FCC Test Report

Report No.:	RWAZ202300129D
Applicant:	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address:	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China
Product Name:	Smart phone
Product Model:	PG2311GBA
Multiple Models:	N/A
Trade Mark:	UMIDIGI
FCC ID:	2ATZ4-G6
Standards:	FCC CFR Title 47 Part 15E (§15.407)
Test Date:	2023/12/22~2024/01/26
Test Result:	Complied
Issue Date:	2024/02/27

Reviewed by: Abel Chen

Approved by: Jacob Gong

Abel Chen
Project Engineer

Jacob Kong
Manager

Prepared by:

World Alliance Testing and Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

NVLAP TESTING NVLAP LAB CODE 600335-0

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2. The results in this report apply only to the sample tested.

3. This sample tested is in compliance with the limits of the above regulation.

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5. The information marked "#" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

Revision History

Version No.	Issued Date	Description
00	*27, Feb,2024*	*Original*

Contents

1 General Information

1.1 Client Information

Applicant:	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address:	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China
Manufacturer:	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address:	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China

1.2 Product Description of EUT

The EUT is Smart phone that contains classic Bluetooth (BDR/EDR), BLE, 2.4G/5G WLAN, NFC and GSM/GPRS/EGPRS/WCDMA/LTE radios, this report covers the full testing of the 5G WLAN radio.

Sample Serial number	2X-5 for CE&RE test, 2X-1 for RF test conducted test (assigned by WATC)
Sample Received Date	2023-12-05
Sample Status	Good Condition
Frequency Range	Band1: 5180-5240 MHz (802.11a/n ht20/ac vht20) 5190-5230 MHz(802.11n ht40/ac vht40) 5210 MHz(802.11ac vht80) Band4: 5745-5825 MHz (802.11a/n ht20/ac vht20) 5755-5795 MHz(802.11n ht40/ac vht40) 5775 MHz(802.11ac vht80)
Maximum Conducted Output Power	5150 MHz - 5250MHz: 8.60dBm 5725 MHz - 5850MHz: 8.86dBm
Modulation Technology	OFDM
Spatial Streams	1TX, 1RX
Antenna Gain#	0.55dBi
Power Supply	DC 3.87V from battery or DC 5V from USB Port
Adapter Information	Adapter 1 Model: HF-0502000U Input: AC100-240V, 50/60Hz, 0.3A Output: DC 5.0V, 2A Adapter 2 Model: HJ-0502000W2-US Input: AC100-240V, 50/60Hz, 0.3A Output: DC 5V, 2A
Modification	Sample No Modification by the test lab

1.3 Antenna information

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.

Device Antenna information:	

The Wi-Fi antenna is an internal antenna which cannot replace by end-user. Please see the product internal photos for details.

1.4 Related Submittal(s)/Grant(s)

FCC Part 15, Subpart C, Equipment Class: DSS, FCC ID: 2ATZ4-G6

FCC Part 15, Subpart C, Equipment Class: DXX, FCC ID: 2ATZ4-G6

FCC Part 15, Subpart C, Equipment Class: DTS, FCC ID: 2ATZ4-G6

FCC Part 22, Subpart H/Part 24, Subpart E/Part 27, Equipment Class: PCE, FCC ID: 2ATZ4-G6

1.5 Measurement Uncertainty

Parameter		**Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))**
AC Power Lines Conducted Emissions		±3.14dB
Emissions, Radiated	Below 30MHz	±2.78dB
	Below 1GHz	±4.84dB
	Above 1GHz	±5.44dB
Conducted Power		0.74dB
Frequency Error		150Hz
Bandwidth		0.34%
Power Spectral Density		0.74dB

Note 1: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Note 2: The Decision Rule is based on simple acceptance with ISO Guide 98-4:2012 Clause 8.2 (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

1.6 Laboratory Location

World Alliance Testing and Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

Tel: +86-755-29691511, Email: qa@watc.com.cn

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 463912, the FCC Designation No. : CN5040.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0160.

1.7 Test Methodology

FCC CFR 47 Part 2

FCC CFR 47 Part 15

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

ANSI C63.10-2020

2 Description of Measurement

2.1 Test Configuration

Operating channels: (5150-5250MHz)					
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
36	5180	42	5210	48	5240
38	5190	44	5220	/	/
40	5200	46	5230	/	/
According to ANSI C63.10-2020 chapter 5.6.1 Table 11 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:					
802.11a, 802.11n-HT20, 802.11ac-VHT20					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
36	5180	40	5200	48	5240
802.11n-HT40, 802.11ac-VHT40					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
38	5190	/	/	46	5230
802.11ac-VHT80					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
/	/	42	5210	/	/

Operating channels: (5725-5850MHz)					
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
149	5745	155	5775	161	5805
151	5755	157	5785	165	5825
153	5765	159	5795	/	/
According to ANSI C63.10-2020 chapter 5.6.1 Table 11 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:					
802.11a, 802.11n-HT20, 802.11ac-VHT20					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency	Channel No.	Frequency	Channel No.	Frequency

	(MHz)		(MHz)		(MHz)
149	5745	157	5785	165	5825

802.11n-HT40, 802.11ac-VHT40					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
151	5755	/	/	159	5795

802.11ac-VHT80					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
/	/	155	5775	/	/

Test Mode:	
Transmitting mode:	Keep the EUT in continuous transmitting with modulation
Exercise software#:	Engineering model

Band1

Mode	Data rate	Powel Level Setting#		
		Low Channel	Middle Channel	High Channel
802.11a	6Mbps	16	16	16
802.11n-HT20	MCS0	16	16	16
802.11n-HT40	MCS0	15	/	15
802.11ac-VHT80	MCS0	/	15	/

Band4

Mode	Data rate	Powel Level Setting#		
		Low Channel	Middle Channel	High Channel
802.11a	6Mbps	16	16	16
802.11n-HT20	MCS0	16	16	16
802.11n-HT40	MCS0	15	/	15
802.11ac-VHT80	MCS0	/	15	/

The exercise software and the maximum power setting that provided by manufacturer.

Worst-Case Configuration:

For radiated emissions, EUT was investigated in three orthogonal orientation, the worst-case orientation was recorded in report

For AC power line conducted emission and radiated emission 9kHz-1GHz and above 18GHz were performed with the EUT transmits at the channel with highest output power as worst-case scenario.

For the adapter 1 and adapter 2, the adapter 1 was the worse one of radiated spurious emission below 1GHz in the DSS report. So only adapter 1 was chosen for the full test in this report.

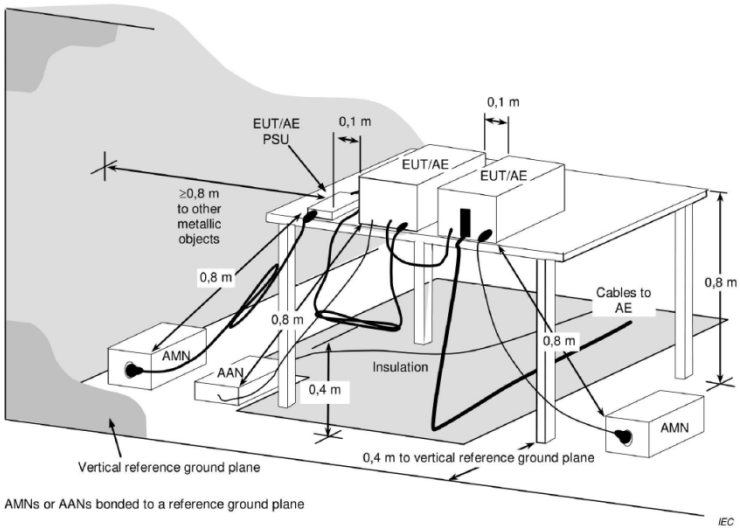
The ac vht20/ac vht40 was reduced test since the identical parameters with n-ht20/n-ht40.

2.2 Test Auxiliary Equipment

Manufacturer	Description	Model	Serial Number
/	/	/	/

2.3 Test Setup

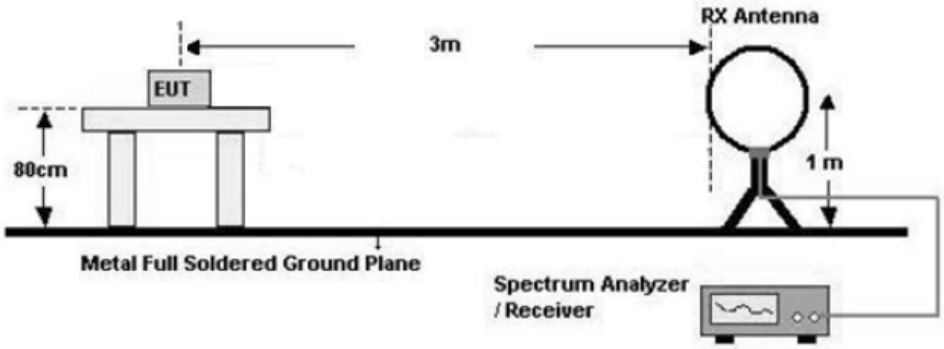
1) Conducted emission measurement:



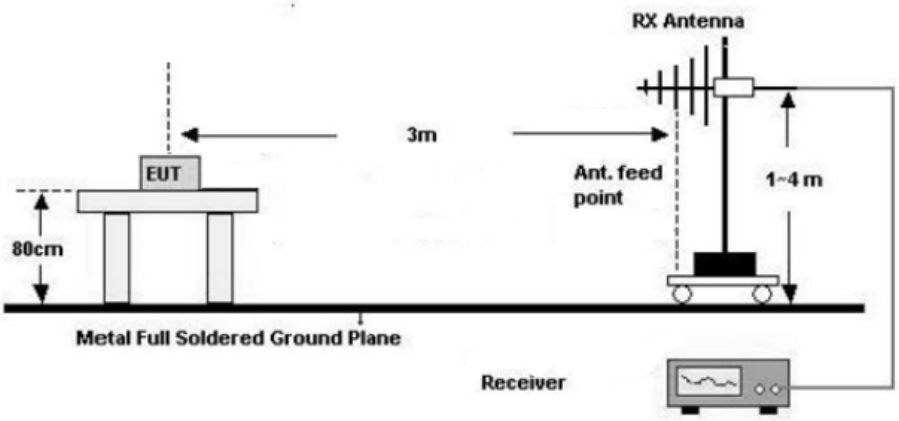
Note: The 0.8 m distance specified between EUT/AE/PSU and AMN/AAN, is applicable only to the EUT being measured. If the device is AE then it shall be >0.8 m.

2) Radiated emission measurement:

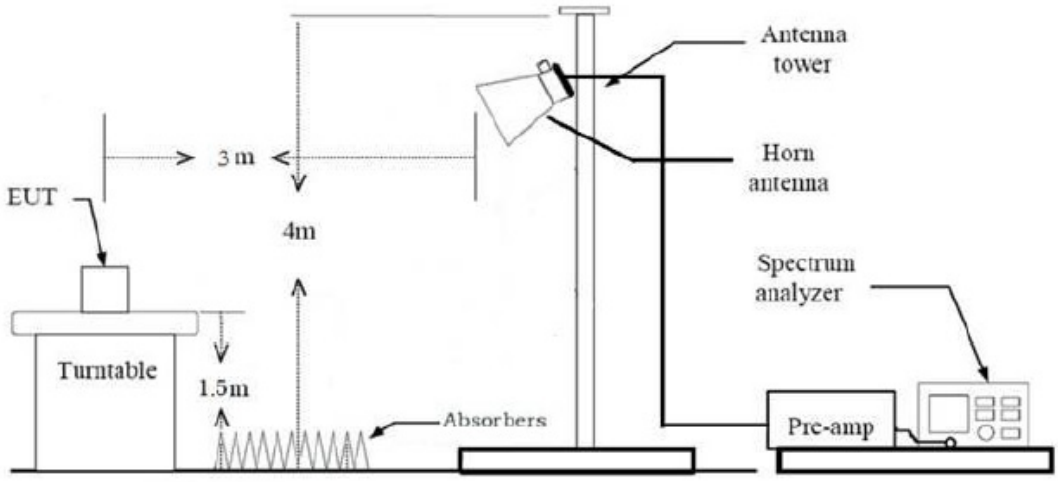
Below 30MHz (3m SAC)



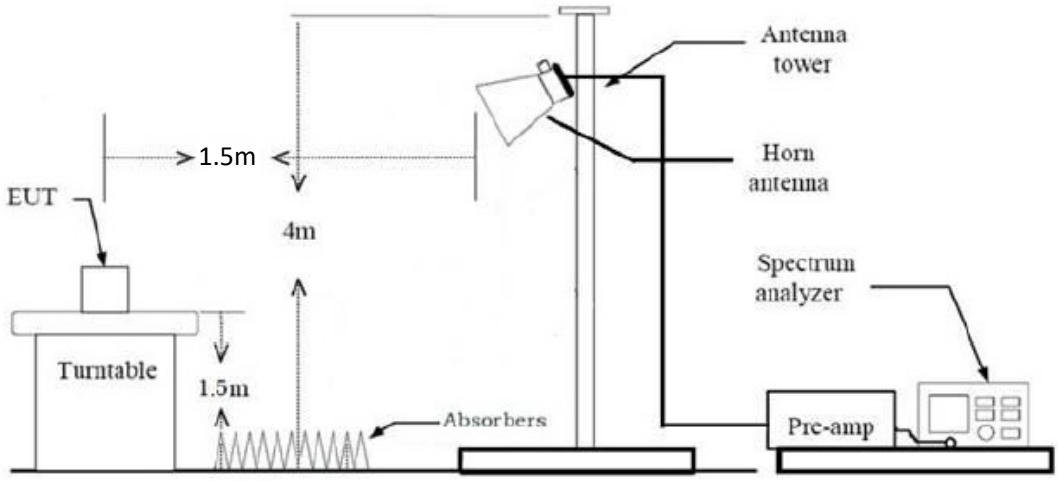
0MHz-1GHz (3m SAC)



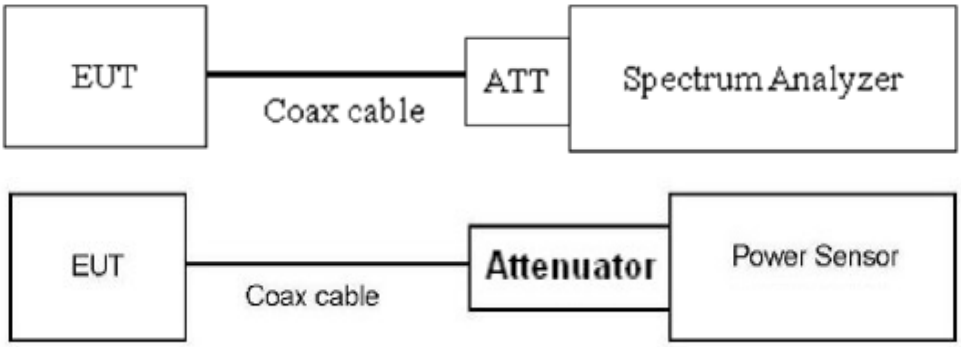
1GHz-18GHz(3m FAC)



Above 18GHz (3m FAC)



3) RF Conducted Test



2.4 Test Procedure

Conducted emission:

1. The E.U.T is placed on a non-conducting table 40cm from the vertical ground plane and 80cm above the horizontal ground plane (Please refer to the block diagram of the test setup and photographs).
2. 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.
3. Line conducted data is recorded for both Line and Neutral

Radiated Emission Procedure:

a) For below 30MHz

1. All measurements were made at a test distance of 3 m. The measured data was extrapolated from the

test distance (3m) to the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz- 30 MHz) to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were 40*Log (test distance / specification distance).

2. Loop antenna use, investigation was done on the three antenna orientations (parallel, perpendicular, gound-parallel)

b) For 30MHz-1GHz:

1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.
2. EUT works in each mode of operation that needs to be tested. 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.

c) 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 (1-18GHz) and 1.5 m (above 18GHz).
2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working. 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.
4. Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

RF Conducted Test:

1. The antenna port of EUT was connected to the RF port of the test equipment (Power Meter or Spectrum analyzer) through Attenuator and RF cable.
2. The cable assembly insertion loss of 11dB (including 10 dB Attenuator and 1.0 dB cable) was entered as an offset in the power meter. Note: Actual cable loss was unavailable at the time of testing, therefore a loss of 1.0dB was assumed as worst case. This was later verified to be true by laboratory. (if the RF cable provided by client, the cable loss declared by client)
3. The EUT is keeping in continuous transmission mode and tested in all modulation modes.

2.5 Measurement Method

Description of Test	Measurement Method
AC Line Conducted Emissions	ANSI C63.10-2020 Section 6.2

Maximum Conducted Output Power	KDB 789033 D02 v02r01 section E.3. b)
Power Spectral Density	KDB 789033 D02 v02r01 section F
26 dB Emission Bandwidth	KDB 789033 D02 v02r01 section C.1
6 dB Emission Bandwidth	KDB 789033 D02 v02r01 section C.2
99% Occupied Bandwidth	KDB 789033 D02 v02r01 section D.
Unwanted Emissions	KDB 789033 D02 v02r01 section G.
Duty Cycle	KDB 789033 D02 v02r01 section B.

2.6 Measurement Equipment

Manufacturer	Description	Model	Management No.	Calibration Date	Calibration Due Date
AC Line Conducted Emission Test					
ROHDE& SCHWARZ	EMI TEST RECEIVER	ESR	101817	2023/7/3	2024/7/2
R&S	LISN	ENV216	101748	2023/8/1	2024/7/30
N/A	Coaxial Cable	NO.12	N/A	2023/7/3	2024/7/2
Farad	Test Software	EZ-EMC	Ver. EMEC-3A1	/	/
Radiated Emission Test					
R&S	EMI test receiver	ESR3	102758	2023/7/3	2024/7/2
ROHDE& SCHWARZ	SPECTRUM ANALYZER	FSV40-N	101608	2023/7/3	2024/7/2
SONOMA INSTRUMENT	Low frequency amplifier	310	186014	2023/7/12	2024/7/11
COM-POWER	preamplifier	PAM-118A	18040152	2023/8/21	2024/8/20
COM-POWER	Amplifier	PAM-840A	461306	2023/8/8	2024/8/7
ETS	Passive Loop Antenna	6512	29604	2023/7/7	2024/7/6
SCHWARZBECK	Log - periodic wideband antenna	VULB 9163	9163-872	2023/7/7	2024/7/6
Astro Antenna Ltd	Horn antenna	AHA-118S	3015	2023/7/6	2024/7/5
Ducommun technologies	Horn Antenna	ARH-4223-02	1007726-03	2023/7/10	2024/7/9
Ducommun technologies	Horn Antenna	ARH-2823-02	1007726-03	2023/7/10	2024/7/9
Oulitong	Band Reject Filter	OBSF-5150-5850-S	OE02104371	2023/9/15	2024/9/14
N/A	Coaxial Cable	N/A	NO.9	2023/8/8	2024/8/7
N/A	Coaxial Cable	N/A	NO.10	2023/8/8	2024/8/7
N/A	Coaxial Cable	N/A	NO.11	2023/8/8	2024/8/7
Audix	Test Software	E3	191218 V9	/	/
RF Conducted Test					
R&S	Spectrum Analyzer	FSV40	101590	2023/11/16	2024/11/15
MARCONI	10dB Attenuator	1692595	2942	2023/10/25	2024/10/24
ANRITSU	USB Power Sensor	MA24418A	12620	2023/7/12	2024/7/11

Note: All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or International standards.

3 Test Results

3.1 Test Summary

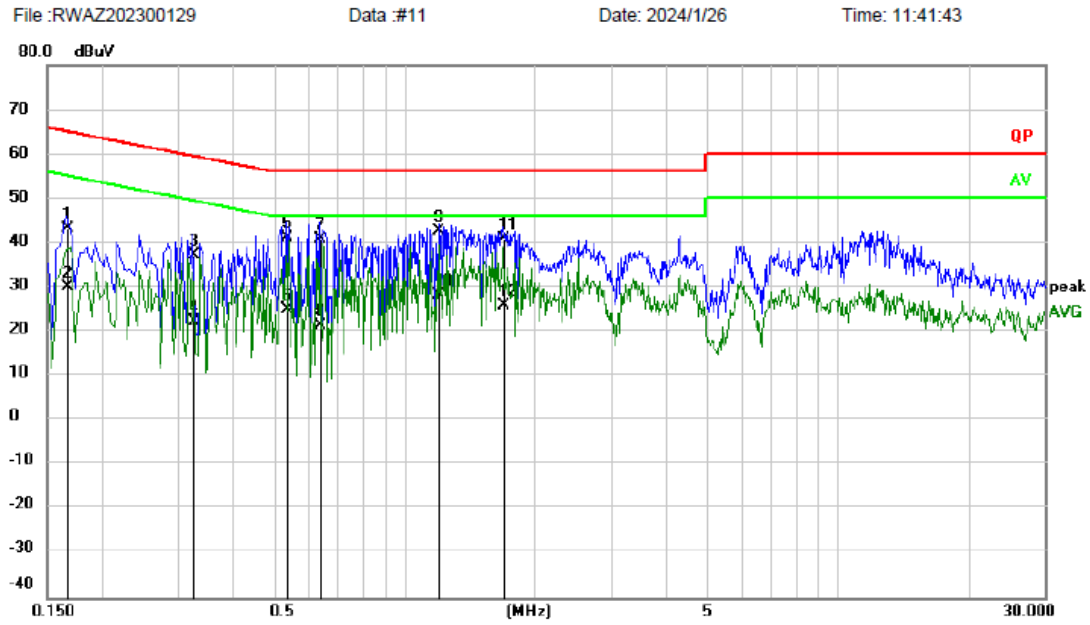
FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliance
§15.207 (a) §15.407 (b)(9)	AC Line Conducted Emissions	Compliance
§15.407 (a)(1)(iv),(3)(i)	Conducted Output Power Power Spectral Density	Compliance
§15.407 (a)(12)	99% Occupied Bandwidth	Compliance
§15.407 (a)	26 dB Emission Bandwidth	Compliance
§15.407 (e)	6 dB Emission Bandwidth	Compliance
§15.205, §15.209, §15.407 (b)(1), (4), (9), (10)	Unwanted Emissions	Compliance
/	Duty Cycle	Compliance

3.2 Limit

Test items	Limit
AC Power Line Conducted Emission	See details §15.207 (a)
Conducted Peak Output Power Power Spectral Density	**For the band 5.725-5.895 GHz:** For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas ofdirectional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, Fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi withoutany corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipointsystems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. Theoperator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
26dB Emission Bandwidth 99% Occupied Bandwidth	N/A
6dB Emission Bandwidth	Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.
Unwanted Emissions	For transmitters operating in the 5.15–5.25 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. For transmitters operating in the 5.25–5.35 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. For transmitters operating in the 5.47–5.725 GHz band: All emissions outside of the 5.47–5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. For transmitters operating solely in the 5.725–5.850 GHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. The provisions of § 15.205 apply to intentional radiators operating under this section.

3.3 AC Line Conducted Emissions Test Data

Test Date:	2024-1-26	Test By:	Lirou Li
Environment condition:	Temperature: 21.8°C; Relative Humidity:31%; ATM Pressure: 101.4kPa		

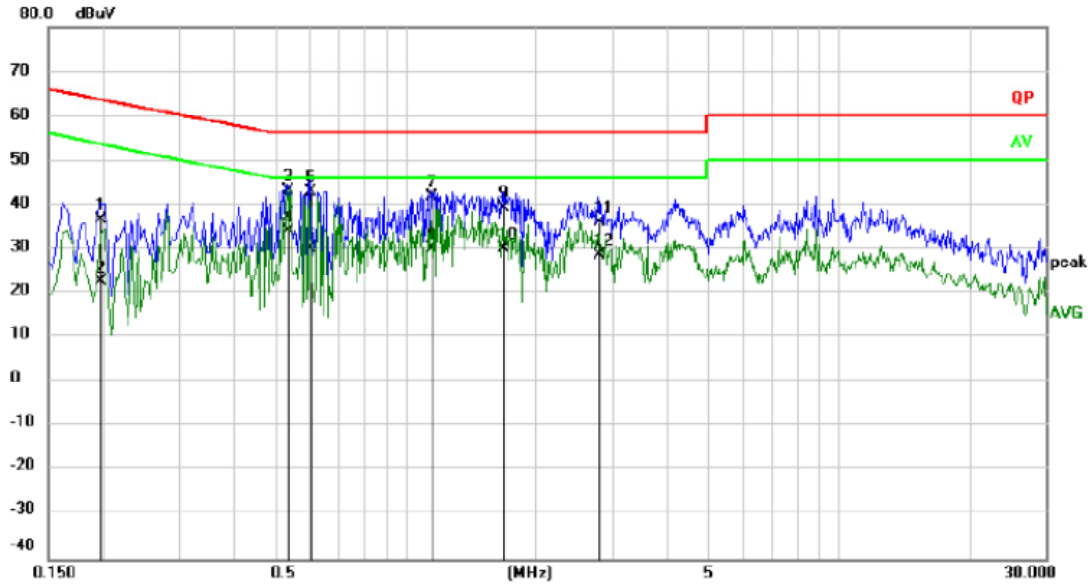


Limit: QP
Mode:transmitting
Note: 5G-WIFI

Phase: L1
Power: AC 120V/60Hz

Temperature: 21.8
Humidity: 31 %
Air Pressure: 1014 hpa

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over Limit		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1660	32.64	10.75	43.39	65.16	-21.77	QP	
2		0.1660	19.35	10.75	30.10	55.16	-25.06	AVG	
3		0.3260	26.60	10.72	37.32	59.55	-22.23	QP	
4		0.3260	11.62	10.72	22.34	49.55	-27.21	AVG	
5		0.5340	30.36	10.82	41.18	56.00	-14.82	QP	
6		0.5340	14.11	10.82	24.93	46.00	-21.07	AVG	
7		0.6380	29.99	10.85	40.84	56.00	-15.16	QP	
8		0.6380	10.64	10.85	21.49	46.00	-24.51	AVG	
9	*	1.2020	31.78	10.95	42.73	56.00	-13.27	QP	
10		1.2020	17.32	10.95	28.27	46.00	-17.73	AVG	
11		1.6940	30.27	10.66	40.93	56.00	-15.07	QP	
12		1.6940	15.18	10.66	25.84	46.00	-20.16	AVG	



Limit: QP
Mode:transmitting
Note: 5G-WIFI

Phase: N
Power: AC 120V/60Hz

Temperature: 21.8
Humidity: 31 %
Air Pressure: 1014 hpa

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over Limit		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1980	26.35	10.42	36.77	63.69	-26.92	QP	
2		0.1980	12.04	10.42	22.46	53.69	-31.23	AVG	
3		0.5340	32.62	10.69	43.31	56.00	-12.69	QP	
4	*	0.5340	23.17	10.69	33.86	46.00	-12.14	AVG	
5		0.6020	32.33	10.64	42.97	56.00	-13.03	QP	
6		0.6020	19.52	10.64	30.16	46.00	-15.84	AVG	
7		1.1460	31.20	10.66	41.86	56.00	-14.14	QP	
8		1.1460	19.39	10.66	30.05	46.00	-15.95	AVG	
9		1.6740	28.63	10.68	39.31	56.00	-16.69	QP	
10		1.6740	19.40	10.68	30.08	46.00	-15.92	AVG	
11		2.7900	25.33	10.58	35.91	56.00	-20.09	QP	
12		2.7900	17.97	10.58	28.55	46.00	-17.45	AVG	

Remark:

Measurement (dBuV)= Reading Level (dBuV) + Correct Factor(dB)

Correct Factor(dB)= LISN Voltage Division Factor (dB)+ Cable loss(dB)

Over = Measurement – Limit

3.4 Radiated emission Test Data

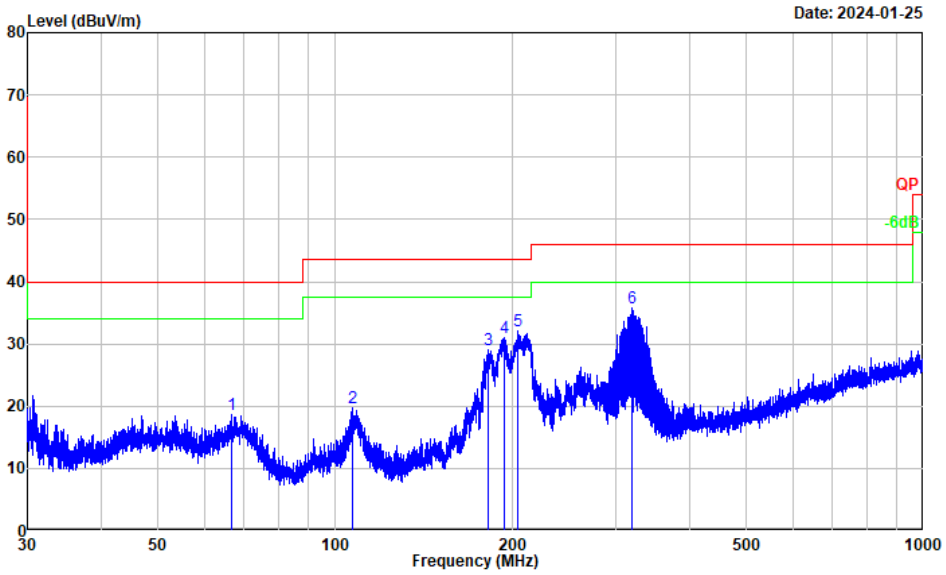
9 kHz-30MHz:

Test Date:	2024-01-25	**Test By:**	Bard Huang
Environment condition:	Temperature: 22.1 °C; Relative Humidity:27%; ATM Pressure: 102.3kPa		

For radiated emissions below 30MHz, there were no emissions found within 20dB of limit.

30MHz-1GHz:

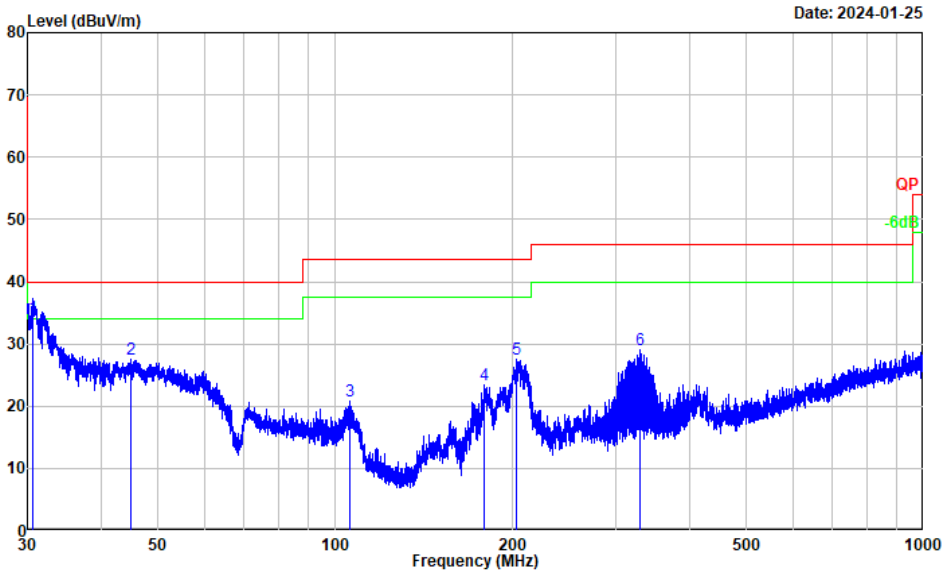
Test Date:	2024-01-25	Test By:	Bard Huang
Environment condition:	Temperature: 22.1 °C; Relative Humidity:27%; ATM Pressure: 102.3kPa		



Project No. : RWAZ202300129
Test Mode : Transmitting
Test Voltage : AC 120V/60Hz
Environment : 22.1℃/27%R.H./102.3kPa
Tested by : Bard Huang
Polarization : horizontal
Remark : 5G

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	66.791	33.60	-14.95	18.65	40.00	-21.35	Peak
2	107.134	33.71	-14.05	19.66	43.50	-23.84	Peak
3	182.479	44.40	-15.44	28.96	43.50	-14.54	Peak
4	194.283	45.12	-14.20	30.92	43.50	-12.58	Peak
5	204.865	45.88	-13.82	32.06	43.50	-11.44	Peak
6	320.218	46.58	-10.82	35.76	46.00	-10.24	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain



Project No. : RWAZ202300129
Test Mode : Transmitting
Test Voltage : AC 120V/60Hz
Environment : 22.1℃/27%R.H./102.3kPa
Tested by : Bard Huang
Polarization : vertical
Remark : 5G

--No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Detector
1	30.624	49.50	-15.20	34.30	40.00	-5.70	QP
2	45.078	39.62	-12.19	27.43	40.00	-12.57	Peak
3	105.781	34.78	-13.95	20.83	43.50	-22.67	Peak
4	179.072	39.20	-15.71	23.49	43.50	-20.01	Peak
5	203.345	41.36	-13.81	27.55	43.50	-15.95	Peak
6	329.328	39.50	-10.47	29.03	46.00	-16.97	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain

Remark:

Result = Reading + Factor

Factor = Antenna factor + Cable loss – Amplifier gain

Margin = Result – Limit

Above 1GHz:

Test Date:	2024-01-25	Test By:	Luke Li
Environment condition:	Temperature: 22.1 °C; Relative Humidity:27%; ATM Pressure: 102.3kPa		

5150- 5250MHz:

Frequency (MHz)	Reading level (dBμV)	Polar (H/V)	Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
802.11a							
Low Channel							
5150	50.06	Horizontal	11.57	61.63	74	-12.37	Peak
5150	36.18	Horizontal	11.57	47.75	54	-6.25	Average
5150	51.99	Vertical	11.57	63.56	74	-10.44	Peak
5150	36.74	Vertical	11.57	48.31	54	-5.69	Average
10360	49.11	Horizontal	5.5	54.61	68.2	-13.59	Peak
10360	49.68	Vertical	5.5	55.18	68.2	-13.02	Peak
15540	59.46	Horizontal	8.11	67.57	74	-6.43	Peak
15540	41.01	Horizontal	8.11	49.12	54	-4.88	Average
15540	60.7	Vertical	8.11	68.81	74	-5.19	Peak
15540	39.64	Vertical	8.11	47.75	54	-6.25	Average
Middle Channel							
10400	48.9	Horizontal	5.7	54.6	68.2	-13.6	Peak
10400	48.96	Vertical	5.7	54.66	68.2	-13.54	Peak
15600	61.13	Horizontal	8.1	69.23	74	-4.77	Peak
15600	39.72	Horizontal	8.1	47.82	54	-6.18	Average
15600	57.75	Vertical	8.1	65.85	74	-8.15	Peak
15600	39.22	Vertical	8.1	47.32	54	-6.68	Average
High Channel							
5350	50.38	Horizontal	11.44	61.82	74	-12.18	Peak
5350	36.2	Horizontal	11.44	47.64	54	-6.36	Average
5350	50.87	Vertical	11.44	62.31	74	-11.69	Peak
5350	36.78	Vertical	11.44	48.22	54	-5.78	Average
10480	49.9	Horizontal	5.74	55.64	68.2	-12.56	Peak
10480	49.83	Vertical	5.74	55.57	68.2	-12.63	Peak
15720	59.6	Horizontal	7.69	67.29	74	-6.71	Peak
15720	39.93	Horizontal	7.69	47.62	54	-6.38	Average
15720	58.43	Vertical	7.69	66.12	74	-7.88	Peak
15720	39.96	Vertical	7.69	47.65	54	-6.35	Average
802.11n20							

Low Channel							
5150	55.56	Horizontal	11.57	67.13	74	-6.87	Peak
5150	36.15	Horizontal	11.57	47.72	54	-6.28	Average
5150	52.78	Vertical	11.57	64.35	74	-9.65	Peak
5150	36.05	Vertical	11.57	47.62	54	-6.38	Average
10360	49.69	Horizontal	5.5	55.19	68.2	-13.01	Peak
10360	50.13	Vertical	5.5	55.63	68.2	-12.57	Peak
15540	59.45	Horizontal	8.11	67.56	74	-6.44	Peak
15540	38.9	Horizontal	8.11	47.01	54	-6.99	Average
15540	62.42	Vertical	8.11	70.53	74	-3.47	Peak
15540	40.28	Vertical	8.11	48.39	54	-5.61	Average
Middle Channel							
10400	49.52	Horizontal	5.7	55.22	68.2	-12.98	Peak
10400	49.9	Vertical	5.7	55.6	68.2	-12.6	Peak
15600	58.34	Horizontal	8.1	66.44	74	-7.56	Peak
15600	38.85	Horizontal	8.1	46.95	54	-7.05	Average
15600	57.61	Vertical	8.1	65.71	74	-8.29	Peak
15600	38.81	Vertical	8.1	46.91	54	-7.09	Average
High Channel							
5350	51.34	Horizontal	11.44	62.78	74	-11.22	Peak
5350	37.37	Horizontal	11.44	48.81	54	-5.19	Average
5350	51.43	Vertical	11.44	62.87	74	-11.13	Peak
5350	36.87	Vertical	11.44	48.31	54	-5.69	Average
10480	49.88	Horizontal	5.74	55.62	68.2	-12.58	Peak
10480	49.77	Vertical	5.74	55.51	68.2	-12.69	Peak
15720	57.48	Horizontal	7.69	65.17	74	-8.83	Peak
15720	39.94	Horizontal	7.69	47.63	54	-6.37	Average
15720	59	Vertical	7.69	66.69	74	-7.31	Peak
15720	40.17	Vertical	7.69	47.86	54	-6.14	Average
802.11n40							
Low Channel							
5150	51.11	Horizontal	11.57	62.68	74	-11.32	Peak
5150	36.79	Horizontal	11.57	48.36	54	-5.64	Average
5150	49.36	Vertical	11.57	60.93	74	-13.07	Peak
5150	36.08	Vertical	11.57	47.65	54	-6.35	Average
10380	50.52	Horizontal	5.6	56.12	68.2	-12.08	Peak
10380	50.17	Vertical	5.6	55.77	68.2	-12.43	Peak
15570	51.96	Horizontal	8.11	60.07	74	-13.93	Peak

15570	39.04	Horizontal	8.11	47.15	54	-6.85	Average
15570	53.71	Vertical	8.11	61.82	74	-12.18	Peak
15570	39.74	Vertical	8.11	47.85	54	-6.15	Average
High Channel							
5350	51.54	Horizontal	11.44	62.98	74	-11.02	Peak
5350	37.3	Horizontal	11.44	48.74	54	-5.26	Average
5350	50.94	Vertical	11.44	62.38	74	-11.62	Peak
5350	36.78	Vertical	11.44	48.22	54	-5.78	Average
10460	49.99	Horizontal	5.73	55.72	68.2	-12.48	Peak
10460	51.54	Vertical	5.73	57.27	68.2	-10.93	Peak
15690	52.89	Horizontal	7.74	60.63	74	-13.37	Peak
15690	39.73	Horizontal	7.74	47.47	54	-6.53	Average
15690	53.02	Vertical	7.74	60.76	74	-13.24	Peak
15690	40.17	Vertical	7.74	47.91	54	-6.09	Average
802.11ac80							
Middle Channel							
5150	50.4	Horizontal	11.57	61.97	74	-12.03	Peak
5150	36.74	Horizontal	11.57	48.31	54	-5.69	Average
5150	50.89	Vertical	11.57	62.46	74	-11.54	Peak
5150	37.19	Vertical	11.57	48.76	54	-5.24	Average
5350	50.32	Horizontal	11.44	61.76	74	-12.24	Peak
5350	36.38	Horizontal	11.44	47.82	54	-6.18	Average
5350	51.24	Vertical	11.44	62.68	74	-11.32	Peak
5350	36.8	Vertical	11.44	48.24	54	-5.76	Average
10420	53.44	Horizontal	5.71	59.15	68.2	-9.05	Peak
10420	53.37	Vertical	5.71	59.08	68.2	-9.12	Peak
15630	57.48	Horizontal	7.98	65.46	74	-8.54	Peak
15630	39.14	Horizontal	7.98	47.12	54	-6.88	Average
15630	53.84	Vertical	7.98	61.82	74	-12.18	Peak
15630	39.28	Vertical	7.98	47.26	54	-6.74	Average

5725 - 5850MHz:

Frequency (MHz)	Reading level (dBμV)	Polar (H/V)	Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
802.11a							
Low Channel							
5644.304	47.81	Horizontal	11.9	59.71	68.2	-8.49	Peak
5678.624	47.83	Horizontal	11.95	59.78	89.42	-29.64	Peak
5715.752	51.74	Horizontal	12.02	63.76	109.61	-45.85	Peak
5723.864	55.9	Horizontal	12.03	67.93	119.61	-51.68	Peak
5644.616	47.24	Vertical	11.9	59.14	68.2	-9.06	Peak
5694.887	47.01	Vertical	11.99	59	101.42	-42.42	Peak
5718.794	53.86	Vertical	12.03	65.89	110.46	-44.57	Peak
5724.293	63.51	Vertical	12.03	75.54	120.59	-45.05	Peak
11490	49.34	Horizontal	6.46	55.8	74	-18.2	Peak
11490	37.29	Horizontal	6.46	43.75	54	-10.25	Average
11490	49.48	Vertical	6.46	55.94	74	-18.06	Peak
11490	37.79	Vertical	6.46	44.25	54	-9.75	Average
17235	57.1	Horizontal	7.37	64.47	68.2	-3.73	Peak
17235	55.42	Vertical	7.37	62.79	68.2	-5.41	Peak
Middle Channel							
11570	49.94	Horizontal	6.52	56.46	74	-17.54	Peak
11570	38.1	Horizontal	6.52	44.62	54	-9.38	Average
11570	50.5	Vertical	6.52	57.02	74	-16.98	Peak
11570	38.45	Vertical	6.52	44.97	54	-9.03	Average
17355	56.79	Horizontal	7.3	64.09	68.2	-4.11	Peak
17355	56.84	Vertical	7.3	64.14	68.2	-4.06	Peak
High Channel							
5851.3	53.6	Horizontal	12.31	65.91	119.24	-53.33	Peak
5856.13	52.85	Horizontal	12.32	65.17	110.48	-45.31	Peak
5881.715	46.34	Horizontal	12.41	58.75	100.21	-41.46	Peak
5938.975	47.93	Horizontal	12.42	60.35	68.2	-7.85	Peak
5850.95	58.12	Vertical	12.31	70.43	120.03	-49.6	Peak
5856.06	57.16	Vertical	12.32	69.48	110.5	-41.02	Peak
5878.215	48.12	Vertical	12.39	60.51	102.81	-42.3	Peak
5944.155	47.49	Vertical	12.41	59.9	68.2	-8.3	Peak
11650	50.6	Horizontal	6.55	57.15	74	-16.85	Peak
11650	38.2	Horizontal	6.55	44.75	54	-9.25	Average

11650	50.14	Vertical	6.55	56.69	74	-17.31	Peak
11650	38.86	Vertical	6.55	45.41	54	-8.59	Average
17475	56.77	Horizontal	7.48	64.25	68.2	-3.95	Peak
17475	56.53	Vertical	7.48	64.01	68.2	-4.19	Peak
802.11n20							
Low Channel							
5623.673	47.15	Horizontal	11.9	59.05	68.2	-9.15	Peak
5680.808	47.67	Horizontal	11.98	59.65	91.04	-31.39	Peak
5717.429	51.86	Horizontal	12.02	63.88	110.08	-46.2	Peak
5724.566	58.86	Horizontal	12.03	70.89	121.21	-50.32	Peak
5637.128	47.25	Vertical	11.91	59.16	68.2	-9.04	Peak
5698.631	47.65	Vertical	12	59.65	104.19	-44.54	Peak
5718.794	57.8	Vertical	12.03	69.83	110.46	-40.63	Peak
5724.293	65.88	Vertical	12.03	77.91	120.59	-42.68	Peak
11490	49.53	Horizontal	6.46	55.99	74	-18.01	Peak
11490	37.39	Horizontal	6.46	43.85	54	-10.15	Average
11490	49.85	Vertical	6.46	56.31	74	-17.69	Peak
11490	38.78	Vertical	6.46	45.24	54	-8.76	Average
17235	56.99	Horizontal	7.37	64.36	68.2	-3.84	Peak
17235	55.79	Vertical	7.37	63.16	68.2	-5.04	Peak
Middle Channel							
11570	50.13	Horizontal	6.52	56.65	74	-17.35	Peak
11570	38.4	Horizontal	6.52	44.92	54	-9.08	Average
11570	50.65	Vertical	6.52	57.17	74	-16.83	Peak
11570	38.81	Vertical	6.52	45.33	54	-8.67	Average
17355	56.77	Horizontal	7.3	64.07	68.2	-4.13	Peak
17355	56.82	Vertical	7.3	64.12	68.2	-4.08	Peak
High Channel							
5851.51	53.7	Horizontal	12.31	66.01	118.76	-52.75	Peak
5855.85	52.21	Horizontal	12.32	64.53	110.56	-46.03	Peak
5879.825	46.04	Horizontal	12.41	58.45	101.62	-43.17	Peak
5944.4	47.38	Horizontal	12.42	59.8	68.2	-8.4	Peak
5850.95	57.5	Vertical	12.31	69.81	120.03	-50.22	Peak
5856.13	55.34	Vertical	12.32	67.66	110.48	-42.82	Peak
5876.36	48.48	Vertical	12.39	60.87	104.19	-43.32	Peak
5934.845	47.8	Vertical	12.41	60.21	68.2	-7.99	Peak
11650	51.03	Horizontal	6.55	57.58	74	-16.42	Peak
11650	38.71	Horizontal	6.55	45.26	54	-8.74	Average

11650	50.41	Vertical	6.55	56.96	74	-17.04	Peak
11650	39.07	Vertical	6.55	45.62	54	-8.38	Average
17475	56.51	Horizontal	7.48	63.99	68.2	-4.21	Peak
17475	56.57	Vertical	7.48	64.05	68.2	-4.15	Peak
802.11n40							
Low Channel							
5647.508	47.5	Horizontal	11.9	59.4	68.2	-8.8	Peak
5693.578	48.41	Horizontal	12	60.41	100.47	-40.06	Peak
5714.556	57.79	Horizontal	12.01	69.8	109.28	-39.48	Peak
5724.076	58.25	Horizontal	12.03	70.28	120.09	-49.81	Peak
5647.644	47.35	Vertical	11.9	59.25	68.2	-8.95	Peak
5697.998	52.63	Vertical	12	64.63	103.72	-39.09	Peak
5717.378	63.88	Vertical	12.01	75.89	110.07	-34.18	Peak
5724.756	65.68	Vertical	12.03	77.71	121.64	-43.93	Peak
11510	49.05	Horizontal	6.48	55.53	74	-18.47	Peak
11510	37.24	Horizontal	6.48	43.72	54	-10.28	Average
11510	49.56	Vertical	6.48	56.04	74	-17.96	Peak
11510	37.64	Vertical	6.48	44.12	54	-9.88	Average
17265	55.56	Horizontal	7.35	62.91	68.2	-5.29	Peak
17265	55.99	Vertical	7.35	63.34	68.2	-4.86	Peak
High Channel							
5851.32	48.43	Horizontal	12.31	60.74	119.19	-58.45	Peak
5856.76	48.93	Horizontal	12.32	61.25	110.31	-49.06	Peak
5876.56	47.62	Horizontal	12.39	60.01	104.04	-44.03	Peak
5935.24	47.32	Horizontal	12.41	59.73	68.2	-8.47	Peak
5854.08	53.34	Vertical	12.31	65.65	112.9	-47.25	Peak
5860.24	51.77	Vertical	12.32	64.09	109.33	-45.24	Peak
5878.92	47.38	Vertical	12.39	59.77	102.29	-42.52	Peak
5942.4	47.57	Vertical	12.4	59.97	68.2	-8.23	Peak
11590	49.98	Horizontal	6.53	56.51	74	-17.49	Peak
11590	37.45	Horizontal	6.53	43.98	54	-10.02	Average
11590	50.43	Vertical	6.53	56.96	74	-17.04	Peak
11590	37.97	Vertical	6.53	44.5	54	-9.5	Average
17385	56.62	Horizontal	7.32	63.94	68.2	-4.26	Peak
17385	56.55	Vertical	7.32	63.87	68.2	-4.33	Peak
802.11ac80							
Middle Channel							
5631.24	46.38	Horizontal	11.9	58.28	68.2	-9.92	Peak

5697.8	53.33	Horizontal	12	65.33	103.58	-38.25	Peak
5713.01	57.8	Horizontal	12.02	69.82	108.84	-39.02	Peak
5723.28	58.35	Horizontal	12.03	70.38	118.28	-47.9	Peak
5854.385	55.18	Horizontal	12.32	67.5	112.2	-44.7	Peak
5869.92	53.21	Horizontal	12.38	65.59	106.62	-41.03	Peak
5878.89	49.98	Horizontal	12.4	62.38	102.31	-39.93	Peak
5941.225	46.47	Horizontal	12.41	58.88	68.2	-9.32	Peak
5646.58	48.53	Vertical	11.9	60.43	68.2	-7.77	Peak
5697.605	59.56	Vertical	12	71.56	103.44	-31.88	Peak
5712.945	63.48	Vertical	12.02	75.5	108.83	-33.33	Peak
5723.345	63.81	Vertical	12.03	75.84	118.43	-42.59	Peak
5854.385	59.56	Vertical	12.32	71.88	112.2	-40.32	Peak
5855.815	57.85	Vertical	12.32	70.17	110.57	-40.4	Peak
5878.89	52.65	Vertical	12.39	65.04	102.31	-37.27	Peak
5939.08	46.37	Vertical	12.41	58.78	68.2	-9.42	Peak
11550	49.37	Horizontal	6.5	55.87	74	-18.13	Peak
11550	37.73	Horizontal	6.5	44.23	54	-9.77	Average
11550	49.91	Vertical	6.5	56.41	74	-17.59	Peak
11550	39.32	Vertical	6.5	45.82	54	-8.18	Average
17325	56.68	Horizontal	7.3	63.98	68.2	-4.22	Peak
17325	56.81	Vertical	7.3	64.11	68.2	-4.09	Peak

Remark:

Corrected Amplitude= Reading level + corrected Factor

Corrected Factor = Antenna factor + Cable loss – Amplifier gain

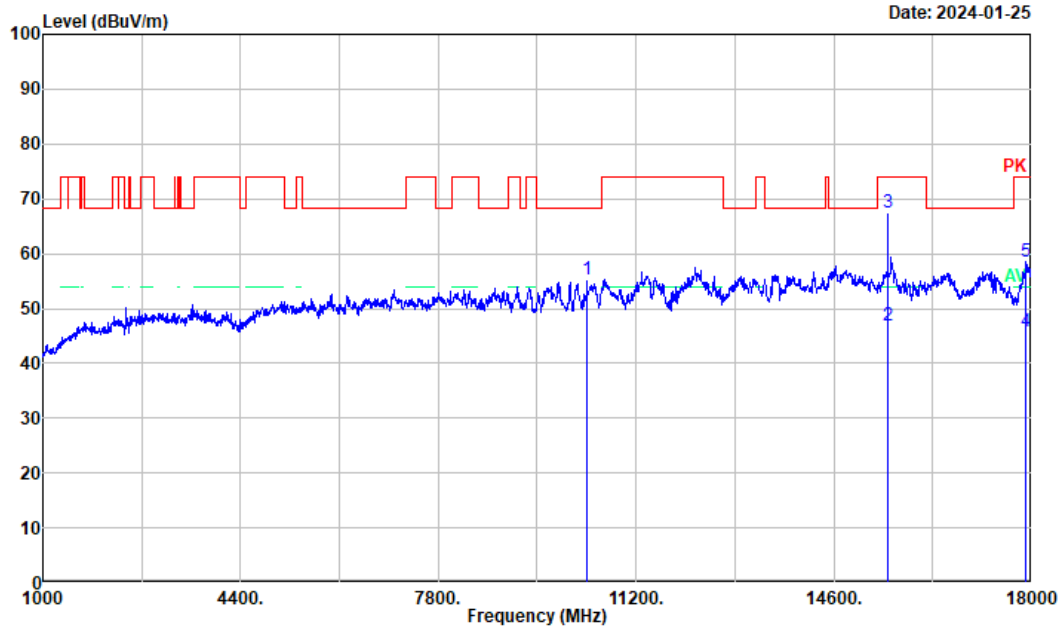
Margin = Corrected Amplitude – Limit

The emission levels of other frequencies that were lower than the limit 20dB, not show in test report.

For emissions in 18GHz-40GHz range, all emissions were investigated and in the noise floor level.

Test plot for example as below:

5150- 5250MHz:			
Mode:	802.11 n20	**Channel:**	Low Channel

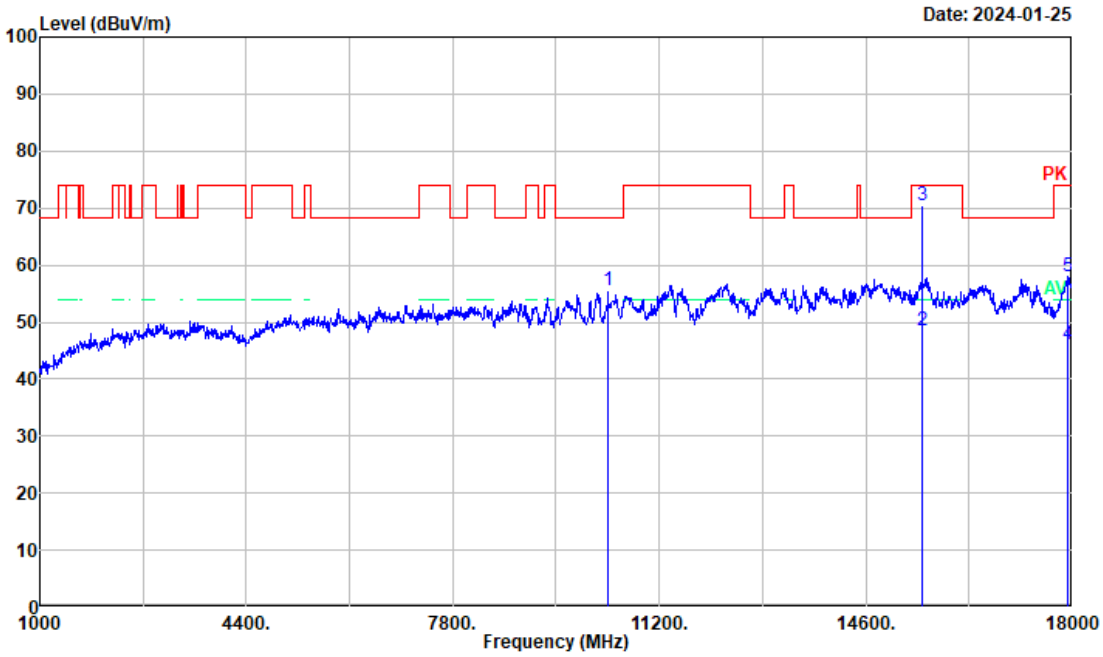


Project No. : RWAZ202300129
Test Mode : Transmitting
Test Voltage : AC 120V/60Hz
Environment : 22.1℃/27%R.H./102.3kPa
Tested by : Luke Li
Polarization : horizontal
Remark : 802.11n20 Low Channal

--No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Detector
1	10360.000	49.69	5.50	55.19	68.20	-13.01	Peak
2	15540.000	38.90	8.11	47.01	54.00	-6.99	Average
3	15540.000	59.45	8.11	67.56	74.00	-6.44	Peak
4	17906.450	37.69	8.20	45.89	54.00	-8.11	Average
5	17906.450	50.22	8.20	58.42	74.00	-15.58	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain

5150- 5250MHz:			
Mode:	802.11 n20	**Channel:**	Low Channel



Project No. : RWAZ202300129
Test Mode : Transmitting
Test Voltage : AC 120V/60Hz
Environment : 22.1℃/27%R.H./102.3kPa
Tested by : Luke Li
Polarization : vertical
Remark : 802.11n20 Low Channal

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	10360.000	50.13	5.50	55.63	68.20	-12.57	Peak
2	15540.000	40.28	8.11	48.39	54.00	-5.61	Average
3	15540.000	62.42	8.11	70.53	74.00	-3.47	Peak
4	17923.460	37.94	8.20	46.14	54.00	-7.86	Average
5	17923.460	49.91	8.20	58.11	74.00	-15.89	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain

3.5 RF Conducted Test Data

Test Date:	2023-12-22~2023-12-28	Test By:	Ryan Zhang
Environment condition:	Temperature: 24~25°C; Relative Humidity: 34~36%; ATM Pressure: 101.0~101.6kPa		

3.5.1 26dB/6dB Emission Bandwidth and 99% Occupied Bandwidth

5150- 5250MHz:

Test Mode	Channel	26dB BW [MHz]	99% OBW [MHz]
802.11a	5180	20.60	16.98
	5200	20.48	16.90
	5240	20.48	16.94
802.11n ht20	5180	20.76	17.82
	5200	20.80	17.90
	5240	20.80	17.82
802.11n ht40	5190	41.52	36.20
	5230	41.52	36.28
802.11ac vht80	5210	81.76	75.28

Note: the 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% occupied bandwidth.

5725 - 5850MHz:

Test Mode	Channel	6dB BW [MHz]	99% OBW [MHz]
802.11a	5745	16.40	16.82
	5785	16.40	16.82
	5825	16.40	16.98
802.11n ht20	5745	17.64	17.82
	5785	17.64	17.82
	5825	17.64	17.82
802.11n ht40	5755	36.48	36.28
	5795	36.48	36.20
802.11ac vht80	5775	76.56	75.44

Note:

1. 6dB Emission Bandwidth Limit: ⩾0.5 MHz
2. the 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

3.5.2 Maximum conducted output power

5150- 5250MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power(dBm)	
		Result	Limit
802.11a	5180	8.42	24
	5200	8.60	24
	5240	8.59	24
802.11n ht20	5180	7.72	24
	5200	7.72	24
	5240	7.64	24
802.11n ht40	5190	6.94	24
	5230	7.10	24
802.11ac vht80	5210	6.69	24

Note: The device is a client device.

5725 - 5850MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)	
		Result	Limit
802.11a	5745	8.86	30
	5785	8.65	30
	5825	8.63	30
802.11n ht20	5745	8.54	30
	5785	8.54	30
	5825	8.15	30
802.11n ht40	5755	7.76	30
	5795	7.32	30
802.11ac vht80	5775	7.57	30

3.5.3 Power Spectral Density

5150- 5250MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/MHz)	Duty Cycle Factor (dB)	Maximum Power Spectral Density (dBm/MHz)	
				Result	Limit
802.11a	5180	-2.20	/	-2.20	11
	5200	-1.98	/	-1.98	11
	5240	-1.95	/	-1.95	11
802.11n ht20	5180	-3.09	/	-3.09	11
	5200	-3.16	/	-3.16	11
	5240	-3.16	/	-3.16	11
802.11n ht40	5190	-6.68	/	-6.68	11
	5230	-6.54	/	-6.54	11
802.11ac vht80	5210	-10.23	/	-10.23	11

Note:

The device is a client device.

Duty cycle ≥98%, method ANSI C63.10-2013 Section 12.3.2.2 was used

5725 - 5850MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/500kHz)	Duty Cycle Factor (dB)	Maximum Power Spectral Density (dBm/500kHz)	
				Result	Limit
802.11a	5745	-4.63	/	-4.63	30
	5785	-4.78	/	-4.78	30
	5825	-4.92	/	-4.92	30
802.11n ht20	5745	-5.12	/	-5.12	30
	5785	-5.05	/	-5.05	30
	5825	-5.50	/	-5.50	30
802.11n ht40	5755	-8.80	/	-8.80	30
	5795	-9.22	/	-9.22	30
802.11ac vht80	5775	-12.18	/	-12.18	30

Duty cycle ≥98%, method ANSI C63.10-2013 Section 12.3.2.2 was used

3.5.4 Duty Cycle

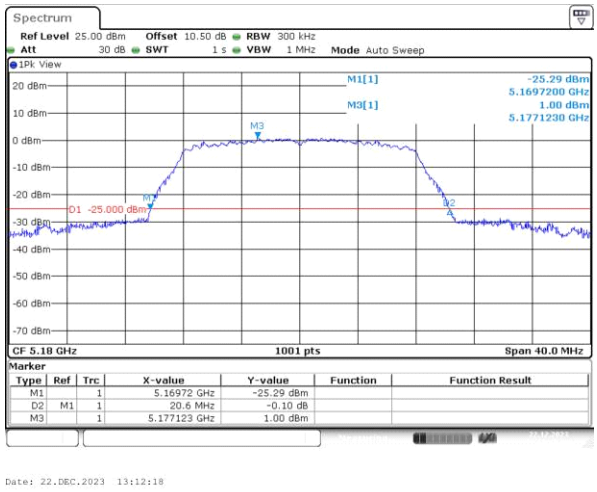
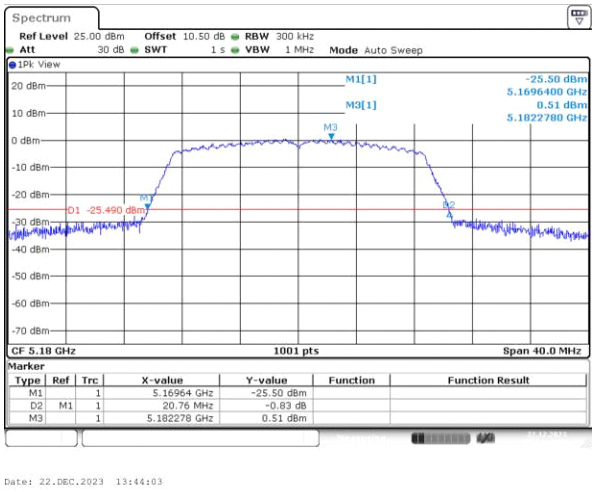
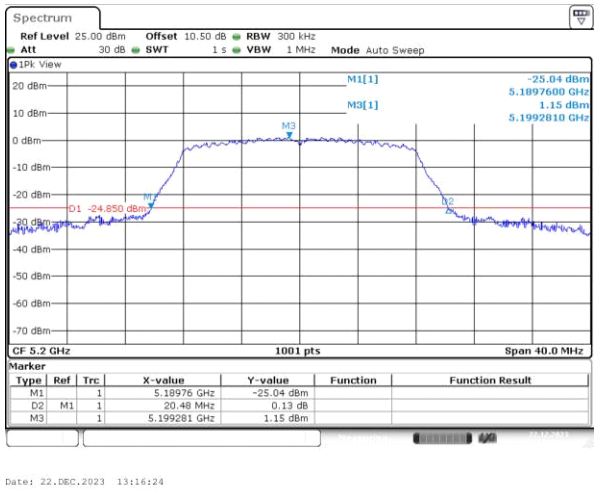
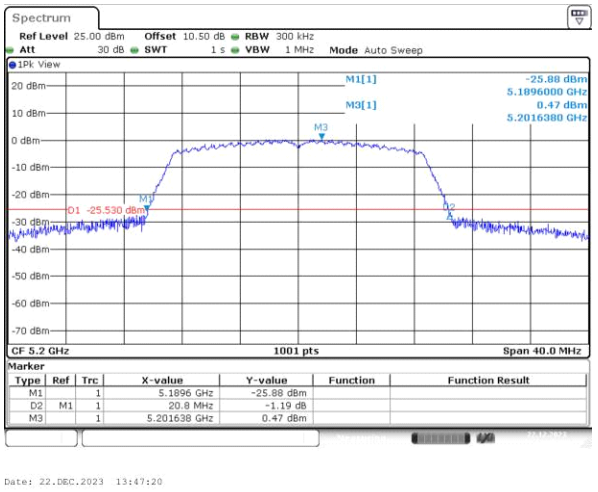
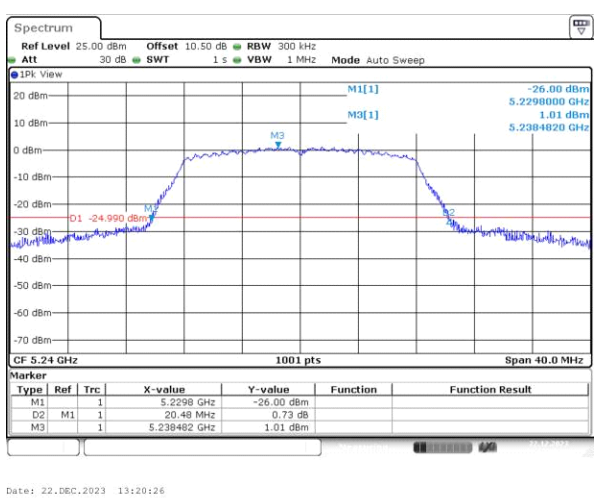
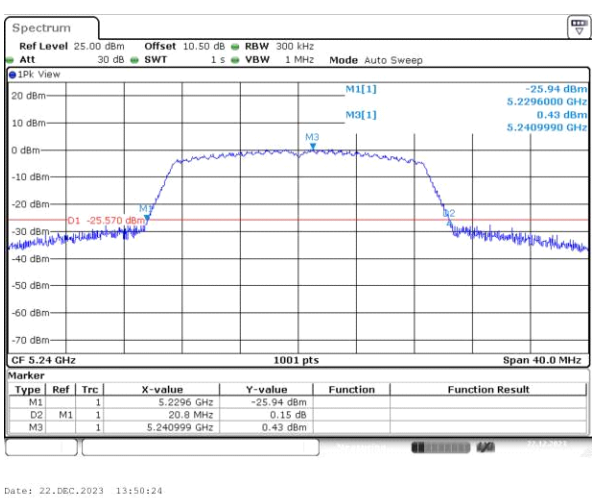
Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	Duty Cycle Factor (dB)	VBW Setting* (Hz)
802.11a	100	100	100	/	10
802.11n HT20	100	100	100	/	10
802.11n HT40	100	100	100	/	10
802.11acVHT80	100	100	100	/	10

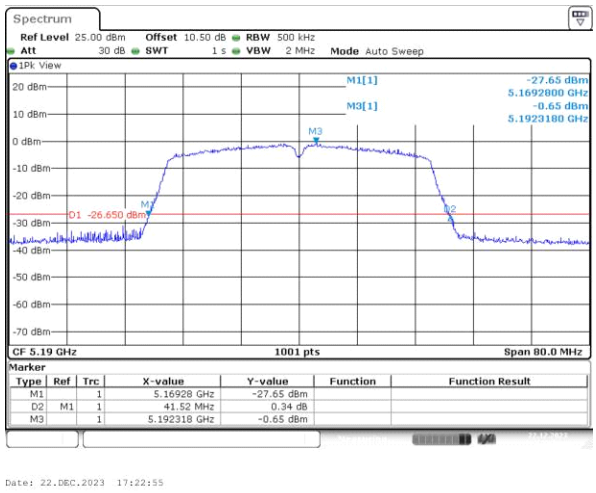
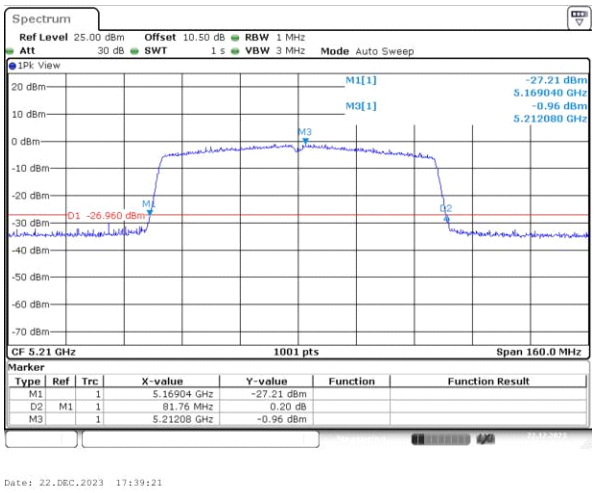
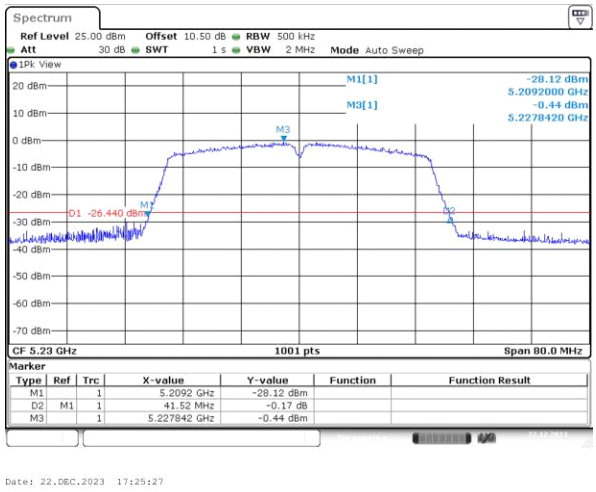
Note*: Radiated emission test with average value, the Spectrum analyzer VBW setting information.

Test Plots:

26dB Emission Bandwidth

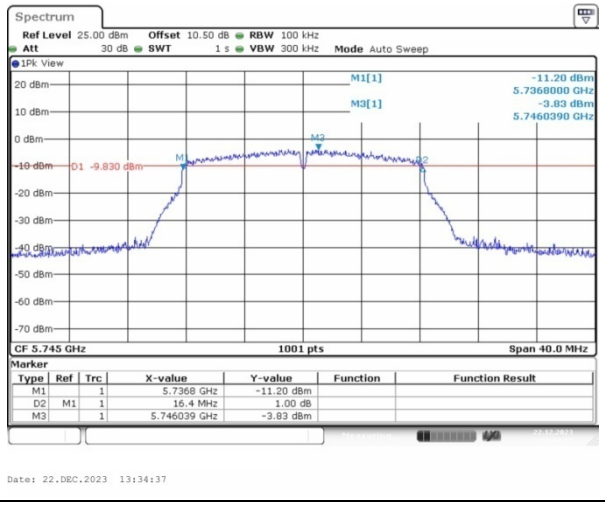
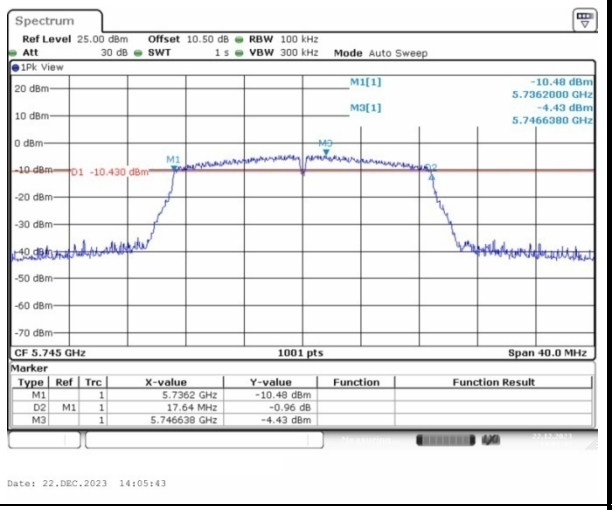
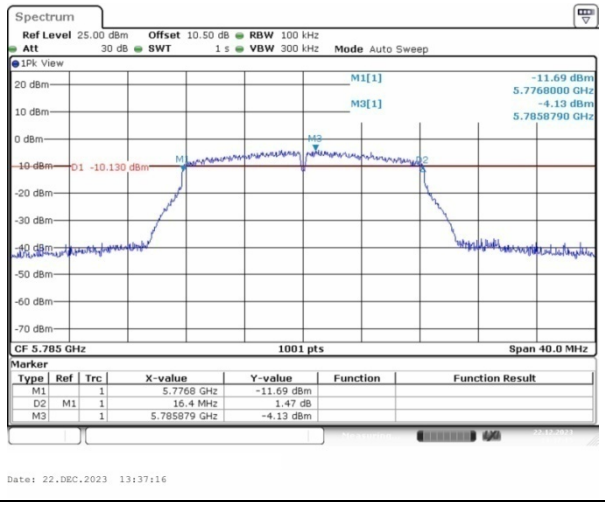
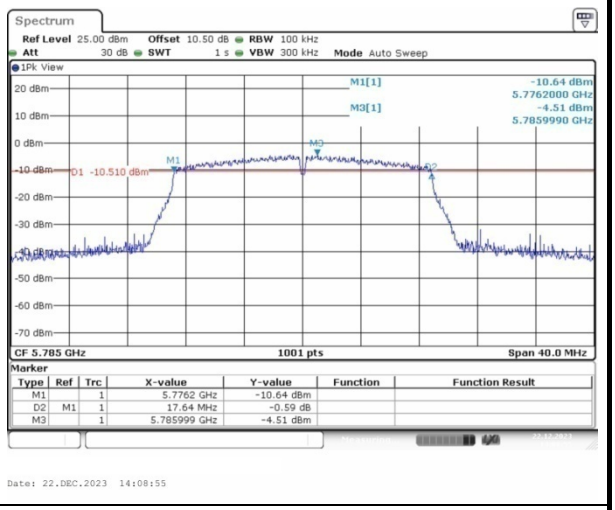
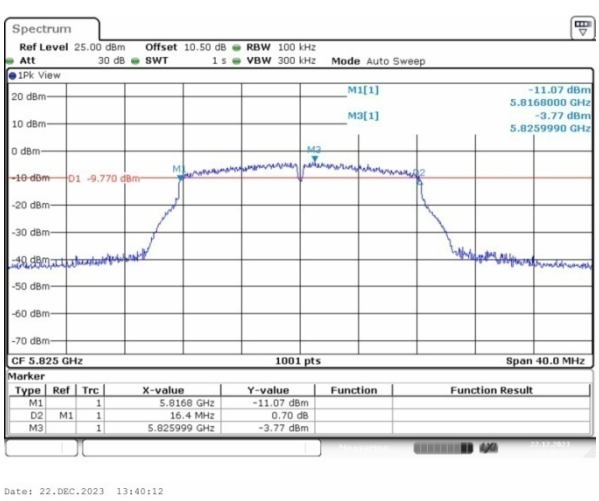
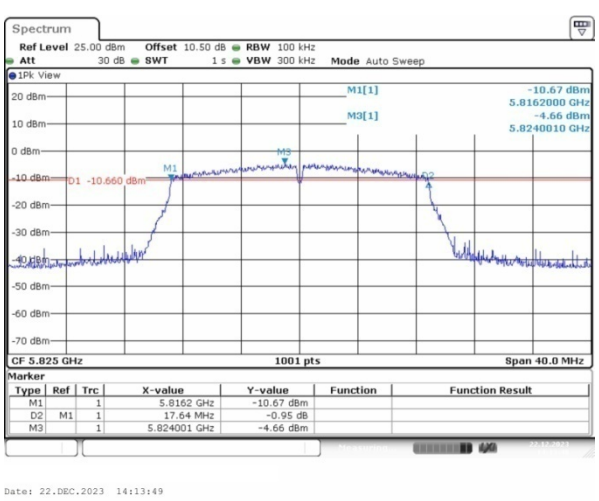
5150- 5250MHz:

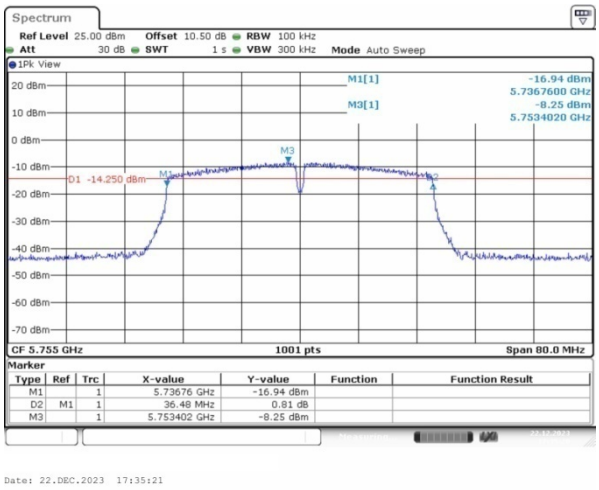
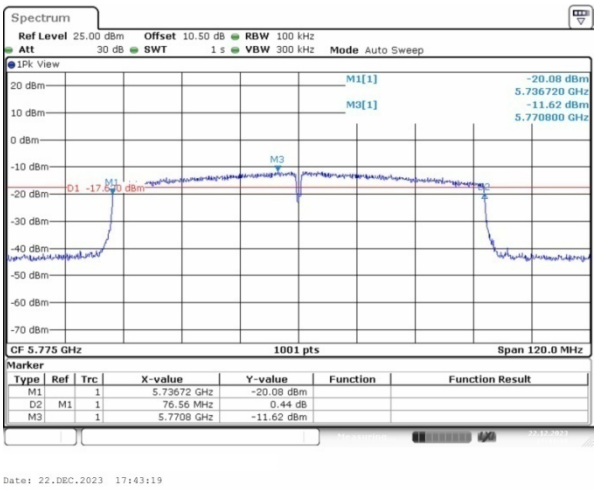
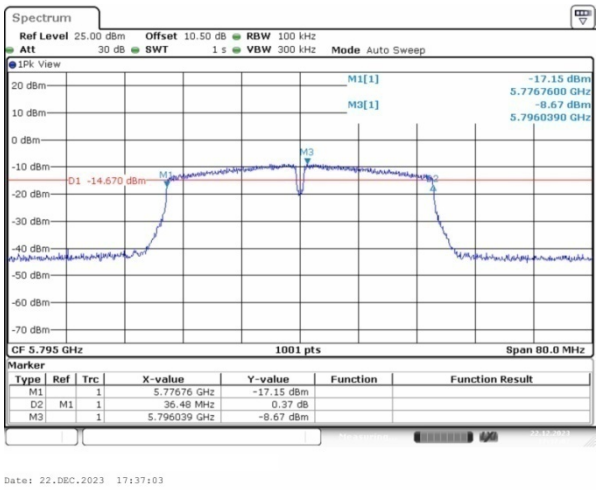
802.11a	802.11 n20
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
High channel	High channel
	

802.11 n40	802.11 ac80
Lowest channel	Middle channel
	
High channel	/
	/

6dB Emission Bandwidth

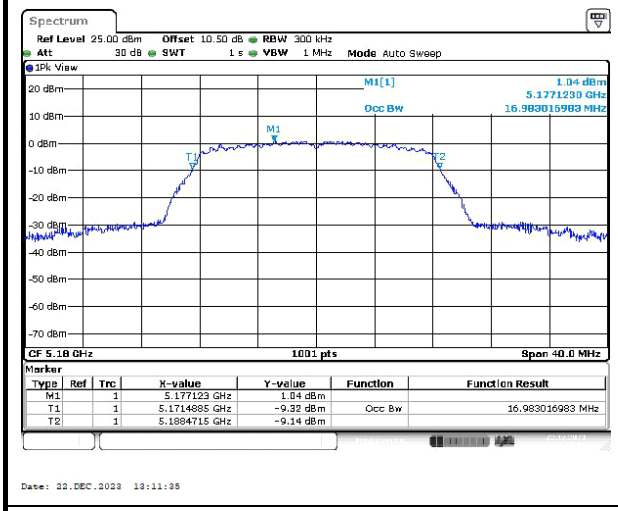
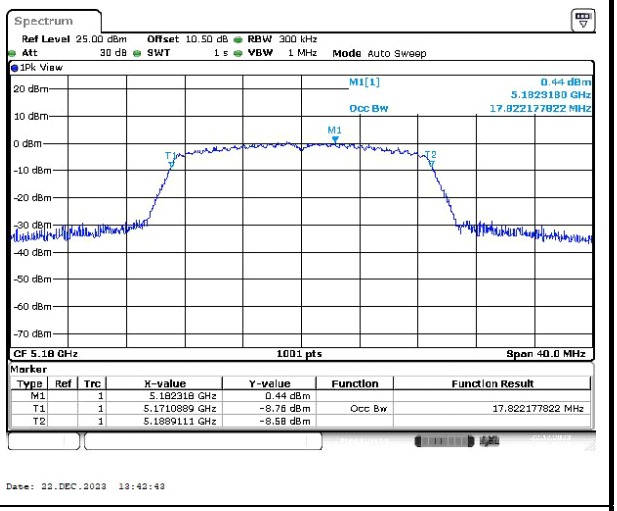
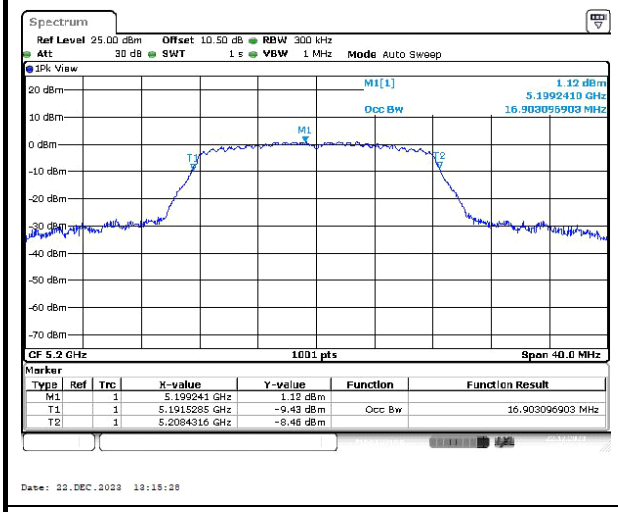
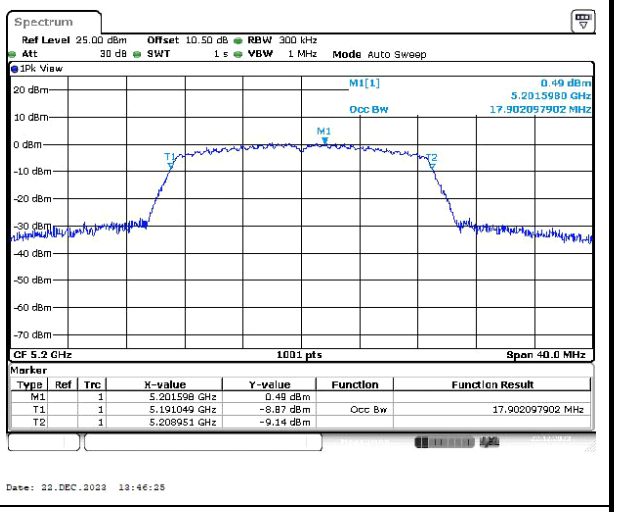
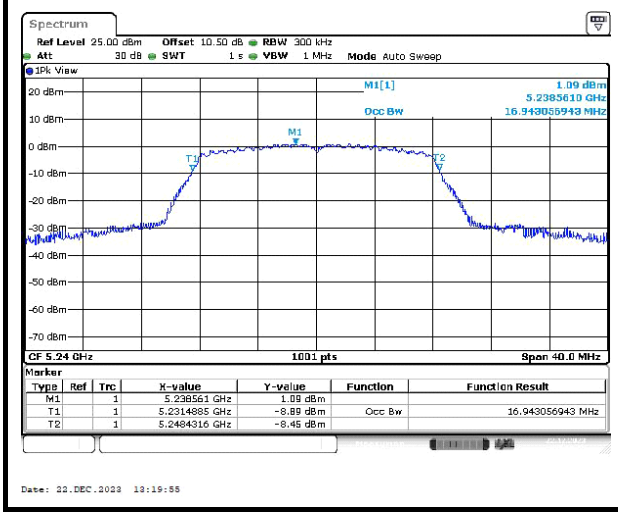
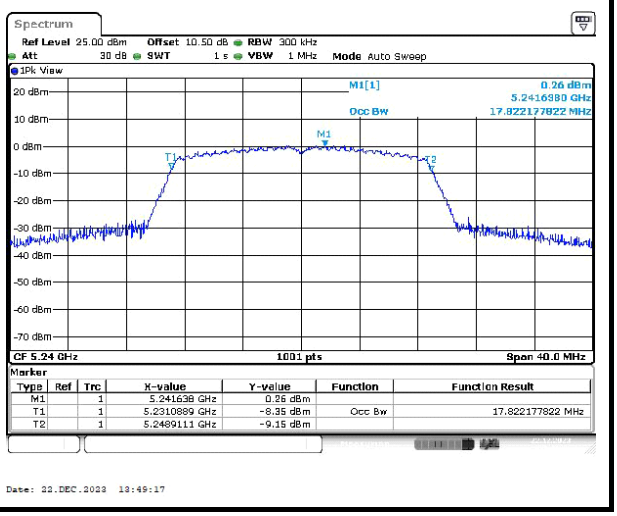
5725 - 5850MHz:

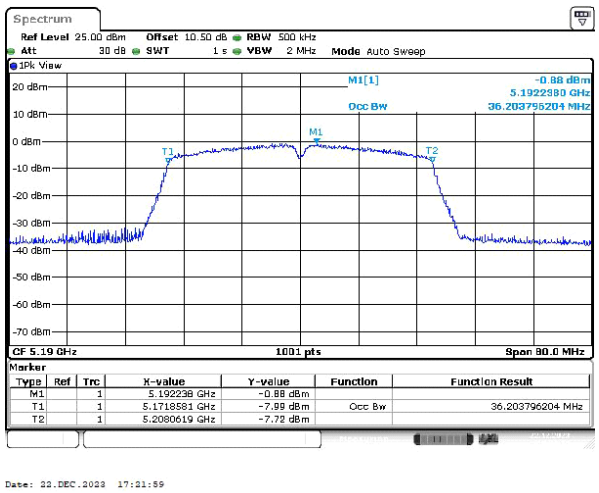
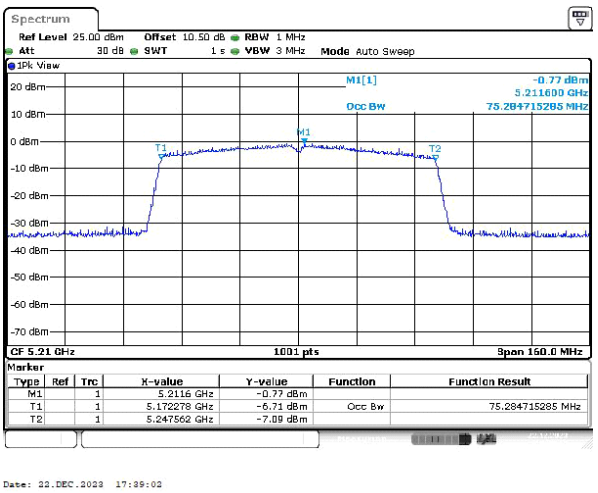
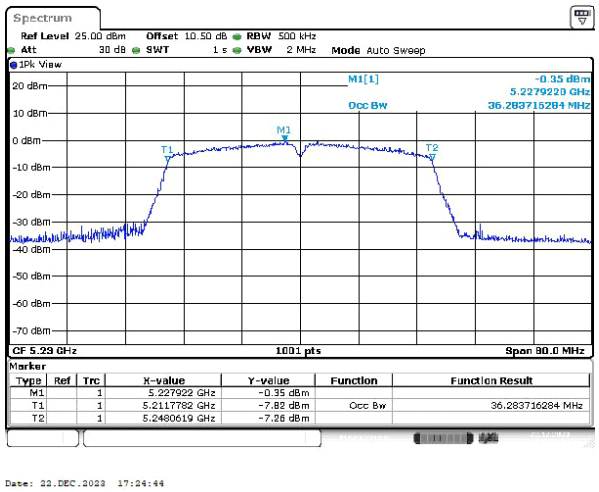
802.11a	802.11 n20
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
High channel	High channel
	

802.11 n40	802.11 ac80
Lowest channel	Middle channel
	
High channel	/
	/

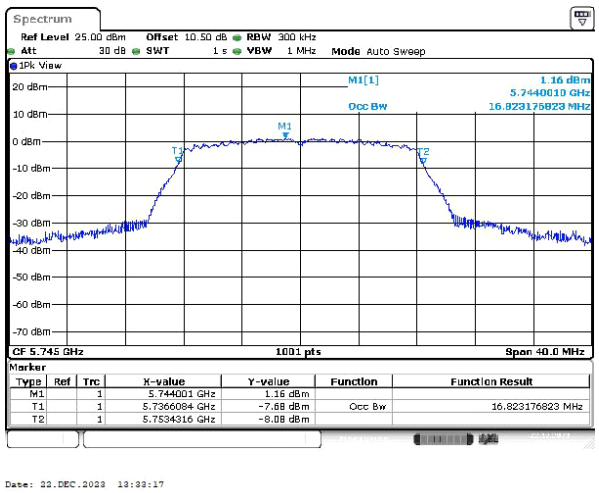
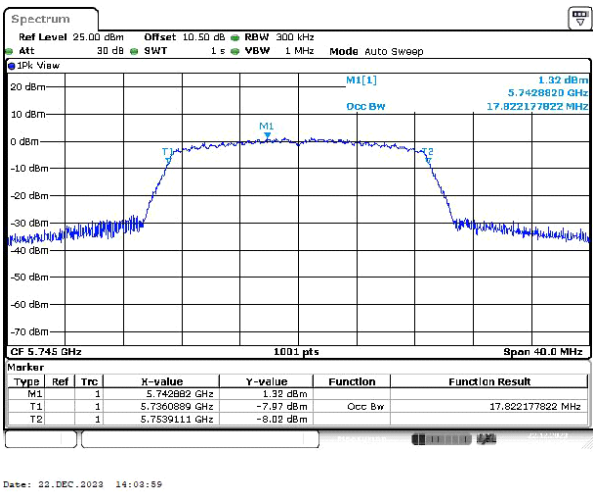
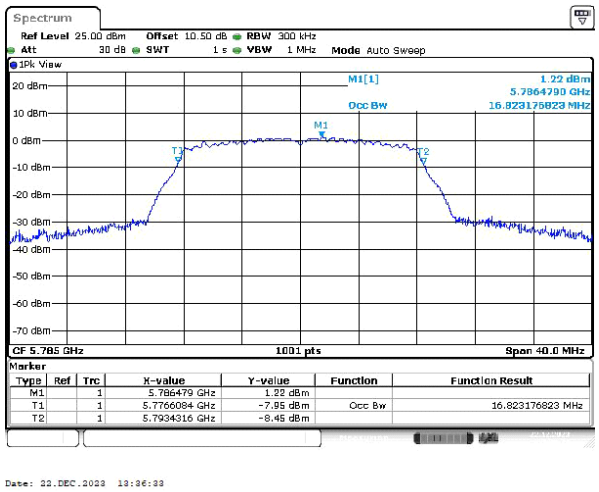
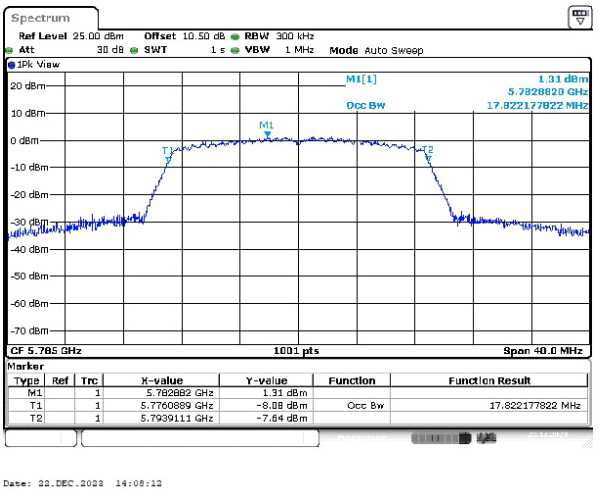
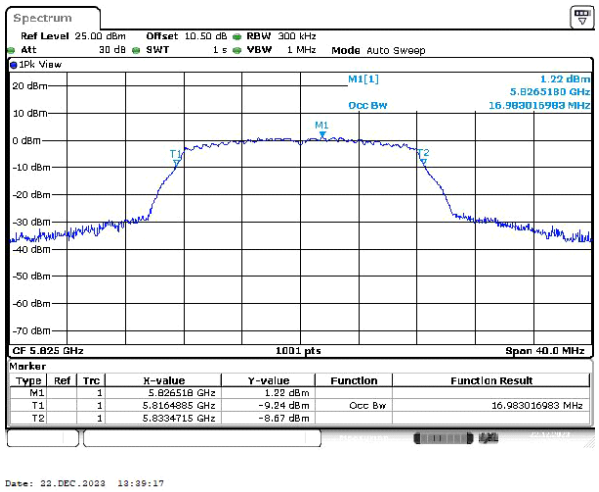
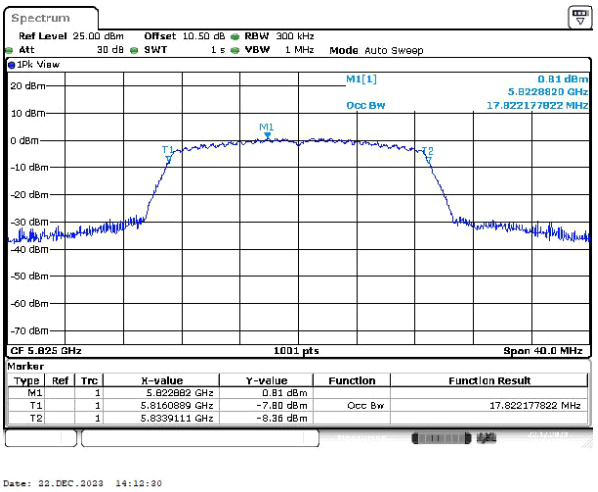
99% Occupied Bandwidth

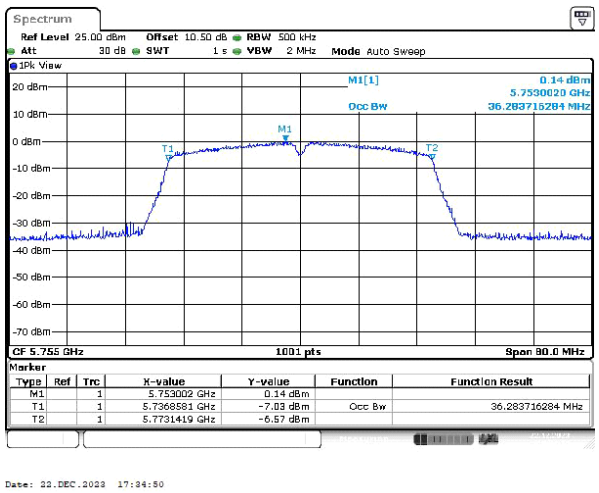
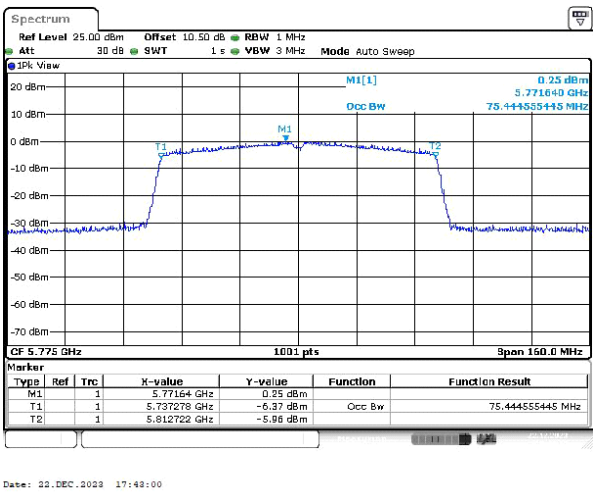
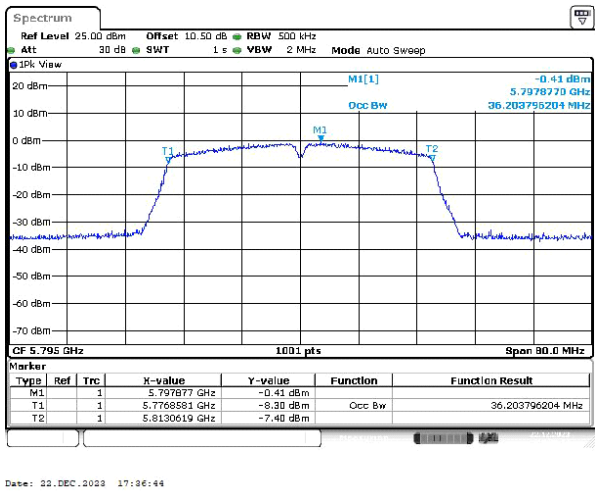
5150- 5250MHz:

802.11a	802.11 n20
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
High channel	High channel
	

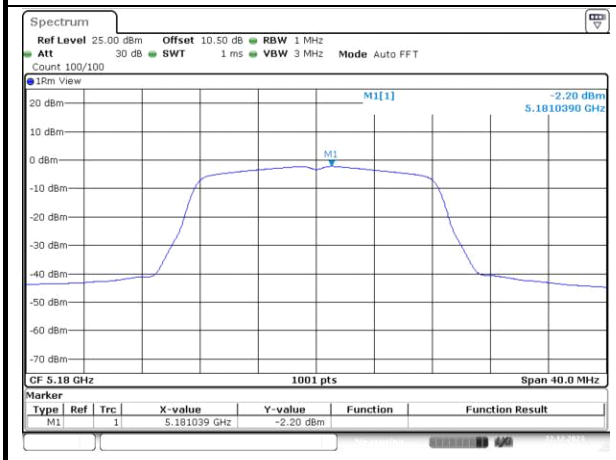
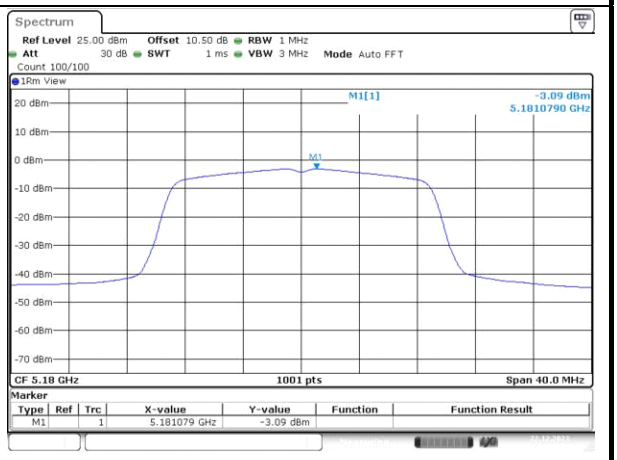
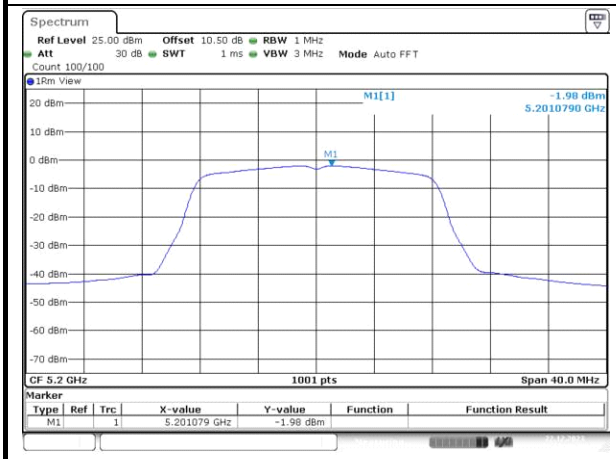
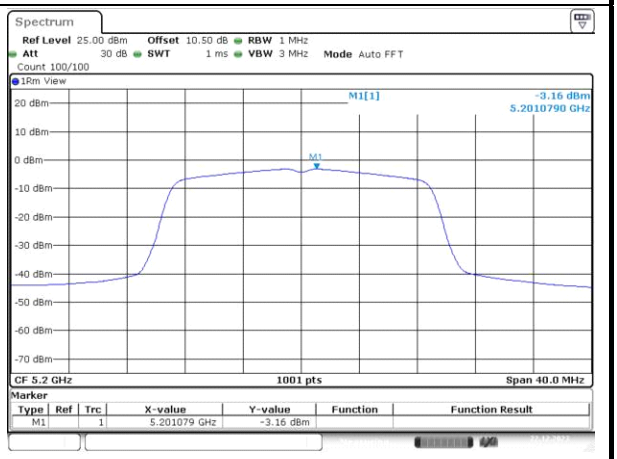
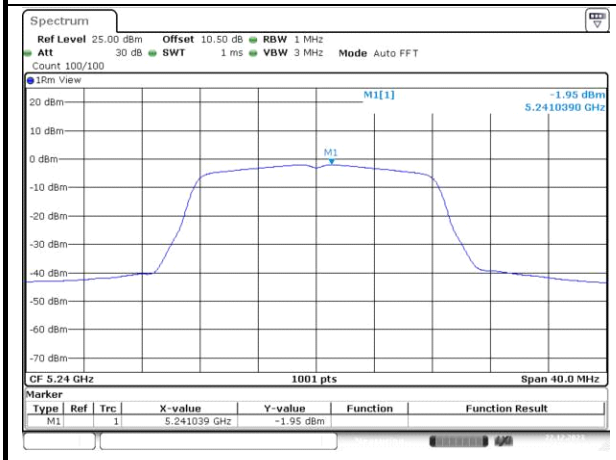
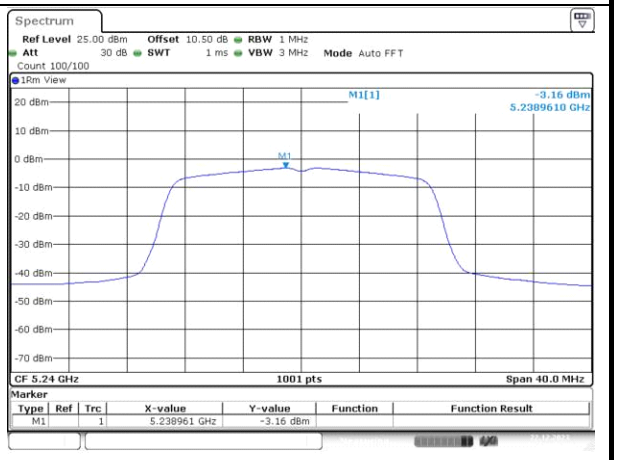
802.11 n40	802.11 ac80
Lowest channel	Middle channel
	
High channel	/
	/

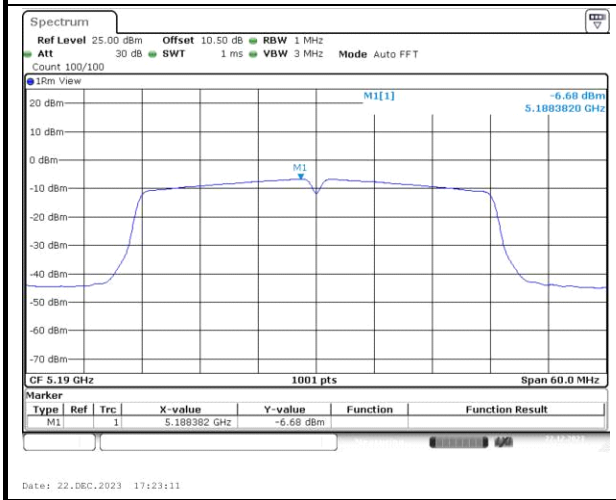
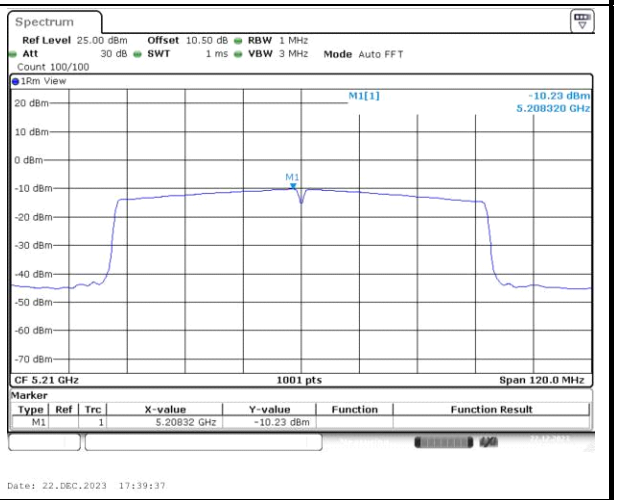
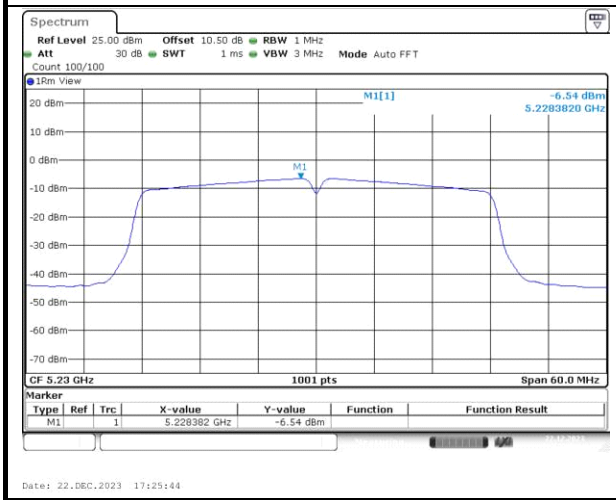
5725 - 5850MHz:

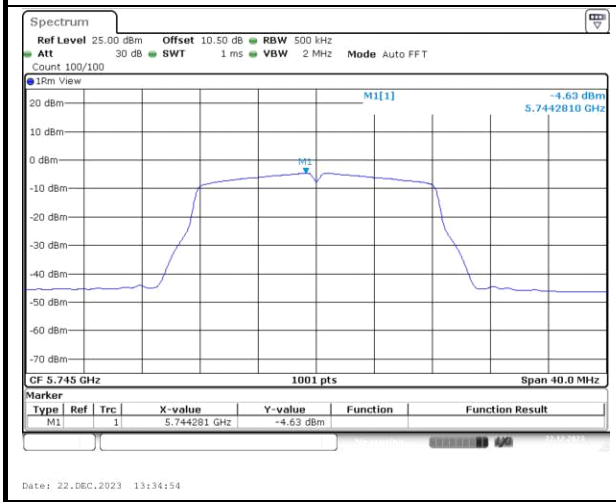
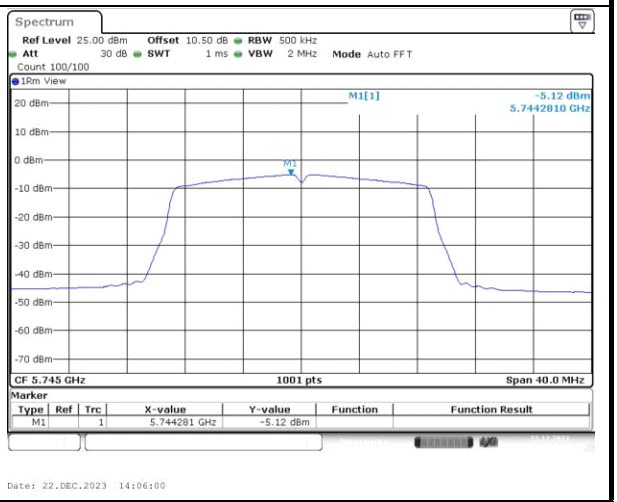
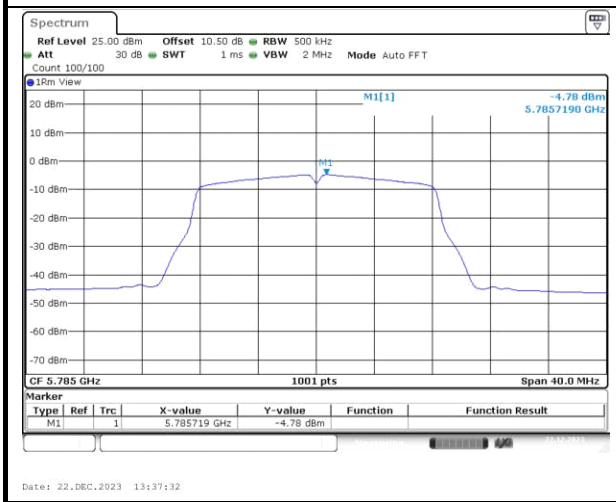
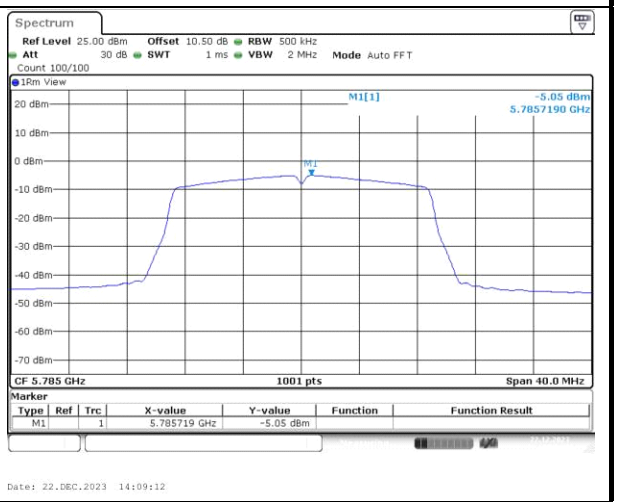
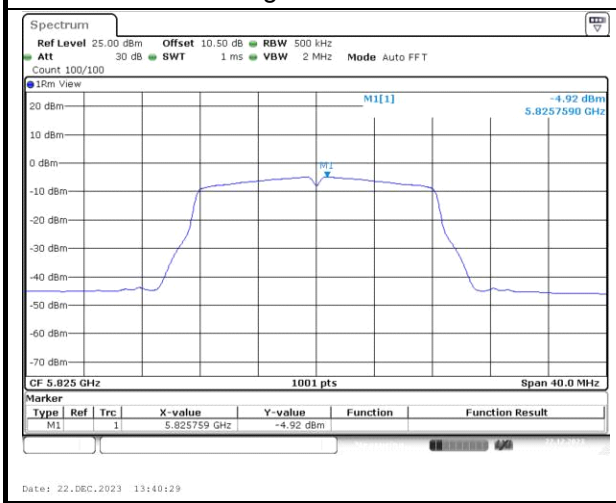
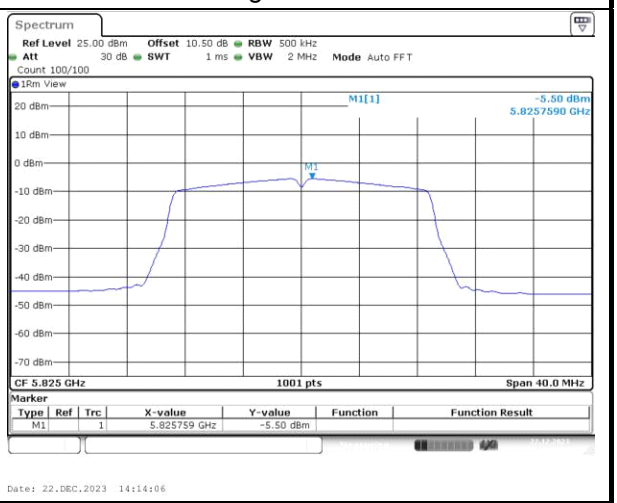
802.11a	802.11 n20
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
High channel	High channel
	

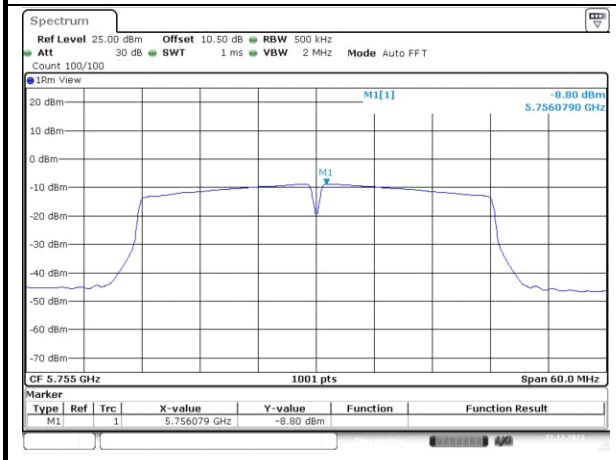
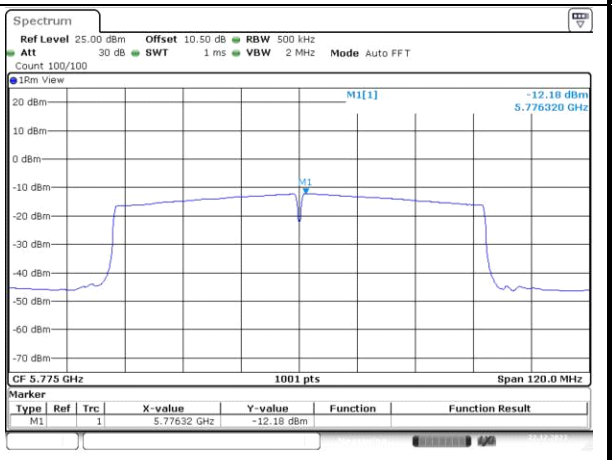
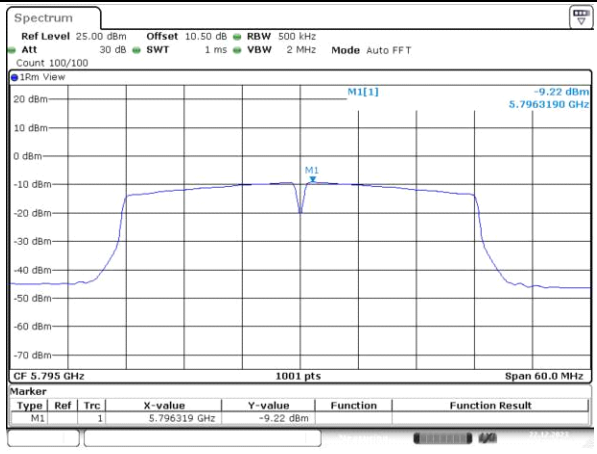
802.11 n40	802.11 ac80
Lowest channel	Middle channel
	
High channel	/
	/

Power Spectral Density

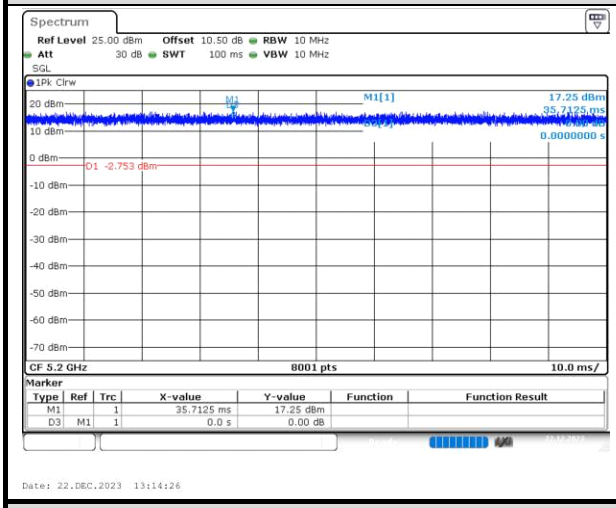
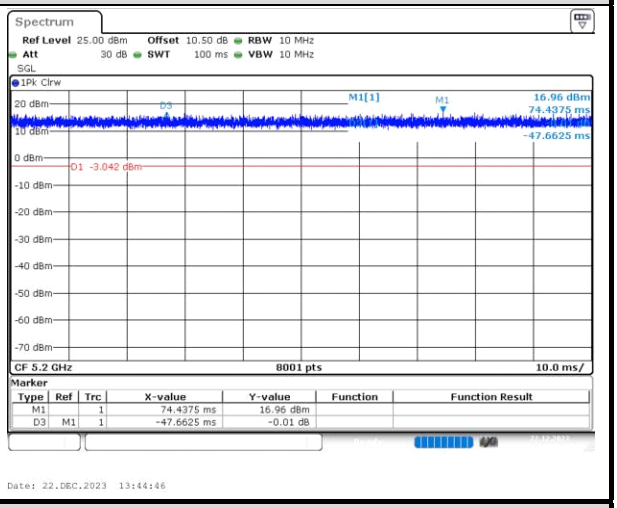
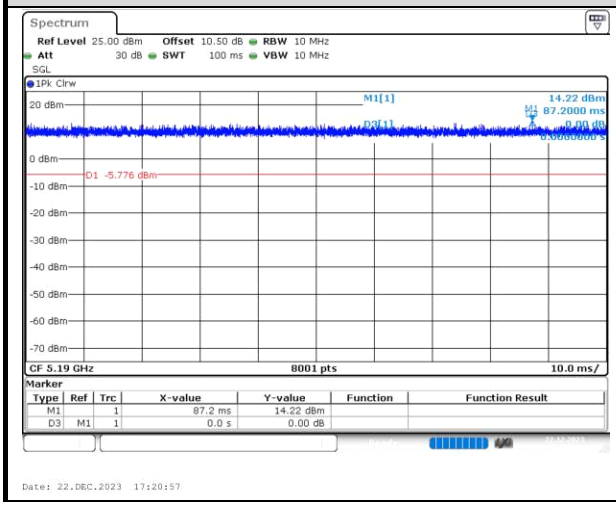
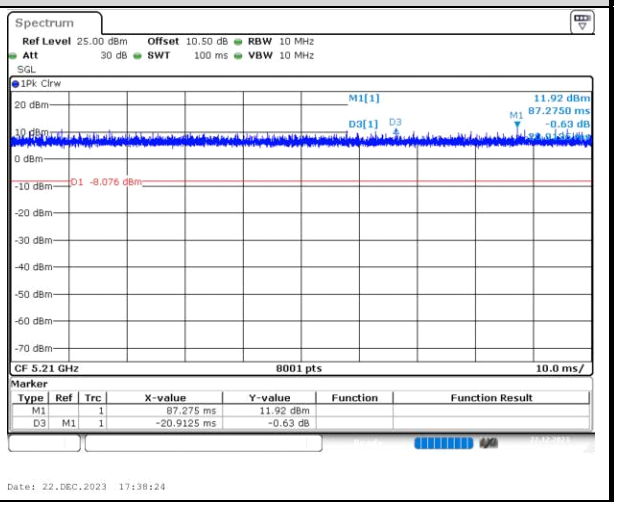
5150- 5250MHz:	
802.11a	**802.11 n20**
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
High channel	High channel
	

802.11 n40	802.11 ac80
Lowest channel	/
	
Highest channel	/
	/

5725 - 5850MHz:	
802.11a	**802.11 n20**
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
High channel	High channel
	

802.11 n40	802.11 ac80
Lowest channel	/
	
High channel	/
	/

Duty Cycle

802.11a	802.11 n20
	
802.11 n40	**802.11 ac80**
	

4 Test Setup Photo

Please refer to the attachment RWAZ202300129 Test Setup photo.

5 E.U.T Photo

Please refer to the attachment RWAZ202300129 External photo and RWAZ202300129 Internal photo.

---End of Report---