

TEST REPORT

Applicant: Quectel Wireless Solutions Co., Ltd.

EUT Description: Wi-Fi & Bluetooth Module

Model: FCE870Q

Brand: QUECTEL

FCC ID: XMR2025FCE870Q

Standards: FCC 47 CFR Part 15 Subpart E

Date of Receipt: 2025/12/29

Date of Test: 2025/12/29 to 2026/03/06

Date of Issue: 2026/03/06

TOWE. Tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. Without written approval of TOWE, the test report shall not be reproduced except in full.



A handwritten signature in black ink, appearing to read 'Jim Huang'.

Jim Huang
Approved By:

A handwritten signature in black ink, appearing to read 'Carey Chen'.

Carey Chen
Reviewed By:

Revision History

Rev.	Issue Date	Description	Revised by
01	2026/03/06	Original	Carey Chen

Summary of Test Results

Clause	FCC Part	Test Items	Test Bands	Result
4.1	§15.203	Antenna Requirement	---	PASS
4.2	§15.407(g)	Frequency Stability	---	---
4.3	§15.207	AC Power Line Conducted Emission	Section 2.2	PASS
4.4	§15.407(a)(1)(iv) §15.407(a)(2) §15.407(a)(3)(i)	Maximum Conducted Output Power	U-NII-1 U-NII-2A U-NII-2C U-NII-3	PASS
4.5	§KDB 789033 II.C.1	Emission Bandwidth	U-NII-1 U-NII-2A U-NII-2C	Reporting purposes only
4.6	§15.407(e)	Minimum Emission Bandwidth	U-NII-3	PASS
4.7	§KDB 789033 II.D	Occupied Bandwidth	U-NII-1 U-NII-2A U-NII-2C U-NII-3	Reporting purposes only
4.8	§15.407(a)(1)(iv) §15.407(a)(2) §15.407(a)(3)(i)	Maximum Power Spectral Density	U-NII-1 U-NII-2A U-NII-2C U-NII-3	PASS
4.9	§15.407(b) §15.209(d)	Unwanted Emissions	U-NII-1 U-NII-2A U-NII-2C U-NII-3	PASS
Test Method: ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024, KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Remark: Pass is EUT meets standard requirements.				

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1 General Description

1.1 Lab Information

1.1.1 Testing Location

These measurements tests were conducted at the Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. Facility located at F401 and F101, Building E, Hongwei Industrial Zone, Liuxian 3rd Road, Bao'an District, Shenzhen, China. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014

Tel.: +86-755-27212361

Contact Email: info@towewireless.com

1.1.2 Test Facility / Accreditations

A2LA (Certificate Number: 7088.01)

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

FCC Designation No.: CN1353

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. Has been recognized as an accredited testing laboratory. Designation Number: CN1353.

ISED CAB identifier: CN0152

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. Has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0152

Company Number: 31000

1.2 Client Information

1.2.1 Applicant

Applicant:	Quectel Wireless Solutions Co., Ltd.
Address:	No. 8 Waipojing Road, Sijing Town, Songjiang District, Shanghai 201601, China

1.2.2 Manufacturer

Manufacturer:	Quectel Wireless Solutions Co., Ltd.
Address:	No. 8 Waipojing Road, Sijing Town, Songjiang District, Shanghai 201601, China

1.3 Product Information

EUT Description:	Wi-Fi & Bluetooth Module			
Model:	FCE870Q			
Brand:	QUECTEL			
Hardware Version:	R1.0			
Software Version:	NA			
SN.:	RF Conducted	E1Y25JS3K000101		
	RSE & AC power line	E1Y25JS3K000117		
Modulation Type:	802.11a/n:	OFDM-BPSK, QPSK, 16QAM, 64QAM		
	802.11ac:	OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM		
	802.11ax:	OFDM/OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM		
	802.11be:	OFDM/OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM		
Smart System:	☐ SISO	802.11a/n/ac/ax/be	/	
	☒ MIMO	802.11n/ac/ax/be	(2)TX(2)RX	
	☒ CDD	802.11a	(2)TX(2)RX	
EUT Function:	☒ Client	☐ Outdoor AP	☐ Indoor AP ☐ Fixed P2P AP	
DFS Function:	☐ Master ☐ Slave with radar detection ☒ Slave without radar detection			
Frequency Range:	U-NII-1:	5150 ~ 5250MHz		
	U-NII-2A:	5250 ~ 5350MHz		
	U-NII-2C:	5470 ~ 5725MHz		
	U-NII-3:	5725 ~ 5850MHz		
Partial RU:	☒ Support	☐ No Support		
Channel Frequency:	20M BWch.:	U-NII-1:	5180 ~ 5240MHz	4 Channels
		U-NII-2A:	5260 ~ 5320MHz	4 Channels
		U-NII-2C:	5500 ~ 5700MHz	11 Channels
		U-NII-3:	5745 ~ 5825MHz	5 Channels
		Straddle Channel:	5720MHz	1 Channel
	40M BWch.:	U-NII-1:	5190 ~ 5230MHz	2 Channels
		U-NII-2A:	5270 ~ 5310MHz	2 Channels
		U-NII-2C:	5510 ~ 5670MHz	5 Channels
		U-NII-3:	5755 ~ 5795MHz	2 Channels
		Straddle Channel:	5710MHz	1 Channel
	80M BWch.:	U-NII-1:	5210MHz	1 Channel
		U-NII-2A:	5290MHz	1 Channel
		U-NII-2C:	5530 ~ 5610MHz	2 Channels
		U-NII-3:	5775MHz	1 Channel
		Straddle Channel:	5690MHz	1 Channel

	160M BWch.:	U-NII-2A:	5250MHz	1 Channel
		U-NII-2C:	5570MHz	1 Channel
Antenna Type:	☒ External, ☐ Integrated			
Antenna Gain:	Frequency Range	Ant1 (dBi)	Ant2 (dBi)	
	U-NII-1	-0.7	-0.7	
	U-NII-2A	-0.8	-0.8	
	U-NII-2C	-1.2	-1.2	
	U-NII-3	-1.5	-1.5	
Remark: The above EUT's information was declared by applicant, please refer to the specifications or user's manual for more detailed description.				

2 Test Configuration

2.1 Test Channel

Frequency Channels for U-NII-1							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180MHz	40	5200MHz	44	5220MHz	48	5240MHz
38	5190MHz	42	5210MHz	46	5230MHz	/	
Remark: 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:							
Modulation Type		Test Channel		Test Frequency			
802.11a/n20 /ac20/ax20/be20		The Lowest channel (CH36)		5180MHz			
		The Middle channel (CH40)		5200MHz			
		The Highest channel (CH48)		5240MHz			
Modulation Type		Test Channel		Test Frequency			
802.11n40 /ac40/ax40/be40		The Lowest channel (CH38)		5190MHz			
		The Highest channel (CH46)		5230MHz			
Modulation Type		Test Channel		Test Frequency			
802.11 ac80/ax80/be80		The Middle channel (CH42)		5210MHz			

Frequency Channels for U-NII-2A							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
50	5250MHz	54	5270MHz	58	5290MHz	62	5310MHz
52	5260MHz	56	5280MHz	60	5300MHz	64	5320MHz
Remark: 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:							
Modulation Type	Test Channel		Test Frequency				
802.11a/n20 /ac20/ax20/be20	The Lowest channel (CH52)		5260MHz				
	The Middle channel (CH60)		5300MHz				
	The Highest channel (CH64)		5320MHz				
Modulation Type	Test Channel		Test Frequency				
802.11n40 /ac40/ax40/be40	The Lowest channel (CH54)		5270MHz				
	The Highest channel (CH62)		5310MHz				
Modulation Type	Test Channel		Test Frequency				
802.11 ac80/ax80/be80	The Middle channel (CH58)		5290MHz				
Modulation Type	Test Channel		Test Frequency				
802.11 ac160/ax160/be160	The Middle channel (CH50)		5250MHz				

Frequency Channels for U-NII-2C							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
100	5500MHz	110	5550MHz	120	5600MHz	132	5660MHz
102	5510MHz	112	5560MHz	122	5610MHz	134	5670MHz
104	5520MHz	114	5570MHz	124	5620MHz	136	5680MHz
106	5530MHz	116	5580MHz	126	5630MHz	140	5700MHz
108	5540MHz	118	5590MHz	128	5640MHz	/	

Remark:

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:

Modulation Type	Test Channel	Test Frequency
802.11a/n20 /ac20/ax20/be20	The Lowest channel (CH100)	5500MHz
	The Middle channel (CH116)	5580MHz
	The Highest channel (CH140)	5700MHz
Modulation Type	Test Channel	Test Frequency
802.11n40 /ac40/ax40/be40	The Lowest channel (CH102)	5510MHz
	The Middle channel (CH118)	5590MHz
	The Highest channel (CH134)	5670MHz
Modulation Type	Test Channel	Test Frequency
802.11 ac80/ax80/be80	The Lowest channel (CH106)	5530MHz
	The Highest channel (CH122)	5610MHz
Modulation Type	Test Channel	Test Frequency
802.11 ac160/ax160/be160	The Middle channel (CH114)	5570MHz

Frequency Channels for U-NII-3							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745MHz	153	5765MHz	157	5785MHz	161	5805MHz
151	5755MHz	155	5775MHz	159	5795MHz	165	5825MHz

Remark:

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:

Modulation Type	Test Channel	Test Frequency
802.11a/n20 /ac20/ax20/be20	The Lowest channel (CH149)	5745MHz
	The Middle channel (CH157)	5785MHz
	The Highest channel (CH165)	5825MHz
Modulation Type	Test Channel	Test Frequency
802.11n40 /ac40/ax40/be40	The Lowest channel (CH151)	5755MHz
	The Highest channel (CH159)	5795MHz
Modulation Type	Test Channel	Test Frequency
802.11 ac80/ax80/be80	The Middle channel (CH155)	5775MHz

Straddle Channel		
Modulation Type	Test Channel	Test Frequency
802.11a/n20 /ac20/ax20/be20	The channel (CH144)	5720MHz
Modulation Type	Test Channel	Test Frequency
802.11n40 /ac40/ax40/be40	The channel (CH142)	5710MHz
Modulation Type	Test Channel	Test Frequency
802.11 ac80/ax80/be80	The channel (CH138)	5690MHz
Modulation Type	Test Channel	Test Frequency
802.11 ac160/ax160/be160	The channel (CH50)	5250MHz

2.2 Worst-case configuration and Mode

Modulation Type	SISO - Data Rate	CDD/MIMO(2)TX(2)RX Data Rate
802.11a	N/A	12 Mbps
802.11n20	N/A	MCS0 (13 Mbps)
802.11n40	N/A	MCS0 (27 Mbps)
802.11ac20	N/A	MCS0 (13 Mbps)
802.11ac40	N/A	MCS0 (27 Mbps)
802.11ac80	N/A	MCS0 (58.6 Mbps)
802.11ac160	N/A	MCS0 (117 Mbps)
802.11ax20	N/A	MCS0 (17.2 Mbps)
802.11ax40	N/A	MCS0 (34.4 Mbps)
802.11ax80	N/A	MCS0 (72.0 Mbps)
802.11ax160	N/A	MCS0 (144.2 Mbps)
802.11be20	N/A	MCS0 (17.2 Mbps)
802.11be40	N/A	MCS0 (34.4 Mbps)
802.11be80	N/A	MCS0 (72.0 Mbps)
802.11be160	N/A	MCS0 (144.2 Mbps)
Transmitting mode:	Keep the EUT was programmed to be in continuously transmitting mode.	
Normal Link:	Keep the EUT operation to normal function.	

Remark: For 802.11n20/40, 802.11ac20/40/80/160, 802.11ax20/40/80/160 and 802.11be20/40/80/160 mode, the whole testing have assessed only, 802.11ac20/40/80/160, 802.11be20/40/80/160 by referring to their higher output power.

Test RU Types & Channel Bandwidth:

RU Types	be20	be40	be80	be160
26-tone RU	26 tone_0 26 tone_8	/	/	/
52-tone RU	52 tone_37 52 tone_40	/	/	/
106-tone RU	106 tone_53 106 tone_54	/	/	/
242-tone RU	/	242 tone 61 242 tone 62	/	/
484-tone RU	/	/	484 tone 65 484 tone 66	/
996-tone RU	/	/	/	996 tone 67 996 tone 68

2.3 Support Unit used in test

Description	Manufacturer	Model	Serial Number
Development Board*	QUECTEL	FCE870Q-M.2	E1Y25JU4K000027
Development Board*	QUECTEL	RK3568-WF-EVB	D1C25H22Y000017
Laptop	Lenovo	Thinkbook 14 G4+IAP	YX05AZ13
Remark: *the information are provided by applicant.			

2.4 Test Environment

Temperature:	Normal: 15°C ~ 35°C
Humidity:	45 ~ 56 % RH Ambient
Voltage:	DC 3.3V
AC Voltage:	AC 120V/60Hz for Conducted Emissions
Remark: The testing environment is within the scope of the EUT user manual and meets the requirements of the standard testing environment.	

2.5 Test RF Cable

For all conducted test items: The offset level is set spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

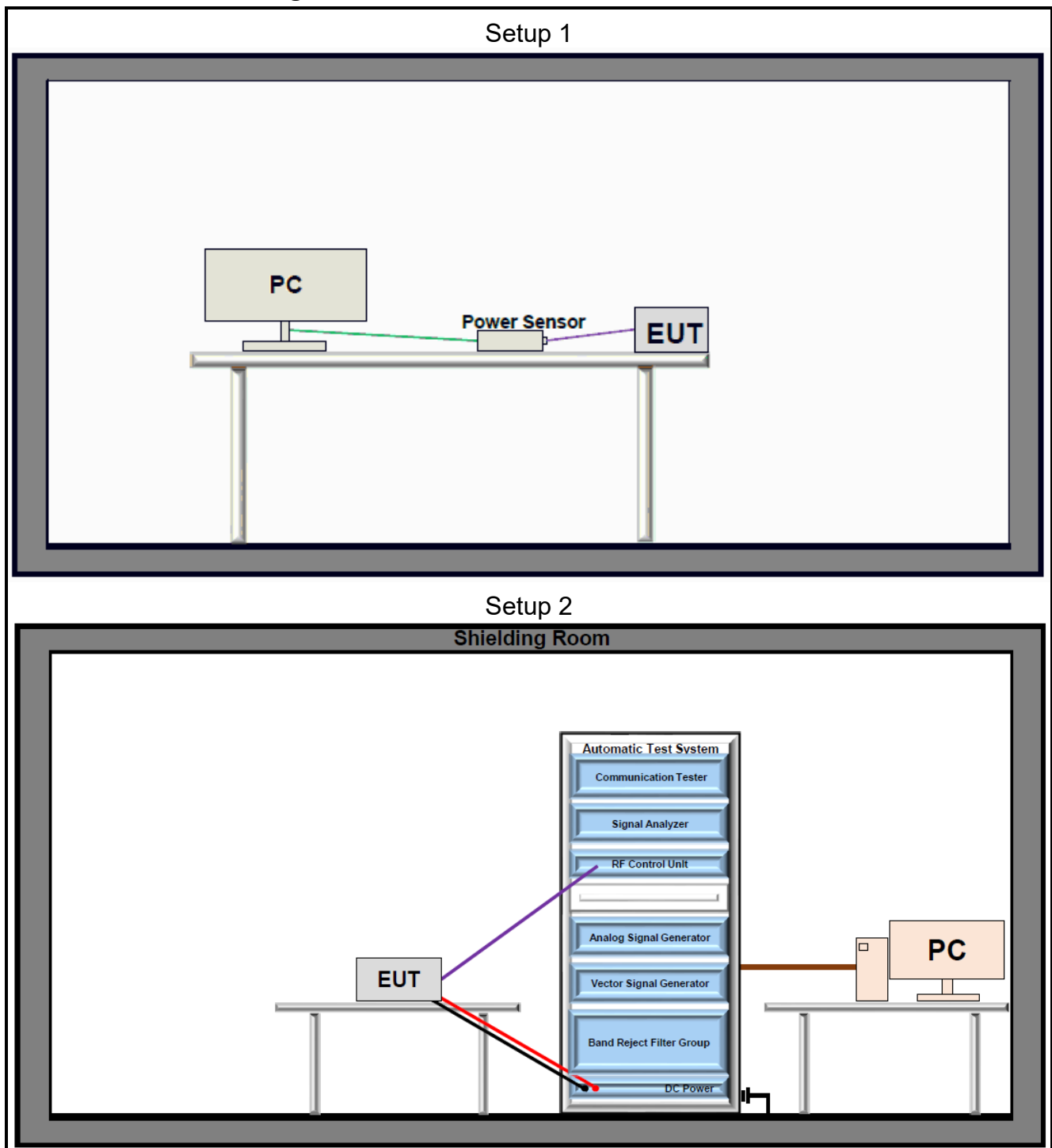
Offset = RF cable loss + attenuator factor.

2.6 Modifications

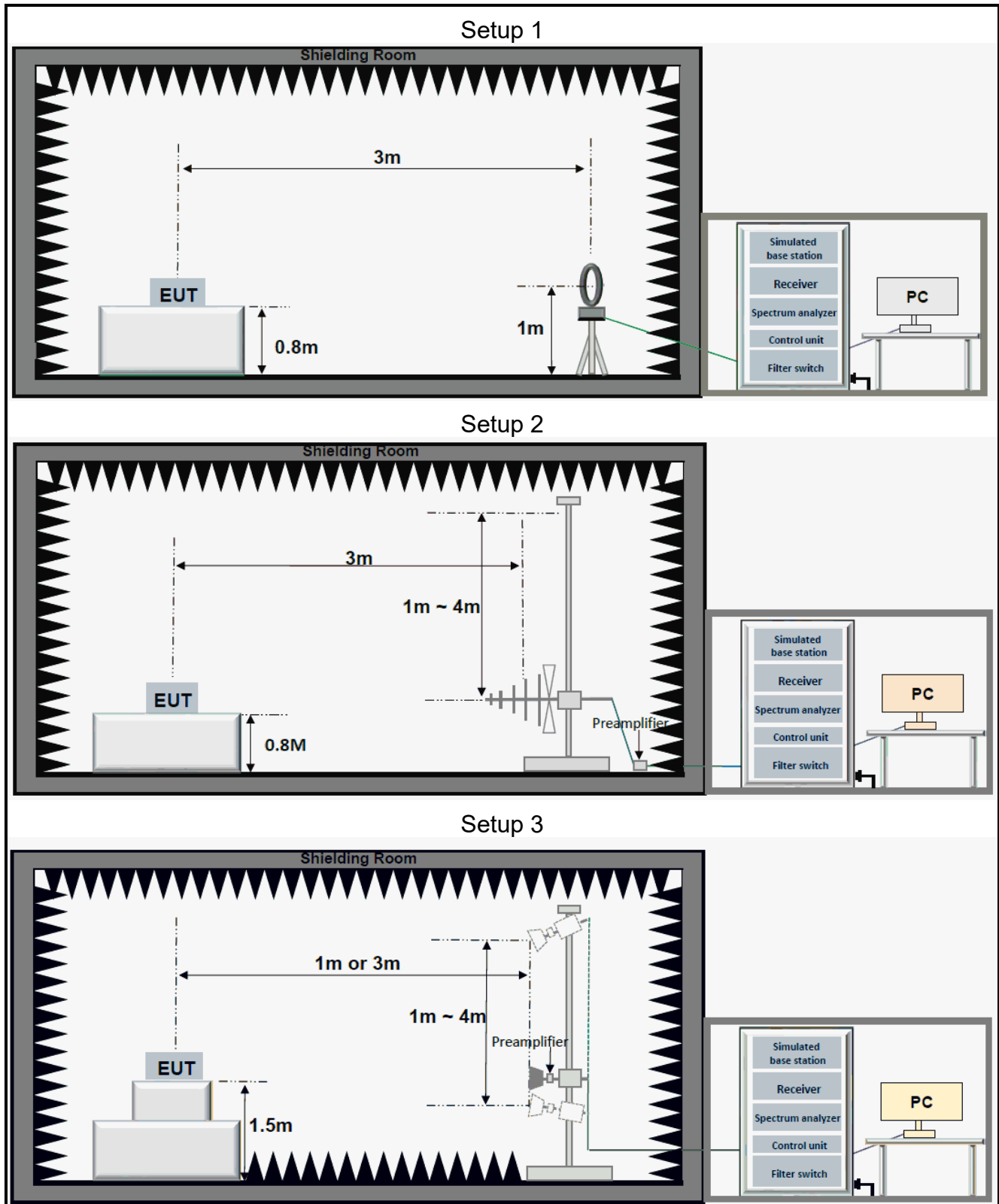
No modifications were made during testing.

2.7 Test Setup Diagram

2.7.1 Conducted Configuration



2.7.2 Radiated Configuration



Directional gain calculations:

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

If all antennas have the same gain, G_{ANT} , Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

- For power spectral density (PSD) measurements on all devices

$$\text{Array Gain} = 10 \log(N_{ANT}/N_{SS}=1) \text{ dB}$$

- For power measurements on IEEE 802.11 devices:

$$\text{Array Gain} = 0 \text{ dB (i.e., no array gain) for } N_{ANT} \leq 4;$$

$$\text{Array Gain} = 0 \text{ dB (i.e., no array gain) for channel widths } \geq 40 \text{ MHz for any } N_{ANT};$$

$$\text{Array Gain} = 5 \log(N_{ANT}/N_{SS}=1) \text{ dB or } 3 \text{ dB, whichever is less, for 20-MHz channel widths with } N_{ANT} \geq 5.$$

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain.

Unequal antenna gains, with equal transmit powers. For antenna gains given by $G_1, G_2, \dots, G_N$ dBi

- If transmit signals are correlated, then

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

- If all transmit signals are completely uncorrelated, then

$$\text{Directional gain} = 10 \log[(10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_N/10}) / N_{ANT}] \text{ dBi}$$

The Power and PSD limit should be modified if the directional gain of EUT is over 6dBi.

The EUT supports CDD System.

Transmit signals are completely correlated						
Operation Band	ANT Gain1 (dBi)	ANT Gain2 (dBi)	Directional gain For Power (dBi)	Directional gain For PSD (dBi)	Power Limit Reduction (dBm)	PSD Limit Reduction (dBm)
U-NII-1	-0.7	-0.7	-0.7	2.31	0	0
U-NII-2A	-0.8	-0.8	-0.8	2.21	0	0
U-NII-2C	-1.2	-1.2	-1.2	1.81	0	0
U-NII-3	-1.5	-1.5	-1.5	1.51	0	0

3 Equipment and Measurement Uncertainty

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, whichever is less, and where applicable is traceable to recognized national standards.

3.1 Test Equipment List

RF Conducted					
Description	Manufacturer	Model	S.N.	Last Due	Cal Due
Signal Analyzer	Keysight	N9020A	US46470429	2025/03/14	2026/03/13
Signal Generator	R&S	SMR20	101027	2025/03/11	2026/03/10
Vector Signal Generator	R&S	SMM100A	549353	2025/05/29	2026/05/28
Power Sensor	Anritsu	MA24408A	12520	2025/05/29	2026/05/28
RF Control Unit	Tonscend	JS0806-2	23C80620671	2025/05/29	2026/05/28
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY63440541	2025/05/29	2026/05/28
Attenuator	Yin Saige	SMA-10dBm	N/A	N/A	N/A
Measurement Software	Tonscend	TS1120-3	10659	N/A	N/A

Radiated Emission					
Description	Manufacturer	Model	S.N.	Last Due	Cal Due
Biconic Logarithmic Periodic Antennas	Tonscend	BLA32-30	806HA003608251015	2025/12/13	2028/12/12
Double-Ridged Horn Antennas	Tonscend	HA32-18	80SBLA001011251010	2025/12/13	2028/12/12
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	1290	2023/06/25	2026/06/24
Loop Antenna	Schwarzbeck	FMZB 1519C	1519C-028	2023/06/29	2026/06/28
Signal Analyzer	Keysight	N9020A	MY57120015	2025/03/11	2026/03/10
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY63440541	2025/05/29	2026/05/28
EMI Tester Receiver	Rohde & Schwarz	ESR7	102719	2025/05/29	2026/05/28
Low Noise Amplifier*	Tonscend	TAP9K3G40	AP23A8060273	2026/01/19	2028/01/18
Low Noise Amplifier*	Tonscend	TAP01018050	AP22G806258	2026/01/19	2028/01/18
Low Noise Amplifier	Tonscend	TAP18040048	AP22G806247	2025/03/11	2027/03/10
Hygrometer	BINGYU	HTC-1	N/A	2025/07/25	2026/07/24
Radio Frequency Switch	Townshend	JS0806s	806JSSX019811251028	N/A	N/A
Test Software	Tonscend	TS+	Version: 5.0.0	N/A	N/A
N/A: Not applicable, confirmed internally by the laboratory					
*There were no testing before 2026/01/19.					

Conducted Emission					
Description	Manufacturer	Model	S.N.	Last Due	Cal Due
EMI Tester Receiver	Rohde & Schwarz	ESR3	103108	2025/05/29	2026/05/28
LISN*	Rohde & Schwarz	ENV 216	102836	2025/01/04	2026/01/03
				2026/01/19	2027/01/18
Test software	Rohde & Schwarz	ELEKTRA V4.61	N/A	N/A	N/A
N/A: Not applicable, confirmed internally by the laboratory					
*There was no testing between 2026/01/03~2026/01/19.					

3.2 Measurement Uncertainty

Parameter	U _{lab}
Frequency Error	679.98Hz
Output Power	0.76dB
Conducted Spurious Emissions	2.22dB
Conducted Emissions(150kHz~30MHz)	2.43dB
Radiated Emissions(9kHz~30MHz)	2.40dB
Radiated Emissions(30MHz~1000MHz)	4.66dB
Radiated Emissions(1GHz~18GHz)	5.42dB
Radiated Emissions(18GHz~40GHz)	5.46dB

Uncertainty figures are valid to a confidence level of 95%

4 Test Results

4.1 Antenna Requirement

Standard Applicable:	47 CFR Part 15E Section 15.203
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
The antenna gain and type as provided by the manufacturer are as follows: The antenna Type is External. With Antenna gain is U-NII-1: -0.7dBi(Ant1); -0.7dBi(Ant2); U-NII-2A: -0.8dBi(Ant1); -0.8dBi(Ant2); U-NII-2C: -1.2dBi(Ant1); -1.2dBi(Ant2); U-NII-3: -1.5dBi(Ant1); -1.5dBi(Ant2); Antenna Anti-Replacement Construction: An embedded-in antenna design is used.	

4.2 Frequency Stability

Standard Applicable:	47 CFR Part 15E Section 15.407(g)
Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.	

4.3 AC Power Line Conducted Emissions

Limits

Frequency range (MHz)	Limit (dBμV)	
	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.

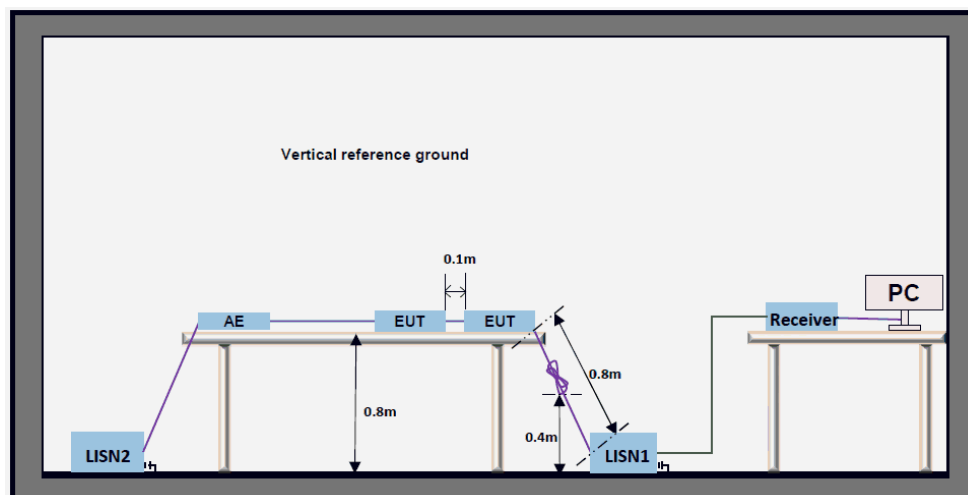
Test Procedure

ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024, Section 6.2.

Test Settings

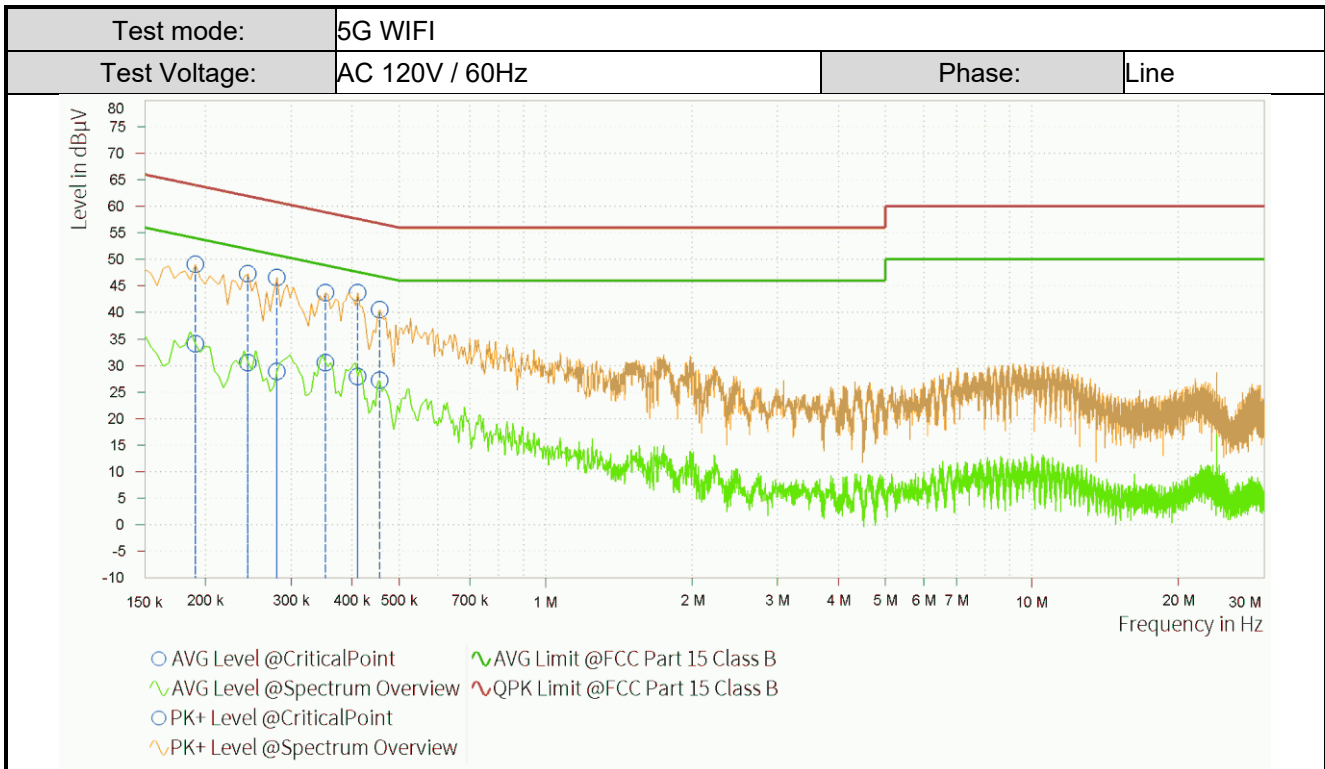
1. The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
2. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.
3. The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
4. Set the test-receiver system to Peak detect function and specified bandwidth (if bandwidth =9kHz) with maximum hold mode. Then measurement is also conducted by average detector and Quasi-Peak detector function respectively
5. Both sides of AC 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.

Test Setup



Measuring Instruments

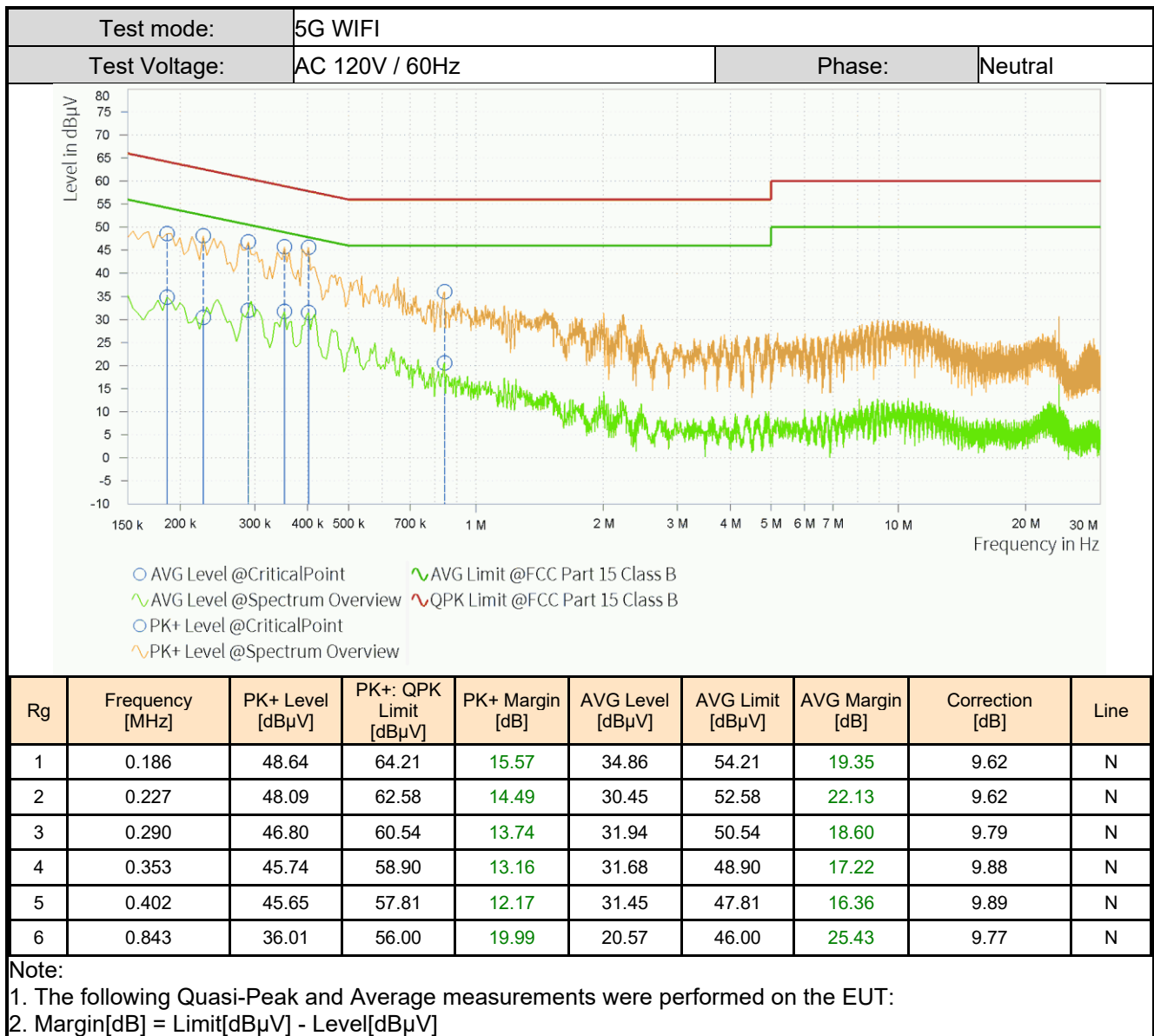
The measuring equipment is listed in the section 3.1 of this test report.

Test Result:

Rg	Frequency [MHz]	PK+ Level [dBμV]	PK+: QPK Limit [dBμV]	PK+ Margin [dB]	AVG Level [dBμV]	AVG Limit [dBμV]	AVG Margin [dB]	Correction [dB]	Line
1	0.191	49.06	64.01	14.95	34.10	54.01	19.92	9.55	L1
2	0.245	47.27	61.94	14.67	30.49	51.94	21.45	9.49	L1
3	0.281	46.58	60.80	14.22	28.90	50.80	21.91	9.69	L1
4	0.353	43.68	58.90	15.22	30.60	48.90	18.31	9.78	L1
5	0.411	43.72	57.63	13.91	27.87	47.63	19.76	9.91	L1
6	0.456	40.49	56.77	16.28	27.20	46.77	19.57	9.88	L1

Note:

- The following Quasi-Peak and Average measurements were performed on the EUT:
- $\text{Margin[dB]} = \text{Limit[dB}\mu\text{V]} - \text{Level[dB}\mu\text{V]}$



4.4 Maximum Conducted Output Power

Limits

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

Test Procedure

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.E.3.b (Other Channel)

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.E.2.b(Straddle Channel)

Test Settings

1. PM-G:
Set to the maximum power setting and enable the EUT transmit continuously.
The power output was measured on the EUT antenna port using RF Cable with an attenuator connected to a power sensor. Output power was read directly from the power sensor.
Measure and record the results in the test report.
2. SA:
RBW = 1MHz
VBW $\geq$ 3MHz
Span = Encompass the EBW (or, alternatively, the entire 99% occupied bandwidth)
Sweep = Auto
Detector = power averaging (rms)

Test Setup

Refer to section 2.7.1 Setup 1 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.5 Emission Bandwidth

Limits

None, for reporting purposes only.

Test Procedure

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.C.1.

Test Settings

1. Set to the maximum power setting and enable the EUT transmit continuously.
2. The transmitter output is connected to a spectrum analyzer:
3. RBW = 1% - 5%(99%BW)
4. VBW = 3 times the RBW
5. Sweep = Auto
6. Detector = Peak
7. Trace = Max hold
8. The trace was allowed to stabilize
9. Measure and record the results in the test report.

Test Notes

The signal analyzers' automatic bandwidth measurement capability of the spectrum analyzer was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to X= 26. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.

Test Setup

Refer to section 2.7.1 Setup 2 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.6 Minimum Emission Bandwidth

Limits

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.

Test Procedure

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.C.2.

Test Settings

1. Set to the maximum power setting and enable the EUT transmit continuously.
2. The transmitter output is connected to a spectrum analyzer:
3. RBW = 100kHz(DTS)
4. VBW = 3 times the RBW
5. Sweep = Auto
6. Detector = Peak
7. Trace = Max hold
8. The trace was allowed to stabilize
9. Measure and record the results in the test report.

Test Notes

Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Test Setup

Refer to section 2.7.1- Setup 2 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.7 Occupied Bandwidth

Limits

None, for reporting purposes only.

Test Procedure

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.D.

Test Settings

1. Set to the maximum power setting and enable the EUT transmit continuously.
2. The transmitter output is connected to a spectrum analyzer:
3. RBW = 1% - 5%(99%BW)
4. VBW = 3 times the RBW
5. Sweep = Auto
6. Detector = Peak
7. Trace = Max hold
8. The trace was allowed to stabilize
9. Measure and record the results in the test report.

Test Setup

Refer to section 2.7.1- Setup 2 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.8 Maximum Power Spectral Density

Limits

For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1-megahertz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1-megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

Test Procedure

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.F

Test Settings

1. Set to the maximum power setting and enable the EUT transmit continuously
2. The transmitter output is connected to a spectrum analyzer
3. RBW = 1MHz (for 5.15–5.25 GHz, 5.25–5.35 GHz, and 5.47–5.725 GHz)
4. RBW = 500kHz (for 5.725–5.85 GHz)
5. VBW $\geq$ 3 times RBW
6. Sweep = Auto
7. Detector = Peak
8. Trace = Max hold
9. The trace was allowed to stabilize
10. Measure and record the results in the test report.

Test Setup

Refer to section 2.7.1- Setup 2 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

4.9 Unwanted Emissions

Limits

Spurious emissions are permitted in an of the frequency bands:

MHz	MHz	MHz	MHz	GHz	GHz
0.090 - 0.110	12.29 - 12.293	149.9 - 150.05	1660 - 1710	4.5 - 5.15	14.47 - 14.5
0.495 - 0.505	12.51975 - 12.52025	156.52475 - 156.52525	1718.8 - 1722.2	5.35 - 5.46	15.35 - 16.2
2.1735 - 2.1905	12.5767 - 12.57725	156.7 - 156.9	2200 - 2300	7.25 - 7.75	17.7 - 21.4
4.125 - 128	13.36 - 13.41	162.0125 - 167.17	2310 - 2390	8.025 - 8.5	22.01 - 23.12
4.17725 - 4.17775	16.42 - 16.423	167.72 - 173.2	2483.5 - 2500	9.0 - 9.2	23.6 - 24.0
4.20725 - 4.20775	16.69475 - 16.69525	240 - 285	2655 - 2900	9.3 - 9.5	31.2 - 31.8
6.215 - 6.218	1680425 - 1680475	322 - 335.4	3260 - 3267	10.6 - 12.7	36.43 - 36.5
6.26775 - 6.26825	25.5 - 25.67	399.9 - 410	3332 - 3339	13.25 - 13.4	
6.31175 - 6.31225	37.5 - 38.25	608 - 614	3345.8 - 3358		
8.291 - 8.294	73 - 74.6	960 - 1240	3600 - 4400		
8.362 - 8.366	74.8 - 75.2	1300 - 1427			
8.37625 - 8.38675	108 - 121.94	1435 - 1626.5			
8.41425 - 8.41475	123 - 138	1645.5 - 1646.5			

Radiated disturbance of an intentional radiator:

Frequency	Field strength ($\mu\text{V/m}$)	Limit (dB $\mu\text{V/m}$)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	74.0	Peak	3
		54.0	Average	

Un-restricted band emissions above 1GHz limit:

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.

Test Procedure

ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 Section 6.4 & 6.5 & 6.6.

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II.G.3 ~ 6.

Test Settings

1. For radiated emissions measurements performed at frequencies less than or equal to 1GHz, the EUT shall be placed on a RF-transparent table or support at a nominal height of 80cm above the reference ground plane.
2. For radiated emissions measurements performed at frequencies above 1GHz, the EUT shall be placed on a RF-transparent table or support at a nominal height of 80cm above the ground plane.
3. Radiated measurements shall be made with the measurement antenna positioned in both horizontal and vertical polarization. The measurement antenna shall be varied from 1m to 4m in height above the reference ground in a search for the relative positioning that produces the maximum radiated signal level (i.e, field strength or received power), when orienting the measurement antenna in vertical polarization, the minimum height of the lowest element of the antenna shall clear the site reference ground plane by at least 25cm.
4. For each suspected emission, the EUT was ranged its worst case and then tune the antenna tower(from 1~4m) and turntable(from 0~360°) find the maximum reading. Preamplifier and a high pass filter are used for the test in order get better signal level comply with the guidelines.
5. The simulated base station was set to force the EUT to its maximum transmitting power.
6. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
7. spectrum analyzer setting:
Measurements Below 1000MHz: RBW = 120 kHz; VBW ≥ 300 kHz; Detector = Peak
Measurements Above 1000MHz: RBW = 1 MHz; VBW ≥ 3 MHz; Detector = Peak
Average Measurements Above 1000MHz:
RBW = 1 MHz, VBW ≥ 1/T, with peak detector for average measurements.
8. The field strength is calculated by adding the Antenna Factor, Cable Factor. The basic equation with a sample calculation is as follows:
Level = Reading(dBμV) + Factor(dB):
Factor = Cable Factor(dB) + AF(dB/m) - Preamplifier gain(dB)
AF = Antenna Factor(dB/m)
Margin = Limit(dBμV/m) – Level(dBμV/m)
9. Repeat above procedures until all frequencies measured was complete.
10. Measure and record the results in the test report.

Test Notes

1. Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1-meter test distance with the application of a distance correction factor.
2. Radiated spurious emissions were investigated from 9kHz to 30MHz, 30MHz-1GHz and above 1GHz. the disturbance between 9kHz to 30MHz and 18GHz to 40GHz was very low. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be recorded, so only the harmonics had been displayed.
3. These frequencies which near "-" should be ignored because they are Fundamental frequency.

Test Setup

Refer to section 2.7.2 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix.**

5 Test Setup Photos

The detailed test data see: **Appendix A - BTWIFI Setup Photos**

Appendix

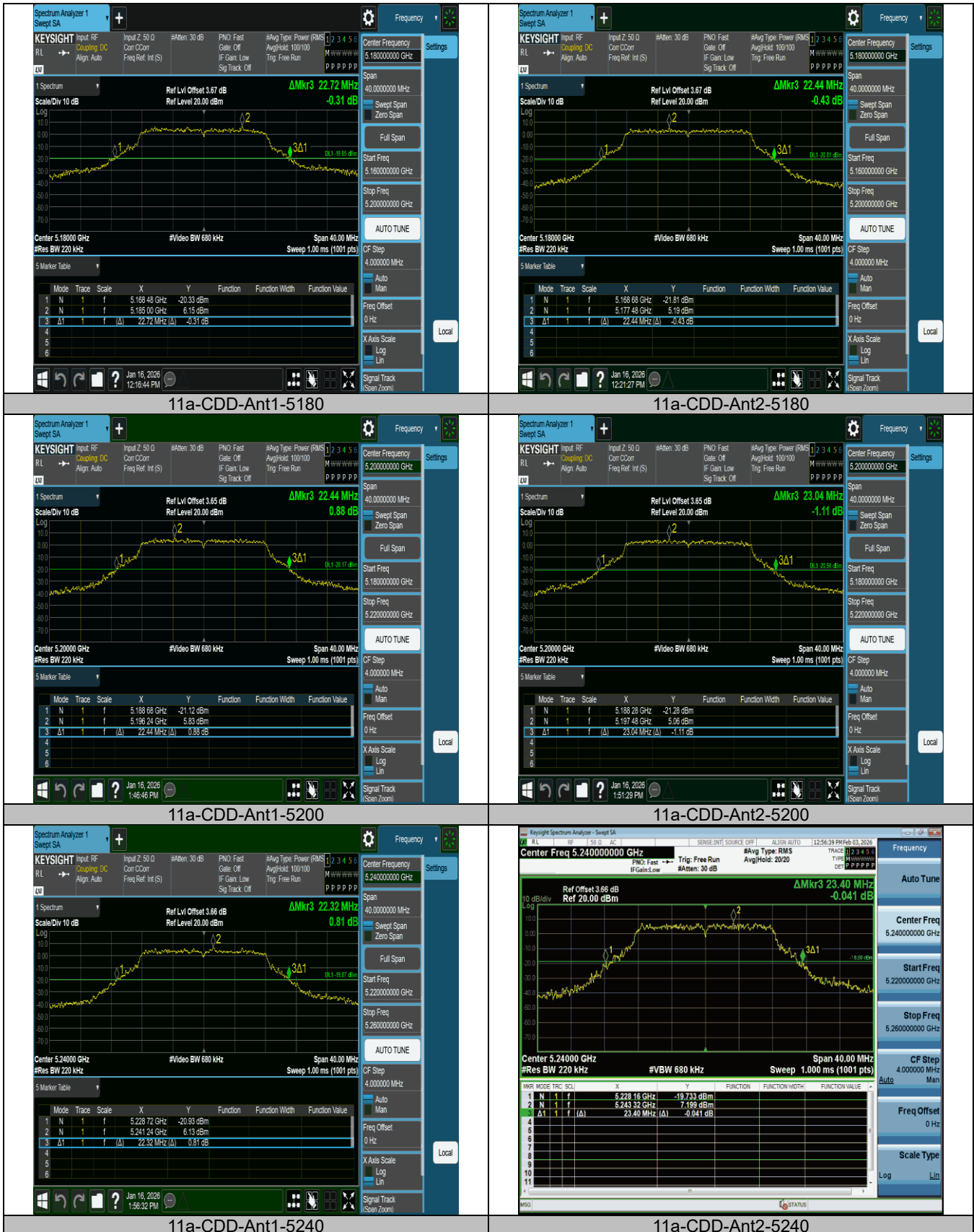
Emission Bandwidth Test Result

TestMode	Antenna	Frequency[MHz]	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11a-CDD	Ant1	5180	22.720	5168.480	5191.200	---	---
11a-CDD	Ant2	5180	22.440	5168.680	5191.120	---	---
11a-CDD	Ant1	5200	22.440	5188.680	5211.120	---	---
11a-CDD	Ant2	5200	23.040	5188.280	5211.320	---	---
11a-CDD	Ant1	5240	22.320	5228.720	5251.040	---	---
11a-CDD	Ant2	5240	23.400	5228.160	5251.560	---	---
11a-CDD	Ant1	5260	21.680	5249.200	5270.880	---	---
11a-CDD	Ant2	5260	22.280	5248.920	5271.200	---	---
11a-CDD	Ant1	5300	22.720	5288.600	5311.320	---	---
11a-CDD	Ant2	5300	22.720	5289.000	5311.720	---	---
11a-CDD	Ant1	5320	21.760	5309.040	5330.800	---	---
11a-CDD	Ant2	5320	21.880	5308.840	5330.720	---	---
11a-CDD	Ant1	5500	22.320	5488.640	5510.960	---	---
11a-CDD	Ant2	5500	21.960	5489.080	5511.040	---	---
11a-CDD	Ant1	5600	22.720	5588.640	5611.360	---	---
11a-CDD	Ant2	5600	23.080	5588.240	5611.320	---	---
11a-CDD	Ant1	5700	22.760	5688.280	5711.040	---	---
11a-CDD	Ant2	5700	22.640	5688.640	5711.280	---	---
11a-CDD	Ant1	5720	22.080	5708.960	5731.040	---	---
11a-CDD	Ant2	5720	22.520	5708.720	5731.240	---	---
11a-CDD	Ant1	5720 UNII-2C	16.04	5708.960	5725	---	---
11a-CDD	Ant2	5720 UNII-2C	16.28	5708.720	5725	---	---
11a-CDD	Ant1	5720 UNII-3	6.04	5725	5731.040	---	---
11a-CDD	Ant2	5720 UNII-3	6.24	5725	5731.240	---	---
11a-CDD	Ant1	5745	22.160	5733.680	5755.840	---	---
11a-CDD	Ant2	5745	22.760	5733.160	5755.920	---	---
11a-CDD	Ant1	5785	21.880	5773.760	5795.640	---	---
11a-CDD	Ant2	5785	21.960	5773.960	5795.920	---	---
11a-CDD	Ant1	5825	22.000	5814.000	5836.000	---	---
11a-CDD	Ant2	5825	21.880	5814.160	5836.040	---	---
11ac20MIMO	Ant1	5180	22.640	5169.000	5191.640	---	---
11ac20MIMO	Ant2	5180	22.880	5168.440	5191.320	---	---
11ac20MIMO	Ant1	5200	23.160	5188.400	5211.560	---	---
11ac20MIMO	Ant2	5200	22.840	5188.160	5211.000	---	---
11ac20MIMO	Ant1	5240	22.520	5228.560	5251.080	---	---
11ac20MIMO	Ant2	5240	22.080	5228.960	5251.040	---	---
11ac20MIMO	Ant1	5260	23.400	5248.000	5271.400	---	---
11ac20MIMO	Ant2	5260	23.120	5248.600	5271.720	---	---
11ac20MIMO	Ant1	5300	22.160	5288.760	5310.920	---	---
11ac20MIMO	Ant2	5300	22.760	5288.600	5311.360	---	---
11ac20MIMO	Ant1	5320	23.240	5308.480	5331.720	---	---
11ac20MIMO	Ant2	5320	22.360	5309.040	5331.400	---	---
11ac20MIMO	Ant1	5500	22.000	5488.840	5510.840	---	---
11ac20MIMO	Ant2	5500	22.680	5488.600	5511.280	---	---
11ac20MIMO	Ant1	5600	23.160	5588.360	5611.520	---	---
11ac20MIMO	Ant2	5600	23.280	5587.920	5611.200	---	---
11ac20MIMO	Ant1	5700	22.880	5688.440	5711.320	---	---
11ac20MIMO	Ant2	5700	22.280	5688.880	5711.160	---	---
11ac20MIMO	Ant1	5720	21.840	5708.960	5730.800	---	---
11ac20MIMO	Ant2	5720	22.880	5708.280	5731.160	---	---
11ac20MIMO	Ant1	5720 UNII-2C	16.04	5708.960	5725	---	---
11ac20MIMO	Ant2	5720 UNII-2C	16.72	5708.280	5725	---	---
11ac20MIMO	Ant1	5720 UNII-3	5.8	5725	5730.800	---	---
11ac20MIMO	Ant2	5720 UNII-3	6.16	5725	5731.160	---	---
11ac20MIMO	Ant1	5745	22.520	5733.520	5756.040	---	---
11ac20MIMO	Ant2	5745	22.480	5733.920	5756.400	---	---

11ac20MIMO	Ant1	5785	22.920	5773.320	5796.240	---	---
11ac20MIMO	Ant2	5785	22.280	5773.720	5796.000	---	---
11ac20MIMO	Ant1	5825	22.960	5813.240	5836.200	---	---
11ac20MIMO	Ant2	5825	23.240	5813.520	5836.760	---	---
11ac40MIMO	Ant1	5190	43.840	5168.160	5212.000	---	---
11ac40MIMO	Ant2	5190	44.160	5168.320	5212.480	---	---
11ac40MIMO	Ant1	5230	43.840	5207.680	5251.520	---	---
11ac40MIMO	Ant2	5230	44.080	5207.760	5251.840	---	---
11ac40MIMO	Ant1	5270	43.520	5248.000	5291.520	---	---
11ac40MIMO	Ant2	5270	43.200	5248.240	5291.440	---	---
11ac40MIMO	Ant1	5310	42.640	5289.040	5331.680	---	---
11ac40MIMO	Ant2	5310	43.040	5288.960	5332.000	---	---
11ac40MIMO	Ant1	5510	42.720	5488.400	5531.120	---	---
11ac40MIMO	Ant2	5510	42.160	5489.440	5531.600	---	---
11ac40MIMO	Ant1	5590	43.840	5568.000	5611.840	---	---
11ac40MIMO	Ant2	5590	43.680	5566.960	5610.640	---	---
11ac40MIMO	Ant1	5670	44.480	5648.080	5692.560	---	---
11ac40MIMO	Ant2	5670	43.280	5648.320	5691.600	---	---
11ac40MIMO	Ant1	5710	43.600	5688.320	5731.920	---	---
11ac40MIMO	Ant2	5710	43.840	5688.000	5731.840	---	---
11ac40MIMO	Ant1	5710 UNII-2C	36.68	5688.320	5725	---	---
11ac40MIMO	Ant2	5710 UNII-2C	37	5688.000	5725	---	---
11ac40MIMO	Ant1	5710 UNII-3	6.92	5725	5731.920	---	---
11ac40MIMO	Ant2	5710 UNII-3	6.84	5725	5731.840	---	---
11ac40MIMO	Ant1	5755	44.160	5732.440	5776.600	---	---
11ac40MIMO	Ant2	5755	43.680	5733.240	5776.920	---	---
11ac40MIMO	Ant1	5795	43.440	5773.400	5816.840	---	---
11ac40MIMO	Ant2	5795	42.640	5773.000	5815.640	---	---
11ac80MIMO	Ant1	5210	89.120	5165.520	5254.640	---	---
11ac80MIMO	Ant2	5210	87.840	5165.840	5253.680	---	---
11ac80MIMO	Ant1	5290	88.640	5246.480	5335.120	---	---
11ac80MIMO	Ant2	5290	86.400	5248.400	5334.800	---	---
11ac80MIMO	Ant1	5530	87.680	5486.320	5574.000	---	---
11ac80MIMO	Ant2	5530	88.000	5486.160	5574.160	---	---
11ac80MIMO	Ant1	5610	87.520	5566.320	5653.840	---	---
11ac80MIMO	Ant2	5610	89.280	5565.200	5654.480	---	---
11ac80MIMO	Ant1	5690	87.360	5647.120	5734.480	---	---
11ac80MIMO	Ant2	5690	86.720	5648.720	5735.440	---	---
11ac80MIMO	Ant1	5690 UNII-2C	77.88	5647.120	5725	---	---
11ac80MIMO	Ant2	5690 UNII-2C	76.28	5648.720	5725	---	---
11ac80MIMO	Ant1	5690 UNII-3	9.48	5725	5734.480	---	---
11ac80MIMO	Ant2	5690 UNII-3	10.44	5725	5735.440	---	---
11ac80MIMO	Ant1	5775	87.360	5731.800	5819.160	---	---
11ac80MIMO	Ant2	5775	88.480	5729.400	5817.880	---	---
11be20MIMO	Ant1	5180	21.760	5168.880	5190.640	---	---
11be20MIMO	Ant2	5180	22.600	5169.080	5191.680	---	---
11be20MIMO	Ant1	5200	22.120	5189.120	5211.240	---	---
11be20MIMO	Ant2	5200	22.280	5188.680	5210.960	---	---
11be20MIMO	Ant1	5240	22.160	5228.920	5251.080	---	---
11be20MIMO	Ant2	5240	21.960	5229.320	5251.280	---	---
11be20MIMO	Ant1	5260	22.440	5248.720	5271.160	---	---
11be20MIMO	Ant2	5260	22.200	5248.960	5271.160	---	---
11be20MIMO	Ant1	5300	21.800	5288.840	5310.640	---	---
11be20MIMO	Ant2	5300	21.480	5289.320	5310.800	---	---
11be20MIMO	Ant1	5320	22.200	5308.680	5330.880	---	---
11be20MIMO	Ant2	5320	22.880	5308.480	5331.360	---	---
11be20MIMO	Ant1	5500	21.680	5489.160	5510.840	---	---
11be20MIMO	Ant2	5500	22.320	5489.040	5511.360	---	---
11be20MIMO	Ant1	5600	21.320	5589.520	5610.840	---	---
11be20MIMO	Ant2	5600	22.120	5588.840	5610.960	---	---
11be20MIMO	Ant1	5700	21.520	5689.240	5710.760	---	---
11be20MIMO	Ant2	5700	22.440	5688.560	5711.000	---	---
11be20MIMO	Ant1	5720	22.160	5709.040	5731.200	---	---
11be20MIMO	Ant2	5720	22.000	5709.040	5731.040	---	---
11be20MIMO	Ant1	5720 UNII-2C	15.96	5709.040	5725	---	---
11be20MIMO	Ant2	5720 UNII-2C	15.96	5709.040	5725	---	---
11be20MIMO	Ant1	5720 UNII-3	6.2	5725	5731.200	---	---

11be20MIMO	Ant2	5720 UNII-3	6.04	5725	5731.040	---	---
11be20MIMO	Ant1	5745	21.960	5734.200	5756.160	---	---
11be20MIMO	Ant2	5745	22.520	5733.400	5755.920	---	---
11be20MIMO	Ant1	5785	21.920	5773.880	5795.800	---	---
11be20MIMO	Ant2	5785	22.880	5773.480	5796.360	---	---
11be20MIMO	Ant1	5825	22.680	5813.760	5836.440	---	---
11be20MIMO	Ant2	5825	22.280	5814.080	5836.360	---	---
11be40MIMO	Ant1	5190	43.760	5168.320	5212.080	---	---
11be40MIMO	Ant2	5190	41.680	5168.880	5210.560	---	---
11be40MIMO	Ant1	5230	41.600	5209.360	5250.960	---	---
11be40MIMO	Ant2	5230	42.160	5208.720	5250.880	---	---
11be40MIMO	Ant1	5270	42.880	5249.120	5292.000	---	---
11be40MIMO	Ant2	5270	42.960	5249.360	5292.320	---	---
11be40MIMO	Ant1	5310	42.160	5289.200	5331.360	---	---
11be40MIMO	Ant2	5310	41.040	5289.680	5330.720	---	---
11be40MIMO	Ant1	5510	41.920	5489.440	5531.360	---	---
11be40MIMO	Ant2	5510	41.600	5489.600	5531.200	---	---
11be40MIMO	Ant1	5590	42.720	5568.720	5611.440	---	---
11be40MIMO	Ant2	5590	41.840	5568.880	5610.720	---	---
11be40MIMO	Ant1	5670	41.920	5649.040	5690.960	---	---
11be40MIMO	Ant2	5670	42.000	5648.960	5690.960	---	---
11be40MIMO	Ant1	5710	41.040	5689.440	5730.480	---	---
11be40MIMO	Ant2	5710	41.840	5688.880	5730.720	---	---
11be40MIMO	Ant1	5710 UNII-2C	35.56	5689.440	5725	---	---
11be40MIMO	Ant2	5710 UNII-2C	36.12	5688.880	5725	---	---
11be40MIMO	Ant1	5710 UNII-3	5.48	5725	5730.480	---	---
11be40MIMO	Ant2	5710 UNII-3	5.72	5725	5730.720	---	---
11be40MIMO	Ant1	5755	42.480	5733.720	5776.200	---	---
11be40MIMO	Ant2	5755	41.440	5734.120	5775.560	---	---
11be40MIMO	Ant1	5795	42.240	5773.560	5815.800	---	---
11be40MIMO	Ant2	5795	42.960	5773.560	5816.520	---	---
11be80MIMO	Ant1	5210	83.520	5168.560	5252.080	---	---
11be80MIMO	Ant2	5210	85.120	5165.840	5250.960	---	---
11be80MIMO	Ant1	5290	84.960	5248.400	5333.360	---	---
11be80MIMO	Ant2	5290	86.720	5248.080	5334.800	---	---
11be80MIMO	Ant1	5530	84.000	5488.080	5572.080	---	---
11be80MIMO	Ant2	5530	84.960	5487.600	5572.560	---	---
11be80MIMO	Ant1	5610	85.920	5566.640	5652.560	---	---
11be80MIMO	Ant2	5610	86.720	5567.600	5654.320	---	---
11be80MIMO	Ant1	5690	83.360	5648.560	5731.920	---	---
11be80MIMO	Ant2	5690	84.640	5649.200	5733.840	---	---
11be80MIMO	Ant1	5690 UNII-2C	76.44	5648.560	5725	---	---
11be80MIMO	Ant2	5690 UNII-2C	75.8	5649.200	5725	---	---
11be80MIMO	Ant1	5690 UNII-3	6.92	5725	5731.920	---	---
11be80MIMO	Ant2	5690 UNII-3	8.84	5725	5733.840	---	---
11be80MIMO	Ant1	5775	83.200	5733.400	5816.600	---	---
11be80MIMO	Ant2	5775	87.040	5731.320	5818.360	---	---
11be160MIMO	Ant1	5250	173.760	5162.640	5336.400	---	---
11be160MIMO	Ant2	5250	169.280	5165.840	5335.120	---	---
11be160MIMO	Ant1	5250 UNII-1	87.36	5162.640	5250	---	---
11be160MIMO	Ant2	5250 UNII-1	84.16	5165.840	5250	---	---
11be160MIMO	Ant1	5250 UNII-2A	86.4	5250	5336.400	---	---
11be160MIMO	Ant2	5250 UNII-2A	85.12	5250	5335.120	---	---
11be160MIMO	Ant1	5570	320.000	5410.000	5730.000	---	---
11be160MIMO	Ant2	5570	320.000	5410.000	5730.000	---	---

Test Graphs





11a-CDD-Ant1-5260



11a-CDD-Ant2-5260



11a-CDD-Ant1-5300



11a-CDD-Ant2-5300



11a-CDD-Ant1-5320



11a-CDD-Ant2-5320



11a-CDD-Ant1-5500



11a-CDD-Ant2-5500



11a-CDD-Ant1-5600



11a-CDD-Ant2-5600



11a-CDD-Ant1-5700



11a-CDD-Ant2-5700



11a-CDD-Ant1-5720



11a-CDD-Ant2-5720



11a-CDD-Ant1-5745



11a-CDD-Ant2-5745



11a-CDD-Ant1-5785



11a-CDD-Ant2-5785



11a-CDD-Ant1-5825



11a-CDD-Ant2-5825



11ac20MIMO-Ant1-5180



11ac20MIMO-Ant2-5180



11ac20MIMO-Ant1-5200



11ac20MIMO-Ant2-5200



11ac20MIMO-Ant1-5240



11ac20MIMO-Ant2-5240



11ac20MIMO-Ant1-5260



11ac20MIMO-Ant2-5260



11ac20MIMO-Ant1-5300



11ac20MIMO-Ant2-5300



11ac20MIMO-Ant1-5320



11ac20MIMO-Ant2-5320



11ac20MIMO-Ant1-5500



11ac20MIMO-Ant2-5500



11ac20MIMO-Ant1-5600



11ac20MIMO-Ant2-5600



11ac20MIMO-Ant1-5700



11ac20MIMO-Ant2-5700



11ac20MIMO-Ant1-5720



11ac20MIMO-Ant2-5720



11ac20MIMO-Ant1-5745



11ac20MIMO-Ant2-5745



11ac20MIMO-Ant1-5785



11ac20MIMO-Ant2-5785



11ac20MIMO-Ant1-5825



11ac20MIMO-Ant2-5825



11ac40MIMO-Ant1-5190



11ac40MIMO-Ant2-5190



11ac40MIMO-Ant1-5230



11ac40MIMO-Ant2-5230



11ac40MIMO-Ant1-5270



11ac40MIMO-Ant2-5270



11ac40MIMO-Ant1-5310



11ac40MIMO-Ant2-5310



11ac40MIMO-Ant1-5510



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11ac40MIMO-Ant2-5590



11ac40MIMO-Ant1-5670



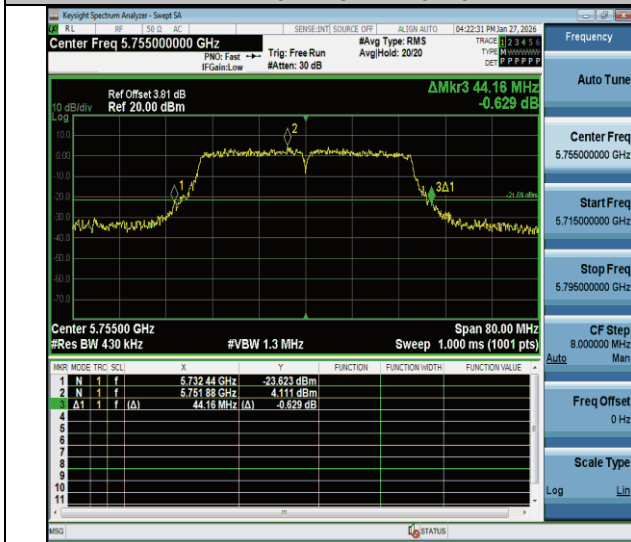
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11ac40MIMO-Ant2-5710



11ac40MIMO-Ant1-5755



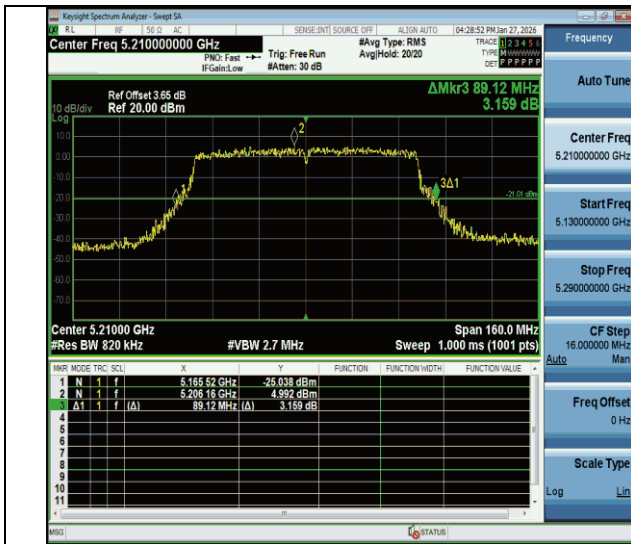
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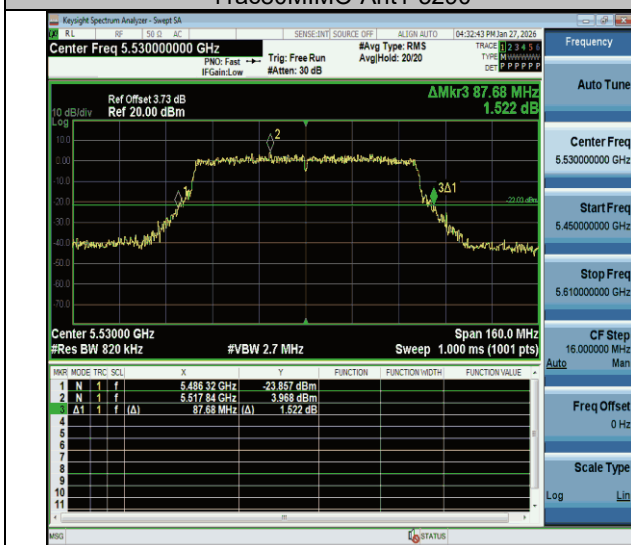
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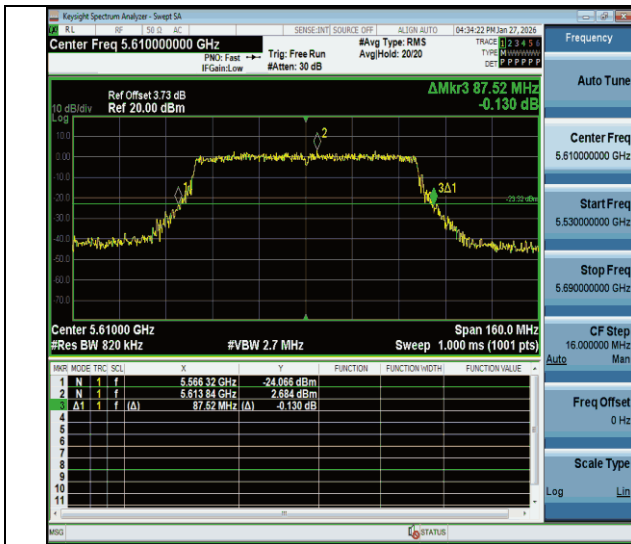
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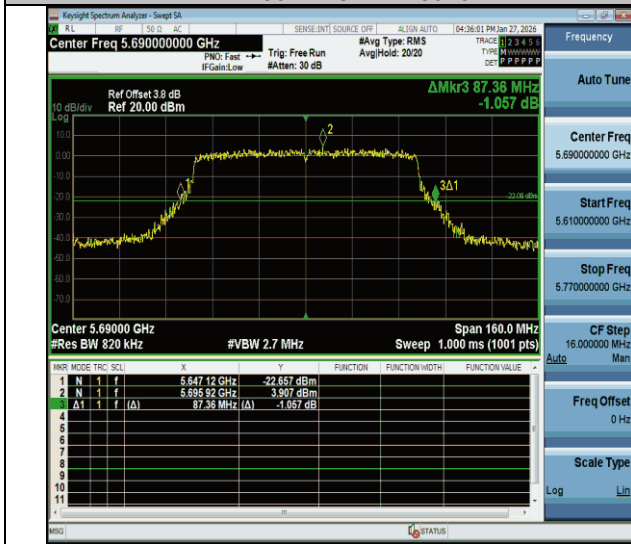
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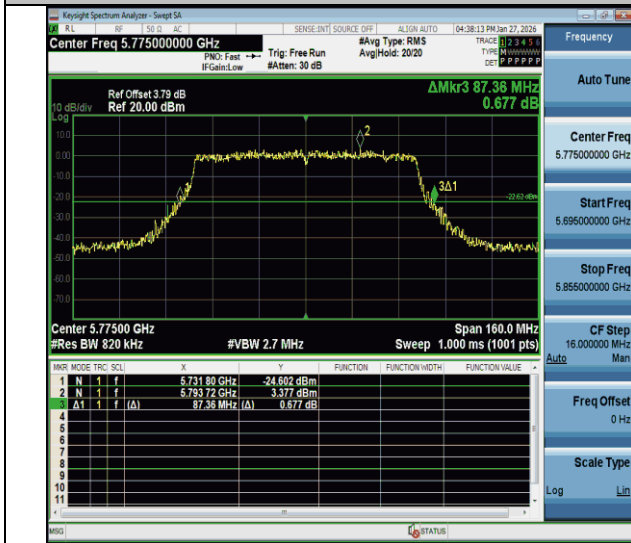
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11ac80MIMO-Ant2-5690



11ac80MIMO-Ant1-5775



11ac80MIMO-Ant2-5775



11be20MIMO-Ant1-5180



11be20MIMO-Ant2-5180



11be20MIMO-Ant1-5200



11be20MIMO-Ant2-5200



11be20MIMO-Ant1-5240



11be20MIMO-Ant2-5240



11be20MIMO-Ant1-5260



11be20MIMO-Ant2-5260



11be20MIMO-Ant1-5300



11be20MIMO-Ant2-5300



11be20MIMO-Ant1-5320



11be20MIMO-Ant2-5320



11be20MIMO-Ant1-5500



11be20MIMO-Ant2-5500



11be20MIMO-Ant1-5600



11be20MIMO-Ant2-5600



11be20MIMO-Ant1-5700



11be20MIMO-Ant2-5700



11be20MIMO-Ant1-5720



11be20MIMO-Ant2-5720



11be20MIMO-Ant1-5745



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11be20MIMO-Ant2-5785



11be20MIMO-Ant1-5825



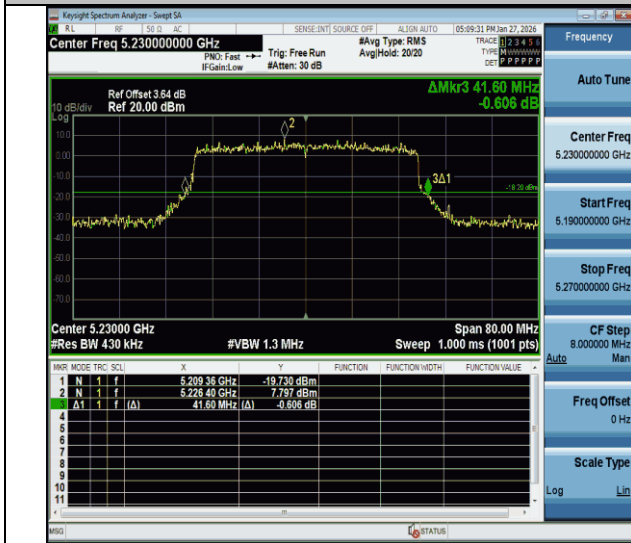
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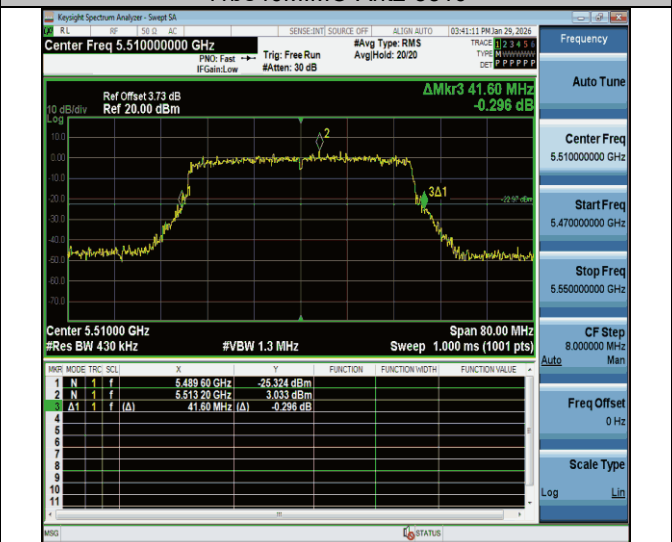
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