FCC RF Test Report

(U-NII)

Report No.:	JYTSZ-R12-2500543
Applicant:	Shenzhen Gotron Electronic CO., LTD.
Address of Applicant:	7B01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City, Guangdong Province China
Equipment Under Test (EUT)	
Product Name:	Smart Phone
Model No.:	GQ5017, Armor 34 Pro, Armor 34, Armor 34 Ultra, Armor 34T Ultra, Armor 34T Pro, Armor 34 Lite, Armor 34s, Armor 34s Pro
Trade Mark:	ulefone
FCC ID:	2AOWK-5017
Applicable Standards:	FCC CFR Title 47 Part 15E (§15.407)
Date of Sample Receipt:	24 Mar., 2025
Date of Test:	25 Mar., to 30 Jul., 2025
Date of Report Issued:	30 Jul., 2025
Test Result:	PASS

Tested by:	Lucai Ying ***Project Engineer***	***Date:***	*30 Jul., 2025*
Reviewed by:	Victor Chang ***Senior Engineer***	***Date:***	*30 Jul., 2025*
Approved by:	James Wei ***Manager***	***Date:***	*30 Jul., 2025*

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.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

1 Version

Version No.	Date	Description
00	*22 Apr., 2025*	*Original*
01	*16 Jul., 2025*	*Updated pages 5 ,7 ,13,16,19 and Appendix – 5.2G Wi-Fi and Appendix – 5.8G Wi-Fi*
02	*16 Jul., 2025*	*Updated Appendix – 5.2G Wi-Fi and Appendix – 5.8G Wi-Fi*

2 Contents

Page

Cover Page **1**
1 Version **2**
2 Contents **3**
3 General Information **4**
3.1 Client Information 4
3.2 General Description of E.U.T. 4
3.3 Test Mode and Environment 5
3.4 Description of Test Auxiliary Equipment 5
3.5 Measurement Uncertainty 5
3.6 Additions to, Deviations, or Exclusions from the Method 5
3.7 Laboratory Facility 6
3.8 Laboratory Location 6
3.9 Test Instruments List 6
4 Measurement Setup and Procedure **9**
4.1 Test Channel 9
4.2 Test Setup 9
4.3 Test Procedure 12
5 Test Results **13**
5.1 Summary 13
5.1.1 Clause and Data Summary 13
5.1.2 Test Limit 14
5.2 Antenna requirement 16
5.3 AC Power Line Conducted Emission 17
5.4 Unwanted Emissions 19

3 General Information

3.1 Client Information

Applicant:	Shenzhen Gotron Electronic CO., LTD.
Address:	7B01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City, Guangdong Province China
Manufacturer:	Shenzhen Gotron Electronic CO., LTD.
Address:	7B01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City, Guangdong Province China

3.2 General Description of E.U.T.

Product Name:	Smart Phone	
Model No.:	GQ5017, Armor 34 Pro, Armor 34, Armor 34 Ultra, Armor 34T Ultra, Armor 34T Pro, Armor 34 Lite, Armor 34s, Armor 34s Pro	
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:	Internal Antenna	
Antenna Gain:	Band 1:	ANT0: 3.81 dBi (declare by applicant)
		ANT8: 2.40 dBi (declare by applicant)
	Band 4:	ANT0: 0.23dBi (declare by applicant)
		ANT8: 1.30 dBi (declare by applicant)
Antenna Transmit Mode:	MIMO (2TX, 2RX)	
Power Supply:	Rechargeable Li-ion Battery DC3.87V, 25500mAh	
AC Adapter:	Model:HJ-PD66W-US Input: AC100-240V, 50/60Hz, 1.5A Output: DC 5.0V, 3.0A 15.0W OR 9.0V, 3.0A 27.0W OR 12.0V, 3.0A 36.0W OR 15.0V, 3.0A 45.0W OR 20.0V 3.25A 65W OR 11.0V, 6.0A 66.0W MAX	
Remark:	GQ5017, Armor 34 Pro, Armor 34, Armor 34 Ultra, Armor 34T Ultra, Armor 34T Pro, Armor 34 Lite, Armor 34s, Armor 34s Pro were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being model name.	
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:

1. *For AC power line conducted emission and radiated spurious emission (below 1GHz), pre-scan 802.11a, n, ac modulation mode, found 5.2GHz Wi-Fi ANT0 802.11a modulation and Lowes channel mode was worse case mode. The report only reflects the test data of worst mode.*
2. *During the test, the mobile phone dial interface is used to enter the EUT engineering mode, and the prototype transmission power level is set as follows: The 802.11a mode transmission power level is 14, the 802.11n/ac20 mode prototype transmission power level is 16, the 802.11n/ac40 mode prototype transmission power level is 10 and the 802.11ac80 mode prototype transmission power level is 10.*

Operating Environment:	
Temperature:	15℃ ~ 35℃
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 3.87Vdc, Extreme: Low 3.00Vdc, High 4.45Vdc
Test Engineer:	Li Huang(Conducted measurement) Robin Gu(Radiated measurement)

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)))
Occupied Channel Bandwidth	0.250 MHz
RF output power, conducted	0.75dB
Power Spectral Density, conducted	±3.0 dB
Unwanted Emissions, conducted	2.86 dB
Conducted Emission for LISN (9kHz ~ 150kHz)	±3.0 dB
Conducted Emission for LISN (150kHz ~ 30MHz)	±2.4 dB
Radiated Emission (30MHz ~ 200MHz) (3m SAC)	±4.6 dB
Radiated Emission (200MHz ~ 1000MHz) (3m SAC)	±5.8 dB
Radiated Emission (1GHz ~ 18GHz) (3m FAR)	5.15 dB
Radiated Emission (18GHz ~ 40GHz) (3m FAR)	5.30 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	04-13-2026
Loop Antenna	Schwarzbeck	FMZB 1519 B	WXJ002-4	01-03-2025	01-02-2026
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ002	01-03-2025	01-02-2026
Pre-amplifier (30MHz ~ 1GHz)	Schwarzbeck	BBV9743B	WXJ001-2	12-16-2024	12-15-2025
EMI Test Receiver	Rohde & Schwarz	ESRP7	WXJ003-1	12-16-2024	12-15-2025
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-8M	WXG001-4	01-15-2025	01-14-2026
Band Reject Filter Group	Tonscend	JS0806-F	WXJ089	N/A	
Test Software	Tonscend	TS+	Version: 3.0.0.1		

Radiated Emission(3m FAR):					
Test Equipment	**Manufacturer**	**Model No.**	**Manage No.**	**Cal. Date (mm-dd-yy)**	**Cal. Due date (mm-dd-yy)**
3m FAR	YUNYI	9m*6m*6m	WXJ097	06-15-2023	06-14-2028
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ097-2	07-01-2024	06-30-2025
				04-24-2025	04-23-2026
Biconical Antenna	Schwarzbeck	VUBA9117	WXJ002-1	07-01-2024	06-30-2027
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ097-3	06-16-2024	06-15-2025
				05-23-2025	05-22-2026
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-3	12-25-2024	12-24-2025
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-5	12-25-2024	12-24-2025
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-6	12-25-2024	12-24-2025
Pre-amplifier (30MHz ~ 1GHz)	YUNYI	PAM-310N	WXJ097-5	04-24-2024	04-23-2025
				04-21-2025	04-20-2026
Pre-amplifier (1GHz ~ 18GHz)	YUNYI	PAM-118N	WXJ097-6	04-24-2024	04-23-2025
				04-21-2025	04-20-2026
Pre-amplifier (18GHz ~ 40GHz)	RF System	TRLA-180400G45B	WXJ002-7	12-16-2024	12-15-2025
EMI Test Receiver	Rohde & Schwarz	ESCI3	WXJ003	12-16-2024	12-15-2025
Spectrum Analyzer	Rohde & Schwarz	FSP 30	WXJ004	12-16-2024	12-15-2025
Spectrum Analyzer	KEYSIGHT	N9020B	WXJ081-1	06-11-2024	06-10-2025
				05-08-2025	05-07-2026
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-13M	WXG097-1	07-30-2024	07-29-2025
Coaxial Cable (1GHz ~ 18GHz)	JYTSZ	JYT3M-18G-NN-8M	WXG097-2	07-30-2024	07-29-2025
Coaxial Cable (18GHz ~ 40GHz)	JYTSZ	JYT3M-40G-SS-8M	WXG097-3	07-30-2024	07-29-2025
High Band Reject Filter Group	Tonscend	JS0806-F	WXJ089	N/A	
Low Band Reject Filter Group	Tonscend	JS0806-F	WXJ097-4	N/A	
Test Software	Tonscend	TS+	Version: 5.0.0		

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	06-11-2024	06-10-2025
				05-08-2025	05-07-2026
LISN	Schwarzbeck	NSLK 8127	QCJ001-13	12-17-2024	12-16-2025
LISN	Rohde & Schwarz	ESH3-Z5	WXJ005-1	12-17-2024	12-16-2025
LISN Coaxial Cable (9kHz ~ 30MHz)	JYTSZ	JYTCE-1G-NN-2M	WXG003-1	01-15-2025	01-14-2026
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	09-10-2024	09-09-2025
Temperature Humidity Chamber	ZHONG ZHI	CZ-A-80D	WXJ032-3	12-17-2024	12-16-2026
Power Detector Box	MWRFTEST	MW100-PSB	WXJ007-4	09-10-2024	09-09-2025
RF Control Unit	MWRFTEST	MW100-RFCB	WXG006	N/A	
RF Switch	TOP PRECISION	RSU0301	WXG003	N/A	
DC Power Supply	Keysight	E3642A	WXJ025-2	N/A	
Test Software	MWRFTEST	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

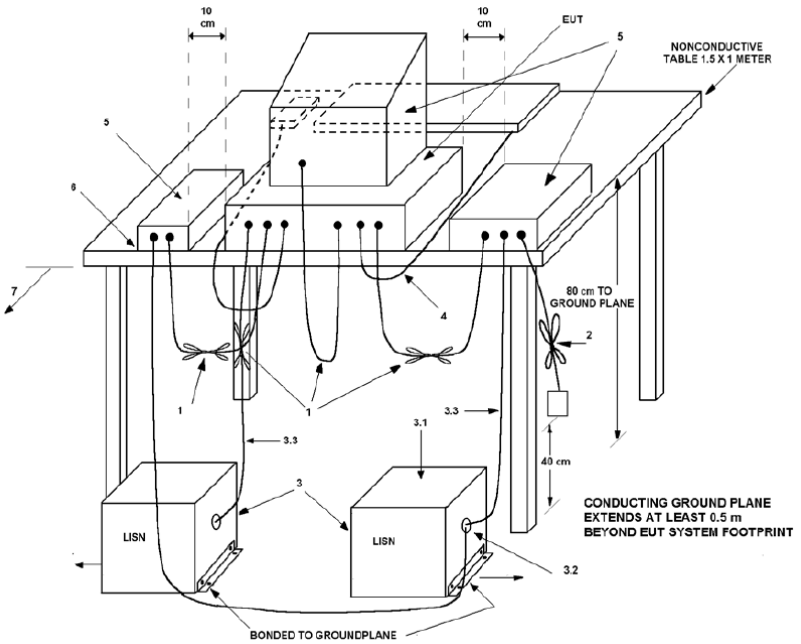
Modulation mode	Lowest channel		Middle channel		Highest channel	
	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
802.11a, n-HT20, ac-VHT20	36	5180	40	5200	48	5240
802.11n-HT40, ac-VHT40	38	5190	/	/	46	5230
802.11ac-VHT80	/	/	42	5210	/	/

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

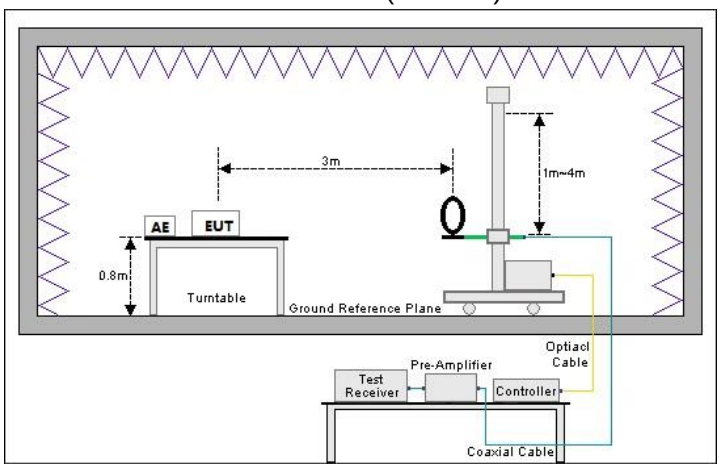
1) Conducted emission measurement:



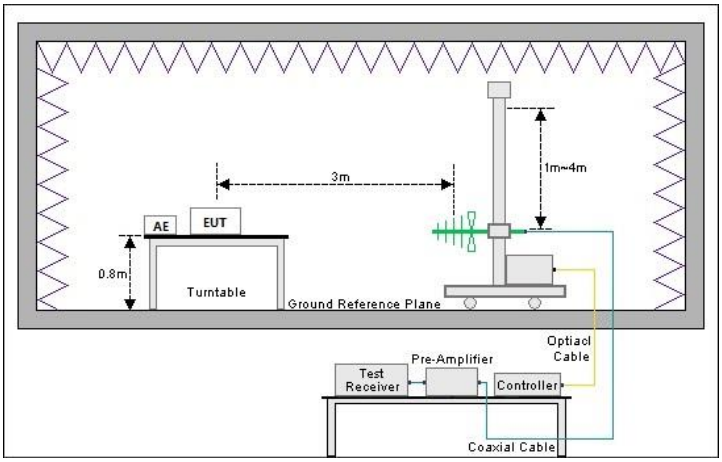
Note: The detailed descriptions please refer to Figure 8 of ANSI C63.4:2014.

2) Radiated emission measurement:

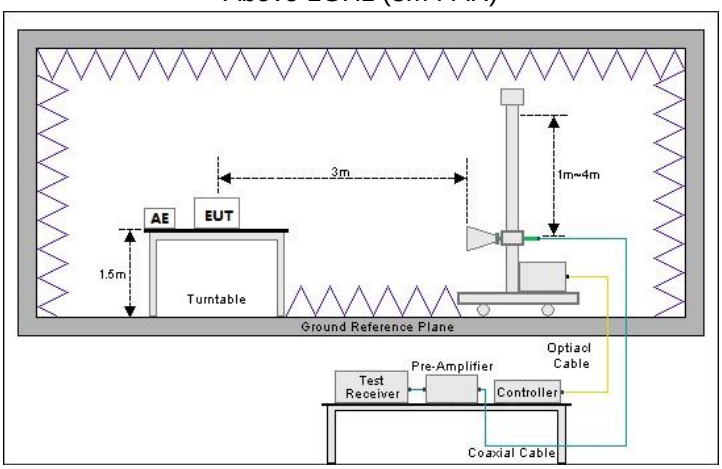
9KHz-30MHz (3m SAC)



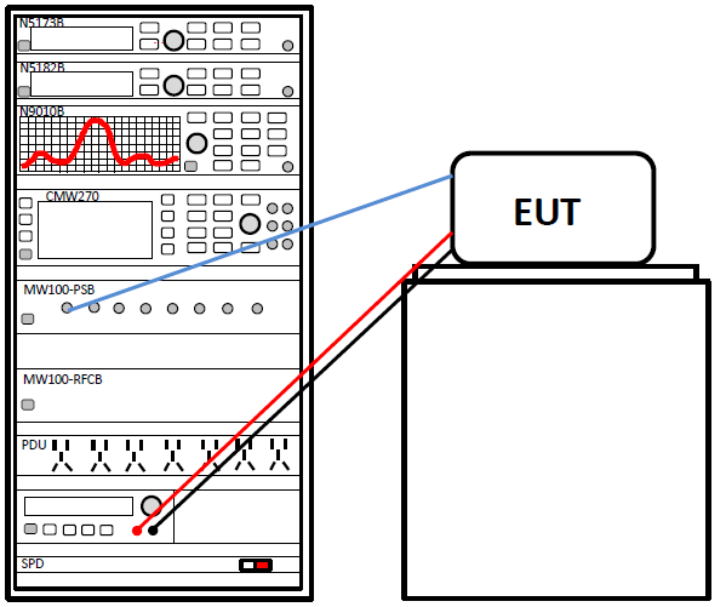
Below 1GHz (3m SAC)



Above 1GHz (3m FAR)



3) Conducted test method



4.3 Test Procedure

Test method	Test step
Conducted emission	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	**For below 30MHz:** 1. The EUT was placed on the table top of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. 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. **For below 1GHz:** 4. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m. 5. 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. 6. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data. **For above 1GHz:** 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	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 Method	Test data	Result
Antenna Requirement	15.203	/	See Section 5.2	Pass
AC Power Line Conducted Emission	15.207 15.407 (b)(9)	ANSI C63.10 clause 6.2	See Section 5.3	Pass
Duty Cycle	ANSI C63.10-2013	ANSI C63.10 clause 12.2	Appendix – 5.2G Wi-Fi Appendix – 5.8G Wi-Fi	Pass
Conducted Peak Output Power Power Spectral Density	15.407 (a)(1)(iv), (a)(3)(i)	ANSI C63.10 clause 12.3.3.1, ANSI C63.10 clause 12.5	Appendix – 5.2G Wi-Fi Appendix – 5.8G Wi-Fi	Pass
26dB Emission Bandwidth 99% Occupied Bandwidth	15.407 (a)(12)	ANSI C63.10 clause 12.4.1, ANSI C63.10 clause 6.9.3	Appendix – 5.2G Wi-Fi	Pass
6dB Emission Bandwidth	15.407 (e)	ANSI C63.10 clause 12.4.1	Appendix – 5.8G Wi-Fi	Pass
Unwanted Emissions	15.205 15.209 15.407 (b)(1), (4), (9), (10)	ANSI C63.10 clause 6.3, 6.5, 6.6 and 6.10.5	See Section 5.4	Pass
Frequency Stability	15.407 (g)	ANSI C63.10 clause 6.8.1	Appendix – 5.2G Wi-Fi Appendix – 5.8G Wi-Fi	Pass
Dynamic frequency selection	15.407 (h)(2)	KDB 905462 D02	N/A	N/A

Remark:

1. *Pass: The EUT complies with the essential requirements in the standard.*
2. *N/A: Not Applicable.*
3. *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

<table>
<tr><th>Test items</th><th>Limit</th></tr>
<tr><td>AC Power Line Conducted Emission</td><td>
<table>
<tr><th rowspan="2">Frequency (MHz)</th><th colspan="2">Limit (dBμV)</th></tr>
<tr><th>Quasi-Peak</th><th>Average</th></tr>
<tr><td>0.15 – 0.5</td><td>66 to 56 Note 1</td><td>56 to 46 Note 1</td></tr>
<tr><td>0.5 – 5</td><td>56</td><td>46</td></tr>
<tr><td>5 – 30</td><td>60</td><td>50</td></tr>
<tr><td colspan="3">Note 1: The limit level in dBμV decreases linearly with the logarithm of frequency.
Note 2: The more stringent limit applies at transition frequencies.</td></tr>
</table>
</td></tr>
<tr><td>Conducted Peak Output Power

Power Spectral Density</td><td>For the 5.15-5.25 GHz band:
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.

For the band 5.725-5.895 GHz:
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.</td></tr>
<tr><td>26dB Emission Bandwidth
99% Occupied Bandwidth</td><td>N/A</td></tr>
<tr><td>6dB Emission Bandwidth</td><td>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.</td></tr>
</table>

<table>
<tr><td>Unwanted Emissions</td><td>

(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.

(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.

(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:

<table>
<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>
<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>
<tr><td colspan="4">Note: The more stringent limit applies at transition frequencies.</td></tr>
<tr><th rowspan="2">Frequency</th><th colspan="3">Limit (dBμV/m) @ 3m</th></tr>
<tr><th colspan="2">Average</th><th>Peake</th></tr>
<tr><td>Above 1 GHz</td><td colspan="2">54.0</td><td>74.0</td></tr>
<tr><td colspan="4">Note: The measurement bandwidth shall be 1 MHz or greater.</td></tr>
</table>

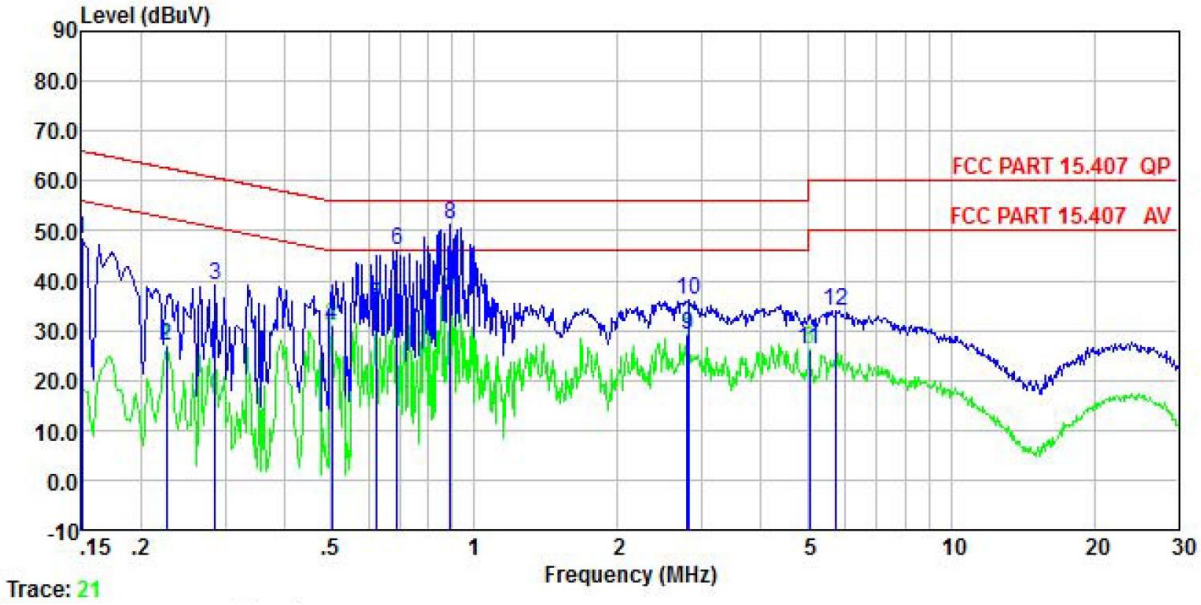
</td></tr>
<tr><td>Frequency Stability</td><td>Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.</td></tr>
</table>

5.2 Antenna requirement

Standard requirement:	FCC Part 15 C Section 15.203
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.	
E.U.T Antenna:	
The Wi-Fi antenna is an internal antenna which cannot replace by end-user, the best case gain of the antenna is ANT0: 3.81dBi. See product internal photos for details. *Note: Unequal antenna gains, with equal transmit powers. The transmit signals are correlated, then* 5.2GHz WiFi:Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})2/N_{ant}$]; So Directional gain = 6.14dBi. 5.8GHz WiFi:Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})2/N_{ant}$]; So Directional gain = 3.65dBi.	

5.3 AC Power Line Conducted Emission

Product name:	Smart Phone	**Product model:**	GQ5017
Test by:	Kiran Zeng	**Test mode:**	5G Wi-Fi mode
Test frequency:	150 kHz ~ 30 MHz	**Phase:**	Line
Test voltage:	AC 120 V/60 Hz		

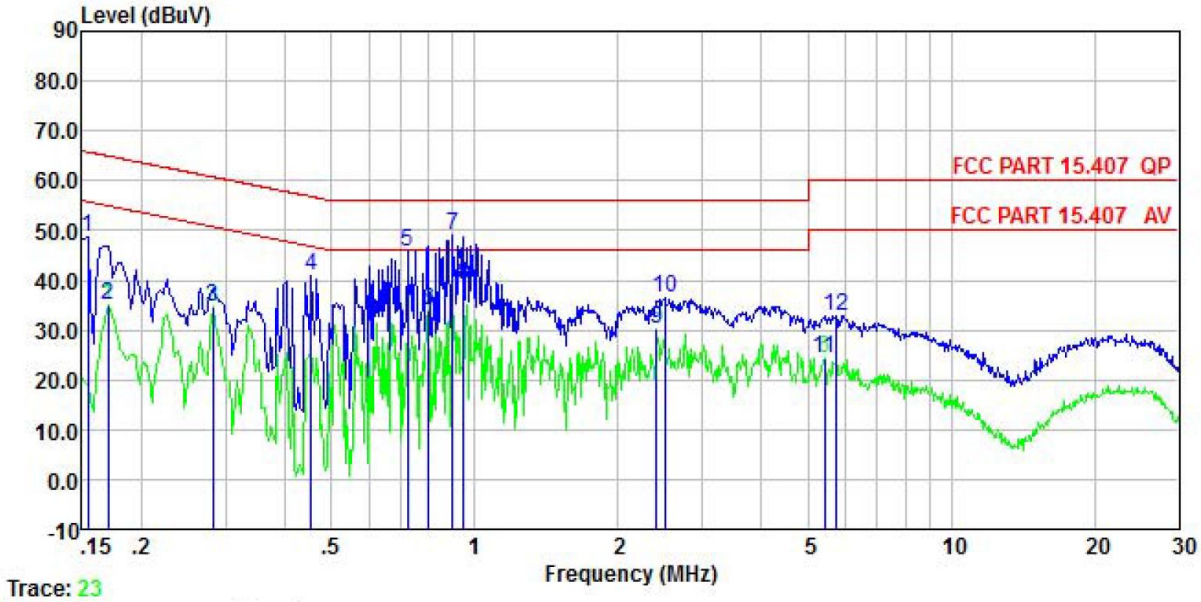


	Freq	Read Level	LISN Factor	Aux Factor	Aux2 Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dB	dBuV	dBuV	dB	
1	0.150	28.27	10.20	0.00	9.88	0.01	48.36	66.00	-17.64	QP
2	0.226	6.84	10.10	0.00	9.88	0.02	26.84	52.61	-25.77	Average
3	0.286	19.24	10.10	0.00	9.88	0.03	39.25	60.63	-21.38	QP
4	0.502	11.06	10.16	0.00	9.88	0.03	31.13	46.00	-14.87	Average
5	0.621	15.03	10.19	0.00	9.88	0.02	35.12	46.00	-10.88	Average
6	0.690	26.05	10.15	0.00	9.88	0.03	46.11	56.00	-9.89	QP
7	0.890	18.08	10.15	0.00	9.88	0.04	38.15	46.00	-7.85	Average
8	0.890	31.32	10.15	0.00	9.88	0.04	51.39	56.00	-4.61	QP
9	2.794	8.87	10.26	0.00	9.88	0.10	29.11	46.00	-16.89	Average
10	2.809	15.91	10.27	0.00	9.88	0.09	36.15	56.00	-19.85	QP
11	5.058	5.94	10.30	0.00	9.89	0.09	26.22	50.00	-23.78	Average
12	5.744	13.74	10.34	0.00	9.90	0.09	34.07	60.00	-25.93	QP

Remark:

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

Product name:	Smart Phone	**Product model:**	GQ5017
Test by:	Kiran Zeng	**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	Aux Factor	Aux2 Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dB	dBuV	dBuV	dB	
1	0.154	28.55	10.20	0.00	9.88	0.01	48.64	65.78	-17.14	QP
2	0.170	14.83	10.20	0.00	9.88	0.01	34.92	54.94	-20.02	Average
3	0.282	14.54	10.15	0.00	9.88	0.02	34.59	50.76	-16.17	Average
4	0.454	20.83	10.16	0.00	9.88	0.03	40.90	56.80	-15.90	QP
5	0.724	25.46	10.30	0.00	9.88	0.03	45.67	56.00	-10.33	QP
6	0.800	13.74	10.30	0.00	9.88	0.03	33.95	46.00	-12.05	Average
7	0.899	28.79	10.25	0.00	9.88	0.04	48.96	56.00	-7.04	QP
8	0.948	18.88	10.23	0.00	9.88	0.05	39.04	46.00	-6.96	Average
9	2.409	9.82	10.25	0.00	9.88	0.15	30.10	46.00	-15.90	Average
10	2.500	16.09	10.24	0.00	9.88	0.13	36.34	56.00	-19.66	QP
11	5.419	4.24	10.22	0.00	9.90	0.09	24.45	50.00	-25.55	Average
12	5.713	12.59	10.24	0.00	9.90	0.09	32.82	60.00	-27.18	QP

Remark:

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

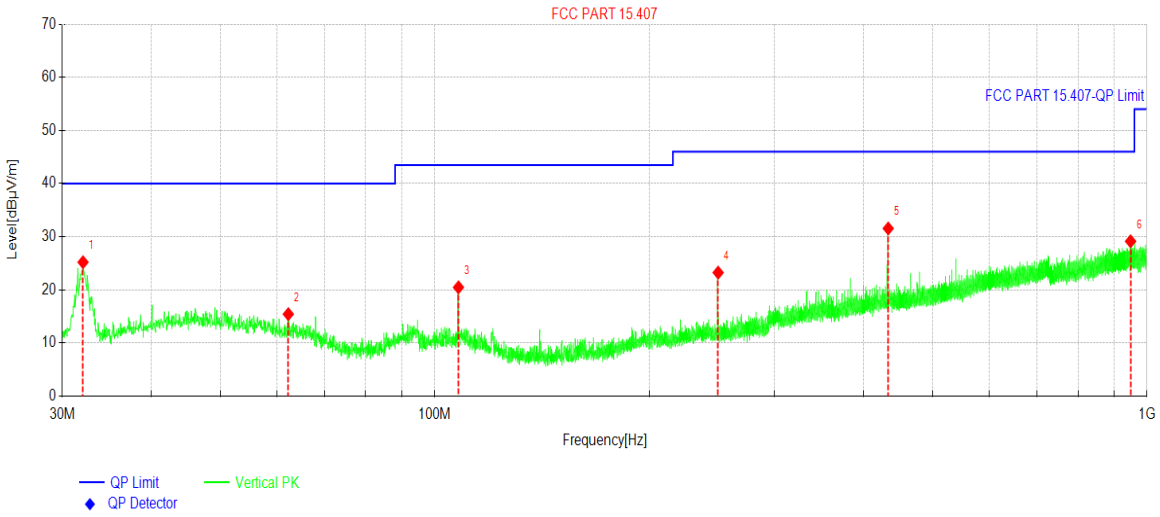
5.4 Unwanted Emissions

Below 30MHz:

Test Frequency from 9kHz to 30MHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.

Below 1GHz:

Product Name:	Smart Phone	**Product Model:**	GQ5017
Test By:	Kiran Zeng	**Test mode:**	5G Wi-Fi mode
Test Frequency:	30 MHz ~ 1 GHz	**Polarization:**	Vertical
Test Voltage:	DC 3.87V		

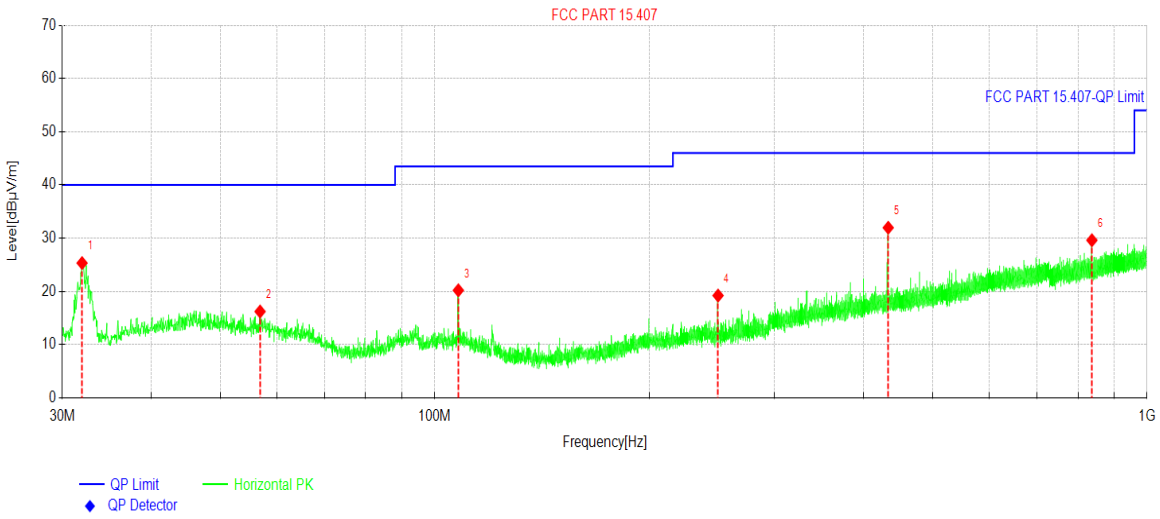


Suspected Data List								
NO.	Freq. [MHz]	Reading[dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	32.0856	40.84	-15.63	25.21	40.00	14.79	PK	Vertical
2	62.3026	29.72	-14.29	15.43	40.00	24.57	PK	Vertical
3	107.9919	34.69	-14.22	20.47	43.50	23.03	PK	Vertical
4	250.0070	36.83	-13.59	23.24	46.00	22.76	PK	Vertical
5	433.2492	41.39	-9.83	31.56	46.00	14.44	PK	Vertical
6	948.2479	31.06	-1.92	29.14	46.00	16.86	PK	Vertical

Remark:

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

Product Name:	Smart Phone	**Product Model:**	GQ5017
Test By:	Kiran Zeng	**Test mode:**	5G Wi-Fi mode
Test Frequency:	30 MHz ~ 1 GHz	**Polarization:**	Horizontal
Test Voltage:	DC 3.87V		



Suspected Data List								
NO.	Freq. [MHz]	Reading[dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	31.9886	40.97	-15.64	25.33	40.00	14.67	PK	Horizontal
2	56.8703	29.61	-13.39	16.22	40.00	23.78	PK	Horizontal
3	107.9434	34.42	-14.22	20.20	43.50	23.30	PK	Horizontal
4	249.9585	32.81	-13.59	19.22	46.00	26.78	PK	Horizontal
5	433.2492	41.80	-9.83	31.97	46.00	14.03	PK	Horizontal
6	836.9833	33.02	-3.41	29.61	46.00	16.39	PK	Horizontal

Remark:

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

Above 1GHz

Band 1: 5150 MHz - 5250 MHz, 802.11a – ANT0

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	35.76	20.12	55.88	74.00	18.12	Vertical
10360.00	45.86	1.40	47.26	68.20	20.94	Vertical
5150.00	36.17	20.12	56.29	74.00	17.71	Horizontal
10360.00	46.49	1.40	47.89	68.20	20.31	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5150.00	23.95	20.12	44.07	54.00	9.93	Vertical
5150.00	24.05	20.12	44.17	54.00	9.83	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	45.84	2.45	48.29	68.20	19.91	Vertical
10400.00	46.24	2.45	48.69	68.20	19.51	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	35.05	19.93	54.98	74.00	19.02	Vertical
10480.00	46.09	2.74	48.83	68.20	19.37	Vertical
5350.00	35.22	19.93	55.15	74.00	18.85	Horizontal
10480.00	46.00	2.74	48.74	68.20	19.46	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5350.00	23.69	19.93	43.62	54.00	10.38	Vertical
5350.00	23.76	19.93	43.69	54.00	10.31	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, 802.11a – ANT8

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	34.58	20.12	54.70	74.00	19.30	Vertical
10360.00	47.06	1.40	48.46	68.20	19.74	Vertical
5150.00	35.32	20.12	55.44	74.00	18.56	Horizontal
10360.00	44.88	1.40	46.28	68.20	21.92	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5150.00	23.56	20.12	43.68	54.00	10.32	Vertical
5150.00	23.63	20.12	43.75	54.00	10.25	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	46.96	2.45	49.41	68.20	18.79	Vertical
10400.00	44.70	2.45	47.15	68.20	21.05	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	35.23	19.93	55.16	74.00	18.84	Vertical
10480.00	46.99	2.74	49.73	68.20	18.47	Vertical
5350.00	35.09	19.93	55.02	74.00	18.98	Horizontal
10480.00	45.01	2.74	47.75	68.20	20.45	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5350.00	23.80	19.93	43.73	54.00	10.27	Vertical
5350.00	23.71	19.93	43.64	54.00	10.36	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	35.31	20.12	55.43	74.00	18.57	Vertical
10360.00	45.89	1.40	47.29	68.20	20.91	Vertical
5150.00	35.73	20.12	55.85	74.00	18.15	Horizontal
10360.00	46.04	1.40	47.44	68.20	20.76	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5150.00	24.18	20.12	44.30	54.00	9.70	Vertical
5150.00	24.24	20.12	44.36	54.00	9.64	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	45.85	2.45	48.30	68.20	19.90	Vertical
10400.00	46.38	2.45	48.83	68.20	19.37	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	34.81	19.93	54.74	74.00	19.26	Vertical
10480.00	46.33	2.74	49.07	68.20	19.13	Vertical
5350.00	34.95	19.93	54.88	74.00	19.12	Horizontal
10480.00	46.08	2.74	48.82	68.20	19.38	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5350.00	23.99	19.93	43.92	54.00	10.08	Vertical
5350.00	24.08	19.93	44.01	54.00	9.99	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 (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5150.00	35.42	20.12	55.54	74.00	18.46	Vertical
10380.00	45.89	1.96	47.85	68.20	20.35	Vertical
5150.00	35.63	20.12	55.75	74.00	18.25	Horizontal
10380.00	46.49	1.96	48.45	68.20	19.75	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5150.00	23.95	20.12	44.07	54.00	9.93	Vertical
5150.00	24.14	20.12	44.26	54.00	9.74	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	34.86	19.93	54.79	74.00	19.21	Vertical
10460.00	45.71	1.64	47.35	68.20	20.85	Vertical
5350.00	35.44	19.93	55.37	74.00	18.63	Horizontal
10460.00	46.44	1.64	48.08	68.20	20.12	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5350.00	24.06	19.93	43.99	54.00	10.01	Vertical
5350.00	23.85	19.93	43.78	54.00	10.22	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.*

Band 1: 5150 MHz - 5250 MHz, 802.11ac-VHT20 – 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	35.35	20.12	55.47	74.00	18.53	Vertical
10360.00	45.85	1.40	47.25	68.20	20.95	Vertical
5150.00	35.75	20.12	55.87	74.00	18.13	Horizontal
10360.00	46.46	1.40	47.86	68.20	20.34	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5150.00	24.20	20.12	44.32	54.00	9.68	Vertical
5150.00	24.10	20.12	44.22	54.00	9.78	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	46.34	2.45	48.79	68.20	19.41	Vertical
10400.00	45.95	2.45	48.40	68.20	19.80	Horizontal

Test channel: Highest channel

Detector: Peak Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5350.00	34.87	19.93	54.80	74.00	19.20	Vertical
10480.00	46.60	2.74	49.34	68.20	18.86	Vertical
5350.00	35.43	19.93	55.36	74.00	18.64	Horizontal
10480.00	46.54	2.74	49.28	68.20	18.92	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5350.00	24.23	19.93	44.16	54.00	9.84	Vertical
5350.00	23.78	19.93	43.71	54.00	10.29	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 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	35.12	20.12	55.24	74.00	18.76	Vertical
10380.00	45.51	1.96	47.47	68.20	20.73	Vertical
5150.00	35.82	20.12	55.94	74.00	18.06	Horizontal
10380.00	46.08	1.96	48.04	68.20	20.16	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5150.00	24.36	20.12	44.48	54.00	9.52	Vertical
5150.00	24.38	20.12	44.50	54.00	9.50	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	34.69	19.93	54.62	74.00	19.38	Vertical
10460.00	45.48	1.64	47.12	68.20	21.08	Vertical
5350.00	35.69	19.93	55.62	74.00	18.38	Horizontal
10460.00	46.89	1.64	48.53	68.20	19.67	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5350.00	24.07	19.93	44.00	54.00	10.00	Vertical
5350.00	23.60	19.93	43.53	54.00	10.47	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 (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5150.00	35.98	20.12	56.10	74.00	17.90	Vertical
5350.00	36.03	19.93	55.96	74.00	18.04	Vertical
10420.00	46.16	1.92	48.08	68.20	20.12	Vertical
5150.00	36.12	20.12	56.24	74.00	17.76	Horizontal
5350.00	35.56	19.93	55.49	74.00	18.51	Horizontal
10420.00	46.18	1.92	48.10	68.20	20.10	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5150.00	24.58	20.12	44.70	54.00	9.30	Vertical
5350.00	24.11	19.93	44.04	54.00	9.96	Vertical
5150.00	24.69	20.12	44.81	54.00	9.19	Horizontal
5350.00	23.95	19.93	43.88	54.00	10.12	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, 802.11a – ANT0

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	40.83	20.81	61.64	68.20	6.56	Vertical
5700.00	40.97	21.58	62.55	105.20	42.65	Vertical
5720.00	41.45	21.35	62.80	110.80	48.00	Vertical
5725.00	40.15	21.29	61.44	122.20	60.76	Vertical
11490.00	46.14	2.44	48.58	74.00	25.42	Vertical
5650.00	41.02	20.81	61.83	68.20	6.37	Horizontal
5700.00	39.67	21.58	61.25	105.20	43.95	Horizontal
5720.00	41.37	21.35	62.72	110.80	48.08	Horizontal
5725.00	40.84	21.29	62.13	122.20	60.07	Horizontal
11490.00	45.66	2.44	48.10	74.00	25.90	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11490.00	37.16	2.44	39.60	54.00	14.40	Vertical
11490.00	36.26	2.44	38.70	54.00	15.30	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	46.11	2.74	48.85	74.00	25.15	Vertical
11570.00	45.37	2.74	48.11	74.00	25.89	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11570.00	36.92	2.74	39.66	54.00	14.34	Vertical
11570.00	36.43	2.74	39.17	54.00	14.83	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 (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5850.00	39.64	21.10	60.74	122.20	61.46	Vertical
5855.00	39.27	21.15	60.42	110.80	50.38	Vertical
5875.00	39.38	21.36	60.74	105.20	44.46	Vertical
5925.00	39.11	21.70	60.81	68.20	7.39	Vertical
11650.00	46.11	2.00	48.11	74.00	25.89	Vertical
5850.00	39.86	21.10	60.96	122.20	61.24	Horizontal
5855.00	40.77	21.15	61.92	110.80	48.88	Horizontal
5875.00	38.67	21.36	60.03	105.20	45.17	Horizontal
5925.00	39.58	21.70	61.28	68.20	6.92	Horizontal
11650.00	45.28	2.00	47.28	74.00	26.72	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11650.00	37.58	2.00	39.58	54.00	14.42	Vertical
11650.00	36.15	2.00	38.15	54.00	15.85	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, 802.11a – ANT8						
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	40.56	20.81	61.37	68.20	6.83	Vertical
5700.00	40.62	21.58	62.20	105.20	43.00	Vertical
5720.00	41.61	41.09	82.70	110.80	28.10	Vertical
5725.00	39.71	40.96	80.67	122.20	41.53	Vertical
11490.00	47.27	2.44	49.71	74.00	24.29	Vertical
5650.00	40.88	20.81	61.69	68.20	6.51	Horizontal
5700.00	40.49	21.58	62.07	105.20	43.13	Horizontal
5720.00	40.11	21.35	61.46	110.80	49.34	Horizontal
5725.00	40.45	21.29	61.74	122.20	60.46	Horizontal
11490.00	46.60	2.44	49.04	74.00	24.96	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11490.00	37.20	2.44	39.64	54.00	14.36	Vertical
11490.00	37.48	2.44	39.92	54.00	14.08	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	47.11	2.74	49.85	74.00	24.15	Vertical
11570.00	46.75	2.74	49.49	74.00	24.51	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11570.00	36.96	2.74	39.70	54.00	14.30	Vertical
11570.00	37.32	2.74	40.06	54.00	13.94	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 (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5850.00	40.03	21.10	61.13	122.20	61.07	Vertical
5855.00	39.16	21.15	60.31	110.80	50.49	Vertical
5875.00	39.79	21.36	61.15	105.20	44.05	Vertical
5925.00	39.40	21.70	61.10	68.20	7.10	Vertical
11650.00	47.17	2.00	49.17	74.00	24.83	Vertical
5850.00	39.84	21.10	60.94	122.20	61.26	Horizontal
5855.00	39.81	21.15	60.96	110.80	49.84	Horizontal
5875.00	39.07	21.36	60.43	105.20	44.77	Horizontal
5925.00	39.34	21.70	61.04	68.20	7.16	Horizontal
11650.00	46.47	2.00	48.47	74.00	25.53	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11650.00	36.76	2.00	38.76	54.00	15.24	Vertical
11650.00	37.72	2.00	39.72	54.00	14.28	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	41.36	20.81	62.17	68.20	6.03	Vertical
5700.00	40.44	21.58	62.02	105.20	43.18	Vertical
5720.00	48.67	21.35	70.02	110.80	40.78	Vertical
5725.00	56.65	21.29	77.94	122.20	44.26	Vertical
11490.00	46.49	2.44	48.93	74.00	25.07	Vertical
5650.00	39.83	20.81	60.64	68.20	7.56	Horizontal
5700.00	40.41	21.58	61.99	105.20	43.21	Horizontal
5720.00	41.19	21.35	62.54	110.80	48.26	Horizontal
5725.00	48.02	21.29	69.31	122.20	52.89	Horizontal
11490.00	45.19	2.44	47.63	74.00	26.37	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11490.00	37.77	2.44	40.21	54.00	13.79	Vertical
11490.00	36.64	2.44	39.08	54.00	14.92	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	46.15	2.74	48.89	74.00	25.11	Vertical
11570.00	45.07	2.74	47.81	74.00	26.19	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11570.00	37.41	2.74	40.15	54.00	13.85	Vertical
11570.00	36.05	2.74	38.79	54.00	15.21	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 (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5850.00	39.86	21.10	60.96	122.20	61.24	Vertical
5855.00	38.95	21.15	60.10	110.80	50.70	Vertical
5875.00	39.99	21.36	61.35	105.20	43.85	Vertical
5925.00	40.14	21.70	61.84	68.20	6.36	Vertical
11650.00	46.42	2.00	48.42	74.00	25.58	Vertical
5850.00	39.53	21.10	60.63	122.20	61.57	Horizontal
5855.00	39.51	21.15	60.66	110.80	50.14	Horizontal
5875.00	39.10	21.36	60.46	105.20	44.74	Horizontal
5925.00	39.15	21.70	60.85	68.20	7.35	Horizontal
11650.00	45.47	2.00	47.47	74.00	26.53	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11650.00	37.59	2.00	39.59	54.00	14.41	Vertical
11650.00	36.27	2.00	38.27	54.00	15.73	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	40.67	20.81	61.48	68.20	6.72	Vertical
5700.00	40.56	21.58	62.14	105.20	43.06	Vertical
5720.00	40.69	21.35	62.04	110.80	48.76	Vertical
5725.00	40.61	21.29	61.90	122.20	60.30	Vertical
11510.00	45.76	2.60	48.36	74.00	25.64	Vertical
5650.00	40.04	20.81	60.85	68.20	7.35	Horizontal
5700.00	41.34	21.58	62.92	105.20	42.28	Horizontal
5720.00	40.30	21.35	61.65	110.80	49.15	Horizontal
5725.00	40.75	21.29	62.04	122.20	60.16	Horizontal
11510.00	45.74	2.60	48.34	74.00	25.66	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11510.00	37.03	2.60	39.63	54.00	14.37	Vertical
11510.00	36.53	2.60	39.13	54.00	14.87	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	39.98	21.10	61.08	122.20	61.12	Vertical
5855.00	40.00	21.15	61.15	110.80	49.65	Vertical
5875.00	39.30	21.36	60.66	105.20	44.54	Vertical
5925.00	39.07	21.70	60.77	68.20	7.43	Vertical
11590.00	45.38	2.73	48.11	74.00	25.89	Vertical
5850.00	39.68	21.10	60.78	122.20	61.42	Horizontal
5855.00	40.34	21.15	61.49	110.80	49.31	Horizontal
5875.00	38.85	21.36	60.21	105.20	44.99	Horizontal
5925.00	39.50	21.70	61.20	68.20	7.00	Horizontal
11590.00	45.45	2.73	48.18	74.00	25.82	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11590.00	36.76	2.73	39.49	54.00	14.51	Vertical
11590.00	37.00	2.73	39.73	54.00	14.27	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 (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5650.00	40.21	20.81	61.02	68.20	7.18	Vertical
5700.00	40.18	21.58	61.76	105.20	43.44	Vertical
5720.00	39.98	21.35	61.33	110.80	49.47	Vertical
5725.00	39.86	21.29	61.15	122.20	61.05	Vertical
11490.00	46.17	2.44	48.61	74.00	25.39	Vertical
5650.00	40.11	20.81	60.92	68.20	7.28	Horizontal
5700.00	40.55	21.58	62.13	105.20	43.07	Horizontal
5720.00	39.94	21.35	61.29	110.80	49.51	Horizontal
5725.00	40.57	21.29	61.86	122.20	60.34	Horizontal
11490.00	45.36	2.44	47.80	74.00	26.20	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11490.00	37.18	2.44	39.62	54.00	14.38	Vertical
11490.00	36.68	2.44	39.12	54.00	14.88	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	46.26	2.74	49.00	74.00	25.00	Vertical
11570.00	45.62	2.74	48.36	74.00	25.64	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11570.00	36.70	2.74	39.44	54.00	14.56	Vertical
11570.00	36.16	2.74	38.90	54.00	15.10	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 (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
5850.00	40.14	21.10	61.24	122.20	60.96	Vertical
5855.00	39.66	21.15	60.81	110.80	49.99	Vertical
5875.00	39.20	21.36	60.56	105.20	44.64	Vertical
5925.00	39.92	21.70	61.62	68.20	6.58	Vertical
11650.00	46.54	2.00	48.54	74.00	25.46	Vertical
5850.00	39.94	21.10	61.04	122.20	61.16	Horizontal
5855.00	40.02	21.15	61.17	110.80	49.63	Horizontal
5875.00	38.85	21.36	60.21	105.20	44.99	Horizontal
5925.00	39.70	21.70	61.40	68.20	6.80	Horizontal
11650.00	45.25	2.00	47.25	74.00	26.75	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11650.00	37.86	2.00	39.86	54.00	14.14	Vertical
11650.00	36.17	2.00	38.17	54.00	15.83	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	40.85	20.81	61.66	68.20	6.54	Vertical
5700.00	41.57	21.58	63.15	105.20	42.05	Vertical
5720.00	40.53	21.35	61.88	110.80	48.92	Vertical
5725.00	40.22	21.29	61.51	122.20	60.69	Vertical
11510.00	46.23	2.60	48.83	74.00	25.17	Vertical
5650.00	40.43	20.81	61.24	68.20	6.96	Horizontal
5700.00	40.66	21.58	62.24	105.20	42.96	Horizontal
5720.00	41.15	21.35	62.50	110.80	48.30	Horizontal
5725.00	40.14	21.29	61.43	122.20	60.77	Horizontal
11510.00	45.58	2.60	48.18	74.00	25.82	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11510.00	37.14	2.60	39.74	54.00	14.26	Vertical
11510.00	36.85	2.60	39.45	54.00	14.55	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	39.62	21.10	60.72	122.20	61.48	Vertical
5855.00	39.47	21.15	60.62	110.80	50.18	Vertical
5875.00	40.07	21.36	61.43	105.20	43.77	Vertical
5925.00	39.25	21.70	60.95	68.20	7.25	Vertical
11590.00	45.75	2.73	48.48	74.00	25.52	Vertical
5850.00	39.40	21.10	60.50	122.20	61.70	Horizontal
5855.00	39.75	21.15	60.90	110.80	49.90	Horizontal
5875.00	39.91	21.36	61.27	105.20	43.93	Horizontal
5925.00	38.97	21.70	60.67	68.20	7.53	Horizontal
11590.00	45.98	2.73	48.71	74.00	25.29	Horizontal

Detector: Average Value

Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11590.00	37.04	2.73	39.77	54.00	14.23	Vertical
11590.00	36.88	2.73	39.61	54.00	14.39	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 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	46.24	20.81	67.05	68.20	1.15	Vertical
5700.00	40.67	21.58	62.25	105.20	42.95	Vertical
5720.00	39.77	21.35	61.12	110.80	49.68	Vertical
5725.00	40.54	21.29	61.83	122.20	60.37	Vertical
5850.00	40.43	21.10	61.53	122.20	60.67	Vertical
5855.00	39.24	21.15	60.39	110.80	50.41	Vertical
5875.00	40.32	21.36	61.68	105.20	43.52	Vertical
5925.00	39.59	21.70	61.29	68.20	6.91	Vertical
11550.00	39.24	2.74	41.98	74.00	32.02	Vertical
5650.00	41.66	20.81	62.47	68.20	5.73	Horizontal
5700.00	40.68	21.58	62.26	105.20	42.94	Horizontal
5720.00	40.28	21.35	61.63	110.80	49.17	Horizontal
5725.00	39.98	21.29	61.27	122.20	60.93	Horizontal
5850.00	39.05	21.10	60.15	122.20	62.05	Horizontal
5855.00	39.60	21.15	60.75	110.80	50.05	Horizontal
5875.00	38.57	21.36	59.93	105.20	45.27	Horizontal
5925.00	38.96	21.70	60.66	68.20	7.54	Horizontal
11550.00	45.42	2.74	48.16	74.00	25.84	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
11550.00	37.23	2.74	39.97	54.00	14.03	Vertical
11550.00	36.40	2.74	39.14	54.00	14.86	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.*

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