

# EMC Test Report

Client Name : VENUS AI TECHNOLOGY CO., LTD  
Address : 2F., NO.162, MAIJIN RD., YINGGE VIL., ANLE DIST.,  
KEELUNG CITY 204, TAIWAN (R.O.C)  
Product Name : Soap dispenser  
Date : Jul. 22, 2021

**Shenzhen Anbotek Compliance Laboratory Limited**



# Contents

1. General Information.....	4
1.1. Client Information.....	4
1.2. Description of Device (EUT).....	4
1.3. Auxiliary Equipment Used During Test.....	4
1.4. Description of Test Modes.....	5
1.5. Test Summary.....	5
1.6. Test Equipment List.....	6
1.7. Description of Test Facility.....	7
1.8. EMS Performance Criteria.....	8
2. Power Line Conducted Emission Test.....	9
2.1. Test Standard and Limit.....	9
2.2. Test Setup.....	9
2.3. EUT Configuration on Measurement.....	9
2.4. Operating Condition of EUT.....	9
2.5. Test Procedure.....	10
2.6. Test Results.....	10
3. Radiated Emission Test.....	13
3.1. Test Standard and Limit.....	13
3.2. Test Setup.....	13
3.3. EUT Configuration on Measurement.....	13
3.4. Operating Condition of EUT.....	14
3.5. Test Procedure.....	14
3.6. Test Results.....	14
4. Electrostatic Discharge Immunity Test.....	19
4.1. Test Standard and Level.....	19
4.2. Test Setup.....	19
4.3. EUT Configuration on Measurement.....	19
4.4. Operating Condition of EUT.....	19
4.5. Test Procedure.....	20
4.6. Test Results.....	20
5. RF Field Strength Susceptibility Test.....	22
5.1. Test Standard and Level.....	22
5.2. Test Setup.....	22
5.3. EUT Configuration on Measurement.....	23
5.4. Operating Condition of EUT.....	23
5.5. Test Procedure.....	23
5.6. Measuring Results.....	23
APPENDIX I -- TEST SETUP PHOTOGRAPH.....	25
APPENDIX II -- EXTERNAL PHOTOGRAPH.....	27
APPENDIX III -- INTERNAL PHOTOGRAPH.....	31



# TEST REPORT

Applicant : VENUS AI TECHNOLOGY CO., LTD  
Manufacturer : VENUS AI TECHNOLOGY CO., LTD  
Product Name : Soap dispenser  
Model No. : VE-48, VE-4RX, K9 PRO PLUS, K9 PRO DUAL  
Trade Mark : N.A.  
Rating(s) : DC 6V, 2A, 1.32W

**Test Standard(s) : EN 55014-1: 2017;  
EN 55014-2: 2015  
(IEC 61000-4-2; IEC 61000-4-3)**

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited To determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. This report shows the EUT to be technically compliant with the EN 55014-1 and EN 55014-2 requirements. The test results are contained in this report and Shenzhen Anbotek Compliance Laboratory Limited Is assumed full responsibility for the accuracy and completeness of these tests.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited

Date of Receipt: Mar. 05, 2021

Date of Test: Mar. 05~10, 2021

Prepared By:

*Yee Huang*

(Yee Huang)

Approved & Authorized Signer:

*KingKong Jin*

(KingKong Jin)



## 1. General Information

### 1.1. Client Information

Applicant	:	VENUS AI TECHNOLOGY CO., LTD
Address	:	2F., NO.162, MAIJIN RD., YINGGE VIL., ANLE DIST., KEELUNG CITY 204, TAIWAN (R.O.C)
Manufacturer	:	VENUS AI TECHNOLOGY CO., LTD
Address	:	2F., NO.162, MAIJIN RD., YINGGE VIL., ANLE DIST., KEELUNG CITY 204, TAIWAN (R.O.C)
Factory	:	VENUS AI TECHNOLOGY CO., LTD
Address	:	2F., NO.162, MAIJIN RD., YINGGE VIL., ANLE DIST., KEELUNG CITY 204, TAIWAN (R.O.C)

### 1.2. Description of Device (EUT)

Product Name	:	Soap dispenser	
Model No.	:	VE-48, VE-4RX, K9 PRO PLUS, K9 PRO DUAL	
Trade Mark	:	N.A.	
Test Power Supply	:	DC 6V / DC 5V via adapter	
Test Sample No.	:	1-1-1	
Product Description	:	Adapter:	N/A
<p><b>Remark:</b> (1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.</p> <p>(2)As specified by the client, all the results in this report were quoted from report 18250EC10017001-M1, test model: K9 PRO PLUS.</p>			

### 1.3. Auxiliary Equipment Used During Test

N/A	
-----	--



## 1.4. Description of Test Modes

Pretest Modes	Descriptions
Mode 1	Battery Mode
Mode 2	DC Mode

For Mode 1 Block Diagram of Test Setup



For Mode 2 Block Diagram of Test Setup



## 1.5. Test Summary

Test Items	Test Modes	Status
Power Line Conducted Emission Test (150kHz To 30MHz)	Mode 2	P
Radiated Emission Test (30MHz To 1000MHz)	All Mode	P
Electrostatic Discharge immunity Test	All Mode	P
RF Field Strength susceptibility Test	Mode 1	P
Electrical Fast Transient/Burst Immunity Test	/	N
Surge Immunity Test	/	N
Injected Currents Susceptibility Test	/	N
Voltage Dips and Interruptions Test	/	N
P) Indicates "PASS". N) Indicates "Not applicable".		

## 1.6. Test Equipment List

### Conducted Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Oct. 26, 2020	1 Year
2.	L.I.S.N. Artificial Mains Network	Schwarzbeck	NSLK 8127	8127386	Oct. 26, 2020	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Oct. 26, 2020	1 Year
4.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Oct. 26, 2020	1 Year
5.	Software Name EZ-EMC	Ferrari Technology	ANB-03A	N/A	N/A	N/A

### Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	Oct. 26, 2020	1 Year
2.	Pre-amplifier	SONOMA	310N	186860	Oct. 26, 2020	1 Year
3.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Nov. 02, 2020	2 Year
4.	Software Name EZ-EMC	Ferrari Technology	ANB-03A	N/A	N/A	N/A

### Electrostatic Discharge Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	ESD Simulators	3Ctest	EDS-30T	ES0131505	Oct. 28, 2020	1 Year

### R/S Immunity Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Signal Generator	Agilent	N5182A	MY4818065 6	Oct. 26, 2020	1 Year
2.	Amplifier	Micotoop	MPA-80-100 0-250	MPA190309 6	Oct. 26, 2020	1 Year
3.	Amplifier	Micotoop	MPA-1000-6 000-100	MPA190312 2	Oct. 26, 2020	1 Year
4.	Log-Periodic Antenna	Schwarzbeck	VULP9118E	00992	Apr.17, 2020	1 Year
5.	Horn Antenna	Instruments corporation	GTH-0118	351600	Nov. 02, 2020	2 Year
6.	Power Sensor	Agilent	E9301A	MY4149890 6	Oct. 26, 2020	1 Year
7.	Power Sensor	Agilent	E9301A	MY4149808 8	Oct. 26, 2020	1 Year
8.	Power Meter	Agilent	E4419B	GB4020290 9	Oct. 26, 2020	1 Year
9.	Field Probe	ETS-Lindgren	HI-6006	00212747	Apr.17, 2020	1 Year
10.	RS Test software	EMtrace	EM 3	V1.1.7	N/A	N/A

## 1.7. Description of Test Facility

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

### **FCC-Registration No.: 184111**

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111, September 30, 2020.

### **ISED-Registration No.: 8058A**

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A, September 30, 2020.

### **Test Location**

Shenzhen Anbotek Compliance Laboratory Limited.  
1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518128



### 1.8. EMS Performance Criteria

- ✓ A: Normal performance within the specification limits
- ✓ B: Temporary degradation or loss of function or performance which is self-recoverable
- ✓ C: Temporary degradation or loss of function or performance which requires operator intervention or system reset
- ✓ D: Degradation or loss of function which is not recoverable due to damage of equipment (components) or software, or loss of data

Note: The manufacturer's specification may define effects on the EUT which may be considered insignificant, and therefore acceptable.

This classification may be used as a guide in formulating performance criteria, by committees responsible for generic, product and product-family standards, or as a framework for the agreement on performance criteria between the manufacturer and the purchaser, for example where no suitable generic, product or product-family standard exists.



## 2. Power Line Conducted Emission Test

### 2.1. Test Standard and Limit

Test Standard	EN 55014-1
---------------	------------

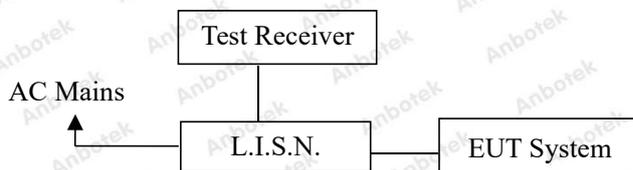
Limits for conducted emissions

Test Limit	Frequency (MHz)	At mains terminals (dB $\mu$ V)	
		Quasi-peak Level	Average Level
	0.15 ~ 0.50	66.0 ~ 56.0*	59.0 ~ 46.0*
	0.50 ~ 5.00	56.0	46.0
	5.00 ~ 30.00	60.0	50.0

**Remark:** (1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to

### 2.2. Test Setup



### 2.3. EUT Configuration on Measurement

The following equipments are installed on Conducted Emission Measurement to meet EN 55014–1 requirements and operating in a manner which tends to maximize its emission characteristics in a normal application.

### 2.4. Operating Condition of EUT

2.4.1. Setup the EUT as shown in Section 2.2.

2.4.2. Turn on the power of all equipments.

2.4.3. Let the EUT work in test mode and measure it.

## 2.5. Test Procedure

The EUT is put on the plane 0.8 m high above the ground by insulating support and connected to the AC mains through Line Impedance Stability Network(L.I.S.N). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are investigated to find out the maximum conducted emission according to the EN 55014-1 regulations during conducted emission measurement.

The bandwidth of the field strength meter (R&S Test Receiver ESCI) is set at 9kHz in 150kHz~30MHz.

The frequency range from 150kHz to 30MHz is investigated for AC mains.

All the test results are listed in Section 2.6.

## 2.6. Test Results

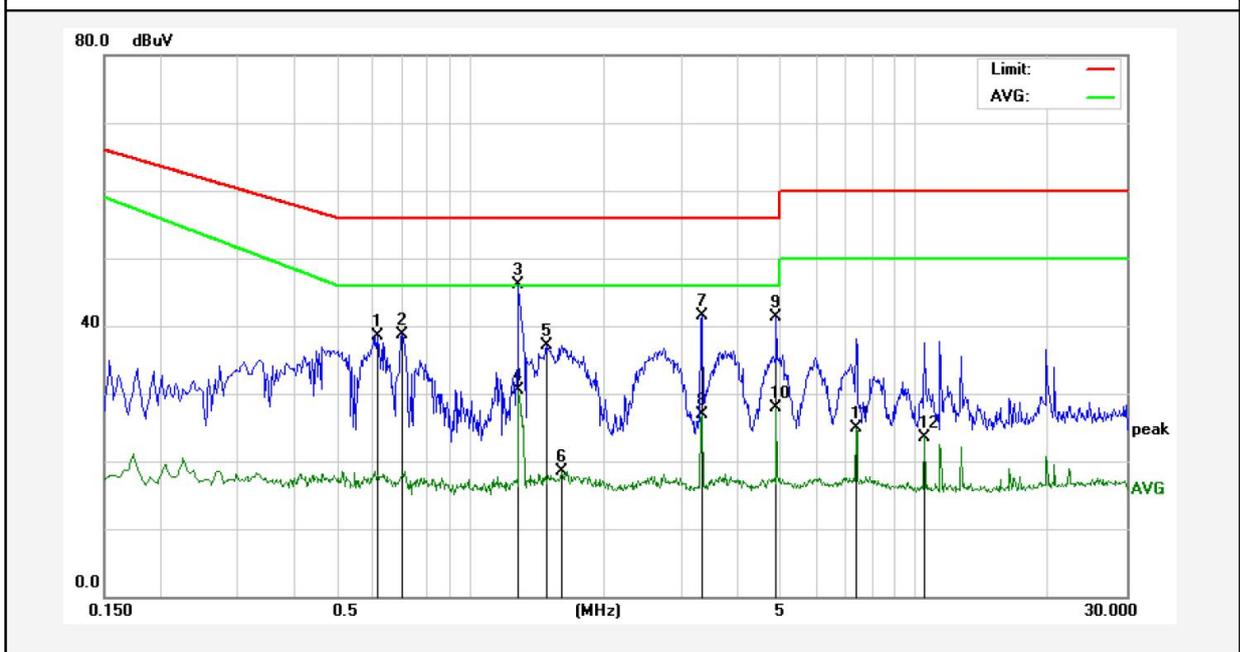
**PASS**

The test curves are shown in the following pages.



## Conducted Emission Test Data

Test Site: 1# Shielded Room  
 Test Specification: DC 5V via adapter  
 Comment: Live Line  
 Temp.: 21.6°C Hum.: 50%

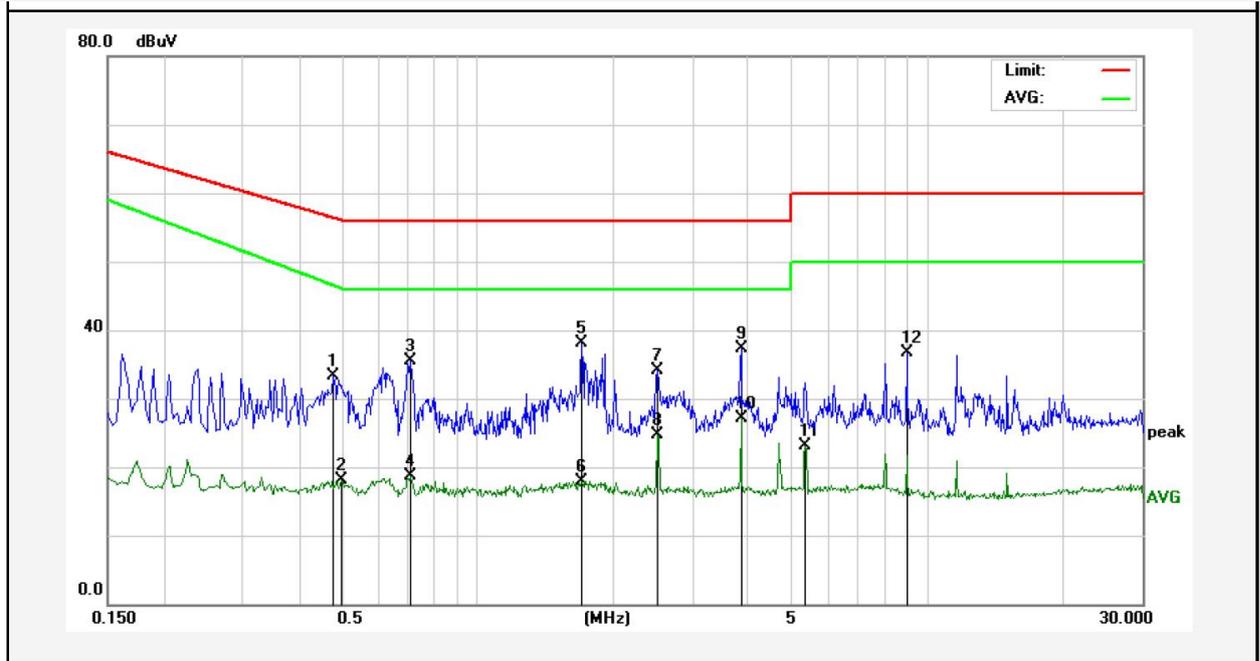


No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.6180	18.48	20.02	38.50	56.00	-17.50	QP	
2	0.7019	18.70	20.04	38.74	56.00	-17.26	QP	
3	1.2860	25.93	20.13	46.06	56.00	-9.94	QP	
4	1.2860	10.42	20.13	30.55	46.00	-15.45	AVG	
5	1.4819	17.02	20.13	37.15	56.00	-18.85	QP	
6	1.6060	-1.56	20.13	18.57	46.00	-27.43	AVG	
7	3.3140	21.25	20.17	41.42	56.00	-14.58	QP	
8	3.3140	6.72	20.17	26.89	46.00	-19.11	AVG	
9	4.8819	21.19	20.20	41.39	56.00	-14.61	QP	
10	4.8819	7.75	20.20	27.95	46.00	-18.05	AVG	
11	7.3979	4.62	20.27	24.89	50.00	-25.11	AVG	
12	10.5219	3.27	20.33	23.60	50.00	-26.40	AVG	

**Note:** Result=Reading+Factor Over Limit=Result-Limit

## Conducted Emission Test Data

Test Site: 1# Shielded Room  
 Test Specification: DC 5V via adapter  
 Comment: Neutral Line  
 Temp.: 21.6°C Hum.: 50%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.4780	13.25	19.97	33.22	56.37	-23.15	QP	
2	0.4980	-1.78	19.98	18.20	46.04	-27.84	AVG	
3	0.7060	15.51	20.04	35.55	56.00	-20.45	QP	
4	0.7060	-1.37	20.04	18.67	46.00	-27.33	AVG	
5	1.7020	18.01	20.13	38.14	56.00	-17.86	QP	
6	1.7020	-2.19	20.13	17.94	46.00	-28.06	AVG	
7	2.5100	13.90	20.15	34.05	56.00	-21.95	QP	
8	2.5100	4.55	20.15	24.70	46.00	-21.30	AVG	
9	3.8420	17.21	20.18	37.39	56.00	-18.61	QP	
10	3.8420	6.86	20.18	27.04	46.00	-18.96	AVG	
11	5.3460	2.96	20.22	23.18	50.00	-26.82	AVG	
12	8.9860	16.35	20.31	36.66	60.00	-23.34	QP	

**Note:** Result=Reading+Factor Over Limit=Result-Limit

## 3. Radiated Emission Test

### 3.1. Test Standard and Limit

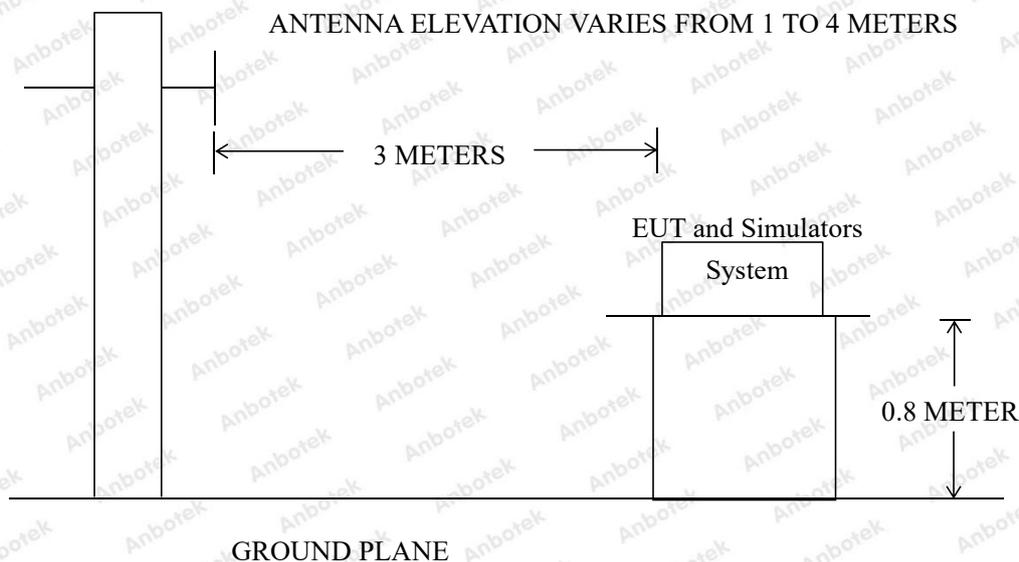
Test Standard	EN 55014-1
---------------	------------

Radiated Emission Test Limit

Test Limit	Frequency (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMIT (dB $\mu$ V/m)
	30 ~ 230	3	40
	230 ~ 1000	3	47

**Remark:** (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.

### 3.2. Test Setup



### 3.3. EUT Configuration on Measurement

The EN 55014-1 regulations test method must be used to find the maximum emission during radiated emission measurement.

### 3.4. Operating Condition of EUT

- 3.4.1. Setup the EUT as shown in Section 3.2.
- 3.4.2. Turn on the power of all equipments.
- 3.4.3. Let the EUT work in test mode and measure it.

### 3.5. Test Procedure

The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table 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 a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Bilog antenna is used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the Receiver (ESCI) is set at 120kHz.

The EUT is tested in 9\*6\*6 Chamber.

The test results are listed in Section 3.6.

### 3.6. Test Results

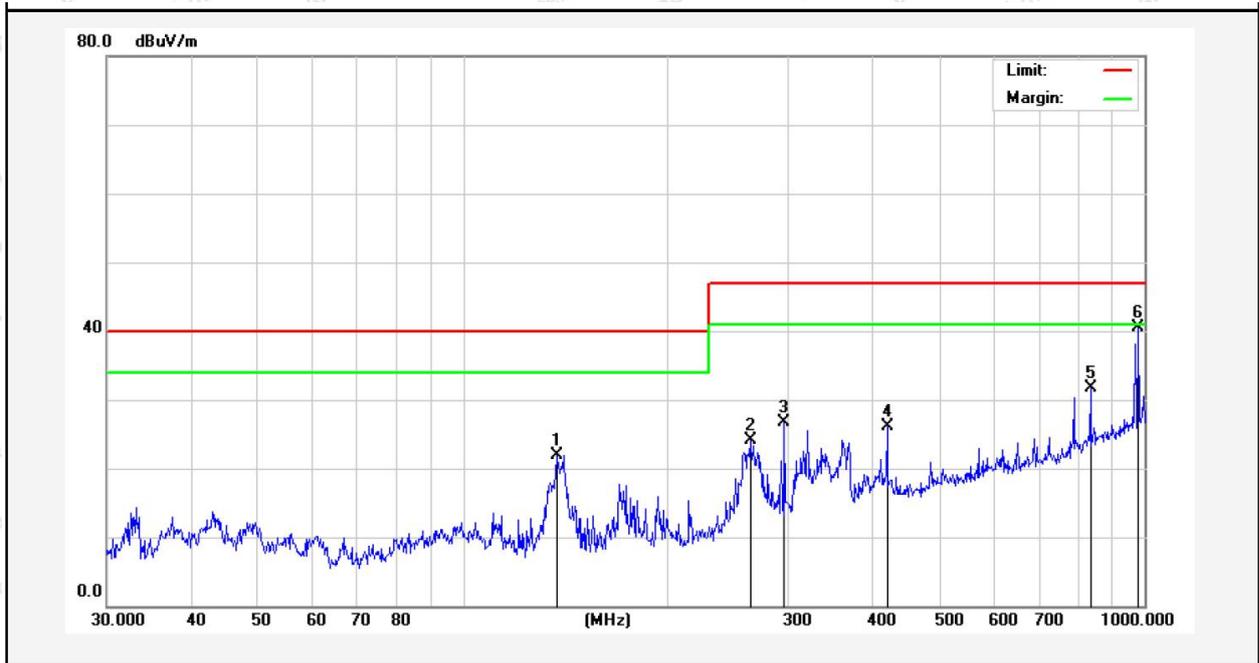
#### **PASS**

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

The test curves are shown in the following pages.



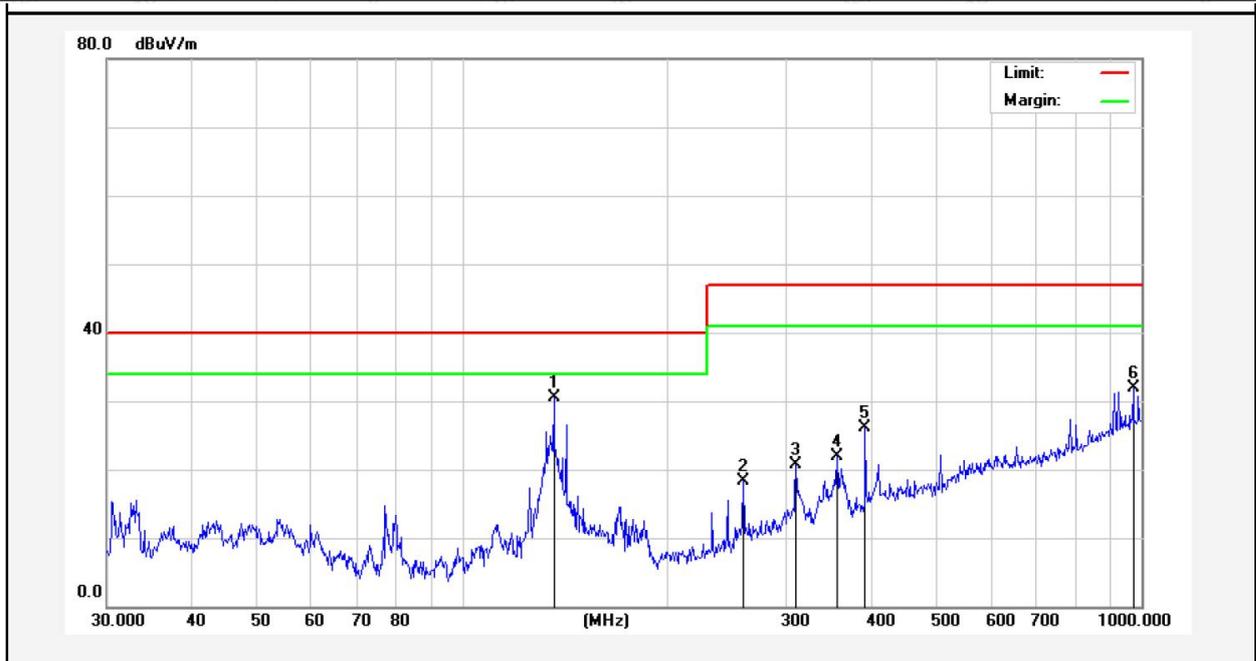
**Test item:** Radiation Test      **Polarization:** Horizontal  
**Standard:** (RE)EN 55014-1      **Power Source:** DC 6V  
**Distance:** 3m      **Temp.(°C)/Hum.(%RH):** 22.5(°C )/50%RH  
**Test Mode:** Battery Mode



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	137.4202	42.73	-20.82	21.91	40.00	-18.09	peak			
2	263.8190	41.66	-17.58	24.08	47.00	-22.92	peak			
3	296.1836	41.27	-14.65	26.62	47.00	-20.38	peak			
4	419.1081	38.78	-12.63	26.15	47.00	-20.85	peak			
5	833.3171	35.18	-3.50	31.68	47.00	-15.32	peak			
6	979.1804	40.61	-0.17	40.44	47.00	-6.56	peak			

**Note:**      **Result=Reading+Factor**      **Over Limit=Result-Limit**

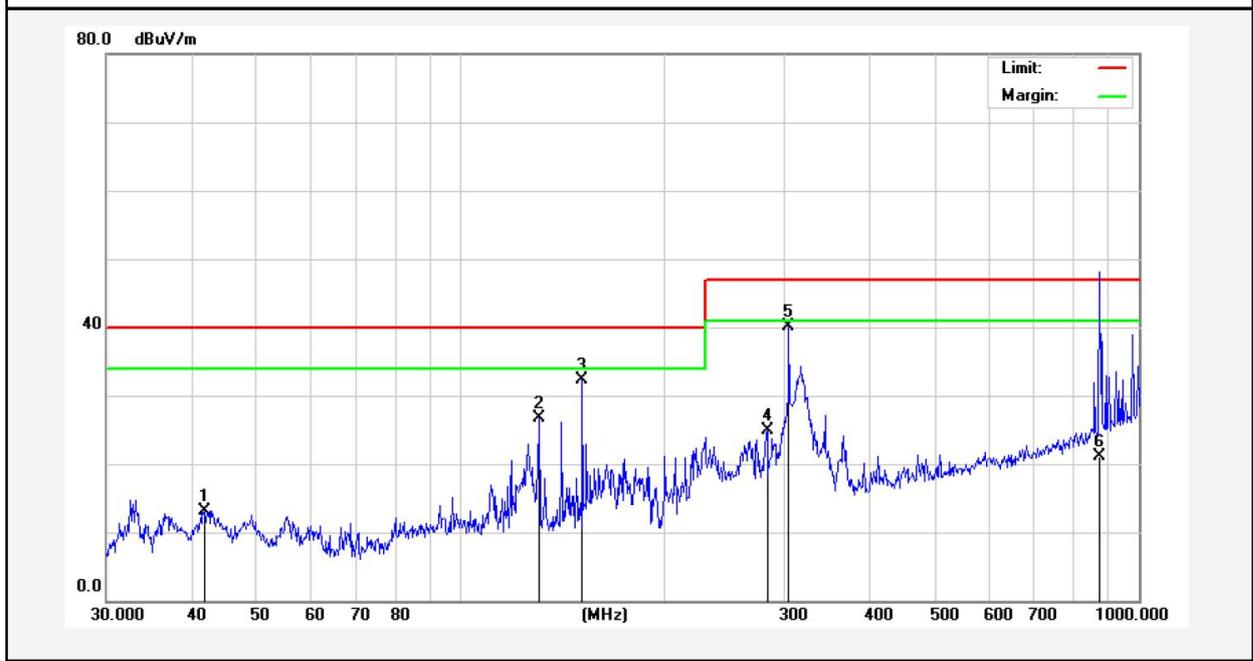
**Test item:** Radiation Test      **Polarization:** Vertical  
**Standard:** (RE)EN 55014-1      **Power Source:** DC 6V  
**Distance:** 3m      **Temp.(°C)/Hum.(%RH):** 22.5(°C )/50%RH  
**Test Mode:** Battery Mode



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	136.4598	50.26	-19.83	30.43	40.00	-9.57	peak			
2	259.2338	33.15	-14.92	18.23	47.00	-28.77	peak			
3	309.9977	33.81	-13.11	20.70	47.00	-26.30	peak			
4	356.6758	33.88	-11.90	21.98	47.00	-25.02	peak			
5	392.0951	37.51	-11.40	26.11	47.00	-20.89	peak			
6	972.3374	32.30	-0.33	31.97	47.00	-15.03	peak			

**Note:**      **Result=Reading+Factor**      **Over Limit=Result-Limit**

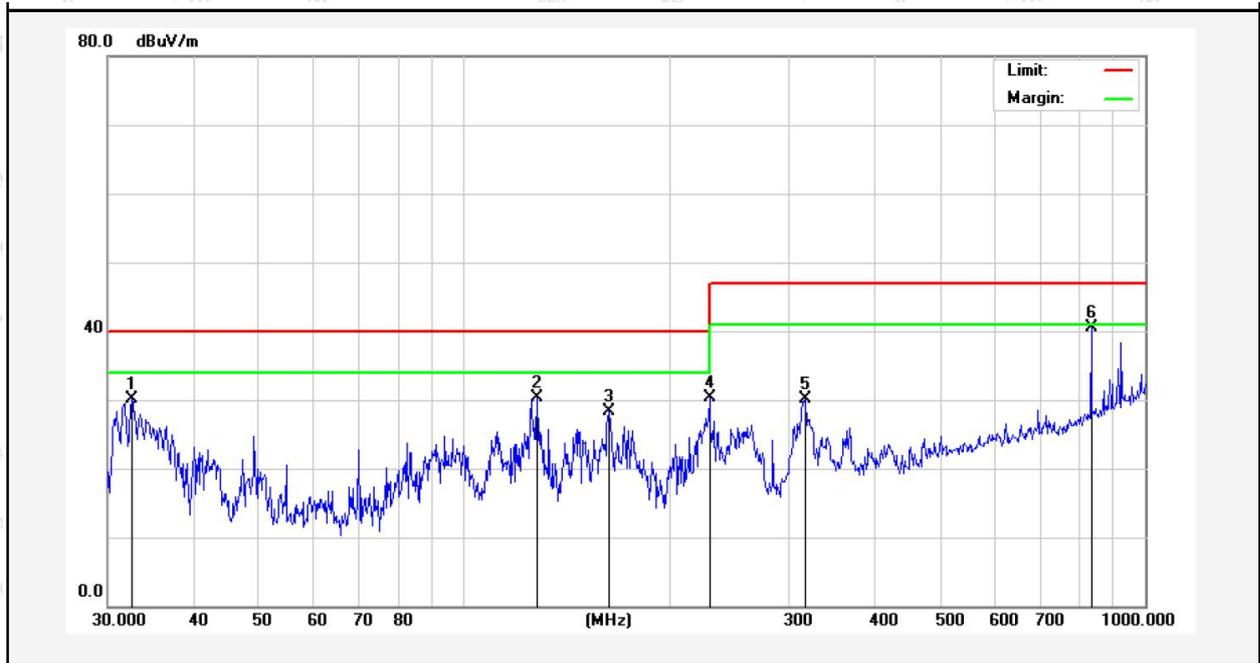
**Test item:** Radiation Test      **Polarization:** Horizontal  
**Standard:** (RE)EN 55014-1      **Power Source:** DC 5V via adapter  
**Distance:** 3m      **Temp.(°C)/Hum.(%RH):** 22.5(°C )/50%RH  
**Test Mode:** DC Mode



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	41.8596	27.84	-14.76	13.08	40.00	-26.92	peak			
2	130.3789	47.17	-20.44	26.73	40.00	-13.27	peak			
3	151.0666	53.03	-20.80	32.23	40.00	-7.77	peak			
4	282.9852	40.76	-15.85	24.91	47.00	-22.09	peak			
5	304.6099	54.22	-14.18	40.04	47.00	-6.96	peak			
6	876.1960	23.54	-2.41	21.13	47.00	-25.87	QP	100	360	

**Note:**      **Result=Reading+Factor**      **Over Limit=Result-Limit**

<b>Test item:</b>	<b>Radiation Test</b>	<b>Polarization:</b>	<b>Vertical</b>
<b>Standard:</b>	<b>(RE)EN 55014-1</b>	<b>Power Source:</b>	<b>DC 5V via adapter</b>
<b>Distance:</b>	<b>3m</b>	<b>Temp.(°C)/Hum.(%RH):</b>	<b>22.5(°C )/50%RH</b>
<b>Test Mode:</b>	<b>DC Mode</b>		



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	32.5198	46.93	-16.73	30.20	40.00	-9.80	peak			
2	128.1130	49.46	-19.12	30.34	40.00	-9.66	peak			
3	163.1818	47.55	-19.24	28.31	40.00	-11.69	peak			
4	229.2931	46.30	-16.08	30.22	40.00	-9.78	peak			
5	317.7011	42.96	-12.91	30.05	47.00	-16.95	peak			
6	833.3171	44.08	-3.50	40.58	47.00	-6.42	peak			

**Note:**      **Result=Reading+Factor**      **Over Limit=Result-Limit**

## 4. Electrostatic Discharge Immunity Test

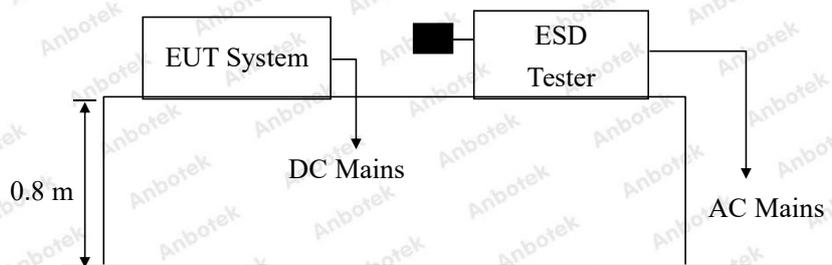
### 4.1. Test Standard and Level

Test Standard:	EN 55014-2 (IEC 61000-4-2)
Performance Criterion:	B
Severity Level: 3 / Air Discharge: $\pm 8$ kV, Level: 2 / Contact Discharge: $\pm 4$ kV	

Test Level

Level	Test Voltage Contact Discharge (kV)	Test Voltage Air Discharge (kV)
1.	$\pm 2$	$\pm 2$
2.	$\pm 4$	$\pm 4$
3.	$\pm 6$	$\pm 8$
4.	$\pm 8$	$\pm 15$
X	Special	Special

### 4.2. Test Setup



### 4.3. EUT Configuration on Measurement

The following equipments are installed on Electrostatic Discharge immunity Measurement to meet EN 55014-2 requirements and operating in a manner which tends to maximize its emission characteristics in a normal application.

### 4.4. Operating Condition of EUT

- 4.4.1. Setup the EUT as shown on Section 4.2.
- 4.4.2. Turn on the power of all equipments.
- 4.4.3. After that, let the EUT work in test mode measure it.

## 4.5. Test Procedure

### 4.5.1. Air Discharge:

This test is done on a non-conductive surface. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed

### 4.5.2. Contact Discharge:

All the procedure shall be same as Section 4.5.1. except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

### 4.5.3. Indirect discharge for horizontal coupling plane

At least 20 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT. The discharge electrode positions vertically at a distance of 0.1m from the EUT and with the discharge electrode touching the coupling plane.

### 4.5.4. Indirect discharge for vertical coupling plane

At least 20 single discharge shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m × 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

## 4.6. Test Results

**PASS**

Please refer to the following page.



## Electrostatic Discharge Test Results

Air discharge :	±8.0kV	Temperature :	23.7℃
Contact discharge :	±4.0kV	Humidity :	46%
Power Supply :	DC 6V/ DC 5V via adapter	Expert conclusion :	A
Number of discharge :	10	Test Result:	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Location		Kind A-Air Discharge C-Contact Discharge	Result
Slot	4 points	A	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
Type-C Port	2 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
Screen	4 points	A	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
Button	4 points	A	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
HCP	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
VCP of the front	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
VCP of the rear	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
VCP of the left	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
VCP of the right	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p><b>Remark:</b> Discharge should be considered on Contact and Air and Horizontal Coupling Plane (HCP) and Vertical Coupling Plane (VCP).</p>			

## 5. RF Field Strength Susceptibility Test

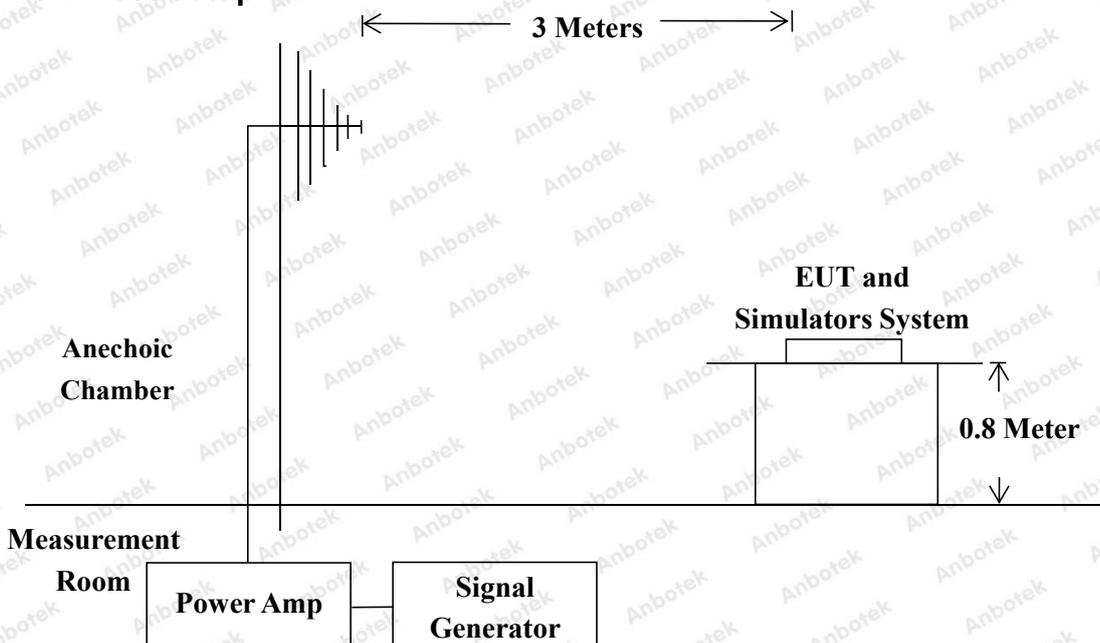
### 5.1. Test Standard and Level

Test Standard:	EN 55014-2 (IEC 61000-4-3)
Required Performance:	A
Frequency Range:	80MHz to 1000MHz
Field Strength:	3 V/m
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Frequency Step:	1 % of preceding frequency value
Polarity of Antenna:	Horizontal and Vertical
Test Distance:	3 m
Antenna Height:	1.5 m
Dwell Time:	at least 0.5s

Test Level

Level	Field Strength V/m
1.	1
2.	3
3.	10
X.	Special

### 5.2. Test Setup



### 5.3. EUT Configuration on Measurement

The following equipments are installed on RF Field Strength susceptibility Measurement to meet EN 55014-2 requirements and operating in a manner which tends to maximize its emission characteristics in a normal application.

### 5.4. Operating Condition of EUT

- 5.4.1. Setup the EUT as shown on Section 5.2.
- 5.4.2. Turn on the power of all equipments.
- 5.4.3. After that, let the EUT work in test mode measure it.

### 5.5. Test Procedure

The EUT and support equipment, which are placed on a table that is 0.8 meter above ground and the testing was performed in a fully-anechoic chamber. The testing distance from antenna to the EUT was 3 meters.

- 1) The field strength level was 3V/m.
- 2) The frequency range is swept from 80 MHz to 1000 MHz with the signal 80% amplitude modulated with a 1kHz sine wave.
- 3) The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond, but shall in no case be less than 0.5s.
- 4) The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.

### 5.6. Measuring Results

**PASS**

Please refer to the following page.



# RF Field Strength Susceptibility Test Results

Field Strength :	3V/m	Temperature :	23.9℃
Expert conclusion :	A	Humidity :	47%
Power Supply :	DC 6V	Test Result :	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Dwell Time:	1s		

Frequency Range (MHz)	Antenna Polarity	R.F. Field Strength	Azimuth	Result
80~1000	H / V	3 V/m (rms)	Front	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
			Rear	
			Left	
			Right	

## APPENDIX I -- TEST SETUP PHOTOGRAPH

Photo of Power Line Conducted Emission Test



Photo of Radiated Emission Test



Photo of Electrostatic Discharge Immunity Test

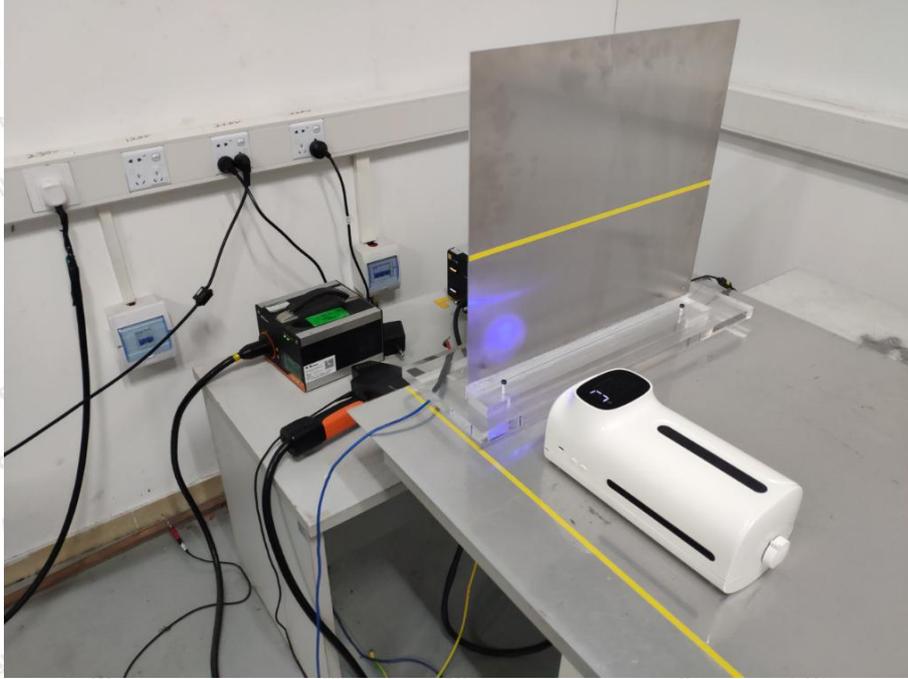


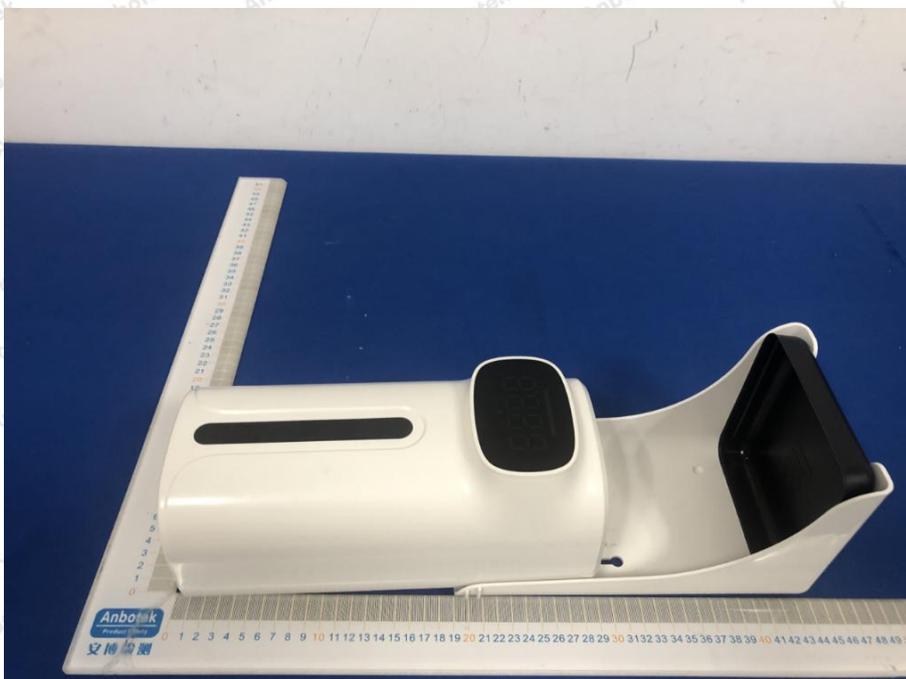
Photo of RF Field Strength susceptibility Test

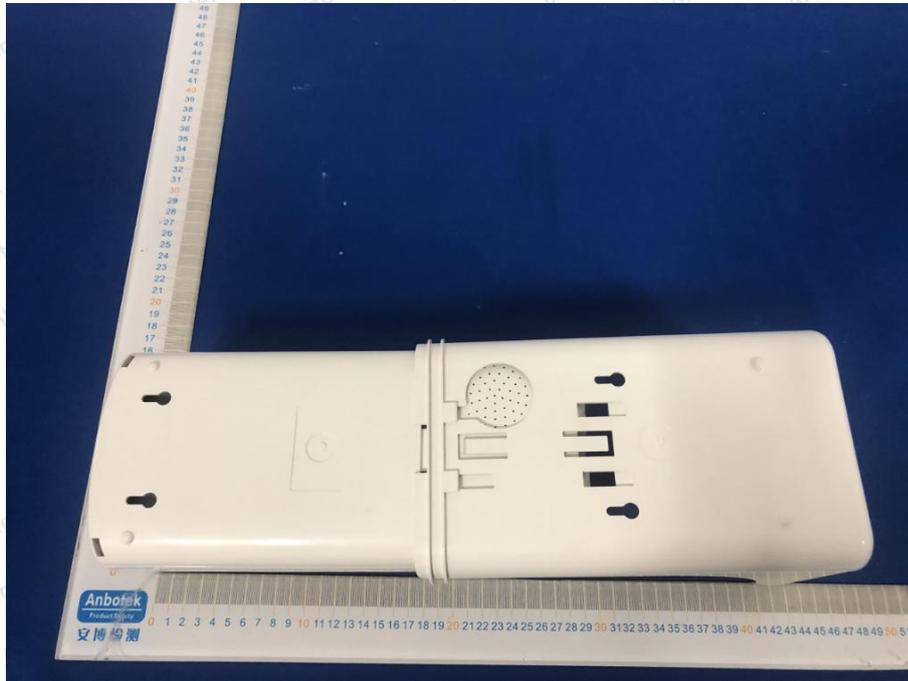


## APPENDIX II -- EXTERNAL PHOTOGRAPH

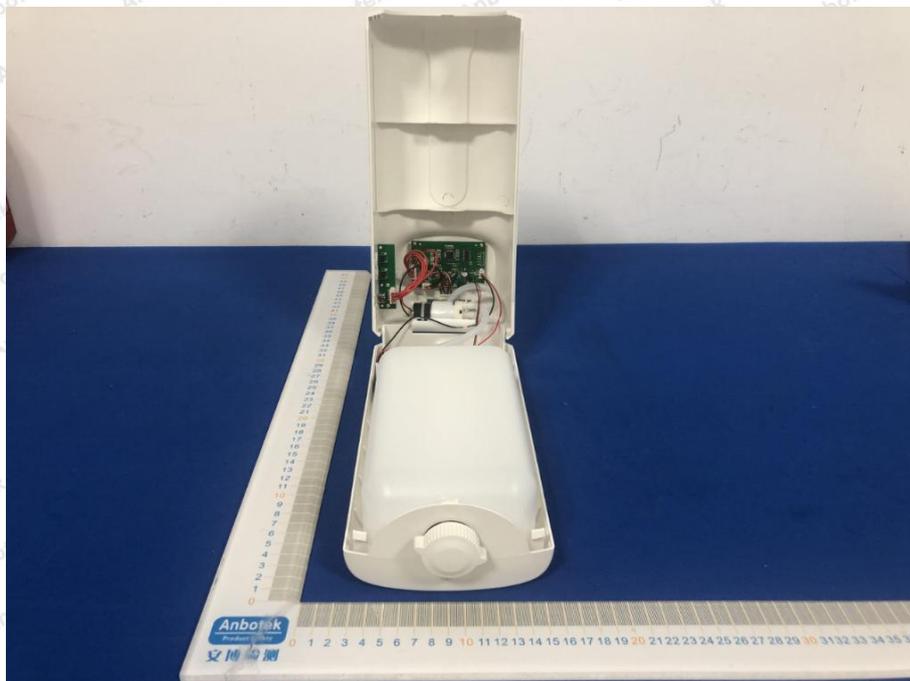


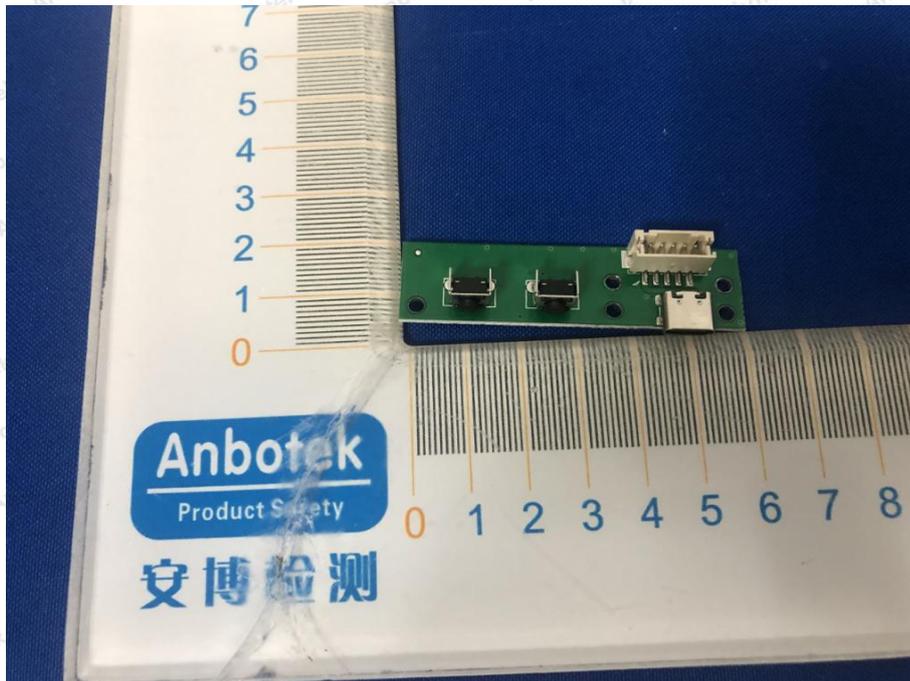
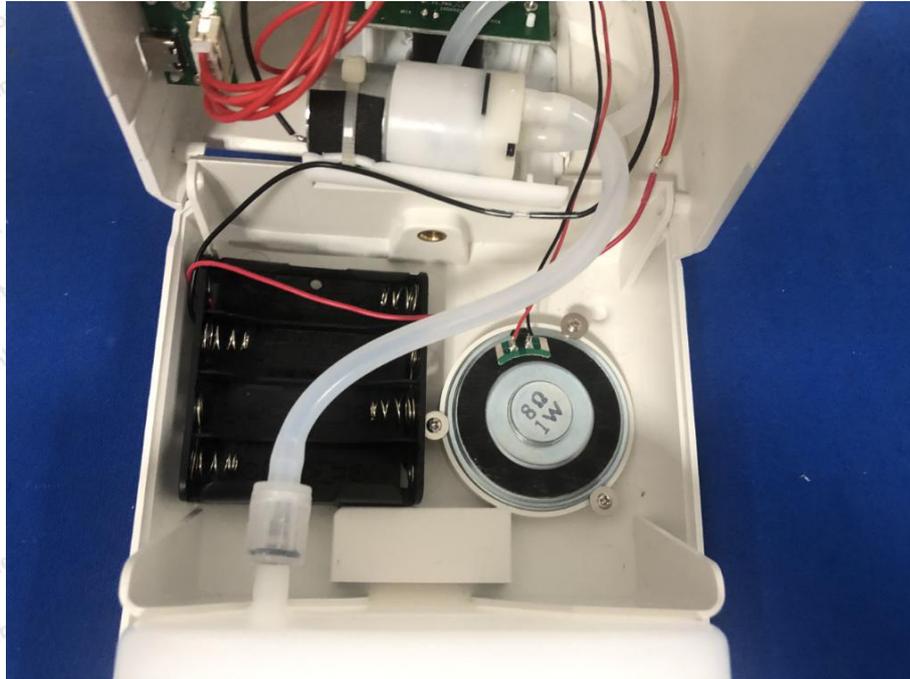


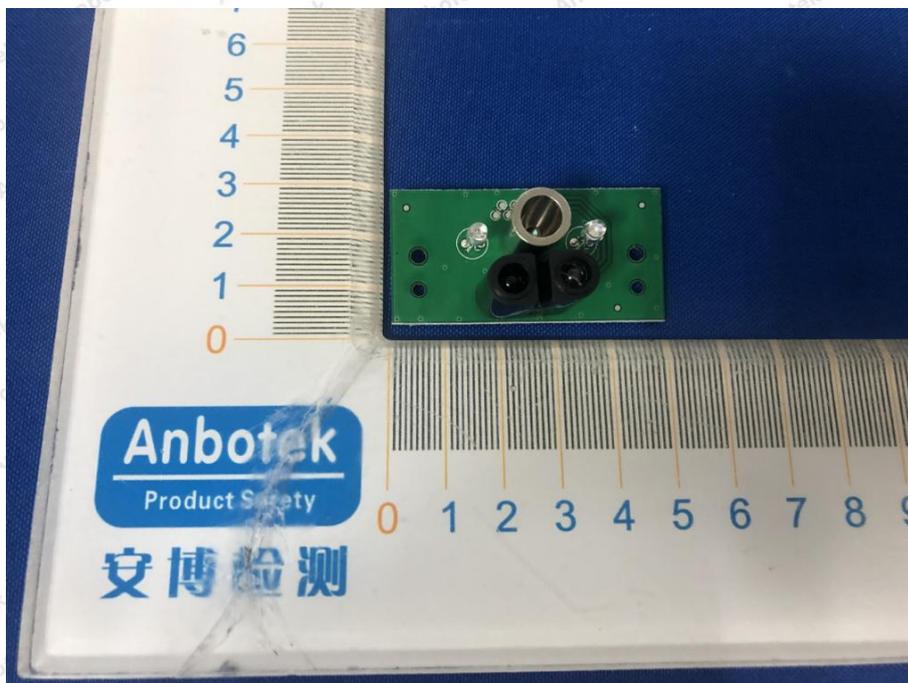
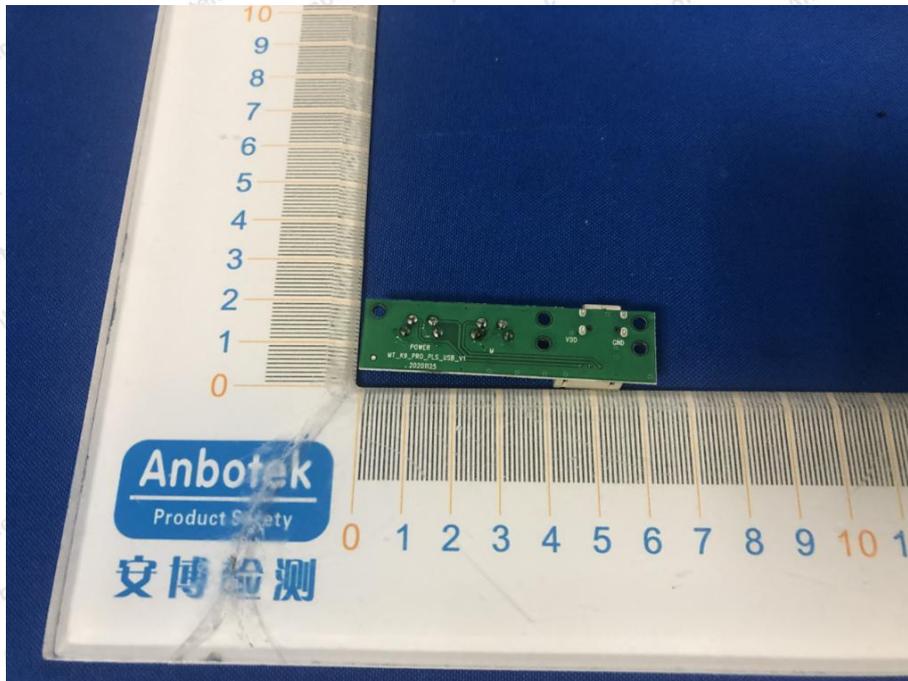


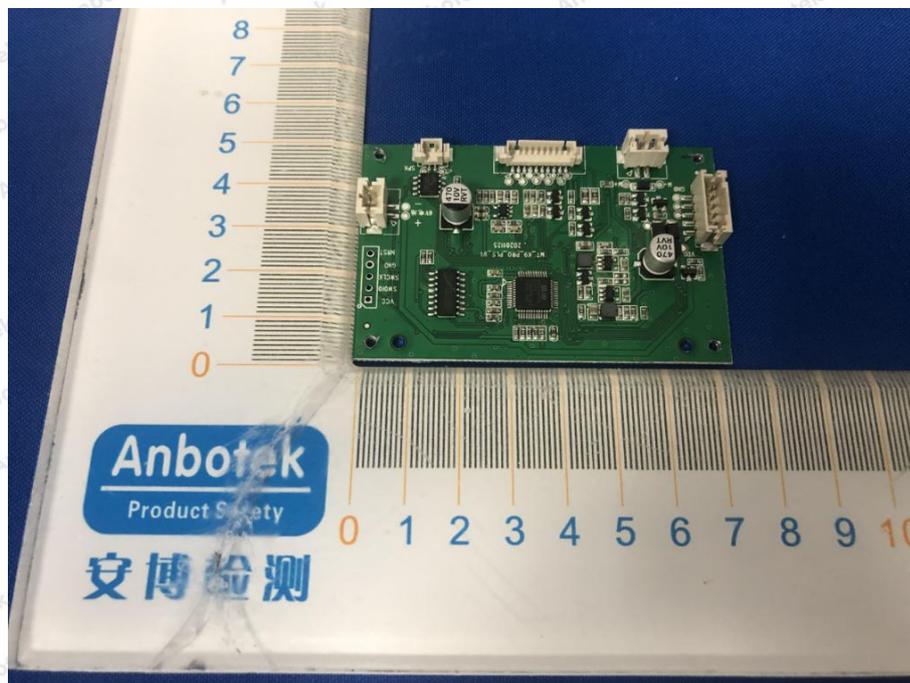


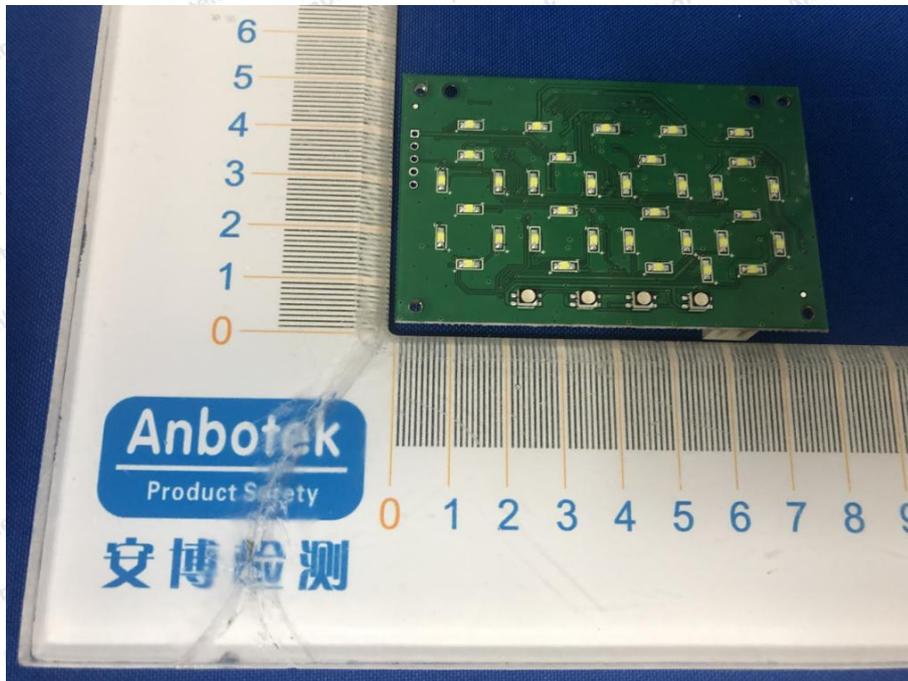
## APPENDIX III -- INTERNAL PHOTOGRAPH











## CE Label

1. The CE conformity marking must consist of the initials 'CE' taking the following form:

If the CE marking is reduced or enlarged, the proportions given in the above graduated drawing must be respected.

2. The CE marking must have a height of at least 5 mm except where this is not possible on account of the nature of the apparatus.

3. The CE marking must be affixed to the product or to its data plate. Additionally it must be affixed to the packaging, if any, and to the accompanying documents.

4. The CE marking must be affixed visibly, legibly and indelibly.

It must have the same height as the initials 'CE'.

----- End of Report -----

