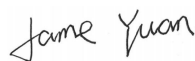




RF MEASUREMENT REPORT

FCC ID: DD4ADTDG57
Applicant: Shure Incorporated
Product: Wireless Dual Transmitter
Model No.: ADTD G57, ADTD DC G57
Brand Name: , **SHURE**[®]
FCC Classification: Part 15 Wireless Microphone (DWM)
FCC Rule Part(s): Part 15 Subpart C (Section 15.236)
Result: Complies
Received Date: 2024-06-13
Test Date: 2024-08-21 ~ 2024-11-28

Reviewed By:



Jame Yuan

Approved By:



Robin Wu



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2406RSU021-U12	V01	Initial Report	2024-11-30	Invalid
2406RSU021-U12	V02	Update KDB 206256 Version	2024-12-10	Valid

CONTENTS

Description	Page
CONTENTS	3
1. General Information	5
1.1. Applicant	5
1.2. Manufacturer	5
1.3. Testing Facility	5
1.4. Product Information	6
1.5. Radio Specification under Test	7
1.6. Working Frequencies	7
1.7. Antenna Details	7
2. Test Configuration	8
2.1. Test Mode	8
2.2. Test Software	8
2.3. Applied Standards	8
2.4. Test Environment Condition	8
3. Measuring Instrument	9
4. Decision Rules and Measurement Uncertainty	10
4.1. Decision Rules	10
4.2. Measurement Uncertainty	10
5. Test Result	10
5.1. Summary	11
5.2. 99% Occupied Bandwidth Measurement	12
5.2.1. Test Limit	12
5.2.2. Test Procedure	12
5.2.3. Test Setting	12
5.2.4. Test Setup	12
5.2.5. Test Result	12
5.3. Frequency Tolerance Measurement	14
5.3.1. Test Limit	14
5.3.2. Test Procedure	14
5.3.3. Test Setting	14
5.3.4. Test Setup	15
5.3.5. Test Result	15
5.4. Emission Mask Measurement	16
5.4.1. Test Limit	16

5.4.2.	Test Procedure	18
5.4.3.	Test Setting	18
5.4.4.	Test Setup	18
5.4.5.	Test Result	18
5.5.	Output Power Measurement	19
5.5.1.	Test Limit	19
5.5.2.	Test Procedure	19
5.5.3.	Test Setting	19
5.5.4.	Test Setup	19
5.5.5.	Test Result	19
5.6.	Radiated Spurious Emission Measurement	20
5.6.1.	Test Limit	20
5.6.2.	Test Procedure	21
5.6.3.	Test Setting	21
5.6.4.	Test Setup	22
5.6.5.	Test Result	23
5.7.	AC Conducted Emissions Measurement	24
5.7.1.	Test Limit	24
5.7.2.	Test Setup	24
5.7.3.	Test Result	24
Appendix A	- Test Result	25
A.1	99% Occupied Bandwidth Test Result	25
A.2	Frequency Tolerance Test Result	30
A.3	Emission Mask Test Result	31
A.4	Output Power Test Result	34
A.5	Radiated Spurious Emission Test Result	41
A.6	AC Conducted Emissions Test Result	44
Appendix B	- Test Setup Photograph	48
Appendix C	- EUT Photograph	49

1. General Information

1.1. Applicant

Shure Incorporated

5800 West Touhy Avenue, Niles, IL 60714-4608, USA

1.2. Manufacturer

Shure Incorporated

5800 West Touhy Avenue, Niles, IL 60714-4608, USA

1.3. Testing Facility

☒	Test Site – MRT Suzhou Laboratory			
	Laboratory Location (Suzhou - Wuzhong)			
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China			
	Laboratory Location (Suzhou - SIP)			
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China			
	Laboratory Location (Suzhou - Wujiang)			
	Building 1, No.1 Xingdong Road, Wujiang, Suzhou, Jiangsu, People's Republic of China			
☒	Laboratory Accreditations			
	A2LA: 3628.01		CNAS: L10551	
	FCC: CN1166		ISED: CN0001	
	VCCI:	☐ R-20025	☐ G-20034	☐ C-20020
		☐ R-20141	☐ G-20134	☐ C-20103
☐	Test Site – MRT Shenzhen Laboratory			
	Laboratory Location (Shenzhen)			
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China			
	Laboratory Accreditations			
	A2LA: 3628.02		CNAS: L10551	
☐	Test Site – MRT Taiwan Laboratory			
	Laboratory Location (Taiwan)			
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)			
	Laboratory Accreditations			
	TAF: 3261		ISED: TW3261	

1.4. Product Information

Product Name	Wireless Dual Transmitter
Model No.	ADTD G57, ADTD DC G57
Serial No.	2DA31999902
Radio Specification	UHF Microphone Transmitter
Antenna Information	Refer to section 1.7
Operating Temperature	-18 ~ 50°C
Network Interface	10/100/1000 Mbps, Dante Digital Audio
Power Type	AC Power Input (100~240V AC) & DC Power Input (12~48V) AC Power Output (100~240V AC)
Accessory	
8 Port Antenna Combiner	Model: AD8C, AD8C DC AC Ver.: 100-240V~, 50/60Hz, 0.76A max (5.76A max outlet loaded), DC Ver.: 12-48V DC, 4A max
Note 1: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer. Note 2: ADTD G57 and ADTD DC G57 are completely same except power supply difference, ADTD G57 supports AC power supply, while ADTD DC G57 supports both AC and DC power supply. Note 3: AD8C and AD8C DC are completely same except power supply difference, AD8C supports AC power supply, while AD8C DC supports both AC and DC power supply.	

1.5. Radio Specification under Test

Transmission Mode	Analog FM & Narrowband & 4-channel Wideband (WMAS) & PTP
Frequency Range	470 ~ 608 MHz
Declared Power Level	Low & Mid & High
Type of Modulation	Analog FM: FM
	Narrowband: OFDM
	4-channel Wideband: OFDM
	PTP: 16QAM
Declared Occupied Bandwidth	Analog FM: 200kHz
	Narrowband: 200kHz
	4-channel Wideband (WMAS): 440kHz
	4-channel Wideband (WMAS): 850kHz
	PTP: 200kHz
Channel Spacing	25kHz
RF Connector Type	BNC

1.6. Working Frequencies

Bottom Channel (MHz)	Middle Channel (MHz)	Top Channel (MHz)
Analog FM & Narrowband & PTP		
470.125	539.000	607.875
4-channel wideband		
470.400	539.000	607.600

1.7. Antenna Details

Antenna Type	Frequency Band (MHz)	Manufacturer	Peak Gain (dBi)
Dipole	470 ~ 608	Shure	1.10

2. Test Configuration

2.1. Test Mode

Mode 1: Transmit at G57 Band by Analog FM (Power Level = 50mW)
Mode 2: Transmit at G57 Band by Analog FM combined (Power Level = 20mW)
Mode 3: Transmit at G57 Band by Narrowband (Power Level = 50mW)
Mode 4: Transmit at G57 Band by Narrowband combined (Power Level = 20mW)
Mode 5: Transmit at G57 Band by Narrowband spatial diversity (Power Level = 10mW)
Mode 6: Transmit at G57 Band by 4-channel wideband (Power Level = 40mW)
Mode 7: Transmit at G57 Band by 4-channel wideband 8 audio mixes (Power Level = 50mW)
Mode 8: Transmit at G57 Band by 4-channel wideband spatial diversity (Power Level = 20mW)
Mode 9: Transmit at G57 Band by Axient Digital Standard (PTP) (Power Level = 50mW)
Mode 10: Transmit at G57 Band by Axient Digital Standard combined (PTP) (Power Level = 20mW)
Mode 11: Transmit at G57 Band by Narrowband, frequency diversity combined (Power Level = 20mW)
Mode 12: Transmit at G57 Band by 4-channel wideband frequency diversity (Power Level = 20mW)

2.2. Test Software

Power level and transmit frequency can be selected using the front panel controls.

2.3. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15.236
- KDB 206256 D01v03
- ANSI C63.10-2013
- ETSI EN 300 422 - 1 V 2.2.1

2.4. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20 ~ 75%RH

3. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
Temperature Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2025-09-02	WZ-TR3
Signal Analyzer	Keysight	N9010B	MRTSUE06457	1 year	2025-05-08	WZ-TR3
Thermohygrometer	testo	608-H1	MRTSUE11268	1 year	2024-12-14	WZ-TR3
Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2025-02-03	WZ-SR5
Thermohygrometer	testo	608-H1	MRTSUE06402	1 year	2025-05-12	WZ-SR5
Shielding Room	HUAMING	WZ-SR5	MRTSUE06442	N/A	N/A	WZ-SR5
Signal Analyzer	Keysight	N9010B	MRTSUE06558	1 year	2025-05-20	WZ-SR5
Audio Analyzer	R&S	UPV	MRTSUE06357	1 year	2025-04-11	WZ-SR5
Multifunction Synthesizer	HP	HP8904A	MRTSUE06097	1 year	2025-07-18	WZ-SR5
USB Power Sensor	Keysight	U2021XA	MRTSUE06446	1 year	2025-05-08	WZ-SR5
Attenuator	MVE	MVE2213	MRTSUE11077	1 year	2025-06-05	WZ-SR5
Attenuator	MVE	MVE2213	MRTSUE11078	1 year	2025-06-05	WZ-SR5
Attenuator	MVE	MVE2213	MRTSUE11079	1 year	2025-06-05	WZ-SR5
Attenuator	MVE	MVE2213	MRTSUE11080	1 year	2025-06-05	WZ-SR5
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2025-05-08	WZ-SR2
Shielding Room	MIX-BEP	WZ-SR2	MRTSUE06215	5 years	2026-12-20	WZ-SR2
Thermohygrometer	testo	608-H1	MRTSUE06404	1 year	2025-05-12	WZ-SR2
EMI Test Receiver	R&S	ESR3	MRTSUE06909	1 year	2025-09-05	WZ-SR2
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2025-04-17	WZ-AC2
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2025-05-08	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2025-09-23	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2024-10-11	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2025-05-06	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2025-04-18	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE11263	1 year	2025-10-16	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE11263	1 year	2024-11-07	WZ-AC2

Software	Version	Function
e3	230711	RE & CE
Controller_MF 7802	2.03C	RE Antenna & Turntable
BenchVue Power Meter	2018.1	Power

4. Decision Rules and Measurement Uncertainty

4.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2.

(Measurement uncertainty is not taken into account when stating conformity with a specified requirement.

4.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

AC Conducted Emission Measurement
The maximum measurement uncertainty is evaluated as: 9kHz~150kHz: 3.02dB 150kHz~30MHz: 2.56dB
Radiated Emission Measurement
The maximum measurement uncertainty is evaluated as: Coaxial: 9kHz~30MHz: 2.35dB Coplanar: 9kHz~30MHz: 2.37dB Horizontal: 30MHz~200MHz: 3.46dB 200MHz~1GHz: 3.78dB 1GHz~40GHz: 4.97dB Vertical: 30MHz~200MHz: 4.07dB 200MHz~1GHz: 5.28dB 1GHz~40GHz: 4.78dB
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 2.5dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 1.3dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 2.5dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 2.6%

5. Test Result

5.1. Summary

FCC Part Section(s)	Test Description	Test Condition	Test Result
15.236(f) (1&2)	99% Occupied Bandwidth	Conducted	Pass
15.236(f)(1)(iii)	Frequency Tolerance		Pass
15.236(g) (1&2&3)	Emission Mask		Pass
15.236(d)(1)	RF Output Power		Pass
15.236(g)(4)	Radiated Spurious Emission	Radiated	Pass
15.207	AC Conducted Emissions 150kHz - 30MHz	Line Conducted	Pass

Note: The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.

5.2. 99% Occupied Bandwidth Measurement

5.2.1. Test Limit

One or more adjacent 25 kHz segments within the assignable frequencies may be combined to form a channel whose maximum bandwidth shall not exceed 200 kHz. The operating bandwidth shall not exceed 200 kHz.

A wireless multichannel audio system may have an operating bandwidth not exceeding 6 megahertz and must have a mode of operation in which it is capable of operating with at least three audio channels per megahertz. For wireless multichannel audio systems operating in the TV bands (channels 2-36), the 6 megahertz (or less) channel must fall entirely within a single TV channel.

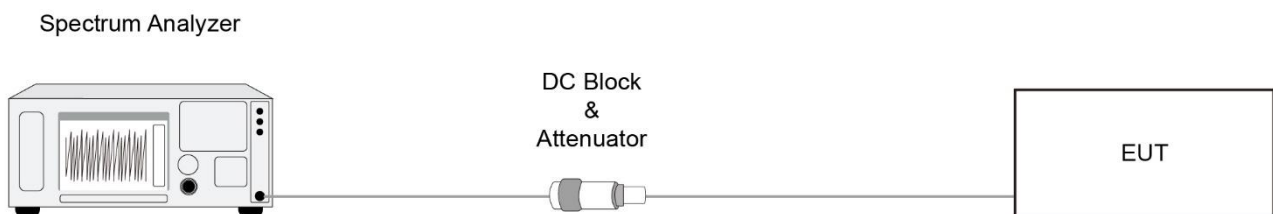
5.2.2. Test Procedure

ANSI C63.10-2013 - Section 6.9.3

5.2.3. Test Setting

1. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
2. Set RBW $\geq$ 1% to 5% of the OBW
3. VBW = Approximately three times RBW
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace to stabilize
8. Use the 99% power bandwidth function of the instrument and report the measured bandwidth.

5.2.4. Test Setup



5.2.5. Test Result

Refer to Appendix A.1.

5.3. Frequency Tolerance Measurement

5.3.1. Test Limit

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.005\%$ of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. Battery operated equipment shall be tested using a new battery.

5.3.2. Test Procedure

ANSI C63.10-2013 - Section 6.8

5.3.3. Test Setting

The EUT was programmed to transmit with an unmodulated carrier.

Frequency Stability Under Temperature Variations:

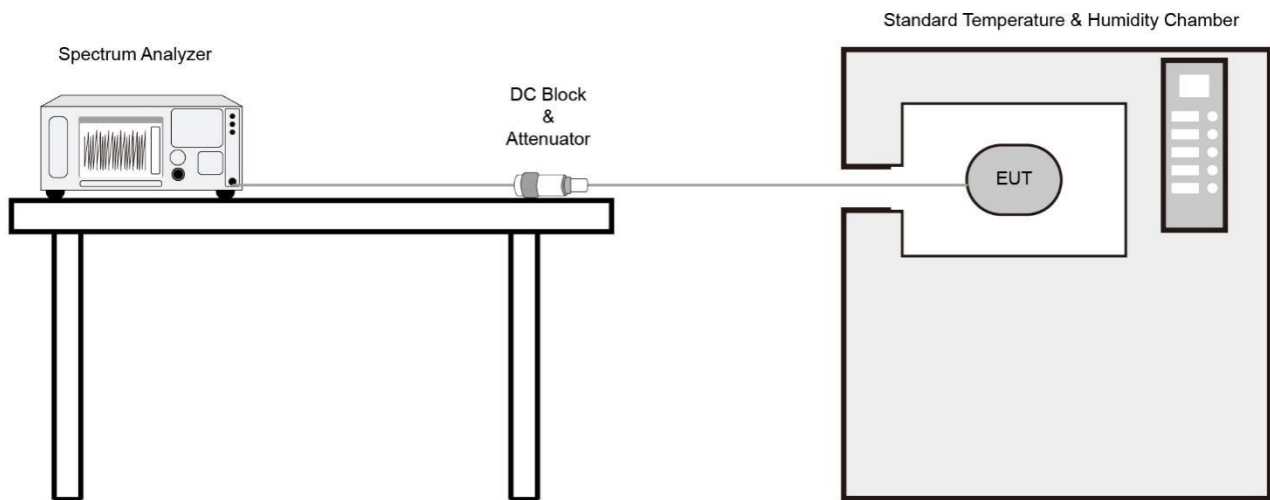
The equipment under test was connected to an external DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. While maintaining a constant temperature inside the environmental chamber, turn the EUT on and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

5.3.4. Test Setup



5.3.5. Test Result

Refer to Appendix A.2.

5.4. Emission Mask Measurement

5.4.1. Test Limit

(1) Analog systems. Emissions within the band from $2.5 \times B$ below to $2.5 \times B$ above the carrier frequency, where B is the channel bandwidth, shall comply with the emission mask in Figure 1 of section 4.2.4.2.2 of ETSI EN 300 422-1 V2.2.1 (2021-11) (incorporated by reference, see § 15.38).

(2) Digital systems. Emissions within the band from $2.5 \times B$ below to $2.5 \times B$ above the carrier frequency, where B is the channel bandwidth, shall comply with the emission mask in Figure 2 of section 4.2.4.2.2 of ETSI EN 300 422-1 V2.2.1 (2021-11) (incorporated by reference, see § 15.38).

(3) Wireless Multichannel Audio Systems. Emissions within the band from $2.5 \times B$ below to $2.5 \times B$ above the carrier frequency, where B is the channel bandwidth, shall comply with the emission mask in Figure 3 of section 4.2.4.2.2 of ETSI EN 300 422-1 V2.2.1 (2021-11), (incorporated by reference, see § 15.38).

The mean Power Density, measured with 1 kHz measurement bandwidth and RMS detector, of the transmitter unwanted emissions shall not exceed the limits of the masks provided in figure 1 for equipment employing analogue modulation and figure 2 for equipment employing digital modulation, but excluding WMAS. B is the Declared Channel Bandwidth.

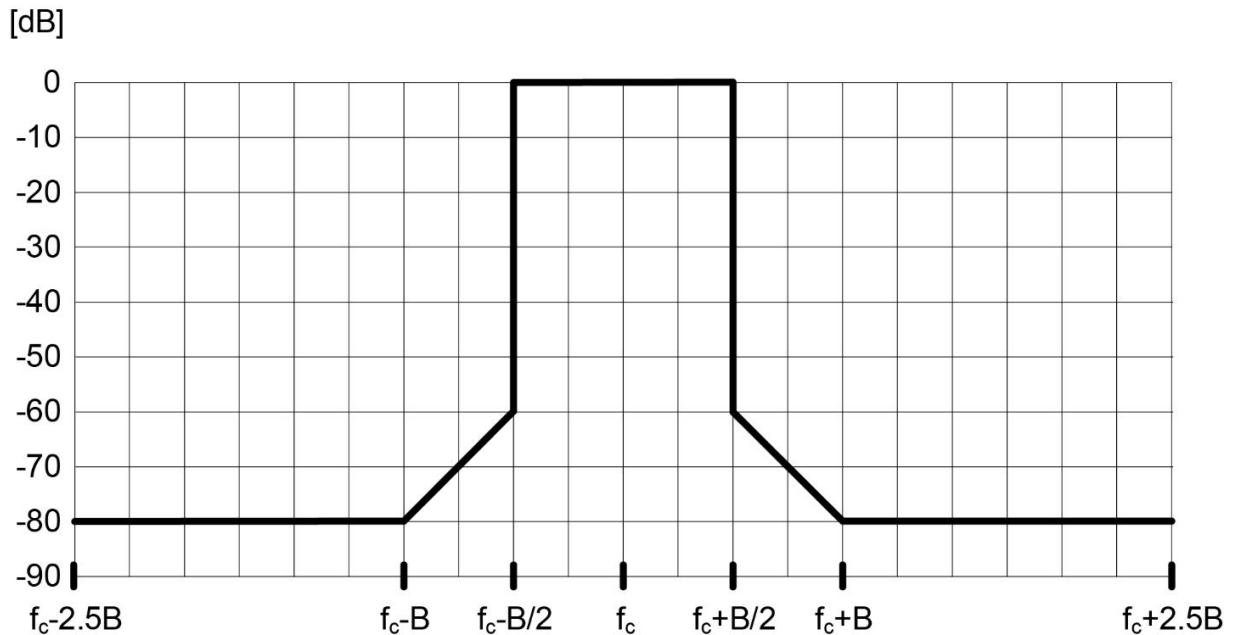


Figure 1: Transmit spectral power mask for equipment employing analogue modulation, RBW = 1 kHz

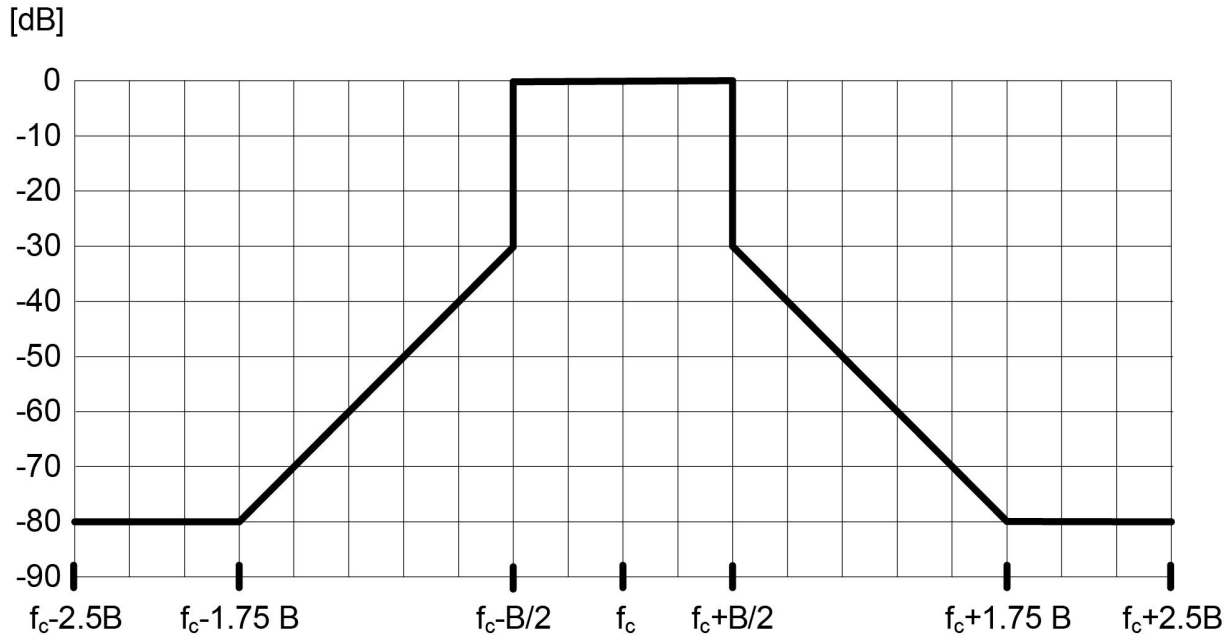


Figure 2: Transmit spectral power mask for equipment employing digital modulation, except WMAS, RBW = 1 kHz

The limits in figure 3 are applicable for WMAS, where B is the Declared Channel Bandwidth.

The mean Power Density, measured with 100 kHz measurement bandwidth and PEAK detector, of the transmitter unwanted emissions shall not exceed the limits of the mask provided in figure 3.

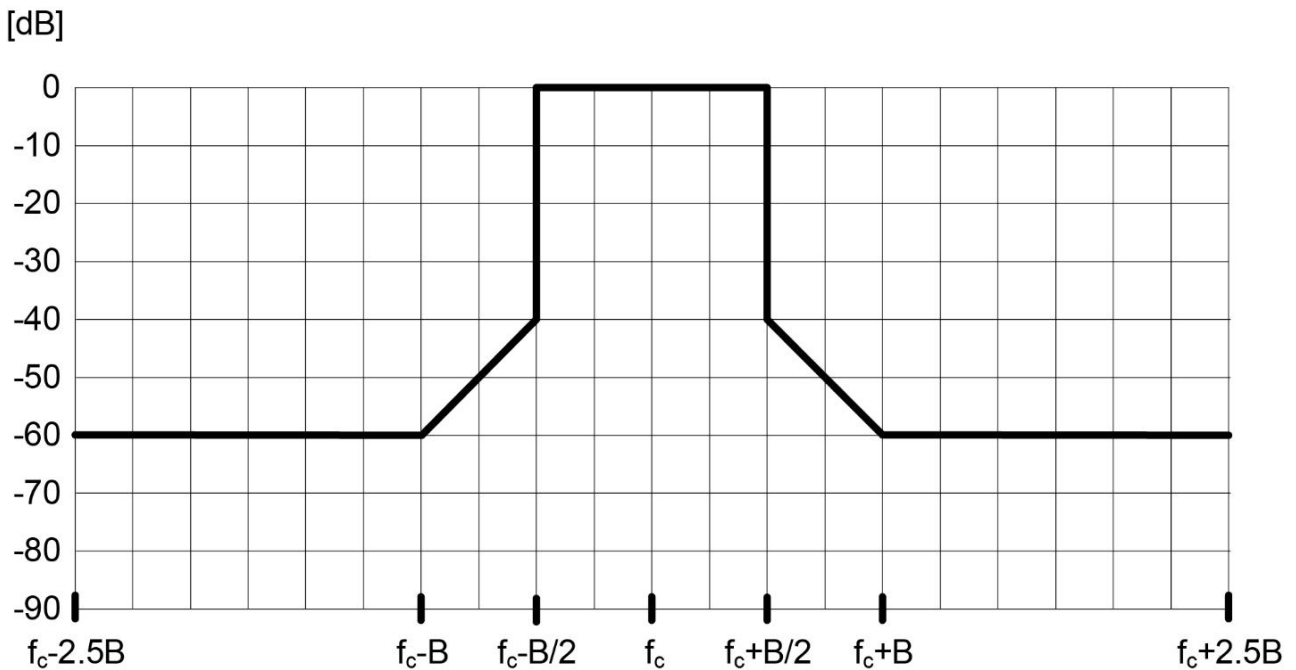


Figure 3: Transmit spectral power mask for WMAS, RBW = 100 kHz

The limits in figure 3 are provided with RBW = 100 kHz. The relevant measurements can also be performed with other RBW for certain ranges of B, accounting that the relevant limit given under RBW = 100 kHz needs to be converted appropriately by adding $c = 10 \times \log_{10} (\text{RBW}/100 \text{ kHz})$ for correction.

Correction Factor for different B and applicable RBW

B	RBW, VBW	c = correction factor
$B < 2 \text{ MHz}$	10 kHz	-10dB
$2 \text{ MHz} \leq B < 5 \text{ MHz}$	25 kHz	-7dB
$5 \text{ Hz} \leq B \leq 20 \text{ MHz}$	100 kHz	0dB

5.4.2. Test Procedure

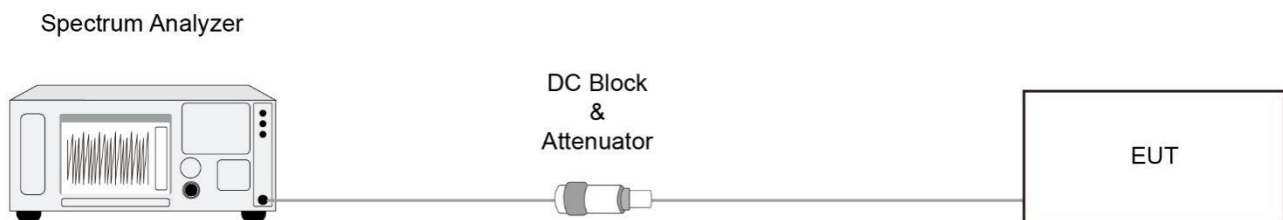
EN 300 422-1 V2.2.1 clause 5.4.3.2.

5.4.3. Test Setting

The EUT was powered up and the transmit frequency & power output of the EUT were selected.

The spectrum analyzer center frequency is set to the nominal EUT channel frequency.

5.4.4. Test Setup



5.4.5. Test Result

Refer to Appendix A.3.

5.5. Output Power Measurement

5.5.1. Test Limit

- (i) Wireless microphones: 50 mW EIRP.
- (ii) Wireless multichannel audio systems with a bandwidth up to 1 MHz: 50 mW EIRP.
- (iii) Wireless multichannel audio systems with a bandwidth greater than 1 MHz: 100 mW EIRP.

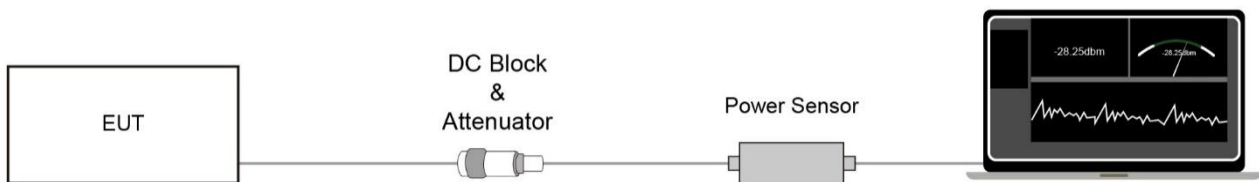
5.5.2. Test Procedure

ANSI C63.10 - 2013 - Section 11.9.2.3.2

5.5.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

5.5.4. Test Setup



5.5.5. Test Result

Refer to Appendix A.4.

5.6. Radiated Spurious Emission Measurement

5.6.1. Test Limit

Spurious emission limits. Emissions outside of the emission masks listed in paragraphs (g)(1) through (g)(3) shall comply with the limits specified in section 4.2.4.1.2 of ETSI EN 300 422-1 V2.2.1 (2021-11), (incorporated by reference, see § 15.38).

The level of transmitter unwanted emissions in the spurious domain shall not exceed the limits given in table. Transmitter unwanted emission limits

Frequency Range	Maximum power	RBW
9kHz – 150kHz	-36dBm	1kHz
150kHz – 30MHz	-36dBm	10kHz
30MHz – 1GHz	-36dBm	$F_c + 2.5B \leq f \leq F_c + 4B$: 1kHz $F_c + 4B < f \leq F_c + 10B$: 10kHz $f > F_c + 10B$: 100kHz $f < F_c - 10B$: 100kHz $F_c - 10B \leq f < F_c - 4B$: 10kHz $F_c - 4B \leq f \leq F_c - 2.5B$: 1kHz
Except:		
47MHz to 74MHz 87.5MHz to 118MHz	-54dBm	100kHz
174MHz to 230MHz 470MHz to 862MHz	-36dBm	$F_c + 2.5B \leq f \leq F_c + 4B$: 1kHz $F_c + 4B < f \leq F_c + 10B$: 10kHz $f > F_c + 10B$: 100kHz $f < F_c - 10B$: 100kHz $F_c - 10B \leq f < F_c - 4B$: 10kHz $F_c - 4B \leq f \leq F_c - 2.5B$: 1kHz
$1\text{GHz} < f \leq F_{\text{upper}}$	-30dBm	$F_c + 2.5B \leq f \leq F_c + 10B$: 30kHz $F_c + 10B < f \leq F_c + 12B$: 300kHz $f > F_c + 12B$: 1MHz $f < F_c - 12B$: 1MHz $F_c - 12B \leq f < F_c - 10B$: 300kHz $F_c - 10B \leq f \leq F_c - 2.5B$: 30kHz
With B being the Declared Channel Bandwidth. F_{upper} is defined in table 5.		

Table 5: Frequency range for measurement of unwanted emissions

Applicable fundamental frequency range	Frequency range for measurements	
	Lower frequency	Upper frequency
9 kHz - 100 MHz	9 kHz	1GHz
100 MHz - 300 MHz	9 kHz	10th harmonic of the operating frequency
300 MHz - 600 MHz	30MHz	3GHz
600 MHz - 3 GHz	30MHz	5th harmonic of the operating frequency

5.6.2. Test Procedure

ETSI EN 300 422-1 V2.2.1 clause 5.4.4

5.6.3. Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
30 ~ 1000 MHz	100 kHz
1000 ~ 7000 MHz	1 MHz

Emissions shall be investigated up to the 10th harmonic of the fundamental.

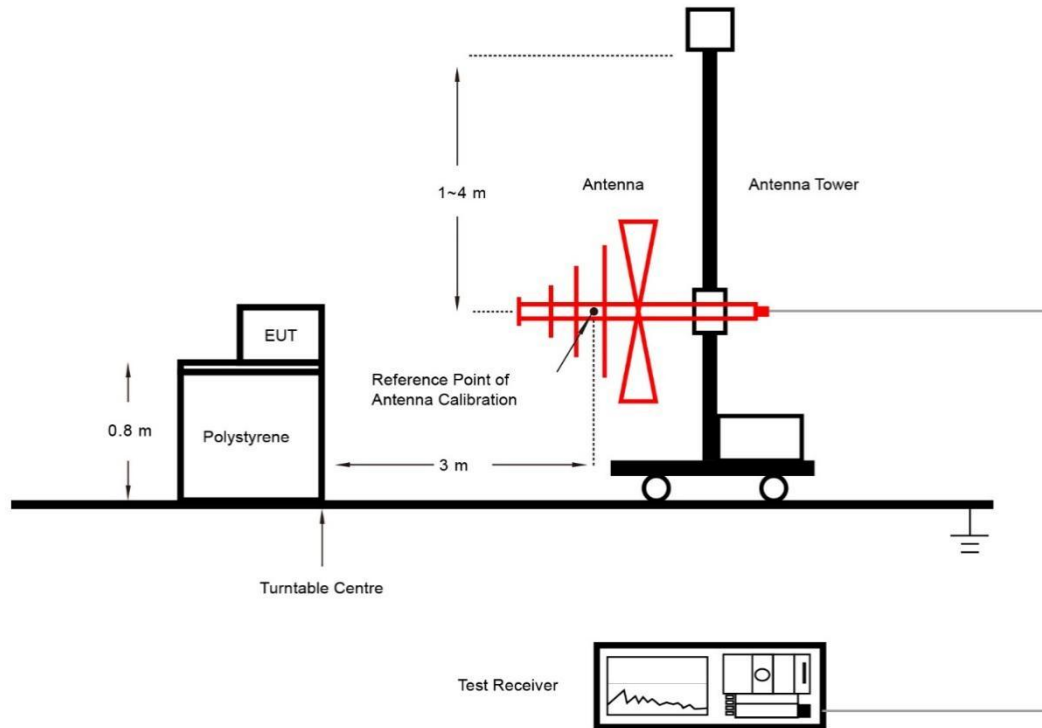
All the emissions shall be demonstrated using a QP detector below 1 GHz and an RMS Average detector above 1 GHz.

All significant broadband and narrowband signals found in the preliminary sweeps were measured using a peak detector at a test distance of 3 meters.

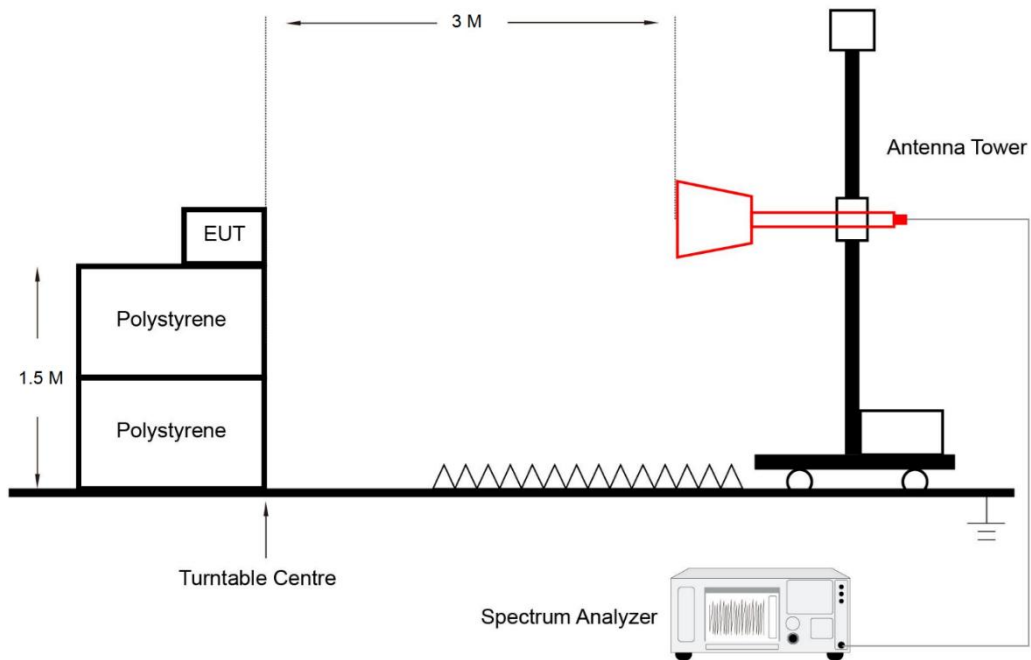
at each frequency at which a component is detected, the sample shall be rotated to obtain maximum response and the effective radiated power of that component determined by a substitution measurement.

5.6.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.6.5. Test Result

Refer to Appendix A.5.

5.7. AC Conducted Emissions Measurement

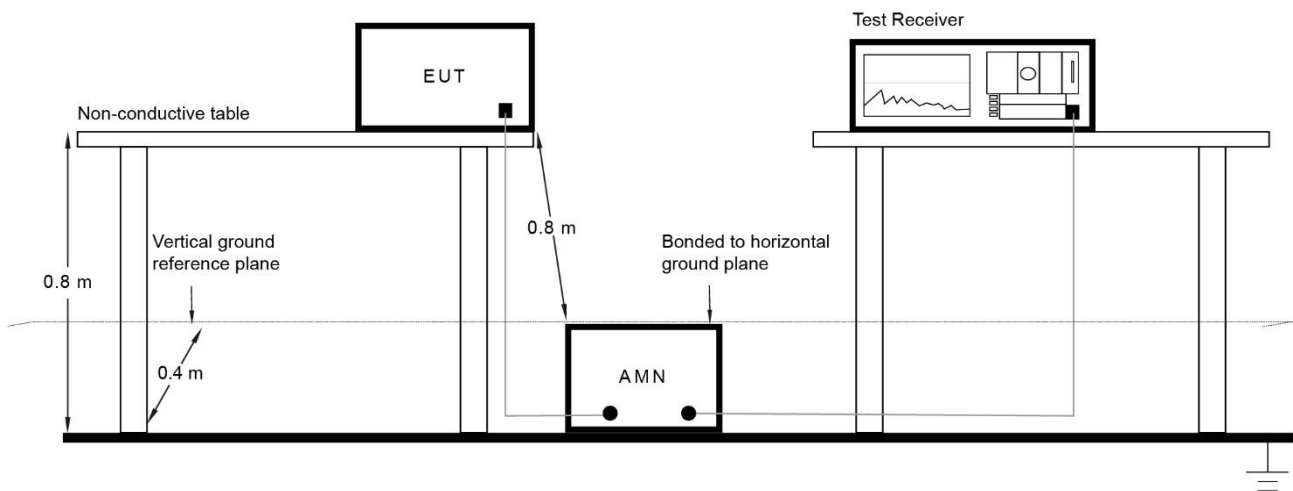
5.7.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	Average (dB μ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

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

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

5.7.2. Test Setup



5.7.3. Test Result

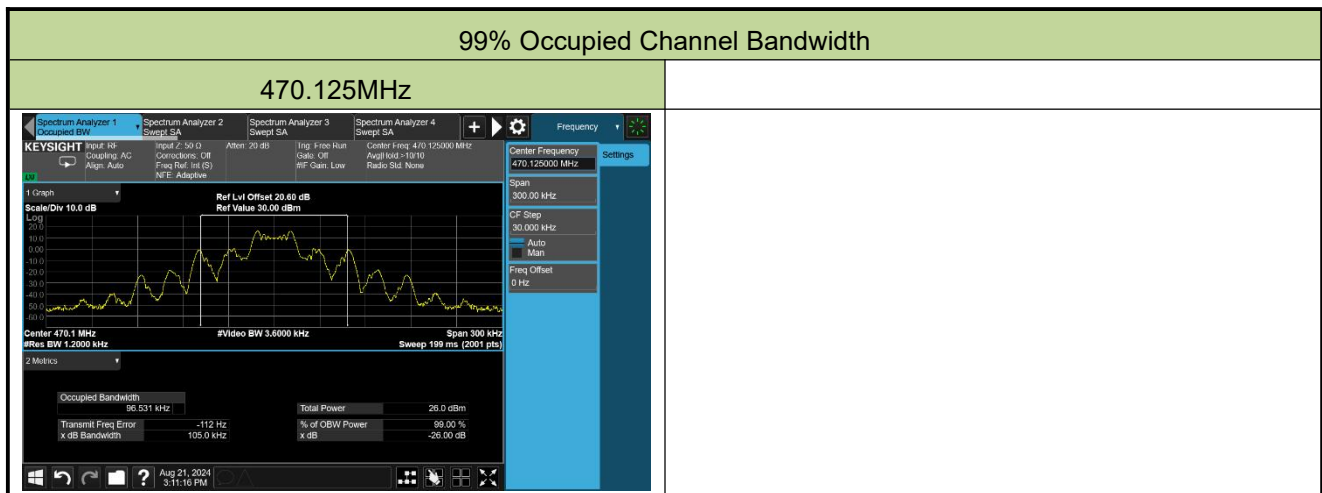
Refer to Appendix A.6.

Appendix A – Test Result

A.1 99% Occupied Bandwidth Test Result

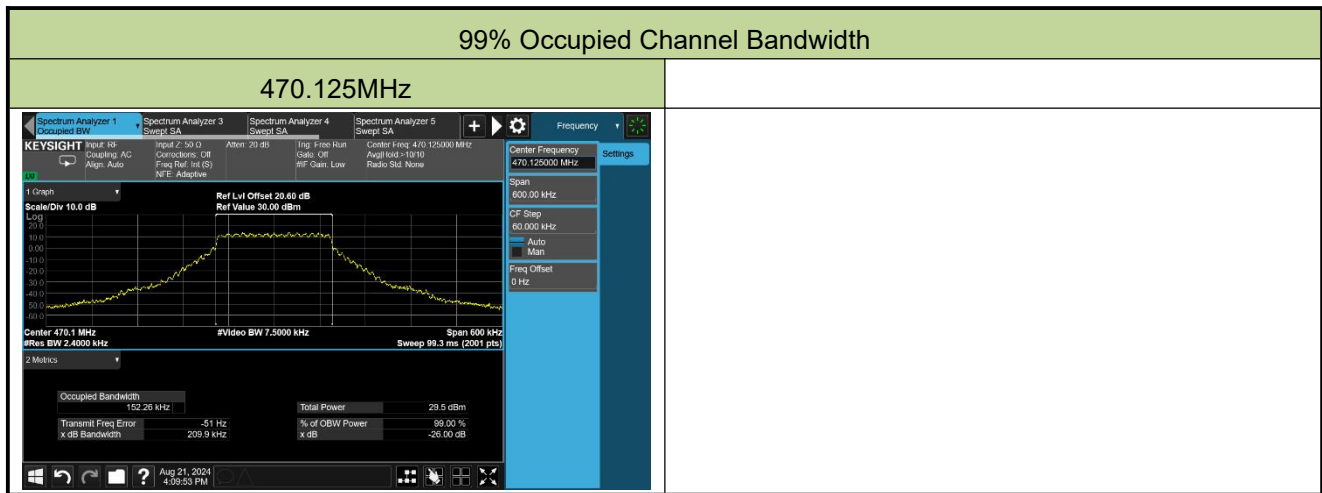
Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-08-21	Test Mode	Mode 1

Frequency (MHz)	99% Bandwidth (kHz)	Limit (kHz)	Result
470.125	96.531	< 200	Pass



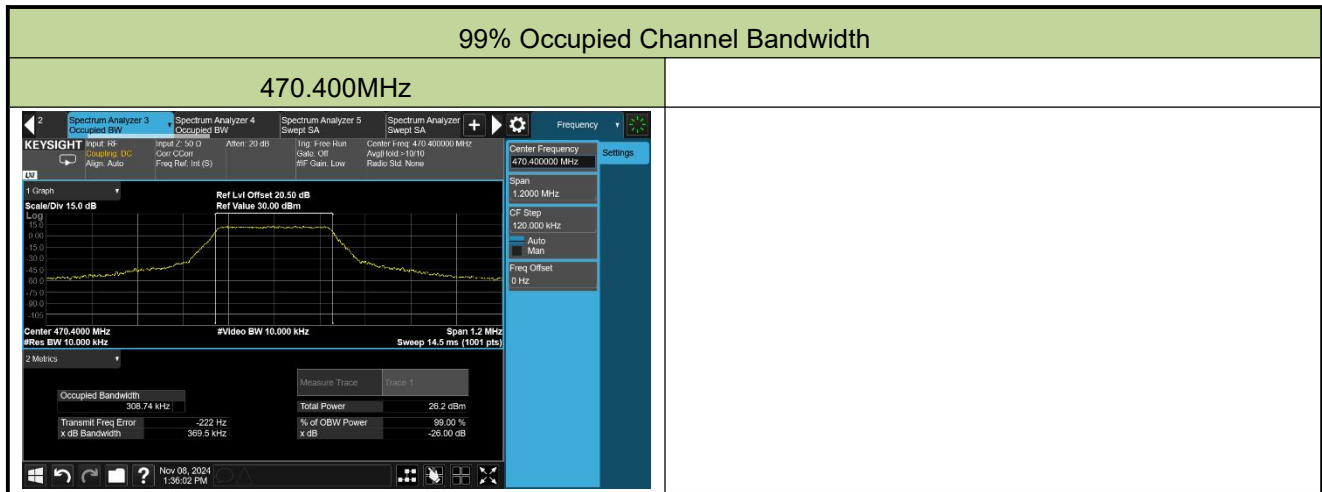
Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-08-21	Test Mode	Mode 3

Frequency (MHz)	99% Occupied Channel Bandwidth (kHz)	Limit (kHz)	Result
470.125	152.260	< 200	Pass



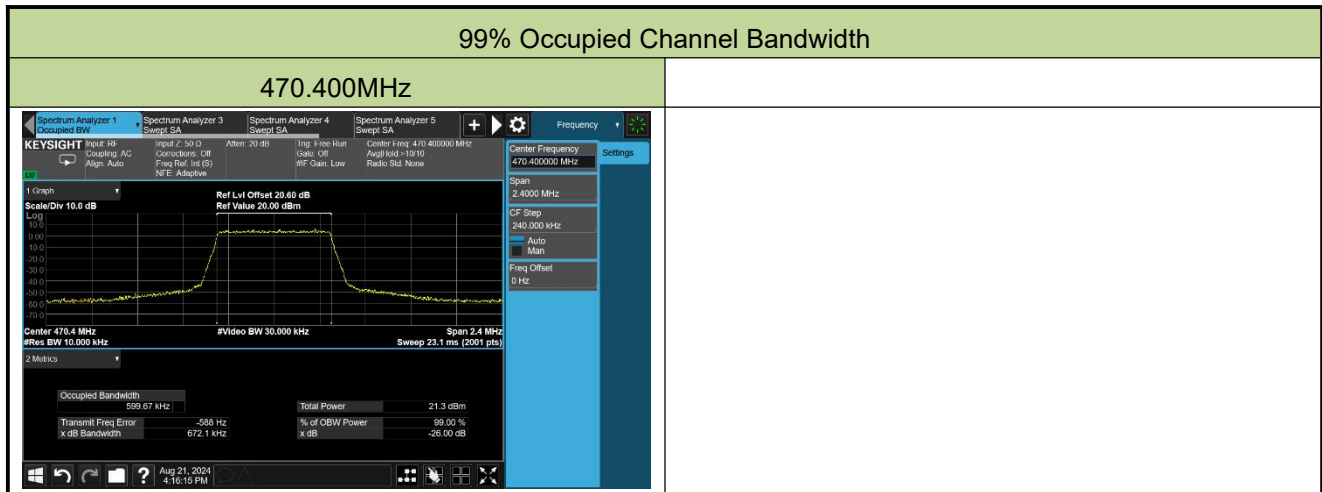
Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-08	Test Mode	Mode 6

Frequency (MHz)	99% Occupied Channel Bandwidth (kHz)	Limit (kHz)	Result
470.400	308.740	< 6000	Pass



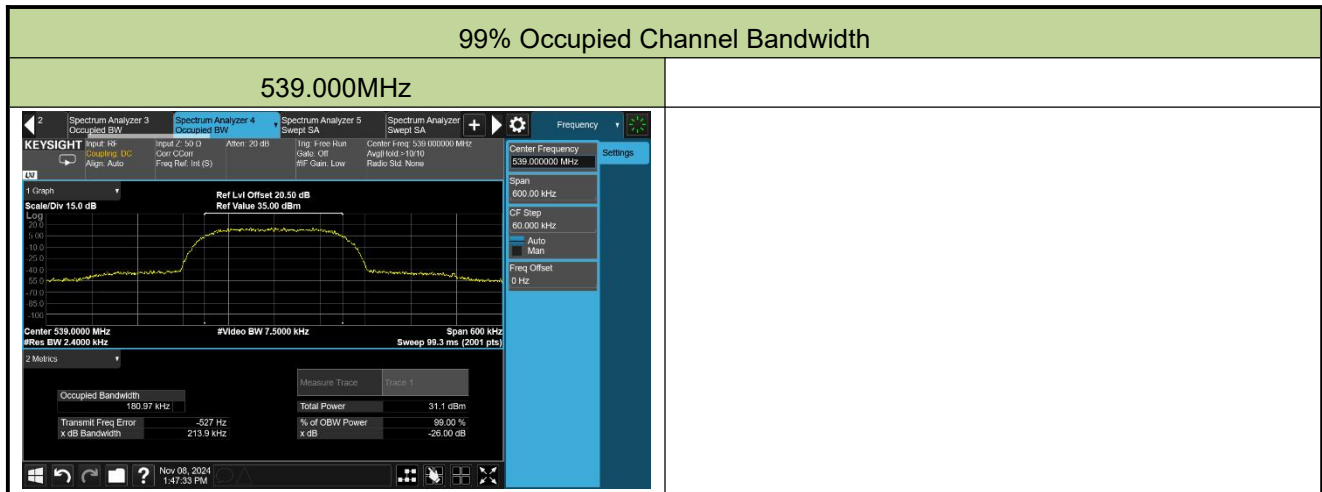
Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-08-21	Test Mode	Mode 7

Frequency (MHz)	99% Occupied Channel Bandwidth (kHz)	Limit (kHz)	Result
470.400	599.670	< 6000	Pass



Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-08	Test Mode	Mode 9

Frequency (MHz)	99% Occupied Channel Bandwidth (kHz)	Limit (kHz)	Result
539.000	180.970	< 200	Pass



A.2 Frequency Tolerance Test Result

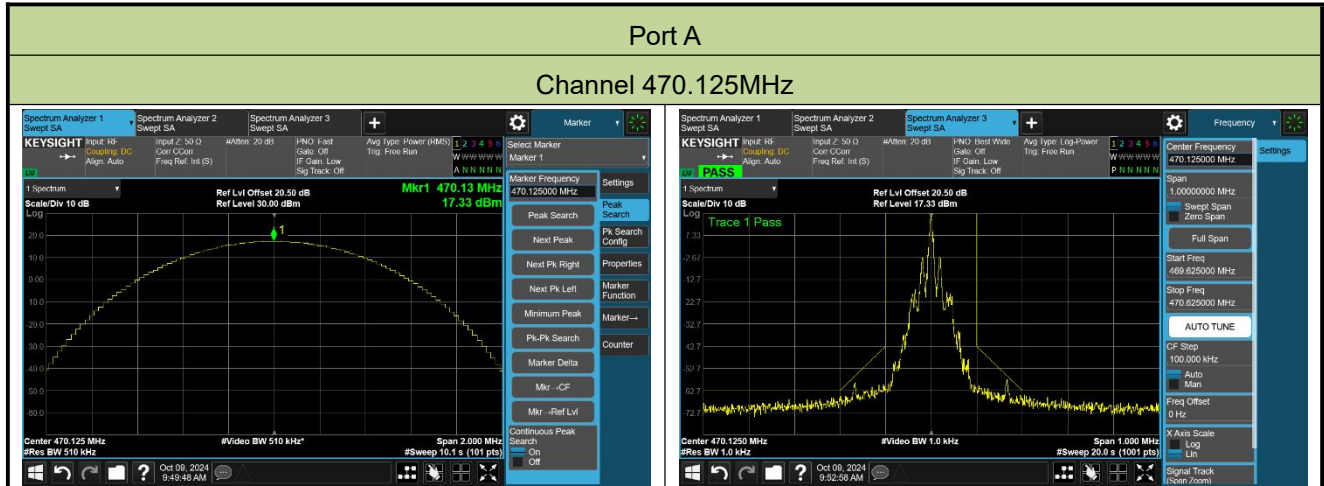
Test Site	WZ-TR3	Test Engineer	Lynn Yang
Test Date	2024-10-10 ~ 2024-10-11	Test Frequency	470.125MHz

Voltage (%)	Power (AC)	Temp (°C)	Frequency Tolerance (%)			
			0 minutes	2 minutes	5 minutes	10 minutes
100	120	- 20	-0.00002850	-0.00002850	-0.00002808	-0.00002446
		-10	-0.00002850	-0.00002872	-0.00002872	-0.00002829
		0	-0.00002616	-0.00002765	-0.00002808	-0.00002850
		+ 10	-0.00002850	-0.00002829	-0.00002808	-0.00002744
		+ 20	-0.00002467	-0.00002574	-0.00002574	-0.00002425
		+ 30	-0.00002595	-0.00002531	-0.00002467	-0.00002489
		+ 40	-0.00002531	-0.00002553	-0.00002553	-0.00002553
		+ 50	-0.00002872	-0.00002935	-0.00002893	-0.00002872
115	138	+ 20	-0.00002489	-0.00002553	-0.00002595	-0.00002467
85	102	+ 20	-0.00002510	-0.00002595	-0.00002553	-0.00002489
Limit	0.005%					
Result	Pass					

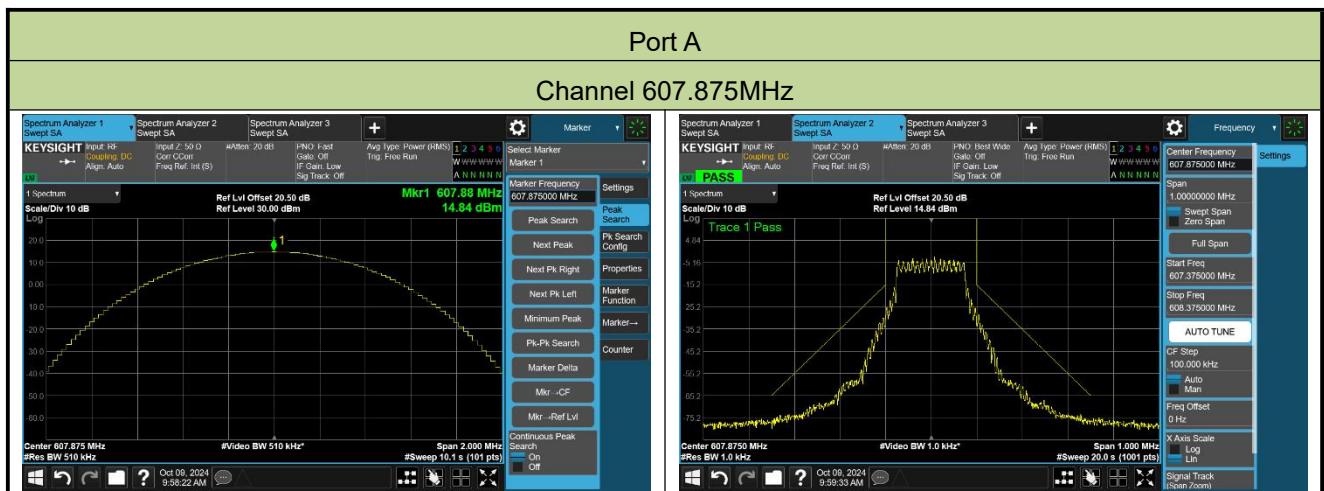
Note: Frequency Tolerance (ppm) = {[Measured Frequency (Hz) - Declared Frequency (Hz)] / Declared Frequency (Hz)} *10².

A.3 Emission Mask Test Result

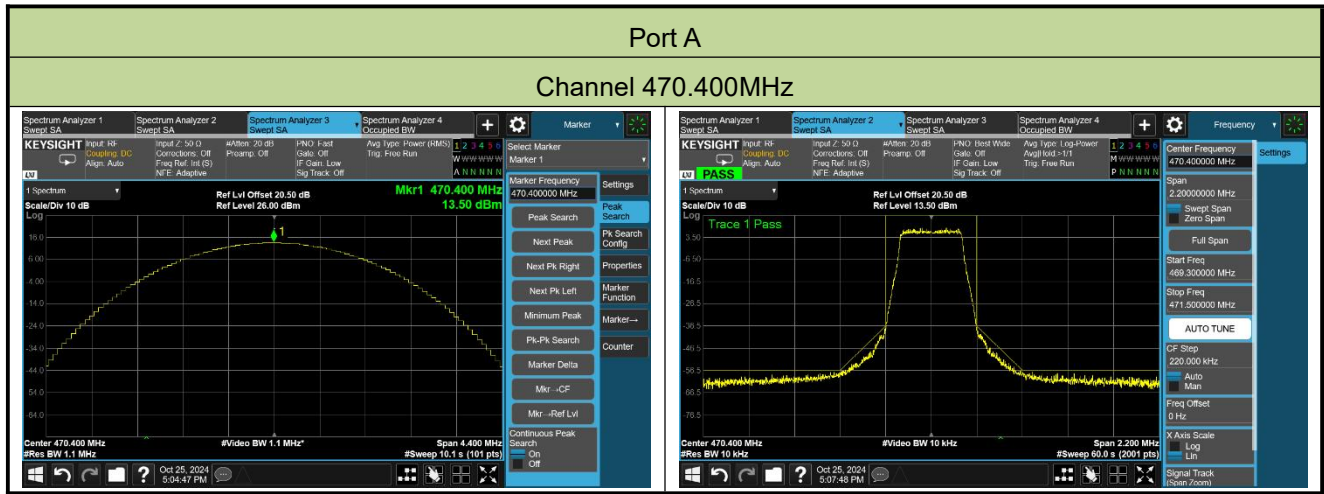
Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-10-09	Test Mode	Mode 1



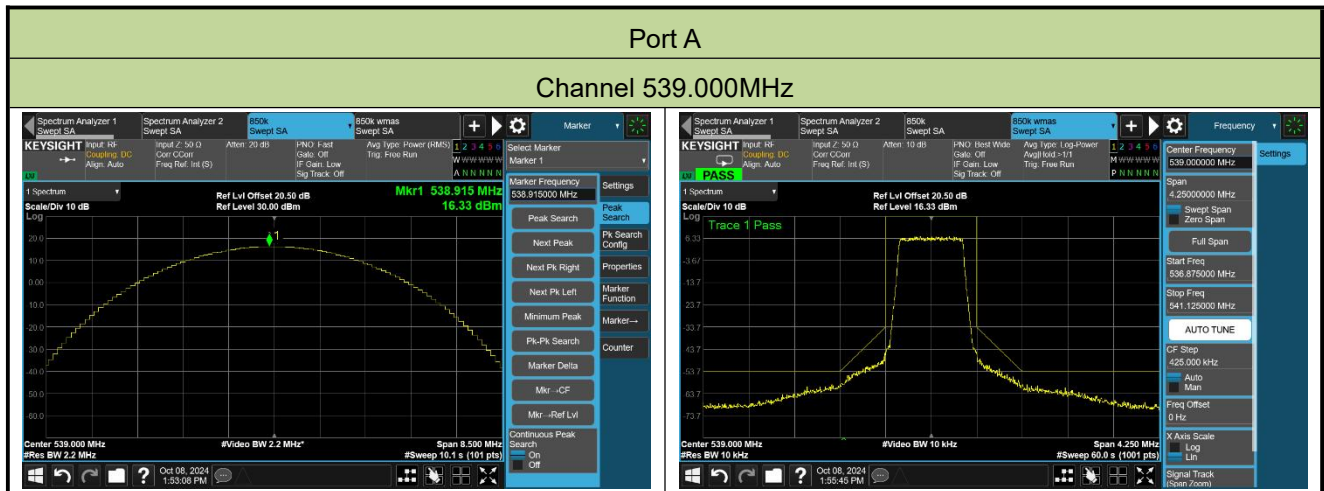
Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-10-09	Test Mode	Mode 3



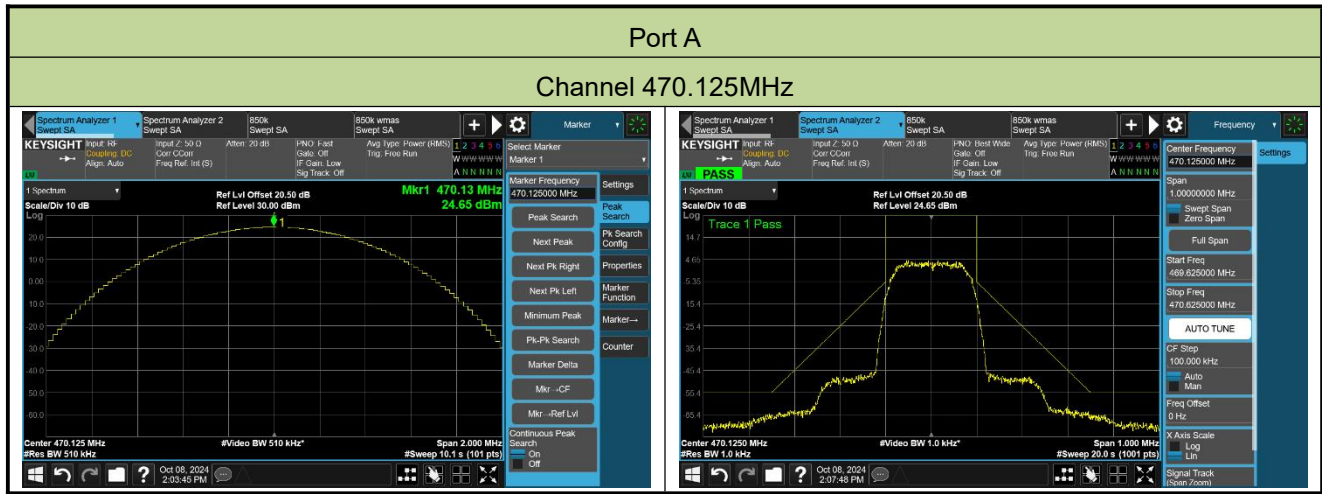
Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-10-25	Test Mode	Mode 6



Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-10-08	Test Mode	Mode 7



Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-10-08	Test Mode	Mode 9



A.4 Output Power Test Result

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 1 Single Port

Frequency (MHz)	Conducted Power (dBm)		Antenna Gain (dBi)	EIRP (dBm)		Limit (dBm)	Test Result
	Port A	Port B		Port A	Port B		
50mW Power Level							
470.125	15.06	14.81	1.10	16.16	15.91	≤ 16.99	Pass
539.000	14.86	14.45	1.10	15.96	15.55	≤ 16.99	Pass
607.875	14.41	14.20	1.10	15.51	15.30	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 1 Multi Ports

Frequency (MHz)	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Antenna Gain (dBi)	Total EIRP (dBm)	Limit (dBm)	Test Result
	Port A	Port B					
20mW Power Level							
470.125	11.74	11.16	14.47	1.10	15.57	≤ 16.99	Pass
539.000	10.41	10.69	13.56	1.10	14.66	≤ 16.99	Pass
607.875	10.04	10.15	13.11	1.10	14.21	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: Total Conducted Output Power (dBm) = $10 \cdot \log(10^{(\text{Port A}/10)} + 10^{(\text{Port B}/10)}) \text{ (dBm)}$.

Note 3: Total EIRP (dBm) = Total Conducted Output Power dBm + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 2

Frequency (MHz)		Conducted Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Test Result
F1	F2					
20mW Power Level						
470.125	470.475	14.26	1.10	15.36	≤ 16.99	
539.000	539.350	13.23	1.10	14.33	≤ 16.99	
607.875	607.525	13.05	1.10	14.15	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 3 Single Port

Frequency (MHz)	Conducted Power (dBm)		Antenna Gain (dBi)	EIRP (dBm)		Limit (dBm)	Test Result
	Port A	Port B		Port A	Port B		
50mW Power Level							
470.125	14.07	13.51	1.10	15.17	14.61	≤ 16.99	Pass
539.000	14.05	13.72	1.10	15.15	14.82	≤ 16.99	Pass
607.875	14.16	13.48	1.10	15.26	14.58	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 3 Multi Ports

Frequency (MHz)	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Antenna Gain (dBi)	Total EIRP (dBm)	Limit (dBm)	Test Result
	Port A	Port B					
20mW Power Level							
470.125	11.63	11.23	14.44	1.10	15.54	≤ 16.99	Pass
539.000	10.39	10.77	13.59	1.10	14.69	≤ 16.99	Pass
607.875	10.08	10.35	13.23	1.10	14.33	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: Total Conducted Output Power (dBm) = $10 \cdot \log(10^{(\text{Port A}/10)} + 10^{(\text{Port B}/10)}) \text{ (dBm)}$.

Note 3: Total EIRP (dBm) = Total Conducted Output Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 4

Frequency (MHz)		Conducted Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Test Result
F1	F2					
20mW Power Level						
470.125	470.475	14.69	1.10	15.79	≤ 16.99	Pass
539.000	539.350	13.85	1.10	14.95	≤ 16.99	Pass
607.875	607.525	13.73	1.10	14.83	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 5

Frequency (MHz)	Conducted Output Power (dBm)		Total Conducted Output Power (dBm)	Antenna Gain (dBi)	Total EIRP (dBm)	Limit (dBm)	Test Result
	Port A	Port B					
10mW Power Level							
470.125	11.52	11.02	14.29	1.10	15.39	≤ 16.99	Pass
539.000	10.54	11.06	13.82	1.10	14.92	≤ 16.99	Pass
607.875	10.26	10.72	13.51	1.10	14.61	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: Total Conducted Output Power (dBm) = $10 \cdot \log(10^{\text{Port A}/10} + 10^{\text{Port B}/10}) \text{ (dBm)}$.

Note 3: Total EIRP (dBm) = Total Conducted Output Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 6

Frequency (MHz)	Conducted Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Test Result
40mW Power Level					
470.400	15.22	1.10	16.32	≤ 16.99	Pass
539.000	12.15	1.10	13.25	≤ 16.99	Pass
607.600	13.11	1.10	14.21	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 7 Single Port

Frequency (MHz)	Conducted Output Power (dBm)		Antenna Gain (dBi)	EIRP (dBm)		Limit (dBm)	Test Result
	Port A	Port B		Port A	Port B		
50mW Power Level							
470.400	13.50	13.20	1.10	14.60	14.30	≤ 16.99	Pass
539.000	13.34	13.33	1.10	14.44	14.43	≤ 16.99	Pass
607.600	13.19	13.32	1.10	14.29	14.42	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 7 Multi Ports

Frequency (MHz)	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Antenna Gain (dBi)	Total EIRP (dBm)	Limit (dBm)	Test Result
	Port A	Port B					
20mW Power Level							
470.400	12.36	11.35	14.89	1.10	15.99	≤ 16.99	Pass
539.000	12.11	11.61	14.88	1.10	15.98	≤ 16.99	Pass
607.600	12.34	11.21	14.82	1.10	15.92	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: Total Conducted Output Power (dBm) = $10 \cdot \log(10^{(\text{Port A}/10)} + 10^{(\text{Port B}/10)}) \text{ (dBm)}$.

Note 3: Total EIRP (dBm) = Total Conducted Output Power dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 8

Frequency (MHz)	Conducted Output Power (dBm)		Total Conducted Output Power (dBm)	Antenna Gain (dBi)	Total EIRP (dBm)	Limit (dBm)	Test Result
	Port A	Port B					
20mW Power Level							
470.400	12.71	12.61	15.67	1.10	16.77	≤ 16.99	Pass
539.000	12.43	12.22	15.34	1.10	16.44	≤ 16.99	Pass
607.600	12.06	11.88	14.98	1.10	16.08	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: Total Conducted Output Power (dBm) = $10 \cdot \log(10^{(\text{Port A}/10)} + 10^{(\text{Port B}/10)}) \text{ (dBm)}$.

Note 3: Total EIRP (dBm) = Total Conducted Output Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 9 Single Port

Frequency (MHz)	Conducted Output Power (dBm)		Antenna Gain (dBi)	EIRP (dBm)		Limit (dBm)	Test Result
	Port A	Port B		Port A	Port B		
50mW Power Level							
470.125	13.56	13.17	1.10	14.66	14.27	≤ 16.99	Pass
539.000	13.48	13.09	1.10	14.58	14.19	≤ 16.99	Pass
607.875	13.25	12.79	1.10	14.35	13.89	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 9 Multi Ports

Frequency (MHz)	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Antenna Gain (dBi)	Total EIRP (dBm)	Limit (dBm)	Test Result
	Port A	Port B					
20mW Power Level							
470.125	11.68	11.55	14.63	1.10	15.73	≤ 16.99	Pass
539.000	11.66	11.45	14.57	1.10	15.67	≤ 16.99	Pass
607.875	11.74	11.23	14.50	1.10	15.60	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: Total Conducted Output Power (dBm) = $10 \cdot \log(10^{\text{Port A}/10} + 10^{\text{Port B}/10}) \text{ (dBm)}$.

Note 3: Total EIRP (dBm) = Total Conducted Output Power (dBm) + Antenna Gain (dBi).

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2024-11-24 ~ 2024-11-28	Test Mode	Mode 10

Frequency (MHz)		Conducted Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Test Result
F1	F2					
20mW Power Level						
470.125	470.475	14.68	1.10	15.78	≤ 16.99	Pass
539.000	539.350	13.47	1.10	14.57	≤ 16.99	Pass
607.875	607.525	13.29	1.10	14.39	≤ 16.99	Pass

Note 1: Limit = $10 \cdot \log(50\text{mW}) = 16.99 \text{ dBm}$.

Note 2: EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi).

A.5 Radiated Spurious Emission Test Result

Test Site	WZ-AC2	Test Engineer	Bob Zhang
Test Date	2024-09-13 ~ 2024-09-14	Test Mode	Mode 2

Test Channel (MHz)	Frequency (MHz)	Reading Level (dBm)	Substitution Factor (dB)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Polarization
470.125 + 470.475	58.615	-104.7	27.8	-76.9	-54.0	-22.9	Peak	Horizontal
	692.413	-103.3	37.2	-66.1	-54.0	-12.1	Peak	Horizontal
	96.154	-103.3	39.4	-63.9	-54.0	-9.9	Peak	Vertical
	585.519	-101.6	35.6	-66.0	-54.0	-12.0	Peak	Vertical
	2215.200	-70.2	10.6	-59.6	-30.0	-29.6	Peak	Horizontal
	3846.400	-71.1	12.5	-58.6	-30.0	-28.6	Peak	Horizontal
	1665.200	-69.3	9.0	-60.3	-30.0	-30.3	Peak	Vertical
	3080.400	-69.1	9.9	-59.2	-30.0	-29.2	Peak	Vertical
539.000 + 539.350	51.437	-105.4	30.7	-74.7	-54.0	-20.7	Peak	Horizontal
	709.000	-103.0	37.0	-66.0	-54.0	-12.0	Peak	Horizontal
	98.676	-105.4	39.0	-66.4	-54.0	-12.4	Peak	Vertical
	606.665	-101.5	35.3	-66.2	-54.0	-12.2	Peak	Vertical
	2253.000	-71.4	11.2	-60.2	-30.0	-30.2	Peak	Horizontal
	4646.000	-72.6	15.0	-57.6	-30.0	-27.6	Peak	Horizontal
	2167.500	-70.1	10.0	-60.1	-30.0	-30.1	Peak	Vertical
	4206.000	-71.4	13.0	-58.4	-30.0	-28.4	Peak	Vertical
607.875 + 607.525	48.236	-103.2	31.4	-71.8	-54.0	-17.8	Peak	Horizontal
	730.534	-103.3	37.9	-65.4	-54.0	-11.4	Peak	Horizontal
	101.877	-103.9	38.4	-65.5	-54.0	-11.5	Peak	Vertical
	813.663	-103.5	38.1	-65.4	-54.0	-11.4	Peak	Vertical
	2251.600	-71.0	11.1	-59.9	-30.0	-29.9	Peak	Horizontal
	5093.800	-72.7	15.8	-56.9	-30.0	-26.9	Peak	Horizontal
	2162.800	-69.1	9.9	-59.2	-30.0	-29.2	Peak	Vertical
	5445.400	-72.1	14.9	-57.2	-30.0	-27.2	Peak	Vertical

Note 1: Measure Level (dBm) = Reading Level (dBm) + Substitution Factor (dB)

Note 2: Substitution Factor (dB) = Cable Loss (dB) + Space Attenuation (dB) - Antenna Gain (dBi) - 2.15 (dB)

Note 3: QP measurement was not performed when peak measure level was lower than the QP limit.

RMS measurement was not performed when peak measure level was lower than the RMS limit.

Test Site	WZ-AC2	Test Engineer	Bob Zhang
Test Date	2024-09-13 ~ 2024-09-14	Test Mode	Mode 4

Test Channel (MHz)	Frequency (MHz)	Reading Level (dBm)	Substitution Factor (dB)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Polarization
470.125 + 470.475	51.146	-105.5	30.7	-74.8	-54.0	-20.8	Peak	Horizontal
	715.208	-103.7	37.4	-66.3	-54.0	-12.3	Peak	Horizontal
	98.094	-104.6	39.3	-65.3	-54.0	-11.3	Peak	Vertical
	578.244	-100.7	35.1	-65.6	-54.0	-11.6	Peak	Vertical
	1527.600	-69.4	8.9	-60.5	-30.0	-30.5	Peak	Horizontal
	3701.200	-69.5	12.2	-57.3	-30.0	-27.3	Peak	Horizontal
	1411.200	-66.3	8.2	-58.1	-30.0	-28.1	Peak	Vertical
	2402.400	-67.4	10.0	-57.4	-30.0	-27.4	Peak	Vertical
539.000 + 539.350	53.668	-104.8	30.0	-74.8	-54.0	-20.8	Peak	Horizontal
	720.058	-103.0	37.7	-65.3	-54.0	-11.3	Peak	Horizontal
	102.750	-104.7	38.3	-66.4	-54.0	-12.4	Peak	Vertical
	480.080	-93.7	33.4	-60.3	-54.0	-6.3	Peak	Vertical
	2234.500	-69.8	10.7	-59.1	-30.0	-29.1	Peak	Horizontal
	5039.500	-72.5	15.8	-56.7	-30.0	-26.7	Peak	Horizontal
	2432.500	-61.1	9.6	-51.5	-30.0	-21.5	Peak	Vertical
	4295.500	-71.6	13.7	-57.9	-30.0	-27.9	Peak	Vertical
607.875 + 607.525	54.056	-106.1	29.7	-76.4	-54.0	-22.4	Peak	Horizontal
	714.044	-100.7	37.5	-63.2	-54.0	-9.2	Peak	Horizontal
	93.147	-105.0	38.6	-66.4	-54.0	-12.4	Peak	Vertical
	479.983	-93.7	33.3	-60.4	-54.0	-6.4	Peak	Vertical
	2251.000	-70.3	11.1	-59.2	-30.0	-29.2	Peak	Horizontal
	6615.400	-74.3	20.0	-54.3	-30.0	-24.3	Peak	Horizontal
	2089.000	-68.8	8.9	-59.9	-30.0	-29.9	Peak	Vertical
	5371.600	-71.7	15.1	-56.6	-30.0	-26.6	Peak	Vertical

Note 1: Measure Level (dBm) = Reading Level (dBm) + Substitution Factor (dB)

Note 2: Substitution Factor (dB) = Cable Loss (dB) + Space Attenuation (dB) - Antenna Gain (dBi) - 2.15 (dB)

Note 3: QP measurement was not performed when peak measure level was lower than the QP limit.

RMS measurement was not performed when peak measure level was lower than the RMS limit.

Test Site	WZ-AC2	Test Engineer	Bob Zhang
Test Date	2024-09-13 ~ 2024-09-14	Test Mode	Mode 10

Test Channel (MHz)	Frequency (MHz)	Reading Level (dBm)	Substitution Factor (dB)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Polarization
470.125 + 470.475	214.882	-102.0	31.4	-70.6	-54.0	-16.6	Peak	Horizontal
	725.199	-103.2	37.3	-65.9	-54.0	-11.9	Peak	Horizontal
	100.810	-102.4	37.7	-64.7	-54.0	-10.7	Peak	Vertical
	479.983	-95.3	33.0	-62.3	-54.0	-8.3	RMS	Vertical
	1411.600	-64.7	8.3	-56.4	-30.0	-26.4	Peak	Horizontal
	2183.200	-66.7	10.5	-56.2	-30.0	-26.2	Peak	Horizontal
	1411.600	-57.2	6.4	-50.8	-30.0	-20.8	Peak	Vertical
	3218.800	-65.6	8.3	-57.3	-30.0	-27.3	Peak	Vertical
539.000 + 539.350	221.575	-102.5	31.2	-71.3	-54.0	-17.3	Peak	Horizontal
	479.983	-97.0	33.3	-63.7	-54.0	-9.7	Peak	Horizontal
	97.415	-102.8	39.0	-63.8	-54.0	-9.8	Peak	Vertical
	479.983	-92.6	33	-59.6	-54.0	-5.6	Peak	Vertical
	1415.800	-66.2	7.0	-59.2	-30.0	-29.2	Peak	Horizontal
	2800.000	-64.8	8.3	-56.5	-30.0	-26.5	Peak	Horizontal
	1118.800	-65.0	6.4	-58.6	-30.0	-28.6	Peak	Vertical
	3007.000	-65.4	7.9	-57.5	-30.0	-27.5	Peak	Vertical
607.875 + 607.525	227.007	-102.2	30.6	-71.6	-54.0	-17.6	Peak	Horizontal
	512.284	-100.4	34.4	-66.0	-54.0	-12.0	Peak	Horizontal
	103.138	-103.3	38.1	-65.2	-54.0	-11.2	Peak	Vertical
	479.983	-91	33	-58.0	-54.0	-4.0	Peak	Vertical
	1416.400	-66.6	7.0	-59.6	-30.0	-29.6	Peak	Horizontal
	3299.200	-66.2	9.9	-56.4	-30.0	-26.4	Peak	Horizontal
	1110.400	-64.1	6.3	-57.8	-30.0	-27.8	Peak	Vertical
	3161.800	-66.0	8.7	-57.3	-30.0	-27.3	Peak	Vertical

Note 1: Measure Level (dBm) = Reading Level (dBm) + Substitution Factor (dB)

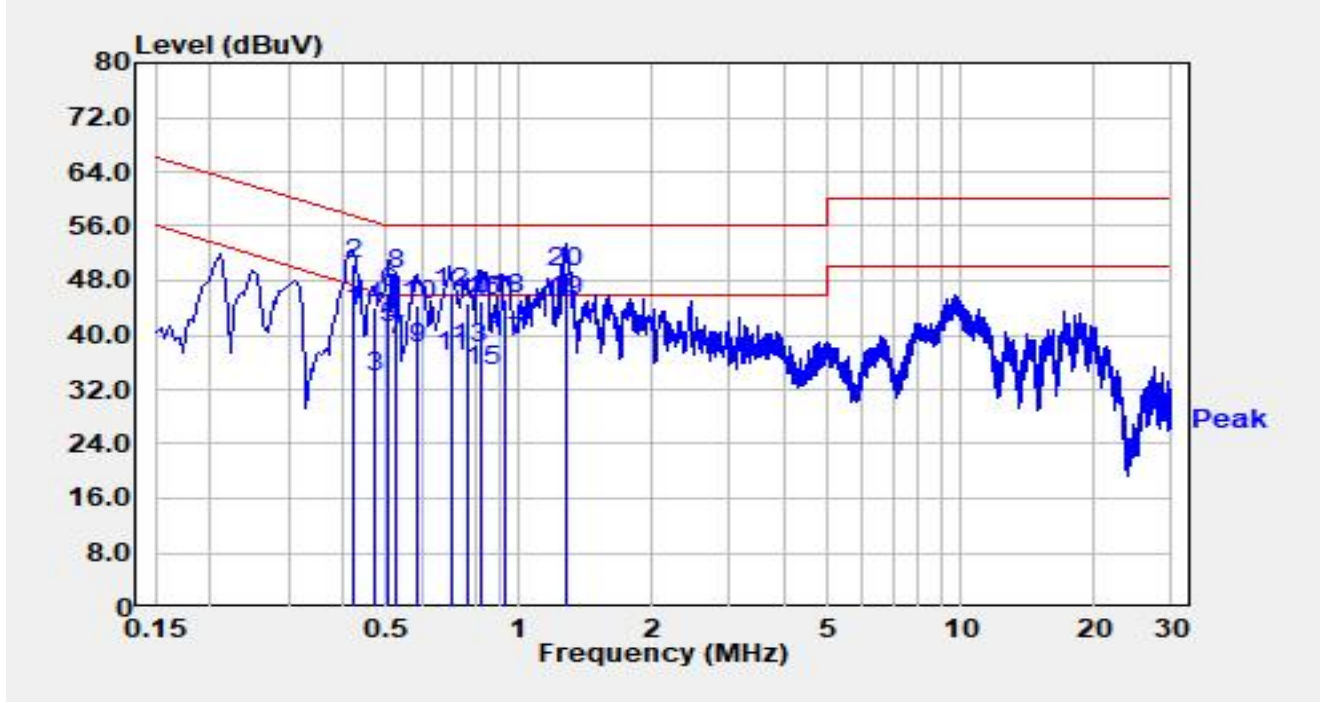
Note 2: Substitution Factor (dB) = Cable Loss (dB) + Space Attenuation (dB) - Antenna Gain (dBi) - 2.15 (dB)

Note 3: QP measurement was not performed when peak measure level was lower than the QP limit.

RMS measurement was not performed when peak measure level was lower than the RMS limit.

A.6 AC Conducted Emissions Test Result

Site	WZ-SR2	Test Date	2024-08-25
Test Engineer	Linda Wei	Temp./Humidity	23.8°C/57.1%
Factor	ENV216_101683_L1_Filter Off_C	Polarity	Line1
EUT	Wireless Dual Transmitter	Test Voltage	AC 120V/60Hz
Test Mode	Transmit by Analog FM at 470.15MHz		



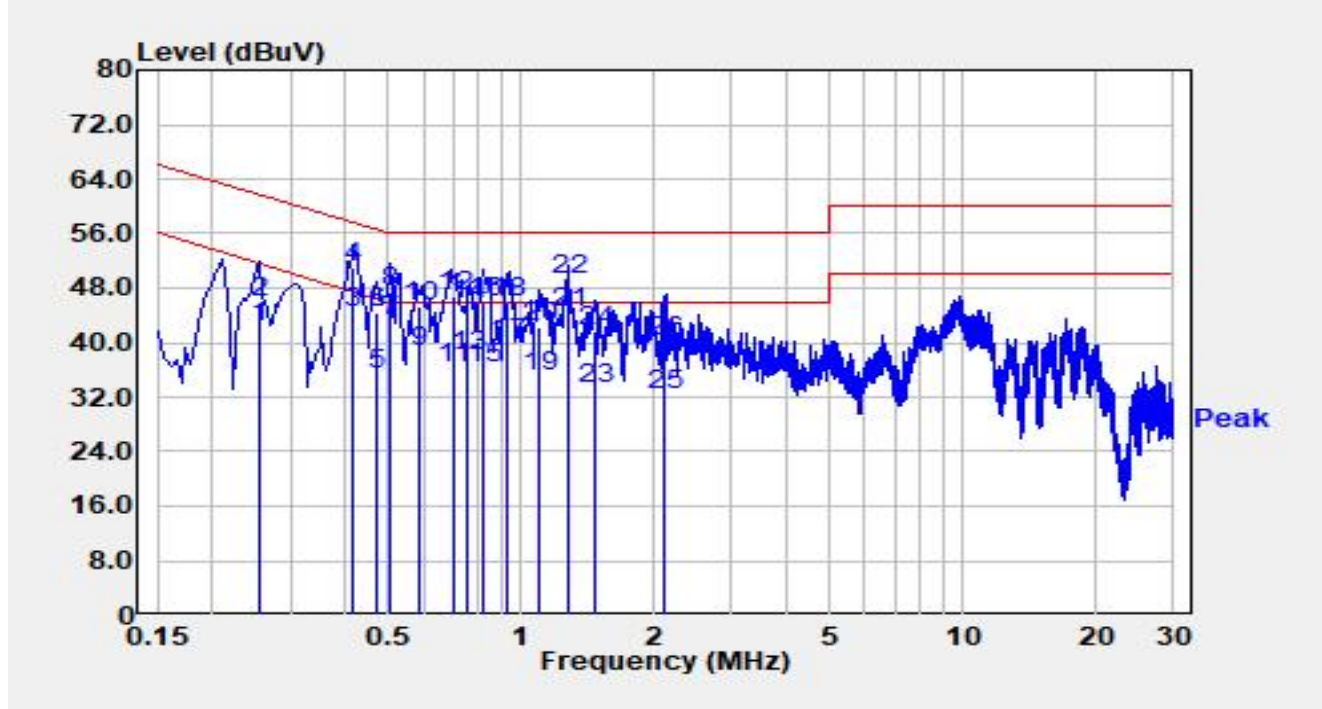
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB)	Measurement (dBμV)	Margin (dB)	Limit (dBμV)	Detector
1		0.422	33.70	9.89	43.59	-3.81	47.41	Average
2		0.422	40.60	9.89	50.49	-6.91	57.41	QP
3		0.468	24.00	9.91	33.91	-12.64	46.55	Average
4		0.468	34.10	9.91	44.01	-12.54	56.55	QP
5		0.506	31.00	9.93	40.93	-5.07	46.00	Average
6		0.506	36.40	9.93	46.33	-9.67	56.00	QP
7		0.526	29.20	9.93	39.13	-6.87	46.00	Average
8		0.526	38.90	9.93	48.83	-7.17	56.00	QP
9		0.585	28.00	9.95	37.95	-8.05	46.00	Average
10		0.585	34.30	9.95	44.25	-11.75	56.00	QP
11		0.699	26.80	10.00	36.80	-9.20	46.00	Average
12		0.699	36.30	10.00	46.30	-9.70	56.00	QP
13		0.761	28.00	10.02	38.02	-7.98	46.00	Average
14		0.761	34.80	10.02	44.82	-11.18	56.00	QP

15		0.818	24.80	10.05	34.85	-11.15	46.00	Average
16		0.818	34.80	10.05	44.85	-11.15	56.00	QP
17		0.929	28.80	10.09	38.89	-7.11	46.00	Average
18		0.929	35.10	10.09	45.19	-10.81	56.00	QP
19	*	1.270	34.80	10.12	44.92	-1.08	46.00	Average
20		1.270	39.00	10.12	49.12	-6.88	56.00	QP

Notes:

1. " * ", means this data is the worst emission level.
2. C.F (dB) = LISN Factor (dB) + Cable Loss (dB).
3. Measurement (dBμV) = Reading (dBμV) + C.F (dB).

Site	WZ-SR2	Test Date	2024-08-25
Test Engineer	Linda Wei	Temp./Humidity	23.8°C/57.1%
Factor	ENV216_101683_N_Filter Off_C	Polarity	Neutral
EUT	Wireless Dual Transmitter	Test Voltage	AC 120V/60Hz
Test Mode	Transmit by Analog FM at 470.15MHz		



No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB)	Measurement (dBμV)	Margin (dB)	Limit (dBμV)	Detector
1		0.254	32.20	10.09	42.29	-9.33	51.63	Average
2		0.254	35.80	10.09	45.89	-15.73	61.63	QP
3		0.418	34.20	10.14	44.34	-3.15	47.49	Average
4		0.418	41.00	10.14	51.14	-6.35	57.49	QP
5		0.470	25.20	10.16	35.36	-11.16	46.51	Average
6		0.470	34.30	10.16	44.46	-12.06	56.51	QP
7		0.505	33.00	10.17	43.17	-2.83	46.00	Average
8		0.505	37.30	10.17	47.47	-8.53	56.00	QP
9		0.587	28.40	10.21	38.61	-7.39	46.00	Average
10		0.587	35.00	10.21	45.21	-10.79	56.00	QP
11		0.700	25.90	10.26	36.16	-9.84	46.00	Average
12		0.700	36.40	10.26	46.66	-9.34	56.00	QP
13		0.759	27.90	10.28	38.18	-7.82	46.00	Average
14		0.759	35.30	10.28	45.58	-10.42	56.00	QP
15		0.825	25.80	10.30	36.10	-9.90	46.00	Average

16		0.825	35.70	10.30	46.00	-10.00	56.00	QP
17		0.932	29.40	10.35	39.75	-6.25	46.00	Average
18		0.932	35.50	10.35	45.85	-10.15	56.00	QP
19		1.100	24.70	10.38	35.08	-10.92	46.00	Average
20		1.100	31.90	10.38	42.28	-13.72	56.00	QP
21	*	1.280	33.90	10.38	44.28	-1.72	46.00	Average
22		1.280	38.80	10.38	49.18	-6.82	56.00	QP
23		1.470	22.90	10.38	33.28	-12.72	46.00	Average
24		1.470	31.40	10.38	41.78	-14.22	56.00	QP
25		2.100	21.80	10.39	32.19	-13.81	46.00	Average
26		2.100	29.70	10.39	40.09	-15.91	56.00	QP

Notes:

1. " * ", means this data is the worst emission level.
2. C.F (dB) = LISN Factor (dB) + Cable Loss (dB).
3. Measurement (dBμV) = Reading (dBμV) + C.F (dB).

Appendix B - Test Setup Photograph

Refer to “2406RSU021-UT” file.

Appendix C - EUT Photograph

Refer to “2406RSU021-UE” file.