



**FCC TEST REPORT**  
**FCC ID: 2A6NV- SSPWF**

On Behalf of

**Dongguan Dirui Electronic Technology Co., Ltd**

**Smart Pet Water Fountain**

**Model No.: SSPWF-R315A-Insf, SSPWF-R315C-Insf, SSPWF-314A-Insf, SSPWF-314C-Insf, SSPWF-311A-Insf, SSPWF-311C-Insf, SSPWF-310A-Insf, SSPWF-312A-Insf, SSPWF-312C-Insf, PW-D03, PW-D04, SSPWF-R326A-Insf**

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 Alpha Product Testing Co., Ltd.  
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Report Number : A2412088-C02-R03-V1  
Date of Receipt : 2025-01-08  
Date of Test : 2025-01-08  
Date of Report : 2025-05-28  
Version Number : V1  
Test Result : Pass

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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 : Smart Pet Water Fountain  
(A) Model No. : SSPWF-R315A-Insf, SSPWF-R315C-Insf, SSPWF-314A-  
Insf, SSPWF-314C-Insf, SSPWF-311A-Insf, SSPWF-311C-  
Insf, SSPWF-310A-Insf, SSPWF-312A-Insf, SSPWF-312C-  
Insf, PW-D03, PW-D04, SSPWF-R326A-Insf  
(B) Trademark : N/A

Measurement Standard Used:

**FCC PART 15:2021****(Part 15 Subpart B Class B, ANSI C63.4:2014)**

The device described above is tested by Shenzhen Alpha Product 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 Alpha Product Testing Co., Ltd. Is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the FCC Part15 requirements.

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

Tested by (name +  
signature).....:

Lily Wang  
Project Engineer



Approved by (name + signature).....:

Jack Xu  
Project Manager



Date of issue.....: 2025-05-28

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**Revision History**

Revision	Issue Date	Revisions	Revised By
V0	2025-03-12	Initial released Issue	Lily Wang
V1	2025-05-28	Added FCC ID number	Yannis Wen

## 1. General Information

### 1.1. Description of Device (EUT)

Product Name : Smart Pet Water Fountain

Model Number : SSPWF-R315A-Insf, SSPWF-R315C-Insf, SSPWF-314A-Insf, SSPWF-314C-Insf, SSPWF-311A-Insf, SSPWF-311C-Insf, SSPWF-310A-Insf, SSPWF-312A-Insf, SSPWF-312C-Insf, PW-D03, PW-D04, SSPWF-R326A-Insf

Diff : There is no difference except the name of the model. All tests are made with the SSPWF-R315A-Insf model.

Test Voltage : DC 3.7V From Battery, DC 5V From Adapter

EUT information : Input: DC 5V

Highest Frequency : Less < 108MHz

Software version : N/A

Hardware version : N/A

### 1.2. Accessories of Device (EUT)

Power Source : N/A

### 1.3. Tested Supporting System Details.

NO.	Description	Manufacturer	Model	Serial Number
NO1.	AC ADAPTER	Shenzhen HUONIU Technology Co., Ltd.	HNFCQC3024UU	N/A

### 1.4. Signal Cable Description of the above Support Units.

NO.	Cable	Length	Shielded	Detachable
-----	-------	--------	----------	------------

## 2. Summary Of Standards And Results

### 2.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

EMISSION			
Description of Test Item	Standard	Limits	Results
Power Line Conducted Emission Test	FCC Part 15 ANSI C63.4:2014	Class B	<b>P</b>
Radiated Emission Test	FCC Part 15 ANSI C63.4:2014	Class B	<b>P</b>
Note: 1. P is an abbreviation for Pass. 2. F is an abbreviation for Fail. 3. N/A is an abbreviation for Not Applicable. 4. The conclusion of this test report is judged by actual test data without considering measurement uncertainty.			

### 2.2. Classification Of Equipment

- (1) Class A equipment refers to equipment that meets Class A limits but does not meet Class B limits.
- (2) Broadcast receiving equipment is Class B equipment
- (3) Class B equipment refers to equipment that meets the requirements of Class B limits and is mainly used in residential environments.
- (4) Equipment compliant with the class A requirements of this publication should have a warning notice in the user manual stating that it could cause radio interference.

**Warning:** Class A equipment is intended for use in an industrial environment. In the documentation for the user, a statement shall be included drawing attention to the fact that there may be potential difficulties in ensuring electromagnetic compatibility in other environments, due to conducted as well as radiated disturbances.

## 2.3. Test Mode Description

For test

TM1. Working, DC 3.7V From Battery  
 TM2. Charging, DC 5V From Adapter  
 TM3. Charging & Working, DC 5V From Adapter  
 Note: This report only reflected the worst mode in this part.

## 2.4. Test Facility

Shenzhen Alpha Product Testing Co., Ltd.  
 Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103,  
 Shenzhen, Guangdong, China

## 2.5. Measurement Uncertainty

Test Item	Uncertainty
Uncertainty for Conduction emission test	1.63dB
Uncertainty for Radiation Emission test (<1G)	3.74 dB (Distance: 3m Polarize: V)
	3.76 dB (Distance: 3m Polarize: H)
Uncertainty for Radiation Emission test (>1G)	3.77 dB (Distance: 3m Polarize: V)
	3.80 dB (Distance: 3m Polarize: H)
(95% confidence levels, k=2)	

## 2.6. Test Equipment List

For Power Line Conducted Emission Test Equipment:

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware version	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde&Schwarz	ESCI	101165	4.42 SP1	2024.08.08	1 Year
2.	L.I.S.N.#1	Schwarz beck	NSLK8126	8126-466	N/A	2024.08.08	1 Year
3.	L.I.S.N.#2	Rohde&Schwarz	ENV216	101043	N/A	2024.08.08	1 Year
4.	Pulse Limiter	Schwarz beck	9516F	9618	N/A	2024.08.08	1 Year

For Frequency Range 30MHz~1GHz Radiated Emission Test Equipment:

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware version	Last Cal.	Cal. Interval
1	Test Receiver	Rohde&Schwarz	ESR	1316.3003K03-102082-Wa	2.28 SP1	2024.08.08	1 Year
3	Bilog Antenna	Schwarz beck	VULB 9168	VULB 9168#627	N/A	2023.08.28	2 Year

For Frequency Range above 1GHz Radiated Emission Test Equipment:

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware version	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Rohde&Schwarz	FSU	200002	4.71.SP5	2024.08.08	1 Year
2	Horn Antenna	Schwarz beck	BBHA 9120 D	02106	N/A	2023.08.19	2 Year
3	Amplifier	Agilent	8449B	3008A02664	N/A	2024.08.08	1 Year

For Test Software Information

Item	Software Name	Manufacturer	Version
RE	EZ-EMC	Farad	Alpha-3A1
CE	EZ-EMC	Farad	Alpha-3A1



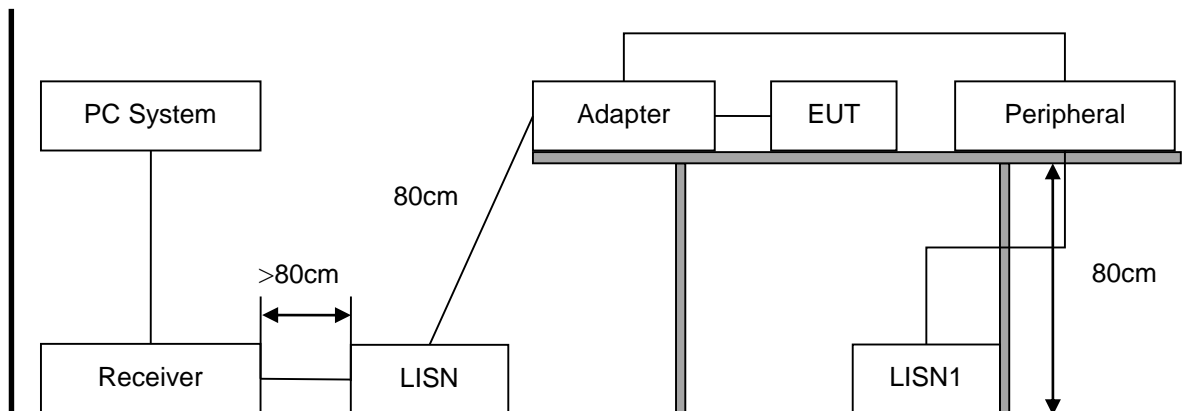
### 3. Power Line Conducted Emission Test

#### 3.1. Test Limits

Frequency	Maximum RF Line Voltage		Classification
	Quasi-Peak Level dB( $\mu$ V)	Average Level dB( $\mu$ V)	
150kHz ~ 500kHz	79	66	A
500kHz ~ 30MHz	73	60	
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*	B
500kHz ~ 5MHz	56	46	
5MHz ~ 30MHz	60	50	

- Notes:
1. Emission level=Read level + LISN factor-Preamp factor + Cable loss
  2. \* Decreasing linearly with logarithm of frequency.
  3. The lower limit shall apply at the transition frequencies.

#### 3.2. Block Diagram of Test Setup



#### 3.3. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

#### 3.4. Operating Condition of EUT

- (1) Setup the EUT as shown as Section 3.2.
- (2) Turn on the power of all equipment.
- (3) Let the EUT work in test mode and 15 minutes before taking the test.

### 3.5. Test Procedure

- (1) The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4:2014 on conducted Emission test.
- (2) The frequency range from 150kHz to 30MHz is checked, the bandwidth of test receiver (R&S TEST RECEIVER ESCI) is set at 9kHz.

### 3.6. Test Results

**Refer to attached Appendix I**

## 4. Radiated Emission Test

### 4.1. Test Limit

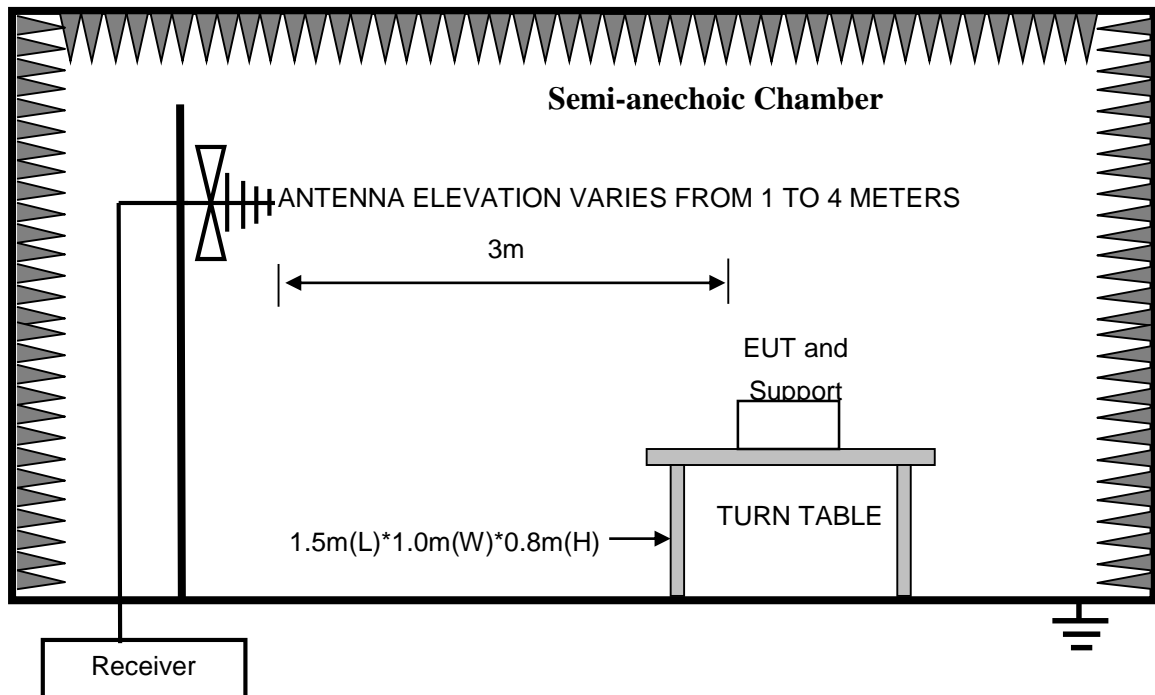
Frequency MHz			Distance (Meters)	Field Strengths Limits dB( $\mu$ V)/m	Classification
30	~	88	3	40.0	A
88	~	216	3	43.5	
216	~	960	3	46.0	
960	~	1000	3	54.0	
30	~	88	3	49.0	B
88	~	216	3	53.5	
216	~	960	3	56.0	
960	~	1000	3	59.5	
Above 1GHz			3	80(Peak) 60(Average)	

- Notes:
1. The smaller limit shall apply at the cross point between two frequency bands.
  2. Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.
  3. Frequency range of radiated measurements:

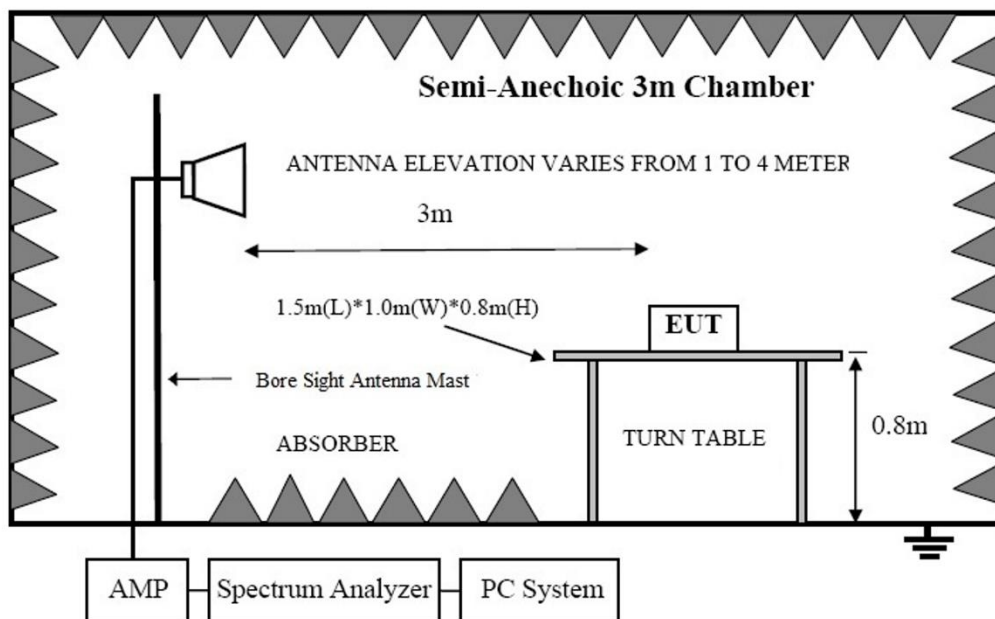
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

## 4.2. Block Diagram of Test Setup

In Semi Anechoic Chamber (3m) Test Setup Diagram for 30MHz~1000MHz



In Semi Anechoic Chamber (3m) Test Setup Diagram for Above 1GHz



## 4.3. Configuration of EUT on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner that tends to maximize its emission characteristics in normal application.

#### 4.4. Operating Condition of EUT

- (1) Setup the EUT as shown as Section 4.2.
- (2) Turn on the power of all equipment.
- (3) Let the EUT work in test mode and 15 minutes before taking the test.

#### 4.5. Test Procedure

- (1) The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4:2014 on Radiated Emission test.
- (2) For the radiated emission test above 1GHz:  

Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- (3) The frequency range from 30MHz to 1000MHz is checked, the bandwidth of test receiver (R&S TEST RECEIVER ESR) is set at 120kHz.
- (4) The frequency range from above 1GHz is checked, the bandwidth of spectrum analyzer (Spectrum Analyzer FSV40-N) is set at 1MHz.
- (5) The frequency range from 30MHz to 1000MHz was pre-scanned with a peak detector and all final readings of measurement from Test Receiver are Quasi-Peak values, the frequency range from 1GHz to 6GHz was pre-scanned with a peak detector and all final readings of measurement from Spectrum Analyzer are peak and average values checked, all measurement distance is 3m in 3m semi anechoic chamber.
- (6) The test results are reported on Section 4.6.

#### 4.6. Test Results

**Refer to attached Appendix I**

Appendix I (Test Data)

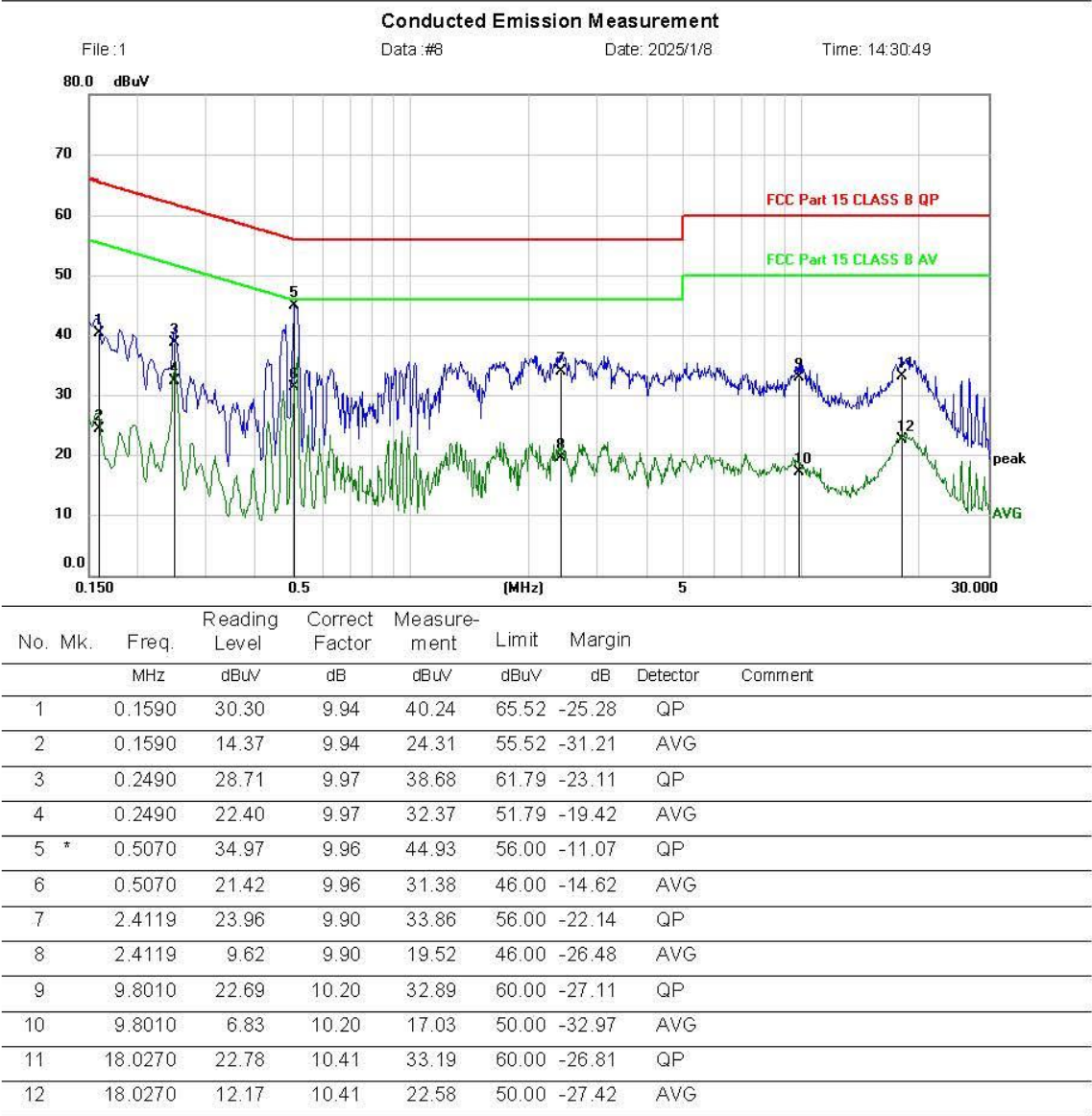
Conducted Emissions Test Data



深圳阿尔法商品检验有限公司  
SHENZHEN ALPHA PRODUCT TESTING CO.,LTD.

深圳阿尔法商品检验有限公司  
Shenzhen Alpha Product Testing Co.,Ltd.  
地址: ALPHA 广东省深圳市宝安区福永街道立新路 2 号 i 栋  
TEL: 4008-3008-95

Site LAB	Phase: <b>N</b>	Temperature: 23.4
Limit: FCC Part 15 CLASS B QP	Power: DC 5V From Adapter	Humidity: 50 %
EUT/Task No : A2412088-C02-M02		
M/N/Sample No: A2412088-C02-S0033		
Mode : TM3		
Note:		
Engineer Signature:		



\*:Maximum data    x:Over limit    !:over margin      (Reference Only)  
Note: Measurement=Reading Level+Correc Factor    Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable



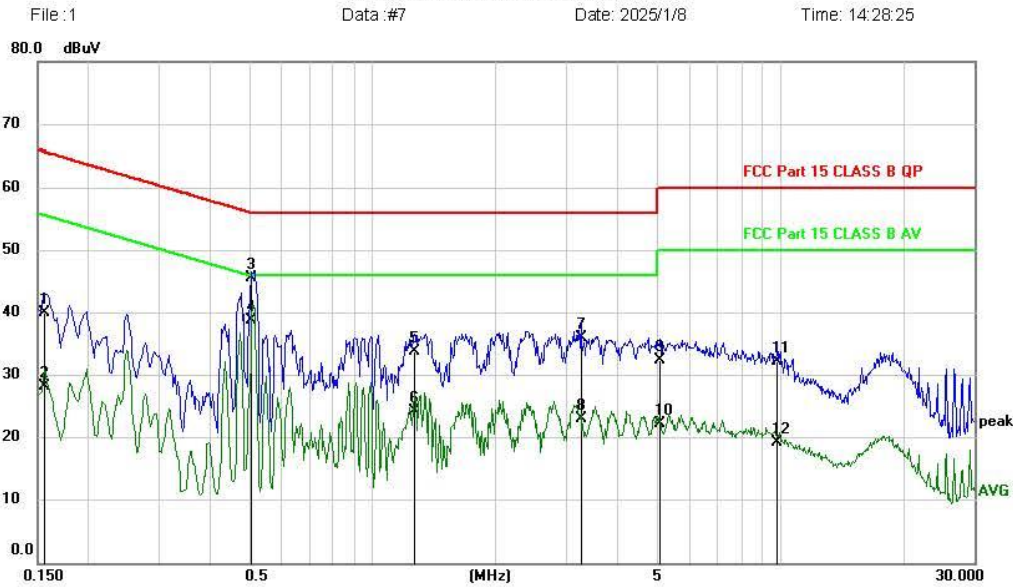
深圳阿尔法商品检验有限公司  
SHENZHEN ALPHA PRODUCT TESTING CO.,LTD.

深圳阿尔法商品检验有限公司  
Shenzhen Alpha Product Testing Co.,Ltd.  
地址: ALPHA 广东省深圳市宝安区福永街道立新路 2 号 i 栋  
TEL: 4008-3008-95

Site: LAB  
Limit: FCC Part 15 CLASS B QP  
EUT/Task No.: A2412088-C02-M02  
M/N/Sample No.: A2412088-C02-S0033  
Mode: TM3  
Note:  
Engineer Signature:

Phase: L1  
Power: DC 5V From Adapter  
Temperature: 23.4  
Humidity: 50 %

### Conducted Emission Measurement



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1560	29.94	9.94	39.88	65.67	-25.79	QP	
2		0.1560	18.21	9.94	28.15	55.67	-27.52	AVG	
3		0.5070	35.53	9.96	45.49	56.00	-10.51	QP	
4	*	0.5070	28.71	9.96	38.67	46.00	-7.33	AVG	
5		1.2660	23.83	9.89	33.72	56.00	-22.28	QP	
6		1.2660	14.19	9.89	24.08	46.00	-21.92	AVG	
7		3.2520	26.03	9.95	35.98	56.00	-20.02	QP	
8		3.2520	12.92	9.95	22.87	46.00	-23.13	AVG	
9		5.0970	22.32	10.04	32.36	60.00	-27.64	QP	
10		5.0970	11.97	10.04	22.01	50.00	-27.99	AVG	
11		9.8340	21.94	10.20	32.14	60.00	-27.86	QP	
12		9.8340	8.86	10.20	19.06	50.00	-30.94	AVG	

\*:Maximum data x:Over limit !:over margin

(Reference Only)

Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

## Radiated Emissions Test Data(30M-1G)

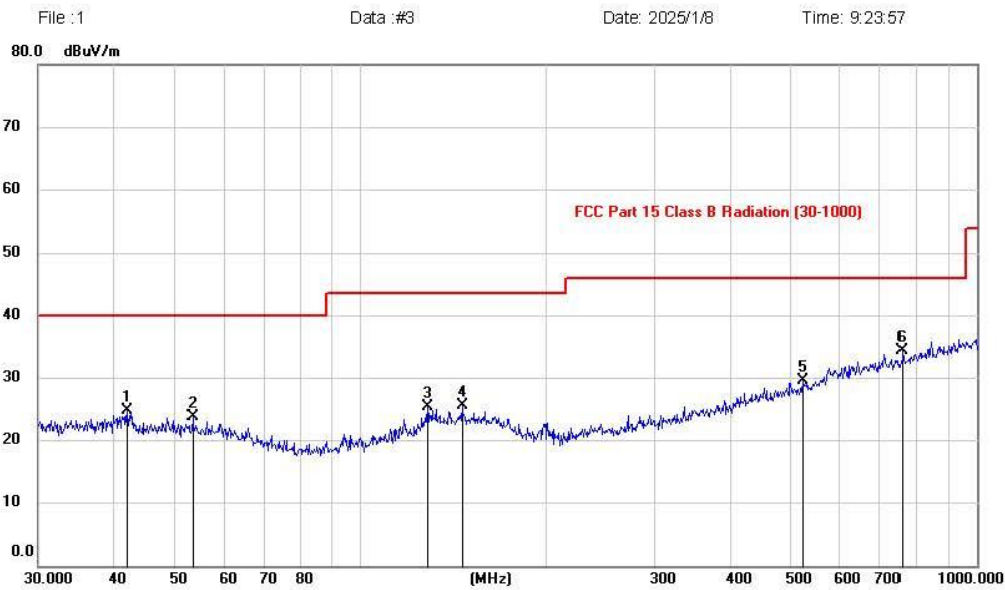


深圳阿尔法商品检验有限公司  
SHENZHEN ALPHA PRODUCT TESTING CO.,LTD. Shenzhen Alpha Product Testing Co.,Ltd.

地址: ALPHA 广东省深圳市宝安区福永街道立新路 2 号 i 栋  
TEL: 4008-3008-95

Site: LAB 966 Chamber 1	Polarization: <b>Horizontal</b>	Temperature: 23.2
Limit: FCC Part 15 Class B Radiation (30-1000)	Power: DC 5V From Adapter	Humidity: 57 %
EUT/Task No: A2412088-C02-M02	Distance: 3m	
M/N/Sample No: A2412088-C02-S0033		
Mode: TM3		
Note:		
Engineer Signature:		

### Radiated Emission Measurement



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		41.9870	10.31	14.35	24.66	40.00	-15.34	peak		
2		53.4613	10.00	13.72	23.72	40.00	-16.28	peak		
3		128.6983	11.72	13.52	25.24	43.50	-18.26	peak		
4		146.6988	10.61	14.82	25.43	43.50	-18.07	peak		
5		524.3701	10.84	18.70	29.54	46.00	-16.46	peak		
6	*	760.5257	11.67	22.59	34.26	46.00	-11.74	peak		

Note:1. \*:Maximum data; x:Over limit; l:over margin.

2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.





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SHENZHEN ALPHA PRODUCT TESTING CO.,LTD.

深圳阿尔法商品检验有限公司  
Shenzhen Alpha Product Testing Co.,Ltd.

地址: ALPHA 广东省深圳市宝安区福永街道立新路 2 号 i 栋  
TEL: 4008-3008-95

Site: LAB 966 Chamber 1

Polarization: **Vertical**

Temperature: 23.2

Limit: FCC Part 15 Class B Radiation (30-1000)

Power: DC 5V From Adapter

Humidity: 57 %

EUT/Task No: A2412088-C02-M02

Distance: 3m

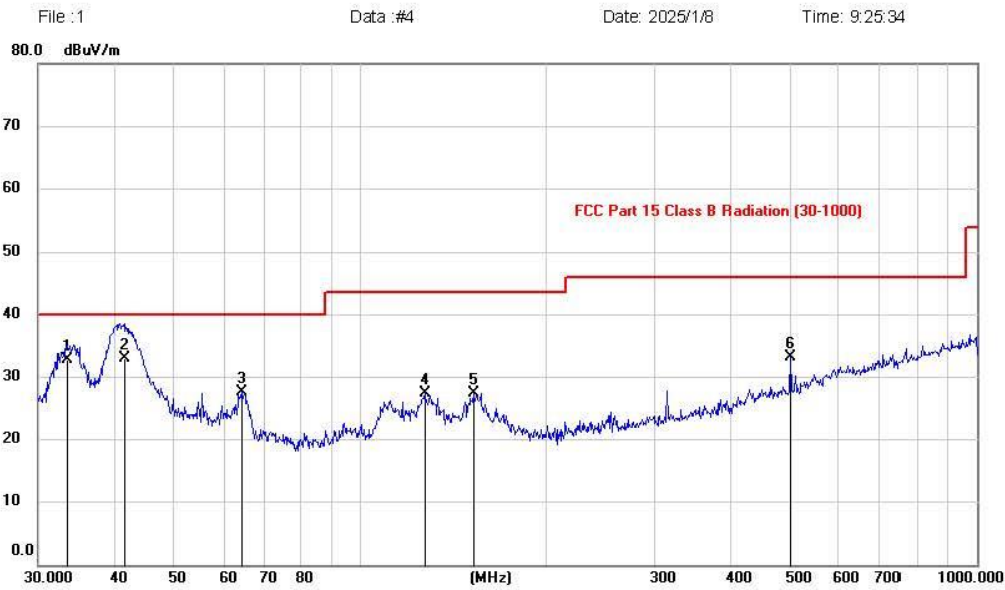
M/N/Sample No: A2412088-C02-S0033

Mode: TM3

Note:

Engineer Signature:

### Radiated Emission Measurement



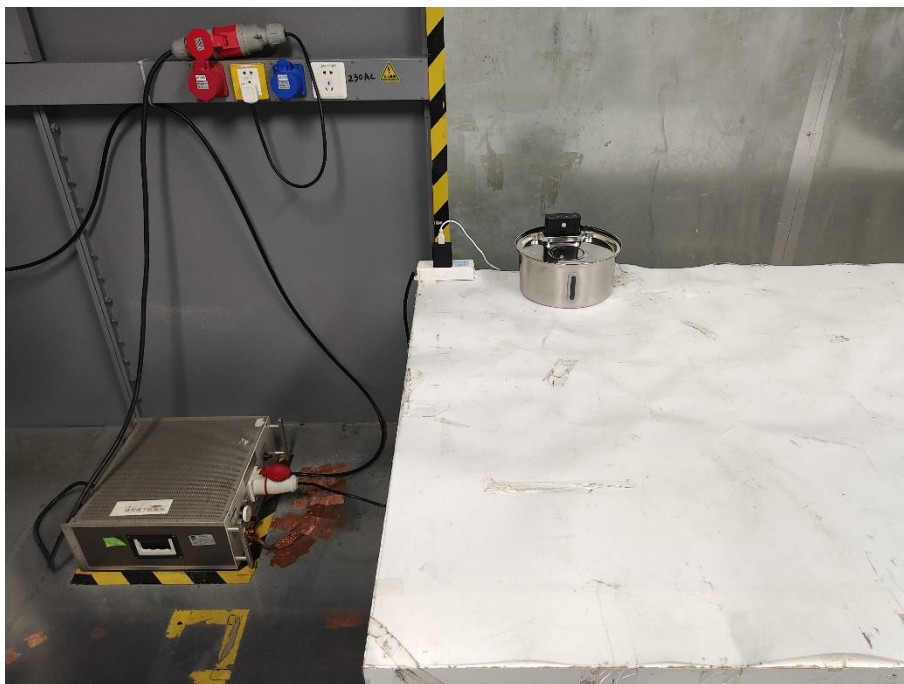
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		33.4645	18.99	13.67	32.66	40.00	-7.34	QP		
2	*	41.5476	18.48	14.35	32.83	40.00	-7.17	QP		
3		64.4029	15.16	12.36	27.52	40.00	-12.48	peak		
4		127.3069	13.96	13.44	27.40	43.50	-16.10	peak		
5		153.0751	12.29	15.05	27.34	43.50	-16.16	peak		
6		500.0088	14.82	18.21	33.03	46.00	-12.97	peak		

Note: 1. \*: Maximum data; x: Over limit; l: over margin.

2. Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

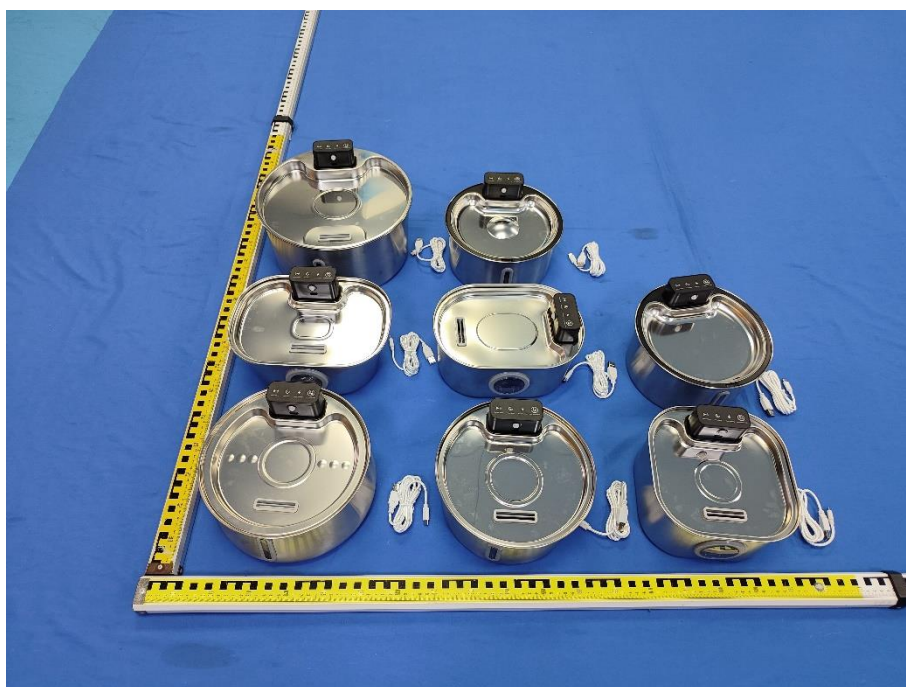
## Appendix II (Photographs of the Test Set-up)

### Photographs of the Test Set-up for Power Line Conducted Emission Test

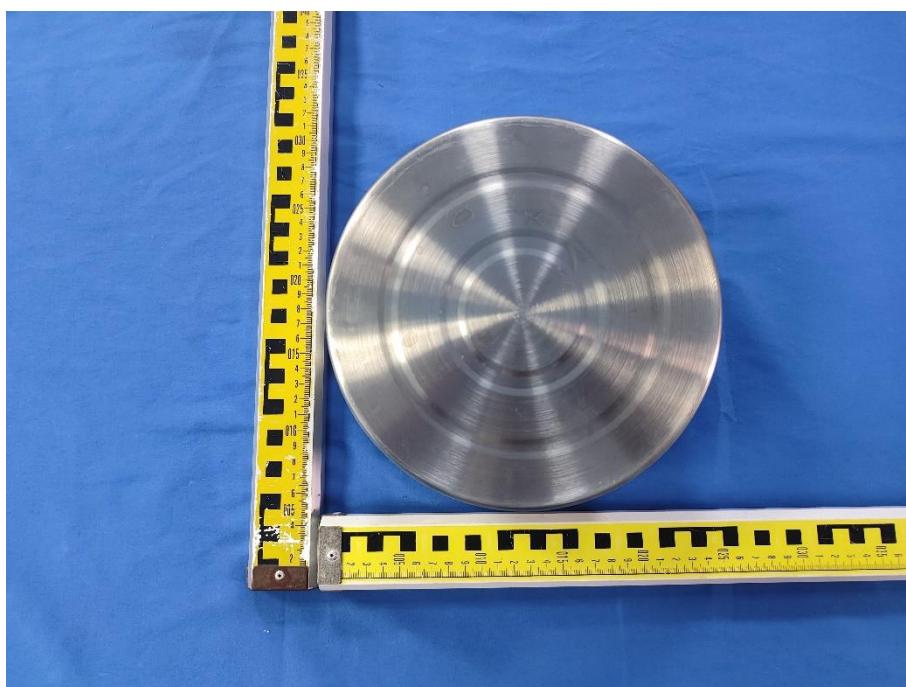


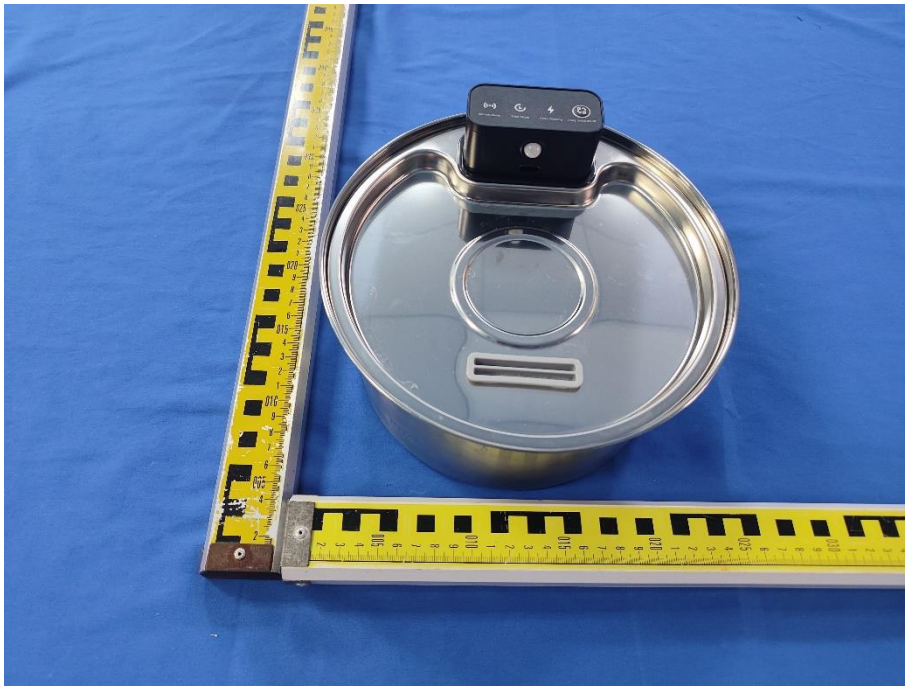
### Photographs of the Test Set-up for Radiated Emissions(30-1000MHz)



**Appendix III** (Photographs of the EUT)



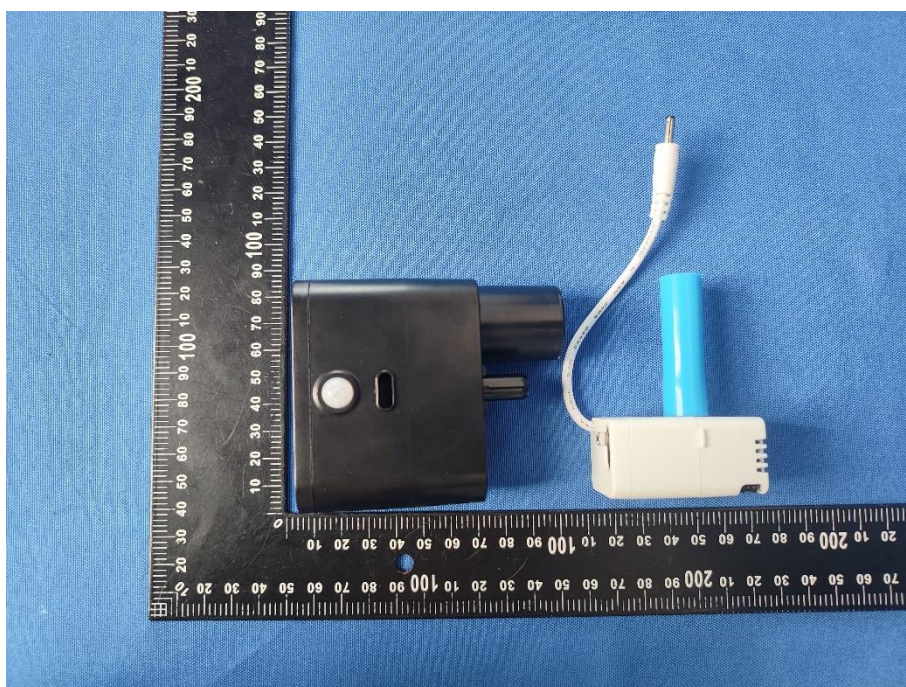
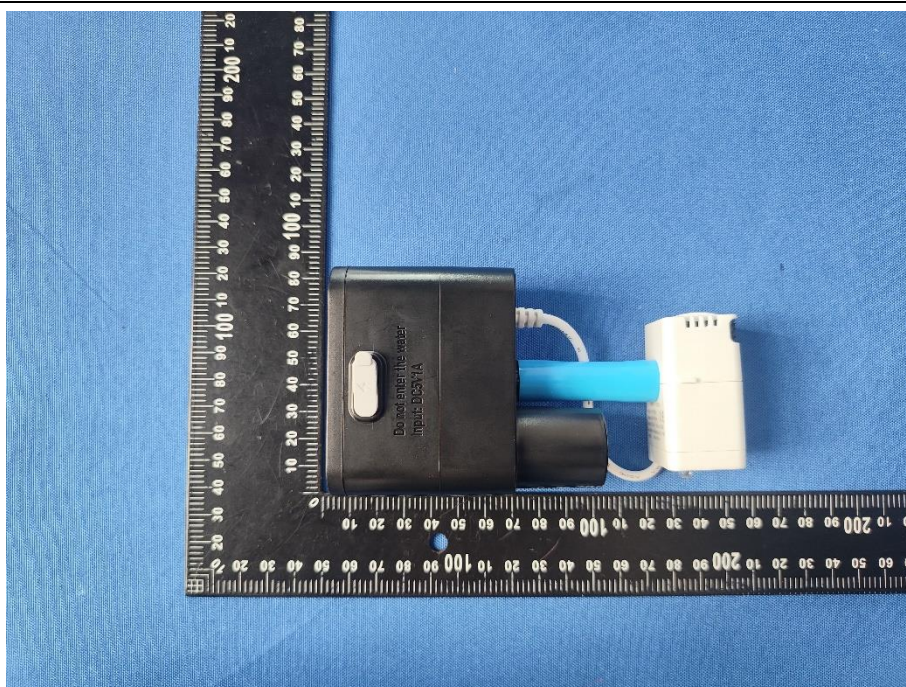




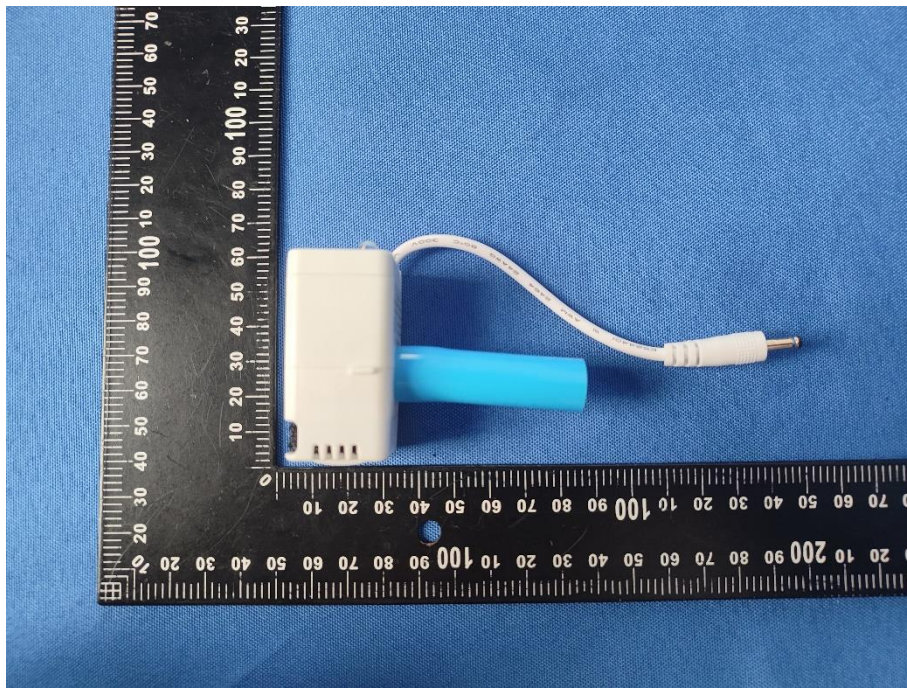








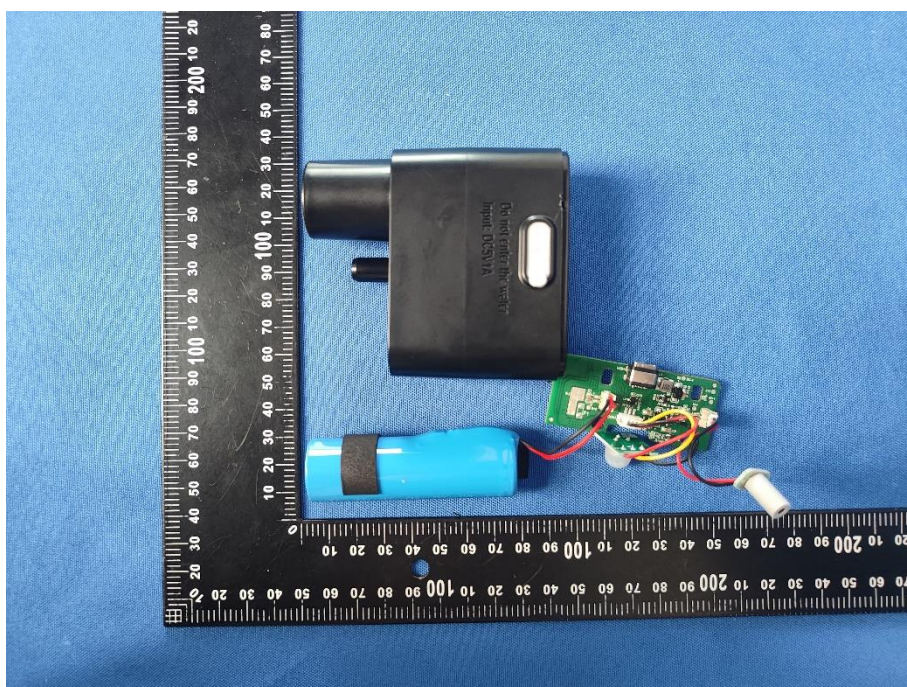




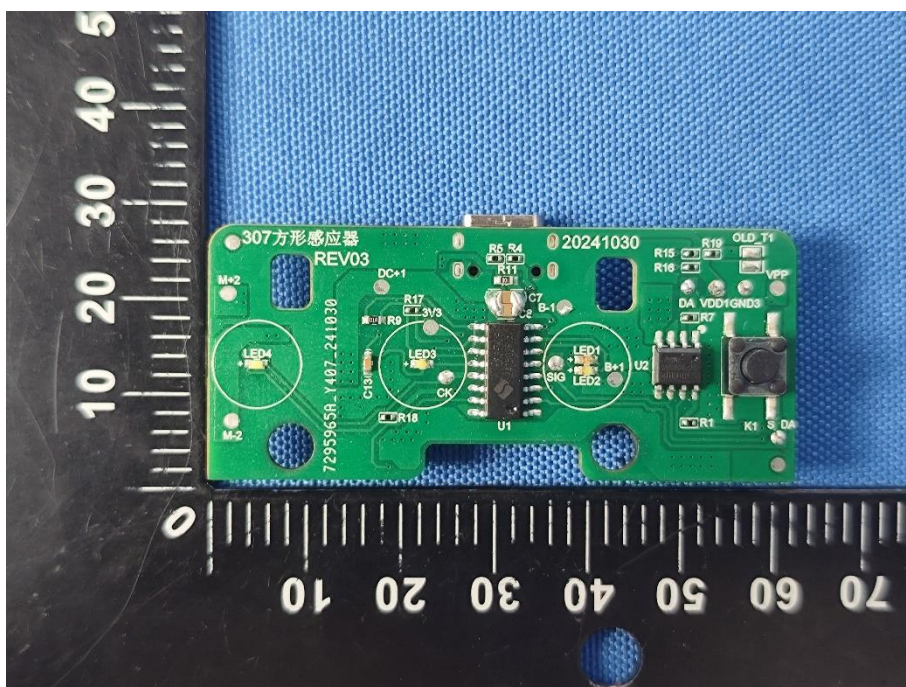
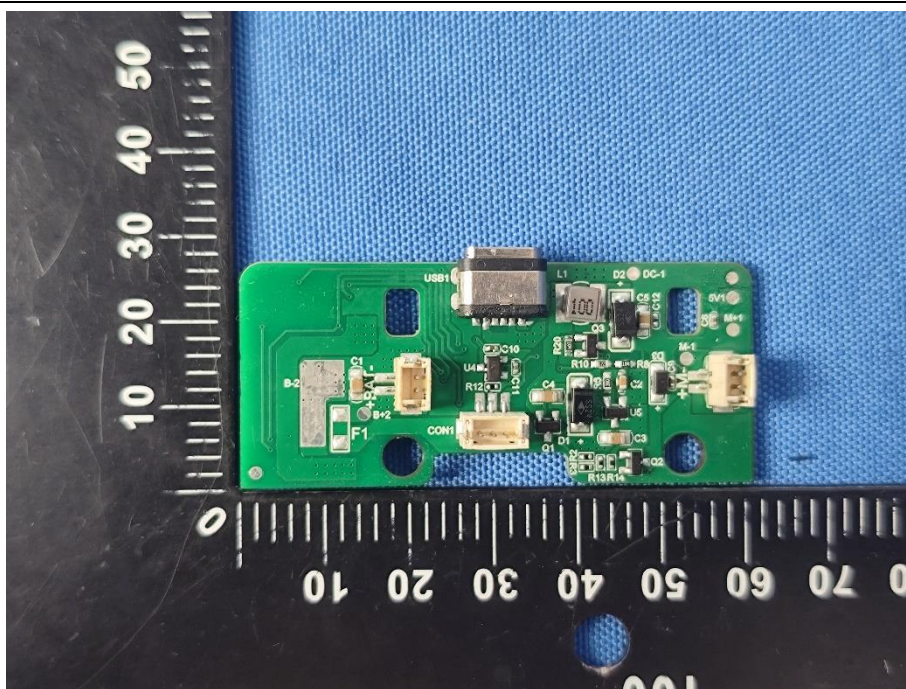


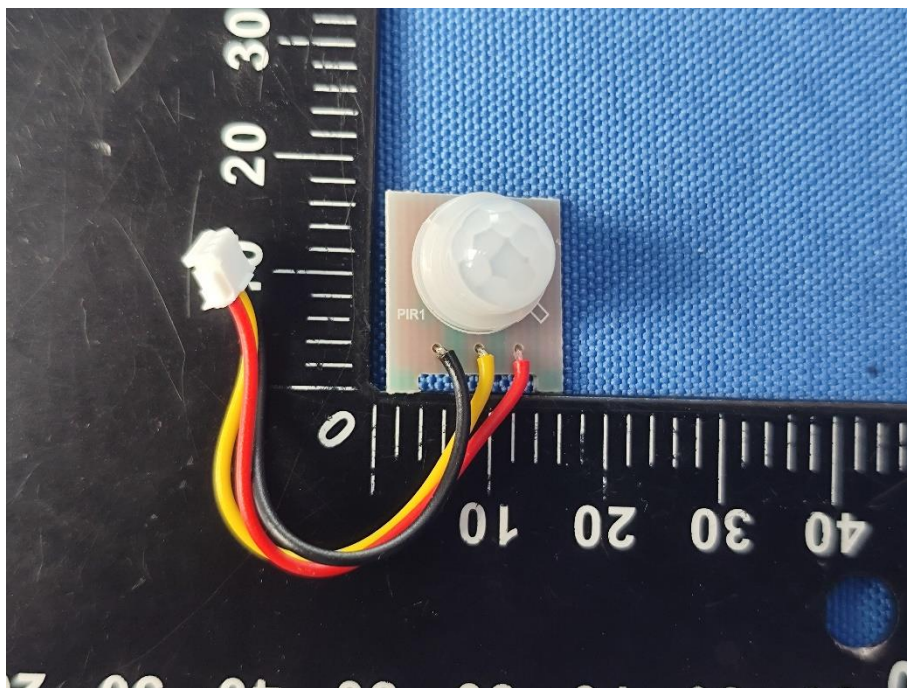
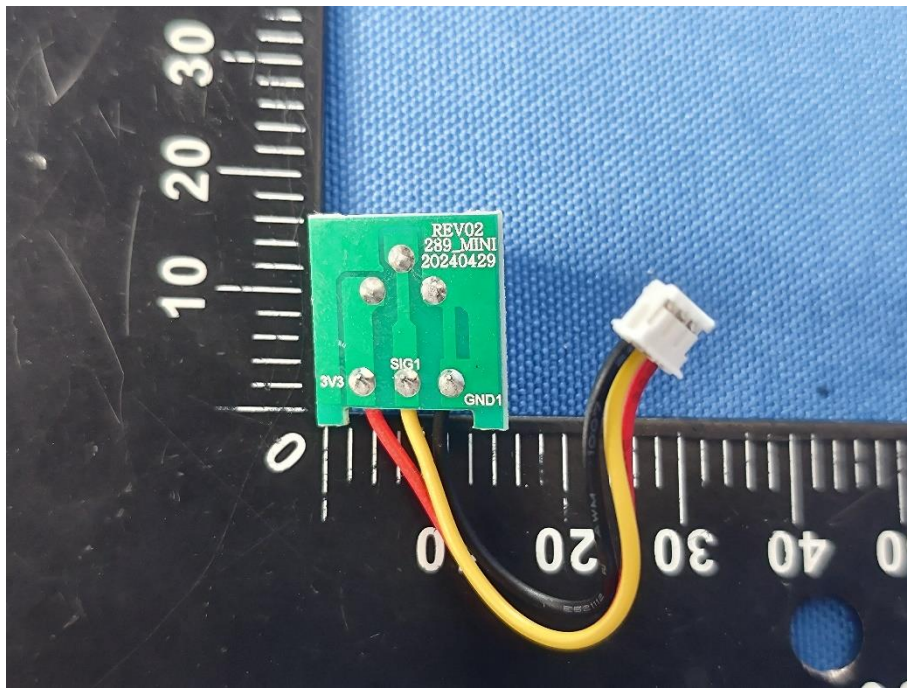




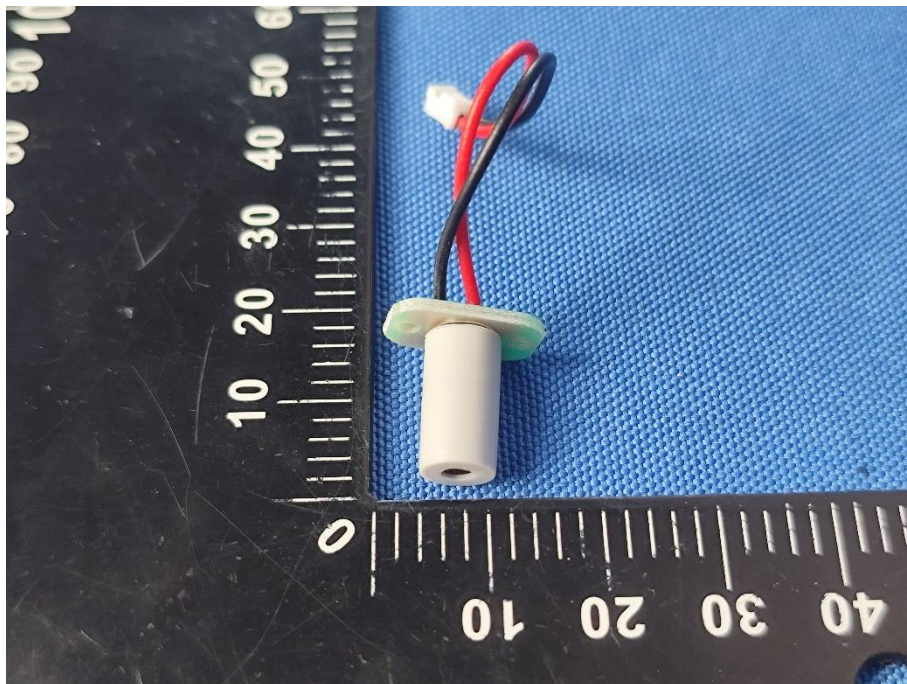
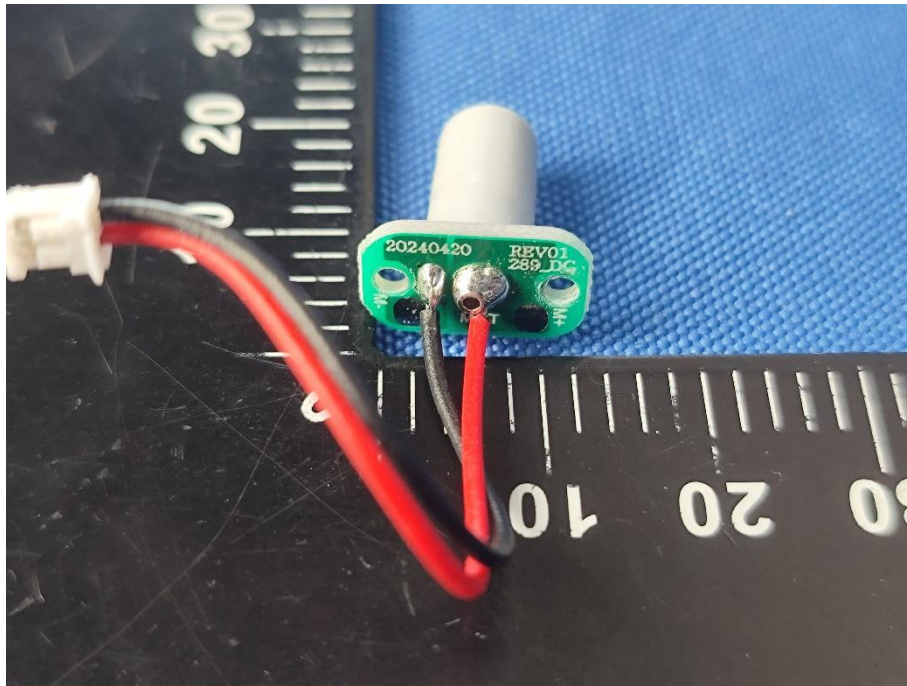














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