

FCC RF Test Report

(2.4G Wi-Fi)

Report No.: JYTSZ-R12-2500880

Applicant: DOKE COMMUNICATION (HK) LIMITED

Address of Applicant: 19H MAXGRAND PLAZA NO 3 TAI YAU STREET SAN PO KONG KL

Equipment Under Test (EUT)

Product Name: 4G Smartphone

Model No.: MARINE 2

Trade Mark: OSCAL

FCC ID: 2A7DX-MARINE2

Applicable Standards: FCC CFR Title 47 Part 15C (§15.247)

Date of Sample Receipt: 16 Apr., 2025

Date of Test: 17 Apr., to 24 Jun., 2025

Date of Report Issued: 25 Jun., 2025

Test Result: PASS

Project by:

Alex Chan
Project Engineer

Date:

25 Jun., 2025

Reviewed by:

Victor Chan
Senior Engineer

Date:

25 Jun., 2025

Approved by:

James Wei
Manager

Date:

25 Jun., 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	25 Jun., 2025	Original

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3 General Information

3.1 Client Information

Applicant:	DOKE COMMUNICATION (HK) LIMITED
Address:	19H MAXGRAND PLAZA NO 3 TAI YAU STREET SAN PO KONG KL
Manufacturer:	Shenzhen DOKE Electronic Co., Ltd
Address:	801, Building3, 7th Industrial Zone, Yulv Community, Yutang Road, Guangming District, Shenzhen, China.
Factory:	Shenzhen DOKE Electronic Co., Ltd
Address:	801, Building3, 7th Industrial Zone, Yulv Community, Yutang Road, Guangming District, Shenzhen, China.

3.2 General Description of E.U.T.

Product Name:	4G Smartphone
Model No.:	MARINE 2
Operation Frequency:	2412 MHz - 2462 MHz (802.11b, g, n-HT20) 2422 MHz - 2452 MHz (802.11n-HT40)
Channel Numbers:	11 (802.11b, g, n-HT20) 7 (802.11n-HT40)
Channel Separation:	5MHz
Modulation Technology: (IEEE 802.11b)	DSSS-DBPSK, DQPSK, CCK
Modulation Technology: (IEEE 802.11g/802.11n)	OFDM-BPSK, QPSK, 16QAM, 64QAM
Antenna Type:	Internal Antenna
Antenna Gain:	1.95 dBi (declare by applicant)
Antenna Transmit Mode:	SISO (1TX, 1RX)
Power Supply:	Rechargeable Li-ion Battery DC3.85V, 11000mAh
AC Adapter:	Model: QZ-0180AAA00 Input: AC100-240V, 50/60Hz, 0.5A Output: DC 5.0V, 3.0A 15.0W or 9.0V, 2.0A 18.0W or 12.0V, 1.5A 18.0W
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
802.11b	1Mbps
802.11g	6Mbps
802.11n-HT20	6.5Mbps
802.11n-HT40	13.5Mbps
Remark:	
- For AC power line conducted emission and radiated spurious emission (below 1GHz), pre-scan 802.11b, g, n modulation mode, found 802.11b modulation mode and Highest channel was worse case mode. The report only reflects the test data of worst mode. - Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report. - 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 802.11b mode transmission power level is 12, the 802.11g mode prototype transmission power level is 8, the 802.11n20 mode prototype transmission power level is 5 and the 802.11n40 mode prototype transmission power level is 6.	
Operating Environment:	
Temperature:	15℃ ~ 35℃
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 3.85Vdc, Extreme: Low 3.50Vdc, High 4.40Vdc
Test Engineer:	Hopper Li(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
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-2	01-03-2025	01-02-2026
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-5	12-25-2024	12-24-2025
Pre-amplifier (30MHz ~ 1GHz)	Schwarzbeck	BBV9743B	WXJ001-2	12-16-2024	12-15-2025
Pre-amplifier (1GHz ~ 18GHz)	SKET	LNPA_0118G-50	WXJ001-3	12-16-2024	12-15-2025
Pre-amplifier (18GHz ~ 40GHz)	RF System	TRLA-180400G45B	WXJ002-7	12-16-2024	12-15-2025
EMI Test Receiver	Rohde & Schwarz	ESRP7	WXJ003-1	12-16-2024	12-15-2025
Spectrum Analyzer	Rohde & Schwarz	FSP 30	WXJ004	12-16-2024	12-15-2025
Spectrum Analyzer	KEYSIGHT	N9010B	WXJ004-2	09-09-2024	09-08-2025
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-8M	WXG001-4	01-15-2025	01-14-2026
Coaxial Cable (1GHz ~ 18GHz)	JYTSZ	JYT3M-18G-NN-8M	WXG001-5	01-15-2025	01-14-2026
Coaxial Cable (18GHz ~ 40GHz)	JYTSZ	JYT3M-40G-SS-8M	WXG001-7	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
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
DC Power Supply	Keysight	E3642A	WXJ025-2	N/A	
RF Control Unit	MWRFTEST	MW100-RFCB	WXG006	N/A	
Test Software	MWRFTEST	MTS 8310	Version: 2.0.0.0		

4 Measurement Setup and Procedure

4.1 Test Channel

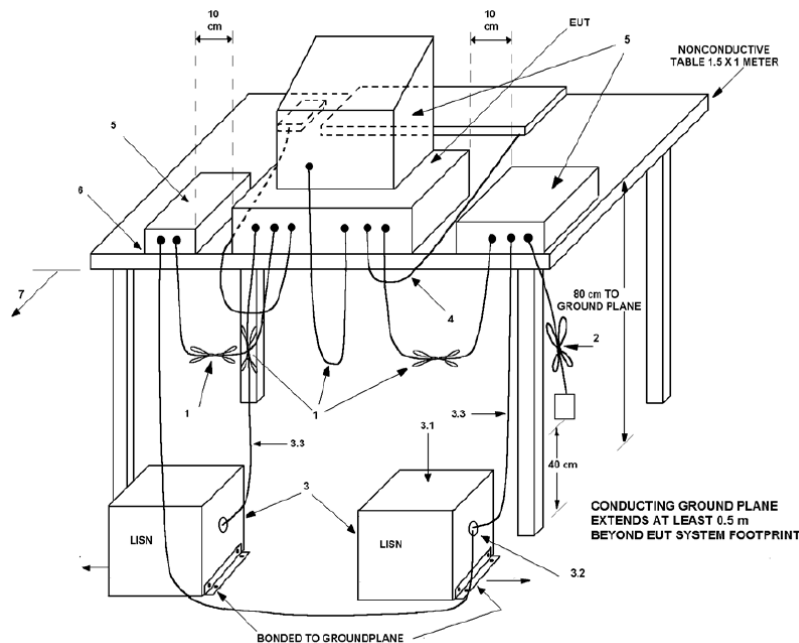
According to ANSI C63.10-2013 chapter 5.6.1 Table 4 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:

802.11b, 802.11g, 802.11n-HT20					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	2412	6	2437	11	2462

802.11n-HT40					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
3	2422	6	2437	9	2452

4.2 Test Setup

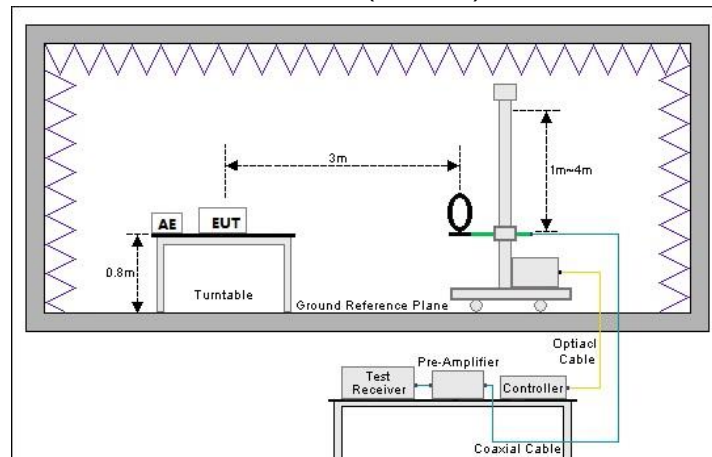
1) Conducted emission measurement:



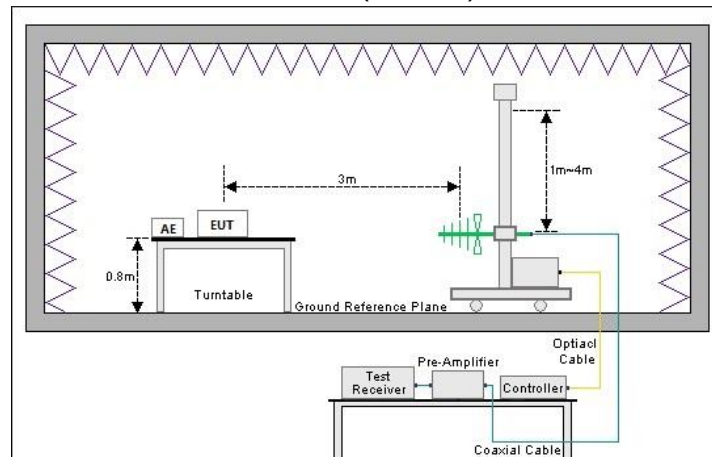
Note: The detailed descriptions please refer to Figure 8 of ANSI C63.4:2014.

2) Radiated emission measurement:

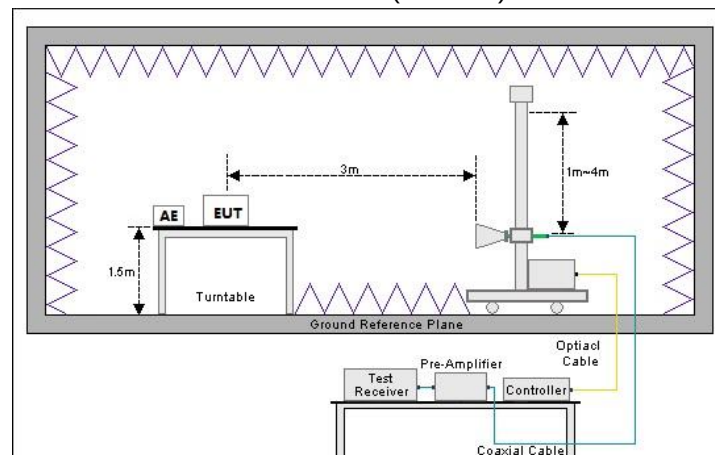
9KHz-30MHz (3m SAC)



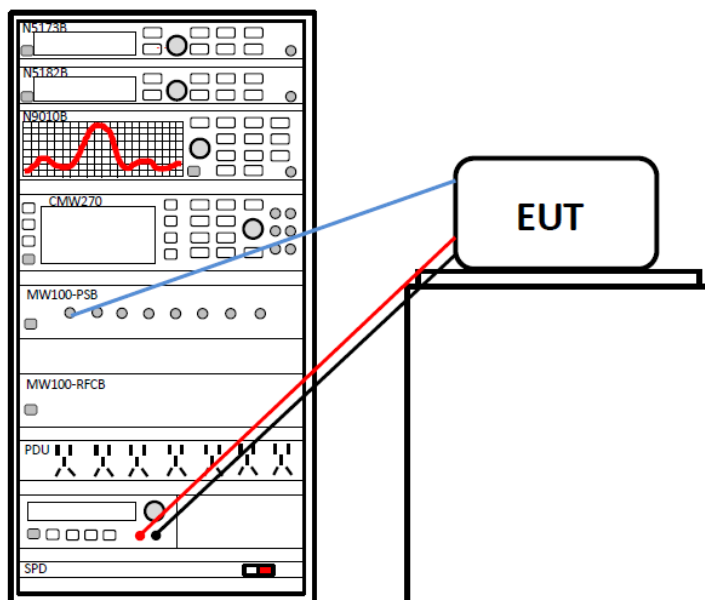
Below 1GHz (3m SAC)



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: 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 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 data	Result
Antenna Requirement	15.203 15.247 (b)(4)	See Section 5.2	Pass
AC Power Line Conducted Emission	15.207	See Section 5.3	Pass
Duty Cycle	ANSI C63.10-2013	Appendix – 2.4G Wi-Fi	Pass
Conducted Output Power	15.247 (b)(3)	Appendix – 2.4G Wi-Fi	Pass
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2)	Appendix – 2.4G Wi-Fi	Pass
Power Spectral Density	15.247 (e)	Appendix – 2.4G Wi-Fi	Pass
Band-edge Emission Conduction Spurious Emission	15.247 (d)	Appendix – 2.4G Wi-Fi	Pass
Emissions in Restricted Frequency Bands	15.205 15.247 (d)	See Section 5.4	Pass
Emissions in Non-restricted Frequency Bands	15.209 15.247(d)	See Section 5.5	Pass
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 0.5dB (provided by the customer).			
Test Method:	ANSI C63.10-2013 KDB 558074 D01 15.247 Meas Guidance v05r02		

5.1.2 Test Limit

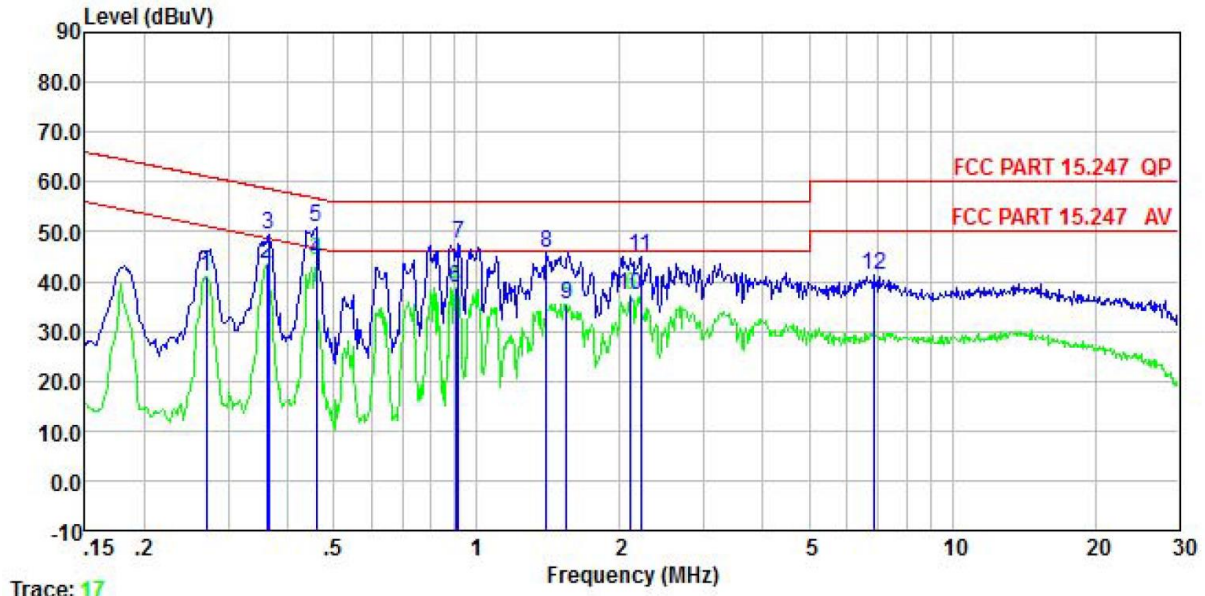
Test items	Limit																														
AC Power Line Conducted Emission	<table><tr><th rowspan="2">Frequency (MHz)</th><th colspan="2">Limit (dBμV)</th></tr><tr><th>Quasi-Peak</th><th>Average</th></tr><tr><td>0.15 – 0.5</td><td>66 to 56 Note 1</td><td>56 to 46 Note 1</td></tr><tr><td>0.5 – 5</td><td>56</td><td>46</td></tr><tr><td>5 – 30</td><td>60</td><td>50</td></tr></table> Note 1: The limit level in dBμV decreases linearly with the logarithm of frequency. Note 2: The more stringent limit applies at transition frequencies.	Frequency (MHz)	Limit (dBμV)		Quasi-Peak	Average	0.15 – 0.5	66 to 56 Note 1	56 to 46 Note 1	0.5 – 5	56	46	5 – 30	60	50																
Frequency (MHz)	Limit (dBμV)																														
	Quasi-Peak	Average																													
0.15 – 0.5	66 to 56 Note 1	56 to 46 Note 1																													
0.5 – 5	56	46																													
5 – 30	60	50																													
Conducted Output Power	For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.																														
6dB Emission Bandwidth	The minimum 6 dB bandwidth shall be at least 500 kHz.																														
99% Occupied Bandwidth	N/A																														
Power Spectral Density	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.																														
Band-edge Emission Conduction Spurious Emission	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).																														
Emissions in Restricted Frequency Bands Emissions in Non-restricted Frequency Bands	<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></table> Note: The more stringent limit applies at transition frequencies. <table><tr><th rowspan="2">Frequency</th><th colspan="2">Limit (dBμV/m) @ 3m</th></tr><tr><th>Average</th><th>Peake</th></tr><tr><td>Above 1 GHz</td><td>54.0</td><td>74.0</td></tr></table> Note: The measurement bandwidth shall be 1 MHz or greater.	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																													

5.2 Antenna Requirement

Standard Requirement:	FCC Part 15 C Section 15.203/15.247 (b)(4)
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. 15.247 (b)(4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	
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 1.95 dBi. See product internal photos for details.	

5.3 AC Power Line Conducted Emission

Product name:	4G Smartphone	Product model:	MARINE 2
Test by:	Kiran Zeng	Test mode:	2.4G Wi-Fi mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz		

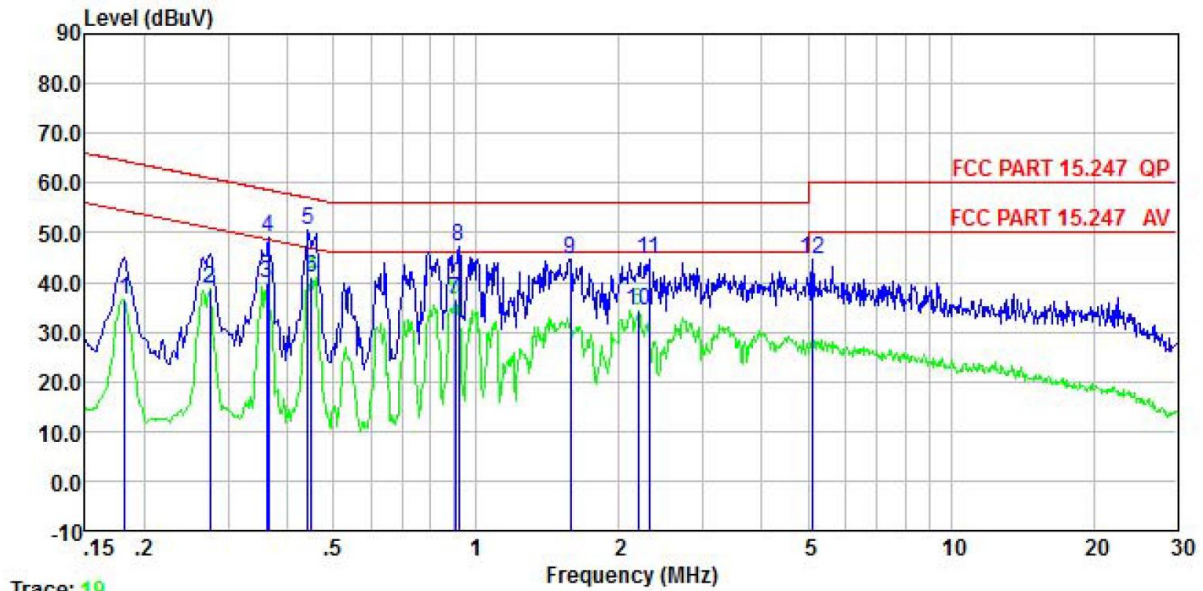


	Freq	Read Level	LISN Factor	Aux Factor	Aux2 Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dB	dBuV	dBuV	dB	
1	0.270	21.06	10.10	0.00	9.88	0.02	41.06	51.12	-10.06	Average
2	0.361	23.34	10.10	0.00	9.88	0.02	43.34	48.69	-5.35	Average
3	0.365	29.22	10.10	0.00	9.88	0.03	49.23	58.61	-9.38	QP
4	0.459	24.02	10.13	0.00	9.88	0.03	44.06	46.71	-2.65	Average
5	0.459	31.02	10.13	0.00	9.88	0.03	51.06	56.71	-5.65	QP
6	0.904	18.68	10.15	0.00	9.88	0.04	38.75	46.00	-7.25	Average
7	0.914	27.63	10.16	0.00	9.88	0.04	47.71	56.00	-8.29	QP
8	1.403	25.58	10.15	0.00	9.88	0.13	45.74	56.00	-10.26	QP
9	1.544	15.25	10.14	0.00	9.88	0.15	35.42	46.00	-10.58	Average
10	2.110	17.01	10.13	0.00	9.88	0.19	37.21	46.00	-8.79	Average
11	2.213	24.71	10.15	0.00	9.88	0.17	44.91	56.00	-11.09	QP
12	6.841	21.04	10.39	0.00	9.90	0.10	41.43	60.00	-18.57	QP

Remark:

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

Product name:	4G Smartphone	Product model:	MARINE 2
Test by:	Kiran Zeng	Test mode:	2.4G Wi-Fi mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz		



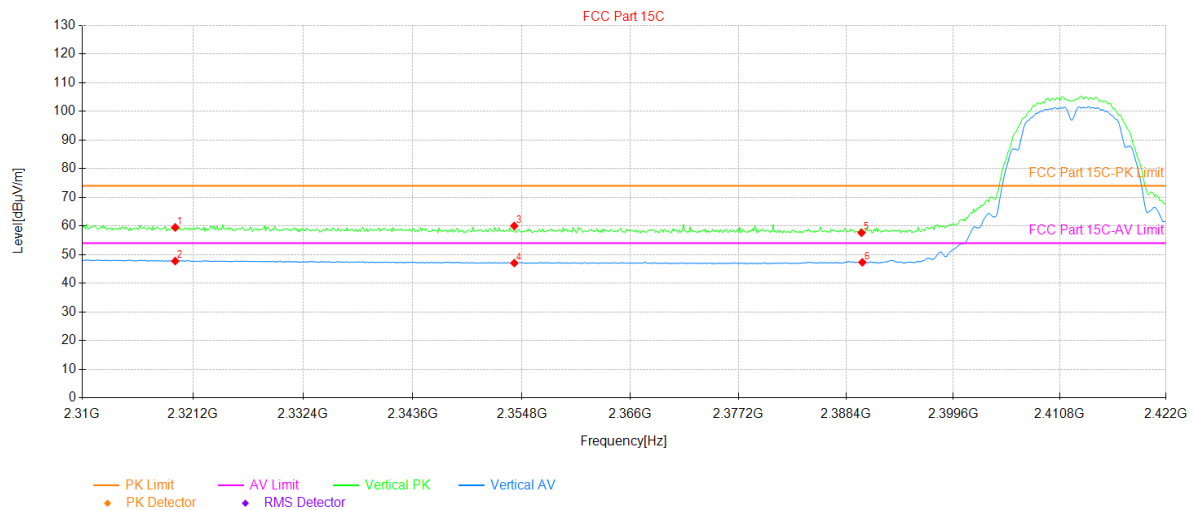
	Read	LISN	Aux	Aux2	Cable		Limit	Over	
Freq	Level	Factor	Factor	Factor	Loss	Level	Line	Limit	Remark
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dBuV	dB	dB	dB	dB	dBuV	dBuV	dB	
1	0.182	16.58	10.20	0.00	9.88	0.01	36.67	54.42	-17.75 Average
2	0.274	18.64	10.15	0.00	9.88	0.02	38.69	50.98	-12.29 Average
3	0.361	19.75	10.12	0.00	9.88	0.02	39.77	48.69	-8.92 Average
4	0.365	29.05	10.11	0.00	9.88	0.03	49.07	58.61	-9.54 QP
5	0.442	30.53	10.15	0.00	9.88	0.03	50.59	57.02	-6.43 QP
6	0.449	20.87	10.16	0.00	9.88	0.03	40.94	46.89	-5.95 Average
7	0.904	16.26	10.25	0.00	9.88	0.04	36.43	46.00	-9.57 Average
8	0.918	27.13	10.24	0.00	9.88	0.04	47.29	56.00	-8.71 QP
9	1.577	24.33	10.27	0.00	9.88	0.16	44.64	56.00	-11.36 QP
10	2.190	13.86	10.28	0.00	9.88	0.18	34.20	46.00	-11.80 Average
11	2.309	24.39	10.26	0.00	9.88	0.16	44.69	56.00	-11.31 QP
12	5.112	24.31	10.21	0.00	9.89	0.09	44.50	60.00	-15.50 QP

Remark:

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

5.4 Emissions in Restricted Frequency Bands

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11b Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		

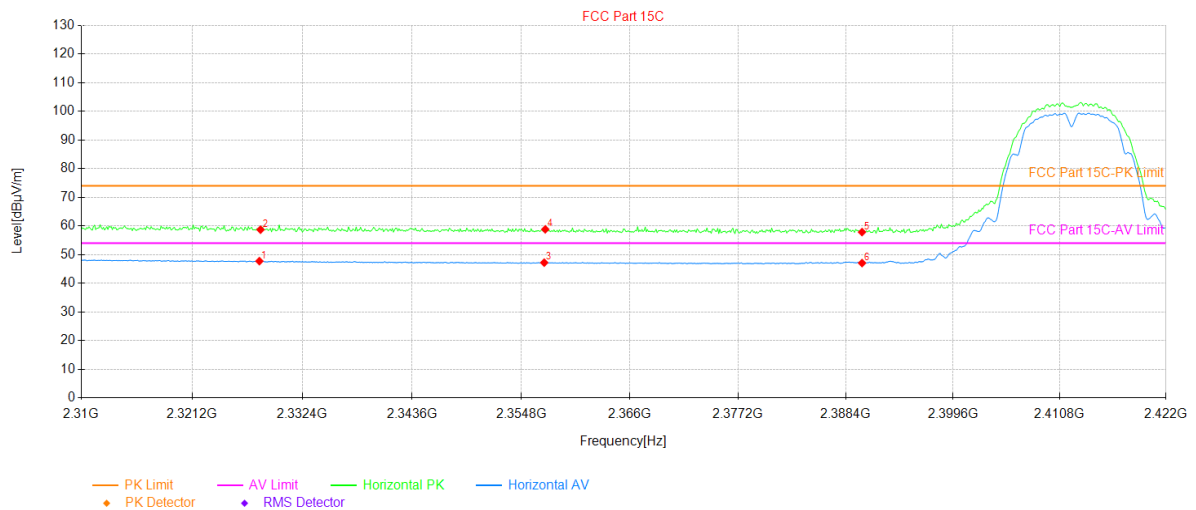


Suspected Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2319.41	23.05	36.41	59.46	74.00	14.54	222	PK	PASS	Vertical
2	2319.41	11.31	36.41	47.72	54.00	6.28	251	AV	PASS	Vertical
3	2354.02	24.03	35.96	59.99	74.00	14.01	315	PK	PASS	Vertical
4	2354.02	11.07	35.96	47.03	54.00	6.97	31	AV	PASS	Vertical
5	2390.00	21.68	35.93	57.61	74.00	16.39	348	PK	PASS	Vertical
6	2390.08	11.36	35.93	47.29	54.00	6.71	348	AV	PASS	Vertical

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11b Tx mode
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		



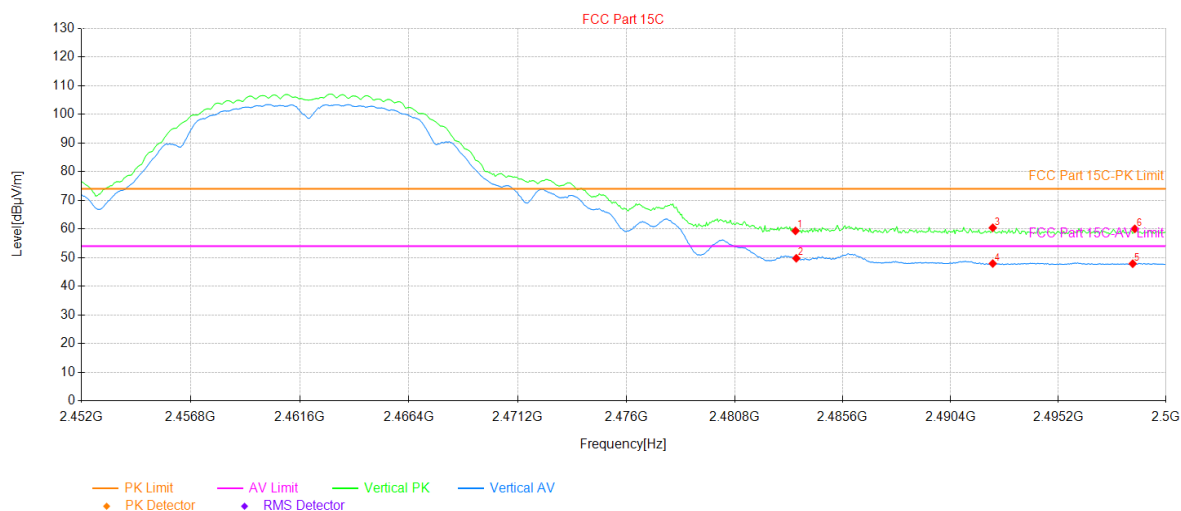
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2328.03	11.44	36.26	47.70	54.00	6.30	321	AV	PASS	Horizontal
2	2328.14	22.42	36.26	58.68	74.00	15.32	269	PK	PASS	Horizontal
3	2357.15	11.22	35.96	47.18	54.00	6.82	236	AV	PASS	Horizontal
4	2357.26	22.84	35.96	58.80	74.00	15.20	26	PK	PASS	Horizontal
5	2390.08	21.91	35.93	57.84	74.00	16.16	247	PK	PASS	Horizontal
6	2390.08	11.10	35.93	47.03	54.00	6.97	8	AV	PASS	Horizontal

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11b Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		



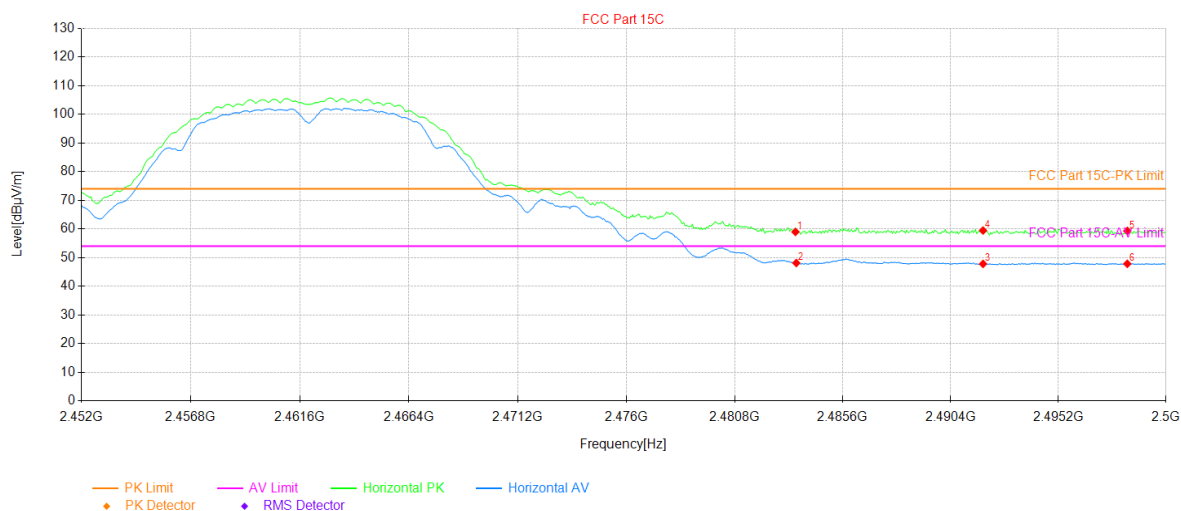
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	22.57	36.74	59.31	74.00	14.69	0	PK	PASS	Vertical
2	2483.54	13.00	36.74	49.74	54.00	4.26	4	AV	PASS	Vertical
3	2492.27	23.61	36.77	60.38	74.00	13.62	107	PK	PASS	Vertical
4	2492.27	11.13	36.77	47.90	54.00	6.10	2	AV	PASS	Vertical
5	2498.51	11.08	36.77	47.85	54.00	6.15	345	AV	PASS	Vertical
6	2498.61	23.24	36.77	60.01	74.00	13.99	315	PK	PASS	Vertical

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11b Tx mode
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		

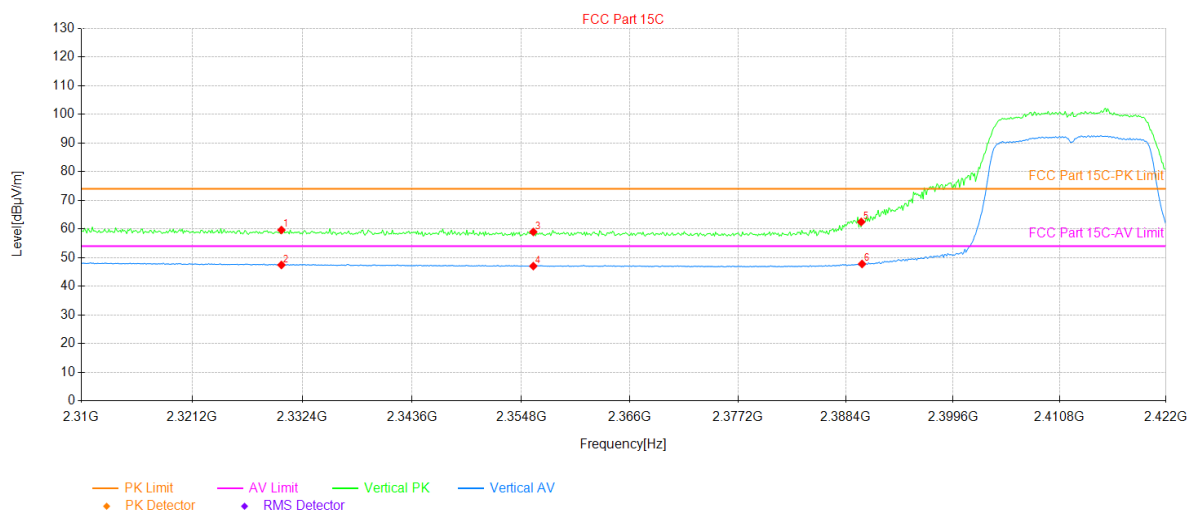


Suspected Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	22.20	36.74	58.94	74.00	15.06	2	PK	PASS	Horizontal
2	2483.54	11.35	36.74	48.09	54.00	5.91	334	AV	PASS	Horizontal
3	2491.84	11.03	36.76	47.79	54.00	6.21	326	AV	PASS	Horizontal
4	2491.84	22.67	36.76	59.43	74.00	14.57	319	PK	PASS	Horizontal
5	2498.27	22.53	36.77	59.30	74.00	14.70	2	PK	PASS	Horizontal
6	2498.27	11.04	36.77	47.81	54.00	6.19	45	AV	PASS	Horizontal

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11g Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		



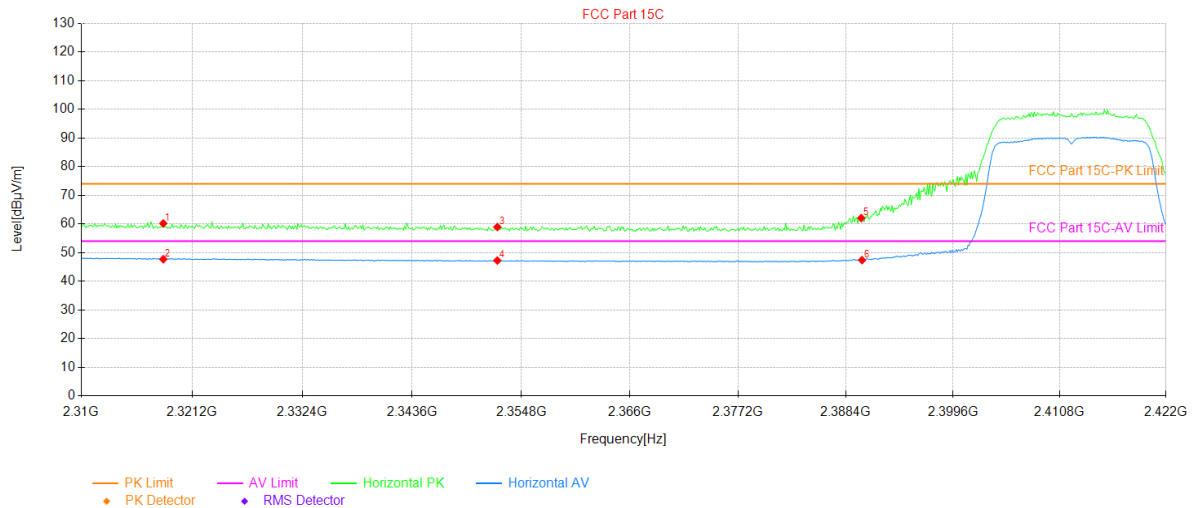
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2330.27	23.38	36.23	59.61	74.00	14.39	282	PK	PASS	Vertical
2	2330.27	11.18	36.23	47.41	54.00	6.59	114	AV	PASS	Vertical
3	2356.03	22.97	35.97	58.94	74.00	15.06	226	PK	PASS	Vertical
4	2356.03	11.04	35.97	47.01	54.00	6.99	36	AV	PASS	Vertical
5	2390.00	26.50	35.93	62.43	74.00	11.57	337	PK	PASS	Vertical
6	2390.08	11.83	35.93	47.76	54.00	6.24	345	AV	PASS	Vertical

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11g Tx mode
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		



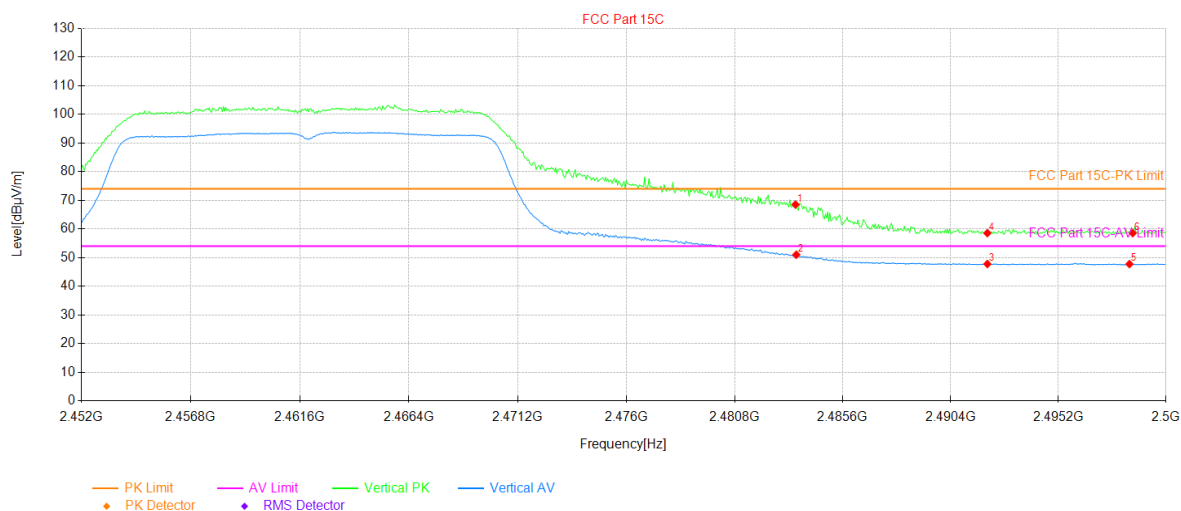
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2318.29	23.70	36.44	60.14	74.00	13.86	123	PK	PASS	Horizontal
2	2318.29	11.23	36.44	47.67	54.00	6.33	180	AV	PASS	Horizontal
3	2352.34	22.93	35.97	58.90	74.00	15.10	75	PK	PASS	Horizontal
4	2352.34	11.25	35.97	47.22	54.00	6.78	262	AV	PASS	Horizontal
5	2390.00	26.10	35.93	62.03	74.00	11.97	340	PK	PASS	Horizontal
6	2390.08	11.42	35.93	47.35	54.00	6.65	321	AV	PASS	Horizontal

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11g Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		



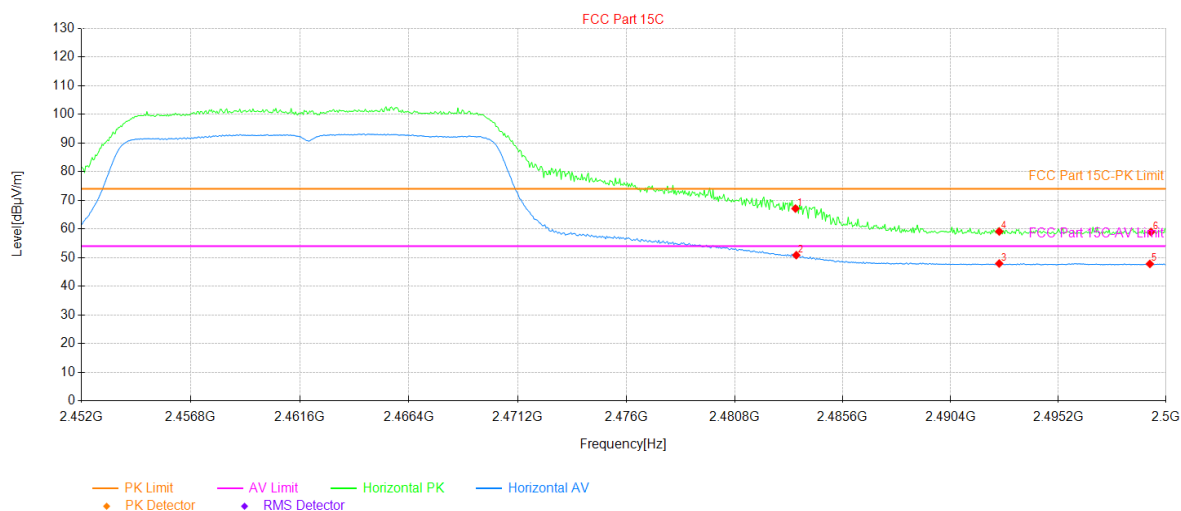
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	31.74	36.74	68.48	74.00	5.52	330	PK	PASS	Vertical
2	2483.54	14.23	36.74	50.97	54.00	3.03	334	AV	PASS	Vertical
3	2492.03	10.99	36.76	47.75	54.00	6.25	345	AV	PASS	Vertical
4	2492.03	21.76	36.76	58.52	74.00	15.48	167	PK	PASS	Vertical
5	2498.37	10.96	36.77	47.73	54.00	6.27	115	AV	PASS	Vertical
6	2498.51	21.75	36.77	58.52	74.00	15.48	315	PK	PASS	Vertical

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11g Tx mode
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		

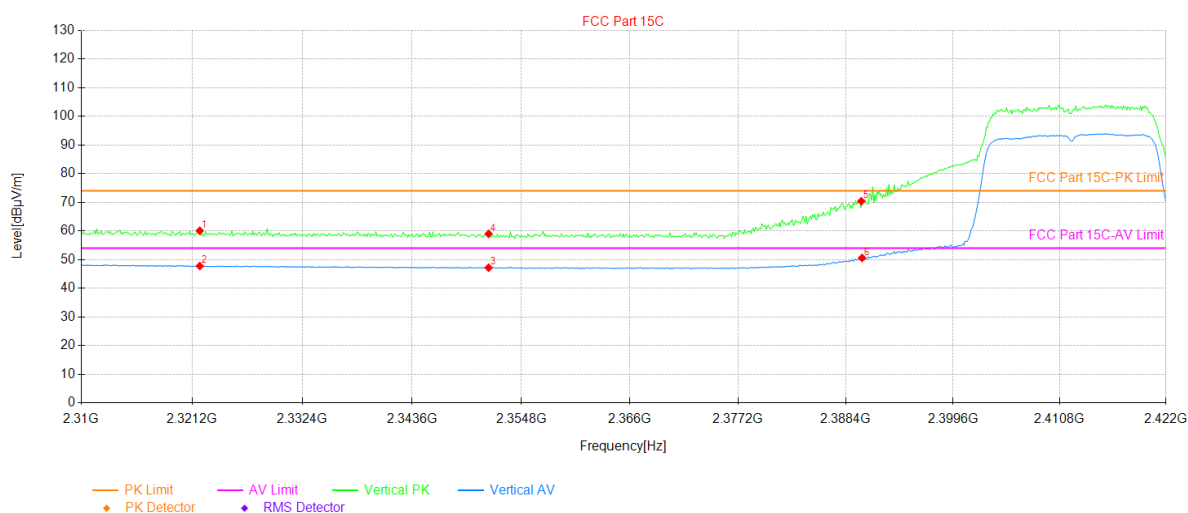


Suspected Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	30.35	36.74	67.09	74.00	6.91	350	PK	PASS	Horizontal
2	2483.54	14.09	36.74	50.83	54.00	3.17	328	AV	PASS	Horizontal
3	2492.56	11.16	36.76	47.92	54.00	6.08	320	AV	PASS	Horizontal
4	2492.56	22.34	36.76	59.10	74.00	14.90	339	PK	PASS	Horizontal
5	2499.28	11.00	36.78	47.78	54.00	6.22	320	AV	PASS	Horizontal
6	2499.33	22.15	36.78	58.93	74.00	15.07	272	PK	PASS	Horizontal

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11n-HT20 Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		



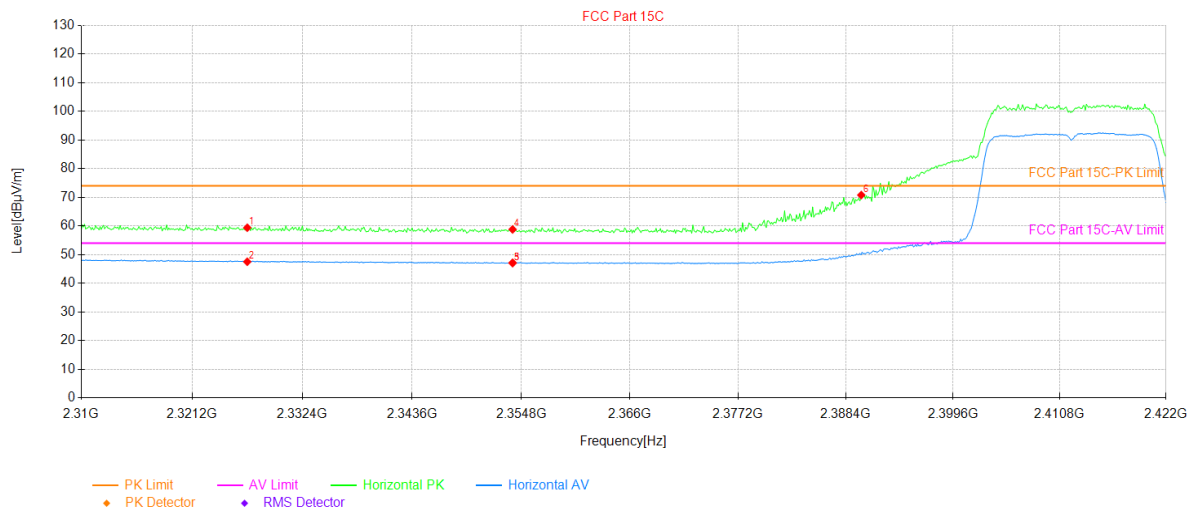
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2321.98	23.70	36.37	60.07	74.00	13.93	5	PK	PASS	Vertical
2	2321.98	11.36	36.37	47.73	54.00	6.27	65	AV	PASS	Vertical
3	2351.44	11.20	35.96	47.16	54.00	6.84	91	AV	PASS	Vertical
4	2351.44	23.00	35.96	58.96	74.00	15.04	308	PK	PASS	Vertical
5	2390.00	34.41	35.93	70.34	74.00	3.66	345	PK	PASS	Vertical
6	2390.08	14.65	35.93	50.58	54.00	3.42	345	AV	PASS	Vertical

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11n-HT20 Tx mode
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		



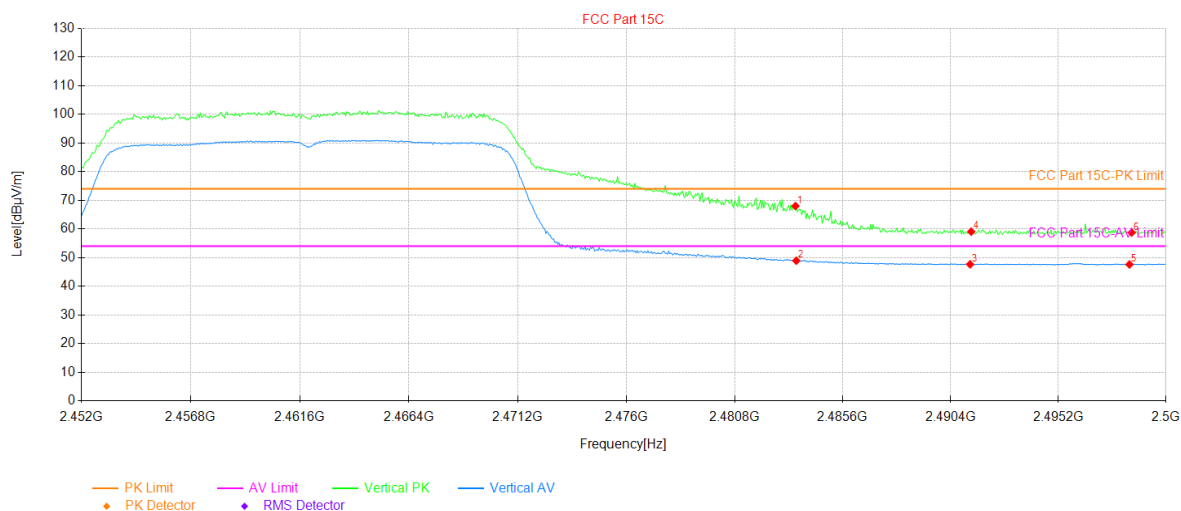
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2326.80	23.08	36.28	59.36	74.00	14.64	108	PK	PASS	Horizontal
2	2326.80	11.21	36.28	47.49	54.00	6.51	2	AV	PASS	Horizontal
3	2353.90	11.12	35.96	47.08	54.00	6.92	280	AV	PASS	Horizontal
4	2353.90	22.81	35.96	58.77	74.00	15.23	30	PK	PASS	Horizontal
5	2353.90	11.12	35.96	47.08	54.00	6.92	280	AV	PASS	Horizontal
6	2390.00	34.82	35.93	70.75	74.00	3.25	2	PK	PASS	Horizontal

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11n-HT20 Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		



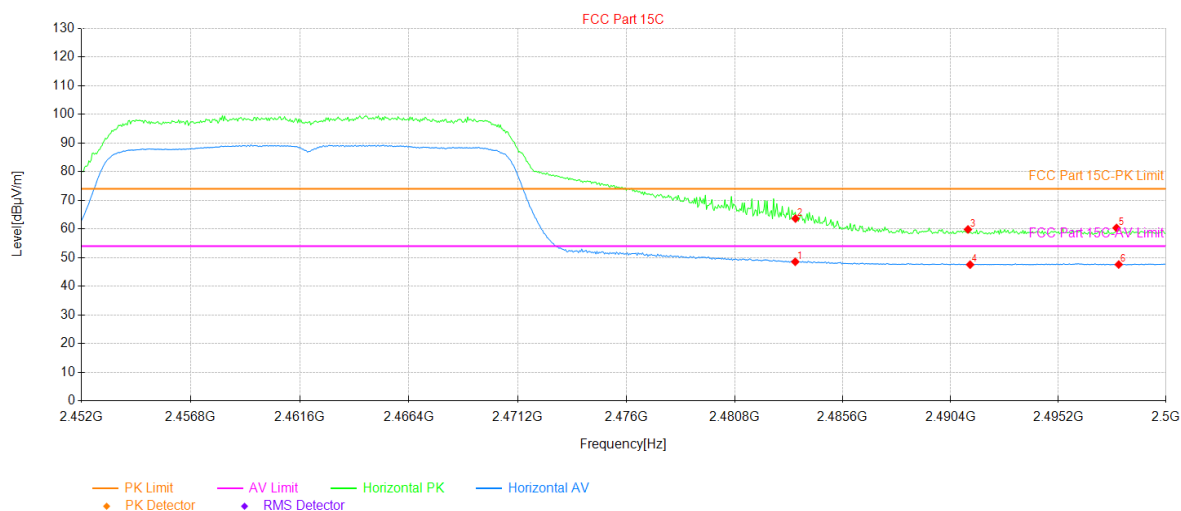
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	31.22	36.74	67.96	74.00	6.04	323	PK	PASS	Vertical
2	2483.54	12.16	36.74	48.90	54.00	5.10	341	AV	PASS	Vertical
3	2491.26	10.88	36.76	47.64	54.00	6.36	122	AV	PASS	Vertical
4	2491.31	22.27	36.76	59.03	74.00	14.97	356	PK	PASS	Vertical
5	2498.37	10.82	36.77	47.59	54.00	6.41	244	AV	PASS	Vertical
6	2498.46	21.94	36.77	58.71	74.00	15.29	22	PK	PASS	Vertical

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11n-HT20 Tx mode
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		



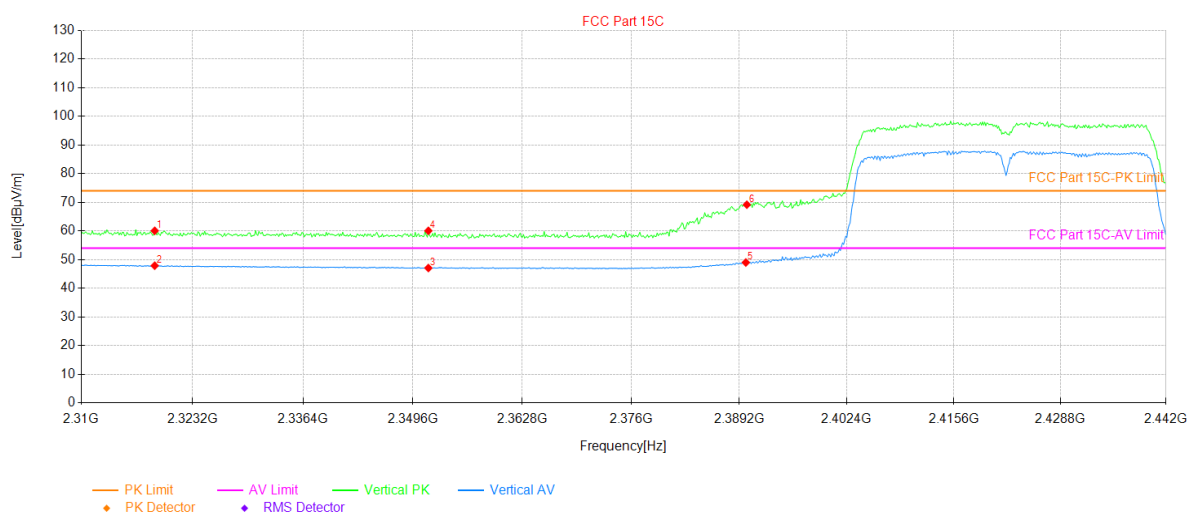
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.49	11.78	36.74	48.52	54.00	5.48	331	AV	PASS	Horizontal
2	2483.50	26.86	36.74	63.60	74.00	10.40	309	PK	PASS	Horizontal
3	2491.17	23.05	36.76	59.81	74.00	14.19	23	PK	PASS	Horizontal
4	2491.26	10.76	36.76	47.52	54.00	6.48	353	AV	PASS	Horizontal
5	2497.79	23.55	36.77	60.32	74.00	13.68	2	PK	PASS	Horizontal
6	2497.89	10.80	36.77	47.57	54.00	6.43	71	AV	PASS	Horizontal

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11n-HT40 Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		



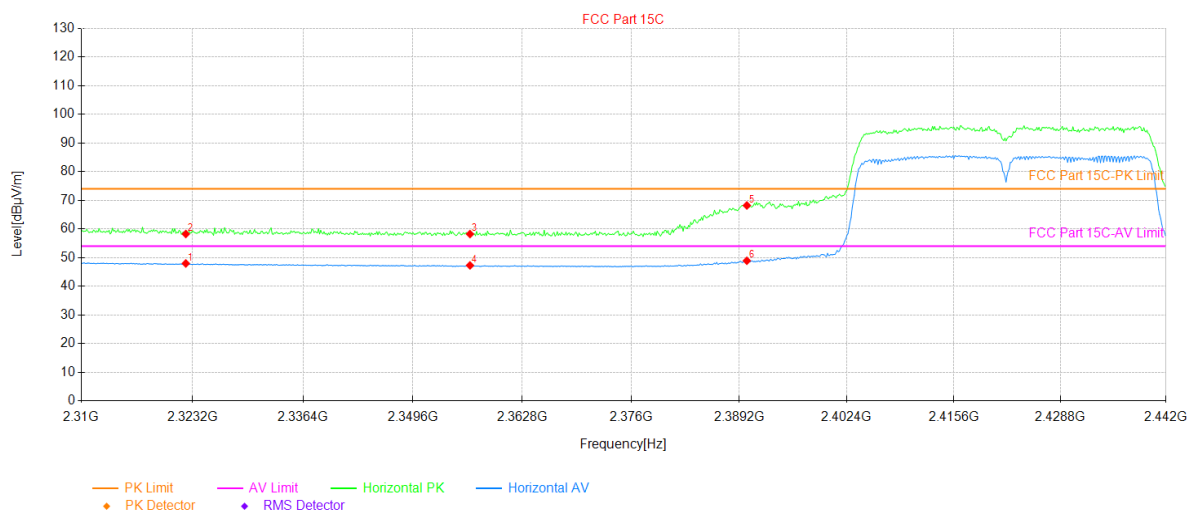
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2318.71	23.61	36.42	60.03	74.00	13.97	33	PK	PASS	Vertical
2	2318.71	11.44	36.42	47.86	54.00	6.14	115	AV	PASS	Vertical
3	2351.45	11.08	35.96	47.04	54.00	6.96	237	AV	PASS	Vertical
4	2351.45	24.07	35.96	60.03	74.00	13.97	218	PK	PASS	Vertical
5	2390.00	13.05	35.93	48.98	54.00	5.02	11	AV	PASS	Vertical
6	2390.12	33.20	35.93	69.13	74.00	4.87	337	PK	PASS	Vertical

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11n-HT40 Tx mode
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		



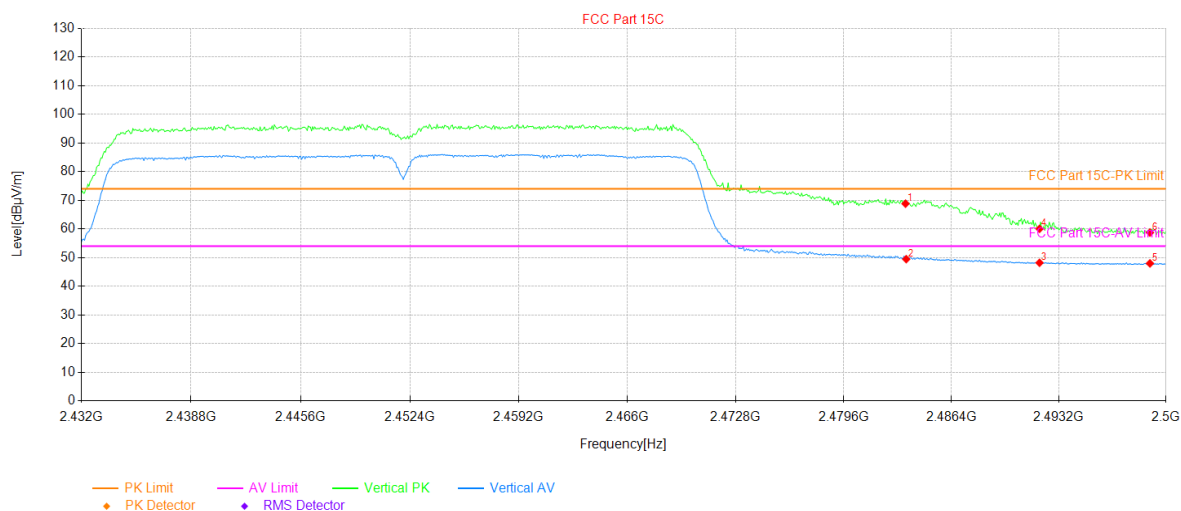
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2322.41	11.58	36.36	47.94	54.00	6.06	299	AV	PASS	Horizontal
2	2322.41	21.86	36.36	58.22	74.00	15.78	2	PK	PASS	Horizontal
3	2356.46	22.24	35.96	58.20	74.00	15.80	224	PK	PASS	Horizontal
4	2356.46	11.30	35.96	47.26	54.00	6.74	202	AV	PASS	Horizontal
5	2390.12	32.23	35.93	68.16	74.00	5.84	348	PK	PASS	Horizontal
6	2390.12	12.95	35.93	48.88	54.00	5.12	352	AV	PASS	Horizontal

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11n-HT40 Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		



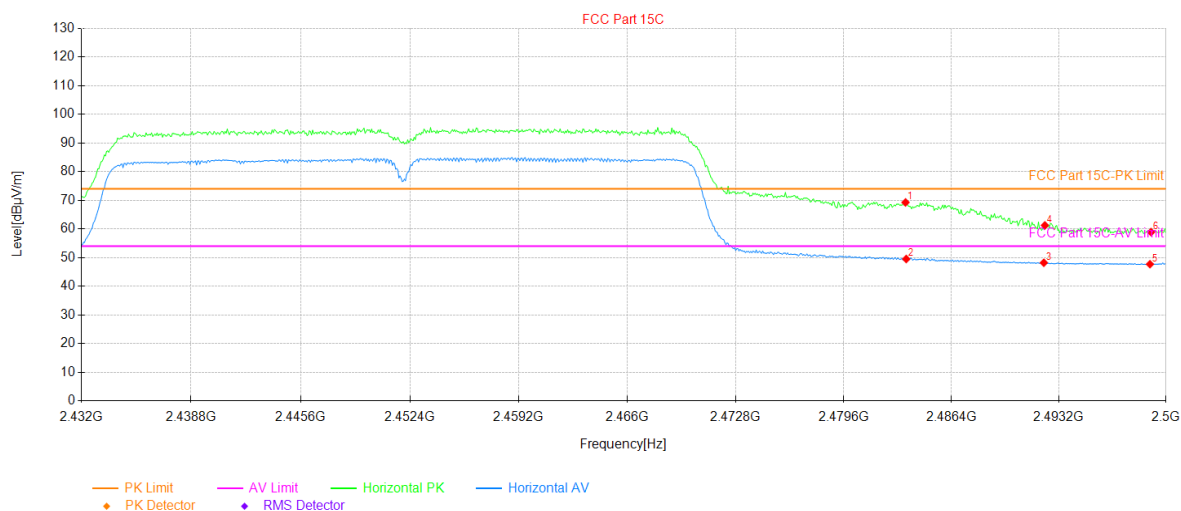
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	32.05	36.74	68.79	74.00	5.21	349	PK	PASS	Vertical
2	2483.54	12.70	36.74	49.44	54.00	4.56	345	AV	PASS	Vertical
3	2491.98	11.42	36.76	48.18	54.00	5.82	1	AV	PASS	Vertical
4	2491.98	23.26	36.76	60.02	74.00	13.98	330	PK	PASS	Vertical
5	2498.98	11.19	36.77	47.96	54.00	6.04	0	AV	PASS	Vertical
6	2498.98	21.94	36.77	58.71	74.00	15.29	59	PK	PASS	Vertical

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Robin Gu	Test mode:	802.11n-HT40 Tx mode
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	32.49	36.74	69.23	74.00	4.77	335	PK	PASS	Horizontal
2	2483.54	12.76	36.74	49.50	54.00	4.50	350	AV	PASS	Horizontal
3	2492.25	11.41	36.77	48.18	54.00	5.82	338	AV	PASS	Horizontal
4	2492.32	24.46	36.77	61.23	74.00	12.77	327	PK	PASS	Horizontal
5	2498.98	10.91	36.77	47.68	54.00	6.32	15	AV	PASS	Horizontal
6	2499.05	22.11	36.77	58.88	74.00	15.12	290	PK	PASS	Horizontal

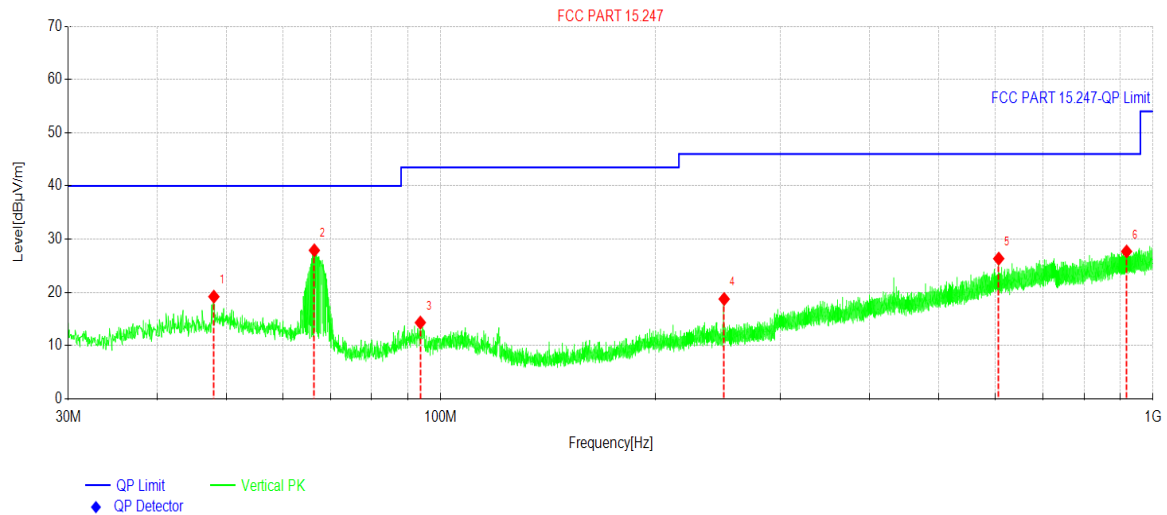
Remark:

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

5.5 Emissions in Non-restricted Frequency Bands

Below 1GHz:

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Kiran Zeng	Test mode:	2.4G Wi-Fi mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	DC 3.85V		



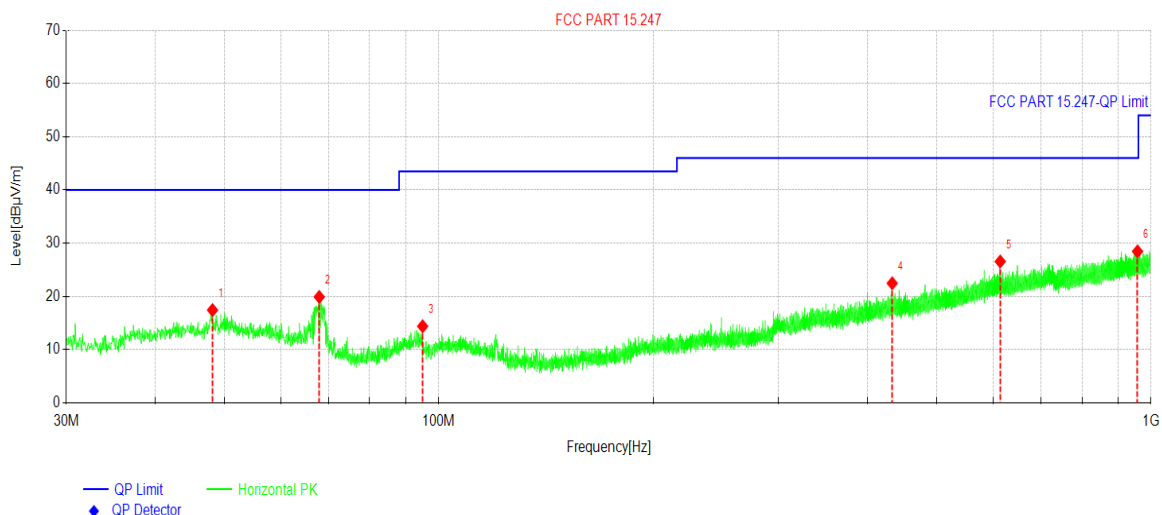
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Trace	Polarity
1	48.0429	31.62	-12.42	19.20	40.00	20.80	PK	Vertical
2	66.4738	42.97	-15.07	27.90	40.00	12.10	PK	Vertical
3	93.6352	29.70	-15.37	14.33	43.50	29.17	PK	Vertical
4	250.0070	32.35	-13.59	18.76	46.00	27.24	PK	Vertical
5	607.2759	32.53	-6.19	26.34	46.00	19.66	PK	Vertical
6	918.2734	29.80	-2.11	27.69	46.00	18.31	PK	Vertical

Remark:

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

Product Name:	4G Smartphone	Product Model:	MARINE 2
Test By:	Kiran Zeng	Test mode:	2.4G Wi-Fi mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	DC 3.85V		



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Trace	Polarity
1	48.1399	29.85	-12.42	17.43	40.00	22.57	PK	Horizontal
2	67.9774	35.63	-15.73	19.90	40.00	20.10	PK	Horizontal
3	94.9447	29.40	-15.01	14.39	43.50	29.11	PK	Horizontal
4	433.2492	32.30	-9.83	22.47	46.00	23.53	PK	Horizontal
5	614.2602	32.72	-6.16	26.56	46.00	19.44	PK	Horizontal
6	957.4149	30.20	-1.75	28.45	46.00	17.55	PK	Horizontal

Remark:

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

Above 1GHz

802.11b						
Test channel: Lowest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4824.00	61.80	-7.92	53.88	74.00	20.12	Vertical
4824.00	62.48	-7.92	54.56	74.00	19.44	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4824.00	57.53	-7.92	49.61	54.00	4.39	Vertical
4824.00	56.60	-7.92	48.68	54.00	5.32	Horizontal
Test channel: Middle channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4874.00	61.50	-7.55	53.95	74.00	20.05	Vertical
4874.00	62.80	-7.55	55.25	74.00	18.75	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4874.00	57.11	-7.55	49.56	54.00	4.44	Vertical
4874.00	56.21	-7.55	48.66	54.00	5.34	Horizontal
Test channel: Highest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4924.00	61.87	-7.21	54.66	74.00	19.34	Vertical
4924.00	62.46	-7.21	55.25	74.00	18.75	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4924.00	57.14	-7.21	49.93	54.00	4.07	Vertical
4924.00	56.14	-7.21	48.93	54.00	5.07	Horizontal
Remark: 1. Level = Reading + Factor. 2. Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

802.11g						
Test channel: Lowest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4824.00	61.42	-7.82	53.60	74.00	20.40	Vertical
4824.00	62.88	-7.82	55.06	74.00	18.94	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4824.00	57.69	-7.82	49.87	54.00	4.13	Vertical
4824.00	56.65	-7.82	48.83	54.00	5.17	Horizontal
Test channel: Middle channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4874.00	62.27	-7.50	54.77	74.00	19.23	Vertical
4874.00	62.45	-7.50	54.95	74.00	19.05	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4874.00	57.80	-7.50	50.30	54.00	3.70	Vertical
4874.00	56.54	-7.50	49.04	54.00	4.96	Horizontal
Test channel: Highest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4924.00	62.25	-7.21	55.04	74.00	18.96	Vertical
4924.00	62.11	-7.21	54.90	74.00	19.10	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4924.00	57.97	-7.21	50.76	54.00	3.24	Vertical
4924.00	56.95	-7.21	49.74	54.00	4.26	Horizontal
Remark: 1. Level = Reading + Factor. 2. Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

802.11n-HT20						
Test channel: Lowest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4824.00	61.63	-7.82	53.81	74.00	20.19	Vertical
4824.00	62.81	-7.82	54.99	74.00	19.01	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4824.00	57.65	-7.82	49.83	54.00	4.17	Vertical
4824.00	56.99	-7.82	49.17	54.00	4.83	Horizontal
Test channel: Middle channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4874.00	61.91	-7.50	54.41	74.00	19.59	Vertical
4874.00	62.83	-7.50	55.33	74.00	18.67	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4874.00	57.53	-7.50	50.03	54.00	3.97	Vertical
4874.00	56.91	-7.50	49.41	54.00	4.59	Horizontal
Test channel: Highest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4924.00	61.30	-7.21	54.09	74.00	19.91	Vertical
4924.00	62.34	-7.21	55.13	74.00	18.87	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4924.00	57.44	-7.21	50.23	54.00	3.77	Vertical
4924.00	56.53	-7.21	49.32	54.00	4.68	Horizontal
Remark: 1. Level = Reading + Factor. 2. Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

802.11n-HT40						
Test channel: Lowest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4844.00	61.51	-7.65	53.86	74.00	20.14	Vertical
4844.00	62.85	-7.65	55.20	74.00	18.80	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4844.00	57.82	-7.65	50.17	54.00	3.83	Vertical
4844.00	56.40	-7.65	48.75	54.00	5.25	Horizontal
Test channel: Middle channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4874.00	62.08	-7.50	54.58	74.00	19.42	Vertical
4874.00	62.65	-7.50	55.15	74.00	18.85	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4874.00	57.61	-7.50	50.11	54.00	3.89	Vertical
4874.00	56.61	-7.50	49.11	54.00	4.89	Horizontal
Test channel: Highest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4904.00	62.25	-7.35	54.90	74.00	19.10	Vertical
4904.00	62.30	-7.35	54.95	74.00	19.05	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4904.00	57.78	-7.35	50.43	54.00	3.57	Vertical
4904.00	56.73	-7.35	49.38	54.00	4.62	Horizontal
Remark: 1. Level = Reading + Factor. 2. Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

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