TEST REPORT

Application No.:	GZCR2512002084HS
Applicant:	XIAMEN ZHOULONG SPORTING GOODS CO., LTD
Address of Applicant:	No. 77 Lianmei San Road, Lianhua Industrial Zone, Tong'an District, Xiamen, Fujian, China
Manufacturer:	XIAMEN ZHOULONG SPORTING GOODS CO., LTD
Address of Manufacturer:	No. 77 Lianmei San Road, Lianhua Industrial Zone, Tong'an District, Xiamen, Fujian, China
Factory:	XIAMEN ZHOULONG SPORTING GOODS CO., LTD
Address of Factory:	No. 77 Lianmei San Road, Lianhua Industrial Zone, Tong'an District, Xiamen, Fujian, China
Product Name:	RECUMBENT BIKE
Model No.:	BR201E, BR202EB ¤
¤	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Standard(s) :	47 CFR Part 1.1310
	KDB 680106 D01 v04
	KDB 447498 D01 General Radio Frequency Exposure Guidelines v06
Date of Receipt:	2025-12-26
Date of Test:	2026-03-10
Date of Issue:	2026-03-13
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

Revision Record			
Version	**Report No.**	**Date**	**Remark**
01	GZCR251200208403	2026-03-19	Original

Authorized for issue by:				
		Key Liang **Key Liang/Project Engineer**		
Approved By		Vico Cui **Vico Cui/Reviewer**		

2 Test Summary

Radio Spectrum Matter Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Field strength	KDB 680106 D01 v04	KDB 680106 Section 3	47 CFR Part 1.1310	Pass
RF Exposure	KDB 447498 D01 v06	KDB 447498 D01 v06	47 CFR Part 1.1310	Pass

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

¤ Declaration of EUT Family Grouping:

Model No.: BR201E, BR202EB

According to the declaration from the applicant, the electrical circuit design, layout, components used and internal wiring were identical for all models, with only difference on model name, appearance, color.

Therefore only one model BR201E was tested in this report.

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	DC 12 V powered by AC/DC adapter as below:
	Model: EA036-1200-3000
	Input: AC 100-240V 50/60Hz 0.8A
	Output: DC 12.0V 3.0A, 36.0 W
Test voltage:	AC 120V, 60Hz
Cable(s):	1.1m x 2 wires unscreened AC input cable for AC/DC adapter.
	0.9m 2 wires unscreened DC output cable for AC/DC adapter.
Operation frequency:	113.500kHz to 146.772kHz
Modulation type:	Load modulation
Antenna type:	Loop (Coil) Antenna

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Mobile Phone	APPLE	iPhone 12 mini	F71DP3NG0GQY
Wireless charge load	YBZ	MPP25W	/

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Field strength	H_{tot}: U=2.65dB, E_{tot}: U=1.89dB

Remark:

The U_{lab} (lab Uncertainty) is less than U_{cispr} (CISPR Uncertainty) or U_{ETSI}(ETSI Uncertainty).

Emission decision rule:

– Compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit, marked as Pass in the report.

– Non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit, marked as Fail in the report.

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663

Tel: +86 20 82155555

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

- **ISED (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

- **VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)**

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

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5 Equipment List

Magnetic field strength					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
743 Compact 3m Semi-Anechoic Chamber	ChangZhou ZhongYu	N/A	EMC0525	2025-10-16	2028-10-14
MAGPy-8H3D+E3D	SPEAG	MAGPy	SEMC060-31	2026-02-05	2027-02-04
MAGPy-DAS	SPEAG	MAGPy	SEMC060-32	2026-02-05	2027-02-04
Test Software MAGPy 2.6	SPEAG	V2.6.0	N/A	N/A	N/A

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
DMM	Fluke	73	EMC0006	2025-06-03	2026-06-02

6 Radio Spectrum Matter Test Results

6.1 Magnetic field strength

Test Requirement 47 CFR Part 1.1310
Test Method: KDB 680106 Section 3
Test Engineer: Lily Kuang
Limit:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(i) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*($900/f^2$)	<6
30-300	61.4	0.163	1.0	<6
300-1,500	/	/	f/300	<6
1,500-100,000	/	/	5	<6
(ii) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*($180/f^2$)	<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.

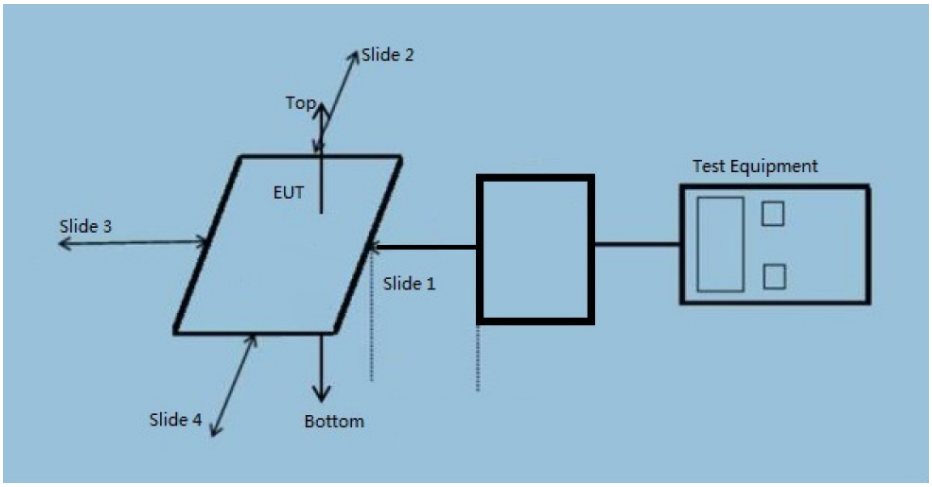
* = Plane-wave equivalent power density.

The emissions should be within the limits at 300kHz in Table 1 0f 1.1310 (use the 300kHz limits for the lower frequencies)

6.1.1 E.U.T. Operation

Operating Environment:
Temperature: 25.6 °C Humidity: 53.2 % RH Atmospheric Pressure: 1006 mbar

6.1.2 Test Setup Diagram



6.1.3 Measurement Procedure and Data

Output Voltage= DC 5 V; The max output power = 15 W; Calculation of resistor value=1.67 Ω						
Electric Field Emissions						
Operation frequency	**Test Distance**	**Test Position**	**Probe Measure Result(V/m)**			**Limit**
	(cm)*		**unload**	**Half load**	**full load**	**(V/m)**
113.5 kHz which is the worst case within the operation frequency range	20	Side 1	0.73	0.91	1.17	<=614
		Side 2	0.61	0.82	1.03	
		Side 3	0.53	0.83	0.92	
		Side 4	0.32	0.65	0.96	
		Top	0.56	1.01	1.47	
		Bottom	0.17	0.26	0.69	

Magnetic Field Emissions						
Operation frequency	**Test Distance**	**Test Position**	**Probe Measure Result(A/m)**			**Limit**
	(cm)*		**unload**	**Half load**	**full load**	**(A/m)**
113.5 kHz which is the worst case within the operation frequency range	20	Side 1	0.31	0.51	0.91	<=1.63
		Side 2	0.44	0.56	0.82	
		Side 3	-0.02	0.37	0.86	
		Side 4	0.31	0.37	0.77	
		Top	0.26	0.72	**1.14**	
		Bottom	-0.07	0.18	0.51	

Mobile phone has been charged at zero charge, intermediate charge, and full charge.

Electric Field Emissions

Operation frequency	Test Distance (cm)*	Test Position	Probe Measure Result(V/m)			Limit (V/m)
			zero charge	intermediate charge	full charge	
113.5 kHz which is the worst case within the operation frequency range	20	Side 1	1.71	1.50	1.43	<=614
		Side 2	1.63	1.34	1.08	
		Side 3	1.33	1.16	0.67	
		Side 4	1.52	1.09	0.76	
		Top	1.89	1.65	1.63	
		Bottom	1.21	0.91	0.46	

Magnetic Field Emissions

Operation frequency	Test Distance (cm)*	Test Position	Probe Measure Result(A/m)			Limit (A/m)
			zero charge	intermediate charge	full charge	
113.5 kHz which is the worst case within the operation frequency range	20	Side 1	0.66	1.00	1.25	<=1.63
		Side 2	0.89	1.24	1.34	
		Side 3	0.50	0.93	1.07	
		Side 4	0.69	1.16	1.17	
		Top	0.56	1.03	**1.42**	
		Bottom	0.10	0.49	0.67	

*Remark: The test distance 20 cm was the worst case of all the distance declared in user manual by applicant.

6.2 RF Exposure Evaluation

6.2.1 Limit & Test Method

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

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^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f^2)	6
30–300	61.4	0.163	1.0	6
300–1500	.....	.....	f/300	6
1500–100,000	.....	.....	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f^2)	30
30–300	27.5	0.073	0.2	30
300–1500	.....	.....	f/1500	30
1500–100,000	.....	.....	1.0	30

F= Frequency in MHz

Friis Formula

Friis transmission formula: $P_d = (P_{out}*G)/(4* P_i * R^2)$

Where

P_d = power density in mW/cm^2

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

P_i = 3.1416

R = distance between observation point and center of the radiator in cm

P_d id the limit of MPE, 1 mW/cm^2. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

6.2.2 Conclusion

Multiple transmitter-According to Section 7.2 of KDB 447498 D01 General Radio Frequency Exposure Guidelines v06

RF exposure of FCC ID: 2AOT2SH-BLEM18 use BLE function.

For Bluetooth BLE

Antenna Gain: 1.2 dBi

Frequency (MHz)	Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2402	1.32	0.47	1.11	0.00029	1	Complies
2440	1.32	0.45	1.11	0.00029	1	Complies
2480	1.32	0.43	1.10	0.00029	1	Complies

RF exposure of FCC ID: 2A9G7-AI00750 use BR/EDR function.

For Bluetooth BR/EDR

Antenna Gain: 1 dBi

Frequency (MHz)	Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2402	1.26	-2.35	0.58	0.00015	1	Complies
2440	1.26	-1.75	0.67	0.00017	1	Complies
2480	1.26	-1.82	0.66	0.00016	1	Complies

The BLE & BR/EDR & WPC can be transmitted at the same time, so the result is 0.00029+0.00017+1.42/1.63=0.8716<1, so the device meets the RF exposure and without further test.

7 Test Setup Photo

Refer to Appendix - Test Setup Photo for GZCR251200208403

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8 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for GZCR2512002084HS

- End of the Report -

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