*Full*

# TEST REPORT

## No. I17D00059-WLA

*For*

**Client : Mobiwire SAS**

**Production : 3G Smart Phone**

**Model Name : MobiWire Kosumi**

**FCC ID: QPN-KOSUMI**

**Hardware Version: V01**

**Software Version: V01**

**Issued date: 2017-05-19**

**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 ECIT Shanghai.

**Test Laboratory:**

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**Revision Version**

| Report Number | Revision | Date | Memo |
|---|---|---|---|
| I17D00059-WLAN | 00 | 2017-04-28 | Initial creation of test report |
| I17D00059-WLAN | 01 | 2017-05-11 | Second creation of test report |
| I17D00059-WLAN | 02 | 2017-05-19 | Third creation of test report |

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# 1. Test Laboratory

## 1.1. Testing Location

| | |
|---|---|
| Company Name: | ECIT Shanghai, East China Institute of Telecommunications |
| Address: | 7-8F, G Area, No. 668, Beijing East Road, Huangpu District, Shanghai, P. R. China |
| Postal Code: | 200001 |
| Telephone: | (+86)-021-63843300 |
| Fax: | (+86)-021-63843301 |

## 1.2. Testing Environment

| | |
|---|---|
| Normal Temperature: | 15-35℃ |
| Extreme Temperature: | -10/+55℃ |
| Relative Humidity: | 20-75% |

## 1.3. Project data

| | |
|---|---|
| Project Leader: | Yu Anlu |
| Testing Start Date: | 2017-04-05 |
| Testing End Date: | 2017-04-06 |

## 1.4. Signature

**Chen Lei**
**(Prepared this test report)**

**Ding Li**
**(Reviewed this test report)**

**Zheng Zhongbin**
**Director of the laboratory**
**(Approved this test report)**

# 2. Client Information

## 2.1. Applicant Information

| | |
|---|---|
| Company Name: | Mobiwire SAS |
| Address: | 79 AVENUE FRANCOIS ARAGO 92017 NANTERRE CEDEX France. |
| Telephone: | +33 1 78 14 09 58 |
| Postcode: | France 92017 |

## 2.2. Manufacturer Information

| | |
|---|---|
| Company Name: | MOBIWIRE MOBILES (NINGBO) CO.,LTD |
| Address: | No.999,Dacheng East Road,Fenghua City,Zhejiang |
| Telephone: | 0574 59555707 |
| Postcode: | 315500 |

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

## 3.1. About EUT

| | |
|---|---|
| EUT Description | 3G Smart Phone |
| Model name | MobiWire Kosumi |
| WLAN Frequency | 2412MHz-2472MHz |
| WLAN Channel | Channel1-Channel11,CH12,CH13 |
| WLAN type of modulation | 802.11b:DSSS<br>802.11g/n: OFDM |
| Extreme Temperature | -10/+55 ℃ |
| Nominal Voltage | 3.5V |
| Extreme High Voltage | 3.8V |
| Extreme Low Voltage | 4.35V |

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* | SN or IMEI | HW Version | SW Version | Date of receipt |
|---|---|---|---|---|
| N01 | 351780080668561 | V01 | V01 | 2017-03-20 |

*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 | SN |
|---|---|---|
| AE1 | RF cable | --- |
| AE2 | --- | --- |

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

# 4. Reference Documents

## 4.1. 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, 2400-2483.5MHz, and 5725-5850MHz. | Jun,2016 Edition |
| ANSI 63.10 | Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9KHz to 40GHz | 2013 |

# 5. Summary of Test Results

A brief summary of the tests carried out is shown as following.

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

Please refer to part 5 for detail.

The measurements are according to Public notice KDB558074 and ANSI C63.4.

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 ECIT. |
| NA | Not Applicable, the test was not applicable. |
| F | Fail, the EUT does not comply with the essential requirements in the standard. |

Test Conditions

| | |
|---|---|
| Tnom | Normal temperature |
| Tmin | Low Temperature |
| Tmax | High Temperature |
| Vnom | Normal Voltage |
| Vmin | Low Voltage |
| Vmax | High Voltage |
| Hnom | Norm Humidity |
| Anom | Norm Air Pressure |

For this report, all the test case listed above are tested under Normal Temperature and Normal Voltage, and also under norm humidity, the specific conditions as following:

| | | |
|---|---|---|
| Temperature | Tnom | 22℃ |
| Voltage | Vnom | 3.7V |
| Humidity | Hnom | 32% |
| Air Pressure | Anom | 1010hPa |

## 5.1. Notes

All reported tests were carried out on a sample equipment to demonstrate limited compliance with section 3.

The test results of this test report relate exclusively to the item(s) tested as specified in section 5.

The following deviation from, additions to, or exclusions from the test specifications have been made. See section 3.

## 5.2. Statements

The product name MobiWire Kosumi, supporting GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA/HSPA+/WLAN/BT/BLE/GPS, manufactured by MOBIWIRE MOBILES (NINGBO) CO.,LTD is a new product for testing.

ECIT has verified that the compliance of the tested device specified in section 5 of this test report is successfully evaluated according to the procedure and test methods as defined in type certification requirement listed in section 5 of this test report.

# 6. Test result

## 6.1. Maximum Output Power

### 6.1.1 Measurement Limit and method:

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

### 6.1.2 Test procedure

The measurement is according to ANSI C63.10 clause 11.2

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW ⩾ OBW, VBW ⩾ 3RBW.
4. Detector : Peak.
5. Trace mode: Max Hold

### 6.1.3 Measurement Uncertainty:

| | |
|---|---|
| Measurement Uncertainty | 0.75dB |

### 6.1.4 Maximum Peak Output Power-conducted

**Measurement Results:**

**802.11b/g mode**

| Mode | Data Rate(Mbps) | Teat Result(dBm) | | |
|---|---|---|---|---|
| | | 2412MHz(Ch1) | 2437MHz(Ch6) | 2462MHz(Ch11) |
| 802.11b | 1 | 17.404 | 17.322 | 17.286 |
| | 2 | 17.534 | 17.421 | 17.488 |
| | 5.5 | 17.351 | 17.301 | 17.352 |
| | 11 | 17.328 | 17.423 | 17..318 |
| 802.11g | 6 | 18.801 | 18.635 | 18.753 |
| | 9 | 18.564 | 18.418 | 18.236 |
| | 12 | 19.022 | 18.932 | 18.842 |
| | 18 | 18.473 | 18.316 | 18.828 |

| | | | | |
|---|---|---|---|---|
| | 24 | 17.954 | 17.981 | 17.845 |
| | 36 | 18.771 | 18.836 | 18.418 |
| | 48 | 18.022 | 18.423 | 18.316 |
| | 54 | 18.328 | 18.365 | 18.712 |

The data rate 2Mbps and 12Mbps are selected as worse condition, and the following cases are performed with this condition.

| Mode | Data Rate(Mbps) | Teat Result(dBm) | | |
|---|---|---|---|---|
| | | 2467MHz(Ch12) | 2472MHz(Ch13) | / |
| 802.11b | 1 | 17.284 | 17.324 | / |
| | 2 | 17.421 | 17.264 | / |
| | 5.5 | 17.574 | 17.534 | / |
| | 11 | 17.342 | 17.423 | / |
| 802.11g | 6 | 18.768 | 18.234 | / |
| | 9 | 18.324 | 18.431 | / |
| | 12 | 18.656 | 18.632 | / |
| | 18 | 18.231 | 18.453 | / |
| | 24 | 17.345 | 17.882 | / |
| | 36 | 18.177 | 18.623 | / |
| | 48 | 18.232 | 18.234 | / |
| | 54 | 18.498 | 18.552 | / |

**802.11n mode**

| Mode | Data Rate(Index) | Teat Result(dBm) | | |
|---|---|---|---|---|
| | | 2412MHz(Ch1) | 2437MHz(Ch6) | 2462MHz(Ch11) |
| 802.11n(20MHz) | MCS0 | 18.595 | 18.345 | 18.452 |
| | MCS1 | 18.747 | 18.732 | 18.675 |
| | MCS2 | 18.938 | 18.669 | 18.904 |

| | | | | |
|---|---|---|---|---|
| | MCS3 | 18.892 | 18.234 | 18.327 |
| | MCS4 | 18.663 | 18.885 | 18.824 |
| | MCS5 | 18.969 | 18.912 | 18.876 |
| | MCS6 | 19.167 | 18.923 | 18.968 |
| | MCS7 | 18.595 | 18.523 | 18.543 |
| 802.11n(40MHz) | MCS0 | / | / | / |
| | MCS1 | / | / | / |
| | MCS2 | / | / | / |
| | MCS3 | / | / | / |
| | MCS4 | / | / | / |
| | MCS5 | / | / | / |
| | MCS6 | / | / | / |
| | MCS7 | / | / | / |

The data rate MCS6 for 802.11n(20M) are selected as worse condition, and the following case are performed with this condition.

**802.11n mode**

| Mode | Data Rate(Index) | Teat Result(dBm) | | |
|---|---|---|---|---|
| | | 2467MHz(Ch12) | 2472MHz(Ch13) | / |
| 802.11n(20MHz) | MCS0 | 18.235 | 18.655 | / |
| | MCS1 | 18.756 | 18.232 | / |
| | MCS2 | 18.978 | 18.439 | / |
| | MCS3 | 18.892 | 18.641 | / |
| | MCS4 | 18.612 | 18.455 | / |
| | MCS5 | 18.459 | 18.782 | / |
| | MCS6 | 18.889 | 18.233 | / |
| | MCS7 | 18.578 | 18.133 | / |

| | | | | |
|---|---|---|---|---|
| 802.11n(40MHz) | MCS0 | / | / | / |
| | MCS1 | / | / | / |
| | MCS2 | / | / | / |
| | MCS3 | / | / | / |
| | MCS4 | / | / | / |
| | MCS5 | / | / | / |
| | MCS6 | / | / | / |
| | MCS7 | / | / | / |

### 6.1.5 Maximum Average Output Power-conducted

**802.11b/g mode**

| Mode | Test Result(dBm) | | |
|---|---|---|---|
| | 2412MHz(Ch1) | 2437MHz(Ch6) | 2462MHz(Ch11) |
| 802.11b | 13.21 | 12.97 | 12.39 |
| 802.11g | 10.40 | 9.97 | 9.23 |

**802.11b/g mode**

| Mode | Test Result(dBm) | | |
|---|---|---|---|
| | 2467MHz(Ch12) | 2472MHz(Ch13) | / |
| 802.11b | 13.02 | 12.88 | / |
| 802.11g | 9.92 | 9.84 | / |

**802.11n mode**

| Mode | Test Result(dBm) | | |
|---|---|---|---|
| | 2412MHz(Ch1) | 2437MHz(Ch6) | 2462MHz(Ch11) |
| 802.11n(20MHz) | 9.54 | 10.67 | 10.43 |
| 802.11n(40MHz) | / | / | / |

**802.11n mode**

| Mode | Test Result(dBm) | | |
|---|---|---|---|
| | **2467MHz(Ch12)** | **2472MHz(Ch13)** | / |
| 802.11n(20MHz) | 9.82 | 9.67 | / |
| 802.11n(40MHz) | / | / | / |

**Conclusion: PASS**

## 6.2. Peak Power Spectral Density

### 6.2.1 Measurement Limit:

| Standard | Limit |
|---|---|
| FCC CFR Part 15.247(e) | < 8dBm/3 KHz |

### 6.2.2 Test procedures

The measurement is according to ANSI C63.10 clause 11.10.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set analyzer center frequency to DTS channel center frequency.
4. Set the span to 1.5 times the DTS bandwidth.
5. Set the RBW to 3 kHz ⩽ RBW ⩽ 100 kHz.
6. Set the VBW ⩾ [3 × RBW].
7. Detector = peak.
8. Sweep time = auto couple.
9. Trace mode = max hold.
10. Allow trace to fully stabilize.
11. Use the peak marker function to determine the maximum amplitude level within the RBW.
12. If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

### 6.2.3 Measurement Uncertainty:

| Measurement Uncertainty | 0.75dB |
|---|---|

**6.2.4 Measurement Results:**

**802.11b/g mode**

| Mode | Channel | Power Spectral Density(dBm/3kHz) | | Conclusion |
|---|---|---|---|---|
| 802.11b | 1 | Fig.1 | -7.658 | P |
| | 6 | Fig.2 | -7.658 | P |
| | 11 | Fig.3 | -8.191 | P |
| | 12 | Fig.4 | -7.116 | P |
| | 13 | Fig.5 | -7.082 | P |
| 802.11g | 1 | Fig.6 | -15.457 | P |
| | 6 | Fig.7 | -16.001 | P |
| | 11 | Fig.8 | -16.702 | P |
| | 12 | Fig.9 | -16.252 | P |
| | 13 | Fig.10 | -16.286 | P |

**802.11n mode**

| Mode | Channel | Power Spectral Density(dBm/3kHz) | | Conclusion |
|---|---|---|---|---|
| 802.11n(20MHz) | 1 | Fig.11 | -14.528 | P |
| | 6 | Fig.12 | -14.73 | P |
| | 11 | Fig.13 | -15.246 | P |
| | 12 | Fig.14 | -14.729 | P |
| | 13 | Fig.15 | -14.374 | P |
| 802.11g(40MHz) | 1 | / | / | / |
| | 6 | / | / | / |
| | 11 | / | / | / |

**Conclusion: PASS**

**Test graphs as below:**

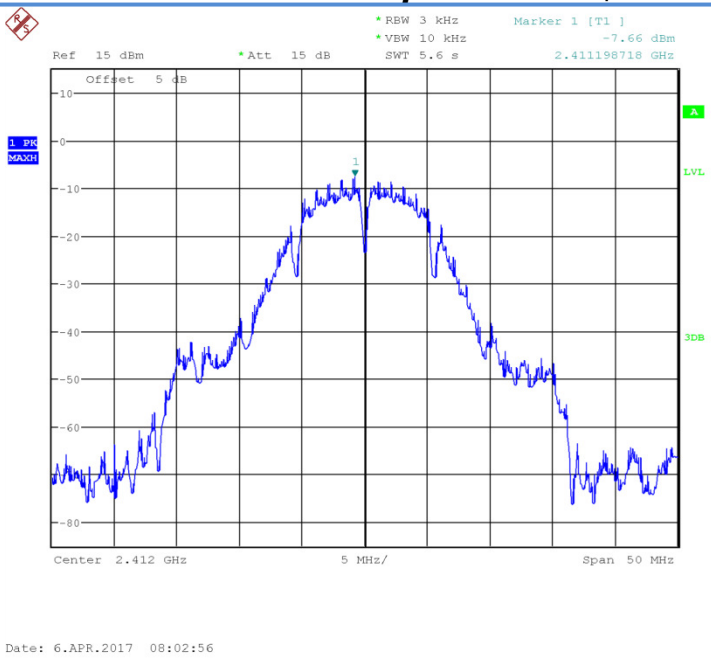



**Fig.1 Power Spectral Density (802.1b,Ch1)**

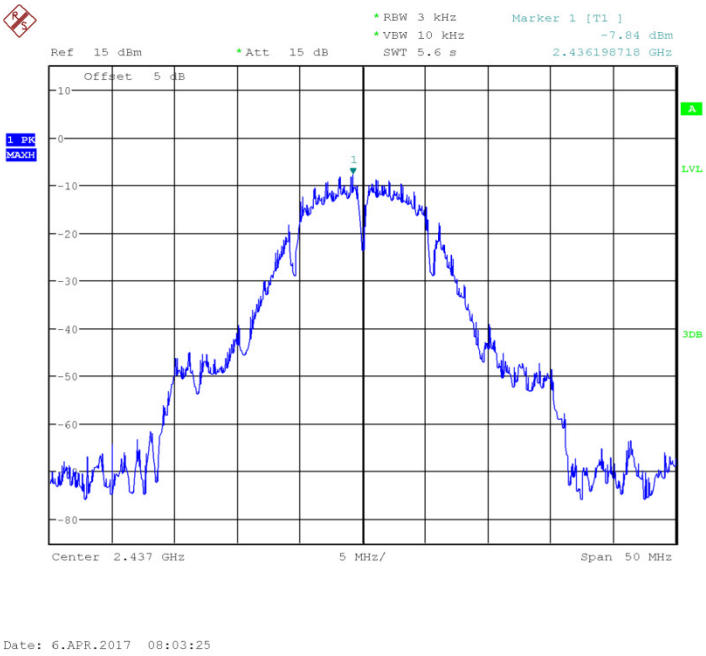



**Fig.2 Power Spectral Density (802.1b,Ch6)**

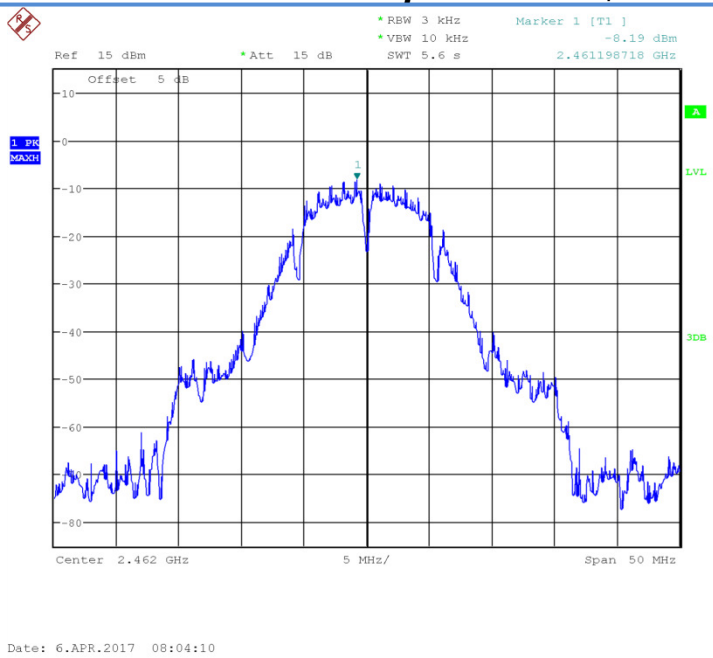



**Fig.3 Power Spectral Density (802.1b,Ch11)**

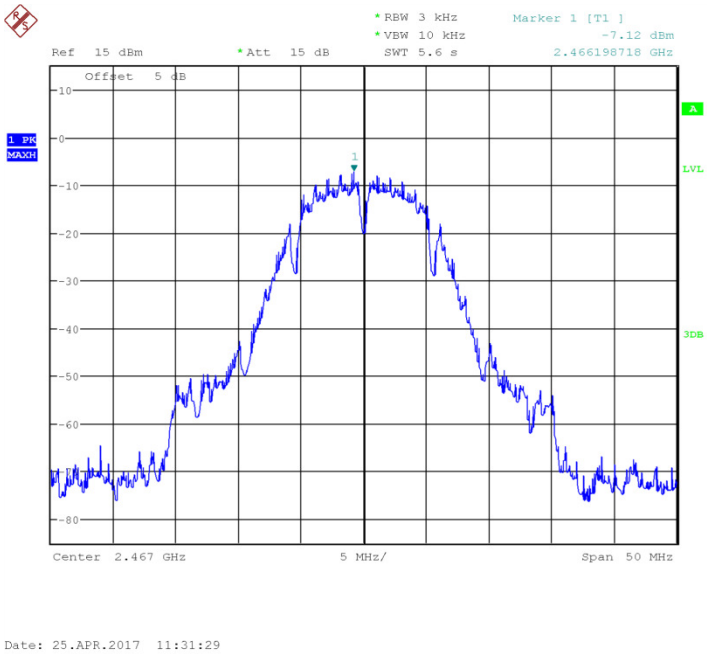



**Fig.4 Power Spectral Density (802.1b,Ch12)**

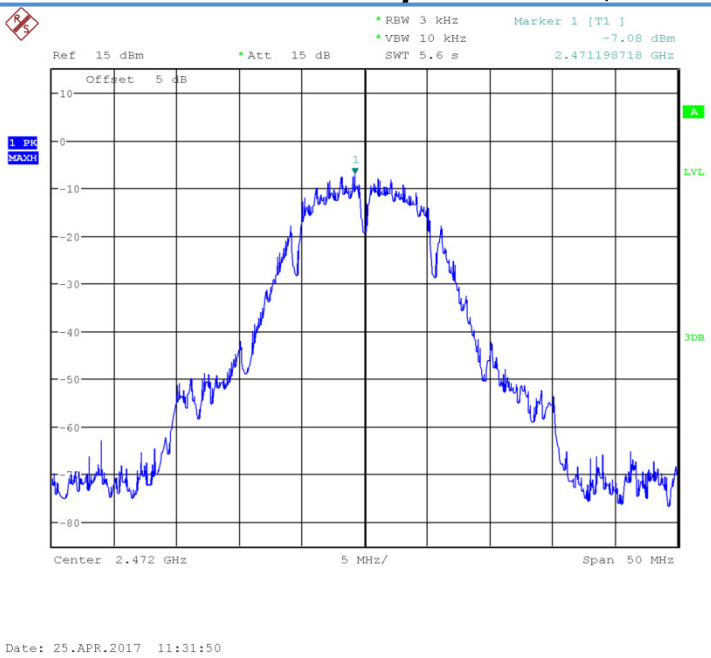



**Fig.5 Power Spectral Density (802.1b,Ch13)**

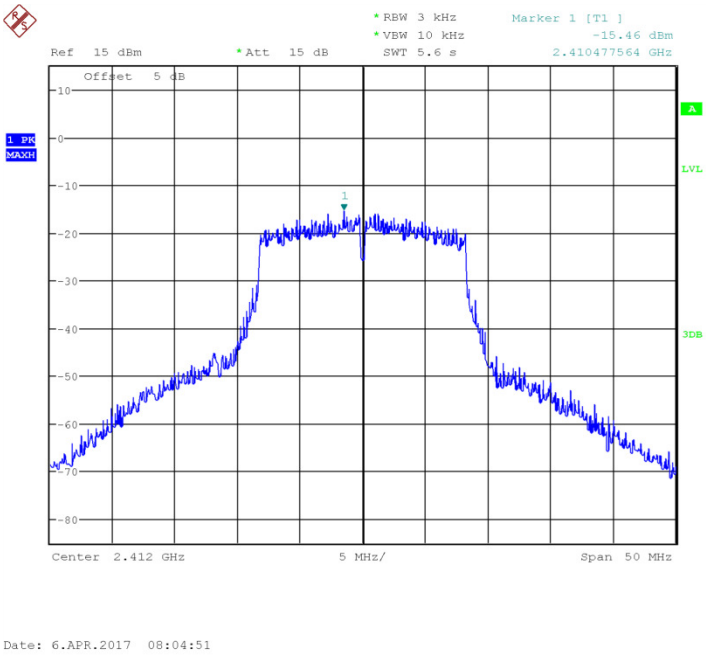



**Fig.6 Power Spectral Density (802.1g,Ch1)**

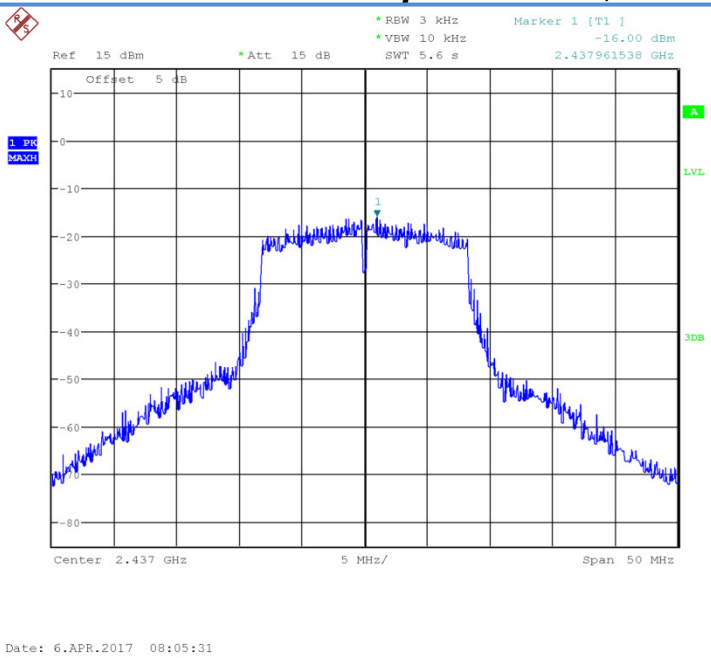



**Fig.7 Power Spectral Density (802.1g,Ch6)**

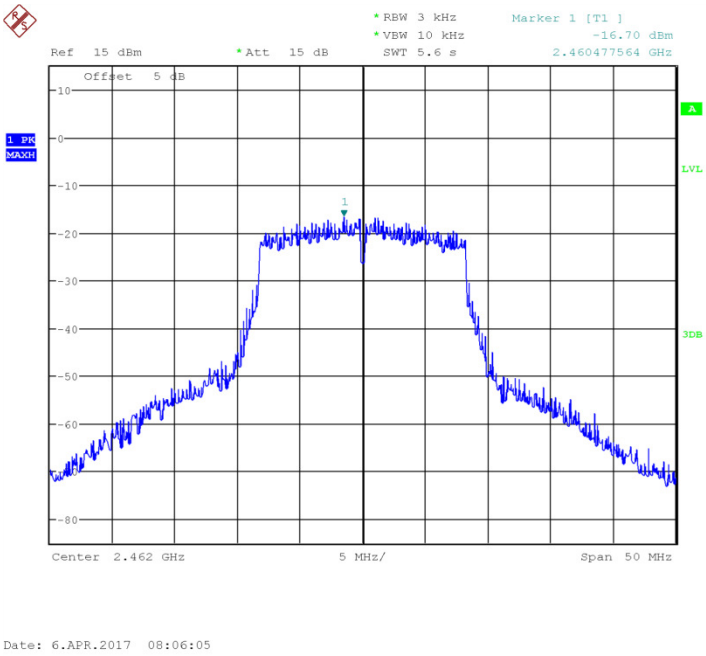



**Fig.8 Power Spectral Density (802.1g,Ch11)**

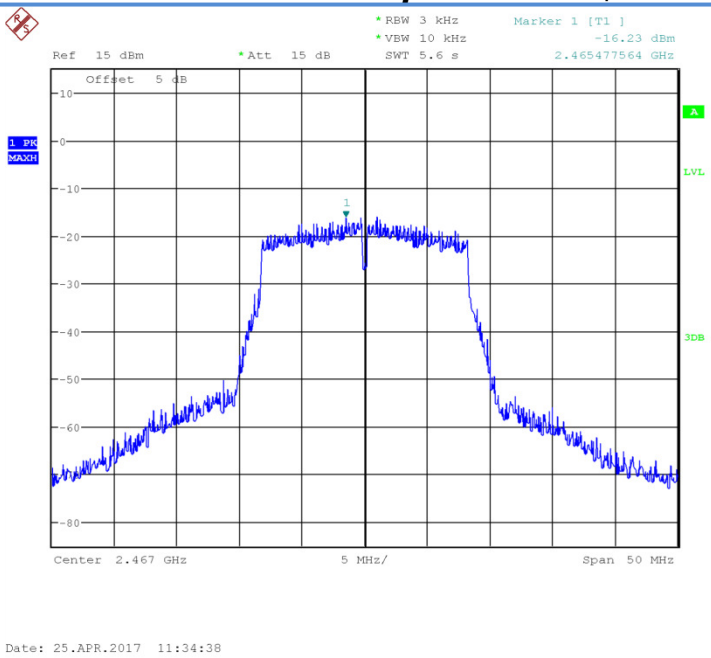



**Fig.9 Power Spectral Density (802.1g,Ch12)**

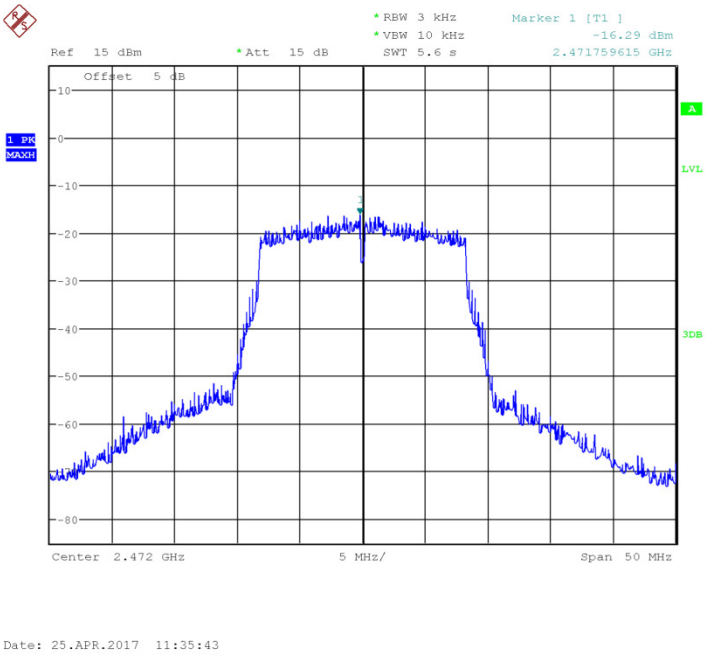



**Fig.10 Power Spectral Density (802.1g,Ch13)**

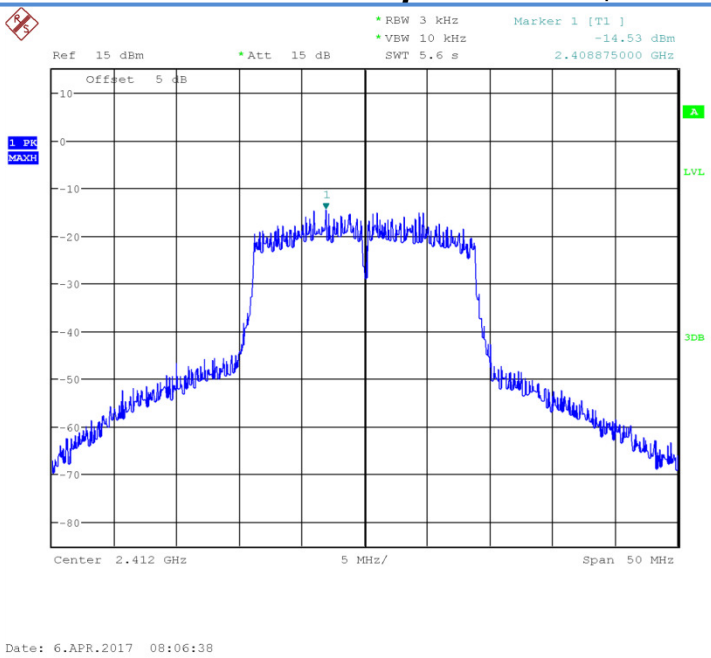



**Fig.11 Power Spectral Density (802.1n-20MHz,Ch1)**

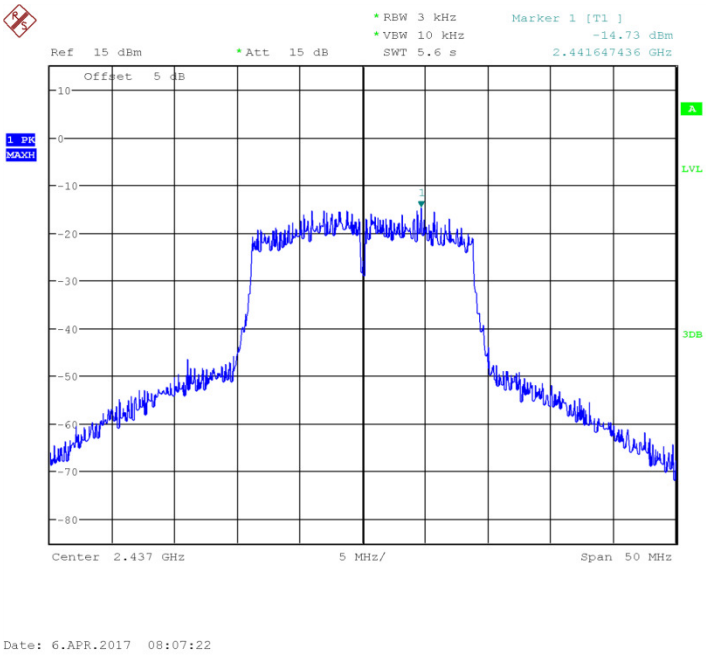



**Fig.12 Power Spectral Density (802.1n-20MHz,Ch6)**

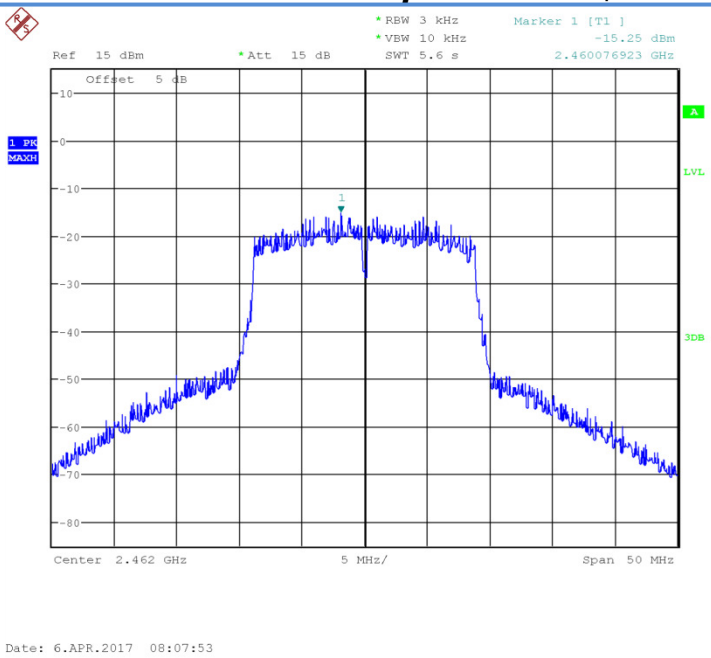



**Fig.13 Power Spectral Density (802.1n-20MHz,Ch11)**

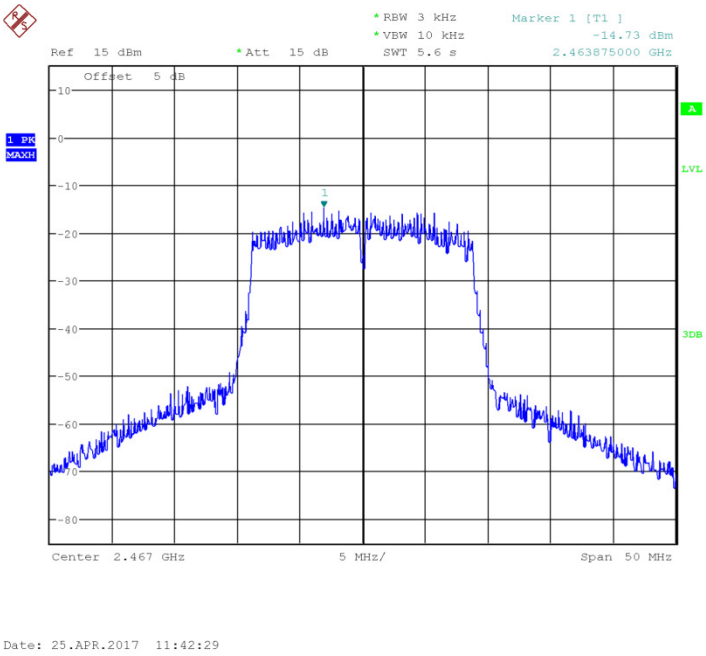



**Fig.14 Power Spectral Density (802.1n-20MHz,Ch12)**

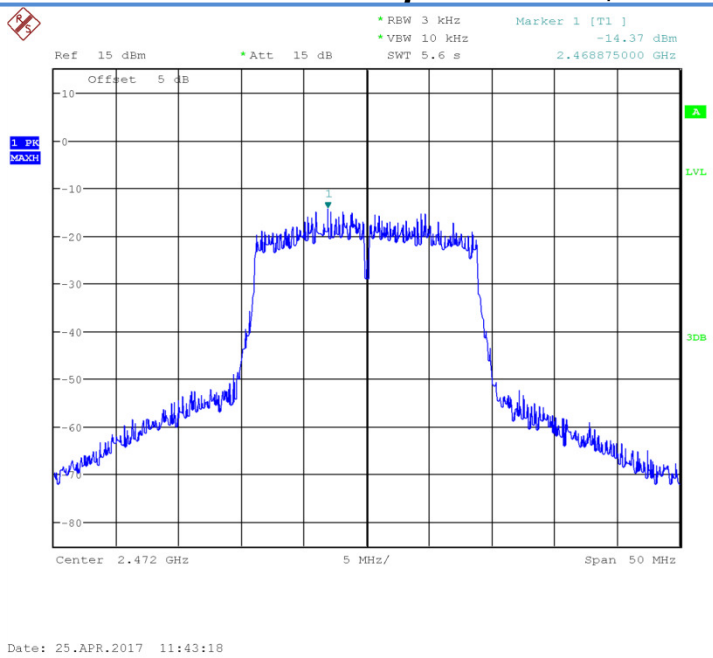



**Fig.15 Power Spectral Density (802.1n-20MHz,Ch13)**

## 6.3. Occupied 6dB Bandwidth

### 6.3.1 Measurement Limit:

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

### 6.3.2 Test procedure

The measurement is according to ANSI C63.10 clause 11.8.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW = 100 kHz.
4. Set the VBW ⩾ [3 × RBW].
5. Detector = peak.
6. Trace mode = max hold.
7. Sweep = auto couple.
8. Allow the trace to stabilize.
9. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### 6.3.4 Measurement Uncertainty:

| | |
|---|---|
| Measurement Uncertainty | 60.80Hz |

**6.3.5 Measurement Result:**

**802.11b/g mode**

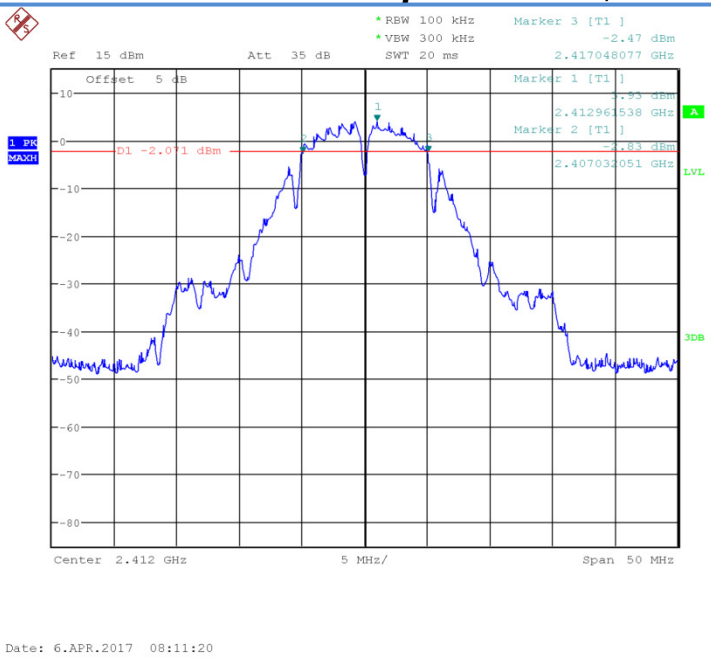
| Mode | Channel | Occupied 6dB Bandwidth(MHz) | | Conclusion |
|---|---|---|---|---|
| 802.11b | 1 | Fig.16 | 10.016 | P |
| | 6 | Fig.17 | 10.016 | P |
| | 11 | Fig.18 | 9.936 | P |
| | 12 | Fig.19 | 9.856 | P |
| | 13 | Fig.20 | 9.856 | P |
| 802.11g | 1 | Fig.21 | 16.506 | P |
| | 6 | Fig.22 | 16.506 | P |
| | 11 | Fig.23 | 16.506 | P |
| | 12 | Fig.24 | 16.506 | P |
| | 13 | Fig.25 | 16.506 | P |

**802.11n mode**

| Mode | Channel | Occupied 6dB Bandwidth(MHz) | | Conclusion |
|---|---|---|---|---|
| 802.11n(20MHz) | 1 | Fig.26 | 17.788 | P |
| | 6 | Fig.27 | 17.788 | P |
| | 11 | Fig.28 | 17.788 | P |
| | 12 | Fig.29 | 17.788 | P |
| | 13 | Fig.30 | 17.788 | P |
| 802.11n(40MHz) | 3 | / | / | / |
| | 6 | / | / | / |
| | 11 | / | / | / |
| | 12 | / | / | / |
| | 13 | / | / | / |

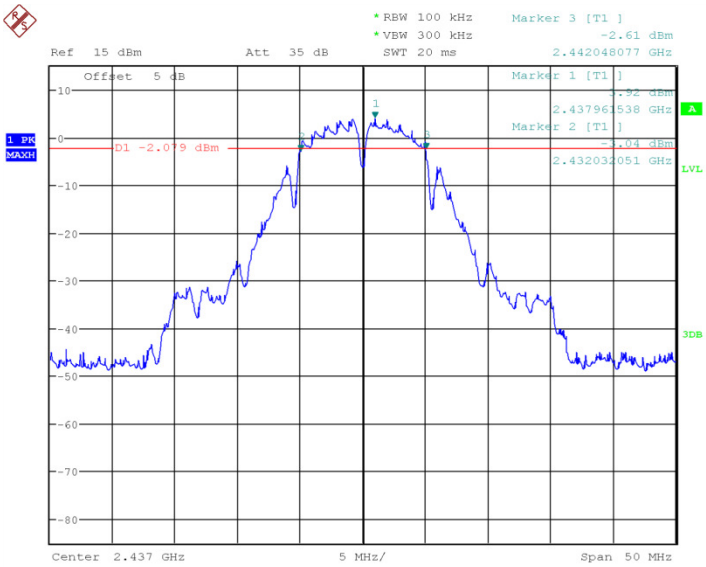
**Conclusion: PASS**

**Test graphs as below:**



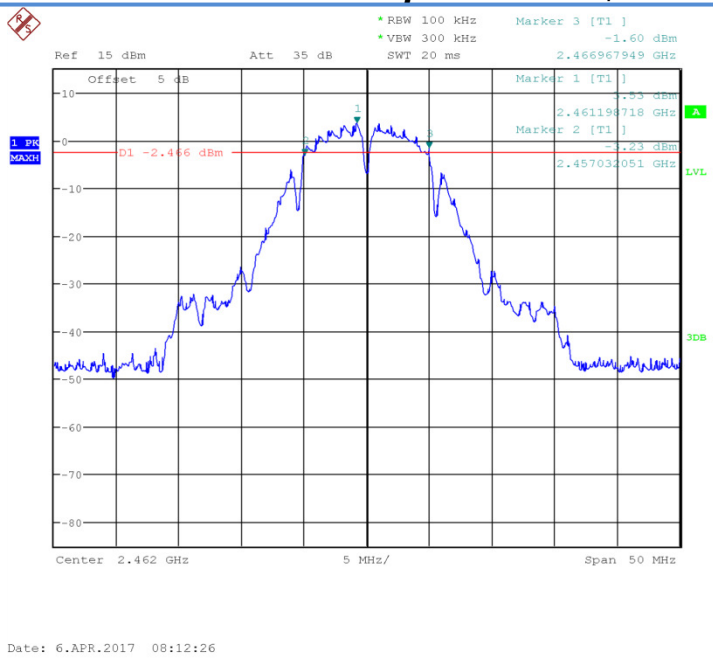

Date: 6.APR.2017 08:11:20

**Fig.16 Occupied 6dB Bandwidth (802.11b, Ch1)**



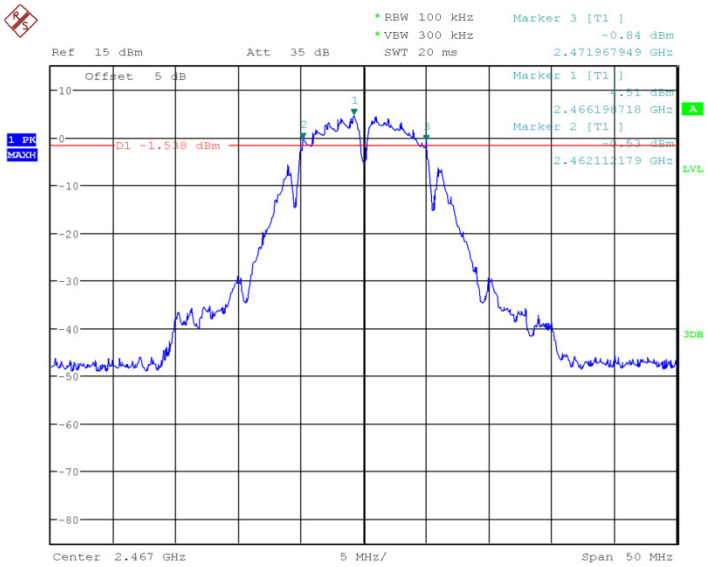

Date: 6.APR.2017 08:11:58

**Fig.17 Occupied 6dB Bandwidth (802.11b, Ch6)**



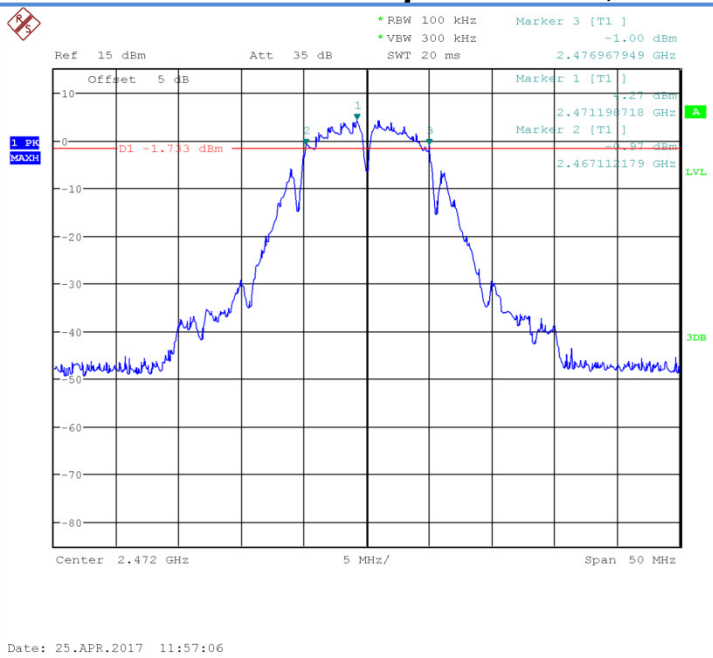

Date: 6.APR.2017 08:12:26

**Fig.18 Occupied 6dB Bandwidth (802.11b, Ch11)**



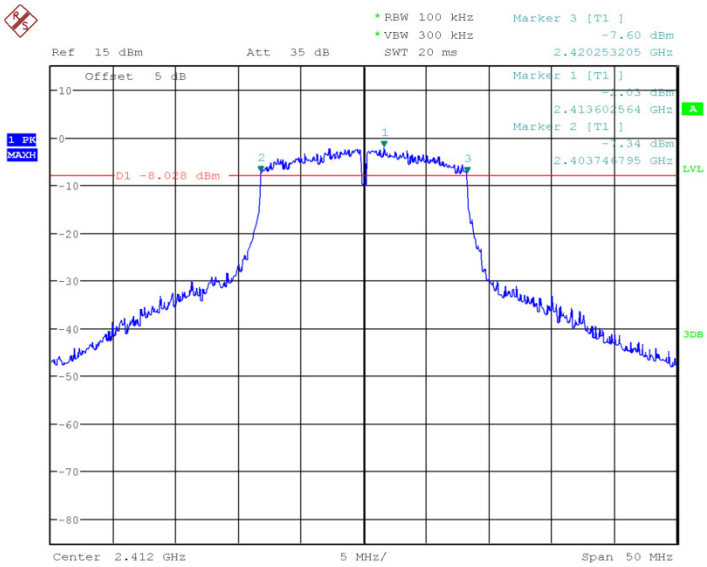

Date: 25.APR.2017 11:56:33

**Fig.19 Occupied 6dB Bandwidth (802.11b, Ch12)**




Date: 25.APR.2017 11:57:06

**Fig.20 Occupied 6dB Bandwidth (802.11b, Ch13)**




Date: 6.APR.2017 08:13:04

**Fig.21 Occupied 6dB Bandwidth (802.11g, Ch1)**

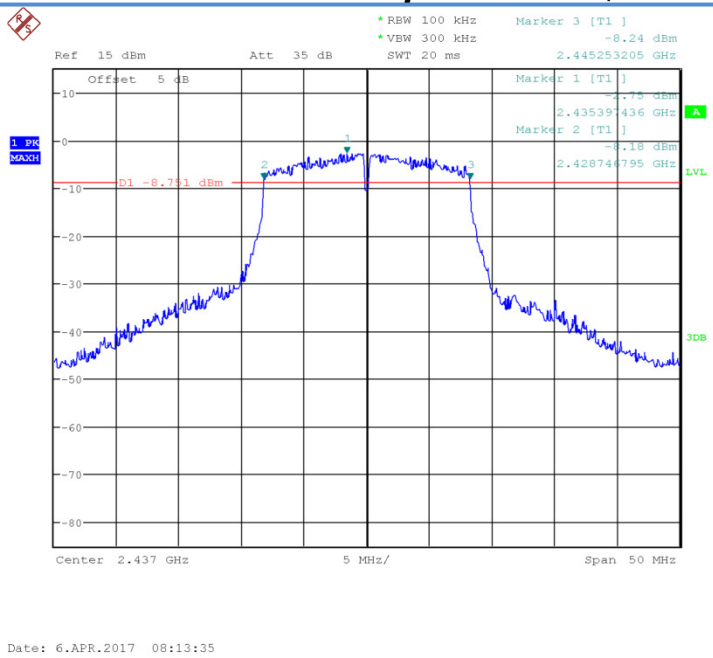



**Fig.22 Occupied 6dB Bandwidth (802.11g, Ch6)**

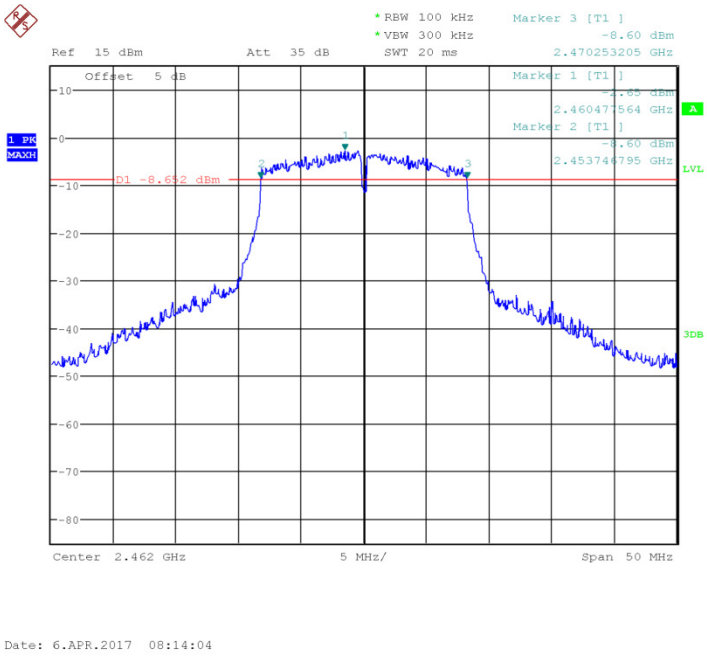
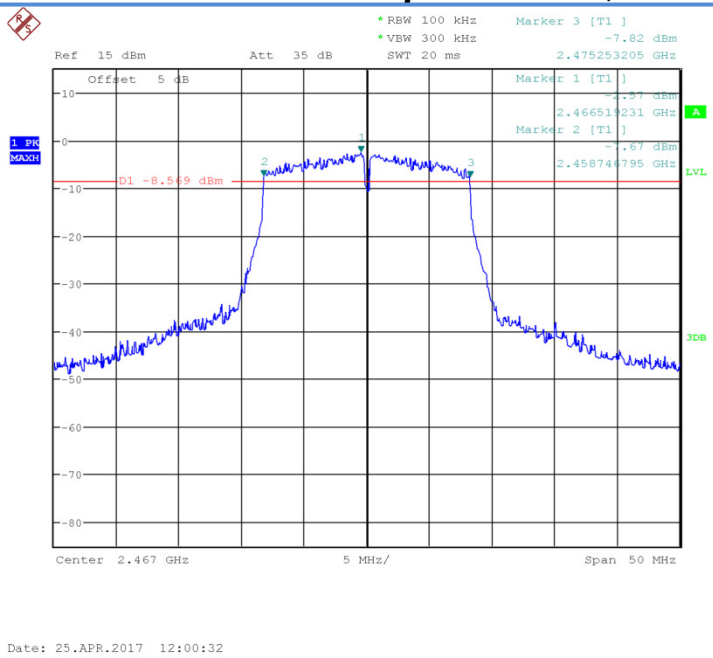
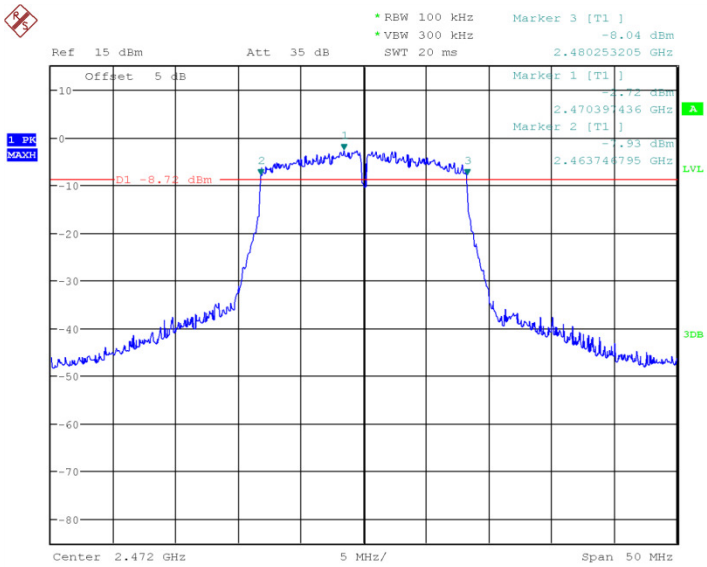



**Fig.23 Occupied 6dB Bandwidth (802.11g, Ch11)**




Date: 25.APR.2017 12:00:32

**Fig.24 Occupied 6dB Bandwidth (802.11g, Ch12)**




Date: 25.APR.2017 12:03:01

**Fig.25 Occupied 6dB Bandwidth (802.11g, Ch13)**

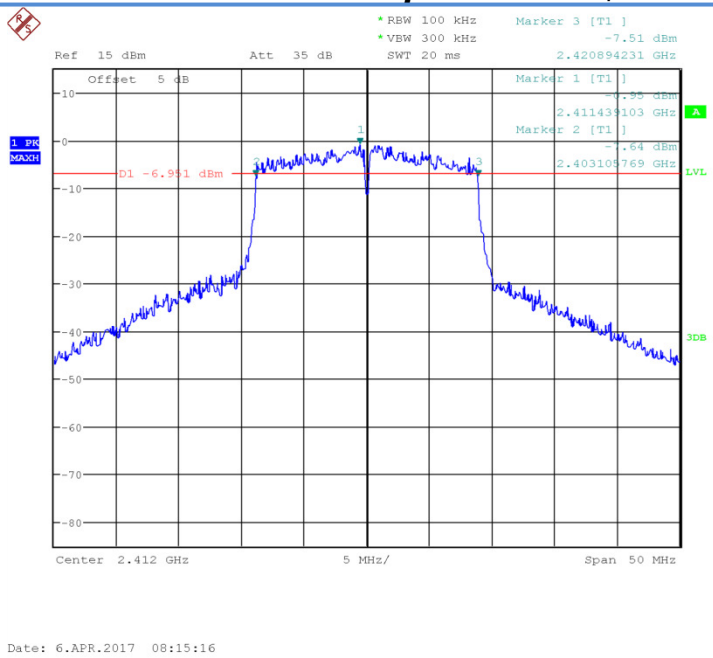



**Fig.26 Occupied 6dB Bandwidth (802.11n-20MHz, Ch1)**

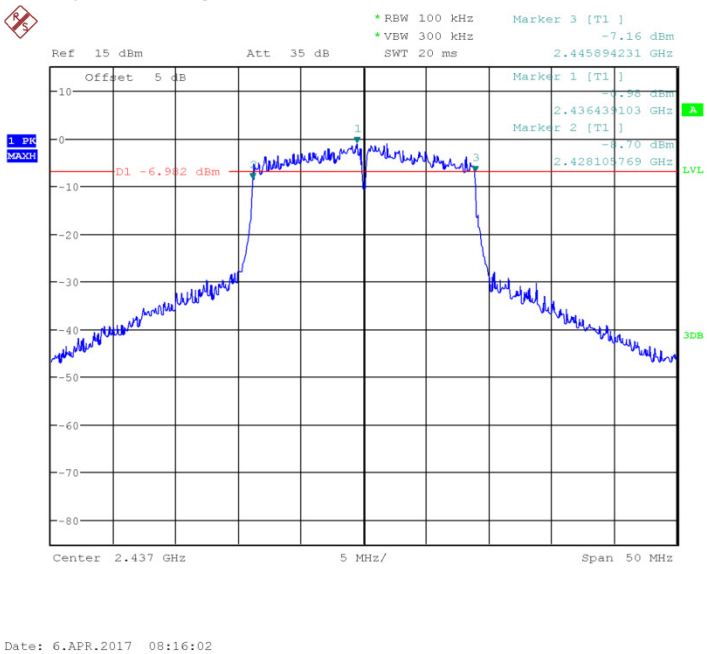
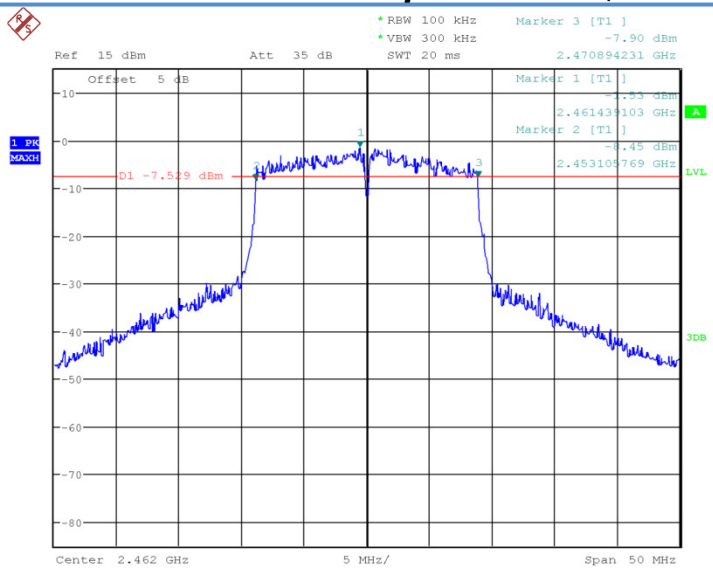
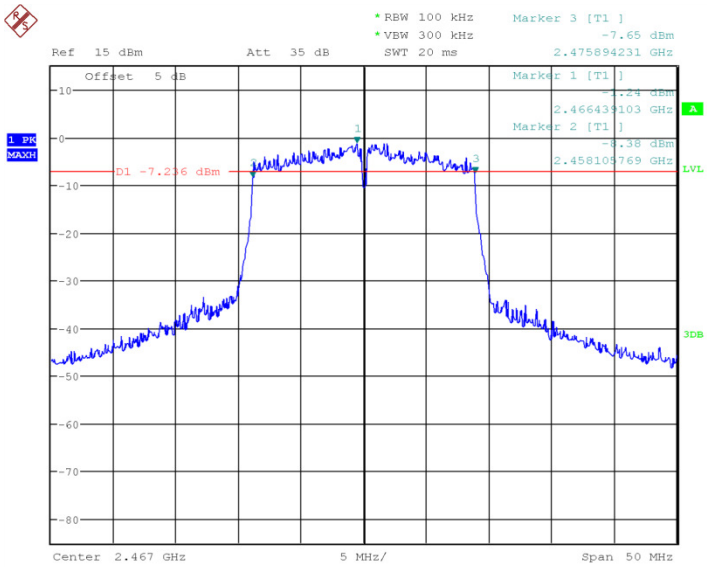



**Fig.27 Occupied 6dB Bandwidth (802.11n-20MHz, Ch6)**




Date: 6.APR.2017 08:16:36

**Fig.28 Occupied 6dB Bandwidth (802.11n-20MHz, Ch11)**




Date: 25.APR.2017 12:06:43

**Fig.29 Occupied 6dB Bandwidth (802.11g, Ch12)**

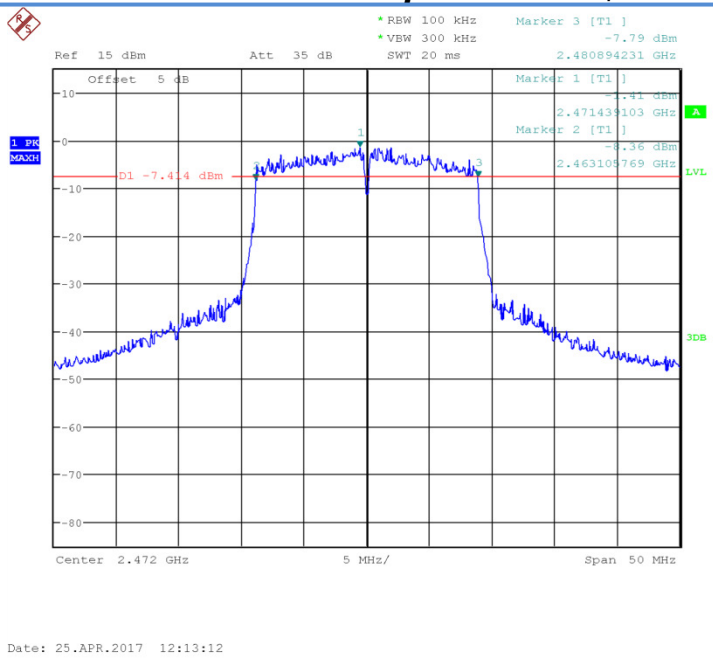



**Fig.30 Occupied 6dB Bandwidth (802.11g, Ch13)**

## 6.4. Band Edges Compliance

### 6.4.1 Measurement Limit:

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

### 6.4.2 Test procedures

The measurement is according to ANSI C63.10 clause11.13.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set instrument center frequency to the frequency of the emission to be measured (must be within 2MHz of the authorized band edge).
4. Set span to 2 MHz.
5. RBW = 100 kHz.
6. VBW ⩾ [3 × RBW].
7. Detector = peak.
8. Sweep time = auto.
9. Trace mode = max hold.
10. Allow sweep to continue until the trace stabilizes

### 6.4.3 Measurement Uncertainty:

| | |
|---|---|
| Measurement Uncertainty | 0.75dB |

### 6.4.4 Measurement results

**802.11b/g mode**

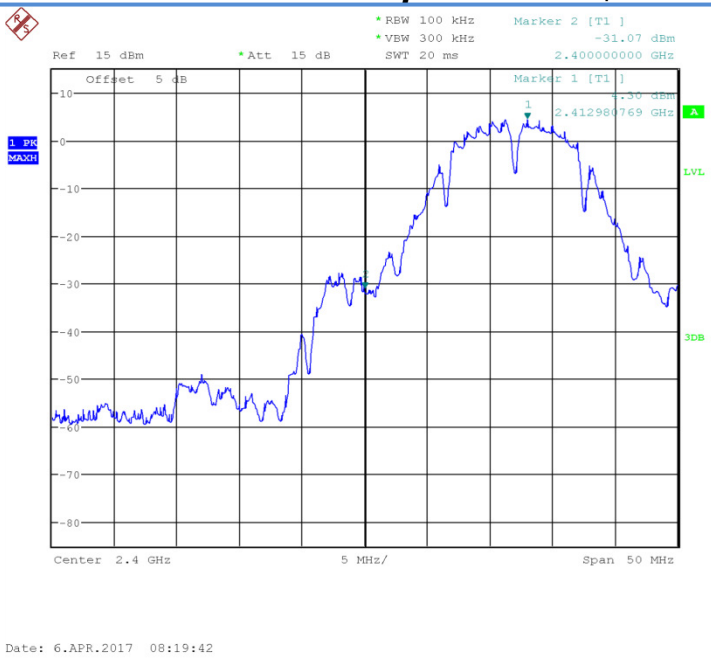
| Mode | Channel | Test Results | Conclusion |
|---|---|---|---|
| 802.11b | 1 | Fig.31 | P |
| | 11 | Fig.32 | P |
| | 12 | Fig.33 | P |
| | 13 | Fig.34 | P |
| 802.11g | 1 | Fig.35 | P |
| | 11 | Fig.36 | P |
| | 12 | Fig.37 | P |
| | 13 | Fig.38 | P |

**802.11n mode**

| Mode | Channel | Test Results | Conclusion |
|---|---|---|---|
| 802.11n(20MHz) | 1 | Fig.39 | P |
| | 11 | Fig.40 | P |
| | 12 | Fig.41 | P |
| | 13 | Fig.42 | P |
| 802.11(40MHz) | 3 | / | / |
| | 11 | / | / |
| | 12 | | |
| | 13 | | |

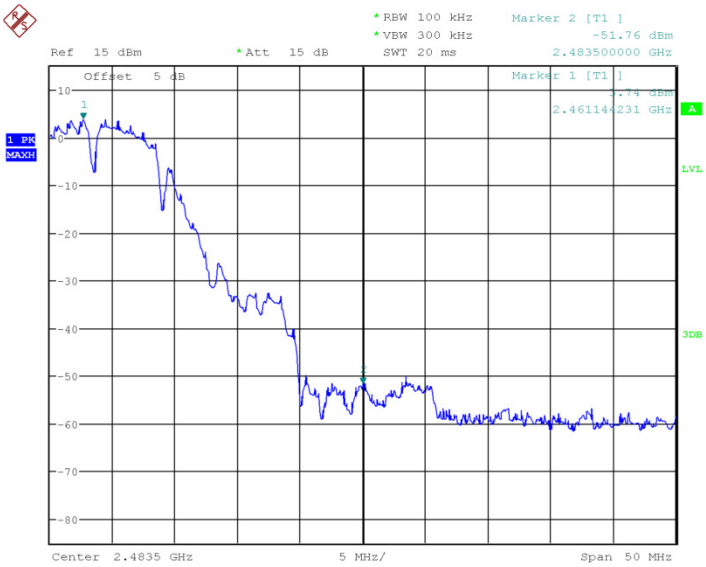
**Conclusion: PASS**

**Test graphs as blew:**




Date: 6.APR.2017 08:19:42

**Fig.31 Band Edges (802.11b, Ch1)**




Date: 6.APR.2017 08:20:04

**Fig.32 Band Edges (802.11b, Ch11)**

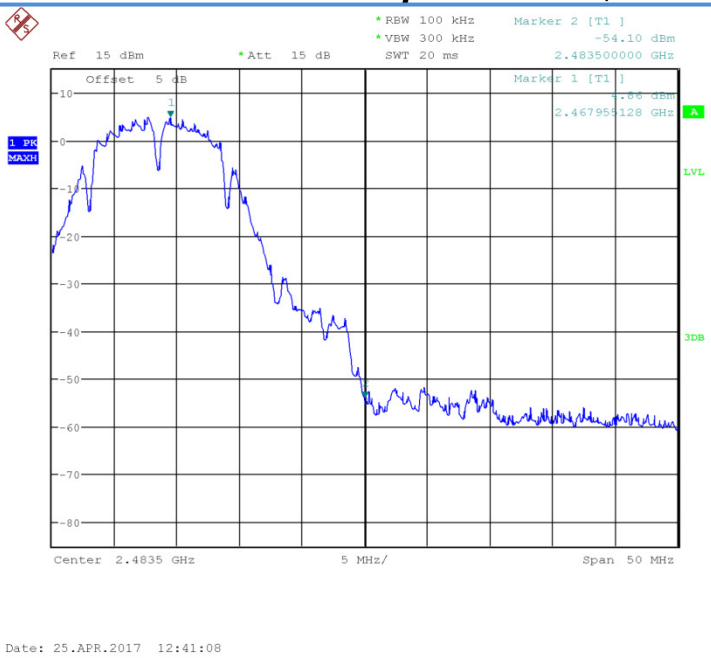



**Fig.33 Band Edges (802.11b, Ch12)**

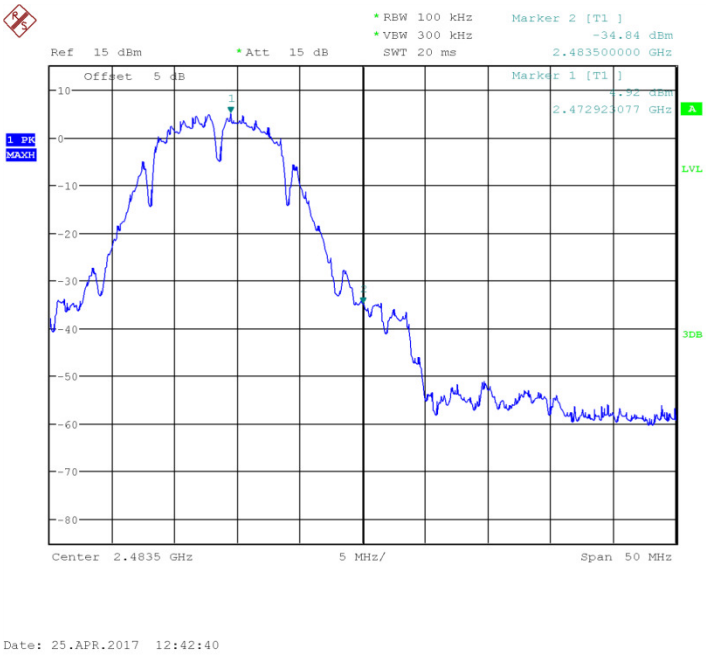
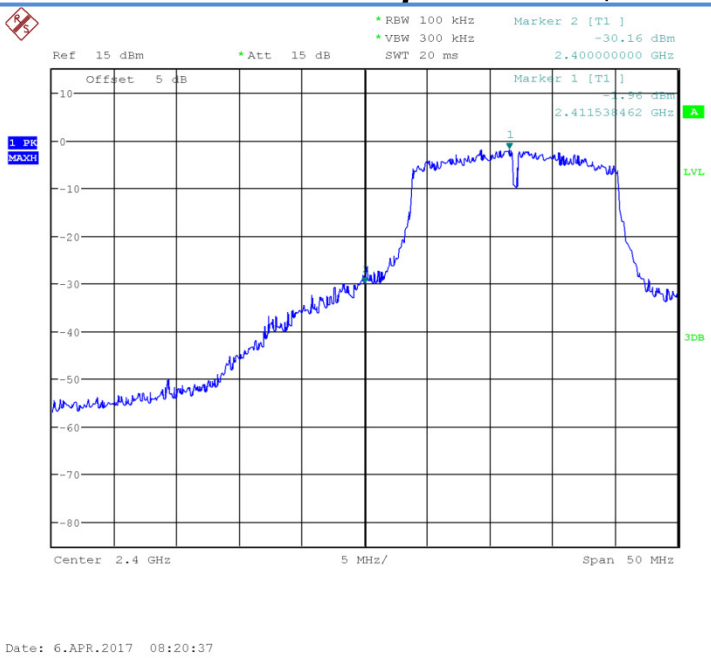
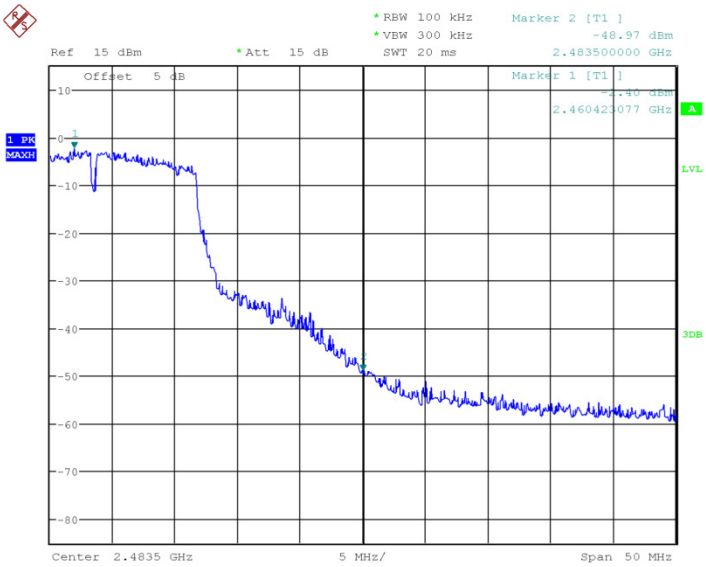



**Fig.34 Band Edges (802.11b, Ch13)**




Date: 6.APR.2017 08:20:37

**Fig.35 Band Edges (802.11g, Ch1)**




Date: 6.APR.2017 08:21:39

**Fig.36 Band Edges (802.11g, Ch11)**

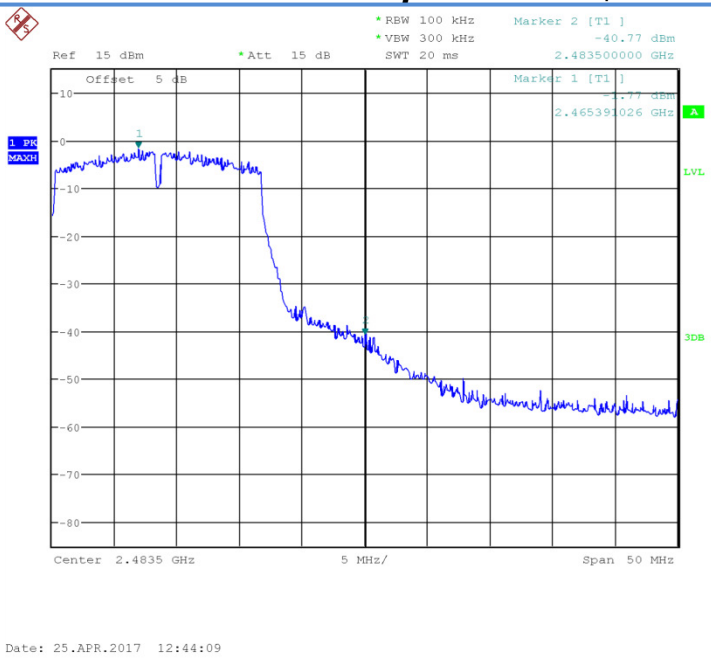



**Fig.37 Band Edges (802.11g, Ch12)**

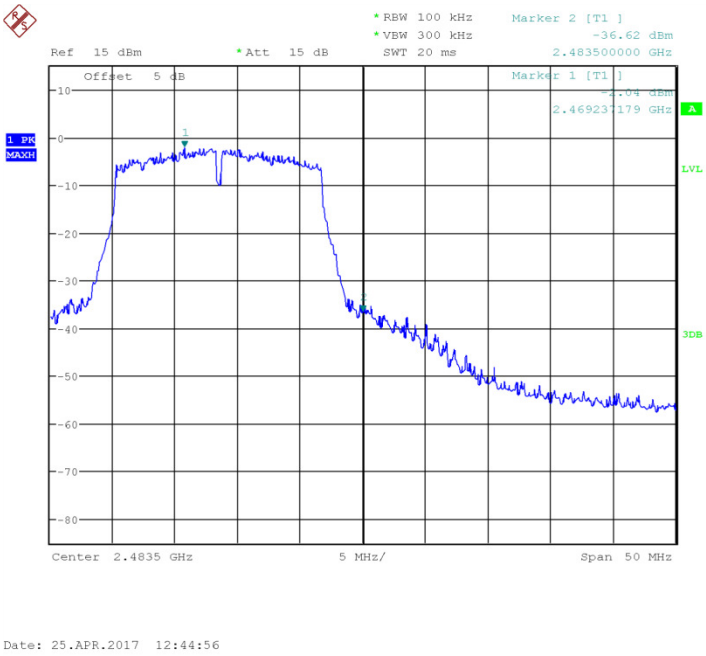
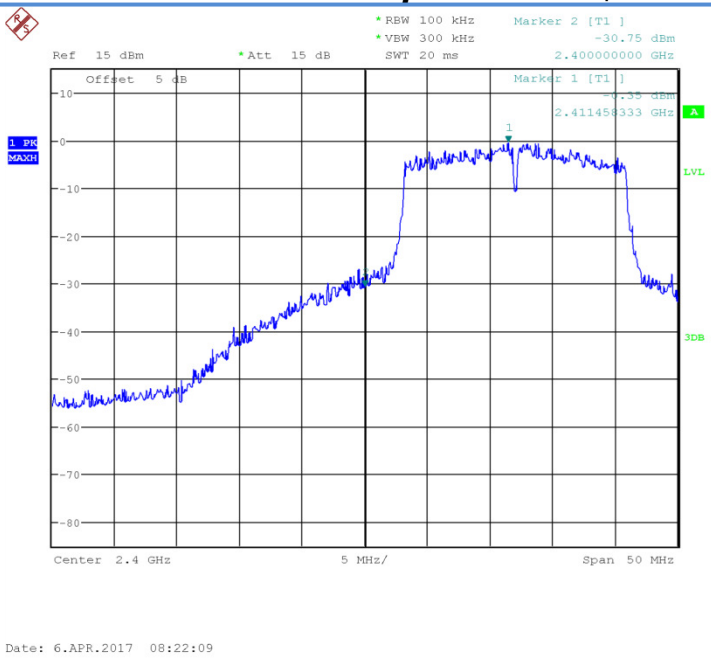
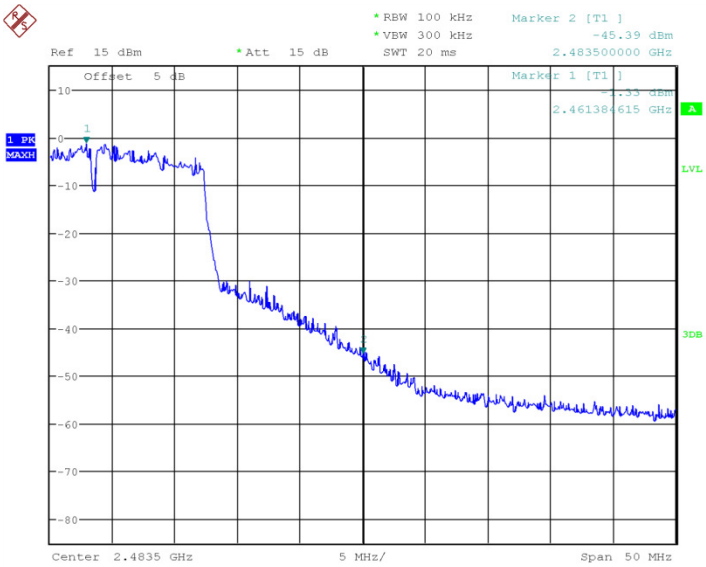



**Fig.38 Band Edges (802.11g, Ch13)**




Date: 6.APR.2017 08:22:09

**Fig.39 Band Edges (802.11n-20MHz, Ch1)**




Date: 6.APR.2017 08:22:40

**Fig.40 Band Edges (802.11n-20MHz, Ch11)**

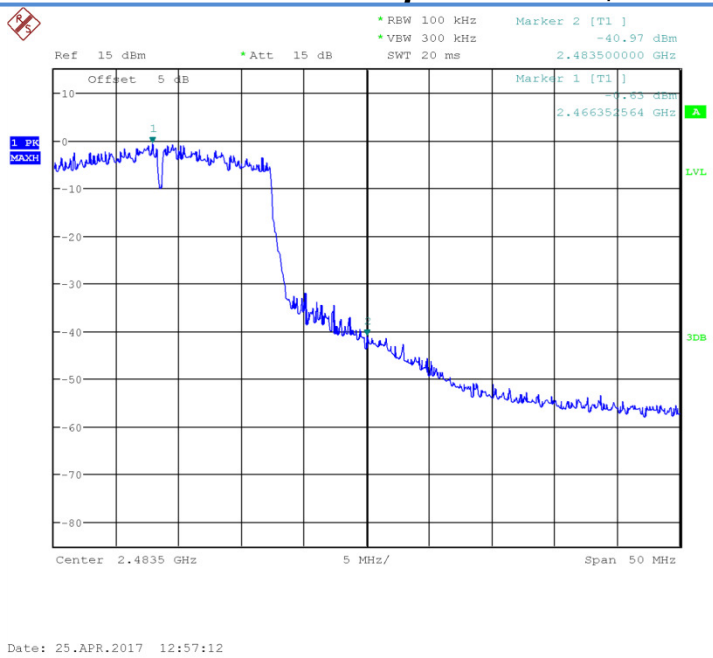



**Fig.41 Band Edges (802.11n-20MHz, Ch12)**

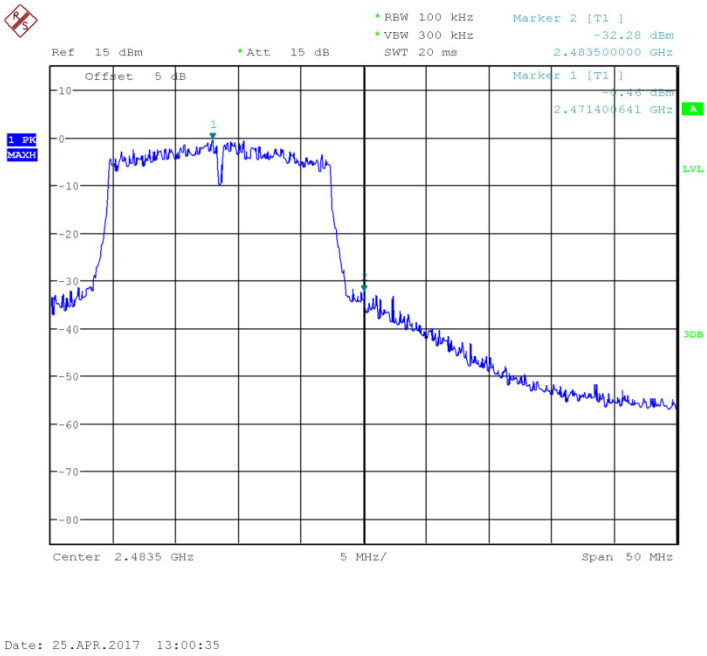



**Fig.42 Band Edges (802.11n-20MHz, Ch13)**

## 6.5. Transmitter Spurious Emission-conducted

### 6.5.1 Measurement Limit:

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

### 6.5.2 Test procedures

This measurement is according to ANSI C63.10 clause 11.11.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.

Reference level measurement

3. Set instrument center frequency to DTS channel center frequency.
4. Set the span to ≥ 1.5 times the DTS bandwidth.
5. Set the RBW = 100 kHz.
6. Set the VBW ≥ [3 × RBW].
7. Detector = peak.
8. Sweep time = auto couple.
9. Trace mode = max hold.
10. Allow trace to fully stabilize.
11. Use the peak marker function to determine the maximum PSD level.

Emission level measurement

12. Set the center frequency and span to encompass frequency range to be measured.
13. Set the RBW = 100 kHz.
14. Set the VBW ≥ [3 × RBW].
15. Detector = peak.
16. Sweep time = auto couple.
17. Trace mode = max hold.
18. Allow trace to fully stabilize.
19. Use the peak marker function to determine the maximum amplitude level.

### 6.5.3 Measurement Uncertainty:

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

### 6.5.4 Measurement Result:

**802.11b/g mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| 802.11b | 1 | 2.412GHz | Fig.43 | P |
| | | 30MHz~26GHz | Fig.44 | P |
| | 6 | 2.437GHz | Fig.45 | P |
| | | 30MHz~26GHz | Fig.46 | P |
| | 11 | 2.462GHz | Fig.47 | P |
| | | 30MHz~26GHz | Fig.48 | P |
| | 12 | 2.462GHz | Fig.49 | P |
| | | 30MHz~26GHz | Fig.50 | P |
| | 13 | 2.462GHz | Fig.51 | P |
| | | 30MHz~26GHz | Fig.52 | P |
| 802.11g | 1 | 2.412GHz | Fig.53 | P |
| | | 30MHz~26GHz | Fig.54 | P |
| | 6 | 2.437GHz | Fig.55 | P |
| | | 30MHz~26GHz | Fig.56 | P |
| | 11 | 2.462GHz | Fig.57 | P |
| | | 30MHz~26GHz | Fig.58 | P |
| | 12 | 2.462GHz | Fig.59 | P |
| | | 30MHz~26GHz | Fig.60 | P |
| | 13 | 2.462GHz | Fig.61 | P |
| | | 30MHz~26GHz | Fig.62 | P |

**802.11n mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11n(20MHz) | 1 | 2.412GHz | Fig.63 | P |
| | | 30MHz~26GHz | Fig.64 | P |
| | 6 | 2.437GHz | Fig.65 | P |
| | | 30MHz~26GHz | Fig.66 | P |

| | | | | |
|---|---|---|---|---|
| | 11 | 2.462GHz | Fig.67 | P |
| | | 30MHz~26GHz | Fig.68 | P |
| | 12 | 2.462GHz | Fig.69 | P |
| | | 30MHz~26GHz | Fig.70 | P |
| | 13 | 2.462GHz | Fig.71 | P |
| | | 30MHz~26GHz | Fig.72 | P |
| 802.11n(40MHz) | 3 | 2.422GHz | / | / |
| | | 30MHz~26GHz | / | / |
| | 6 | 2.437GHz | / | / |
| | | 30MHz~26GHz | / | / |
| | 11 | 2.462GHz | / | / |
| | | 30MHz~26GHz | / | / |

**Conclusion: PASS**

**Test graphs as below:**

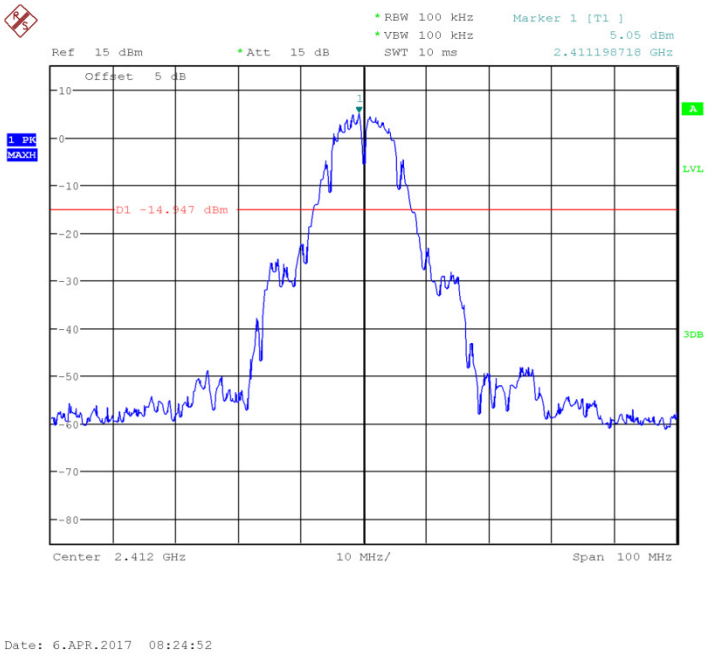



**Fig.43 Conducted Spurious Emission (802.11b, Ch1)**

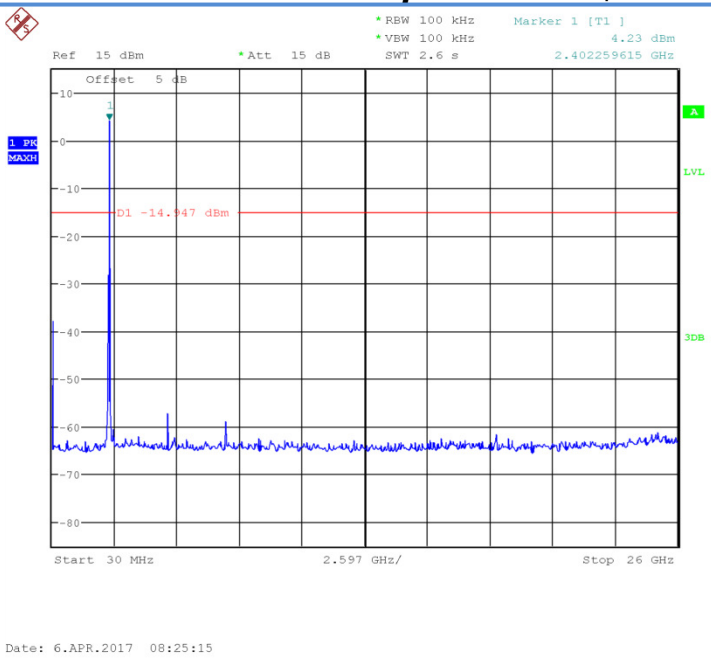



**Fig.44 Conducted Spurious Emission (802.11b, Ch1, 30MHz~26GHz)**

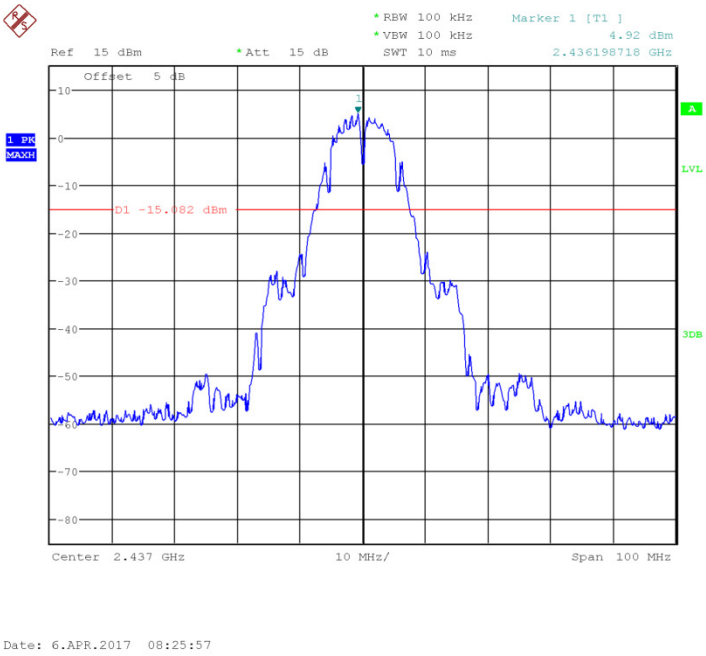



**Fig.45 Conducted Spurious Emission (802.11b, Ch6)**

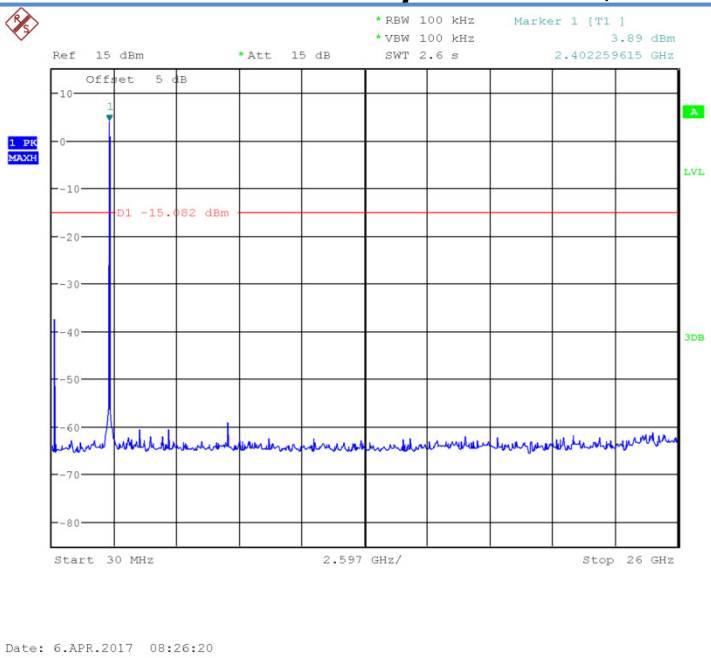



**Fig.46 Conducted Spurious Emission (802.11b, Ch6, 30MHz~26GHz)**

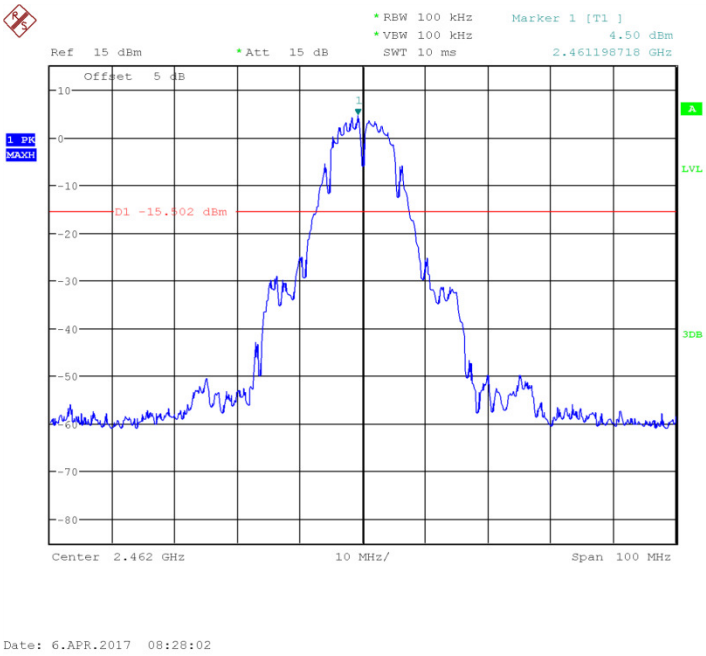



**Fig.47 Conducted Spurious Emission (802.11b, Ch11)**

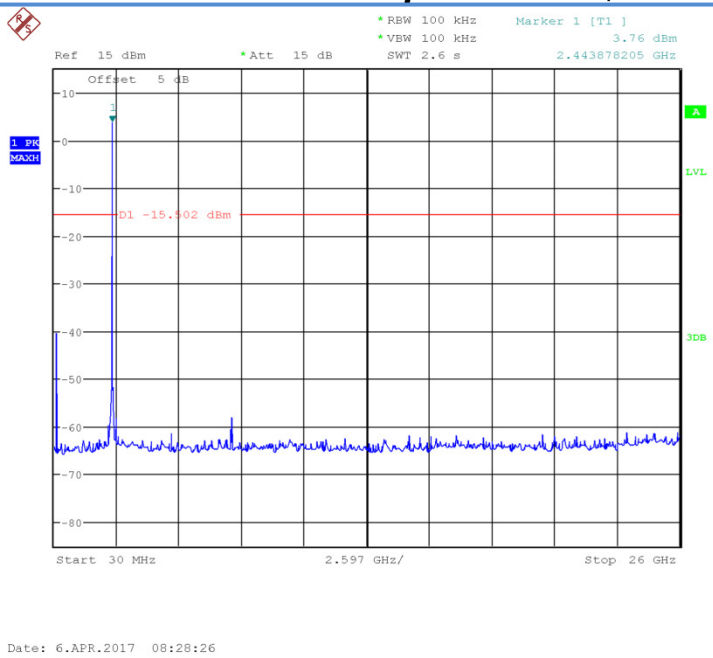



**Fig.48 Conducted Spurious Emission (802.11b, Ch11, 30MHz~26GHz)**

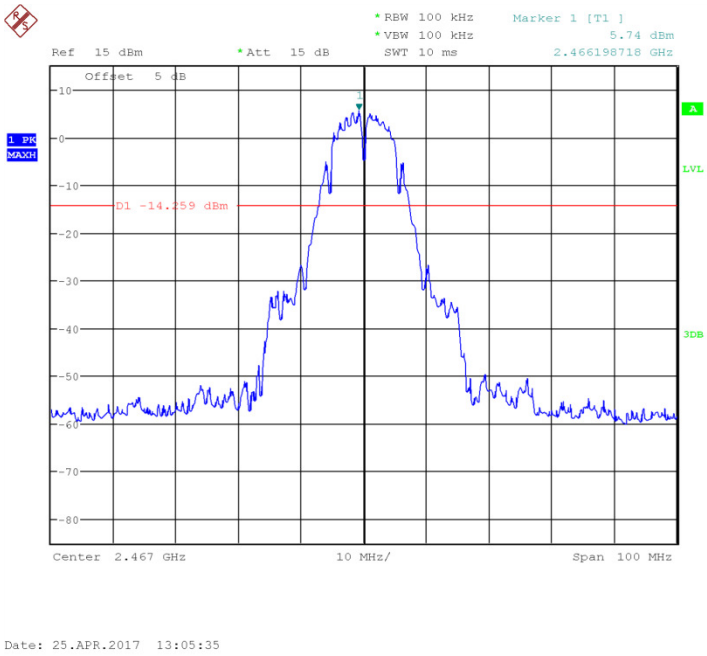



**Fig.49 Conducted Spurious Emission (802.11b, Ch12)**

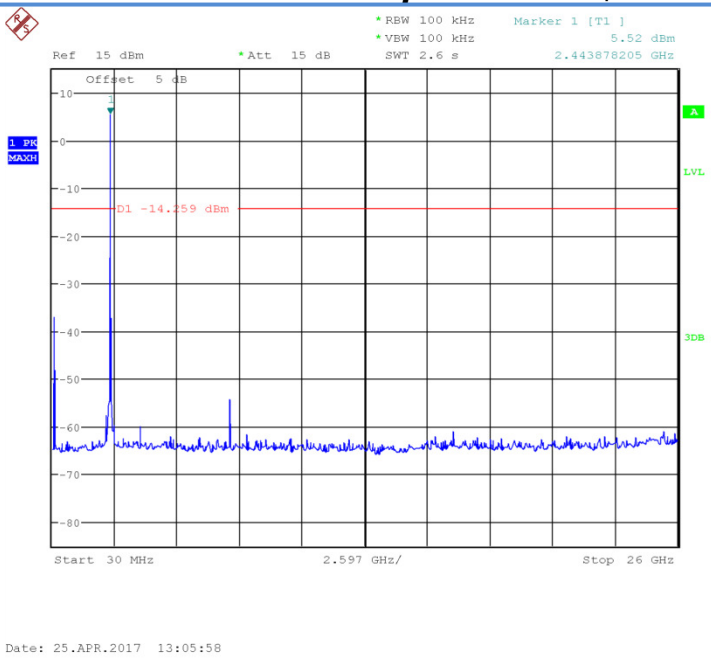



**Fig.50 Conducted Spurious Emission (802.11b, Ch12, 30MHz~26GHz)**

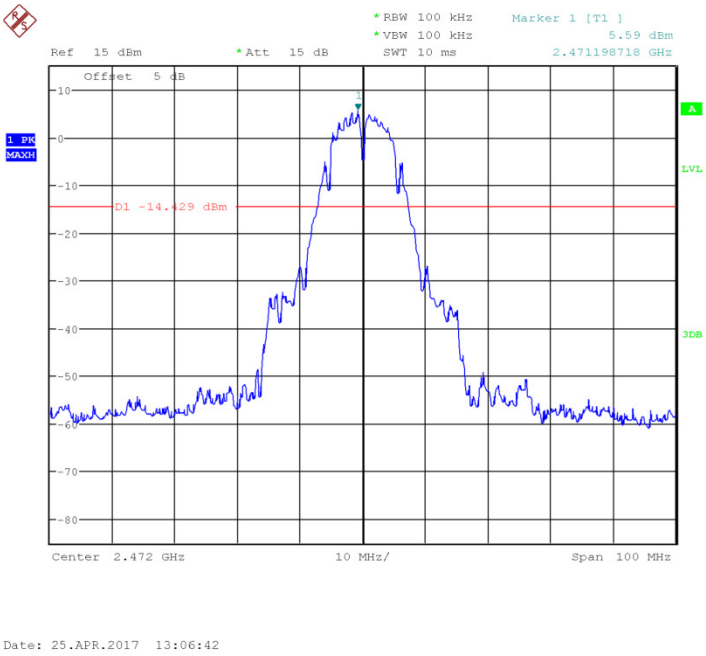



**Fig.51 Conducted Spurious Emission (802.11b, Ch13)**

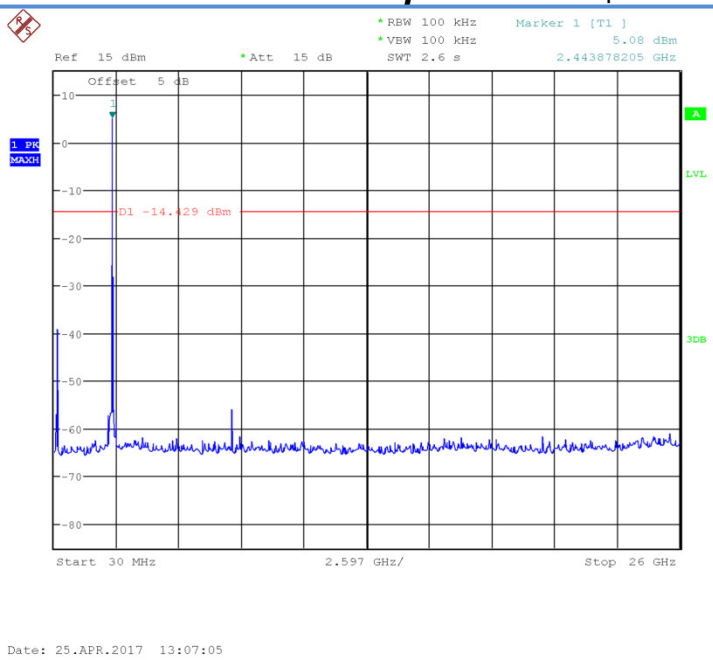



**Fig.52 Conducted Spurious Emission (802.11b, Ch13, 30MHz~26GHz)**

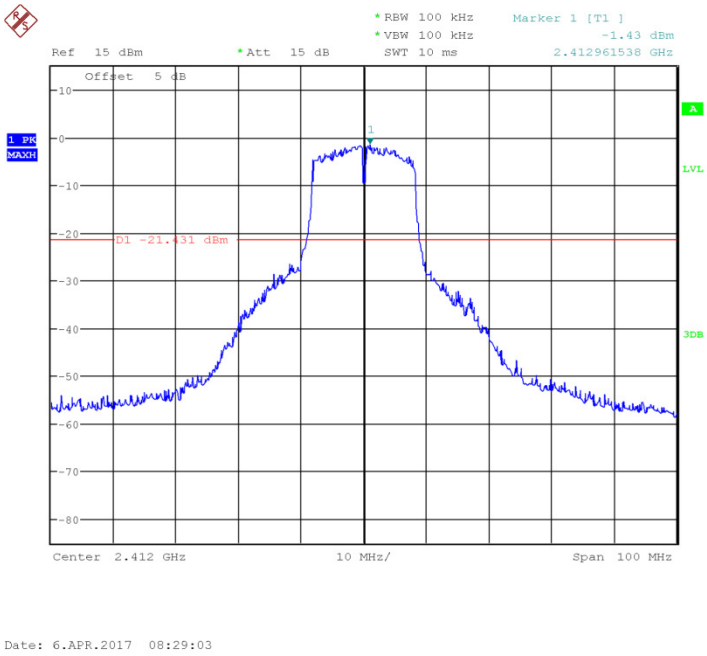



**Fig.53 Conducted Spurious Emission (802.11g, Ch1)**