Shenzhen CTA Testing Technology Co., Ltd.
Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

TEST REPORT
FCC Part 95

Report Reference No.	**CTA25080700201**
FCC ID.	**2AYZG-MHP3010**
Compiled by (position+printed name+signature) .:	File administrators Zoey Cao
Supervised by (position+printed name+signature) .:	Project Engineer Ace Chai
Approved by (position+printed name+signature) .:	RF Manager Eric Wang
Date of issue	Aug. 16, 2025

Testing Laboratory Name	**Shenzhen CTA Testing Technology Co., Ltd.**
Address	Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community,Fuhai Street, Bao'an District, Shenzhen, China
Applicant's name	**ShenZhen litian technology Co.,Ltd**
Address	Rm609,#2 Zonghe Bldg,Bao yun da center, Xixiang St,Bao an District,Shenzhen,China
Test specification	
Standard	**FCC Part 95**

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Test item description	**Walkie Talkies**
Trade Mark	N/A
Manufacturer	ShenZhen litian technology Co.,Ltd
Model/Type reference	MHP3010
Listed Models	MHP3011
Ratings	DC 6.0V From Battery
Modulation	FM
Hardware version	N/A
Software version	N/A
Frequency	FRS: 462.5500MHz~462.7250MHz; FRS: 462.5625MHz~462.7125MHz; FRS: 467.5625MHz~467.7125MHz
Result	**PASS**

TEST REPORT

Equipment under Test	:	Walkie Talkies
Model /Type	:	MHP3010
Listed Models	:	MHP3011
Model difference	:	The PCB board, circuit, structure and internal of these models are the same, Only model number and colour is different for these model.
Applicant	:	**ShenZhen litian technology Co.,Ltd**
Address	:	Rm609,#2 Zonghe Bldg,Bao yun da center, Xixiang St,Bao an District,Shenzhen,China
Manufacturer	:	**ShenZhen litian technology Co.,Ltd**
Address	:	Rm609,#2 Zonghe Bldg,Bao yun da center, Xixiang St,Bao an District,Shenzhen,China

Test result	**Pass**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Contents

1 TEST STANDARDS

The tests were performed according to following standards:
FCC Rules Part 95 : PERSONAL RADIO SERVICES
ANSI/TIA-603-E-2016: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.
FCC Part 2: FREQUENCY ALLOCA-TIONS AND RADIO TREATY MAT-TERS; GENERAL RULES AND REG-ULATIONS
ANSI C63.26-2015 : IEEE/ANSI Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

2 SUMMARY

2.1 General Remarks

Date of receipt of test sample	:	Aug. 07, 2025
Testing commenced on	:	Aug. 07, 2025
Testing concluded on	:	Aug. 16, 2025

2.2 Product Description

Name of EUT	Walkie Talkies
Model Number	MHP3010
Power Supply	DC 6.0V from battery
Frequency Range	FRS:462.5500MHz~462.7250MHz; FRS:462.5625MHz~462.7125MHz; FRS:467.5625MHz~467.7125MHz
Rate Power	0.5W (It was fixed by the manufacturer, any individual can't arbitrarily change it.)
Modulation Type	FM
Emission Type	F3E
Channel Separation	12.5KHz
Antenna Type	Spring Antenna
Antennal Gain	2.00dBi
Sample ID:	CTA250807002-1#(Engineer sample) CTA250807002 -2#(Normal sample)

2.3 Short description of the Equipment under Test (EUT)

This is a Walkie talkie.
For more details, refer to the user's manual of the EUT.

2.4 Description of Test Modes and Test Frequency

The EUT has been tested under typical operating condition. As, test modes selected as below by the technical parameters of the EUT:

Operation Mode No.	Modulation	Channel Separation	Condition	
	FM	12.5KHz	TX	RX
1	☒	☒	☒	
2	☒	☒		☒

Frequency list(FRS):

Channel	Frequency(MHz)	Type	Power
1	**462.5625**	**FRS**	2.0W
2	462.5875	FRS	
3	462.6125	FRS	
4	462.6375	FRS	
5	462.6625	FRS	
6	462.6875	FRS	
7	462.7125	FRS	
8	467.5625	FRS	0.5W
9	467.5875	FRS	
10	467.6125	FRS	
11	**467.6375**	**FRS**	
12	467.6625	FRS	
13	467.6875	FRS	
14	467.7125	FRS	
15	462.5500	FRS	2.0W
16	462.5750	FRS	
17	462.6000	FRS	
18	462.6250	FRS	
19	462.6500	FRS	
20	462.6750	FRS	
21	462.7000	FRS	
22	**462.7250**	**FRS**	

Note1: The line display in grey was the channel selected for test.

2.5 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended to comply with FCC Part 95 Rules.

2.6 Modifications

No modifications were implemented to meet testing criteria.

3 TEST ENVIRONMENT

3.1 Address of the test laboratory

Shenzhen CTA Testing Technology Co., Ltd.
Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community,Fuhai Street, Bao'an District, Shenzhen, China

3.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 517856 Designation Number: CN1318
Shenzhen CTA Testing Technology Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA-Lab Cert. No.: 6534.01
Shenzhen CTA Testing Technology Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

ISED#: 27890 CAB identifier: CN0127
Shenzhen CTA Testing Technology Co., Ltd. has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

3.3 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	15-35 ℃
Lative Humidity	30-60 %
Air Pressure	950-1050mbar

3.4 Equipments Used during the Test

Test Equipment	Manufacturer	Model No.	Equipment No.	Calibration Date	Calibration Due Date
LISN	R&S	ENV216	CTA-308	2025/08/04	2026/08/03
LISN	R&S	ENV216	CTA-314	2025/07/30	2026/07/29
EMI Test Receiver	R&S	ESPI	CTA-307	2025/07/30	2026/07/29
EMI Test Receiver	R&S	ESCI	CTA-306	2025/07/30	2026/07/29
Spectrum Analyzer	Agilent	N9020A	CTA-301	2025/07/30	2026/07/29
Vector Signal generator	Agilent	N5182A	CTA-305	2025/07/30	2026/07/29
Analog Signal Generator	R&S	E4421B	CTA-304	2025/07/30	2026/07/29
WIDEBAND RADIO COMMUNICATIO N TESTER	CMW500	R&S	CTA-302	2025/07/30	2026/07/29
Temperature and humidity meter	Chigo	ZG-7020	CTA-326	2025/07/31	2026/07/30
Ultra-Broadband Antenna	Schwarzbeck	VULB9163	CTA-310	2023/10/17	2026/10/16
Horn Antenna	Schwarzbeck	BBHA 9120D	CTA-309	2023/10/13	2026/10/12
Loop Antenna	Zhinan	ZN30900C	CTA-311	2023/10/17	2026/10/16
Horn Antenna	Schwarzbeck	BBHA 9170	CTA-346	2025/05/18	2028/05/17
Amplifier	Schwarzbeck	BBV9745	CTA-312	2025/07/30	2026/07/29
Amplifier	Tonscend	TAP-011840	CTA-313	2025/07/30	2026/07/29
High-Pass Filter	XingBo	XBLBQ-GTA18	CTA-402	2025/07/30	2026/07/29
High-Pass Filter	XingBo	XBLBQ-GTA27	CTA-403	2025/07/30	2026/07/29
Automatic control unit	Tonscend	JS0806-2	CTA-404	2025/07/30	2026/07/29
Power Sensor	Agilent	U2021XA	CTA-405	2025/07/30	2026/07/29
Amplifier	SKET	LNPA 1840G-50	CTA-345	2025/05/17	2026/05/16
Spectrum analyzer	R&S	FSV40-N	CTA-344	2025/05/17	2026/05/16
Power Meter	R&S	NRVS	CTA-354	2025/07/30	2026/07/29
Attenuator	XINQY	10dB	N/A	N/A	N/A
Programmable Constant Temperature And Humidity Test Chamber	DONGGUAN JINGYU	HT-H-408	CTA-053	2025/07/30	2026/07/29
EMI Test Software	Tonscend	TS®JS32-RE	5.0.0.2	N/A	N/A
EMI Test Software	Tonscend	TS®JS32-CE	5.0.0.1	N/A	N/A
RF Test Software	Tonscend	TS®JS1120-3	3.1.65	N/A	N/A
RF Test Software	Tonscend	TS®JS1120	3.1.46	N/A	N/A

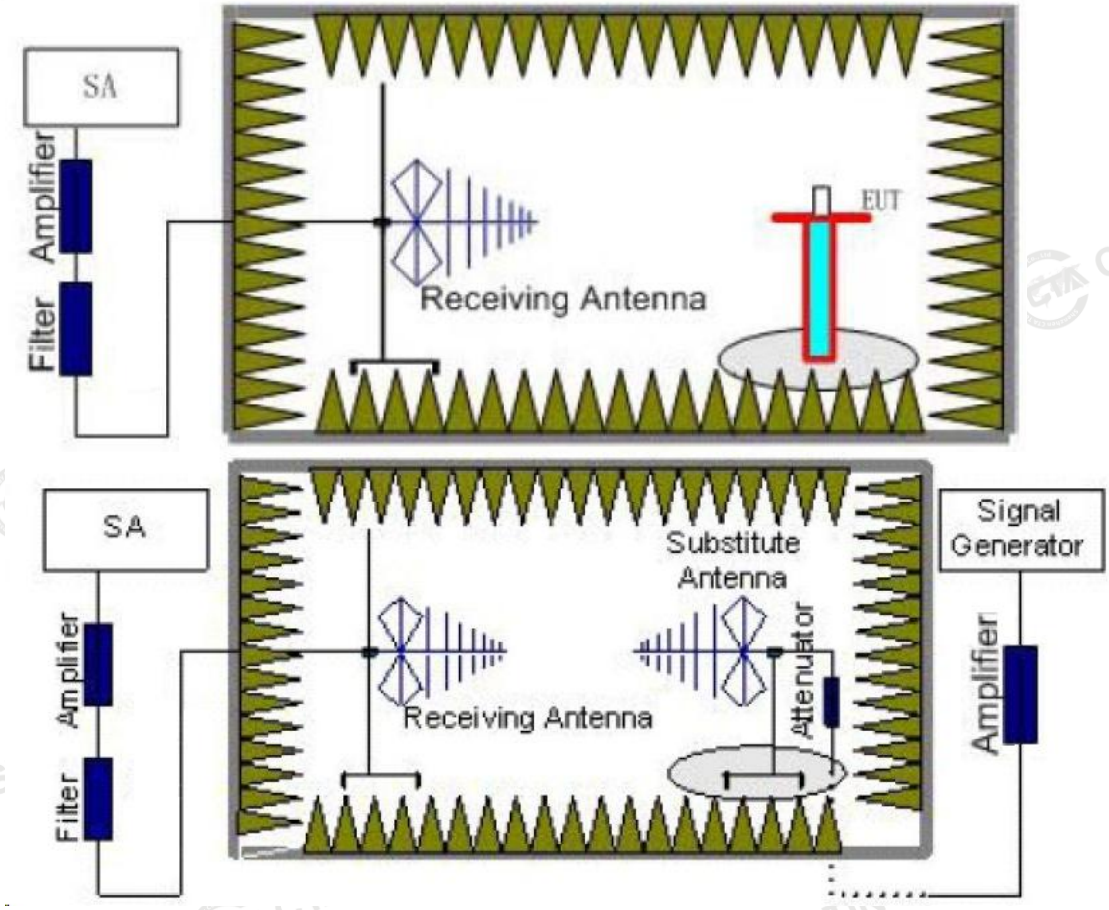
4 TEST CONDITIONS AND RESULTS

4.1 Maximum Transmitter Power

LIMITS

According to FCC Part 95.567:
Each FRS transmitter type must be designed such that the effective radiated power (ERP) on channels 8 through 14 does not exceed 0.5 Watts and the ERP on channels 1 through 7 and 15 through 22 does not exceed 2.0 Watts.

TEST CONFIGURATION



Measurement Procedure

1. EUT was placed on a 0.8 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.0m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all test transmit frequencies were measured with peak detector.
2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.

3. The EUT is then put into continuously transmitting mode at its maximum power level during the test.Set Test Receiver or Spectrum RBW=1MHz,VBW=3MHz, And the maximum value of the receiver should be recorded as (P_r).
4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
5. An amplifier may be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (P_{cl}) ,the Substitution Antenna Gain (G_a) and the Amplifier Gain (P_{Ag}) should be recorded after test. The measurement results are obtained as described below:
   Power(EIRP)=$P_{Mea+}P_{Ag}$ - P_{cl} + G_a
6. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
7. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

TEST RESULTS

Remark;
The field strength of radiation emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The data show in this report only with the worst case setup. After exploratory measurement the worst case of Z axis and receiver antenna at vertical polarization was reported.

Test Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dBi)	Correction (dB)	P_{Ag} (dB)	ERP (dBm)	ERP (mW)	Limit (W)	Polarization
462.6375	-11.41	2.13	7.75	2.15	34.65	26.71	469.14	2	V
467.6375	-11.23	2.13	7.75	2.15	34.65	26.89	488.47	0.5	V
462.6500	-11.69	2.13	7.75	2.15	34.65	26.43	439.38	2	V

Remark:
1. *$EIRP=P_{Mea}(dBm)+P_{Ag}(dB)-P_{cl}(dB)+G_a(dBi)$*
2. *ERP = EIRP – 2.15dBi as EIRP by subtracting the gain of the dipole.*

4.2 Occupied Bandwidth and Emission Mask

LIMITS

According to FCC 95.573:

Each FRS transmitter type must be designed such that the occupied bandwidth does not exceed 12.5 kHz.

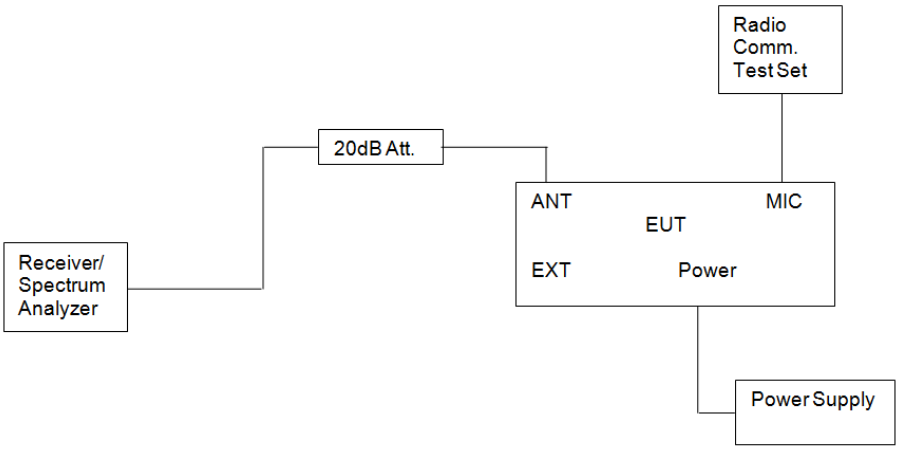
According to FCC 95.579:

At least 25dB (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.

At least 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.

At least 43 + 10 log10 (T) dB on any frequency removed from the center of the authorized bandwidth by more than 250 %.

TEST CONFIGURATION



TEST PROCEDURE

1 The EUT was modulated by 2.5 KHz Sine wave audio signal; the level of the audio signal employed is 16 dB greater than that necessary to produce 50% of rated system deviation. Rated system deviation is 2.5 kHz (12.5 kHz channel spacing) and 5 kHz (25 kHz channel spacing).

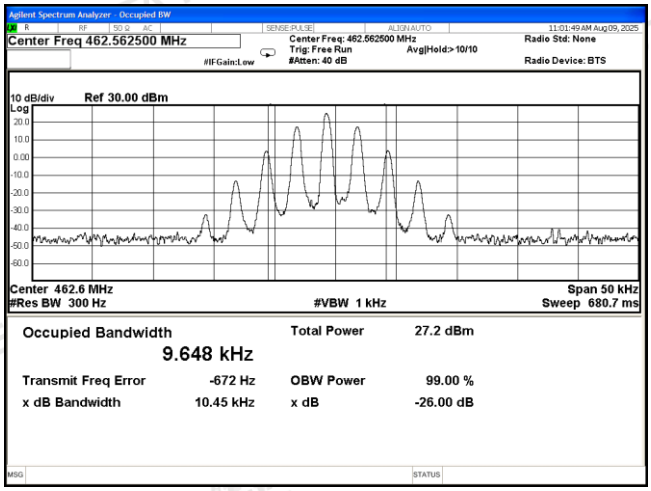
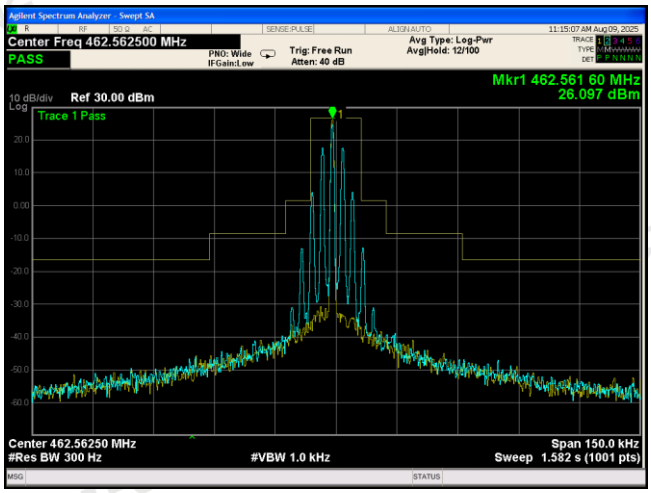
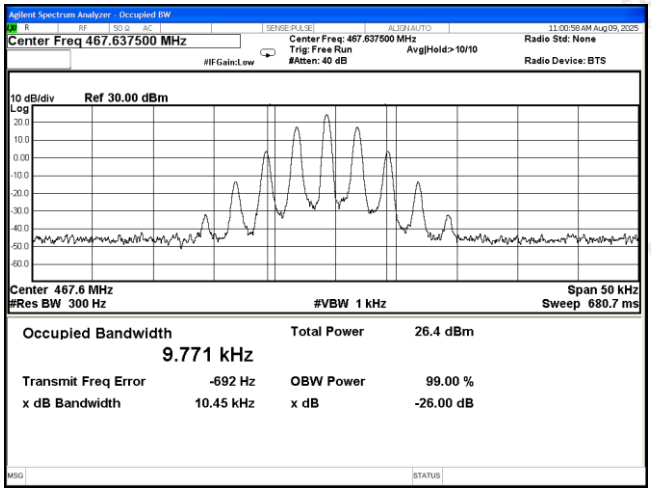
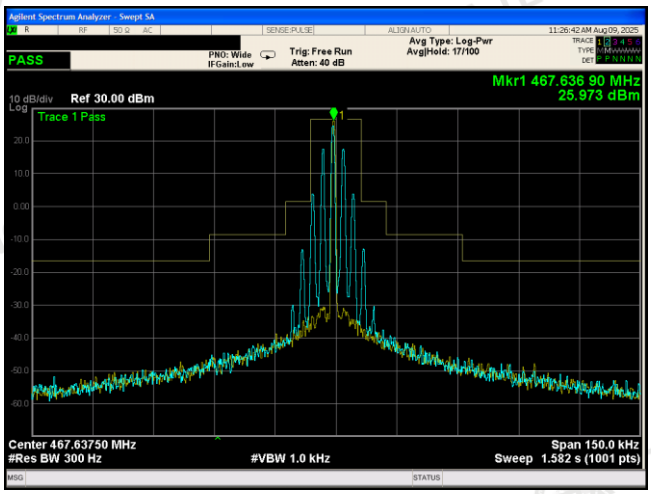
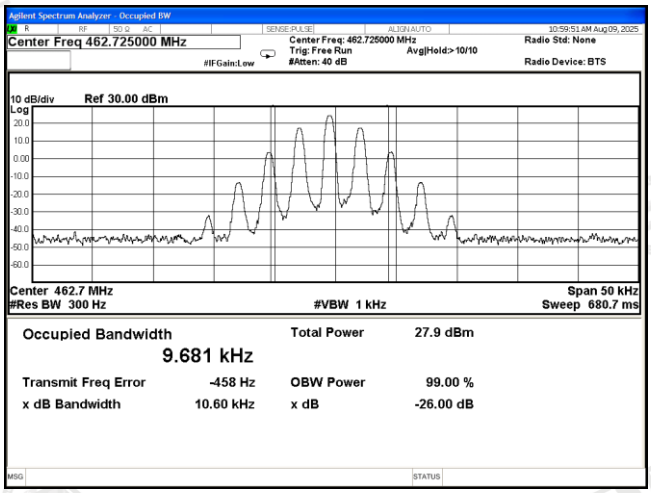
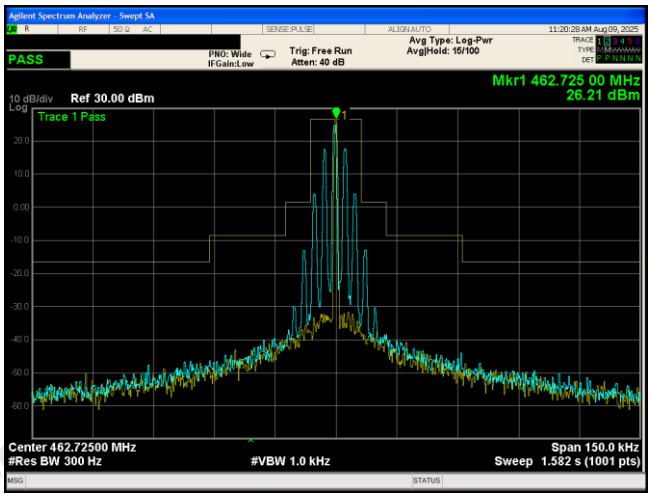
2 Set SPA Center Frequency = fundamental frequency, RBW=300Hz, VBW= 3 KHz, span =50 KHz.

3 Set SPA Max hold. Mark peak, Set 99% Occupied Bandwidth and 26dB Occupied Bandwidth.

TEST RESULTS

Occupied Bandwidth:

Emission Type	Frequency (MHz)	99% OBW (kHz)	26dB bandwidth (kHz)	Limit (KHz)	Result
F3E	462.5625	9.648	10.45	12.5	Pass
F3E	467.6375	9.771	10.45	12.5	Pass
F3E	462.7250	9.681	10.60	12.5	Pass

Test Plot of Occupied Bandwidth and Emission Mask	
Occupied Bandwidth	Emission Mask
	
Channel 1: 462.5625MHz	
	
Channel 11: 467.6375MHz	
	
Channel 22: 462.7250MHz	

4.3 Modulation Limit

LIMITS

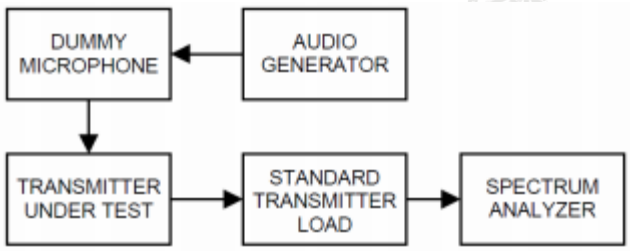
FCC Part 95.575, FCC Part 2.1047(b) Each FRS transmitter type must be designed such that the peak frequency deviation does not exceed 2.5 kHz, and the highest audio frequency contributing substantially to modulation must not exceed 3.125 kHz.

TEST PROCEDURE

Modulation Limit

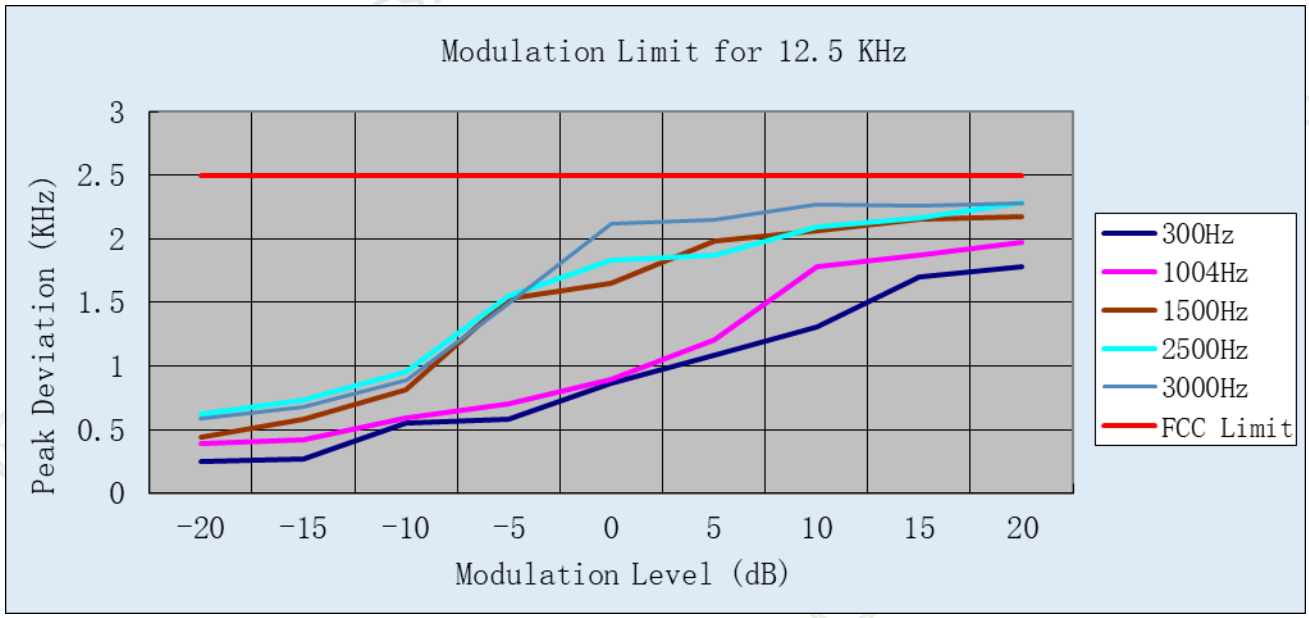
1) Connect the equipment as illustrated.
2) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
3) Set the test receiver to measure peak positive deviation. Set the audio bandwidth for ≤0.25 Hz to ≥15,000 Hz. Turn the de-emphasis function off.
4)Apply a 1000 Hz modulating signal to the transmitter from the audio frequency generator, and adjust the level to obtain 60% of full rated system deviation.
5) Apply Input Modulation Signal to EUT according to Section 3.4 and vary the input level from –20 to +20dB.
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 e), slowly vary the audio frequency from 300 Hz to 3000 Hz and observe the steady-state deviation. Record the maximum deviation.
8) Set the test receiver to measure peak negative deviation and repeat steps d) through g).
9) The values recorded in steps g) and h) are the modulation limiting.

TEST CONFIGURATION

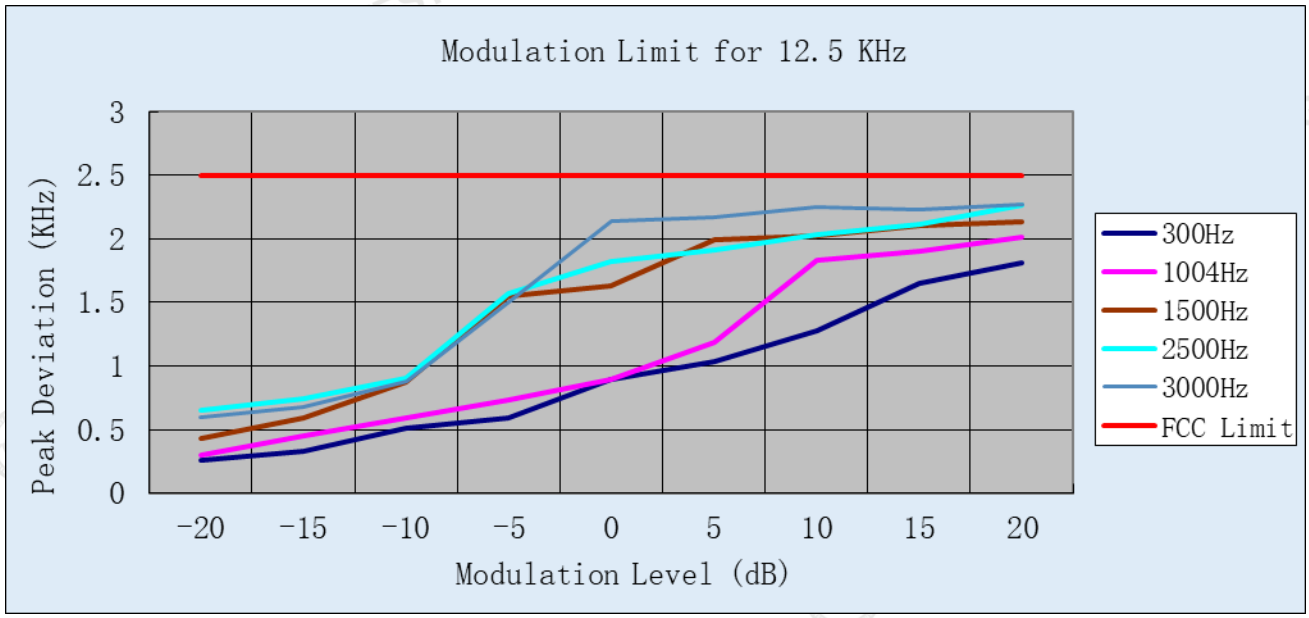


TEST RESULTS

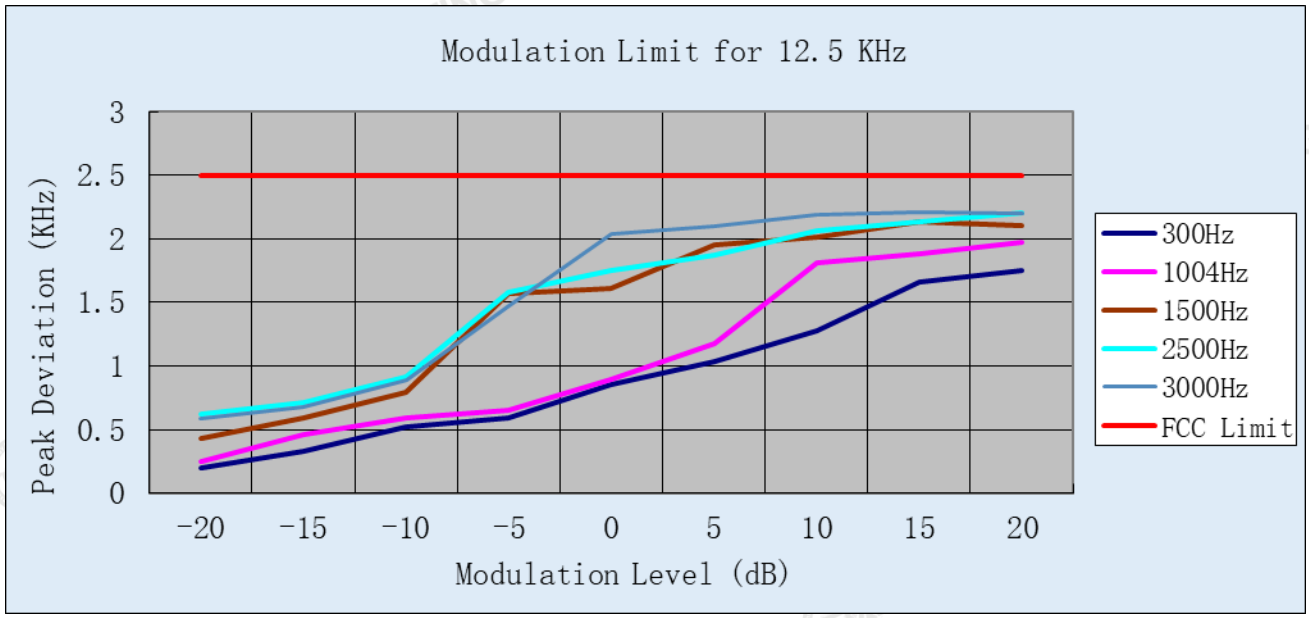
Channel 1: 462.5625MHz					
Modulation Level (dB)	Peak Freq. Deviation At 300Hz (KHz)	Peak Freq. Deviation At 1004Hz (KHz)	Peak Freq. Deviation At 1500Hz (KHz)	Peak Freq. Deviation At 2500Hz (KHz)	Peak Freq. Deviation At 3000Hz (KHz)
-20	0.25	0.39	0.44	0.62	0.59
-15	0.27	0.42	0.58	0.73	0.68
-10	0.55	0.59	0.81	0.95	0.89
-5	0.58	0.70	1.53	1.55	1.49
0	0.86	0.89	1.65	1.83	2.12
+5	1.09	1.21	1.98	1.87	2.15
+10	1.31	1.78	2.06	2.09	2.27
+15	1.70	1.87	2.15	2.16	2.26
+20	1.78	1.97	2.18	2.29	2.28



Channel 11: 467.6375MHz					
Modulation Level (dB)	Peak Freq. Deviation At 300Hz (KHz)	Peak Freq. Deviation At 1004Hz (KHz)	Peak Freq. Deviation At 1500Hz (KHz)	Peak Freq. Deviation At 2500Hz (KHz)	Peak Freq. Deviation At 3000Hz (KHz)
-20	0.26	0.30	0.43	0.65	0.60
-15	0.33	0.45	0.59	0.74	0.68
-10	0.51	0.59	0.87	0.90	0.88
-5	0.59	0.73	1.55	1.57	1.50
0	0.89	0.89	1.63	1.82	2.14
+5	1.03	1.19	1.99	1.91	2.17
+10	1.28	1.83	2.02	2.03	2.25
+15	1.65	1.90	2.10	2.11	2.23
+20	1.81	2.01	2.13	2.27	2.27



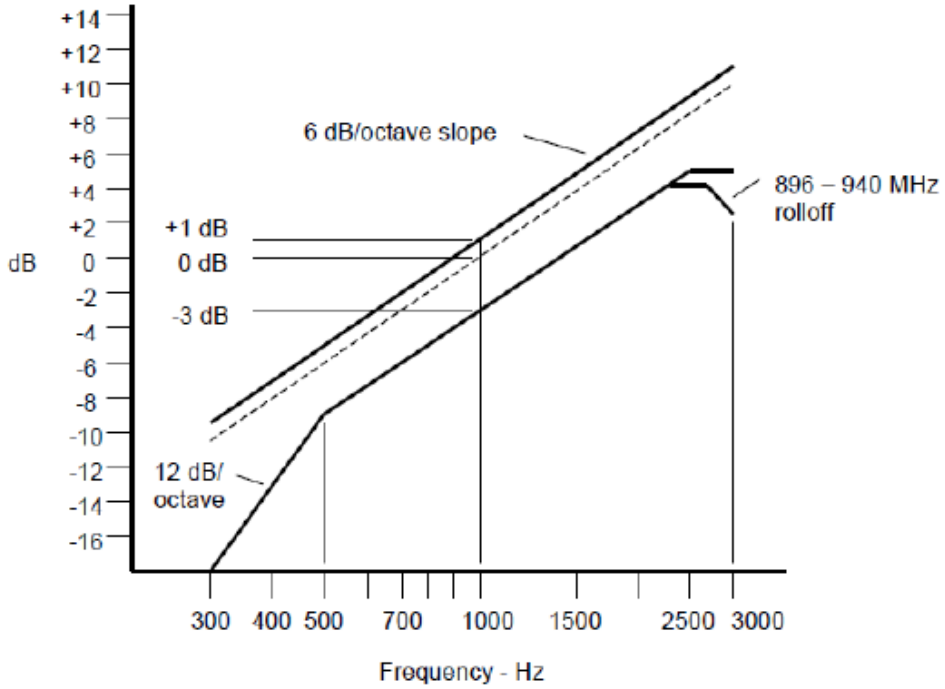
Channel 22: 462.7250MHzMHz					
Modulation Level (dB)	Peak Freq. Deviation At 300Hz (KHz)	Peak Freq. Deviation At 1004Hz (KHz)	Peak Freq. Deviation At 1500Hz (KHz)	Peak Freq. Deviation At 2500Hz (KHz)	Peak Freq. Deviation At 3000Hz (KHz)
-20	0.20	0.25	0.43	0.62	0.59
-15	0.33	0.46	0.59	0.71	0.68
-10	0.52	0.59	0.79	0.91	0.89
-5	0.59	0.65	1.57	1.58	1.47
0	0.85	0.89	1.61	1.75	2.04
+5	1.03	1.18	1.95	1.87	2.10
+10	1.28	1.81	2.01	2.06	2.19
+15	1.66	1.88	2.13	2.13	2.21
+20	1.75	1.97	2.10	2.21	2.20



4.4 Audio Frequency Response

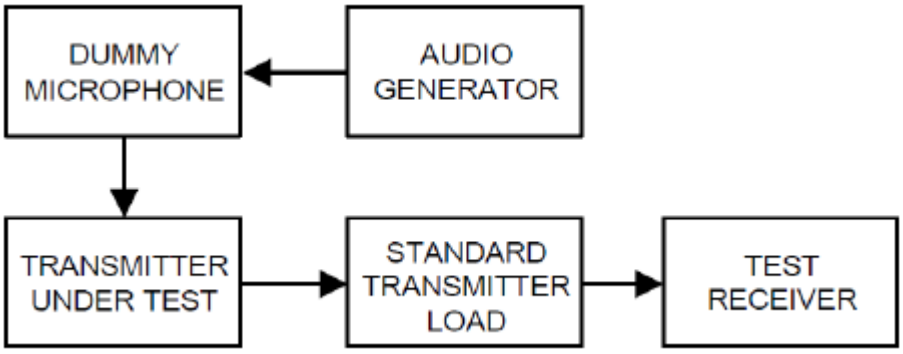
LIMIT

FCC Part 95.575),FCC Part 2.1047(a): Each FRS transmitter type must be designed such that the peak frequency deviation does 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

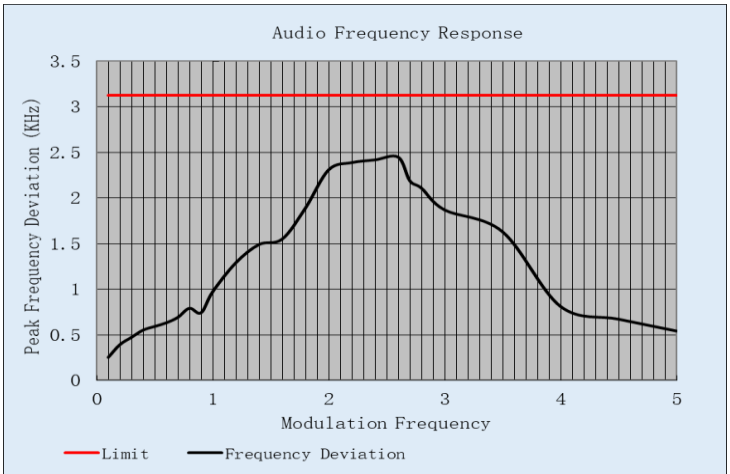
1) Connect the equipment as illustrated.
2) Set the test receiver to measure peak positive deviation. Set the audio bandwidth for 50 Hz to 15,000 Hz. Turn the de-emphasis function off.
3) Set the DMM to measure rms voltage.
4) Adjust the transmitter per the manufacturer's procedure for full rated system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

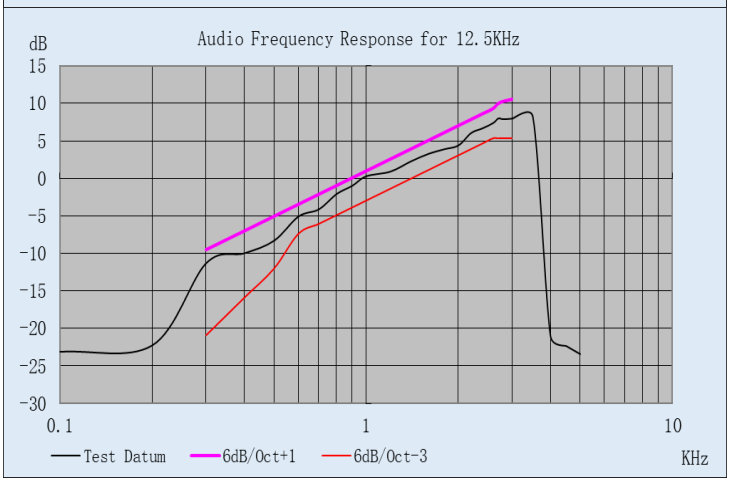
8) Set the audio frequency generator to the desired test frequency between 300 Hz and 3000 Hz.
9) Vary the audio frequency generator output level until the deviation reading that was recorded in step 6) is obtained.
10) Record the DMM reading as V_{FREQ}
11) Calculate the audio frequency response at the present frequency as: audio frequency response=20log10 (V_{FREQ}/V_{REF}).
12) Repeat steps 8) through 11) for all the desired test frequencies

TEST RESULTS

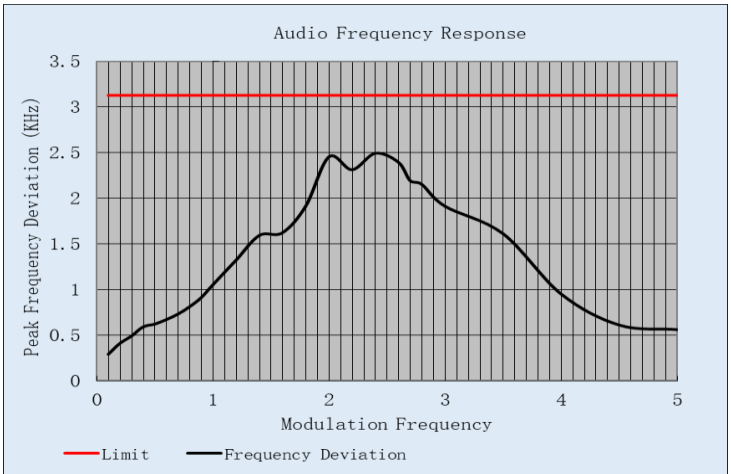
Audio Frequency Response:

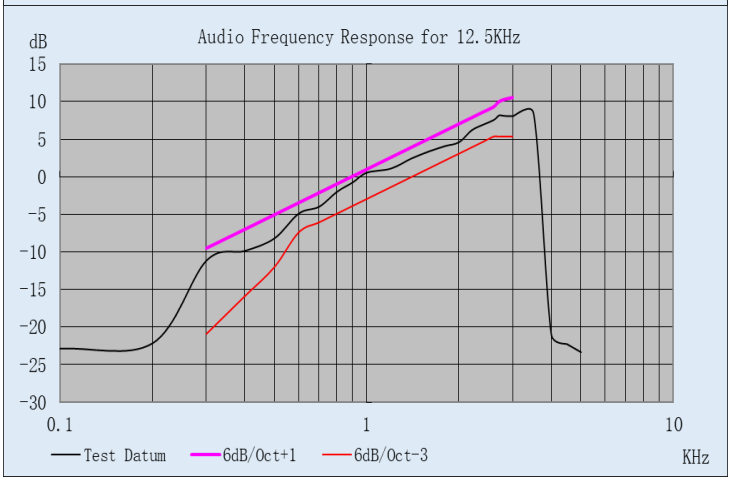
Channel 1: 462.5625MHz			
Modulation Frequency (Hz)	Peak Freq. Deviation (KHz)	Audio Frequency Response (dB)	Limit (KHz)
100	0.25	-23.07	3.125
200	0.39	-22.23	3.125
300	0.47	-11.27	3.125
400	0.55	-9.95	3.125
500	0.59	-8.27	3.125
600	0.63	-5.06	3.125
700	0.69	-4.09	3.125
800	0.79	-2.05	3.125
900	0.74	-0.95	3.125
1000	0.97	0.32	3.125
1200	1.29	0.95	3.125
1400	1.49	2.31	3.125
1600	1.55	3.32	3.125
1800	1.89	3.93	3.125
2000	2.31	4.43	3.125
2200	2.39	6.08	3.125
2400	2.42	6.72	3.125
2600	2.45	7.43	3.125
2700	2.19	8.03	3.125
2800	2.11	7.93	3.125
3000	1.87	8.01	3.125
3500	1.63	8.24	3.125
4000	0.81	-21.06	3.125
4500	0.67	-22.31	3.125
5000	0.54	-23.39	3.125



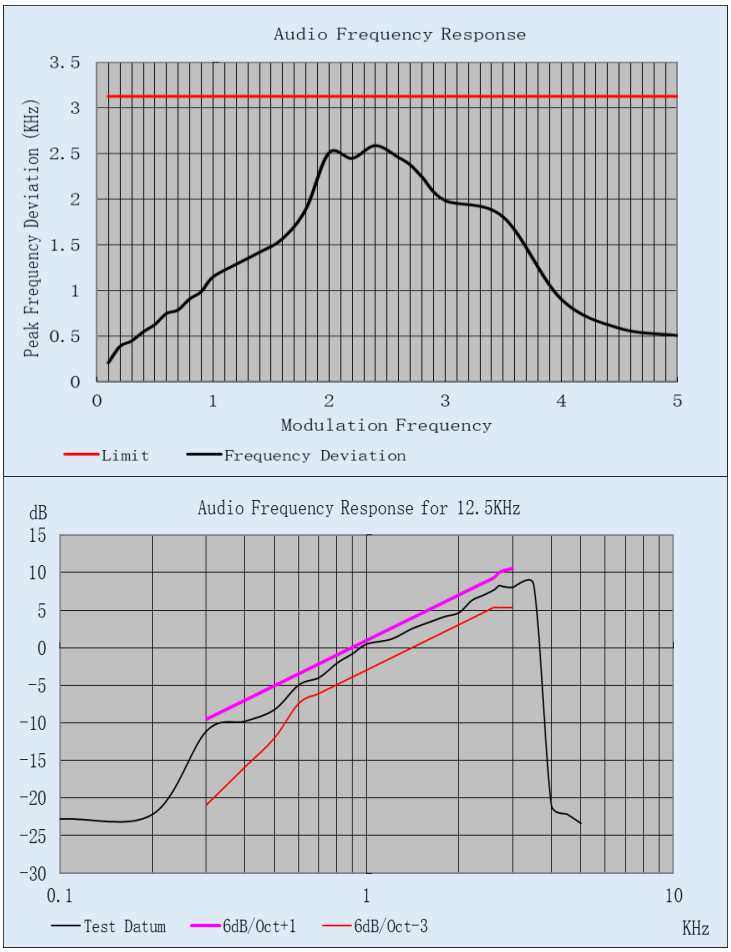


Channel 11: 467.6375MHz			
Modulation Frequency (Hz)	Peak Freq. Deviation (KHz)	Audio Frequency Response (dB)	Limit (KHz)
100	0.29	-22.91	3.125
200	0.41	-22.21	3.125
300	0.49	-11.20	3.125
400	0.59	-9.92	3.125
500	0.62	-8.24	3.125
600	0.67	-4.94	3.125
700	0.73	-4.02	3.125
800	0.81	-2.04	3.125
900	0.91	-0.80	3.125
1000	1.05	0.49	3.125
1200	1.32	1.05	3.125
1400	1.59	2.39	3.125
1600	1.62	3.34	3.125
1800	1.91	4.03	3.125
2000	2.45	4.55	3.125
2200	2.31	6.14	3.125
2400	2.49	6.89	3.125
2600	2.39	7.52	3.125
2700	2.19	8.11	3.125
2800	2.15	8.06	3.125
3000	1.91	8.02	3.125
3500	1.61	8.37	3.125
4000	0.95	-21.04	3.125
4500	0.61	-22.31	3.125
5000	0.56	-23.38	3.125





Channel 22: 462.7250MHzMHz			
Modulation Frequency (Hz)	Peak Freq. Deviation (KHz)	Audio Frequency Response (dB)	Limit (KHz)
100	0.21	-22.76	3.125
200	0.39	-22.16	3.125
300	0.45	-11.06	3.125
400	0.55	-9.78	3.125
500	0.63	-8.22	3.125
600	0.75	-4.93	3.125
700	0.79	-3.94	3.125
800	0.91	-2.02	3.125
900	0.99	-0.76	3.125
1000	1.15	0.51	3.125
1200	1.29	1.16	3.125
1400	1.42	2.53	3.125
1600	1.57	3.42	3.125
1800	1.89	4.18	3.125
2000	2.51	4.69	3.125
2200	2.45	6.31	3.125
2400	2.59	7.01	3.125
2600	2.46	7.72	3.125
2700	2.38	8.28	3.125
2800	2.25	8.15	3.125
3000	1.99	8.07	3.125
3500	1.81	8.44	3.125
4000	0.91	-20.91	3.125
4500	0.59	-22.11	3.125
5000	0.51	-23.36	3.125



Note: All the modes had been tested, but only the worst data recorded in the report.

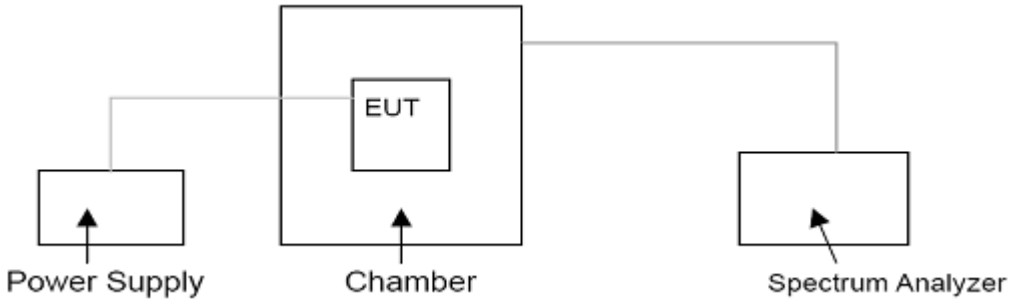
4.5 Frequency Stability

LIMITS

According to FCC 95.565

Each FRS transmitter type must be designed such that the carrier frequencies remain within ±2.5 parts-per-million of the channel center frequencies specified in §95.563 during normal operating conditions.

TEST CONFIGURATION



TEST PROCEDURE

The EUT was set in the climate chamber and connected to an external DC power supply. The RF output was directly connected to Spectrum Analyzer. The coupling loss of the additional cables was recorded and taken in account for all the measurements. After temperature stabilization (approx. 20 min for each stage), the frequency for the lower, the middle and the highest frequency range was recorded. For Frequency stability Vs. Voltage the EUT was connected to a DC power supply and the voltage was adjusted in the required ranges. The result was recorded.

TEST RESULTS

Reference Frequency: 462.5625MHz					
Voltage (V)	Temperature (℃)	Frequency error (Hz)	Frequency Tolerance (%)	Limit (%)	Result
6.0	-30	(Hz)	(%)	0.00025%	Pass
	-20	321	0.000070		
	-10	459	0.000099		
	0	344	0.000074		
	10	552	0.000119		
	20	565	0.000122		
	30	376	0.000081		
	40	382	0.000083		
	50	338	0.000073		
5.1	25	448	0.000097		
6.9	25	444	0.000096		

Reference Frequency: 467.6375MHz					
Voltage (V)	Temperature (℃)	Frequency error (Hz)	Frequency Tolerance (%)	Limit (%)	Result
6.0	-30	318	0.000068	0.00025%	Pass
	-20	457	0.000098		
	-10	353	0.000075		
	0	552	0.000118		
	10	566	0.000121		
	20	374	0.000080		
	30	379	0.000081		
	40	332	0.000071		
	50	450	0.000096		
5.1	25	452	0.000097		
6.9	25	402	0.000086		

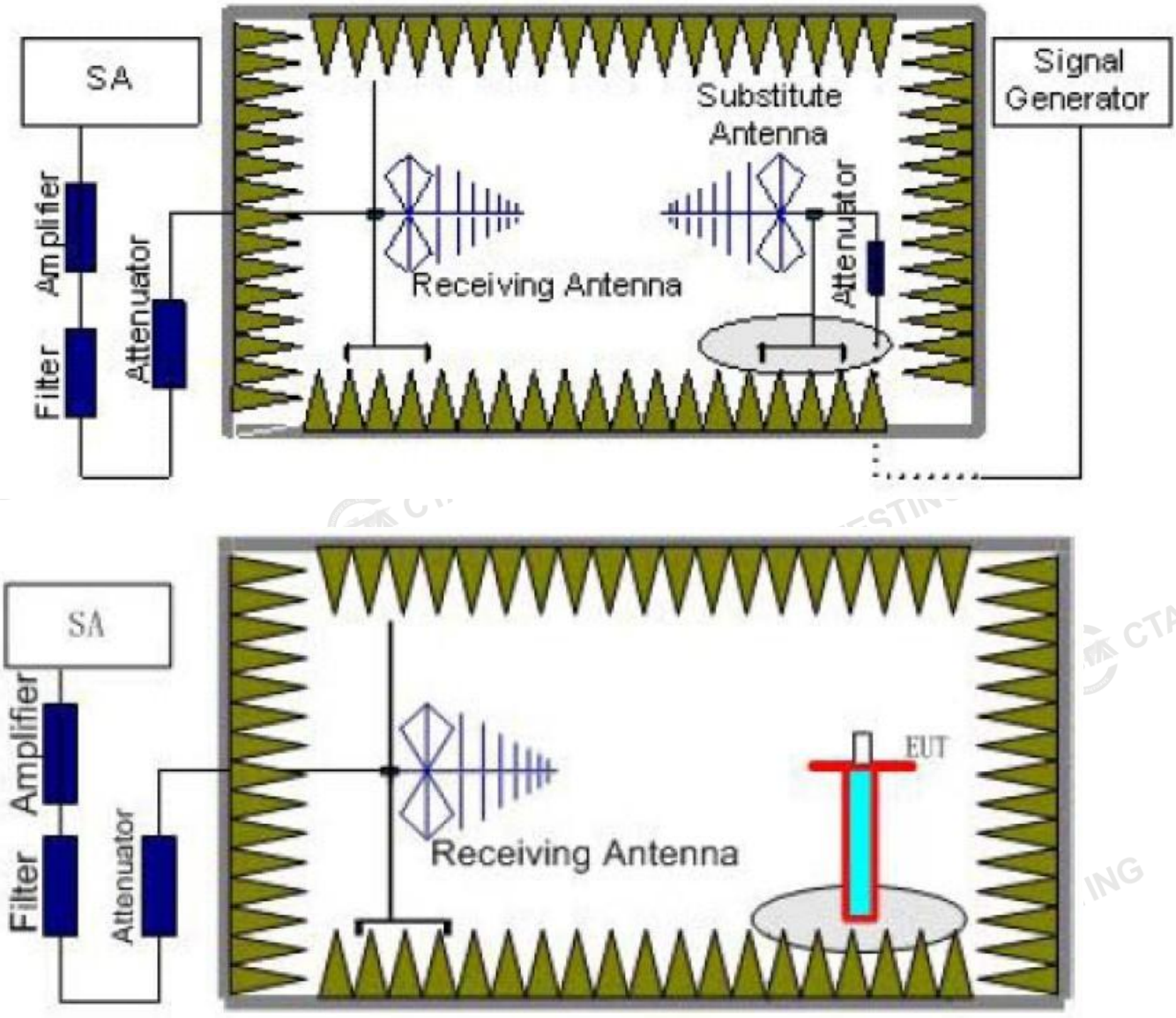
Reference Frequency: 462.7250MHz					
Voltage (V)	Temperature (℃)	Frequency error (Hz)	Frequency Tolerance (%)	Limit (%)	Result
6.0	-30	316	0.000068	0.00025%	Pass
	-20	459	0.000099		
	-10	353	0.000076		
	0	552	0.000119		
	10	562	0.000121		
	20	379	0.000082		
	30	376	0.000081		
	40	332	0.000072		
	50	456	0.000099		
5.1	25	450	0.000097		
6.9	25	399	0.000086		

4.6 Transmitter Radiated Spurious Emission

Limit

The unwanted emission should be attenuated below TP by at least 43+10log(Transmit Power) dB and unwanted emissions falling within the restricted bands of RSS-Gen shall be attenuated to the limits provided in this section or to the general field strength limits shown in RSS-Gen, whichever are less stringent.

TEST CONFIGURATION



TEST PROCEDURE

a. EUT was placed on a 0.8 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.0m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all test transmit frequencies were measured with peak detector.
b. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
c. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum 100 kHz below 1GHz and 1MHz above 1GHz, Sweep from 30MHz to the 10th harmonic of the fundamental frequency; and recorded the level of the concerned spurious emission point as (P_r).
d. The EUT then replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
   The measurement results are obtained as described below:

$$Power_{(EIRP)} = P_{Mea} - P_{cl} + G_a$$

   Where;
   P_{Mea} is the recorded signal generator level
   P_{cl} is the cable loss connect between instruments
   G_a Substitution Antenna Gain
e. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
f. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15dBi.
g. Test site anechoic chamber refer to ANSI C63.4

TEST RESULTS

Remark: 1: The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency;

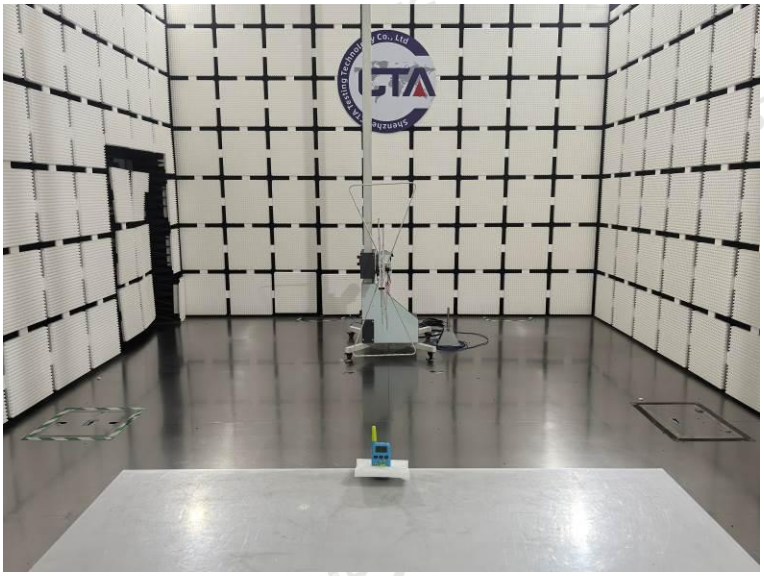
Test Frequency (MHz)	Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	Distance (m)	G_a Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Pol.
462.5625	925.125	-25.62	3.52	3	12.87	-16.27	-13	3.27	V
	1387.688	-35.79	4.27	3	15.48	-24.58	-13	11.58	V
	1850.250	-33.15	4.59	3	17.32	-20.42	-13	7.42	V
	2312.813	-49.82	5.31	3	18.76	-36.37	-13	23.37	V
	--	--	--	--	--	v	--	--	--
467.6375	935.275	-24.24	3.52	3	12.87	-14.89	-13	1.89	V
	1402.913	-35.14	4.27	3	15.48	-23.93	-13	10.93	V
	1870.550	-32.63	4.59	3	17.32	-19.90	-13	6.90	V
	2338.188	-49.01	5.31	3	18.76	-35.56	-13	22.56	V
	--	--	--	--	--	--	--	--	--
462.7250	925.125	-24.92	3.52	3	12.87	-15.57	-13	2.57	V
	1387.688	-35.58	4.27	3	15.48	-24.37	-13	11.37	V
	1850.250	-33.21	4.59	3	17.32	-20.48	-13	7.48	V
	2312.813	-49.78	5.31	3	18.76	-36.33	-13	23.33	V
	--	--	--	--	--	--	--	--	--

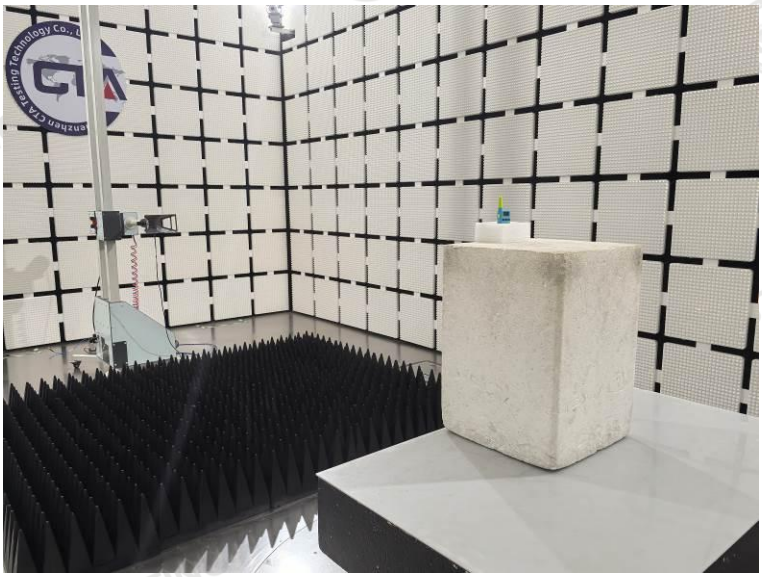
Test Frequency (MHz)	Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	Distance (m)	G_a Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Pol.
462.5625	925.125	-27.85	3.52	3	12.87	-18.50	-13	5.50	H
	1387.688	-38.12	4.27	3	15.48	-26.91	-13	13.91	H
	1850.250	-40.49	4.59	3	17.32	-27.76	-13	14.76	H
	2312.813	-45.02	5.31	3	18.76	-31.57	-13	18.57	H
	--	--	--	--	--	v	--	--	--
467.6375	935.275	-26.82	3.52	3	12.87	-17.47	-13	4.47	H
	1402.913	-38.63	4.27	3	15.48	-27.42	-13	14.42	H
	1870.550	-39.19	4.59	3	17.32	-26.46	-13	13.46	H
	2338.188	-45.00	5.31	3	18.76	-31.55	-13	18.55	H
	--	--	--	--	--	--	--	--	--
462.7250	925.125	-27.65	3.52	3	12.87	-18.30	-13	5.30	H
	1387.688	-38.26	4.27	3	15.48	-27.05	-13	14.05	H
	1850.250	-40.92	4.59	3	17.32	-28.19	-13	15.19	H
	2312.813	-44.21	5.31	3	18.76	-30.76	-13	17.76	H
	--	--	--	--	--	--	--	--	--

Remark:

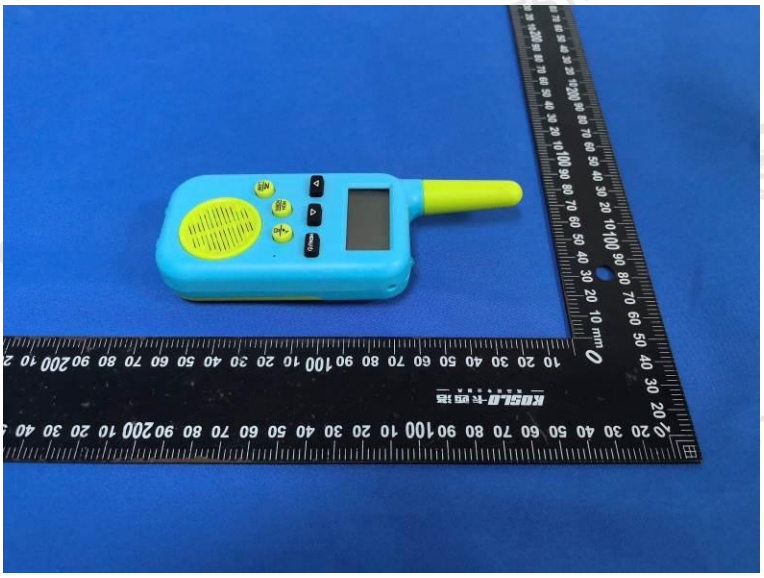
1. *EIRP=P_{Mea}(dBm)-P_{cl}(dB) +G_a(dBi)*
2. *-- Means other points for values lower than limits and not recorded.*
3. *Margin = Limit – EIRP*

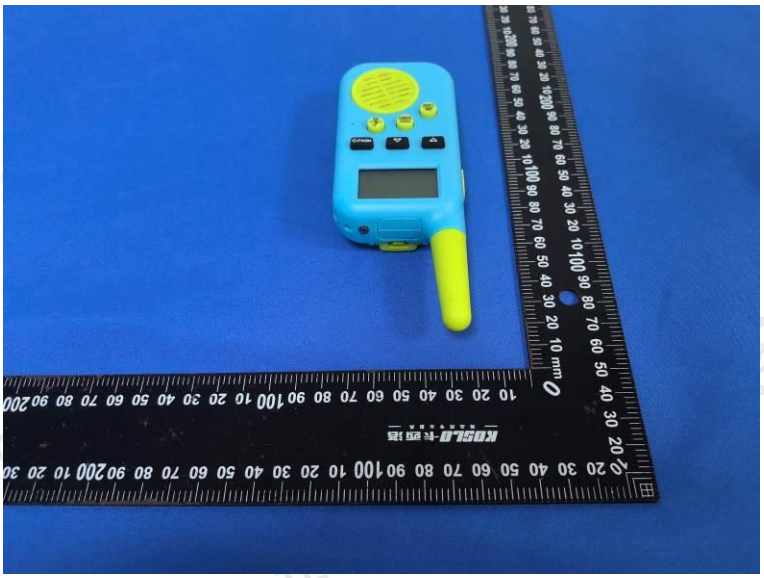
5 Test Setup Photos of the EUT

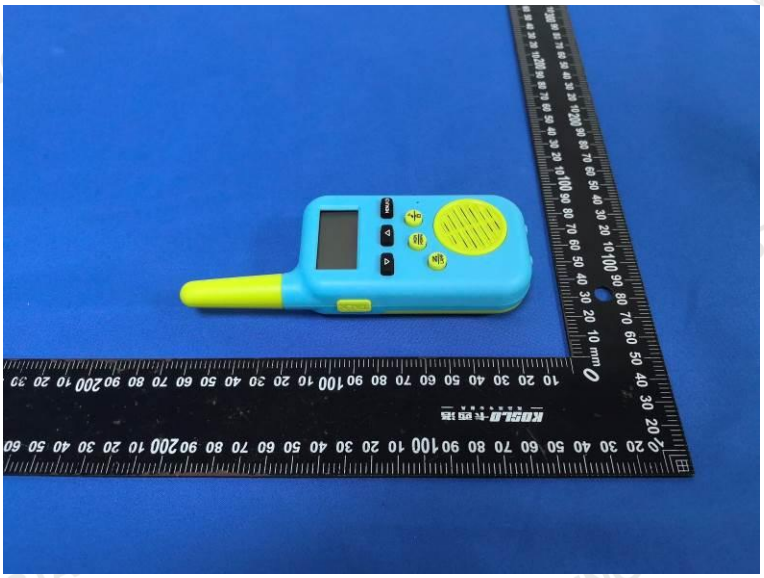


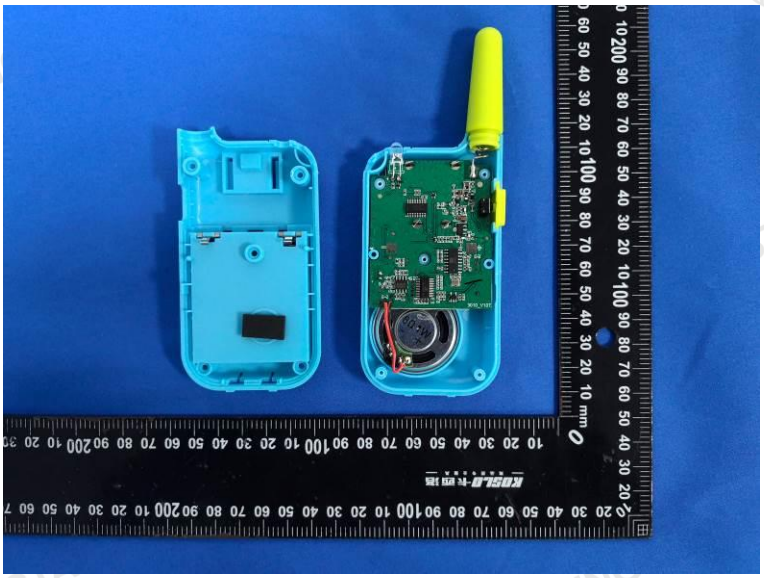


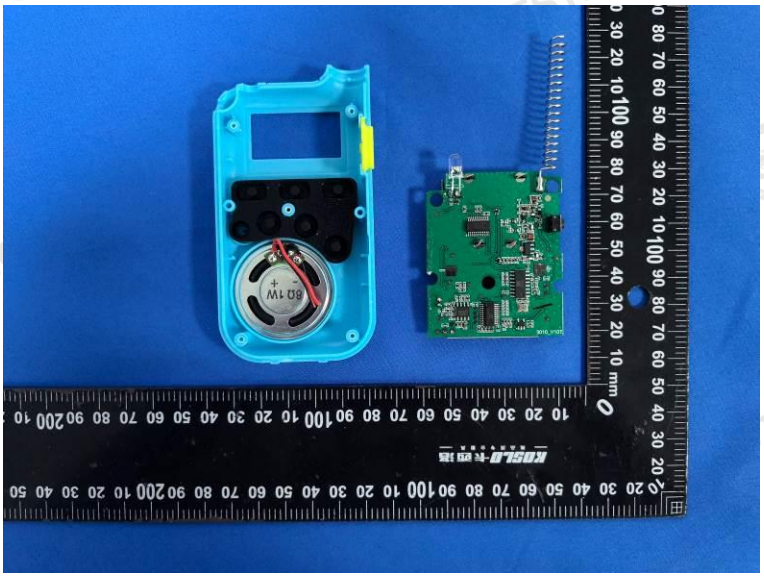
6 EXTERIOR AND INTERIOR PHOTOGRAPHS OF THE EUT

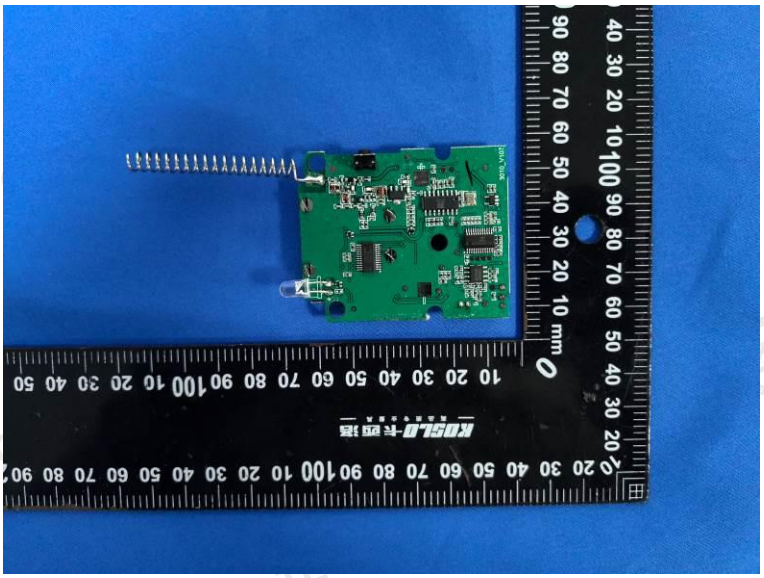


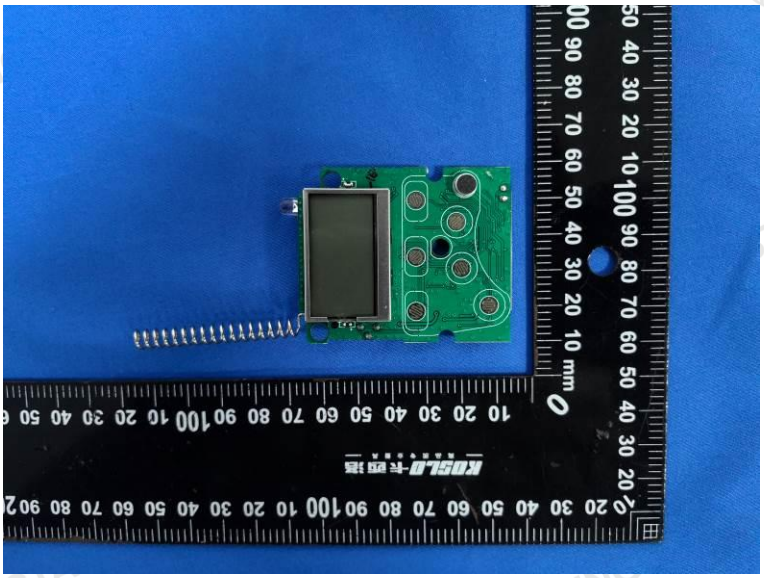


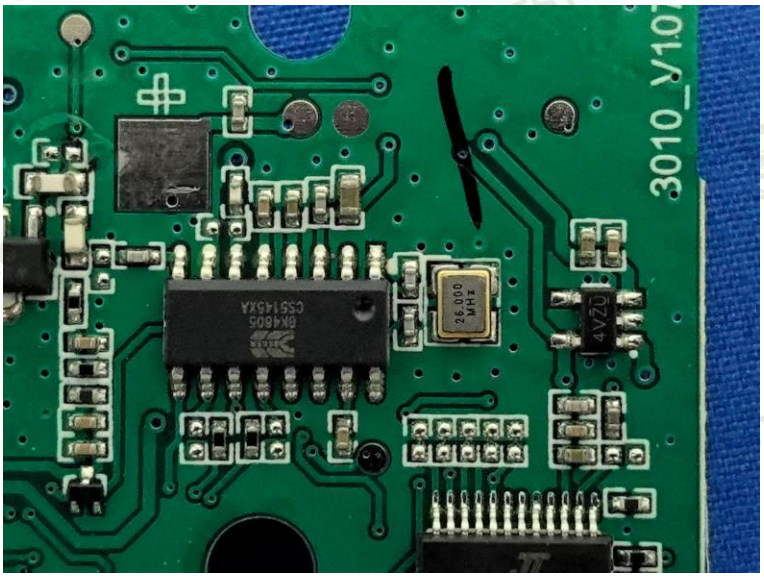












********** End of Report **********