UN38.3 Test Report

UN38.3 测试报告

样品名称

Sample name: 二次锂离子电池组 Rechargeable Li-ion Battery Pack
ASUS, C31N2201, 11.55V, 42Wh/ BYD/ 178(g)

委托单位

Consignor: 新普科技股份有限公司
SIMPLO TECHNOLOGY CO., LTD.

报告版本: V01

Version of Test Report

批准 Approved By	审核 Checked By	编制 Prepared By
经理 Manager	授权签字人 Authorized Signatory	测试工程师 Test Engineer
		

新普科技股份有限公司
SIMPLO TECHNOLOGY CO., LTD.
地址：新竹县湖口乡八德路 2 段 471 号
471 Pa Teh Rd, Sec 2 Hu Kou, Hsinchu Hsien, 303 Taiwan
TEL: +886-3-5695920, FAX: +886-3-5695931
Email：Test_Lab@simplo.com.tw Website：http://www.simplo.com.tw/

样品名称 Sample name	二次锂离子电池组 Rechargeable Li-ion Battery Pack ASUS, C31N2201, 11.55V, 42Wh/ BYD/ 178(g)		
委托单位 Consignor	新普科技股份有限公司 SIMPLO TECHNOLOGY CO., LTD.		
生产单位 Manufacturer	新普科技（重庆）有限公司 SIMPLO TECHNOLOGY (CHONGQING) INC		
检测方法/判定标准 Test method/Criterion	《关于危险货物运输的建议书-标准与试验手册》ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 Recommendations on the TRANSPORT OF DANGEROUS GOODS, Manual of the Tests and Criteria, Seventh revised edition, Amend 1, section 38.3		
样品外观 Appearance	黑色塑料外壳。 Black Plastic film shell.		
样品接受日期 Accepted Date	2023/03/22	**检测起迄日期 Test Date**	2023/03/22~2023/04/11
检测项目 Test Items	高度模拟；热测试；振动；冲击；外短路；挤压；过充电；强制放电； Altitude Simulation；Thermal Test；Vibration；Shock；External Short Circuit； Crush；Overcharge；Forced Discharge；		
检测结论 Conclusion	经检测，该样品试验符合联合国《关于危险货物运输的建议书-标准与试验手册》ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 标准要求。 The test results complied with the requirements of “Recommendations on the TRANSPORT OF DANGEROUS GOODS, Manual of the Tests and Criteria, Seventh revised edition, Amend 1”, section 38.3		
备注 Remarks	可充电电池组 Rechargeable Li-ion Battery Pack		

报告版本清单 List of report version

版本 Version	**修改内容 Modify content**	**生效日 Issue date**
01	First publish	2023/04/11

Form NO. W11-002-B06

序号 No.	检测项目 Test items	标准要求或标准条款号 Standard requirement or the clause number of the standard	检测结果 Test results	本项结论 Conclusion	备注 Remarks
1	高度模拟 Altitude Simulation	联合国《标准与试验手册》 ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 試驗 T1 UN Manual of the Tests and Criteria, ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 Test T1	见附表 1 See Appendix 1	合格 Pass	
2	热测试 Thermal Test	联合国《标准与试验手册》 ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 試驗 T2 UN Manual of the Tests and Criteria, ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 Test T2	见附表 2 See Appendix 2	合格 Pass	
3	振动 Vibration	联合国《标准与试验手册》 ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 試驗 T3 UN Manual of the Tests and Criteria, ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 Test T3	见附表 3 See Appendix 3	合格 Pass	
4	冲击 Shock	联合国《标准与试验手册》 ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 試驗 T4 UN Manual of the Tests and Criteria, ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 Test T4	见附表 4 See Appendix 4	合格 Pass	
5	外短路 External Short Circuit	联合国《标准与试验手册》 ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 試驗 T5 UN Manual of the Tests and Criteria, ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 Test T5	见附表 5 See Appendix 5	合格 Pass	

6-1	撞击 Impact	联合国《标准与试验手册》 ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 試驗 T6 UN Manual of the Tests and Criteria, ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 Test T6	见附表 6-1 See Appendix 6-1	N/A	
6-2	挤压 Crush	联合国《标准与试验手册》 ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 試驗 T6 UN Manual of the Tests and Criteria, ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 Test T6	见附表 6-2 See Appendix 6-2	合格 Pass	
7	过充电 Overcharge	联合国《标准与试验手册》 ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 試驗 T7 UN Manual of the Tests and Criteria, ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 Test T7	见附表 7 See Appendix 7	合格 Pass	
8	强制放电 Forced Discharge	联合国《标准与试验手册》 ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 試驗 T8 UN Manual of the Tests and Criteria, ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 Test T8	见附表 8 See Appendix 8	合格 Pass	
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检测环境条件 Test environment condition		环境温度：19.3℃~23.8℃；环境湿度：49%~58%。 Ambient temperature：19.3℃~23.8℃；Ambient humidity：49%~58%。			

报告声明 Report statement	测试结果包含符合基于 ST/SG/AC.10/11/Rev7 Amend 1, section 38.3 标准的决策规则的声明。 The test results contain statement of conformity with the decision rules which are based on the standards ST/SG/AC.10/11/Rev7 Amend 1, section 38.3.
	本试验结果基于标准未规定、客户无需求，不对测量不确定度进行评定。 This test result does not evaluate the measurement uncertainty based on the fact that the standard is not specified and the customer has no demand.
	本报告中呈现的测试结果仅与测试项目/样品有关。 The test results presented in this report relate only to the test items/samples.

附表 1 Appendix 1								
序号 No.	1	检测项目 Test items			高度模拟 Altitude Simulation			
试样编号 Sample No.	样品状态 Sample Status	开路电压 OCV/V		剩余电压 Residual OCV	质量 Mass/g		质量损失 Mass loss	其他现象 Other Event
		试验前 Before	试验后 After		试验前 Before	试验后 After		
01	1CY 完全充电 1 Cycle Fully charged	12.849	12.843	99.95%	177.269	177.266	0.00%	O
02	1CY 完全充电 1 Cycle Fully charged	12.853	12.847	99.95%	176.550	176.545	0.00%	O
03	1CY 完全充电 1 Cycle Fully charged	12.780	12.776	99.97%	176.992	176.990	0.00%	O
04	1CY 完全充电 1 Cycle Fully charged	12.816	12.806	99.92%	176.961	176.958	0.00%	O
05	25CY 完全充电 25 Cycles Fully charged	12.850	12.846	99.97%	177.089	177.084	0.00%	O
06	25CY 完全充电 25 Cycles Fully charged	12.778	12.772	99.95%	176.977	176.976	0.00%	O
07	25CY 完全充电 25 Cycles Fully charged	12.804	12.795	99.93%	176.836	176.834	0.00%	O
08	25CY 完全充电 25 Cycles Fully charged	12.837	12.827	99.92%	176.995	176.991	0.00%	O
以下空白	Blank below							

注：L-泄漏, V-泄气, D-解体, R-破裂, F-起火, O-无泄漏、无泄气、无解体、无破裂且无起火.
Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No leakage, no venting, no disassembly, no rupture and no fire.

附表 2 Appendix 2

序号 No.	2	检测项目 Test items			热测试 Thermal Test			
试样编号 Sample No.	样品状态 Sample Status	开路电压 OCV/V		剩余电压 Residual OCV	质量 Mass/g		质量损失 Mass loss	其他现象 Other Event
		试验前 Before	试验后 After		试验前 Before	试验后 After		
01	1CY 完全充电 1 Cycle Fully charged	12.843	12.596	98.08%	177.266	177.202	0.04%	O
02	1CY 完全充电 1 Cycle Fully charged	12.847	12.596	98.05%	176.545	176.479	0.04%	O
03	1CY 完全充电 1 Cycle Fully charged	12.776	12.572	98.40%	176.990	176.924	0.04%	O
04	1CY 完全充电 1 Cycle Fully charged	12.806	12.572	98.17%	176.958	176.900	0.03%	O
05	25CY 完全充电 25 Cycles Fully charged	12.846	12.510	97.38%	177.084	177.025	0.03%	O
06	25CY 完全充电 25 Cycles Fully charged	12.772	12.615	98.77%	176.976	176.915	0.03%	O
07	25CY 完全充电 25 Cycles Fully charged	12.795	12.638	98.77%	176.834	176.770	0.04%	O
08	25CY 完全充电 25 Cycles Fully charged	12.827	12.668	98.76%	176.991	176.928	0.04%	O
以下空白	Blank below							

注：L-泄漏, V-泄气, D-解体, R-破裂, F-起火, O-无泄漏、无泄气、无解体、无破裂且无起火.
Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No leakage, no venting, no disassembly, no rupture and no fire.

附表 3 Appendix 3								
序号 No.	3	检测项目 Test items			振动 Vibration			
试样编号 Sample No.	样品状态 Sample Status	开路电压 OCV/V		剩余电压 Residual OCV	质量 Mass/g		质量损失 Mass loss	其他现象 Other Event
		试验前 Before	试验后 After		试验前 Before	试验后 After		
01	1CY 完全充电 1 Cycle Fully charged	12.596	12.541	99.56%	177.202	177.210	0.00%	O
02	1CY 完全充电 1 Cycle Fully charged	12.596	12.544	99.59%	176.479	176.483	0.00%	O
03	1CY 完全充电 1 Cycle Fully charged	12.572	12.526	99.63%	176.924	176.929	0.00%	O
04	1CY 完全充电 1 Cycle Fully charged	12.572	12.510	99.51%	176.900	176.906	0.00%	O
05	25CY 完全充电 25 Cycles Fully charged	12.510	12.455	99.56%	177.025	177.030	0.00%	O
06	25CY 完全充电 25 Cycles Fully charged	12.615	12.602	99.90%	176.915	176.921	0.00%	O
07	25CY 完全充电 25 Cycles Fully charged	12.638	12.621	99.87%	176.770	176.776	0.00%	O
08	25CY 完全充电 25 Cycles Fully charged	12.668	12.647	99.83%	176.928	176.934	0.00%	O
以下空白	Blank below							

注：L-泄漏, V-泄气, D-解体, R-破裂, F-起火, O-无泄漏、无泄气、无解体、无破裂且无起火.
Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No leakage, no venting, no disassembly, no rupture and no fire.

附表 4 Appendix 4								
序号 No.	4	检测项目 Test items			冲击 Shock			
试样编号 Sample No.	样品状态 Sample Status	开路电压 OCV/V		剩余电压 Residual OCV	质量 Mass/g		质量损失 Mass loss	其他现象 Other Event
		试验前 Before	试验后 After		试验前 Before	试验后 After		
01	1CY 完全充电 1 Cycle Fully charged	12.541	12.537	99.97%	177.210	177.216	0.00%	O
02	1CY 完全充电 1 Cycle Fully charged	12.544	12.541	99.98%	176.483	176.488	0.00%	O
03	1CY 完全充电 1 Cycle Fully charged	12.526	12.523	99.98%	176.929	176.933	0.00%	O
04	1CY 完全充电 1 Cycle Fully charged	12.510	12.506	99.97%	176.906	176.906	0.00%	O
05	25CY 完全充电 25 Cycles Fully charged	12.455	12.451	99.97%	177.030	177.033	0.00%	O
06	25CY 完全充电 25 Cycles Fully charged	12.602	12.597	99.96%	176.921	176.921	0.00%	O
07	25CY 完全充电 25 Cycles Fully charged	12.621	12.618	99.98%	176.776	176.776	0.00%	O
08	25CY 完全充电 25 Cycles Fully charged	12.647	12.644	99.98%	176.934	176.937	0.00%	O
以下空白	Blank below							
注：L-泄漏, V-泄气, D-解体, R-破裂, F-起火, O-无泄漏、无泄气、无解体、无破裂且无起火. Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No leakage, no venting, no disassembly, no rupture and no fire.								

附表 5 Appendix 5			
序号 No.	5	检测项目 Test items	外短路 External Short Circuit
试样编号 Sample No.	样品状态 Sample Status	表面最高温度 Max. External Temperature/℃	其他现象 Other Event
01	1CY 完全充电 1 Cycle Fully charged	58.3	O
02	1CY 完全充电 1 Cycle Fully charged	58.4	O
03	1CY 完全充电 1 Cycle Fully charged	58.4	O
04	1CY 完全充电 1 Cycle Fully charged	58.4	O
05	25CY 完全充电 25 Cycles Fully charged	58.1	O
06	25CY 完全充电 25 Cycles Fully charged	58.3	O
07	25CY 完全充电 25 Cycles Fully charged	58.4	O
08	25CY 完全充电 25 Cycles Fully charged	59.4	O
以下空白	Blank below		
注： D-解体, R-破裂, F-起火, O-无解体、无破裂且无起火 Note: D-Disassembly, R-Rupture, F-Fire, O-No disassembly, no rupture and no fire.			

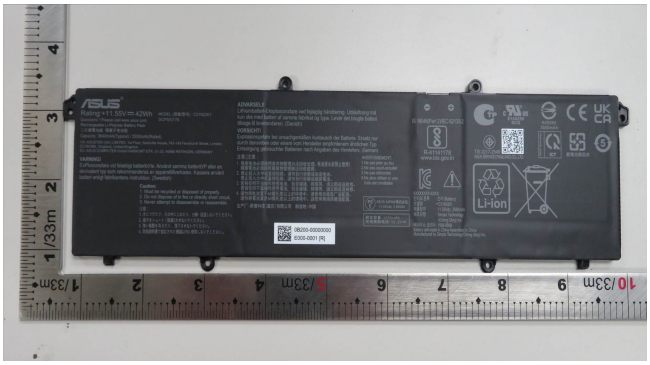
附表 6-1 Appendix 6-1			
序号 No.	6-1	检测项目 Test items	撞击 Impact
试样编号 Sample No.	样品状态 Sample Status	表面最高溫度 Max. External Temperature/℃	其他现象 Other Event
01 C	1CY 50% 容量 1 Cycle 50% Capacity	N/A	N/A
02 C	1CY 50% 容量 1 Cycle 50% Capacity	N/A	N/A
03 C	1CY 50% 容量 1 Cycle 50% Capacity	N/A	N/A
04 C	1CY 50% 容量 1 Cycle 50% Capacity	N/A	N/A
05 C	1CY 50% 容量 1 Cycle 50% Capacity	N/A	N/A
06 C	25CY 50% 容量 25 Cycles 50% Capacity	N/A	N/A
07 C	25CY 50% 容量 25 Cycles 50% Capacity	N/A	N/A
08 C	25CY 50% 容量 25 Cycles 50% Capacity	N/A	N/A
09 C	25CY 50% 容量 25 Cycles 50% Capacity	N/A	N/A
10 C	25CY 50% 容量 25 Cycles 50% Capacity	N/A	N/A
以下 空白	Blank below		
注： D-解体, F-起火, O-无解体且无起火. Note: D-Disassembly, F-Fire, O-No disassembly and no fire.			

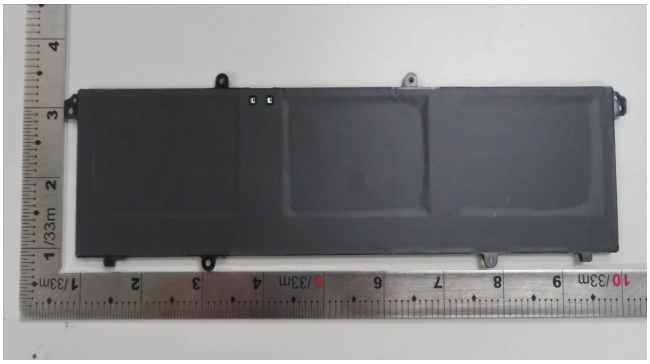
附表 6-2 Appendix 6-2			
序号 No.	6-2	检测项目 Test items	挤压 Crush
试样编号 Sample No.	样品状态 Sample Status	表面最高溫度 Max. External Temperature/℃	其他现象 Other Event
01 C	1CY 50% 容量 1 Cycle 50% Capacity	21.1	O
02 C	1CY 50% 容量 1 Cycle 50% Capacity	19.8	O
03 C	1CY 50% 容量 1 Cycle 50% Capacity	19.4	O
04 C	1CY 50% 容量 1 Cycle 50% Capacity	19.9	O
05 C	1CY 50% 容量 1 Cycle 50% Capacity	20.5	O
06 C	25CY 50% 容量 25 Cycles 50% Capacity	20.1	O
07 C	25CY 50% 容量 25 Cycles 50% Capacity	20.1	O
08 C	25CY 50% 容量 25 Cycles 50% Capacity	20.7	O
09 C	25CY 50% 容量 25 Cycles 50% Capacity	20.0	O
10 C	25CY 50% 容量 25 Cycles 50% Capacity	19.9	O
以下 空白	Blank below		
注： D-解体, F-起火, O-无解体且无起火 Note: D-Disassembly, F-Fire, O-No disassembly and no fire.			

附表 7 Appendix 7			
序号 No.	7	检测项目 Test items	过充电 Overcharge
试样编号 Sample No.	样品状态 Sample Status	其他现象 Other Event	
09	1CY 完全充电 1 Cycle Fully charged	O	
10	1CY 完全充电 1 Cycle Fully charged	O	
11	1CY 完全充电 1 Cycle Fully charged	O	
12	1CY 完全充电 1 Cycle Fully charged	O	
13	25CY 完全充电 25 Cycles Fully charged	O	
14	25CY 完全充电 25 Cycles Fully charged	O	
15	25CY 完全充电 25 Cycles Fully charged	O	
16	25CY 完全充电 25 Cycles Fully charged	O	
以下 空白	Blank below		
注： D-解体, F-起火, O-无解体且无起火 Note: D-Disassembly, F-Fire, O-No disassembly and no fire.			

附表 8 Appendix 8			
序号 No.	8	检测项目 Test items	强制放电 Forced Discharge
试样编号 Sample No.	样品状态 Sample Status	其他现象 Other Event	
11 C	1CY 完全放电 1 Cycle Fully Discharged	O	
12 C	1CY 完全放电 1 Cycle Fully Discharged	O	
13 C	1CY 完全放电 1 Cycle Fully Discharged	O	
14 C	1CY 完全放电 1 Cycle Fully Discharged	O	
15 C	1CY 完全放电 1 Cycle Fully Discharged	O	
16 C	1CY 完全放电 1 Cycle Fully Discharged	O	
17 C	1CY 完全放电 1 Cycle Fully Discharged	O	
18 C	1CY 完全放电 1 Cycle Fully Discharged	O	
19 C	1CY 完全放电 1 Cycle Fully Discharged	O	
20 C	1CY 完全放电 1 Cycle Fully Discharged	O	
21 C	25CY 完全放电 25 Cycles Fully Discharged	O	
22 C	25CY 完全放电 25 Cycles Fully Discharged	O	
23 C	25CY 完全放电 25 Cycles Fully Discharged	O	
24 C	25CY 完全放电 25 Cycles Fully Discharged	O	
25 C	25CY 完全放电 25 Cycles Fully Discharged	O	
26 C	25CY 完全放电 25 Cycles Fully Discharged	O	
27 C	25CY 完全放电 25 Cycles Fully Discharged	O	
28 C	25CY 完全放电 25 Cycles Fully Discharged	O	
29 C	25CY 完全放电 25 Cycles Fully Discharged	O	
30 C	25CY 完全放电 25 Cycles Fully Discharged	O	
以下空白	Blank below		
注： D-解体, F-起火, O-无解体且无起火 Note: D-Disassembly, F-Fire, O-No disassembly and no fire.			

待测物照片 Test Pictures:





仪器清册 Test Equipment List:

SIMPLO TECHNOLOGY CO., LTD.
Address : No.471, Sec.2, Pa Teh Rd., Hu Kou, Hsin Chu Hsien 303, Taiwan
TEL: +886-3-5695920; FAX: +886-3-5695931

Revised Date: 2023-04-11

Test Instruments Reference List

Used	Instrument ID	Instrument Name	Type	Range of use	Manufacturer	Calibration Date_Last	Calibration Date_Next	Remarks
	Pretest							
	ML-761	Learning	715C	0~18V 0~8A	SMP	2023/1/17	2024/2/17	
V	ML-762	Learning	715C	0~18V 0~8A	SMP	2023/1/4	2024/2/4	
	ML-763	Learning	715C	0~18V 0~8A	SMP	2023/1/17	2024/2/17	
	ML-925	Learning	750C8	0~60V 0~30A	SMP	2023/1/4	2024/2/4	
V	ML-1139	Learning	L720-191212-D	0~19V 0~12A	SMP	2023/1/4	2024/2/4	
	T.1 Altitude Simulation							
V	ML-522	Altitude	SVT-120	kPa:30~90	HSIN JIANG	2022/6/2	2023/7/2	
V	ML-257	Multimeter	34401A	Note 1	Agilent	2023/1/17	2024/2/17	
V	ML-995	Electronic Balance	UX1020H	1-1220 gf	SHIMADZU	2023/1/4	2024/2/4	
	ML-1035	Electronic Balance	JWI-700W	30*0.005kg	JADEVER	2022/6/2	2023/7/2	
V	ML-550	Data Logger	313	15~35 ℃; 30~80 %RH	CENTER	2022/7/8	2023/8/8	
V	ML-964	Barometric Air Pressure	MP55	750 to 1100 mbar	KIMO	2022/6/6	2023/7/6	
	T.2 Thermal Test							
V	ML-789	Thermal Shock	GTST-080-65-AW	T:-40 to 100℃	GF	2023/1/4	2024/2/4	
V	ML-257	Multimeter	34401A	note 1	Agilent	2023/1/17	2024/2/17	
V	ML-995	Electronic Balance	UX1020H	1-1220 gf	SHIMADZU	2023/1/4	2024/2/4	
	ML-1035	Electronic Balance	JWI-700W	30*0.005kg	JADEVER	2022/6/2	2023/7/2	
V	ML-551	Data Logger	313	15~35 ℃; 30~80 %RH	CENTER	2022/7/8	2023/8/8	
	T.3 Vibration							
V	ML-233	Vibration	KD-9363-EM-300F2K-30N80	F:5~2000Hz G:0.2~20G	King Design	2022/7/25	2023/8/25	
V	ML-257	Multimeter	34401A	note 1	Agilent	2023/1/17	2024/2/17	
V	ML-995	Electronic Balance	UX1020H	1-1220 gf	SHIMADZU	2023/1/4	2024/2/4	
	ML-1035	Electronic Balance	JWI-700W	30*0.005kg	JADEVER	2022/6/2	2023/7/2	
V	ML-552	Data Logger	313	15~35 ℃; 30~80 %RH	CENTER	2022/7/8	2023/8/8	
	T.4 Shock							
V	ML-056	Shock	DP-1200-25	G:10~600G	King Design	2022/7/25	2023/8/25	
V	ML-257	Multimeter	34401A	note 1	Agilent	2023/1/17	2024/2/17	
V	ML-995	Electronic Balance	UX1020H	1-1220 gf	SHIMADZU	2023/1/4	2024/2/4	
	ML-1035	Electronic Balance	JWI-700W	30*0.005kg	JADEVER	2022/6/2	2023/7/2	
V	ML-551	Data Logger	313	15~35 ℃; 30~80 %RH	CENTER	2022/7/8	2023/8/8	
	T.5 External Short Circuit							
V	ML-894	Battery Hitester	BT3562	10mΩ ~ 30kΩ	HIOKI	2022/4/14	2023/5/14	
V	ML-257	Multimeter	34401A	note 1	Agilent	2023/1/17	2024/2/17	
V	ML-459	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200℃	Yokogawa	2022/7/6	2023/8/6	
V	ML-460	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200℃	Yokogawa	2022/7/6	2023/8/6	
V	ML-521	Oven	9031	30~80 ℃	YEOW LONG	2022/8/3	2023/9/3	
V	ML-1083	Data Logger	1161	15~35 ℃; 30~80 %RH	TES	2022/9/14	2023/10/14	
	T.6 Impact / Crush							
V	ML-458	Data Acquisition	XL122-D	1-100 Vdc, -50 to 150℃	Yokogawa	2022/4/28	2023/5/28	
	ML-1016	Impact Tester	KD-2054E		King Design	2023/3/23	2024/4/23	
	ML-553	Crush Tester	BCT-01		Simplo	2023/3/23	2024/4/23	
V	ML-866	Crush Tester	M0654		JYI SHENG	2023/3/23	2024/4/23	
V	ML-1083	Data Logger	1161	15~35 ℃; 30~80 %RH	TES	2022/9/14	2023/10/14	
	ML-459	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200℃	Yokogawa	2022/7/6	2023/8/6	

SIMPLO TECHNOLOGY CO., LTD.
Address : No.471, Sec.2, Pa Teh Rd., Hu Kou, Hsin Chu Hsien 303, Taiwan
TEL: +886-3-5695920; FAX: +886-3-5695931

Revised Date: 2023-04-11

Test Instruments Reference List

Used	Instrument ID	Instrument Name	Type	Range of use	Manufacturer	Calibration Date_Last	Calibration Date_Next	Remarks
	T.7 Overcharge							
	ML-482	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2022/4/28	2023/5/28	
	ML-484	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2022/4/28	2023/5/28	
	ML-904	Programmable DC Source	DS10014-MO	1-100Vdc, 0.3-14.4A	B&K Precision	2022/4/28	2023/5/28	
	ML-487	Programmable DC Source	DS6024	1-60 Vdc, 0.3-24A	MOTECH	2022/4/28	2023/5/28	
	ML-488	Programmable DC Source	DS6024	1-60 Vdc, 0.3-24A	MOTECH	2022/4/28	2023/5/28	
V	ML-1083	Data Logger	1161	15~35 ℃; 30~80 %RH	TES	2022/9/14	2023/10/14	
	ML-459	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200℃	Yokogawa	2022/7/6	2023/8/6	
	ML-460	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200°C	Yokogawa	2022/7/6	2023/8/6	
V	ML-918	Overcharge & Forced discharge tester	T901	3~30 Vdc, Charge: 0.05~20A Discharge: 0.02~10A	SMP	2022/4/28	2023/5/28	
	T.8 Forced Discharge							
	ML-894	Battery Hitester	BT3562	10mΩ ~ 30kΩ	HIOKI	2022/4/14	2023/5/14	
	ML-132	Electronic Load	3311C	60V,60A, 300W	Prodigit	2023/1/16	2024/2/16	
	ML-133	Electronic Load	3311C	60V,60A, 300W	Prodigit	2023/1/16	2024/2/16	
	ML-136	Electronic Load	3311C	60V,60A, 300W	Prodigit	2023/1/16	2024/2/16	
	ML-192	Electronic Load	3311C	60V,60A, 300W	Prodigit	2023/1/16	2024/2/16	
	ML-269	Electronic Load	3311C	60V,60A, 300W	Prodigit	2023/1/16	2024/2/16	
	ML-532	DC Electronic Load	33511-01	120V, 240A, 3600W	Prodigit	2022/5/30	2023/6/30	
	ML-482	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2022/4/28	2023/5/28	
	ML-484	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2022/4/28	2023/5/28	
	ML-904	Programmable DC Source	DS10014-MO	1-100Vdc, 0.3-14.4A	B&K Precision	2022/4/28	2023/5/28	
	ML-487	Programmable DC Source	DS6024	1-60 Vdc, 0.3-24A	MOTECH	2022/4/28	2023/5/28	
	ML-488	Programmable DC Source	DS6024	1-60 Vdc, 0.3-24A	MOTECH	2022/4/28	2023/5/28	
V	ML-1083	Data Logger	1161	15~35 ℃; 30~80 %RH	TES	2022/9/14	2023/10/14	
	ML-459	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200℃	Yokogawa	2022/7/6	2023/8/6	
	ML-460	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200℃	Yokogawa	2022/7/6	2023/8/6	
V	ML-918	Overcharge & Forced discharge tester	T901	3~30 Vdc, Charge: 0.05~20A Discharge: 0.02~10A	SMP	2022/4/28	2023/5/28	

Note 1: DC Voltage: 0.1-1000V; AC Voltage: 0.5-700V at 60Hz, 1kHz; Resistance: 10Ω-10MΩ; DC Current: 0.1mA-3A; AC Current: 0.01-3A at 60Hz, 0.01-1A, at 1kHz.

报告结束 End of Test Report

Form NO. W11-002-B06