



## FCC 47 CFR MPE REPORT

mophie LLC

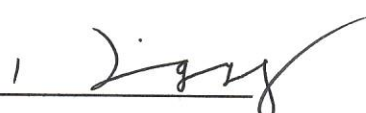
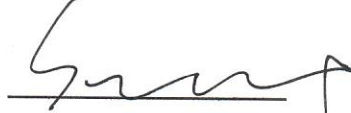

mophie AirPods Max Charging Stand

Model Number: APM-STND-USBC-WRLS

FCC ID: 2ACWB-APMSTDA

Applicant:	mophie LLC
Address:	6244 Technology Ave. Kalamazoo, MI 49009,
	United States of America.
Prepared By:	EST Technology Co., Ltd.
	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China
Tel: 86-769-83081888-808	

Report Number:	ESTE-R2412207
Date of Test:	Dec. 25, 2024~ Dec. 26, 2024
Date of Report:	Jan. 16, 2025

<b>Applicant: Address:</b>	mophie LLC 6244 Technology Ave. Kalamazoo, MI 49009, United States of America.		
<b>Manufacturer: Address:</b>	mophie LLC 6244 Technology Ave. Kalamazoo, MI 49009, United States of America.		
<b>E.U.T:</b>	mophie AirPods Max Charging Stand		
<b>Model Number:</b>	APM-STND-USBC-WRLS		
<b>Power Supply:</b>	Input: DC 5V/2.5A; DC 9V/1.5A Output: DC 5V/1A BBP 5W Max		
<b>Trade Name:</b>	mophie	<b>Serial No.:</b>	-----
<b>Date of Receipt:</b>	Dec. 25, 2024	<b>Date of Test:</b>	Dec. 25, 2024~ Dec. 26, 2024
<b>Test Specification:</b>	FCC CFR 47 Part 1.1307(b)&1.1310 KDB 680106 D01 RF Exposure Wireless Charging Apps v04r01		
<b>Test Result:</b>	The device described above is tested by EST Technology Co., Ltd. The measurement results were contained in this test report and EST Technology Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the FCC CFR 47 Part 1.1307(b)&1.1310 requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd.		
<b>Prepared by:</b>		<b>Reviewed by:</b>	
 Ring Yang / Assistant		 Seven Wang / Engineer	
		<b>Date:</b> Dec. 27, 2024	
		<b>Approved by:</b>  Iceman Hu / Manager	
<b>Other Aspects:</b> None.			
Abbreviations: OK/P=passed    fail/F=failed    n.a/N=not applicable    E.U.T=equipment under tested			
This test report is based on a single evaluation of one sample of above mentioned products ,It is not permitted to be duplicated in extracts without written approval of EST Technology Co., Ltd.			

## 1. Summary of test

### 1.1. Summary of test result

No.	Description of Test Item	FCC Standard Section	Results
1	Maximum Permissible Exposure	Part 1.1307(b)&1.1310	PASS

### 1.2. Test Mode

Test Item	Test Mode	
Maximum Permissible Exposure	AC Mains: 5W	Full load
		Half load
		No load
Note: All modes have been tested. The report only reflects the worst case of full load test data.		

### 1.3. Test Equipment List

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Electric and Magnetic Field Probe-Analyzer	Narda S.T.S./PMM	EHP-200A	EST-E106	June 13,24	1 Year
Test Software	Narda	EHP200-TS	Rel 1.92	N/A	N/A
Note: Test uncertainty: $\pm 1.62$ dB (H-field); $\pm 1.64$ dB (E-field) at a level of confidence of 95%.					

### 1.4. Assistant equipment used for test

Item	Equipment	Brand	Model Name/Type No.	FCC ID	Series No.
1	Adapter	-	A784-120167C-U51	-	-
2	Airpods	Apple	A2564	-	-

Item	Shielded Type	Ferrite Core	Length	Model Name/Type No.	Note
1	NO	NO	1.5m	-	Type-C Cable

## 2. Maximum Permissible Exposure

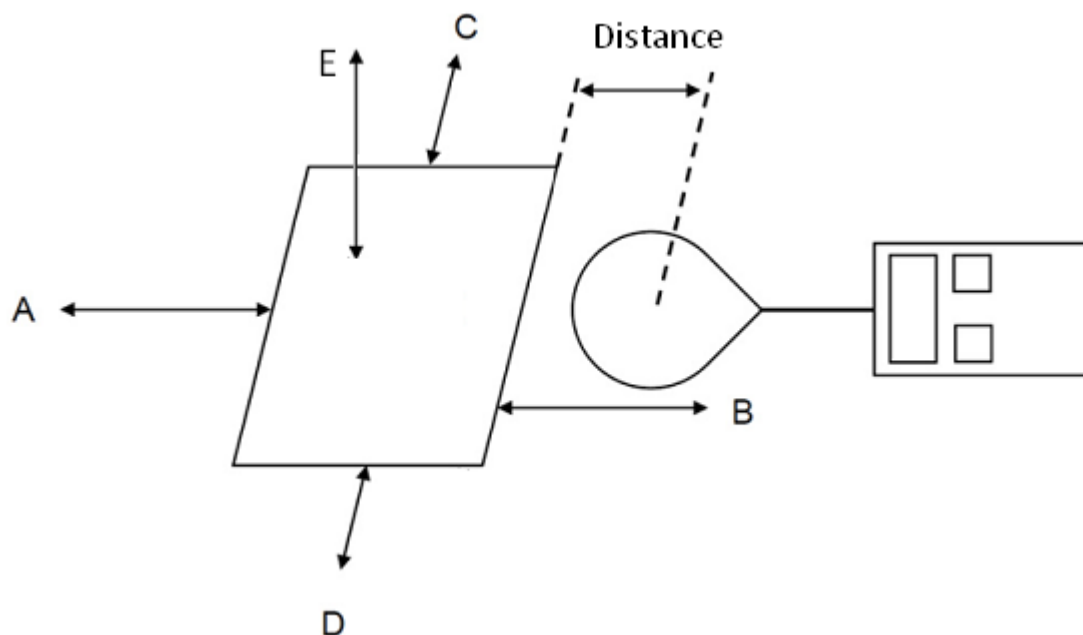
### 2.1. Limit

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

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
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
300-1,500			f/1500	30
1,500-100,000			1.0	30

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

### 2.2. Test Setup



### 2.3. Test Procedure

- a. The test was performed on 360 degree turn table in anechoic chamber.
- b. The probe was placed at 20 cm surrounding, for test setup.
- c. The highest emission level was recorded and compared with limit as soon as measurement of each point; A, B, C, D, E were completed.

### 2.4. Equipment Approval Considerations

Inductive wireless power transfer applications with supporting field strength results and meeting all of the following requirements are not required to submit a KDB inquiry for devices approved using SDoC or a PAG for equipment approved using certification to address RF exposure compliance.

1	Power transfer frequency is less than 4 MHz
	YES; the device operated in the frequency range from 110.5-205KHz.
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 5W.
3	The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.
	YES; The EUT has three source primary coils
4	Client device is 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).
	YES; Mobile exposure conditions only.
6	The aggregate H-field strengths anywhere at or beyond 20 cm surrounding the device, and 20 cm away from the surface from all coils that by design can simultaneously transmit, and while those coils are simultaneously energized, are demonstrated to be less than 50% of the applicable MPE limit.
	YES; The EUT field strength levels are 50% x MPE limits.

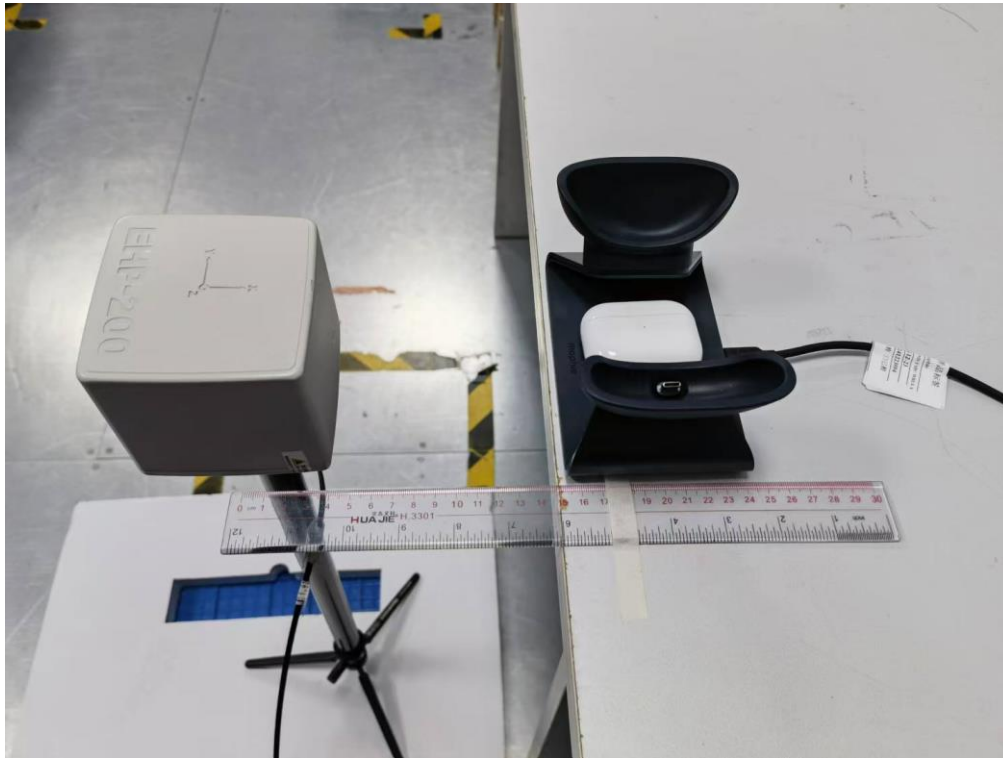
## 2.5. Test Result for Test setup :

E-field strength			
Frequency range (KHz)	110.5 to 205 kHz		
Test Mode	Full Load	Half Load	Empty Load
Position A(V/m)	0.817	0.512	0.336
Position B(V/m)	0.641	0.426	0.361
Position C(V/m)	0.561	0.401	0.345
Position D(V/m)	0.691	0.467	0.352
Position E(V/m)	0.740	0.556	0.339
Limits (V/m)	614		
50% Limits(V/m)	307		
H-field strength			
Frequency range (KHz)	110.5 to 205 kHz		
Test Mode	Full Load	Half Load	Empty Load
Position A(A/m)	0.042	0.042	0.039
Position B(A/m)	0.049	0.049	0.035
Position C(A/m)	0.044	0.048	0.038
Position D(A/m)	0.051	0.045	0.041
Position E(A/m)	0.042	0.043	0.042
Limits (A/m)	1.630		
50% Limits (A/m)	0.815		

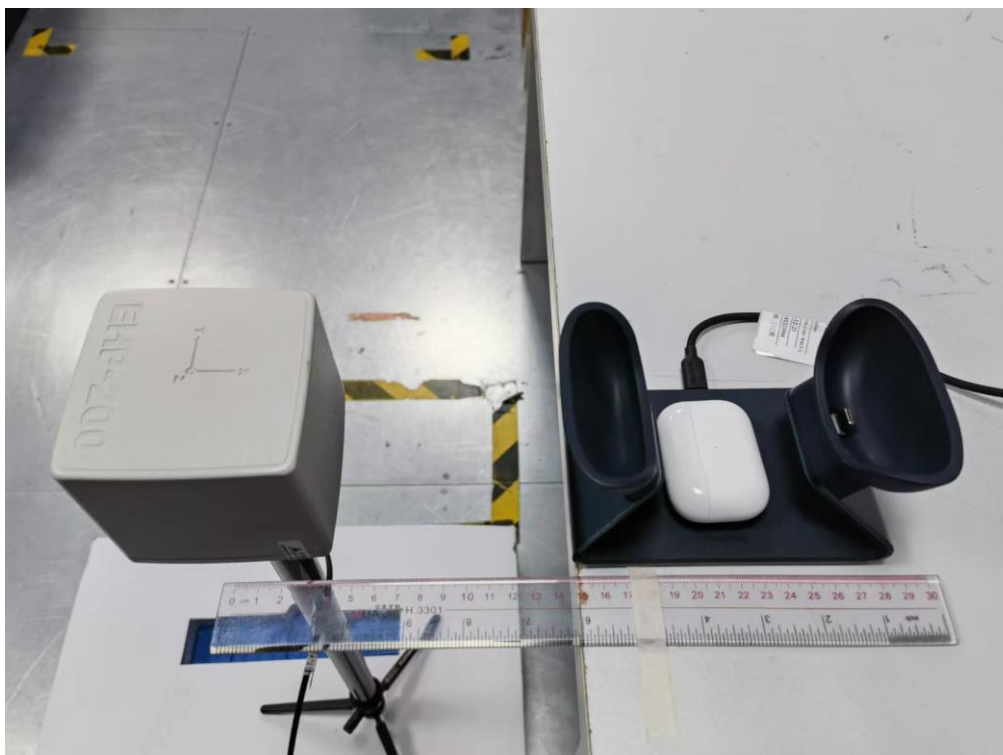


### 3. Test photo

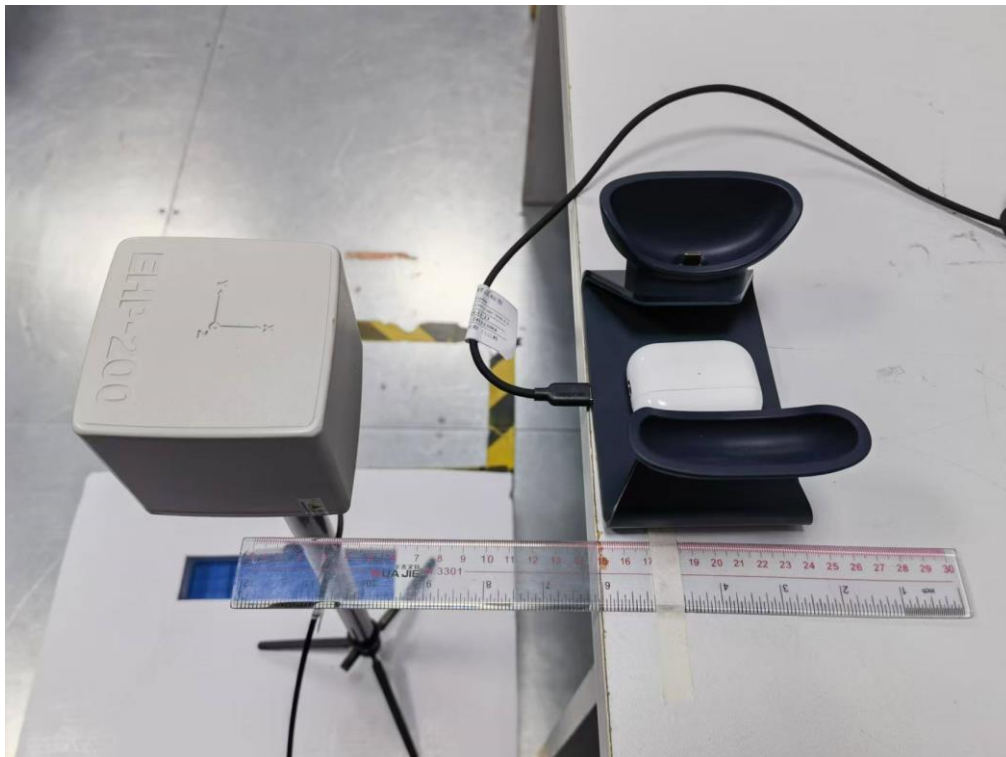
Position A



Position B



Position C

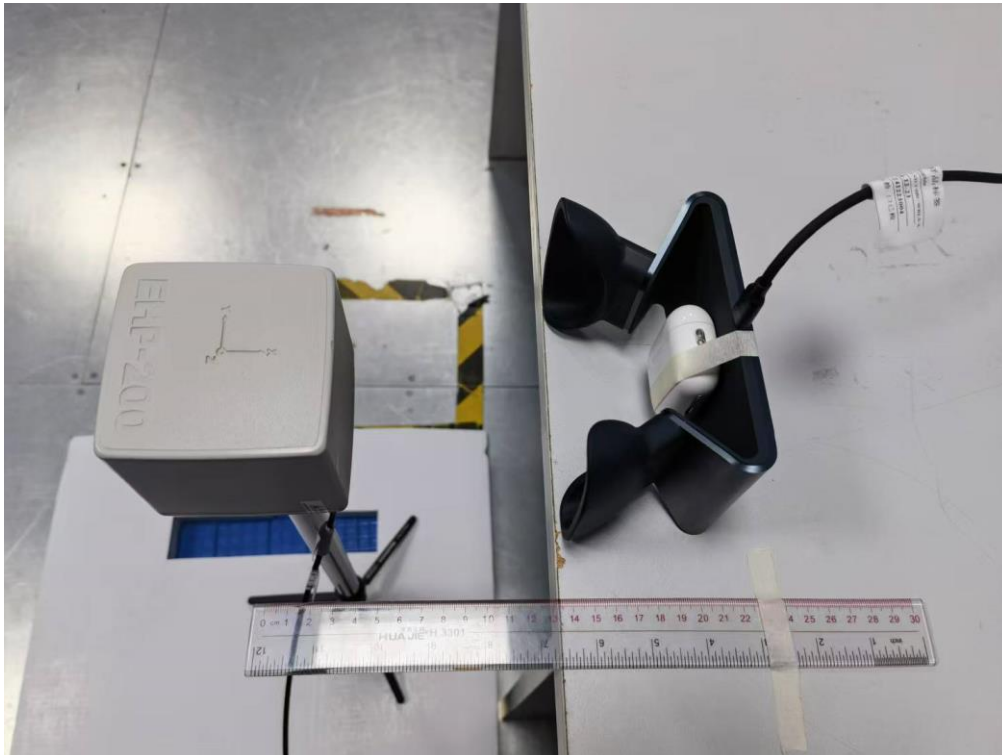


Position D





Position E



**End of Test Report**