ZERTIFIKAT ◆ CERTIFICATE ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Certificate of Conformity

Certificate No.: UTT202501261C

Date of Issued: Jan. 22, 2025

In accordance with the following Applicable Directives:

2014/30/EU

Electromagnetic Compatibility

The test results are traceable to the international or national standards.

Note:

The certification is only valid for the equipment and configuration described, in conjunction with the test data detailed above.The CE mark as shown beside can be used, under the responsibility of the manufacturer, after completion of an EC Directive of Conformity and compliance with all relevant EC Directive.

Certificate Holder:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Manufacturer:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Product Name:	Vacuum sucker
Brand Name:	N/A
Model(s):	S13, S16, S19, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Rating:	Input: DC5V, 1A
Standard:	EN 55032: 2015+A11:2020; EN 55035:2017+A11:2020; EN IEC 61000-3-2:2019+A1:2021; EN 61000-3-3:2013+A2:2021
Test Report No.:	UTT202501261E

Joseph Zhang

For and on behalf of
Universal Test Technology

CE

Dongguan UTT Service Co., Ltd.
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Tel.: +86-0769-33376882 E-mail: service@utt-cert.com Website: www.uttcert.com

TEST REPORT

EN 55032: 2015+A11:2020;
EN 55035:2017+A11:2020;
EN IEC 61000-3-2:2019+A1:2021;
EN 61000-3-3:2013+A2:2021

Report Reference No..... :	**UTT202501261E**
Compiled by (position+printed name+signature).. :	Jowin Huang
Supervised by (position+printed name+signature).. :	Bill Wu
Approved by (position+printed name+signature).. :	Aiden Zhang
Date of issue..... :	Jan. 22, 2025
Representative Laboratory Name.. :	**Dongguan UTT Service Co., Ltd.**
Address..... :	Room 107, Building 2, No.3, Mu Lun The second road of entrepreneurship, Changping Town, Dongguan City, Guangdong, China
Applicant's name..... :	**Dongguan Ruichengxing Electronic Technology Co., Ltd.**
Address..... :	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Test specification..... :	
Standard..... :	EN 55032: 2015+A11:2020; EN 55035:2017+A11:2020; EN IEC 61000-3-2:2019+A1:2021; EN 61000-3-3:2013+A2:2021
TRF Originator..... :	Dongguan UTT Service Co., Ltd.
Master TRF..... :	Dated 2021-12

Product Name ……..:	Vacuum sucker
Trade Mark..... :	N/A
Manufacturer..... :	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address……..:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Model/Type reference..... :	S13, S16, S19, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Model different..... :	All the model are the same except model name.
Ratings..... :	Input: DC5V, 1A
Result..... :	**PASS**

TEST REPORT

Test Report No. :	UTT202501261E	Jan. 22, 2025 Date of issue

Equipment under Test	:	Vacuum sucker
Model /Type	:	S13, S16, S19, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Applicant	:	**Dongguan Ruichengxing Electronic Technology Co., Ltd.**
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Manufacturer	:	**Dongguan Ruichengxing Electronic Technology Co., Ltd.**
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, 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

The tests were performed according to following standards:

EN 55032:2015+A11:2020 Electromagnetic compatibility of multimedia equipment - Emission Requirements
EN 55035:2017+A11:2020 Electromagnetic compatibility of multimedia equipment - Immunity requirements
EN IEC 61000-3-2:2019+A1:2021Electromagnetic compatibility (EMC) -- Part 3-2: Limits - Limits for harmonic current emissions (equipment input current up to and including 16 A per phase)
EN 61000-3-3:2013+A2:2021 Electromagnetic compatibility (EMC) -- Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection

2. SUMMARY

2.1. General Remarks

Date of receipt of test sample	:	Jan. 18, 2025
Testing commenced on	:	Jan. 18, 2025
Testing concluded on	:	Jan. 22, 2025

2.2. Product Description

Product Name:	Vacuum sucker
Trade Mark:	N/A
Model/Type reference:	S13, S16, S19, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Power supply:	Input: DC5V, 1A

Power supply system utilised

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

DC 5V

2.3. EUT operation mode

Test mode	Description
1	On

Note:
1. ■ is operation mode.
Pre-scan above all test mode, found below test mode which it was worse case mode.

Test item	Test mode (Worse case mode)
Conducted emission	Mode 1
Radiated emission	Mode 1
EMS	Mode 1

2.4. EUT configuration

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

☐ - supplied by the manufacturer
☐ - supplied by the lab

2.5. Test software

The Radiated Emission use software JS32-RE ersion:2.0.1.5
The Conducted Disturbance use software EMI measurement Software ES-K1 V1.71 Servicepack 2
The Harmonic Current and Voltage Fluctuation and Flicker use software HARCS,HARCS Version:4.21
The Conducted disturbances induced by radio-frequency fields use software EN61000-4-6,Application software 10KHz Version,Version 1.3.0(04.02.2014)

2.6. Modifications

No modifications were implemented to meet testing criteria.

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Dongguan UTT Service Co., Ltd.
Room 107, Building 2, No.3, Mu Lun The second road of entrepreneurship , Changping Town, Dongguan City, Guangdong, China

3.2. Environmental conditions

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

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

3.3. Test Description

Emission Measurement		
Radiated Emission	EN 55032:2015+A11:2020	PASS
Conducted Emission(AC Mains)	EN 55032:2015+A11:2020	PASS
Harmonic Current Emissions	EN IEC 61000-3-2:2019+A1:2021	N/A
Voltage Fluctuations and Flicker	EN 61000-3-3:2013+A2:2021	N/A
Immunity Measurement		
Electrostatic Discharge	EN 55035:2017+A11:2020	PASS
RF Electromagnetic Field	EN 55035:2017+A11:2020	PASS
Fast Transients Common Mode	EN 55035:2017+A11:2020	N/A
RF Common Mode 0,15 MHz to 80 MHz	EN 55035:2017+A11:2020	N/A
Voltage Dips and Interruptions	EN 55035:2017+A11:2020	N/A
Surges	EN 55035:2017+A11:2020	N/A
Broadband impulsive conducted disturbances	EN 55035:2017+A11:2020	N/A

Remark: The measurement uncertainty is not included in the test result.

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 CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“and is documented in the UTT. 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 UTT laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.10 dB	(1)
Radiated Emission	1~18GHz	4.32 dB	(1)
Conducted Disturbance	0.15~30MHz	3.12 dB	(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

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	101102	2024/10/15	2025/10/14
2	Artificial Mains	ROHDE & SCHWARZ	ESH2-Z5	893606/008	2024/10/15	2025/10/14
3	Pulse Limiter	Agilent	11947A	3107A04120	2024/10/15	2025/10/14

Radiated Emission						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	ULTRA-BROADBAND ANTENNA	Schwarzbeck	VULB9163	000976	2024/10/15	2025/10/14
2	EMI Test Receiver	Rohde&Schwarz	ESCI	101102	2024/10/15	2025/10/14
3	Horn Antenna	Schwarzbeck	BBHA 9120D	01622	2024/10/15	2025/10/14
4	Pre-Amplifier	Schwarzbeck	BBV 9743	#202	2024/10/15	2025/10/14
5	Pre-Amplifier	Chenyi	EMC051845B	980355	2024/10/15	2025/10/14

Harmonic Current/ Voltage Fluctuation and Flicker						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	Harmonic and Flicker Analyzer	EMC Partner	HARMONICS 1000	HAR1000-1P 230V-0221	2024/10/15	2025/10/14

Electrostatic Discharge						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	ESD Simulators	EMC Partner	ESD3000	ESD3000-1680	2024/10/15	2025/10/14

Electrical Fast Transient/Surge/Dips						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	Ultra Compact Simulator	EMC Partner	TRANSIENT3000	TRA3000 F5-S-D-V-1527	2024/10/15	2025/10/14

RF Field Strength Susceptibility						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	SIGNAL GENERATOR	IFR	2032	203002/100	2024/10/15	2025/10/14
2	AMPLIFIER	AR	150W1000	301584	2024/10/15	2025/10/14
3	DUAL DIRECTIONAL COUPLER	AR	DC6080	301508	2024/10/15	2025/10/14
4	POWER HEAD	AR	PH2000	301193	2024/10/15	2025/10/14
5	POWER METER	AR	PM2002	302799	2024/10/15	2025/10/14
6	Bilog Antenna	ETS-LINDGREN	3142D	00135452	2024/10/15	2025/10/14

Conducted Susceptibility						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	CS Test system	Frankonia	CIT-10-75	126B1333	2024/10/15	2025/10/14
2	6dB Attenuator	Frankonia	75-A-FFN-06	1509	2024/10/15	2025/10/14
3	CDN	Frankonia	M2+M3	A2210239	2024/10/15	2025/10/14

The calibration interval is 1 year.

4. TEST CONDITIONS AND RESULTS

4.1. EMISSION

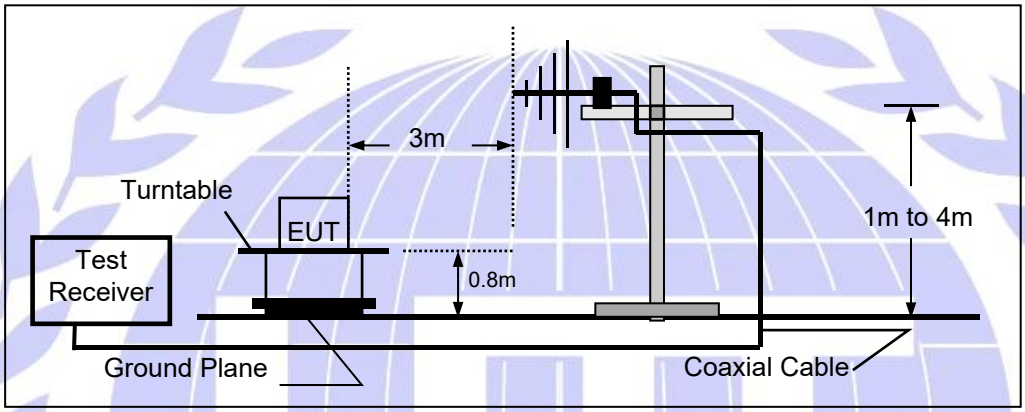
4.1.1. Radiated Emission

LIMIT

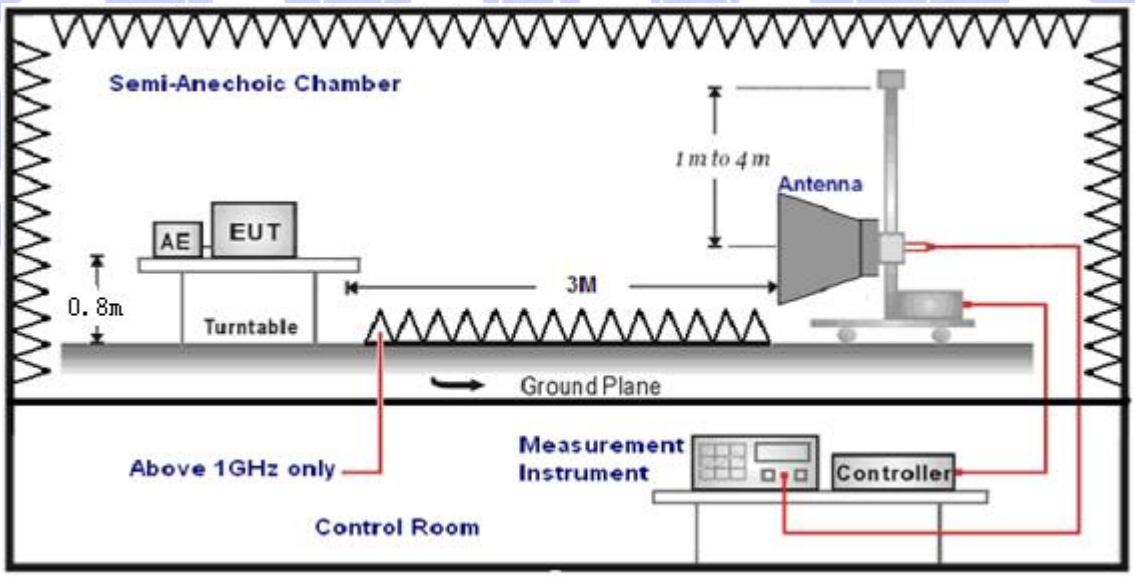
Please refer to EN55032 Annex A, Table A.4,A.5, and Class B

TEST CONFIGURATION

a) Radiated emission test set-up, frequency below 1000MHz:



b) Radiated emission test set-up, frequency above 1000MHz



TEST PROCEDURE

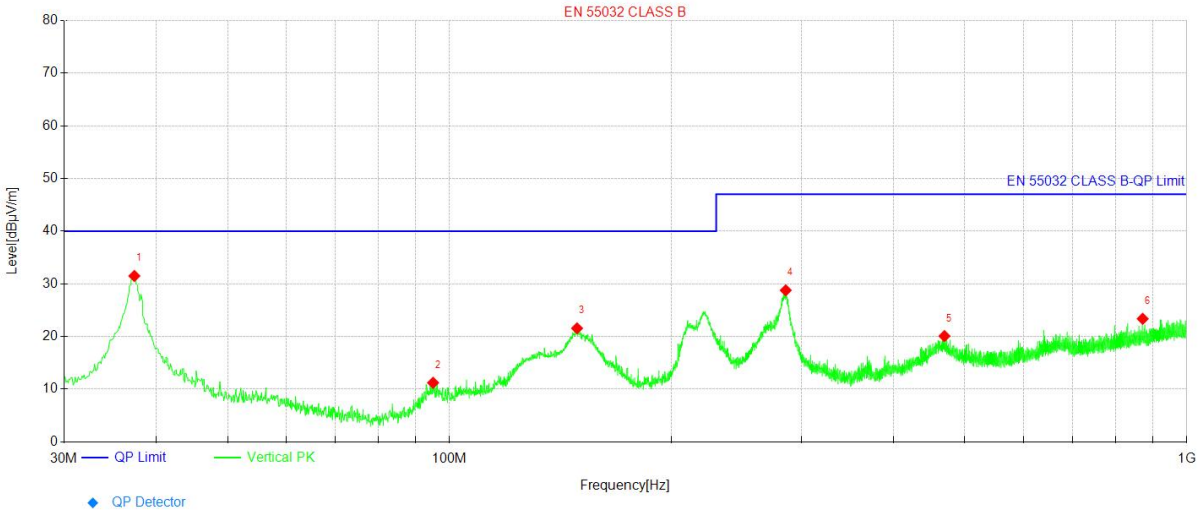
Please refer to EN55032 Annex A for the measurement methods

TEST RESULTS

Passed

Please refer to the below test data:

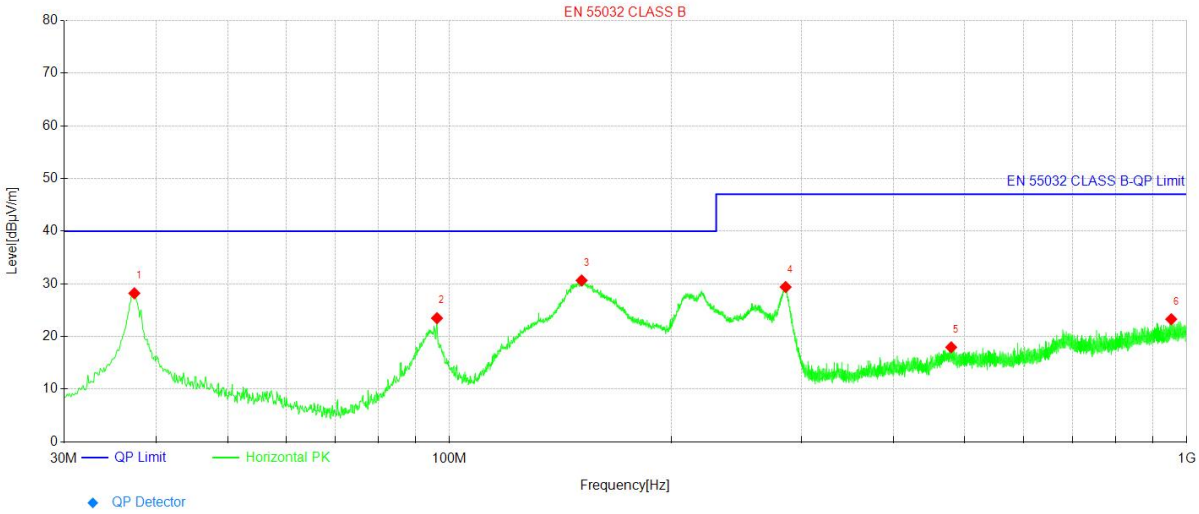
Test mode:	Mode 1	Polarization	Horizontal



Suspected Test Data

NO.	Freq. [MHz]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Factor [dB]	Height [cm]	Angle [°]	Polarity	Result
1	37.3727	31.48	40.00	8.52	-22.20	100	268	Vertical	PASS
2	94.9965	11.19	40.00	28.81	-23.39	100	162	Vertical	PASS
3	148.9339	21.53	40.00	18.47	-25.39	100	250	Vertical	PASS
4	285.8146	28.75	47.00	18.25	-19.81	100	188	Vertical	PASS
5	469.1629	20.06	47.00	26.94	-16.00	100	116	Vertical	PASS
6	871.3651	23.34	47.00	23.66	-9.82	100	345	Vertical	PASS

Test mode:	Mode 1	Polarization	Vertical



Suspected Test Data

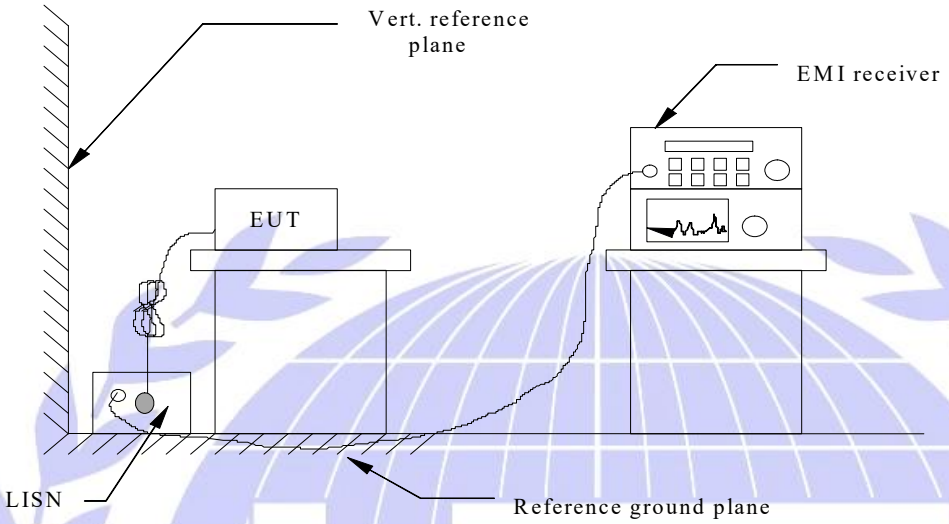
NO.	Freq. [MHz]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Factor [dB]	Height [cm]	Angle [°]	Polarity	Result
1	37.3727	28.19	40.00	11.81	-22.20	200	190	Horizo	PASS
2	96.1606	23.46	40.00	16.54	-23.22	200	190	Horizo	PASS
3	151.0681	30.62	40.00	9.38	-25.30	200	172	Horizo	PASS
4	285.7176	29.38	47.00	17.62	-19.81	200	75	Horizo	PASS
5	479.1549	17.92	47.00	29.08	-15.77	200	216	Horizo	PASS
6	952.6593	23.26	47.00	23.74	-8.88	200	360	Horizo	PASS

4.1.2. Conducted Emission (AC Mains)

LIMIT

Please refer to ETSI EN301489-1 Clause 8.4.3, Table 8 and EN55032 Annex A Table A.10 and Class B

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN55032 Annex A for the measurement methods

TEST RESULTS

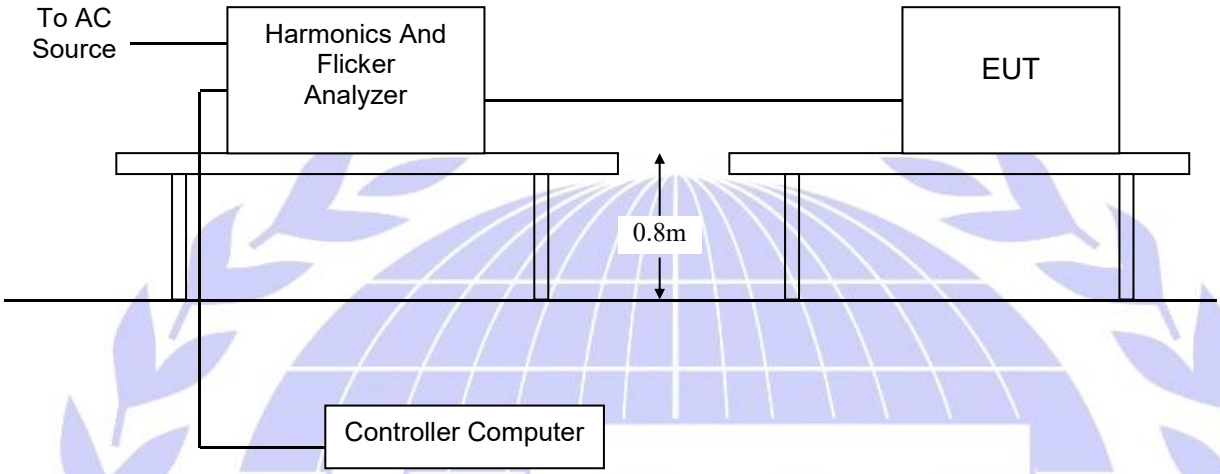
N/A

4.1.3. Harmonic Current Emission

LIMIT

Please refer to EN 61000-3-2

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN 61000-3-2 for the measurement methods.

TEST RESULTS

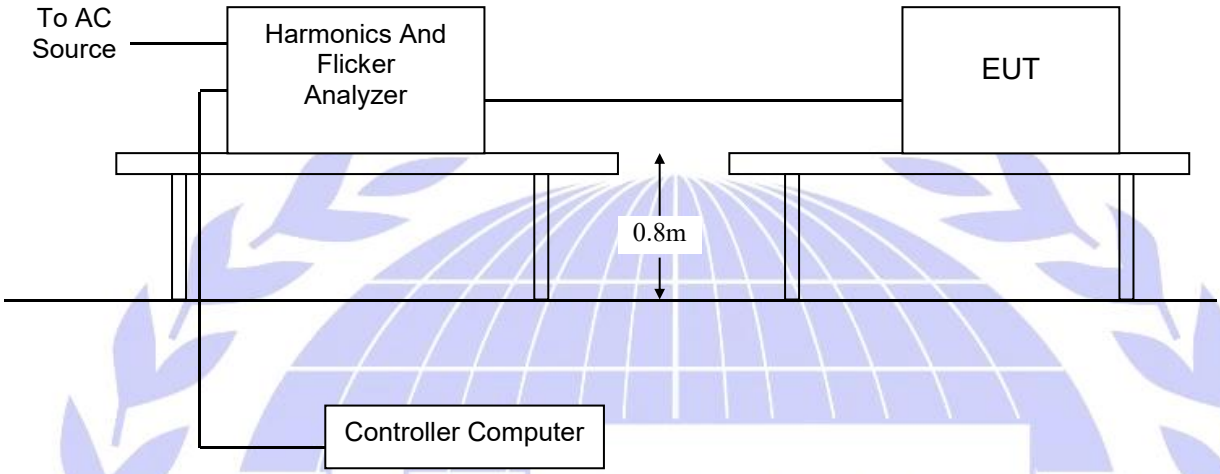
Not applicable to this device (The product without test since the rating power of EUT is less than 75W).

4.1.4. Voltage Fluctuation and Flicker

LIMIT

Please refer to EN 61000-3-3

TEST CONFIGURATION



TEST PROCEDURE

N/A

4.2. IMMUNITY

4.2.1. Performance criteria

■ **Performance Criterion of EN55035**

Criterion A: The equipment shall continue to operate as intended without operator intervention. No degradation of performance of 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.

Criteria A:	During and after the test the EUT shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a minimum performance level specified by the manufacturer when the EUT is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the EUT if used as intended.
Criteria B:	After the test, the EUT 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 EUT is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is allowed. However, no change of operating state or stored data is allowed to persist after the test. If the minimum performance level (or the permissible performance loss) is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the EUT if used as intended.
Criteria C:	During and after testing, a temporary loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls or cycling of the power to the EUT by the user in accordance with the manufacturer's instructions. Functions, and/or information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

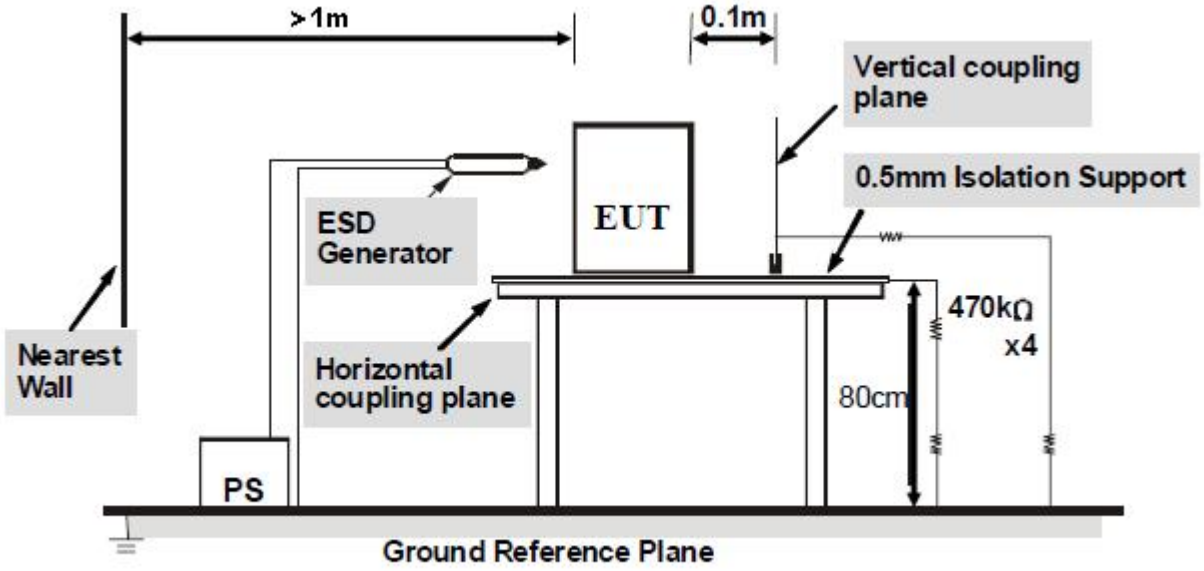
4.2.2. Electrostatic Discharge

LIMIT

SEVERITY LEVELS OF ELECTROSTATIC DISCHARGE

Test level: Contact Discharge at ±2KV, ±4KV Air Discharge at ±2KV, ±4KV, ±8KV

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN 61000-4-2 for the measurement methods.

Contact Discharge:

The ESD generator is held perpendicular to the surface to which the discharge is applied and the tip of the discharge electrode touch the surface of EUT. Then turn the discharge switch. The generator is then re-triggered for a new single discharge and repeated at least 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

Air Discharge:

Air discharge is used where contact discharge can't be applied. 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 at least 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

Indirect discharge for horizontal coupling plane:

At least 10 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT.

Indirect discharge for vertical coupling plane:

At least 10 single discharges 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.

TEST MODE

Please reference to the section 2.3

TEST RESULTS

Pass

Air Discharge					
Test Points	Test Levels	Results			
	± 8 kV	***Pass***	***Fail***	***Observation***	**Performance Criterion**
Shell 4 Points	☒	☒	☐	Note ☐1☒2☐3	B

Contact Discharge					
Test Points	Test Levels	Results			
	± 4 kV	**Pass**	**Fail**	***Observation***	**Performance Criterion**
HCP 4 Points	☒	☒	☐	Note ☒1 ☐2 ☐3	B
VCP 4 Points	☒	☒	☐	Note ☒1 ☐2 ☐3	B
Positive pole 1 Point	☒	☒	☐	Note ☒1 ☐2 ☐3	B
Negative pole 1 Point	☒	☒	☐	Note ☒1 ☐2 ☐3	B

Note: 1) There was no change compared with initial operation during the test.
2) During the test and After the test, the EUT can resume to operate as intended without operator intervention.
3) During the test and After the test, During and after testing, the EUT needs to return to normal operation with operator intervention.

4.2.3. RF Electromagnetic Field

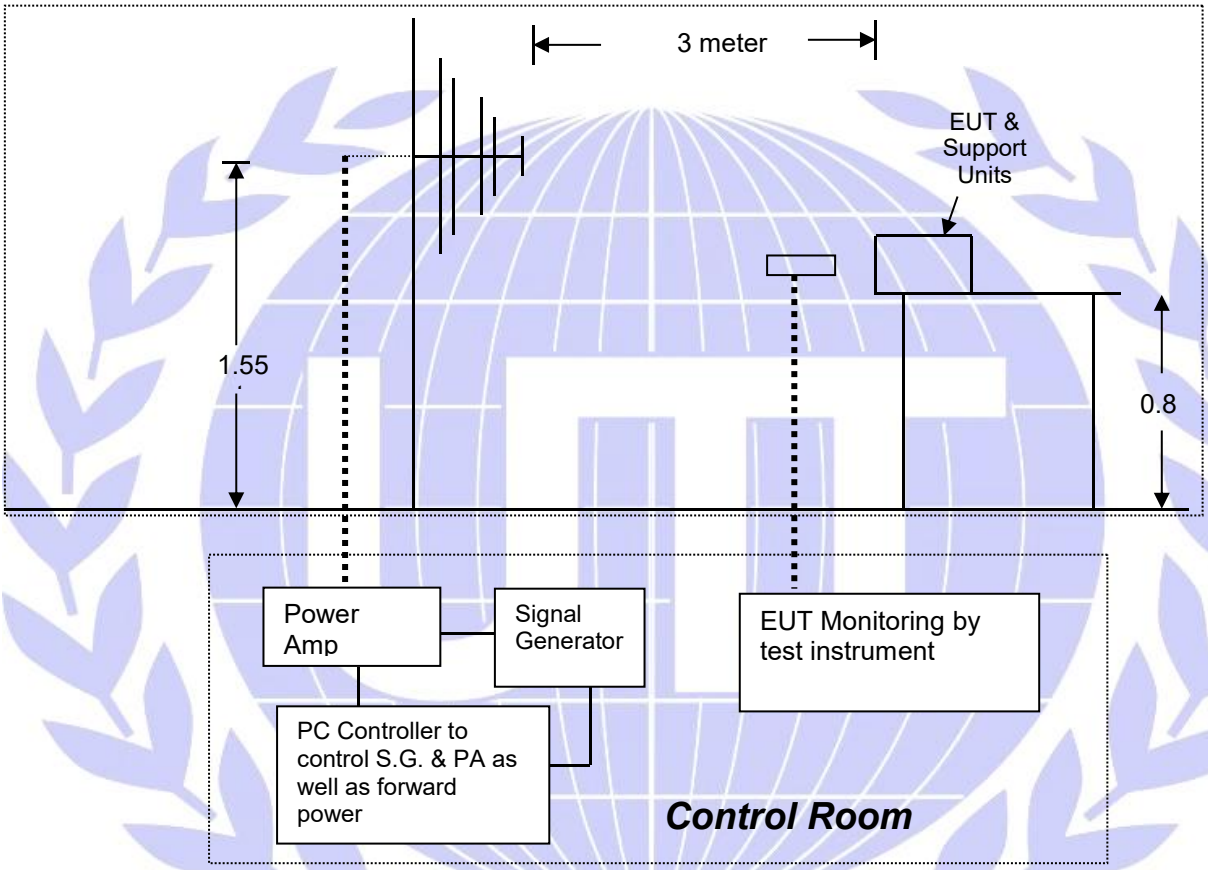
PERFORMANCE CRITERION

Criteria A

TEST LEVEL

3V/m (80%, 1kHz Amplitude Modulation)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 61000-4-3 for the measurement methods.

TEST MODE

Please reference to the section 2.3

TEST RESULTS

Pass

Frequency	Level	Modulation	Antenna Polarization	EUT Face	Observations (Performance Criterion)	Result
80 MHz-1 GHz 1.8 GHz 2.6 GHz 3.5 GHz 5 GHz	3 V/m	1 kHz, 80 % Amp. Mod, 1 % increment, dwell time=3seconds	V	Front	A	Pass
			H		A	Pass
			V	Rear	A	Pass
			H		A	Pass
			V	Left	A	Pass
			H		A	Pass
			V	Right	A	Pass
			H		A	Pass
			V	Top	A	Pass
			H		A	Pass
			V	Bottom	A	Pass
			H		A	Pass

Note: 1) There was no change compared with initial operation during the test.
2) During the test and After the test, the EUT can resume to operate as intended without operator intervention.
3) During the test and After the test, During and after testing, the EUT needs to return to normal operation with operator intervention.

4.2.4. Surges

PERFORMANCE CRITERION

Criteria B

TEST LEVEL

Mains:1kV Line to Line: Differential mode

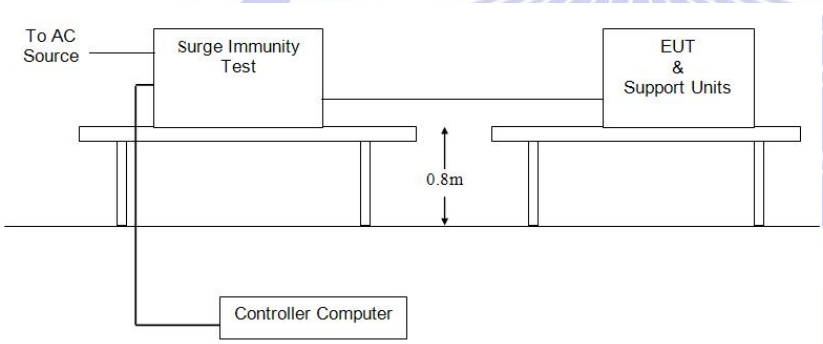
2kV Line to Ground: Common mode

(Voltage Waveform: 1.2/50 us; Current Waveform: 8/20 us)

Signal port:1kV Line to Ground: Common mode

(Voltage Waveform: 10/700 us; Current Waveform: 5/320 us)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN 61000-4-5 for the measurement methods.

TEST MODE

Please reference to the section 2.3

TEST RESULTS

N/A

4.2.5. RF- Common Mode 0.15MHz to 80MHz

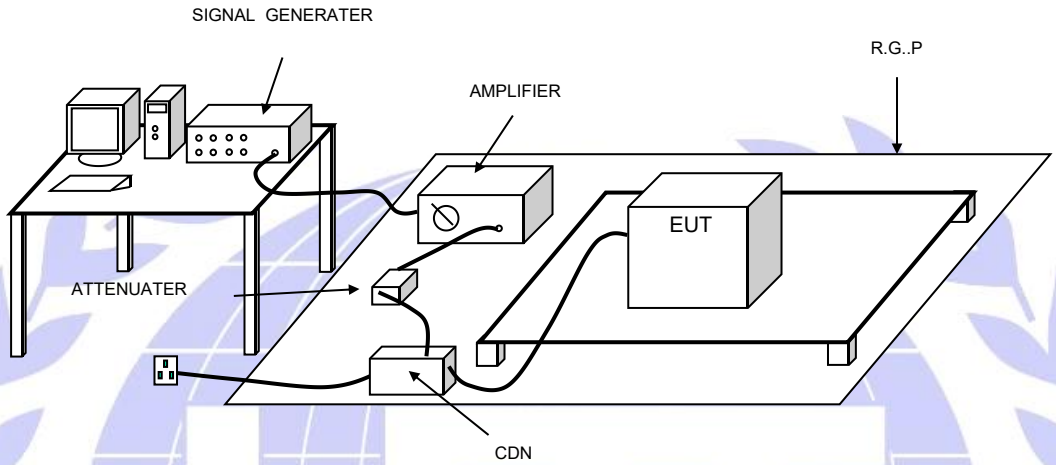
PERFORMANCE CRITERION

Criteria A

TEST LEVEL

3Vrms on AC main port (80%, 1kHz Amplitude Modulation)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN 61000-4-6 for the measurement methods.

TEST MODE

Please reference to the section 2.3

TEST RESULTS

N/A

4.2.6. Fast Transients Common Mode

PERFORMANCE CRITERION

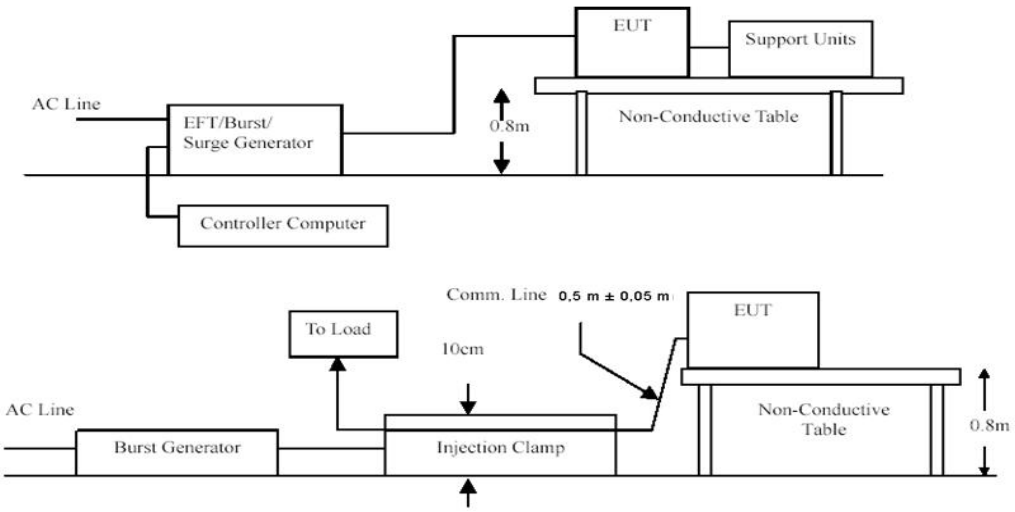
Criteria B

TEST LEVEL

1KV for AC main port

(Impulse Frequency: 5 kHz; Tr/Th: 5/50ns; Burst Duration: 15ms; Burst Period: 3Hz)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN 61000-4-4 for the measurement methods.

TEST MODE

Please reference to the section 2.3

TEST RESULTS

N/A

4.2.7. Voltage Dips and Interruptions

PERFORMANCE CRITERION

>95% VD, 0.5 period----Performance criterion: B

>95% VD, 1.0 period----Performance criterion: B

30% VD, 25 period----Performance criterion: C

>95% VI, 250 period----Performance criterion: C

TEST LEVEL

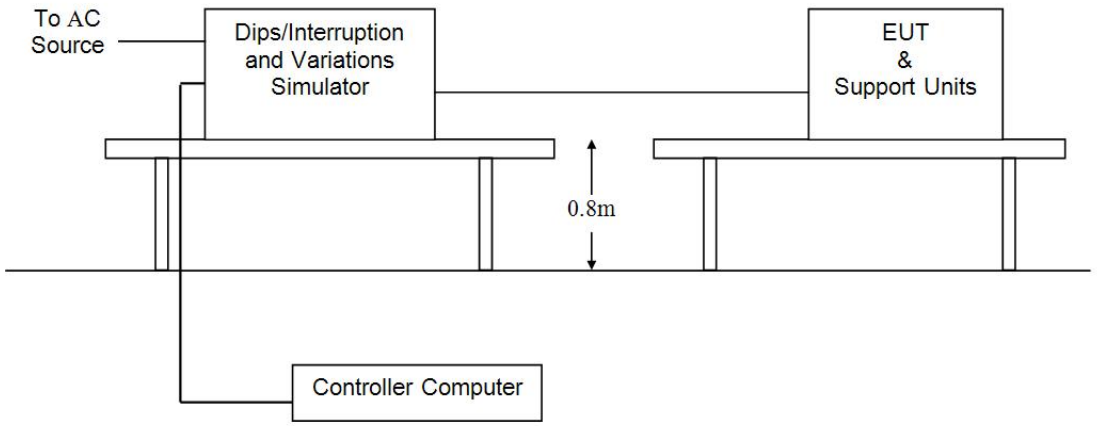
0% of VT(Supply Voltage) for 0.5 period

0% of VT(Supply Voltage) for 1.0 period

70% of VT(Supply Voltage) for 25 period

0% of VT(Supply Voltage) for 250 period

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN 61000-4-11 for the measurement methods.

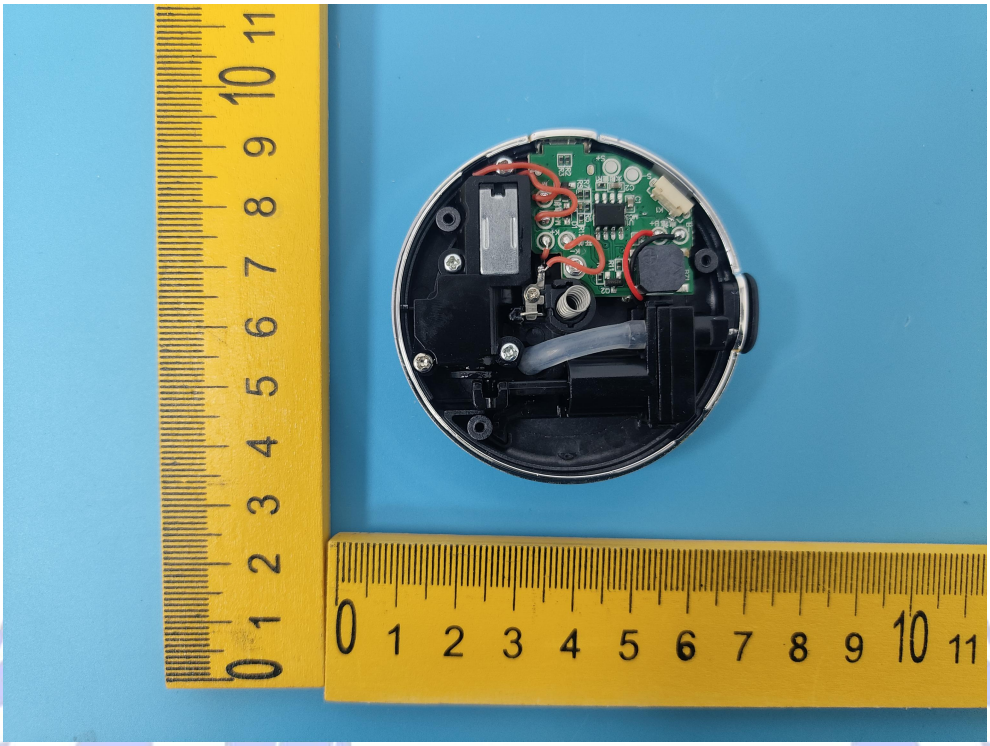
TEST MODE

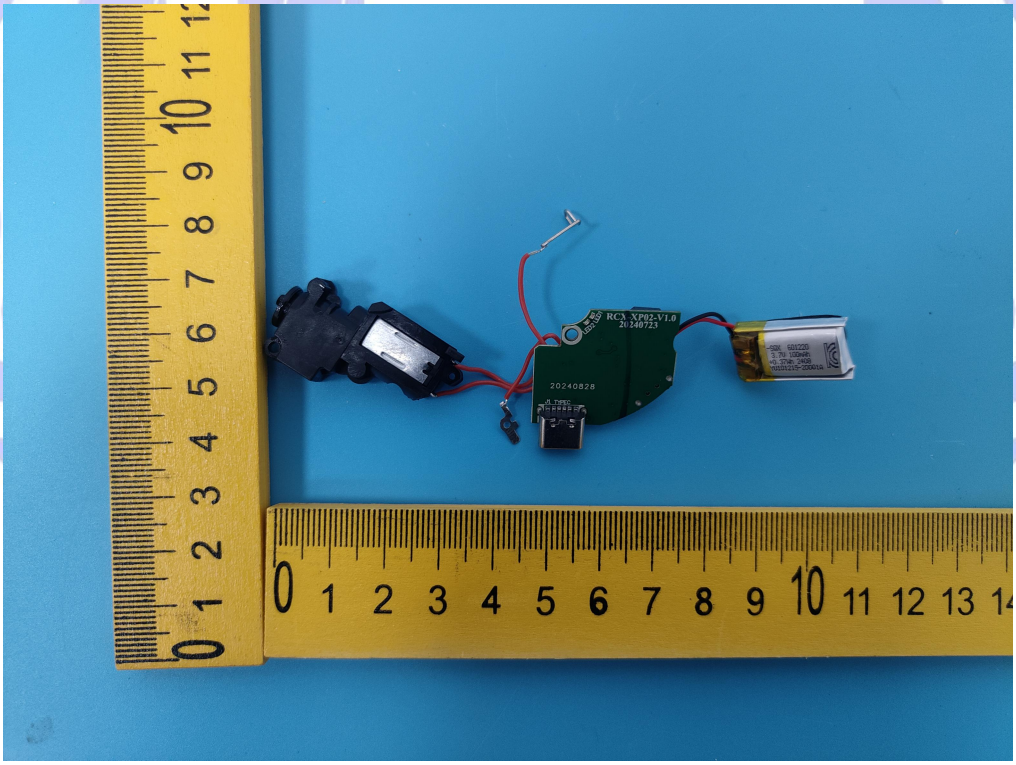
Please reference to the section 2.3

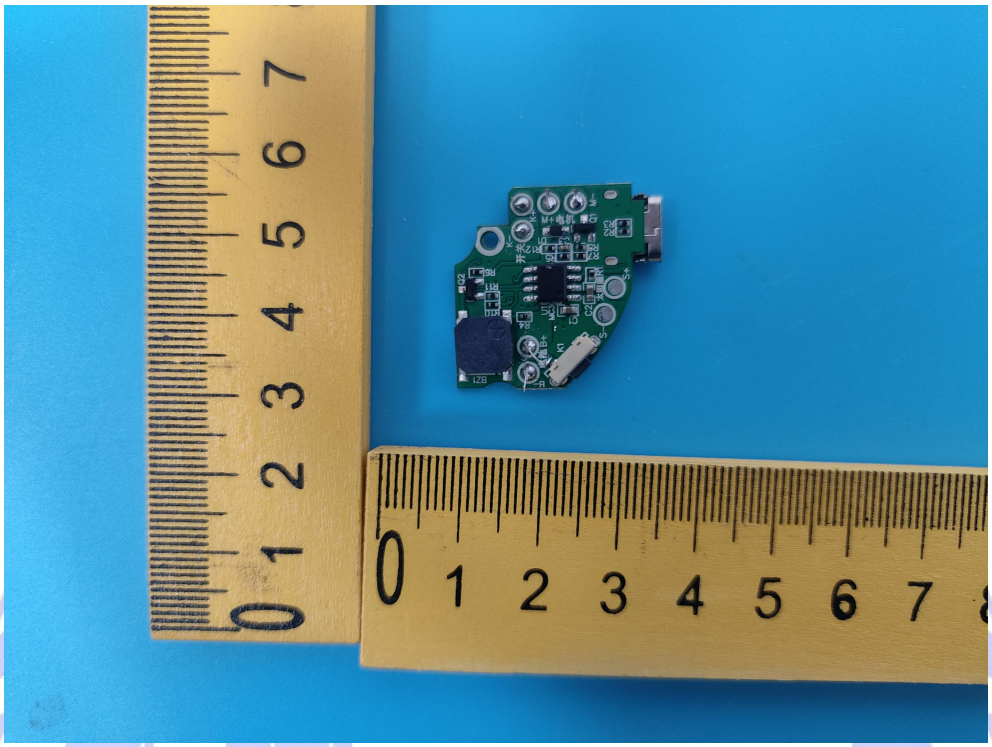
TEST RESULTS

N/A

5. External and Internal Photos of the EUT







.....End of Report.....

TEST REPORT

Applicant	:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Manufacturer	:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Sample name	:	Vacuum sucker
Trademark	:	N/A
Model	:	S13, S16, S19, C2, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Model different	:	All the model are the same except model name.
Test Requested:		As specified by client, with reference to RoHS Directive 2011/65/EU Annex II amending Annex (EU)2015/863 to determine the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Dibutuyl Phthalate (DBP), Benzyl butyl phthalate(BBP), Bis-(2-ethyl hexyl)-phthalate(DEHP) and Diisobutyl phthalate(DIBP) content in the submitted sample.
Test item	:	Cd、Pb、Hg、Cr(VI)、PBBs、PBDEs、DBP、BBP、DEHP、DIBP
Report Number	:	UTT202501262S1
Date of Test	:	Jan. 18, 2025 to Jan. 22, 2025
Date of Report	:	Jan. 22, 2025
Test by	:	Jowin Huang
Review by	:	Nike Huang
Approve by	:	Joseph Zhang

DONGGUAN UTT SERVICE CO., LTD. * CERTIFICATED *

1. Tested components

No.	SAMPLE No.	COMPONENTS	MATERIAL OR COLOR	REMARK
1	A-1	Push	BLACK	SEE THE PHOTO
2	A-2	Cover	TRANSPARENT	SEE THE PHOTO
3	A-3	Type C	MIXED	SEE THE PHOTO
4	A-4	Sucker	BLACK	SEE THE PHOTO
5	A-5	Enclosure	BLACK	SEE THE PHOTO
6	A-6	Ring	WHITE	SEE THE PHOTO
7	A-7	Pipe	WHITE	SEE THE PHOTO
8	A-8	Wire	RED	SEE THE PHOTO
9	A-9	Battery	MIXED	SEE THE PHOTO
10	A-10	PCB	GREEN	SEE THE PHOTO
11	A-11	Motor	MIXED	SEE THE PHOTO
12	A-12	Soldering tin	WHITE	SEE THE PHOTO
13	A-13	Capacitance	MIXED	SEE THE PHOTO
14	A-14	Inductance	MIXED	SEE THE PHOTO
15	A-15	Connector	WHITE	SEE THE PHOTO
16	A-16	Chip	BLACK	SEE THE PHOTO

2. Test result:

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
A-1	Push	Cadmium (Cd)	**N.D.**	**P**
		Lead (Pb)	**N.D.**	
		Mercury (Hg)	**N.D.**	
		Hexavalent Chromium (CrVI)	**N.D.**	
		Bromine (Br)	**N.D**	
		Dibutyl Phthalate(DBP)	**N.D.**	
		Benzyl butyl phthalate (BBP)	**N.D.**	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	**N.D.**	
		Diisobutyl Phthalate(DIBP)	**N.D**	
A-2	Cover	Cadmium (Cd)	**N.D.**	**P**
		Lead (Pb)	**N.D.**	
		Mercury (Hg)	**N.D.**	
		Hexavalent Chromium (CrVI)	**N.D.**	
		Bromine (Br)	**N.D**	
		Dibutyl Phthalate(DBP)	**N.D.**	
		Benzyl butyl phthalate (BBP)	**N.D.**	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-3	Type C	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-4	Sucker	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-5	Enclosure	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-6	Ring	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-7	Pipe	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate	N.D.	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		(DEHP)		
		Diisobutyl Phthalate(DIBP)	N.D	
A-8	Wire	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-9	Battery	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-10	PCB	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-11	Motor	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-12	Soldering tin	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		Diisobutyl Phthalate(DIBP)	N.D	
A-13	Capacitance	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-14	Inductance	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-15	Connector	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-16	Chip	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	

Remark:
(1) P=Pass; F=Fail; IC=Inconclusive; N.A.=Not Applicable
(2) N.D.= not detected, less than MDL
(3) mg/kg = milligram per kilogram
(4) MDL = method detection limit
(5) IC# represents a region, the value fell on this area need further confirmation.
(6) *1 Exceeds XRF screening limits, need further chemical confirmation.
(7) #1 The test result is detected in the boiling-water-extraction solution and should not be interpreted as the Cr(VI) concentration in the surface of the sample.
(8) #2 This value is based on the concentration of extraction of 50 cm^2 area of the sample.
(9) XRF screening result for reference only.
(10) The product photo was in the report provided by the applicant

3. Test Method

Chemical testing methods & Equipments

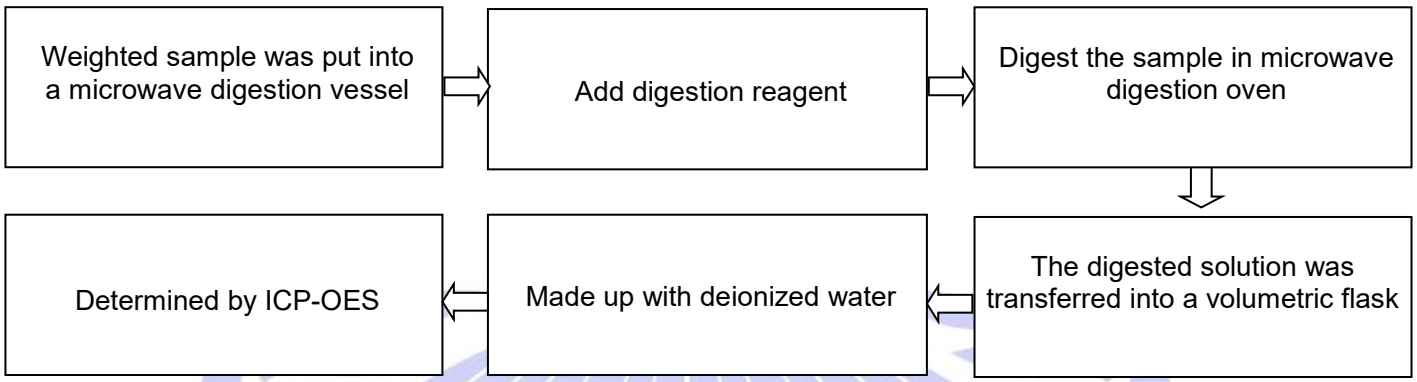
Testing Item	Testing Method	Equipment	Cal Date	Due Date
Lead (Pb)	IEC62321-5-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Cadmium (Cd)	IEC62321-5-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Mercury (Hg)	IEC62321-4-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Hexavalent chromium (Cr(VI)) for plastic	IEC 62321-7-2:2017	UV-VIS	2024/10/15	2025/10/14
Hexavalent chromium (Cr(VI)) for coating on metals	IEC62321-7-1-2015	UV-VIS	2024/10/15	2025/10/14
PBBs	IEC62321-6-2015 (Ed1.0)	GC-MS	2024/10/15	2025/10/14
PBDEs	IEC62321-6-2015 (Ed1.0)	GC-MS	2024/10/15	2025/10/14
DBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
BBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
DEHP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
DIBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14

4. RoHS Requirement(mg/kg) :

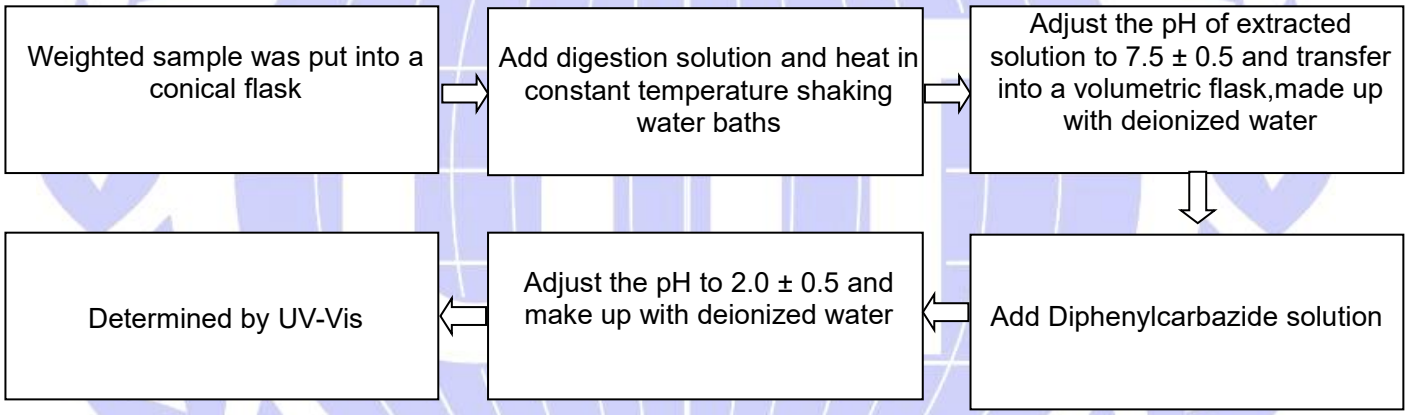
Restricted substances	Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs	BBP	DBP	DEHP	DIBP
RoHS limit	100	1000	1000	1000	1000	1000	1000	1000	1000	1000

5. Measurement Flowchart

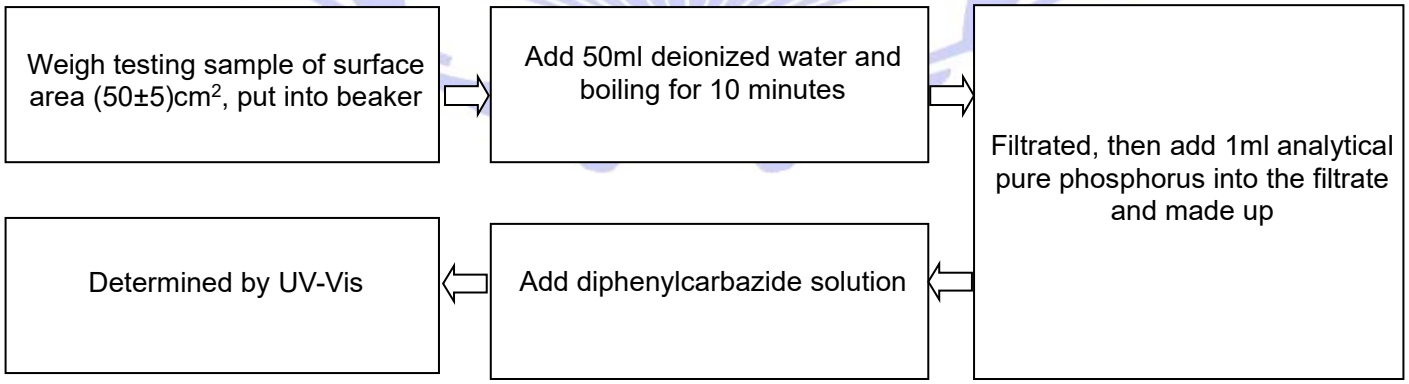
a. Test for Cd / Pb /Hg contents)



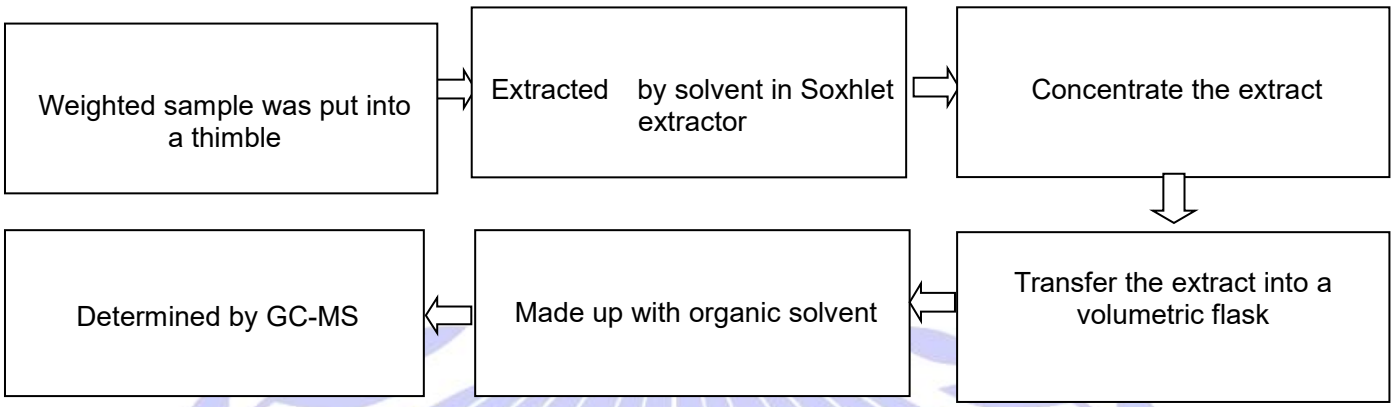
b. Test for Cr(VI) content (for non-metal)



c. Test for Cr(VI) content (for metal)



d. Test for PBBs,PBDEs,DBP,BBP,DEHP,DIBP



6. Photo(s) of the sample(s)

Photo 1

Photo 2

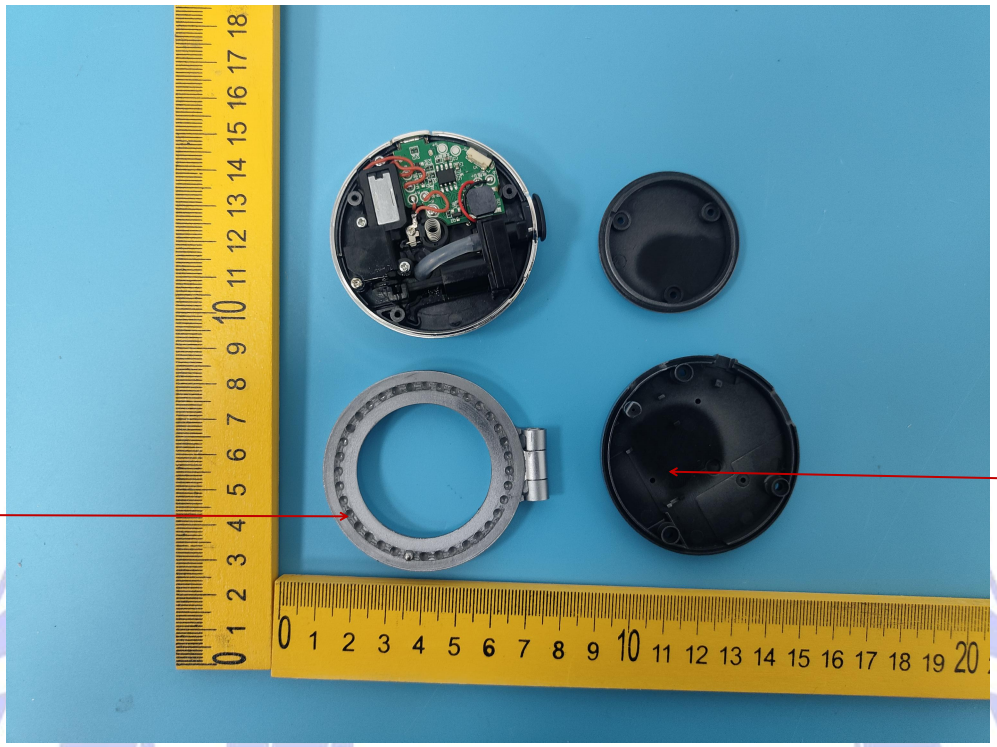


Photo 3

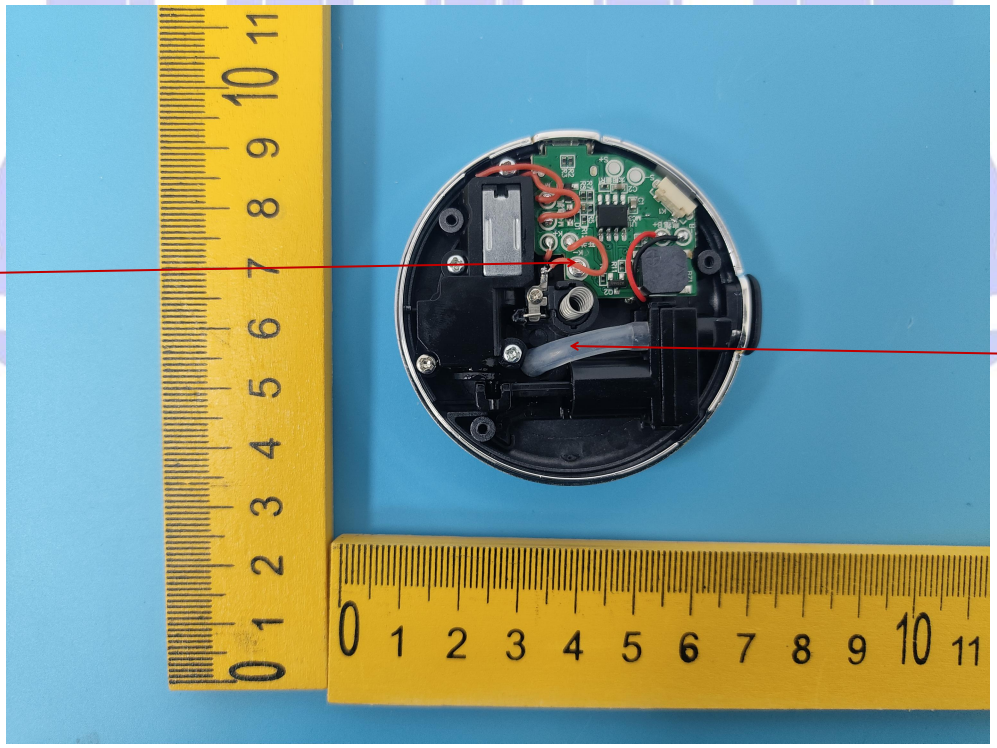


Photo 4

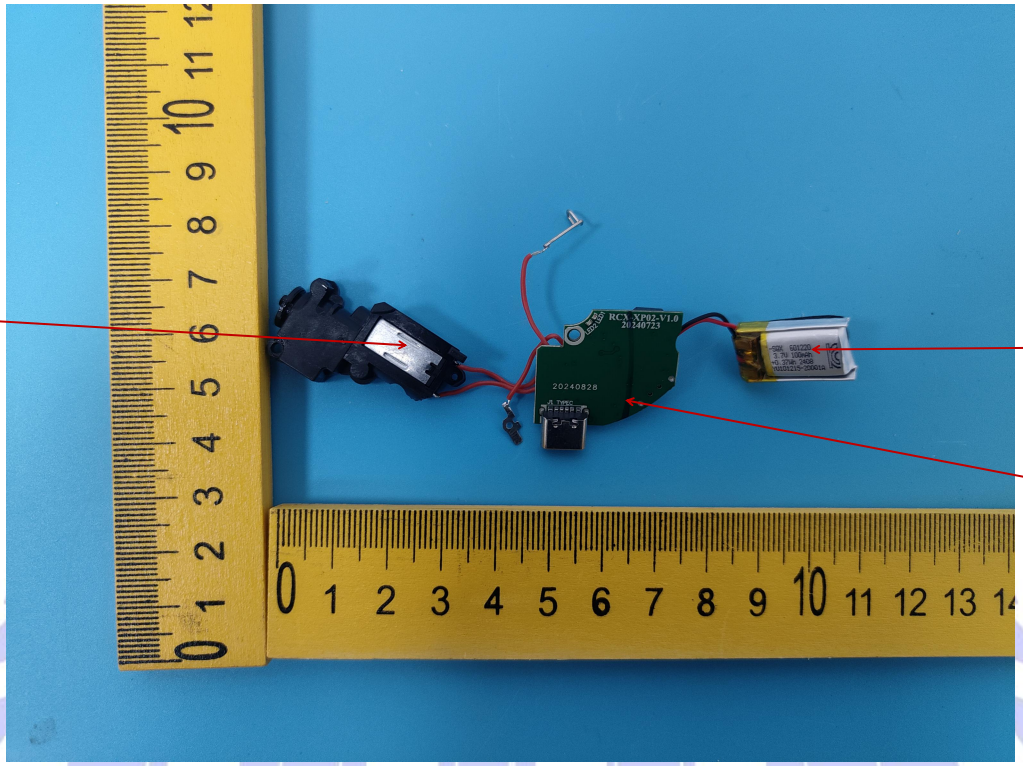


Photo 5

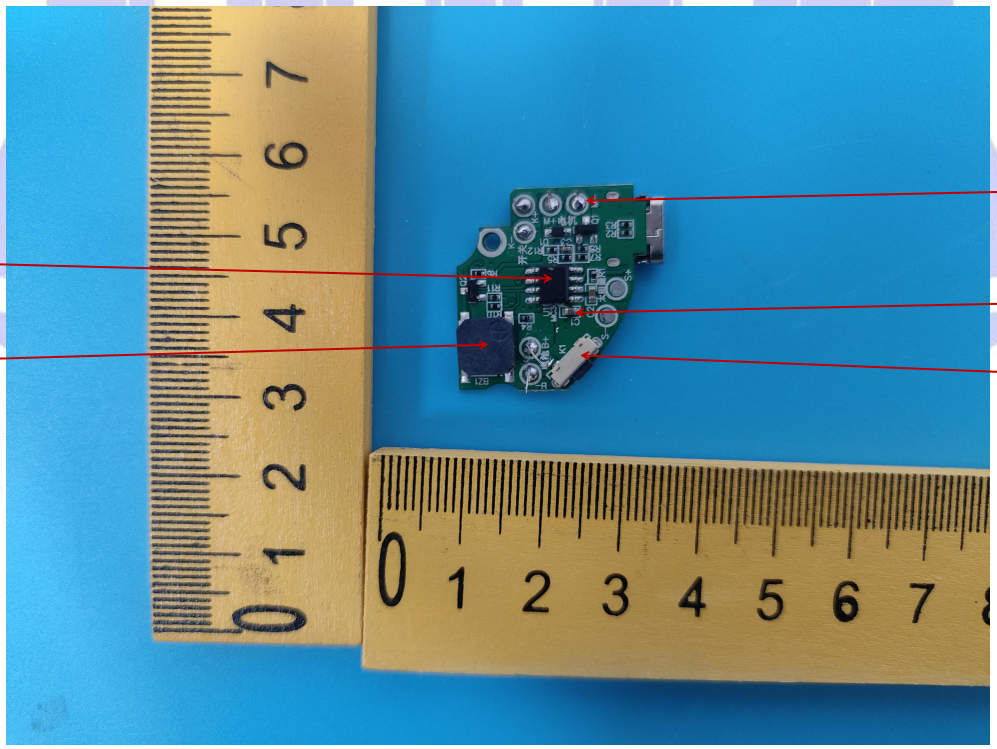


Photo 6

Photo 7

Photo 8

※※※※※ END OF REPORT ※※※※※

TEST REPORT

Applicant	:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Manufacturer	:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Sample name	:	Vacuum sucker
Trademark	:	N/A
Model	:	S13, S16, S19, C2, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Model different	:	All the model are the same except model name.
Test Requested:		As specified by client, with reference to RoHS Directive 2011/65/EU Annex II amending Annex (EU)2015/863 to determine the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Dibutuyl Phthalate (DBP), Benzyl butyl phthalate(BBP), Bis-(2-ethyl hexyl)-phthalate(DEHP) and Diisobutyl phthalate(DIBP) content in the submitted sample.
Test item	:	Cd、Pb、Hg、Cr(VI)、PBBs、PBDEs、DBP、BBP、DEHP、DIBP
Report Number	:	UTT202501262S1
Date of Test	:	Jan. 18, 2025 to Jan. 22, 2025
Date of Report	:	Jan. 22, 2025
Test by	:	Jowin Huang
Review by	:	Nike Huang
Approve by	:	Joseph Zhang

DONGGUAN UTT SERVICE CO., LTD. * CERTIFICATED *

1. Tested components

No.	SAMPLE No.	COMPONENTS	MATERIAL OR COLOR	REMARK
1	A-1	Push	BLACK	SEE THE PHOTO
2	A-2	Cover	TRANSPARENT	SEE THE PHOTO
3	A-3	Type C	MIXED	SEE THE PHOTO
4	A-4	Sucker	BLACK	SEE THE PHOTO
5	A-5	Enclosure	BLACK	SEE THE PHOTO
6	A-6	Ring	WHITE	SEE THE PHOTO
7	A-7	Pipe	WHITE	SEE THE PHOTO
8	A-8	Wire	RED	SEE THE PHOTO
9	A-9	Battery	MIXED	SEE THE PHOTO
10	A-10	PCB	GREEN	SEE THE PHOTO
11	A-11	Motor	MIXED	SEE THE PHOTO
12	A-12	Soldering tin	WHITE	SEE THE PHOTO
13	A-13	Capacitance	MIXED	SEE THE PHOTO
14	A-14	Inductance	MIXED	SEE THE PHOTO
15	A-15	Connector	WHITE	SEE THE PHOTO
16	A-16	Chip	BLACK	SEE THE PHOTO

2. Test result:

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
A-1	Push	Cadmium (Cd)	**N.D.**	**P**
		Lead (Pb)	**N.D.**	
		Mercury (Hg)	**N.D.**	
		Hexavalent Chromium (CrVI)	**N.D.**	
		Bromine (Br)	**N.D**	
		Dibutyl Phthalate(DBP)	**N.D.**	
		Benzyl butyl phthalate (BBP)	**N.D.**	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	**N.D.**	
		Diisobutyl Phthalate(DIBP)	**N.D**	
A-2	Cover	Cadmium (Cd)	**N.D.**	**P**
		Lead (Pb)	**N.D.**	
		Mercury (Hg)	**N.D.**	
		Hexavalent Chromium (CrVI)	**N.D.**	
		Bromine (Br)	**N.D**	
		Dibutyl Phthalate(DBP)	**N.D.**	
		Benzyl butyl phthalate (BBP)	**N.D.**	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-3	Type C	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-4	Sucker	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-5	Enclosure	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-6	Ring	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-7	Pipe	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate	N.D.	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		(DEHP)		
		Diisobutyl Phthalate(DIBP)	N.D	
A-8	Wire	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-9	Battery	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-10	PCB	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-11	Motor	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-12	Soldering tin	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		Diisobutyl Phthalate(DIBP)	N.D	
A-13	Capacitance	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-14	Inductance	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-15	Connector	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-16	Chip	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	

Remark:
(1) P=Pass; F=Fail; IC=Inconclusive; N.A.=Not Applicable
(2) N.D.= not detected, less than MDL
(3) mg/kg = milligram per kilogram
(4) MDL = method detection limit
(5) IC# represents a region, the value fell on this area need further confirmation.
(6) *1 Exceeds XRF screening limits, need further chemical confirmation.
(7) #1 The test result is detected in the boiling-water-extraction solution and should not be interpreted as the Cr(VI) concentration in the surface of the sample.
(8) #2 This value is based on the concentration of extraction of 50 cm^2 area of the sample.
(9) XRF screening result for reference only.
(10) The product photo was in the report provided by the applicant

3. Test Method

Chemical testing methods & Equipments

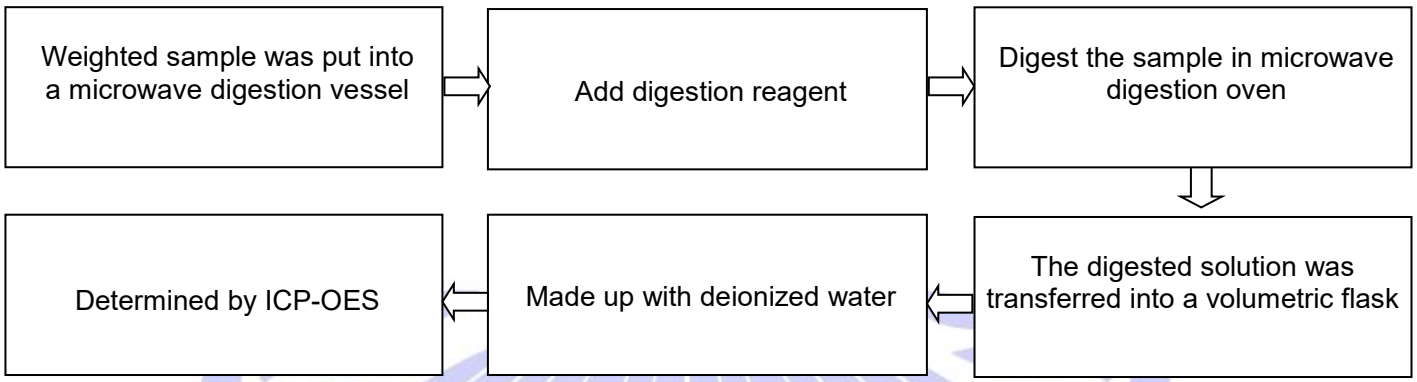
Testing Item	Testing Method	Equipment	Cal Date	Due Date
Lead (Pb)	IEC62321-5-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Cadmium (Cd)	IEC62321-5-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Mercury (Hg)	IEC62321-4-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Hexavalent chromium (Cr(VI)) for plastic	IEC 62321-7-2:2017	UV-VIS	2024/10/15	2025/10/14
Hexavalent chromium (Cr(VI)) for coating on metals	IEC62321-7-1-2015	UV-VIS	2024/10/15	2025/10/14
PBBs	IEC62321-6-2015 (Ed1.0)	GC-MS	2024/10/15	2025/10/14
PBDEs	IEC62321-6-2015 (Ed1.0)	GC-MS	2024/10/15	2025/10/14
DBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
BBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
DEHP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
DIBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14

4. RoHS Requirement(mg/kg) :

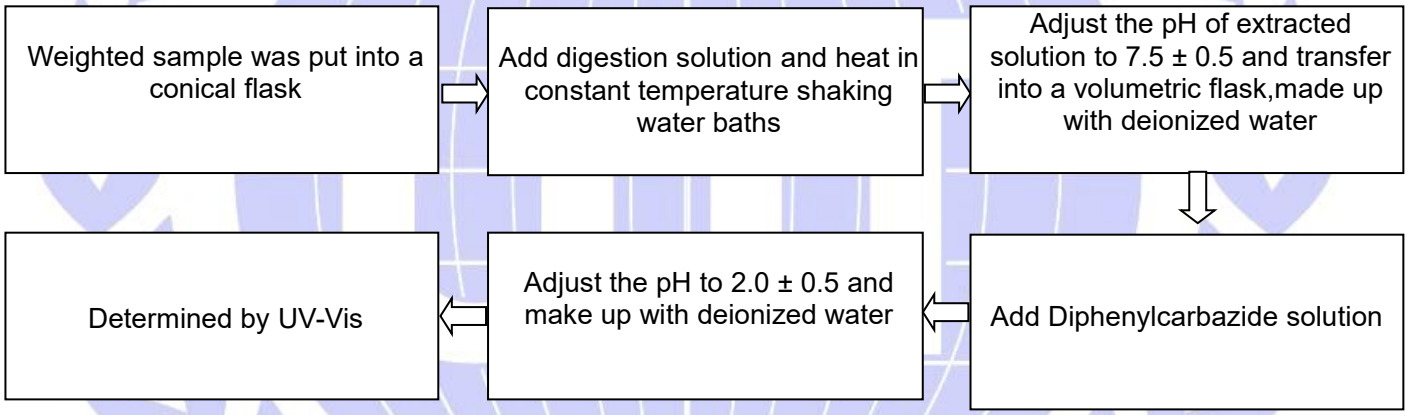
Restricted substances	Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs	BBP	DBP	DEHP	DIBP
RoHS limit	100	1000	1000	1000	1000	1000	1000	1000	1000	1000

5. Measurement Flowchart

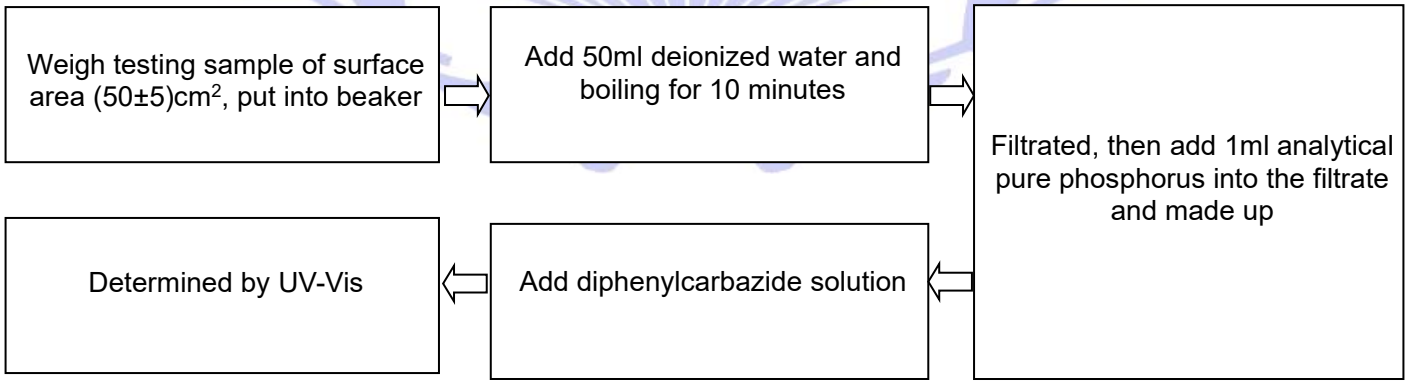
a. Test for Cd / Pb /Hg contents)



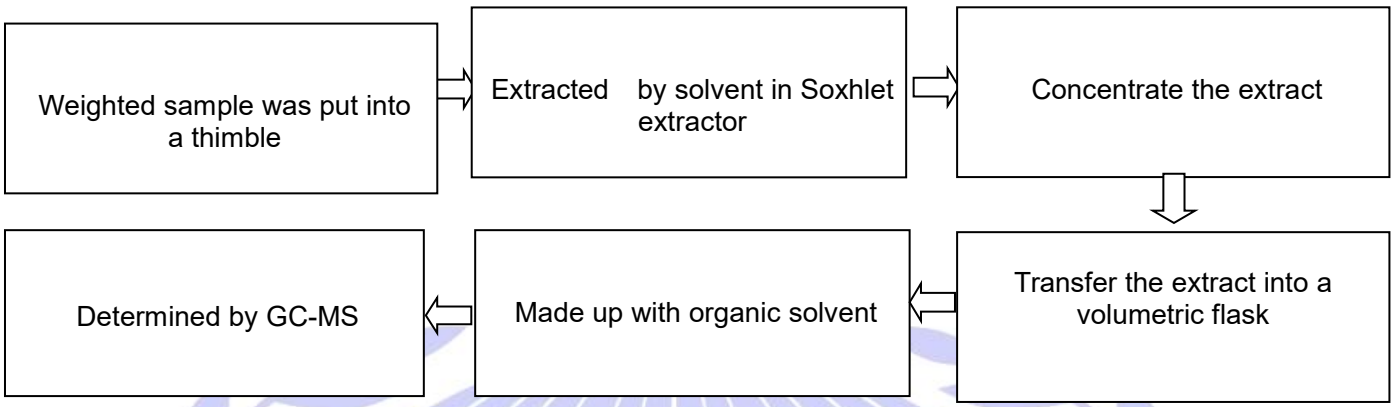
b. Test for Cr(VI) content (for non-metal)



c. Test for Cr(VI) content (for metal)



d. Test for PBBs,PBDEs,DBP,BBP,DEHP,DIBP



6. Photo(s) of the sample(s)

Photo 1

Photo 2

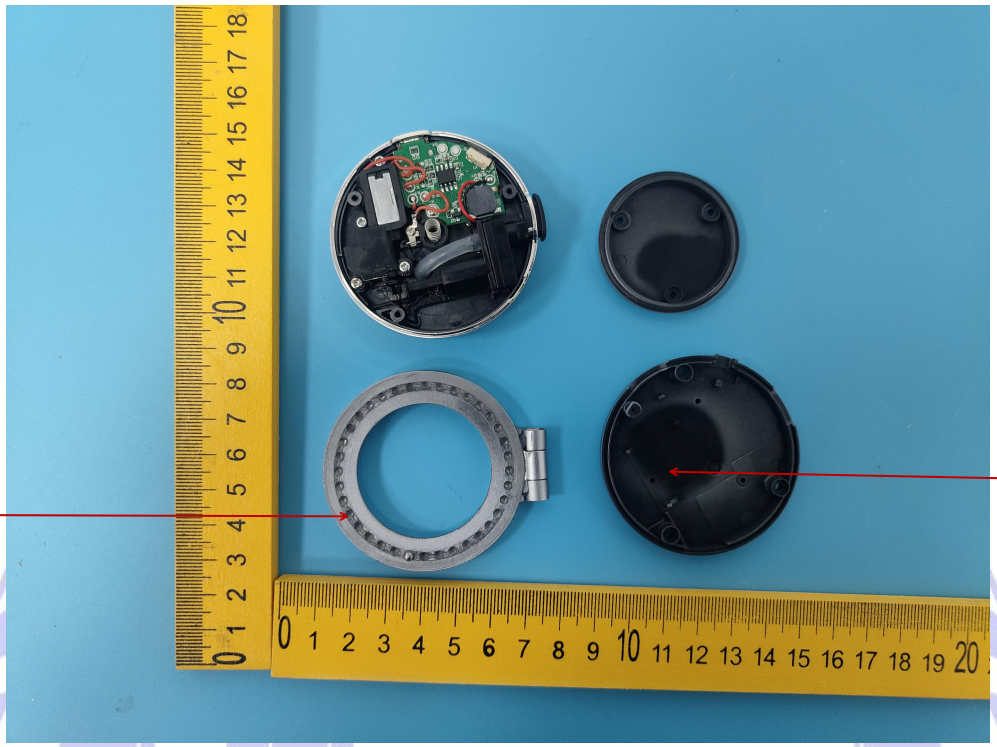


Photo 3

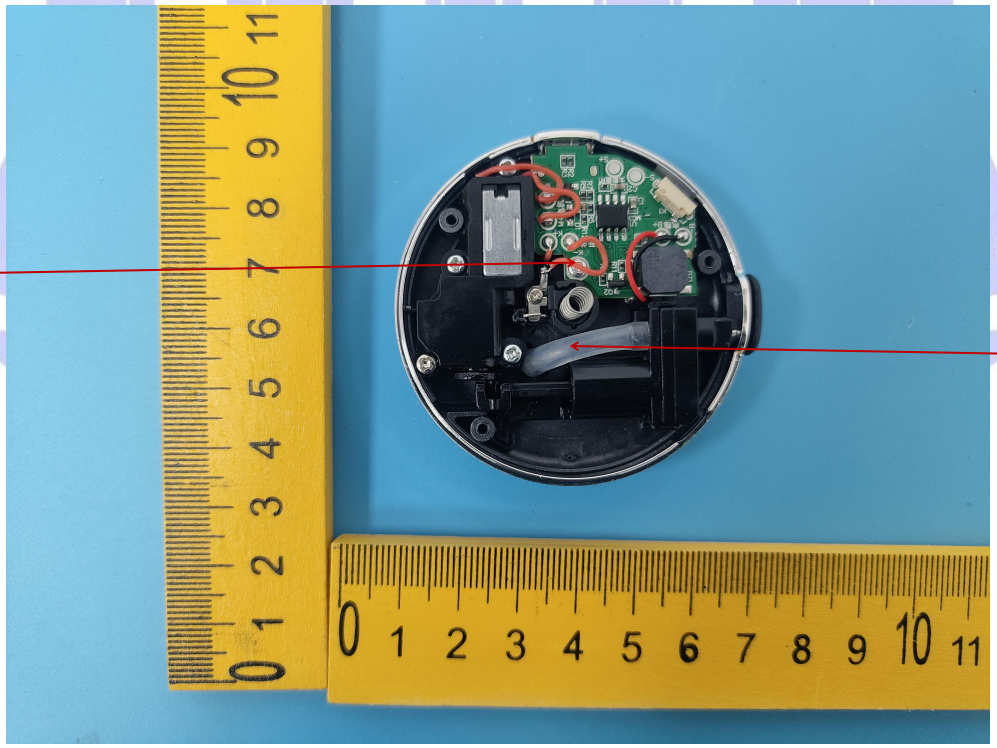


Photo 4

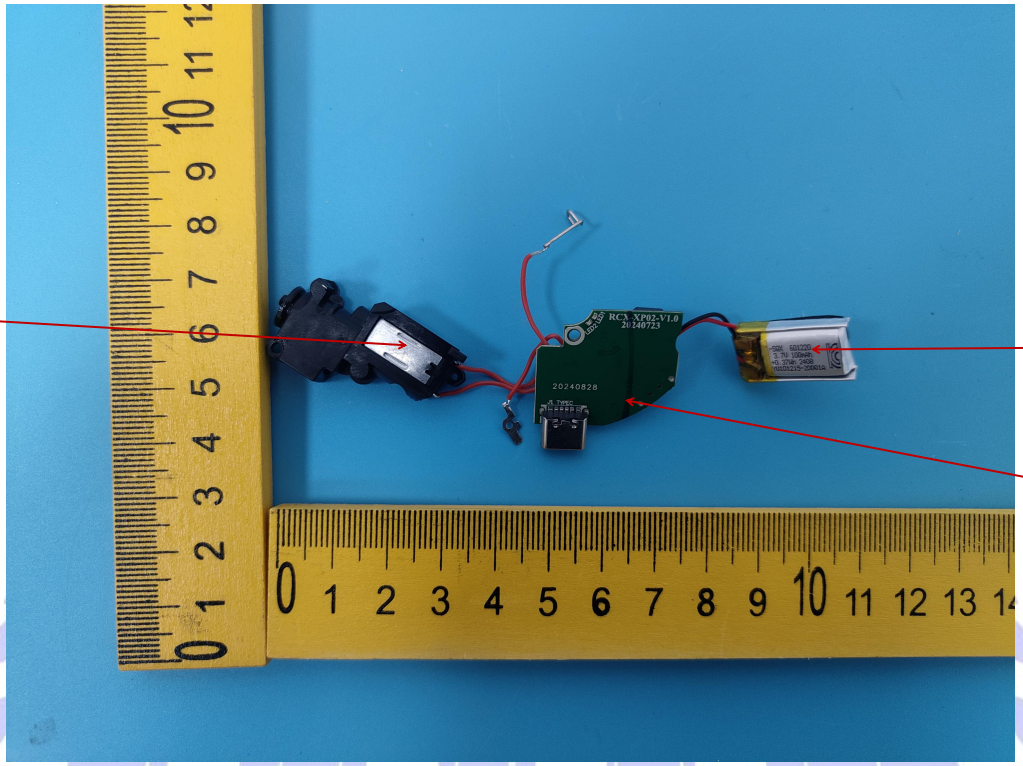


Photo 5

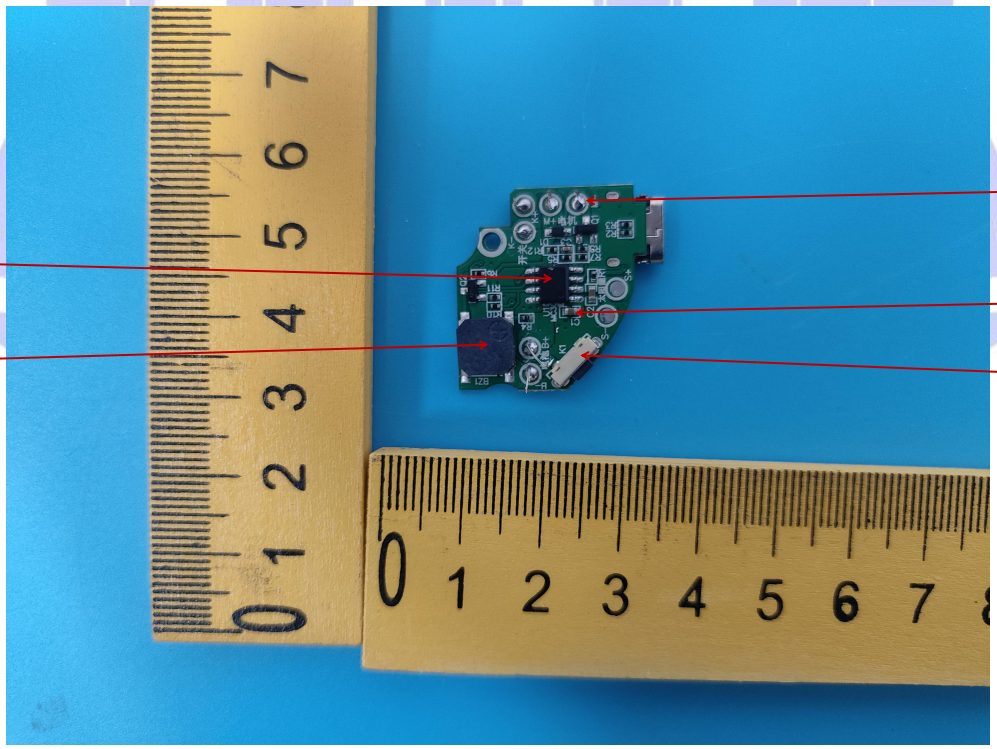


Photo 6

Photo 7

Photo 8

※※※※※ END OF REPORT ※※※※※

TEST REPORT

Applicant	:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Manufacturer	:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Sample name	:	Vacuum sucker
Trademark	:	N/A
Model	:	S13, S16, S19, C2, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Model different	:	All the model are the same except model name.
Test Requested:		As specified by client, with reference to RoHS Directive 2011/65/EU Annex II amending Annex (EU)2015/863 to determine the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Dibutuyl Phthalate (DBP), Benzyl butyl phthalate(BBP), Bis-(2-ethyl hexyl)-phthalate(DEHP) and Diisobutyl phthalate(DIBP) content in the submitted sample.
Test item	:	Cd、Pb、Hg、Cr(VI)、PBBs、PBDEs、DBP、BBP、DEHP、DIBP
Report Number	:	UTT202501262S1
Date of Test	:	Jan. 18, 2025 to Jan. 22, 2025
Date of Report	:	Jan. 22, 2025
Test by	:	Jowin Huang
Review by	:	Nike Huang
Approve by	:	Joseph Zhang

DONGGUAN UTT SERVICE CO., LTD. * CERTIFICATED *

1. Tested components

No.	SAMPLE No.	COMPONENTS	MATERIAL OR COLOR	REMARK
1	A-1	Push	BLACK	SEE THE PHOTO
2	A-2	Cover	TRANSPARENT	SEE THE PHOTO
3	A-3	Type C	MIXED	SEE THE PHOTO
4	A-4	Sucker	BLACK	SEE THE PHOTO
5	A-5	Enclosure	BLACK	SEE THE PHOTO
6	A-6	Ring	WHITE	SEE THE PHOTO
7	A-7	Pipe	WHITE	SEE THE PHOTO
8	A-8	Wire	RED	SEE THE PHOTO
9	A-9	Battery	MIXED	SEE THE PHOTO
10	A-10	PCB	GREEN	SEE THE PHOTO
11	A-11	Motor	MIXED	SEE THE PHOTO
12	A-12	Soldering tin	WHITE	SEE THE PHOTO
13	A-13	Capacitance	MIXED	SEE THE PHOTO
14	A-14	Inductance	MIXED	SEE THE PHOTO
15	A-15	Connector	WHITE	SEE THE PHOTO
16	A-16	Chip	BLACK	SEE THE PHOTO

2. Test result:

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
A-1	Push	Cadmium (Cd)	**N.D.**	**P**
		Lead (Pb)	**N.D.**	
		Mercury (Hg)	**N.D.**	
		Hexavalent Chromium (CrVI)	**N.D.**	
		Bromine (Br)	**N.D**	
		Dibutyl Phthalate(DBP)	**N.D.**	
		Benzyl butyl phthalate (BBP)	**N.D.**	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	**N.D.**	
		Diisobutyl Phthalate(DIBP)	**N.D**	
A-2	Cover	Cadmium (Cd)	**N.D.**	**P**
		Lead (Pb)	**N.D.**	
		Mercury (Hg)	**N.D.**	
		Hexavalent Chromium (CrVI)	**N.D.**	
		Bromine (Br)	**N.D**	
		Dibutyl Phthalate(DBP)	**N.D.**	
		Benzyl butyl phthalate (BBP)	**N.D.**	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-3	Type C	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-4	Sucker	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-5	Enclosure	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-6	Ring	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-7	Pipe	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate	N.D.	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		(DEHP)		
		Diisobutyl Phthalate(DIBP)	N.D	
A-8	Wire	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-9	Battery	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-10	PCB	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-11	Motor	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-12	Soldering tin	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		Diisobutyl Phthalate(DIBP)	N.D	
A-13	Capacitance	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-14	Inductance	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-15	Connector	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-16	Chip	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	

Remark:
(1) P=Pass; F=Fail; IC=Inconclusive; N.A.=Not Applicable
(2) N.D.= not detected, less than MDL
(3) mg/kg = milligram per kilogram
(4) MDL = method detection limit
(5) IC# represents a region, the value fell on this area need further confirmation.
(6) *1 Exceeds XRF screening limits, need further chemical confirmation.
(7) #1 The test result is detected in the boiling-water-extraction solution and should not be interpreted as the Cr(VI) concentration in the surface of the sample.
(8) #2 This value is based on the concentration of extraction of 50 cm^2 area of the sample.
(9) XRF screening result for reference only.
(10) The product photo was in the report provided by the applicant

3. Test Method

Chemical testing methods & Equipments

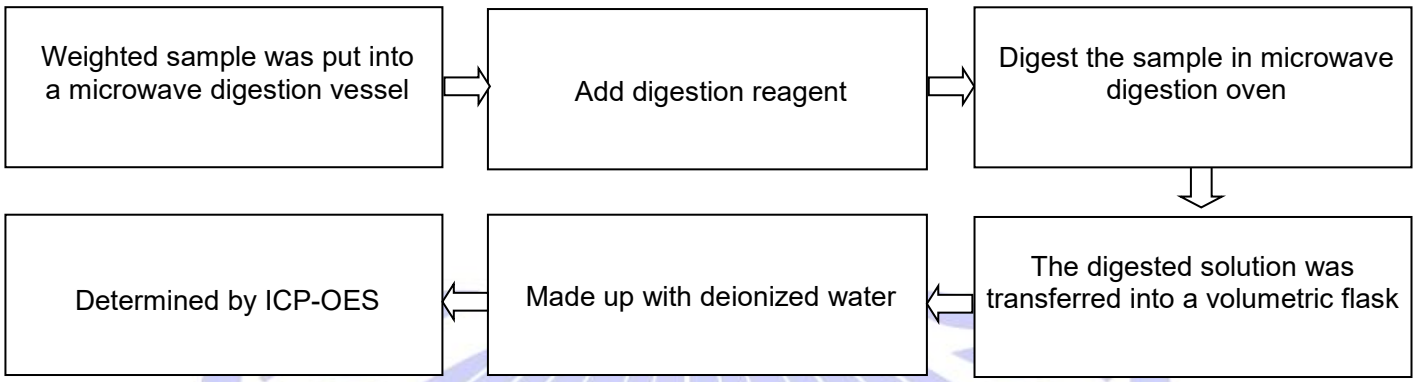
Testing Item	Testing Method	Equipment	Cal Date	Due Date
Lead (Pb)	IEC62321-5-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Cadmium (Cd)	IEC62321-5-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Mercury (Hg)	IEC62321-4-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Hexavalent chromium (Cr(VI)) for plastic	IEC 62321-7-2:2017	UV-VIS	2024/10/15	2025/10/14
Hexavalent chromium (Cr(VI)) for coating on metals	IEC62321-7-1-2015	UV-VIS	2024/10/15	2025/10/14
PBBs	IEC62321-6-2015 (Ed1.0)	GC-MS	2024/10/15	2025/10/14
PBDEs	IEC62321-6-2015 (Ed1.0)	GC-MS	2024/10/15	2025/10/14
DBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
BBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
DEHP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
DIBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14

4. RoHS Requirement(mg/kg) :

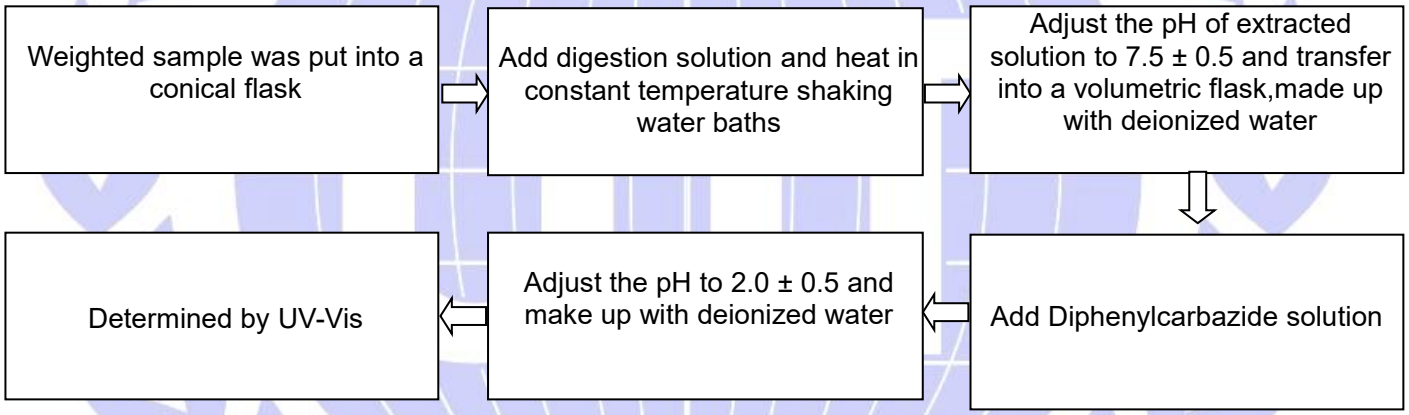
Restricted substances	Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs	BBP	DBP	DEHP	DIBP
RoHS limit	100	1000	1000	1000	1000	1000	1000	1000	1000	1000

5. Measurement Flowchart

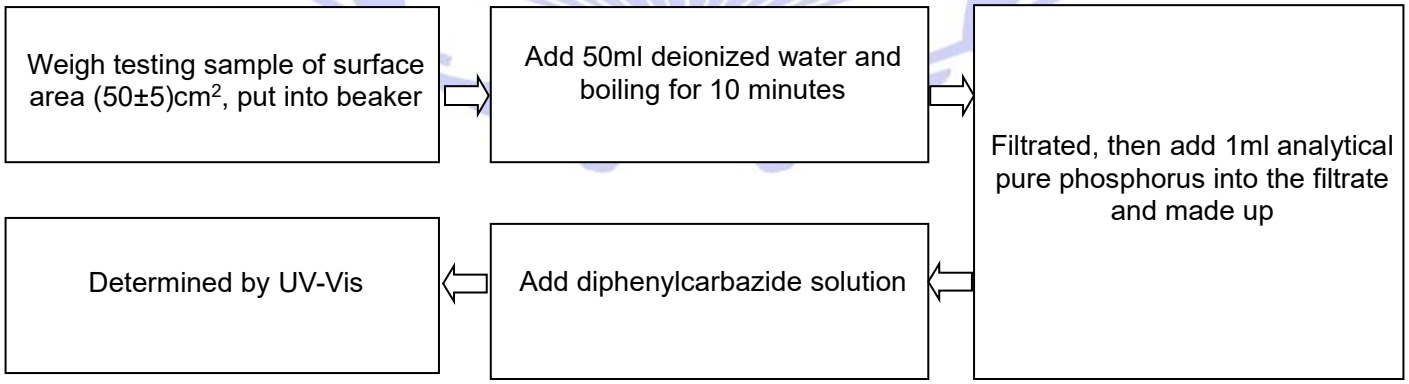
a. Test for Cd / Pb /Hg contents)



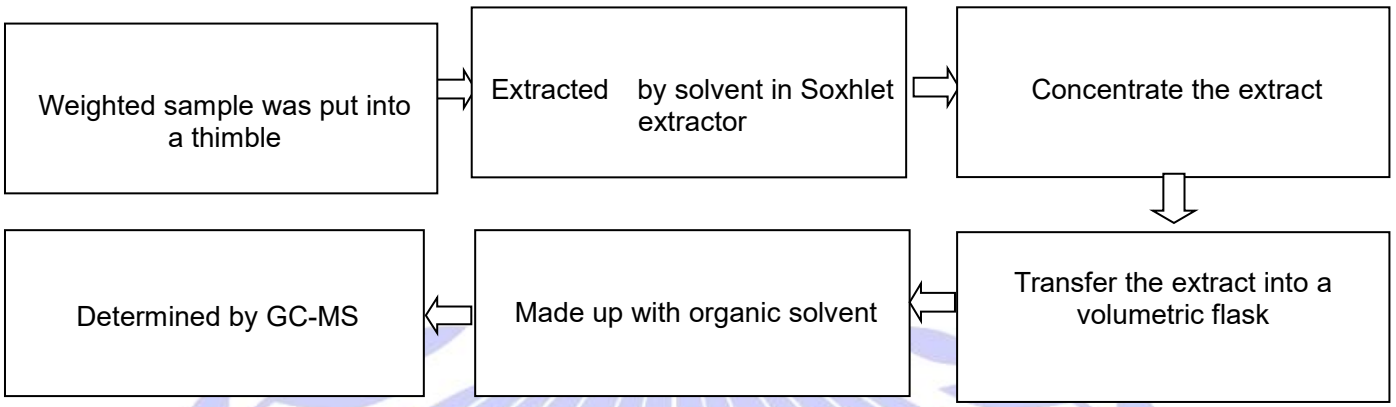
b. Test for Cr(VI) content (for non-metal)



c. Test for Cr(VI) content (for metal)



d. Test for PBBs,PBDEs,DBP,BBP,DEHP,DIBP



6. Photo(s) of the sample(s)

Photo 1

Photo 2

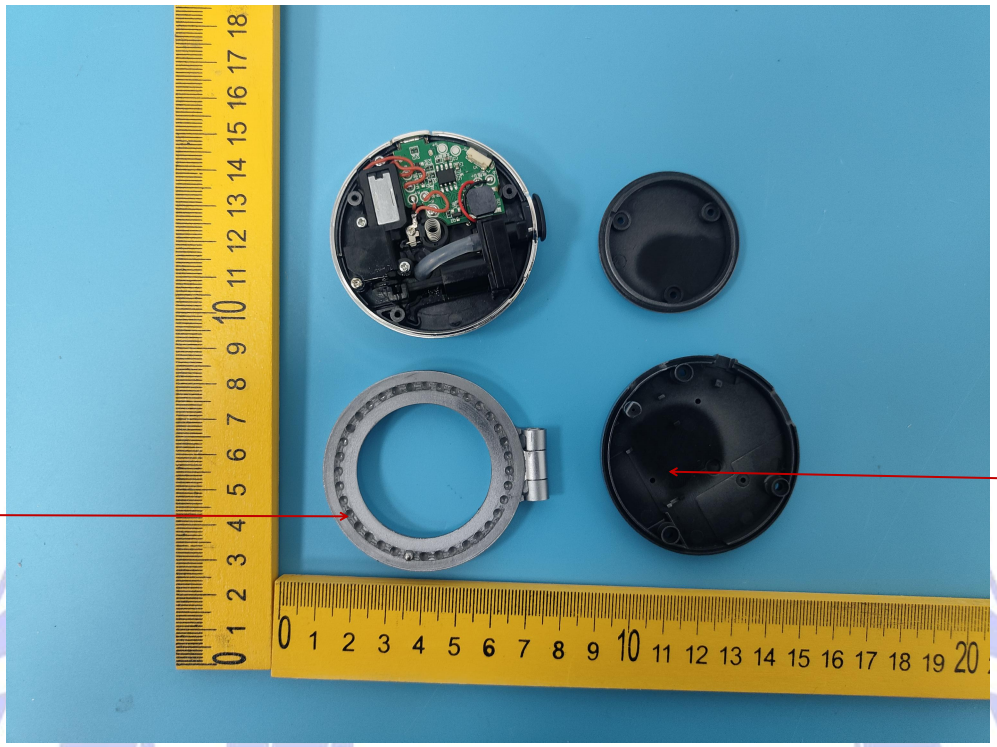


Photo 3

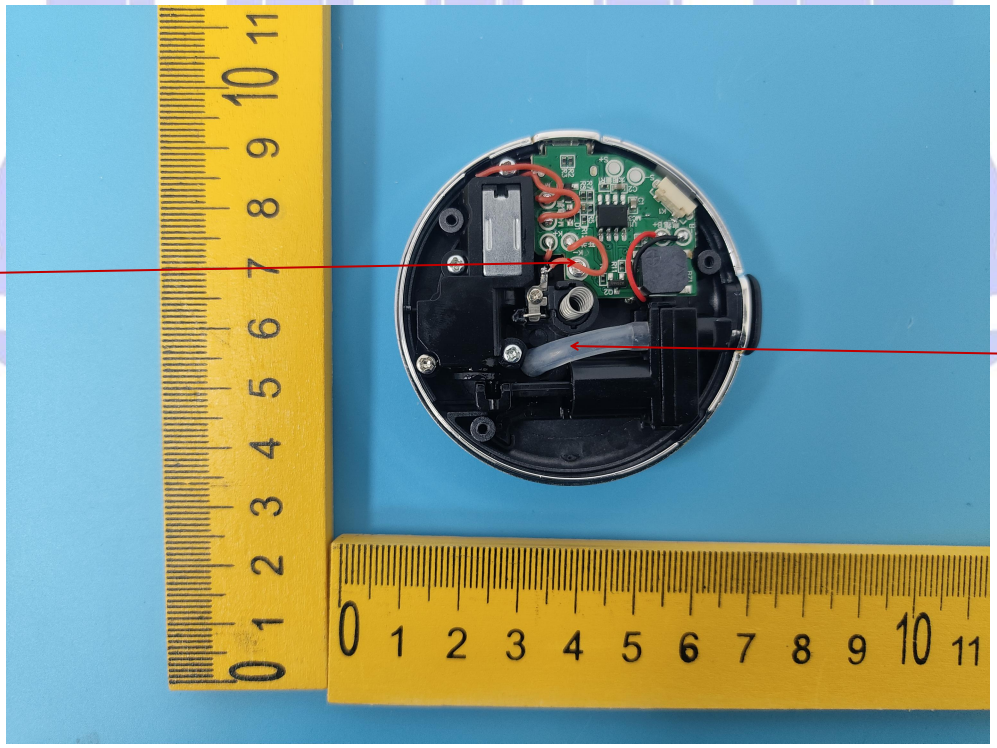


Photo 4

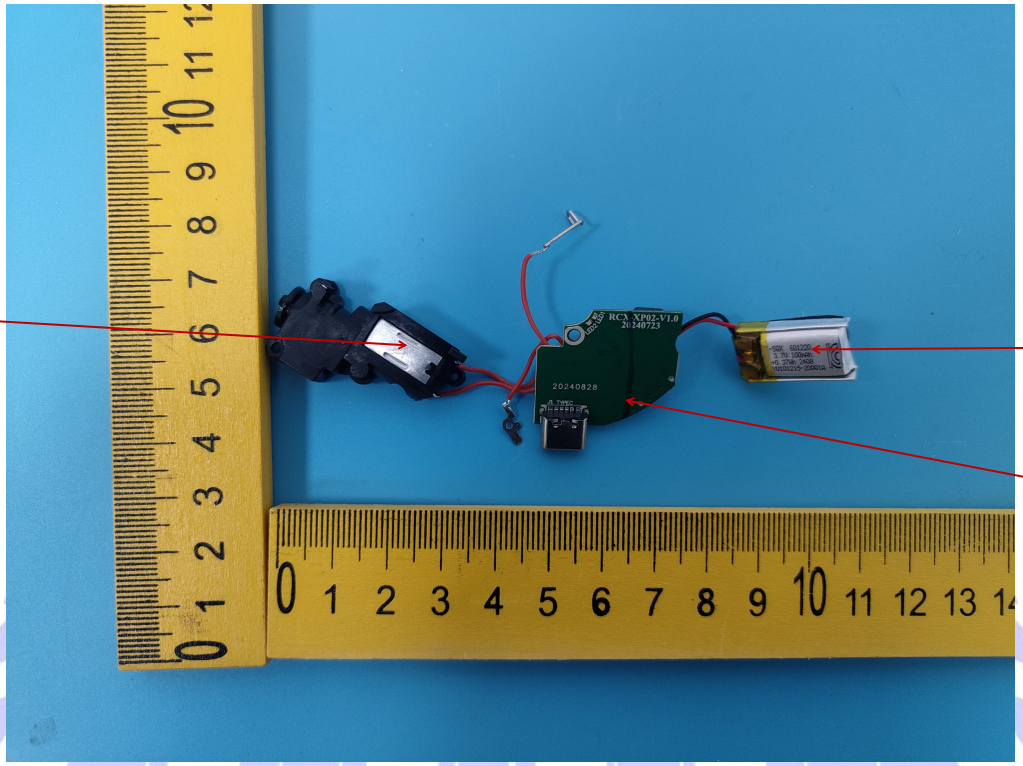


Photo 5

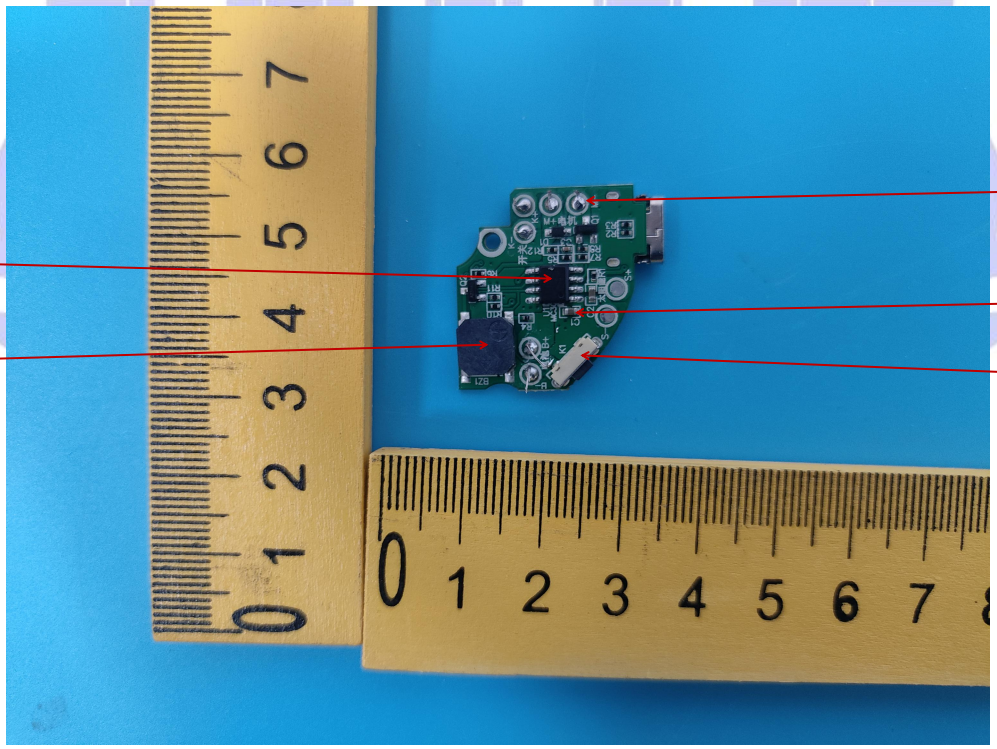


Photo 6

Photo 7

Photo 8

※※※※※ END OF REPORT ※※※※※

ZERTIFIKAT ◆ CERTIFICATE ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Supplier's Declaration of Conformity

Certificate No.: UTT202502321C

Date of Issued: Feb. 14, 2025

The device is tested to determine the maximum emission levels, and the results are compared to the radiated emission limits listed in FCC Rules and Regulations Part 15 Subpart B. The results in this report are applicable only to the equipment tested. This report shall not be reproduced in full or in part without written approval of Dongguan UTT Service Co., Ltd.

Certificate Holder:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Manufacturer:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Product Name:	Vacuum sucker
Brand Name:	N/A
Model(s):	S13, S16, S19, C2, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Rating:	Input: DC5V, 1A
Standard:	47 CFR FCC Part 15 Subpart B (Class B) ANSI C63.4: 2014
Test Report No.:	UTT202502321F

Joseph Zhang

For and on behalf of
Universal Test Technology

DONGGUAN UTT SERVICE CO., LTD. UTT * CERTIFICATED *

Dongguan UTT Service Co., Ltd.
Room 107, Building 2, No.3, Mu Lun The second road of entrepreneurship, Changping Town, Dongguan City, Guangdong, China
Tel.: +86-0769-33376882 E-mail: service@utt-cert.com Website: www.uttcert.com

TEST REPORT

47 CFR FCC Part 15 Subpart B (Class B)
Radio Frequency Devices – Unintentional Radiators – Limits and methods of measurement
ANSI C63.4: 2014
American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

Report Reference No.....:	**UTT202502321F**
Compiled by (position+printed name+signature)..:	Jowin Huang
Supervised by (position+printed name+signature)..:	Bill Wu
Approved by (position+printed name + signature).:	Aiden Zhang
Date of issue.....:	Feb. 14, 2025
Testing Laboratory Name.....:	**Dongguan UTT Service Co., Ltd.**
Address.....:	Room 107, Building 2, No.3, Mu Lun The second road of entrepreneurship , Changping Town, Dongguan City, Guangdong, China
Applicant's name.....:	**Dongguan Ruichengxing Electronic Technology Co., Ltd.**
Address.....:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Test specification:	
Standard.....:	47 CFR FCC Part 15 Subpart B (Class B) ANSI C63.4: 2014
TRF Originator.....:	Dongguan UTT Service Co., Ltd.
Master TRF.....:	Dated 2021-12

Product Name .....:	Vacuum sucker
Trade Mark .....:	N/A
Manufacturer.....:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address.....:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Model/Type reference.....:	S13, S16, S19, C2, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Model different.....:	All the model are the same except model name.
Ratings.....:	Input: DC5V, 1A
Result.....:	**Pass**

TEST REPORT

Test Report No. :	UTT202502321F	Feb. 14, 2025 Date of issue

Product name	:	Vacuum sucker
Model /Type	:	S13, S16, S19, C2, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Applicant	:	**Dongguan Ruichengxing Electronic Technology Co., Ltd.**
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Manufacturer	:	**Dongguan Ruichengxing Electronic Technology Co., Ltd.**
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, 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

The tests were performed according to following standards:

47 CFR FCC Part 15 Subpart B (Class B) Radio Frequency Devices – Unintentional Radiators – Limits and methods of measurement
ANSI C63.4: 2014 American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.

2. SUMMARY

2.1. General Remarks

Date of receipt of test sample	:	Feb. 08, 2025
Testing commenced on	:	Feb. 08, 2025
Testing concluded on	:	Feb. 14, 2025

2.2. Equipment Under Test

Power supply system utilised

Power supply voltage	:	○	120V / 60 Hz	○	230V / 50Hz
		○	12 V DC	○	24 V DC
		●	Other		

DC 5V

Adapter information

Adapter	
Description	/
Model	/
Ratings	/
Manufacturer	/

2.3. Short description of the Equipment under Test (EUT)

The EUT is Portable projector.

2.4. EUT operation mode

Operation mode	
Mode 1	On
Remark: we tested all the mode and recorded the worst data in report	

2.5. EUT configuration

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

● - supplied by the manufacturer

○ - Supplied by the lab

○	/	M/N:	/
	/	Manufacturer:	/

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Dongguan UTT Service Co., Ltd.
Room 107, Building 2, No.3, Mu Lun The second road of entrepreneurship , Changping Town, Dongguan City, Guangdong, China

3.2. Environmental conditions

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

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

3.3. Test Description

Emission Measurement		
Radiated Emission	47 CFR FCC Part 15 Subpart B Class B ANSI C63.4 2014	PASS
Conducted Disturbance	47 CFR FCC Part 15 Subpart B Class B ANSI C63.4 2014	PASS

Remark: N/A means “not applicable”.
The measurement uncertainty is not included in the test result.

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 CISPR 16 - 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the UTT 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 UTT laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.24dB	(1)
Conducted Disturbance	0.15~30MHz	3.12dB	(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

Radiated Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	ULTRA-BROADBAND ANTENNA	Schwarzbeck	VULB9163	000976	2024/10/15
2	EMI Test Receiver	Rohde&Schwarz	ESCI	101102	2024/10/15
3	Pre-Amplifier	Schwarzbeck	BBV 9743	#202	2024/10/15

Conducted Disturbance					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	101102	2024/10/15
2	Artificial Mains	ROHDE & SCHWARZ	ESH2-Z5	893606/008	2024/10/15
3	Pulse Limiter	Agilent	11947A	3107A04120	2024/10/15

The calibration interval was one year.

4. TEST CONDITIONS AND RESULTS

4.1. Radiated Emission

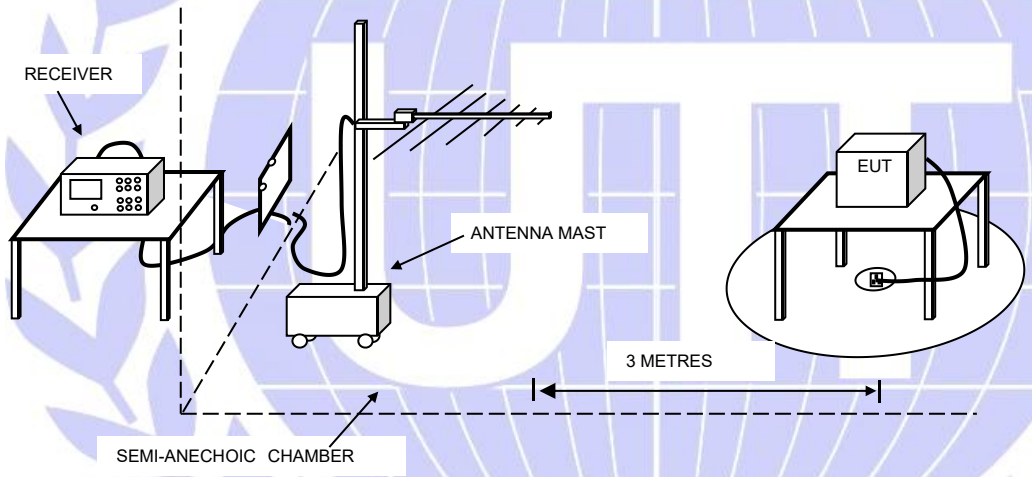
4.1.1. LIMITS OF DISTURBANCE (Class B)

Frequency (MHz)	Distance (Meters)	Field Strengths Limits (dBμV/m)
30 ~ 88	3	40
88~216	3	43.5
216 ~ 960	3	46
960-1000	3	54

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

(2) Distance refers to the distance in meters between the test instrument antenna and the closest point of any part of the E.U.T.

4.1.2. TEST CONFIGURATION



4.1.3. TEST PROCEDURE

EUT is tested in Semi-Anechoic Chamber. EUT is placed on a nonmetal table which is 0.8 meter above a grounded turntable. The turntable can rotate 360 degrees to determine the azimuth of the maximum emission level. EUT is set 3 meters away from the center of receiving antenna. The antenna can move up and down from 1 to 4 meter to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna are set on the test.

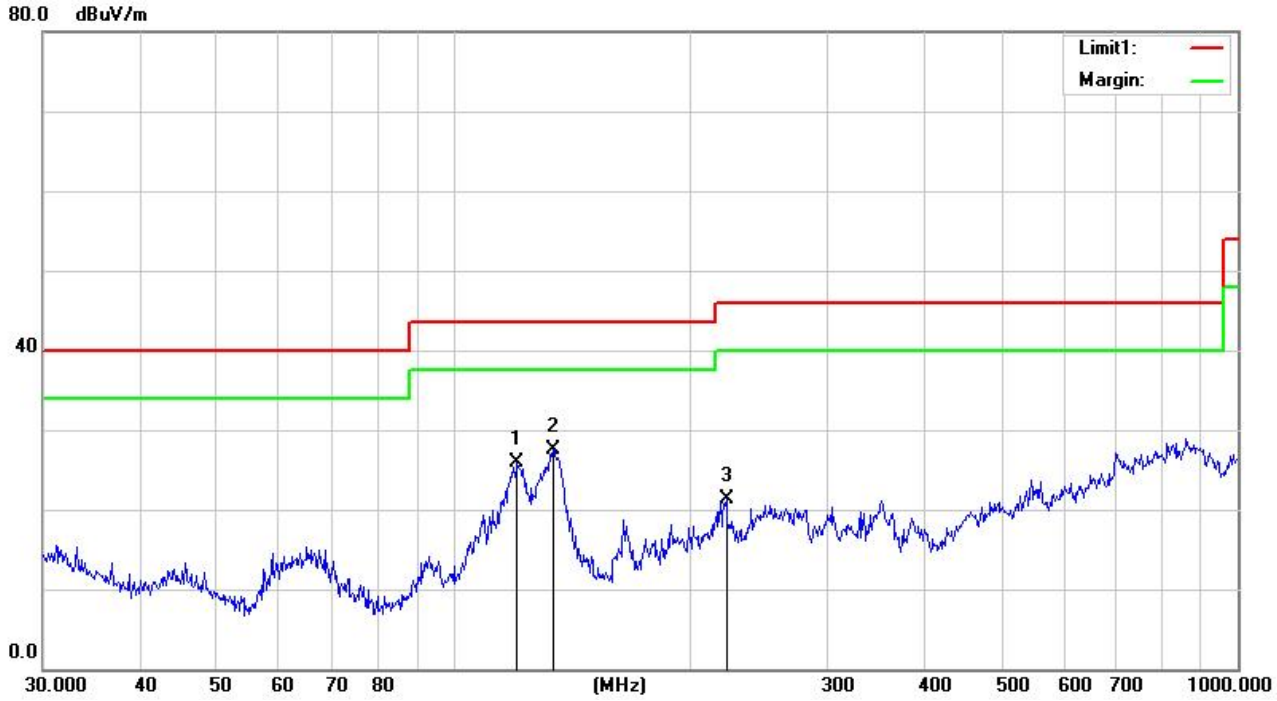
4.1.4. CLIMATIC CONDITIONS

- ambient temperature : 24 ℃
- relative humidity: 48%
- atmospheric pressure: 960 mbar

4.1.5. TEST RESULTS

Remark: 1.The EUT has been tested all modes, the worst mode has been recorded.
2. The highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1GHz.

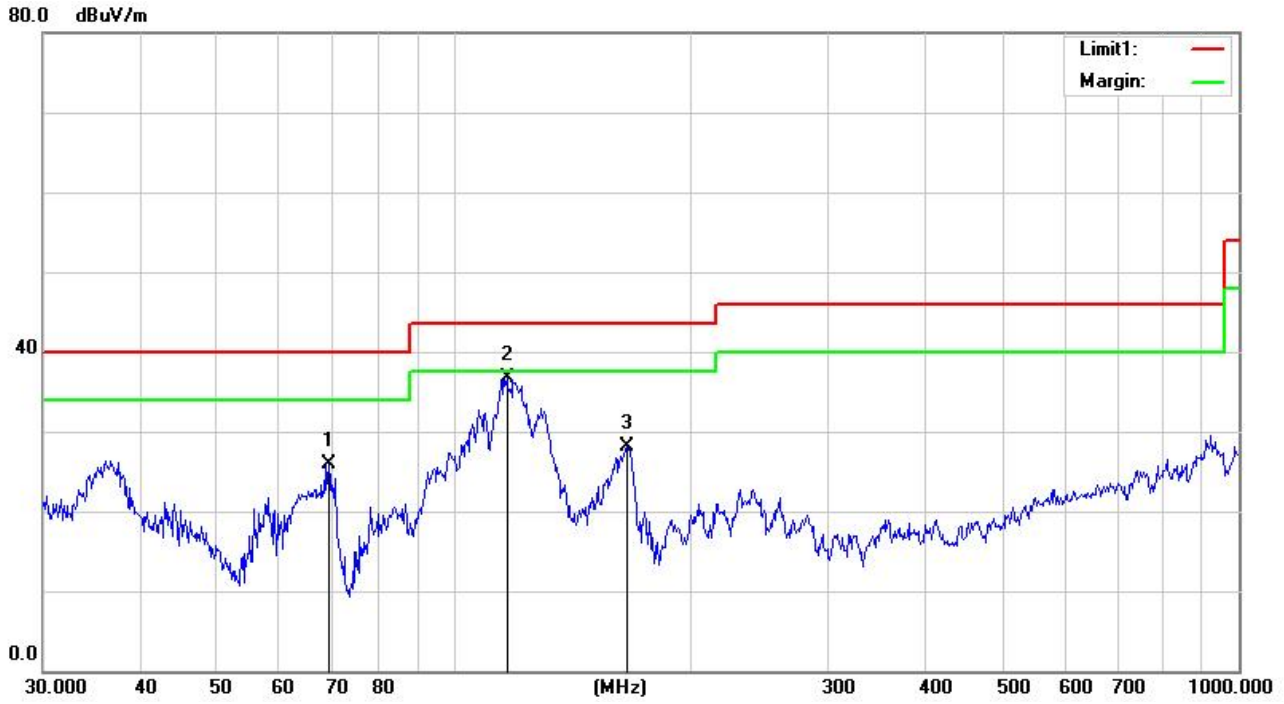
Test mode:	Model 1	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		120.6991	38.51	-12.52	25.99	43.50	-17.51	peak			
2	*	134.0882	41.47	-13.90	27.57	43.50	-15.93	peak			
3		222.9502	30.79	-9.58	21.21	46.00	-24.79	peak			

Note: Result = Reading +Factor Over Limit = Result - Limit

Test mode:	Model 1	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		69.3568	43.26	-17.39	25.87	40.00	-14.13	peak			
2	*	116.9495	49.13	-12.37	36.76	43.50	-6.74	peak			
3		166.0680	41.29	-13.23	28.06	43.50	-15.44	peak			

Note: Result = Reading +Factor Over Limit = Result - Limit

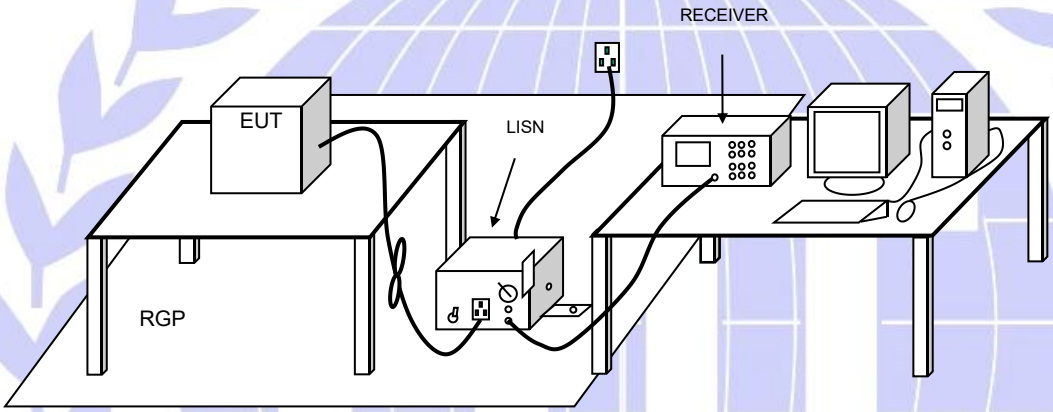
4.2. Conducted disturbance

4.2.1. LIMITS OF DISTURBANCE (Class B)

Frequency Range (MHz)	Limits (dBuV)	
	Quasi-Peak	Average
0.150～0.500	66~56	56~46
0.500～5.000	56	46
5.000~30.000	60	50

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

4.2.2. TEST CONFIGURATION



4.2.3. TEST PROCEDURE

EUT is placed on a nonmetal table which is 0.8 meter (or 0.1 meter for floor-stood equipments) above the grounded reference plane. Connect the power line of the EUT to the LISN. Voltage of the power supply is varied over a range of 0.9 to 1.1 times of the rated voltage in order to check whether the level of disturbance varies considerably with the supply voltage at the selected frequency about 160KHz. Perform an initial measurement on each line with peak detector to identify the frequencies where the maximum disturbances may occur. Then measure and record the maximum disturbances with quasi-peak and average detector.

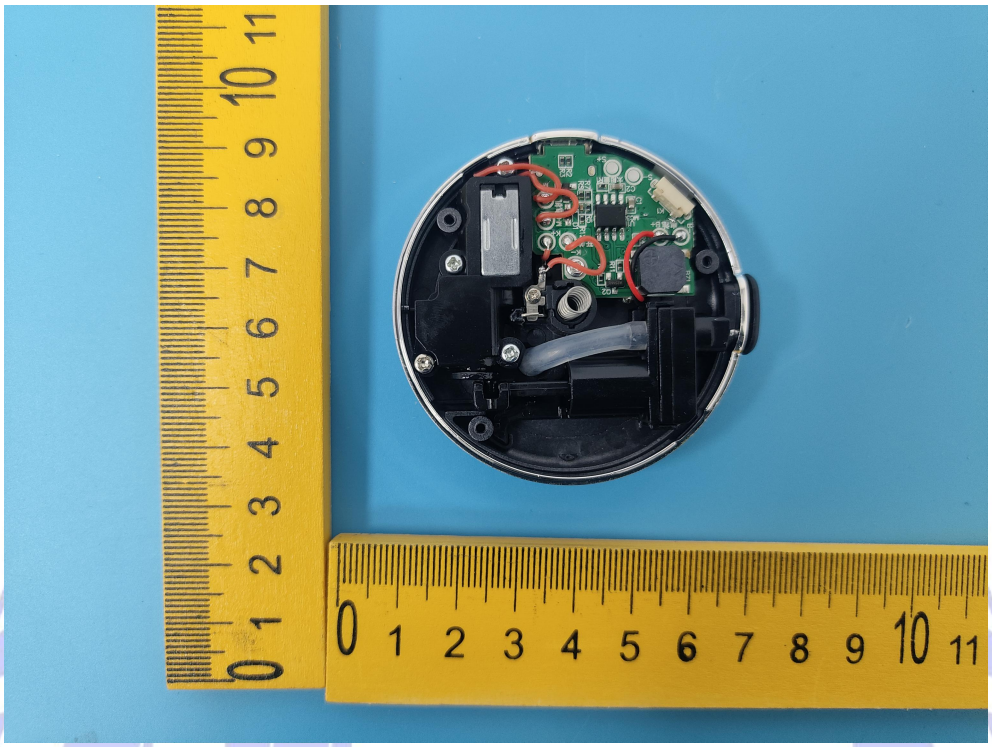
4.2.4. CLIMATIC CONDITIONS

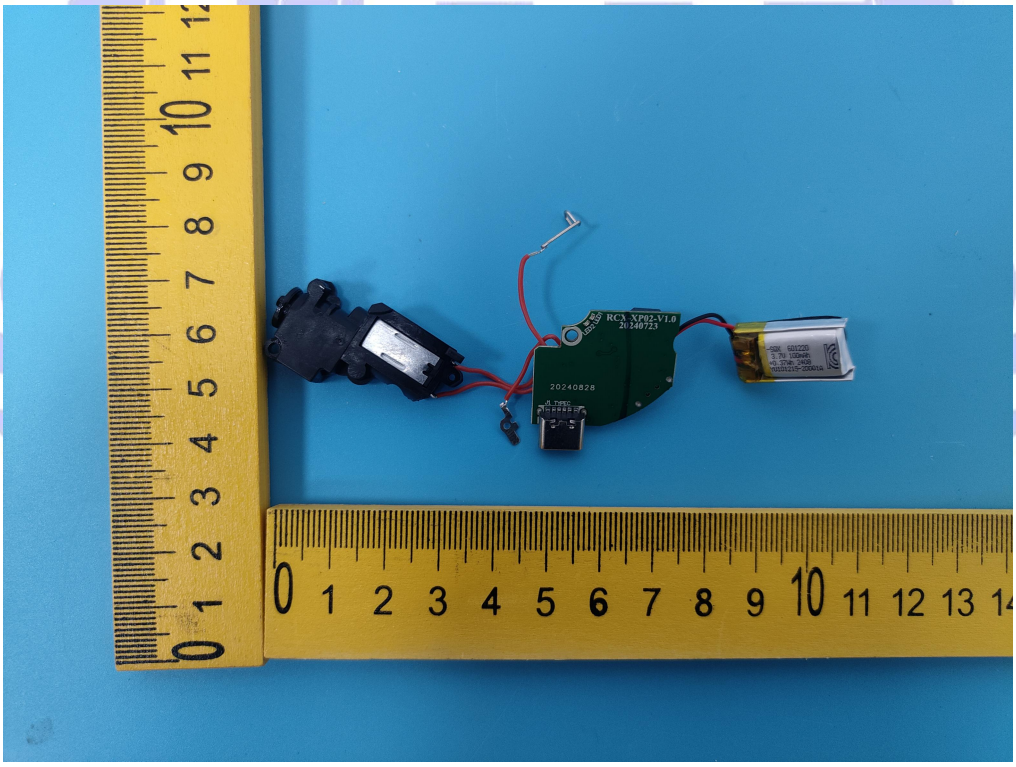
- ambient temperature : 25 ℃
- relative humidity: 52%
- atmospheric pressure: 960 mbar

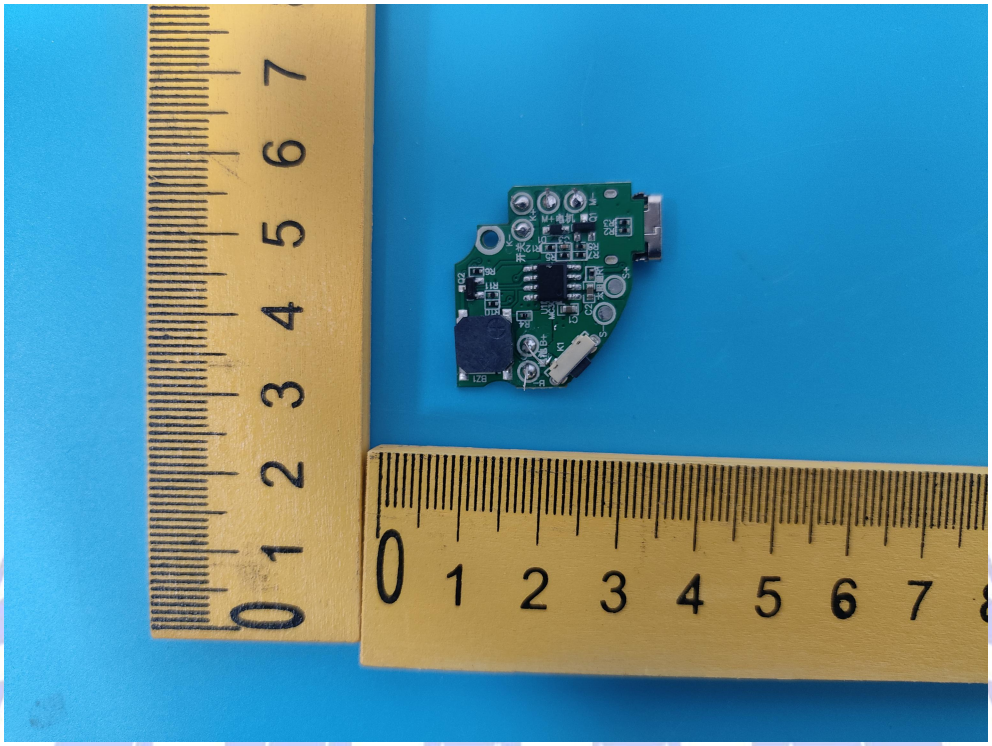
4.2.5. TEST RESULTS

N/A

5. External and Internal Photos of the EUT




RCA XP02-V1.0
20240723
20240828



.....End of Report.....

TEST REPORT

Applicant	:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Manufacturer	:	Dongguan Ruichengxing Electronic Technology Co., Ltd.
Address	:	203, Building C, No. 10, Sunerpai Road, Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province, China
Sample name	:	Vacuum sucker
Trademark	:	N/A
Model	:	S13, S16, S19, C3, C5, C6, C7, C9, C11, C12, C13, C15, C16, C17, C18, C19
Model different	:	All the model are the same except model name.
Test Requested:		As specified by client, with reference to RoHS Directive 2011/65/EU Annex II amending Annex (EU)2015/863 to determine the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Dibutuyl Phthalate (DBP), Benzyl butyl phthalate(BBP), Bis-(2-ethyl hexyl)-phthalate(DEHP) and Diisobutyl phthalate(DIBP) content in the submitted sample.
Test item	:	Cd、Pb、Hg、Cr(VI)、PBBs、PBDEs、DBP、BBP、DEHP、DIBP
Report Number	:	UTT202501262S
Date of Test	:	Jan. 18, 2025 to Jan. 22, 2025
Date of Report	:	Jan. 22, 2025
Test by	:	Jowin Huang
Review by	:	Nike Huang
Approve by	:	Joseph Zhang

DONGGUAN UTT SERVICE CO., LTD. * CERTIFICATED *

1. Tested components

No.	SAMPLE No.	COMPONENTS	MATERIAL OR COLOR	REMARK
1	A-1	Push	BLACK	SEE THE PHOTO
2	A-2	Cover	TRANSPARENT	SEE THE PHOTO
3	A-3	Type C	MIXED	SEE THE PHOTO
4	A-4	Sucker	BLACK	SEE THE PHOTO
5	A-5	Enclosure	BLACK	SEE THE PHOTO
6	A-6	Ring	WHITE	SEE THE PHOTO
7	A-7	Pipe	WHITE	SEE THE PHOTO
8	A-8	Wire	RED	SEE THE PHOTO
9	A-9	Battery	MIXED	SEE THE PHOTO
10	A-10	PCB	GREEN	SEE THE PHOTO
11	A-11	Motor	MIXED	SEE THE PHOTO
12	A-12	Soldering tin	WHITE	SEE THE PHOTO
13	A-13	Capacitance	MIXED	SEE THE PHOTO
14	A-14	Inductance	MIXED	SEE THE PHOTO
15	A-15	Connector	WHITE	SEE THE PHOTO
16	A-16	Chip	BLACK	SEE THE PHOTO

2. Test result:

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
A-1	Push	Cadmium (Cd)	**N.D.**	**P**
		Lead (Pb)	**N.D.**	
		Mercury (Hg)	**N.D.**	
		Hexavalent Chromium (CrVI)	**N.D.**	
		Bromine (Br)	**N.D**	
		Dibutyl Phthalate(DBP)	**N.D.**	
		Benzyl butyl phthalate (BBP)	**N.D.**	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	**N.D.**	
		Diisobutyl Phthalate(DIBP)	**N.D**	
A-2	Cover	Cadmium (Cd)	**N.D.**	**P**
		Lead (Pb)	**N.D.**	
		Mercury (Hg)	**N.D.**	
		Hexavalent Chromium (CrVI)	**N.D.**	
		Bromine (Br)	**N.D**	
		Dibutyl Phthalate(DBP)	**N.D.**	
		Benzyl butyl phthalate (BBP)	**N.D.**	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-3	Type C	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-4	Sucker	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-5	Enclosure	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-6	Ring	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-7	Pipe	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate	N.D.	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		(DEHP)		
		Diisobutyl Phthalate(DIBP)	N.D	
A-8	Wire	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-9	Battery	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-10	PCB	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-11	Motor	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-12	Soldering tin	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	

Sample No.	Component Description	Test Item	XRF Screening Result(mg/kg)	Verdict
		Diisobutyl Phthalate(DIBP)	N.D	
A-13	Capacitance	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-14	Inductance	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-15	Connector	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	
A-16	Chip	Cadmium (Cd)	N.D.	P
		Lead (Pb)	N.D.	
		Mercury (Hg)	N.D.	
		Hexavalent Chromium (CrVI)	N.D.	
		Bromine (Br)	N.D	
		Dibutyl Phthalate(DBP)	N.D.	
		Benzyl butyl phthalate (BBP)	N.D.	
		Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D.	
		Diisobutyl Phthalate(DIBP)	N.D	

Remark:
(1) P=Pass; F=Fail; IC=Inconclusive; N.A.=Not Applicable
(2) N.D.= not detected, less than MDL
(3) mg/kg = milligram per kilogram
(4) MDL = method detection limit
(5) IC# represents a region, the value fell on this area need further confirmation.
(6) *1 Exceeds XRF screening limits, need further chemical confirmation.
(7) #1 The test result is detected in the boiling-water-extraction solution and should not be interpreted as the Cr(VI) concentration in the surface of the sample.
(8) #2 This value is based on the concentration of extraction of 50 cm^2 area of the sample.
(9) XRF screening result for reference only.
(10) The product photo was in the report provided by the applicant

3. Test Method

Chemical testing methods & Equipments

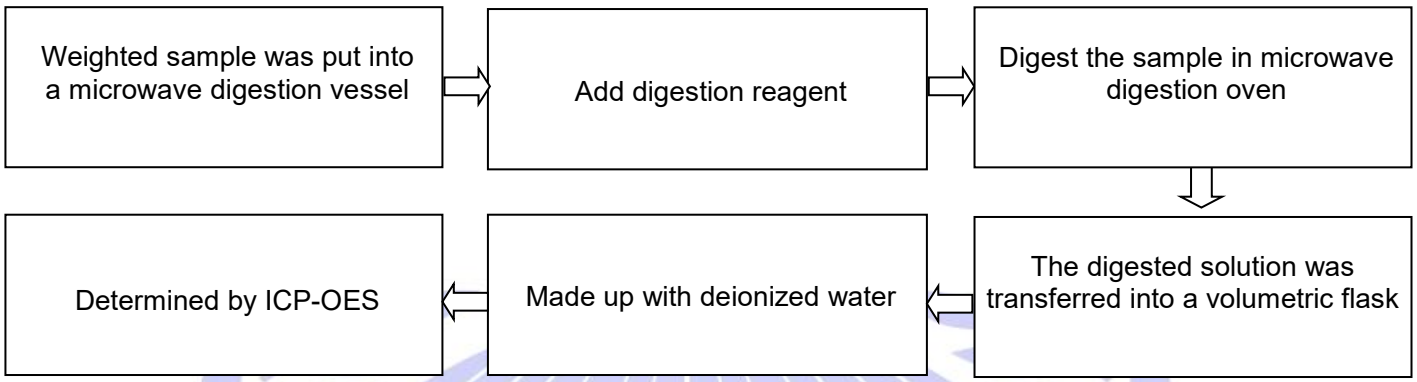
Testing Item	Testing Method	Equipment	Cal Date	Due Date
Lead (Pb)	IEC62321-5-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Cadmium (Cd)	IEC62321-5-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Mercury (Hg)	IEC62321-4-2013 (Ed1.0)	ICP-OES	2024/10/15	2025/10/14
Hexavalent chromium (Cr(VI)) for plastic	IEC 62321-7-2:2017	UV-VIS	2024/10/15	2025/10/14
Hexavalent chromium (Cr(VI)) for coating on metals	IEC62321-7-1-2015	UV-VIS	2024/10/15	2025/10/14
PBBs	IEC62321-6-2015 (Ed1.0)	GC-MS	2024/10/15	2025/10/14
PBDEs	IEC62321-6-2015 (Ed1.0)	GC-MS	2024/10/15	2025/10/14
DBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
BBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
DEHP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14
DIBP	IEC 62321-8:2017	GC-MS	2024/10/15	2025/10/14

4. RoHS Requirement(mg/kg) :

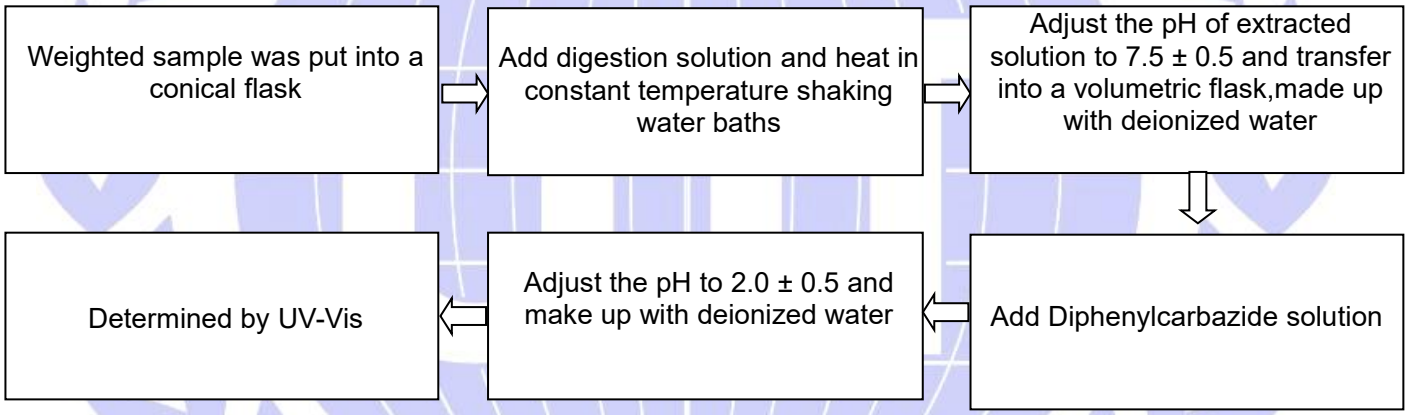
Restricted substances	Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs	BBP	DBP	DEHP	DIBP
RoHS limit	100	1000	1000	1000	1000	1000	1000	1000	1000	1000

5. Measurement Flowchart

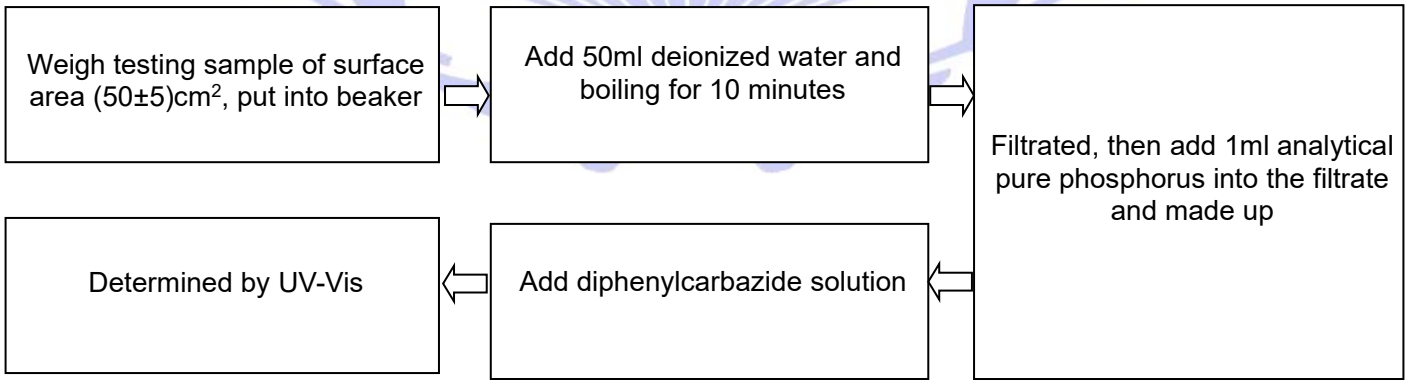
a. Test for Cd / Pb /Hg contents)



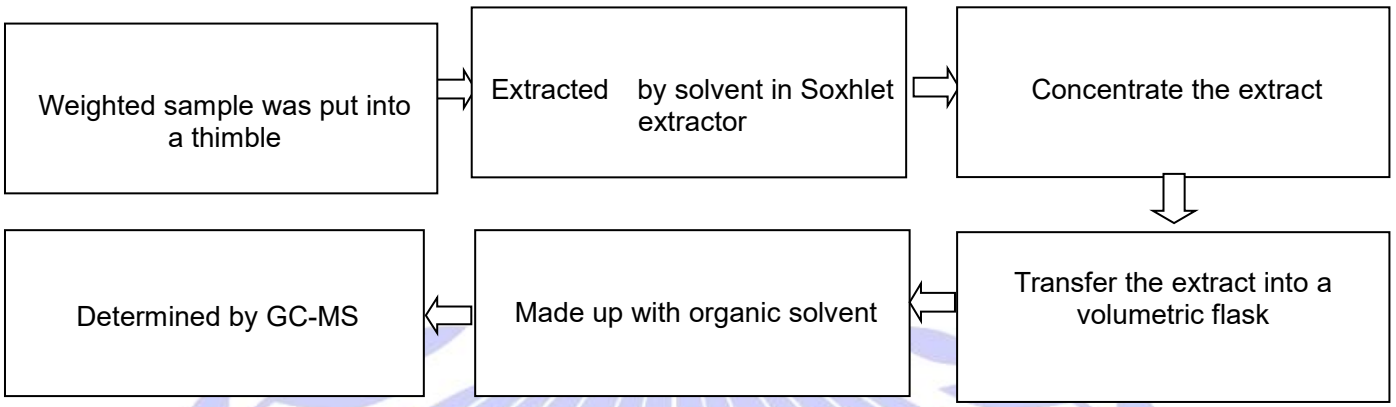
b. Test for Cr(VI) content (for non-metal)



c. Test for Cr(VI) content (for metal)



d. Test for PBBs,PBDEs,DBP,BBP,DEHP,DIBP



6. Photo(s) of the sample(s)

Photo 1

Photo 2

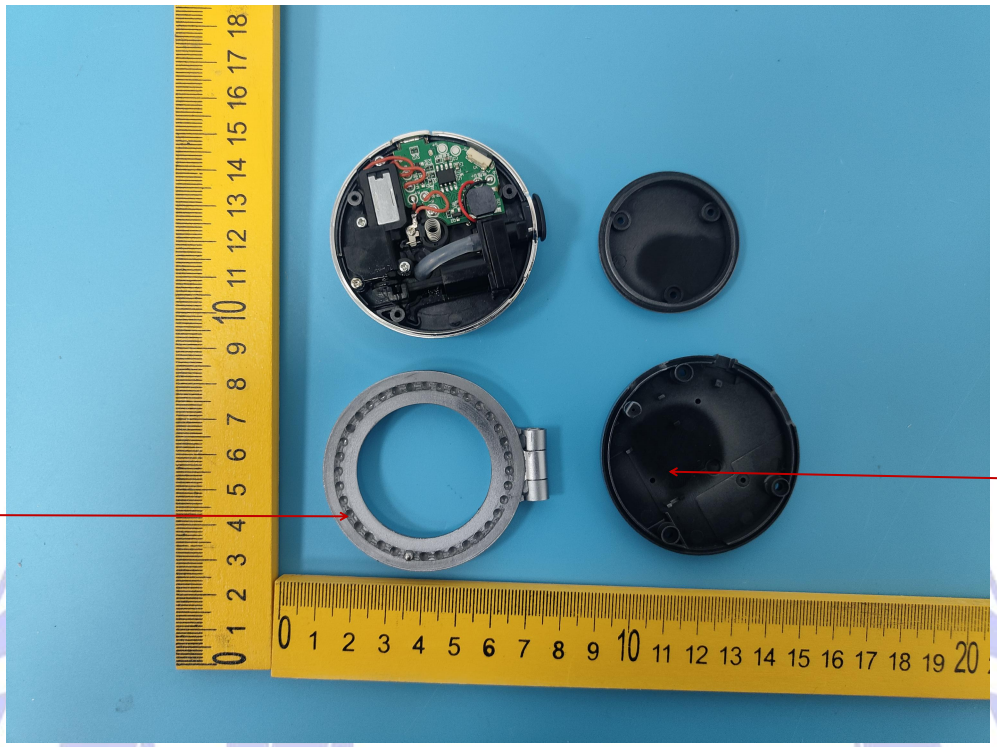


Photo 3

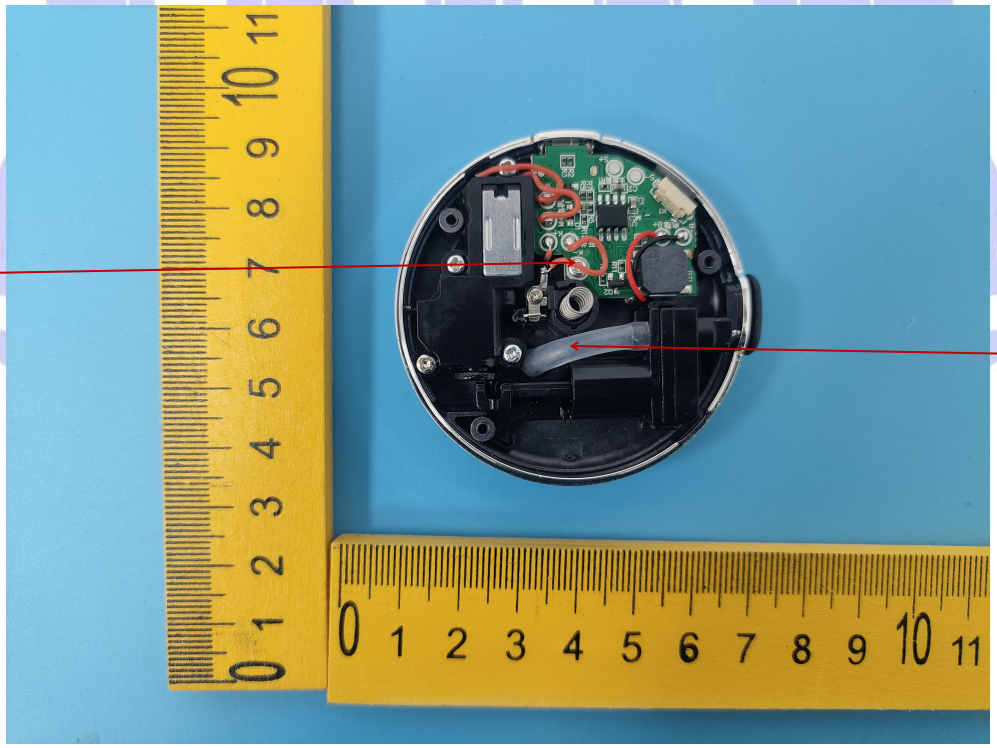


Photo 4

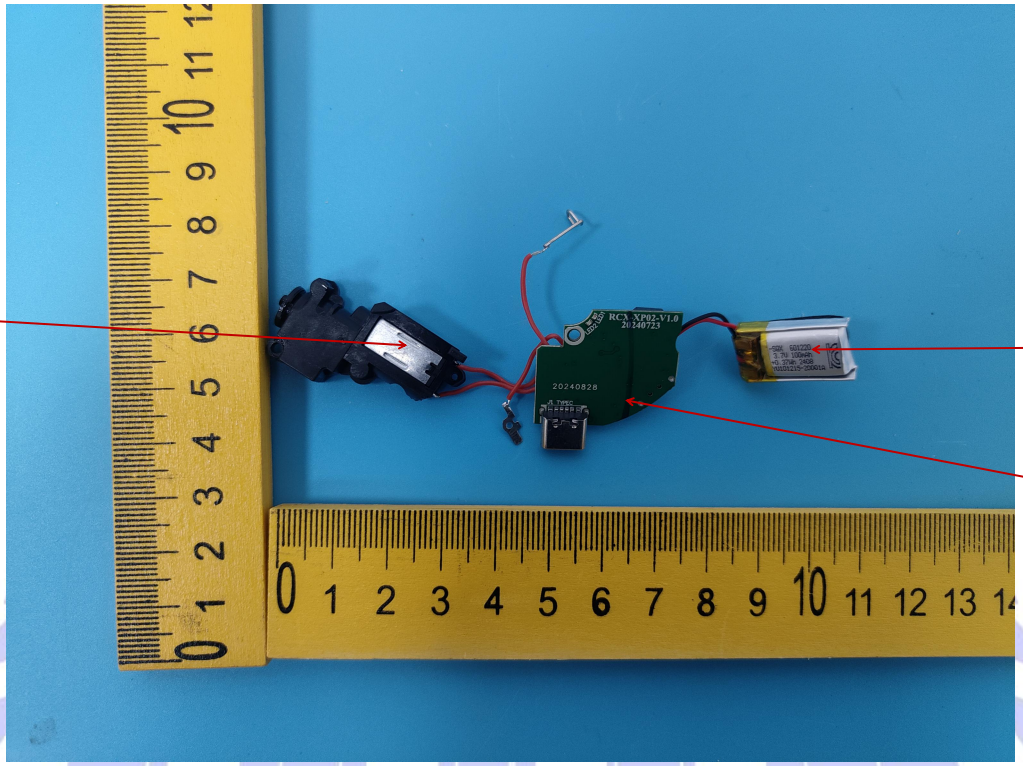


Photo 5

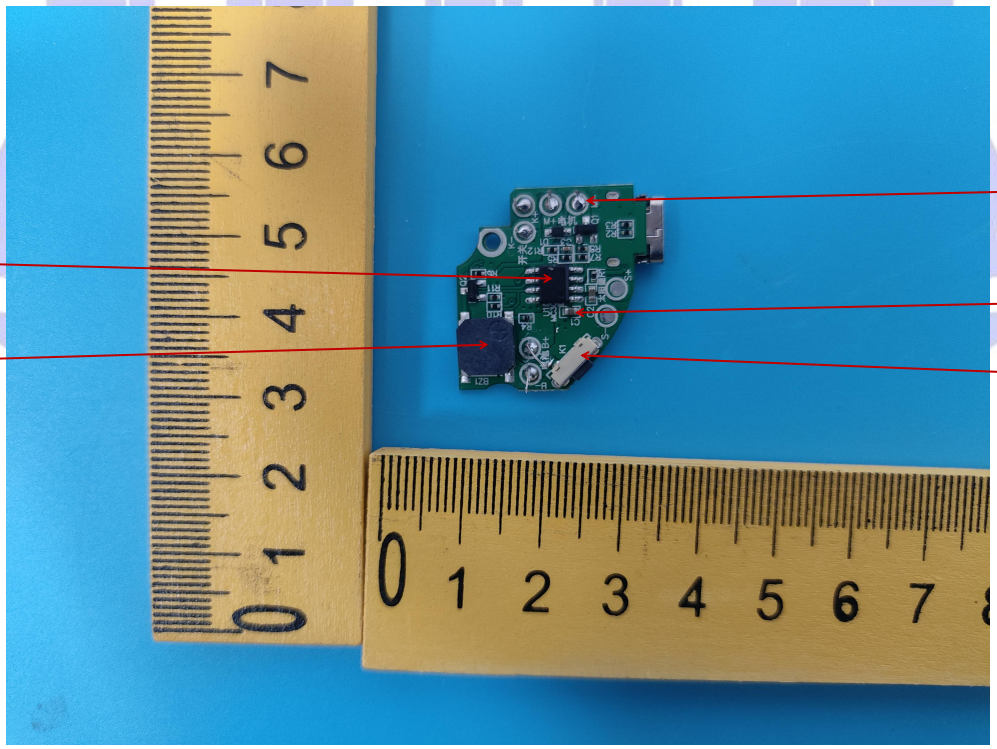


Photo 6

※※※※※ END OF REPORT ※※※※※