

R&D Update

M65A performance (preliminary)



Aaron. Weng

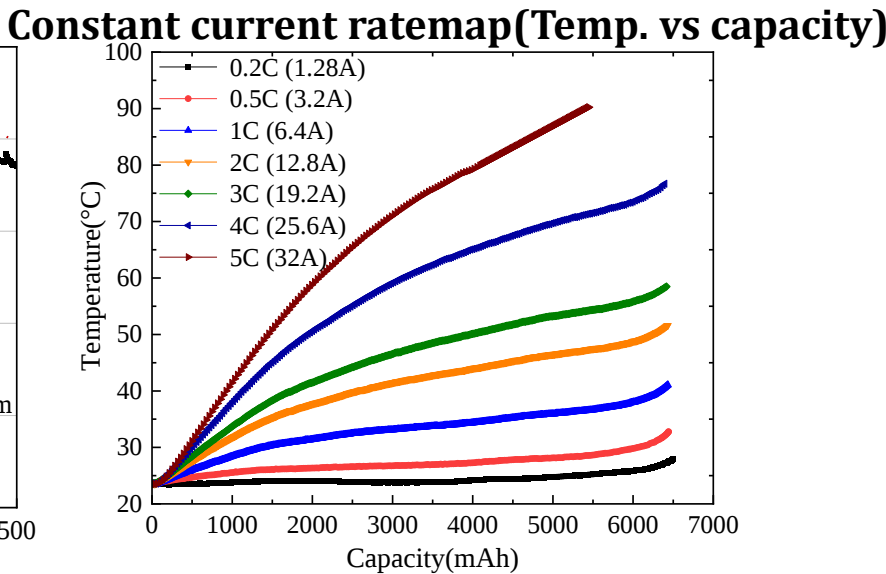
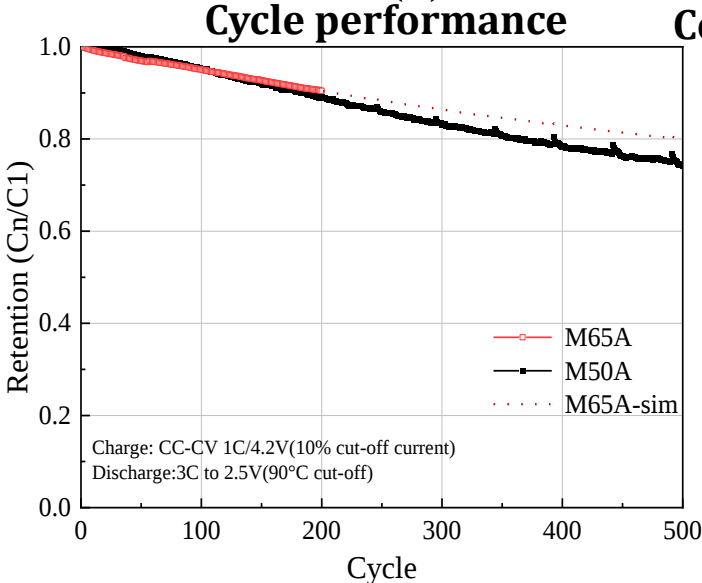
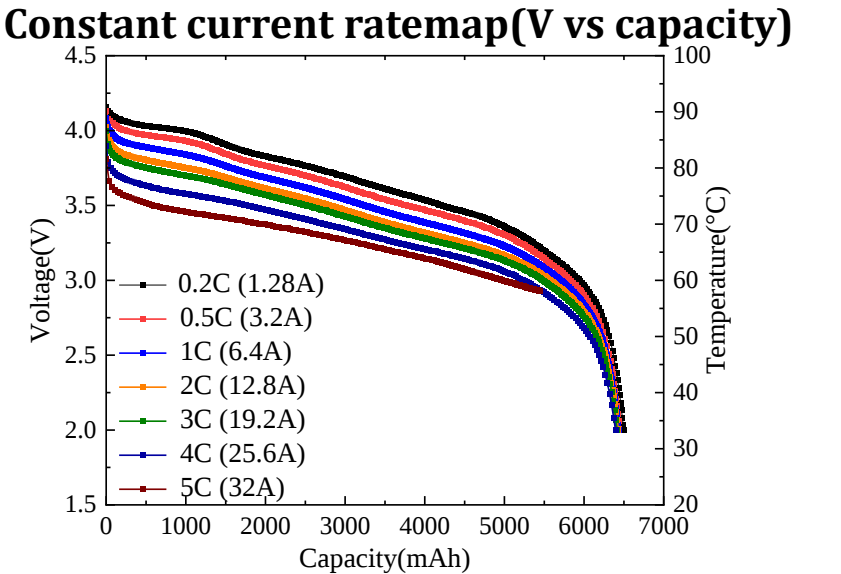
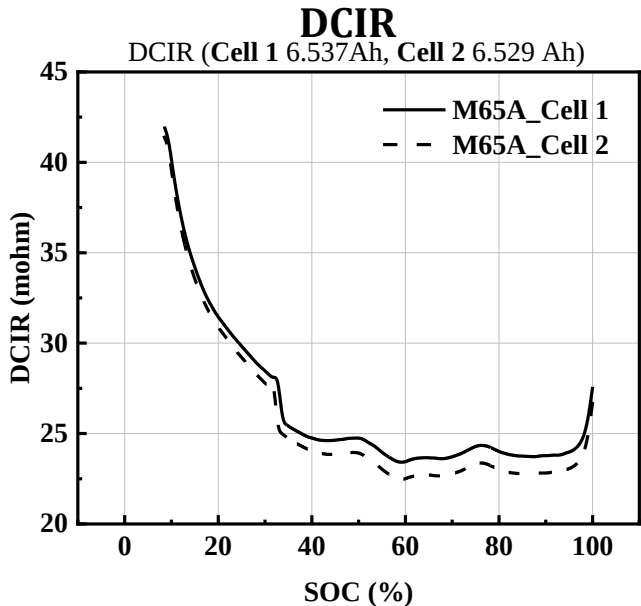
Manager | Product Development and Engineering

E-ONE MOLI ENERGY CORP.

Product Data sheet_21700 M65A



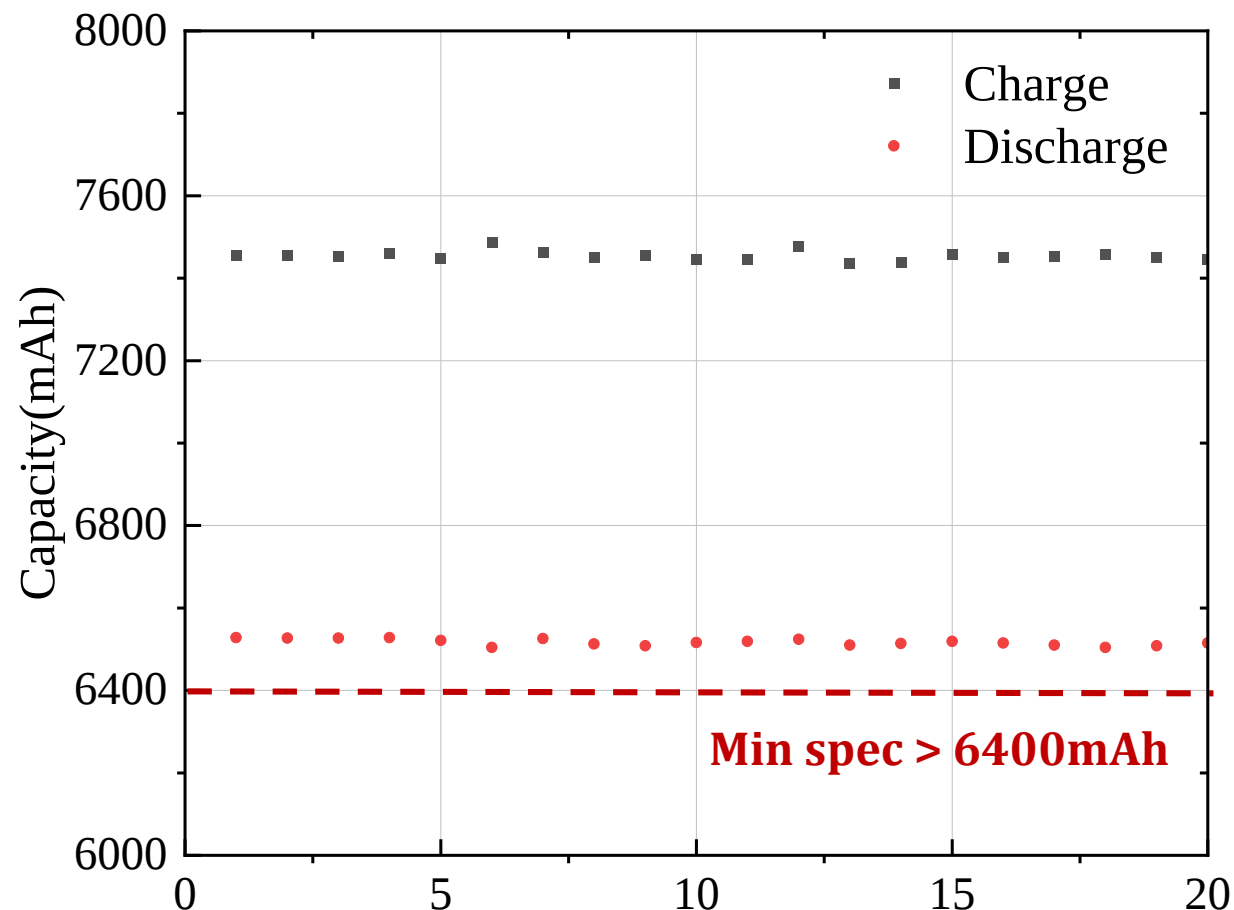
Cell ID	21700-M65A
Capacity (0.2C)	6500 mAh $\pm$ 70 mAh
Cell Voltage	2.5V-4.2V
Charge current	6.5A (Standard) 6.5A (Max)
Discharge current	25.6A (90°C cut-off)
Operation temperature	Charge 0°C to 60°C (Surface:80°C) Discharge -40°C to 60°C (Surface:90°C)
Energy Density	Volumetric 928 Wh/L Gravimetric 310-325 Wh/kg
Typical Impedence	AC(30%SOC) 11.5m Ω DC(50%SOC) 26-27m Ω
Weight	72.5 $\pm$ 1.5g



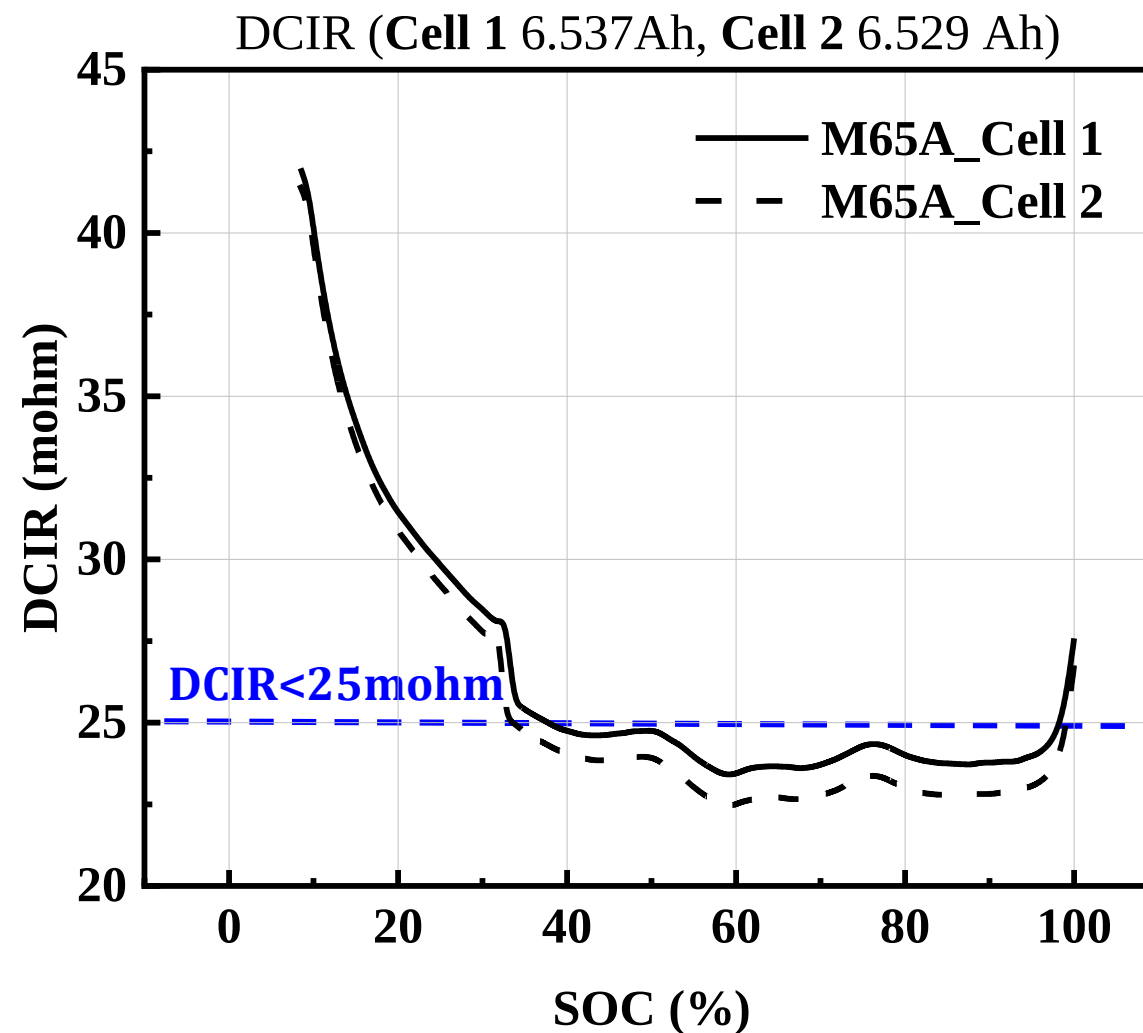
➤Constant current Ratemap: Standard 23°C charge +6.5A to 4.2V 10% cut-off current, then 23°C discharge at 0.2C/ 0.5C/ 1C/ 2C/ 3C/ 4C/ 5C to 2.5V or 90 °C cut-off, consecutively with standard charge in between each discharge.
➤DCIR: Charge at 23°C +6.5A (4.2V, 10% cut-off current). Delay for 1 hour. Repeat 1A for 2min then 10A for 10 sec (no rest) to 2.5V.

M65A Formation and DCIR(R&D line)

M65A formation discharge capacity ~ 6520mAh · DCIR SOC 50% < 25mohm



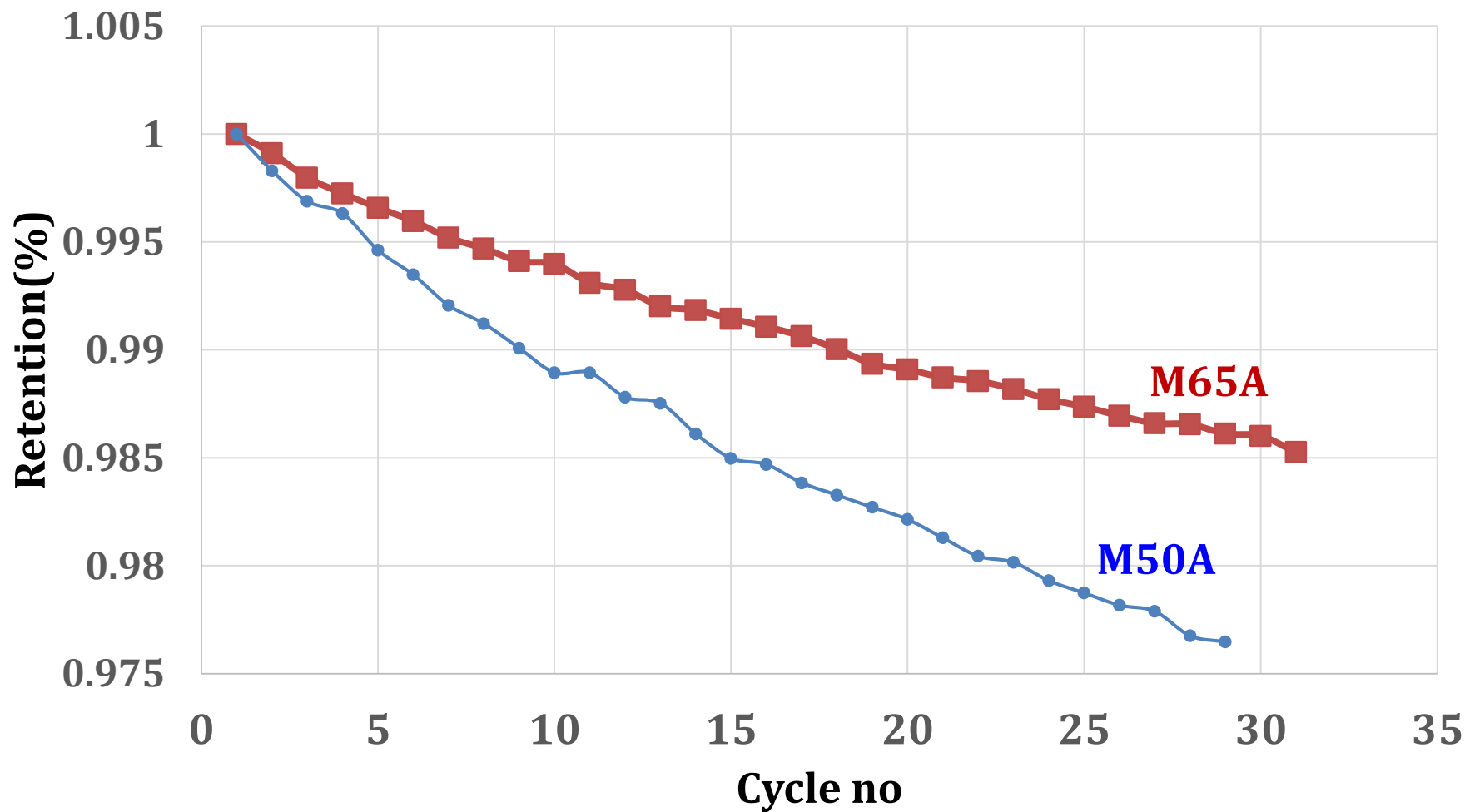
- Charge: 7454mAh
- Discharge: 6517mAh
- ACR: 12.5mohm



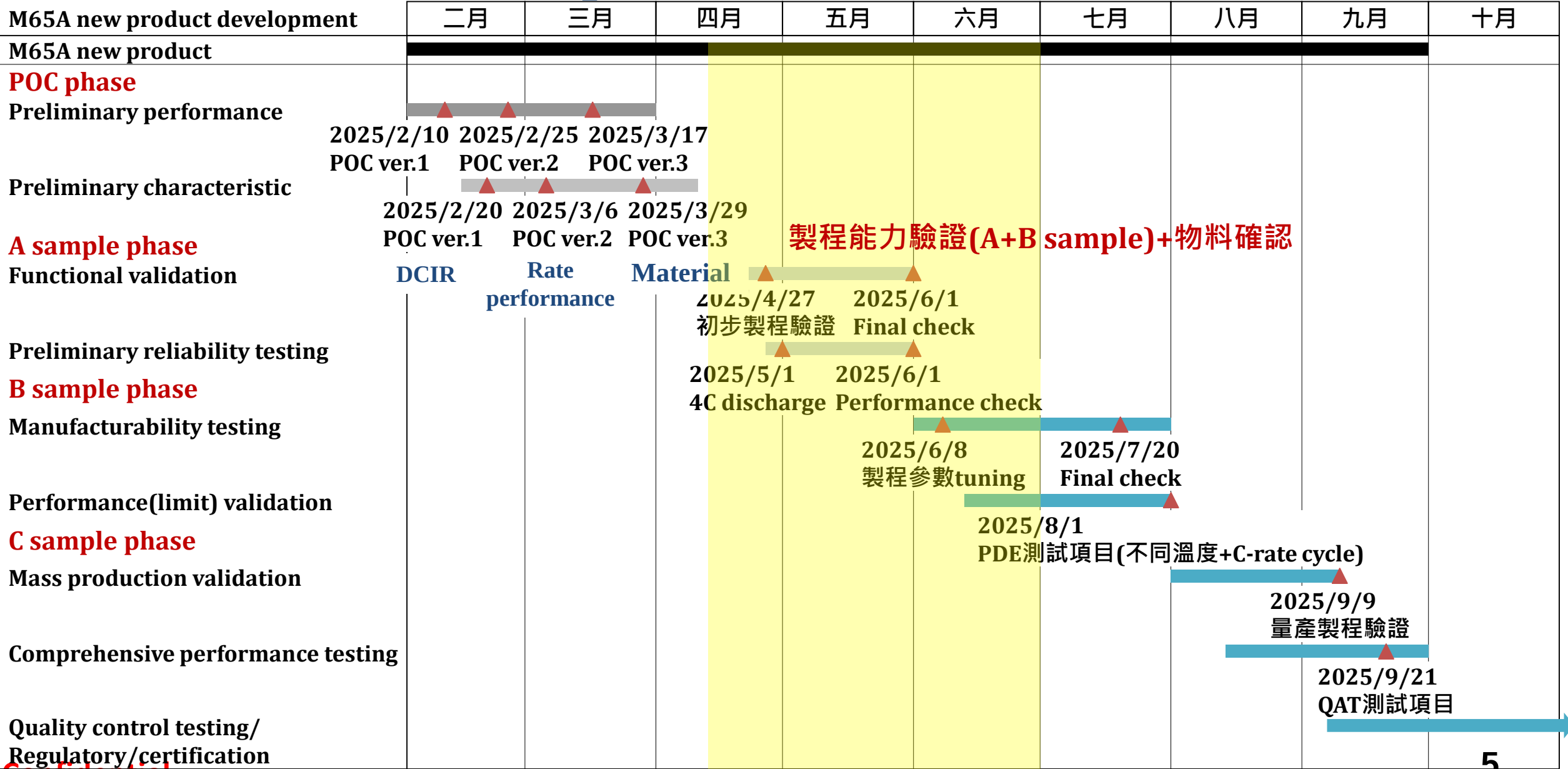
M65A vs M50A cycle life

M65A 1C充放電比表現優於M50A

23'C, 4.2V-2.5V, +1C/-1C



M65A Product development schedule





High Power.
Long cycle life.
Wide range temperature.

