

# TEST REPORT

**Report No. :** KS2206S2437E

**FCC ID:** 2A7MU-M1000

**Applicant :** Guangdong MIQ Power Co.,Ltd.

**Address :** Build R, Butterfly Ridge Ind District, Dongyuan, Heyuan city, Guangdong province, China

**Manufacturer.....:** Guangdong MIQ Power Co.,Ltd.

**Address.....:** Build R, Butterfly Ridge Ind District, Dongyuan, Heyuan city, Guangdong province, China

**Product Name :** Outdoor Power Supply

**Trade Mark :** N/A

**Model/Type reference :** M1000

**Listed Model(s) :** M1000 PRO, M1000 PLUS, M300, M500, M500 PRO, M600, M700, M800, M1200, M1500, M2000, BK-E1000, BK-E500A, BK-E500B, BK-E700, BK-E300

**Standard :** FCC Rules and Regulations Part 15 Subpart C (Section 15.209), ANSI C63.10: 2013

**Date of Receipt :** June 13, 2022

**Date of Test Date :** June 13, 2022 ~ July 6, 2022

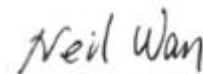
**Date of issue :** July 6, 2022

**Test result :** Pass

Prepared by:  
( Printed Name + Signature ) Sky Dong



Approved by:  
( Printed Name + Signature ) Neil Wan



**Testing Laboratory Name :** KSIGN(Guangdong) Testing Co., Ltd.

**Address :** West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

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TRF No. RF exposure\_R1

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## 1 TEST SUMMARY

### 1.1 Test Standards

The tests were performed according to following standards:

[FCC Rules and Regulations Part 15 Subpart C \(Section 15.207\)](#): Conducted limits.

[FCC Rules and Regulations Part 15 Subpart C \(Section 15.209\)](#): Radiated emission limits; general requirements.

[ANSI C63.10: 2013](#): American National Standard for Testing Unlicensed Wireless Devices

### 1.2 Report Version

| Revised No. | Date of issue | Description |
|-------------|---------------|-------------|
| 01          | July 6, 2022  | Original    |
|             |               |             |
|             |               |             |
|             |               |             |

TRF No. FCC Part 15C\_R2

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

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## 2 SUMMARY

### 2.1 Product Description

|                                   |                                                                                                                                                                                                                                                                                                       |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Name:</b>              | Outdoor Power Supply                                                                                                                                                                                                                                                                                  |
| <b>Trade Mark:</b>                | N/A                                                                                                                                                                                                                                                                                                   |
| <b>Model/Type reference:</b>      | M1000                                                                                                                                                                                                                                                                                                 |
| <b>Listed Model(s):</b>           | M1000 PRO, M1000 PLUS, M300, M500, M500 PRO, M600, M700, M800, M1200, M1500, M2000, BK-E1000, BK-E500A, BK-E500B, BK-E700, BK-E300                                                                                                                                                                    |
| <b>Model Different:</b>           | The difference between product models only depends on the model naming is different for the marketing requirement. Other power supply methods, interior structure, electrical circuits and key components are the same, which do not affect the safety and electromagnetic compatibility performance. |
| <b>Hardware version:</b>          | V1.0                                                                                                                                                                                                                                                                                                  |
| <b>Software version:</b>          | V1.0                                                                                                                                                                                                                                                                                                  |
| <b>Test samples ID:</b>           | KS2206S2437E-1# (Engineer sample),<br>KS2206S2437E-2# (Normal sample)                                                                                                                                                                                                                                 |
| <b>Power supply((Adaptor)):</b>   | Input:AC 110-240V 50/60Hz<br>Output:DC 24V,6.25A                                                                                                                                                                                                                                                      |
| <b>Power supply(Battery):</b>     | DC 22.2V                                                                                                                                                                                                                                                                                              |
| <b>Wireless Charging(Output):</b> | 10W(Max)                                                                                                                                                                                                                                                                                              |
| <b>Operation frequency:</b>       | 115KHz - 205KHz                                                                                                                                                                                                                                                                                       |
| <b>Modulation type:</b>           | ASK                                                                                                                                                                                                                                                                                                   |
| <b>Antenna type:</b>              | Coil Antenna                                                                                                                                                                                                                                                                                          |
| <b>Antenna gain:</b>              | 0 dBi                                                                                                                                                                                                                                                                                                 |

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## 2.2 Description of the test mode

Equipment under test was operated during the measurement under the following conditions:

☒ Charging and communication mode

| Test Modes:                                                                               |                          |            |
|-------------------------------------------------------------------------------------------|--------------------------|------------|
| Mode 1                                                                                    | Wireless Charging (10W)  | Recorded   |
| Mode 2                                                                                    | Wireless Charging (7.5W) | Recorded   |
| Mode 3                                                                                    | Wireless Charging (5W)   | Recorded   |
| Mode 4                                                                                    | Standby                  | Pre-tested |
| Note: All test modes were pre-tested, but we only recorded the worst case in this report. |                          |            |

## 2.3 Special Accessories

Follow auxiliary equipment(s) test with EUT that provided by the manufacturer or laboratory is listed as follow:

| Description            | Manufacturer | Model           | Technical Parameters                            | Certificate | Provided by  |
|------------------------|--------------|-----------------|-------------------------------------------------|-------------|--------------|
| Adapter                | /            | SOY-2400625-094 | Input: 100-240V, 50/60Hz<br>Output:DC 24V 6.25A | FCC         | manufacturer |
| Wireless charging load | /            | EESON           | 5W/7.5W/10W                                     | FCC         | laboratory   |

## 2.4 Modifications

No modifications were implemented to meet testing criteria.

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### 3 TEST ENVIRONMENT

#### 3.1 Address of the test laboratory

**KSIGN(Guangdong) Testing Co., Ltd.**

West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

#### 3.2 Test Facility

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

**CNAS-Lab Code: L13261**

KSIGN(Guangdong) Testing Co., Ltd. has been assessed and proved to be in Compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

**A2LA-Lab Cert. No.: 5457.01**

KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

**ISED#: 25693 CAB identifier.: CN0096**

KSIGN(Guangdong) Testing Co., Ltd. has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

**FCC-Registration No.: 294912 Designation Number: CN1328**

KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

#### 3.3 Environmental conditions

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

Radiated Emission:

|                       |              |
|-----------------------|--------------|
| Temperature:          | 24 ° C       |
| Humidity:             | 45 %         |
| Atmospheric pressure: | 950-1050mbar |

AC Power Conducted Emission:

|                       |              |
|-----------------------|--------------|
| Temperature:          | 25 ° C       |
| Humidity:             | 46 %         |
| Atmospheric pressure: | 950-1050mbar |

Conducted testing:

|                       |              |
|-----------------------|--------------|
| Temperature:          | 25 ° C       |
| Humidity:             | 44 %         |
| Atmospheric pressure: | 950-1050mbar |

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### 3.4 Summary of measurement results

| Description of test      | Result    |
|--------------------------|-----------|
| Conducted emissions test | Compliant |
| Radiated emission test   | Compliant |
| Antenna requirement      | Compliant |

### 3.5 Statement of the measurement uncertainty

| Test                  | Range      | Measurement Uncertainty | Notes |
|-----------------------|------------|-------------------------|-------|
| Radiated Emission     | 30~1000MHz | 4.06 dB                 | (1)   |
| Radiated Emission     | 1~18GHz    | 5.14 dB                 | (1)   |
| Radiated Emission     | 18-40GHz   | 5.38 dB                 | (1)   |
| Conducted Disturbance | 0.15~30MHz | 2.14 dB                 | (1)   |
| Radiated Emission     | 9~30MHz    | 2.20dB                  | (1)   |

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

### 3.6 Equipments Used during the Test

| Tonscend JS0806-2 Test system |                                     |              |           |            |            |
|-------------------------------|-------------------------------------|--------------|-----------|------------|------------|
| Item                          | Test Equipment                      | Manufacturer | Model No. | Serial No. | Cal. Until |
| 1                             | Spectrum Analyzer                   | R&S          | FSV40-N   | 101798     | 03/04/2023 |
| 2                             | Vector Signal Generator             | Agilent      | N5182A    | MY50142520 | 03/04/2023 |
| 3                             | Analog Signal Generator             | HP           | 83752A    | 3344A00337 | 03/04/2023 |
| 4                             | Power Sensor                        | Agilent      | E9304A    | MY50390009 | 03/04/2023 |
| 5                             | Power Sensor                        | Agilent      | E9300A    | MY41498315 | 03/04/2023 |
| 6                             | Wideband Radio Communication Tester | R&S          | CMW500    | 157282     | 03/04/2023 |
| 7                             | Climate Chamber                     | Angul        | AGNH80L   | 1903042120 | 03/04/2023 |
| 8                             | Dual Output DC Power Supply         | Agilent      | E3646A    | MY40009992 | 03/04/2023 |
| 9                             | RF Control Unit                     | Tonscend     | JS0806-2  | /          | 03/04/2023 |

| Transmitter spurious emissions & Receiver spurious emissions |                                            |                     |              |            |            |
|--------------------------------------------------------------|--------------------------------------------|---------------------|--------------|------------|------------|
| Item                                                         | Test Equipment                             | Manufacturer        | Model No.    | Serial No. | Cal. Until |
| 1                                                            | EMI Test Receiver                          | R&S                 | ESR          | 102525     | 03/04/2023 |
| 2                                                            | High Pass Filter                           | Chengdu E-Microwave | OHF-3-18-S   | 0E01901038 | 03/04/2023 |
| 3                                                            | High Pass Filter                           | Chengdu E-Microwave | OHF-6.5-18-S | 0E01901039 | 03/04/2023 |
| 4                                                            | Spectrum Analyzer                          | HP                  | 8593E        | 3831U02087 | 03/04/2023 |
| 5                                                            | Ultra-Broadband logarithmic period Antenna | Schwarzbeck         | VULB 9163    | 01230      | 12/04/2023 |

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|    |                   |               |             |          |            |
|----|-------------------|---------------|-------------|----------|------------|
| 6  | Loop Antenna      | Beijin ZHINAN | ZN30900C    | 18050    | 03/04/2023 |
| 7  | Spectrum Analyzer | R&S           | FSV40-N     | 101798   | 03/04/2023 |
| 8  | Horn Antenna      | Schwarzbeck   | BBHA 9120 D | 2023     | 03/29/2023 |
| 9  | Pre-Amplifier     | Schwarzbeck   | BBV 9745    | 9745#129 | 03/04/2023 |
| 10 | Pre-Amplifier     | EMCI          | EMC051835SE | 980662   | 03/04/2023 |

| Item | Test Equipment    | Manufacturer | Model No. | Serial No.   | Cal. Until |
|------|-------------------|--------------|-----------|--------------|------------|
| 1    | LISN              | R&S          | ENV432    | 1326.6105.02 | 03/04/2023 |
| 2    | EMI Test Receiver | R&S          | ESR       | 102524       | 03/04/2023 |
| 3    | Manual RF Switch  | JS TOYO      | /         | MSW-01/002   | 03/04/2023 |

Note: 1)The Cal.Interval was one year.

2)The cable loss has calculated in test result which connection between each test instruments.

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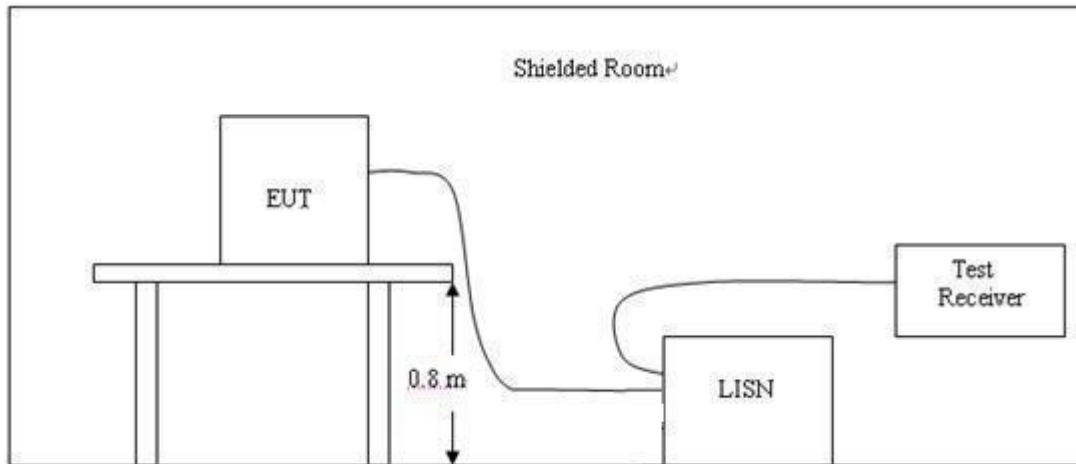
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## 4. TEST CONDITIONS AND RESULTS

### 4.1 AC Power Conducted Emission

#### TEST CONFIGURATION



#### TEST PROCEDURE

- 1, 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 C63.10.
- 2, Support equipment, if needed, was placed as per ANSI C63.10.
- 3, All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4, If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5, All support equipments received AC power from a second LISN, if any.
- 6, 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.
- 7, Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.

#### AC Power Conducted Emission Limit

For intentional device, according to § 15.207(a) AC Power Conducted Emission Limits is as following:

| Frequency range (MHz) | Limit (dBuV) |           |
|-----------------------|--------------|-----------|
|                       | Quasi-peak   | Average   |
| 0.15-0.5              | 66 to 56*    | 56 to 46* |
| 0.5-5                 | 56           | 46        |
| 5-30                  | 60           | 50        |

\* Decreases with the logarithm of the frequency.

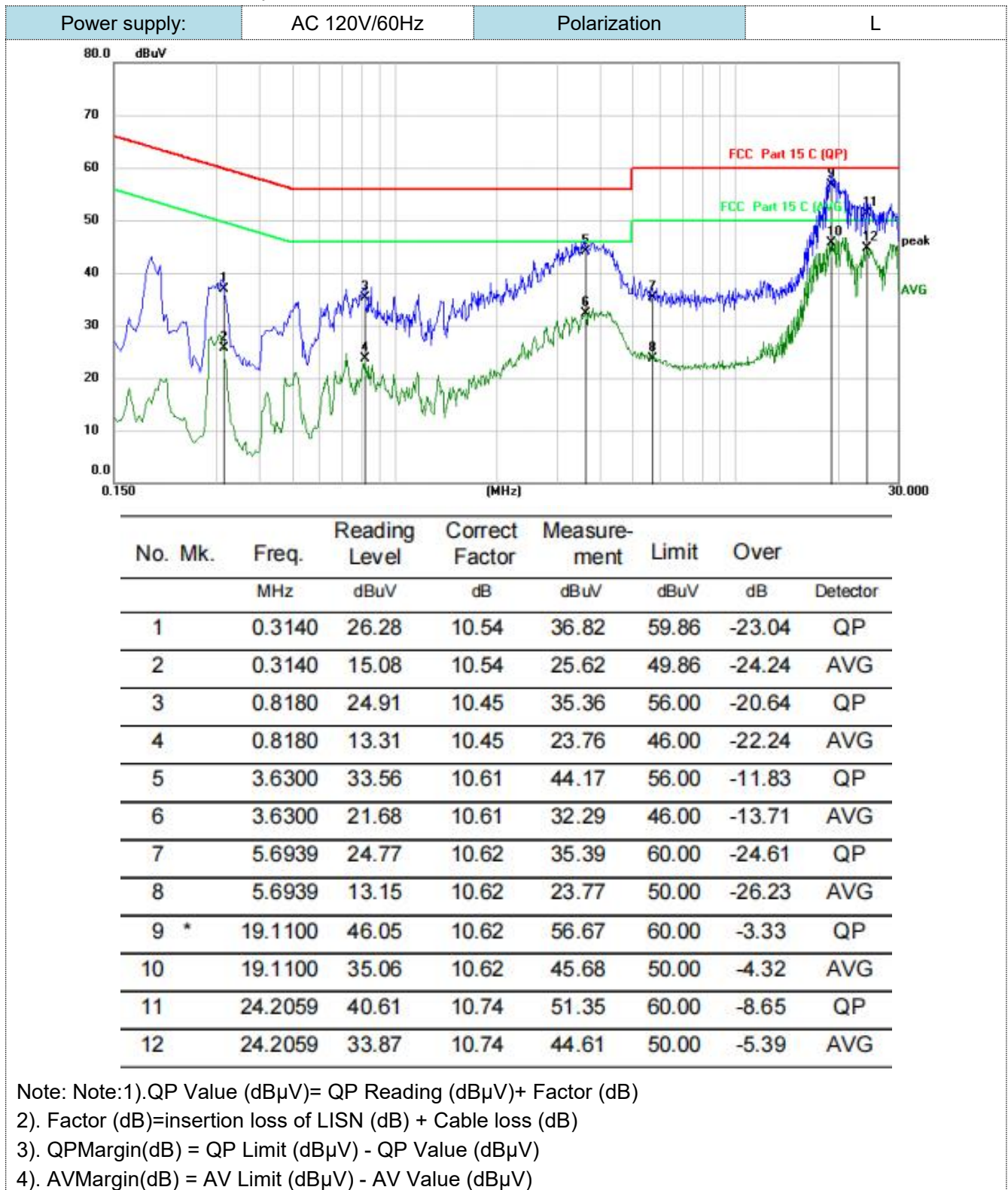
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## TEST RESULTS

- Both 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz power supply have been tested, only the worst result of 120 VAC, 60 Hz was reported as below:



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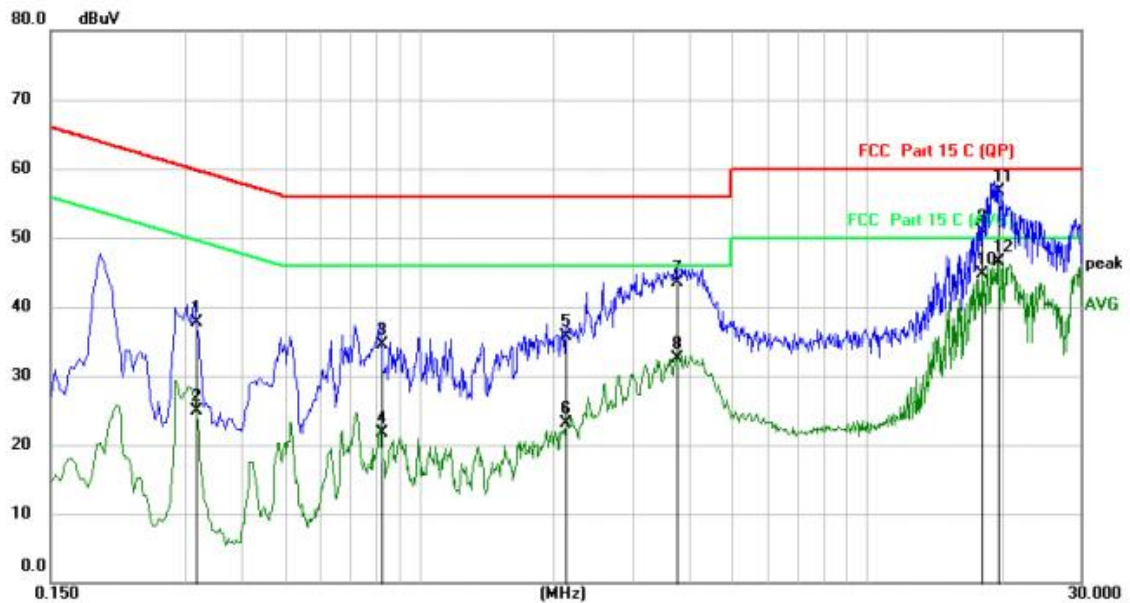
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Power supply:

AC 120V/60Hz

Polarization

N



| No. | Mk. | Freq.   | Reading | Correct | Measure- | Limit | Over   |          |
|-----|-----|---------|---------|---------|----------|-------|--------|----------|
|     |     | MHz     | Level   | Factor  | ment     |       |        | Detector |
|     |     |         | dBμV    | dB      | dBμV     | dBμV  | dB     |          |
| 1   |     | 0.3180  | 27.22   | 10.52   | 37.74    | 59.76 | -22.02 | QP       |
| 2   |     | 0.3180  | 14.44   | 10.52   | 24.96    | 49.76 | -24.80 | AVG      |
| 3   |     | 0.8220  | 24.16   | 10.44   | 34.60    | 56.00 | -21.40 | QP       |
| 4   |     | 0.8220  | 11.29   | 10.44   | 21.73    | 46.00 | -24.27 | AVG      |
| 5   |     | 2.1260  | 25.11   | 10.55   | 35.66    | 56.00 | -20.34 | QP       |
| 6   |     | 2.1260  | 12.51   | 10.55   | 23.06    | 46.00 | -22.94 | AVG      |
| 7   |     | 3.7580  | 32.94   | 10.60   | 43.54    | 56.00 | -12.46 | QP       |
| 8   |     | 3.7580  | 21.90   | 10.60   | 32.50    | 46.00 | -13.50 | AVG      |
| 9   |     | 18.0500 | 39.99   | 10.84   | 50.83    | 60.00 | -9.17  | QP       |
| 10  |     | 18.0500 | 33.81   | 10.84   | 44.65    | 50.00 | -5.35  | AVG      |
| 11  | *   | 19.5418 | 45.85   | 10.87   | 56.72    | 60.00 | -3.28  | QP       |
| 12  |     | 19.5418 | 35.65   | 10.87   | 46.52    | 50.00 | -3.48  | AVG      |

Note: Note:1).QP Value (dBμV)= QP Reading (dBμV)+ Factor (dB)

2). Factor (dB)=insertion loss of LISN (dB) + Cable loss (dB)

3). QPMargin(dB) = QP Limit (dBμV) - QP Value (dBμV)

4). AVMargin(dB) = AV Limit (dBμV) - AV Value (dBμV)

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## 4.2 Radiated Emission

### Limit

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emission out of authorized band shall not exceed the following table at a 3 meters measurement distance.

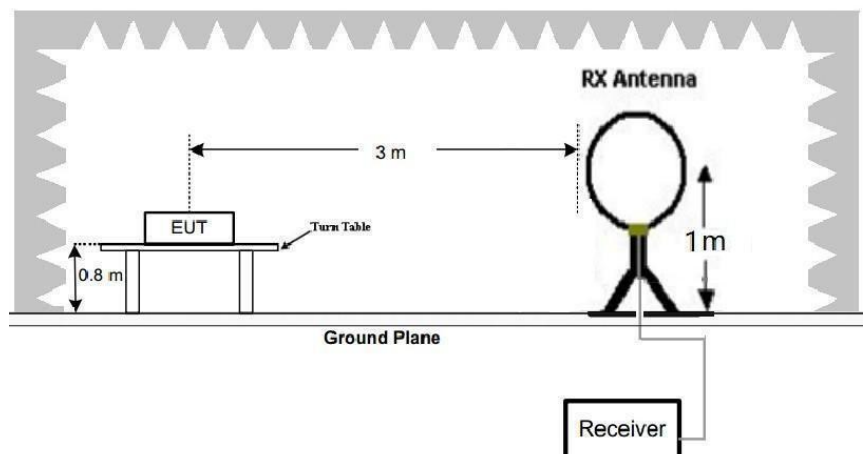
In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a)

Radiated emission limits

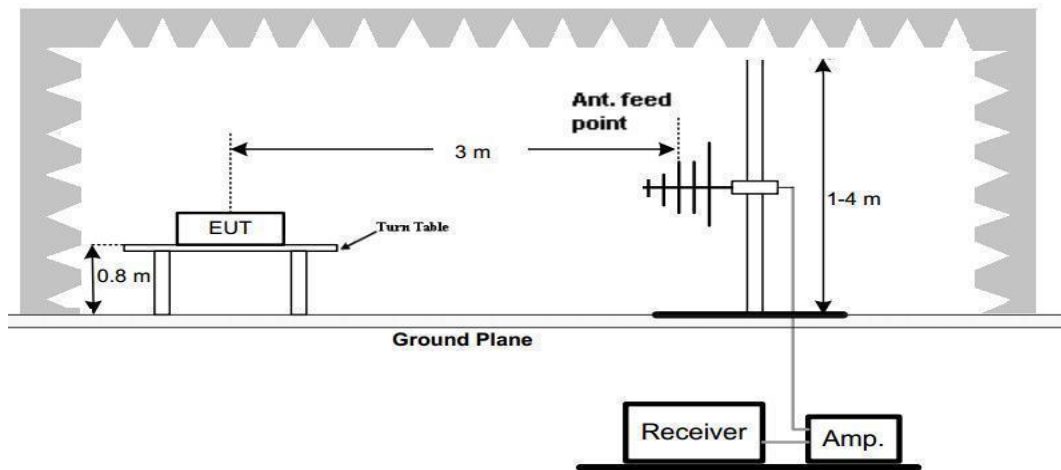
| Frequency (MHz) | Distance (Meters) | Radiated (dBμV/m)                          | Radiated (μV/m)       |
|-----------------|-------------------|--------------------------------------------|-----------------------|
| 0.009-0.49      | 3                 | $20\log(2400/F(\text{KHz}))+40\log(300/3)$ | $2400/F(\text{KHz})$  |
| 0.49-1.705      | 3                 | $20\log(24000/F(\text{KHz}))+40\log(30/3)$ | $24000/F(\text{KHz})$ |
| 1.705-30        | 3                 | $20\log(30)+40\log(30/3)$                  | 30                    |
| 30-88           | 3                 | 40.0                                       | 100                   |
| 88-216          | 3                 | 43.5                                       | 150                   |
| 216-960         | 3                 | 46.0                                       | 200                   |
| Above 960       | 3                 | 54.0                                       | 500                   |

### TEST CONFIGURATION

#### 1. Radiated Emission Test Set-Up, Frequency Below 30MHz



#### 2. Radiated Emission Test Set-Up, Frequency below 1000MHz



### Test Procedure

- Below 1GHz measurement the EUT is placed on a turntable which is 0.8m above ground plane.
- Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0° to 360° to acquire the highest emissions from EUT
- And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- Repeat above procedures until all frequency measurements have been completed.
- Radiated emission test frequency band from 9KHz to 1000MHz.
- The distance between test antenna and EUT as following table states:

| Test Frequency range | Test Antenna Type   | Test Distance |
|----------------------|---------------------|---------------|
| 9KHz-30MHz           | Active Loop Antenna | 3             |
| 30MHz-1GHz           | Bilog Antenna       | 3             |

- Setting test receiver/spectrum as following table states:

| Test Frequency range | Test Receiver/Spectrum Setting          | Detector |
|----------------------|-----------------------------------------|----------|
| 9KHz-150KHz          | RBW=200Hz/VBW=3KHz, Sweep time=Auto     | QP       |
| 150KHz-30MHz         | RBW=9KHz/VBW=100KHz, Sweep time=Auto    | QP       |
| 30MHz-1GHz           | RBW=120KHz/VBW=1000KHz, Sweep time=Auto | QP       |

### TEST RESULTS

#### For 9 KHz-30MHz

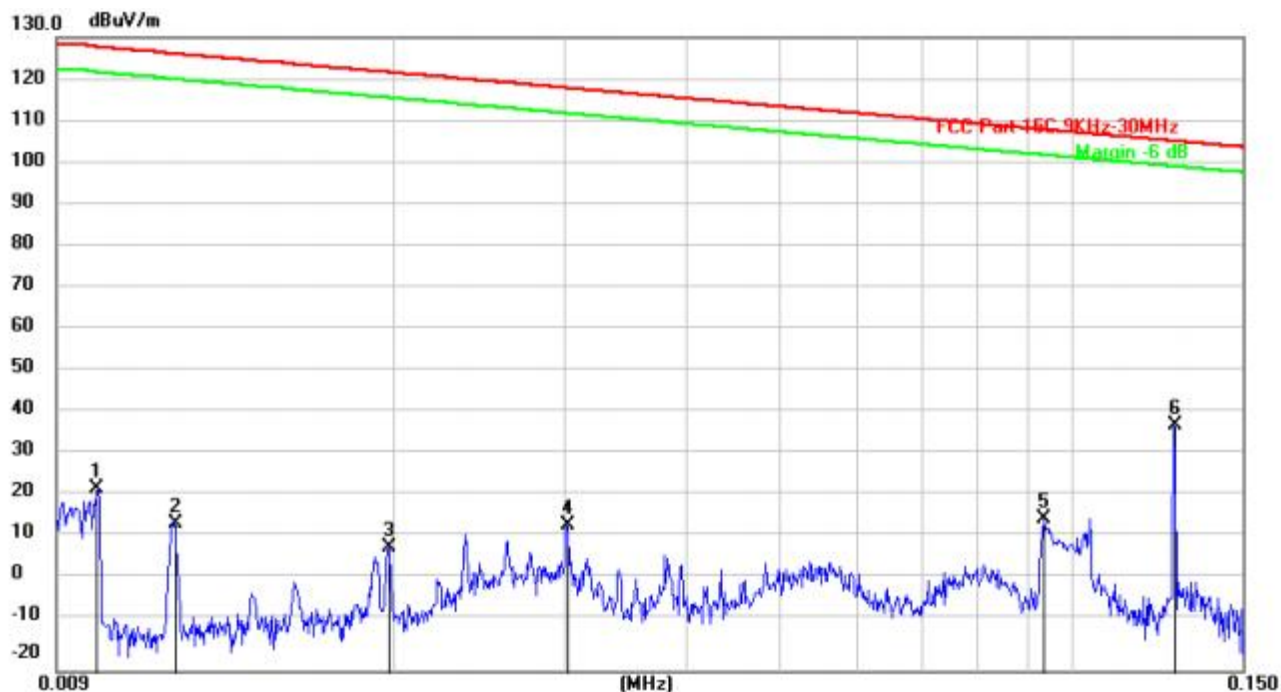
TRF No. FCC Part 15C\_R2

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

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## Face

## 9K-150K



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   |     | 0.0099       | 52.85                      | -29.70                      | 23.15                        | 127.69            | -104.54      | peak     |
| 2   |     | 0.0119       | 44.60                      | -29.60                      | 15.00                        | 126.09            | -111.09      | peak     |
| 3   |     | 0.0198       | 39.14                      | -29.60                      | 9.54                         | 121.67            | -112.13      | peak     |
| 4   |     | 0.0302       | 44.20                      | -29.60                      | 14.60                        | 118.00            | -103.40      | peak     |
| 5   |     | 0.0937       | 45.95                      | -29.60                      | 16.35                        | 108.17            | -91.82       | peak     |
| 6   | *   | 0.1276       | 68.03                      | -29.61                      | 38.42                        | 105.49            | -67.07       | peak     |

Remark:

Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor

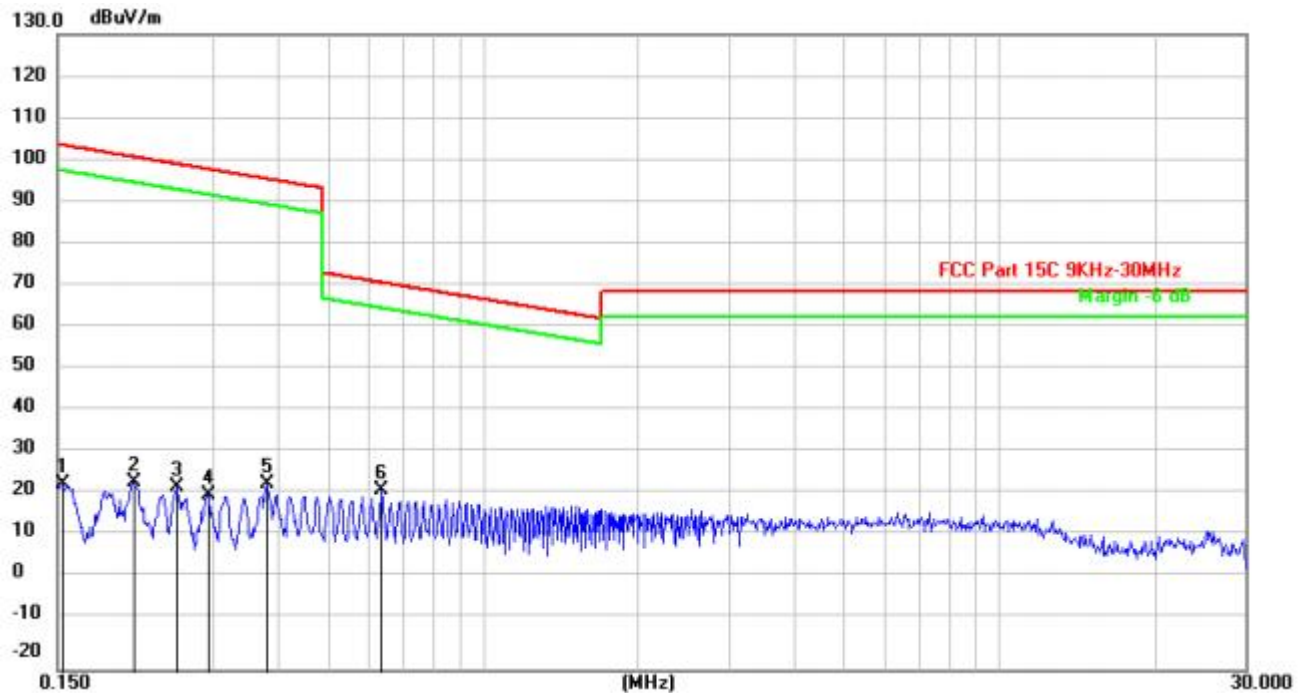
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## Face

## 150K-30M



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   |     | 0.1534       | 53.84                      | -29.63                      | 24.21                        | 103.89            | -79.68       | peak     |
| 2   |     | 0.2109       | 54.23                      | -29.66                      | 24.57                        | 101.12            | -76.55       | peak     |
| 3   |     | 0.2552       | 53.04                      | -29.69                      | 23.35                        | 99.47             | -76.12       | peak     |
| 4   |     | 0.2937       | 51.07                      | -29.71                      | 21.36                        | 98.25             | -76.89       | peak     |
| 5   |     | 0.3823       | 53.77                      | -29.76                      | 24.01                        | 95.96             | -71.95       | peak     |
| 6   | *   | 0.6365       | 52.54                      | -29.87                      | 22.67                        | 71.53             | -48.86       | peak     |

Remark:

Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor

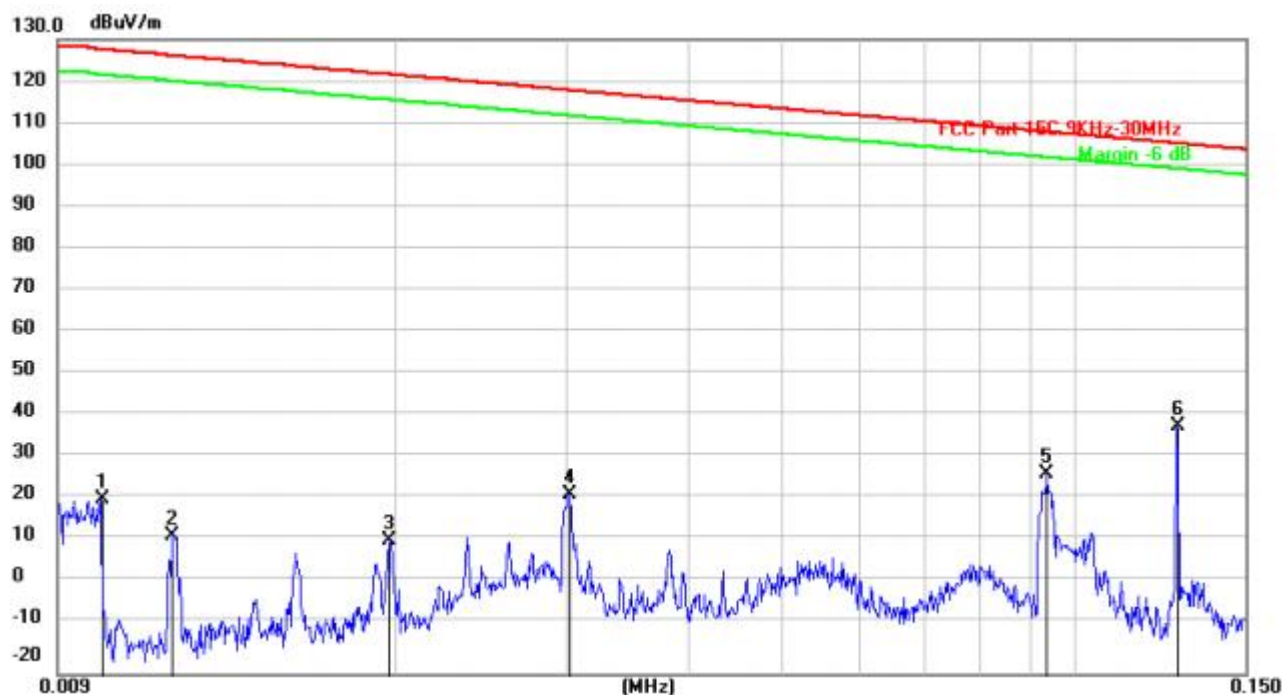
TRF No. FCC Part 15C\_R2

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## Side

9K-150K



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   |     | 0.0100       | 50.88                      | -29.60                      | 21.28                        | 127.60            | -106.32      | peak     |
| 2   |     | 0.0118       | 42.46                      | -29.60                      | 12.86                        | 126.17            | -113.31      | peak     |
| 3   |     | 0.0197       | 41.36                      | -29.60                      | 11.76                        | 121.72            | -109.96      | peak     |
| 4   |     | 0.0302       | 52.30                      | -29.60                      | 22.70                        | 118.00            | -95.30       | peak     |
| 5   |     | 0.0937       | 56.99                      | -29.60                      | 27.39                        | 108.17            | -80.78       | peak     |
| 6   | *   | 0.1276       | 68.23                      | -29.61                      | 38.62                        | 105.49            | -66.87       | peak     |

Remark:

Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor

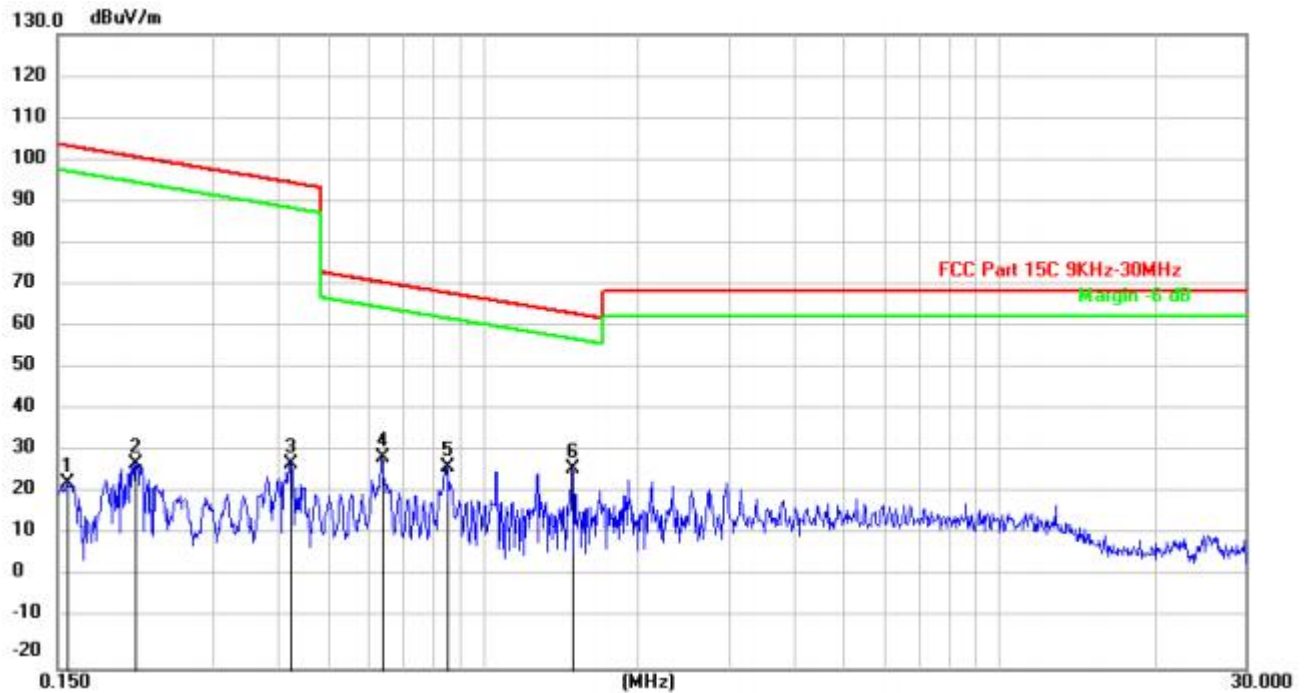
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# Side

## 150K-30M



Remark:

Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor

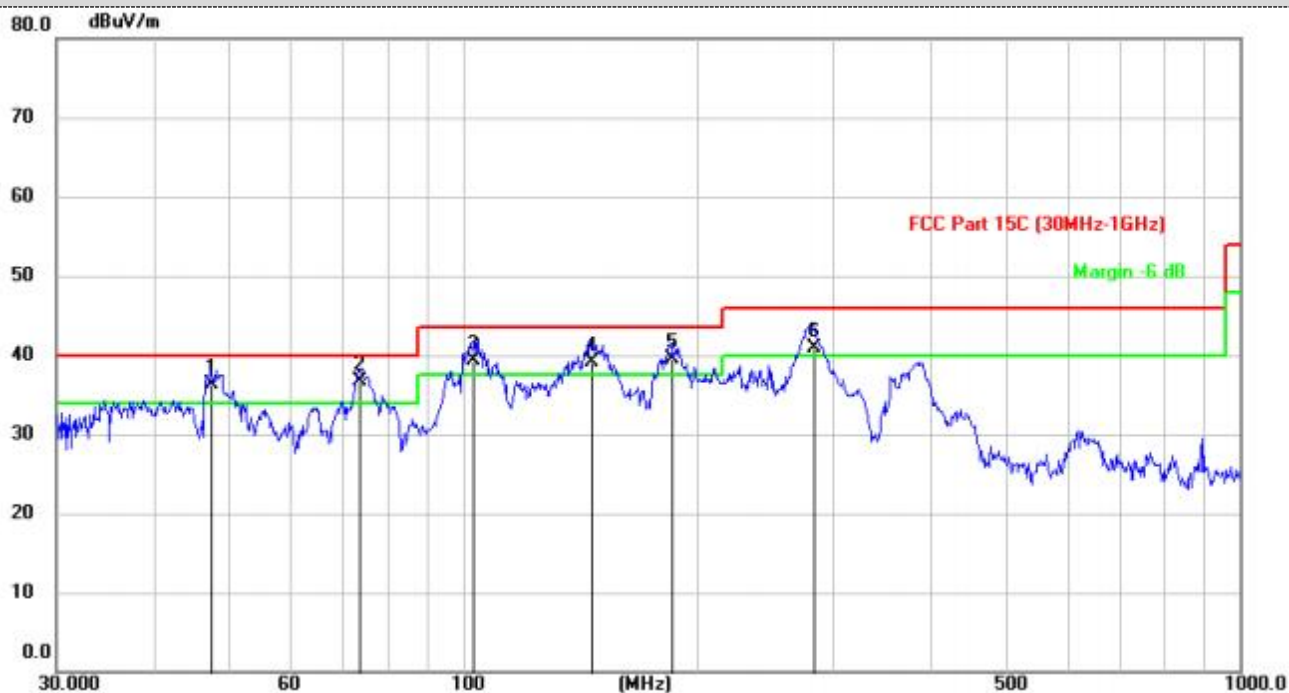
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# For 30MHz-1GHz

## Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   | !   | 47.3920      | 52.08                      | -15.87                      | 36.21                        | 40.00             | -3.79        | QP       |
| 2   | *   | 73.5138      | 56.82                      | -20.06                      | 36.76                        | 40.00             | -3.24        | QP       |
| 3   | !   | 103.0439     | 57.16                      | -17.87                      | 39.29                        | 43.50             | -4.21        | QP       |
| 4   | !   | 145.9635     | 60.36                      | -21.35                      | 39.01                        | 43.50             | -4.49        | QP       |
| 5   | !   | 185.5278     | 58.27                      | -18.71                      | 39.56                        | 43.50             | -3.94        | QP       |
| 6   | !   | 282.1923     | 55.99                      | -15.09                      | 40.90                        | 46.00             | -5.10        | QP       |

Note:1).Level (dBuV/m)= Reading (dBuV)+ Factor (dB/m)

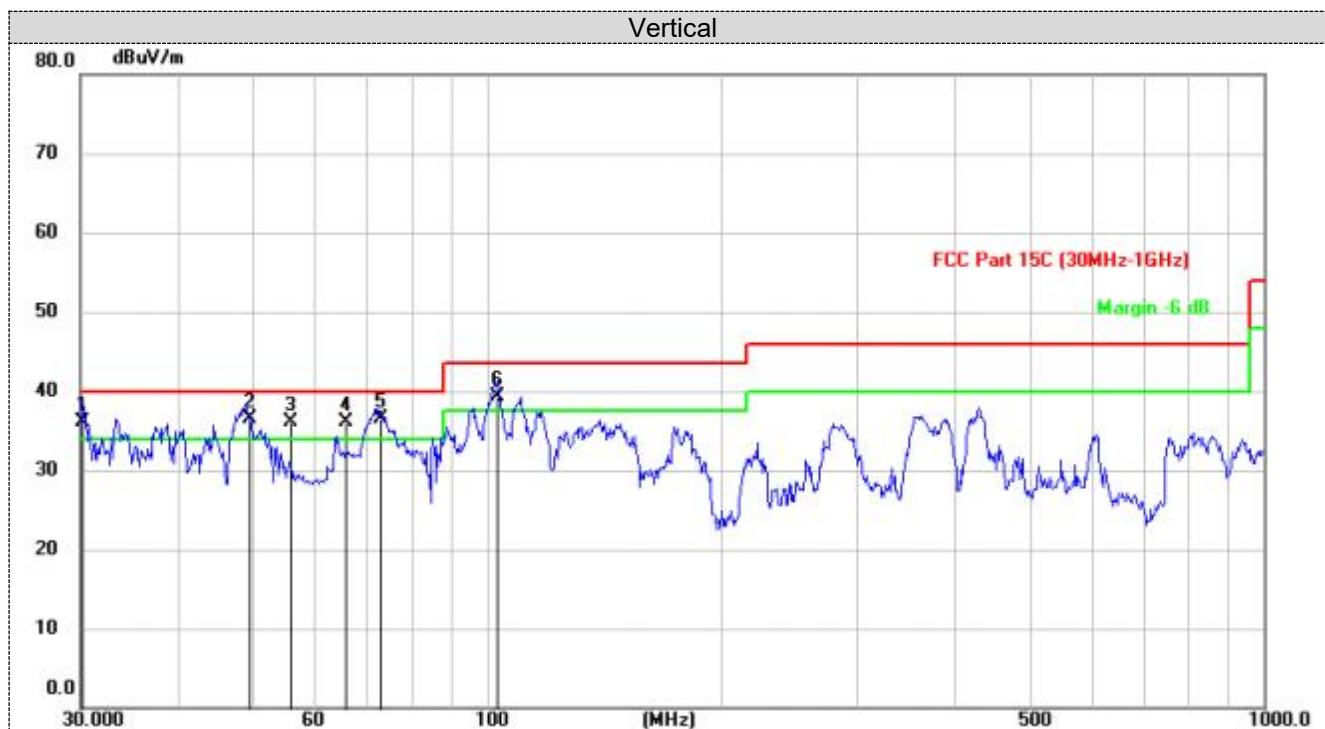
2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB)

3). Margin(dB) = Limit (dBuV/m) - Level (dBuV/m)

TRF No. FCC Part 15C\_R2

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| No. | Mk. | Freq.    | Reading | Correct | Measure- | Limit    | Over  |          |
|-----|-----|----------|---------|---------|----------|----------|-------|----------|
|     |     | MHz      | (dBuV)  | Factor  | ment     | (dBuV/m) | (dB)  | Detector |
| 1   | !   | 30.1582  | 55.03   | -19.01  | 36.02    | 40.00    | -3.98 | QP       |
| 2   | *   | 49.5154  | 52.20   | -15.67  | 36.53    | 40.00    | -3.47 | QP       |
| 3   | !   | 55.9026  | 52.99   | -16.85  | 36.14    | 40.00    | -3.86 | QP       |
| 4   | !   | 65.8954  | 54.92   | -18.84  | 36.08    | 40.00    | -3.92 | QP       |
| 5   | !   | 73.1025  | 56.54   | -20.03  | 36.51    | 40.00    | -3.49 | QP       |
| 6   | !   | 103.2609 | 57.25   | -17.88  | 39.37    | 43.50    | -4.13 | QP       |

Note:1).Level (dBuV/m)= Reading (dBuV)+ Factor (dB/m)

2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB)

3). Margin(dB) = Limit (dBuV/m) - Level (dBuV/m)

TRF No. FCC Part 15C\_R2

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### 4.3 Antenna Requirement

#### Standard Applicable

#### **Standard Applicable**

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

#### **Antenna Information**

The antenna used in this product is a Coil Antenna, The directional gains of antenna used for transmitting is 0dBi.

## 5. Test Setup Photos of the EUT

Radiated Measurement (Below 30MHz)



Radiated Measurement (Above 30MHz)



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## Conducted Emission



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## 6. PHOTOS OF THE EUT

### External Photographs



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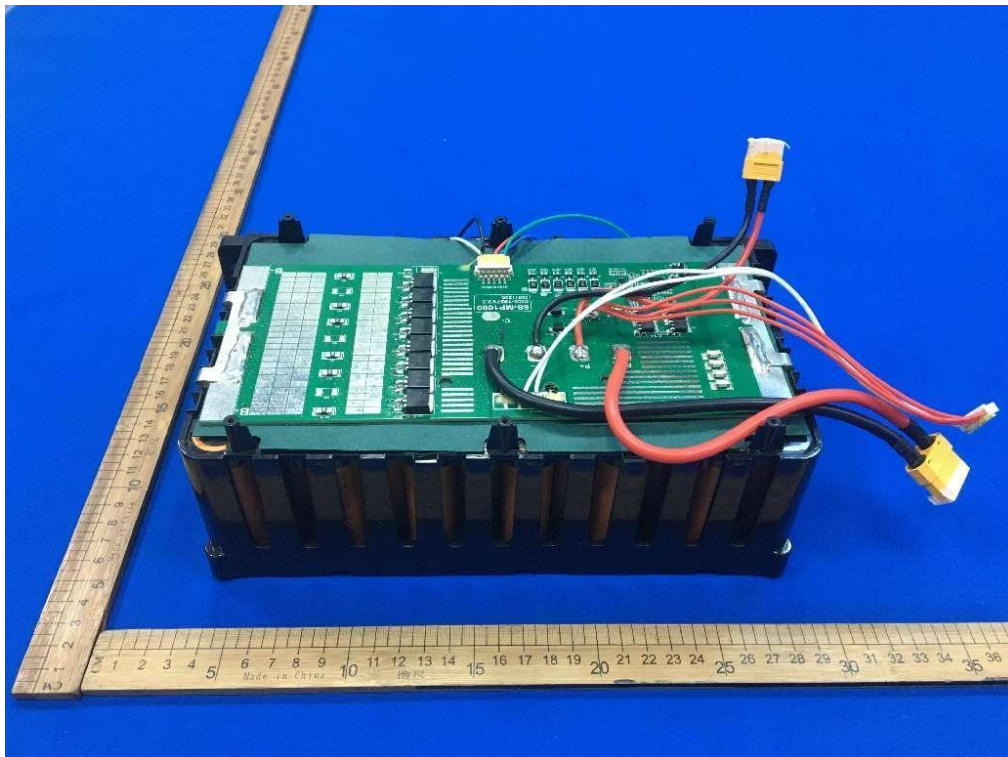
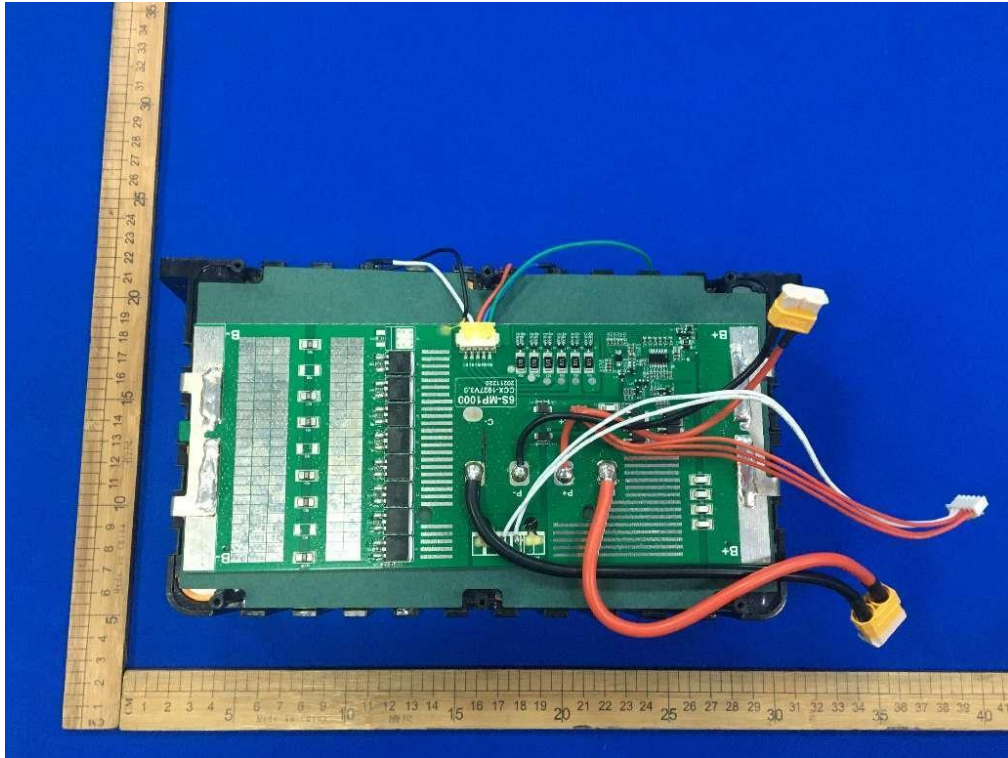


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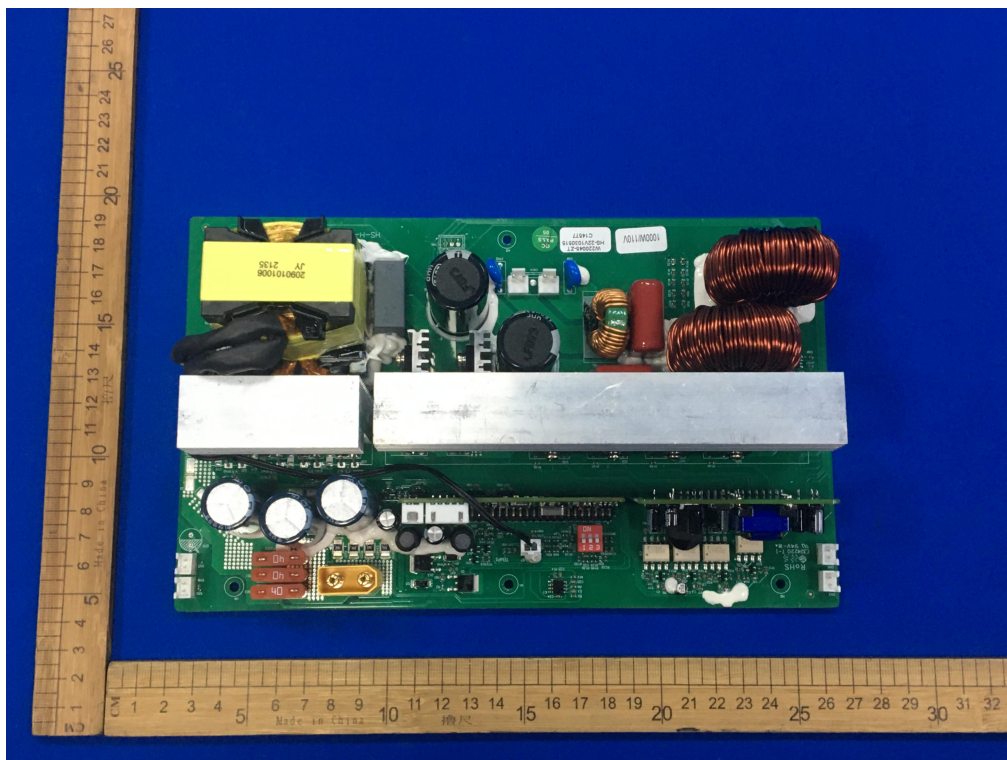
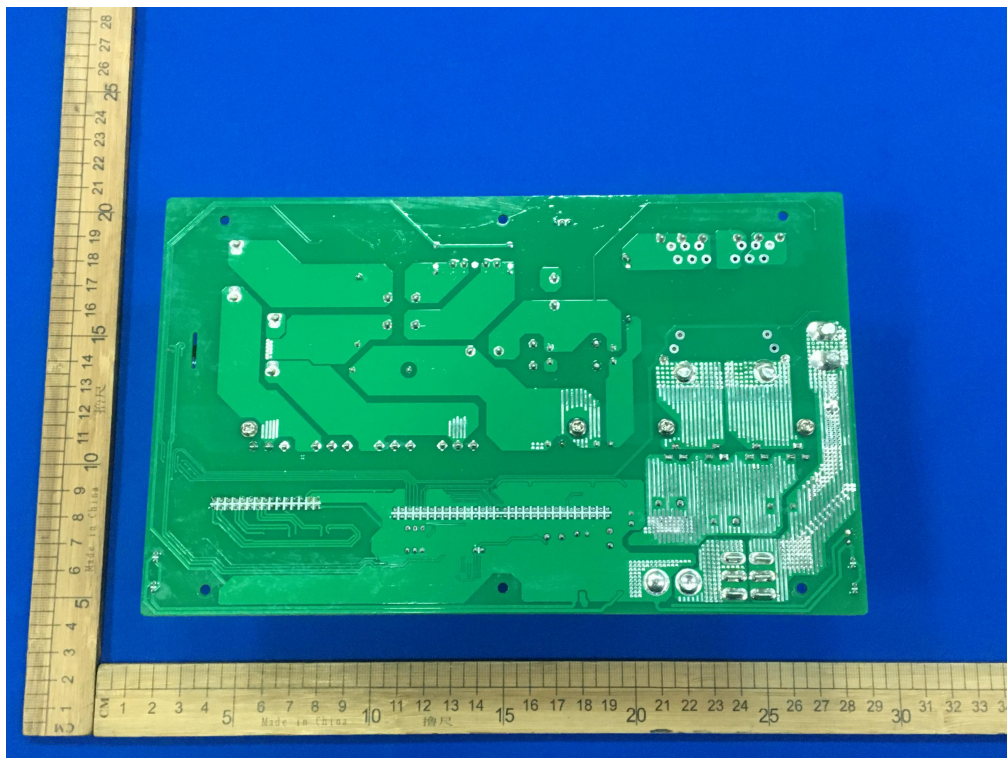
## Internal Photographs



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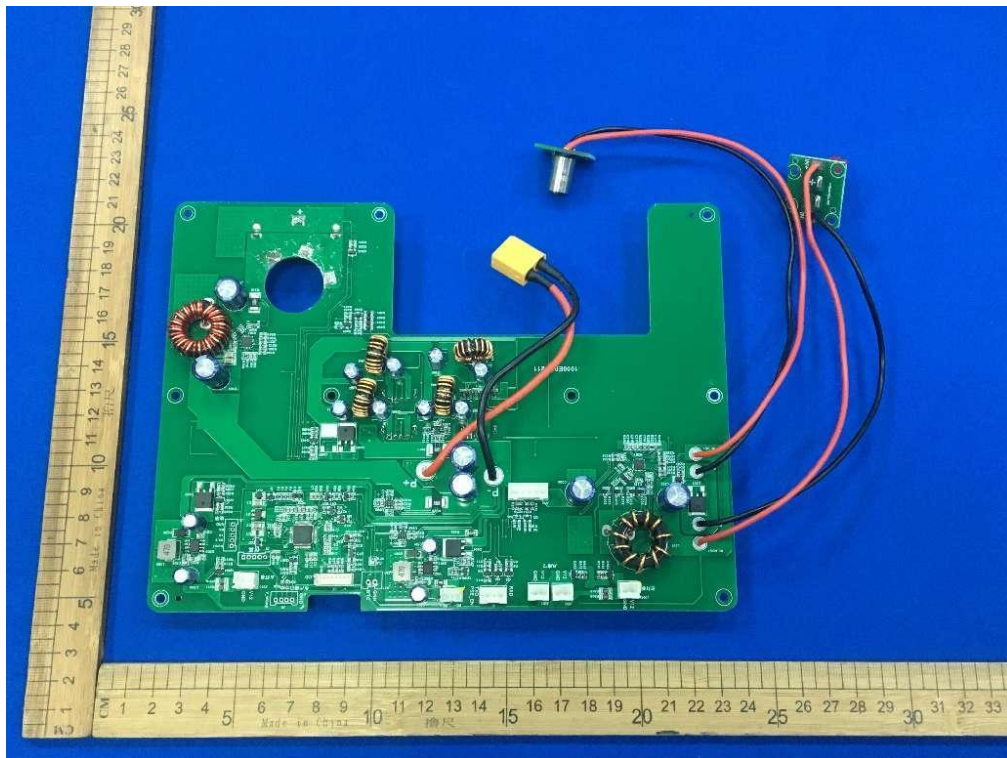
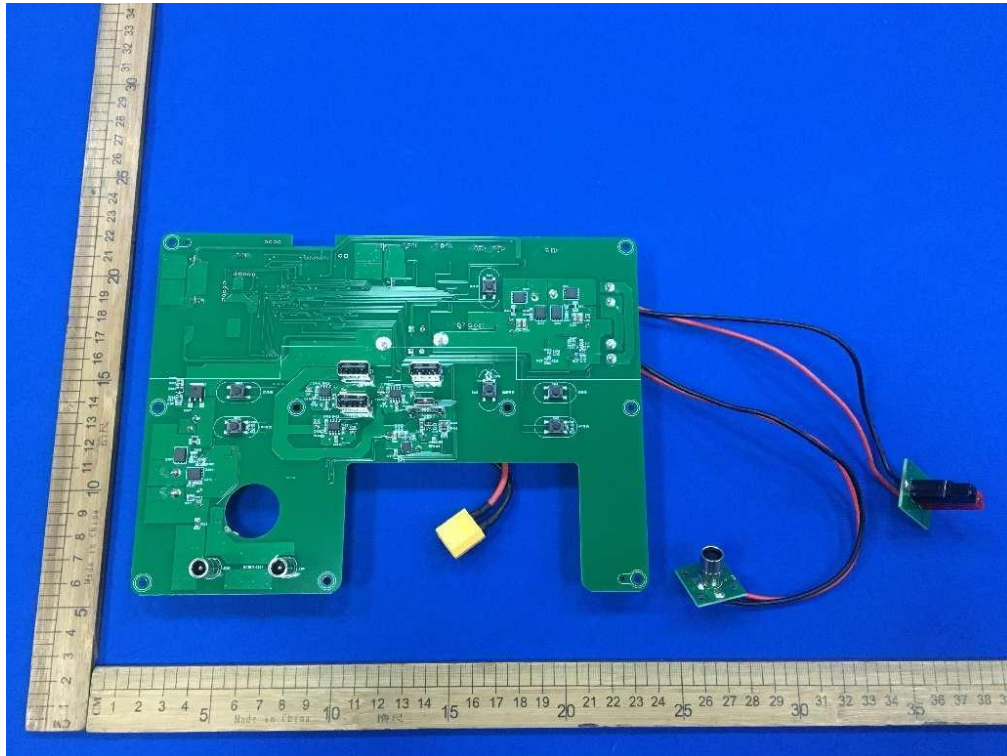
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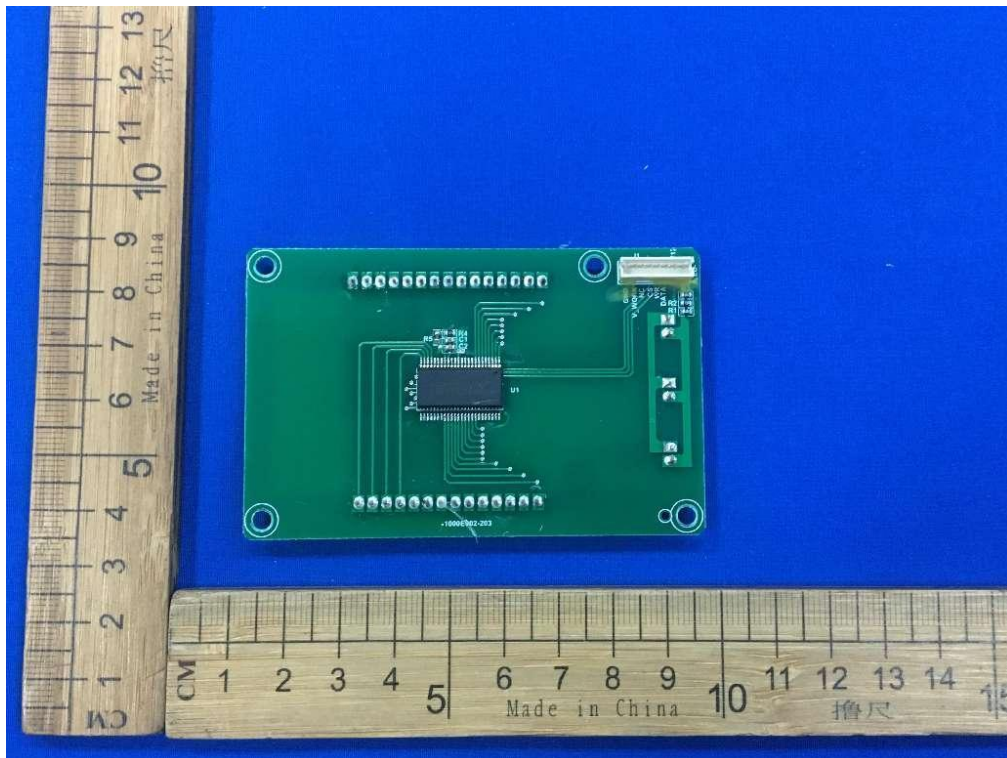
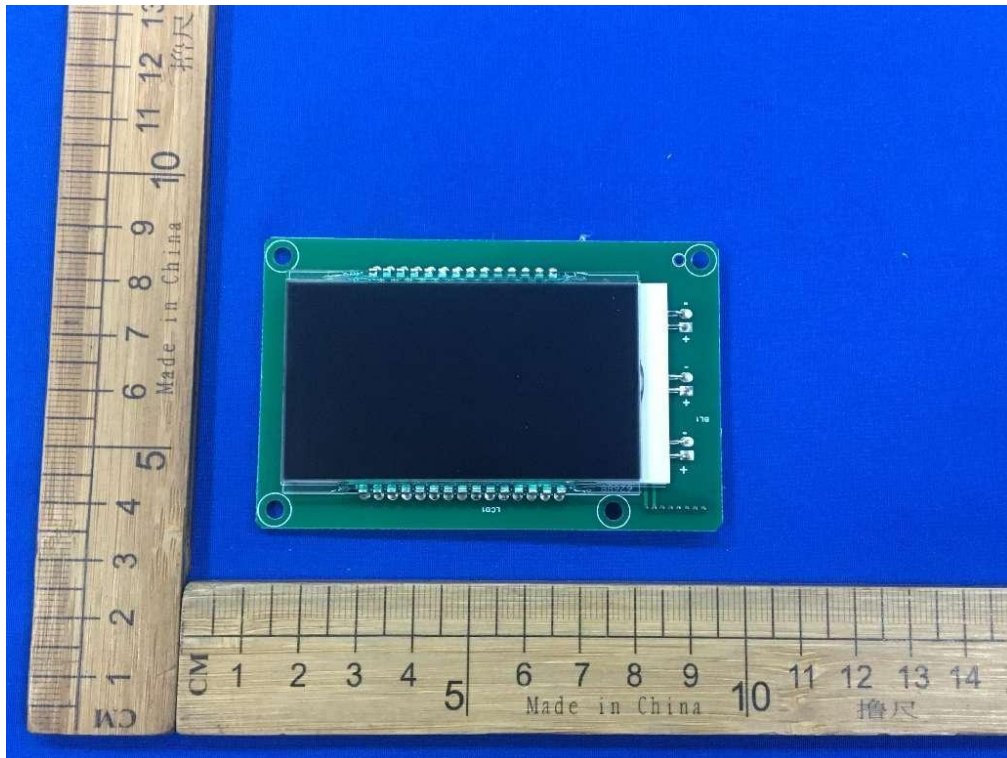
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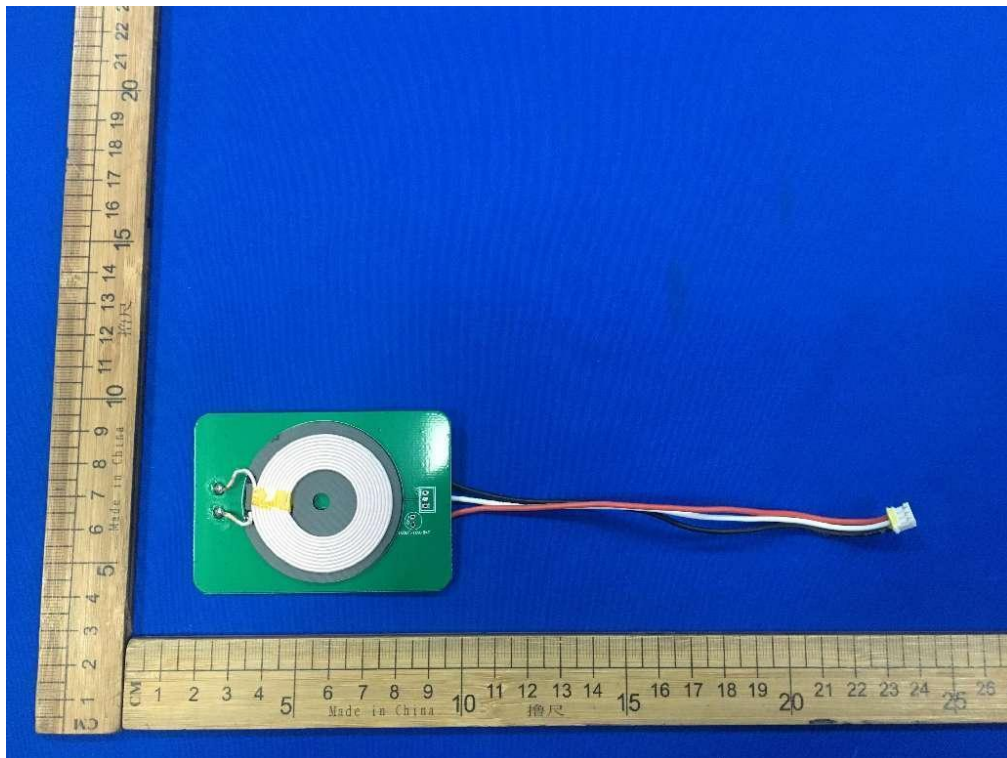
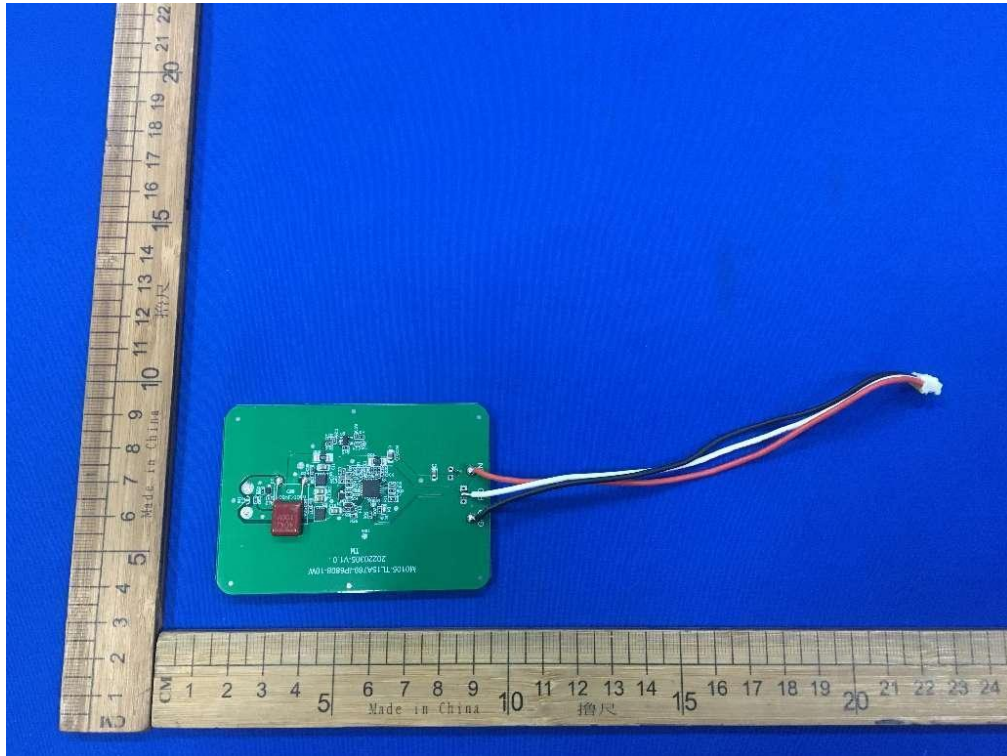
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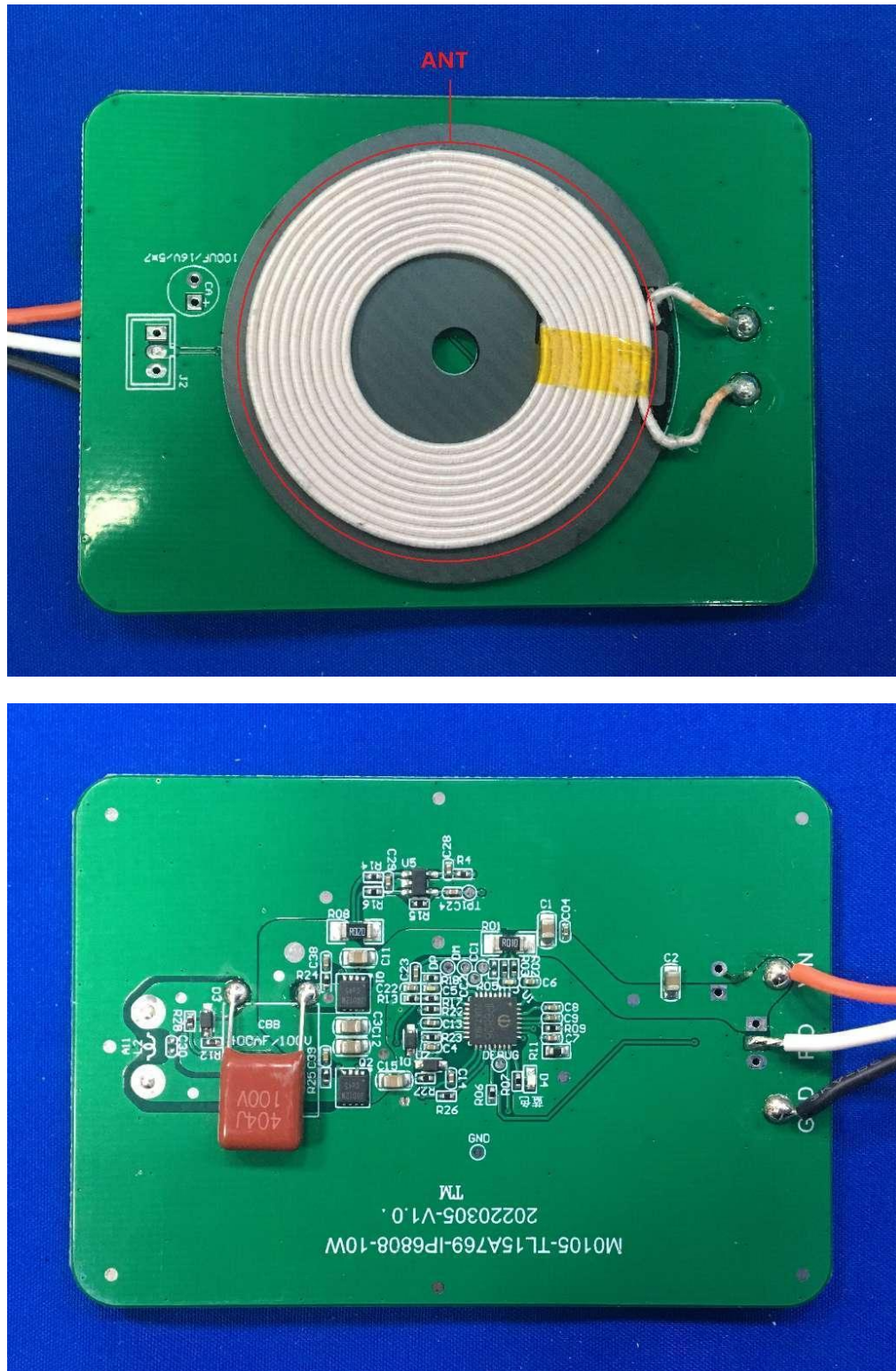
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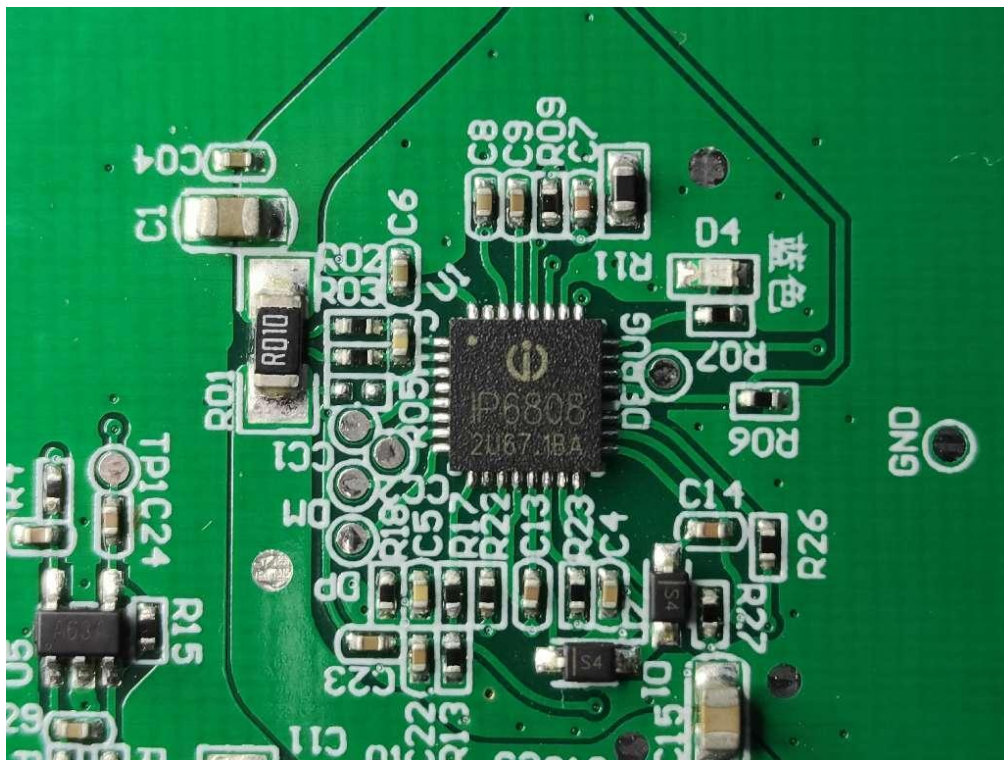
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