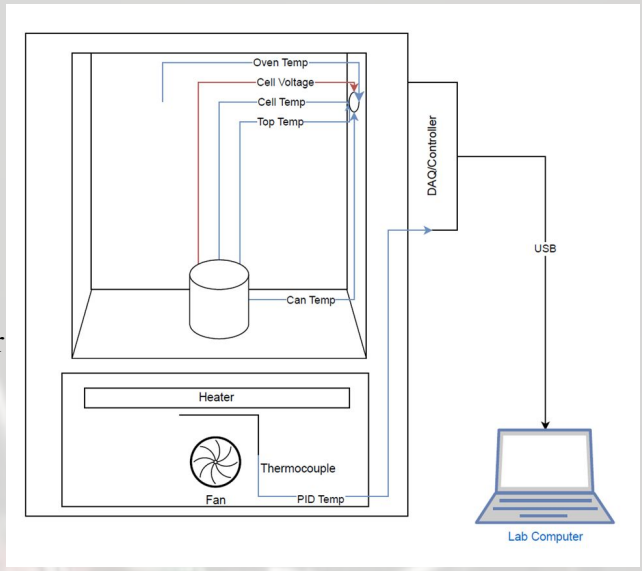
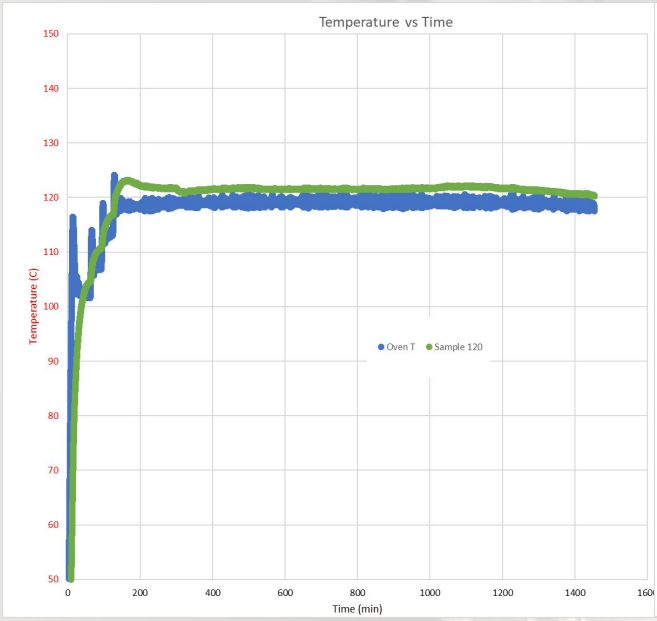
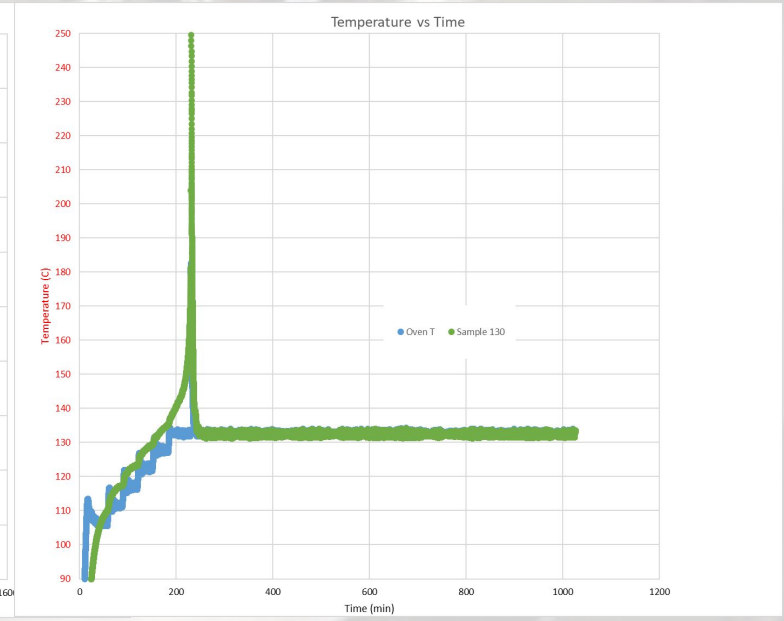
Thermal Stability

The objective of the Thermal Stability test is to measure the maximum temperature at which the test cell is stable indefinitely. This is achieved by heating the cell at 5C increment at a rate of 5C/min then holding at that temperature for 30 minutes, while in wait step.
If an exotherm of 1C/min is detected, then the temperature will be held at that temperature until the cell temperature stabilizes (+/- 5C oven temperature for 30 minutes). Otherwise, this process will repeat until (1) an exotherm is detected (2) Cell goes to thermal runaway, or (3) Oven reaches maximum operating temperature of 250C.







Cell ID	Oven Set T	Cell Max. T	Peak Heating Rate	GO/NOGO	Findings
Typical	°C	°C	°C/min	-	-
18650	148	594.6	263.3	GO	Thermal Runaway
18650	132	720.3	352.8	GO	Thermal Runaway
18650	119	123.2	4.11	NOGO	Vent Open @ 121 C
18650	123	128.3	4.35	NOGO	No Vent Open
18650	122	129.2	4.35	NOGO	No Vent Open

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