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TEST REPORT

For RF

Report No..... : CHTW26045008

Project No : SHT2601081701W

FCC ID : 2A3OORA87

Applicant's name : Shenzhen Ysair Technology Co., LTD

Address..... : Room 403, 4th Floor, Building 4, Yunli Intelligent Park, No. 3 Changfa Middle Road, Yangmei Community, Bantian Street, Longgang District, Shenzhen

Product Name : GMRS Mobile Radio

Trade Mark..... : RETEVIS

Model No..... : RA87

Listed Model(s) : -

Standard : **FCC CFR Title 47 Part 95 Subpart E**

Date of receipt of test sample..... : 2026/1/30

Date of testing..... : 2026/1/30- 2026/4/20

Date of issue..... : 2026/4/21

Result..... : **Pass**



Compiled by
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Testing Laboratory Name : **Shenzhen Huatongwei International Inspection Co., Ltd.**

Address..... : Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China

Test Report Form No. : R0054

Test Report Form(s) Originator : Shenzhen Huatongwei International Inspection Co., Ltd.

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1. TEST STANDARDS AND REPORT VERSION

1.1. Test Standards

The tests were performed according to following standards:

- [FCC CFR Title 47 Part 95 Subpart E](#): General Mobile Radio Service
- [FCC Rules Part 2](#): Frequency allocations and radio treaty matters; General rules and regulations
- [ANSI C63.26-2013](#): American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

1.2. Report version

Revision No.	Date of issue	Description
N/A	2026-04-21	Original

2. TEST DESCRIPTION

Report clause	Test Items	Standard Requirement	Result
5.1	Carrier Output Power (ERP)	Part 95.1767 Part 2.1046	PASS
5.2	99% Occupied Bandwidth & 26dB bandwidth	Part 95.1773 Part 2.1049	PASS
5.3	Emission Mask	Part 95.1779 Part 2.1049	PASS
5.4	Modulation Limit	Part 95.1775 Part 2.1047	PASS
5.5	Audio Frequency Response	Part 95.1775 Part 2.1047	PASS
5.6	Audio Low Pass Filter Response	Part 95.1775 Part 2.1047	PASS
5.7	Frequency Stability V.S. Temperature	Part 95.1765 Part 2.1055	PASS
5.8	Frequency Stability V.S. Voltage	Part 95.1765 Part 2.1055	PASS
5.9	Transmit Radiated Spurious Emission	Part 95.1779 Part 2.1051	PASS

Note:

- The measurement uncertainty is not included in the test result.

3. SUMMARY

3.1. Client Information

Applicant:	Shenzhen Ysair Technology Co., LTD
Address:	Room 403, 4th Floor, Building 4, Yunli Intelligent Park, No. 3 Changfa Middle Road, Yangmei Community, Bantian Street, Longgang District, Shenzhen
Manufacturer:	Shenzhen Retevis Technology Co., Ltd.
Address:	7/F, 13-C, Zhonghaixin Science&Technology Park, No.12 Ganli 6th Road, Jihua Street, Longgang District, Shenzhen, China

3.2. Product Description

Main unit information:	
Product Name:	GMRS Mobile Radio
Trade Mark:	RETEVIS
Model No.:	RA87
Listed Model(s):	-
Power supply:	DC 13.8V
Hardware version:	6PM7-2010-E
Software version:	V1.6

3.3. Radio Specification Description

Support Frequency Range:	462MHz Main channel:	462.5500, 462.5750, 462.6000, 462.6250, 462.6500, 462.6750, 462.7000, 462.7250MHz
	462MHz interstitial channel:	462.5625, 462.5875, 462.6125, 462.6375, 462.6625, 462.6875, 462.7125 MHz
	467MHz Main channel:	467.5500, 467.5750, 467.6000, 467.6250, 467.6500, 467.6750, 467.7000, 467.7250MHz
Modulation Type:	FM	
Emission Designator:	11K0F3E,16K0F3E	

3.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.	
Laboratory Location	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China	
Connect information:	Tel: 400-963-0755 E-mail: cs@szhtw.com.cn http://www.szhtw.com.cn	
Qualifications	Type	Accreditation Number
	FCC Registration Number	762235
	FCC Designation Number	CN1181

4. TEST CONFIGURATION

4.1. Test frequency list

According to ANSI C63.26 section 5.1.2.1:

Measurements of transmitters shall be performed and, if required, reported for each frequency band in which the EUT can be operated with the device transmitting at the number of frequencies in each band specified in Table 2.

Frequency range over which EUT operates	Number of frequencies	Location in frequency range of operation
1 MHz or less	1	Middle
1 MHz to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

Test Channel	Frequency range	Type	Frequency (MHz)
CH _{M1}	462MHz	Main	462.6250
CH _{M2}	467MHz	Main	467.6250
CH _{M3}	462MHz	Interstitial	462.6625
CH _{M4}	462MHz	Main	462.6250
CH _{M5}	467MHz	Main	467.6250
CH _{M6}	462MHz	Interstitial	462.6625

Test Channel	Analog Channel Separation	Rated output power
CH _{M1}	12.5KHz	40W
CH _{M2}		40W
CH _{M3}		5W
CH _{M4}	25KHz	40W
CH _{M5}		40W
CH _{M6}		5W

The Product channel frequency table:

Frequency Band	Type	Frequency (MHz)	Frequency Band	Type	Frequency (MHz)
462MHz	Main	462.5500	462MHz	Interstitial	462.5625
		462.5750			462.5875
		462.6000			462.6125
		462.6250			462.6375
		462.6500			462.6625
		462.6750			462.6875
		462.7000			462.7125
		462.7250			-

Frequency Band	Type	Frequency (MHz)
467MHz	Main	467.5500
		467.5750
		467.6000
		467.6250
		467.6500
		467.6750
		467.7000
		467.7250

4.2. Test mode

Test mode	Transmitting	Receiving	Charging	GMRS
TX-GMRS	√			√
RX-GMRS		√		√

Note:

√: is operation mode.

Modulation Type	Description
UM	Un-modulation
AM2	Apply a 1000 Hz tone and adjust the audio frequency generator to produce 20% of the rated system deviation.
AM6	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, then increase the level from the audio generator by 20 dB
AM5	Modulate the transmitter with a 2500 Hz sine wave at an input level 16 dB greater than that necessary to produce 50% of rated system deviation.

Test item	Modulation Type	Test mode
Output Power(ERP)	UM	TX-GMRS
99% Occupied Bandwidth & 26dB bandwidth	AM6	TX-GMRS
Emission Mask	AM5	TX-GMRS
Modulation Limit	AM6	TX-GMRS
Audio Frequency Response	AM2	TX-GMRS
Audio Low Pass Filter Response	AM2	TX-GMRS
Frequency Stability VS Temperature	UM	TX-GMRS
Frequency Stability VS Voltage	UM	TX-GMRS
Transmit Radiated Spurious Emission	AM5	TX-GMRS

4.3. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Whether support unit is used?					
✓ No					
Item	Equipment	Trade Name	Model No.	FCC ID	Power cord
1					
2					

4.4. Testing environmental condition

Type	Requirement	Actual
Temperature:	15~35°C	25°C
Relative Humidity:	25~75%	50%
Air Pressure:	860~1060mbar	1000mbar
Test voltage:	Normal voltage (V_N):	
	Extreme lower voltage (V_L):	
	Extreme higher voltage (V_H):	

4.5. Measurement uncertainty

Test Item	Measurement Uncertainty
Frequency stability	25 Hz
Carrier output power (ERP)	2.20 dB
Occupied Bandwidth	35 Hz
Modulation Limiting	0.42 %
FM deviation	25 Hz
Audio level	0.62 dB
Radiated Spurious Emission 30~1000MHz	4.65 dB
Radiated Spurious Emission 1~18GHz	5.16 dB
AC power line Conducted Emission 9KHz-30MHz	3.39 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=1.96$.

4.6. Equipment Used during the Test

● Test Software					
Used	Test Item	Software Name	Manufacturer	Equipment No.	Version
●	Radiated Emission	EMC32	R&S	HTWER012	V10.60.20

● RF Conducted test item							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Spectrum Analyzer	Agilent	HTWE0286	N9020A	MY50510187	2025/8/19	2026/8/18
●	Signal & Spectrum Analyzer	R&S	HTWE0262	FSW26	103440	2025/8/19	2026/8/18
●	RF Communication Test Set	HP	HTWE0038	8920A	3813A10206	2025/8/19	2026/8/18
●	Digital intercom communication tester	Aeroflex	HTWE0255	3920B	1001682041	2025/8/19	2026/8/18
●	Filter-VHF	Microwave	HTWE0309	N26460M1	498702	2025/7/28	2026/7/27
●	Filter-UHF	Microwave	HTWE0311	N25155M2	498704	2025/7/28	2026/7/27
●	Power Divider	Microwave	HTWE0043	OPD1040-N-4	N/A	2025/3/26	2026/3/25
●	Attenuator	JFW	HTWE0292	50FH-030-100	N/A	2025/10/22	2026/10/21
●	Attenuator	Eastsheep	HTWE0387	NCP-20-3-100W	/	2026/3/26	2027/3/25
●	Attenuator	Eastsheep	HTWE0388	NCP-10-3-100W	/	2026/3/26	2027/3/25
●	High Pass Filter	RFSYS	HTWE0390-05	RFSYS-GTA10	200615-1-04	2025/5/26	2026/5/25
●	Filter-UHF	Microwave	HTWE0310	N26460M1	498703 DC1808	2026/1/20	2027/1/19
●	Filter-VHF	Microwave	HTWE0312	N25155M2	498704 DC1808	2026/1/20	2027/1/19

● Auxiliary Equipment							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Climate chamber	ESPEC	HTWS0715	GPL-2	N/A	2025/6/11	2026/6/10
●	Walk-in Constant Temperature And Humidity Cabinet	重庆银河	HTWS0383	SDJ610A	201800463	2025/6/11	2026/6/10
●	DC Power Supply	Gwinstek	HTWE0274	SPS-2415	GER835793	N/A	N/A
●	DC Power Supply	MESTEK	HTWE0705	DP6010	00230820197	N/A	N/A

● Radiated Spurious Emission							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Full-Anechoic Chamber	Albatross projects	HTWE0122	SAC-3m-01	C11122	2023/4/17	2026/4/16
●	Full-Anechoic Chamber	Albatross projects	HTWE0122	SAC-3m-01	C11122	2026/3/19	2029/3/18
●	Spectrum Analyzer	R&S	HTWE0098	FSP40	100597	2025/8/6	2026/8/5
●	Spectrum Analyzer	Agilent	HTWE0385	N9020A	MY54486658	2025/8/6	2026/8/5
●	Ultra-Broadband Antenna	SCHWARZBECK	HTWE0123	VULB9163	538	2024/4/8	2027/4/7
●	Ultra-Broadband Antenna	SCHWARZBECK	HTWE0700	VULB9163	1422	2025/4/7	2028/4/6
●	Horn Antenna	SCHWARZBECK	HTWE0126	BBHA 9120D	1011	2026/1/23	2029/1/22
●	Horn Antenna	ETS	HTWE0532	3117	240056	2025/4/14	2028/4/13
●	Pre-Amplifier	CD	HTWE0071	PAP-0102	12004	2025/5/26	2026/5/25
●	Broadband Pre-amplifier	SCHWARZBECK	HTWE0551	SCU18F	100855	2025/5/26	2026/5/25

● Auxiliary Equipment							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	High pass filter	Wainwright	HTWE0297	WHKX3.0/18G-10SS	38	2025/5/26	2026/5/25
●	Band Stop filter	-	HTWE0039	N/A	N/A	2026/1/20	2027/1/19
●	High Pass Filter	Microwave	HTWE0040	OSF-HPF26300P20-LC	N/A	2026/1/20	2027/1/19
●	DC Power Supply	Gwinstek	HTWE0274	SPS-2415	GER835793	N/A	N/A
●	DC Power Supply	MESTEK	HTWE0705	DP6010	00230820197	N/A	N/A

5. TEST CONDITIONS AND RESULTS

5.1. Carrier Output Power (ERP)

LIMIT

FCC Part 95.1767, FCC Part 2.1046

(a) 462/467 MHz main channels.

The limits in this paragraph apply to stations transmitting on any of the 462 MHz main channels or any of the 467 MHz main channels. Each GMRS transmitter type must be capable of operating within the allowable power range. GMRS licensees are responsible for ensuring that their GMRS stations operate in compliance with these limits.

(1) The transmitter output power of mobile, repeater and base stations must **not exceed 50 Watts**.

(2) The transmitter output power of fixed stations must **not exceed 15 Watts**.

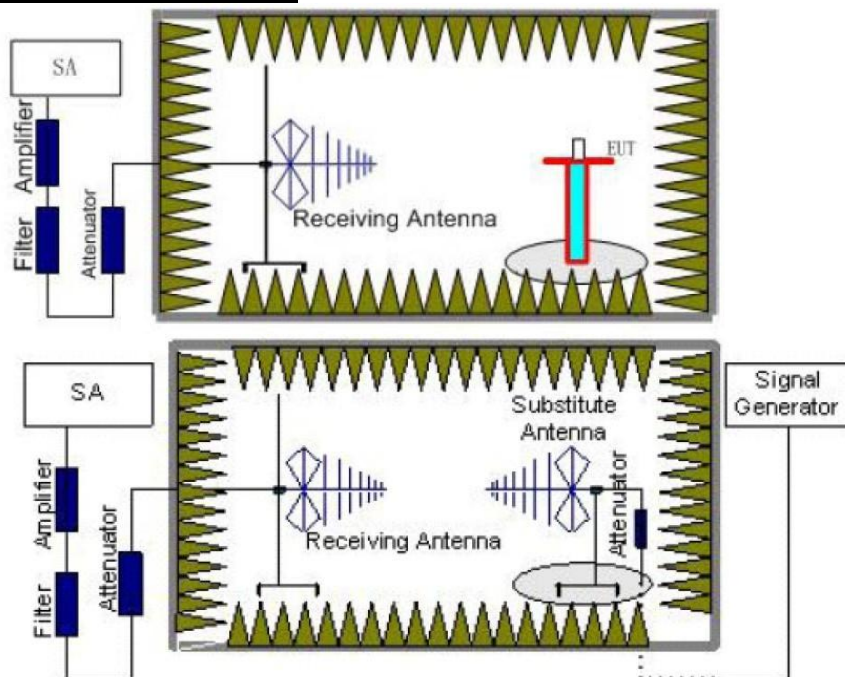
(b) 462 MHz interstitial channels.

The effective radiated power (ERP) of mobile, hand-held portable and base stations transmitting on the 462MHz interstitial channels must **not exceed 5 Watts**.

(c) 467 MHz interstitial channels.

The effective radiated power (ERP) of hand-held portable units transmitting on the 467 MHz interstitial channels must **not exceed 0.5 Watt**. Each GMRS transmitter type capable of transmitting on these channels must be designed such that the ERP does not exceed 0.5 Watt.

TEST CONFIGURATION



TEST PROCEDURE

- 1) The measuring distance of at 3m shall be used for measurements
- 2) The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation
- 3) The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4) The spectrum setting for Equivalent Isotropically Radiated Power (EIRP) is RBW = 100kHz, VBW = 300kHz. Detector Mode is Positive Peak
- 5) Record the field strength level of the EUT from the spectrum

- 6) The substitution antenna is substituted for EUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be moved height from 1m to 4m to find the highest radiation. Adjust the S.G. output level and repeat this step to get the same field strength level as the EUT
- 7) The EIRP level = S.G. output level(dBm)- TX cable(dB) + Substituted Antenna Gain(dBi)
- 8) The ERP level = EIRP-2.15

TEST MODE

Please reference to the section 4.2

TEST RESULTS

☒ Passed ☐ Not Applicable

TEST Data

Please refer to appendix A on the appendix report

5.2. 99% Occupied Bandwidth & 26dB Bandwidth

LIMIT

FCC Part 95.1773, FCC Part 2.1049

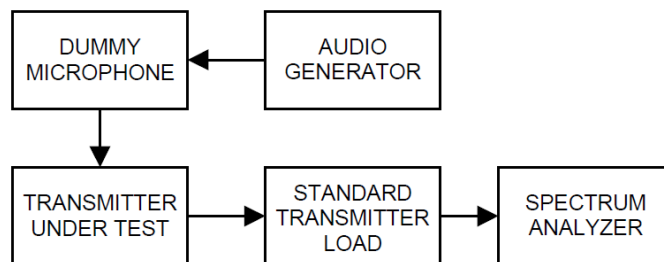
(a) Main channels.

The authorized bandwidth is **20 kHz** for GMRS transmitters operating on any of the 462 MHz main channels or any of the 467 MHz main channels.

(b) Interstitial channels.

The authorized bandwidth is **20 kHz** for GMRS transmitters operating on any of the 462 MHz interstitial channels and is **12.5 kHz** for GMRS transmitters operating on any of the 467 MHz interstitial channels

TEST CONFIGURATION



TEST PROCEDURE

- 1) Connect the equipment as illustrated
- 2) Spectrum set as follow:
 Centre frequency = the nominal EUT channel center frequency,
 The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (typically a span of $1.5 \times \text{OBW}$ is sufficient)
 RBW = 1% to 5% of the anticipated OBW, VBW $\geq 3 \times \text{RBW}$, Sweep = auto,
 Detector function = peak, Trace = max hold
- 3) Set 99% Occupied Bandwidth and 26dB Bandwidth
- 4) Measure and record the results in the test report.

TEST MODE

Please reference to the section 4.2

TEST RESULTS

☒ Passed ☐ Not Applicable

TEST Data

Please refer to appendix B on the appendix report

5.3. Emission Mask

LIMIT

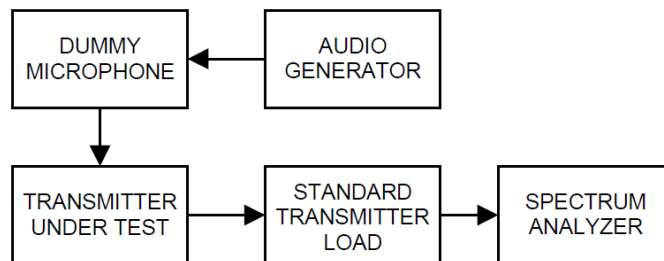
FCC Part 95.1779(b)(1)(2)(7), FCC Part 2.1049

(b) Attenuation requirements.

The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) by at least:

- (1) **25 dB** (decibels) on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 100% of the authorized bandwidth.
- (2) **35 dB** on any frequency removed from the center of the authorized bandwidth by more than 100% up to and including 250% of the authorized bandwidth.
- (7) **43 + 10 log (P) dB** on any frequency removed from the center of the authorized bandwidth by more than 250%.

TEST CONFIGURATION



TEST PROCEDURE

- 1) Connect the equipment as illustrated.
- 2) Spectrum set as follow:
 12.5KHz: Centre frequency = fundamental frequency, RBW=200Hz, VBW=500Hz, Sweep = auto, Detector function = peak, Trace = max hold
 25KHz: Centre frequency = fundamental frequency, RBW=300Hz, VBW=1000Hz, Sweep = auto, Detector function = peak, Trace = max hold
- 3) Key the transmitter, and set the level of the unmodulated carrier to a full scale reference line. This is the 0dB reference for the measurement.
- 4) Apply Input Modulation Signal to EUT according to Section 4.2
- 5) Measure and record the results in the test report.

TEST MODE

Please reference to the section 4.2

TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

TEST Data

Please refer to appendix C on the appendix report

5.4. Modulation Limit

LIMIT

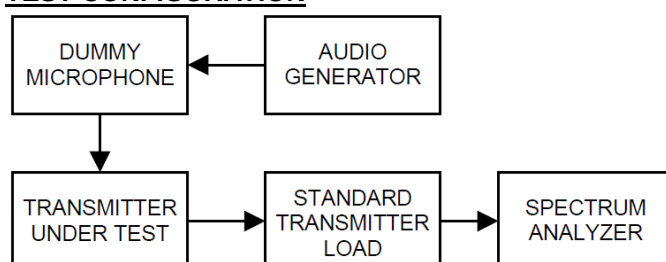
FCC Part 95.1775, FCC Part 2.1047(b)

Each GMRS transmitter type must be designed to satisfy the modulation requirements in this section.

Operation of GMRS stations must also be in compliance with these requirements.

- (a) **Main channels** The peak frequency deviation for emissions to be transmitted on the main channels must **not exceed ± 5 kHz**.
- (b) **462 MHz interstitial channels**. The peak frequency deviation for emissions to be transmitted on the 462 MHz interstitial channels must **not exceed ± 5 kHz**.
- (c) **467 MHz interstitial channels**. The peak frequency deviation for emissions to be transmitted on the 467 MHz interstitial channels must **not exceed ± 2.5 kHz**, and the highest audio frequency contributing substantially to modulation must **not exceed 3.125 kHz**.

TEST CONFIGURATION



TEST PROCEDURE

- 1) Connect the equipment as illustrated.
- 2) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
- 3) Set the test receiver to measure peak positive deviation. Set the audio bandwidth for ≤ 0.25 Hz to $\geq 15,000$ Hz. Turn the de-emphasis function off.
- 4) 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.
- 5) Increase the level from the audio frequency generator by 20 dB in one step (rise time between the 10% and 90% points shall be 0.1 second maximum).
- 6) Measure both the instantaneous and steady-state deviation at and after the time of increasing the audio input level
- 7) With the level from the audio frequency generator held constant at the level obtained in step 4), slowly vary the audio frequency from 300 Hz to 3000 Hz and observe the steady-state deviation. Record the maximum deviation.

TEST MODE

Please reference to the section 4.2

TEST RESULTS

☒ Passed ☐ Not Applicable

TEST Data

Please refer to appendix D on the appendix report

5.5. Audio Frequency Response

LIMIT

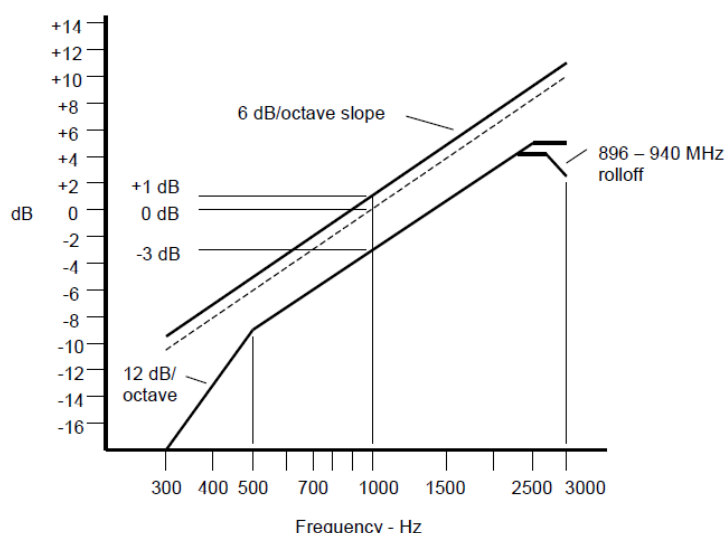
FCC Part 95.1775, FCC Part 2.1047(a)

Each GMRS transmitter type must be designed to satisfy the modulation requirements in this section.

Operation of GMRS stations must also be in compliance with these requirements.

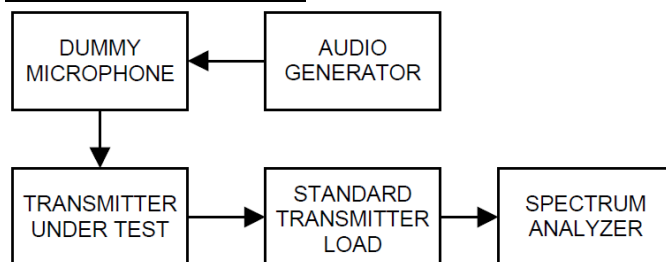
- (d) **Main channels** The peak frequency deviation for emissions to be transmitted on the main channels must **not exceed ± 5 kHz**.
- (e) **462 MHz interstitial channels**. The peak frequency deviation for emissions to be transmitted on the 462 MHz interstitial channels must **not exceed ± 5 kHz**.
- (f) **467 MHz interstitial channels**. The peak frequency deviation for emissions to be transmitted on the 467 MHz interstitial channels must **not exceed ± 2.5 kHz**, and the highest audio frequency contributing substantially to modulation must **not exceed 3.125 kHz**.

Voice modulated communication equipment. A curve or equivalent data showing the frequency response of the audio modulating circuit over a range of 100 to 5000 Hz shall be submitted.



An additional 6 dB per octave attenuation is allowed from 2500 Hz to 3000 Hz in equipment operating in the 25 MHz to 869 MHz range.

TEST CONFIGURATION



TEST PROCEDURE

- 1) Connect the equipment as illustrated.
- 2) Set the test receiver to measure peak positive deviation. Set the audio bandwidth for 50 Hz to 15,000 Hz. Turn the de-emphasis function off.
- 3) Set the DMM to measure rms voltage.
- 4) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
- 5) Apply a 1000 Hz tone and adjust the audio frequency generator to produce 20% of the rated system deviation.
- 6) Set the test receiver to measure rms deviation and record the deviation reading.
- 7) Record the DMM reading as V_{REF} .

- 8) Set the audio frequency generator to the desired test frequency between 300 Hz and 3000 Hz.
- 9) Vary the audio frequency generator output level until the deviation reading that was recorded in step 6) is obtained.
- 10) Record the DMM reading as V_{FREQ}
- 11) Calculate the audio frequency response at the present frequency as:
audio frequency response = $20 \log_{10} (V_{\text{FREQ}}/V_{\text{REF}})$.
- 12) Repeat steps 8) through 11) for all the desired test frequencies

TEST MODE

Please reference to the section 4.2

TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

TEST Data

Please refer to appendix E on the appendix report

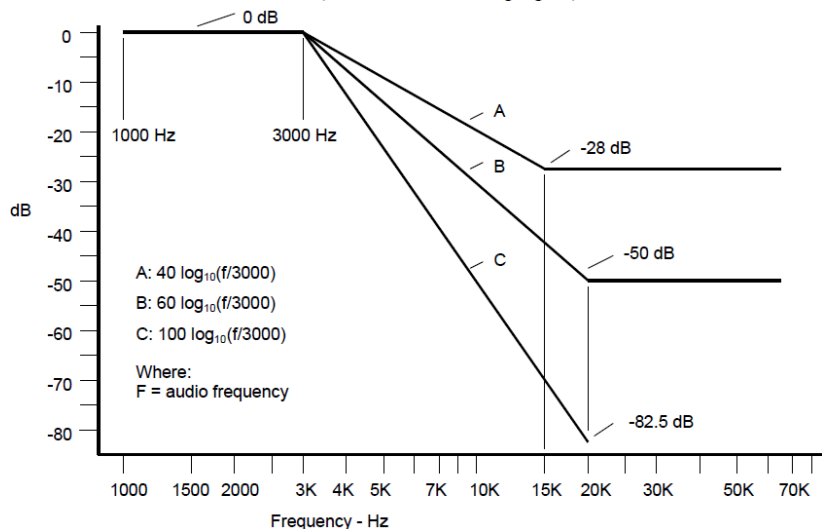
5.6. Audio Low Pass Filter Response

LIMIT

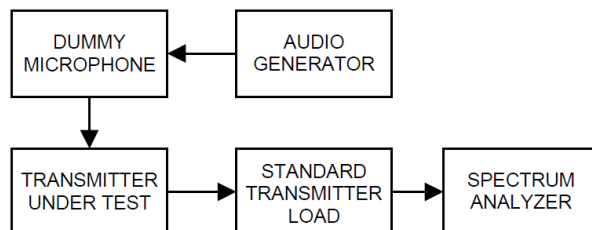
FCC Part 95.1775(e)(1)(2):

(e) Audio filter. Each GMRS transmitter type must include audio frequency low pass filtering, unless it complies with the applicable paragraphs of §95.1779 (without filtering).

- (1) The filter must be between the modulation limiter and the modulated stage of the transmitter.
- (2) At any frequency (f in kHz) between 3 and 20 kHz, the filter must have an attenuation of at least $60 \log(f/3)$ dB more than the attenuation at 1 kHz. Above 20 kHz, it must have an attenuation of at least 50 dB more than the attenuation at 1 kHz.



TEST CONFIGURATION



TEST PROCEDURE

- 1) Configure the EUT as shown in figure .
- 2) Apply a 1000 Hz tone from the audio signal generator and adjust the level per manufacturer's specifications. Record the dB level of the 1000 Hz tone as LEV_{REF} .
- 3) Set the audio signal generator to the desired test frequency between 3000 Hz and the upper low pass filter limit. Record the dB level at the test frequency as LEV_{FREQ} .
- 4) Calculate the audio frequency response at the test frequency as:
 low pass filter response = $LEV_{FREQ} - LEV_{REF}$

TEST MODE

Please reference to the section 4.2

TEST RESULTS

☒ Passed ☐ Not Applicable

TEST Data

Please refer to appendix F on the appendix report

5.7. Frequency stability VS Temperature

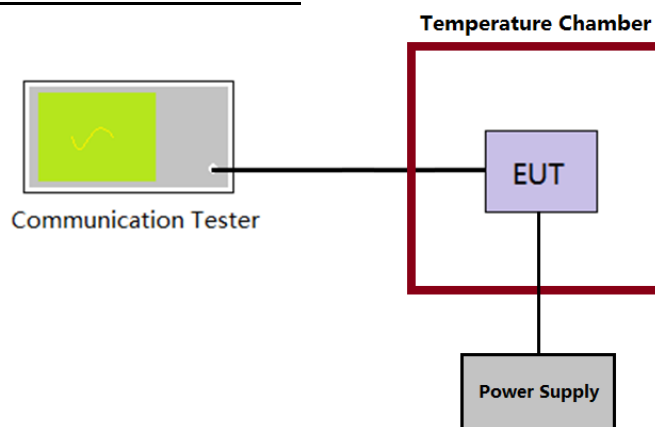
LIMIT

FCC Part 95.1765:

Each GMRS transmitter type must be designed to comply with the frequency accuracy requirements in this section under normal operating conditions. Operators of GMRS stations must also ensure compliance with these requirements.

- (a) The carrier frequency of each GMRS transmitter transmitting an emission with an occupied bandwidth greater than 12.5 kHz must remain **within 5 ppm** of the channel center frequencies listed in §95.1763 under normal operating conditions.
- (b) The carrier frequency of each GMRS transmitter transmitting an emission with an occupied bandwidth of 12.5 kHz or less must remain within **2.5 ppm** of the channel center frequencies listed in §95.1763 under normal operating conditions.

TEST CONFIGURATION



TEST PROCEDURE

- 1) The EUT output port was connected to communication tester.
- 2) The EUT was placed inside the temperature chamber.
- 3) Turn EUT off and set the chamber temperature to -30°C . After the temperature stabilized for approximately 30 minutes recorded the frequency as MCF_{MHz} .
- 4) Calculate the ppm frequency error by the following:

$$\text{ppm error} = (MCF_{\text{MHz}} / ACF_{\text{MHz}} - 1) * 10^6$$
 where
 MCF_{MHz} is the Measured Carrier Frequency in MHz
 ACF_{MHz} is the Assigned Carrier Frequency in MHz
- 5) Repeat step 3 measure with 10°C increased per stage until the highest temperature of $+50^{\circ}\text{C}$ reached.

TEST MODE

Please reference to the section 4.2

TEST RESULTS

☒ Passed ☐ Not Applicable

TEST Data

Please refer to appendix G on the appendix report

5.8. Frequency stability VS Voltage

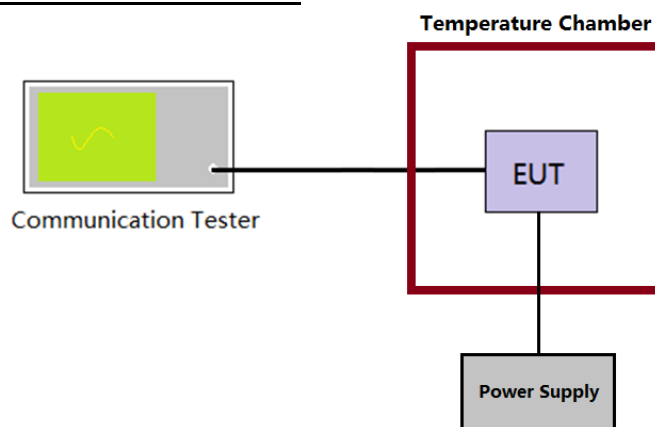
LIMIT

FCC Part 95.1765:

Each GMRS transmitter type must be designed to comply with the frequency accuracy requirements in this section under normal operating conditions. Operators of GMRS stations must also ensure compliance with these requirements.

- (a) The carrier frequency of each GMRS transmitter transmitting an emission with an occupied bandwidth greater than 12.5 kHz must remain **within 5 ppm** of the channel center frequencies listed in §95.1763 under normal operating conditions.
- (b) The carrier frequency of each GMRS transmitter transmitting an emission with an occupied bandwidth of 12.5 kHz or less must remain within **2.5 ppm** of the channel center frequencies listed in §95.1763 under normal operating conditions.

TEST CONFIGURATION



TEST PROCEDURE

- 1) The EUT output port was connected to communication tester.
- 2) The EUT was placed inside the temperature chamber at 25°C
- 3) Record the carrier frequency of the transmitter as MCF_{MHz}
- 4) Calculate the ppm frequency error by the following:

$$ppm\ error = (MCF_{MHz} / ACF_{MHz} - 1) * 10^6$$

where
 MCF_{MHz} is the Measured Carrier Frequency in MHz
 ACF_{MHz} is the Assigned Carrier Frequency in MHz
- 5) Repeat step 3 measure with varied $\pm 15\%$ of the nominal value measured at the input to the EUT

TEST MODE

Please reference to the section 4.2

TEST RESULTS

☒ Passed ☐ Not Applicable

TEST Data

Please refer to appendix H on the appendix report

5.9. Transmit Radiated Spurious Emission

LIMIT

FCC Part 95.1779(b)(1)(2)(7), FCC Part 2.1049

(c) Attenuation requirements.

The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) by at least:

- (1) **25 dB** (decibels) on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 100% of the authorized bandwidth.
- (2) **35 dB** on any frequency removed from the center of the authorized bandwidth by more than 100% up to and including 250% of the authorized bandwidth.
- (7) **$43 + 10 \log (P)$ dB** on any frequency removed from the center of the authorized bandwidth by more than 250%.

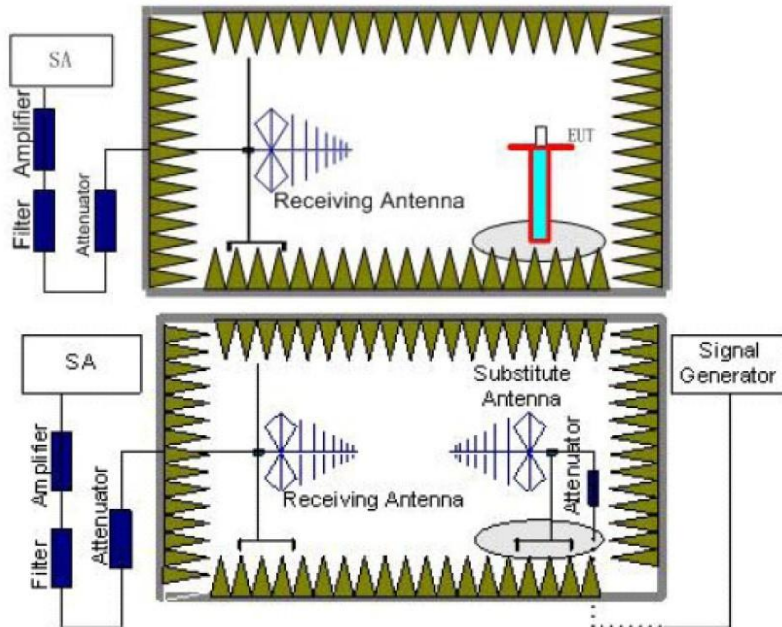
Note:

Limit (dBm) = $EL - [43 + 10 \log(P)] = 10 \log(P \times 1000) - [43 + 10 \log(P)] = 10 \log(P) + 30 - 43 - 10 \log(P) = -13 \text{ dBm}$

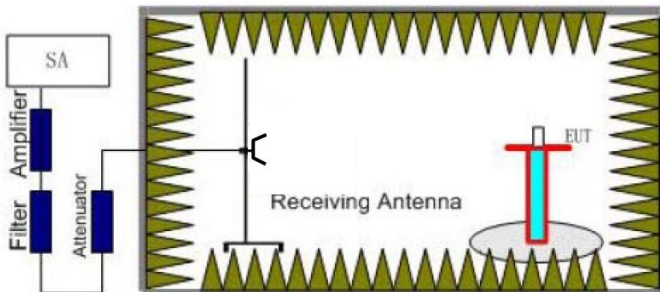
EL is the emission level of the Output Power expressed in dBm,

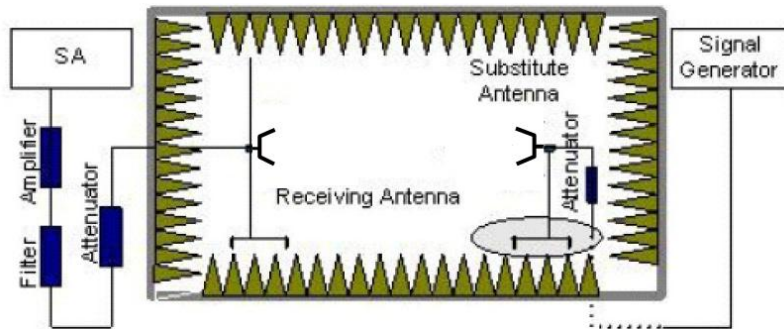
TEST CONFIGURATION

Below 1GHz:



Above 1GHz:





TEST PROCEDURE

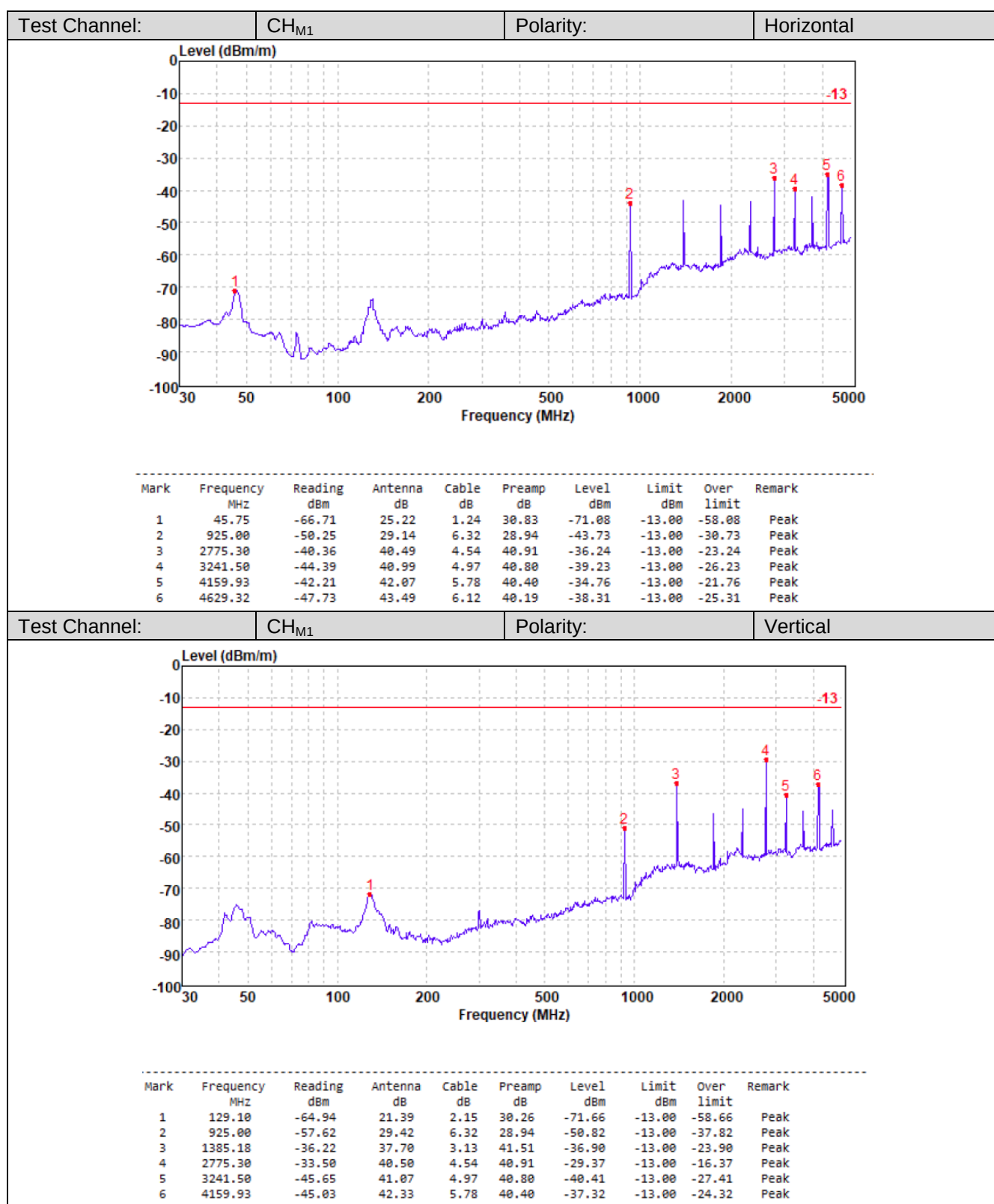
- 1) The measuring distance of at 3m shall be used for measurements
- 2) The EUT is placed on a turn table which is 1.5 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The table was rotated 360 degrees to determine the position of the highest radiation
- 3) The height of the equipment or of the substitution antenna shall be 1.5 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4) The spectrum setting as follow
 - Below 1 GHz: RBW=120kHz, VBW=300kHz, Sweep time=auto, Detector =peak, Trace=max hold;
 - Above 1GHz: RBW=1MHz, VBW=3MHz Sweep time=auto, Detector=peak, Trace=max hold
- 5) Record the field strength level of the EUT from the spectrum
- 6) The substitution antenna is substituted for EUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be moved height from 1m to 4m to find the highest radiation. Adjust the S.G. output level and repeat this step to get the same field strength level as the EUT
- 7) The EIRP level = S.G. output level(dBm)- TX cable(dB) + Substituted Antenna Gain(dBi)
- 8) Record the ERP value for below 1GHz, ERP value = EIRP-2.15; Record the EIRP for above 1GHz.

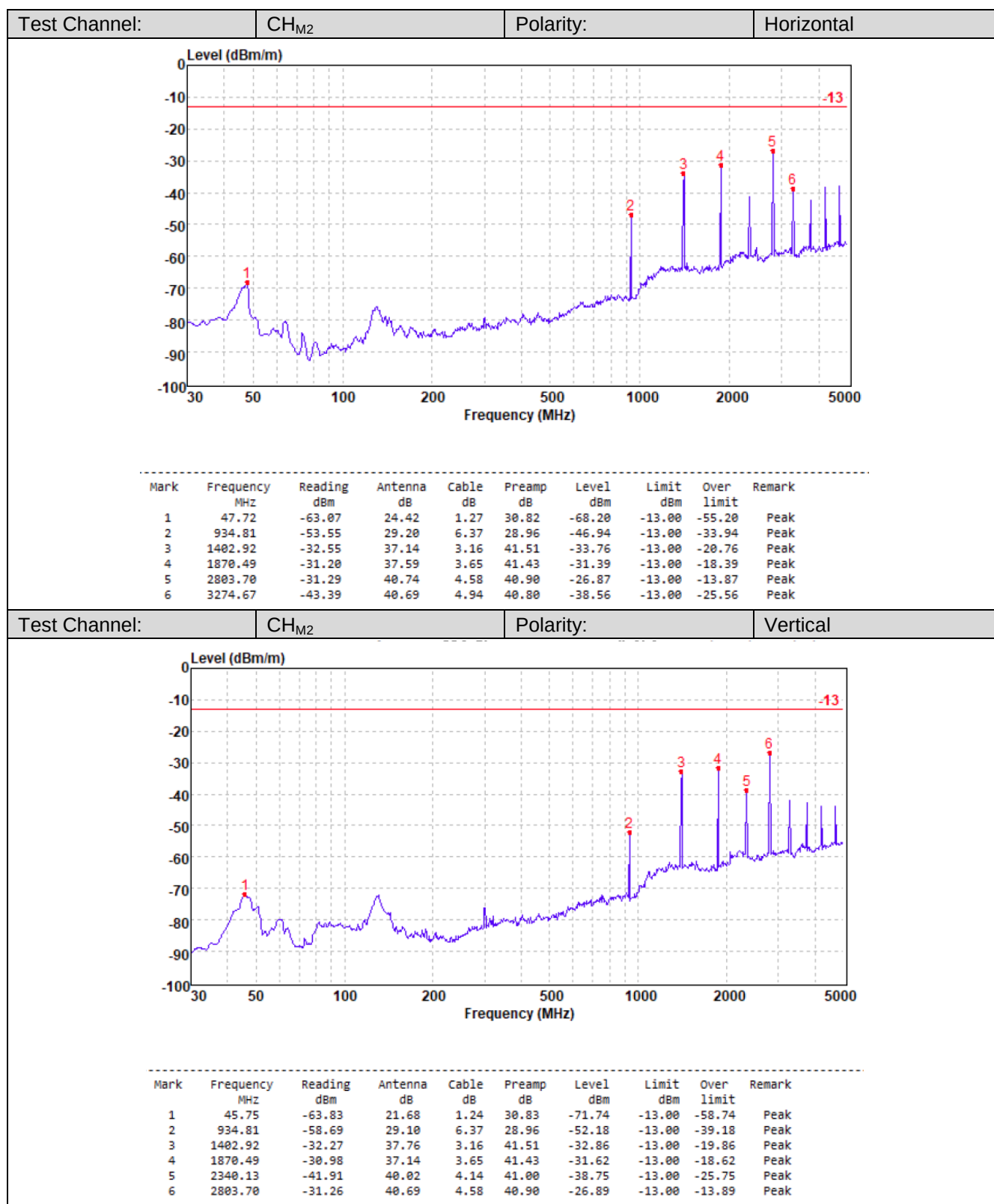
TEST MODE

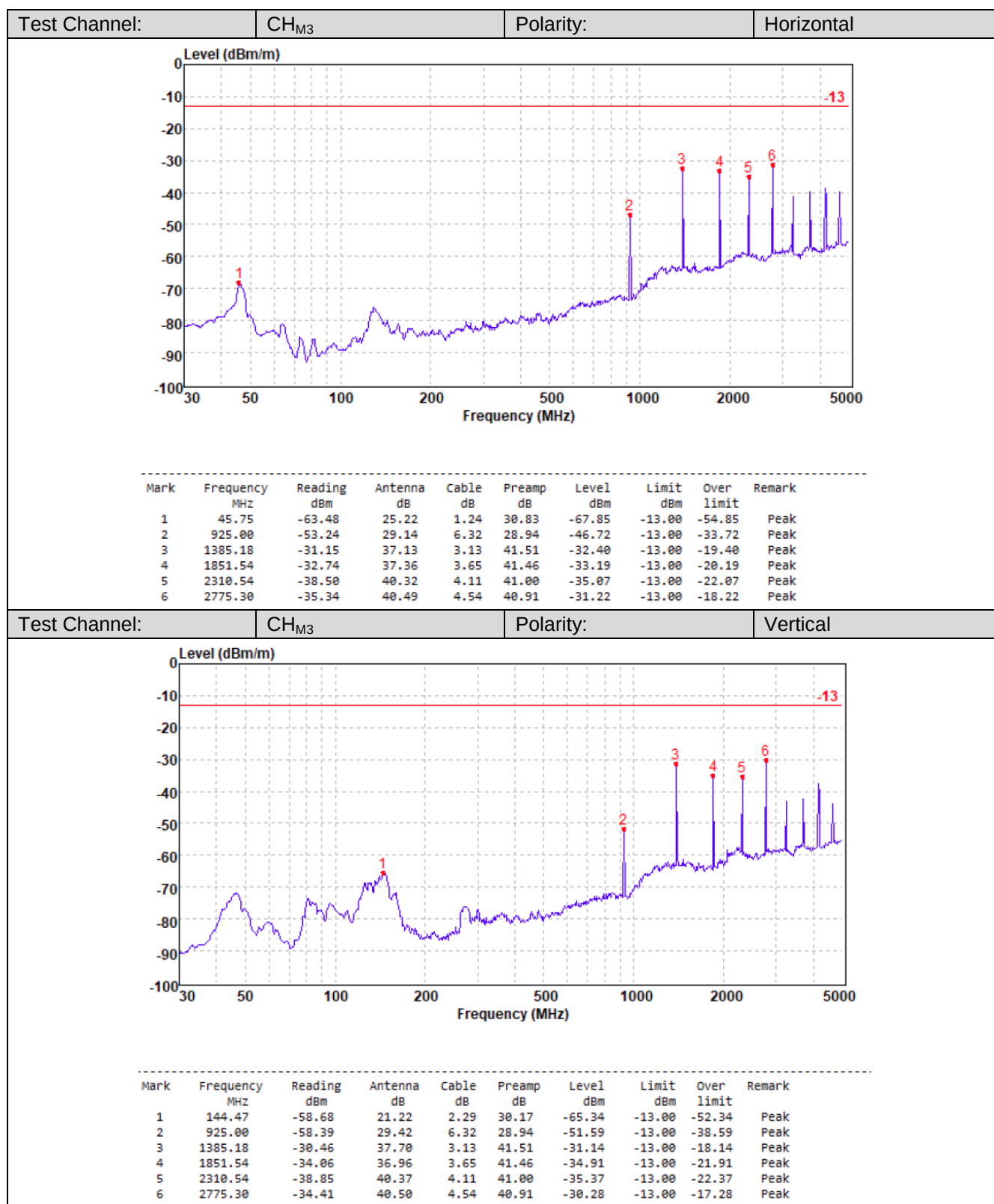
Please reference to the section 4.2

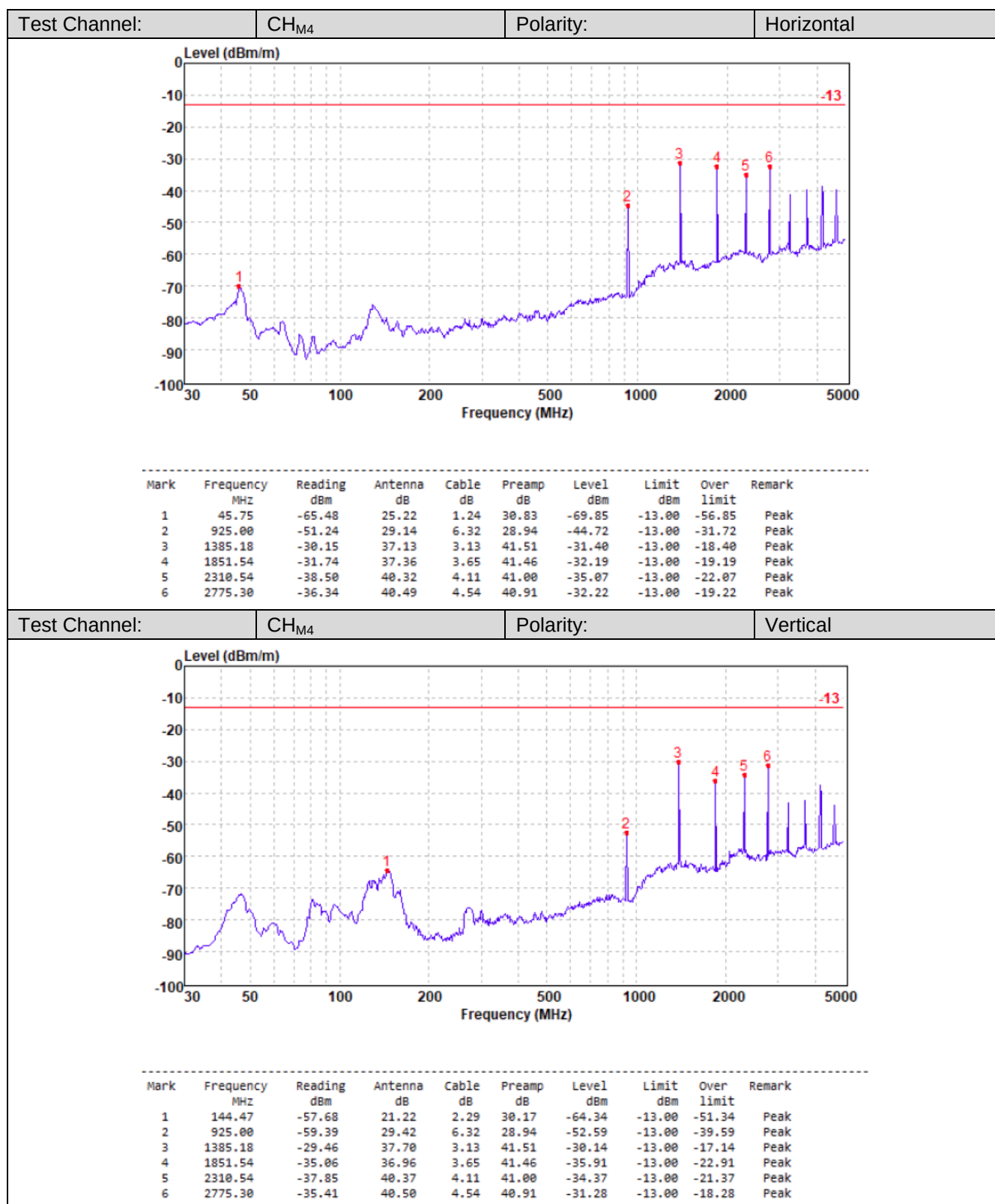
TEST RESULTS

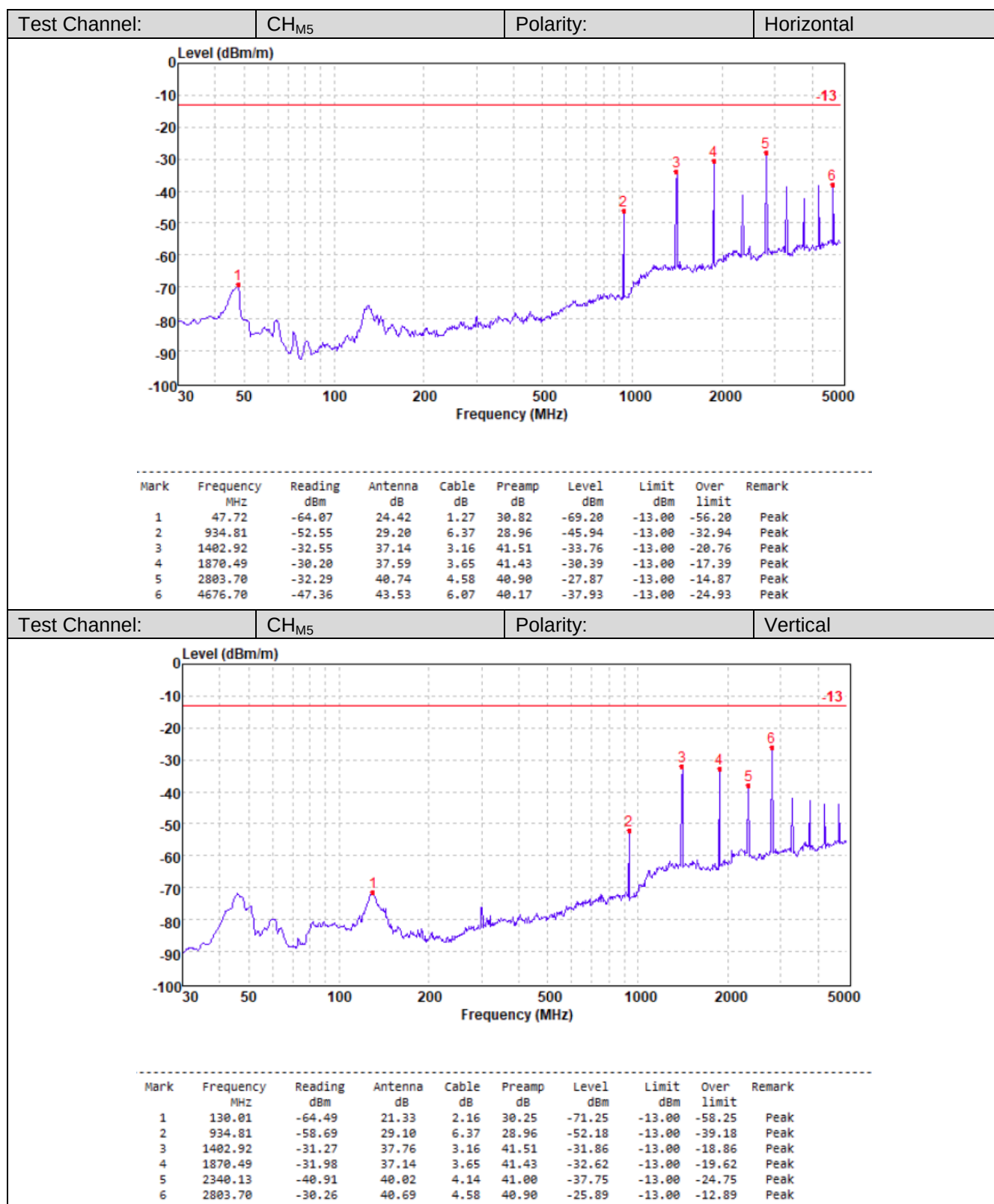
☒ Passed ☐ Not Applicable

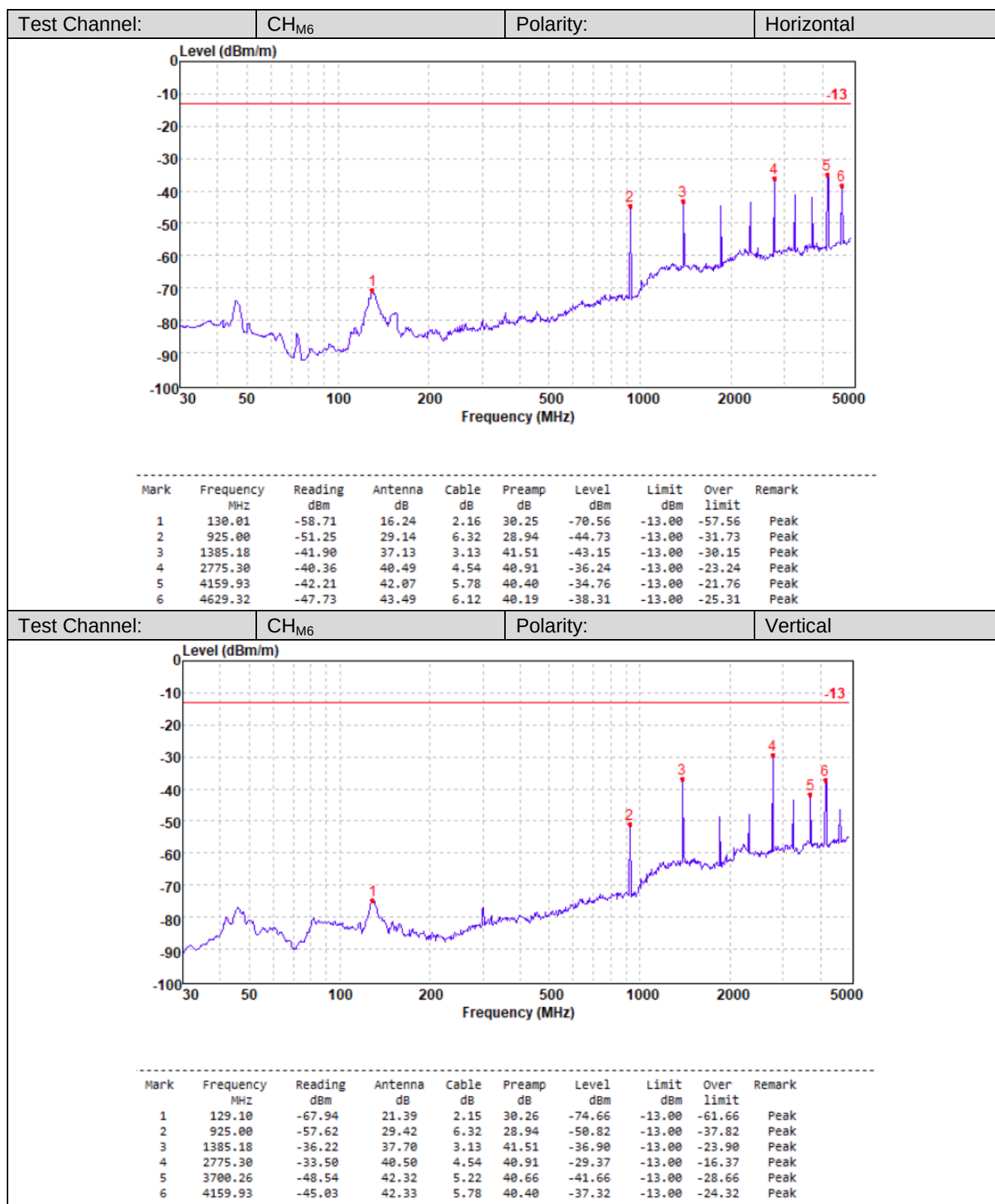












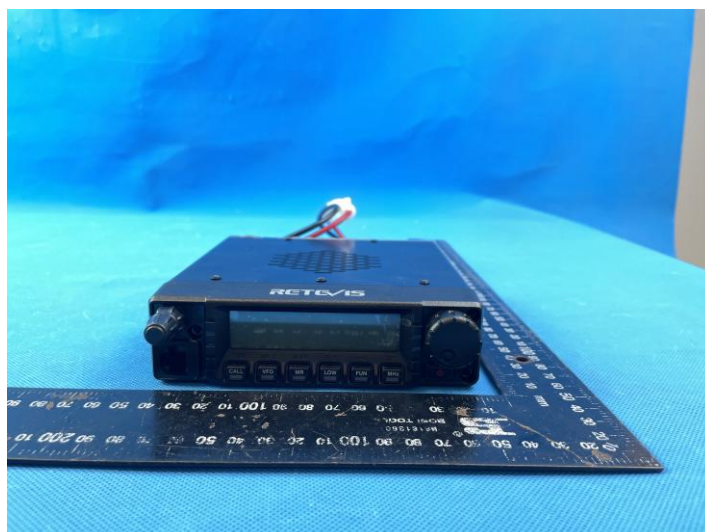
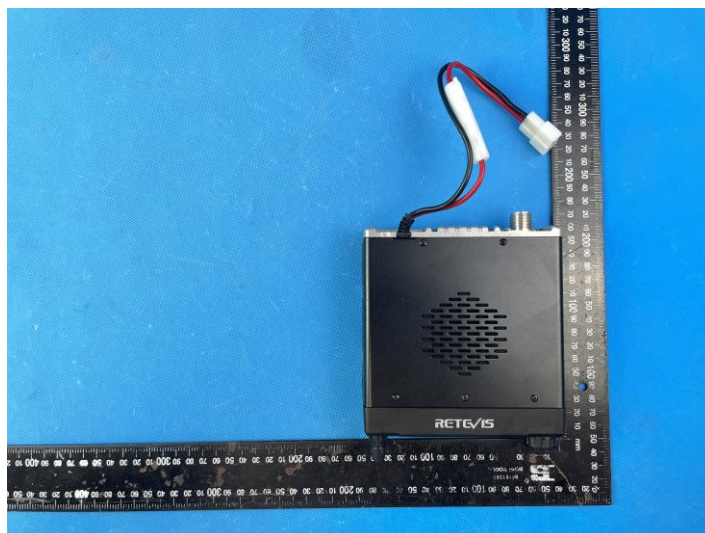
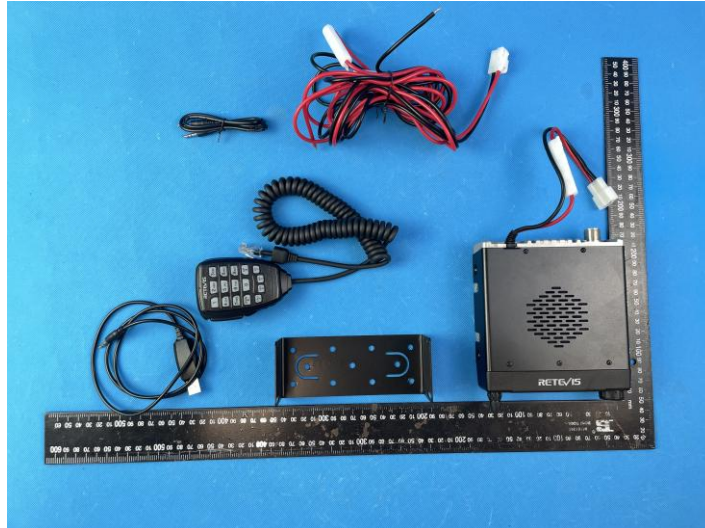
6. TEST SETUP PHOTOS

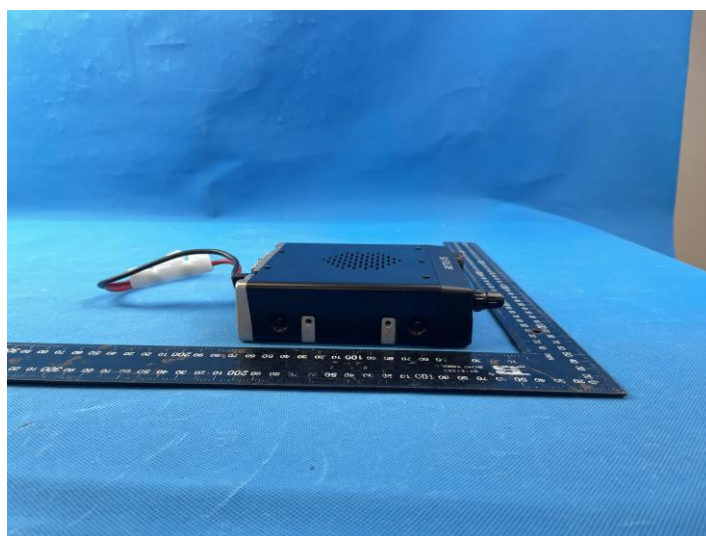
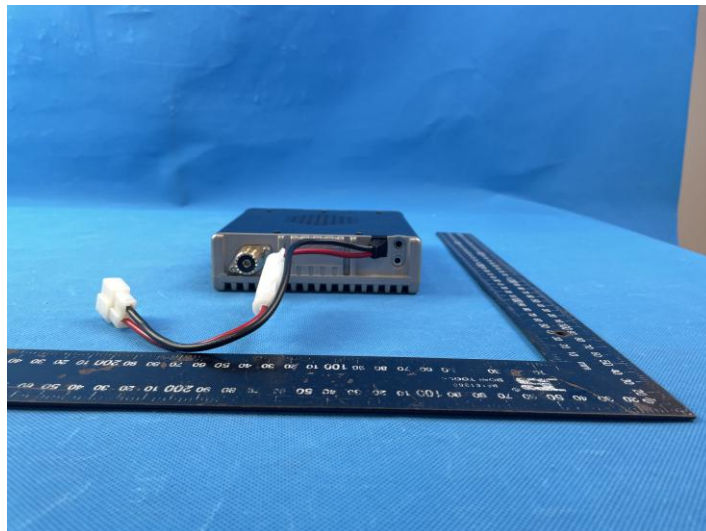
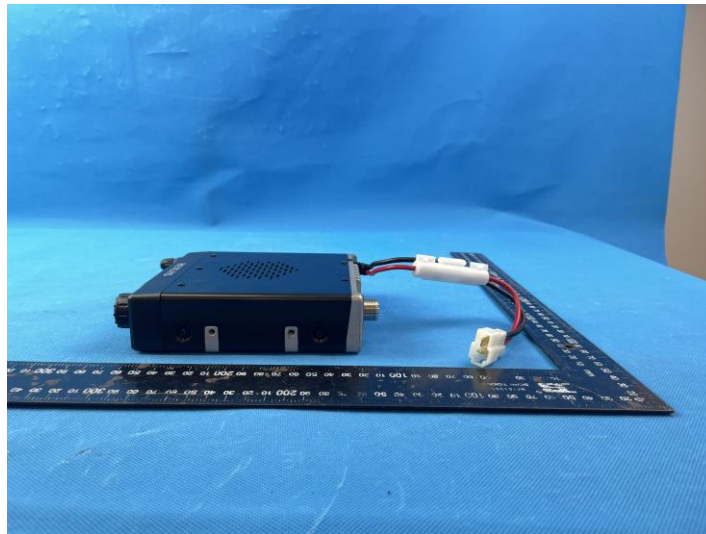


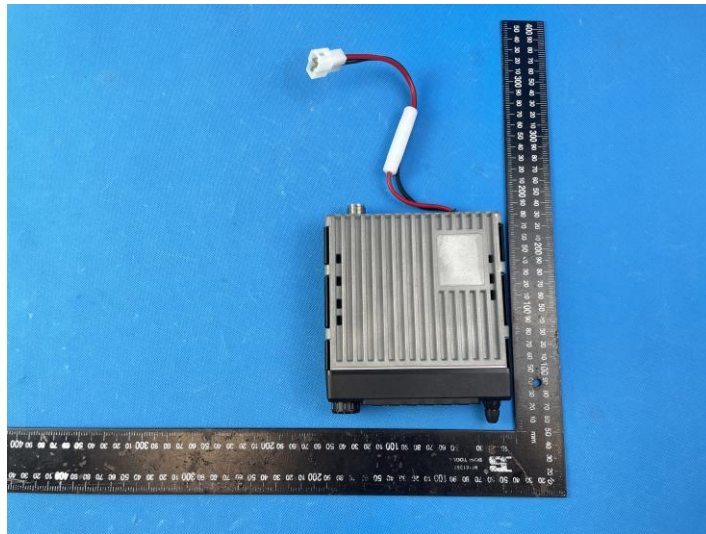


7. EXTERNAL AND INTERNAL PHOTOS

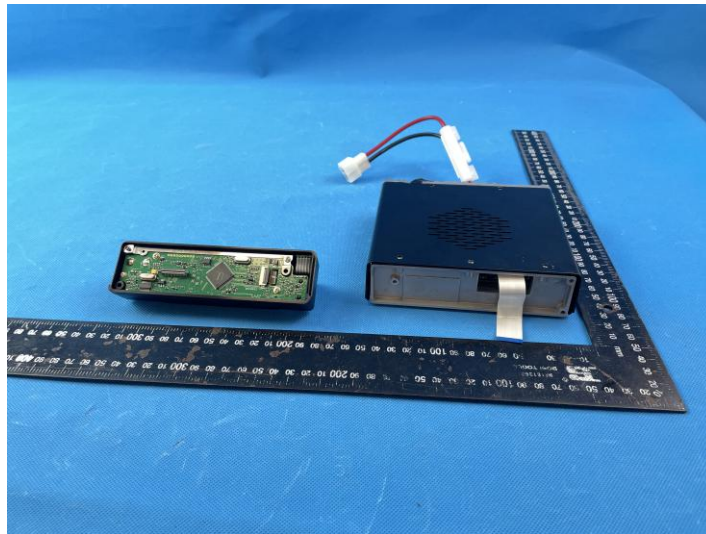
7.1. External Photos

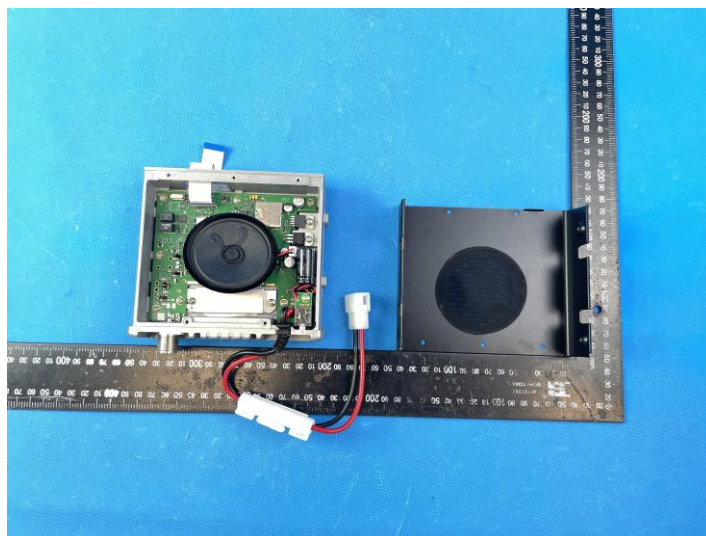
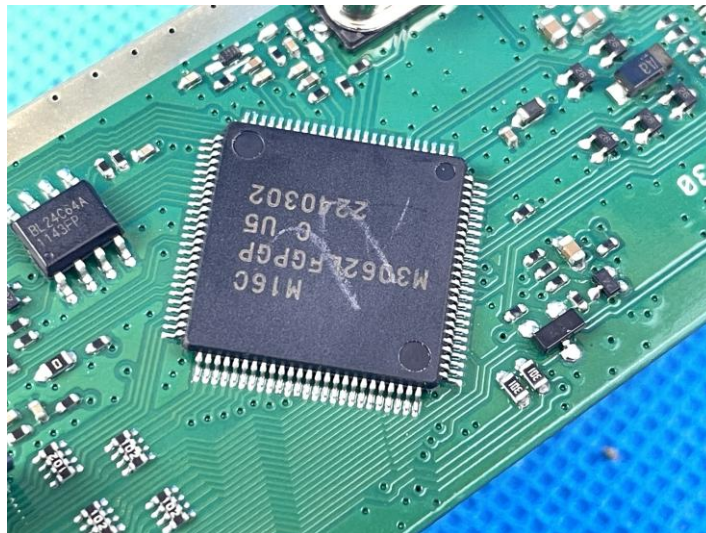
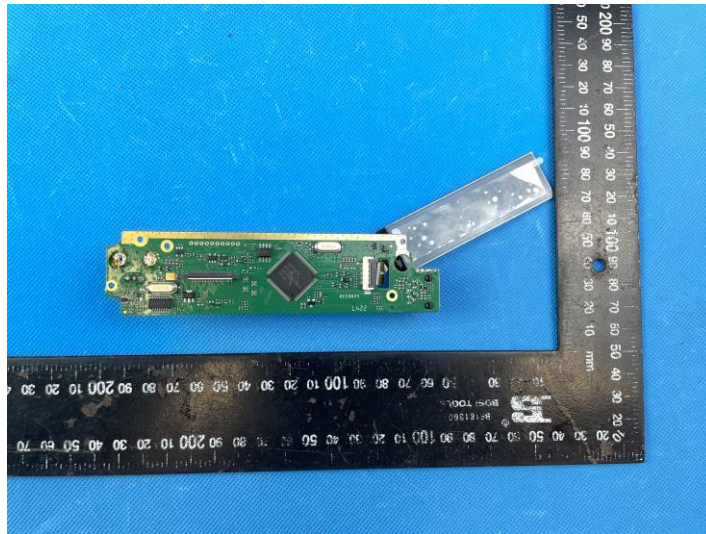


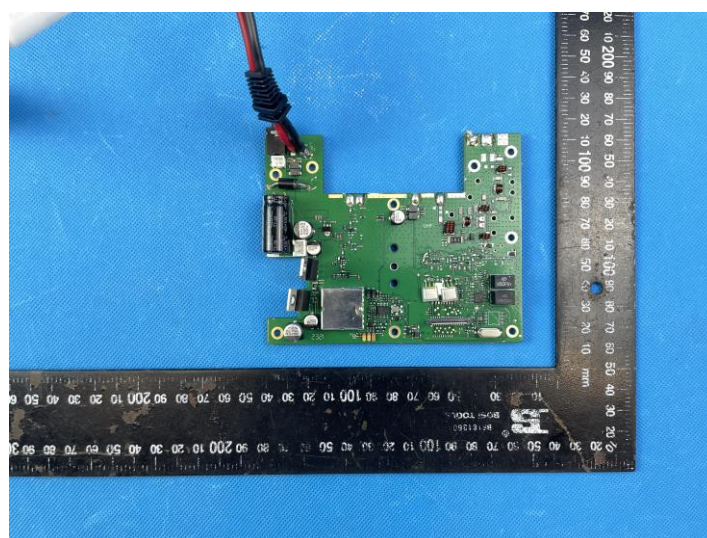
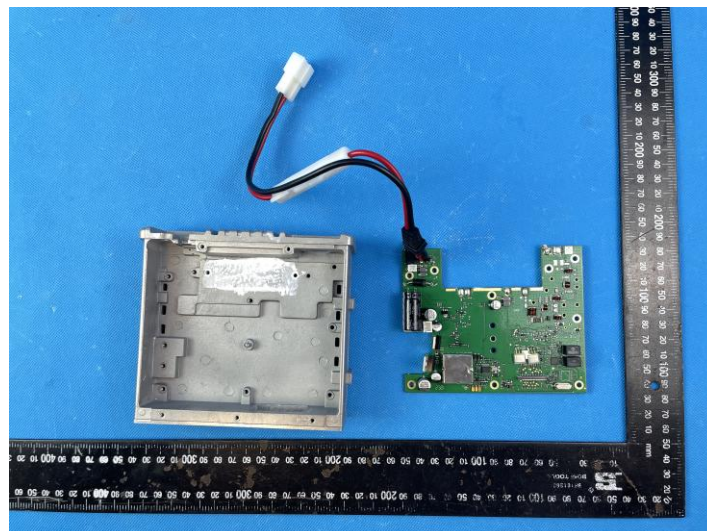
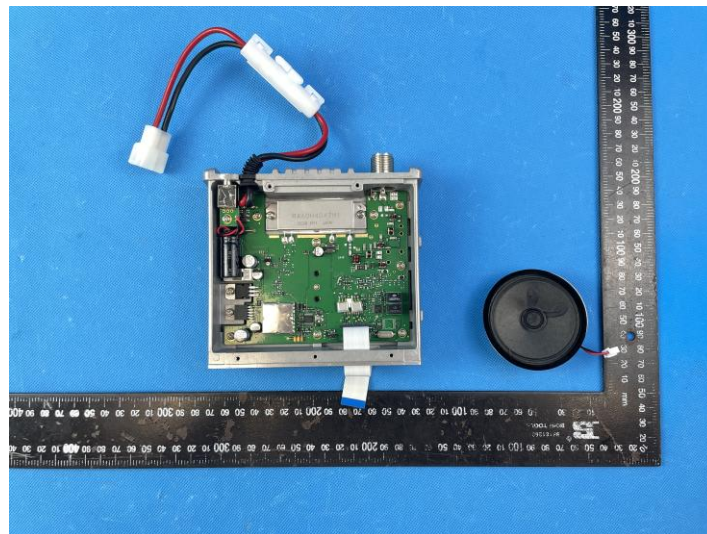


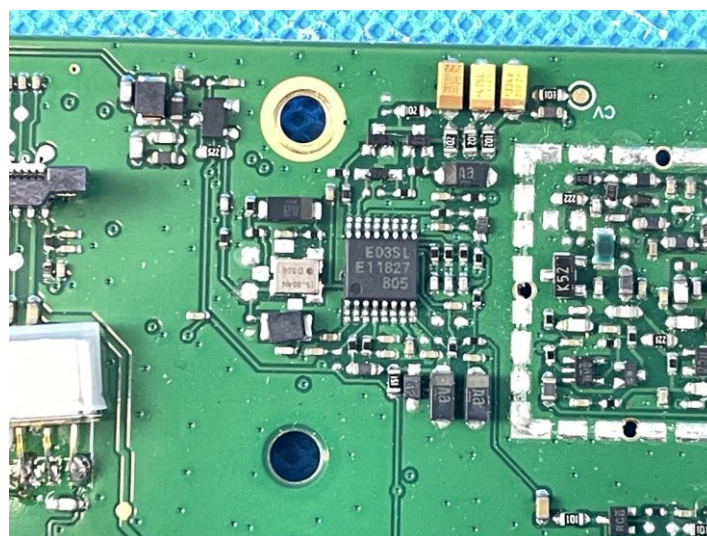
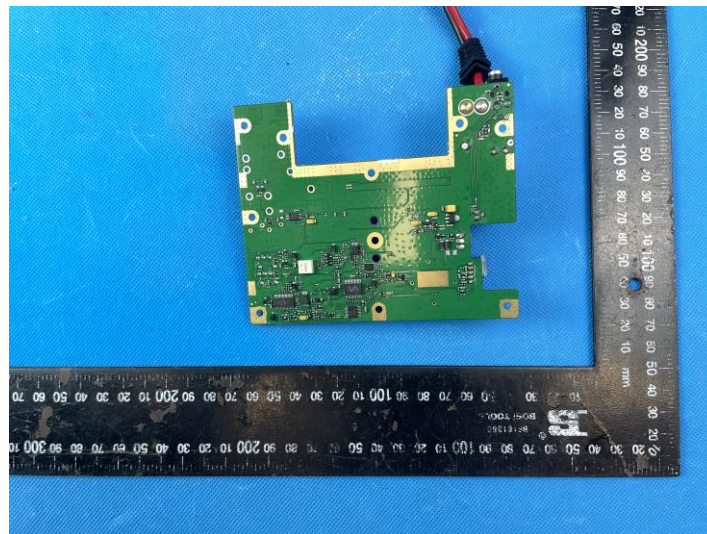


7.2. Internal Photos









8. APPENDIX REPORT

Project No.	SHT2601081701W		
Test sample No.	YPHT26010817002	Model No.	RA87
Start test date	2026/2/28	Finish date	2026/4/20
Temperature	24.3℃	Humidity	57%
Test Engineer	Xiangyu Wei	Auditor	<i>Xiaodong Zhu</i>

Appendix clause	Test Item	Test date (M/D)	Test Result (PASS/FAIL)
A	Transmitting Power	4/20	PASS
B	99% Occupied Bandwidth & 26dB Bandwidth	4/20	PASS
C	Emission Mask	4/20	PASS
D	Modulation Limit	4/20	PASS
E	Audio Frequency Response	4/20	PASS
F	Audio Low Pass Filter Response	4/20	PASS
G	Frequency Stability Test & Temperature	4/20	PASS
H	Frequency Stability Test & Voltage	4/20	PASS

Appendix A: Transmitting Power

Test Mode	Modulation Type	Test Channel	Measured power (dBm)	Measured power (W)	Limit(W)	Result
TX-GMRS	FM	CH _{M1}	45.80	37.99	≤40	PASS
TX-GMRS	FM	CH _{M2}	45.92	39.09	≤40	PASS
TX-GMRS	FM	CH _{M3}	36.08	4.05	≤5	PASS
TX-GMRS	FM	CH _{M4}	45.77	37.74	≤40	PASS
TX-GMRS	FM	CH _{M5}	45.93	39.16	≤40	PASS
TX-GMRS	FM	CH _{M6}	36.09	4.06	≤5	PASS

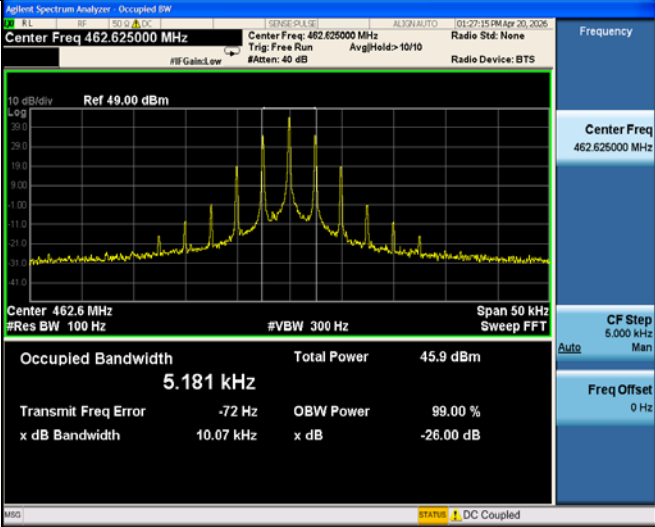
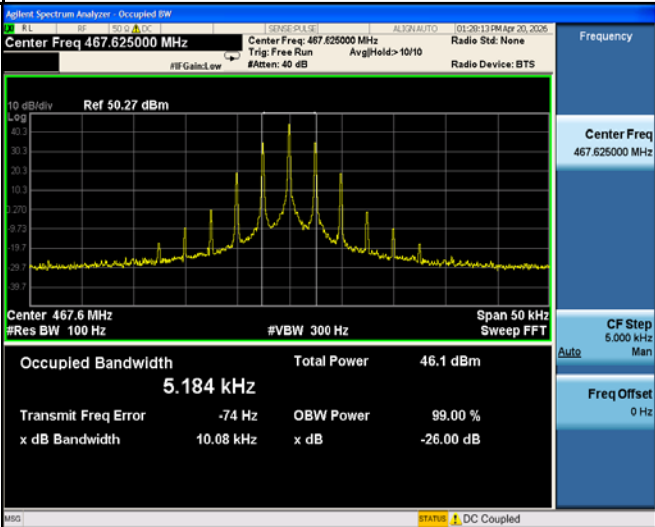
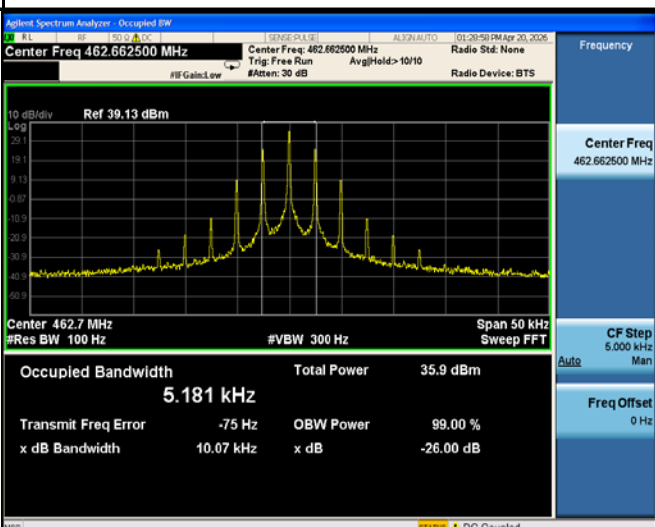
Appendix B: 99% Occupied Bandwidth & 26dB Bandwidth

Test Mode	Modulation Type	Test Channel	Occupied Bandwidth		99% Limit(kHz)	Result
			99%(kHz)	26dB(kHz)		
TX-GMRS	FM	CH _{M1}	5.181	10.070	≤20	PASS
TX-GMRS	FM	CH _{M2}	5.184	10.080	≤20	PASS
TX-GMRS	FM	CH _{M3}	5.181	10.070	≤20	PASS
TX-GMRS	FM	CH _{M4}	10.184	10.690	≤20	PASS
TX-GMRS	FM	CH _{M5}	10.185	10.690	≤20	PASS
TX-GMRS	FM	CH _{M6}	10.188	10.690	≤20	PASS

Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
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Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-GMRS	FM	CH _{M1}	 Agilent Spectrum Analyzer - Occupied BW Center Freq 462.625000 MHz Center Freq: 462.625000 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 49.00 dBm Center 462.6 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 5.181 kHz Total Power 45.9 dBm Transmit Freq Error -72 Hz OBW Power 99.00 % x dB Bandwidth 10.07 kHz x dB -26.00 dB Frequency Center Freq 462.625000 MHz CF Step 5.000 kHz Auto Man Freq Offset 0 Hz STATUS: DC Coupled
TX-GMRS	FM	CH _{M2}	 Agilent Spectrum Analyzer - Occupied BW Center Freq 467.625000 MHz Center Freq: 467.625000 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 50.27 dBm Center 467.6 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 5.184 kHz Total Power 46.1 dBm Transmit Freq Error -74 Hz OBW Power 99.00 % x dB Bandwidth 10.08 kHz x dB -26.00 dB Frequency Center Freq 467.625000 MHz CF Step 5.000 kHz Auto Man Freq Offset 0 Hz STATUS: DC Coupled
TX-GMRS	FM	CH _{M3}	 Agilent Spectrum Analyzer - Occupied BW Center Freq 462.662500 MHz Center Freq: 462.662500 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 39.13 dBm Center 462.7 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 5.181 kHz Total Power 35.9 dBm Transmit Freq Error -75 Hz OBW Power 99.00 % x dB Bandwidth 10.07 kHz x dB -26.00 dB Frequency Center Freq 462.662500 MHz CF Step 5.000 kHz Auto Man Freq Offset 0 Hz STATUS: DC Coupled

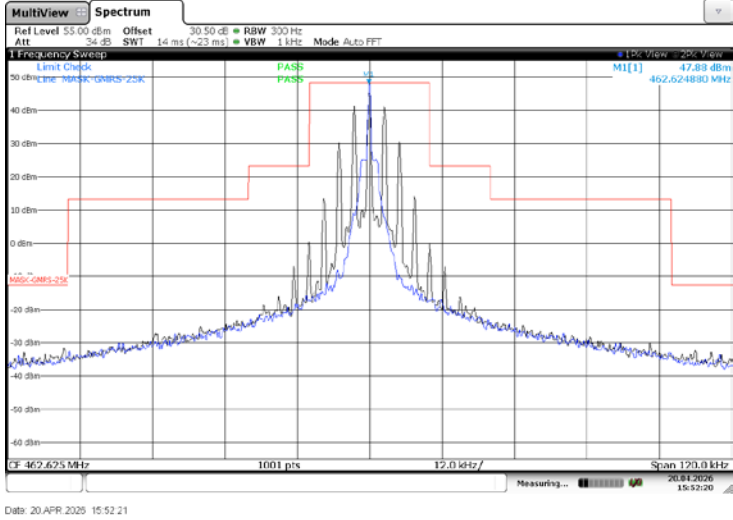
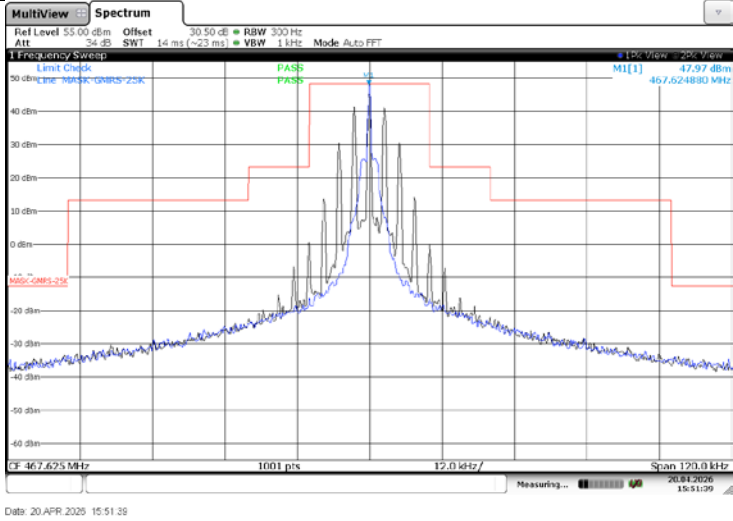
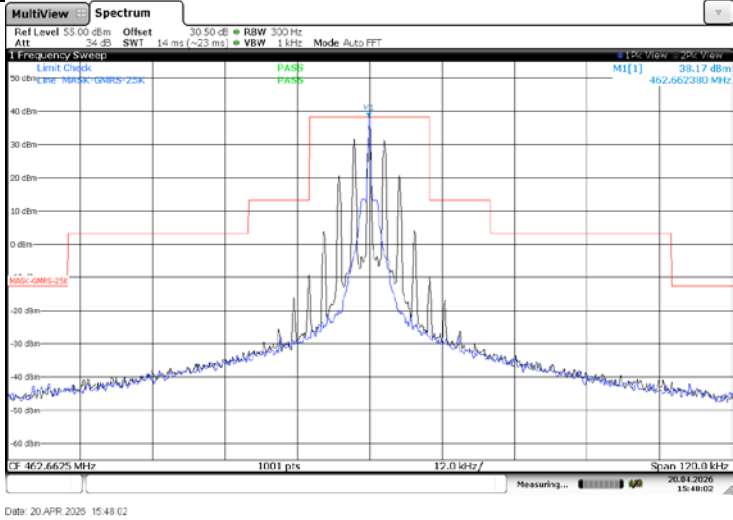
Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-GMRS	FM	CH _{M4}	Agilent Spectrum Analyzer - Occupied BW Center Freq 462.625000 MHz Center Freq: 462.625000 MHz Trig: Free Run Avg/Hold: 10/10 Radio St: None Radio Device: BTS Ref 50.17 dBm Center 462.6 MHz #Res BW 300 Hz #VBW 1 kHz Span 50 kHz Sweep 527.2 ms Occupied Bandwidth 10.184 kHz Total Power 46.2 dBm Transmit Freq Error -81 Hz OBW Power 99.00 % x dB Bandwidth 10.69 kHz x dB -26.00 dB Frequency Center Freq 462.625000 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz STATUS: DC Coupled
TX-GMRS	FM	CH _{M5}	Agilent Spectrum Analyzer - Occupied BW Center Freq 467.625000 MHz Center Freq: 467.625000 MHz Trig: Free Run Avg/Hold: 10/10 Radio St: None Radio Device: BTS Ref 50.15 dBm Center 467.6 MHz #Res BW 300 Hz #VBW 1 kHz Span 50 kHz Sweep 527.2 ms Occupied Bandwidth 10.185 kHz Total Power 46.4 dBm Transmit Freq Error -85 Hz OBW Power 99.00 % x dB Bandwidth 10.69 kHz x dB -26.00 dB Frequency Center Freq 467.625000 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz STATUS: DC Coupled
TX-GMRS	FM	CH _{M6}	Agilent Spectrum Analyzer - Occupied BW Center Freq 462.662500 MHz Center Freq: 462.662500 MHz Trig: Free Run Avg/Hold: 10/10 Radio St: None Radio Device: BTS Ref 38.89 dBm Center 462.7 MHz #Res BW 300 Hz #VBW 1 kHz Span 50 kHz Sweep 527.2 ms Occupied Bandwidth 10.188 kHz Total Power 36.4 dBm Transmit Freq Error -78 Hz OBW Power 99.00 % x dB Bandwidth 10.69 kHz x dB -26.00 dB Frequency Center Freq 462.662500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz STATUS: DC Coupled

Appendix C:Emission Mask

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-GMRS	FM	CH _{M1}	MultiView Spectrum Ref Level 55.00 dBm Offset 34 dB SWT 21 ms (~37 ms) VBW 500 Hz Mode Auto FFT 1 Frequency Sweep Limit Check PASS M1[1] 47.92 dBm 467.624890 MHz CF 467.625 MHz 1001 pts 12.0 kHz/ Span 120.0 kHz Date: 20 APR 2025 15:57:16
TX-GMRS	FM	CH _{M2}	MultiView Spectrum Ref Level 55.00 dBm Offset 34 dB SWT 21 ms (~37 ms) VBW 500 Hz Mode Auto FFT 1 Frequency Sweep Limit Check PASS M1[1] 48.02 dBm 467.624890 MHz CF 467.625 MHz 1001 pts 12.0 kHz/ Span 120.0 kHz Date: 20 APR 2025 15:58:07
TX-GMRS	FM	CH _{M3}	MultiView Spectrum Ref Level 55.00 dBm Offset 34 dB SWT 21 ms (~37 ms) VBW 500 Hz Mode Auto FFT 1 Frequency Sweep Limit Check PASS M1[1] 38.17 dBm 467.662380 MHz CF 467.6625 MHz 1001 pts 12.0 kHz/ Span 120.0 kHz Date: 20 APR 2025 15:59:23

Appendix C:Emission Mask

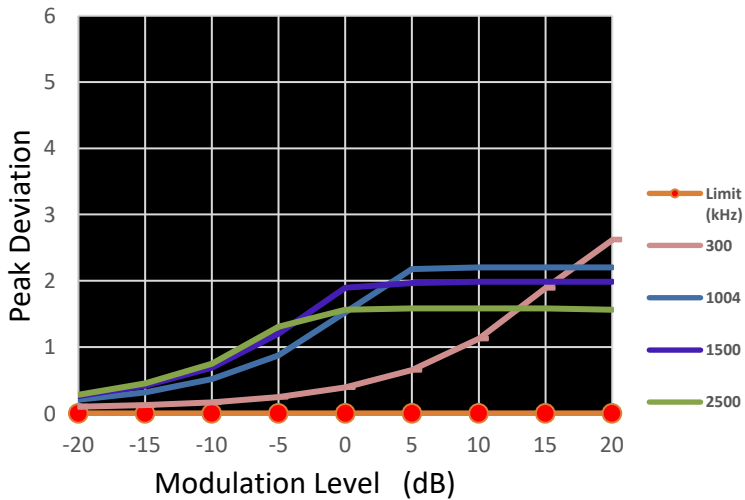
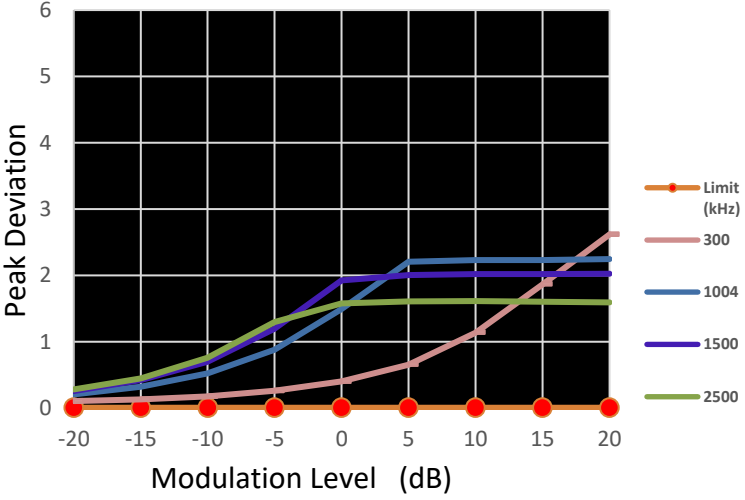
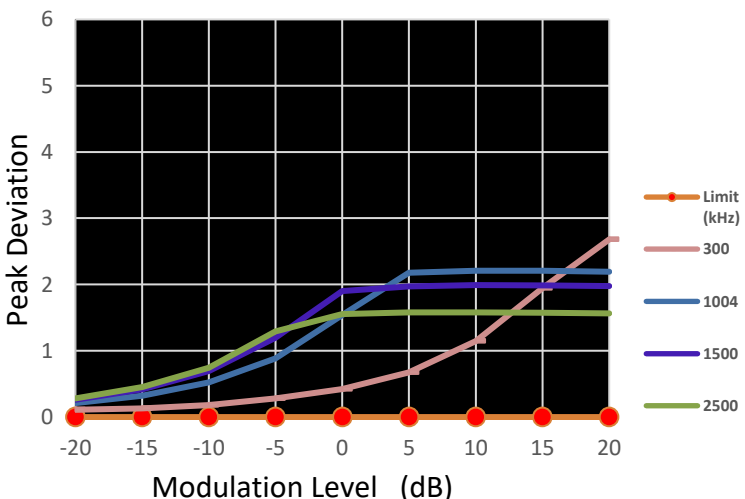
Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-GMRS	FM	CH _{M4}	 MultiView Spectrum Ref Level 55.00 dBm Offset 30.50 dB RBW 300 Hz Att 34 dB SWF 14 ms (~23 ms) VBW 1 kHz Mode Auto FFT 1 Frequency Sweep Limit Check 30 dBm: MASK-GMRS-25K PASS PASS M1[1] 47.89 dBm 467.624880 MHz CF 467.625 MHz 1001 pts 12.0 kHz Span 120.0 kHz Measuring... 20.04.2026 15:52:26 Date: 20.APR.2025 15:52:21
TX-GMRS	FM	CH _{M5}	 MultiView Spectrum Ref Level 55.00 dBm Offset 30.50 dB RBW 300 Hz Att 34 dB SWF 14 ms (~23 ms) VBW 1 kHz Mode Auto FFT 1 Frequency Sweep Limit Check 30 dBm: MASK-GMRS-25K PASS PASS M1[1] 47.97 dBm 467.624880 MHz CF 467.625 MHz 1001 pts 12.0 kHz Span 120.0 kHz Measuring... 20.04.2026 15:51:29 Date: 20.APR.2025 15:51:28
TX-GMRS	FM	CH _{M6}	 MultiView Spectrum Ref Level 55.00 dBm Offset 30.50 dB RBW 300 Hz Att 34 dB SWF 14 ms (~23 ms) VBW 1 kHz Mode Auto FFT 1 Frequency Sweep Limit Check 30 dBm: MASK-GMRS-25K PASS PASS M1[1] 48.17 dBm 467.662380 MHz CF 467.6625 MHz 1001 pts 12.0 kHz Span 120.0 kHz Measuring... 20.04.2026 15:49:02 Date: 20.APR.2025 15:49:02

Appendix D:Modulation Limit

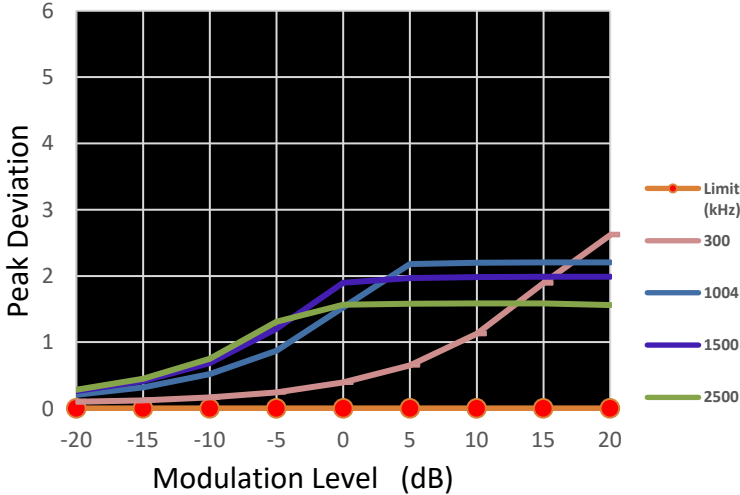
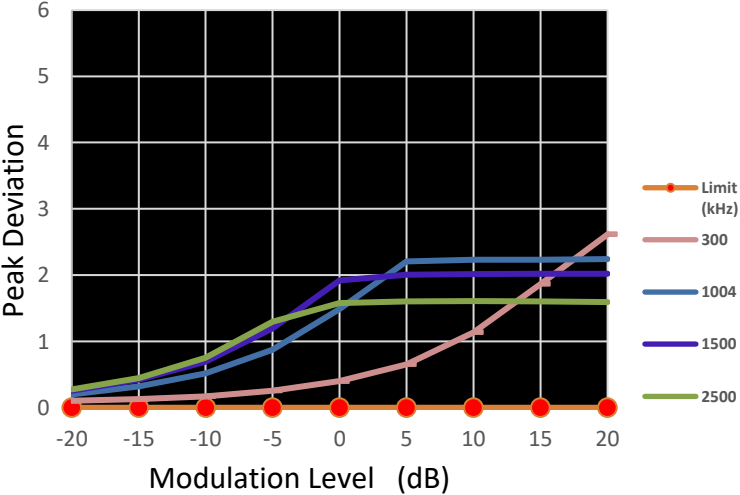
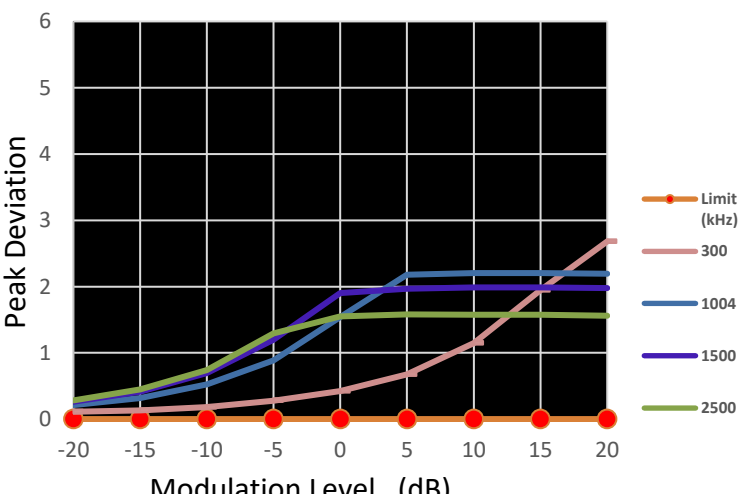
Test Mode	Modulation Type	Test Channel	Modulation Level (dB)	Peak Frequency Deviation (Hz)				Limit (kHz)	Result
				300	1004	1500	2500		
TX-GMRS	FM	CH _{M1}	-20	0.102	0.206	0.262	0.281	±5	PASS
TX-GMRS	FM	CH _{M1}	-15	0.123	0.318	0.415	0.450	±5	PASS
TX-GMRS	FM	CH _{M1}	-10	0.166	0.520	0.688	0.751	±5	PASS
TX-GMRS	FM	CH _{M1}	-5	0.245	0.873	1.202	1.309	±5	PASS
TX-GMRS	FM	CH _{M1}	0	0.394	1.524	1.898	1.564	±5	PASS
TX-GMRS	FM	CH _{M1}	5	0.652	2.178	1.967	1.582	±5	PASS
TX-GMRS	FM	CH _{M1}	10	1.128	2.200	1.985	1.584	±5	PASS
TX-GMRS	FM	CH _{M1}	15	1.891	2.202	1.987	1.585	±5	PASS
TX-GMRS	FM	CH _{M1}	20	2.617	2.203	1.988	1.563	±5	PASS
TX-GMRS	FM	CH _{M2}	-20	0.103	0.202	0.255	0.277	±5	PASS
TX-GMRS	FM	CH _{M2}	-15	0.128	0.319	0.421	0.445	±5	PASS
TX-GMRS	FM	CH _{M2}	-10	0.171	0.519	0.695	0.755	±5	PASS
TX-GMRS	FM	CH _{M2}	-5	0.258	0.876	1.196	1.296	±5	PASS
TX-GMRS	FM	CH _{M2}	0	0.399	1.489	1.921	1.577	±5	PASS
TX-GMRS	FM	CH _{M2}	5	0.653	2.205	2.006	1.605	±5	PASS
TX-GMRS	FM	CH _{M2}	10	1.136	2.232	2.017	1.609	±5	PASS
TX-GMRS	FM	CH _{M2}	15	1.863	2.232	2.021	1.601	±5	PASS
TX-GMRS	FM	CH _{M2}	20	2.615	2.243	2.023	1.591	±5	PASS
TX-GMRS	FM	CH _{M3}	-20	0.110	0.213	0.263	0.283	±5	PASS
TX-GMRS	FM	CH _{M3}	-15	0.132	0.319	0.415	0.450	±5	PASS
TX-GMRS	FM	CH _{M3}	-10	0.181	0.522	0.694	0.743	±5	PASS
TX-GMRS	FM	CH _{M3}	-5	0.280	0.884	1.196	1.294	±5	PASS
TX-GMRS	FM	CH _{M3}	0	0.423	1.539	1.900	1.552	±5	PASS
TX-GMRS	FM	CH _{M3}	5	0.675	2.179	1.969	1.578	±5	PASS
TX-GMRS	FM	CH _{M3}	10	1.148	2.205	1.990	1.577	±5	PASS
TX-GMRS	FM	CH _{M3}	15	1.948	2.205	1.987	1.575	±5	PASS
TX-GMRS	FM	CH _{M3}	20	2.680	2.192	1.976	1.562	±5	PASS
TX-GMRS	FM	CH _{M4}	-20	0.712	0.352	0.472	0.563	±5	PASS
TX-GMRS	FM	CH _{M4}	-15	0.193	0.584	0.789	0.943	±5	PASS
TX-GMRS	FM	CH _{M4}	-10	0.287	1.000	1.371	1.647	±5	PASS
TX-GMRS	FM	CH _{M4}	-5	0.451	1.724	2.388	2.505	±5	PASS
TX-GMRS	FM	CH _{M4}	0	0.752	3.059	3.215	2.607	±5	PASS
TX-GMRS	FM	CH _{M4}	5	1.289	3.610	3.253	2.624	±5	PASS
TX-GMRS	FM	CH _{M4}	10	2.225	3.623	3.251	2.617	±5	PASS
TX-GMRS	FM	CH _{M4}	15	3.576	3.624	3.252	2.600	±5	PASS
TX-GMRS	FM	CH _{M4}	20	4.492	3.621	3.264	2.581	±5	PASS
TX-GMRS	FM	CH _{M5}	-20	0.712	0.356	0.468	0.550	±5	PASS
TX-GMRS	FM	CH _{M5}	-15	0.200	0.575	0.780	0.925	±5	PASS
TX-GMRS	FM	CH _{M5}	-10	0.302	0.987	1.357	1.614	±5	PASS
TX-GMRS	FM	CH _{M5}	-5	0.456	1.698	2.356	2.492	±5	PASS
TX-GMRS	FM	CH _{M5}	0	0.724	2.972	3.203	2.605	±5	PASS
TX-GMRS	FM	CH _{M5}	5	1.247	3.593	3.238	2.614	±5	PASS

Test Mode	Modulation Type	Test Channel	Modulation Level (dB)	Peak Frequency Deviation (Hz)				Limit (kHz)	Result
				300	1004	1500	2500		
TX-GMRS	FM	CH _{M5}	10	2.202	3.617	3.261	2.620	±5	PASS
TX-GMRS	FM	CH _{M5}	15	3.488	3.625	3.266	2.606	±5	PASS
TX-GMRS	FM	CH _{M5}	20	4.430	3.620	3.282	2.583	±5	PASS
TX-GMRS	FM	CH _{M6}	-20	0.717	0.351	0.462	0.548	±5	PASS
TX-GMRS	FM	CH _{M6}	-15	0.220	0.579	0.782	0.929	±5	PASS
TX-GMRS	FM	CH _{M6}	-10	0.313	0.982	1.338	1.605	±5	PASS
TX-GMRS	FM	CH _{M6}	-5	0.481	1.702	2.340	2.477	±5	PASS
TX-GMRS	FM	CH _{M6}	0	0.765	2.979	3.208	2.597	±5	PASS
TX-GMRS	FM	CH _{M6}	5	1.327	3.611	3.264	2.613	±5	PASS
TX-GMRS	FM	CH _{M6}	10	2.255	3.630	3.265	2.618	±5	PASS
TX-GMRS	FM	CH _{M6}	15	3.547	3.634	3.282	2.593	±5	PASS
TX-GMRS	FM	CH _{M6}	20	4.591	3.639	3.298	2.571	±5	PASS

Appendix D:Modulation Limit

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-GMRS	FM	CH _{M1}	
TX-GMRS	FM	CH _{M2}	
TX-GMRS	FM	CH _{M3}	

Appendix D:Modulation Limit

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-GMRS	FM	CH _{M4}	
TX-GMRS	FM	CH _{M5}	
TX-GMRS	FM	CH _{M6}	

Appendix E:Audio Frequency Response

Test Mode	Modulation Type	Test Channel	Frequency (Hz)	Audio Frequency Response (dB)	Lower Limit	Upper Limit	Result
TX-GMRS	FM	CH _{M1}	100	-14.67			PASS
TX-GMRS	FM	CH _{M1}	200	-14.68			PASS
TX-GMRS	FM	CH _{M1}	300	-14.35	-17.84	-9.42	PASS
TX-GMRS	FM	CH _{M1}	400	-11.75	-12.86	-6.93	PASS
TX-GMRS	FM	CH _{M1}	500	-8.72	-9.00	-5.00	PASS
TX-GMRS	FM	CH _{M1}	600	-7.02	-7.42	-3.42	PASS
TX-GMRS	FM	CH _{M1}	700	-4.92	-6.09	-2.09	PASS
TX-GMRS	FM	CH _{M1}	800	-3.02	-4.93	-0.93	PASS
TX-GMRS	FM	CH _{M1}	900	-1.34	-3.91	0.09	PASS
TX-GMRS	FM	CH _{M1}	1000	0.06	-3.00	1.00	PASS
TX-GMRS	FM	CH _{M1}	1200	2.37	-1.42	2.58	PASS
TX-GMRS	FM	CH _{M1}	1400	3.15	-0.09	3.91	PASS
TX-GMRS	FM	CH _{M1}	1600	4.57	1.07	5.07	PASS
TX-GMRS	FM	CH _{M1}	1800	5.70	2.09	6.09	PASS
TX-GMRS	FM	CH _{M1}	2000	6.35	3.00	7.00	PASS
TX-GMRS	FM	CH _{M1}	2100	6.53	3.42	7.42	PASS
TX-GMRS	FM	CH _{M1}	2200	7.66	3.83	7.83	PASS
TX-GMRS	FM	CH _{M1}	2300	7.77	4.21	8.21	PASS
TX-GMRS	FM	CH _{M1}	2400	7.83	4.58	8.58	PASS
TX-GMRS	FM	CH _{M1}	2500	7.89	4.93	8.93	PASS
TX-GMRS	FM	CH _{M1}	2600	7.92	4.59	9.27	PASS
TX-GMRS	FM	CH _{M1}	2700	7.93	4.27	9.60	PASS
TX-GMRS	FM	CH _{M1}	2800	7.90	3.95	9.91	PASS
TX-GMRS	FM	CH _{M1}	2900	7.83	3.65	10.22	PASS
TX-GMRS	FM	CH _{M1}	3000	7.69	3.35	10.51	PASS
TX-GMRS	FM	CH _{M1}	3500	4.71			PASS
TX-GMRS	FM	CH _{M1}	4000	-2.60			PASS
TX-GMRS	FM	CH _{M1}	4500	-9.84			PASS
TX-GMRS	FM	CH _{M1}	5000	-13.29			PASS
TX-GMRS	FM	CH _{M2}	100	-7.38			PASS
TX-GMRS	FM	CH _{M2}	200	-7.38			PASS
TX-GMRS	FM	CH _{M2}	300	-10.30	-17.84	-9.42	PASS
TX-GMRS	FM	CH _{M2}	400	-7.91	-12.86	-6.93	PASS
TX-GMRS	FM	CH _{M2}	500	-6.13	-9.00	-5.00	PASS
TX-GMRS	FM	CH _{M2}	600	-4.94	-7.42	-3.42	PASS
TX-GMRS	FM	CH _{M2}	700	-3.73	-6.09	-2.09	PASS
TX-GMRS	FM	CH _{M2}	800	-2.41	-4.93	-0.93	PASS
TX-GMRS	FM	CH _{M2}	900	-1.16	-3.91	0.09	PASS
TX-GMRS	FM	CH _{M2}	1000	0.00	-3.00	1.00	PASS
TX-GMRS	FM	CH _{M2}	1200	2.05	-1.42	2.58	PASS
TX-GMRS	FM	CH _{M2}	1400	3.70	-0.09	3.91	PASS
TX-GMRS	FM	CH _{M2}	1600	5.05	1.07	5.07	PASS

Appendix E:Audio Frequency Response

Test Mode	Modulation Type	Test Channel	Frequency (Hz)	Audio Frequency Response (dB)	Lower Limit	Upper Limit	Result
TX-GMRS	FM	CH _{M2}	1800	5.13	2.09	6.09	PASS
TX-GMRS	FM	CH _{M2}	2000	6.95	3.00	7.00	PASS
TX-GMRS	FM	CH _{M2}	2100	7.18	3.42	7.42	PASS
TX-GMRS	FM	CH _{M2}	2200	7.34	3.83	7.83	PASS
TX-GMRS	FM	CH _{M2}	2300	7.46	4.21	8.21	PASS
TX-GMRS	FM	CH _{M2}	2400	7.55	4.58	8.58	PASS
TX-GMRS	FM	CH _{M2}	2500	7.62	4.93	8.93	PASS
TX-GMRS	FM	CH _{M2}	2600	7.67	4.59	9.27	PASS
TX-GMRS	FM	CH _{M2}	2700	7.69	4.27	9.60	PASS
TX-GMRS	FM	CH _{M2}	2800	7.66	3.95	9.91	PASS
TX-GMRS	FM	CH _{M2}	2900	7.60	3.65	10.22	PASS
TX-GMRS	FM	CH _{M2}	3000	7.47	3.35	10.51	PASS
TX-GMRS	FM	CH _{M2}	3500	4.61			PASS
TX-GMRS	FM	CH _{M2}	4000	-1.82			PASS
TX-GMRS	FM	CH _{M2}	4500	-6.06			PASS
TX-GMRS	FM	CH _{M2}	5000	-7.18			PASS
TX-GMRS	FM	CH _{M3}	100	-7.39			PASS
TX-GMRS	FM	CH _{M3}	200	-7.39			PASS
TX-GMRS	FM	CH _{M3}	300	-10.31	-17.84	-9.42	PASS
TX-GMRS	FM	CH _{M3}	400	-7.88	-12.86	-6.93	PASS
TX-GMRS	FM	CH _{M3}	500	-6.16	-9.00	-5.00	PASS
TX-GMRS	FM	CH _{M3}	600	-5.00	-7.42	-3.42	PASS
TX-GMRS	FM	CH _{M3}	700	-3.73	-6.09	-2.09	PASS
TX-GMRS	FM	CH _{M3}	800	-2.42	-4.93	-0.93	PASS
TX-GMRS	FM	CH _{M3}	900	-1.20	-3.91	0.09	PASS
TX-GMRS	FM	CH _{M3}	1000	-0.01	-3.00	1.00	PASS
TX-GMRS	FM	CH _{M3}	1200	2.03	-1.42	2.58	PASS
TX-GMRS	FM	CH _{M3}	1400	3.68	-0.09	3.91	PASS
TX-GMRS	FM	CH _{M3}	1600	5.03	1.07	5.07	PASS
TX-GMRS	FM	CH _{M3}	1800	5.11	2.09	6.09	PASS
TX-GMRS	FM	CH _{M3}	2000	6.95	3.00	7.00	PASS
TX-GMRS	FM	CH _{M3}	2100	7.17	3.42	7.42	PASS
TX-GMRS	FM	CH _{M3}	2200	7.34	3.83	7.83	PASS
TX-GMRS	FM	CH _{M3}	2300	7.46	4.21	8.21	PASS
TX-GMRS	FM	CH _{M3}	2400	7.55	4.58	8.58	PASS
TX-GMRS	FM	CH _{M3}	2500	7.62	4.93	8.93	PASS
TX-GMRS	FM	CH _{M3}	2600	7.66	4.59	9.27	PASS
TX-GMRS	FM	CH _{M3}	2700	7.68	4.27	9.60	PASS
TX-GMRS	FM	CH _{M3}	2800	7.66	3.95	9.91	PASS
TX-GMRS	FM	CH _{M3}	2900	7.61	3.65	10.22	PASS
TX-GMRS	FM	CH _{M3}	3000	7.46	3.35	10.51	PASS
TX-GMRS	FM	CH _{M3}	3500	4.61			PASS

Appendix E:Audio Frequency Response

Test Mode	Modulation Type	Test Channel	Frequency (Hz)	Audio Frequency Response (dB)	Lower Limit	Upper Limit	Result
TX-GMRS	FM	CH _{M3}	4000	-1.81			PASS
TX-GMRS	FM	CH _{M3}	4500	-6.07			PASS
TX-GMRS	FM	CH _{M3}	5000	-7.18			PASS
TX-GMRS	FM	CH _{M4}	100	-12.30			PASS
TX-GMRS	FM	CH _{M4}	200	-11.81			PASS
TX-GMRS	FM	CH _{M4}	300	-12.55	-17.84	-9.42	PASS
TX-GMRS	FM	CH _{M4}	400	-10.30	-12.86	-6.93	PASS
TX-GMRS	FM	CH _{M4}	500	-8.29	-9.00	-5.00	PASS
TX-GMRS	FM	CH _{M4}	600	-6.70	-7.42	-3.42	PASS
TX-GMRS	FM	CH _{M4}	700	-4.72	-6.09	-2.09	PASS
TX-GMRS	FM	CH _{M4}	800	-2.84	-4.93	-0.93	PASS
TX-GMRS	FM	CH _{M4}	900	-1.40	-3.91	0.09	PASS
TX-GMRS	FM	CH _{M4}	1000	0.05	-3.00	1.00	PASS
TX-GMRS	FM	CH _{M4}	1200	2.37	-1.42	2.58	PASS
TX-GMRS	FM	CH _{M4}	1400	3.10	-0.09	3.91	PASS
TX-GMRS	FM	CH _{M4}	1600	4.51	1.07	5.07	PASS
TX-GMRS	FM	CH _{M4}	1800	5.66	2.09	6.09	PASS
TX-GMRS	FM	CH _{M4}	2000	6.56	3.00	7.00	PASS
TX-GMRS	FM	CH _{M4}	2100	6.96	3.42	7.42	PASS
TX-GMRS	FM	CH _{M4}	2200	7.30	3.83	7.83	PASS
TX-GMRS	FM	CH _{M4}	2300	7.62	4.21	8.21	PASS
TX-GMRS	FM	CH _{M4}	2400	7.85	4.58	8.58	PASS
TX-GMRS	FM	CH _{M4}	2500	8.03	4.93	8.93	PASS
TX-GMRS	FM	CH _{M4}	2600	9.13	4.59	9.27	PASS
TX-GMRS	FM	CH _{M4}	2700	9.20	4.27	9.60	PASS
TX-GMRS	FM	CH _{M4}	2800	9.22	3.95	9.91	PASS
TX-GMRS	FM	CH _{M4}	2900	9.18	3.65	10.22	PASS
TX-GMRS	FM	CH _{M4}	3000	9.05	3.35	10.51	PASS
TX-GMRS	FM	CH _{M4}	3500	6.10			PASS
TX-GMRS	FM	CH _{M4}	4000	-1.32			PASS
TX-GMRS	FM	CH _{M4}	4500	-8.13			PASS
TX-GMRS	FM	CH _{M4}	5000	-12.28			PASS
TX-GMRS	FM	CH _{M5}	100	-5.16			PASS
TX-GMRS	FM	CH _{M5}	200	-5.16			PASS
TX-GMRS	FM	CH _{M5}	300	-10.12	-17.84	-9.42	PASS
TX-GMRS	FM	CH _{M5}	400	-7.90	-12.86	-6.93	PASS
TX-GMRS	FM	CH _{M5}	500	-5.47	-9.00	-5.00	PASS
TX-GMRS	FM	CH _{M5}	600	-3.74	-7.42	-3.42	PASS
TX-GMRS	FM	CH _{M5}	700	-2.89	-6.09	-2.09	PASS
TX-GMRS	FM	CH _{M5}	800	-1.89	-4.93	-0.93	PASS
TX-GMRS	FM	CH _{M5}	900	-0.92	-3.91	0.09	PASS
TX-GMRS	FM	CH _{M5}	1000	0.07	-3.00	1.00	PASS

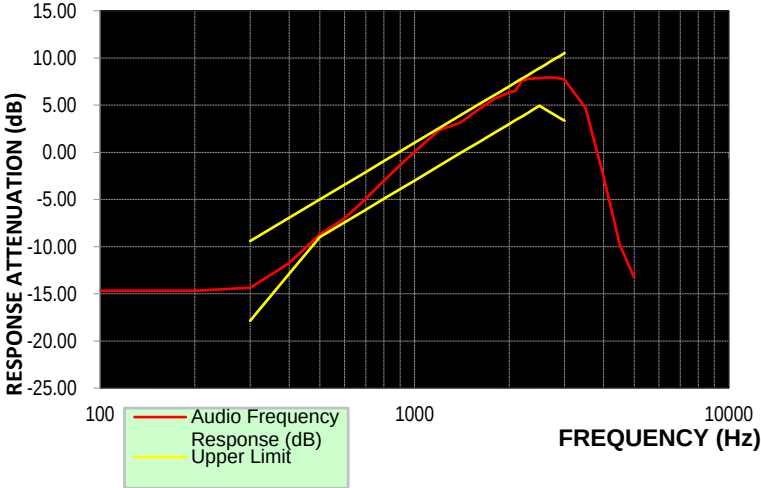
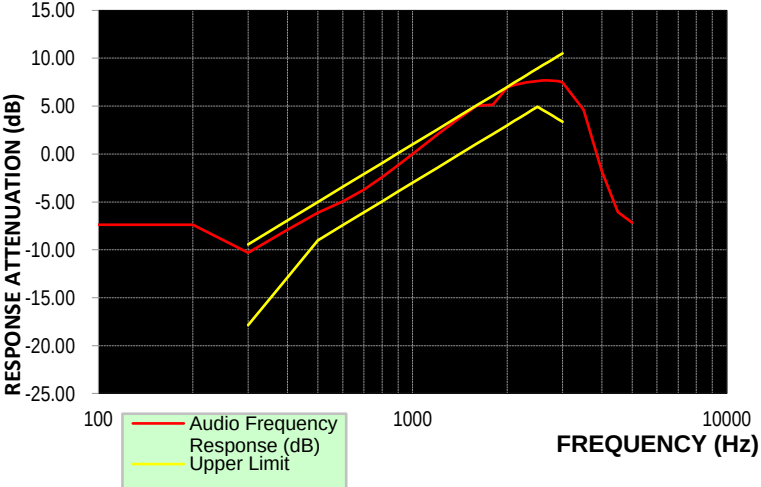
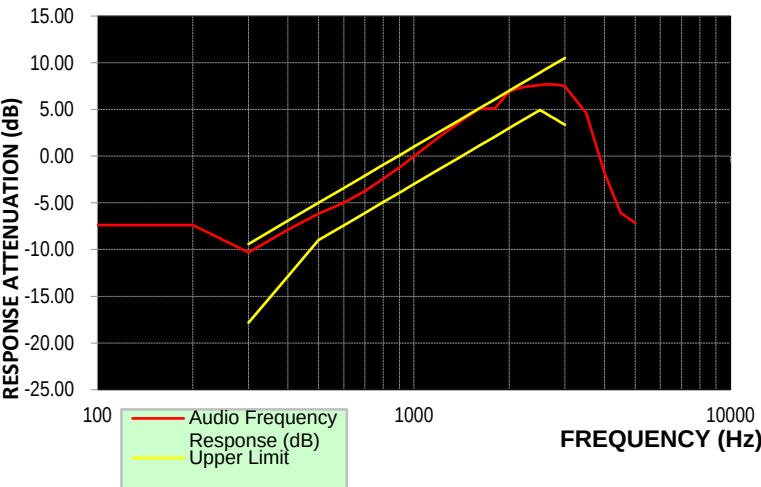
Appendix E:Audio Frequency Response

Test Mode	Modulation Type	Test Channel	Frequency (Hz)	Audio Frequency Response (dB)	Lower Limit	Upper Limit	Result
TX-GMRS	FM	CH _{M5}	1200	1.92	-1.42	2.58	PASS
TX-GMRS	FM	CH _{M5}	1400	3.37	-0.09	3.91	PASS
TX-GMRS	FM	CH _{M5}	1600	4.63	1.07	5.07	PASS
TX-GMRS	FM	CH _{M5}	1800	5.68	2.09	6.09	PASS
TX-GMRS	FM	CH _{M5}	2000	6.54	3.00	7.00	PASS
TX-GMRS	FM	CH _{M5}	2100	6.90	3.42	7.42	PASS
TX-GMRS	FM	CH _{M5}	2200	7.21	3.83	7.83	PASS
TX-GMRS	FM	CH _{M5}	2300	7.53	4.21	8.21	PASS
TX-GMRS	FM	CH _{M5}	2400	7.76	4.58	8.58	PASS
TX-GMRS	FM	CH _{M5}	2500	7.98	4.93	8.93	PASS
TX-GMRS	FM	CH _{M5}	2600	8.15	4.59	9.27	PASS
TX-GMRS	FM	CH _{M5}	2700	8.31	4.27	9.60	PASS
TX-GMRS	FM	CH _{M5}	2800	8.34	3.95	9.91	PASS
TX-GMRS	FM	CH _{M5}	2900	8.36	3.65	10.22	PASS
TX-GMRS	FM	CH _{M5}	3000	8.34	3.35	10.51	PASS
TX-GMRS	FM	CH _{M5}	3500	5.58			PASS
TX-GMRS	FM	CH _{M5}	4000	-0.75			PASS
TX-GMRS	FM	CH _{M5}	4500	-4.32			PASS
TX-GMRS	FM	CH _{M5}	5000	-5.04			PASS
TX-GMRS	FM	CH _{M6}	100	-5.18			PASS
TX-GMRS	FM	CH _{M6}	200	-5.18			PASS
TX-GMRS	FM	CH _{M6}	300	-10.14	-17.84	-9.42	PASS
TX-GMRS	FM	CH _{M6}	400	-7.91	-12.86	-6.93	PASS
TX-GMRS	FM	CH _{M6}	500	-5.50	-9.00	-5.00	PASS
TX-GMRS	FM	CH _{M6}	600	-3.78	-7.42	-3.42	PASS
TX-GMRS	FM	CH _{M6}	700	-2.92	-6.09	-2.09	PASS
TX-GMRS	FM	CH _{M6}	800	-1.93	-4.93	-0.93	PASS
TX-GMRS	FM	CH _{M6}	900	-0.95	-3.91	0.09	PASS
TX-GMRS	FM	CH _{M6}	1000	0.03	-3.00	1.00	PASS
TX-GMRS	FM	CH _{M6}	1200	1.83	-1.42	2.58	PASS
TX-GMRS	FM	CH _{M6}	1400	3.32	-0.09	3.91	PASS
TX-GMRS	FM	CH _{M6}	1600	4.59	1.07	5.07	PASS
TX-GMRS	FM	CH _{M6}	1800	5.64	2.09	6.09	PASS
TX-GMRS	FM	CH _{M6}	2000	6.47	3.00	7.00	PASS
TX-GMRS	FM	CH _{M6}	2100	6.84	3.42	7.42	PASS
TX-GMRS	FM	CH _{M6}	2200	7.15	3.83	7.83	PASS
TX-GMRS	FM	CH _{M6}	2300	7.46	4.21	8.21	PASS
TX-GMRS	FM	CH _{M6}	2400	7.67	4.58	8.58	PASS
TX-GMRS	FM	CH _{M6}	2500	7.88	4.93	8.93	PASS
TX-GMRS	FM	CH _{M6}	2600	8.07	4.59	9.27	PASS
TX-GMRS	FM	CH _{M6}	2700	8.21	4.27	9.60	PASS
TX-GMRS	FM	CH _{M6}	2800	8.27	3.95	9.91	PASS

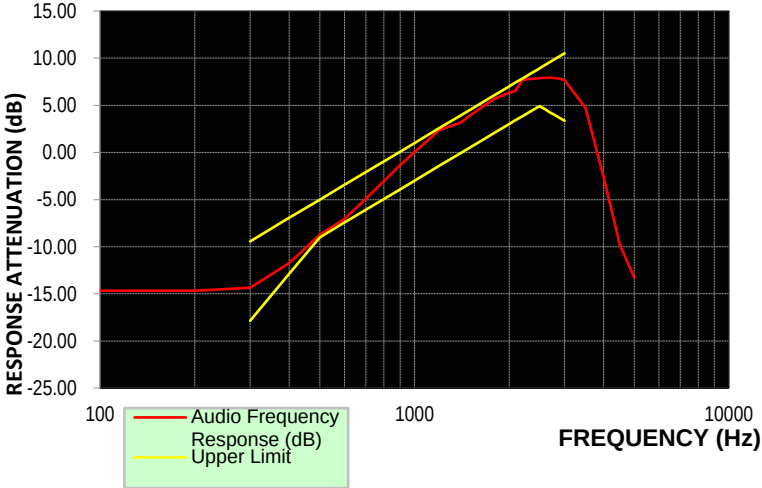
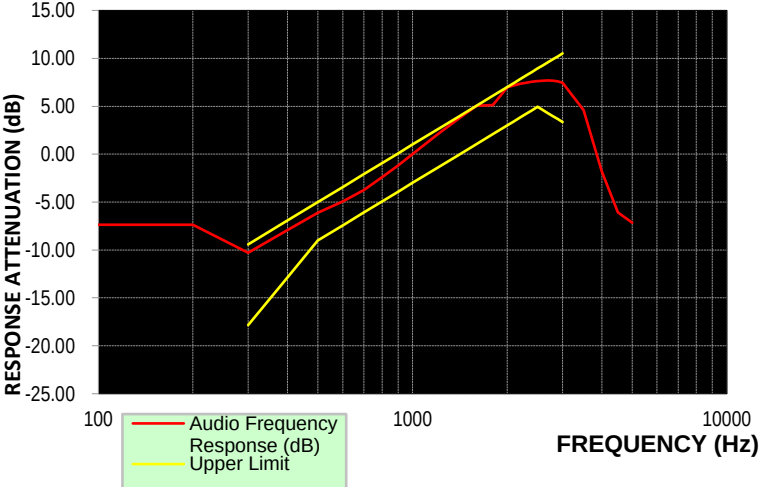
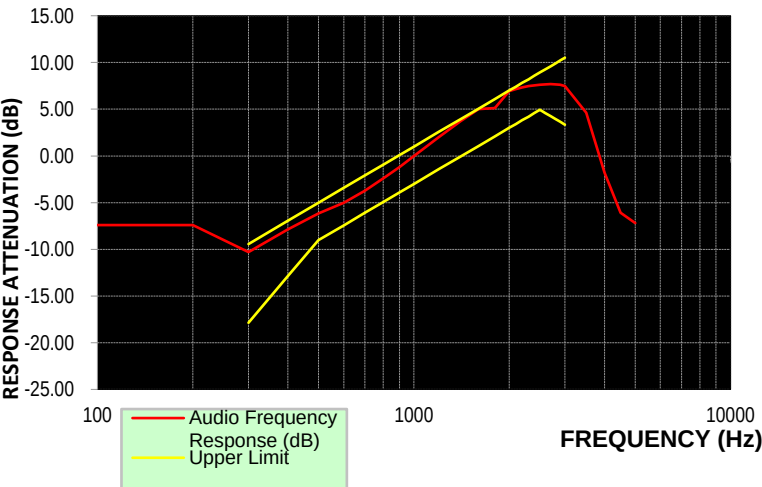
Appendix E:Audio Frequency Response

Test Mode	Modulation Type	Test Channel	Frequency (Hz)	Audio Frequency Response (dB)	Lower Limit	Upper Limit	Result
TX-GMRS	FM	CH _{M6}	2900	8.31	3.65	10.22	PASS
TX-GMRS	FM	CH _{M6}	3000	8.23	3.35	10.51	PASS
TX-GMRS	FM	CH _{M6}	3500	5.48			PASS
TX-GMRS	FM	CH _{M6}	4000	-0.81			PASS
TX-GMRS	FM	CH _{M6}	4500	-4.36			PASS
TX-GMRS	FM	CH _{M6}	5000	-5.07			PASS

Appendix E:Audio Frequency Response

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-GMRS	FM	CH _{M1}	
TX-GMRS	FM	CH _{M2}	
TX-GMRS	FM	CH _{M3}	

Appendix E:Audio Frequency Response

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-GMRS	FM	CH _{M4}	 The plot for CH_{M4} shows the audio frequency response from 100 Hz to 10,000 Hz. The y-axis represents Response Attenuation in dB, ranging from -25.00 to 15.00. A red line indicates the measured response, which starts at -15.00 dB at 100 Hz, remains flat until 300 Hz, then rises to a peak of approximately 7.5 dB at 3,000 Hz before dropping sharply to -12.5 dB at 10,000 Hz. A yellow line represents the upper limit, starting at -10.00 dB at 300 Hz and rising to 10.00 dB at 3,000 Hz.
TX-GMRS	FM	CH _{M5}	 The plot for CH_{M5} shows the audio frequency response from 100 Hz to 10,000 Hz. The y-axis represents Response Attenuation in dB, ranging from -25.00 to 15.00. A red line indicates the measured response, starting at -7.5 dB at 100 Hz, dipping to -10.0 dB at 300 Hz, then rising to a peak of approximately 7.5 dB at 3,000 Hz before dropping to -7.5 dB at 10,000 Hz. A yellow line represents the upper limit, starting at -17.5 dB at 300 Hz and rising to 10.0 dB at 3,000 Hz.
TX-GMRS	FM	CH _{M6}	 The plot for CH_{M6} shows the audio frequency response from 100 Hz to 10,000 Hz. The y-axis represents Response Attenuation in dB, ranging from -25.00 to 15.00. A red line indicates the measured response, starting at -7.5 dB at 100 Hz, dipping to -10.0 dB at 300 Hz, then rising to a peak of approximately 7.5 dB at 3,000 Hz before dropping to -7.5 dB at 10,000 Hz. A yellow line represents the upper limit, starting at -17.5 dB at 300 Hz and rising to 10.0 dB at 3,000 Hz.

Appendix F:Audio Low Pass Filter Response

Test Mode	Modulation Type	Test Channel	Audio Frequency(Hz)	Audio Frequency Response(dB)	Limit	Result
TX-GMRS	FM	CH _{M1}	1000	-14.18	0	PASS
TX-GMRS	FM	CH _{M1}	3000	-20.23	0	PASS
TX-GMRS	FM	CH _{M1}	4000	-39.37	-7.5	PASS
TX-GMRS	FM	CH _{M1}	5000	-52.00	-13.3	PASS
TX-GMRS	FM	CH _{M1}	6000	-52.26	-18.1	PASS
TX-GMRS	FM	CH _{M1}	8000	-52.16	-25.6	PASS
TX-GMRS	FM	CH _{M1}	10000	-52.41	-31.4	PASS
TX-GMRS	FM	CH _{M1}	15000	-52.03	-41.9	PASS
TX-GMRS	FM	CH _{M1}	20000	-51.85	-50	PASS
TX-GMRS	FM	CH _{M1}	30000	-52.10	-50	PASS
TX-GMRS	FM	CH _{M1}	40000	-52.51	-50	PASS
TX-GMRS	FM	CH _{M1}	50000	-52.24	-50	PASS
TX-GMRS	FM	CH _{M1}	60000	-52.44	-50	PASS
TX-GMRS	FM	CH _{M1}	70000	-53.01	-50	PASS
TX-GMRS	FM	CH _{M1}	80000	-53.03	-50	PASS
TX-GMRS	FM	CH _{M1}	90000	-52.97	-50	PASS
TX-GMRS	FM	CH _{M1}	100000	-53.05	-50	PASS
TX-GMRS	FM	CH _{M2}	1000	-14.22	0	PASS
TX-GMRS	FM	CH _{M2}	3000	-20.27	0	PASS
TX-GMRS	FM	CH _{M2}	4000	-39.41	-7.5	PASS
TX-GMRS	FM	CH _{M2}	5000	-52.04	-13.3	PASS
TX-GMRS	FM	CH _{M2}	6000	-52.30	-18.1	PASS
TX-GMRS	FM	CH _{M2}	8000	-52.20	-25.6	PASS
TX-GMRS	FM	CH _{M2}	10000	-52.45	-31.4	PASS
TX-GMRS	FM	CH _{M2}	15000	-52.07	-41.9	PASS
TX-GMRS	FM	CH _{M2}	20000	-51.89	-50	PASS
TX-GMRS	FM	CH _{M2}	30000	-52.16	-50	PASS
TX-GMRS	FM	CH _{M2}	40000	-52.57	-50	PASS
TX-GMRS	FM	CH _{M2}	50000	-52.30	-50	PASS
TX-GMRS	FM	CH _{M2}	60000	-52.50	-50	PASS
TX-GMRS	FM	CH _{M2}	70000	-53.07	-50	PASS
TX-GMRS	FM	CH _{M2}	80000	-53.09	-50	PASS
TX-GMRS	FM	CH _{M2}	90000	-53.03	-50	PASS
TX-GMRS	FM	CH _{M2}	100000	-53.11	-50	PASS
TX-GMRS	FM	CH _{M3}	1000	-13.98	0	PASS
TX-GMRS	FM	CH _{M3}	3000	-20.03	0	PASS
TX-GMRS	FM	CH _{M3}	4000	-39.17	-7.5	PASS
TX-GMRS	FM	CH _{M3}	5000	-51.80	-13.3	PASS
TX-GMRS	FM	CH _{M3}	6000	-52.06	-18.1	PASS
TX-GMRS	FM	CH _{M3}	8000	-51.96	-25.6	PASS
TX-GMRS	FM	CH _{M3}	10000	-52.21	-31.4	PASS
TX-GMRS	FM	CH _{M3}	15000	-51.83	-41.9	PASS
TX-GMRS	FM	CH _{M3}	20000	-51.65	-50	PASS
TX-GMRS	FM	CH _{M3}	30000	-51.90	-50	PASS

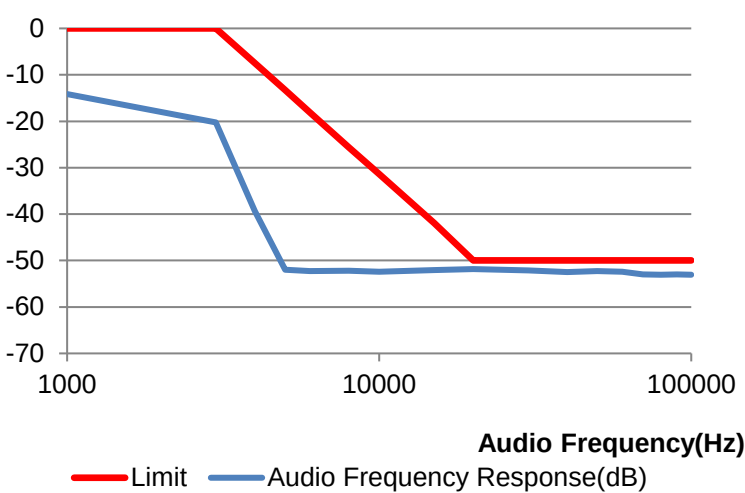
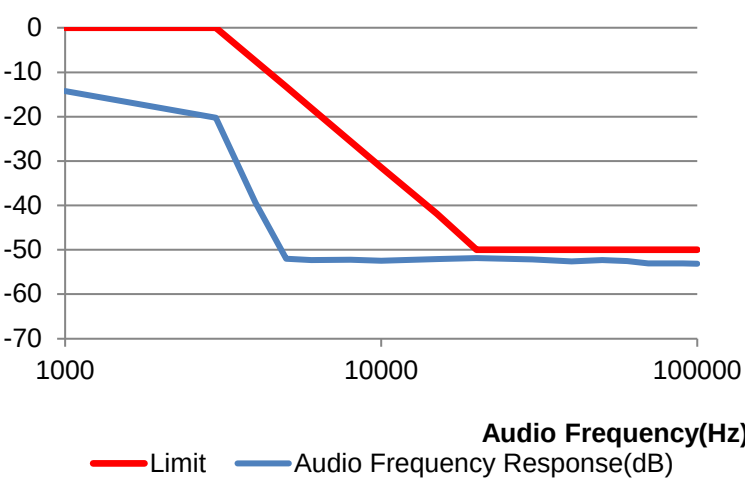
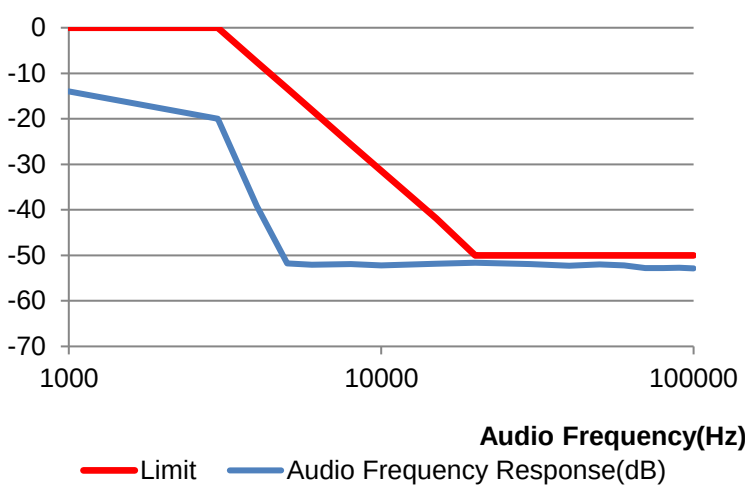
Appendix F:Audio Low Pass Filter Response

Test Mode	Modulation Type	Test Channel	Audio Frequency(Hz)	Audio Frequency Response(dB)	Limit	Result
TX-GMRS	FM	CH _{M3}	40000	-52.31	-50	PASS
TX-GMRS	FM	CH _{M3}	50000	-52.04	-50	PASS
TX-GMRS	FM	CH _{M3}	60000	-52.24	-50	PASS
TX-GMRS	FM	CH _{M3}	70000	-52.81	-50	PASS
TX-GMRS	FM	CH _{M3}	80000	-52.83	-50	PASS
TX-GMRS	FM	CH _{M3}	90000	-52.77	-50	PASS
TX-GMRS	FM	CH _{M3}	100000	-52.85	-50	PASS
TX-GMRS	FM	CH _{M4}	1000	-12.12	0	PASS
TX-GMRS	FM	CH _{M4}	3000	-20.35	0	PASS
TX-GMRS	FM	CH _{M4}	4000	-39.30	-7.5	PASS
TX-GMRS	FM	CH _{M4}	5000	-52.12	-13.3	PASS
TX-GMRS	FM	CH _{M4}	6000	-52.11	-18.1	PASS
TX-GMRS	FM	CH _{M4}	8000	-52.85	-25.6	PASS
TX-GMRS	FM	CH _{M4}	10000	-52.27	-31.4	PASS
TX-GMRS	FM	CH _{M4}	15000	-52.04	-41.9	PASS
TX-GMRS	FM	CH _{M4}	20000	-51.62	-50	PASS
TX-GMRS	FM	CH _{M4}	30000	-52.42	-50	PASS
TX-GMRS	FM	CH _{M4}	40000	-52.37	-50	PASS
TX-GMRS	FM	CH _{M4}	50000	-52.22	-50	PASS
TX-GMRS	FM	CH _{M4}	60000	-52.56	-50	PASS
TX-GMRS	FM	CH _{M4}	70000	-53.23	-50	PASS
TX-GMRS	FM	CH _{M4}	80000	-53.44	-50	PASS
TX-GMRS	FM	CH _{M4}	90000	-52.75	-50	PASS
TX-GMRS	FM	CH _{M4}	100000	-53.28	-50	PASS
TX-GMRS	FM	CH _{M5}	1000	-12.89	0	PASS
TX-GMRS	FM	CH _{M5}	3000	-19.69	0	PASS
TX-GMRS	FM	CH _{M5}	4000	-38.47	-7.5	PASS
TX-GMRS	FM	CH _{M5}	5000	-50.96	-13.3	PASS
TX-GMRS	FM	CH _{M5}	6000	-52.00	-18.1	PASS
TX-GMRS	FM	CH _{M5}	8000	-51.04	-25.6	PASS
TX-GMRS	FM	CH _{M5}	10000	-51.99	-31.4	PASS
TX-GMRS	FM	CH _{M5}	15000	-51.65	-41.9	PASS
TX-GMRS	FM	CH _{M5}	20000	-51.37	-50	PASS
TX-GMRS	FM	CH _{M5}	30000	-51.74	-50	PASS
TX-GMRS	FM	CH _{M5}	40000	-52.36	-50	PASS
TX-GMRS	FM	CH _{M5}	50000	-52.32	-50	PASS
TX-GMRS	FM	CH _{M5}	60000	-52.01	-50	PASS
TX-GMRS	FM	CH _{M5}	70000	-52.75	-50	PASS
TX-GMRS	FM	CH _{M5}	80000	-52.65	-50	PASS
TX-GMRS	FM	CH _{M5}	90000	-52.39	-50	PASS
TX-GMRS	FM	CH _{M5}	100000	-52.69	-50	PASS
TX-GMRS	FM	CH _{M6}	1000	-13.70	0	PASS
TX-GMRS	FM	CH _{M6}	3000	-19.59	0	PASS
TX-GMRS	FM	CH _{M6}	4000	-39.02	-7.5	PASS
TX-GMRS	FM	CH _{M6}	5000	-52.00	-13.3	PASS
TX-GMRS	FM	CH _{M6}	6000	-52.01	-18.1	PASS

Appendix F:Audio Low Pass Filter Response

Test Mode	Modulation Type	Test Channel	Audio Frequency(Hz)	Audio Frequency Response(dB)	Limit	Result
TX-GMRS	FM	CH _{M6}	8000	-52.37	-25.6	PASS
TX-GMRS	FM	CH _{M6}	10000	-52.38	-31.4	PASS
TX-GMRS	FM	CH _{M6}	15000	-52.02	-41.9	PASS
TX-GMRS	FM	CH _{M6}	20000	-51.37	-50	PASS
TX-GMRS	FM	CH _{M6}	30000	-52.31	-50	PASS
TX-GMRS	FM	CH _{M6}	40000	-52.08	-50	PASS
TX-GMRS	FM	CH _{M6}	50000	-52.32	-50	PASS
TX-GMRS	FM	CH _{M6}	60000	-52.65	-50	PASS
TX-GMRS	FM	CH _{M6}	70000	-53.35	-50	PASS
TX-GMRS	FM	CH _{M6}	80000	-53.01	-50	PASS
TX-GMRS	FM	CH _{M6}	90000	-53.15	-50	PASS
TX-GMRS	FM	CH _{M6}	100000	-53.27	-50	PASS

Appendix F:Audio Low Pass Filter Response

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-GMRS	FM	CH _{M1}	
TX-GMRS	FM	CH _{M2}	
TX-GMRS	FM	CH _{M3}	

Appendix F:Audio Low Pass Filter Response

Test Mode	Modulation Type	Test Channel	TEST PLOT RESULT																					
TX-GMRS	FM	CH _{M4}	Audio Frequency Response (dB) vs Audio Frequency (Hz) for CH_{M4}. The plot shows the audio frequency response (blue line) compared to the limit (red line). The response is within the limit across the entire frequency range. <table><tr><th>Audio Frequency (Hz)</th><th>Limit (dB)</th><th>Audio Frequency Response (dB)</th></tr><tr><td>1000</td><td>0</td><td>-15</td></tr><tr><td>3000</td><td>0</td><td>-20</td></tr><tr><td>5000</td><td>-10</td><td>-50</td></tr><tr><td>10000</td><td>-20</td><td>-50</td></tr><tr><td>20000</td><td>-50</td><td>-50</td></tr><tr><td>100000</td><td>-50</td><td>-50</td></tr></table>	Audio Frequency (Hz)	Limit (dB)	Audio Frequency Response (dB)	1000	0	-15	3000	0	-20	5000	-10	-50	10000	-20	-50	20000	-50	-50	100000	-50	-50
Audio Frequency (Hz)	Limit (dB)	Audio Frequency Response (dB)																						
1000	0	-15																						
3000	0	-20																						
5000	-10	-50																						
10000	-20	-50																						
20000	-50	-50																						
100000	-50	-50																						
TX-GMRS	FM	CH _{M5}	Audio Frequency Response (dB) vs Audio Frequency (Hz) for CH_{M5}. The plot shows the audio frequency response (blue line) compared to the limit (red line). The response is within the limit across the entire frequency range. <table><tr><th>Audio Frequency (Hz)</th><th>Limit (dB)</th><th>Audio Frequency Response (dB)</th></tr><tr><td>1000</td><td>0</td><td>-15</td></tr><tr><td>3000</td><td>0</td><td>-20</td></tr><tr><td>5000</td><td>-10</td><td>-50</td></tr><tr><td>10000</td><td>-20</td><td>-50</td></tr><tr><td>20000</td><td>-50</td><td>-50</td></tr><tr><td>100000</td><td>-50</td><td>-50</td></tr></table>	Audio Frequency (Hz)	Limit (dB)	Audio Frequency Response (dB)	1000	0	-15	3000	0	-20	5000	-10	-50	10000	-20	-50	20000	-50	-50	100000	-50	-50
Audio Frequency (Hz)	Limit (dB)	Audio Frequency Response (dB)																						
1000	0	-15																						
3000	0	-20																						
5000	-10	-50																						
10000	-20	-50																						
20000	-50	-50																						
100000	-50	-50																						
TX-GMRS	FM	CH _{M6}	Audio Frequency Response (dB) vs Audio Frequency (Hz) for CH_{M6}. The plot shows the audio frequency response (blue line) compared to the limit (red line). The response is within the limit across the entire frequency range. <table><tr><th>Audio Frequency (Hz)</th><th>Limit (dB)</th><th>Audio Frequency Response (dB)</th></tr><tr><td>1000</td><td>0</td><td>-15</td></tr><tr><td>3000</td><td>0</td><td>-20</td></tr><tr><td>5000</td><td>-10</td><td>-50</td></tr><tr><td>10000</td><td>-20</td><td>-50</td></tr><tr><td>20000</td><td>-50</td><td>-50</td></tr><tr><td>100000</td><td>-50</td><td>-50</td></tr></table>	Audio Frequency (Hz)	Limit (dB)	Audio Frequency Response (dB)	1000	0	-15	3000	0	-20	5000	-10	-50	10000	-20	-50	20000	-50	-50	100000	-50	-50
Audio Frequency (Hz)	Limit (dB)	Audio Frequency Response (dB)																						
1000	0	-15																						
3000	0	-20																						
5000	-10	-50																						
10000	-20	-50																						
20000	-50	-50																						
100000	-50	-50																						

Appendix G:Frequency Stability Test & Temperature

Test Mode	Modulation Type	Test Conditions		Frequency error (ppm)			Limit (ppm)	Result
		Voltage	Temperature	CH _{M1}	CH _{M2}	CH _{M3}		
TX-GMRS	FM	V _N	-30	-0.084	-0.042	-0.121	±2.5	PASS
TX-GMRS	FM	V _N	-20	-0.092	-0.052	-0.109	±2.5	PASS
TX-GMRS	FM	V _N	-10	-0.082	-0.049	-0.128	±2.5	PASS
TX-GMRS	FM	V _N	0	-0.076	-0.046	-0.112	±2.5	PASS
TX-GMRS	FM	V _N	10	-0.084	-0.057	-0.105	±2.5	PASS
TX-GMRS	FM	V _N	20	-0.086	-0.050	-0.104	±2.5	PASS
TX-GMRS	FM	V _N	30	-0.071	-0.047	-0.109	±2.5	PASS
TX-GMRS	FM	V _N	40	-0.079	-0.058	-0.115	±2.5	PASS
TX-GMRS	FM	V _N	50	-0.083	-0.067	-0.131	±2.5	PASS

Test Mode	Modulation Type	Test Conditions		Frequency error (ppm)			Limit (ppm)	Result
		Voltage	Temperature	CH _{M5}	CH _{M5}	CH _{M6}		
TX-GMRS	FM	V _N	-30	-0.092	-0.042	-0.051	±2.5	PASS
TX-GMRS	FM	V _N	-20	-0.076	-0.057	-0.067	±2.5	PASS
TX-GMRS	FM	V _N	-10	-0.086	-0.041	-0.062	±2.5	PASS
TX-GMRS	FM	V _N	0	-0.072	-0.059	-0.065	±2.5	PASS
TX-GMRS	FM	V _N	10	-0.081	-0.067	-0.048	±2.5	PASS
TX-GMRS	FM	V _N	20	-0.083	-0.051	-0.059	±2.5	PASS
TX-GMRS	FM	V _N	30	-0.089	-0.064	-0.047	±2.5	PASS
TX-GMRS	FM	V _N	40	-0.094	-0.057	-0.042	±2.5	PASS
TX-GMRS	FM	V _N	50	-0.076	-0.046	-0.046	±2.5	PASS

Appendix H:Frequency Stability Test & Voltage

Test Mode	Modulation Type	Test Conditions		Frequency error (ppm)			Limit (ppm)	Result
		Voltage	Temperature	CH _{M1}	CH _{M2}	CH _{M3}		
TX-GMRS	FM	V _N	T _N	-0.043	-0.050	-0.104	±2.5	PASS
TX-GMRS	FM	V _L	T _N	-0.058	0.049	-0.109	±2.5	PASS
TX-GMRS	FM	V _H	T _N	-0.049	-0.064	-0.115	±2.5	PASS

Test Mode	Modulation Type	Test Conditions		Frequency error (ppm)			Limit (ppm)	Result
		Voltage	Temperature	CH _{M4}	CH _{M5}	CH _{M6}		
TX-GMRS	FM	V _N	T _N	-0.083	-0.051	-0.059	±2.5	PASS
TX-GMRS	FM	V _L	T _N	-0.079	-0.059	-0.052	±2.5	PASS
TX-GMRS	FM	V _H	T _N	-0.086	-0.061	-0.049	±2.5	PASS