

# MPE Test Report

**FCC ID: 2AGR4-102641-001**

**Report No.** : DSP26030807-2H

**Applicant** : The Gem Group, Inc.

**Product Name** : MAGNETIX RCS RECYCLED PLASTIC 5.000 MAH MAGNETIC  
POWERBANK - BLACK

**Model Name** : 102641-001

**Test Standard** : FCC CFR 47 PART 1, 1.1310

**Date of Issue** : 2026-03-27

**Shenzhen CCUT Quality Technology Co., Ltd.**

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Guangdong, China; (Tel.:+86-755-23406590 website: www.ccuttest.com)

This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen CCUT Quality Technology Co., Ltd.

### Test Report Basic Information

|                                                                                                                                                                                                                                                                                            |                                                                                     |              |                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------|
| <b>Applicant</b> .....:                                                                                                                                                                                                                                                                    | The Gem Group, Inc.                                                                 |              |                                                                                       |
| <b>Address of Applicant</b> .....:                                                                                                                                                                                                                                                         | 9 International Way, Lawrence Massachusetts United States 01843                     |              |                                                                                       |
| <b>Manufacturer</b> .....:                                                                                                                                                                                                                                                                 | The Gem Group, Inc.                                                                 |              |                                                                                       |
| <b>Address of Manufacturer</b> .....:                                                                                                                                                                                                                                                      | 9 International Way, Lawrence Massachusetts United States 01843                     |              |                                                                                       |
| <b>Product Name</b> .....:                                                                                                                                                                                                                                                                 | MAGNETIX RCS RECYCLED PLASTIC 5.000 MAH MAGNETIC POWERBANK - BLACK                  |              |                                                                                       |
| <b>Brand Name</b> .....:                                                                                                                                                                                                                                                                   | -                                                                                   |              |                                                                                       |
| <b>Main Model</b> .....:                                                                                                                                                                                                                                                                   | 102641-001                                                                          |              |                                                                                       |
| <b>Series Models</b> .....:                                                                                                                                                                                                                                                                | -                                                                                   |              |                                                                                       |
| <b>Test Standard</b> .....:                                                                                                                                                                                                                                                                | FCC CFR 47 PART 1, 1.1310<br>KDB 680106 D01 Wireless Power Transfer v04             |              |                                                                                       |
| <b>Date of Test</b> .....                                                                                                                                                                                                                                                                  | 2026-03-19 to 2026-03-23                                                            |              |                                                                                       |
| <b>Test Result</b> .....:                                                                                                                                                                                                                                                                  | PASS                                                                                |              |                                                                                       |
| <b>Tested By</b> .....                                                                                                                                                                                                                                                                     |  | (Colin Chen) |  |
| <b>Reviewed By</b> .....:                                                                                                                                                                                                                                                                  |  | (Lorzix Luo) |                                                                                       |
| <b>Authorized Signatory</b> .....:                                                                                                                                                                                                                                                         |  | (Lahm Peng)  |                                                                                       |
| <p>Note : This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen CCUT Quality Technology Co., Ltd.. All test data presented in this test report is only applicable to presented test sample.</p> |                                                                                     |              |                                                                                       |

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## CONTENTS

|                                           |           |
|-------------------------------------------|-----------|
| <b>1. General Information.....</b>        | <b>5</b>  |
| 1.1 Product Information .....             | 5         |
| 1.2 Test Setup Information.....           | 6         |
| 1.3 Test Facilities.....                  | 7         |
| 1.4 List of Measurement Instruments ..... | 7         |
| 1.5 Measurement Uncertainty .....         | 7         |
| <b>2. RF Exposure.....</b>                | <b>8</b>  |
| 2.1 Standard and Limit.....               | 8         |
| 2.2 Test Procedures .....                 | 8         |
| 2.3 Test Setup Block Diagram.....         | 9         |
| 2.4 Test Data and Results .....           | 10        |
| <b>Annex A. Test Photos.....</b>          | <b>14</b> |

### Revision History

| Revision | Issue Date | Description     | Revised By |
|----------|------------|-----------------|------------|
| V1.0     | 2026-03-27 | Initial Release | Lahm Peng  |
|          |            |                 |            |
|          |            |                 |            |
|          |            |                 |            |
|          |            |                 |            |

## 1. General Information

### 1.1 Product Information

|                                                                                           |                                                                                               |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Product Name:                                                                             | MAGNETIX RCS RECYCLED PLASTIC 5.000 MAH MAGNETIC POWERBANK - BLACK                            |
| Trade Name:                                                                               | -                                                                                             |
| Test Model:                                                                               | 102641-001                                                                                    |
| Series Models:                                                                            | -                                                                                             |
| Rated Voltage:                                                                            | USB-C Port Input: DC 5V=2.4A<br>USB-C Port Output: DC 5V=2.4A<br>Wireless Charging Output: 5W |
| Battery:                                                                                  | 19.25Wh (5000mAh, 3.85V)                                                                      |
| Test Sample No:                                                                           | DSP26030807-1                                                                                 |
| Hardware Version:                                                                         | V1.0                                                                                          |
| Software Version:                                                                         | V1.0                                                                                          |
| Note 1: The test data is gathered from a production sample, provided by the manufacturer. |                                                                                               |

| Wireless Specification |                                                                                                                                    |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Wireless Standard:     | WPC (QI)                                                                                                                           |
| Operating Frequency:   | Wireless charging Output(Phone):110.5kHz-205kHz,                                                                                   |
| Modulation:            | FSK                                                                                                                                |
| Antenna Gain:          | 0dBi                                                                                                                               |
| Type of Antenna:       | Coil Antenna                                                                                                                       |
| Type of Device:        | <input checked="" type="checkbox"/> Portable Device <input type="checkbox"/> Mobile Device <input type="checkbox"/> Modular Device |

## 1.2 Test Setup Information

| List of Test Modes                                                                                                                                          |                                 |                     |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------|----------------------|
| Test Mode                                                                                                                                                   | Description                     |                     | Remark               |
| TM1                                                                                                                                                         | Wireless charging 5W            |                     | -                    |
| TM2                                                                                                                                                         | Wireless charging 5W + Charging |                     | -                    |
| Note: All modes of the main model and accessory models mentioned above have been tested. The report only shows the worst modes of the main model: TM1 data. |                                 |                     |                      |
| List and Details of Auxiliary Cable                                                                                                                         |                                 |                     |                      |
| Description                                                                                                                                                 | Length (cm)                     | Shielded/Unshielded | With/Without Ferrite |
| USB                                                                                                                                                         | 100cm                           | Unshielded          | Without Ferrite      |
| -                                                                                                                                                           | -                               | -                   | -                    |
| List and Details of Auxiliary Equipment                                                                                                                     |                                 |                     |                      |
| Description                                                                                                                                                 | Manufacturer                    | Model               | Serial Number        |
| Phone                                                                                                                                                       | iPhone                          | iPhone 12pro        | -                    |
| Adapter                                                                                                                                                     | XIAOMI                          | MDY-14-EU           | 45461/A62505U102607S |

### 1.3 Test Facilities

|                        |                                                                                                                                                                              |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Laboratory Name:       | <b>Shenzhen CCUT Quality Technology Co., Ltd.</b><br>1F, Building 35, Changxing Technology Industrial Park, Yutang Street,<br>Guangming District, Shenzhen, Guangdong, China |
| CNAS Laboratory No.:   | L18863                                                                                                                                                                       |
| A2LA Certificate No.:  | 6983.01                                                                                                                                                                      |
| FCC Registration No:   | 583813                                                                                                                                                                       |
| ISED Registration No.: | CN0164                                                                                                                                                                       |

### 1.4 List of Measurement Instruments

| Description                      | Manufacturer | Model   | Serial Number | Cal. Date  | Due. Date  |
|----------------------------------|--------------|---------|---------------|------------|------------|
| Electromagnetic radiation tester | WAVECONTROL  | SMP3    | 23SL0158      | 2025-07-16 | 2026-07-15 |
| Electromagnetic field probe      | WAVECONTROL  | WP400-3 | 24WP240067    | 2025-07-16 | 2026-07-15 |
| Test Software                    | WAVECONTROL  | SMP     | N/A           | N/A        | N/A        |

Probe radius: 1.65CM

### 1.5 Measurement Uncertainty

| Test Item | Frequency Range | Uncertainty |
|-----------|-----------------|-------------|
| E-field   | 10Hz ~ 100kHz   | ± 2.6%      |
|           | 100kHz ~ 400kHz | ± 4.9%      |
| H-field   | 10Hz ~ 3kHz     | ± 2.5%      |
|           | 3kHz ~ 10kHz    | ± 2.6%      |
|           | 10kHz ~ 100kHz  | ± 4.3%      |
|           | 100kHz ~ 400kHz | ± 5.0%      |

## 2. RF Exposure

### 2.1 Standard and Limit

| 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                       |

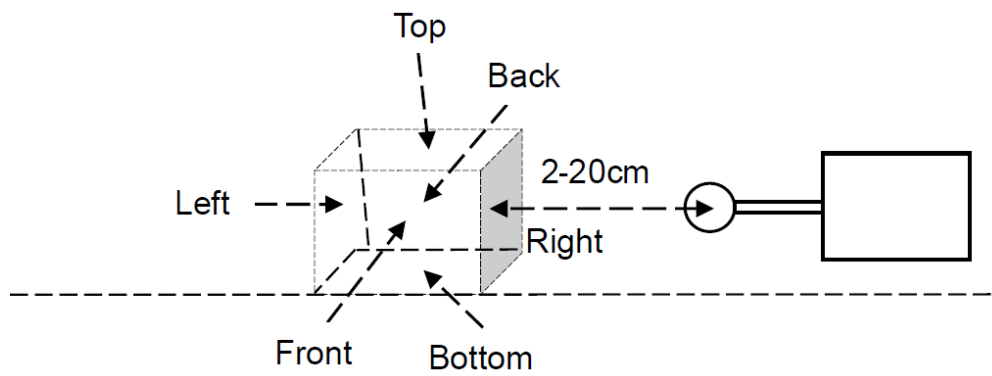
f = frequency in MHz

### 2.2 Test Procedures

The EUT was measured according to the KDB 680106 D01v04.

- 1) The RF exposure test was performed in an anechoic chamber.
- 2) The measurement probe was placed at test distance(2~20cm) which is between the edge of the wireless charger and the geometric center of probe for portable exposure, and the measurement probe was placed at test distance(20~24cm) which is between the edge of the wireless charger and the geometric center of probe for mobile exposure.
- 3) Choose the worst mode among battery with zero/partial/full charge, then perform measurement.
- 4) The highest emission level was recorded and all sides (A, B, C, D, E, F) were completed.
- 5) Calculate the final E/H-field strength.

## 2.3 Test Setup Block Diagram



Note: Front side = A, Right side = B, Back side = C, Left side = D, Top side = E, Bottom side = F.

## 2.4 Test Data and Results

For portable exposure conditions:

Operating modes with client device (1 %, 50%, 99% battery status of client device) have been tested, only show the data of worst case of battery status of client device.

H-field measurements taken every 2 cm (starting as close to 20 cm as possible) on each side of the device were also evaluated for portable exposure use condition.

Test Mode: TM1(the worst mode)

Transmitter Battery Level: 99%

| Test Distance<br>(cm) | Test Position<br>A(uT) | Test Position<br>B(uT) | Test Position<br>C(uT) | Test Position<br>D(uT) | Test Position<br>E(uT) | Test Position<br>F(uT) |
|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 2                     | 0.941                  | 1.098                  | 1.213                  | 0.567                  | 0.652                  | 0.588                  |
| 4                     | 0.762                  | 0.766                  | 0.652                  | 0.344                  | 0.456                  | 0.543                  |
| 6                     | 0.599                  | 0.511                  | 0.311                  | 0.262                  | 0.321                  | 0.456                  |
| 8                     | 0.376                  | 0.411                  | 0.234                  | 0.158                  | 0.213                  | 0.256                  |
| 10                    | 0.241                  | 0.331                  | 0.111                  | 0.096                  | 0.123                  | 0.121                  |
| 12                    | 0.138                  | 0.213                  | 0.065                  | 0.054                  | 0.076                  | 0.089                  |
| 14                    | 0.098                  | 0.112                  | 0.042                  | 0.042                  | 0.056                  | 0.066                  |
| 16                    | 0.065                  | 0.095                  | 0.031                  | 0.033                  | 0.043                  | 0.043                  |
| 18                    | 0.034                  | 0.065                  | 0.024                  | 0.021                  | 0.031                  | 0.033                  |
| 20                    | 0.018                  | 0.033                  | 0.016                  | 0.015                  | 0.019                  | 0.021                  |

| Test Distance<br>(cm) | Test Position<br>A(V/m) | Test Position<br>B(V/m) | Test Position<br>C(V/m) | Test Position<br>D(V/m) | Test Position<br>E(V/m) | Test Position<br>F(V/m) |
|-----------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| 2                     | 12.55                   | 12.22                   | 11.23                   | 10.55                   | 10.21                   | 10.33                   |
| 4                     | 9.66                    | 9.43                    | 9.21                    | 9.01                    | 8.65                    | 8.88                    |
| 6                     | 8.99                    | 8.66                    | 8.32                    | 7.94                    | 7.65                    | 7.76                    |
| 8                     | 7.39                    | 7.31                    | 7.11                    | 7.10                    | 7.01                    | 7.08                    |
| 10                    | 6.55                    | 6.89                    | 6.12                    | 6.06                    | 6.02                    | 6.04                    |
| 12                    | 6.32                    | 6.37                    | 6.17                    | 5.88                    | 5.63                    | 5.85                    |
| 14                    | 5.87                    | 5.91                    | 5.67                    | 5.21                    | 5.02                    | 5.20                    |
| 16                    | 5.55                    | 5.51                    | 5.21                    | 4.98                    | 4.79                    | 4.93                    |
| 18                    | 5.23                    | 5.21                    | 5.09                    | 4.32                    | 4.25                    | 4.31                    |
| 20                    | 4.68                    | 4.55                    | 4.11                    | 3.98                    | 3.92                    | 3.95                    |

| Test Distance (cm) | Test Position |         |         |         |         |         | Limits (A/m) |
|--------------------|---------------|---------|---------|---------|---------|---------|--------------|
|                    | A (A/m)       | B (A/m) | C (A/m) | D (A/m) | E (A/m) | F (A/m) |              |
| 2                  | 0.753         | 0.878   | 0.970   | 0.454   | 0.522   | 0.470   | 1.63         |
| 4                  | 0.610         | 0.613   | 0.522   | 0.275   | 0.365   | 0.434   | 1.63         |
| 6                  | 0.479         | 0.409   | 0.249   | 0.210   | 0.257   | 0.365   | 1.63         |
| 8                  | 0.301         | 0.329   | 0.187   | 0.126   | 0.170   | 0.205   | 1.63         |
| 10                 | 0.193         | 0.265   | 0.089   | 0.077   | 0.098   | 0.097   | 1.63         |
| 12                 | 0.110         | 0.170   | 0.052   | 0.043   | 0.061   | 0.071   | 1.63         |
| 14                 | 0.078         | 0.090   | 0.034   | 0.034   | 0.045   | 0.053   | 1.63         |
| 16                 | 0.052         | 0.076   | 0.025   | 0.026   | 0.034   | 0.034   | 1.63         |
| 18                 | 0.027         | 0.052   | 0.019   | 0.017   | 0.025   | 0.026   | 1.63         |
| 20                 | 0.014         | 0.026   | 0.013   | 0.012   | 0.015   | 0.017   | 1.63         |

Note: H-field(A/m) = H-field(uT)/1.25.

Using Polynomial order 10, the value of 2 cm and 4 cm can be estimated, and the result of comparison meets the requirements (<30%), therefore, the calculation method is acceptable.

Distance: 2cm

| Test Position       | A     | B     | C     | D     | E     | F     |
|---------------------|-------|-------|-------|-------|-------|-------|
| Valuation (A/m)     | 0.753 | 0.878 | 0.970 | 0.454 | 0.522 | 0.470 |
| Measure Value (A/m) | 0.751 | 0.877 | 0.967 | 0.453 | 0.520 | 0.469 |
| Agreement Ratio (%) | 0.27% | 0.11% | 0.31% | 0.22% | 0.38% | 0.21% |
| Limit (%)           | 30%   | 30%   | 30%   | 30%   | 30%   | 30%   |
| Result              | Pass  | Pass  | Pass  | Pass  | Pass  | Pass  |

| Test Position       | A     | B     | C     | D     | E     | F     |
|---------------------|-------|-------|-------|-------|-------|-------|
| Valuation (V/m)     | 12.55 | 12.22 | 11.23 | 10.55 | 10.21 | 10.33 |
| Measure Value (V/m) | 12.53 | 12.20 | 11.22 | 10.54 | 10.20 | 10.31 |
| Agreement Ratio (%) | 0.16% | 0.16% | 0.09% | 0.09% | 0.10% | 0.19% |
| Limit (%)           | 30%   | 30%   | 30%   | 30%   | 30%   | 30%   |
| Result              | Pass  | Pass  | Pass  | Pass  | Pass  | Pass  |

Distance: 4cm

| Test Position       | A     | B     | C     | D     | E     | F     |
|---------------------|-------|-------|-------|-------|-------|-------|
| Valuation (A/m)     | 0.610 | 0.613 | 0.522 | 0.275 | 0.365 | 0.434 |
| Measure Value (A/m) | 0.609 | 0.612 | 0.521 | 0.274 | 0.364 | 0.433 |
| Agreement Ratio (%) | 0.16% | 0.16% | 0.19% | 0.36% | 0.27% | 0.23% |
| Limit (%)           | 30%   | 30%   | 30%   | 30%   | 30%   | 30%   |
| Result              | Pass  | Pass  | Pass  | Pass  | Pass  | Pass  |

| Test Position       | A     | B     | C     | D     | E     | F     |
|---------------------|-------|-------|-------|-------|-------|-------|
| Valuation (V/m)     | 9.66  | 9.43  | 9.21  | 9.01  | 8.65  | 8.88  |
| Measure Value (V/m) | 9.65  | 9.42  | 9.20  | 9.00  | 8.64  | 8.87  |
| Agreement Ratio (%) | 0.10% | 0.11% | 0.11% | 0.11% | 0.12% | 0.11% |
| Limit (%)           | 30%   | 30%   | 30%   | 30%   | 30%   | 30%   |
| Result              | Pass  | Pass  | Pass  | Pass  | Pass  | Pass  |

Based on the above results, using Polynomial order 10, the value of 0 cm can be estimated as below.

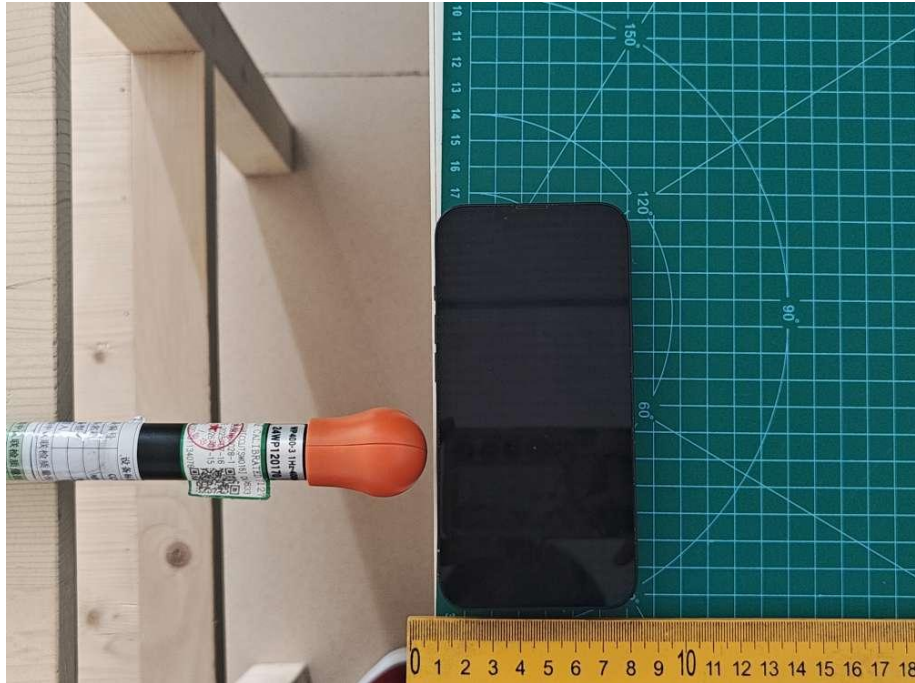
| Test Distance (cm) | Test Position |         |         |         |         |         | Limits (A/m) |
|--------------------|---------------|---------|---------|---------|---------|---------|--------------|
|                    | A (A/m)       | B (A/m) | C (A/m) | D (A/m) | E (A/m) | F (A/m) |              |
| 0                  | 1.40          | 0.89    | 0.41    | 0.98    | 0.60    | 0.64    | 1.63         |

| Test Distance (cm) | Test Position |         |         |         |         |         | Limits (A/m) |
|--------------------|---------------|---------|---------|---------|---------|---------|--------------|
|                    | A (V/m)       | B (V/m) | C (V/m) | D (V/m) | E (V/m) | F (V/m) |              |
| 0                  | 21.66         | 24.79   | 10.32   | 4.42    | 5.21    | 2.62    | 614          |

## Annex A. Test Photos

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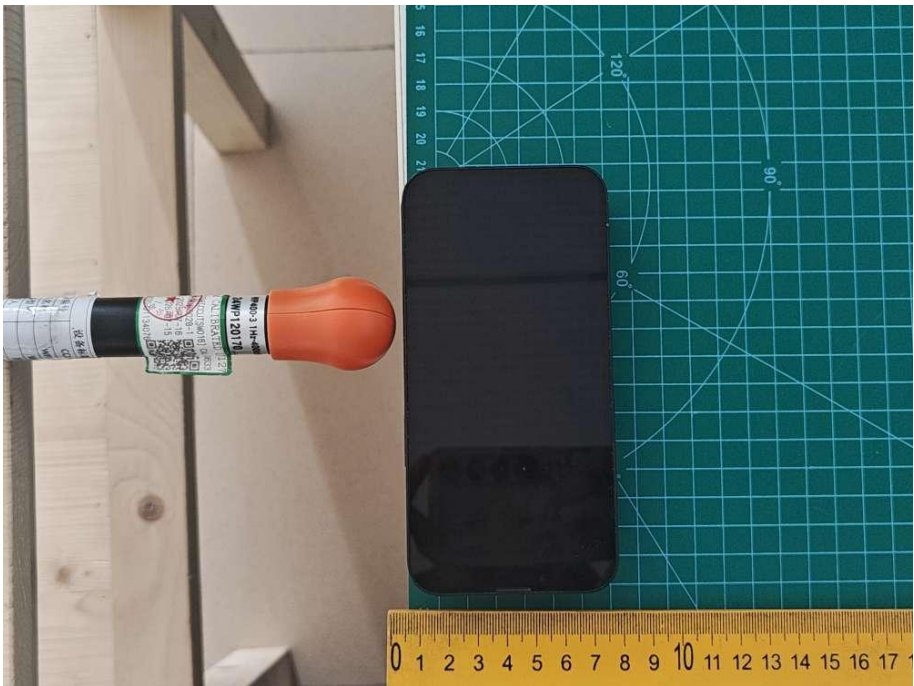
Test View 1



Test View 2



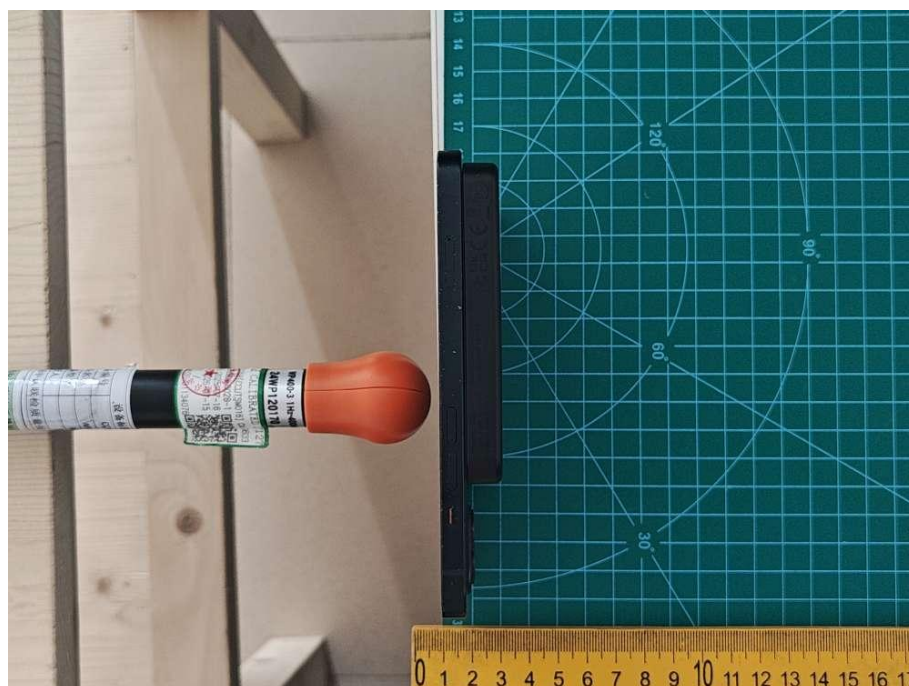
Test View 3



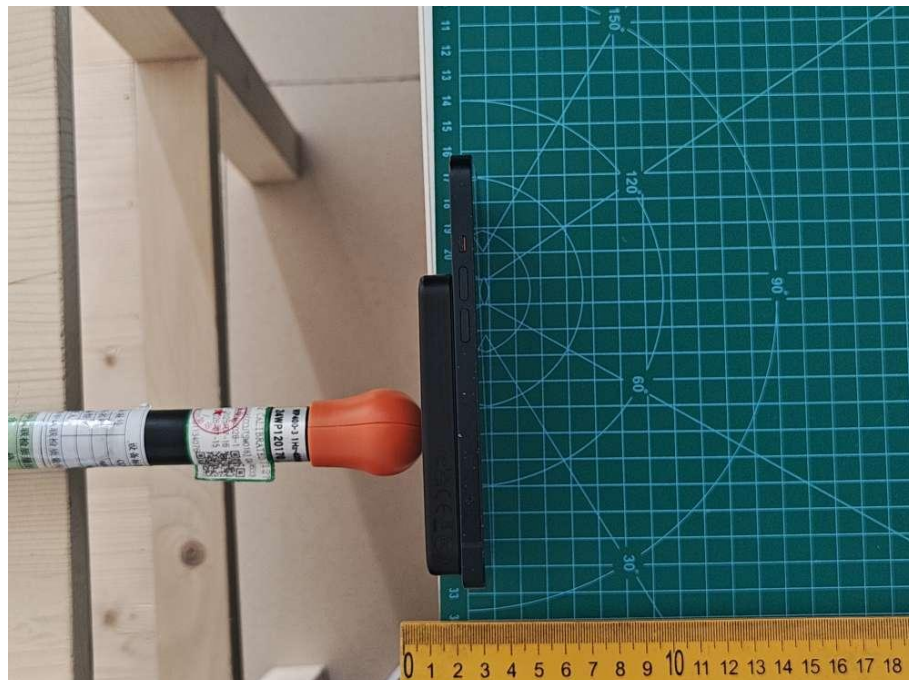
Test View 4



Test View 5



Test View 6



\*\*\*\*\* END OF REPORT \*\*\*\*\*