

## TEST REPORT

**Application No.:** BTEK231103010AE  
**Applicant:** ZAGG INC.  
**Address of Applicant:** 910 West Legacy Center Way Midvale Utah United States  
**Manufacturer:** ZAGG INC.  
**Address of Manufacturer:** 910 West Legacy Center Way Midvale Utah United States  
**Factory:** NA  
**Address of Factory:** NA  
**Equipment Under Test (EUT):**  
**EUT Name:** ZAGG Wireless Charging Desk Mat  
**Model No.:** ZMATUNIWC61  
**Trade Mark:**   
ZAGG  
**Standard(s) :** 47 CFR Part 2 Subpart J Section 2.1091  
**Date of Receipt:** 2023-11-14  
**Date of Test:** 2023-11-14 to 2023-12-08  
**Date of Issue:** 2023-12-08

<b>Test Result:</b>	<b>Pass*</b>
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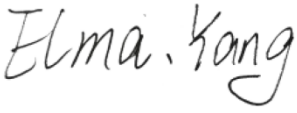
\* In the configuration tested, the EUT complied with the standards specified above.



Damon Su  
EMC Laboratory Manager



Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2023-12-08		Original

Authorized for issue by			
			
		<hr/>	
		Carl Yang /Project Engineer	
			
		<hr/>	
		Elma Yang /Reviewer	



## 2 Contents

	Page
<b>1 Cover Page</b> .....	<b>1</b>
<b>2 Contents</b> .....	<b>3</b>
<b>3 General Information</b> .....	<b>4</b>
3.1 Details of E.U.T. ....	4
3.2 Description of Support Units .....	4
3.3 Test Location.....	5
3.4 Deviation from Standards.....	5
3.5 Abnormalities from Standard Conditions .....	5
<b>4 Test Requirement</b> .....	<b>6</b>
4.1 Assessment Result .....	7
4.2 Test Set-up Photo .....	9



### 3 General Information

#### 3.1 Details of E.U.T.

Power Supply	Input: DC 5V/2A, 9V/2A Wireless Output: 5W, 7.5W, 10W
Modulation Type	FSK
Frequency Range	The frequency block is 110.0 KHz to 205.0KHz.
Antenna Type	Coil antenna
Sample No.:	BTEK231103010AE-01
Remark: The information in this section is provided by the applicant or manufacturer, BANTEK is not liable to the accuracy, suitability, reliability or/and integrity of the information.	

#### Declaration of EUT Family Grouping:

Model No.: ZMATUNIWC61

According to the declaration from the applicant, the electrical circuit design, layout, components used, internal wiring and functions of other models are identical for the above models, with only difference on colour.

#### 3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
WPC charging load	EESON	2S	--
adapter	Shenzhen Aoda Power Technology Co.,Ltd	A829-200150C-EU4	--
/	iPhone	/	/



### 3.3 Test Location

All tests were performed at:

Shenzhen BANTEK Testing Co., Ltd.,

A5&A6, Building B1&B2, No.45 Gangtuo Road, Bogang Community, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Tel:0755-2334 4200

Fax: 0755-2334 4200

FCC Registration Number: 264293

Designation Number: CN1356

No tests were sub-contracted.

### 3.4 Deviation from Standards

None

### 3.5 Abnormalities from Standard Conditions

None



## 4 Test Requirement

KDB 680106 D01 RF Exposure Wireless Charging App v04

Inductive wireless power transfer applications that meet all of the following requirements are excluded from, submitting an RF exposure evaluation.

Requirements of KDB 680106 D01	Description
WPT operating frequency (or frequencies).	The device operate in the frequency range 110KHz~205KHz
Number of radiating structure(Coil)	Only one radiated Coil
Conducted power for each radiating structure.	Maximum 10W
§ 2.1091-Mobile or § 2.1093-Portable demonstrated scenarios of operation, including RF exposure compliance information	Mobile Device
Maximum distance from the WPT transmitter at which, by design, a load can be charged (including slow-charging operations)	Charing with the load directly contact

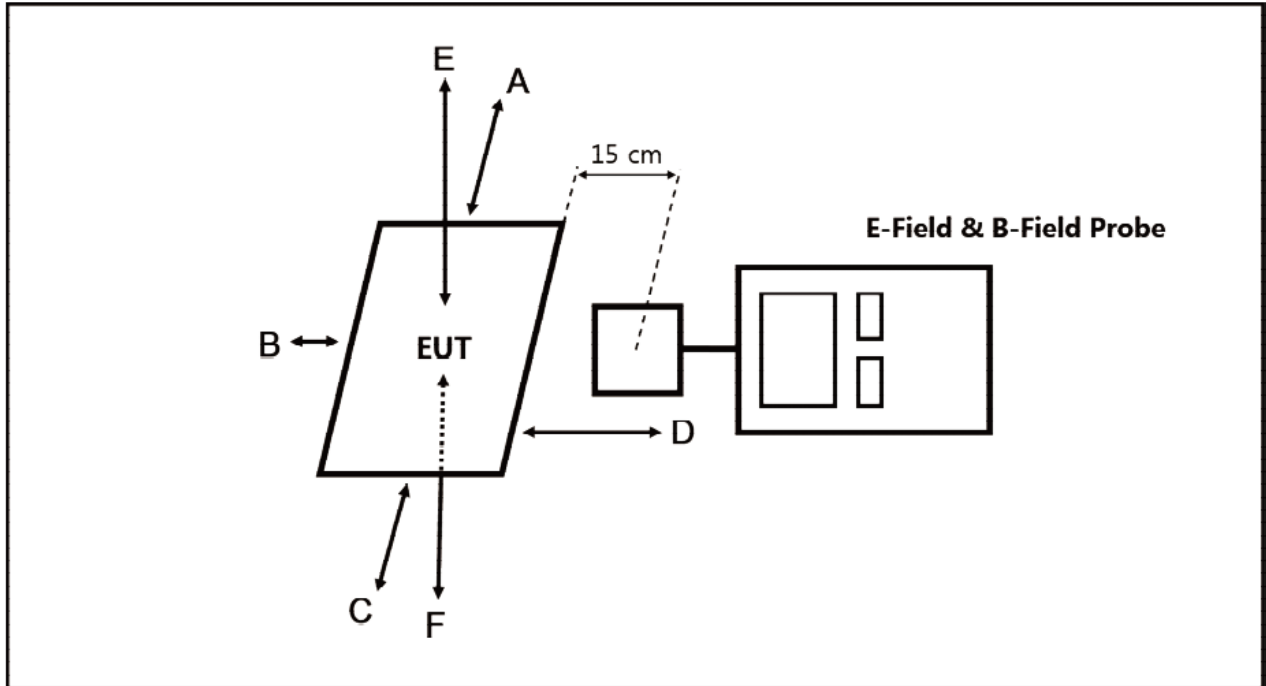
TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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



**Test Setup**



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

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (15 cm from all sides and 20 cm from the top) which is between the edge of the charger and the geometric center of probe.
- 3) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v04.

**4.1 Assessment Result**

**Passed**       **Not Applicable**

Note: All test modes were pre-tested, but we only recorded the worst case in this report.

H-Field Strength at 15 cm from the edges surrounding the EUT and 15cm from the top surface of the EUT

Charging Battery Level	Unit	Frequency Range (MHz)	Measured E-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
			Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.146	0.1546	0.1518	0.1547	0.1525	0.1554	--	--
1%	A/m	0.146	0.1263	0.1217	0.1241	0.1254	0.1227	0.815	1.63
50%	uT	0.146	0.1369	0.1342	0.1315	0.1336	0.1385	--	--
50%	A/m	0.146	0.1069	0.1016	0.1065	0.1077	0.1046	0.815	1.63
99%	uT	0.146	0.1248	0.1277	0.1217	0.1213	0.1203	--	--
99%	A/m	0.146	0.0944	0.0914	0.0911	0.0945	0.0924	0.815	1.63

uT=1.25\* A/m

E-Field Strength at 15 cm from the edges surrounding the EUT and 15cm from the top surface of the EUT  
ShenZhen BANTEK Testing Co.,Ltd.

Add : A5&A6, Building B1&B2, No.45 Gangtou Road, Bogang Community, Shajing Street  
Bao'an District, Shenzhen, Guangdong, China 518104

Tel : +(86)755-2334 4200    E-mail : Service@btek-lab.com    Web : www.btek-lab.com



**H-Field Strength at 20cm from the top surface of the EUT**

Charging Battery Level	Unit	Frequency Range (MHz)	Measured E-Field Strength Values (A/m)	FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
			Test Position E		
1%	uT	0.146	0.1074	--	--
1%	A/m	0.146	0.1055	0.815	1.63
50%	uT	0.146	0.1047	--	--
50%	A/m	0.146	0.1016	0.815	1.63
99%	uT	0.146	0.1071	--	--
99%	A/m	0.146	0.1041	0.815	1.63

Note:A/m=uT/1.25

Note:

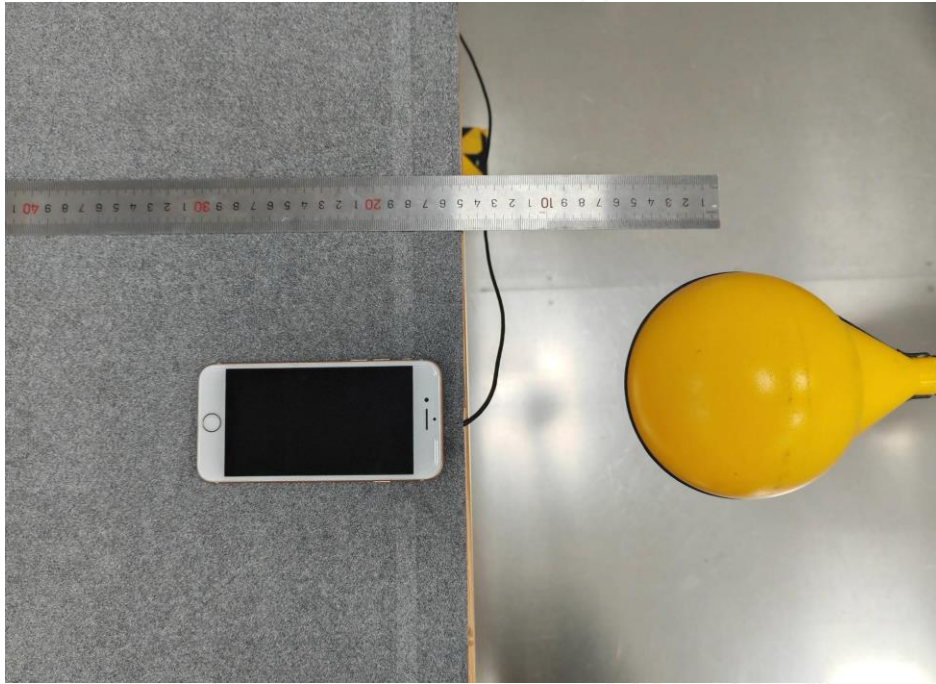
1. All test modes were pre-tested, but we only recorded the worst case in this report.
2. During test the frequencies less than 1 MHz and E/H ratio less than 1/10 of the 377-ohm free space wave impedance, only record H-field measurements result.





## 4.2 Test Set-up Photo

Front 15cm



- End of the Report -

