

DISCHARGE PERFORMANCE, RATED CAPACITY

PREPARED FOR:

Baltrade sp. Z o.o.
Attn: Michal Seredzinski
Ul. Kartuska 493
80-298 Gdansk
Poland

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PREPARED BY:

Per Lindström
Project Engineer at Intertek Semko AB

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ISSUING OFFICE:

Intertek Semko AB
Torshamnsgatan 43, Box 1103,
SE-164 22 Kista, Sweden
Telephone +46 8 750 00 00,
Fax +46 8 750 60 30
www.intertek.se
Registered in Sweden: No: SE556024059901
Registered office: As address

PROJECT LEADER:


Per Lindström

APPROVED BY:


Johnny Jönsson

DISTRIBUTION:

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EXECUTIVE SUMMARY

Testing of rechargeable NiMH batteries of size AA and AAA, according to IEC 61951-2 2017 ED 4 section 7.3.2 Discharge performance at 20 °C to determine capacity after five performed cycles.

Table 1 Average discharge capacity (mAh) everActive Professional line HRL6 (AA) 2500 mAh

Cycle No.	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5
Average	2612	2616	2615	2613	2610

Table 2 Average discharge capacity (mAh) everActive Professional line HRL03 (AAA) 1000 mAh

Cycle No.	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5
Average	1031	1034	1034	1034	1033



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References:

Proposal No. SO2205347

Test conditions: IEC 61951-2 2017 ED 4



TEST REPORT issued by an
Accredited Testing Laboratory



1 COMMISSION

The commission is according to IEC 61951-2 2017 ED 4 clause 7.3.2, Discharge performance at 20°C and with our proposal No. SO2205347.

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2 TEST SAMPLES

Table 1 Test samples

Brand	Battery type/Rated capacity	Production lot	Intertek ID number	Date of arrival
everActive Professional line	NiMH HRL6 (AA) 2500 mAh	2220B	ES22-047	2022-06-22
everActive Professional line	NiMH HRL03 (AAA) 1000 mAh	2220B	ES22-047	2022-06-22

note: ES number is Intertek Semko AB identification for each sample. The test samples were delivered from Baltrade sp. Z o.o. to Intertek for testing.

Photographs of tested products:



Figure: 1 everActive Professional line HRL6



Figure 2: everActive Professional line HRL03



4 TEST CONDITIONS

Test conditions are according to IEC 61951-2

Intertek Semko AB's computer-controlled test equipment of type PEC ACT 0550, Inventory No. 33674 has been used for all cycling.

Room temperature: 21 ± 1 °C

Humidity: 45 – 65 %

For determine of time to cut-off voltage, the battery voltage is checked approximately every 30 ms, registered at every 30 seconds and $\Delta V = 5$ mV.

4.1 Uncertainty of voltage/current/temperature measurement

The uncertainty of voltage measurement is calculated to be ≤ 1 % based on calibrations.

The uncertainty of current measurement is calculated to be ≤ 1 % based on calibrations.

The uncertainty of temperature is calculated to be ≤ 1 °C based on calibrations.



5 TEST RESULTS

Table 5 *Discharge capacity (mAh) everActive Professional line HRL6 (AA) 2500 mAh*

Sample nr:	Rest discharge	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5
1	1748	2602	2608	2606	2604	2602
2	1745	2612	2613	2611	2608	2605
3	1783	2628	2630	2629	2626	2622
4	1783	2590	2597	2600	2601	2601
5	1759	2627	2630	2628	2625	2622

Table 6 *Discharge capacity (mAh) everActive Professional line HRL03 (AAA) 1000 mAh*

Sample nr:	Rest discharge	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5
1	670	989	994	996	997	998
2	628	1026	1028	1028	1028	1028
3	718	1031	1034	1034	1034	1034
4	737	1040	1040	1039	1037	1036
5	720	1071	1073	1072	1071	1071

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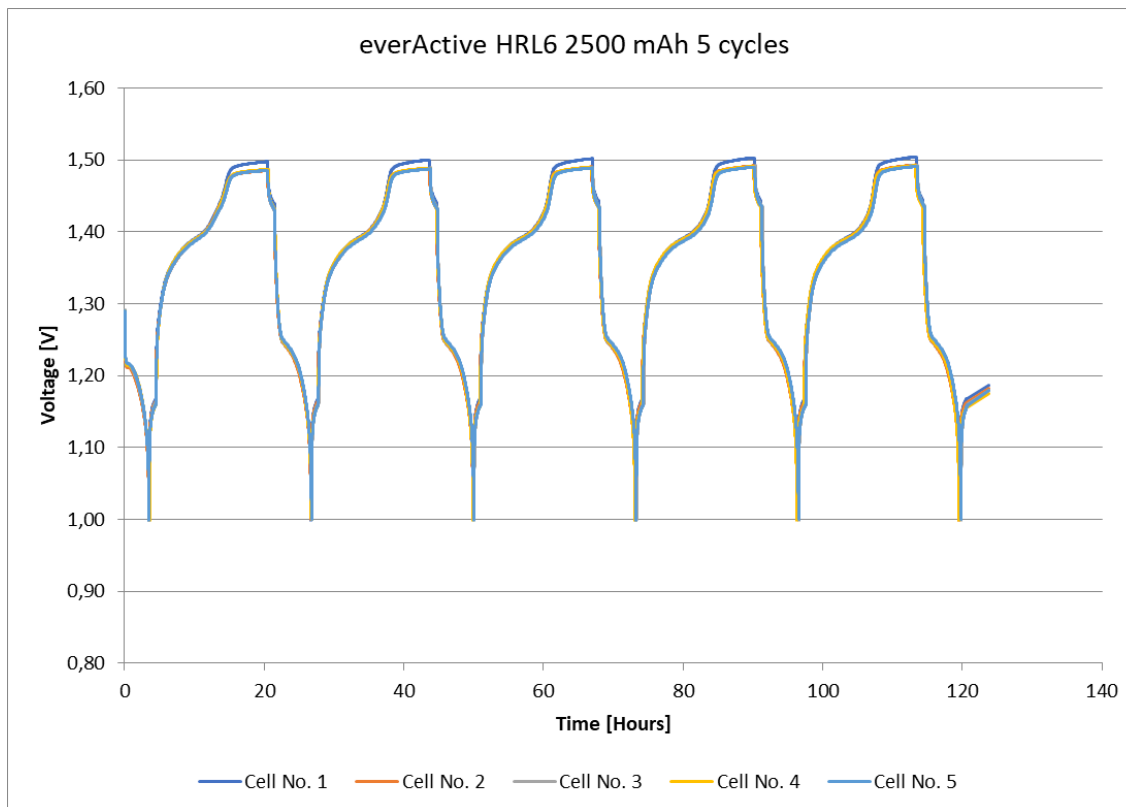


Figure 1

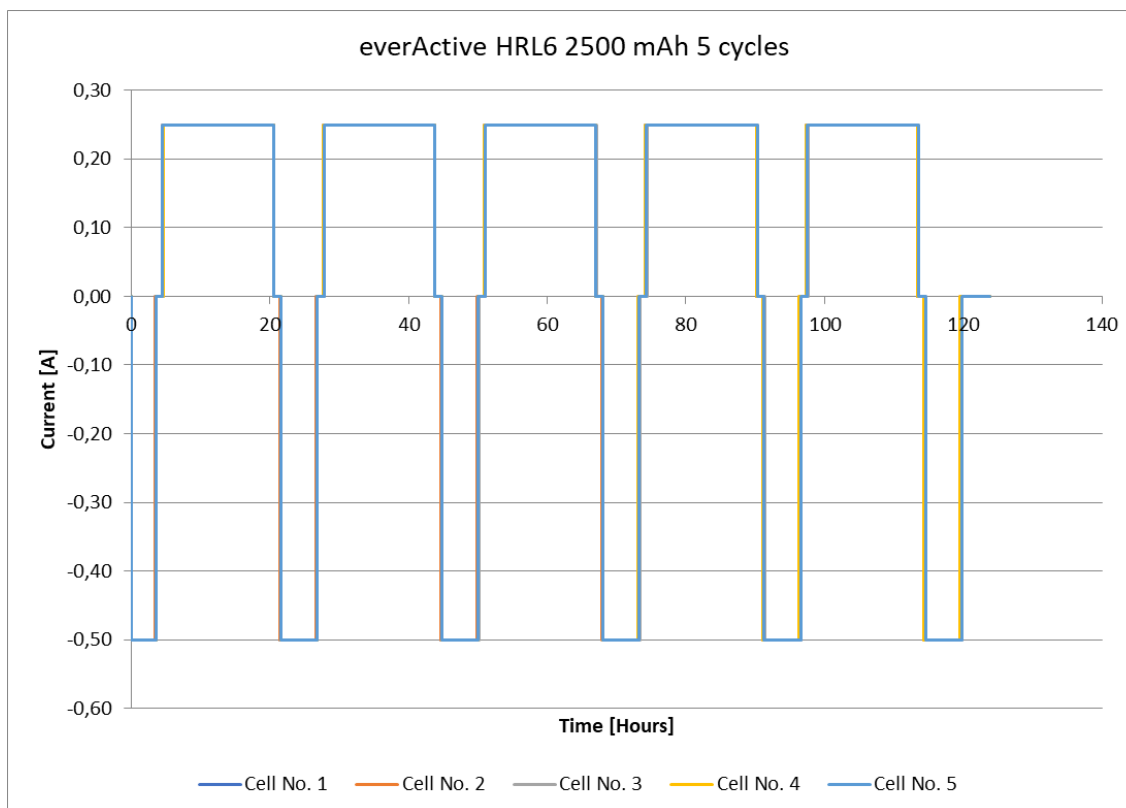


Figure 2

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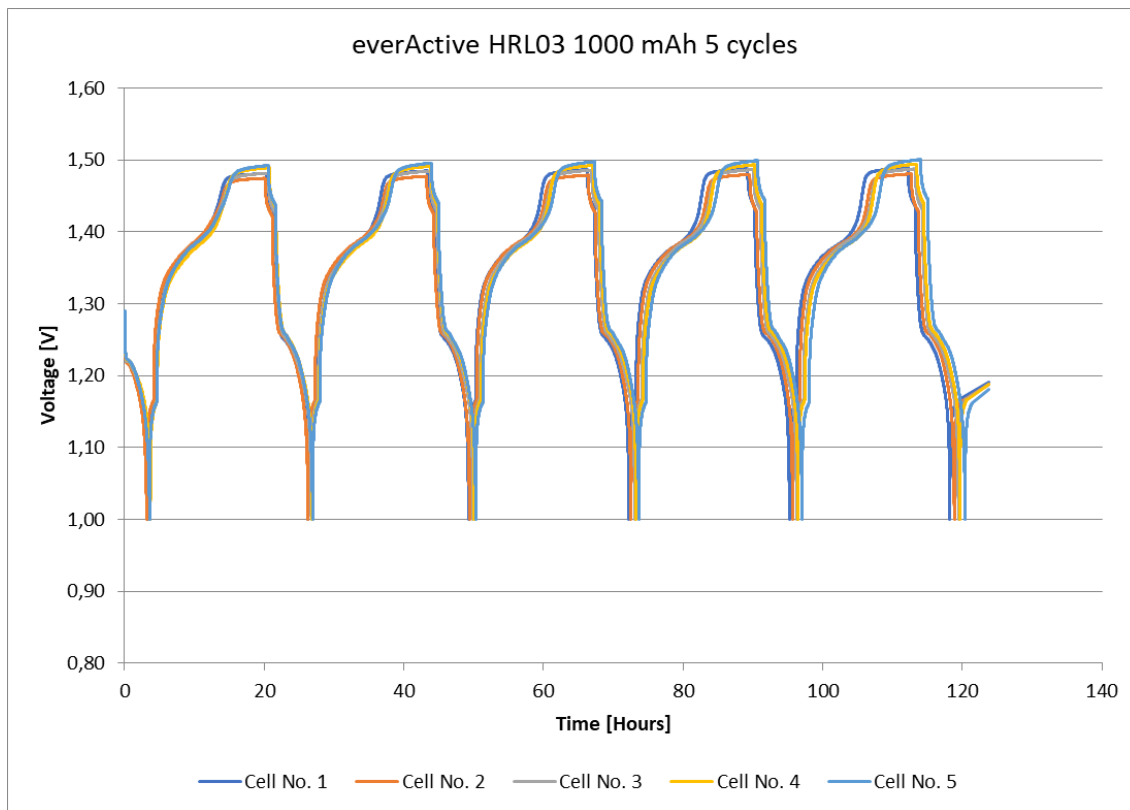


Figure 3

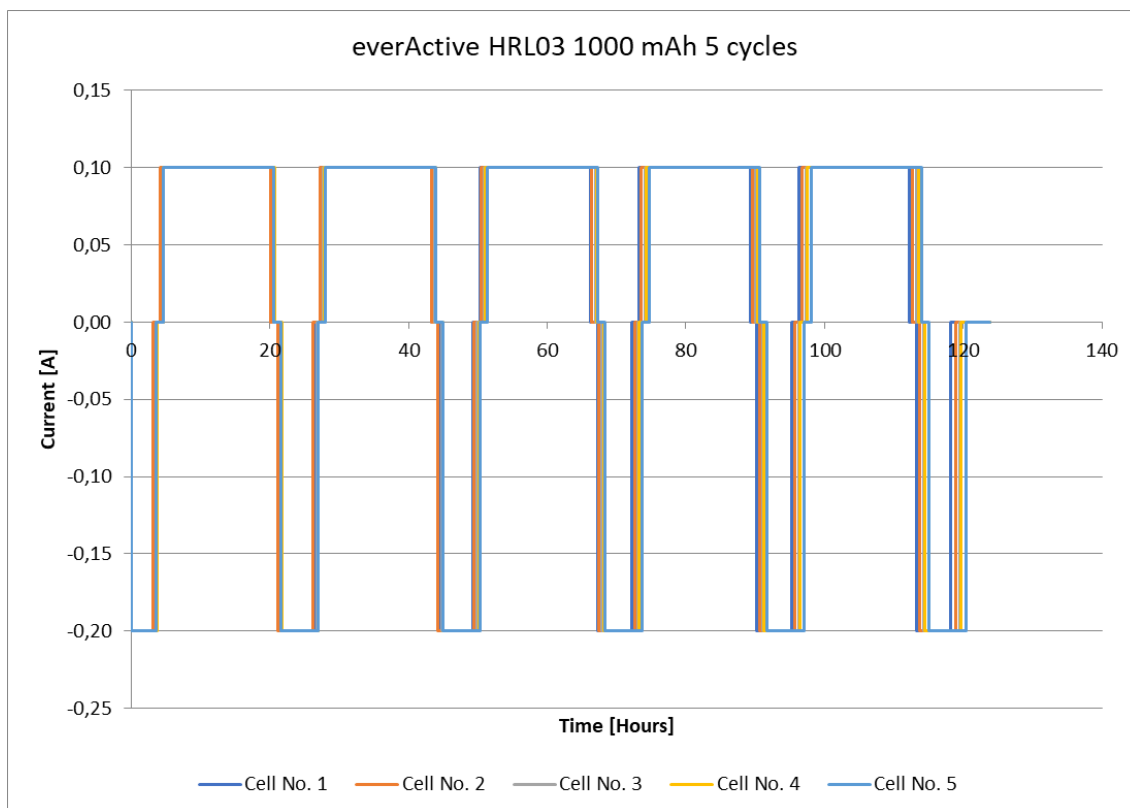


Figure 4

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