RINCELL Si-Gr 18650 & 21700

HIGHEST ENERGY & PERFORMANCE – APRIL 10, 2026

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RINCELL IS SHIPPING BATTERIES NOW AND SCALING RAPIDLY

- *US & Allied* manufacturing of high-performance Silicon-Graphite & Sodium-ion batteries.
- Ramping commercial production of highest capacity-performance 18650 and 21700 Silicon-Graphite cells. Sampling Sodium-ion prototypes to customers..
- Dual-Use products focused on Defense and Commercial applications. UAV, Drones, Communications, Space, Medical, Datacenter and EV.
- Cell prototyping facility in California; Domestic Cell Production facility in CY2027
- Venture financed. Funding from In-Q-Tel, Department of Defense and California State

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WORLD'S HIGHEST CAPACITY 4.1AH 18650 (RC41)

Item		Specification
Form Factor		18650
Chemistry		**Silicon-Graphite / NMC**
Nominal Capacity		**4.1 Ah (+17% vs Best in Class)**
Cell Energy Density		> 300 Wh / kg
Cycle Life		> 800
Nominal Voltage		3.45 V
Operating Voltage Range		4.2 – 2.5 V
Max Charge and Discharge		3C **(0 – 80% Charge in 20 min)**
Operating Temperature	Charge	**-20ºC** – 60ºC
	Discharge	**-40ºC** – 60ºC **(Extreme Low Temp)**

UN38.3 UL IEC 62133 Bureau of Indian Standards

Shipping Commercial Production

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WORLD'S HIGHEST CAPACITY 5.8AH 21700 (RC58)

Item		Specification
Form Factor		21700
Chemistry		**Silicon-Graphite / NMC**
Nominal Capacity		**5.8 Ah (+16% vs Best in Class)**
Cell Energy Density		> 300 Wh / kg
Cycle Life		> 800
Nominal Voltage		3.45 V
Operating Voltage Range		4.2 – 2.5 V
Max Charge and Discharge		3C **(0 – 80% Charge in 20 min)**
Operating Temperature	Charge	**-20ºC** – 60ºC
	Discharge	**-40ºC** – 60ºC **(Extreme Low Temp)**

UN38.3 PASSED
Transport Safety Certified

Shipping Customer Samples since 2024. Production Ramp ongoing

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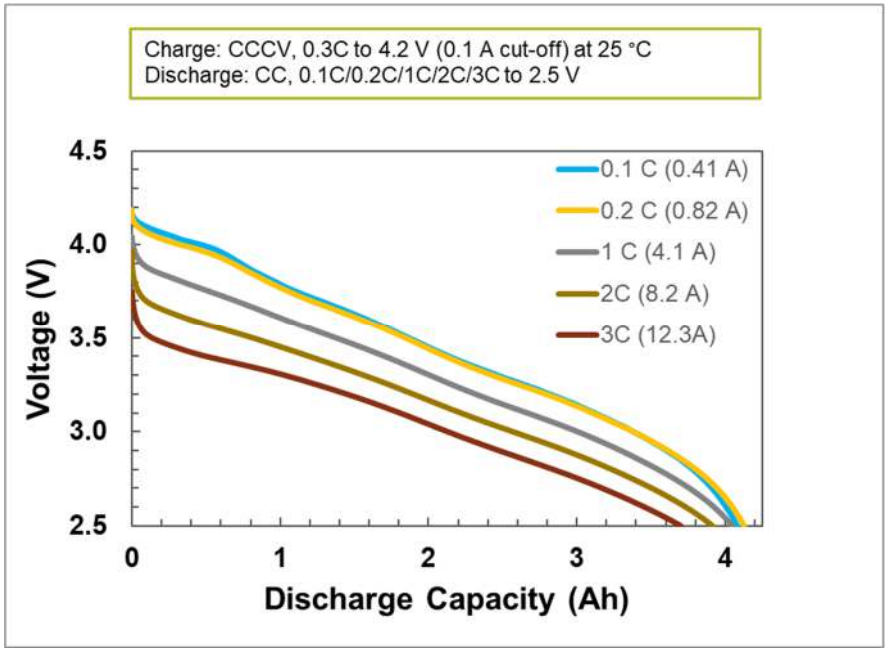
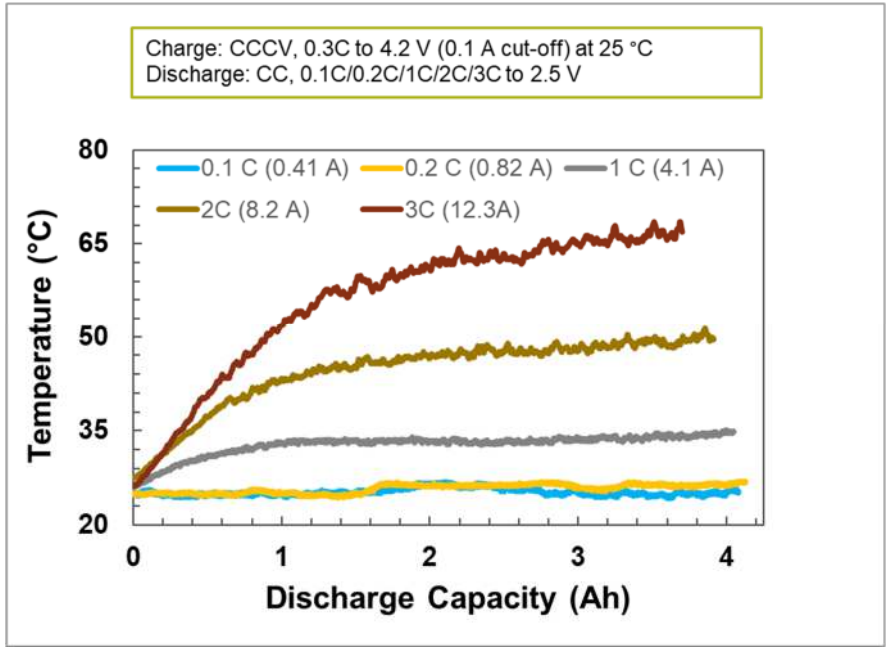
EXCELLENT HIGH-POWER DISCHARGE PERFORMANCE (RC41)





High Energy Cell with Superior Power Performance.
~ 90% capacity retention & lower heat generation at 3C rate.

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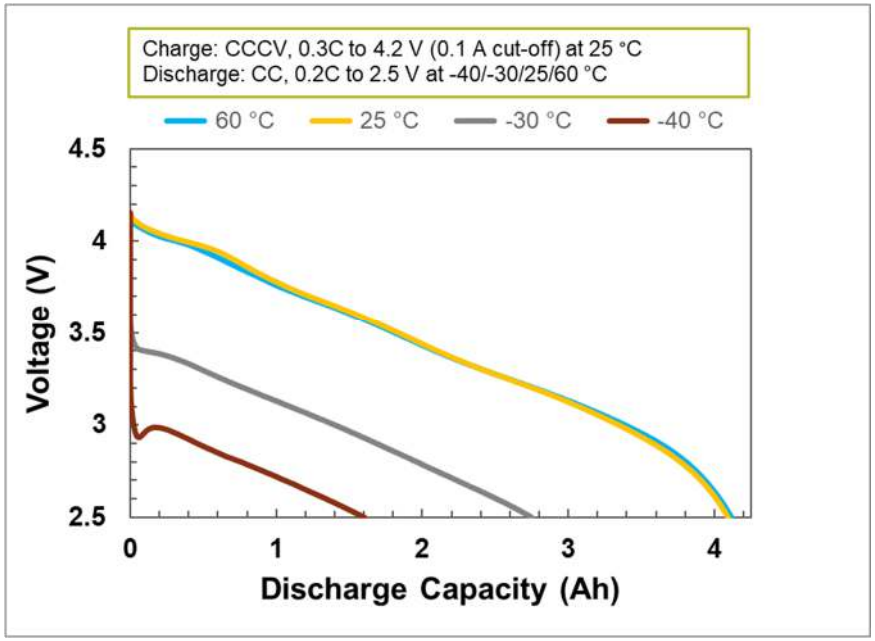
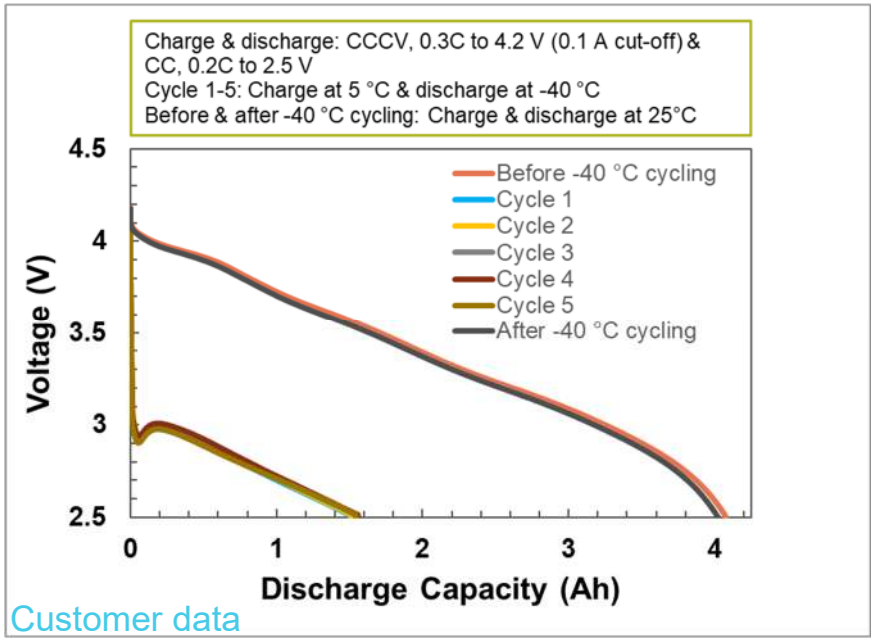
BEST IN CLASS LOW TEMP PERFORMANCE (RC41)





Customer data

> 40% Capacity at – 40 °C & Minimum Capacity Degradation over Multiple – 40 °C Cycling. Excellent Performance over a Wide Temperature Range.

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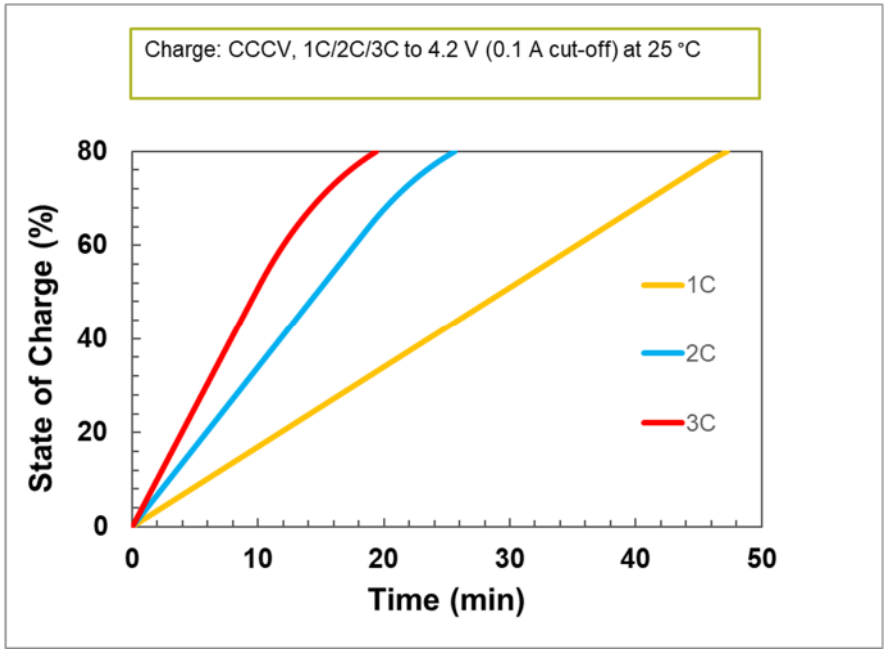
EXCELLENT FAST CHARGING CAPABILITY (RC41)



0 – 80% Charge in < 20 min.

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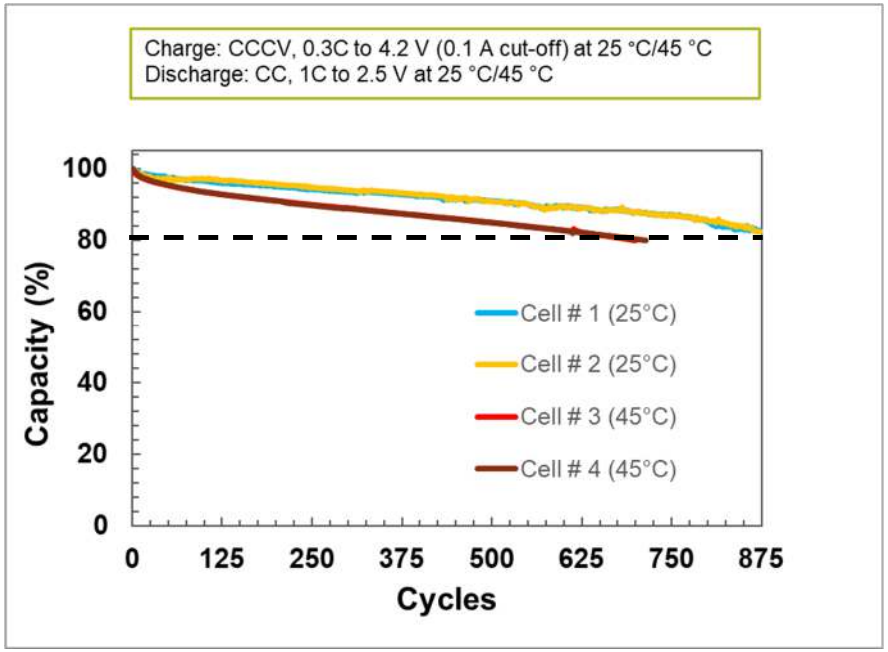
CYCLE LIFE AT 100% DOD – RT & 45 °C (RC41)



Meets Defense MIL-PRF-32383 Spec. Unparalleled High Temperature Stability.

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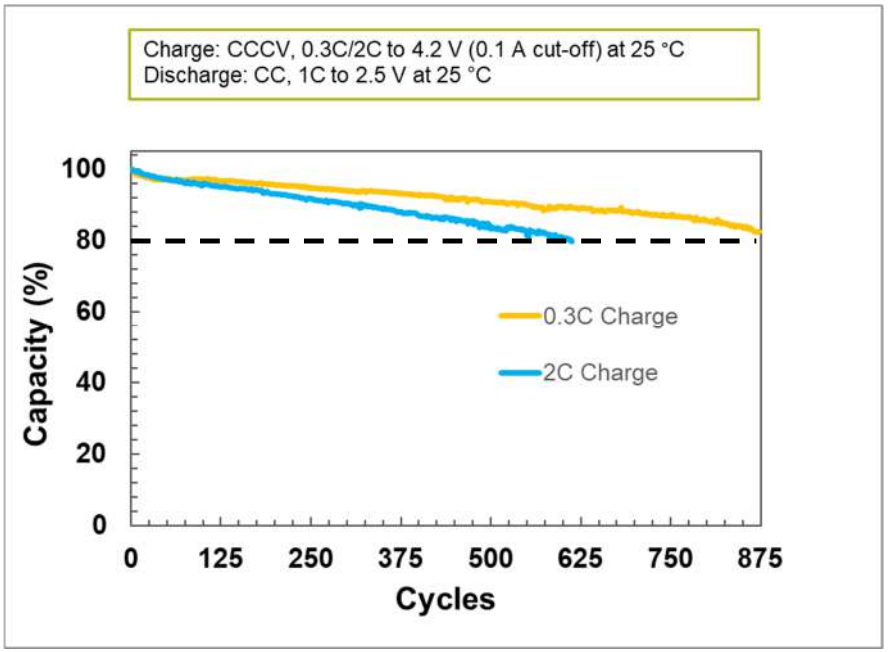
CYCLE LIFE AT 2C CHARGE AND 100% DOD (RC41)



Unprecedented 2C Consecutive Fast Charging performance for High-Energy Cylindrical cells.

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SAFETY-ENHANCED CELL DESIGN

- Steel Can Selection – Ensures structural integrity
- Separator Selection – Provide high mechanical stability and low thermal shrinkage
- CID (Current Interrupt Device) – Current cut-off during overpressure
- Pressure Relief Vent – Prevents rupture under stress

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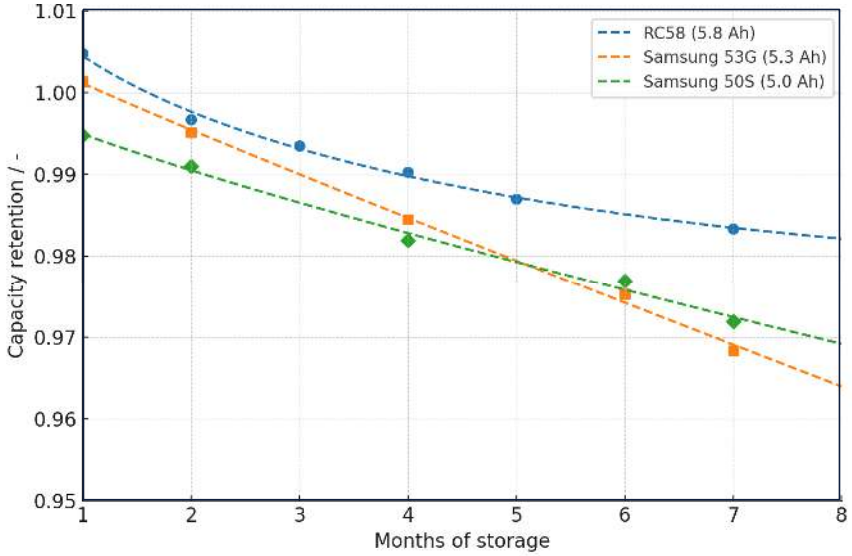
CALENDAR LIFE: VOLTAGE HOLD TEST

Test Condition: Hold voltage at 4.2 V (100% SOC) at RT
Check capacity and impedance every month



Degradation rate on par with COTS cells under float charge conditions - excellent calendar and shelf life.

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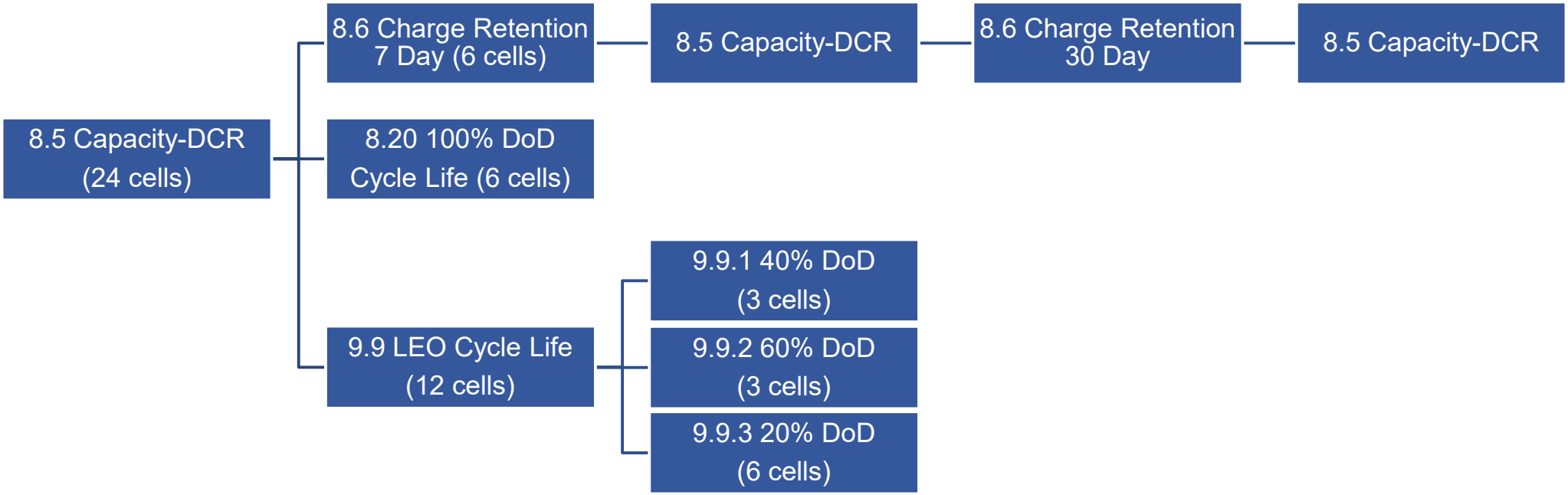
S-144 TEST SEQUENCE



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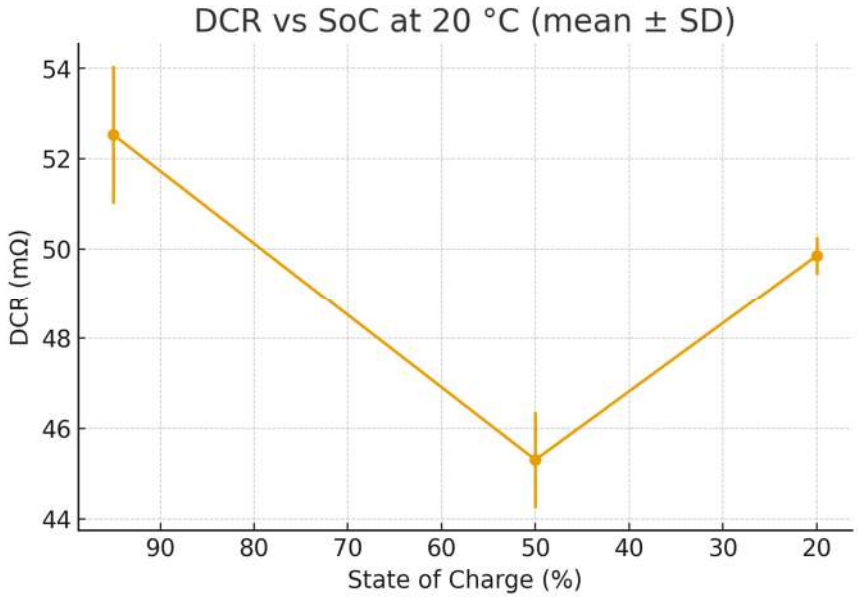
S-144 §8.5 — 20 °C CAPACITY & DCR RESULTS OVERVIEW

Metric	Mean	Std Dev	Units
Capacity (Discharge)	3.952	0.027	Ah
Energy (Discharge)	13.254	0.092	Wh
Coulombic Efficiency	99.67	0.23	%
Energy Efficiency	88.91	0.30	%
DCR @ 95% SoC	52.53	1.53	mΩ
DCR @ 50% SoC	45.30	1.07	mΩ
DCR @ 20% SoC	49.85	0.42	mΩ
EOCV	4.200		V
EODV	2.500		V



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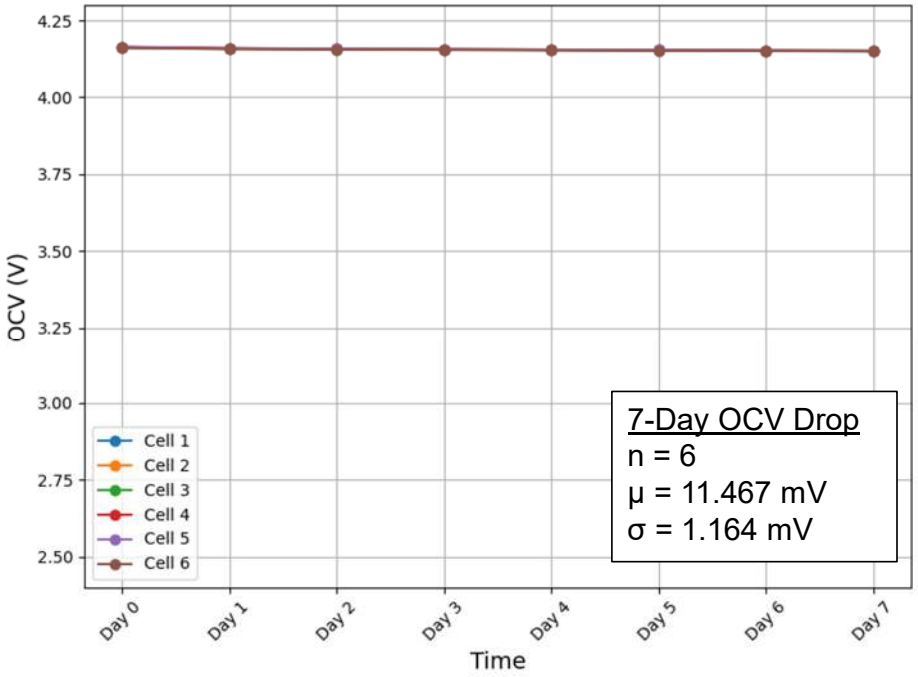
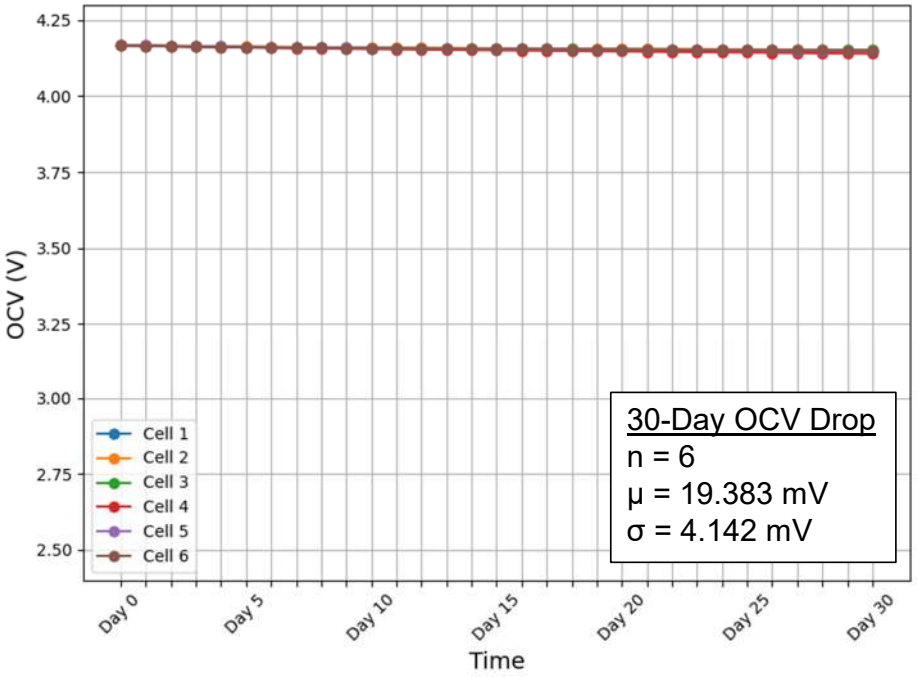
S-144 §8.6 – 20 °C CHARGE RETENTION

7-day storage at 100% SOC and at 20 °C



30-day storage at 100% SOC and at 20 °C



Excellent charge retention and low self-discharge rate (1.64 mV/day over 7 days, 0.65 mV/day over 30 days).

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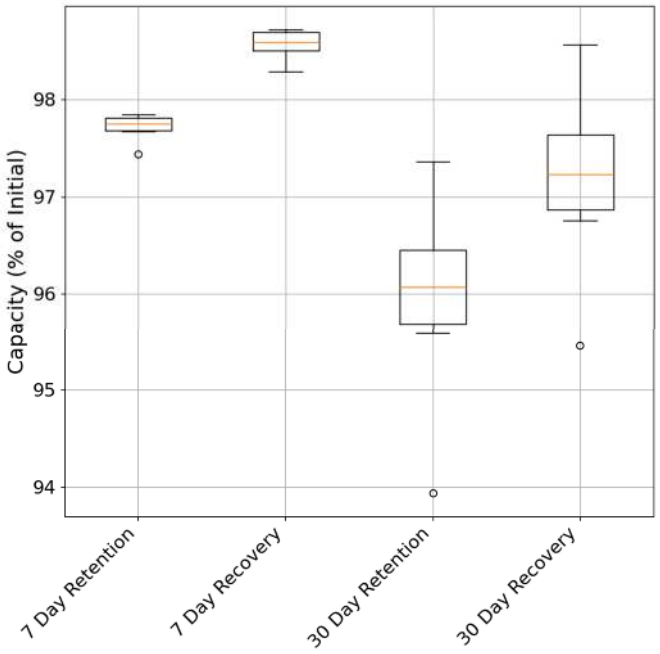
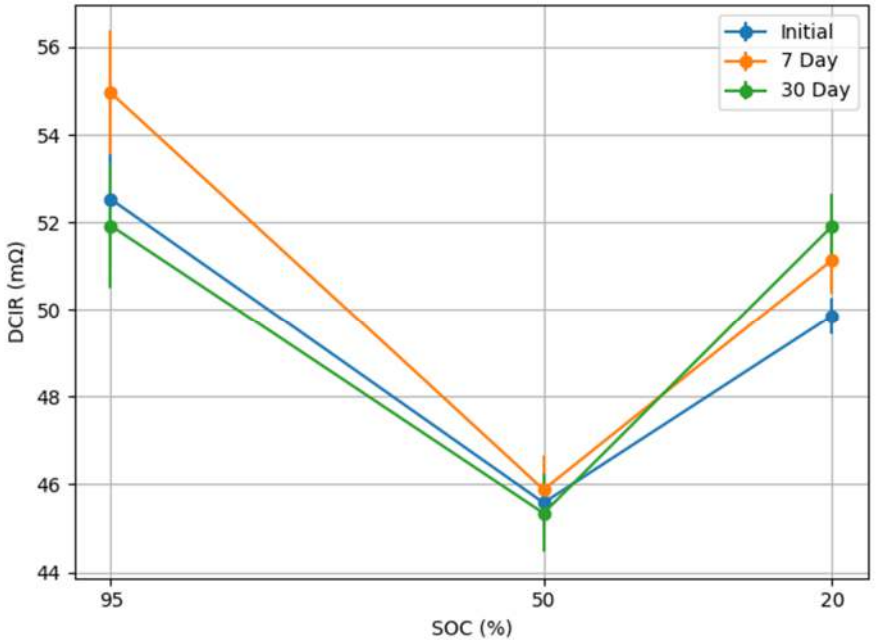
S-144 §8.6 – CHARGE RETENTION – CAPACITY-DCR





Excellent retention and recovery after storage. Minimal DCR growth after storage.

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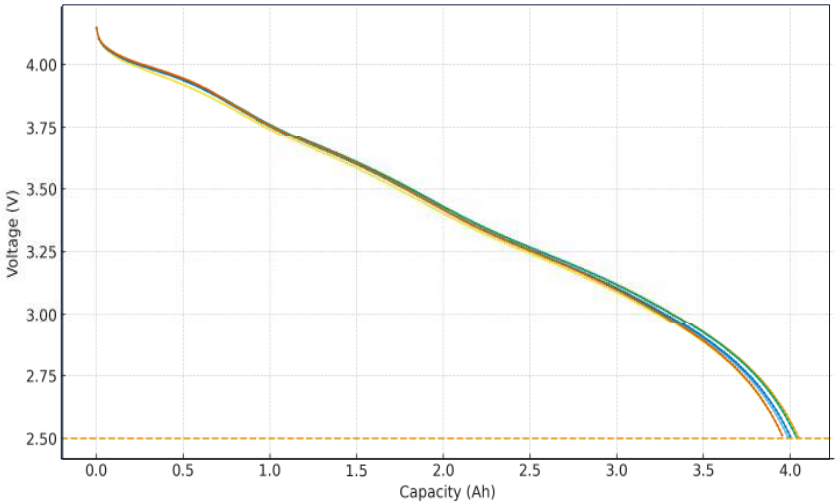
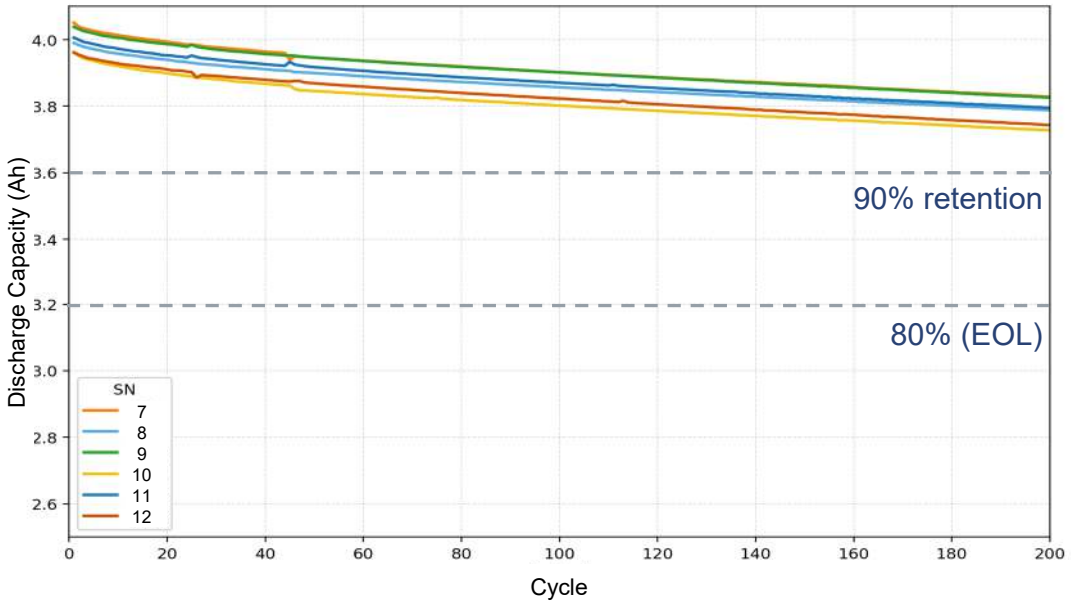
S-144 §8.20 – 100% DOD CYCLE LIFE

Cycle 1 Voltage Profile



Capacity vs. Cycle



>92% retention after 200 cycles at 100% DOD and at 20 °C.

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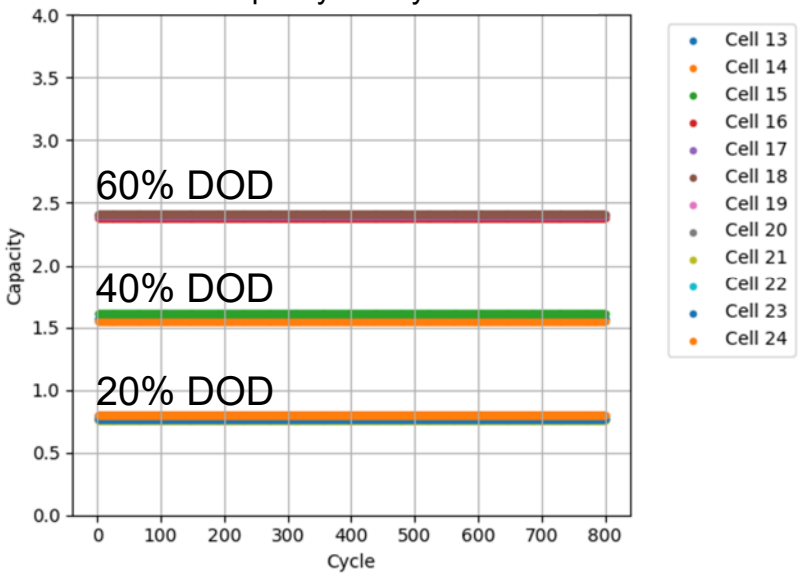
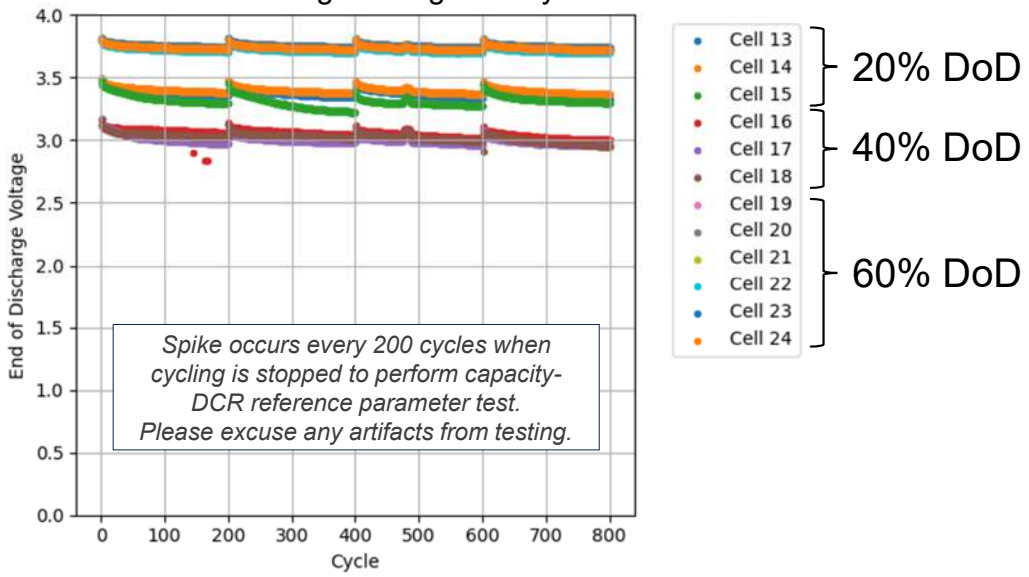
S-144 §9.9 – LEO CYCLE LIFE CHARACTERIZATION (RC41)

- Cells tested per LEO cycle life method at 20%, 40%, and 60% DoD using fixed current and fixed discharge duration (cycling in progress).

Capacity vs. Cycle



End of Discharge Voltage vs. Cycle



Very stable end of discharge voltage over 800 cycles, even at 60% DoD (1C/0.75C) continuous cycling (no rest steps).

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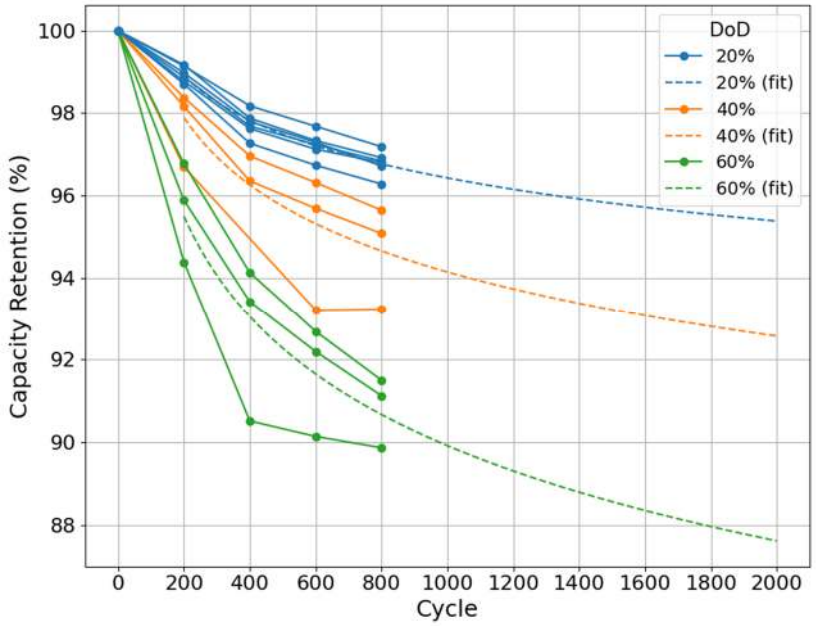
S-144 §9.9 LEO CYCLE – CAPACITY-DCR

Capacity Retention vs. LEO Cycle by DoD

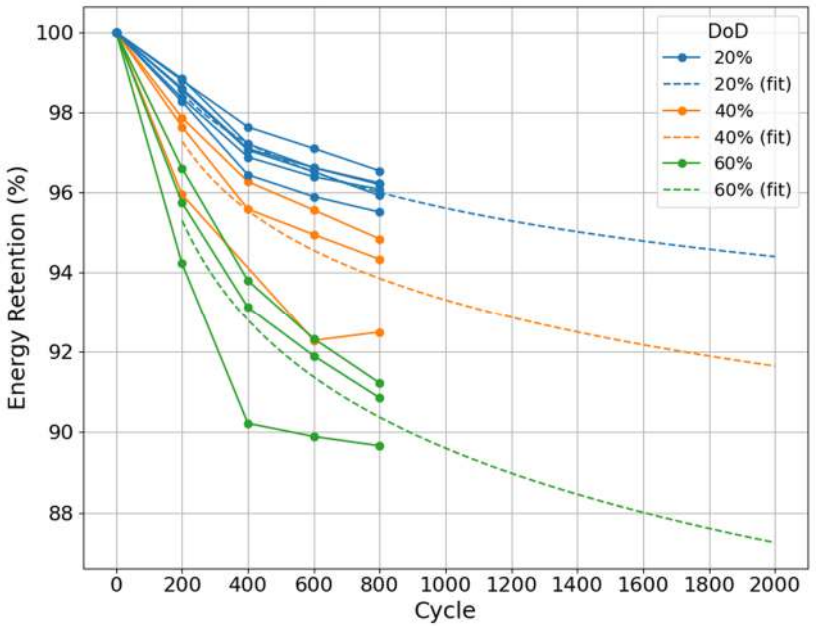


20% DoD EOL
>8,000 cycles

40% DoD EOL
>7,500 cycles

60% DoD EOL
>3,500 cycles

Energy Retention vs. LEO Cycle by DoD



Capacity retention >90% after 800 cycles (projected cycle life is several thousands). Energy retention is nearly identical to capacity retention (DCIR growth is minimal).

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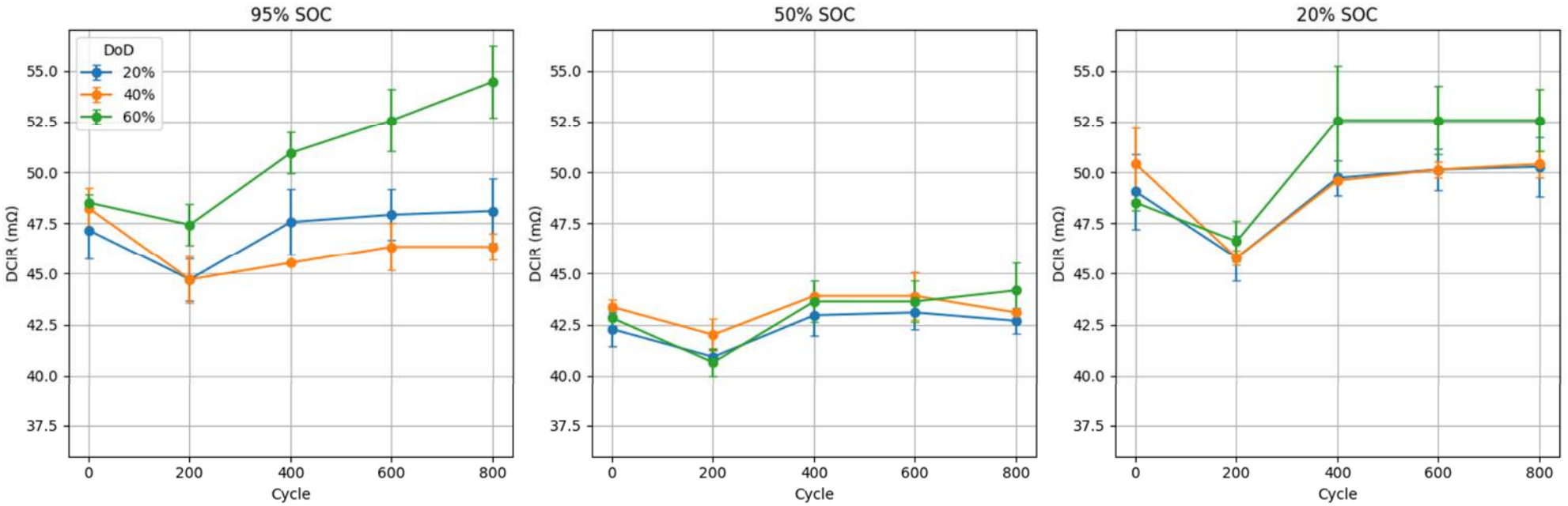
S-144 §9.9 LEO CYCLE – 8.5 CAPACITY-DCR RESULTS



DCIR growth is <5 mΩ over 800 cycles. At 60% DOD, the DCIR growth is <10 mΩ.

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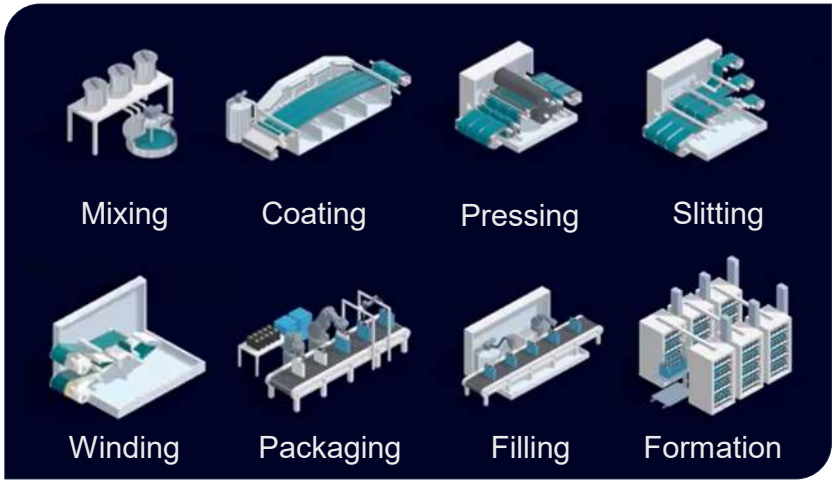
RINCELL BATTERY CELL PILOT LINE IN CALIFORNIA

- 6,500 sq. ft. in Fremont, California
- Cylindrical (18650/21700) and Pouch
- End-to-end mixing, electrode, assembly, formation, & test. Line-side quality stations.
- Production-representative tooling from Korea
- Cell-making as a service
- Commissioning complete (Operational since Q4 2025)



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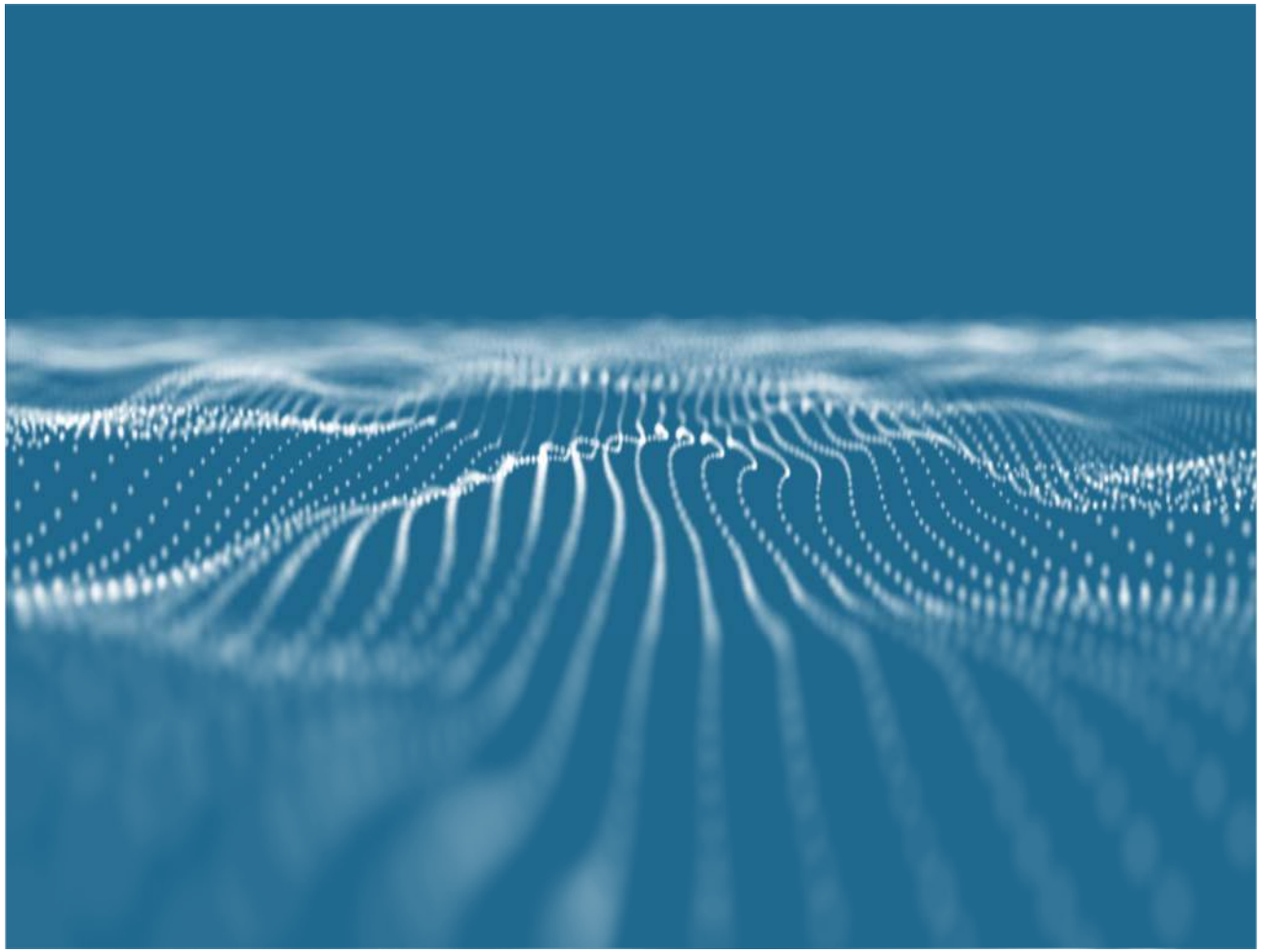

Thank You

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