

# TEST REPORT

**Reference No.** : WTS18S03103824-2W  
**FCC ID** : 2ACWB-BASEMINI  
**Applicant** : mophie LLC  
**Address** : 6244 Technology Ave. Kalamazoo, MI 49009 U.S.A.  
**Manufacturer** : The same as above  
**Address** : The same as above  
**Product** : mophie charge stream pad mini  
**Model(s)** : WRLS-CHGBASEMINI-5W  
**Standards** : FCC Part 15 subpart C  
**Date of Receipt sample** : 2018-03-02  
**Date of Test** : 2018-04-12 to 2018-05-15  
**Date of Issue** : 2018-05-15  
**Test Result** : **Pass**

**Remarks:**

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

**Prepared By:**

**Waltek Services (Shenzhen) Co., Ltd.**

Address: 1/F., Fukangtai Building, West Baima Road, Songgang Street, Baoan District, Shenzhen, Guangdong, China

Tel :+86-755-83551033

Fax:+86-755-83552400

Compiled by:

*Jack Wen*

Jack Wen / Project Engineer

Approved by:



*Philo Zhong*

Philo Zhong / Manager

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### 3 General Information

#### 3.1 General Description of E.U.T

|                       |                               |
|-----------------------|-------------------------------|
| Product:              | mophie charge stream pad mini |
| Model(s):             | WRLS-CHGBASEMINI-5W           |
| Model Difference:     | N/A                           |
| Type of Modulation:   | ASK                           |
| Frequency Range:      | 0.112~0.205MHz                |
| Antenna installation: | Coil Antenna                  |
| Antenna gain:         | 0dBi                          |
| Input:                | DC 5V 1.5A                    |

## 4 Equipment Used during Test

### 4.1 Equipments List

| RF EXPOSURE |                    |              |           |            |                       |                      |
|-------------|--------------------|--------------|-----------|------------|-----------------------|----------------------|
| Item        | Equipment          | Manufacturer | Model No. | Serial No. | Last Calibration Date | Calibration Due Date |
| 1           | Protection Network | SCHWARZBECK  | VDHH9502  | 9502-103   | 2018-04-11            | 2019-04-10           |
| 2           | EMI Test Receiver  | R&S          | ESCI      | 101528     | 2018-04-11            | 2019-04-10           |

### 4.2 Description of Auxiliary Equipment

| Equipment | Manufacturer | Model No. | Series No. |
|-----------|--------------|-----------|------------|
| /         | /            | /         | /          |

### 4.3 Test Equipment Calibration

All the test equipments used are valid and calibrated by GUANG ZHOU GRG METROLOGY & TEST CO., LTD. address is No.163, Pingyun Rd. West of Huangpu Ave, Tianhe District, Guangzhou, Guangdong, China.

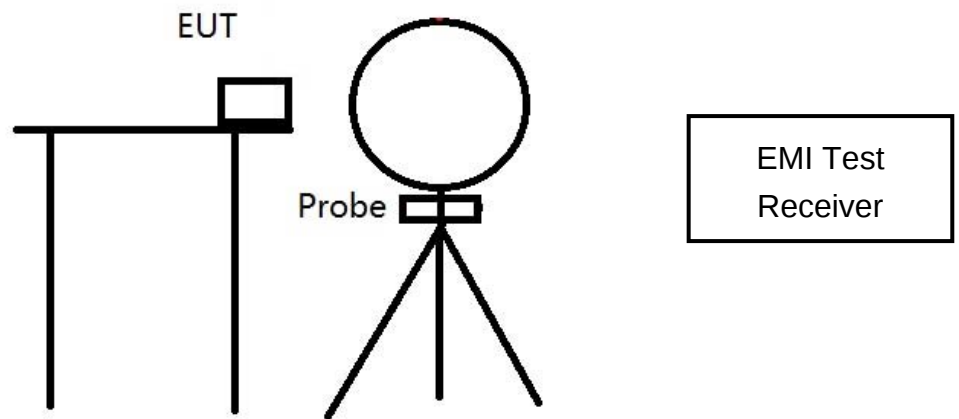
## 5 RF Exposure

Test Requirement:

Environmental evaluation and exposure limit according to FCC CFR 47 Part 1.1307(b), 1.1310

According KDB680106 D01v03: RF Exposure Wireless Charging Apps v03

### 5.1 Test Setup



These testing were performed at test configuration as above diagram.

EUT was placed on a table, and the measure probe was placed at a measurement distance of 15cm surrounding the device and 20cm above the top surface.

The EUT was put in different directions (Left, Right, Front, Rear, Top and Bottom) to obtain the maximum reading.

## 5.2 The procedures / limit

### (A) Limits for Occupational / Controlled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ cm <sup>2</sup> ) | Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|------------------------------------------|-------------------------------------------------------------------|
| 0.3-3.0               | 614                               | 1.63                              | (100)*                                   | 6                                                                 |
| 3.0-30                | 1842 / f                          | 4.89 / f                          | (900 / f)*                               | 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

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ cm <sup>2</sup> ) | Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|------------------------------------------|-------------------------------------------------------------------|
| 0.3-1.34              | 614                               | 1.63                              | (100)*                                   | 30                                                                |
| 1.34-30               | 824/f                             | 2.19/f                            | (180/f)*                                 | 30                                                                |
| 30-300                | 27.5                              | 0.073                             | 0.2                                      | 30                                                                |
| 300-1500              |                                   |                                   | F/1500                                   | 30                                                                |
| 1500-100,000          |                                   |                                   | 1.0                                      | 30                                                                |

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

## 5.3 Test Data

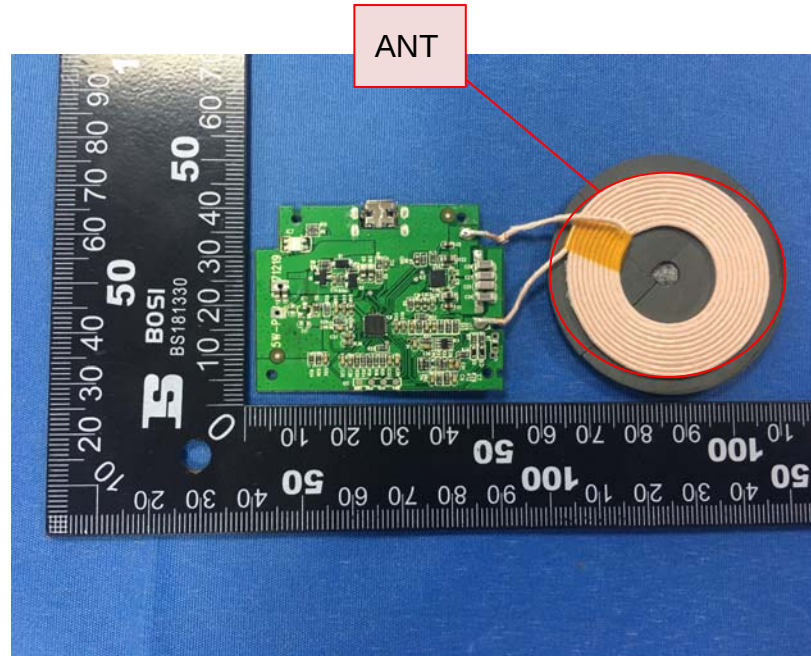
### H-Field

| Test Side        | Separation Distance(cm) | H-Field Measured(A/m) | H-Field Limit(A/m) | Result(%) |
|------------------|-------------------------|-----------------------|--------------------|-----------|
| Left             | 15                      | 0.20                  | 1.63               | 12.27     |
| Right            | 15                      | 0.10                  | 1.63               | 6.13      |
| Front            | 15                      | 0.19                  | 1.63               | 11.66     |
| Rear             | 15                      | 0.19                  | 1.63               | 11.66     |
| Top              | 20                      | 0.44                  | 1.63               | 26.99     |
| Bottom           | 15                      | 0.33                  | 1.63               | 20.25     |
| Margin Limit (%) |                         | 26.99%                |                    |           |

Remark: The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

#### 5.4 EUT coupling surface area

The inductive area is below (Coupling area:  $\varnothing 30$  mm, The located at top of the equipment):



## 6 Photograph – RF Exposure Test Setup

Left Side(measurement distance of 15cm)



Right Side(measurement distance of 15cm)



Front Side(measurement distance of 15cm)



Rear Side(measurement distance of 15cm)



Top Side(measurement distance of 20cm)



Bottom Side(measurement distance of 15cm)



=====End of Report=====