



## Sequence Report



### Pre-Sequence Inputs:

ID: Ferrum WANDLA (Analog Vol Control)

### Summary

#### SIG 1 - Scope Views (44.1khz)

1khz Tone View	✓ PASSED
15khz Tone View	✓ PASSED
-90.31dBFS 1khz 16 bit undithered sine (96khz Bandwidth)	✓ PASSED
-90.31dBFS 1khz 16 bit dithered sine (96khz Bandwidth)	✓ PASSED
-90.31dBFS 1khz 24 bit undithered sine (96khz Bandwidth)	✓ PASSED
-90.31dBFS 1khz 24 bit dithered sine (96khz Bandwidth)	✓ PASSED
Filter Ultrasonic Attenuation	✓ PASSED
20hz-90khz Noise RMS Level	✓ PASSED

#### SIG 1.5 - Scope Views (44.1khz)

1khz Tone View	✓ PASSED
15khz Tone View	✓ PASSED
-90.31dBFS 1khz undithered 16b sine (1Mhz bandwidth)	✓ PASSED
-90.31dBFS 1khz dithered 16b sine (1Mhz bandwidth)	✓ PASSED
-90.31dBFS 1khz undithered 24b sine (1Mhz bandwidth)	✓ PASSED
-90.31dBFS 1khz dithered 24b sine (1Mhz bandwidth)	✓ PASSED
Filter Ultrasonic Attenuation	✓ PASSED
1Mhz RMS Noise Level	✓ PASSED

#### SIG 2 - Main Measurements (44.1khz)

Output Level (Vrms)	✓ PASSED
Frequency Response (Audible Band)	✓ PASSED
20hz-20khz Noise RMS Level	✓ PASSED
Idle Noise FFT	✓ PASSED
1khz FFT (0dbfs)	✓ PASSED
1khz FFT (-3dbfs)	✓ PASSED
50khz FFT (0dbfs)	✓ PASSED
50hz FFT (-3dbfs)	✓ PASSED
Effective Number of Bits 0dbfs	✓ PASSED
Effective Number of Bits -3dbfs	✓ PASSED
THD+N 0dbfs	✓ PASSED
THD+N -3dbfs	✓ PASSED

THD+N/Frequency	✔ PASSED
Dynamic Range - AES17	✔ PASSED
Signal to Noise Ratio	✔ PASSED
IMD ( SMPTE )	✔ PASSED
50hz/7khz IMD SMPTE FFT	✔ PASSED
IMD Level Sweep ( SMPTE )	✔ PASSED
Linearity	✔ PASSED
Linearity (No Bandpass)	✔ PASSED
Crosstalk Sweep, One Channel Driven	✔ PASSED
DC Offset (active)	✔ PASSED
DC Offset (idle)	✔ PASSED
SIG 3 - 44.1khz Jitter	
44.1khz J-Test (Jitter)	✔ PASSED
SIG 4 - 48khz Jitter	
48khz J-Test (Jitter)	✔ PASSED
SIG 5 - Bandwidth (192khz)	
90khz Bandwidth	✔ PASSED
SIG 6 - THD and Phase vs Frequency	
THD+N vs frequency (AES 40khz filter)	✔ PASSED
Interchannel Phase and Group Delay	✔ PASSED
SIG 7 - Wideband and Intersample Overs	
Wideband idle noise	✔ PASSED
1khz 0dbfs wideband	✔ PASSED
1khz -3dbfs wideband	✔ PASSED
Intersample Overs (+3dB)	✔ PASSED
Intersample Overs (+1dB)	✔ PASSED
SIG 8 - Multitone	
32 Tone Test	✔ PASSED
Sequence Result:	
Sequence Result:	✔ PASSED



## Sequence Report



### SIG 1 - Scope Views (44.1kHz) : Signal Path Setup

Output Connector:	ASIO
Asio Device:	Ferrum USB Audio
Scaling Mode:	Digital
Output Sample Rate:	44.1000 kHz
Output Latency:	Auto
Buffer Size:	2048
Clock Source:	Computer
Input 1:	Analog Balanced
Measure:	Auto
Channels:	Auto (2 Channels)
Ch1	Data from Ch1, Sensitivity = 0.00 dB, Gain = 0.00 dB
Ch2	Data from Ch2, Sensitivity = 0.00 dB, Gain = 0.00 dB
Input Bandwidth:	AC (<10 Hz) - 90k (192 kHz SR)
Input EQ:	None
Termination:	200 kohm
High Performance Sine Analyzer:	Disabled
Input 2:	None
Device Delay:	0.000 s
• References	
dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
Analog Input	
dBrA:	4.063 Vrms
dBrB:	4.063 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	3.000 dB
dB SPL1:	4.063 Vrms
dB SPL2:	4.063 Vrms
dB SPL1 Calibrator Level:	60.000 dB SPL



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dB SPL2 Calibrator Level:	50.000 dB SPL
dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm
• DCX	
DCX is not detected.	
• Clocks	
Output Rate:	Track Output SR
Sync Out Level:	3.300 V
Sync Out Polarity:	Normal
Timebase Reference:	Internal
Jitter:	Disabled
• Triggers	
Source:	Off
Input Logic Level:	3.300 V
Edge:	Rising



## Sequence Report



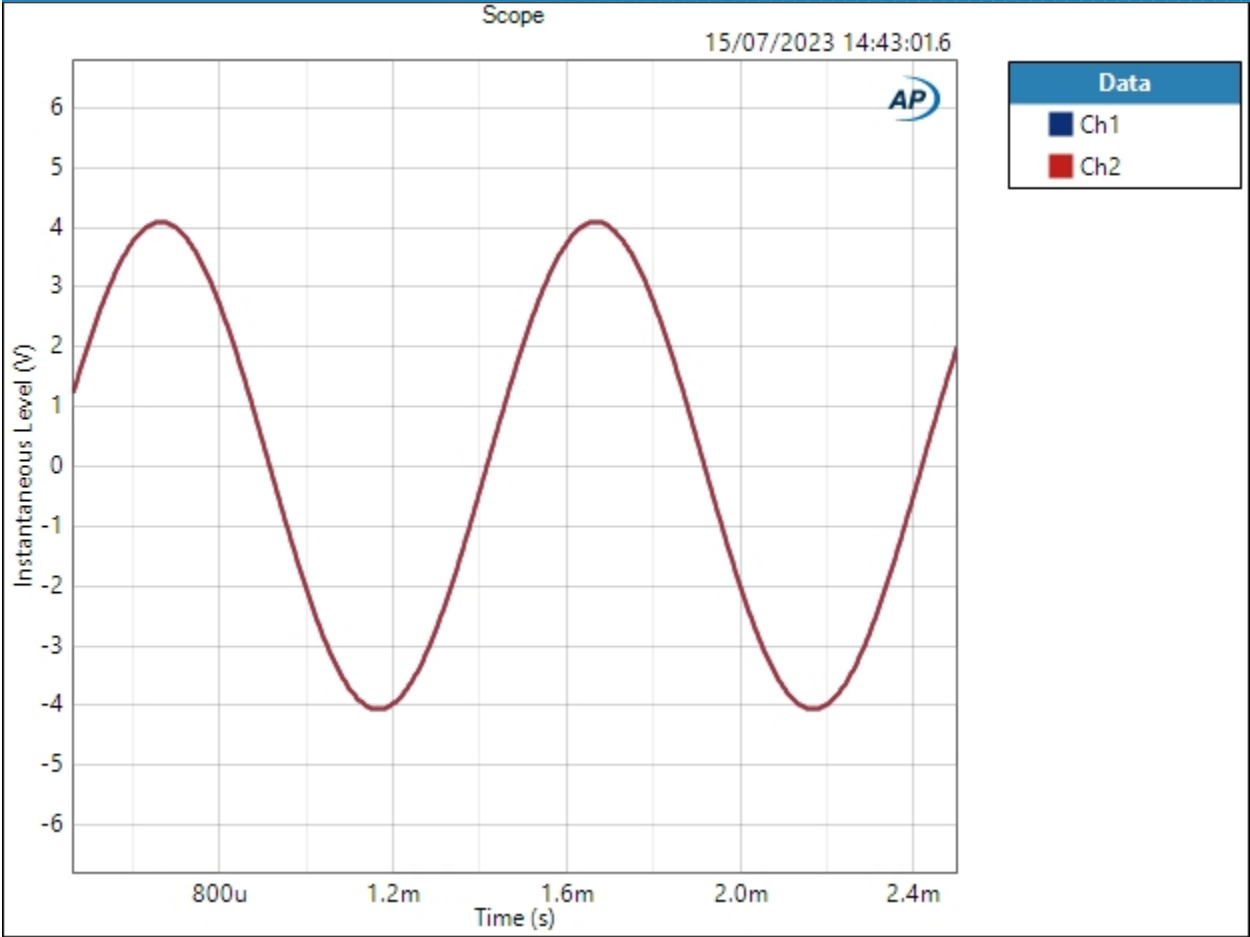
### SIG 1 - Scope Views (44.1kHz) : 1kHz Tone View

Waveform: Sine  
Generator Level: -3.000 dBFS  
DC Offset: 0.000 D  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1: 15/07/2023 14:43:01  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 250.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 1  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:43:01.653)



# Sequence Report



### Scope Parameters

Interpolated: On

Result: PASSED



## Sequence Report



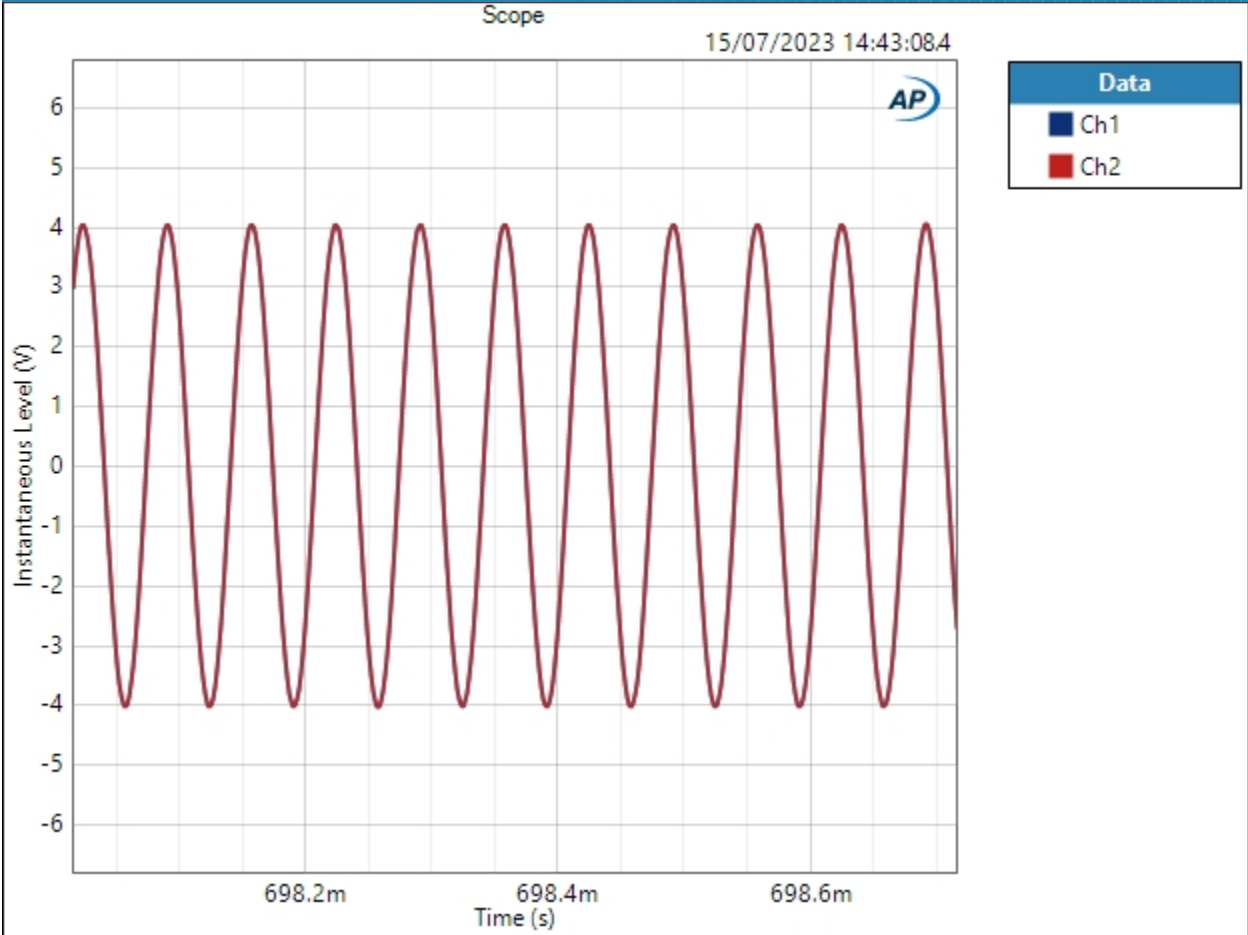
### SIG 1 - Scope Views (44.1kHz) : 15kHz Tone View

Waveform: Sine  
Generator Level: -3.000 dBFS  
DC Offset: 0.000 D  
Frequency: 15.0000 kHz  
Secondary Source: None  
Measured 1: 15/07/2023 14:43:08  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 250.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 1  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:43:08.481)



# Sequence Report



### Scope Parameters

Interpolated: On

Result: PASSED





## Sequence Report



SIG 1 - Scope Views (44.1kHz) : -90.31dBFS 1kHz 16 bit undithered sine (96kHz Bandwidth)

Waveform: 1kHz -90.31dB undithered 16b sine.wav

Bit Exact: True

Start Offset (sec): 0.000 s

Secondary Source: None

Measured 1 15/07/2023 14:43:15

Acquisition Type: Auto

Trigger: Free Run

Delay Time: 250.0 ms

Input Bandwidth: Use Signal Path

FFT Length: 262144

Averaging: Power

Averages: 1

Window: AP-Equiripple

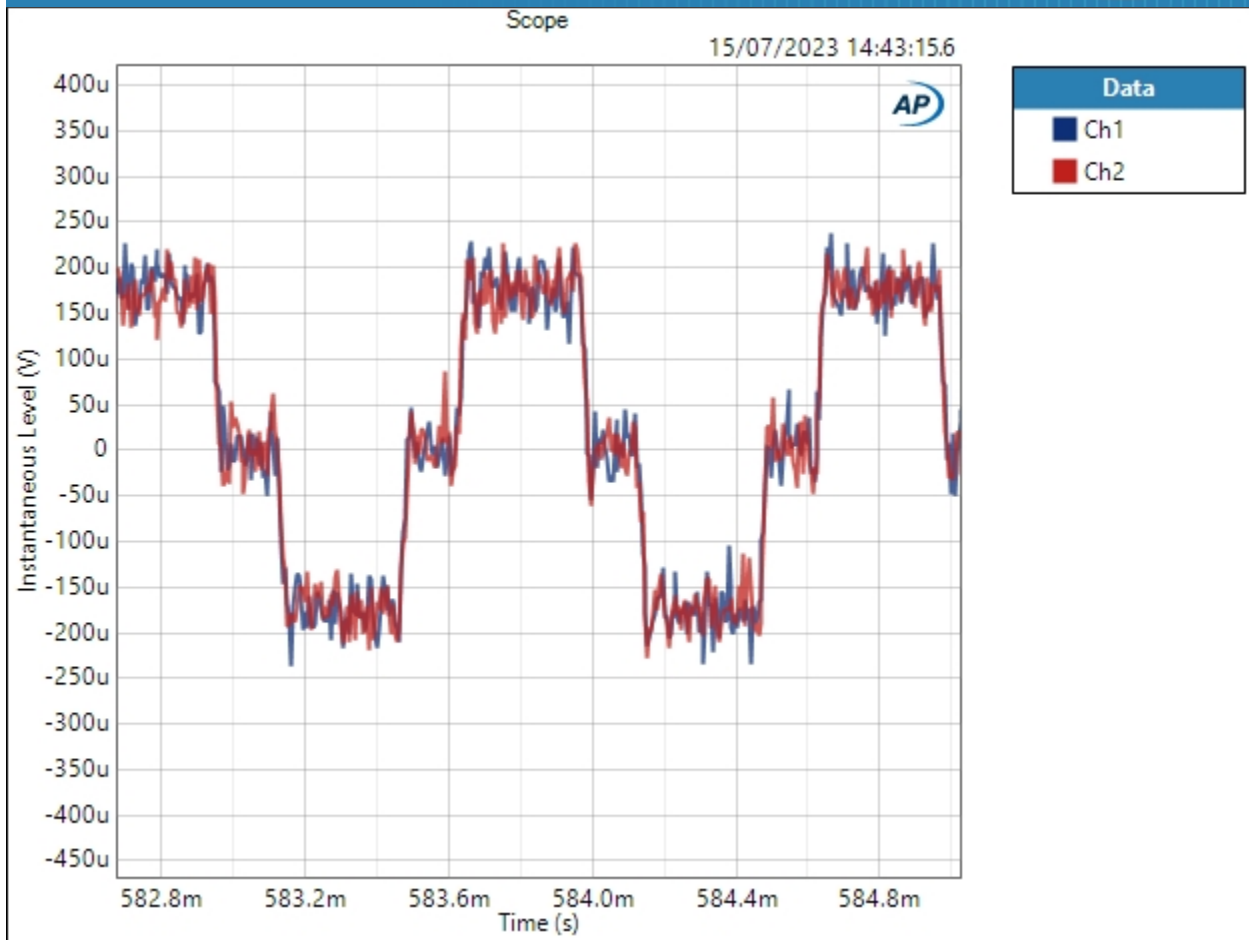
Record Acquisition: False

Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:43:15.666)



## Sequence Report



Scope Parameters

Interpolated: On

Result: PASSED



## Sequence Report



SIG 1 - Scope Views (44.1kHz) : -90.31dBFS 1kHz 16 bit dithered sine (96kHz Bandwidth)

Waveform: 1kHz -90.31dB dithered 16b sine.wav

Bit Exact: True

Start Offset (sec): 0.000 s

Secondary Source: None

Measured 1 15/07/2023 14:43:22

Acquisition Type: Auto

Trigger: Free Run

Delay Time: 250.0 ms

Input Bandwidth: Use Signal Path

FFT Length: 262144

Averaging: Power

Averages: 1

Window: AP-Equiripple

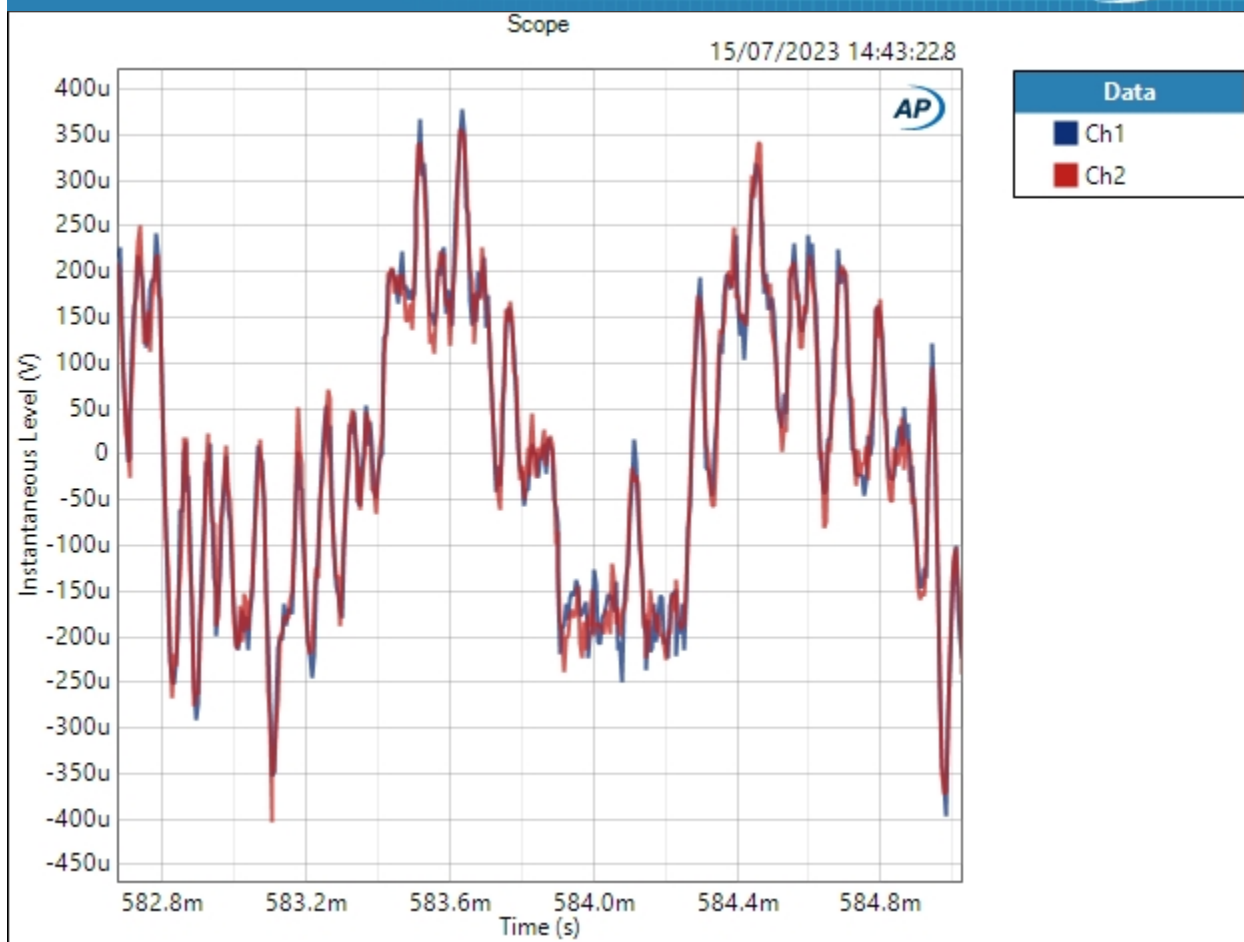
Record Acquisition: False

Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:43:22.810)



## Sequence Report



Scope Parameters

Interpolated: On

Result: PASSED



## Sequence Report



SIG 1 - Scope Views (44.1kHz) : -90.31dBFS 1kHz 24 bit undithered sine (96kHz Bandwidth)

Waveform: 1kHz -90.31dB undithered 24b sine.wav

Bit Exact: True

Start Offset (sec): 0.000 s

Secondary Source: None

Measured 1 15/07/2023 14:43:29

Acquisition Type: Auto

Trigger: Free Run

Delay Time: 250.0 ms

Input Bandwidth: Use Signal Path

FFT Length: 262144

Averaging: Power

Averages: 1

Window: AP-Equiripple

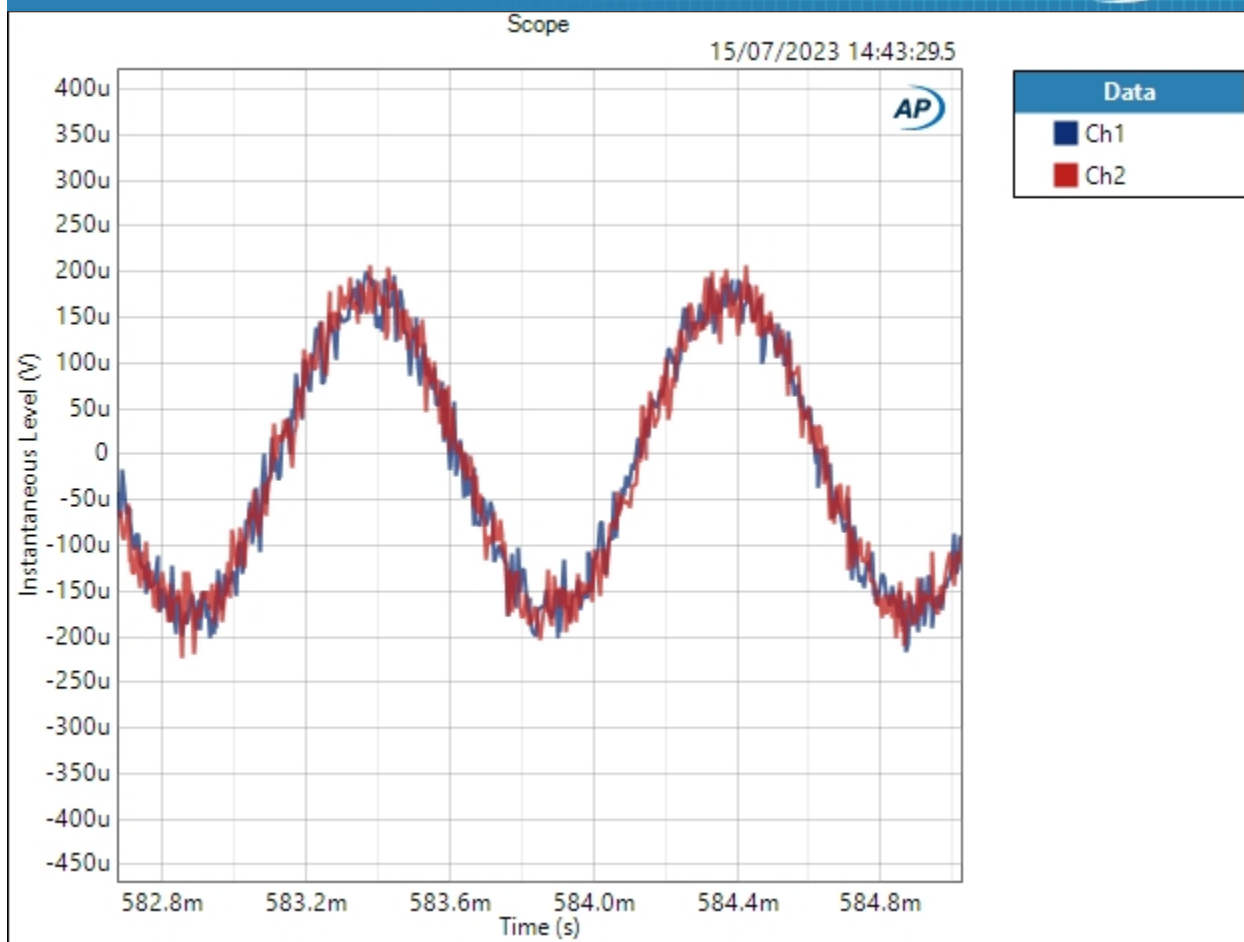
Record Acquisition: False

Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:43:29.522)



## Sequence Report



Scope Parameters

Interpolated: On

Result: ✔ PASSED



## Sequence Report



SIG 1 - Scope Views (44.1kHz) : -90.31dBFS 1kHz 24 bit dithered sine (96kHz Bandwidth)

Waveform: 1kHz -90.31dB dithered 24b sine.wav

Bit Exact: True

Start Offset (sec): 0.000 s

Secondary Source: None

Measured 1 15/07/2023 14:43:36

Acquisition Type: Auto

Trigger: Free Run

Delay Time: 250.0 ms

Input Bandwidth: Use Signal Path

FFT Length: 262144

Averaging: Power

Averages: 1

Window: AP-Equiripple

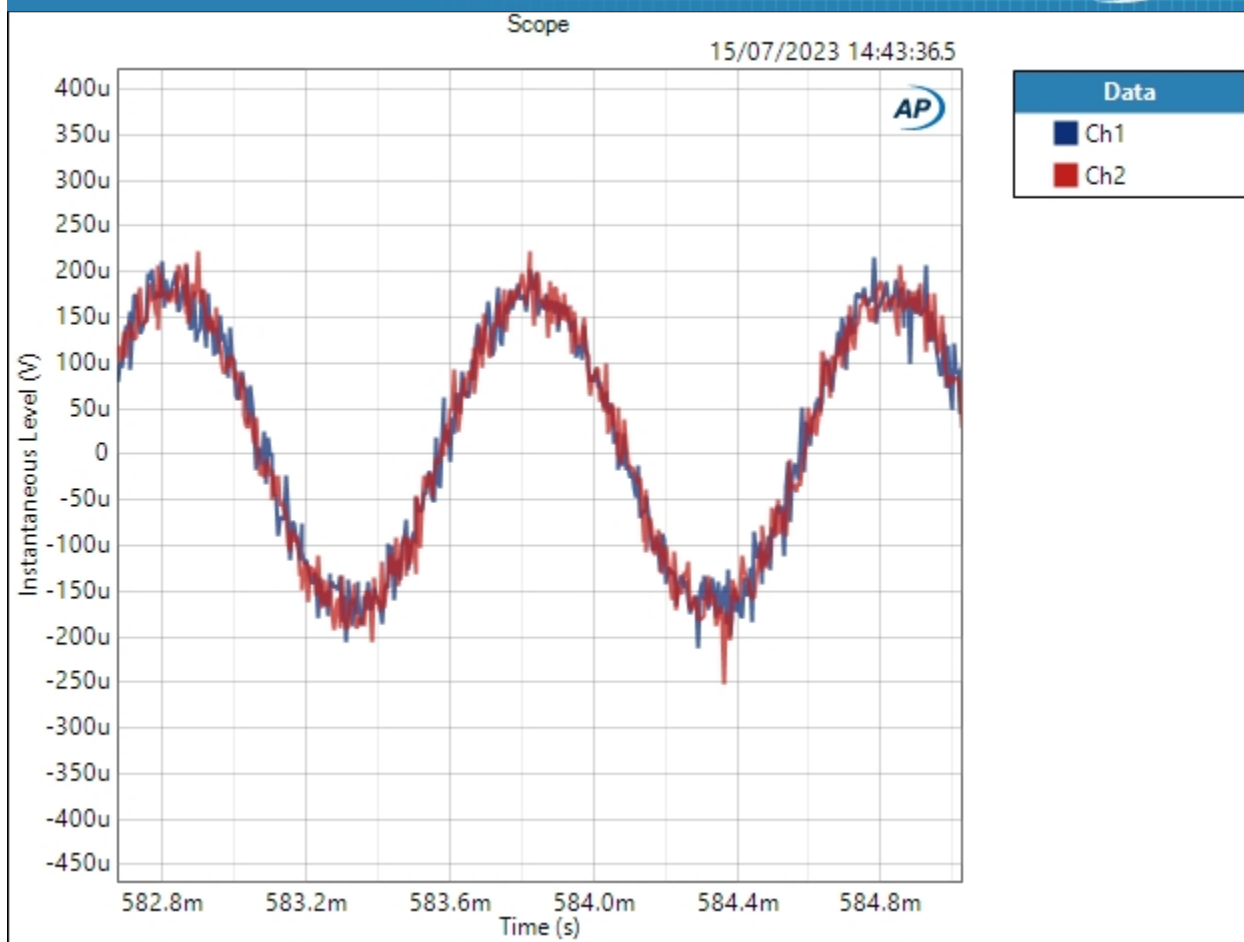
Record Acquisition: False

Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:43:36.563)



## Sequence Report



Scope Parameters

Interpolated: On

Result: PASSED





## Sequence Report



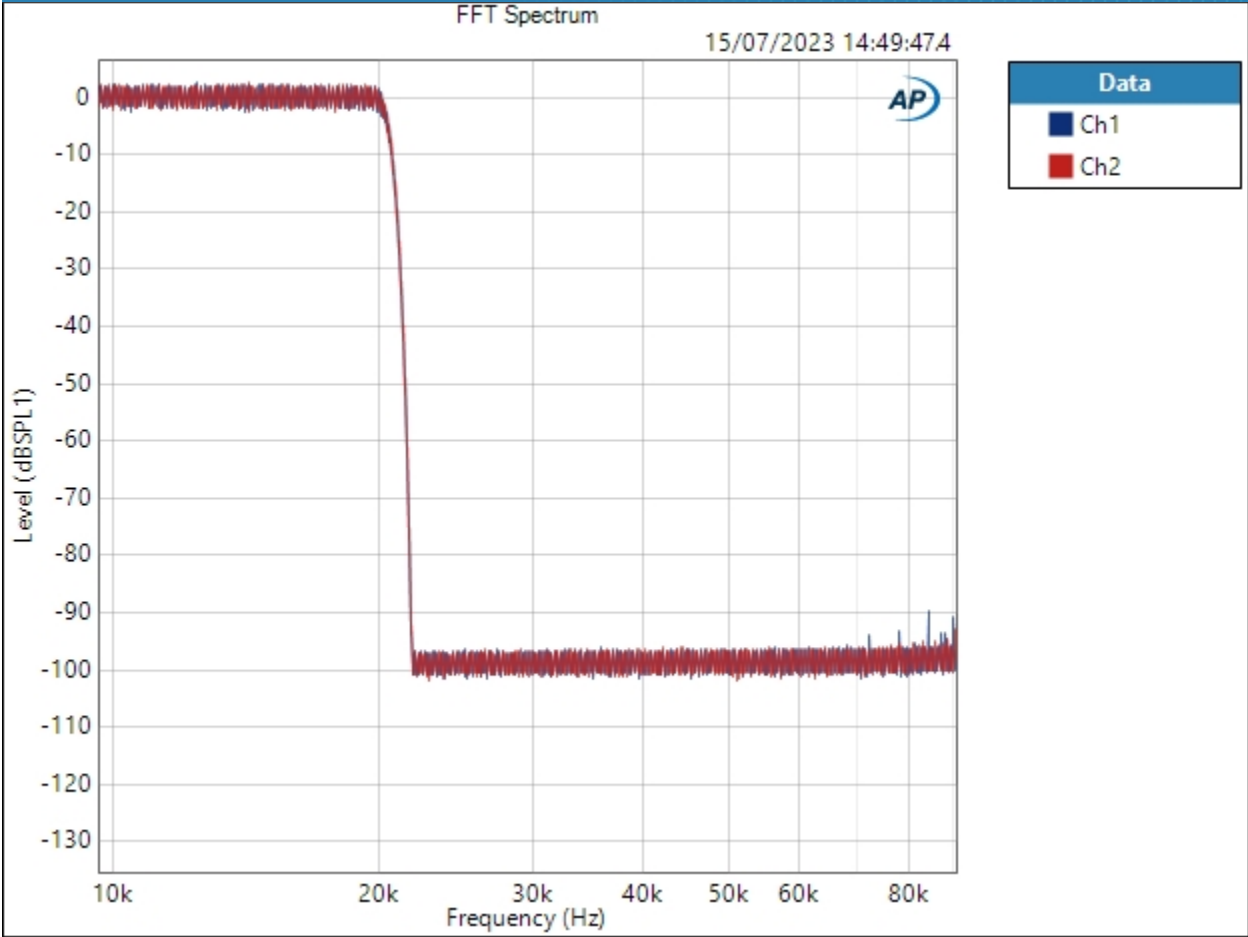
### SIG 1 - Scope Views (44.1khz) : Filter Ultrasonic Attenuation

Waveform: Noise  
Generator Level: -3.000 dBFS  
DC Offset: 0.000 D  
Noise Shape: White  
Secondary Source: None  
Measured 1: 15/07/2023 14:49:47  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 500.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 1248000  
Averaging: Power  
Averages: 50  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 14:49:47.410)



# Sequence Report



Result: PASSED



## Sequence Report



SIG 1 - Scope Views (44.1kHz) : 20hz-90kHz Noise RMS Level

Waveform: None  
High-pass Filter: Elliptic  
High-pass Frequency: 20 Hz  
Low-pass Filter: Signal Path  
Weighting Filter: Signal Path  
Acquisition Time: 250.0 ms  
Delay Time: 300.0 ms

Noise Level (15/07/2023 14:49:49.105)

Ch1 19.70 uVrms

Ch2 19.65 uVrms



## Sequence Report



### SIG 1.5 - Scope Views (44.1kHz) : Signal Path Setup

Output Connector:	ASIO
Asio Device:	Ferrum USB Audio
Scaling Mode:	Digital
Output Sample Rate:	44.1000 kHz
Output Latency:	Auto
Buffer Size:	2048
Clock Source:	Computer
Input 1:	Analog Balanced
Measure:	Auto
Channels:	Auto (2 Channels)
Ch1	Data from Ch1, Sensitivity = 0.00 dB, Gain = 0.00 dB
Ch2	Data from Ch2, Sensitivity = 0.00 dB, Gain = 0.00 dB
Input Bandwidth:	AC (<10 Hz) - 1M (2.496 MHz SR)
Input EQ:	None
Termination:	200 kohm
High Performance Sine Analyzer:	Disabled
Input 2:	None
Device Delay:	0.000 s
• References	
dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
Analog Input	
dBrA:	4.063 Vrms
dBrB:	4.063 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	3.000 dB
dB SPL1:	4.063 Vrms
dB SPL2:	4.063 Vrms
dB SPL1 Calibrator Level:	60.000 dB SPL
dB SPL2 Calibrator Level:	50.000 dB SPL



## Sequence Report



dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm
• DCX	
DCX is not detected.	
• Clocks	
Output Rate:	Track Output SR
Sync Out Level:	3.300 V
Sync Out Polarity:	Normal
Timebase Reference:	Internal
Jitter:	Disabled
• Triggers	
Source:	Off
Input Logic Level:	3.300 V
Edge:	Rising



## Sequence Report



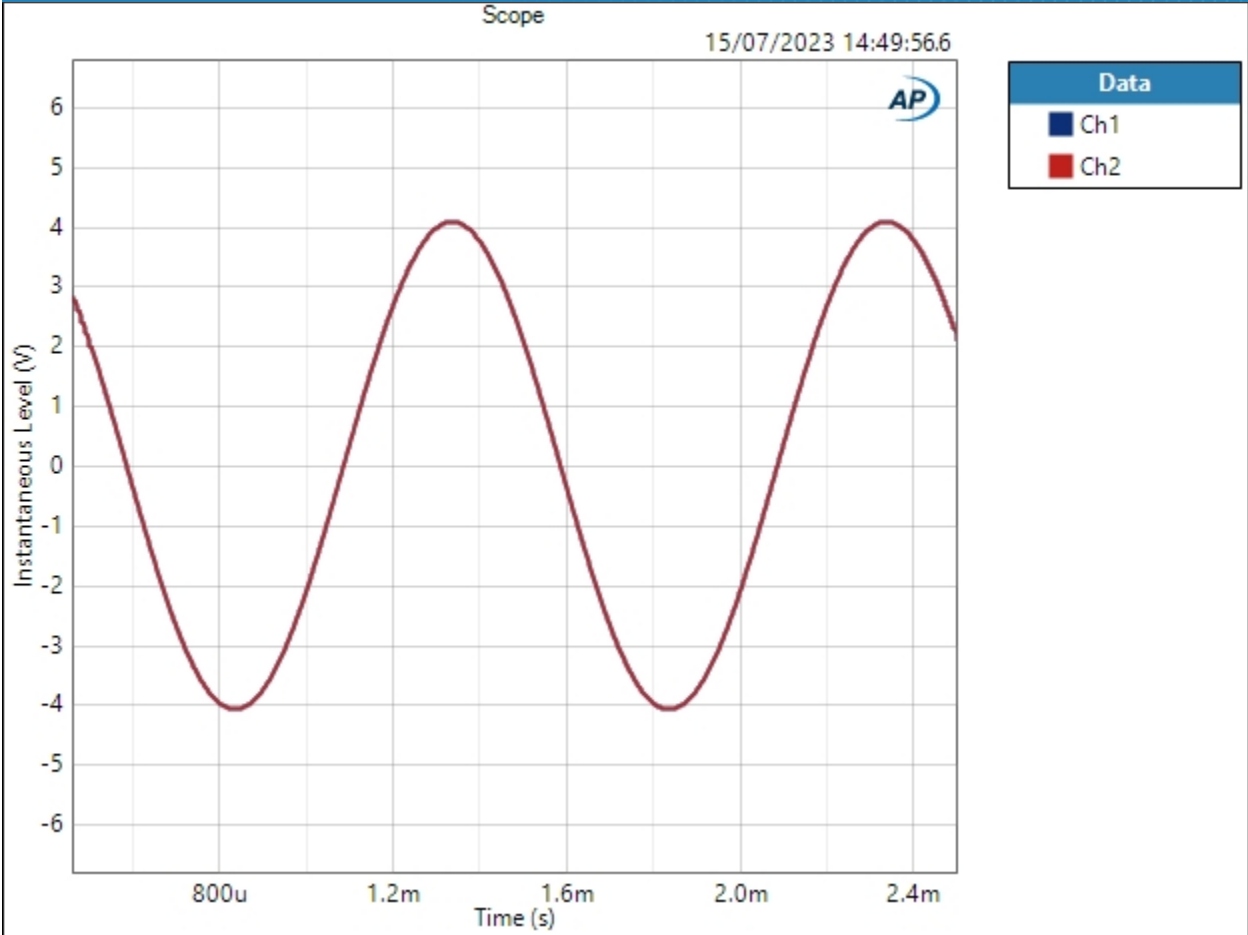
SIG 1.5 - Scope Views (44.1kHz) : 1kHz Tone View

Waveform: Sine  
Generator Level: -3.000 dBFS  
DC Offset: 0.000 D  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1: 15/07/2023 14:49:56  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 250.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 1  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:49:56.600)



# Sequence Report



### Scope Parameters

Interpolated: On

Result: PASSED



## Sequence Report



### SIG 1.5 - Scope Views (44.1kHz) : 15kHz Tone View

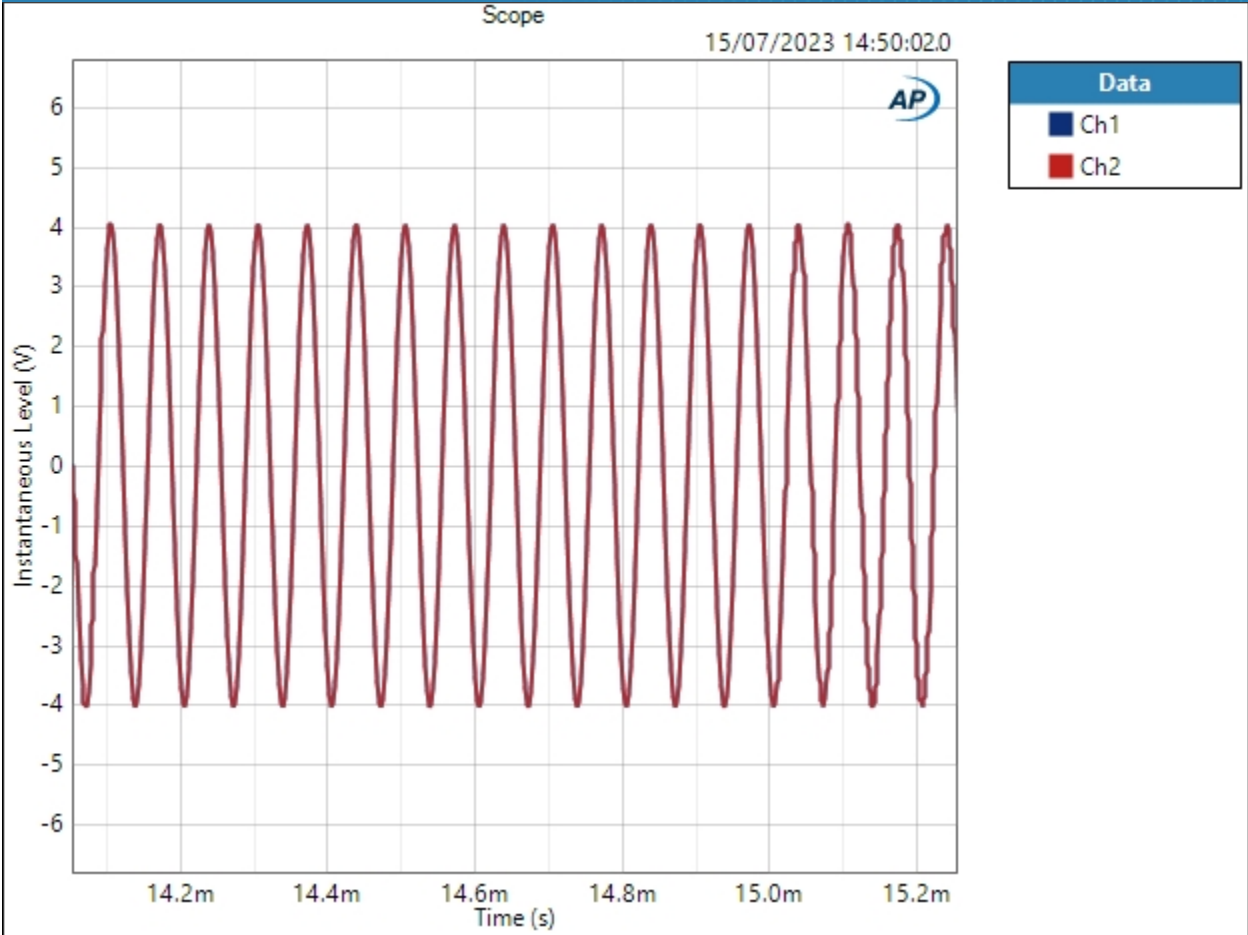
Waveform: Sine  
Generator Level: -3.000 dBFS  
DC Offset: 0.000 D  
Frequency: 15.0000 kHz  
Secondary Source: None  
Measured 1: 15/07/2023 14:50:02  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 250.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 1  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:50:02.094)





# Sequence Report AP



### Scope Parameters

Interpolated: On

Result: ✔ PASSED



## Sequence Report



SIG 1.5 - Scope Views (44.1kHz) : -90.31dBFS 1kHz undithered 16b sine (1Mhz bandwidth)

Waveform: 1kHz -90.31dB undithered 16b sine.wav

Bit Exact: True

Start Offset (sec): 0.000 s

Secondary Source: None

Measured 1 15/07/2023 14:50:07

Acquisition Type: Auto

Trigger: Free Run

Delay Time: 250.0 ms

Input Bandwidth: Use Signal Path

FFT Length: 262144

Averaging: Power

Averages: 1

Window: AP-Equiripple

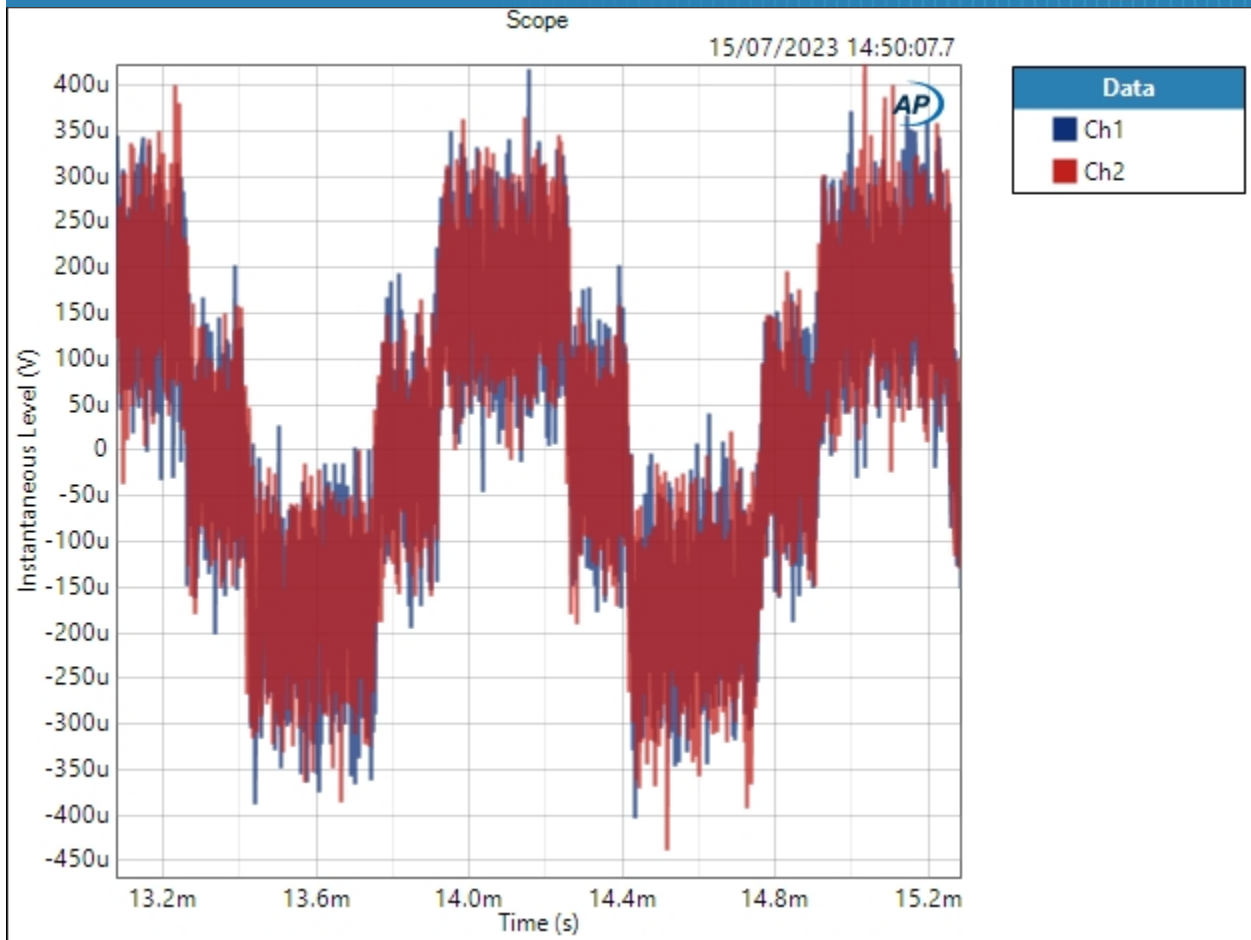
Record Acquisition: False

Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:50:07.791)



## Sequence Report



Scope Parameters

Interpolated: On

Result: PASSED



## Sequence Report



SIG 1.5 - Scope Views (44.1kHz) : -90.31dBFS 1kHz dithered 16b sine (1Mhz bandwidth)

Waveform: 1kHz -90.31dB dithered 16b sine.wav

Bit Exact: True

Start Offset (sec): 0.000 s

Secondary Source: None

Measured 1 15/07/2023 14:50:13

Acquisition Type: Auto

Trigger: Free Run

Delay Time: 250.0 ms

Input Bandwidth: Use Signal Path

FFT Length: 262144

Averaging: Power

Averages: 1

Window: AP-Equiripple

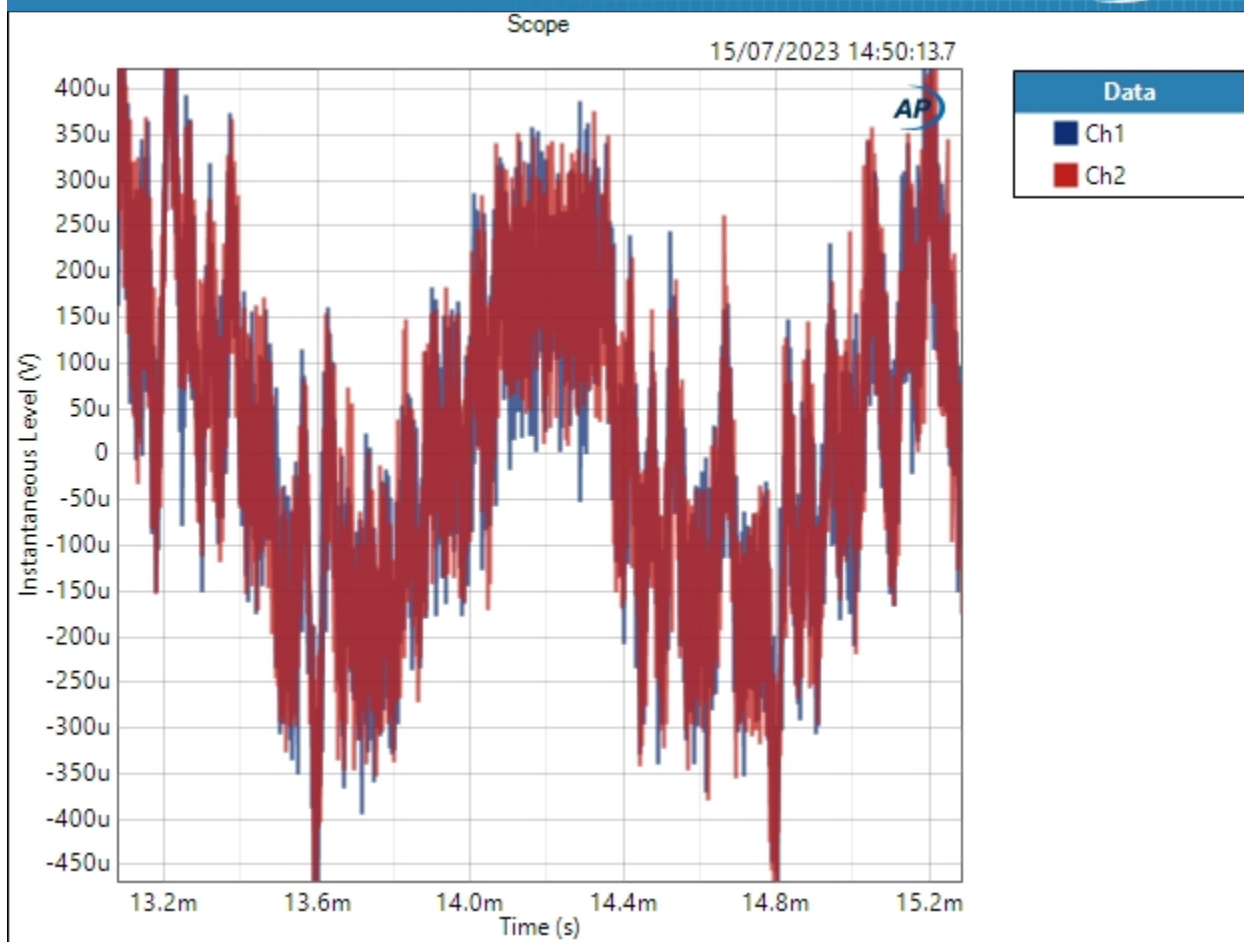
Record Acquisition: False

Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:50:13.799)



## Sequence Report



Scope Parameters

Interpolated: On

Result: PASSED



## Sequence Report



SIG 1.5 - Scope Views (44.1kHz) : -90.31dBFS 1kHz undithered 24b sine (1Mhz bandwidth)

Waveform: 1kHz -90.31dB undithered 24b sine.wav

Bit Exact: True

Start Offset (sec): 0.000 s

Secondary Source: None

Measured 1 15/07/2023 14:50:20

Acquisition Type: Auto

Trigger: Free Run

Delay Time: 250.0 ms

Input Bandwidth: Use Signal Path

FFT Length: 262144

Averaging: Power

Averages: 1

Window: AP-Equiripple

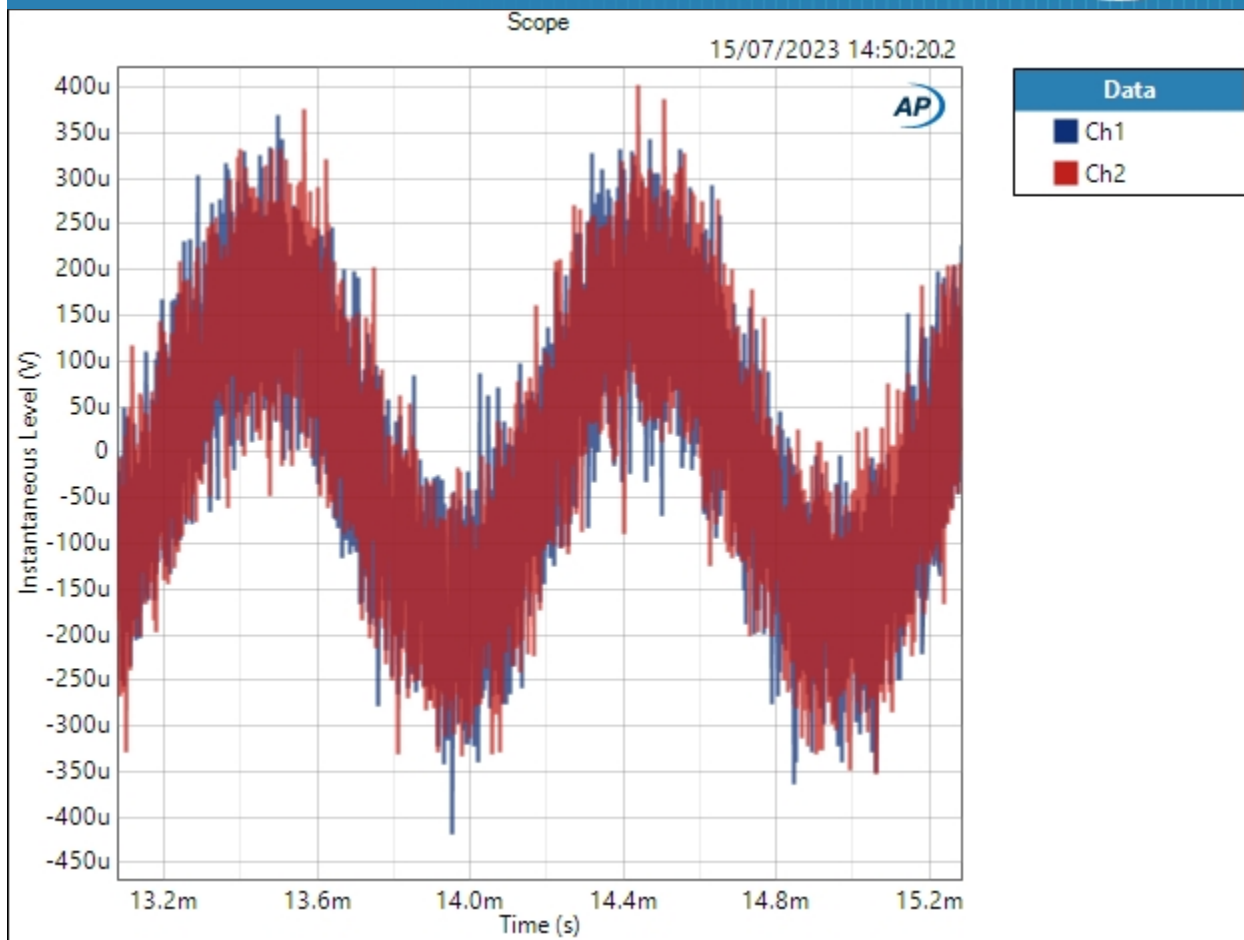
Record Acquisition: False

Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:50:20.211)



## Sequence Report



Scope Parameters

Interpolated: On

Result: PASSED



## Sequence Report



SIG 1.5 - Scope Views (44.1kHz) : -90.31dBFS 1kHz dithered 24b sine (1Mhz bandwidth)

Waveform: 1kHz -90.31dB dithered 24b sine.wav

Bit Exact: True

Start Offset (sec): 0.000 s

Secondary Source: None

Measured 1 15/07/2023 14:50:26

Acquisition Type: Auto

Trigger: Free Run

Delay Time: 250.0 ms

Input Bandwidth: Use Signal Path

FFT Length: 262144

Averaging: Power

Averages: 1

Window: AP-Equiripple

Record Acquisition: False

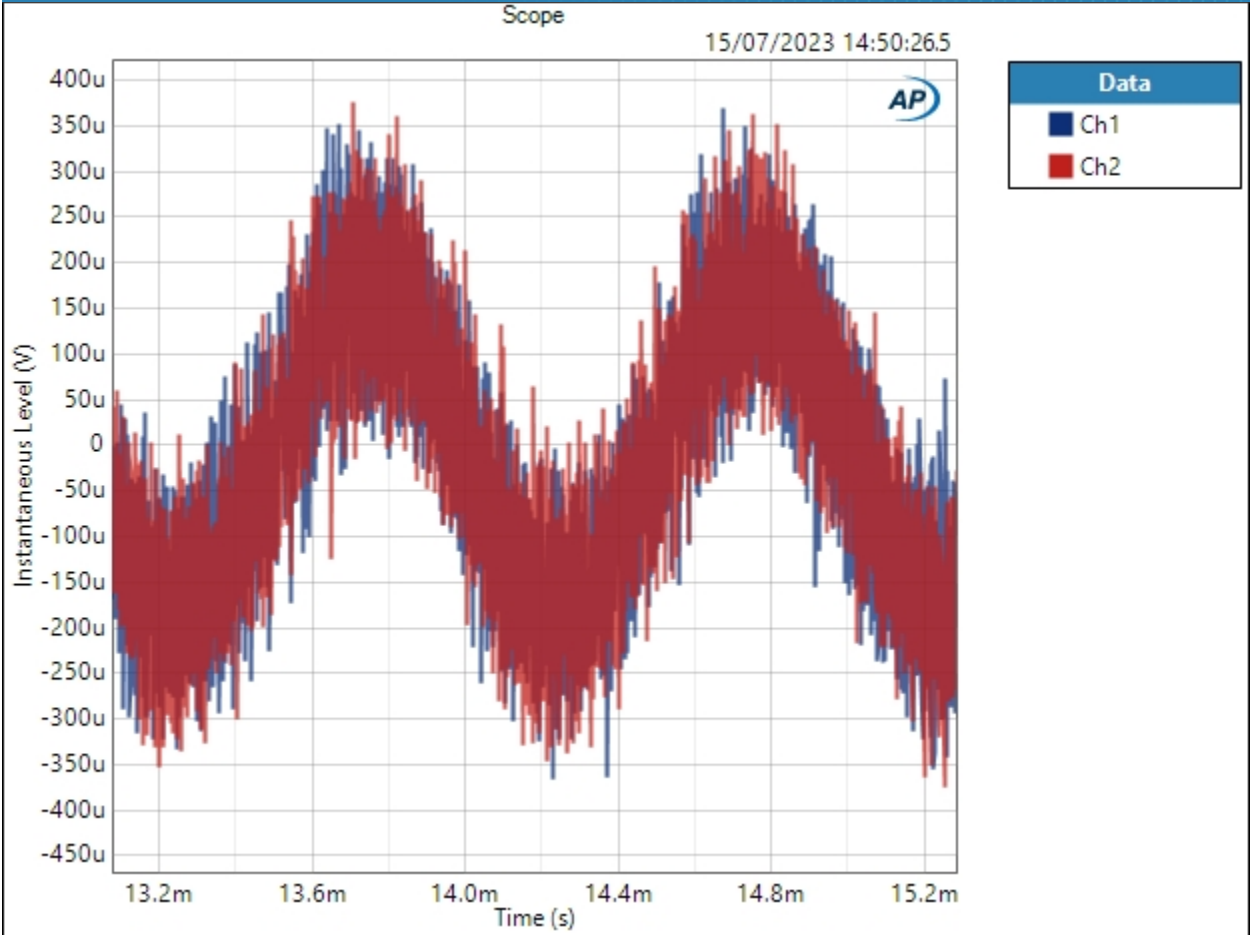
Recording Type: Multiple Mono PCM (.wav)

Scope (15/07/2023 14:50:26.513)





# Sequence Report AP



Scope Parameters

Interpolated: On

Result: ✔ PASSED



## Sequence Report



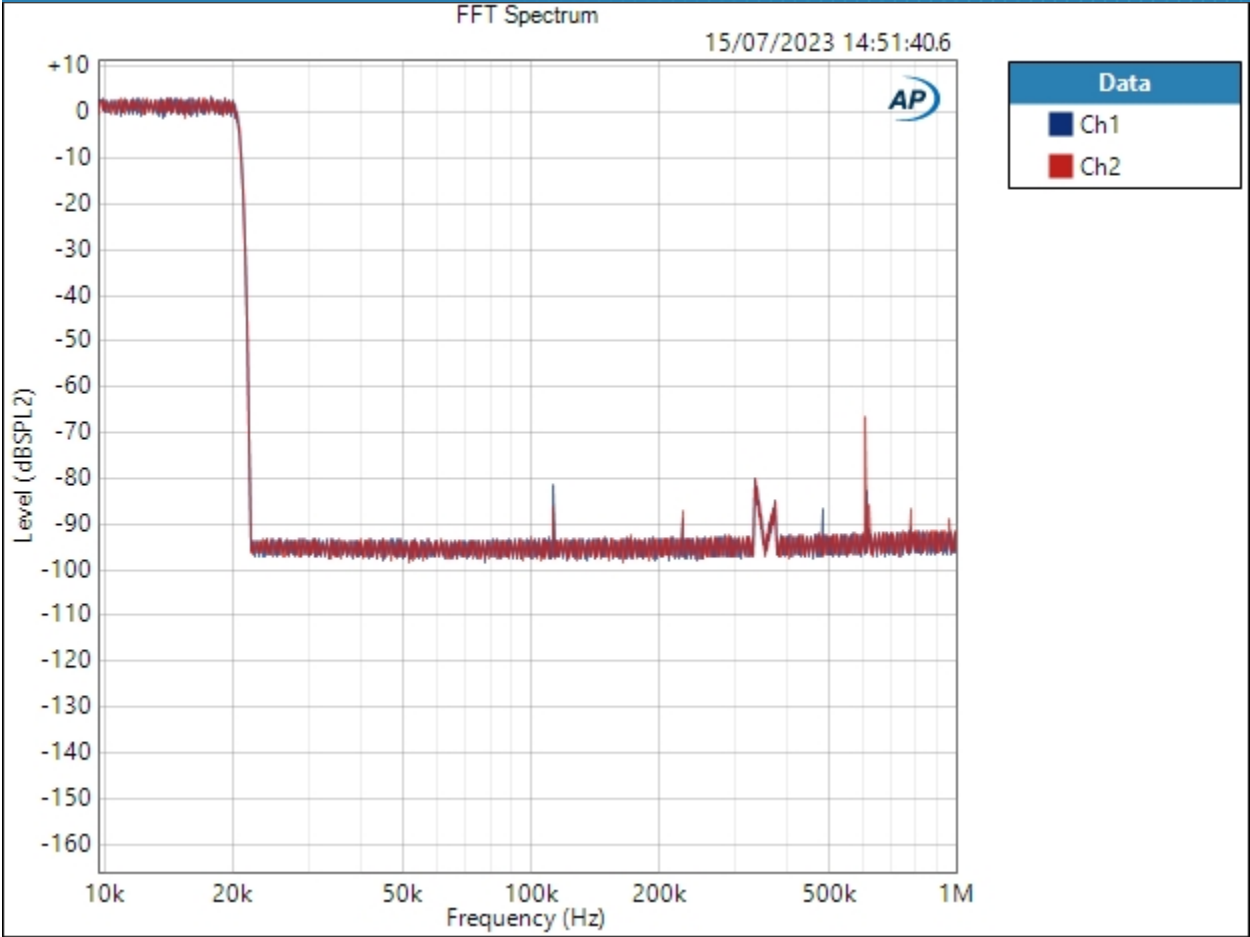
SIG 1.5 - Scope Views (44.1kHz) : Filter Ultrasonic Attenuation

Waveform: Noise  
Generator Level: -3.000 dBFS  
DC Offset: 0.000 D  
Noise Shape: White  
Secondary Source: None  
Measured 1: 15/07/2023 14:51:40  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 500.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 1248000  
Averaging: Power  
Averages: 50  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 14:51:40.678)



# Sequence Report



Result: PASSED



## Sequence Report



SIG 1.5 - Scope Views (44.1kHz) : 1Mhz RMS Noise Level

Waveform:	None
High-pass Filter:	Elliptic
High-pass Frequency:	20 Hz
Low-pass Filter:	Signal Path
Weighting Filter:	Signal Path
Acquisition Time:	250.0 ms
Delay Time:	300.0 ms

Noise Level (15/07/2023 14:51:42.641)

Ch1 65.85 uVrms

Ch2 65.60 uVrms



## Sequence Report



### SIG 2 - Main Measurements (44.1kHz) : Signal Path Setup

Output Connector:	ASIO
Asio Device:	Ferrum USB Audio
Scaling Mode:	Digital
Output Sample Rate:	44.1000 kHz
Output Latency:	Auto
Buffer Size:	2048
Clock Source:	Computer
Input 1:	Analog Balanced
Measure:	Auto
Channels:	Auto (2 Channels)
Ch1	Data from Ch1, Sensitivity = 0.00 dB, Gain = 0.00 dB
Ch2	Data from Ch2, Sensitivity = 0.00 dB, Gain = 0.00 dB
Input Bandwidth:	AC (<10 Hz) - AES17 (20 kHz)
Input EQ:	None
Termination:	200 kohm
High Performance Sine Analyzer:	Enabled
Input 2:	None
Device Delay:	0.000 s
• References	
dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
Analog Input	
dBrA:	4.063 Vrms
dBrB:	4.063 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	3.000 dB
dB SPL1:	4.063 Vrms
dB SPL2:	4.063 Vrms
dB SPL1 Calibrator Level:	60.000 dB SPL
dB SPL2 Calibrator Level:	50.000 dB SPL



## Sequence Report



dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm
• DCX	
DCX is not detected.	
• Clocks	
Output Rate:	Track Output SR
Sync Out Level:	3.300 V
Sync Out Polarity:	Normal
Timebase Reference:	Internal
Jitter:	Disabled
• Triggers	
Source:	Off
Input Logic Level:	3.300 V
Edge:	Rising

### SIG 2 - Main Measurements (44.1kHz) : Output Level (Vrms)

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

### RMS Level (15/07/2023 14:51:47.902)

Ch1	4.061 Vrms
Ch2	4.061 Vrms



## Sequence Report



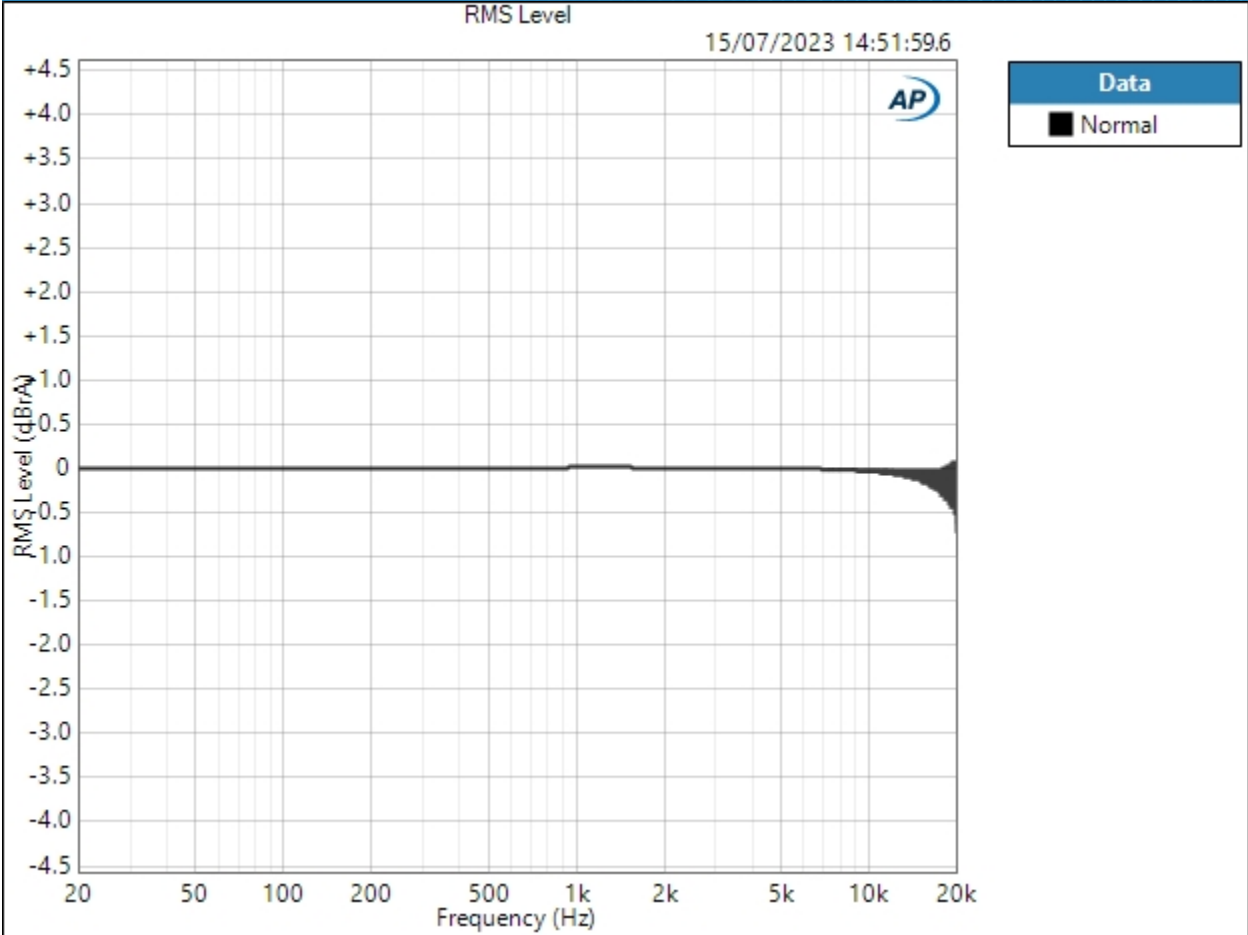
### SIG 2 - Main Measurements (44.1kHz) : Frequency Response (Audible Band)

Start Frequency:	20.0000 Hz
Stop Frequency:	22.0500 kHz
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
EQ:	None
Pre-Sweep:	50.00 ms
Sweep:	5.000 s
Extend Acquisition By:	50.00 ms
Secondary Source:	None
Measured 1	15/07/2023 14:51:59

RMS Level (15/07/2023 14:51:59.616)



# Sequence Report AP



Result: ✔ PASSED

Deviation (20.0000 Hz - 4.00000 kHz) (15/07/2023 14:51:59.616)

Ch1 ±0.004 dB

Ch2 ±0.004 dB

Deviation (20.0000 Hz - 4.00000 kHz) Parameters

Min: 20.0000 Hz

Max: 4.00000 kHz





## Sequence Report



### SIG 2 - Main Measurements (44.1kHz) : 20hz-20khz Noise RMS Level

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

### Noise Level (15/07/2023 14:52:03.790)

Ch1 9.108 uVrms  
Ch2 9.231 uVrms



## Sequence Report



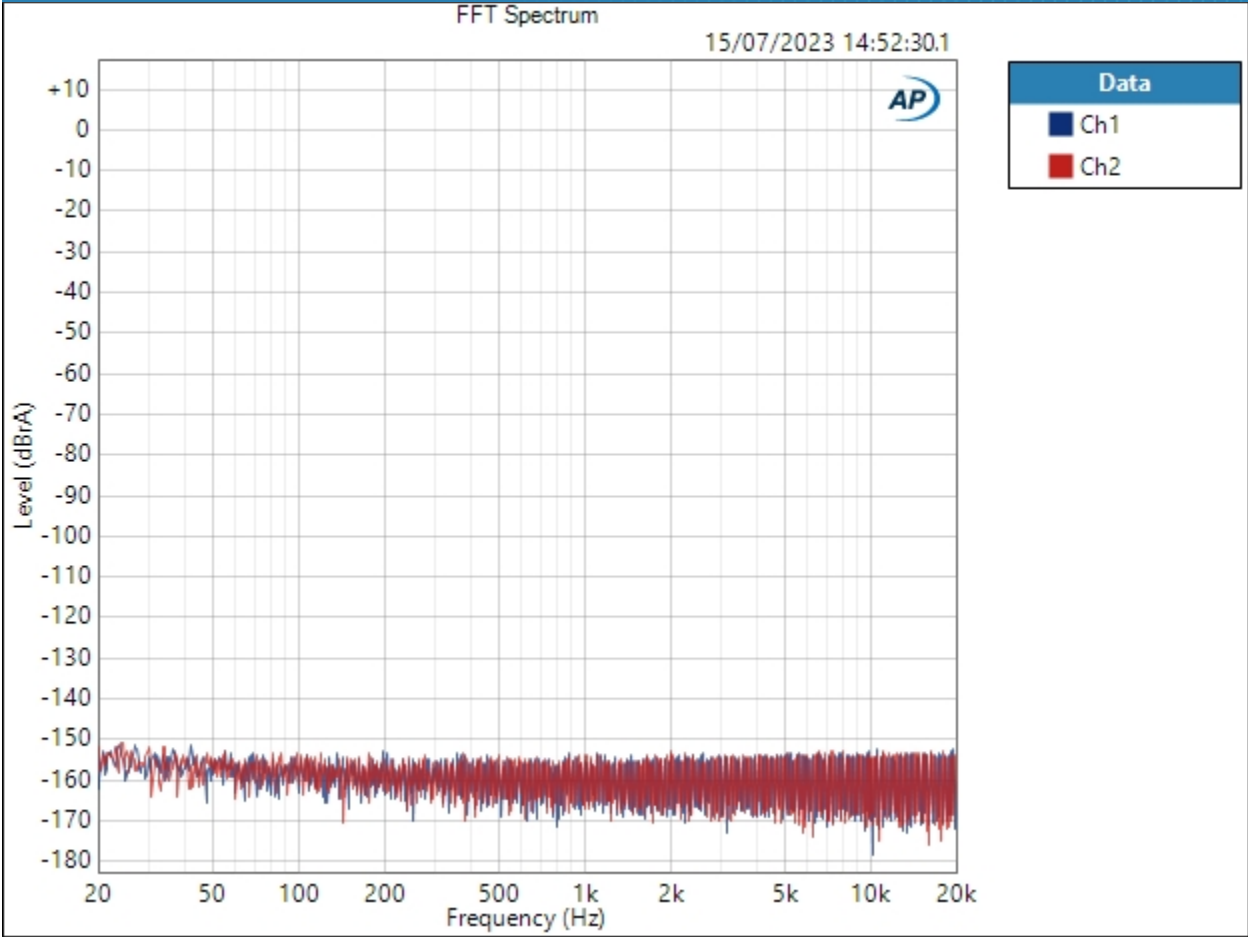
### SIG 2 - Main Measurements (44.1kHz) : Idle Noise FFT

Waveform: Sine  
Generator Level:  $-\infty$  dBFS  
DC Offset: 0.000 D  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1: 15/07/2023 14:52:30  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 500.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 4  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 14:52:30.191)



# Sequence Report AP



Result: ✔ PASSED



## Sequence Report



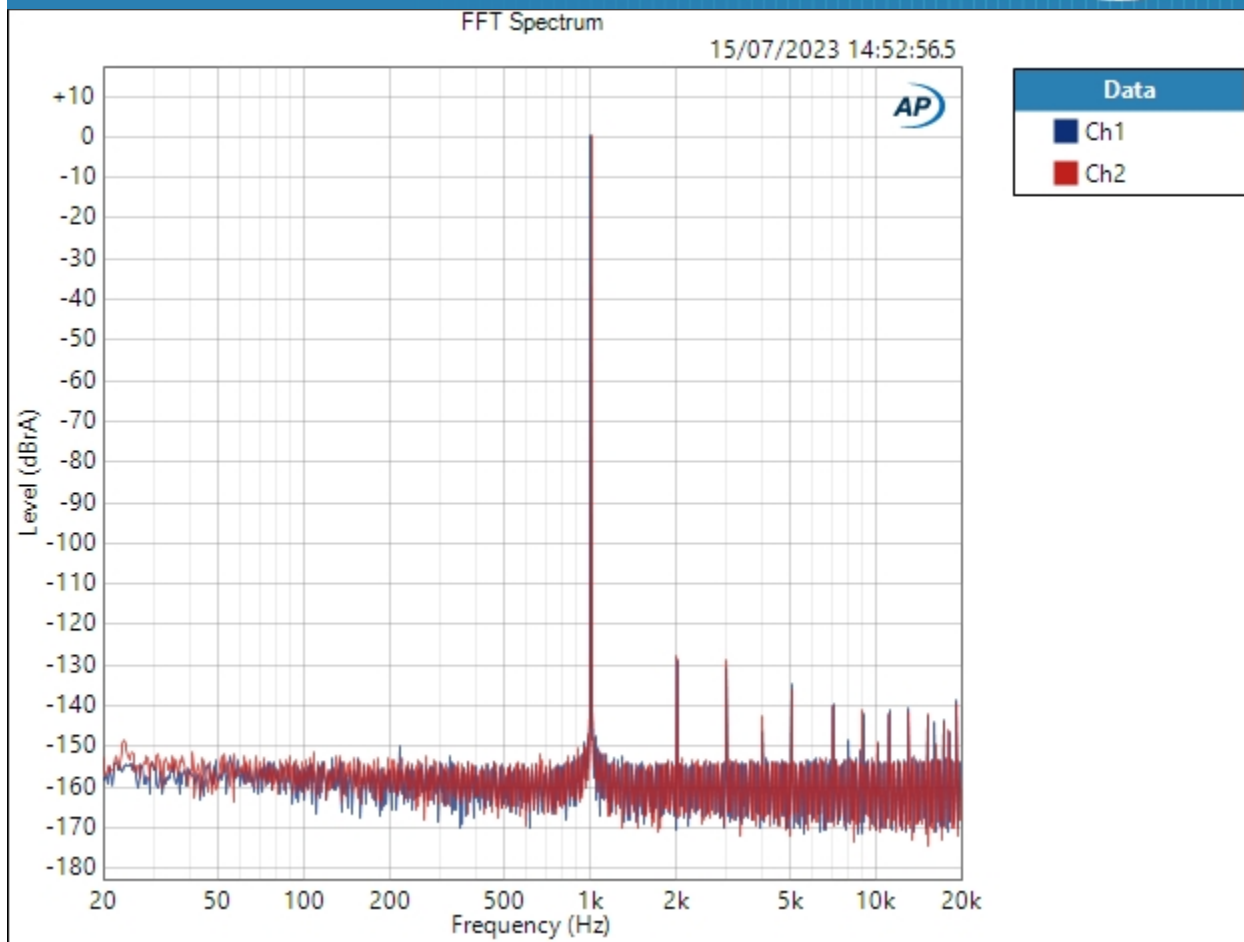
### SIG 2 - Main Measurements (44.1kHz) : 1kHz FFT (0dbfs)

Waveform: Sine  
Generator Level: -0.000 dBFS  
DC Offset: 0.000 D  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1 15/07/2023 14:52:56  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 500.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 4  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 14:52:56.583)



# Sequence Report



Result: PASSED



## Sequence Report



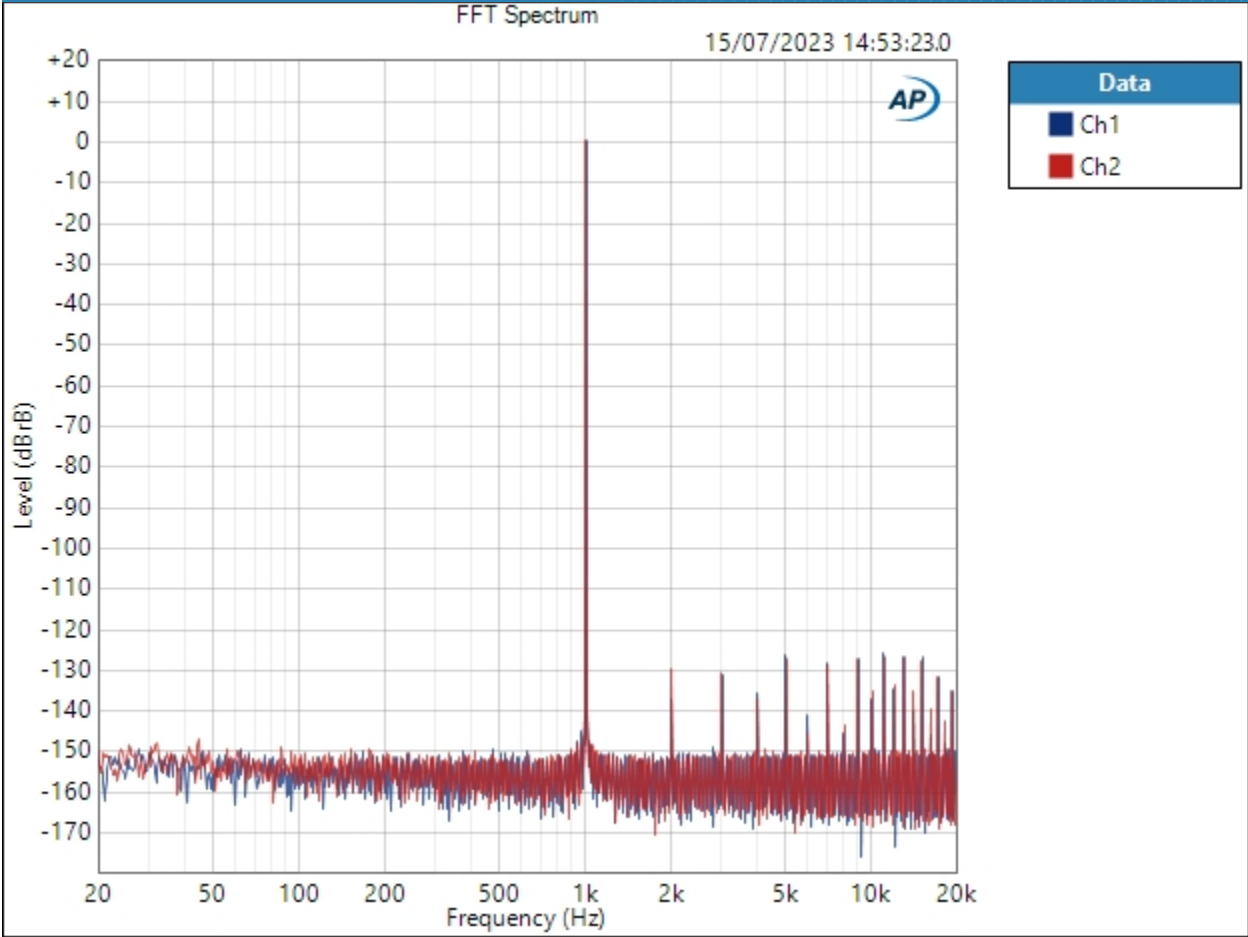
### SIG 2 - Main Measurements (44.1kHz) : 1kHz FFT (-3dbfs)

Waveform: Sine  
Generator Level: -3.000 dBFS  
DC Offset: 0.000 D  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1: 15/07/2023 14:53:23  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 500.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 4  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

### FFT Spectrum (15/07/2023 14:53:23.028)



# Sequence Report AP



Result: ✔ PASSED



## Sequence Report



### SIG 2 - Main Measurements (44.1khz) : 50khz FFT (0dbfs)

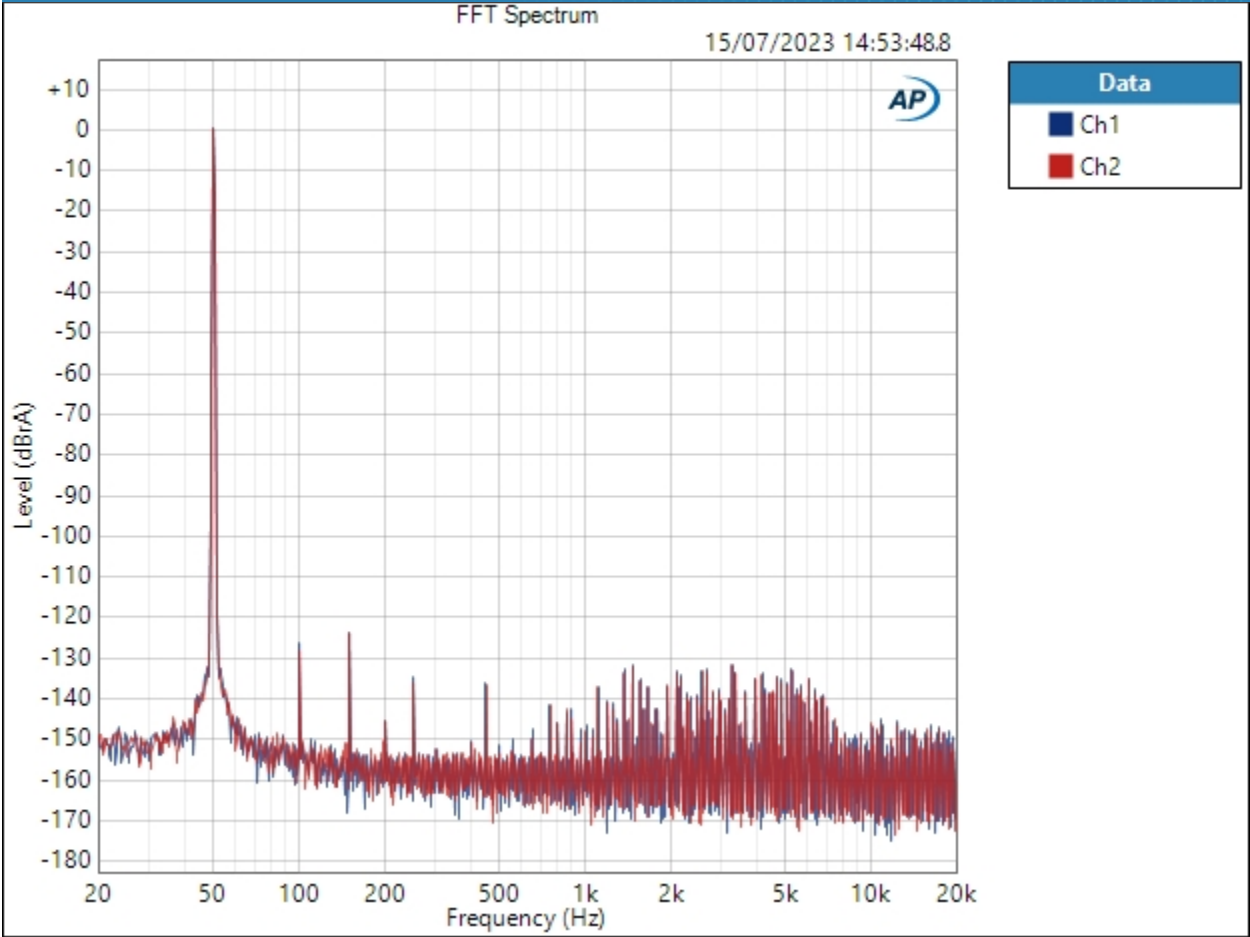
Waveform: Sine  
Generator Level: -0.000 dBFS  
DC Offset: 0.000 D  
Frequency: 50.0000 Hz  
Secondary Source: None  
Measured 1 15/07/2023 14:53:48  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 500.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 4  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 14:53:48.845)





# Sequence Report AP



Result: ✔ PASSED



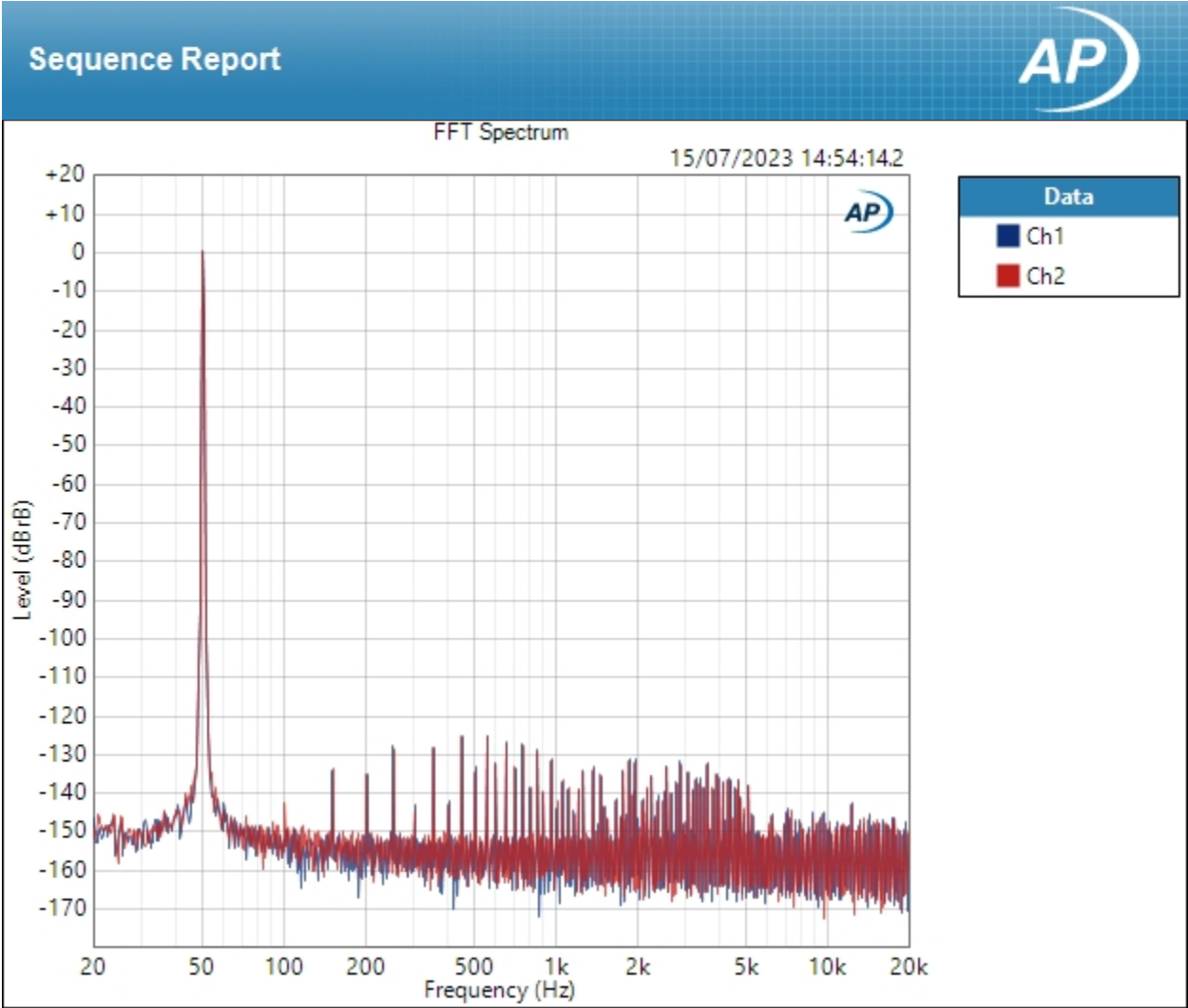
## Sequence Report



### SIG 2 - Main Measurements (44.1kHz) : 50hz FFT (-3dbfs)

Waveform: Sine  
Generator Level: -3.000 dBFS  
DC Offset: 0.000 D  
Frequency: 50.0000 Hz  
Secondary Source: None  
Measured 1: 15/07/2023 14:54:14  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 250.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 4  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

### FFT Spectrum (15/07/2023 14:54:14.220)



Result: PASSED



## Sequence Report



### SIG 2 - Main Measurements (44.1kHz) : Effective Number of Bits 0dbfs

Waveform: Sine (1 kHz)  
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: Signal Path  
Notch Tuning Mode: Measured Frequency

ENOB (15/07/2023 14:54:17.151)

Ch1 18.4  
Ch2 18.4

### SIG 2 - Main Measurements (44.1kHz) : Effective Number of Bits -3dbfs

Waveform: Sine (1 kHz)  
Generator Level: -3.000 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: Signal Path  
Notch Tuning Mode: Measured Frequency

ENOB (15/07/2023 14:54:19.777)

Ch1 17.9  
Ch2 17.8



## Sequence Report



### SIG 2 - Main Measurements (44.1kHz) : THD+N 0dbfs

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: Signal Path  
 Notch Tuning Mode: Measured Frequency

#### THD+N Ratio (15/07/2023 14:54:23.180)

Ch1 0.000239 %  
 Ch2 0.000237 %

#### THD+N Level (15/07/2023 14:54:23.180)

Ch1 -112.434 dBrA  
 Ch2 -112.519 dBrA

#### Noise Level (15/07/2023 14:54:23.180)

Ch1 9.296 uVrms  
 Ch2 9.152 uVrms

#### Distortion Product Ratio (15/07/2023 14:54:23.180)

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	8.000k	9.000k	10.00k
Ch1	-0.00	-129.46	-129.68	-138.65	-134.18	-142.91	-140.15	-141.53	-138.29	-139.97
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-127.44	-128.45	-134.98	-133.95	-140.43	-139.16	-138.79	-138.32	-141.35

#### Distortion Product Ratio Parameters

Frequency Unit: Hz  
 Ratio Unit: dB  
 Channel: Ch1



## Sequence Report



### SIG 2 - Main Measurements (44.1kHz) : THD+N -3dbfs

Waveform: Sine  
Generator Level: -3.000 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: Signal Path  
Notch Tuning Mode: Measured Frequency

#### THD+N Ratio (15/07/2023 14:54:25.749)

Ch1 0.000351 %  
Ch2 0.000350 %

#### THD+N Level (15/07/2023 14:54:25.749)

Ch1 -109.085 dBrB  
Ch2 -109.115 dBrB

#### Noise Level (15/07/2023 14:54:25.749)

Ch1 9.228 uVrms  
Ch2 9.343 uVrms

#### Distortion Product Ratio (15/07/2023 14:54:25.749)

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	8.000k	9.000k	10.00k
Ch1	-0.00	-134.16	-129.19	-135.48	-126.38	-135.85	-126.68	-138.41	-126.08	-129.27
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-129.60	-129.99	-134.81	-126.99	-140.11	-129.27	-137.95	-125.76	-134.40

#### Distortion Product Ratio Parameters

Frequency Unit: Hz  
Ratio Unit: dB  
Channel: Ch1



## Sequence Report



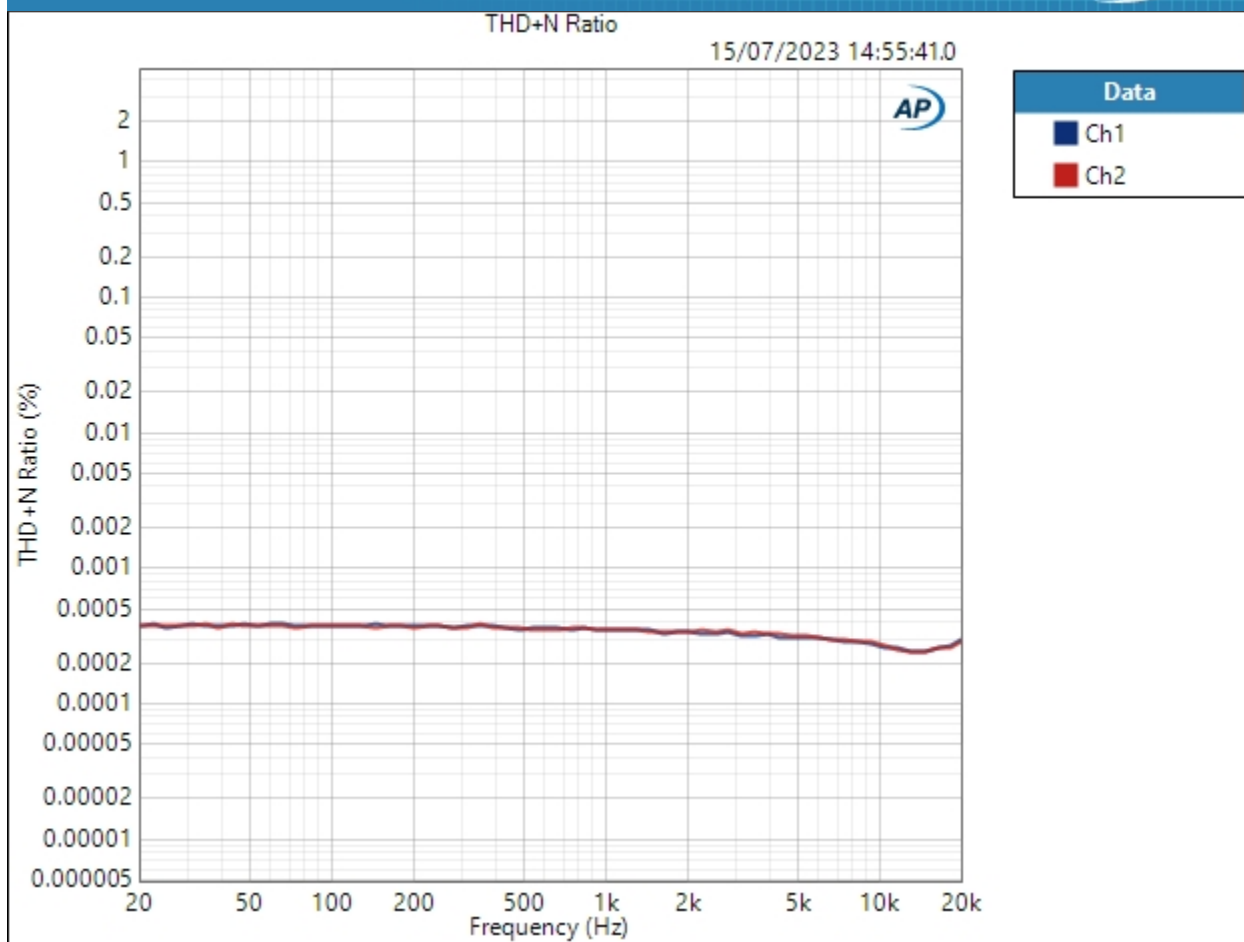
### SIG 2 - Main Measurements (44.1kHz) : THD+N/Frequency

Waveform:	Sine
Generator Level:	-3.000 dBFS
DC Offset:	0.000 D
EQ:	None
Start Frequency:	20.0000 kHz
Stop Frequency:	20.0000 Hz
Step Type:	Logarithmic
Number of Points:	64
High-pass Filter:	Elliptic
High-pass Frequency:	20 Hz
Low-pass Filter:	Signal Path
Weighting Filter:	Signal Path
Phase Ref Channel:	Ch1
Measured 1	15/07/2023 14:55:41

THD+N Ratio (15/07/2023 14:55:41.048)



## Sequence Report



Result: PASSED





## Sequence Report



### SIG 2 - Main Measurements (44.1kHz) : Dynamic Range - AES17

Waveform: Sine  
Generator Level: -0.000 dBFS  
DC Offset: 0.000 D  
Frequency: 0.99700 kHz  
Level Ratio: -60.000 dB  
High-pass Filter: Signal Path  
Low-pass Filter: Elliptic  
Low-pass Frequency: 20 kHz  
Weighting Filter: CCIR-2k

### Dynamic Range - AES17 (15/07/2023 14:55:48.978)

Ch1 111.341 dB  
Ch2 111.303 dB

### SIG 2 - Main Measurements (44.1kHz) : 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: Signal Path

### Signal to Noise Ratio (15/07/2023 14:55:53.226)

Ch1 112.921 dB  
Ch2 112.866 dB



## Sequence Report



### SIG 2 - Main Measurements (44.1kHz) : IMD ( SMPTE )

IMD Type: SMPTE  
Waveform: IMD  
Generator Level: -0.000 dBFS  
DC Offset: 0.000 D  
Frequency 1: 60.0000 Hz  
Frequency 2: 7.00000 kHz  
Frequency Ratio: 4:1  
IMD Split: False

### SMPTE Ratio (15/07/2023 14:55:59.619)

Ch1 -102.320 dB

Ch2 -103.511 dB

### SMPTE Distortion Product Ratio (15/07/2023 14:55:59.619)

Channel	f1	d5	d4	d3	d2	f2	d2	d3	d4	d5
	60.00	6.760k	6.820k	6.880k	6.940k	7.000k	7.060k	7.120k	7.180k	7.240k
Ch1	12.05	-122.35	-128.96	-110.16	-121.72	0.00	-117.80	-109.64	-124.44	-120.13
	60.00	6.760k	6.820k	6.880k	6.940k	7.000k	7.060k	7.120k	7.180k	7.240k
Ch2	12.05	-122.10	-125.29	-111.95	-113.61	0.00	-113.13	-111.87	-124.04	-124.20

### SMPTE Distortion Product Ratio Parameters

Frequency Unit: Hz  
Ratio Unit: dB  
Channel: Ch1



## Sequence Report



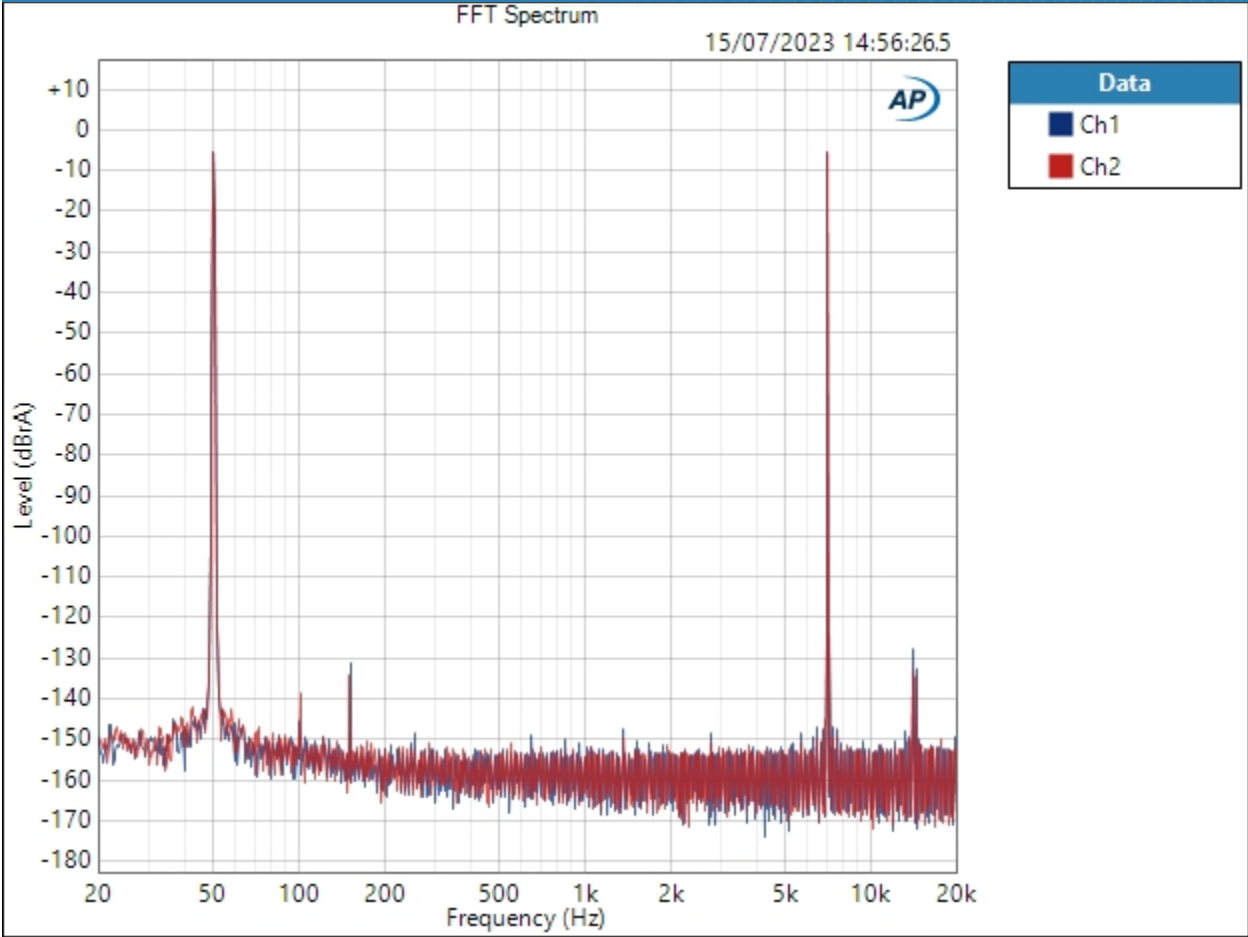
SIG 2 - Main Measurements (44.1kHz) : 50hz/7khz IMD SMPTE FFT

Waveform: Sine, Dual  
Generator Level: -0.000 dBFS  
DC Offset: 0.000 D  
Frequency: 50.0000 Hz  
Frequency B: 7.00000 kHz  
IMD Split: No  
FB:FA Ratio: 1.000 x/y  
Secondary Source: None  
Measured 1 15/07/2023 14:56:26  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 500.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 4  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 14:56:26.572)



# Sequence Report



Result: PASSED



## Sequence Report



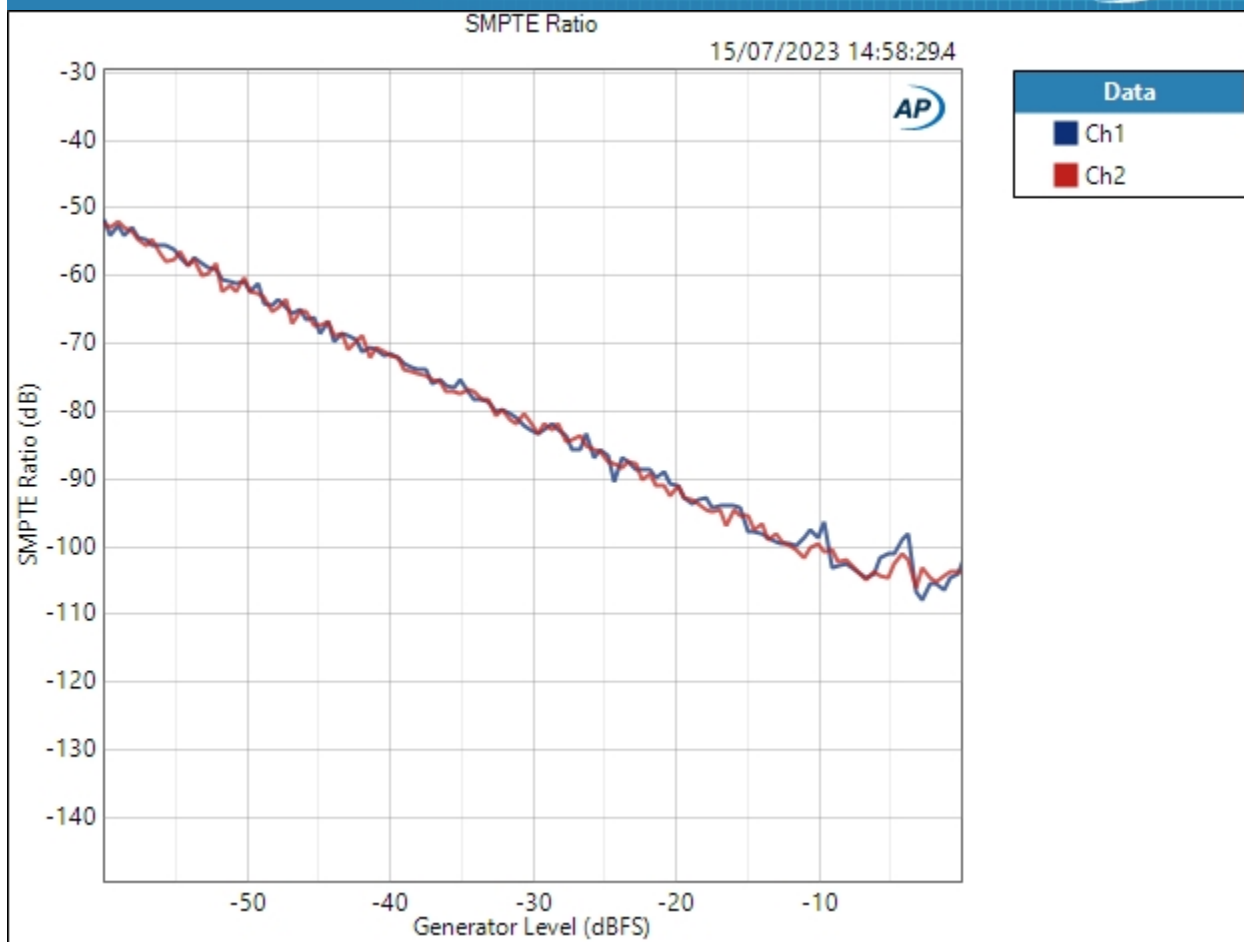
SIG 2 - Main Measurements (44.1kHz) : IMD Level Sweep ( SMPTE )

IMD Type: SMPTE  
Frequency 1: 60.0000 Hz  
Frequency 2: 7.00000 kHz  
Frequency Ratio: 4:1  
IMD Split: False  
Start Level: -60.000 dBFS  
Stop Level: -0.000 dBFS  
Step Type: Linear  
Number of Points: 124  
Step Size: +0.488 dBFS  
Measured 1 15/07/2023 14:58:29

SMPTE Ratio (15/07/2023 14:58:29.407)



## Sequence Report

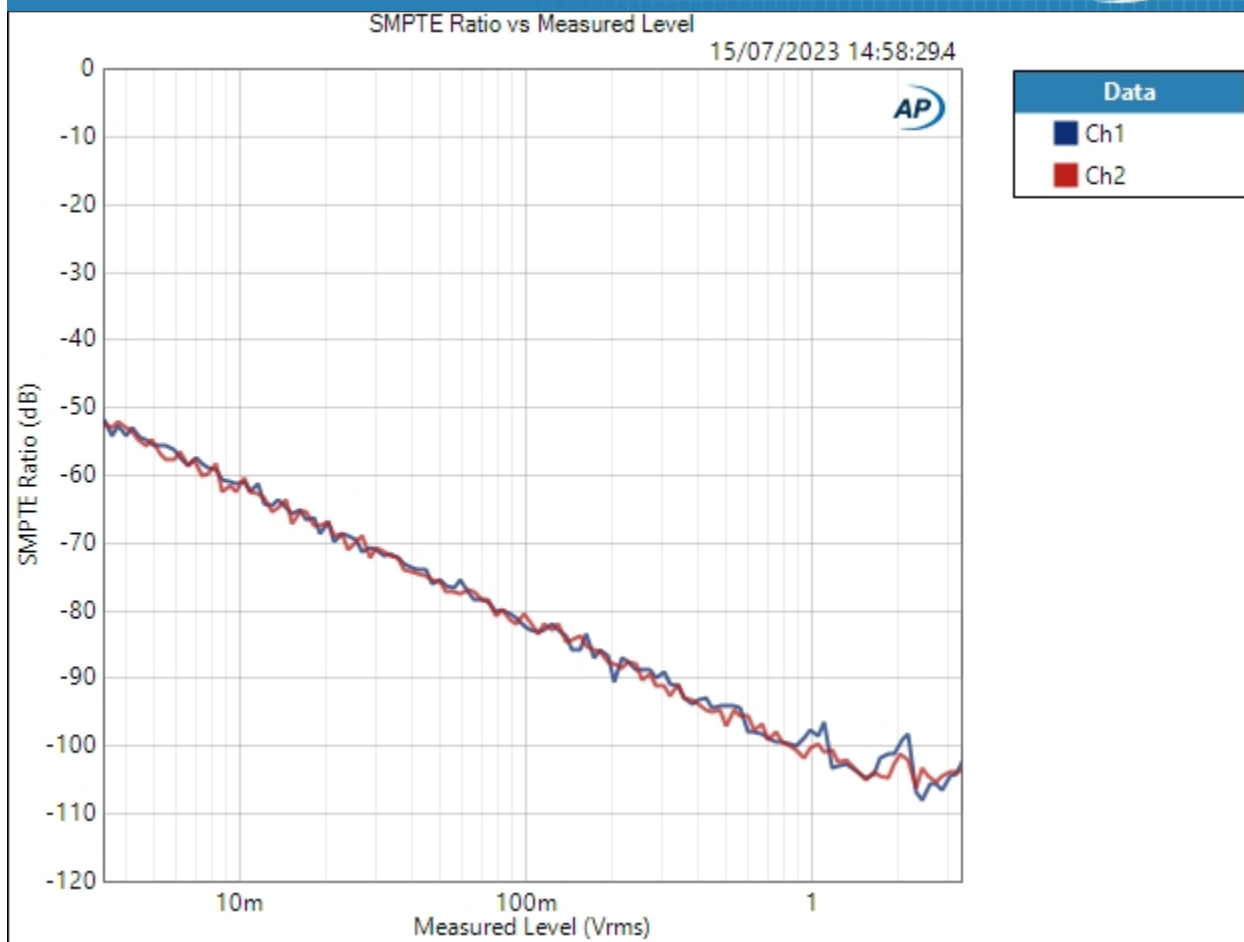


Result: ✔ PASSED

SMPTE Ratio vs Measured Level (15/07/2023 14:58:29.407)



## Sequence Report



Result: ✔ PASSED



## Sequence Report



### SIG 2 - Main Measurements (44.1kHz) : Linearity

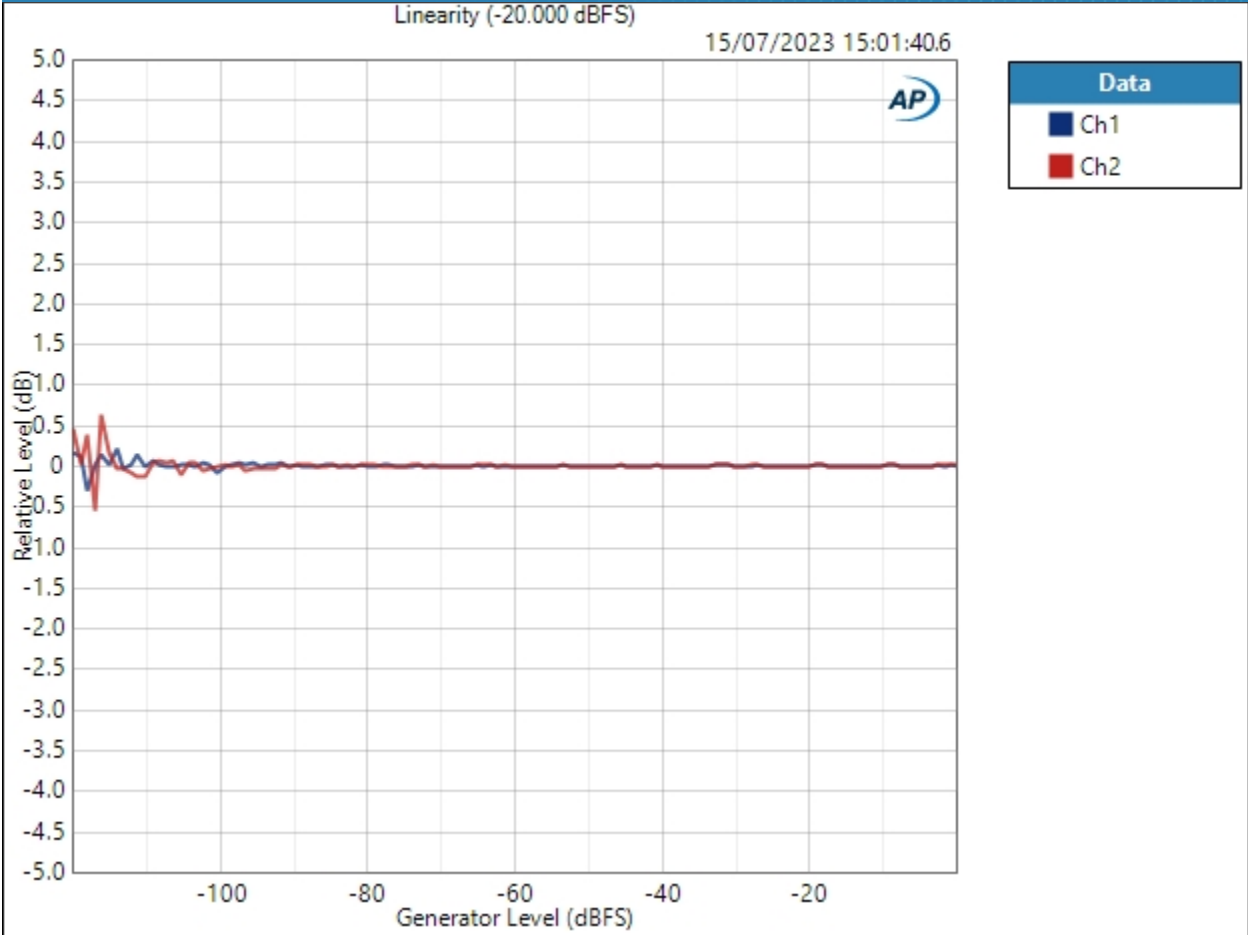
Waveform:	Sine
Frequency:	1.00000 kHz
Start Level:	-120.000 dBFS
Stop Level:	-0.000 dBFS
Step Type:	Linear
Number of Points:	124
Step Size:	+0.976 dBFS
Offset:	0.000 D
Selectivity:	1/24 octave
Bandpass Tuning Mode:	Generator Frequency
Measured 1	15/07/2023 15:01:40

Linearity (-20.000 dBFS) (15/07/2023 15:01:40.604)





# Sequence Report AP



### Linearity (-20.000 dBFS) Parameters

Mode: Normalized at Reference

Relative Level: -20.000 dBFS

Result: ✔ PASSED



## Sequence Report



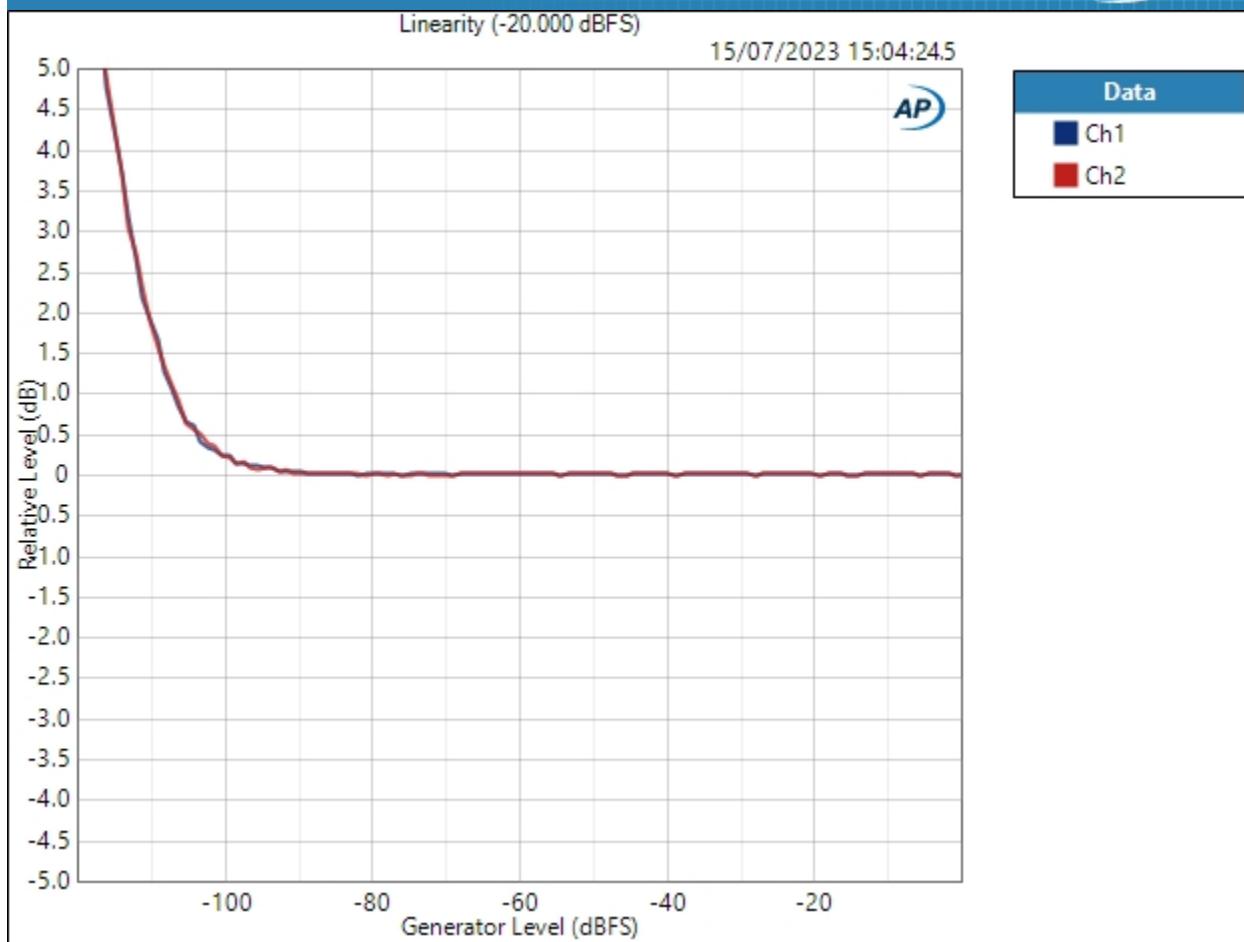
### SIG 2 - Main Measurements (44.1kHz) : Linearity (No Bandpass)

Waveform:	Sine
Frequency:	1.00000 kHz
Start Level:	-120.000 dBFS
Stop Level:	-0.000 dBFS
Step Type:	Linear
Number of Points:	124
Step Size:	+0.976 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:	Signal Path
Notch Tuning Mode:	Generator Frequency
Measured 1	15/07/2023 15:04:24

Linearity (-20.000 dBFS) (15/07/2023 15:04:24.538)



## Sequence Report



### Linearity (-20.000 dBFS) Parameters

Mode: Normalized at Reference

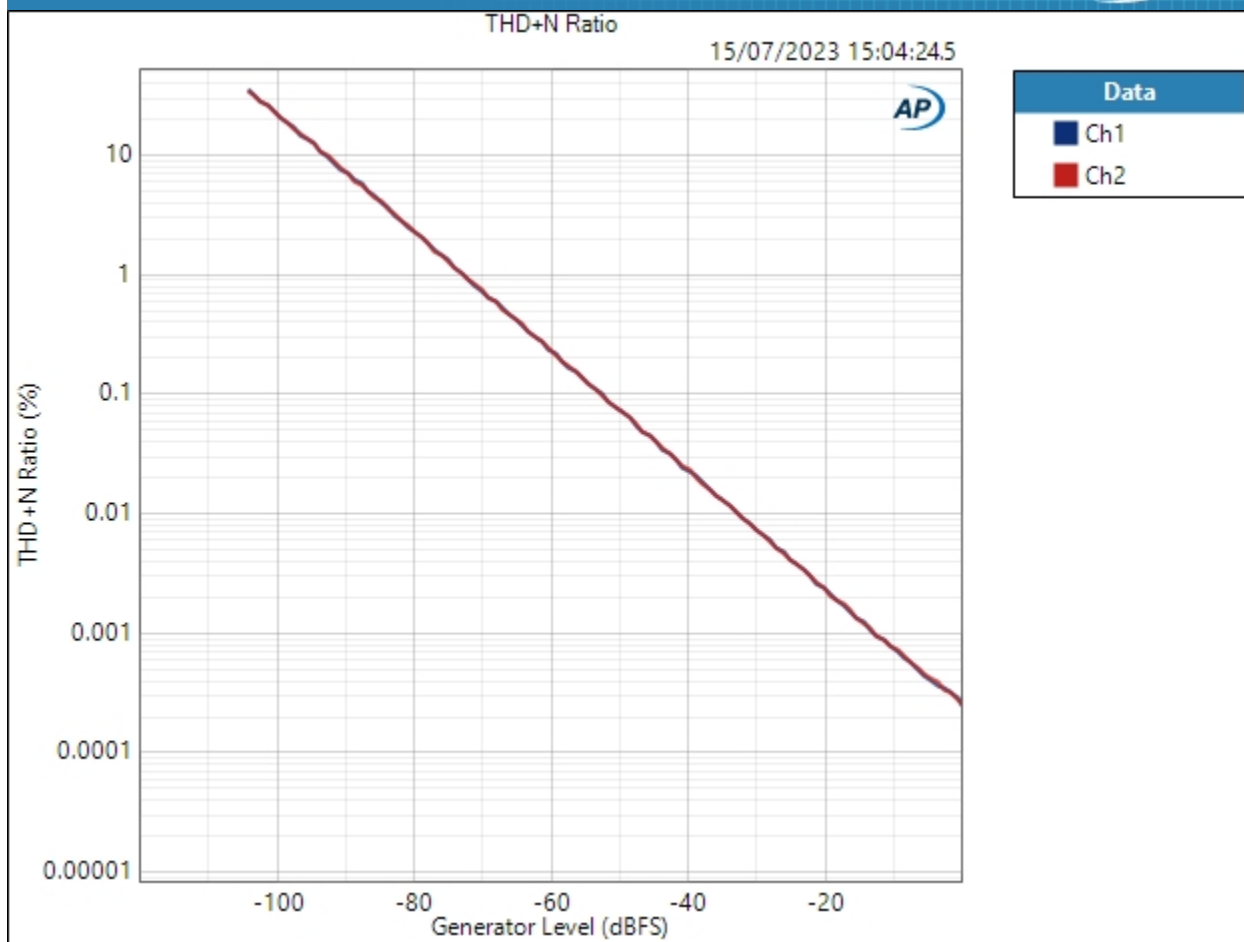
Relative Level: -20.000 dBFS

Result: ✔ PASSED

THD+N Ratio (15/07/2023 15:04:24.538)



## Sequence Report

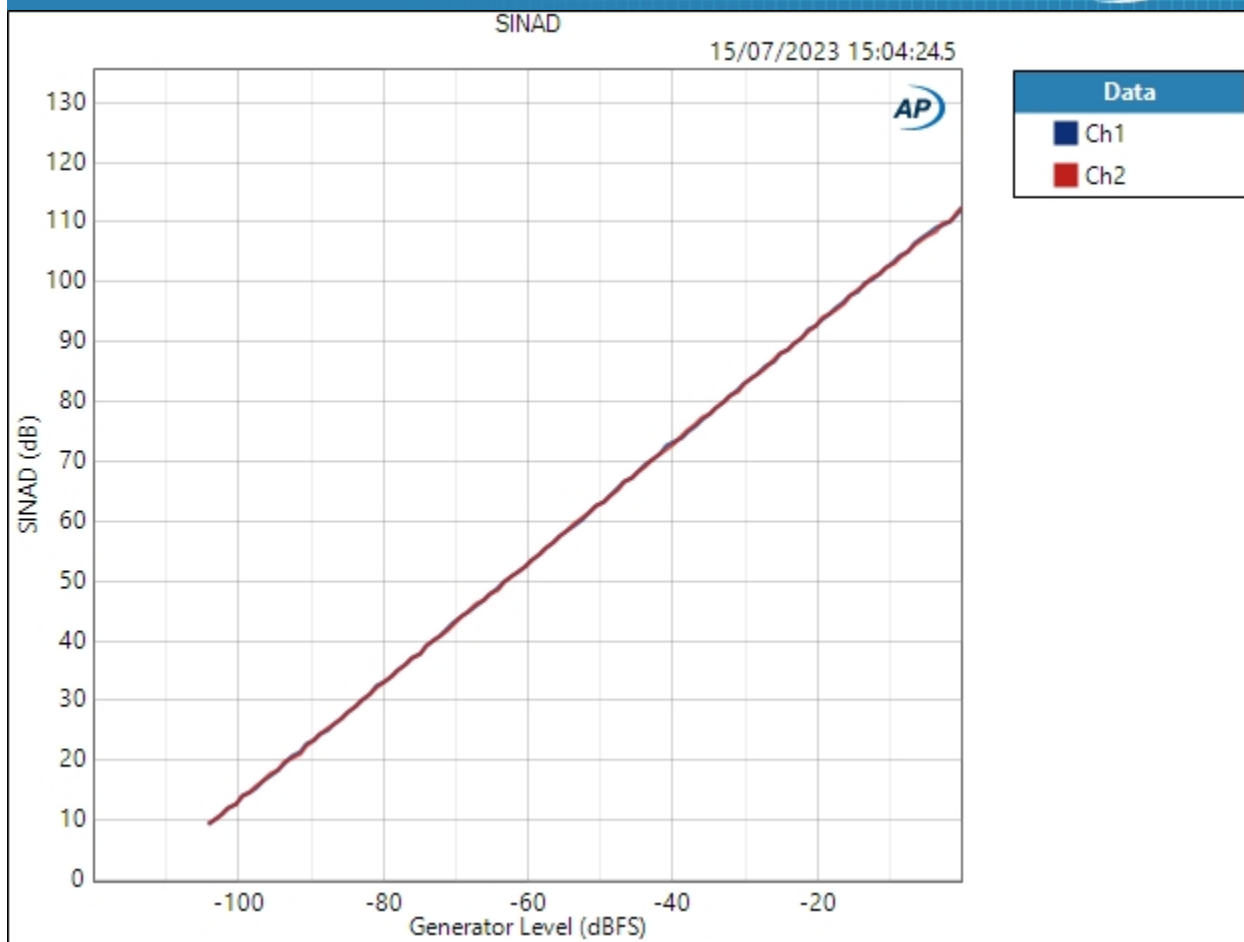


Result: PASSED

SINAD (15/07/2023 15:04:24.538)



## Sequence Report

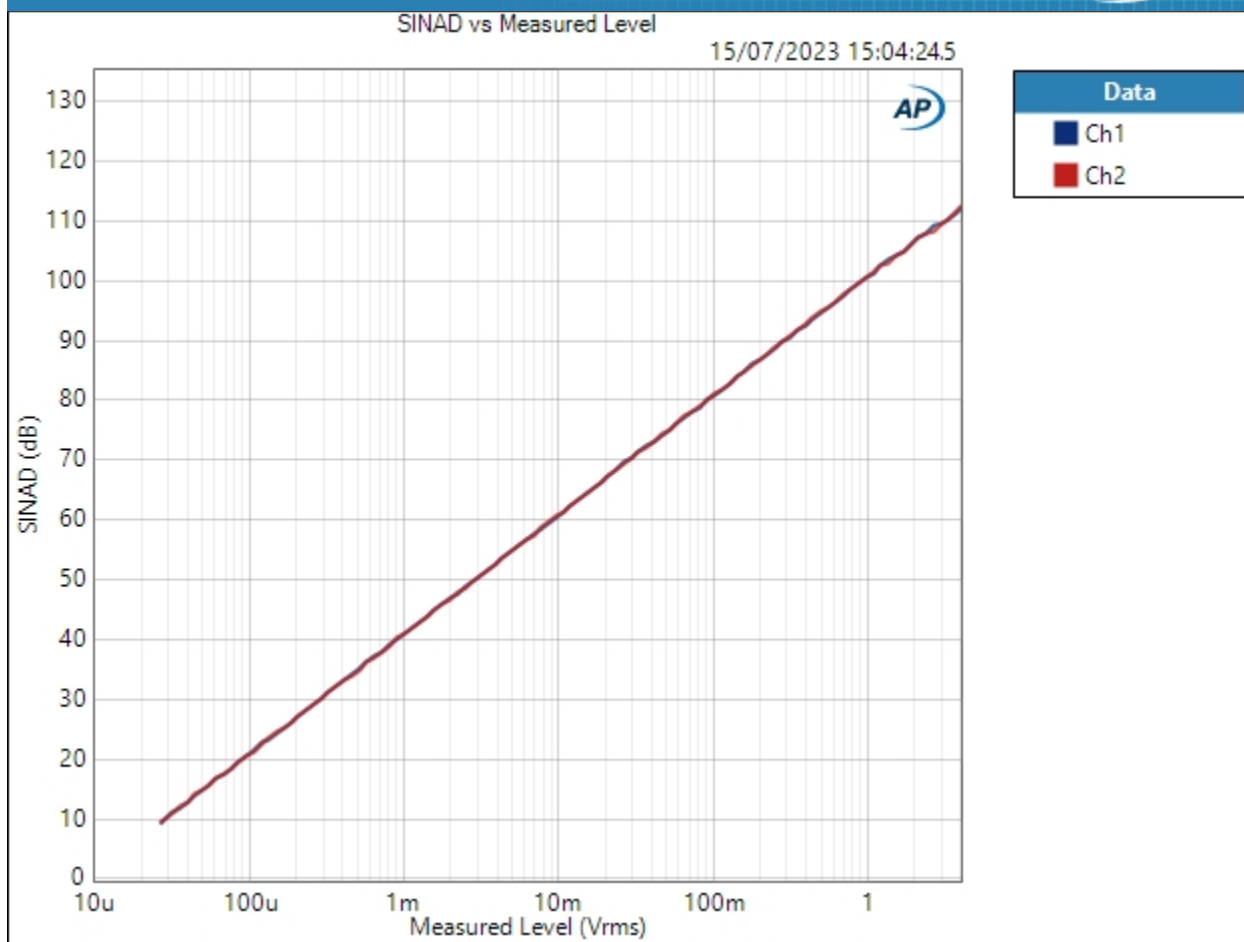


Result: PASSED

SINAD vs Measured Level (15/07/2023 15:04:24.538)



## Sequence Report



Result: PASSED



## Sequence Report



SIG 2 - Main Measurements (44.1kHz) : Crosstalk Sweep, One Channel Driven

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Start Frequency: 20.0000 kHz

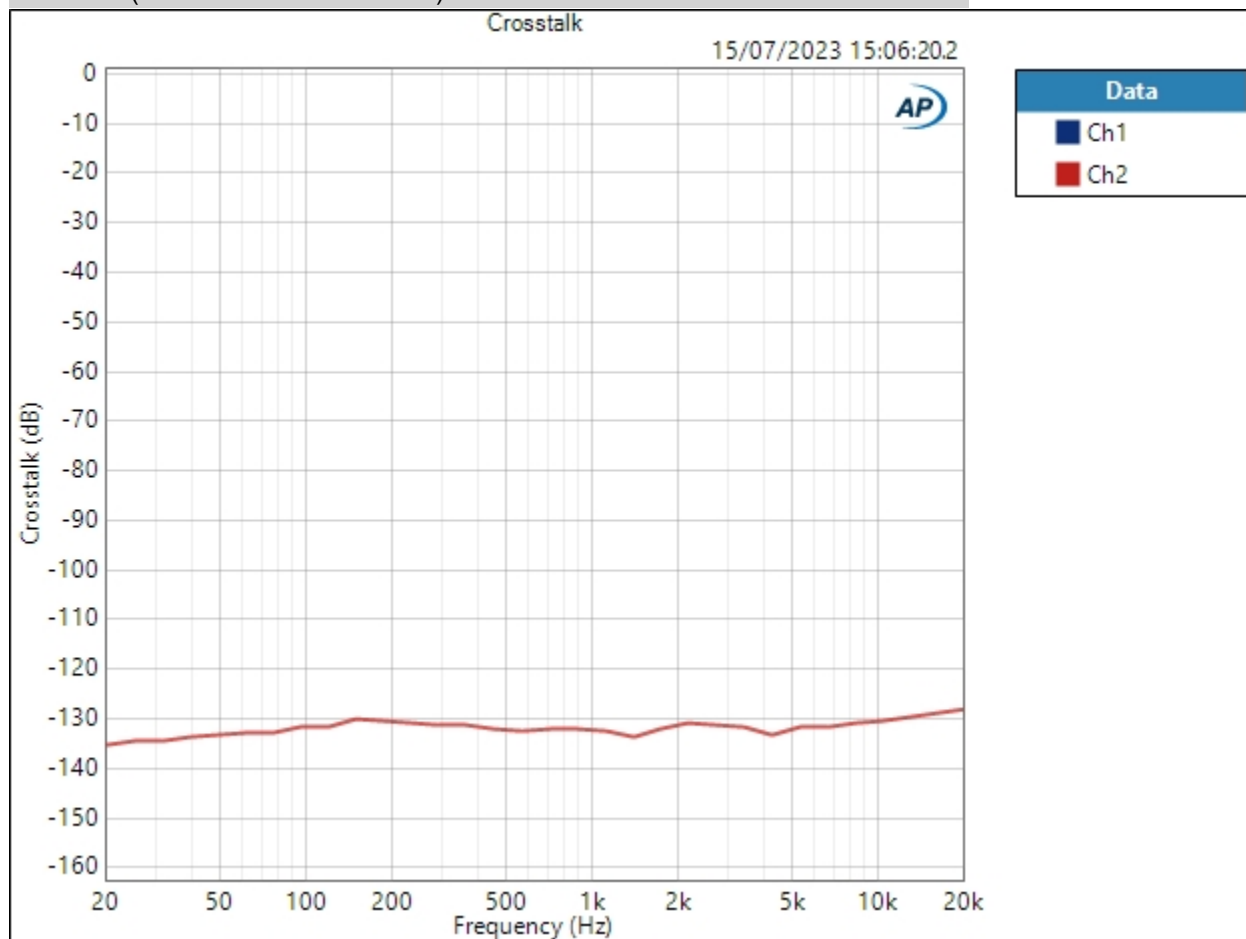
Stop Frequency: 20.0000 Hz

Step Type: Logarithmic

Number of Points: 32

Measured 1 15/07/2023 15:06:20

Crosstalk (15/07/2023 15:06:20.241)





## Sequence Report



### Crosstalk Parameters

Source: Ch1

Result:  PASSED

### SIG 2 - Main Measurements (44.1kHz) : DC Offset (active)

Waveform: Sine  
Generator Level: -3.000 dBFS  
DC Offset: 0.000 D  
Frequency: 1.00000 kHz  
Delay Time: 400.0 ms  
Acquisition Time: 333.0 ms

### DC Level (15/07/2023 15:08:23.077)

Ch1 -37.61 uV  
Ch2 34.83 uV

### SIG 2 - Main Measurements (44.1kHz) : DC Offset (idle)

Waveform: Sine  
Generator Level:  $-\infty$  dBFS  
DC Offset: 0.000 D  
Frequency: 1.00000 kHz  
Delay Time: 100.0 ms  
Acquisition Time: 333.0 ms

### DC Level (15/07/2023 15:08:29.558)

Ch1 -90.98 uV  
Ch2 77.90 uV





## Sequence Report



### SIG 3 - 44.1kHz Jitter : Signap Path Setup

Output Connector:	ASIO
Asio Device:	Ferrum USB Audio
Scaling Mode:	Digital
Output Sample Rate:	44.1000 kHz
Output Latency:	Auto
Buffer Size:	2048
Clock Source:	Computer
Input 1:	Analog Balanced
Measure:	Auto
Channels:	Auto (2 Channels)
Ch1	Data from Ch1, Sensitivity = 0.00 dB, Gain = 0.00 dB
Ch2	Data from Ch2, Sensitivity = 0.00 dB, Gain = 0.00 dB
Input Bandwidth:	AC (<10 Hz) - 90k (192 kHz SR)
Input EQ:	None
Termination:	200 kohm
High Performance Sine Analyzer:	Disabled
Input 2:	None
Device Delay:	0.000 s
• References	
dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
Analog Input	
dBrA:	4.063 Vrms
dBrB:	4.063 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	3.000 dB
dB SPL1:	4.063 Vrms
dB SPL2:	4.063 Vrms
dB SPL1 Calibrator Level:	60.000 dB SPL
dB SPL2 Calibrator Level:	50.000 dB SPL



## Sequence Report



dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm
• DCX	
DCX is not detected.	
• Clocks	
Output Rate:	Track Output SR
Sync Out Level:	3.300 V
Sync Out Polarity:	Normal
Timebase Reference:	Internal
Jitter:	Disabled
• Triggers	
Source:	Off
Input Logic Level:	3.300 V
Edge:	Rising



## Sequence Report



SIG 3 - 44.1kHz Jitter : 44.1kHz J-Test (Jitter)

Waveform: J-test\_44k\_PCM24\_LR.wav

Bit Exact: True

Start Offset (sec): 0.000 s

Secondary Source: None

Measured 1 15/07/2023 15:09:33

Acquisition Type: Auto

Trigger: Free Run

Delay Time: 500.0 ms

Input Bandwidth: Use Signal Path

FFT Length: 1248000

Averaging: Power

Averages: 8

Window: AP-Equiripple

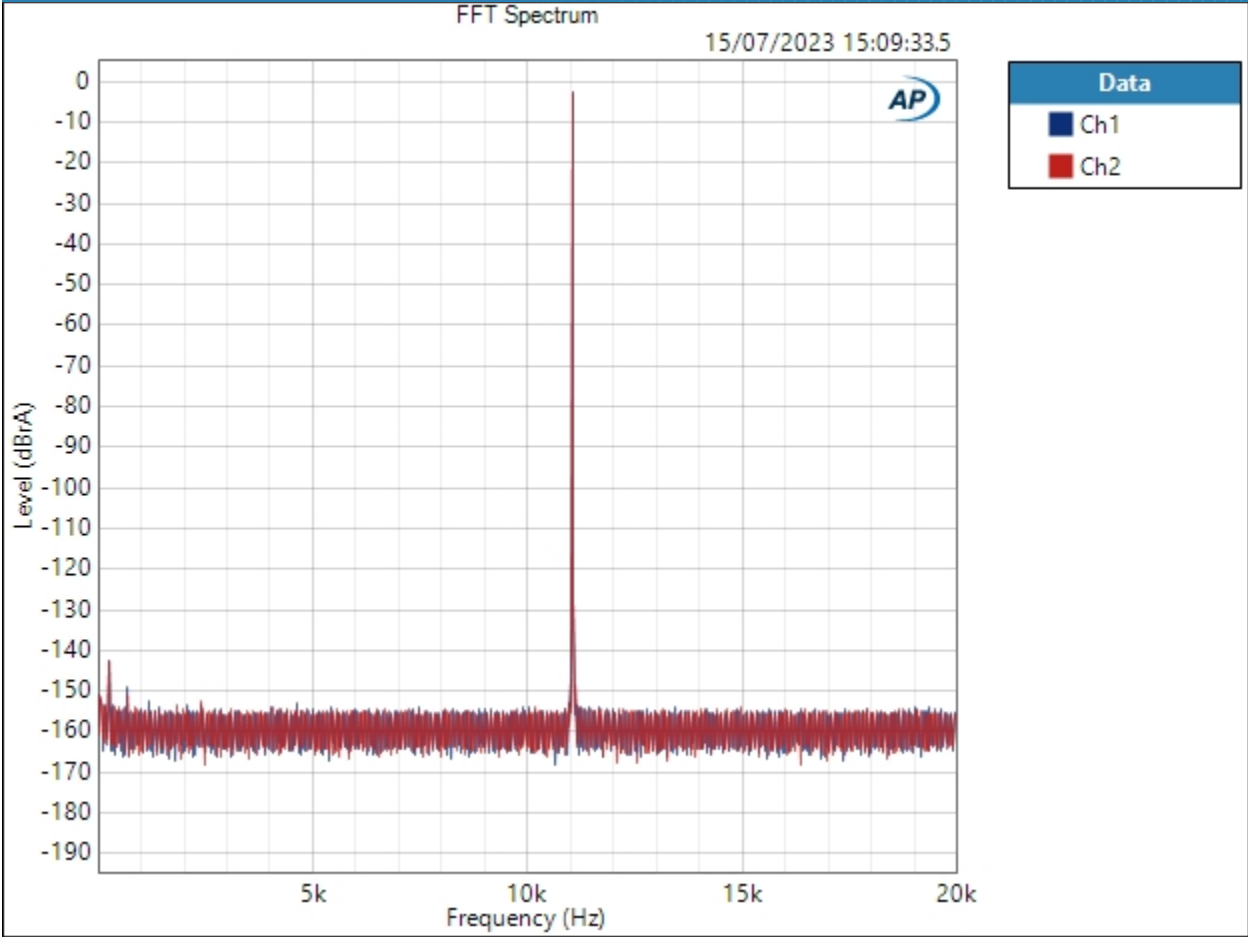
Record Acquisition: False

Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 15:09:33.563)



# Sequence Report



Result: PASSED



## Sequence Report



### SIG 4 - 48khz Jitter : Signap Path Setup

Output Connector:	ASIO
Asio Device:	Ferrum USB Audio
Scaling Mode:	Digital
Output Sample Rate:	48.0000 kHz
Output Latency:	Auto
Buffer Size:	2048
Clock Source:	Computer
Input 1:	Analog Balanced
Measure:	Auto
Channels:	Auto (2 Channels)
Ch1	Data from Ch1, Sensitivity = 0.00 dB, Gain = 0.00 dB
Ch2	Data from Ch2, Sensitivity = 0.00 dB, Gain = 0.00 dB
Input Bandwidth:	AC (<10 Hz) - AES17 (20 kHz)
Input EQ:	None
Termination:	200 kohm
High Performance Sine Analyzer:	Disabled
Input 2:	None
Device Delay:	0.000 s
• References	
dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
Analog Input	
dBrA:	4.063 Vrms
dBrB:	4.063 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	3.000 dB
dB SPL1:	4.063 Vrms
dB SPL2:	4.063 Vrms
dB SPL1 Calibrator Level:	60.000 dB SPL
dB SPL2 Calibrator Level:	50.000 dB SPL



## Sequence Report



dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm
• DCX	
DCX is not detected.	
• Clocks	
Output Rate:	Track Output SR
Sync Out Level:	3.300 V
Sync Out Polarity:	Normal
Timebase Reference:	Internal
Jitter:	Disabled
• Triggers	
Source:	Off
Input Logic Level:	3.300 V
Edge:	Rising



## Sequence Report



SIG 4 - 48khz Jitter : 48khz J-Test (Jitter)

Waveform: J-test\_48k\_PCM24\_LR.wav

Bit Exact: True

Start Offset (sec): 0.000 s

Secondary Source: None

Measured 1 15/07/2023 15:11:00

Acquisition Type: Auto

Trigger: Free Run

Delay Time: 500.0 ms

Input Bandwidth: Use Signal Path

FFT Length: 1248000

Averaging: Power

Averages: 3

Window: AP-Equiripple

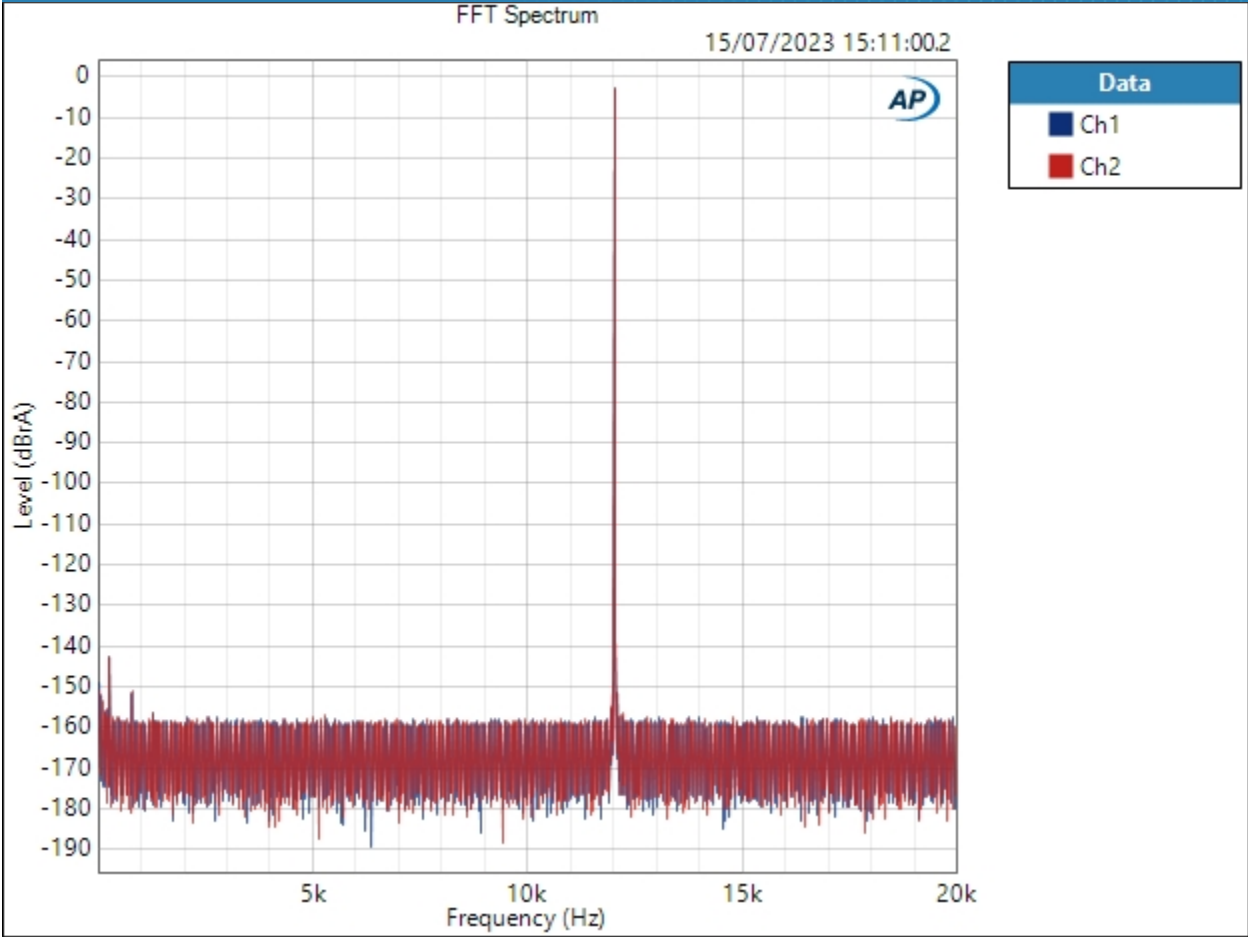
Record Acquisition: False

Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 15:11:00.215)



# Sequence Report



Result: PASSED





## Sequence Report



### SIG 5 - Bandwidth (192khz) : Signal Path Setup

Output Connector:	ASIO
Asio Device:	Ferrum USB Audio
Scaling Mode:	Digital
Output Sample Rate:	192.000 kHz
Output Latency:	Auto
Buffer Size:	2048
Clock Source:	Computer
Input 1:	Analog Balanced
Measure:	Auto
Channels:	Custom (2 Channels)
Ch1	Data from Ch1, Sensitivity = 0.00 dB, Gain = 0.00 dB
Ch2	Data from Ch2, Sensitivity = 0.00 dB, Gain = 0.00 dB
Input Bandwidth:	AC (<10 Hz) - 90k (192 kHz SR)
Input EQ:	None
Termination:	200 kohm
High Performance Sine Analyzer:	Enabled
Input 2:	None
Device Delay:	0.000 s
• References	
dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
Analog Input	
dBrA:	4.063 Vrms
dBrB:	4.063 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	3.000 dB
dB SPL1:	4.063 Vrms
dB SPL2:	4.063 Vrms
dB SPL1 Calibrator Level:	60.000 dB SPL
dB SPL2 Calibrator Level:	50.000 dB SPL



## Sequence Report



dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm
• DCX	
DCX is not detected.	
• Clocks	
Output Rate:	Track Output SR
Sync Out Level:	3.300 V
Sync Out Polarity:	Normal
Timebase Reference:	Internal
Jitter:	Disabled
• Triggers	
Source:	Off
Input Logic Level:	3.300 V
Edge:	Rising



## Sequence Report



SIG 5 - Bandwidth (192khz) : 90khz Bandwidth

Start Frequency: 20.0000 Hz

Stop Frequency: 90.0000 kHz

Generator Level: -3.000 dBFS

DC Offset: 0.000 D

EQ: None

Pre-Sweep: 500.0 ms

Sweep: 5.000 s

Extend Acquisition By: 500.0 ms

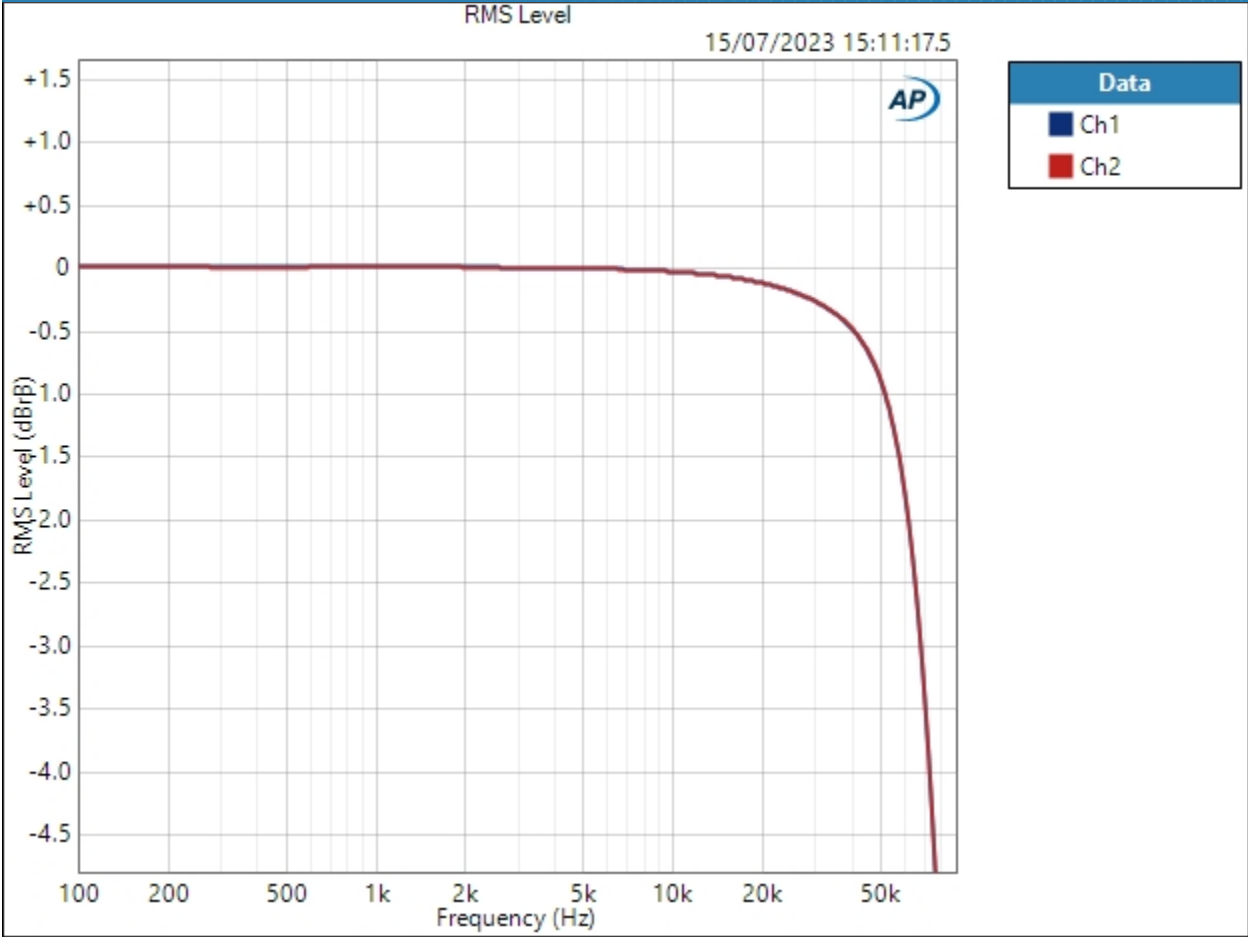
Secondary Source: None

Measured 1 15/07/2023 15:11:17

RMS Level (15/07/2023 15:11:17.536)



# Sequence Report AP



Result: ✔ PASSED



## Sequence Report



### SIG 6 - THD and Phase vs Frequency : Signal Path Setup

Output Connector:	ASIO
Asio Device:	Ferrum USB Audio
Scaling Mode:	Digital
Output Sample Rate:	44.1000 kHz
Output Latency:	Auto
Buffer Size:	2048
Clock Source:	Computer
Input 1:	Analog Balanced
Measure:	Auto
Channels:	Custom (2 Channels)
Ch1	Data from Ch1, Sensitivity = 0.00 dB, Gain = 0.00 dB
Ch2	Data from Ch2, Sensitivity = 0.00 dB, Gain = 0.00 dB
Input Bandwidth:	AC (<10 Hz) - 90k (192 kHz SR)
Input EQ:	None
Termination:	200 kohm
High Performance Sine Analyzer:	Enabled
Input 2:	None
Device Delay:	0.000 s
• References	
dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
Analog Input	
dBrA:	4.063 Vrms
dBrB:	4.063 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	3.000 dB
dB SPL1:	4.063 Vrms
dB SPL2:	4.063 Vrms
dB SPL1 Calibrator Level:	60.000 dB SPL
dB SPL2 Calibrator Level:	50.000 dB SPL



## Sequence Report



dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm
• DCX	
DCX is not detected.	
• Clocks	
Output Rate:	Track Output SR
Sync Out Level:	3.300 V
Sync Out Polarity:	Normal
Timebase Reference:	Internal
Jitter:	Disabled
• Triggers	
Source:	Off
Input Logic Level:	3.300 V
Edge:	Rising



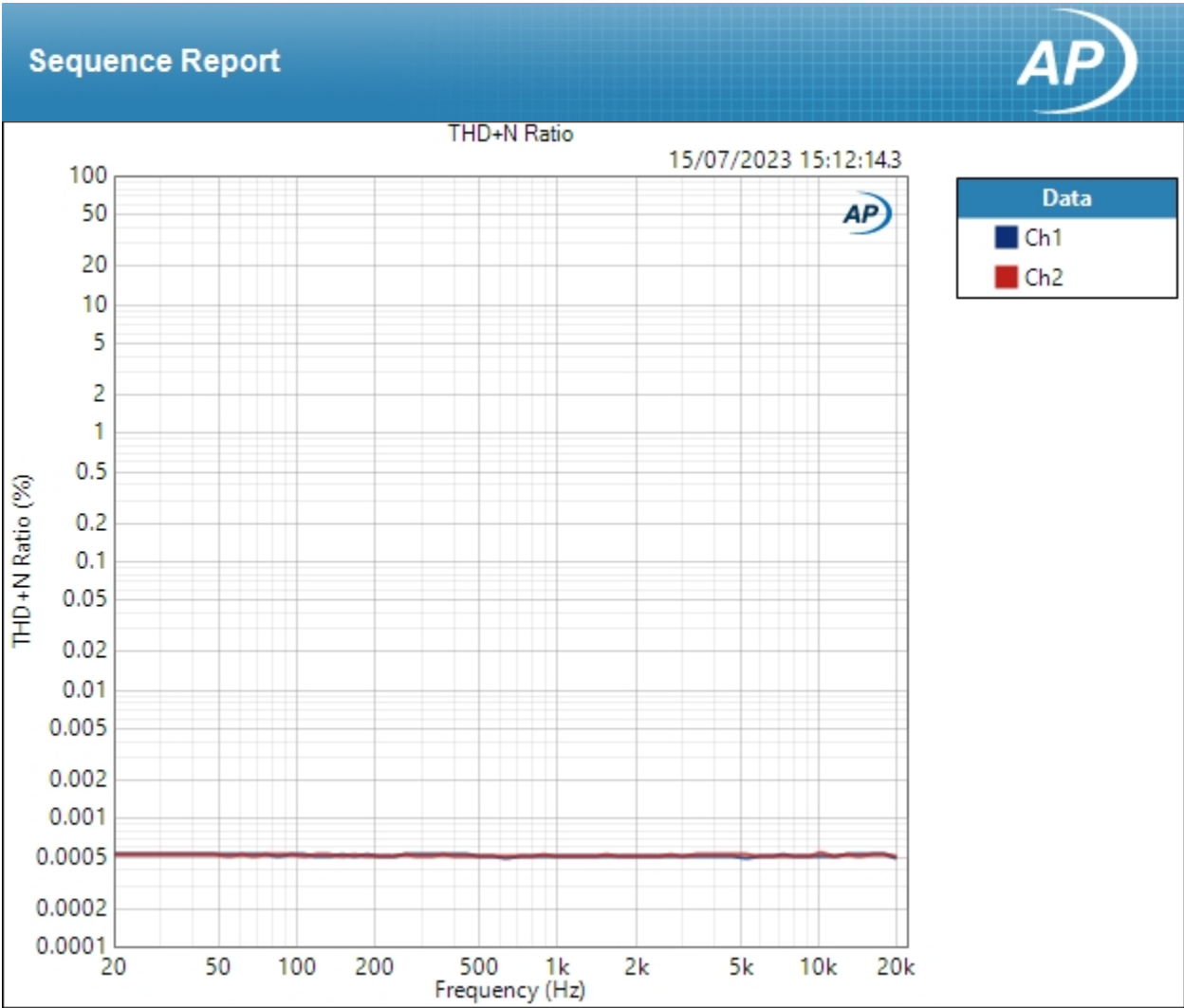
## Sequence Report



SIG 6 - THD and Phase vs Frequency : THD+N vs frequency (AES 40kHz filter)

Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
EQ:	None
Start Frequency:	22.0059 kHz
Stop Frequency:	20.0000 Hz
Step Type:	Logarithmic
Number of Points:	64
High-pass Filter:	Elliptic
High-pass Frequency:	20 Hz
Low-pass Filter:	Signal Path
Weighting Filter:	Signal Path
Phase Ref Channel:	Ch1
Measured 1	15/07/2023 15:12:14

THD+N Ratio (15/07/2023 15:12:14.349)



Result: PASSED





## Sequence Report



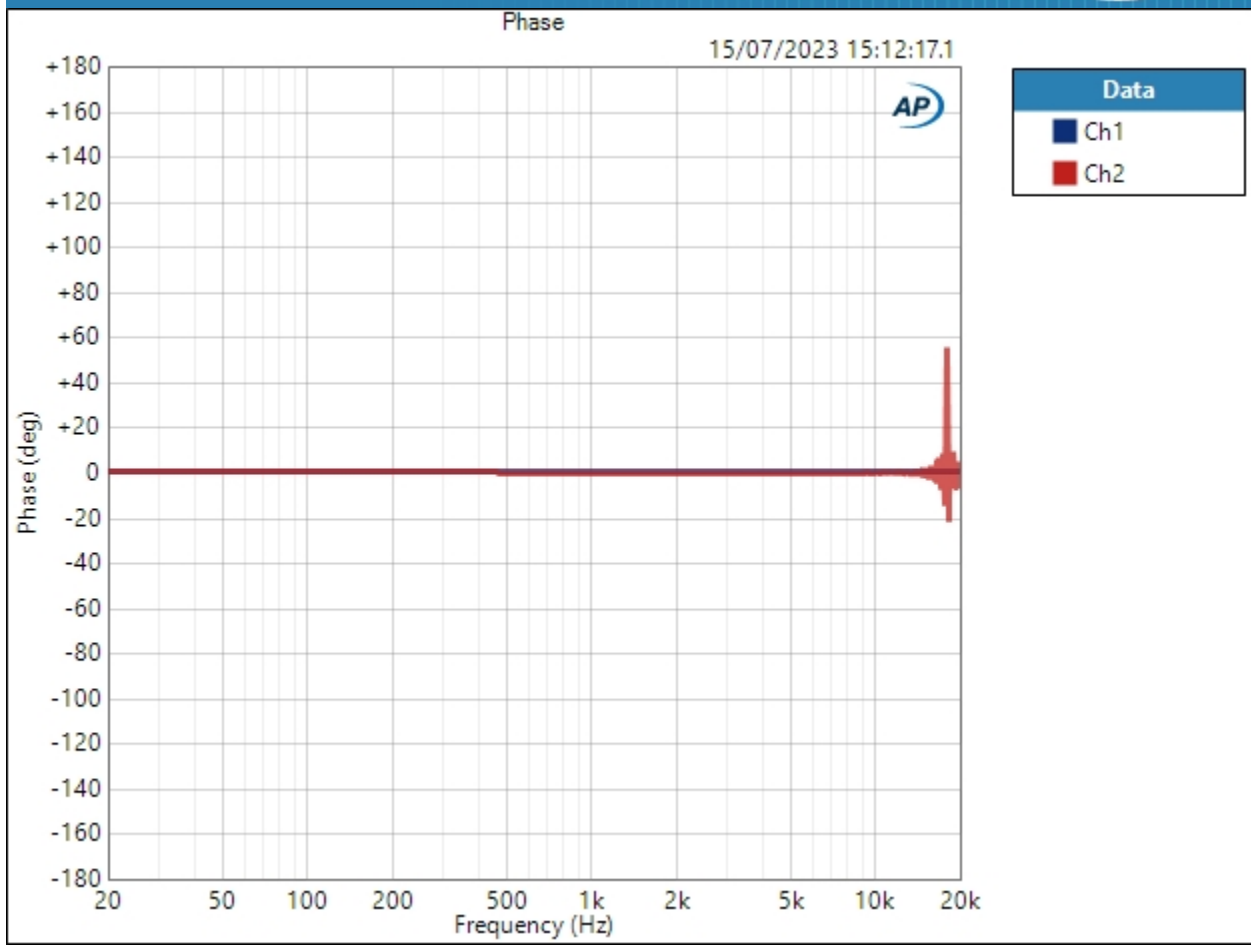
SIG 6 - THD and Phase vs Frequency : Interchannel Phase and Group Delay

Start Frequency: 20.0000 Hz  
Stop Frequency: 20.0000 kHz  
Generator Level: -20.000 dBFS  
DC Offset: 0.000 D  
EQ: None  
Pre-Sweep: 0.000 s  
Sweep: 350.0 ms  
Measured 1 15/07/2023 15:12:17  
Step Type: Log Chirp  
Extend Acquisition By: 50.00 ms  
Crosstalk Type: High speed  
Secondary Source: None

Phase (15/07/2023 15:12:17.185)



# Sequence Report



## Phase Parameters

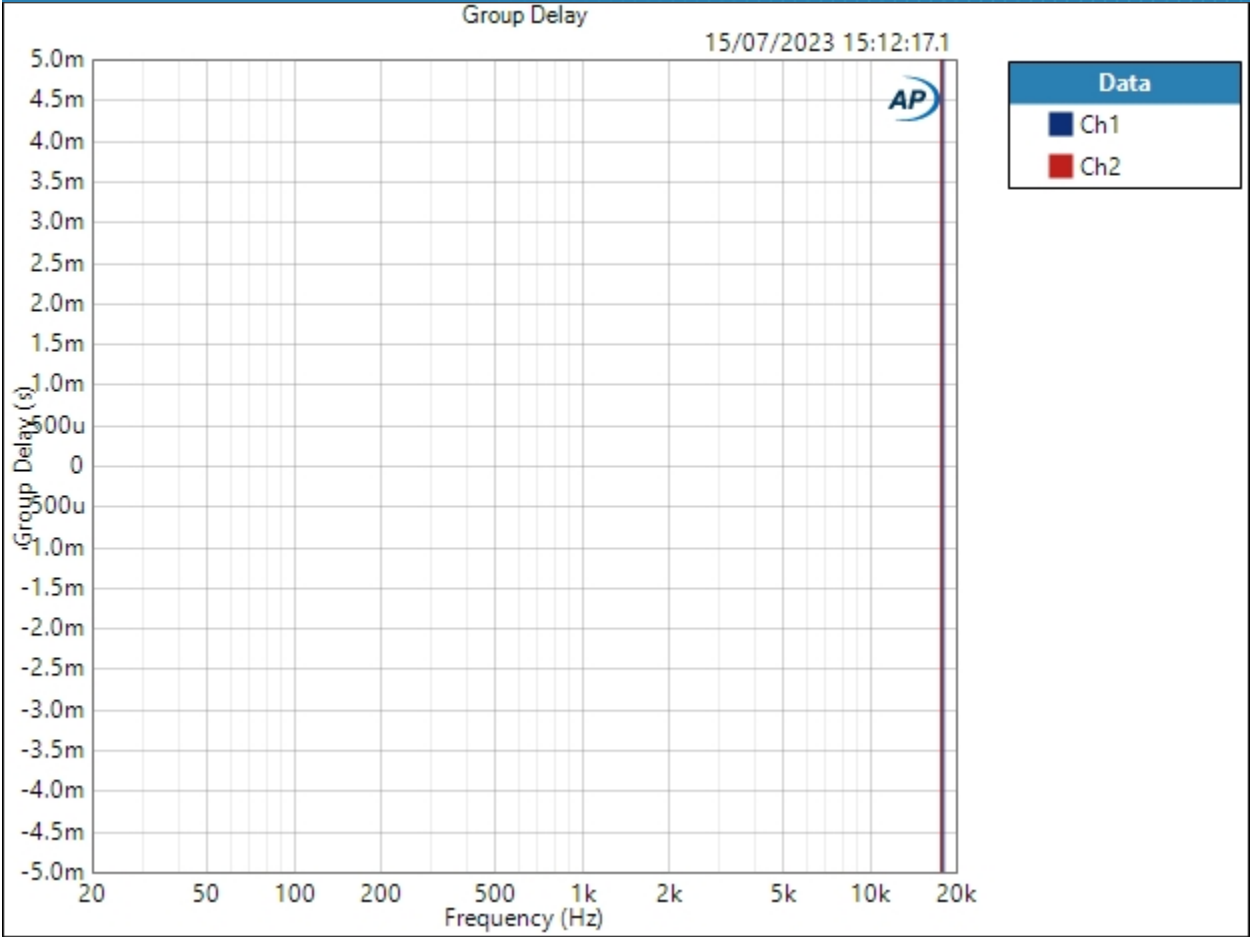
Mode: Relative to Ch1

Result: ✔ PASSED

Group Delay (15/07/2023 15:12:17.185)



# Sequence Report



Result: PASSED



## Sequence Report



### SIG 7 - Wideband and Intersample Overs : Signal Path Setup

Output Connector:	ASIO
Asio Device:	Ferrum USB Audio
Scaling Mode:	Digital
Output Sample Rate:	44.1000 kHz
Output Latency:	Auto
Buffer Size:	2048
Clock Source:	Computer
Input 1:	Analog Balanced
Measure:	Auto
Channels:	Auto (2 Channels)
Ch1	Data from Ch1, Sensitivity = 0.00 dB, Gain = 0.00 dB
Ch2	Data from Ch2, Sensitivity = 0.00 dB, Gain = 0.00 dB
Input Bandwidth:	AC (<10 Hz) - 1M (2.496 MHz SR)
Input EQ:	None
Termination:	200 kohm
High Performance Sine Analyzer:	Disabled
Input 2:	None
Device Delay:	0.000 s
• References	
dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
Analog Input	
dBrA:	4.063 Vrms
dBrB:	4.063 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	3.000 dB
dB SPL1:	4.063 Vrms
dB SPL2:	4.063 Vrms
dB SPL1 Calibrator Level:	60.000 dB SPL
dB SPL2 Calibrator Level:	50.000 dB SPL



## Sequence Report



dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm
• DCX	
DCX is not detected.	
• Clocks	
Output Rate:	Track Output SR
Sync Out Level:	3.300 V
Sync Out Polarity:	Normal
Timebase Reference:	Internal
Jitter:	Disabled
• Triggers	
Source:	Off
Input Logic Level:	3.300 V
Edge:	Rising



## Sequence Report



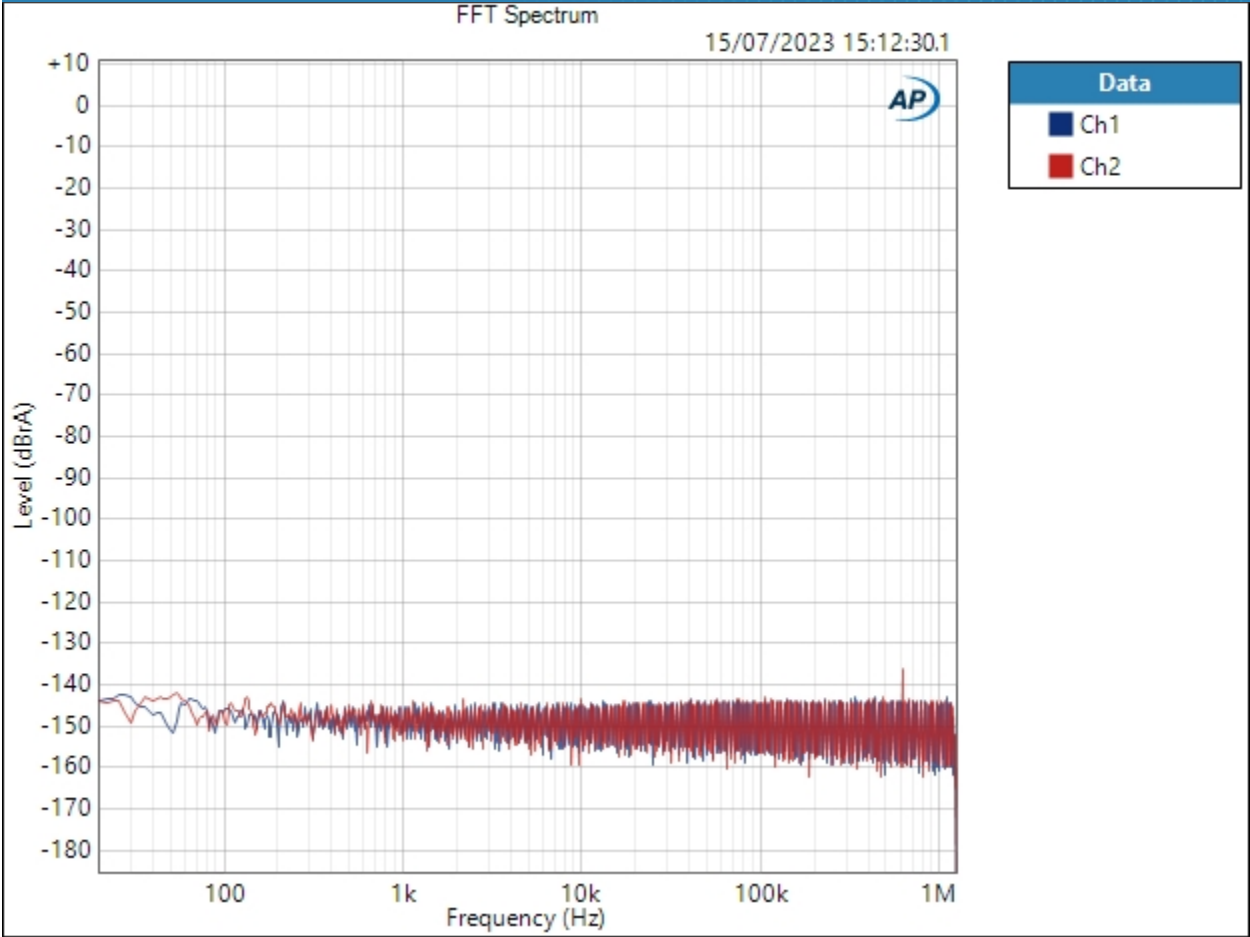
SIG 7 - Wideband and Intersample Overs : Wideband idle noise

Waveform: Sine  
Generator Level:  $-\infty$  dBFS  
DC Offset: 0.000 D  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1: 15/07/2023 15:12:30  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 250.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 1248000  
Averaging: Power  
Averages: 6  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 15:12:30.156)



# Sequence Report AP



Result: ✔ PASSED



## Sequence Report



SIG 7 - Wideband and Intersample Overs : 1khz 0dbfs wideband

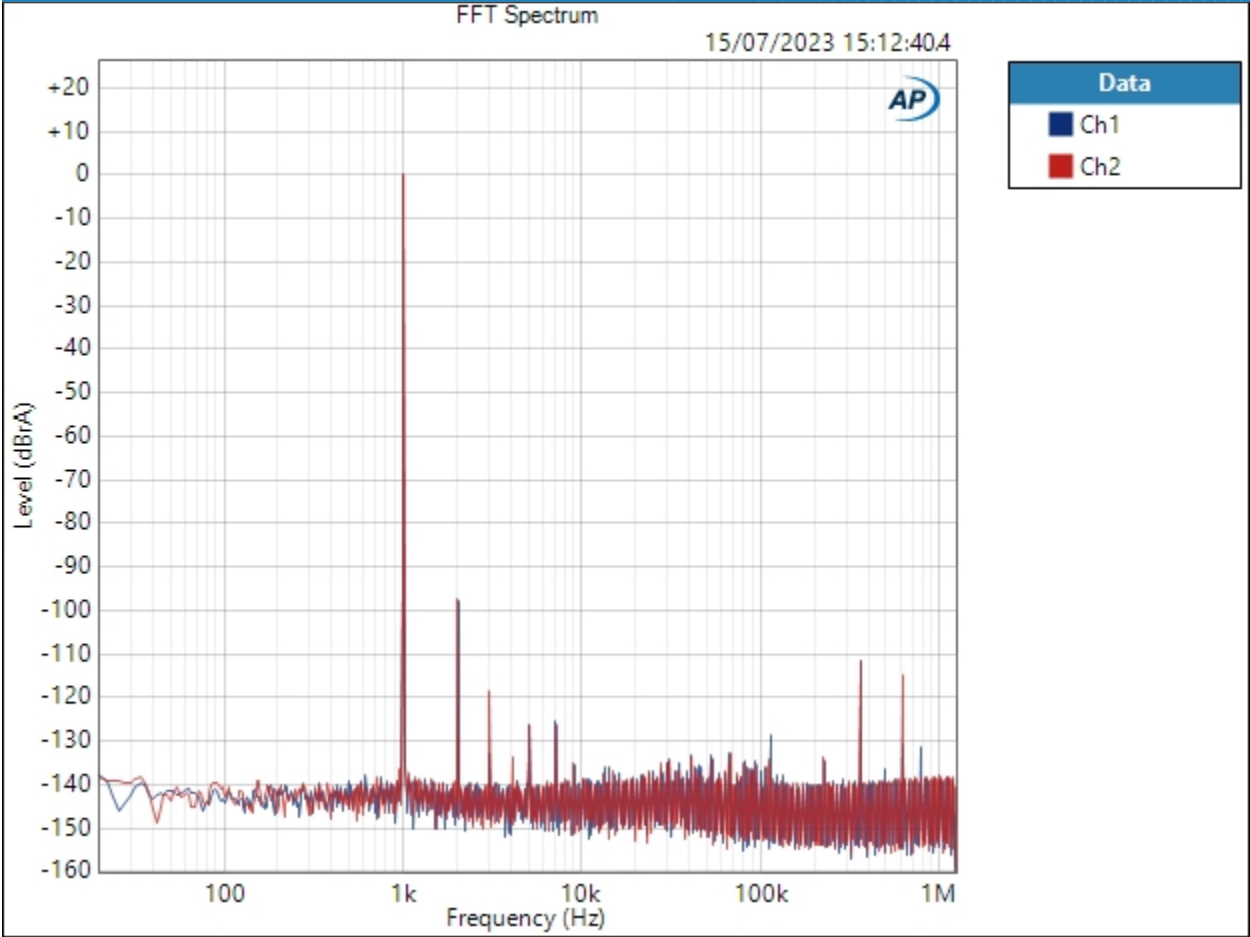
Waveform: Sine  
Generator Level: -0.000 dBFS  
DC Offset: 0.000 D  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1 15/07/2023 15:12:40  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 250.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 1248000  
Averaging: Power  
Averages: 6  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 15:12:40.471)





# Sequence Report AP



Result: ✔ PASSED



## Sequence Report



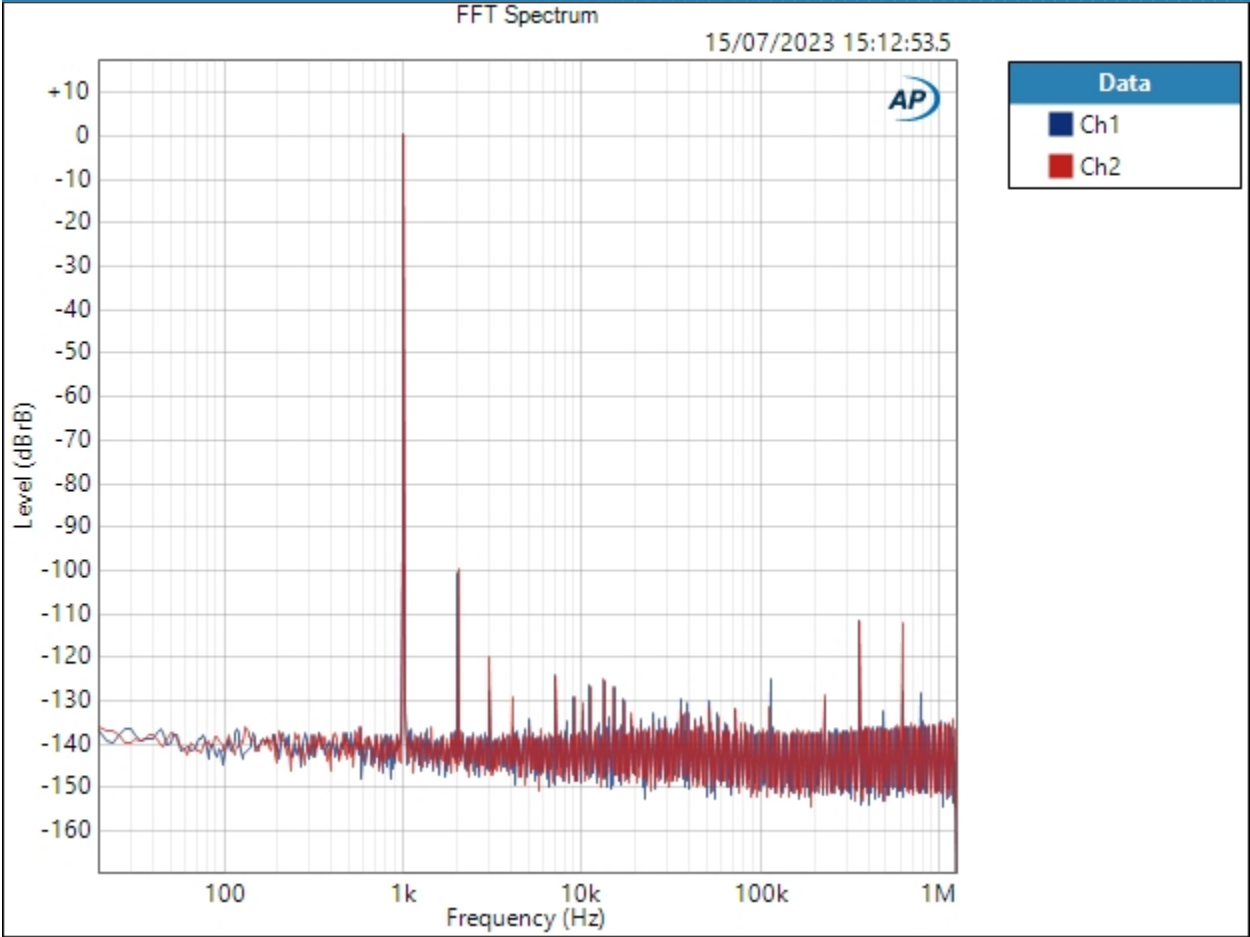
SIG 7 - Wideband and Intersample Overs : 1khz -3dbfs wideband

Waveform: Sine  
Generator Level: -3.000 dBFS  
DC Offset: 0.000 D  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1 15/07/2023 15:12:53  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 250.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 1248000  
Averaging: Power  
Averages: 6  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 15:12:53.504)



# Sequence Report AP



Result: ✔ PASSED



## Sequence Report



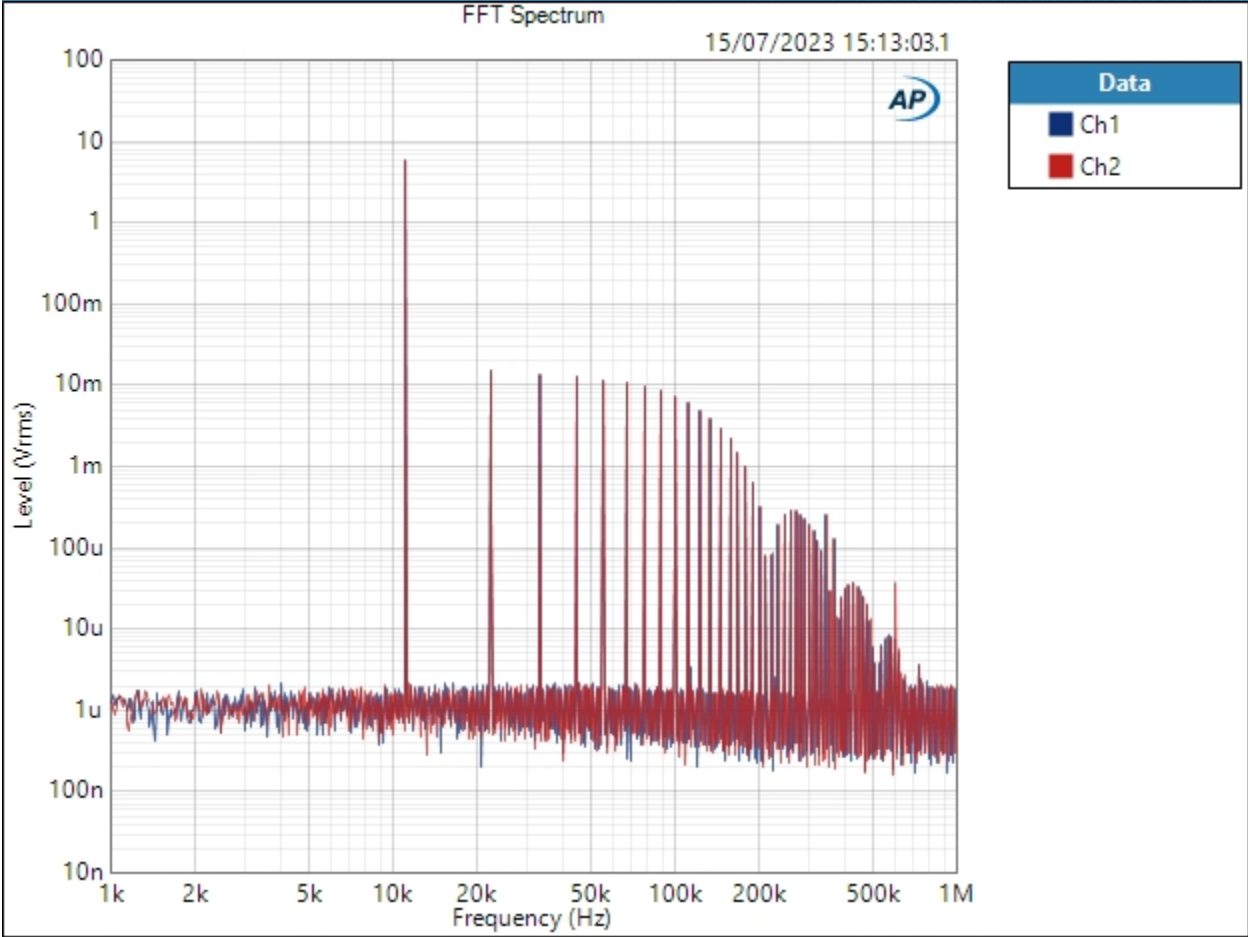
SIG 7 - Wideband and Intersample Overs : Intersample Overs (+3dB)

Waveform: Intersample overs +3dB.wav  
Bit Exact: True  
Start Offset (sec): 0.000 s  
Secondary Source: None  
Measured 1: 15/07/2023 15:13:03  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 1.000 s  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 4  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 15:13:03.113)



# Sequence Report AP

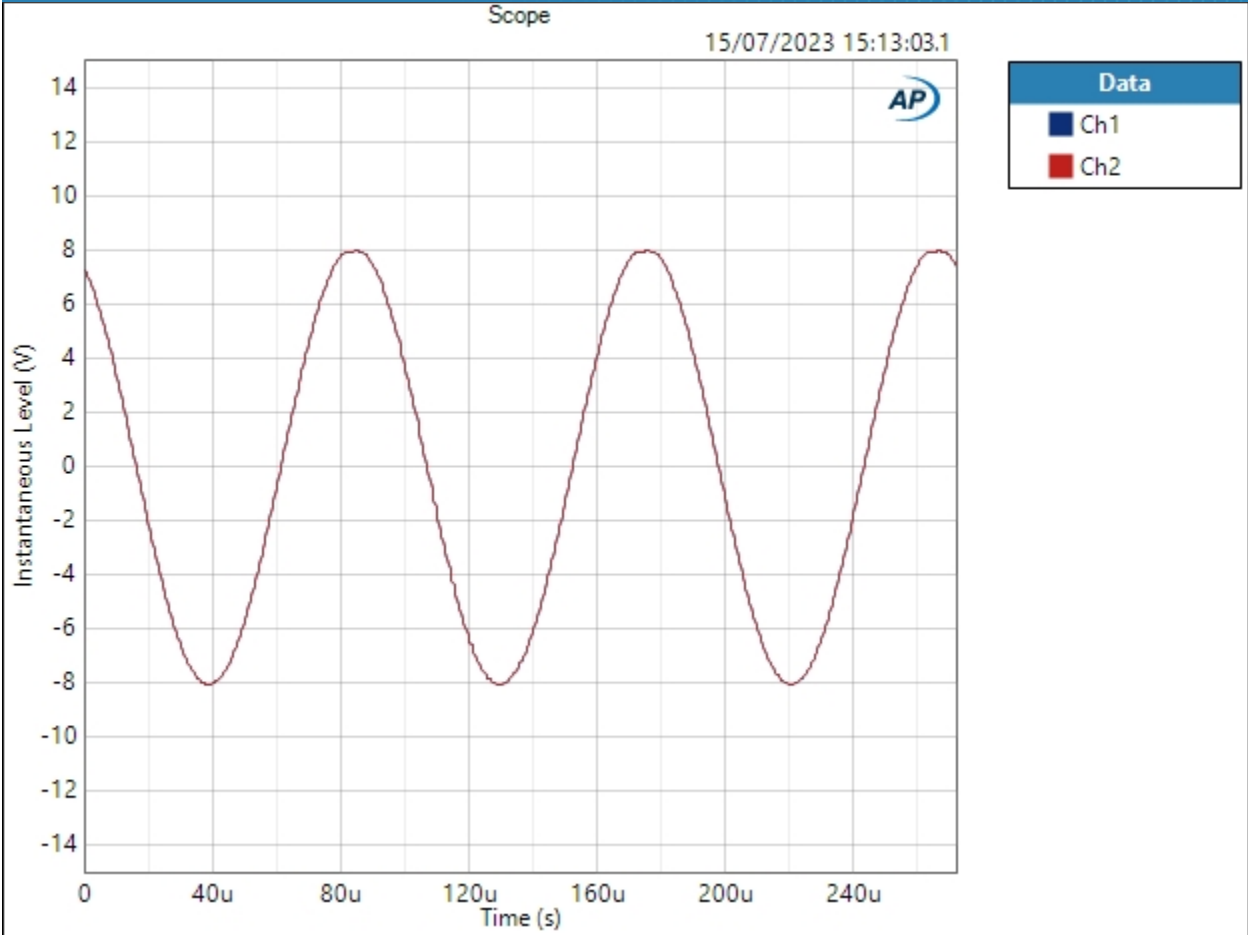


Result: ✔ PASSED

Scope (15/07/2023 15:13:03.113)



# Sequence Report



### Scope Parameters

Interpolated: On

Result: PASSED



## Sequence Report



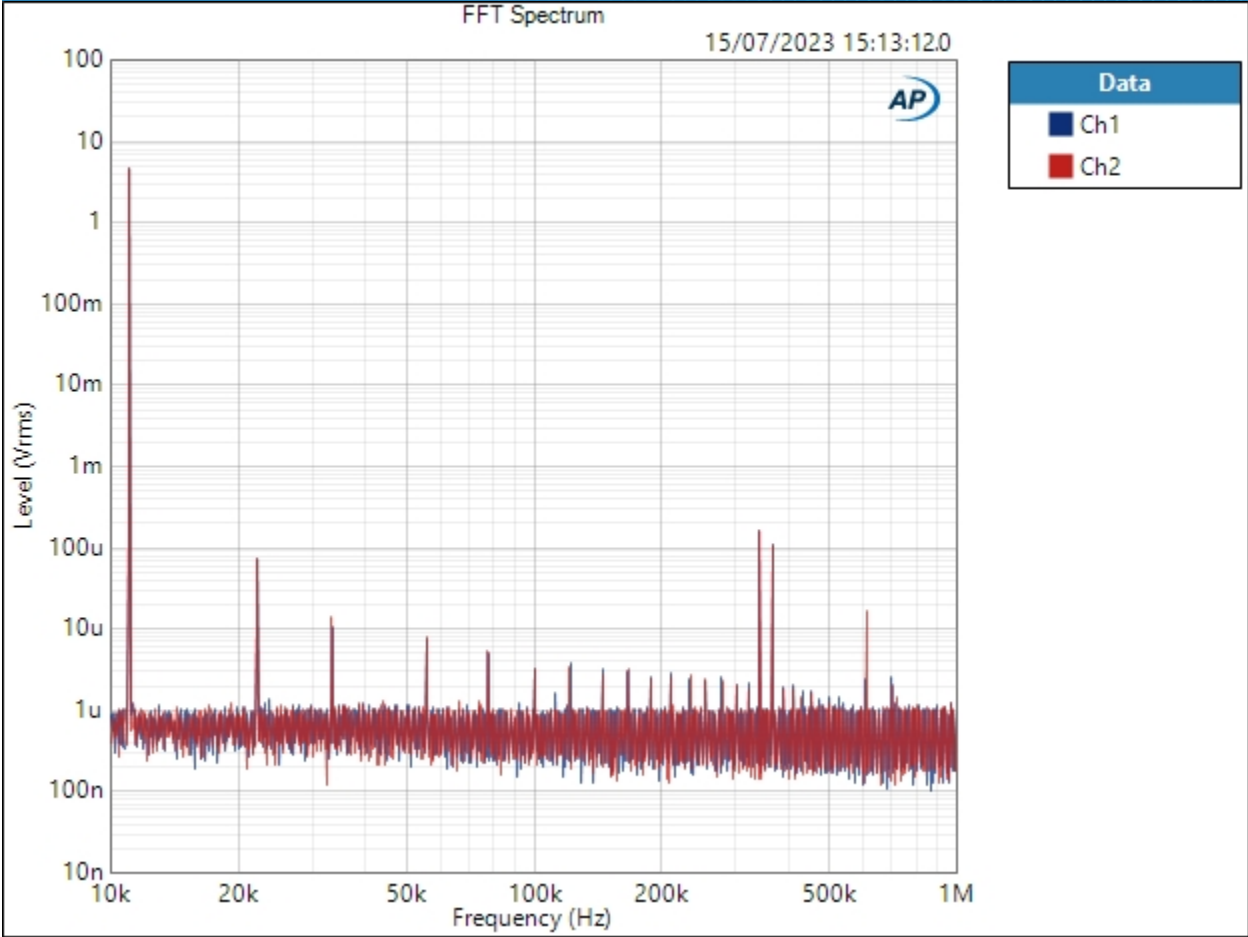
SIG 7 - Wideband and Intersample Overs : Intersample Overs (+1dB)

Waveform: Intersample Overs +1dB.wav  
Bit Exact: True  
Start Offset (sec): 0.000 s  
Secondary Source: None  
Measured 1: 15/07/2023 15:13:12  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 1.000 s  
Input Bandwidth: Use Signal Path  
FFT Length: 262144  
Averaging: Power  
Averages: 4  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 15:13:12.071)



Sequence Report AP



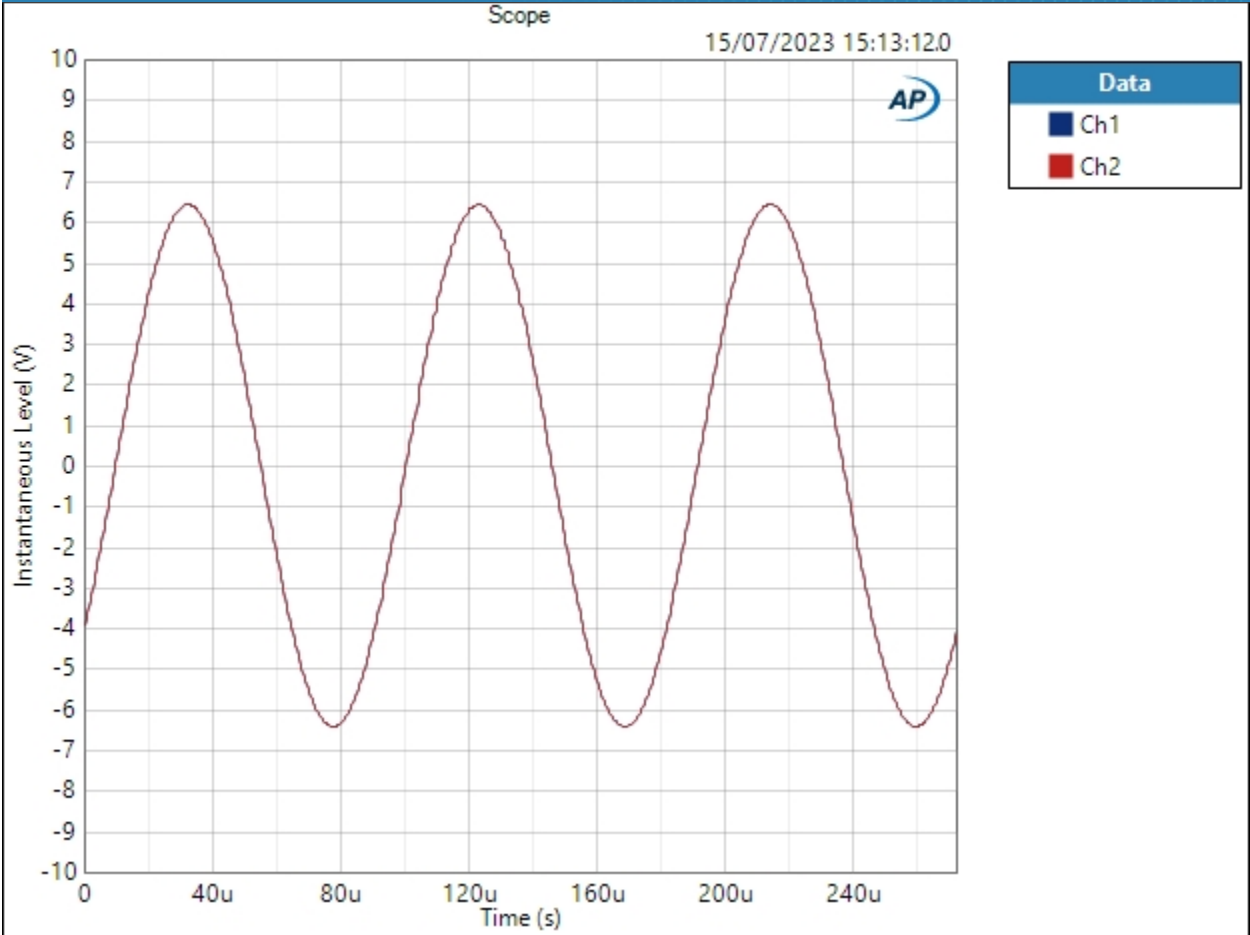
Result: ✔ PASSED

Scope (15/07/2023 15:13:12.071)





# Sequence Report



### Scope Parameters

Interpolated: On

Result: PASSED



## Sequence Report



### SIG 8 - Multitone : Signal Path Setup

Output Connector:	ASIO
Asio Device:	Ferrum USB Audio
Scaling Mode:	Digital
Output Sample Rate:	192.000 kHz
Output Latency:	Auto
Buffer Size:	2048
Clock Source:	Computer
Input 1:	Analog Balanced
Measure:	Auto
Channels:	Custom (2 Channels)
Ch1	Data from Ch1, Sensitivity = 0.00 dB, Gain = 0.00 dB
Ch2	Data from Ch2, Sensitivity = 0.00 dB, Gain = 0.00 dB
Input Bandwidth:	AC (<10 Hz) - 90k (192 kHz SR)
Input EQ:	None
Termination:	200 kohm
High Performance Sine Analyzer:	Enabled
Input 2:	None
Device Delay:	0.000 s
• References	
dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
Analog Input	
dBrA:	4.160 Vrms
dBrB:	4.160 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	3.000 dB
dB SPL1:	4.160 Vrms
dB SPL2:	4.063 Vrms
dB SPL1 Calibrator Level:	60.000 dB SPL
dB SPL2 Calibrator Level:	21.500 dB SPL



## Sequence Report



dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm
• DCX	
DCX is not detected.	
• Clocks	
Output Rate:	Track Output SR
Sync Out Level:	3.300 V
Sync Out Polarity:	Normal
Timebase Reference:	Internal
Jitter:	Disabled
• Triggers	
Source:	Off
Input Logic Level:	3.300 V
Edge:	Rising



## Sequence Report



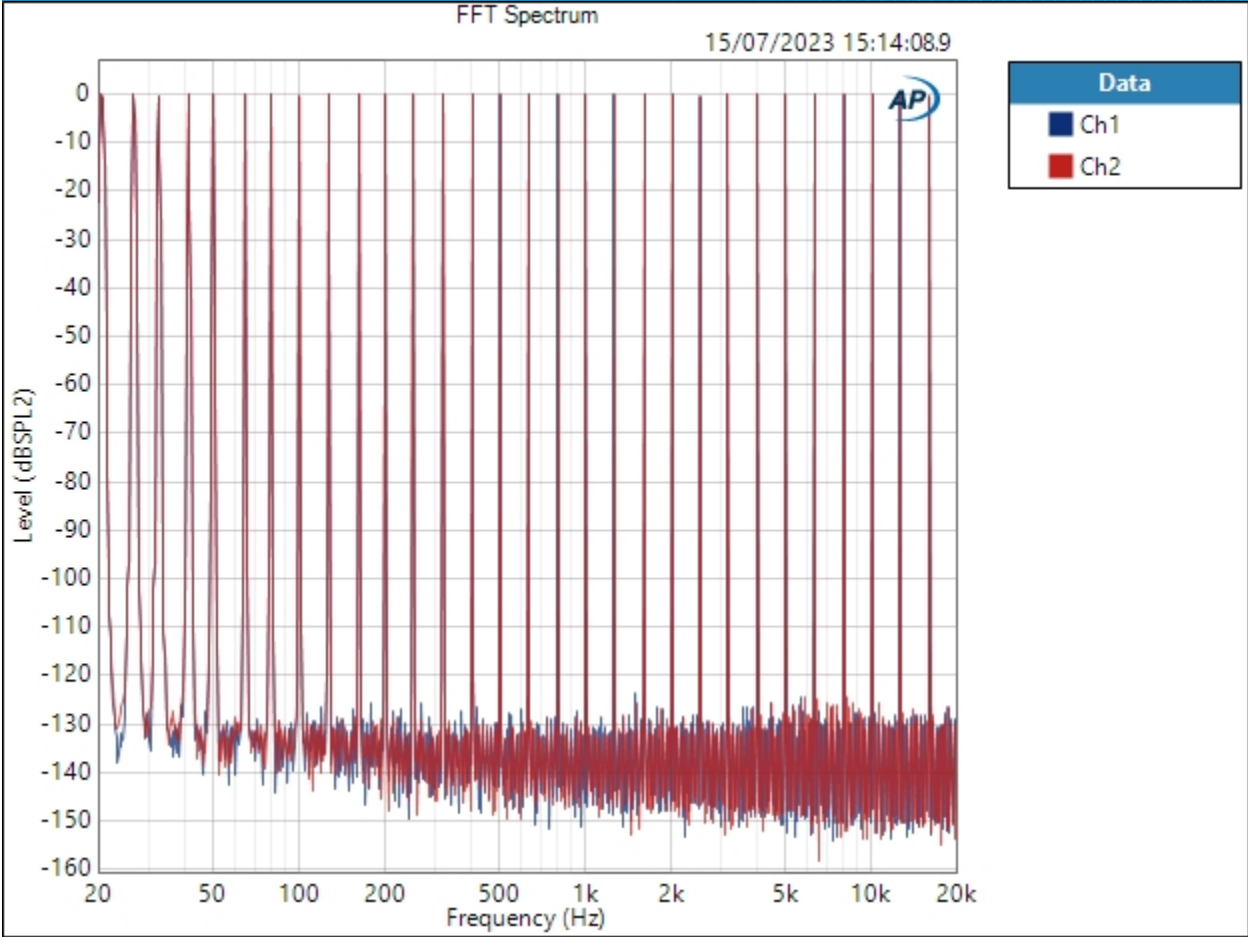
### SIG 8 - Multitone : 32 Tone Test

Waveform: APx555 Multitone 32 192 khz 24 bit.wav  
Bit Exact: True  
Start Offset (sec): 0.000 s  
Secondary Source: None  
Measured 1: 15/07/2023 15:14:08  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 250.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 1248000  
Averaging: Power  
Averages: 3  
Window: AP-Equiripple  
Record Acquisition: False  
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (15/07/2023 15:14:08.919)



# Sequence Report

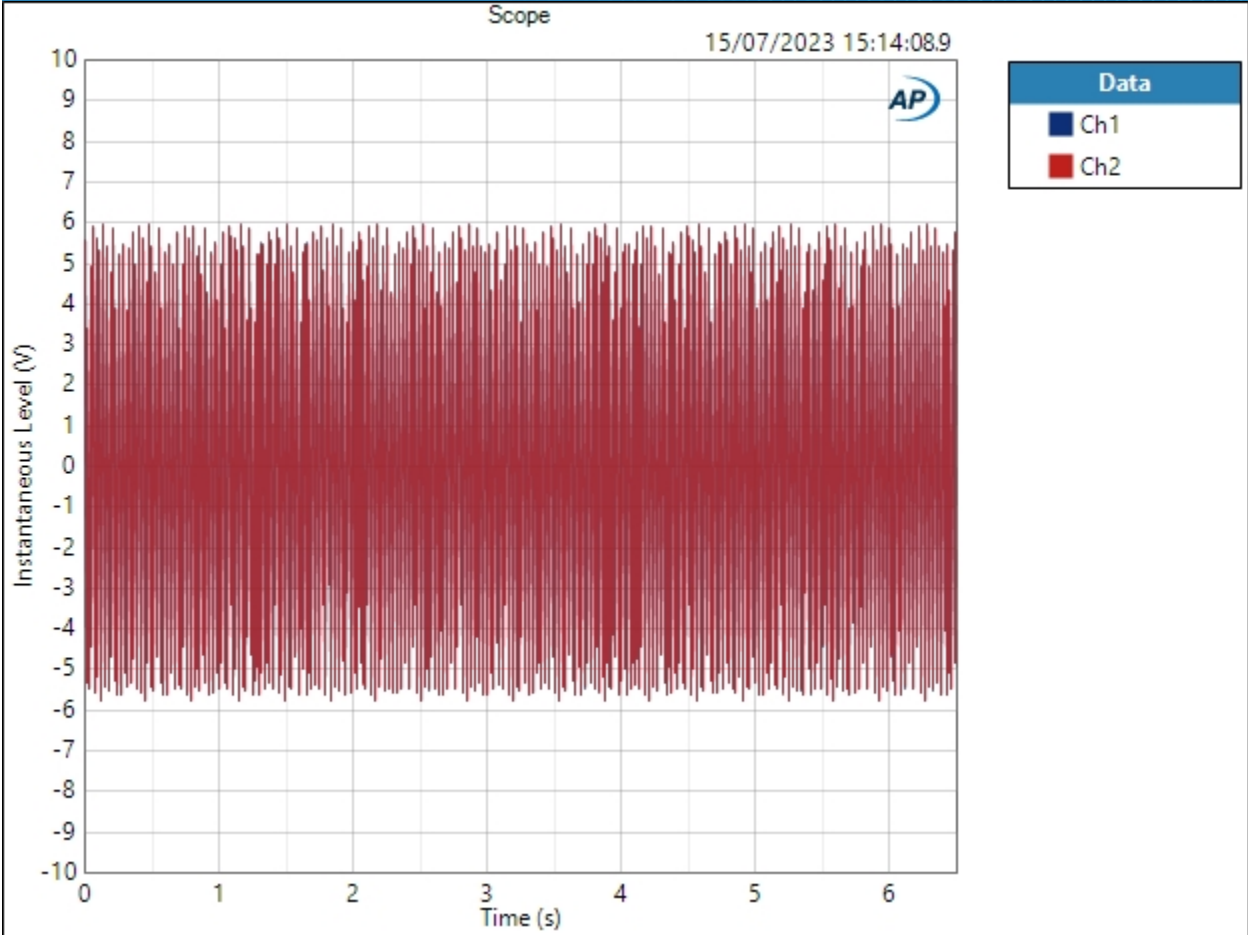


Result: PASSED

Scope (15/07/2023 15:14:08.919)



# Sequence Report AP



Scope Parameters

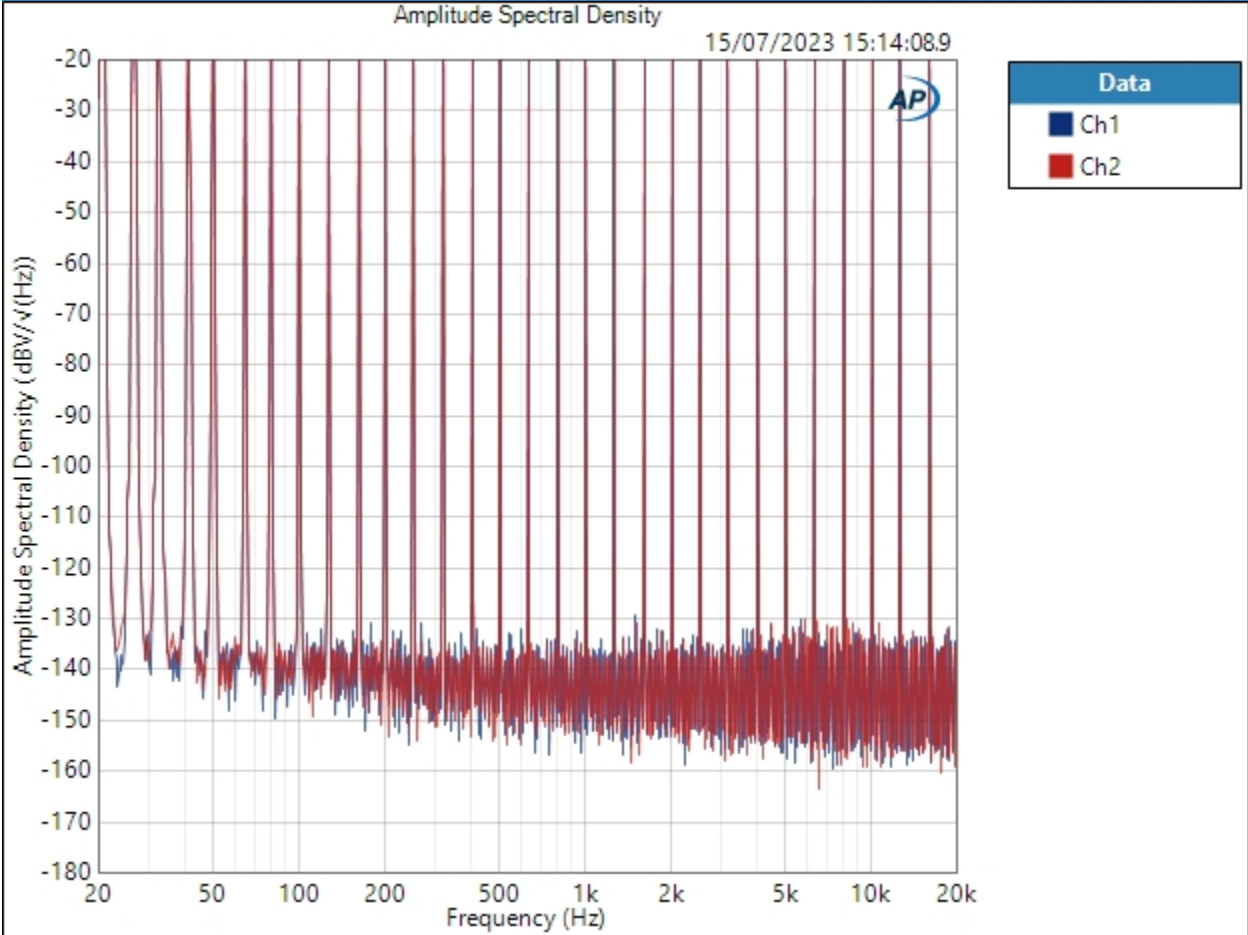
Interpolated: On

Result: ✔ PASSED

Amplitude Spectral Density (15/07/2023 15:14:08.919)



# Sequence Report

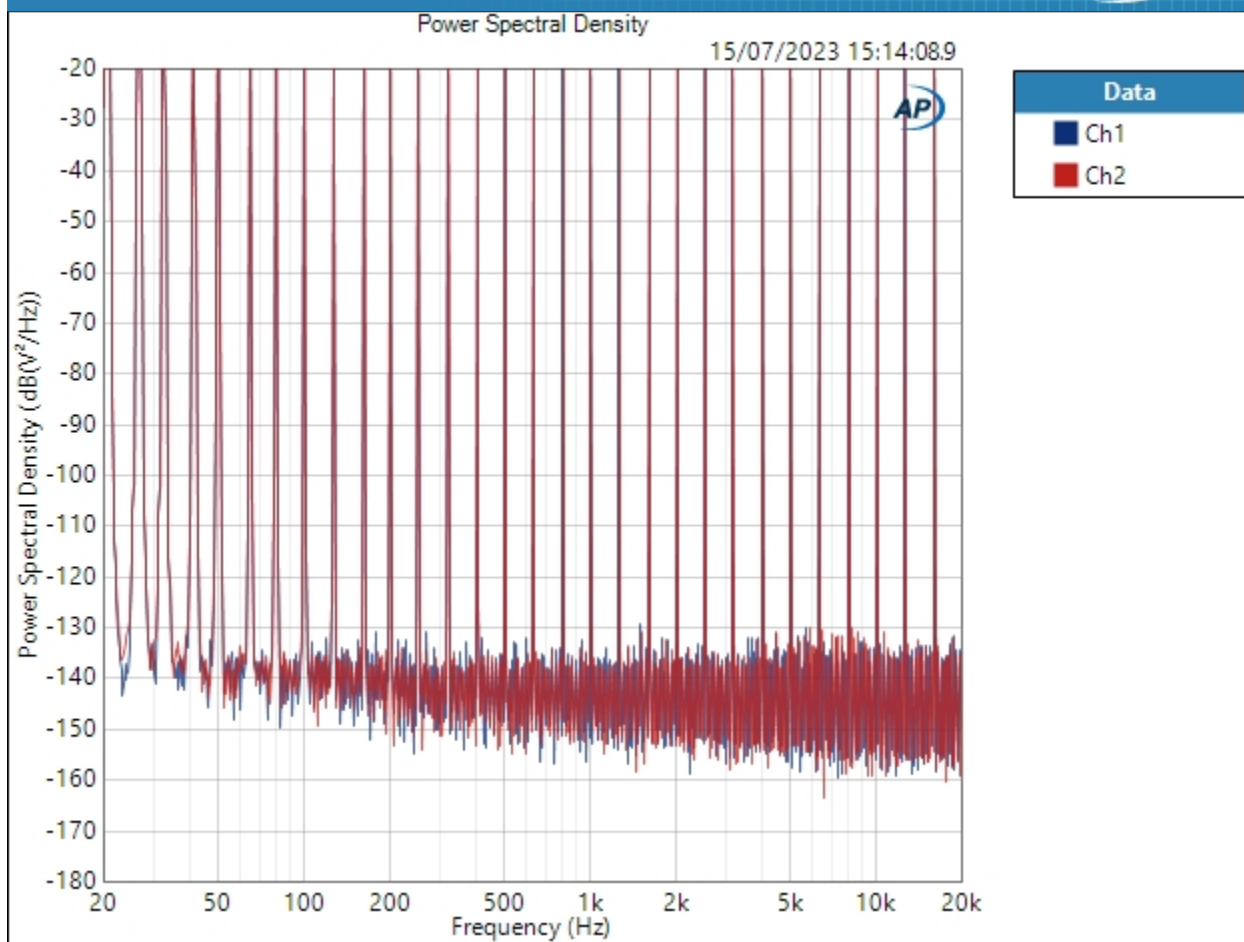


Result: ✔ PASSED

Power Spectral Density (15/07/2023 15:14:08.919)



## Sequence Report



Result: PASSED