# **TEST REPORT**

Reference No. : WTS18S06115934-2W

FCC ID : 2ACWB-USBC10K

Applicant : mophie LLC

Address : 6244 Technology Ave. Kalamazoo, MI 49009 U.S.A.

Manufacturer : mophie LLC

Address : 6244 Technology Ave. Kalamazoo, MI 49009 U.S.A.

**Product** : mophie powerstation wireless XL with charge stream

Model(s) : PWRSTION-WRLS-10K

Standards : FCC Part 15 subpart C

Date of Receipt sample : 2018-06-25

**Date of Test** : 2018-06-26 to 2018-07-03

**Date of Issue** : 2018-07-04

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:

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# 3 General Information

# 3.1 General Description of E.U.T

Product: mophie powerstation wireless XL with charge stream

Model(s): PWRSTION-WRLS-10K

Model Difference: N/A
Type of Modulation: ASK

Frequency Range: 0.112~0.205MHz

Antenna installation: Coil Antenna

Antenna gain: 0dBi

Input (USB-C): 5V 3A Output (USB-A): 5V 2.4A

Input: Output (Qi): 5W

Battery: 3.8V 10000mAh 38Wh

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# 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	2018-04-12	2019-04-11
2	EMI Test Receiver	R&S	ESCI	101528	2018-04-12	2019-04-11

# 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 & TES T CO., LTD. address is No.163, Pingyun Rd. West of Huangpu Ave, Tianhe District, Guangzhou, Guangdong, China.

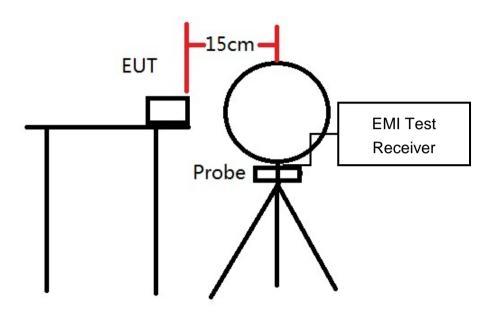
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# 5 RF Exposure

Test Requirement:

Environmental evaluation and exposure limit according to FCC CFR 47 Part 1.1307(b), 1.1310 According KDB680106 D01 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 from the EUT to the center of the probe.

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

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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	Test Side Separation		H-Field	
	Distance(cm)	Measured(V/m)	Limit(V/m)	
Left	15	0.18	1.63	
Right	15	0.15	1.63	
Front	15	0.13	1.63	
Rear	15	0.26	1.63	
Тор	20	0.38	1.63	
Bottom	15	0.23	1.63	
Margin I	_imit (%)	23.31%		

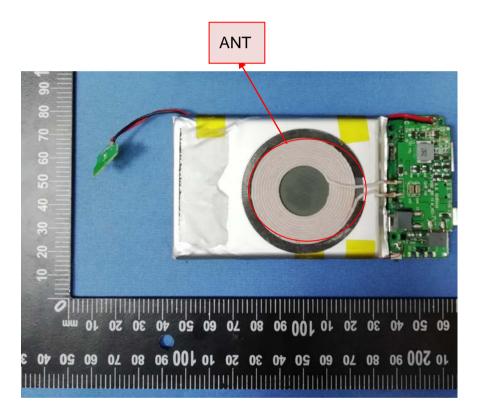
Remark: The device meets the RF exposure limit at a 15cm separation distance as specified in §1.1310 of the FCC Rules and meeting all of the following requirements as follows.

- (1) Power transfer frequency is less than 1 MHz.
- (2) Output power from each primary coil is less than or equal to 15 watts.

- (3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.
- (4) Client device is placed directly in contact with the transmitter.
- (5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
- (6) 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: ø 40 mm, The located at top of the equipment):



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