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CNAS L15105

Report No.： CJ2509150R01E

TEST REPORT

Sample Name ： Battery protection module

Sample Model ： FB-L-5.12-EU

Applicant Name ： Pylon Technologies Co., Ltd.

Test Type ： Entrust test

Jiangsu Jiashide Testing Services Technology Co., Ltd.

TEST REPORT

Applicant Name ： Pylon Technologies Co., Ltd.

Applicant Address ： No. 300, Miaoqiao Road, Kangqiao Town, Pudong New Area, Shanghai, China

The following samples are submitted and identified on behalf of the applicant as:

Sample Description：

Sample Name ： Battery protection module

Sample Model ： FB-L-5.12-EU

Sample Quantity ： 2 pcs

Sample No. ： CJ2509150-A-1, CJ2509150-B-1

Applicant No. ： /

Manufacturer ： Pylon Technologies Co., Ltd.

Receiving Date ： 2025/09/10

Test Period ： 2025/09/16~2025/09/19

Test Conducted：

As requested by the applicant, for details refer to attached page(s).

Approved by Sheikh. Zhang Reviewed by Mark. Feng Tested by Andy. Tang

Sheikh Zhang, Technology Director

Conclusion：

Section No.	Test Name	Evaluation*
R01	IP6X	Conforming
R02	IPX5	Conforming
R03	Vibration	Conforming

*Note: 1. The acceptance criteria and functional inspection methods are provided by the customer and are not within the scope of laboratory accreditation.

2. The withstand voltage test, is not within the scope of accreditation of the laboratory.

Lab Environmental Condition:

Ambient Temperature	21.3 ℃~27.8 ℃	Relative Humidity	51% RH~70% RH	Air pressure	101.9 kPa

Sample Detail Information：

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Test Items, Method and Results：

R01. IP6X

Sample No.	CJ2509150-A-1
Refer Specs	IEC 60529(Edition 2.2):2013 Degrees of protection provided by enclosure (IP code)
Test Method	Simulated dust: Talcum powder; Dust usage: 2 kg/m³; Whether to pump air: Yes; Test time: 8 h. After the test, inspect the appearance, and open the sample to check if there is any dust inside, then power on the sample and check if it can start up normally.
Acceptance Criteria	No dust inside the sample. The sample can start up normally.

Deviation	/				
Test Results	After the test, visual inspection on the sample, no abnormalities on appearance, and open the sample to check, there is no dust inside. Then power on the sample to check that it can start up normally.				
Evaluation	Conforming				
Test Instruments	No.	Equipment Name	Equipment Number	Calibration Due Date	Equipment Ownership
	1	Dustproof Test Chamber	IP-HK00-15	2024/10/21~2025/10/20	Lab
Remarks	/				

Sample and Test Pictures

Fig.R01.1 Before the test

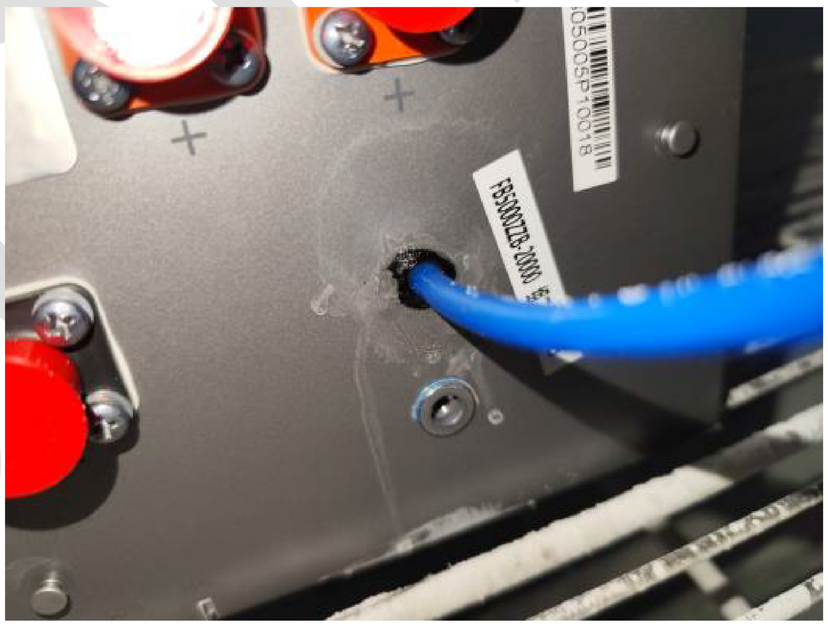

Fig.R01.2 Pumping position

Fig.R01.3 During the test before falling dust

Fig.R01.4 During the test after falling dust

Fig.R01.5 After the test

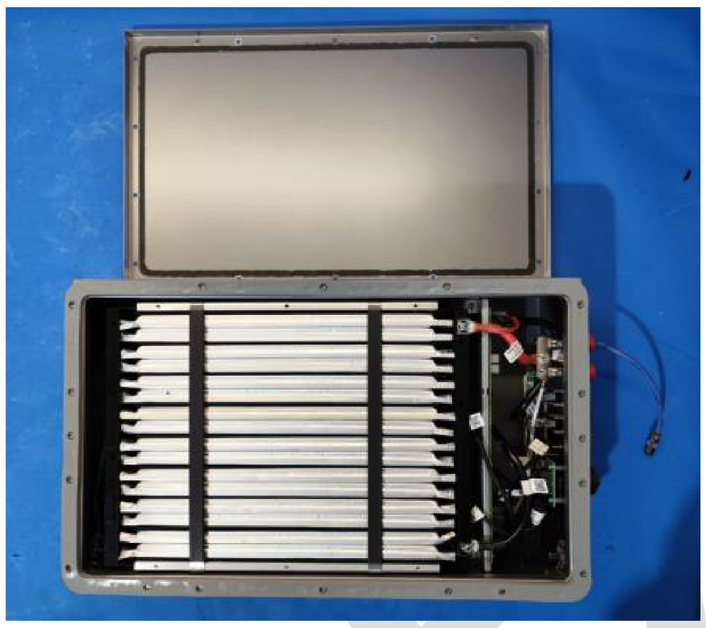

Fig.R01.6 After the test no dust inside

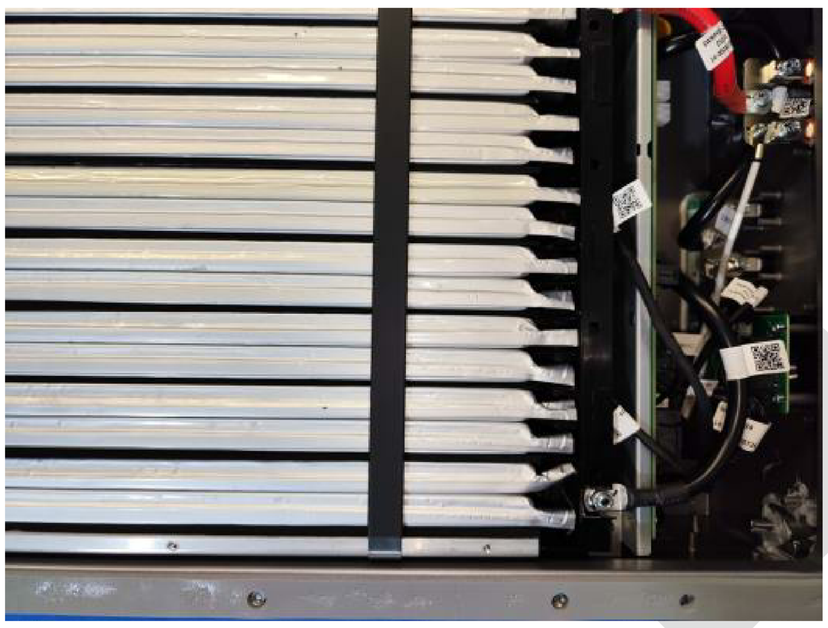

Fig.R01.7 After the test no dust inside

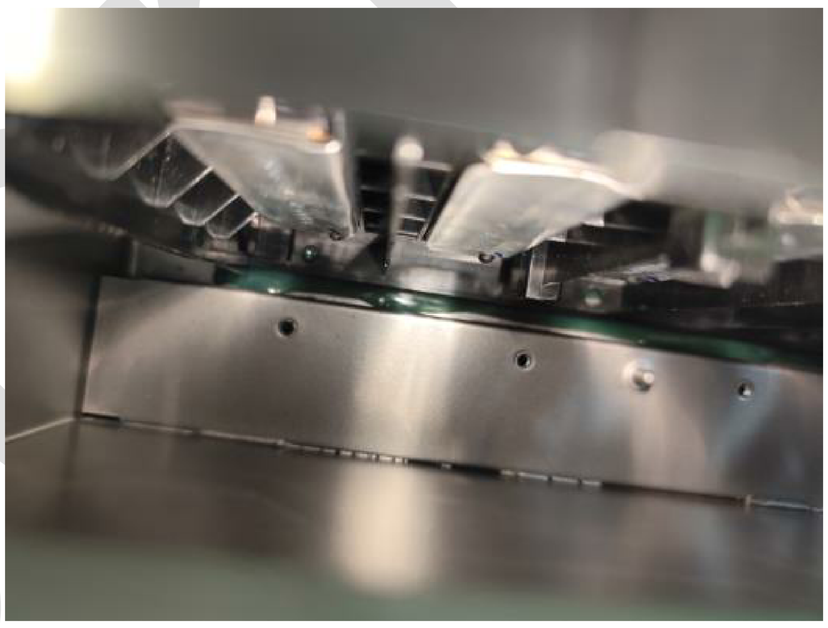

Fig.R01.8 After the test no dust inside

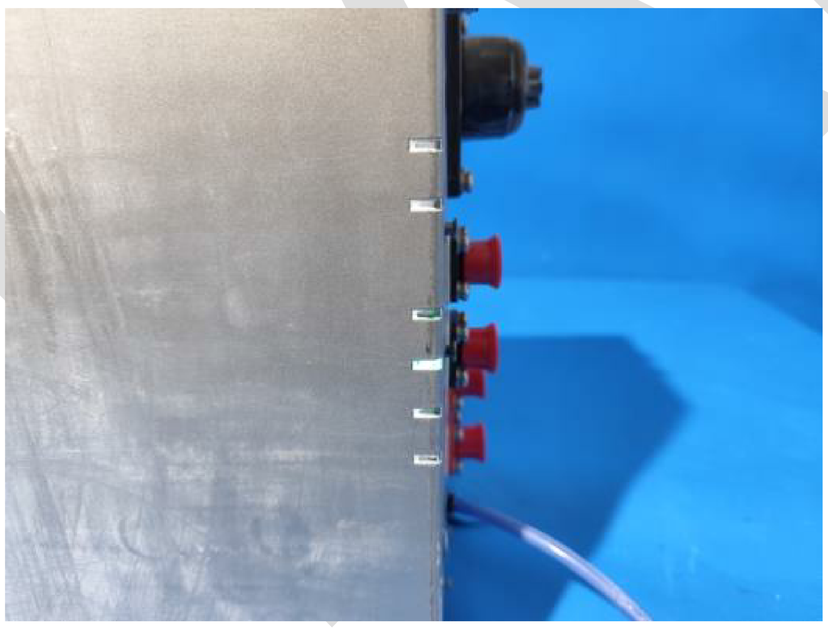

Fig.R01.9 After the test

The sample can start up normally.

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R02. IPX5

Sample No.	CJ2509150-A-1
Refer Specs	IEC 60529(Edition 2.2):2013 Degrees of protection provided by enclosure (IP code)
Test Method	Distance from sample to water nozzle: (2.5~3) m; Nozzle diameter: 6.3 mm; Water flow: 12.5（1±5%）L/min; Test time: 1 min per square meter calculated according to the surface of the sample shell. Test for at least 3 min. After the test, inspect the appearance, and open the sample to check if there is any water inside, then power on the sample and check if it can start up normally. Finally, the withstand voltage test is conducted. The method for the withstand voltage test is as follows: Apply 500 VDC between any negative terminal of the sample and the ground terminal for a duration of 1 minute, and measure the leakage current of the sample.
Acceptance Criteria	No water inside the sample. The sample can start up normally. Leakage current is less than or equal to 1 mA.
Deviation	/
Test Results	After the test, visual inspection on the sample, no abnormalities on appearance, and open the sample to check, there is no water inside. Then power on the sample to check that it can start up normally. No breakdown or flashover occurs during the withstand voltage test. Leakage current is 6 μA, meet the requirements.
Evaluation	Conforming

Test Instruments

No.	Equipment Name	Equipment Number	Calibration Due Date	Equipment Ownership
1	Waterproof Test Machine	IP-XK00-03	2024/11/18~2025/11/17	Lab
2	Steel Tape	JSDYQ-197	2024/10/21~2026/10/20	Lab
3	Thermometer	JSDYQ-108	2024/06/11~2026/06/10	Lab
4	Withstand Voltage Tester	EL-JS00-27	2025/05/09~2026/05/08	Lab

Remarks	/

Sample and Test Pictures

Fig.R02.1 During the test setup

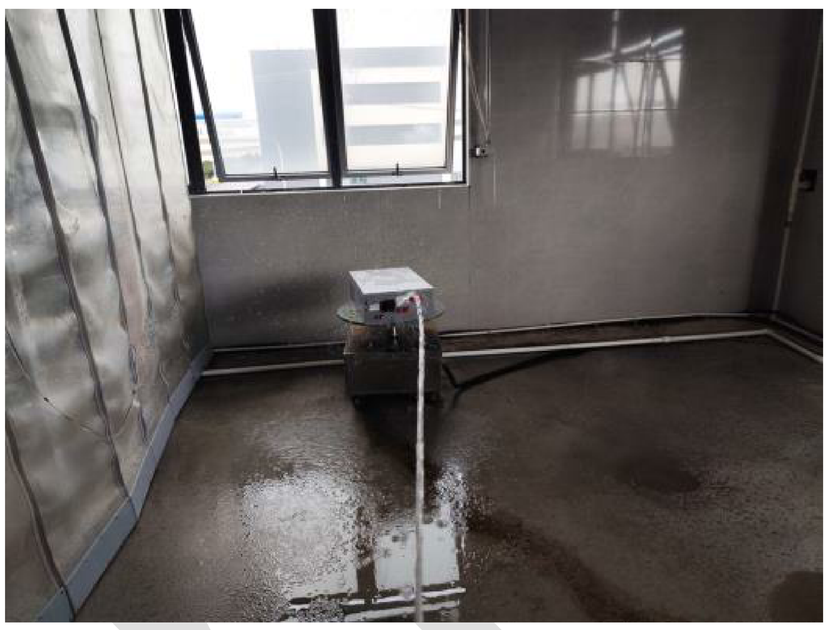

Fig.R02.2 During the test

Fig.R02.3 After the test

Fig.R02.4 After the test no water inside

Fig.R02.5 After the test no water inside

Fig.R02.6 After the test no water inside

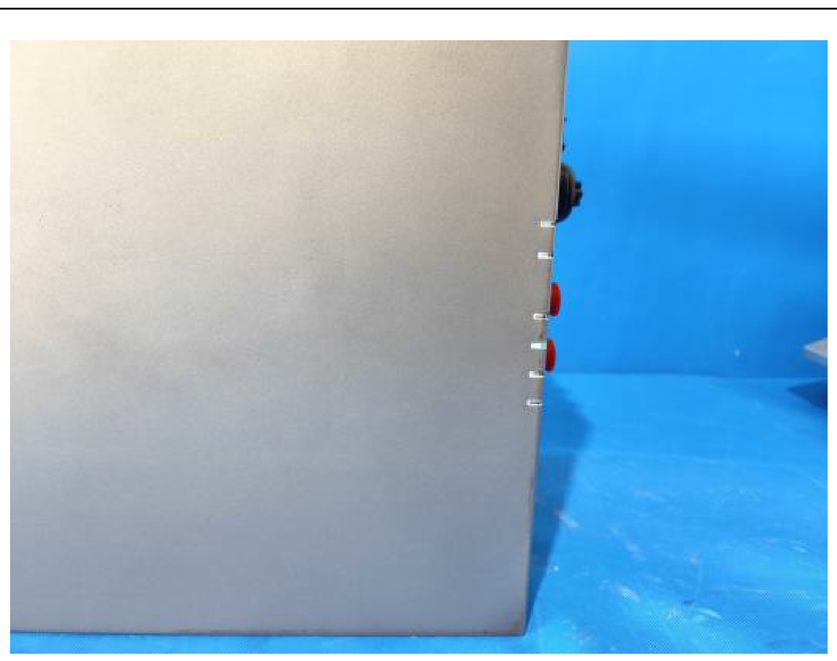	
Fig.R02.7 After the test The sample can start up normally.	Fig.R02.8 After the test Leakage current is 6 μA.

R03. Vibration

Sample No.	CJ2509150-B-1
Refer Specs	IEC 60068-2-6:2007 Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)
Test Method	Frequency range: (10~150) Hz; Half-amplitude and acceleration are as follows: Sweep frequency rate: 1 oct/min; Number of test cycles: 10 cycles/axis; Test axes: X axis, Y axis, Z axis. After the test, check the appearance, and then the withstand voltage test is conducted. The method for the withstand voltage test is as follows: Apply 500 VDC between any negative terminal of the sample and the ground terminal for a duration of 1 minute, and measure the leakage current of the sample.
Acceptance Criteria	Leakage current is less than or equal to 1 mA.
Deviation	/
Test Results	Before the test, visual inspection on the sample, no abnormalities on appearance. After the test, visual inspection on the sample, no abnormalities on appearance. No breakdown or flashover occurs during the withstand voltage test. Leakage current is 6 μA, meet the requirements.
Evaluation	Conforming

Frequency（Hz）	Half-amplitude（mm）	Acceleration（m/s^2）
10~58	0.075	/
58~150	/	10

Test Instruments

No.	Equipment Name	Equipment Number	Calibration Due Date	Equipment Ownership
1	High Frequency Vibration Test Machine	VB-DL00-31	2025/03/05~2026/03/04	Lab
		VB-SS00-25	2025/02/14~2026/02/13	Lab
2	Withstand Voltage Tester	EL-JS00-27	2025/05/09~2026/05/08	Lab

Remarks	The fixed method is specified by the customer.

Sample and Test Pictures

Fig.R03.1 Before the test

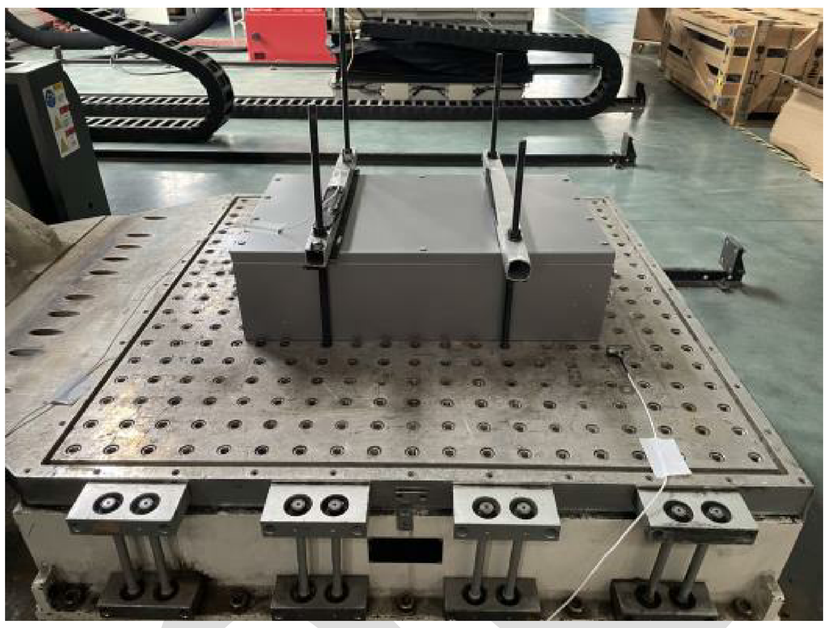

Fig.R03.2 X axis

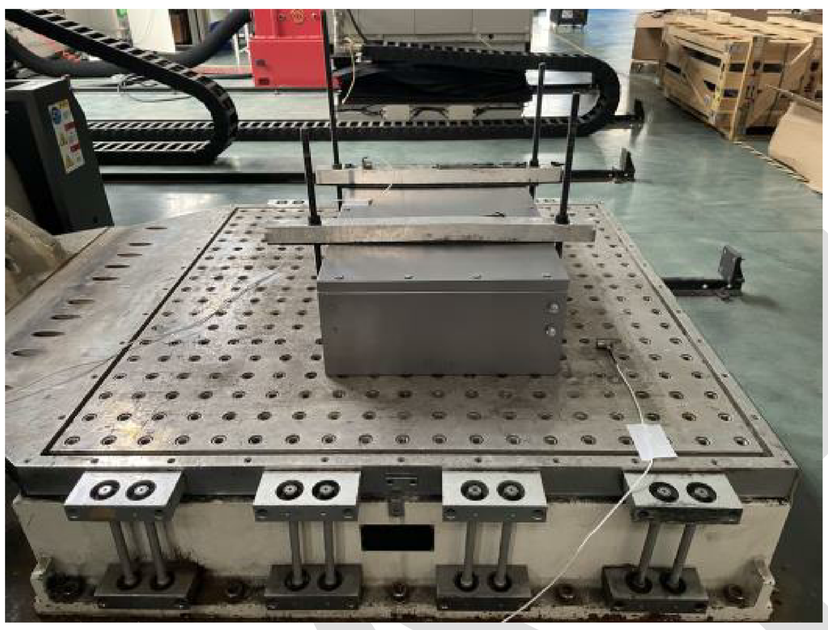

Fig.R03.3 Y axis

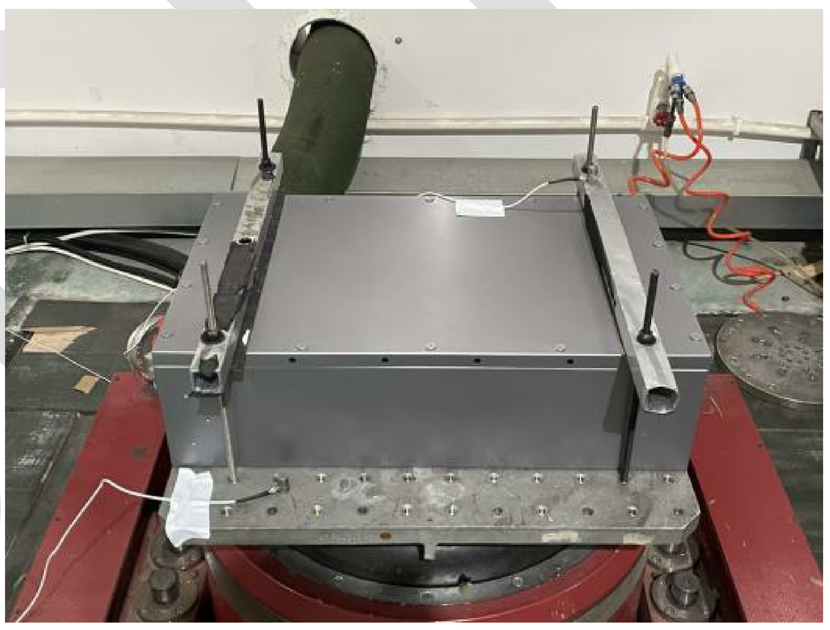

Fig.R03.4 Z axis

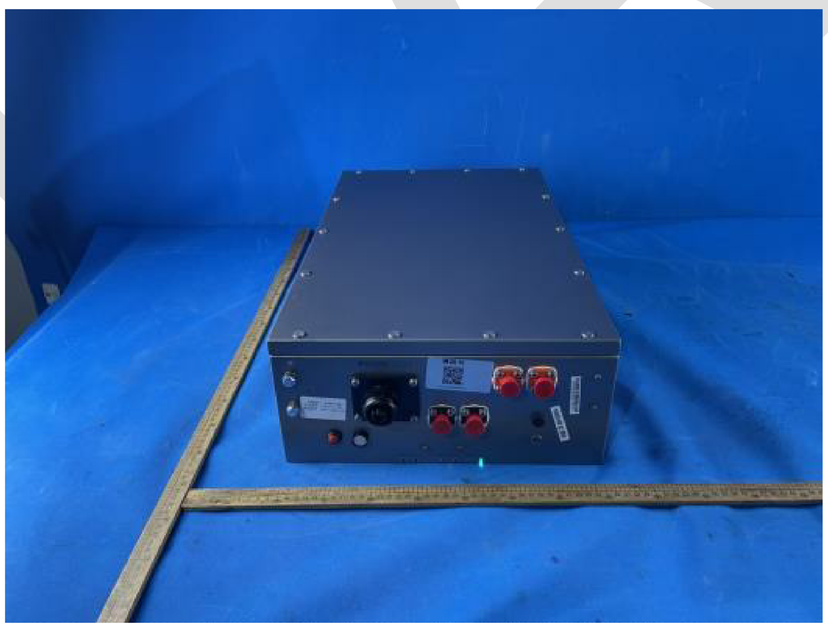

Fig.R03.5 After the test

Fig.R03.6 After the test

Leakage current is 6 μA.

Test Curves

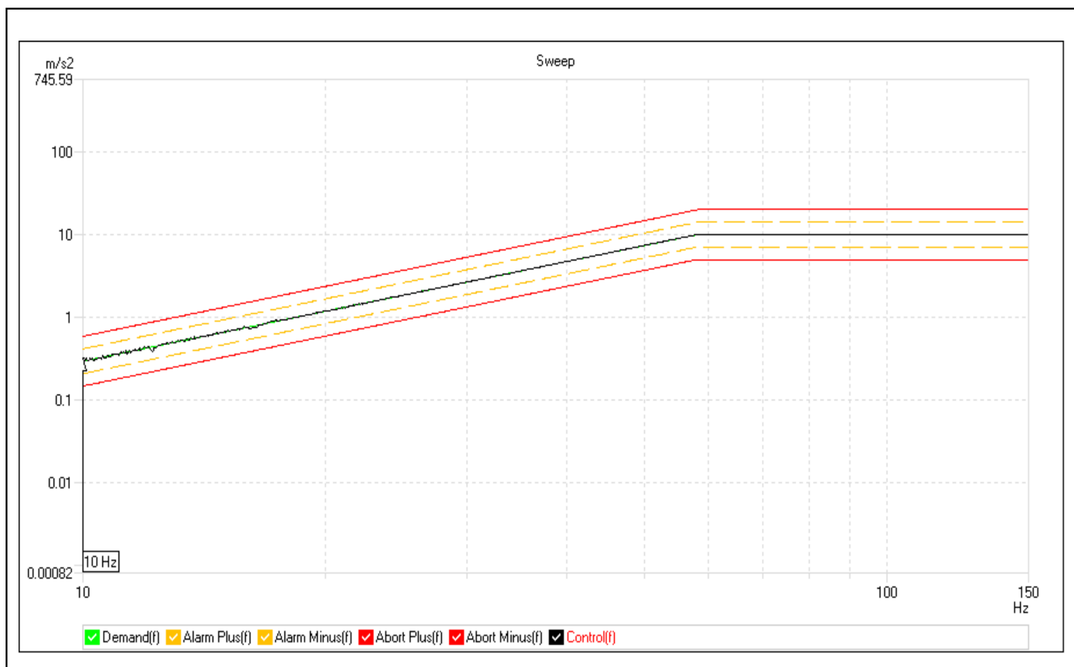

Fig.R03.7 Curve of vibration X axis

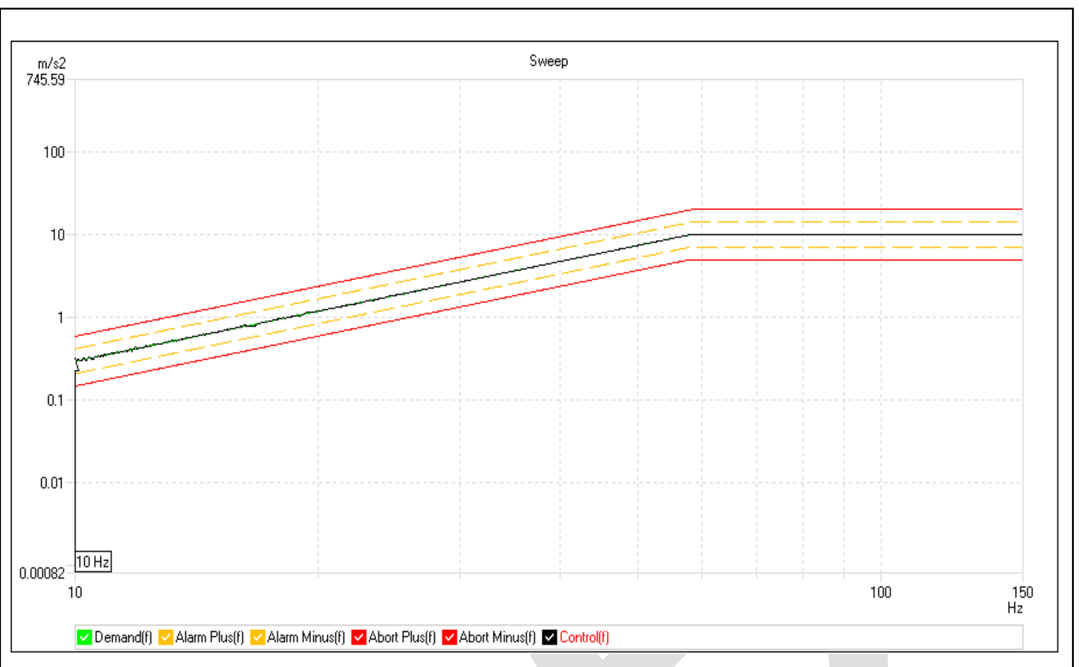

Fig.R03.8 Curve of vibration Y axis

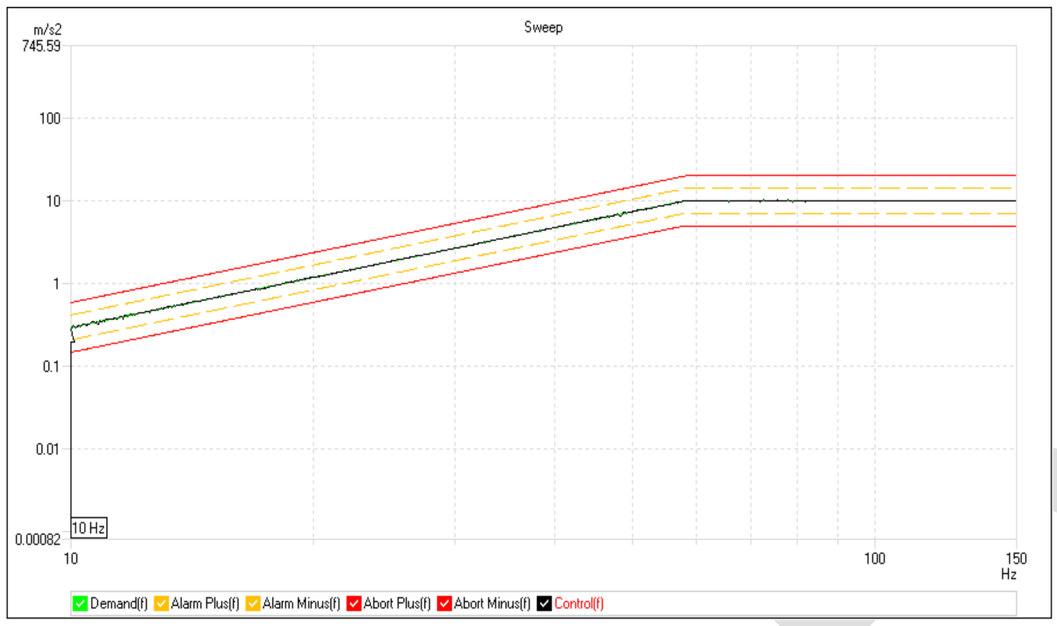

Fig.R03.9 Curve of vibration Z axis

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TEST REPORT

Appendix:

Client Reference Information:

Main Model: FB-L-5.12-EU

The shell of the sample submitted for inspection is the same type of shell as the following samples in terms of colour, raw material, process, material, manufacturer, structure.

Serial Number	Sample Name	Model
1	Battery protection module	FB-L-5.12-EU-Pro

Statement:

The Appendix Information are provided by the applicant, and the applicant is responsible for their authenticity which is not verified by our laboratory.

End of Report