Sequence Report

ABTEC

Summary

Signal Path1

Signal Path Setup	PASSED
Level and Gain	PASSED
THD+N	PASSED
Frequency Response	PASSED
Stepped Frequency Sweep	PASSED
Signal to Noise Ratio	PASSED
Crosstalk, One Channel Undriven	PASSED
Interchannel Phase	PASSED
Signal Analyzer	PASSED
Acoustic Response	PASSED
Noise (RMS)	PASSED
Noise Recorder (RMS)	PASSED
Stepped Level Sweep	PASSED
Stepped Frequency Sweep	PASSED

Sequence Result:

Sequence Result: PASSED

Signal Path1 : Signal Path Setup

Output Connector:	ASIO
Asio Device:	XMOS USB Audio Device
Scaling Mode:	Digital
Output Sample Rate:	48.0000 kHz
Output Latency:	Auto
Buffer Size:	512
Clock Source:	Computer
Input 1:	Analog Unbalanced
Input Bandwidth:	AC (<10 Hz) - 90k (192 kHz SR)
Input EQ:	None
Channels:	2
Termination:	600 ohm
Input 2:	None
Device Delay:	0.000 s

• References

dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz

Analog Input

dBrA:	1.000 Vrms
dBrB:	1.000 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	0.000 dB
dBSPL1:	10.00 mVrms
dBSPL2:	10.00 mVrms
dBSPL1 Calibrator Level:	94.000 dBSPL
dBSPL2 Calibrator Level:	94.000 dBSPL
dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	66.00 ohm

• DCX

DCX is not detected.

Signal Path1 : Verify Connections

Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz

RMS Level (2025/3/22 20:45:19.033)

Ch1 1.008 Vrms
Ch2 0.998 Vrms

Gain (2025/3/22 20:45:19.033)

Ch1 +0.069 dB(Vrms/FS)
Ch2 -0.021 dB(Vrms/FS)

THD+N Ratio (2025/3/22 20:45:19.033)

Ch1 0.032539 %
Ch2 0.028519 %

Signal Path1 : Level and Gain

Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (2025/3/22 20:45:20.763)

Ch1 1.008 Vrms
Ch2 0.998 Vrms

Gain (2025/3/22 20:45:20.763)

Ch1 +0.069 dB(Vrms/FS)
Ch2 -0.021 dB(Vrms/FS)

Peak Level (2025/3/22 20:45:20.763)

Ch1 1.429 V
Ch2 1.414 V

Signal Path1 : THD+N

Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
High-pass Filter:	Elliptic
High-pass Frequency:	20 Hz
Low-pass Filter:	Elliptic
Low-pass Frequency:	20 kHz
Weighting Filter:	CCIR-1k
Notch Tuning Mode:	Measured Frequency

THD+N Ratio (2025/3/22 20:45:22.595)

Ch1 0.048664 %
Ch2 0.021597 %

THD+N Level (2025/3/22 20:45:22.595)

Ch1 489.0 uVrms
Ch2 214.8 uVrms

THD Ratio (2025/3/22 20:45:22.595)

Ch1 0.048077 %
Ch2 0.021130 %

THD Level (2025/3/22 20:45:22.595)

Ch1 484.6 uVrms
Ch2 210.8 uVrms

Noise Ratio (2025/3/22 20:45:22.595)

Ch1 0.006316 %
Ch2 0.004641 %

Noise Level (2025/3/22 20:45:22.595)

Ch1 63.67 uVrms
Ch2 46.30 uVrms

Distortion Product Ratio (2025/3/22 20:45:22.595)

Channel	F	H2	H3	H4	H5	H6	H7	H8	H9	H10
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.001k	9.001k	10.00k
Ch1	-0.00	-79.26	-68.95	-89.67	-71.20	-99.30	-88.04	-87.68	-79.50	-98.76
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.001k	9.001k	10.00k
Ch2	-0.00	-73.70	-88.21	-110.04	-102.40	-104.84	-95.44	-110.28	-106.62	-113.63

Distortion Product Ratio Parameters

Frequency Unit:	Hz
Ratio Unit:	dB

Channel: Ch1

Distortion Product Level (2025/3/22 20:45:22.595)

Channel	F	H2	H3	H4	H5	H6	H7	H8	H9	H10
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.001k	9.001k	10.00k
Ch1	1.008	109.8 u	359.8 u	33.13 u	277.5 u	10.93 u	39.92 u	41.64 u	106.8 u	11.62 u
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.001k	9.001k	10.00k
Ch2	0.998	206.2 u	38.77 u	3.140 u	7.570 u	5.717 u	16.87 u	3.054 u	4.655 u	2.078 u

Distortion Product Level Parameters

Frequency Unit: Hz

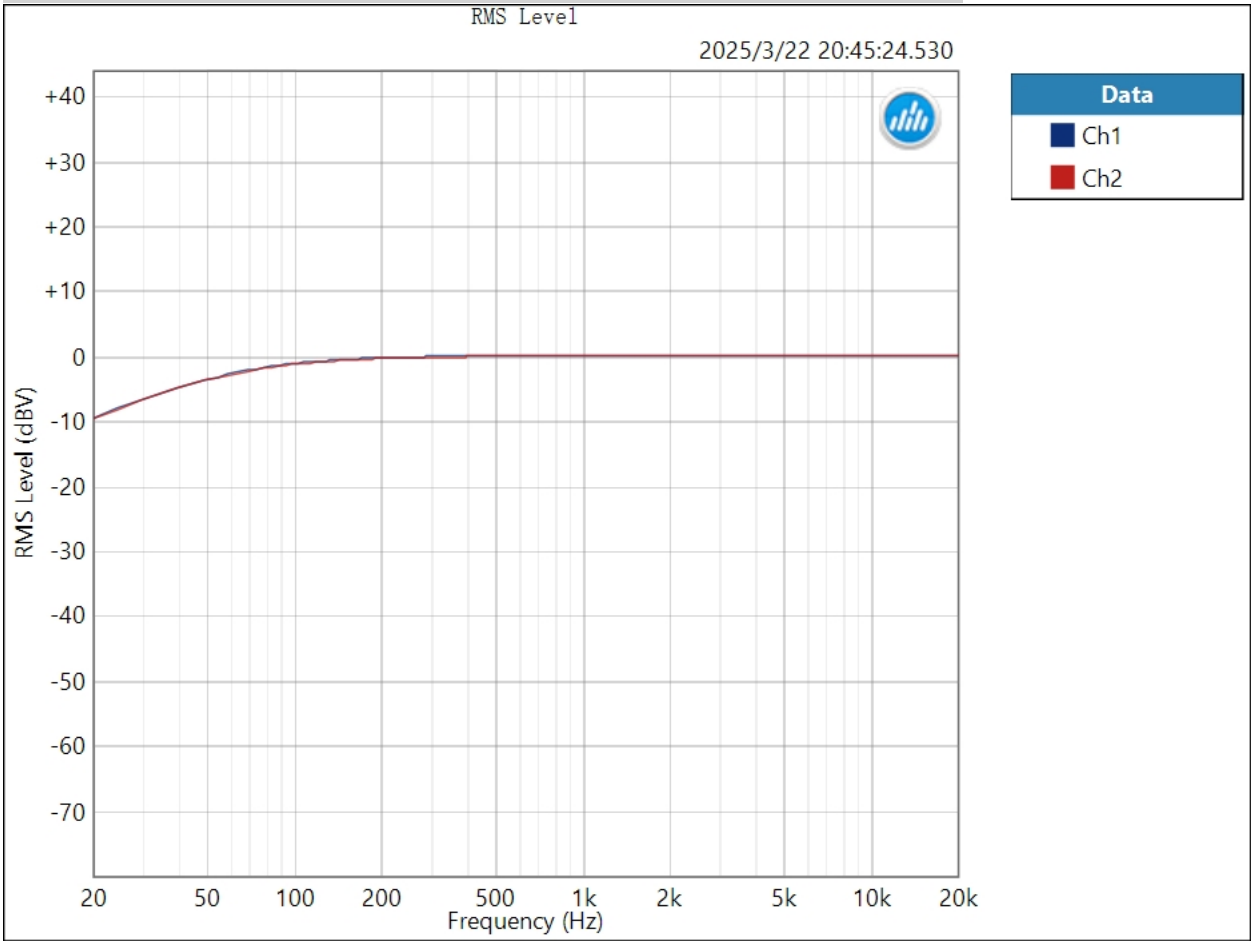
Level Unit: Vrms

Channel: Ch1

Signal Path1 : Frequency Response

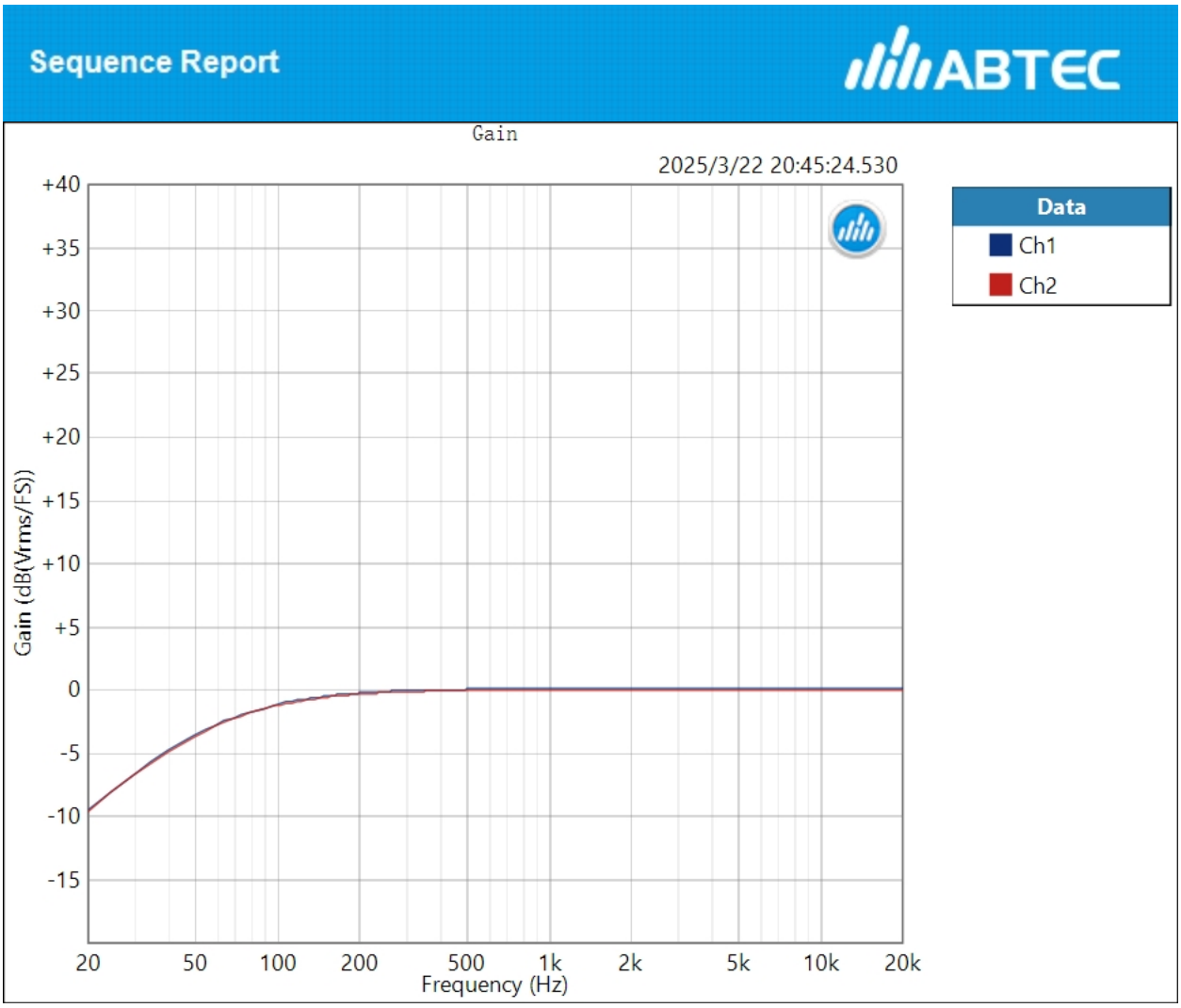
Start Frequency:	20.0000 Hz
Stop Frequency:	20.0000 kHz
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
EQ:	None
Pre-Sweep:	0.000 s
Sweep:	350.0 ms
Extend Acquisition By:	50.00 ms
Secondary Source:	None
Measured 1	2025/3/22 20:45:24

RMS Level (2025/3/22 20:45:24.530)



Result: PASSED

Gain (2025/3/22 20:45:24.530)

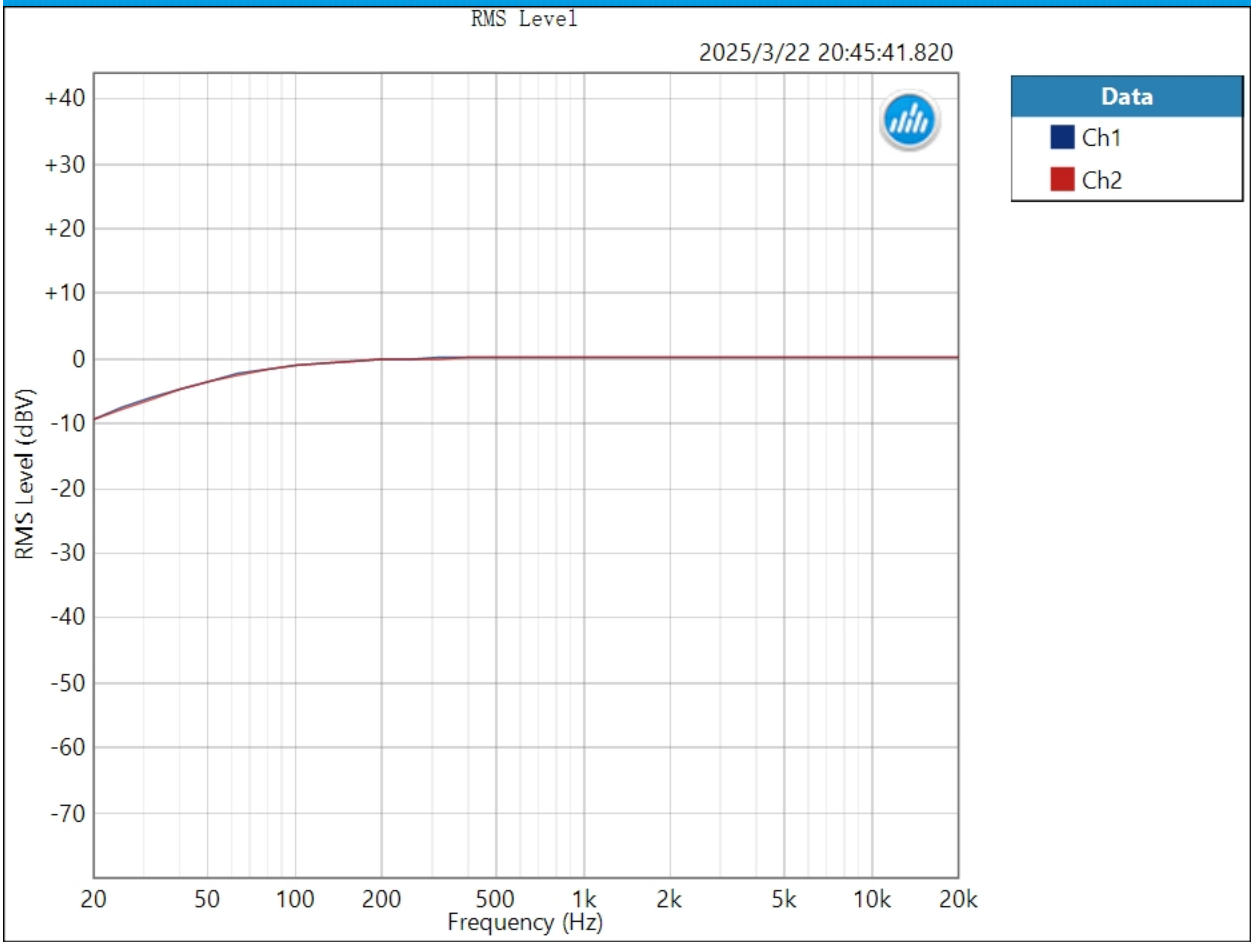


Result: PASSED

Signal Path1 : Stepped Frequency Sweep

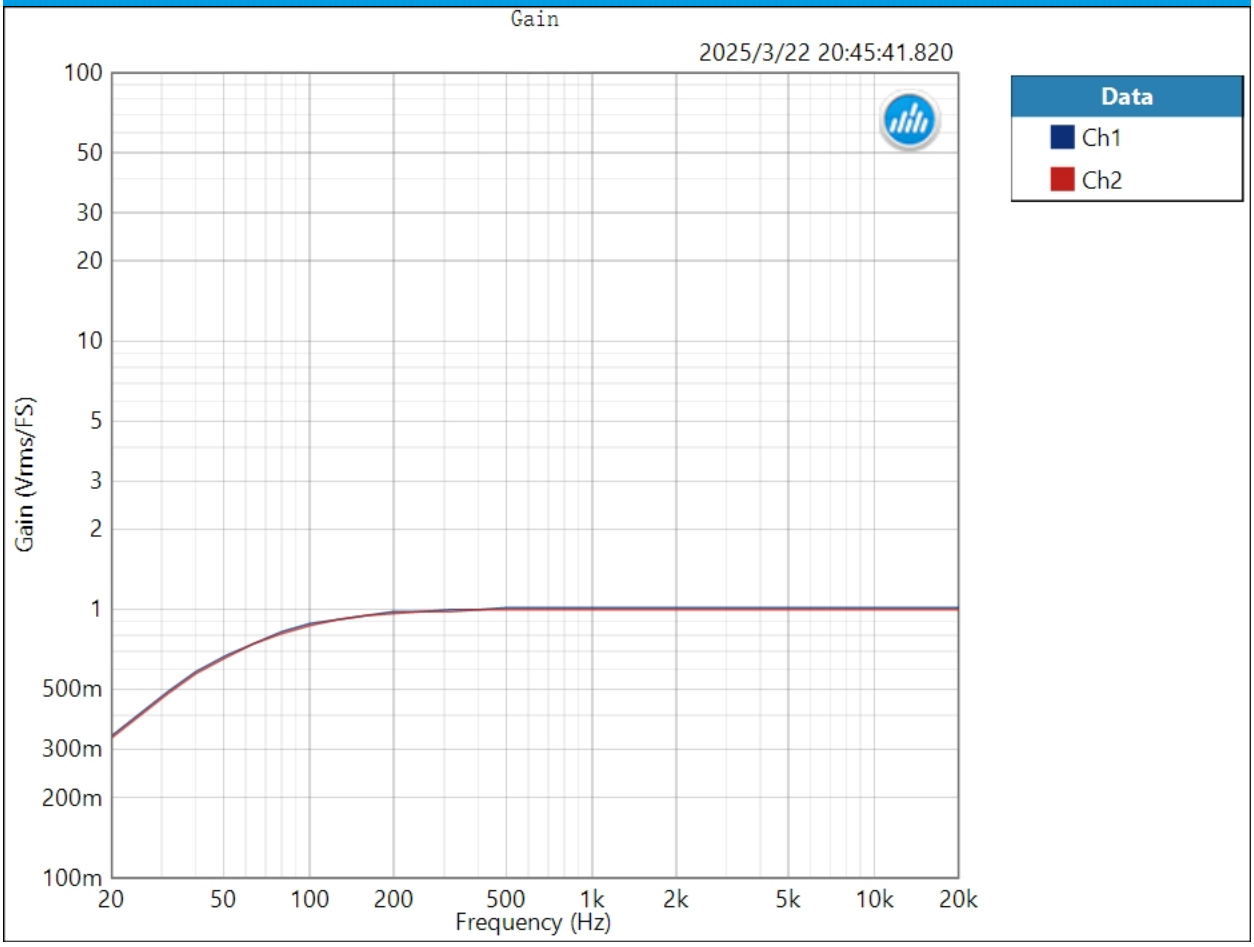
Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
EQ:	None
Start Frequency:	20.0000 kHz
Stop Frequency:	20.0000 Hz
Step Type:	Logarithmic
Number of Points:	31
High-pass Filter:	Elliptic
High-pass Frequency:	20 Hz
Low-pass Filter:	Signal Path
Weighting Filter:	A-wt.
Phase Ref Channel:	Ch1
Measured 1	2025/3/22 20:45:41

RMS Level (2025/3/22 20:45:41.820)



Result: PASSED

Gain (2025/3/22 20:45:41.820)



Result: PASSED

Signal Path1 : Signal to Noise Ratio

Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
High-pass Filter:	Elliptic
High-pass Frequency:	20 Hz
Low-pass Filter:	Elliptic
Low-pass Frequency:	20 kHz
Weighting Filter:	A-wt.

Signal to Noise Ratio (2025/3/22 20:45:44.114)

Ch1 99.381 dB
Ch2 99.637 dB

Signal Path1 : Crosstalk, One Channel Undriven

Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz

Crosstalk (2025/3/22 20:45:45.367)

Ch1 54.082 dB
Ch2 53.090 dB

Signal Path1 : Interchannel Phase

Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Reference Channel:	Ch1
Meter Range:	-90 -> 270 deg

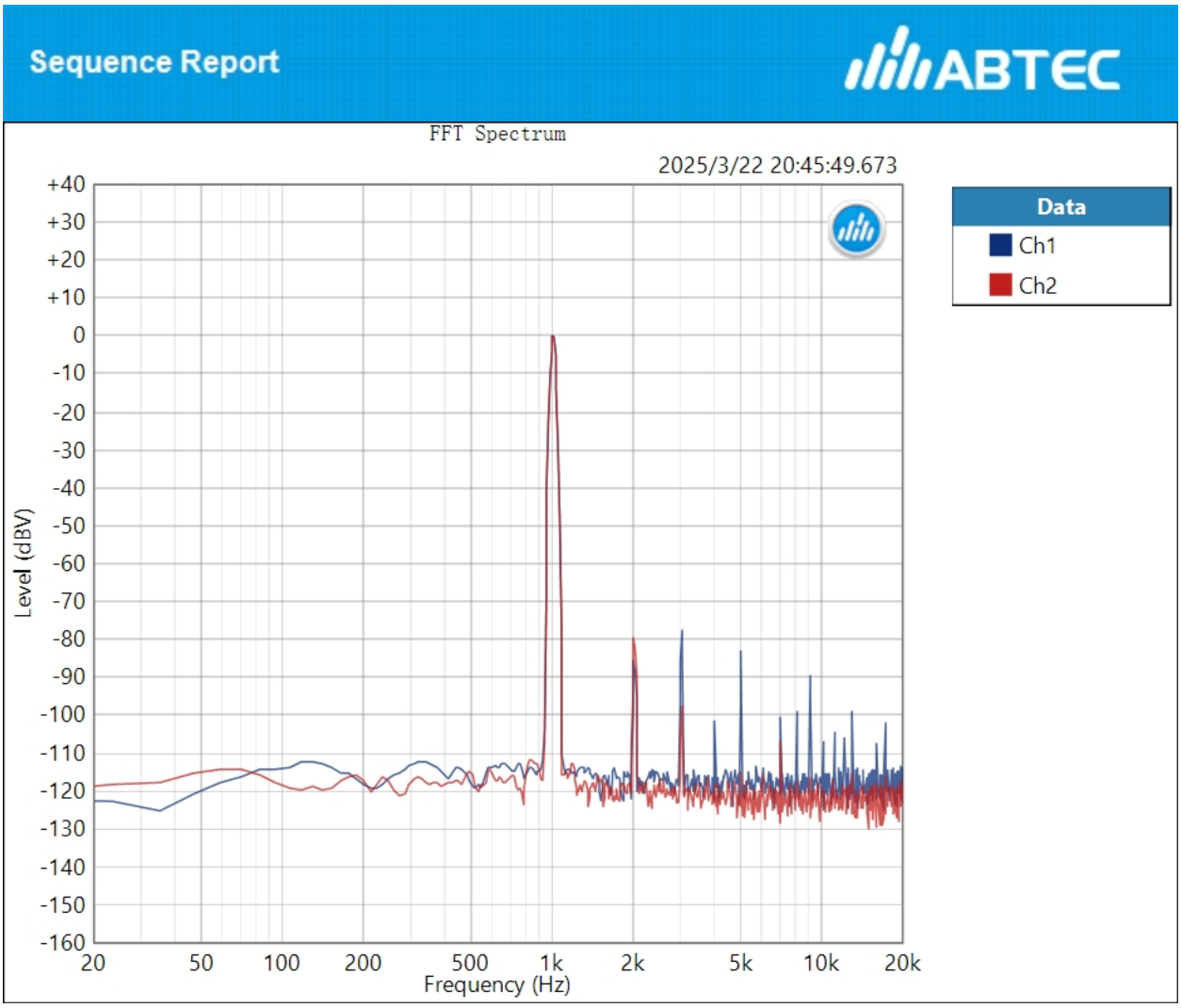
Phase (2025/3/22 20:45:46.865)

Ch1 ---- deg
Ch2 +0.013 deg

Signal Path1 : Signal Analyzer

Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Secondary Source:	None
Measured 1	2025/3/22 20:45:49
Acquisition Type:	Auto
Trigger:	Free Run
Delay Time:	250.0 ms
Input Bandwidth:	Use Signal Path
FFT Length:	16K
Averaging:	Power
Averages:	5
Window:	ATC-Equiripple
Record Acquisition:	False
Recording Type:	Multiple Mono PCM (.wav)

FFT Spectrum (2025/3/22 20:45:49.673)

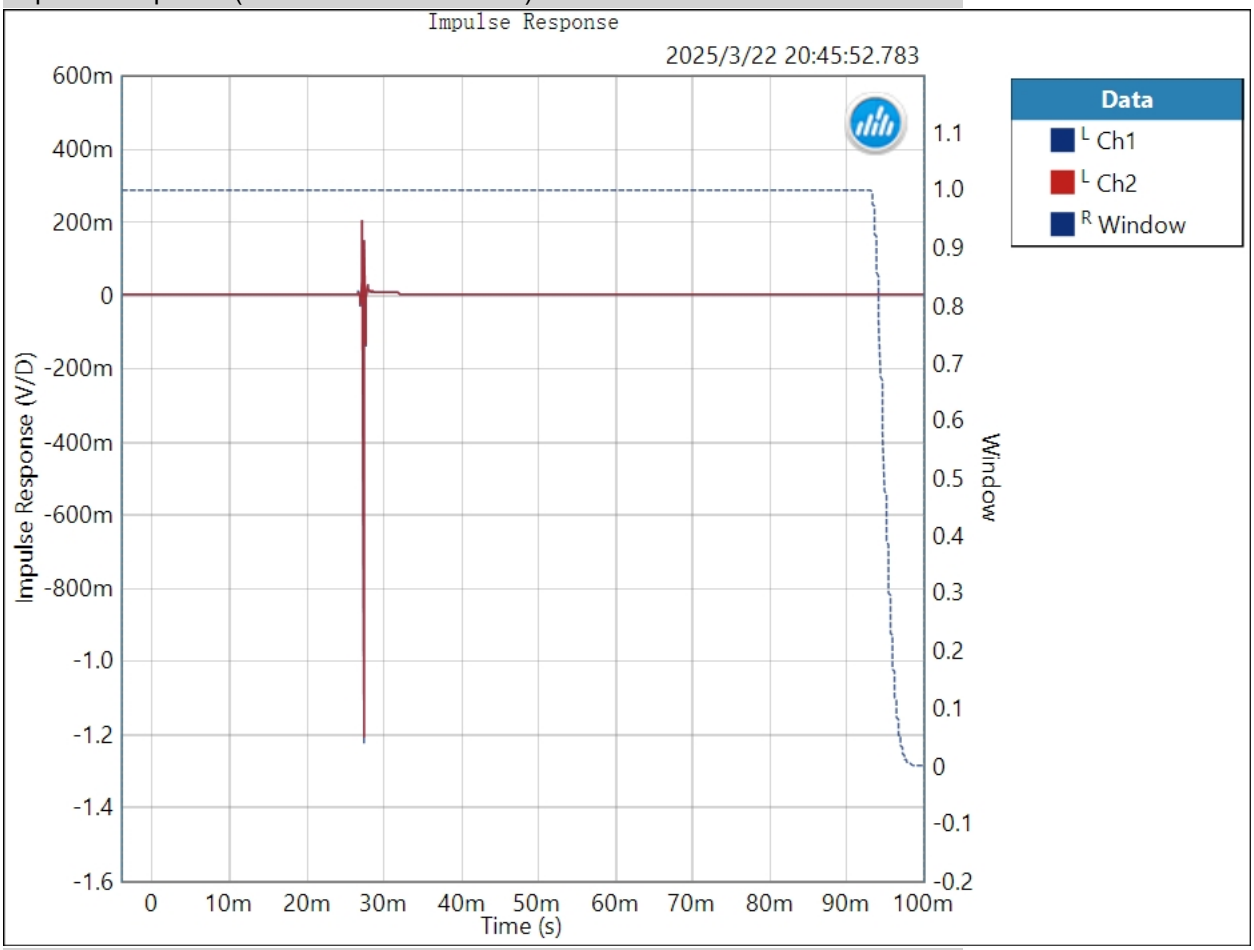


Result: PASSED

Signal Path1 : Acoustic Response

Start Frequency:	20.0000 Hz
Stop Frequency:	20.0000 kHz
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
EQ:	None
Pre-Sweep:	0.000 s
Sweep:	350.0 ms
Measured 1	2025/3/22 20:45:52
Averages:	1
Extend Acquisition By:	50.00 ms
Secondary Source:	None

Impulse Response (2025/3/22 20:45:52.783)

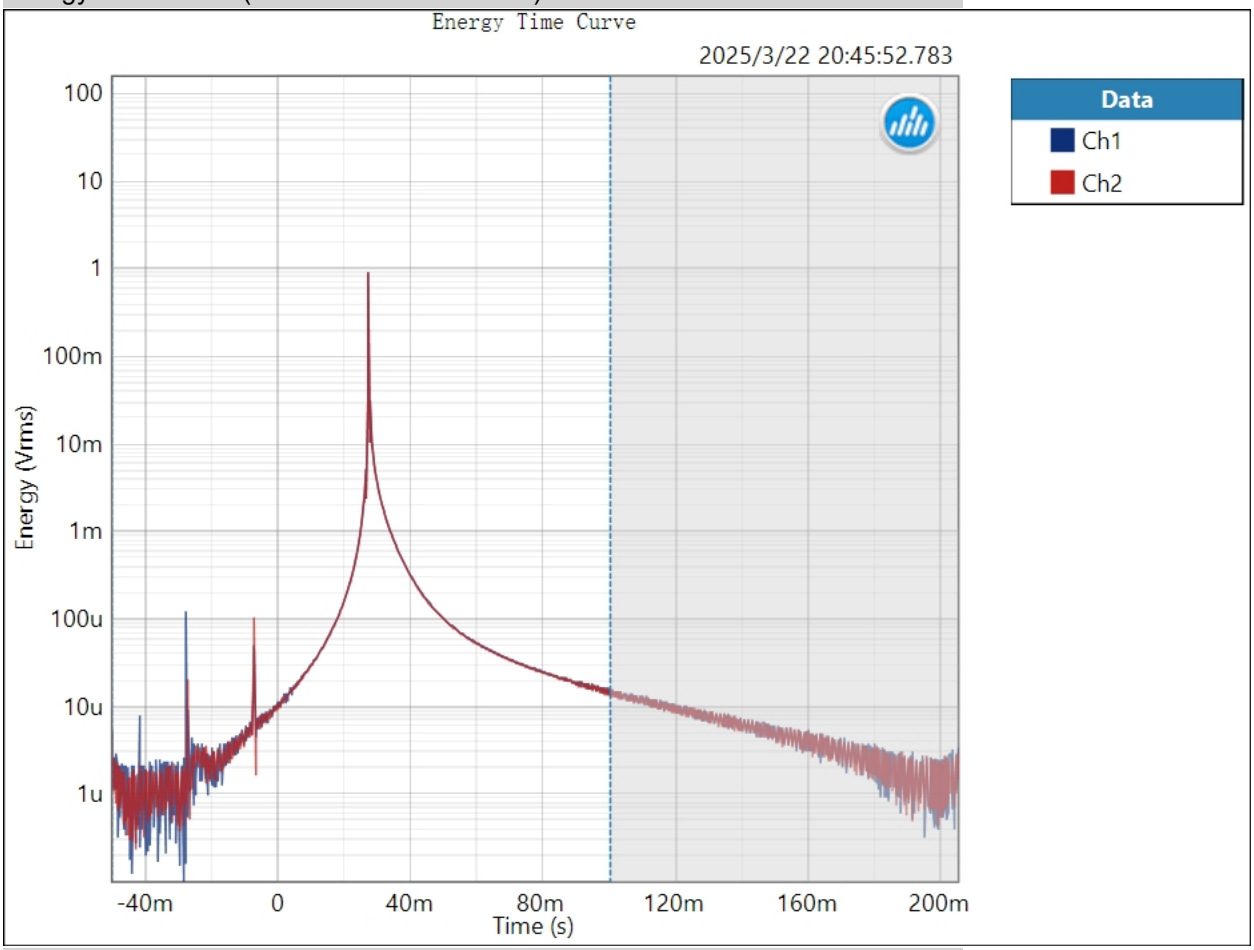


Impulse Response Parameters

Auto Window Start	True
Window End:	100.0 ms
Taper Type:	ATC-Equiripple
Time Window:	Track Peak
Taper Start:	10.000 %
Taper End:	10.000 %

Result: PASSED

Energy Time Curve (2025/3/22 20:45:52.783)

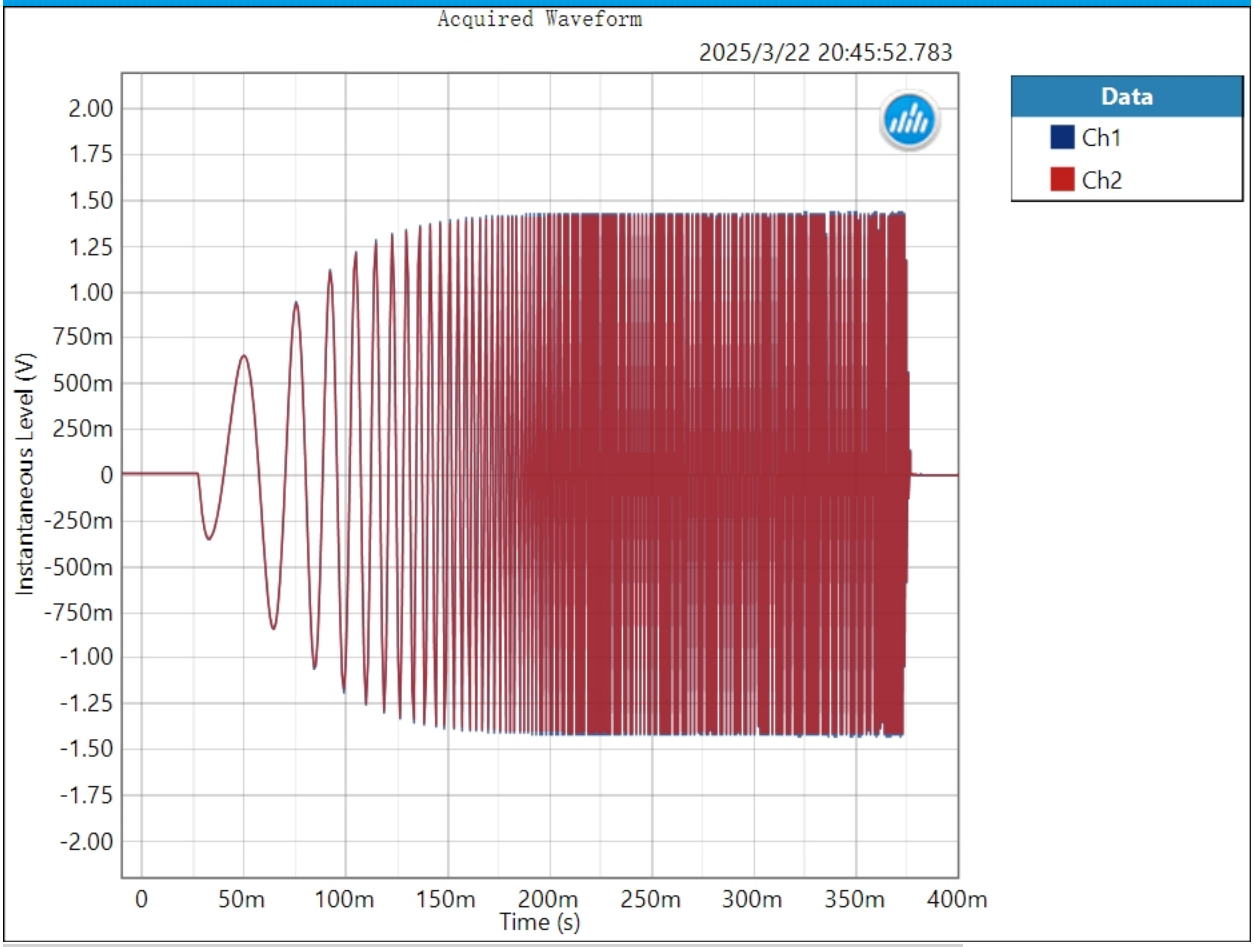


Energy Time Curve Parameters

Auto Window Start	True
Window End:	100.0 ms

Result: PASSED

Acquired Waveform (2025/3/22 20:45:52.783)



Acquired Waveform Parameters

Interpolated: On

Result: PASSED

Signal Path1 : Noise (RMS)

Waveform:	None
High-pass Filter:	Elliptic
High-pass Frequency:	20 Hz
Low-pass Filter:	Elliptic
Low-pass Frequency:	20 kHz
Weighting Filter:	A-wt.
Acquisition Time:	250.0 ms
Delay Time:	300.0 ms

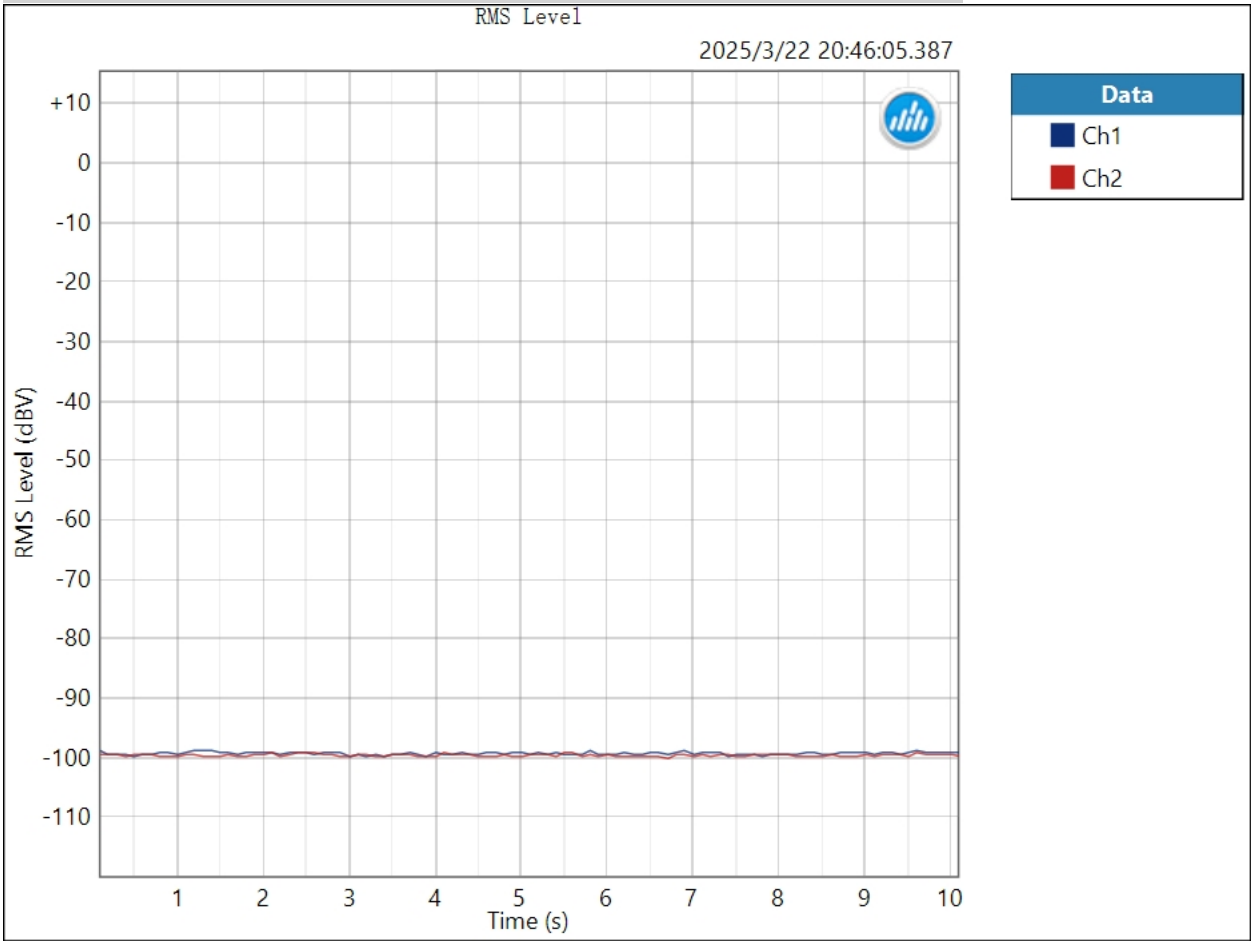
Noise Level (2025/3/22 20:45:54.571)

Ch1 -99.525 dBV
Ch2 -99.480 dBV

Signal Path1 : Noise Recorder (RMS)

Waveform:	None
High-pass Filter:	Elliptic
High-pass Frequency:	20 Hz
Low-pass Filter:	Elliptic
Low-pass Frequency:	20 kHz
Weighting Filter:	A-wt.
Sweep Time:	0.00:00:10.000
Reading Rate:	10/sec
Input Bandwidth:	Use Signal Path
Record Acquisition:	False
Recording Type:	Multiple Mono PCM (.wav)
Measured 1	2025/3/22 20:46:05

RMS Level (2025/3/22 20:46:05.387)

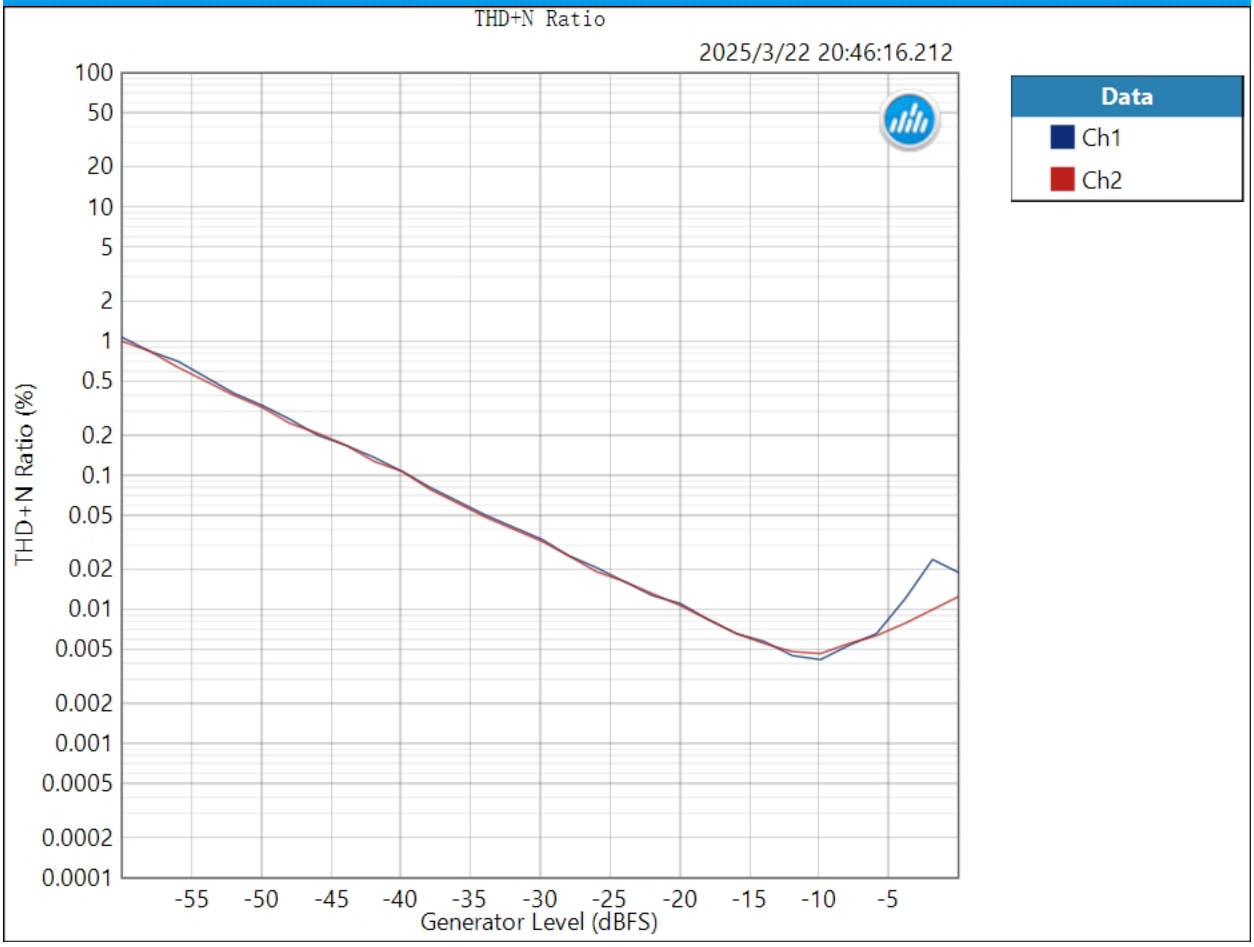


Result: PASSED

Signal Path1 : Stepped Level Sweep

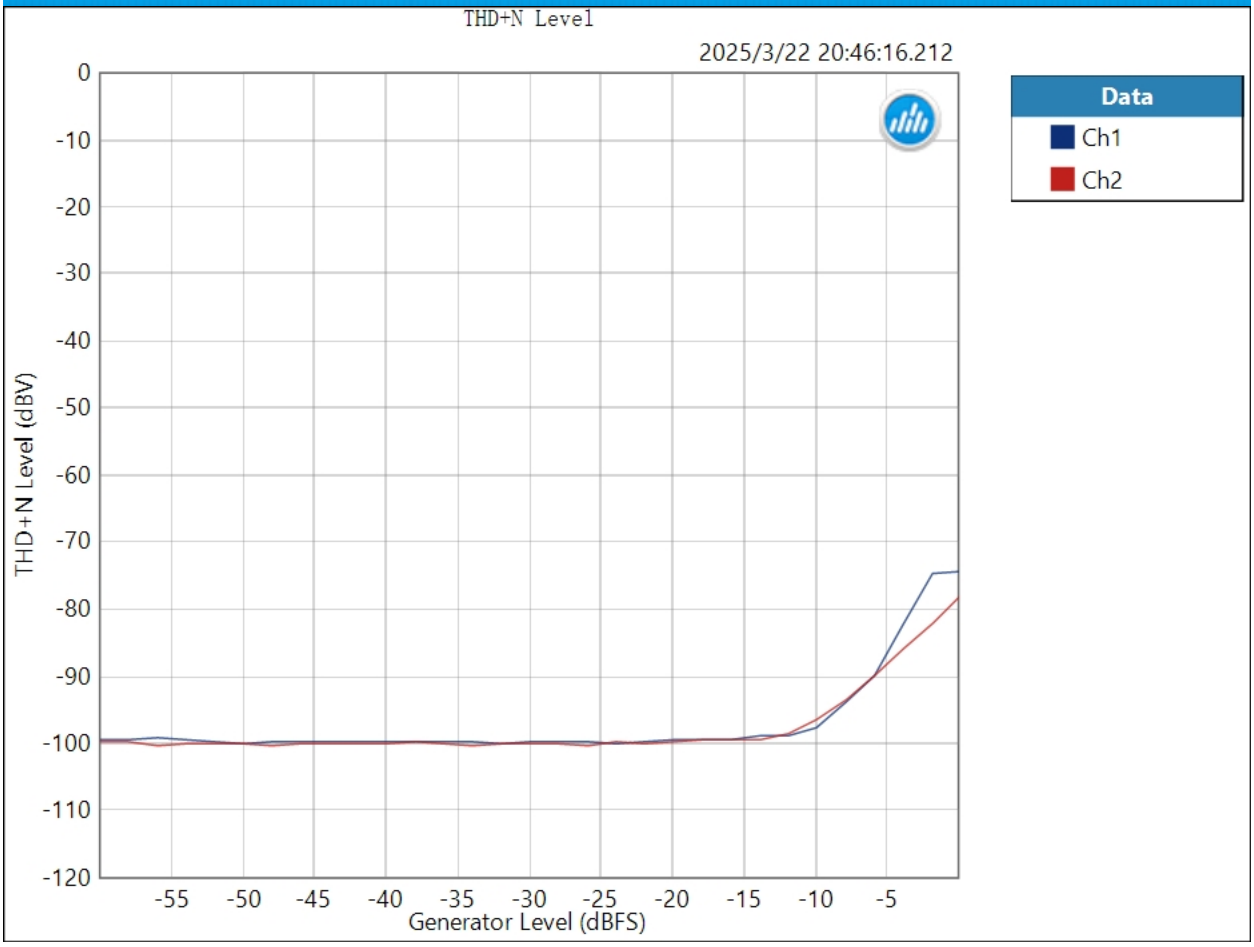
Waveform:	Sine
Frequency:	1.00000 kHz
Start Level:	-60.000 dBFS
Stop Level:	-0.000 dBFS
Step Type:	Linear
Number of Points:	31
Step Size:	+2.000 dBFS
Offset:	0.000 D
High-pass Filter:	Elliptic
High-pass Frequency:	20 Hz
Low-pass Filter:	Elliptic
Low-pass Frequency:	20 kHz
Weighting Filter:	A-wt.
Notch Tuning Mode:	Generator Frequency
Measured 1	2025/3/22 20:46:16

THD+N Ratio (2025/3/22 20:46:16.212)



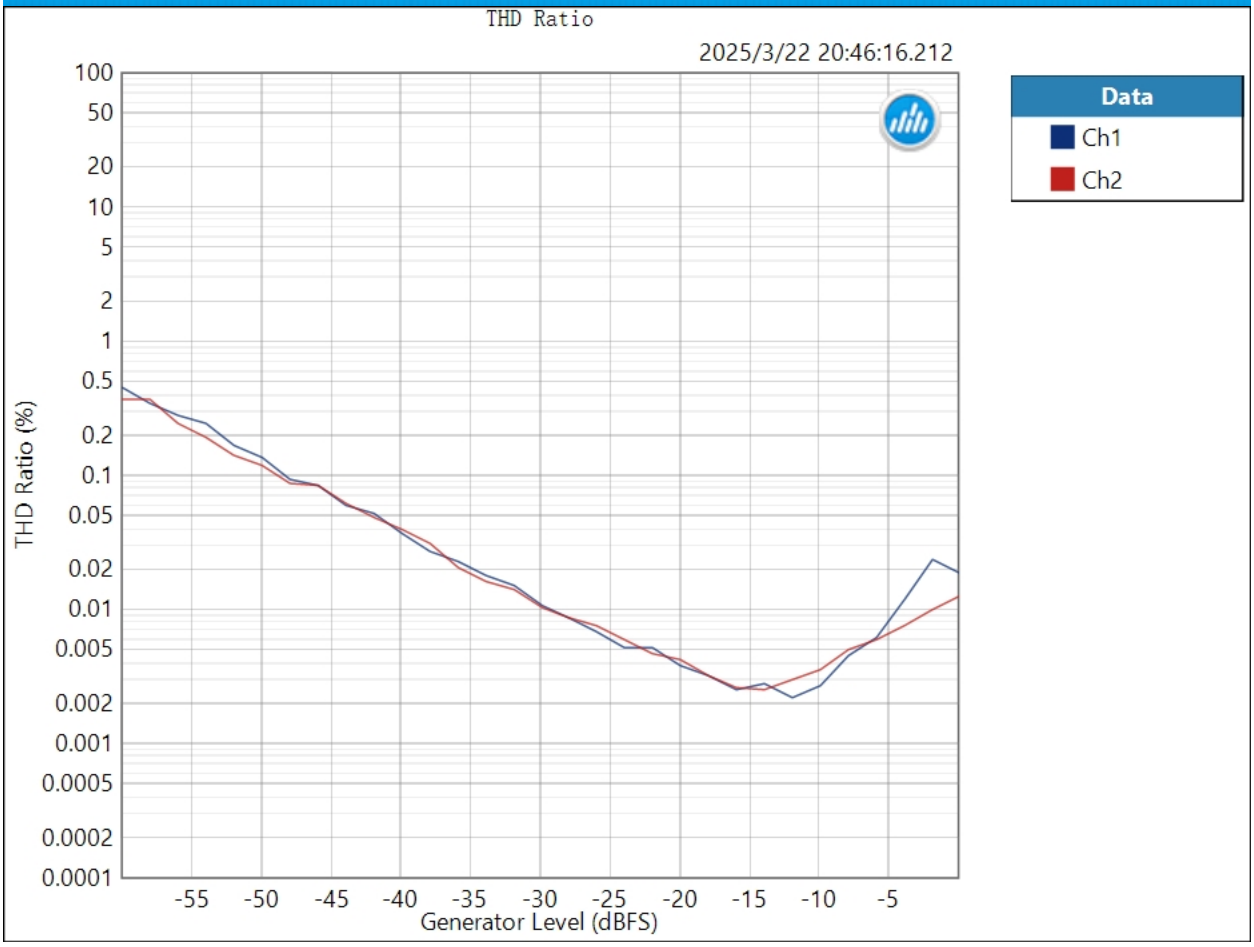
Result: PASSED

THD+N Level (2025/3/22 20:46:16.212)



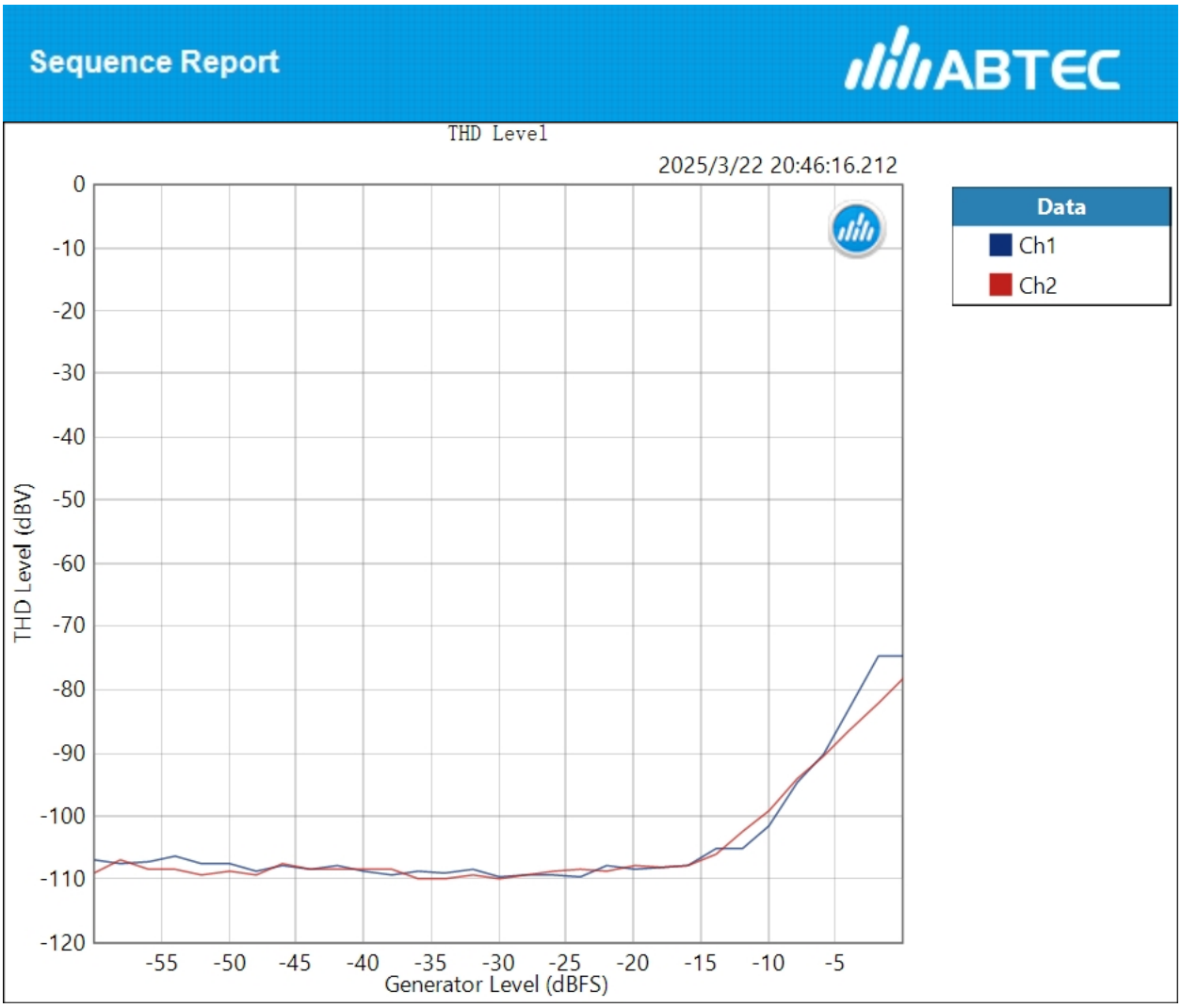
Result: PASSED

THD Ratio (2025/3/22 20:46:16.212)



Result: PASSED

THD Level (2025/3/22 20:46:16.212)

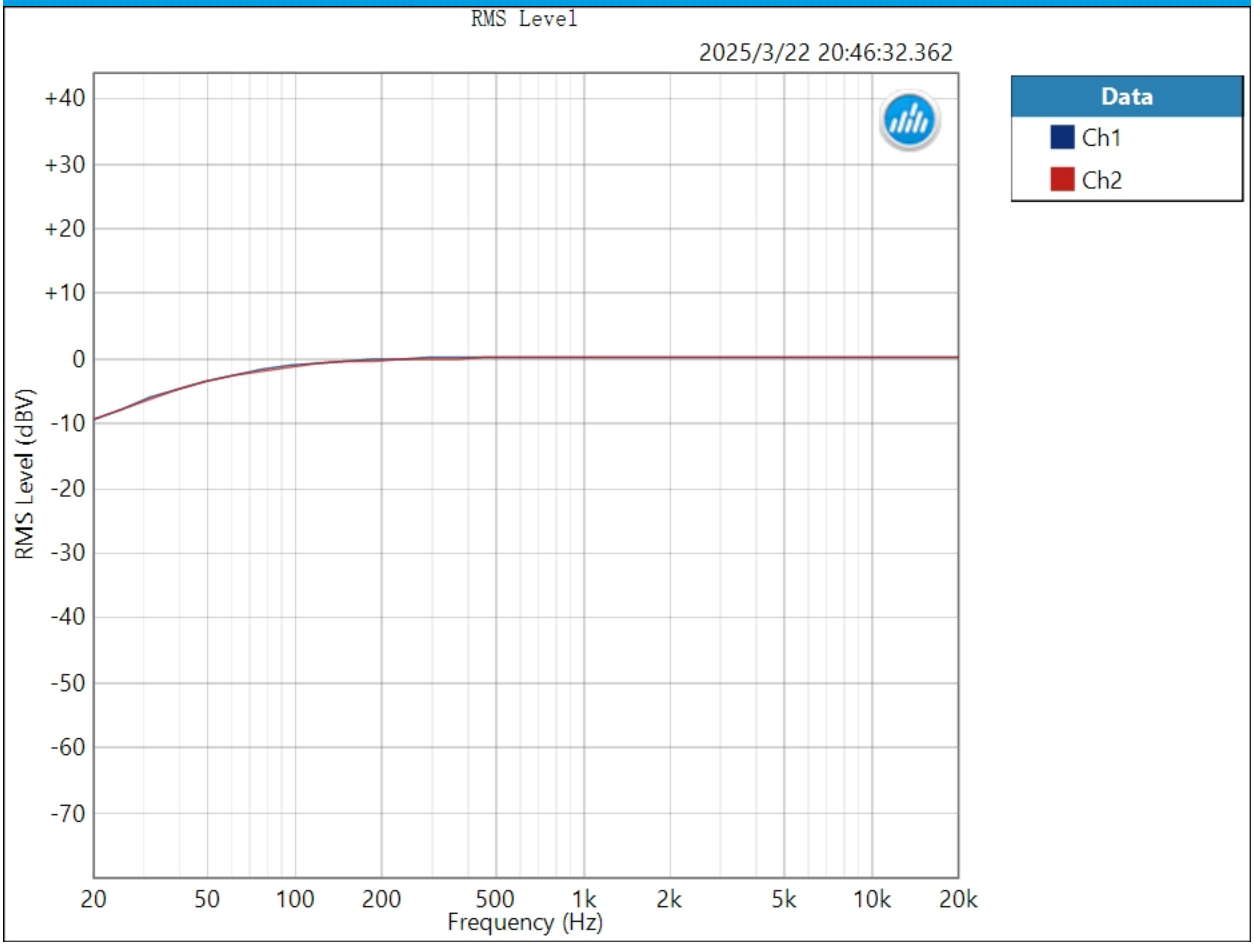


Result: PASSED

Signal Path1 : Stepped Frequency Sweep

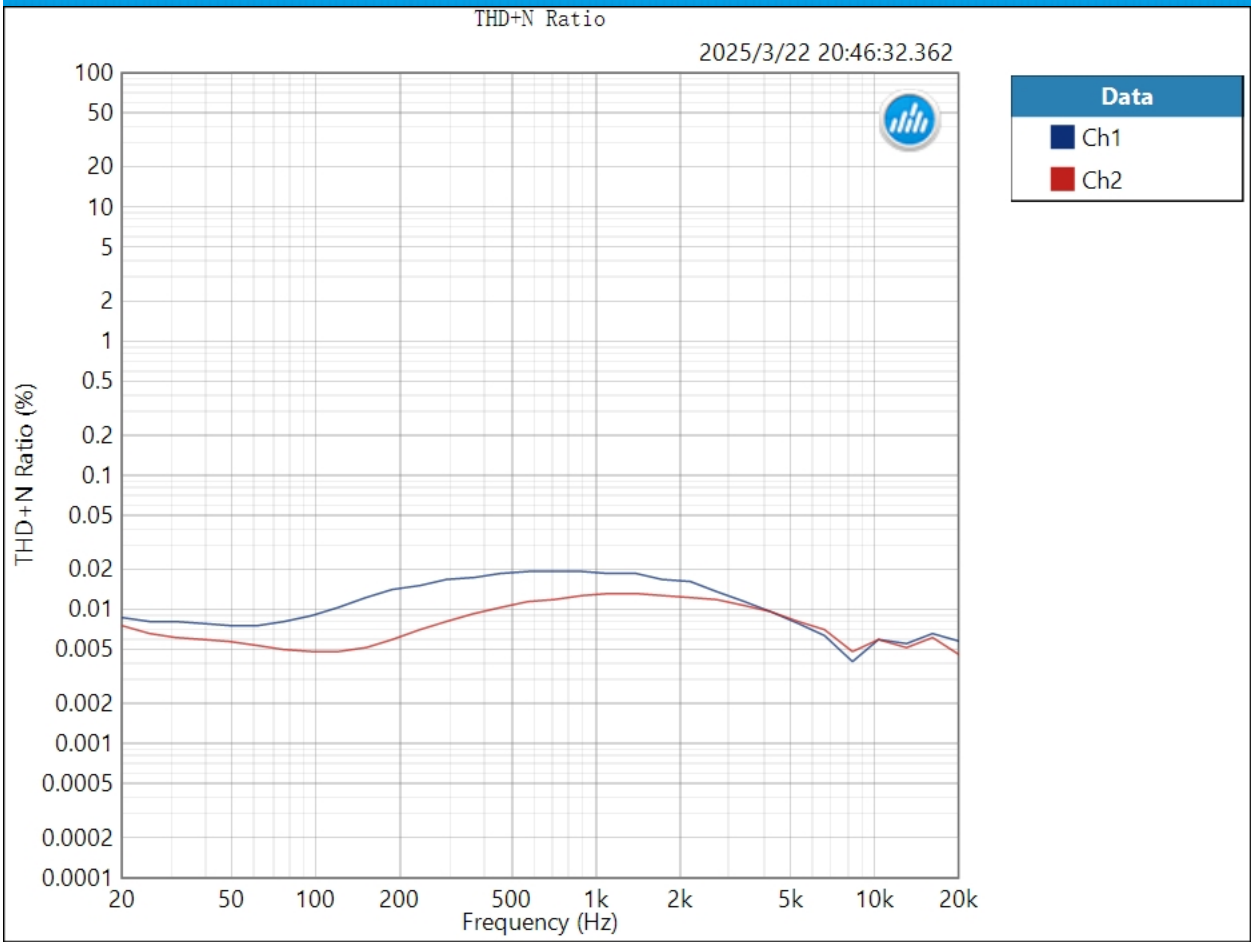
Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
EQ:	None
Start Frequency:	20.0000 kHz
Stop Frequency:	20.0000 Hz
Step Type:	Logarithmic
Number of Points:	32
High-pass Filter:	Elliptic
High-pass Frequency:	20 Hz
Low-pass Filter:	Signal Path
Weighting Filter:	A-wt.
Phase Ref Channel:	Ch1
Measured 1	2025/3/22 20:46:32

RMS Level (2025/3/22 20:46:32.362)



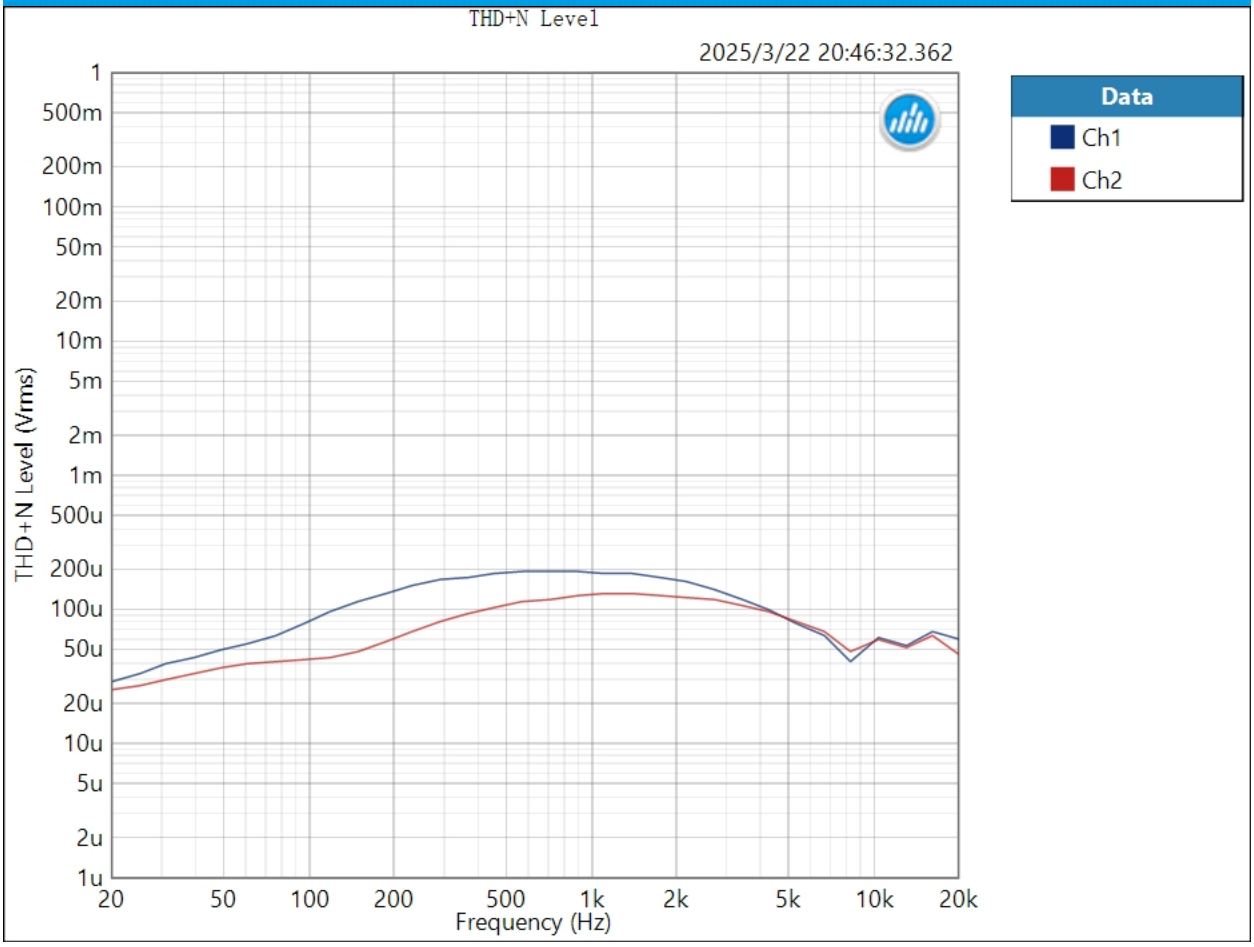
Result: PASSED

THD+N Ratio (2025/3/22 20:46:32.362)



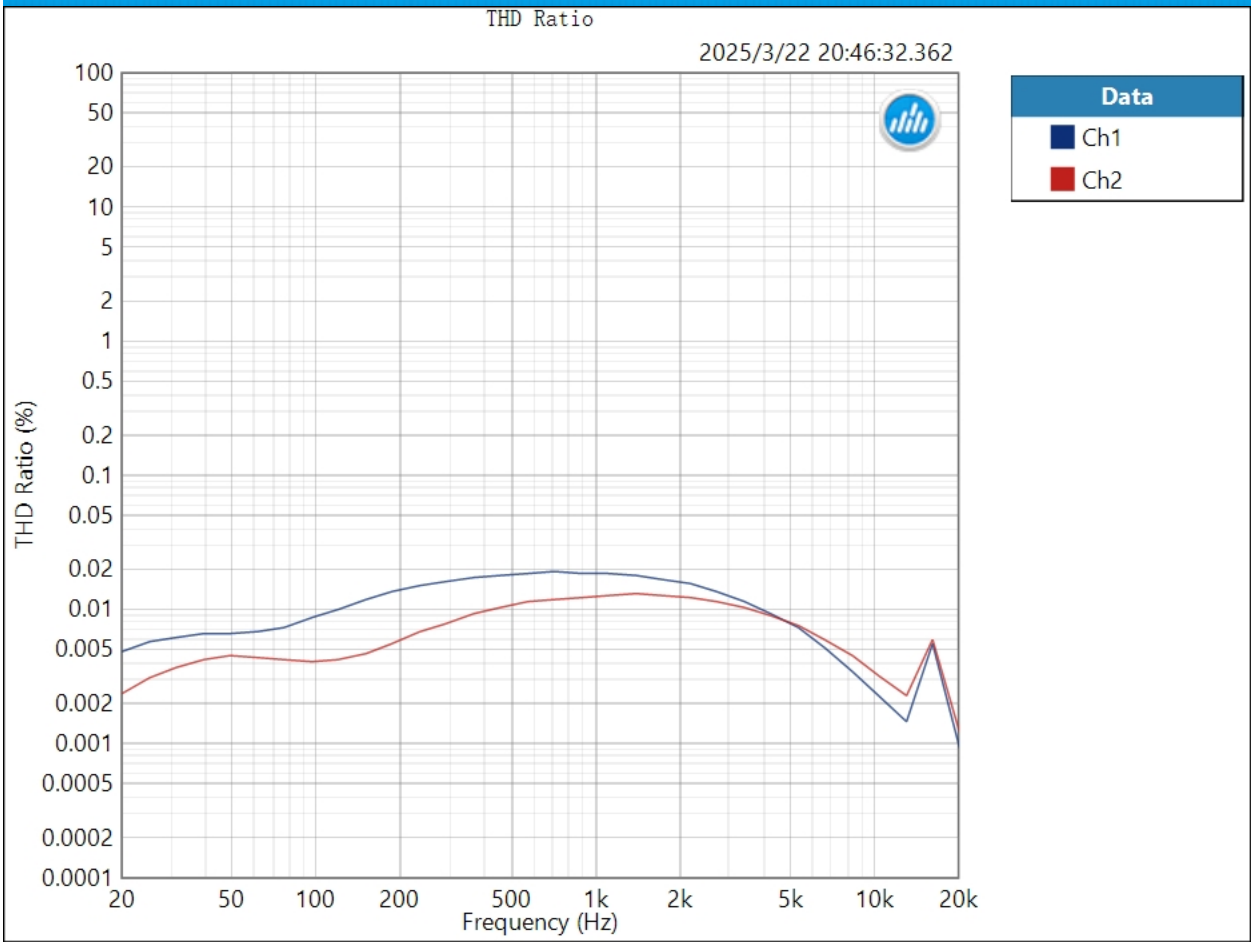
Result: PASSED

THD+N Level (2025/3/22 20:46:32.362)



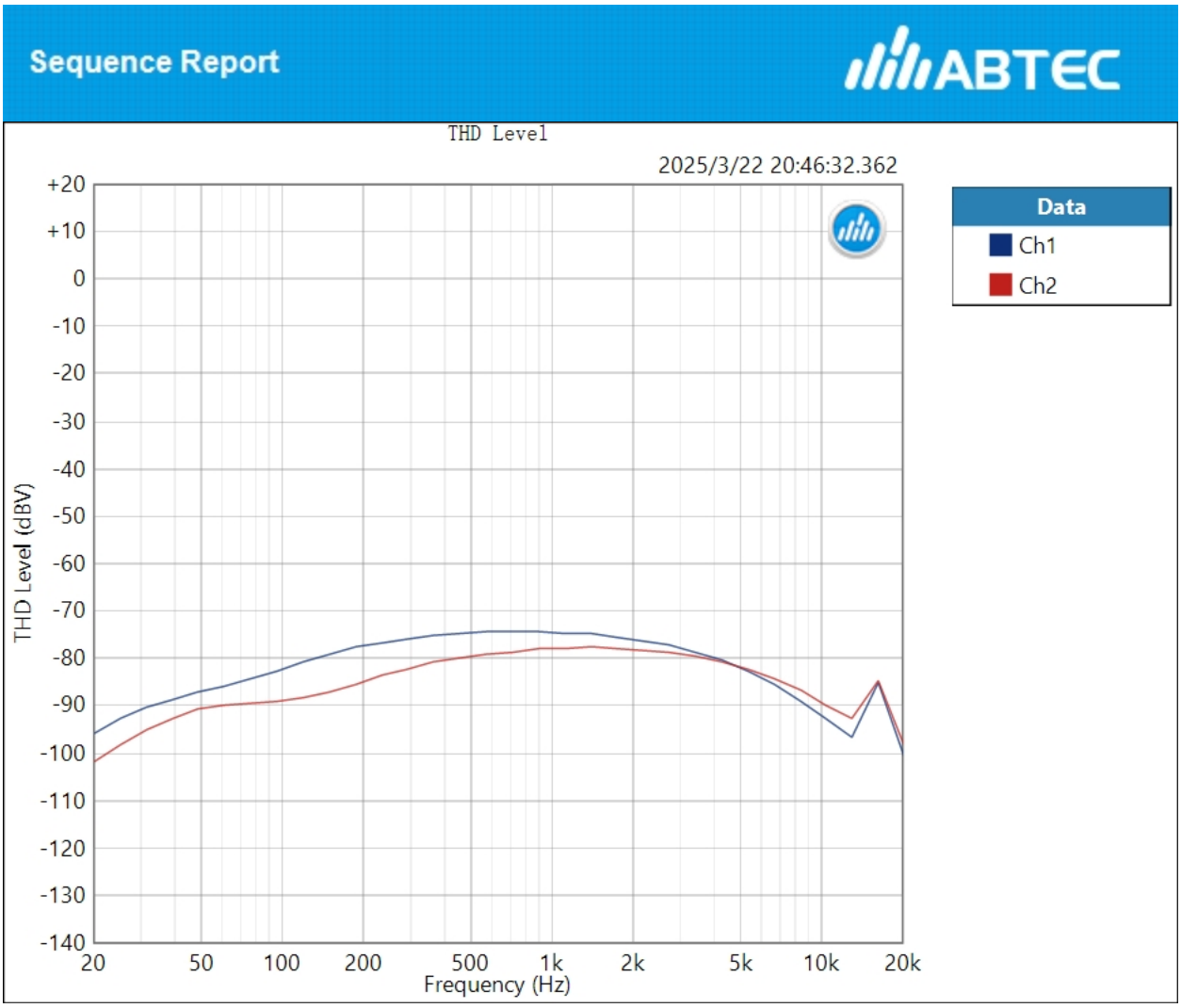
Result: PASSED

THD Ratio (2025/3/22 20:46:32.362)



Result: PASSED

THD Level (2025/3/22 20:46:32.362)



Result: PASSED