

|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                              |                                      |                                          |                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Prüfbericht-Nr.:</b><br>Test report no.:                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>CN22LJ5J 001</b>                                                                                                                                          | <b>Auftrags-Nr.:</b><br>Order no.:   | <b>168378850</b>                         | <b>Seite 1 von 25</b><br>Page 1 of 25                                                 |
| <b>Kunden-Referenz-Nr.:</b><br>Client reference no.:                                                                                                                                                                                                                                                                                                                                                                                                        | N/A                                                                                                                                                          | <b>Auftragsdatum:</b><br>Order date: | 2022-06-23                               |                                                                                       |
| <b>Auftraggeber:</b><br>Client:                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Shenzhen Reflying Electronic Co., Ltd</b><br>6 Bldg, GaoXinJian Industrial zone, HePing village, Fuyong Town, Bao'an district, Shenzhen, Guangdong, China |                                      |                                          |                                                                                       |
| <b>Prüfgegenstand:</b><br>Test item:                                                                                                                                                                                                                                                                                                                                                                                                                        | 3-in-1 Magnetic Wireless Charger                                                                                                                             |                                      |                                          |                                                                                       |
| <b>Bezeichnung / Typ-Nr.:</b><br>Identification / Type no.:                                                                                                                                                                                                                                                                                                                                                                                                 | BE-MQ231W23, BE-MQ231xxxxxxx, NS-MQ231xxxxxxx, ("x"=0-9, A-Z, a-z, - or blank, for market purpose only)                                                      |                                      |                                          |                                                                                       |
| <b>Auftrags-Inhalt:</b><br>Order content:                                                                                                                                                                                                                                                                                                                                                                                                                   | Type test                                                                                                                                                    |                                      |                                          |                                                                                       |
| <b>Prüfgrundlage:</b><br>Test specification:                                                                                                                                                                                                                                                                                                                                                                                                                | CFR47 FCC Part 15: Subpart C Section 15.207<br>CFR47 FCC Part 15: Subpart C Section 15.209<br>CFR47 FCC Part 15: Subpart C Section 15.215                    |                                      |                                          |                                                                                       |
| <b>Wareneingangsdatum:</b><br>Date of sample receipt:                                                                                                                                                                                                                                                                                                                                                                                                       | 2022-06-28                                                                                                                                                   | Refer to photos document             |                                          |                                                                                       |
| <b>Prüfmuster-Nr.:</b><br>Test sample no.:                                                                                                                                                                                                                                                                                                                                                                                                                  | A003289440-001~006                                                                                                                                           |                                      |                                          |                                                                                       |
| <b>Prüfzeitraum:</b><br>Testing period:                                                                                                                                                                                                                                                                                                                                                                                                                     | 2022-07-06 – 2022-07-12                                                                                                                                      |                                      |                                          |                                                                                       |
| <b>Ort der Prüfung:</b><br>Place of testing:                                                                                                                                                                                                                                                                                                                                                                                                                | TÜV Rheinland (Shenzhen) Co., Ltd.                                                                                                                           |                                      |                                          |                                                                                       |
| <b>Prüflaboratorium:</b><br>Testing laboratory:                                                                                                                                                                                                                                                                                                                                                                                                             | TÜV Rheinland (Shenzhen) Co., Ltd.                                                                                                                           |                                      |                                          |                                                                                       |
| <b>Prüfergebnis*:</b><br>Test result*:                                                                                                                                                                                                                                                                                                                                                                                                                      | Pass                                                                                                                                                         |                                      |                                          |                                                                                       |
| <b>geprüft von:</b><br>tested by:                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                           |                                      | <b>genehmigt von:</b><br>authorized by:  |  |
| <b>Datum:</b><br>Date:                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2022-07-22                                                                                                                                                   |                                      | <b>Ausstellungsdatum:</b><br>Issue date: | 2022-07-25                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Signed by: Alex Lan                                                                                                                                          |                                      |                                          | Signed by: Lin Lin                                                                    |
| <b>Stellung / Position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  | Assistant Project Manager                                                                                                                                    |                                      | <b>Stellung / Position</b>               | Reviewer                                                                              |
| <b>Sonstiges / Other:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   | FCC ID: A7M-MQ231W23                                                                                                                                         |                                      |                                          |                                                                                       |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br>Condition of the test item at delivery:                                                                                                                                                                                                                                                                                                                                                             | Prüfmuster vollständig und unbeschädigt<br>Test item complete and undamaged:                                                                                 |                                      |                                          |                                                                                       |
| <p>* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft<br/>P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet<br/>Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor<br/>P(ass) = passed a.m. test specifications(s) F(ail) = failed a.m. test specifications(s) N/A = not applicable N/T = not tested</p>               |                                                                                                                                                              |                                      |                                          |                                                                                       |
| <p><b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b><br/>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</p> |                                                                                                                                                              |                                      |                                          |                                                                                       |

V05

**Prüfbericht - Nr.: CN22LJ5J 001**  
Test Report No.:

Seite 2 von 25  
Page 2 of 25

## ***Test Summary***

**5.1.1 ANTENNA REQUIREMENT**

*RESULT: Pass*

**5.1.2 99% BANDWIDTH**

*RESULT: Pass*

**5.1.3 20dB BANDWIDTH**

*RESULT: Pass*

**5.1.4 RADIATED SPURIOUS EMISSION**

*RESULT: Pass*

**5.1.5 CONDUCTED EMISSION ON AC MAINS**

*RESULT: Pass*

## **Contents**

|              |                                                           |           |
|--------------|-----------------------------------------------------------|-----------|
| <b>1</b>     | <b>GENERAL REMARKS .....</b>                              | <b>4</b>  |
| <b>1.1</b>   | <b>COMPLEMENTARY MATERIALS.....</b>                       | <b>4</b>  |
| <b>2</b>     | <b>TEST SITES.....</b>                                    | <b>5</b>  |
| <b>2.1</b>   | <b>TEST FACILITIES .....</b>                              | <b>5</b>  |
| <b>2.2</b>   | <b>LIST OF TEST AND MEASUREMENT INSTRUMENTS .....</b>     | <b>5</b>  |
| <b>2.3</b>   | <b>TRACEABILITY .....</b>                                 | <b>6</b>  |
| <b>2.4</b>   | <b>CALIBRATION.....</b>                                   | <b>6</b>  |
| <b>2.5</b>   | <b>MEASUREMENT UNCERTAINTY .....</b>                      | <b>6</b>  |
| <b>2.6</b>   | <b>LOCATION OF ORIGINAL DATA .....</b>                    | <b>6</b>  |
| <b>2.7</b>   | <b>STATUS OF FACILITY USED FOR TESTING .....</b>          | <b>6</b>  |
| <b>3</b>     | <b>GENERAL PRODUCT INFORMATION .....</b>                  | <b>7</b>  |
| <b>3.1</b>   | <b>PRODUCT FUNCTION AND INTENDED USE .....</b>            | <b>7</b>  |
| <b>3.2</b>   | <b>RATINGS AND SYSTEM DETAILS.....</b>                    | <b>7</b>  |
| <b>3.3</b>   | <b>INDEPENDENT OPERATION MODES.....</b>                   | <b>7</b>  |
| <b>3.4</b>   | <b>NOISE GENERATING AND NOISE SUPPRESSING PARTS .....</b> | <b>8</b>  |
| <b>3.5</b>   | <b>SUBMITTED DOCUMENTS.....</b>                           | <b>8</b>  |
| <b>4</b>     | <b>TEST SET-UP AND OPERATION MODES.....</b>               | <b>9</b>  |
| <b>4.1</b>   | <b>PRINCIPLE OF CONFIGURATION SELECTION .....</b>         | <b>9</b>  |
| <b>4.2</b>   | <b>TEST OPERATION AND TEST SOFTWARE .....</b>             | <b>9</b>  |
| <b>4.3</b>   | <b>SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT .....</b>  | <b>9</b>  |
| <b>4.4</b>   | <b>COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE .....</b>    | <b>9</b>  |
| <b>4.5</b>   | <b>TEST SETUP DIAGRAM .....</b>                           | <b>10</b> |
| <b>5</b>     | <b>TEST RESULTS .....</b>                                 | <b>11</b> |
| <b>5.1</b>   | <b>TRANSMITTER REQUIREMENT &amp; TEST SUITES.....</b>     | <b>11</b> |
| <b>5.1.1</b> | <i>Antenna Requirement.....</i>                           | <i>11</i> |
| <b>5.1.2</b> | <i>99% Bandwidth.....</i>                                 | <i>12</i> |
| <b>5.1.3</b> | <i>20dB Bandwidth .....</i>                               | <i>14</i> |
| <b>5.1.4</b> | <i>Radiated Spurious Emission .....</i>                   | <i>16</i> |
| <b>5.1.5</b> | <i>Conducted Emission on AC Mains.....</i>                | <i>22</i> |
| <b>6</b>     | <b>PHOTOGRAPHS OF THE TEST SET-UP .....</b>               | <b>25</b> |
| <b>7</b>     | <b>LIST OF TABLES.....</b>                                | <b>25</b> |

**Prüfbericht - Nr.: CN22LJ5J 001**  
Test Report No.:

Seite 4 von 25  
Page 4 of 25

# 1 General Remarks

## 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

## 2 Test Sites

### 2.1 Test Facilities

**TÜV Rheinland (Shenzhen) Co., Ltd.**

No. 362 Huangguan Road Middle, Longhua District, Shenzhen 518110, China

FCC Registration No.: CN1260

IC Registration No.: 25069 and the CAB identifier is CN0078.

### 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

| Radio Spectrum Testing                    |              |                   |              |            |
|-------------------------------------------|--------------|-------------------|--------------|------------|
| Description                               | Manufacturer | Model             | Serial No.   | Cal. Until |
| EXA Signal Analyzer, Multi-touch          | Keysight     | N9010B            | MY60241175   | 2022-09-28 |
| Power Control Unit                        | Tonscend     | JS0806-4ADC       | N/A          | 2022-09-28 |
| Automation Control Unit                   | Tonscend     | JS0806-2          | 21C8060396   | 2022-09-28 |
| Test Software                             | Tonscend     | JS1120-3          | N/A          | N/A        |
| Control PC                                | Lenovo       | TianYi510S-071MB  | YLX23JMF     | N/A        |
| Unwanted Emission Testing                 |              |                   |              |            |
| Description                               | Manufacturer | Model             | Serial No.   | Cal. Until |
| EMI Test Receiver                         | R&S          | ESR 7             | 102021       | 2022-08-10 |
| Signal Analyzer                           | R&S          | FSV 40            | 101439       | 2022-08-09 |
| System Controller Interface               | R&S          | SCI-100           | S10010038    | N/A        |
| Filterbank                                | R&S          | Wlan              | 100759       | 2022-08-09 |
| OSP                                       | R&S          | OSP 120           | 102040       | N/A        |
| Pre-amplifier                             | R&S          | SCU08F1           | 08320031     | 2022-08-09 |
| Amplifier                                 | R&S          | SCU-18F           | 180070       | 2022-08-09 |
| Amplifier                                 | R&S          | SCU40A            | 100475       | 2022-08-09 |
| Trilog Broadband Antenna (30 MHz - 7 GHz) | Schwarzbeck  | VULB 9162         | 193          | 2022-08-08 |
| Double-Ridged Antenna (1 -18 GHz)         | ETS-LINDGREN | 3117              | 00218717     | 2022-08-08 |
| Wideband Ridged Horn Antenna (18-40 GHz)  | Steatite     | QMS-00880         | 19067        | 2022-08-08 |
| Active Loop Antenna                       | Schwarzbeck  | FMZB 1513         | 302          | 2022-09-13 |
| Test software                             | R&S          | EMC32 (V10.60.10) | N/A          | N/A        |
| Control PC                                | Dell         | OptiPlex 7050     | 36NV9P2      | N/A        |
| 3m Semi-Anechoic Chamber                  | Albatross    | SAC-3m            | APC17151-SAC | 2024-06-22 |

Prüfbericht - Nr.: CN22LJ5J 001  
Test Report No.:Seite 6 von 25  
Page 6 of 25

| Conducted Emission       |              |                     |            |            |
|--------------------------|--------------|---------------------|------------|------------|
| Description              | Manufacturer | Model               | Serial No. | Cal. Until |
| EMI Test Receiver        | R&S          | ESR3                | 102680     | 2023-02-27 |
| Artificial Mains Network | R&S          | ENV216              | 101445     | 2023-02-27 |
| EMC32 test software      | R&S          | EMC32(Ver.10.50.00) | N/A        | N/A        |

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

| Parameter                                              | Uncertainty         |
|--------------------------------------------------------|---------------------|
| Radiated Emission, valid up to 26.5 GHz                | ±6 dB               |
| Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz) | ±3.70 dB / ±3.30 dB |

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No. 362 Huangguan Road Middle, Longhua District, Shenzhen 518110, China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

### 3 General Product Information

#### 3.1 Product Function and Intended Use

The EUTs are a **3-in-1 Magnetic Wireless Charger** which supports wireless charging function.

All models are identical except the model number or color for different market purpose.

For details refer to the User Manual, Technical Description and Circuit Diagram.

#### 3.2 Ratings and System Details

**Table 2: Technical Specification of EUT**

| General Information of EUT     | Value                                                                                                   |
|--------------------------------|---------------------------------------------------------------------------------------------------------|
| Kind of Equipment              | 3-in-1 Magnetic Wireless Charger                                                                        |
| Type Designation               | BE-MQ231W23, BE-MQ231xxxxxxx, NS-MQ231xxxxxxx, ("x"=0-9, A-Z, a-z, - or blank, for market purpose only) |
| FCC ID                         | A7M-MQ231W23                                                                                            |
| Operating Voltage              | Input: AC 100-240V, 50/60Hz via AC/DC Adapter<br>Output: DC 5V, 1A for USB-A and 7.5W / 5W for wireless |
| Testing Voltage                | AC 120V, 60Hz                                                                                           |
| AC/DC Adapter                  | Model: PSD1202000UW<br>Input: AC 100-240V, 50/60Hz, 0.6A<br>Output: DC 12V, 2.0A 24.0W                  |
| Technical Specification of WPT |                                                                                                         |
| Operating Frequency            | 111-205KHz                                                                                              |
| Modulation                     | FSK                                                                                                     |
| Antenna Type                   | Induction Coil Antenna                                                                                  |
| Antenna Gain                   | 0 dBi                                                                                                   |
| Antenna number                 | 2                                                                                                       |
| Wireless Charger output power  | 7.5W & 5W                                                                                               |

#### 3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Wireless charging (WPT)
  - 1. 7.5W
  - 2. 5W
  - 3. 7.5W+5W
- B. On, Wired charging by USB-A(5W)
- C. Off

**Prüfbericht - Nr.: CN22LJ5J 001**  
Test Report No.:

Seite 8 von 25  
Page 8 of 25

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

### 3.5 Submitted Documents

- |                                  |                         |
|----------------------------------|-------------------------|
| - FCC/IC Label and Location Info | - Instruction Manual    |
| - Application Form               | - Operation Description |



## 4 Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

**Radio Spectrum:** The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5&6. All testing were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all test were applied on model **BE-MQ231W23**.

### 4.3 Special Accessories and Auxiliary Equipment

Table 3: List of Accessories and Auxiliary Equipment

| Description  | Manufacturer | Model | S/N | Remark           |
|--------------|--------------|-------|-----|------------------|
| Dummy Load   | YBZ          | N/A   | N/A | Supply by Lab    |
| Mobile Phone | Apple        | N/A   | N/A | Supply by Lab    |
| Earphone     | TWS          | N/A   | N/A | Supply by Client |
| USB Load     | N/A          | N/A   | N/A | Supply by Client |

### 4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 30MHz)

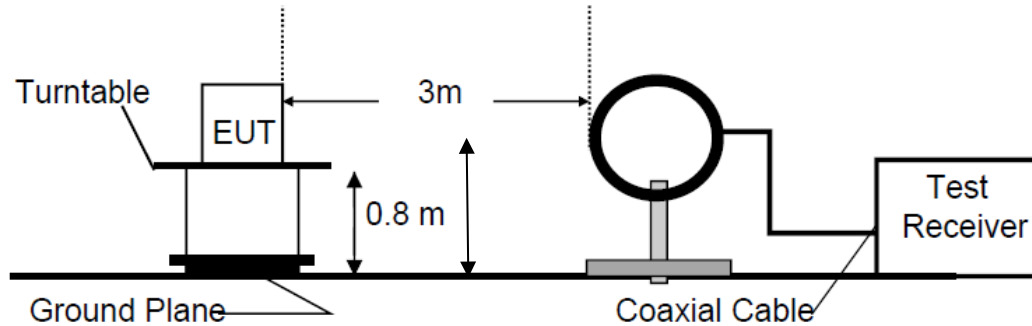


Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

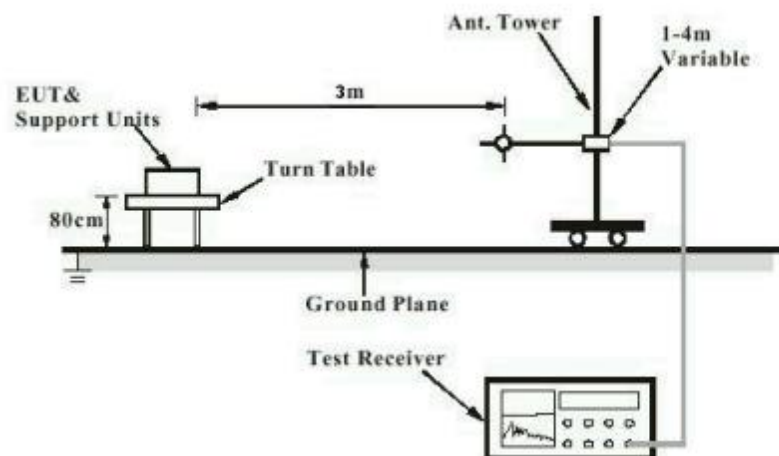
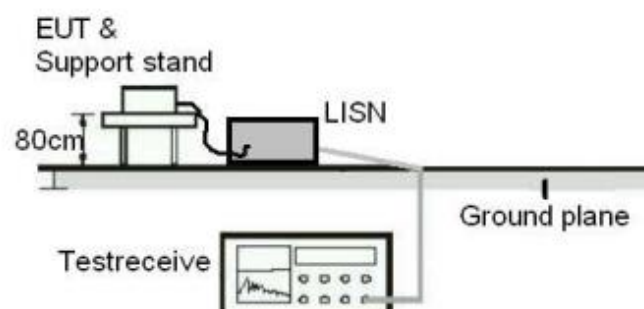


Diagram of Measurement Configuration for Mains Conduction Measurement



## 5 Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Antenna Requirement

RESULT:

Pass

##### Test Specification

Test standard : Part 15.203

According to the manufacturer declared, the EUT has two internal antenna, and the antenna is permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

**Prüfbericht - Nr.: CN22LJ5J 001**

Test Report No.:

Seite 12 von 25

Page 12 of 25

## 5.1.2 99% Bandwidth

**RESULT:**

**Pass**

### Test Specification

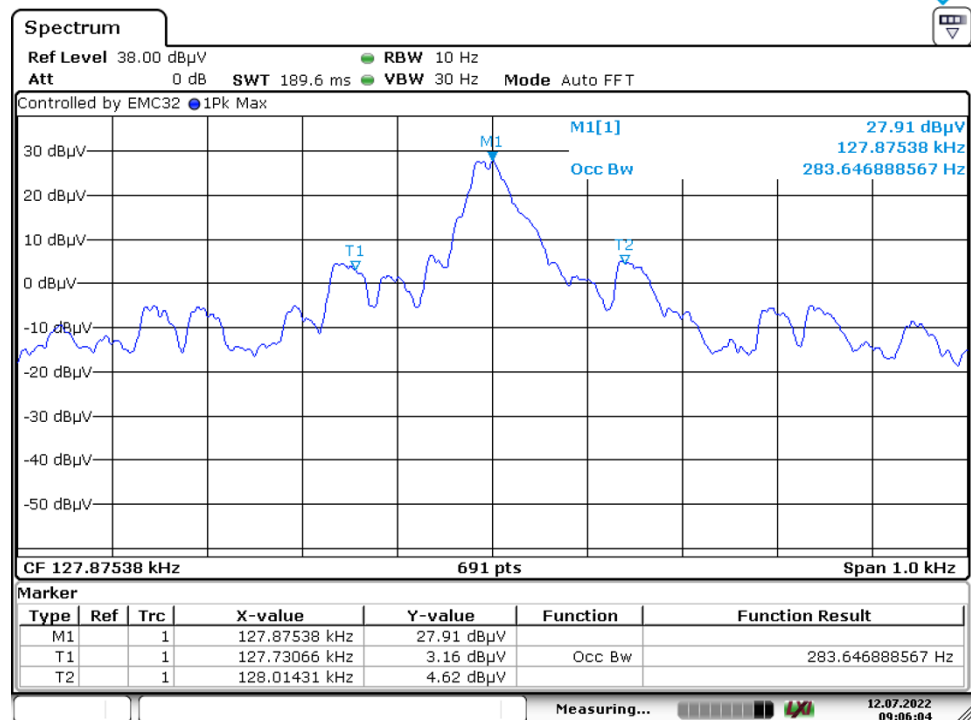
Basic standard : ANSI C63.10: 2013  
Kind of test site : Shielded Room

### Test Setup

Date of testing : 2022-07-12  
Input voltage : AC 120V, 60Hz  
Operation mode : A  
Ambient temperature : 22 °C  
Relative humidity : 52 %  
Atmospheric pressure : 101 kPa

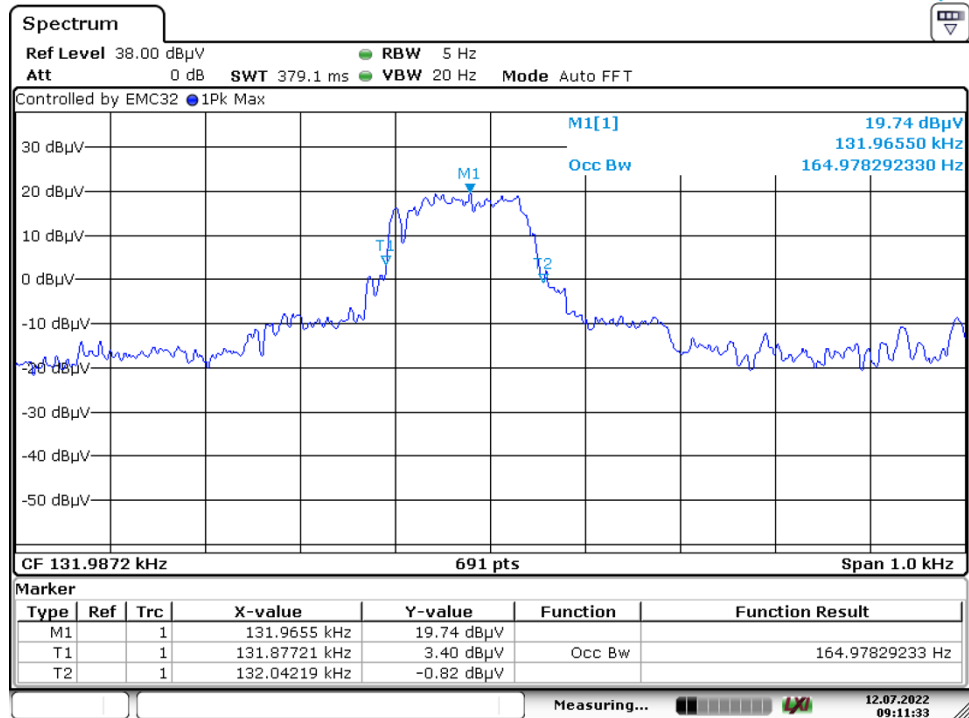
For the measurement records, refer to the following test plots.

For 7.5W



Date: 12.JUL.2022 09:06:05

For 5W



Date: 12.JUL.2022 09:11:33

**Prüfbericht - Nr.: CN22LJ5J 001**
*Test Report No.:*

Seite 14 von 25

Page 14 of 25

### 5.1.3 20dB Bandwidth

**RESULT:**
**Pass**
**Test Specification**

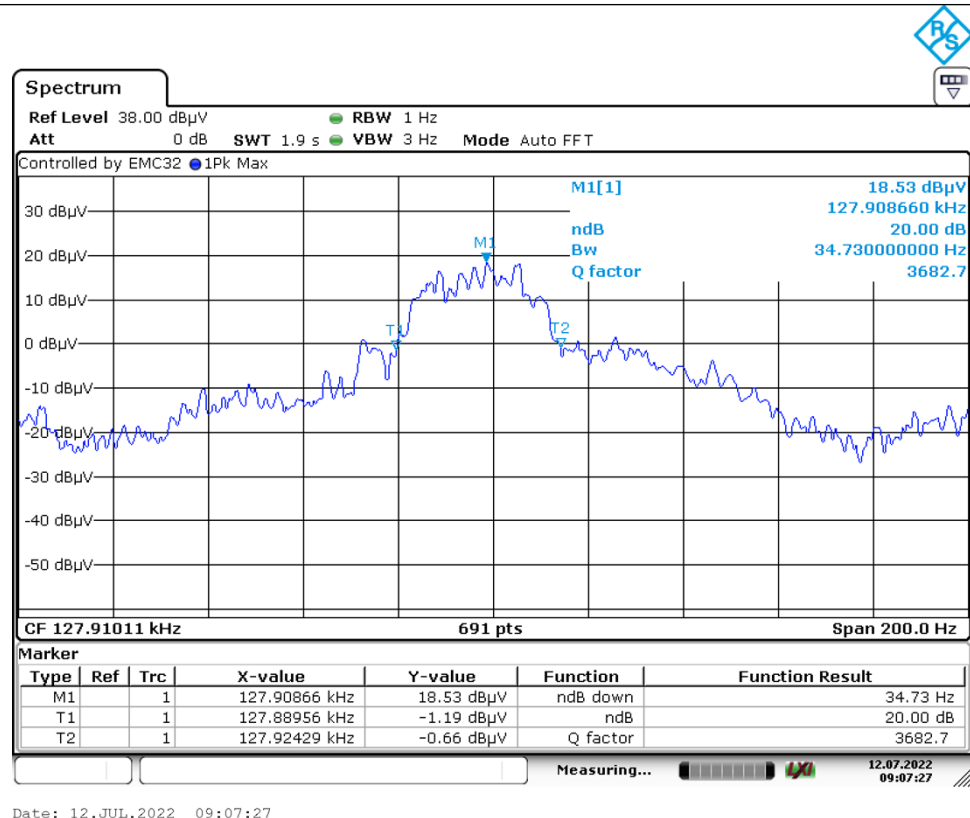
Test standard : FCC Part 15.215(c)  
Basic standard : ANSI C63.10: 2013  
Kind of test site : Shielded Room

**Test Setup**

Date of testing : 2022-07-12  
Input voltage : AC 120V, 60Hz  
Operation mode : A  
Ambient temperature : 22 °C  
Relative humidity : 52 %  
Atmospheric pressure : 101 kPa

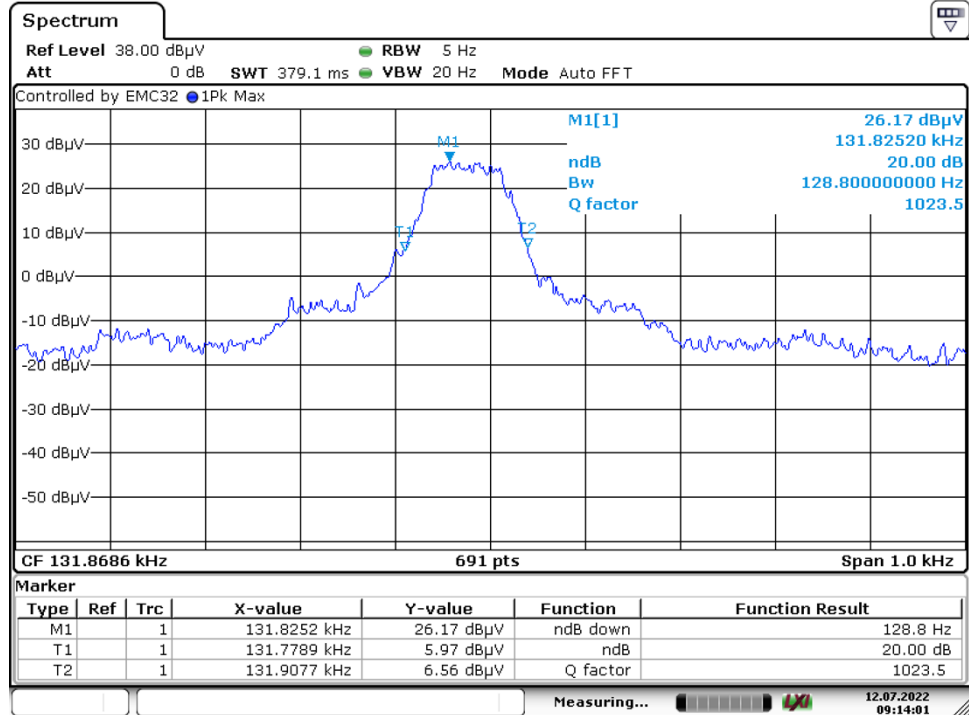
For the measurement records, refer to the following test plots.

For 7.5W



Date: 12.JUL.2022 09:07:27

For 5W



Date: 12.JUL.2022 09:14:02

**Prüfbericht - Nr.: CN22LJ5J 001**  
Test Report No.:

Seite 16 von 25  
Page 16 of 25

## 5.1.4 Radiated Spurious Emission

**RESULT:**

**Pass**

### Test Specification

|                   |                            |
|-------------------|----------------------------|
| Test standard     | : FCC Part 15.209 & 15.205 |
| Basic standard    | : ANSI C63.10: 2013        |
| Limits            | : Refer to 15.209(a)       |
| Kind of test site | : 3m Semi-anechoic Chamber |

### Test Setup

|                      |                 |
|----------------------|-----------------|
| Date of testing      | : 2022-07-12    |
| Input voltage        | : AC 120V, 60Hz |
| Operation mode       | : A             |
| Ambient temperature  | : 22 °C         |
| Relative humidity    | : 52 %          |
| Atmospheric pressure | : 101 kPa       |

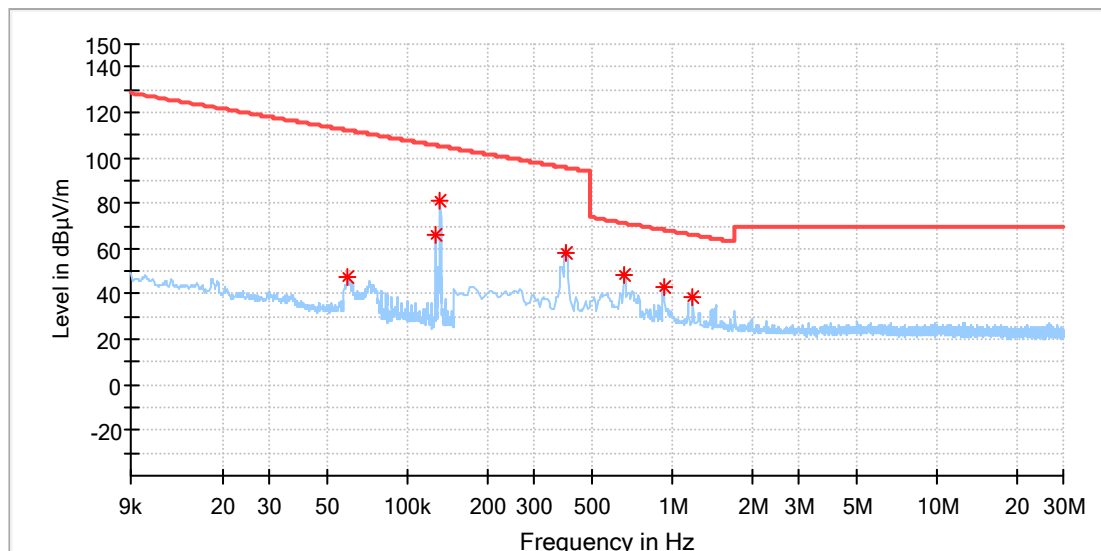
This testing was carried out on all operation modes, but only the worst case was presented in this report.

Refer to following test plots for details of test result.



## EUT Information

EUT Name: 3-in-1 Magnetic Wireless Charger  
Model: BE-MQ231W23  
Test Mode: Wireless charging (WPT)  
Order No/Sample No: 168378850/A003289440-002  
Test Voltage: 120V/60Hz  
Remark: Temp 22 Humi:52%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical Freqs

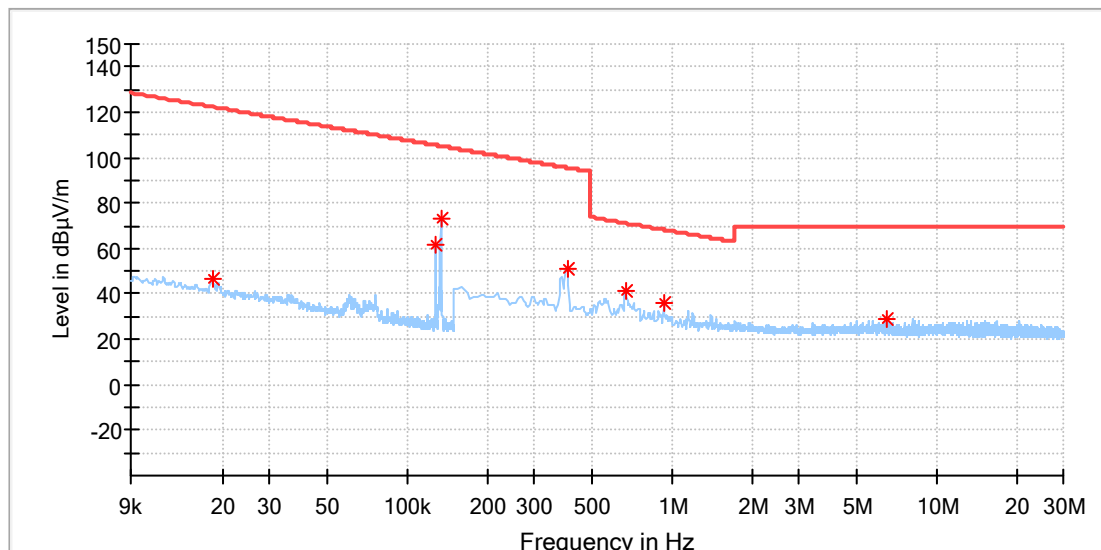
| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 0.059659        | 47.13            | 112.08         | 64.95       | 100.0       | X   | 319.0         | 20.1         |
| 0.127843        | 65.86            | 105.46         | 39.61       | 100.0       | X   | 148.0         | 20.1         |
| 0.132677        | 81.30            | 105.14         | 23.85       | 100.0       | X   | 16.0          | 20.1         |
| 0.395824        | 58.49            | 95.65          | 37.16       | 100.0       | X   | 14.0          | 20.1         |
| 0.659206        | 48.74            | 71.23          | 22.49       | 100.0       | X   | 40.0          | 20.1         |
| 0.931368        | 42.78            | 68.24          | 25.45       | 100.0       | X   | 21.0          | 20.1         |
| 1.194750        | 38.39            | 66.08          | 27.69       | 100.0       | X   | 3.0           | 20.1         |

**Prüfbericht - Nr.: CN22LJ5J 001**  
*Test Report No.:*

Seite 18 von 25  
 Page 18 of 25

## EUT Information

EUT Name: 3-in-1 Magnetic Wireless Charger  
 Model: BE-MQ231W23  
 Test Mode: Wireless charging (WPT)  
 Order No./Sample No: 168378850/A003289440-002  
 Test Voltage: 120V/60Hz  
 Remark: Temp 22 Humi:52%  
 Test Standard: FCC Part 15C  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



## Critical\_Freqs

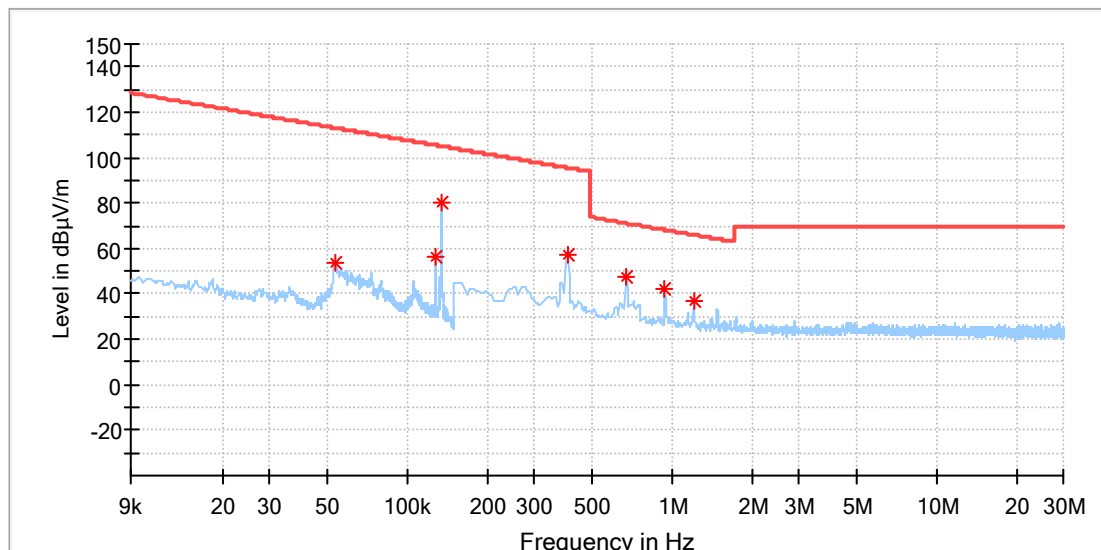
| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 0.018266        | 46.51            | 122.36         | 75.84       | 100.0       | Y   | 260.0         | 20.1         |
| 0.127742        | 61.78            | 105.47         | 43.69       | 100.0       | Y   | 64.0          | 20.1         |
| 0.133382        | 73.51            | 105.10         | 31.58       | 100.0       | Y   | 104.0         | 20.1         |
| 0.400213        | 50.69            | 95.56          | 44.87       | 100.0       | Y   | 103.0         | 20.1         |
| 0.663596        | 41.62            | 71.17          | 29.56       | 100.0       | Y   | 82.0          | 20.1         |
| 0.931368        | 36.22            | 68.24          | 32.02       | 100.0       | Y   | 274.0         | 20.1         |
| 6.510684        | 29.07            | 69.50          | 40.43       | 100.0       | Y   | 310.0         | 20.3         |

**Prüfbericht - Nr.: CN22LJ5J 001**  
*Test Report No.:*

Seite 19 von 25  
 Page 19 of 25

## EUT Information

EUT Name: 3-in-1 Magnetic Wireless Charger  
 Model: BE-MQ231W23  
 Test Mode: Wireless charging (WPT)  
 Order No./Sample No: 168378850/A003289440-002  
 Test Voltage: 120V/60Hz  
 Remark: Temp 22 Humi:52%  
 Test Standard: FCC Part 15C  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin

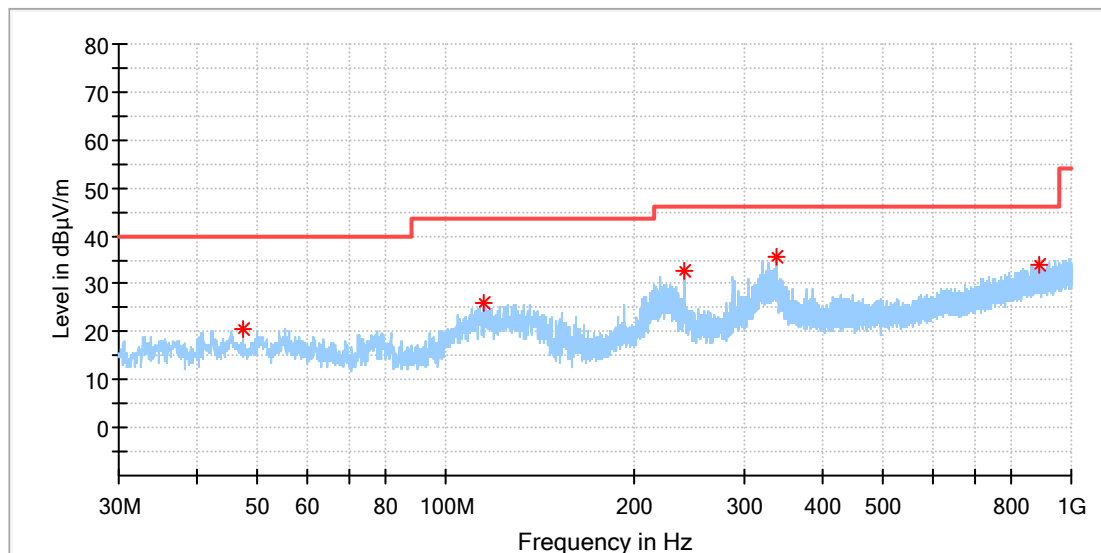


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 0.053012        | 53.79            | 113.11         | 59.31       | 100.0       | Z   | 307.0         | 20.1         |
| 0.127742        | 56.44            | 105.47         | 49.03       | 100.0       | Z   | 157.0         | 20.1         |
| 0.134389        | 79.80            | 105.03         | 25.23       | 100.0       | Z   | 93.0          | 20.1         |
| 0.400213        | 56.79            | 95.56          | 38.77       | 100.0       | Z   | 71.0          | 20.1         |
| 0.672375        | 47.42            | 71.06          | 23.64       | 100.0       | Z   | 93.0          | 20.1         |
| 0.940147        | 41.80            | 68.16          | 26.35       | 100.0       | Z   | 71.0          | 20.1         |
| 1.207919        | 36.63            | 65.99          | 29.36       | 100.0       | Z   | 82.0          | 20.1         |

## EUT Information

EUT Name: 3-in-1 Magnetic Wireless Charger  
Model: BE-MQ231W23  
Test Mode: Wireless charging (WPT)  
Order No/Sample No: 168378850/A003289440-002  
Test Voltage: 120V/60Hz  
Remark: Temp 22 Humi:52%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

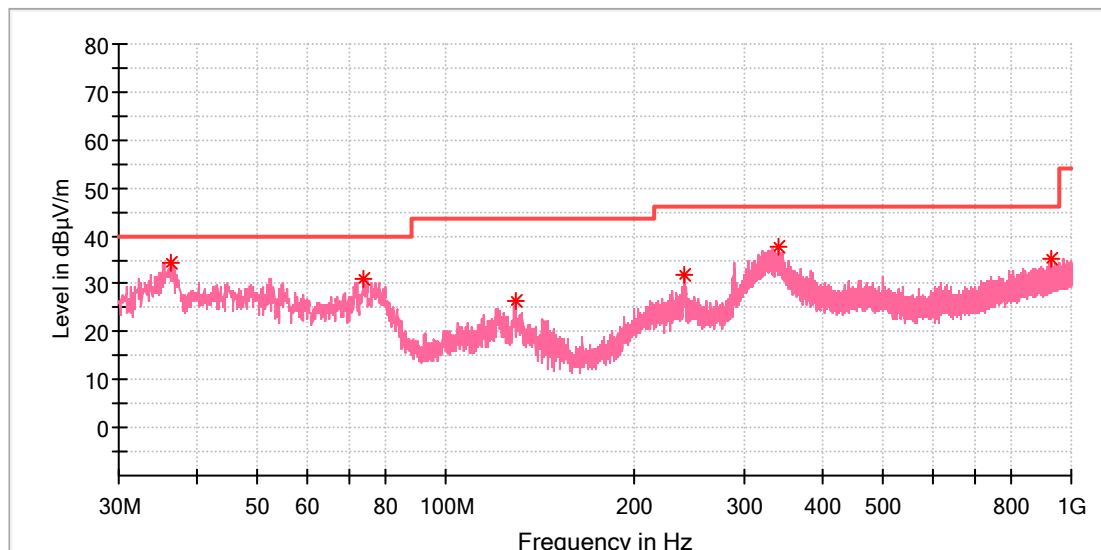


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 47.460000       | 20.66            | 40.00          | 19.34       | 100.0       | H   | 268.0         | -18.5        |
| 115.020500      | 26.19            | 43.50          | 17.31       | 100.0       | H   | 215.0         | -19.7        |
| 240.635500      | 32.64            | 46.00          | 13.36       | 100.0       | H   | 268.0         | -17.7        |
| 337.150500      | 35.53            | 46.00          | 10.47       | 100.0       | H   | 208.0         | -15.1        |
| 888.838000      | 33.96            | 46.00          | 12.04       | 100.0       | H   | 258.0         | -5.1         |

## EUT Information

EUT Name: 3-in-1 Magnetic Wireless Charger  
Model: BE-MQ231W23  
Test Mode: Wireless charging (WPT)  
Order No/Sample No: 168378850/A003289440-002  
Test Voltage: 120V/60Hz  
Remark: Temp 22 Humi:52%  
Test Standard: FCC Part 15C  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 36.305000       | 34.39            | 40.00          | 5.61        | 100.0       | V   | 354.0         | -21.5        |
| 73.989500       | 31.14            | 40.00          | 8.86        | 100.0       | V   | 166.0         | -23.1        |
| 129.134000      | 26.38            | 43.50          | 17.12       | 100.0       | V   | 123.0         | -21.8        |
| 240.878000      | 32.06            | 46.00          | 13.94       | 100.0       | V   | 251.0         | -17.7        |
| 339.139000      | 37.61            | 46.00          | 8.39        | 100.0       | V   | 214.0         | -15.0        |
| 925.843500      | 35.02            | 46.00          | 10.98       | 100.0       | V   | 2.0           | -4.7         |

## Final\_Result

| Frequency (MHz) | QuasiPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|--------------------|----------------|-------------|-------------|-----|---------------|--------------|
| ---             | ---                | ---            | ---         | ---         |     | ---           | ---          |

**Prüfbericht - Nr.: CN22LJ5J 001**  
Test Report No.:

Seite 22 von 25  
Page 22 of 25

## 5.1.5 Conducted Emission on AC Mains

**RESULT:**

**Pass**

### Test Specification

|                   |                      |
|-------------------|----------------------|
| Test standard     | : FCC Part 15.207    |
| Basic standard    | : ANSI C63.10: 2013  |
| Frequency range   | : 150KHz - 30MHz     |
| Limits            | : FCC Part 15.207(a) |
| Kind of test site | : Shielded Room      |

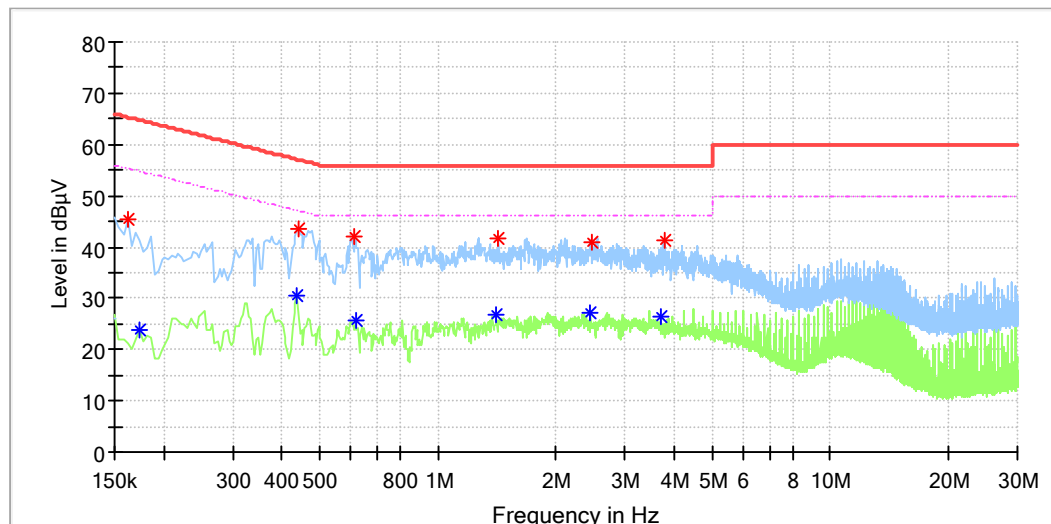
### Test Setup

|                      |                 |
|----------------------|-----------------|
| Date of testing      | : 2022-07-06    |
| Input voltage        | : AC 120V, 60Hz |
| Operation mode       | : A+B           |
| Earthing             | : Not connected |
| Ambient temperature  | : 24.5 °C       |
| Relative humidity    | : 52.6 %        |
| Atmospheric pressure | : 101 kPa       |

Refer to following test plots for details of test result.

## EUT Information

EUT Name: 3-in-1 Magnetic Wireless Charger  
Order No: 168378850\_P00732528  
Model: BE-MQ231W23  
Test mode: Full load (apple 7.5W + TWS5W + USB-A 5W)  
Test Voltage: AC 120V/60Hz  
Test By:/Review By: Charlie Zha/Gary Chen  
Test Standard: FCC 15C  
Tem./Hum./Pressure: 24.5°C/52.6%/101kPa  
Remark: SR2

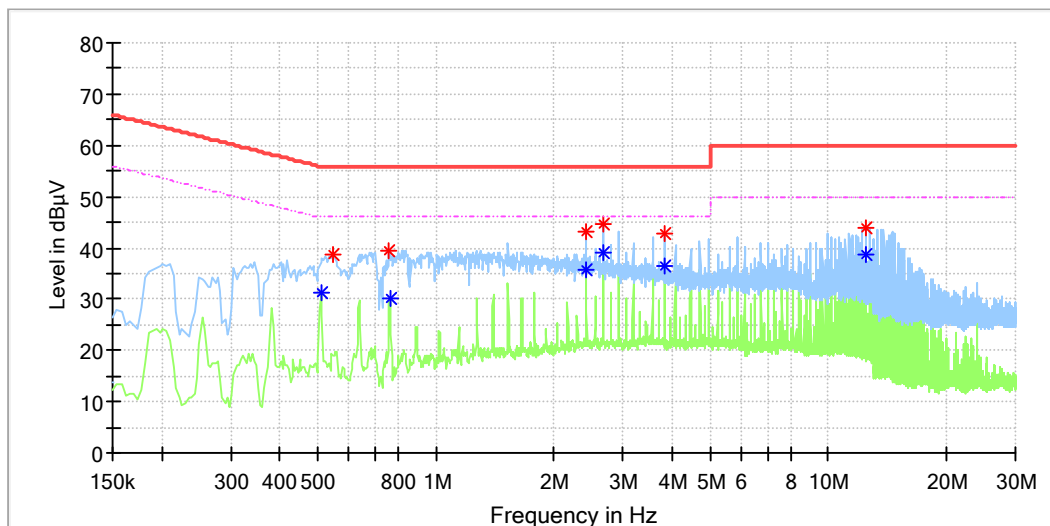


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Line | Corr. (dB) |
|-----------------|----------------|----------------|--------------|-------------|------|------------|
| 0.162000        | 45.58          | ---            | 65.36        | 19.78       | L1   | 9.9        |
| 0.174000        | ---            | 23.99          | 54.77        | 30.78       | L1   | 9.9        |
| 0.438000        | ---            | 30.43          | 47.10        | 16.67       | L1   | 9.9        |
| 0.442000        | 43.59          | ---            | 57.02        | 13.44       | L1   | 9.9        |
| 0.614000        | 41.99          | ---            | 56.00        | 14.01       | L1   | 10.0       |
| 0.618000        | ---            | 25.55          | 46.00        | 20.45       | L1   | 10.0       |
| 1.410000        | ---            | 26.86          | 46.00        | 19.14       | L1   | 10.1       |
| 1.430000        | 41.79          | ---            | 56.00        | 14.21       | L1   | 10.1       |
| 2.454000        | ---            | 27.10          | 46.00        | 18.90       | L1   | 10.2       |
| 2.466000        | 40.95          | ---            | 56.00        | 15.05       | L1   | 10.2       |
| 3.714000        | ---            | 26.53          | 46.00        | 19.47       | L1   | 10.2       |
| 3.774000        | 41.14          | ---            | 56.00        | 14.86       | L1   | 10.2       |

## EUT Information

EUT Name: 3-in-1 Magnetic Wireless Charger  
Order No: 168378850\_P00732528  
Model: BE-MQ231W23  
Test mode: Full load (apple 7.5W + TWS5W + USB-A 5W)  
Test Voltage: AC 120V/60Hz  
Test By:/Review By: Charlie Zha/Gary Chen  
Test Standard: FCC 15C  
Tem./Hum./Pressure: 24.5°C/52.6%/101kPa  
Remark: SR2



## Critical Freqs

| Frequency (MHz) | MaxPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Line | Corr. (dB) |
|-----------------|----------------|----------------|--------------|-------------|------|------------|
| 0.510000        | ---            | 31.40          | 46.00        | 14.60       | N    | 9.8        |
| 0.546000        | 38.67          | ---            | 56.00        | 17.33       | N    | 9.8        |
| 0.762000        | 39.41          | ---            | 56.00        | 16.59       | N    | 9.8        |
| 0.766000        | ---            | 30.00          | 46.00        | 16.00       | N    | 9.8        |
| 2.422000        | 43.01          | ---            | 56.00        | 12.99       | N    | 9.9        |
| 2.422000        | ---            | 35.86          | 46.00        | 10.14       | N    | 9.9        |
| 2.674000        | 44.71          | ---            | 56.00        | 11.29       | N    | 9.9        |
| 2.674000        | ---            | 38.89          | 46.00        | 7.11        | N    | 9.9        |
| 3.822000        | ---            | 36.62          | 46.00        | 9.38        | N    | 9.9        |
| 3.822000        | 42.72          | ---            | 56.00        | 13.28       | N    | 9.9        |
| 12.482000       | 43.85          | ---            | 60.00        | 16.15       | N    | 10.1       |
| 12.482000       | ---            | 38.68          | 50.00        | 11.32       | N    | 10.1       |



## 6 Photographs of the Test Set-Up

Refer to test photo document.

## 7 List of Tables

|                                                           |   |
|-----------------------------------------------------------|---|
| Table 1: List of Test and Measurement Equipment.....      | 5 |
| Table 2: Technical Specification of EUT.....              | 7 |
| Table 3: List of Accessories and Auxiliary Equipment..... | 9 |