

# 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

## 2 Contents

	Page
<b>1 COVER PAGE.....</b>	<b>1</b>
<b>2 CONTENTS .....</b>	<b>2</b>
<b>3 GENERAL INFORMATION.....</b>	<b>3</b>
3.1 GENERAL DESCRIPTION OF E.U.T.....	3
<b>4 EQUIPMENT USED DURING TEST .....</b>	<b>4</b>
4.1 EQUIPMENTS LIST .....	4
4.2 DESCRIPTION OF AUXILIARY EQUIPMENT .....	4
4.3 TEST EQUIPMENT CALIBRATION .....	4
<b>5 RF EXPOSURE.....</b>	<b>5</b>
5.1 TEST SETUP .....	5
5.2 THE PROCEDURES / LIMIT .....	6
5.3 TEST DATA .....	6
5.4 EUT COUPLING SURFACE AREA .....	7
<b>6 PHOTOGRAPH – RF EXPOSURE TEST SETUP .....</b>	<b>8</b>

### 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.

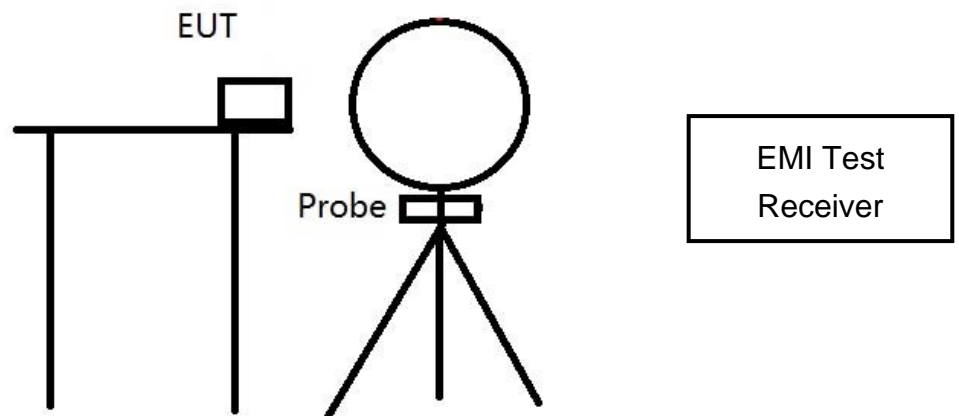
## 5 RF Exposure

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

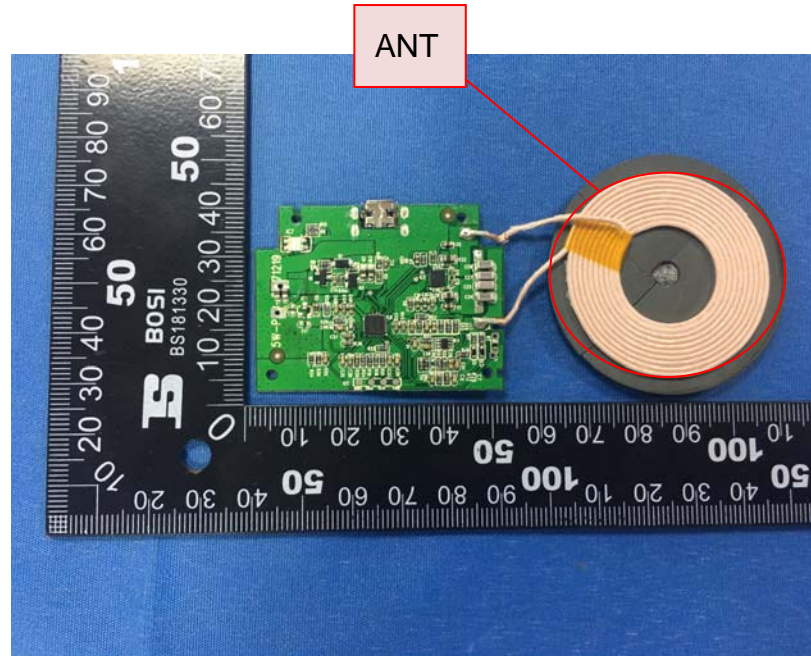
### H-Field

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=====