AUSTRALIA TEST REPORT

For

Shenzhen Eview GPS Technology

Personal Mobile Alarm System

Test Model: EV-07B-4G

Prepared for	:	Shenzhen Eview GPS Technology
Address	:	#1203 Building 2, GuoLe Technology Park, Lirong Road, Dalang, Longhua, Shenzhen, China
Prepared by	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Address	:	101, 601, Xingyuan Industrial Park, Gushu Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China
Tel	:	(+86)755-82591330
Fax	:	(+86)755-82591332
Web	:	www.LCS-cert.com
Mail	:	webmaster@LCS-cert.com
Date of receipt of test sample	:	April 15, 2019
Number of tested samples	:	1
Serial number	:	Prototype
Date of Test	:	April 15, 2019 ~ April 15, 2019
Date of Report	:	April 23, 2019

AUSTRALIA TEST REPORT
AS/NZS CISPR 32: 2015
Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement

Report Reference No. .....:	**LCS190415005AE**
Date Of Issue .....:	April 23, 2019
Testing Laboratory Name.....:	**Shenzhen LCS Compliance Testing Laboratory Ltd.**
Address .....:	101, 601, Xingyuan Industrial Park, Gushu Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China
Testing Location/ Procedure .....:	Full application of Harmonised standards ■ Partial application of Harmonised standards □ Other standard testing method □
Applicant's Name .....:	**Shenzhen Eview GPS Technology**
Address .....:	#1203 Building 2, GuoLe Technology Park, Lirong Road, Dalang, Longhua, Shenzhen, China
Test Specification:	
Standard .....:	AS/NZS CISPR 32: 2015
Test Report Form No. .....:	LCSEMC-1.0
TRF Originator .....:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF .....:	Dated 2011-03

Test Item Description. .....:	**Personal Mobile Alarm System**
Trade Mark .....:	N/A
Test Model .....:	EV-07B-4G
Ratings .....:	DC 3.7V by Rechargeable Li-ion Battery(800mAh) Maximum Charging Voltage: DC 4.2V For AC/DC Adapter Input: AC 100-240V, 50/60Hz, 0.2A Output: DC 5V, 1000mA
Result .....:	**Positive**

Compiled by:	**Supervised by:**	**Approved by:**
Hana Zeng	Leo Lee	Gavin Liang
Hana Zeng/ File administrators	Leo Lee/ Technique principal	Gavin Liang/ Manager

AUSTRALIA -- TEST REPORT

Test Report No. : LCS190415005AE	April 23, 2019 Date of issue

Test Model.....	:	EV-07B-4G
EUT.....	:	Personal Mobile Alarm System
Applicant.....	**:**	**Shenzhen Eview GPS Technology**
Address.....	:	#1203 Building 2, GuoLe Technology Park, Lirong Road, Dalang, Longhua, Shenzhen, China
Telephone.....	:	/
Fax.....	:	/
Manufacturer.....	:	**Shenzhen Eview GPS Technology**
Address.....	:	#1203 Building 2, GuoLe Technology Park, Lirong Road, Dalang, Longhua, Shenzhen, China
Telephone.....	:	/
Fax.....	:	/
Factory.....	**:**	**Shenzhen Eview GPS Technology**
Address.....	:	#1203 Building 2, GuoLe Technology Park, Lirong Road, Dalang, Longhua, Shenzhen, China
Telephone.....	:	/
Fax.....	:	/

Test Result according to the standards on page 6: **Positive**

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Revision	Issue Date	Revisions	Revised By
000	April 23, 2019	Initial Issue	Gavin Liang

TABLE OF CONTENTS

Test Report Description Page

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

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

EMISSION (AS/NZS CISPR 32: 2015)			
Description of Test Item	**Standard**	**Limits**	**Results**
Conducted disturbance at mains terminals	AS/NZS CISPR 32: 2015	Class B	PASS
Radiated disturbance	AS/NZS CISPR 32: 2015	Class B	PASS
N/A is an abbreviation for Not Applicable.			

Test mode:		
Mode 1	TX Mode	Pre-scan
Mode 2	Charging Mode	Record
***Note: All test modes were tested, but we only recorded the worst case in this report.		

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

EUT : Personal Mobile Alarm System

Trade Mark : N/A

Test Model : EV-07B-4G

Power Supply : DC 3.7V by Rechargeable Li-ion Battery(800mAh)
Maximum Charging Voltage: DC 4.2V
For AC/DC Adapter Input: AC 100-240V, 50/60Hz, 0.2A
Output: DC 5V, 1000mA

EUT Clock : ＞108MHz

2.2 Support Equipment List

Description	Manufacturer	Model	Serial Number
AC/DC ADAPTER	Shenzhen Rongweixin Technology Co.,Lt	RWX-AA050100G	---

2.3.Description of Test Facility

Site Description
EMC Lab. : FCC Registration Number is 254912.
Industry Canada Registration Number is 9642A-1.
ESMD Registration Number is ARCB0108.
UL Registration Number is 100571-492.
TUV SUD Registration Number is SCN1081.
TUV RH Registration Number is UA 50296516-001.
NVLAP Registration Code is 600167-0.

2.4.Statement of the Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

2.5.Measurement Uncertainty

Test	**Parameters**	**Expanded uncertainty (Ulab)**	**Expanded uncertainty (Ucispr)**
Conducted Emission	Level accuracy (9kHz to 150kHz) (150kHz to 30MHz)	± 2.63 dB ± 2.35 dB	± 3.8 dB ± 3.4 dB
Power Disturbance	Level accuracy (30MHz to 300MHz)	± 2.90dB	± 4.5 dB
Electromagnetic Radiated Emission (3-loop)	Level accuracy (9kHz to 30MHz)	± 3.60 dB	± 3.3 dB
Radiated Emission	Level accuracy (9kHz to 30MHz)	± 3.68 dB	N/A
Radiated Emission	Level accuracy (30MHz to 1000MHz)	± 3.48 dB	± 5.3 dB
Radiated Emission	Level accuracy (above 1000MHz)	± 3.90 dB	± 5.2 dB
Mains Harmonic	Voltage	± 0.510%	N/A
Voltage Fluctuations & Flicker	Voltage	± 0.510%	N/A
EMF		± 21.59%	N/A

(1) Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus.

(2) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

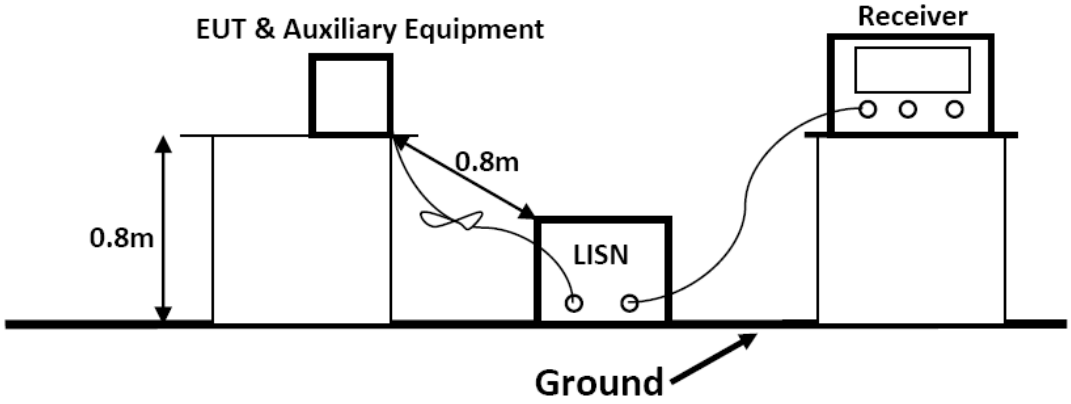
3. POWER LINE CONDUCTED EMISSION MEASUREMENT

3.1. Test Equipment

The following test equipments are used during the power line conducted measurement:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI Test Software	AUDIX	E3	/	2018-06-16
2	EMI Test Receiver	R&S	ESPI	101840	2018-06-16
3	Artificial Mains	R&S	ENV216	101288	2018-06-16
4	10dB Attenuator	SCHWARZBECK	MTS-IMP-136	261115-001-0032	2018-06-16

3.2.Block Diagram of Test Setup



3.3.Test Standard

AS/NZS CISPR 32: 2015

Power Line Conducted Emission Limits (Class B)

Frequency (MHz)			Limit (dBμV)	
			Quasi-peak Level	Average Level
0.15	~	0.50	66.0 ~ 56.0 *	56.0 ~ 46.0 *
0.50	~	5.00	56.0	46.0
5.00	~	30.00	60.0	50.0
NOTE1-The lower limit shall apply at the transition frequencies. NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.				

3.4.EUT Configuration on Test

The following equipments are installed on Conducted Emission Measurement to see AS/NZS CISPR 32: 2015 requirements and operating in a manner which tends to maximize its emission characteristics in normal application.

3.5.Operating Condition of EUT

3.5.1.Setup the EUT as shown on Section 3.2

3.5.2.Turn on the power of all equipments.

3.5.3.Let the EUT work in measuring Mode 2 and measure it.

3.6.Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to AS/NZS CISPR 32: 2015 on Conducted Emission Measurement.

The bandwidth of the test receiver is set at 9kHz.

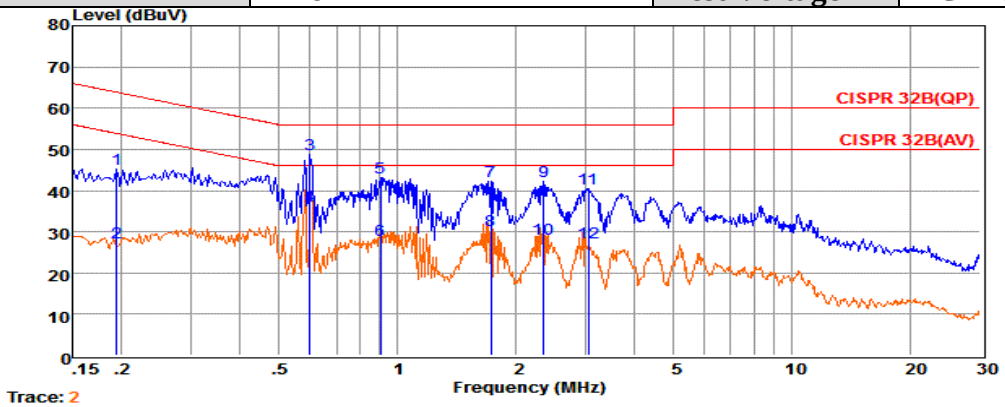
The frequency range from 150kHz to 30MHz is investigated

3.7.Test Results

PASS.

The test result please refer to the next page.

Test Model	EV-07B-4G	**Test Mode**	Mode 2
Environmental Conditions	23.8℃/ 52.9% RH	**Test Engineer**	Daiwei Dai
Pol	Line	**Test Voltage**	AC 240V/50Hz

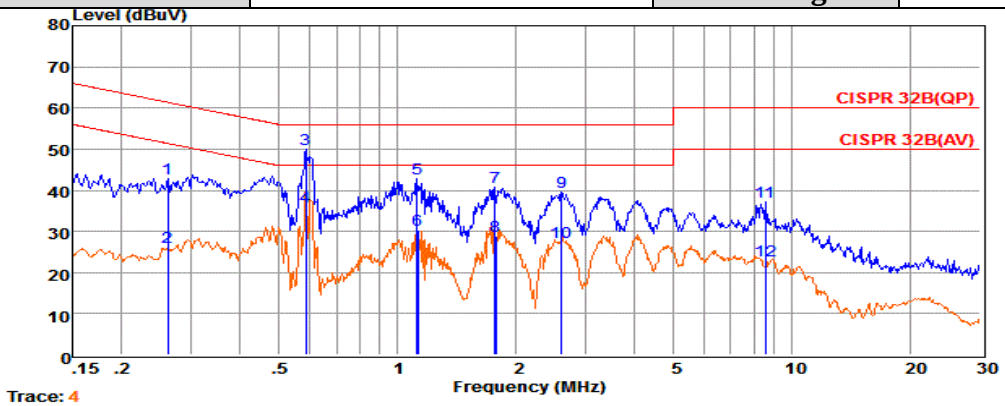


Trace: 2

	Freq	Reading	LISNFac	CabLos	Aux2Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.19	25.64	9.62	0.02	10.00	45.28	63.84	-18.56	QP
2	0.19	7.77	9.62	0.02	10.00	27.41	53.84	-26.43	Average
3	0.60	28.98	9.63	0.04	10.00	48.65	56.00	-7.35	QP
4	0.60	16.72	9.63	0.04	10.00	36.39	46.00	-9.61	Average
5	0.90	23.44	9.63	0.05	10.00	43.12	56.00	-12.88	QP
6	0.90	8.36	9.63	0.05	10.00	28.04	46.00	-17.96	Average
7	1.73	22.68	9.64	0.05	10.00	42.37	56.00	-13.63	QP
8	1.73	10.65	9.64	0.05	10.00	30.34	46.00	-15.66	Average
9	2.35	22.59	9.64	0.05	10.00	42.28	56.00	-13.72	QP
10	2.35	8.68	9.64	0.05	10.00	28.37	46.00	-17.63	Average
11	3.04	20.72	9.64	0.06	10.00	40.42	56.00	-15.58	QP
12	3.04	7.56	9.64	0.06	10.00	27.26	46.00	-18.74	Average

Remarks: 1. Measured = Reading + LISNFac + Cable Loss + Aux2 Fac.
2. The emission levels that are 20dB below the official limit are not reported.

Test Model	EV-07B-4G	**Test Mode**	Mode 2
Environmental Conditions	23.8℃/ 52.9% RH	**Test Engineer**	Daiwei Dai
Pol	Neutral	**Test Voltage**	AC 240V/50Hz



Trace: 4

	Freq	Reading	LISNFac	CabLos	Aux2Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.26	23.20	9.60	0.03	10.00	42.83	61.38	-18.55	QP
2	0.26	6.66	9.60	0.03	10.00	26.29	51.38	-25.09	Average
3	0.59	30.37	9.62	0.04	10.00	50.03	56.00	-5.97	QP
4	0.59	16.33	9.62	0.04	10.00	35.99	46.00	-10.01	Average
5	1.12	23.05	9.63	0.05	10.00	42.73	56.00	-13.27	QP
6	1.12	10.78	9.63	0.05	10.00	30.46	46.00	-15.54	Average
7	1.77	21.08	9.63	0.05	10.00	40.76	56.00	-15.24	QP
8	1.77	9.10	9.63	0.05	10.00	28.78	46.00	-17.22	Average
9	2.61	19.89	9.64	0.05	10.00	39.58	56.00	-16.42	QP
10	2.61	7.80	9.64	0.05	10.00	27.49	46.00	-18.51	Average
11	8.55	17.36	9.71	0.08	10.00	37.15	60.00	-22.85	QP
12	8.55	3.15	9.71	0.08	10.00	22.94	50.00	-27.06	Average

Remarks: 1. Measured = Reading + LISNFac + Cable Loss + Aux2 Fac.
2. The emission levels that are 20dB below the official limit are not reported.

Note: For conducted emission and radiated emission test, a power supply of 240VAC and 120VAC was used for testing respectively, and only recorded the worst case of 240VAC.

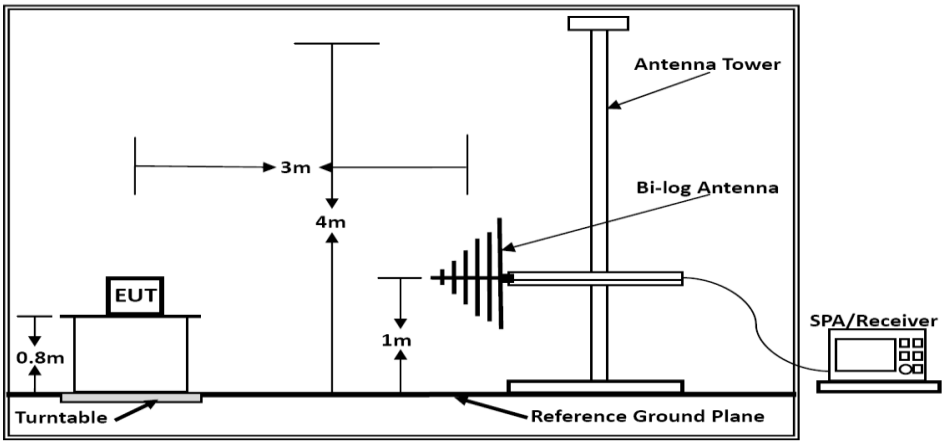
4. RADIATED EMISSION MEASUREMENT

4.1. Test Equipment

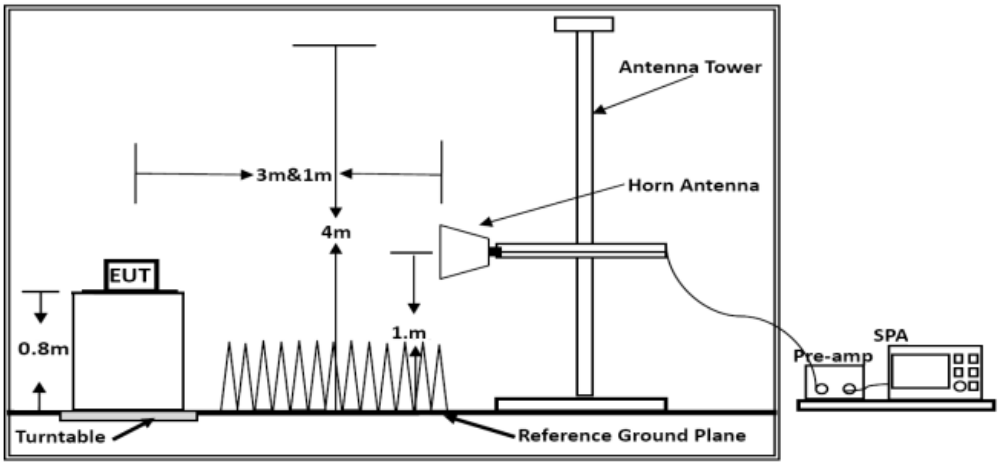
The following test equipments are used during the radiated emission measurement:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI Test Software	AUDIX	E3	/	2018-06-16
2	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2018-06-16
3	Positioning Controller	MF	MF-7082	/	2018-06-16
4	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	2018-07-26
5	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2018-07-02
6	EMI Test Receiver	R&S	ESR 7	101181	2018-06-16
7	RS SPECTRUM ANALYZER	R&S	FSP40	100503	2018-11-15
8	AMPLIFIER	QuieTek	QTK	CHM/08090 65	2018-11-15
9	RF Cable-R03m	Jye Bao	RG142	CB021	2018-06-16
10	RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	2018-06-16

4.2.Block Diagram of Test Setup



Below 1GHz



Above 1GHz

4.3.Test Standard

AS/NZS CISPR 32: 2015

4.4.Radiated Emission Limits

All emanations from a class B device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

Limits for Radiated Emission Below 1GHz		
Frequency (MHz)	Distance (Meters)	Field Strengths Limit (dBμV/m)
30 ~ 230	3	40
230 ~ 1000	3	47
***Note: (1) The smaller limit shall apply at the combination point between two frequency bands. (2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.		

Limits for Radiated Emission Above 1GHz			
Frequency (MHz)	Distance (Meters)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)
1000 ~ 3000	3	70	50
3000 ~ 6000	3	74	54
***Note: The lower limit applies at the transition frequency.			

4.5.EUT Configuration on Test

The AS/NZS CISPR 32: 2015 regulations test method must be used to find the maximum emission during radiated emission measurement.

4.6.Operating Condition of EUT

4.6.1 Turn on the power.

4.6.2 After that, let the EUT work in test Mode 2 and measure it.

4.7.Test Procedure

The EUT is placed on a turntable, which is 0.8 meter high above the ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. By-log antenna (calibrated by Dipole Antenna) is used as a receiving antenna. Both horizontal and vertical polarization of the antenna is set on test.

The bandwidth of the Receiver is set at 120kHz.

The frequency range from 30MHz to 1000MHz is investigated.

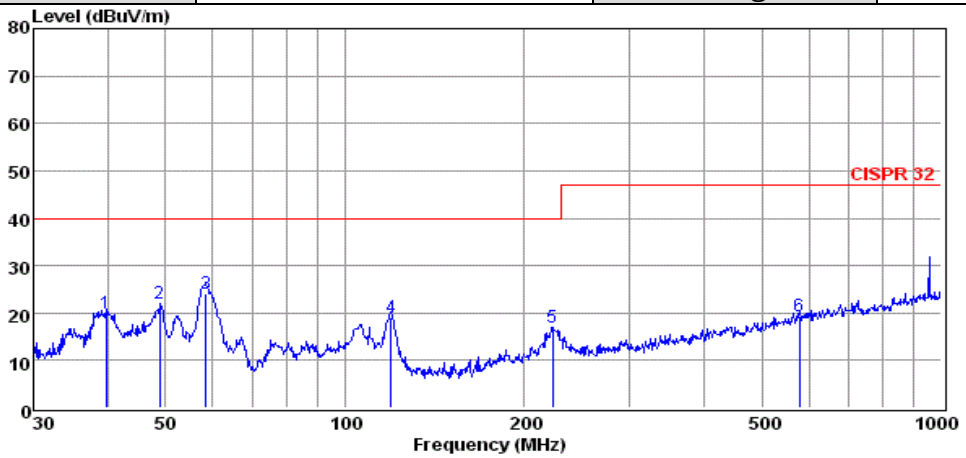
The frequency range from 1000MHz to 6000MHz is investigated.

4.8.Test Results

PASS.

All the scanning waveform is in next page.

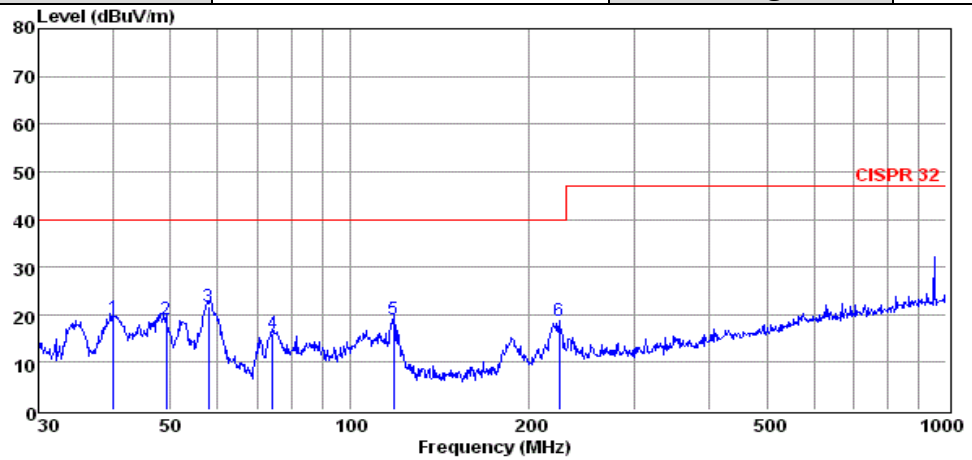
Test Model	EV-07B-4G	**Test Mode**	Mode 2
Environmental Conditions	24.1℃, 52.9% RH	**Detector Function**	Quasi-peak
Pol	Vertical	**Distance**	3m
Test Engineer	Daiwei Dai	**Test Voltage**	AC 240V/50Hz



	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	39.71	5.91	0.38	13.51	19.80	40.00	-20.20	QP
2	48.84	8.46	0.35	13.32	22.13	40.00	-17.87	QP
3	58.41	10.84	0.49	12.80	24.13	40.00	-15.87	QP
4	119.44	7.93	0.64	10.58	19.15	40.00	-20.85	QP
5	222.95	4.71	0.95	11.33	16.99	40.00	-23.01	QP
6	578.67	-0.03	1.44	18.05	19.46	47.00	-27.54	QP

Note: 1. All readings are Quasi-peak values.
2. Measured= Reading + Antenna Factor + Cable Loss
3. The emission that are 20db below the official limit are not reported

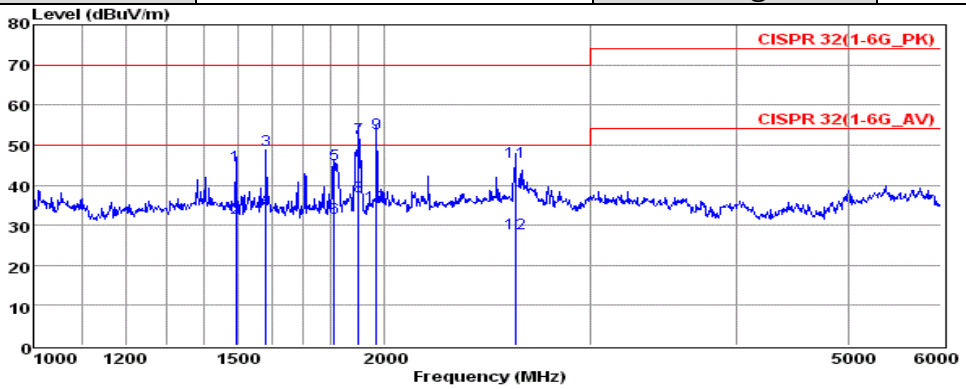
Test Model	EV-07B-4G	**Test Mode**	Mode 2
Environmental Conditions	24.1℃, 52.9% RH	**Detector Function**	Quasi-peak
Pol	Horizontal	**Distance**	3m
Test Engineer	Daiwei Dai	**Test Voltage**	AC 240V/50Hz



	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	40.13	5.40	0.38	13.58	19.36	40.00	-20.64	QP
2	49.19	5.53	0.35	13.30	19.18	40.00	-20.82	QP
3	57.80	8.48	0.47	12.84	21.79	40.00	-18.21	QP
4	74.14	7.48	0.54	7.95	15.97	40.00	-24.03	QP
5	118.19	7.74	0.64	10.80	19.18	40.00	-20.82	QP
6	224.52	6.26	0.95	11.40	18.61	40.00	-21.39	QP

Note: 1. All readings are Quasi-peak values.
2. Measured= Reading + Antenna Factor + Cable Loss
3. The emission that are 20db below the official limit are not reported

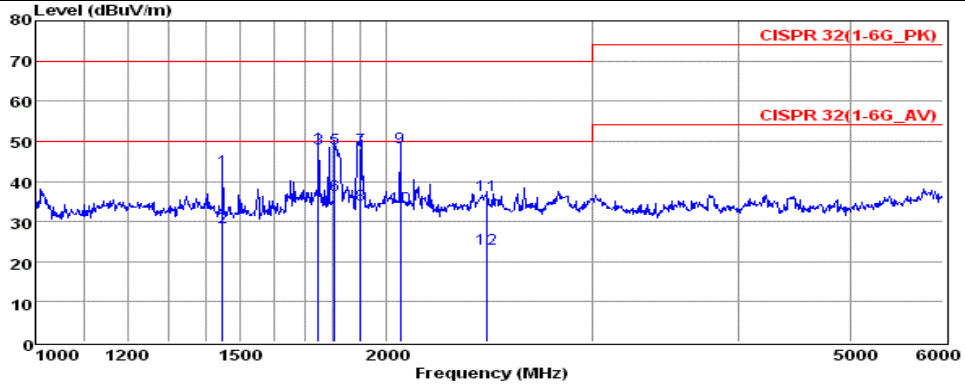
Test Model	EV-07B-4G	**Test Mode**	Mode 2
Environmental Conditions	24.1℃, 52.9% RH	**Detector Function**	Peak+Average
Pol	Vertical	**Distance**	3m
Test Engineer	Daiwei Dai	**Test Voltage**	AC 240V/50Hz



	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	1491.17	48.84	4.40	28.59	44.94	70.00	-25.06	Peak
2	1491.17	35.65	4.40	28.59	31.75	50.00	-18.25	Average
3	1582.00	52.04	4.42	29.17	48.69	70.00	-21.31	Peak
4	1582.00	37.95	4.42	29.17	34.60	50.00	-15.40	Average
5	1809.54	46.95	4.46	30.77	45.16	70.00	-24.84	Peak
6	1809.54	33.64	4.46	30.77	31.85	50.00	-18.15	Average
7	1899.23	52.78	4.48	31.39	51.61	70.00	-18.39	Peak
8	1899.23	38.37	4.48	31.39	37.20	50.00	-12.80	Average
9	1968.53	53.70	4.49	31.88	53.02	70.00	-16.98	Peak
10	1968.53	35.49	4.49	31.88	34.81	50.00	-15.19	Average
11	2589.40	44.33	5.33	33.24	45.80	70.00	-24.20	Peak
12	2589.40	26.38	5.33	33.24	27.85	50.00	-22.15	Average

Note: 1. All readings are Quasi-peak values.
2. Measured= Reading + Antenna Factor + Cable Loss
3. The emission that are 20db below the official limit are not reported

Test Model	EV-07B-4G	**Test Mode**	Mode 2
Environmental Conditions	24.1℃, 52.9% RH	**Detector Function**	Peak+Average
Pol	Horizontal	**Distance**	3m
Test Engineer	Daiwei Dai	**Test Voltage**	AC 240V/50Hz



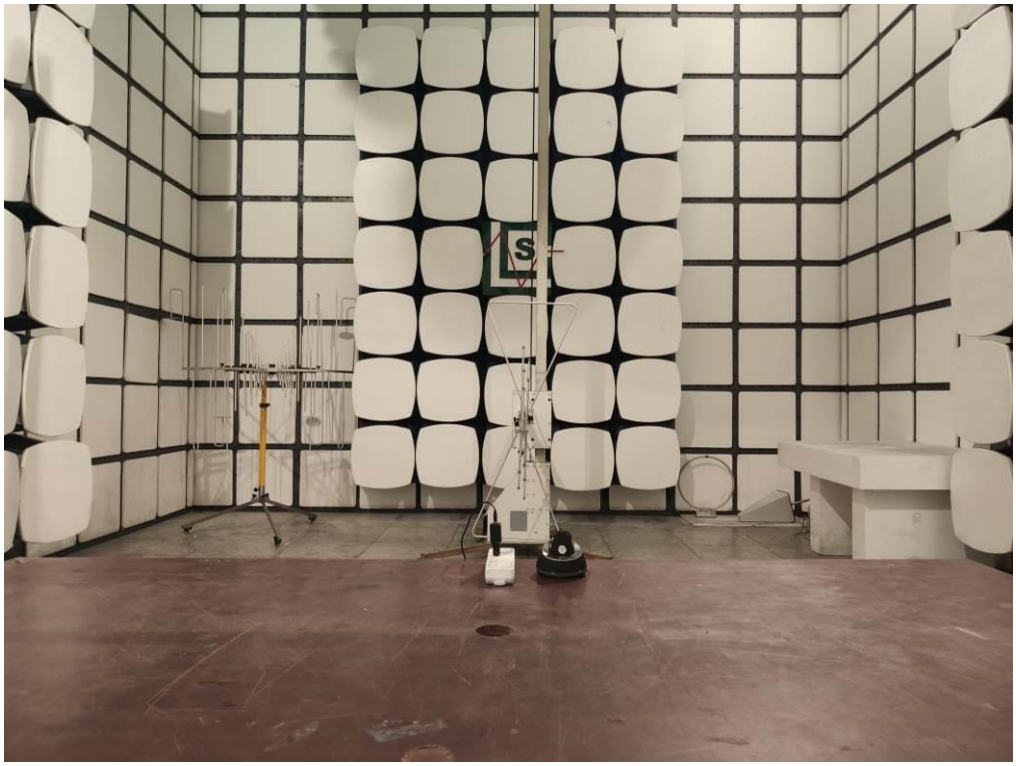
	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	1446.44	46.80	4.39	28.57	42.90	70.00	-27.10	Peak
2	1446.44	32.39	4.39	28.57	28.49	50.00	-21.51	Average
3	1748.97	50.34	4.45	30.34	48.12	70.00	-21.88	Peak
4	1748.97	37.43	4.45	30.34	35.21	50.00	-14.79	Average
5	1806.30	50.13	4.46	30.74	48.31	70.00	-21.69	Peak
6	1806.30	38.47	4.46	30.74	36.65	50.00	-13.35	Average
7	1899.23	49.41	4.48	31.39	48.24	70.00	-21.76	Peak
8	1899.23	35.49	4.48	31.39	34.32	50.00	-15.68	Average
9	2055.02	48.88	4.58	32.21	48.61	70.00	-21.39	Peak
10	2055.02	33.92	4.58	32.21	33.65	50.00	-16.35	Average
11	2440.73	35.62	5.12	32.98	36.62	70.00	-33.38	Peak
12	2440.73	22.06	5.12	32.98	23.06	50.00	-26.94	Average

Note: 1. All readings are Quasi-peak values.
2. Measured= Reading + Antenna Factor + Cable Loss
3. The emission that are 20db below the official limit are not reported

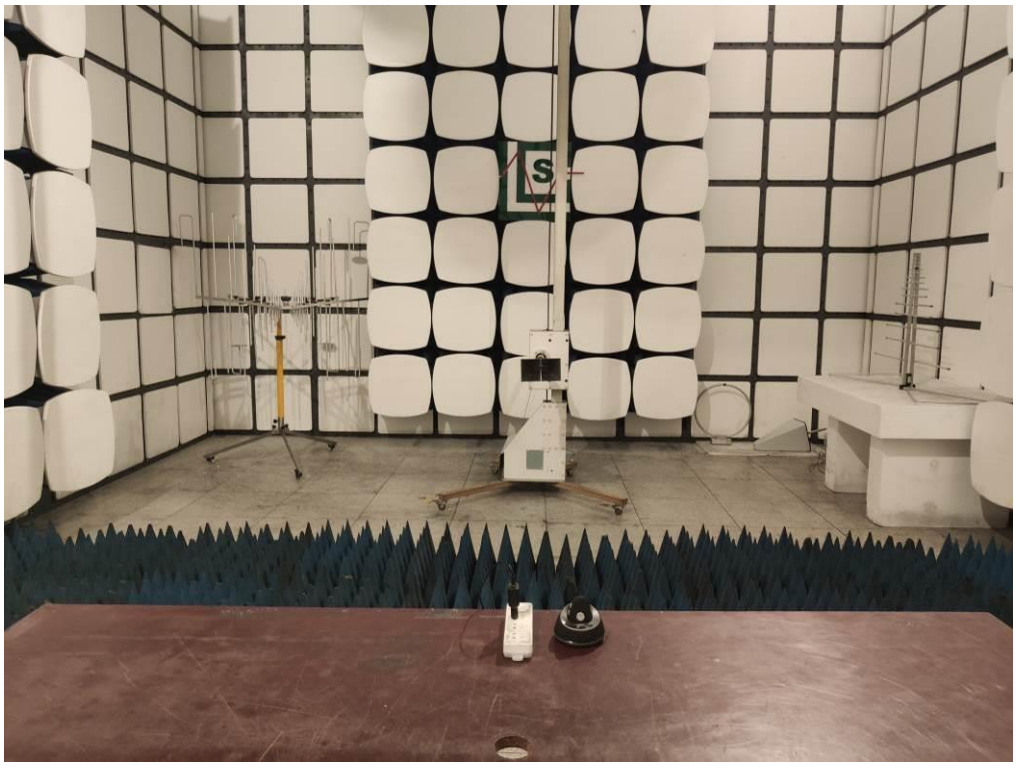
5. PHOTOGRAPH

5.1.Photo of Power Line Conducted Measurement

5.2.Photo of Radiated Measurement



Below 1GHz



Above 1GHz

6. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Fig. 1

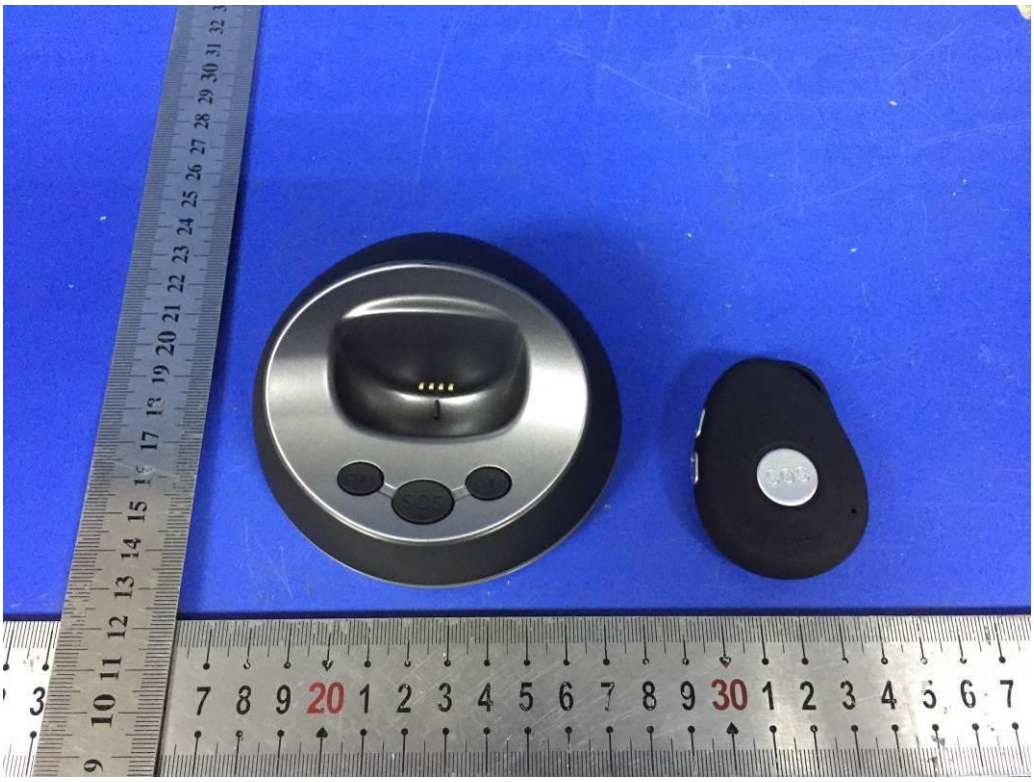


Fig. 2

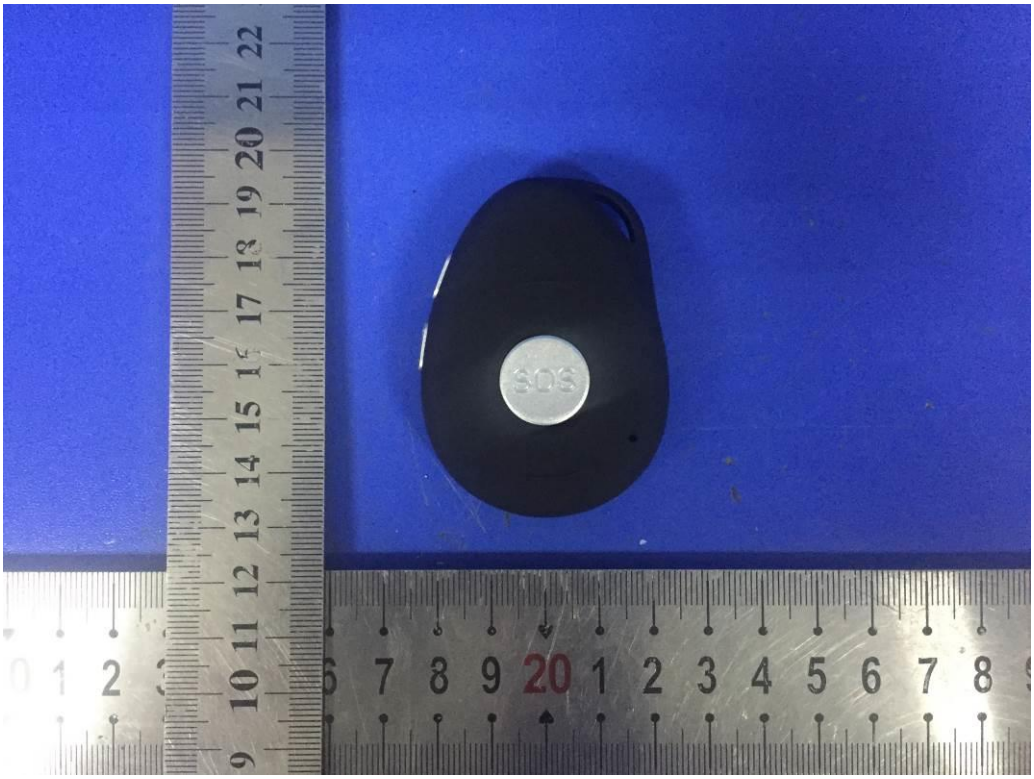


Fig. 3

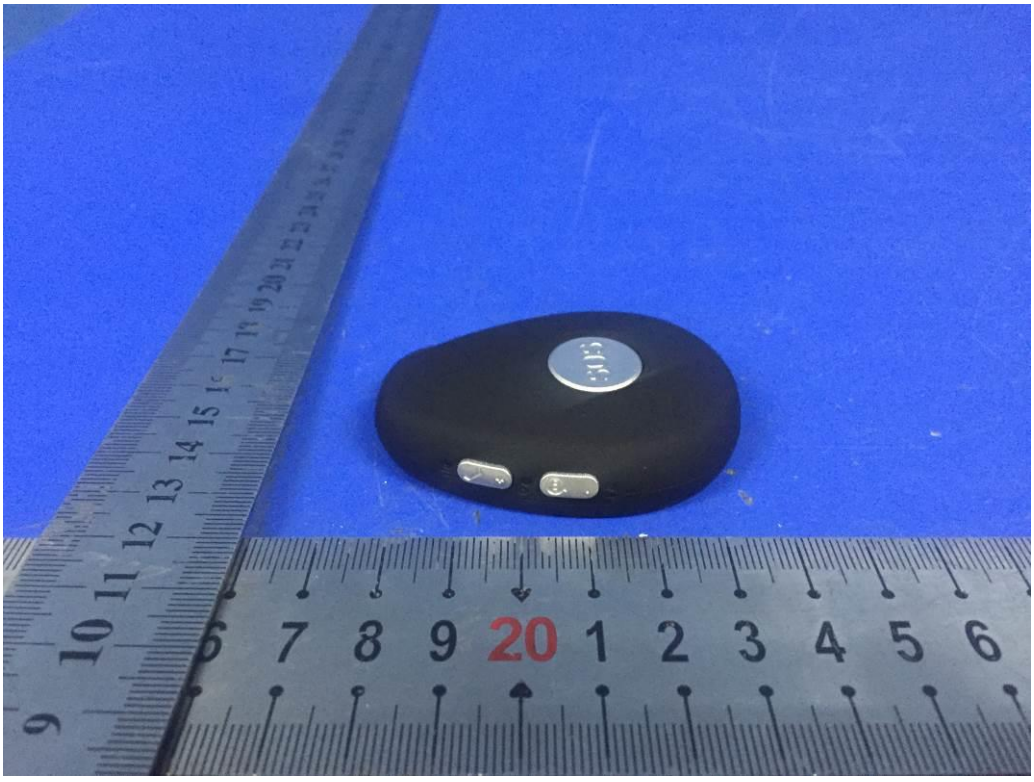


Fig. 4

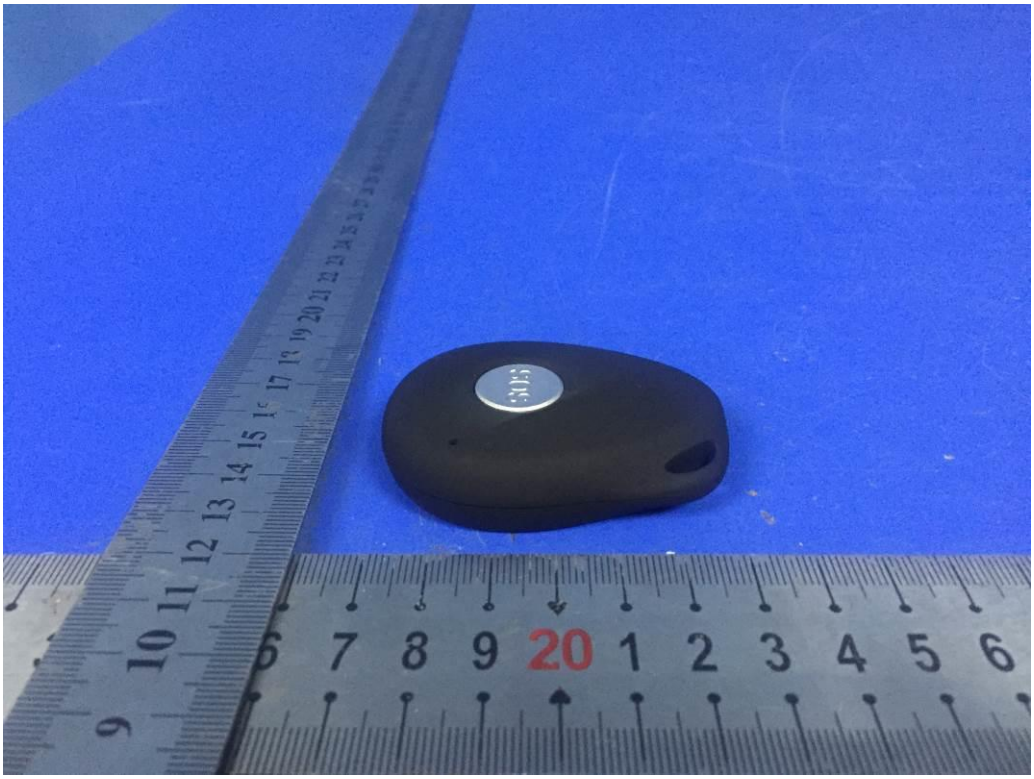


Fig. 5

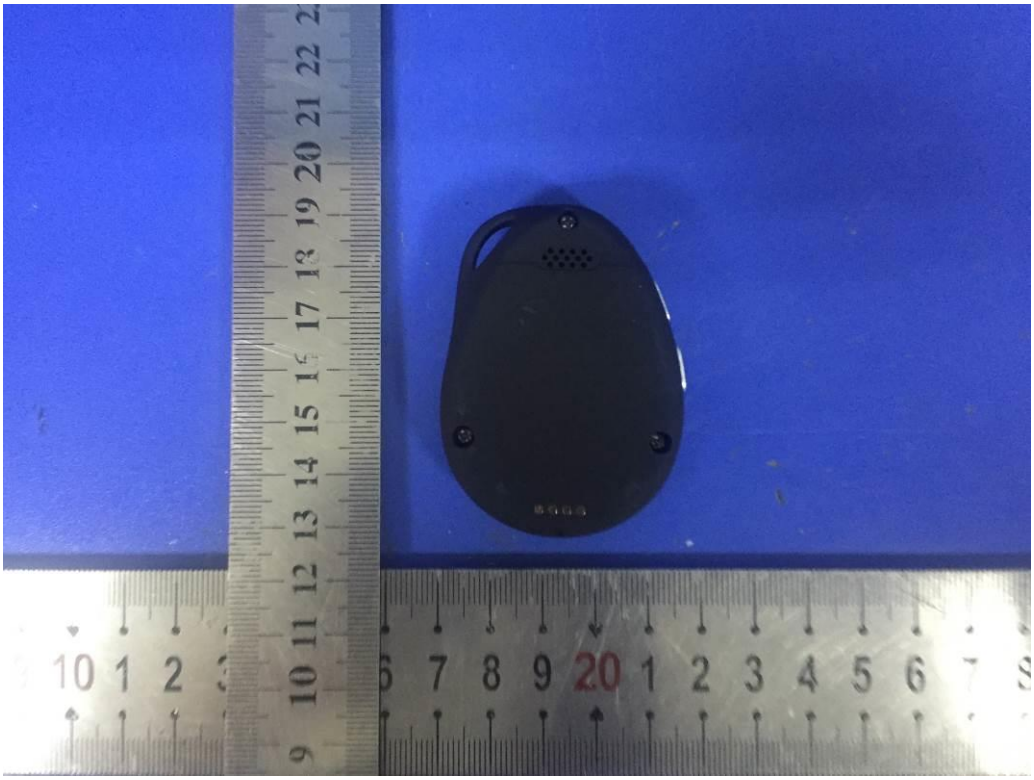


Fig. 6

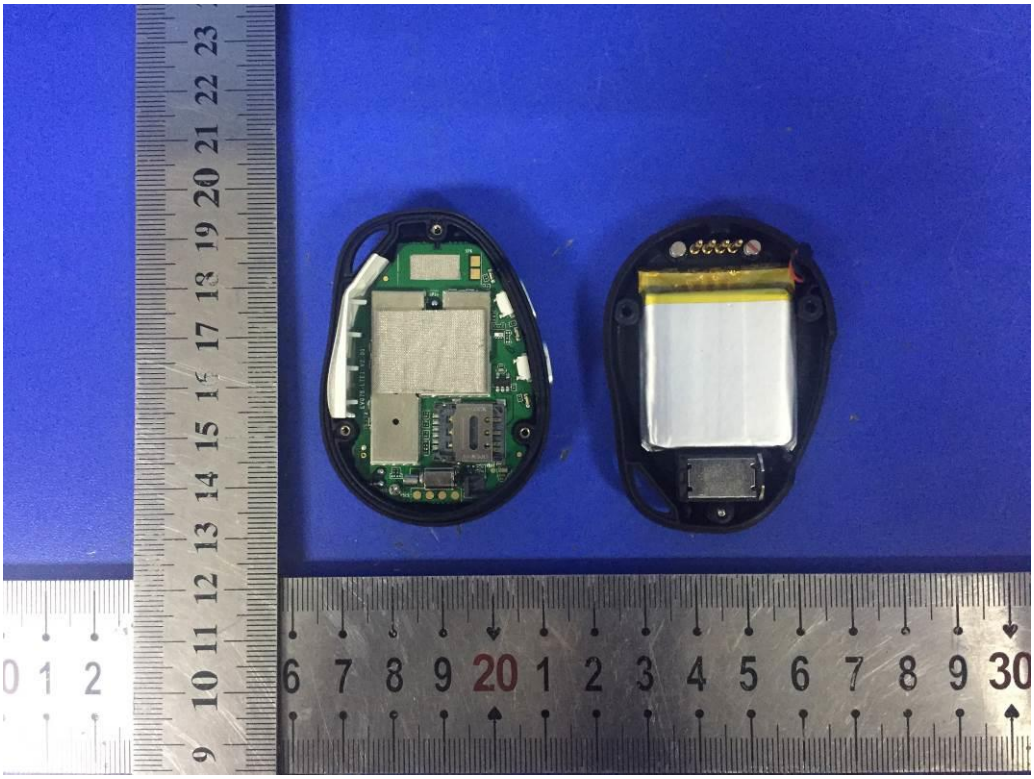


Fig. 7

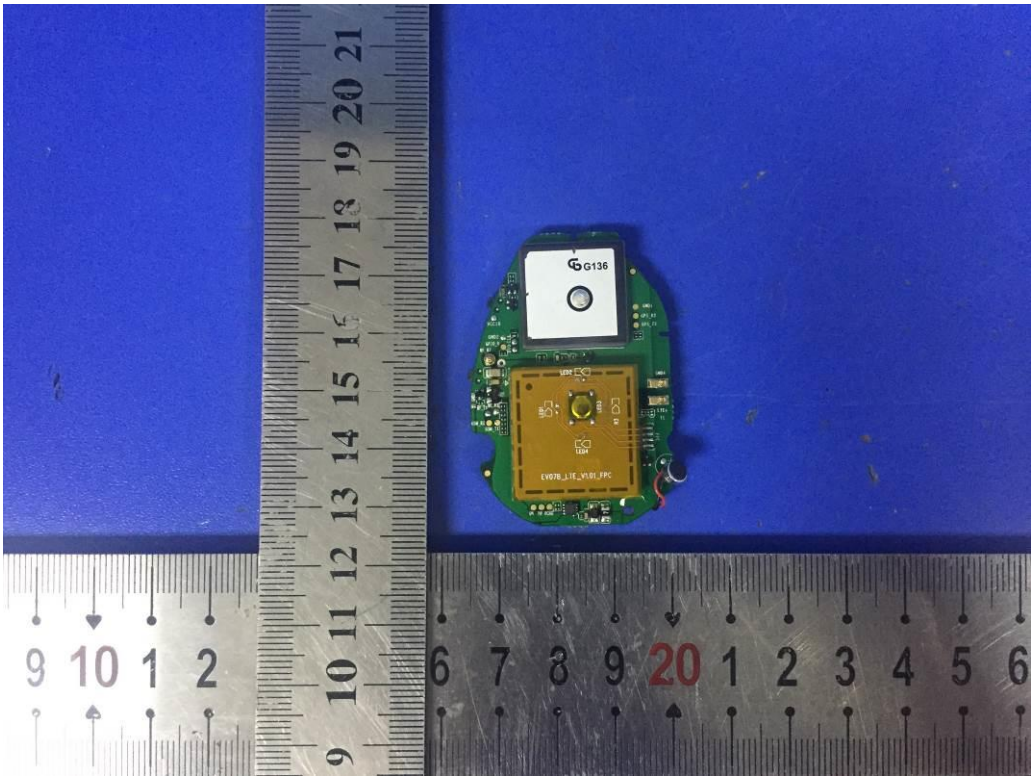


Fig. 8

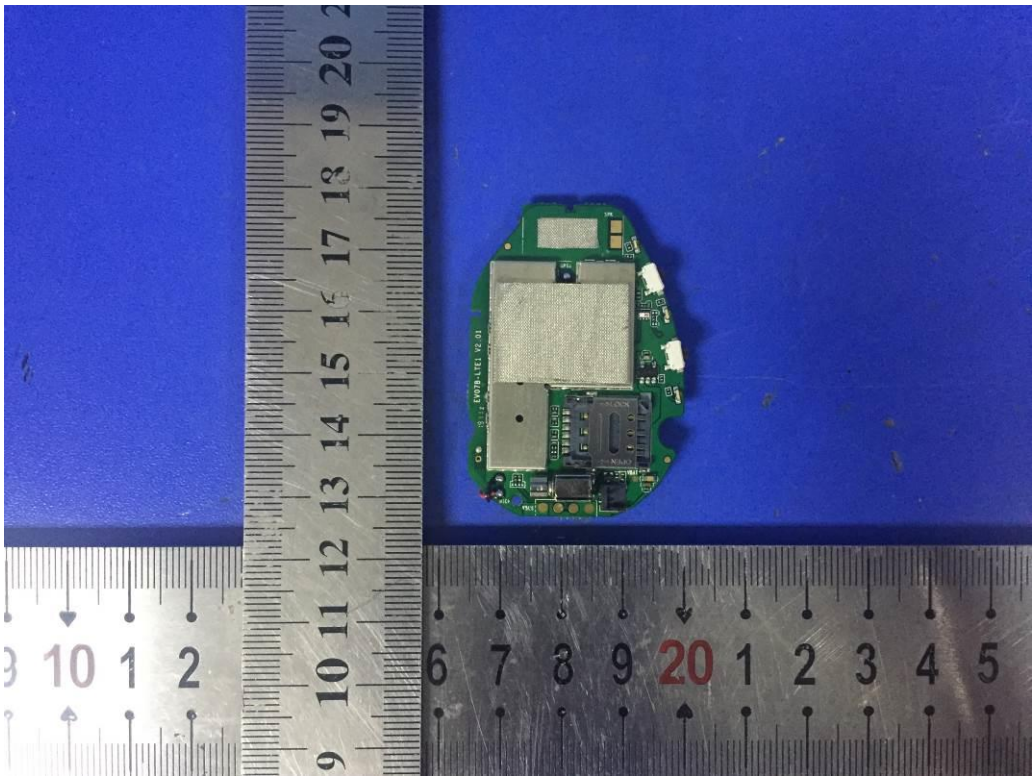


Fig. 9

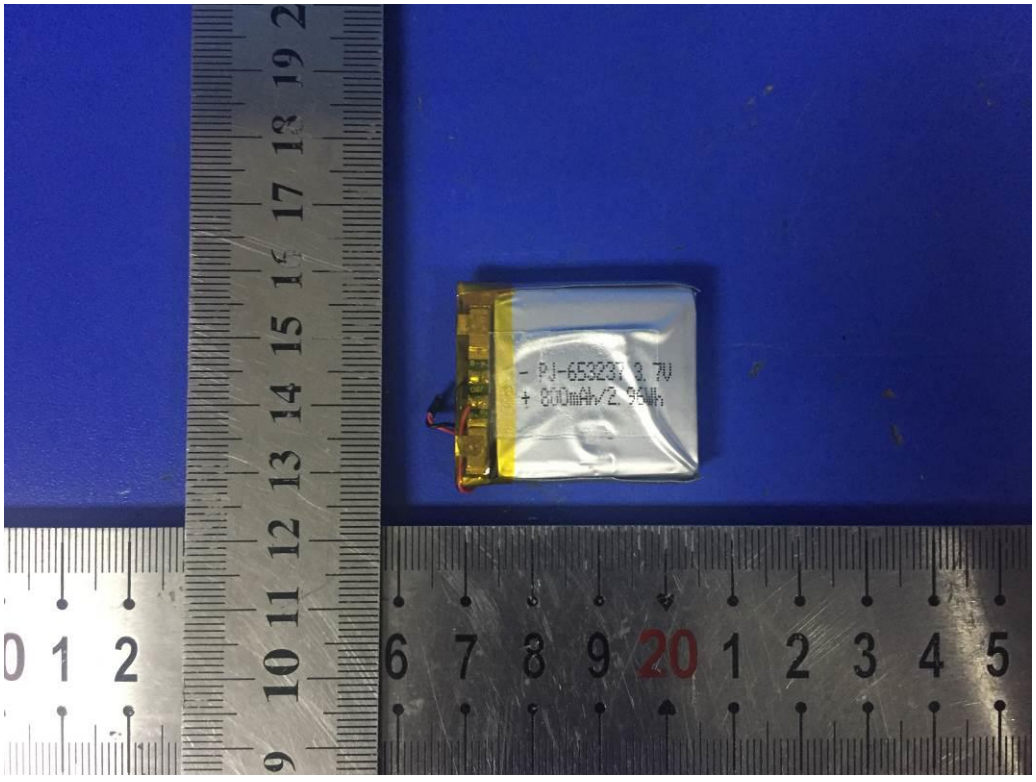


Fig. 10

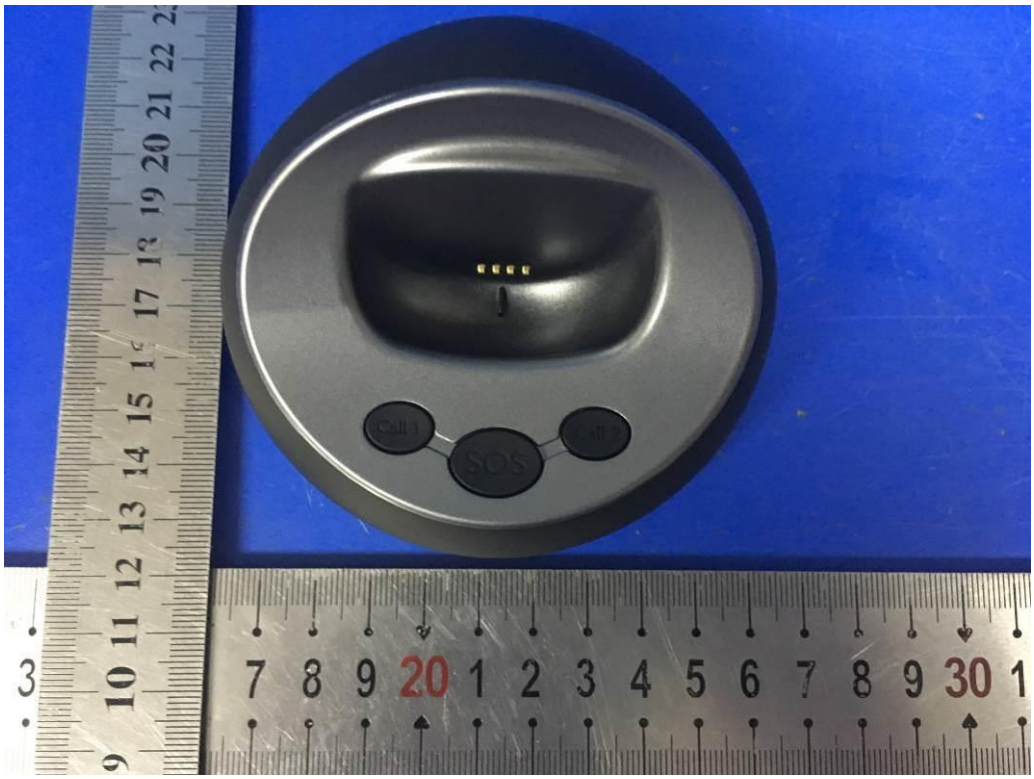


Fig. 11

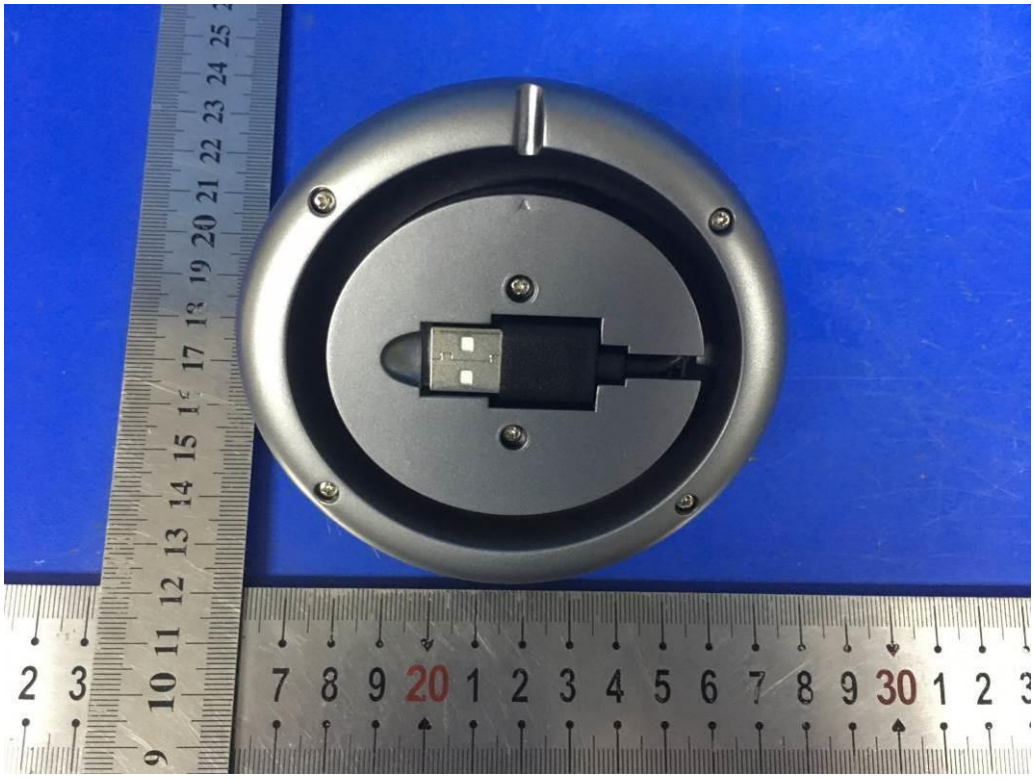


Fig. 12

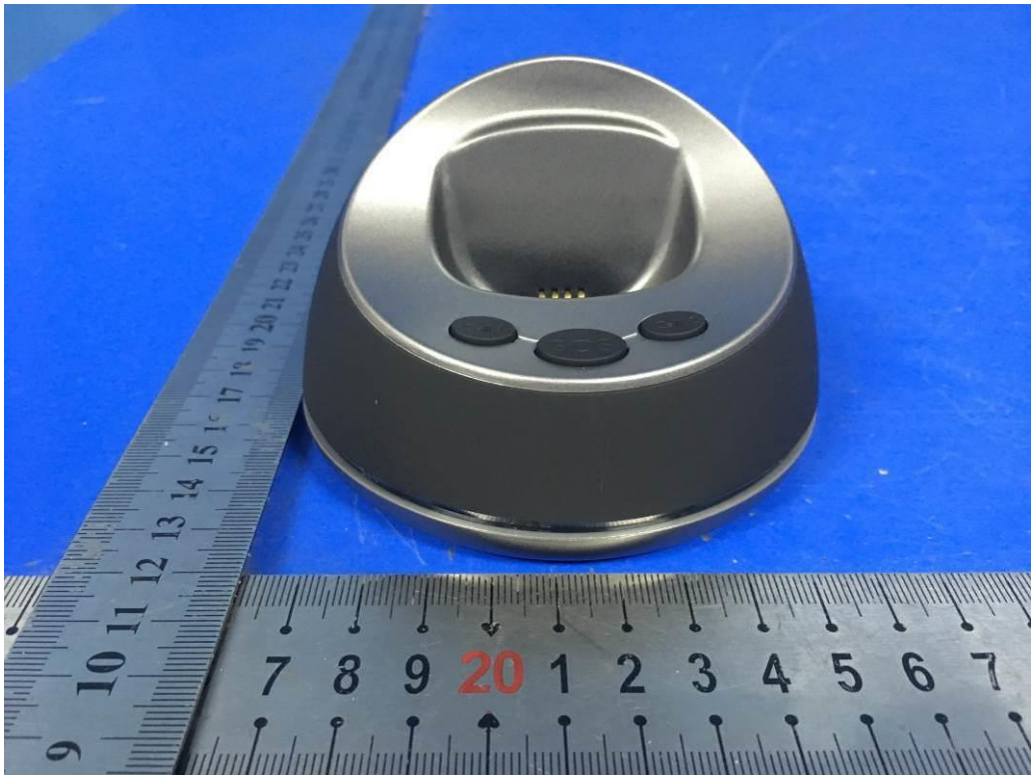


Fig. 13

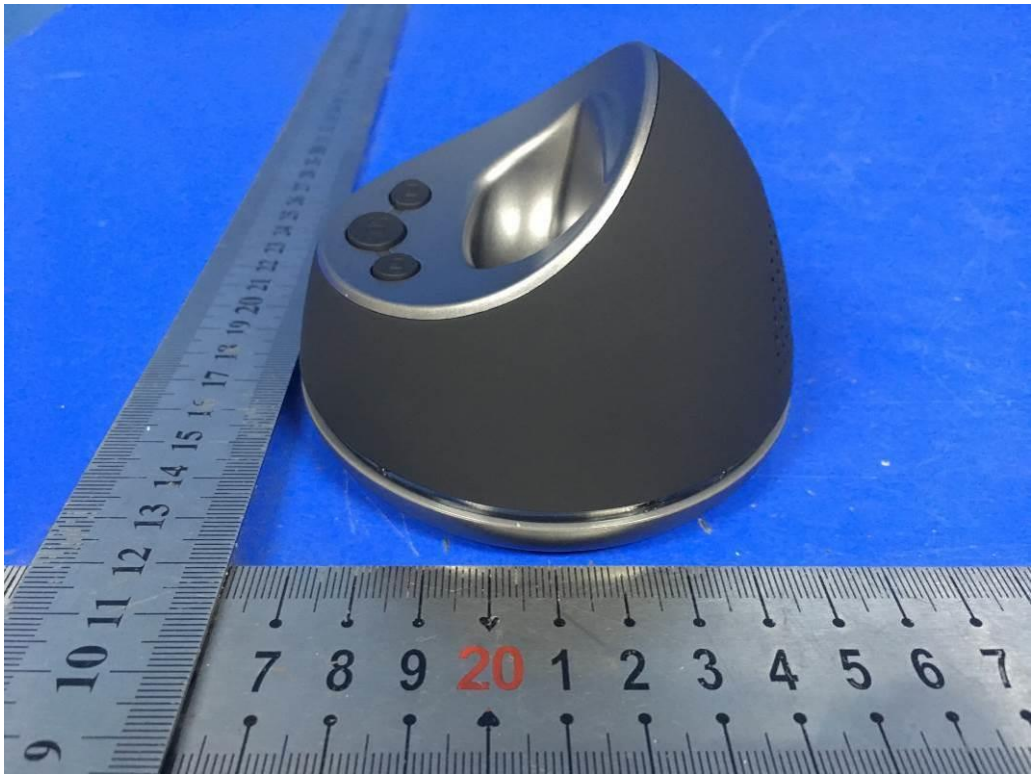


Fig. 14

Fig. 15

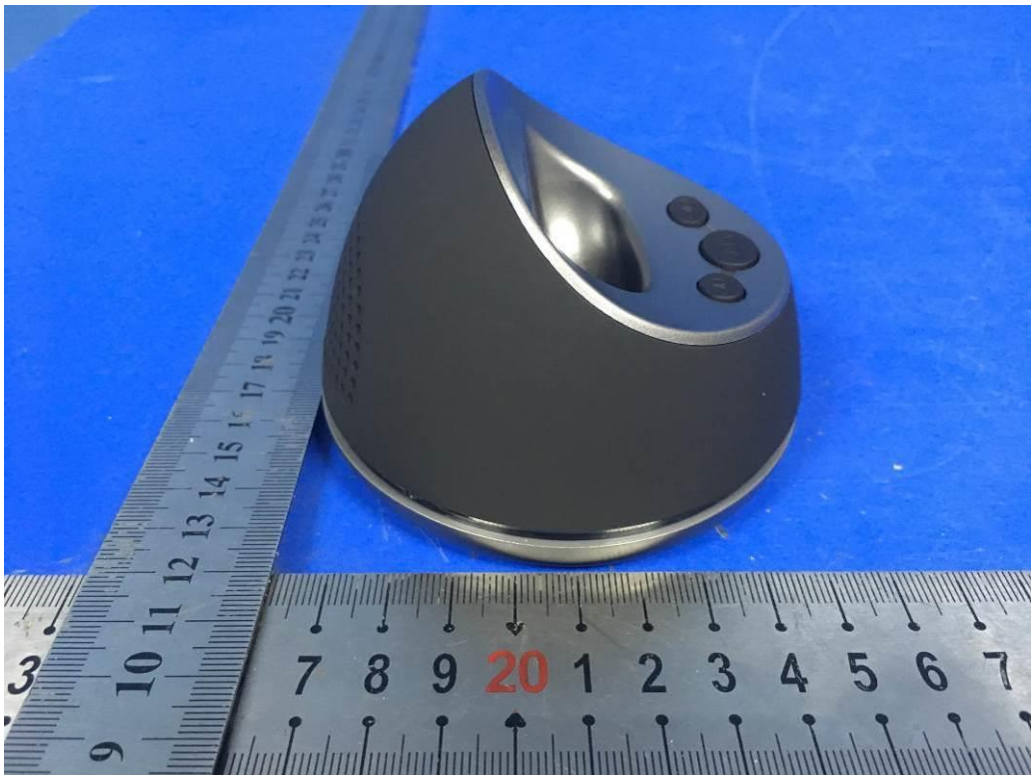


Fig. 16

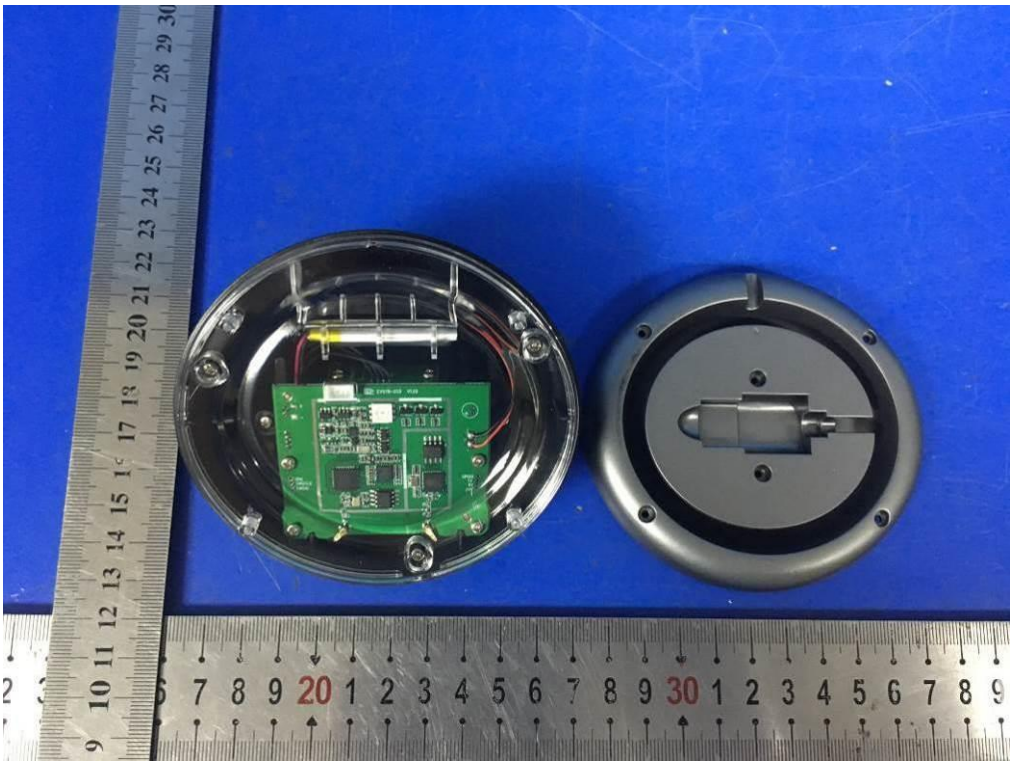


Fig. 17

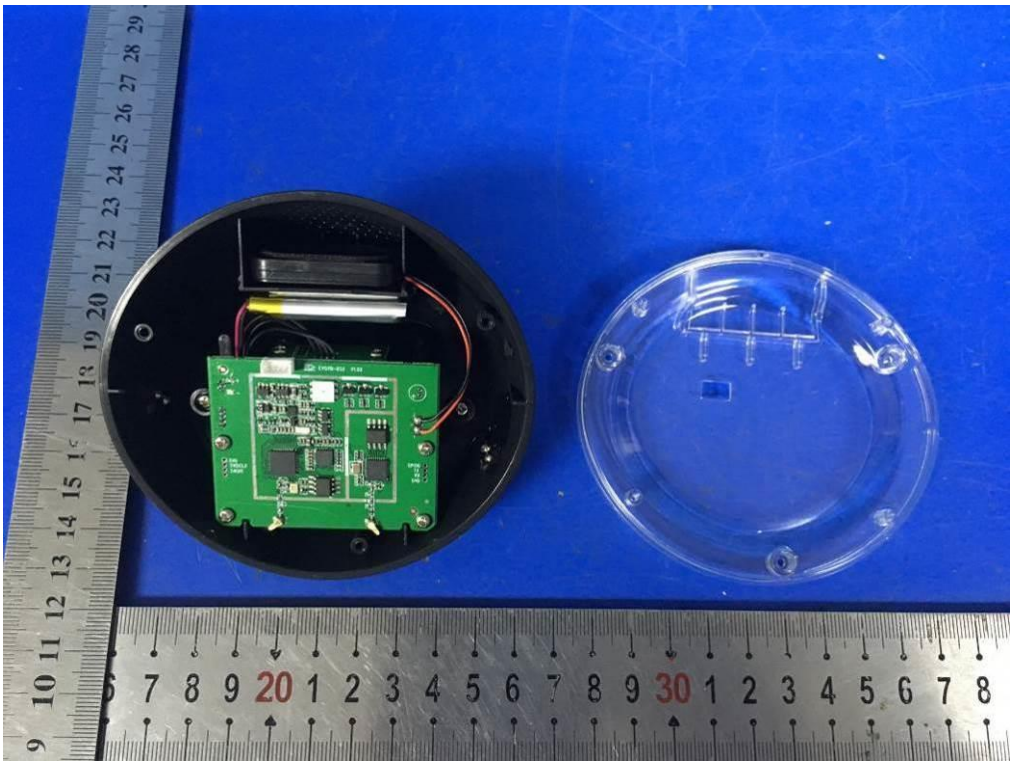


Fig. 18

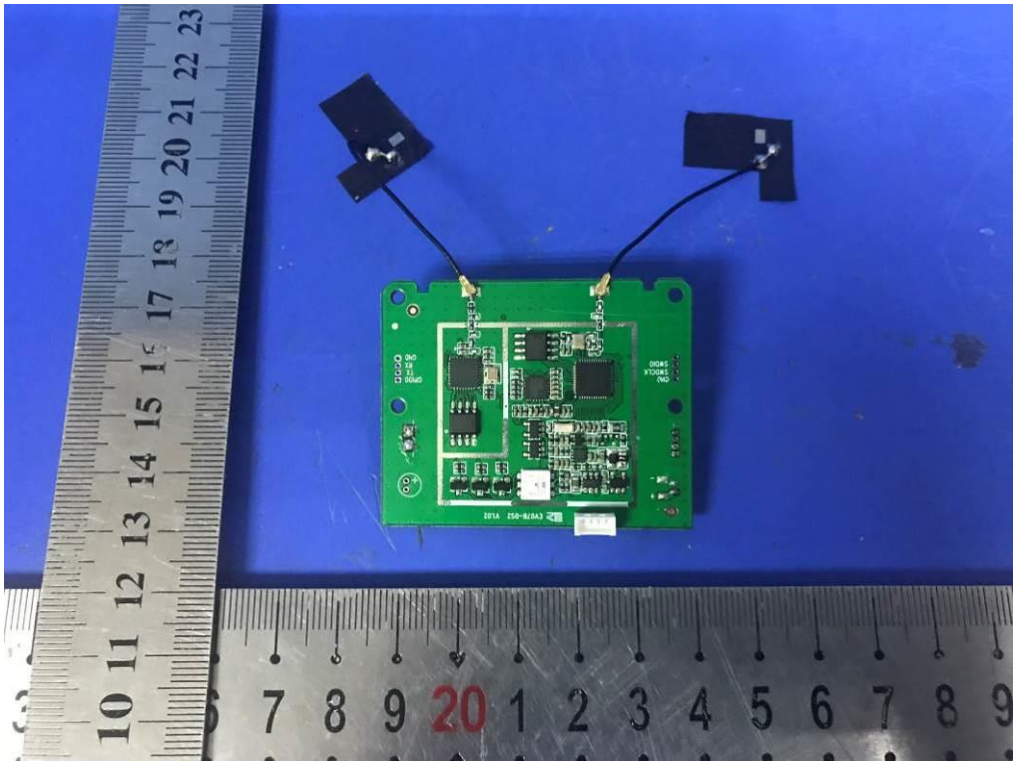


Fig. 19

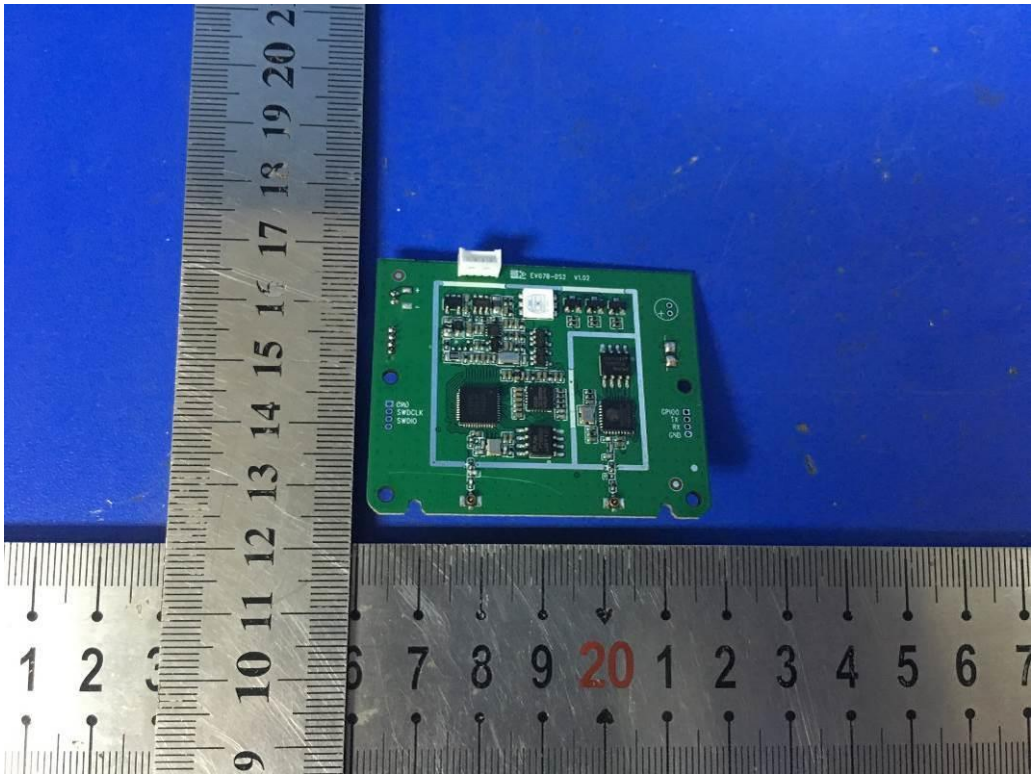


Fig. 20

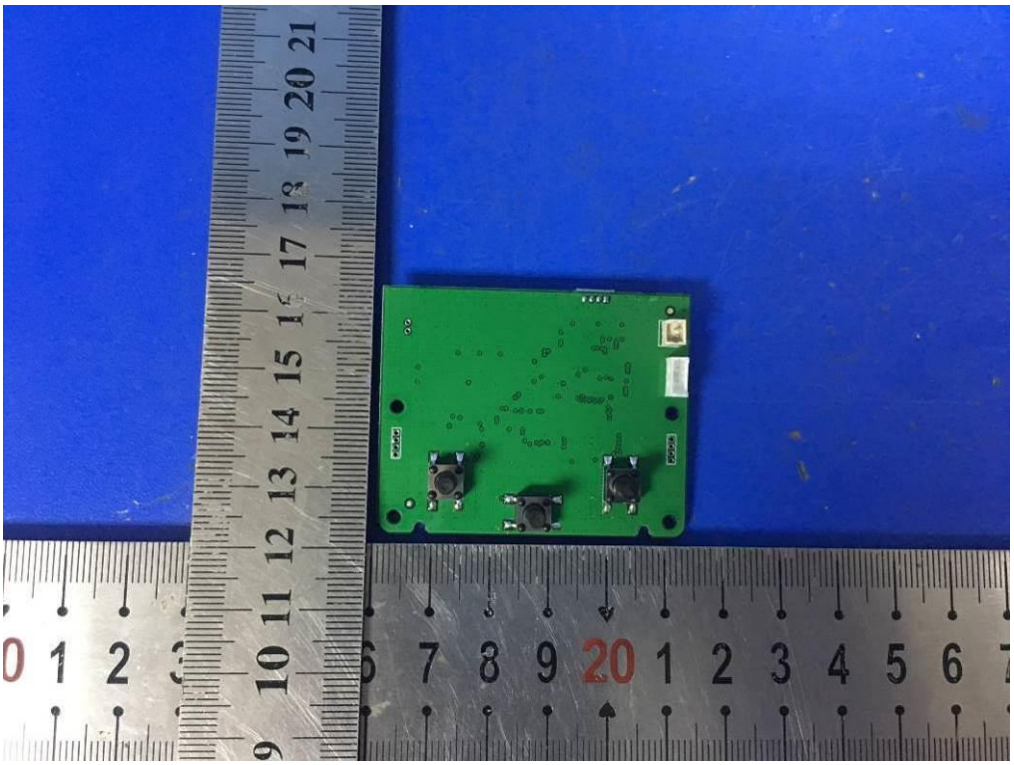


Fig. 21

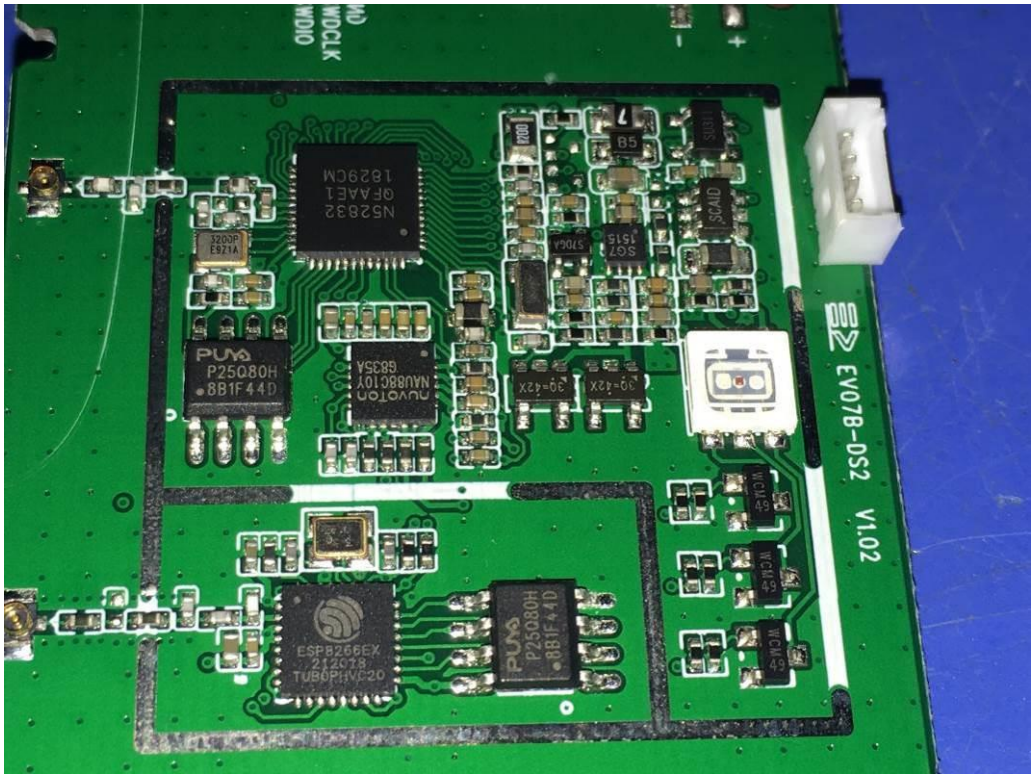


Fig. 22

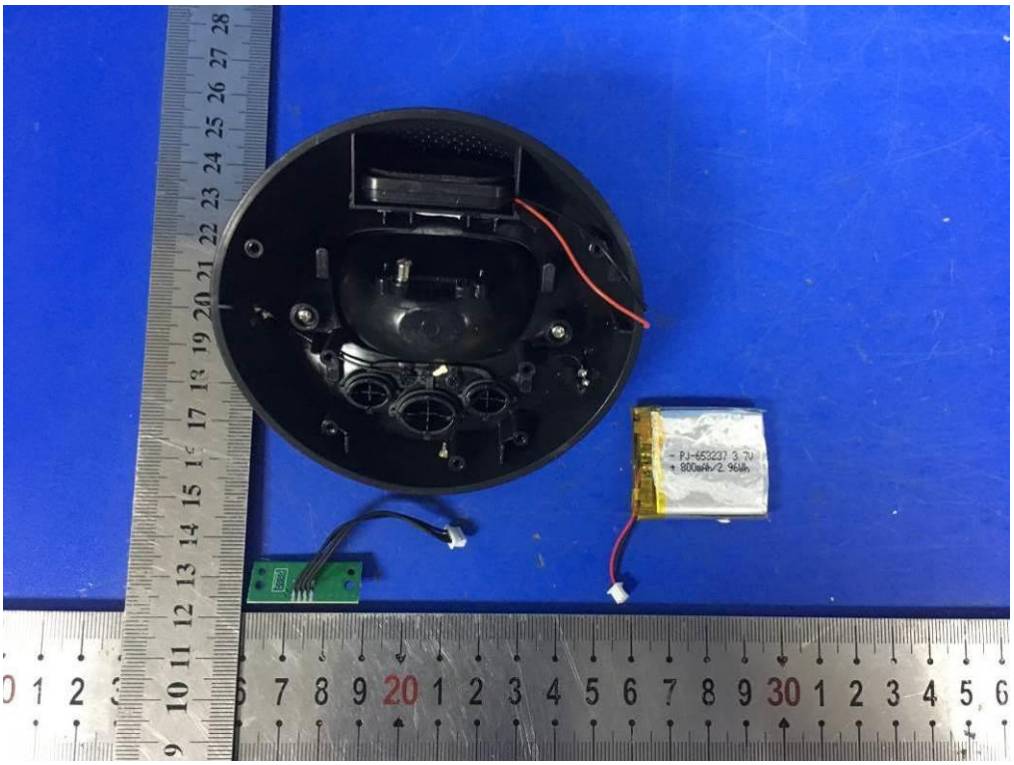


Fig. 23

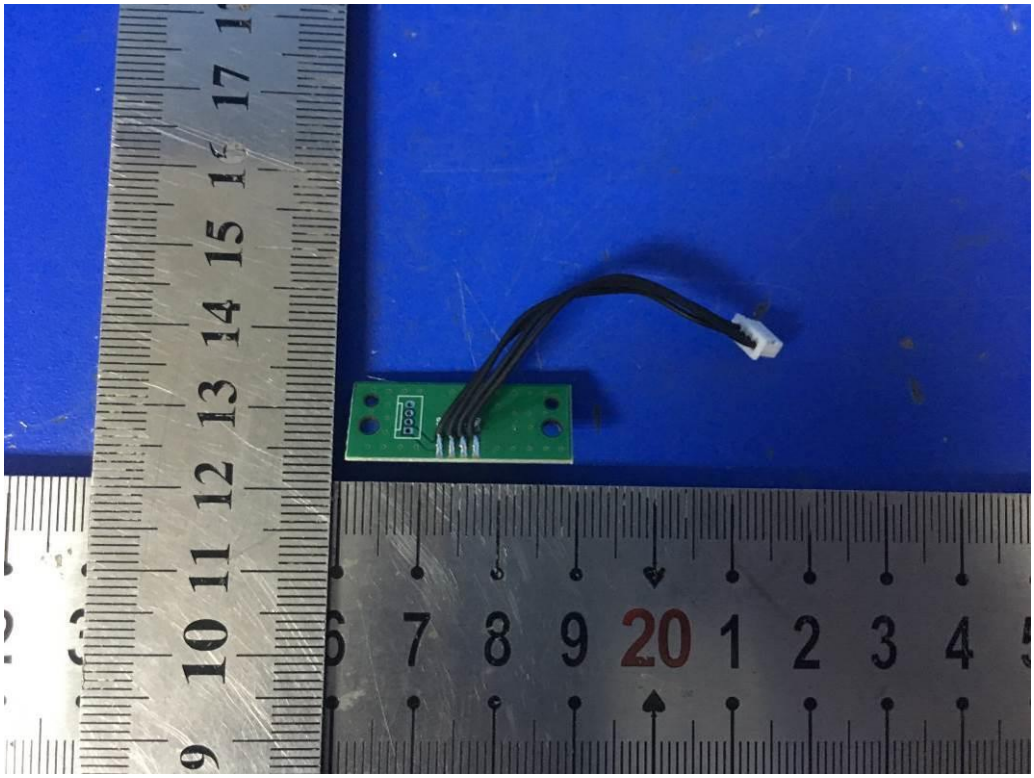


Fig. 24

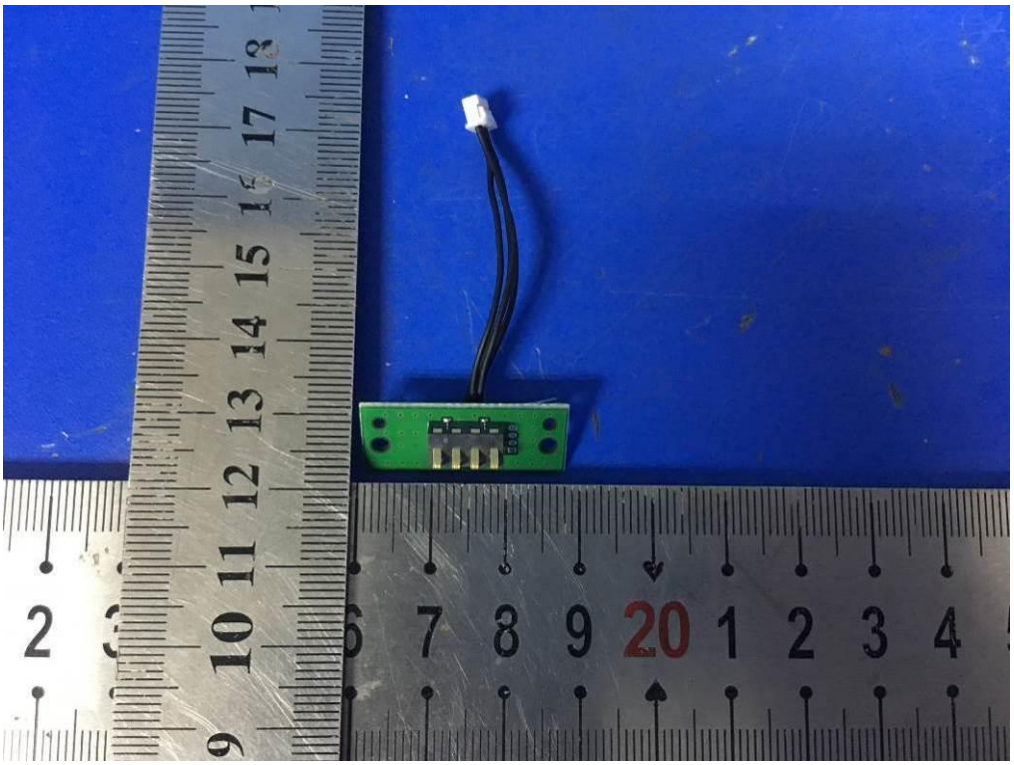


Fig. 25

Fig. 26

----------THE END OF TEST REPORT----------