

## Production Test for Device

*Tango*

Serial Number: #0001278

Microphone Capsule: 10023

Preamplifier: #20126

This device was tested according to IEC 61672-1:2013 and  
the internal test specifications of SINUS Messtechnik GmbH.

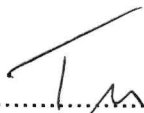
Date: 25-Aug-2023

Recommended Interval: 24 months

Next Manufacturer Test: 25-Aug-2025

Operator: TUL

Signature:

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## Summary

The results of the testing procedure can be found in the table below. Testing equipment:

Generator: DS360, StanfordResearchSystems (serial number: 33965)  
Calibration certificate (4305099) valid until: 26-May-2025  
Reference value for calibration to device: 94 dB at 1000 Hz

Software: Testing program version: 1.0.18.0  
Device software version: M907-Tango V1.47 (17.09.2018)

The serial number of the microphone capsule is 10023.  
The serial number of the microphone preamplifier is #20126.

All measured data can be ordered in XML file format for an additional price.

The following frequency weighting tests were performed:

Nominal Amplitude (dB)	Start Time	Result
100,0	15:48:22	OK

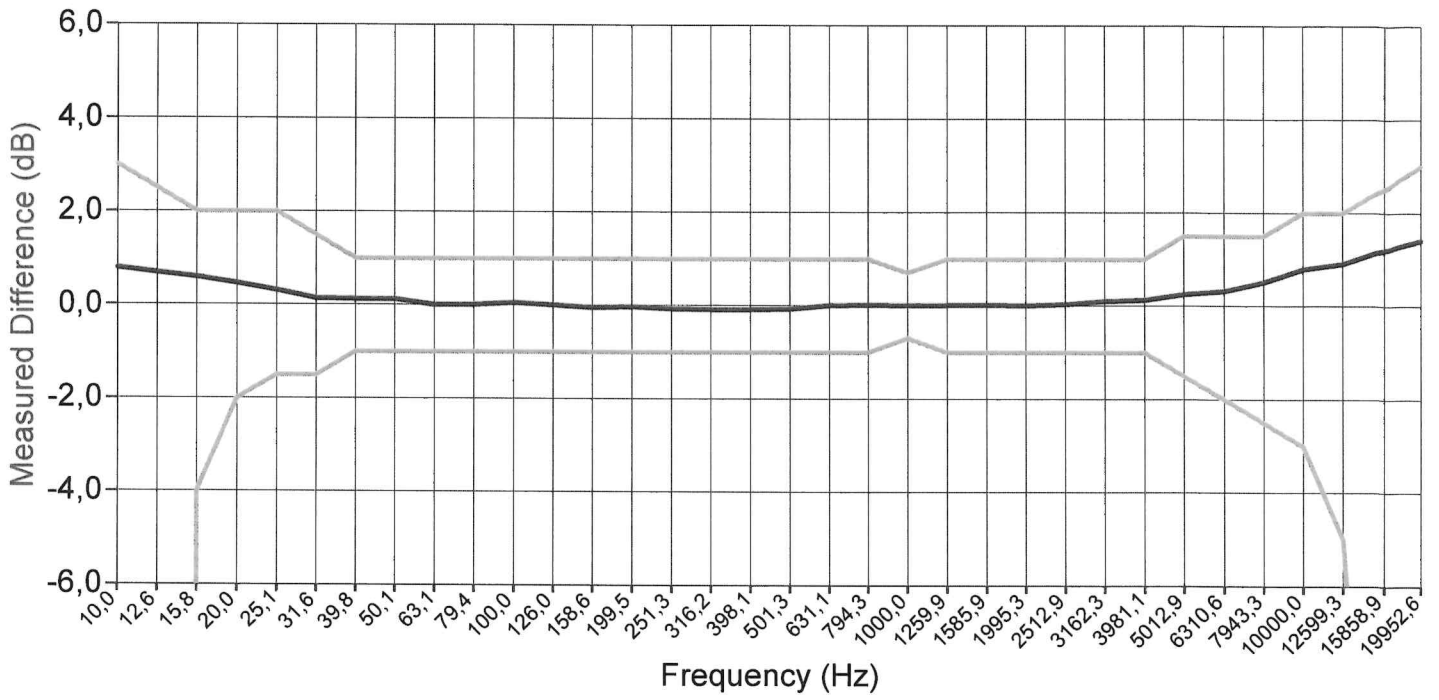
The following linearity tests were performed:

Frequency (Hz)	Start Time	Result
31,6	15:38:56	OK
1000,0	15:41:58	OK
12589,3	15:45:06	OK

## Frequency Response Test according to IEC 61672-1:2013 passed!

Frequency (Hz)	Measurement Result	Weighting A	Value LAF	Difference $\Delta$ LAF	Limit	
					Lower	Upper
10,0	UNDERRANGE	-70,4	30,4	0,8	-inf	3,0
12,6	OK	-63,4	37,3	0,7	-inf	2,5
15,8	OK	-56,7	43,9	0,6	-4,0	2,0
20,0	OK	-50,5	50,0	0,5	-2,0	2,0
25,1	OK	-44,7	55,6	0,3	-1,5	2,0
31,6	OK	-39,4	60,7	0,1	-1,5	1,5
39,8	OK	-34,6	65,5	0,1	-1,0	1,0
50,1	OK	-30,2	69,9	0,1	-1,0	1,0
63,1	OK	-26,2	73,8	0,0	-1,0	1,0
79,4	OK	-22,5	77,5	0,0	-1,0	1,0
100,0	OK	-19,2	80,9	0,0	-1,0	1,0
126,0	OK	-16,1	83,9	0,0	-1,0	1,0
158,6	OK	-13,4	86,6	-0,1	-1,0	1,0
199,5	OK	-10,9	89,1	0,0	-1,0	1,0
251,3	OK	-8,6	91,3	-0,1	-1,0	1,0
316,2	OK	-6,6	93,3	-0,1	-1,0	1,0
398,1	OK	-4,8	95,1	-0,1	-1,0	1,0
501,3	OK	-3,2	96,7	-0,1	-1,0	1,0
631,1	OK	-1,9	98,1	0,0	-1,0	1,0
794,3	OK	-0,8	99,2	0,0	-1,0	1,0
1000,0	OK	0,0	100,0	0,0	-0,7	0,7
1259,9	OK	0,6	100,6	0,0	-1,0	1,0
1585,9	OK	1,0	101,0	0,0	-1,0	1,0
1995,3	OK	1,2	101,2	0,0	-1,0	1,0
2512,9	OK	1,3	101,3	0,0	-1,0	1,0
3162,3	OK	1,2	101,3	0,1	-1,0	1,0
3981,1	OK	1,0	101,1	0,1	-1,0	1,0
5012,9	OK	0,6	100,8	0,3	-1,5	1,5
6310,6	OK	-0,1	100,2	0,3	-2,0	1,5
7943,3	OK	-1,1	99,4	0,5	-2,5	1,5
10000,0	OK	-2,5	98,3	0,8	-3,0	2,0
12599,3	OK	-4,3	96,6	0,9	-5,0	2,0
15858,9	OK	-6,6	94,6	1,2	-16,0	2,5
19952,6	OK	-9,3	92,1	1,4	-inf	3,0

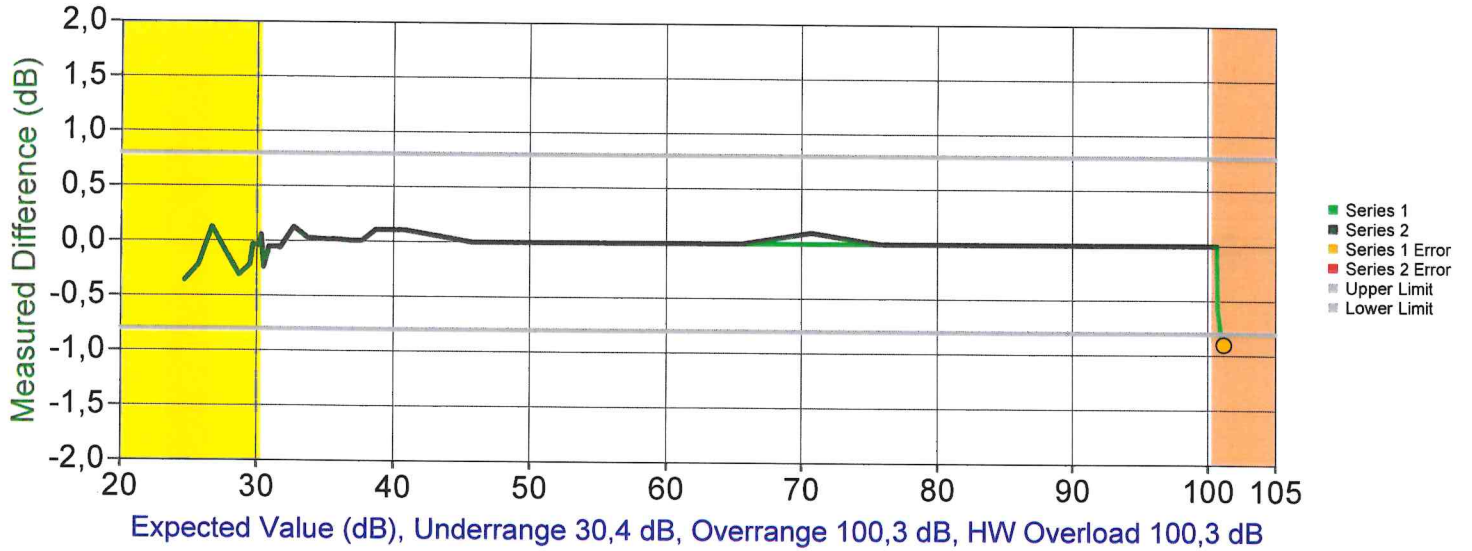
LAF Frequency Response



# Level Linearity Test according to ISO 61672 passed!

Frequency	Weighting	Result	Target	Linearity	Underrange	Overrange	HW OVL
31,6	LAF	OK	31,0..100,0	30,4..100,3	30,4	100,3	100,3

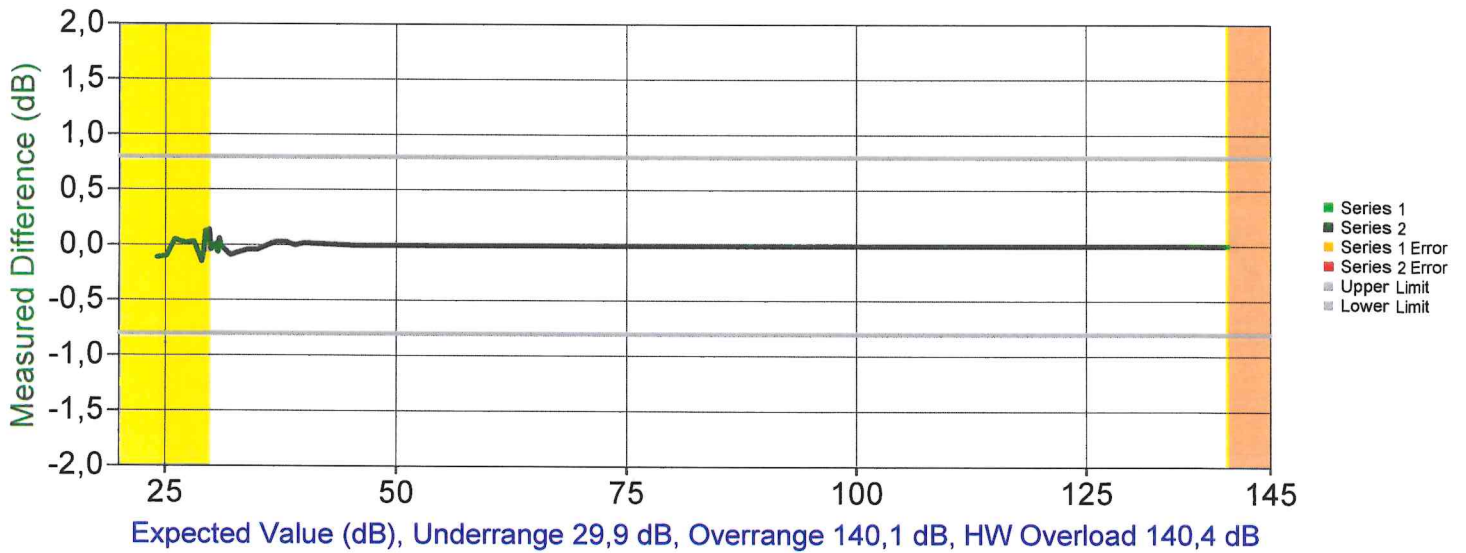
Linearity (LAF) at 31.6 Hz



# Level Linearity Test according to ISO 61672 passed!

Frequency	Weighting	Result	Target	Linearity	Underrange	Overrange	HW OVL
1000,0	LAF	OK	31,0..139,8	30,3..140,0	29,9	140,1	140,4

Linearity (LAF) at 1000.0 Hz



# Level Linearity Test according to ISO 61672 passed!

Frequency	Weighting	Result	Target	Linearity	Underrange	Overrange	HW OVL
12599,3	LAF	OK	32,0..135,0	30,3..137,3	30,1	137,4	137,4

Linearity (LAF) at 12599.3 Hz

