

# TEST REPORT

|                                        |                                                                                                                                                      |                                                                                       |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| FCC ID. .... :                         | 2A4DZ-TSB9265                                                                                                                                        |                                                                                       |
| Test Report No..... :                  | TCT221011E021                                                                                                                                        |                                                                                       |
| Date of issue..... :                   | Oct. 20, 2022                                                                                                                                        |                                                                                       |
| Testing laboratory .....               | SHENZHEN TONGCE TESTING LAB                                                                                                                          |                                                                                       |
| Testing location/ address:             | 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China |                                                                                       |
| Applicant's name..... :                | MITA EXPEDITIONS LLC                                                                                                                                 |                                                                                       |
| Address..... :                         | 3821 Bedford Avenue, Brooklyn, New York 11229, United States                                                                                         |                                                                                       |
| Manufacturer's name ... :              | MITA EXPEDITIONS LLC                                                                                                                                 |                                                                                       |
| Address..... :                         | 3821 Bedford Avenue Brooklyn NY 11229 United States Of America                                                                                       |                                                                                       |
| Standard(s) .....                      | FCC CFR Title 47 Part 1.1310<br>KDB 680106 D01 RF Exposure Wireless Charging App v03r01                                                              |                                                                                       |
| Product Name..... :                    | power bank                                                                                                                                           |                                                                                       |
| Trade Mark .....                       | N/A                                                                                                                                                  |                                                                                       |
| Model/Type reference..... :            | TSB9265, TSB9266, TSB9267                                                                                                                            |                                                                                       |
| Rating(s) .....                        | Rechargeable Li-ion Battery DC 3.7V                                                                                                                  |                                                                                       |
| Date of receipt of test item .....     | Oct. 11, 2022                                                                                                                                        |                                                                                       |
| Date (s) of performance of test..... : | Oct. 11, 2022 ~ Oct. 20, 2022                                                                                                                        |                                                                                       |
| Tested by (+signature) ... :           | Rleo LIU                                                                                                                                             |  |
| Check by (+signature).... :            | Beryl ZHAO                                                                                                                                           |  |
| Approved by (+signature):              | Tomsin                                                                                                                                               |  |

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## 1. General Product Information

### 1.1. EUT description

|                             |                                     |
|-----------------------------|-------------------------------------|
| Product Name.....:          | power bank                          |
| Model/Type reference.....:  | TSB9265                             |
| Sample Number.....:         | TCT221011E020-0101                  |
| Operation Frequency .....   | 114.12KHz ~ 187.26 KHz              |
| Modulation Technology ..... | Load modulation                     |
| Max. Wireless Output Power: | 15W                                 |
| Antenna Type.....:          | Inductive loop coil Antenna         |
| Rating(s).....:             | Rechargeable Li-ion Battery DC 3.7V |

### 1.2. Model(s) list

| No.          | Model No.        | Tested with                         |
|--------------|------------------|-------------------------------------|
| 1            | TSB9265          | <input checked="" type="checkbox"/> |
| Other models | TSB9266, TSB9267 | <input type="checkbox"/>            |

Note: TSB9265 is tested model, other models are derivative models. The models are identical in circuit and PCB layout, only different on the model names. So the test data of TSB9265 can represent the remaining models.

## 2. General Information

### 2.1. Test environment and mode

| Operating Environment:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                     |                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Conducted Emission                                                                                                  | Radiated Emission                                              |
| Temperature:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 25.0 °C                                                                                                             | 25.0 °C                                                        |
| Voltage:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC 20V                                                                                                              | DC 5V                                                          |
| Humidity:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 55 % RH                                                                                                             | 55 % RH                                                        |
| Atmospheric Pressure:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1010 mbar                                                                                                           | 1010 mbar                                                      |
| Test Mode:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                     |                                                                |
| AC mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Mode1                                                                                                               |                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Keep the EUT in max. wireless output power(5W)+full load(10W)                                                       |                                                                |
| Internal Battery Mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Mode2                                                                                                               | Mode3                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Keep the EUT in max. wireless output power(15W)                                                                     | Keep the EUT in max. wireless output power(5W) +full load(10W) |
| Remark                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | All modes have been tested. The worst mode (Mode 1) reported for Conducted emission test and Radiated emission test |                                                                |
| The sample was placed 0.8m for the measurement below 1GHz above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case( Z axis) are shown in Test Results of the following pages. |                                                                                                                     |                                                                |

### 3. Facilities and Accreditations

#### 3.1. Facilities

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

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

#### 3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

## 4. Technical Requirements Specification

### 4.1. Requirements

According to the item 5 of KDB 680106 D01 RF Exposure Wireless Charging App v03r01:

- (1) Power transfer frequency is less than 1 MHz.  
Yes
- (2) Output power from each primary coil is less than or equal to 15 watts.  
Yes
- (3) The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.  
Yes
- (4) Client device is placed directly in contact with the transmitter.  
Yes
- (5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).  
No
- (6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.  
Yes

### Limits

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

| Frequency range (MHz)                                   | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|---------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (A) Limits for Occupational/Controlled Exposures        |                               |                               |                                     |                          |
| 0.3-3.0                                                 | 614                           | 1.63                          | *(100)                              | 6                        |
| 3.0-30                                                  | 1842/f                        | 4.89/f                        | *(900/f <sup>2</sup> )              | 6                        |
| 30-300                                                  | 61.4                          | 0.163                         | 1.0                                 | 6                        |
| 300-1500                                                | /                             | /                             | f/300                               | 6                        |
| 1500-100,000                                            | /                             | /                             | 5                                   | 6                        |
| (B) Limits for General Population/Uncontrolled Exposure |                               |                               |                                     |                          |
| 0.3-1.34                                                | 614                           | 1.63                          | *(100)                              | 30                       |
| 1.34-30                                                 | 824/f                         | 2.19/f                        | *(180/f <sup>2</sup> )              | 30                       |
| 30-300                                                  | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300-1500                                                | /                             | /                             | f/1500                              | 30                       |
| 1500-100,000                                            | /                             | /                             | 1.0                                 | 30                       |

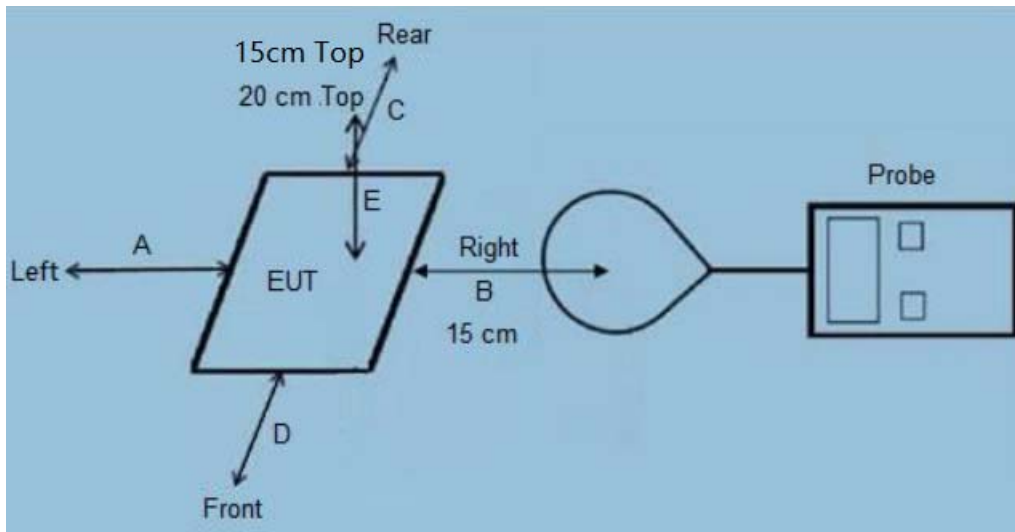
F=frequency in MHz

\*=Plane-wave equivalent power density

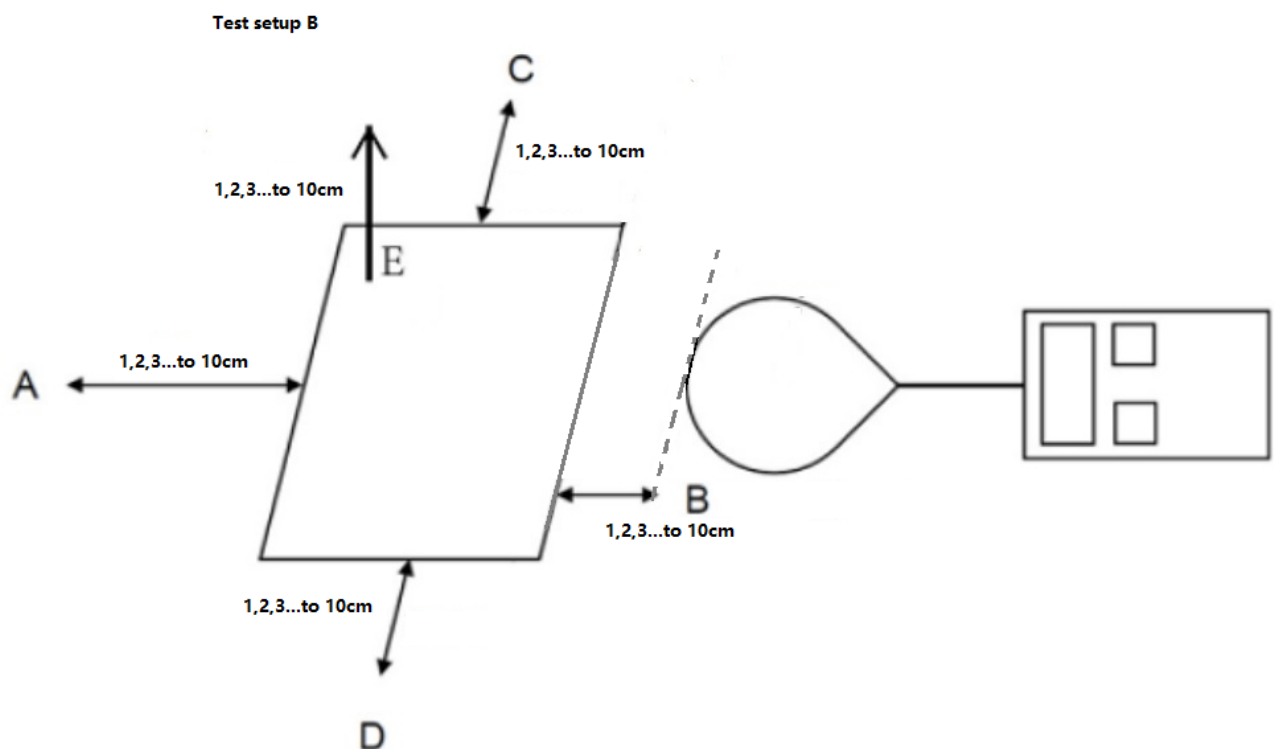
RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

## 4.2. Test Setup

A:



B:



### 4.3. Test Procedure

- 1) The RF exposure test was performed in an echoic chamber;
- 2) The measurement probe was placed at test distance(15 cm from edges, 20 cm and 15cm from top) Which is between the edge of the charger and the geometric center of probe, for test setup A;
- 3) In addition to what is described in KDB 680106 D01, please measure and provide magnetic and electrical field strength at a distance 10cm to 1cm at 1cm iteration, i.e. at a distance of 10cm, 9cm, 8cm, ..... 1cm. Which is between the edge of the charger and the edge of of probe, for test setup B;
- 4) The highest emission level was recorded and compared with limit as soon as measurement of each points (A,B, C,D, E)were completed;
- 5) The EUT was measured according to the dictates of KDB680106D01v03; And KDB Tracking Number 671578 ; TCB Workshop, October 2018, 5.2 RF Exposure Procedures

Remark: The EUT's test position A, B,C, D and E is valid for the E and H field measurements.

### 4.4. Test Instruments List

| Equipment                            | Manufacturer | Model No. | Serial No.       | Calibration Due |
|--------------------------------------|--------------|-----------|------------------|-----------------|
| Electric and Magnetic Field Analyzer | Narda        | EHP-200A  | 180ZX20511       | Feb. 24, 2023   |
| 5W/7.5W/10W/15W Load                 | /            | /         | /                | /               |
| Adapter                              | JD           | JD-050200 | 2012010907576735 | /               |

## 4.5. Test Result

Note: EUT mode: wireless output 15 W

Test Result for Test setup A:

Note: Internal battery power mode

E-Filed Strength at (15 cm from edges A,B,C,D, 20 cm and 15cm from top E) surrounding the EUT (V/m)

| Charging Load<br>Worse case | Test<br>Position A<br>(V/m) | Test<br>Position B<br>(V/m) | Test<br>Position C<br>(V/m) | Test<br>Position D<br>(V/m) | Test<br>Position E<br>(V/m)20cm | Test<br>Position E<br>(V/m)15cm | Limits<br>(V/m) |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------------|---------------------------------|-----------------|
| <5%                         | 1.52                        | 1.66                        | 1.71                        | 1.82                        | 1.57                            | 1.75                            | 614             |
| 50%                         | 1.38                        | 1.60                        | 1.62                        | 1.71                        | 1.52                            | 1.70                            | 614             |
| >90 %                       | 1.33                        | 1.42                        | 1.53                        | 1.56                        | 1.48                            | 1.67                            | 614             |

H-Filed Strength at (15 cm from edges A,B,C,D, 20 cm and 15cm from top E) surrounding the EUT (A/m)

| Charging Load<br>Worse case | Test<br>Position A<br>(A/m) | Test<br>Position B<br>(A/m) | Test<br>Position C<br>(A/m) | Test<br>Position D<br>(A/m) | Test<br>Position E<br>(A/m)20cm | Test<br>Position E<br>(A/m)15cm | Limits<br>(A/m) |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------------|---------------------------------|-----------------|
| <5%                         | 0.204                       | 0.197                       | 0.205                       | 0.202                       | 0.192                           | 0.198                           | 1.63            |
| 50%                         | 0.197                       | 0.193                       | 0.197                       | 0.190                       | 0.188                           | 0.190                           | 1.63            |
| >90 %                       | 0.198                       | 0.180                       | 0.195                       | 0.193                       | 0.184                           | 0.185                           | 1.63            |

**Note: AC power in mode**

**E-Filed Strength at (15 cm from edges A,B,C,D, 20 cm and 15cm from top E) surrounding the EUT (V/m)**

| Charging Load<br>Worse case | Test<br>Position A<br>(V/m) | Test<br>Position B<br>(V/m) | Test<br>Position C<br>(V/m) | Test<br>Position D<br>(V/m) | Test<br>Position E<br>(V/m)20cm | Test<br>Position E<br>(V/m)15cm | Limits<br>(V/m) |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------------|---------------------------------|-----------------|
| <5%                         | 1.55                        | 1.65                        | 1.67                        | 1.73                        | 1.50                            | 1.78                            | 614             |
| 50%                         | 1.36                        | 1.60                        | 1.58                        | 1.65                        | 1.47                            | 1.61                            | 614             |
| >90 %                       | 1.30                        | 1.38                        | 1.50                        | 1.57                        | 1.45                            | 1.62                            | 614             |

**H-Filed Strength at (15 cm from edges A,B,C,D, 20 cm and 15cm from top E) surrounding the EUT (A/m)**

| Charging Load<br>Worse case | Test<br>Position<br>A(A/m) | Test<br>Position<br>B(A/m) | Test<br>Position<br>C(A/m) | Test<br>Position<br>D(A/m) | Test<br>Position<br>E(A/m)20cm | Test<br>Position<br>E(A/m)15cm | Limits<br>(A/m) |
|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------------------|--------------------------------|-----------------|
| <5%                         | 0.204                      | 0.198                      | 0.197                      | 0.199                      | 0.192                          | 0.200                          | 1.63            |
| 50%                         | 0.197                      | 0.189                      | 0.199                      | 0.190                      | 0.187                          | 0.194                          | 1.63            |
| >90 %                       | 0.195                      | 0.175                      | 0.195                      | 0.191                      | 0.180                          | 0.195                          | 1.63            |

## Test Result for Test setup B:

Note: internal battery power mode is worse case , and only worse case is reported.

<5% ,50% ,>90% load all have been tested ,only worse case Max load (<5%) is reported.

**E-Filed Strength at (distance 10cm to 1cm at 1cm iteration, i.e. at a distance of 10cm, 9cm, 8cm, ..... 1cm, Which is between the edge of the charger and the edge of of probe,) surrounding the EUT (V/m)**

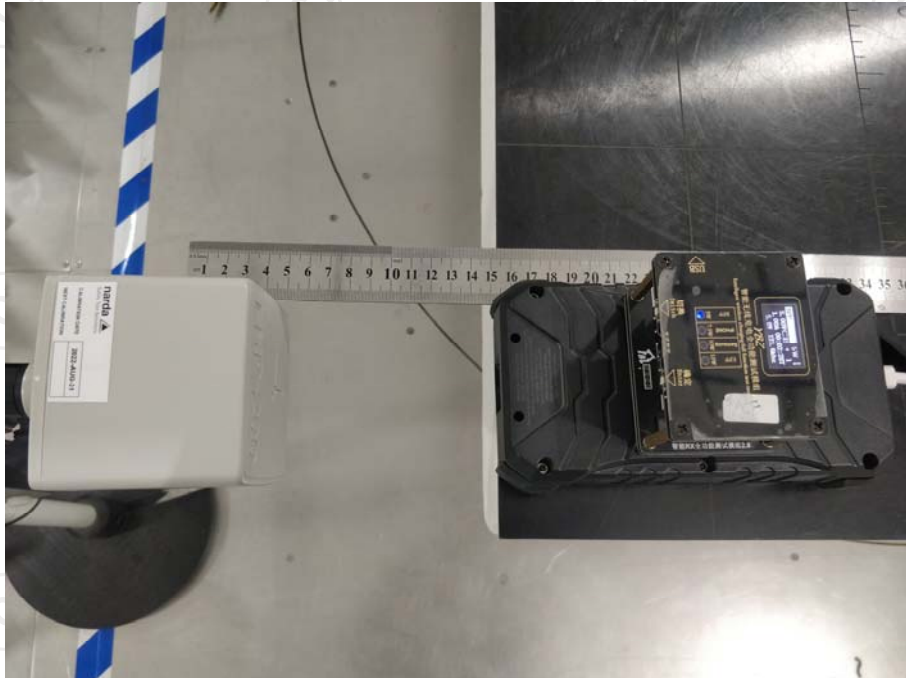
| Test distance (cm) | Test Position A(V/m) | Test Position B(V/m) | Test Position C(V/m) | Test Position D(V/m) | Test Position E(V/m) | Limits (V/m) |
|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------------|
| 1                  | 2.40                 | 2.53                 | 2.42                 | 2.60                 | 2.39                 | 614          |
| 2                  | 2.23                 | 2.39                 | 2.34                 | 2.37                 | 2.23                 | 614          |
| 3                  | 2.16                 | 2.33                 | 2.24                 | 2.39                 | 2.23                 | 614          |
| 4                  | 2.10                 | 2.30                 | 2.21                 | 2.29                 | 2.13                 | 614          |
| 5                  | 1.16                 | 2.17                 | 2.09                 | 2.15                 | 2.03                 | 614          |
| 6                  | 1.91                 | 2.12                 | 2.09                 | 2.12                 | 1.97                 | 614          |
| 7                  | 1.86                 | 2.15                 | 2.00                 | 2.11                 | 1.98                 | 614          |
| 8                  | 1.82                 | 2.08                 | 1.97                 | 2.06                 | 1.94                 | 614          |
| 9                  | 1.81                 | 1.99                 | 1.88                 | 2.04                 | 1.89                 | 614          |
| 10                 | 1.77                 | 2.05                 | 1.94                 | 2.08                 | 1.90                 | 614          |

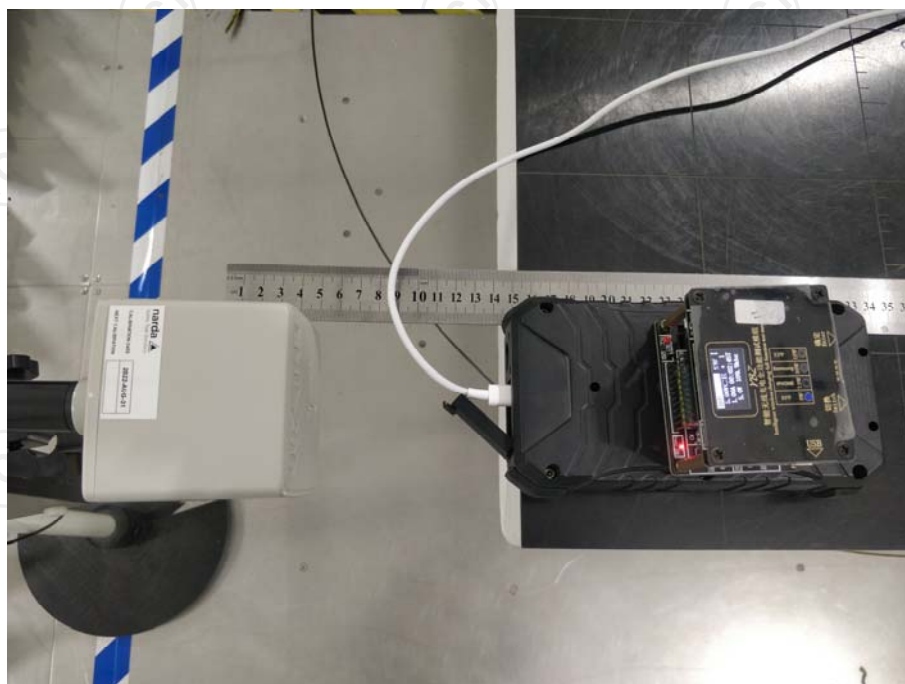
**H-Filed Strength at (distance 10cm to 1cm at 1cm iteration, i.e. at a distance of 10cm, 9cm, 8cm, ..... 1cm, Which is between the edge of the charger and the edge of of probe,) surrounding the EUT (A/m)**

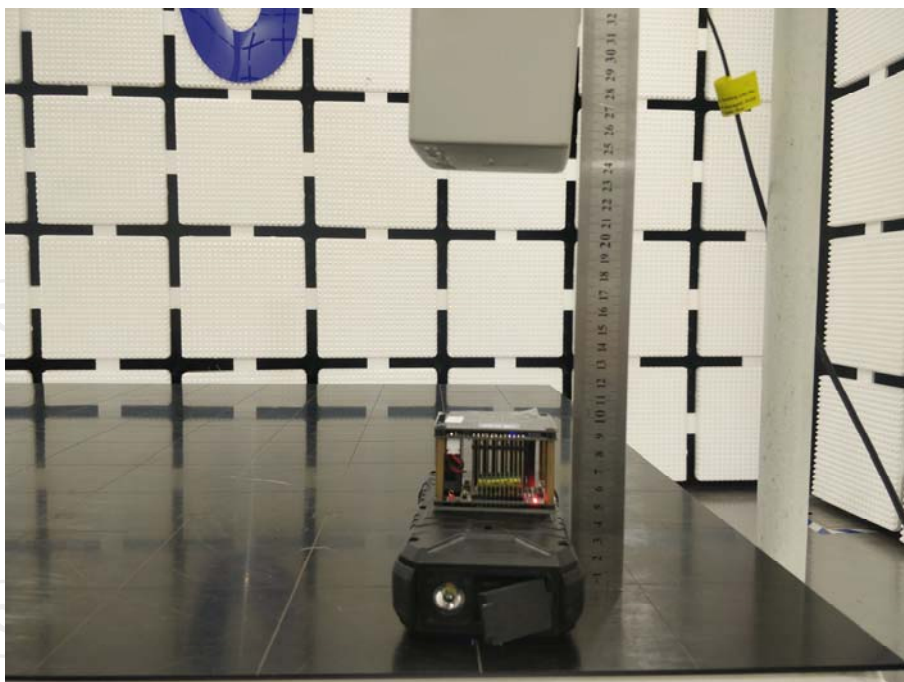
| Test distance (cm) | Test Position A(A/m) | Test Position B(A/m) | Test Position C(A/m) | Test Position D(A/m) | Test Position E(A/m) | Limits (A/m) |
|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------------|
| 1                  | 0.375                | 0.355                | 0.345                | 0.342                | 0.354                | 1.63         |
| 2                  | 0.343                | 0.318                | 0.312                | 0.307                | 0.305                | 1.63         |
| 3                  | 0.306                | 0.295                | 0.297                | 0.289                | 0.287                | 1.63         |
| 4                  | 0.287                | 0.267                | 0.266                | 0.257                | 0.262                | 1.63         |
| 5                  | 0.264                | 0.246                | 0.254                | 0.242                | 0.245                | 1.63         |
| 6                  | 0.255                | 0.232                | 0.245                | 0.230                | 0.233                | 1.63         |
| 7                  | 0.248                | 0.223                | 0.238                | 0.226                | 0.222                | 1.63         |
| 8                  | 0.226                | 0.204                | 0.225                | 0.208                | 0.206                | 1.63         |
| 9                  | 0.219                | 0.199                | 0.219                | 0.205                | 0.198                | 1.63         |
| 10                 | 0.210                | 0.187                | 0.206                | 0.197                | 0.196                | 1.63         |

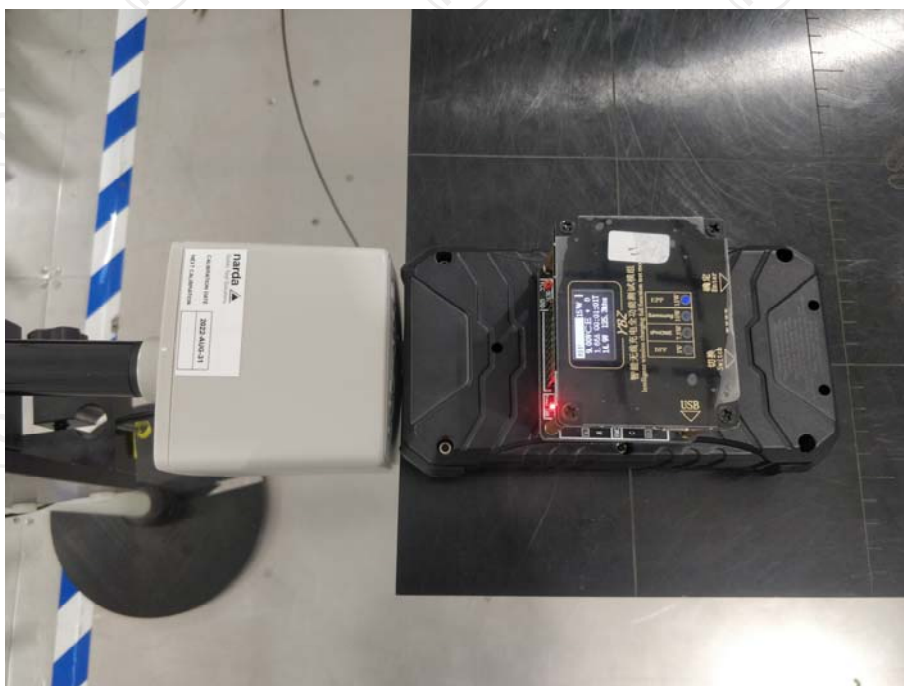
## 4.6. Test Set-up Photo

AC in mode

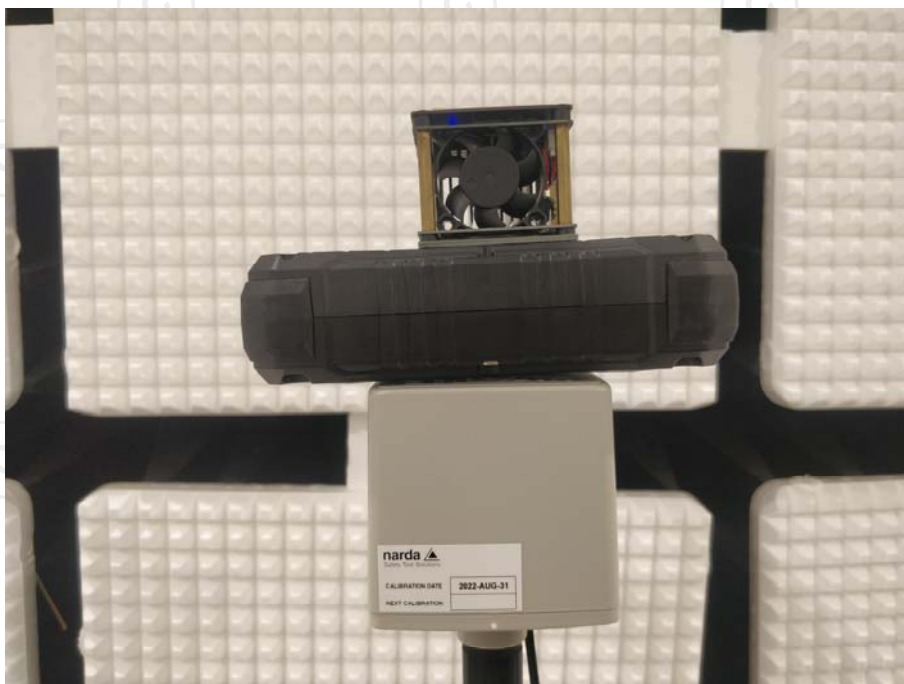
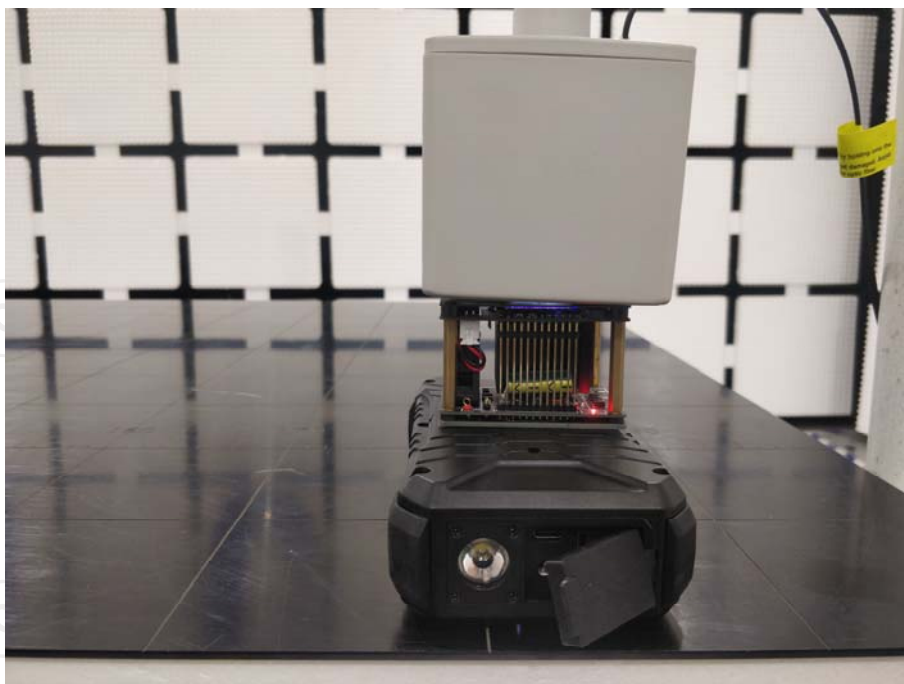












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