

## **TEST REPORT**

Report No.: BCTC2108882668-2E

Applicant: mophie LLC

Product Name: mophie snap powerstation stand 10K

Model/Type Ref.: SNP-PS-STND-10K

Tested Date: 2021-09-09 to 2021-12-22

Issued Date: 2021-12-22





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## FCC ID: 2ACWB-SNAP10K

Product Name: mophie snap powerstation stand 10K

Trademark: mophie

Model/Type Ref.: SNP-PS-STND-10K

Prepared For: mophie LLC

Address: 6244 Technology Ave.Kalamazoo.MI49009 United States of

America.

Manufacturer: mophie LLC

Address: 6244 Technology Ave.Kalamazoo.MI49009 United States of

America.

Prepared By: Shenzhen BCTC Testing Co., Ltd.

1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan

Address: 1st Road, Tangwei, Fuhai Subdistrict, Bao'an District,

Shenzhen, Guangdong, China

Sample Received Date: 2021-09-09

Sample tested Date: 2021-09-09 to 2021-12-22

Issue Date: 2021-12-22

Report No.: BCTC2108882668-2E

Test Standards FCC CFR 47 part1, 1.1307(b), 1.1310

Test Results PASS

Tested by:

Willem Wang

Willem Wang/Project Handler

Approved by:

Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

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(Note: N/A means not applicable)

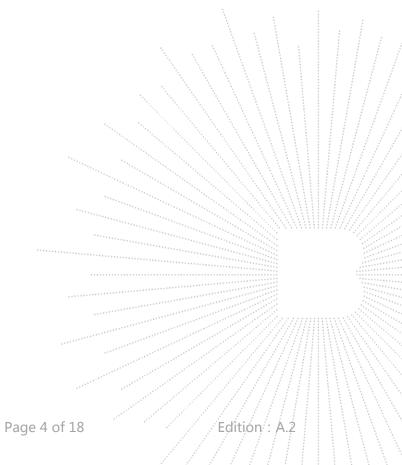
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### 1. VERSION

Report No.	Issue Date	Description	Approved
BCTC2108882668-2E	2021-12-22	Original	Valid



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### 2. PRODUCT INFORMATION

#### 2.1 Product Information

Model/Type Ref.: SNP-PS-STND-10K

Model differences: N/A

Product Description: mophie snap powerstation stand 10K

modulation type: ASK

Operation Frequency: 115kHz-205kHz

Antenna installation: Inductive loop coil antenna

Antenna Gain: 0dBi

Ratings: Input(USB-C): DC5V 3A DC 9V 2.22A

Max Output(ÚSB-C): DC 5V 3A DC9V 2.22A Max Output: 10W, Max Total Output:20W

Battery: 3.7V 10000mAh 37Wh

Hardware Version: PS Snap\_10K V3.0

Software Version: V1.0

### 2.2 Support Equipment

Device Type	Brand	Model	Series No.	Data Cable	Remark
Mobile phone	MI	Mi 11	N/A	N/A	Auxiliary

#### Notes:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

#### 2.3 Test Mode

Test Modes 1	Wireless 5W
Test Modes 2	Wireless 10W

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### 2.4 Copy of marking plate



10000 mAh

mophie snap powerstation stand 10K | M/N: SNP-PS-STND-10K

Input (USB-C): 5V == 3A, 9V == 2.22A Max Output (USB-C): 5V == 3A, 9V == 2.22A

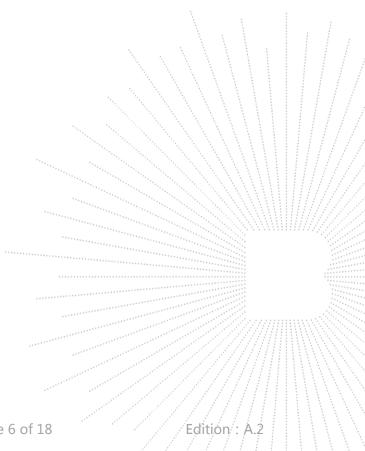
Max Wireless Output: 10W, Max Total Output: 20W

Battery: 3.7V 10000mAh 37Wh

Cell Converted Capacity: 6.300Ah (5V) 3.400Ah (9V) FCC ID: 2ACWB-SNAP10K | IC: 10465A-SNAP10K © 2021 mophie inc. MADE IN CHINA 110-09543-A

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V14 PH21, Ireland



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### 3. TEST FACILITY AND TEST INSTRUMENT USED

### 3.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Tangwei, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

FCC Test Firm Registration Number: 712850

IC Registered No.: 23583

#### 3.2 Test Instrument Used

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Electro- magnetic radiation tester	Wavecontrol	SMP160	19SN0980	Aug. 30, 2021	Aug. 29, 2022
Electro- magnetic field probe	Wavecontrol	WP400-3	20WP1200 82	Aug. 30, 2021	Aug. 29, 2022
843 Chamber	ETS	843	84301	Aug. 27, 2020	Aug. 26, 2023
Software	Frad	EZ-EMC	EMC-CON 3A1	1	

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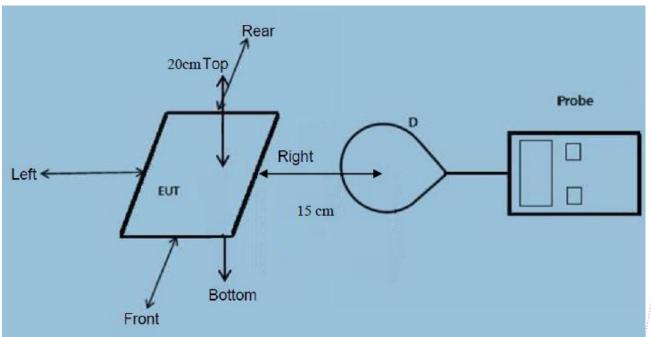


### 4. METHOD OF MEASUREMENT

### 4.1 Applicable Standard

According to §1.1307(b)(1), 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. According to §1.1310 and §2.1093 RF exposure is calculated. According KDB680106 D01 RF Exposure Wireless Charging Apps v03r01.

### 4.2 Block Diagram Of Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device

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	Limits for Occupational / Controlled Exposure										
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time  E ², H ² 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							

	Limits for General	Population / Uncont	rolled Exposure	
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time  E ², H ² 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	30

### 4.4 Test procedure

- a) The RF exposure test was performed on 360 degree turn table in anechoic chamber.
- b) The measurement probe was placed at test distance (15cm/10cm/8cm/6cm/4cm/2cm/0cm) which is between the edge of the charger and the geometric centre of probe.
- c) The turn table was rotated 360d degree to search of highest strength.
- d) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- e) The EUT were measured according to the dictates of KDB680106 D01 RF Exposure Wireless Charging Apps v03r01.

Remark: The position A is Left, The position B is Front, The position C is Right, The position D is Rear, The position E is Top.

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### 4.5 Equipment Approval Considerations

The EUT does comply with item 5(b) of KDB680106 D01 RF Exposure Wireless Charging Apps v03r01.

- Power transfer frequency is less than 1MHz
  Yes, the device operate in the frequency range from 115-205kHz
- 2) Output power from each primary coil is less than or equal to 15 watts.

Yes, the maximum output power of the primary coil is 10W.

3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that able to detect and allow coupling onlybetween individual pair of coils.

Yes, the transfer system includes only single primary and secondary coils.

4) Client device is inserted in or placed directly in contact with the transmitter.

Yes, client device is placed directly in contact with the transmitter.

5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

NO., the EUT is a portable device.

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.

Yes, the EUT field strength levels are 50% x MPE limit.

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### 4.6 E field Strength

## E-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(V/m)
							(V/m)	
1%	0.115-0.205	0.63	0.58	0.69	0.74	0.56	307	614
50%	0.115-0.205	0.79	0.69	0.54	0.80	0.48	307	614
99%	0.115-0.205	0.65	0.78	0.75	0.65	0.51	307	614

## H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(A/m)
							(A/m)	
1%	0.115-0.205	0.065	0.068	0.075	0.066	0.058	0.815	1.63
50%	0.115-0.205	0.043	0.059	0.079	0.064	0.073	0.815	1.63
99%	0.115-0.205	0.051	0.071	0.058	0.063	0.068	0.815	1.63

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## E-Field Strength at 10 cm surrounding the EUT and 10cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(V/m)
							(V/m)	
1%	0.115-0.205	0.72	0.64	0.76	0.79	0.58	307	614
50%	0.115-0.205	0.89	0.71	0.58	0.85	0.53	307	614
99%	0.115-0.205	0.68	0.81	0.81	0.66	0.52	307	614

## H-Field Strength at 10 cm surrounding the EUT and 10cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(A/m)
							(A/m)	
1%	0.115-0.205	0.073	0.077	0.084	0.067	0.067	0.815	1.63
50%	0.115-0.205	0.046	0.061	0.079	0.071	0.082	0.815	1.63
99%	0.115-0.205	0.057	0.077	0.064	0.073	0.071	0.815	1.63

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## E-Field Strength at 8 cm surrounding the EUT and 8cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(V/m)
							(V/m)	
1%	0.115-0.205	0.75	0.64	0.80	0.86	0.63	307	614
50%	0.115-0.205	0.92	0.78	0.62	0.94	0.61	307	614
99%	0.115-0.205	0.69	0.85	0.87	0.69	0.54	307	614

# H-Field Strength at 8 cm surrounding the EUT and 8cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(A/m)
							(A/m)	
1%	0.115-0.205	0.081	0.079	0.085	0.067	0.075	0.815	1.63
50%	0.115-0.205	0.050	0.064	0.080	0.072	0.084	0.815	1.63
99%	0.115-0.205	0.060	0.078	0.073	0.077	0.077	0.815	1.63

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## E-Field Strength at 6 cm surrounding the EUT and 6cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(V/m)
							(V/m)	
1%	0.115-0.205	0.81	0.83	1.00	1.01	0.81	307	614
50%	0.115-0.205	1.00	0.86	0.70	1.01	0.77	307	614
99%	0.115-0.205	0.78	0.98	1.03	0.75	0.56	307	614

# H-Field Strength at 6 cm surrounding the EUT and 6cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(A/m)
							(A/m)	
1%	0.115-0.205	0.091	0.089	0.097	0.068	0.085	0.815	1.63
50%	0.115-0.205	0.056	0.065	0.086	0.076	0.090	0.815	1.63
99%	0.115-0.205	0.062	0.081	0.083	0.078	0.077	0.815	1.63

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## E-Field Strength at 4 cm surrounding the EUT and 4cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(V/m)
							(V/m)	
1%	0.115-0.205	0.96	0.96	1.09	1.11	0.91	307	614
50%	0.115-0.205	1.16	0.95	0.75	1.04	0.83	307	614
99%	0.115-0.205	0.82	1.10	1.12	0.94	0.68	307	614

## H-Field Strength at 4 cm surrounding the EUT and 4cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(A/m)
							(A/m)	
1%	0.115-0.205	0.097	0.104	0.104	0.079	0.089	0.815	1.63
50%	0.115-0.205	0.065	0.078	0.092	0.081	0.097	0.815	1.63
99%	0.115-0.205	0.078	0.083	0.098	0.087	0.086	0.815	1.63

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## E-Field Strength at 2 cm surrounding the EUT and 2cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(V/m)
							(V/m)	
1%	0.115-0.205	1.02	1.06	1.26	1.18	0.94	307	614
50%	0.115-0.205	1.26	1.05	0.81	1.16	1.00	307	614
99%	0.115-0.205	0.89	1.17	1.26	0.96	0.87	307	614

# H-Field Strength at 2 cm surrounding the EUT and 2cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(A/m)
							(A/m)	
1%	0.115-0.205	0.069	0.062	0.075	0.063	0.102	0.815	1.63
50%	0.115-0.205	0.077	0.079	0.066	0.066	0.101	0.815	1.63
99%	0.115-0.205	0.068	0.074	0.072	0.07	0.086	0.815	1.63

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## E-Field Strength at 0 cm surrounding the EUT and 0cm above the top surface of the EUT

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(V/m)
							(V/m)	
1%	0.115-0.205	1.13	1.11	1.37	1.30	1.13	307	614
50%	0.115-0.205	1.31	1.14	0.98	1.33	1.16	307	614
99%	0.115-0.205	1.03	1.33	1.36	1.15	1.03	307	614

# H-Field Strength at 0 cm surrounding the EUT and 0cm above the top surface of the EUT $\,$

Battery	Frequency	Test	Test	Test	Test	Test	50%	Limits
level	Range	Position	Position	Position	Position	Position	Limits	Test
	(MHz)	Α	В	С	D	Е	Test	(A/m)
							(A/m)	
1%	0.115-0.205	0.076	0.078	0.068	0.06	0.148	0.815	1.63
50%	0.115-0.205	0.075	0.072	0.072	0.071	0.138	0.815	1.63
99%	0.115-0.205	0.079	0.065	0.069	0.07	0.113	0.815	1.63

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### **STATEMENT**

- 1. The equipment lists are traceable to the national reference standards.
- 2. The test report can not be partially copied unless prior written approval is issued from our lab.
- 3. The test report is invalid without stamp of laboratory.
- 4. The test report is invalid without signature of person(s) testing and authorizing.
- 5. The test process and test result is only related to the Unit Under Test.
- 6. The quality system of our laboratory is in accordance with ISO/IEC17025.
- 7.If there is any objection to report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

#### Address:

1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Tangwei, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

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\*\*\*\* END \*\*\*\*

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