



FLASH TEST REPORT

Execution

State of charge **70 %**
Date 26/03/2025 09:00:52
Executed by Carla AB

Vehicle

Brand Volvo
Model C40 Recharge - 82 kWh
VIN YV1XKERR4R2109001
Mileage 19,866 km

Analysis Result

AVILOO SCORE

99
/ 100

High voltage battery usage and history
Analysis of charging & driving behavior

69 / 70

High voltage battery performance
Analysis of cell voltages and module temperatures.

30 / 30

High voltage battery control unit
Check of signals and calculations of the battery management control unit.



Vehicle communication interface
Check of communication via the diagnostic interface.



Dr. Marcus Berger
CEO and Partner



DI Wolfgang Berger MBA
CSO and Founder



DI Nikolaus Mayerhofer
CTO and Founder



EXPLANATION OF THE BATTERY FLASH TEST

ANALYSIS METHOD

The analysis performed is a combined result of: The communication quality between the diagnostic hardware AVILOO Box and the on-board diagnostic interface of the vehicle. The live battery data and data that indicates the previous use of the high voltage battery, which is made available to the AVILOO Box by the battery management system during the measurement. The plausibility check and classification of the battery condition using the collected values and a comparison with the AVILOO Battery Cloud using Big Data algorithms.

FLASH TEST EXECUTION PROTOCOL

09:00:48 AVILOO Box connected.
✓ FLASH Test started.
✓ Vehicle detected.
✓ Starting data acquisition.
✓ Finished data acquisition.
✓ Analyzing data.
✓ Analysis completed.

DETAILED RESULTS OF PERFORMED CHECKS

Vehicle Information

VIN	YV1XKERR4R2109001
Date	26/03/2025 09:00:52
Mileage	19,866 km

Measurements High Voltage System

Battery temperature	8.5 °C
Maximum cell temperature deviation	0.9 °C
Pack voltage	434.5 V
Maximum cell voltage deviation	10.32 mV
Peak current during check	-16.53 A
State of Health (SoH - read from car manufacturer)*	98.94 %

*The SoH shown here was not calculated by AVILOO but corresponds to the SoH read out from the battery management system and calculated by the manufacturer. AVILOO therefore does not guarantee the correctness of this SoH.

