FCC TEST REPORT
For

Dongguan Pinguan Sports Technology Co., LTD

Smart Li-Polymer Battery Pack

Test Model: PG-6000

Additional Model No.: PG-5000, PG-7000, PG-8000, PG-8500, PG-4000

Prepared for	:	Dongguan Pinguan Sports Technology Co., LTD
Address	:	Room 303, Building 3, No. 8, Shajingkeng Road, Liaobu Town, Dongguan City, Guangdong Province
Prepared by	:	Shenzhen AOCE Electronic Technology Service Co., Ltd.
Address	:	Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China
Tel	:	(+86)755-85277785
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Web	:	www.aoc-cert.com
Mail	:	postmaster@aoc-cert.com
Date of receipt of test sample	:	May 29, 2025
Number of tested samples	:	1
Serial number	:	Prototype
Date of Test	:	May 29, 2025 - June 5, 2025
Date of Report	:	June 5, 2025

FCC TEST REPORT
FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4 -2014

Report Reference No. .....:	**AOC250605102F**
Date Of Issue.....:	June 5, 2025
Testing Laboratory Name.....:	**Shenzhen AOCE Electronic Technology Service Co., Ltd.**
Address.....:	Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China
Testing Location/ Procedure.....:	Full application of Harmonised standards ■ Partial application of Harmonised standards □ Other standard testing method □
Applicant's Name..... :	Dongguan Pinguan Sports Technology Co., LTD
Address.....:	Room 303, Building 3, No. 8, Shajingkeng Road, Liaobu Town, Dongguan City, Guangdong Province
Test Specification:	
Standard.....:	FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4 -2014
Test Report Form No.....:	AOCEMC-1.0
TRF Originator.....:	Shenzhen AOCE Electronic Technology Service Co., Ltd.
Master TRF.....:	Dated 2011-03

Test Item Description..... :	Smart Li-Polymer Battery Pack
Trade Mark.....:	N/A
Model/ Type Reference.....:	PG-6000
Ratings.....:	5V, 2A, 10W
Result .....:	**Pass**

Compiled by:	**Supervised by:**	**Approved by:**
David Liu	Kevin Huang	Jackson
David Liu/ File administrators	Kevin Huang/ Technique principal	Jackson Fang/ Manager

FCC -- TEST REPORT

Test Report No. : AOC250605102F	June 5, 2025 Date of issue

Type / Model.....	:	PG-6000
EUT.....	:	Smart Li-Polymer Battery Pack
Applicant.....	**:**	**Dongguan Pinguan Sports Technology Co., LTD**
Address.....	:	Room 303, Building 3, No. 8, Shajingkeng Road, Liaobu Town, Dongguan City, Guangdong Province
Telephone.....	:	/
Fax.....	:	/
Manufacturer.....	**:**	**Dongguan Pinguan Sports Technology Co., LTD**
Address.....	:	Room 303, Building 3, No. 8, Shajingkeng Road, Liaobu Town, Dongguan City, Guangdong Province
Telephone.....	:	/
Fax.....	:	/
Factory.....	**:**	**Dongguan Pinguan Sports Technology Co., LTD**
Address.....	:	Room 303, Building 3, No. 8, Shajingkeng Road, Liaobu Town, Dongguan City, Guangdong Province
Telephone.....	:	/
Fax.....	:	/

Test Result according to the standards on page 5: **Pass**

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.

TABLE OF CONTENT

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			
Description of Test Item	**Standard**	**Limits**	**Results**
Conducted disturbance at mains terminals	FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4 -2014	Class B	PASS
Radiated disturbance	FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4 -2014	Class B	PASS
N/A is an abbreviation for Not Applicable.			

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

EUT : Smart Li-Polymer Battery Pack

Model Number : PG-6000

Power Supply : 5V, 2A, 10W

2.2.Description of Support Device

Name	Manufacturers	M/N	S/N
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2.3.Description of Test Facility

Site Description
EMC Lab. : ---

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 AOC 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 Item		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
Radiated Emission	:	Level accuracy (9kHz to 200MHz)	±3.68 dB	N/A
Radiated Emission		Level accuracy (200Hz to 1000MHz)	±3.48 dB	±5.3 dB
Radiated Emission		Level accuracy (above 1000MHz)	±3.90 dB	±5.2 dB

（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.TEST RESULTS

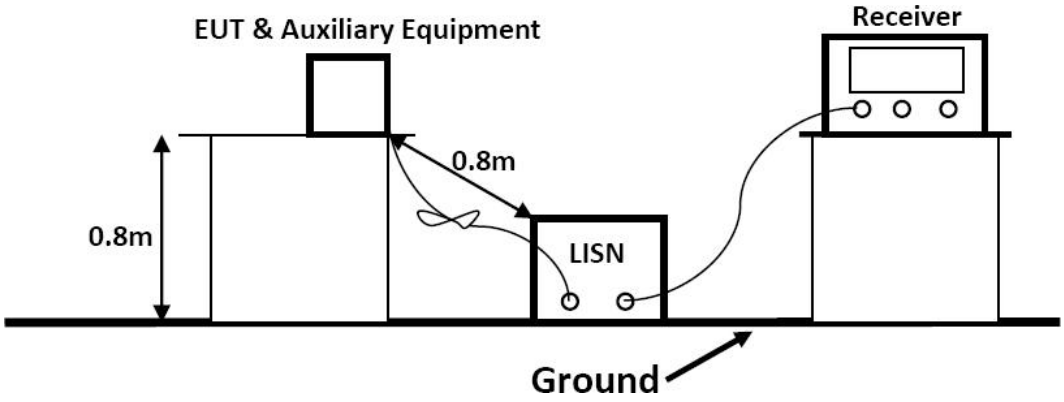
3.1. POWER LINE CONDUCTED EMISSION MEASUREMENT

3.1.1. Test Equipment

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

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Software	EZ	EZ-EMC	/	N/A	N/A
2	EMI Test Receiver	R&S	ESPI	101840	2023/04/24	2024/04/23
3	Artificial Mains	R&S	ENV216	101288	2023/04/24	2024/04/23
4	10dB Attenuator	SCHWARZBECK	MTS-IMP-136	261115-001-0032	2023/04/24	2024/04/23
5	Impedance Stabilization Network	TESEQ	ISN T800	45130	2023/04/24	2024/04/23

3.1.2. Block Diagram of Test Setup



3.1.3. Test Standard

Power Line Conducted Emission Limits (Class B)

Frequency (MHz)			Limit (dB V)	
			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.				

3.1.4. EUT Configuration on Test

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

3.1.5. Operating Condition of EUT

3.1.5.1. Setup the EUT as shown on Section

3.1.5.2.Turn on the power of all equipments.

3.1.5.3.Let the EUT work in measuring Working and measure it.

3.1.6. 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 FCC/ANSI C63.4-2014 on Conducted Emission Measurement.

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

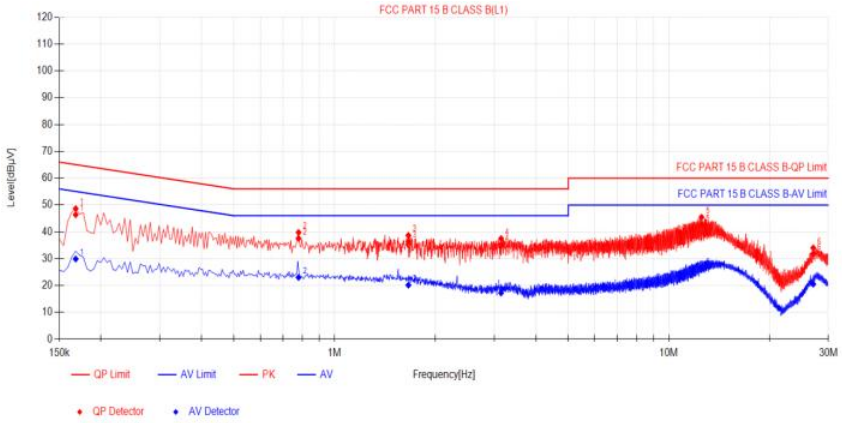
The frequency range from 150kHz to 30MHz is investigated

3.1.7.Test Results

PASS.

The test result please refer to the next page.

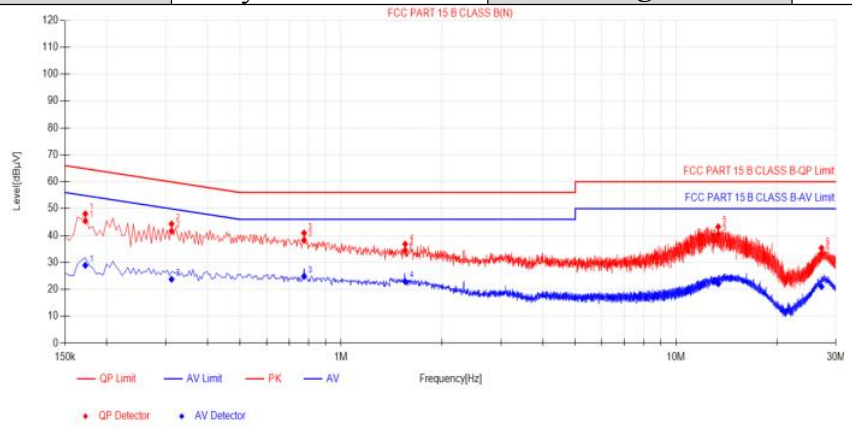
Model No.	PG-6000	**Test Date**	June 5, 2025
Environmental Conditions	24℃/ 56% RH	**Test Mode**	Working
Pol	Line	**Detector Function**	Quasi-peak
Test Engineer	Andy	**Test Voltage**	AC 125V



Suspected List

NO.	Freq. [MHz]	Reading [dBµV]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Detector	Type	Verdict
1	0.168	38.69	48.64	9.95	65.08	16.44	PK	L1	PASS
2	0.78	29.83	39.79	9.96	56.00	16.21	PK	L1	PASS
3	1.662	28.74	38.65	9.91	56.00	17.35	PK	L1	PASS
4	3.147	27.48	37.48	10.00	56.00	18.52	PK	L1	PASS
5	12.5205	35.19	45.47	10.28	60.00	14.53	PK	L1	PASS
6	27.033	23.46	34.01	10.55	60.00	25.99	PK	L1	PASS

Model No.	PG-6000	**Test Date**	June 5, 2025
Environmental Conditions	24℃/ 56% RH	**Test Mode**	Working
Pol	Line	**Detector Function**	Quasi-peak
Test Engineer	Andy	**Test Voltage**	AC 125V



Suspected List

NO.	Freq. [MHz]	Reading [dBµV]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Detector	Type	Verdict
1	0.1725	38.02	48.09	10.07	64.91	16.82	PK	N	PASS
2	0.312	34.45	44.31	9.86	59.94	15.63	PK	N	PASS
3	0.7755	30.80	40.92	10.12	56.00	15.08	PK	N	PASS
4	1.554	26.69	36.83	10.14	56.00	19.17	PK	N	PASS
5	13.3575	32.85	43.26	10.41	60.00	16.74	PK	N	PASS
6	27.1635	24.61	35.37	10.76	60.00	24.63	PK	N	PASS

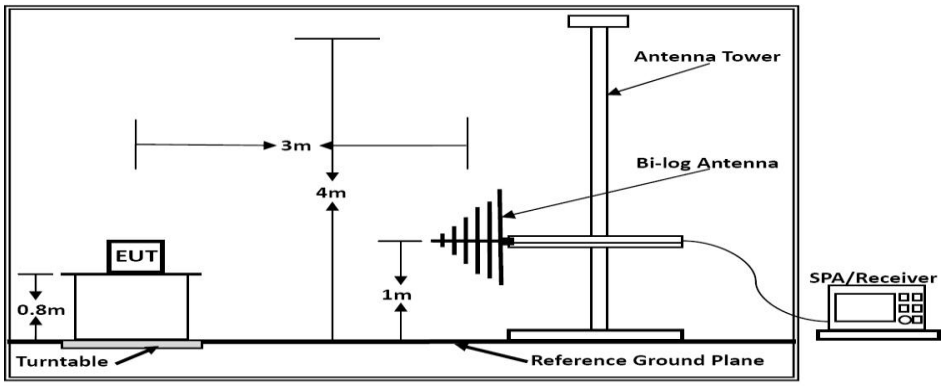
3.2. Radiated emission Measurement

3.2.1Test Equipment

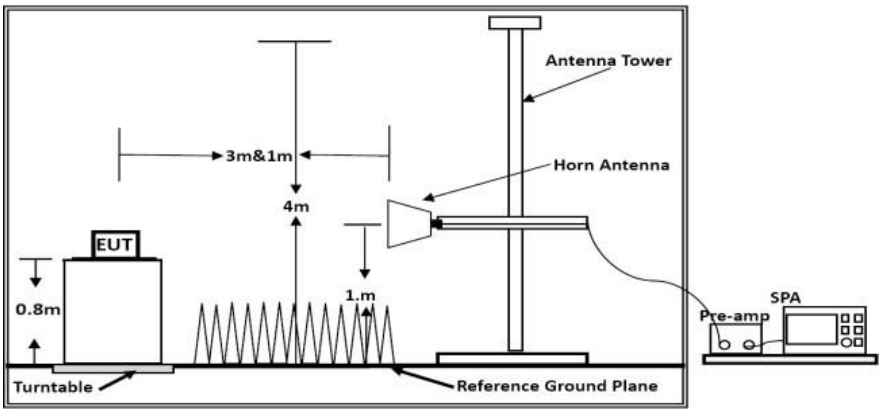
The following test equipments are used during the radiated emission measurement:

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Software	EZ	EZ-EMC	/	N/A	N/A
2	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	2023/04/24	2024/04/23
3	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2023/04/24	2024/04/23
4	EMI Test Receiver	R&S	ESR 7	101181	2023/04/24	2024/04/23
5	Broadband Preamplifier	/	BP-01M18G	P190501	2023/04/24	2024/04/23

3.2.2.Block Diagram of Test Setup



Below 1GHz



Above 1GHz

3.2.3. Radiated Emission Limit (Class B)

Limits for Radiated Disturbance Below 1GHz

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		V/ m	dB(V)/ m
30 ~ 88	3	100	40
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46
960 ~ 1000	3	500	54
Remark：(1) Emission level (dB) V = 20 log Emission level V/m (2) The smaller limit shall apply at the cross point between two frequency bands. (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.			
Limits for Radiated Emission Above 1GHz			
Frequency (MHz)	Distance (Meters)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)
Above 1000	3	74	54
***Note: The lower limit applies at the transition frequency.			

3.2.4. EUT Configuration on Measurement

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

3.2.5. Operating Condition of EUT

1.1.1.1. Setup the EUT as shown in Section 3.2.2.

3.2.5.2.Let the EUT work in test Mode 1 and measure it.

3.2.6. Test Procedure

EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated by-log antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2014 on radiated emission measurement.

The bandwidth of the EMI test receiver is set at 120kHz, 300kHz.

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

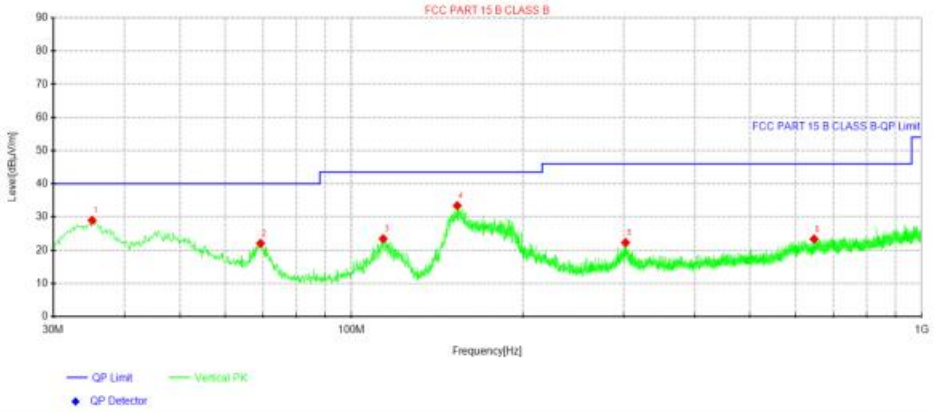
3.2.7. Radiated Emission Noise Measurement Result

PASS.

The scanning waveforms please refer to the next page.

Model No.	PG-6000	**Test Date**	June 5, 2025
Environmental Conditions	24℃/ 56% RH	**Test Mode**	ON
Pol	Vertical	**Detector Function**	Quasi-peak
Test Engineer	Andy	**Distance**	3m

Test Graph

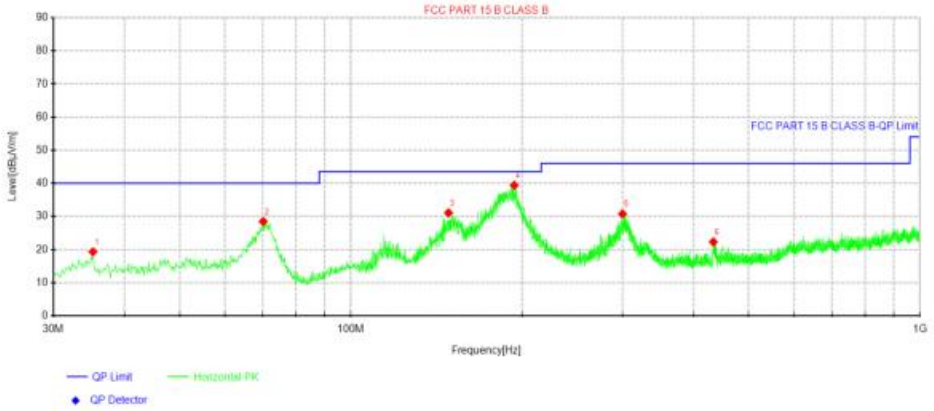


Suspected Data List

NO.	Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	35.0925	42.67	28.99	-13.68	40.00	11.01	100	298	Vertical
2	69.285	36.60	22.02	-14.58	40.00	17.98	100	275	Vertical
3	113.662	36.99	23.43	-13.56	43.50	20.07	100	230	Vertical
4	153.311	49.02	33.41	-15.61	43.50	10.09	100	11	Vertical
5	302.448	33.19	22.31	-10.88	46.00	23.69	100	264	Vertical
6	647.526	28.79	23.35	-5.44	46.00	22.65	100	91	Vertical

Model No.	PG-6000	**Test Date**	June 5, 2025
Environmental Conditions	24℃/ 56% RH	**Test Mode**	ON
Pol	Horizontal	**Detector Function**	Quasi-peak
Test Engineer	Andy	**Distance**	3m

Test Graph



Suspected Data List

NO.	Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	35.2138	32.97	19.33	-13.64	40.00	20.67	100	314	Horizontal
2	70.1338	43.20	28.48	-14.72	40.00	11.52	100	187	Horizontal
3	148.461	46.53	31.09	-15.44	43.50	12.41	100	233	Horizontal
4	193.687	52.71	39.41	-13.30	43.50	4.09	100	0	Horizontal
5	300.145	41.66	30.78	-10.88	46.00	15.22	100	221	Horizontal
6	433.398	32.15	22.32	-9.83	46.00	23.68	100	0	Horizontal

4. PHOTOGRAPH

Fig.1

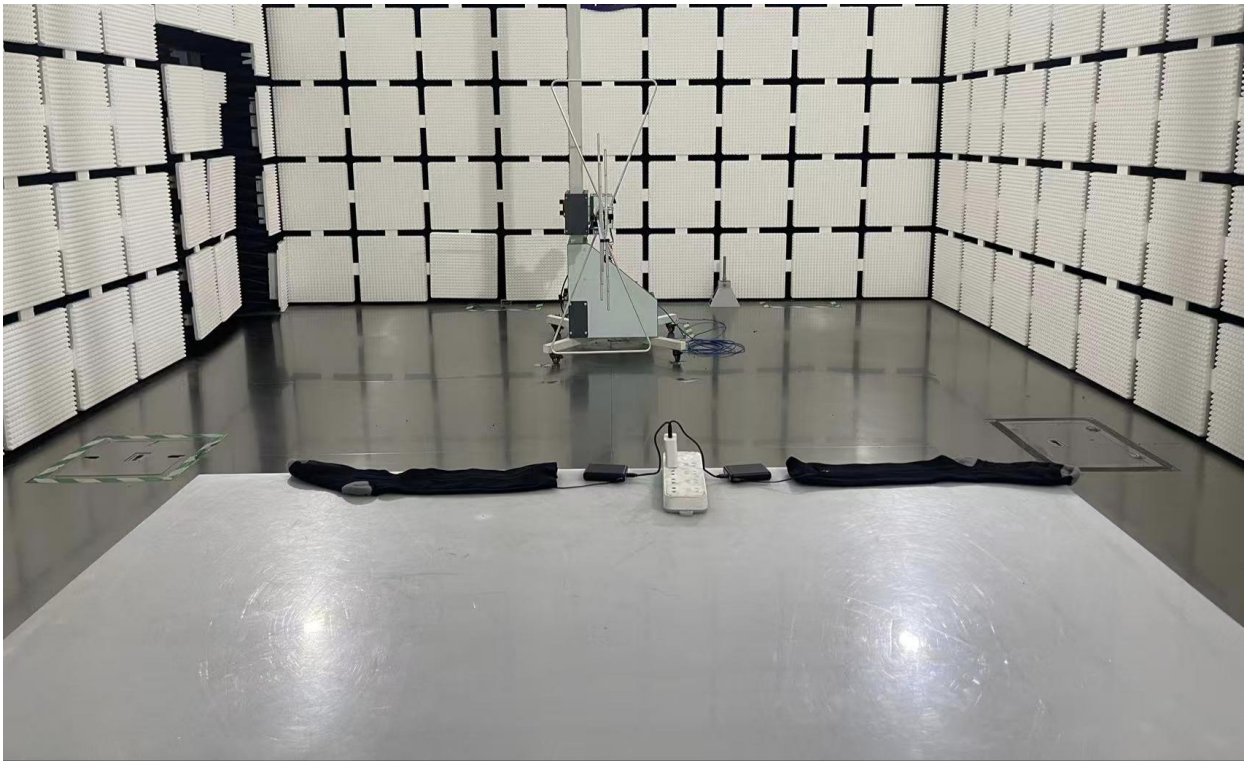


Fig.2

5. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Fig.1

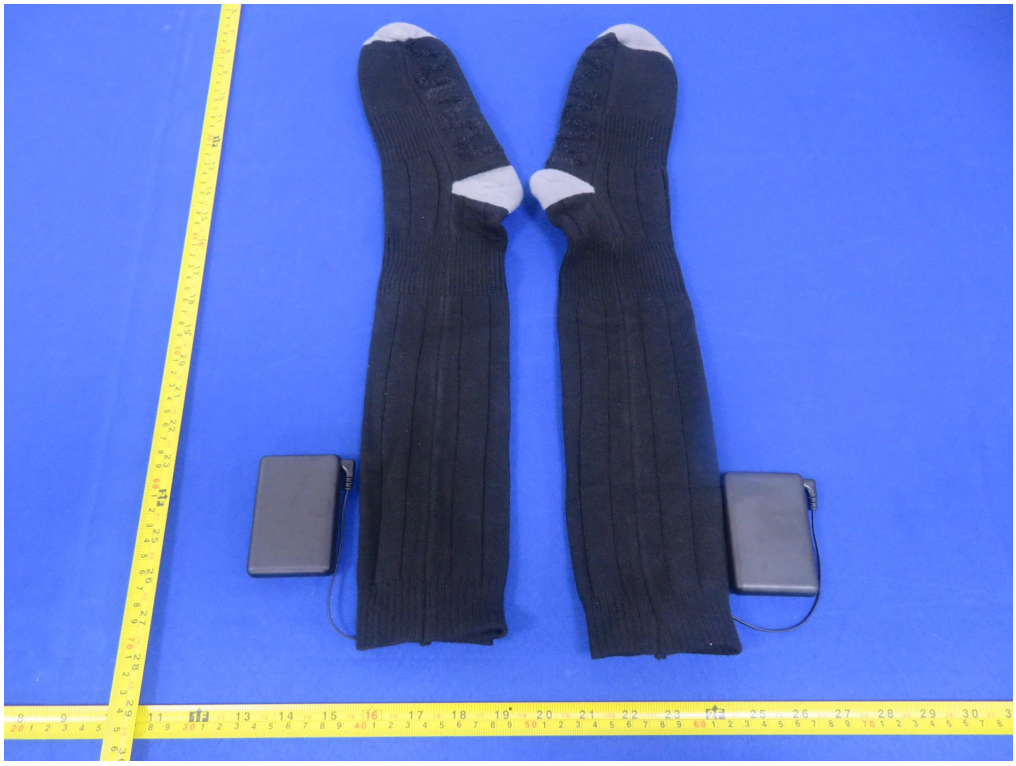


Fig.2

Fig.3

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