

FCC RF Test Report

(U-NII)

Applicant: Hangzhou Roombanker Technology Co., Ltd.

Address of Applicant: A#801 Wantong center, Hangzhou, China

Equipment Under Test (EUT)

Product Name: Smart Gateway

Model No.: DSGW-021

FCC ID: 2AUXBDSGW-021

Applicable Standards: FCC CFR Title 47 Part 15E (§15.407)

Date of Sample Receipt: 23 Dec., 2022

Date of Test: 24 Dec., 2022 to 16 Jan., 2023

Date of Report Issued: 17 Jan., 2023

Test Result: PASS

Tested by:

Mike Ou
Test Engineer

Date:

17 Jan., 2023

Reviewed by:

Winner Zhang
Project Engineer

Date:

17 Jan., 2023

Approved by:

Winner Zhang
Manager

Date:

17 Jan., 2023

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

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1 Version

| Version No. | Date | Description |
|-------------|---------------|-------------|
| 00 | 17 Jan., 2023 | Original |
| | | |
| | | |
| | | |
| | | |

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3 General Information

3.1 Client Information

| | |
|---------------|--|
| Applicant: | Hangzhou Roombanker Technology Co., Ltd. |
| Address: | A#801 Wantong center, Hangzhou, China |
| Manufacturer: | Hangzhou Roombanker Technology Co., Ltd. |
| Address: | A#801 Wantong center, Hangzhou, China |

3.2 General Description of E.U.T.

| | | |
|--|---|---|
| Product Name: | Smart Gateway | |
| Model No.: | DSGW-021 | |
| Operation Frequency: | Band 1: 5150 MHz - 5250 MHz | |
| | Band 4: 5725 MHz - 5850 MHz | |
| Channel Numbers: | Band 1: 4 , Band 4: 5 (802.11a, n-HT20, ac-VHT20) | |
| | Band 1, 4: 2 (802.11n-HT40, ac-VHT40) | |
| | Band 1, 4: 1 (802.11ac-VHT80) | |
| Modulation Technology: (IEEE 802.11a/802.11n) | OFDM-BPSK, QPSK, 16QAM, 64QAM | |
| Modulation Technology: (IEEE 802.11ac) | OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM | |
| Antenna Type: | Integral antenna | |
| Antenna Gain: | 5G WiFi | Band 1: 4.23 dBi (declare by applicant) |
| | | Band 4: 4.80 dBi (declare by applicant) |
| Antenna Transmit Mode: | MIMO (2TX, 2RX) | |
| Test Sample Condition: | The test samples were provided in good working order with no visible defects. | |

3.3 Test Mode and Environment

| Test Mode: | |
|--|---|
| Transmitting mode: | Keep the EUT in continuous transmitting with modulation |
| Per-scan all kind of data rate, the follow list were the worst case: | |
| Mode | Data rate |
| 802.11a | 6.0 Mbps |
| 802.11n-HT20 | 6.5 Mbps |
| 802.11n-HT40 | 13.5 Mbps |
| 802.11ac-VHT20 | 6.5 Mbps |
| 802.11ac-VHT40 | 13.5 Mbps |
| 802.11ac-VHT80 | 29.3 Mbps |
| Remark: For AC power line conducted emission and radiated spurious emission (below 1GHz), pre-scan 802.11a, n, ac modulation mode, found 802.11a modulation mode was worse case mode. The report only reflects the test data of worst mode. | |
| Operating Environment: | |
| Temperature: | 15°C ~ 35°C |
| Humidity: | 20 % ~ 75 % RH |
| Atmospheric Pressure: | 1008 mbar |
| Voltage: | Nominal: 5.0Vdc, Extreme: Low 4.25Vdc, High 5.75Vdc |

3.4 Description of Test Auxiliary Equipment

The EUT has been tested as an independent unit.

3.5 Measurement Uncertainty

| Parameter | Expanded Uncertainty (Confidence of 95%(U = 2Uc(y))) |
|--|---|
| Conducted Emission for LISN (9kHz ~ 10MHz) | 1.9 dB |
| Conducted Emission for LISN (10MHz ~ 30MHz) | 2.6 dB |
| Radiated Emission (30MHz ~ 1GHz) (3m SAC) | 3.8 dB |
| Radiated Emission (1GHz ~ 18GHz) (3m SAC) | 3.6 dB |
| Radiated Emission (18GHz ~ 40GHz) (3m SAC) | 5.34 dB |
| Radiated Emission (30MHz ~ 1GHz) (10m SAC) | 3.7 dB |
| Note: All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance. | |

3.6 Additions to, Deviations, or Exclusions from the Method

No

3.7 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

3.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: <http://jyt.lets.com>

3.9 Test Instruments List

| Radiated Emission(3m SAC): | | | | | |
|-------------------------------|-----------------|-----------------|------------------|----------------------|--------------------------|
| Test Equipment | Manufacturer | Model No. | Manage No. | Cal. Date (mm-dd-yy) | Cal. Due date (mm-dd-yy) |
| 3m SAC | ETS | 9m*6m*6m | WXJ001-1 | 04-14-2021 | 04-13-2024 |
| Loop Antenna | Schwarzbeck | FMZB 1519 B | WXJ002-4 | 03-07-2022 | 03-06-2023 |
| BiConiLog Antenna | Schwarzbeck | VULB9163 | WXJ002 | 03-08-2022 | 03-07-2023 |
| Horn Antenna | Schwarzbeck | BBHA9120D | WXJ002-2 | 03-08-2022 | 03-07-2023 |
| Horn Antenna | Schwarzbeck | BBHA9170 | WXJ002-5 | 04-07-2022 | 04-06-2023 |
| Pre-amplifier (30MHz ~ 1GHz) | Schwarzbeck | BBV9743B | WXJ001-2 | 01-20-2022 | 01-19-2023 |
| Pre-amplifier (1GHz ~ 18GHz) | SKET | LNPA_0118G-50 | WXJ001-3 | 01-20-2022 | 01-19-2023 |
| Pre-amplifier (18GHz ~ 40GHz) | RF System | TRLA-180400G45B | WXJ002-7 | 03-30-2022 | 03-29-2023 |
| EMI Test Receiver | Rohde & Schwarz | ESRP7 | WXJ003-1 | 03-05-2022 | 03-04-2023 |
| Spectrum Analyzer | Rohde & Schwarz | FSP 30 | WXJ004 | 01-20-2022 | 01-19-2023 |
| Spectrum Analyzer | KEYSIGHT | N9010B | WXJ004-2 | 10-17-2022 | 10-16-2023 |
| Coaxial Cable (30MHz ~ 1GHz) | JYTSZ | JYT3M-1G-NN-8M | WXG001-4 | 01-20-2022 | 01-19-2023 |
| Coaxial Cable (1GHz ~ 18GHz) | JYTSZ | JYT3M-18G-NN-8M | WXG001-5 | 01-20-2022 | 01-19-2023 |
| Coaxial Cable (18GHz ~ 40GHz) | JYTSZ | JYT3M-40G-SS-8M | WXG001-7 | 01-20-2022 | 01-19-2023 |
| Band Reject Filter Group | Tonscend | JS0806-F | WXJ089 | N/A | |
| Test Software | Tonscend | TS+ | Version: 3.0.0.1 | | |

| Radiated Emission(10m SAC): | | | | | |
|------------------------------------|---------------------|------------------|-------------------|-----------------------------|---------------------------------|
| Test Equipment | Manufacturer | Model No. | Manage No. | Cal. Date (mm-dd-yy) | Cal. Due date (mm-dd-yy) |
| 10m SAC | ETS | RFSD-100-F/A | WXJ090 | 04-28-2021 | 04-27-2024 |
| BiConiLog Antenna | SCHWARZBECK | VULB 9168 | WXJ090-1 | 04-01-2022 | 03-31-2023 |
| BiConiLog Antenna | SCHWARZBECK | VULB 9168 | WXJ090-2 | 03-31-2022 | 03-30-2023 |
| EMI Test Receiver | R&S | ESR 3 | WXJ090-3 | 03-30-2022 | 03-29-2023 |
| EMI Test Receiver | R&S | ESR 3 | WXJ090-4 | 03-30-2022 | 03-29-2023 |
| Low Pre-amplifier | Bost | LNA 0920N | WXJ090-6 | 01-20-2022 | 01-19-2023 |
| Low Pre-amplifier | Bost | LNA 0920N | WXJ090-7 | 01-20-2022 | 01-19-2023 |
| Cable | Bost | JYT10M-1G-NN-10M | WXG002-7 | 01-20-2022 | 01-19-2023 |
| Cable | Bost | JYT10M-1G-NN-10M | WXG002-8 | 01-20-2022 | 01-19-2023 |
| Test Software | R&S | EMC32 | Version: 10.50.40 | | |

| Conducted Emission: | | | | | |
|-----------------------------------|---------------------|------------------|--------------------|-----------------------------|---------------------------------|
| Test Equipment | Manufacturer | Model No. | Manage No. | Cal. Date (mm-dd-yy) | Cal. Due date (mm-dd-yy) |
| EMI Test Receiver | Rohde & Schwarz | ESR3 | WXJ003-2 | 07-12-2022 | 07-11-2023 |
| LISN | Schwarzbeck | NSLK 8127 | QCJ001-13 | 02-24-2022 | 02-23-2023 |
| LISN | Rohde & Schwarz | ESH3-Z5 | WXJ005-1 | 03-30-2022 | 03-29-2023 |
| LISN Coaxial Cable (9kHz ~ 30MHz) | JYTSZ | JYTCE-1G-NN-2M | WXG003-1 | 02-24-2022 | 02-23-2023 |
| RF Switch | TOP PRECISION | RSU0301 | WXG003 | N/A | |
| Test Software | AUDIX | E3 | Version: 6.110919b | | |

| Conducted Method: | | | | | |
|------------------------------|---------------------|------------------|-------------------|-----------------------------|---------------------------------|
| Test Equipment | Manufacturer | Model No. | Manage No. | Cal. Date (mm-dd-yy) | Cal. Due date (mm-dd-yy) |
| Spectrum Analyzer | Keysight | N9010B | WXJ004-3 | 10-17-2022 | 10-16-2023 |
| DC Power Supply | Keysight | E3642A | WXJ025-2 | N/A | |
| Temperature Humidity Chamber | ZHONG ZHI | CZ-A-80D | WXJ032-3 | 03-19-2021 | 03-18-2023 |
| Power Detector Box | MWRFTTEST | MW100-PSB | WXJ007-4 | 10-17-2022 | 10-16-2023 |
| RF Control Unit | MWRFTTEST | MW100-RFCB | WXG006 | N/A | |
| Test Software | MWRFTTEST | MTS 8310 | Version: 2.0.0.0 | | |

4 Measurement Setup and Procedure

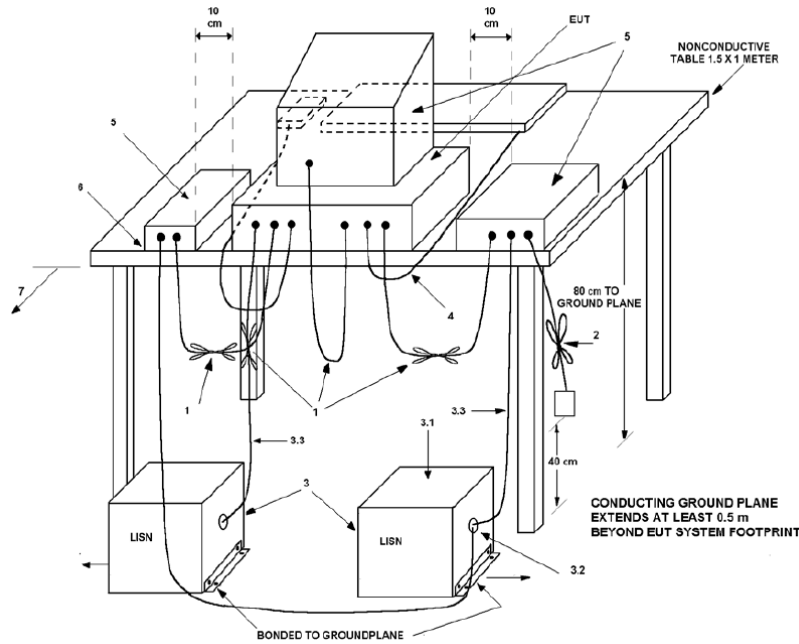
4.1 Test Channel

According to ANSI C63.10-2013 chapter 5.6.1 Table 4 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:

| Operation frequency: 5150 MHz – 5250 MHz | | | | | | |
|--|----------------|-----------------|----------------|-----------------|-----------------|-----------------|
| Modulation mode | Lowest channel | | Middle channel | | Highest channel | |
| | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) |
| 802.11a, n-HT20, ac-VHT20 | 36 | 5180 | 40 | 5200 | 48 | 5240 |
| 802.11n-HT40, ac-VHT40 | 38 | 5190 | / | / | 46 | 5230 |
| 802.11ac-VHT80 | / | / | 42 | 5210 | / | / |
| Operation frequency: 5725 MHz – 5850 MHz | | | | | | |
| Modulation mode | Lowest channel | | Middle channel | | Highest channel | |
| | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) |
| 802.11a, n-HT20, ac-VHT20 | 149 | 5745 | 157 | 5785 | 165 | 5825 |
| 802.11n-HT40, ac-VHT40 | 151 | 5755 | / | / | 159 | 5795 |
| 802.11ac-VHT80 | / | / | 155 | 5775 | / | / |

4.2 Test Setup

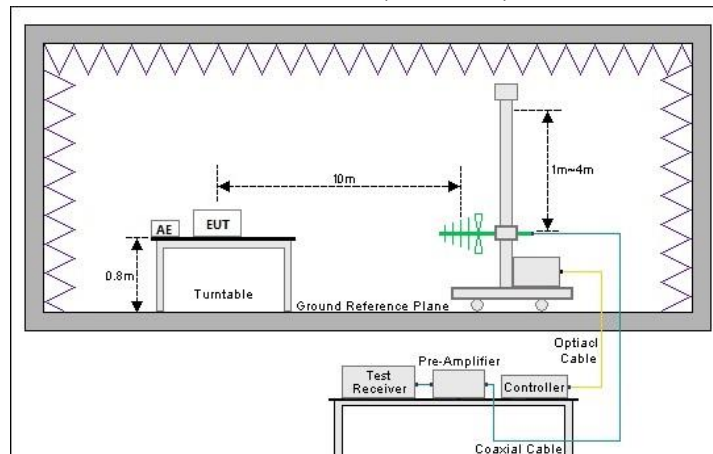
1) Conducted emission measurement:



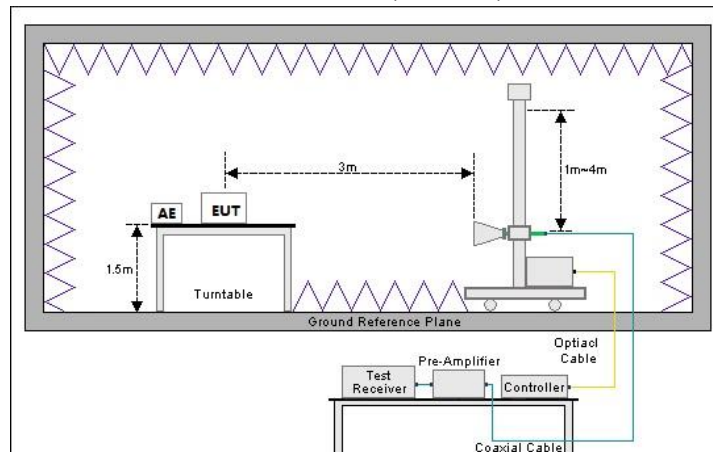
Note: The detailed descriptions please refer to Figure 8 of ANSI C63.4:2014.

2) Radiated emission measurement:

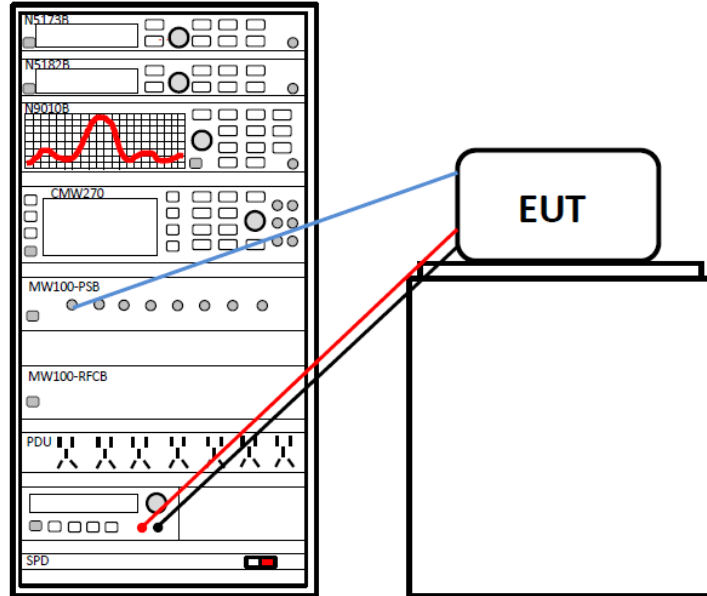
Below 1GHz (10m SAC)



Above 1GHz (3m SAC)



3) Conducted test method



4.3 Test Procedure

| Test method | Test step |
|-----------------------|---|
| Conducted emission | <ol style="list-style-type: none"> 1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement. |
| Radiated emission | <p>For below 1GHz:</p> <ol style="list-style-type: none"> 1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 10 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 10 m. 2. EUT works in each mode of operation that needs to be tested , and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data. <p>For above 1GHz:</p> <ol style="list-style-type: none"> 1. The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m. 2. EUT works in each mode of operation that needs to be tested , and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data. |
| Conducted test method | <ol style="list-style-type: none"> 1. The Wi-Fi antenna port of EUT was connected to the test port of the test system through an RF cable. 2. The EUT is keeping in continuous transmission mode and tested in all modulation modes. 3. Open the test software, prepare a test plan, and control the system through the software. After the test is completed, the test report is exported through the test software. |

5 Test Results

5.1 Summary

5.1.1 Clause and Data Summary

| Test items | Standard clause | Test data | Result |
|---|---|--|--------|
| Antenna Requirement | 15.203 | See Section 5.2 | Pass |
| AC Power Line Conducted Emission | 15.207 15.407 (b)(9) | See Section 5.3 | Pass |
| Duty Cycle | ANSI C63.10-2013 | Appendix A – 5.2G Wi-Fi MIMO Appendix A – 5.8G Wi-Fi MIMO | Pass |
| Conducted Peak Output Power Power Spectral Density | 15.407 (a)(1)(iv) , (a)(3)(i) | Appendix A – 5.2G Wi-Fi MIMO Appendix A – 5.8G Wi-Fi MIMO | Pass |
| 26dB Emission Bandwidth 99% Occupied Bandwidth | 15.407 (a)(12) | Appendix A – 5.2G Wi-Fi MIMO Appendix A – 5.8G Wi-Fi MIMO | Pass |
| 6dB Emission Bandwidth | 15.407 (e) | Appendix A – 5.2G Wi-Fi MIMO Appendix A – 5.8G Wi-Fi MIMO | Pass |
| Unwanted Emissions | 15.205 15.209 15.407 (b)(1), (4), (9), (10) | See Section 5.4 | Pass |
| Frequency Stability | 15.407 (g) | Appendix A – 5.2G Wi-Fi MIMO Appendix A – 5.8G Wi-Fi MIMO | Pass |
| Dynamic frequency selection | 15.407 (h)(2) | N/A | N/A |
| Remark: 1. Pass: The EUT complies with the essential requirements in the standard. 2. The cable insertion loss used by “RF Output Power” and other conduction measurement items is 1.0dB (provided by the customer). | | | |
| Test Method: | ANSI C63.10-2013 KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 | | |

5.1.2 Test Limit

| Test items | Limit | | | | | | | | | | | | | | | |
|---|--|--------------------------------|--------------|--|--|------------|---------|------------|--------------------------------|--------------------------------|---------|----|----|--------|----|----|
| AC Power Line Conducted Emission | <table border="1"> <thead> <tr> <th data-bbox="603 280 898 342">Frequency (MHz)</th> <th colspan="2" data-bbox="898 280 1437 315">Limit (dBµV)</th> </tr> <tr> <td></td> <th data-bbox="898 315 1171 342">Quasi-Peak</th> <th data-bbox="1171 315 1437 342">Average</th> </tr> </thead> <tbody> <tr> <td data-bbox="603 342 898 371">0.15 – 0.5</td> <td data-bbox="898 342 1171 371">66 to 56 <small>Note 1</small></td> <td data-bbox="1171 342 1437 371">56 to 46 <small>Note 1</small></td> </tr> <tr> <td data-bbox="603 371 898 400">0.5 – 5</td> <td data-bbox="898 371 1171 400">56</td> <td data-bbox="1171 371 1437 400">46</td> </tr> <tr> <td data-bbox="603 400 898 430">5 – 30</td> <td data-bbox="898 400 1171 430">60</td> <td data-bbox="1171 400 1437 430">50</td> </tr> </tbody> </table> <p data-bbox="614 439 1310 463">Note 1: The limit level in dBµV decreases linearly with the logarithm of frequency.</p> <p data-bbox="614 465 1166 490">Note 2: The more stringent limit applies at transition frequencies.</p> | Frequency (MHz) | Limit (dBµV) | | | Quasi-Peak | Average | 0.15 – 0.5 | 66 to 56 <small>Note 1</small> | 56 to 46 <small>Note 1</small> | 0.5 – 5 | 56 | 46 | 5 – 30 | 60 | 50 |
| Frequency (MHz) | Limit (dBµV) | | | | | | | | | | | | | | | |
| | Quasi-Peak | Average | | | | | | | | | | | | | | |
| 0.15 – 0.5 | 66 to 56 <small>Note 1</small> | 56 to 46 <small>Note 1</small> | | | | | | | | | | | | | | |
| 0.5 – 5 | 56 | 46 | | | | | | | | | | | | | | |
| 5 – 30 | 60 | 50 | | | | | | | | | | | | | | |
| Conducted Peak Output Power Power Spectral Density | <p data-bbox="579 517 932 542">For the 5.15-5.25 GHz band:</p> <p data-bbox="579 555 1474 801">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. 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.</p> <p data-bbox="579 853 962 878">For the band 5.725-5.895 GHz:</p> <p data-bbox="579 891 1474 1391">For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz 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. However, Fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.</p> | | | | | | | | | | | | | | | |
| 26dB Emission Bandwidth 99% Occupied Bandwidth | N/A | | | | | | | | | | | | | | | |
| 6dB Emission Bandwidth | Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz. | | | | | | | | | | | | | | | |

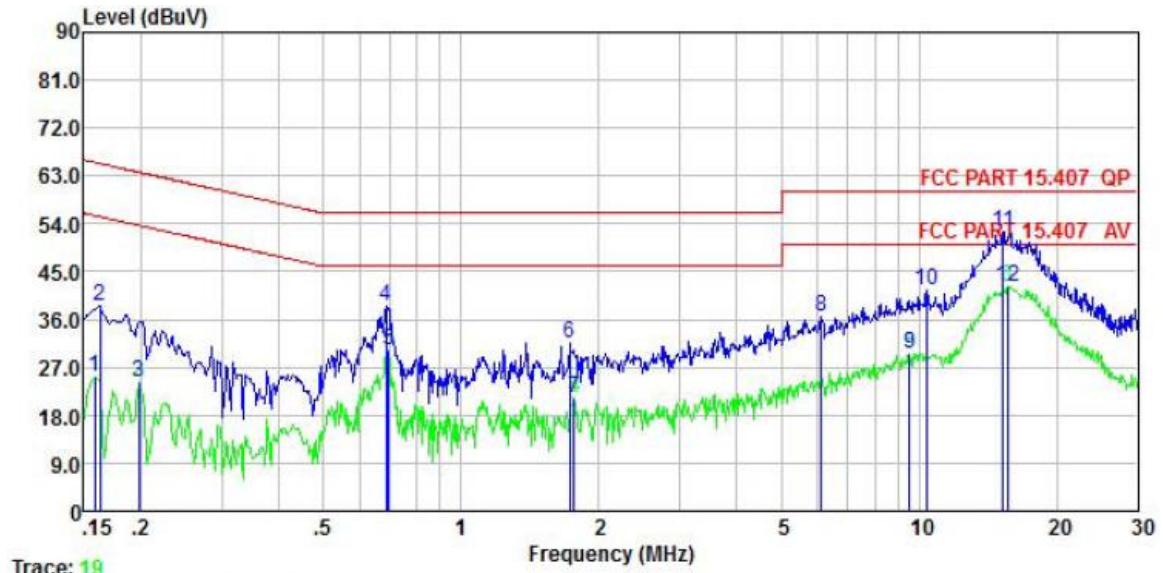
| <p>Unwanted Emissions</p> | <p>(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.</p> <p>(2) For transmitters operating solely in the 5.725-5.850 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p> <p>(3) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. The provisions of § 15.205 apply to intentional radiators operating under this section:</p> <table border="1" data-bbox="580 752 1457 949"> <thead> <tr> <th rowspan="2">Frequency (MHz)</th> <th colspan="2">Limit (dBµV/m)</th> <th rowspan="2">Detector</th> </tr> <tr> <th>@ 3m</th> <th>@ 10m</th> </tr> </thead> <tbody> <tr> <td>30 – 88</td> <td>40.0</td> <td>30.0</td> <td>Quasi-peak</td> </tr> <tr> <td>88 – 216</td> <td>43.5</td> <td>33.5</td> <td>Quasi-peak</td> </tr> <tr> <td>216 – 960</td> <td>46.0</td> <td>36.0</td> <td>Quasi-peak</td> </tr> <tr> <td>960 – 1000</td> <td>54.0</td> <td>44.0</td> <td>Quasi-peak</td> </tr> </tbody> </table> <p>Note: The more stringent limit applies at transition frequencies.</p> <table border="1" data-bbox="580 981 1457 1084"> <thead> <tr> <th rowspan="2">Frequency</th> <th colspan="2">Limit (dBµV/m) @ 3m</th> </tr> <tr> <th>Average</th> <th>Peake</th> </tr> </thead> <tbody> <tr> <td>Above 1 GHz</td> <td>54.0</td> <td>74.0</td> </tr> </tbody> </table> <p>Note: The measurement bandwidth shall be 1 MHz or greater.</p> | Frequency (MHz) | Limit (dBµV/m) | | Detector | @ 3m | @ 10m | 30 – 88 | 40.0 | 30.0 | Quasi-peak | 88 – 216 | 43.5 | 33.5 | Quasi-peak | 216 – 960 | 46.0 | 36.0 | Quasi-peak | 960 – 1000 | 54.0 | 44.0 | Quasi-peak | Frequency | Limit (dBµV/m) @ 3m | | Average | Peake | Above 1 GHz | 54.0 | 74.0 |
|----------------------------|---|-----------------|----------------|--|----------|------|-------|---------|------|------|------------|----------|------|------|------------|-----------|------|------|------------|------------|------|------|------------|-----------|---------------------|--|---------|-------|-------------|------|------|
| Frequency (MHz) | Limit (dBµV/m) | | Detector | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | @ 3m | @ 10m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 – 88 | 40.0 | 30.0 | Quasi-peak | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 88 – 216 | 43.5 | 33.5 | Quasi-peak | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 216 – 960 | 46.0 | 36.0 | Quasi-peak | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 960 – 1000 | 54.0 | 44.0 | Quasi-peak | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency | Limit (dBµV/m) @ 3m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Average | Peake | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Above 1 GHz | 54.0 | 74.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Frequency Stability</p> | <p>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 users manual.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

5.2 Antenna requirement

| | |
|--|------------------------------|
| Standard requirement: | FCC Part 15 C Section 15.203 |
| <p>15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p> | |
| E.U.T Antenna: | |
| <p>The Wi-Fi antenna is an Integral antenna which cannot replace by end-user, the best case gain of the antenna is 4.80 dBi. See product internal photos for details.</p> | |

5.3 AC Power Line Conducted Emission

| | | | |
|-----------------|------------------|----------------|---------------|
| Product name: | Smart Gateway | Product model: | DSGW-021 |
| Test by: | Mike | Test mode: | 5G Wi-Fi mode |
| Test frequency: | 150 kHz ~ 30 MHz | Phase: | Line |
| Test voltage: | AC 120 V/60 Hz | | |



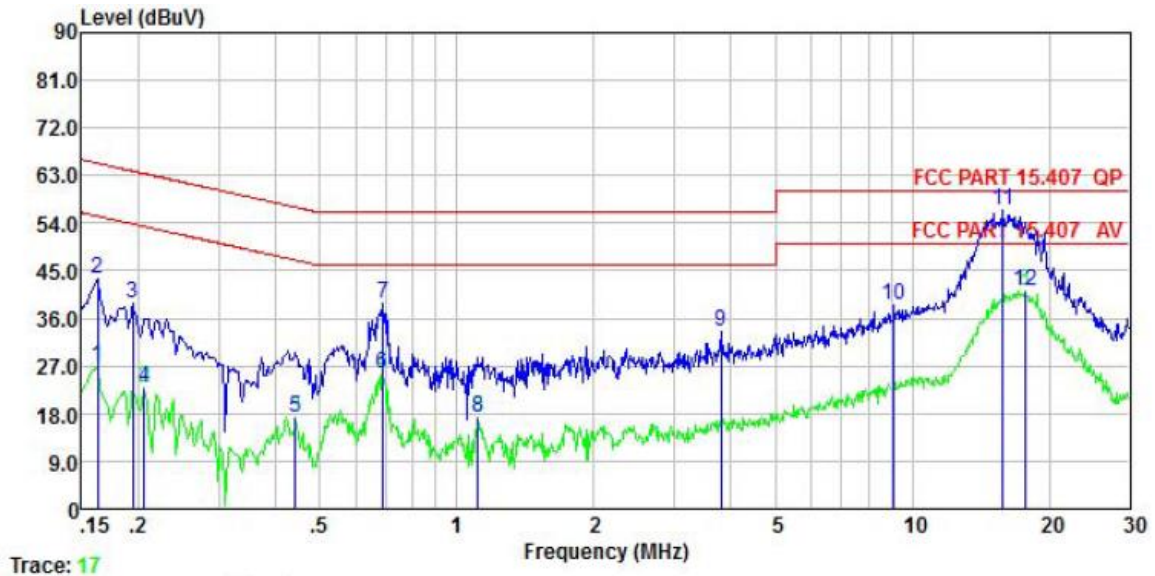
Trace: 19

| | Read Freq | Read Level | LISN Factor | Aux2 Factor | Cable Loss | Level | Limit Line | Over Limit | Remark |
|----|-----------|------------|-------------|-------------|------------|-------|------------|------------|---------|
| | MHz | dBuV | dB | dB | dB | dBuV | dBuV | dB | |
| 1 | 0.158 | 14.54 | 0.04 | 10.50 | 0.01 | 25.09 | 55.56 | -30.47 | Average |
| 2 | 0.162 | 28.04 | 0.04 | 10.50 | 0.01 | 38.59 | 65.34 | -26.75 | QP |
| 3 | 0.198 | 13.70 | 0.05 | 10.50 | 0.04 | 24.29 | 53.71 | -29.42 | Average |
| 4 | 0.686 | 28.03 | 0.07 | 10.50 | 0.03 | 38.63 | 56.00 | -17.37 | QP |
| 5 | 0.694 | 19.53 | 0.07 | 10.50 | 0.03 | 30.13 | 46.00 | -15.87 | Average |
| 6 | 1.725 | 20.86 | 0.08 | 10.50 | 0.18 | 31.62 | 56.00 | -24.38 | QP |
| 7 | 1.762 | 10.38 | 0.08 | 10.50 | 0.18 | 21.14 | 46.00 | -24.86 | Average |
| 8 | 6.121 | 25.74 | 0.15 | 10.50 | 0.09 | 36.48 | 60.00 | -23.52 | QP |
| 9 | 9.552 | 18.67 | 0.21 | 10.50 | 0.12 | 29.50 | 50.00 | -20.50 | Average |
| 10 | 10.397 | 30.75 | 0.23 | 10.50 | 0.12 | 41.60 | 60.00 | -18.40 | QP |
| 11 | 15.226 | 41.62 | 0.29 | 10.50 | 0.14 | 52.55 | 60.00 | -7.45 | QP |
| 12 | 15.635 | 31.36 | 0.30 | 10.50 | 0.15 | 42.31 | 50.00 | -7.69 | Average |

Remark:

1. Level = Read level + LISN Factor + Cable Loss.

| | | | |
|-----------------|------------------|----------------|---------------|
| Product name: | Smart Gateway | Product model: | DSGW-021 |
| Test by: | Mike | Test mode: | 5G Wi-Fi mode |
| Test frequency: | 150 kHz ~ 30 MHz | Phase: | Neutral |
| Test voltage: | AC 120 V/60 Hz | | |



| | Freq | Read Level | LISN Factor | Aux2 Factor | Cable Loss | Level | Limit Line | Over Limit | Remark |
|----|--------|------------|-------------|-------------|------------|-------|------------|------------|---------|
| | MHz | dBuV | dB | dB | dB | dBuV | dBuV | dB | |
| 1 | 0.162 | 16.17 | 0.06 | 10.50 | 0.01 | 26.74 | 55.34 | -28.60 | Average |
| 2 | 0.162 | 32.77 | 0.06 | 10.50 | 0.01 | 43.34 | 65.34 | -22.00 | QP |
| 3 | 0.194 | 28.16 | 0.05 | 10.50 | 0.03 | 38.74 | 63.84 | -25.10 | QP |
| 4 | 0.206 | 12.32 | 0.05 | 10.50 | 0.04 | 22.91 | 53.36 | -30.45 | Average |
| 5 | 0.442 | 6.66 | 0.04 | 10.50 | 0.03 | 17.23 | 47.02 | -29.79 | Average |
| 6 | 0.686 | 14.99 | 0.06 | 10.50 | 0.03 | 25.58 | 46.00 | -20.42 | Average |
| 7 | 0.690 | 28.38 | 0.06 | 10.50 | 0.03 | 38.97 | 56.00 | -17.03 | QP |
| 8 | 1.111 | 6.60 | 0.06 | 10.50 | 0.07 | 17.23 | 46.00 | -28.77 | Average |
| 9 | 3.799 | 22.89 | 0.10 | 10.50 | 0.08 | 33.57 | 56.00 | -22.43 | QP |
| 10 | 9.107 | 27.80 | 0.20 | 10.50 | 0.11 | 38.61 | 60.00 | -21.39 | QP |
| 11 | 15.801 | 45.64 | 0.28 | 10.50 | 0.16 | 56.58 | 60.00 | -3.42 | QP |
| 12 | 17.661 | 30.34 | 0.30 | 10.50 | 0.15 | 41.29 | 50.00 | -8.71 | Average |

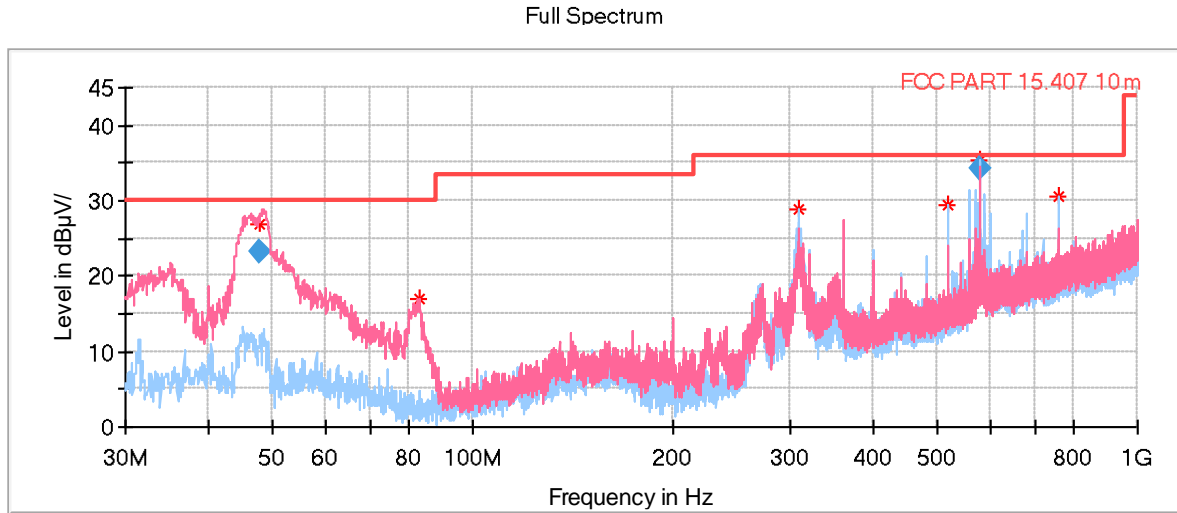
Remark:

1. Level = Read level + LISN Factor + Cable Loss.

5.4 Unwanted Emissions

Below 1GHz:

| | | | |
|------------------------|----------------|-----------------------|-----------------------|
| Product Name: | Smart Gateway | Product Model: | DSGW-021 |
| Test By: | Mike | Test mode: | 5G Wi-Fi mode |
| Test Frequency: | 30 MHz ~ 1 GHz | Polarization: | Vertical & Horizontal |
| Test Voltage: | AC 120/60Hz | | |



- * Critical Freqs PK+
- Preview Result 1H-PK+
- + QuasiPeak-QPK (Single)
- FCC PART 15.407 10m
- Preview Result 1V-PK+
- ◆ Final Result QPK
- × MaxPeak-PK+ (Single)

Critical Freqs

| Frequency (MHz) | MaxPeak (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|--------------------|------------------|-------------|-------------|-----|---------------|--------------|
| 47.804500 | 27.00 | 30.00 | 2.44 | 125.0 | V | 238.0 | -16.2 |
| 83.107500 | 16.99 | 30.00 | 13.01 | 100.0 | V | 0.0 | -20.2 |
| 309.457000 | 28.84 | 36.00 | 7.16 | 100.0 | H | 192.0 | -14.7 |
| 519.995500 | 29.48 | 36.00 | 6.52 | 100.0 | H | 229.0 | -9.3 |
| 580.087000 | 35.25 | 36.00 | 0.75 | 100.0 | H | 157.0 | -8.1 |
| 760.022000 | 30.54 | 36.00 | 5.46 | 100.0 | H | 83.0 | -4.2 |

Final Result

| Frequency (MHz) | QuasiPeak (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|----------------------|------------------|-------------|-------------|-----|---------------|--------------|
| 47.804500 | 23.29 | 30.00 | 6.71 | 125.0 | V | 238.0 | -16.2 |
| 580.087000 | 34.25 | 36.00 | 1.75 | 100.0 | H | 157.0 | -8.1 |

Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Above 1GHz:

ANT1:

| Band 1: 5150 MHz - 5250 MHz, 802.11a | | | | | | |
|--|-------------------|-------------|----------------|----------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5150.00 | 37.71 | 15.74 | 53.45 | 74.00 | 20.55 | Vertical |
| 10360.00 | 52.29 | 4.88 | 57.17 | 68.20 | 11.03 | Vertical |
| 5150.00 | 34.29 | 15.74 | 50.03 | 74.00 | 23.97 | Horizontal |
| 10360.00 | 53.89 | 4.88 | 58.77 | 68.20 | 9.43 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5150.00 | 28.36 | 15.74 | 44.10 | 54.00 | 9.90 | Vertical |
| 5150.00 | 26.12 | 15.74 | 41.86 | 54.00 | 12.14 | Horizontal |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 10400.00 | 52.54 | 4.71 | 57.25 | 68.20 | 10.95 | Vertical |
| 10400.00 | 53.58 | 4.71 | 58.29 | 68.20 | 9.91 | Horizontal |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5350.00 | 34.63 | 16.49 | 51.12 | 74.00 | 22.88 | Vertical |
| 10480.00 | 52.61 | 5.38 | 57.99 | 68.20 | 10.21 | Vertical |
| 5350.00 | 34.39 | 16.49 | 50.88 | 74.00 | 23.12 | Horizontal |
| 10480.00 | 54.38 | 5.38 | 59.76 | 68.20 | 8.44 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5350.00 | 26.39 | 16.49 | 42.88 | 54.00 | 11.12 | Vertical |
| 5350.00 | 25.85 | 16.49 | 42.34 | 54.00 | 11.66 | Horizontal |
| Remark: | | | | | | |
| 1. <i>Level = Reading + Factor.</i> | | | | | | |
| 2. <i>Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.</i> | | | | | | |

ANT2:

| Band 1: 5150 MHz - 5250 MHz, 802.11a | | | | | | |
|---|-------------------|-------------|----------------|----------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5150.00 | 53.00 | 15.74 | 68.74 | 74.00 | 5.26 | Vertical |
| 10360.00 | 52.38 | 4.88 | 57.26 | 68.20 | 10.94 | Vertical |
| 5150.00 | 52.15 | 15.74 | 67.89 | 74.00 | 6.11 | Horizontal |
| 10360.00 | 54.15 | 4.88 | 59.03 | 68.20 | 9.17 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5150.00 | 26.09 | 15.74 | 41.83 | 54.00 | 12.17 | Vertical |
| 5150.00 | 26.16 | 15.74 | 41.90 | 54.00 | 12.10 | Horizontal |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 10400.00 | 52.58 | 4.71 | 57.29 | 68.20 | 10.91 | Vertical |
| 10400.00 | 53.54 | 4.71 | 58.25 | 68.20 | 9.95 | Horizontal |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5350.00 | 34.72 | 16.49 | 51.21 | 74.00 | 22.79 | Vertical |
| 10480.00 | 52.39 | 5.38 | 57.77 | 68.20 | 10.43 | Vertical |
| 5350.00 | 34.16 | 16.49 | 50.65 | 74.00 | 23.35 | Horizontal |
| 10480.00 | 54.79 | 5.38 | 60.17 | 68.20 | 8.03 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5350.00 | 26.16 | 16.49 | 42.65 | 54.00 | 11.35 | Vertical |
| 5350.00 | 26.12 | 16.49 | 42.61 | 54.00 | 11.39 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Band 1: 5150 MHz - 5250 MHz, 802.11n-HT20 MIMO | | | | | | |
|---|-------------------|-------------|----------------|----------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5150.00 | 35.54 | 15.74 | 51.28 | 74.00 | 22.72 | Vertical |
| 10360.00 | 52.35 | 4.88 | 57.23 | 68.20 | 10.97 | Vertical |
| 5150.00 | 34.91 | 15.74 | 50.65 | 74.00 | 23.35 | Horizontal |
| 10360.00 | 54.12 | 4.88 | 59.00 | 68.20 | 9.20 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5150.00 | 27.78 | 15.74 | 43.52 | 54.00 | 10.48 | Vertical |
| 5150.00 | 26.60 | 15.74 | 42.34 | 54.00 | 11.66 | Horizontal |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 10400.00 | 52.45 | 4.71 | 57.16 | 68.20 | 11.04 | Vertical |
| 10400.00 | 53.70 | 4.71 | 58.41 | 68.20 | 9.79 | Horizontal |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5350.00 | 37.87 | 16.49 | 54.36 | 74.00 | 19.64 | Vertical |
| 10480.00 | 52.36 | 5.38 | 57.74 | 68.20 | 10.46 | Vertical |
| 5350.00 | 33.88 | 16.49 | 50.37 | 74.00 | 23.63 | Horizontal |
| 10480.00 | 51.35 | 5.38 | 56.73 | 68.20 | 11.47 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5350.00 | 28.36 | 16.49 | 44.85 | 54.00 | 9.15 | Vertical |
| 5350.00 | 26.27 | 16.49 | 42.76 | 54.00 | 11.24 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Band 1: 5150 MHz - 5250 MHz, 802.11n-HT40 MIMO | | | | | | |
|---|-------------------------|-------------|----------------------|----------------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5150.00 | 38.72 | 15.74 | 54.46 | 74.00 | 19.54 | Vertical |
| 10380.00 | 52.63 | 4.79 | 57.42 | 68.20 | 10.78 | Vertical |
| 5150.00 | 35.41 | 15.74 | 51.15 | 74.00 | 22.85 | Horizontal |
| 10380.00 | 53.42 | 4.79 | 58.21 | 68.20 | 9.99 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5150.00 | 29.46 | 15.74 | 45.20 | 54.00 | 8.80 | Vertical |
| 5150.00 | 26.64 | 15.74 | 42.38 | 54.00 | 11.62 | Horizontal |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5350.00 | 38.42 | 16.49 | 54.91 | 74.00 | 19.09 | Vertical |
| 10460.00 | 52.26 | 5.21 | 57.47 | 68.20 | 10.73 | Vertical |
| 5350.00 | 35.82 | 16.49 | 52.31 | 74.00 | 21.69 | Horizontal |
| 10460.00 | 53.22 | 5.21 | 58.43 | 68.20 | 9.77 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5350.00 | 29.10 | 16.49 | 45.59 | 54.00 | 8.41 | Vertical |
| 5350.00 | 27.09 | 16.49 | 43.58 | 54.00 | 10.42 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Band 1: 5150 MHz - 5250 MHz, 802.11ac-VHT20 MIMO | | | | | | |
|---|-------------------------|-------------|----------------------|----------------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5150.00 | 35.98 | 15.74 | 51.72 | 74.00 | 22.28 | Vertical |
| 10360.00 | 52.70 | 4.88 | 57.58 | 68.20 | 10.62 | Vertical |
| 5150.00 | 35.04 | 15.74 | 50.78 | 74.00 | 23.22 | Horizontal |
| 10360.00 | 53.66 | 4.88 | 58.54 | 68.20 | 9.66 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5150.00 | 28.13 | 15.74 | 43.87 | 54.00 | 10.13 | Vertical |
| 5150.00 | 26.79 | 15.74 | 42.53 | 54.00 | 11.47 | Horizontal |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 10400.00 | 52.65 | 4.71 | 57.36 | 68.20 | 10.84 | Vertical |
| 10400.00 | 54.09 | 4.71 | 58.80 | 68.20 | 9.40 | Horizontal |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5350.00 | 34.40 | 16.49 | 50.89 | 74.00 | 23.11 | Vertical |
| 10480.00 | 52.43 | 5.38 | 57.81 | 68.20 | 10.39 | Vertical |
| 5350.00 | 34.22 | 16.49 | 50.71 | 74.00 | 23.29 | Horizontal |
| 10480.00 | 55.20 | 5.38 | 60.58 | 68.20 | 7.62 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5350.00 | 25.83 | 16.49 | 42.32 | 54.00 | 11.68 | Vertical |
| 5350.00 | 25.46 | 16.49 | 41.95 | 54.00 | 12.05 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Band 1: 5150 MHz - 5250 MHz, 802.11ac-VHT40 MIMO | | | | | | |
|---|-------------------|-------------|----------------|----------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5150.00 | 34.97 | 15.74 | 50.71 | 74.00 | 23.29 | Vertical |
| 10380.00 | 52.36 | 4.79 | 57.15 | 68.20 | 11.05 | Vertical |
| 5150.00 | 34.39 | 15.74 | 50.13 | 74.00 | 23.87 | Horizontal |
| 10380.00 | 52.97 | 4.79 | 57.76 | 68.20 | 10.44 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5150.00 | 26.18 | 15.74 | 41.92 | 54.00 | 12.08 | Vertical |
| 5150.00 | 26.19 | 15.74 | 41.93 | 54.00 | 12.07 | Horizontal |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5350.00 | 37.82 | 16.49 | 54.31 | 74.00 | 19.69 | Vertical |
| 10460.00 | 52.30 | 5.21 | 57.51 | 68.20 | 10.69 | Vertical |
| 5350.00 | 35.51 | 16.49 | 52.00 | 74.00 | 22.00 | Horizontal |
| 10460.00 | 53.18 | 5.21 | 58.39 | 68.20 | 9.81 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5350.00 | 28.48 | 16.49 | 44.97 | 54.00 | 9.03 | Vertical |
| 5350.00 | 27.55 | 16.49 | 44.04 | 54.00 | 9.96 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Band 1: 5150 MHz - 5250 MHz, 802.11ac-VHT80 MIMO | | | | | | |
|---|-------------------------|-------------|----------------------|----------------------|-------------|--------------|
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5150.00 | 37.09 | 15.74 | 52.83 | 74.00 | 21.17 | Vertical |
| 5350.00 | 34.74 | 16.49 | 51.23 | 74.00 | 22.77 | Vertical |
| 10420.00 | 53.26 | 4.88 | 58.14 | 68.20 | 10.06 | Vertical |
| 5150.00 | 35.82 | 15.74 | 51.56 | 74.00 | 22.44 | Horizontal |
| 5350.00 | 35.68 | 16.49 | 52.17 | 74.00 | 21.83 | Horizontal |
| 10420.00 | 52.43 | 4.88 | 57.31 | 68.20 | 10.89 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5150.00 | 28.84 | 15.74 | 44.58 | 54.00 | 9.42 | Vertical |
| 5350.00 | 25.89 | 16.49 | 42.38 | 54.00 | 11.62 | Vertical |
| 5150.00 | 26.38 | 15.74 | 42.12 | 54.00 | 11.88 | Horizontal |
| 5350.00 | 25.74 | 16.49 | 42.23 | 54.00 | 11.77 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

ANT1:

| Band 4: 5725 MHz - 5825 MHz, 802.11a | | | | | | |
|---|-------------------|-------------|----------------|----------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5650.00 | 35.00 | 17.16 | 52.16 | 68.20 | 16.04 | Vertical |
| 5700.00 | 35.66 | 17.35 | 53.01 | 105.20 | 52.19 | Vertical |
| 5720.00 | 39.71 | 17.46 | 57.17 | 110.80 | 53.63 | Vertical |
| 5725.00 | 47.86 | 17.49 | 65.35 | 122.20 | 56.85 | Vertical |
| 11490.00 | 51.65 | 6.61 | 58.26 | 74.00 | 15.74 | Vertical |
| 5650.00 | 34.60 | 17.16 | 51.76 | 68.20 | 16.44 | Horizontal |
| 5700.00 | 35.41 | 17.35 | 52.76 | 105.20 | 52.44 | Horizontal |
| 5720.00 | 35.57 | 17.46 | 53.03 | 110.80 | 57.77 | Horizontal |
| 5725.00 | 40.20 | 17.49 | 57.69 | 122.20 | 64.51 | Horizontal |
| 11490.00 | 50.79 | 6.61 | 57.40 | 74.00 | 16.60 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11490.00 | 43.19 | 6.61 | 49.80 | 54.00 | 4.20 | Vertical |
| 11490.00 | 44.32 | 6.61 | 50.93 | 54.00 | 3.07 | Horizontal |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11570.00 | 51.57 | 6.28 | 57.85 | 74.00 | 16.15 | Vertical |
| 11570.00 | 51.02 | 6.28 | 57.30 | 74.00 | 16.70 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11570.00 | 43.50 | 6.28 | 49.78 | 54.00 | 4.22 | Vertical |
| 11570.00 | 44.55 | 6.28 | 50.83 | 54.00 | 3.17 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Test channel: Highest channel | | | | | | |
|---|-------------------------|-------------|----------------------|----------------------|-------------|--------------|
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5850.00 | 33.7 | 18.01 | 51.71 | 122.20 | 70.49 | Vertical |
| 5855.00 | 34.17 | 18.02 | 52.19 | 110.80 | 58.61 | Vertical |
| 5875.00 | 33.94 | 18.07 | 52.01 | 105.20 | 53.19 | Vertical |
| 5925.00 | 34.57 | 17.95 | 52.52 | 68.20 | 15.68 | Vertical |
| 11650.00 | 51.16 | 6.49 | 57.65 | 74.00 | 16.35 | Vertical |
| 5850.00 | 33.76 | 18.01 | 51.77 | 122.20 | 70.43 | Horizontal |
| 5855.00 | 34.36 | 18.02 | 52.38 | 110.80 | 58.42 | Horizontal |
| 5875.00 | 34.42 | 18.07 | 52.49 | 105.20 | 52.71 | Horizontal |
| 5925.00 | 34.45 | 17.95 | 52.40 | 68.20 | 15.80 | Horizontal |
| 11650.00 | 51.09 | 6.49 | 57.58 | 74.00 | 16.42 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 11650.00 | 43.02 | 6.49 | 49.51 | 54.00 | 4.49 | Vertical |
| 11650.00 | 44.07 | 6.49 | 50.56 | 54.00 | 3.44 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

ANT2:

| Band 4: 5725 MHz - 5825 MHz, 802.11a | | | | | | |
|---|-------------------|-------------|----------------|----------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5650.00 | 35.22 | 17.16 | 52.38 | 68.20 | 15.82 | Vertical |
| 5700.00 | 34.92 | 17.35 | 52.27 | 105.20 | 52.93 | Vertical |
| 5720.00 | 42.58 | 17.46 | 60.04 | 110.80 | 50.76 | Vertical |
| 5725.00 | 52.31 | 17.49 | 69.80 | 122.20 | 52.40 | Vertical |
| 11490.00 | 51.71 | 6.61 | 58.32 | 74.00 | 15.68 | Vertical |
| 5650.00 | 34.54 | 17.16 | 51.70 | 68.20 | 16.50 | Horizontal |
| 5700.00 | 34.46 | 17.35 | 51.81 | 105.20 | 53.39 | Horizontal |
| 5720.00 | 35.57 | 17.46 | 53.03 | 110.80 | 57.77 | Horizontal |
| 5725.00 | 41.19 | 17.49 | 58.68 | 122.20 | 63.52 | Horizontal |
| 11490.00 | 50.81 | 6.61 | 57.42 | 74.00 | 16.58 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11490.00 | 43.32 | 6.61 | 49.93 | 54.00 | 4.07 | Vertical |
| 11490.00 | 44.37 | 6.61 | 50.98 | 54.00 | 3.02 | Horizontal |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11570.00 | 52.02 | 6.28 | 58.30 | 74.00 | 15.70 | Vertical |
| 11570.00 | 51.39 | 6.28 | 57.67 | 74.00 | 16.33 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11570.00 | 43.66 | 6.28 | 49.94 | 54.00 | 4.06 | Vertical |
| 11570.00 | 44.11 | 6.28 | 50.39 | 54.00 | 3.61 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Test channel: Highest channel | | | | | | |
|---|-------------------------|-------------|----------------------|----------------------|-------------|--------------|
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5850.00 | 52.5 | 18.01 | 70.51 | 122.20 | 51.69 | Vertical |
| 5855.00 | 51.96 | 18.02 | 69.98 | 110.80 | 40.82 | Vertical |
| 5875.00 | 34.78 | 18.07 | 52.85 | 105.20 | 52.35 | Vertical |
| 5925.00 | 34.49 | 17.95 | 52.44 | 68.20 | 15.76 | Vertical |
| 11650.00 | 51.19 | 6.49 | 57.68 | 74.00 | 16.32 | Vertical |
| 5850.00 | 42.99 | 18.01 | 61.00 | 122.20 | 61.20 | Horizontal |
| 5855.00 | 40.04 | 18.02 | 58.06 | 110.80 | 52.74 | Horizontal |
| 5875.00 | 34.15 | 18.07 | 52.22 | 105.20 | 52.98 | Horizontal |
| 5925.00 | 34.84 | 17.95 | 52.79 | 68.20 | 15.41 | Horizontal |
| 11650.00 | 51.10 | 6.49 | 57.59 | 74.00 | 16.41 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 11650.00 | 42.90 | 6.49 | 49.39 | 54.00 | 4.61 | Vertical |
| 11650.00 | 43.86 | 6.49 | 50.35 | 54.00 | 3.65 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Band 4: 5725 MHz - 5825 MHz, 802.11n-HT20 MIMO | | | | | | |
|---|-------------------|-------------|----------------|----------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5650.00 | 34.30 | 17.16 | 51.46 | 68.20 | 16.74 | Vertical |
| 5700.00 | 34.57 | 17.35 | 51.92 | 105.20 | 53.28 | Vertical |
| 5720.00 | 34.95 | 17.46 | 52.41 | 110.80 | 58.39 | Vertical |
| 5725.00 | 39.50 | 17.49 | 56.99 | 122.20 | 65.21 | Vertical |
| 11490.00 | 51.66 | 6.61 | 58.27 | 74.00 | 15.73 | Vertical |
| 5650.00 | 34.93 | 17.16 | 52.09 | 68.20 | 16.11 | Horizontal |
| 5700.00 | 36.17 | 17.35 | 53.52 | 105.20 | 51.68 | Horizontal |
| 5720.00 | 34.29 | 17.46 | 51.75 | 110.80 | 59.05 | Horizontal |
| 5725.00 | 35.02 | 17.49 | 52.51 | 122.20 | 69.69 | Horizontal |
| 11490.00 | 50.77 | 6.61 | 57.38 | 74.00 | 16.62 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11490.00 | 42.91 | 6.61 | 49.52 | 54.00 | 4.48 | Vertical |
| 11490.00 | 44.78 | 6.61 | 51.39 | 54.00 | 2.61 | Horizontal |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11570.00 | 51.57 | 6.28 | 57.85 | 74.00 | 16.15 | Vertical |
| 11570.00 | 51.28 | 6.28 | 57.56 | 74.00 | 16.44 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11570.00 | 43.99 | 6.28 | 50.27 | 54.00 | 3.73 | Vertical |
| 11570.00 | 44.92 | 6.28 | 51.20 | 54.00 | 2.80 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Test channel: Highest channel | | | | | | |
|---|-------------------------|-------------|----------------------|----------------------|-------------|--------------|
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5850.00 | 34.93 | 18.01 | 52.94 | 122.20 | 69.26 | Vertical |
| 5855.00 | 33.93 | 18.02 | 51.95 | 110.80 | 58.85 | Vertical |
| 5875.00 | 34.31 | 18.07 | 52.38 | 105.20 | 52.82 | Vertical |
| 5925.00 | 34.31 | 17.95 | 52.26 | 68.20 | 15.94 | Vertical |
| 11650.00 | 50.89 | 6.49 | 57.38 | 74.00 | 16.62 | Vertical |
| 5850.00 | 34.09 | 18.01 | 52.10 | 122.20 | 70.10 | Horizontal |
| 5855.00 | 33.95 | 18.02 | 51.97 | 110.80 | 58.83 | Horizontal |
| 5875.00 | 33.88 | 18.07 | 51.95 | 105.20 | 53.25 | Horizontal |
| 5925.00 | 34.08 | 17.95 | 52.03 | 68.20 | 16.17 | Horizontal |
| 11650.00 | 51.37 | 6.49 | 57.86 | 74.00 | 16.14 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 11650.00 | 42.75 | 6.49 | 49.24 | 54.00 | 4.76 | Vertical |
| 11650.00 | 44.22 | 6.49 | 50.71 | 54.00 | 3.29 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Band 4: 5725 MHz - 5825 MHz, 802.11n-HT40 MIMO | | | | | | |
|---|-------------------|-------------|----------------|----------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5650.00 | 34.84 | 17.16 | 52.00 | 68.20 | 16.20 | Vertical |
| 5700.00 | 34.97 | 17.35 | 52.32 | 105.20 | 52.88 | Vertical |
| 5720.00 | 42.52 | 17.46 | 59.98 | 110.80 | 50.82 | Vertical |
| 5725.00 | 40.85 | 17.49 | 58.34 | 122.20 | 63.86 | Vertical |
| 11510.00 | 51.58 | 6.60 | 58.18 | 74.00 | 15.82 | Vertical |
| 5650.00 | 34.00 | 17.16 | 51.16 | 68.20 | 17.04 | Horizontal |
| 5700.00 | 35.36 | 17.35 | 52.71 | 105.20 | 52.49 | Horizontal |
| 5720.00 | 35.99 | 17.46 | 53.45 | 110.80 | 57.35 | Horizontal |
| 5725.00 | 36.36 | 17.49 | 53.85 | 122.20 | 68.35 | Horizontal |
| 11510.00 | 51.11 | 6.60 | 57.71 | 74.00 | 16.29 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11510.00 | 43.33 | 6.60 | 49.93 | 54.00 | 4.07 | Vertical |
| 11510.00 | 44.41 | 6.60 | 51.01 | 54.00 | 2.99 | Horizontal |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5850.00 | 34.09 | 18.01 | 52.10 | 122.20 | 70.10 | Vertical |
| 5855.00 | 35.46 | 18.02 | 53.48 | 110.80 | 57.32 | Vertical |
| 5875.00 | 42.95 | 18.07 | 61.02 | 105.20 | 44.18 | Vertical |
| 5925.00 | 41.55 | 17.95 | 59.50 | 68.20 | 8.70 | Vertical |
| 11590.00 | 51.96 | 6.17 | 58.13 | 74.00 | 15.87 | Vertical |
| 5850.00 | 34.50 | 18.01 | 52.51 | 122.20 | 69.69 | Horizontal |
| 5855.00 | 35.58 | 18.02 | 53.60 | 110.80 | 57.20 | Horizontal |
| 5875.00 | 35.76 | 18.07 | 53.83 | 105.20 | 51.37 | Horizontal |
| 5925.00 | 36.86 | 17.95 | 54.81 | 68.20 | 13.39 | Horizontal |
| 11590.00 | 50.60 | 6.17 | 56.77 | 74.00 | 17.23 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11590.00 | 42.70 | 6.17 | 48.87 | 54.00 | 5.13 | Vertical |
| 11590.00 | 44.39 | 6.17 | 50.56 | 54.00 | 3.44 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Band 4: 5725 MHz - 5825 MHz, 8802.11ac-VHT20 MIMO | | | | | | |
|---|-------------------------|-------------|----------------------|----------------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5650.00 | 35.14 | 17.16 | 52.30 | 68.20 | 15.90 | Vertical |
| 5700.00 | 35.01 | 17.35 | 52.36 | 105.20 | 52.84 | Vertical |
| 5720.00 | 42.25 | 17.46 | 59.71 | 110.80 | 51.09 | Vertical |
| 5725.00 | 52.39 | 17.49 | 69.88 | 122.20 | 52.32 | Vertical |
| 11490.00 | 52.07 | 6.61 | 58.68 | 74.00 | 15.32 | Vertical |
| 5650.00 | 34.45 | 17.16 | 51.61 | 68.20 | 16.59 | Horizontal |
| 5700.00 | 34.91 | 17.35 | 52.26 | 105.20 | 52.94 | Horizontal |
| 5720.00 | 35.23 | 17.46 | 52.69 | 110.80 | 58.11 | Horizontal |
| 5725.00 | 40.73 | 17.49 | 58.22 | 122.20 | 63.98 | Horizontal |
| 11490.00 | 51.13 | 6.61 | 57.74 | 74.00 | 16.26 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 11490.00 | 43.26 | 6.61 | 49.87 | 54.00 | 4.13 | Vertical |
| 11490.00 | 44.32 | 6.61 | 50.93 | 54.00 | 3.07 | Horizontal |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 11570.00 | 52.50 | 6.28 | 58.78 | 74.00 | 15.22 | Vertical |
| 11570.00 | 52.42 | 6.28 | 58.70 | 74.00 | 15.30 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 11570.00 | 43.36 | 6.28 | 49.64 | 54.00 | 4.36 | Vertical |
| 11570.00 | 44.50 | 6.28 | 50.78 | 54.00 | 3.22 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Test channel: Highest channel | | | | | | |
|---|-------------------------|-------------|----------------------|----------------------|-------------|--------------|
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 5850.00 | 34.84 | 18.01 | 52.85 | 122.20 | 69.35 | Vertical |
| 5855.00 | 34.88 | 18.02 | 52.90 | 110.80 | 57.90 | Vertical |
| 5875.00 | 39.72 | 18.07 | 57.79 | 105.20 | 47.41 | Vertical |
| 5925.00 | 47.54 | 17.95 | 65.49 | 68.20 | 2.71 | Vertical |
| 11650.00 | 51.57 | 6.49 | 58.06 | 74.00 | 15.94 | Vertical |
| 5850.00 | 34.40 | 18.01 | 52.41 | 122.20 | 69.79 | Horizontal |
| 5855.00 | 35.20 | 18.02 | 53.22 | 110.80 | 57.58 | Horizontal |
| 5875.00 | 35.96 | 18.07 | 54.03 | 105.20 | 51.17 | Horizontal |
| 5925.00 | 40.41 | 17.95 | 58.36 | 68.20 | 9.84 | Horizontal |
| 11650.00 | 50.94 | 6.49 | 57.43 | 74.00 | 16.57 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dB μ V) | Factor (dB) | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Polarization |
| 11650.00 | 42.99 | 6.49 | 49.48 | 54.00 | 4.52 | Vertical |
| 11650.00 | 43.46 | 6.49 | 49.95 | 54.00 | 4.05 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Band 4: 5725 MHz - 5825 MHz, 802.11ac-VHT40 MIMO | | | | | | |
|---|-------------------|-------------|----------------|----------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5650.00 | 34.50 | 17.16 | 51.66 | 68.20 | 16.54 | Vertical |
| 5700.00 | 35.25 | 17.35 | 52.60 | 105.20 | 52.60 | Vertical |
| 5720.00 | 43.01 | 17.46 | 60.47 | 110.80 | 50.33 | Vertical |
| 5725.00 | 40.93 | 17.49 | 58.42 | 122.20 | 63.78 | Vertical |
| 11510.00 | 51.85 | 6.60 | 58.45 | 74.00 | 15.55 | Vertical |
| 5650.00 | 34.45 | 17.16 | 51.61 | 68.20 | 16.59 | Horizontal |
| 5700.00 | 35.54 | 17.35 | 52.89 | 105.20 | 52.31 | Horizontal |
| 5720.00 | 35.69 | 17.46 | 53.15 | 110.80 | 57.65 | Horizontal |
| 5725.00 | 36.66 | 17.49 | 54.15 | 122.20 | 68.05 | Horizontal |
| 11510.00 | 50.89 | 6.60 | 57.49 | 74.00 | 16.51 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11510.00 | 43.01 | 6.60 | 49.61 | 54.00 | 4.39 | Vertical |
| 11510.00 | 44.60 | 6.60 | 51.20 | 54.00 | 2.80 | Horizontal |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5850.00 | 34.29 | 18.01 | 52.30 | 122.20 | 69.90 | Vertical |
| 5855.00 | 33.90 | 18.02 | 51.92 | 110.80 | 58.88 | Vertical |
| 5875.00 | 34.28 | 18.07 | 52.35 | 105.20 | 52.85 | Vertical |
| 5925.00 | 34.69 | 17.95 | 52.64 | 68.20 | 15.56 | Vertical |
| 11590.00 | 52.01 | 6.17 | 58.18 | 74.00 | 15.82 | Vertical |
| 5850.00 | 33.84 | 18.01 | 51.85 | 122.20 | 70.35 | Horizontal |
| 5855.00 | 33.53 | 18.02 | 51.55 | 110.80 | 59.25 | Horizontal |
| 5875.00 | 34.71 | 18.07 | 52.78 | 105.20 | 52.42 | Horizontal |
| 5925.00 | 34.20 | 17.95 | 52.15 | 68.20 | 16.05 | Horizontal |
| 11590.00 | 50.72 | 6.17 | 56.89 | 74.00 | 17.11 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11590.00 | 42.59 | 6.17 | 48.76 | 54.00 | 5.24 | Vertical |
| 11590.00 | 44.40 | 6.17 | 50.57 | 54.00 | 3.43 | Horizontal |
| Remark: | | | | | | |
| 1. Level = Reading + Factor. | | | | | | |
| 2. Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report. | | | | | | |

| Band 4: 5725 MHz - 5825 MHz, 802.11ac-VHT80 MIMO | | | | | | |
|--|-------------------|-------------|----------------|----------------|-------------|--------------|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 5650.00 | 34.84 | 17.16 | 52.00 | 68.20 | 16.20 | Vertical |
| 5700.00 | 40.46 | 17.35 | 57.81 | 105.20 | 47.39 | Vertical |
| 5720.00 | 42.96 | 17.46 | 60.42 | 110.80 | 50.38 | Vertical |
| 5725.00 | 44.05 | 17.49 | 61.54 | 122.20 | 60.66 | Vertical |
| 5850.00 | 36.64 | 18.01 | 54.65 | 122.20 | 67.55 | Vertical |
| 5855.00 | 35.20 | 18.02 | 53.22 | 110.80 | 57.58 | Vertical |
| 5875.00 | 34.41 | 18.07 | 52.48 | 105.20 | 52.72 | Vertical |
| 5925.00 | 34.74 | 17.95 | 52.69 | 68.20 | 15.51 | Vertical |
| 11550.00 | 52.29 | 6.39 | 58.68 | 74.00 | 15.32 | Vertical |
| 5650.00 | 34.03 | 17.16 | 51.19 | 68.20 | 17.01 | Horizontal |
| 5700.00 | 35.08 | 17.35 | 52.43 | 105.20 | 52.77 | Horizontal |
| 5720.00 | 36.19 | 17.46 | 53.65 | 110.80 | 57.15 | Horizontal |
| 5725.00 | 36.27 | 17.49 | 53.76 | 122.20 | 68.44 | Horizontal |
| 5850.00 | 34.06 | 18.01 | 52.07 | 122.20 | 70.13 | Horizontal |
| 5855.00 | 34.39 | 18.02 | 52.41 | 110.80 | 58.39 | Horizontal |
| 5875.00 | 34.44 | 18.07 | 52.51 | 105.20 | 52.69 | Horizontal |
| 5925.00 | 34.57 | 17.95 | 52.52 | 68.20 | 15.68 | Horizontal |
| 11550.00 | 51.07 | 6.39 | 57.46 | 74.00 | 16.54 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 11550.00 | 43.28 | 6.39 | 49.67 | 54.00 | 4.33 | Vertical |
| 11550.00 | 44.79 | 6.39 | 51.18 | 54.00 | 2.82 | Horizontal |
| Remark: | | | | | | |
| 1. <i>Level = Reading + Factor.</i> | | | | | | |
| 2. <i>Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.</i> | | | | | | |

-----End of report-----