



新普科技股份有限公司
新世電子(常熟)有限公司
新普科技(重慶)有限公司
華普電子(常熟)有限公司

Control Number: SLEU-1910006

Lithium-ion Battery UN38.3 Test Report

Recommendations on the TRANSPORT OF DANGEROUS GOODS

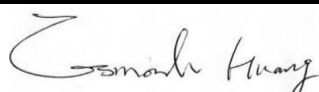
(Manual of Tests and Criteria, Sixth revised edition, Amend 1)

Customer: Lenovo

Model: L19M4PC0

**Rating/ Mass: 15.44V, Typical Capacity 4000mAh/ 60Wh
Rated Capacity 3940mAh/ 58.5Wh/ 256 (g)**

Issue date: 2019/10/16

Approved By	Checked By	Prepared By
Assistant Manager	Authorized Signatory	Test Engineer
		

SIMPLO TECHNOLOGY CO., LTD.

ADD : No. 471 Pa Teh Rd, Sec 2 Hu Kou, Hsinchu Hsien, 303 Taiwan

TEL: +886-3-5695920

FAX: +886-3-5695931

SIMPLO TECHNOLOGY (CHANGSHU) INC.

ADD : No.888 Dongnan Avenue, Changshu New & Hi-Tech Industrial Development Zone, Changshu, Jiangsu, China

TEL: +86-512-52302255

FAX: +86-512-52302277

SIMPLO TECHNOLOGY (CHONGQING) INC.

ADD : No.2 Zongbao Avenue, Shapingba District, ChongQing, China

TEL: +86-23-61718899

FAX: +86-23-61210488

HUAPU TECHNOLOGY (CHANGSHU) INC.

ADD : No.888 Dongnan Avenue, Changshu New & Hi-Tech Industrial Development Zone, Changshu, Jiangsu, China

TEL: +86-512-52302255

FAX: +86-512-52302277

Email : Test_Lab@simplo.com.tw

Website : <http://www.simplo.com.tw/>



Form No. : W11-002-B05

本資料為新普科技股份有限公司之智慧財產權，非經本公司書面授權許可，不得透露或使用本資料，亦不得複印、複製或轉變成其它任何形式使用。
The information contained herein is the exclusive property of SIMPLO TECHNOLOGY CO., LTD, and shall not be distributed, reproduced, or disclosed in whole or in part without prior written permission.

本測試報告僅對上述測試項目有效，本報告分離使用無效

This test report is valid only to the items, Invalid for separation using.



新普科技股份有限公司
新世電子(常熟)有限公司
新普科技(重慶)有限公司
華普電子(常熟)有限公司

Control Number: SLEU-1910006

1. Purpose of the Test :

To test each cell/battery is of the type proved to meet the requirements in United Nations Recommendations on the TRANSPORT OF DANGEROUS GOODS, Manual of Tests and Criteria, Sixth revised edition, Amend 1, Section 38.3.

2. Test Result :

Test results of the UN Recommendations on the Transport of Dangerous Goods

No.	Test Item	Test results
T.1	Altitude simulation	PASS
T.2	Thermal test	PASS
T.3	Vibration test	PASS
T.4	Shock test	PASS
T.5	External short circuit	PASS
T.6	Impact, Crush test	PASS
T.7	Overcharge	PASS
T.8	Forced discharge	PASS

3. Test Lab: Email : Test_Lab@simplo.com.tw Website : <http://www.simplo.com.tw/>

●	SIMPLO (Taiwan) Laboratory ADD : No. 471 Pa Teh Rd, Sec 2 Hu Kou, Hsinchu Hsien, 303 Taiwan TEL: +886-3-5695920 FAX: +886-3-5695931
	SIMPLO (CHANGSHU) Laboratory ADD : No.888 Dongnan Avenue, Changshu New & Hi-Tech Industrial Development Zone, Changshu, Jiangsu, China TEL: +86-512-52302255 FAX: +86-512-52302277
	SIMPLO (CHONGQING) Laboratory. ADD : No.2 Zongbao Avenue, Shapingba District, ChongQing, China TEL: +86-23-61718899 FAX: +86-23-61210488

Form No. : W11-002-B05

本資料為新普科技股份有限公司之智慧財產權，非經本公司書面授權許可，不得透露或使用本資料，亦不得複印、複製或轉變成其它任何形式使用。
The information contained herein is the exclusive property of SIMPLO TECHNOLOGY CO., LTD, and shall not be distributed, reproduced, or disclosed in whole or in part without prior written permission.

本測試報告僅對上述測試項目有效，本報告分離使用無效

This test report is valid only to the items, Invalid for separation using.



新普科技股份有限公司
新世電子(常熟)有限公司
新普科技(重慶)有限公司
華普電子(常熟)有限公司

Control Number: SLEU-1910006

4. Product manufacturer : Email : Test_Lab@simplo.com.tw Website : <http://www.simplo.com.tw/>

●	SIMPLO TECHNOLOGY CO., LTD. ADD : No. 471 Pa Teh Rd, Sec 2 Hu Kou, Hsinchu Hsien, 303 Taiwan TEL: +886-3-5695920 FAX: +886-3-5695931
	SIMPLO TECHNOLOGY (CHANGSHU) INC. ADD : No.888 Dongnan Avenue, Changshu New & Hi-Tech Industrial Development Zone, Changshu, Jiangsu, China TEL: +86-512-52302255 FAX: +86-512-52302277
●	SIMPLO TECHNOLOGY (CHONGQING) INC. ADD : No.2 Zongbao Avenue, Shapingba District, ChongQing, China TEL: +86-23-61718899 FAX: +86-23-61210488
	HUAPU TECHNOLOGY (CHANGSHU) INC. ADD : No.888 Dongnan Avenue, Changshu New & Hi-Tech Industrial Development Zone, Changshu, Jiangsu, China TEL: +86-512-52302255 FAX: +86-512-52302277

5. Test Quantity :

- 5.1 Four batteries, at first cycle, in fully charged states. (For T.1~T.5)
- 5.2 Four batteries, after 25 cycles ending in fully charged states. (For T.1~T.5)
- 5.3 Five component cells, at first cycle at 50% of the design rated capacity. (For T.6)
- 5.4 Five component cells, after 25 cycles at 50% of the design rated capacity. (For T.6)
- 5.5 Four batteries, at first cycle, in fully charged states. (For T.7)
- 5.6 Four batteries, after 25 cycles ending in fully charged states. (For T.7)
- 5.7 Ten component cells, at first cycle in fully discharge states. (For T.8)
- 5.8 Ten component cells, after 25 cycles ending in fully discharged states. (For T.8)

Form No. : W11-002-B05

本資料為新普科技股份有限公司之智慧財產權，非經本公司書面授權許可，不得透露或使用本資料，亦不得複印、複製或轉變成其它任何形式使用。
The information contained herein is the exclusive property of SIMPLO TECHNOLOGY CO., LTD, and shall not be distributed, reproduced, or disclosed in whole or in part without prior written permission.

本測試報告僅對上述測試項目有效，本報告分離使用無效

Page 3 of 8

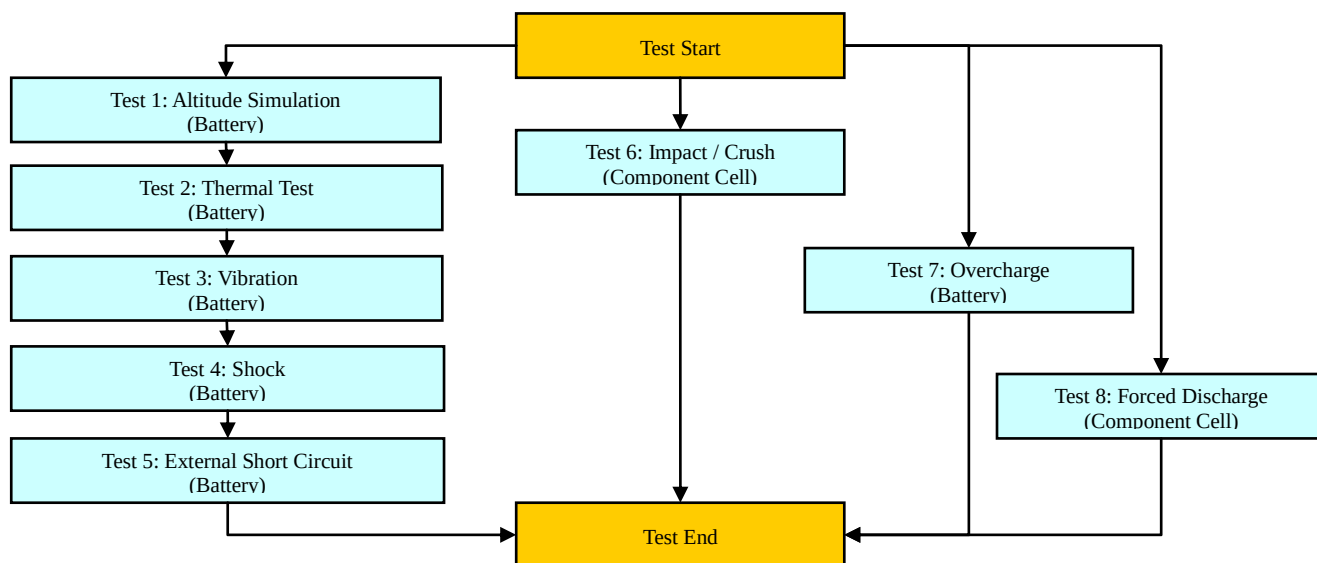
This test report is valid only to the items, Invalid for separation using.



6. Test Procedure :

6.1 All detailed test procedures must be based on United Nations Recommendations on the TRANSPORT OF DANGEROUS GOODS, Manual of Tests and Criteria, Sixth revised edition, Amend 1, Section 38.3.

6.2 Test flow shall be followed as below.



Conclusion: The samples had passed the test items of UN38.3.

7. Comment : NA



新普科技股份有限公司
新世電子(常熟)有限公司
新普科技(重慶)有限公司
華普電子(常熟)有限公司

Control Number: SLEU-1910006

8. Test Equipment :



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: 2019-10-16

Test Instruments Reference List								
Used	Instrument ID	Instrument Name	Type	Range of use	Manufacturer	Calibration Date_Last	Calibration Date_Next	Remarks
	Pretest							
V	ML-761	Learning	715C	0~18V 0~8A	SMP	2019/2/25	2020/2/25	
V	ML-762	Learning	715C	0~18V 0~8A	SMP	2019/1/3	2020/1/3	
V	ML-763	Learning	715C	0~18V 0~8A	SMP	2019/2/26	2020/2/26	
V	ML-764	Learning	715C	0~18V 0~8A	SMP	2019/1/3	2020/1/3	
	ML-925	Learning	750C8	0~60V 0~30A	SMP	2019/1/3	2020/1/3	
	T.1 Altitude Simulation							
V	ML-522	Altitude	SVT-120	kPa:30~90	HSIN JIANG	2019/7/17	2020/7/17	
V	ML-257	Multimeter	34401A	Note 1	Agilent	2019/9/2	2020/9/2	
V	ML-494	Electronic Balance	XS1220M-SCS	1-1220 gf	PRECISA	2019/7/17	2020/7/17	
	ML-523	Electronic Balance	MTW-30K	30*0.005kg		2019/8/16	2020/8/16	
V	ML-550	Data Logger	313	15~35 °C; 30~80 %RH	CENTER	2019/8/15	2020/8/15	
V	ML-964	Barometric Air Pressure	MP55	750 to 1100 mbar	KIMO	2019/6/8	2020/6/8	
	T.2 Thermal Test							
V	ML-789	Thermal Shock	GTST-080-65-AW	T:-40 to 100°C	GF	2019/7/2	2020/7/2	
V	ML-257	Multimeter	34401A	note 1	Agilent	2019/9/2	2020/9/2	
V	ML-494	Electronic Balance	XS1220M-SCS	1-1220 gf	PRECISA	2019/7/17	2020/7/17	
	ML-523	Electronic Balance	MTW-30K	30*0.005kg		2019/8/16	2020/8/16	
V	ML-551	Data Logger	313	15~35 °C; 30~80 %RH	CENTER	2019/8/15	2020/8/15	
	T.3 Vibration							
V	ML-233	Vibration	KD-9636-EM-300F2K-30N80	F:5~2000Hz G:0.2~20G	King Design	2019/8/7	2020/8/7	
V	ML-257	Multimeter	34401A	note 1	Agilent	2019/9/2	2020/9/2	
V	ML-494	Electronic Balance	XS1220M-SCS	1-1220 gf	PRECISA	2019/7/17	2020/7/17	
	ML-523	Electronic Balance	MTW-30K	30*0.005kg		2019/8/16	2020/8/16	
V	ML-552	Data Logger	313	15~35 °C; 30~80 %RH	CENTER	2019/8/15	2020/8/15	
	T.4 Shock							
V	ML-056	Shock	DP-1200-25	G:10~600G	King Design	2019/8/7	2020/8/7	
V	ML-257	Multimeter	34401A	note 1	Agilent	2019/9/2	2020/9/2	
V	ML-494	Electronic Balance	XS1220M-SCS	1-1220 gf	PRECISA	2019/7/17	2020/7/17	
	ML-523	Electronic Balance	MTW-30K	30*0.005kg		2019/8/16	2020/8/16	
V	ML-551	Data Logger	313	15~35 °C; 30~80 %RH	CENTER	2019/8/15	2020/8/15	
	T.5 External Short Circuit							
V	ML-894	Battery Hitester	BT3562	1mΩ ~ 30kΩ	HIOKI	2019/6/11	2020/6/11	
V	ML-459	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200°C	Yokogawa	2019/8/16	2020/8/16	
V	ML-460	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200°C	Yokogawa	2019/8/16	2020/8/16	
V	ML-521	Oven	9031	30~80 °C	YEOW LONG	2019/8/16	2020/8/16	
V	ML-952	Data Logger	313	15~35 °C; 30~80 %RH	CENTER	2019/7/24	2020/7/24	
	T.6 Impact / Crush							
V	ML-458	Data Acquisition	XL122-D	1-100 Vdc, -50 to 150°C	Yokogawa	2019/6/12	2020/6/12	
	ML-076	Impact Tester			JYI SHENG	2019/1/3	2020/1/3	
	ML-553	Crush Tester	BCT-01		Simplo	2019/5/10	2020/5/10	
V	ML-866	Crush Tester	M0654		JYI SHENG	2019/4/8	2020/4/8	
	ML-459	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200°C	Yokogawa	2019/8/16	2020/8/16	

Form No. : W11-002-B05

本資料為新普科技股份有限公司之智慧財產權，非經本公司書面授權許可，不得透露或使用本資料，亦不得複印、複製或轉變成其它任何形式使用。
The information contained herein is the exclusive property of SIMPLO TECHNOLOGY CO., LTD, and shall not be distributed, reproduced, or disclosed in whole or in part without prior written permission.

本測試報告僅對上述測試項目有效，本報告分離使用無效

This test report is valid only to the items, Invalid for separation using.



新普科技股份有限公司
新世電子(常熟)有限公司
新普科技(重慶)有限公司
華普電子(常熟)有限公司

Control Number: SLEU-1910006

SMP 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: 2019-10-16

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	2019/5/9	2020/5/9	
	ML-483	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2019/5/9	2020/5/9	
	ML-484	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2019/5/9	2020/5/9	
	ML-486	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2019/5/9	2020/5/9	
	ML-487	Programmable DC Source	DS6024	1-60 Vdc, 0.3-24A	MOTECH	2019/5/9	2020/5/9	
V	ML-952	Data Logger	313	15~35 ℃; 30~80 %RH	CENTER	2019/7/24	2020/7/24	
	ML-459	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200℃	Yokogawa	2019/8/16	2020/8/16	
	ML-460	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200℃	Yokogawa	2019/8/16	2020/8/16	
V	ML-918	Overcharge & Forced discharge tester	T901	3~30 Vdc, Charge: 0.05~20A Discharge: 0.02~10A	SMP	2019/5/10	2020/5/10	
	T.8 Forced Discharge							
	ML-132	Electronic Load	3311C	60V,60A, 300W	Prodigit	2019/2/26	2020/2/26	
	ML-133	Electronic Load	3311C	60V,60A, 300W	Prodigit	2019/2/26	2020/2/26	
	ML-136	Electronic Load	3311C	60V,60A, 300W	Prodigit	2019/2/26	2020/2/26	
	ML-192	Electronic Load	3311C	60V,60A, 300W	Prodigit	2019/2/26	2020/2/26	
	ML-269	Electronic Load	3311C	60V,60A, 300W	Prodigit	2019/2/26	2020/2/26	
	ML-532	DC Electronic Load	33511-01	120V, 240A, 3600W	Prodigit	2019/7/17	2020/7/17	
	ML-482	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2019/5/9	2020/5/9	
	ML-483	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2019/5/9	2020/5/9	
	ML-484	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2019/5/9	2020/5/9	
	ML-486	Programmable DC Source	DS10014	1-100Vdc, 0.3-14.4A	MOTECH	2019/5/9	2020/5/9	
	ML-487	Programmable DC Source	DS6024	1-60 Vdc, 0.3-24A	MOTECH	2019/5/9	2020/5/9	
V	ML-952	Data Logger	313	15~35 ℃; 30~80 %RH	CENTER	2019/7/24	2020/7/24	
	ML-459	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200℃	Yokogawa	2019/8/16	2020/8/16	
	ML-460	Data Acquisition	MX100-E-1D	1-100 Vdc, -50 to 200℃	Yokogawa	2019/8/16	2020/8/16	
V	ML-918	Overcharge & Forced discharge tester	T901	3~30 Vdc, Charge: 0.05~20A Discharge: 0.02~10A	SMP	2019/5/10	2020/5/10	
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.								

Form No. : W11-002-B05

本資料為新普科技股份有限公司之智慧財產權，非經本公司書面授權許可，不得透露或使用本資料，亦不得複印、複製或轉變成其它任何形式使用。
The information contained herein is the exclusive property of SIMPLO TECHNOLOGY CO., LTD, and shall not be distributed, reproduced, or disclosed in whole or in part without prior written permission.

本測試報告僅對上述測試項目有效,本報告分離使用無效

Page 6 of 8

This test report is valid only to the items, Invalid for separation using.



新普科技股份有限公司
新世電子(常熟)有限公司
新普科技(重慶)有限公司
華普電子(常熟)有限公司

Control Number: SLEU-1910006

9. T.1~T.8 Detail Reports:

UN 38.3 Test Datasheet UN38.3/ST/SG/AC.10/11/Rev.6/Amend.1

Control Number: SLEU-1910006	Customer: Lenovo	Model Name: L19M4PC0	SMP Project Name: Y550-15, 60Wh
Pack P/N: 928QA305H (A)(B)	Configuration: 4S1P	Test Duration: 2019/09/30~2019/10/16	Reviewer: Esmond

Test Sample Identification: ☐ Large Battery ☒ Small Battery ☐ Single-cell Battery

Battery Pack						Component Cell		
Used	Sample No.	Sample State	Used	Sample No.	Sample State	Used	Sample No.	Sample State
V	01~04	1 Cycle, Fully charged	V	05~08	25 Cycles, Fully charged	V	01C~05C	1 Cycle, 50% SOC
V	09~12	1 Cycle, Fully charged	V	13~16	25 Cycles, Fully charged	V	06C~10C	25 Cycles, 50% SOC
						V	11C~20C	1 Cycle, Fully discharged (0% SOC)
						V	21C~30C	25 Cycles, Fully discharged (0% SOC)

T.1 Altitude Simulation

Start time: 2019/10/07 08:57		Ambient temp.: 24.0 °C					Operator: Gibson		
Finish time: 2019/10/07 16:00		Sample 01	Sample 02	Sample 03	Sample 04	Sample 05	Sample 06	Sample 07	Sample 08
OCV (V)	Before	16.938	16.955	16.942	16.950	16.958	16.946	16.935	16.953
	After	16.918	16.930	16.919	16.930	16.936	16.919	16.911	16.928
	Residual OCV %	99.88%	99.85%	99.86%	99.88%	99.87%	99.84%	99.86%	99.85%
Mass (g)	Before	256.406	255.932	255.967	256.126	256.091	255.985	255.937	256.361
	After	256.399	255.927	255.956	256.117	256.083	255.975	255.929	256.355
	Mass loss %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Results		P	P	P	P	P	P	P	P

T.2 Thermal Test

Start time: 2019/10/07 16:20		Ambient temp.: 24.2 °C					Operator: Gibson		
Finish time: 2019/10/14 09:18		Sample 01	Sample 02	Sample 03	Sample 04	Sample 05	Sample 06	Sample 07	Sample 08
OCV (V)	Before	16.918	16.930	16.919	16.930	16.936	16.919	16.911	16.928
	After	16.733	16.750	16.726	16.740	16.742	16.731	16.725	16.737
	Residual OCV %	98.91%	98.94%	98.86%	98.88%	98.85%	98.89%	98.90%	98.87%
Mass (g)	Before	256.399	255.927	255.956	256.117	256.083	255.975	255.929	256.355
	After	256.384	255.909	255.933	256.098	256.063	255.958	255.913	256.335
	Mass loss %	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Results		P	P	P	P	P	P	P	P

T.3 Vibration

Start time: 2019/10/14 09:40		Ambient temp.: 24.6 °C					Operator: Gibson		
Finish time: 2019/10/15 09:00		Sample 01	Sample 02	Sample 03	Sample 04	Sample 05	Sample 06	Sample 07	Sample 08
OCV (V)	Before	16.733	16.750	16.726	16.740	16.742	16.731	16.725	16.737
	After	16.721	16.736	16.716	16.726	16.730	16.716	16.713	16.723
	Residual OCV %	99.93%	99.92%	99.94%	99.92%	99.93%	99.91%	99.93%	99.92%
Mass (g)	Before	256.384	255.909	255.933	256.098	256.063	255.958	255.913	256.335
	After	256.376	255.904	255.927	256.090	256.056	255.952	255.908	256.327
	Mass loss %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Results		P	P	P	P	P	P	P	P

T.4 Shock

Start time: 2019/10/15 09:20		Ambient temp.: 24.5 °C					Operator: Gibson		
Finish time: 2019/10/15 13:13		Sample 01	Sample 02	Sample 03	Sample 04	Sample 05	Sample 06	Sample 07	Sample 08
OCV (V)	Before	16.721	16.736	16.716	16.726	16.730	16.716	16.713	16.723
	After	16.717	16.728	16.710	16.719	16.726	16.711	16.705	16.718
	Residual OCV %	99.98%	99.95%	99.96%	99.96%	99.98%	99.97%	99.95%	99.97%
Mass (g)	Before	256.376	255.904	255.927	256.090	256.056	255.952	255.908	256.327
	After	256.369	255.899	255.921	256.083	256.050	255.947	255.903	256.321
	Mass loss %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Results		P	P	P	P	P	P	P	P

Form No. : W11-002-B05

本資料為新普科技股份有限公司之智慧財產權，非經本公司書面授權許可，不得透露或使用本資料，亦不得複印、複製或轉變成其它任何形式使用。
The information contained herein is the exclusive property of SIMPLO TECHNOLOGY CO., LTD, and shall not be distributed, reproduced, or disclosed in whole or in part without prior written permission.

本測試報告僅對上述測試項目有效，本報告分離使用無效

This test report is valid only to the items, Invalid for separation using.



新普科技股份有限公司
新世電子(常熟)有限公司
新普科技(重慶)有限公司
華普電子(常熟)有限公司

Control Number: SLEU-1910006

T.5 External Short Circuit

Start time: 2019/10/15 13:38	Ambient temp.: 24.7 °C				Operator: Gibson			
Finish time: 2019/10/16 09:04	Sample 01	Sample 02	Sample 03	Sample 04	Sample 05	Sample 06	Sample 07	Sample 08
OCV (V)	Before	16.717	16.728	16.710	16.719	16.726	16.711	16.705
	After	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Resistance (<100mΩ)		59.7	56.4	55.8	56.0	58.3	60.4	59.1
Max Temp. (< 170°C)		57.6	57.3	57.8	57.5	57.2	57.9	57.7
Results		P	P	P	P	P	P	P

T.6 Impact / Crush (Component Cell)

UN38.3/ST/SG/AC.10/11/Rev.6/Amend.1

□ Impact - Cylindrical cells not less than 18.0 mm in diameter

■ Crush - Prismatic, pouch, coin/button cells and cylindrical cells less than 18.0 mm in diameter

Start time: 2019/10/08 13:06	Ambient temp.: 24.6 °C				Operator: Gibson			
Finish time: 2019/10/08 17:32	Sample 01C	Sample 02C	Sample 03C	Sample 04C	Sample 05C			
Initial OCV (V)	3.816	3.822	3.826	3.813	3.825			
Max Temp. (< 170°C)	23.6	23.2	24.0	24.7	23.9			
Results	P	P	P	P	P			
Sample No.	Sample 06C	Sample 07C	Sample 08C	Sample 09C	Sample 10C			
Initial OCV (V)	3.819	3.814	3.823	3.829	3.818			
Max Temp. (< 170°C)	24.2	23.9	24.3	23.5	24.1			
Results	P	P	P	P	P			

T.7 Overcharge

Start time: 2019/10/07 10:15	Ambient temp.: 24.3 °C				Operator: Gibson			
Finish time: 2019/10/15 11:50	Sample 09	Sample 10	Sample 11	Sample 12	Sample 13	Sample 14	Sample 15	Sample 16
Initial OCV (V)	16.937	16.958	16.940	16.956	16.958	16.949	16.930	16.954
Results	P	P	P	P	P	P	P	P

T.8 Forced Discharge (Component Cell)

Start time: 2019/10/08 09:11	Ambient temp.: 24.4 °C				Operator: Gibson			
Finish time: 2019/10/16 10:40	Sample 11C	Sample 12C	Sample 13C	Sample 14C	Sample 15C	Sample 16C	Sample 17C	Sample 18C
Initial OCV (V)	3.470	3.454	3.446	3.457	3.463	3.478	3.461	3.450
Results	P	P	P	P	P	P	P	P
Sample No.	Sample 19C	Sample 20C	Sample 21C	Sample 22C	Sample 23C	Sample 24C	Sample 25C	Sample 26C
Initial OCV (V)	3.467	3.442	3.458	3.462	3.441	3.459	3.440	3.453
Results	P	P	P	P	P	P	P	P
Sample No.	Sample 27C	Sample 28C	Sample 29C	Sample 30C				
Initial OCV (V)	3.474	3.466	3.449	3.460				
Results	P	P	P	P				

9. Test Sample:



Form No. : W11-002-B05

本資料為新普科技股份有限公司之智慧財產權，非經本公司書面授權許可，不得透露或使用本資料，亦不得複印、複製或轉變成其它任何形式使用。
The information contained herein is the exclusive property of SIMPLO TECHNOLOGY CO., LTD, and shall not be distributed, reproduced, or disclosed in whole or in part without prior written permission.

本測試報告僅對上述測試項目有效，本報告分離使用無效

This test report is valid only to the items, Invalid for separation using.