

RF MEASUREMENT REPORT

FCC ID: 2A6DTET001
Applicant: EVOTE INTERNATIONAL LIMITED
Product: Aviation Radio
Model No.: KG-S74A
Serial Model No.: KG-S74A Plus, KG-S74AX, KG-S94A, KG-S94A Plus, KG-S94AX, KG-114A, KG-114A Plus, KG-114AX
Brand Name: WOUXUN
FCC Classification: Licensed Non-Broadcast Station Transmitter Held to Face
FCC Rule Part(s): FCC Part 87 Subpart D
Received Date: 2022-09-01
Test Date: 2022-11-14 ~ 2023-01-06

Reviewed By:

Jame Yuan

Approved By:

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.26. Test results reported herein relate only to the item(s) tested.

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
2209RSU003-U2	V01	Initial Report	2023-02-06	Invalid
2209RSU003-U2	V02	Update frequency rang and test equipment information	2023-02-08	Valid

CONTENTS

Description	Page
1. General Information.....	5
1.1. Applicant.....	5
1.2. Manufacturer	5
1.3. Testing Facility	5
1.4. Product Information	6
2. Test Configuration	7
2.1. Test Mode.....	7
2.2. Test System Connection Diagram.....	7
2.3. Applied Standards	8
2.4. Test Environment Condition	8
3. Measuring Instrument	9
4. Measurement Uncertainty	10
4.1. Decision Rules.....	10
4.2. Measurement Uncertainty.....	10
5. Test Result.....	11
5.1. Test Summary	11
5.2. RF Output Power 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.....	13
5.2.5. Test Result.....	13
5.3. Frequency Stability 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. Modulation Characteristics Measurement.....	16
5.4.1. Test Limit	16
5.4.2. Test Procedure.....	16
5.4.3. Test Setting.....	16
5.4.4. Test Setup.....	17
5.4.5. Test Result.....	17

5.5. Occupied Bandwidth Measurement	18
5.5.1. Test Limit	18
5.5.2. Test Procedure.....	18
5.5.3. Test Setting.....	18
5.5.4. Test Setup.....	18
5.5.5. Test Result.....	19
5.6. Conducted Spurious Emission and Emissions Mask Measurement.....	20
5.6.1. Test Limit	20
5.6.2. Test Procedure.....	20
5.6.3. Test Setting.....	20
5.6.4. Test Setup.....	21
5.6.5. Test Result.....	21
5.7. Radiated Unwanted Emissions Measurement.....	22
5.7.1. Test Limit	22
5.7.2. Test Procedure.....	22
5.7.3. Test Setting.....	22
5.7.4. Test Setup.....	23
5.7.5. Test Result.....	24
Appendix A- Test Result.....	25
A.1 RF Output Power Test Result.....	25
A.2 Rrequency Stability Test Result	26
A.3 Modulation Characteristics Test Result	27
A.4 Occupied Bandwidth Test Result	35
A.5 Conducted Spurious Emission at Antenna Terminals Test Result.....	37
A.6 Radiated Unwanted Emission Test Result.....	42
Appendix B - Test Setup Photograph	44
Appendix C - EUT Photograph.....	45

1. General Information

1.1. Applicant

EVOTE INTERNATIONAL LIMITED

FLAT/RM A 12/F ZJ 300 300 LOCKHART ROAD WAN CHAI HONGKONG

1.2. Manufacturer

Quanzhou Wouxun Electronics Co., Ltd.

#38 Yuantai 1st Road, Jiangnan High Technology Industry Park, Quanzhou, Fujian 362000, China

1.3. Testing Facility

<input checked="" type="checkbox"/>	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
<input type="checkbox"/>	Laboratory Accreditations
	A2LA: 3628.01
	FCC: CN1166
	VCCI: <input type="checkbox"/> R-20025 <input type="checkbox"/> G-20034 <input type="checkbox"/> C-20020 <input type="checkbox"/> T-20020 <input type="checkbox"/> R-20141 <input type="checkbox"/> G-20134 <input type="checkbox"/> C-20103 <input type="checkbox"/> T-20104
	Test Site – MRT Shenzhen Laboratory
<input type="checkbox"/>	Laboratory Location (Shenzhen)
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China
	Laboratory Accreditations
	A2LA: 3628.02
	FCC: CN1284
<input type="checkbox"/>	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: L3261-190725
	FCC: 291082, TW3261
	ISED: TW3261

1.4. Product Information

Product Name	Aviation Radio
Model No.	KG-S74A
Serial Model No.	KG-S74A Plus, KG-S74AX, KG-S94A, KG-S94A Plus, KG-S94AX, KG-114A, KG-114A Plus, KG-114AX
Serial No.	C09AR0004
Frequency Range	118.000MHz ~ 135.995MHz
Working Voltage	7.4VDC
Type of Modulation	AM
Channel Spacing	8.33kHz & 25kHz
Antenna Type	Dipole
Antenna Gain	2.0 dBi
Accessories	
Adapter	Model: DSX-120050L-US INPUT: 100-240VAC 50-60Hz 0.3A OUTPUT: 12VDC 0.5A
Battery	7.4VDC 2000mAh (14.8Wh)
Notes:	
<ol style="list-style-type: none">1. The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.2. KG-S74A is selected for all testing, specified by the manufacturer.3. The difference between the above models is with different model names and plastic enclosure, the above models are with the same diagram and mainboard.	

2. Test Configuration

2.1. Test Mode

Mode 1: Transmit at channel 118.025MHz with 8.33kHz channel spacing

Mode 2: Transmit at channel 127.025MHz with 8.33kHz channel spacing

Mode 3: Transmit at channel 135.975MHz with 8.33kHz channel spacing

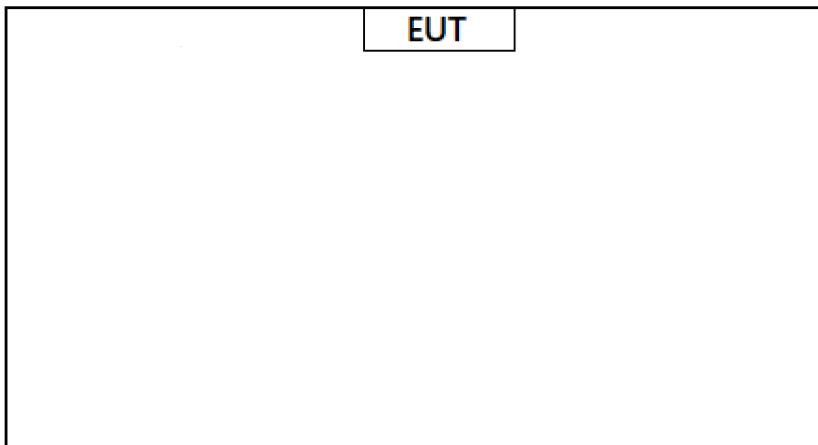
Mode 4: Transmit at channel 118.025MHz with 25kHz channel spacing

Mode 5: Transmit at channel 127.025MHz with 25kHz channel spacing

Mode 6: Transmit at channel 135.975MHz with 25kHz channel spacing

2.2. Test System Connection Diagram

Connection Diagram – Radiated Unwanted Emission Testing



2.3. Applied Standards

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

FCC Part 87 Subpart A and Subpart D

FCC Part 2

ANSI C63.26 - 2015

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
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2023-05-20	WZ-AC2
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2023-06-04	WZ-AC2
Thermohygrometer	Mingle	ETH529	MRTSUE06170	1 year	2023-11-27	WZ-AC2
				1 year	2022-11-28	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2023-10-13	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2023-05-08	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2023-04-21	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE11038	1 year	2023-11-01	WZ-AC2
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2023-09-29	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE06401	1 year	2023-06-06	WZ-TR3
Temperature Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2023-10-08	WZ-TR3
Thermohygrometer	testo	608-H1	MRTSUE06402	1 year	2023-06-06	WZ-SR5
Shielding Room	HUAMING	WZ-SR5	MRTSUE06442	N/A	N/A	WZ-SR5/WZ-TR3
Signal Analyzer	Keysight	N9010B	MRTSUE06457	1 year	2023-06-04	WZ-SR5
Audio Analyzer	R&S	UPV	MRTSUE06357	1 year	2023-04-28	WZ-SR5
Modulation Analyzer	HP	HP8901A	MRTSUE06098	1 year	2023-08-23	WZ-SR5

Software	Version	Function
EMI Software	V3	EMI Test Software
Controller_MF 7802	1.02	RE Antenna & Turntable

4. 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 $k = 2$.

Radiated Spurious Emissions
Measurement Uncertainty for a Level of Confidence of 95% ($U=2U_{c(y)}$): Horizontal: 9kHz ~ 300MHz: 5.04dB 300MHz ~ 1GHz: 4.95dB 1GHz ~ 40GHz: 6.40dB Vertical: 9kHz ~ 300MHz: 5.24dB 300MHz ~ 1GHz: 6.03dB 1GHz ~ 40GHz: 6.40dB
Conducted Spurious Emissions
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_{c(y)}$): 0.78dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_{c(y)}$): 1.13dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_{c(y)}$): 0.28%
Frequency Stability
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_{c(y)}$): 76.2Hz

5. Test Result

5.1. Test Summary

FCC Part Section(s)	Test Description	Test Condition	Verdict
§87.131, §2.1046	RF Output Power	Conducted	Pass
§87.133, §2.1055	Frequency Stability		Pass
§87.141(a), §2.1047	Modulation Characteristics (Audio Frequency Response)		Pass
§87.141, §2.1047	Modulation Characteristics (Modulation Limiting)		Pass
§87.135, §2.1049	Occupied Bandwidth		Pass
§87.139, §2.1051	Conducted Spurious Emission at Antenna Terminals		Pass
§87.139, §2.1053	Radiated Unwanted Emission	Radiated	Pass

Remark:

1. 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.
2. For radiated emission tests, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.

5.2. RF Output Power Measurement

5.2.1. Test Limit

The following table lists authorized emissions and maximum power. Power must be determined by direct measurement.

Class of station	Frequency band/frequency	Authorized emission(s)	Maximum power ¹
Aeronautical advisory	VHF	A3E	10 watts ²
Aeronautical multicom	VHF	A3E	10 watts
Aeronautical search and rescue	VHF	A3E	10 watts
Flight test land	VHF	A3E	200 watts
Aviation support	VHF	A3E	50 watts
Airport control tower	VHF	A3E	50 watts
Aeronautical utility mobile	VHF	A3E	10 watts
Aircraft (Communication)	VHF	A3E	55 watts

Note1: The power is measured at the transmitter output terminals and the type of power is determined according to the emission designator as follows:

- (i) Mean power (pY) for amplitude modulated emissions and transmitting both sidebands using unmodulated full carrier.
- (ii) Peak envelope power (pX) for all emission designators other than those referred to in paragraph (i) of this note.

Note2: Power is limited to 0.5 watt, but may not exceed 2 watts when station is used in an automatic unattended mode.

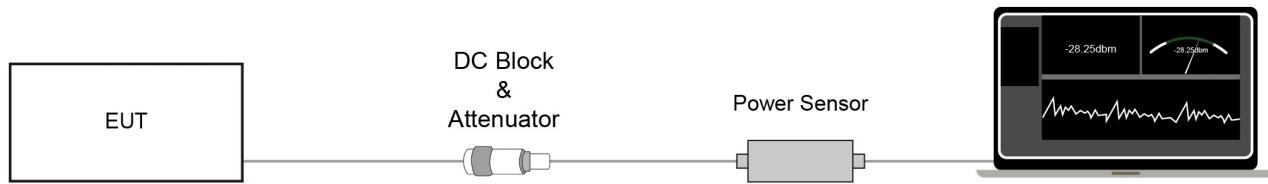
5.2.2. Test Procedure

ANSI C63.26-2015 - Section 5.2.3.2

5.2.3. 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.

5.2.4. Test Setup



5.2.5. Test Result

Refer to Appendix A.

5.3. Frequency Stability Measurement

5.3.1. Test Limit

The carrier frequency of each station must be maintained within the tolerance in the following table:

Frequency band (lower limit exclusive, upper limit inclusive), and categories of stations	Tolerance (ppm)
(5) Band – 108 to 137MHz: Aircraft and other mobile stations in the Aviation Services	30

5.3.2. Test Procedure

ANSI C63.26-2015 - Section 5.6

5.3.3. Test Setting

Frequency Stability Under Temperature Variations:

The equipment under test was connected to an external AC or 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. Turn EUT off and set the chamber temperature to High. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the Low temperature reached.

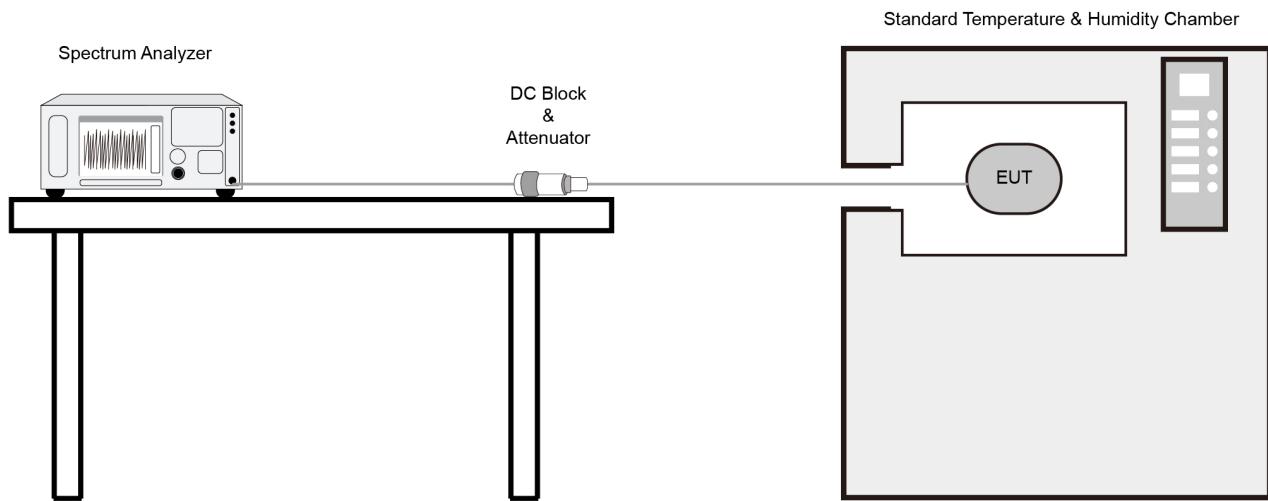
Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / 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.

For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.

5.3.4. Test Setup



5.3.5. Test Result

Refer to Appendix A.

5.4. Modulation Characteristics Measurement

5.4.1. Test Limit

(a) When A3E emission is used, the modulation percentage must not exceed 100 percent. This requirement does not apply to emergency locator transmitters or survival craft transmitters.

(c) If any licensed radiotelephone transmitter causes harmful interference to any authorized radio service because of excessive modulation, the Commission will require the use of the transmitter to be discontinued until it is rendered capable of automatically preventing modulation in excess of 100 percent.

5.4.2. Test Procedure

ANSI C63.26-2015 - Section 5.3.3.1 & Section 5.3.2

5.4.3. Test Setting

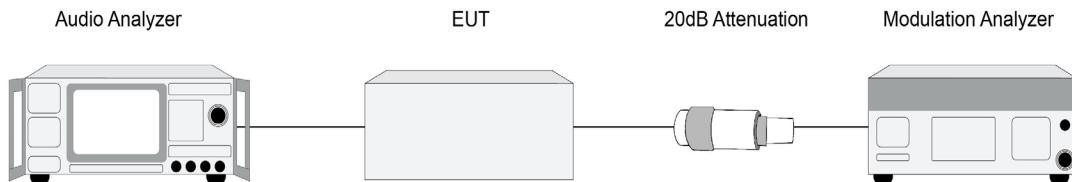
Audio Frequency Response

1. Connect the equipment following the below figure
2. Apply a 1000 Hz tone and adjust the audio frequency generator to produce 20% of the rated system deviation.
3. Set the test receiver to measure rms deviation and record the deviation reading
4. Record the audio frequency input reading as V_{REF}
5. Set the audio frequency generator to the desired test frequency between 100 Hz and 5000Hz and record the input levels necessary to maintain a constant 20% modulation.
6. Record the audio frequency input reading as V_{FREQ}
7. Calculate the audio frequency response at the present frequency as follows in Equation
$$\text{audio frequency response} = 20 * \text{LOG}(V_{FREQ}/V_{REF})$$

Modulation Limiting Response

1. Connect the equipment following the below figure
2. Apply a 1000 Hz modulating signal to the transmitter from the audio frequency generator, and adjust the level to obtain 60% of full rated system deviation. This is the 0 dB reference level.
3. Increase the level from the audio generator by 20 dB in 5 dB increments recording the deviation as measured from the test receiver in each step. Verify that the audio level used to make the OBW measurement is included in the sweep.
4. Repeat for step 3) at 300 Hz, 2500 Hz and 3000 Hz at a minimum using the 0 dB reference level obtained in step 2).
5. Set the test receiver to measure peak negative deviation and repeat step 2) through step 4).
6. The values recorded in step 4) and step 5) are the modulation limiting.

5.4.4. Test Setup



5.4.5. Test Result

Refer to Appendix A.

5.5. Occupied Bandwidth Measurement

5.5.1. Test Limit

(a) Occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to 0.5 percent of the total mean power of a given emission.

(b) The authorized bandwidth is the maximum occupied bandwidth authorized to be used by a station.

(c) The necessary bandwidth for a given class of emission is the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions

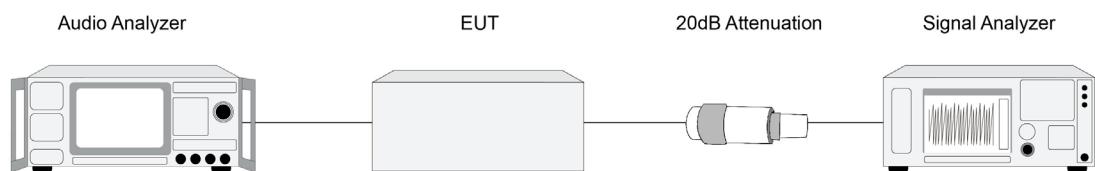
5.5.2. Test Procedure

ANSI C63.26-2015 - Section 5.4

5.5.3. Test Setting

1. Span shall be set wide enough to capture all modulation products including the emission skirts
2. Set RBW = 1% to 5% the OBW
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace was allowed to stabilize
8. Use the instrument's 99% OBW function to measure

5.5.4. Test Setup



5.5.5. Test Result

Refer to Appendix A.

5.6. Conducted Spurious Emission and Emissions Mask Measurement

5.6.1. Test Limit

(a) Except for ELTs and when using single sideband (R3E, H3E, J3E), or frequency modulation (F9) or digital modulation (F9Y) for telemetry or telecommand in the 1435-1525 MHz, 2345-2395 MHz, or 5091-5150 MHz band or digital modulation (G7D) for differential GPS, the mean power of any emissions must be attenuated below the mean power of the transmitter (pY) as follows:

- (1) When the frequency is removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth the attenuation must be at least 25 dB;
- (2) When the frequency is removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth the attenuation must be at least 35 dB.
- (3) When the frequency is removed from the assigned frequency by more than 250 percent of the authorized bandwidth the attenuation for aircraft station transmitters must be at least 40 dB; and the attenuation for aeronautical station transmitters must be at least $43 + 10 \log_{10} pY$ dB

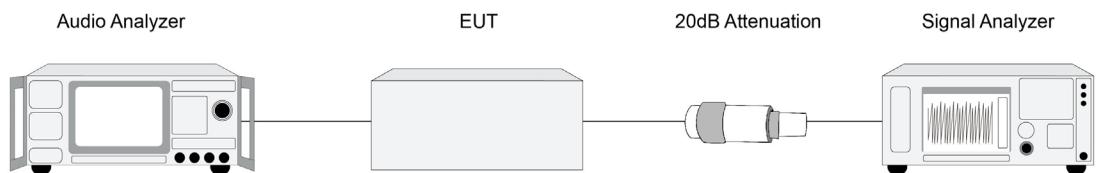
5.6.2. Test Procedure

ANSI C63.26-2015 - Section 5.7

5.6.3. Test Setting

1. Connect the EUT antenna output port to the spectrum analyzer via an appropriate RF cable.
2. Analyzer was set to the center frequency of the EUT channel under investigation
3. Span ≥ 1.5 times the OBW
4. Set the RBW as required by applicable regulations.
5. VBW to a value $\geq 3 \times$ RBW
6. Detector = Peak
7. Sweep time = auto couple
8. Trace mode = max hold
9. Trace was allowed to stabilize

5.6.4. Test Setup



5.6.5. Test Result

Refer to Appendix A.

5.7. Radiated Unwanted Emissions Measurement

5.7.1. Test Limit

(a)(3) When the frequency is removed from the assigned frequency by more than 250 percent of the authorized bandwidth the attenuation for aircraft station transmitters must be at least 40 dB; and the attenuation for aeronautical station transmitters must be at least $43 + 10 \log_{10} pY \text{ Db}$

$E (\text{dB}\mu\text{V/m}) = \text{EIRP} (\text{dBm}) - 20 \log D + 104.8$; where D is the measurement distance in meters. The emission limit equal to $82.3 \text{ dB}\mu\text{V/m}$.

5.7.2. Test Procedure

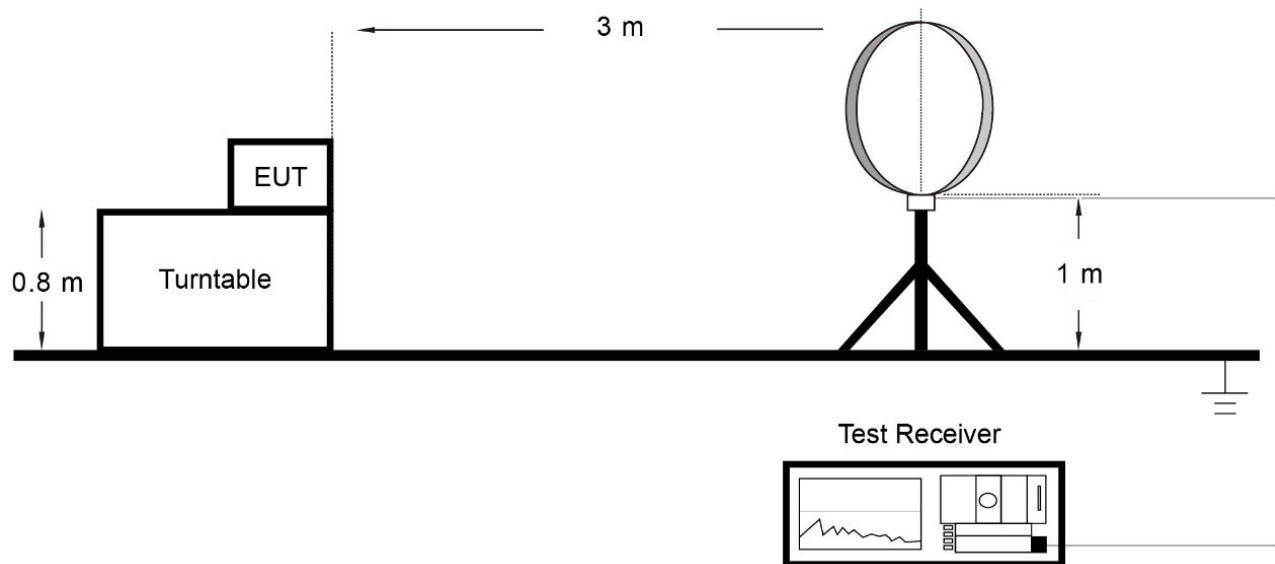
ANSI C63.26-2015 - Section 5.7

5.7.3. Test Setting

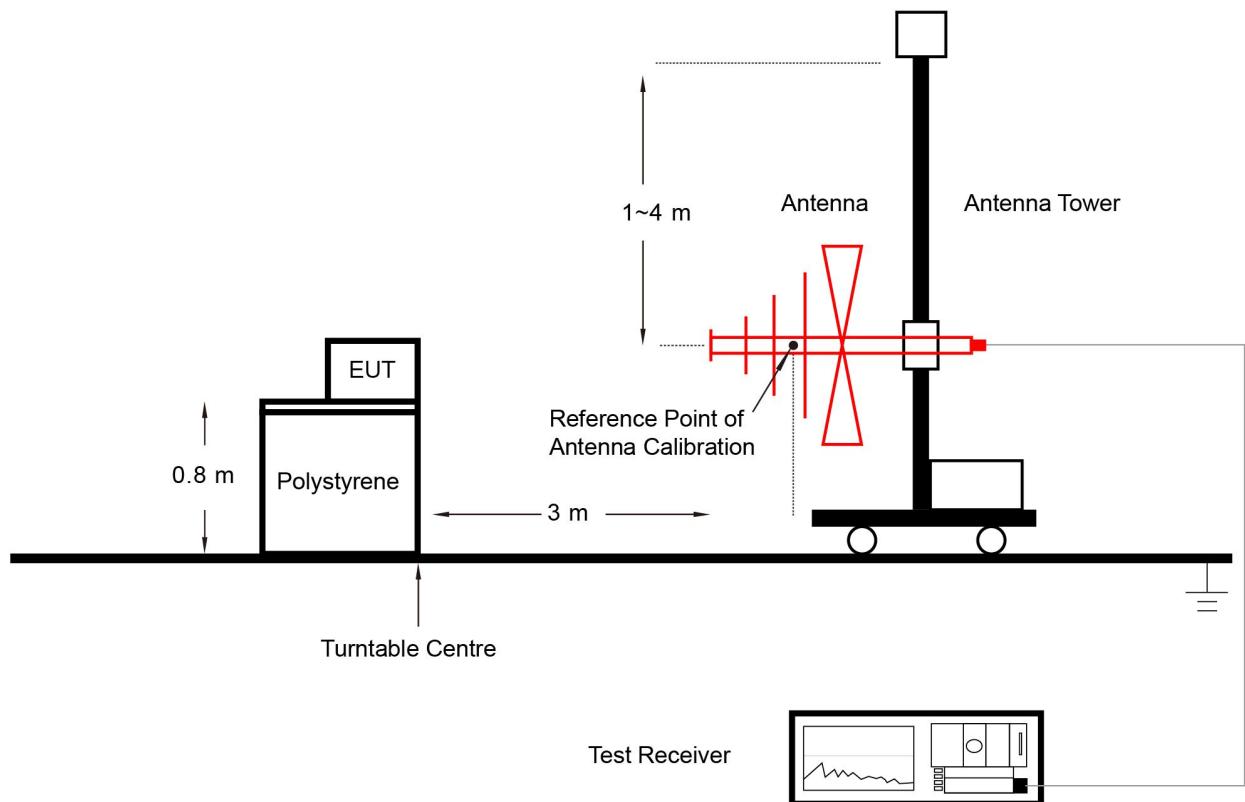
1. RBW = 1MHz
2. VBW $\geq 3 \times \text{RBW}$
3. Sweep time $\geq 10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})$
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

5.7.4. Test Setup

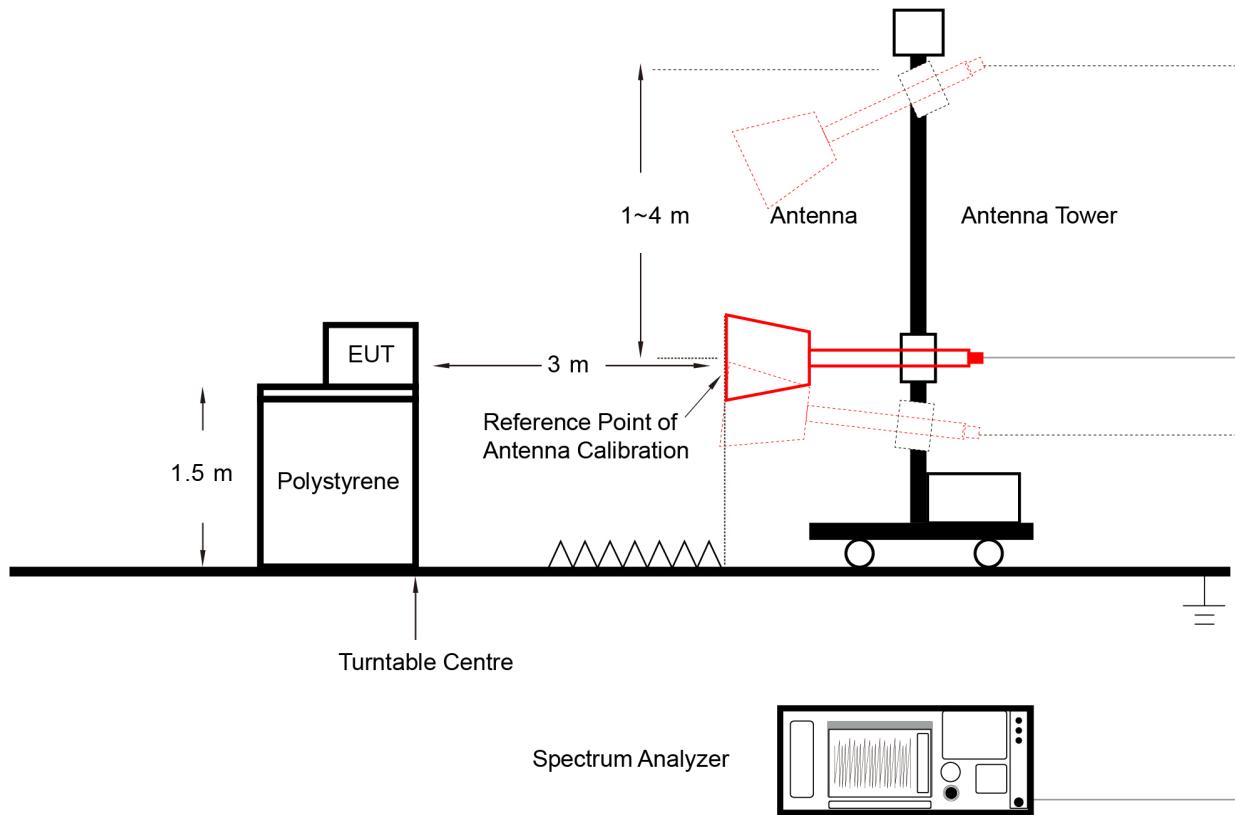
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.7.5. Test Result

Refer to Appendix A.

Appendix A- Test Result

A.1 RF Output Power Test Result

Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2023-01-03		

Frequency (MHz)	Channel Spacing (kHz)	Output Power (dBm)	Output Power (W)	Result
118.025	8.33	33.48	2.23	Pass
127.025	8.33	33.76	2.38	Pass
135.975	8.33	34.17	2.61	Pass
118.025	25	33.47	2.22	Pass
127.025	25	33.75	2.37	Pass
135.975	25	34.13	2.59	Pass

Note: Measured Output Power(W) = $10^{(Measured\ Output\ Power\ (dBm)\ /10)\ /1000}$

A.2 Frequency Stability Test Result

Test Site	WZ-TR3	Test Engineer	Liz Yuan
Test Date	2023-01-05		

Voltage (V)	Temp (°C)	Frequency Tolerance (ppm)	
		Reference Frequency: 127.025MHz	Limit
7.4	-30	-4.06	-30 ~ +30
	-20	0.17	-30 ~ +30
	-10	0.16	-30 ~ +30
	0	0.15	-30 ~ +30
	+ 10	0.15	-30 ~ +30
	+ 20	0.13	-30 ~ +30
	+ 30	0.13	-30 ~ +30
	+ 40	0.11	-30 ~ +30
	+ 50	0.10	-30 ~ +30
6.1 Note1	20	0.10	-30 ~ +30

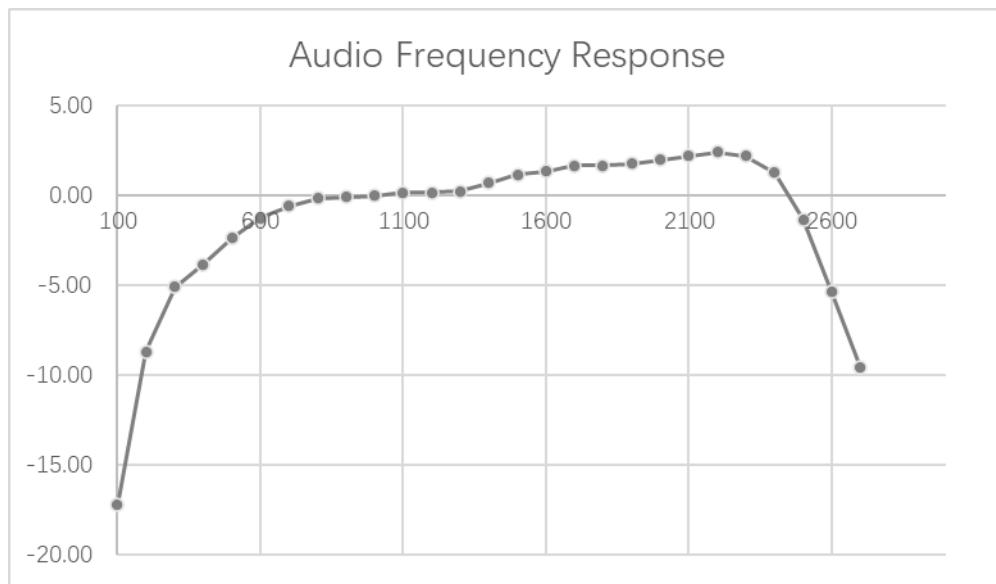
Note1: Battery endpoint voltage is declared and specified by the manufacturer.

A.3 Modulation Characteristics Test Result

Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2023-01-06	Test Item	Audio Frequency Response
Test Mode	8.33kHz channel spacing		

Frequency (Hz)	AM level (with 20% modulation percentage) (mV)	Audio Frequency Response (dB)
100	75.0	-17.24
200	28.0	-8.69
300	18.5	-5.09
400	16.0	-3.83
500	13.5	-2.35
600	11.9	-1.25
700	11.0	-0.57
800	10.5	-0.17
900	10.4	-0.08
1000	10.3	0.00
1100	10.1	0.17
1200	10.1	0.17
1300	10.0	0.26
1400	9.5	0.70
1500	9.0	1.17
1600	8.8	1.37
1700	8.5	1.67
1800	8.5	1.67
1900	8.4	1.77
2000	8.2	1.98
2100	8.0	2.19
2200	7.8	2.41
2300	8.0	2.19
2400	8.9	1.27
2500	12.0	-1.33
2600	19.0	-5.32
2700	31.0	-9.57

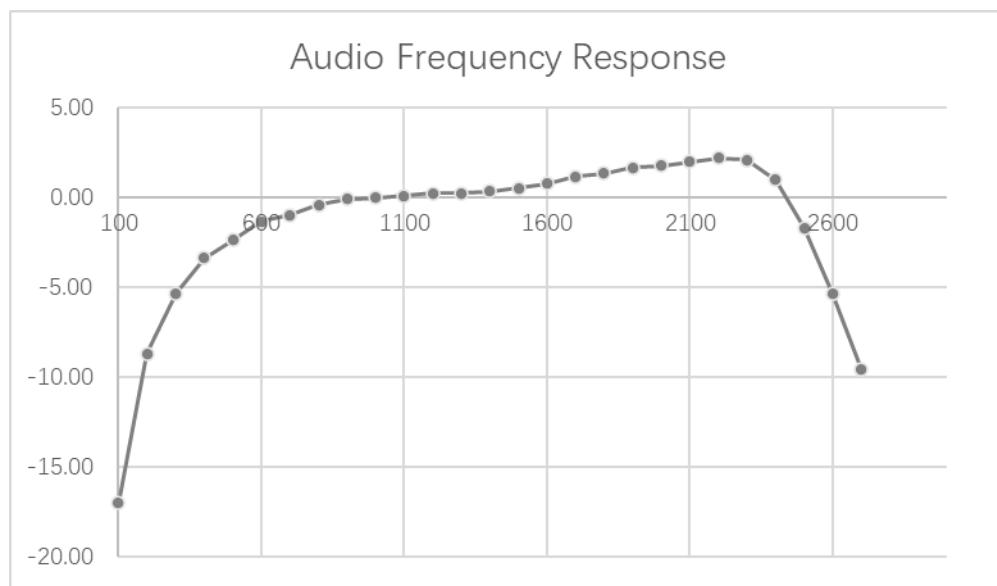
Note: 20% modulation could not be achieved above 2700Hz



Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2023-01-06	Test Item	Audio Frequency Response
Test Mode	25kHz channel spacing		

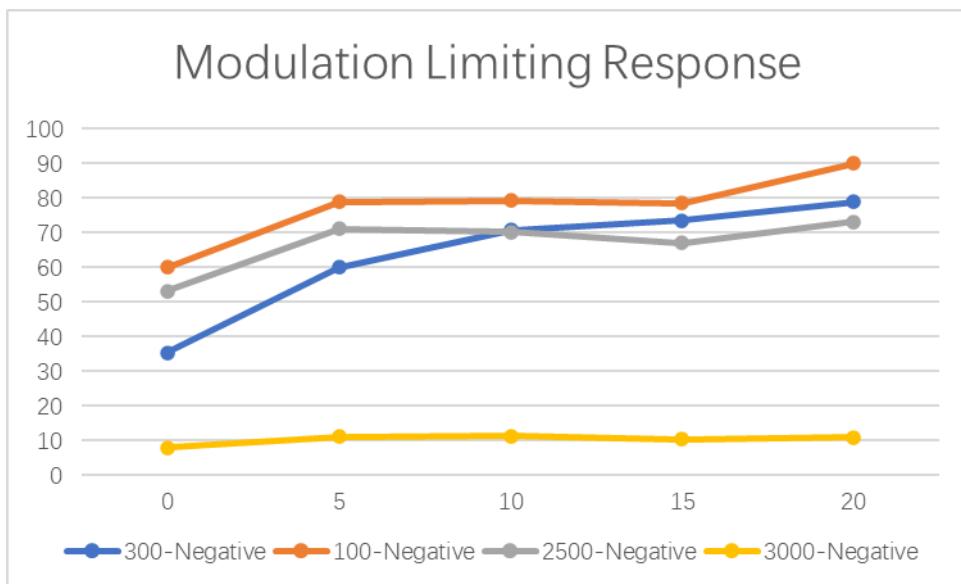
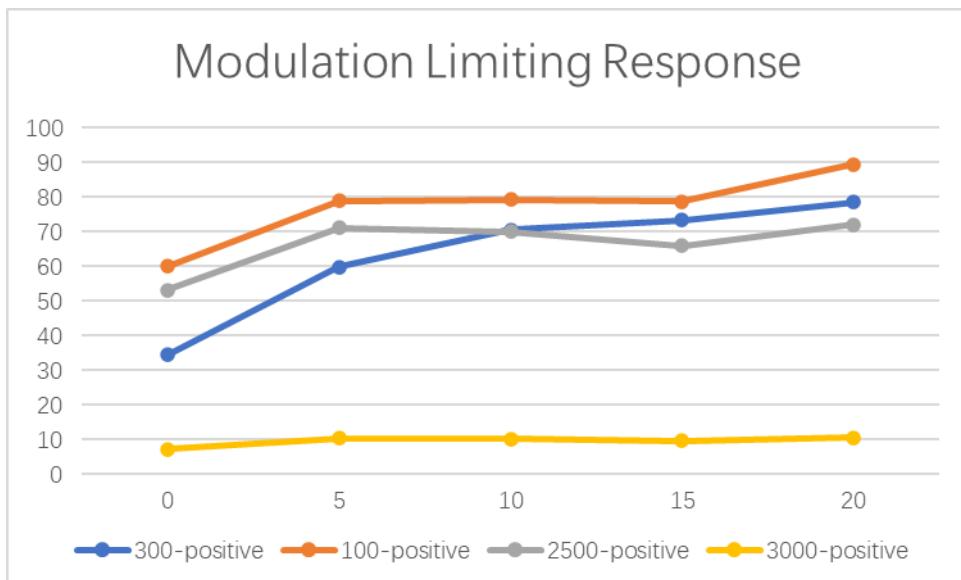
Frequency (Hz)	AM level (with 20% modulation percentage) (mV)	Audio Frequency Response (dB)
100	100	-17.01
200	200	-8.69
300	300	-5.32
400	400	-3.38
500	500	-2.35
600	600	-1.33
700	700	-0.96
800	800	-0.41
900	900	-0.08
1000	1000	0.00
1100	1100	0.08
1200	1200	0.26
1300	1300	0.26
1400	1400	0.34
1500	1500	0.52
1600	1600	0.79
1700	1700	1.17
1800	1800	1.37
1900	1900	1.67
2000	2000	1.77
2100	2100	1.98
2200	2200	2.19
2300	2300	2.09
2400	2400	0.98
2500	2500	-1.68
2600	2600	-5.32
2700	2700	-9.57

Note: 20% modulation could not be achieved above 2700Hz



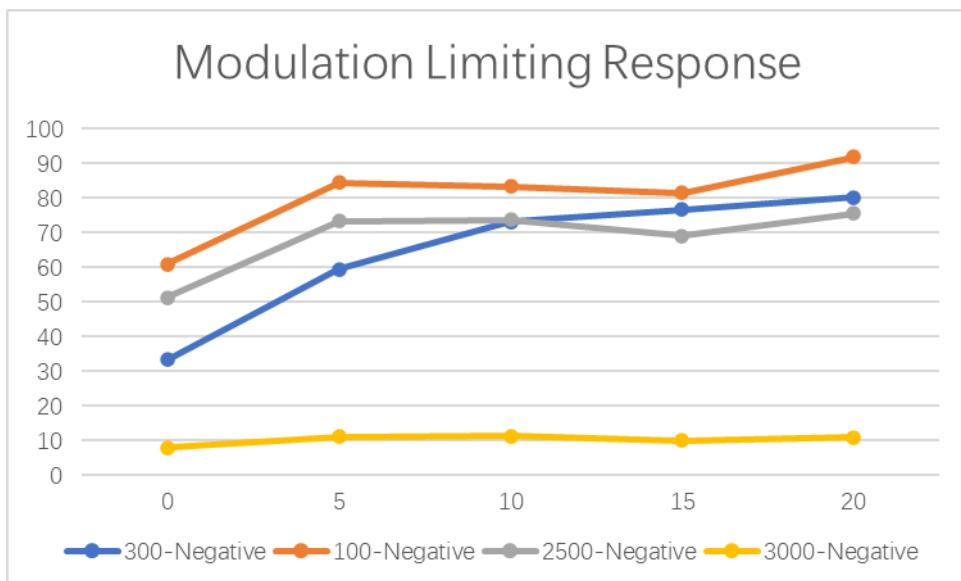
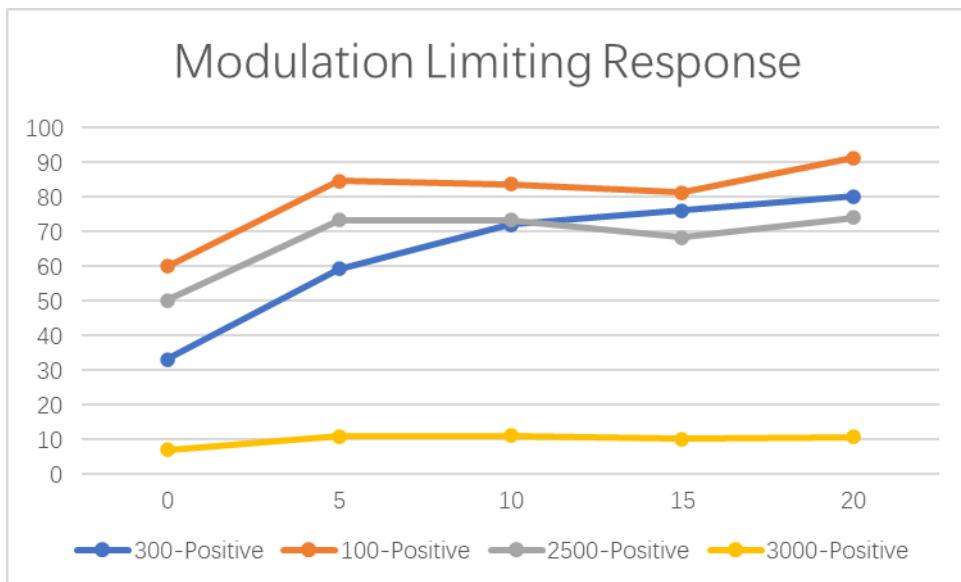
Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2023-01-06	Test Item	Modulation Limiting Response
Test Mode	8.33kHz channel spacing		

Frequency (Hz)	Increase level relative to reference (dB)	Positive Modulation percentage	Negative Modulation percentage
300	0	34.50	35.51
	5	59.90	60.12
	10	70.60	70.89
	15	73.50	73.55
	20	78.60	79.01
1000	0	60.00	60.05
	5	78.90	78.99
	10	79.40	79.35
	15	78.70	78.65
	20	89.50	90.01
2500	0	53.30	53.24
	5	71.10	71.16
	10	70.10	70.22
	15	66.00	67.03
	20	72.20	73.15
3000	0	7.32	8.01
	5	10.40	11.23
	10	10.28	11.43
	15	9.78	10.54
	20	10.58	11.03



Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2023-01-06	Test Item	Modulation Limiting Response
Test Mode	25kHz channel spacing		

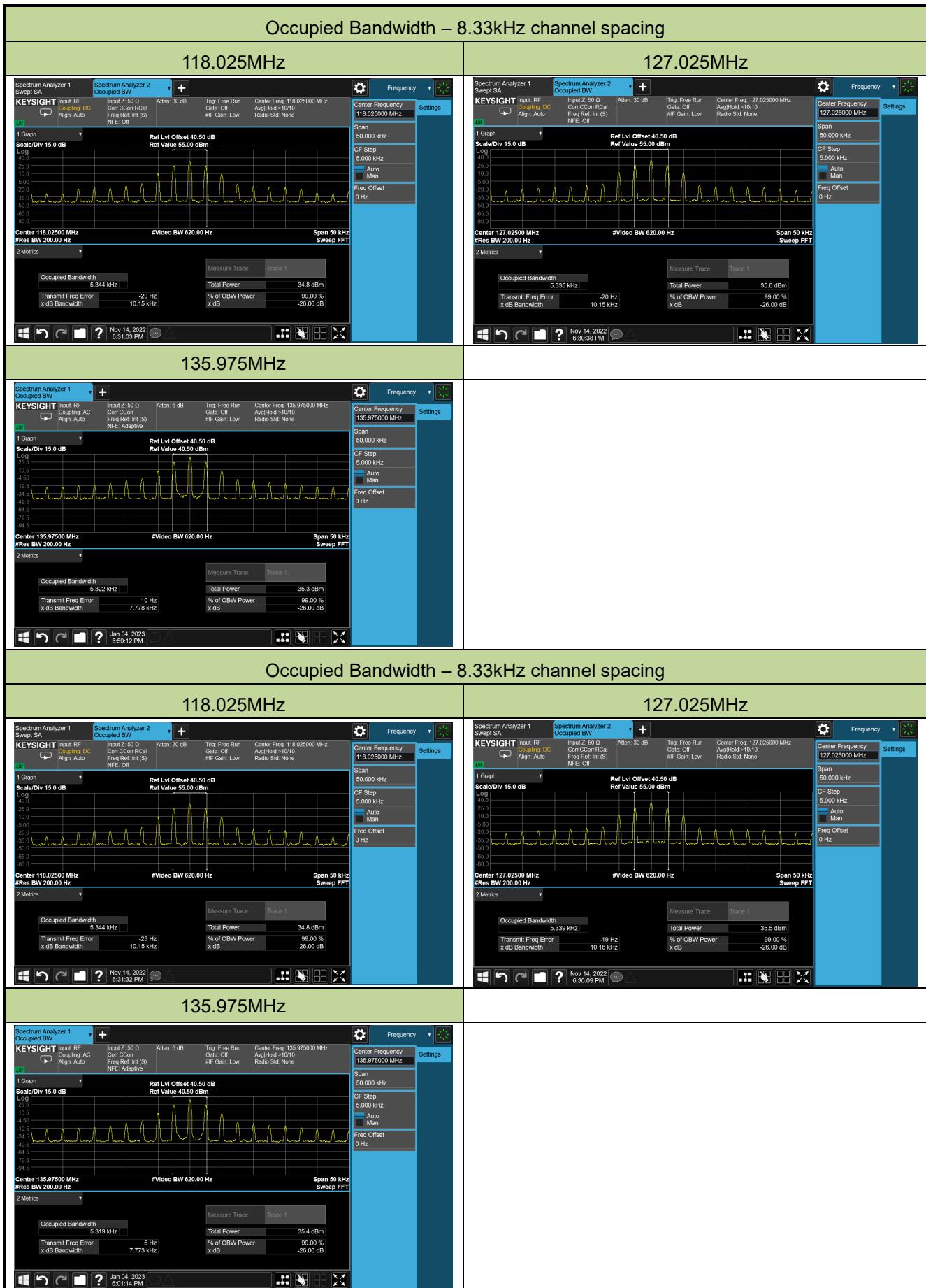
Frequency (Hz)	Increase level relative to reference (dB)	Positive Modulation percentage	Negative Modulation percentage
300	0	33.20	33.45
	5	59.40	59.49
	10	72.10	73.15
	15	76.20	76.79
	20	80.30	80.21
1000	0	60.00	61.04
	5	84.70	84.54
	10	83.80	83.37
	15	81.30	81.55
	20	91.40	91.90
2500	0	50.30	51.32
	5	73.50	73.38
	10	73.40	73.79
	15	68.50	69.14
	20	74.10	75.62
3000	0	7.08	8.04
	5	11.05	11.15
	10	11.14	11.43
	15	10.20	10.17
	20	10.86	10.96



A.4 Occupied Bandwidth Test Result

Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2022-11-14 ~ 2023-01-04		

Frequency (MHz)	Channel Spacing (kHz)	99% Bandwidth (kHz)	Limit (kHz)	Result
118.025	8.33	5.344	≤ 8.33	Pass
127.025		5.335	≤ 8.33	Pass
135.975		5.322	≤ 8.33	Pass
118.025	25	5.344	≤ 25	Pass
127.025		5.339	≤ 25	Pass
135.975		5.319	≤ 25	Pass



A.5 Conducted Spurious Emission at Antenna Terminals Test Result

Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2022-11-22 ~ 2023-01-05	Test Mode	Out-of-Band Emission

