FCC TEST REPORT

FCC ID: 2A6NV-PF-S02B

On Behalf of

Dongguan Dirui Electronic Technology Co., Ltd.

Pet Fountain

Model No.: PF-S02B, PF-S02W

Prepared for	:	Dongguan Dirui Electronic Technology Co., Ltd.
Address	:	Room 501, Building 7, Tailian lane No.1, Chang An Town, Dongguan City, Guangdong Province

Prepared By	:	Shenzhen PSI Testing Co., Ltd.
Address	:	1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Report Number	:	psi2402001-C01-R10
Date of Receipt	:	February 22, 2024
Date of Test	:	February 22, 2024-March 4, 2024
Date of Report	:	March 4, 2024
Version Number	:	V0

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TEST REPORT DECLARATION

Applicant	:	Dongguan Dirui Electronic Technology Co., Ltd.
Address	:	Room 501, Building 7, Tailian lane No.1, Chang An Town, Dongguan City, Guangdong Province
Manufacturer	:	Dongguan Dirui Electronic Technology Co., Ltd.
Address	:	Room 501, Building 7, Tailian lane No.1, Chang An Town, Dongguan City, Guangdong Province
EUT Description	:	Pet Fountain
		(A) Model No. : PF-S02B, PF-S02W
		(B) Trademark : N/A

Measurement Standard Used:

FCC CFR 47 PART 1, FCC CFR 47 part1, 1.1307(b), 1.1310

KDB 680106 D01 Wireless Power Transfer v04

The device described above is tested by Shenzhen PSI Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen PSI Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness test. Also, this report shows that the EUT is technically compliant with the KDB 680106 D01 requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen PSI Testing Co., Ltd.

Tested by (name + signature).....:	Jensen Wang Test Engineer	Jensen Wang
Approved by (name + signature).....:	Simple Guan Project Manager	Simple Guan
Date of issue.....:	March 4, 2024	

Revision History

Revision	Issue Date	Revisions	Revised By
REV0	March 4, 2024	Initial released Issue	Jensen Wang

1. Test Result Summary

Requirement	CFR 47 Section	Result
RF EXPOSURE	§1.1307(b)(1), §1.1310& KDB680106	PASS

Note:

1. PASS: Test item meets the requirement.

2. Fail: Test item does not meet the requirement.

3. N/A: Test case does not apply to the test object.

4. The test result judgment is decided by the limit of test standard.

5. Decision rules for the conclusion of this test report: decision by actual test data without considering measurement uncertainty.

2. EUT Description

2.1. Description of Device (EUT)

EUT Name	:	Pet Fountain
Model No.	:	PF-S02B, PF-S02W
DIFF.	:	There is no difference between the models except the appearance color. So all the test were performed on the model PF-S02B.
Power supply	:	DC 5V from adapter, DC 3.7V from battery.
Radio Technology	:	Wireless power transmission systems
Operation frequency	:	115KHz-205KHz
Modulation	:	ASK
Antenna Type	:	Coil Antenna
Connector cable loss	:	0.5dB
Software version	:	V1.0
Hardware version	:	V1.0
Note	:	Antenna information is provided by applicant. Testing lab is not responsible for the accuracy of the information.

Conditions requirement	Answers
Power transfer frequency is less than 1MHz.	Yes, The operating frequency range is 115 kHz - 205 kHz;
The 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
A client device providing the maximum permitted load is placed in physical contact with the transmitter(i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)	Yes. Client device is placed directly in contact with the transmitter.
Only $ 2.1091-Mobile exposure conditions apply (i.e., this provision does not cover $ 2.1093-Portableexposure conditions).	only Mobile exposure condition is applicable
The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a l/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios.(i.e.. the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.	Yes, The E-field and H-field strengths levels are less than 50% of MPE limit.
For systems with more than one radiating structure, the conditions specified in (5) must be when the system is fully loaded (.e. clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions, If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered. then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W. or one coil powered at 15W: in this case, both scenarios shall be tested.	Mobile exposure conditions only. The product only has one transmitting coil.

2.2. Accessories of Device (EUT)

Accessories	:	Adapter
Manufacturer	:	Bazhong Chuanyuan Technology Co., Ltd
Model	:	CY-01050100UU
specifications	:	Input: AC100-240V~ 50/60Hz 0.3A Output: 5.0V⎓1.0A 5.0W

2.3. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number	Certification or SDoC
1	N/A	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A	N/A

2.4. Block Diagram of connection between EUT and simulators

2.5. Description of Test Modes

Mode	Test mode description
1※	TX
2	Standby
Note: 1. ※ represents the worst-case testing mode.	

2.6. Test Conditions

Items	Required	Actual
Temperature range:	15-35℃	24℃
Humidity range:	25-75%	56%
Pressure range:	86-106kPa	98kPa

2.7. Test Facility

Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

September 13, 2023 File on Federal Communication Commission
Registration Number: 916281

2.8. Measurement Uncertainty

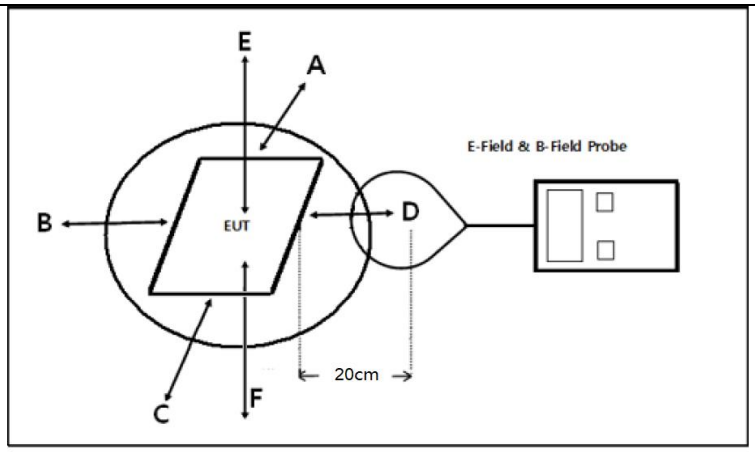
(95% confidence levels, k=2)

Item	**Uncertainty**
Uncertainty for H-Field	2.39dB
Uncertainty for E-Field	2.45dB
Uncertainty for conducted RF Power	0.65dB
Uncertainty for temperature	0.2°C
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

3. Test Results and Measurement Data

3.1. RF EXPOSURE TEST

3.1.1. Test Specification

Test Requirement:	**FCC Rules and Regulations KDB680106**
Test Method:	§1.1307(b)(1) & KDB680106
Limits:	According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. According to §1.1310 and §2.1091 RF exposure is calculated. According KDB 680106 D01 Wireless Power Transfer v04: RF Exposure Wireless Charging.
Test Setup:	 E to position is 20cm, F is the bottom of the product
Test Mode:	Transmitting Mode (Mobile phone will been charge at zero charge, intermediate charge, and full charge.)
Test Procedure:	1. The RF exposure test was carried out on a non-metallic table top 80cm high in the shielding darkroom. 2. The measurement probe was placed at test distance (20 cm for Top side) which is between the edge of the charger and the geometric centre of probe. 3. The test time is maintained for more than one minute. 4. The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed. 5. The EUT were measured according to the dictates of KDB 680106 D01 Wireless Power Transfer v04. 6. H-field strengths levels should less than 50% of MPE limit.
Test Result:	PASS

3.1.2. Test Instruments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Exposure Level Tester	narda	ELT-400	N-0231	2023.12.19	1 Year
2	Magnetic field probe 100cm2	narda	ELT probe 100cm2	M0675	2023.12.19	1 Year
3	Isotropic Electric Field Probe	narda	EP-601	511WX60706	2023.12.19	1 Year

3.1.3. Test data

For TX mode:

E-Field Strength at 20 cm for position A, B, C, D, E from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limit (50%) (V/m)	Limits Test (V/m)
0.115-0.205	6.61	**7.27**	6.78	6.24	6.84	307	614

H-Filed Strength at 20 cm for position A, B, C, D, E from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limit (50%) (A/m)	Limits Test (A/m)
0.115-0.205	0.337	0.488	0.415	0.349	0.377	0.815	1.63
uT	0.421	**0.610**	0.519	0.436	0.471	/	/

Note: uT to A/m: A/m = uT/1.25

For Standby mode:

E-Field Strength at 20 cm for position A, B, C, D, E from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limit (50%) (V/m)	Limits Test (V/m)
0.115-0.205	2.64	2.51	2.00	2.09	1.75	307	614

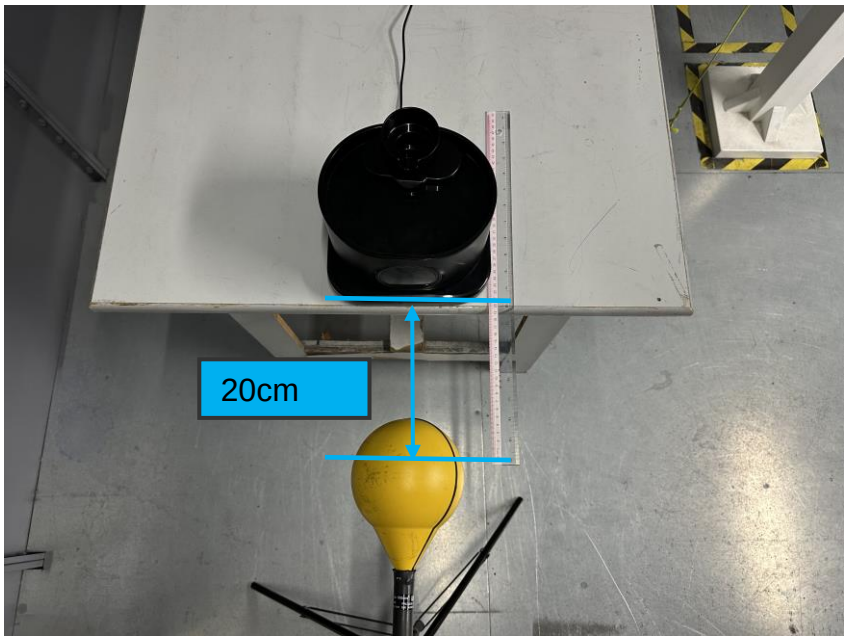
H-Filed Strength at 20 cm for position A, B, C, D, E from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limit (50%) (A/m)	Limits Test (A/m)
0.115-0.205	0.174	0.171	0.173	0.166	0.167	0.815	1.63
uT	0.218	0.214	0.216	0.208	0.209	/	/

Note: uT to A/m: A/m = uT/1.25

4. Photos of test setup

H-Filed



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