# RF EXPOSURE REPORT FOR CERTIFICATION On Behalf of

### **Anker Innovations Limited**

Anker MagGo Power Bank (5,000mAh, 7.5W, Stand)

Model Number: A1618

FCC ID: 2AOKB-A1618

Applicant:	Anker Innovations Limited					
Address:	Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok,					
	Kowloon, Hong Kong					
Prepared By:	EST Technology Co., Ltd.					
	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China					
Tel: 86-769-83081888-808						

Report Number:	ESTE-R2306153
Date of Test:	Jun. 14~30, 2023
Date of Report:	Jul. 04, 2023

EST Technology Co., Ltd Report No. ESTE-R2306153

# TABLE OF CONTENTS

<u>Descr</u>	<u>iption</u>	1	Page
TEST R	EPORT	VERIFICATION	3
1.	SUM	IMARY OF TEST	4
	1.1.	Summary of test result	4
	1.2.	Test Mode	
	1.3.	Test Equipment List	4
2.	MAX	XIMUM PERMISSIBLE EXPOSURE	5
	2.1.	Limit	
	2.2.	Test Setup A	5
	2.3.	Test Setup B	6
	2.4.	Test Procedure	6
	2.5.	Equipment Approval Considerations	7
	2.6	Test Result	8

# EST Technology Co., Ltd.

Applicant: Address:	Anker Innovations Limited Room 1318-19, Hollywood Plaza, Kowloon, Hong Kong	610 Nathan Road, Mongkok,					
Manufacturer: Address:	Anker Innovations Limited Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hong Kong						
E.U.T:	Anker MagGo Power Bank (5,000mAh, 7.5W, Stand)						
Model Number:	A1618						
Power Supply:	Cell Capacity: 5000mAh 3.7Vdc/1 rated voltage: 5V rated capacity: USB-C Input:5V === 2A USB-C Output: 5V === 2.4A Wireless Output:5W/ 7.5W Total Output: 12W						
Trade Name:	ANKER Sea	rial No.:					
Date of Receipt:	Jun. 14, 2023 Da	te of Test: Jun. 14~30, 2023					
Test Specification:	FCC CFR 47 Part 1.1307(b)&1.13 KDB 680106 D01 RF Exposure W						
Test Result:	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.						
		Date: Jul 04,2023					
Prepared by:	Reviewed by:	Approved by:					
Ring Yang / Assistant	Seven Wang / Engineer	Iceman Hu / Manager					
Other Aspects: None.	\ 						
Abbreviations: OK/P=pas	sed fail/F=failed n.a/N=not appli	cable E.U.T=equipment under tested					
rest .							

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.

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	Wireless Charging with Empty Load Wireless Charging with Half Load		
-	Wireless Charging with Full Load		
Note: The worst Full Load status is recorded in the report			

# 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 12,23	1 Year
Simulated load	/	/	EST-306	N/A	N/A
Simulated load	/	/	EST-307	N/A	N/A
Test Software	Narda	EHP200-TS	Rel 1.92	N/A	N/A

EST Technology Co., Ltd Report No. ESTE-R2306153 Page 4 of 9

#### 2. MAXIMUM PERMISSIBLE EXPOSURE

#### 2.1. Limit

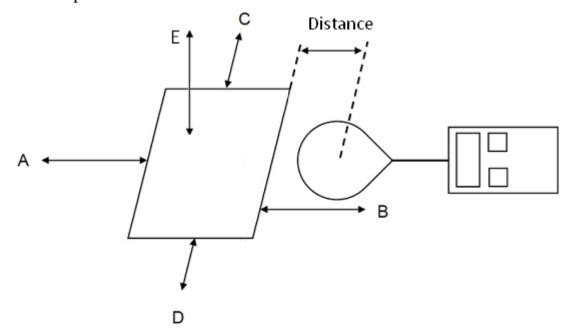
#### **Limits for Maximum Permissible Exposure (MPE)**

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)				
(A) Limits for Occupational/Controlled Exposure								
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) Limits for Gene	eral Population/Und	controlled Exposure	ę				
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:

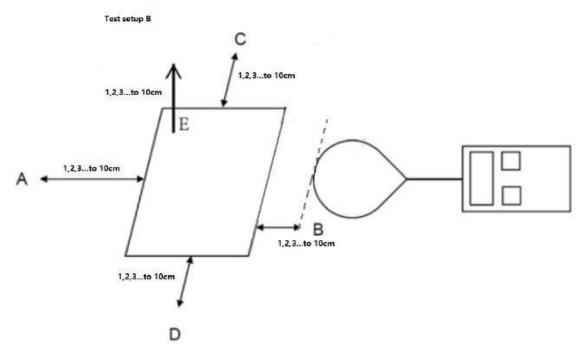
- 1. f = frequency in MHz \* = Plane-wave equivalent power density.
- 2. For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. 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. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

### 2.2. Test Setup A



EST Technology Co., Ltd Report No. ESTE-R2306153

#### 2.3. Test Setup B



#### 2.4. Test Procedure

- a. The test was performed on 360 degree turn table in anechoic chamber.
- b. The probe was placed at 15 cm surrounding the device and 20 cm above the top of the charger and the geometric centre of the probe, for test setup A.
- c. Measure magnetic and electrical field strength at a distance 10cm to 1cm at 1cm iteration, Which is between the edge of the charger and the edge of probe, for test setup B.
- d. The highest emission level was recorded and compared with limit as soon as measurement of each point; A, B, C, D, E were completed.

 $\operatorname{EST}$  Technology Co., Ltd

# 2.5. 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 that 1 MHz
1	YES; the device operated in the frequency range from 111-205KHz.
2	Output power from each primary coil is less than or equal to 15 watts.
4	YES; the maximum output power of the primary coil is 7.5W.
	The system may consist of more than one source primary coils, charging one or more
3	clients. If more than one primary coil is present, the coil pairs may be powered on at
3	the same time.
	YES; the transfer system includes only single primary and secondary coils.
4	Client device is placed directly in contact with the transmitter.
4	YES; Client device is placed directly in contact with the transmitter.
	Mobile exposure conditions only (portable exposure conditions are not covered by
5	this exclusion).
	No.
	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
6	50% of the MPE limit.
	YES; The EUT field strength levels are 50% x MPE limts.

Report No. ESTE-R2306153

# 2.6. Test Result:

Setup A:

Setup A:					
E-field strength					
Frequency range (KHz)	111 to 205 kHz				
Test Mode	Full Load	Half Load	Empty Load		
Position A(V/m)	1.487	0.312	0.225		
Position B(V/m)	1.213	0.305	0.257		
Position C(V/m)	0.385	0.307	0.301		
Position D(V/m)	0.520	0.308	0.285		
Position E(V/m)	0.457	0.354	0.305		
Limits (V/m) 614					
50% Limits(V/m)	50% Limits(V/m) 307				
	H-field strengt	h			
Frequency range (KHz)		111 to 205 kHz			
Test Mode	Full Load	Half Load	Empty Load		
Position A(A/m)	0.110	0.047	0.036		
Position B(A/m)	0.079	0.046	0.042		
Position C(A/m)	0.065	0.042	0.039		
Position D(A/m)	0.060 0.043 0.041				
Position E(A/m)	0.092	0.044	0.040		
Limits (A/m)	1.630				
50% Limits (A/m)	50% Limits (A/m) 0.815				

Report No. ESTE-R2306153

Setup B: E-Filed Strength at (distance 10cm to 1cm at 1cm iteration, i.e. at a distance of 10cm, 9cm, 8cm, ...... 1cm, Which is between the edge of the charger and the edge of of probe,) surrounding the EUT (V/m)

Test distance (cm)	Position A (V/m)	Position B (V/m)	Position C (V/m)	Position D (V/m)	Position E (V/m)	Limits (V/m)
1	4.756	3.234	3.429	3.508	3.302	614
2	3.875	2.611	2.848	2.667	1.945	614
3	2.881	2.551	2.436	2.297	1.456	614
4	2.432	1.849	1.640	1.807	1.256	614
5	1.958	1.252	1.252	1.197	0.899	614
6	1.491	0.985	0.901	0.878	0.789	614
7	1.225	0.712	0.696	0.667	0.652	614
8	0.997	0.582	0.583	0.548	0.509	614
9	0.811	0.454	0.467	0.454	0.415	614
10	0.728	0.412	0.377	0.404	0.390	614

H-Filed Strength at (distance 10cm to 1cm at 1cm iteration, i.e. at a distance of 10cm, 9cm, 8cm, ...... 1cm, Which is between the edge of the charger and the edge of of probe,) surrounding the EUT (A/m)

Test distance (cm)	Position A (A/m)	Position B (A/m)	Position C (A/m)	Position D (A/m)	Position E (A/m)	Limits (A/m)
1	0.257	0.161	0.256	0.044	0.043	1.63
2	0.204	0.158	0.240	0.046	0.044	1.63
3	0.174	0.147	0.227	0.048	0.044	1.63
4	0.146	0.131	0.178	0.047	0.040	1.63
5	0.124	0.128	0.158	0.046	0.046	1.63
6	0.099	0.111	0.138	0.045	0.047	1.63
7	0.094	0.103	0.119	0.047	0.049	1.63
8	0.082	0.089	0.111	0.047	0.044	1.63
9	0.070	0.078	0.103	0.042	0.049	1.63
10	0.065	0.073	0.079	0.049	0.052	1.63

Note: The product has AC Power in mode and internal battery mode, all mode have been tested, only worst case internal battery mode is recorded.