-20℃ - +80℃	10 days	50%(expected)
-20℃ - +60℃	1month	75%(expected)
-20℃ - +45℃	3months	70%(expected)
-20℃ - +25℃	1year	80%(expected)

4. Battery Performance

4.1. Visual Inspection

There shall be no such defects as remarkable scratches, cracks, leakage or deformations.

4.2. Test Condition

4.2.1.Standard Test Condition

Test new cells within one month after shipment from our factory and the cells shall not be cycled over five times before the tests.

All the tests in this specification shall be conducted in an ambient temperature of 25℃ ±5℃ under a humidity of 25% to 85%, unless otherwise specified.

4.2.2 Measuring Instrument or Apparatus

4.2.2.1. The dimension measurement shall be implemented by instruments with equal or more precision of 0.01mm.

4.2.2.2 Standard class specified in the national standard or more sensitive class having inner impedance more than 10kΩ/V.

4.2.2.3 Impedance shall be measured by a sinusoidal alternating current method (1kHz LCR meter).

4.2.2.4 The current measurement shall be implemented by instrument with equal to more precision scale of±0.1% and the constant voltage precision should be implemented with±0.5%, and the timing precision should be not below ±0.1%.

4.2.2.5 The temperature measurement shall be implemented by instrument with equal or more precision seal of ±0.5℃.

4.3 Electrical Characteristics

4.3.1 Standard Charge

The cell shall be charged at a constant current of 0.5C to 4.2V and then at constant voltage of 4.2V with a charging time of 3.5 hours or 0.02C cut off.

4.3.2 Rated Capacity (0.2C): 1300mAh (minimum)

The capacity shall be measured at a discharge current of 0.2C and a cut-off voltage of 2.75V after the standard charge (Section 4.3.1.)

4.3.3 High Rate Discharge Capacity (1C): 85% (minimum) of Rated Capacity

The capacity shall be measured at a discharge current of 1C and a cut-off voltage

of 2.75V after the standard charge (Section 4.3.1.)

4.3.4 Low Temperature Discharge Capacity (0℃): 80% (minimum) of Rated Capacity

The capacity shall be measured at a discharge current of 0.2C in an ambient temperature of 0℃±2℃ and a cut-off voltage of 2.75V after the standard charge (Section 4.3.1.)

4.3.5 Low Temperature Discharge Capacity (-10℃): 70% (minimum) of Rated Capacity

The capacity shall be measured at a discharge current of 0.2C in an ambient temperature of -10℃±2℃ and a cut-off voltage of 2.75V after the standard charge (Section 4.3.1.)

4.3.6 High Temperature Discharge Capacity (60℃): 100% (minimum) of Rated Capacity

The capacity shall be measured at a discharge current of 0.2C in an ambient temperature of 60℃±2℃ and a cut-off voltage of 2.75V after the standard charge (Section 4.3.1.)

4.3.7. Storage Characteristics (25℃)

Capacity Retention: 85% (minimum) of Rated Capacity
Capacity Recovery: 90% (minimum) of Rated Capacity
The capacity retention shall be measured at a discharge current of 0.2C and a cut-off voltage of 2.75V after standard charge (Section 4.3.1.) and being stored for 28 days at 25℃±5℃. Then, the capacity recovery shall be measured at a discharge current of 0.2C and a cut-off voltage of 2.75V after standard charge (Section 4.3.1.).

4.3.8. Storage Characteristics (45℃)

Capacity Retention: 60% (minimum) of Rated Capacity
Capacity Recovery: 70% (minimum) of Rated Capacity
The capacity retention shall be measured at a discharge current of 0.2C and a cut-off voltage of 2.75V after standard charge (Section 4.3.1.) and being stored for 28 days at 45℃±5℃. Then, the capacity recovery shall be measured at a discharge current Of 0.2C and a cut-off voltage of 2.75V after standard charge (Section 4.3.1.)

4.3.9 Internal Impedance: 90mΩ(type) ; 120mΩ(max)

The internal impedance shall be measured at a since wave alternative current process of 1kHz after the standard charge.

4.3.10. Cycle Life :

The cycle life shall be conducted as the following procedures：

Step 1: charge the cell with the standard charge (as of section 4.3.1);
Step 2: discharge the cell at 0.5C to 2.75V,
Step 3: repeat Step 1 and Step 2 for 500 times.
The capacity after 300 cycles is expected to be equal to or more than 80% of the rated capacity. The capacity after 500 cycles is expected to be equal to or more than 60% of the