

FCC Test Report

Applicant : Nemo Power Tools Limited

Address : 21st Floor, CMA Building 64 Connaught Road
Central Hong Kong

Product Name : GRABO Li-ion Battery

Report Date : Jan. 02, 2024

Shenzhen Anbotek Compliance Laboratory Limited



Shenzhen Anbotek Compliance Laboratory Limited

Address: 1/F., Building D, Sogood Science and Technology Park, Sanwei Community,
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Hotline

400-003-0500

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Report No.: 18230EC30238701

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TEST REPORT

Applicant : Nemo Power Tools Limited
Manufacturer : Nemo Power Tools(HuiZhou) Co.,Ltd.
Product Name : GRABO Li-ion Battery
Test Model No. : TB05000
Reference Model No. : N/A
Trade Mark : N/A
Rating(s) : DC 14.4V 2600mAh
Test Standard(s) : **FCC 47 CFR Part 15 Subpart B**
ANSI C63.4-2014

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. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with above listed standard(s) requirements. 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:

Dec. 12, 2023

Date of Test:

Dec. 12, 2023 to Dec. 19, 2023

Prepared By:



(Yee Huang)

Approved & Authorized Signer:



(KingKong Jin)

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1. General Information

1.1. Client Information

Applicant	:	Nemo Power Tools Limited
Address	:	21st Floor, CMA Building 64 Connaught Road Central Hong Kong
Manufacturer	:	Nemo Power Tools(HuiZhou) Co.,Ltd.
Address	:	2/F, 4th Industrial Area, Luokeng Village, Xiaotie Zone, Xiaojinkou Town,Huicheng District, Huizhou City, Guangdong Province, China
Factory	:	Shenzhen Unitek Energy Technology Co.,Ltd. Dongguan Branch
Address	:	Room 408, No.8 Xinbao 3rd Street, Dalang Town, Dongguan City, Guangdong Province

1.2. Description of Device (EUT)

Product Name	:	GRABO Li-ion Battery
Test Model No.	:	TB05000
Reference Model No.	:	N/A
Trade Mark	:	N/A
Test Power Supply	:	DC 14.4V
Test Sample No.	:	1-1-1
Adapter	:	N/A

Remark:

(1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

1.3. Auxiliary Equipment Used During Test

Title	Manufacturer	Model No.	Serial No.
/	/	/	/



1.4. Description of Test Modes

Pretest Modes	Descriptions
TM1	on mode

For Mode 1 Block Diagram of Test Setup



1.5. Measurement Uncertainty

Parameter	Uncertainty
Radiated emissions (30MHz~1000MHz)	Horizontal: 3.96dB; Vertical: 4.60dB
This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	



1.6. Test Summary

Test Items	Test Modes	Status
Radiated emissions (Below 1GHz)	Mode1	P
Note: P: Pass N: N/A, not applicable		

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1.7. Description of Test Facility

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

FCC-Registration No.:434132

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. 434132.

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.

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.

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1.8. Test Equipment List

Radiated emissions (Below 1GHz)						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	2023-10-12	2024-10-11
2	Pre-amplifier	Schwarzbeck	BBV-9745	9745-075	2023-10-12	2024-10-11
3	Bilog Broadband Antenna	SCHWARZBECK	VULB 9163	01109	2022-10-16	2025-10-15
4	Software Name EZ-EMC	Farad Technology	EMEC-3A1	N/A	/	/



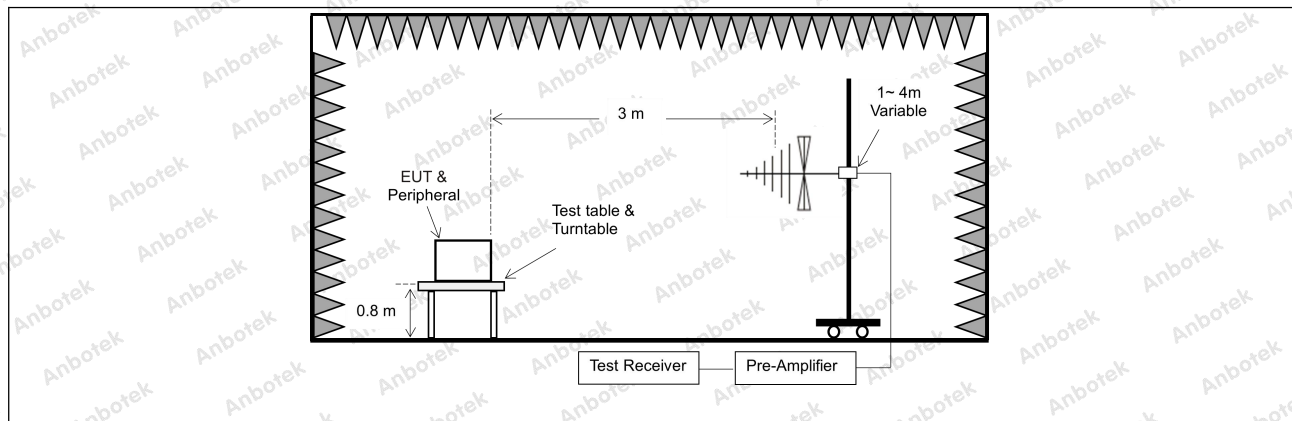
2. Radiated emissions (Below 1GHz)

Test Requirement:	15.109, Class B			
Test Limit:	Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:			
	Frequency of emission (MHz)	Field strength @3m		Field strength @10m
		(uV/m)	(dBuV/m)	(uV/m) (dBuV/m)
	30 – 88	100	40	30 29.5
	88 – 216	150	43.5	45 33.1
	216 – 960	200	46	60 35.6
	Above 960	500	54	150 43.5
Test Method:	ANSI C63.4-2014			
Procedure:	An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities. Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor			

2.1. EUT Operation

Operating Environment:	
Test mode:	1: TM1: on mode

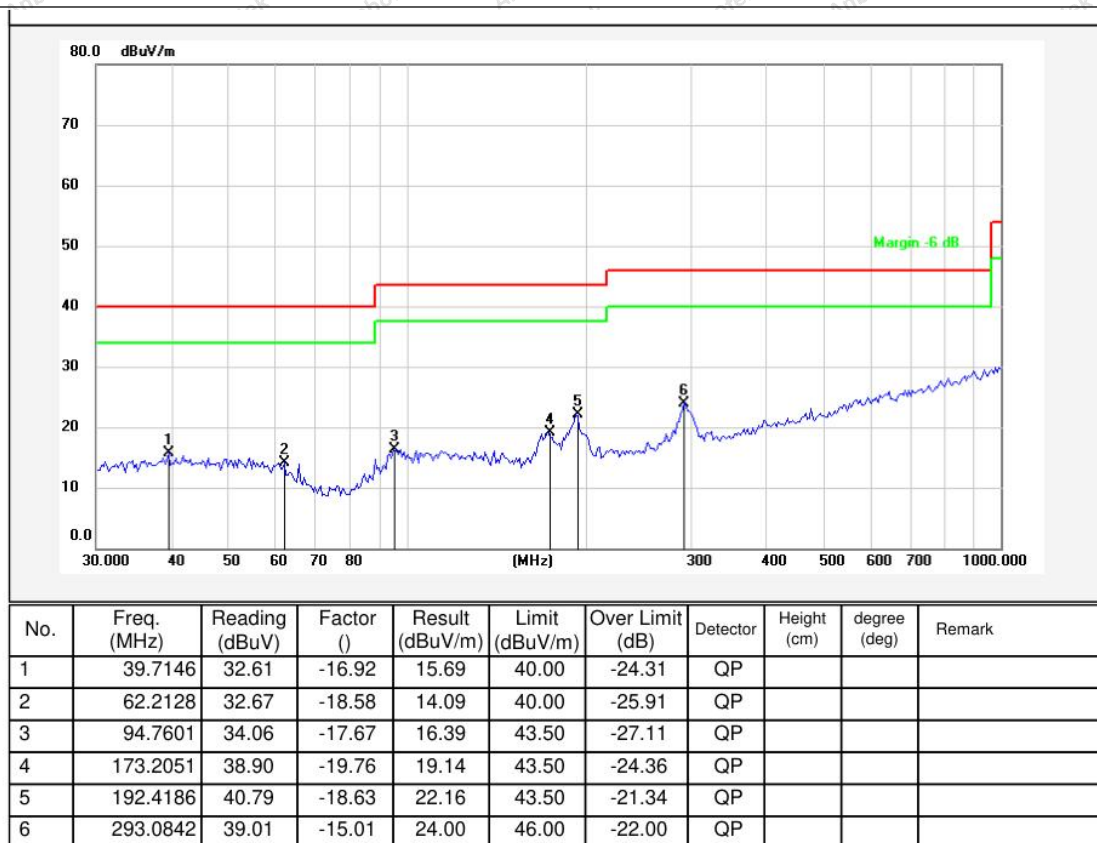
2.2. Test Setup



2.3. Test Data

Temperature:	22.1 °C	Humidity:	54.5 %	Atmospheric Pressure:	101 kPa
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TM1 / Polarization: Horizontal



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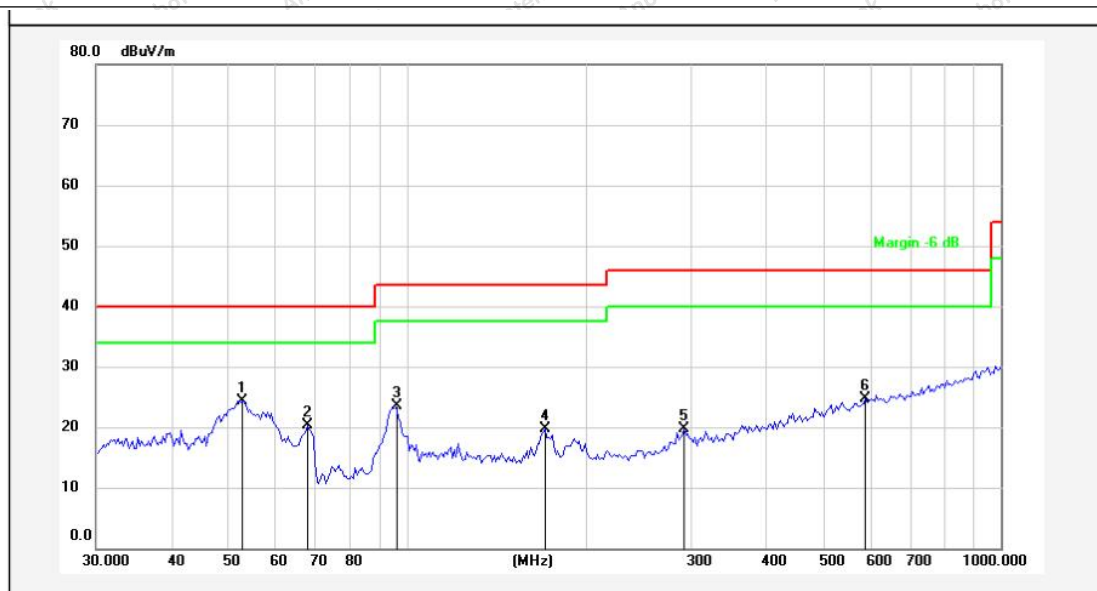
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Temperature: 22.1 °C

Humidity: 54.5 %

Atmospheric Pressure: 101 kPa

TM1 / Polarization: Vertical



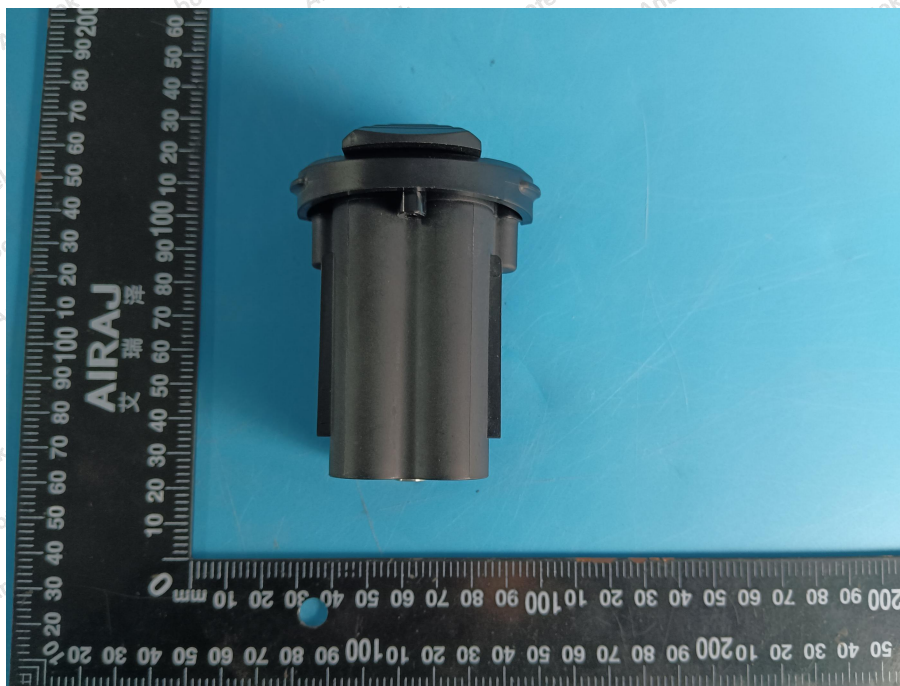
No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	52.9453	41.72	-17.33	24.39	40.00	-15.61	QP			
2	68.1514	41.32	-20.92	20.40	40.00	-19.60	QP			
3	95.4270	40.98	-17.57	23.41	43.50	-20.09	QP			
4	170.7926	39.53	-19.90	19.63	43.50	-23.87	QP			
5	293.0842	34.71	-15.01	19.70	46.00	-26.30	QP			
6	590.9737	33.17	-8.46	24.71	46.00	-21.29	QP			



APPENDIX I -- TEST SETUP PHOTOGRAPH

Radiated emissions (Below 1GHz)



APPENDIX II -- Photo documentation

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

