



Shenzhen GUOREN Certification Technology Service Co., Ltd.

101#, Building K & Building T, The Second Industrial Zone, Jiazitang Community,
Fenghuang Street, Guangming District, Shenzhen, China

**TEST REPORT
FCC Part 95**

Report Reference No......: **GRCTR250602003-01**

FCC ID.....: **2AQQS-W3**

Compiled by

(position+printed name+signature) .: Testing Engineer Jimmy Wang

Supervised by

(position+printed name+signature) .: Project Engineer Kelley Zhang

Approved by

(position+printed name+signature) .: Manager Sam Wang

Date of issue.....: Jul. 04, 2025

Testing Laboratory Name.....: **Shenzhen GUOREN Certification Technology Service Co., Ltd.**

Address.....: 101#, Building K & Building T, The Second Industrial Zone, Jiazitang Community, Fenghuang Street, Guangming District, Shenzhen, China

Applicant's name.....: **Shenzhen Todakj Co., Ltd.**

Address.....: 2nd Floor, Xinshidai Stationery Factory Building, Tiegang Community
Xixiang Subdistrict, Bao'an District, Shenzhen, Guangdong
Province, China

Test specification.....:

Standard.....: **FCC Part 95**

Shenzhen GUOREN Certification Technology Service Co., Ltd. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen GUOREN Certification Technology Service Co., Ltd. is acknowledged as copyright owner and source of the material. Shenzhen GUOREN Certification Technology Service Co., Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

Test item description.....: **Walkie-talkie**

Trade Mark.....: /

Manufacturer.....: **Shenzhen Todakj Co., Ltd.**

Model/Type reference.....: W3

Listed Models: /

Modulation: FM

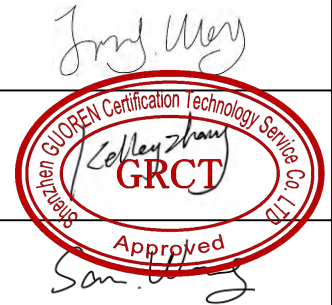
Hardware version.....: V1.0

Software version: V1.0

Frequency.....: 462.5625MHz

Rating.....: DC 4.5V from battery

Result.....: **PASS**



TEST REPORT

Equipment under Test : Walkie-talkie

Model /Type : W3

Listed Models : /

Applicant : **Shenzhen Todakj Co., Ltd.**

Address : 2nd Floor, Xinshidai Stationery Factory Building, Tiegang
Community Xixiang Subdistrict, Bao'an District, Shenzhen,
Guangdong Province, China

Manufacturer : **Shenzhen Todakj Co., Ltd.**

Address : 2nd Floor, Xinshidai Stationery Factory Building, Tiegang
Community Xixiang Subdistrict, Bao'an District, Shenzhen,
Guangdong Province, 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	4
2 SUMMARY	5
2.1 GENERAL REMARKS	5
2.2 PRODUCT DESCRIPTION	5
2.3 EQUIPMENT UNDER TEST	5
2.4 SHORT DESCRIPTION OF THE EQUIPMENT UNDER TEST (EUT)	5
2.5 BLOCK DIAGRAM OF TEST SETUP	5
2.6 RELATED SUBMITTAL(s) / GRANT (s)	6
2.7 MODIFICATIONS	6
3 TEST ENVIRONMENT	7
3.1 ADDRESS OF THE TEST LABORATORY	7
3.2 TEST FACILITY	7
3.3 ENVIRONMENTAL CONDITIONS	7
3.4 STATEMENT OF THE MEASUREMENT UNCERTAINTY	8
3.5 EQUIPMENTS USED DURING THE TEST	8
4 TEST CONDITIONS AND RESULTS	10
4.1 MAXIMUM TRANSMITTER POWER	10
4.2 OCCUPIED BANDWIDTH AND EMISSION MASK	13
4.3 MODULATION LIMIT	15
4.4 AUDIO FREQUENCY RESPONSE	17
4.5 FREQUENCY STABILITY	19
4.6 TRANSMITTER RADIATED SPURIOUS EMISSION	21
5 TEST SETUP PHOTOS OF THE EUT	24
6 EXTERNAL AND INTERNAL PHOTOS OF THE EUT	25

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 ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

[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	:	Jun. 03, 2025
Testing commenced on	:	Jun. 03, 2025
Testing concluded on	:	Jul. 04, 2025

2.2 Product Description

Product Name:	Walkie-talkie
Model/Type reference:	W3
Listed Models:	/
Power Supply	DC 4.5V from battery
Testing sample ID:	GRCTR250602003-01-1#(Engineer sample) GRCTR250602003-01 -2#(Normal sample)
Frequency Range	462.5625MHz
Modulation Type	FM
Antenna Type	Integral antenna
Antenna Gain	1.00dBi
Remark:	

2.3 Equipment Under Test

Power supply system utilised

Power supply voltage	:	☐ 230V / 50 Hz	☐ 120V / 60Hz
		☐ 12 V DC	☐ 24 V DC
		☒ Other (specified in blank below)	

DC 4.5V from battery

2.4 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.

2.5 Block Diagram of Test Setup



2.6 Related Submittal(s) / Grant (s)

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

2.7 Modifications

No modifications were implemented to meet testing criteria.

3 TEST ENVIRONMENT

3.1 Address of the test laboratory

Shenzhen GUOREN Certification Technology Service Co., Ltd.

101#, Building K & Building T, The Second Industrial Zone, Jiazitang Community, Fenghuang Street, Guangming District, Shenzhen, China

3.2 Test Facility

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

FCC-Registration No.: 920798 Designation Number: CN1304

Shenzhen GUOREN Certification Technology Service 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.: 6202.01

Shenzhen GUOREN Certification Technology Service Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

ISED#: 27264 CAB identifier: CN0115

Shenzhen GUOREN Certification Technology Service Co., Ltd. has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

CNAS-Lab Code: L15631

Shenzhen GUOREN Certification Technology Service Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories for the Competence of Testing and Calibration Laboratories.

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 °C
Relative Humidity	30-60 %
Air Pressure	950-1050mbar

3.4 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2" and is documented in the Shenzhen GUOREN Certification Technology Service Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen GUOREN Certification Technology Service Co., Ltd.:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.06 dB	(1)
Radiated Emission	1~18GHz	5.14 dB	(1)
Radiated Emission	18-40GHz	5.38 dB	(1)
Conducted Disturbance	0.15~30MHz	2.14 dB	(1)
Max output power	30MHz~18GHz	0.54 dB	(1)
Spectrum bandwidth	/	1.2%	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.5 Equipments Used during the Test

Test Equipment	Manufacturer	Model No.	Equipment No.	Calibration Date	Calibration Due Date
LISN	R&S	ENV216	GRCTEE009	2024/09/19	2025/09/18
LISN	R&S	ENV216	GRCTEE010	2024/09/19	2025/09/18
EMI Test Receiver	R&S	ESPI	GRCTEE017	2024/09/19	2025/09/18
EMI Test Receiver	R&S	ESCI	GRCTEE008	2024/09/19	2025/09/18
Spectrum Analyzer	Agilent	N9020A	GRCTEE002	2024/09/19	2025/09/18
Spectrum Analyzer	R&S	FSP	GRCTEE003	2024/09/20	2025/09/19
Vector Signal generator	Agilent	N5181A	GRCTEE007	2024/09/19	2025/09/18
Analog Signal Generator	R&S	SML03	GRCTEE006	2024/09/19	2025/09/18
Climate Chamber	QIYA	LCD-9530	GRCTES016	2024/09/19	2025/09/18
Ultra-Broadband Antenna	Schwarzbeck	VULB9163	GRCTEE018	2023/09/28	2026/09/27
Ultra-Broadband Antenna	Schwarzbeck	VULB9163	GRCTEE081	2023/09/28	2026/09/27
Horn Antenna	Schwarzbeck	BBHA 9120D	GRCTEE019	2023/09/28	2026/09/27
Loop Antenna	Zhinan	ZN30900C	GRCTEE020	2023/10/15	2026/10/14
Horn Antenna	Beijing Hangwei Dayang	OBH100400	GRCTEE049	2023/09/28	2026/09/27
Amplifier	Schwarzbeck	BBV 9745	GRCTEE021	2024/09/19	2025/09/18
Amplifier	Schwarzbeck	BBV 9745	GRCTEE084	2024/09/19	2025/09/18
Amplifier	Taiwan chengyi	EMC051845B	GRCTEE022	2024/09/19	2025/09/18
Audio Analyzer	Rohde&Schwarz	UPL	GRCTEE086	2024/09/19	2025/09/18

Temperature/Humidity Meter	Huaguan	HG-308	GRCTES037	2024/09/19	2025/09/18
Directional coupler	NARDA	4226-10	GRCTEE004	2024/09/19	2025/09/18
High-Pass Filter	XingBo	XBLBQ-GTA18	GRCTEE053	2024/09/19	2025/09/18
High-Pass Filter	XingBo	XBLBQ-GTA27	GRCTEE054	2024/09/19	2025/09/18
Automated filter bank	Tonscend	JS0806-F	GRCTEE055	2024/09/19	2025/09/18
Power Sensor	Agilent	U2021XA	GRCTEE070	2024/09/19	2025/09/18
EMI Test Software	ROHDE & SCHWARZ	ESK1-V1.71	GRCTEE060	N/A	N/A
EMI Test Software	Fera	EZ-EMC	GRCTEE061	N/A	N/A

4 TEST CONDITIONS AND RESULTS

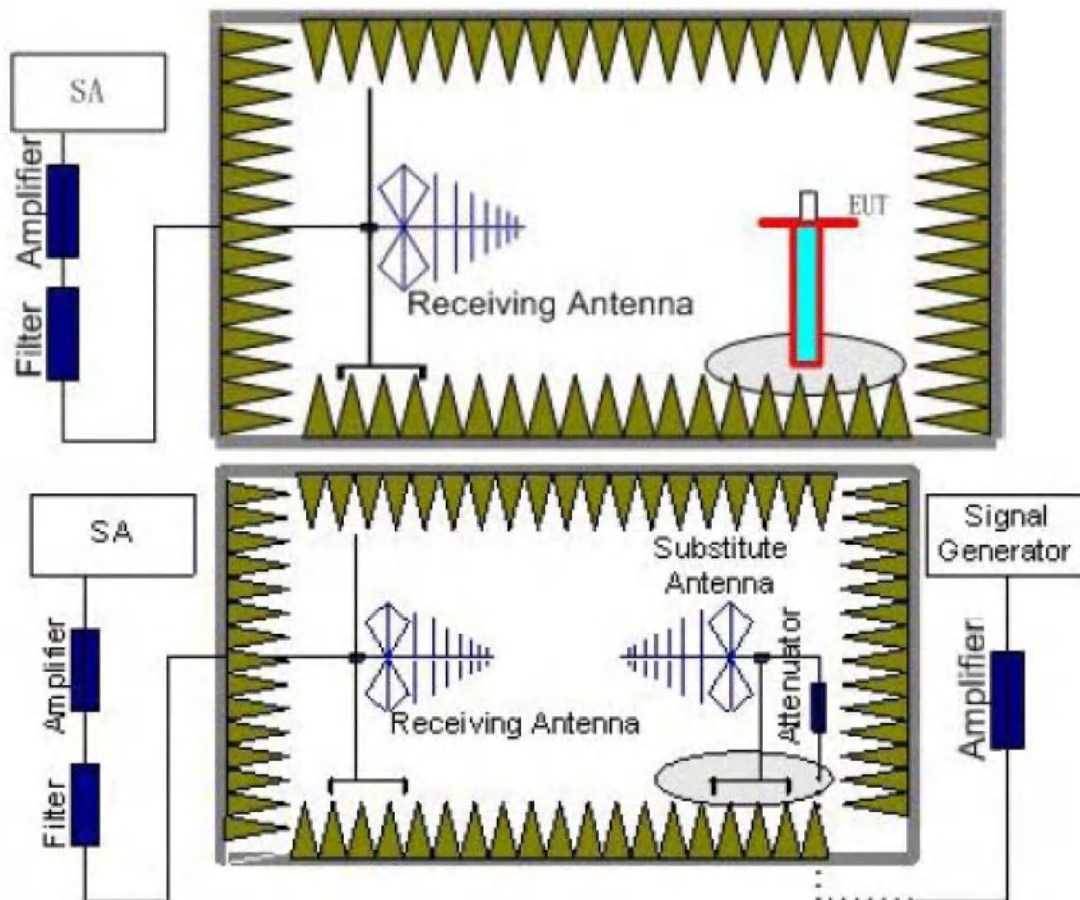
4.1 Maximum Transmitter Power

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:
$$\text{Power(EIRP)} = P_{Mea} + P_{Ag} - P_{cl} + G_a$$
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, $ERP = EIRP - 2.15\text{dBi}$.

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 (W)	Limit (W)	Polarization
462.5625	-29.56	1.96	8.12	2.15	30.46	4.91	0.0031	2.0	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.

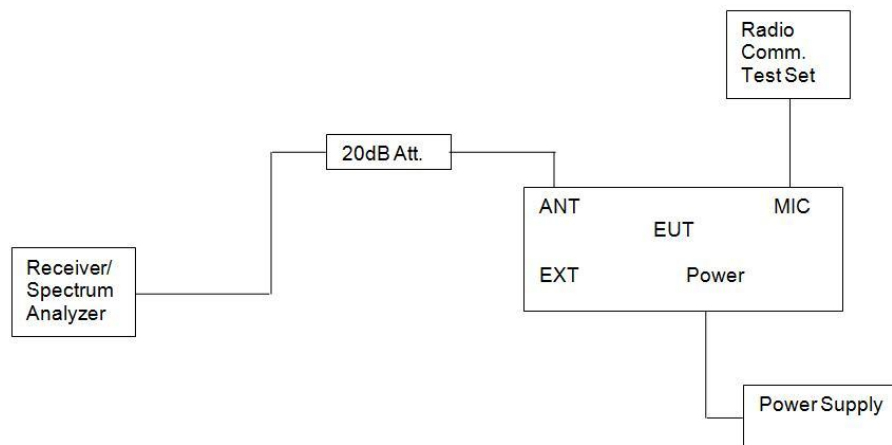
According to FCC 95.579:

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 $43 + 10 \log_{10}(T)$ dB on any frequency removed from the center of the authorized bandwidth by more than 250 %.

TEST CONFIGURATION

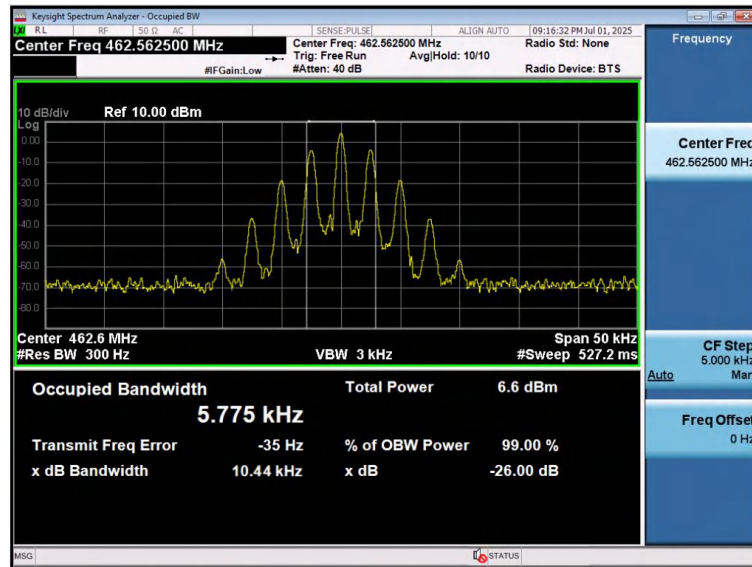
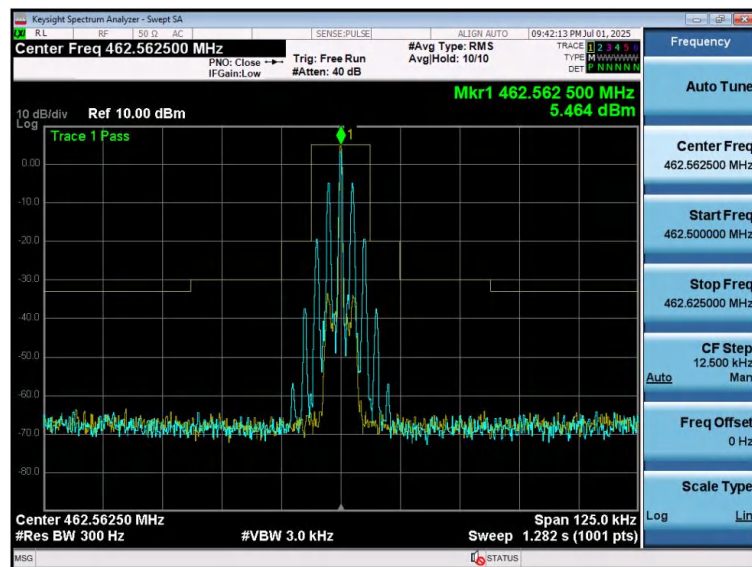


TEST PROCEDURE

- 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:**

Modulation	Test Frequency	26dB bandwidth (kHz)	Limit (KHz)	Result
FM	462.5625	10.44	12.5	Pass

**Emission Mask:**

4.3 Modulation Limit

LIMITS

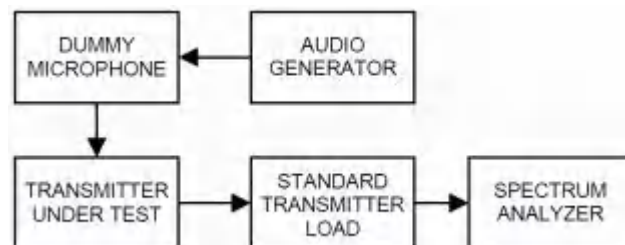
FCC Part 95.575, FCC Part 2.1047(b) Each FRS transmitter type must be designed such that the peak frequency deviation does not exceed 2.5 kHz, and the highest audio frequency contributing substantially to modulation must not exceed 3.125 kHz.

TEST PROCEDURE

Modulation Limit

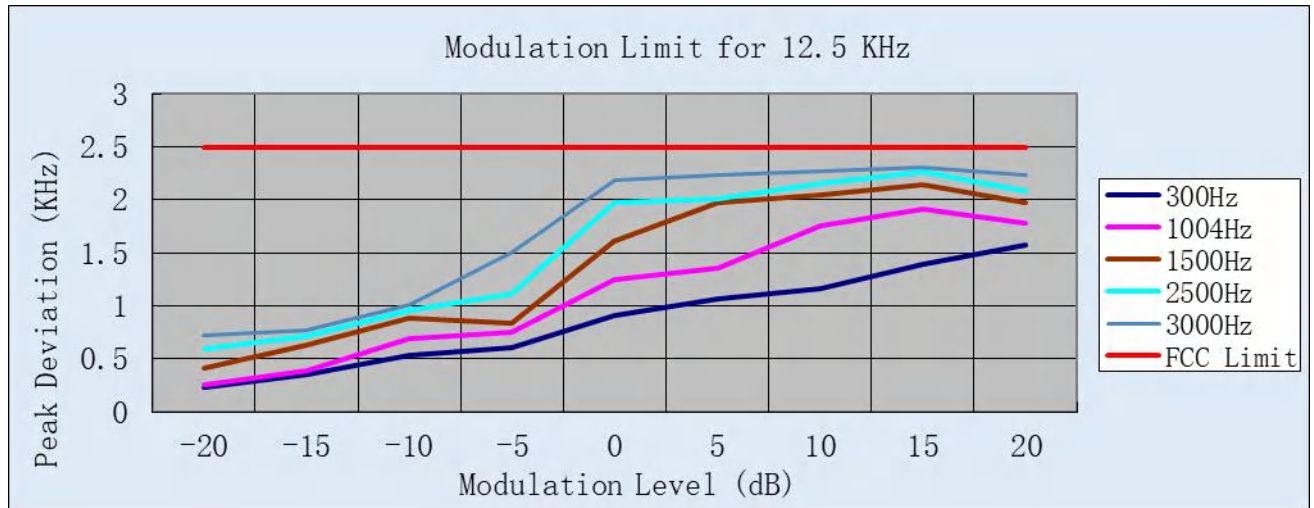
- 1) Connect the equipment as illustrated.
- 2) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
- 3) Set the test receiver to measure peak positive deviation. Set the audio bandwidth for ≤ 0.25 Hz to $\geq 15,000$ Hz. Turn the de-emphasis function off.
- 4) Apply 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) Apply Input Modulation Signal to EUT according to Section 3.4 and vary the input level from -20 to $+20$ dB.
- 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

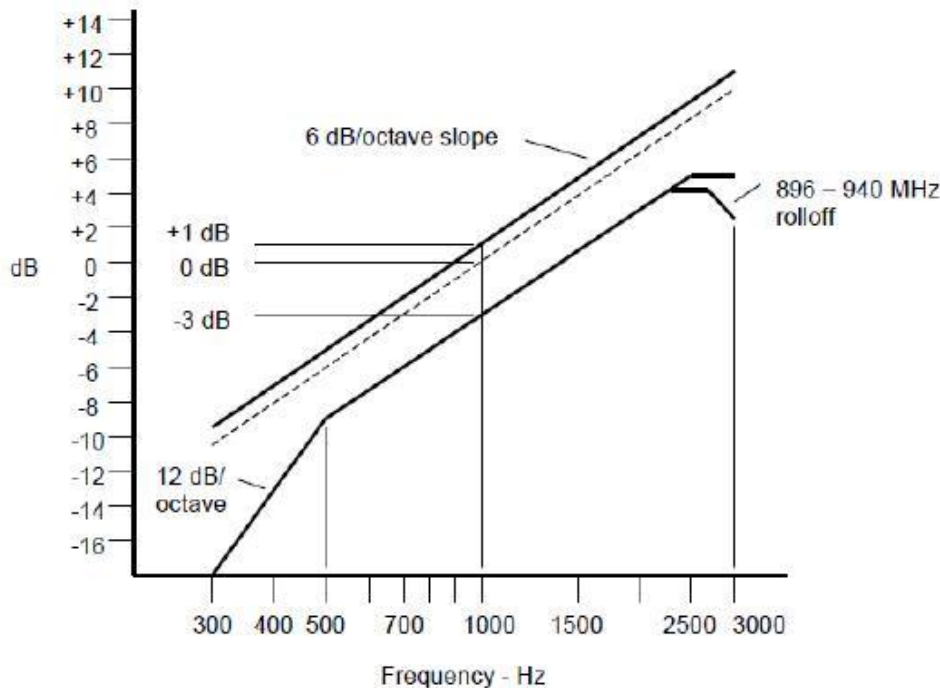
Modulation Level(dB)	Peak Freq. Deviation At 300 Hz(KHz)	Peak Freq. Deviation At 1004 Hz(KHz)	Peak Freq. Deviation At 1500 Hz(KHz)	Peak Freq. Deviation At 2500 Hz(KHz)	Peak Freq. Deviation At 3000 Hz(KHz)
-20	0.23	0.26	0.41	0.59	0.72
-15	0.35	0.39	0.63	0.71	0.77
-10	0.53	0.69	0.88	0.96	1.01
-5	0.61	0.75	0.84	1.12	1.51
0	0.91	1.25	1.61	1.98	2.19
+5	1.07	1.36	1.98	2.01	2.23
+10	1.16	1.76	2.05	2.16	2.27
+15	1.39	1.92	2.14	2.26	2.31
+20	1.57	1.78	1.97	2.08	2.24



4.4 Audio Frequency Response

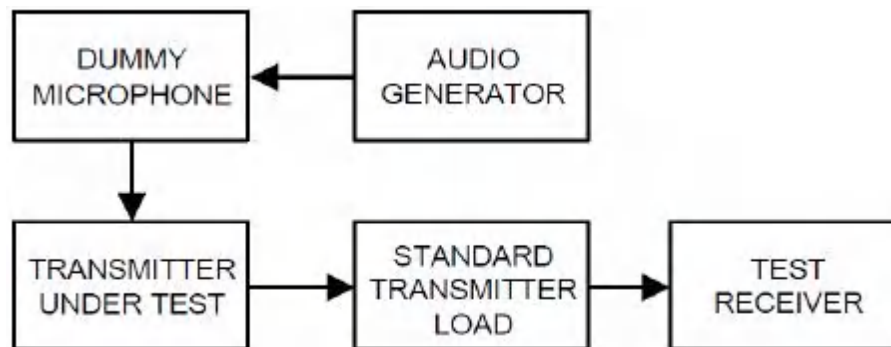
LIMIT

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.

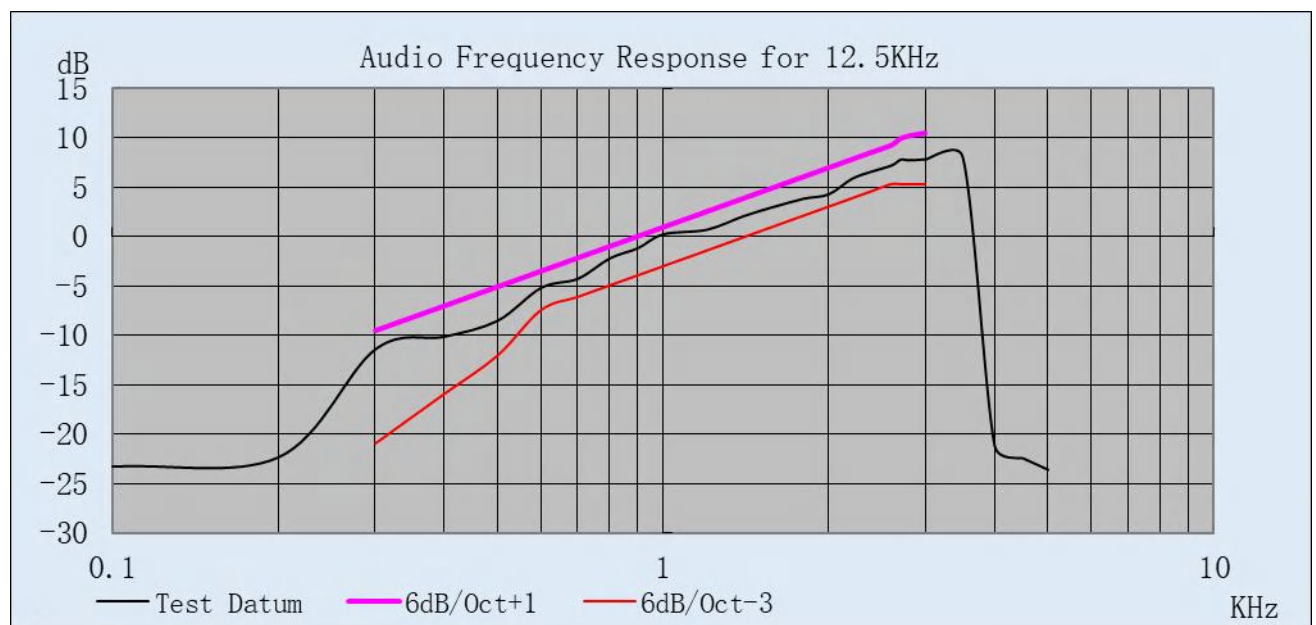
10) Record the DMM reading as V_{FREQ}

11) Calculate the audio frequency response at the present frequency as: audio frequency response = $20\log_{10} (V_{FREQ}/V_{REF})$.

12) Repeat steps 8) through 11) for all the desired test frequencies

TEST RESULTS

Frequency (KHz)	Frequency Deviation (KHz)	1KHz Reference Deviation (KHz)	Audio Frequency Response (dB)
0.1	0.06	0.51	-23.21
0.2	0.06	0.51	-22.28
0.3	0.11	0.51	-11.34
0.4	0.17	0.51	-10.07
0.5	0.19	0.51	-8.45
0.6	0.27	0.51	-5.12
0.7	0.35	0.51	-4.19
0.8	0.39	0.51	-2.13
0.9	0.36	0.51	-1.09
1.0	0.50	0.51	0.31
1.2	0.52	0.51	0.77
1.4	0.69	0.51	2.15
1.6	0.79	0.51	3.14
1.8	0.95	0.51	3.91
2.0	1.01	0.51	4.37
2.2	1.01	0.51	5.92
2.4	1.23	0.51	6.69
2.6	1.15	0.51	7.28
2.7	1.22	0.51	7.87
2.8	1.36	0.51	7.80
3.0	1.26	0.51	7.90
3.5	0.18	0.51	8.09
4.0	0.12	0.51	-21.15
4.5	0.13	0.51	-22.37
5.0	0.08	0.51	-23.53



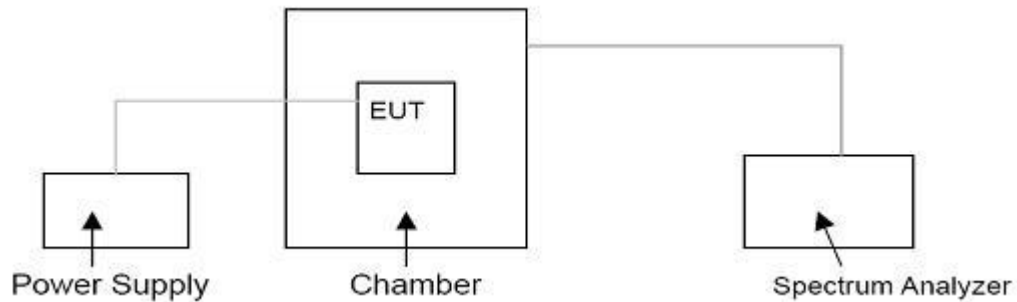
4.5 Frequency Stability

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

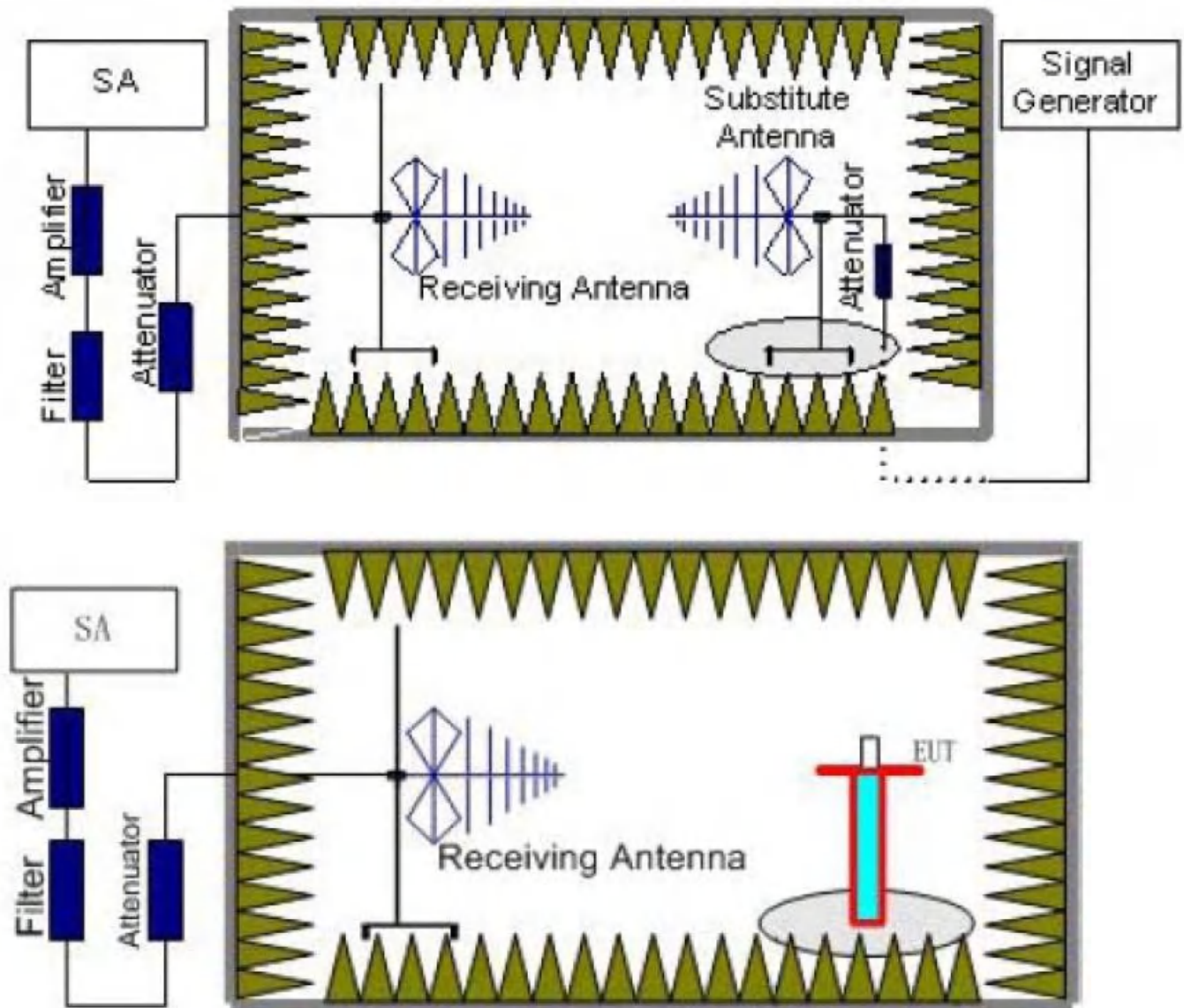
Reference Frequency: 462.5625MHz					
Voltage (V)	Temperature (°C)	Frequency error (Hz)	Frequency Tolerance (ppm)	Limit (ppm)	Result
4.50	-30	69.47	0.15019	±2.5	Pass
	-20	75.82	0.16391		
	-10	63.64	0.13758		
	0	65.89	0.14245		
	10	78.34	0.16936		
	20	84.98	0.18372		
	30	80.46	0.17394		
	40	77.29	0.16709		
	50	71.58	0.15475		
4.50	20	76.24	0.16482	±2.5	Pass
3.83	20	74.83	0.16177		

4.6 Transmitter Radiated Spurious Emission

Limit

The unwanted emission should be attenuated below TP by at least $43 + 10\log(\text{Transmit Power})$ 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:

$$\text{Power}_{(EIRP)} = P_{Mea} - P_{cl} + G_a$$

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, $ERP = EIRP - 2.15\text{dBi}$.
- g. Test site anechoic chamber refer to ANSI C63.

TEST RESULTS

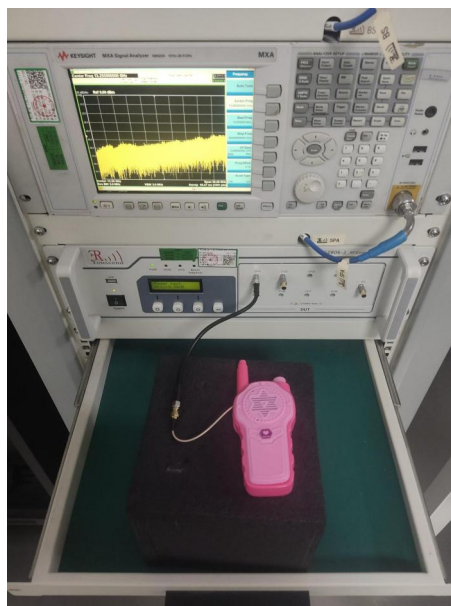
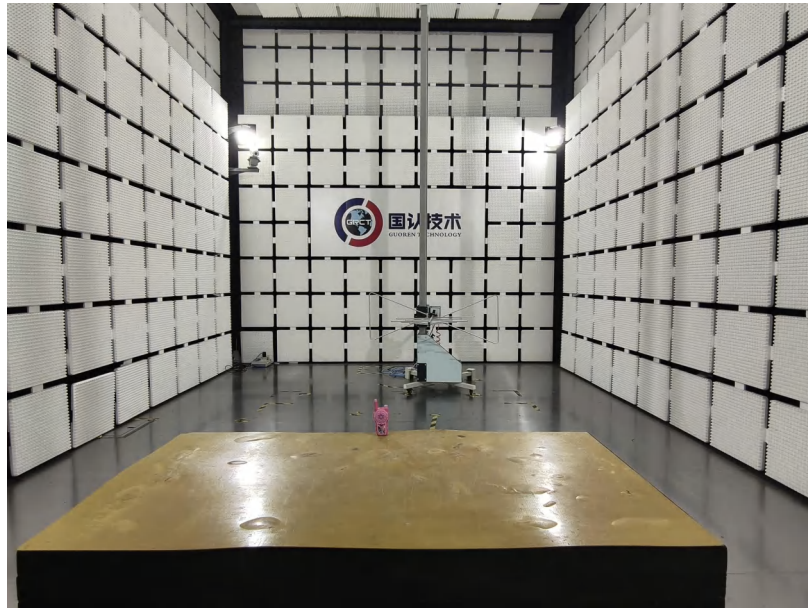
Remark: The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency; and worst spurious emissions recorded as below:

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	925.1250	-42.73	2.87	3.00	-8.01	-53.61	-13.00	40.61	V
	1387.7685	-44.58	3.24	3.00	-8.16	-55.98	-13.00	42.98	V
	1850.2500	-43.62	3.45	3.00	-9.92	-56.99	-13.00	43.99	V
	2312.8125	-44.17	3.61	3.00	-11.23	-59.01	-13.00	46.01	V
	--	--	--	--	--	--	--	--	--

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. $Margin = Limit - EIRP$

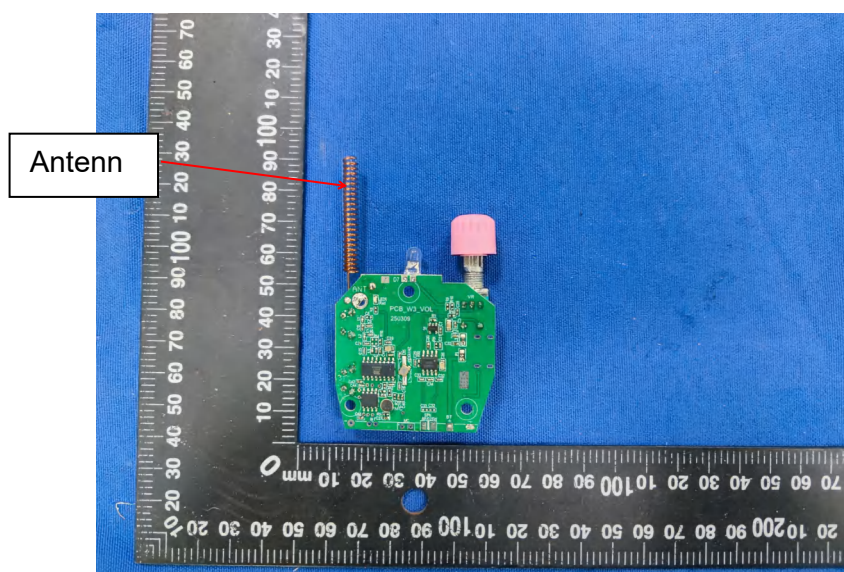
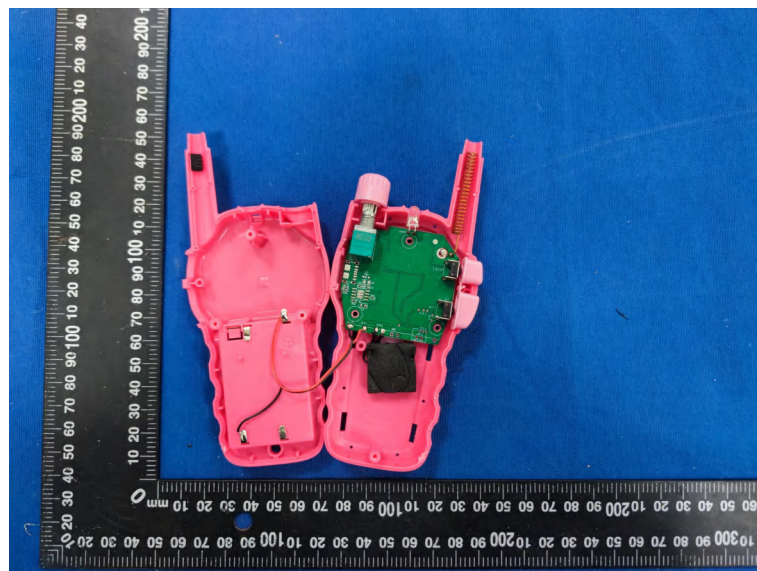
5 Test Setup Photos of the EUT

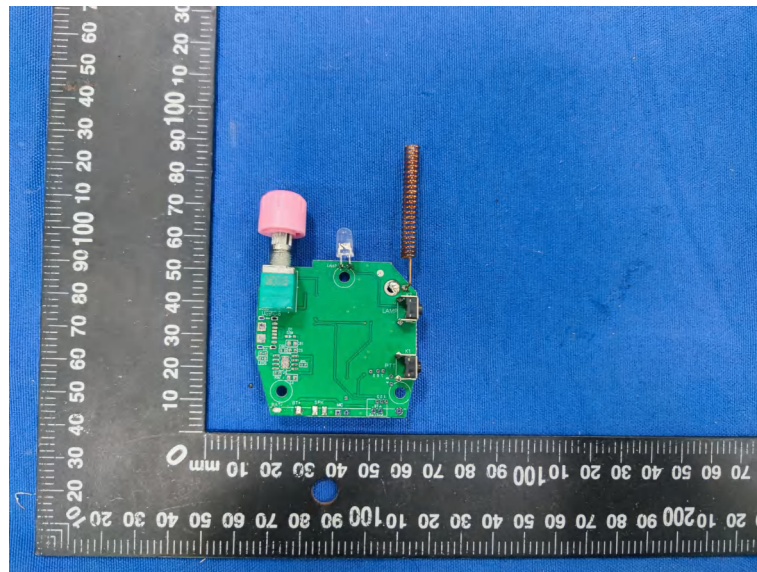


6 External and Internal Photos of the EUT









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