



Test Report No.:
FCC2025-0002-RF1

TEST REPORT

FCC ID : 2BNS6-TM2256-500010
Applicant : Zhengzhou Tiamaes Technology Co., Ltd
Product Name : 4G IN-VEHICLE GATEWAY
Model No. : TM2256

CVC Testing Technology Co., Ltd.

Product Name	4G IN-VEHICLE GATEWAY	Trade Mark	
Type/Model	TM2256	Sample Status	/
Applicant	Zhengzhou Tiamaes Technology Co., Ltd		
Applicant Address	Rooms 106-606 and 108-608, Building 10, No. 316 Lianhua Street, High tech Zone, Zhengzhou City		
Manufacturer	Zhengzhou Tiamaes Technology Co., Ltd		
Manufacturer Address	Rooms 106-606 and 108-608, Building 10, No. 316 Lianhua Street, High tech Zone, Zhengzhou City		
Factory	Zhengzhou Tiamaes Technology Co., Ltd		
Factory Address	Rooms 106-606 and 108-608, Building 10, No. 316 Lianhua Street, High tech Zone, Zhengzhou City		
Sample Identification	1-1	Test Item	See page 9
Tested According To	FCC CFR47 Part 15C Radio Frequency Devices ANSI C63.10-2020+Cor1-2023 KDB 558074 D01 15.247 Meas Guidance v05r02 KDB 662911 D01 Multiple Transmitter Output v02r01		
Receiving Date	Jan.15,2025	Completing Date	Feb.21,2025~May.22,2025
Test conclusion	The equipment under test was found to comply with the requirements of the standards applied. Final Verdict: Pass. Seal of CVC Date of issue: Jul.23,2025		
Abbreviations: / Pass= passed Fail = failed N/A= not applicable			
This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.			

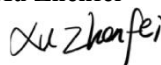
Approved by:

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Reviewed by:

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Tested by:

Li Yueao

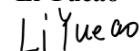


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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCC2025-0002-RF1	Original release	Jul.23,2025

1. General Product Information

1.1 General information

Product Name	4G IN-VEHICLE GATEWAY
Model No.	TM2256
Additional model	/
Power adapter	AC 100-240V 50-60Hz
Power Supply	DC 10-36V
Serial Number(SN)	/
Hardware version	V1.2
Software version	V1.3.3_x64
specific power settings	IEEE 802.11b: 16 IEEE 802.11g: 14 IEEE 802.11n(HT20&HT40): 14 IEEE 802.11ax(HE20&HE40): 14
Antenna Type	External Antenna(Rod antenna) External Antenna(Patch antenna)
Antenna Gain	WIFI(Rod antenna): Ant1:2.50 dBi, Ant2:2.50 dBi (provided by client) WIFI(Patch antenna): Ant1:1.21 dBi, Ant2:1.21 dBi (provided by client)
Beamforming gain	Unsupported (provided by client)
Frequency Range	IEEE 802.11b/g/n(HT20)/ax(HE20): 2412~2462MHz IEEE 802.11n(HT40)/ax(HE40): 2422~2452MHz
Channel Number	IEEE 802.11b/g/n (HT20)/ax(HE20): 11 Channels IEEE 802.11n (HT40)/ax(HE40): 7 Channels
Type of Modulation	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM,256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
Max. Conducted Power	WIFI2.4G:24.27dBm
Operate Temp.Range	-30°C~+70°C
Note: 1. The information of the EUT is declared by the manufacturer. 2. The laboratory is not responsible for the product technical specification provided by the client. 3. The product models of this application are: TM2256. All the tests carried out on model TM2256. 4. EUT photo refer to report (Report NO.:FCC2025-0002-EUT). 5. The EUT have MIMO function, provides 2 completed transmitter and 2 receiver.	

2. Test Sites

2.1 Test Facilities

The tests and measurements refer to this report were performed by RF testing Lab. of CVC Testing Technology Co., Ltd.

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FCC(Test firm designation number: CN1282)

IC(Test firm CAB identifier number: CN0103)

CNAS(Test firm designation number: L0095)

2.2 Description of Non-standard Method and Deviations

The testing and measurement methods used in this report are applied by all standard methods. Not any non-standard method or deviation from the used standards was used.

2.3 List of Test and Measurement Instruments

Refer to **Appendix X**.

3. Test Configuration

3.1 Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Test Mode	Antenna Delivery	Test Channel
IEEE 802.11b	1TX / 1RX	1,6,11
IEEE 802.11g	1TX / 1RX	1,6,11
IEEE 802.11n 20 MIMO	2TX / 2RX	1,6,11
IEEE 802.11n 40 MIMO	2TX / 2RX	3,6,9
IEEE 802.11ax 20 MIMO	2TX / 2RX	1,6,11
IEEE 802.11ax 40 MIMO	2TX / 2RX	3,6,9

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate and different channels. Preliminary tests have been done on all the configurations for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates and channels are shown as following table.

Test Mode	Data Rate		
	Antenna 1	Antenna 2	MIMO
IEEE 802.11b	1	1	/
IEEE 802.11g	6	6	/
IEEE 802.11n 2.4GHz 20MHz	MCS 0	MCS 0	MCS 8
IEEE 802.11n 2.4GHz 40MHz	MCS 0	MCS 0	MCS 8
IEEE 802.11ax 2.4GHz 20MHz	MCS 0	MCS 0	MCS 0
IEEE 802.11ax 2.4GHz 40MHz	MCS 0	MCS 0	MCS 0

Test Items	Test Antennas	Test Modes	Test Channels
Radiated Emissions	Antenna 1, Antenna 2	IEEE 802.11ax 20	1
Radiated Emissions (Band Edge)	Antenna 1, Antenna 2	IEEE 802.11ax 20	1,6,11
Maximum conducted output power	Antenna 1, Antenna 2, MIMO	IEEE 802.11b/ IEEE 802.11g/ IEEE 802.11n 20/ IEEE 802.11n 40/ IEEE 802.11ax 20/ IEEE 802.11ax 40	1,6,11/ 1,6,11/ 1,6,11/ 3,6,9/ 1,6,11/ 3,6,9
Minimum 6 dB bandwidth	Antenna 1, Antenna 2,	IEEE 802.11b/ IEEE 802.11g/ IEEE 802.11n 20/ IEEE 802.11n 40/ IEEE 802.11ax 20/ IEEE 802.11ax 40	1,6,11/ 1,6,11/ 1,6,11/ 3,6,9/ 1,6,11/ 3,6,9
Occupied Channel Bandwidth	Antenna 1, Antenna 2,	IEEE 802.11b/ IEEE 802.11g/ IEEE 802.11n 20/ IEEE 802.11n 40/ IEEE 802.11ax 20/ IEEE 802.11ax 40	1,6,11/ 1,6,11/ 1,6,11/ 3,6,9/ 1,6,11/ 3,6,9
Band Edge Measurement	Antenna 1, Antenna 2,	IEEE 802.11b/ IEEE 802.11g/ IEEE 802.11n 20/ IEEE 802.11n 40/ IEEE 802.11ax 20/ IEEE 802.11ax 40	1,11/ 1,11/ 1,11/ 3,9/ 1,11/ 3,9
Maximum Power spectral density	Antenna 1, Antenna 2, MIMO	IEEE 802.11b/ IEEE 802.11g/ IEEE 802.11n 20/ IEEE 802.11n 40/ IEEE 802.11ax 20/ IEEE 802.11ax 40	1,6,11/ 1,6,11/ 1,6,11/ 3,6,9/ 1,6,11/ 3,6,9
Spurious RF Conducted Emissions	Antenna 1, Antenna 2,	IEEE 802.11b/ IEEE 802.11g/ IEEE 802.11n 20/ IEEE 802.11n 40/ IEEE 802.11ax 20/ IEEE 802.11ax 40	1,6,11/ 1,6,11/ 1,6,11/ 3,6,9/ 1,6,11/ 3,6,9

3.2 Duty cycle

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11B	Ant1	2412	0.69	1.18	58.47
	Ant2	2412	0.69	1.19	57.98
	Ant1	2437	0.69	0.94	73.40
	Ant2	2437	0.69	0.94	73.40
	Ant1	2462	0.69	1.18	58.47
	Ant2	2462	0.69	0.94	73.40
11G	Ant1	2412	1.98	2.11	93.84
	Ant2	2412	1.98	2.14	92.52
	Ant1	2437	1.97	2.15	91.63
	Ant2	2437	1.97	2.10	93.81
	Ant1	2462	1.97	2.12	92.92
	Ant2	2462	1.98	2.08	95.19
11N20MIMO	Ant1	2412	5.43	5.77	94.11
	Ant2	2412	5.42	5.68	95.42
	Ant1	2437	5.43	6.04	89.90
	Ant2	2437	5.43	5.69	95.43
	Ant1	2462	5.43	5.72	94.93
	Ant2	2462	5.42	5.68	95.42
11N40MIMO	Ant1	2422	5.42	6.28	86.31
	Ant2	2422	5.43	5.70	95.26
	Ant1	2437	5.43	5.69	95.43
	Ant2	2437	5.42	6.30	86.03
	Ant1	2452	5.43	5.70	95.26
	Ant2	2452	5.43	5.86	92.66
11AX20MIMO	Ant1	2412	5.44	5.71	95.27
	Ant2	2412	5.44	5.70	95.44
	Ant1	2437	5.44	5.76	94.44
	Ant2	2437	5.44	5.74	94.77
	Ant1	2462	5.45	5.72	95.28
	Ant2	2462	5.44	5.70	95.44
11AX40MIMO	Ant1	2422	5.45	5.72	95.28
	Ant2	2422	5.45	5.76	94.62
	Ant1	2437	5.44	5.78	94.12
	Ant2	2437	5.44	5.76	94.44
	Ant1	2452	5.44	5.76	94.44
	Ant2	2452	5.45	5.72	95.28

4. Summary of measurement results

Summary of measurements of results	Clause in FCC rules	Verdict	Note
Conducted Emissions	15.207	PASS	/
Radiated Emissions	15.247(d),15.205,15.209	PASS	/
Maximum conducted output power	15.247(b)(3)	PASS	Appendix C of WIFI2.4G_ diagram
Minimum 6 dB bandwidth	15.247(a)(2)	PASS	Appendix A of WIFI2.4G_ diagram
Occupied Channel Bandwidth	15.247(a)(2)	PASS	Appendix B of WIFI2.4G_ diagram
Band Edge Measurement	15.247(d)	PASS	Appendix E of WIFI2.4G_ diagram
Maximum Power spectral density	15.247(e)	PASS	Appendix D of WIFI2.4G_ diagram
Spurious RF Conducted Emissions	15.247(d)	PASS	Appendix F of WIFI2.4G_ diagram
Antenna Requirement	15.203	PASS	See note 1

Note 1: According to 15.203, it is considered sufficient to comply with the provisions of this section.

5. Measurement procedure

5.1 Conducted Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT was setup according to ANSI C63.10-2020+Cor1-2023 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

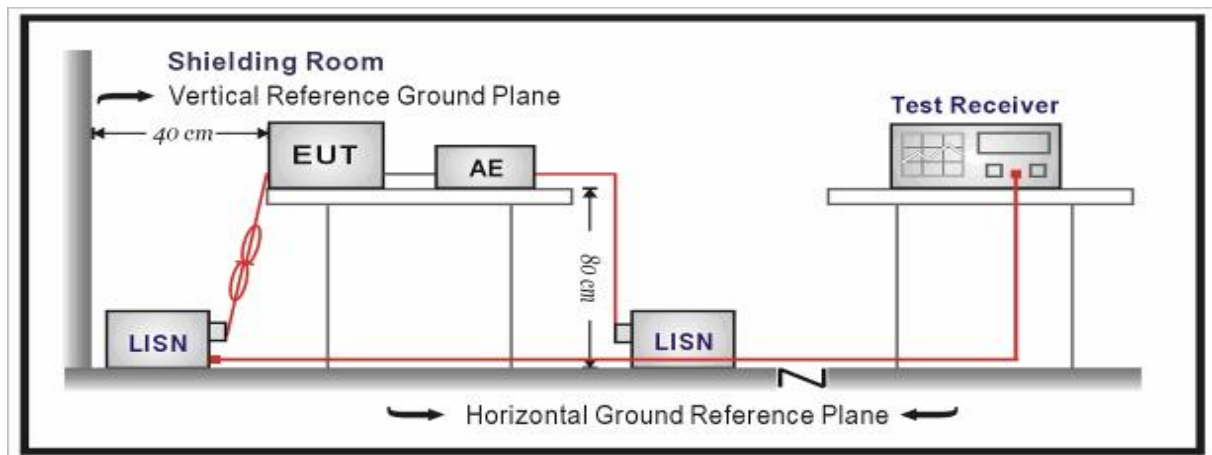
Limits:

Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Test Setup:



Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Notes:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:*
- 2. Final Level = Reading + Factor.*

Measurement Uncertainty:

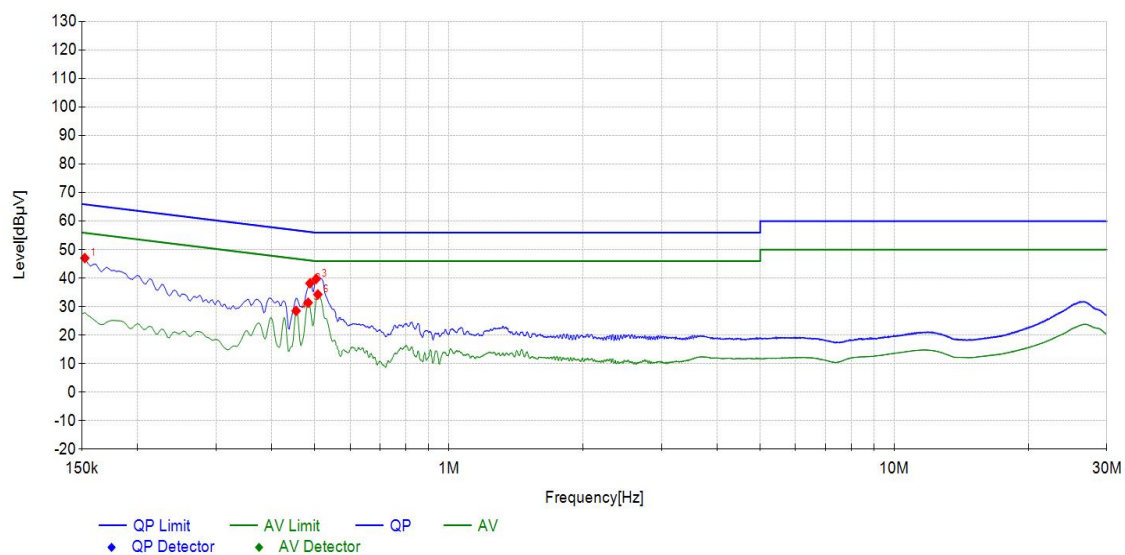
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$. $U = 3.12$ dB.

Test Results:

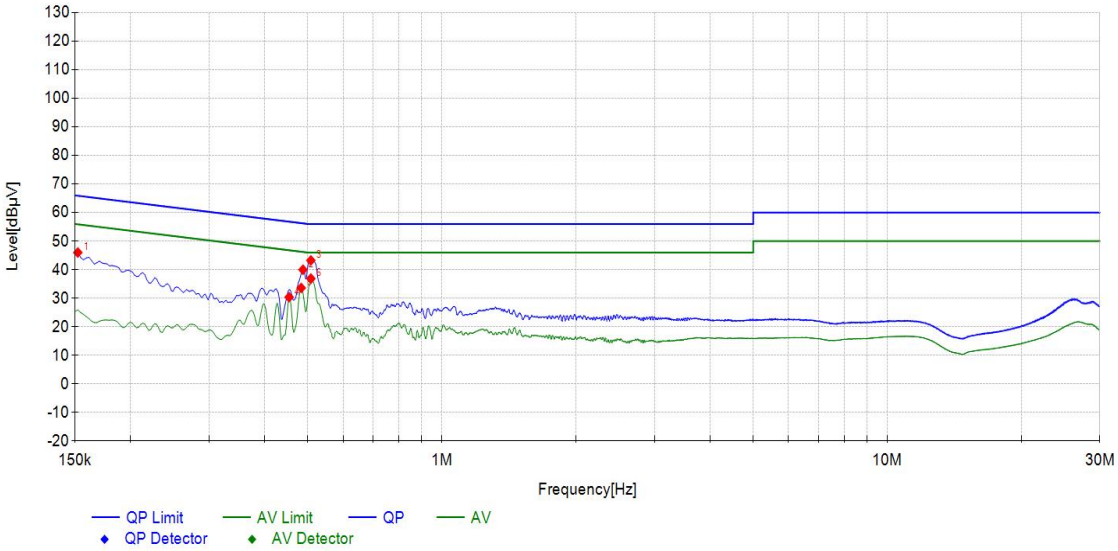
WIFI:

During the test, the Conducted Emission from 150kHz to 30MHz was carried out in 2 power modes, in all modes of WIFI, on all channels and all antennas. 802.11ax20, Channel 1, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Radiates Emission		150k~30MHz						
Power Line		L						
Test channel		Worst-Case						
Suspected List								
Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV]	Limit [dBμV]	Margin [dB]	Detect or	Type	Pass/Fail
0.1522	10.25	36.79	47.04	65.88	18.84	QP	L	PASS
0.4875	10.25	27.96	38.21	56.21	18.00	QP	L	PASS
0.5032	10.25	29.48	39.73	56.00	16.27	QP	L	PASS
0.4538	10.25	18.29	28.54	46.81	18.27	AV	L	PASS
0.483	10.25	21.14	31.39	46.29	14.90	AV	L	PASS
0.5078	10.25	24.04	34.29	46.00	11.71	AV	L	PASS



Radiates Emission		150k~30MHz						
Power Line		N						
Test channel		Worst-Case						
Suspected List								
Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV]	Limit [dBμV]	Margin [dB]	Dete ctor	Typ e	Pass/Fail
0.1522	10.28	35.72	46.00	65.88	19.88	QP	N	PASS
0.4875	10.28	29.70	39.98	56.21	16.23	QP	N	PASS
0.5078	10.28	32.97	43.25	56.00	12.75	QP	N	PASS
0.4538	10.28	20.10	30.38	46.81	16.43	AV	N	PASS
0.483	10.28	23.33	33.61	46.29	12.68	AV	N	PASS
0.5078	10.28	26.60	36.88	46.00	9.12	AV	N	PASS



5.2 Radiated Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT was setup and tested according to ANSI C63.10-2020+Cor1-2023.

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from Antenna to the EUT was 3 meters.

The Antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the Antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2020+Cor1-2023 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

The frequency range from 30MHz to 10th harmonic is checked.

Note: When doing emission measurement above 1GHz, the horn Antenna will be bended down a little (as horn Antenna has the narrow beamwidth) in order to keeping the Antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 10~60 degrees for H-plane and 10~90 degrees for E-plane.

Limits:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

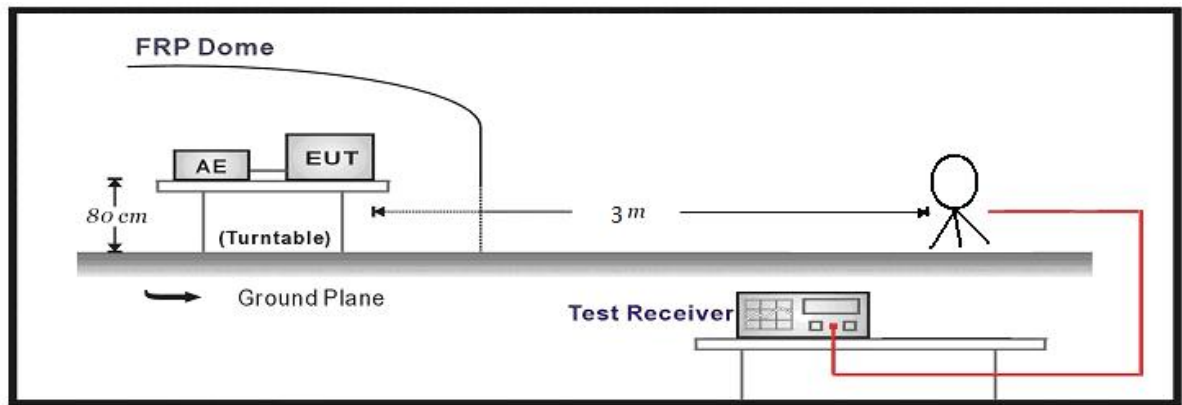
Frequency	Limit (μV/m)	Limit (dBμV/m @3m)	Remark
0.009MHz-0.490MHz	2400/F(kHz)@300m	20lg(24000000/F(kHz))	Quasi-peak Level
0.490MHz~1.705MHz	24000/F(kHz)@30m	20lg(2400000/F(kHz))	Quasi-peak Level
1.705MHz~30.0MHz	30@30m	69.54	Quasi-peak Level
30MHz-88MHz	100@3m	40.0	Quasi-peak Level
88MHz-216MHz	150@3m	43.5	Quasi-peak Level
216MHz-960MHz	200@3m	46.0	Quasi-peak Level
960MHz-1GHz	500@3m	54.0	Quasi-peak Level
Above 1GHz	500@3m	54.0	Average Level
	5000@3m	74.0	Peak Level

Spurious Radiated Emissions are permitted in any of the frequency bands listed below:

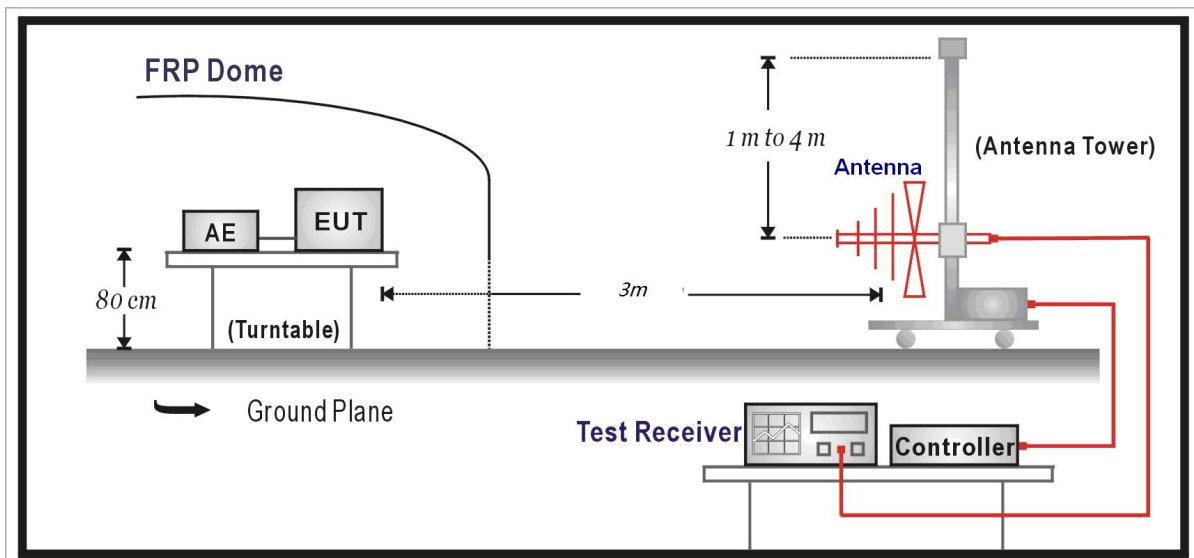
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.
12.57675-12.57725	322-335.4	3600-4400	/
13.36-13.41	/	/	/

Test Setup:

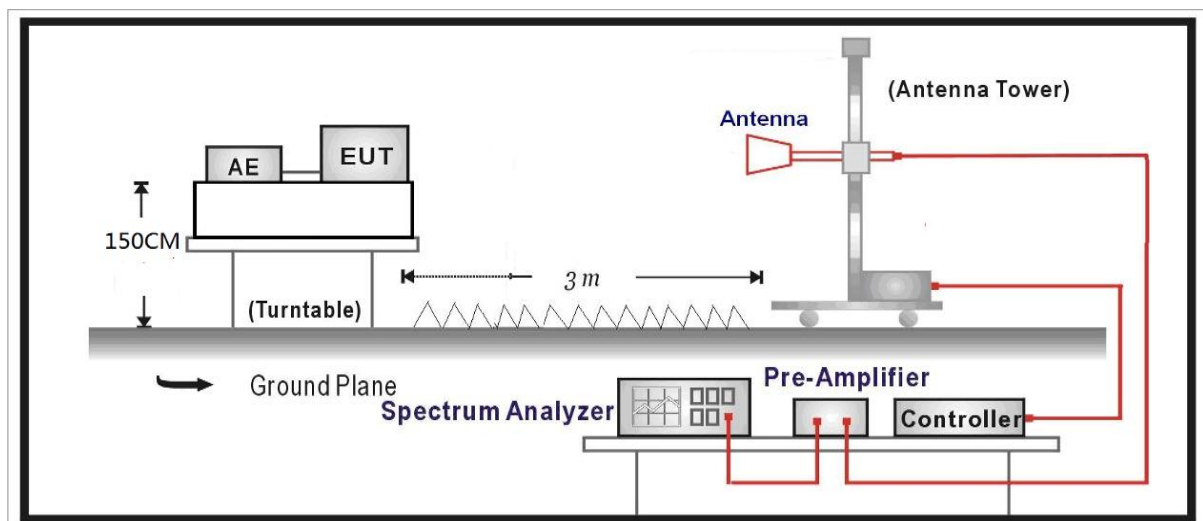
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



Measurement Data:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Level = Reading - Factor

Factor = Preamplifier Factor – Antenna Factor–Cable Loss

Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.19 dB
200MHz-1GHz	3.63 dB
Above 1GHz	3.68 dB

Test Results:

SPURIOUS EMISSIONS:

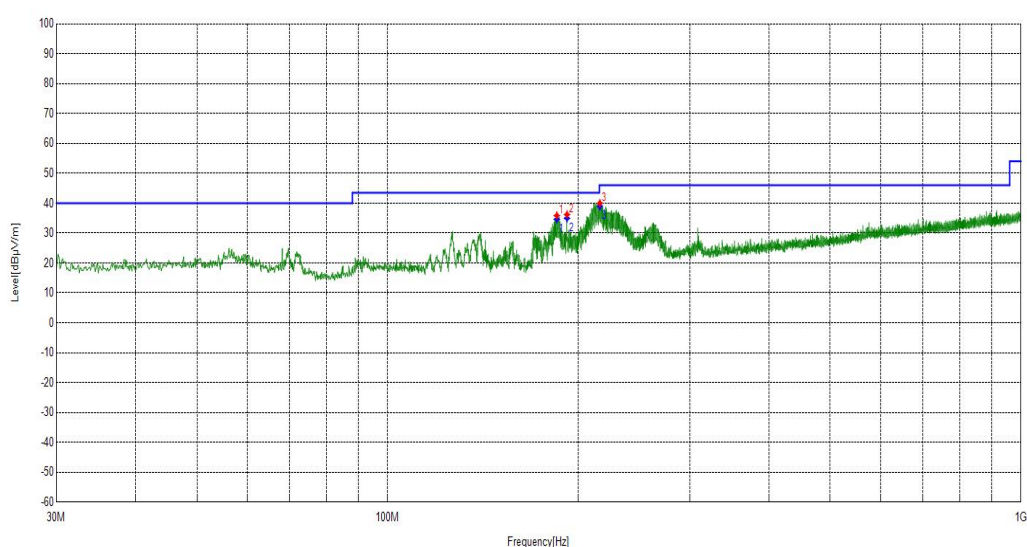
WiFi:Rod antenna

During the test, the Radiates Emission from 9kHz to 1GHz was performed in WIFI all modes with all channels and all antennas. 802.11ax20, Channel 1, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Radiates Emission			9k~1G							
Test channel			Worst-Case							
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV /m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
185.0215	Horizontal	12.27	23.59	35.86	43.50	7.64	PK	100	79	PASS
192.0062	Horizontal	12.77	23.43	36.20	43.50	7.30	PK	100	33	PASS
216.3556	Horizontal	13.32	26.68	40.00	46.00	6.00	PK	100	224	PASS

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

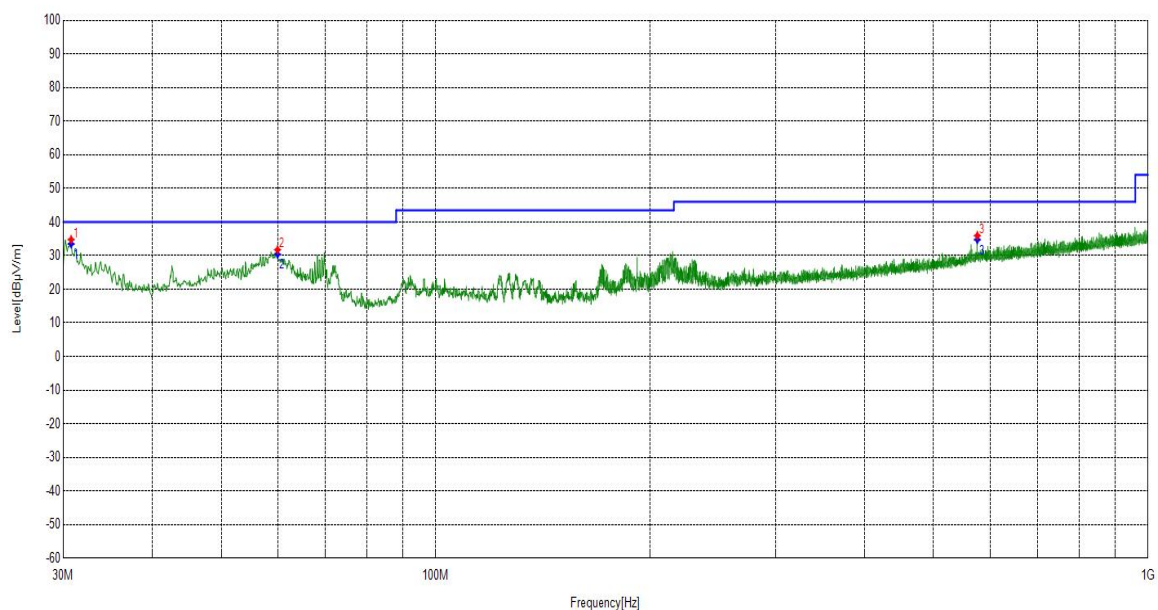
Final Data List									
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dB μ V/m]	QP Limit [dB μ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail	
185.0215	Horizontal	12.27	34.63	43.50	8.87	356	79	PASS	
192.0062	Horizontal	12.77	34.97	43.50	8.53	165	33	PASS	
216.3556	Horizontal	13.32	38.95	46.00	7.05	218	224	PASS	



Radiates Emission			9k~1G							
Test channel			Worst-Case							
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
30.7761	Vertical	10.36	24.42	34.78	40.00	5.22	PK	100	132	PASS
59.976	Vertical	12.18	19.56	31.74	40.00	8.26	PK	100	218	PASS
575.9706	Vertical	21.55	14.39	35.94	46.00	10.06	PK	100	159	PASS

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

Final Data List									
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail	
30.7761	Vertical	10.36	33.48	40.00	6.52	183	132	PASS	
59.976	Vertical	12.18	30.36	40.00	9.64	289	218	PASS	
575.9706	Vertical	21.55	34.74	46.00	11.26	251	159	PASS	



During the test, the Radiates Emission from 1GHz to 40GHz was performed in WIFI all modes with all channels and all antennas. 802.11ax20, Highest, medium, lowest channels, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Radiates Emission		Above 1G							
Test channel		Lowest							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4920.192019	1.75	33.96	35.71	74.00	38.29	PK	150	150	PASS
5980.79808	5.60	30.42	36.02	74.00	37.98	PK	150	250	PASS
10668.766877	12.71	28.58	41.29	74.00	32.71	PK	150	344	PASS
4897.689769	1.65	23.27	24.92	54.00	29.08	AV	150	31	PASS
6016.80168	5.71	20.42	26.13	54.00	27.87	AV	150	42	PASS
10620.762076	12.69	19.21	31.90	54.00	22.10	AV	150	11	PASS
Radiates Emission		Above 1G							
Test channel		Lowest							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4983.19832	2.02	34.32	36.34	74.00	37.66	PK	150	168	PASS
7011.40114	8.95	31.10	40.05	74.00	33.95	PK	150	262	PASS
12291.929193	12.22	30.74	42.96	74.00	31.04	PK	150	41	PASS
5334.233423	3.08	21.52	24.60	54.00	29.40	AV	150	331	PASS
7329.432943	9.00	19.26	28.26	54.00	25.74	AV	150	333	PASS
12590.459046	13.05	18.17	31.22	54.00	22.78	AV	150	354	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Radiates Emission		Above 1G							
Test channel		Medium							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4950.19502	1.88	34.19	36.07	74.00	37.93	PK	150	280	PASS
6645.364537	7.10	29.08	36.18	74.00	37.82	PK	150	80	PASS
11187.818782	12.59	29.91	42.50	74.00	31.50	PK	150	90	PASS
4984.69847	2.03	23.75	25.78	54.00	28.22	AV	150	40	PASS
6613.861386	6.92	20.35	27.27	54.00	26.73	AV	150	220	PASS
11165.316532	12.58	20.69	33.27	54.00	20.73	AV	150	60	PASS
Radiates Emission		Above 1G							
Test channel		Medium							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5043.20432	2.25	32.66	34.91	74.00	39.09	PK	150	150	PASS
6943.894389	8.66	28.88	37.54	74.00	36.46	PK	150	44	PASS
8603.060306	10.11	30.14	40.25	74.00	33.75	PK	150	160	PASS
5262.226223	2.93	22.50	25.43	54.00	28.57	AV	150	231	PASS
7050.405041	8.96	19.96	28.92	54.00	25.08	AV	150	223	PASS
8730.573057	10.13	19.80	29.93	54.00	24.07	AV	150	121	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Radiates Emission		Above 1G							
Test channel		Highest							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4977.19772	2.00	32.92	34.92	74.00	39.08	PK	150	350	PASS
6010.80108	5.70	31.01	36.71	74.00	37.29	PK	150	210	PASS
8577.557756	10.08	30.70	40.78	74.00	33.22	PK	150	210	PASS
4849.684969	1.45	23.65	25.10	54.00	28.90	AV	150	123	PASS
6145.814582	5.88	20.04	25.92	54.00	28.08	AV	150	210	PASS
9252.625263	11.28	19.19	30.47	54.00	23.53	AV	150	40	PASS
Radiates Emission		Above 1G							
Test channel		Highest							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4947.19472	1.86	33.57	35.43	74.00	38.57	PK	150	120	PASS
7003.90039	8.94	30.14	39.08	74.00	34.92	PK	150	50	PASS
9696.669667	12.39	28.32	40.71	74.00	33.29	PK	150	150	PASS
4938.193819	1.83	23.93	25.76	54.00	28.24	AV	150	45	PASS
7126.912691	8.98	20.01	28.99	54.00	25.01	AV	150	60	PASS
9591.659166	12.39	18.21	30.60	54.00	23.40	AV	150	90	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

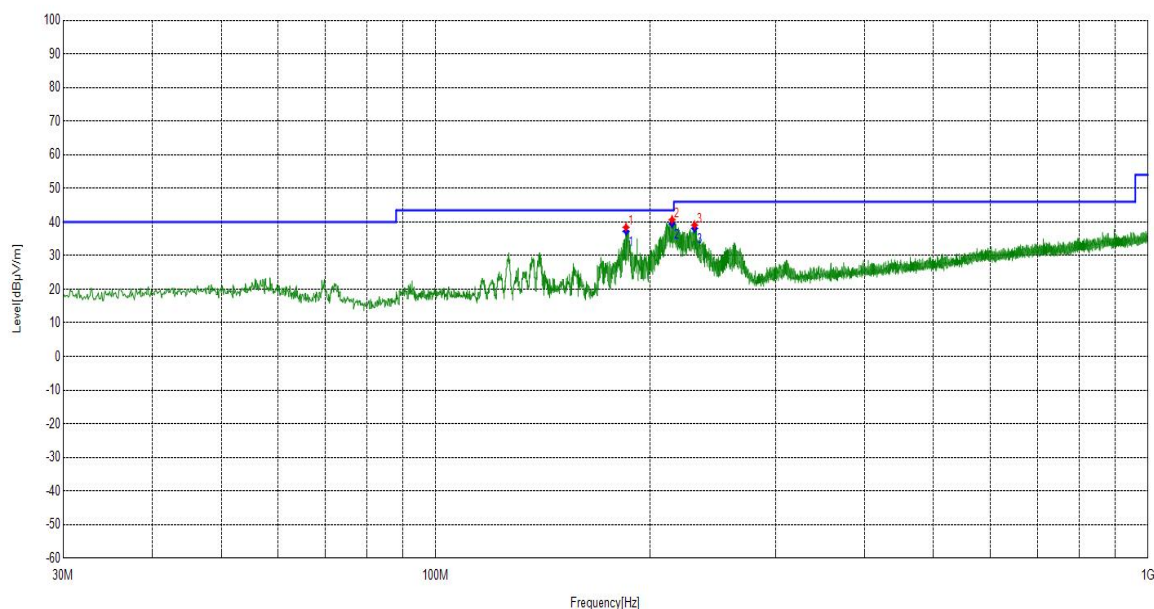
WIFI: Patch antenna

During the test, the Radiates Emission from 9kHz to 1GHz was performed in WIFI all modes with all channels and all antennas. 802.11ax20, Channel 1, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Radiates Emission			9k~1G							
Test channel			Worst-Case							
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV /m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
185.0215	Horizontal	12.27	26.16	38.43	43.50	5.07	PK	100	296	PASS
214.7065	Horizontal	13.27	27.41	40.68	43.50	2.82	PK	100	218	PASS
230.9071	Horizontal	13.71	25.40	39.11	46.00	6.89	PK	100	67	PASS

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

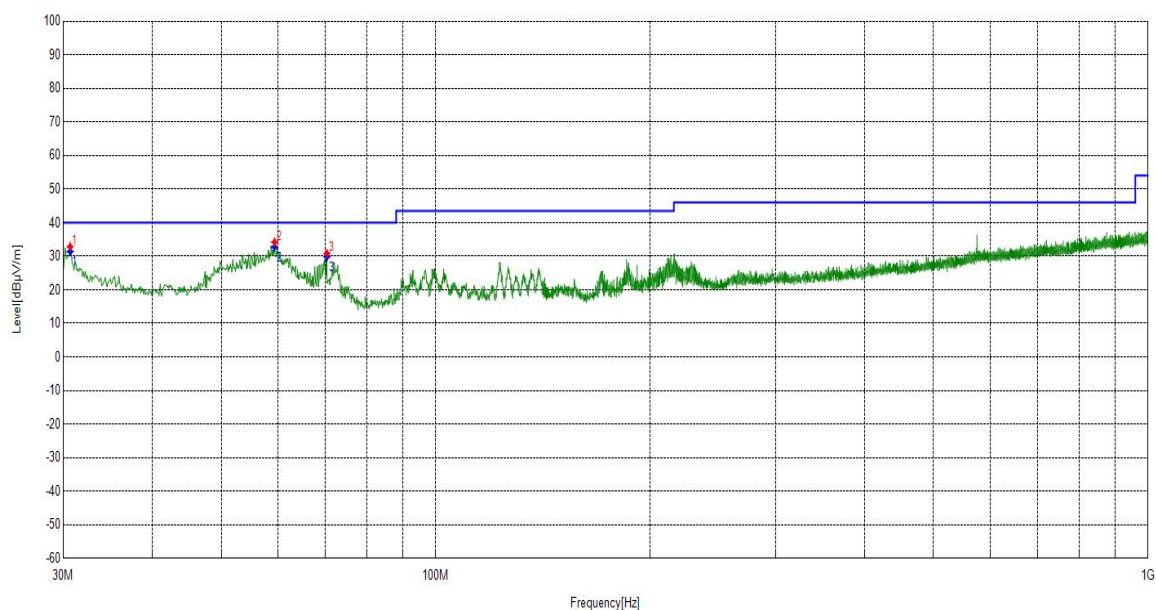
Final Data List									
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dB μ V/m]	QP Limit [dB μ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail	
185.0215	Horizontal	12.27	37.23	43.50	6.27	328	296	PASS	
214.7065	Horizontal	13.27	39.48	43.50	4.02	297	218	PASS	
230.9071	Horizontal	13.71	38.09	46.00	7.91	168	67	PASS	



Radiates Emission			9k~1G							
Test channel			Worst-Case							
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Readin g [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
30.6791	Vertical	10.34	22.50	32.84	40.00	7.16	PK	100	68	PASS
59.3939	Vertical	12.24	21.96	34.20	40.00	5.80	PK	100	187	PASS
70.356	Vertical	9.52	21.30	30.82	40.00	9.18	PK	100	280	PASS

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

Final Data List								
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dB μ V/m]	QP Limit [dB μ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
30.6791	Vertical	10.34	31.39	40.00	8.61	161	68	PASS
59.3939	Vertical	12.24	32.75	40.00	7.25	384	187	PASS
70.356	Vertical	9.52	29.79	40.00	10.21	297	280	PASS



During the test, the Radiates Emission from 1GHz to 40GHz was performed in WIFI all modes with all channels and all antennas. 802.11ax20, Highest, medium, lowest channels, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report..

Radiates Emission		Above 1G							
Test channel		Lowest							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4629.162916	0.48	33.33	33.81	74.00	40.19	PK	150	290	PASS
7524.452445	9.06	30.45	39.51	74.00	34.49	PK	150	250	PASS
9695.169517	12.39	28.34	40.73	74.00	33.27	PK	150	110	PASS
3775.577558	0.11	23.64	23.75	54.00	30.25	AV	150	20	PASS
7020.40204	8.95	20.23	29.18	54.00	24.82	AV	150	210	PASS
9662.166217	12.39	17.69	30.08	54.00	23.92	AV	150	320	PASS
Radiates Emission		Above 1G							
Test channel		Lowest							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4368.136814	0.10	34.90	35.00	74.00	39.00	PK	150	208	PASS
5638.763876	4.05	32.22	36.27	74.00	37.73	PK	150	35	PASS
7573.957396	9.08	30.50	39.58	74.00	34.42	PK	150	335	PASS
4324.632463	0.19	22.88	23.07	54.00	30.93	AV	150	354	PASS
5382.238224	3.17	21.33	24.50	54.00	29.50	AV	150	120	PASS
7329.432943	9.00	19.26	28.26	54.00	25.74	AV	150	113	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Radiates Emission		Above 1G							
Test channel		Medium							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4081.608161	0.50	34.71	35.21	74.00	38.79	PK	150	190	PASS
6483.348335	6.16	28.67	34.83	74.00	39.17	PK	150	290	PASS
9788.178818	12.41	28.56	40.97	74.00	33.03	PK	150	60	PASS
3571.557156	-0.25	27.47	27.22	54.00	26.78	AV	150	120	PASS
6250.825083	5.96	20.17	26.13	54.00	27.87	AV	150	30	PASS
9696.669667	12.39	18.05	30.44	54.00	23.56	AV	150	70	PASS
Radiates Emission		Above 1G							
Test channel		Medium							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4309.630963	0.23	33.30	33.53	74.00	40.47	PK	150	180	PASS
8661.566157	10.12	30.81	40.93	74.00	33.07	PK	150	270	PASS
10718.271827	12.73	29.47	42.20	74.00	31.80	PK	150	40	PASS
4185.118512	0.45	23.32	23.77	54.00	30.23	AV	150	130	PASS
8229.522952	9.56	19.76	29.32	54.00	24.68	AV	150	120	PASS
11150.315032	12.59	20.57	33.16	54.00	20.84	AV	150	10	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Radiates Emission		Above 1G							
Test channel		Highest							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
7276.927693	9.00	30.72	39.72	74.00	34.28	PK	150	270	PASS
8571.857186	10.07	31.16	41.23	74.00	32.77	PK	150	340	PASS
10397.239724	12.89	28.26	41.15	74.00	32.85	PK	150	230	PASS
7260.126013	9.00	19.58	28.58	54.00	25.42	AV	150	30	PASS
8575.457546	10.08	20.71	30.79	54.00	23.21	AV	150	50	PASS
10493.249325	12.84	17.95	30.79	54.00	23.21	AV	150	70	PASS
Radiates Emission		Above 1G							
Test channel		Highest							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
6920.492049	8.55	29.43	37.98	74.00	36.02	PK	150	270	PASS
8250.225023	9.60	29.32	38.92	74.00	35.08	PK	150	30	PASS
9902.790279	12.38	27.33	39.71	74.00	34.29	PK	150	80	PASS
6721.272127	7.52	18.41	25.93	54.00	28.07	AV	150	140	PASS
8586.258626	10.08	19.97	30.05	54.00	23.95	AV	150	100	PASS
9357.935794	11.72	18.74	30.46	54.00	23.54	AV	150	140	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Band Edge: Rod antenna

During the test, the Band Edge was performed in WIFI all modes with all channels and all antennas. 802.11ax20,MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Test mode			802.11ax20						
Test channel			Lowest channel						
polarization			Horizontal						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
2379.1379	-5.08	53.45	48.37	74.00	25.63	PK	150	10	PASS
2390.1390	-5.04	56.10	51.06	74.00	22.94	PK	150	90	PASS
2418.1418	-4.97	102.84	97.87	---	---	PK	150	190	---
2379.1379	-5.08	41.21	36.13	54.00	17.87	AV	150	60	PASS
2390.1390	-5.04	45.45	40.41	54.00	13.59	AV	150	10	PASS
2417.9417	-4.97	93.02	88.05	---	---	AV	150	100	---
Test mode			802.11ax20						
Test channel			Lowest channel						
polarization			Vertical						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
2335.3335	-5.21	55.29	50.08	74.00	23.92	PK	150	200	PASS
2390.1390	-5.04	69.69	64.65	74.00	9.35	PK	150	280	PASS
2416.5416	-4.97	116.38	111.41	---	---	PK	150	10	---
2335.3335	-5.21	41.74	36.53	54.00	17.47	AV	150	40	PASS
2390.1390	-5.04	54.80	49.76	54.00	4.24	AV	150	20	PASS
2412.9407	-4.99	105.18	100.19	---	---	AV	150	10	---

Test mode		802.11ax20							
Test channel		Highest channel							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/ Fail
2462.9462	-4.84	103.47	98.63	---	---	PK	150	30	---
2483.5483	-4.79	53.98	49.19	74.00	24.81	PK	150	100	PASS
2507.3507	-4.70	53.02	48.32	74.00	25.68	PK	150	270	PASS
2463.7463	-4.84	91.52	86.68	---	---	AV	150	10	---
2483.5483	-4.79	43.74	38.95	54.00	15.05	AV	150	40	PASS
2507.3507	-4.70	41.61	36.91	54.00	17.09	AV	150	20	PASS
Test mode		802.11ax20							
Test channel		Highest channel							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/ Fail
2462.5457	-4.85	115.23	110.38	---	---	PK	150	150	---
2483.5483	-4.79	62.69	57.90	74.00	16.10	PK	150	350	PASS
2505.3505	-4.71	54.98	50.27	74.00	23.73	PK	150	130	PASS
2462.3457	-4.85	103.46	98.61	---	---	AV	150	130	---
2483.5483	-4.79	50.08	45.29	54.00	8.71	AV	150	10	PASS
2505.3505	-4.71	43.26	38.55	54.00	15.45	AV	150	10	PASS

Band Edge: Patch antenna

During the test, the Band Edge was performed in WIFI all modes with all channels and all antennas. 802.11ax20,MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Test mode			802.11ax20						
Test channel			Lowest channel						
polarization			Horizontal						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
2237.3237	-5.04	48.70	43.66	74.00	30.34	PK	150	281	PASS
2390.1390	-4.57	72.30	67.73	74.00	6.27	PK	150	48	PASS
2413.1403	-4.53	105.03	100.50	---	---	PK	150	55	---
2237.3237	-5.04	33.61	28.57	54.00	25.43	AV	150	201	PASS
2390.1390	-4.57	53.86	49.29	54.00	4.71	AV	150	41	PASS
2418.1418	-4.49	88.13	83.64	---	---	AV	150	41	---
Test mode			802.11ax20						
Test channel			Lowest channel						
polarization			Vertical						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
2349.7349	-4.70	45.13	40.43	74.00	33.57	PK	150	71	PASS
2390.1390	-4.57	70.13	65.56	74.00	8.44	PK	150	103	PASS
2418.7418	-4.49	101.64	97.15	---	---	PK	150	182	---
2349.7349	-4.70	34.39	29.69	54.00	24.31	AV	150	90	PASS
2390.1390	-4.57	54.73	50.16	54.00	3.84	AV	150	215	PASS
2418.9418	-4.48	89.19	84.71	---	---	AV	150	215	---

Test mode		802.11ax20							
Test channel		Highest channel							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
2464.7464	-4.31	100.92	96.61	---	---	PK	150	52	---
2483.5483	-4.26	67.95	63.69	74.00	10.31	PK	150	52	PASS
2499.3499	-4.20	51.61	47.41	74.00	26.59	PK	150	52	PASS
2463.7473	-4.29	85.04	80.75	---	---	AV	150	45	---
2483.5483	-4.26	53.01	48.75	54.00	5.25	AV	150	45	PASS
2499.3499	-4.20	36.16	31.96	54.00	22.04	AV	150	45	PASS
Test mode		802.11ax20							
Test channel		Highest channel							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
2467.74677	-4.31	98.48	94.17	---	---	PK	150	209	---
2483.54835	-4.26	66.38	62.12	74.00	11.88	PK	150	203	PASS
2500.15001	-4.20	50.74	46.54	74.00	27.46	PK	150	359	PASS
2477.14771	-4.28	87.15	82.87	---	---	AV	150	1	---
2483.54835	-4.26	53.24	48.98	54.00	5.02	AV	150	6	PASS
2500.15001	-4.20	46.41	42.21	54.00	11.79	AV	150	6	PASS

5.3 Maximum conducted output power

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

a.A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor and set the detector to PEAK. Record the power level.

Limits:

Average Output Power	$\leq 1W$ (30dBm)
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Note: the conducted output power limit specified above is based on the use the antennas with directional gains that do not exceed 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated Levels above, as appropriate, by the amount in dB that the directional gain of antenna exceeds 6 dBi.

Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

WiFi(Rod antenna)

Frequency(MHz)	Antenna Gain(dBi)		Directional gain	Limit(dBm)
	Antenna 1	Antenna 2		
2412-2462	2.50	2.50	5.51	30.00

WiFi Antenna:

ANT1:Internal antenna with gain2.50dBi

ANT2:Internal antenna with gain2.50dBi

The maximum peak gain of the transmit antenna less than 6dBi

Directional gain is to be computed as follows:

transmit signals are correlated, then

Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.

WIFI(Patch antenna)

Frequency(MHz)	Antenna Gain(dBi)		Directional gain	Limit(dBm)
	Antenna 1	Antenna 2		
2412-2462	1.21	1.21	4.22	30.00

WiFi Antenna:

ANT1:Internal antenna with gain1.21dBi

ANT2:Internal antenna with gain1.21dBi

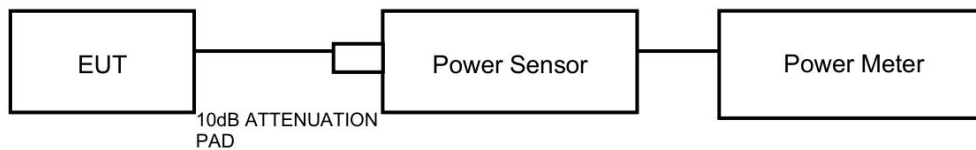
The maximum peak gain of the transmit antenna less than 6dBi

Directional gain is to be computed as follows:

transmit signals are correlated, then

Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.44$ dB.

Test Results:

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	19.91	≤30.00	PASS
	Ant2	2412	17.80	≤30.00	PASS
	Ant1	2437	20.13	≤30.00	PASS
	Ant2	2437	17.87	≤30.00	PASS
	Ant1	2462	20.01	≤30.00	PASS
	Ant2	2462	18.10	≤30.00	PASS
11G	Ant1	2412	21.19	≤30.00	PASS
	Ant2	2412	21.99	≤30.00	PASS
	Ant1	2437	22.63	≤30.00	PASS
	Ant2	2437	22.37	≤30.00	PASS
	Ant1	2462	22.61	≤30.00	PASS
	Ant2	2462	22.56	≤30.00	PASS
11N20MIMO	Ant1	2412	20.39	≤30.00	PASS
	Ant2	2412	20.19	≤30.00	PASS
	total	2412	23.30	≤30.00	PASS
	Ant1	2437	20.64	≤30.00	PASS
	Ant2	2437	20.53	≤30.00	PASS
	total	2437	23.60	≤30.00	PASS
	Ant1	2462	20.53	≤30.00	PASS
	Ant2	2462	20.55	≤30.00	PASS
	total	2462	23.55	≤30.00	PASS
11N40MIMO	Ant1	2422	21.24	≤30.00	PASS
	Ant2	2422	21.15	≤30.00	PASS
	total	2422	24.21	≤30.00	PASS
	Ant1	2437	21.08	≤30.00	PASS
	Ant2	2437	21.31	≤30.00	PASS
	total	2437	24.21	≤30.00	PASS
	Ant1	2452	20.95	≤30.00	PASS
	Ant2	2452	21.02	≤30.00	PASS
	total	2452	24.00	≤30.00	PASS
11AX20MIMO	Ant1	2412	20.78	≤30.00	PASS
	Ant2	2412	20.51	≤30.00	PASS
	total	2412	23.66	≤30.00	PASS
	Ant1	2437	20.84	≤30.00	PASS
	Ant2	2437	20.96	≤30.00	PASS
	total	2437	23.91	≤30.00	PASS
	Ant1	2462	20.92	≤30.00	PASS
	Ant2	2462	20.92	≤30.00	PASS
	total	2462	23.93	≤30.00	PASS
11AX40MIMO	Ant1	2422	21.18	≤30.00	PASS
	Ant2	2422	21.34	≤30.00	PASS
	total	2422	24.27	≤30.00	PASS
	Ant1	2437	21.15	≤30.00	PASS
	Ant2	2437	21.18	≤30.00	PASS
	total	2437	24.18	≤30.00	PASS
	Ant1	2452	21.02	≤30.00	PASS
	Ant2	2452	20.98	≤30.00	PASS
	total	2452	24.01	≤30.00	PASS

Note: WIFI has MIMO function, Directional gain needs to be considered.

5.4 Minimum 6 dB Bandwidth

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable. Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz; VBW is set to greater than 3 times RBW on spectrum analyzer.

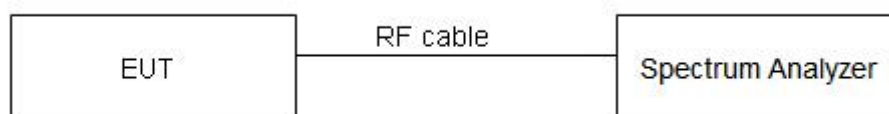
Detector=Peak, Trace mode=Max hold.

Limits:

Rule Part 15.247 (a) (2) specifies that “Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.”

Minimum 6dB Bandwidth	≥ 500 kHz
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Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

Test Results:

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.200	2407.920	2416.120	≥0.5	PASS
	Ant2	2412	8.200	2407.920	2416.120	≥0.5	PASS
	Ant1	2437	8.200	2432.920	2441.120	≥0.5	PASS
	Ant2	2437	8.160	2432.920	2441.080	≥0.5	PASS
	Ant1	2462	8.160	2457.920	2466.080	≥0.5	PASS
	Ant2	2462	8.200	2457.920	2466.120	≥0.5	PASS
11G	Ant1	2412	16.440	2403.800	2420.240	≥0.5	PASS
	Ant2	2412	16.360	2403.760	2420.120	≥0.5	PASS
	Ant1	2437	16.080	2428.880	2444.960	≥0.5	PASS
	Ant2	2437	16.320	2428.880	2445.200	≥0.5	PASS
	Ant1	2462	16.160	2453.960	2470.120	≥0.5	PASS
	Ant2	2462	16.360	2453.840	2470.200	≥0.5	PASS
11N20MIMO	Ant1	2412	17.160	2403.480	2420.640	≥0.5	PASS
	Ant2	2412	17.360	2403.320	2420.680	≥0.5	PASS
	Ant1	2437	17.480	2428.240	2445.720	≥0.5	PASS
	Ant2	2437	17.440	2428.320	2445.760	≥0.5	PASS
	Ant1	2462	17.320	2453.400	2470.720	≥0.5	PASS
	Ant2	2462	17.400	2453.320	2470.720	≥0.5	PASS
11N40MIMO	Ant1	2422	35.920	2404.080	2440.000	≥0.5	PASS
	Ant2	2422	35.920	2404.160	2440.080	≥0.5	PASS
	Ant1	2437	36.000	2419.080	2455.080	≥0.5	PASS
	Ant2	2437	36.080	2419.080	2455.160	≥0.5	PASS
	Ant1	2452	35.440	2434.240	2469.680	≥0.5	PASS
	Ant2	2452	36.080	2434.000	2470.080	≥0.5	PASS
11AX20MIMO	Ant1	2412	18.240	2402.920	2421.160	≥0.5	PASS
	Ant2	2412	18.640	2402.800	2421.440	≥0.5	PASS
	Ant1	2437	19.000	2427.560	2446.560	≥0.5	PASS
	Ant2	2437	18.880	2427.560	2446.440	≥0.5	PASS
	Ant1	2462	18.440	2452.720	2471.160	≥0.5	PASS
	Ant2	2462	18.480	2452.680	2471.160	≥0.5	PASS
11AX40MIMO	Ant1	2422	37.600	2403.280	2440.880	≥0.5	PASS
	Ant2	2422	37.680	2403.200	2440.880	≥0.5	PASS
	Ant1	2437	36.880	2418.680	2455.560	≥0.5	PASS
	Ant2	2437	37.520	2418.360	2455.880	≥0.5	PASS
	Ant1	2452	37.280	2433.440	2470.720	≥0.5	PASS
	Ant2	2452	36.880	2433.680	2470.560	≥0.5	PASS

5.5 Occupied Channel Bandwidth

Ambient condition:

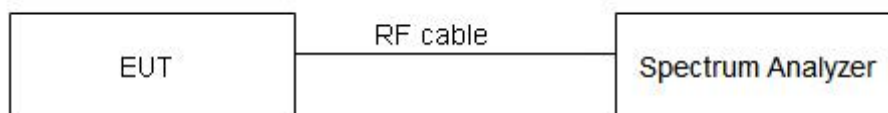
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable. RBW is set to 1% to 5% of the OBW; video bandwidth (VBW) shall be at least three times RBW on spectrum analyzer.

Detector=Peak, Trace mode=Max hold.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

Test Results:

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.025	2405.5039	2418.5289	---	---
	Ant2	2412	13.070	2405.4869	2418.5569	---	---
	Ant1	2437	13.026	2430.4921	2443.5181	---	---
	Ant2	2437	13.054	2430.4881	2443.5421	---	---
	Ant1	2462	13.018	2455.4885	2468.5065	---	---
	Ant2	2462	13.032	2455.4936	2468.5256	---	---
11G	Ant1	2412	16.534	2403.7357	2420.2697	---	---
	Ant2	2412	16.608	2403.7109	2420.3189	---	---
	Ant1	2437	16.592	2428.7138	2445.3058	---	---
	Ant2	2437	16.574	2428.7318	2445.3058	---	---
	Ant1	2462	16.529	2453.7423	2470.2713	---	---
	Ant2	2462	16.547	2453.7566	2470.3036	---	---
11N20MIMO	Ant1	2412	17.734	2403.1480	2420.8820	---	---
	Ant2	2412	17.752	2403.1474	2420.8994	---	---
	Ant1	2437	17.719	2428.1578	2445.8768	---	---
	Ant2	2437	17.742	2428.1466	2445.8886	---	---
	Ant1	2462	17.711	2453.1512	2470.8622	---	---
	Ant2	2462	17.744	2453.1275	2470.8715	---	---
11N40MIMO	Ant1	2422	36.200	2403.9204	2440.1204	---	---
	Ant2	2422	36.158	2403.9593	2440.1173	---	---
	Ant1	2437	36.238	2418.9113	2455.1493	---	---
	Ant2	2437	36.218	2418.9437	2455.1617	---	---
	Ant1	2452	36.132	2433.9647	2470.0967	---	---
	Ant2	2452	36.186	2433.9450	2470.1310	---	---
11AX20MIMO	Ant1	2412	18.980	2402.5116	2421.4916	---	---
	Ant2	2412	19.006	2402.5048	2421.5108	---	---
	Ant1	2437	19.038	2427.4883	2446.5263	---	---
	Ant2	2437	18.992	2427.5459	2446.5379	---	---
	Ant1	2462	19.018	2452.5006	2471.5186	---	---
	Ant2	2462	18.984	2452.5577	2471.5417	---	---
11AX40MIMO	Ant1	2422	37.728	2403.2156	2440.9436	---	---
	Ant2	2422	37.911	2403.0653	2440.9763	---	---
	Ant1	2437	37.914	2418.1190	2456.0330	---	---
	Ant2	2437	37.820	2418.1120	2455.9320	---	---
	Ant1	2452	37.793	2433.0796	2470.8726	---	---
	Ant2	2452	37.830	2433.0898	2470.9198	---	---

5.6 Band Edge Measurement

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

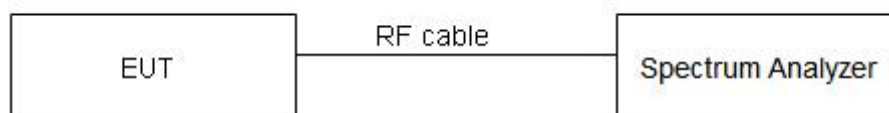
Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable the band edge of the lowest and highest channels were measured. The peak detector is used and RBW is set to 100 kHz and VBW is set to 300 kHz on spectrum analyzer.

Limits:

Rule Part 15.247(d) specifies that “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.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 936 \text{ Hz}$, $2 \text{ GHz}-3 \text{ GHz} = 1.407 \text{ dB}$.

Test Results:

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.38	-42.65	≤ -11.63	PASS
	Ant2	Low	2412	5.83	-45.82	≤ -14.17	PASS
	Ant1	High	2462	9.56	-48.58	≤ -10.44	PASS
	Ant2	High	2462	5.98	-46.61	≤ -14.02	PASS
11G	Ant1	Low	2412	4.06	-33.35	≤ -15.94	PASS
	Ant2	Low	2412	4.54	-32.11	≤ -15.46	PASS
	Ant1	High	2462	4.52	-47.71	≤ -15.48	PASS
	Ant2	High	2462	4.63	-47.98	≤ -15.37	PASS
11N20MIMO	Ant1	Low	2412	2.17	-32.08	≤ -17.83	PASS
	Ant2	Low	2412	3.26	-30.95	≤ -16.74	PASS
	Ant1	High	2462	1.82	-47.71	≤ -18.18	PASS
	Ant2	High	2462	1.77	-47.88	≤ -18.23	PASS
11N40MIMO	Ant1	Low	2422	0.74	-33.79	≤ -19.26	PASS
	Ant2	Low	2422	-0.94	-33.17	≤ -20.94	PASS
	Ant1	High	2452	1.66	-44.82	≤ -18.34	PASS
	Ant2	High	2452	1.36	-45.14	≤ -18.65	PASS
11AX20MIMO	Ant1	Low	2412	3.05	-34.28	≤ -16.95	PASS
	Ant2	Low	2412	-0.15	-32.15	≤ -20.15	PASS
	Ant1	High	2462	-0.88	-47.93	≤ -20.88	PASS
	Ant2	High	2462	2.52	-46.57	≤ -17.48	PASS
11AX40MIMO	Ant1	Low	2422	-1.77	-36.4	≤ -21.77	PASS
	Ant2	Low	2422	-0.29	-36.96	≤ -20.29	PASS
	Ant1	High	2452	-1.31	-47.27	≤ -21.31	PASS
	Ant2	High	2452	-1.11	-46.62	≤ -21.11	PASS

5.7 Maximum Power Spectral Density

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

During the process of the testing, The EUT was connected to Spectrum Analyzer with a known loss. The EUT is max power transmission with proper modulation. The Peak detector is used.

The conducted Power is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

Limits:

Rule Part 15.247(e) specifies that” 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.

Maximum Power Spectral Density	$\leq 8 \text{ dBm} / 3\text{kHz}$
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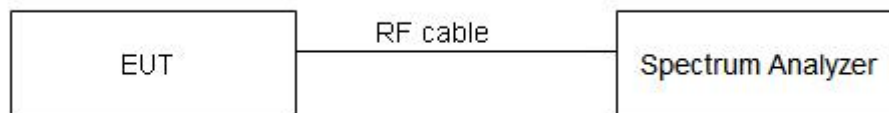
WIFI(Rod antenna)

Frequency(MHz)	Antenna Gain(dBi)		Directional gain	Limit(dBm)
	Antenna 1	Antenna 2		
2412-2462	2.50	2.50	5.51	8.00
Directional gain is to be computed as follows: transmit signals are correlated, then $\text{Directional gain} = 10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{\text{ANT}}] \text{ dBi}$ [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.				

WIFI(Patch antenna)

Frequency(MHz)	Antenna Gain(dBi)		Directional gain	Limit(dBm)
	Antenna 1	Antenna 2		
2412-2462	1.21	1.21	4.22	8.00
Directional gain is to be computed as follows: transmit signals are correlated, then $\text{Directional gain} = 10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{\text{ANT}}] \text{ dBi}$ [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.				

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.75\text{dB}$.

Test Results:

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-2.70	≤8.00	PASS
	Ant2	2412	-4.32	≤8.00	PASS
	Ant1	2437	-2.23	≤8.00	PASS
	Ant2	2437	-3.48	≤8.00	PASS
	Ant1	2462	-0.86	≤8.00	PASS
11G	Ant2	2462	-2.05	≤8.00	PASS
	Ant1	2412	-11.03	≤8.00	PASS
	Ant2	2412	-11.37	≤8.00	PASS
	Ant1	2437	-9.29	≤8.00	PASS
	Ant2	2437	-11.08	≤8.00	PASS
	Ant1	2462	-11.16	≤8.00	PASS
11N20MIMO	Ant2	2462	-11.38	≤8.00	PASS
	Ant1	2412	-9.95	≤8.00	PASS
	Ant2	2412	-10.29	≤8.00	PASS
	total	2412	-7.11	≤8.00	PASS
	Ant1	2437	-8.97	≤8.00	PASS
	Ant2	2437	-9.38	≤8.00	PASS
	total	2437	-6.16	≤8.00	PASS
	Ant1	2462	-10.40	≤8.00	PASS
	Ant2	2462	-9.90	≤8.00	PASS
11N40MIMO	total	2462	-7.13	≤8.00	PASS
	Ant1	2422	-12.35	≤8.00	PASS
	Ant2	2422	-11.85	≤8.00	PASS
	total	2422	-9.08	≤8.00	PASS
	Ant1	2437	-12.09	≤8.00	PASS
	Ant2	2437	-11.71	≤8.00	PASS
	total	2437	-8.89	≤8.00	PASS
	Ant1	2452	-12.41	≤8.00	PASS
	Ant2	2452	-12.36	≤8.00	PASS
11AX20MIMO	total	2452	-9.37	≤8.00	PASS
	Ant1	2412	-12.84	≤8.00	PASS
	Ant2	2412	-13.10	≤8.00	PASS
	total	2412	-9.96	≤8.00	PASS
	Ant1	2437	-12.03	≤8.00	PASS
	Ant2	2437	-12.13	≤8.00	PASS
	total	2437	-9.07	≤8.00	PASS
	Ant1	2462	-12.84	≤8.00	PASS
	Ant2	2462	-13.00	≤8.00	PASS
11AX40MIMO	total	2462	-9.91	≤8.00	PASS
	Ant1	2422	-14.44	≤8.00	PASS
	Ant2	2422	-14.58	≤8.00	PASS
	total	2422	-11.50	≤8.00	PASS
	Ant1	2437	-15.18	≤8.00	PASS
	Ant2	2437	-14.83	≤8.00	PASS
	total	2437	-11.99	≤8.00	PASS
	Ant1	2452	-14.56	≤8.00	PASS
	Ant2	2452	-14.37	≤8.00	PASS
	total	2452	-11.45	≤8.00	PASS

5.8 Spurious RF Conducted Emissions

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer with a known loss. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. Set RBW to 100kHz and VBW to 300 kHz, Sweep is set to AUTO. The test is in transmitting mode.

Limits:

Rule Part 15.247(d) specifies that "In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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."

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-26GHz	1.407 dB

Test Results:

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	6.86	6.86	---	PASS
			30~1000	6.86	-59.4	≤-13.14	PASS
			1000~26500	6.86	-47.14	≤-13.14	PASS
	Ant2	2412	Reference	5.26	5.26	---	PASS
			30~1000	5.26	-60.34	≤-14.74	PASS
			1000~26500	5.26	-46.84	≤-14.74	PASS
	Ant1	2437	Reference	6.71	6.71	---	PASS
			30~1000	6.71	-59.31	≤-13.29	PASS
			1000~26500	6.71	-47.43	≤-13.29	PASS
	Ant2	2437	Reference	5.59	5.59	---	PASS
			30~1000	5.59	-57.94	≤-14.41	PASS
			1000~26500	5.59	-44.73	≤-14.41	PASS
	Ant1	2462	Reference	6.47	6.47	---	PASS
			30~1000	6.47	-59.26	≤-13.53	PASS
			1000~26500	6.47	-47.29	≤-13.53	PASS
11G	Ant1	2412	Reference	4.43	4.43	---	PASS
			30~1000	4.43	-52.25	≤-15.57	PASS
			1000~26500	4.43	-47.41	≤-15.57	PASS
	Ant2	2412	Reference	3.39	3.39	---	PASS
			30~1000	3.39	-59.2	≤-16.61	PASS
			1000~26500	3.39	-47.04	≤-16.61	PASS
	Ant1	2437	Reference	0.27	0.27	---	PASS
			30~1000	0.27	-47.85	≤-19.73	PASS
			1000~26500	0.27	-47.19	≤-19.73	PASS
	Ant2	2437	Reference	1.00	1.00	---	PASS
			30~1000	1.00	-59.77	≤-19	PASS
			1000~26500	1.00	-46.97	≤-19	PASS
11N20MIMO	Ant1	2412	Reference	4.29	4.29	---	PASS
			30~1000	4.29	-59.6	≤-15.71	PASS
			1000~26500	4.29	-47.07	≤-15.71	PASS
	Ant2	2412	Reference	3.78	3.78	---	PASS
			30~1000	3.78	-60.07	≤-16.22	PASS
			1000~26500	3.78	-47.36	≤-16.22	PASS
	Ant1	2437	Reference	3.01	3.01	---	PASS
			30~1000	3.01	-60.45	≤-16.99	PASS
			1000~26500	3.01	-47.22	≤-16.99	PASS
	Ant2	2437	Reference	0.00	0.00	---	PASS
			30~1000	0.00	-58.79	≤-20	PASS
			1000~26500	0.00	-47.15	≤-20	PASS
11N40MIMO	Ant1	2412	Reference	3.04	3.04	---	PASS
			30~1000	3.04	-59.93	≤-16.96	PASS
			1000~26500	3.04	-47.44	≤-16.96	PASS
	Ant2	2412	Reference	1.38	1.38	---	PASS
			30~1000	1.38	-59.94	≤-18.62	PASS
			1000~26500	1.38	-47.41	≤-18.62	PASS
	Ant1	2437	Reference	2.59	2.59	---	PASS
			30~1000	2.59	-60.3	≤-17.41	PASS
			1000~26500	2.59	-47.01	≤-17.41	PASS
	Ant2	2437	Reference	4.10	4.10	---	PASS
			30~1000	4.10	-59.38	≤-15.9	PASS
			1000~26500	4.10	-47.53	≤-15.9	PASS
11N20MIMO	Ant1	2462	Reference	0.15	0.15	---	PASS
			30~1000	0.15	-60.27	≤-19.85	PASS
			1000~26500	0.15	-47.11	≤-19.85	PASS
	Ant2	2462	Reference	-0.06	-0.06	---	PASS
			30~1000	-0.06	-59.92	≤-20.06	PASS
			1000~26500	-0.06	-47.09	≤-20.06	PASS
11N40MIMO	Ant1	2422	Reference	-1.64	-1.64	---	PASS
			30~1000	-1.64	-59.53	≤-21.64	PASS
			Reference	-0.06	-0.06	---	PASS
	Ant2	2422	30~1000	-0.06	-59.92	≤-20.06	PASS
			1000~26500	-0.06	-47.09	≤-20.06	PASS
			Reference	-1.64	-1.64	---	PASS

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
	Ant1	2437	1000~26500	-1.64	-47.4	≤-21.64	PASS
			Reference	-0.89	-0.89	---	PASS
			30~1000	-0.89	-59.56	≤-20.89	PASS
	Ant2	2437	1000~26500	-0.89	-47.06	≤-20.89	PASS
			Reference	-1.30	-1.30	---	PASS
			30~1000	-1.30	-59.7	≤-21.3	PASS
	Ant1	2452	1000~26500	-1.30	-47.57	≤-21.3	PASS
			Reference	-0.50	-0.50	---	PASS
			30~1000	-0.50	-59.71	≤-20.5	PASS
	Ant2	2452	1000~26500	-0.50	-46.37	≤-20.5	PASS
			Reference	-1.55	-1.55	---	PASS
			30~1000	-1.55	-54.54	≤-21.55	PASS
11AX20MIMO	Ant1	2412	1000~26500	-1.55	-47.33	≤-21.55	PASS
			Reference	-1.64	-1.64	---	PASS
			30~1000	-1.64	-42.22	≤-21.64	PASS
	Ant2	2412	1000~26500	-1.64	-47.01	≤-21.64	PASS
			Reference	-2.01	-2.01	---	PASS
			30~1000	-2.01	-59.8	≤-22.01	PASS
	Ant1	2437	1000~26500	-2.01	-47.1	≤-22.01	PASS
			Reference	-1.00	-1.00	---	PASS
			30~1000	-1.00	-59.65	≤-21	PASS
	Ant2	2437	1000~26500	-1.00	-46.11	≤-21	PASS
			Reference	-2.06	-2.06	---	PASS
			30~1000	-2.06	-58.7	≤-22.06	PASS
	Ant1	2462	1000~26500	-2.06	-46.67	≤-22.06	PASS
			Reference	2.47	2.47	---	PASS
			30~1000	2.47	-59.94	≤-17.53	PASS
	Ant2	2462	1000~26500	2.47	-47.27	≤-17.53	PASS
			Reference	-1.11	-1.11	---	PASS
			30~1000	-1.11	-59.49	≤-21.11	PASS
11AX40MIMO	Ant1	2422	1000~26500	-1.11	-47.19	≤-21.11	PASS
			Reference	-4.01	-4.01	---	PASS
			30~1000	-4.01	-59.51	≤-24.01	PASS
	Ant2	2422	1000~26500	-4.01	-46.77	≤-24.01	PASS
			Reference	-4.44	-4.44	---	PASS
			30~1000	-4.44	-59.49	≤-24.44	PASS
	Ant1	2437	1000~26500	-4.44	-46.84	≤-24.44	PASS
			Reference	-3.64	-3.64	---	PASS
			30~1000	-3.64	-59.88	≤-23.64	PASS
	Ant2	2437	1000~26500	-3.64	-46.87	≤-23.64	PASS
			Reference	-3.39	-3.39	---	PASS
			30~1000	-3.39	-58.44	≤-23.39	PASS
	Ant1	2452	1000~26500	-3.39	-46.35	≤-23.39	PASS
			Reference	-2.65	-2.65	---	PASS
			30~1000	-2.65	-59.84	≤-22.65	PASS
	Ant2	2452	1000~26500	-2.65	-47.06	≤-22.65	PASS
			Reference	-3.15	-3.15	---	PASS
			30~1000	-3.15	-60.09	≤-23.15	PASS
			1000~26500	-3.15	-46.69	≤-23.15	PASS

6. Appendix X

Test Equipment	Type/Mode	SERIAL NO.	Equipment No.	Manufacturer	Cal. Due
Communication Shielded Room 2	4m*3m*3m	CRTDSWKS R 44301	/	CRT	2027/04/22
Spectrum Analyzer	FSV40	101580	DZ-000238-3	R&S	2026/03/27
UXA signal analyzer	N9040B	US57212256	DZ-000466	KEYSIGHT	2025/12/17
Power Meter	JS0806-2	19H9080187	DZ-000241	Tonscend	2026/03/27
Programmable DC Power Supply	E3644A	MY58036222	DZ-000178	KEYSIGHT	2026/04/10
5m Semi-Anechoic Chamber	SAC-5	SAC-5-2.0	EM-000557	COMTEST	2027/02/01
Spectrum Analyzer	N9010B	MY57470323	DZ-000174	KEYSIGHT	2026/01/01
EMI Test Receiver	N9038A-508	MY532290079	EM-000397	Agilent	2025/12/26
EMI Test Receiver	ESR7	102235	EM-000574	R&S	2026/01/05
loop antenna	HLA 6121	540046	EM-000546	TESEQ	2026/06/03
Broadband Antenna	VULB 9163	9163-530	EM-000342	SCHWARZBECK	2026/06/08
Waveguide Horn Antenna	HF906	360306/008	EM-000093	R&S	2025/12/26
Waveguide Horn Antenna	BBHA9170	00949	DZ-000209-2	SCHWARZBECK	2025/08/03
Bandstop Filters	SW-BSF-2400-100-7-A1	/	EM-000495	/	2025/08/29
5.8GHz band resistance	ZBSF6-C5725-5850-1627	1232740	DZ-000399-2	Tonscend	2026/05/29
Preamplifier	BBV 9721	9721-050	DZ-000209-1	SCHWARZBECK	2026/06/02
Temperature and humidity meter	MHO-C201	/	DZ-000249-2	Seconds test	2025/07/28
Temperature and humidity meter	MHO-C201	/	DZ-000249-5	Seconds test	2025/07/28

Dynacomm	Software Release	Software Developer
TS1120-3 Test System(Conduction test)	3.3.38	Tonscend
TS+ (5m,Radiation test)	JS32-RE 5.0.0	Tonscend

————— No Body Text Below —————

Important

1. The test report is invalid without the official stamp of CVC;
2. Any part photocopies of the test report are forbidden without the written permission from CVC;
3. The test report is invalid without the signatures of Author and Reviewer;
4. The test report is invalid if altered;
5. Objections to the test report must be submitted to CVC within 15 days;
6. Generally, commission test is responsible for the tested samples only;
7. As for the test result, “—” or “ N/A” means “not applicable”, “ / ”means “not testing”, “P” means “pass” and “F” means “fail”.

Address: No.3,Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, China (Test location)

Post Code: 510663 Tel: 020-32293888

FAX: 020 32293889 E-mail: office@cvc.org.cn