

Verification of Compliance

Verification No.: MK23060045-P01E01

Name and address of Applicant: **Shenzhen Shiwei Industrial Co., Ltd.**
Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province

Name and address of Manufacturer: **Shenzhen Shiwei Industrial Co., Ltd.**
Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province

Product name: **Karaoke Mini Bluetooth Microphone Speaker Set**

Rated: 3.7V---1A, 6W

Product model(s): Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Product trademark: shiwei/basix

This verification confirms that the product meets the requirements of the following standard.
The conformity was demonstrated based on following standard(s) listed by European Commission as harmonized with EMC Directive 2014/30/EU

EN 55032:2015+A11:2020

EN 55035:2017 +A11:2020

The verification has been carried out in accordance with individual rules and conditions agreed with the applicant. Evaluation has been carried out in accordance with:

Test report(s) No.: MK23060045-P01E01

Test conducted by: TMC Testing Services (Shenzhen) Co., Ltd.

Verification issue date: June 16, 2023

Notes:

This verification refers to the above mentioned product and its conformity in regards of above mentioned standard(s) was proven on test sample.

This verification does not imply meeting all essential requirements, assessment of the series-production or any other restricted Notified Bodies conformity assessment procedure appropriate for the product.

This verification holder shall use this verification in connection to verification of conformity and technical data relevant for the product the verification was issued.

TMC Testing Services (Shenzhen) Co., Ltd.

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Lab Director
Vivian Jiang





APPLICATION FOR EMC DIRECTIVE

On Behalf of

Shenzhen Shiwei Industrial Co., Ltd.

Karaoke Mini Bluetooth Microphone Speaker Set

Trade Name: shiwei/basix

Model: Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Prepared For : **Shenzhen Shiwei Industrial Co., Ltd.**
Room 101-104, Building A2, Ailian Taichung Industrial Zone,
Longgang District, Shenzhen City, Guangdong Province

Prepared By : **TMC Testing Services (Shenzhen) Co., Ltd**
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Date of Test: June 12, 2023-June 16, 2023

Date of Report: June 16, 2023

Report Number: MK23060045-P01E01

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TEST REPORT DECLARATION

Applicant	:	Shenzhen Shiwei Industrial Co., Ltd.
Address	:	Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
EUT Description	:	Karaoke Mini Bluetooth Microphone Speaker Set
Model Number	:	Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Test Standards:

EN 55032:2015+A11:2020**EN 55035:2017 +A11:2020**

The EUT described above is tested by TMC Testing Services (Shenzhen) Co., Ltd EMC Laboratory to determine the maximum emissions from the EUT and ensure the EUT to be compliance with the immunity requirements of the EUT. TMC Testing Services (Shenzhen) Co., Ltd EMC Laboratory is assumed full responsibility for the accuracy of the test results. Also, this report shows that the EUT technically complies with the 2014/30/EU directive and its amendment requirements.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Prepared by :



Peishuang Wu/Assistant

Approved & Authorized Signer :

Vivian Jiang / Manager

1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	Test Results
Radiated Emission	PASS
Electrostatic Discharge Immunity	PASS
Radiated Electromagnetic Fields Immunity	PASS
Magnetic Field Immunity	PASS

2. GENERAL INFORMATION

2.1. Report information

- 2.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that TMC approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that TMC in any way guarantees the later performance of the product/equipment.
- 2.1.2. The sample/s mentioned in this report is/are supplied by Applicant, TMC therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.
- 2.1.3. Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through TMC, unless the applicant has authorized TMC in writing to do so.

2.2. Measurement Uncertainty

Available upon request.

3. PRODUCT DESCRIPTION

3.1. EUT Description

Description	:	Karaoke Mini Bluetooth Microphone Speaker Set
Applicant	:	Shenzhen Shiwei Industrial Co., Ltd. Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
Manufacturer	:	Shenzhen Shiwei Industrial Co., Ltd. Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
Model Number	:	Y1

3.2. Block Diagram of EUT Configuration



3.3. Operating Condition of EUT

Test mode : operating

3.4. Support Equipment List

N/A

3.5. Test Conditions

Temperature: 23-26℃

Relative Humidity: 55-68 %

3.6. Modifications

No modification was made.

3.7. Abbreviations

AC	Alternating Current
AMN	Artificial Mains Network
DC	Direct Current
EM	ElectroMagnetic
EMC	ElectroMagnetic Compatibility
EUT	Equipment Under Test
IF	Intermediate Frequency
RF	Radio Frequency
rms	root mean square
EMI	Electromagnetic Interference
EMS	Electromagnetic Susceptibility

3.8. Performance Criterion

Criterion A: The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended.

Criterion B: After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended.

Criterion C: Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions.

4. TEST EQUIPMENT USED

4.1. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration time	Recalibration time
1.	Test Receiver	Rohde&Schwarz	ESC17(9kHz-7GHz)	100336	Oct.28, 22	Oct.27, 23
2.	Broadband antenna	Schwarzbeck	VULB9168	01222	Oct.28, 22	Oct.27, 23
3.	Horn antenna	Schwarzbeck	BBHA9120D	02476	Oct.28, 22	Oct.27, 23
4.	Preamplifier	Schwarzbeck	BBV9745	00250	Oct.28, 22	Oct.27, 23
5.	Preamplifier	N/A	TRLA-01018G440B	21081001	Oct.28, 22	Oct.27, 23
6.	3M method semi anechoic chamber	SKET	9m*6m*6m	2021082304	Oct.14,21	Oct.13,24
7.	Pointer hygrometer	M&G	ARC92570	N/A	Oct.28, 22	Oct.27, 23

4.2. For Electrostatic Discharge Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration time	Recalibration time
1.	Electrostatic analog generator	LIONCEL	ESD-203B	0210502	Oct.28, 22	Oct.27, 23

4.3. For RF Strength Susceptibility Test

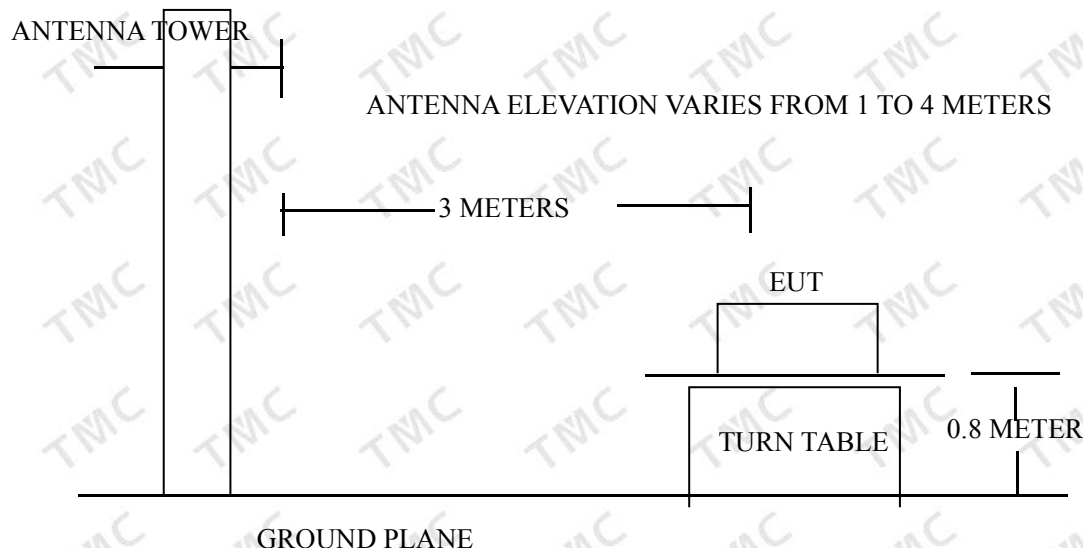
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Recalibration time
1.	Signal Generator	HP	8648A	3633A02081	Oct.28, 22	Oct.27, 23
2.	Amplifier	A&R	500A100	17034	NCR	NCR
3.	Amplifier	A&R	100W/1000M1	17028	NCR	NCR
4.	Isotropic Field Monitor	A&R	FM2000	16829	NCR	NCR
5.	Isotropic Field Probe	A&R	FLW220100	16755	Oct.28, 22	Oct.27, 23
6.	Biconic Antenna	EMCO	3108	9507-2534	NCR	NCR
7.	Log-periodic Antenna	A&R	AT1080	16812	NCR	NCR
8.	PC	N/A	486DX2	N/A	N/A	N/A

4.4. For Magnetic Field Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power frequency magnetic field testing system	LIONCEL	PMF-801C-C	083858-10	Nov.15,22	Nov.16,23

5. RADIATED EMISSION TEST

5.1. Open Site Setup Diagram



5.2. Test Standard

EN 55032:2015+A11:2020

5.3. Radiated Emission Limit

All emanations from a Class B computing devices or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB μ V/m)
30 ~ 230	3	40
230 ~ 1000	3	47

Note:(1) The tighter limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instruments antenna and the closed point of any part of the EUT.

FREQUENCY (GHz)	DISTANCE (Meters)	Average limit (dB μ V/m)	Peak limit (dB μ V/m)
1 ~ 3	3	50	70
3 ~ 6	3	54	74

Note :The lower limit applies at the transition frequency.

5.4. EUT Configuration on Test

The EN55032 Class B regulations test method must be used to find the maximum emission during radiated emission test.

5.5. Operating Condition of EUT

- 5.5.1. Setup the EUT as shown on Section 5.1.
- 5.5.2. Turn on the power of all equipments.
- 5.5.3. Let the EUT work in test mode and measure it.

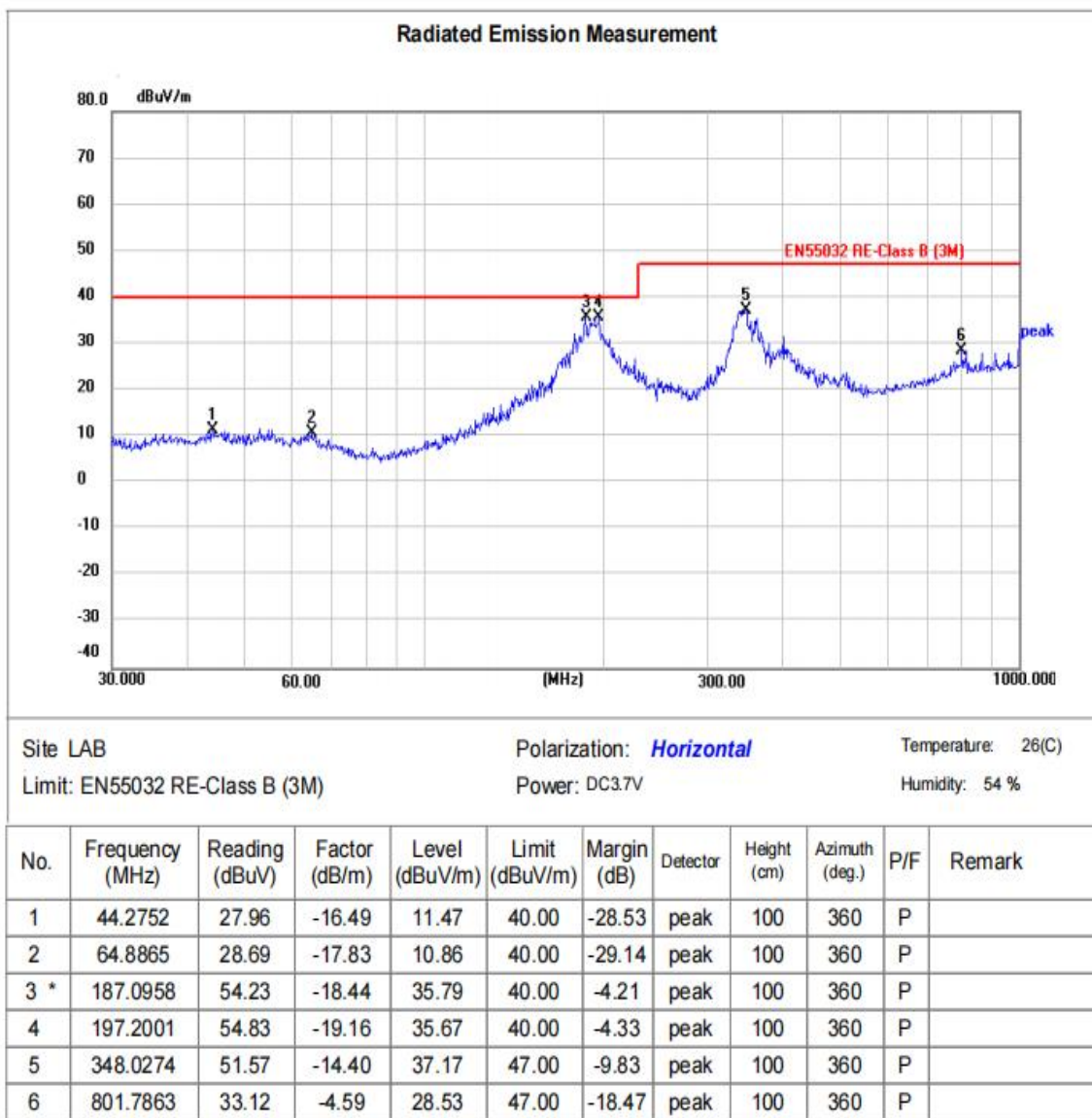
5.6. Test Procedure

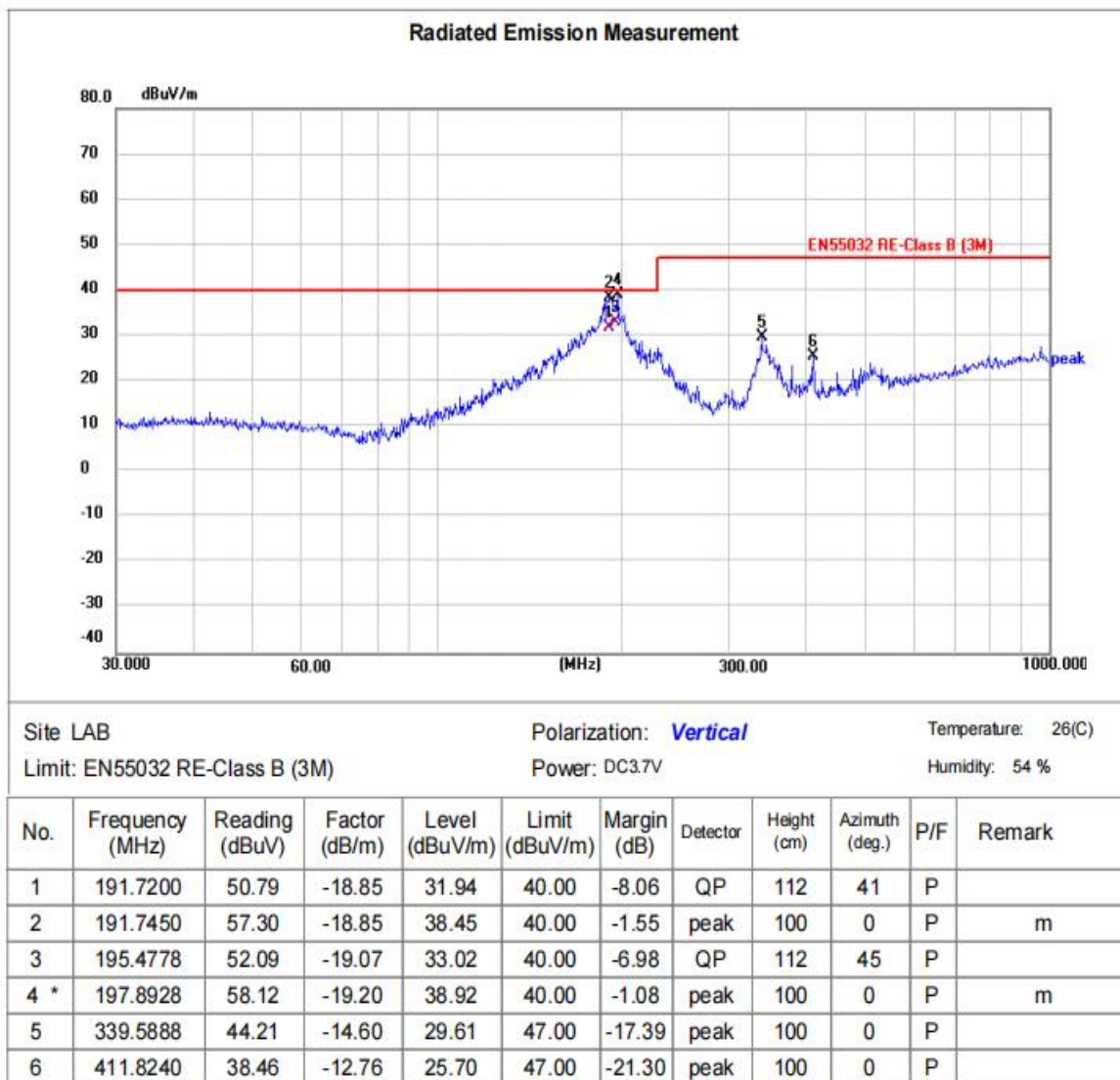
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna (calibrated by dipole antenna) are used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test. The bandwidth setting on the test receiver (R&S TEST RECEIVER ESCS20) is 120 KHz. The EUT is tested in Anechoic Chamber

5.7. Test Results

PASS.

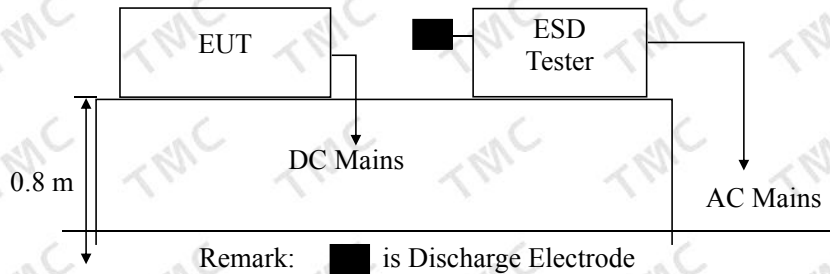
Test Mode: operating





6. ELECTROSTATIC DISCHARGE TEST

6.1. Block Diagram of ESD Test Setup



6.2. Test Standard

EN 55035:2017 +A11:2020

Severity Level 3 for Air Discharge at 8KV

Severity Level 2 for Contact Discharge at 4KV

6.3. Severity Levels and Performance Criterion

6.3.1. Severity level

Level	Test Voltage Contact Discharge (KV)	Test Voltage Air Discharge (KV)
1.	2	2
2.	4	4
3.	6	8
4.	8	15
X.	Special	Special

6.3.2. Performance criterion: B

6.4. EUT Configuration on Test

The configuration of EUT are listed in Section 3.2.

6.5. Operating Condition of EUT

6.5.1. Setup the EUT as shown in Section 9.1.

6.5.2. Turn on the power of all equipments.

6.5.3. Let the EUT work in test mode (full load) and test it.

6.6. Test Procedure

6.6.1. Air Discharge:

This test is done on a non-conductive surfaces. The round discharge tip of the discharge

electrode shall be approached as fast as possible to touch the EUT.

After each discharge, the discharge electrode shall be removed from the EUT.

The generator is then re-triggered for a new single discharge and repeated 10 times

for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

6.6.2. Contact Discharge:

All the procedure shall be same as Section 9.6.1. except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

6.6.3. Indirect discharge for horizontal coupling plane

At least 20 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT. The discharge electrode positions vertically at a distance of 0.1m from the EUT and with the discharge electrode touching the coupling plane.

6.6.4. Indirect discharge for vertical coupling plane

At least 20 single discharge shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

6.7. Test Results

PASS.

Please refer to the following page.

Electrostatic Discharge Test Results

TMC Testing Services (Shenzhen) Co., Ltd

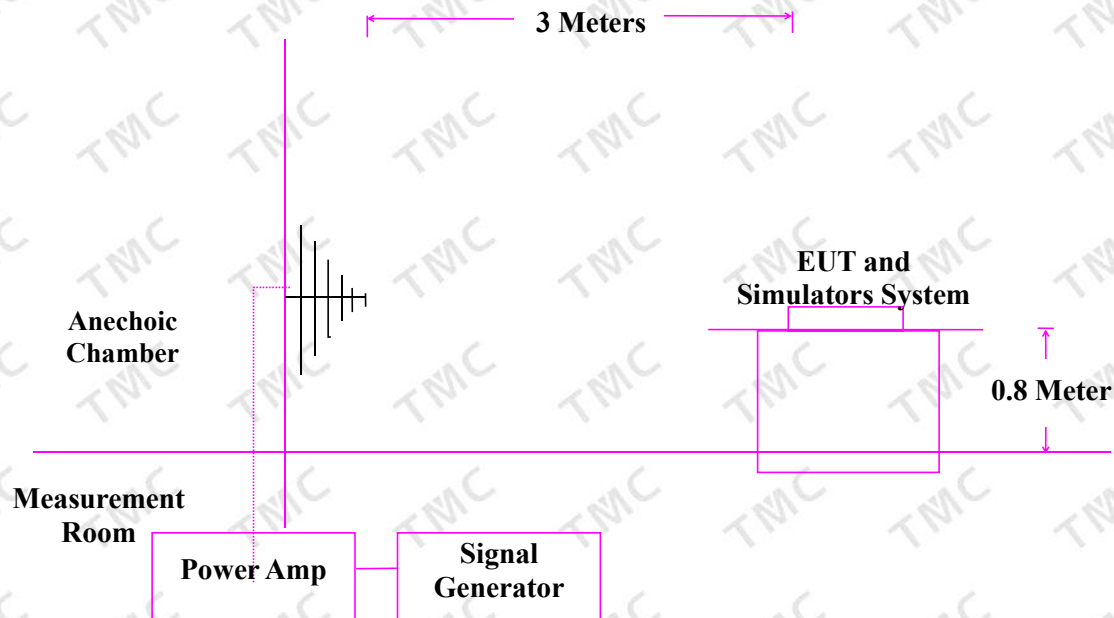
Date: June 16, 2023

Applicant :	Shenzhen Shiwei Industrial Co., Ltd.	Test Date :	June 16, 2023
EUT :	Karaoke Mini Bluetooth Microphone Speaker Set	Temperature :	22 °C
M/N :	YI	Humidity :	50 %
Power Supply :	DC3.7V	Test Mode :	Operating
Test Engineer :	Simon		
Air Discharge: $\pm 8KV$ For each point positive 10 times and negative 10 times discharge. Contact Discharge: $\pm 4KV$			
Location		Kind (A-Air Discharge C-Contact Discharge)	Result (PASS)
surface Slots	15 points	Air Discharge	A
interface Slots	6 points	Air Discharge	A
surface	10 points	Air Discharge	A
HCP	8 points	Contact Discharge	A
VCP	8 points	Contact Discharge	A

Discharge should be considered on Contact and Air and Horizontal Coupling Plane (HCP) and Vertical Coupling Plane (VCP).

7. RF FIELD STRENGTH SUSCEPTIBILITY TEST

7.1. R/S Test Setup



7.2. Test Standard

EN 55035:2017 +A11:2020

Severity Level 2 at 3V / m

7.3. Severity Levels and Performance Criterion

7.3.1. Severity level

Level	Field Strength V/m
1.	1
2.	3
3.	10
X.	Special

7.3.2. Performance criterion : A

7.4. EUT Configuration on Test

The configuration of EUT are listed in Section 3.2

7.5. Operating Condition of EUT

Setup the EUT as shown in Section 10.1.. The operating condition of EUT are listed in section 3.3.

7.6. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above the ground. The EUT is set 3 meters away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of EUT must be faced this transmitting antenna and measured individually.

In order to judge the EUT performance, a CCD camera is used to monitor the EUT.

All the scanning conditions are as follows :

Condition of Test	Remarks
1.Fielded Strength	3 V/m (Severity Level 2)
2.Radiated Signal	Modulated
3.Scanning Frequency	80 - 1000 MHz
4.Sweeping time of radiated	0.0015 decade/s
5.Dwell Time	1 Sec.

7.7. Test Results

PASS.

Please refer to the following page.

RF Field Strength Susceptibility Test Results

TMC Testing Services (Shenzhen) Co., Ltd

Date: June 16, 2023

Applicant :	Shenzhen Shiwei Industrial Co., Ltd.	Test Date :	June 16, 2023
EUT :	Karaoke Mini Bluetooth Microphone Speaker Set	Temperature :	22 °C
M/N :	YI	Humidity :	50 %
Power Supply :	DC3.7V	Test Mode :	Operating
Test Engineer :	Simon	Frequency Range :	80 MHz to 1000 MHz
Modulation: ☒ AM ☐ Pulse ☐ none 1 KHz 80%			
Criterion : A			
	Frequency Rang : 80-1000		
Steps	1%	1%	
	Horizontal	Vertical	
Front	A(pass)	A(pass)	
Right	A(pass)	A(pass)	
Rear	A(pass)	A(pass)	
Left	A(pass)	A(pass)	

8. MAGNETIC FIELD IMMUNITY TEST

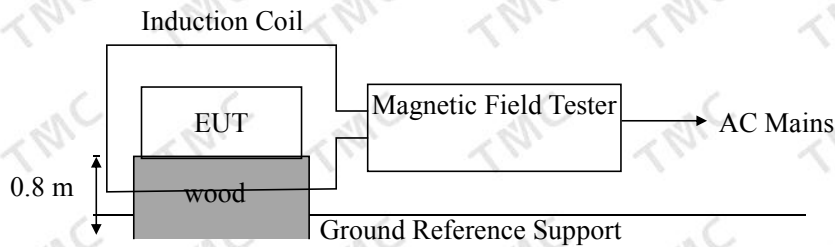
8.1. Block Diagram of Test Setup

8.1.1. Block Diagram of the EUT



(EUT: Karaoke Mini Bluetooth Microphone Speaker Set)

8.1.2. Block Diagram of Test Setup



8.2. Test Standard

EN 55035:2017 +A11:2020

Severity Level 2 at 3V / m

8.3. Severity Levels and Performance Criterion

8.3.1. Severity level

Level	Magnetic Field Strength A/m
1.	1
9.	3
10.	10
11.	30
12.	100
X.	Special

8.3.2 Performance criterion : A

8.4 EUT Configuration on Test

The configuration of EUT are listed in Section 3.2.

8.5 Operating Condition of EUT

8.5.1 Setup the EUT as shown in Section 14.1

8.5.2 Turn on the power of all equipments.

8.5.3 Let the EUT work in test mode (ON) and test it.

8.6. Test Procedure

The EUT shall be subjected to the test magnetic field by using the induction coil of standard dimensions (1m*1m) and shown in Section 14.1. The induction coil shall then be rotated by 90° in order to expose the EUT to the test field with different orientations.

1.7. Test Results

PASS.

Please refer to the following page.

Magnetic Field Immunity Test Results

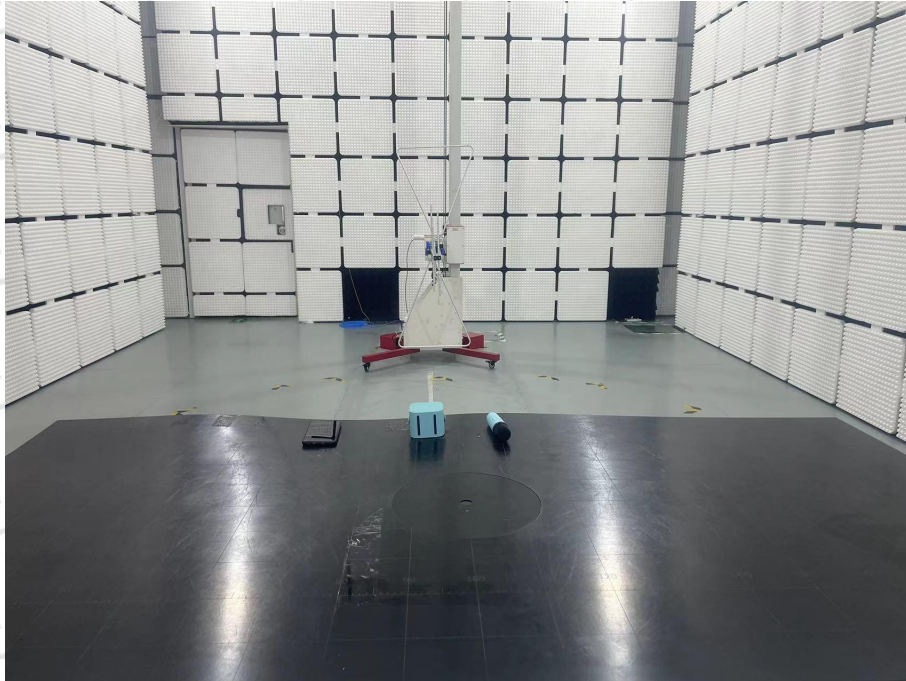
TMC Testing Services (Shenzhen) Co., Ltd

Applicant: Shenzhen Shiwei Industrial Co., Ltd.			Test Date :June 16, 2023	
EUT : Karaoke Mini Bluetooth Microphone Speaker Set			Temperature :26 ℃	
M/N : Y1			Humidity : 60 %	
Power Supply : DC3.7V			Test Engineer :Davis	
Test Model: <u>ON</u>				
Test Level	Testing Duration	Coil Orientation	Criterion	Result
3A/M	5 mins	Horizontal	A	PASS
3A/M	5 mins	Vertical	A	PASS
Remark:		Test Equipment : Magnetic Field Tester MAG100		

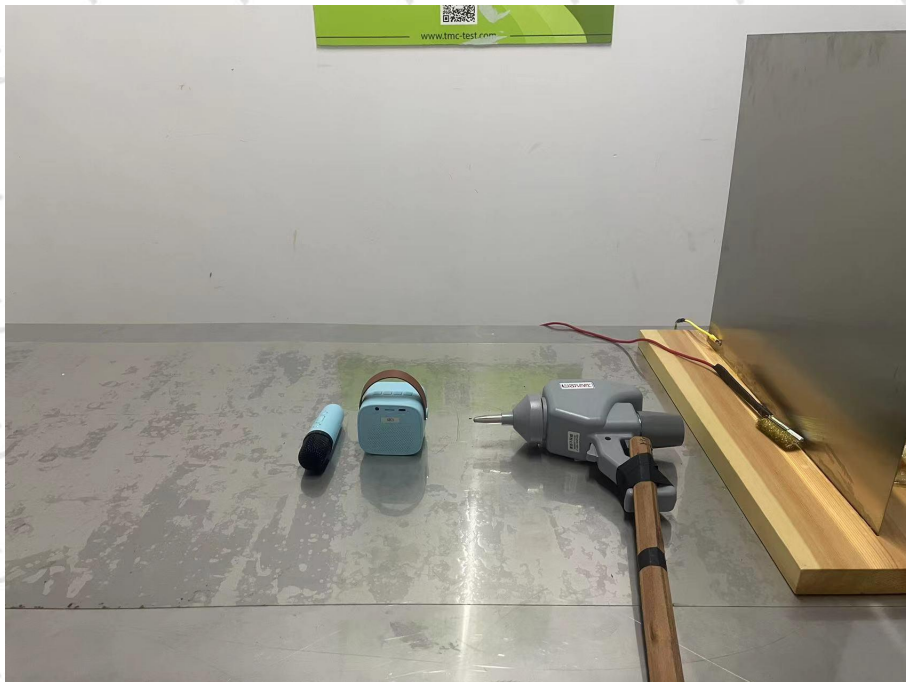
APPENDIX I

(TEST SETUP PHOTOGRAPHS)

RADIATED EMISSION MEASUREMENT



ELECTROSTATIC DISCHARGE IMMUNITY



APPENDIX II

(Photos of the EUT)

Photo 1 General Appearance of the EUT



Photo 2 General Appearance of the EUT



Photo 3 General Appearance of the EUT



Photo 4 General Appearance of the EUT



Photo 5 General Appearance of the EUT



Photo 6 General Appearance of the EUT



Photo 7 General Appearance of the EUT

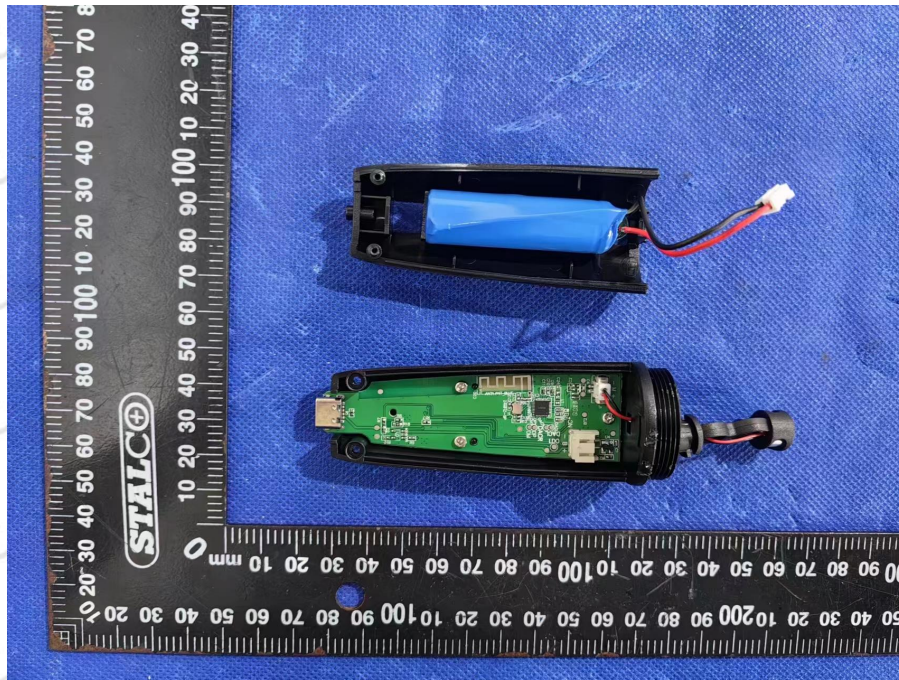


Photo 8 General Appearance of the EUT



*****END OF REPORT*****



APPLICATION FOR EMC DIRECTIVE

On Behalf of

Shenzhen Shiwei Industrial Co., Ltd.

Karaoke Mini Bluetooth Microphone Speaker Set

Trade Name: shiwei/basix

Model: Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Prepared For : Shenzhen Shiwei Industrial Co., Ltd.

Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province

Prepared By : TMC Testing Services (Shenzhen) Co., Ltd.

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Date of Test : June 12, 2023-June 16, 2023

Date of Report : June 16, 2023

Report Number : MK23060045-P01E02

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TEST REPORT DECLARATION

Applicant	:	Shenzhen Shiwei Industrial Co., Ltd.
Address	:	Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
EUT Description	:	Karaoke Mini Bluetooth Microphone Speaker Set
Manufacturer	:	Shenzhen Shiwei Industrial Co., Ltd.
Address	:	Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
Model Number	:	Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Test Standards:

FCC Part 15, Subpart B, Class B(sDoC), ANSI C 63.4-2014

The EUT described above is tested by US to determine the maximum emission levels emanating from the EUT, the maximum emission levels are compared to the FCC Part 15 Subpart Class B limits. The measurement results are contained in this test report. and TMC Testing Services (Shenzhen) Co., Ltd is assumed of full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT is to be technically compliant with the FCC requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of TMC Testing Services (Shenzhen) Co., Ltd



Prepared by :

Peishuang Wu/Assistant

Approved & Authorized Signer :

Vivian Jiang / Manager

1. GENERAL INFORMATION

1.1. Report information

1.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that TMC approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that TMC in any way guarantees the later performance of the product/equipment.

1.1.2. The sample/s mentioned in this report is/are supplied by Applicant, TMC therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

1.1.3. Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through TMC, unless the applicant has authorized TMC in writing to do so.

1.2. Measurement Uncertainty

Available upon request.

1.3. Test Uncertainty

Conducted Emission Uncertainty = $\pm 2.66\text{dB}$

Radiated Emission Uncertainty = $\pm 4.26\text{dB}$

2. PRODUCT DESCRIPTION

2.1. EUT Description

Description	:	Karaoke Mini Bluetooth Microphone Speaker Set
Applicant	:	Shenzhen Shiwei Industrial Co., Ltd. Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
Manufacturer	:	Shenzhen Shiwei Industrial Co., Ltd. Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
Model Number	:	Y1

2.2. Test Conditions

Temperature: 23~25℃

Relative Humidity: 55~63 %

2.3. Support Equipment List

No.	Equipment	Model No.	Serial No.	FCC ID	Trade Name	Data Cable	Power Cord
1	--	--	--	--	--	--	--

3. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	Test Results
Conducted disturbance	N/A
Radiated disturbance	Pass

4. TEST EQUIPMENT USED

4.1. For Conducted Emission Test

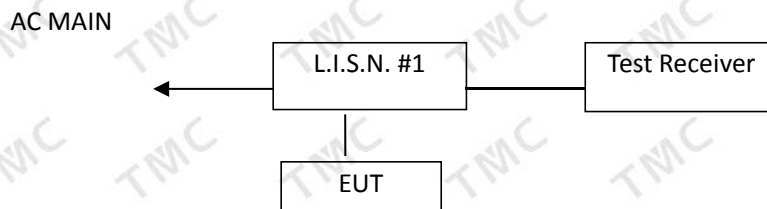
Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration time	Recalibration time
1.	Test Receiver	Rohde & Schwarz	ESPI3	101396	Oct.28, 22	Oct.27, 23
2.	L.I.S.N.	Rohde & Schwarz	ENV216	102723	Oct.28, 22	Oct.27, 23
3.	loop antenna	DAZE	ZN30401	19036	Oct.28, 22	Oct.27, 23
4.	Wet and dry thermometer	M&G	ARC92569	N/A	Oct.28, 22	Oct.27, 23
5.	Shielding room	SKET	2021082301	N/A	Aug.23,21	Aug.22,24

4.2. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration time	Recalibration time
1.	Test Receiver	Rohde&Schwarz	ESC17(9kHz-7G Hz)	100336	Oct.28, 22	Oct.27, 23
2.	Broadband antenna	Schwarzbeck	VULB9168	01222	Oct.28, 22	Oct.27, 23
3.	Horn antenna	Schwarzbeck	BBHA9120D	02476	Oct.28, 22	Oct.27, 23
4.	Preamplifier	Schwarzbeck	BBV9745	00250	Oct.28, 22	Oct.27, 23
5.	Preamplifier	N/A	TRLA-01018G44 0B	21081001	Oct.28, 22	Oct.27, 23
6.	3M method semi anechoic chamber	SKET	9m*6m*6m	2021082304	Oct.14,21	Oct.13,24
7.	Pointer hygrometer	M&G	ARC92570	N/A	Oct.28, 22	Oct.27, 23

5. CONDUCTED EMISSION TEST

5.1. Block Diagram of Test Setup



(EUT: Karaoke Mini Bluetooth Microphone Speaker Set)

5.2. Test Standard

FCC Part 15, Subpart B, Class B

5.3. Conducted Emission Limit (Class B)

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.

5.4. EUT Configuration on Test

The following equipments are installed on conducted emission test to meet Part 15 requirement and operating in a manner, which tends to maximize its emission characteristics in a normal application.

5.4.1. EUT Information

Model Number: Y1

5.5. Operating Condition of EUT

5.5.1. Setup the EUT and simulators as shown in Section 5.1.

5.5.2. Turn on the power of all equipments.

5.5.3. Let the EUT work in test modes (EUT Working) and test it.

5.6. Test Procedure

The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI test receiver (R&S Test Receiver ESCS30) is used to test the emissions form both sides of AC line. The bandwidth of EMI test receiver is set at 9kHz.

The bandwidth of the test receiver (R&S Test Receiver ESHS30) is set at 10KHz. All the test results are listed in Section 5.7

5.7. Test Result

N/A

6. RADIATED EMISSION MEASUREMENT

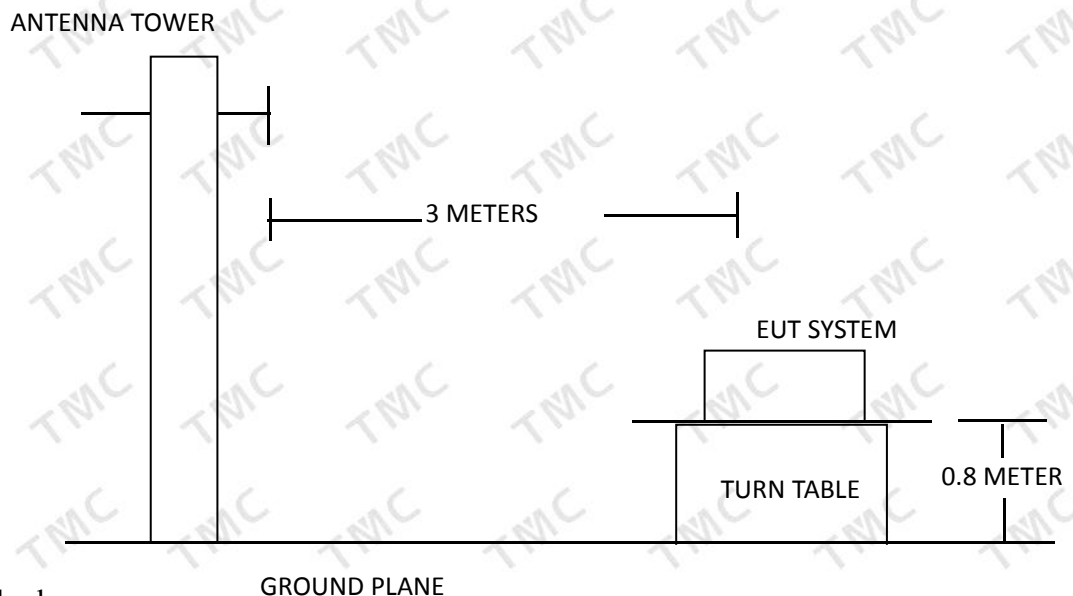
6.1. Block Diagram of EUT Configuration

6.1.1. Block Diagram of connection between the EUT and the simulators



(EUT: Karaoke Mini Bluetooth Microphone Speaker Set)

6.1.2. Anechoic Chamber Test Setup Diagram



6.2. Test Standard

FCC Part 15, Subpart B, Class B

6.3. Radiated Emission Limit (Class B)

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB μ V/m)
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0

Note: (1) The smaller limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT or system.

6.4. EUT Configuration on Test

The following equipment are installed on Radiated Emission Measurement to meet the Commission requirements and operating regulations in a manner which tends to maximize Its emission characteristics in normal application.

6.5. Operating Condition of EUT

6.5.1. Setup the EUT as shown on Section 6.1.2

6.5.2. Turn on the power of all equipments.

6.5.3. Let the EUT work in test mode (EUT working) and measure it.

6.6. Test Procedure

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna (calibrated by dipole antenna) are used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on measurement.

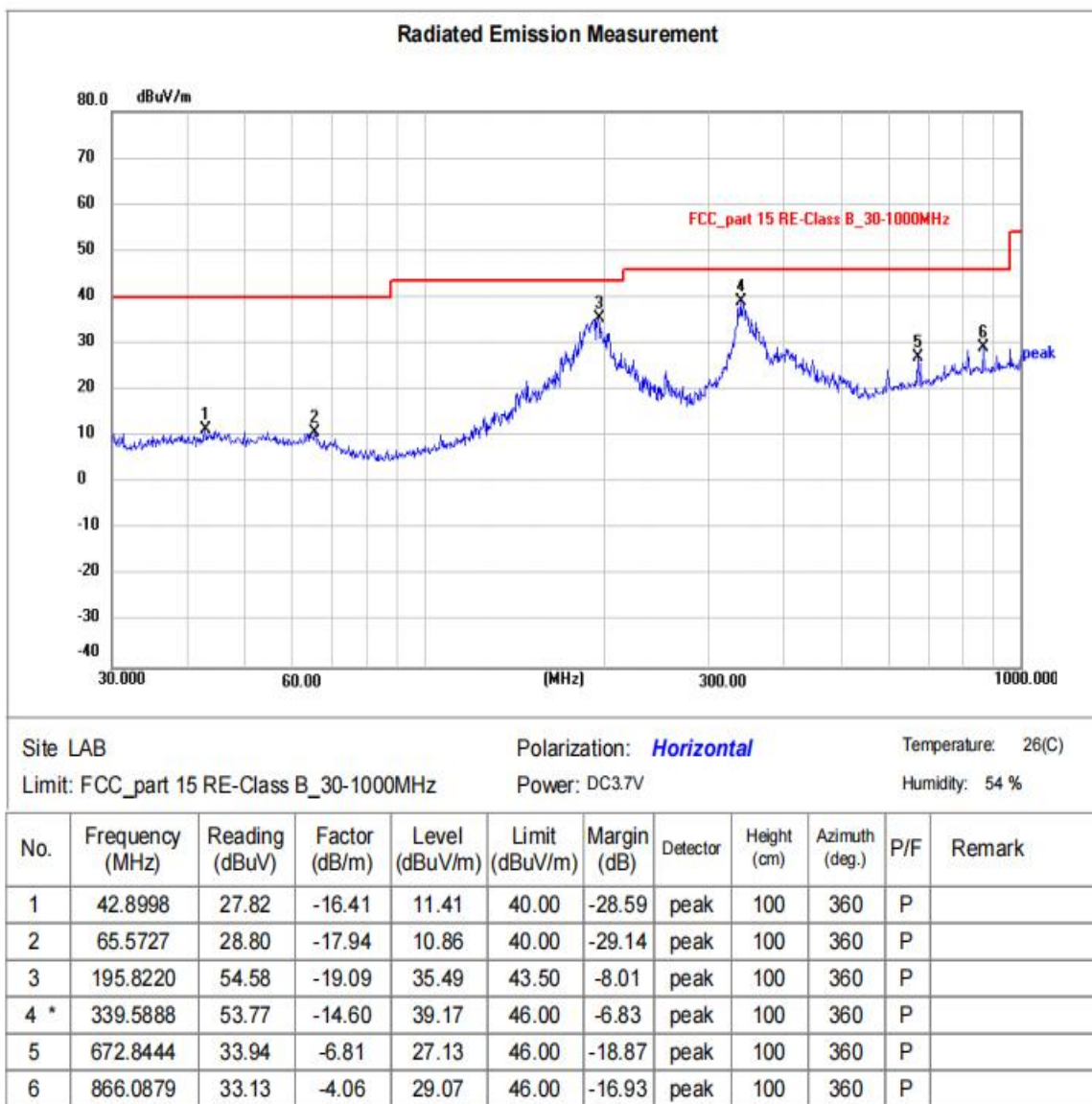
The bandwidth setting on the test receiver (R&S TEST RECEIVER ESCIS28A) is 120 KHz. The EUT is tested in Anechoic Chamber. The frequency range from 30MHz to 1000 MHz is checked. All the test results are listed in Section 6.7. and all the scanning waveform are attached within **Appendix I**

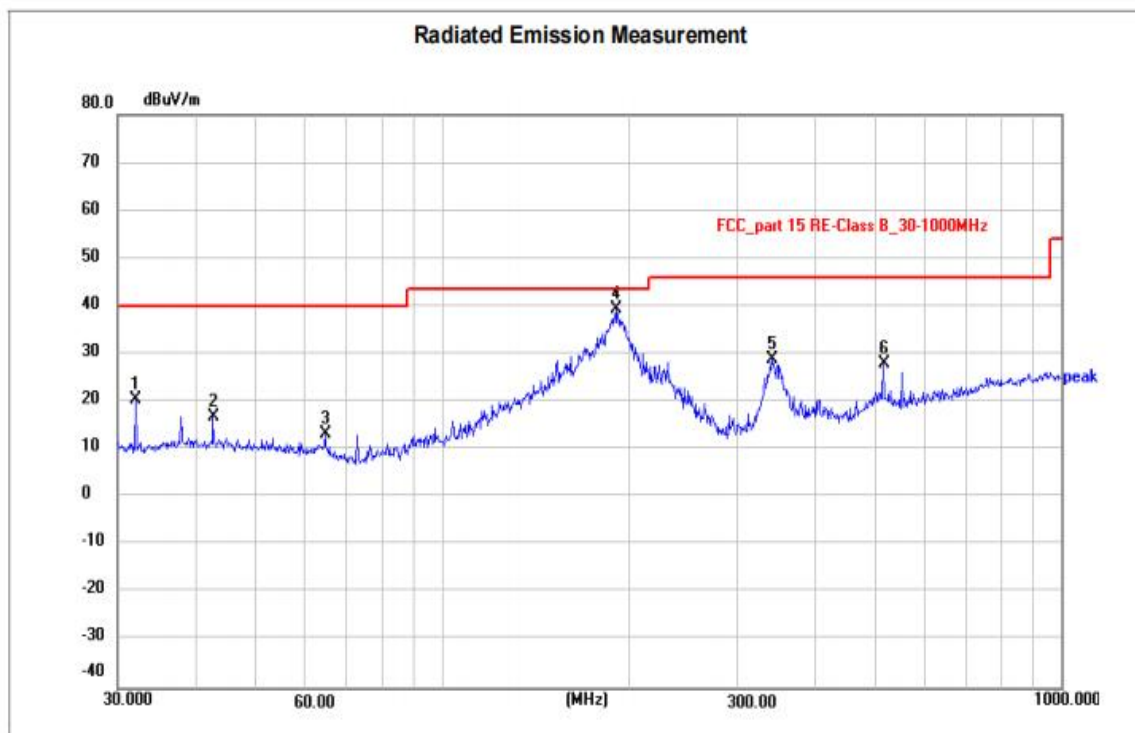
6.7. Test Result

PASS

Test Mode: operating

APPENDIX I





Site LAB

 Polarization: **Vertical**

Temperature: 26(C)

Limit: FCC_part 15 RE-Class B_30-1000MHz

Power: DC3.7V

Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	32.0667	37.53	-17.11	20.42	40.00	-19.58	peak	100	0	P	
2	42.7496	33.37	-16.41	16.96	40.00	-23.04	peak	100	0	P	
3	64.8865	31.08	-17.83	13.25	40.00	-26.75	peak	100	0	P	
4 *	191.7450	58.21	-18.85	39.36	43.50	-4.14	peak	100	0	P	
5	341.9786	43.39	-14.53	28.86	46.00	-17.14	peak	100	0	P	
6	515.4374	38.14	-10.25	27.89	46.00	-18.11	peak	100	0	P	

APPENDIX II

Photo 1 Radiated Emission Test

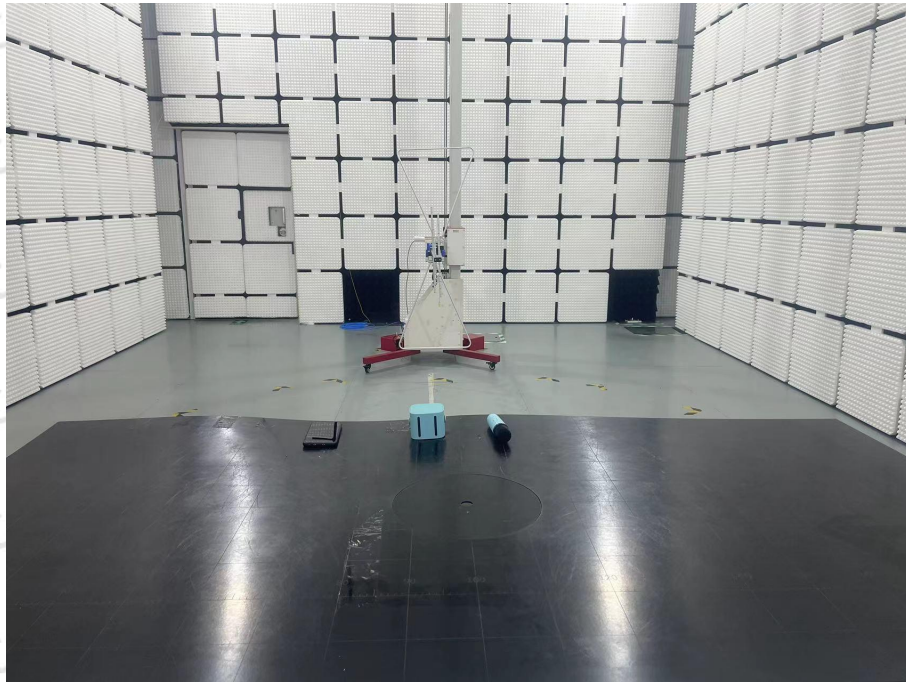


Photo 2 General Appearance of the EUT



Photo 3 General Appearance of the EUT



Photo 4 General Appearance of the EUT



Photo 5 General Appearance of the EUT



Photo 6 General Appearance of the EUT



Photo 7 General Appearance of the EUT



Photo 8 General Appearance of the EUT

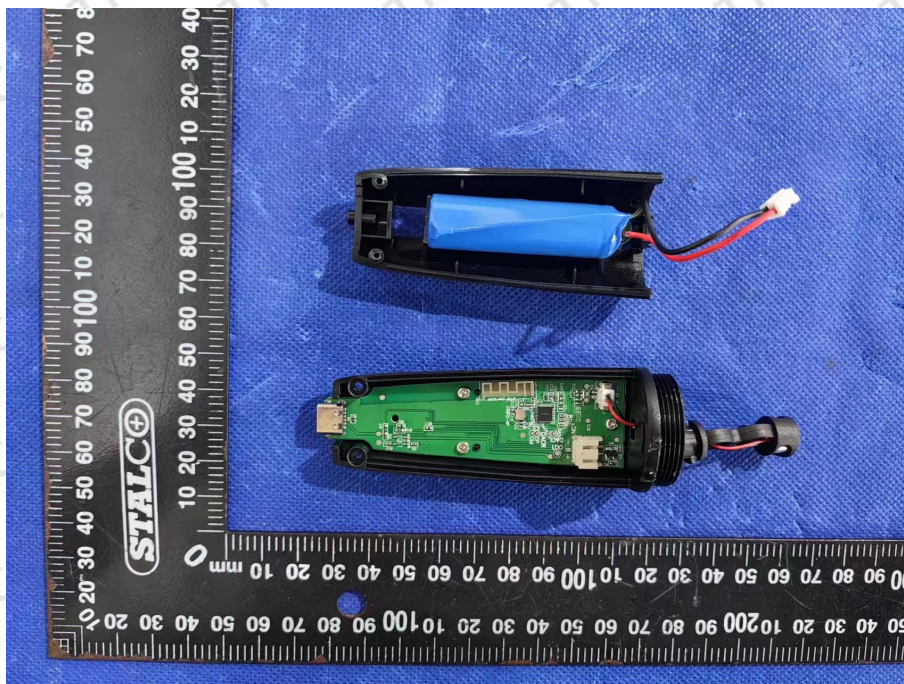


Photo 9 General Appearance of the EUT



******END OF REPORT******

FCC Part 15

Supplier's Declaration of Conformity

Product Name: Karaoke Mini Bluetooth Microphone Speaker Set

Brand Name: shiwei/basix

Model Number: Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Report Number: MK23060045-P01E02

FCC Compliance Statement (for products subject to Part 15)

This device complies with Part 15 of the FCC Rules. Operation is subject to following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Test Laboratory

TMC Testing Services (Shenzhen) Co., Ltd

Street Address: 1/F., Block A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road,
Shilong Community, Shiyan Street, Baoan District, Shenzhen, China

City, State: Shenzhen

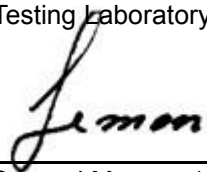
Postal Code: 518109

Country: China

Tel: +86-755- 86642861

E-mail: Cert@tmc-lab.com

For and on behalf of
Testing Laboratory


(General Manager)

Date: June 16, 2023

Responsible Party

Street Address:

City, State:

Postal Code:

Country:

For and on behalf of
Responsible Party

Tel:

E-mail:

()

Date: June 16, 2023

Verification of Compliance

Verification No.: MK23060045-P01C01

Name and address of Applicant: **Shenzhen Shiwei Industrial Co., Ltd.**
Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province

Name and address of Manufacturer: **Shenzhen Shiwei Industrial Co., Ltd.**
Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province

Product name: **Karaoke Mini Bluetooth Microphone Speaker Set**

Product model(s): Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Product trademark: shiwei/basix

This verification confirms that the product meets the requirements of the following standard.
The conformity was demonstrated based on following standard(s) listed by European Commission as harmonized with Directive RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU

IEC 62321-1:2013	IEC 62321-3-1:2013
IEC 62321-4:2013/AMD1:2017	IEC 62321-5:2013
IEC 62321-6:2015	IEC 62321-7-1:2015
IEC 62321-7-2:2017	IEC 62321-8:2017

The verification has been carried out in accordance with individual rules and conditions agreed with the applicant. Evaluation has been carried out in accordance with:

Test report(s) No.: MK23060045-P01C01

Test conducted by: TMC Testing Services (Shenzhen) Co., Ltd.

Verification issue date: June 16, 2023

Notes:

This verification refers to the above mentioned product and its conformity in regards of above mentioned standard(s) was proven on test sample.

This verification does not imply meeting all essential requirements, assessment of the series-production or any other restricted Notified Bodies conformity assessment procedure appropriate for the product.

This verification holder shall use this verification in connection to verification of conformity and technical data relevant for the product the verification was issued.

TMC Testing Services (Shenzhen) Co., Ltd.

t:86-755-86642861 cert@tmc-lab.com www.tmc-lab.com

1st Floor, Block A1, Zone A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shiyan Street, Baoan District, Shenzhen, China



Lab Director
Vivian Jiang



Applicant Shenzhen Shiwei Industrial Co., Ltd.
Address Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District,
Shenzhen City, Guangdong Province
Manufacturer Shenzhen Shiwei Industrial Co., Ltd.
Address Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District,
Shenzhen City, Guangdong Province

The following sample(s) was /were submitted and identified on behalf of the clients as :

Sample Name: Karaoke Mini Bluetooth Microphone Speaker Set

Model Name: Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Trade Name: shiwei/basix

Sample Received Date: June 12, 2023

Testing Period: June 12, 2023-June 16, 2023

Report Date: June 16, 2023

Test Requested: Selected test (s) in the selected parts as requested by client with the RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU on the restriction of hazardous substances.

Test Method Please refer to next page(s).

Test Result Please refer to next page(s).

Test conclusion: Based upon the performed tests by submitted samples, the test results comply with the limits of the RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of

Vivian Jiang
Technical Director

Unless otherwise agreed in writing, this document is issued by the company subject to its general conditions of service printed overleaf, available on request or accessible at <http://www.tmc-lab.com>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. This report shall not be altered, increased or deleted. The results shown in this test report refer only to the sample(s) tested. Without written approval of TMC, this test report shall not be copied except in full and published as advertisement.

1. Pb, Cd, Cr(VI), Hg, PBBs&PBDEs

Test Method:

A. Disassembly, disjointment and mechanical sample preparation

—Ref. to IEC 62321-2:2013, Disassembly, disjointment and mechanical sample preparation.

B. With reference to IEC 62321-1:2013, tests were performed for the samples indicated by the photos in this report.

(1) Screening – Lead, mercury, cadmium, total chromium and total bromine

—Ref. to IEC 62321-3-1:2013, Screening for Lead, mercury, cadmium, total chromium and total bromine by X-ray fluorescence spectrometry.

(2) Wet chemical test method

Test Item(s)	Test Method	Test Equipment	Unit	MDL	Limit
Pb	IEC62321-5:2013	ICP-OES	mg/kg	2	1000
Cd	IEC62321-5:2013	ICP-OES	mg/kg	2	100
Hg	IEC 62321-4:2013 /AMD1:2017	ICP-OES	mg/kg	2	1000
Cr(VI) (Metal)	IEC62321-7-1:2015	UV-Vis	μg/cm ²	0.1	0.13
Cr(VI) (Nonmetal)	IEC62321-7-2:2017	UV-Vis	mg/kg	8	1000
PBBs	IEC62321-6:2015	GC-MS	mg/kg	5	100
PBDEs	IEC62321-6:2015	GC-MS	mg/kg	5	1000

Test result(s):

No.	Sample Description	Results of XRF					Chemical confirmation results (mg/kg)	Conclusion
		Pb	Cd	Hg	Cr	Br		
1	PCB	BL	BL	BL	BL	BL	---	PASS
2	USB interface	BL	BL	BL	BL	---	---	PASS
3	Silver plastic	BL	BL	BL	BL	BL	---	PASS
4	Black plastic	BL	BL	BL	BL	BL	---	PASS
5	Battery	BL	BL	BL	BL	BL	---	PASS
6	Black wire	BL	BL	BL	BL	BL	---	PASS
7	Black metal nethead	BL	BL	BL	BL	---	---	PASS
8	Blue silicone	BL	BL	BL	BL	BL	---	PASS
9	Red wire	BL	BL	BL	BL	BL	---	PASS
10	Blue plastic shell	BL	BL	BL	BL	BL	---	PASS

Remark:

- It is the result on total Br while test item on restricted substances is PBBs/PBDEs. It is the result on total Cr while test item on restricted substances is Cr(VI).
- The XRF screening test for RoHS elements-The reading may be different to the actual content in the sample be of non-uniformity composition.
- Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Pb, Cd, Hg), UV-VIS for Cr(VI) and GC/MSD (for PBBs/PBDEs) is recommended to be performed if the concentration exceeds the below warning value according to IEC 62321-3-1:2013.

Attached table 1, XRF screening limits in mg/kg for regulated elements in various matrices:

Element	Polymer Material	Metallic Material	Composite Material
Pb	$BL \leq 700-3 \sigma \leq X < 1300+3 \sigma \leq OL$	$BL \leq 700-3 \sigma \leq X < 1300+3 \sigma \leq OL$	$BL \leq 500-3 \sigma \leq X < 1500+3 \sigma \leq OL$
Cd	$BL \leq 70-3 \sigma \leq X < 130+3 \sigma \leq OL$	$BL \leq 70-3 \sigma \leq X < 130+3 \sigma \leq OL$	$LOD < X < 150+3 \sigma \leq OL$
Hg	$BL \leq 700-3 \sigma \leq X < 1300+3 \sigma \leq OL$	$BL \leq 700-3 \sigma \leq X < 1300+3 \sigma \leq OL$	$BL \leq 500-3 \sigma \leq X < 1500+3 \sigma \leq OL$
Cr	$BL \leq 700-3 \sigma < X$	$BL \leq 700-3 \sigma < X$	$BL \leq 500-3 \sigma < X$
Br	$BL \leq 300-3 \sigma < X$	--	$BL \leq 250-3 \sigma < X$

XRF detection limits in mg/kg for regulated elements in various material

Element	Polymer Material	Metallic Material	Composite Material
Pb	10	50	50
Cd	10	50	50
Hg	10	50	50
Cr	10	50	50
Br	10	50	50

Note:

- BL = Under the XRF screening limit
- OL = Future chemical test will be conducted while result is above the screening limit
- X = inconclusive, the region where need further chemical testing by ICP-OES (for Pb, Cd, Hg), UV-VIS (for Cr(VI)) and GC/MSD (for PBBs, PBDEs).
- 3 σ =The reproducibility of analytical instruments
- LOD=Detection limit
- “---” = Not Applicable
- mg/kg=0.0001%
- N.D.=Not Detected(<MDL)
- MDL = Method Detection Limit
- Negative = Absence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is less than 0.02 mg/kg with 50cm² sample surface area used.
- *=According to 2011/65/EU Annex, point 6-Lead as an alloying element is steel containing up to 0.35% lead by weight, aluminum containing up to 0.4% lead by weight and as a copper alloy, containing up to 4% lead by weight can be exempted.

2. Phthalates—DBP, BBP, DEHP & DIBP

Test Item(s)	Test Method	Test Equipment	Unit	MDL	Limit
Dibutyl Phthalate(DBP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000
Benzylbutyl Phthalate (BBP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000
Diisobutyl phthalate (DIBP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000

Test result(s):

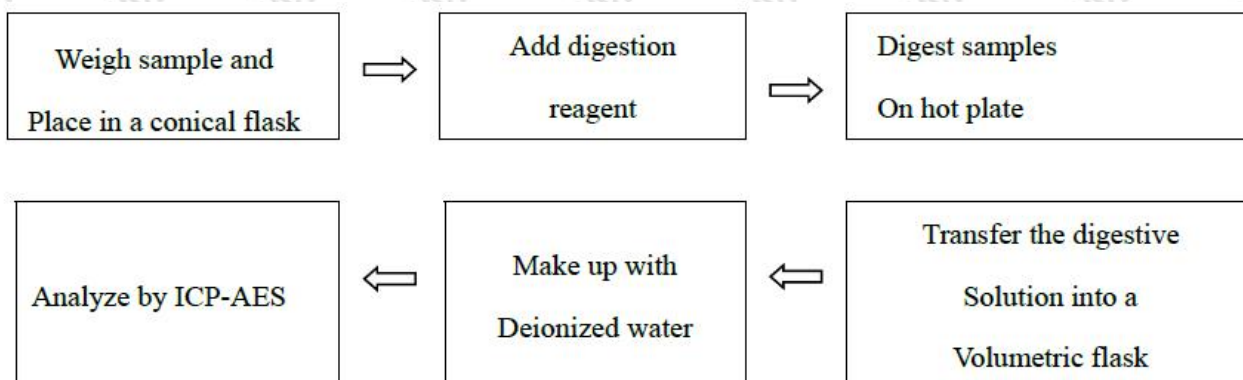
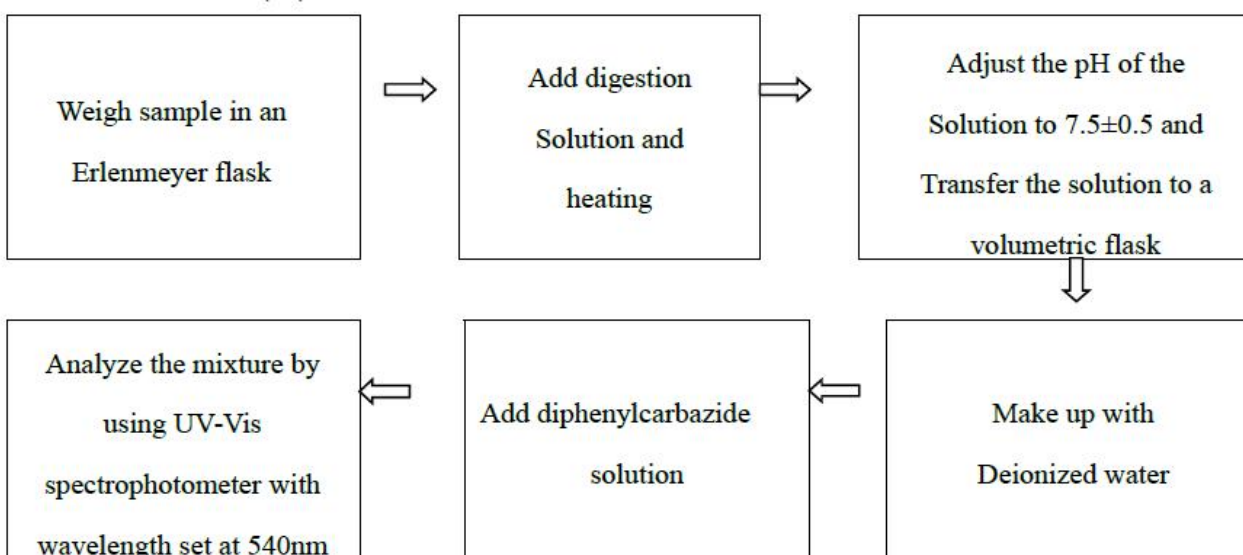
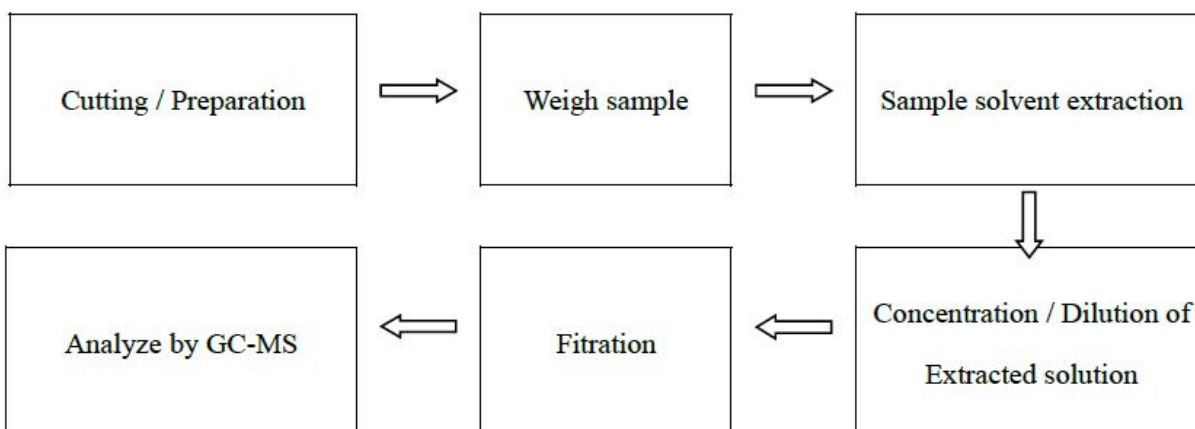
No.	Test item (mg/kg)				Conclusion
	DBP	BBP	DEHP	DIBP	
1	N.D.	N.D.	N.D.	N.D.	PASS
3	N.D.	N.D.	N.D.	N.D.	PASS
4	N.D.	N.D.	N.D.	N.D.	PASS
5	N.D.	N.D.	N.D.	N.D.	PASS
6	N.D.	N.D.	N.D.	N.D.	PASS
8	N.D.	N.D.	N.D.	N.D.	PASS
9	N.D.	N.D.	N.D.	N.D.	PASS
10	N.D.	N.D.	N.D.	N.D.	PASS

Note:

- mg/kg=0.0001%

-ND=Not Detected(<MDL)

-*1 = The samples were resubmitted on

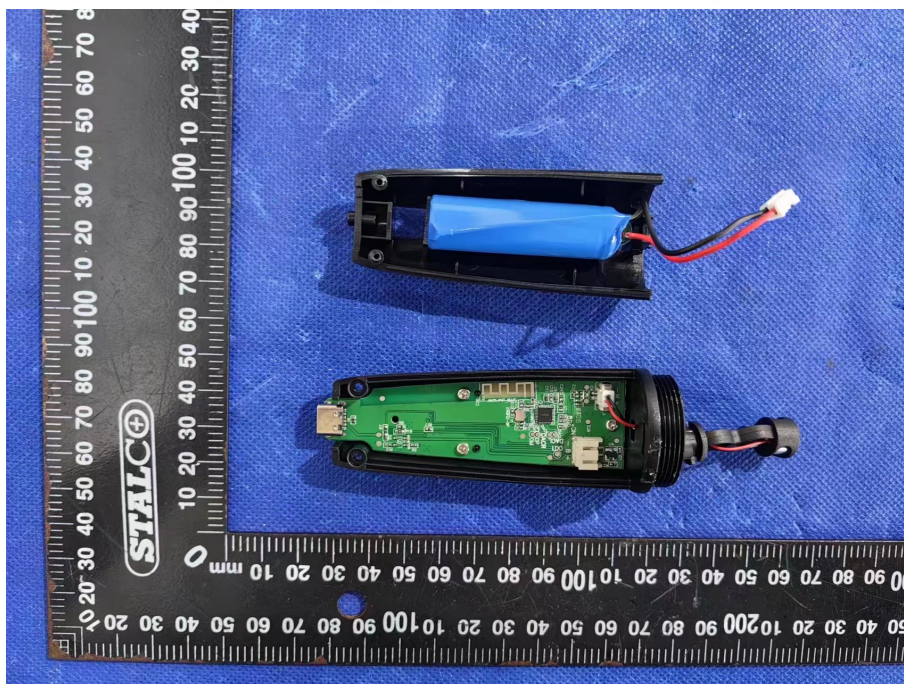
Test Process:
1. Test for Cd/Pb /Hg

2. Test for Chromium (VI) Content

3. Test for PBBs/PBDES/DIBP/DBP/BBP/DEHP Content


Sample photo:









END OF REPORT

CHILDREN'S PRODUCT CERTIFICATE(CPC)

1: Identification of the product covered by this certificate:

Product Name : Karaoke Mini Bluetooth Microphone Speaker Set

Product specification
Product Size Speakers 91*65*77mm
Microphone 40*135mm
Charging time Speakers about 2.5 hours
Microphone about 3.5-4 hours
Package Size 210*169*82mm
Product Weight 430g

Sample Description : Product gross weight 553g
Qty 24set
Packing Gross 13kg
Carton size 51*35*34.5cm
Function Support Bluetooth connection to play music
Support TF card to play music
Support headphone mode to play music
Support USB OTG Built-in microphone
K song amplification function
Built-in reverberation sound function

Trade Marks : Shenzhen Shiwei Industrial Co., Ltd.

ASIN/Model : Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Age grading : 2-15 years old

2: following rules, bans, standards and regulations apply for this product:

Safety Regulation Citations
ASTMF963-17 Standard Consumer Safety Specification for Toy Safety 1.Mechanical and Physical Tests 2.Section 4.2Flammability Tests 3.Section 4.3.5.1 Heavy Metals Content in paint and similar surface coating material 4.Section 4.3.5.2 Heavy Metals Content in Toy Substrate Materials
CPSA Section 14(a) (5) Tracking Labels for Children's Products (15 USC §2063(a)(5) (CPSA))
USA 16 CFR Part 1303 Ban of Lead Containing Paint and Certain Consumer Products Bearing Lead- Containing Paint USA Consumer Product Safety Improvement Act (CPSIA) Sec.101 Children's products containing Lead; Lead paint rule USA Consumer Product Safety Improvement Act (CPSIA) Sec.108 Prohibition on sale of certain products containing specified phthalates USA 16 CFR Part 1307 Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates 16 CFR 1500.50.51.52.53 Simulating use and abuse of toys 16 CFR 1501 Small Objects 16 CFR 1500.48 Sharp point 16 CFR 1500.49 Sharp edge

3: Identification of the U.S. importer or domestic manufacturer certifying compliance of the

Importer : ASOS E-Commerce Limited

address : 338 PALMER AVE STE A MAMARONECK, NY 10543

Phone : 13923730255

4: Contact information for the individual maintaining records of test results:

Contact : Qiu Yanjie
Address : Room 201, Building A2, Taichung Industrial Zone, No. 6 Xinfeng Road, Ailian
Community, Longcheng Street, Longgang District, Shenzhen, China
Phone : 13923730255
Email : rolaliu@163.com

5: Date and place where this product was manufactured:

Manufacturer : Shenzhen Shiwei Industrial Co., Ltd.
Location of Manufacture : Room 201, Building A2, Taichung Industrial Zone, No.6 Xifeng Road,
Ailian,community,Longcheng street, Longgang District, Shenzhen,China
Phone : 13923730255
Manufacture Date : 2023-06-15
Manufacturer's signature/seal : Shenzhen Shiwei Industrial Co., Ltd.

6: Provide the date(s) and place when the product was tested for compliance with the consumer product safety rule(s) cited above:

Testing Date : Jul. 19, 2023 To Jul. 24, 2023
Address : 6/F., Building B, Chuangyigu Industrial Park, No.5, Hehe Street, Songxi Road, Hengkeng,
Liaobu, Dongguan, Guangdong, China/523413

7: Identify any third party, CPSC-accepted laboratory on whose testing the certificate depends:

Third Party : Guangdong KEYS Testing Technology Co., Ltd.
Address : 6/F., Building B, Chuangyigu Industrial Park, No.5, Hehe Street, Songxi Road, Hengkeng,
Liaobu, Dongguan, Guangdong, China/523413
Phone : 0769-89798319
E-mail : info@keys-lab.com
Web : http://www.keys-lab.com
Lab ID : 1752

END

FCC Part 15

Supplier's Declaration of Conformity

Product Name: Karaoke Mini Bluetooth Microphone Speaker Set

Brand Name: shiwei/basix

Model Number: Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Report Number: MK23060045-P01E04

FCC Compliance Statement (for products subject to Part 15)

This device complies with Part 15 of the FCC Rules. Operation is subject to following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Test Laboratory

TMC Testing Services (Shenzhen) Co., Ltd

Street Address: 1/F., Block A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road,
Shilong Community, Shiyan Street, Baoan District, Shenzhen, China

City, State: Shenzhen

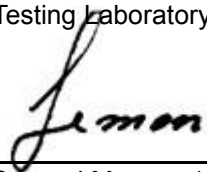
Postal Code: 518109

Country: China

Tel: +86-755- 86642861

E-mail: Cert@tmc-lab.com

For and on behalf of
Testing Laboratory


(General Manager)

Date: June 16, 2023

Responsible Party

Street Address:

City, State:

Postal Code:

Country:

For and on behalf of
Responsible Party

Tel:

E-mail:

()

Date: June 16, 2023



APPLICATION FOR EMC DIRECTIVE

On Behalf of

Shenzhen Shiwei Industrial Co., Ltd.

Karaoke Mini Bluetooth Microphone Speaker Set

Trade Name: shiwei/basix

Model: Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Prepared For : Shenzhen Shiwei Industrial Co., Ltd.

Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province

Prepared By : TMC Testing Services (Shenzhen) Co., Ltd.

1/F., Block A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shilong Community, Shiyan Street, Baoan District, Shenzhen, China

Tel: +86-755- 86642861

Web: www.tmc-lab.com

E-mail: Cert@tmc-lab.com

Date of Test : June 12, 2023-June 16, 2023

Date of Report : June 16, 2023

Report Number : MK23060045-P01E04

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TEST REPORT DECLARATION

Applicant	:	Shenzhen Shiwei Industrial Co., Ltd.
Address	:	Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
EUT Description	:	Karaoke Mini Bluetooth Microphone Speaker Set
Manufacturer	:	Shenzhen Shiwei Industrial Co., Ltd.
Address	:	Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
Model Number	:	Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Test Standards:

FCC Part 15, Subpart B, Class B(sDoC), ANSI C 63.4-2014

The EUT described above is tested by US to determine the maximum emission levels emanating from the EUT, the maximum emission levels are compared to the FCC Part 15 Subpart Class B limits. The measurement results are contained in this test report. and TMC Testing Services (Shenzhen) Co., Ltd is assumed of full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT is to be technically compliant with the FCC requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of TMC Testing Services (Shenzhen) Co., Ltd



Prepared by :

Peishuang Wu/Assistant

Approved & Authorized Signer :

Vivian Jiang / Manager

1. GENERAL INFORMATION

1.1. Report information

1.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that TMC approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that TMC in any way guarantees the later performance of the product/equipment.

1.1.2. The sample/s mentioned in this report is/are supplied by Applicant, TMC therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

1.1.3. Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through TMC, unless the applicant has authorized TMC in writing to do so.

1.2. Measurement Uncertainty

Available upon request.

1.3. Test Uncertainty

Conducted Emission Uncertainty = $\pm 2.66\text{dB}$
Radiated Emission Uncertainty = $\pm 4.26\text{dB}$

2. PRODUCT DESCRIPTION

2.1. EUT Description

Description	:	Karaoke Mini Bluetooth Microphone Speaker Set
Applicant	:	Shenzhen Shiwei Industrial Co., Ltd. Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
Manufacturer	:	Shenzhen Shiwei Industrial Co., Ltd. Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
Model Number	:	Y1

2.2. Test Conditions

Temperature: 23~25℃

Relative Humidity: 55~63 %

2.3. Support Equipment List

No.	Equipment	Model No.	Serial No.	FCC ID	Trade Name	Data Cable	Power Cord
1	--	--	--	--	--	--	--

3. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	Test Results
Conducted disturbance	N/A
Radiated disturbance	Pass

4. TEST EQUIPMENT USED

4.1. For Conducted Emission Test

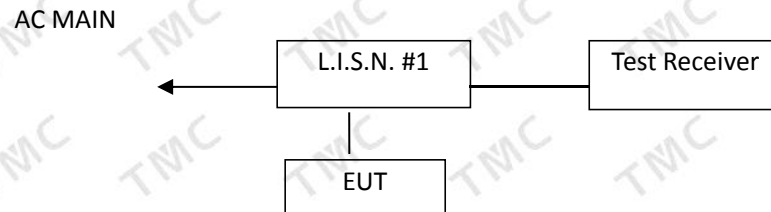
Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration time	Recalibration time
1.	Test Receiver	Rohde & Schwarz	ESPI3	101396	Oct.28, 22	Oct.27, 23
2.	L.I.S.N.	Rohde & Schwarz	ENV216	102723	Oct.28, 22	Oct.27, 23
3.	loop antenna	DAZE	ZN30401	19036	Oct.28, 22	Oct.27, 23
4.	Wet and dry thermometer	M&G	ARC92569	N/A	Oct.28, 22	Oct.27, 23
5.	Shielding room	SKET	2021082301	N/A	Aug.23,21	Aug.22,24

4.2. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration time	Recalibration time
1.	Test Receiver	Rohde&Schwarz	ESC17(9kHz-7G Hz)	100336	Oct.28, 22	Oct.27, 23
2.	Broadband antenna	Schwarzbeck	VULB9168	01222	Oct.28, 22	Oct.27, 23
3.	Horn antenna	Schwarzbeck	BBHA9120D	02476	Oct.28, 22	Oct.27, 23
4.	Preamplifier	Schwarzbeck	BBV9745	00250	Oct.28, 22	Oct.27, 23
5.	Preamplifier	N/A	TRLA-01018G44 0B	21081001	Oct.28, 22	Oct.27, 23
6.	3M method semi anechoic chamber	SKET	9m*6m*6m	2021082304	Oct.14,21	Oct.13,24
7.	Pointer hygrometer	M&G	ARC92570	N/A	Oct.28, 22	Oct.27, 23

5. CONDUCTED EMISSION TEST

5.1. Block Diagram of Test Setup



(EUT: Karaoke Mini Bluetooth Microphone Speaker Set)

5.2. Test Standard

FCC Part 15, Subpart B, Class B

5.3. Conducted Emission Limit (Class B)

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.

5.4. EUT Configuration on Test

The following equipments are installed on conducted emission test to meet Part 15 requirement and operating in a manner, which tends to maximize its emission characteristics in a normal application.

5.4.1. EUT Information

Model Number: Y1

5.5. Operating Condition of EUT

5.5.1. Setup the EUT and simulators as shown in Section 5.1.

5.5.2. Turn on the power of all equipments.

5.5.3. Let the EUT work in test modes (EUT Working) and test it.

5.6. Test Procedure

The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI test receiver (R&S Test Receiver ESCS30) is used to test the emissions form both sides of AC line. The bandwidth of EMI test receiver is set at 9kHz.

The bandwidth of the test receiver (R&S Test Receiver ESHS30) is set at 10KHz. All the test results are listed in Section 5.7

5.7. Test Result

N/A

6. RADIATED EMISSION MEASUREMENT

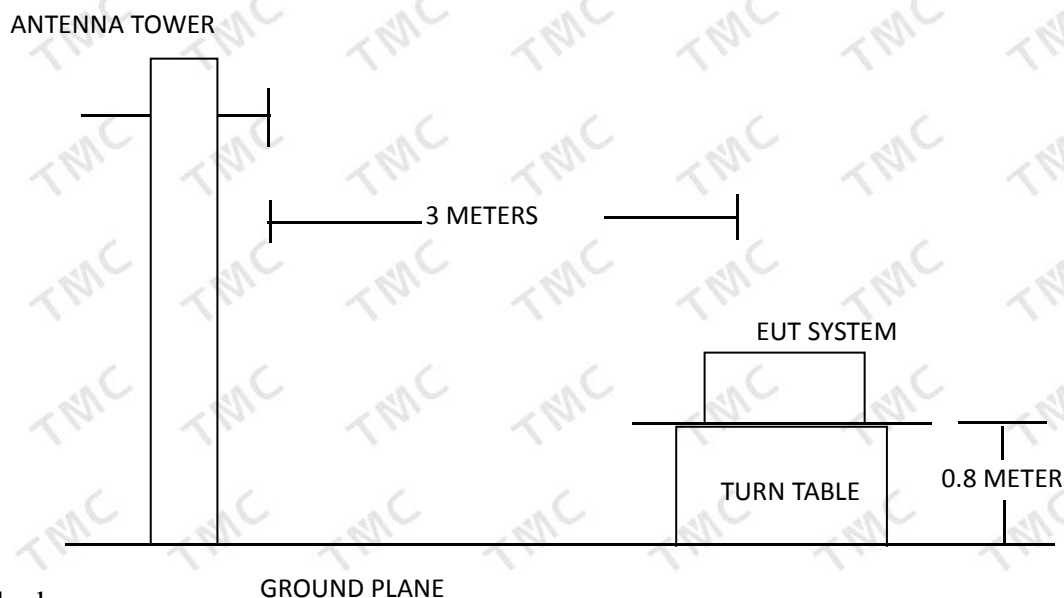
6.1. Block Diagram of EUT Configuration

6.1.1. Block Diagram of connection between the EUT and the simulators



(EUT: Karaoke Mini Bluetooth Microphone Speaker Set)

6.1.2. Anechoic Chamber Test Setup Diagram



6.2. Test Standard

FCC Part 15, Subpart B, Class B

6.3. Radiated Emission Limit (Class B)

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB μ V/m)
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0

Note: (1) The smaller limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT or system.

6.4. EUT Configuration on Test

The following equipment are installed on Radiated Emission Measurement to meet the Commission requirements and operating regulations in a manner which tends to maximize Its emission characteristics in normal application.

6.5. Operating Condition of EUT

6.5.1. Setup the EUT as shown on Section 6.1.2

6.5.2. Turn on the power of all equipments.

6.5.3. Let the EUT work in test mode (EUT working) and measure it.

6.6. Test Procedure

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna (calibrated by dipole antenna) are used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on measurement.

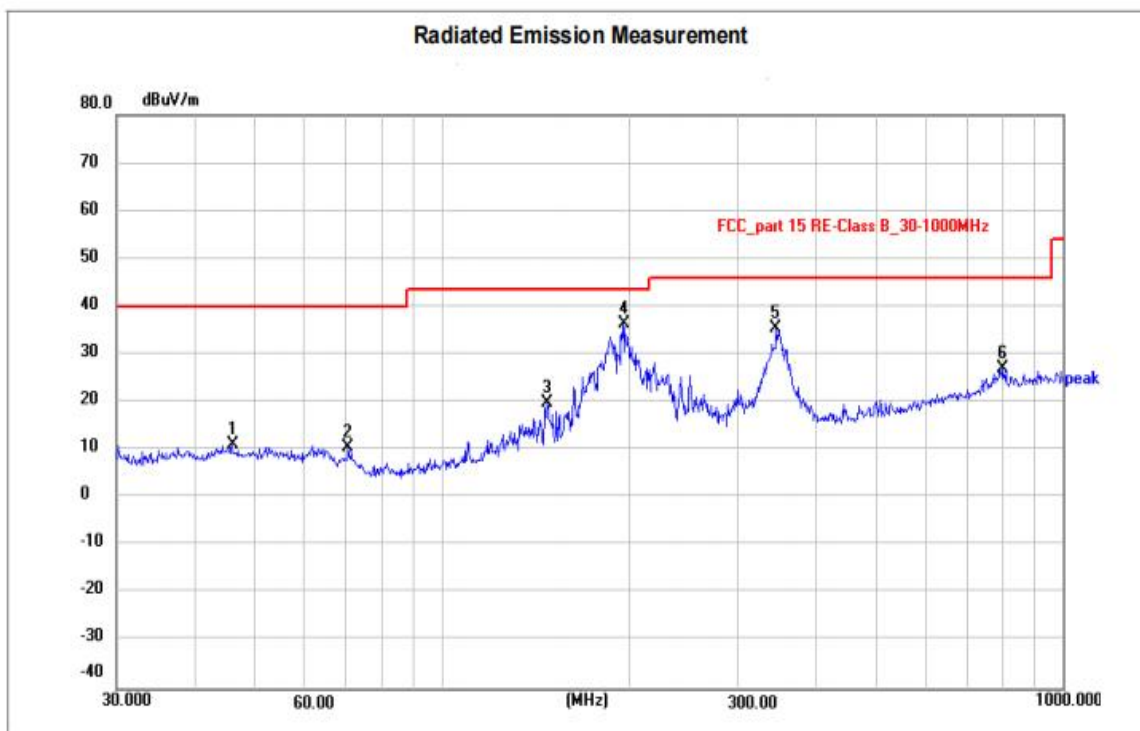
The bandwidth setting on the test receiver (R&S TEST RECEIVER ESCIS28A) is 120 KHz. The EUT is tested in Anechoic Chamber. The frequency range from 30MHz to 1000 MHz is checked. All the test results are listed in Section 6.7. and all the scanning waveform are attached within **Appendix I**

6.7. Test Result

PASS

Test Mode: operating

APPENDIX I



Site LAB

 Polarization: **Horizontal**

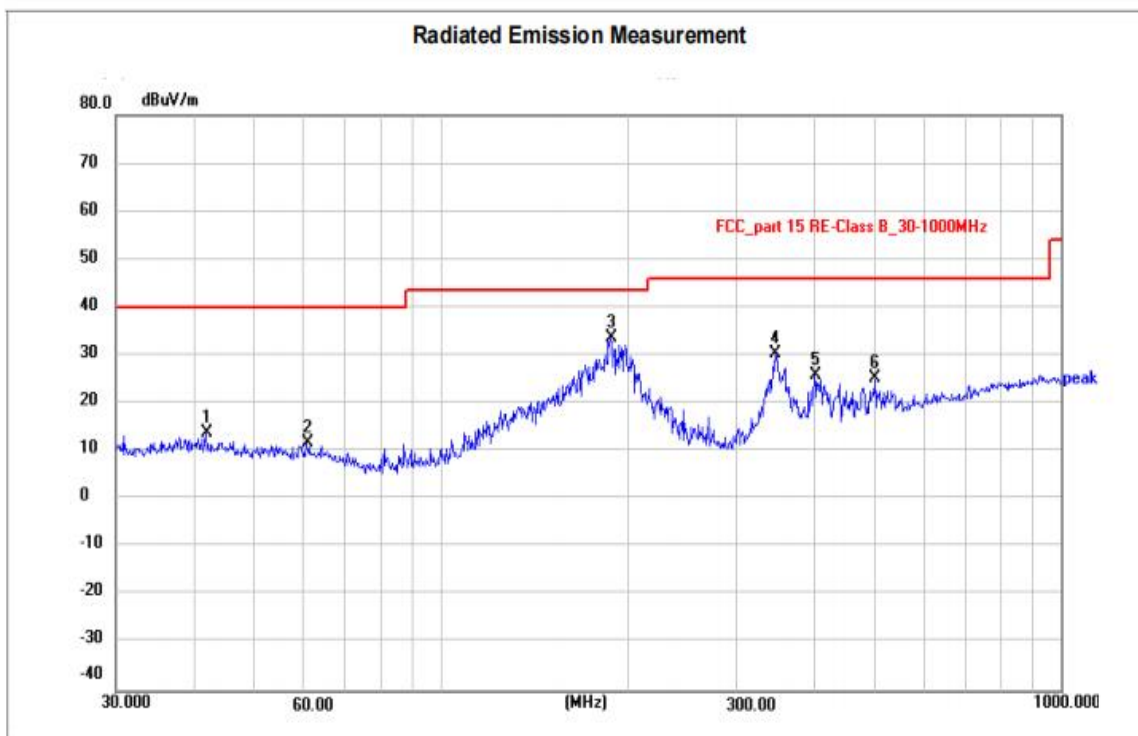
Temperature: 26(C)

Limit: FCC_part 15 RE-Class B_30-1000MHz

Power: DC3.7V

Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	46.0164	27.59	-16.49	11.10	40.00	-28.90	peak	100	0	P	
2	70.8315	29.50	-18.82	10.68	40.00	-29.32	peak	100	0	P	
3	147.9214	35.95	-16.10	19.85	43.50	-23.65	peak	100	0	P	
4 *	195.8220	55.45	-19.09	36.36	43.50	-7.14	peak	100	0	P	
5	345.5952	49.80	-14.45	35.35	46.00	-10.65	peak	100	0	P	
6	798.9797	31.68	-4.61	27.07	46.00	-18.93	peak	100	0	P	



Site LAB

 Polarization: **Vertical**

Temperature: 26(C)

Limit: FCC_part 15 RE-Class B_30-1000MHz

Power: DC3.7V

Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	41.8596	30.18	-16.36	13.82	40.00	-26.18	peak	100	180	P	
2	60.9176	29.07	-17.18	11.89	40.00	-28.11	peak	100	180	P	
3 *	187.7530	52.12	-18.51	33.61	43.50	-9.89	peak	100	180	P	
4	346.8092	44.63	-14.41	30.22	46.00	-15.78	peak	100	180	P	
5	400.4319	39.06	-13.09	25.97	46.00	-20.03	peak	100	180	P	
6	501.1790	35.76	-10.66	25.10	46.00	-20.90	peak	100	180	P	

APPENDIX II

Photo 1 Radiated Emission Test



Photo 2 General Appearance of the EUT



Photo 3 General Appearance of the EUT

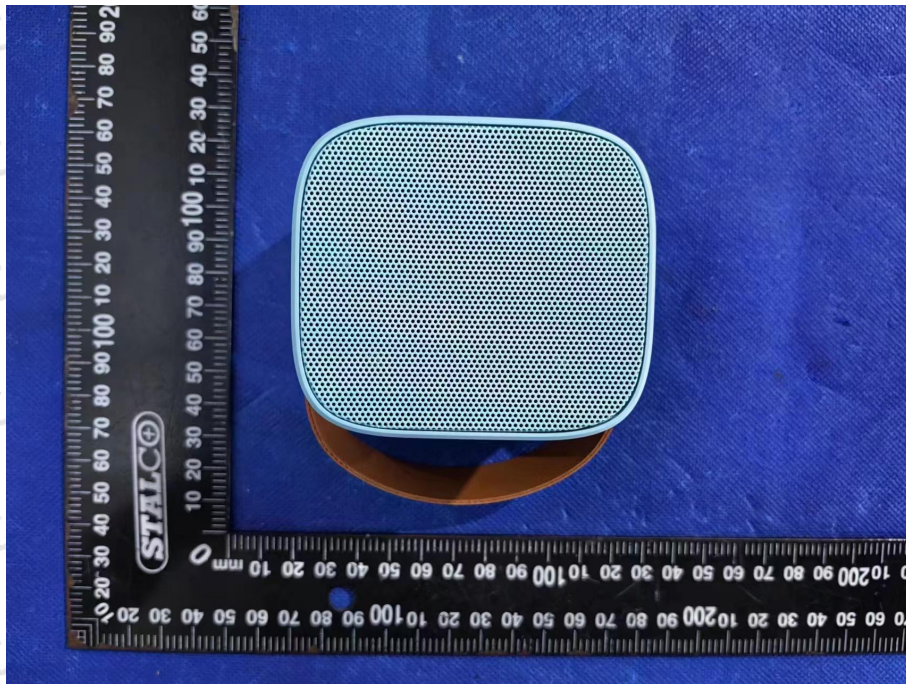


Photo 4 General Appearance of the EUT



Photo 5 General Appearance of the EUT



Photo 6 General Appearance of the EUT

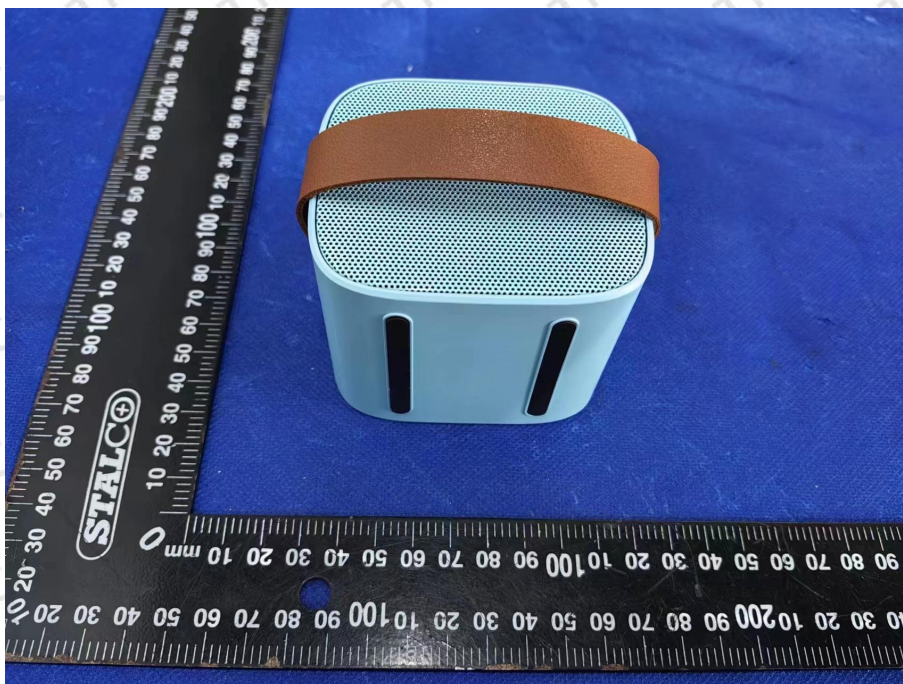


Photo 7 General Appearance of the EUT

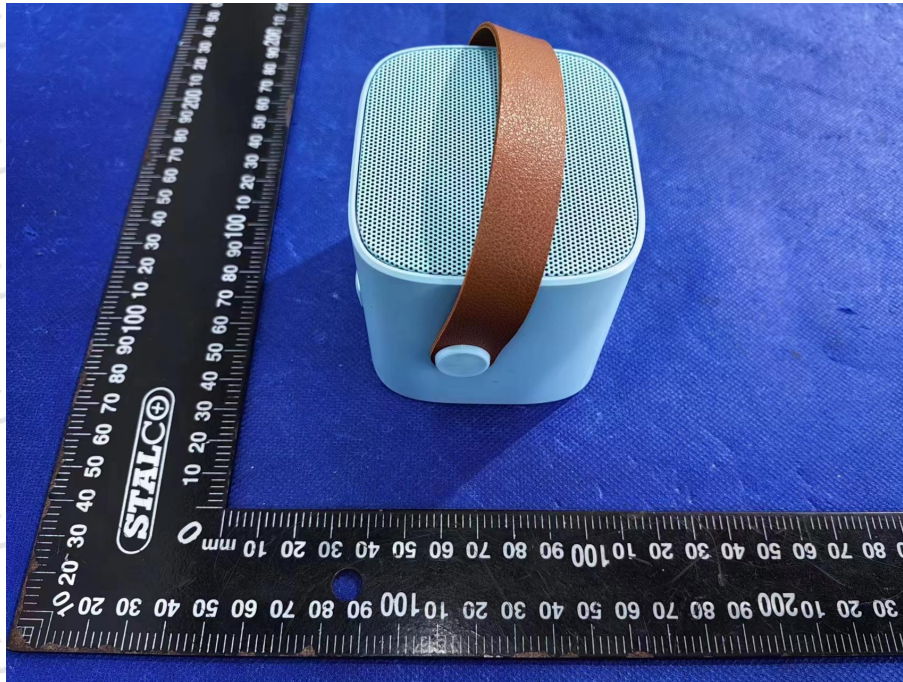


Photo 8 General Appearance of the EUT



Photo 9 General Appearance of the EUT

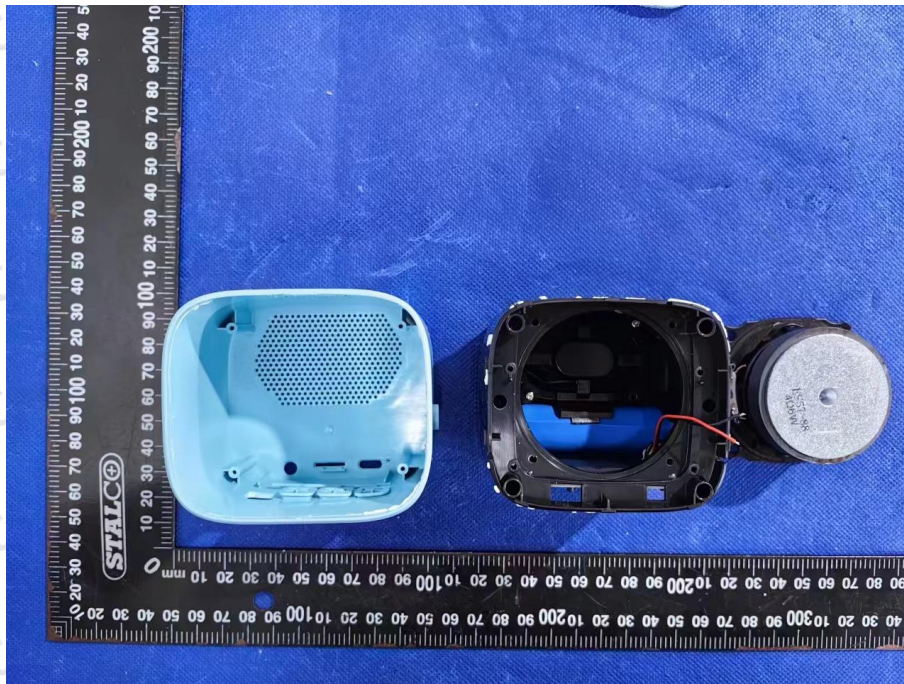


Photo 10 General Appearance of the EUT

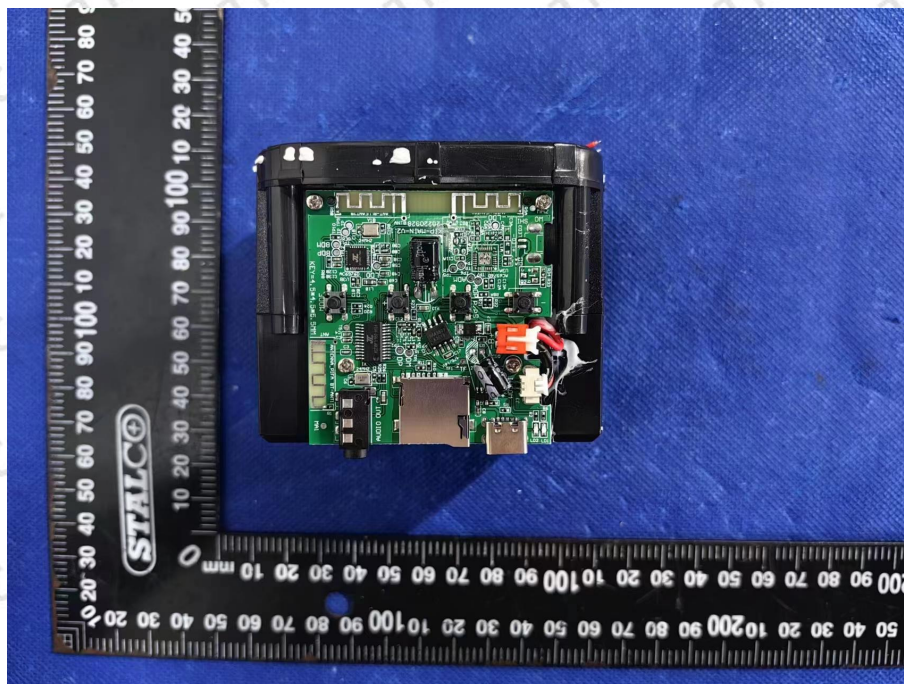
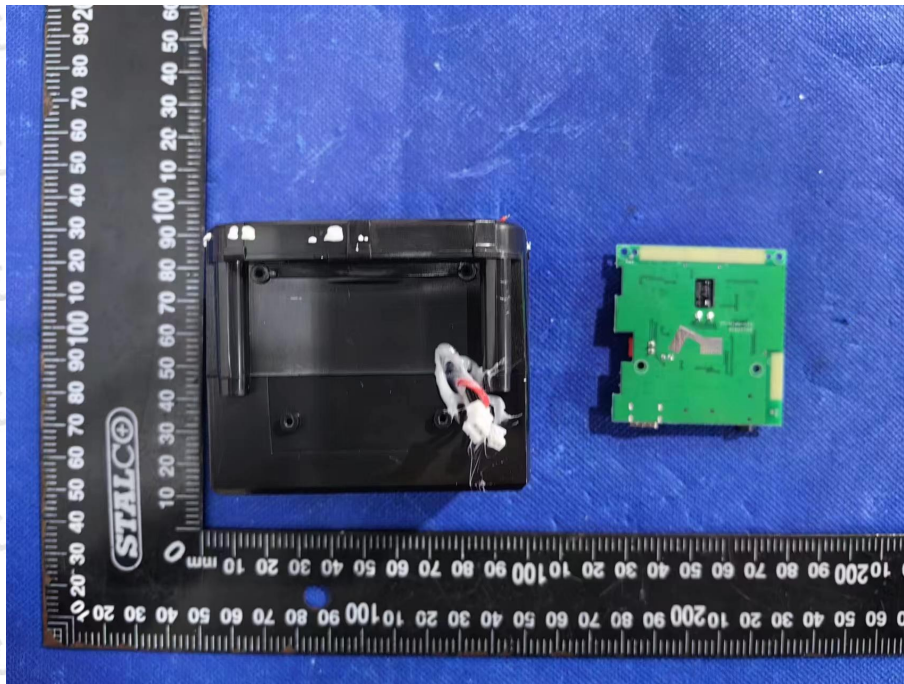


Photo 11 General Appearance of the EUT



******END OF REPORT******

Verification of Compliance

Verification No.: MK23060045-P01C02

Name and address of Applicant: **Shenzhen Shiwei Industrial Co., Ltd.**
Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province

Name and address of Manufacturer: **Shenzhen Shiwei Industrial Co., Ltd.**
Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province

Product name: **Karaoke Mini Bluetooth Microphone Speaker Set**

Product model(s): Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Product trademark: shiwei/basix

This verification confirms that the product meets the requirements of the following standard.
The conformity was demonstrated based on following standard(s) listed by European Commission as harmonized with Directive RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU

IEC 62321-1:2013	IEC 62321-3-1:2013
IEC 62321-4:2013/AMD1:2017	IEC 62321-5:2013
IEC 62321-6:2015	IEC 62321-7-1:2015
IEC 62321-7-2:2017	IEC 62321-8:2017

The verification has been carried out in accordance with individual rules and conditions agreed with the applicant. Evaluation has been carried out in accordance with:

Test report(s) No.: MK23060045-P01C02

Test conducted by: TMC Testing Services (Shenzhen) Co., Ltd.

Verification issue date: June 16, 2023

Notes:

This verification refers to the above mentioned product and its conformity in regards of above mentioned standard(s) was proven on test sample.

This verification does not imply meeting all essential requirements, assessment of the series-production or any other restricted Notified Bodies conformity assessment procedure appropriate for the product.

This verification holder shall use this verification in connection to verification of conformity and technical data relevant for the product the verification was issued.

TMC Testing Services (Shenzhen) Co., Ltd.

t:86-755-86642861 cert@tmc-lab.com www.tmc-lab.com

1st Floor, Block A1, Zone A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shiyuan Street, Baoan District, Shenzhen, China



Lab Director
Vivian Jiang





APPLICATION FOR EMC DIRECTIVE

On Behalf of

Shenzhen Shiwei Industrial Co., Ltd.

Karaoke Mini Bluetooth Microphone Speaker Set

Trade Name: shiwei/basix

Model: Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Prepared For : **Shenzhen Shiwei Industrial Co., Ltd.**
Room 101-104, Building A2, Ailian Taichung Industrial Zone,
Longgang District, Shenzhen City, Guangdong Province

Prepared By : **TMC Testing Services (Shenzhen) Co., Ltd**
1/F., Block A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan
Road, Shilong Community, Shiyan Street, Baoan District, Shenzhen,
China
Tel: +86-755- 86642861
Web: www.tmc-lab.com
E-mail: Cert@tmc-lab.com

Date of Test: June 12, 2023-June 16, 2023

Date of Report: June 16, 2023

Report Number: MK23060045-P01E03

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8.1. Block Diagram of Test Setup	20
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8.3. Severity Levels and Performance Criterion	20
8.4. EUT Configuration on Test	20

8.5 Operating Condition of EUT	21
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TEST REPORT DECLARATION

Applicant	:	Shenzhen Shiwei Industrial Co., Ltd.
Address	:	Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
EUT Description	:	Karaoke Mini Bluetooth Microphone Speaker Set
Model Number	:	Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Test Standards:

EN 55032:2015+A11:2020**EN 55035:2017 +A11:2020**

The EUT described above is tested by TMC Testing Services (Shenzhen) Co., Ltd EMC Laboratory to determine the maximum emissions from the EUT and ensure the EUT to be compliance with the immunity requirements of the EUT. TMC Testing Services (Shenzhen) Co., Ltd EMC Laboratory is assumed full responsibility for the accuracy of the test results. Also, this report shows that the EUT technically complies with the 2014/30/EU directive and its amendment requirements.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Prepared by :



Peishuang Wu/Assistant

Approved & Authorized Signer :

Vivian Jiang / Manager

1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	Test Results
Radiated Emission	PASS
Electrostatic Discharge Immunity	PASS
Radiated Electromagnetic Fields Immunity	PASS
Magnetic Field Immunity	PASS

2. GENERAL INFORMATION

2.1. Report information

- 2.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that TMC approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that TMC in any way guarantees the later performance of the product/equipment.
- 2.1.2. The sample/s mentioned in this report is/are supplied by Applicant, TMC therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.
- 2.1.3. Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through TMC, unless the applicant has authorized TMC in writing to do so.

2.2. Measurement Uncertainty

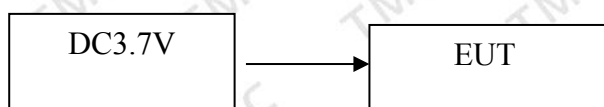
Available upon request.

3. PRODUCT DESCRIPTION

3.1. EUT Description

Description	:	Karaoke Mini Bluetooth Microphone Speaker Set
Applicant	:	Shenzhen Shiwei Industrial Co., Ltd. Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
Manufacturer	:	Shenzhen Shiwei Industrial Co., Ltd. Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province
Model Number	:	Y1

3.2. Block Diagram of EUT Configuration



3.3. Operating Condition of EUT

Test mode : operating

3.4. Support Equipment List

N/A

3.5. Test Conditions

Temperature: 23-26℃

Relative Humidity: 55-68 %

3.6. Modifications

No modification was made.

3.7. Abbreviations

AC	Alternating Current
AMN	Artificial Mains Network
DC	Direct Current
EM	ElectroMagnetic
EMC	ElectroMagnetic Compatibility
EUT	Equipment Under Test
IF	Intermediate Frequency
RF	Radio Frequency
rms	root mean square
EMI	Electromagnetic Interference
EMS	Electromagnetic Susceptibility

3.8. Performance Criterion

Criterion A: The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended.

Criterion B: After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended.

Criterion C: Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions.

4. TEST EQUIPMENT USED

4.1. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration time	Recalibration time
1.	Test Receiver	Rohde&Schwarz	ESC17(9kHz-7GHz)	100336	Oct.28, 22	Oct.27, 23
2.	Broadband antenna	Schwarzbeck	VULB9168	01222	Oct.28, 22	Oct.27, 23
3.	Horn antenna	Schwarzbeck	BBHA9120D	02476	Oct.28, 22	Oct.27, 23
4.	Preamplifier	Schwarzbeck	BBV9745	00250	Oct.28, 22	Oct.27, 23
5.	Preamplifier	N/A	TRLA-01018G440B	21081001	Oct.28, 22	Oct.27, 23
6.	3M method semi anechoic chamber	SKET	9m*6m*6m	2021082304	Oct.14,21	Oct.13,24
7.	Pointer hygrometer	M&G	ARC92570	N/A	Oct.28, 22	Oct.27, 23

4.2. For Electrostatic Discharge Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration time	Recalibration time
1.	Electrostatic analog generator	LIONCEL	ESD-203B	0210502	Oct.28, 22	Oct.27, 23

4.3. For RF Strength Susceptibility Test

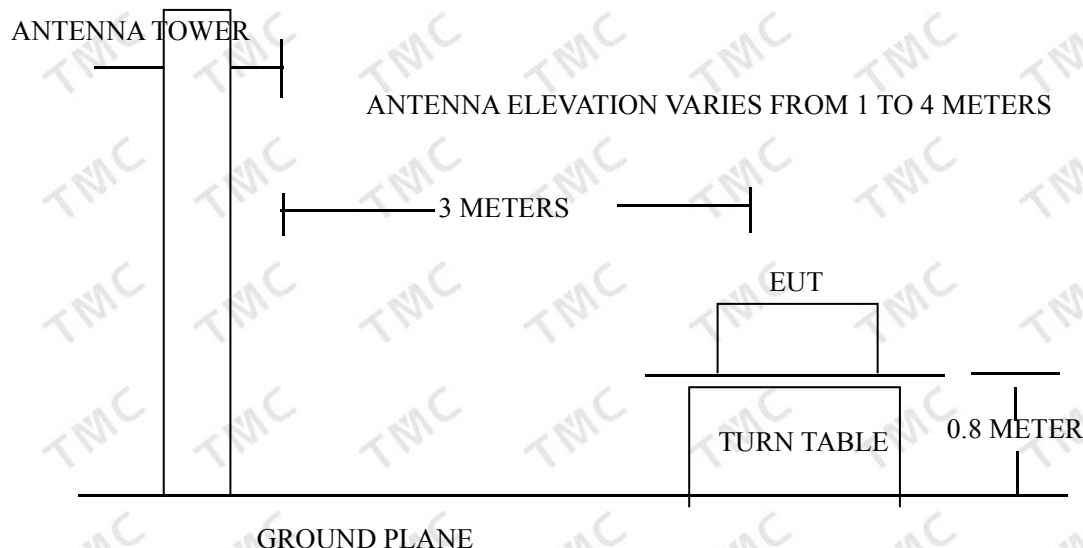
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Recalibration time
1.	Signal Generator	HP	8648A	3633A02081	Oct.28, 22	Oct.27, 23
2.	Amplifier	A&R	500A100	17034	NCR	NCR
3.	Amplifier	A&R	100W/1000M1	17028	NCR	NCR
4.	Isotropic Field Monitor	A&R	FM2000	16829	NCR	NCR
5.	Isotropic Field Probe	A&R	FLW220100	16755	Oct.28, 22	Oct.27, 23
6.	Biconic Antenna	EMCO	3108	9507-2534	NCR	NCR
7.	Log-periodic Antenna	A&R	AT1080	16812	NCR	NCR
8.	PC	N/A	486DX2	N/A	N/A	N/A

4.4. For Magnetic Field Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power frequency magnetic field testing system	LIONCEL	PMF-801C-C	083858-10	Nov.15,22	Nov.16,23

5. RADIATED EMISSION TEST

5.1. Open Site Setup Diagram



5.2. Test Standard

EN 55032:2015+A11:2020

5.3. Radiated Emission Limit

All emanations from a Class B computing devices or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB μ V/m)
30 ~ 230	3	40
230 ~ 1000	3	47

Note:(1) The tighter limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instruments antenna and the closed point of any part of the EUT.

FREQUENCY (GHz)	DISTANCE (Meters)	Average limit (dB μ V/m)	Peak limit (dB μ V/m)
1 ~ 3	3	50	70
3 ~ 6	3	54	74

Note :The lower limit applies at the transition frequency.

5.4. EUT Configuration on Test

The EN55032 Class B regulations test method must be used to find the maximum emission during radiated emission test.

5.5. Operating Condition of EUT

- 5.5.1. Setup the EUT as shown on Section 5.1.
- 5.5.2. Turn on the power of all equipments.
- 5.5.3. Let the EUT work in test mode and measure it.

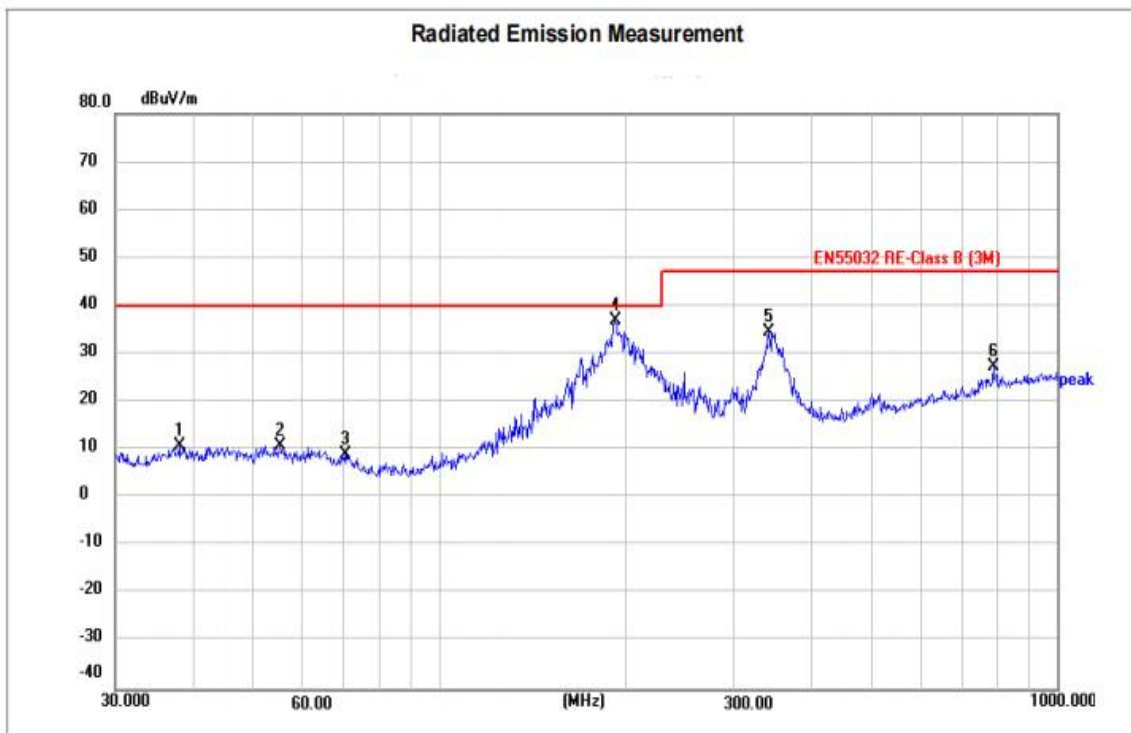
5.6. Test Procedure

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna (calibrated by dipole antenna) are used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test. The bandwidth setting on the test receiver (R&S TEST RECEIVER ESCS20) is 120 KHz. The EUT is tested in Anechoic Chamber

5.7. Test Results

PASS.

Test Mode: operating



Site LAB

 Polarization: **Horizontal**

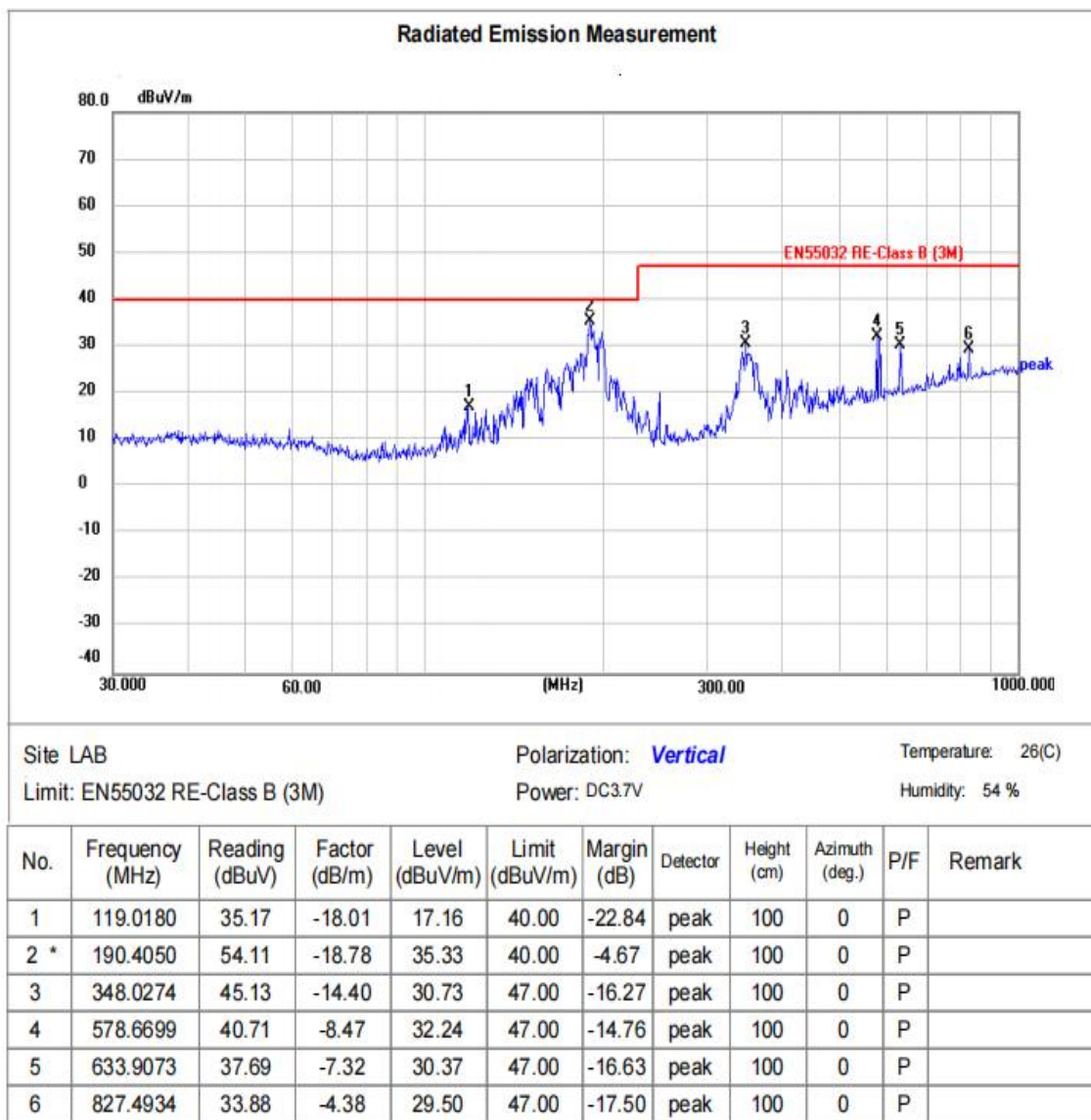
Temperature: 26(C)

Limit: EN55032 RE-Class B (3M)

Power: DC3.7V

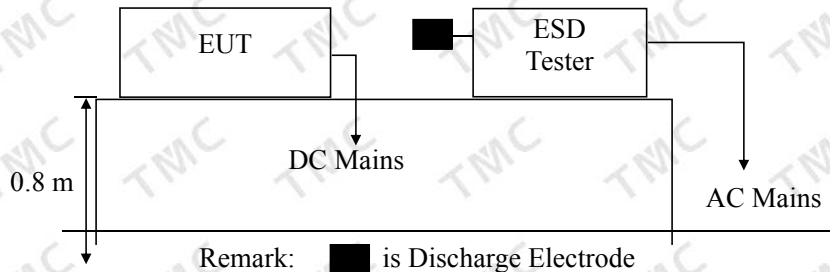
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	38.0783	27.34	-16.58	10.76	40.00	-29.24	peak	100	180	P	
2	55.4147	27.76	-16.86	10.90	40.00	-29.10	peak	100	180	P	
3	70.5836	27.81	-18.77	9.04	40.00	-30.96	peak	100	180	P	
4 *	192.4186	55.78	-18.90	36.88	40.00	-3.12	peak	100	180	P	
5	341.9786	49.19	-14.53	34.66	47.00	-12.34	peak	100	180	P	
6	787.8513	32.01	-4.77	27.24	47.00	-19.76	peak	100	180	P	



6. ELECTROSTATIC DISCHARGE TEST

6.1. Block Diagram of ESD Test Setup



6.2. Test Standard

EN 55035:2017 +A11:2020

Severity Level 3 for Air Discharge at 8KV

Severity Level 2 for Contact Discharge at 4KV

6.3. Severity Levels and Performance Criterion

6.3.1. Severity level

Level	Test Voltage Contact Discharge (KV)	Test Voltage Air Discharge (KV)
1.	2	2
2.	4	4
3.	6	8
4.	8	15
X.	Special	Special

6.3.2. Performance criterion: B

6.4. EUT Configuration on Test

The configuration of EUT are listed in Section 3.2.

6.5. Operating Condition of EUT

6.5.1. Setup the EUT as shown in Section 9.1.

6.5.2. Turn on the power of all equipments.

6.5.3. Let the EUT work in test mode (full load) and test it.

6.6. Test Procedure

6.6.1. Air Discharge:

This test is done on a non-conductive surfaces. The round discharge tip of the discharge

electrode shall be approached as fast as possible to touch the EUT.

After each discharge, the discharge electrode shall be removed from the EUT.

The generator is then re-triggered for a new single discharge and repeated 10 times

for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

6.6.2. Contact Discharge:

All the procedure shall be same as Section 9.6.1. except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

6.6.3. Indirect discharge for horizontal coupling plane

At least 20 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT. The discharge electrode positions vertically at a distance of 0.1m from the EUT and with the discharge electrode touching the coupling plane.

6.6.4. Indirect discharge for vertical coupling plane

At least 20 single discharge shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

6.7. Test Results

PASS.

Please refer to the following page.

Electrostatic Discharge Test Results

TMC Testing Services (Shenzhen) Co., Ltd

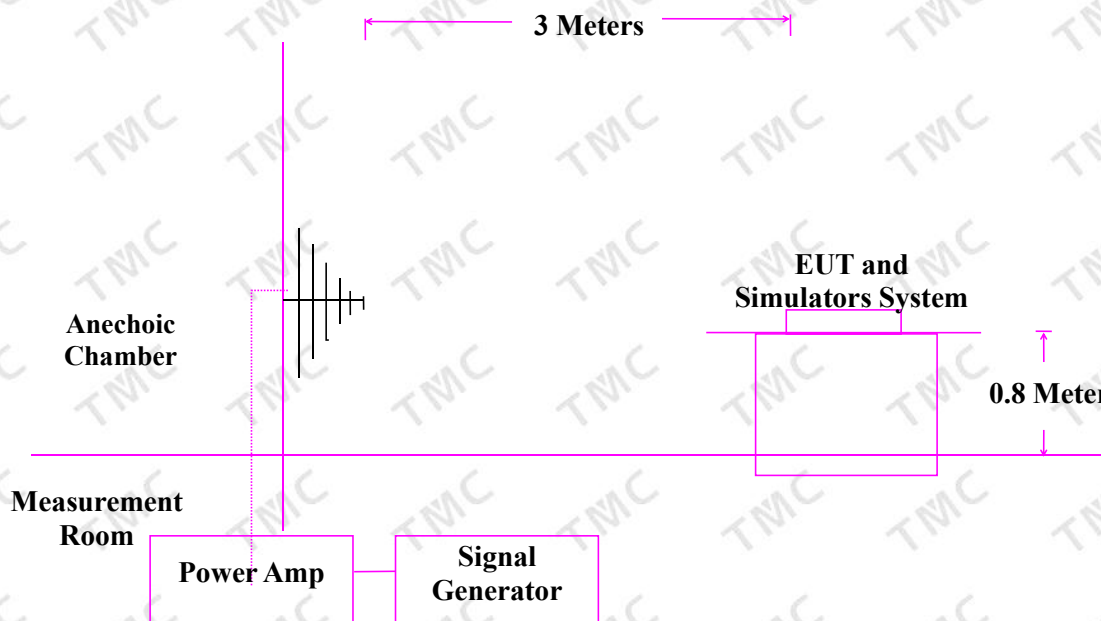
Date: June 16, 2023

Applicant :	Shenzhen Shiwei Industrial Co., Ltd.	Test Date :	June 16, 2023
EUT :	Karaoke Mini Bluetooth Microphone Speaker Set	Temperature :	22 °C
M/N :	YI	Humidity :	50 %
Power Supply :	DC3.7V	Test Mode :	Operating
Test Engineer :	Simon		
Air Discharge: $\pm 8KV$ For each point positive 10 times and negative 10 times discharge. Contact Discharge: $\pm 4KV$			
Location		Kind (A-Air Discharge C-Contact Discharge)	Result (PASS)
surface Slots	15 points	Air Discharge	A
interface Slots	6 points	Air Discharge	A
surface	10 points	Air Discharge	A
HCP	8 points	Contact Discharge	A
VCP	8 points	Contact Discharge	A

Discharge should be considered on Contact and Air and Horizontal Coupling Plane (HCP) and Vertical Coupling Plane (VCP).

7. RF FIELD STRENGTH SUSCEPTIBILITY TEST

7.1. R/S Test Setup



7.2. Test Standard

EN 55035:2017 +A11:2020
Severity Level 2 at 3V / m

7.3. Severity Levels and Performance Criterion

7.3.1. Severity level

Level	Field Strength V/m
1.	1
2.	3
3.	10
X.	Special

7.3.2. Performance criterion : A

7.4. EUT Configuration on Test

The configuration of EUT are listed in Section 3.2

7.5. Operating Condition of EUT

Setup the EUT as shown in Section 10.1.. The operating condition of EUT are listed in section 3.3.

7.6. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above the ground. The EUT is set 3 meters away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of EUT must be faced this transmitting antenna and measured individually.

In order to judge the EUT performance, a CCD camera is used to monitor the EUT.

All the scanning conditions are as follows :

Condition of Test	Remarks
1.Fielded Strength	3 V/m (Severity Level 2)
2.Radiated Signal	Modulated
3.Scanning Frequency	80 - 1000 MHz
4.Sweeping time of radiated	0.0015 decade/s
5.Dwell Time	1 Sec.

7.7. Test Results

PASS.

Please refer to the following page.

RF Field Strength Susceptibility Test Results

TMC Testing Services (Shenzhen) Co., Ltd

Date: June 16, 2023

Applicant :	Shenzhen Shiwei Industrial Co., Ltd.	Test Date :	June 16, 2023
EUT :	Karaoke Mini Bluetooth Microphone Speaker Set	Temperature :	22 °C
M/N :	YI	Humidity :	50 %
Power Supply :	DC3.7V	Test Mode :	Operating
Test Engineer :	Simon	Frequency Range :	80 MHz to 1000 MHz
Modulation: ☒ AM ☐ Pulse ☐ none 1 KHz 80%			
Criterion : A			
	Frequency Rang : 80-1000		
Steps	1%	1%	
	Horizontal	Vertical	
Front	A(pass)	A(pass)	
Right	A(pass)	A(pass)	
Rear	A(pass)	A(pass)	
Left	A(pass)	A(pass)	

8. MAGNETIC FIELD IMMUNITY TEST

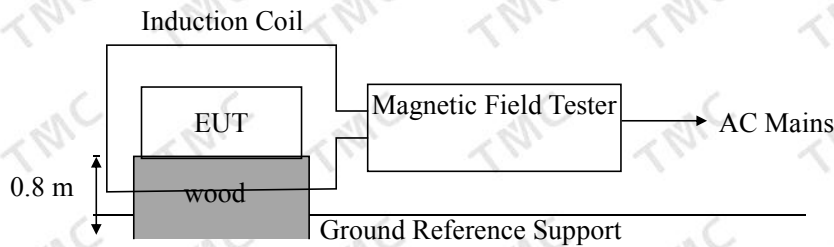
8.1. Block Diagram of Test Setup

8.1.1. Block Diagram of the EUT



(EUT: Karaoke Mini Bluetooth Microphone Speaker Set)

8.1.2. Block Diagram of Test Setup



8.2. Test Standard

EN 55035:2017 +A11:2020
 Severity Level 2 at 3V / m

8.3. Severity Levels and Performance Criterion

8.3.1. Severity level

Level	Magnetic Field Strength A/m
1.	1
9.	3
10.	10
11.	30
12.	100
X.	Special

8.3.2 Performance criterion : A

8.4 EUT Configuration on Test

The configuration of EUT are listed in Section 3.2.

8.5 Operating Condition of EUT

8.5.1 Setup the EUT as shown in Section 14.1

8.5.2 Turn on the power of all equipments.

8.5.3 Let the EUT work in test mode (ON) and test it.

8.6. Test Procedure

The EUT shall be subjected to the test magnetic field by using the induction coil of standard dimensions (1m*1m) and shown in Section 14.1. The induction coil shall then be rotated by 90° in order to expose the EUT to the test field with different orientations.

1.7. Test Results

PASS.

Please refer to the following page.

Magnetic Field Immunity Test Results

TMC Testing Services (Shenzhen) Co., Ltd

Applicant: Shenzhen Shiwei Industrial Co., Ltd.			Test Date :June 16, 2023	
EUT : Karaoke Mini Bluetooth Microphone Speaker Set			Temperature :26 ℃	
M/N : Y1			Humidity : 60 %	
Power Supply : DC3.7V			Test Engineer :Davis	
Test Model: <u>ON</u>				
Test Level	Testing Duration	Coil Orientation	Criterion	Result
3A/M	5 mins	Horizontal	A	PASS
3A/M	5 mins	Vertical	A	PASS
Remark:		Test Equipment : Magnetic Field Tester MAG100		

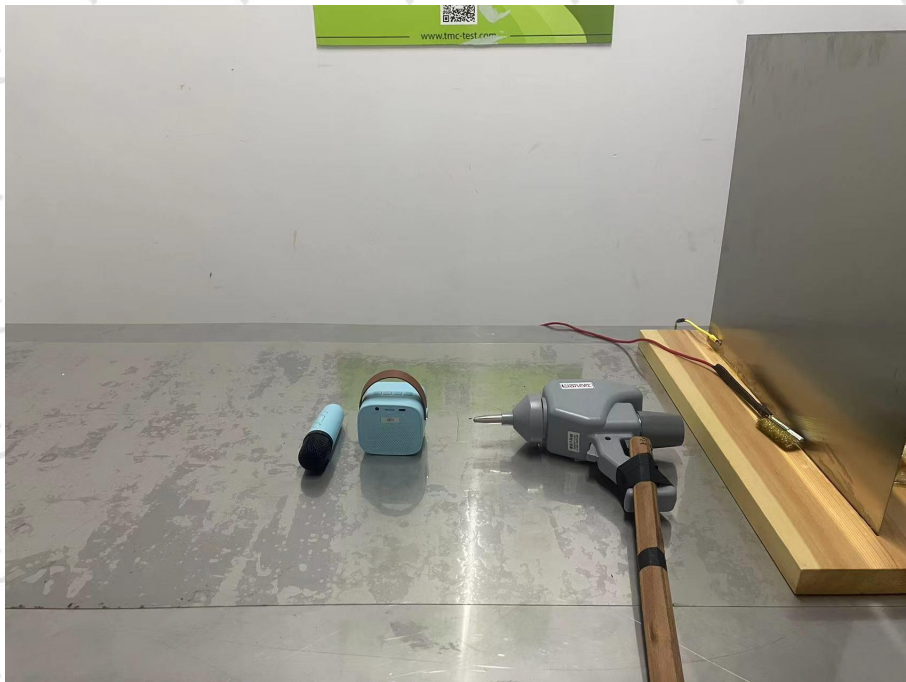
APPENDIX I

(TEST SETUP PHOTOGRAPHS)

RADIATED EMISSION MEASUREMENT



ELECTROSTATIC DISCHARGE IMMUNITY



APPENDIX II

(Photos of the EUT)

Photo 1 General Appearance of the EUT



Photo 2 General Appearance of the EUT

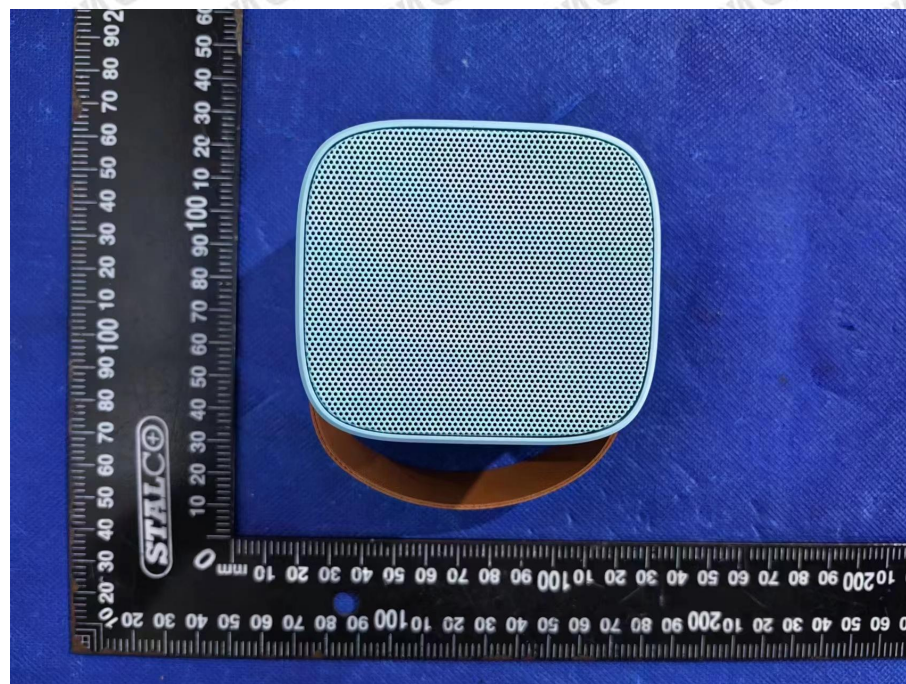


Photo 3 General Appearance of the EUT



Photo 4 General Appearance of the EUT



Photo 5 General Appearance of the EUT

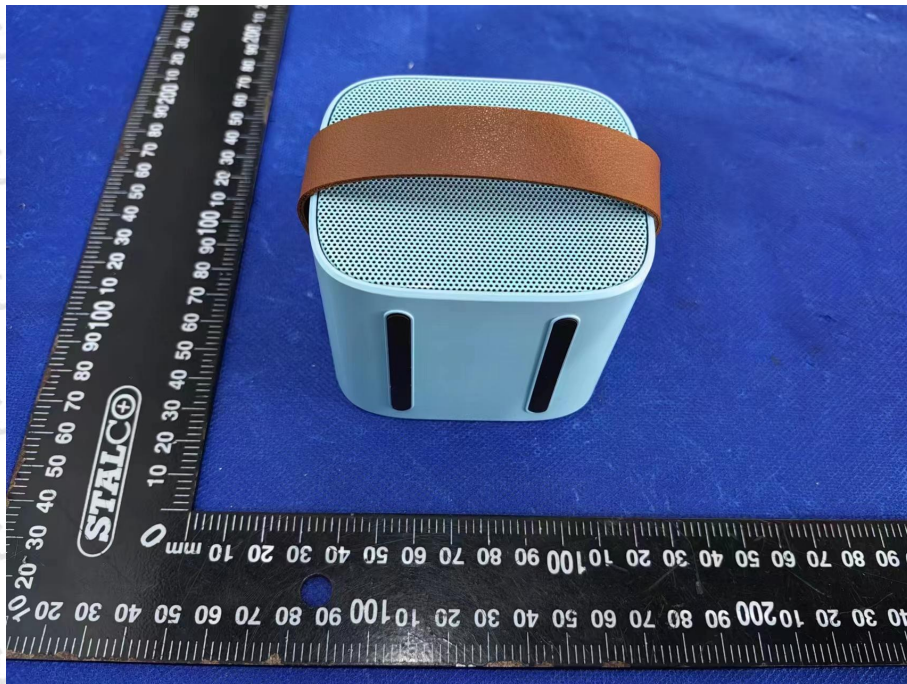


Photo 6 General Appearance of the EUT

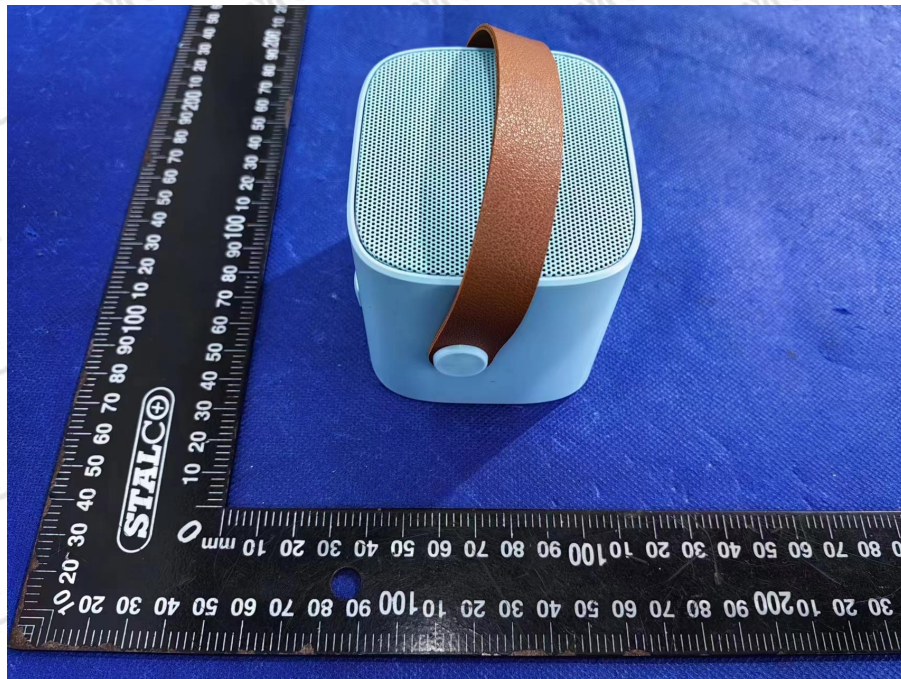


Photo 7 General Appearance of the EUT

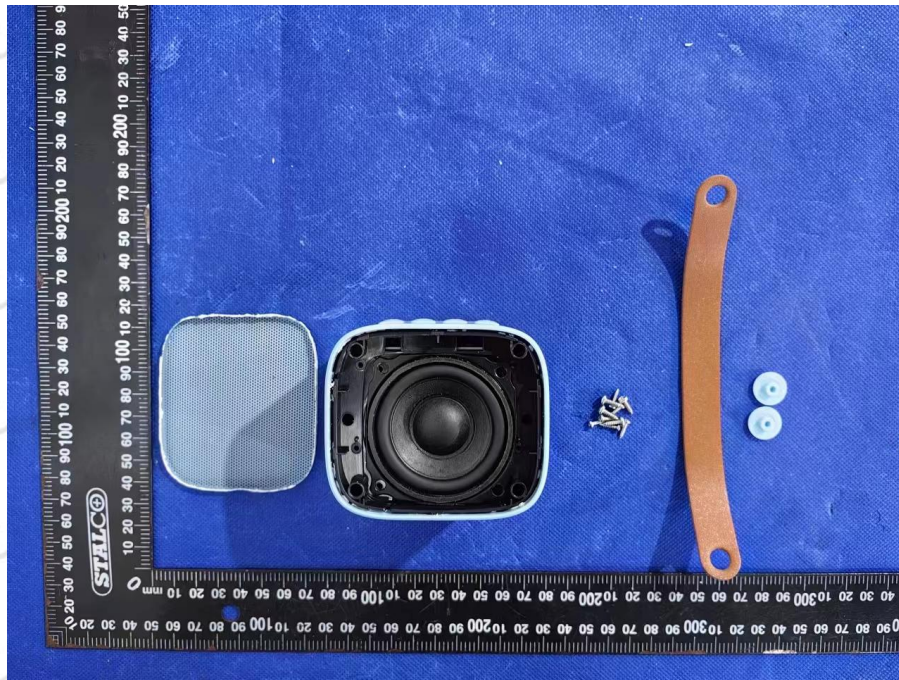


Photo 8 General Appearance of the EUT

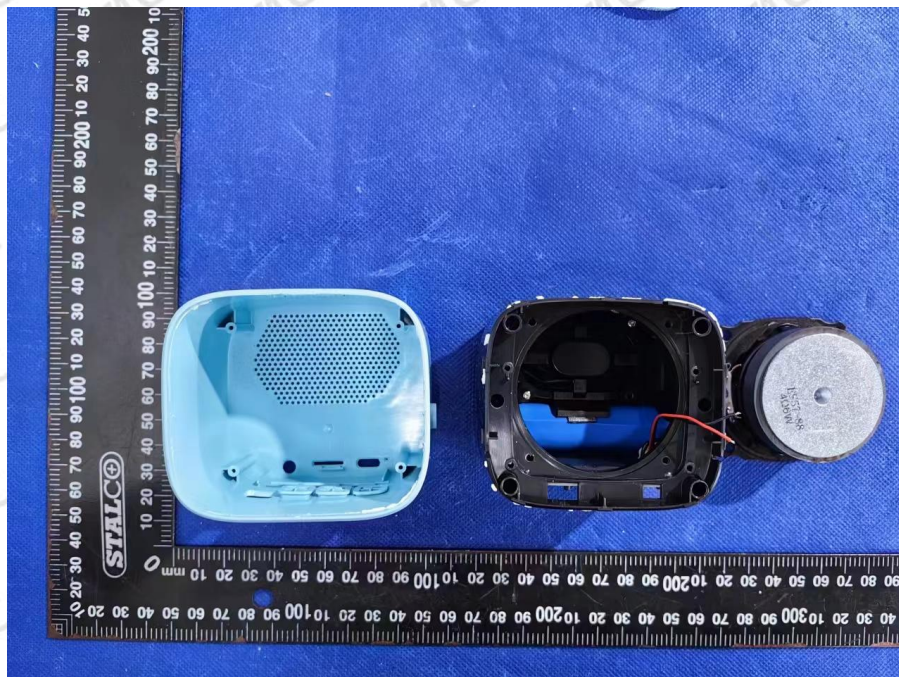
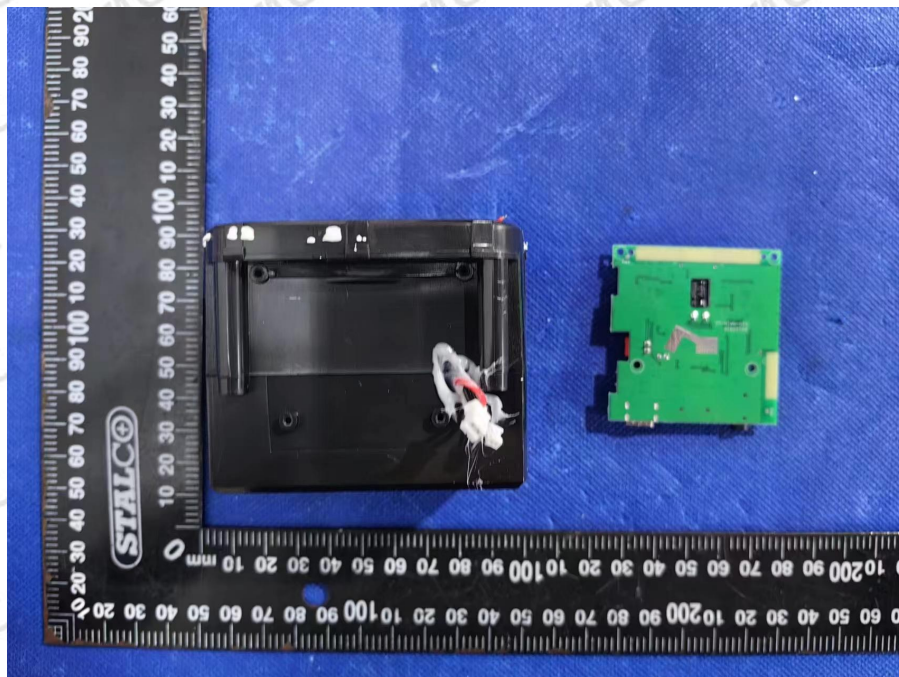


Photo 9 General Appearance of the EUT



Photo 10 General Appearance of the EUT



******END OF REPORT******

Applicant Shenzhen Shiwei Industrial Co., Ltd.
Address Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District,
Shenzhen City, Guangdong Province
Manufacturer Shenzhen Shiwei Industrial Co., Ltd.
Address Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District,
Shenzhen City, Guangdong Province

The following sample(s) was /were submitted and identified on behalf of the clients as :

Sample Name: Karaoke Mini Bluetooth Microphone Speaker Set

Model Name: Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Trade Name: shiwei/basix

Sample Received Date: June 12, 2023

Testing Period: June 12, 2023-June 16, 2023

Report Date: June 16, 2023

Test Requested: Selected test (s) in the selected parts as requested by client with the RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU on the restriction of hazardous substances.

Test Method Please refer to next page(s).

Test Result Please refer to next page(s).

Test conclusion: Based upon the performed tests by submitted samples, the test results comply with the limits of the RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of

Vivian Jiang
Technical Director

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1. Pb, Cd, Cr(VI), Hg, PBBs&PBDEs

Test Method:

A. Disassembly, disjointment and mechanical sample preparation

—Ref. to IEC 62321-2:2013, Disassembly, disjointment and mechanical sample preparation.

B. With reference to IEC 62321-1:2013, tests were performed for the samples indicated by the photos in this report.

(1) Screening – Lead, mercury, cadmium, total chromium and total bromine

—Ref. to IEC 62321-3-1:2013, Screening for Lead, mercury, cadmium, total chromium and total bromine by X-ray fluorescence spectrometry.

(2) Wet chemical test method

Test Item(s)	Test Method	Test Equipment	Unit	MDL	Limit
Pb	IEC62321-5:2013	ICP-OES	mg/kg	2	1000
Cd	IEC62321-5:2013	ICP-OES	mg/kg	2	100
Hg	IEC 62321-4:2013 /AMD1:2017	ICP-OES	mg/kg	2	1000
Cr(VI) (Metal)	IEC62321-7-1:2015	UV-Vis	μg/cm ²	0.1	0.13
Cr(VI) (Nonmetal)	IEC62321-7-2:2017	UV-Vis	mg/kg	8	1000
PBBs	IEC62321-6:2015	GC-MS	mg/kg	5	100
PBDEs	IEC62321-6:2015	GC-MS	mg/kg	5	1000

Test result(s):

No.	Sample Description	Results of XRF					Chemical confirmation results (mg/kg)	Conclusion
		Pb	Cd	Hg	Cr	Br		
1	PCB	BL	BL	BL	BL	BL	---	PASS
2	USB interface	BL	BL	BL	BL	---	---	PASS
3	Electric capacity	BL	BL	BL	BL	BL	---	PASS
4	Black plastic	BL	BL	BL	BL	BL	---	PASS
5	Battery	BL	BL	BL	BL	BL	---	PASS
6	Black wire	BL	BL	BL	BL	BL	---	PASS
7	Blue metal mesh	BL	BL	BL	BL	---	---	PASS
8	Silver metal	BL	BL	BL	BL	---	---	PASS
9	Red wire	BL	BL	BL	BL	BL	---	PASS
10	Blue plastic shell	BL	BL	BL	BL	BL	---	PASS

Remark:

- It is the result on total Br while test item on restricted substances is PBBs/PBDEs. It is the result on total Cr while test item on restricted substances is Cr(VI).
- The XRF screening test for RoHS elements-The reading may be different to the actual content in the sample be of non-uniformity composition.
- Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Pb, Cd, Hg), UV-VIS for Cr(VI) and GC/MSD (for PBBs/PBDEs) is recommended to be performed if the concentration exceeds the below warning value according to IEC 62321-3-1:2013.

Attached table 1, XRF screening limits in mg/kg for regulated elements in various matrices:

Element	Polymer Material	Metallic Material	Composite Material
Pb	$BL \leq 700-3 \sigma \leq X < 1300+3 \sigma \leq OL$	$BL \leq 700-3 \sigma \leq X < 1300+3 \sigma \leq OL$	$BL \leq 500-3 \sigma \leq X < 1500+3 \sigma \leq OL$
Cd	$BL \leq 70-3 \sigma \leq X < 130+3 \sigma \leq OL$	$BL \leq 70-3 \sigma \leq X < 130+3 \sigma \leq OL$	$LOD < X < 150+3 \sigma \leq OL$
Hg	$BL \leq 700-3 \sigma \leq X < 1300+3 \sigma \leq OL$	$BL \leq 700-3 \sigma \leq X < 1300+3 \sigma \leq OL$	$BL \leq 500-3 \sigma \leq X < 1500+3 \sigma \leq OL$
Cr	$BL \leq 700-3 \sigma < X$	$BL \leq 700-3 \sigma < X$	$BL \leq 500-3 \sigma < X$
Br	$BL \leq 300-3 \sigma < X$	--	$BL \leq 250-3 \sigma < X$

XRF detection limits in mg/kg for regulated elements in various material

Element	Polymer Material	Metallic Material	Composite Material
Pb	10	50	50
Cd	10	50	50
Hg	10	50	50
Cr	10	50	50
Br	10	50	50

Note:

- BL = Under the XRF screening limit
- OL = Future chemical test will be conducted while result is above the screening limit
- X = inconclusive, the region where need further chemical testing by ICP-OES (for Pb, Cd, Hg), UV-VIS (for Cr(VI)) and GC/MSD (for PBBs, PBDEs).
- 3 σ =The reproducibility of analytical instruments
- LOD=Detection limit
- “---” = Not Applicable
- mg/kg=0.0001%
- N.D.=Not Detected(<MDL)
- MDL = Method Detection Limit
- Negative = Absence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is less than 0.02 mg/kg with 50cm² sample surface area used.
- *=According to 2011/65/EU Annex, point 6-Lead as an alloying element is steel containing up to 0.35% lead by weight, aluminum containing up to 0.4% lead by weight and as a copper alloy, containing up to 4% lead by weight can be exempted.

2. Phthalates—DBP, BBP, DEHP & DIBP

Test Item(s)	Test Method	Test Equipment	Unit	MDL	Limit
Dibutyl Phthalate(DBP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000
Benzylbutyl Phthalate (BBP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000
Diisobutyl phthalate (DIBP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000

Test result(s):

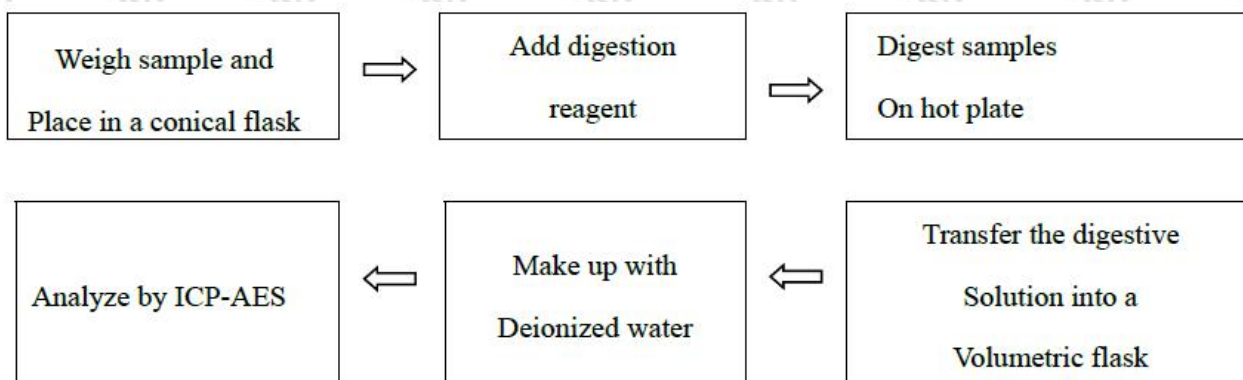
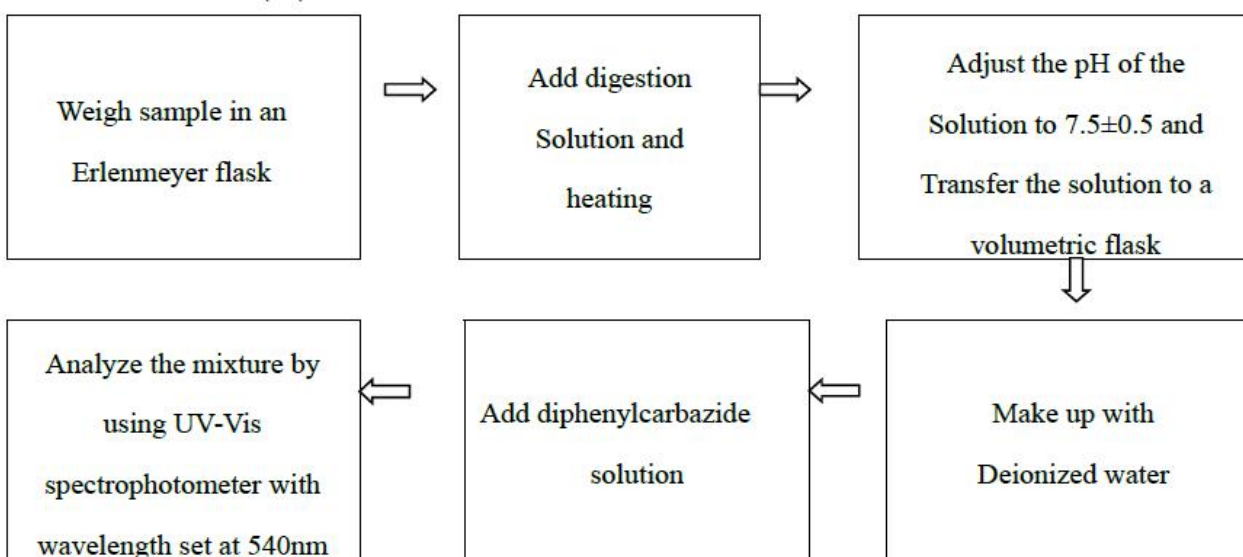
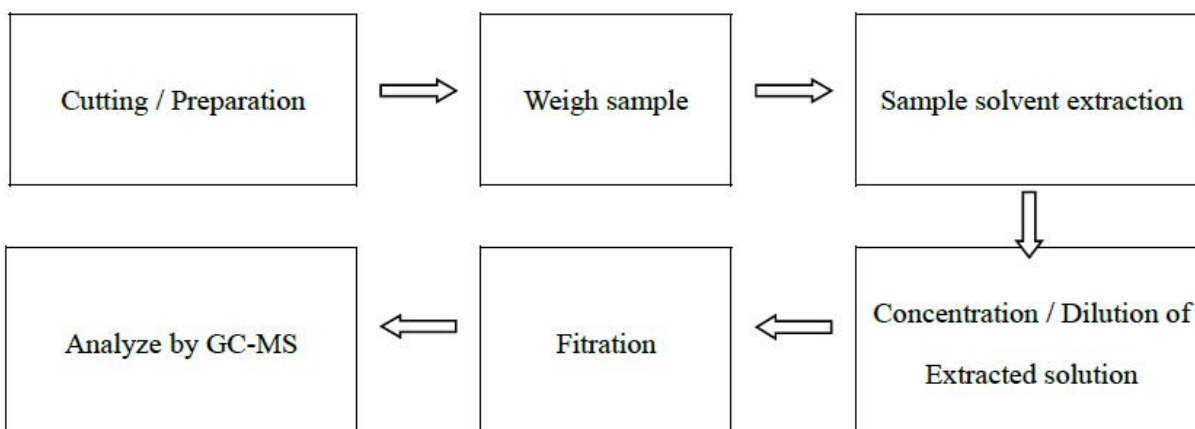
No.	Test item (mg/kg)				Conclusion
	DBP	BBP	DEHP	DIBP	
1	N.D.	N.D.	N.D.	N.D.	PASS
3	N.D.	N.D.	N.D.	N.D.	PASS
4	N.D.	N.D.	N.D.	N.D.	PASS
5	N.D.	N.D.	N.D.	N.D.	PASS
6	N.D.	N.D.	N.D.	N.D.	PASS
9	N.D.	N.D.	N.D.	N.D.	PASS
10	N.D.	N.D.	N.D.	N.D.	PASS

Note:

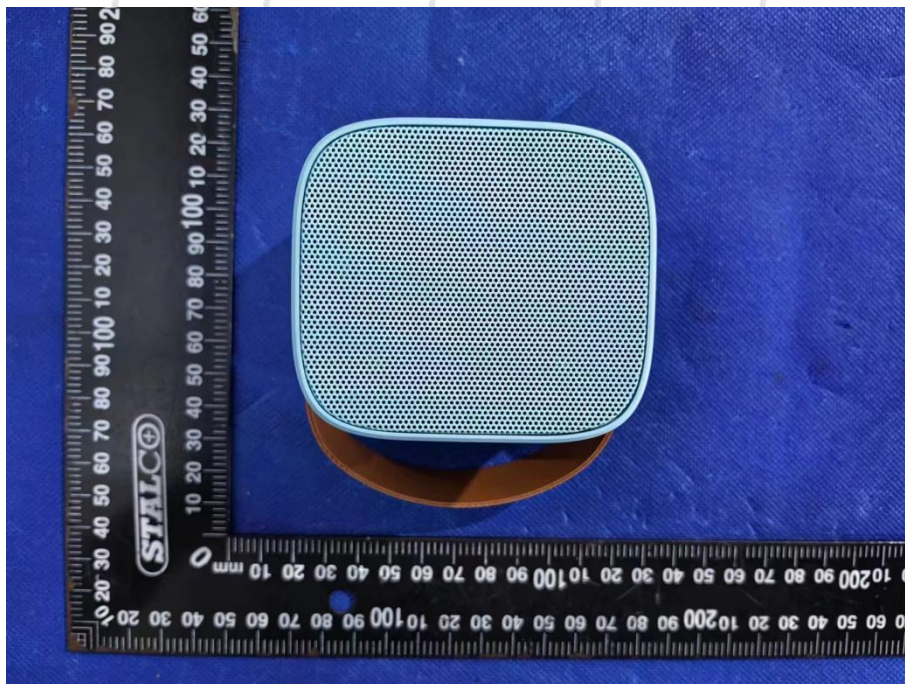
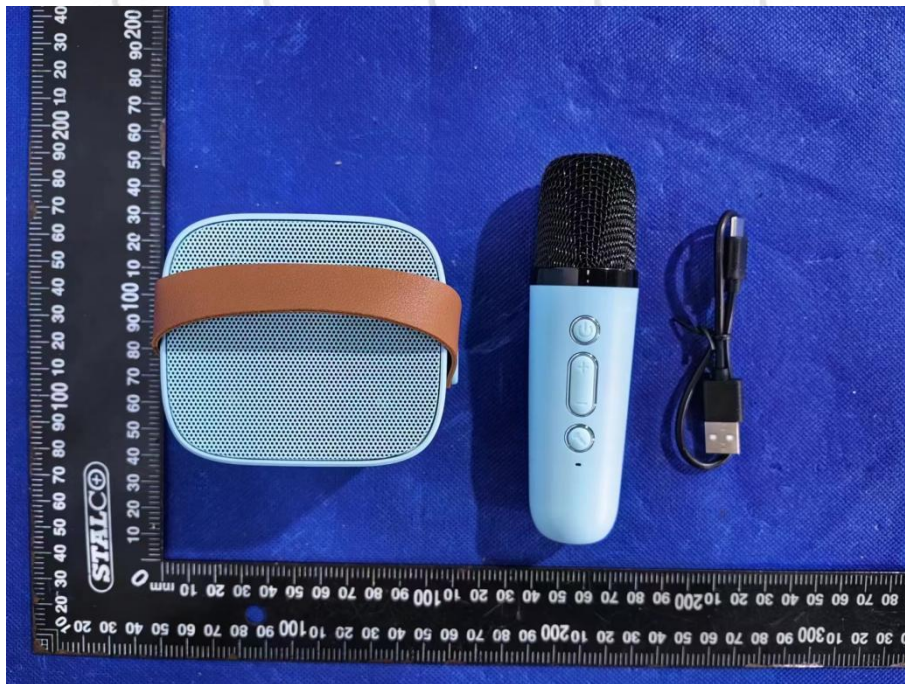
- mg/kg=0.0001%

-ND=Not Detected(<MDL)

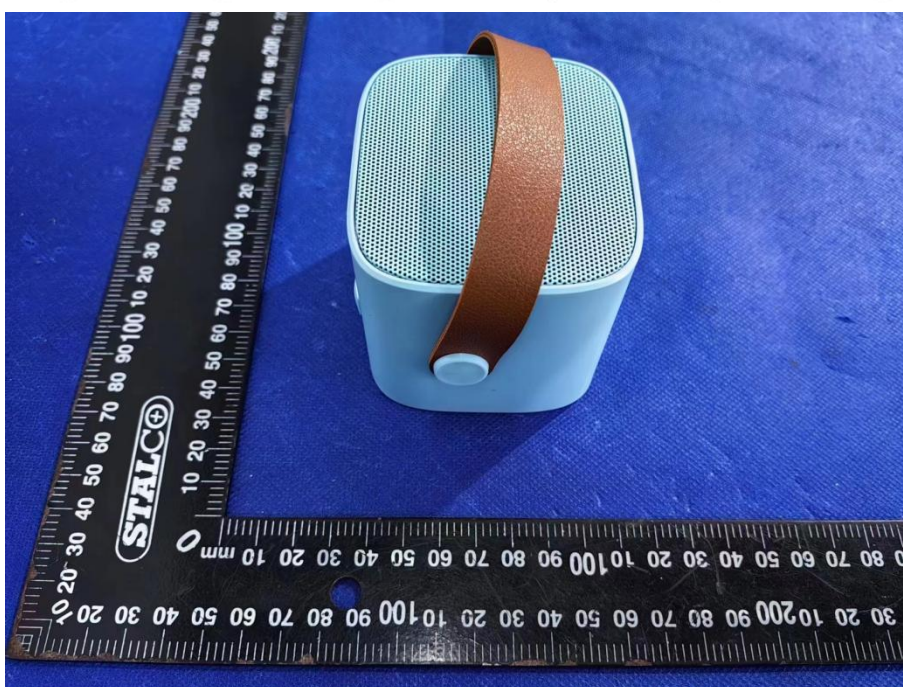
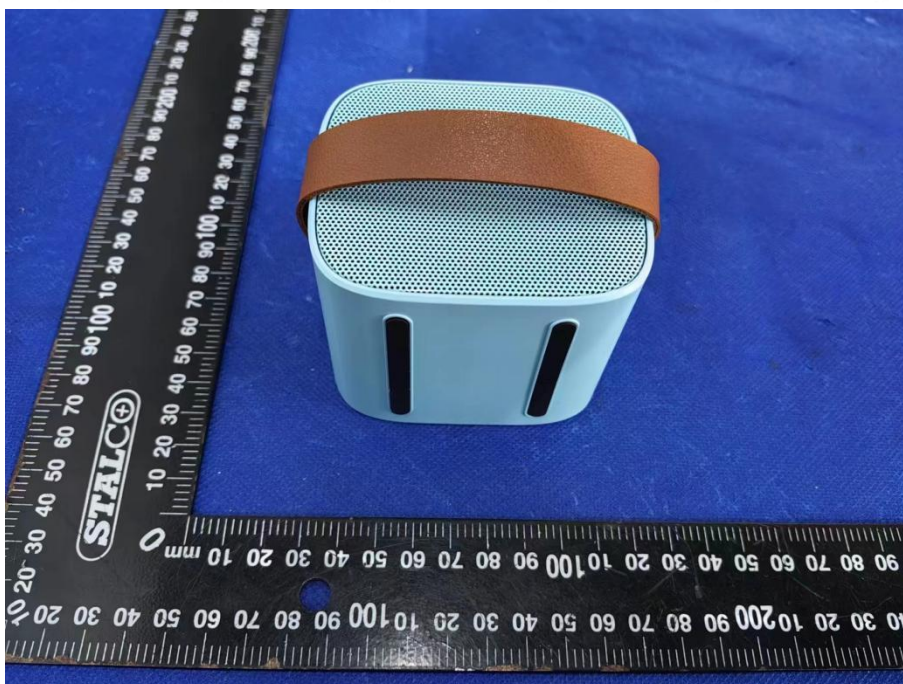
-*1 = The samples were resubmitted on

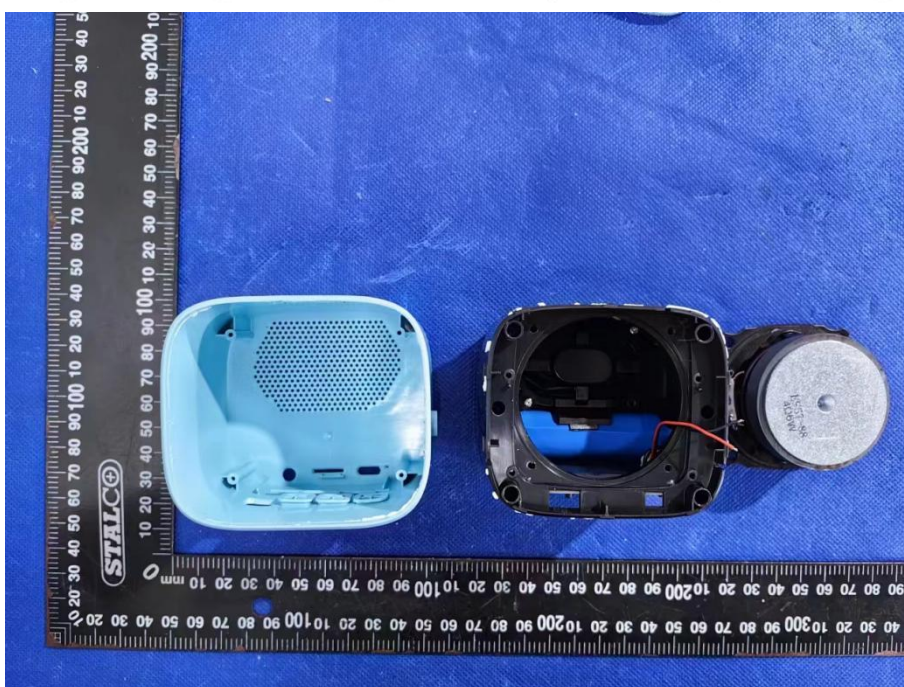
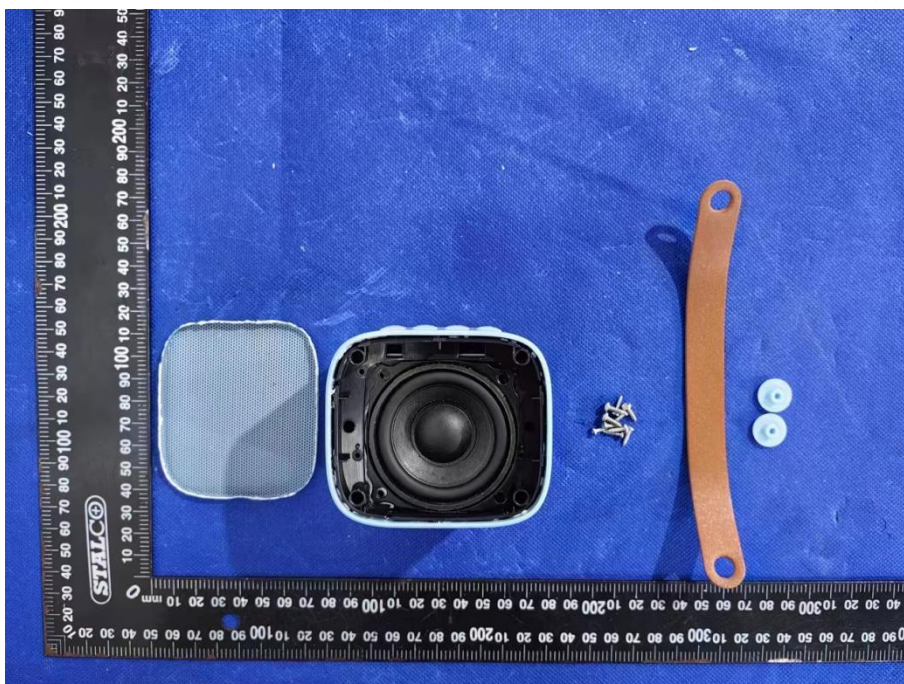
Test Process:
1. Test for Cd/Pb /Hg

2. Test for Chromium (VI) Content

3. Test for PBBs/PBDES/DIBP/DBP/BBP/DEHP Content


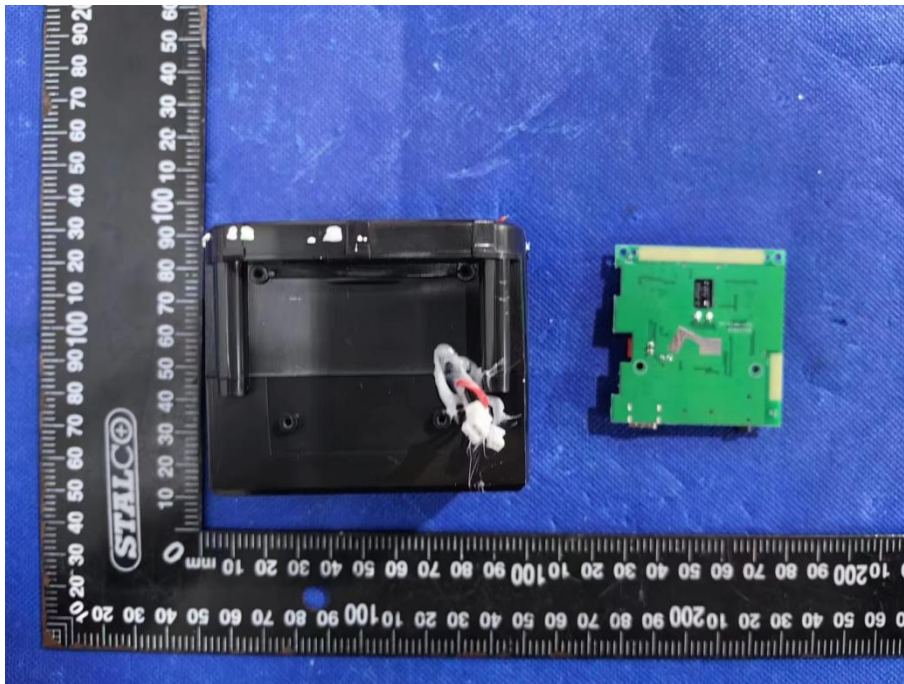
Sample photo:











END OF REPORT

Verification of Compliance

Verification No.: MK23060045-P01E03

Name and address of Applicant: **Shenzhen Shiwei Industrial Co., Ltd.**
Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province

Name and address of Manufacturer: **Shenzhen Shiwei Industrial Co., Ltd.**
Room 101-104, Building A2, Ailian Taichung Industrial Zone, Longgang District, Shenzhen City, Guangdong Province

Product name: **Karaoke Mini Bluetooth Microphone Speaker Set**

Rated: 3.7V---1A, 6W

Product model(s): Y1, Y2, Y3, SK1, SK2, S3, Y4, Y5, Y6, Y7, Y8, Y9, Y10

Product trademark: shiwei/basix

This verification confirms that the product meets the requirements of the following standard.
The conformity was demonstrated based on following standard(s) listed by European Commission as harmonized with EMC Directive 2014/30/EU

EN 55032:2015+A11:2020

EN 55035:2017 +A11:2020

The verification has been carried out in accordance with individual rules and conditions agreed with the applicant. Evaluation has been carried out in accordance with:

Test report(s) No.: MK23060045-P01E03

Test conducted by: TMC Testing Services (Shenzhen) Co., Ltd.

Verification issue date: June 16, 2023

Notes:

This verification refers to the above mentioned product and its conformity in regards of above mentioned standard(s) was proven on test sample.

This verification does not imply meeting all essential requirements, assessment of the series-production or any other restricted Notified Bodies conformity assessment procedure appropriate for the product.

This verification holder shall use this verification in connection to verification of conformity and technical data relevant for the product the verification was issued.

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