

# TEST REPORT

Reference No..... : WTX22X09180691W002  
FCC ID ..... : 2ABY9GRAVITY-C2  
Applicant ..... : Adam Elements International Co., LTD.  
Address..... : 10F.-3, No.54, Songjiang Rd., Zhongshan Dist., Taipei City , Taiwan  
Manufacturer ..... : Amaztec Co.,Ltd  
Address..... : 17/F of Building C6, Hengfeng Industrial Park, Zhoushi Road, Bao'an District, Shenzhen, Guangdong, China, 518126  
Product Name ..... : Magnetic Wireless Charging Power Bank  
Model No..... : GRAVITY C2  
Standards ..... : KDB 680106 D01 V03  
Date of Receipt sample .... : 2022-09-05  
Date of Test..... : 2022-09-05 to 2022-09-20  
Date of Issue ..... : 2022-09-20  
Test Report Form No. .... : WTX\_KDB 680106 D01 V03W  
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 approver.

**Prepared By:**

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**Report version**

Version No.	Date of issue	Description
Rev.00	2022-09-20	Original
/	/	/

## 1. GENERAL INFORMATION

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### 1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	Magnetic Wireless Charging Power Bank
Trade Name:	/
Model No.:	GRAVITY C2
Adding Model(s):	/
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Frequency Range:	110~205KHz
Modulation Type:	ASK
Antenna Type:	Coil Antenna
Antenna Gain	0dBi
Input:	DC5V 3A, DC9V 2A,DC12V1.67A
Wireless output:	5W,7.5W,10W,15W
Power adapter:	/
Capacity:	10000mAh

### 1.2 Auxiliary Equipment List and Details

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Wireless Charging Load	YBZ	YBZ wireless charging tester	/

**1.3 Test Equipment List and Details**

Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
ELECTRIC AND MAGNETIC FIELD ANALYZER	Narda	EHP-200AC	180ZX10226	2021-05-20	2024-05-19

## 2. RF Exposure Test Report

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### 2.1 Standard Applicable

According to § 1.1310 system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

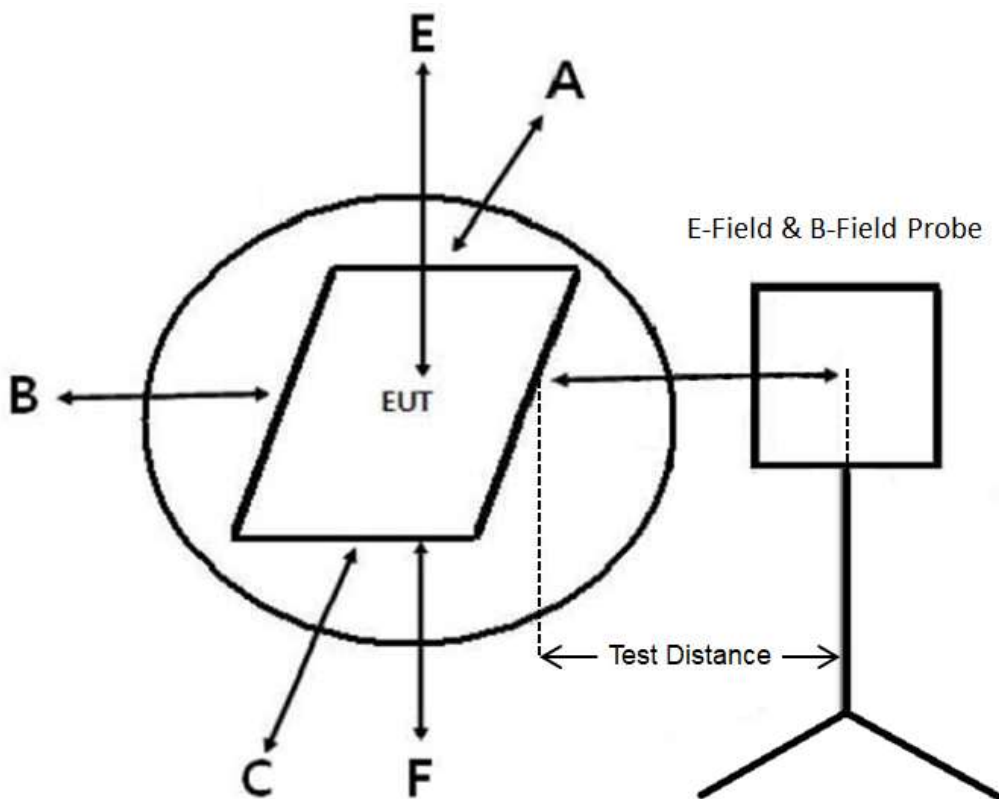
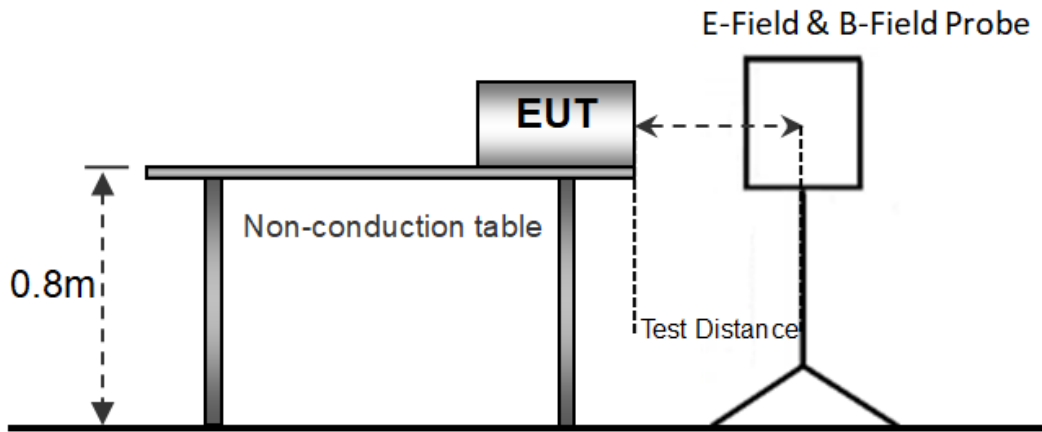
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500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

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

### 2.2 Test Conditions

Test Mode	Description	Remark
TM1	Wireless charging	5W output
TM2	Wireless charging	10W output
TM3	Wireless charging	15W output
<b>Measurement Distance:</b>		
15 cm and 20 cm		

### 2.3 Test Procedure



- The measurement probe was placed at test distance(15 cm for A,B,C,D,F and 20 cm for E) which is between the edge of the charger and the geometric center of probe.
- The highest emission level was recorded at the measurement points(A, B, C, D, E, F).
- The EUT was measured according to the distance of KDB 680106 D01 V03.



## 2.4 Test Result

The EUT complies with item 5.2 of KDB 680106 D01V03

1. Power transfer frequency is less than 1 MHz  
Yes, the device operates in the frequency range from 110kHz to 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 equal to 15W.
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  
Yes, the client device includes only single primary 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).  
Yes, It is mobile exposure conditions only.
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 less than 50% of the MPE limit, refer to test TM1, TM2, TM3 list, and the coils can't be transmitted simultaneously.

*Test Mode: TM1 (worst case)*

<b>Electric Field Emissions</b>			
<b>Test Position</b>	<b>Measure Value (V/m)</b>	<b>Limit(V/m)</b>	<b>50% Limit (V/m)</b>
Point E	4.85	614	307
Point F	5.21	614	307
Point A	2.85	614	307
Point B	2.80	614	307
Point C	1.01	614	307
Point D	2.45	614	307
<b>Magnetic Field Emissions</b>			
<b>Test Position</b>	<b>Measure Value (A/m)</b>	<b>Limit(A/m)</b>	<b>50% Limit (A/m)</b>
Point E	0.23	1.63	0.815
Point F	0.54	1.63	0.815
Point A	0.23	1.63	0.815
Point B	0.16	1.63	0.815
Point C	0.24	1.63	0.815
Point D	0.12	1.63	0.815

**2.5 Measurement Uncertainty**

<b>Measurement uncertainty</b>		
<b>Parameter</b>	<b>Conditions</b>	<b>Uncertainty</b>
Electric Field Emissions	Radiated	$\pm 1.56$ (V/m)
Magnetic Field Emissions	Radiated	$\pm 0.08$ (A/m)

**2.6 Test Photos**



## **APPENDIX PHOTOGRAPHS**

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**Please refer to “ANNEX”**

**\*\*\*\*\* END OF REPORT \*\*\*\*\***