

UN/DOT 38.3

Certification
for Lithium Batteries






ELERIX EX-L110


Lithium Iron Phosphate Cell

TEST RESULT: **PASSED**

Applicant	ELERIX LTD
	Enterprise House 2 Pass Street, Oldham, Manchester, United Kingdom, OL9 6HZ
	www.elerix.com

EU Representative	GIWAL LTD, o.z.
	Sterboholska 1404/104, 102 00 Praha 10 Czech Republic, EU
	www.giwal.com

Certified Laboratory	Vkan Certification & Testing Co., Ltd. No.3, Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou P. R. China.		
	 2014002171A		 中国认可 国际互认 检测 TESTING CNAS L0095
Test Report No.	RZUN2016-3276	Date of issue	2016-12-07
Test Results	PASSED	Validity	Permanent
Tested According To:	ST/SG/AC.10/11/Rev.6/Section 38.3		

	Issued: 2021/8/13 <i>Kurt Sanders</i> Chief Technology Officer
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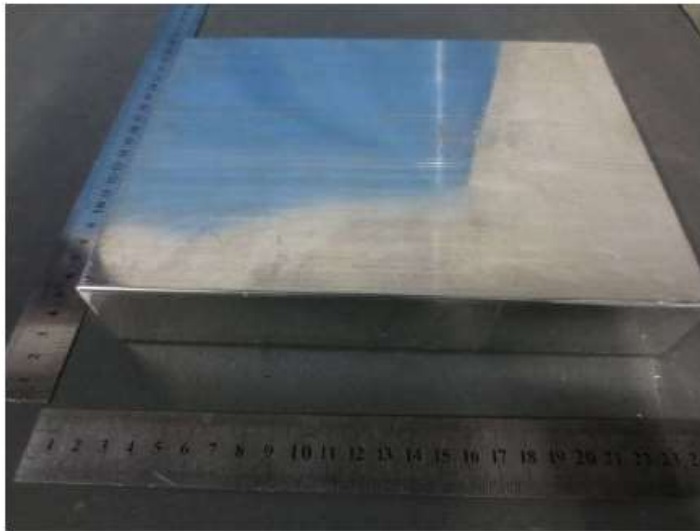
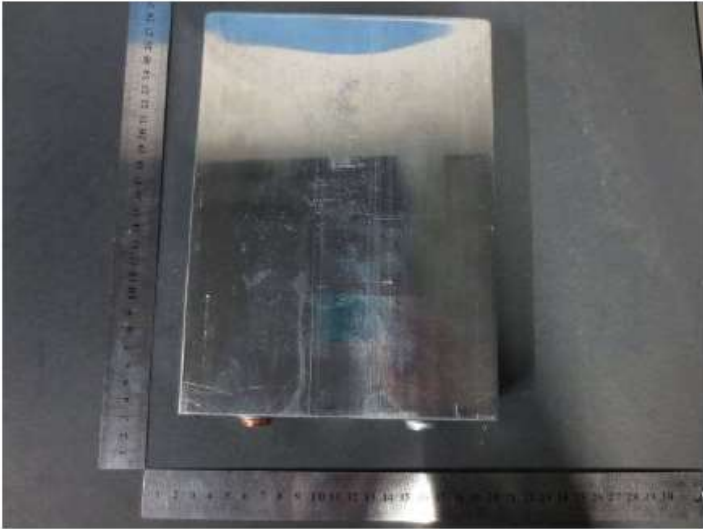
APPLICANT	ELERIX LTD
	Enterprise House 2 Pass Street, Oldham, Manchester, United Kingdom, OL9 6HZ
	www.elerix.com
BRAND	ELERIX (OEM)
MODEL	EX-L110 // EXB-110AH-2C
Nominal Voltage	3.2 V
Nominal Capacity	110 Ah
Nominal Energy	352 Wh

TEST DATA RESULTS	
Test Report ID	RZUN2016-3276
38.3.4.1 - T1 – Altitude Simulation (Primary and Secondary Cells and Batteries) Low pressure testing that simulates unpressurized airplane cargo area at 15,000-meter altitude. After storing batteries at 11.6kPa for >6 hours, these criteria shall be met: no mass loss, leaking, venting, disassembly, rupture or fire, and voltage within 10% of pre-test voltage.	PASSED
38.3.4.2 - T2 – Thermal Test (Primary and Secondary Cells and Batteries) Test covers changes in temperature extremes from -40C to +75C. Batteries are stored for 6 hours at -40C (12 hours for large cells/batteries), then 6 hours at +75C (12 hours for large cells/batteries), for a total of 10 cycles.	PASSED
38.3.4.3 - T3 – Vibration (Primary and Secondary Cells and Batteries) Test simulates vibration during transportation. Test is a Sine Sweep: 7Hz – 200Hz – 7Hz in 15 Minutes; 12 Sweeps (3 hours); 3 mutually perpendicular axes.	PASSED
38.3.4.4 - T4 – Shock (Primary and Secondary Cells and Batteries) Test also simulates vibration during transportation. Test is a Half-Sine pulse: 150G/6ms for small cells/batteries; 50G/11ms for large cells/batteries; 3 pulses per direction; 6 directions (+/-z, +/-x, +/-y).	PASSED
38.3.4.5 - T5 – External Short Circuit (Primary and Secondary Cells and Batteries) This test simulates an external short to the terminals of the cell or battery. At temperature of +55C, apply short circuit (<0.1ohm) across terminals. Maintain at least an hour after sample temperature returns to +55 +/-2°C. Pass criteria are: Case temperature does not exceed +170°C and no disassembly, rupture, or fire within 6 hours of test. Fuse, current limiting circuit, and venting mechanism activation are allowable.	PASSED
38.3.4.5 - T6 – Impact (Primary and Secondary Cells) This test is only applicable to primary and secondary cells. For cylindrical cells >20mm diameter, it simulates impact to case of cell.	PASSED
38.3.4.5 - T7 – Overcharge (Secondary Batteries) This test is for secondary or rechargeable batteries only. It simulates an overcharge condition on a rechargeable battery: 2x the manufacturer’s recommended charge current for 24 hours. Then battery shall be monitored for 7 days for fire or disassembly.	PASSED
38.3.4.5 - T8 – Forced Discharge (Primary and Secondary Cells) This testing simulates a forced discharge condition for primary and secondary cells only.	PASSED
SUMMARY OF PERFORMED TESTS	ALL PASSED

PHOTOS OF PRODUCTS AND SAMPLES

Cell

3.2V 110Ah 352Wh



Rated Voltage : 3.2V
Rated Capacity : 110Ah
Wh : 352Wh

