



# FLASH TEST REPORT

## Execution

State of charge **79 %**  
Date 28/04/2025 12:45:37  
Executed by Carla AB

## Vehicle

Brand BMW  
Model i4 - 83,9 kWh  
VIN WBY31AW03RFR75950  
Mileage 25,676 km

## Analysis Result

# AVILOO SCORE

**98**  
/ 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.

**29** / 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

- 12:45:33
- ✓ 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	WBY31AW03RFR75950
Date	28/04/2025 12:45:37
Mileage	25,676 km

### Measurements High Voltage System

Battery temperature	15.22 °C
Maximum cell temperature deviation	2.15 °C
Pack voltage	437.61 V
Maximum cell voltage deviation	4 mV
Peak current during check	-25.52 A
State of Health (SoH - read from car manufacturer)*	97.9 %

\*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.

