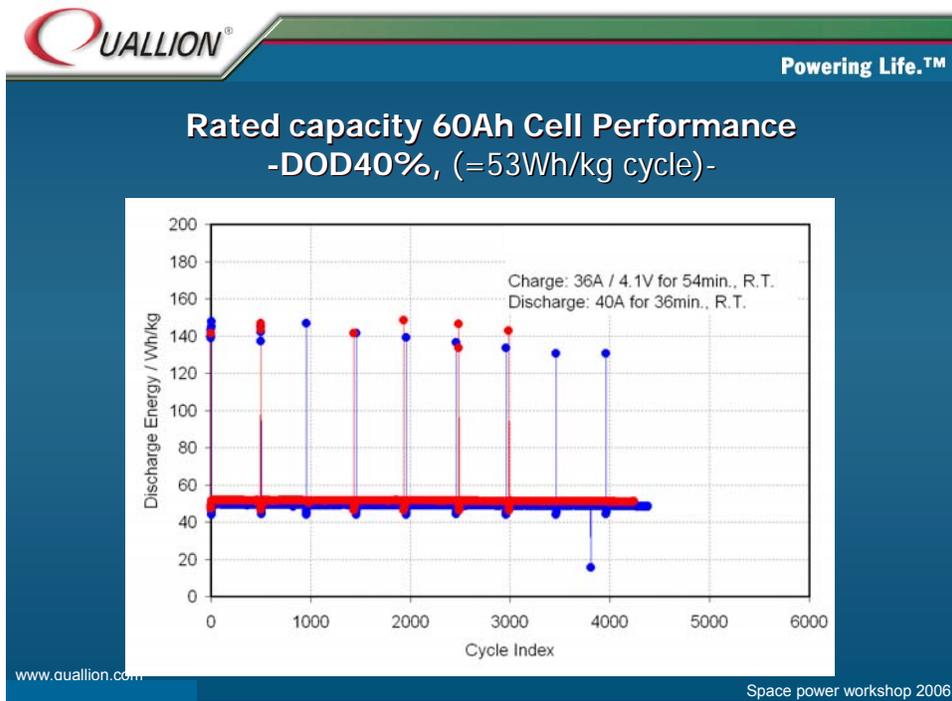
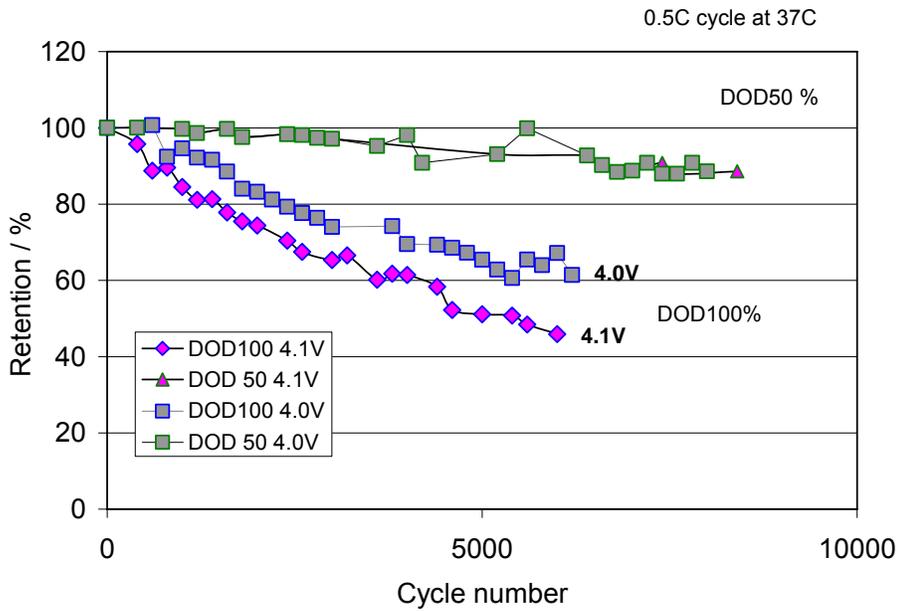


Quallion's method for Cell Rating

1. Aerospace cell's "Rated capacity (=Name plate capacity)" definition
 - 1-1. Rated capacity is a 5/6 of "Average discharge capacity".
 - 1-2. The average discharge capacity is determined by the following method.
 - 1-2.1. Test cells: Fresh cells after formation cycle
 - 1-2.2. Average discharge capacity measurement (one cycle):
25±5°C.
 - 1-2.2.1. Charge with constant current mode at 0.5C to 4.1V. Continue to charge at constant voltage mode until current reaches to 0.05C
 - 1-2.2.2. Rest for 10 minutes
 - 1-2.2.3. Discharge at constant current mode at 0.5C to 2.7V
 - 1-2.2.4. Rest for 10 minutes
 - 1-2.2.5. Calculate the average discharge capacity from 1-2.2.3 data.
2. "Depth of discharge" definition
DOD should be calculated by the following formula:
$$\text{DOD} = (\text{Discharge capacity}) / (\text{Rated capacity}) \times 100 \%$$



3. "EOCV" : Quallion's recommendation for EOCV for Quallion cells is 4.1V (DOD≤50% cycle) and 4.0V (DOD>50% cycle).
See the attached data



4. "Reserve capacity" measurement: Conduct "1-2" test during cycles (more than two cycle is recommendable)