# *Conformiteitsverklaring*

**Wij:**

| | |
|---|---|
| Bedrijfsnaam | Floris E-Commerce |
| Straatnaam: | Schepenstraat 29 |
| Postcode: | 5531 GT |
| Stad: | Bladel |
| Land: | Nederland |

**Verklaren dat dit document van toepassing is op de volgende product(en):**

| | |
|---|---|
| Product naam: | Masturbator voor mannen |
| Merknaam: | Monica Moments |
| Serie nummer: | XS-MA |

**Object van declaratie:**

**Het object hier boven is in overeenstemming met de volgende richtlijnen:**

2014/30/EU

**De volgende geharmoniseerde standaarden en technische specificaties zijn gebruikt:**

EN 55014-1:2021 EN 55014-2:2021 EN 61000-4-2:2009 EN 61000-4-3:2006+A1:2008+A2:2010

**Notified Body (indien gebruikt)** **4 Cijferig Nummer**

Name of Notified Body

Reference Number

**Hierbij verklaren wij onze aansprakelijkheid voor dit document en product.**

**Ondertekend door en voor:**

| **Plaats van ondertekenen** | **Datum van ondertekenen** | **Naam, functie, handtekening** |
|---|---|---|
| Bladel | 19/09/2023 | Floris Nijhof, CEO |

COBO

# Certificate of Compliance

**RoHS Directive 2011/65/EU appendix Ⅱ Revised instructions (EU) 2015/863 of the European parliament and of the council on the restriction of the use of certain hazardous substances in electrical and electronic equipment**

**Certificate No.: COBO23100098 Issue Date: Oct.14.2023**

| | | |
|---|---|---|
| **Applicant** | : | **Guangdong Dangxia Industrial Co., Ltd** |
| **Address** | : | **The second floor of Building B, Kaihuimao Science and Technology Park, No. 56 Liyuan Road, Fuhai Street, Baoan District, Shenzhen, Guangdong Province, China** |
| **Manufacturer** | : | **Guangdong Dangxia Industrial Co., Ltd** |
| **Address** | : | **The second floor of Building B, Kaihuimao Science and Technology Park, No. 56 Liyuan Road, Fuhai Street, Baoan District, Shenzhen, Guangdong Province, China** |
| **Sample Name** | : | **Men's masturbators** |
| **Sample Model** | : | **DX-MA70036, DX-MA70064, DX-MA70051, DX-MA70055, DX-MA70028** |

**This certificate of compliance is based on a test procedure or an evaluation of the above-mentioned product. This is to certify that the above-mentioned product is in compliance with the RoHS Directive 2011/65/EU appendix Ⅱ Revised instructions (EU) 2015/863 of the European parliament. It is only valid in connection with the test report (Report No.: COBO23100098）**

Signed for and on Behalf of COBO

CE RoHS

Sam Xie

Sam Xie / Technical Manager

GUANGDONG COBO TESTING INSTITUTE CO., LTD.
6'Floor YiShiLi building No.9, ZongBu Two Road, Songshan Lake Sci.&Tech. Park, Dongguan, Guangdong, China
Tel:86-769-26622263 Fax: 86-769-26622012

# Test Report

Report No.: COBO23100098 Date: Oct.14.2023 Page 1 of 16

Applicant: Guangdong Dangxia Industrial Co., Ltd

Address: The second floor of Building B, Kaihuimao Science and Technology Park, No. 56 Liyuan Road, Fuhai Street, Baoan District, Shenzhen, Guangdong Province, China

The following samples were submitted and identified on behalf of the clients as

| | |
|---|---|
| Sample Name: | Men's masturbators |
| Model: | DX-MA70036, DX-MA70064, DX-MA70051, DX-MA70055, DX-MA70028 |
| Manufacturer: | Guangdong Dangxia Industrial Co., Ltd |
| Address: | The second floor of Building B, Kaihuimao Science and Technology Park, No. 56 Liyuan Road, Fuhai Street, Baoan District, Shenzhen, Guangdong Province, China |
| Sample quantity: | 1 Set |
| Sample Received Date: | Oct.08.2023 |
| Test Period: | Oct.08.2023 to Oct.14.2023 |
| Test Method: | Please refer to next page(s). |
| Test Result: | Please refer to next page(s). |

Report Issuer:

Anti-counterfeiting code: whdh


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# Test Report



## 1. Test Requested

Based on the performed tests on specified material(s) or submitted sample(s).

RoHS Directive 2011/65/EU appendixⅡRevised instructions (EU) 2015/863 of the European parliament and of the council on the restriction of the use of certain hazardous substances in electrical and electronic equipment

- Lead (Pb)/ Cadmium(Cd)/ Mercury(Hg)/ Hexavalent Chromium($Cr^{6+}$) content.
- Polybrominated biphenyls (PBBs) &Polybrominated diphenyl ethers (PBDEs) content.
- Dibutyl phthalate (DBP), Benzylbutyl phthalate (BBP), Di-(2-ethylhexyl) phthalate (DEHP), Diisobutyl phthalate(DIBP) content

## 2. Test Conclusion

| Test items | Conclusion |
|---|---|
| RoHS Directive 2011/65/EU appendixⅡRevised instructions (EU) 2015/863 of the European parliament and of the council on the restriction of the use of certain hazardous substances in electrical and electronic equipment | |
| - Lead (Pb)/ Cadmium(Cd)/ Mercury(Hg)/ Hexavalent Chromium($Cr^{6+}$) content. | PASS |
| - Polybrominated biphenyls (PBBs) &Polybrominated diphenyl ethers (PBDEs) content. | PASS |
| - Dibutyl phthalate(DBP), Benzylbutyl phthalate (BBP), Di-(2-ethylhexyl) phthalate (DEHP), Diisobutyl phthalate(DIBP) content. | PASS |


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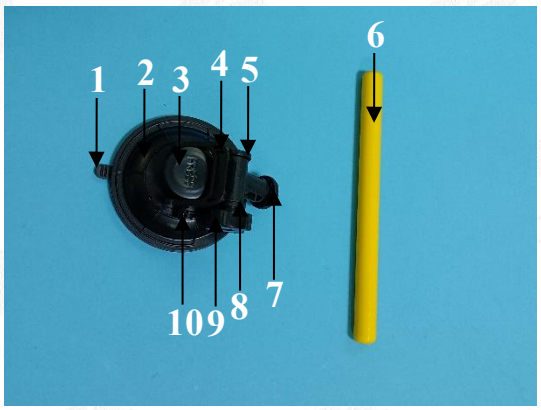
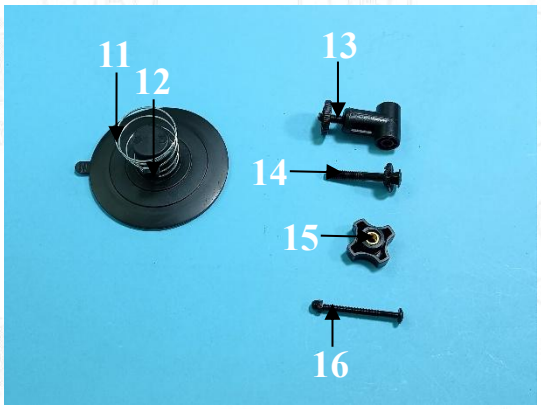
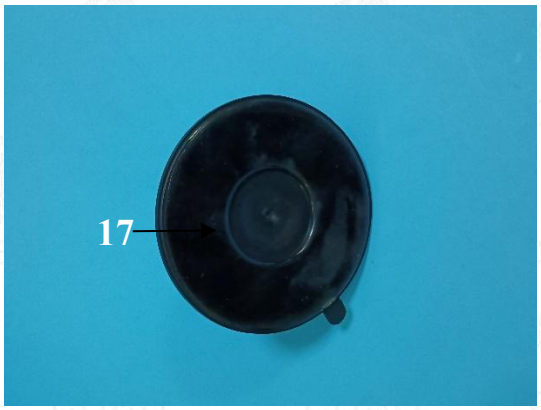
**3. Sample description and sample photo list:**

| Sample No. | Description | Sample photo |
|---|---|---|
| 1 | Black plastic |   |
| 2 | Black plastic | |
| 3 | Black plastic | |
| 4 | Black plastic | |
| 5 | Yellow plastic | |
| 6 | Black plastic | |
| 7 | Black plastic | |
| 8 | Black plastic | |
| 9 | Black plastic | |
| 10 | Silvery metal with black coating | |
| 11 | Silvery metal |   |
| 12 | Black plastic | |
| 13 | Silvery metal with black coating | |
| 14 | Silvery metal with black coating | |
| 15 | Gold metal | |
| 16 | Silvery metal with black coating | |
| 17 | Black plastic |   |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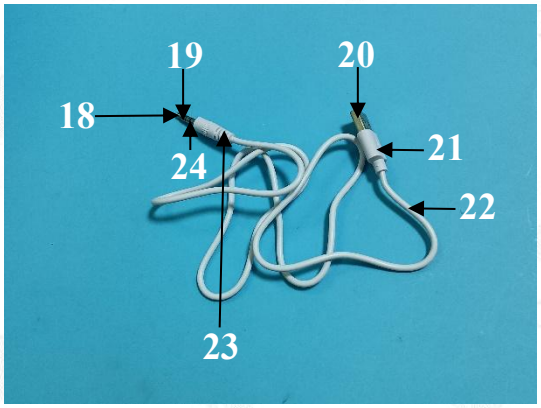
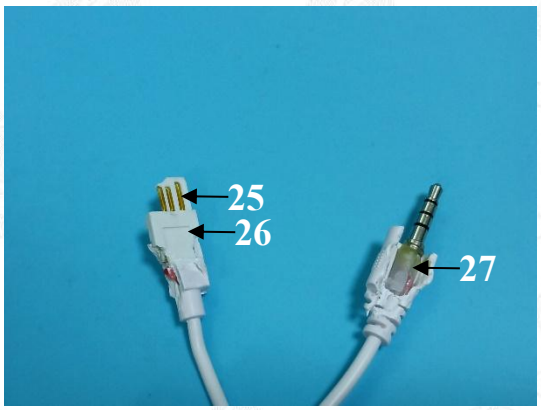
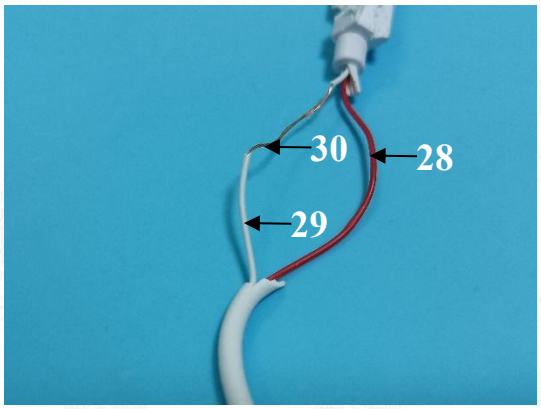
| | | |
|---|---|---|
| 18 | Silvery metal |  |
| 19 | Silvery metal | |
| 20 | Silvery metal | |
| 21 | White plastic | |
| 22 | White plastic | |
| 23 | White plastic | |
| 24 | Black plastic | |
| 25 | Gold metal |  |
| 26 | White plastic | |
| 27 | White plastic | |
| 28 | Red plastic |  |
| 29 | White plastic | |
| 30 | Copper metal | |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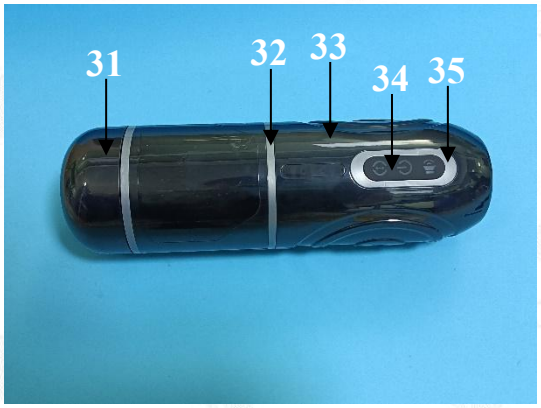
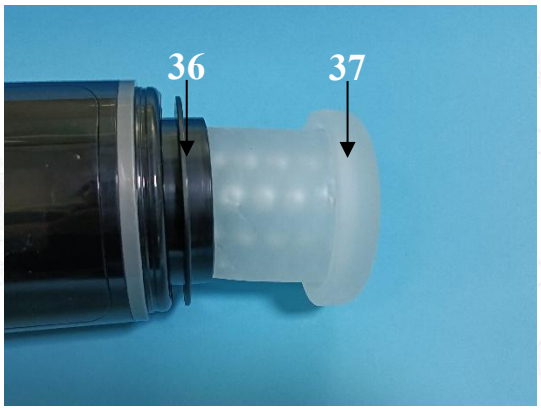
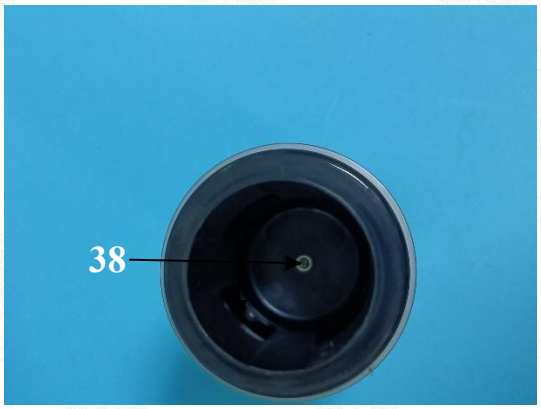
| | | |
|---|---|---|
| 31 | Black plastic |  |
| 32 | Grey plastic | |
| 33 | Black plastic | |
| 34 | White plastic with black coating | |
| 35 | Grey plastic | |
| 36 | Black plastic |  |
| 37 | White plastic | |
| 38 | Silvery metal |  |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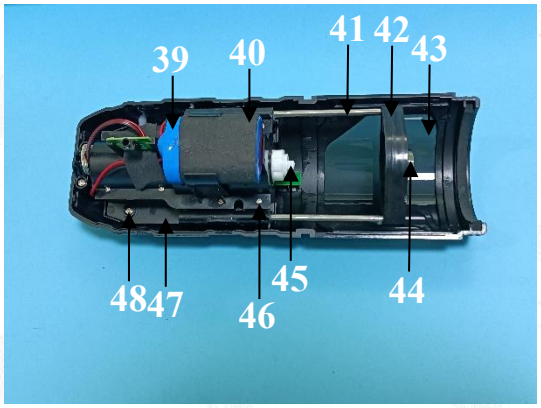
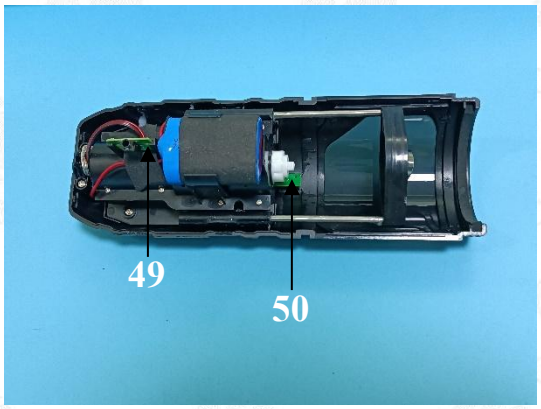
| | | |
|---|---|---|
| 39 | Blue plastic |   |
| 40 | Black foam | |
| 41 | Silvery metal | |
| 42 | Black plastic | |
| 43 | Black plastic | |
| 44 | Silvery metal | |
| 45 | White plastic | |
| 46 | Silvery metal | |
| 47 | Black plastic | |
| 48 | Silvery metal | |
| 49 | PCB |   |
| 50 | PCB | |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## 4. Test Result(s)

### 4.1 Lead (Pb)/Cadmium(Cd)/Mercury(Hg)/Hexavalent Chromium($Cr^{6+}$)/Polybrominated biphenyls (PBBs)/ Polybrominated diphenyl ethers (PBDEs) content- RoHS Directive 2011/65/EU

Test Method:

X-ray data: IEC 62321-3-1:2013, Screening – Lead, mercury, cadmium, total chromium and total bromine by X-ray fluorescence spectrometry.

Lead (Pb)/Cadmium(Cd): IEC 62321-5:2013, analysis was performed by flame atomic absorption spectrometry (AAS) or Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Mercury(Hg): IEC 62321-4:2017 analysis was performed by flame atomic absorption spectrometry (AAS) or Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Hexavalent Chromium($Cr^{6+}$): metal: IEC 62321-7-1:2015,nonmetal:IEC 62321-7-2:2017, analysis was performed by Ultraviolet–visible spectroscopy (UV-Vis).

Polybrominated biphenyls (PBBs)/ Polybrominated diphenyl ethers (PBDEs): IEC 62321-6:2015, analysis was performed by Gas Chromatograph-Mass Spectrometer (GC-MS).

| Test Item | | Total Lead (Pb) | Total Cadmium (Cd) | Total Mercury (Hg) | Hexavalent Chromium ($Cr^{6+}$) | Polybrominated biphenyls (PBBs) | Polybrominated diphenyl ethers (PBDEs) |
|---|---|---|---|---|---|---|---|
| Unit | | mg/kg | mg/kg | mg/kg | μg/cm² | mg/kg | mg/kg |
| Limit | | 1000 | 100 | 1000 | Negative | 1000 | 1000 |
| Material No. | | Result | | | | | |
| 10 | XRF | BL | 67* | BL | 745* | -- | -- |
| | Chemical | -- | N.D. | -- | Negative | -- | -- |
| 11 | XRF | 836* | 148* | BL | BL | -- | -- |
| | Chemical | N.D. | N.D. | -- | -- | -- | -- |
| 13 | XRF | BL | BL | BL | 473* | -- | -- |
| | Chemical | -- | -- | -- | Negative | -- | -- |
| 14 | XRF | 323* | BL | BL | 987* | -- | -- |
| | Chemical | N.D. | -- | -- | Negative | -- | -- |
| 15#4 | XRF | 23456* | 114* | BL | BL | -- | -- |
| | Chemical | 26695.7 | 51.2 | -- | -- | -- | -- |
| 16 | XRF | 371* | 154* | BL | 624* | -- | -- |
| | Chemical | N.D. | N.D. | -- | Negative | -- | -- |
| 18#4 | XRF | 21181* | 72* | BL | BL | -- | -- |
| | Chemical | 30329.2 | N.D. | -- | -- | -- | -- |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | XRF | BL | BL | BL | BL | -- | -- |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 20 | XRF | BL | 97* | BL | BL | -- | -- |
| | Chemical | -- | N.D. | -- | -- | -- | -- |
| 25 | XRF | BL | 72* | BL | BL | -- | -- |
| | Chemical | -- | N.D. | -- | -- | -- | -- |
| 30 | XRF | BL | BL | BL | BL | -- | -- |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 38 | XRF | BL | 145* | BL | BL | -- | -- |
| | Chemical | -- | N.D. | -- | -- | -- | -- |
| 41 | XRF | 768* | 92* | BL | 125953* | -- | -- |
| | Chemical | N.D. | N.D. | -- | Negative | -- | -- |
| 44 | XRF | BL | 80* | BL | 12861* | -- | -- |
| | Chemical | -- | N.D. | -- | Negative | -- | -- |
| 46 | XRF | 774* | 218* | BL | 485* | -- | -- |
| | Chemical | N.D. | N.D. | -- | Negative | -- | -- |
| 48 | XRF | BL | BL | BL | 441* | -- | -- |
| | Chemical | -- | -- | -- | Negative | -- | -- |

| **Test Item** | | **Total Lead (Pb)** | **Total Cadmium (Cd)** | **Total Mercury (Hg)** | **Hexavalent Chromium ($Cr^{6+}$)** | **Polybrominated biphenyls (PBBs)** | **Polybrominated diphenyl ethers (PBDEs)** |
|---|---|---|---|---|---|---|---|
| **Limit (mg/kg)** | | 1000 | 100 | 1000 | 1000 | 1000 | 1000 |
| **Material No.** | | **Result (mg/kg)** | | | | | |
| 1 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 2 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 3 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 4 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |


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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 6 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 7 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 8 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 9 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 12 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 17 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 21 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 22 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 23 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 24 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 26 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 27 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 28 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 29 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 31 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |


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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 32 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 33 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 34 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 35 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 36 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 37 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 39 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 40 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 42 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 43 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 45 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 47 | XRF | BL | BL | BL | BL | BL | BL |
| | Chemical | -- | -- | -- | -- | -- | -- |
| 49 | XRF | BL | BL | BL | BL | 11053* | |
| | Chemical | -- | -- | -- | -- | N.D. | N.D. |
| 50 | XRF | BL | BL | BL | BL | 11398* | |
| | Chemical | -- | -- | -- | -- | N.D. | N.D. |


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Note:
1. mg/kg = milligram per kilogram, μg/cm$^2$= micrograms per square centimeter.
2. RL (Report Limit) = Pb, Cd, Hg: 10mg/kg;$Cr^{6+}$: nonmetal -10mg/kg, metal- Negative.
3. N.D. = Not Detected (< RL).
4. BL=Below Limit of screen, Screening limit = Lead, Chromium and Mercury: 200mg/kg; Cadmium: 50mg/kg
5. Negative = Surface of metal sample absence of $Cr^{6+}$, Positive = Surface of metal sample presence of $Cr^{6+}$.
6. "--" = Does not need to be tested.
7. "*" denotes the scanning result exceeds the screening limit, need to be further confirmed by wet chemical test, and the final wet chemical result shall prevail.

**Remark:**
(#1)=Exceeded upper screening limit, but if sample is Steel for machining purposes or galvanized steel, Aluminium or Copper alloy, the limit for Lead is 3,500mg/kg,4,000 mg/kg and 4,000 mg/kg respectively and further chemical test was suggested.

(#2)=Exceeded upper screening limit, as claimed by the declaration submitted from the applicant/supplier of applicant,/but if Lead comes from the constituent of ceramic of the electronic component(other than dielectric ceramic in capacitors) only .According to EU RoHS Directive(2011/65/EU),Lead in ceramic of this component can be exempted.

(#3)=Exceeded upper screening limit, as claimed by the declaration submitted from the applicant/ supplier of applicant,/ but if Lead comes from the constituent of glass used in cathode ray tube/ in electrical and electronic component only. According to EU RoHS Directive(2011/65/ EU), Lead in glass of this component can be exempted.

(#4) = As claimed by the declaration submitted from the applicant / supplier of applicant, the Lead content of the component comes from Copper alloy only. According to EU RoHS Directive (2011/65/EU),Lead in Copper alloy containing up to 4% (40,000 mg/kg) Lead by weight can be exempted.

(#5) = As claimed by the declaration submitted from the applicant / supplier of applicant, the Lead content of the component comes from steel for machining purposes / galvanized steel only. According to EU RoHS Directive(2011/65/EU),Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35%(3,500 mg/kg) Lead by weight can be exempted.

(#6) = As claimed by the declaration submitted from the applicant / supplier of applicant, the Lead content of the component comes from the constituent of glass used in fluorescent tubes only. According to EU RoHS Directive(2011/65/EU),Lead in glass of fluorescent tubes can not be exceeding 0.2%(2,000 mg/kg) by weight.

(#7) = As claimed by the declaration submitted from the applicant / supplier of applicant, the Lead content of the component comes from the constituent of high melting temperature type solders (i.e. Lead-based alloys containing 85% by weight or more Lead) only. According to EU RoHS Directive(2011/65/EU), Lead in high melting temperature type solders of the component can be exempted.


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## 4.2 Phthalates Content

Test Method: IEC 62321-8:2017, analysis was performed by Gas Chromatograph-Mass Spectrometer (GC-MS).

| Test Item | Limit (mg/kg) | Result(mg/kg) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| Di-(2-ethylhexyl) phthalate (DEHP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Dibutyl phthalate (DBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Benzylbutyl phthalate (BBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Diisobutylphthalate(DIBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |

| Test Item | Limit (mg/kg) | Result(mg/kg) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7 | 8 | 9 | 12 | 17 | 21 |
| Di-(2-ethylhexyl) phthalate (DEHP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Dibutyl phthalate (DBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Benzylbutyl phthalate (BBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Diisobutylphthalate(DIBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |

| Test Item | Limit (mg/kg) | Result(mg/kg) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 22 | 23 | 24 | 26 | 27 | 28 |
| Di-(2-ethylhexyl) phthalate (DEHP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Dibutyl phthalate (DBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Benzylbutyl phthalate (BBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Diisobutylphthalate(DIBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |

| Test Item | Limit (mg/kg) | Result(mg/kg) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 29 | 31 | 32 | 33 | 34 | 35 |
| Di-(2-ethylhexyl) phthalate (DEHP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Dibutyl phthalate (DBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Benzylbutyl phthalate (BBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Diisobutylphthalate(DIBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |


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Tel：86-769-26622263 Fax：86-769-26622012 Web: http://www.cobo-test.com

# Test Report



| Test Item | Limit (mg/kg) | Result(mg/kg) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 36 | 37 | 39 | 40 | 42 | 43 |
| Di-(2-ethylhexyl) phthalate (DEHP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Dibutyl phthalate (DBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Benzylbutyl phthalate (BBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |
| Diisobutylphthalate(DIBP) | 1000 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. |

| Test Item | Limit (mg/kg) | Result(mg/kg) | | | |
|---|---|---|---|---|---|
| | | 45 | 47 | 49 | 50 |
| Di-(2-ethylhexyl) phthalate (DEHP) | 1000 | N.D. | N.D. | N.D. | N.D. |
| Dibutyl phthalate (DBP) | 1000 | N.D. | N.D. | N.D. | N.D. |
| Benzylbutyl phthalate (BBP) | 1000 | N.D. | N.D. | N.D. | N.D. |
| Diisobutylphthalate(DIBP) | 1000 | N.D. | N.D. | N.D. | N.D. |

Note: 1. mg/kg = milligram per kilogram.
2. Report Limit = 50mg/kg.
3. N.D. = Not Detected (< RL).


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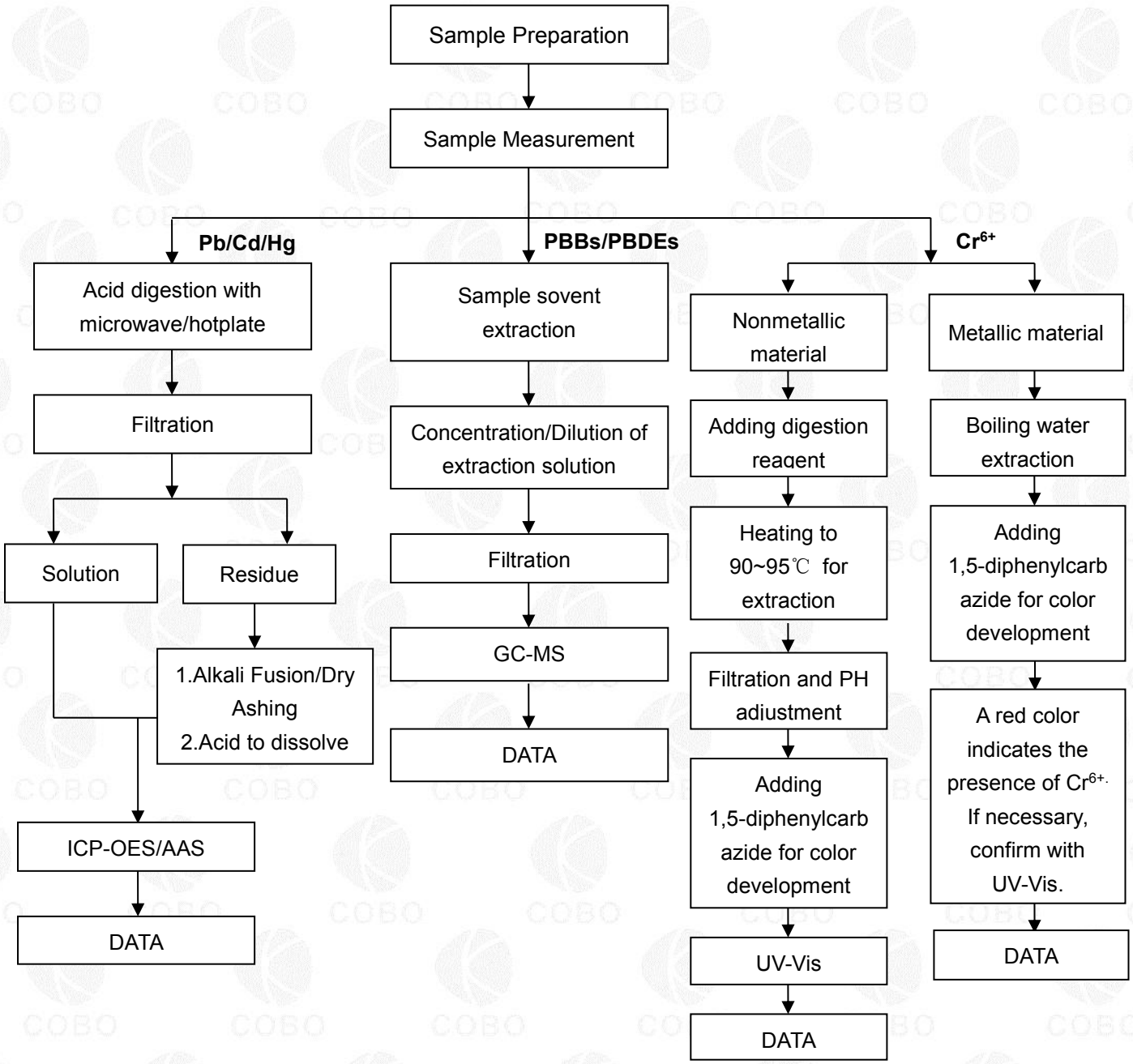
**RoHS Testing Flow Chart**





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**Phthalates Testing Flow Chart**

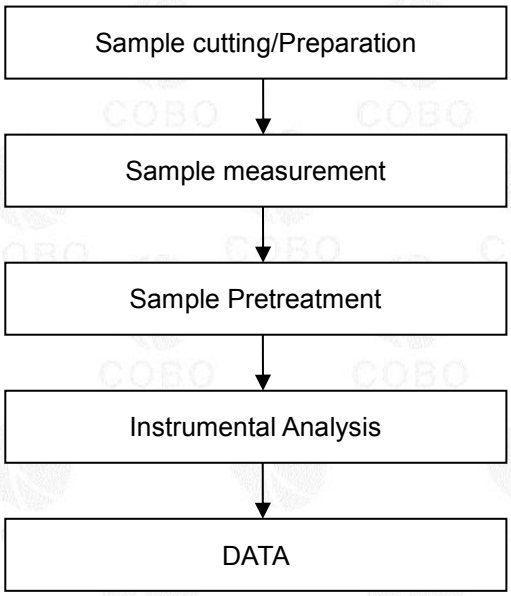



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**Photo of Sample**

***End of Report***


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202119015517

中国认可
国际互认
检测
TESTING
CNAS L15060

# 检 验 报 告

报告编号：JAT22042901609CN-01

产品名称：飞机杯

型号/规格：XS-MA

检验类别：委托检验

委托单位 ：广东幸色实业有限公司


东莞市君安检测认证有限公司
Dongguan Junan Testing & Certification Co., Ltd.
地址： 广东省东莞市沙田镇稔洲路 316 号 1 栋 303 室
电话： 0769-81710286
网址： www.junantest.com





东莞市君安检测认证有限公司 Dongguan Junan Testing & Certification Co., Ltd.
Room 303, Building 1, No.316, Renzhou Road, Shatian Town, Dongguan City, Guangdong Province, China
TEL：0769-81710286 E-mail: youshengwei@junantest.com Http：www.junantest.com

# 检 验 报 告

| | | | |
|---|---|---|---|
| 样品名称： | 飞机杯 | 委托人名称： | 广东幸色实业有限公司 |
| 型　　号： | XS-MA | 委托人地址： | 广东省东莞市大岭山镇矮岭岗村莲峰新路8号第2号楼5楼A区1号 |
| 规　　格： | DC5V | 生产者(制造商)： | 广东幸色实业有限公司 |
| 商　　标： | / | 生产者(制造商)地址： | 广东省东莞市大岭山镇矮岭岗村莲峰新路8号第2号楼5楼A区1号 |
| 数　　量： | 1台 | 生产企业： | 广东幸色实业有限公司 |
| 来样方式 | 送样 | 生产企业地址： | 广东省东莞市大岭山镇矮岭岗村莲峰新路8号第2号楼5楼A区1号 |

| | | | | | |
|---|---|---|---|---|---|
| 送样日期： | 2022.04.29 | 检验日期： | 2022.04.29 - 2022.05.09 | 检验环境： | 20-25℃， 50-60%RH |

| | |
|---|---|
| 检验依据： | GB4706.1-2005 《家用和类似用途电器的安全 第1部分：通用要求》<br>GB4706.10-2008 《家用和类似用途电器的安全 按摩器具的特殊要求》 |
| 试验项目： | 依据委托方要求对所送样品按GB4706.1-2005、GB4706.10-2008进行委托试验（试验项目详见样品和试验描述页）。 |
| 试验结论： | 合格 |

| | | | |
|---|---|---|---|
| 主　检： | 曾祥恩 | | |
| 签　名： | 曾祥恩 | 日期： | 2022.05.09 |
| 审　核： | 李蛮 | | |
| 签　名： | 李蛮 | 日期： | 2022.05.09 |
| 批　准： | 游生伟 | | |
| 签　名： | 游生伟 | 日期： | 2022.05.09 |

东莞市君安检测认证有限公司

（盖章）

2022 年 05 月 09 日

备注：



东莞市君安检测认证有限公司
Dongguan Junan Testing & Certification Co., Ltd.
Room 303, Building 1, No.316, Renzhou Road, Shatian Town, Dongguan City, Guangdong Province, China
TEL：0769-81710286 E-mail: youshengwei@junantest.com Http：www.junantest.com

# 描述与说明（型号差异与检测说明）

一、型号差异：

主检型号：XS-MA

覆盖型号：HS-MA、JL-MA、SQ-MA、SQ-MA70054；

型号差异说明：仅型号命名不同，其他都一致。

二、试验项目汇总表：

| 序号 | 试验项目 | 判定 |
|---|---|---|
| 1. | 第 8 章 对触及带电部件的防护 | 合格 |
| 2. | 第 13 章 工作状态下的泄露电流和电气强度 | 合格 |
| 3. | 第 21 章 机械强度 | 合格 |



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## 样品照片

样品外观

样品外观



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| GB4706.1-2005 GB4706.10-2008 | | | |
|---|---|---|---|
| 条款 | 试验要求 | 试验结果 | 结论 |
| 8 | 对触及带电部件的防护 | | P |
| 8.1 | 应有足够的防止意外触及带电部件的防护 | | P |
| 8.1.1 | 所有状态，包括取下可拆卸部件后的状态 | | P |
| | 装取灯泡期间，应有对触及带电部件的防护 | | N |
| | 用 IEC61032 中的探棒 B 进行检查，不触及带电部件 | | P |
| 8.1.2 | 用 IEC61032 中的探棒 13 检查 0 类器具、II 类器具或 II 类结构上的孔隙，不触及带电部件 | | N |
| | 用探棒 13 检查有绝缘涂层的接地金属外壳上的孔隙，不触及带电部件 | | N |
| 8.1.3 | II 类器具以外的其他器具用 IEC61032 的 41 号试验探棒，应不能触及可见灼热电热元件的带电部件 | | N |
| 8.1.4 | 如果易触及部件为下述情况可认为不带电： | | N |
| | ——由交流安全特低电压供电：电压峰值≤42.4V | | N |
| | ——由直流安全特低电压供电：电压≤42.4V | | N |
| | ——或通过保护阻抗与带电部件隔开 | | N |
| | ——通过保护阻抗与带电部件隔开，直流电流≤2mA | | N |
| | ——通过保护阻抗与带电部件隔开，交流峰值电流≤0.7mA | | N |
| | ——42.4V＜峰值电压≤450V，其电容量≤0.1μF | | N |
| | ——450V＜峰值电压≤15kV，其放电量≤45μC | | N |
| 8.1.5 | 器具在就位或组装之前，带电部件至少应由基本绝缘保护： | | N |
| | ——嵌装式器具 | | N |
| | ——固定式器具 | | N |
| | ——分离组件形式交付的器具 | | N |
| 8.2 | II 类器具和 II 类结构，应对基本绝缘以及仅由基本绝缘与带电部件隔开的金属部件有足够的防止意外接触的保护 | | N |
| | 只允许触及由双重绝缘或加强绝缘与带电部件隔开的部件 | | N |

| | | | |
|---|---|---|---|
| 13 | 工作温度下的泄漏电流和电气强度 | | P |
| 13.1 | 工作温度下，器具的泄漏电流不应过大，并且有足够的电气强度 | | N |
| | 电热器具以1.15倍额定输入功率工作 | | N |
| | 电动器具和联合器具以1.06倍额定电压供电 | | N |
| | 在试验前断开保护阻抗和无线电干扰滤波器 | | N |



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| GB4706.1-2005 GB4706.10-2008 | | | |
|---|---|---|---|
| 条款 | 试验要求 | 试验结果 | 结论 |
| 13.2 | 泄漏电流通过IEC60990中图4所描述电路进行测量 | | N |
| | 泄漏电流的测量 | | N |
| | 对于I类驻立式器具，除固定式器具外，泄漏电流不应超过0.75mA（GB4706.10-2008） | | N |
| 13.3 | 绝缘的电气强度试验 | 见附表 | P |
| | 在试验期间不应出现击穿 | | P |
| 21 | 机械强度 | | P |
| 21.1 | 器具有足够的机械强度，其结构应经受正常使用中可能出现的野蛮搬运 | | P |
| | 对器具外壳各部分以0.5J的冲击能量打击三次后，应无损坏 | | P |
| | 必要时，加强绝缘或附加绝缘要经受16.3的电气强度试验 | | N |
| | 必要时，在新样品的同一部位反复打击，三次为一组 | | N |
| | 打算用于坐着人的脚下的器具，按正常工作条件的规定施加负载，但质量增加到90kg，施加时间30s（GB4706.10-2008） | | N |
| 21.2 | 固体绝缘的易触及部件，应有足够的强度防止锋利工具的刺穿 | | N |
| | 按要求对绝缘进行试验，除非 | | N |
| | 附加绝缘厚度不小于1mm，加强绝缘厚度不少于2mm | | N |



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附表：

| | | | |
|---|---|---|---|
| 13.3 | 表格：工作温度下的电气强度测量 | | P |
| 试验电压施加部位： | | 试验电压 (V) | 是否击穿 |
| 带电部件和易触及部件之间 | | 500 | 未击穿 |
| 以下空白 | | | |



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# 仪器设备清单

| 设备名称 | 仪器编号 | 校准日期 | 下次校准日期 | 本次使用 |
|---|---|---|---|---|
| 秒表 | JAT-SF032 | 2021/8/5 | 2022/8/4 | √ |
| 万用表 | JAT-SF097 | 2021/9/2 | 2022/9/1 | |
| 数字示波器 | JAT-SF013 | 2021/9/2 | 2022/9/1 | |
| 无感电阻 | JAT-SF089 | 2021/9/2 | 2022/9/1 | |
| 可调式变压器 | JAT-SF018 | 2021/8/5 | 2022/8/4 | |
| 数字功率计 | JAT-SF101 | 2021/8/5 | 2022/8/4 | |
| 变频电源 | JAT-SF005 | 2021/8/5 | 2022/8/4 | |
| 直流电源 | JAT-SF008 | 2021/9/2 | 2022/9/1 | |
| 电子负载 | JAT-SF010 | 2021/9/2 | 2022/9/1 | |
| 数据采集器 | JAT-SF016 | 2021/9/2 | 2022/9/1 | |
| 耐压测试仪 | JAT-SF012 | 2021/9/2 | 2022/9/1 | √ |
| 泄露电流测试仪 | JAT-SF102 | 2021/9/2 | 2022/9/1 | |
| 电子天平秤 | JAT-SF021 | 2021/9/2 | 2022/9/1 | |
| 恒温恒湿箱 | JAT-SF006 | 2021/9/2 | 2022/9/1 | |
| 稳定性试验台 | JAT-SF042 | 2021/9/2 | 2022/9/1 | |
| 坡度计 | JAT-SF091 | 2021/9/2 | 2022/9/1 | |
| 五档可调弹簧冲击锤 | JAT-SF056 | 2021/9/2 | 2022/9/1 | √ |
| 推拉力计 | JAT-SF081 | 2021/9/2 | 2022/9/1 | |
| 电子数显卡尺 | JAT-SF035 | 2021/8/5 | 2022/8/4 | √ |
| 扭力批 | JAT-SF084 | 2021/9/2 | 2022/9/1 | |
| 电热鼓风干燥箱 | JAT-SF037 | 2021/8/5 | 2022/8/4 | |
| 球压装置 | JAT-SF083 | 2021/8/5 | 2022/8/4 | |
| 灼热丝试验机 | JAT-SF004 | 2021/9/2 | 2022/9/1 | |
| 针焰试验机 | JAT-SF002 | 2021/9/2 | 2022/9/1 | |
| 漏电起痕试验机 | JAT-SF003 | 2021/9/2 | 2022/9/1 | |
| 防风罩 | JAT-SF038 | 2021/9/2 | 2022/9/1 | |



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# 注 意 事 项

1. 报告无“检验报告专用章”或检验单位公章无效。

2. 复制报告未重新加盖“检验报告专用章”或检验单位公章无效。未经委托单位书面同意，不得复制本报告的任何部分。

3. 报告无主检、审核、批准人签章无效。

4. 报告涂改无效。

5. 若对检验报告持有异议，应于收到报告之日起 15 日内向检验单位提出，逾期不予以处理。

6. 委托检验仅对来样负责。

7. 标注“☆”的项目不在本机构的 CNAS 认可范围内。

8. 报告无 CMA 标志时数据和结果仅供参考。

注：“P”代表单项合格，“F”代表单项不合格，“N”代表未做测试或不考核。

--- 结束 ---



东莞市君安检测认证有限公司
Dongguan Junan Testing & Certification Co., Ltd.
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**Flux Compliance Service Laboratory.**

Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan Tel: 769-27280901 http://www.fcs-lab.com

# ATTESTATION OF CONFORMITY

| | |
|---|---|
| Certificate No. | FCSR20220402402 |
| Product | : Male Masturbator |
| Brand Name | : N/A |
| Model(s) No. | : XS-MA |
| Series Model | : HS-MA;JL-MA;SQ-MA;SQ-MA70054 |
| Holder | : Guangdong XISE Industrial CO., Ltd. |
| Address | : Floor 5 & 6 ,blog 2,Zhenqiangda Technology industrial park ,No.8 Lianfeng New Road, Dalingshan town ,Dongguan City , 523000,Guangdong Province .China |
| Manufacturer | : Guangdong XISE Industrial CO., Ltd. |
| Address | : Floor 5 & 6 ,blog 2,Zhenqiangda Technology industrial park ,No.8 Lianfeng New Road, Dalingshan town ,Dongguan City , 523000,Guangdong Province .China |
| Report No. | : FCS202204024E02 |

*This product has been tested according to the following standard:*
*United States FCC Part 15 Subpart B and ANSI C63.4-2014;*

*This device has been tested and found to comply with the stated standard(s), which is(are) Required by the Federal Communications Committee, The test results are indicated in the test report are applicable only to the test sample identified in the report.*

Approved by: _____

**12 Apr,2022**

**Jack Wang/Managerial**

# FCC Test Report

Report No: FCS202204024E02

Issued for

| | |
|---|---|
| Applicant: | Guangdong XISE Industrial CO., Ltd. |
| Address: | Floor 5 & 6 ,blog 2,Zhenqiangda Technology industrial park ,No.8 Lianfeng New Road, Dalingshan town , Dongguan City , 523000,GuangdongProvince .China |
| Product Name: | Male Masturbator |
| Brand Name: | N/A |
| Model Name: | XS-MA |
| Series Model: | HS-MA;JL-MA;SQ-MA;SQ-MA70054 |
| Test Standard: | FCC Part 15 SUBPART B |

# TEST RESULT CERTIFICATION

| | | |
|---|---|---|
| Applicant's Name | : | Guangdong XISE Industrial CO., Ltd. |
| Address | : | Floor 5 & 6 ,blog 2,Zhenqiangda Technology industrial park ,No.8 Lianfeng New Road, Dalingshan town ,Dongguan City , 523000,Guangdong Province .China |
| Manufacture's Name | : | Guangdong XISE Industrial CO., Ltd. |
| Address | : | Floor 5 & 6 ,blog 2,Zhenqiangda Technology industrial park ,No.8 Lianfeng New Road, Dalingshan town ,Dongguan City , 523000,Guangdong Province .China |

**Product Description**

| | | |
|---|---|---|
| Product Name | : | Male Masturbator |
| Brand Name | : | N/A |
| Model Name | : | XS-MA |
| Series Model | : | HS-MA;JL-MA;SQ-MA;SQ-MA70054 |
| Test Standards | : | FCC Part15 Subpart B |
| Test Procedure | : | ANSI C63.4-2014 |

This device described above has been tested by FCS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.
This report shall not be reproduced except in full, without the written approval of FCS, this document may be altered or revised by FCS, personal only, and shall be noted in the revision of the document..

**Date of Test**.....:

| | | |
|---|---|---|
| Date (s) of performance of tests | : | 20 Apr. 2022 ~21 Apr. 2022 |
| Date of Issue | : | 26 Apr. 2022 |
| Test Result | : | Pass |

Tested by : Scott shen
(Scott Shen)

Reviewed by : Duke Qian
(Duke Qian)

Approved by : Jack Wang
(Jack Wang)

**Table of Contents** **Page**

## Revision History

| Rev. | Issue Date | Report NO. | Effect Page | Contents |
|---|---|---|---|---|
| 00 | 26 Apr,2022 | FCS202204024E02 | N/A | Initial Issue |

# 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

| FCC Rules and Regulations Part 15 Subpart B AND ANSI C63.4-2014. | | | |
|---|---|---|---|
| **No.** | Test Item | Result | Remark |
| 1 | Conducted Emission | PASS | -- |
| 2 | Radiated Emission | PASS | -- |

## 1.1 TESTING LABORATORY

| | |
|---|---|
| Company Name: | Flux Compliance Service Laboratory |
| Address: | Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan |
| Telephone: | +86-769-27280901 |
| Fax: | +86-769-27280901 |
| Laboray Accreditations | |
| FCC Test Firm Registration Number: 514908<br>CNAS Number： L15566<br>Designation number：CN0127<br>A2LA accreditation number：5545.01<br>ISED Number：25801 | |

## 1.2 MEASUREMENT UNCERTAINTY

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

| No. | Item | Uncertainty |
|---|---|---|
| 1 | Conducted Emission (9KHz-150KHz) | ±4.13 dB |
| 2 | Conducted Emission (150KHz-30MHz) | ±4.74 dB |
| 3 | All emissions,radiated(<1G) 30MHz-1000MHz | ±5.2 dB |
| 4 | All emissions,radiated(>1G) 1000MHz -3000MHz | ±4.66 dB |
| 5 | All emissions,radiated(<1G) 3000MHz -6000MHz | ±5.31 dB |

## 1.3 EQUIPMENTS LIST

Radiation Test equipment

| Kind of Equipment | Manufacturer | Type No. | Company No. | Last calibration | Calibrated until |
|---|---|---|---|---|---|
| EMI Test Receiver | R&S | ESRP 3 | FCS-E001 | 2022.02.10 | 2023.02.09 |
| Signal Analyzer | R&S | FSV40-N | FCS-E012 | 2022.02.10 | 2023.02.09 |
| Active loop Antenna | ZHINAN | ZN30900C | FCS-E013 | 2022.02.10 | 2023.02.09 |
| Bilog Antenna | SCHWARZBECK | VULB 9168 | FCS-E002 | 2022.02.10 | 2023.02.09 |
| Horn Antenna | SCHWARZBECK | BBHA 9120D | FCS-E003 | 2022.02.10 | 2023.02.09 |
| SHF-EHF Horn Antenna (18GHz-40GHz) | A-INFO | LB-180400-KF | FCS-E018 | 2022.02.10 | 2023.02.09 |
| Pre-Amplifier(20MHz-3GHz) | EMCI | EM330N | FCS-E004 | 2022.02.10 | 2023.02.09 |
| Pre-Amplifier (1GHz-18GHz) | N/A | TSAMP-0518SE | FCS-E014 | 2022.02.10 | 2023.02.09 |
| Temperature & Humidity | HTC-1 | victor | FCS-E005 | 2022.02.10 | 2023.02.09 |
| Testing Software | EZ-EMC(Ver.STSLAB 03A1 RE) | | | | |

Conduction Test equipment

| Kind of Equipment | Manufacturer | Type No. | Company No. | Last calibration | Calibrated until |
|---|---|---|---|---|---|
| EMI Test Receiver | R&S | ESPI | FCS-E020 | 2022.02.10 | 2023.02.09 |
| LISN | R&S | ENV216 | FCS-E007 | 2022.02.10 | 2023.02.09 |
| LISN | ETS | 3810/2NM | FCS-E009 | 2022.02.10 | 2023.02.09 |
| Temperature & Humidity | HTC-1 | victor | FCS-E008 | 2022.02.10 | 2023.02.09 |
| Testing Software | EZ-EMC(Ver.EMC-CON 3A1.1) | | | | |

**Test Equipment Calibration**

All of the test equipment is effective use and calibration certification institution, GRGT, the address is 163 tianhe district in huangpu road xiping cloud road .Guangzhou,China

# 2. GENERAL INFORMATION

## 2.1 General Description Of The EUT

| | |
|---|---|
| Product Name | Male Masturbator |
| Trade Name | N/A |
| Model Name | XS-MA |
| Series Mode | HS-MA;JL-MA;SQ-MA;SQ-MA70054 |
| Model Difference | The above product with same circuit, PCB layout, electrical parts, materials and wiring structures, Appearance shape, the materials of decorative accessories is same, only different color. |
| Power Supply | DC 5V |
| Battery | N/A |
| Hardware version number | V1.0 |
| Software version number | V1.0 |

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

## **2.1** DESCRIPTION OF THE TEST MODES

To investigate the maximum EUT emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

| Pretest Mode | Description |
|---|---|
| Mode 1 | full load |

Note: The test modes were carried out for all operation modes. Only worst case will be show in this report.

# 3. CONDUCTED EMISSION MEASUREMENT

## 3.1 Power Line Conducted Emission Limits

Operating frequency band. In case the emission fall within the restricted band specified on Part 207(a) limit in the table below has to be followed.

| FREQUENCY (MHz) | Conducted Emissionlimit (dBuV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15 -0.5 | 66 - 56 * | 56 - 46 * |
| 0.50 -5.0 | 56.00 | 46.00 |
| 5.0 -30.0 | 60.00 | 50.00 |

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

| Receiver Parameters | Setting |
|---|---|
| Attenuation | 10 dB |
| Start Frequency | 0.15 MHz |
| Stop Frequency | 30 MHz |
| IF Bandwidth | 9 kHz |

## 3.2 Test Procedure

a. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4.

b. Support equipment, if needed, was placed as per ANSI C63.4.

c. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.

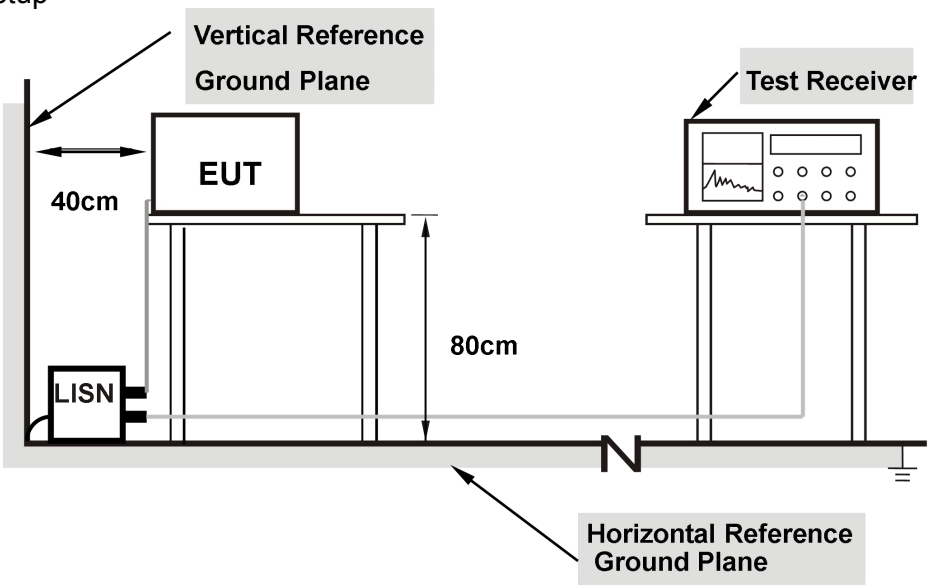
d. If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.

e. All support equipments received AC power from a second LISN, if any.

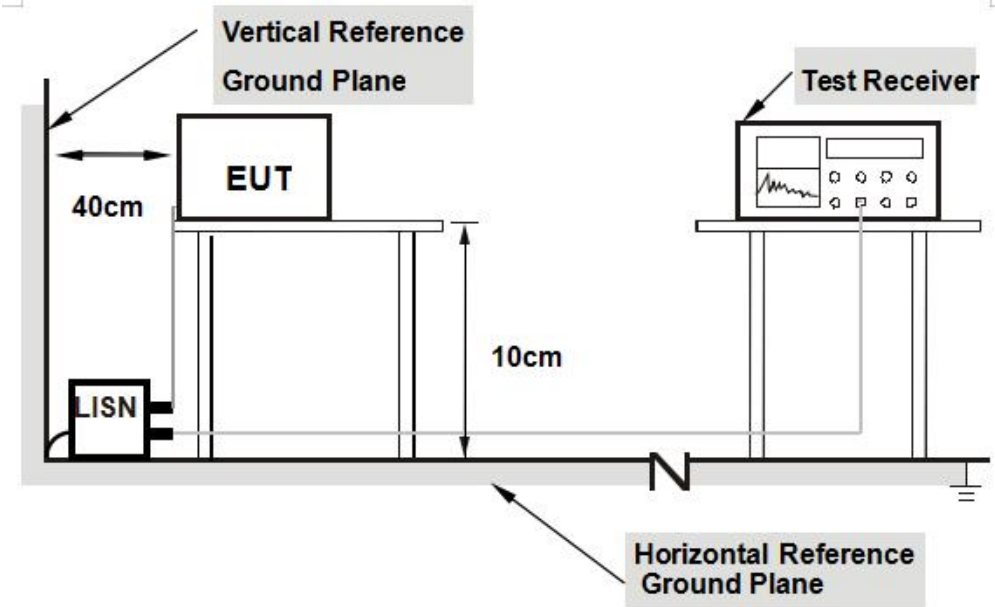
f. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.

g. Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes. and the test data has been listed in 3.4

3.3 Test Setup




Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

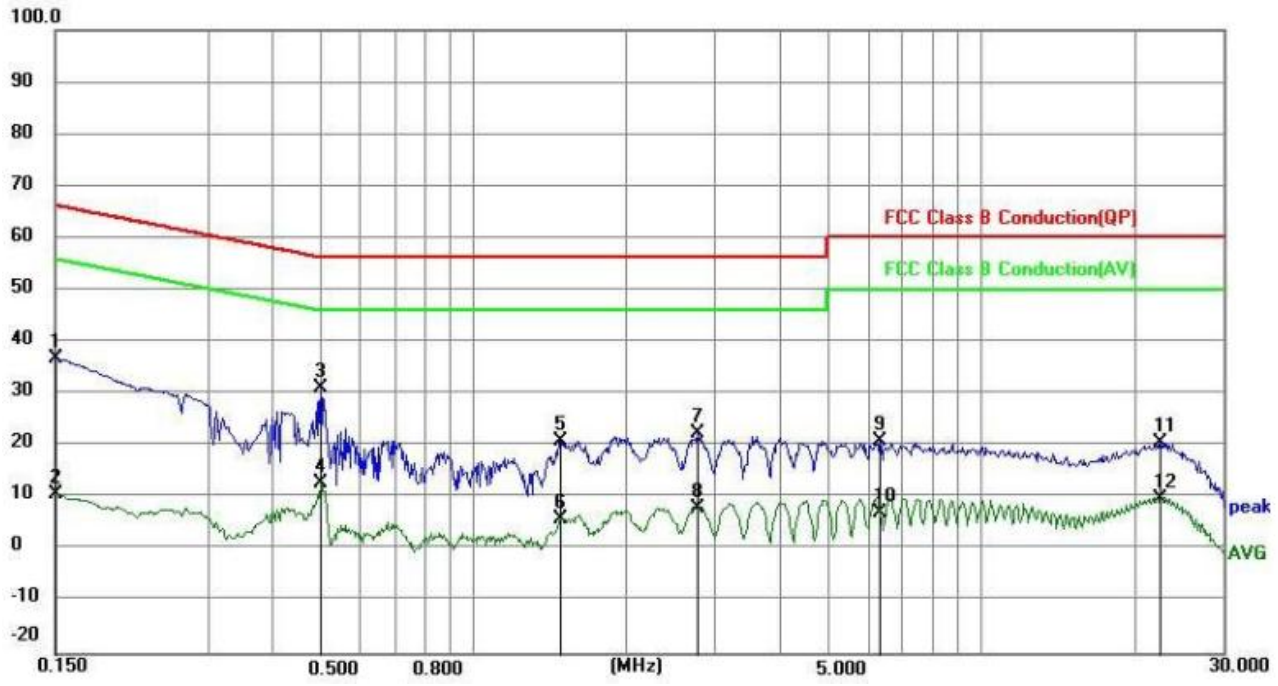



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 10 cm from EUT and at least 10 cm from other units and other metal planes support. units.

3.4 Test Result

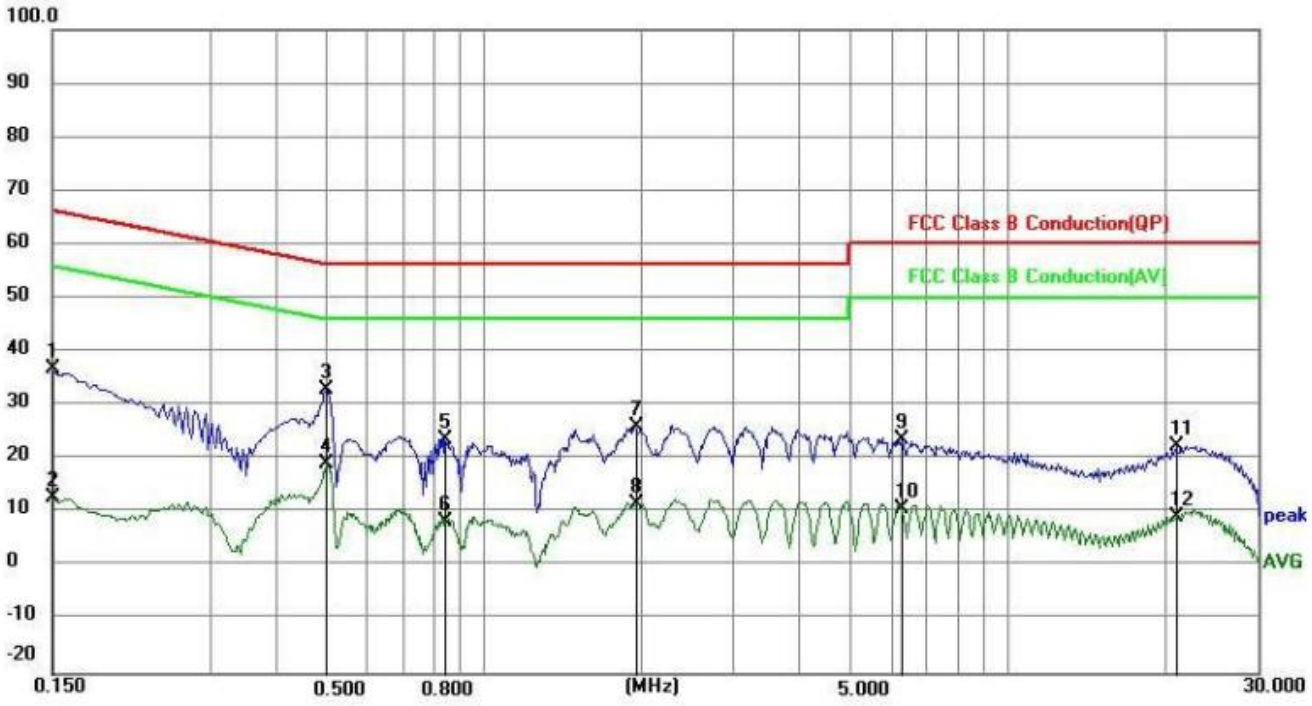
| | | | |
|---|---|---|---|
| Temperature: | 23.5℃ | Relative Humidity: | 59% |
| Phase: | L | Test Mode: | Mode 1 |
| **Test Voltage**: | DC 5V | | |

| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.1500 | 27.39 | 9.52 | 36.91 | 66.00 | 29.09 | QP |
| 2 | 0.1500 | 1.30 | 9.52 | 10.82 | 56.00 | 45.18 | AVG |
| 3 | 0.5010 | 21.64 | 9.56 | 31.20 | 56.00 | 24.80 | QP |
| 4 | 0.5010 | 3.18 | 9.56 | 12.74 | 46.00 | 33.26 | AVG |
| 5 | 1.4775 | 11.47 | 9.57 | 21.04 | 56.00 | 34.96 | QP |
| 6 | 1.4775 | -3.61 | 9.57 | 5.96 | 46.00 | 40.04 | AVG |
| 7 | 2.7735 | 12.74 | 9.58 | 22.32 | 56.00 | 33.68 | QP |
| 8 | 2.7735 | -1.42 | 9.58 | 8.16 | 46.00 | 37.84 | AVG |
| 9 | 6.3195 | 11.35 | 9.60 | 20.95 | 60.00 | 39.05 | QP |
| 10 | 6.3195 | -2.33 | 9.60 | 7.27 | 50.00 | 42.73 | AVG |
| 11 | 22.6319 | 10.82 | 9.77 | 20.59 | 60.00 | 39.41 | QP |
| 12 | 22.6319 | 0.01 | 9.77 | 9.78 | 50.00 | 40.22 | AVG |



| | | | |
|---|---|---|---|
| Temperature: | 23.5℃ | Relative Humidity: | 59% |
| Phase: | N | Test Mode: | Mode 1 |
| **Test Voltage**: | DC 5V | | |

| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.1500 | 27.34 | 9.51 | 36.85 | 66.00 | 29.15 | QP |
| 2 | 0.1500 | 3.33 | 9.51 | 12.84 | 56.00 | 43.16 | AVG |
| 3 | 0.5010 | 23.30 | 9.56 | 32.86 | 56.00 | 23.14 | QP |
| 4 | 0.5010 | 9.65 | 9.56 | 19.21 | 46.00 | 26.79 | AVG |
| 5 | 0.8430 | 14.15 | 9.56 | 23.71 | 56.00 | 32.29 | QP |
| 6 | 0.8430 | -1.26 | 9.56 | 8.30 | 46.00 | 37.70 | AVG |
| 7 | 1.9455 | 16.52 | 9.58 | 26.10 | 56.00 | 29.90 | QP |
| 8 | 1.9455 | 2.05 | 9.58 | 11.63 | 46.00 | 34.37 | AVG |
| 9 | 6.2565 | 13.89 | 9.71 | 23.60 | 60.00 | 36.40 | QP |
| 10 | 6.2565 | 1.13 | 9.71 | 10.84 | 50.00 | 39.16 | AVG |
| 11 | 20.9805 | 12.62 | 9.84 | 22.46 | 60.00 | 37.54 | QP |
| 12 | 20.9805 | -0.47 | 9.84 | 9.37 | 50.00 | 40.63 | AVG |



# 4. RADIATED EMISSION MEASUREMENT

## 4.1 Radiated Emission Limits

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009MHz - 1000MHz)

| Frequencies (MHz) | Field Strength (micorvolts/meter) | Measurement Distance (meters) |
|---|---|---|
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| Above 960 | 500 | 3 |

For Radiated Emission

| Spectrum Parameter | Setting |
|---|---|
| Attenuation | Auto |
| Detector | Peak/AV |
| Start Frequency | 1000 MHz(Peak/AV) |
| Stop Frequency | 10th carrier hamonic(Peak/AV) |
| RB / VB (emission in restricted band) | PK=1MHz / 1MHz, AV=1 MHz /10 Hz |

## 4.2 Test Procedure

a. The EUT is placed on a turntable, which is 0.8m above ground plane.

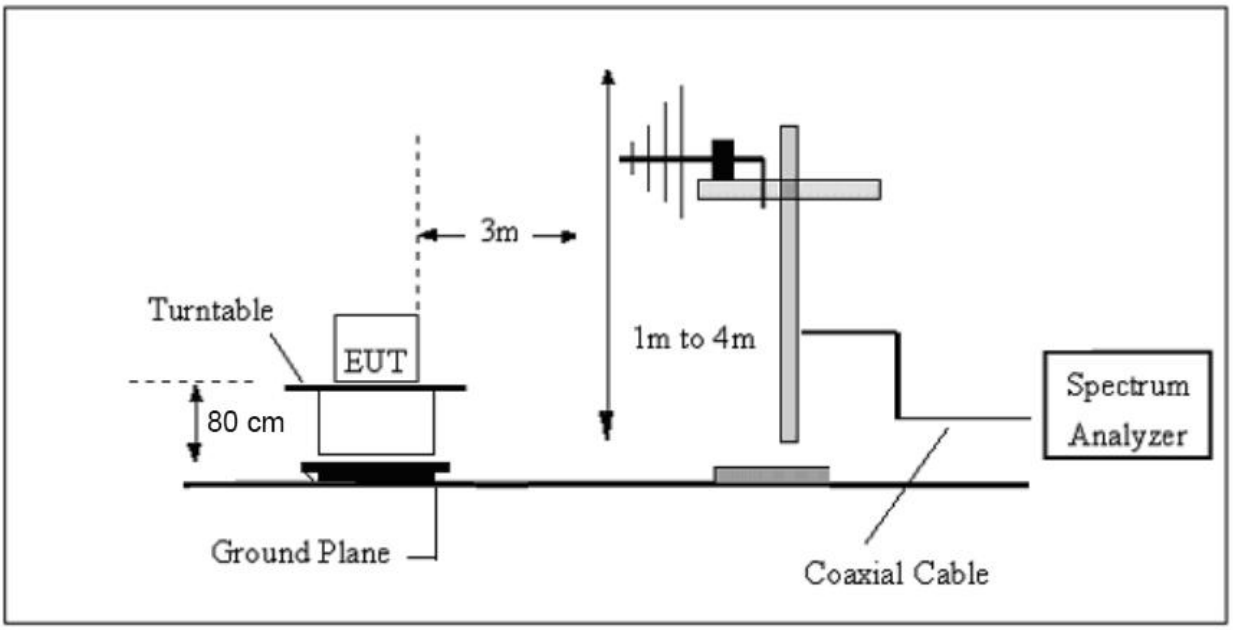
b. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.

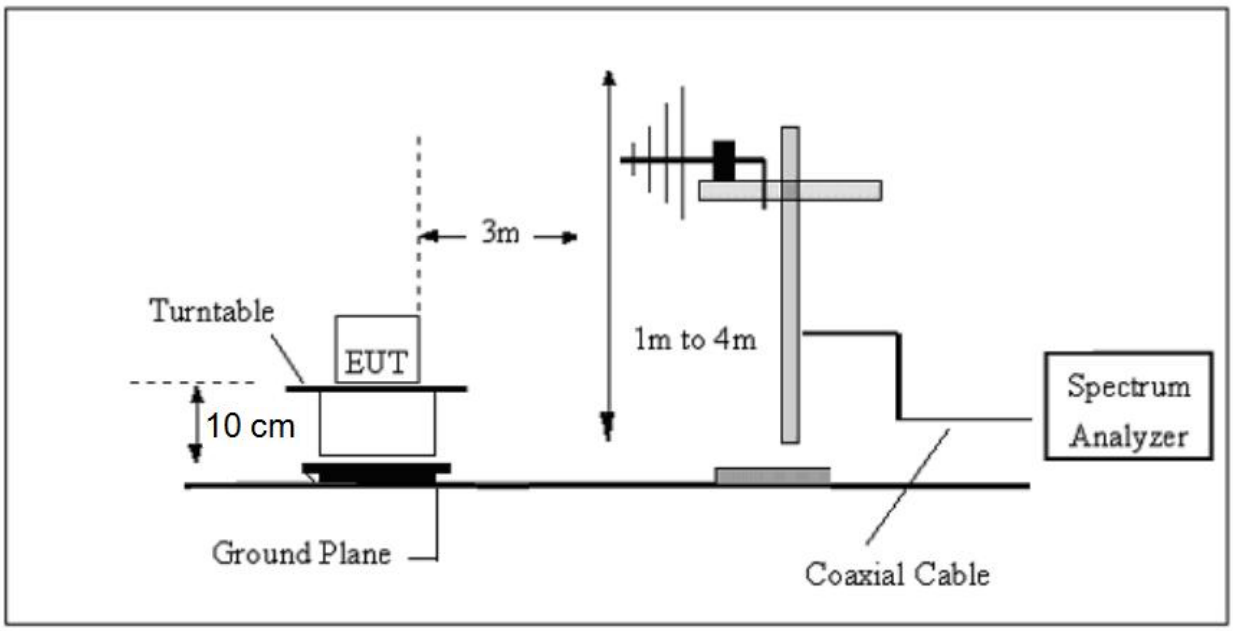
c. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.

d. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.

e. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical

4.3 Test setup



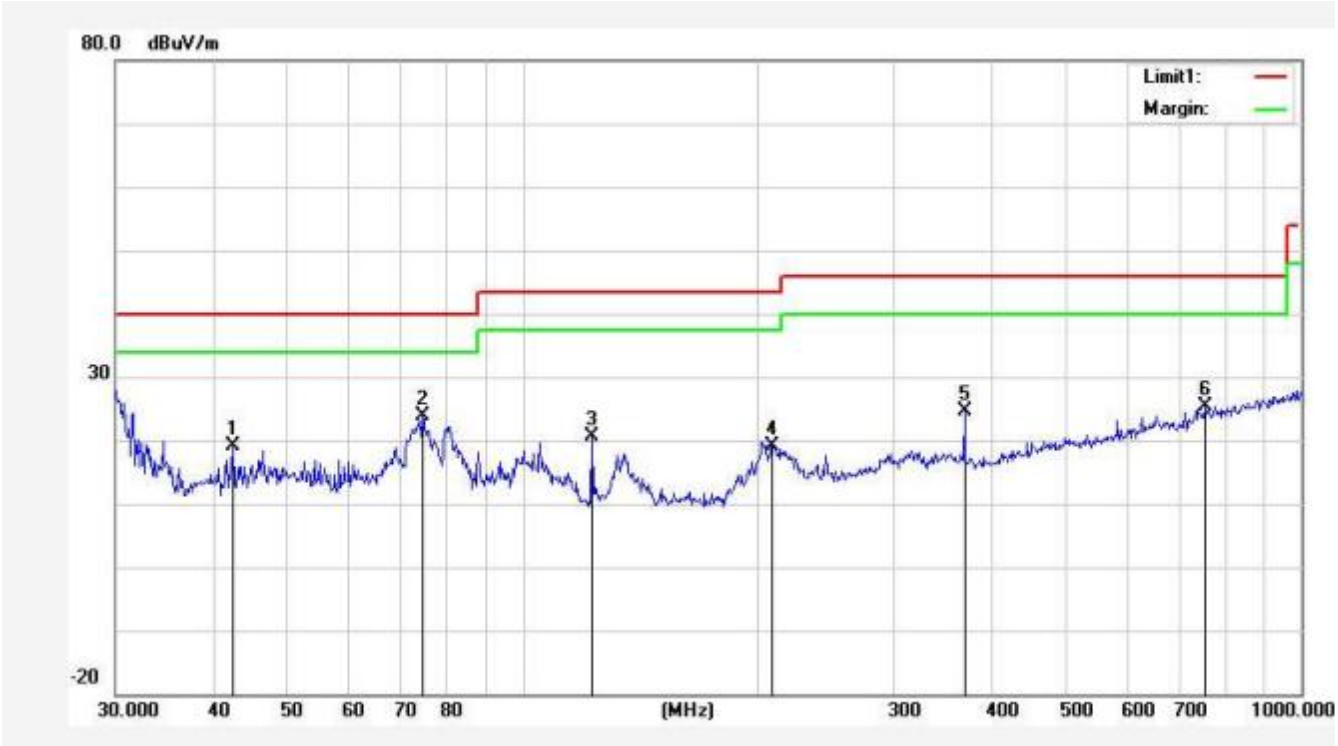



4.4 Test Results

| | | | |
|---|---|---|---|
| Temperature: | 23.5℃ | Relative Humidity: | 59% |
| Test Voltage: | DC 5V | Phase: | Horizontal |
| Test Mode: | Mode 1 | | |

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | Factor(dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 42.4508 | 36.12 | -16.99 | 19.13 | 40.00 | -20.87 | QP |
| 2 | 74.3955 | 45.09 | -21.21 | 23.88 | 40.00 | -16.12 | QP |
| 3 | 122.8340 | 40.99 | -20.30 | 20.69 | 43.50 | -22.81 | QP |
| 4 | 209.3130 | 34.49 | -15.45 | 19.04 | 43.50 | -24.46 | QP |
| 5 | 369.4047 | 37.35 | -12.70 | 24.65 | 46.00 | -21.35 | QP |
| 6 | 752.7432 | 30.12 | -4.83 | 25.29 | 46.00 | -20.71 | QP |

Remark:
1. Margin = Result (Result =Reading + Factor )–Limit



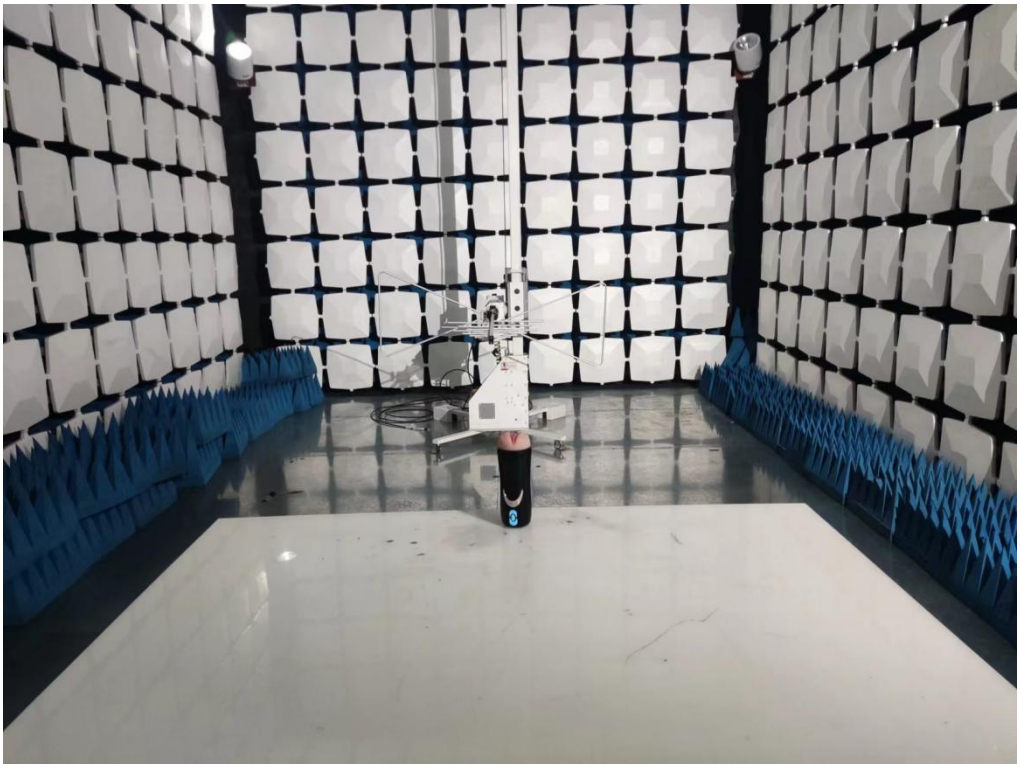
| | | | |
|---|---|---|---|
| Temperature: | 23.5℃ | Relative Humidity: | 59% |
| Test Voltage: | DC 5V | Phase: | Vertical |
| Test Mode: | Mode 1 | | |

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | Factor(dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 31.6202 | 49.30 | -14.11 | 35.19 | 40.00 | -4.81 | QP |
| 2 | 50.5860 | 39.88 | -16.34 | 23.54 | 40.00 | -16.46 | QP |
| 3 | 93.4402 | 44.92 | -19.55 | 25.37 | 43.50 | -18.13 | QP |
| 4 | 219.0753 | 33.64 | -15.39 | 18.25 | 46.00 | -27.75 | QP |
| 5 | 487.3151 | 30.24 | -10.20 | 20.04 | 46.00 | -25.96 | QP |
| 6 | 804.6028 | 30.60 | -4.82 | 25.78 | 46.00 | -20.22 | QP |

Remark:
1. Margin = Result (Result =Reading + Factor )–Limit

## 5.TEST SETUP

**RE**



**CE**

# APPENDIX 1

## Supplementary information for the User manual, labeling requirements

1. Devices subject to FCC part 15 Subpart B must be labelled with the following statement.
The label can be affixed at any space external to the product except the battery door or detachable parts.

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

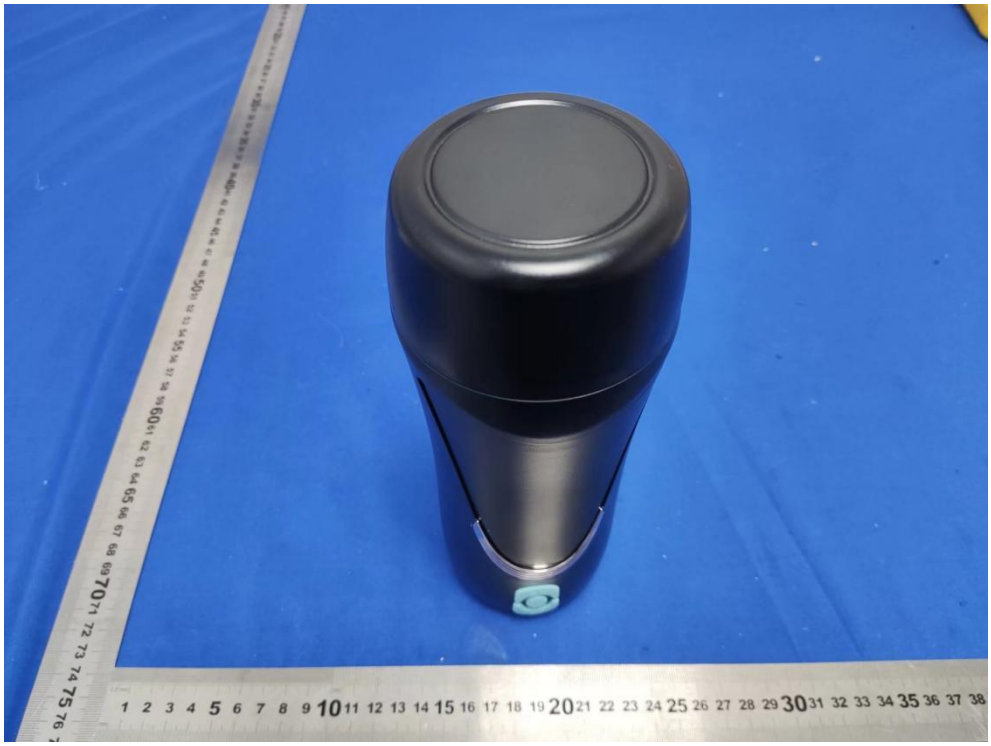
2. In addition, for a Class B digital device or peripheral, the instructions furnished the user shall include the following statement, placed in a prominent location in the text of the manual:

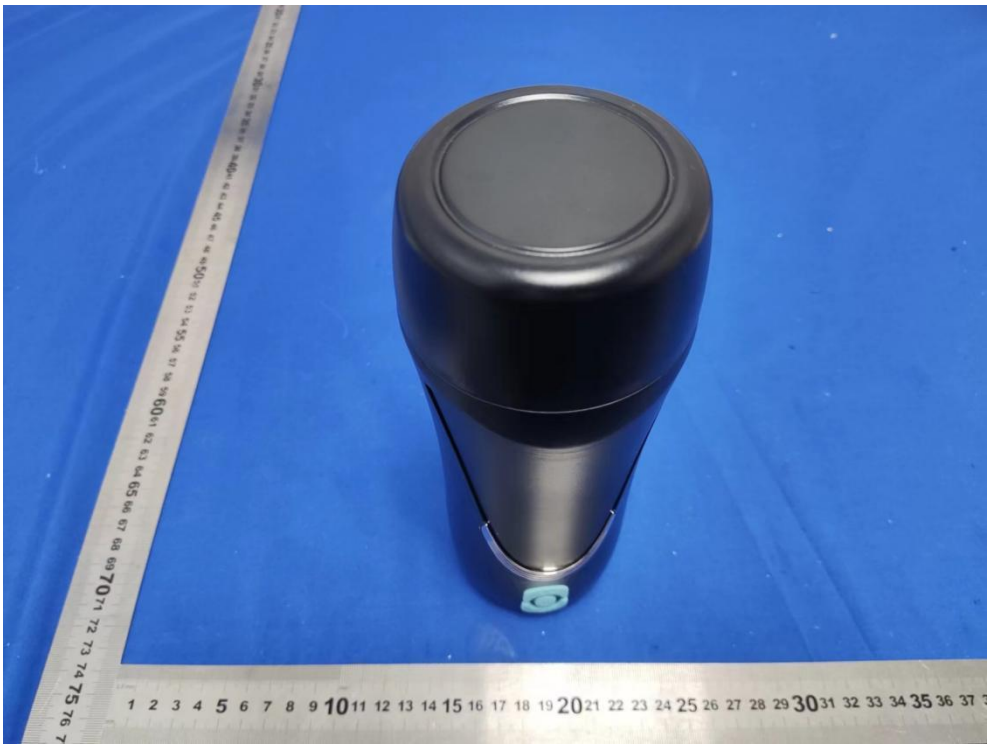
| |
|---|
| NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with The instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:<br>-- Reorient or relocate the receiving antenna.<br>-- Increase the separation between the equipment and receiver.<br>-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.<br>-- Consult the dealer or an experienced radio/TV technician for help. |
| Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the use's authority to operate the equipment. |

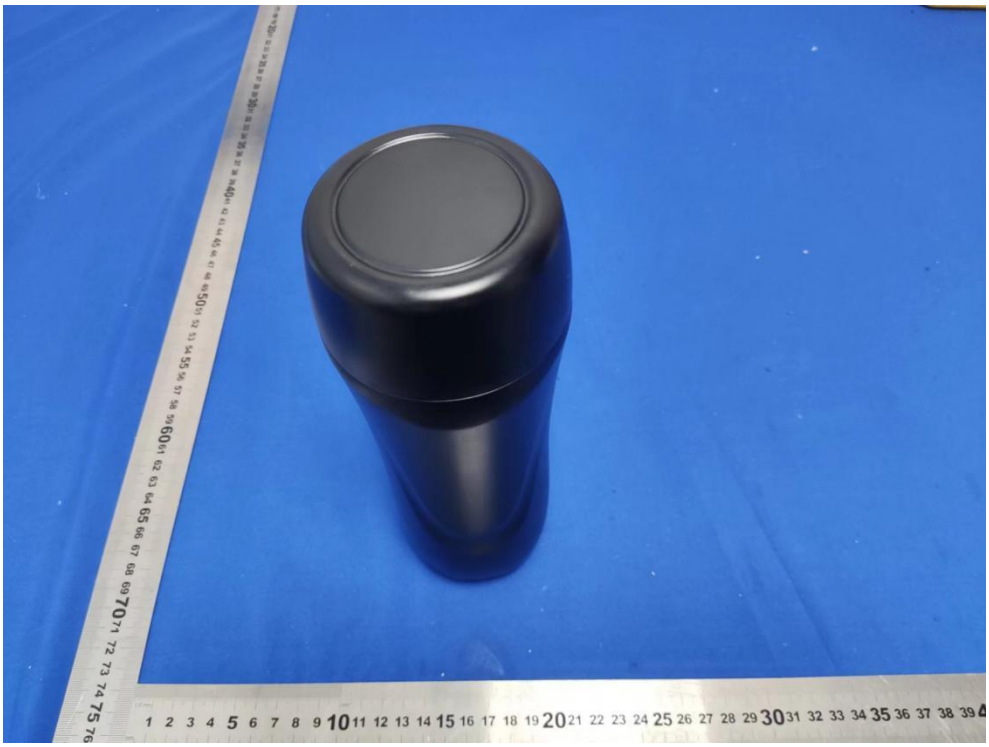
Note: If shielded cables or other specialized accessories are necessary for the unit to achieve compliance, a statement similar to the following should be added:

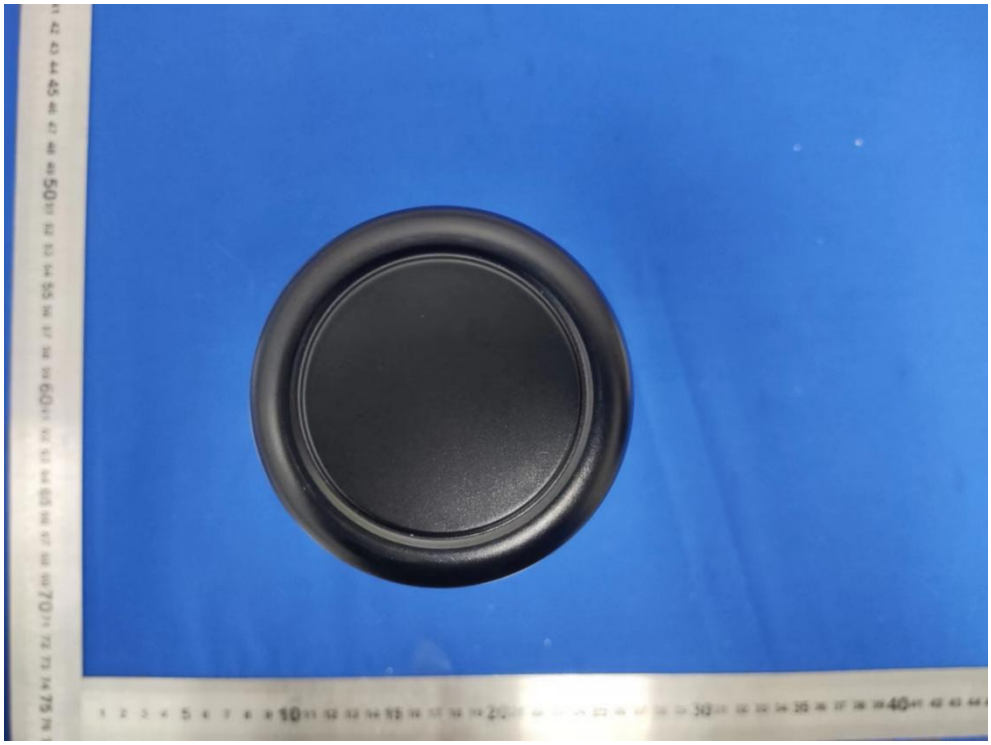
| |
|---|
| Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits. |

# APPENDIX 2-PHOTOGRAPHS OF THE EUT









※※※※※END OF THE REPORT※※※※

**Flux Compliance Service Laboratory.**

Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan Tel: 769-27280901 http://www.fcs-lab.com

# Certificate of Conformity

| | | |
|---|---|---|
| Certificate No. | : | FCSR220220402401 |
| Product | : | Male Masturbator |
| Brand Name | : | N/A |
| Model(s) No. | : | XS-MA |
| Series Model | : | HS-MA;JL-MA;SQ-MA;SQ-MA70054 |
| Holder | : | Guangdong XISE Industrial CO., Ltd. |
| Address | : | Floor 5 & 6 ,blog 2,Zhenqiangda Technology industrial park ,No.8 Lianfeng New Road, Dalingshan town ,Dongguan City ,523000,GuangdongProvince .China |
| Manufacturer | : | Guangdong XISE Industrial CO., Ltd. |
| Address | : | Floor 5 & 6 ,blog 2,Zhenqiangda Technology industrial park ,No.8 Lianfeng New Road, Dalingshan town ,Dongguan City ,523000,Guangdong Province .China |
| Report No. | : | FCS202204024E01 |
| Applied Standards | : | EN 55014-1:2021<br>EN 55014-2-2021<br>EN 61000-4-2:2009<br>EN 61000-4-3:2006+A1: 2008+A2:2010 |

The applicant of the certificate is authorized to use this certificate in connection with EC declaration of conformity to the Directive. The certificate is only applicable to the equipments described above. The submitted sample of the above product has been tested according with Standard(s) used for showing compliance with the essential requirements in the specified directive(s): **2014/30/EU Directive**

CE

Approved by: Jack Wang

**26 Apr,2022**

**Jack Wang/Managerial**

# EMC TEST REPORT

Report No: FCS202204024E01

| | |
|---|---|
| Applicant: | Guangdong XISE Industrial CO., Ltd. |
| Address: | Floor 5 & 6 ,blog 2,Zhenqiangda Technology industrial park ,No.8 Lianfeng New Road,Dalingshantown ,Dongguan City , 523000,GuangdongProvince .China |
| Product Name: | Male Masturbator |
| Brand Name: | N/A |
| Model Name: | XS-MA |
| Series Model: | HS-MA;JL-MA;SQ-MA;SQ-MA70054 |
| Test Standard: | EN 55014-1:2021<br>EN 55014-2-2021<br>EN 61000-4-2:2009<br>EN 61000-4-3:2006+A1: 2008+A2:2010 |
| Issued By: Flux Compliance Service Laboratory<br>Add: Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan<br>Tel: 769-27280901 Fax:769-27280901 http://www.fcs-lab.com | |

# TEST RESULT CERTIFICATION

| | |
|---|---|
| Applicant's Name..... : | Guangdong XISE Industrial CO., Ltd. |
| Address..... : | Floor 5 & 6 ,blog 2,Zhenqiangda Technology industrial park ,No.8 Lianfeng New Road, Dalingshan town ,Dongguan Citv .523000.GuanadonaProvince .China |
| Manufacture's Name..... : | Guangdong XISE Industrial CO., Ltd. |
| Address..... : | Floor 5 & 6 ,blog 2,Zhenqiangda Technology industrial park ,No.8 Lianfeng New Road, Dalingshan town ,Dongguan City ,523000,Guangdong Province .China |

**Product Description**

| | |
|---|---|
| Product Name..... : | Male Masturbator |
| Brand Name ..... : | N/A |
| Model Name..... : | XS-MA |
| Series Model.....: | HS-MA;JL-MA;SQ-MA;SQ-MA70054 |
| Test Standards.....: | EN 55014-1:2021<br>EN 55014-2-2021<br>EN 61000-4-2:2009<br>EN 61000-4-3:2006+A1: 2008+A2:2010 |

This device described above has been tested by FCS, and the test results show that the equipment under test (EUT) is in compliance with the 2014/30/EU EMC Directive requirements. And it is applicable only to the tested sample identified in the report.
This report shall not be reproduced except in full, without the written approval of FCS, this document may be altered or revised by FCS, personal only, and shall be noted in the revision of the document.

**Date of Test**.....:

| | |
|---|---|
| Date (s) of performance of tests. : | 20 Apr. 2022 ~21 Apr. 2022 |
| Date of Issue.....: | 26 Apr. 2022 |
| Test Result..... : | Pass |

Testing Engineer : Scott shen
(Scott Shen)

Technical Manager : Duke Qian
(Duke Qian)

Authorized Signatory : Jack Wang
(Jack Wang)

# TABLE OF CONTENTS

## Revision History

| Rev. | Issue Date | Report No. | Effect Page | Contents |
|---|---|---|---|---|
| 00 | 26 Apr. 2022 | FCS202204024E01 | N/A | Initial Issue |
| | | | | |

## 1. TEST SUMMARY

Test procedures according to the technical standards:

| EMC Emission | | | | |
|---|---|---|---|---|
| Standard | Test Item | Limit | Judgment | Remark |
| EN 55014-1:2021 | Conducted Emissions From The AC Mains Power Ports | Class B | PASS | |
| | Conducted Emissions From Asymmetric Mode | Class B | N/A | |
| | Conducted Differential Voltage Emissions | Class B | N/A | |
| | Radiated Emissions | Class B | PASS | |
| EN 61000-3-2:2019/A1:2021 | Harmonic Current Emission | Class A | N/A | |
| EN 61000-3-3:2013+A1:2019 | Voltage Fluctuations & Flicker | ------ | N/A | |
| **EMC Immunity** | | | | |
| Section EN 55014-2-2021 | Test Item | Performance Criteria | Judgment | Remark |
| EN 61000-4-2:2009 | Electrostatic Discharge | B | PASS | |
| EN 61000-4-3:2006+A1:2008+A2:2010 | RF Electromagnetic Field | A | PASS | |
| EN 61000-4-4:2012 | Fast Transients | B | N/A | |
| EN 61000-4-5:2014/A1:2017 | Surges | B | N/A | |
| EN 61000-4-6:2013 | Radio-frequency Common Mode / Conducted Susceptibility | A | N/A | |
| EN 61000-4-8:2010 | Power Frequency Magnetic Field | A | N/A | |
| EN 61000-4-11:2004/A1:2017 | Volt. Interruptions Volt. Dips | B / C / C | N/A | |

**Note:** "N/A" denotes test is not applicable in this Test Report

## 1.1 TEST FACTORY

| | |
|---|---|
| Company Name: | Flux Compliance Service Laboratory |
| Address: | Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan |
| Telephone: | +86-769-27280901 |
| Fax: | +86-769-27280901 |
| Laboray Accreditations | |
| FCC Test Firm Registration Number: 514908<br>CNAS Number： L15566<br>Designation number：CN0127<br>A2LA accreditation number：5545.01<br>ISED Number：25801 | |

## 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**, where expended 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 |
|---|---|---|---|---|
| FCSC01 | ANSI | 9KHz ~ 150KHz | 3.18 | |
| | | 150 KHz ~ 30MHz | 2.70 | |

B. Radiated Measurement:

| Test Site | Method | Measurement Frequency Range | U，(dB) | NOTE |
|---|---|---|---|---|
| FCSC02 | ANSI | 9KHz ~ 30MHz | 2.50 | |
| | | 30MHz ~ 200MHz | 3.43 | |
| | | 200MHz ~ 1000MHz | 3.57 | |
| | | 1GHz ~ 6 GHz | 4.13 | |

## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF THE EUT

| | |
|---|---|
| Product Name | Male Masturbator |
| Brand Name | N/A |
| Model Name | XS-MA |
| Series Name | HS-MA;JL-MA;SQ-MA;SQ-MA70054 |
| Product Differences | The above product with same circuit, PCB layout, electrical parts, materials and wiring structures, Appearance shape, the materials of decorative accessories is same, only different color. |
| Power Supply | DC 5V |
| Battery | DC 3.7V |
| Hardware version number | V1.0 |
| Software version number | V1.0 |

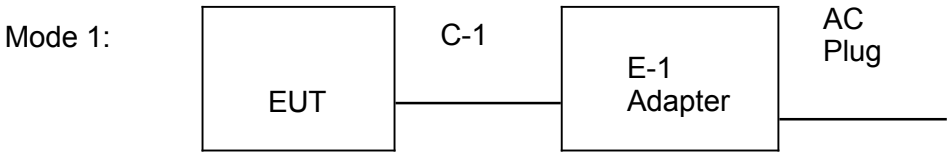
## 2.2 DESCRIPTION OF THE TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

| Pretest Mode | Description |
|---|---|
| Mode 1 | full load |

Note: The test modes were carried out for all operation modes. Only worst case will be show in this report.

## 2.3 DESCRIPTION OF THE TEST SETUP



## 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.

Accessories equipment

Mode 1:

| Item | Equipment | Mfr/Brand | Model/Type No. |
|---|---|---|---|
| N/A | N/A | N/A | N/A |

Auxiliary equipment

Mode 2:

| Item | Equipment | Mfr/Brand | Model/Type No. |
|---|---|---|---|
| N/A | N/A | N/A | N/A |
| | | | |

Cable

Mode 1:

| Item | Type | Shielded Type | Ferrite Core | Length |
|---|---|---|---|---|
| C-1 | N/A | N/A | N/A | N/A |
| | | | | |

Mode 2:

| Item | Type | Shielded Type | Ferrite Core | Length |
|---|---|---|---|---|
| N/A | N/A | N/A | N/A | N/A |
| | | | | |

Note:

(1) The support equipment was authorized by Declaration of Confirmation.

(2) For detachable type I/O cable should be specified the length in cm in『Length』column.

(3) “YES” means “shielded” “with core”; “NO” means “unshielded” “without core”.

## 2.5 MEASUREMENT INSTRUMENTS LIST

### 2.5.1 CONDUCTED TEST SITE

| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last Calibration | Calibrated Until |
|---|---|---|---|---|---|
| EMI Test Receiver | R&S | ESCI | 101427 | 2022.02.10 | 2023.02.09 |
| LISN | R&S | ENV216 | 101242 | 2022.02.10 | 2023.02.09 |
| LISN | ETS | 3810/2NM | 00023625 | 2022.02.10 | 2023.02.09 |
| Absorbing Clamp | R&S | MDS-21 | 100668 | 2022.02.10 | 2023.02.09 |
| Universal Radio Communication Tester | R&S | CMW500 | 117239 | 2022.02.10 | 2023.02.09 |
| CE Cable | N/A | C01 | N/A | 2022.02.10 | 2023.02.09 |
| Temperature & Humidity | Mieo | HH660 | N/A | 2022.02.10 | 2023.02.09 |
| Testing Software | EZ-EMC(Ver.03A1 CE) | | | | |

### 2.5.2 RADIATED TEST SITE

| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last Calibration | Calibrated Until |
|---|---|---|---|---|---|
| EMI Test Receiver | R&S | ESCI | 101427 | 2022.02.10 | 2023.02.09 |
| Bi-log Antenna | TESEQ | CBL6111D | 34678 | 2022.02.10 | 2023.02.09 |
| Horn Antenna | SCHWARZBECK | BBHA 9120D | 9120D-1343 | 2022.02.10 | 2023.02.09 |
| Pre-amplifier(1G-18G) | SKET | LNPA-01018G-45 | SK2018080901 | 2022.02.10 | 2023.02.09 |
| Pre-amplifier(0.1M-3GHz) | EM | EM330 | 060665 | 2022.02.10 | 2023.02.09 |
| Spectrum Analyzer | Agilent | N9020A | MY49100060 | 2022.02.10 | 2023.02.09 |
| Universal Radio Communication Tester | R&S | CMW500 | 117239 | 2022.02.10 | 2023.02.09 |
| RE Cable (9K-1G) | N/A | R01 | N/A | 2022.02.10 | 2023.02.09 |
| RE Cable (1G-18G) | N/A | R02 | N/A | 2022.02.10 | 2023.02.09 |
| Temperature & Humidity | Mieo | HH660 | N/A | 2022.02.10 | 2023.02.09 |
| Testing Software | EZ-EMC(Ver. 03A1 RE) | | | | |

### 2.5.3 HARMONICS AND FLICKER

| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last Calibration | Calibrated Until |
|---|---|---|---|---|---|
| Harmonic Voltage & Flicker | LAPLACE | AC 2000A | 311217 | 2022.02.10 | 2023.02.09 |
| AC Power Source | MTONI | PHF-5010 | 631169 | 2022.02.10 | 2023.02.09 |
| Universal Radio Communication Tester | R&S | CMW500 | 117239 | 2022.02.10 | 2023.02.09 |
| Temperature & Humidity | Mieo | HH660 | N/A | 2022.02.10 | 2023.02.09 |

| Testing Software | HA-PC Link Version 3.03 |
|---|---|

### 2.5.4 ESD

| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last Calibration | Calibrated Until |
|---|---|---|---|---|---|
| Electrostatic Discharge Simulator | KZKUSUI | KES4021 | LB003568 | 2022.02.10 | 2023.02.09 |
| Universal Radio Communication Tester | R&S | CMW500 | 117239 | 2022.02.10 | 2023.02.09 |
| Temperature & Humidity | N/A | WS1066 | N/A | 2022.02.10 | 2023.02.09 |

### 2.5.5 SURGE, EFT/BURST, VOLTAGE INTERRUPTION/DIPS

| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last Calibration | Calibrated Until |
|---|---|---|---|---|---|
| Surger Generator | HTEC | HCWG 10 | 152101 | 2022.02.10 | 2023.02.09 |
| Surger Generator | HTEC | TC0MB4 | 152104 | 2022.02.10 | 2023.02.09 |
| VOLTAGE DIPS & INTERRUPTIONS Generator | HTEC | HPFS 161P | 143803 | 2022.02.10 | 2023.02.09 |
| EFT/B Generator | HTEC | HEFT 51 | 143801 | 2022.02.10 | 2023.02.09 |
| Universal Radio Communication Tester | R&S | CMW500 | 117239 | 2022.02.10 | 2023.02.09 |
| Temperature & Humidity | Mieo | HH660 | N/A | 2022.02.10 | 2023.02.09 |

### 2.5.6 RS

| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last Calibration | Calibrated Until |
|---|---|---|---|---|---|
| Power Meter | Agilent | E4419B | QB4331226 | 2022.02.10 | 2023.02.09 |
| Power Sensor | Hp | E9300A | US39210170 | 2022.02.10 | 2023.02.09 |
| Power Sensor | Hp | E9300A | US39210476 | 2022.02.10 | 2023.02.09 |
| Signal Generator | Agilent | N5181A | MY56144718 | 2022.02.10 | 2023.02.09 |
| Power Amplifier | MICOTOP | MPA-80-1000-250 | MPA1711489 | 2022.02.10 | 2023.02.09 |
| Power Amplifier | MICOTOP | MPA-1000-3000-75 | MPA1711488 | 2022.02.10 | 2023.02.09 |
| Power Amplifier | MICOTOP | MPA-3000-6000-50 | MPA1711490 | 2022.02.10 | 2023.02.09 |
| RS Test Antenna (80-1GHz) | SCHWARZBECK | VULP 9118E | 000999 | 2022.02.10 | 2023.02.09 |
| RS Test Antenna (1G-10GHz) | SCHWARZBECK | STLP 9149 | 000648 | 2022.02.10 | 2023.02.09 |
| Universal Radio Communication Tester | R&S | CMU200 | 109200 | 2022.02.10 | 2023.02.09 |

| | | | | | |
|---|---|---|---|---|---|
| Universal Radio Communication Tester | R&S | CMW500 | 117239 | 2022.02.10 | 2023.02.09 |
| Audio Analyzer | R&S | UPL | 100689 | 2022.02.10 | 2023.02.09 |
| Audio Breakthrough Shielding Box | SKET | SB_ABT/C35 | N/A | 2022.02.10 | 2023.02.09 |
| Ear Simulator | SKET | AE_ABT/C35 | N/A | 2022.02.10 | 2023.02.09 |
| Mouth Simulator | SKET | AM_ABT/C35 | N/A | 2022.02.10 | 2023.02.09 |
| 1KHz Standard Source | SKET | MSC_ABT/C35 | N/A | 2022.02.10 | 2023.02.09 |
| Field Probe | Narda | EP601 | 611WX80261 | 2022.02.10 | 2023.02.09 |
| Temperature & Humidity | Mieo | HH660 | N/A | 2022.02.10 | 2023.02.09 |
| Testing Software | EMC-S V1.2.0.90 | | | | |

### 2.5.7 INJECTION CURRENT

| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last Calibration | Calibrated Until |
|---|---|---|---|---|---|
| CS | SCHLODER | CDG-6000-25 | 126A1280/2014 | 2022.02.10 | 2023.02.09 |
| CDN | SCHLODER | CDN-M2+3 | A2210275/2014 | 2022.02.10 | 2023.02.09 |
| EM Clamp | SCHLODER | EMCL-20 | 132A1283 | 2022.02.10 | 2023.02.09 |
| Attenuator | Nemtest | ATT-6DB-100 | A100W224 | 2022.02.10 | 2023.02.09 |
| Universal Radio Communication Tester | R&S | CMW500 | 117239 | 2022.02.10 | 2023.02.09 |
| Universal Radio Communication Tester | R&S | CMU200 | 109200 | 2022.02.10 | 2023.02.09 |
| Audio Analyzer | R&S | UPL | 100689 | 2022.02.10 | 2023.02.09 |
| Audio Breakthrough Shielding Box | SKET | SB_ABT/C35 | N/A | 2022.02.10 | 2023.02.09 |
| Ear Simulator | SKET | AE_ABT/C35 | N/A | 2022.02.10 | 2023.02.09 |
| Mouth Simulator | SKET | AM_ABT/C35 | N/A | 2022.02.10 | 2023.02.09 |
| 1KHz Standard Source | SKET | MSC_ABT/C35 | N/A | 2022.02.10 | 2023.02.09 |
| Temperature & Humidity | Mieo | HH660 | N/A | 2022.02.10 | 2023.02.09 |

### 2.5.8 PFMF

| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last Calibration | Calibrated Until |
|---|---|---|---|---|---|
| MF Generator | HTEC | HMFG-COMB | 143903 | 2022.02.10 | 2023.02.09 |
| Magnetic Field Coil | HTEC | HCOIL 100 | 143808 | 2022.02.10 | 2023.02.09 |
| Universal Radio Communication Tester | R&S | CMW500 | 117239 | 2022.02.10 | 2023.02.09 |
| Temperature & Humidity | Mieo | HH660 | N/A | 2022.02.10 | 2023.02.09 |

# 3. EMC EMISSION TEST

## 3.1 CONDUCTED EMISSION MEASUREMENT

### 3.1.1 REQUIREMENTS FOR CONDUCTED EMISSIONS FROM THE AC MAINS POWER PORTS OF THE CLASS A EQUIPMENT

| FREQUENCY (MHz) | Coupling device | Detector type / bandwidth | Class A limits dB(μV) |
|---|---|---|---|
| 0.15 - 0.5 | AMN | Quasi Peak / 9 kHz | 79 |
| 0.50 - 30 | | | 63 |
| 0.15 - 0.5 | AMN | Average / 9 kHz | 66 |
| 0.50 - 30 | | | 60 |

### 3.1.2 REQUIREMENTS FOR CONDUCTED EMISSIONS FROM THE AC MAINS POWER PORTS OF THE CLASS B EQUIPMENT

| FREQUENCY (MHz) | Coupling device | Detector type / bandwidth | Class B limits dB(μV) |
|---|---|---|---|
| 0.15 - 0.5 | AMN | Quasi Peak / 9 kHz | 66 - 56* |
| 0.50 - 5 | | | 56 |
| 5 - 30 | | | 60 |
| 0.15 - 0.5 | AMN | Average / 9 kHz | 56 - 46* |
| 0.50 - 5 | | | 46 |
| 5 - 30 | | | 50 |

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

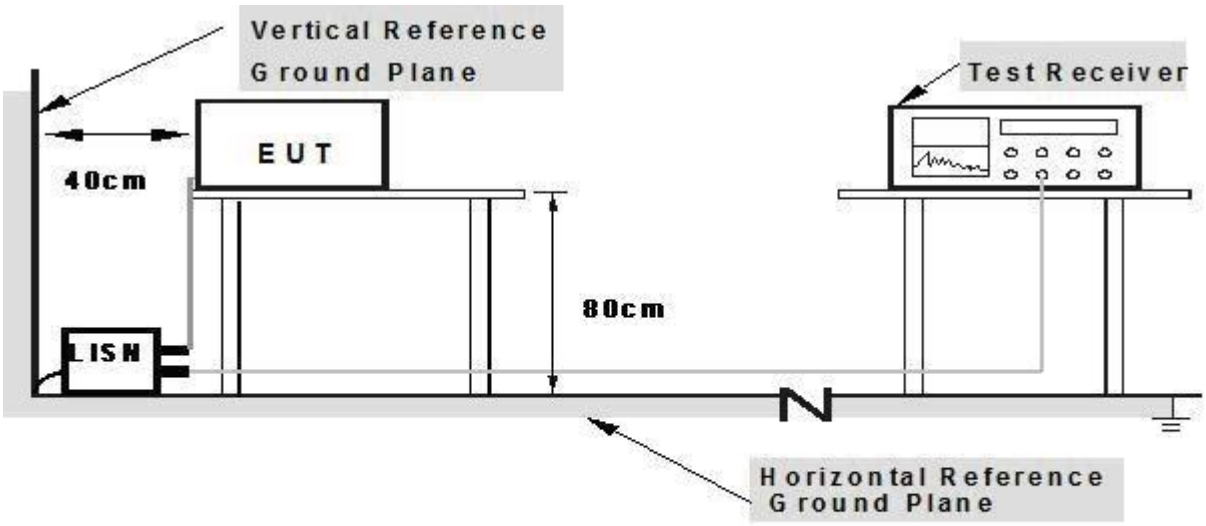
The following table is the setting of the receiver

| Receiver Parameters | Setting |
|---|---|
| Attenuation | 10 dB |
| Start Frequency | 0.15 MHz |
| Stop Frequency | 30 MHz |
| IF Bandwidth | 9 kHz |

### 3.1.3 TEST PROCEDURE

a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. For the actual test configuration, please refer to the related Item –EUT Test Photos.

### 3.1.4 TEST SETUP




**Note: 1.Support units were connected to second LISN.**
**2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes**

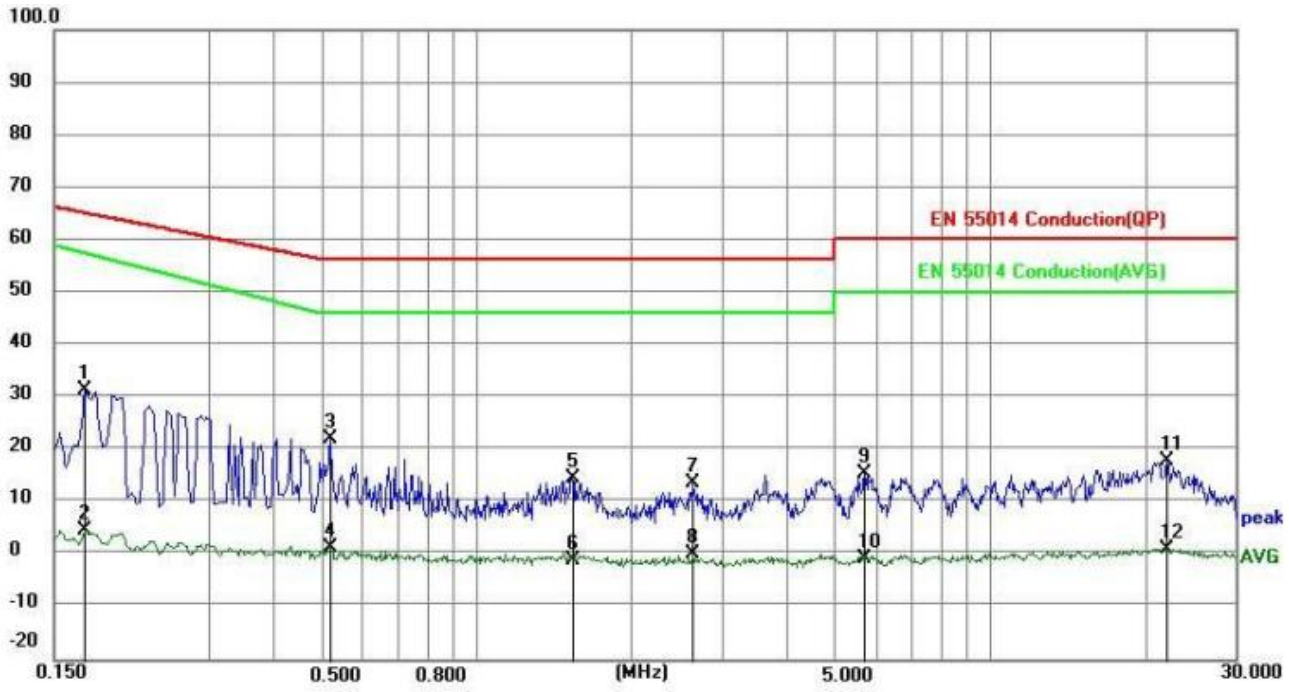
### 3.1.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the following during the testing.

### 3.1.6 TEST RESULTS

| | | | |
|---|---|---|---|
| Temperature: | 25.3℃ | Relative Humidity: | 62% |
| Phase: | L | Test Mode: | Mode 1 |
| Test Voltage: | DC 5V | | |

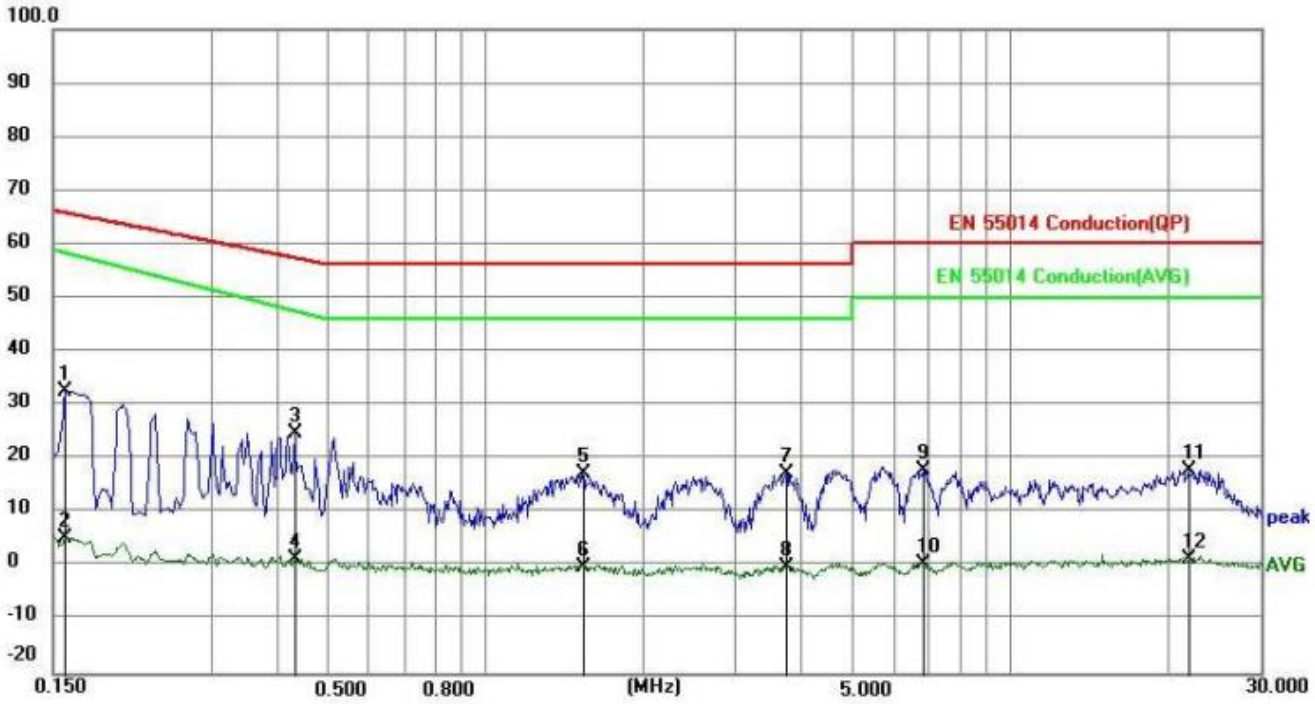
| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.1725 | 21.93 | 9.52 | 31.45 | 64.84 | 33.39 | QP |
| 2 | 0.1725 | -4.82 | 9.52 | 4.70 | 57.49 | 52.79 | AVG |
| 3 | 0.5190 | 12.66 | 9.56 | 22.22 | 56.00 | 33.78 | QP |
| 4 | 0.5190 | -8.05 | 9.56 | 1.51 | 46.00 | 44.49 | AVG |
| 5 | 1.5315 | 4.99 | 9.58 | 14.57 | 56.00 | 41.43 | QP |
| 6 | 1.5315 | -10.50 | 9.58 | -0.92 | 46.00 | 46.92 | AVG |
| 7 | 2.6430 | 4.18 | 9.58 | 13.76 | 56.00 | 42.24 | QP |
| 8 | 2.6430 | -9.35 | 9.58 | 0.23 | 46.00 | 45.77 | AVG |
| 9 | 5.7075 | 5.81 | 9.60 | 15.41 | 60.00 | 44.59 | QP |
| 10 | 5.7075 | -10.28 | 9.60 | -0.68 | 50.00 | 50.68 | AVG |
| 11 | 22.1325 | 8.12 | 9.76 | 17.88 | 60.00 | 42.12 | QP |
| 12 | 22.1325 | -8.73 | 9.76 | 1.03 | 50.00 | 48.97 | AVG |




Remark:
1. All readings are Quasi-Peak and Average values.

| | | | |
|---|---|---|---|
| Temperature: | 25.3℃ | Relative Humidity: | 62% |
| Phase: | N | Test Mode: | Mode 1 |
| Test Voltage: | DC 5V | | |

| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.1590 | 23.17 | 9.51 | 32.68 | 65.52 | 32.84 | QP |
| 2 | 0.1590 | -4.21 | 9.51 | 5.30 | 58.37 | 53.07 | AVG |
| 3 | 0.4335 | 15.30 | 9.55 | 24.85 | 57.19 | 32.34 | QP |
| 4 | 0.4335 | -8.04 | 9.55 | 1.51 | 47.54 | 46.03 | AVG |
| 5 | 1.5315 | 7.70 | 9.58 | 17.28 | 56.00 | 38.72 | QP |
| 6 | 1.5315 | -9.48 | 9.58 | 0.10 | 46.00 | 45.90 | AVG |
| 7 | 3.7500 | 7.87 | 9.62 | 17.49 | 56.00 | 38.51 | QP |
| 8 | 3.7500 | -9.57 | 9.62 | 0.05 | 46.00 | 45.95 | AVG |
| 9 | 6.8325 | 8.15 | 9.73 | 17.88 | 60.00 | 42.12 | QP |
| 10 | 6.8325 | -9.32 | 9.73 | 0.41 | 50.00 | 49.59 | AVG |
| 11 | 21.9390 | 8.20 | 9.84 | 18.04 | 60.00 | 41.96 | QP |
| 12 | 21.9390 | -8.35 | 9.84 | 1.49 | 50.00 | 48.51 | AVG |




Remark:
1. All readings are Quasi-Peak and Average values.

## 3.2 RADIATED EMISSION MEASUREMENT

### 3.2.1 LIMITS OF THE RADIATED EMISSION MEASUREMENT

| FREQUENCY (MHz) | Distance （m） | Detector type/ bandwidth | Class A dBuV/m | Class B dBuV/m |
|---|---|---|---|---|
| 30 - 230 | 3 | Quasi peak/ 120 kHz | 50 | 40 |
| 230 - 1000 | 3 | Quasi peak/ 120 kHz | 57 | 47 |
| 1000 - 3000 | 3 | Peak /1 MHz | 76 | 70 |
| 3000 - 6000 | 3 | Peak /1 MHz | 80 | 74 |
| 1000 - 3000 | 3 | AV/1 MHz | 56 | 50 |
| 3000 - 6000 | 3 | AV/1 MHz | 60 | 54 |

Notes:

(1) The tighter limit applies at the band edges.

(2) Emission level (dBuV/m) = 20log Emission level (uV/m).

### 3.2.3 TEST PROCEDURE

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The height of antenna is varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1GHz.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

### 3.2.4 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz

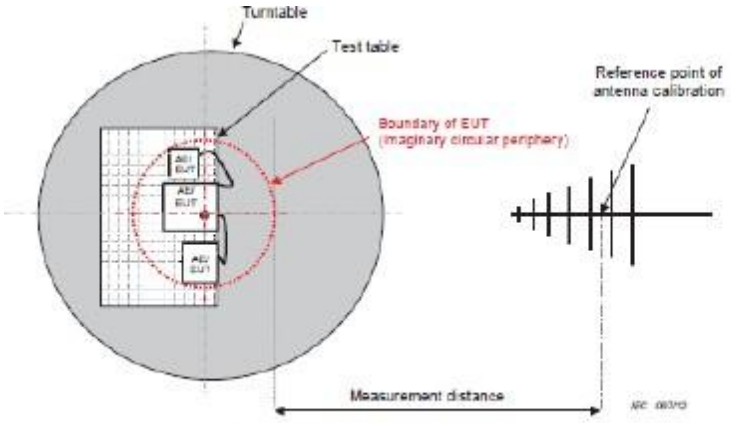



Figure C.1 – Measurement distance

(B) Radiated Emission Test Set-Up Frequency Above 1GHz

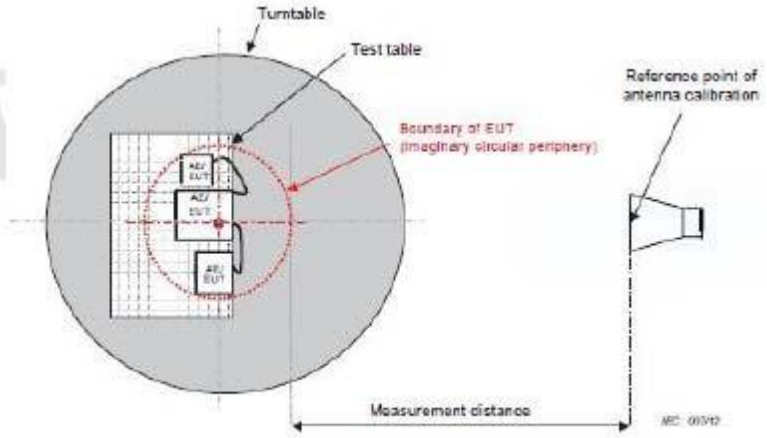



Figure C.1 – Measurement distance

### 3.2.5 EUT OPERATING CONDITIONS

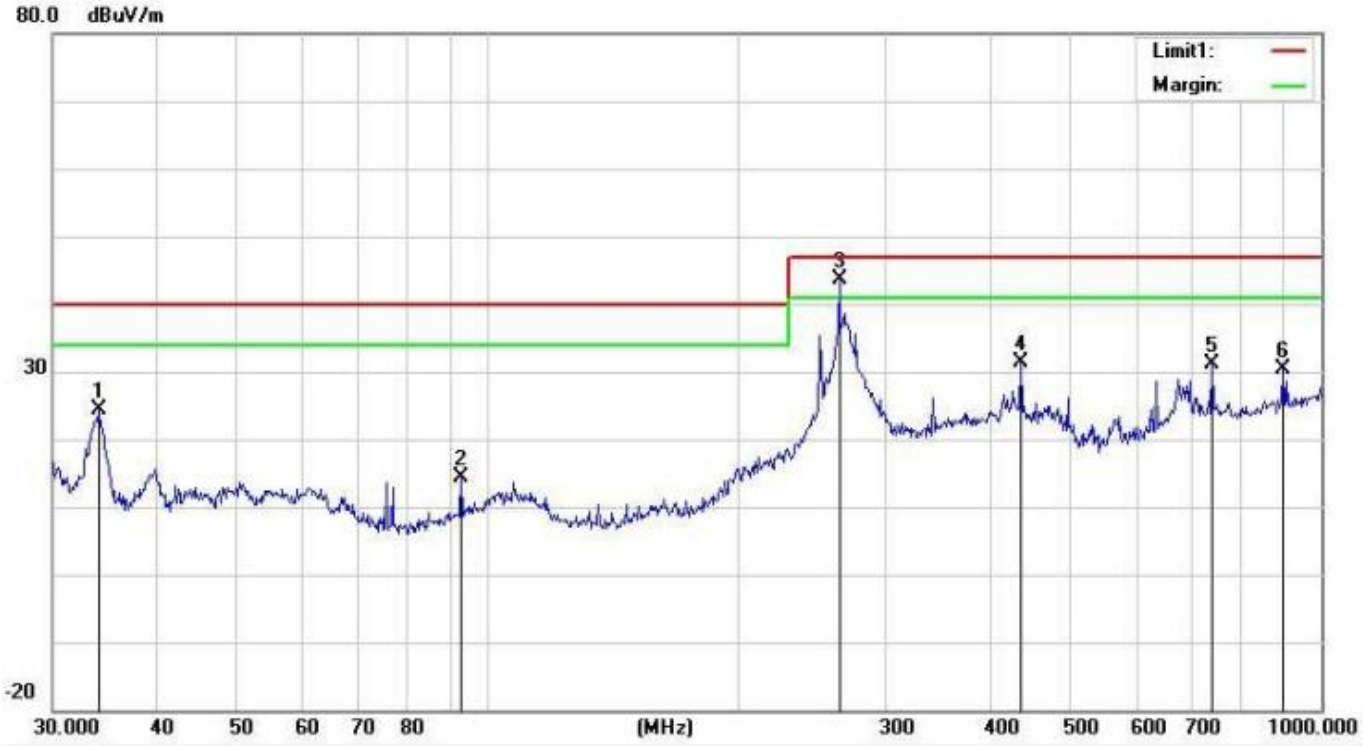
The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the following during the testing.

### 3.2.6 TEST RESULTS

| | | | |
|---|---|---|---|
| Temperature: | 24.4℃ | Relative Humidity: | 51% |
| Phase: | Horizontal | Test Mode: | Mode 1 |
| Test Voltage: | DC 5V | | |

| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 34.0365 | 39.92 | -15.62 | 24.30 | 40.00 | -15.70 | QP |
| 2 | 92.7871 | 33.96 | -19.70 | 14.26 | 40.00 | -25.74 | QP |
| 3 | 263.8190 | 58.54 | -14.85 | 43.69 | 47.00 | -3.31 | QP |
| 4 | 435.5898 | 42.97 | -11.52 | 31.45 | 47.00 | -15.55 | QP |
| 5 | 739.6604 | 36.41 | -5.17 | 31.24 | 47.00 | -15.76 | QP |
| 6 | 900.1474 | 33.84 | -3.34 | 30.50 | 47.00 | -16.50 | QP |

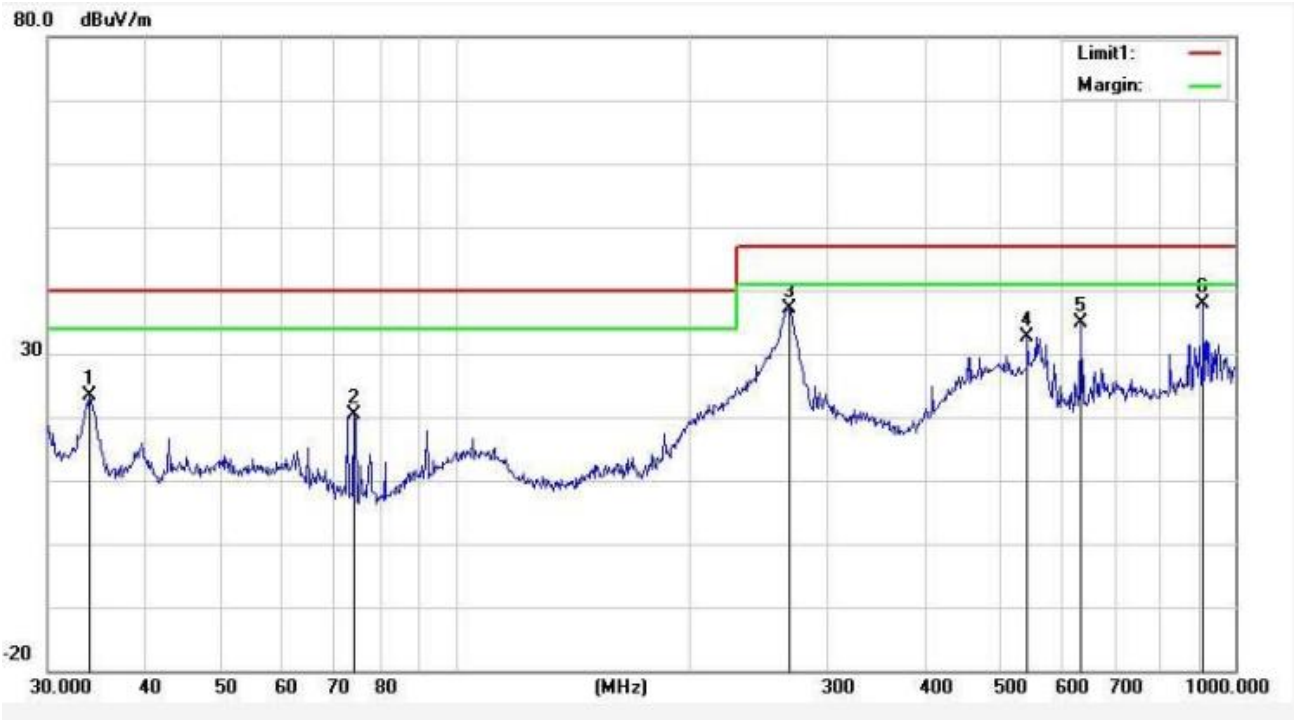
Remark:
1. All readings are Quasi-Peak.
2. Margin = Result (Result =Reading + Factor )–Limit
3. Factor= Cable Loss +Antenna Factor-Amplifier Gain



| | | | |
|---|---|---|---|
| Temperature: | 24.4℃ | Relative Humidity: | 51% |
| Phase: | Vertical | Test Mode: | Mode 1 |
| Test Voltage: | DC 5V | | |

| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 33.9174 | 38.88 | -15.55 | 23.33 | 40.00 | -16.67 | QP |
| 2 | 74.1351 | 41.46 | -21.16 | 20.30 | 40.00 | -19.70 | QP |
| 3 | 268.4853 | 51.89 | -14.70 | 37.19 | 47.00 | -9.81 | QP |
| 4 | 541.3725 | 42.28 | -9.54 | 32.74 | 47.00 | -14.26 | QP |
| 5 | 633.9073 | 42.14 | -7.22 | 34.92 | 47.00 | -12.08 | QP |
| 6 | 909.6667 | 41.11 | -3.18 | 37.93 | 47.00 | -9.07 | QP |

Remark:
1. All readings are Quasi-Peak.
2. Margin = Result (Result =Reading + Factor )–Limit
3. Factor= Cable Loss +Antenna Factor-Amplifier Gain



## 3.3 VOLTAGE FLUCTUATION AND FLICKERS

### 3.3.1 LIMITS OF THE VOLTAGE FLUCTUATION AND FLICKERS

| Tests | Measurement Value | Limit | Descriptions |
|---|---|---|---|
| | IEC555-3 | IEC/EN 61000-3-3 | |
| $P_{st}$ | ≤ 1.0,Tp= 10 min. | ≤ 1.0,Tp= 10 min. | Short Term Flicker Indicator |
| $P_{lt}$ | N/A | ≤0.65,Tp=2 hr. | Long Term Flicker Indicator |
| $T_{dt(s)}$ | ≤ 3% | ≤ 3.3% | Relative Steady-State V-Chang |
| $d_{max}$(%) | ≤ 4% | ≤ 4% | Maximum Relative V-Chang |
| $d_c$(%) | N/A | ≤ 3.3% for > 500ms | Relative V-change Characteristic |

### 3.3.2 TEST PROCEDURE

a. Fluctuation and Flickers Test:

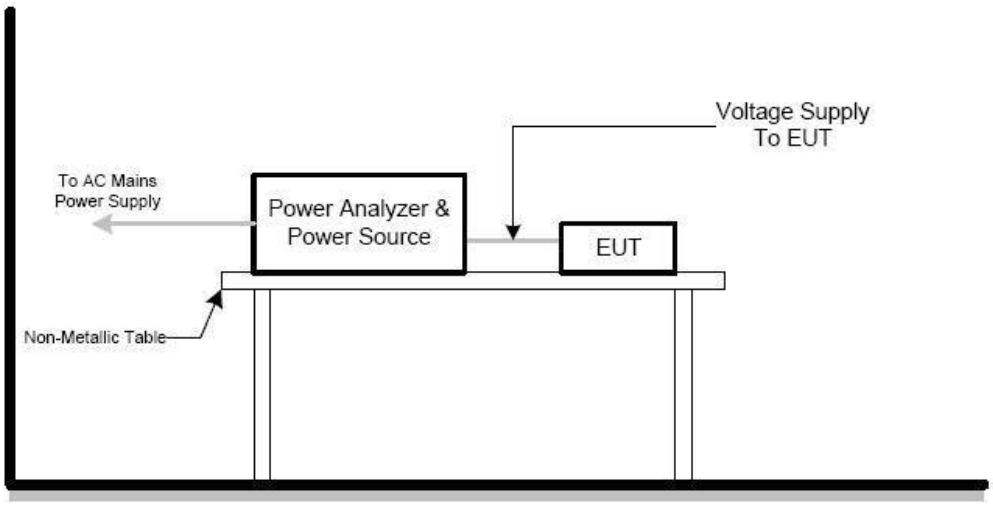
Tests was performed according to the Test Conditions/Assessment of Voltage Fluctuations specified in Clause 5.0/6.0 of IEC555-3 and/or Clause 6.0/4.0 of IEC/EN 61000-3-3 depend on which standard adopted for compliance measurement.

b. All types of voltage fluctuation in this report are assessed by direct measurement using flicker-meter.

### 3.3.3 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the following during the testing.

### 3.3.4 TEST SETUP



### 3.3.5 TEST RESULTS

| Temperature: | 23.9 ℃ | Relative Humidity: | 54% |
|---|---|---|---|
| Test Voltage: | DC 5V | | |

| Test Parameter | Measurement Value | Limit | Remarks |
|---|---|---|---|
| $P_{st}$ | 0.00 | 1.0 | Pass |
| $P_{lt}$ | -- | 0.65 | -- |
| $T_{dt(s)}$ | 0.00 | 0.5 | Pass |
| $d_{max}$(%) | 0.00% | 4% | Pass |
| $d_c$(%) | 0.00% | 3.3% | Pass |

# 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 |
|---|---|---|---|
| 1. ESD<br>IEC/EN 61000-4-2 | 8KV air discharge<br>4KV contact discharge | Direct Mode | B |
| | 4KV HCP discharge<br>4KV VCP discharge | Indirect Mode | B |
| 2. RS<br>IEC/EN 61000-4-3 | 80 MHz - 1000 MHz,1800MHz,2600MHz,3500MHz,5000MHz, 1000Hz, 80%, AM modulated | Enclosure | A |
| 3. EFT/Burst<br>IEC/EN 61000-4-4 | 5/50ns Tr/Th<br>5KHz Repetition Freq. | Power Supply Port | B |
| | 5/50ns Tr/Th<br>5KHz Repetition Freq. | CTL/Signal Data Line Port | B |
| 4. Surges<br>IEC/EN 61000-4-5 | 1.2/50(8/20) Tr/Th us | L-N | B |
| | 1.2/50(8/20) Tr/Th us | L-PE<br>N-PE | B |
| 5. Injected Current<br>IEC/EN 61000-4-6 | 0.15 MHz to 80 MHz, 1000Hz 80％, AM Modulated<br>150Ω source impedance | CTL/Signal Port | A |
| | 0.15 MHz to 80 MHz, 1000Hz 80％, AM Modulated<br>150Ω source impedance | AC Power Port | A |
| | 0.15 MHz to 80 MHz, 1000Hz 80％, AM Modulated<br>150Ω source impedance | DC Power Port | A |
| 6. Power Frequency Magnetic Field<br>IEC/EN 61000-4-8 | 50 Hz, | Enclosure | A |
| 7. Volt. Interruptions<br>Volt. Dips<br>IEC/EN 61000-4-11 | Voltage dip 100%<br>Voltage dip 30%<br>Interruption 100% | AC Power Port | B<br>C<br>C |

## 4.2 GENERAL PERFORMANCE CRITERIA

According to **EN 55014** 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.<br>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.<br>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.<br>Information stored in non-volatile memory, or protected by a battery backup, shall not be lost. |

### 4.2.1 GENERAL PERFORMANCE CRITERIA TEST SETUP

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the following during the testing.

## 4.3 ELECTROSTATIC DISCHARGE IMMUNITY TEST (ESD)

### 4.3.1 TEST SPECIFICATION

| | |
|---|---|
| Basic Standard: | IEC/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. 200 times in total<br>20 times at each test point |
| Discharge Mode: | Single Discharge |
| Discharge Period: | 1 second minimum |

### 4.3.2 TEST PROCEDURE

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

a. 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.

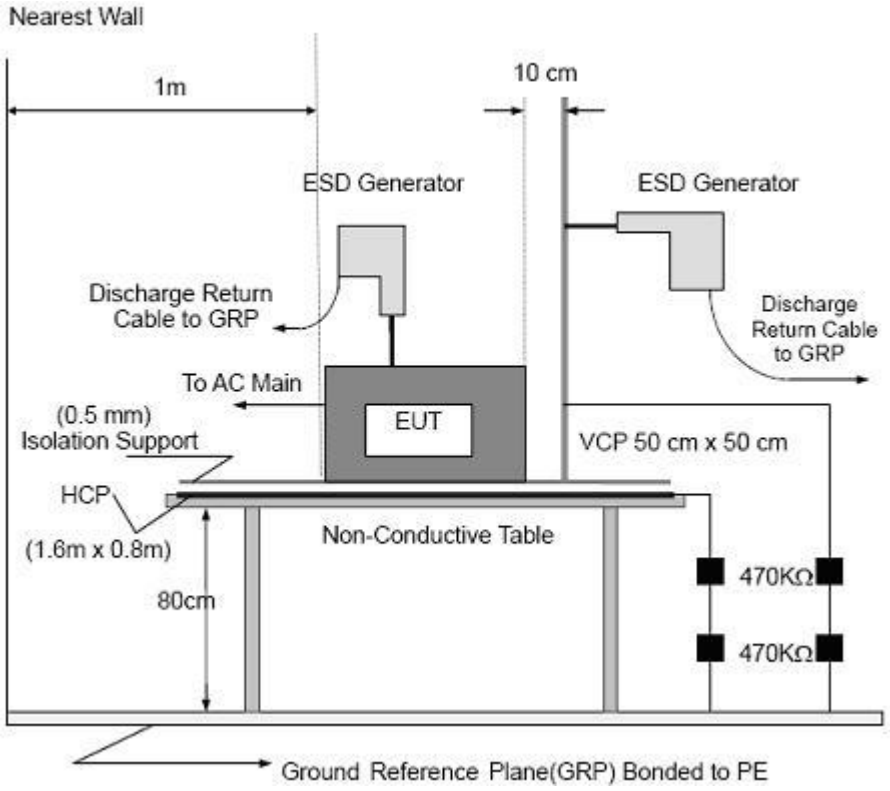
Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.

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.

b. Air discharges at insulation surfaces of the EUT.
It was at least ten single discharges with positive and negative at the same selected point.

### 4.3.3 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 940kΩ total impedance. The equipment under test, was installed in a representative system as described in section 7 of IEC /EN 61000-4-2, and its cables were placed on the HCP and isolated by an insulating support of 0.5mm thickness. A distance of0.8-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 IEC/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.

### 4.3.4 TEST RESULTS

| | | | |
|---|---|---|---|
| Temperature: | 23.9℃ | Relative Humidity: | 56% |
| Pressure: | 1020.1hPa | Test Voltage: | DC 5V |
| Test Mode: | Mode1 | | |

| Discharge Level | Polarity | Test Points | Contact Discharge | Air Discharge | Criterion | Test Result |
|---|---|---|---|---|---|---|
| 4 | +/- | VCP/HCP | NOTE | N/A | B | PASS |
| 2,4 | +/- | Green Dot | Note | N/A | B | PASS |
| 2,4,8 | +/- | Red Dot | N/A | NOTE | B | PASS |

Note: The EUT function was correct during the test.
Red Dot —Air Discharged
Green Dot —Contact Discharged

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

### 4.4.1 TEST SPECIFICATION

| | |
|---|---|
| Basic Standard: | IEC/EN 61000-4-3 |
| Required Performance: | A |
| Frequency Range: | 80 MHz - 6000 MHz |
| 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: | 1.5 m |
| Dwell Time: | 1.5x $10^{-3}$ decade/s |

### 4.4.2 TEST PROCEDURE

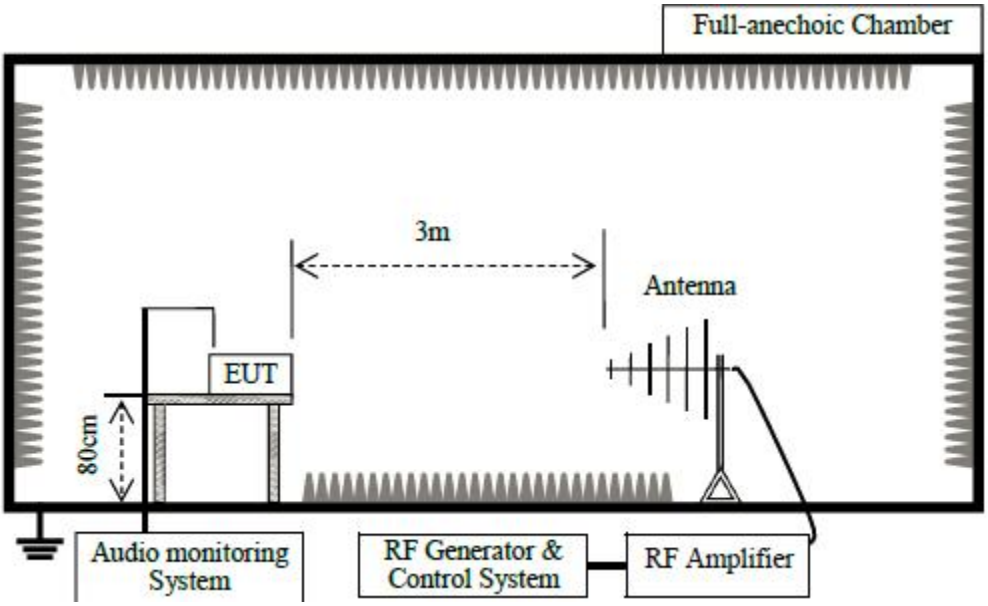
a. The testing was performed in a fully anechoic chamber. The transmit antenna was located at a distance of 3 meters from the EUT.

b. The frequency range is swept from 80 MHz to 1000 MHz, 1800 MHz, 2600 MHz, 3500 MHz, 5000 MHz, with the signal 80% amplitude modulated with a 1kHz sine-wave. The rate of sweep did not exceed 1.5 x $10^{-3}$ decade/s, where the frequency range is swept incrementally, the step size was 1% of preceding frequency value.

c. The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.

e. The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.

### 4.4.3 TEST SETUP




Note:

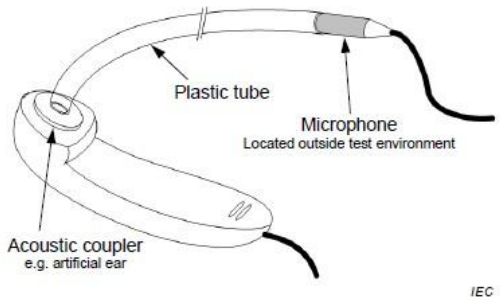
TABLE-TOP EQUIPMENT

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

For Audio output function use below setting




NOTE 1 The microphone is connected via the cable to a suitable amplifier.

NOTE 2 This setup is suitable for radiated immunity testing. See G.6.3

**Figure G.5 – Example test setup for on-ear acoustic measurements, microphone located away from earpiece transducer**

### 4.4.4TEST RESULTS

| Temperature: | 23.9℃ | Relative Humidity: | 54% |
|---|---|---|---|
| Test Voltage: | DC 5V | Test Mode: | Mode1 |

| Frequency Range (MHz) | RF Field Position | R.F. Field Strength | Azimuth | Perform. Criteria | Results | Judgment |
|---|---|---|---|---|---|---|
| 80MHz - 6000MHz | H / V | 3 V/m (rms) AM Modulated 1000Hz, 80% | Front | A | A | PASS |
| | | | Rear | | | |
| | | | Left | | | |
| | | | Right | | | |
| | | | Rear | | | |
| | | | Left | | | |
| | | | Right | | | |

For the acoustic level of the demodulated audio limits

| Frequency(MHz) | dB(SPL) |
|---|---|
| 80 to 1 000 | 75 |

Note: According to EN 55035: 2017, Annex A, A.2 Applicability, the EUT belongs to Group 2. And then according to EN 55035: 2017, Annex A, A.4Modified test levels and performance criteria, Table A.2 – Modified test levels for performance criterion A for the broadcast reception function, no test requirements apply to this EUT.

## 4.5 ELECTRICAL FAST TRANSIENT (EFT)

### 4.5.1 TEST SPECIFICATION

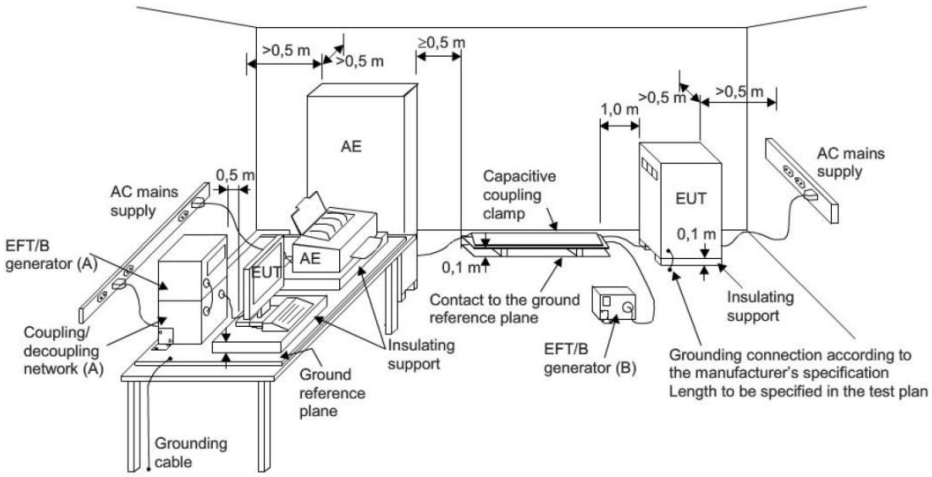
| | |
|---|---|
| Basic Standard: | IEC/EN 61000-4-4 |
| Required Performance: | B |
| Test Voltage: | Power Line：1 KV<br>Signal/Control Line：0.5 KV<br>DC network power port:0.5KV |
| Polarity: | Positive & Negative |
| Impulse Frequency: | 5 kHz |
| Impulse Wave shape : | 5/50 ns |
| Burst Duration: | 15ms |
| Burst Period: | 300ms |
| Test Duration: | Not less than 1 min. |

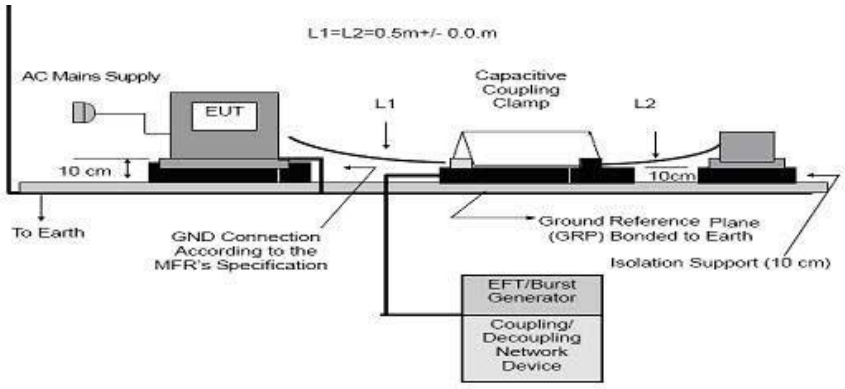
### 4.5.2 TEST PROCEDURE

The EUT and support equipment, are placed on a table that is 0.8 meter&0.1 meter above a metal ground plane measured 1m*1m min .
The ground reference plane shall be a metallic sheet (copper or aluminum) of 0. 25 mm minimum thickness; other metallic materials may be used, but they shall have at least 0.65 mm minimum thickness.
The other condition need as following manners:

c. The length of power cord between the coupling device and the EUT should not exceed 1 meter.
d. Both positive and negative polarity discharges were applied.
e. The duration time of each test sequential was 1 minute

### 4.5.3 TEST SETUP



Note:

TABLE-TOP EQUIPMENT

Table-top equipment and equipment normally mounted on ceilings or walls as well as built-in equipment shall be tested with the EUT located (0.1 ± 0.01) m above the ground reference plane.
Testing of large table-top equipment or multiple systems can be performed on the floor; maintaining the same distances as for the test setup of table-top equipment.
The test generator and the coupling/decoupling network shall be bonded to the ground reference plane.
The ground reference plane shall be a metallic sheet (copper or aluminum) of 0. 25mm minimum thickness; other metallic materials may be used , but they shall have at least 0.65 mm minimum thickness.
The minimum size of the ground reference plane is 0.8m x 1m The actual size depends on the dimensions of the EUT.
The ground reference plane shall project beyond the EUT by at least 0.1m on all sides.
The ground reference plane shall be connected to the earth (PE) for safety reasons.
The EUT shall be arranged and connected to satisfy its functional requirements, according to the equipment installation specifications.
The minimum distance between the EUT and all other conductive structures (including the generator, AE and the walls of a shielded room), except the ground reference plane, shall be more than 0.5m.
AII cables to The EUT shall be placed on The insulation support 0.1m above The ground reference plane. Cables not subject to electrical fast transients shall be routed as far as possible from the cable under test to minimize the coupling between the cables.
The EUT shall be connected to the earth system in accordance with the manufacturer's installation specifications; no additional earth connections are allowed.
The connection impedance of the coupling/decoupling network earth cables to the ground reference plane and all connectors shall provide a low inductance
Either a direct coupling network or a capacitive clamp shall be used for the application of the test voltages. The test voltages shall be coupled to all of the EUT ports in turn including those between two units of equipment involved in the test, unless the length of the interconnecting cable makes it impossible to test.

FLOOR-STANDING EQUIPMENT

When using the coupling clamp, the minimum distance between the coupling plates and all other conductive surfaces (including the generator), except the ground reference plane beneath the coupling clamp and beneath the EUT, shall be at least 0.5m.
The distance between any coupling devices and the EUT shall be (0.5 - 0/+0.1) m for tabletop equipment testing, and (1.0 ± 0.1) m for floor standing equipment, unless otherwise specified in product standards. When it is not physically possible to apply the distances mentioned above, other distances can be used and shall be recorded in the test report.
The cable between the EUT and the coupling device, if detachable, shall be as short as possible to comply with the requirements of this clause. If the manufacturer provides a cable exceeding the distance between the coupling device and the point of only of the EUT, the excess length of this cable shall be bundled and situated at a distance of 0,1m above the ground reference plane. When a capacitive clamp is used as a coupling device, the excess cable length shall be bundled at the AE side.
Parts of the EUT with interconnecting cables of a length less than 3m, which are not tested, shall be placed on the insulating support. The parts of the EUT shall have a distance of 0,5m between them. Excess cable length shall be bundled.

### 4.5.4 TEST RESULTS

| Temperature: | 23.9℃ | Relative Humidity: | 54% |
|---|---|---|---|
| Test Voltage: | N/A | Test Mode: | N/A |

| Coupling Line | | Test level | Perform. Criteria | Results | Judgment |
|---|---|---|---|---|---|
| AC line | L | N/A | B | N/A | N/A |
| | N | N/A | | N/A | N/A |
| | PE | N/A | | N/A | N/A |
| | L+N | N/A | | N/A | N/A |
| | L+PE | N/A | | N/A | N/A |
| | N+PE | N/A | | N/A | N/A |
| | L+N+PE | N/A | | N/A | N/A |
| DC network power port Line | | N/A | | N/A | N/A |
| Signal Line | | N/A | | N/A | N/A |

*Note: 1) N/A - denotes test is not applicable in this test report.*

## 4.6 SURGE TESTING

### 4.6.1 TEST SPECIFICATION

| | |
|---|---|
| Basic Standard: | IEC/EN 61000-4-5 |
| Required Performance: | B |
| Wave-Shape: | Combination Wave<br>1.2/50us Open Circuit Voltage |
| Test Voltage: | Power line ~ line to line: 1 KV<br>line to ground: 2KV<br>Telecommunication line: 0.5KV<br>DC network power port:0.5KV |
| Surge Input/Output: | L-N, L-PE, N-PE |
| Generator Source: | (L-N)2 ohm between networks |
| Impedance: | (L-PE, N-PE)12 ohm between network and ground |
| Polarity: | Positive/Negative |
| Phase Angle: | 0°/90°/180°/270° |
| Pulse Repetition Rate: | 1 time / min. (maximum) |
| Number of Tests: | 5 positive and 5 negative at selected points |

### 4.6.2 TEST PROCEDURE

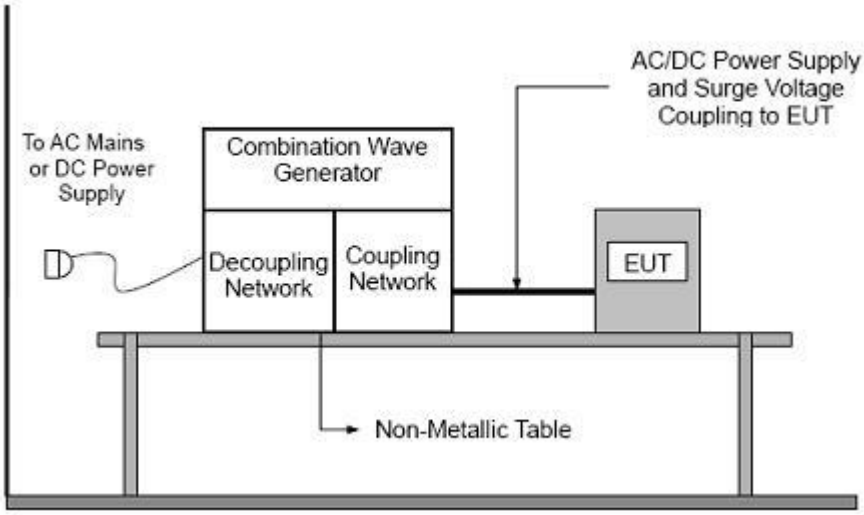
a. For EUT power supply:

b. The surge is to be applied to the EUT power supply terminals via the capacitive coupling network. Decoupling networks are required in order to avoid possible adverse effects on equipment not under test that may be powered by the same lines, and to provide sufficient decoupling impedance to the surge wave. The power cord between the EUT and the coupling/decoupling networks shall be 2meters in length (or shorter).

c. For test applied to unshielded unsymmetrically operated interconnection lines of EUT:

d. The surge is applied to the lines via the capacitive coupling. The coupling /decoupling networks shall not influence the specified functional conditions of the EUT. The interconnection line between the EUT and the coupling/decoupling networks shall be 2 meters in length (or shorter).

### 4.6.3 TEST SETUP




### 4.6.4 TEST RESULTS

| Temperature: | 23.9℃ | Relative Humidity: | 54% |
|---|---|---|---|
| Test Voltage: | N/A | Test Mode: | N/A |

| Coupling Line | | Test level | Perform. Criteria | Results | Judgment |
|---|---|---|---|---|---|
| AC line | L-N | N/A | A | N/A | N/A |
| | L-PE | N/A | | N/A | N/A |
| | N-PE | N/A | | N/A | N/A |
| DC network power port | | N/A | | N/A | N/A |
| Signal Line | | N/A | | N/A | N/A |

*Note: 1) N/A - denotes test is not applicable in this test report.*

## 4.7 CONDUCTED RADIO FREQUENCY DISTURBANCES (CS)

### 4.7.1 TEST SPECIFICATION

| | |
|---|---|
| Basic Standard: | IEC/EN 61000-4-6 |
| Required Performance: | A |
| Frequency Range: | 0.15 MHz - 80 MHz |
| Field Strength: | 0.15 MHz - 80 MHz, 3V. |
| Modulation: | 1kHz Sine Wave, 80%, AM Modulation |
| Frequency Step: | 1 % of fundamental |
| Dwell Time: | 1.5x $10^{-3}$ decade/s |

### 4.7.2 TEST PROCEDURE

The EUT shall be tested within its intended operating and climatic conditions.

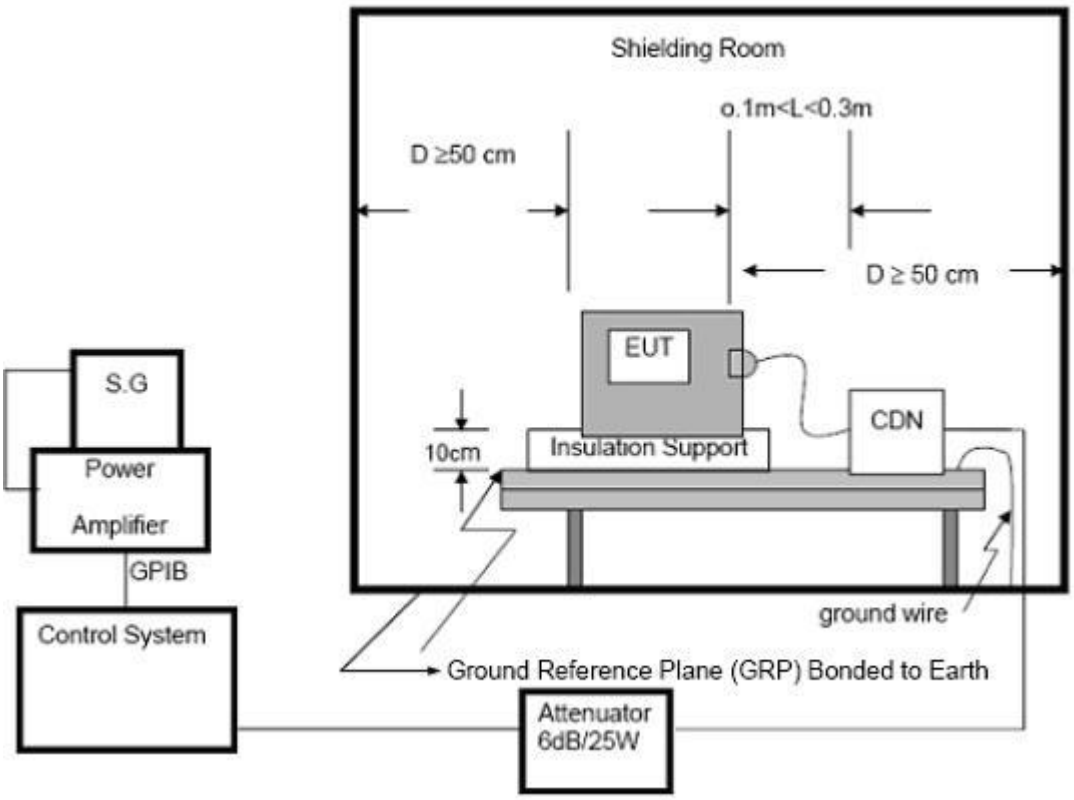
The test shell performed with the test generator connected to each of the coupling and decoupling devices in turn, while the other non-excited RF input ports of the coupling devices are terminated by a 50-ohm load resistor.

The frequency range was swept from 150 kHz to 80 MHz using the signal level established during the setting process and with a disturbance signal of 80 % amplitude. The signal was modulated with a 1 kHz sine wave, pausing to adjust the RF signal level or the switch coupling devices as necessary. The sweep rate was 1.5 x $10^{-3}$ decades/s. Where the frequency range is swept incrementally, the step size was 1 % of preceding frequency value from 150 kHz to 80 MHz

The dwell time at each frequency was less than the time necessary for the EUT to be exercised, and able to respond. Sensitive frequencies such as clock frequency (ies) and harmonics or frequencies of dominant interest, was analyzed separately.

Attempts was made to fully exercise the EUT during testing, and to fully interrogate all exercise modes selected for susceptibility.

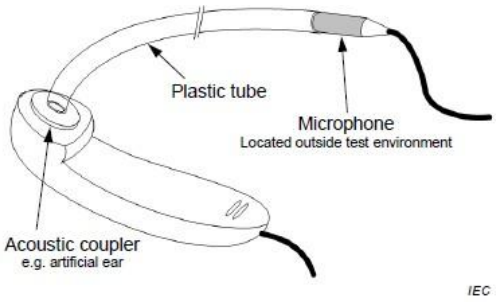
### 4.7.3 TEST SETUP




NOTE:
FLOOR-STANDING EQUIPMENT

The equipment to be tested is placed on an insulating support of 0.1 meters height above a ground reference plane. All relevant cables shall be provided with the appropriate coupling and decoupling devices at a distance between 0.1 meters and 0.3 meters from the projected geometry of the EUT on the ground reference plane.

For Audio output function use below setting




NOTE 1 The microphone is connected via the cable to a suitable amplifier.

NOTE 2 This setup is suitable for radiated immunity testing. See G.6.3

**Figure G.5 – Example test setup for on-ear acoustic measurements, microphone located away from earpiece transducer**

### 4.7.4 TEST RESULTS

| Temperature: | 23.9℃ | Relative Humidity: | 54% |
|---|---|---|---|
| Test Voltage: | N/A | Test Mode: | N/A |

| Test Ports (Mode) | Freq. Range MHz) | Field Strength | Perform. Criteria | Results | Judgment |
|---|---|---|---|---|---|
| Input/ Output AC. Power Port | 0.15 –80 MHZ | 3V(rms) AM Modulated 1000Hz, 80% | B | B | PASS |
| Input/ Output DC. Power Port | 0.15 –80 MHZ | 3V(rms) AM Modulated 1000Hz, 80% | N/A | N/A | N/A |
| Signal Line | 0.15 –80 MHZ | 3V(rms) AM Modulated 1000Hz, 80% | N/A | N/A | N/A |

*Note: 1) N/A - denotes test is not applicable in this test report.*

For the acoustic level of the demodulated audio limits

| Frequency(MHz) | dB(SPL) |
|---|---|
| 0,15 to 30 | 55 |
| 30 to 80 | 65 |

Note: According to EN 55035: 2017, Annex A, A.2 Applicability, the EUT belongs to Group 2. And then according to EN 55035: 2017, Annex A, A.4Modified test levels and performance criteria, Table A.2 – Modified test levels for performance criterion A for the broadcast reception function, no test requirements apply to this EUT.

## 4.8 POWER FREQUENCY MAGNETIC FIELD TESTING

### 4.8.1 TEST SPECIFICATION

| | |
|---|---|
| Basic Standard: | IEC/EN 61000-4-8 |
| Required Performance: | B |
| Frequency Range: | 50Hz |
| Field Strength: | 1 A/m |
| Observation Time: | 1 minute |
| Inductance Coil: | Rectangular type, 1mx1m |

### 4.8.2 TEST PROCEDURE

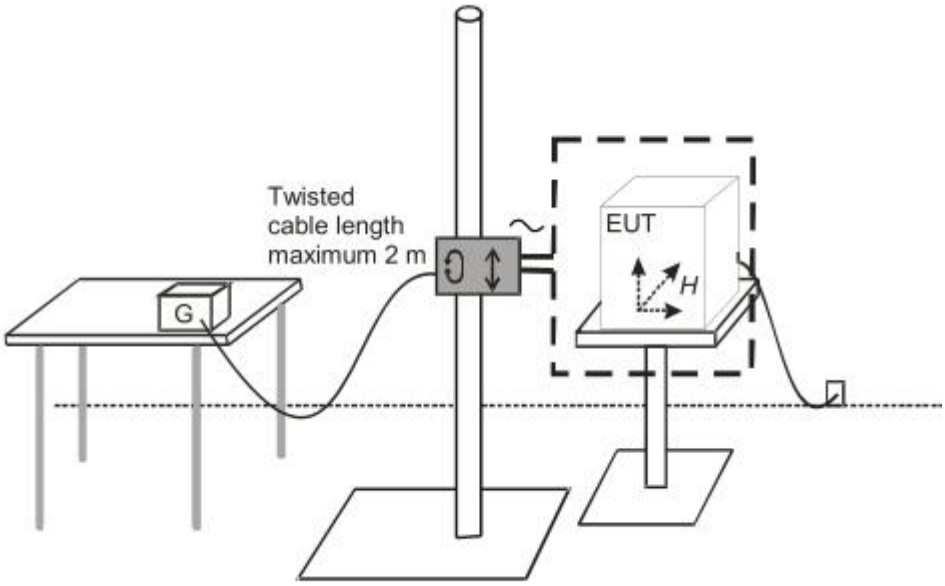
The EUT and support equipment, are placed on a table that is 0.8 meter&0.1 meter above a metal ground plane measured 1m*1m min.

The other condition need as following manners:

a. The equipment cabinets shall be connected to the safety earth directly on the GRP via the earth terminal of the EUT.

b. The cables supplied or recommended by the equipment manufacturer shall be used. 1 meter of all cables used shall be exposed to the magnetic field.

### 4.8.3 TEST SETUP




Note:
TABLE-TOP EQUIPMENT

The equipment shall be subjected to the test magnetic field by using the induction coil of standard dimension (1 m x 1 m). The induction coil shall then be rotated by 90 degrees in order to expose the EUT to the test field with different orientations.

FLOOR-STANDING EQUIPMENT

The equipment shall be subjected to the test magnetic field by using induction coils of suitable dimensions. The test shall be repeated by moving and shifting the induction coils, in order to test the whole volume of the EUT for each orthogonal direction. The test shall be repeated with the coil shifted to different positions along the side of the EUT, in steps corresponding to 50 % of the shortest side of the coil. The induction coil shall then be rotated by 90 degrees in order to expose the EUT to the test field with different orientations.

### 4.8.4 TEST RESULTS

| Temperature: | 23.9℃ | Relative Humidity: | 54% |
|---|---|---|---|
| Test Voltage: | N/A | Test Mode: | N/A |

| Test Mode | Test Level | inductive coil | Duration (s) | Perform Criteria | Results | Judgment |
|---|---|---|---|---|---|---|
| Enclosure | 3A/m | X | 60s | B | B | PASS |
| Enclosure | 3A/m | Y | 60s | B | B | PASS |
| Enclosure | 3A/m | Z | 60s | B | B | PASS |

## 4.9 VOLTAGE INTERRUPTION/DIPS TESTING (DIPS)

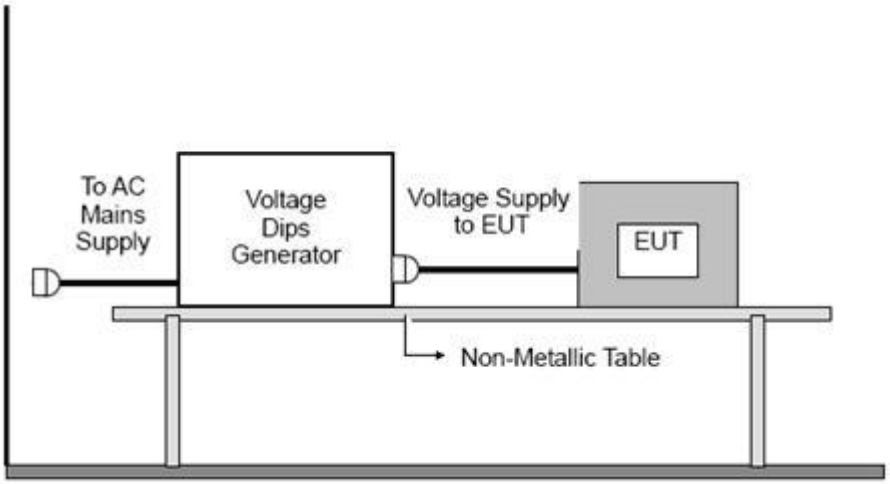
### 4.9.1 TEST SPECIFICATION

| | |
|---|---|
| Basic Standard: | IEC/EN 61000-4-11 |
| Required Performance: | B (For 100% Voltage Dips, 0.5 Cycle)<br>B (For 100% Voltage Dips, 1 Cycle)<br>C (For 30% Voltage Dips, 25 Cycles)<br>C (For 100% Voltage Interruptions, 250 Cycles) |
| Test Duration Time: | Minimum three test events in sequence |
| Interval between Event: | Minimum ten seconds |
| Phase Angle: | 0°/45°/90°/135°/180°/225°/270°/315°/360° |
| Test Cycle: | 3 times |

### 4.9.2 TEST PROCEDURE

The EUT shall be tested for each selected combination of test levels and duration with a sequence of three dips/interruptions with intervals of 10 s minimum (between each test event). Each representative mode of operation shall be tested. Abrupt changes in supply voltage shall occur at zero crossings of the voltage waveform.

### 4.9.3 TEST SETUP



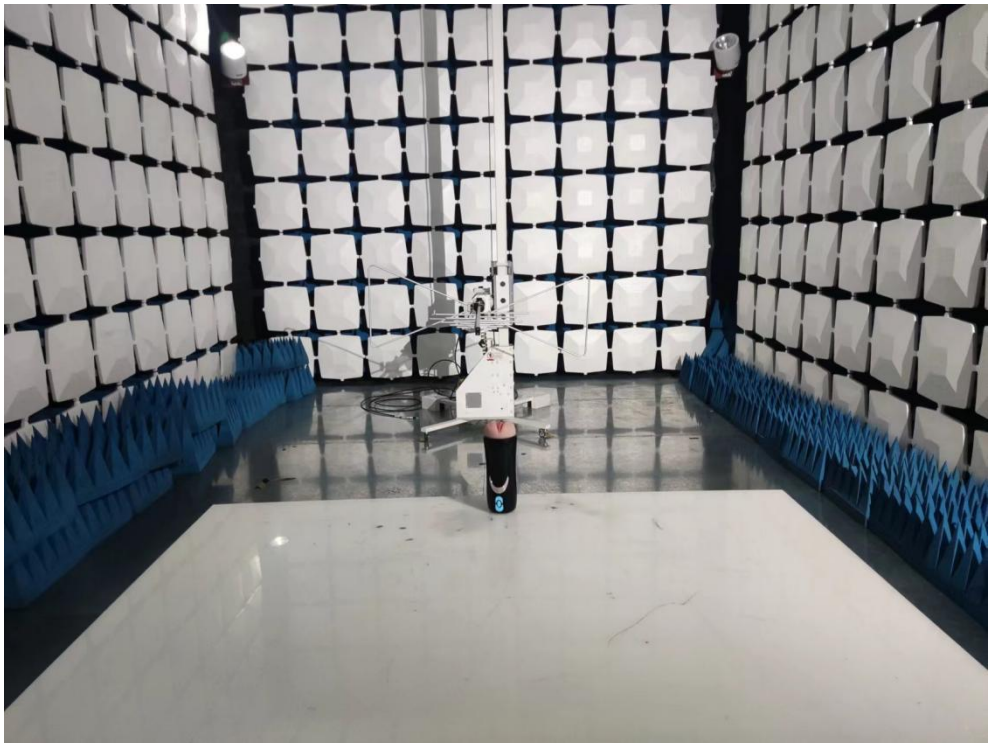
### 4.9.4 TEST RESULTS

| Temperature: | 23.9℃ | Relative Humidity: | 54% |
|---|---|---|---|
| Test Voltage: | N/A | Test Mode: | N/A |

| Voltage Reduction | Duration (cycle) | Perform Criteria | Results | Judgment |
|---|---|---|---|---|
| Voltage dip 100% | 0.5 | B | N/A | N/A |
| Voltage dip 100% | 1 | B | N/A | N/A |
| Voltage dip 30% | 25 | C | N/A | N/A |
| Voltage interruptions | 250 | C | N/A | N/A |

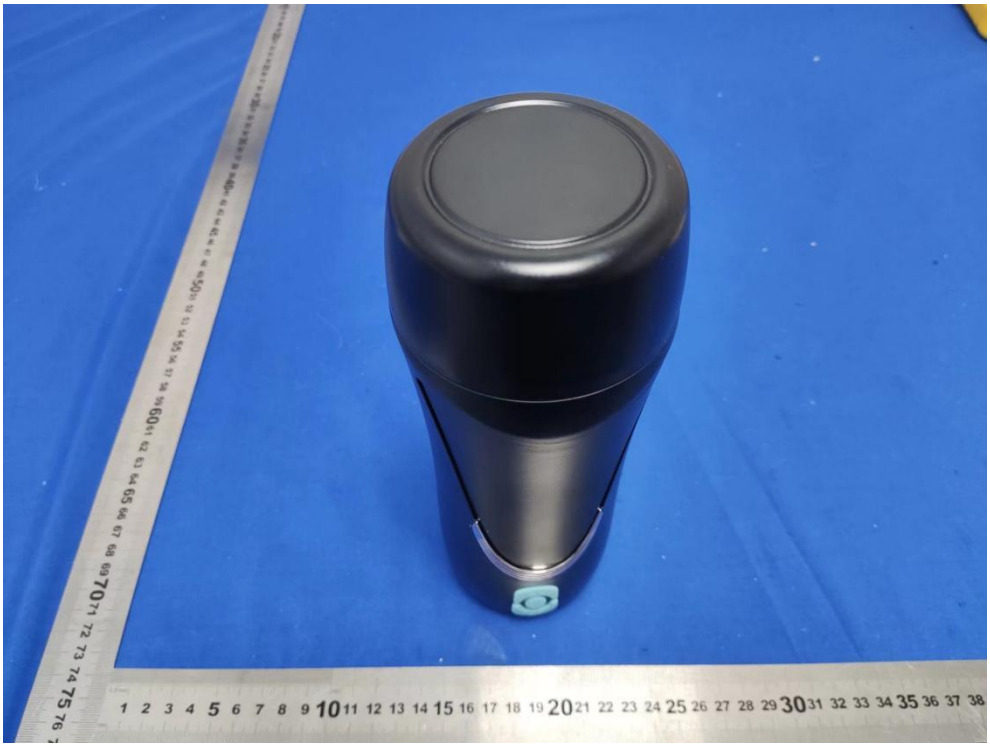
# APPENDIX 1- TEST SETUP

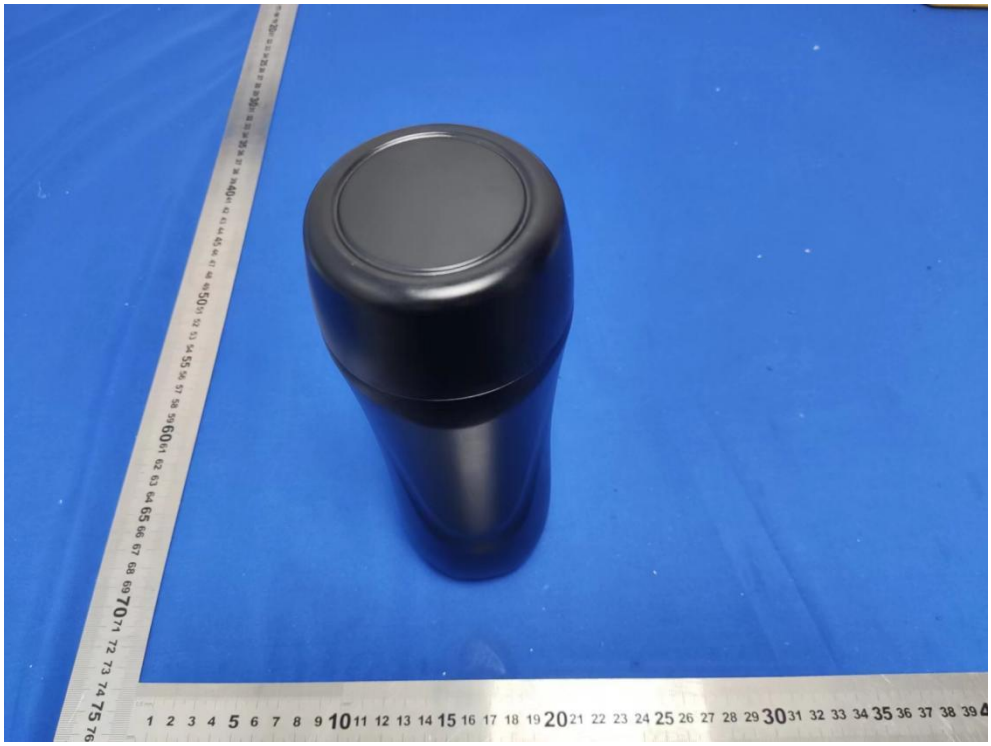
**RE**

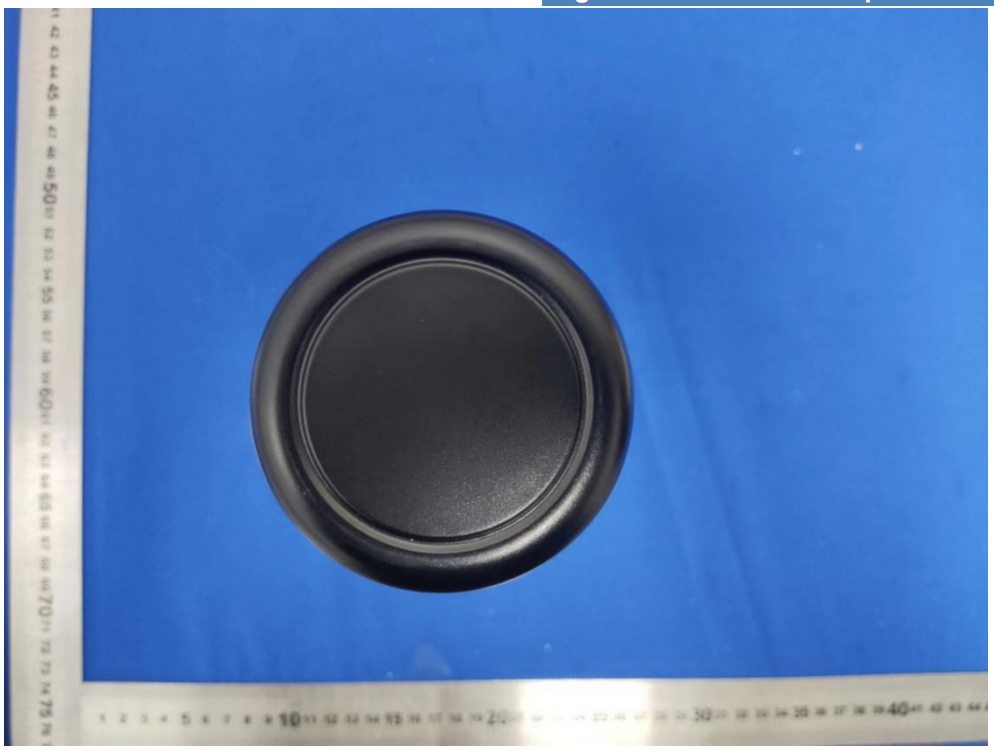


**CE**

**ESD**







※※※※※END OF THE REPORT※※※※※