

TEST REPORT

Applicant: Hankook Technology Commerce Limited

Address of Applicant: FLAT E, 23/F GOLDEN SUN CENTRE 56-67 BONHAM STRAND WEST SHEUNG WAN HK

Manufacturer: Hankook Technology Commerce Limited

Address of Manufacturer: FLAT E, 23/F GOLDEN SUN CENTRE 56-67 BONHAM STRAND WEST SHEUNG WAN HK

Equipment Under Test (EUT)

Product Name: 5G Mobile Phone

Model No.: NX809J

FCC ID: 2BTCR-NX809J

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of sample receipt: November 18, 2025

Date of Test: November 19, 2025-December 15, 2025

Date of report issued: December 15, 2025

Test Result : PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

Version No.	Date	Description
00	December 15, 2025	Original

Tested By:

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Date:

December 15, 2025

Test Engineer

Prepared By:

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Date:

December 15, 2025

Project Engineer

Check By:

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Date:

December 15, 2025

Reviewer

3 Contents

	Page
1 COVER PAGE	1
2 VERSION.....	2
3 CONTENTS	3
4 TEST SUMMARY	4
5 GENERAL INFORMATION.....	5
5.1 GENERAL DESCRIPTION OF EUT	5
5.2 TEST MODE	7
5.3 DESCRIPTION OF SUPPORT UNITS	7
5.4 DEVIATION FROM STANDARDS	7
5.5 ABNORMALITIES FROM STANDARD CONDITIONS	7
5.6 TEST FACILITY.....	7
5.7 TEST LOCATION.....	8
6 TEST INSTRUMENTS LIST.....	9
7 TEST RESULTS AND MEASUREMENT DATA	11
7.1 ANTENNA REQUIREMENT	11
7.2 AC POWER LINE CONDUCTED EMISSION	12
7.3 CONDUCTED OUTPUT POWER	15
7.4 CHANNEL BANDWIDTH	16
7.5 POWER SPECTRAL DENSITY	17
7.6 SPURIOUS EMISSION IN NON-RESTRICTED & RESTRICTED BANDS	18
7.6.1 Conducted Emission Method.....	18
7.6.2 Radiated Emission Method.....	19
8 TEST SETUP PHOTO.....	27
9 EUT CONSTRUCTIONAL DETAILS	28

4 Test Summary

Test Item	Section	Result
Antenna requirement	FCC part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	FCC part 15.207	Pass
Conducted Peak Output Power	FCC part 15.247 (b)(3)	Pass
Channel Bandwidth & 99% OCB	FCC part 15.247 (a)(2)	Pass
Power Spectral Density	FCC part 15.247 (e)	Pass
Band Edge	FCC part 15.247(d)	Pass
Spurious Emission	FCC part 15.205/15.209/15.247(d)	Pass

Remark:

1. Test according to ANSI C63.10:2020
2. Pass: The EUT complies with the essential requirements in the standard.
3. N/A: Not applicable.

Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9kHz-30MHz	3.1dB	(1)
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
Radiated Emission	18GHz-40GHz	3.30dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

5 General Information

5.1 General Description of EUT

Product Name:	5G Mobile Phone
Model No.:	NX809J
Test sample(s) ID:	GTSL2025120078F-2, GTSL2025120078F-3
Sample(s) Status	Engineer sample
Operation Frequency:	802.11b/g/n/ax-20MHz: 2.412GHz - 2.462GHz 802.11n/ax-40MHz: 2.422GHz - 2.452GHz
Channel numbers:	802.11b/g/n/ax-20MHz: 11 802.11n/ax-40MHz: 7
Channel separation:	5MHz
Transfer Rate:	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n: up to 300Mbps (2×2MIMO) 802.11ax: up to 573.529Mbps (2×2MIMO)
Modulation technology:	DSSS: 802.11b OFDM: 802.11g/n/ax OFDMA: 802.11ax
Antenna Type:	Integral Antenna
Antenna gain:	Ant6: -2.7dBi Ant7: -2.5dBi
Power supply:	Rechargeable Li-ion Polymer Battery DC 3.79V/7500mAh

Disclaimer statement:

1. Antenna gain information provided by the customer, and the laboratory is not responsible for its authenticity.
2. The information in this section is provided by the applicant or manufacturer, GTS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

5.2 Channel List

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test channel	Frequency (MHz)	
	802.11b/g/n(HT20)/ax(HE20)	802.11n(HT40)/ax(HE40)
Lowest channel	2412MHz	2422MHz
Middle channel	2437MHz	2437MHz
Highest channel	2462MHz	2452MHz

5.3 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode
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We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	802.11b	802.11g	802.11n(HT20)/ax(HE20)	802.11n(HT40)/ax(HE40)
Data rate	1Mbps	6Mbps	MCS 0	MCS 0

RU type and bandwidth configuration:

RU Types	802.11ax20	802.11ax40
26-Tone RU	26-Tone_0 26-Tone_8	26-Tone_0 26-Tone_8
52-Tone RU	52-Tone_37 52-Tone_40	52-Tone_37 52-Tone_40
106-Tone RU	106-Tone_53 106-Tone_54	106-Tone_53 106-Tone_54
242-Tone RU	/	242-Tone_61 242-Tone_62

Note 1: All RU modes of 802.11be were tested, but only the worst case (26-Tone RU) was reported.

5.4 Description of Support Units

Manufacturer	Description	Model	Serial Number
Lenovo	PC Host	M6900	EA05257893

5.5 Deviation from Standards

None.

5.6 Abnormalities from Standard Conditions

None.

5.7 Test Facility

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

● **FCC —Registration No.: 381383**

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files.

● **ISED—Registration No.: 9079A**

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing.

● **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.8 Test Location

All tests were performed at:
Global United Technology Services Co., Ltd. Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960

6 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Apr. 11, 2025	Apr. 10, 2026
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Apr. 12, 2025	Apr. 11, 2026
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	Apr. 12, 2025	Apr. 11, 2026
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	Jul. 01, 2025	Jun. 30, 2026
7	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov.15, 2025	Nov.14, 2026
8	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	Apr. 11, 2025	Apr. 10, 2026
9	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	Apr. 11, 2025	Apr. 10, 2026
10	Horn Antenna (18GH-40GHz)	Schwarzbeck	BBHA 9170	GTS691	Apr. 11, 2025	Apr. 10, 2026
11	FSV·Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	Mar. 11, 2025	Mar. 10, 2026
12	Amplifier	/	LNA-1000-30S	GTS650	Apr. 11, 2025	Apr. 10, 2026
13	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS692	Nov. 12, 2025	Nov. 11, 2026
14	Wideband Amplifier	/	WDA-01004000-15P35	GTS602	Apr. 11, 2025	Apr. 10, 2026
15	Thermo meter	JINCHUANG	GSP-8A	GTS643	Apr. 15, 2025	Apr. 14, 2026
16	RE cable 1	GTS	N/A	GTS675	Jul. 11, 2025	Jul. 10, 2026
17	RE cable 2	GTS	N/A	GTS676	Jul. 11, 2025	Jul. 10, 2026
18	RE cable 3	GTS	N/A	GTS677	Jul. 11, 2025	Jul. 10, 2026
19	RE cable 4	GTS	N/A	GTS678	Jul. 11, 2025	Jul. 10, 2026
20	RE cable 5	GTS	N/A	GTS679	Jul. 11, 2025	Jul. 10, 2026
21	RE cable 6	GTS	N/A	GTS680	Jul. 11, 2025	Jul. 10, 2026
22	RE cable 7	GTS	N/A	GTS681	Jul. 11, 2025	Jul. 10, 2026
23	RE cable 8	GTS	N/A	GTS682	Jul. 11, 2025	Jul. 10, 2026
24	EMI Test Software	AUDIX	E3-6.100614a	GTS725	N/A	N/A

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	Jul. 12, 2022	Jul. 11, 2027
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026
3	LISN	ROHDE & SCHWARZ	ENV216	GTS226	Apr. 11, 2025	Apr. 10, 2026
4	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
5	Thermo meter	JINCHUANG	GSP-8A	GTS642	Apr. 15, 2025	Apr. 14, 2026
6	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	Apr. 12, 2025	Apr. 11, 2026
7	ISN	SCHWARZBECK	NTFM 8158	GTS565	Apr. 11, 2025	Apr. 10, 2026
8	High voltage probe	SCHWARZBECK	TK9420	GTS537	Apr. 11, 2025	Apr. 10, 2026
9	Antenna end assembly	Weinschel	1870A	GTS560	Apr. 11, 2025	Apr. 10, 2026
10	EMI Test Software	AUDIX	E3-6.100622	GTS726	N/A	N/A
11	Current probe	CYBERTEK	EM5011	GTS698	Jan. 13, 2025	Jan. 12, 2026

RF Conducted Test:						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	Apr. 11, 2025	Apr. 10, 2026
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026
3	PSA Series Spectrum Analyzer	Agilent	E4440A	GTS536	Apr. 11, 2025	Apr. 10, 2026
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	Apr. 11, 2025	Apr. 10, 2026
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Power Meter	Keysight	N1924A	GTS673	Apr. 11, 2025	Apr. 10, 2026
7	USB RF Power Sensor	DARE	RPR3006W	GTS569	Apr. 11, 2025	Apr. 10, 2026
8	RF Switch Box	Shongyi	RFSW3003328	GTS571	Apr. 11, 2025	Apr. 10, 2026
9	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	Apr. 11, 2025	Apr. 10, 2026
10	Thermo meter	JINCHUANG	GSP-8A	GTS641	Apr. 15, 2025	Apr. 14, 2026

General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Barometer	KUMAO	SF132	GTS647	Jul. 16, 2025	Jul. 15, 2026

7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement:		FCC Part15 C Section 15.203 /247(c)	
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(c) (1)(i) requirement: (i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi 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 6dBi.			
EUT Antenna:		Internal Antenna	
Tx chains are uncorrelated for power and correlated for PSD due to the device supporting CDD in all MIMO modes. The directional gains are as follows:			
Ant6 Antenna Gain (dBi)	Ant7 Antenna Gain (dBi)	Uncorrelated Chains Directional gain	Correlated Chains Directional gain
-2.7dBi	-2.5dBi	-2.6dBi	0.41dBi
Note 1: Uncorrelated directional gain = $10 * \log[(10^{Ant6/10} + 10^{Ant8 /10}) / N_{ANT}]$ dBi.			
Note 2: Uncorrelated directional gain = $10 * \log[(10^{Ant6/20} + 10^{Ant8/20})^2 / N_{ANT}]$ dBi.			

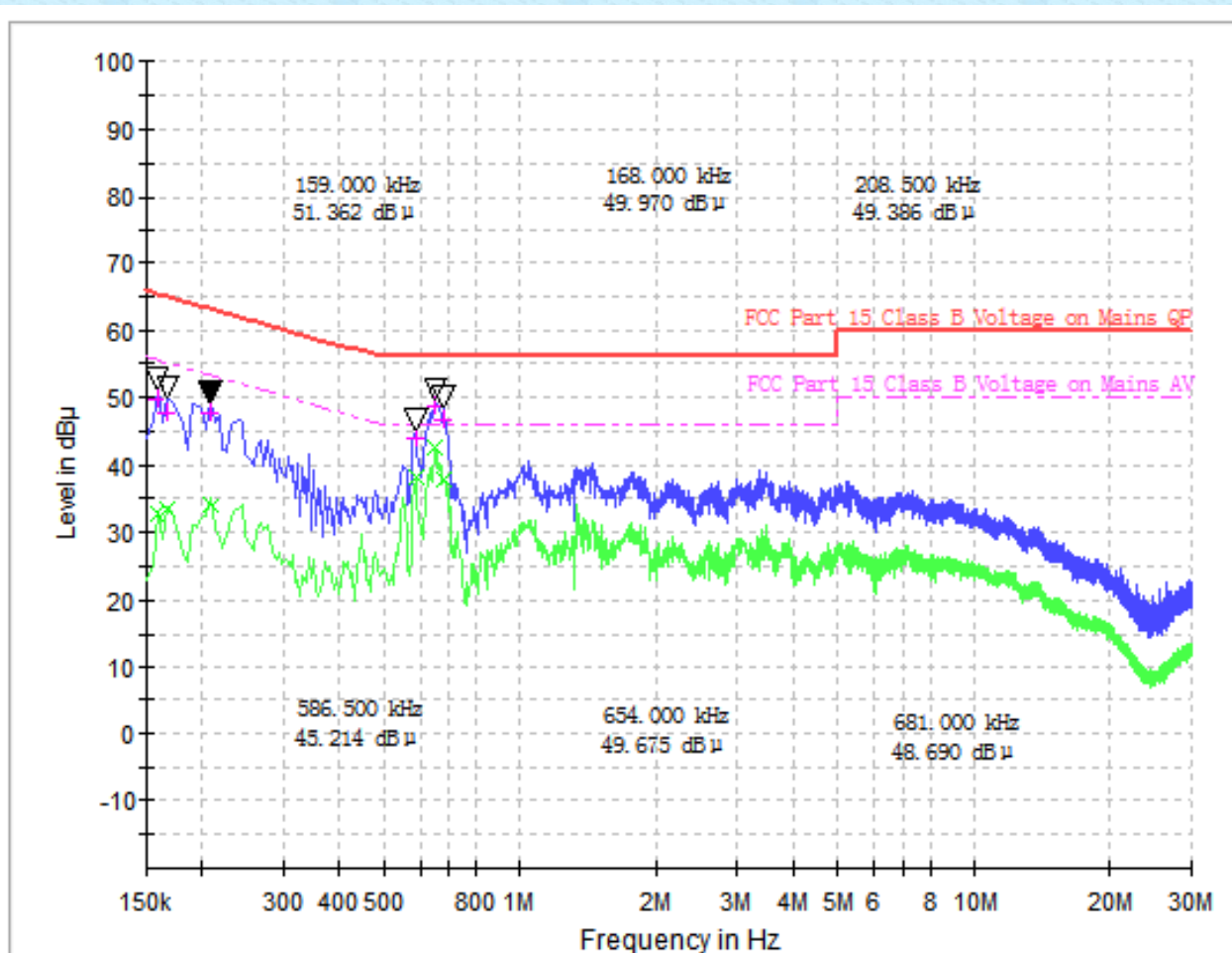
7.2 AC Power Line Conducted Emission

Test Requirement:	FCC Part15 C Section 15.207						
Test Method:	ANSI C63.10:2020						
Test Frequency Range:	150kHz to 30MHz						
Receiver setup:	RBW=9kHz, VBW=30kHz, Sweep time=auto						
Limit:	Frequency range (MHz)		Limit (dBuV)				
			Quasi-peak		Average		
	0.15-0.5		66 to 56*		56 to 46*		
	0.5-5		56		46		
	5-30		60		50		
* Decreases with the logarithm of the frequency.							
Test setup:	Reference Plane 40cm LISN 40cm AUX Equipment E.U.T Test table/Insulation plane 80cm 40cm LISN Filter AC power EMI Receiver Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m						
Test procedure:	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 C63.10:2020 on conducted measurement.						
Test Instruments:	Refer to section 6.0 for details						
Test mode:	Refer to section 5.3 for details						
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar	
Test voltage:	AC 120V, 60Hz						
Test results:	Pass						

Measurement data

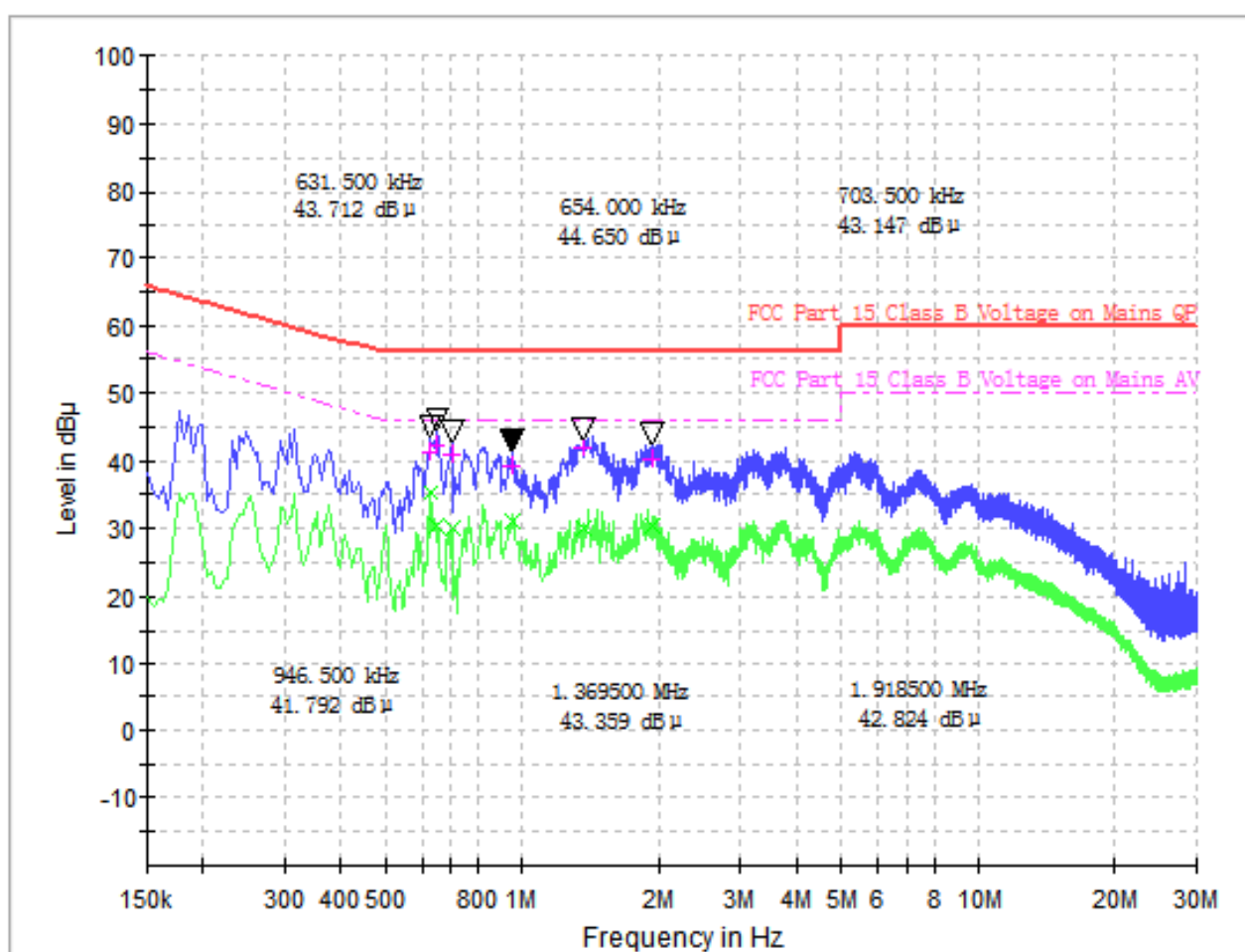
Pre-scan all test modes, found worst case at 802.11b 2437MHz (Ant6), and so only show the test result of it.

Line:



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBμV)	Margin - AV (dB)	Limit - AV (dBμV)
0.159000	49.71	32.49	10.3	15.81	65.52	23.03	55.52
0.168000	47.75	33.39	10.3	17.31	65.06	21.67	55.06
0.208500	47.56	33.97	10.6	15.70	63.26	19.29	53.26
0.586500	44.06	38.32	10.6	11.94	56.00	7.68	46.00
0.654000	48.82	42.74	10.4	7.18	56.00	3.26	46.00
0.681000	46.55	37.86	10.2	9.45	56.00	8.14	46.00

Neutral:

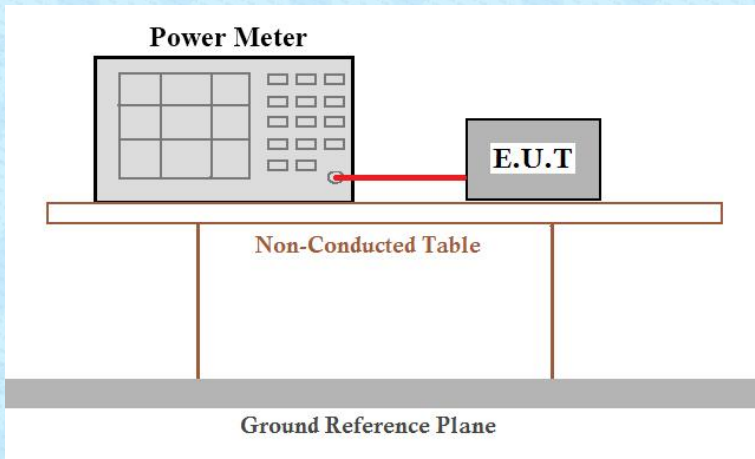


Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBμV)	Margin - AV (dB)	Limit - AV (dBμV)
0.631500	41.47	32.49	10.3	35.43	10.6	14.53	56.00
0.654000	42.45	33.39	10.3	30.39	10.6	13.55	56.00
0.703500	41.10	33.97	10.6	30.06	10.7	14.90	56.00
0.946500	39.39	38.32	10.6	31.04	10.4	16.61	56.00
1.369500	41.89	42.74	10.4	29.80	10.5	14.11	56.00
0.681000	40.35	37.86	10.2	30.42	10.4	15.65	56.00

Notes:

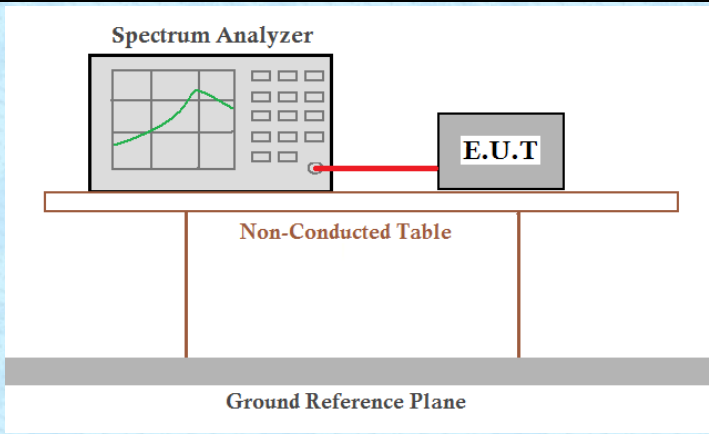
1. Final Level = Receiver Read level + Correction factor.

7.3 Conducted Output Power

Test Requirement :	FCC Part15 C Section 15.247 (b)(3)
Test Method :	ANSI C63.10-2020 Section 11.9.2.2.4
Limit:	30dBm 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.
Test setup:	 The diagram illustrates the test setup. A 'Power Meter' is connected to an 'E.U.T.' (Equipment Under Test) by a red cable. Both components are positioned on a 'Non-Conducted Table'. This table is supported by a 'Ground Reference Plane'.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

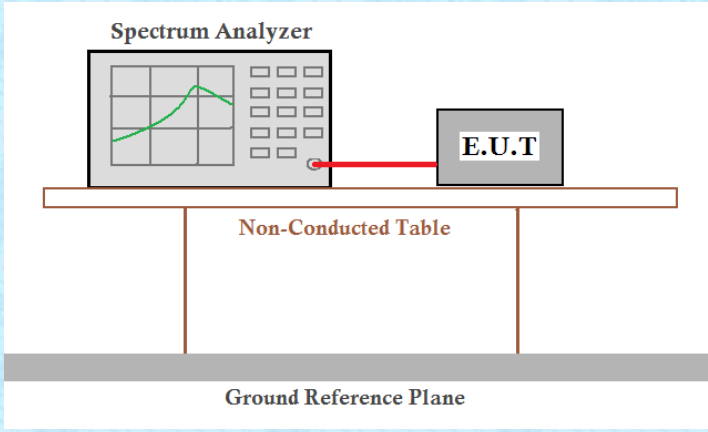
Measurement Data: The detailed test data see Appendix for WIFI 2.4G.

7.4 Channel Bandwidth

Test Requirement :	FCC Part15 C Section 15.247 (a)(2)
Test Method :	ANSI C63.10-2020 Section 11.8.1 and 6.9.3
Limit:	>500kHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement Data: The detailed test data see Appendix for WIFI 2.4G.

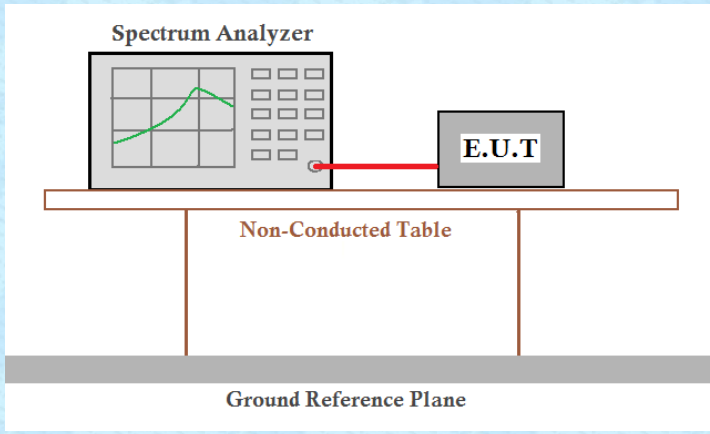
7.5 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	ANSI C63.10-2020 Section 11.10.5
Limit:	8dBm/3kHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer, shown with a grid and a green curve, is connected to an E.U.T. (Equipment Under Test) box by a red cable. Both the Spectrum Analyzer and the E.U.T. are positioned on a brown rectangular table labeled 'Non-Conducted Table'. This table is supported by two vertical legs and sits on a grey horizontal bar labeled 'Ground Reference Plane'.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement Data: The detailed test data see Appendix for WIFI 2.4G.

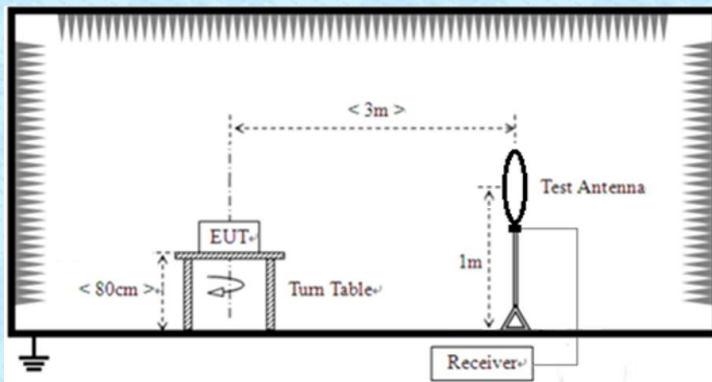
7.6 Spurious Emission in Non-restricted & restricted Bands

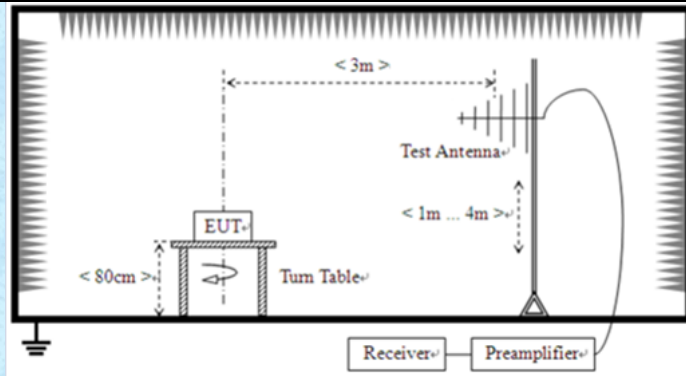
7.6.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.10-2020 Section 11.11 and 11.12
Limit:	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 30 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.
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

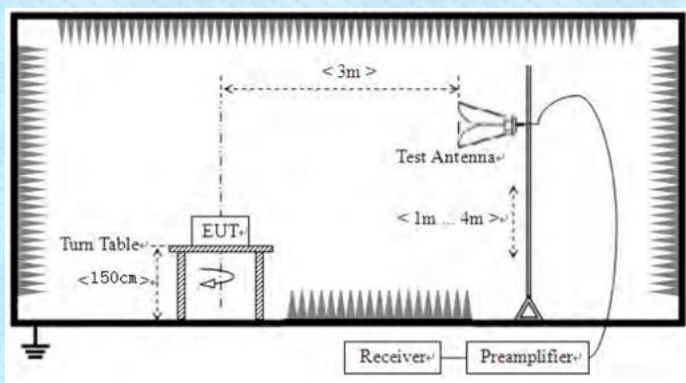
Measurement Data: The detailed test data see Appendix for WIFI 2.4G.

7.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10:2020				
Test Frequency Range:	9kHz to 25GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	9kHz-150kHz	Quasi-peak	200Hz	600Hz	Quasi-peak
	150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
	Note: For Duty cycle ≥ 98%, average detector set as above For Duty cycle < 98%, average detector set as below: VBW ≥ 1 / T				
Limit:	Frequency	Limit (uV/m)	Value	Measurement Distance	
	0.009MHz-0.490MHz	2400/F(kHz)	PK/QP/A V	300m	
	0.490MHz-1.705MHz	24000/F(kHz)	QP	30m	
	1.705MHz-30MHz	30	QP	30m	
	30MHz-88MHz	100	QP	3m	
	88MHz-216MHz	150	QP		
	216MHz-960MHz	200	QP		
	960MHz-1GHz	500	QP		
	Above 1GHz	500	Average		
		5000	Peak		
Test setup:	For radiated emissions from 9kHz to 30MHz				
					
For radiated emissions from 30MHz to 1GHz					



For radiated emissions above 1GHz



Test Procedure:

1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Test Instruments:

Refer to section 6.0 for details

Test mode:

Refer to section 5.3 for details

Test environment:

Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
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Test voltage:	AC 120V, 60Hz
Test results:	Pass

Remarks:

1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

Measurement data:

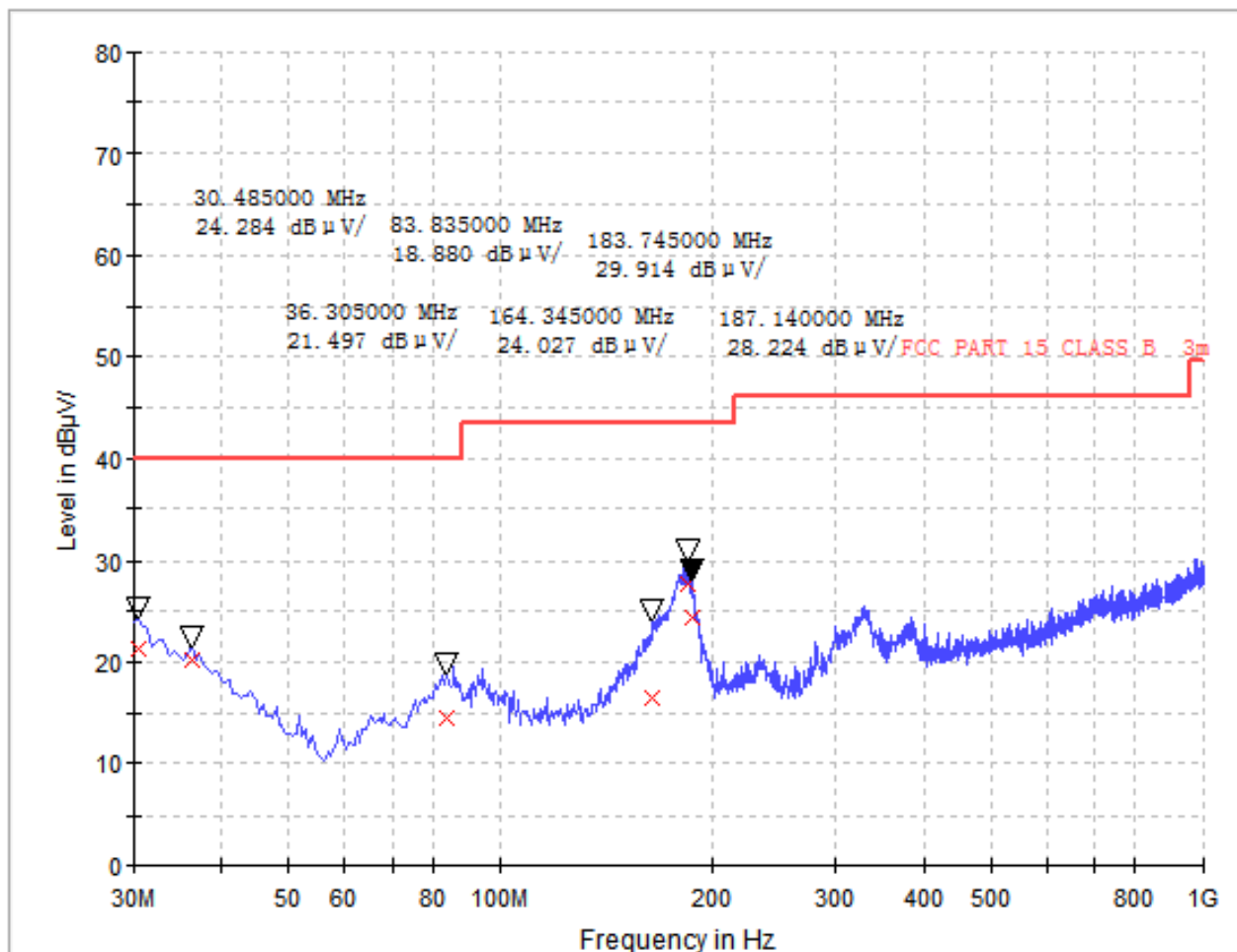
■ **9kHz~30MHz**

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o), the test result no need to reported.

■ Below 1GHz

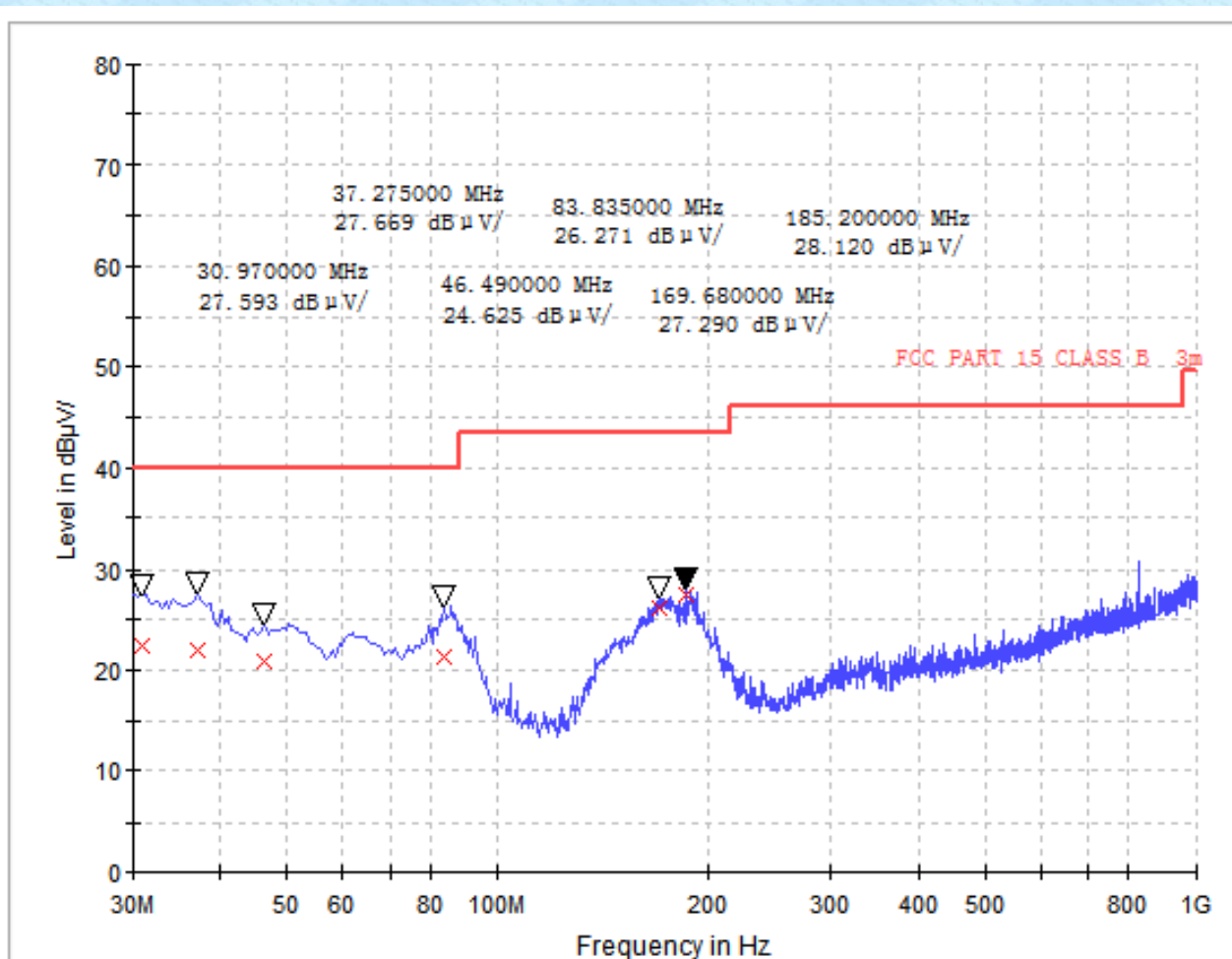
Pre-scan all test modes, found worst case at 802.11b 2437MHz (Ant6), and so only show the test result of it.

Horizontal:



Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)	Comment
30.480000	21.27	120.000	100.0	H	19.1	18.73	40.0	21
36.320000	20.00	120.000	100.0	H	16.0	20.00	40.0	118
83.840000	14.56	120.000	100.0	H	8.3	25.44	40.0	316
164.360000	16.56	120.000	100.0	H	12.0	26.94	43.5	92
183.760000	27.63	120.000	100.0	H	11.8	15.87	43.5	217
187.120000	24.25	120.000	100.0	H	11.8	19.25	43.5	36

Vertical:



Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)	Comment
30.960000	22.44	120.000	100.0	V	18.8	17.56	40.0	32
37.280000	21.83	120.000	100.0	V	15.5	18.17	40.0	182
46.480000	20.69	120.000	100.0	V	10.7	19.31	40.0	21
83.840000	21.13	120.000	100.0	V	8.3	18.87	40.0	115
169.680000	26.15	120.000	100.0	V	11.9	17.35	43.5	139
185.200000	27.59	120.000	100.0	V	11.8	15.91	43.5	75

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB).
3. Margin value = Emission Level – Limit value
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. Only the antenna height (from 1m to 4m) at maximum reading are recorded.

■ Above 1GHz

For Above 1GHz, Only worst-case (Ant6) data is reported.

Test mode:	802.11b	Test channel:	Lowest
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Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
2390.00	53.15	74.00	-20.85	1.50	250	56.24	-3.09	Horizontal	Peak
2390.00	44.17	54.00	-9.83	1.50	250	47.26	-3.09	Horizontal	Average
4824.00	46.76	74.00	-27.24	1.50	250	45.59	1.17	Horizontal	Peak
4824.00	37.56	54.00	-16.44	1.50	250	36.39	1.17	Horizontal	Average
7236.00	50.98	74.00	-23.02	1.50	250	45.03	5.95	Horizontal	Peak
7236.00	40.71	54.00	-13.29	1.50	250	34.76	5.95	Horizontal	Average
2390.00	52.55	74.00	-21.45	1.50	140	55.64	-3.09	Vertical	Peak
2390.00	43.36	54.00	-10.64	1.50	140	46.45	-3.09	Vertical	Average
4824.00	47.12	74.00	-26.88	1.50	140	45.95	1.17	Vertical	Peak
4824.00	37.50	54.00	-16.50	1.50	140	36.33	1.17	Vertical	Average
7236.00	50.13	74.00	-23.87	1.50	140	44.18	5.95	Vertical	Peak
7236.00	41.61	54.00	-12.39	1.50	140	35.66	5.95	Vertical	Average

Test mode:	802.11b	Test channel:	Middle
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Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
4874.00	46.83	74.00	-27.17	1.50	250	45.87	0.96	Horizontal	Peak
4874.00	36.86	54.00	-17.14	1.50	250	35.90	0.96	Horizontal	Average
7311.00	50.58	74.00	-23.42	1.50	250	45.04	5.54	Horizontal	Peak
7311.00	41.34	54.00	-12.66	1.50	250	35.80	5.54	Horizontal	Average
4874.00	46.38	74.00	-27.62	1.50	140	45.42	0.96	Vertical	Peak
4874.00	37.00	54.00	-17.00	1.50	140	36.04	0.96	Vertical	Average
7311.00	50.58	74.00	-23.42	1.50	140	45.04	5.54	Vertical	Peak
7311.00	40.70	54.00	-13.30	1.50	140	35.16	5.54	Vertical	Average

Test mode:	802.11b	Test channel:	Highest
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Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
2483.50	53.81	74.00	-20.19	1.50	250	58.56	-4.75	Horizontal	Peak
2483.50	44.31	54.00	-9.69	1.50	250	49.06	-4.75	Horizontal	Average
4924.00	45.90	74.00	-28.10	1.50	250	45.30	0.60	Horizontal	Peak
4924.00	36.66	54.00	-17.34	1.50	250	36.06	0.60	Horizontal	Average
7386.00	49.59	74.00	-24.41	1.50	250	43.66	5.93	Horizontal	Peak
7386.00	40.67	54.00	-13.33	1.50	250	34.74	5.93	Horizontal	Average
2483.50	53.55	74.00	-20.45	1.50	140	58.30	-4.75	Vertical	Peak
2483.50	44.62	54.00	-9.38	1.50	140	49.37	-4.75	Vertical	Average
4924.00	45.56	74.00	-28.44	1.50	140	44.96	0.60	Vertical	Peak
4924.00	36.33	54.00	-17.67	1.50	140	35.73	0.60	Vertical	Average
7386.00	51.09	74.00	-22.91	1.50	140	45.16	5.93	Vertical	Peak
7386.00	40.41	54.00	-13.59	1.50	140	34.48	5.93	Vertical	Average

Test mode:	802.11ax-HE40	Test channel:	Lowest
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Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
2390.00	53.40	74.00	-20.60	1.50	250	56.49	-3.09	Horizontal	Peak
2390.00	43.82	54.00	-10.18	1.50	250	46.91	-3.09	Horizontal	Average
4824.00	46.91	74.00	-27.09	1.50	250	45.83	1.08	Horizontal	Peak
4824.00	37.17	54.00	-16.83	1.50	250	36.09	1.08	Horizontal	Average
7236.00	51.82	74.00	-22.18	1.50	250	46.10	5.72	Horizontal	Peak
7236.00	40.81	54.00	-13.19	1.50	250	35.09	5.72	Horizontal	Average
2390.00	52.87	74.00	-21.13	1.50	140	55.96	-3.09	Vertical	Peak
2390.00	43.81	54.00	-10.19	1.50	140	46.90	-3.09	Vertical	Average
4824.00	47.61	74.00	-26.39	1.50	140	46.53	1.08	Vertical	Peak
4824.00	37.12	54.00	-16.88	1.50	140	36.04	1.08	Vertical	Average
7236.00	50.92	74.00	-23.08	1.50	140	45.20	5.72	Vertical	Peak
7236.00	41.92	54.00	-12.08	1.50	140	36.20	5.72	Vertical	Average

Test mode:	802.11ax-HE40	Test channel:	Middle
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Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
4874.00	46.87	74.00	-27.13	1.50	250	45.91	0.96	Horizontal	Peak
4874.00	36.40	54.00	-17.60	1.50	250	35.44	0.96	Horizontal	Average
7311.00	50.45	74.00	-23.55	1.50	250	44.91	5.54	Horizontal	Peak
7311.00	41.43	54.00	-12.57	1.50	250	35.89	5.54	Horizontal	Average
4874.00	45.97	74.00	-28.03	1.50	140	45.01	0.96	Vertical	Peak
4874.00	36.74	54.00	-17.26	1.50	140	35.78	0.96	Vertical	Average
7311.00	50.65	74.00	-23.35	1.50	140	45.11	5.54	Vertical	Peak
7311.00	40.43	54.00	-13.57	1.50	140	34.89	5.54	Vertical	Average

Test mode:	802.11ax-HE40	Test channel:	Highest
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Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
2483.50	54.02	74.00	-19.98	1.50	250	58.77	-4.75	Horizontal	Peak
2483.50	43.98	54.00	-10.02	1.50	250	48.73	-4.75	Horizontal	Average
4924.00	45.68	74.00	-28.32	1.50	250	44.87	0.81	Horizontal	Peak
4924.00	37.15	54.00	-16.85	1.50	250	36.34	0.81	Horizontal	Average
7386.00	49.01	74.00	-24.99	1.50	250	43.23	5.78	Horizontal	Peak
7386.00	40.35	54.00	-13.65	1.50	250	34.57	5.78	Horizontal	Average
2483.50	53.21	74.00	-20.79	1.50	140	57.96	-4.75	Vertical	Peak
2483.50	45.09	54.00	-8.91	1.50	140	49.84	-4.75	Vertical	Average
4924.00	45.17	74.00	-28.83	1.50	140	44.36	0.81	Vertical	Peak
4924.00	36.65	54.00	-17.35	1.50	140	35.84	0.81	Vertical	Average
7386.00	50.49	74.00	-23.51	1.50	140	44.71	5.78	Vertical	Peak
7386.00	39.67	54.00	-14.33	1.50	140	33.89	5.78	Vertical	Average

Remarks:

- $Emission\ Level(dBuV/m) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
- $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB)$
- $Margin\ value = Emission\ Level - Limit\ value$
- The emission levels of other frequencies are very lower than the limit and not show in test report.
Only the antenna height (from 1m to 4m) and turntable angle (from 0 degrees to 360 degrees) at maximum reading are recorded.

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

-----End-----