

# TEST REPORT

Applicant Name: Senbiosys SA  
Address: Route des Gouttes-d'Or 40, 2000 Neuchâtel, Switzerland  
Report Number: 2501T60787E-RF-00  
FCC ID: 2BKU5-SBDV02LA

## Test Standard (s)

47 CFR, Part 1, Subpart I, Section 1.1310; 47 CFR, Part 2, Subpart J, Section 2.1091

## Sample Description

Product Type: dock  
Model No.: Charger US10  
Multiple Model(s) No.: N/A  
Trade Mark: VELIA  
Date Received: 2025/05/26  
Issue Date: 2025/07/30

Test Result:

Pass<sup>▲</sup>

▲ In the configuration tested, the EUT complied with the standards above.

## Prepared and Checked By:

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Bruce Lin  
RF Engineer

## Approved By:

*Nancy Wang*

Nancy Wang  
RF Supervisor

Note: The information marked <sup>#</sup> is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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## **TABLE OF CONTENTS**

<b>DOCUMENT REVISION HISTORY .....</b>	<b>3</b>
<b>GENERAL INFORMATION.....</b>	<b>4</b>
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) .....	4
OBJECTIVE .....	4
TEST METHODOLOGY .....	4
MEASUREMENT UNCERTAINTY.....	4
TEST FACILITY .....	5
<b>SYSTEM TEST CONFIGURATION.....</b>	<b>6</b>
DESCRIPTION OF TEST CONFIGURATION .....	6
EUT EXERCISE SOFTWARE .....	6
SUPPORT EQUIPMENT LIST AND DETAILS .....	6
EXTERNAL I/O CABLE.....	6
<b>SUMMARY OF TEST RESULTS .....</b>	<b>7</b>
<b>TEST EQUIPMENT LIST .....</b>	<b>8</b>
<b>FCC §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE) .....</b>	<b>9</b>
APPLICABLE STANDARD .....	9
BLOCK DIAGRAM OF TEST SETUP .....	10
TEST PROCEDURES.....	10
TEST DATA .....	10
<b>EUT PHOTOGRAPHS.....</b>	<b>12</b>
<b>TEST SETUP PHOTOGRAPHS .....</b>	<b>13</b>

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2501T60787E-RF-00	Original Report	2025/07/30

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

Product	dock
Tested Model	Charger US10
Multiple Model(s)	N/A
Frequency Range	609-619kHz
Antenna Type	Coil
Input Voltage	DC 5V
Output Power	0.55Watts
Sample serial number	33ER-1 (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A

### Objective

This test report is in accordance with Part 2, Subpart J Section 2.1091 of the Federal Communications Commission's rules and KDB680106 D01 Wireless Power Transfer v04.

### Test Methodology

All tests and measurements indicated in this document were performed in accordance KDB 680106 D01 Wireless Power Transfer v04

Each test item follows test standards and with no deviation.

### Measurement Uncertainty

Parameter	Uncertainty
Electric Field	1.14dB
Magnetic Field	0.74dB
Temperature	±1℃
Humidity	±1%
Supply voltages	±0.4%

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

## Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

Each test item follows test standards and with no deviation.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in a test mode.

### EUT Exercise Software

No software used in test.

### Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Senbiosys SA	Ring	US10	RAS10AE16000001

### External I/O Cable

Cable Description	Length (m)	From Port	To
/	/	/	/

**SUMMARY OF TEST RESULTS**

FCC Rules	Description of Test	Result
FCC§1.1310 & §2.1091	Maximum Permissible Exposure(MPE)	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
SPEAG	Probe	MAGPy-8H3D-E3D	3106	2025/04/29	2026/04/28
SPEAG	Data Acquisition System	MAPGPY-DAS	3089	2025/04/29	2026/04/28

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).



## FCC §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

#### Limits for Maximum Permissible Exposure (MPE)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; \* = Plane-wave equivalent power density;

According with 680106 D01 Wireless Power Transfer v04 clause 3.2

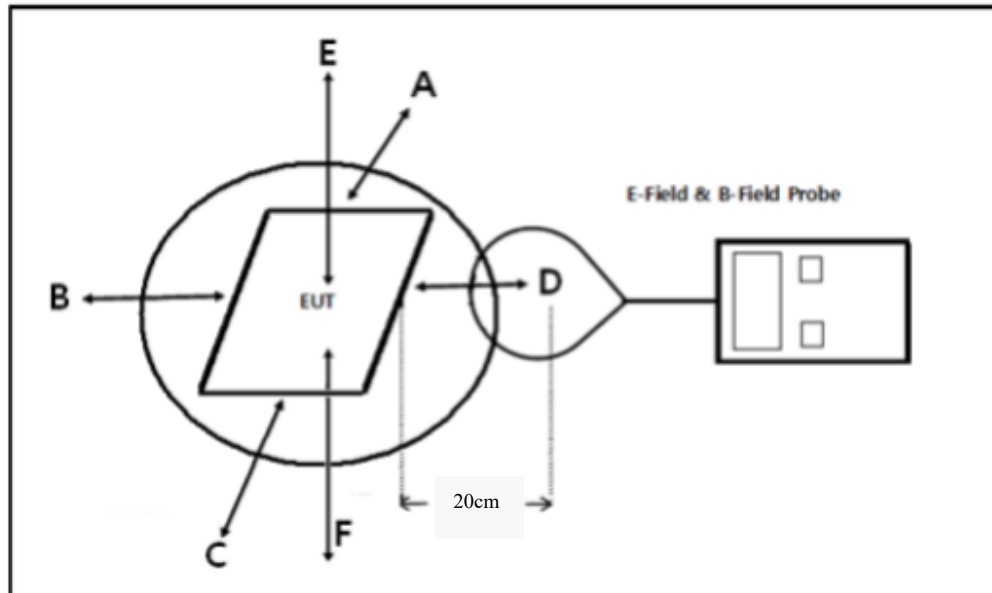
Accordingly, for § 2.1091-Mobile devices, the MPE limits between 100 kHz to 300 kHz are to be considered the same as those at 300 kHz in Table 1 of § 1.1310, that is, 614 V/m and 1.63 A/m, for the electric field and magnetic field, respectively. For § 2.1093-Portable devices below 4 MHz and down to 100 kHz, the MPE limits in § 1.1310 (with the 300 kHz limit applicable all the way down to 100 kHz) can be used for the purpose of equipment authorization in lieu of SAR evaluations.

There might be situations where the WPT RF emissions are limited enough that even operations in a “crowded” environment, where many similar WPT devices are present, do not pose significant EMC and RF exposure concerns. In this scenario, and for devices operating within a one-meter distance from the receiver, as defined above, a manufacturer will not have to submit an “Equipment Compliance Review” KDB, and receive FCC concurrence before proceeding with equipment authorization. This exception to the requirement of submitting the ECR to obtain FCC concurrence only applies when all the following criteria (1) through (6) are met:

- (1) The power transfer frequency is below 1 MHz.
- (2) The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts.
- (3) A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)
- (4) Only § 2.1091-Mobile exposure conditions apply (i.e., this provision does not cover § 2.1093-Portable exposure conditions).
- (5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a 1/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.
- (6) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating

structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.

### Block Diagram of Test Setup



### Test Procedures

- 1) Perform H-field and E-field measurements for each all sides of the EUT at 20cm, along all the principal axes defined with respect to the orientation of the transmitting element (e.g., coil or antenna).
- 2) The highest emission level was recorded and compared with limit.
- 3) The EUT was measured according to 680106 D01 Wireless Power Transfer v04.

### Test Data

#### Environmental Conditions

Temperature:	25.2 °C
Relative Humidity:	47 %
ATM Pressure:	100 kPa

*The testing was performed by Rainbow Zhu on 2025-06-26.*

*Test mode: Wireless charging (Maximum output power)*

**H-Field Strength**

Test Frequency (kHz)	Position A (A/m)	Position B (A/m)	Position C (A/m)	Position D (A/m)	Position E (A/m)	Position F (A/m)	50% Limit (A/m)	Limit (A/m)
614	0.00403	0.00465	0.00240	0.00165	0.00157	0.00131	0.815	1.63

**E-Field Strength**

Test Frequency (kHz)	Position A (V/m)	Position B (V/m)	Position C (V/m)	Position D (V/m)	Position E (V/m)	Position F (V/m)	50% Limit (V/m)	Limit (V/m)
614	1.08	1.10	1.16	0.46	0.66	0.70	307	614

Note: Test with 20cm distance from the center of the probe(s) to the edge of the device.

- (1) The power transfer frequency is below 1 MHz.

The operation frequency is 614±5kHz.

- (2) The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts.

The maximum output power is 0.55 watts.

- (3) A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)

The load is physical contact with the EUT.

- (4) Only § 2.1091-Mobile exposure conditions apply (i.e., this provision does not cover § 2.1093-Portable exposure conditions).

The EUT is used in the mobile exposure condition.

- (5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a 1/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.

The E-field and H-field strengths are less than 50% of the limit.

- (6) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.

The EUT has only one coil.

## **EUT PHOTOGRAPHS**

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Please refer to the Attachment No.1 2504V70513E-RF<sup>#</sup> EUT External Photos and Attachment No.2 2504V70513E-RF<sup>#</sup> EUT Internal Photos, issued by Shenzhen Accurate Technology Co., Ltd.

## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment 2501T60787E-RF-00 Test Setup photo.

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