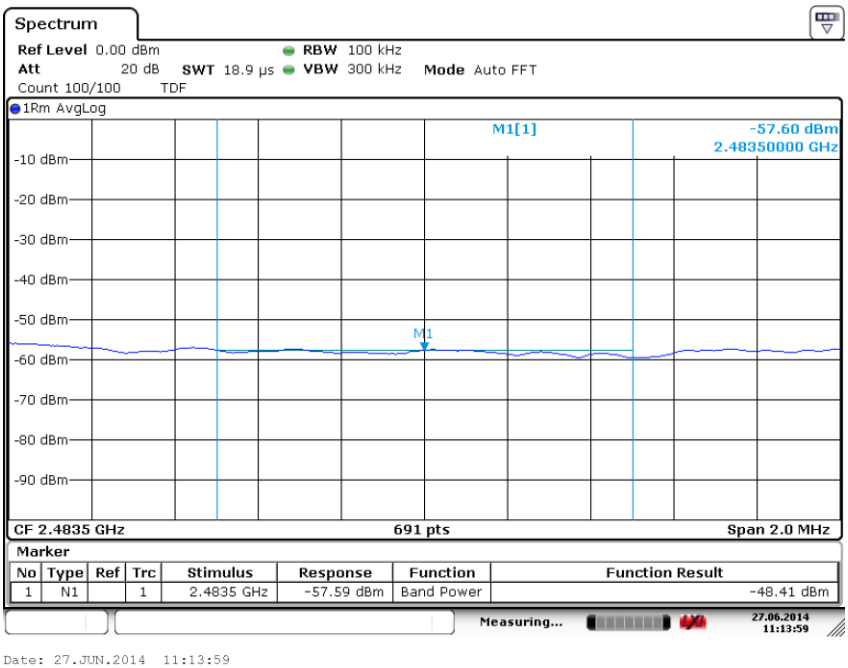


**Fig. 28 Band Edges (802.11g, Ch 11)**

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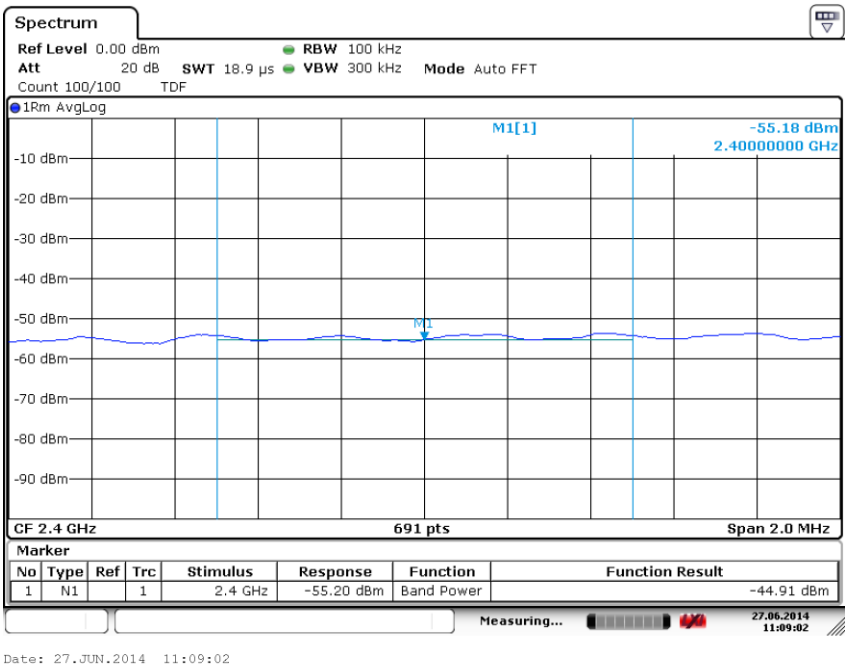


**Fig. 29 Band Edges (802.11 n-20MHz, Ch 1)**

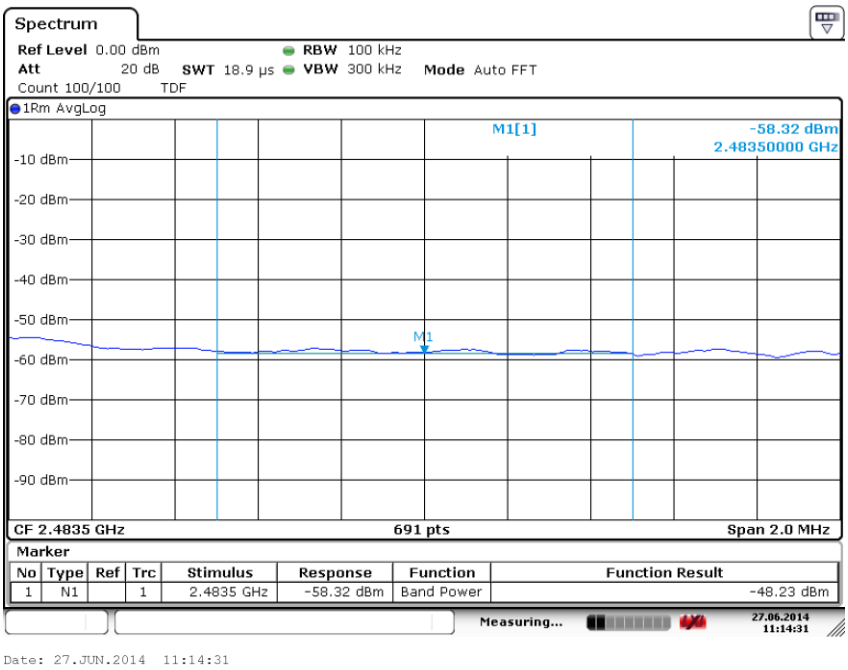


**Fig. 30 Band Edges (802.11 n-20MHz, Ch 11)**

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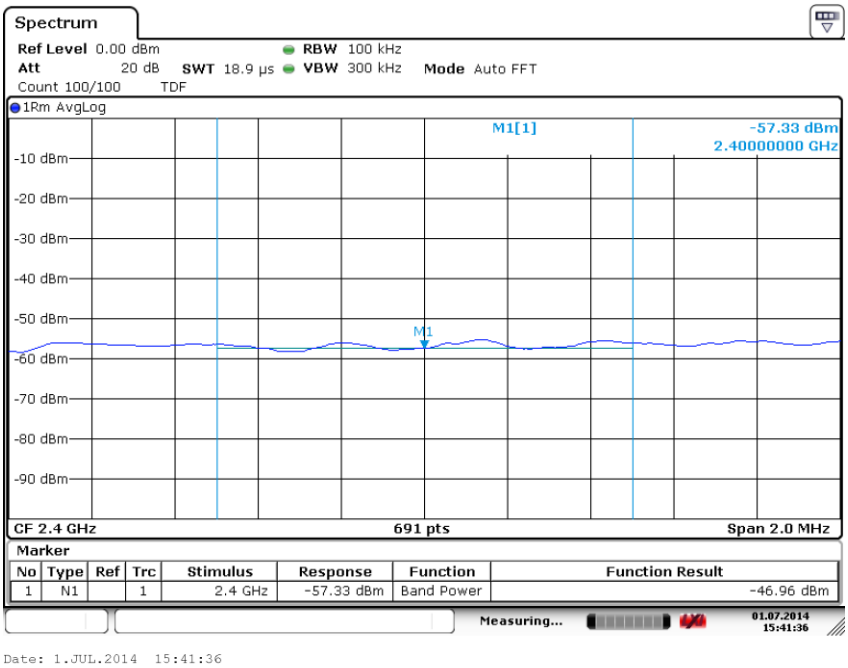


**Fig. 31 Band Edges (802.11 n-40MHz, Ch 3)**

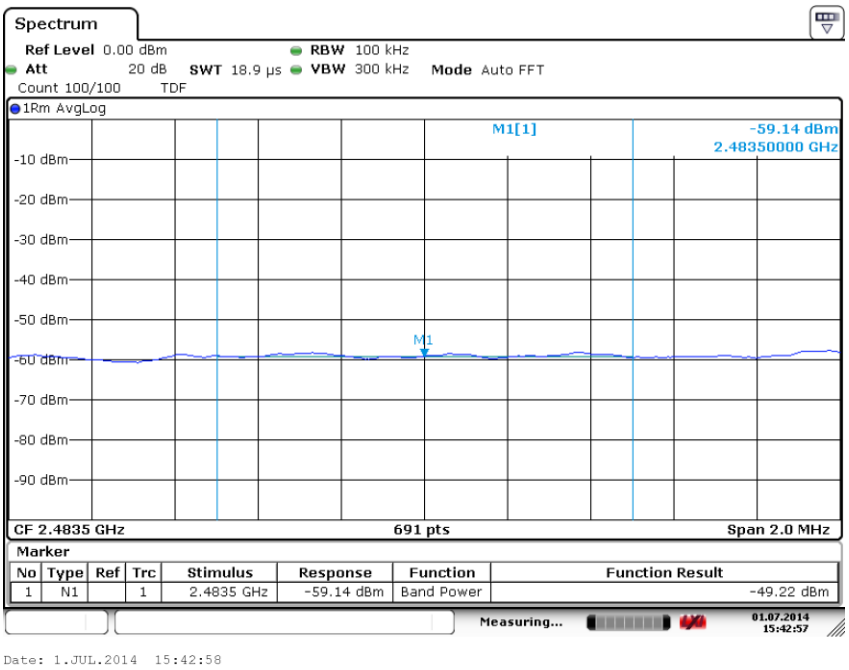


**Fig. 32 Band Edges (802.11 n-40MHz, Ch 9)**

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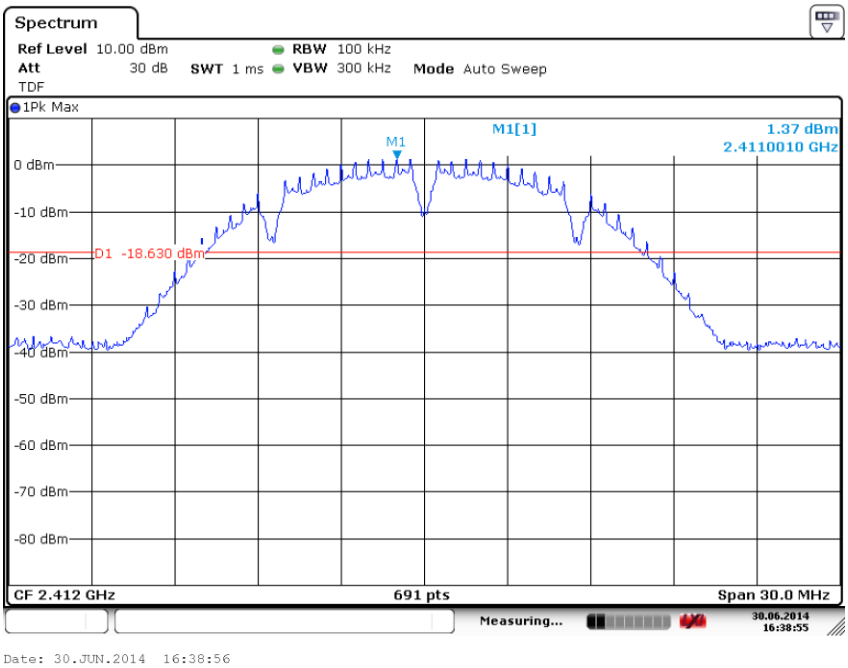


**Fig. 33 Conducted Spurious Emission (802.11b, Ch1, Center Frequency)**

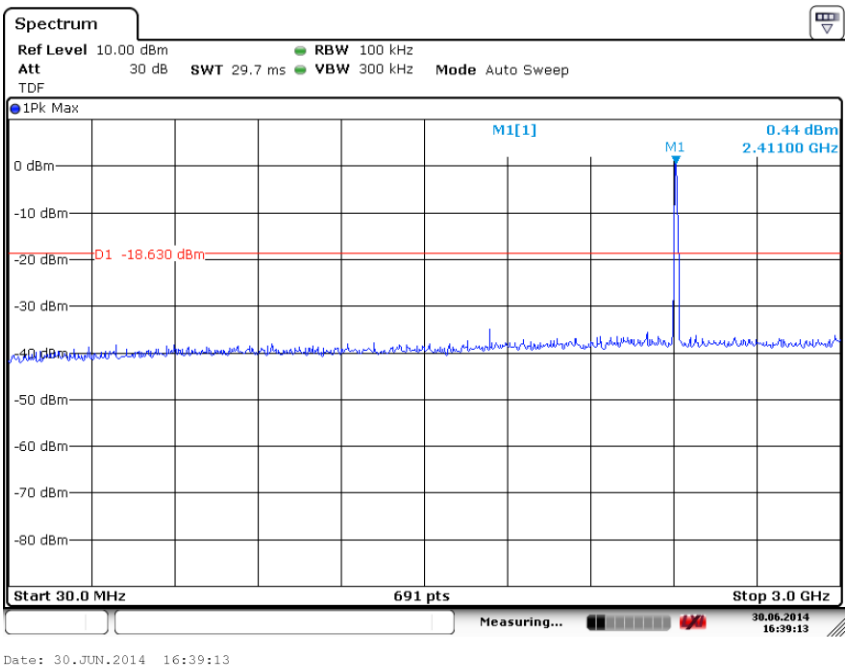


**Fig. 34 Conducted Spurious Emission (802.11b, Ch1, 30 MHz-3 GHz)**

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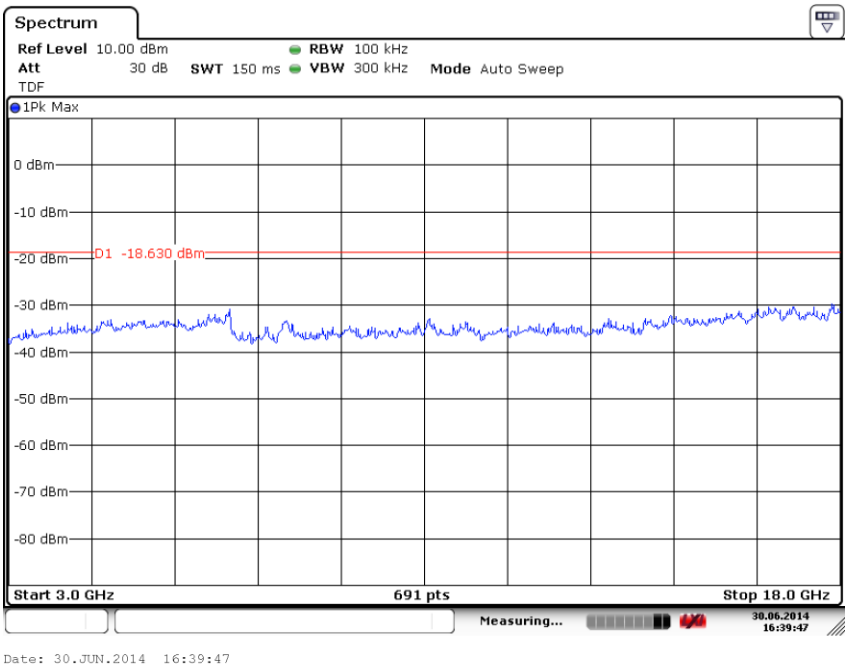


**Fig. 35 Conducted Spurious Emission (802.11b, Ch1, 3 GHz-18 GHz)**

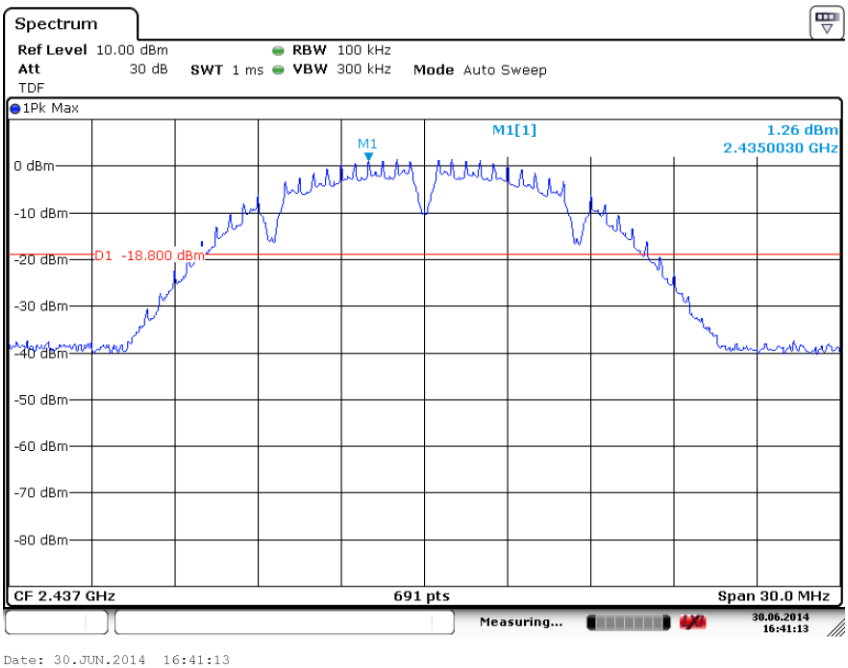


**Fig. 36 Conducted Spurious Emission (802.11b, Ch6, Center Frequency)**

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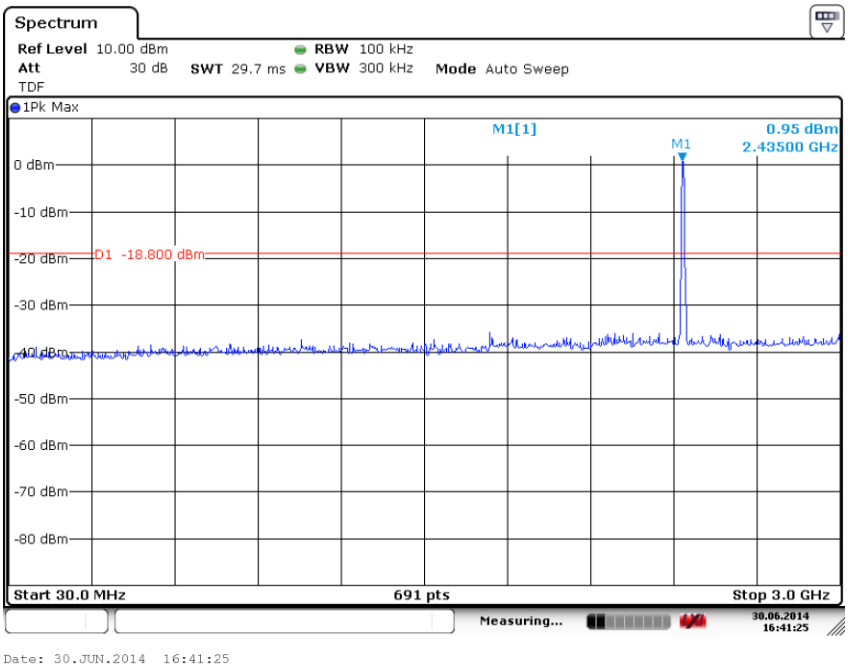


**Fig. 37 Conducted Spurious Emission (802.11b, Ch6, 30 MHz-3 GHz)**

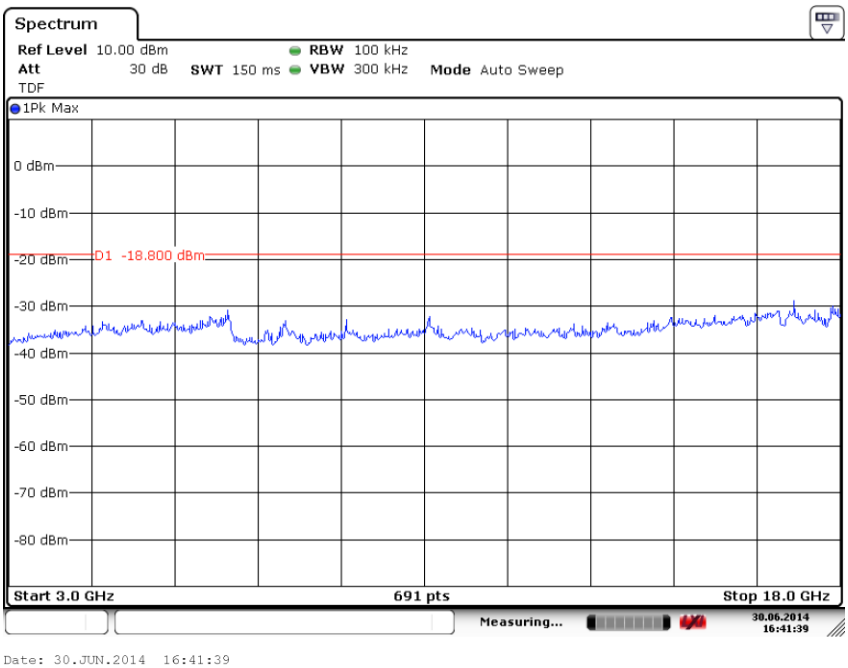


**Fig. 38 Conducted Spurious Emission (802.11b, Ch6, 3 GHz-18 GHz)**

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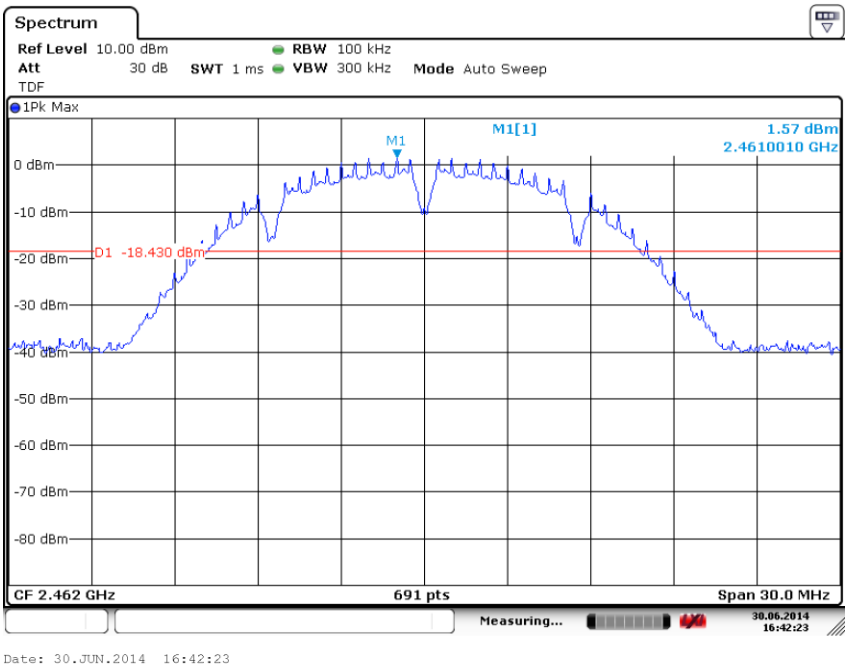


**Fig. 39 Conducted Spurious Emission (802.11b, Ch11, Center Frequency)**

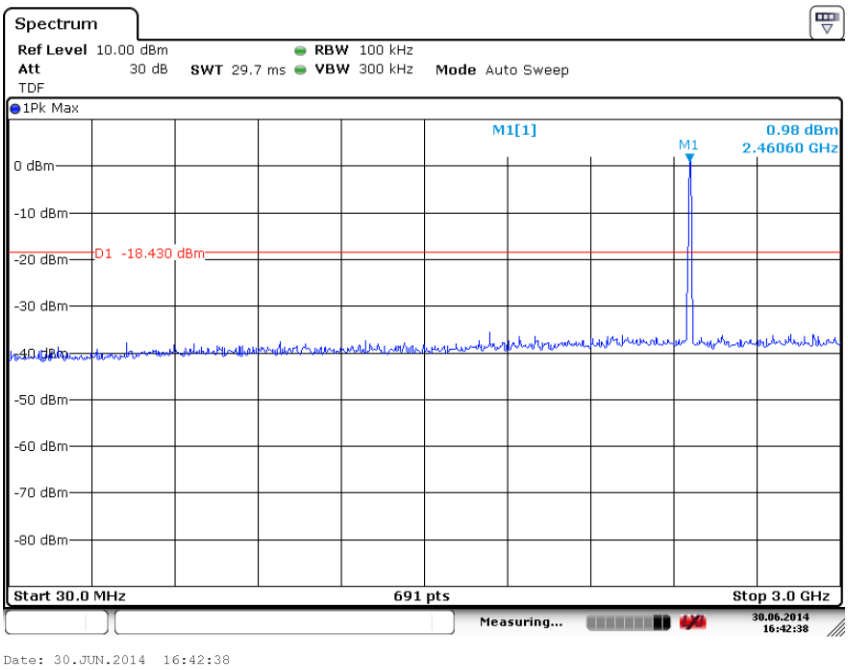


**Fig. 40 Conducted Spurious Emission (802.11b, Ch11, 30 MHz-3 GHz)**

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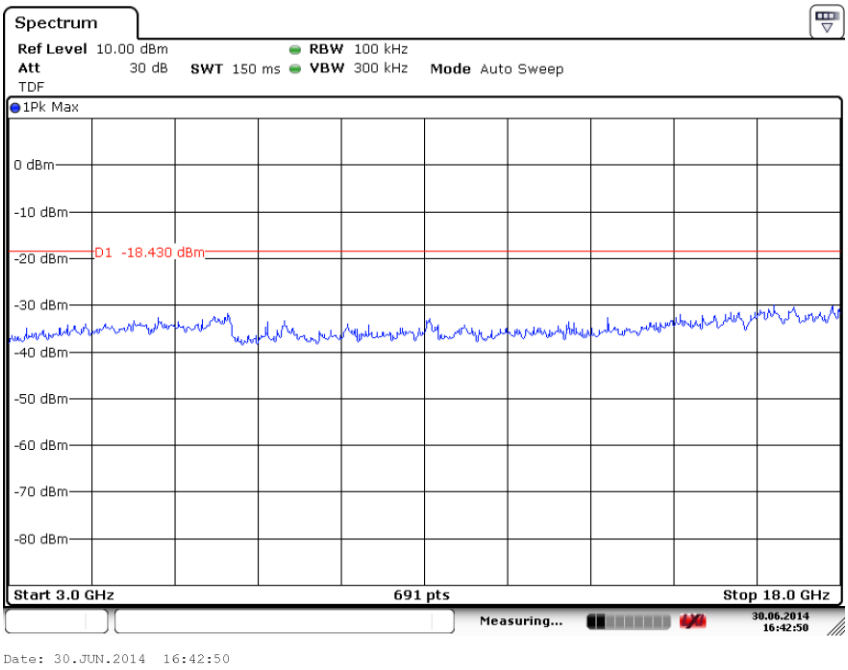


**Fig. 41 Conducted Spurious Emission (802.11b, Ch11, 3 GHz-18 GHz)**

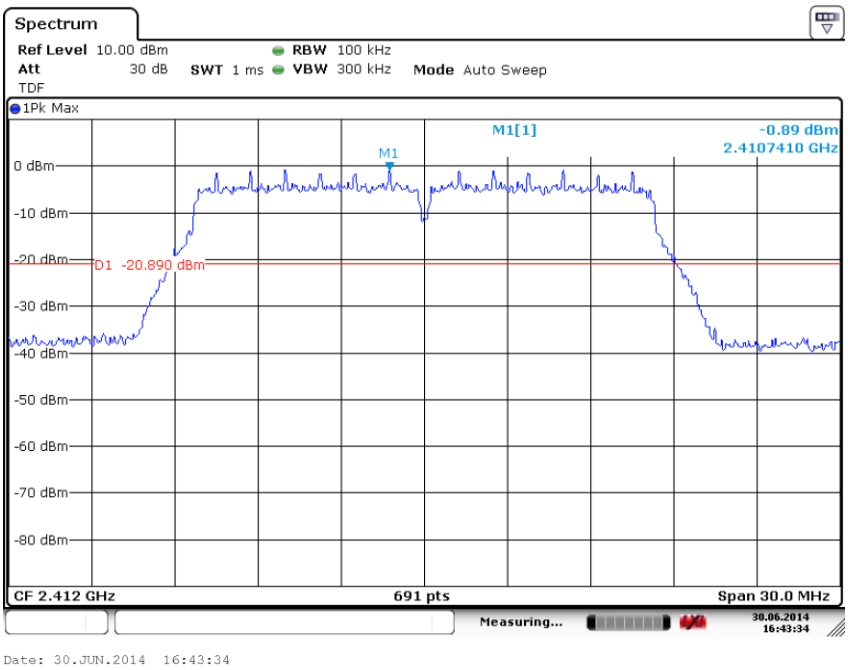


**Fig. 42 Conducted Spurious Emission (802.11g, Ch1, Center Frequency)**

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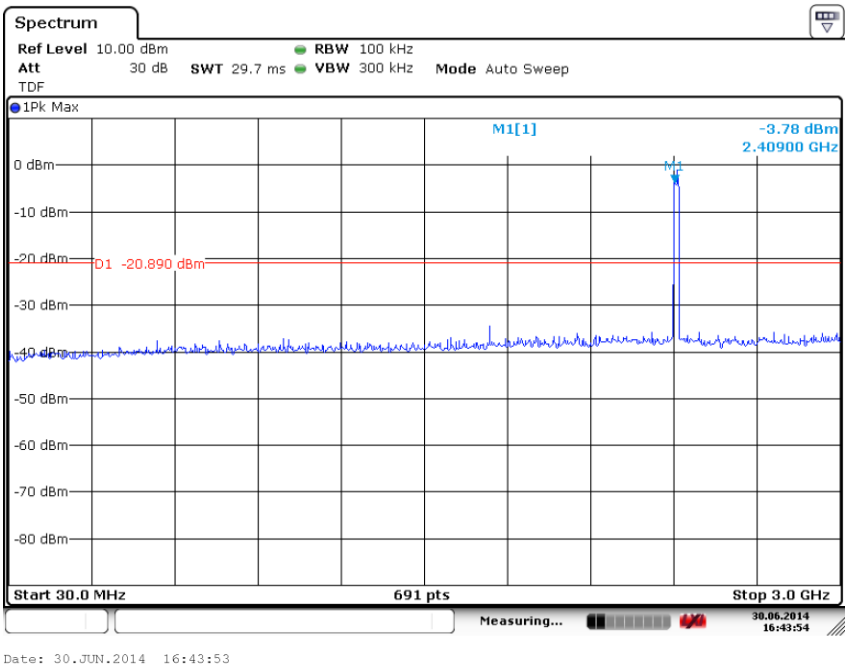


**Fig. 43 Conducted Spurious Emission (802.11g, Ch1, 30 MHz-3 GHz)**

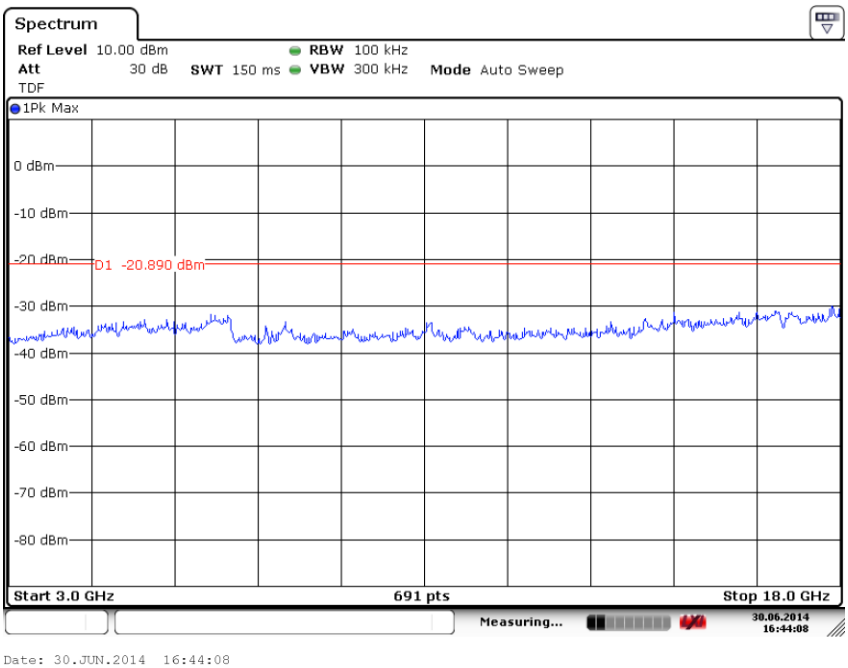


**Fig. 44 Conducted Spurious Emission (802.11g, Ch1, 3 GHz-18 GHz)**

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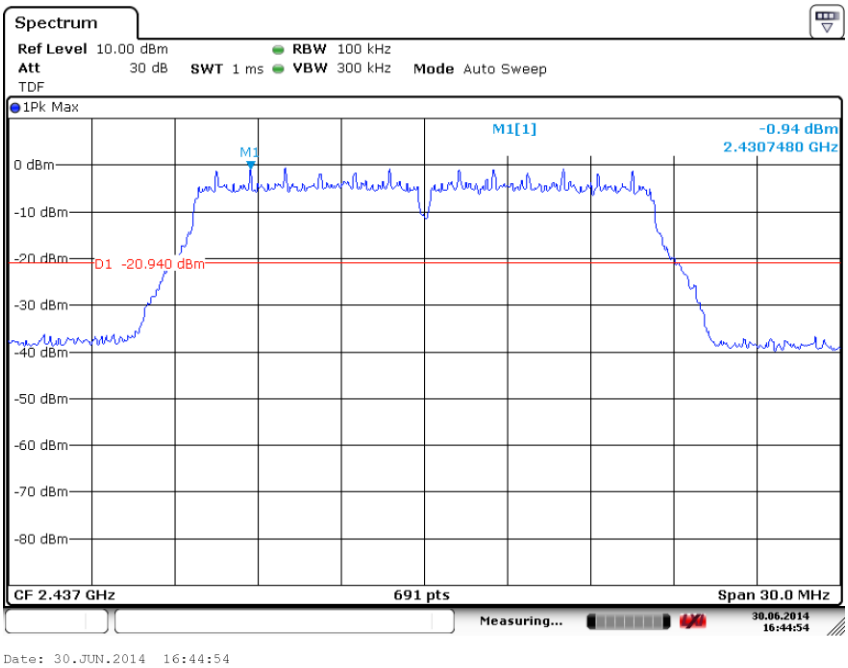


**Fig. 45 Conducted Spurious Emission (802.11g, Ch6, Center Frequency)**

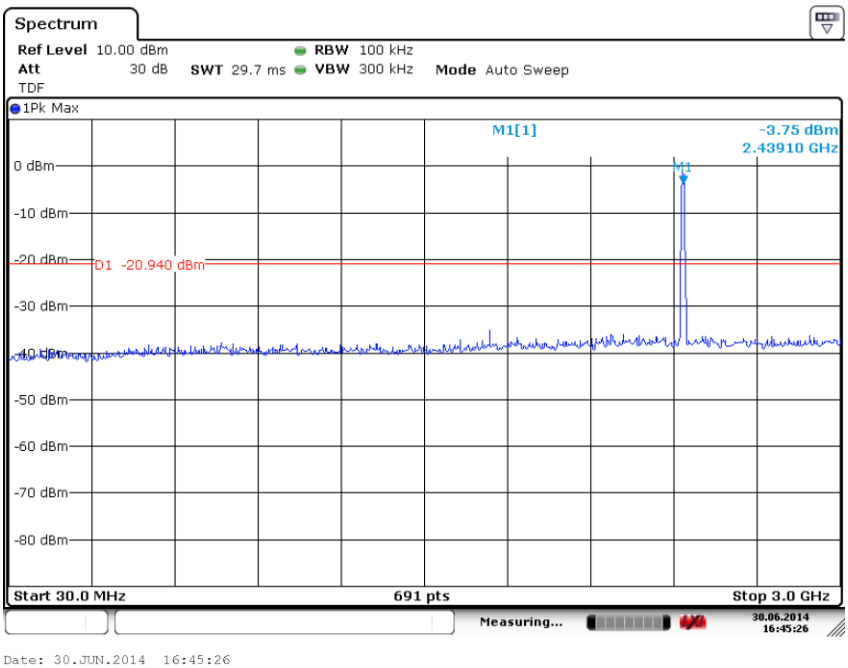


**Fig. 46 Conducted Spurious Emission (802.11g, Ch6, 30 MHz-3 GHz)**

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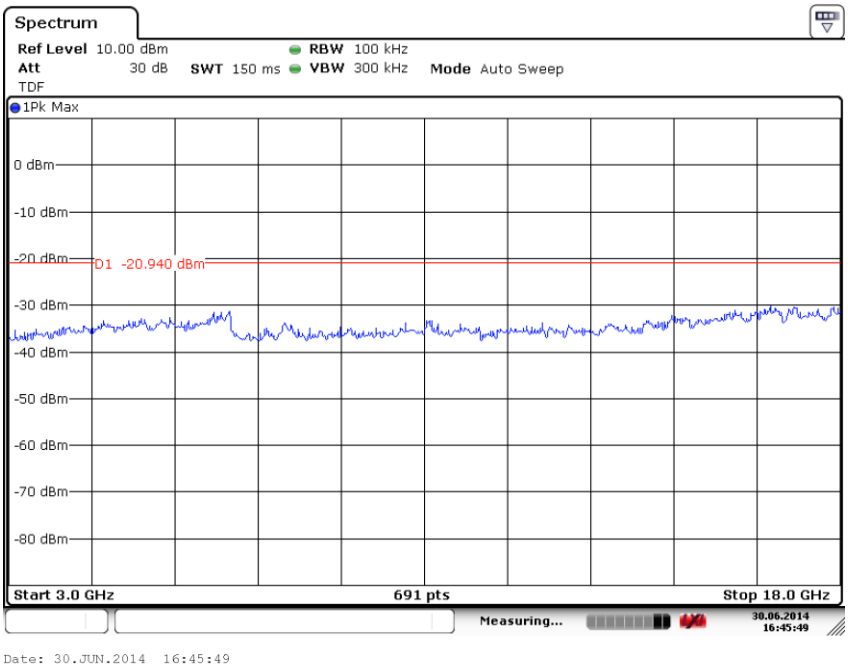


**Fig. 47 Conducted Spurious Emission (802.11g, Ch6, 3 GHz-18 GHz)**

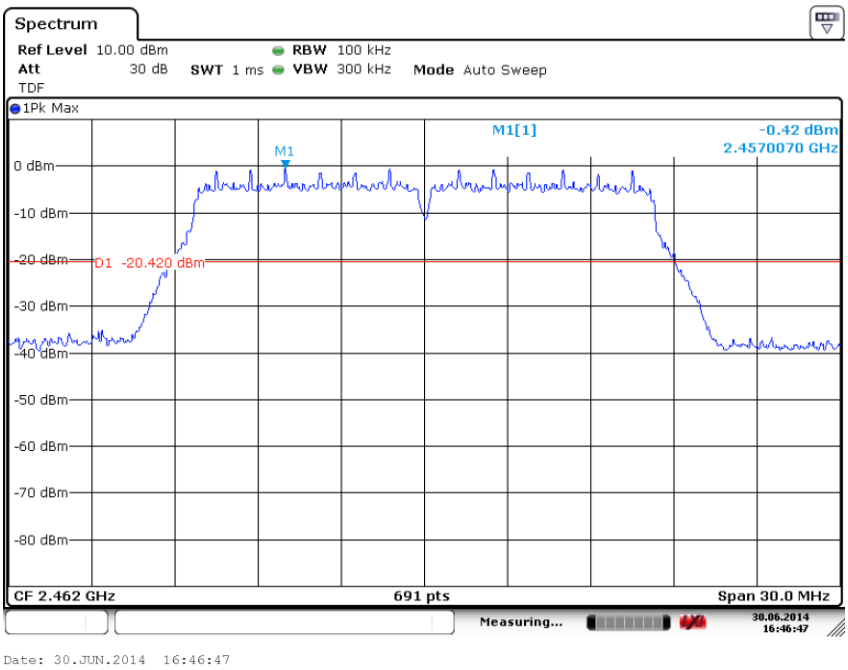


**Fig. 48 Conducted Spurious Emission (802.11g, Ch11, Center Frequency)**

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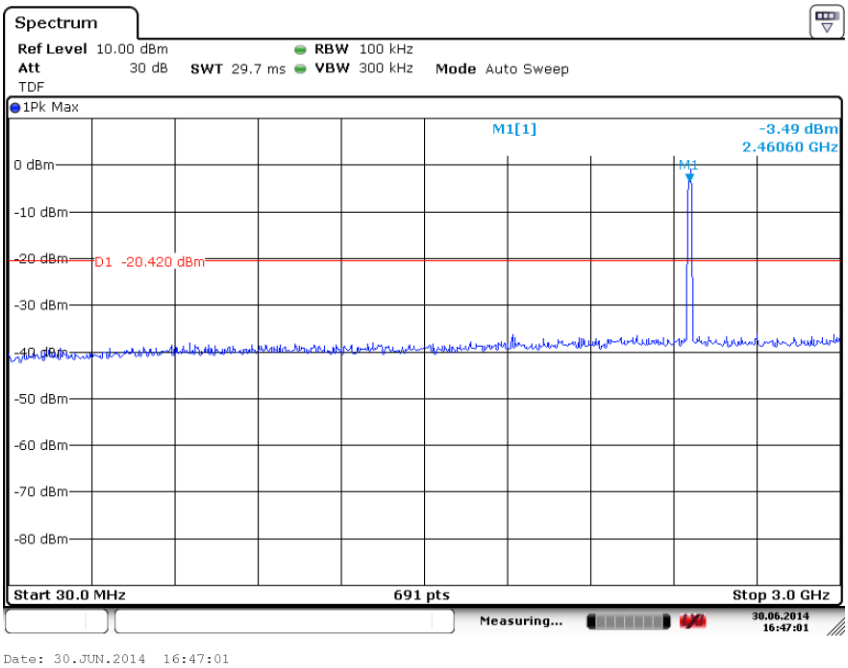


**Fig. 49 Conducted Spurious Emission (802.11g, Ch11, 30 MHz-3 GHz)**

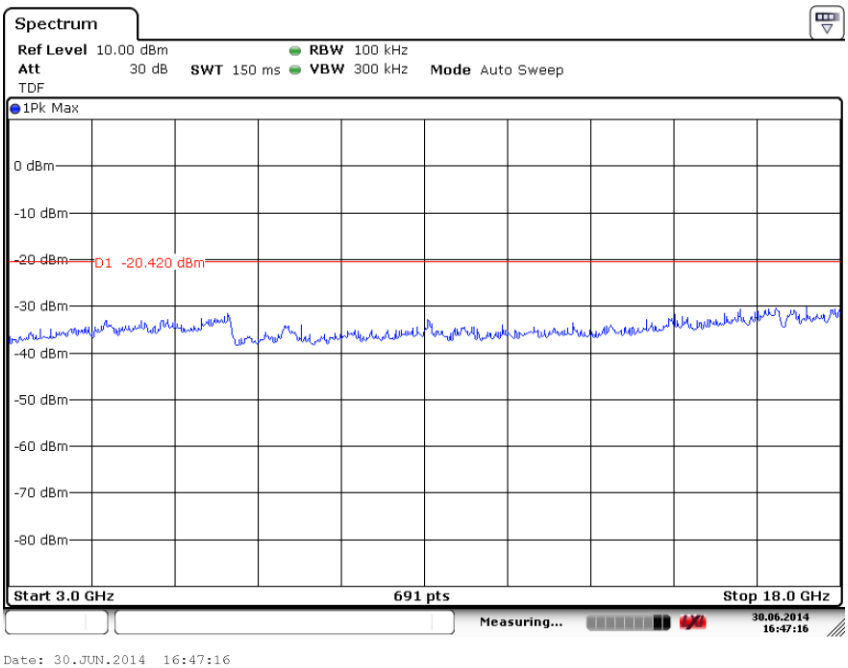


**Fig. 50 Conducted Spurious Emission (802.11g, Ch11, 3 GHz-18 GHz)**

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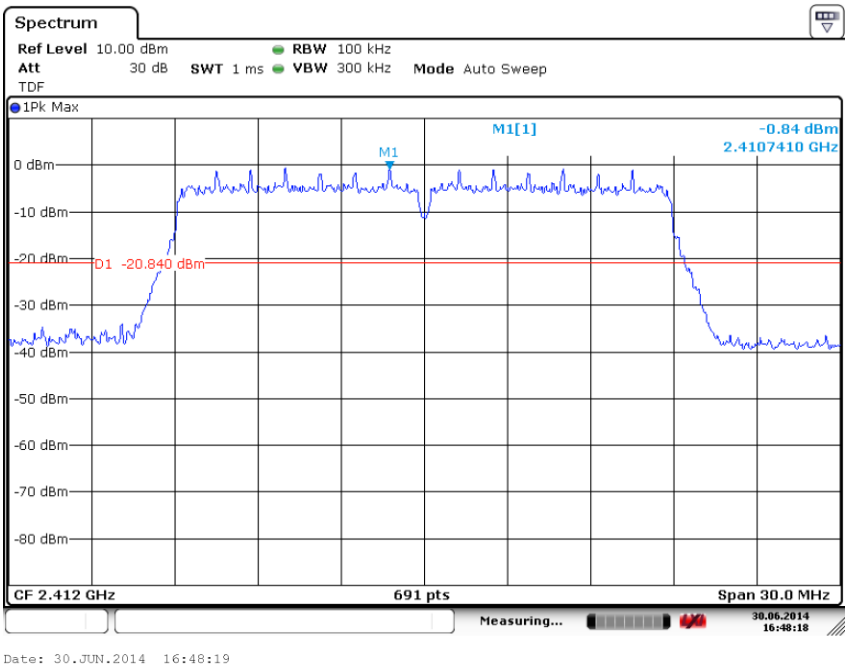


**Fig. 51 Conducted Spurious Emission (802.11n-20M, Ch1, Center Frequency)**

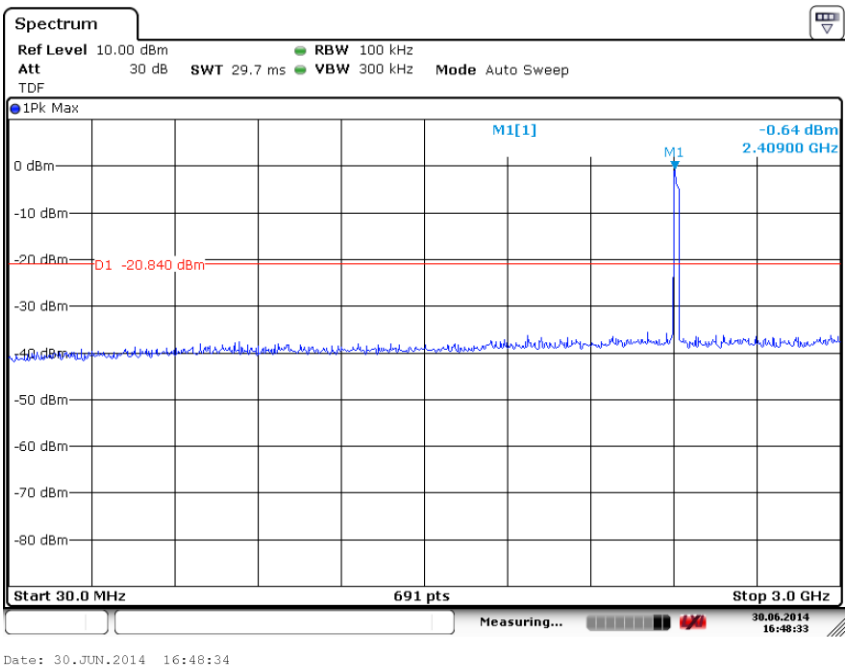


**Fig. 52 Conducted Spurious Emission (802.11n-20M, Ch1, 30 MHz-3 GHz)**

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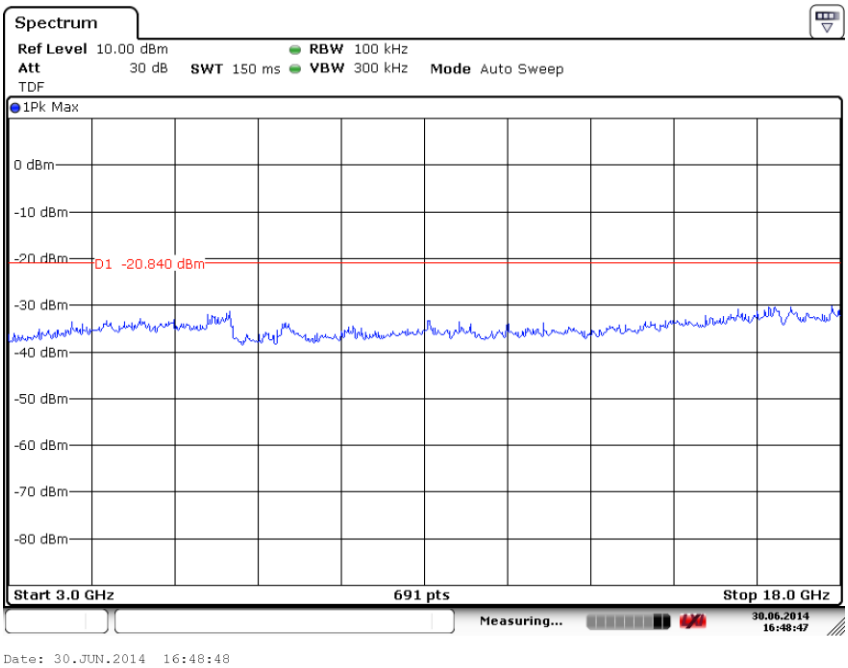


**Fig. 53 Conducted Spurious Emission (802.11n-20M, Ch1, 3 GHz-18 GHz)**

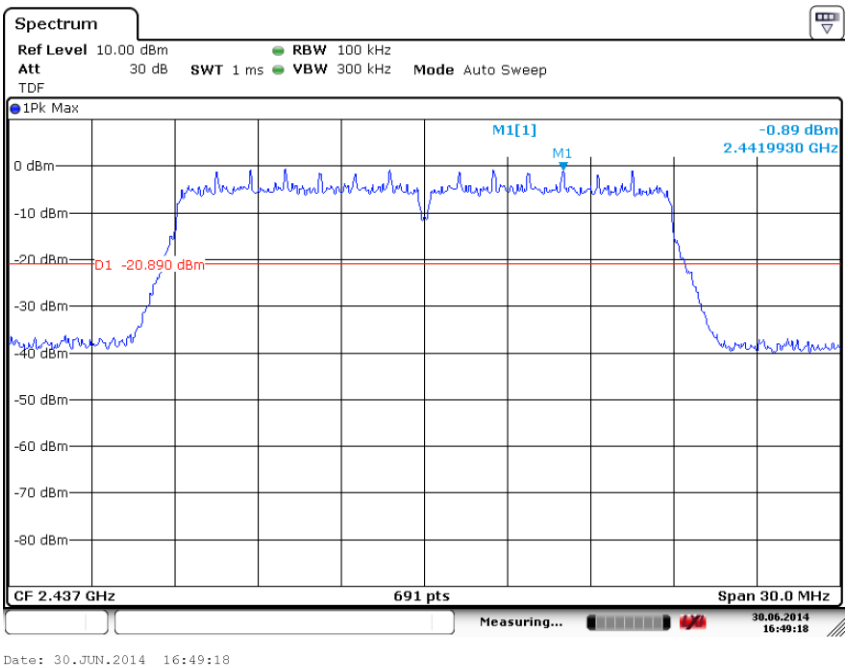


**Fig. 54 Conducted Spurious Emission (802.11n-20M, Ch6, Center Frequency)**

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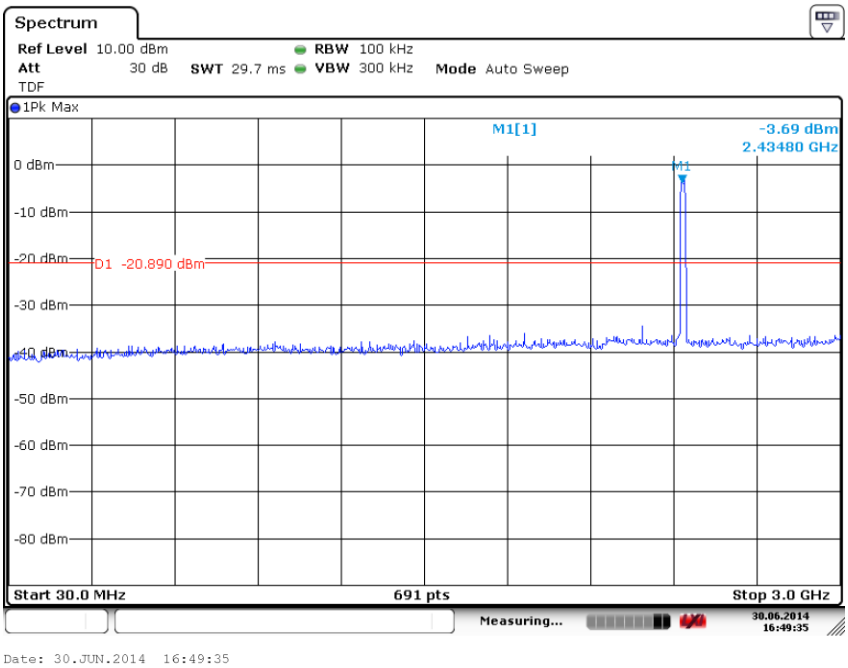


**Fig. 55 Conducted Spurious Emission (802.11n-20M, Ch6, 30 MHz-3 GHz)**

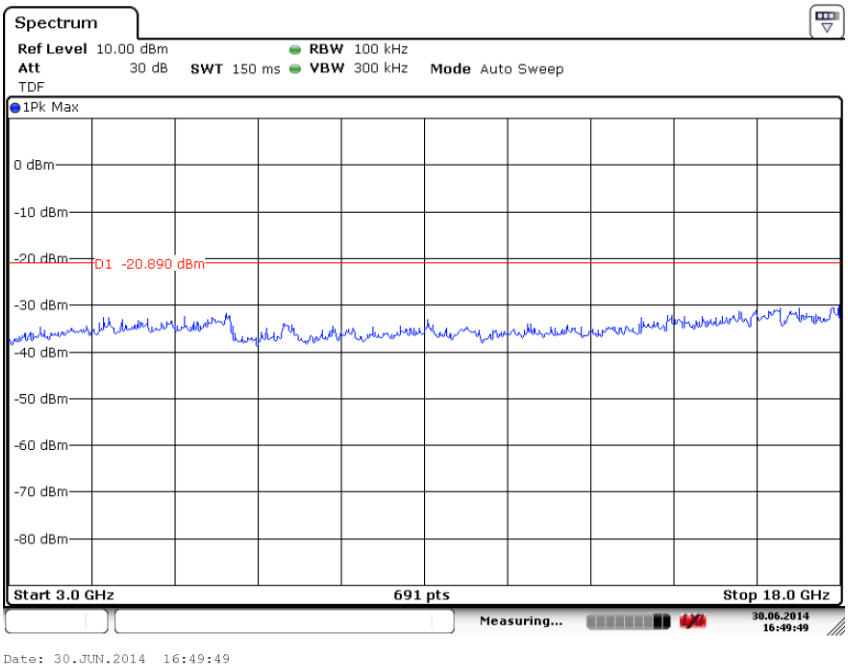


**Fig. 56 Conducted Spurious Emission (802.11n-20M, Ch6, 3 GHz-18 GHz)**

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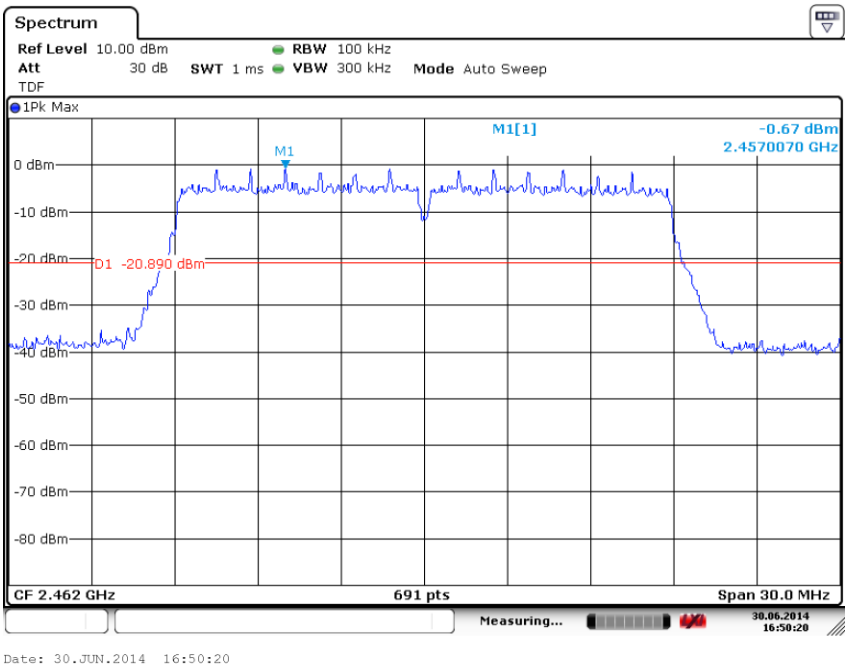


**Fig. 57 Conducted Spurious Emission (802.11n-20M, Ch11, Center Frequency)**

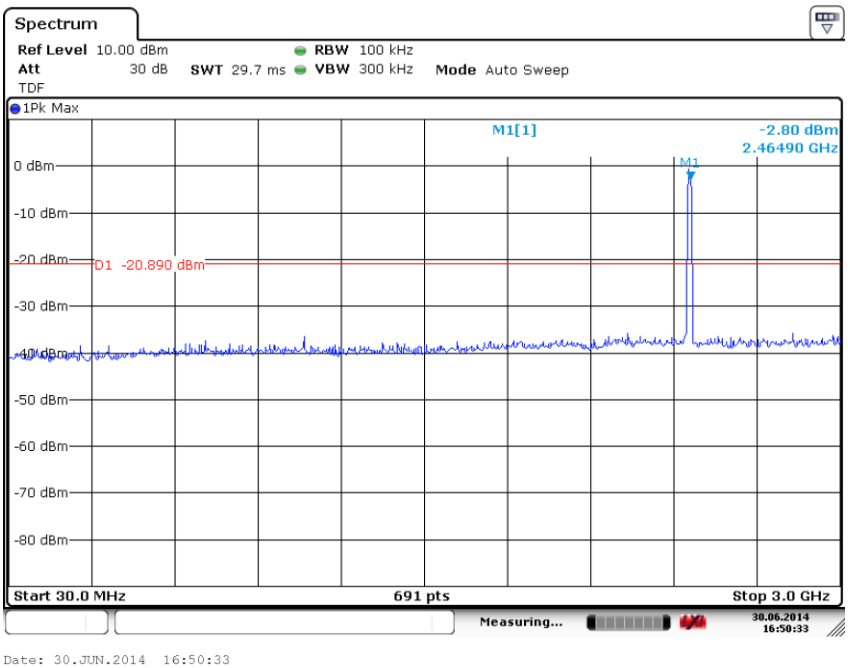


**Fig. 58 Conducted Spurious Emission (802.11n-20M, Ch11, 30 MHz-3 GHz)**

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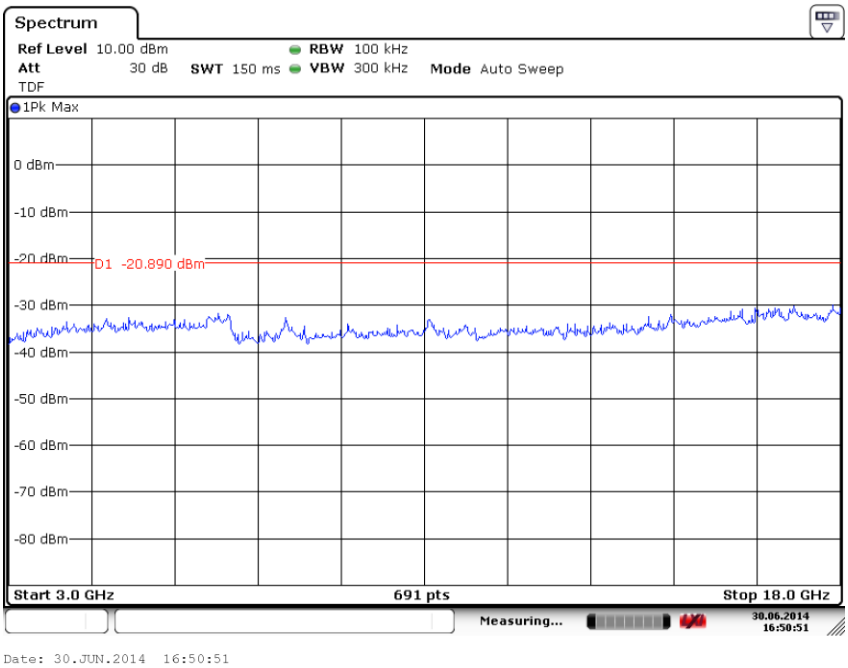


**Fig. 59 Conducted Spurious Emission (802.11n-20M, Ch11, 3 GHz-18 GHz)**

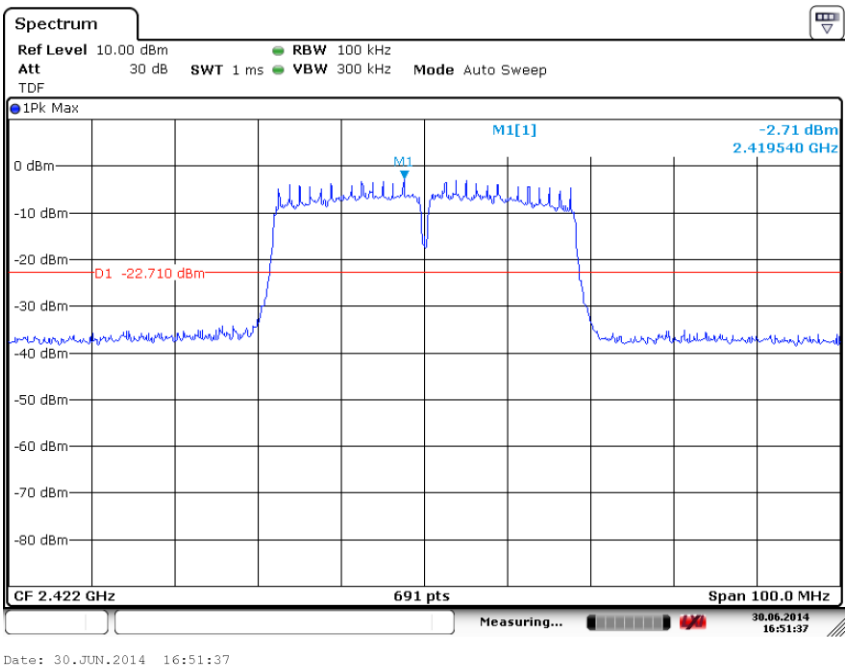


**Fig. 60 Conducted Spurious Emission (802.11n-40M, Ch3, Center Frequency)**

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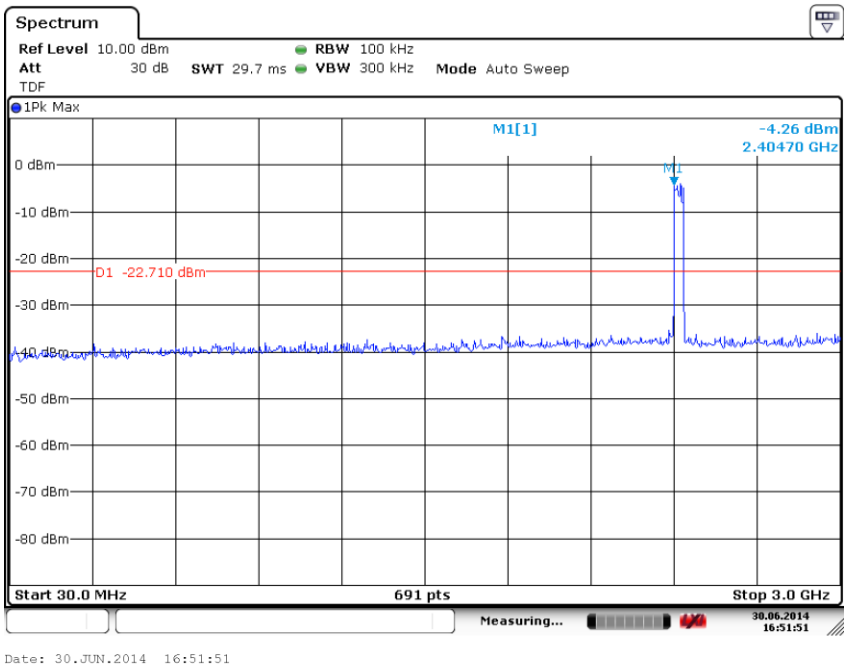


**Fig. 61 Conducted Spurious Emission (802.11n-40M, Ch3, 30 MHz-3 GHz)**

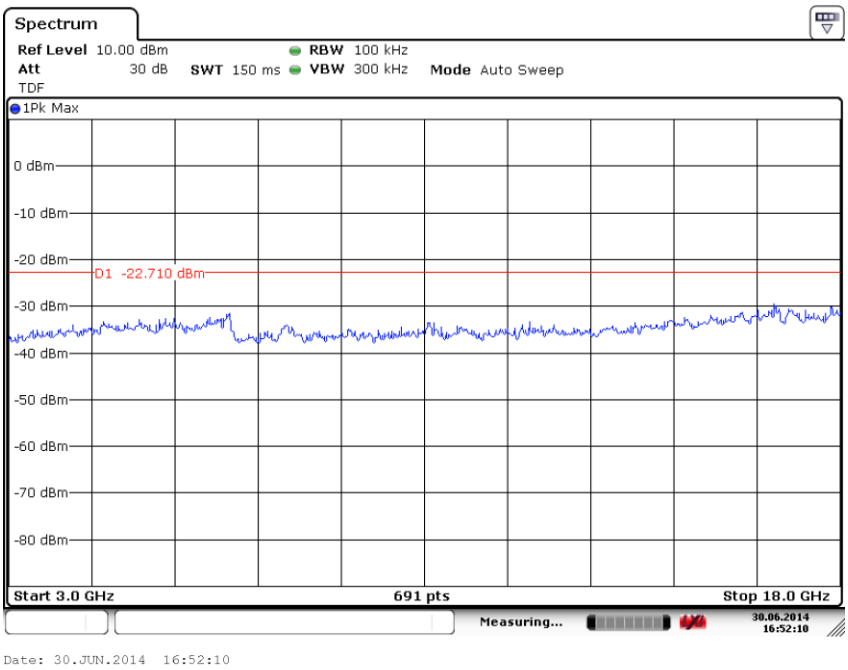


**Fig. 62 Conducted Spurious Emission (802.11n-40M, Ch3, 3 GHz-18 GHz)**

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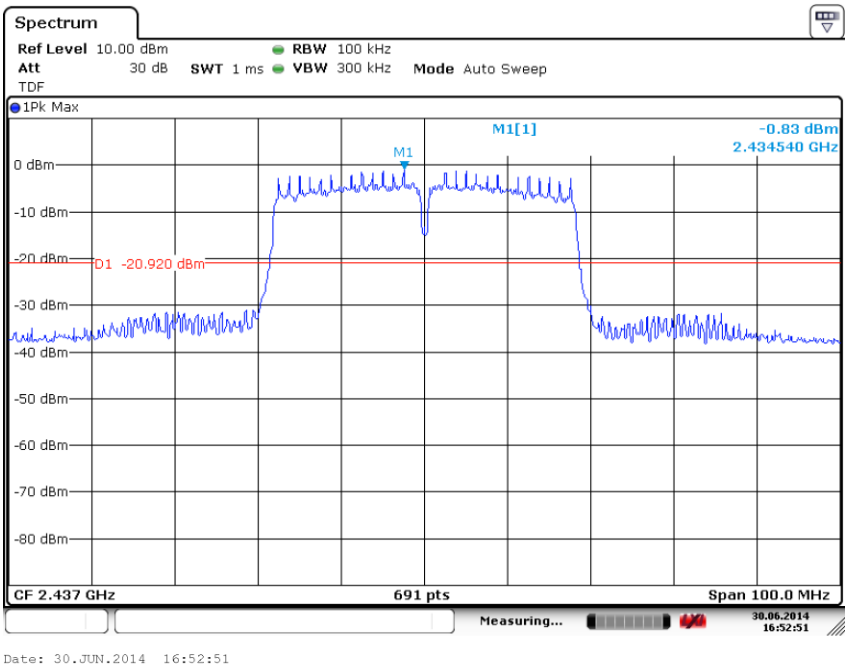


**Fig. 63 Conducted Spurious Emission (802.11n-40M, Ch6, Center Frequency)**

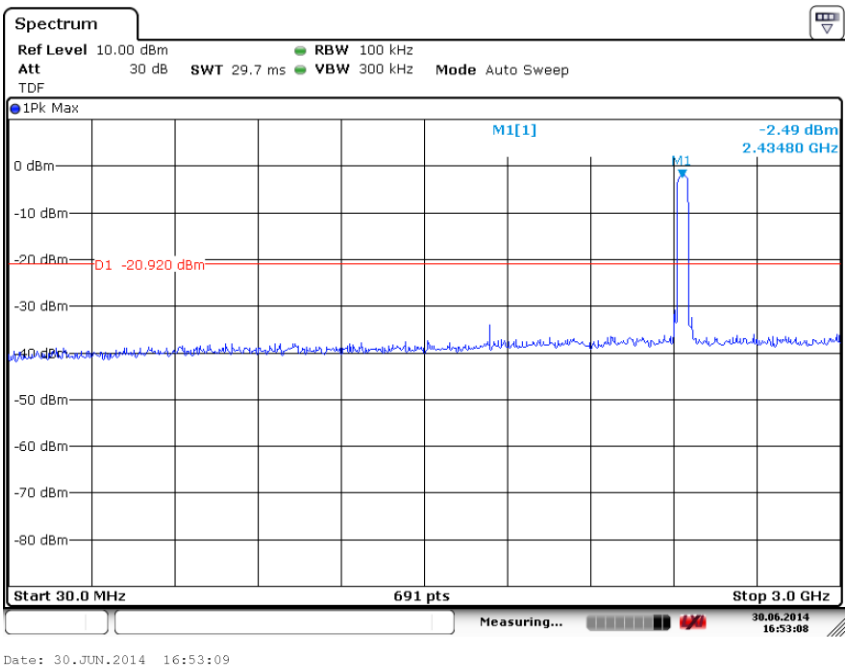


**Fig. 64 Conducted Spurious Emission (802.11n-40M, Ch6, 30 MHz-3 GHz)**

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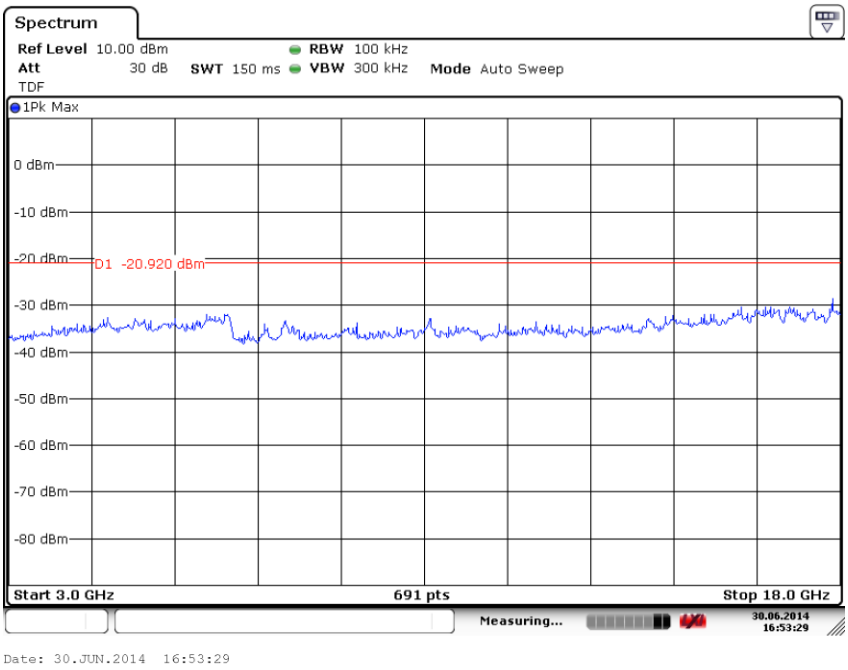


**Fig. 65 Conducted Spurious Emission (802.11n-40M, Ch6, 3 GHz-18 GHz)**

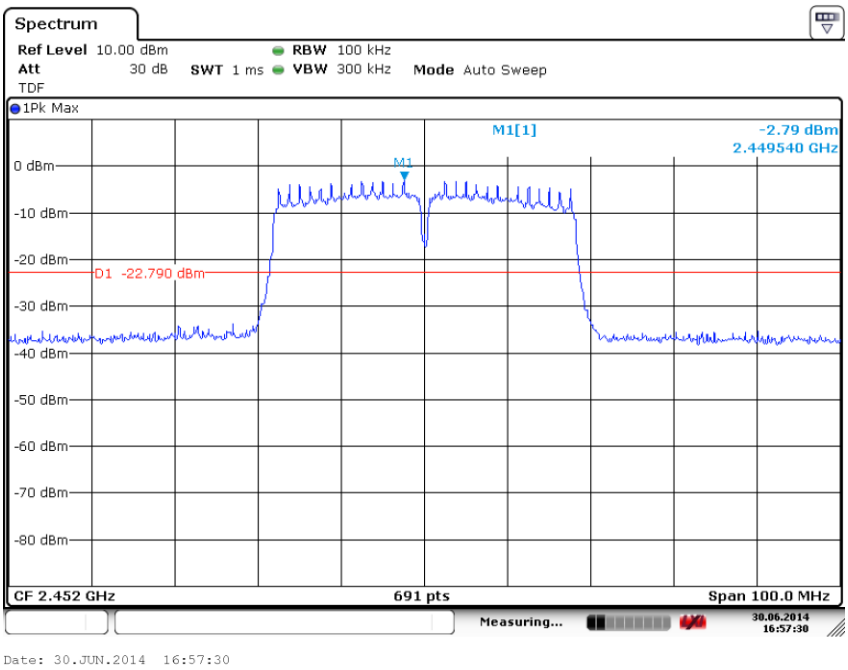


**Fig. 66 Conducted Spurious Emission (802.11n-40M, Ch9, Center Frequency)**

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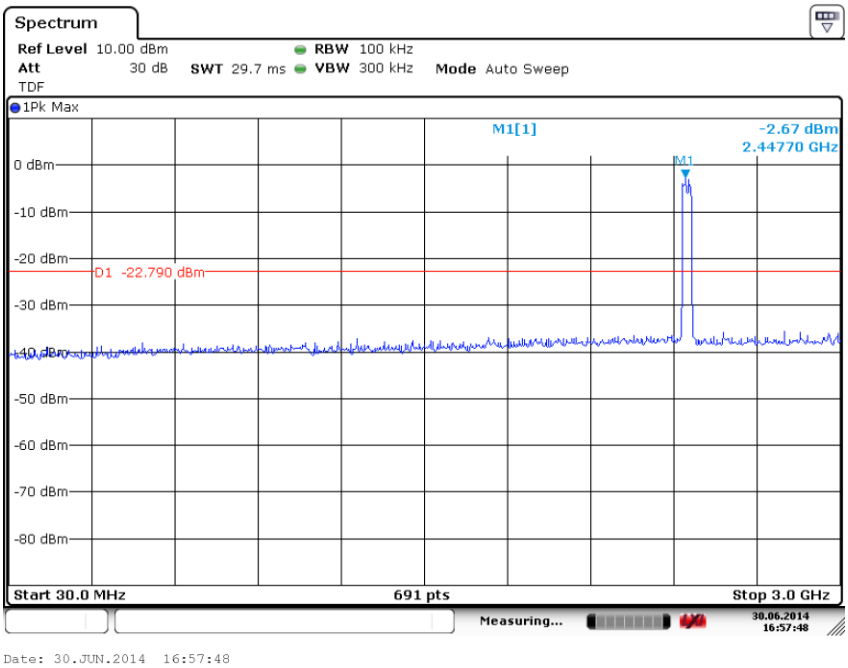


**Fig. 67 Conducted Spurious Emission (802.11n-40M, Ch9, 30 MHz-3 GHz)**

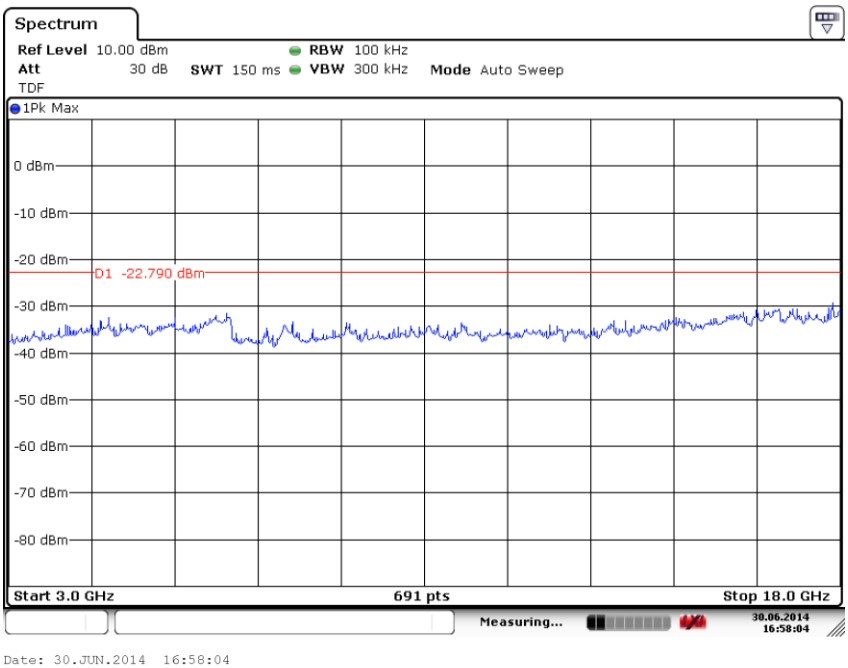


**Fig. 68 Conducted Spurious Emission (802.11n-40M, Ch9, 3 GHz-18 GHz)**

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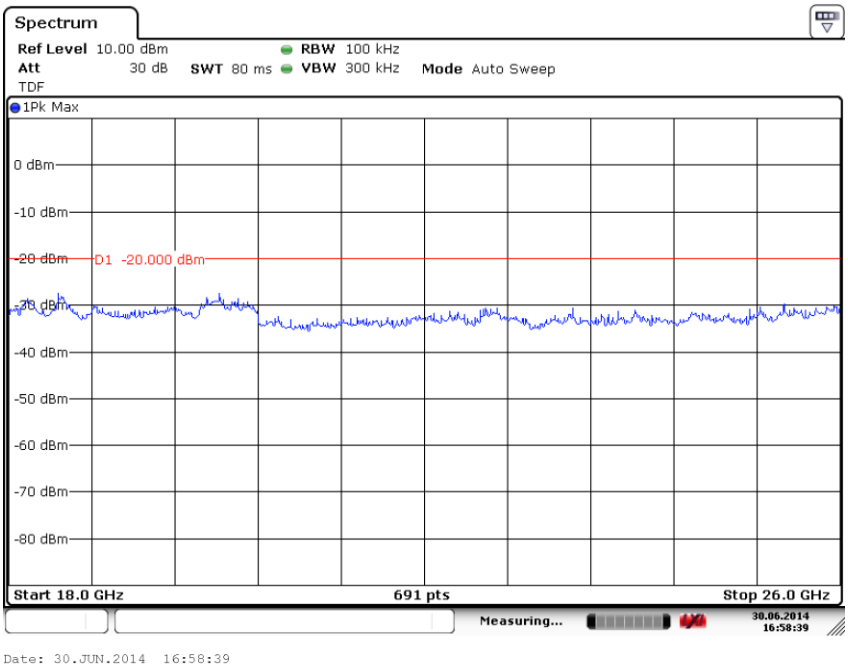


**Fig. 69 Conducted Spurious Emission (All channels, 18 GHz-26 GHz)**

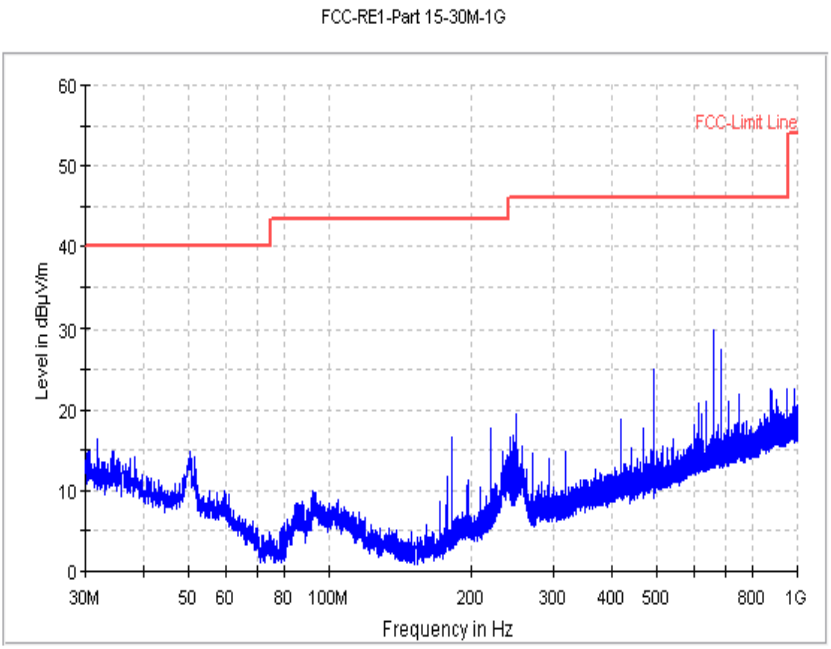


**Fig. 70 Radiated Spurious Emission (802.11b, Ch1, 30MHz-1 GHz)**

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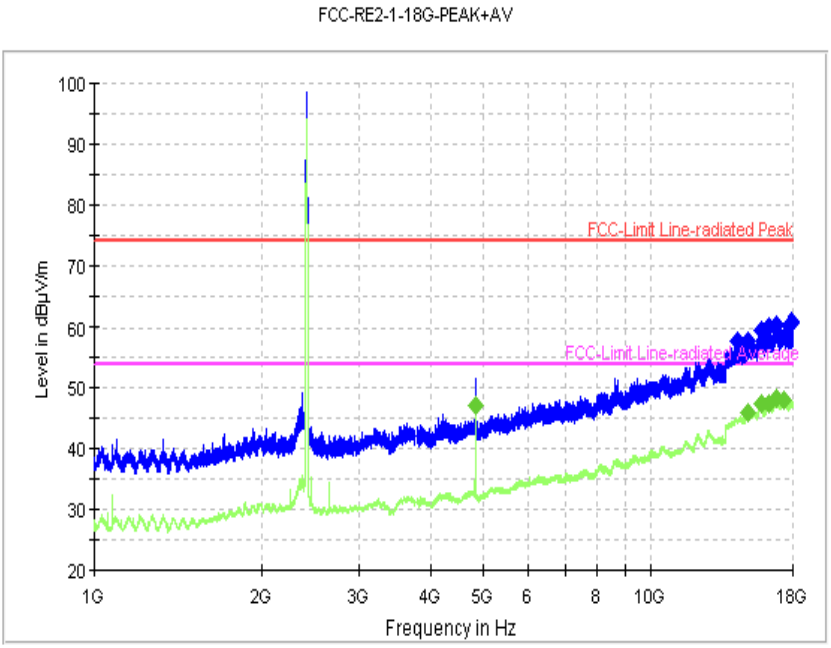


**Fig. 71 Radiated Spurious Emission (802.11b, Ch1, 1 GHz-18 GHz)**

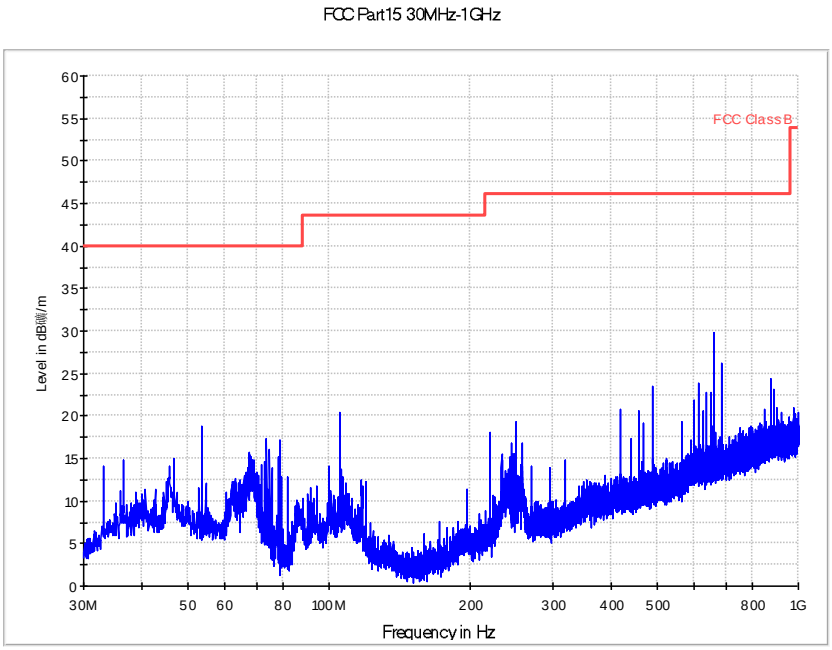


**Fig. 72 Radiated Spurious Emission (802.11b, Ch6, 30MHz-1 GHz)**

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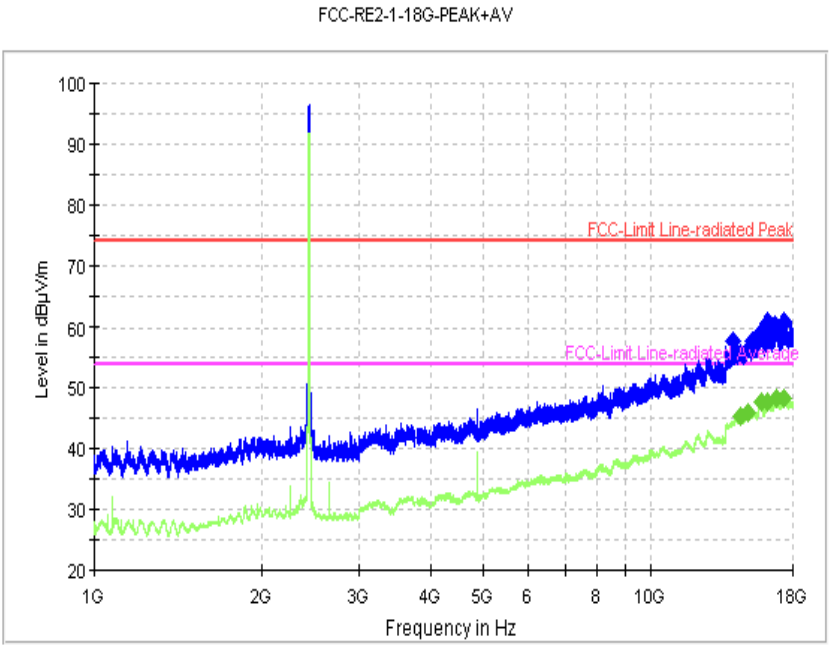


**Fig. 73 Radiated Spurious Emission (802.11b, Ch6, 1 GHz-18 GHz)**

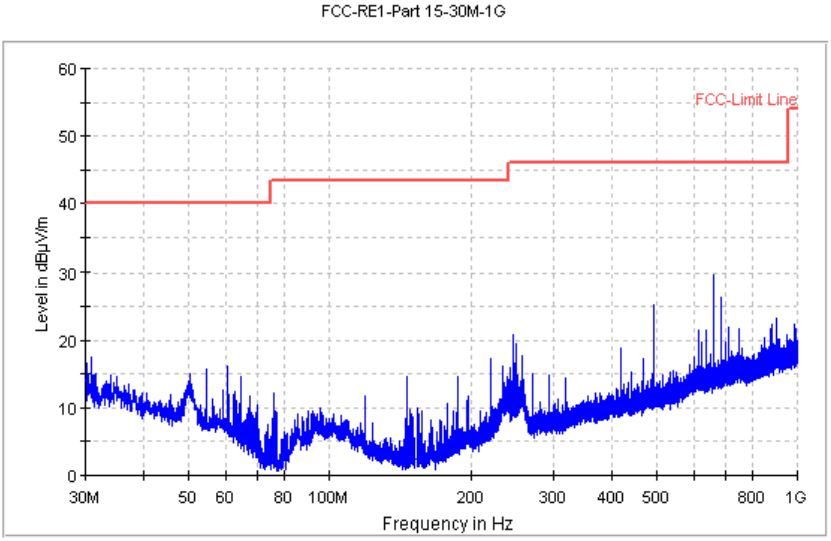


**Fig. 74 Radiated Spurious Emission (802.11b, Ch11, 30MHz-1 GHz)**

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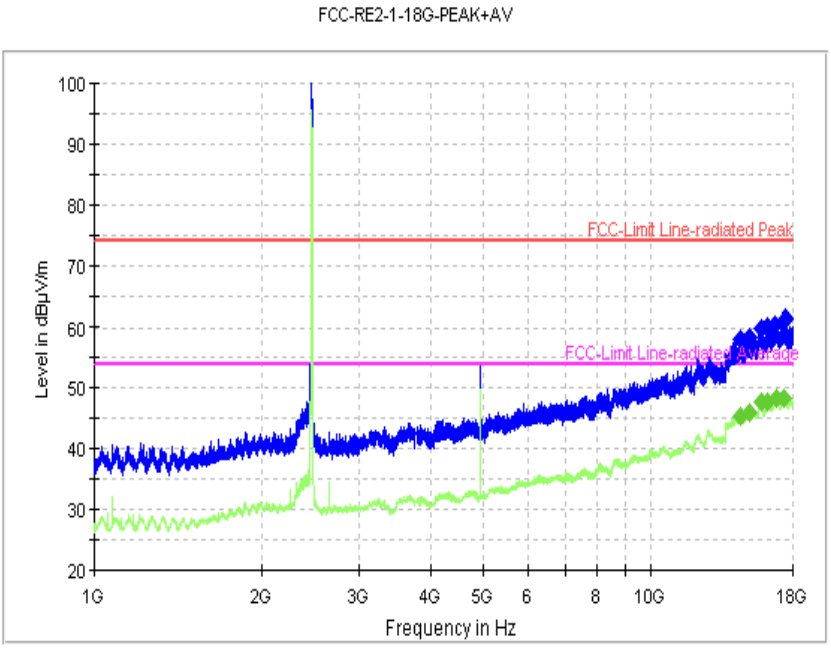


**Fig. 75 Radiated Spurious Emission (802.11b, Ch11, 1 GHz-18 GHz)**

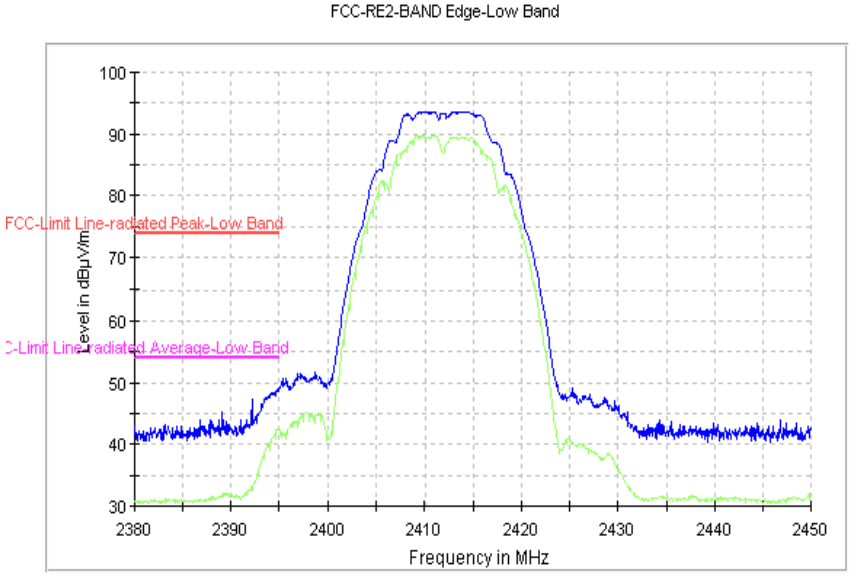


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**Fig. 76 Radiated Emission Power (802.11b, Ch1, 2380GHz~2450GHz)**

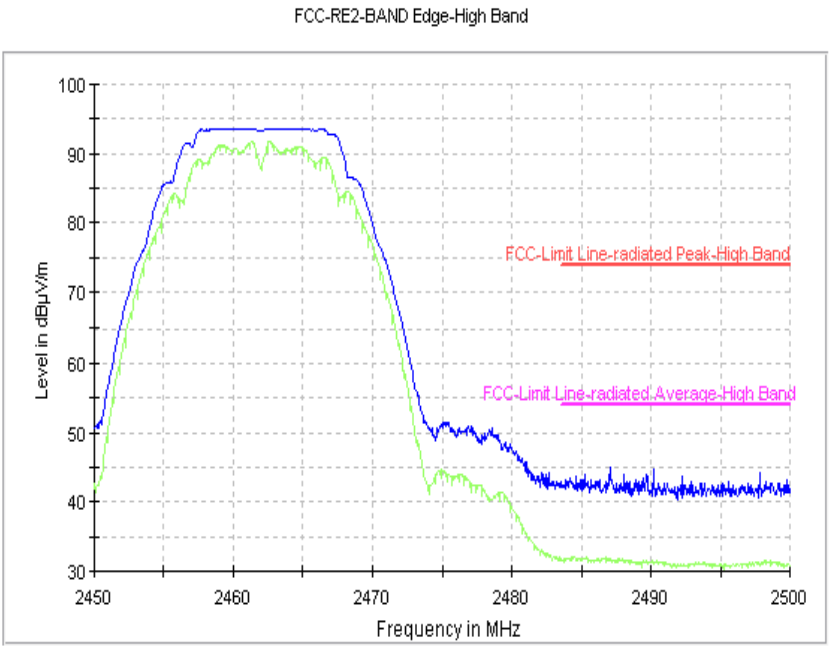


**Fig. 77 Radiated Emission Power (802.11b, Ch11, 2450GHz~2500GHz)**

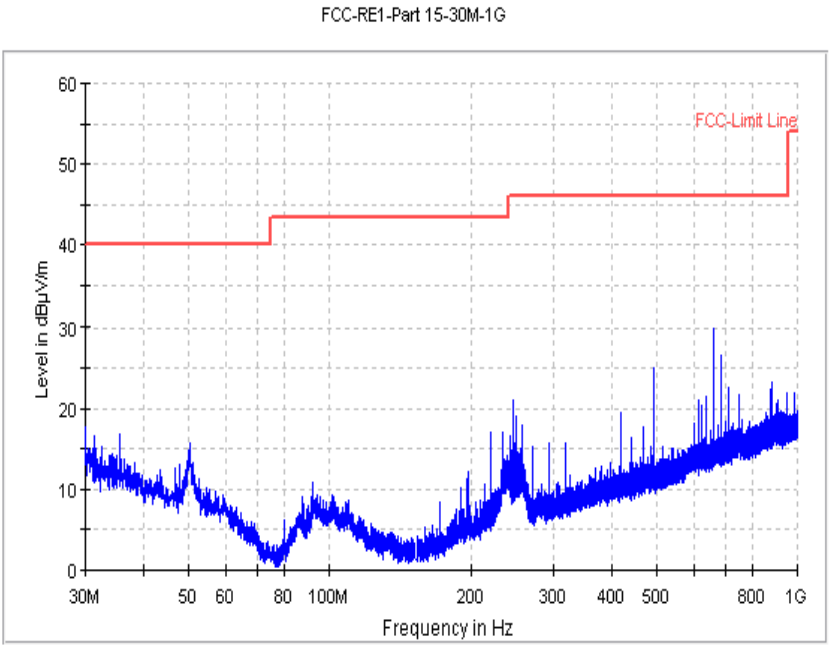


**Fig. 78 Radiated Spurious Emission (802.11g, Ch1,30MHz-1 GHz)**

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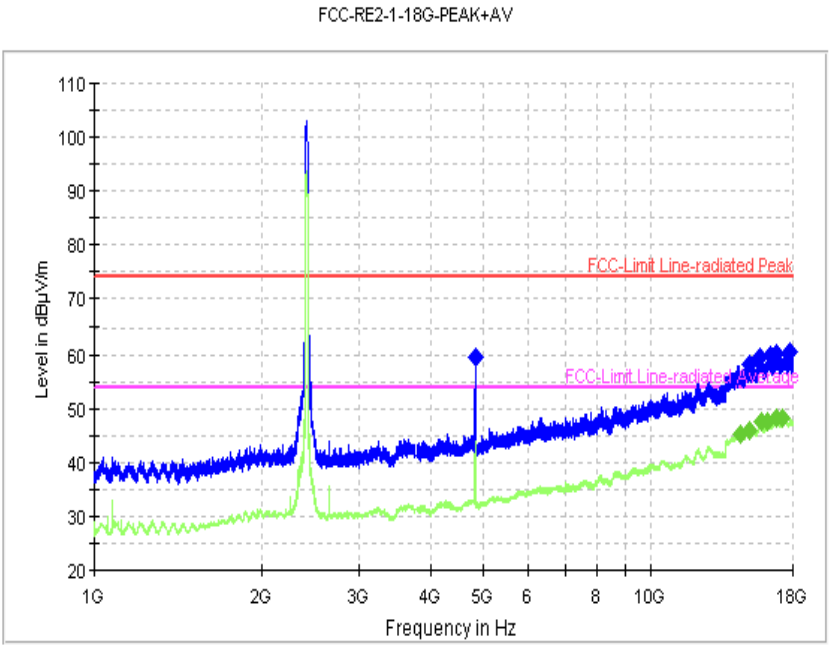


**Fig. 79 Radiated Spurious Emission (802.11g, Ch1, 1 GHz-18 GHz)**

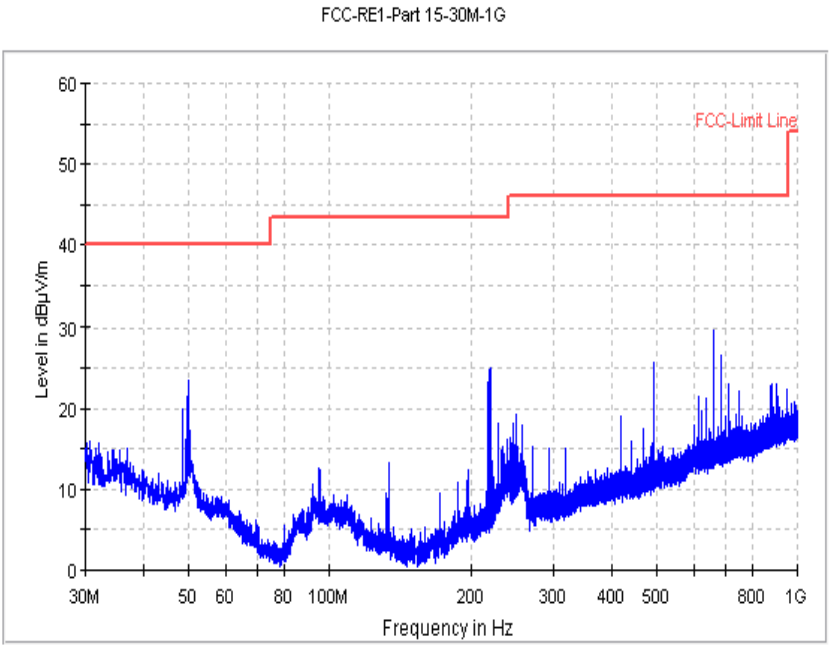


**Fig. 80 Radiated Spurious Emission (802.11g, Ch6, 30MHz-1 GHz)**

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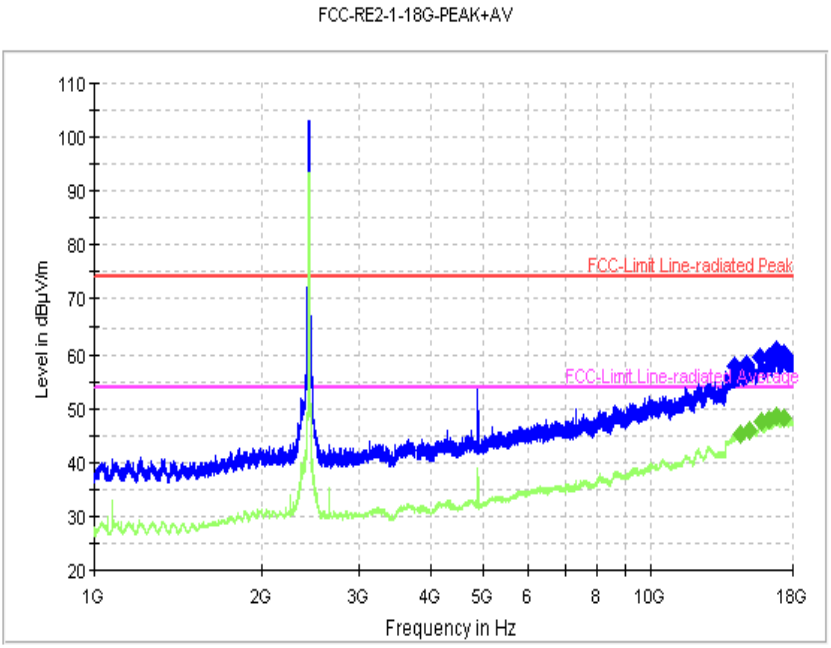


**Fig. 81 Radiated Spurious Emission (802.11g, Ch6, 1 GHz-18 GHz)**

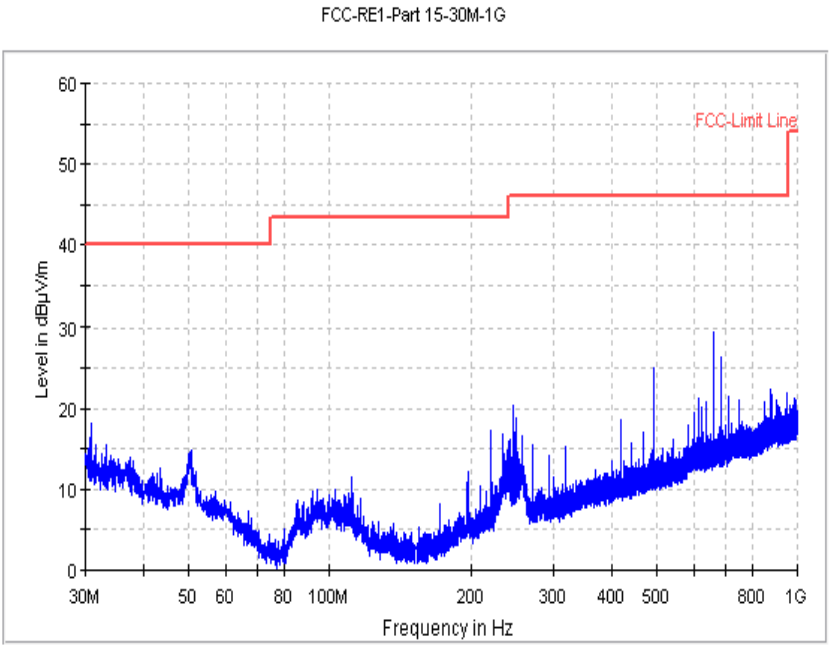


**Fig. 82 Radiated Spurious Emission (802.11g, Ch11, 30MHz-1 GHz)**

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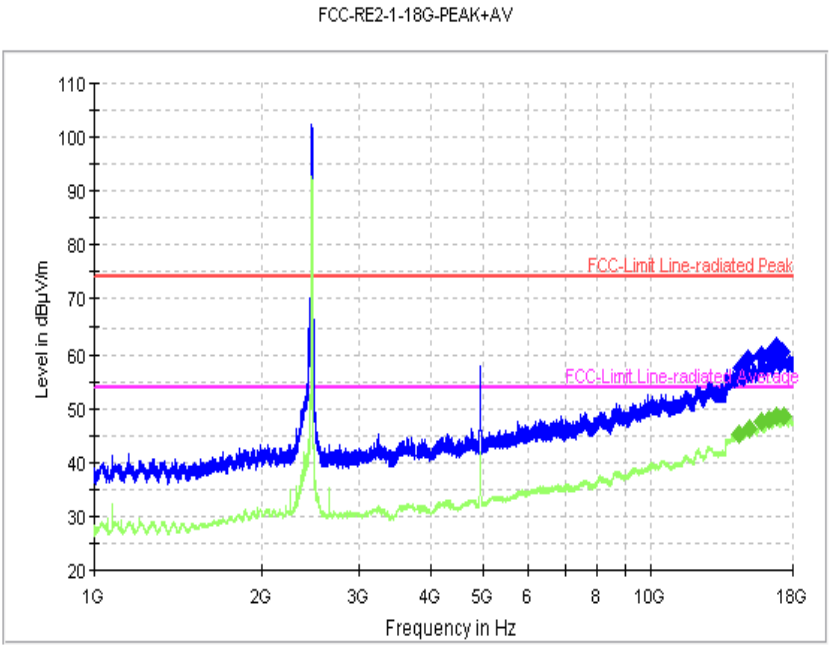


**Fig. 83 Radiated Spurious Emission (802.11g, Ch11, 1 GHz-18 GHz)**

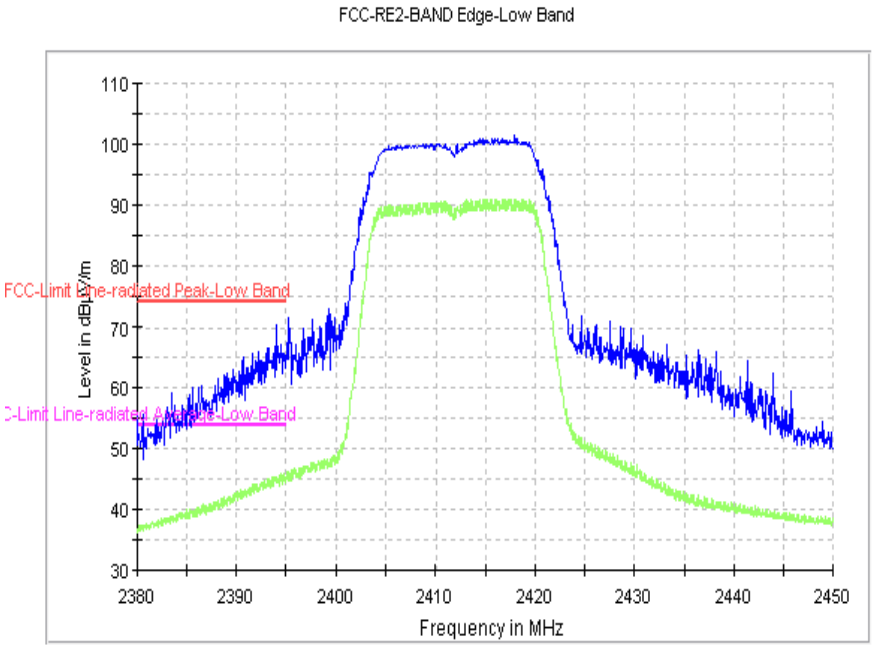


**Fig. 84 Radiated Emission Power (802.11g, Ch1, 2380GHz~2450GHz)**

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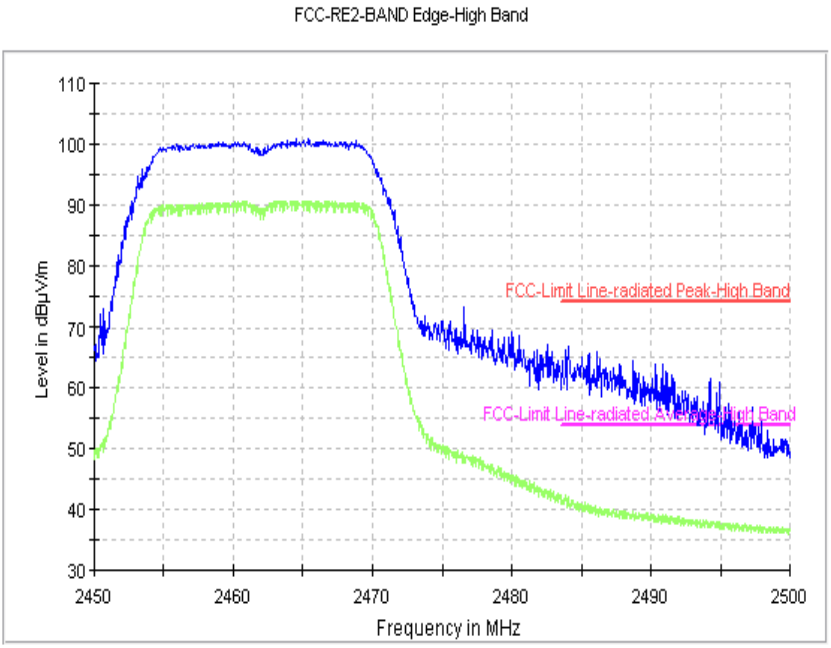


**Fig. 85 Radiated Emission Power (802.11g, Ch11, 2450GHz~2500GHz)**

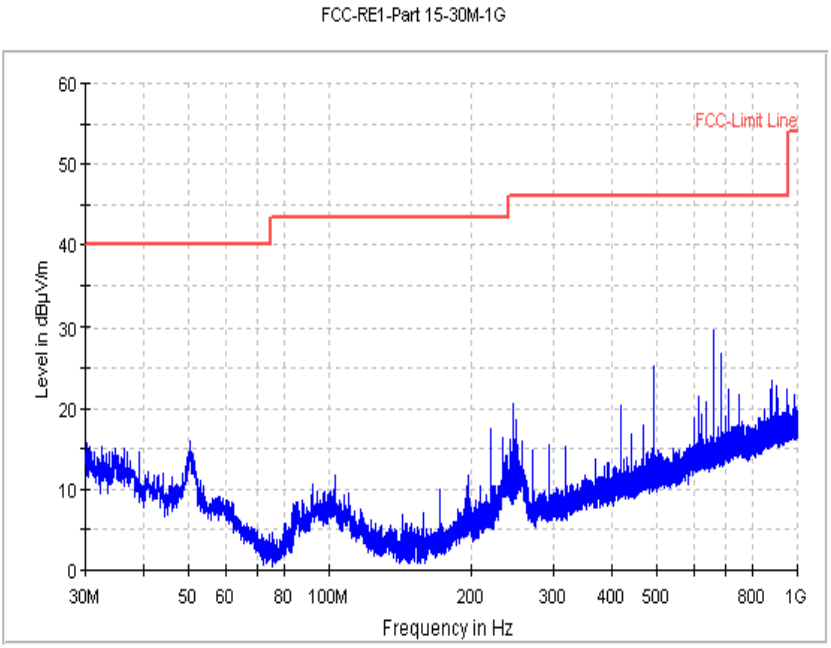


**Fig. 86 Radiated Spurious Emission (802.11n-20M, Ch1, 30MHz-1 GHz)**

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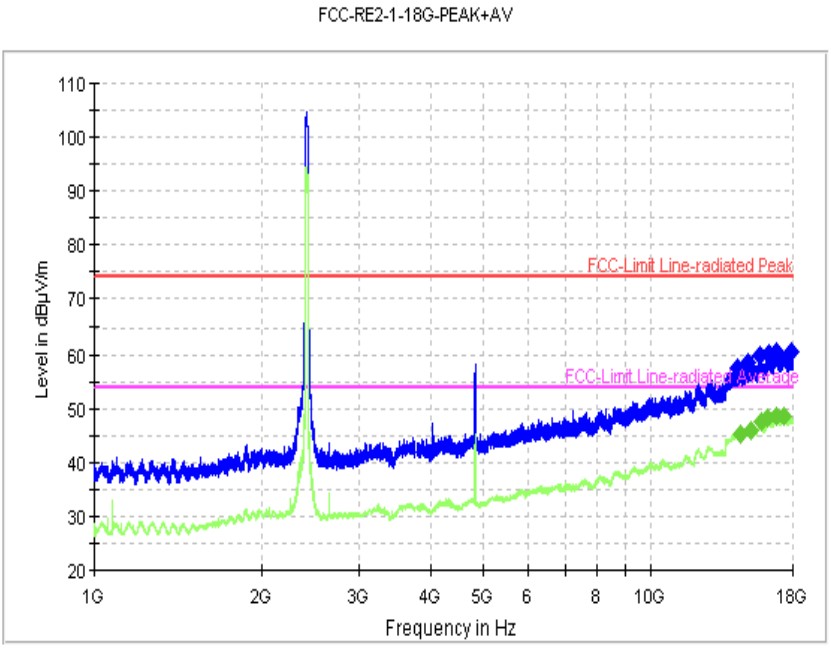


**Fig. 87 Radiated Spurious Emission (802.11n-20M, Ch1, 1 GHz-18 GHz)**

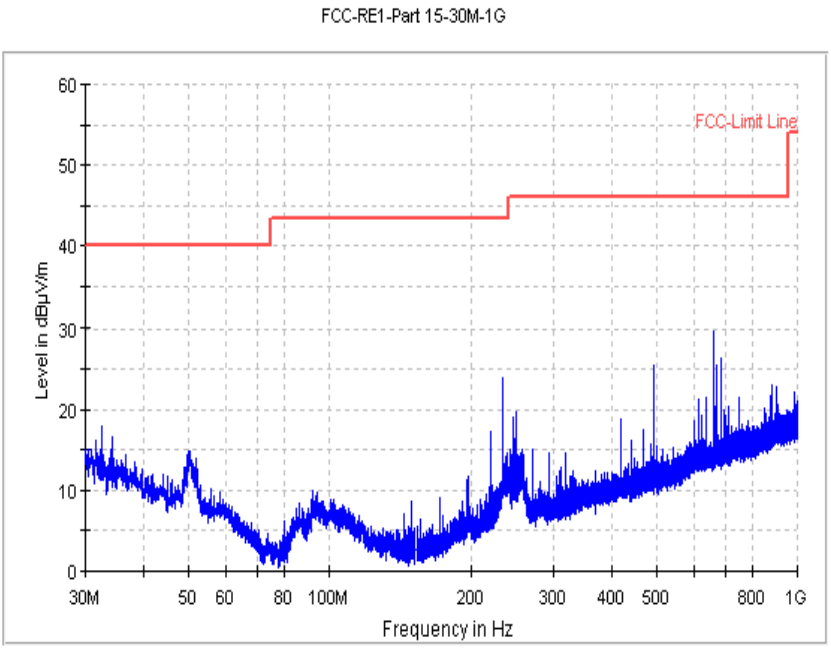


**Fig. 88 Radiated Spurious Emission (802.11n-20M, Ch6, 30MHz-1 GHz)**

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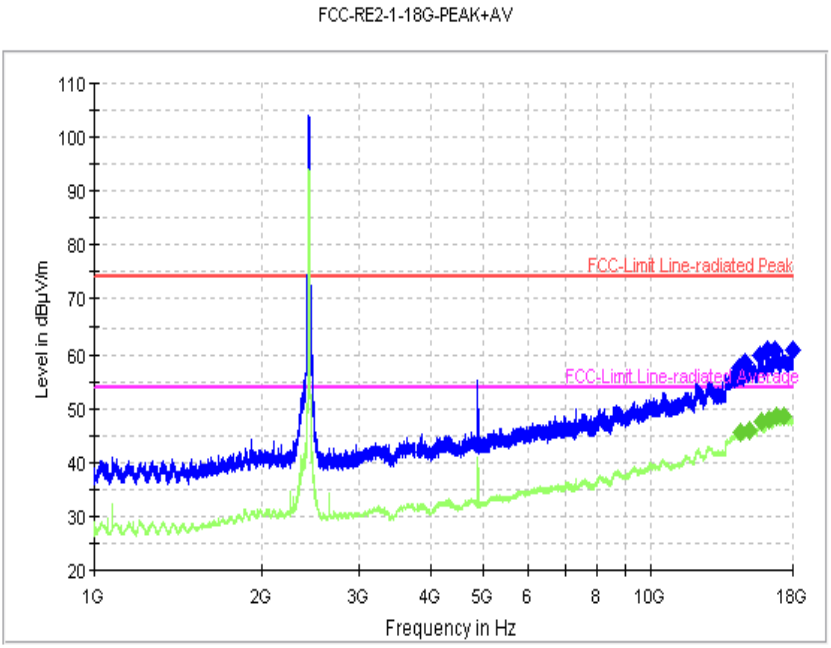


**Fig. 89 Radiated Spurious Emission (802.11n-20M, Ch6, 1 GHz-18 GHz)**

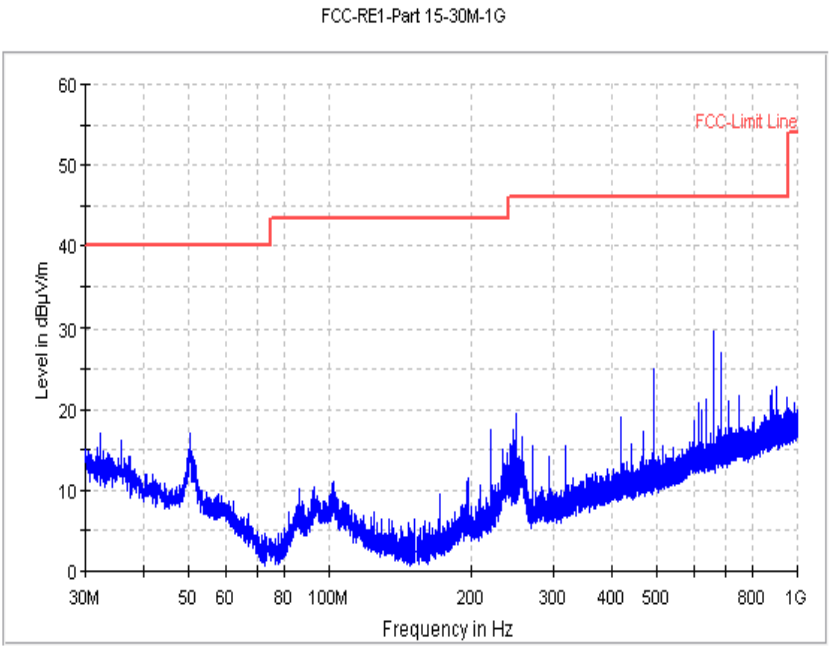


**Fig. 90 Radiated Spurious Emission (802.11n-20M, Ch11, 30MHz-1 GHz)**

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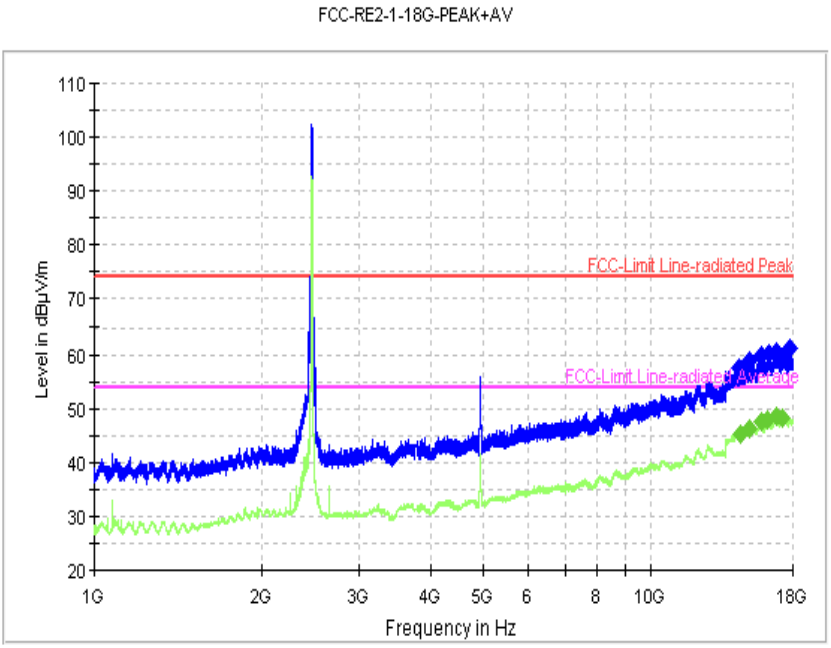


**Fig. 91 Radiated Spurious Emission (802.11n-20M, Ch11, 1 GHz-18 GHz)**

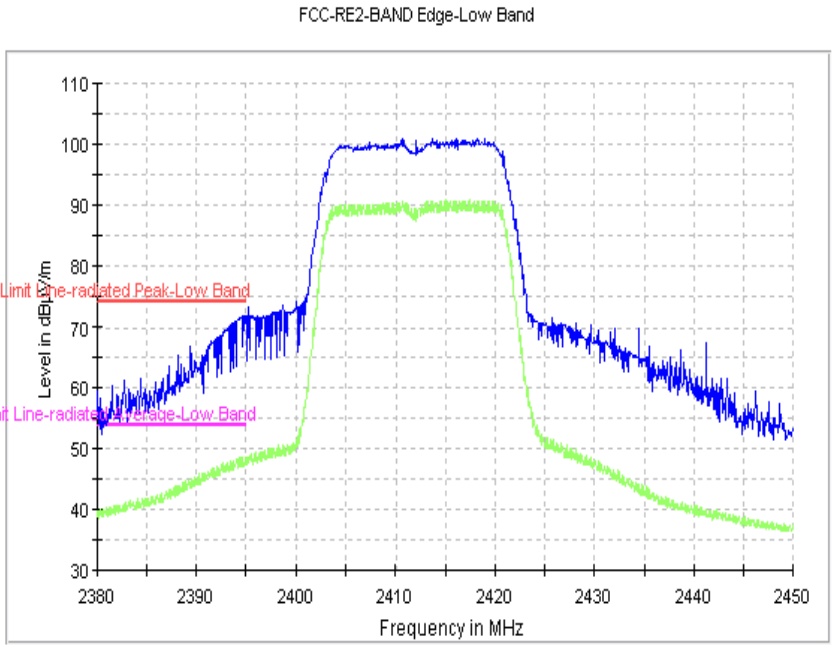


**Fig. 92 Radiated Emission Power (802.11n-20M, Ch1, 2380GHz~2450GHz)**

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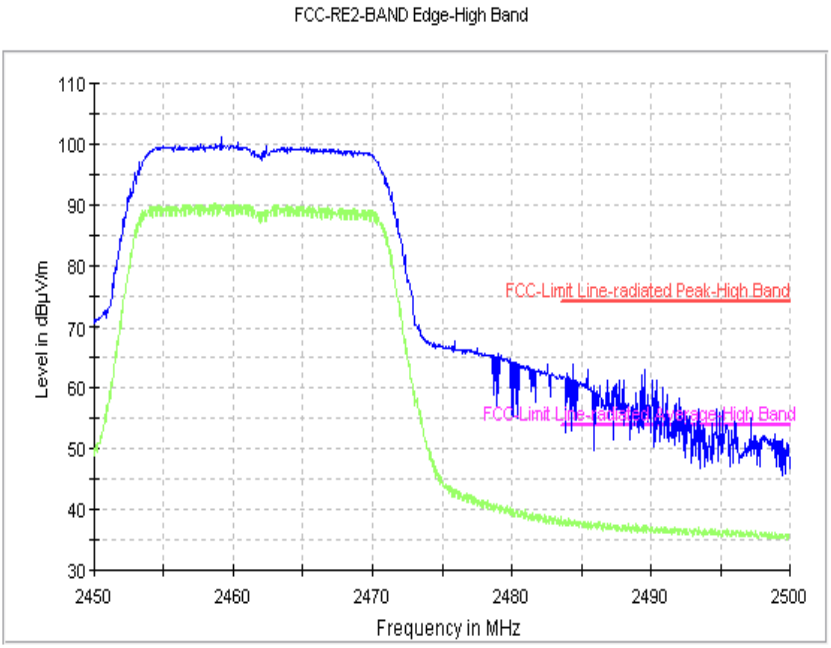


**Fig. 93 Radiated Emission Power (802.11n-20M, Ch11, 2450GHz~2500GHz)**

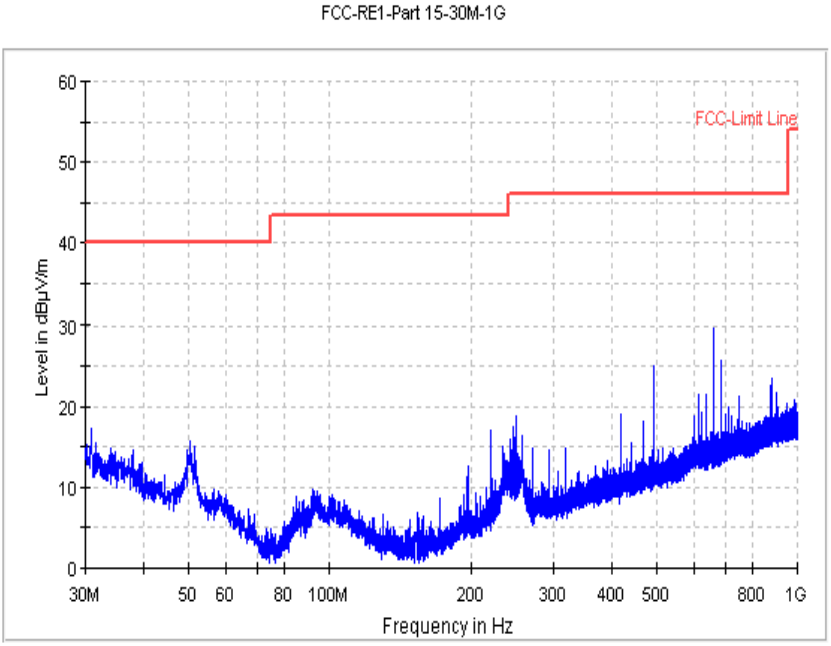


**Fig. 94 Radiated Spurious Emission (802.11n-40M, Ch3, 30MHz-1 GHz)**

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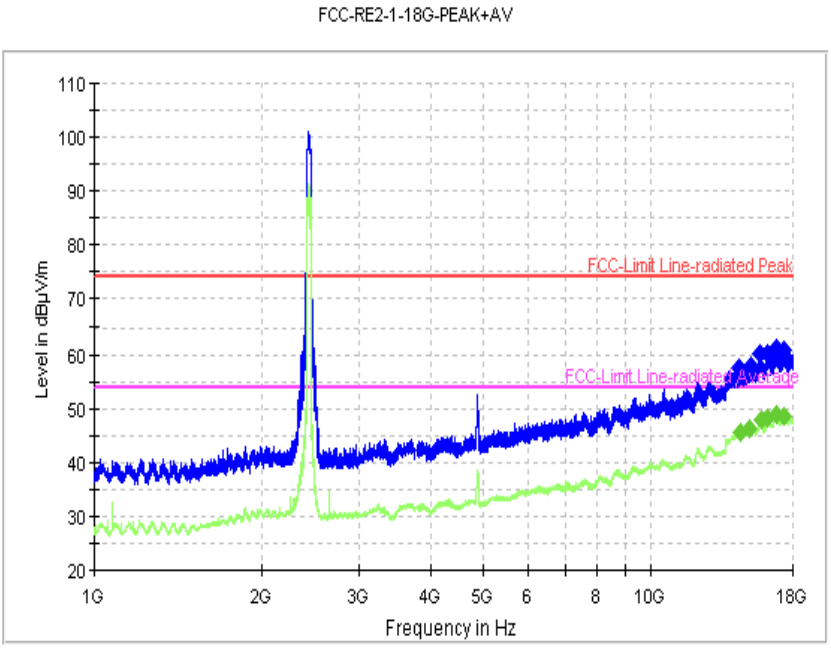


**Fig. 95 Radiated Spurious Emission (802.11n-40M, Ch3, 1 GHz-18 GHz)**

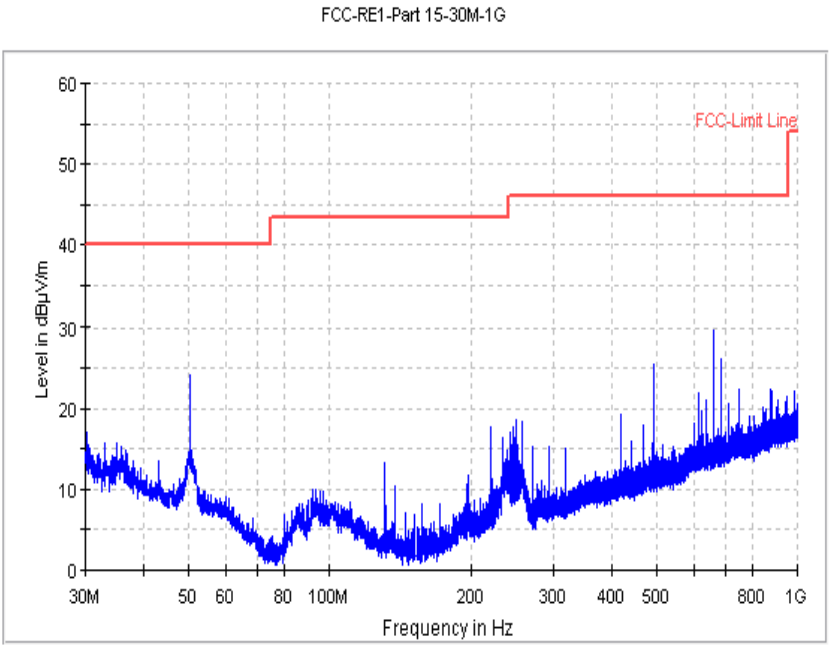


**Fig. 96 Radiated Spurious Emission (802.11n-40M, Ch6, 30MHz-1 GHz)**

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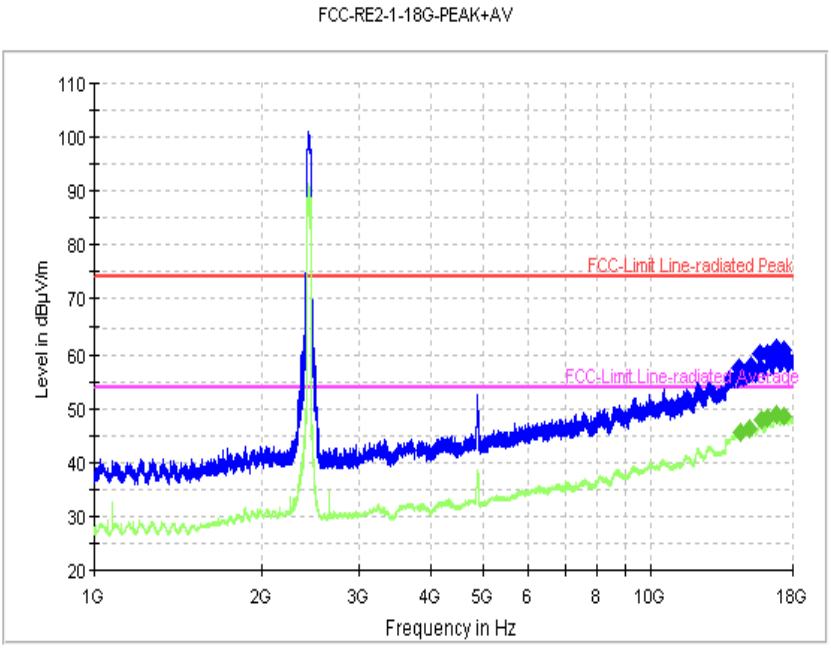


**Fig. 97 Radiated Spurious Emission (802.11n-40M, Ch6, 1 GHz-18 GHz)**

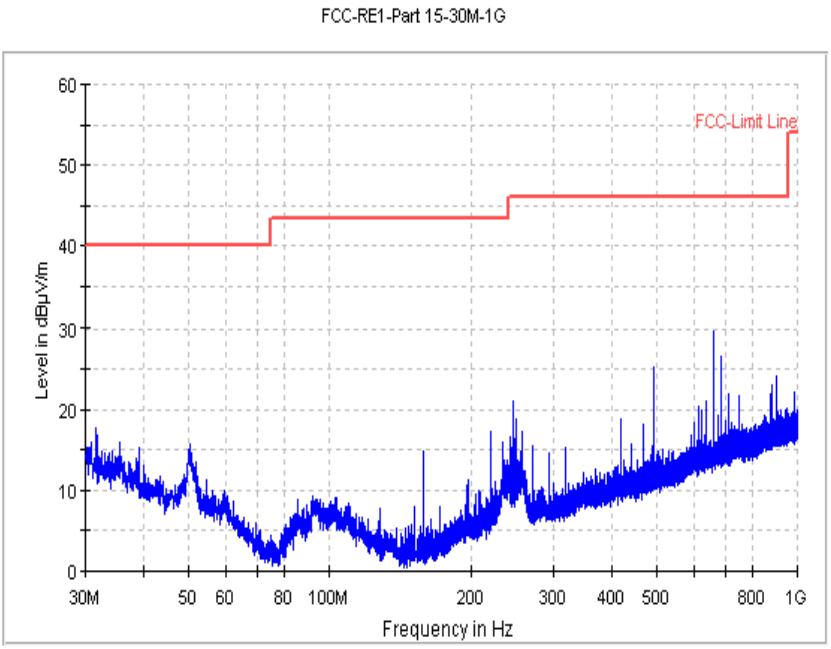


**Fig. 98 Radiated Spurious Emission (802.11n-40M, Ch9, 30MHz-1 GHz)**

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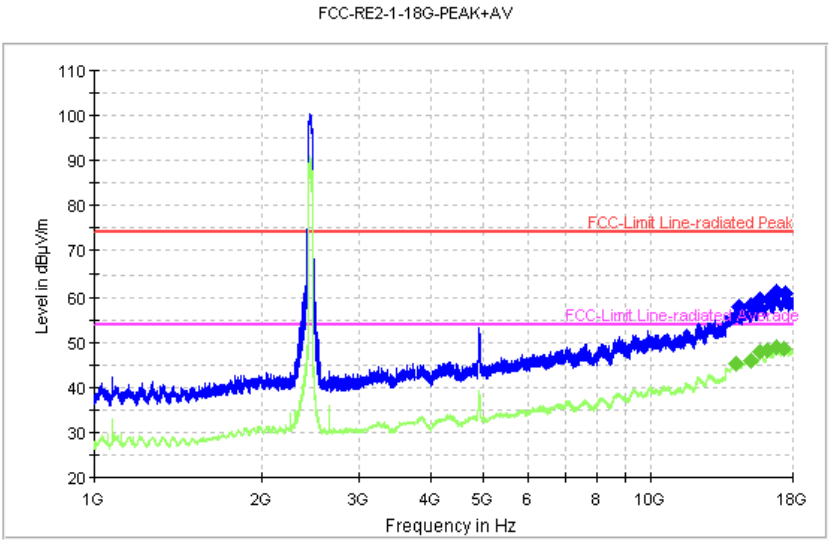


**Fig. 99 Radiated Spurious Emission (802.11n-40M, Ch9, 1 GHz-18 GHz)**

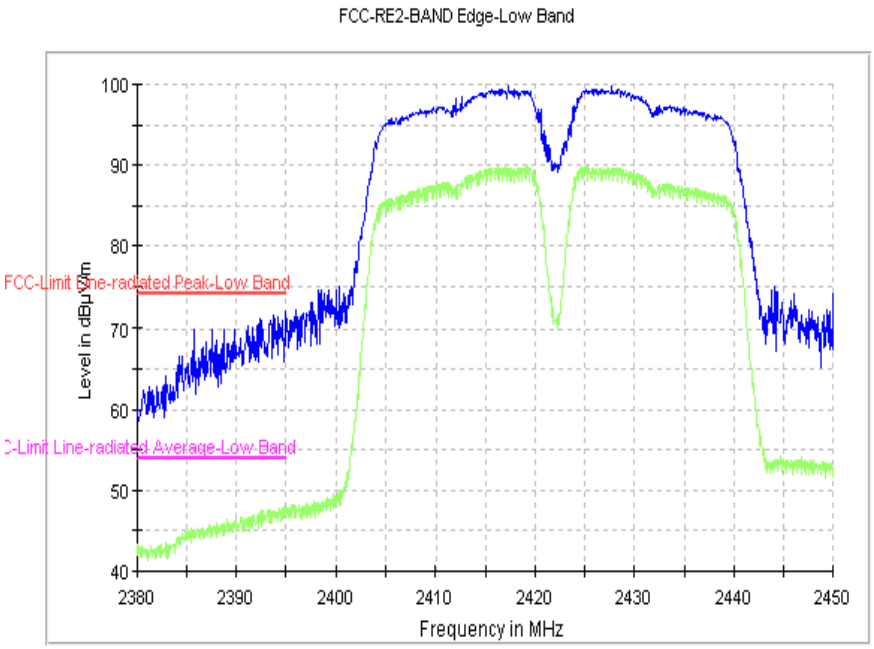


**Fig. 100 Radiated Emission Power (802.11n-40M, Ch3, 2380GHz~2450GHz)**

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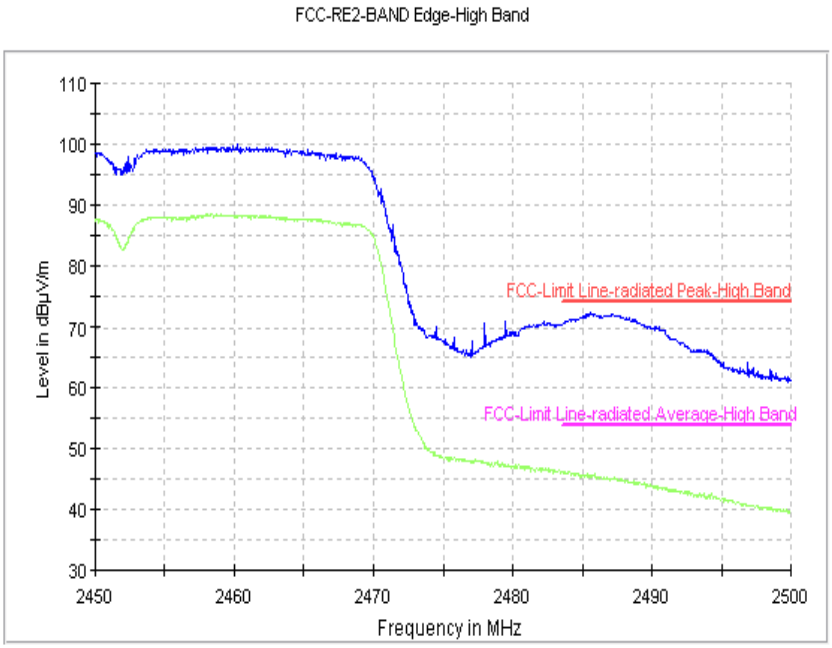


**Fig. 101 Radiated Emission Power (802.11n-20M, Ch9, 2450GHz~2500GHz)**

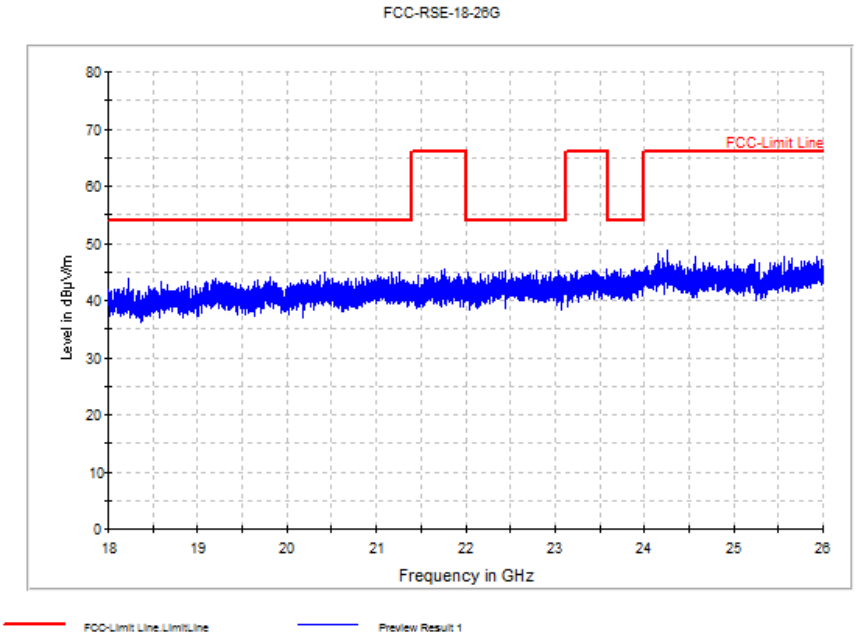


**Fig. 102 Radiated emission: 18 GHz - 26 GHz**

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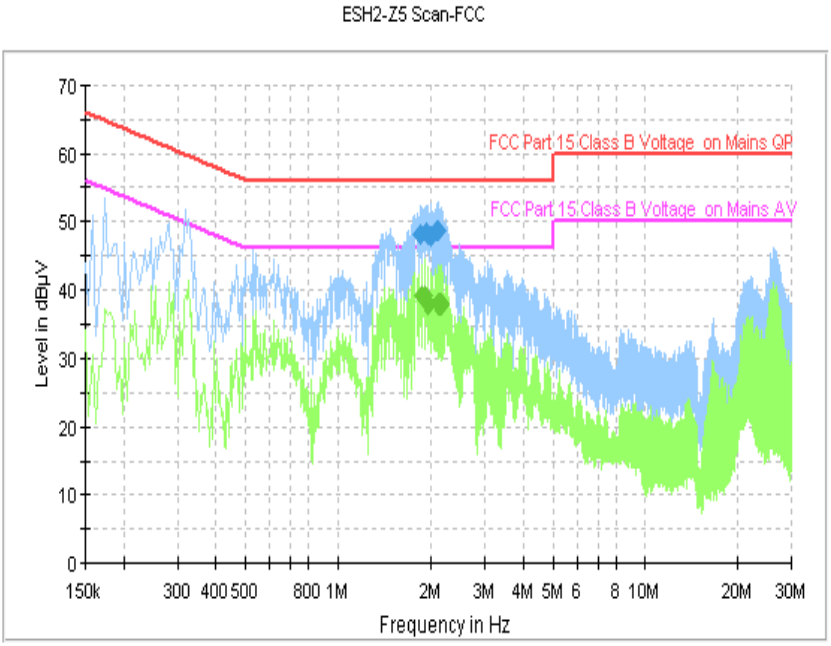


**Fig. 103 AC Powerline Conducted Emission (Traffic, AE2)**

MEASUREMENT RESULT: " QuasiPeak "

| Frequency (MHz) | QuasiPeak (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 1.838000 | 48.1 | FLO | L1 | 10.1 | 7.9 | 56.0 |
| 1.926000 | 48.3 | FLO | L1 | 10.1 | 7.7 | 56.0 |
| 1.958000 | 48.1 | FLO | L1 | 10.1 | 7.9 | 56.0 |
| 1.990000 | 47.8 | FLO | L1 | 10.1 | 8.2 | 56.0 |
| 2.094000 | 48.6 | FLO | L1 | 10.1 | 7.4 | 56.0 |
| 2.110000 | 48.7 | FLO | L1 | 10.1 | 7.3 | 56.0 |

MEASUREMENT RESULT: " Average "

| Frequency (MHz) | CAverage (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 1.870000 | 39.2 | FLO | L1 | 10.1 | 6.8 | 46.0 |
| 1.914000 | 39.1 | FLO | L1 | 10.1 | 6.9 | 46.0 |
| 1.958000 | 38.0 | FLO | L1 | 10.1 | 8.0 | 46.0 |
| 2.110000 | 37.8 | FLO | L1 | 10.1 | 8.2 | 46.0 |
| 2.138000 | 38.0 | FLO | L1 | 10.1 | 8.0 | 46.0 |
| 2.166000 | 38.0 | FLO | L1 | 10.1 | 8.0 | 46.0 |

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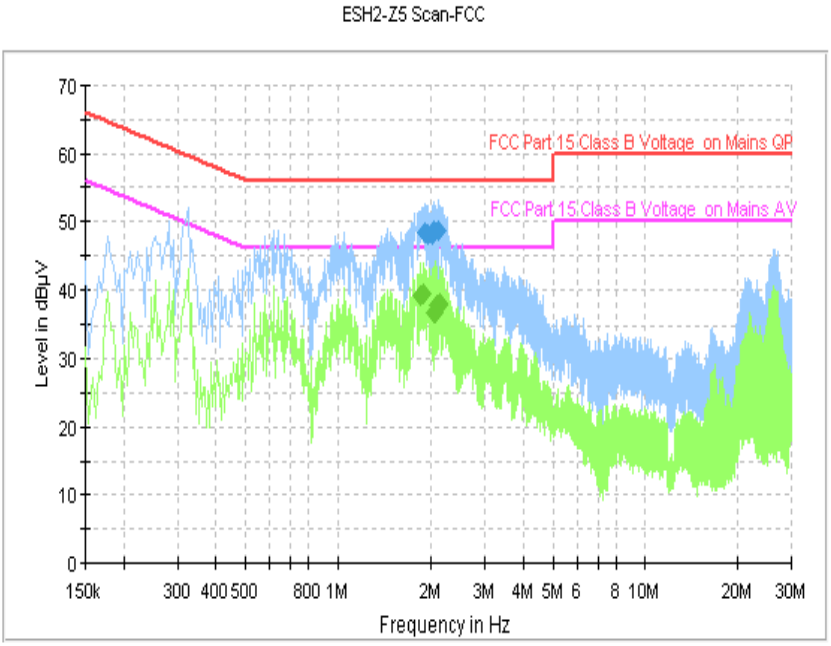


**Fig. 104 AC Powerline Conducted Emission (Idle, AE2)**

MEASUREMENT RESULT: " QuasiPeak "

| Frequency (MHz) | QuasiPeak (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 1.906000 | 48.3 | FLO | L1 | 10.1 | 7.7 | 56.0 |
| 1.950000 | 48.0 | FLO | L1 | 10.1 | 8.0 | 56.0 |
| 2.010000 | 48.1 | FLO | L1 | 10.1 | 7.9 | 56.0 |
| 2.038000 | 48.4 | FLO | L1 | 10.1 | 7.6 | 56.0 |
| 2.050000 | 48.6 | FLO | L1 | 10.1 | 7.4 | 56.0 |
| 2.106000 | 48.6 | FLO | L1 | 10.1 | 7.4 | 56.0 |

MEASUREMENT RESULT: " Average "

| Frequency (MHz) | CAverage (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 1.846000 | 39.1 | FLO | L1 | 10.1 | 6.9 | 46.0 |
| 1.890000 | 39.3 | FLO | L1 | 10.1 | 6.7 | 46.0 |
| 2.038000 | 36.7 | FLO | L1 | 10.1 | 9.3 | 46.0 |
| 2.066000 | 36.9 | FLO | L1 | 10.1 | 9.1 | 46.0 |
| 2.094000 | 37.5 | FLO | L1 | 10.1 | 8.5 | 46.0 |
| 2.122000 | 37.9 | FLO | L1 | 10.1 | 8.1 | 46.0 |

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

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