

**The Appendix is an integral part of
Certificate of Accreditation No. 412/2017 of 14/ 07/ 2017**

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

Exova Metech, s.r.o.
Calibration Laboratory
Toužimská 767, Letňany, 199 00 Praha 9

Field of measured quantity: **Length**

Calibration:

Nominal calibration temperature: (20 ± 1) °C

| Ordinal number ¹⁾ | Measured quantity | Measured quantity range | Calibration and Measurement Capability [±] ²⁾ | Calibration procedure identification |
|------------------------------|--------------------------------|-------------------------|------------------------------------------------------------|----------------------------------------------|
| 1 | Slide gauges | 0 to 300 mm | (30 + 30L) μm | LIII-D001 (DAkKS-DKD-R 4-3 Blatt 9.1) |
| 2 | Micrometers | 0 to 100 mm | (3 + 10L) μm | LIII-D002 (DAkKS-DKD-R 4-3 Blatt 10.1) |
| 3 | Setting gauges for micrometers | 0 to 100 mm | (2 + 5L) μm | LIII-D003 (DAkKS-DKD-R 4-3 Blatt 4.4) |
| 4 | Cylindrical gauges | 2 to 100 mm | 1 μm | LIII-D004 (DAkKS-DKD-R 4-3 Blatt 4.1) |
| 5 | Thread gauges | 3 to 100 mm | 3.5 μm | LIII-D005 (DAkKS-DKD-R 4-3 Blatt 4.8) |

Explanations:

L [m] /characteristic dimension /

Measured instruments or devices:

(In accordance with the above list of measured quantities and their range of measurement, it is possible to measure the following types of devices and equipment)

| Ordinal number | Measured instrument/device type |
|----------------|---------------------------------------------|
| 1 | Slide gauges up to 300 mm |
| 2 | Micrometers up to 100 mm |
| 3 | Setting gauges for micrometers up to 100 mm |
| 4 | Cylindrical gauges from 2 to 100 mm |
| 5 | Thread gauges from 3 to 100 mm |



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Field of measured quantity: **Electrical quantities**

Calibration:

Nominal calibration temperature: (23 ± 3) °C

| Ordinal number ¹⁾ | Measured quantity and range of measurement | Frequency | Calibration and Measurement Capability [±] ²⁾ | Method identification |
|------------------------------|--------------------------------------------|-----------|------------------------------------------------------------|-----------------------|
| 1* | DC resistance – measurement | | | LIII-006 |
| | 0 Ω to 0.1 Ω | - | 68 μΩ | |
| | 0.1 to 1 Ω | - | 0.0020 % | |
| | 1 Ω to 10 Ω | - | 0.0020 % | |
| | 10 Ω to 100 Ω | - | 0.006 % | |
| | 100 Ω to 1 kΩ | - | 0.0014 % | |
| | 1 kΩ to 10 kΩ | - | 0.0014 % | |
| | 10 kΩ to 100 kΩ | - | 0.0014 % | |
| | 100 kΩ to 1 MΩ | - | 0.0032 % | |
| | 1 MΩ to 10 MΩ | - | 0.015 % | |
| | 10 MΩ to 100 MΩ | - | 0.083 % | |
| 100 MΩ to 1 GΩ | - | 0.87 % | | |
| 2* | DC voltage – measurement | | | LIII-001 |
| | 10 mV to 119.9 mV | - | 0.00075 % +1.0 μV | |
| | 120 mV to 1.199 V | - | 0.00055 % +1.0 μV | |
| | 1.2 V to 11.99 V | - | 0.00055 % | |
| | 12 V to 119.9 V | - | 0.00087 % | |
| 120 V to 1 kV | - | 0.0016 % | | |



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| Ordinal number ¹⁾ | Measured quantity and range of measurement | Frequency | Calibration and Measurement Capability [±] ²⁾ | Method identification |
|------------------------------|--------------------------------------------|-------------------|------------------------------------------------------------|-----------------------|
| 3* | Direct current – measurement | | | LIII-004 |
| | 100 nA to 1 µA | - | 0.47 nA | |
| | 1 µA to 10 µA | - | 0.3 nA | |
| | 10 µA to 100 µA | - | 0.0097 % | |
| | 100 µA to 1 mA | - | 0.0064 % | |
| | 1 mA to 10 mA | - | 0.0064 % | |
| | 10 mA to 100 mA | - | 0.0077 % | |
| | 100 mA to 1 A | - | 0.021 % | |
| | 1 A to 10 A | - | 0.029 % | |
| | 10 A to 20 A | - | 0.030 % | |
| | 20 A to 30 A | - | 0.031 % | |
| | 30 A to 40 A | - | 0.032 % | |
| | 40 A to 50 A | - | 0.038 % | |
| 4* | AC voltage – measurement | | | LIII-005 |
| | 1 mV to 11.99 mV | 1 kHz | 4.5 µV | |
| | 12 mV to 119.9 mV | 1 kHz | 11 µV | |
| | 120 mV to 11.99 V | 40 Hz to 1 kHz | 0.027 % | |
| | | 1 kHz to 20 kHz | 0.030 % | |
| | | 20 kHz to 50 kHz | 0.043 % | |
| | | 50 kHz to 100 kHz | 0.096 % | |
| | 12V to 119.9 V | 40 Hz to 20 kHz | 0.035 % | |
| | | 20 kHz to 50 kHz | 0.048 % | |
| | | 50 kHz to 100 kHz | 0.14 % | |
| | 120 V to 700 V | 40 Hz to 20 kHz | 0.075 % | |
| 5* | Alternating current – measurement | | | LIII-002 |
| | 10 µA to 119.9 µA | 45 Hz to 1 kHz | 82 nA | |
| | 120 µA to 1.199 mA | 45 Hz to 5 kHz | 0.49 µA | |
| | 1.2 mA to 11.99 mA | 45 Hz to 5 kHz | 0.26 % | |
| | 12 mA to 119.9 mA | 45 Hz to 5 kHz | 0.26 % | |
| | 120 mA to 1 A | 45 Hz to 5 kHz | 0.28 % | |



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|------------------------------|--------------------------------------------|-----------|-------------------------------------------------------------|-----------------------|
| 6* | DC voltage – generation | | | LIII-001 |
| | 0 mV to 220 mV | - | 0.00075 % + 0.4 μV | |
| | 220 mV to 2.2 V | - | 0.00048 % + 0.7 μV | |
| | 2.2 V to 11 V | - | 0.00044 % | |
| | 11 V to 22 V | - | 0.00037 % | |
| | 22 V to 220 V | - | 0.00065 % | |
| 7* | Direct current – generation | | | LIII-004 |
| | 0 μA to 220 μA | - | 0.004 % + 6 nA | |
| | 220 μA to 2.2 mA | - | 0.0032 % + 7 nA | |
| | 2.2 mA to 22 mA | - | 0.005 % | |
| | 22 mA to 220 mA | - | 0.0069 % | |
| 8* | DC resistance – generation | | | LIII-006 |
| | 1 Ω | | 0.0087 % | |
| | 1.9 Ω | | 0.0096 % | |
| | 10 Ω | | 0.0022 % | |
| | 19 Ω | | 0.0022 % | |
| | 100 Ω | | 0.0010 % | |
| | 190 Ω | | 0.0011 % | |
| | 1 kΩ | | 0.0008 % | |
| | 1.9 kΩ | | 0.00086 % | |
| | 10 kΩ | | 0.00078 % | |
| | 19 kΩ | | 0.00079 % | |
| | 100 kΩ | | 0.0011 % | |
| | 190 kΩ | | 0.0011 % | |
| | 1 MΩ | | 0.0019 % | |
| 1.9 MΩ | | 0.0021 % | | |
| 10 MΩ | | 0.0039 % | | |
| 19 MΩ | | 0.0047 % | | |
| 100 MΩ | | 0.012 % | | |



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|------------------------------|--------------------------------------------|--------------------|------------------------------------------------------------|-----------------------|----------------|
| 9* | AC voltage – generation | | | LIII-005 | |
| | 0 V to 2.2 mV | 10 Hz to 20 Hz | 0.079 % + 4 μV | | |
| | | 20 Hz to 40 Hz | 0.076 % + 4 μV | | |
| | | 40 Hz to 20 kHz | 0.044 % + 4 μV | | |
| | | 20 kHz to 50 kHz | 0.085 % + 4 μV | | |
| | | 50 kHz to 100 kHz | 0.13 % + 5 μV | | |
| | | 100 kHz to 300 kHz | 0.26 % + 10 μV | | |
| | | 300 kHz to 500 kHz | 0.28 % + 20 μV | | |
| | | 500 kHz to 1 MHz | 0.44 % + 20 μV | | |
| | | 2.2 mV to 22 mV | 10 Hz to 20 Hz | | 0.038 % + 4 μV |
| | | | 20 Hz to 40 Hz | | 0.022 % + 4 μV |
| | | | 40 Hz to 20 kHz | | 0.014 % + 4 μV |
| | | | 20 kHz to 50 kHz | | 0.029 % + 4 μV |
| | | | 50 kHz to 100 kHz | | 0.056 % + 5 μV |
| | | | 100 kHz to 300 kHz | | 0.13 % + 10 μV |
| | | | 300 kHz to 500 kHz | | 0.16 % + 20 μV |
| | | | 500 kHz to 1 MHz | | 0.32 % + 20 μV |
| | | 22 mV to 220 mV | 10 Hz to 20 Hz | | 0.085 % |
| | | | 20 Hz to 40 Hz | | 0.042 % |
| | | | 40 Hz to 20 kHz | | 0.038 % |
| | | | 20 kHz to 50 kHz | | 0.05 % |
| | | | 50 kHz to 100 kHz | | 0.12 % |
| | | | 100 kHz to 300 kHz | | 0.18 % |
| | | | 300 kHz to 500 kHz | | 0.25 % |
| | | | 500 kHz to 1 MHz | | 0.49 % |
| | | 220 mV to 2.2 V | 10 Hz to 20 Hz | | 0.05 % |
| | | | 20 Hz to 40 Hz | | 0.018 % |
| | | 40 Hz to 20 kHz | 0.0085 % | | |
| | | 20 kHz to 50 kHz | 0.013 % | | |
| | | 50 kHz to 100 kHz | 0.015 % | | |
| | | 100 kHz to 300 kHz | 0.078 % | | |
| | | 300 kHz to 500 kHz | 0.19 % | | |
| | | 500 kHz to 1 MHz | 0.32 % | | |



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|------------------------------|--------------------------------------------|--------------------|------------------------------------------------------------|-----------------------|
| 9* | AC voltage – generation | | | LIII-005 |
| | 2.2 V to 22 V | 10 Hz to 20 Hz | 0.049 % | |
| | | 20 Hz to 40 Hz | 0.018 % | |
| | | 40 Hz to 20 kHz | 0.0075 % | |
| | | 20 kHz to 50 kHz | 0.013 % | |
| | | 50 kHz to 100 kHz | 0.022 % | |
| | | 100 kHz to 300 kHz | 0.060 % | |
| | | 300 kHz to 500 kHz | 0.19 % | |
| | | 500 kHz to 1 MHz | 0.33 % | |
| | 22 V to 220 V | 10 Hz to 20 Hz | 0.049 % | |
| | | 20 Hz to 40 Hz | 0.018 % | |
| | | 40 Hz to 20 kHz | 0.0085 % | |
| | | 20 kHz to 50 kHz | 0.015 % | |
| | | 50 kHz to 100 kHz | 0.028 % | |
| | 220 V to 1000 V | 50 Hz to 1 kHz | 0.023 % | |



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|------------------------------|----------------------------------------------------------|--------------------------|------------------------------------------------------------|-----------------------------------------|-----------------|
| 10* | Alternating current – generation 20 nA to 220 µA | 10 Hz to 40 Hz | 0.041 % + 18 nA | LIII-002 | |
| | | 40 Hz to 1 kHz | 0.036 % + 8 nA | | |
| | | 1 kHz to 5 kHz | 0.047 % + 12 nA | | |
| | | 5 kHz to 10 kHz | 0.11 % + 65 nA | | |
| | 220 µA to 2.2 mA | 10 Hz to 40 Hz | 0.059 % | | |
| | | 40 Hz to 1 kHz | 0.049 % | | |
| | | 1 kHz to 5 kHz | 0.095 % | | |
| | | 5 kHz to 10 kHz | 0.39 % | | |
| | 2.2 mA to 22 mA | 10 Hz to 40 Hz | 0.045 % | | |
| | | 40 Hz to 1 kHz | 0.031 % | | |
| | | 1 kHz to 5 kHz | 0.057 % | | |
| | | 5 kHz to 10 kHz | 0.32 % | | |
| | 22 mA to 220 mA | 10 Hz to 40 Hz | 0.045 % | | |
| | | 40 Hz to 1 kHz | 0.028 % | | |
| | | 1 kHz to 5 kHz | 0.046 % | | |
| | | 5 kHz to 10 kHz | 0.15 % | | |
| 220 mA to 2.2 A | 20 Hz to 1 kHz | 0.046 % | | | |
| | 1 kHz to 5 kHz | 0.083 % | | | |
| | 5 kHz to 10 kHz | 0.70 % | | | |
| | | | | | |
| 11* | Amplitude modulation depth – measurement 10 % to 90 % | <i>Carrier frequency</i> | | LIII-050 <i>Modulation frequency</i> | |
| | | 150 kHz to 10 MHz | 2.7 % | | 20 Hz to 50 Hz |
| | | | 3.8 % | | 50 Hz to 50 kHz |
| | | 10 MHz to 1.3 GHz | 1.6 % | | 20 Hz to 50 Hz |
| | | | 3.8 % | 50 Hz to 100 kHz | |



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|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------|
| 12* | Distortion of LF signal (THD) – measurement 0.001 % to 0.1 % 0.1 % to 3 % 3 % to 30 % 0.001 % to 0.1 % 0.1 % to 3 % 3 % to 30 % | 20 Hz to 20 kHz 20 kHz to 100 kHz | 0.04 % abs 0.15 % abs 0.42 % abs 0.11 % abs 0.32 % abs 0.90 % abs | LIII-056 <i>Signal level</i> 50 mV to 300 V |

| Ordinal number ¹⁾ | Measured quantity and range of measurement | Method identification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-------------|------------|------------|------------|------------|----------|-------------------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|-------|-------|-------|------------------|-------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|------|--------------------------------|
| 13* | Reflection coefficient – measurement <table border="1"> <thead> <tr> <th>Frequency</th> <th>0 to 0.02</th> <th>0.02 to 0.1</th> <th>0.1 to 0.2</th> <th>0.2 to 0.4</th> <th>0.4 to 0.6</th> <th>0.6 to 0.8</th> <th>0.8 to 1</th> </tr> </thead> <tbody> <tr> <td>30 kHz to 300 kHz</td> <td>0.010</td> <td>0.011</td> <td>0.012</td> <td>0.016</td> <td>0.020</td> <td>0.026</td> <td>0.032</td> </tr> <tr> <td>300 kHz to 1.3 GHz</td> <td>0.010</td> <td>0.011</td> <td>0.012</td> <td>0.017</td> <td>0.023</td> <td>0.030</td> <td>0.039</td> </tr> <tr> <td>1.3 GHz to 2 GHz</td> <td>0.010</td> <td>0.011</td> <td>0.014</td> <td>0.021</td> <td>0.031</td> <td>0.044</td> <td>0.059</td> </tr> <tr> <td>2 GHz to 3 GHz</td> <td>0.013</td> <td>0.014</td> <td>0.017</td> <td>0.024</td> <td>0.034</td> <td>0.047</td> <td>0.062</td> </tr> <tr> <td>3 GHz to 6 GHz</td> <td>0.023</td> <td>0.026</td> <td>0.031</td> <td>0.044</td> <td>0.062</td> <td>0.084</td> <td>0.11</td> </tr> </tbody> </table> | Frequency | 0 to 0.02 | 0.02 to 0.1 | 0.1 to 0.2 | 0.2 to 0.4 | 0.4 to 0.6 | 0.6 to 0.8 | 0.8 to 1 | 30 kHz to 300 kHz | 0.010 | 0.011 | 0.012 | 0.016 | 0.020 | 0.026 | 0.032 | 300 kHz to 1.3 GHz | 0.010 | 0.011 | 0.012 | 0.017 | 0.023 | 0.030 | 0.039 | 1.3 GHz to 2 GHz | 0.010 | 0.011 | 0.014 | 0.021 | 0.031 | 0.044 | 0.059 | 2 GHz to 3 GHz | 0.013 | 0.014 | 0.017 | 0.024 | 0.034 | 0.047 | 0.062 | 3 GHz to 6 GHz | 0.023 | 0.026 | 0.031 | 0.044 | 0.062 | 0.084 | 0.11 | LIII-055 N type 50 Ω |
| Frequency | 0 to 0.02 | 0.02 to 0.1 | 0.1 to 0.2 | 0.2 to 0.4 | 0.4 to 0.6 | 0.6 to 0.8 | 0.8 to 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 kHz to 300 kHz | 0.010 | 0.011 | 0.012 | 0.016 | 0.020 | 0.026 | 0.032 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 300 kHz to 1.3 GHz | 0.010 | 0.011 | 0.012 | 0.017 | 0.023 | 0.030 | 0.039 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.3 GHz to 2 GHz | 0.010 | 0.011 | 0.014 | 0.021 | 0.031 | 0.044 | 0.059 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 GHz to 3 GHz | 0.013 | 0.014 | 0.017 | 0.024 | 0.034 | 0.047 | 0.062 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 GHz to 6 GHz | 0.023 | 0.026 | 0.031 | 0.044 | 0.062 | 0.084 | 0.11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



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|------------------------------|---------------------------------------------|-------------------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|----------|--------------------------------|-------|
| 13* | Reflection coefficient – measurement | | | | | | | | | | LIII-055 N type 50 Ω | |
| | 0 to 0.1 | 0.1 to 0.2 | 0.2 to 0.3 | 0.3 to 0.4 | 0.4 to 0.5 | 0.5 to 0.6 | 0.6 to 0.7 | 0.7 to 0.8 | 0.8 to 0.9 | 0.9 to 1 | | |
| | Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | | | | | | | | |
| | 0.05 to 0.1 | 0.006 | 0.006 | 0.007 | 0.010 | 0.015 | 0.021 | 0.028 | 0.036 | 0.046 | | 0.057 |
| | 0.1 to 0.2 | 0.006 | 0.006 | 0.007 | 0.010 | 0.015 | 0.021 | 0.028 | 0.036 | 0.046 | | 0.057 |
| | 0.2 to 0.5 | 0.006 | 0.006 | 0.008 | 0.011 | 0.015 | 0.021 | 0.028 | 0.036 | 0.046 | | 0.057 |
| | 0.5 to 1 | 0.006 | 0.006 | 0.008 | 0.011 | 0.015 | 0.021 | 0.028 | 0.037 | 0.046 | | 0.057 |
| | 1 to 2 | 0.006 | 0.007 | 0.008 | 0.011 | 0.016 | 0.022 | 0.030 | 0.039 | 0.049 | | 0.06 |
| | 2 to 3 | 0.009 | 0.009 | 0.010 | 0.013 | 0.017 | 0.023 | 0.030 | 0.039 | 0.049 | | 0.061 |
| | 3 to 4 | 0.009 | 0.009 | 0.010 | 0.013 | 0.017 | 0.023 | 0.031 | 0.039 | 0.049 | | 0.061 |
| | 4 to 5 | 0.009 | 0.010 | 0.011 | 0.013 | 0.018 | 0.023 | 0.031 | 0.04 | 0.05 | | 0.061 |
| | 5 to 6 | 0.011 | 0.011 | 0.012 | 0.014 | 0.018 | 0.024 | 0.031 | 0.04 | 0.05 | | 0.061 |
| | 6 to 7 | 0.029 | 0.029 | 0.029 | 0.031 | 0.033 | 0.036 | 0.041 | 0.048 | 0.057 | | 0.067 |
| | 7 to 8 | 0.029 | 0.029 | 0.029 | 0.031 | 0.033 | 0.036 | 0.041 | 0.048 | 0.057 | | 0.067 |
| | 8 to 9 | 0.029 | 0.029 | 0.029 | 0.031 | 0.033 | 0.036 | 0.041 | 0.048 | 0.057 | | 0.067 |
| | 9 to 10 | 0.029 | 0.029 | 0.029 | 0.031 | 0.033 | 0.036 | 0.041 | 0.048 | 0.057 | | 0.067 |
| | 10 to 11 | 0.029 | 0.029 | 0.029 | 0.031 | 0.033 | 0.036 | 0.041 | 0.048 | 0.057 | | 0.067 |
| | 11 to 12 | 0.029 | 0.030 | 0.030 | 0.031 | 0.033 | 0.037 | 0.042 | 0.048 | 0.057 | | 0.067 |
| | 12 to 13 | 0.029 | 0.030 | 0.030 | 0.031 | 0.033 | 0.037 | 0.042 | 0.048 | 0.057 | | 0.067 |
| | 13 to 14 | 0.030 | 0.030 | 0.031 | 0.032 | 0.034 | 0.037 | 0.042 | 0.049 | 0.057 | | 0.067 |
| | 14 to 15 | 0.030 | 0.030 | 0.031 | 0.032 | 0.034 | 0.037 | 0.042 | 0.049 | 0.057 | 0.067 | |
| | 15 to 16 | 0.030 | 0.030 | 0.031 | 0.032 | 0.034 | 0.037 | 0.042 | 0.049 | 0.057 | 0.067 | |
| | 16 to 17 | 0.030 | 0.030 | 0.031 | 0.032 | 0.034 | 0.037 | 0.042 | 0.049 | 0.057 | 0.067 | |
| | 17 to 18 | 0.030 | 0.030 | 0.031 | 0.032 | 0.034 | 0.037 | 0.042 | 0.049 | 0.057 | 0.067 | |



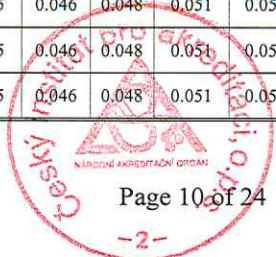
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|------------------------------|------------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|-------------------------|
| 13* | Reflection coefficient – measurement | | | | | | | | | | |
| | 0 to 0.1 | 0.1 to 0.2 | 0.2 to 0.3 | 0.3 to 0.4 | 0.4 to 0.5 | 0.5 to 0.6 | 0.6 to 0.7 | 0.7 to 0.8 | 0.8 to 0.9 | 0.9 to 1 | LIII-055 3.5 mm 50 Ω |
| Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | | | | | | | | |
| 0.05 to 0.25 | 0.007 | 0.007 | 0.010 | 0.014 | 0.021 | 0.029 | 0.039 | 0.051 | 0.065 | 0.08 | |
| 0.25 to 0.5 | 0.008 | 0.008 | 0.010 | 0.015 | 0.021 | 0.03 | 0.04 | 0.051 | 0.065 | 0.08 | |
| 0.5 to 1 | 0.009 | 0.009 | 0.011 | 0.016 | 0.022 | 0.03 | 0.04 | 0.052 | 0.065 | 0.08 | |
| 1 to 2 | 0.012 | 0.012 | 0.014 | 0.018 | 0.024 | 0.032 | 0.042 | 0.054 | 0.068 | 0.083 | |
| 2 to 3 | 0.013 | 0.013 | 0.015 | 0.019 | 0.024 | 0.032 | 0.042 | 0.054 | 0.068 | 0.083 | |
| 3 to 4 | 0.014 | 0.014 | 0.016 | 0.019 | 0.025 | 0.033 | 0.043 | 0.054 | 0.068 | 0.083 | |
| 4 to 5 | 0.017 | 0.017 | 0.018 | 0.021 | 0.026 | 0.034 | 0.044 | 0.055 | 0.069 | 0.084 | |
| 5 to 6 | 0.018 | 0.018 | 0.019 | 0.022 | 0.027 | 0.035 | 0.044 | 0.056 | 0.069 | 0.084 | |
| 6 to 7 | 0.045 | 0.045 | 0.046 | 0.047 | 0.049 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 7 to 8 | 0.045 | 0.045 | 0.046 | 0.047 | 0.049 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 8 to 9 | 0.045 | 0.045 | 0.046 | 0.047 | 0.049 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 9 to 10 | 0.045 | 0.045 | 0.046 | 0.047 | 0.049 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 10 to 11 | 0.045 | 0.045 | 0.046 | 0.047 | 0.05 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 11 to 12 | 0.045 | 0.045 | 0.046 | 0.047 | 0.05 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 12 to 13 | 0.045 | 0.045 | 0.046 | 0.047 | 0.05 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 13 to 14 | 0.045 | 0.045 | 0.046 | 0.047 | 0.05 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 14 to 15 | 0.045 | 0.045 | 0.046 | 0.047 | 0.05 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 15 to 16 | 0.045 | 0.045 | 0.046 | 0.047 | 0.05 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 16 to 17 | 0.045 | 0.045 | 0.046 | 0.047 | 0.05 | 0.054 | 0.06 | 0.069 | 0.08 | 0.094 | |
| 17 to 18 | 0.045 | 0.045 | 0.046 | 0.047 | 0.05 | 0.054 | 0.061 | 0.069 | 0.081 | 0.094 | |
| 18 to 19 | 0.045 | 0.045 | 0.046 | 0.047 | 0.05 | 0.054 | 0.061 | 0.069 | 0.081 | 0.094 | |
| 19 to 20 | 0.045 | 0.045 | 0.046 | 0.047 | 0.05 | 0.054 | 0.061 | 0.069 | 0.081 | 0.094 | |
| 20 to 21 | 0.045 | 0.045 | 0.046 | 0.048 | 0.051 | 0.057 | 0.065 | 0.076 | 0.09 | 0.11 | |
| 21 to 22 | 0.045 | 0.045 | 0.046 | 0.048 | 0.051 | 0.057 | 0.065 | 0.076 | 0.09 | 0.11 | |
| 22 to 23 | 0.045 | 0.045 | 0.046 | 0.048 | 0.051 | 0.057 | 0.065 | 0.076 | 0.09 | 0.11 | |
| 23 to 24 | 0.045 | 0.045 | 0.046 | 0.048 | 0.051 | 0.057 | 0.065 | 0.076 | 0.09 | 0.11 | |
| 24 to 25 | 0.045 | 0.045 | 0.046 | 0.048 | 0.051 | 0.057 | 0.065 | 0.076 | 0.09 | 0.11 | |
| 25 to 26 | 0.045 | 0.045 | 0.046 | 0.048 | 0.051 | 0.057 | 0.065 | 0.076 | 0.09 | 0.11 | |
| 26 to 26.5 | 0.045 | 0.045 | 0.046 | 0.048 | 0.051 | 0.057 | 0.065 | 0.076 | 0.09 | 0.11 | |

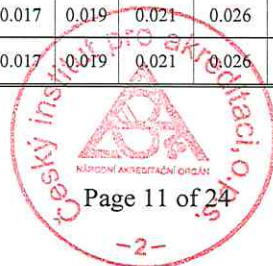


The Appendix is an integral part of
Certificate of Accreditation No. 412/2017 of 14/ 07/ 2017

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

Exova Metech, s.r.o.
Calibration Laboratory
Toužimská 767, Letňany, 199 00 Praha 9

| Ordinal number ¹⁾ | Measured quantity and range of measurement | Method identification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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---|------------|------------|------------|------------|------------|------------|----------|-----------------|------------------------------------------------------------|--|--|--|--|--|--|--|--|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 13* | Reflection coefficient – measurement | LIII-055 2.4 mm 50 Ω | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th></th> <th>0 to 0.1</th> <th>0.1 to 0.2</th> <th>0.2 to 0.3</th> <th>0.3 to 0.4</th> <th>0.4 to 0.5</th> <th>0.5 to 0.6</th> <th>0.6 to 0.7</th> <th>0.7 to 0.8</th> <th>0.8 to 0.9</th> <th>0.9 to 1</th> </tr> </thead> <tbody> <tr> <th>Frequency (GHz)</th> <th colspan="10">Calibration and Measurement Capability [±] ²⁾</th> </tr> <tr><td>0.05 to 0.1</td><td>0.010</td><td>0.010</td><td>0.010</td><td>0.011</td><td>0.011</td><td>0.011</td><td>0.011</td><td>0.012</td><td>0.013</td><td>0.014</td></tr> <tr><td>0.1 to 0.5</td><td>0.010</td><td>0.010</td><td>0.010</td><td>0.011</td><td>0.011</td><td>0.011</td><td>0.012</td><td>0.013</td><td>0.014</td><td>0.015</td></tr> <tr><td>0.5 to 1</td><td>0.010</td><td>0.010</td><td>0.010</td><td>0.011</td><td>0.011</td><td>0.011</td><td>0.012</td><td>0.013</td><td>0.014</td><td>0.015</td></tr> <tr><td>1 to 2</td><td>0.010</td><td>0.010</td><td>0.010</td><td>0.011</td><td>0.011</td><td>0.011</td><td>0.012</td><td>0.013</td><td>0.014</td><td>0.015</td></tr> <tr><td>2 to 3</td><td>0.011</td><td>0.012</td><td>0.012</td><td>0.012</td><td>0.013</td><td>0.014</td><td>0.016</td><td>0.019</td><td>0.022</td><td>0.026</td></tr> <tr><td>3 to 4</td><td>0.012</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.014</td><td>0.015</td><td>0.017</td><td>0.020</td><td>0.023</td><td>0.027</td></tr> <tr><td>4 to 5</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.014</td><td>0.015</td><td>0.017</td><td>0.020</td><td>0.023</td><td>0.027</td></tr> <tr><td>5 to 6</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.014</td><td>0.015</td><td>0.017</td><td>0.020</td><td>0.023</td><td>0.027</td></tr> <tr><td>6 to 7</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.014</td><td>0.015</td><td>0.017</td><td>0.020</td><td>0.023</td><td>0.027</td></tr> <tr><td>7 to 8</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.014</td><td>0.015</td><td>0.017</td><td>0.020</td><td>0.023</td><td>0.027</td></tr> <tr><td>8 to 9</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.014</td><td>0.015</td><td>0.018</td><td>0.020</td><td>0.024</td><td>0.028</td></tr> <tr><td>9 to 10</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.014</td><td>0.015</td><td>0.018</td><td>0.020</td><td>0.024</td><td>0.028</td></tr> <tr><td>10 to 11</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.014</td><td>0.015</td><td>0.018</td><td>0.020</td><td>0.024</td><td>0.028</td></tr> <tr><td>11 to 12</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.013</td><td>0.014</td><td>0.015</td><td>0.017</td><td>0.020</td><td>0.023</td><td>0.027</td></tr> <tr><td>12 to 13</td><td>0.014</td><td>0.014</td><td>0.014</td><td>0.015</td><td>0.015</td><td>0.016</td><td>0.018</td><td>0.021</td><td>0.024</td><td>0.027</td></tr> <tr><td>13 to 14</td><td>0.014</td><td>0.014</td><td>0.014</td><td>0.015</td><td>0.015</td><td>0.016</td><td>0.018</td><td>0.021</td><td>0.024</td><td>0.027</td></tr> <tr><td>14 to 15</td><td>0.016</td><td>0.016</td><td>0.016</td><td>0.016</td><td>0.017</td><td>0.018</td><td>0.019</td><td>0.022</td><td>0.025</td><td>0.028</td></tr> <tr><td>15 to 16</td><td>0.016</td><td>0.016</td><td>0.016</td><td>0.016</td><td>0.017</td><td>0.018</td><td>0.019</td><td>0.022</td><td>0.025</td><td>0.028</td></tr> <tr><td>16 to 17</td><td>0.016</td><td>0.016</td><td>0.016</td><td>0.016</td><td>0.017</td><td>0.018</td><td>0.020</td><td>0.022</td><td>0.025</td><td>0.029</td></tr> <tr><td>17 to 18</td><td>0.016</td><td>0.016</td><td>0.016</td><td>0.016</td><td>0.017</td><td>0.018</td><td>0.020</td><td>0.022</td><td>0.025</td><td>0.029</td></tr> <tr><td>18 to 19</td><td>0.016</td><td>0.016</td><td>0.016</td><td>0.017</td><td>0.017</td><td>0.018</td><td>0.020</td><td>0.023</td><td>0.026</td><td>0.03</td></tr> <tr><td>19 to 20</td><td>0.016</td><td>0.016</td><td>0.016</td><td>0.017</td><td>0.017</td><td>0.018</td><td>0.020</td><td>0.022</td><td>0.025</td><td>0.029</td></tr> <tr><td>20 to 21</td><td>0.017</td><td>0.017</td><td>0.018</td><td>0.019</td><td>0.022</td><td>0.026</td><td>0.032</td><td>0.039</td><td>0.047</td><td>0.057</td></tr> <tr><td>21 to 22</td><td>0.017</td><td>0.017</td><td>0.018</td><td>0.019</td><td>0.022</td><td>0.026</td><td>0.032</td><td>0.039</td><td>0.047</td><td>0.057</td></tr> <tr><td>22 to 23</td><td>0.017</td><td>0.017</td><td>0.017</td><td>0.019</td><td>0.021</td><td>0.026</td><td>0.031</td><td>0.039</td><td>0.047</td><td>0.057</td></tr> <tr><td>23 to 24</td><td>0.017</td><td>0.017</td><td>0.017</td><td>0.019</td><td>0.021</td><td>0.026</td><td>0.031</td><td>0.039</td><td>0.047</td><td>0.057</td></tr> <tr><td>24 to 25</td><td>0.017</td><td>0.017</td><td>0.017</td><td>0.019</td><td>0.021</td><td>0.026</td><td>0.031</td><td>0.039</td><td>0.047</td><td>0.057</td></tr> </tbody> </table> | | | 0 to 0.1 | 0.1 to 0.2 | 0.2 to 0.3 | 0.3 to 0.4 | 0.4 to 0.5 | 0.5 to 0.6 | 0.6 to 0.7 | 0.7 to 0.8 | 0.8 to 0.9 | 0.9 to 1 | Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | | | | | | | | 0.05 to 0.1 | 0.010 | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 | 0.011 | 0.012 | 0.013 | 0.014 | 0.1 to 0.5 | 0.010 | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 | 0.012 | 0.013 | 0.014 | 0.015 | 0.5 to 1 | 0.010 | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 | 0.012 | 0.013 | 0.014 | 0.015 | 1 to 2 | 0.010 | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 | 0.012 | 0.013 | 0.014 | 0.015 | 2 to 3 | 0.011 | 0.012 | 0.012 | 0.012 | 0.013 | 0.014 | 0.016 | 0.019 | 0.022 | 0.026 | 3 to 4 | 0.012 | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | 4 to 5 | 0.013 | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | 5 to 6 | 0.013 | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | 6 to 7 | 0.013 | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | 7 to 8 | 0.013 | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | 8 to 9 | 0.013 | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.018 | 0.020 | 0.024 | 0.028 | 9 to 10 | 0.013 | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.018 | 0.020 | 0.024 | 0.028 | 10 to 11 | 0.013 | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.018 | 0.020 | 0.024 | 0.028 | 11 to 12 | 0.013 | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | 12 to 13 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 | 0.016 | 0.018 | 0.021 | 0.024 | 0.027 | 13 to 14 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 | 0.016 | 0.018 | 0.021 | 0.024 | 0.027 | 14 to 15 | 0.016 | 0.016 | 0.016 | 0.016 | 0.017 | 0.018 | 0.019 | 0.022 | 0.025 | 0.028 | 15 to 16 | 0.016 | 0.016 | 0.016 | 0.016 | 0.017 | 0.018 | 0.019 | 0.022 | 0.025 | 0.028 | 16 to 17 | 0.016 | 0.016 | 0.016 | 0.016 | 0.017 | 0.018 | 0.020 | 0.022 | 0.025 | 0.029 | 17 to 18 | 0.016 | 0.016 | 0.016 | 0.016 | 0.017 | 0.018 | 0.020 | 0.022 | 0.025 | 0.029 | 18 to 19 | 0.016 | 0.016 | 0.016 | 0.017 | 0.017 | 0.018 | 0.020 | 0.023 | 0.026 | 0.03 | 19 to 20 | 0.016 | 0.016 | 0.016 | 0.017 | 0.017 | 0.018 | 0.020 | 0.022 | 0.025 | 0.029 | 20 to 21 | 0.017 | 0.017 | 0.018 | 0.019 | 0.022 | 0.026 | 0.032 | 0.039 | 0.047 | 0.057 | 21 to 22 | 0.017 | 0.017 | 0.018 | 0.019 | 0.022 | 0.026 | 0.032 | 0.039 | 0.047 | 0.057 | 22 to 23 | 0.017 | 0.017 | 0.017 | 0.019 | 0.021 | 0.026 | 0.031 | 0.039 | 0.047 | 0.057 | 23 to 24 | 0.017 | 0.017 | 0.017 | 0.019 | 0.021 | 0.026 | 0.031 | 0.039 | 0.047 | 0.057 | 24 to 25 | 0.017 | 0.017 | 0.017 | 0.019 | 0.021 | 0.026 | 0.031 | 0.039 | 0.047 | 0.057 |
| | 0 to 0.1 | | 0.1 to 0.2 | 0.2 to 0.3 | 0.3 to 0.4 | 0.4 to 0.5 | 0.5 to 0.6 | 0.6 to 0.7 | 0.7 to 0.8 | 0.8 to 0.9 | 0.9 to 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.05 to 0.1 | 0.010 | | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 | 0.011 | 0.012 | 0.013 | 0.014 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1 to 0.5 | 0.010 | | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 | 0.012 | 0.013 | 0.014 | 0.015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 to 1 | 0.010 | | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 | 0.012 | 0.013 | 0.014 | 0.015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 to 2 | 0.010 | | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 | 0.012 | 0.013 | 0.014 | 0.015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 to 3 | 0.011 | | 0.012 | 0.012 | 0.012 | 0.013 | 0.014 | 0.016 | 0.019 | 0.022 | 0.026 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 to 4 | 0.012 | | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 to 5 | 0.013 | | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 to 6 | 0.013 | | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 to 7 | 0.013 | | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 to 8 | 0.013 | | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 to 9 | 0.013 | | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.018 | 0.020 | 0.024 | 0.028 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 to 10 | 0.013 | | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.018 | 0.020 | 0.024 | 0.028 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 to 11 | 0.013 | | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.018 | 0.020 | 0.024 | 0.028 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 to 12 | 0.013 | | 0.013 | 0.013 | 0.013 | 0.014 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 to 13 | 0.014 | | 0.014 | 0.014 | 0.015 | 0.015 | 0.016 | 0.018 | 0.021 | 0.024 | 0.027 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 to 14 | 0.014 | | 0.014 | 0.014 | 0.015 | 0.015 | 0.016 | 0.018 | 0.021 | 0.024 | 0.027 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 to 15 | 0.016 | | 0.016 | 0.016 | 0.016 | 0.017 | 0.018 | 0.019 | 0.022 | 0.025 | 0.028 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 to 16 | 0.016 | | 0.016 | 0.016 | 0.016 | 0.017 | 0.018 | 0.019 | 0.022 | 0.025 | 0.028 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 to 17 | 0.016 | | 0.016 | 0.016 | 0.016 | 0.017 | 0.018 | 0.020 | 0.022 | 0.025 | 0.029 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 to 18 | 0.016 | | 0.016 | 0.016 | 0.016 | 0.017 | 0.018 | 0.020 | 0.022 | 0.025 | 0.029 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 to 19 | 0.016 | | 0.016 | 0.016 | 0.017 | 0.017 | 0.018 | 0.020 | 0.023 | 0.026 | 0.03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 to 20 | 0.016 | 0.016 | 0.016 | 0.017 | 0.017 | 0.018 | 0.020 | 0.022 | 0.025 | 0.029 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 to 21 | 0.017 | 0.017 | 0.018 | 0.019 | 0.022 | 0.026 | 0.032 | 0.039 | 0.047 | 0.057 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 to 22 | 0.017 | 0.017 | 0.018 | 0.019 | 0.022 | 0.026 | 0.032 | 0.039 | 0.047 | 0.057 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 to 23 | 0.017 | 0.017 | 0.017 | 0.019 | 0.021 | 0.026 | 0.031 | 0.039 | 0.047 | 0.057 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 to 24 | 0.017 | 0.017 | 0.017 | 0.019 | 0.021 | 0.026 | 0.031 | 0.039 | 0.047 | 0.057 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 to 25 | 0.017 | 0.017 | 0.017 | 0.019 | 0.021 | 0.026 | 0.031 | 0.039 | 0.047 | 0.057 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



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Accredited entity according to ČSN EN ISO/IEC 17025:2005:

Exova Metech, s.r.o.
Calibration Laboratory
Toužimská 767, Letňany, 199 00 Praha 9

| Ordinal number 1) | Measured quantity and range of measurement | | | | | | | | | | Method identification |
|----------------------|----------------------------------------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------|-------------------------|
| 13* | Reflection coefficient – measurement | | | | | | | | | | |
| | 0 to 0.1 | 0.1 to 0.2 | 0.2 to 0.3 | 0.3 to 0.4 | 0.4 to 0.5 | 0.5 to 0.6 | 0.6 to 0.7 | 0.7 to 0.8 | 0.8 to 0.9 | 0.9 to 1 | LIII-055 2.4 mm 50 Ω |
| | Frequency (GHz) Calibration and Measurement Capability [±] ²⁾ | | | | | | | | | | |
| | 25 to 26 | 0.017 | 0.017 | 0.017 | 0.019 | 0.021 | 0.026 | 0.031 | 0.039 | 0.047 | 0.057 |
| | 26 to 27 | 0.018 | 0.018 | 0.019 | 0.02 | 0.023 | 0.027 | 0.032 | 0.039 | 0.048 | 0.058 |
| | 27 to 28 | 0.018 | 0.018 | 0.019 | 0.02 | 0.023 | 0.027 | 0.032 | 0.039 | 0.048 | 0.058 |
| | 28 to 29 | 0.018 | 0.018 | 0.019 | 0.02 | 0.023 | 0.027 | 0.032 | 0.039 | 0.048 | 0.058 |
| | 29 to 30 | 0.018 | 0.018 | 0.019 | 0.02 | 0.023 | 0.027 | 0.032 | 0.04 | 0.048 | 0.058 |
| | 30 to 31 | 0.021 | 0.021 | 0.021 | 0.023 | 0.025 | 0.029 | 0.034 | 0.041 | 0.05 | 0.06 |
| | 31 to 32 | 0.021 | 0.021 | 0.021 | 0.023 | 0.025 | 0.029 | 0.034 | 0.041 | 0.05 | 0.06 |
| | 32 to 33 | 0.021 | 0.021 | 0.021 | 0.023 | 0.025 | 0.029 | 0.034 | 0.041 | 0.05 | 0.06 |
| | 33 to 34 | 0.021 | 0.021 | 0.021 | 0.023 | 0.025 | 0.029 | 0.034 | 0.041 | 0.05 | 0.06 |
| | 34 to 35 | 0.022 | 0.022 | 0.022 | 0.023 | 0.026 | 0.03 | 0.035 | 0.042 | 0.05 | 0.06 |
| | 35 to 36 | 0.022 | 0.022 | 0.022 | 0.023 | 0.026 | 0.029 | 0.035 | 0.042 | 0.05 | 0.06 |
| | 36 to 37 | 0.024 | 0.024 | 0.024 | 0.025 | 0.028 | 0.031 | 0.036 | 0.043 | 0.052 | 0.061 |
| | 37 to 38 | 0.024 | 0.024 | 0.024 | 0.025 | 0.028 | 0.031 | 0.036 | 0.043 | 0.051 | 0.061 |
| | 38 to 39 | 0.024 | 0.024 | 0.024 | 0.025 | 0.028 | 0.031 | 0.036 | 0.043 | 0.051 | 0.061 |
| | 39 to 40 | 0.020 | 0.020 | 0.020 | 0.022 | 0.024 | 0.028 | 0.034 | 0.041 | 0.049 | 0.059 |
| | 40 to 41 | 0.023 | 0.023 | 0.023 | 0.025 | 0.029 | 0.035 | 0.043 | 0.053 | 0.064 | 0.078 |
| | 41 to 42 | 0.023 | 0.023 | 0.023 | 0.025 | 0.029 | 0.035 | 0.043 | 0.053 | 0.064 | 0.078 |
| | 42 to 43 | 0.023 | 0.023 | 0.023 | 0.025 | 0.029 | 0.035 | 0.043 | 0.053 | 0.064 | 0.078 |
| | 43 to 44 | 0.021 | 0.021 | 0.022 | 0.024 | 0.028 | 0.034 | 0.042 | 0.052 | 0.063 | 0.077 |
| | 44 to 45 | 0.031 | 0.031 | 0.032 | 0.033 | 0.036 | 0.041 | 0.048 | 0.057 | 0.068 | 0.08 |
| | 45 to 46 | 0.031 | 0.031 | 0.032 | 0.033 | 0.036 | 0.041 | 0.048 | 0.057 | 0.068 | 0.08 |
| | 46 to 47 | 0.031 | 0.031 | 0.032 | 0.033 | 0.036 | 0.041 | 0.048 | 0.057 | 0.068 | 0.08 |
| | 47 to 48 | 0.035 | 0.036 | 0.036 | 0.037 | 0.04 | 0.045 | 0.051 | 0.06 | 0.07 | 0.083 |
| | 48 to 49 | 0.035 | 0.036 | 0.036 | 0.037 | 0.04 | 0.045 | 0.051 | 0.06 | 0.07 | 0.083 |
| | 49 to 50 | 0.035 | 0.036 | 0.036 | 0.037 | 0.04 | 0.045 | 0.051 | 0.06 | 0.07 | 0.083 |

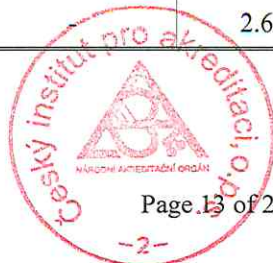


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Calibration Laboratory
Toužimská 767, Letňany, 199 00 Praha 9

| Ordinal number ¹⁾ | Measured quantity and range of measurement | | | Method identification | |
|------------------------------|--------------------------------------------|-------------------------------------------------------------------|---------------------|-----------------------|---------------------|
| 14* | HF power – calibration factor | | | LIII-052 | |
| | Connector | N male 50 Ω | 2.4 mm male 50 Ω | | 2.4 mm male 50 Ω |
| | Nominal level | 1 mW | 1 mW | | 1 μW |
| | Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | |
| | 0.01 | 2.0 % | - | | - |
| | 0.03 | 1.6 % | - | | - |
| | 0.1 | 1.6 % | 2.4 % | | 2.5 % |
| | 0.3 | 1.7 % | 2.4 % | | 2.5 % |
| | 0.5 | - | 2.5 % | | 2.6 % |
| | 1.0 | 1.7 % | 2.5 % | | 2.6 % |
| | 1.5 | 1.7 % | - | - | |
| | 2 | 1.7 % | 2.5 % | 2.6 % | |
| | 3 | 1.7 % | 2.5 % | 2.6 % | |
| | 4 | 1.7 % | 2.5 % | 2.6 % | |
| | 5 | 2.1 % | 2.5 % | 2.6 % | |
| | 6 | 2.1 % | 2.5 % | 2.6 % | |
| | 7 | 2.0 % | 2.5 % | 2.6 % | |
| | 8 | 2.0 % | 2.5 % | 2.6 % | |
| | 9 | 2.2 % | 2.6 % | 2.7 % | |
| | 10 | 2.3 % | 2.6 % | 2.7 % | |
| | 11 | 2.2 % | 2.6 % | 2.7 % | |
| | 12 | 2.5 % | 2.6 % | 2.7 % | |
| | 13 | 2.6 % | 2.6 % | 2.7 % | |
| | 14 | 2.7 % | 2.6 % | 2.7 % | |
| | 15 | 2.3 % | 2.6 % | 2.7 % | |
| | 16 | 2.5 % | 2.6 % | 2.7 % | |
| | 17 | 2.9 % | 2.6 % | 2.7 % | |
| | 18 | 4.3 % | 2.6 % | 2.7 % | |
| | 19 | - | 2.6 % | 2.7 % | |
| | 20 | | 2.6 % | 2.7 % | |



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| Ordinal number ¹⁾ | Measured quantity and range of measurement | | | Method identification | |
|------------------------------|--------------------------------------------|------------------------------------------------------------|---------------------|-----------------------|----------|
| 14* | HF power – calibration factor | | | | |
| | Connector | N male 50 Ω | 2.4 mm male 50 Ω | 2.4 mm male 50 Ω | LIII-052 |
| | Nominal level | 1 mW | 1 mW | 1 μW | |
| | Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | |
| | 21 | - | 2.8 % | 2.7 % | |
| | 22 | - | 2.9 % | 2.7 % | |
| | 23 | - | 2.7 % | 2.8 % | |
| | 24 | - | 2.8 % | 2.8 % | |
| | 25 | - | 2.8 % | 2.8 % | |
| | 26 | - | 2.8 % | 2.8 % | |
| | 27 | - | 2.8 % | 2.9 % | |
| | 28 | - | 2.8 % | 2.9 % | |
| | 29 | - | 2.8 % | 2.8 % | |
| | 30 | - | 3.6 % | 2.9 % | |
| | 31 | - | 3.0 % | 2.9 % | |
| | 32 | - | 3.0 % | 2.9 % | |
| | 33 | - | 3.0 % | 3.0 % | |
| | 34 | - | 3.0 % | 2.9 % | |
| | 34.5 | - | 3.0 % | 2.9 % | |
| | 35 | - | 2.9 % | 2.9 % | |
| | 36 | - | 3.0 % | 2.9 % | |
| | 37 | - | 3.0 % | 2.9 % | |
| | 38 | - | 3.1 % | 3.0 % | |
| | 39 | - | 3.1 % | 3.1 % | |
| | 40 | - | 3.2 % | 3.1 % | |
| | 41 | - | 3.2 % | 3.2 % | |
| | 42 | - | 3.3 % | 3.3 % | |
| | 43 | - | 3.7 % | 3.3 % | |
| | 44 | - | 3.7 % | 3.5 % | |
| | 45 | - | 3.6 % | 3.5 % | |



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Toužimská 767, Letňany, 199 00 Praha 9

| Ordinal number ¹⁾ | Measured quantity and range of measurement | | | | Method identification |
|------------------------------|--------------------------------------------|------------------------------------------------------------|---------------------|---------------------|-----------------------|
| 14* | HF power – calibration factor | | | | LIII-052 |
| | Connector | N male 50 Ω | 2.4 mm male 50 Ω | 2.4 mm male 50 Ω | |
| | Nominal level | 1 mW | 1 mW | 1 μW | |
| | Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | |
| | 46 | - | 3.5 % | 3.5 % | |
| | 47 | - | 3.6 % | 3.6 % | |
| | 48 | - | 3.7 % | 3.6 % | |
| | 49 | - | 5.8 % | 3.8 % | |
| | 50 | - | 4.8 % | 4.1 % | |

| Ordinal number ¹⁾ | Measured quantity and range of measurement | Frequency | Calibration and Measurement Capability [±] ²⁾ | Method identification |
|------------------------------|--------------------------------------------|--------------------|------------------------------------------------------------|-----------------------|
| 15* | Power output – measurement | | | |
| | 0.7 mW to 30 W | 400 MHz to 4 GHz | 3.2 % + 0.10 mW | LIII-054 |
| | 0.5 mW to 1.5 mW | 50 MHz | 0.6 % | LIII-059 |
| | -20 dBm to +20 dBm | 100 kHz to 12 GHz | 0.12 dB | LIII-054 |
| | | 12 GHz to 18 GHz | 0.14 dB | |
| | | 18 GHz to 26.5 GHz | 0.20 dB | |
| | | 26.5 GHz to 47 GHz | 0.23 dB | |
| | | 47 GHz to 50 GHz | 0.29 dB | |
| | -50 dBm to -20 dBm | 100 kHz to 4 GHz | 0.13 dB | |
| | | 4 GHz to 6 GHz | 0.14 dB | |
| | | 6 GHz to 31 GHz | 0.19 dB | |
| | | 31 GHz to 40 GHz | 0.20 dB | |
| | | 40 GHz to 43 GHz | 0.21 dB | |
| | | 43 GHz to 48 GHz | 0.23 dB | |
| | | 48 GHz to 50 GHz | 0.24 dB | |

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| Ordinal number ¹⁾ | Measured quantity and range of measurement | Frequency | Calibration and Measurement Capability [±] ²⁾ | Method identification |
|------------------------------|------------------------------------------------|--------------------|------------------------------------------------------------|-----------------------|
| 15* | Power output measurement -80 dBm to -50 dBm | 2.5 MHz to 10 MHz | 0.28 dB | LIII-054 |
| | | 10 MHz to 26.5 GHz | 0.15 dB | |
| | -110 dBm to -80 dBm | 2.5 MHz to 10 MHz | 0.33 dB | LIII-054 |
| | | 10 MHz to 26.5 GHz | 0.23 dB | |
| | -120 dBm to -110 dBm | 2.5 MHz to 1.3 GHz | 0.41 dB | LIII-054 |

| Ordinal number ¹⁾ | Measured quantity and range of measurement | Frequency | Calibration and Measurement Capability [±] ²⁾ | Method identification |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------|------------------------------------------------------------------------------------|
| 16* | HF attenuation – measurement 0 dB to 10 dB 10 dB to 20 dB 20 dB to 30 dB 30 dB to 40 dB 40 dB to 50 dB 50 dB to 60 dB 60 dB to 70 dB 70 dB to 80 dB 80 dB to 90 dB 90 dB to 100 dB 100 dB to 110 dB | 2.5 MHz to 1.3 GHz | 0.11 dB | LIII-057 (Method A) Uncertainties for 2-gate 50 Ω devices with "N" connector |
| | | | 0.14 dB | |
| | | | 0.15 dB | |
| | | | 0.20 dB | |
| | | | 0.20 dB | |
| | | | 0.20 dB | |
| | | | 0.25 dB | |
| | | | 0.37 dB | |
| | | | 0.56 dB | |
| | | | 0.56 dB | |
| | | | 0.65 dB | |



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| Ordinal number ¹⁾ | Measured quantity and range of measurement | | | | | | | | | | Method identification |
|------------------------------|--------------------------------------------|-------------------------------------------------------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------|----------------------------------------------------------------|
| 16* | HF attenuation – measurement | | | | | | | | | | LIII-057 |
| | 0 dB to 3 dB | 3 dB to 6 dB | 6 dB to 10 dB | 10 dB to 20 dB | 20 dB to 30 dB | 30 dB to 40 dB | 40 dB to 50 dB | 50 dB to 60 dB | 60 dB to 70 dB | | (Method B) |
| | Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | | | | | | | Uncertainties for 2-gate 50 Ω devices with "N" connector |
| | 0.0003 to 0.003 | 0.03 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 0.003 to 0.25 | 0.03 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 0.25 to 0.5 | 0.03 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 0.5 to 1.0 | 0.03 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 1.0 to 1.5 | 0.03 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 1.5 to 2.0 | 0.03 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 2.0 to 2.5 | 0.04 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 2.5 to 3.0 | 0.04 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 3.0 to 3.5 | 0.04 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 3.5 to 4.0 | 0.04 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 4.0 to 4.5 | 0.04 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 4.5 to 5.0 | 0.04 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 5.0 to 5.5 | 0.04 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |
| | 5.5 to 6.0 | 0.04 | 0.05 | 0.07 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | |



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Exova Metech, s.r.o.
Calibration Laboratory
Toužimská 767, Letňany, 199 00 Praha 9

| Ordinal number ¹⁾ | Measured quantity and range of measurement | Method identification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 16* | HF attenuation – measurement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 5%;">0 dB to 10 dB</th> <th style="width: 5%;">10 dB to 20 dB</th> <th style="width: 5%;">20 dB to 30 dB</th> <th style="width: 5%;">30 dB to 40 dB</th> <th style="width: 5%;">40 dB to 50 dB</th> <th style="width: 5%;">50 dB to 60 dB</th> <th style="width: 5%;">60 dB to 70 dB</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Frequency (GHz)</td> <td colspan="7" style="text-align: center;">Calibration and Measurement Capability [±] ²⁾</td> </tr> <tr><td style="text-align: center;">0.05 to 0.1</td><td style="text-align: center;">0.04</td><td style="text-align: center;">0.06</td><td style="text-align: center;">0.08</td><td style="text-align: center;">0.12</td><td style="text-align: center;">0.16</td><td style="text-align: center;">0.27</td><td style="text-align: center;">0.56</td></tr> <tr><td style="text-align: center;">0.1 to 0.2</td><td 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and Measurement Capability [±] ²⁾ | | | | | | | 0.05 to 0.1 | 0.04 | 0.06 | 0.08 | 0.12 | 0.16 | 0.27 | 0.56 | 0.1 to 0.2 | 0.04 | 0.06 | 0.08 | 0.12 | 0.16 | 0.27 | 0.56 | 0.2 to 0.5 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | 0.5 to 1 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | 1 to 2 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | 2 to 3 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | 3 to 4 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | 4 to 5 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | 5 to 6 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | 6 to 7 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | 7 to 8 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | 8 to 9 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | 9 to 10 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | 10 to 11 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | 11 to 12 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 12 to 13 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 13 to 14 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 14 to 15 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 15 to 16 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 16 to 17 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 17 to 18 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | <p>LIII-057</p> <p>(Method B)</p> <p>Uncertainties for 2-gate 50 Ω devices with "N" connector</p> |
| | 0 dB to 10 dB | 10 dB to 20 dB | 20 dB to 30 dB | 30 dB to 40 dB | 40 dB to 50 dB | 50 dB to 60 dB | 60 dB to 70 dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.05 to 0.1 | 0.04 | 0.06 | 0.08 | 0.12 | 0.16 | 0.27 | 0.56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1 to 0.2 | 0.04 | 0.06 | 0.08 | 0.12 | 0.16 | 0.27 | 0.56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.2 to 0.5 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 to 1 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 to 2 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 to 3 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 to 4 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 to 5 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 to 6 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 to 7 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 to 8 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 to 9 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 to 10 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 to 11 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 to 12 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 to 13 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 to 14 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 to 15 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 to 16 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 to 17 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 to 18 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



The Appendix is an integral part of
Certificate of Accreditation No. 412/2017 of 14/ 07/ 2017

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

Exova Metech, s.r.o.
Calibration Laboratory
Toužimská 767, Letňany, 199 00 Praha 9

| Ordinal number ¹⁾ | Measured quantity and range of measurement | | | | | | | | Method identification | |
|------------------------------|--------------------------------------------|------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------------------------------------------------|--|
| 16* | HF attenuation – measurement | | | | | | | | | |
| | | 0 dB to 10 dB | 10 dB to 20 dB | 20 dB to 30 dB | 30 dB to 40 dB | 40 dB to 50 dB | 50 dB to 60 dB | 60 dB to 70 dB | LIII-057 | |
| | Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | | | | | | |
| | 0.05 to 0.2 | 0.06 | 0.07 | 0.09 | 0.13 | 0.17 | 0.27 | 0.56 | Uncertainties for 2-gate 50 Ω devices with 3.5 mm connector | |
| | 0.2 to 0.5 | 0.06 | 0.07 | 0.09 | 0.12 | 0.16 | 0.25 | 0.45 | | |
| | 0.5 to 1 | 0.06 | 0.07 | 0.09 | 0.12 | 0.16 | 0.25 | 0.45 | | |
| | 1 to 2 | 0.06 | 0.07 | 0.09 | 0.12 | 0.16 | 0.25 | 0.45 | | |
| | 2 to 3 | 0.06 | 0.07 | 0.09 | 0.12 | 0.16 | 0.25 | 0.45 | | |
| | 3 to 4 | 0.14 | 0.14 | 0.15 | 0.17 | 0.20 | 0.28 | 0.46 | | |
| | 4 to 5 | 0.14 | 0.14 | 0.15 | 0.17 | 0.20 | 0.28 | 0.46 | | |
| | 5 to 6 | 0.14 | 0.14 | 0.15 | 0.18 | 0.21 | 0.28 | 0.46 | | |
| | 6 to 7 | 0.14 | 0.15 | 0.17 | 0.20 | 0.24 | 0.32 | 0.50 | | |
| | 7 to 8 | 0.14 | 0.15 | 0.17 | 0.20 | 0.24 | 0.32 | 0.50 | | |
| | 8 to 9 | 0.14 | 0.15 | 0.17 | 0.20 | 0.24 | 0.32 | 0.50 | | |
| | 9 to 10 | 0.14 | 0.15 | 0.17 | 0.20 | 0.24 | 0.32 | 0.50 | | |
| | 10 to 11 | 0.14 | 0.15 | 0.17 | 0.20 | 0.24 | 0.32 | 0.50 | | |
| | 11 to 12 | 0.15 | 0.16 | 0.18 | 0.22 | 0.30 | 0.47 | 0.86 | | |
| | 12 to 13 | 0.15 | 0.16 | 0.18 | 0.22 | 0.30 | 0.47 | 0.86 | | |
| | 13 to 14 | 0.15 | 0.16 | 0.18 | 0.22 | 0.30 | 0.47 | 0.86 | | |
| | 14 to 15 | 0.15 | 0.16 | 0.18 | 0.22 | 0.30 | 0.47 | 0.86 | | |
| | 15 to 16 | 0.15 | 0.16 | 0.18 | 0.22 | 0.30 | 0.47 | 0.86 | | |
| | 16 to 17 | 0.15 | 0.16 | 0.18 | 0.22 | 0.30 | 0.47 | 0.86 | | |
| | 17 to 18 | 0.15 | 0.16 | 0.18 | 0.22 | 0.30 | 0.47 | 0.86 | | |
| | 18 to 19 | 0.15 | 0.16 | 0.18 | 0.22 | 0.30 | 0.47 | 0.86 | | |
| | 19 to 20 | 0.15 | 0.16 | 0.18 | 0.23 | 0.30 | 0.48 | 0.86 | | |
| | 20 to 21 | 0.43 | 0.43 | 0.44 | 0.46 | 0.51 | 0.68 | 1.3 | | |
| | 21 to 22 | 0.43 | 0.43 | 0.44 | 0.49 | 0.56 | 0.75 | 1.5 | | |
| | 22 to 23 | 0.43 | 0.43 | 0.44 | 0.49 | 0.56 | 0.75 | 1.5 | | |
| | 23 to 24 | 0.43 | 0.43 | 0.44 | 0.49 | 0.56 | 0.75 | 1.5 | | |
| | 24 to 25 | 0.43 | 0.43 | 0.44 | 0.49 | 0.56 | 0.75 | 1.5 | | |
| | 25 to 26 | 0.43 | 0.43 | 0.44 | 0.49 | 0.56 | 0.75 | 1.5 | | |
| | 26 to 26.5 | 0.43 | 0.43 | 0.44 | 0.49 | 0.56 | 0.75 | 1.5 | | |



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Exova Metech, s.r.o.
Calibration Laboratory
Toužimská 767, Letňany, 199 00 Praha 9

| Ordinal number ¹⁾ | Measured quantity and range of measurement | Method identification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 16* | HF attenuation – measurement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 5%;">0 dB to 10 dB</th> <th style="width: 5%;">10 dB to 20 dB</th> <th style="width: 5%;">20 dB to 30 dB</th> <th style="width: 5%;">30 dB to 40 dB</th> <th style="width: 5%;">40 dB to 50 dB</th> <th style="width: 5%;">50 dB to 60 dB</th> <th style="width: 5%;">60 dB to 70 dB</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Frequency (GHz)</td> <td colspan="7" style="text-align: center;">Calibration and Measurement Capability [±] ²⁾</td> </tr> <tr><td style="text-align: center;">0.05 to 0.1</td><td style="text-align: center;">0.04</td><td style="text-align: center;">0.06</td><td style="text-align: center;">0.08</td><td style="text-align: center;">0.12</td><td style="text-align: center;">0.16</td><td style="text-align: center;">0.27</td><td style="text-align: center;">0.56</td></tr> <tr><td style="text-align: center;">0.1 to 0.5</td><td 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center;">0.17</td><td style="text-align: center;">0.22</td><td style="text-align: center;">0.30</td><td style="text-align: center;">0.47</td><td style="text-align: center;">0.85</td></tr> <tr><td style="text-align: center;">20 to 21</td><td style="text-align: center;">0.14</td><td style="text-align: center;">0.15</td><td style="text-align: center;">0.17</td><td style="text-align: center;">0.22</td><td style="text-align: center;">0.31</td><td style="text-align: center;">0.55</td><td style="text-align: center;">1.3</td></tr> <tr><td style="text-align: center;">21 to 22</td><td style="text-align: center;">0.14</td><td style="text-align: center;">0.15</td><td style="text-align: center;">0.17</td><td style="text-align: center;">0.28</td><td style="text-align: center;">0.38</td><td style="text-align: center;">0.63</td><td style="text-align: center;">1.4</td></tr> <tr><td style="text-align: center;">22 to 23</td><td style="text-align: center;">0.14</td><td style="text-align: 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center;">0.14</td><td style="text-align: center;">0.15</td><td style="text-align: center;">0.17</td><td style="text-align: center;">0.28</td><td style="text-align: center;">0.38</td><td style="text-align: center;">0.63</td><td style="text-align: center;">1.4</td></tr> <tr><td style="text-align: center;">26 to 27</td><td style="text-align: center;">0.14</td><td style="text-align: center;">0.15</td><td style="text-align: center;">0.17</td><td style="text-align: center;">0.28</td><td style="text-align: center;">0.38</td><td style="text-align: center;">0.63</td><td style="text-align: center;">1.4</td></tr> </tbody> </table> | | 0 dB to 10 dB | 10 dB to 20 dB | 20 dB to 30 dB | 30 dB to 40 dB | 40 dB to 50 dB | 50 dB to 60 dB | 60 dB to 70 dB | Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | | | | | 0.05 to 0.1 | 0.04 | 0.06 | 0.08 | 0.12 | 0.16 | 0.27 | 0.56 | 0.1 to 0.5 | 0.04 | 0.06 | 0.08 | 0.12 | 0.16 | 0.27 | 0.56 | 0.5 to 1 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | 1 to 2 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | 2 to 3 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | 3 to 4 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | 4 to 5 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | 5 to 6 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | 6 to 7 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | 7 to 8 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | 8 to 9 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | 9 to 10 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | 10 to 11 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | 11 to 12 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | 12 to 13 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 13 to 14 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 14 to 15 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 15 to 16 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 16 to 17 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 17 to 18 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 18 to 19 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 19 to 20 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | 20 to 21 | 0.14 | 0.15 | 0.17 | 0.22 | 0.31 | 0.55 | 1.3 | 21 to 22 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | 22 to 23 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | 23 to 24 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | 24 to 25 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | 25 to 26 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | 26 to 27 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | <p style="text-align: center;">LIII-057</p> <p style="text-align: center;">Uncertainties for 2-gate 50 Ω devices with 2.4 mm connector</p> |
| | 0 dB to 10 dB | 10 dB to 20 dB | 20 dB to 30 dB | 30 dB to 40 dB | 40 dB to 50 dB | 50 dB to 60 dB | 60 dB to 70 dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.05 to 0.1 | 0.04 | 0.06 | 0.08 | 0.12 | 0.16 | 0.27 | 0.56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1 to 0.5 | 0.04 | 0.06 | 0.08 | 0.12 | 0.16 | 0.27 | 0.56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 to 1 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 to 2 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 to 3 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 to 4 | 0.04 | 0.06 | 0.08 | 0.11 | 0.16 | 0.25 | 0.44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 to 5 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 to 6 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 to 7 | 0.13 | 0.13 | 0.14 | 0.17 | 0.20 | 0.28 | 0.46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 to 8 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 to 9 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 to 10 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 to 11 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 to 12 | 0.13 | 0.14 | 0.16 | 0.20 | 0.24 | 0.32 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 to 13 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 to 14 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 to 15 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 to 16 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 to 17 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 to 18 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 to 19 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 to 20 | 0.14 | 0.15 | 0.17 | 0.22 | 0.30 | 0.47 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 to 21 | 0.14 | 0.15 | 0.17 | 0.22 | 0.31 | 0.55 | 1.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 to 22 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 to 23 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 to 24 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 to 25 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 to 26 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 to 27 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



The Appendix is an integral part of
Certificate of Accreditation No. 412/2017 of 14/ 07/ 2017

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

Exova Metech, s.r.o.
Calibration Laboratory
Toužimská 767, Letňany, 199 00 Praha 9

| Ordinal number ¹⁾ | Measured quantity and range of measurement | | | | | | | | Method identification |
|------------------------------|--------------------------------------------|------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------------------------------------------------|
| 16* | HF attenuation – measurement | | | | | | | | |
| | | 0 dB to 10 dB | 10 dB to 20 dB | 20 dB to 30 dB | 30 dB to 40 dB | 40 dB to 50 dB | 50 dB to 60 dB | 60 dB to 70 dB | LIII-057 |
| | Frequency (GHz) | Calibration and Measurement Capability [±] ²⁾ | | | | | | | |
| | 27 to 28 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | Uncertainties for 2-gate 50 Ω devices with 2.4 mm connector |
| | 28 to 29 | 0.14 | 0.15 | 0.17 | 0.28 | 0.38 | 0.63 | 1.4 | |
| | 29 to 30 | 0.14 | 0.16 | 0.19 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 30 to 31 | 0.14 | 0.16 | 0.19 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 31 to 32 | 0.14 | 0.16 | 0.19 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 32 to 33 | 0.14 | 0.16 | 0.19 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 33 to 34 | 0.14 | 0.16 | 0.19 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 34 to 35 | 0.14 | 0.16 | 0.19 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 35 to 36 | 0.14 | 0.16 | 0.19 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 36 to 37 | 0.14 | 0.17 | 0.2 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 37 to 38 | 0.14 | 0.16 | 0.19 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 38 to 39 | 0.14 | 0.16 | 0.19 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 39 to 40 | 0.14 | 0.16 | 0.19 | 0.31 | 0.41 | 0.65 | 1.4 | |
| | 40 to 41 | 0.19 | 0.21 | 0.24 | 0.41 | 0.59 | 1.2 | 3.5 | |
| | 41 to 42 | 0.20 | 0.21 | 0.24 | 0.41 | 0.59 | 1.2 | 3.5 | |
| | 42 to 43 | 0.20 | 0.21 | 0.24 | 0.41 | 0.59 | 1.2 | 3.5 | |
| | 43 to 44 | 0.20 | 0.21 | 0.24 | 0.41 | 0.59 | 1.2 | 3.5 | |
| | 44 to 45 | 0.20 | 0.21 | 0.24 | 0.41 | 0.59 | 1.2 | 3.5 | |
| | 45 to 46 | 0.20 | 0.21 | 0.24 | 0.41 | 0.59 | 1.2 | 3.5 | |
| | 46 to 47 | 0.20 | 0.21 | 0.24 | 0.41 | 0.59 | 1.2 | 3.5 | |
| | 47 to 48 | 0.21 | 0.22 | 0.25 | 0.42 | 0.60 | 1.2 | 3.5 | |
| | 48 to 49 | 0.21 | 0.22 | 0.25 | 0.42 | 0.60 | 1.2 | 3.5 | |
| | 49 to 50 | 0.21 | 0.22 | 0.25 | 0.42 | 0.60 | 1.2 | 3.5 | |



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Measured instruments or devices:

(In accordance with the above list of measured quantities and the ranges of measurement the following types of instruments or devices can be measured.)

| Ordinal number | Measured instrument/device type |
|----------------|-------------------------------------------------|
| 1 | Electrical resistors |
| 2 | Direct voltage power sources and calibrators |
| 3 | Direct current power sources and calibrators |
| 4 | Alternate voltage power sources and calibrators |
| 5 | Alternate current power sources and calibrators |
| 6 | Direct voltage meters |
| 7 | Direct current meters |
| 8 | Electric resistance meters |
| 9 | Alternate voltage meters |
| 10 | Alternate current meters |
| 11 | Amplitude modulation generators |
| 12 | LF signal generators |
| 13 | Active and passive HF instruments |
| 14 | HF power meters |
| 15 | HF power generators |
| 16 | HF attenuators and cables |



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Field of measured quantity: **Frequency and time**

Calibration:

Nominal calibration temperature: (23 ± 3) °C

| Ordinal number ¹⁾ | Measured quantity | Measured quantity range | Calibration and Measurement Capability [±] ²⁾ | Method identification |
|------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 1* | Frequency – measurement | 0.01 Hz to 0.1 Hz 0.1 Hz to 1 Hz 1 Hz to 10 Hz 10 Hz to 100 Hz 100 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 100 kHz 100 kHz to 1 MHz 1 MHz to 1.3 GHz 1.3 GHz to 10 GHz 10 GHz to 26.5 GHz | 2.0 x 10 ⁻³ 2.0 x 10 ⁻⁴ 2.0 x 10 ⁻⁵ 2.0 x 10 ⁻⁶ 2.0 x 10 ⁻⁷ 2.0 x 10 ⁻⁸ 2.0 x 10 ⁻⁹ 7.0 x 10 ⁻¹⁰ 5.0 x 10 ⁻¹⁰ 2.0 x 10 ⁻⁹ 2.0 x 10 ⁻¹⁰ | LIII-053 |
| 2* | Frequency – generation | 10 MHz | 2.0 x 10 ⁻¹² | LIII-053 |
| 3* | Time interval – measurement | 10 ns to 1000 s | 15 ns | LIII-053 |
| 4* | Frequency modulation frequency swing – measurement | <i>Frequency swing</i> | | LIII-051 |
| | <i>Carrier frequency</i> | 50 Hz to 40 kHz | 2.6 % | <i>Modulation frequency</i> 50 Hz to 100 kHz |
| | 250 kHz to 10 MHz | 50 Hz to 400 kHz | 1.5 % | 50 Hz to 100 kHz |
| | 10 MHz to 1300 MHz | 50 Hz to 400 kHz | 6.1 % | 20 Hz to 200 kHz |
| | 10 MHz to 1300 MHz | | | |



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Measured instruments or devices:

(In accordance with the above list of measured quantities and the ranges of measurement the following types of instruments or devices can be measured.)

| Ordinal number | Measured instrument/device type |
|----------------|---------------------------------|
| 1 | Frequency generators |
| 2 | Frequency meters |
| 3 | Time and time interval meters |
| 4 | Frequency modulation generators |

- 1) Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.
- 2) Expressed like uncertainty in accordance with the requirements of the document EA 4/02 at $k = 2$.

Explanations:

LIII-xxx Calibration Procedure (Internal)
THD Total Harmonic Distortion

