

# EMC TEST REPORT

**Sample :** COUNTER

**Trade Mark :** N/A

**Main Model :** CB-2013

**Additional Model :** Additional model see the table in page 6.

**Report No. :** UNIA23073103ER-11

## Prepared for

ZHEJIANG CHONG BO SCIENCE & TECHNOLOGY CO., LTD.

NO.620 Jiulong North Road Yongkang City Zhejiang Province

## Prepared by

Shenzhen United Testing Technology Co., Ltd.

D101&D401, No. 107, Kaicheng High-Tech Park, Taoyuan Community,  
Dalang Sub-District, Longhua District, Shenzhen, Guangdong, China

## TEST RESULT CERTIFICATION

**Applicant** ..... : ZHEJIANG CHONG BO SCIENCE & TECHNOLOGY CO., LTD.

**Address** ..... : NO.620 Jiulong North Road Yongkang City Zhejiang Province

**Manufacturer** ..... : ZHEJIANG CHONG BO SCIENCE & TECHNOLOGY CO., LTD.

**Address** ..... : NO.620 Jiulong North Road Yongkang City Zhejiang Province

**Product description**

**Product** ..... : COUNTER

**Trade Mark** ..... : N/A

**Model Name** ..... : CB-2013, Additional model see the table in page 6.

**Standards** ..... : EN IEC 55014-1:2021  
EN IEC 55014-2:2021

**Date of Test**

**Date (s) of performance of tests** ..... : Jul. 31, 2023 ~ Aug. 04, 2023

**Date of Issue** ..... : Aug. 08, 2023

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

Prepared by:

*Jason Ye*

Jason Ye/Editor

Reviewer:

*Kelly Cheng*

Kelly Cheng/Supervisor

Approved & Authorized Signer:

*Liuze*

Liuze/Manager

## Table of Contents

## Page

|                                                                                    |           |
|------------------------------------------------------------------------------------|-----------|
| <b>1 TEST SUMMARY .....</b>                                                        | <b>4</b>  |
| 1.1 TEST RESULTS .....                                                             | 4         |
| 1.2 TEST LOCATION .....                                                            | 4         |
| 1.3 MEASUREMENT UNCERTAINTY .....                                                  | 5         |
| 1.4 ENVIRONMENTAL CONDITIONS .....                                                 | 5         |
| <b>2 GENERAL INFORMATION .....</b>                                                 | <b>6</b>  |
| 2.1 GENERAL DESCRIPTION OF EUT .....                                               | 6         |
| 2.2 DESCRIPTION OF THE TEST MODES .....                                            | 7         |
| 2.3 DESCRIPTION OF TEST SETUP .....                                                | 7         |
| 2.4 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL .....                           | 7         |
| 2.5 MEASUREMENT INSTRUMENTS LIST .....                                             | 8         |
| <b>3 RADIATED EMISSIONS MEASUREMENT .....</b>                                      | <b>9</b>  |
| 3.1 RADIATED EMISSION LIMIT .....                                                  | 9         |
| 3.2 TEST SETUP .....                                                               | 9         |
| 3.4 TEST PROCEDURE .....                                                           | 9         |
| 3.5 TEST RESULT .....                                                              | 9         |
| <b>4 EMC IMMUNITY TEST .....</b>                                                   | <b>12</b> |
| 4.1 STANDARD COMPLIANCE/SERVIRITY LEVEL/CRITERIA .....                             | 12        |
| 4.2 GENERAL PERFORMANCE CRITERIA .....                                             | 12        |
| <b>5 ELECTROSTATIC DISCHARGE IMMUNITY TEST (ESD) .....</b>                         | <b>13</b> |
| 5.1 TEST SPECIFICATION .....                                                       | 13        |
| 5.2 TEST SETUP .....                                                               | 13        |
| 5.3 TEST PROCEDURE .....                                                           | 14        |
| 5.4 TEST RESULT .....                                                              | 15        |
| <b>6 RADIATED, RADIO-FREQUENCY, ELECTROMAGNETIC FIELD IMMUNITY TEST (RS) .....</b> | <b>16</b> |
| 6.1 TEST SPECIFICATION .....                                                       | 16        |
| 6.2 TEST SETUP .....                                                               | 16        |
| 6.3 TEST PROCEDURE .....                                                           | 17        |
| 6.4 TEST RESULT .....                                                              | 17        |
| <b>7 PHOTO OF EUT .....</b>                                                        | <b>18</b> |
| <b>8 PHOTO OF TEST .....</b>                                                       | <b>22</b> |

# 1 TEST SUMMARY

## 1.1 TEST RESULTS

Test procedures according to the technical standards:

| EMC Emission                                 |                                       |                         |        |        |
|----------------------------------------------|---------------------------------------|-------------------------|--------|--------|
| Standard                                     | Test Item                             | Class                   | Result | Remark |
| EN IEC 55014-1:2021                          | Radiated Emission<br>30MHz to 1000MHz | Class B                 | PASS   | --     |
| EMC Immunity                                 |                                       |                         |        |        |
| Section<br>EN IEC 55014-2:2021               | Test Item                             | Performance<br>Criteria | Result | Remark |
| EN 61000-4-2:2009                            | Electrostatic Discharge               | B                       | PASS   | --     |
| EN IEC<br>61000-4-3:2020<br>+A1:2008+A2:2010 | RF Electromagnetic Field              | A                       | PASS   | --     |

Note:

- (1) For client's request and manual description, the test will not be executed.
- (2) "N/A" denotes test is not applicable in this Test Report
- (3) "--" means "no" in this test report.

## 1.2 TEST LOCATION

Test Laboratory : Shenzhen United Testing Technology Co., Ltd.

Address : D101&D401, No. 107, Kaicheng High-Tech Park, Taoyuan Community,  
Dalang Sub-District, Longhua District, Shenzhen, Guangdong, China

### 1.3 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k = 2$ , providing a level of confidence of approximately 95%.

#### A. Conducted Measurement:

| Test Site | Method | Measurement Frequency Range | U, (dB) | NOTE |
|-----------|--------|-----------------------------|---------|------|
| UNI       | ANSI   | 9kHz ~ 150kHz               | 2.96    | --   |
|           |        | 150kHz ~ 30MHz              | 2.44    | --   |

#### B. Radiated Measurement:

| Test Site | Method | Measurement Frequency Range | U, (dB) | NOTE |
|-----------|--------|-----------------------------|---------|------|
| UNI       | ANSI   | 9kHz ~ 30MHz                | 2.50    | --   |
|           |        | 30MHz ~ 1000MHz             | 4.80    | --   |
|           |        | 1000MHz ~ 6000MHz           | 4.13    | --   |

### 1.4 ENVIRONMENTAL CONDITIONS

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

|                    |              |
|--------------------|--------------|
| Temperature:       | 15~35 °C     |
| Relative Humidity: | 30~60 %      |
| Air Pressure:      | 950~1050 hPa |



## 2 GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

The following information of EUT submitted and identified by applicant:

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>             | COUNTER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Trade Mark:</b>          | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Main Model:</b>          | CB-2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Additional Model:</b>    | CB-JP060, CB-JP059, CB-JP039, CB-JP021, CB-JP036, CB-JP066, CB-JP063, CB-JP065, CB-JP012, CB-2003, CB-TP022, CB-JP033, CB-8005, CB-8006, CB-8007, CB-JP006-P, CB-JP040, CB-JP034, CB-8009, CB-8010, CB-8011, CB-8015, CB-8016, CB-8017, CB-8018, CB-JP038, CB-JP035, CB-JP015, CB-TP003, CB-TP004, CB-TP005, CB-TP006, CB-TP007, CB-TP008, CB-TP010, CB-TP009, CB-TP011, CB-TP017, CB-TP013, CB-TP015, CB-TP016, CB-TP026, CB-TP028, CB-TP030, CB-TP031, CB-JP004, CB-JP003, CB-JP007, CB-JP006, CB-JP008, CB-2001, CB-2005, CB-2006, CB-TP019, CB8029, CB6025 |
| <b>Model Difference:</b>    | All model's the function, software and electric circuit are the same, only with a product color and model named different. Test sample model: CB-2013.                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Power Source:</b>        | DC 3V by battery                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Product Description:</b> | The EUT is a COUNTER.<br><br>Based on the application, features, or specification exhibited in User's Manual, more details of EUT technical specification, please refer to the User's Manual.                                                                                                                                                                                                                                                                                                                                                                  |

I/O Port Information (☐ Applicable ☒ Not Applicable)

| I/O Port Type | Number |
|---------------|--------|
| --            | --     |

## 2.2 DESCRIPTION OF THE TEST MODES

| No. | Test mode description |
|-----|-----------------------|
| 1   | Working mode          |

## 2.3 DESCRIPTION OF TEST SETUP



Note: The EUT tested system was configured as upper figure, unless otherwise a special operating condition is specified in the following during the testing.

## 2.4 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment | Mfr/Brand | Model/Type No. | Power Cable Length | Note |
|------|-----------|-----------|----------------|--------------------|------|
| E-1  | COUNTER   | N/A       | CB-2013        | --                 | EUT  |

Note:

1. The support equipment was authorized by Declaration of Confirmation.
2. All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

## 2.5 MEASUREMENT INSTRUMENTS LIST

| Item                           | Equipment                       | Manufacturer            | Model No.            | Serial No.           | Calibrated until |
|--------------------------------|---------------------------------|-------------------------|----------------------|----------------------|------------------|
| Radiated Emissions Measurement |                                 |                         |                      |                      |                  |
| 1                              | Radiated Emission Test Software | EZ-EMC                  | Ver.CCS-03A1         | N/A                  | N/A              |
| 2                              | Horn Antenna                    | Sunol                   | DRH-118              | A101415              | 2023.09.27       |
| 3                              | Broadband Hybrid Antenna        | Sunol                   | JB1                  | A090215              | 2024.02.26       |
| 4                              | PREAMP                          | HP                      | 8449B                | 3008A00160           | 2023.09.22       |
| 5                              | PREAMP                          | HP                      | 8447D                | 2944A07999           | 2024.05.30       |
| 6                              | EMI Test Receiver               | Rohde&Schwarz           | ESR3                 | 101891               | 2023.09.22       |
| 7                              | MXA Signal Analyzer             | Keysight                | N9020A               | MY51110104           | 2023.09.22       |
| 8                              | Active Loop Antenna             | Com-Power               | AL-310R              | 10160009             | 2024.05.28       |
| 9                              | Horn Antenna                    | Schwarzbeck             | BBHA9120D            | 9120D-1680           | 2024.05.27       |
| 10                             | Horn Antenna                    | A-INFOMW                | LB-180400-KF         | J211060660           | 2023.10.30       |
| 11                             | Loop Antenna                    | Beijing daze Technology | ZN30401              | 13015                | 2023.09.22       |
| 12                             | EM Clamp                        | Schwarzbeck             | MDS21                | 03350                | 2023.10.27       |
| Electrostatic Discharge Test   |                                 |                         |                      |                      |                  |
| 1                              | ESD Generator                   | EVERFINE                | EMS61000-2A          | P185811CA837112<br>1 | 2023.10.22       |
| RS Test                        |                                 |                         |                      |                      |                  |
| 1                              | Power Meter                     | Agilent                 | E4419B               | QB4331226            | 2023.10.10       |
| 2                              | Power Sensor                    | Agilent                 | 8481A                | MY41092622           | 2023.10.10       |
| 3                              | Power Sensor                    | Agilent                 | 8481A                | US37296783           | 2023.10.10       |
| 4                              | Signal Generator                | Agilent                 | N5182A               | MY46240556           | 2023.10.10       |
| 5                              | Power Amplifier                 | MICOTOP                 | MPA-80-1000-250      | 1711489              | 2023.10.10       |
| 6                              | Power Amplifier                 | MICOTOP                 | MPA-1000-3000-7<br>5 | 1711488              | 2023.10.10       |
| 7                              | Power Amplifier                 | MICOTOP                 | MPA-3000-6000-5<br>0 | MPA1706275           | 2023.10.10       |
| 8                              | Bilog Antenna                   | TESEQ                   | CBL6111D             | 34678                | 2023.10.10       |
| 9                              | Horn Antenna                    | Schwarzbeck             | BBHA9120D            | 9120D-1680           | 2024.05.27       |



### 3 RADIATED EMISSIONS MEASUREMENT

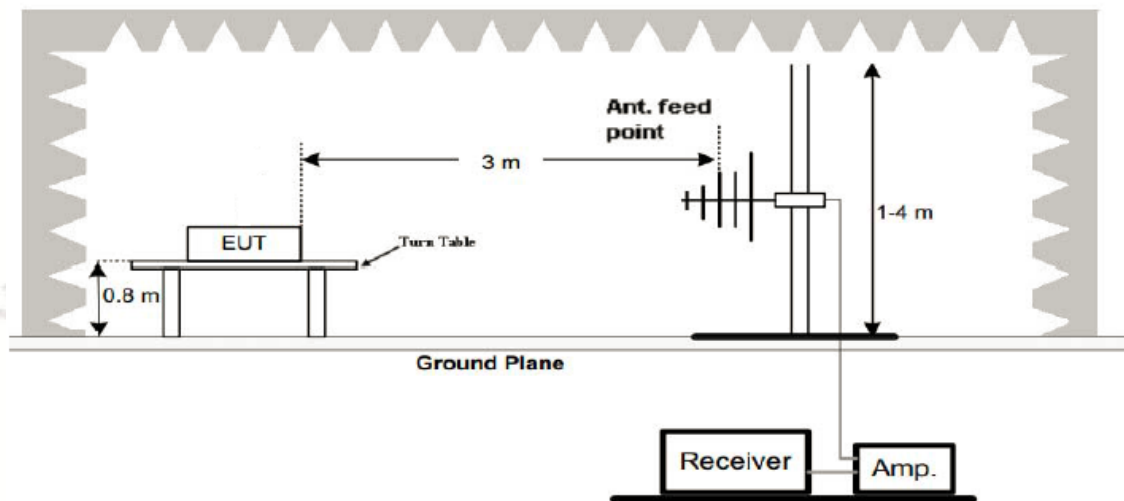
#### 3.1 RADIATED EMISSION LIMIT

| Frequency (MHz) | 10m    | 3m     |
|-----------------|--------|--------|
|                 | dBuV/m | dBuV/m |
| 30~230          | 30     | 40     |
| 230~1000        | 37     | 47     |

Note:

1. The limit for radiated test was performed according to as following: CISPR 14.
2. The tighter limit applies at the band edges.
3. Emission level (dBuV/m) = 20log Emission level (uV/m).

#### 3.2 TEST SETUP



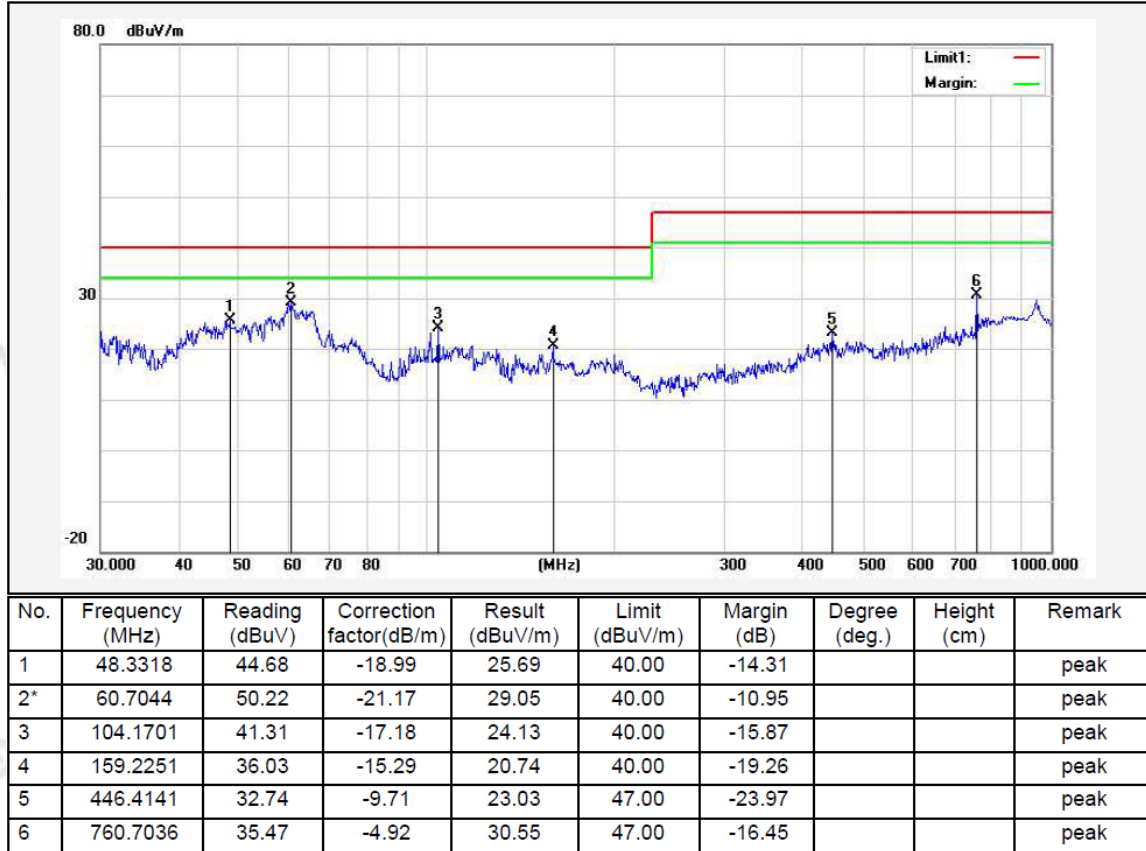
#### 3.4 TEST PROCEDURE

1. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
2. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
3. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured, above 1G Average detector mode will be instead.
5. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP(AV) Limits and then no additional QP Mode measurement performed.
6. For the actual test configuration, please refer to the related Item EUT Test Photos.

#### 3.5 TEST RESULT

PASS

|               |        |                    |            |
|---------------|--------|--------------------|------------|
| Temperature:  | 25°C   | Relative Humidity: | 60%        |
| Test Voltage: | DC 3V  | Pressure:          | 1010hPa    |
| Test Mode:    | Mode 1 | Polarization:      | Horizontal |



|               |        |                    |          |
|---------------|--------|--------------------|----------|
| Temperature:  | 25°C   | Relative Humidity: | 60%      |
| Test Voltage: | DC 3V  | Pressure:          | 1010hPa  |
| Test Mode:    | Mode 1 | Polarization:      | Vertical |



| No. | Frequency (MHz) | Reading (dBuV) | Correction factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (deg.) | Height (cm) | Remark |
|-----|-----------------|----------------|-------------------------|-----------------|----------------|-------------|---------------|-------------|--------|
| 1*  | 31.6202         | 41.21          | -8.07                   | 33.14           | 40.00          | -6.86       |               |             | peak   |
| 2   | 51.3005         | 51.46          | -19.86                  | 31.60           | 40.00          | -8.40       |               |             | peak   |
| 3   | 66.2662         | 46.63          | -20.47                  | 26.16           | 40.00          | -13.84      |               |             | peak   |
| 4   | 97.7983         | 43.97          | -18.35                  | 25.62           | 40.00          | -14.38      |               |             | peak   |
| 5   | 138.8735        | 38.59          | -14.71                  | 23.88           | 40.00          | -16.12      |               |             | peak   |
| 6   | 945.4399        | 31.79          | -1.87                   | 29.92           | 47.00          | -17.08      |               |             | peak   |

Remark: Result = Reading Level + Factor, Margin = Result – Limit  
Factor = Ant. Factor + Cable Loss – Pre-amplifier

## 4 EMC IMMUNITY TEST

### 4.1 STANDARD COMPLIANCE/SERVRITY LEVEL/CRITERIA

| Tests<br>Standard No. | TEST SPECIFICATION                              | Test Mode<br>Test Ports | Perform<br>Criteria |
|-----------------------|-------------------------------------------------|-------------------------|---------------------|
| ESD<br>EN 61000-4-2   | 8kV air discharge<br>4kV contact discharge      | Direct Mode             | B                   |
|                       | 4kV HCP discharge<br>4kV VCP discharge          | Indirect Mode           | B                   |
| RS<br>EN 61000-4-3    | 80 MHz to 1000 MHz, 1000Hz,<br>80%,AM modulated | Enclosure               | A                   |

### 4.2 GENERAL PERFORMANCE CRITERIA

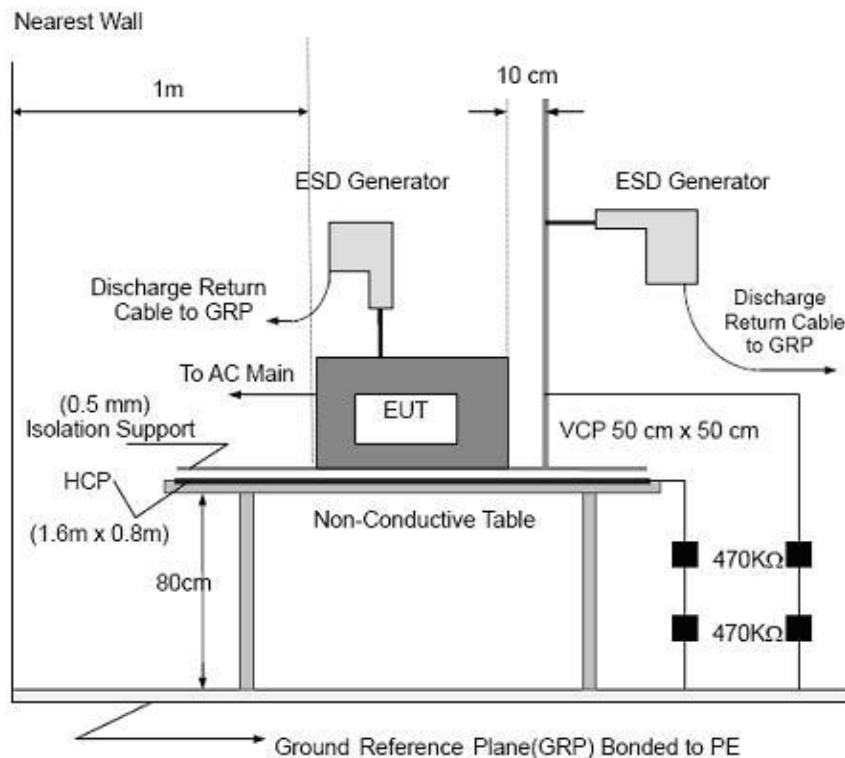
According to EN 55014-2 standard, the general performance criteria as following:

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Criterion A | The equipment shall continue to operate as intended without operator intervention. No degradation of performance, loss of function or change of operating state is allowed below a performance level specified by the manufacturer when the equipment 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 equipment if used as intended.                                                                                                                                                                                                            |
| Criterion B | During the application of the disturbance, degradation of performance is allowed. However, no unintended change of actual operating state or stored data is allowed to persist after the test. After the test, 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. The performance level may be replaced by a permissible loss of performance. If the minimum performance level (or the permissible performance loss), or recovery time, 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 equipment if 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. A reboot or re-start operation is allowed. Information stored in non-volatile memory, or protected by a battery backup, shall not be lost.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## 5.1 TEST SPECIFICATION

|                       |                                                                                                        |
|-----------------------|--------------------------------------------------------------------------------------------------------|
| Basic Standard:       | EN 61000-4-2                                                                                           |
| Discharge Impedance:  | 330 ohm / 150 pF                                                                                       |
| Required Performance: | B                                                                                                      |
| Discharge Voltage:    | Air Discharge: 2kV/4kV/8kV (Direct)<br>Contact Discharge: 2kV/4kV (Direct/Indirect)                    |
| Polarity:             | Positive & Negative                                                                                    |
| Number of Discharge:  | Air Discharge: min. 20 times at each test point<br>Contact Discharge: min. 20 times at each test point |
| Discharge Mode:       | Single Discharge                                                                                       |
| Discharge Period:     | 1 second minimum                                                                                       |

## 5.2 TEST SETUP





Note:

#### TABLE-TOP EQUIPMENT

The configuration consisted of a wooden table 0.8 meters high standing on the Ground Reference Plane. The GRP consisted of a sheet of aluminum at least 0.25mm thick. A Horizontal Coupling Plane (1.6m x 0.8m) was placed on the table and attached to the GRP by means of a cable with 940k $\Omega$  total impedance. The equipment under test, was installed in a representative system as described in section 7 of EN 61000-4-2, and its cables were placed on the HCP and isolated by an insulating support of 0.5mm thickness. A distance of 0.8-meter minimum was provided between the EUT and the walls of the laboratory and any other metallic structure.

#### FLOOR-STANDING EQUIPMENT

The equipment under test was installed in a representative system as described in section 7 of EN 61000-4-2, and its cables were isolated from the Ground Reference Plane by an insulating support of 0.1 meter thickness. The GRP was consisted of a sheet of aluminum that is at least 0.25mm thick, and extended at least 0.5 meters from the EUT on all sides.

### 5.3 TEST PROCEDURE

The test generator necessary to perform direct and indirect application of discharges to the EUT in the following manners:

1. Electrostatic discharges were applied only to those points and surfaces of the EUT that are accessible to users during normal operation. The test was performed with at least ten single discharges on the pre-selected points in the most sensitive polarity.

The time interval between two successive single discharges was at least 1 second.

The ESD generator was held perpendicularly to the surface to which the discharge was applied and the return cable was at least 0.2 meters from the EUT.

Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.

Air discharges were applied with the round discharge tip of the discharge electrode approaching the EUT as fast as possible (without causing mechanical damage) to touch the EUT. After each discharge, the ESD generator was removed from the EUT and re-triggered for a new single discharge. The test was repeated until all discharges were complete.

Vertical Coupling Plane (VCP):

The coupling plane, of dimensions 0.5m x 0.5m, is placed parallel to, and positioned at a distance 0.1m from, the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge.

Horizontal Coupling Plane (HCP):

The coupling plane is placed under to the EUT. The generator shall be positioned vertically at a distance of 0.1m from the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge.

2. Air discharges at insulation surfaces of the EUT.

It was at least ten single discharges with positive and negative at the same selected point.

## 5.4 TEST RESULT

|               |        |                    |         |
|---------------|--------|--------------------|---------|
| Temperature:  | 22°C   | Relative Humidity: | 48%     |
| Test Voltage: | DC 3V  | Pressure:          | 1010hPa |
| Test Mode:    | Mode 1 |                    |         |

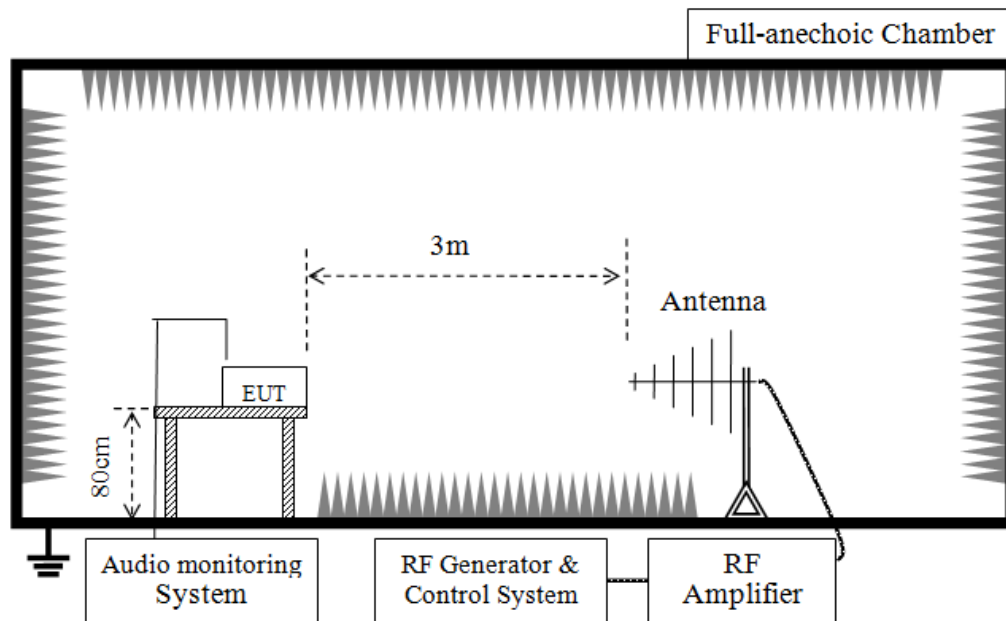
| Voltage | Coupling                       | Test Performance | Performance Result | Result (Pass/Fail) |
|---------|--------------------------------|------------------|--------------------|--------------------|
| ±4kV    | Contact Discharge              | No function loss | A                  | Pass               |
| ±4kV    | Indirect Discharge HCP (Front) | No function loss | A                  | Pass               |
| ±4kV    | Indirect Discharge HCP (Left)  | No function loss | A                  | Pass               |
| ±4kV    | Indirect Discharge HCP (Back)  | No function loss | A                  | Pass               |
| ±4kV    | Indirect Discharge HCP (Right) | No function loss | A                  | Pass               |
| ±4kV    | Indirect Discharge VCP (Front) | No function loss | A                  | Pass               |
| ±4kV    | Indirect Discharge VCP (Left)  | No function loss | A                  | Pass               |
| ±4kV    | Indirect Discharge VCP (Back)  | No function loss | A                  | Pass               |
| ±4kV    | Indirect Discharge VCP (Right) | No function loss | A                  | Pass               |
| ±8kV    | Air Discharge                  | No function loss | A                  | Pass               |

## 6 RADIATED, RADIO-FREQUENCY, ELECTROMAGNETIC FIELD IMMUNITY TEST (RS)

### 6.1 TEST SPECIFICATION

|                       |                                    |
|-----------------------|------------------------------------|
| Basic Standard:       | EN 61000-4-3                       |
| Required Performance: | A                                  |
| Frequency Range:      | 80~1000MHz                         |
| Field Strength:       | 3 V/m                              |
| Modulation:           | 1kHz Sine Wave, 80%, AM Modulation |
| Frequency Step:       | 1 % of fundamental                 |
| Polarity of Antenna:  | Horizontal and Vertical            |
| Test Distance:        | 3 m                                |
| Antenna Height:       | 1.55m                              |
| Dwell Time:           | at least 3 seconds                 |

### 6.2 TEST SETUP



Note:

#### TABLE-TOP EQUIPMENT

The EUT installed in a representative system as described in section 7 of EN 61000-4-3 was placed on a non-conductive table 0.8 meters in height. The system under test was connected to the power and signal wire according to relevant installation instructions.

#### FLOOR-STANDING EQUIPMENT

The EUT installed in a representative system as described in section 7 of EN 61000-4-3 was placed on a non-conductive wood support 0.1 meter in height. The system under test was connected to the power and signal wire according to relevant installation instructions.

### 6.3 TEST PROCEDURE

The EUT and support equipment, which are placed on a table that is 0.8 meters above ground and the testing was performed in a fully-anechoic chamber.

The testing distance from antenna to the EUT was 3 meters.

The other condition need as following manners:

- 1.The frequency range is swept from 80 MHz to 1000 MHz, with the signal 80% amplitude modulated with a 1kHz sine wave. The rate of sweep did not exceed  $1.5 \times 10^{-3}$  decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.
- 2.The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.
- 3.The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.

### 6.4 TEST RESULT

|               |        |                    |         |
|---------------|--------|--------------------|---------|
| Temperature:  | 22°C   | Relative Humidity: | 48%     |
| Test Voltage: | DC 3V  | Pressure:          | 1010hPa |
| Test Mode:    | Mode 1 |                    |         |

| Frequency Range (MHz) | RF Field Position | R.F. Field Strength                        | Azimuth | Performance Result | Result (Pass/Fail) |
|-----------------------|-------------------|--------------------------------------------|---------|--------------------|--------------------|
| 80~1000               | H / V             | 3 V/m (rms)<br>AM Modulated<br>1000Hz, 80% | Front   | A                  | PASS               |
|                       |                   |                                            | Rear    |                    |                    |
|                       |                   |                                            | Left    |                    |                    |
|                       |                   |                                            | Right   |                    |                    |



## 7 PHOTO OF EUT



PHOTO 01



PHOTO 02



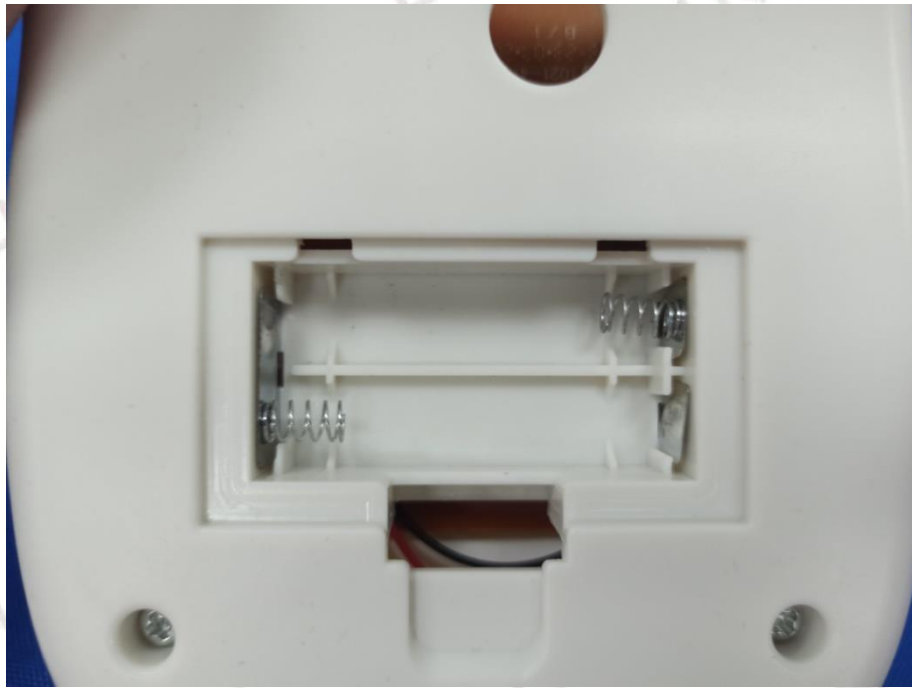


PHOTO 03

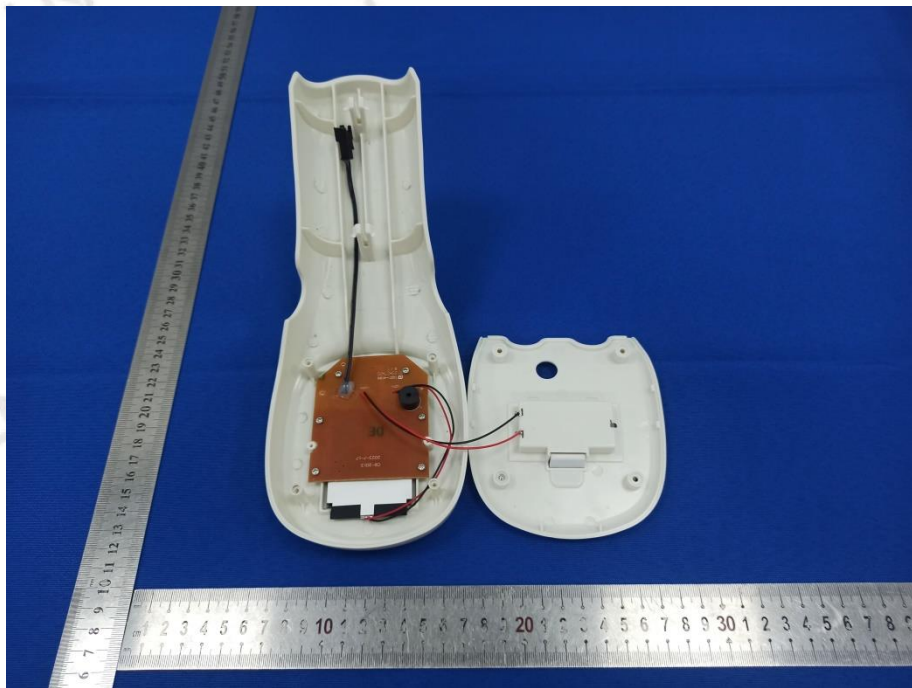


PHOTO 04

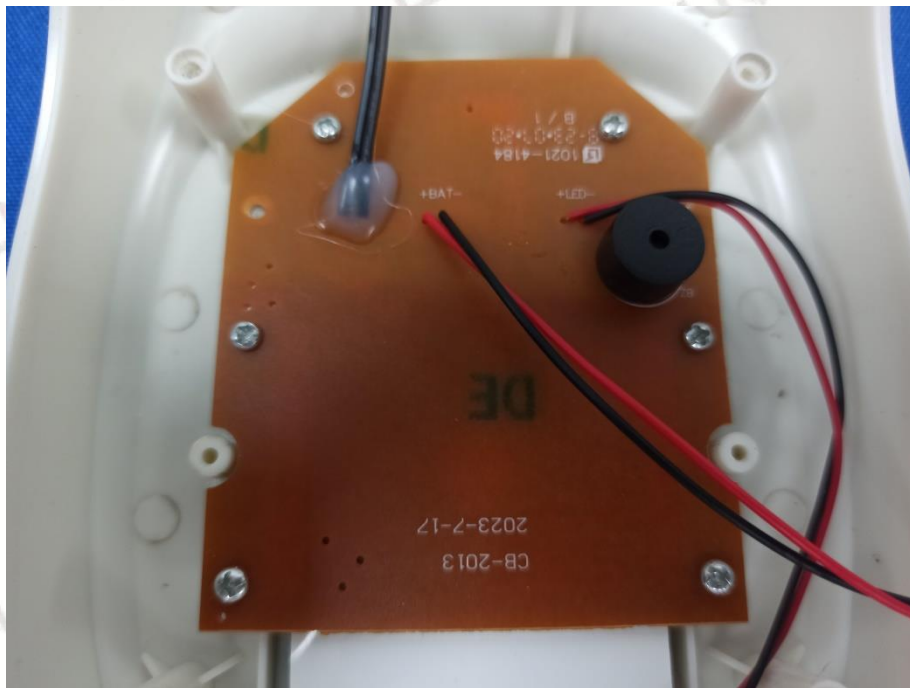


PHOTO 05

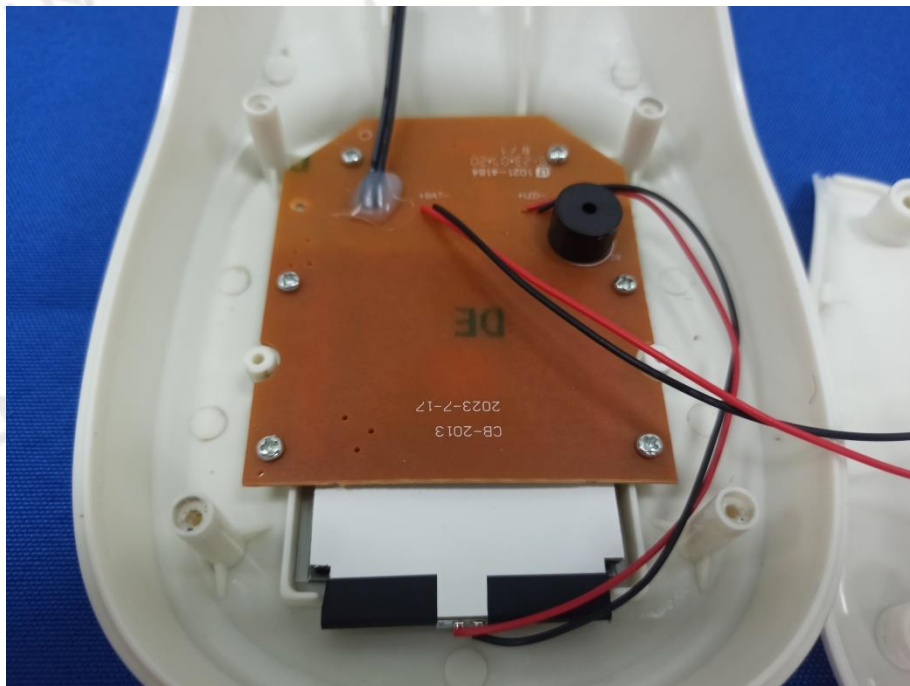


PHOTO 06

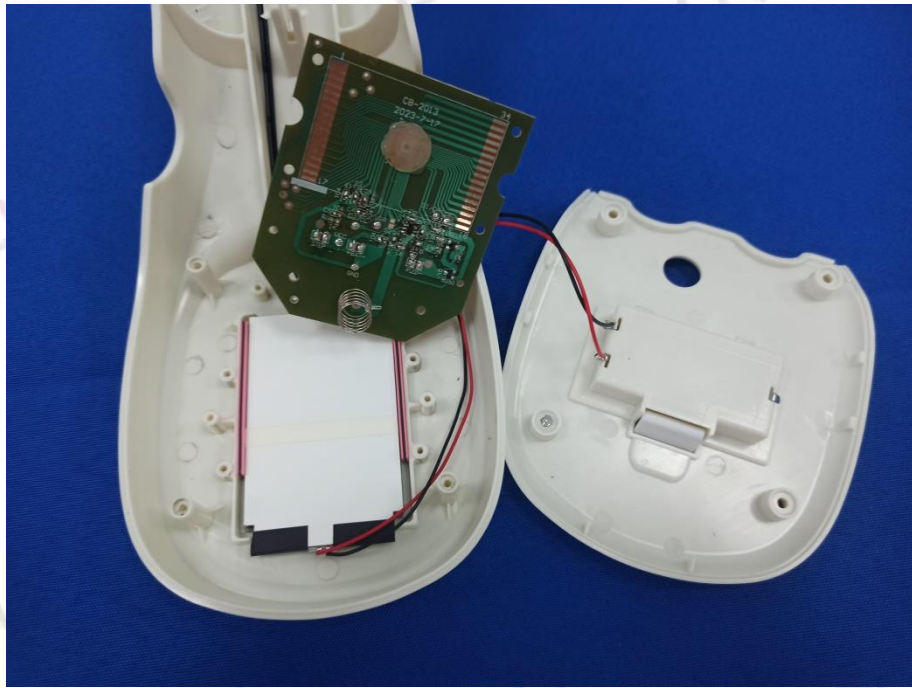


PHOTO 07

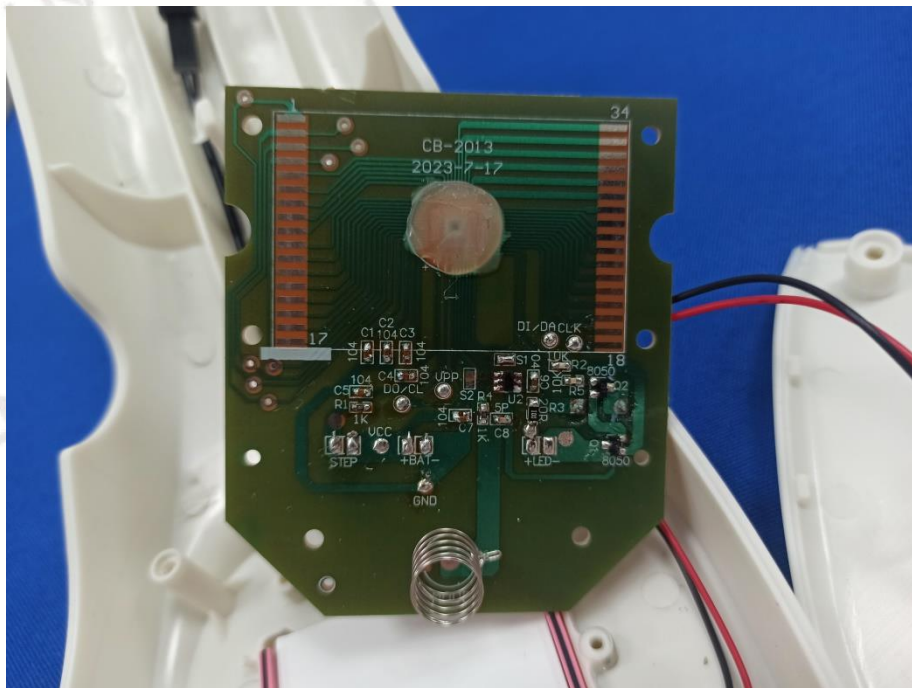


PHOTO 08



## 8 PHOTO OF TEST



PHOTO 01



PHOTO 02

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

## Statement

- 1.This report must have the signature of the authorized signatory and the special seal of the report, otherwise it will be considered invalid.If there is no anti-counterfeiting electronic seal of the laboratory in the report in PDF format or it is displayed as "x", the report is invalid.
- 2.This report shall not be modified, added or deleted without authorization.
- 3.The results of this report are only valid for the EUT provided by Applicant to our laboratory for inspection (That is,EUT received by our laboratory.Without special explanation, it refers to the samples presented in the report " PHOTO OF EUT ").
- 4.If there is any objection to the test data and conclusions of this report, please submit it in writing within 10 working days after the date of issuance of the report.
- 5.Without the written consent of the laboratory, this report shall not be copied (except for full copy), nor shall it be used as publicity materials or advertising.
- 6.The cover of the report is for decoration only, not included in the body of the report.
- 7.The paper report issued by our laboratory has the same effect as the electronic report. In case of any difference between the two, the electronic report shall prevail.
- 8.The Chinese and English reports issued by our laboratory have the same effect. In case of any difference in understanding, the Chinese version shall prevail.
- 9.Please provide the complete report documents issued by our laboratory when inquiring the report.
- 10.For cases where compliance is determined based on test values, when relevant specifications, standards, documents, and customers have no relevant requirements and no other special instructions, the test report issued by this laboratory is carried out in full value and adopts ILAC-G8:09 /2019 "Simple Acceptance Rule" for judgment.
- 11.In the People's Republic of China, when there is no CMA Accredited Symbol in this report, the report is only for scientific research, teaching or internal quality control activities.