

TEST REPORT

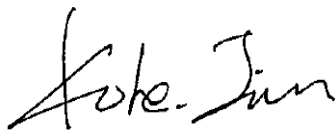
Application No.: GZEM2009015200HS
Applicant: Nanchang Smile Technology Co., Ltd
Address of Applicant: Room 1201, 12th Floor, MSQ Building, No.888 Gaoxin South Avenue, Qingshan Lake District, Nanchang 330096, Jiangxi, China
Manufacturer: Nanchang Smile Technology Co., Ltd
Address of Manufacturer: Room 1201, 12th Floor, MSQ Building, No.888 Gaoxin South Avenue, Qingshan Lake District, Nanchang 330096, Jiangxi, China
Factory: Nanchang Smile Technology Co., Ltd
Address of Factory: Room 1201, 12th Floor, MSQ Building, No.888 Gaoxin South Avenue, Qingshan Lake District, Nanchang 330096, Jiangxi, China

Equipment Under Test (EUT):

EUT Name: Electric toothbrush
Model No.: IVI-02TB, IVI-02TW, IVI-02TP
Trade Mark: IVISMILE
Standard(s): 47 CFR Part 18
 47 CFR Part 15, Subpart B
Date of Receipt: 2020-09-18
Date of Test: 2020-09-24 to 2020-09-30
Date of Issue: 2020-10-20

| | |
|---------------------|--------------|
| Test Result: | Pass* |
|---------------------|--------------|

* In the configuration tested, the EUT complied with the standards specified above.





Kobe Jian
EMC Laboratory Manager



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| Revision Record | | | | |
|-----------------|---------|------------|----------|----------|
| Version | Chapter | Date | Modifier | Remark |
| 01 | | 2020-10-20 | | Original |
| | | | | |
| | | | | |
| | | | | |

| | | | | |
|--------------------------|--|---|--|--------------------------|
| Authorized for issue by: | | | | |
| Tested By | |  | | 2020-09-24 to 2020-09-30 |
| | | Allen_Zhou /Project Engineer | | Date |
| Checked By | |  | | 2020-10-20 |
| | | Terry_Lai /Reviewer | | Date |



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2 Test Summary

| Emission Part | | | | |
|---|---------------------------|-------------------|-------------|--------|
| Item | Standard | Method | Requirement | Result |
| Conducted Emissions at Mains Terminals (150kHz-30MHz) | 47 CFR Part 18 | FCC OST/MP-5:1986 | 18.307 | Pass |
| Radiated Emissions (30MHz-1GHz) | 47 CFR Part 15, Subpart B | ANSI C63.4:2014 | Class B | Pass |
| Radiated Emissions (Magnetic field Strength) (9kHz-30MHz) | 47 CFR Part 18 | FCC OST/MP-5:1986 | 18.305 | Pass |

| Internal Source | Upper Frequency |
|--------------------|--|
| Below 1.705MHz | 30MHz |
| 1.705MHz to 108MHz | 1GHz |
| 108MHz to 500MHz | 2GHz |
| 500MHz to 1GHz | 5GHz |
| Above 1GHz | 5th harmonic of the highest frequency or 40GHz, whichever is lower |

■ Declaration of EUT Family Grouping:

Model No.: IVI-02TB, IVI-02TW, IVI-02TP.

According to the declaration from the applicant, the electrical circuit design, layout, components used and internal wiring were identical for all models, with only difference on the model No.

Therefore only one model **IVI-02TB** was tested in this report.



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4 General Information

4.1 Details of E.U.T.

Power Supply: DC 3.7V with an internal rechargeable battery
charge voltage: DC 5V
Cable: 1.0m unscreened USB charge cable
Highest operating frequency: Below 108MHz

4.2 Description of Support Units

| Description | Manufacturer | Model No. | SN/Certificate NO |
|-----------------------|--|-----------|-------------------|
| Adapter 2(EMCA022) | Caixinge Shenzhen Electronic Co., Ltd | CX-4405 | N/A |

4.3 Measurement Uncertainty

| No. | Item | Measurement Uncertainty |
|-----|---|--------------------------|
| 1 | Conducted Disturbance Voltage at Mains Terminals | 3.63dB (9kHz to 150kHz) |
| | | 3.22dB (150kHz to 30MHz) |
| 2 | Disturbance Power | 3.78dB |
| 3 | Radiated Emissions | 5.0dB (30MHz-1GHz) |
| | | 5.0dB (1GHz-6GHz) |

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,
198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District,
Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.



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4.5 Test Facility

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

● **NVLAP (Lab Code: 200611-0)**

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

● **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

● **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

● **CNAS (Lab Code: L0167)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

● **FCC Recognized 2.948 Listed Test Firm(Registration No.: 282399)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 282399, May 31, 2002.

● **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818, Jul 13, 2017.

● **Industry Canada (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

● **VCCI (Registration No.: R-12460, C-12584, G-10449 and T-11179)**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-10449 and T-11179 respectively.

● **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2005, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.



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4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

| Conducted Emissions at Mains Terminals (150kHz-30MHz) | | | | | |
|---|-------------------|----------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| Shielding Room | ChangZhou ZhongYu | 8m x 3m x 3.8m | EMC0306 | N/A | N/A |
| Two-Line V-Network | Rohde & Schwarz | ENV216 | EMC0118 | 2020-01-10 | 2021-01-09 |
| LISN | Rohde & Schwarz | ENV216 | EMC2135 | 2020-09-25 | 2021-09-24 |
| EMI Test Receiver | Rohde & Schwarz | ESCS30 | EMC0506 | 2019-11-18 | 2020-11-17 |
| Coaxial Cable | HangTianXing | 2m | EMC0107 | 2020-09-09 | 2022-09-08 |
| Voltage Probe | SGS-EMC | N/A | EMC0106 | 2019-05-10 | 2021-05-09 |
| Conical Metal Housing | SGS-EMC | N/A | EMC0167 | 2020-04-19 | 2022-04-18 |
| Test Software E3c | Audix | Ver. 5.4.1221b | GZE100-62 | N/A | N/A |

| Radiated Emissions (30MHz-1GHz) | | | | | |
|-------------------------------------|-----------------------------|---------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| EMI Test Receiver | Rohde & Schwarz | ESIB26 | EMC0522 | 2020-01-10 | 2021-01-09 |
| EMI Test Receiver | Rohde & Schwarz | ESCI | EMC0056 | 2020-01-10 | 2021-01-09 |
| Chamber cable | HangTianXing | N/A | EMC0542 | 2019-06-28 | 2021-06-27 |
| Trilog Broadband Antenna 25MHz-1GHz | SCHWARZBECKME SS-ELEKTRONIK | VULB 9168 | EMC2174 | 2018-09-06 | 2021-09-05 |
| Trilog Broadband Antenna 30MHz-1GHz | SCHWARZBECKME SS-ELEKTRONIK | VULB 9168 | SEM003-18 | 2019-02-22 | 2022-02-22 |
| Bi-log Type Antenna | Schaffner Chase | CBL6143 | EMC0519 | 2020-06-08 | 2023-06-07 |
| Horn Antenna 1GHz-18GHz | Rohde & Schwarz | HF906 | EMC0518 | 2018-09-02 | 2021-09-01 |
| 1GHz-26.5 GHz Pre-Amplifier | Agilent | 8449B | EMC0521 | 2020-01-10 | 2021-01-09 |
| Amplifier | HP | 8447F | EMC2065 | 2020-05-26 | 2021-05-25 |
| Pre-Amplifier MH648A | ANRITSU CORP | MH648A | EMC2086 | 2019-11-18 | 2020-11-17 |
| Active Loop Antenna | ETS-Lindgren | 6502 | EMC2190 | 2019-12-27 | 2021-12-26 |
| High Pass Filter(915MHz) | FSY MICROWAVE | HM1465-9SS | EMC2079 | 2020-01-10 | 2021-01-09 |
| 2.4GHz Filter | Micro-Tronics | BRM 50702 | EMC2069 | 2020-01-10 | 2021-01-09 |
| 10m Semi-Anechoic Chamber | ETS | N/A | EMC0530 | 2019-10-20 | 2022-10-19 |
| 966 Anechoic Chamber | C.R.T | 9m x 6m x 6m | EMC2142 | 2017-12-19 | 2020-12-18 |
| MXE EMI Receiver | Keysight | N9038A | EMC2139 | 2019-11-18 | 2020-11-17 |
| EXA Signal Analyzer | Keysight | N9010A | EMC2138 | 2019-11-18 | 2020-11-17 |
| Test Software E3 | Audix | Ver.6.120110a | GZE100-61 | N/A | N/A |



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| Radiated Emissions (Magnetic field Strength) (9kHz-30MHz) | | | | | |
|---|-----------------------------|---------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| EMI Test Receiver | Rohde & Schwarz | ESIB26 | EMC0522 | 2020-01-10 | 2021-01-09 |
| EMI Test Receiver | Rohde & Schwarz | ESCI | EMC0056 | 2020-01-10 | 2021-01-09 |
| Chamber cable | HangTianXing | N/A | EMC0542 | 2019-06-28 | 2021-06-27 |
| Trilog Broadband Antenna 25MHz-1GHz | SCHWARZBECKME SS-ELEKTRONIK | VULB 9168 | EMC2174 | 2018-09-06 | 2021-09-05 |
| Trilog Broadband Antenna 30MHz-1GHz | SCHWARZBECKME SS-ELEKTRONIK | VULB 9168 | SEM003-18 | 2019-02-22 | 2022-02-22 |
| Bi-log Type Antenna | Schaffner Chase | CBL6143 | EMC0519 | 2020-06-08 | 2023-06-07 |
| Horn Antenna 1GHz-18GHz | Rohde & Schwarz | HF906 | EMC0518 | 2018-09-02 | 2021-09-01 |
| 1GHz-26.5 GHz Pre-Amplifier | Agilent | 8449B | EMC0521 | 2020-01-10 | 2021-01-09 |
| Amplifier | HP | 8447F | EMC2065 | 2020-05-26 | 2021-05-25 |
| Pre-Amplifier MH648A | ANRITSU CORP | MH648A | EMC2086 | 2019-11-18 | 2020-11-17 |
| Active Loop Antenna | ETS-Lindgren | 6502 | EMC2190 | 2019-12-27 | 2021-12-26 |
| High Pass Filter(915MHz) | FSY MICROWAVE | HM1465-9SS | EMC2079 | 2020-01-10 | 2021-01-09 |
| 2.4GHz Filter | Micro-Tronics | BRM 50702 | EMC2069 | 2020-01-10 | 2021-01-09 |
| 10m Semi-Anechoic Chamber | ETS | N/A | EMC0530 | 2019-10-20 | 2022-10-19 |
| 966 Anechoic Chamber | C.R.T | 9m x 6m x 6m | EMC2142 | 2017-12-19 | 2020-12-18 |
| MXE EMI Receiver | Keysight | N9038A | EMC2139 | 2019-11-18 | 2020-11-17 |
| EXA Signal Analyzer | Keysight | N9010A | EMC2138 | 2019-11-18 | 2020-11-17 |
| Test Software E3 | Audix | Ver.6.120110a | GZE100-61 | N/A | N/A |

| General used equipment | | | | | |
|------------------------|--------------|----------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| DMM | Fluke | 73 | EMC0006 | 2020-07-09 | 2021-07-08 |
| DMM | Fluke | 73 | EMC0007 | 2020-07-09 | 2021-07-08 |



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6 Emission Test Results

6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

| | |
|-------------------|--|
| Test Requirement: | 47 CFR Part 18 |
| Test Method: | FCC OST/MP-5:1986 |
| Frequency Range: | 150kHz to 30MHz |
| Limit: | |
| 0.15MHz – 0.5MHz | 66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average |
| 0.5MHz – 5MHz | 56dB(μV) quasi-peak, 46dB(μV) average |
| 5MHz – 30MHz | 60dB(μV) quasi-peak, 50dB(μV) average |
| Detector: | Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz |

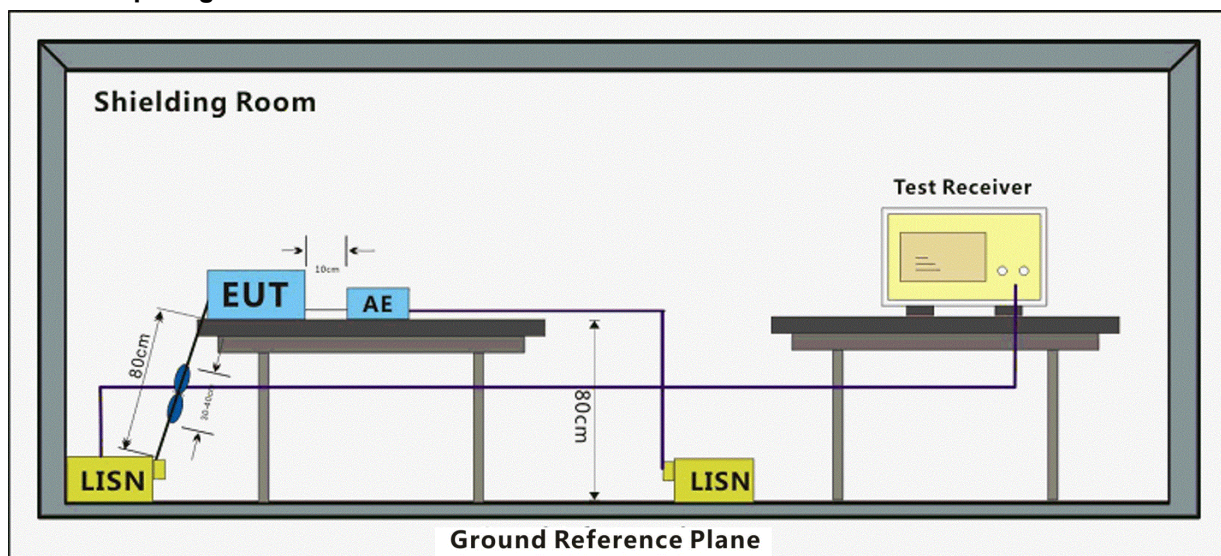
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.1 °C Humidity: 52 % RH Atmospheric Pressure: 1020 mbar

Test Mode: a: charging mode power with AC/DC adapter.

6.1.2 Test Setup Diagram



6.1.3 Measurement Data

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.

Measured Level = Read level + Cable Loss + LISN Factor

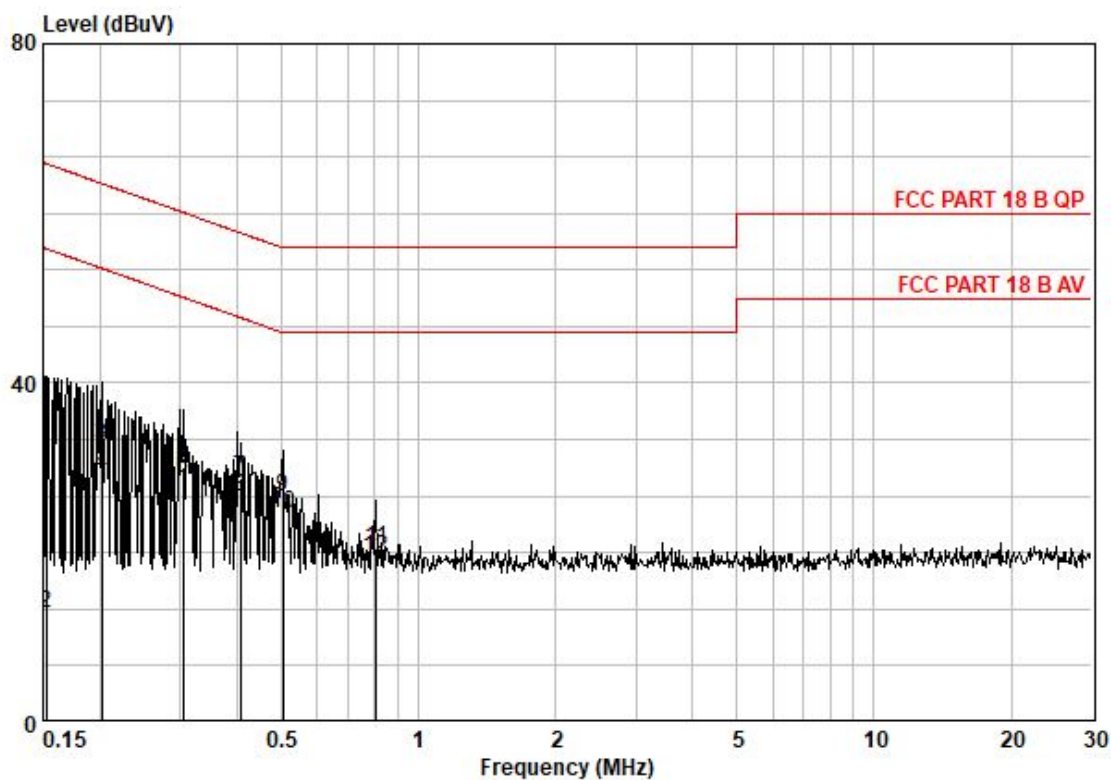


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Mode:a; Line:Live Line

Pol :LIVE
Mode :
Model :

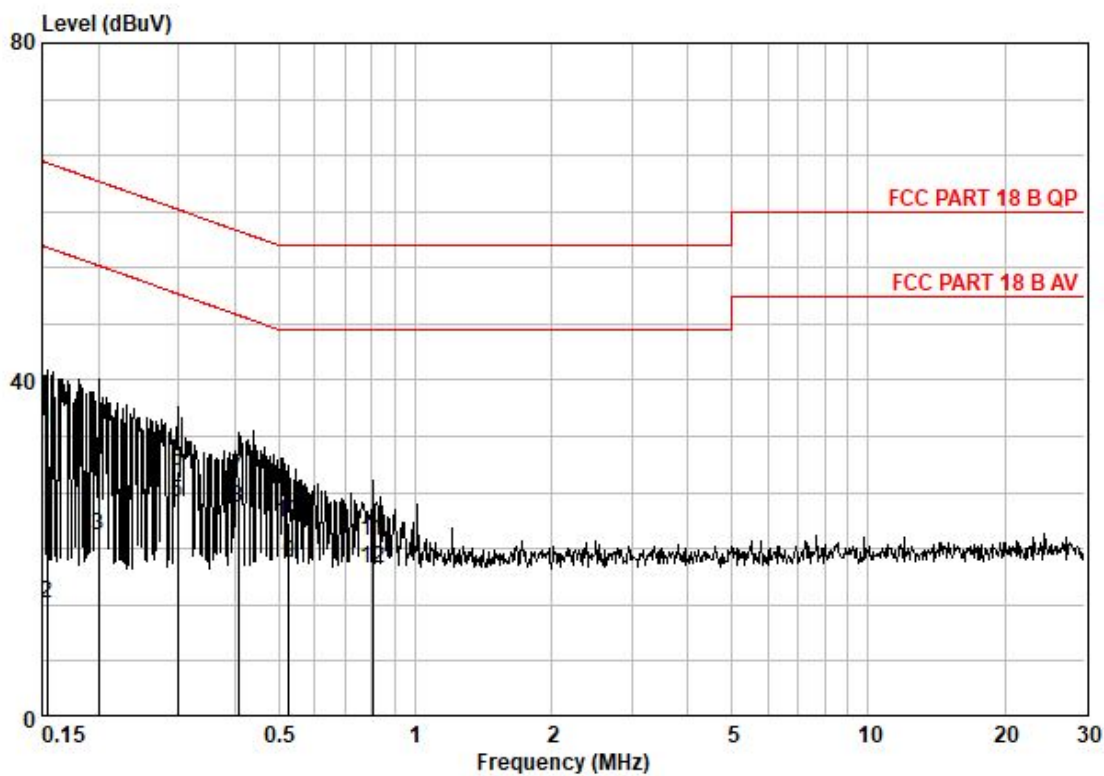
| Frequency MHz | read level dBuV | Cable Loss dB | LISN Factor dB | Measured level dBuV | Limit Line dBuV | Over limit dB | Remark |
|------------------|-----------------------|---------------------|----------------------|---------------------------|-----------------------|---------------------|---------|
| 0.15 | 24.36 | 0.10 | 9.61 | 34.07 | 65.87 | -31.80 | QP |
| 0.15 | 3.22 | 0.10 | 9.61 | 12.93 | 55.87 | -42.94 | AVERAGE |
| 0.20 | 23.00 | 0.10 | 9.60 | 32.70 | 63.54 | -30.84 | QP |
| 0.20 | 19.51 | 0.10 | 9.60 | 29.21 | 53.54 | -24.33 | AVERAGE |
| 0.31 | 20.38 | 0.10 | 9.60 | 30.08 | 60.10 | -30.02 | QP |
| 0.31 | 19.14 | 0.10 | 9.60 | 28.84 | 50.10 | -21.26 | AVERAGE |
| 0.41 | 19.04 | 0.10 | 9.61 | 28.75 | 57.73 | -28.98 | QP |
| 0.41 | 16.89 | 0.10 | 9.61 | 26.60 | 47.73 | -21.13 | AVERAGE |
| 0.50 | 16.86 | 0.10 | 9.61 | 26.57 | 56.00 | -29.43 | QP |
| 0.50 | 15.01 | 0.10 | 9.61 | 24.72 | 46.00 | -21.28 | AVERAGE |
| 0.81 | 10.74 | 0.10 | 9.61 | 20.45 | 56.00 | -35.55 | QP |
| 0.81 | 9.62 | 0.10 | 9.61 | 19.33 | 46.00 | -26.67 | AVERAGE |



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Mode:a; Line:Neutral Line

Pol : NEUTRAL
Mode :
Model :

| Frequency MHz | read level dBuV | Cable Loss dB | LISN Factor dB | Measured level dBuV | Limit Line dBuV | Over limit dB | Remark |
|------------------|-----------------------|---------------------|----------------------|---------------------------|-----------------------|---------------------|---------|
| 0.15 | 24.54 | 0.10 | 9.61 | 34.25 | 65.78 | -31.53 | QP |
| 0.15 | 3.74 | 0.10 | 9.61 | 13.45 | 55.78 | -42.33 | AVERAGE |
| 0.20 | 11.85 | 0.10 | 9.62 | 21.57 | 53.62 | -32.05 | AVERAGE |
| 0.20 | 20.86 | 0.10 | 9.62 | 30.58 | 63.62 | -33.04 | QP |
| 0.30 | 15.82 | 0.10 | 9.63 | 25.55 | 50.28 | -24.73 | AVERAGE |
| 0.30 | 19.52 | 0.10 | 9.63 | 29.25 | 60.28 | -31.03 | QP |
| 0.41 | 18.90 | 0.10 | 9.64 | 28.64 | 57.73 | -29.09 | QP |
| 0.41 | 15.06 | 0.10 | 9.64 | 24.80 | 47.73 | -22.93 | AVERAGE |
| 0.53 | 8.62 | 0.10 | 9.64 | 18.36 | 46.00 | -27.64 | AVERAGE |
| 0.53 | 13.28 | 0.10 | 9.64 | 23.02 | 56.00 | -32.98 | QP |
| 0.80 | 11.22 | 0.10 | 9.67 | 20.99 | 56.00 | -35.01 | QP |
| 0.80 | 7.99 | 0.10 | 9.67 | 17.76 | 46.00 | -28.24 | AVERAGE |



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6.2 Radiated Emissions (30MHz-1GHz)

Test Requirement: 47 CFR Part 15, Subpart B

Test Method: ANSI C63.4:2014

Frequency Range: 30MHz to 1GHz

Measurement Distance: 10m

Limit:

30MHz -88MHz 29.5(dBμV/m) quasi-peak

88MHz-216MHz 33.1(dBμV/m) quasi-peak

216MHz-960MHz 35.6(dBμV/m) quasi-peak

960MHz-1000MHz 43.5(dBμV/m) quasi-peak

Detector: Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHz

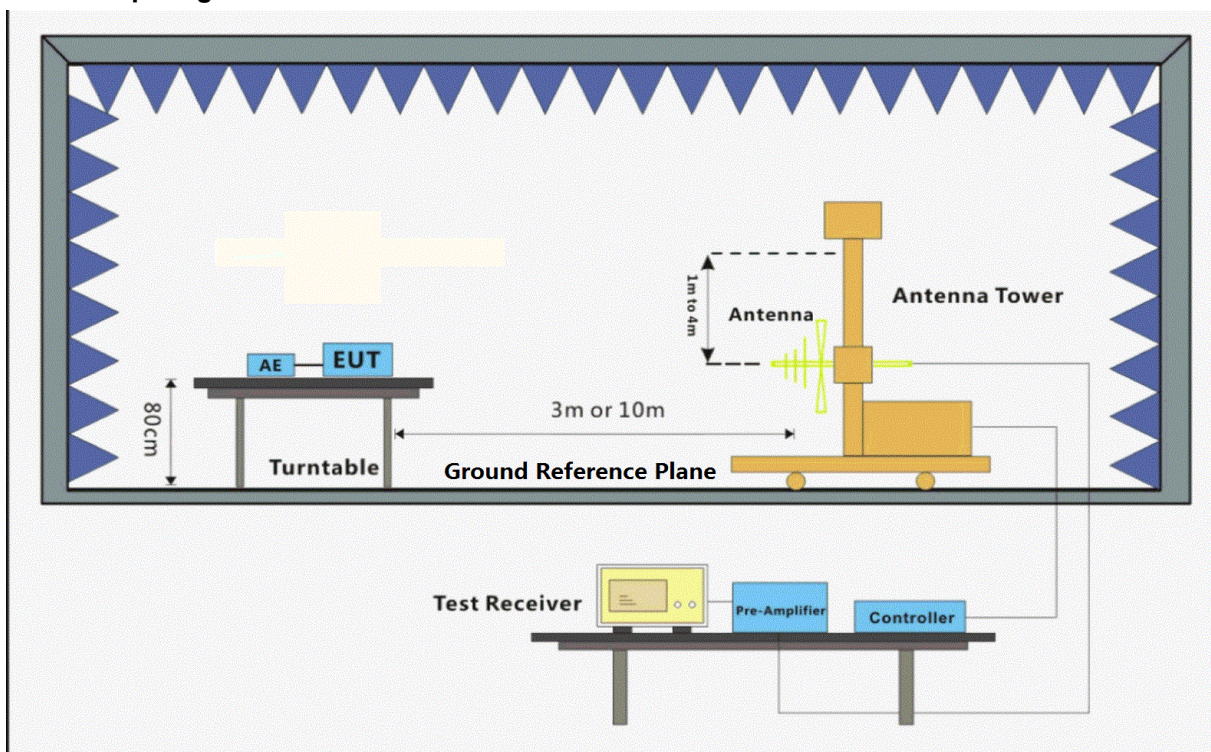
6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 52 % RH Atmospheric Pressure: 1020 mbar

Test Mode: b: motor running mode power with internal DC battery.

6.2.2 Test Setup Diagram



6.2.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

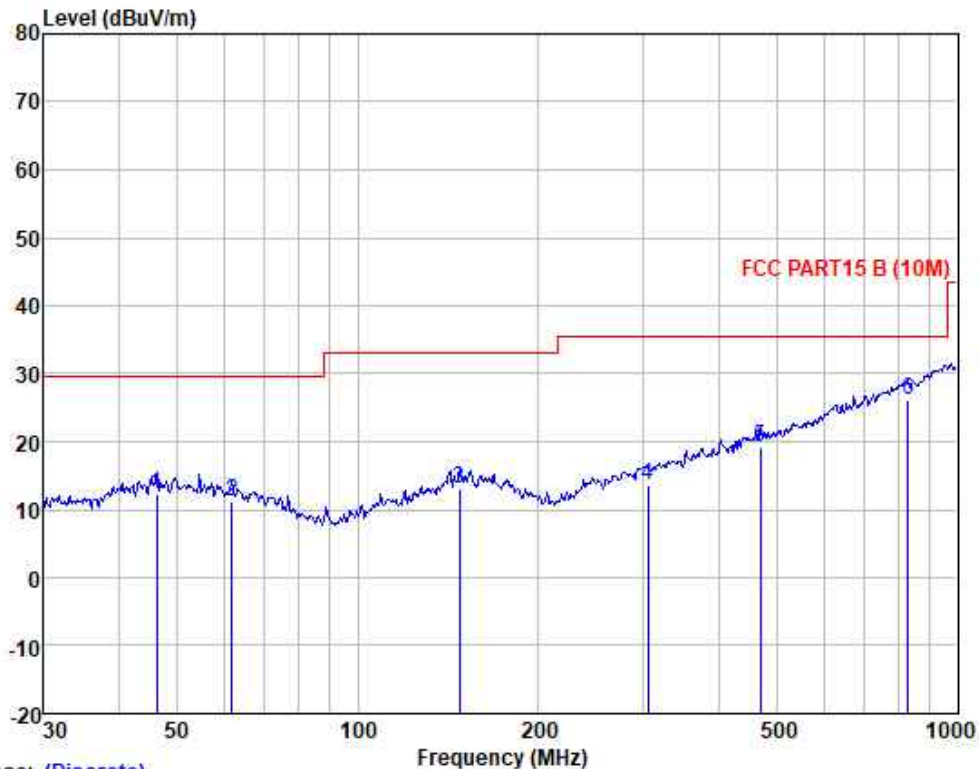
$$\text{Level} = \text{Read Level} + \text{Antenna Factor} + \text{Cable Loss} - \text{Preamplifier Factor}$$


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Mode:b; Polarization:Horizontal



Trace: (Discrete)

Site : SGS
Condition: FCC PART15 B (10M) 10m HORIZONTAL
Job :
Model :
Power :
Test Mode:

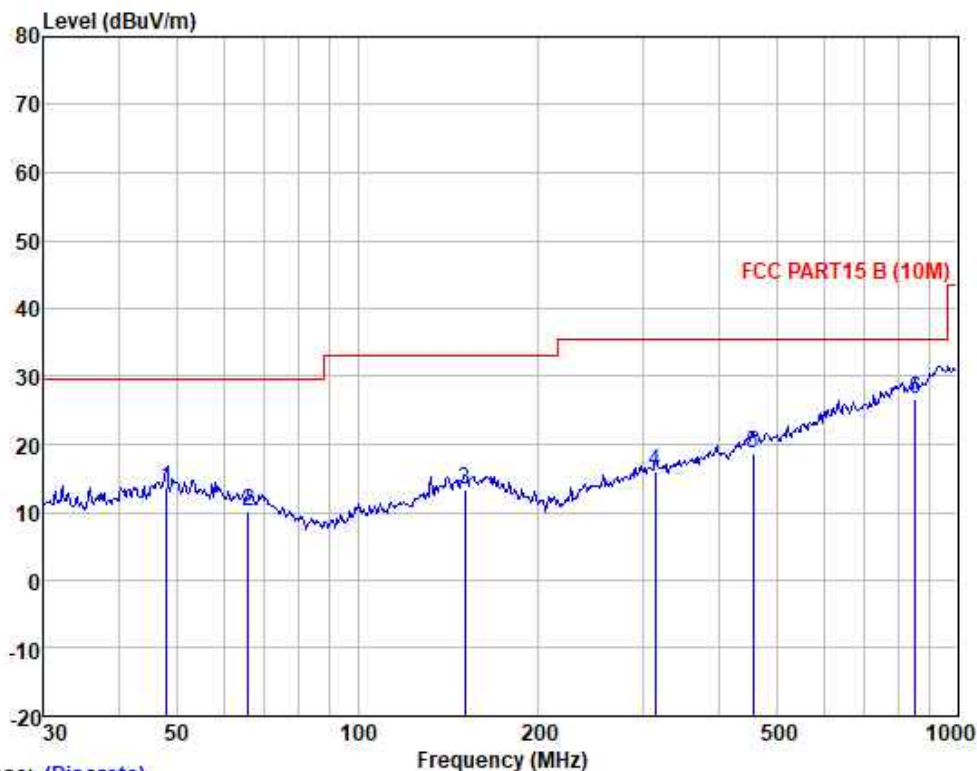
| | Freq | ReadAntenna Level | Factor | Cable Loss | Preamp Factor | Limit Level | Over Line | Limit | Pol/Phase | Remark |
|---|---------|----------------------|--------|---------------|------------------|----------------|--------------|--------|------------|--------|
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | | |
| 1 | 46.340 | 24.36 | 13.91 | 1.19 | 27.17 | 12.29 | 29.50 | -17.21 | HORIZONTAL | QP |
| 2 | 61.778 | 23.96 | 13.13 | 1.32 | 27.15 | 11.26 | 29.50 | -18.24 | HORIZONTAL | QP |
| 3 | 147.921 | 24.10 | 13.70 | 2.05 | 26.85 | 13.00 | 33.10 | -20.10 | HORIZONTAL | QP |
| 4 | 304.610 | 23.36 | 13.70 | 2.98 | 26.57 | 13.47 | 35.60 | -22.13 | HORIZONTAL | QP |
| 5 | 468.876 | 25.53 | 17.47 | 4.13 | 27.84 | 19.29 | 35.60 | -16.31 | HORIZONTAL | QP |
| 6 | 827.493 | 25.59 | 22.72 | 5.71 | 27.99 | 26.03 | 35.60 | -9.57 | HORIZONTAL | QP |



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Mode:b; Polarization:Vertical



Trace: (Discrete)

Site : SGS
Condition: FCC PART15 B (10M) 10m VERTICAL
Job :
Model :
Power :
Test Mode:

| | Freq | ReadAntenna | Cable | Preamp | Limit | Over | | | |
|---|---------|-------------|--------|--------|-------|--------|--------|-----------|-------------|
| | MHz | Level | Factor | Loss | Level | Line | Limit | Pol/Phase | Remark |
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | |
| 1 | 47.994 | 25.51 | 14.00 | 1.19 | 27.17 | 13.53 | 29.50 | -15.97 | VERTICAL QP |
| 2 | 65.803 | 23.42 | 12.63 | 1.30 | 27.15 | 10.20 | 29.50 | -19.30 | VERTICAL QP |
| 3 | 151.067 | 24.40 | 13.80 | 2.06 | 26.83 | 13.43 | 33.10 | -19.67 | VERTICAL QP |
| 4 | 313.276 | 25.55 | 14.04 | 2.99 | 26.62 | 15.96 | 35.60 | -19.64 | VERTICAL QP |
| 5 | 455.906 | 24.81 | 17.42 | 4.12 | 27.75 | 18.60 | 35.60 | -17.00 | VERTICAL QP |
| 6 | 851.035 | 25.94 | 22.80 | 5.83 | 27.93 | 26.64 | 35.60 | -8.96 | VERTICAL QP |



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6.3 Radiated Emissions (Magnetic field Strength) (9kHz-30MHz)

Test Requirement: 47 CFR Part 18
 Test Method: FCC OST/MP-5:1986
 Frequency Range: 9kHz to 30MHz
 Measurement Distance: 10m
 Detector: Peak for pre-scan, Average for the final result
 (120 kHz Resolution Bandwidth for 30 MHz to 1 GHz)

Limit:

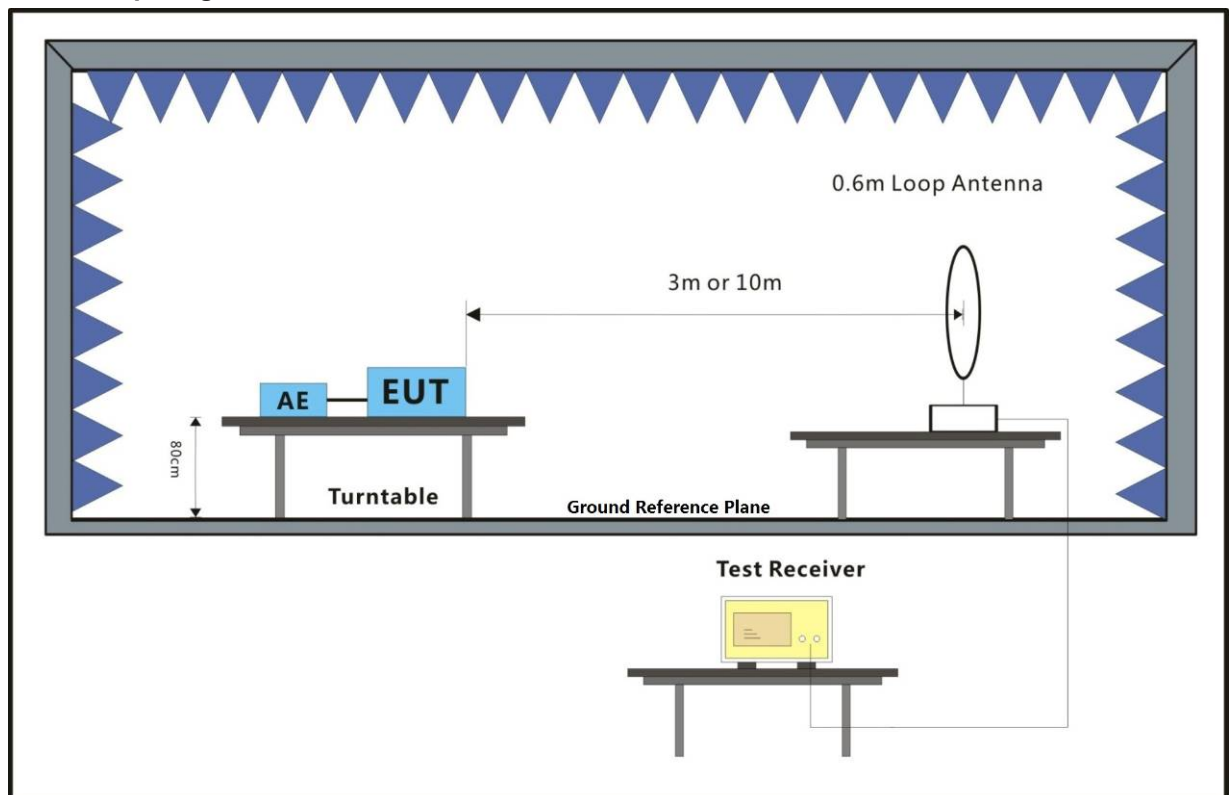
| Equipment | Operating frequency | RF Power generated by equipment (watts) | Field strength limit (uV/m) | Distance (meters) |
|---|-----------------------|---|-------------------------------------|-------------------|
| Any type unless otherwise specified (miscellaneous) | Any ISM frequency | Below 500 | 25 | 300 |
| | | 500 or more | $25 \times \sqrt{\text{power}/500}$ | $1/300$ |
| | Any non-ISM frequency | Below 500 | 15 | 300 |
| | | 500 or more | $15 \times \sqrt{\text{power}/500}$ | $1/300$ |

For Any non-ISM frequency, RF power below 500W, the field strength limit is 15 $\mu\text{V}/\text{m}$ @ 300m, i.e. **53.06dB $\mu\text{V}/\text{m}$ @ 10m distance.**

6.3.1 E.U.T. Operation

Operating Environment:
 Temperature: 22 °C Humidity: 52 % RH Atmospheric Pressure: 1020 mbar
 Test Mode: a: charging mode power with AC/DC adapter.

6.3.2 Test Setup Diagram

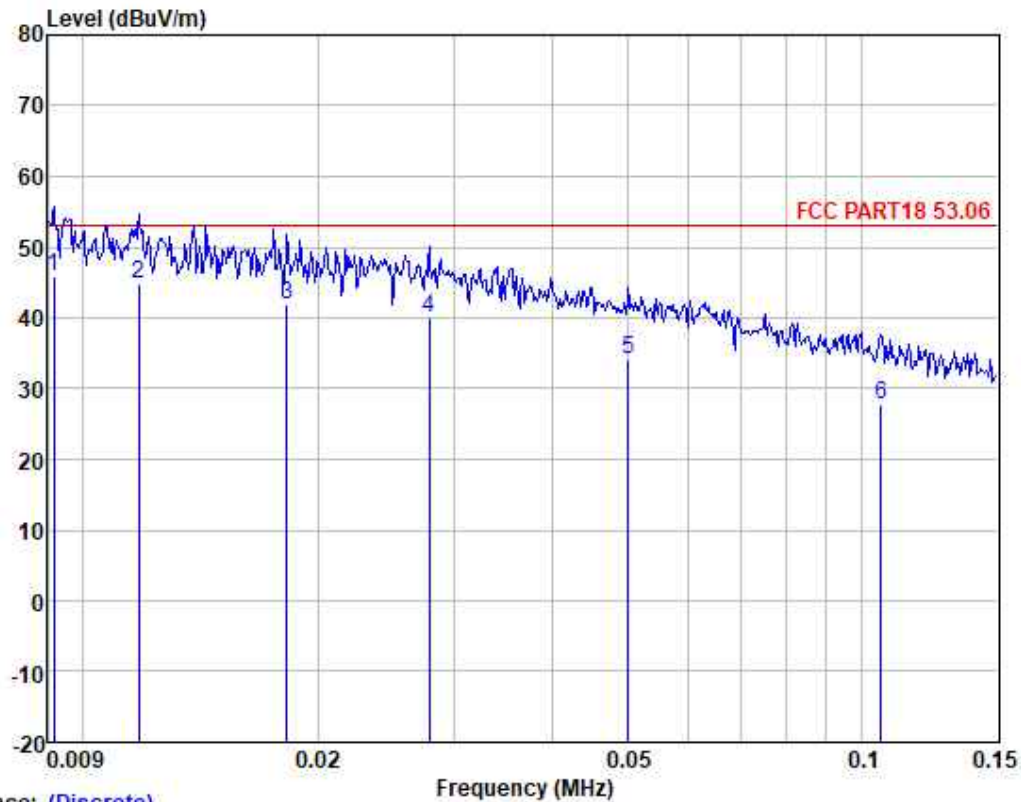


6.3.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

Level=Read Level + Antenna Factor + Cable Loss - Preamp Factor

Mode:a; Polarization:Horizontal



Trace: (Discrete)
Site : SGS
Condition: FCC PART18 53.06 10m HORIZONTAL
Job :
Model :
Power :
Test Mode:

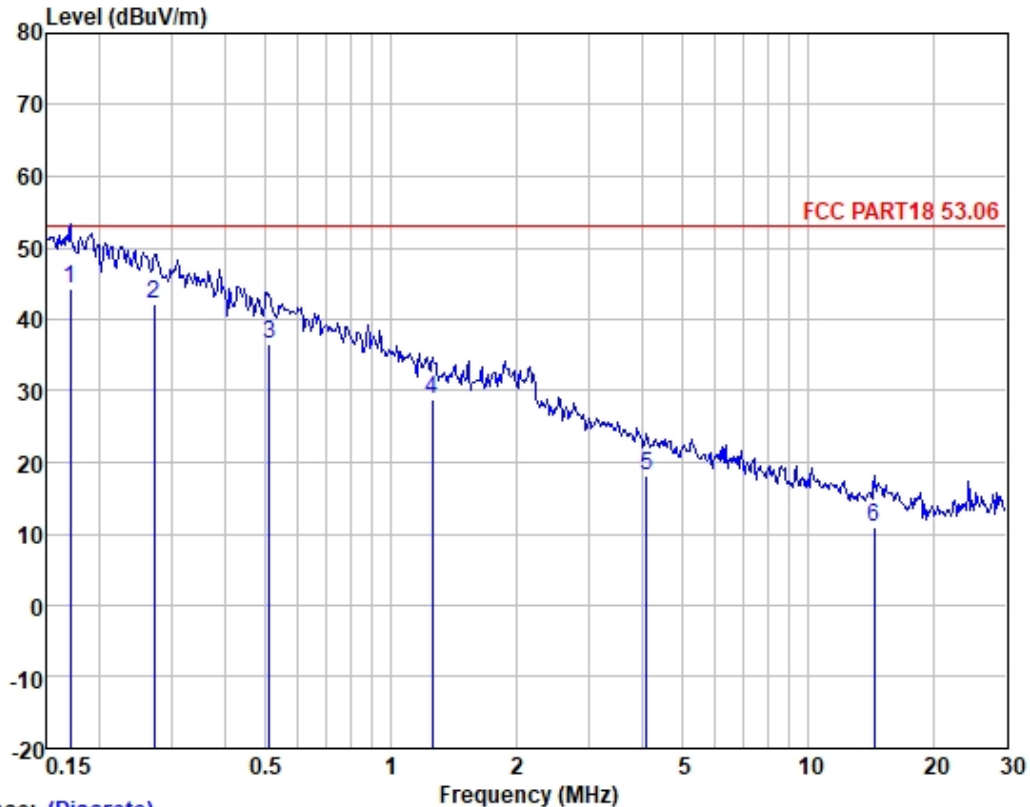
| | | ReadAntenna | | Cable | Preamp | | Limit | Over | | |
|---|-------|-------------|--------|-------|--------|--------|--------|--------|------------|---------|
| | Freq | Level | Factor | Loss | Factor | Level | Line | Limit | Pol/Phase | Remark |
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | | |
| 1 | 0.009 | 56.03 | 17.86 | 0.00 | 28.15 | 45.74 | 53.06 | -7.32 | HORIZONTAL | Average |
| 2 | 0.012 | 57.51 | 15.40 | 0.00 | 28.21 | 44.70 | 53.06 | -8.36 | HORIZONTAL | Average |
| 3 | 0.018 | 56.97 | 13.20 | 0.00 | 28.34 | 41.83 | 53.06 | -11.23 | HORIZONTAL | Average |
| 4 | 0.028 | 56.05 | 12.72 | 0.00 | 28.66 | 40.11 | 53.06 | -12.95 | HORIZONTAL | Average |
| 5 | 0.050 | 51.61 | 11.89 | 0.00 | 29.29 | 34.21 | 53.06 | -18.85 | HORIZONTAL | Average |
| 6 | 0.106 | 46.69 | 10.42 | 0.00 | 29.47 | 27.64 | 53.06 | -25.42 | HORIZONTAL | Average |



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Mode:a; Polarization:Horizontal



Site : SGS
Condition: FCC PART18 53.06 10m HORIZONTAL
Job :
Model :
Power :
Test Mode:

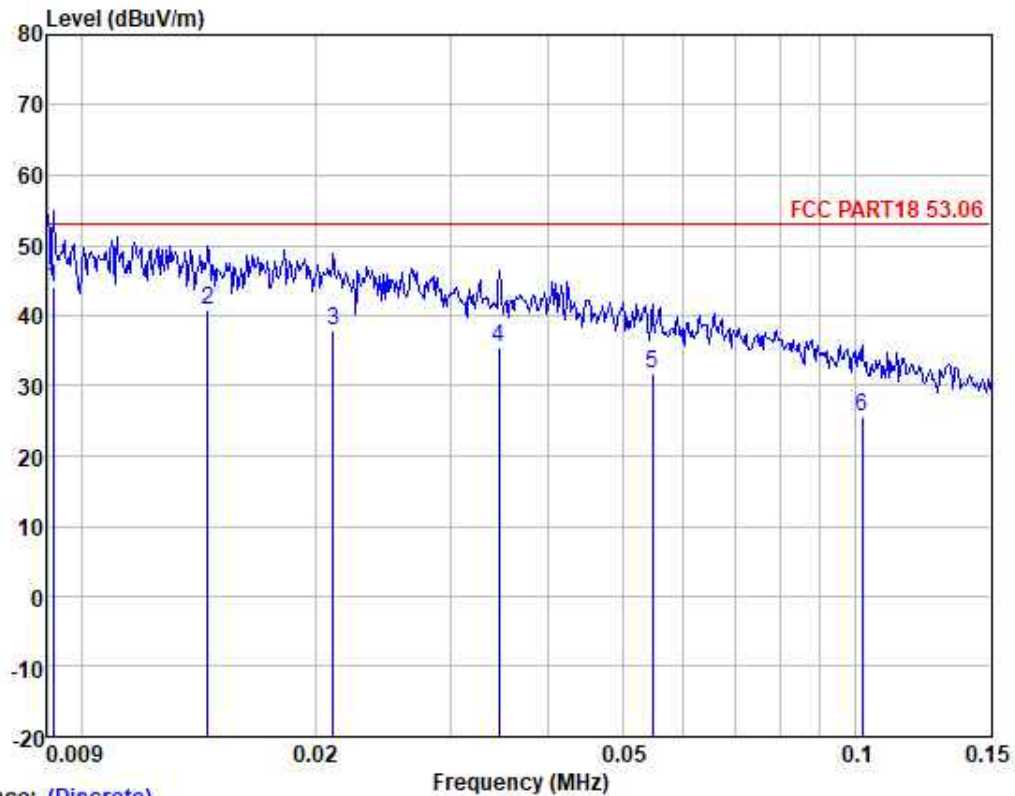
| | | ReadAntenna | Cable | Preamp | | Limit | Over | | |
|------|--------|-------------|-------|--------|--------|--------|-------|-----------|--------------------|
| Freq | Level | Factor | Loss | Factor | Level | Line | Limit | Pol/Phase | Remark |
| MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | | |
| 1 | 0.170 | 63.03 | 10.74 | 0.00 | 29.45 | 44.32 | 53.06 | -8.74 | HORIZONTAL Average |
| 2 | 0.272 | 60.71 | 10.78 | 0.10 | 29.44 | 42.15 | 53.06 | -10.91 | HORIZONTAL Average |
| 3 | 0.513 | 55.17 | 10.69 | 0.10 | 29.42 | 36.54 | 53.06 | -16.52 | HORIZONTAL Average |
| 4 | 1.255 | 47.50 | 10.54 | 0.10 | 29.40 | 28.74 | 53.06 | -24.32 | HORIZONTAL Average |
| 5 | 4.114 | 36.64 | 10.56 | 0.20 | 29.34 | 18.06 | 53.06 | -35.00 | HORIZONTAL Average |
| 6 | 14.440 | 31.06 | 8.79 | 0.40 | 29.24 | 11.01 | 53.06 | -42.05 | HORIZONTAL Average |



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Mode:a; Polarization:Vertical



Site : SGS
Condition: FCC PART18 53.06 10m VERTICAL
Job :
Model :
Power :
Test Mode:

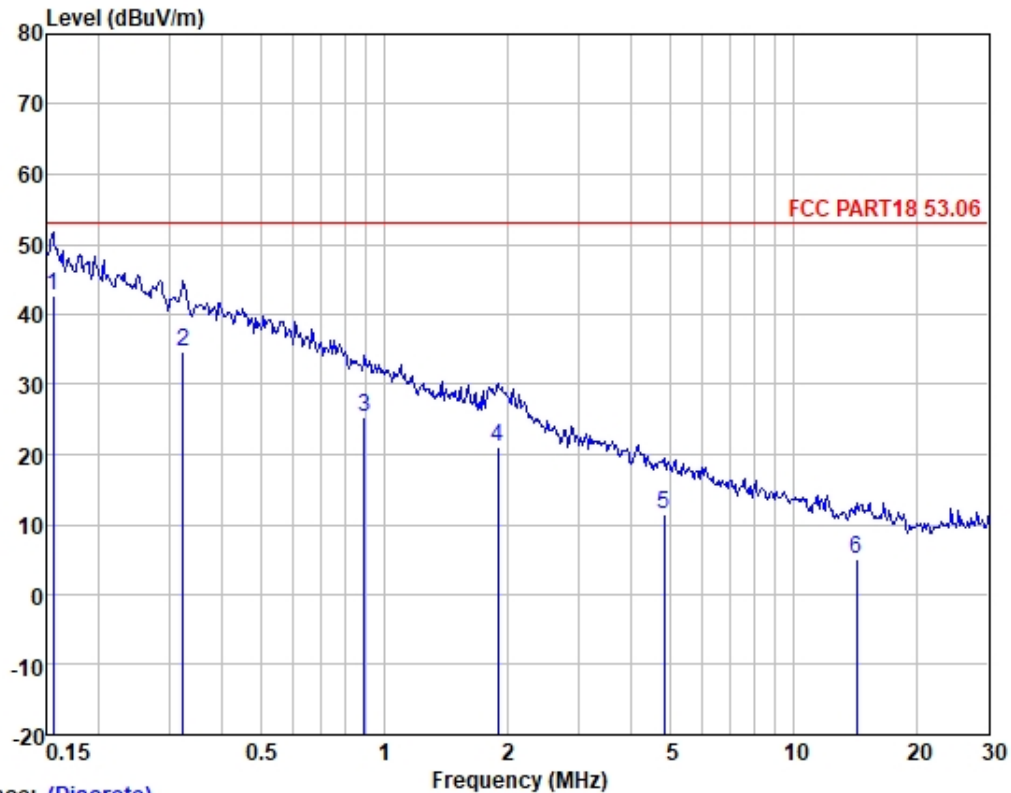
| | Freq | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Level | Limit | Over Limit | Pol/Phase | Remark |
|---|-------|----------------------|-------------------|---------------|------------------|--------|--------|---------------|-----------|---------|
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | | |
| 1 | 0.009 | 54.20 | 17.86 | 0.00 | 28.15 | 43.91 | 53.06 | -9.15 | VERTICAL | Average |
| 2 | 0.015 | 54.91 | 14.18 | 0.00 | 28.26 | 40.83 | 53.06 | -12.23 | VERTICAL | Average |
| 3 | 0.021 | 53.35 | 12.97 | 0.00 | 28.41 | 37.91 | 53.06 | -15.15 | VERTICAL | Average |
| 4 | 0.035 | 52.24 | 12.22 | 0.00 | 29.06 | 35.40 | 53.06 | -17.66 | VERTICAL | Average |
| 5 | 0.055 | 49.13 | 11.80 | 0.00 | 29.32 | 31.61 | 53.06 | -21.45 | VERTICAL | Average |
| 6 | 0.102 | 44.77 | 10.41 | 0.00 | 29.47 | 25.71 | 53.06 | -27.35 | VERTICAL | Average |



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Mode:a; Polarization:Vertical



Site : SGS
Condition: FCC PART18 53.06 10m VERTICAL
Job :
Model :
Power :
Test Mode:

| | | ReadAntenna | | Cable | Preamp | | Limit | Over | | |
|---|--------|-------------|--------|-------|--------|--------|--------|--------|-----------|---------|
| | Freq | Level | Factor | Loss | Factor | Level | Line | Limit | Pol/Phase | Remark |
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | | |
| 1 | 0.155 | 61.40 | 10.69 | 0.00 | 29.46 | 42.63 | 53.06 | -10.43 | VERTICAL | Average |
| 2 | 0.322 | 53.37 | 10.74 | 0.10 | 29.43 | 34.78 | 53.06 | -18.28 | VERTICAL | Average |
| 3 | 0.894 | 44.11 | 10.43 | 0.10 | 29.41 | 25.23 | 53.06 | -27.83 | VERTICAL | Average |
| 4 | 1.898 | 39.46 | 10.98 | 0.10 | 29.38 | 21.16 | 53.06 | -31.90 | VERTICAL | Average |
| 5 | 4.822 | 30.15 | 10.51 | 0.20 | 29.33 | 11.53 | 53.06 | -41.53 | VERTICAL | Average |
| 6 | 14.288 | 25.13 | 8.81 | 0.40 | 29.24 | 5.10 | 53.06 | -47.96 | VERTICAL | Average |



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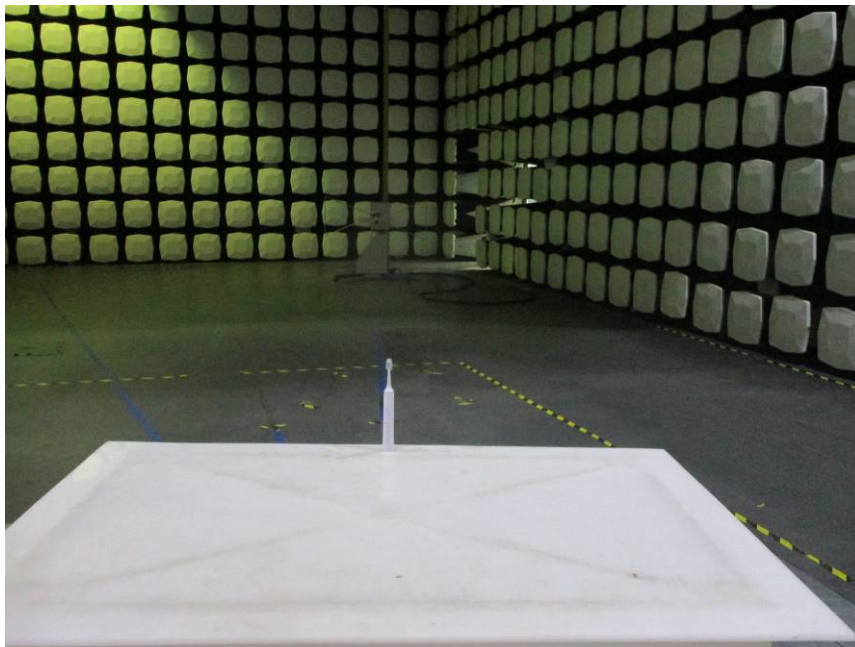
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7 Photographs

7.1 Conducted Emissions at Mains Terminals (150kHz-30MHz) Test Setup



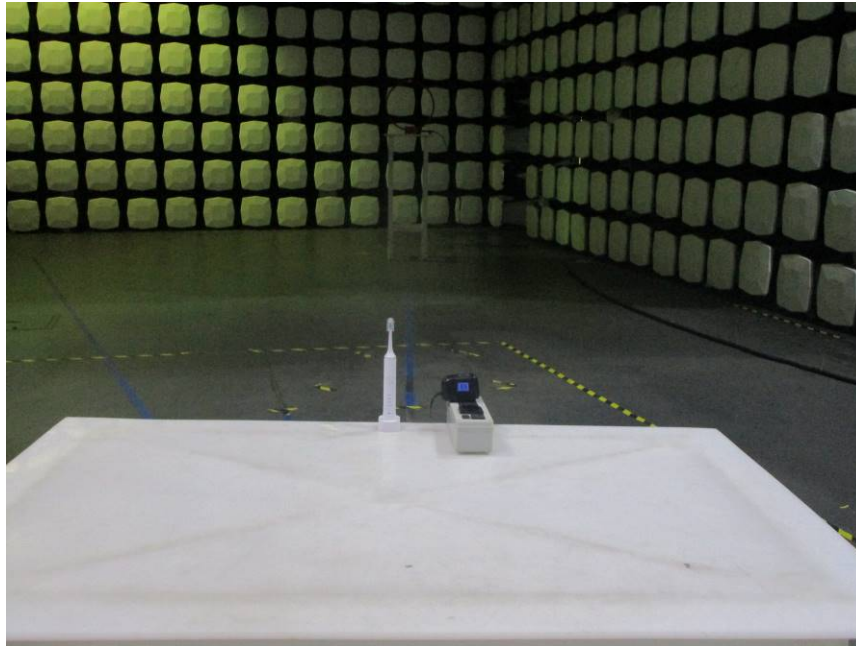
7.2 Radiated Emissions (30MHz-1GHz) Test Setup



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7.3 Radiated Emissions (Magnetic field Strength) (9kHz-30MHz) Test Setup



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7.4 EUT Constructional Details



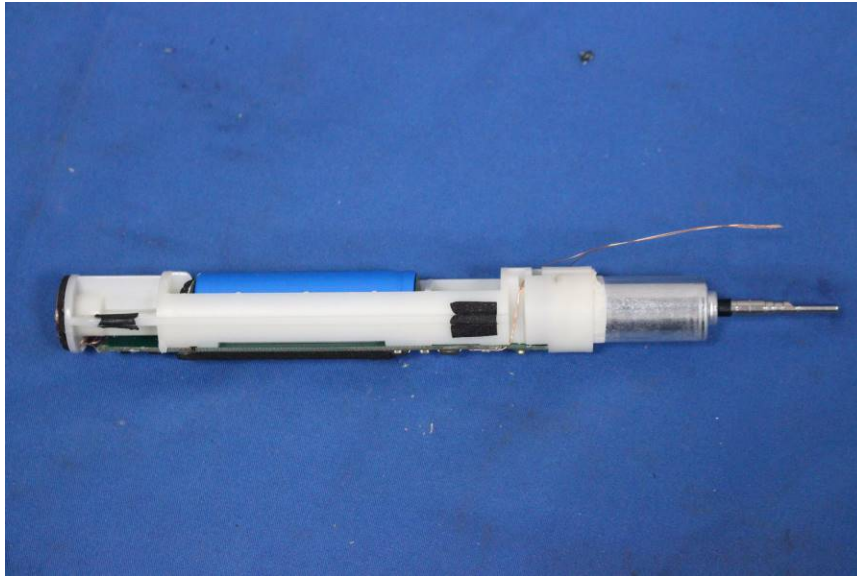
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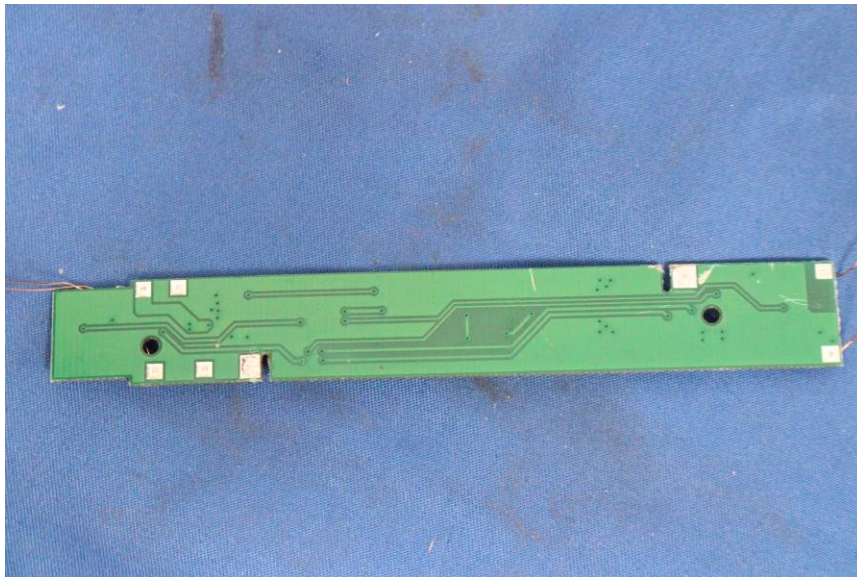
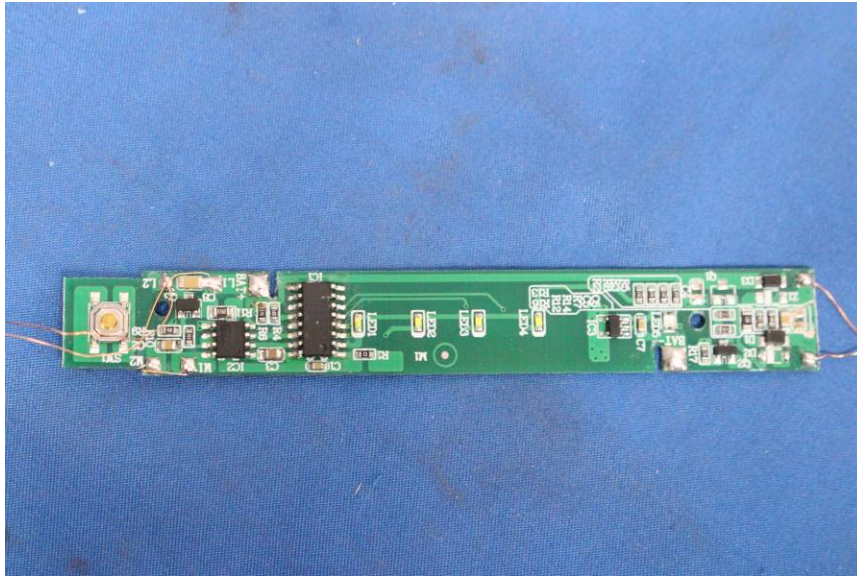
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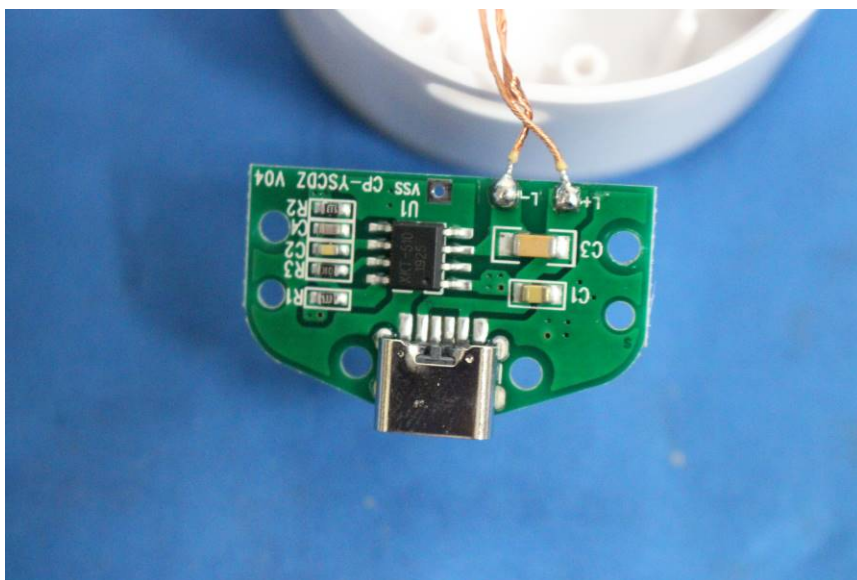
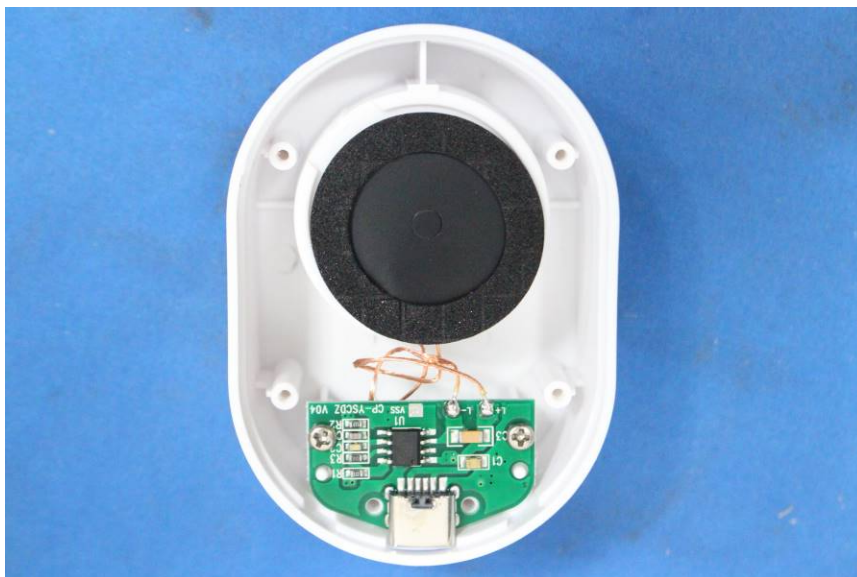






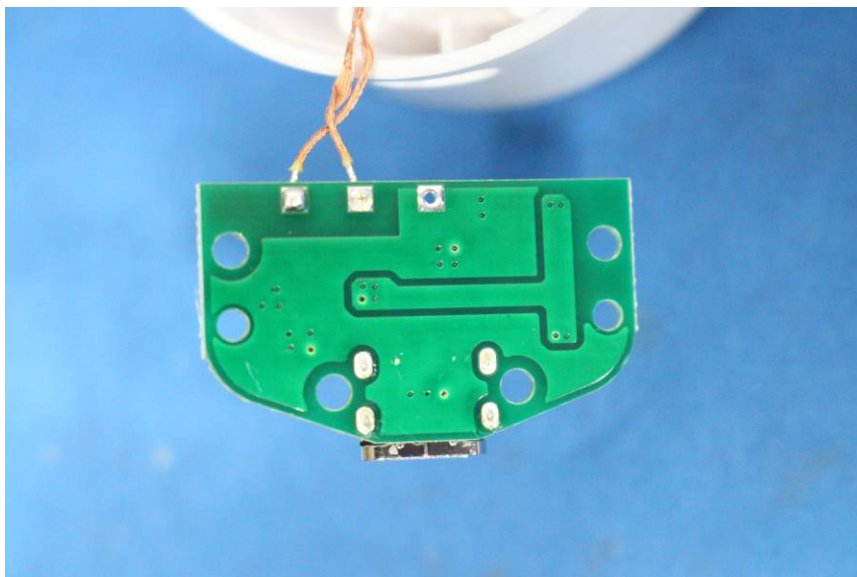
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