# FCC Part 15C Test Report
# FCC ID: 2A8JR-DN39C

| | |
|---|---|
| Applicant: | Shenzhen Weikesen Electronic Technology Co., Ltd. |
| Address: | 1909, No. 2, Baolong Factory, Anbo Tech, No. 2, Baolong 4th Road, Longgang Dist., Shenzhen |
| Manufacturer: | Shenzhen Weikesen Electronic Technology Co., Ltd. |
| Address: | 1909, No. 2, Baolong Factory, Anbo Tech, No. 2, Baolong 4th Road, Longgang Dist., Shenzhen |
| EUT: | notebook |
| Trade Mark: | N/A |
| Model Number: | DN39C(MGI i5 12500H Pro) |
| Date of Receipt: | Oct. 03, 2022 |
| Test Date: | Oct. 03, 2022 – Dec. 29, 2022 |
| Date of Report: | Dec. 29, 2022 |
| Prepared By: | Shenzhen DL Testing Technology Co., Ltd. |
| Address: | 101-201, Building C, Shuanghuan, No.8, Baoqing Road, Baolong Industrial Zone, Baolong Street, Longgang District, Shenzhen, Guangdong, China |
| Applicable Standards: | FCC PART 15 C 15.407<br>ANSI C63.10:2013 |
| Test Result: | Pass |
| Report Number: | DL-20221111009E |

| | |
|---|---|
| Prepared (Test Engineer): | Pxing Huang |
| Reviewer (Supervisor): | Jack Bu |
| Approved (Manager): | Jade Yang |

*This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.*

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## 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

| FCC Part15 (15.407) , Subpart C | | | |
|---|---|---|---|
| Standard Section | Test Item | Judgment | Remark |
| 15.207 | Conducted Emission | PASS | |
| 15.407(b), 15.209 | Radiated Spurious Emission | PASS | |
| 15.407 (b) | Band Edge Emission | PASS | |
| 15.407 (a) | Peak Output Power | PASS | |
| 15.407 (a) | Power Spectral Density | PASS | |
| 15.403(i)<br>15.407(e) | 26dB bandwidth and 99%dB Bandwidth<br>6dB bandwidth and 99%dB Bandwidth | PASS | |
| 15.407(g) | Frequency Stability | PASS | |
| 15.407(c) | Transmission in case of Absence of Information | PASS | |
| 15.203 | Antenna Requirement | PASS | |

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

### 1.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**, where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**，providing a level of confidence of approximately **95** %。

| No. | Item | Uncertainty |
|---|---|---|
| 1 | Conducted Emission Test | ±2.56dB |
| 2 | RF power,conducted | ±0.42dB |
| 3 | Spurious emissions,conducted | ±2.76dB |
| 4 | All emissions,radiated(<1G) | ±3.65dB |
| 5 | All emissions,radiated(>1G) | ±4.89dB |
| 6 | Temperature | ±0.5°C |
| 7 | Humidity | ±2% |

## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

| | |
|---|---|
| Product Name: | notebook |
| Trademark | N/A |
| Model No.: | DN39C(MGI i5 12500H Pro) |
| Model Difference | N/A |
| Operation Frequency: | 5180-5240 (802.11a/ac/ax/n(HT20))<br>5190-5230 (802.11ac/ax n(HT40))<br>5210MHz (802.11ac/ax80) |
| Channel numbers: | See channel list |
| Channel separation: | 20MHz for 802.11a/ac/ax/n(HT20)<br>40MHz for 802.11ac/ax/n(HT40) |
| Modulation technology: | 64QAM, 16QAM, QPSK, BPSK for OFDM |
| Rate of Transmitter | 802.11a: 6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps,54Mbps<br>802.11n: Up to 300Mbps<br>802.11ac: up to 867Mbps<br>802.11ax: up to 1200Mbps |
| Antenna Type: | Internal Antenna*2 |
| Antenna gain: | -4.62dBi<br>MIMO Gain=-4.62dBi+10log(2)=-1.62dBi |
| Power supply: | For Adapter Model Number: A879-200500C-US1<br>Input: 100-240V~ 50/60Hz, 2.5A<br>PD Output: DC 5V/3A, DC 9V/3A, DC 12V/3A, DC 15C/3A, DC 20V/5A<br>PPS: DC 3.3-11V/5A 55W Max<br>3.3-21V/5A 100W Max<br>DC 11.55V from battery |

Note:

1.For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.The EUT's all information provided by client.

3. The MIMO mode is only used for 802.11 ac/ax/n mode.

4. This product only support SU mode for 802.11ax.

2. Channel List

| 802.11a/ac/ax/n(HT20) | | | |
|---|---|---|---|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 36 | 5180 | 44 | 5220 |
| 40 | 5200 | 48 | 5240 |

| 802.11ac/ax/n(HT40) | | | | 802.11ac/ax 80 | |
|---|---|---|---|---|---|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 38 | 5190 | 46 | 5230 | 42 | 5210 |

## 2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

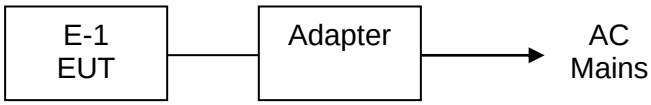
| Description | | |
|---|---|---|
| Pretest Mode | Channel | Band 1 |
| Mode 1 | 802.11a /ac/ax/n HT20 | CH36, CH44, CH48 |
| Mode 2 | 802.11n/ac/ax HT40 | CH38, CH46 |
| Mode 3 | 802.11ac/ax HT80 | CH42 |
| Mode 4 | Other | Link Mode |

| For Radiated Emission | | |
|---|---|---|
| Pretest Mode | Channel | Band 1 |
| Mode 1 | 802.11a/n/acHT20 | CH36, CH44, CH48 |
| Mode 2 | 802.11n/acHT40 | CH38, CH46 |
| Mode 3 | 802.11ac/ax HT80 | CH42 |
| Mode 4 | Other | Link Mode |

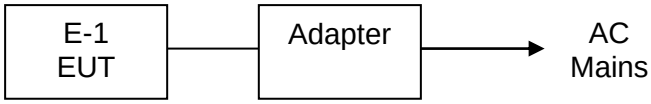
Note: 1. The measurements are performed at the highest, middle, lowest available channels.

## 2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test




Conducted Spurious Emission Test




## 2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment | Model/Type No. | Series No. | Note |
|---|---|---|---|---|
| E-1 | notebook | DN39C(MGI i5 12500H Pro) | N/A | EUT |
| | | | | |

| Item | Shielded Type | Ferrite Core | Length | Note |
|---|---|---|---|---|
| | | | | |

Note:

(1) For detachable type I/O cable should be specified the length in cm in『Length』column.

## 2.5 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the end product.

| Max output power Setting | | | |
|---|---|---|---|
| Test software Version | Test program: AXDN-0002.0 | | |
| Mode | 802.11a/ac/ax | 802.11n HT20 | 802.11n HT40 |
| Data Rate | MCS0 | MSC0 | MSC0 |
| Power Setting of Softwave | 45 | 45 | 45 |

## 2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation test, Band-edge test and 6db bandwidth test equipment

| Item | Equipment | Manufacturer | Type No. | Serial No. | Last calibration | Calibrated until |
|---|---|---|---|---|---|---|
| 1 | Spectrum Analyzer (9kHz-26.5GHz) | Agilent | E4408B | MY50140780 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 2 | Test Receiver (9kHz-7GHz) | R&S | ESRP7 | 101393 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 3 | Bilog Antenna (30MHz-1GHz) | R&S | VULB9162 | 00306 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 4 | Horn Antenna (1GHz-18GHz) | Schwarzbeck | BBHA9120D | 02139 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 5 | Horn Antenna (18GHz-40GHz) | A.H. Systems | SAS-574 | 588 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 6 | Amplifier (9KHz-6GHz) | Schwarzbeck | BBV9743B | 00153 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 7 | Amplifier (1GHz-18GHz) | EMEC | EM01G8GA | 00270 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 8 | Amplifier (18GHz-40GHz) | Quanjuda | DLE-161 | 97 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 9 | Loop Antenna (9KHz-30MHz) | Schwarzbeck | FMZB1519B | 00014 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 10 | RF cables1 (9kHz-1GHz) | ChengYu | 966 | 004 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 11 | RF cables2 (1GHz-40GHz) | ChengYu | 966 | 003 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 12 | Antenna connector | Florida RF Labs | N/A | RF 01# | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 13 | Power probe | KEYSIGHT | U2021XA | MY55210018 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 14 | Signal Analyzer 9kHz-26.5GHz | Agilent | N9020A | MY55370280 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 15 | Test Receiver 20kHz-40GHz | R&S | ESU 40 | 100376 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 16 | D.C. Power Supply | LongWei | PS-305D | 010964729 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |

Conduction Test equipment

| Item | Equipment | Manufacturer | Type No. | Serial No. | Last calibration | Calibrated until |
|---|---|---|---|---|---|---|
| 1 | 843 Shielded Room | ChengYu | 843 Room | 843 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 2 | EMI Receiver | R&S | ESR | 101421 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 3 | LISN | R&S | ENV216 | 102417 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |
| 4 | 843 Cable 1# | ChengYu | CE Cable | 001 | Oct. 05, 2021<br>Nov. 06, 2022 | Oct. 04, 2021<br>Nov. 05, 2023 |

Other

| Item | Name | Manufacturer | Model | Software version |
|---|---|---|---|---|
| 1 | EMC Conduction Test System | FALA | EZ_EMC | EMC-CON 3A1.1 |
| 2 | EMC radiation test system | FALA | EZ_EMC | FA-03A2 |
| 3 | RF test system | MAIWEI | MTS8310 | 2.0.0.0 |
| 4 | RF communication test system | MAIWEI | MTS8200 | 2.0.0.0 |

## 3. EMC EMISSION TEST

### 3.1 CONDUCTED EMISSION MEASUREMENT

#### 3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

| FREQUENCY (MHz) | Limit (dBuV) | | Standard |
|---|---|---|---|
| | Quasi-peak | Average | |
| 0.15 -0.5 | 66 - 56 * | 56 - 46 * | FCC |
| 0.5 -5.0 | 56.00 | 46.00 | FCC |
| 5.0 -30.0 | 60.00 | 50.00 | FCC |

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

| Receiver Parameters | Setting |
|---|---|
| Attenuation | 10 dB |
| Start Frequency | 0.15 MHz |
| Stop Frequency | 30 MHz |
| IF Bandwidth | 9 kHz |

#### 3.1.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

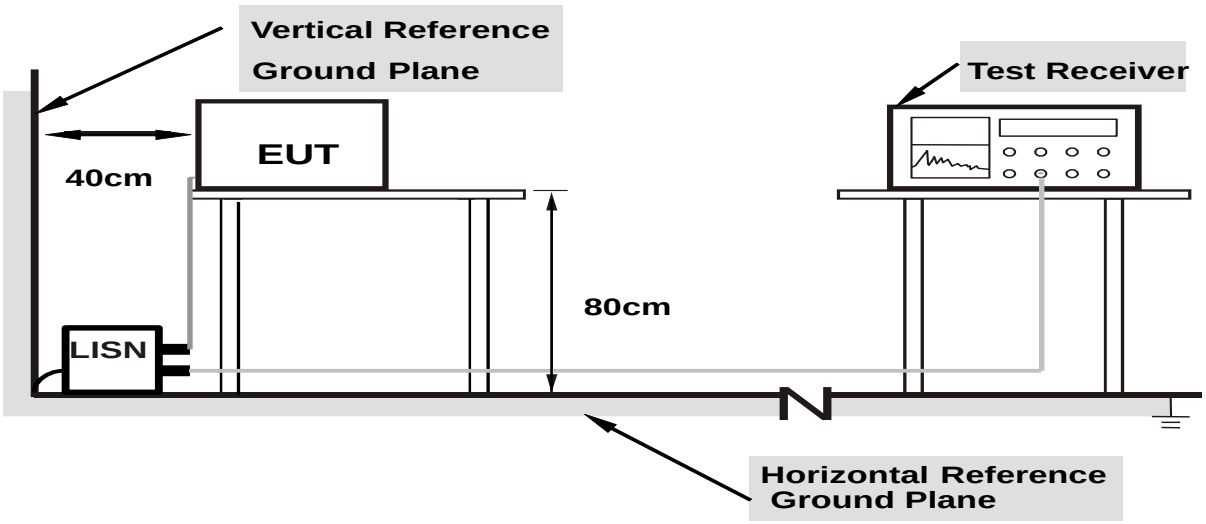
d. LISN at least 80 cm from nearest part of EUT chassis.

e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 3.1.3 DEVIATION FROM TEST STANDARD

No deviation

### 3.1.4 TEST SETUP



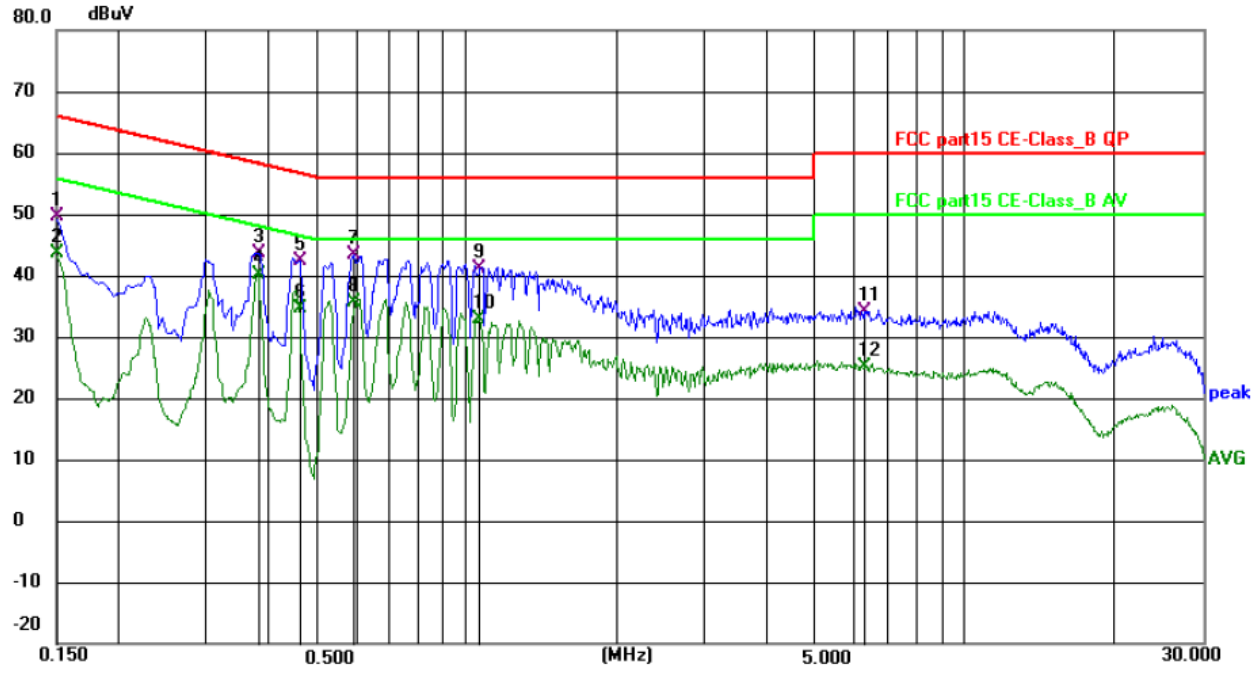

**Note: 1.Support units were connected to second LISN.**
**2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes**

### 3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.
We pretest AC 120V and AC 230V, the worst voltage was AC 120V and the data recording in the report.

### 3.1.6 TEST RESULTS

| | | | |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 54% |
| Pressure: | 1010hPa | Phase : | L |
| Test Voltage : | AC 120V/60Hz | Test Mode: | Mode 4 |

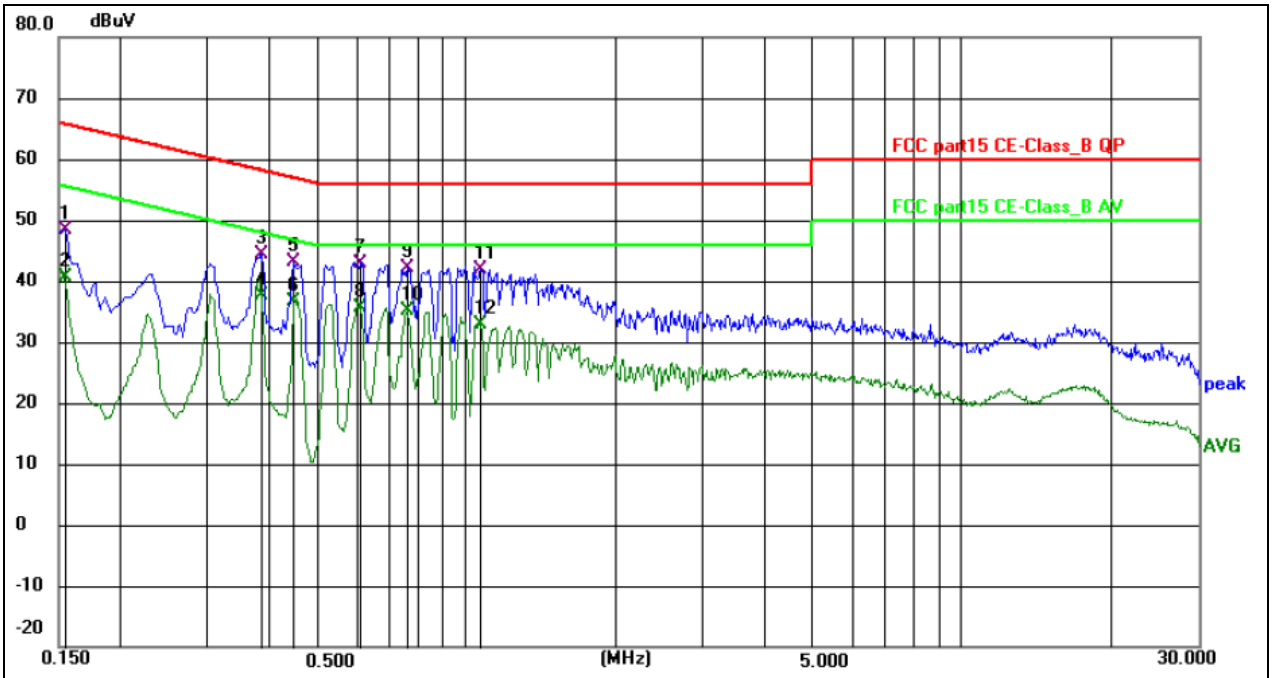



Remark:

Margin = Limit – Level, Correct Factor = Cable lose + LISN insertion loss, Level= Reading + Correct factor

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector | P/F | Remark |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.150000 | 39.17 | 10.50 | 49.67 | 66.00 | -16.33 | QP | P | |
| 2 | 0.150000 | 33.05 | 10.50 | 43.55 | 56.00 | -12.45 | AVG | P | |
| 3 | 0.379500 | 34.46 | 9.10 | 43.56 | 58.29 | -14.73 | QP | P | |
| 4 * | 0.379500 | 31.11 | 9.10 | 40.21 | 48.29 | -8.08 | AVG | P | |
| 5 | 0.460500 | 33.29 | 9.16 | 42.45 | 56.68 | -14.23 | QP | P | |
| 6 | 0.460500 | 25.48 | 9.16 | 34.64 | 46.68 | -12.04 | AVG | P | |
| 7 | 0.590900 | 34.17 | 9.31 | 43.48 | 56.00 | -12.52 | QP | P | |
| 8 | 0.590900 | 26.32 | 9.31 | 35.63 | 46.00 | -10.37 | AVG | P | |
| 9 | 1.063400 | 31.91 | 9.32 | 41.23 | 56.00 | -14.77 | QP | P | |
| 10 | 1.063400 | 23.57 | 9.32 | 32.89 | 46.00 | -13.11 | AVG | P | |
| 11 | 6.265500 | 24.47 | 9.71 | 34.18 | 60.00 | -25.82 | QP | P | |
| 12 | 6.265500 | 15.50 | 9.71 | 25.21 | 50.00 | -24.79 | AVG | P | |

| | | | |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 54% |
| Pressure: | 1010hPa | Phase : | N |
| Test Voltage : | AC 120V/60Hz | Test Mode: | Mode 4 |




Remark:

Margin = Limit – Level, Correct Factor = Cable lose + LISN insertion loss, Level= Reading + Correct factor

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector | P/F | Remark |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.154400 | 38.22 | 10.22 | 48.44 | 65.76 | -17.32 | QP | P | |
| 2 | 0.154400 | 30.41 | 10.22 | 40.63 | 55.76 | -15.13 | AVG | P | |
| 3 | 0.384000 | 35.17 | 9.20 | 44.37 | 58.19 | -13.82 | QP | P | |
| 4 | 0.384000 | 28.51 | 9.20 | 37.71 | 48.19 | -10.48 | AVG | P | |
| 5 | 0.447000 | 33.84 | 9.31 | 43.15 | 56.93 | -13.78 | QP | P | |
| 6 | 0.447000 | 27.22 | 9.31 | 36.53 | 46.93 | -10.40 | AVG | P | |
| 7 | 0.608900 | 33.61 | 9.24 | 42.85 | 56.00 | -13.15 | QP | P | |
| 8 * | 0.608900 | 26.47 | 9.24 | 35.71 | 46.00 | -10.29 | AVG | P | |
| 9 | 0.762000 | 33.02 | 9.23 | 42.25 | 56.00 | -13.75 | QP | P | |
| 10 | 0.762000 | 25.79 | 9.23 | 35.02 | 46.00 | -10.98 | AVG | P | |
| 11 | 1.068000 | 32.46 | 9.44 | 41.90 | 56.00 | -14.10 | QP | P | |
| 12 | 1.068000 | 23.55 | 9.44 | 32.99 | 46.00 | -13.01 | AVG | P | |

## 3.2 RADIATED EMISSION MEASUREMENT

### 3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

| Frequencies (MHz) | Field Strength (micorvolts/meter) | 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 |

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

| FREQUENCY (MHz) | Limit (dBuV/m) (at 3M) | |
|---|---|---|
| | PEAK | AVERAGE |
| Above 1000 | 74 | 54 |

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

| Spectrum Parameter | Setting |
|---|---|
| Attenuation | Auto |
| Start Frequency | 1000 MHz |
| Stop Frequency | 25GHz |
| RB / VB (emission in restricted band) | 1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average |

| Receiver Parameter | Setting |
|---|---|
| Attenuation | Auto |
| Start ~ Stop Frequency | 9kHz~150kHz / RB 200Hz for QP |
| Start ~ Stop Frequency | 150kHz~30MHz / RB 9kHz for QP |
| Start ~ Stop Frequency | 30MHz~1000MHz / RB 120kHz for QP |

### 3.2.2 TEST PROCEDURE

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre( Above 18GHz the distance is 1 meter and table is 1.5 metre).
h. Test the EUT in the lowest channel, the middle channel, the Highest channel

Note:

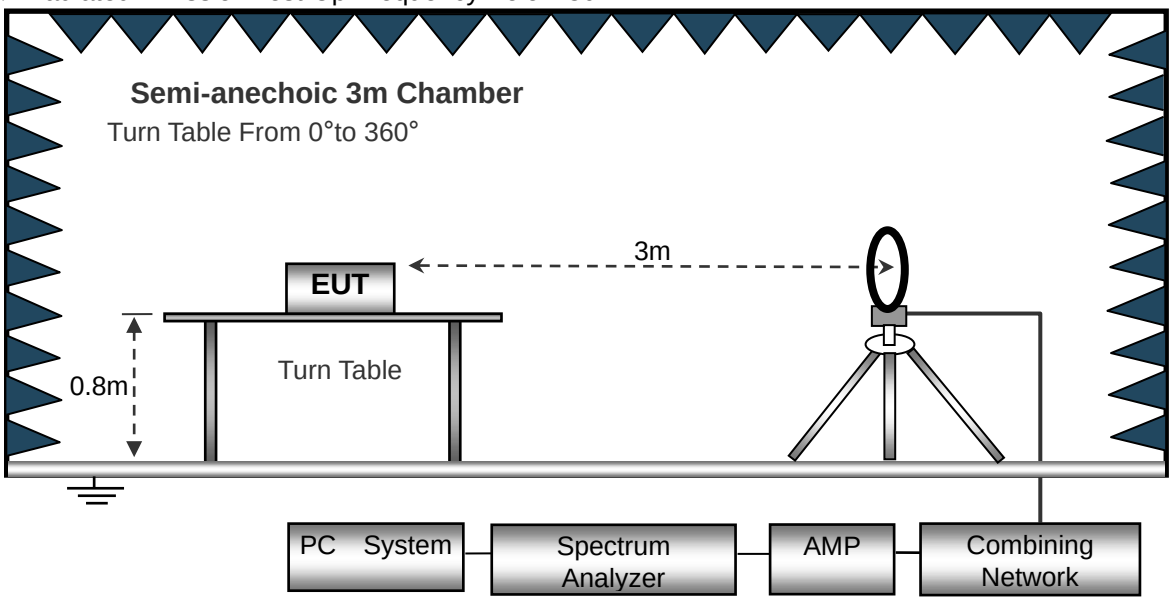
Both horizontal and vertical antenna polarities were tested
and performed pretest to all antenna,. The worst case was antenna 1 and emissions were reported

### 3.2.3 DEVIATION FROM TEST STANDARD

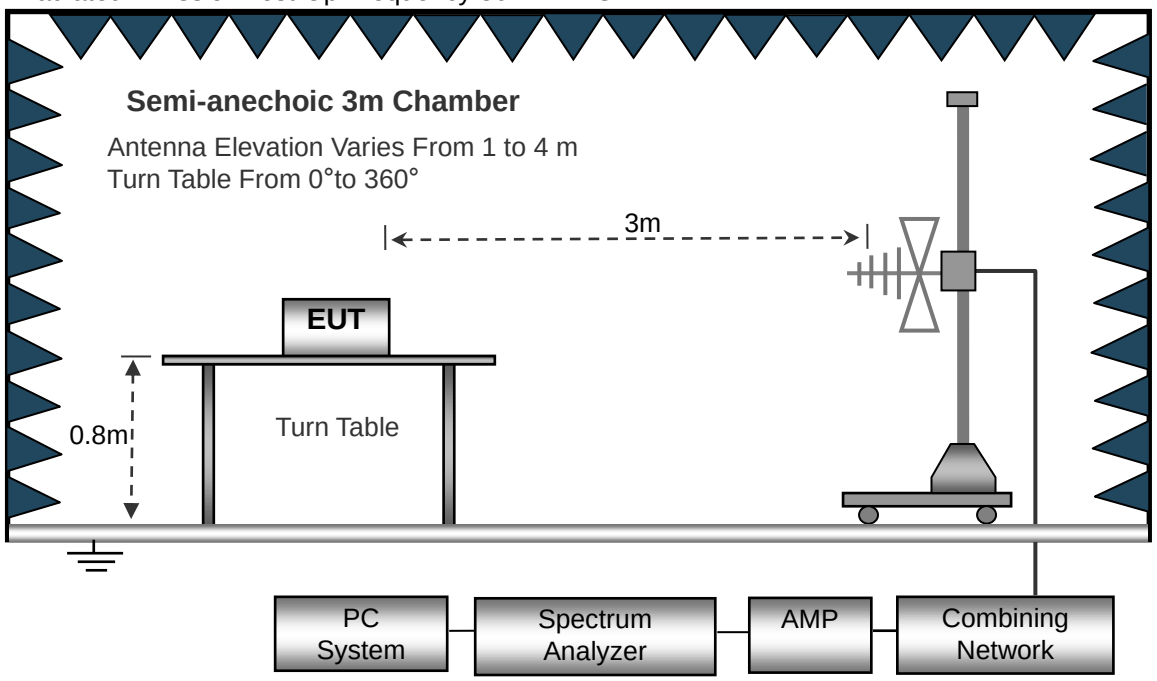
No deviation

### 3.2.4 TEST SETUP

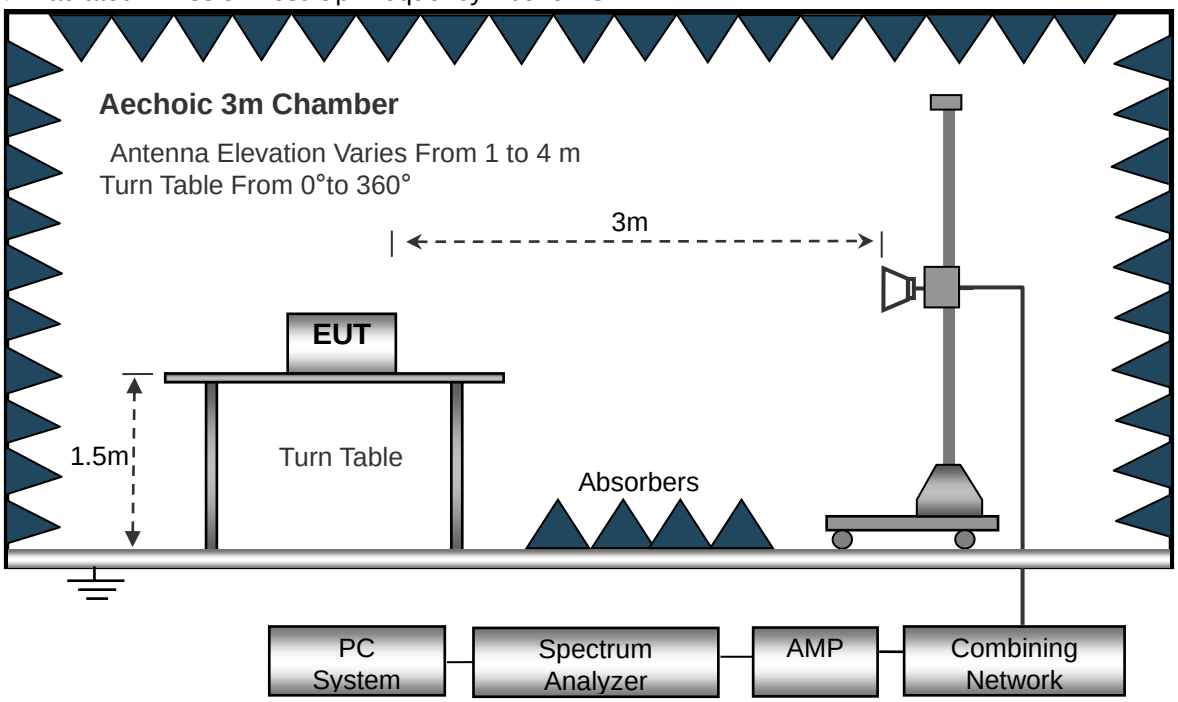
（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz




（C）Radiated Emission Test-Up Frequency Above 1GHz




### 3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

### 3.2.6 TEST RESULTS (Between 9KHz – 30 MHz)

| | | | |
|---|---|---|---|
| Temperature: | 20℃ | Relative Humidtity: | 48% |
| Pressure: | 1010 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | Mode 4 | Polarization : | -- |

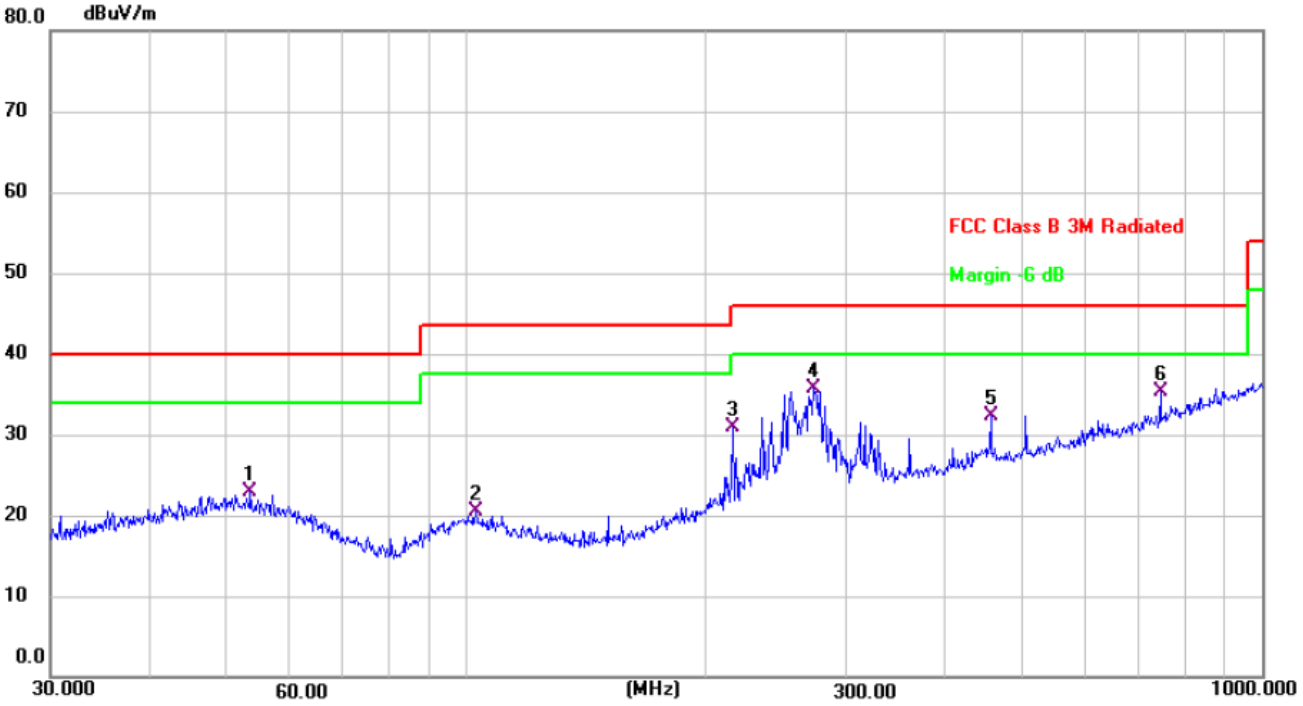
| Freq. | Reading | Limit | Margin | State |
|---|---|---|---|---|
| (MHz) | (dBuV/m) | (dBuV/m) | (dB) | P/F |
| -- | -- | -- | -- | PASS |
| -- | -- | -- | -- | PASS |

**NOTE:**

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

### 3.2.7 TEST RESULTS (Between 30MHz – 1GHz)

| | | | |
|---|---|---|---|
| Temperature: | 26℃ | Relative Humidity: | 54% |
| Pressure: | 1010 hPa | Polarization : | Horizontal |
| Test Voltage : | AC 120V/60Hz | | |
| Test Mode : | Mode 4 | | |



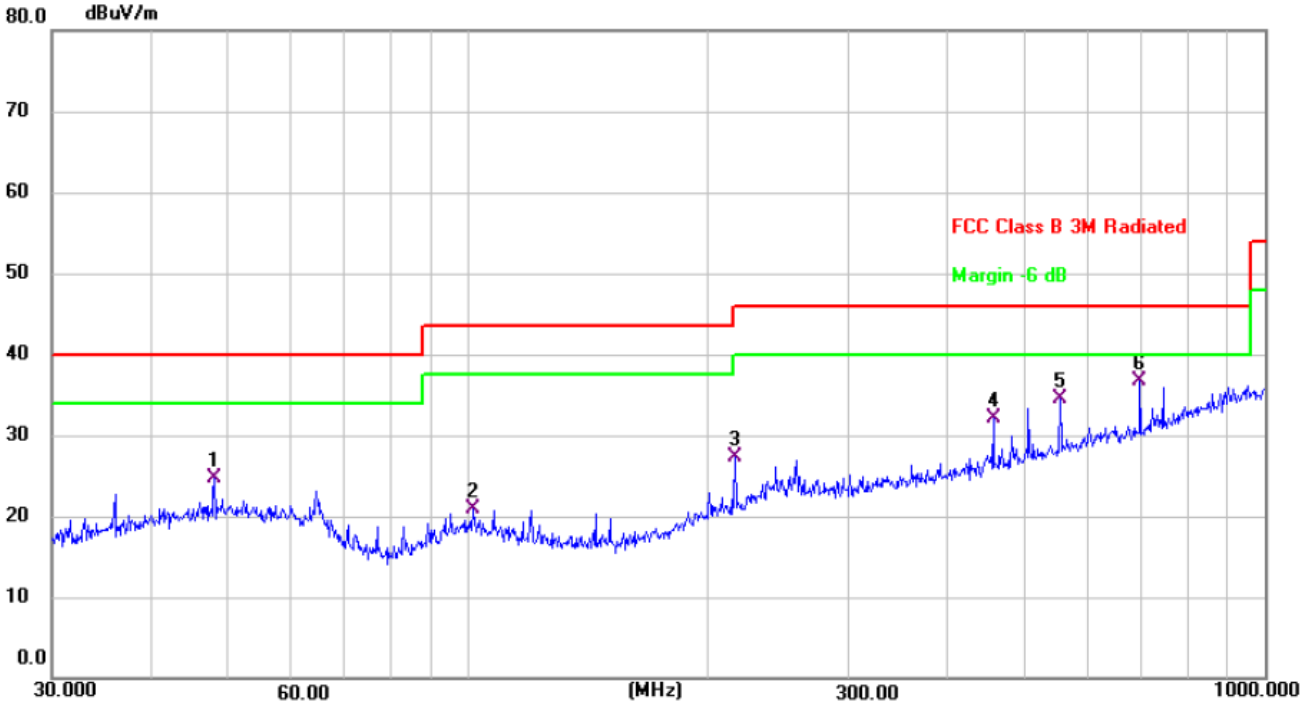

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|
| 1 | 53.5052 | 34.62 | -11.81 | 22.81 | 40.00 | -17.19 | QP |
| 2 | 102.7192 | 34.26 | -13.77 | 20.49 | 43.50 | -23.01 | QP |
| 3 | 216.0240 | 43.28 | -12.34 | 30.94 | 46.00 | -15.06 | QP |
| 4 * | 273.2341 | 46.40 | -10.66 | 35.74 | 46.00 | -10.26 | QP |
| 5 | 455.9058 | 39.74 | -7.38 | 32.36 | 46.00 | -13.64 | QP |
| 6 | 744.8661 | 37.75 | -2.42 | 35.33 | 46.00 | -10.67 | QP |

Remark:

Correct Factor = Cable loss + Antenna factor – Preamplifier;

Level = Reading Level + Correct Factor; Margin = Limit – Level;

| | | | |
|---|---|---|---|
| Temperature: | 26℃ | Relative Humidity: | 54% |
| Pressure: | 1010 hPa | Polarization : | Vertical |
| test voltage : | AC 120V/60Hz | | |
| Test Mode : | Mode 4 | | |




| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|
| 1 | 47.9940 | 36.47 | -11.68 | 24.79 | 40.00 | -15.21 | QP |
| 2 | 101.2885 | 34.56 | -13.63 | 20.93 | 43.50 | -22.57 | QP |
| 3 | 216.0240 | 39.65 | -12.34 | 27.31 | 46.00 | -18.69 | QP |
| 4 | 455.9058 | 39.42 | -7.38 | 32.04 | 46.00 | -13.96 | QP |
| 5 | 552.8832 | 40.10 | -5.62 | 34.48 | 46.00 | -11.52 | QP |
| 6 * | 696.8567 | 39.84 | -3.06 | 36.78 | 46.00 | -9.22 | QP |

Remark:

Correct Factor = Cable loss + Antenna factor – Preamplifier;

Level = Reading Level + Correct Factor; Margin = Limit – Level;

### 3.2.8 TEST RESULTS (1ghz~40ghZ)

802.11a band 1
We test all antenna's data, the data only show the antenna1 worst mode1,2,3.

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| operation frequency:5180 | | | | | | | | | |
| V | 10360 | 56.33 | 49.05 | 15.3 | 37.39 | 59.97 | 68.2 | -8.23 | PK |
| V | 10360 | 41.41 | 49.05 | 15.3 | 37.39 | 45.05 | 68.2 | -23.15 | AV |
| V | 15540 | 56.62 | 49.16 | 15.27 | 40.45 | 63.18 | 74 | -10.82 | PK |
| V | 15540 | 39.17 | 49.16 | 15.27 | 40.45 | 45.73 | 54 | -8.27 | AV |
| H | 10360 | 56.05 | 49.05 | 15.3 | 37.39 | 59.69 | 68.2 | -8.51 | PK |
| H | 10360 | 40.43 | 49.05 | 15.3 | 37.39 | 44.07 | 68.2 | -24.13 | AV |
| H | 15540 | 59.12 | 49.16 | 15.27 | 40.45 | 65.68 | 74 | -8.32 | PK |
| H | 15540 | 38.08 | 49.16 | 15.27 | 40.45 | 44.64 | 54 | -9.36 | AV |
| operation frequency:5200 | | | | | | | | | |
| V | 10400 | 57.43 | 49.09 | 15.34 | 37.42 | 61.1 | 68.2 | -7.10 | PK |
| V | 10400 | 39.31 | 49.09 | 15.34 | 37.42 | 42.98 | 68.2 | -25.22 | AV |
| V | 15600 | 59.42 | 49.18 | 15.29 | 40.47 | 66 | 74 | -8.00 | PK |
| V | 15600 | 38.19 | 49.18 | 15.29 | 40.47 | 44.77 | 54 | -9.23 | AV |
| H | 10400 | 56.33 | 49.09 | 15.34 | 37.42 | 60 | 68.2 | -8.20 | PK |
| H | 10400 | 39.75 | 49.09 | 15.34 | 37.42 | 43.42 | 68.2 | -24.78 | AV |
| H | 15600 | 59.43 | 49.18 | 15.29 | 40.47 | 66.01 | 74 | -7.99 | PK |
| H | 15600 | 38.34 | 49.18 | 15.29 | 40.47 | 44.92 | 54 | -9.08 | AV |
| operation frequency:5240 | | | | | | | | | |
| V | 10480 | 58.52 | 49.11 | 15.37 | 37.46 | 62.24 | 68.2 | -5.96 | PK |
| V | 10480 | 39.38 | 49.11 | 15.37 | 37.46 | 43.1 | 68.2 | -25.10 | AV |
| V | 15720 | 59.12 | 49.21 | 15.34 | 40.51 | 65.76 | 74 | -8.24 | PK |
| V | 15720 | 38.33 | 49.21 | 15.34 | 40.51 | 44.97 | 54 | -9.03 | AV |
| H | 10480 | 57.24 | 49.11 | 15.37 | 31.31 | 54.81 | 68.2 | -13.39 | PK |
| H | 10480 | 45.53 | 49.11 | 15.37 | 31.31 | 43.1 | 68.2 | -25.10 | AV |
| H | 15720 | 57.48 | 49.21 | 15.34 | 40.51 | 64.12 | 74 | -9.88 | PK |
| H | 15720 | 37.51 | 49.21 | 15.34 | 40.51 | 44.15 | 54 | -9.85 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ac20 band 1

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5180** | | | | | | | | | |
| V | 10360 | 56.12 | 49.05 | 15.3 | 37.39 | 59.76 | 68.2 | -8.44 | PK |
| V | 10360 | 38.46 | 49.05 | 15.3 | 37.39 | 42.1 | 68.2 | -26.10 | AV |
| V | 15540 | 56.55 | 49.16 | 15.27 | 40.45 | 63.11 | 74 | -10.89 | PK |
| V | 15540 | 38.23 | 49.16 | 15.27 | 40.45 | 44.79 | 54 | -9.21 | AV |
| H | 10360 | 56.64 | 49.05 | 15.3 | 37.39 | 60.28 | 68.2 | -7.92 | PK |
| H | 10360 | 39.33 | 49.05 | 15.3 | 37.39 | 42.97 | 68.2 | -25.23 | AV |
| H | 15540 | 54.17 | 49.16 | 15.27 | 40.45 | 60.73 | 74 | -13.27 | PK |
| H | 15540 | 38.31 | 49.16 | 15.27 | 40.45 | 44.87 | 54 | -9.13 | AV |
| **operation frequency:5200** | | | | | | | | | |
| V | 10400 | 56.26 | 49.09 | 15.34 | 37.42 | 59.93 | 68.2 | -8.27 | PK |
| V | 10400 | 39.73 | 49.09 | 15.34 | 37.42 | 43.4 | 68.2 | -24.80 | AV |
| V | 15600 | 55.38 | 49.18 | 15.29 | 40.47 | 61.96 | 74 | -12.04 | PK |
| V | 15600 | 38.34 | 49.18 | 15.29 | 40.47 | 44.92 | 54 | -9.08 | AV |
| H | 10400 | 55.51 | 49.09 | 15.34 | 37.42 | 59.18 | 68.2 | -9.02 | PK |
| H | 10400 | 40.36 | 49.09 | 15.34 | 37.42 | 44.03 | 68.2 | -24.17 | AV |
| H | 15600 | 55.02 | 49.18 | 15.29 | 40.47 | 61.6 | 74 | -12.40 | PK |
| H | 15600 | 39.28 | 49.18 | 15.29 | 40.47 | 45.86 | 54 | -8.14 | AV |
| **operation frequency:5240** | | | | | | | | | |
| V | 10480 | 57.13 | 49.11 | 15.37 | 37.46 | 60.85 | 68.2 | -7.35 | PK |
| V | 10480 | 40.58 | 49.11 | 15.37 | 37.46 | 44.3 | 68.2 | -23.90 | AV |
| V | 15720 | 54.34 | 49.21 | 15.34 | 40.51 | 60.98 | 74 | -13.02 | PK |
| V | 15720 | 38.43 | 49.21 | 15.34 | 40.51 | 45.07 | 54 | -8.93 | AV |
| H | 10480 | 57.11 | 49.11 | 15.37 | 31.31 | 54.68 | 68.2 | -13.52 | PK |
| H | 10480 | 44.69 | 49.11 | 15.37 | 31.31 | 42.26 | 68.2 | -25.94 | AV |
| H | 15720 | 55.35 | 49.21 | 15.34 | 40.51 | 61.99 | 74 | -12.01 | PK |
| H | 15720 | 39.23 | 49.21 | 15.34 | 40.51 | 45.87 | 54 | -8.13 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ax20 band 1

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5180** | | | | | | | | | |
| V | 10360 | 56.33 | 49.05 | 15.3 | 37.39 | 59.97 | 68.2 | -8.23 | PK |
| V | 10360 | 41.48 | 49.05 | 15.3 | 37.39 | 45.12 | 68.2 | -23.08 | AV |
| V | 15540 | 56.63 | 49.16 | 15.27 | 40.45 | 63.19 | 74 | -10.81 | PK |
| V | 15540 | 39.14 | 49.16 | 15.27 | 40.45 | 45.7 | 54 | -8.30 | AV |
| H | 10360 | 56.02 | 49.05 | 15.3 | 37.39 | 59.66 | 68.2 | -8.54 | PK |
| H | 10360 | 40.49 | 49.05 | 15.3 | 37.39 | 44.13 | 68.2 | -24.07 | AV |
| H | 15540 | 59.14 | 49.16 | 15.27 | 40.45 | 65.7 | 74 | -8.30 | PK |
| H | 15540 | 38.05 | 49.16 | 15.27 | 40.45 | 44.61 | 54 | -9.39 | AV |
| **operation frequency:5200** | | | | | | | | | |
| V | 10400 | 57.41 | 49.09 | 15.34 | 37.42 | 61.08 | 68.2 | -7.12 | PK |
| V | 10400 | 39.33 | 49.09 | 15.34 | 37.42 | 43 | 68.2 | -25.20 | AV |
| V | 15600 | 59.47 | 49.18 | 15.29 | 40.47 | 66.05 | 74 | -7.95 | PK |
| V | 15600 | 38.15 | 49.18 | 15.29 | 40.47 | 44.73 | 54 | -9.27 | AV |
| H | 10400 | 56.33 | 49.09 | 15.34 | 37.42 | 60 | 68.2 | -8.20 | PK |
| H | 10400 | 39.78 | 49.09 | 15.34 | 37.42 | 43.45 | 68.2 | -24.75 | AV |
| H | 15600 | 59.41 | 49.18 | 15.29 | 40.47 | 65.99 | 74 | -8.01 | PK |
| H | 15600 | 38.32 | 49.18 | 15.29 | 40.47 | 44.9 | 54 | -9.10 | AV |
| **operation frequency:5240** | | | | | | | | | |
| V | 10480 | 58.53 | 49.11 | 15.37 | 37.46 | 62.25 | 68.2 | -5.95 | PK |
| V | 10480 | 39.38 | 49.11 | 15.37 | 37.46 | 43.1 | 68.2 | -25.10 | AV |
| V | 15720 | 59.11 | 49.21 | 15.34 | 40.51 | 65.75 | 74 | -8.25 | PK |
| V | 15720 | 38.39 | 49.21 | 15.34 | 40.51 | 45.03 | 54 | -8.97 | AV |
| H | 10480 | 57.23 | 49.11 | 15.37 | 31.31 | 54.8 | 68.2 | -13.40 | PK |
| H | 10480 | 45.54 | 49.11 | 15.37 | 31.31 | 43.11 | 68.2 | -25.09 | AV |
| H | 15720 | 57.41 | 49.21 | 15.34 | 40.51 | 64.05 | 74 | -9.95 | PK |
| H | 15720 | 37.57 | 49.21 | 15.34 | 40.51 | 44.21 | 54 | -9.79 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11n HT20

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5180** | | | | | | | | | |
| V | 10360 | 56.39 | 49.05 | 15.3 | 37.39 | 60.03 | 68.2 | -8.17 | PK |
| V | 10360 | 41.42 | 49.05 | 15.3 | 37.39 | 45.06 | 68.2 | -23.14 | AV |
| V | 15540 | 56.61 | 49.16 | 15.27 | 40.45 | 63.17 | 74 | -10.83 | PK |
| V | 15540 | 39.16 | 49.16 | 15.27 | 40.45 | 45.72 | 54 | -8.28 | AV |
| H | 10360 | 56.08 | 49.05 | 15.3 | 37.39 | 59.72 | 68.2 | -8.48 | PK |
| H | 10360 | 40.43 | 49.05 | 15.3 | 37.39 | 44.07 | 68.2 | -24.13 | AV |
| H | 15540 | 59.15 | 49.16 | 15.27 | 40.45 | 65.71 | 74 | -8.29 | PK |
| H | 15540 | 38.01 | 49.16 | 15.27 | 40.45 | 44.57 | 54 | -9.43 | AV |
| **operation frequency:5200** | | | | | | | | | |
| V | 10400 | 57.46 | 49.09 | 15.34 | 37.42 | 61.13 | 68.2 | -7.07 | PK |
| V | 10400 | 39.37 | 49.09 | 15.34 | 37.42 | 43.04 | 68.2 | -25.16 | AV |
| V | 15600 | 59.43 | 49.18 | 15.29 | 40.47 | 66.01 | 74 | -7.99 | PK |
| V | 15600 | 38.12 | 49.18 | 15.29 | 40.47 | 44.7 | 54 | -9.30 | AV |
| H | 10400 | 56.35 | 49.09 | 15.34 | 37.42 | 60.02 | 68.2 | -8.18 | PK |
| H | 10400 | 39.73 | 49.09 | 15.34 | 37.42 | 43.4 | 68.2 | -24.80 | AV |
| H | 15600 | 59.48 | 49.18 | 15.29 | 40.47 | 66.06 | 74 | -7.94 | PK |
| H | 15600 | 38.33 | 49.18 | 15.29 | 40.47 | 44.91 | 54 | -9.09 | AV |
| **operation frequency:5240** | | | | | | | | | |
| V | 10480 | 58.54 | 49.11 | 15.37 | 37.46 | 62.26 | 68.2 | -5.94 | PK |
| V | 10480 | 39.33 | 49.11 | 15.37 | 37.46 | 43.05 | 68.2 | -25.15 | AV |
| V | 15720 | 59.18 | 49.21 | 15.34 | 40.51 | 65.82 | 74 | -8.18 | PK |
| V | 15720 | 38.33 | 49.21 | 15.34 | 40.51 | 44.97 | 54 | -9.03 | AV |
| H | 10480 | 57.25 | 49.11 | 15.37 | 31.31 | 54.82 | 68.2 | -13.38 | PK |
| H | 10480 | 45.52 | 49.11 | 15.37 | 31.31 | 43.09 | 68.2 | -25.11 | AV |
| H | 15720 | 57.48 | 49.21 | 15.34 | 40.51 | 64.12 | 74 | -9.88 | PK |
| H | 15720 | 37.56 | 49.21 | 15.34 | 40.51 | 44.2 | 54 | -9.80 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ac 40

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5190** | | | | | | | | | |
| V | 10380 | 56.71 | 49.07 | 15.33 | 37.41 | 60.38 | 68.2 | -7.82 | PK |
| V | 10380 | 40.29 | 49.07 | 15.33 | 37.41 | 43.96 | 68.2 | -24.24 | AV |
| V | 15570 | 56.33 | 49.17 | 15.28 | 40.46 | 62.9 | 74 | -11.10 | PK |
| V | 15570 | 39.75 | 49.17 | 15.28 | 40.46 | 46.32 | 54 | -7.68 | AV |
| H | 10380 | 56.52 | 49.07 | 15.33 | 37.41 | 60.19 | 68.2 | -8.01 | PK |
| H | 10380 | 40.44 | 49.07 | 15.33 | 37.41 | 44.11 | 68.2 | -24.09 | AV |
| H | 15570 | 54.53 | 49.17 | 15.28 | 40.46 | 61.1 | 74 | -12.90 | PK |
| H | 15570 | 39.38 | 49.17 | 15.28 | 40.46 | 45.95 | 54 | -8.05 | AV |
| **operation frequency:5230** | | | | | | | | | |
| V | 10460 | 57.11 | 49.11 | 15.37 | 37.46 | 60.83 | 68.2 | -7.37 | PK |
| V | 10460 | 41.28 | 49.11 | 15.37 | 37.46 | 45 | 68.2 | -23.20 | AV |
| V | 15690 | 54.42 | 49.21 | 15.34 | 40.51 | 61.06 | 74 | -12.94 | PK |
| V | 15690 | 39.31 | 49.21 | 15.34 | 40.51 | 45.95 | 54 | -8.05 | AV |
| H | 10460 | 57.15 | 49.11 | 15.37 | 31.31 | 54.72 | 68.2 | -13.48 | PK |
| H | 10460 | 44.56 | 49.11 | 15.37 | 31.31 | 42.13 | 68.2 | -26.07 | AV |
| H | 15690 | 55.14 | 49.21 | 15.34 | 40.51 | 61.78 | 74 | -12.22 | PK |
| H | 15690 | 40.09 | 49.21 | 15.34 | 40.51 | 46.73 | 54 | -7.27 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ac HT80

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5210** | | | | | | | | | |
| V | 10420 | 56.29 | 49.07 | 15.33 | 37.41 | 59.96 | 74 | -14.04 | PK |
| V | 10420 | 41.67 | 49.07 | 15.33 | 37.41 | 45.34 | 54 | -8.66 | AV |
| V | 15630 | 56.12 | 49.17 | 15.28 | 40.46 | 62.69 | 74 | -11.31 | PK |
| V | 15630 | 39.13 | 49.17 | 15.28 | 40.46 | 45.7 | 54 | -8.30 | AV |
| H | 10420 | 56.38 | 49.07 | 15.33 | 37.41 | 60.05 | 74 | -13.95 | PK |
| H | 10420 | 41.24 | 49.07 | 15.33 | 37.41 | 44.91 | 54 | -9.09 | AV |
| H | 15630 | 54.06 | 49.17 | 15.28 | 40.46 | 60.63 | 74 | -13.37 | PK |
| H | 15630 | 40.38 | 49.17 | 15.28 | 40.46 | 46.95 | 54 | -7.05 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ax 40

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5190** | | | | | | | | | |
| V | 10380 | 56.79 | 49.07 | 15.33 | 37.41 | 60.46 | 68.2 | -7.74 | PK |
| V | 10380 | 40.23 | 49.07 | 15.33 | 37.41 | 43.9 | 68.2 | -24.30 | AV |
| V | 15570 | 56.35 | 49.17 | 15.28 | 40.46 | 62.92 | 74 | -11.08 | PK |
| V | 15570 | 39.77 | 49.17 | 15.28 | 40.46 | 46.34 | 54 | -7.66 | AV |
| H | 10380 | 56.56 | 49.07 | 15.33 | 37.41 | 60.23 | 68.2 | -7.97 | PK |
| H | 10380 | 40.42 | 49.07 | 15.33 | 37.41 | 44.09 | 68.2 | -24.11 | AV |
| H | 15570 | 54.58 | 49.17 | 15.28 | 40.46 | 61.15 | 74 | -12.85 | PK |
| H | 15570 | 39.33 | 49.17 | 15.28 | 40.46 | 45.9 | 54 | -8.10 | AV |
| **operation frequency:5230** | | | | | | | | | |
| V | 10460 | 57.15 | 49.11 | 15.37 | 37.46 | 60.87 | 68.2 | -7.33 | PK |
| V | 10460 | 41.26 | 49.11 | 15.37 | 37.46 | 44.98 | 68.2 | -23.22 | AV |
| V | 15690 | 54.43 | 49.21 | 15.34 | 40.51 | 61.07 | 74 | -12.93 | PK |
| V | 15690 | 39.38 | 49.21 | 15.34 | 40.51 | 46.02 | 54 | -7.98 | AV |
| H | 10460 | 57.19 | 49.11 | 15.37 | 31.31 | 54.76 | 68.2 | -13.44 | PK |
| H | 10460 | 44.53 | 49.11 | 15.37 | 31.31 | 42.1 | 68.2 | -26.10 | AV |
| H | 15690 | 55.15 | 49.21 | 15.34 | 40.51 | 61.79 | 74 | -12.21 | PK |
| H | 15690 | 40.06 | 49.21 | 15.34 | 40.51 | 46.7 | 54 | -7.30 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ax HT80

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5210** | | | | | | | | | |
| V | 10420 | 56.25 | 49.07 | 15.33 | 37.41 | 59.92 | 74 | -14.08 | PK |
| V | 10420 | 41.61 | 49.07 | 15.33 | 37.41 | 45.28 | 54 | -8.72 | AV |
| V | 15630 | 56.16 | 49.17 | 15.28 | 40.46 | 62.73 | 74 | -11.27 | PK |
| V | 15630 | 39.18 | 49.17 | 15.28 | 40.46 | 45.75 | 54 | -8.25 | AV |
| H | 10420 | 56.34 | 49.07 | 15.33 | 37.41 | 60.01 | 74 | -13.99 | PK |
| H | 10420 | 41.26 | 49.07 | 15.33 | 37.41 | 44.93 | 54 | -9.07 | AV |
| H | 15630 | 54.03 | 49.17 | 15.28 | 40.46 | 60.6 | 74 | -13.40 | PK |
| H | 15630 | 40.37 | 49.17 | 15.28 | 40.46 | 46.94 | 54 | -7.06 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11n HT40

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5190** | | | | | | | | | |
| V | 10380 | 56.73 | 49.07 | 15.33 | 37.41 | 60.4 | 68.2 | -7.80 | PK |
| V | 10380 | 40.21 | 49.07 | 15.33 | 37.41 | 43.88 | 68.2 | -24.32 | AV |
| V | 15570 | 56.39 | 49.17 | 15.28 | 40.46 | 62.96 | 74 | -11.04 | PK |
| V | 15570 | 39.75 | 49.17 | 15.28 | 40.46 | 46.32 | 54 | -7.68 | AV |
| H | 10380 | 56.53 | 49.07 | 15.33 | 37.41 | 60.2 | 68.2 | -8.00 | PK |
| H | 10380 | 40.45 | 49.07 | 15.33 | 37.41 | 44.12 | 68.2 | -24.08 | AV |
| H | 15570 | 54.18 | 49.17 | 15.28 | 40.46 | 60.75 | 74 | -13.25 | PK |
| H | 15570 | 39.32 | 49.17 | 15.28 | 40.46 | 45.89 | 54 | -8.11 | AV |
| **operation frequency:5230** | | | | | | | | | |
| V | 10460 | 57.12 | 49.11 | 15.37 | 37.46 | 60.84 | 68.2 | -7.36 | PK |
| V | 10460 | 41.29 | 49.11 | 15.37 | 37.46 | 45.01 | 68.2 | -23.19 | AV |
| V | 15690 | 54.44 | 49.21 | 15.34 | 40.51 | 61.08 | 74 | -12.92 | PK |
| V | 15690 | 39.32 | 49.21 | 15.34 | 40.51 | 45.96 | 54 | -8.04 | AV |
| H | 10460 | 57.17 | 49.11 | 15.37 | 31.31 | 54.74 | 68.2 | -13.46 | PK |
| H | 10460 | 44.56 | 49.11 | 15.37 | 31.31 | 42.13 | 68.2 | -26.07 | AV |
| H | 15690 | 55.11 | 49.21 | 15.34 | 40.51 | 61.75 | 74 | -12.25 | PK |
| H | 15690 | 40.05 | 49.21 | 15.34 | 40.51 | 46.69 | 54 | -7.31 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

For MIMO mode

802.11ac20

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5180** | | | | | | | | | |
| V | 10360 | 56.33 | 49.05 | 15.3 | 37.39 | 59.97 | 68.2 | -8.23 | PK |
| V | 10360 | 41.48 | 49.05 | 15.3 | 37.39 | 45.12 | 68.2 | -23.08 | AV |
| V | 15540 | 56.62 | 49.16 | 15.27 | 40.45 | 63.18 | 74 | -10.82 | PK |
| V | 15540 | 39.13 | 49.16 | 15.27 | 40.45 | 45.69 | 54 | -8.31 | AV |
| H | 10360 | 56.04 | 49.05 | 15.3 | 37.39 | 59.68 | 68.2 | -8.52 | PK |
| H | 10360 | 40.41 | 49.05 | 15.3 | 37.39 | 44.05 | 68.2 | -24.15 | AV |
| H | 15540 | 59.16 | 49.16 | 15.27 | 40.45 | 65.72 | 74 | -8.28 | PK |
| H | 15540 | 38.08 | 49.16 | 15.27 | 40.45 | 44.64 | 54 | -9.36 | AV |
| **operation frequency:5200** | | | | | | | | | |
| V | 10400 | 57.43 | 49.09 | 15.34 | 37.42 | 61.1 | 68.2 | -7.10 | PK |
| V | 10400 | 39.35 | 49.09 | 15.34 | 37.42 | 43.02 | 68.2 | -25.18 | AV |
| V | 15600 | 59.42 | 49.18 | 15.29 | 40.47 | 66 | 74 | -8.00 | PK |
| V | 15600 | 38.16 | 49.18 | 15.29 | 40.47 | 44.74 | 54 | -9.26 | AV |
| H | 10400 | 56.31 | 49.09 | 15.34 | 37.42 | 59.98 | 68.2 | -8.22 | PK |
| H | 10400 | 39.79 | 49.09 | 15.34 | 37.42 | 43.46 | 68.2 | -24.74 | AV |
| H | 15600 | 59.44 | 49.18 | 15.29 | 40.47 | 66.02 | 74 | -7.98 | PK |
| H | 15600 | 38.32 | 49.18 | 15.29 | 40.47 | 44.9 | 54 | -9.10 | AV |
| **operation frequency:5240** | | | | | | | | | |
| V | 10480 | 58.53 | 49.11 | 15.37 | 37.46 | 62.25 | 68.2 | -5.95 | PK |
| V | 10480 | 39.29 | 49.11 | 15.37 | 37.46 | 43.01 | 68.2 | -25.19 | AV |
| V | 15720 | 59.11 | 49.21 | 15.34 | 40.51 | 65.75 | 74 | -8.25 | PK |
| V | 15720 | 38.39 | 49.21 | 15.34 | 40.51 | 45.03 | 54 | -8.97 | AV |
| H | 10480 | 57.21 | 49.11 | 15.37 | 31.31 | 54.78 | 68.2 | -13.42 | PK |
| H | 10480 | 45.53 | 49.11 | 15.37 | 31.31 | 43.1 | 68.2 | -25.10 | AV |
| H | 15720 | 57.45 | 49.21 | 15.34 | 40.51 | 64.09 | 74 | -9.91 | PK |
| H | 15720 | 37.53 | 49.21 | 15.34 | 40.51 | 44.17 | 54 | -9.83 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ax20 band 1

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5180** | | | | | | | | | |
| V | 10360 | 56.39 | 49.05 | 15.3 | 37.39 | 60.03 | 68.2 | -8.17 | PK |
| V | 10360 | 41.43 | 49.05 | 15.3 | 37.39 | 45.07 | 68.2 | -23.13 | AV |
| V | 15540 | 56.64 | 49.16 | 15.27 | 40.45 | 63.2 | 74 | -10.80 | PK |
| V | 15540 | 39.19 | 49.16 | 15.27 | 40.45 | 45.75 | 54 | -8.25 | AV |
| H | 10360 | 56.03 | 49.05 | 15.3 | 37.39 | 59.67 | 68.2 | -8.53 | PK |
| H | 10360 | 40.45 | 49.05 | 15.3 | 37.39 | 44.09 | 68.2 | -24.11 | AV |
| H | 15540 | 59.11 | 49.16 | 15.27 | 40.45 | 65.67 | 74 | -8.33 | PK |
| H | 15540 | 38.06 | 49.16 | 15.27 | 40.45 | 44.62 | 54 | -9.38 | AV |
| **operation frequency:5200** | | | | | | | | | |
| V | 10400 | 57.42 | 49.09 | 15.34 | 37.42 | 61.09 | 68.2 | -7.11 | PK |
| V | 10400 | 39.34 | 49.09 | 15.34 | 37.42 | 43.01 | 68.2 | -25.19 | AV |
| V | 15600 | 59.46 | 49.18 | 15.29 | 40.47 | 66.04 | 74 | -7.96 | PK |
| V | 15600 | 38.13 | 49.18 | 15.29 | 40.47 | 44.71 | 54 | -9.29 | AV |
| H | 10400 | 56.38 | 49.09 | 15.34 | 37.42 | 60.05 | 68.2 | -8.15 | PK |
| H | 10400 | 39.73 | 49.09 | 15.34 | 37.42 | 43.4 | 68.2 | -24.80 | AV |
| H | 15600 | 59.45 | 49.18 | 15.29 | 40.47 | 66.03 | 74 | -7.97 | PK |
| H | 15600 | 38.36 | 49.18 | 15.29 | 40.47 | 44.94 | 54 | -9.06 | AV |
| **operation frequency:5240** | | | | | | | | | |
| V | 10480 | 58.52 | 49.11 | 15.37 | 37.46 | 62.24 | 68.2 | -5.96 | PK |
| V | 10480 | 39.27 | 49.11 | 15.37 | 37.46 | 42.99 | 68.2 | -25.21 | AV |
| V | 15720 | 59.16 | 49.21 | 15.34 | 40.51 | 65.8 | 74 | -8.20 | PK |
| V | 15720 | 38.35 | 49.21 | 15.34 | 40.51 | 44.99 | 54 | -9.01 | AV |
| H | 10480 | 57.23 | 49.11 | 15.37 | 31.31 | 54.8 | 68.2 | -13.40 | PK |
| H | 10480 | 45.58 | 49.11 | 15.37 | 31.31 | 43.15 | 68.2 | -25.05 | AV |
| H | 15720 | 57.44 | 49.21 | 15.34 | 40.51 | 64.08 | 74 | -9.92 | PK |
| H | 15720 | 37.59 | 49.21 | 15.34 | 40.51 | 44.23 | 54 | -9.77 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11n HT20

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5180** | | | | | | | | | |
| V | 10360 | 56.32 | 49.05 | 15.3 | 37.39 | 59.96 | 68.2 | -8.24 | PK |
| V | 10360 | 41.45 | 49.05 | 15.3 | 37.39 | 45.09 | 68.2 | -23.11 | AV |
| V | 15540 | 56.66 | 49.16 | 15.27 | 40.45 | 63.22 | 74 | -10.78 | PK |
| V | 15540 | 39.17 | 49.16 | 15.27 | 40.45 | 45.73 | 54 | -8.27 | AV |
| H | 10360 | 56.01 | 49.05 | 15.3 | 37.39 | 59.65 | 68.2 | -8.55 | PK |
| H | 10360 | 40.46 | 49.05 | 15.3 | 37.39 | 44.1 | 68.2 | -24.10 | AV |
| H | 15540 | 59.13 | 49.16 | 15.27 | 40.45 | 65.69 | 74 | -8.31 | PK |
| H | 15540 | 38.04 | 49.16 | 15.27 | 40.45 | 44.6 | 54 | -9.40 | AV |
| **operation frequency:5200** | | | | | | | | | |
| V | 10400 | 57.43 | 49.09 | 15.34 | 37.42 | 61.1 | 68.2 | -7.10 | PK |
| V | 10400 | 39.38 | 49.09 | 15.34 | 37.42 | 43.05 | 68.2 | -25.15 | AV |
| V | 15600 | 59.44 | 49.18 | 15.29 | 40.47 | 66.02 | 74 | -7.98 | PK |
| V | 15600 | 38.16 | 49.18 | 15.29 | 40.47 | 44.74 | 54 | -9.26 | AV |
| H | 10400 | 56.33 | 49.09 | 15.34 | 37.42 | 60 | 68.2 | -8.20 | PK |
| H | 10400 | 39.78 | 49.09 | 15.34 | 37.42 | 43.45 | 68.2 | -24.75 | AV |
| H | 15600 | 59.41 | 49.18 | 15.29 | 40.47 | 65.99 | 74 | -8.01 | PK |
| H | 15600 | 38.33 | 49.18 | 15.29 | 40.47 | 44.91 | 54 | -9.09 | AV |
| **operation frequency:5240** | | | | | | | | | |
| V | 10480 | 58.55 | 49.11 | 15.37 | 37.46 | 62.27 | 68.2 | -5.93 | PK |
| V | 10480 | 39.29 | 49.11 | 15.37 | 37.46 | 43.01 | 68.2 | -25.19 | AV |
| V | 15720 | 59.14 | 49.21 | 15.34 | 40.51 | 65.78 | 74 | -8.22 | PK |
| V | 15720 | 38.33 | 49.21 | 15.34 | 40.51 | 44.97 | 54 | -9.03 | AV |
| H | 10480 | 57.25 | 49.11 | 15.37 | 31.31 | 54.82 | 68.2 | -13.38 | PK |
| H | 10480 | 45.54 | 49.11 | 15.37 | 31.31 | 43.11 | 68.2 | -25.09 | AV |
| H | 15720 | 57.43 | 49.21 | 15.34 | 40.51 | 64.07 | 74 | -9.93 | PK |
| H | 15720 | 37.57 | 49.21 | 15.34 | 40.51 | 44.21 | 54 | -9.79 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ac 40

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5190** | | | | | | | | | |
| V | 10380 | 56.79 | 49.07 | 15.33 | 37.41 | 60.46 | 68.2 | -7.74 | PK |
| V | 10380 | 40.22 | 49.07 | 15.33 | 37.41 | 43.89 | 68.2 | -24.31 | AV |
| V | 15570 | 56.33 | 49.17 | 15.28 | 40.46 | 62.9 | 74 | -11.10 | PK |
| V | 15570 | 39.78 | 49.17 | 15.28 | 40.46 | 46.35 | 54 | -7.65 | AV |
| H | 10380 | 56.54 | 49.07 | 15.33 | 37.41 | 60.21 | 68.2 | -7.99 | PK |
| H | 10380 | 40.46 | 49.07 | 15.33 | 37.41 | 44.13 | 68.2 | -24.07 | AV |
| H | 15570 | 54.55 | 49.17 | 15.28 | 40.46 | 61.12 | 74 | -12.88 | PK |
| H | 15570 | 39.38 | 49.17 | 15.28 | 40.46 | 45.95 | 54 | -8.05 | AV |
| **operation frequency:5230** | | | | | | | | | |
| V | 10460 | 57.16 | 49.11 | 15.37 | 37.46 | 60.88 | 68.2 | -7.32 | PK |
| V | 10460 | 41.13 | 49.11 | 15.37 | 37.46 | 44.85 | 68.2 | -23.35 | AV |
| V | 15690 | 54.47 | 49.21 | 15.34 | 40.51 | 61.11 | 74 | -12.89 | PK |
| V | 15690 | 39.36 | 49.21 | 15.34 | 40.51 | 46 | 54 | -8.00 | AV |
| H | 10460 | 57.11 | 49.11 | 15.37 | 31.31 | 54.68 | 68.2 | -13.52 | PK |
| H | 10460 | 44.52 | 49.11 | 15.37 | 31.31 | 42.09 | 68.2 | -26.11 | AV |
| H | 15690 | 55.18 | 49.21 | 15.34 | 40.51 | 61.82 | 74 | -12.18 | PK |
| H | 15690 | 40.03 | 49.21 | 15.34 | 40.51 | 46.67 | 54 | -7.33 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ac HT80

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5210** | | | | | | | | | |
| V | 10420 | 56.29 | 49.07 | 15.33 | 37.41 | 59.96 | 74 | -14.04 | PK |
| V | 10420 | 41.67 | 49.07 | 15.33 | 37.41 | 45.34 | 54 | -8.66 | AV |
| V | 15630 | 56.15 | 49.17 | 15.28 | 40.46 | 62.72 | 74 | -11.28 | PK |
| V | 15630 | 39.11 | 49.17 | 15.28 | 40.46 | 45.68 | 54 | -8.32 | AV |
| H | 10420 | 56.39 | 49.07 | 15.33 | 37.41 | 60.06 | 74 | -13.94 | PK |
| H | 10420 | 41.23 | 49.07 | 15.33 | 37.41 | 44.9 | 54 | -9.10 | AV |
| H | 15630 | 54.07 | 49.17 | 15.28 | 40.46 | 60.64 | 74 | -13.36 | PK |
| H | 15630 | 40.38 | 49.17 | 15.28 | 40.46 | 46.95 | 54 | -7.05 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ax 40

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5190** | | | | | | | | | |
| V | 10380 | 56.73 | 49.07 | 15.33 | 37.41 | 60.4 | 68.2 | -7.80 | PK |
| V | 10380 | 40.25 | 49.07 | 15.33 | 37.41 | 43.92 | 68.2 | -24.28 | AV |
| V | 15570 | 56.32 | 49.17 | 15.28 | 40.46 | 62.89 | 74 | -11.11 | PK |
| V | 15570 | 39.71 | 49.17 | 15.28 | 40.46 | 46.28 | 54 | -7.72 | AV |
| H | 10380 | 56.56 | 49.07 | 15.33 | 37.41 | 60.23 | 68.2 | -7.97 | PK |
| H | 10380 | 40.44 | 49.07 | 15.33 | 37.41 | 44.11 | 68.2 | -24.09 | AV |
| H | 15570 | 54.57 | 49.17 | 15.28 | 40.46 | 61.14 | 74 | -12.86 | PK |
| H | 15570 | 39.33 | 49.17 | 15.28 | 40.46 | 45.9 | 54 | -8.10 | AV |
| **operation frequency:5230** | | | | | | | | | |
| V | 10460 | 57.11 | 49.11 | 15.37 | 37.46 | 60.83 | 68.2 | -7.37 | PK |
| V | 10460 | 41.18 | 49.11 | 15.37 | 37.46 | 44.9 | 68.2 | -23.30 | AV |
| V | 15690 | 54.46 | 49.21 | 15.34 | 40.51 | 61.1 | 74 | -12.90 | PK |
| V | 15690 | 39.33 | 49.21 | 15.34 | 40.51 | 45.97 | 54 | -8.03 | AV |
| H | 10460 | 57.15 | 49.11 | 15.37 | 31.31 | 54.72 | 68.2 | -13.48 | PK |
| H | 10460 | 44.51 | 49.11 | 15.37 | 31.31 | 42.08 | 68.2 | -26.12 | AV |
| H | 15690 | 55.17 | 49.21 | 15.34 | 40.51 | 61.81 | 74 | -12.19 | PK |
| H | 15690 | 40.06 | 49.21 | 15.34 | 40.51 | 46.7 | 54 | -7.30 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11ax HT80

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5210** | | | | | | | | | |
| V | 10420 | 56.25 | 49.07 | 15.33 | 37.41 | 59.92 | 74 | -14.08 | PK |
| V | 10420 | 41.66 | 49.07 | 15.33 | 37.41 | 45.33 | 54 | -8.67 | AV |
| V | 15630 | 56.17 | 49.17 | 15.28 | 40.46 | 62.74 | 74 | -11.26 | PK |
| V | 15630 | 39.15 | 49.17 | 15.28 | 40.46 | 45.72 | 54 | -8.28 | AV |
| H | 10420 | 56.36 | 49.07 | 15.33 | 37.41 | 60.03 | 74 | -13.97 | PK |
| H | 10420 | 41.27 | 49.07 | 15.33 | 37.41 | 44.94 | 54 | -9.06 | AV |
| H | 15630 | 54.04 | 49.17 | 15.28 | 40.46 | 60.61 | 74 | -13.39 | PK |
| H | 15630 | 40.39 | 49.17 | 15.28 | 40.46 | 46.96 | 54 | -7.04 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11n HT40

| Polar (H/V) | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|---|---|---|
| **operation frequency:5190** | | | | | | | | | |
| V | 10380 | 56.78 | 49.07 | 15.33 | 37.41 | 60.45 | 68.2 | -7.75 | PK |
| V | 10380 | 40.23 | 49.07 | 15.33 | 37.41 | 43.9 | 68.2 | -24.30 | AV |
| V | 15570 | 56.35 | 49.17 | 15.28 | 40.46 | 62.92 | 74 | -11.08 | PK |
| V | 15570 | 39.79 | 49.17 | 15.28 | 40.46 | 46.36 | 54 | -7.64 | AV |
| H | 10380 | 56.53 | 49.07 | 15.33 | 37.41 | 60.2 | 68.2 | -8.00 | PK |
| H | 10380 | 40.45 | 49.07 | 15.33 | 37.41 | 44.12 | 68.2 | -24.08 | AV |
| H | 15570 | 54.56 | 49.17 | 15.28 | 40.46 | 61.13 | 74 | -12.87 | PK |
| H | 15570 | 39.32 | 49.17 | 15.28 | 40.46 | 45.89 | 54 | -8.11 | AV |
| **operation frequency:5230** | | | | | | | | | |
| V | 10460 | 57.18 | 49.11 | 15.37 | 37.46 | 60.9 | 68.2 | -7.30 | PK |
| V | 10460 | 41.26 | 49.11 | 15.37 | 37.46 | 44.98 | 68.2 | -23.22 | AV |
| V | 15690 | 54.43 | 49.21 | 15.34 | 40.51 | 61.07 | 74 | -12.93 | PK |
| V | 15690 | 39.38 | 49.21 | 15.34 | 40.51 | 46.02 | 54 | -7.98 | AV |
| H | 10460 | 57.13 | 49.11 | 15.37 | 31.31 | 54.7 | 68.2 | -13.50 | PK |
| H | 10460 | 44.55 | 49.11 | 15.37 | 31.31 | 42.12 | 68.2 | -26.08 | AV |
| H | 15690 | 55.16 | 49.21 | 15.34 | 40.51 | 61.8 | 74 | -12.20 | PK |
| H | 15690 | 40.04 | 49.21 | 15.34 | 40.51 | 46.68 | 54 | -7.32 | AV |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

## 3.3 CONDUCTED BAND EMISSION MEASUREMENT

### 3.3.1 TEST REQUIREMENT:

FCC Part15 C Section 15.209 and 15.407

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

| Spectrum Parameter | Setting | |
|---|---|---|
| Attenuation | Auto | |
| Start Frequency | 5150MHz | 5725MHz |
| Stop Frequency | 5250MHz | 5850MHz |
| RB / VB (emission in restricted band) | 1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average | |

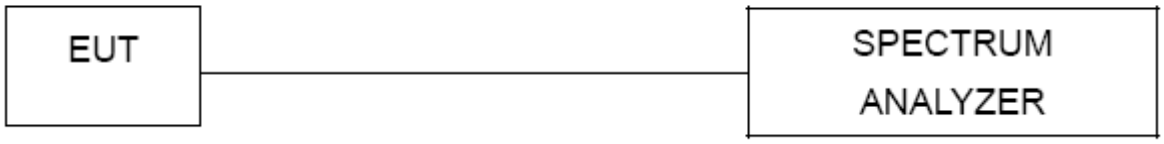
### 3.3.2 TEST PROCEDURE

Test method: FCC KDB 789033 G)& Parts 15.407(b)(4) & 15.209(a)

### 3.3.3 DEVIATION FROM TEST STANDARD

No deviation

### 3.3.4 TEST SETUP




### 3.3.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

### 3.3.6 TEST RESULT

For Conducted

Please see annex 2

The test result of ANT1 & ANT 2 are all attenuated 3dB below the limit. So the MIMO mode is passed.

## 4. PEAK OUTPUT POWER

### 4.1 APPLIED PROCEDURES / LIMIT

| For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. |
|---|

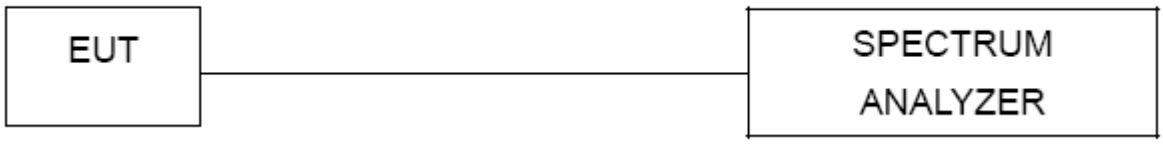
#### 4.1.1 TEST PROCEDURE

a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
b. (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
(ii) Set RBW = 1 MHz.
(iii) Set VBW ≥ 3 MHz.
(iv) Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
(v) Sweep time = auto.
(vi) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
(vii) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98%, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."
(viii) Trace average at least 100 traces in power averaging (rms) mode.
(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

#### 4.1.2 DEVIATION FROM STANDARD

No deviation.

#### 4.1.3 TEST SETUP




#### 4.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

#### 4.1.5 TEST RESULTS

Please see annex 2

## 5. POWER SPECTRAL DENSITY TEST

### 5.1 APPLIED PROCEDURES / LIMIT

| |
|---|
| In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. |

| Spectrum Parameters | Setting |
|---|---|
| Attenuation | Auto |
| Span Frequency | = the frequency band of operation |
| RB | RBW ≥ 1MHz for band 1<br>RBW ≥ 510KHz for band 4 |
| VB | VBW ≥ 3RBW |
| Detector | AVG |
| Trace | Max Hold |
| Sweep Time | Auto |

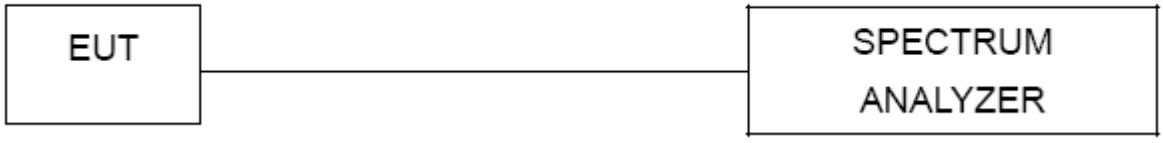
#### 5.1.1 TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02.
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
4. For U-NII1, U-NII-2A, U-NII-2C Band:
Set RBW=1MHz, VBW=3MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = sample, traces 100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)
For U-NII-3 Band:
Set RBW=510 kHz, VBW=3*RBW, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = sample, traces 100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)
5. User the cursor on spectrum to peak search the highest level of trace
6. Record the max. reading and add 10 log(1/duty cycle).
we test all antennas, the antenna 1 was worst mode and the data recording in the report.
7. Duty factor Reference is made to the test results in Section 7.1.5.

#### 5.1.2 DEVIATION FROM STANDARD

No deviation.

#### 5.1.3 TEST SETUP




#### 5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

#### 5.1.5 TEST RESULTS

Please see annex 2

## 6. 26DB&99% BANDWIDTH TEST

### 6.1 APPLIED PROCEDURES / LIMIT

| |
|---|
| The 26 dB bandwidth is used to determine the conducted power limits.<br>There is no limit bandwidth for U-NII-1, U-NII-2-A and U-NII-2-C. |

#### 6.1.1 TEST PROCEDURE

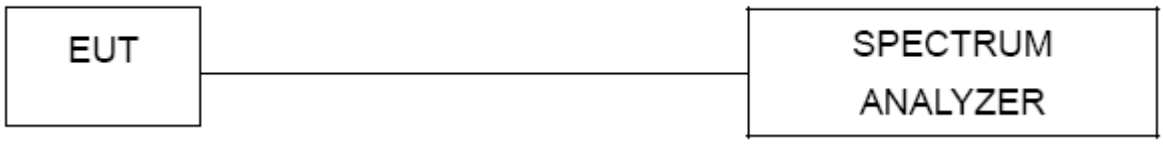
| 26dB Bandwidth | |
|---|---|
| Spectrum Parameters | Setting |
| RBW | approximately 1% of the emission bandwidth |
| VBW | >RBW |
| Span | 30MHz(20MHz Bandwidth mode)<br>60MHz(40MHz Bandwidth mode)<br>120MHz(80MHz Bandwidth mode) |
| Sweep Time | Auto |
| Detector | Peak |
| Trace Mode | Max Hold |

| 99% Occupied Bandwidth | |
|---|---|
| Spectrum Parameters | Setting |
| RBW | 1% to 5% of the OBW |
| VBW | Approximately three times the RBW |
| Span | between 1.5 times and 5.0 times the OBW |
| Sweep Time | Auto |
| Detector | Peak |
| Trace Mode | Max Hold |

#### 6.1.2 DEVIATION FROM STANDARD

No deviation.

#### 6.1.3 TEST SETUP




#### 6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

#### 6.1.5 TEST RESULTS

Please see annex 2

## 7. DUTY CYCLE TEST SIGNAL

### 7.1 APPLIED PROCEDURES / LIMIT

| |
|---|
| Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle. All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage. |

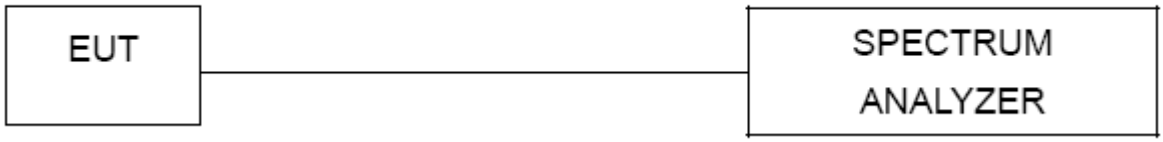
#### 7.1.1 TEST PROCEDURE

1. Set RBW = 1 MHz.
2. Set the video bandwidth (VBW) ≥RBW.
3. Detector = Peak.
4. Sweep = auto couple.
5. Allow the trace to stabilize.
6. Span=0

#### 7.1.2 DEVIATION FROM STANDARD

No deviation.

#### 7.1.3 TEST SETUP




#### 7.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

#### 7.1.5 TEST RESULTS

Please see annex 2

## 8. FREQUENCY STABILITY

### 8.1 APPLIED PROCEDURES / LIMIT

| |
|---|
| Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual. |

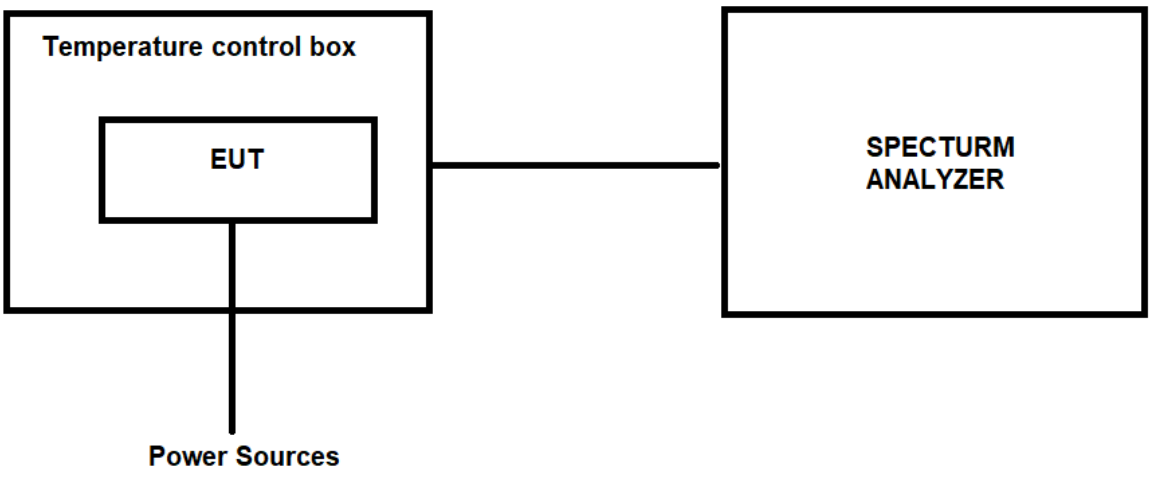
#### 8.1.1 TEST PROCEDURE

1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.
2. Set EUT as normal operation.
3. Turn the EUT on and couple its output to spectrum.
4. Turn the EUT off and set the chamber to the highest temperature specified.
5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.
6. Repeat step with the temperature chamber set to the lowest temperature.

#### 8.1.2 DEVIATION FROM STANDARD

No deviation.

#### 8.1.3 TEST SETUP




#### 8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

### 8.1.5 TEST RESULTS

ANT1

| Test Voltage | Test Temp. | Measured Frequency (MHz) | Spectrum Frequency (MHz) | | Δ Frequency (MHz) | |
|---|---|---|---|---|---|---|
| | | | 802.11a | 802.11n HT20 | 802.11a | 802.11n HT20 |
| 132V | -20℃ | 5180.0000 | 5180.0276 | 5180.0156 | -0.0276 | -0.0156 |
| | | 5220.0000 | 5220.0317 | 5220.0232 | -0.0317 | -0.0232 |
| | | 5240.0000 | 5240.0267 | 5240.0132 | -0.0267 | -0.0132 |
| 108V | | 5180.0000 | 5180.0346 | 5180.0176 | -0.0346 | -0.0176 |
| | | 5220.0000 | 5220.0276 | 5220.0765 | -0.0276 | -0.0765 |
| | | 5240.0000 | 5240.0211 | 5240.0432 | -0.0211 | -0.0432 |
| 120V | 25℃ | 5180.0000 | 5180.0277 | 5180.0342 | -0.0277 | -0.0342 |
| | | 5220.0000 | 5220.0326 | 5220.0432 | -0.0326 | -0.0432 |
| | | 5240.0000 | 5240.0278 | 5240.0321 | -0.0278 | -0.0321 |
| 132V | 50℃ | 5180.0000 | 5180.0298 | 5180.0267 | -0.0298 | -0.0267 |
| | | 5220.0000 | 5220.0278 | 5220.0154 | -0.0278 | -0.0154 |
| | | 5240.0000 | 5240.0297 | 5240.0178 | -0.0297 | -0.0178 |
| 108V | 50℃ | 5180.0000 | 5180.0278 | 5180.0321 | -0.0278 | -0.0321 |
| | | 5220.0000 | 5220.0297 | 5220.0187 | -0.0297 | -0.0187 |
| | | 5240.0000 | 5240.0178 | 5240.0167 | -0.0178 | -0.0167 |

| Test Voltage | Test Temp. | Measured Frequency (MHz) | Spectrum Frequency (MHz) | | Δ Frequency (MHz) | |
|---|---|---|---|---|---|---|
| | | | 802.11ac 20 | 802.11ax 20 | 802.11ac 20 | 802.11ax 20 |
| 132V | -20℃ | 5180.0000 | 5180.0245 | 5180.0123 | -0.0245 | -0.0123 |
| | | 5220.0000 | 5220.0202 | 5220.0227 | -0.0202 | -0.0227 |
| | | 5240.0000 | 5240.0053 | 5240.0187 | -0.0053 | -0.0187 |
| 108V | | 5180.0000 | 5180.0134 | 5180.0093 | -0.0134 | -0.0093 |
| | | 5220.0000 | 5220.0242 | 5220.0185 | -0.0242 | -0.0185 |
| | | 5240.0000 | 5240.0253 | 5240.0268 | -0.0253 | -0.0268 |
| 120V | 25℃ | 5180.0000 | 5180.0444 | 5180.0418 | -0.0444 | -0.0418 |
| | | 5220.0000 | 5220.0123 | 5220.0094 | -0.0123 | -0.0094 |
| | | 5240.0000 | 5240.0122 | 5240.0197 | -0.0122 | -0.0197 |
| 132V | 50℃ | 5180.0000 | 5180.0243 | 5180.0183 | -0.0243 | -0.0183 |
| | | 5220.0000 | 5220.0174 | 5220.0068 | -0.0174 | -0.0068 |
| | | 5240.0000 | 5240.0342 | 5240.0363 | -0.0342 | -0.0363 |
| 108V | 50℃ | 5180.0000 | 5180.0345 | 5180.0363 | -0.0345 | -0.0363 |
| | | 5220.0000 | 5220.0296 | 5220.0322 | -0.0296 | -0.0322 |
| | | 5240.0000 | 5240.0345 | 5240.0234 | -0.0345 | -0.0234 |

| Test Voltage | Test Temp. | Measured Frequency (MHz) | Spectrum Frequency (MHz) | | | Δ Frequency (MHz) | | |
|---|---|---|---|---|---|---|---|---|
| | | | 802.11ac 40 | 802.11ax 40 | 802.11n HT40 | 802.11ac 40 | 802.11 ax 40 | 802.11n HT40 |
| 132V | -20℃ | 5190.000 | 5190.0198 | 5190.0214 | 5190.0356 | -0.0198 | -0.0214 | -0.0356 |
| | | 5230.000 | 5230.0339 | 5230.0276 | 5230.0467 | -0.0339 | -0.0276 | -0.0467 |
| 108V | | 5190.000 | 5190.0247 | 5190.0276 | 5190.0387 | -0.0247 | -0.0276 | -0.0387 |
| | | 5230.000 | 5230.0312 | 5230.0367 | 5230.0289 | -0.0312 | -0.0367 | -0.0289 |
| 120V | 25℃ | 5190.000 | 5190.0231 | 5190.045 | 5190.0467 | -0.0231 | -0.0450 | -0.0467 |
| | | 5230.000 | 5230.0650 | 5230.0672 | 5230.0533 | -0.0650 | -0.0672 | -0.0533 |
| 132V | 50℃ | 5190.000 | 5190.0631 | 5190.0513 | 5190.0654 | -0.0631 | -0.0513 | -0.0654 |
| | | 5230.000 | 5230.0543 | 5230.0557 | 5230.0511 | -0.0543 | -0.0557 | -0.0511 |
| 108V | 50℃ | 5190.000 | 5190.0533 | 5190.0558 | 5190.0378 | -0.0533 | -0.0558 | -0.0378 |
| | | 5230.000 | 5230.0342 | 5230.0397 | 5230.0411 | -0.0342 | -0.0397 | -0.0411 |

| Test Voltage | Test Temp. | Measured Frequency (MHz) | Spectrum Frequency (MHz) | | Δ Frequency (MHz) | |
|---|---|---|---|---|---|---|
| | | | 802.11ac 80 | 802.11ax 80 | 802.11ac 80 | 802.11ax 80 |
| 132V | -20℃ | 5210.0000 | 5210.0265 | 5210.0476 | -0.0265 | -0.0476 |
| 108V | | 5210.0000 | 5210.0378 | 5210.0653 | -0.0378 | -0.0653 |
| 120V | 25℃ | 5210.0000 | 5210.0657 | 5210.0646 | -0.0657 | -0.0646 |
| 132V | 50℃ | 5210.0000 | 5210.0685 | 5210.0598 | -0.0685 | -0.0598 |
| 108V | 50℃ | 5210.0000 | 5210.0459 | 5210.0589 | -0.0459 | -0.0589 |

ANT2

| Test Voltage | Test Temp. | Measured Frequency (MHz) | Spectrum Frequency (MHz) | | Δ Frequency (MHz) | |
|---|---|---|---|---|---|---|
| | | | 802.11a | 802.11n HT20 | 802.11a | 802.11n HT20 |
| 132V | -20℃ | 5180.0000 | 5180.0286 | 5180.0166 | -0.0286 | -0.0166 |
| | | 5220.0000 | 5220.0327 | 5220.0242 | -0.0327 | -0.0242 |
| | | 5240.0000 | 5240.0277 | 5240.0142 | -0.0277 | -0.0142 |
| 108V | | 5180.0000 | 5180.0356 | 5180.0186 | -0.0356 | -0.0186 |
| | | 5220.0000 | 5220.0286 | 5220.0775 | -0.0286 | -0.0775 |
| | | 5240.0000 | 5240.0221 | 5240.0442 | -0.0221 | -0.0442 |
| 120V | 25℃ | 5180.0000 | 5180.0287 | 5180.0352 | -0.0287 | -0.0352 |
| | | 5220.0000 | 5220.0336 | 5220.0442 | -0.0336 | -0.0442 |
| | | 5240.0000 | 5240.0288 | 5240.0331 | -0.0288 | -0.0331 |
| 132V | 50℃ | 5180.0000 | 5180.0308 | 5180.0277 | -0.0308 | -0.0277 |
| | | 5220.0000 | 5220.0288 | 5220.0164 | -0.0288 | -0.0164 |
| | | 5240.0000 | 5240.0307 | 5240.0188 | -0.0307 | -0.0188 |
| 108V | 50℃ | 5180.0000 | 5180.0288 | 5180.0331 | -0.0288 | -0.0331 |
| | | 5220.0000 | 5220.0307 | 5220.0197 | -0.0307 | -0.0197 |
| | | 5240.0000 | 5240.0188 | 5240.0177 | -0.0188 | -0.0177 |

| Test Voltage | Test Temp. | Measured Frequency (MHz) | Spectrum Frequency (MHz) | | Δ Frequency (MHz) | |
|---|---|---|---|---|---|---|
| | | | 802.11ac 20 | 802.11ax 20 | 802.11ac 20 | 802.11ax 20 |
| 132V | -20℃ | 5180.0000 | 5180.0255 | 5180.0133 | -0.0255 | -0.0133 |
| | | 5220.0000 | 5220.0212 | 5220.0237 | -0.0212 | -0.0237 |
| | | 5240.0000 | 5240.0063 | 5240.0197 | -0.0063 | -0.0197 |
| 108V | | 5180.0000 | 5180.0144 | 5180.0103 | -0.0144 | -0.0103 |
| | | 5220.0000 | 5220.0252 | 5220.0195 | -0.0252 | -0.0195 |
| | | 5240.0000 | 5240.0263 | 5240.0278 | -0.0263 | -0.0278 |
| 120V | 25℃ | 5180.0000 | 5180.0454 | 5180.0428 | -0.0454 | -0.0428 |
| | | 5220.0000 | 5220.0133 | 5220.0104 | -0.0133 | -0.0104 |
| | | 5240.0000 | 5240.0132 | 5240.0207 | -0.0132 | -0.0207 |
| 132V | 50℃ | 5180.0000 | 5180.0253 | 5180.0193 | -0.0253 | -0.0193 |
| | | 5220.0000 | 5220.0184 | 5220.0078 | -0.0184 | -0.0078 |
| | | 5240.0000 | 5240.0352 | 5240.0373 | -0.0352 | -0.0373 |
| 108V | 50℃ | 5180.0000 | 5180.0355 | 5180.0373 | -0.0355 | -0.0373 |
| | | 5220.0000 | 5220.0306 | 5220.0332 | -0.0306 | -0.0332 |
| | | 5240.0000 | 5240.0355 | 5240.0244 | -0.0355 | -0.0244 |

| Test Voltage | Test Temp. | Measured Frequency (MHz) | Spectrum Frequency (MHz) | | | Δ Frequency (MHz) | | |
|---|---|---|---|---|---|---|---|---|
| | | | 802.11ac 40 | 802.11ax 40 | 802.11n HT40 | 802.11ac 40 | 802.11 ax 40 | 802.11n HT40 |
| 132V | -20℃ | 5190.000 | 5190.0208 | 5190.0224 | 5190.0366 | -0.0208 | -0.0224 | -0.0366 |
| | | 5230.000 | 5230.0349 | 5230.0286 | 5230.0477 | -0.0349 | -0.0286 | -0.0477 |
| 108V | | 5190.000 | 5190.0257 | 5190.0286 | 5190.0397 | -0.0257 | -0.0286 | -0.0397 |
| | | 5230.000 | 5230.0322 | 5230.0377 | 5230.0299 | -0.0322 | -0.0377 | -0.0299 |
| 120V | 25℃ | 5190.000 | 5190.0241 | 5190.0460 | 5190.0477 | -0.0241 | -0.0460 | -0.0477 |
| | | 5230.000 | 5230.0660 | 5230.0682 | 5230.0543 | -0.0660 | -0.0682 | -0.0543 |
| 132V | 50℃ | 5190.000 | 5190.0641 | 5190.0523 | 5190.0664 | -0.0641 | -0.0523 | -0.0664 |
| | | 5230.000 | 5230.0553 | 5230.0567 | 5230.0521 | -0.0553 | -0.0567 | -0.0521 |
| 108V | 50℃ | 5190.000 | 5190.0543 | 5190.0568 | 5190.0388 | -0.0543 | -0.0568 | -0.0388 |
| | | 5230.000 | 5230.0352 | 5230.0407 | 5230.0421 | -0.0352 | -0.0407 | -0.0421 |

| Test Voltage | Test Temp. | Measured Frequency (MHz) | Spectrum Frequency (MHz) | | Δ Frequency (MHz) | |
|---|---|---|---|---|---|---|
| | | | 802.11ac 80 | 802.11ax 80 | 802.11ac 80 | 802.11ax 80 |
| 132V | -20℃ | 5210.0000 | 5210.0275 | 5210.0486 | -0.0275 | -0.0486 |
| 108V | | 5210.0000 | 5210.0388 | 5210.0663 | -0.0388 | -0.0663 |
| 120V | 25℃ | 5210.0000 | 5210.0667 | 5210.0656 | -0.0667 | -0.0656 |
| 132V | 50℃ | 5210.0000 | 5210.0695 | 5210.0608 | -0.0695 | -0.0608 |
| 108V | 50℃ | 5210.0000 | 5210.0469 | 5210.0599 | -0.0469 | -0.0599 |

## 9. TRANSMISSION IN THE ABSENCE OF DATA

### 9.1 STANDARD REQUIREMENT

According to §15.407(c)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

### 9.2 TEST RESULT

No non-compliance noted:
Refer to the theory of operation.

## 10. ANTENNA REQUIREMENT

### 10.1 STANDARD REQUIREMENT

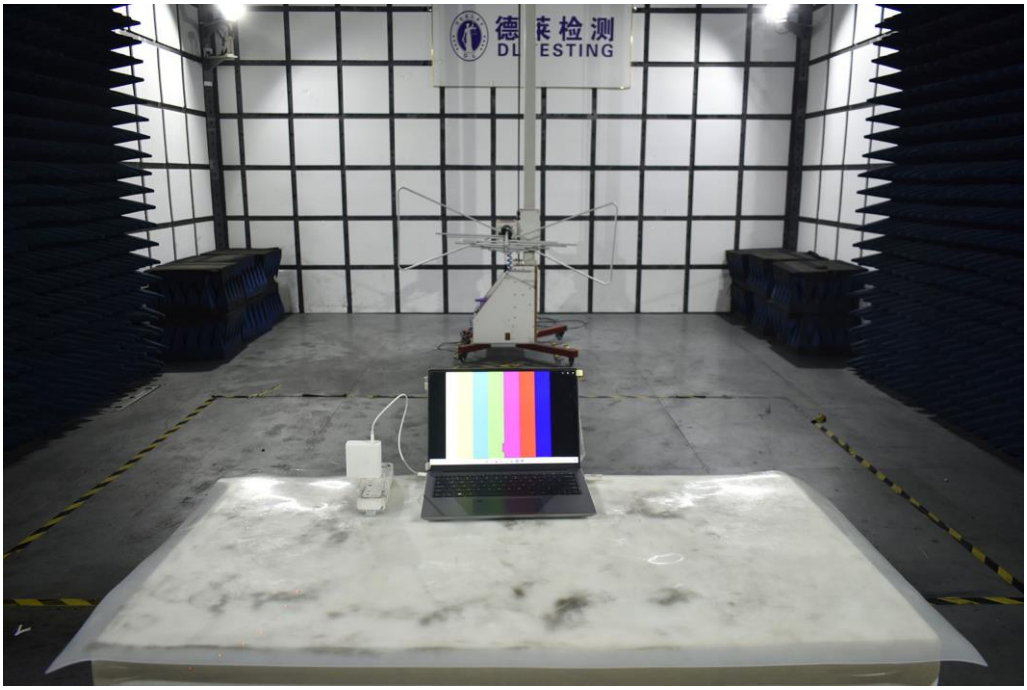
15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

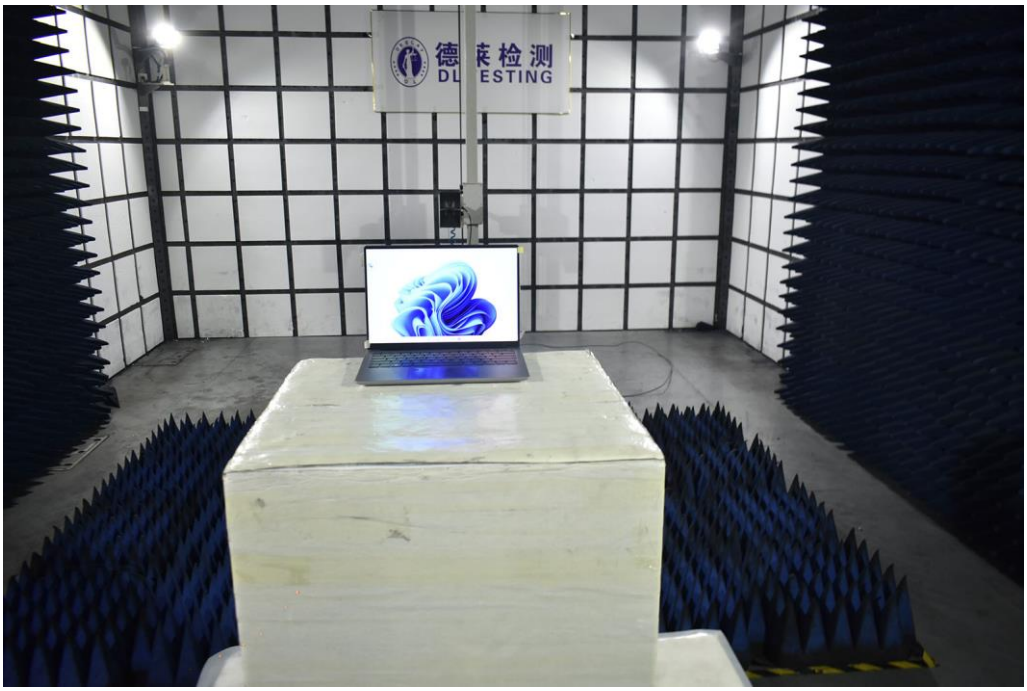
### 10.2 EUT ANTENNA

The EUT antenna is equipped unique antenna connector and antenna gain less than 6dBi, It comply with the standard requirement.

## 11. TEST SEUUP PHOTO

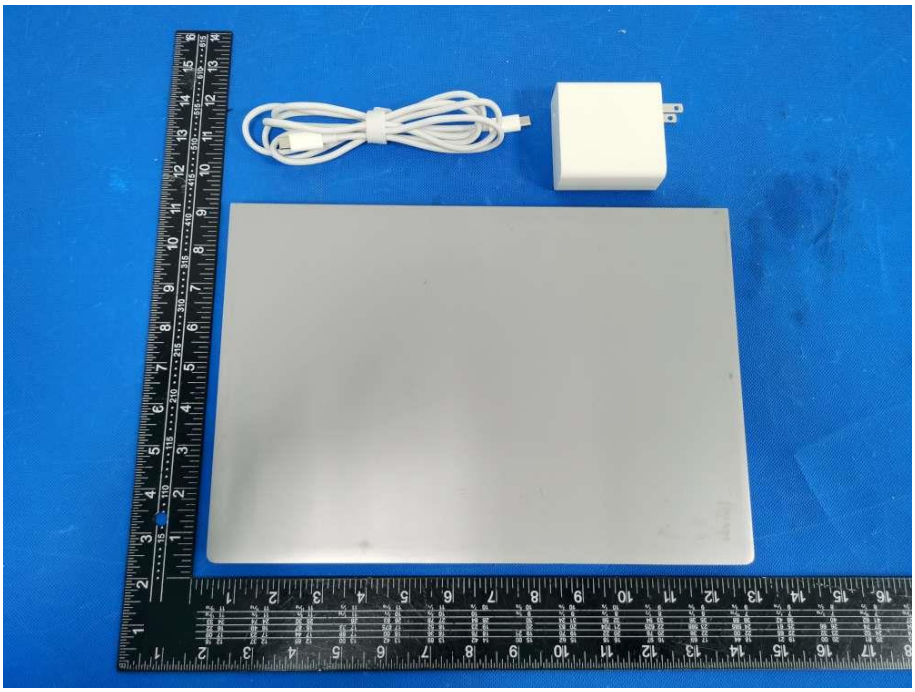
**Radiated Measurement Photos**

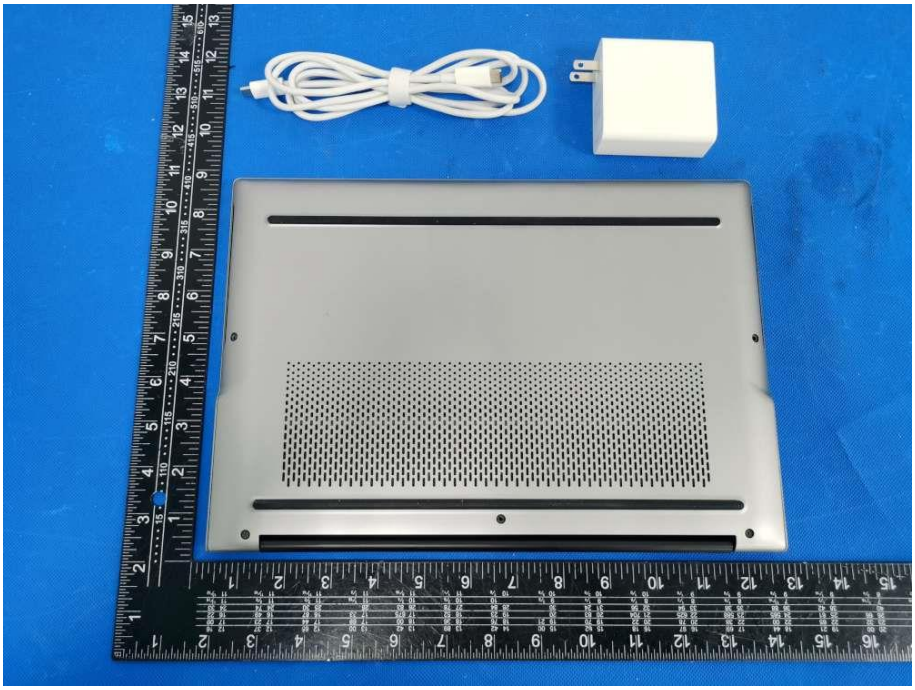


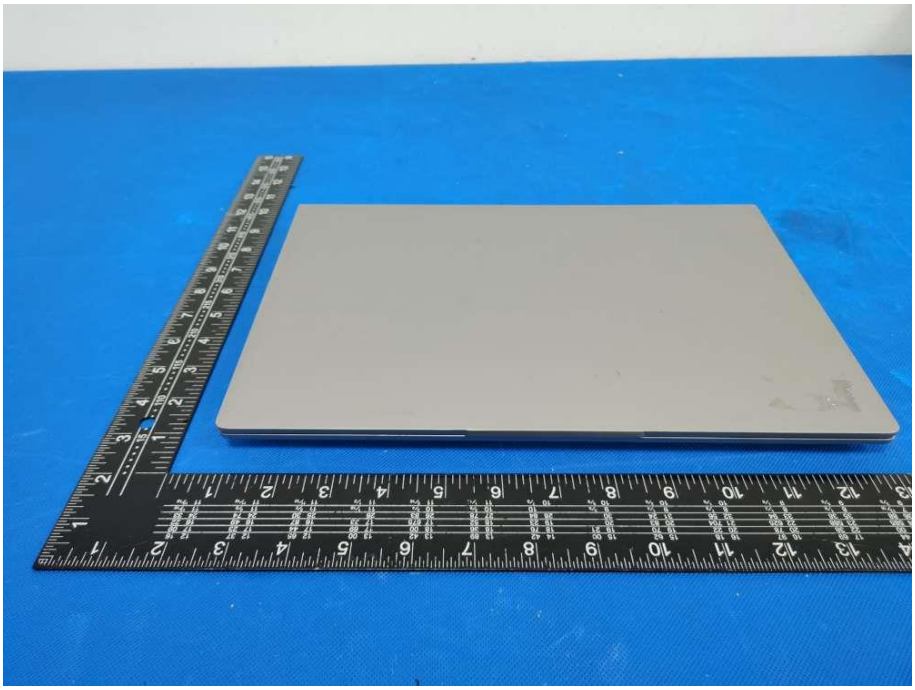



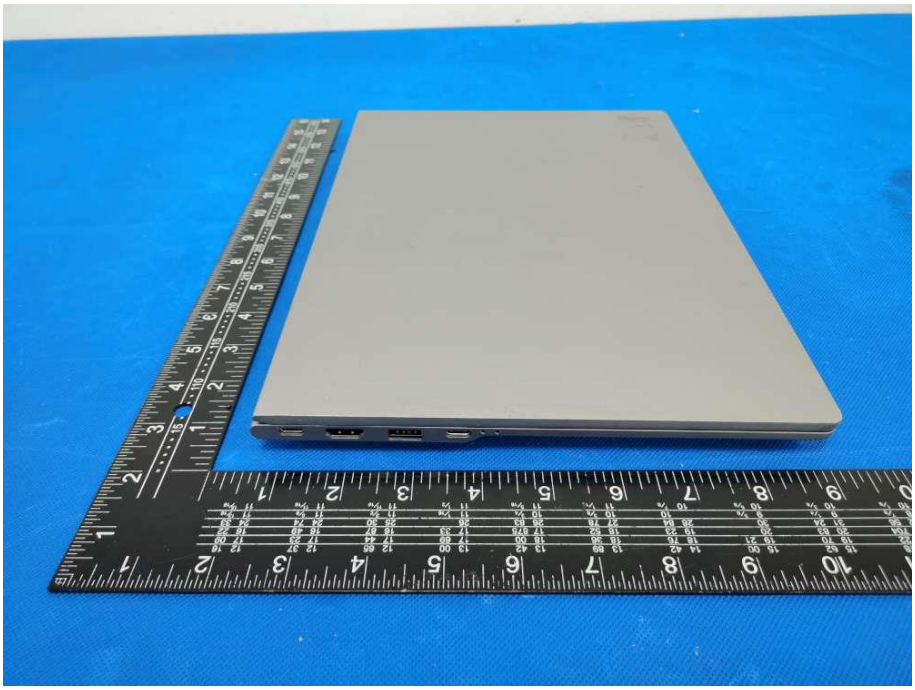
**Conducted Measurement Photos**

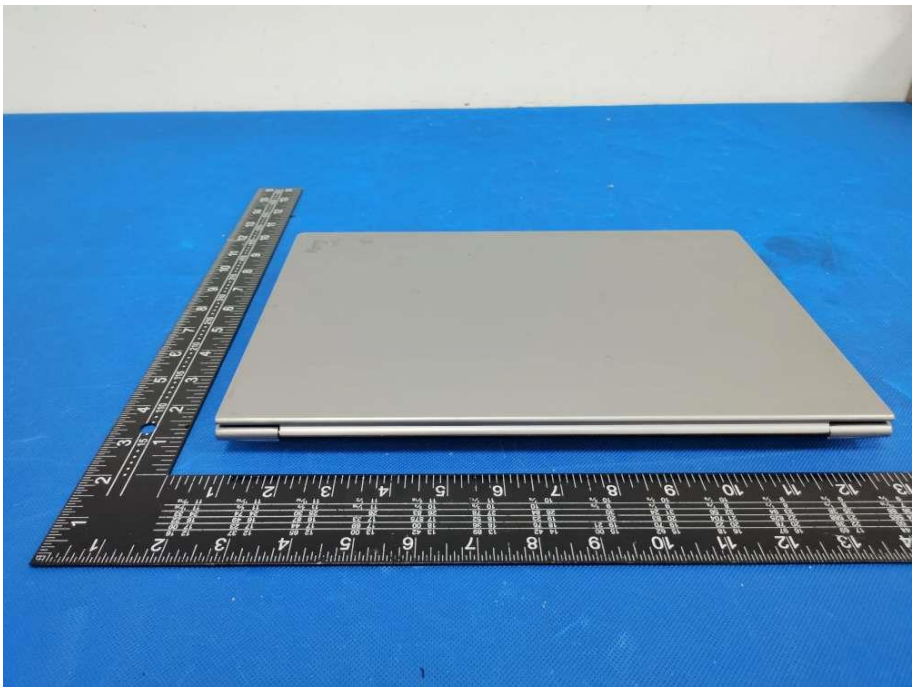
**12. EUT PHOTO**

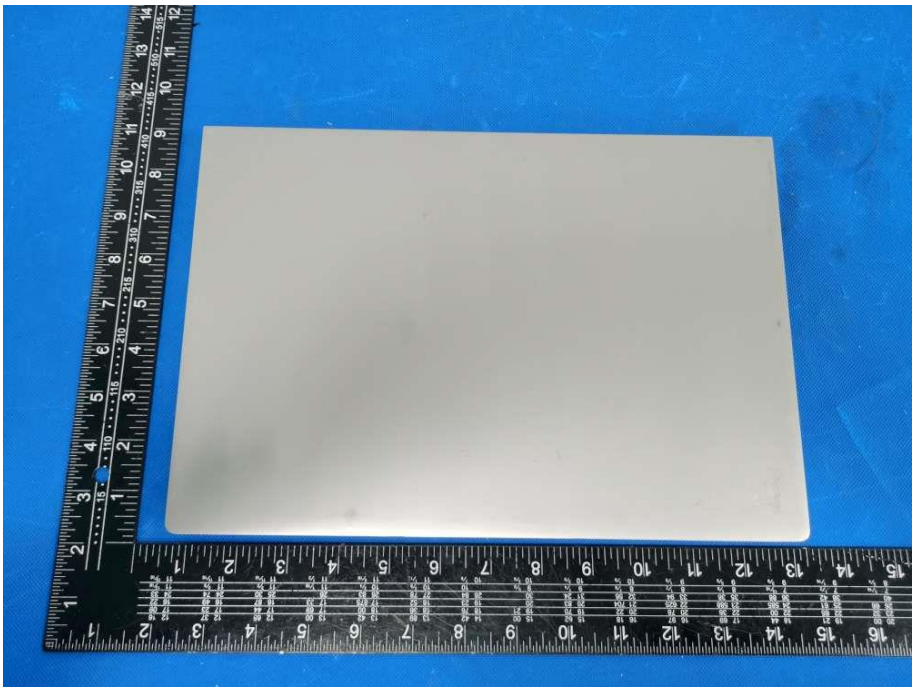


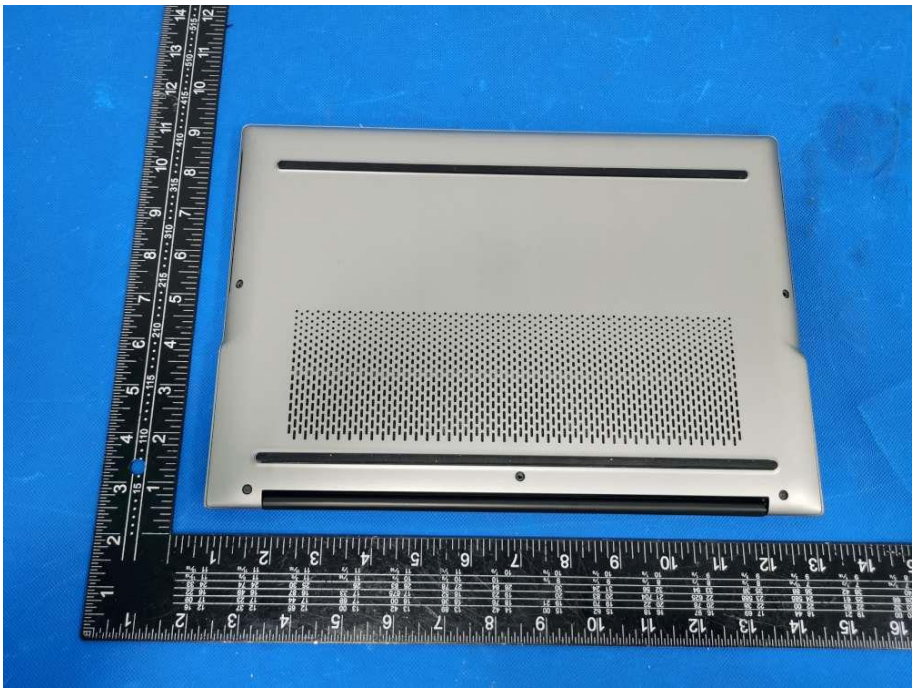




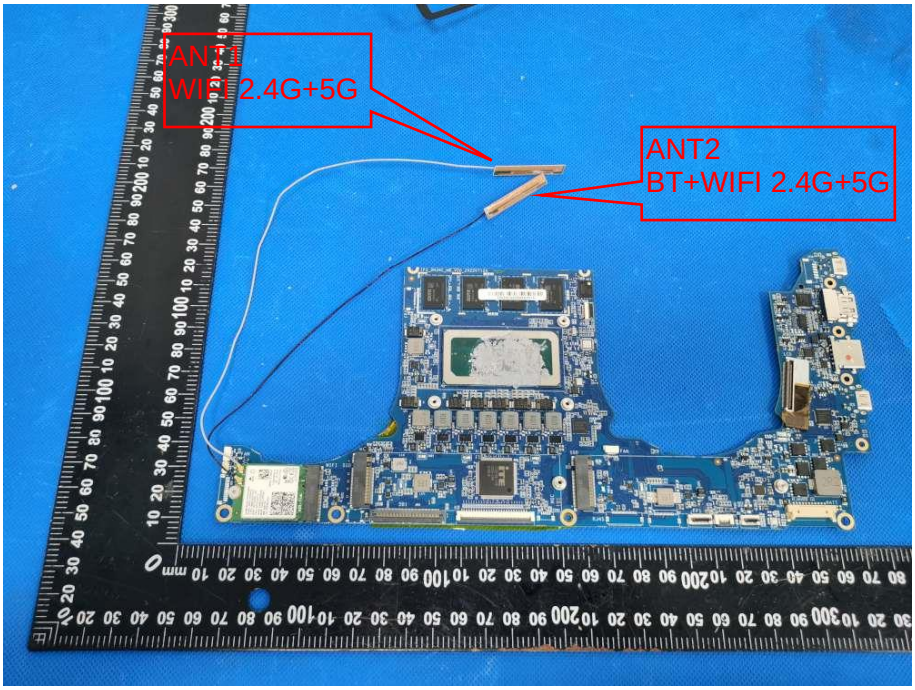









USB-C Power Adapter
Made in China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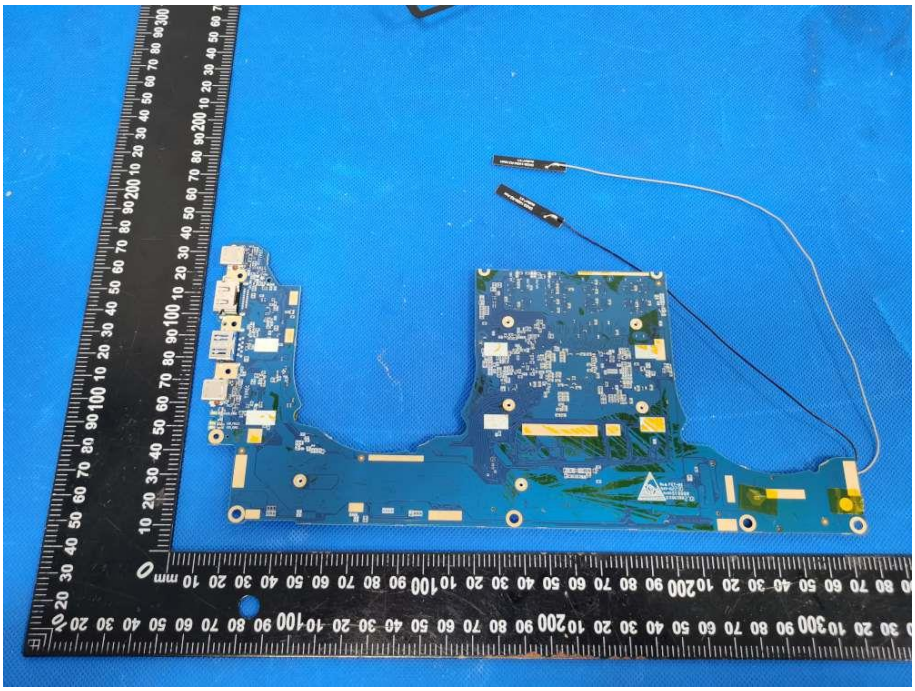
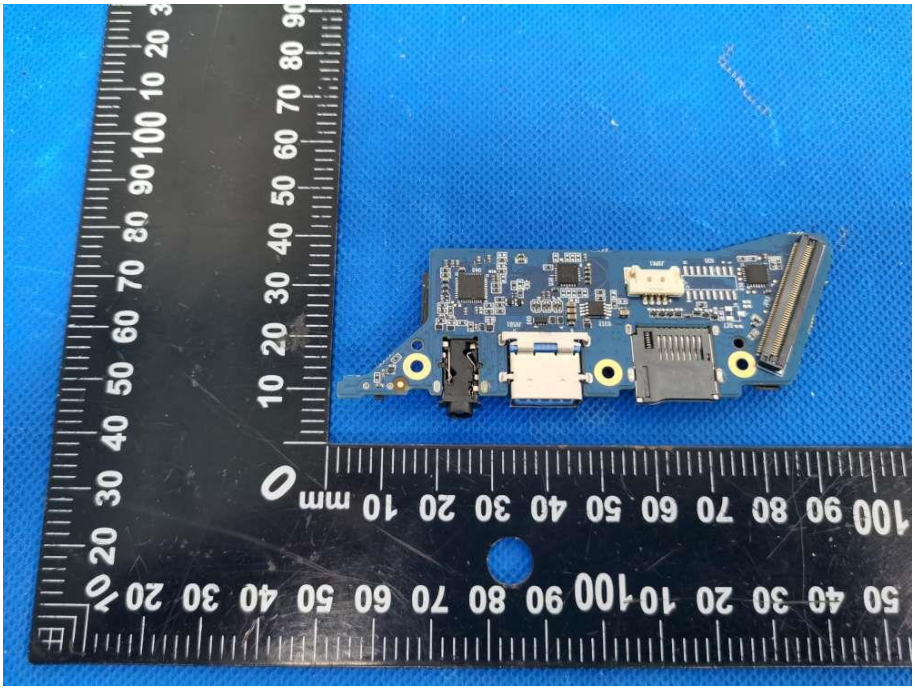
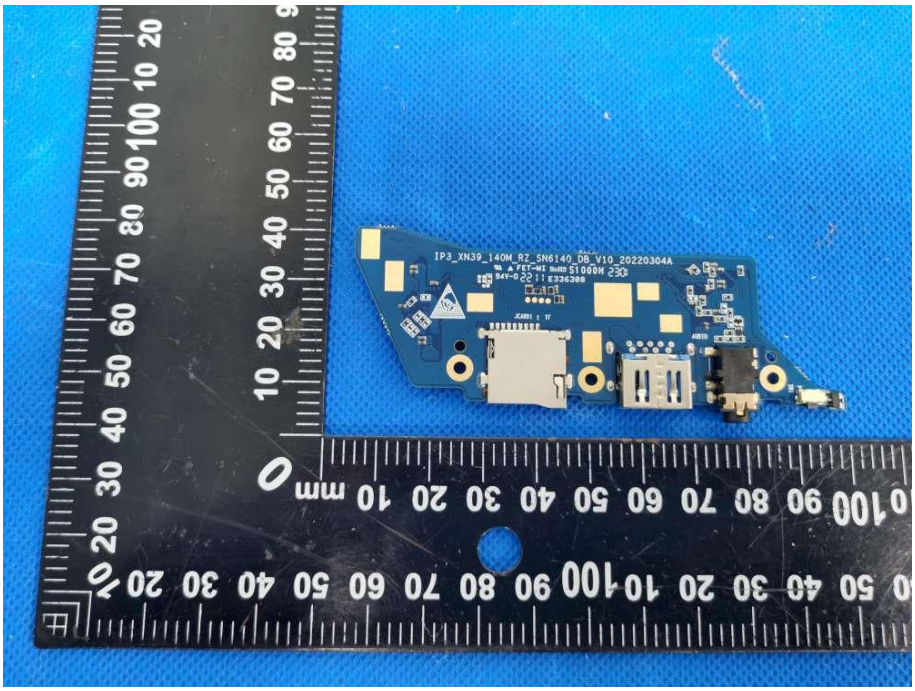
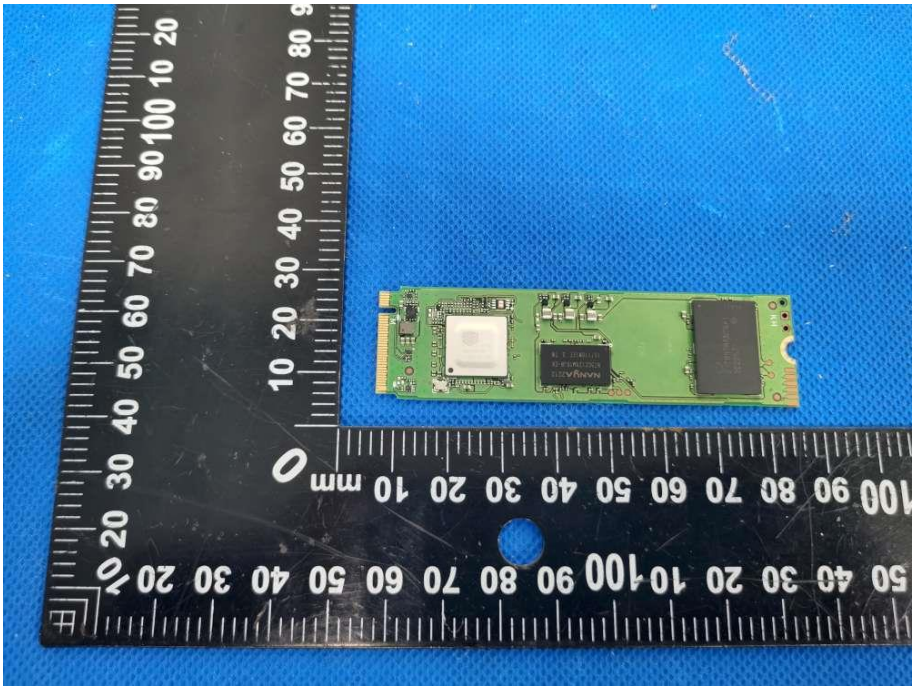
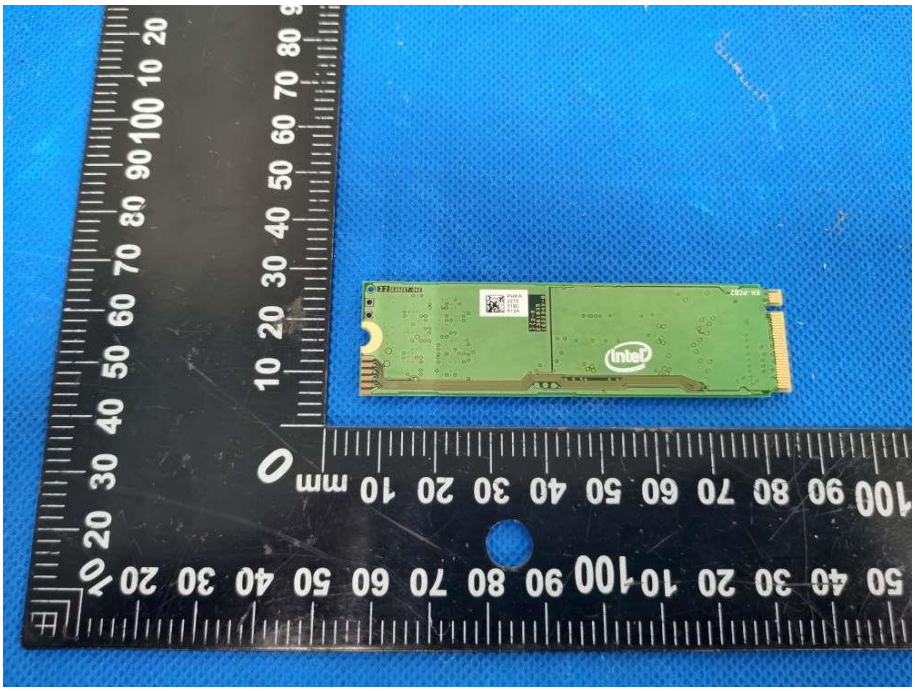
WIFI 2.4G+5G
ANT2
BT+WIFI 2.4G+5G

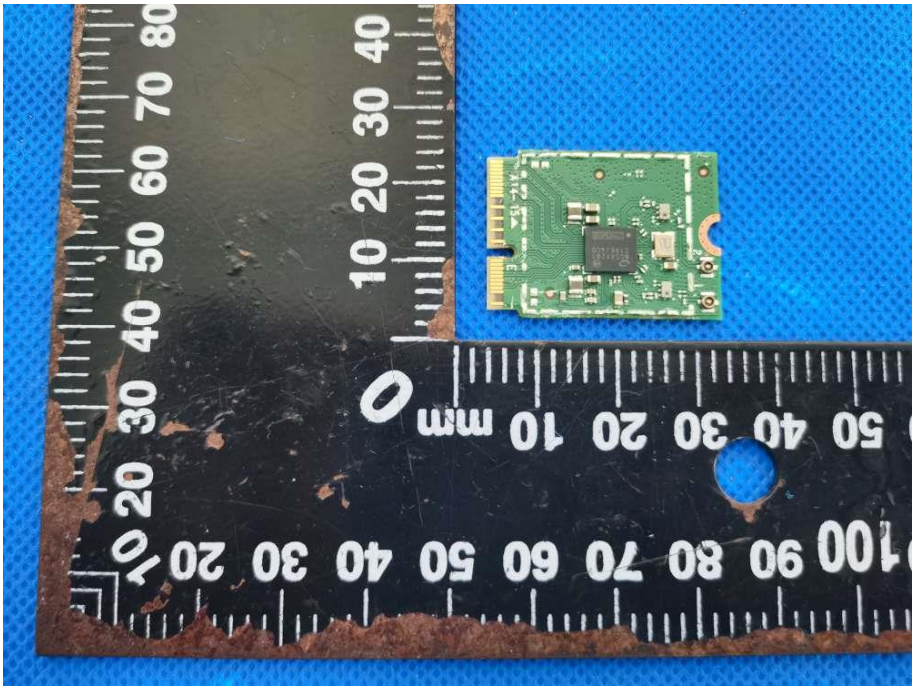


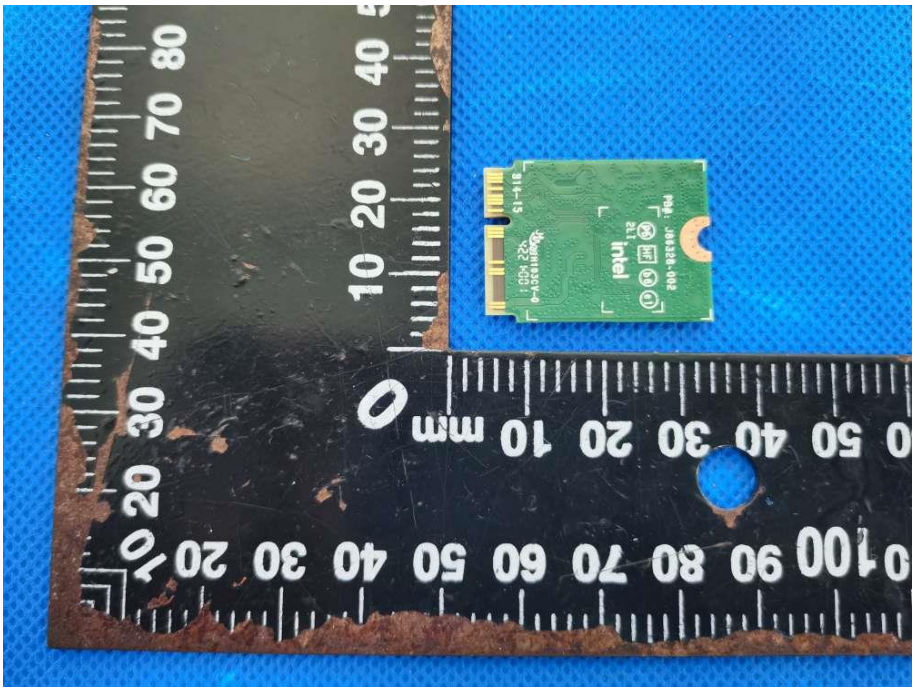








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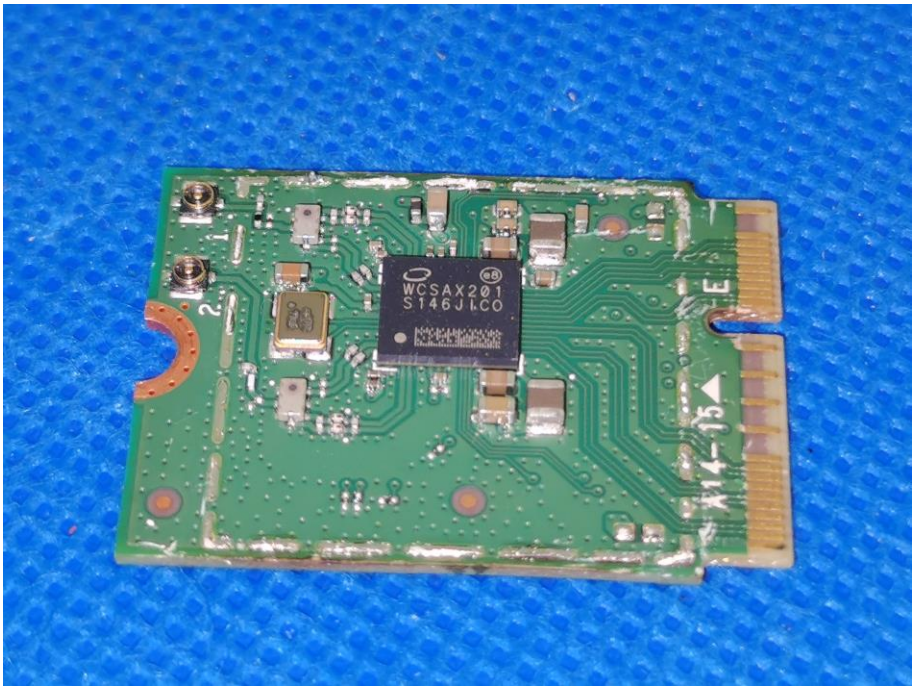
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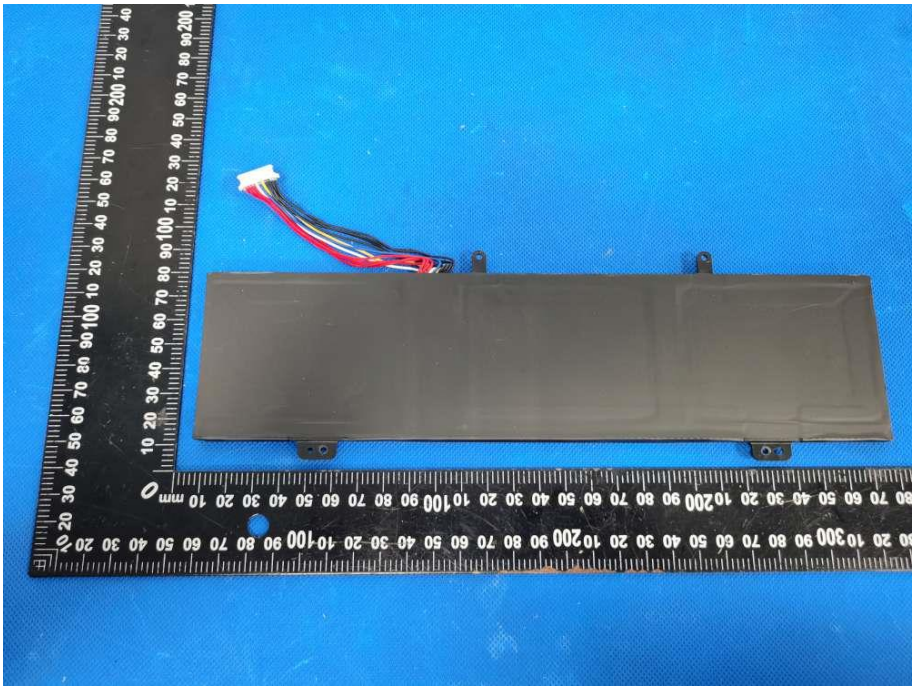

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