



# FLASH TEST REPORT

## Execution

State of charge 31 %  
Date 22/06/2025 09:33:03  
Executed by Carla AB

## Vehicle

Brand Volvo  
Model XC40 Recharge - 69 kWh  
VIN YV1XZEFVKN2778573  
Mileage 79,735 km

## Analysis Result

# AVILOO SCORE

94  
/ 100

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

66 / 70

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

28 / 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

- 09:32:59
- AVILOO Box connected.
- ✓
- FLASH Test started.
- ✓
- Starting data acquisition.
- ✓
- Vehicle detected.
- ✓
- Finished data acquisition.
- ✓
- Analyzing data.
- ✓
- Analysis completed.

## DETAILED RESULTS OF PERFORMED CHECKS

### Vehicle Information

|         |                     |
|---------|---------------------|
| Date    | 22/06/2025 09:33:03 |
| Mileage | 79,735 km           |
| VIN     | YV1XZEFVKN2778573   |

### Measurements High Voltage System

|                                                     |         |
|-----------------------------------------------------|---------|
| Battery temperature                                 | 15.4 °C |
| Maximum cell temperature deviation                  | 1.73 °C |
| Pack voltage                                        | 349.5 V |
| Maximum cell voltage deviation                      | 5 mV    |
| Peak current during check                           | -8 A    |
| State of Health (SoH - read from car manufacturer)* | 93.13 % |

\*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.

