RF EXPOSURE Test Report

Product: Smart Water Fountain

Trade Mark: N/A

Model Number: PW1

FCC ID: 2AG7C-PET8

Prepared for

Hangzhou Meari Technology Co., Ltd.

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Prepared by

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TEST RESULT CERTIFICATION

Applicant's Name..... :	Hangzhou Meari Technology Co., Ltd.
Address ..... :	Building 4,Huiding Intelligent Innovation Center,No. 825,Ruquan Road,Changhe Street,Binjiang District,Hangzhou,Zhejiang, China
Manufacturer's Name ..... :	Hangzhou Meari Technology Co., Ltd.
Address ..... :	Building 4,Huiding Intelligent Innovation Center,No. 825,Ruquan Road,Changhe Street,Binjiang District,Hangzhou,Zhejiang, China

Product description

Product name ..... :	Smart Water Fountain
Model Number ..... :	PW1
Standards ..... :	FCC CFR 47 PART 1 , 1.1310
Test procedure..... :	KDB 447498 D01 General RF Exposure Guidance v06

This device described above has been tested by Shenzhen HongBiao Certification& Testing Co., Ltd and the test results show that the equipment under test (EUT) is in compliance with the EMC requirements. And it is applicable only to the tested sample identified in the report.

Date of Test ..... :

Date (s) of performance of tests..... :	Sept. 17, 2026~Oct. 06, 2026
Test Result..... :	**Pass**

Testing Engineer : Zoe Su

(Zoe Su)

Technical Manager : Hans Mou

(Hans Mou)

Authorized Signatory : Leo Su

(Leo Su)

Revision History

Revised No.	Date of Issue	Description
01	Oct. 06, 2026	Original

1 General Description

1.1 Description of EUT

Product name:	Smart Water Fountain
Model name:	PW1
Series Model:	Pet 8, Pet 19, PWF1
Different of series model:	All the models are the same circuit and module, except the model No..
Operation frequency:	BLE: 2402-2480MHz 2.4GHz WIFI: IEEE 802.11b/g/n/ax20: 2412-2462MHz
Modulation type:	BLE: GFSK 2.4GHz WIFI: IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g/n/ax (HT20): OFDM/OFDMA (BPSK, QPSK,16QAM, 64QAM)
Bit Rate of transmitter:	BLE: 1 Mbps 2.4GHz WIFI: IEEE 802.11b: 1/2/5.5/11Mbps IEEE 802.11g: 6/9/12/18/24/36/48/54Mbps IEEE 802.11n(20MHz): MCS0-7, up to 72.2Mbps IEEE 802.11ax(20MHz): MCS0-11, up to 143.4Mbps
Antenna type:	Metal Antenna
Antenna gain:	2.76dBi
Max. output power:	BLE: 11.94dBm 2.4GHz WIFI: 24.79dBm
Hardware version:	PET8-BL616D-REV1_0
Software version:	V1.0
Battery:	DC 3.7V, 5200mAh, 19.24Wh
Power supply:	Input: 100-240V~ 50/60Hz, 0.2A Output: 5.0V⎓1.0A, 5.0W
Adapter information:	Model: DCT06W050100US-C1 Input: 100-240V~ 50/60Hz 200mA Output: 5.0V⎓1.0A Model: TPA-46B050100UU Input: 100-240V~ 50/60Hz 0.2A Output: 5.0V⎓1000mA

Note: both adapters were tested separately on the host, and the report only reflects the worst model: DCT06W050100US-C1 adapter data.

1.2 Test Mode

Pretest Test Mode	Description of Mode
1	TX
2	/
3	/

1.3 Test Setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

1.4 Ancillary Equipment

Equipment	Model	S/N	Manufacturer
/	/	/	/

2 Test Facilities and Accreditations

2.1 Test Laboratory

Test Site	Shenzhen HongBiao Certification& Testing Co., Ltd
Test Site Location	Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen, China
Telephone:	(86-755) 2998 9321
Fax:	(86-755) 2998 5110
Designation Number:	848916
FCC Registration No.:	CN1341
A2LA Certificate No.:	6765.01

2.2 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15ºC~35ºC
Relative Humidity:	20%~75%
Air Pressure:	98kPa~101kPa

2.3 Measurement Uncertainty

The reported uncertainty of measurement y ± U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.
The data and results quoted in this document are true and accurate values, and uncertainties are not involved in the calculations.
In addition, components and mass production processes that are similar to testing equipment may introduce additional deviations, and the manufacturer is solely responsible for the continued compliance of the equipment.

Measurement Frequency Range	U, (dB)	Note
RF frequency	$2x\ 10^{-5}$	
RF power, conducted	± 0.57 dB	
Temperature	±1 degree	
Humidity	± 5 %	

2.4 Test Software

Software name	Manufacturer	Model	Version
RF Test System	MWRF	MTS 8310	V2.0.0.0

3 List of Test Equipment

RF							
Item	Equipment No.	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	HB-E041	MXG Anaiog Signal Generator	Agilent	N5181A	MY47070421	2026-04-27	2027-04-26
2	HB-E042	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW500	132108	2026-04-27	2027-04-26
3	HB-E043	MXG Anaiog Signal Generator	Agilent	N5182A	US46240335	2026-04-28	2027-04-27
4	HB-E044	Signal& spectrum Analyzer	R&S	FSV3044	101264	2026-04-28	2027-04-27
5	HB-E045	RF Control Box	Noyetec	NY100-RFCB	N/A	2026-04-28	2027-04-27
6	HB-E058	Thermometer Clock Humidity Monitor	N/A	HTC-1S	N/A	2026-04-30	2027-04-29

Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

4 RF Exposure

4.1 Standalone SAR test exclusion considerations

4.1.1. Limit

According to FCC 1.1310: 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 §1.1307(b).

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 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
(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
300-1,500			f/1500	30
1,500-100,000			1.0	30

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

MPE Calculation Method
Friis transmission formula: Pd= (Pout*G)\ (4*pi*R^2)
Where
Pd= Power density in mW/cm^2
Pout=output power to antenna in mW
G= Numeric gain of the antenna relative to isotropic antenna
Pi=3.1415926
R= distance between observation point and center of the radiator in cm(20cm)
Pd the limit of MPE, 1mW/cm^2.
If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

4.1.2. Test Result

BLE:
Operation Frequency: 2402-2480MHz,
Power density limited: 1mW/cm^2
2.4GHz WIFI:
Operation Frequency: IEEE 802.11b/g/n/ax20: 2412-2462MHz
Power density limited: 1mW/cm^2

Antenna Type:
BLE & 2.4GHz WIFI: Metal Antenna

Antenna gain:
BLE: 2.76dBi
2.4GHz WIFI: 2.76dBi

R=20cm
mW=10^(dBm/10)
antenna gain Numeric=10^(dBi/10)= 10^(2.76/10)=1.89

BLE(Worst):

Channel Freq. (MHz)	modulation	Conducted Power (dBm)	Tune-up power (dBm)	Max		Antenna		Evaluation result	Power density Limits
		(dBm)		tune-up power		Gain		(mW/cm^2)	(mW/cm^2)
				(dBm)	(mW)	(dBi)	Numeric		
2480	GFSK	11.94	11±1	12	15.849	2.76	1.89	0.0060	1

2.4GHz WIFI(Worst):

Channel Freq. (MHz)	modulation	Conducted Power (dBm)	Tune-up power (dBm)	Max		Antenna		Evaluation result	Power density Limits
		(dBm)		tune-up power		Gain		(mW/cm^2)	(mW/cm^2)
				(dBm)	(mW)	(dBi)	Numeric		
2412	802.11g	24.79	24±1	25	316.228	2.76	1.89	0.1188	1

Conclusion:

According to KDB 447498 D01 General RF Exposure Guidance v06, At the transmit simultaneously calculation method is as follows:
Transmit simultaneously MPE = Σ of MPE ratios
MPE ratios = Field strengths or power density / MPE limit at the test frequency
For the max result: 0.1188≤1g SAR, No SAR is required.

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