



TEST REPORT

No. B23N00005-RSE-WLAN 2.4GHz

for

HONOR Device Co., Ltd.

Smart Phone

Model Name: RBN-NX3

with

Hardware Version: HN1RBNM

Software Version: 6.1.0.100 (C900E100R1P1)

FCC ID: 2AYGCRBN-NX3

Issued Date: 2023-02-17

Designation Number: CN1210

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 SAICT.

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No. B23N00005-RSE-WLAN 2.4GHz

REPORT HISTORY

| Report Number | Revision | Description | Issue Date |
|------------------------------|-----------------|--------------------|-------------------|
| B23N00005-RSE-WLAN 2.4GHz | Rev.0 | 1st edition | 2023-02-17 |

Note: the latest revision of the test report supersedes all previous versions.



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1. Summary of Test Report

1.1. Test Items

| | |
|---------------------|------------------------|
| Description | Smart Phone |
| Model Name | RBN-NX3 |
| Applicant's name | HONOR Device Co., Ltd. |
| Manufacturer's Name | HONOR Device Co., Ltd. |

1.2. Test Standards

FCC Part15-2021; ANSI C63.10-2013.

1.3. Test Result

Pass

Please refer to "5.2. Test Results"

1.4. Testing Location

Address: EMC Laboratory, Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China

1.5. Project data

| | |
|---------------------|------------|
| Testing Start Date: | 2023-01-10 |
| Testing End Date: | 2023-02-10 |

1.6. Signature

Huang Kaiyang
(Prepared this test report)

Huang Yuqing
(Reviewed this test report)

Cao Junfei
(Approved this test report)



No. B23N00005-RSE-WLAN 2.4GHz

2. Client Information

2.1. Applicant Information

Company Name: HONOR Device Co., Ltd.

Address: Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China

2.2. Manufacturer Information

Company Name: HONOR Device Co., Ltd.

Address: Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China



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

3.1. About EUT

| | |
|------------------------------|------------------------------|
| Description | Smart Phone |
| Model Name | RBN-NX3 |
| RF Protocol | IEEE 802.11b/g/n-HT20 |
| Operating Frequency | ISM 2412MHz~2462MHz |
| Type of Modulation | DSSS/CCK/OFDM |
| Antenna Type | Integrated antenna |
| Power Supply | 3.87V DC by Battery |
| FCC ID | 2AYGCRBN-NX3 |
| Condition of EUT as received | No abnormality in appearance |

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of Shenzhen Academy of Information and Communications Technology.

3.2. Internal Identification of EUT used during the test

| EUT ID* | SN or IMEI | HW Version | SW Version | Date of Receipt |
|---------|-----------------|------------|-----------------------------|-----------------|
| UT01aa | 861571060013230 | HN1RBNM | 6.1.0.100 (C900E100R1P1) | 2023-01-06 |
| UT03aa | 861571060012547 | HN1RBNM | 6.1.0.100 (C900E100R1P1) | 2023-01-06 |

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

UT05aa is used for radiation test, and UT03aa is used for AC Power line Conducted Emission test.

3.3. Internal Identification of AE used during the test

| AE No. | Description | AE ID* |
|-----------------|------------------------------|--------|
| AE1 | Battery | |
| AE2 | Charger | |
| AE3 | USB Cable | |
| AE4 | Headset | |
| AE1-1 | | |
| Model | HB496590EFW | |
| Manufacturer | Honor Device Co., Ltd.(SCUD) | |
| Capacity | 4900mAh | |
| Nominal Voltage | 3.87 V | |
| AE1-2 | | |
| Model | HB496590EFW-F | |
| Manufacturer | Honor Device Co., Ltd.(SCUD) | |
| Capacity | 4900mAh | |
| Nominal Voltage | 3.87 V | |
| AE1-3 | | |
| Model | HB496590EFW | |



No. B23N00005-RSE-WLAN 2.4GHz

| | |
|-----------------|--|
| Manufacturer | Honor Device Co., Ltd.(NVT) |
| Capacity | 4900mAh |
| Nominal Voltage | 3.87 V |
| AE1-4 | |
| Model | HB496590EFW-F |
| Manufacturer | Honor Device Co., Ltd.(NVT) |
| Capacity | 4900mAh |
| Nominal Voltage | 3.87 V |
| AE2-1 | |
| Model | HN-100225E00 |
| Manufacturer | Honor Device Co., Ltd. (Factory: Salcomp) |
| AE2-2 | |
| Model | HN-100225U00 |
| Manufacturer | Honor Device Co., Ltd. (Factory: Salcomp) |
| AE2-3 | |
| Model | HN-100225B00 |
| Manufacturer | Honor Device Co., Ltd. (Factory: Salcomp) |
| AE2-4 | |
| Model | HN-100225E00 |
| Manufacturer | Honor Device Co., Ltd. (Factory: Huntkey) |
| AE2-5 | |
| Model | HN-100225U00 |
| Manufacturer | Honor Device Co., Ltd. (Factory: Huntkey) |
| AE2-6 | |
| Model | HW-100225E00 |
| Manufacturer | Honor Device Co., Ltd. (Factory: Huntkey) |
| AE2-7 | |
| Model | HW-100225U00 |
| Manufacturer | Honor Device Co., Ltd. (Factory: Huntkey) |
| AE2-8 | |
| Model | HW-100225B00 |
| Manufacturer | Honor Device Co., Ltd. (Factory: Huntkey) |
| AE2-9 | |
| Model | HN-100225B00 |
| Manufacturer | Honor Device Co., Ltd. (Factory: Huntkey) |



AE3-1

Model CUDU01B-HC451 -EH
Manufacturer Fuding Precision Components (Shenzhen) Co., Ltd.

AE3-2

Model AU2-CRO013 HF
Manufacturer Freeport Ji an Electronics Co.,Ltd.

AE3-3

Model L125UC007-CS-H
Manufacturer Luxshare Precision Industry Co.,Ltd.

AE3-4

Model 2120-00001-0
Manufacturer Guangdong Mingji Hi-Tech Electronics Co.,Ltd.

AE3-5

Model RY0002
Manufacturer Guangxi Broad Telecommunication Co.,Ltd.

AE4-1

Model 1293-3283-3.5mm-339
Manufacturer BOLUO COUNTY QUANCHENG ELECTRONIC CO.,LTD.

AE4-2

Model EPAB542-2WH05-DH
Manufacturer FOXCONN INTERCONNECT TECHNOLOGY LIMITED

AE4-3

Model MEND1532B528C00
Manufacturer Jiangxi Lianchuang Hongsheng Electronic Co., LTD.

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

AE: ancillary equipment.

AE2: The circuit boards of AE2-2 and AE2-3 are the same, the circuit boards of AE2-5 and AE2-9 are the same, the circuit boards of AE2-7 and AE2-8 are the same.

3.4. EUT Set-ups

| EUT set-up No. | Combination of EUT and AE | Remarks |
|----------------|-----------------------------|---------|
| Set.1 | EUT+AE1-1+AE2-1+AE3-1+AE4-1 | |
| Set.2 | EUT+AE1-1+AE2-2+AE3-2+AE4-2 | |
| Set.3 | EUT+AE1-1+AE2-4+AE3-3+AE4-3 | |
| Set.4 | EUT+AE1-1+AE2-5+AE3-4+AE4-1 | |
| Set.5 | EUT+AE1-1+AE2-6+AE3-1+AE4-2 | |
| Set.6 | EUT+AE1-1+AE2-7+AE3-2+AE4-3 | |



3.5. General Description

The Equipment under Test (EUT) is a model of Smart Phone with integrated antenna and battery.

It consists of normal options: Battery, Charger, USB Cable and Headset.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.



4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

| Reference | Title | Version |
|------------------|---|----------------|
| FCC Part15 | FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902–928MHz, 2400–2483.5 MHz, and 5725–5850 MHz | 2021 |
| ANSI C63.10 | American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices | 2013 |

5. Test Results

5.1. Testing Environment

Normal Temperature: 15~35°C

Relative Humidity: 20~75%

5.2. Test Results

| No | Test cases | Sub-clause of Part 15C | Verdict |
|----|-------------------------|------------------------|---------|
| 1 | Radiated Emission | 15.247, 15.205, 15.209 | P |
| 2 | AC Power line Conducted | 15.207 | P |

See **ANNEX A** for details.

5.3. Statements

SAICT has evaluated the test cases requested by the applicant/manufacturer as listed in section 5.2 of this report, for the EUT specified in section 3, according to the standards or reference documents listed in section 4.2.

Disclaimer:

- A. After confirmation with the customer, the sample information provided by the customer may affect the validity of the measurement results in this report, and the impact and consequences arising therefrom shall be borne by the customer.
- B. The samples in this report are provided by the customer, and the test results are only applicable to the samples received.



6. Measuring Apparatus Utilized

Radiated test system

| No. | Equipment | Model | Serial Number | Manufacturer | Calibration Due date | Calibration Period |
|-----|-------------------|-----------------------|---------------|-----------------|----------------------|--------------------|
| 1 | Test Receiver | ESR7 | 101676 | Rohde & Schwarz | 2023-11-23 | 1 year |
| 2 | BiLog Antenna | 3142E | 0224831 | ETS-Lindgren | 2024-05-27 | 3 years |
| 3 | Horn Antenna | 3117 | 00066577 | ETS-Lindgren | 2025-04-17 | 3 years |
| 4 | Anechoic Chamber | FACT3-2.0 | 1285 | ETS-Lindgren | 2023-05-29 | 2 years |
| 5 | Spectrum Analyzer | FSV40 | 101192 | Rohde & Schwarz | 2024-01-11 | 1 year |
| 6 | Loop Antenna | HLA6120 | 35779 | TESEQ | 2025-05-10 | 3 years |
| 7 | Horn Antenna | QSH-SL-1 8-26-S-20 | 17013 | Q-par | 2026-01-30 | 3 years |
| 8 | Test Receiver | ESCI | 100702 | Rohde & Schwarz | 2024-01-11 | 1 year |
| 9 | LISN | ENV216 | 102067 | Rohde & Schwarz | 2023-07-14 | 1 year |

Test software

| No. | Equipment | Manufacturer | Version |
|-----|-----------|-----------------|----------|
| 1 | EMC32 | Rohde & Schwarz | 10.50.40 |

EUT is engineering software provided by the customer to control the transmitting signal. The EUT was programmed to be in continuously transmitting mode.

7. Laboratory Environment

Shielded room did not exceed following limits along the EMC testing:

| | |
|--------------------------|--|
| Temperature | Min. = 15 °C, Max. = 35 °C |
| Relative humidity | Min. = 20 %, Max. = 75 % |
| Shielding effectiveness | 0.014MHz-1MHz > 60 dB; 1MHz-18000MHz > 90 dB |
| Electrical insulation | > 2MΩ |
| Ground system resistance | < 4Ω |

Anechoic chamber (FACT3-2.0) did not exceed following limits along the EMC testing:

9.10m×6.10m×5.60m (L×W×H)

| | |
|------------------------------------|--|
| Temperature | Min. = 15 °C, Max. = 35 °C |
| Relative humidity | Min. = 20 %, Max. = 75 % |
| Shielding effectiveness | 0.014MHz-1MHz > 60 dB; 1MHz-18000MHz > 90 dB |
| Electrical insulation | > 2MΩ |
| Ground system resistance | < 4Ω |
| Normalised site attenuation (NSA) | < ±4 dB, 3 m distance, from 30 to 1000 MHz |
| Voltage Standing Wave Ratio (VSWR) | ≤ 6 dB, from 1 to 18 GHz, 3 m distance |
| Uniformity of field strength | Between 0 and 6 dB, from 80 to 6000 MHz |



8. Measurement Uncertainty

| Test Name | Uncertainty ($k=2$) | |
|----------------------------------|--|--------|
| Radiated Emission | $9\text{kHz} \leq f < 30\text{MHz}$ | 1.79dB |
| | $30\text{MHz} \leq f < 1\text{GHz}$ | 4.86dB |
| | $1\text{GHz} \leq f < 18\text{GHz}$ | 4.82dB |
| | $18\text{GHz} \leq f \leq 40\text{GHz}$ | 2.90dB |
| AC Power line Conducted Emission | $150\text{kHz} \leq f \leq 30\text{MHz}$ | 2.62dB |

ANNEX A: Detailed Test Results

Test Configuration

The measurement is made according to ANSI C63.10.

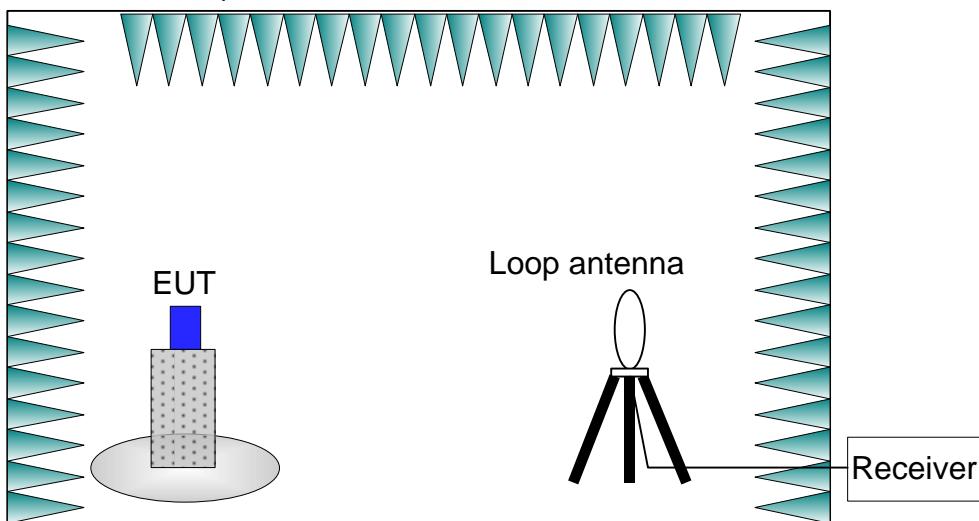
1) Radiated Measurements

Test setup:

9kHz-30MHz:

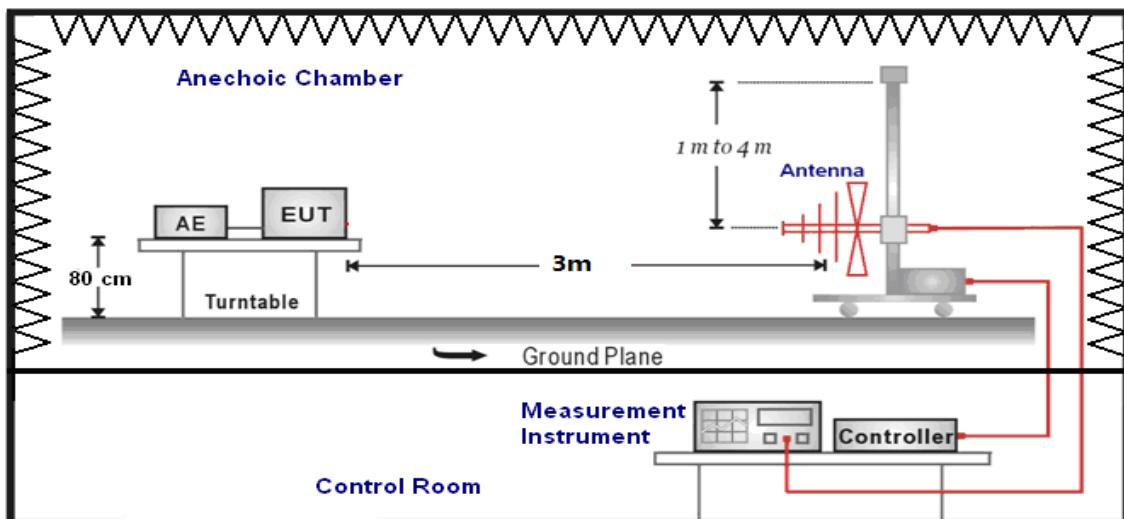
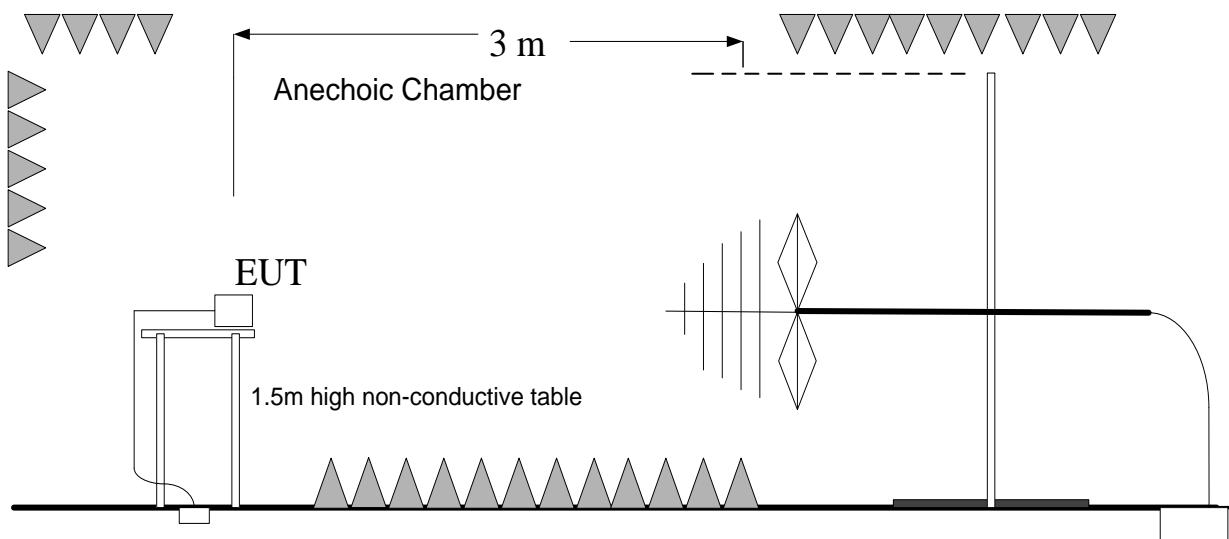
The EUT are measured in a anechoic chamber. The EUT is placed on a non-conductive stand of 80cm high, and at a measurement distance of 3m from the receiving antenna. The center of the receiving loop antenna is 1.0 meter above the ground. The test setup refers to figure below.

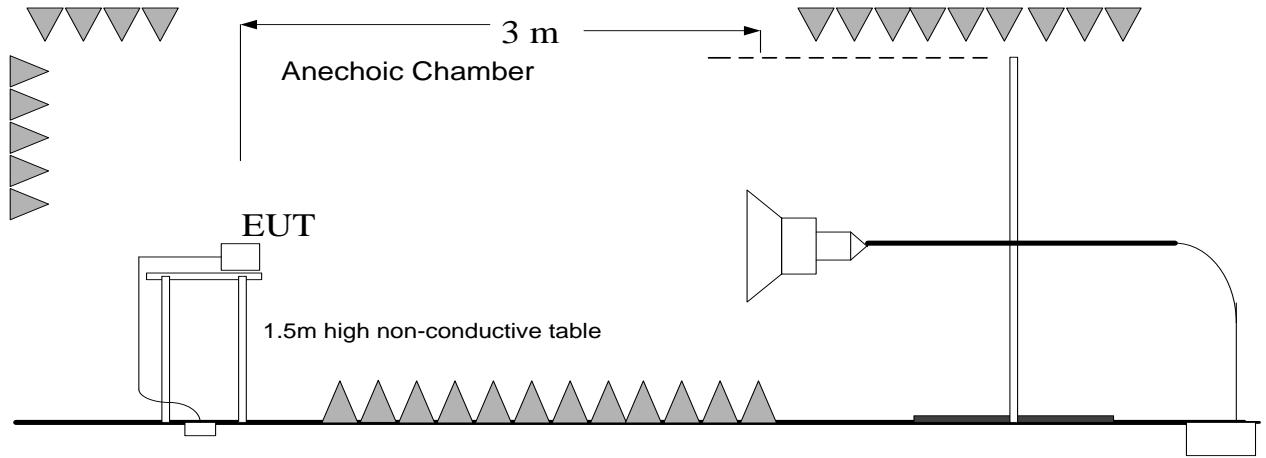
Detected emissions were maximized at each frequency by rotating the EUT and adjusting the receiver antenna polarization.



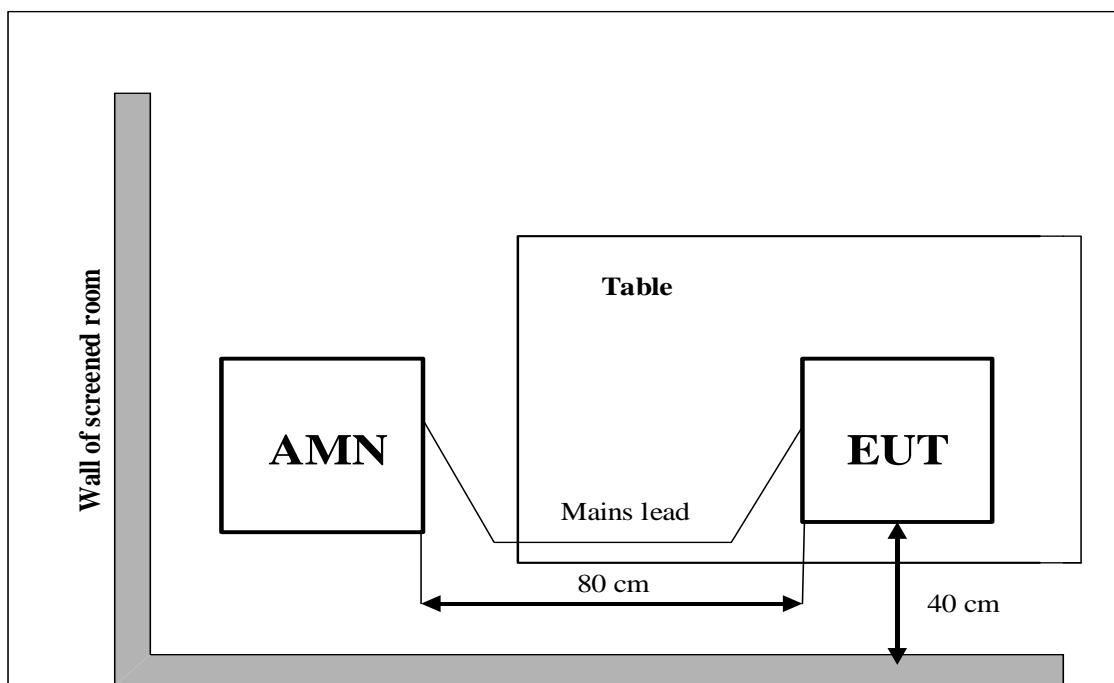
30MHz-26.5GHz:

The EUT are measured in a anechoic chamber. The EUT is placed on a non-conductive stand of 80cm high, and at a measurement distance of 3m from the receiving antenna. The center of the receiving antenna is 1.0 meter to 4.0 meter above the ground. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT and adjusting the receiver antenna polarization.

30MHz-1GHz:

1GHz-3GHz:


3GHz-26.5GHz:

2) AC Power line Conducted Emission Measurement

For WLAN, the EUT is working under test mode. The EUT is commanded to operate at maximum transmitting power.





A.1 Radiated Emission

Method of Measurement: See ANSI C63.10-clause 11.11&11.12.

Measurement Limit:

| Standard | Limit (dBm) |
|--|-------------------------------|
| FCC 47 CFR Part 15.247, 15.205, 15.209 | 20dBm 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(μ V/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 | 120kHz/300kHz | 5 |
| 1000-4000 | 1MHz/3MHz | 15 |
| 4000-18000 | 1MHz/3MHz | 40 |
| 18000-26500 | 1MHz/3MHz | 20 |

Note 1: According to the performance evaluation, the radiated emission margin of EUT is over 20dB in the band from 9kHz to 30MHz. Therefore, the measurement starts from 30MHz to tenth harmonic. The measurement results include the horizontal polarization and vertical polarization measurements. For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

Note 2: All the EUT set-ups in section 3.4 tests conditions are both been validated, and Set.1 is the worst result, showed in this report.

**Measurement Results:**

| Mode | Frequency (MHz) | Frequency Range | Test Results | Conclusion |
|------------------|------------------------|---------------------|--------------|------------|
| 802.11b | 2412(CH1) | 1 GHz ~18 GHz | Fig.1 | P |
| | 2437(CH6) | 1 GHz ~18 GHz | Fig.2 | P |
| | 2462(CH11) | 1 GHz ~18 GHz | Fig.3 | P |
| | Restricted Band (CH1) | 2.38 GHz ~ 2.45 GHz | Fig.4 | P |
| | Restricted Band (CH11) | 2.45 GHz ~ 2.5 GHz | Fig.5 | P |
| 802.11g | 2412(CH1) | 1 GHz ~18 GHz | Fig.6 | P |
| | 2437(CH6) | 1 GHz ~18 GHz | Fig.7 | P |
| | 2462(CH11) | 1 GHz ~18 GHz | Fig.8 | P |
| | Restricted Band (CH1) | 2.38 GHz ~ 2.45 GHz | Fig.9 | P |
| | Restricted Band (CH11) | 2.45 GHz ~ 2.5 GHz | Fig.10 | P |
| 802.11n- HT20 | 2412(CH1) | 1 GHz ~18 GHz | Fig.11 | P |
| | 2437(CH6) | 1 GHz ~18 GHz | Fig.12 | P |
| | 2462(CH11) | 1 GHz ~18 GHz | Fig.13 | P |
| | Restricted Band (CH1) | 2.38 GHz ~ 2.45 GHz | Fig.14 | P |
| | Restricted Band (CH11) | 2.45 GHz ~ 2.5 GHz | Fig.15 | P |
| 802.11n- HT40 | 2412(CH1) | 1 GHz ~18 GHz | Fig.16 | P |
| | 2437(CH3) | 1 GHz ~18 GHz | Fig.17 | P |
| | 2462(CH9) | 1 GHz ~18 GHz | Fig.18 | P |
| | Restricted Band (CH3) | 2.38 GHz ~ 2.45 GHz | Fig.19 | P |
| | Restricted Band (CH9) | 2.45 GHz ~ 2.5 GHz | Fig.20 | P |
| / | All Channels | 9 kHz ~30 MHz | Fig.21 | P |
| | | 30 MHz ~1 GHz | Fig.22 | P |
| | | 18 GHz ~26.5 GHz | Fig.23 | P |

**Worst-Case Result:****802.11b CH11 (1-18GHz)**

| Frequency (MHz) | MaxPeak (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|----------------------|-------------|-----|--------------|
| 10461.000000 | 47.24 | 74.00 | 26.76 | V | 9.0 |
| 11196.428572 | 47.08 | 74.00 | 26.92 | H | 9.7 |
| 12467.142857 | 48.51 | 74.00 | 25.49 | V | 11.3 |
| 13405.714286 | 47.53 | 74.00 | 26.47 | H | 11.5 |
| 14888.142857 | 50.99 | 74.00 | 23.01 | H | 13.0 |
| 16967.571429 | 55.68 | 74.00 | 18.32 | V | 18.3 |

| Frequency (MHz) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|----------------------|-------------|-----|--------------|
| 10461.000000 | 37.00 | 54.00 | 16.00 | V | 9.0 |
| 11196.428572 | 36.58 | 54.00 | 17.42 | H | 9.7 |
| 12467.142857 | 38.11 | 54.00 | 15.89 | V | 11.3 |
| 13405.714286 | 37.63 | 54.00 | 16.37 | H | 11.5 |
| 14888.142857 | 38.54 | 54.00 | 15.46 | H | 13.0 |
| 16967.571429 | 43.12 | 54.00 | 10.88 | V | 18.3 |

802.11g CH6 (1GHz-18GHz)

| Frequency (MHz) | MaxPeak (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|----------------------|-------------|-----|--------------|
| 9767.571429 | 45.35 | 74.00 | 28.65 | V | 7.5 |
| 11640.428572 | 47.96 | 74.00 | 26.04 | H | 9.9 |
| 13202.142857 | 47.80 | 74.00 | 26.20 | H | 10.9 |
| 14880.428572 | 50.65 | 74.00 | 23.35 | H | 13.0 |
| 17112.428571 | 53.74 | 74.00 | 20.26 | V | 18.4 |
| 17913.428571 | 54.90 | 74.00 | 19.10 | H | 18.9 |

| Frequency (MHz) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|----------------------|-------------|-----|--------------|
| 9767.571429 | 38.35 | 54.00 | 15.65 | V | 7.5 |
| 11640.428572 | 37.68 | 54.00 | 16.32 | H | 9.9 |
| 13202.142857 | 37.00 | 54.00 | 16.00 | H | 10.9 |
| 14880.428572 | 40.42 | 54.00 | 13.58 | H | 13.0 |
| 17112.428571 | 43.95 | 54.00 | 10.05 | V | 18.4 |
| 17913.428571 | 42.56 | 54.00 | 11.44 | H | 18.9 |

**802.11n-HT20 CH1 (1GHz-18GHz)**

| Frequency (MHz) | MaxPeak (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|----------------------|-------------|-----|--------------|
| 10414.714286 | 47.26 | 74.00 | 26.74 | V | 9.1 |
| 12249.000000 | 47.76 | 74.00 | 26.24 | H | 10.9 |
| 14879.571429 | 50.26 | 74.00 | 23.74 | V | 13.0 |
| 15877.714286 | 51.94 | 74.00 | 22.06 | H | 14.0 |
| 16977.428571 | 54.76 | 74.00 | 19.24 | V | 18.3 |
| 17979.857143 | 54.97 | 74.00 | 19.03 | H | 19.1 |

| Frequency (MHz) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|----------------------|-------------|-----|--------------|
| 10414.714286 | 36.87 | 54.00 | 17.13 | V | 9.1 |
| 12249.000000 | 37.53 | 54.00 | 16.47 | H | 10.9 |
| 14879.571429 | 40.36 | 54.00 | 13.64 | V | 13.0 |
| 15877.714286 | 41.54 | 54.00 | 12.46 | H | 14.0 |
| 16977.428571 | 43.77 | 54.00 | 10.23 | V | 18.3 |
| 17979.857143 | 42.64 | 54.00 | 11.36 | H | 19.1 |

802.11n-HT40 CH9 (1GHz-18GHz)

| Frequency (MHz) | MaxPeak (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|----------------------|-------------|-----|--------------|
| 10456.285714 | 47.03 | 74.00 | 26.97 | V | 9.0 |
| 11642.571429 | 48.20 | 74.00 | 25.80 | H | 9.9 |
| 13407.000000 | 47.70 | 74.00 | 26.30 | H | 11.5 |
| 15892.714286 | 51.38 | 74.00 | 22.62 | H | 14.0 |
| 16893.857143 | 54.99 | 74.00 | 19.01 | H | 18.1 |
| 17903.142857 | 54.02 | 74.00 | 19.98 | H | 18.8 |

| Frequency (MHz) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|----------------------|-------------|-----|--------------|
| 10456.285714 | 36.91 | 54.00 | 17.09 | V | 9.0 |
| 11642.571429 | 37.69 | 54.00 | 16.31 | H | 9.9 |
| 13407.000000 | 37.62 | 54.00 | 16.38 | H | 11.5 |
| 15892.714286 | 41.20 | 54.00 | 12.80 | H | 14.0 |
| 16893.857143 | 43.75 | 54.00 | 10.25 | H | 18.1 |
| 17903.142857 | 43.17 | 54.00 | 10.83 | H | 18.8 |

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and Antenna Factor, 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} +Cable Loss +Antenna Factor-Gain of the preamplifier.

See below for test graphs.

Conclusion: PASS

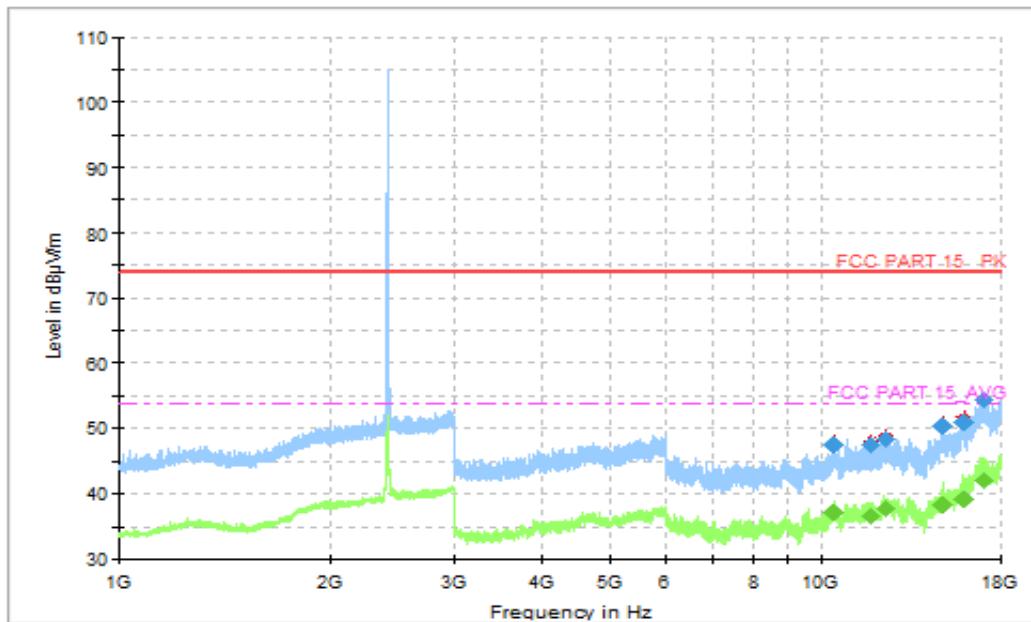


Fig.1 Radiated Spurious Emission (802.11b, CH1, 1GHz-18GHz)

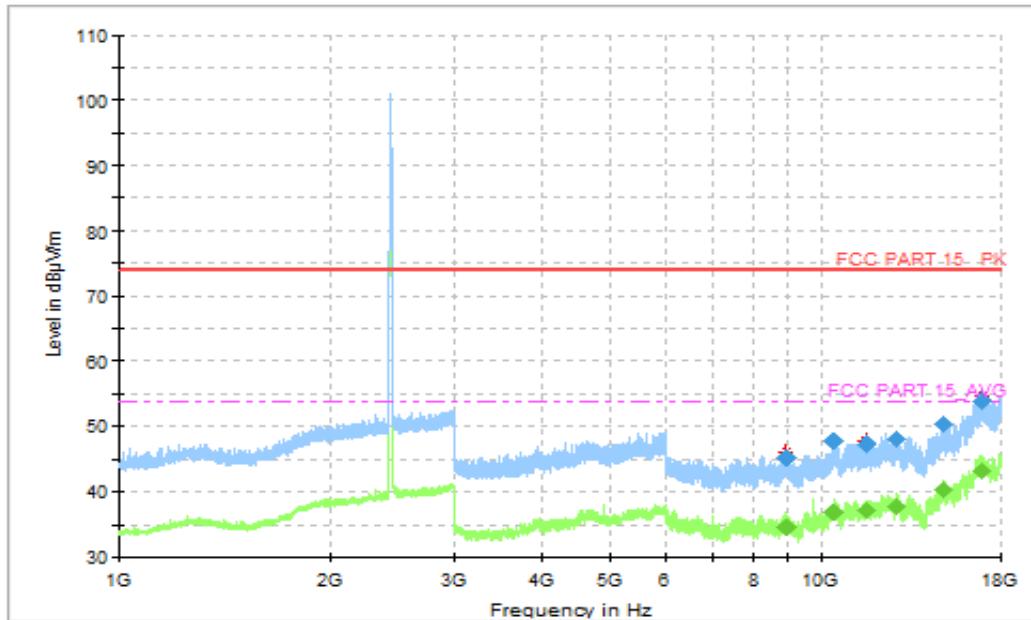


Fig.2 Radiated Spurious Emission (802.11b, CH6, 1GHz-18GHz)

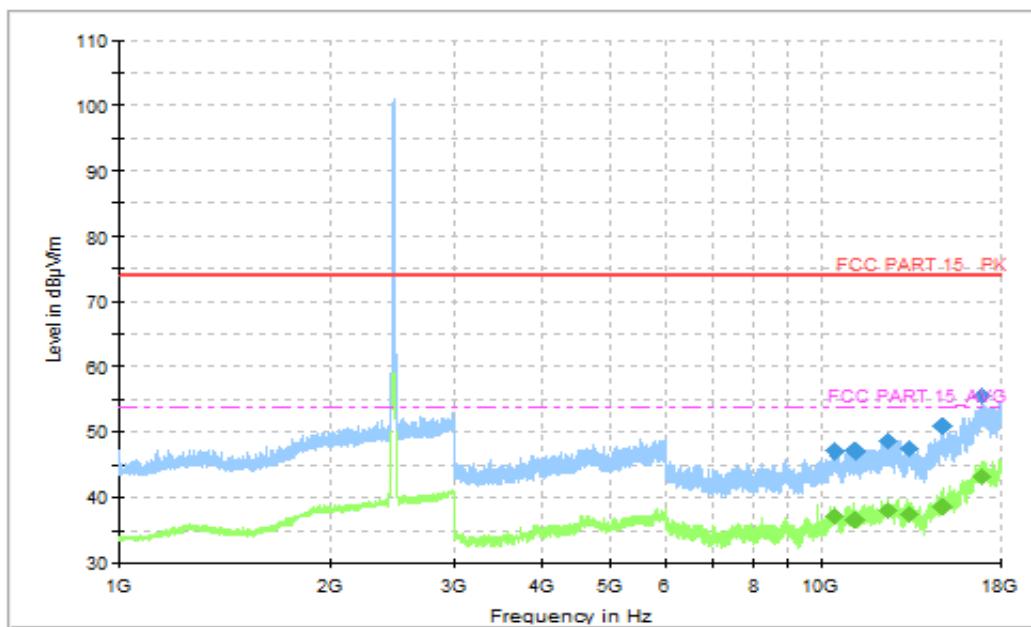


Fig.3 Radiated Spurious Emission (802.11b, CH11, 1GHz-18GHz)

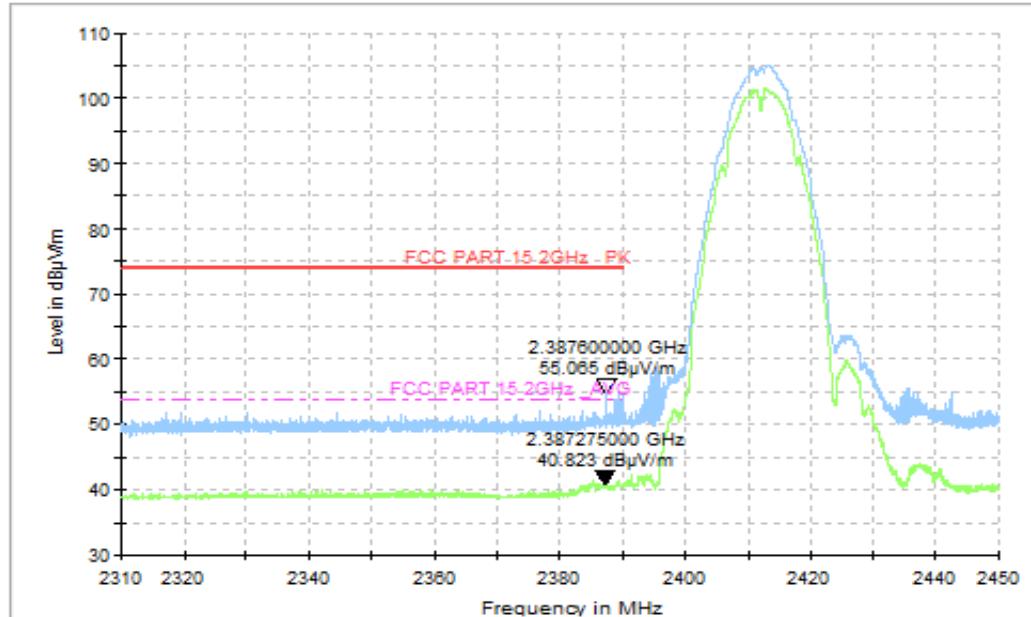


Fig.4 Radiated Restricted Band (802.11b, CH1, 2.38GHz~2.45GHz)

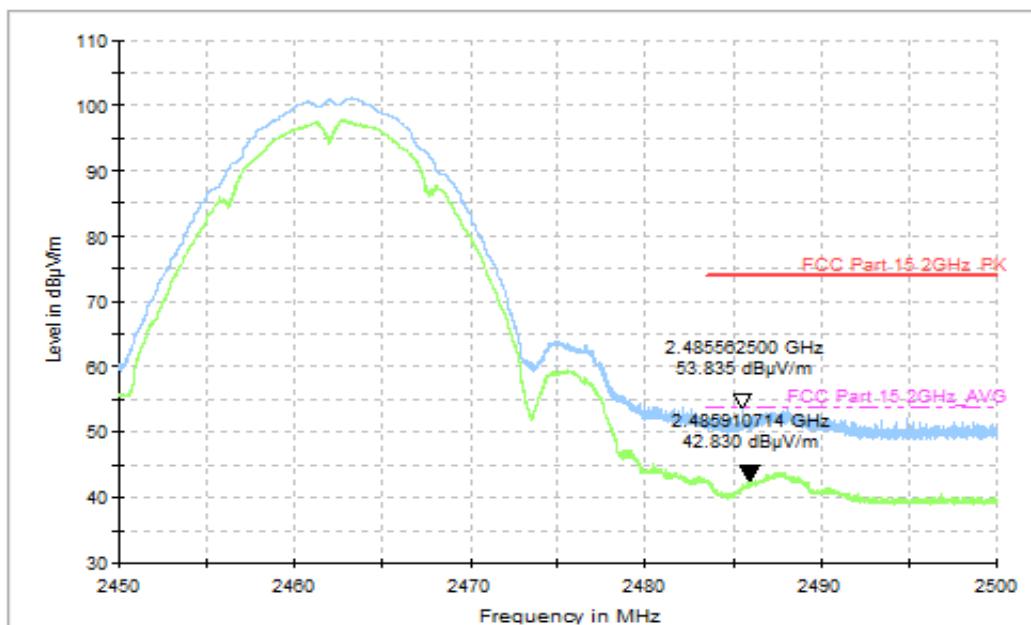


Fig.5 Radiated Restricted Band (802.11b, CH11, 2.45GHz~2.50GHz)

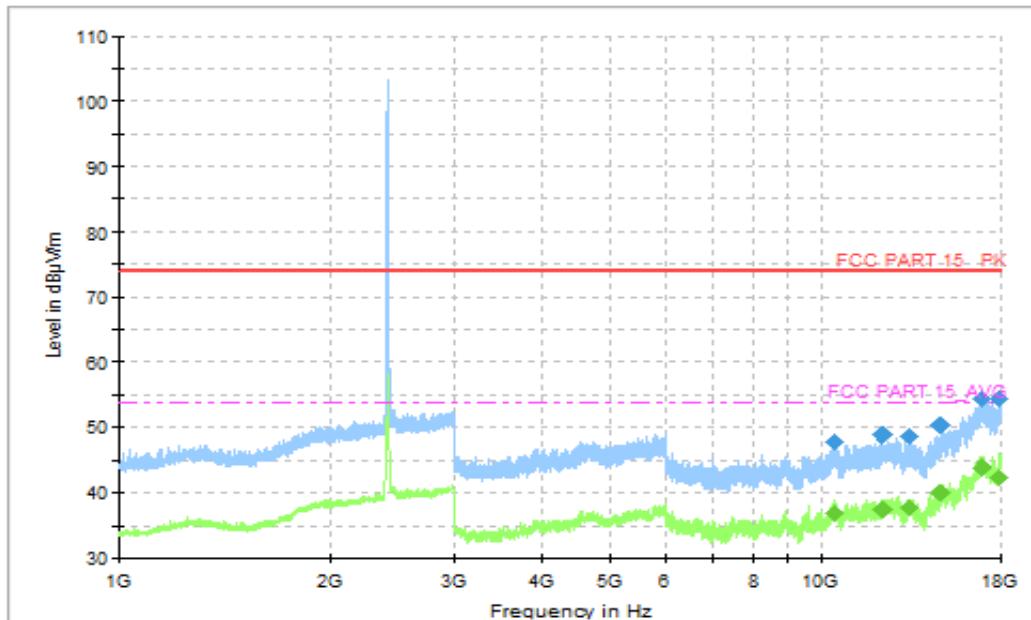


Fig.6 Radiated Spurious Emission (802.11g, CH1, 1GHz-18GHz)

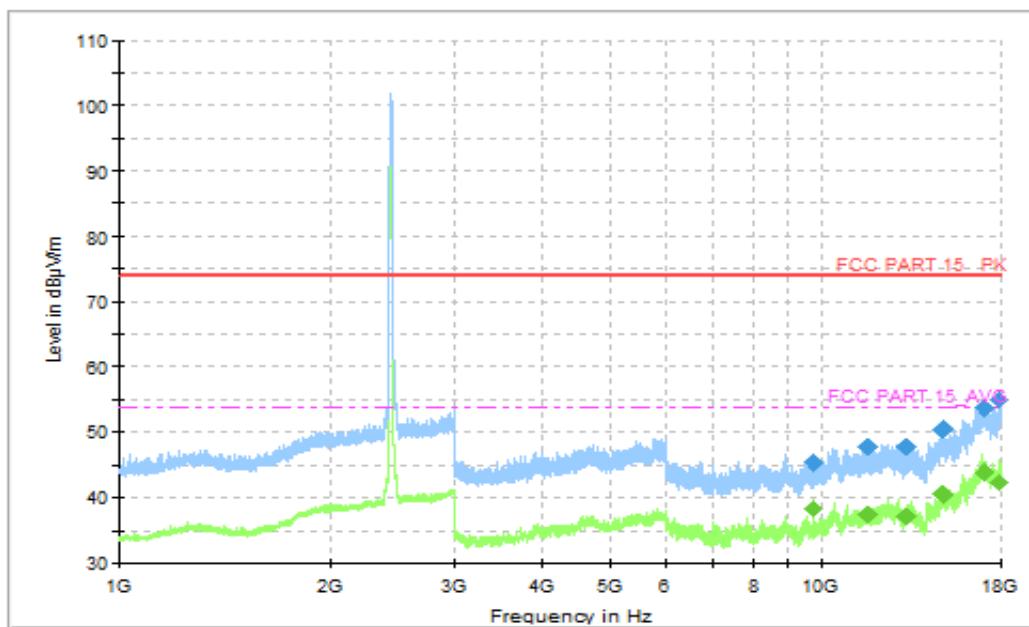


Fig.7 Radiated Spurious Emission (802.11g, CH6, 1GHz-18GHz)

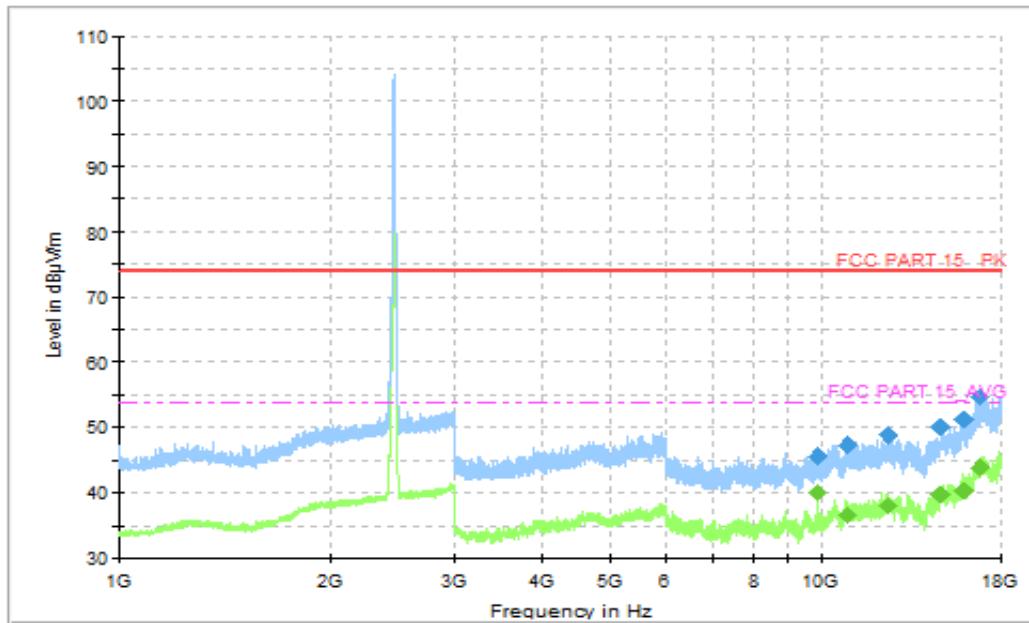


Fig.8 Radiated Spurious Emission (802.11g, CH11, 1GHz-18GHz)

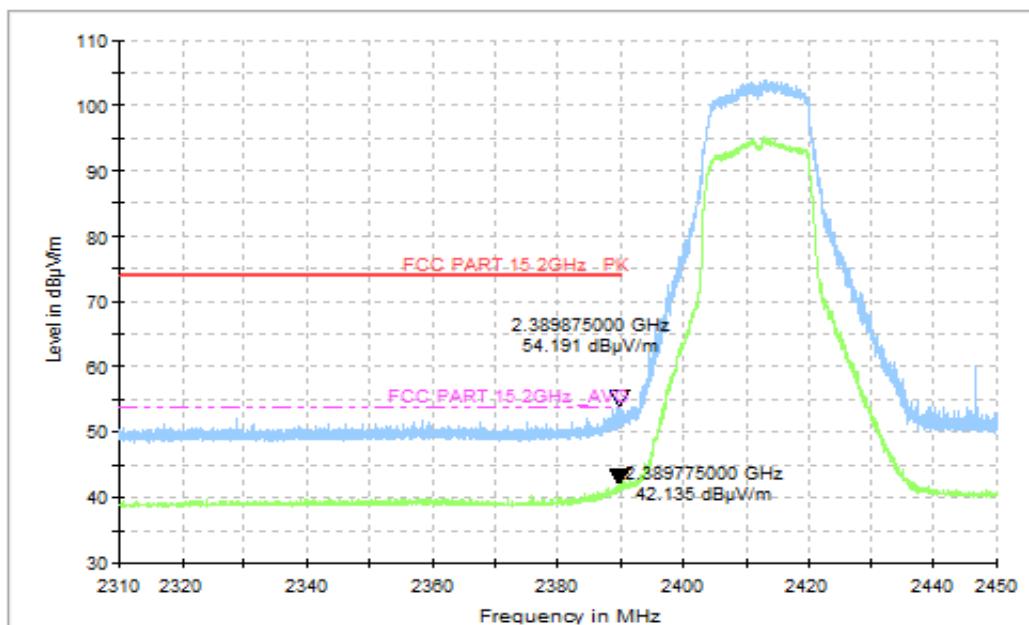


Fig.9 Radiated Restricted Band (802.11g, CH1, 2.38GHz~2.45GHz)

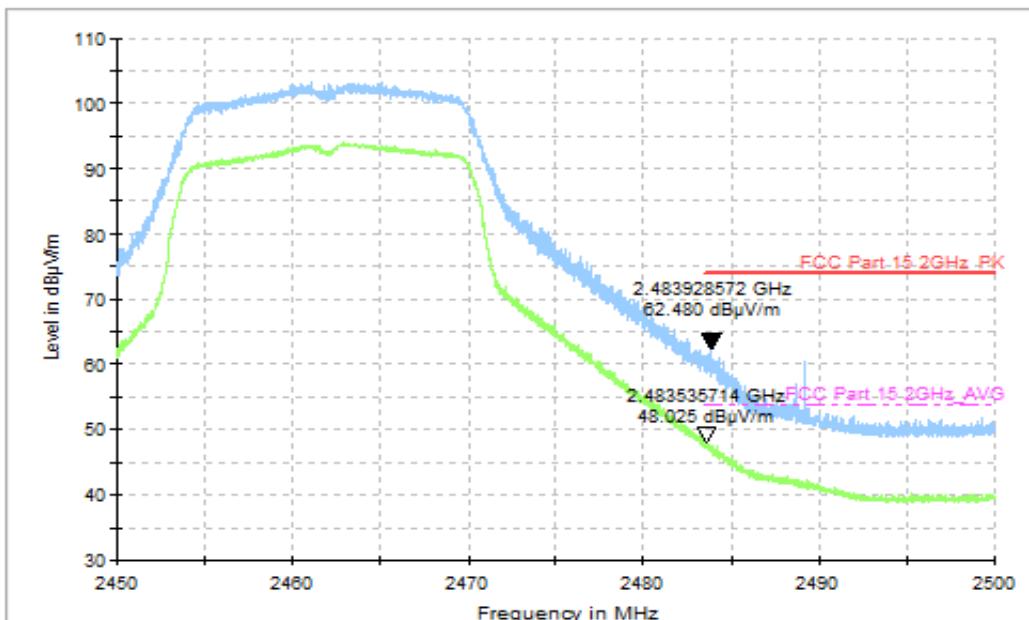


Fig.10 Radiated Restricted Band (802.11g, CH11, 2.45GHz~2.50GHz)

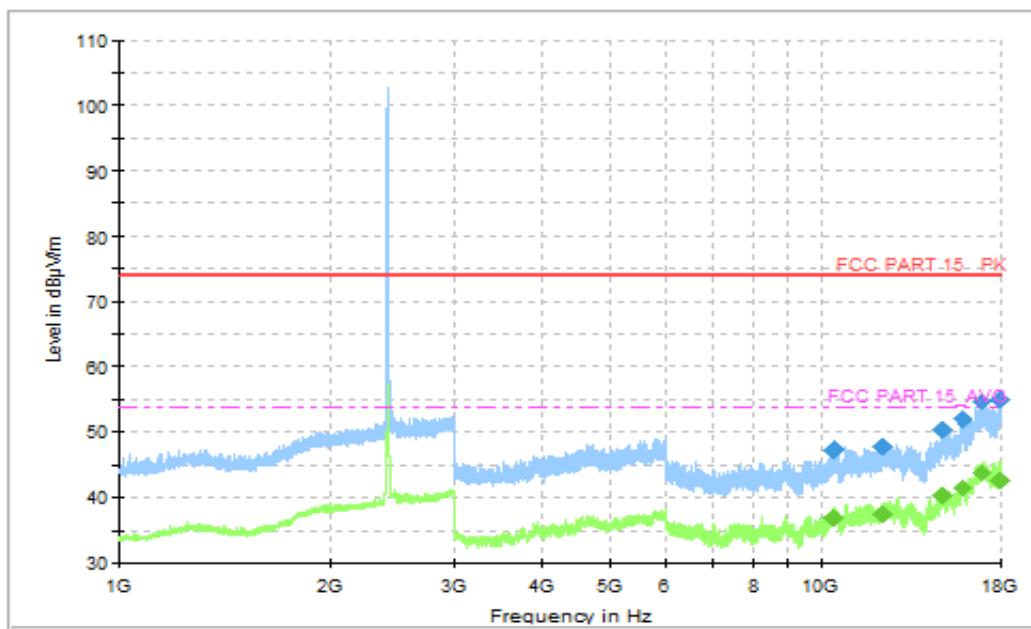


Fig.11 Radiated Spurious Emission (802.11n-HT20, CH1, 1GHz-18GHz)

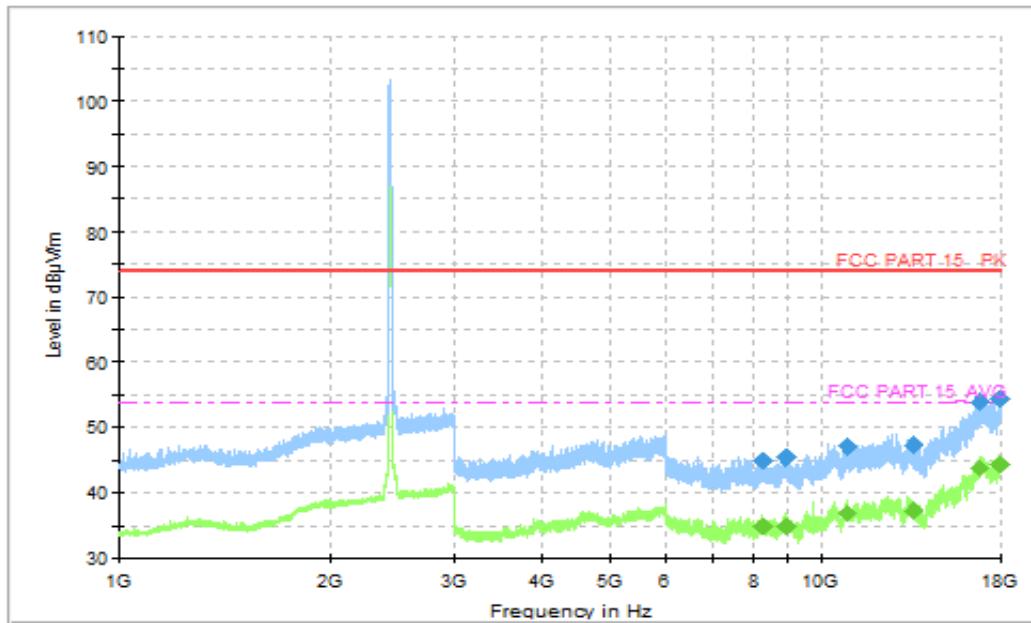


Fig.12 Radiated Spurious Emission (802.11n-HT20, CH6, 1GHz-18GHz)

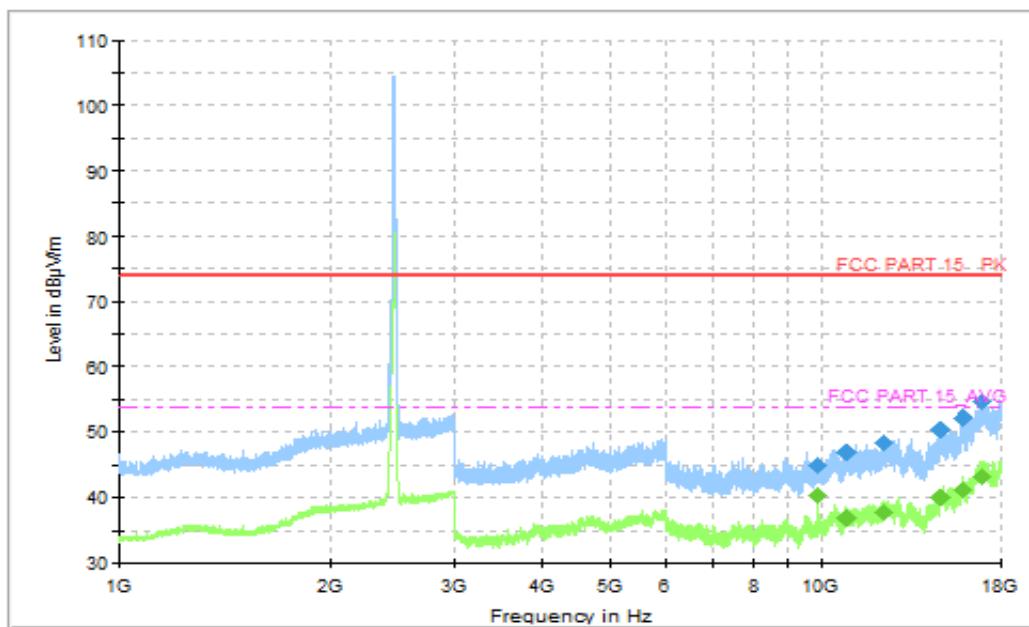


Fig.13 Radiated Spurious Emission (802.11n-HT20, CH11, 1GHz-18GHz)

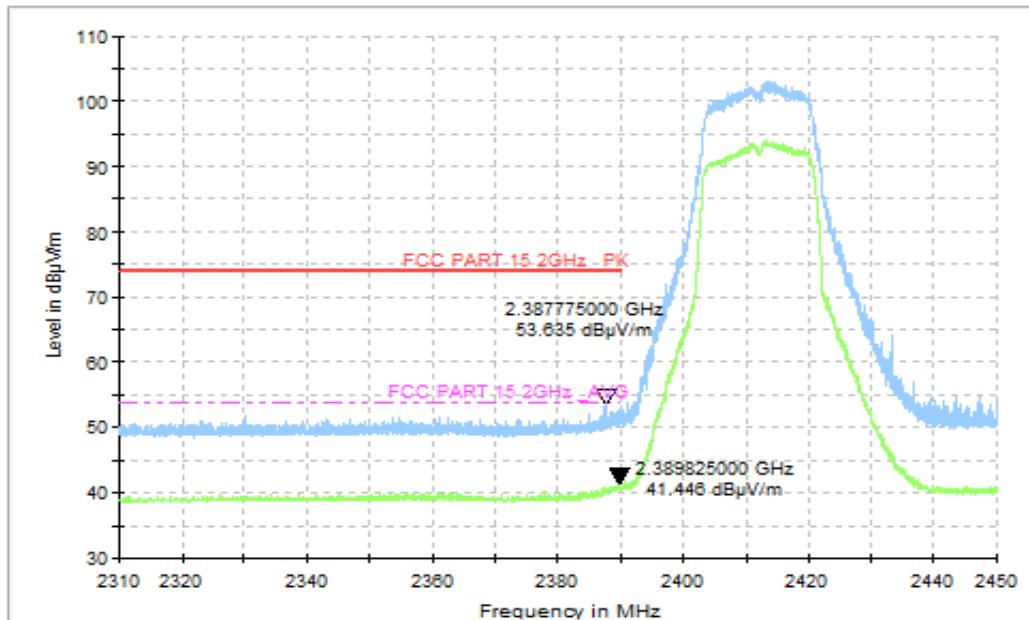


Fig.14 Radiated Restricted Band (802.11n-HT20, CH1, 2.38GHz~2.45GHz)

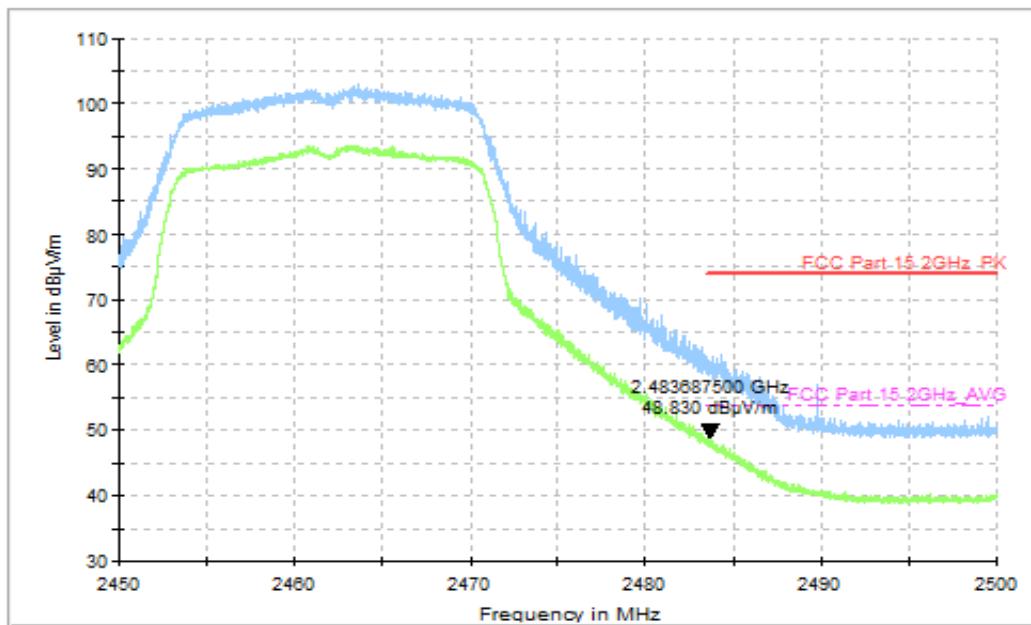


Fig.15 Radiated Spurious Emission (802.11n-HT20, CH11, 2.45GHz~2.50GHz)

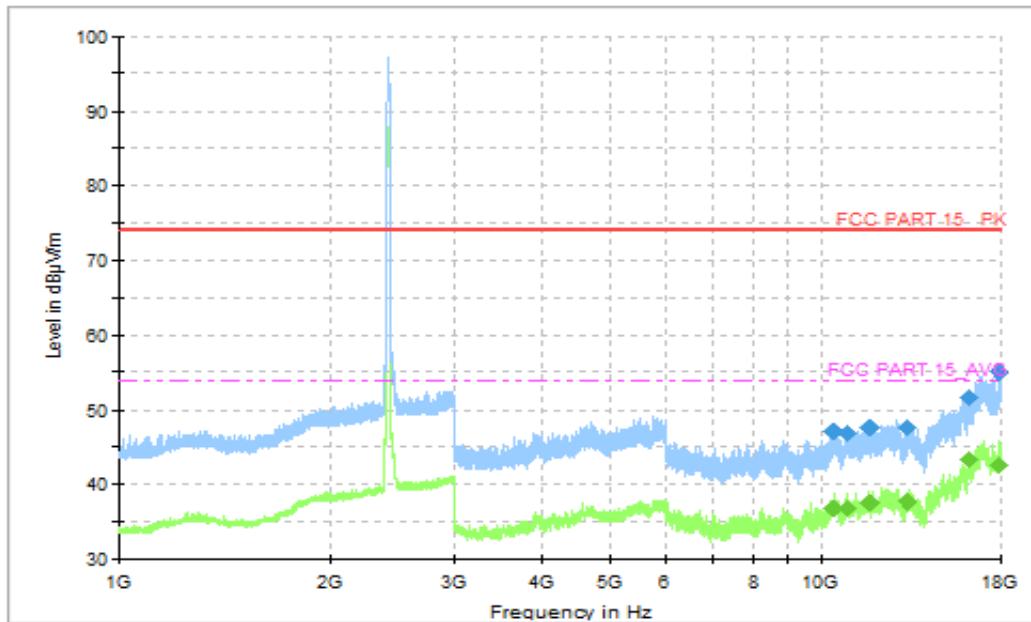


Fig.16 Radiated Spurious Emission (802.11n-HT40, CH3, 1GHz-18GHz)

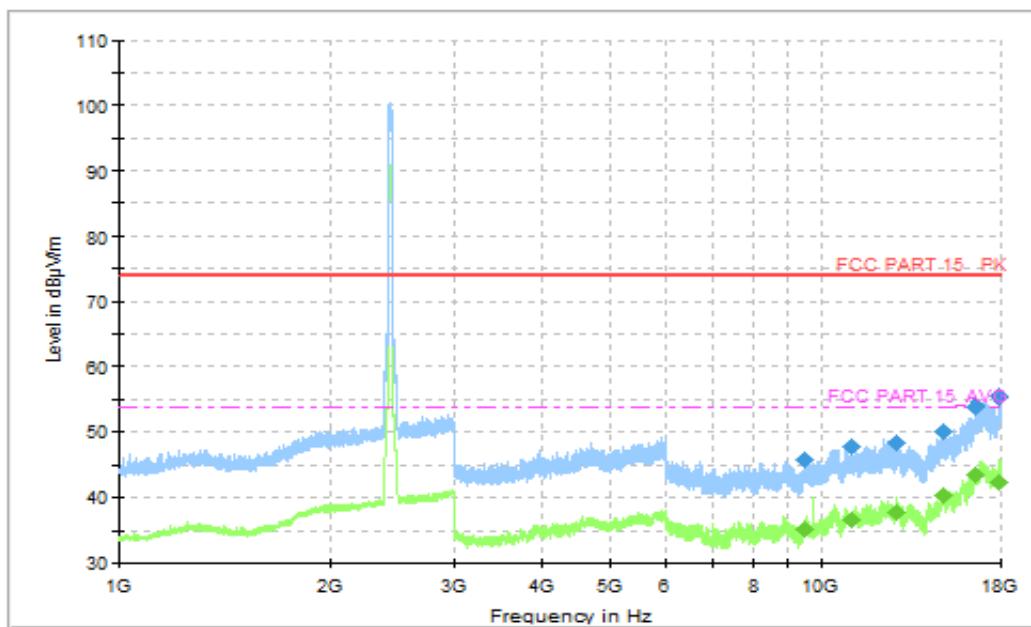


Fig.17 Radiated Spurious Emission (802.11n-HT40, CH6, 1GHz-18GHz)

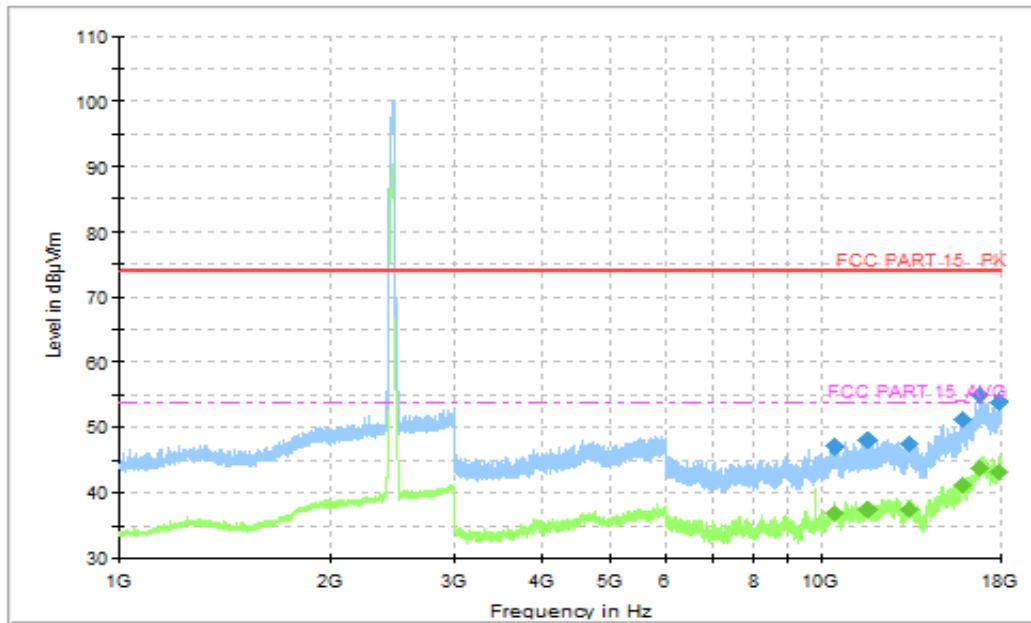


Fig.18 Radiated Spurious Emission (802.11n-HT40, CH9, 1GHz-18GHz)

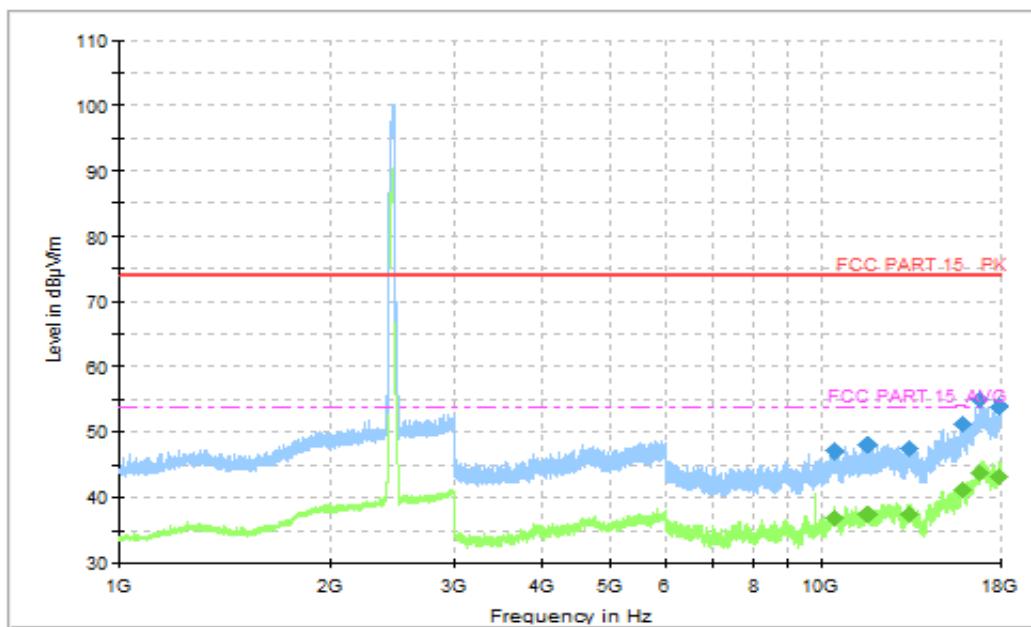


Fig.19 Radiated Restricted Band (802.11n-HT40, CH3, 2.38GHz~2.45GHz)

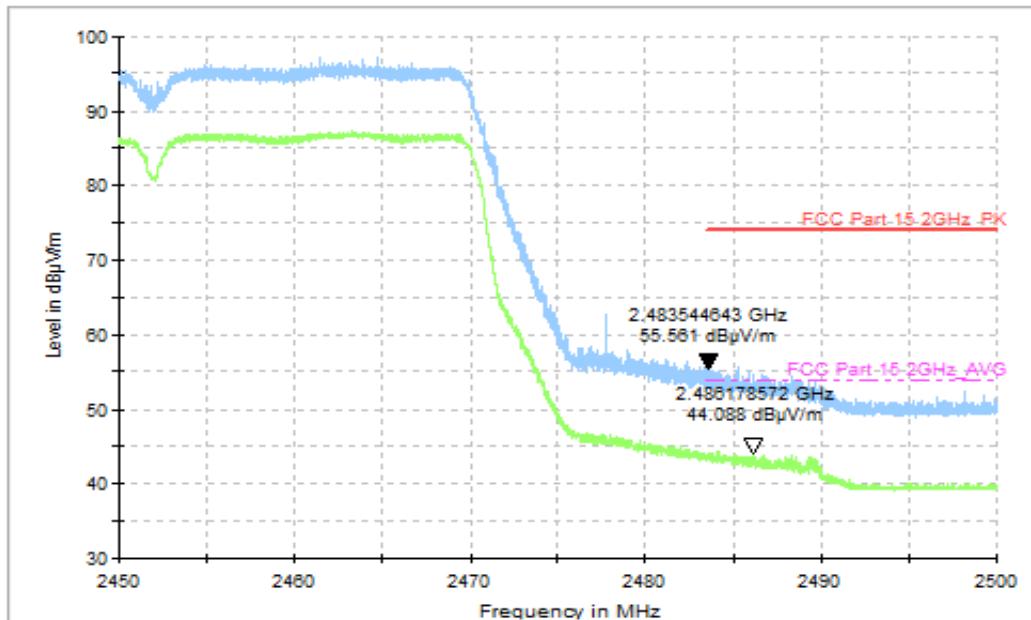


Fig.20 Radiated Spurious Emission (802.11n-HT40, CH9, 2.45GHz~2.50GHz)

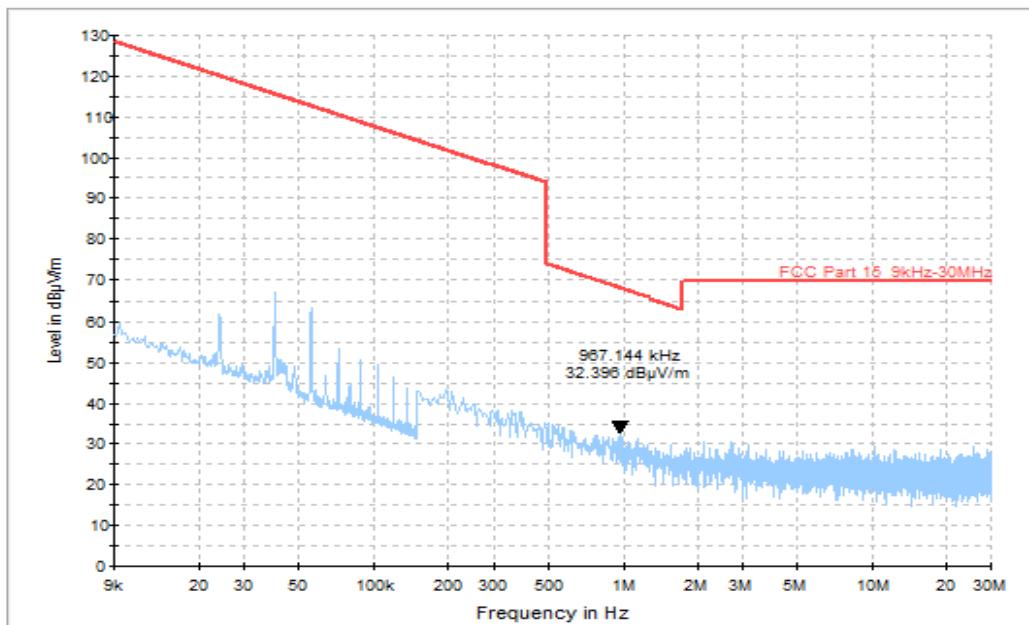


Fig.21 Radiated Spurious Emission (All channel, 9kHz~30MHz)

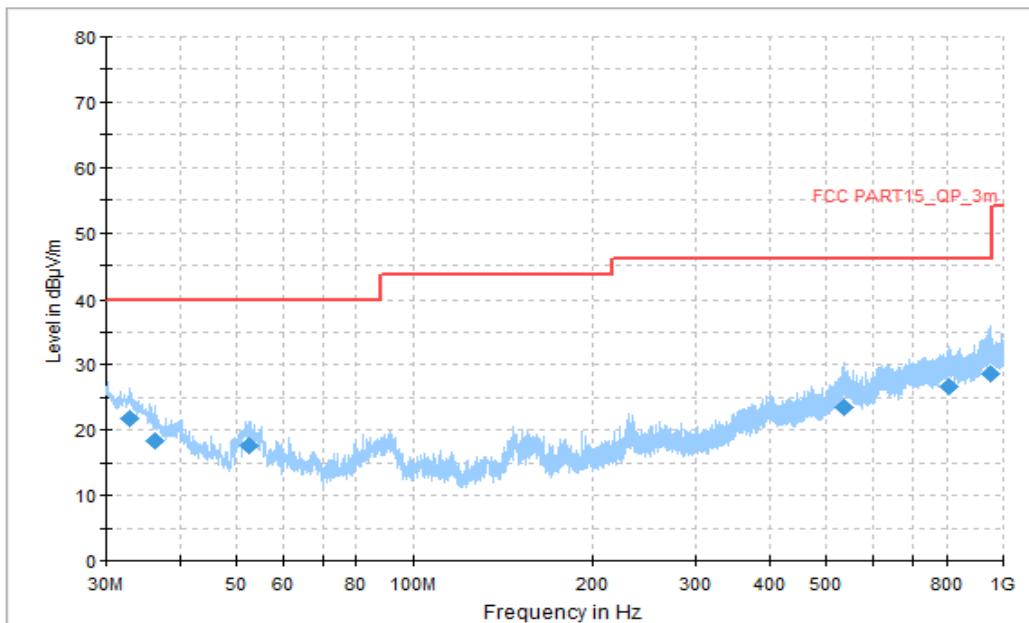


Fig.22 Radiated Spurious Emission (All channel, 30MHz~1GHz)

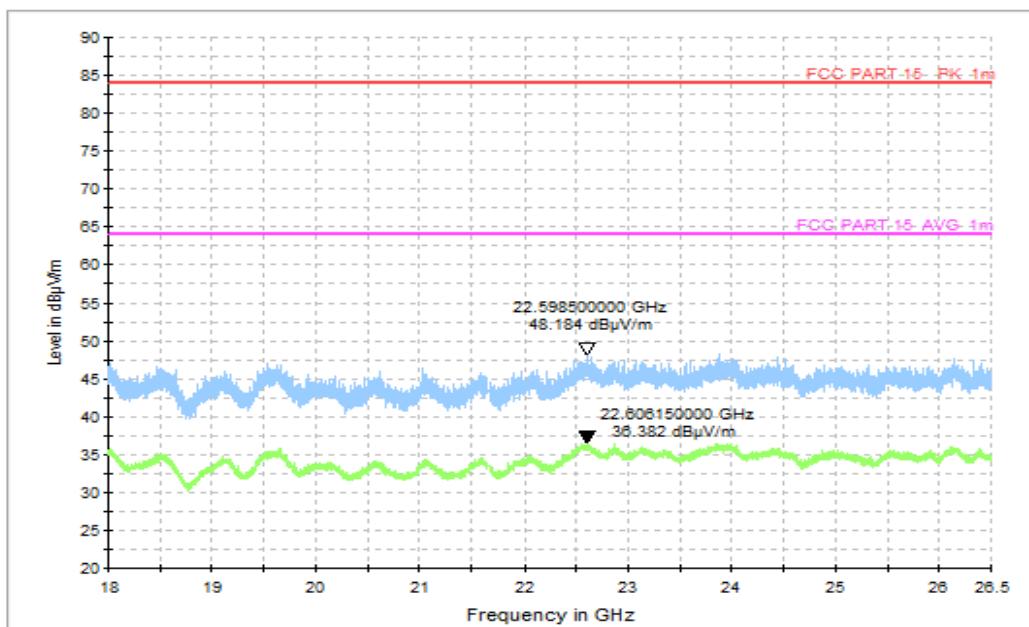


Fig.23 Radiated Spurious Emission (All channel, 18GHz~26.5GHz)

A.2 AC Power line Conducted Emission

Method of Measurement: See ANSI C63.10-clause 6.2.

Test Condition:

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

Measurement Result and limit:

WLAN 2.4GHz - AE2, AE3

| Frequency range (MHz) | Quasi-peak Limit (dB μ V) | Average-peak Limit (dB μ V) | Result (dB μ V) | | Conclusion |
|-----------------------|-------------------------------|---------------------------------|---------------------|--------|------------|
| | | | Traffic | Idle | |
| 0.15 to 0.5 | 66 to 56 | 56 to 46 | Fig.24 | Fig.25 | P |
| 0.5 to 5 | 56 | 46 | | | |
| 5 to 30 | 60 | 50 | | | |

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

Note1: The measurement results include the L1 and N measurements.

Note 2: All the EUT set-ups in section 3.4 tests conditions are both been validated, and Set.2 is the worst result, showed in this report.

See below for test graphs.

Conclusion: PASS

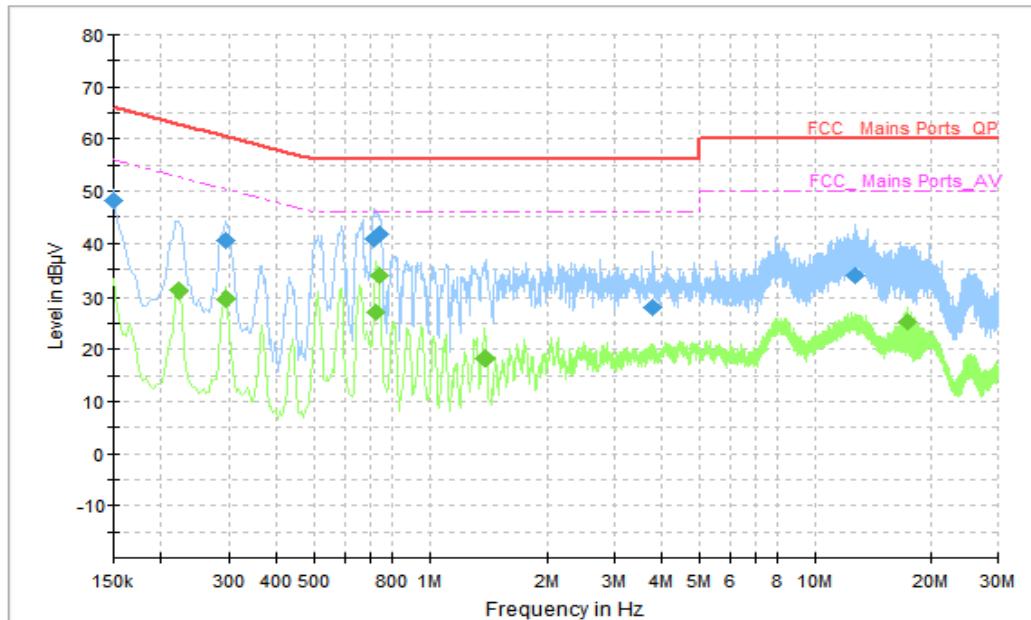


Fig.24 AC Power line Conducted Emission (Traffic)

Measurement Results: Quasi Peak

| Frequency (MHz) | Quasi Peak (dB μ V) | Limit (dB μ V) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|-------------------------|--------------------|-------------|------|--------|------------|
| 0.150000 | 48.33 | 66.00 | 17.67 | L1 | ON | 10 |
| 0.294000 | 40.42 | 60.41 | 19.99 | L1 | ON | 10 |
| 0.718000 | 40.82 | 56.00 | 15.18 | L1 | ON | 10 |
| 0.738000 | 41.82 | 56.00 | 14.18 | L1 | ON | 10 |
| 3.790000 | 27.99 | 56.00 | 28.01 | L1 | ON | 10 |
| 12.714000 | 33.90 | 60.00 | 26.10 | L1 | ON | 10 |

Measurement Results: Average

| Frequency (MHz) | Average (dB μ V) | Limit (dB μ V) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|----------------------|--------------------|-------------|------|--------|------------|
| 0.222000 | 31.09 | 52.74 | 21.65 | L1 | ON | 10 |
| 0.294000 | 29.60 | 50.41 | 20.81 | L1 | ON | 10 |
| 0.726000 | 27.12 | 46.00 | 18.88 | L1 | ON | 10 |
| 0.738000 | 33.94 | 46.00 | 12.06 | L1 | ON | 10 |
| 1.394000 | 18.24 | 46.00 | 27.76 | L1 | ON | 10 |
| 17.450000 | 25.26 | 50.00 | 24.74 | L1 | ON | 10 |

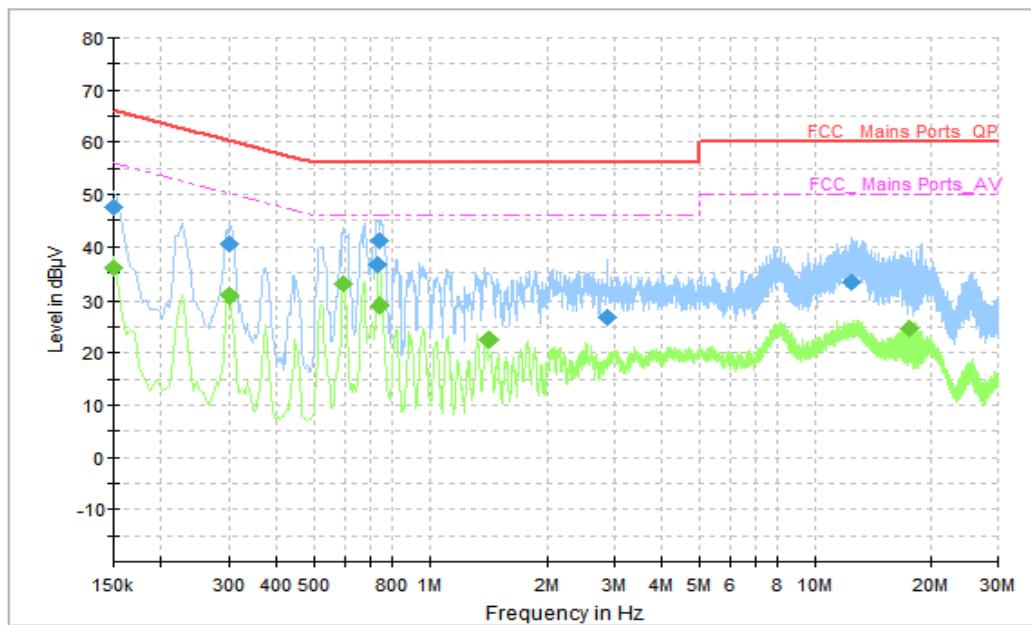


Fig.25 AC Power line Conducted Emission (Idle)

Measurement Results: Quasi Peak

| Frequency (MHz) | Quasi Peak (dB μ V) | Limit (dB μ V) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|-------------------------|--------------------|-------------|------|--------|------------|
| 0.150000 | 47.65 | 66.00 | 18.35 | L1 | ON | 10 |
| 0.302000 | 40.57 | 60.19 | 19.62 | L1 | ON | 10 |
| 0.730000 | 36.69 | 56.00 | 19.31 | L1 | ON | 10 |
| 0.738000 | 41.21 | 56.00 | 14.79 | L1 | ON | 10 |
| 2.870000 | 26.66 | 56.00 | 29.34 | L1 | ON | 10 |
| 12.466000 | 33.10 | 60.00 | 26.90 | L1 | ON | 10 |

Measurement Results: Average

| Frequency (MHz) | Average (dB μ V) | Limit (dB μ V) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|----------------------|--------------------|-------------|------|--------|------------|
| 0.150000 | 35.92 | 56.00 | 20.08 | L1 | ON | 10 |
| 0.302000 | 30.88 | 50.19 | 19.31 | L1 | ON | 10 |
| 0.598000 | 32.93 | 46.00 | 13.07 | L1 | ON | 10 |
| 0.738000 | 28.78 | 46.00 | 17.22 | L1 | ON | 10 |
| 1.414000 | 22.56 | 46.00 | 23.44 | L1 | ON | 10 |
| 17.682000 | 24.62 | 50.00 | 25.38 | L1 | ON | 10 |

END OF REPORT