

# Test Report

**Report No.** : MTi250723006-0201E2

**Date of Issue** : 2025-10-27

**Applicant** : Shenzhen Kerchan Star Technology Co., Ltd

**Product** : wireless charger

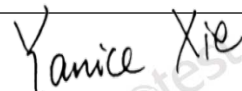
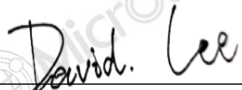
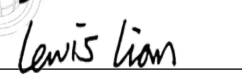
**Model(s)** : KX212

**FCC ID** : 2A7FC-KX212P

**Shenzhen Microtest Co., Ltd.**

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|                                  |                                                                                                               |                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Test Result Certification</b> |                                                                                                               |                                                                                       |
| Applicant                        | Shenzhen Kerchan Star Technology Co., Ltd                                                                     |                                                                                       |
| Applicant Address                | 7th Floor, Building B, Huafeng International Robot Industrial Park, Hangcheng Road, Bao'an District, Shenzhen |                                                                                       |
| Manufacturer                     | Shenzhen Kemei Vision Technology Co.,Ltd                                                                      |                                                                                       |
| Manufacturer Address             | 5F Building B shuangjinhui Industrial Park Fu hai street Yonghe road 8 Fu'yong,Baoan Shenzhen China 518103    |                                                                                       |
| Factory                          | Shenzhen Kemei Vision Technology Co.,Ltd                                                                      |                                                                                       |
| Factory Address                  | 5F Building B shuangjinhui Industrial Park Fu hai street Yonghe road 8 Fu'yong,Baoan Shenzhen China 518103    |                                                                                       |
| <b>Product description</b>       |                                                                                                               |                                                                                       |
| Product name                     | wireless charger                                                                                              |                                                                                       |
| Trademark                        | ANJANK                                                                                                        |                                                                                       |
| Model name                       | KX212                                                                                                         |                                                                                       |
| Series Model(s)                  | N/A                                                                                                           |                                                                                       |
| Standards                        | 47 CFR PART 1, § 1.1310<br>47 CFR PART 2.1093                                                                 |                                                                                       |
| Test Method                      | KDB 680106 D01 Wireless Power Transfer v04                                                                    |                                                                                       |
| <b>Testing Information</b>       |                                                                                                               |                                                                                       |
| Date of test                     | 2025-08-26 to 2025-10-23                                                                                      |                                                                                       |
| Test result                      | Pass                                                                                                          |                                                                                       |
| Prepared by:                     | Yanice Xie                                                                                                    |  |
| Reviewed by:                     | David Lee                                                                                                     |  |
| Approved by:                     | Lewis Lian                                                                                                    |  |

## 1 General Description

### 1.1 Description of the EUT

|                          |                                                                                                                                                                                  |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name:            | wireless charger                                                                                                                                                                 |
| Model name:              | KX212                                                                                                                                                                            |
| Series Model(s):         | N/A                                                                                                                                                                              |
| Model difference:        | N/A                                                                                                                                                                              |
| Electrical rating:       | Lithium battery energy:5000mAh 3.85Vdc /19.25Wh<br>Rated capacity:5000 mAh/USB-C Input: DC 5V3A, 9V2A, 12V1.5A<br>USB-C Output/Wireless output: :5W/7.5W/10W<br>Total output:12W |
| Accessories:             | 1.Adaptor:<br>Model No.:HX18WQX-A001-AU<br>Input:100-240V~50/60Hz 0.5A Max<br>Output:5.0V= 3.0A, 9.0A= 2.0A,12.0V= 1.5A 18.0W Max<br>2.Cable:<br>USB-C to USB-C *1               |
| Hardware version:        | V1.0                                                                                                                                                                             |
| Software version:        | V1.0                                                                                                                                                                             |
| Test sample(s) number:   | MTi250723006-02-R001                                                                                                                                                             |
| <b>RF specification:</b> |                                                                                                                                                                                  |
| Operation frequency:     | 115-205kHz                                                                                                                                                                       |
| Modulation type:         | ASK                                                                                                                                                                              |
| Antenna type:            | Coil                                                                                                                                                                             |

**1.2 Description of test modes**

All the test modes were carried out with the EUT in normal operation, the final test mode of the EUT was the worst test mode for emission test, which was shown in this report and defined as:

| No.   | Emission test modes          |
|-------|------------------------------|
| Mode1 | Charging+Wireless Output(5W) |
| Mode2 | Wireless Output(5W)          |
| Mode3 | Wireless Output(7.5W)        |
| Mode4 | Wireless Output(10W)         |
| Mode5 | Stand by                     |

**1.3 Description of support units**

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Support equipment list |            |            |              |
|------------------------|------------|------------|--------------|
| Description            | Model      | Serial No. | Manufacturer |
| Mobile phone           | S9+        | /          | Samsung      |
| Support cable list     |            |            |              |
| Description            | Length (m) | From       | To           |
| /                      | /          | /          | /            |

**2 Measurement uncertainty**

| Parameter                               | Expanded Uncertainty |
|-----------------------------------------|----------------------|
| Magnetic field measurements(3kHz~10MHz) | $\pm 14.8\%$         |
| Electric field measurements(3kHz~10MHz) | $\pm 17.5\%$         |

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

**3 Test facilities and accreditations****3.1 Test laboratory**

|                        |                                                                                                                                       |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Test laboratory:       | Shenzhen Microtest Co., Ltd.                                                                                                          |
| Test site location:    | 101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China |
| Telephone:             | (86-755)88850135                                                                                                                      |
| Fax:                   | (86-755)88850136                                                                                                                      |
| CNAS Registration No.: | CNAS L5868                                                                                                                            |
| FCC Registration No.:  | 448573                                                                                                                                |

**4 List of test equipment**

| No.      | Equipment                                            | Manufacturer | Model           | Serial No. | Cal. date | Cal. Due  |
|----------|------------------------------------------------------|--------------|-----------------|------------|-----------|-----------|
| MTI-E143 | Near-field Electric and Magnetic Field Sensor System | SPEAG        | MAGPy-8H3 D+ED3 | 3101       | 2024/3/12 | 2027/3/11 |

| No.       | Equipment         | Manufacturer | Model     | Software version: | Cal. date | Cal. Due |
|-----------|-------------------|--------------|-----------|-------------------|-----------|----------|
| MTI-E016S | MPE test software | SPEAG        | MAGPY 2.6 | 2.6               | /         | /        |

## 5 Test result

### 5.1.1 Requirement

§1.1310: 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), except in the case of portable devices which shall be evaluated according to the provisions of FCC part 2.1093 of this chapter.

**Table 1 to §1.1310(e)(1) - 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) |
|-----------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| <b>(i) Limits for Occupational/Controlled Exposure</b>          |                               |                               |                                     |                          |
| 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                       |
| 1500-100000                                                     |                               |                               | 5                                   | <6                       |
| <b>(ii) Limits for General Population/Uncontrolled Exposure</b> |                               |                               |                                     |                          |
| 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                      |
| 1500-100000                                                     |                               |                               | 1.0                                 | <30                      |

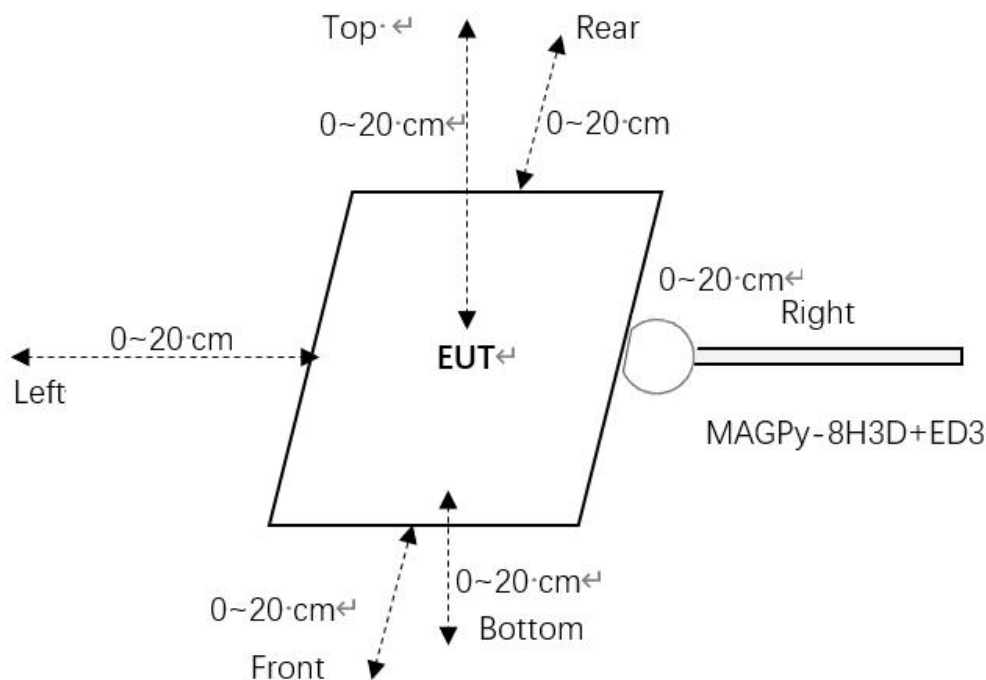
f = frequency in MHz

\* = Plane-wave equivalent power density

**Note 1:** Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

**Note 2:** General population/uncontrolled exposure limits apply in situations in which the general public may be exposed, or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

## 5.2 Test setup



Note: tips mode of the test probe is used for 0cm measurement.

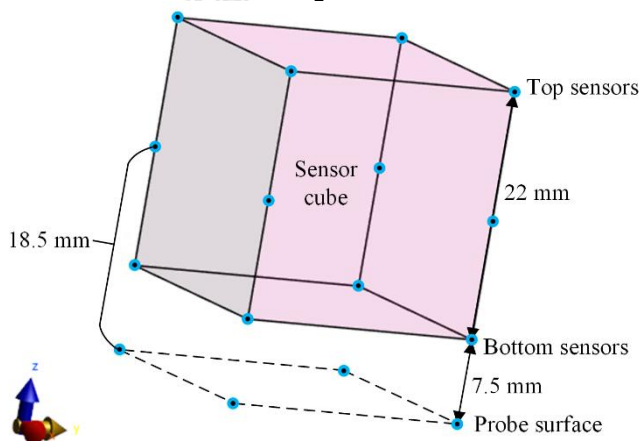
## 5.3 Test Procedures

H-field measurements should be taken 0 cm ~ 20 cm with 2 cm increments from the center of the probe.

The center of the probe to the tip surface of the probe is 18.5 mm, so the directly testing can be performed at the probe center from 2 cm to 20 cm.

To measure the 0 cm H-field, the probe tip mode is used. The total H-field at the tip-surface  $H_{tip-surface}$  can be extrapolated using the total H-field measured at the top and bottom sensors,  $H_{top}$  and  $H_{bottom}$ , as well as the normalized H-field gradient  $G_n$ . The field extrapolation formula is a polynomial function of  $G_n$  ( $\Delta d = 18.5$  mm)

$$H_{tip-surface} = \frac{H_{bottom} + H_{top}}{2} \sum_{i=0}^7 ci(G_n \Delta d)^i$$



## 5.4 Information of test equipment

|                                                                                     |                                                                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Test equipment: MAGPy-8H3D+ED3                                                      |                                                                                           |
| Diameter                                                                            | 60mm                                                                                      |
| 8 isotropic H-field sensors                                                         | Concentric loops of 1cm <sup>2</sup> arranged at the corner of a cube of 22mm side length |
| 1 isotropic E-field sensor                                                          | Orthogonal dipole/monopole (arm length: 50mm)                                             |
| Measurement center                                                                  | 18.5mm from the probe tip                                                                 |
| Dimensions                                                                          | 110*635*35mm<br>(MAGPy-8H3D+E3D V2 & MAGPy-DAS V2)                                        |
|  |                                                                                           |
| Test probe, without the casing                                                      |                                                                                           |

| Item                  | Specification                                   |
|-----------------------|-------------------------------------------------|
| Test frequency range: | 3kHz ~ 10MHz                                    |
| Probe sensitivity     | E-field: 0.08-2000 V/m<br>H-field: 0.1-3200 A/m |
| Probe level response  | E-field: ±1dB<br>H-field: ±1dB                  |
| linearity error       | E-field: ±0.3dB<br>H-field: ±0.3dB              |
| Isotropy              | E-field: ±0.8dB<br>H-field: ±0.6dB              |

## 5.5 Test results

All client power has been assessed (1%,50%, 99%), and the 1% battery status of client device was the worst.

Test condition 1: Mode 5 operating mode with client device (1 % battery status of client device)

-estimated value: 0cm

### Estimated value for H-Filed Strength at 0 cm from the edges surrounding the EUT (A/m)

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 1.48          | 1.63  | 93.87%         |
| Bottom         | 1.44          |       |                |
| Left           | 1.53          |       |                |
| Right          | 1.34          |       |                |
| Front          | 1.5           |       |                |
| Rear           | 1.02          |       |                |

Test condition 1: Mode 5 operatingmode with client device (1 % battery status of client device)

- Test distance: 2cm

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 1.30          | 1.63  | 82.60%         |
| Bottom         | 1.27          |       |                |
| Left           | 1.35          |       |                |
| Right          | 1.18          |       |                |
| Front          | 1.32          |       |                |
| Rear           | 0.90          |       |                |

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**Test condition 1: Mode 5 operatingmode with client device (1 % battery status of client device)****- Test distance: 4cm**

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 1.15          | 1.63  | 72.69%         |
| Bottom         | 1.12          |       |                |
| Left           | 1.18          |       |                |
| Right          | 1.04          |       |                |
| Front          | 1.16          |       |                |
| Rear           | 0.79          |       |                |

**Test condition 1: Mode 5 operatingmode with client device (1 % battery status of client device)****- Test distance: 6cm**

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 1.01          | 1.63  | 63.97%         |
| Bottom         | 0.98          |       |                |
| Left           | 1.04          |       |                |
| Right          | 0.91          |       |                |
| Front          | 1.02          |       |                |
| Rear           | 0.70          |       |                |

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**Test condition 1: Mode 5 operatingmode with client device (1 % battery status of client device)****- Test distance: 8cm**

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 0.89          | 1.63  | 56.29%         |
| Bottom         | 0.86          |       |                |
| Left           | 0.92          |       |                |
| Right          | 0.80          |       |                |
| Front          | 0.90          |       |                |
| Rear           | 0.61          |       |                |

**Test condition 1: Mode 5 operatingmode with client device (1 % battery status of client device)****- Test distance: 10cm**

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 0.78          | 1.63  | 49.54%         |
| Bottom         | 0.76          |       |                |
| Left           | 0.81          |       |                |
| Right          | 0.71          |       |                |
| Front          | 0.79          |       |                |
| Rear           | 0.54          |       |                |

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**Test condition 1: Mode 5 operatingmode with client device (1 % battery status of client device)****- Test distance: 12cm**

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 0.69          | 1.63  | 43.59%         |
| Bottom         | 0.67          |       |                |
| Left           | 0.71          |       |                |
| Right          | 0.62          |       |                |
| Front          | 0.70          |       |                |
| Rear           | 0.47          |       |                |

**Test condition 1: Mode 5 operatingmode with client device (1 % battery status of client device)****- Test distance: 14cm**

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 0.60          | 1.63  | 38.26%         |
| Bottom         | 0.59          |       |                |
| Left           | 0.63          |       |                |
| Right          | 0.55          |       |                |
| Front          | 0.61          |       |                |
| Rear           | 0.42          |       |                |

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**Test condition 1: Mode 5 operatingmode with client device (1 % battery status of client device)****- Test distance: 16cm**

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 0.53          | 1.63  | 33.76%         |
| Bottom         | 0.52          |       |                |
| Left           | 0.55          |       |                |
| Right          | 0.48          |       |                |
| Front          | 0.54          |       |                |
| Rear           | 0.37          |       |                |

**Test condition 1: Mode 5 operatingmode with client device (1 % battery status of client device)****- Test distance: 18cm**

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 0.47          | 1.63  | 29.71%         |
| Bottom         | 0.46          |       |                |
| Left           | 0.48          |       |                |
| Right          | 0.42          |       |                |
| Front          | 0.47          |       |                |
| Rear           | 0.32          |       |                |

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**Test condition 1: Mode 5 operatingmode with client device (1 % battery status of client device)****- Test distance: 20cm**

| Probe Position | H-field (A/m) |       |                |
|----------------|---------------|-------|----------------|
|                | Measurement   | Limit | Percentage (%) |
| Z axis         | 0.41          | 1.63  | 26.14%         |
| Bottom         | 0.40          |       |                |
| Left           | 0.43          |       |                |
| Right          | 0.37          |       |                |
| Front          | 0.42          |       |                |
| Rear           | 0.28          |       |                |

**Photographs of the Test Setup**

See the Appendix - Test Setup Photos.

**Photographs of the EUT**

See the Appendix - EUT Photos.

## Statement

1. This report is invalid without the seal and signature of the laboratory.
2. The test results of this report are only responsible for the samples submitted. Client shall be responsible for representativeness of the sample and authenticity of the material.
3. The report shall not be partially reproduced without the written consent of the Laboratory.
4. This report is invalid if transferred, altered or tampered with in any form without authorization.
5. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
6. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

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