

Dieter.Kos  
08.07.2024  
Approved



Kalibrierlaboratorium

## Kalibrierschein / Calibration Certificate

erstellt durch das Kalibrierlaboratorium der  
*issued by the calibration laboratory of the*



HEAD acoustics GmbH  
Ebertstraße 30a  
52134 Herzogenrath  
Germany

*Mitglied im / Member of the*

Deutschen  
Kalibrierdienst



Kalibrierzeichen

*Calibration mark*

000453

D-K-21099-  
02-00

2024-07

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gegenstand<br><i>Object</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Multichannel-Frontend</b>                                                                                                        | <p>Dieser Kalibrierschein dokumentiert die metrologische Rückführbarkeit auf nationale Normale zur Darstellung der Einheiten in Übereinstimmung mit dem Internationalen Einheitensystem (SI).<br/>Die DAkkS ist Unterzeichner der multilateralen Übereinkommen der European co-operation for Accreditation (EA) und der International Laboratory Accreditation Cooperation (ILAC) zur gegenseitigen Anerkennung der Kalibrierscheine.<br/>Für die Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Benutzer verantwortlich.<br/><i>This calibration certificate documents the metrological traceability to national standards, which realize the units of measurement according to the International System of Units (SI).</i><br/><i>The DAkkS is signatory to the multilateral agreements of the European co-operation for Accreditation (EA) and of the International Laboratory Accreditation Cooperation (ILAC) for the mutual recognition of calibration certificates.</i><br/><i>The user is obliged to have the object recalibrated at appropriate intervals.</i></p> |
| Hersteller<br><i>Manufacturer</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>HEAD acoustics GmbH</b>                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Typ<br><i>Type</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>labCORE</b>                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Fabrikat/Serien-Nr.<br><i>Serial Number</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>77000342</b>                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Auftraggeber<br><i>Customer</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Sporton International Inc.</b><br><b>Huaya 1st Rd., Guishan Distr No. 52</b><br><b>Taoyuan City 333</b>                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Kostenträger<br><i>Order No.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>R8247014</b>                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Anzahl der Seiten des Kalibrierscheines<br><i>Number of pages of the certificate</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>7</b>                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Datum der Kalibrierung<br><i>Date of calibration</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>2024-07-08</b>                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p>Dieser Kalibrierschein darf nur vollständig und unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung des ausstellenden Kalibrierlaboratoriums. Kalibrierscheine sind bei Nennung des für die Freigabe Verantwortlichen in Klarschrift auch ohne Unterschrift gültig.<br/><i>This calibration certificate may not be reproduced other than in full except with the permission of the issuing laboratory. Calibration certificates with the full name of the approval responsible person are valid without signature.</i></p> |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Datum der Ausstellung<br><i>Date of issue</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Freigabe des Kalibrierscheins durch (siehe Freigabestempel)<br><i>Approval of the calibration certificate by (see release seal)</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Dieter Kos</b><br>Leiter des Kalibrierlaboratoriums<br><i>Head of the calibration laboratory</i>                                 | <b>René Collet</b><br>Stellv. Leiter des Kalibrierlaboratoriums<br><i>Deputy Head of the calibration laboratory</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>HEAD acoustics GmbH</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Ebertstraße 30a<br>52134 Herzogenrath<br>Germany<br><br>Tel.: +49 2407 577-97<br>Fax: +49 2407 577-99                               | Geschäftsführer   Managing Directors:<br>Prof. Dr.-Ing. Klaus Genuit,<br>Dr.-Ing. Hans Wilhelm Gierlich,<br>Stephan Noth, Dr.-Ing. Aulis Telle<br><br>Amtsgericht Aachen   Local Court Aachen: HRB 3468                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>www.head-acoustics.com</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Kalibriergegenstand***Calibration object*

labCORE SN: 77000342, FW: 3.7.5,

**Kalibrierverfahren***Calibration procedure*

Software: ACQUA 4.3.100

Die Kalibrierung erfolgte durch Vergleich der Anzeige des Kalibriergegenstandes (DUT) mit den durch die Kalibriergeräte/Normale dargestellten Werten. Bezug ist die Realisierung der Einheiten der PTB.

*The calibration was performed by comparing the indication of the calibration object (DUT) with the values, displayed by the standards/normals. References are the units of the PTB.*

**Ort der Kalibrierung***Place of calibration*

Kalibrierlabor der HEAD acoustics GmbH, Ebertstr. 30a, 52134 Herzogenrath.

Calibration laboratory of the HEAD acoustics GmbH, Ebertstr. 30a, 52134 Herzogenrath.

**Messbedingungen***Measurement conditions*

Vor der Kalibrierung waren der Kalibriergegenstand und das Referenzequipment mehr als 4 Stunden am Ort der Kalibrierung aufgestellt und eingeschaltet.

Before calibration the calibration object and the reference equipment were installed and powered on for more than 4 hours at the place of calibration.

**Umgebungsbedingungen***Ambient conditions*

Temperatur: (23 ± 2) °C  
*Temperature*

Rel. Luftfeuchtigkeit: (50 ± 30) %  
*Rel. humidity*

**Messergebnisse***Measurement results*

Auf den folgenden Seiten sind die Messergebnisse dokumentiert, diese beziehen sich nur auf die geprüften bzw. kalibrierten Gegenstände.

*On the following pages, the measurement results are documented, these results relate only to the items tested or calibrated.*

**Messunsicherheit***Measurement uncertainty*

Angegeben ist die erweiterte Messunsicherheit, die sich aus der Standardmessunsicherheit durch Multiplikation mit dem Erweiterungsfaktor  $k = 2$  ergibt. Sie wurde gemäß EA-4/02 M:2022 ermittelt. Der Wert der Messgröße liegt mit einer Wahrscheinlichkeit von etwa 95 % im zugeordneten Werteintervall. Ein Anteil für die Langzeit-Stabilität des Kalibriergegenstandes ist nicht enthalten.

*Given is the enlarged uncertainty, calculated by multiplication of the standard uncertainty with the factor  $k = 2$ . It was calculated in relation to EA-4/02 M:2022. The values of the measurements are with a probability of about 95 % in the related range. A part for long time stability of the calibrated instrument is not included.*

**Anerkennung des Kalibrierscheines***Recognition of the calibration certificate*

Die Deutsche Akkreditierungsstelle GmbH ist Unterzeichnerin der multilateralen Übereinkommen der European co-operation for Accreditation (EA) und der International Laboratory Accreditation Cooperation (ILAC) zur gegenseitigen Anerkennung der Kalibrierscheine. Die weiteren Unterzeichner innerhalb und außerhalb Europas sind den Internetseiten von EA ([www.european-accreditation.org](http://www.european-accreditation.org)) und ILAC ([www.ilac.org](http://www.ilac.org)) zu entnehmen.

*The DAkkS is signatory to the multilateral agreements of the European co-operation for Accreditation (EA) and of the International Laboratory Accreditation Cooperation (ILAC) for the mutual recognition of calibration certificates. The other signatories in Europe and beyond can be found on the website of EA ([www.european-accreditation.org](http://www.european-accreditation.org)) and ILAC ([www.ilac.org](http://www.ilac.org)).*

**Auswertung***Evaluation*

Die gemessenen Werte liegen innerhalb der Herstellerspezifikationen.

The measured values are within the manufacturer's specifications.

**Anmerkung***Remark***Erläuterung der Spaltenüberschriften***Explanation of the column headings*

| Header Title   | Meaning                 | Bedeutung                  |
|----------------|-------------------------|----------------------------|
| Measurement    | Type of Measurement     | Bezeichnung der Messung    |
| Nominal/unit   | Nominal Value           | Sollwert                   |
| Indicated/unit | Indicated Value         | Angezeigter Wert (Istwert) |
| Min/mV         | Lower Tolerance Value   | Unterer Toleranzwert       |
| Max/mV         | Upper Tolerance Value   | Oberer Toleranzwert        |
| MU/unit        | Measurement Uncertainty | Messunsicherheiten         |



| Analog Inputs                       |            |              |        |        |       |  |
|-------------------------------------|------------|--------------|--------|--------|-------|--|
| Measurement                         | Nominal/mV | Indicated/mV | Min/mV | Max/mV | MU/mV |  |
| Input Level -12 dB 1 kHz Ch 1       | 250,0      | 250,1        | 247,1  | 252,9  | 1,0   |  |
| Input Level -12 dB 1 kHz Ch 2       | 250,0      | 250,1        | 247,1  | 252,9  | 1,0   |  |
| Input Level -6 dB 1 kHz Ch 1        | 500,0      | 500,0        | 494,3  | 505,7  | 2,0   |  |
| Input Level -6 dB 1 kHz Ch 2        | 500,0      | 500,0        | 494,3  | 505,7  | 2,0   |  |
| Measurement                         | Nominal/V  | Indicated/V  | Min/V  | Max/V  | MU/mV |  |
| Input Level 0 dB 1 kHz Ch 1         | 1,000      | 1,000        | 0,989  | 1,011  | 2,0   |  |
| Input Level 0 dB 1 kHz Ch 2         | 1,000      | 1,000        | 0,989  | 1,011  | 2,0   |  |
| Input Level 6 dB 1 kHz Ch 1         | 2,000      | 2,001        | 1,978  | 2,022  | 6,6   |  |
| Input Level 6 dB 1 kHz Ch 2         | 2,000      | 2,001        | 1,978  | 2,022  | 6,6   |  |
|                                     |            |              |        |        |       |  |
| Measurement                         | Nominal/mV | Indicated/mV | Min/mV | Max/mV | MU/mV |  |
| Input Linearity 0 dB 1 kHz Ch 1     | 100,0      | 100,0        | 89,0   | 111,0  | 1,0   |  |
| Input Linearity 0 dB 1 kHz Ch 2     | 100,0      | 100,0        | 89,0   | 111,0  | 1,0   |  |
| Input Linearity 0 dB 1 kHz Ch 1     | 500,0      | 500,0        | 489,0  | 511,0  | 2,0   |  |
| Input Linearity 0 dB 1 kHz Ch 2     | 500,0      | 500,0        | 489,0  | 511,0  | 2,0   |  |
| Input Linearity 0 dB 1 kHz Ch 1     | 900,0      | 900,1        | 889,0  | 911,0  | 2,0   |  |
| Input Linearity 0 dB 1 kHz Ch 2     | 900,0      | 900,1        | 889,0  | 911,0  | 2,0   |  |
|                                     |            |              |        |        |       |  |
| Measurement                         | Nominal/V  | Indicated/V  | Min/V  | Max/V  | MU/mV |  |
| Frequency response 0 dB 100 Hz CH 1 | 1,000      | 1,002        | 0,983  | 1,017  | 2,0   |  |
| Frequency response 0 dB 100 Hz CH 2 | 1,000      | 1,002        | 0,983  | 1,017  | 2,0   |  |
| Frequency response 0 dB 1 kHz CH 1  | 1,000      | 1,001        | 0,989  | 1,011  | 2,0   |  |
| Frequency response 0 dB 1 kHz CH 2  | 1,000      | 1,001        | 0,989  | 1,011  | 2,0   |  |
| Frequency response 0 dB 10 kHz CH 1 | 1,000      | 1,004        | 0,983  | 1,017  | 2,0   |  |
| Frequency response 0 dB 10 kHz CH 2 | 1,000      | 1,004        | 0,983  | 1,017  | 2,0   |  |
| Frequency response 0 dB 20 kHz CH 1 | 1,000      | 0,998        | 0,983  | 1,017  | 2,0   |  |
| Frequency response 0 dB 20 kHz CH 2 | 1,000      | 0,998        | 0,983  | 1,017  | 2,0   |  |

Seite 5  
Pagevon 7  
of

000453

D-K-21099-  
02-00

2024-07

| Analog Outputs                      |            |              |        |        |       |  |
|-------------------------------------|------------|--------------|--------|--------|-------|--|
| Measurement                         | Nominal/mV | Indicated/mV | Min/mV | Max/mV | MU/mV |  |
| Output Level -24 dB 1 kHz Ch 1      | 60,0       | 60,0         | 59,3   | 60,7   | 0,2   |  |
| Output Level -24 dB 1 kHz Ch 2      | 60,0       | 59,8         | 59,3   | 60,7   | 0,2   |  |
| Output Level -18 dB 1 kHz Ch 1      | 125,0      | 125,0        | 123,6  | 126,4  | 0,6   |  |
| Output Level -18 dB 1 kHz Ch 2      | 125,0      | 125,0        | 123,6  | 126,4  | 0,6   |  |
| Output Level -12 dB 1 kHz Ch 1      | 250,0      | 250,0        | 247,1  | 252,9  | 1,0   |  |
| Output Level -12 dB 1 kHz Ch 2      | 250,0      | 250,0        | 247,1  | 252,9  | 1,0   |  |
| Output Level -6 dB 1 kHz Ch 1       | 500,0      | 499,9        | 494,3  | 505,7  | 2,0   |  |
| Output Level -6 dB 1 kHz Ch 2       | 500,0      | 499,9        | 494,3  | 505,7  | 2,0   |  |
| Measurement                         | Nominal/V  | Indicated/V  | Min/V  | Max/V  | MU/mV |  |
| Output Level 0 dB 1 kHz Ch 1        | 1,000      | 0,999        | 0,989  | 1,011  | 2,0   |  |
| Output Level 0 dB 1 kHz Ch 2        | 1,000      | 1,000        | 0,989  | 1,011  | 2,0   |  |
| Output Level 3 dB 1 kHz Ch 1        | 1,410      | 1,409        | 1,394  | 1,426  | 6,0   |  |
| Output Level 3 dB 1 kHz Ch 2        | 1,410      | 1,409        | 1,394  | 1,426  | 6,0   |  |
|                                     |            |              |        |        |       |  |
| Measurement                         | Nominal/mV | Indicated/mV | Min/mV | Max/mV | MU/mV |  |
| Output Linearity 0 dB 1 kHz Ch 1    | 100,0      | 100,0        | 89,0   | 111,0  | 1,0   |  |
| Output Linearity 0 dB 1 kHz Ch 2    | 100,0      | 100,0        | 89,0   | 111,0  | 1,0   |  |
| Output Linearity 0 dB 1 kHz Ch 1    | 500,0      | 499,7        | 489,0  | 511,0  | 2,0   |  |
| Output Linearity 0 dB 1 kHz Ch 2    | 500,0      | 499,8        | 489,0  | 511,0  | 2,0   |  |
| Output Linearity 0 dB 1 kHz Ch 1    | 900,0      | 899,5        | 889,0  | 911,0  | 2,0   |  |
| Output Linearity 0 dB 1 kHz Ch 2    | 900,0      | 899,6        | 889,0  | 911,0  | 2,0   |  |
|                                     |            |              |        |        |       |  |
| Measurement                         | Nominal/V  | Indicated/V  | Min/V  | Max/V  | MU/mV |  |
| Frequency response 0 dB 100 Hz CH 1 | 1,000      | 1,000        | 0,983  | 1,017  | 2,0   |  |
| Frequency response 0 dB 100 Hz CH 2 | 1,000      | 1,000        | 0,983  | 1,017  | 2,0   |  |
| Frequency response 0 dB 1 kHz CH 1  | 1,000      | 1,000        | 0,989  | 1,011  | 2,0   |  |
| Frequency response 0 dB 1 kHz CH 2  | 1,000      | 1,000        | 0,989  | 1,011  | 2,0   |  |
| Frequency response 0 dB 10 kHz CH 1 | 1,000      | 0,999        | 0,983  | 1,017  | 2,0   |  |
| Frequency response 0 dB 10 kHz CH 2 | 1,000      | 0,999        | 0,983  | 1,017  | 2,0   |  |
| Frequency response 0 dB 20 kHz CH 1 | 1,000      | 0,992        | 0,983  | 1,017  | 2,0   |  |
| Frequency response 0 dB 20 kHz CH 2 | 1,000      | 0,993        | 0,983  | 1,017  | 2,0   |  |



000453

D-K-21099-02-00

2024-07

| Analog Inputs (coreIN-Mic4)   |            |              |        |        |       |  |
|-------------------------------|------------|--------------|--------|--------|-------|--|
| Measurement                   | Nominal/mV | Indicated/mV | Min/mV | Max/mV | MU/mV |  |
| Input Level 108 dB 1 kHz Ch 1 | 60,0       | 60,0         | 59,3   | 60,7   | 0,2   |  |
| Input Level 108 dB 1 kHz Ch 2 | 60,0       | 60,0         | 59,3   | 60,7   | 0,2   |  |
| Input Level 114 dB 1 kHz Ch 1 | 125,0      | 125,0        | 123,6  | 126,4  | 0,6   |  |
| Input Level 114 dB 1 kHz Ch 2 | 125,0      | 125,0        | 123,6  | 126,4  | 0,6   |  |
| Input Level 120 dB 1 kHz Ch 1 | 250,0      | 250,0        | 247,1  | 252,9  | 1,0   |  |
| Input Level 120 dB 1 kHz Ch 2 | 250,0      | 250,0        | 247,1  | 252,9  | 1,0   |  |
| Input Level 126 dB 1 kHz Ch 1 | 500,0      | 500,0        | 494,3  | 505,7  | 2,0   |  |
| Input Level 126 dB 1 kHz Ch 2 | 500,0      | 500,0        | 494,3  | 505,7  | 2,0   |  |
| Measurement                   | Nominal/V  | Indicated/V  | Min/V  | Max/V  | MU/mV |  |
| Input Level 132 dB 1 kHz Ch 1 | 1,000      | 1,000        | 0,989  | 1,011  | 2,0   |  |
| Input Level 132 dB 1 kHz Ch 2 | 1,000      | 1,000        | 0,989  | 1,011  | 2,0   |  |
| Input Level 138 dB 1 kHz Ch 1 | 2,000      | 2,000        | 1,978  | 2,022  | 6,6   |  |
| Input Level 138 dB 1 kHz Ch 2 | 2,000      | 2,000        | 1,978  | 2,022  | 6,6   |  |
| Input Level 144 dB 1 kHz Ch 1 | 4,000      | 4,000        | 3,955  | 4,045  | 10    |  |
| Input Level 144 dB 1 kHz Ch 2 | 4,000      | 4,000        | 3,955  | 4,045  | 10    |  |
|                               |            |              |        |        |       |  |
| Measurement                   | Nominal/mV | Indicated/mV | Min/mV | Max/mV | MU/mV |  |
| Input Level 108 dB 1 kHz Ch 3 | 60,0       | 60,0         | 59,3   | 60,7   | 0,2   |  |
| Input Level 108 dB 1 kHz Ch 4 | 60,0       | 60,0         | 59,3   | 60,7   | 0,2   |  |
| Input Level 114 dB 1 kHz Ch 3 | 125,0      | 125,0        | 123,6  | 126,4  | 0,6   |  |
| Input Level 114 dB 1 kHz Ch 4 | 125,0      | 125,0        | 123,6  | 126,4  | 0,6   |  |
| Input Level 120 dB 1 kHz Ch 3 | 250,0      | 250,0        | 247,1  | 252,9  | 1,0   |  |
| Input Level 120 dB 1 kHz Ch 4 | 250,0      | 250,0        | 247,1  | 252,9  | 1,0   |  |
| Input Level 126 dB 1 kHz Ch 3 | 500,0      | 500,0        | 494,3  | 505,7  | 2,0   |  |
| Input Level 126 dB 1 kHz Ch 4 | 500,0      | 500,0        | 494,3  | 505,7  | 2,0   |  |
| Measurement                   | Nominal/V  | Indicated/V  | Min/V  | Max/V  | MU/mV |  |
| Input Level 132 dB 1 kHz Ch 3 | 1,000      | 1,000        | 0,989  | 1,011  | 2,0   |  |
| Input Level 132 dB 1 kHz Ch 4 | 1,000      | 1,000        | 0,989  | 1,011  | 2,0   |  |
| Input Level 138 dB 1 kHz Ch 3 | 2,000      | 2,000        | 1,978  | 2,022  | 6,6   |  |
| Input Level 138 dB 1 kHz Ch 4 | 2,000      | 2,000        | 1,978  | 2,022  | 6,6   |  |
| Input Level 144 dB 1 kHz Ch 3 | 4,000      | 4,000        | 3,955  | 4,045  | 10    |  |
| Input Level 144 dB 1 kHz Ch 4 | 4,000      | 4,000        | 3,955  | 4,045  | 10    |  |

Seite 7  
Pagevon 7  
of

000453

D-K-21099-  
02-00

2024-07

| Linearity (coreIN-Mic4)           |            |              |        |        |       |  |
|-----------------------------------|------------|--------------|--------|--------|-------|--|
| Measurement                       | Nominal/mV | Indicated/mV | Min/mV | Max/mV | MU/mV |  |
| Input Linearity 1 kHz 132 dB Ch 1 | 100,0      | 100,0        | 89,0   | 111,0  | 1,0   |  |
| Input Linearity 1 kHz 132 dB Ch 2 | 100,0      | 100,0        | 89,0   | 111,0  | 1,0   |  |
| Input Linearity 1 kHz 132 dB Ch 1 | 500,0      | 500,0        | 489,0  | 511,0  | 2,0   |  |
| Input Linearity 1 kHz 132 dB Ch 2 | 500,0      | 500,0        | 489,0  | 511,0  | 2,0   |  |
| Input Linearity 1 kHz 132 dB Ch 1 | 900,0      | 900,0        | 889,0  | 911,0  | 2,0   |  |
| Input Linearity 1 kHz 132 dB Ch 2 | 900,0      | 900,0        | 889,0  | 911,0  | 2,0   |  |
| Measurement                       | Nominal/mV | Indicated/mV | Min/mV | Max/mV | MU/mV |  |
| Input Linearity 1 kHz 132 dB Ch 3 | 100,0      | 100,0        | 89,0   | 111,0  | 1,0   |  |
| Input Linearity 1 kHz 132 dB Ch 4 | 100,0      | 100,0        | 89,0   | 111,0  | 1,0   |  |
| Input Linearity 1 kHz 132 dB Ch 3 | 500,0      | 500,0        | 489,0  | 511,0  | 2,0   |  |
| Input Linearity 1 kHz 132 dB Ch 4 | 500,0      | 500,0        | 489,0  | 511,0  | 2,0   |  |
| Input Linearity 1 kHz 132 dB Ch 3 | 900,0      | 900,0        | 889,0  | 911,0  | 2,0   |  |
| Input Linearity 1 kHz 132 dB Ch 4 | 900,0      | 900,0        | 889,0  | 911,0  | 2,0   |  |

| Frequency response (coreIN-Mic4)      |           |             |       |       |       |  |
|---------------------------------------|-----------|-------------|-------|-------|-------|--|
| Measurement                           | Nominal/V | Indicated/V | Min/V | Max/V | MU/mV |  |
| Frequency response 132 dB 100 Hz Ch 1 | 1,000     | 1,000       | 0,983 | 1,017 | 2,0   |  |
| Frequency response 132 dB 100 Hz Ch 2 | 1,000     | 1,000       | 0,983 | 1,017 | 2,0   |  |
| Frequency response 132 dB 1 kHz Ch 1  | 1,000     | 1,000       | 0,989 | 1,011 | 2,0   |  |
| Frequency response 132 dB 1 kHz Ch 2  | 1,000     | 1,000       | 0,989 | 1,011 | 2,0   |  |
| Frequency response 132 dB 10 kHz Ch 1 | 1,000     | 1,001       | 0,983 | 1,017 | 2,0   |  |
| Frequency response 132 dB 10 kHz Ch 2 | 1,000     | 1,001       | 0,983 | 1,017 | 2,0   |  |
| Frequency response 132 dB 20 kHz Ch 1 | 1,000     | 1,001       | 0,983 | 1,017 | 2,0   |  |
| Frequency response 132 dB 20 kHz Ch 2 | 1,000     | 1,001       | 0,983 | 1,017 | 2,0   |  |
| Measurement                           | Nominal/V | Indicated/V | Min/V | Max/V | MU/mV |  |
| Frequency response 132 dB 100 Hz Ch 3 | 1,000     | 1,000       | 0,983 | 1,017 | 2,0   |  |
| Frequency response 132 dB 100 Hz Ch 4 | 1,000     | 1,000       | 0,983 | 1,017 | 2,0   |  |
| Frequency response 132 dB 1 kHz Ch 3  | 1,000     | 1,000       | 0,989 | 1,011 | 2,0   |  |
| Frequency response 132 dB 1 kHz Ch 4  | 1,000     | 1,000       | 0,989 | 1,011 | 2,0   |  |
| Frequency response 132 dB 10 kHz Ch 3 | 1,000     | 1,001       | 0,983 | 1,017 | 2,0   |  |
| Frequency response 132 dB 10 kHz Ch 4 | 1,000     | 1,001       | 0,983 | 1,017 | 2,0   |  |
| Frequency response 132 dB 20 kHz Ch 3 | 1,000     | 1,001       | 0,983 | 1,017 | 2,0   |  |
| Frequency response 132 dB 20 kHz Ch 4 | 1,000     | 1,001       | 0,983 | 1,017 | 2,0   |  |

- Ende des Kalibrierscheines -  
- End of Calibration Certificate -