Performance Test Condition

1. Performance covers all series of 48V low voltage(parallel connection) RESS products, that means it covers the US2000/Phantom-S/US3000.

2. All the data didn`t involved temperature as a factor for comparison is measured at 25℃.

3. All the data didn`t involved charge/discharge C-rate(current) as a factor for comparison is measured at: (1) 0.5C for cycle times，(2) 0.2C for EOL capacity;

4. All the data didn`t involved End of Life(EOL, % against initial capacity) as a factor for comparison is measured at 70%EOL.

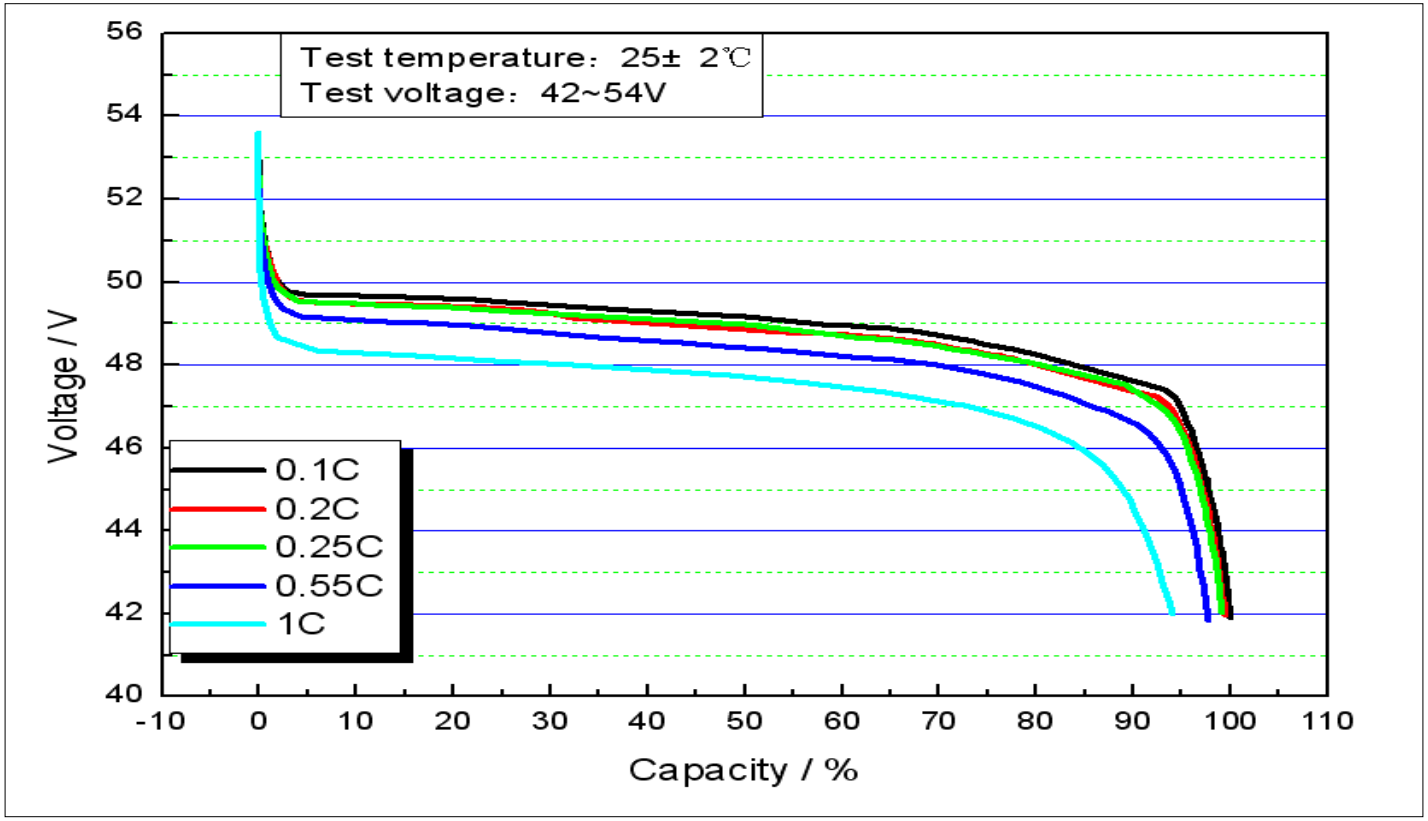
5. All the factors involved in each curve for comparison, is tested in the same condition. For instance, if the 'varying C-rate & cycle times' is being compared, then the EOL and temperature condition will remain the same.

6. The temperature rising during all the testing, especially in the most critical 1C condition, is within 5℃ for a full cycle(fully charge and discharge).

7. Charge termination is current ≤ 0.02C & voltage = 54VDC； Discharge termination is voltage =42VDC.

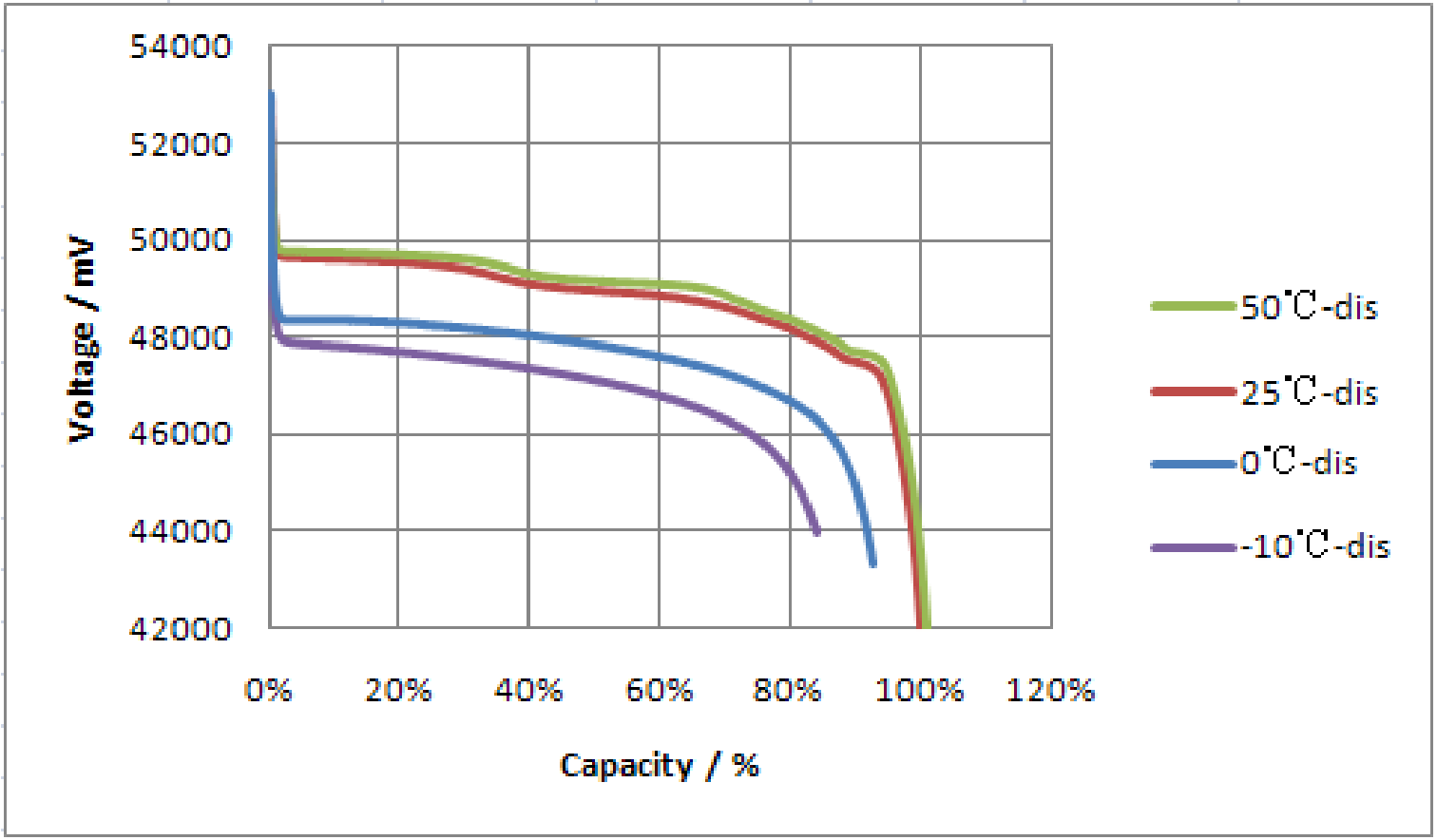
Capacity vs. Discharge rate

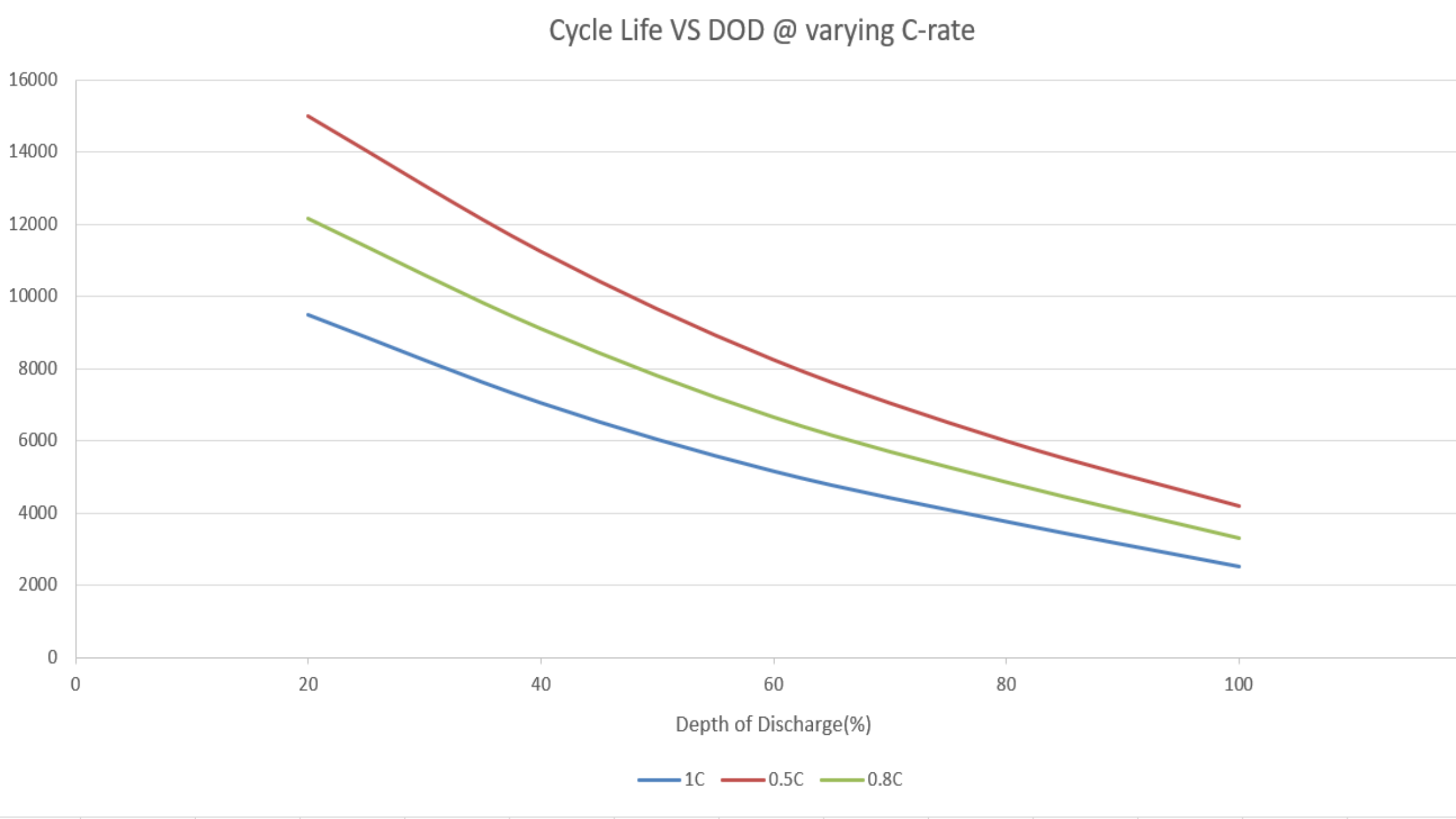
PYLON Battery, has high valid capacity even when the discharging rate be at 1C (50A).

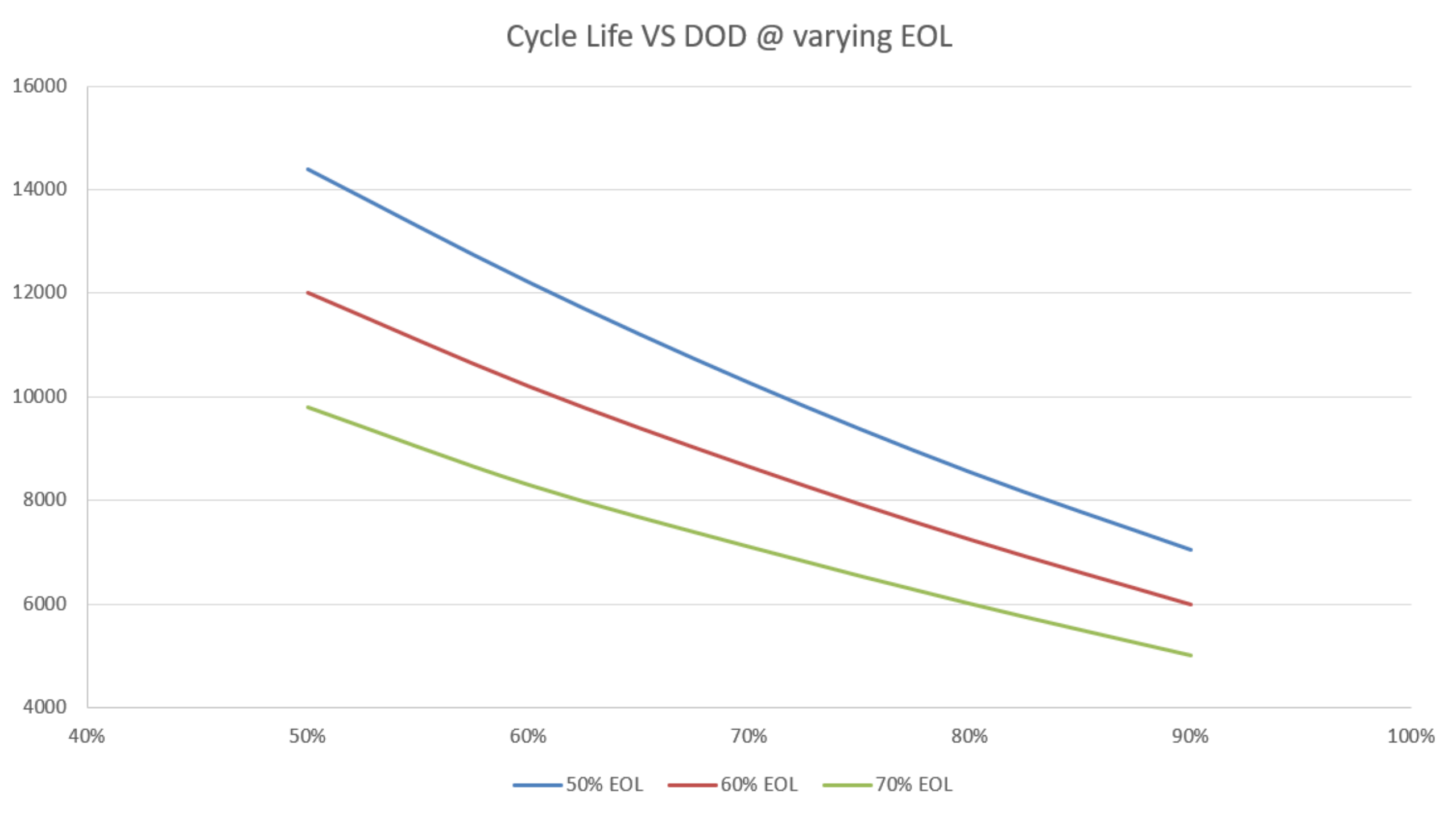


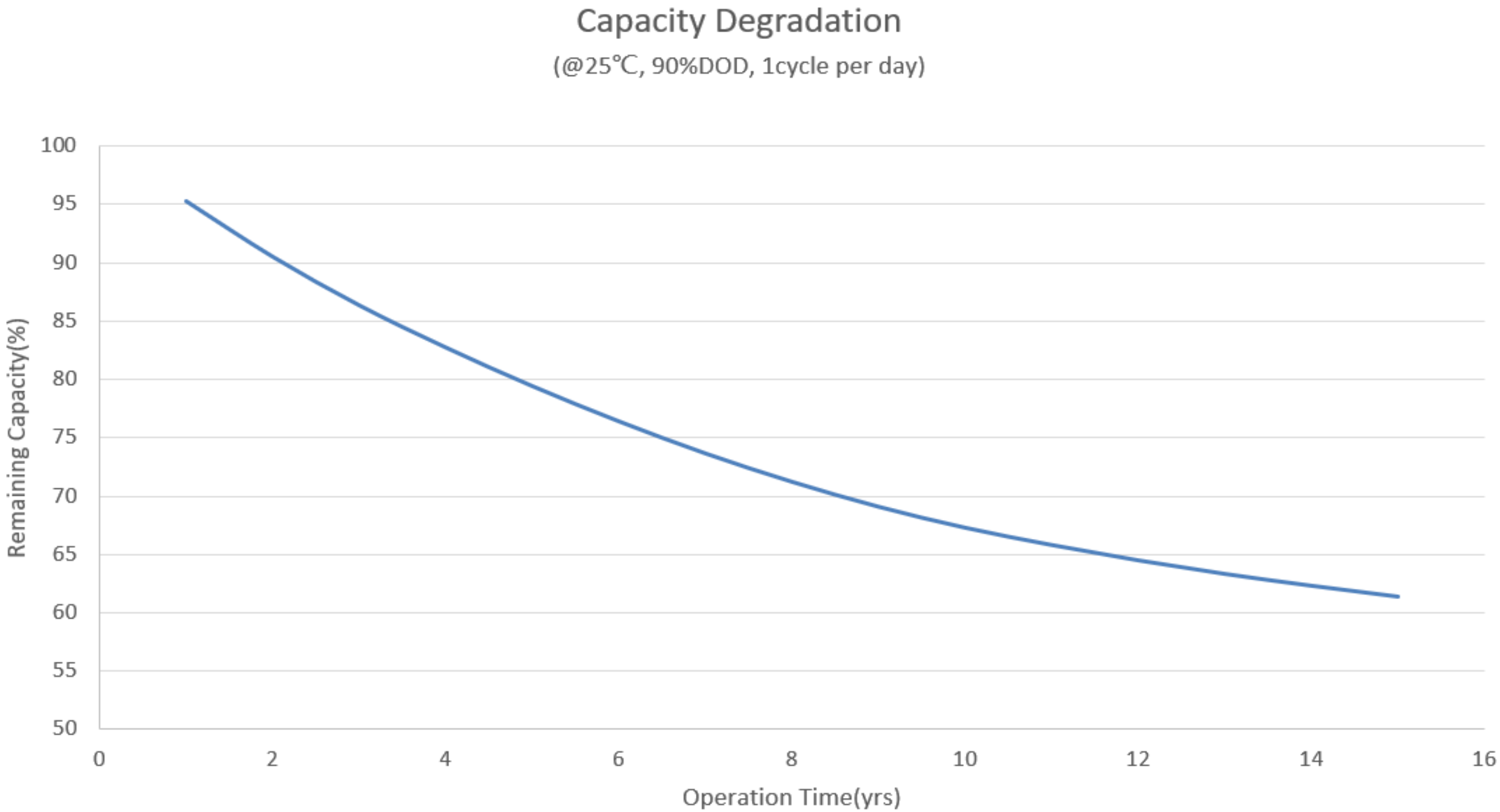
Capacity vs. Temperature

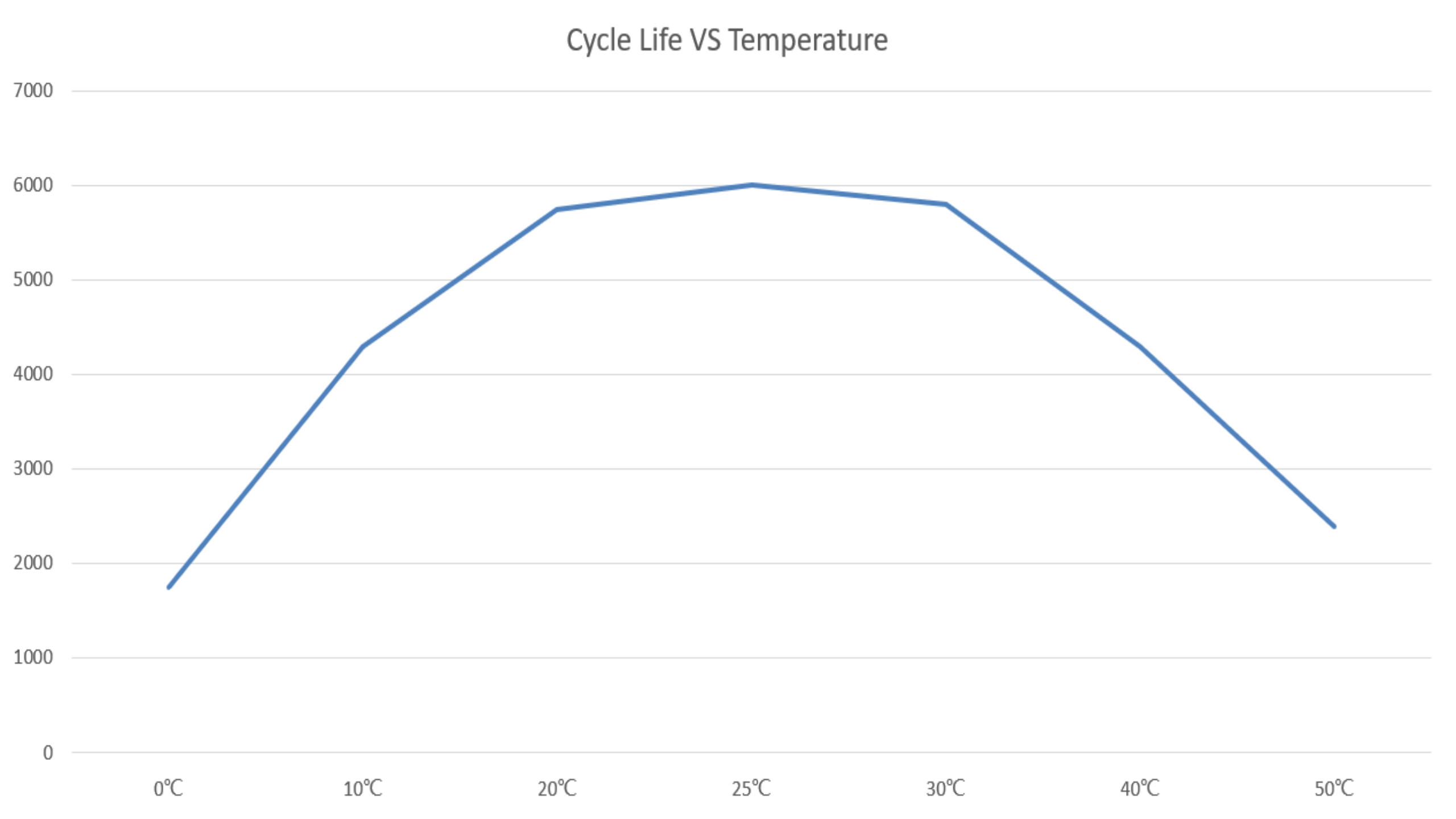
PYLON Battery, will discharge more than 80% capacity even when it be at -10 degree.




Cycle Life VS DOD @ varying C-rate
16000
14000
12000
10000
8000
6000
4000
2000
0
0
20
40
60
80
100
Depth of Discharge(%)
1C
0.5C
0.8C

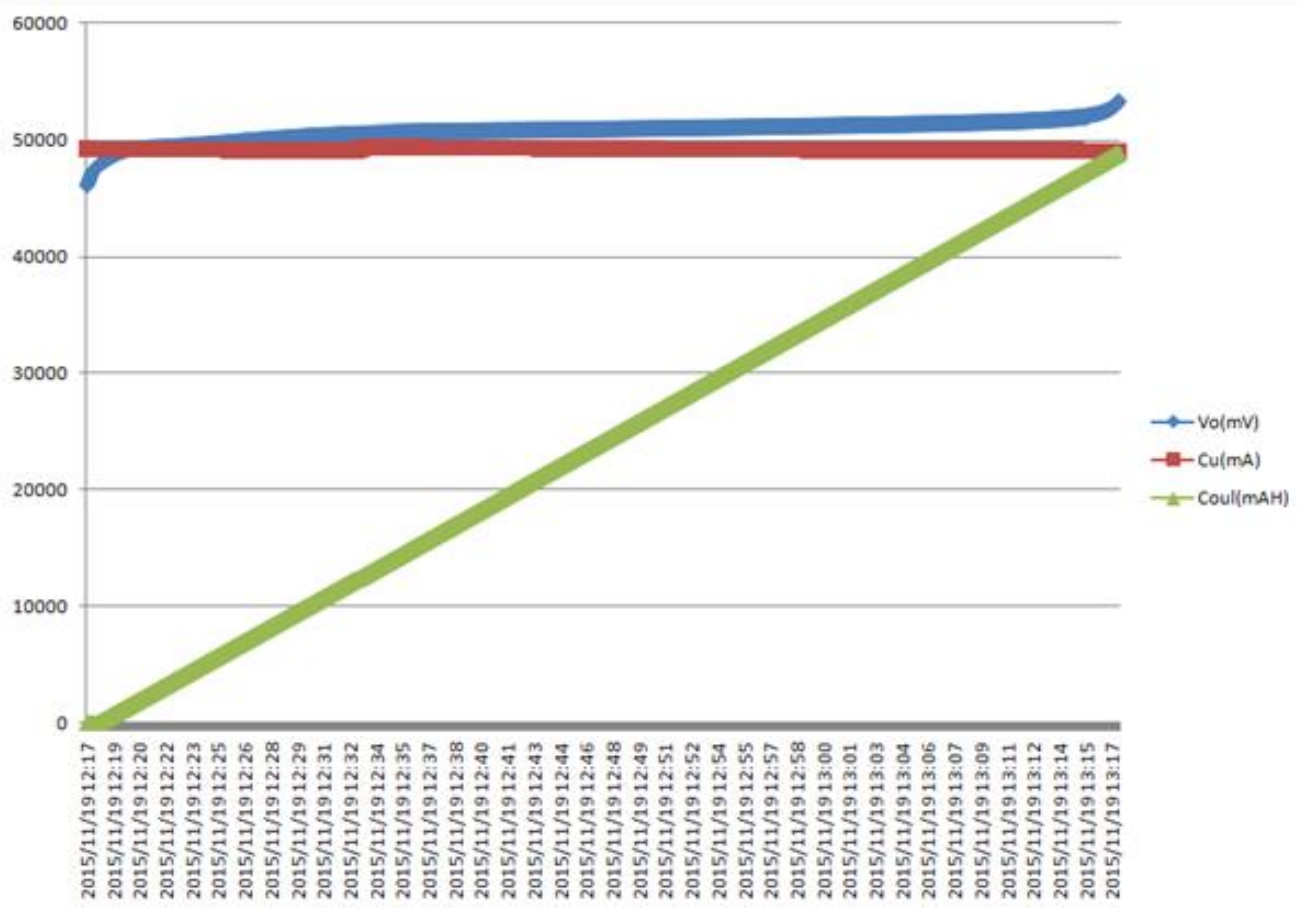

Cycle Life VS DOD @ varying EOL
16000
14000
12000
10000
8000
6000
4000
40%
50%
60%
70%
80%
90%
100%
50% EOL
60% EOL
70% EOL


Capacity Degradation
(@25℃, 90%DOD, 1cycle per day)
Remaining Capacity(%)
100
95
90
85
80
75
70
65
60
55
50
0
2
4
6
8
10
12
14
16
Operation Time(yrs)


Cycle Life VS Temperature
7000
6000
5000
4000
3000
2000
1000
0
0℃
10℃
20℃
25℃
30℃
40℃
50℃

Capacity vs. Temperature

PYLON Battery, charge in 1C



Capacity vs. Temperature

PYLON Battery, discharge in 1C