

# Standards Laboratory Calibration Report

DATE: 12 June 2023 CERT#: WO-004  
ITEM: DC Reference Standard MODEL: 732B  
S/N:  MFR: Fluke

This Zenner voltage standard was calibrated by comparing its output voltages with those from the NIST Josephson-array Voltage Standard and using the value for  $2e/h$  (483 597.848 416 984 GHz/V) internationally adopted on May 20, 2019, for representing the volt. The difference in voltages were measured using a calibrated digital voltmeter from 18 May 2023 to 7 June 2023.

The voltage standard was plugged into the ac power line for all measurements for stability in the process of calibration. It was allowed to stabilize for 24 hours before the calibration. The voltage standard was in an average ambient room temperature of 22.8°C, relative humidity of 43%, and atmospheric pressure 1007 hPa.

The Measured Voltage given in the table below is the mean value of the results of the individual measurements of the respective nominal outputs.

| Nominal Output (V) | Measured Voltage (V) | Uncertainty (nV) |
|--------------------|----------------------|------------------|
| 10                 | 9.999 971 610        | 26               |
| 1.018              | 1.018 171 200        | 7.5              |