

Notes:

This is a test of a representative sample. If you have measurements that differ significantly from these, first check your analyzer and setup carefully, and (ideally) see if you can replicate the results on another analyzer. If the odd results persist, contact info@schiiit.com so we can have a look.

Summary

300 Ohm Negative Gain

| | |
|---------------------------------|----------|
| Level and Gain | ✓ PASSED |
| DC Level | ✓ PASSED |
| Signal Analyzer | ✓ PASSED |
| Frequency Response | ✓ PASSED |
| Signal to Noise Ratio | ✓ PASSED |
| THD+N | ✓ PASSED |
| IMD Level Sweep (CCIF) | ✓ PASSED |
| IMD Frequency Sweep (CCIF) | ✓ PASSED |
| Crosstalk, One Channel Undriven | ✓ PASSED |
| Stepped Level Sweep | ✓ PASSED |

300 Ohm Low Gain

| | |
|---------------------------------|----------|
| Level and Gain | ✓ PASSED |
| DC Level | ✓ PASSED |
| Signal Analyzer | ✓ PASSED |
| Frequency Response | ✓ PASSED |
| Signal to Noise Ratio | ✓ PASSED |
| THD+N | ✓ PASSED |
| IMD Level Sweep (CCIF) | ✓ PASSED |
| IMD Frequency Sweep (CCIF) | ✓ PASSED |
| Crosstalk, One Channel Undriven | ✓ PASSED |
| Stepped Level Sweep | ✓ PASSED |

300 Ohm High Gain

| | |
|---------------------------------|----------|
| Level and Gain | ✓ PASSED |
| DC Level | ✓ PASSED |
| Signal Analyzer | ✓ PASSED |
| Frequency Response | ✓ PASSED |
| Signal to Noise Ratio | ✓ PASSED |
| THD+N | ✓ PASSED |
| IMD Level Sweep (CCIF) | ✓ PASSED |
| IMD Frequency Sweep (CCIF) | ✓ PASSED |
| Crosstalk, One Channel Undriven | ✓ PASSED |
| Stepped Level Sweep | ✓ PASSED |

32 Ohm Negative Gain

| | |
|------------------------------|----------|
| Level and Gain | ✓ PASSED |
| DC Level | ✓ PASSED |
| Signal Analyzer | ✓ PASSED |
| Frequency Response | ✓ PASSED |
| Signal to Noise Ratio | ✓ PASSED |
| THD+N | ✓ PASSED |
| IMD Level Sweep (CCIF) | ✓ PASSED |
| IMD Frequency Sweep (CCIF) | ✓ PASSED |
| Stepped Level Sweep | ✓ PASSED |

32 Ohm Low Gain

| | |
|------------------------------|----------|
| Level and Gain | ✓ PASSED |
| DC Level | ✓ PASSED |
| Signal Analyzer | ✓ PASSED |
| Frequency Response | ✓ PASSED |
| Signal to Noise Ratio | ✓ PASSED |
| THD+N | ✓ PASSED |
| IMD Level Sweep (CCIF) | ✓ PASSED |
| IMD Frequency Sweep (CCIF) | ✓ PASSED |
| Stepped Level Sweep | ✓ PASSED |


32 Ohm High Gain

| | |
|------------------------------|----------|
| Level and Gain | ✓ PASSED |
| DC Level | ✓ PASSED |
| Signal Analyzer | ✓ PASSED |
| Frequency Response | ✓ PASSED |
| Signal to Noise Ratio | ✓ PASSED |
| THD+N | ✓ PASSED |
| IMD Level Sweep (CCIF) | ✓ PASSED |
| IMD Frequency Sweep (CCIF) | ✓ PASSED |
| Stepped Level Sweep | ✓ PASSED |

Preamp

| | |
|---------------------------------|----------|
| Level and Gain | ✓ PASSED |
| DC Level | ✓ PASSED |
| Signal Analyzer | ✓ PASSED |
| Frequency Response | ✓ PASSED |
| Signal to Noise Ratio | ✓ PASSED |
| THD+N | ✓ PASSED |
| IMD Level Sweep (CCIF) | ✓ PASSED |
| IMD Frequency Sweep (CCIF) | ✓ PASSED |
| Crosstalk, One Channel Undriven | ✓ PASSED |
| Stepped Level Sweep | ✓ PASSED |

Sequence Result:

Sequence Result:  PASSED

APx Instrument

Instrument ID: 11571
Calibration Date: 3/23/2021
APx Version: 6.0.2.600.149330

300 Ohm Negative Gain : Signal Path Setup

| | |
|---------------------------------|------------------------------------|
| Output Connector: | Analog Unbalanced |
| Channels: | 2 |
| Generator Mode: | High Performance Sine Generator |
| Precision Tune: | Disabled |
| Source Impedance: | 20 ohm, 20 ohm |
| AG52 Generator Option: | Installed |
| Auto Range: | Enabled |
| Output EQ: | None |
| Input 1: | Analog Unbalanced |
| Input Bandwidth: | AC (<10 Hz) - 20 kHz (44.1 kHz SR) |
| Input EQ: | None |
| Channels: | 2 |
| Termination: | 300 ohm |
| High Performance Sine Analyzer: | Enabled |
| Input 2: | None |
| Device Delay: | 0.000 s |
| • References | |
| dBr G: | 100.0 mVrms |
| dBm (Output Power): | 600.0 ohm |
| W(watts) (Output Power): | 8.000 ohm |
| 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 |
| dB SPL1: | 10.00 mVrms |
| dB SPL2: | 10.00 mVrms |
| dB SPL1 Calibrator Level: | 94.000 dB SPL |
| dB SPL2 Calibrator Level: | 94.000 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

300 Ohm Negative Gain : Level and Gain

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.100 Vrms
 Frequency: 1.00000 kHz
 Low-pass Filter: Signal Path

RMS Level (10/31/2022 11:40:38.560 AM)

Ch1 422.3 mVrms
 Ch2 423.2 mVrms

300 Ohm Negative Gain : DC Level

Waveform: Sine
 Generator Level: 0.000 Vrms
 DC Offset: 0.000 V
 Frequency: 1.00000 kHz
 Delay Time: 100.0 ms
 Acquisition Time: 333.0 ms

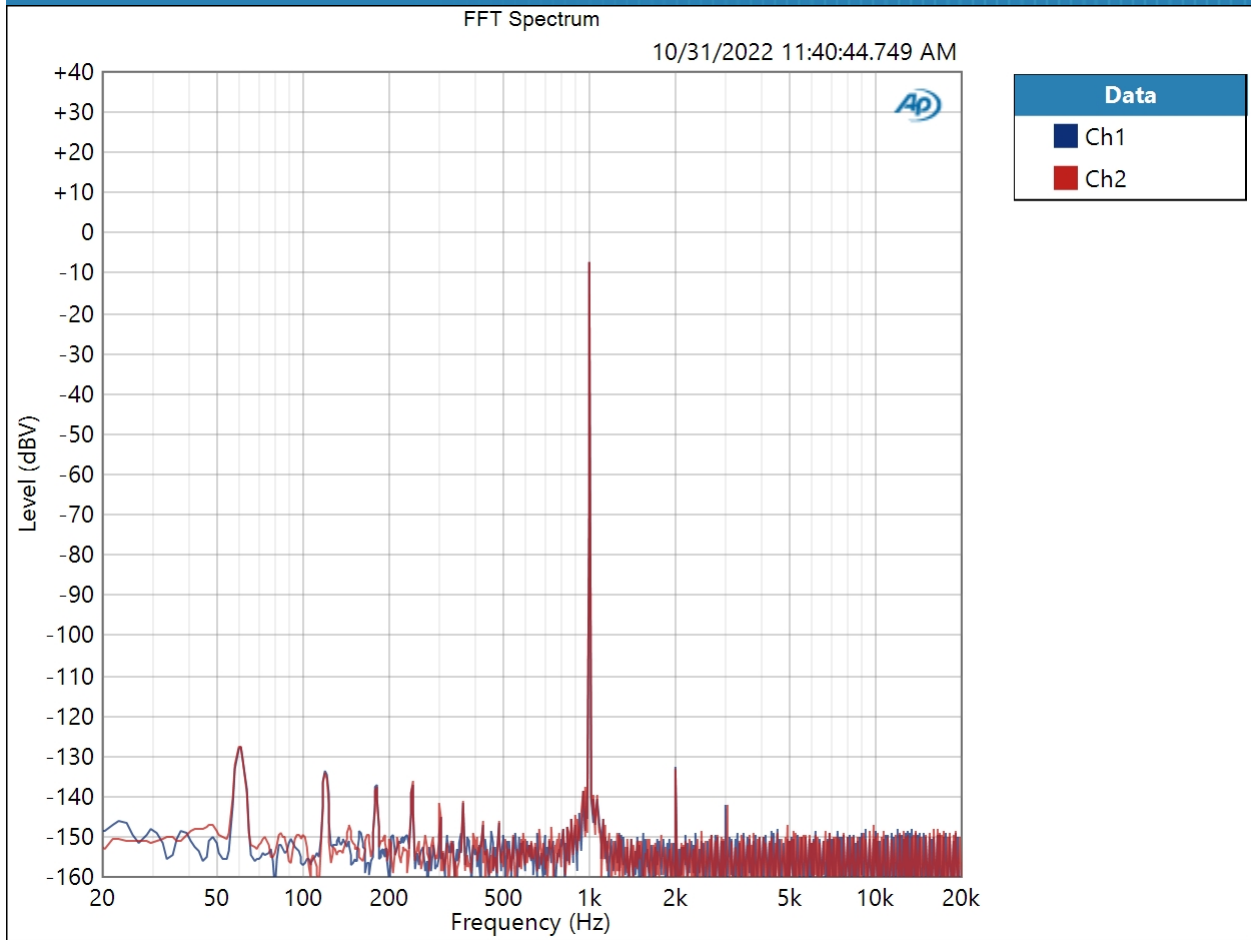
DC Level (10/31/2022 11:40:40.257 AM)

Ch1 -210.6 uV
 Ch2 -73.81 uV

300 Ohm Negative Gain : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.100 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/31/2022 11:40:44 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/31/2022 11:40:44.749 AM)

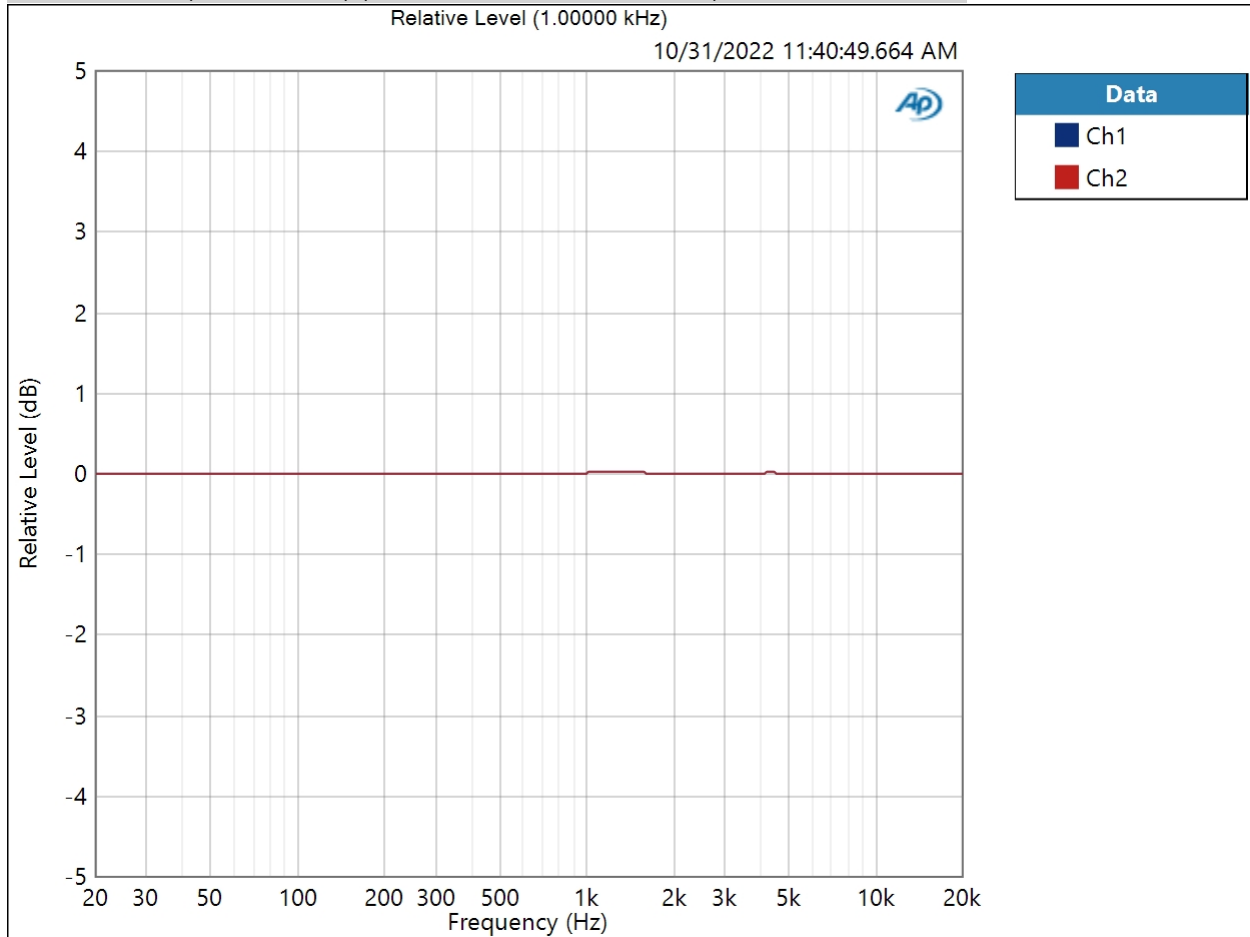


Result:  PASSED

300 Ohm Negative Gain : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.100 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 1.000 s
Secondary Source: None
Measured 1 10/31/2022 11:40:49 AM

Relative Level (1.00000 kHz) (10/31/2022 11:40:49.664 AM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference

Ref Frequency: 1.00000 kHz

Result:  PASSED

Deviation (20.0000 Hz - 20.0000 kHz) (10/31/2022 11:40:49.664 AM)

Ch1 ± 0.009 dB

Ch2 ± 0.008 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

300 Ohm Negative Gain : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 5.200 Vrms

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 (10/31/2022 11:40:52.691 AM)

Ch1 122.524 dB

Ch2 122.489 dB

300 Ohm Negative Gain : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 2.200 Vrms
 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 (10/31/2022 11:40:55.993 AM)

Ch1 -112.757 dB
 Ch2 -112.836 dB

THD Ratio (10/31/2022 11:40:55.993 AM)

Ch1 0.000131 %
 Ch2 0.000126 %

Noise Ratio (10/31/2022 11:40:55.993 AM)

Ch1 0.000188 %
 Ch2 0.000192 %

Distortion Product Ratio (10/31/2022 11:40:55.993 AM)

| 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 | -119.56 | -122.81 | -139.77 | -144.60 | -144.07 | -145.60 | -143.82 | -145.05 | -143.91 |
| Ch2 | -0.00 | -120.29 | -122.44 | -146.17 | -142.79 | -146.14 | -143.69 | -145.63 | -142.64 | -141.63 |

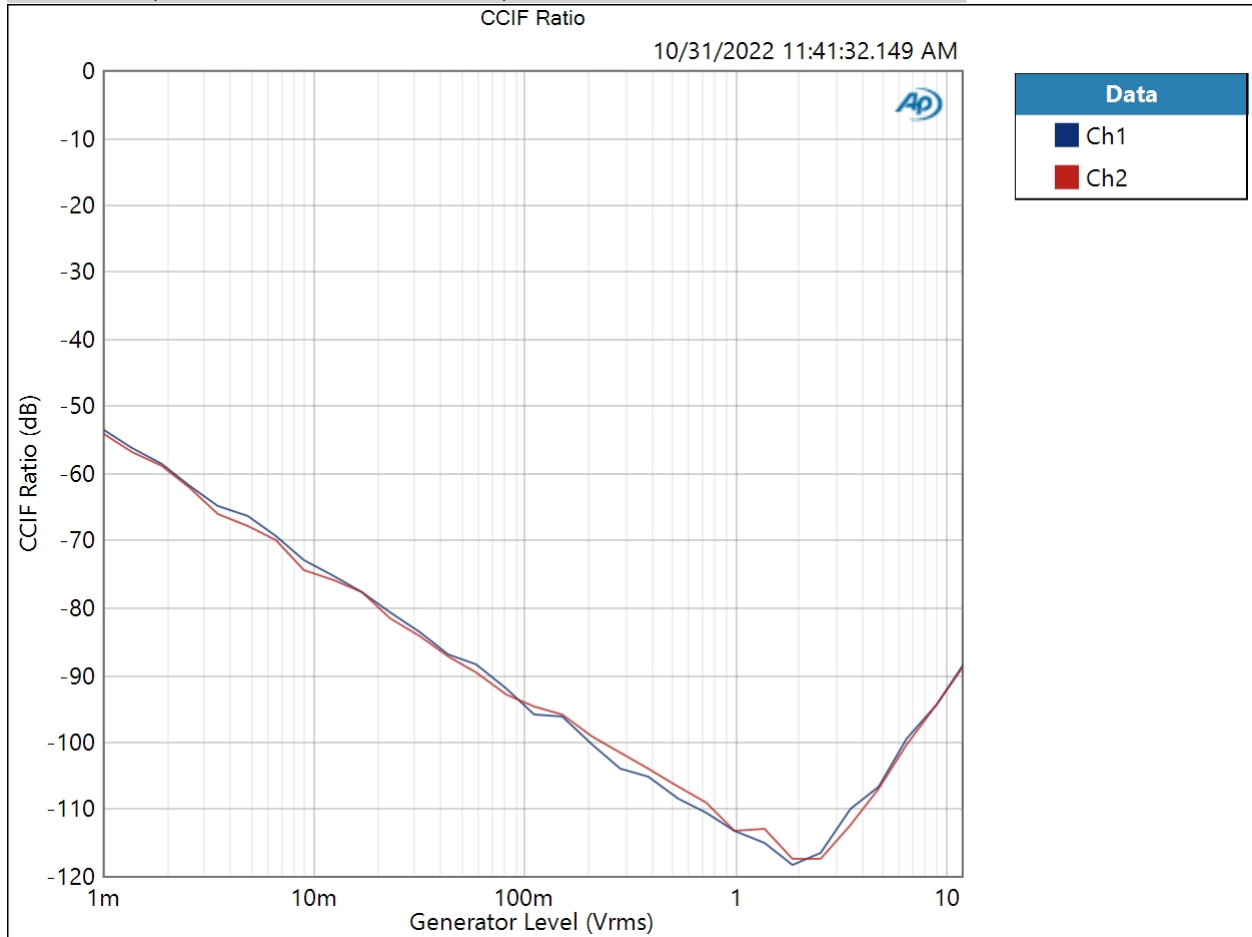
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

300 Ohm Negative Gain : IMD Level Sweep (CCIF)

IMD Type: CCIF
 Mean Frequency: 12.5000 kHz
 Diff Frequency: 80.0000 Hz
 IMD Split: False
 Start Level: 1.000 mVrms
 Stop Level: 12.00 Vrms
 Step Type: Logarithmic
 Number of Points: 31
 Mode: d2+d3
 Measured 1 10/31/2022 11:41:32 AM

CCIF Ratio (10/31/2022 11:41:32.149 AM)



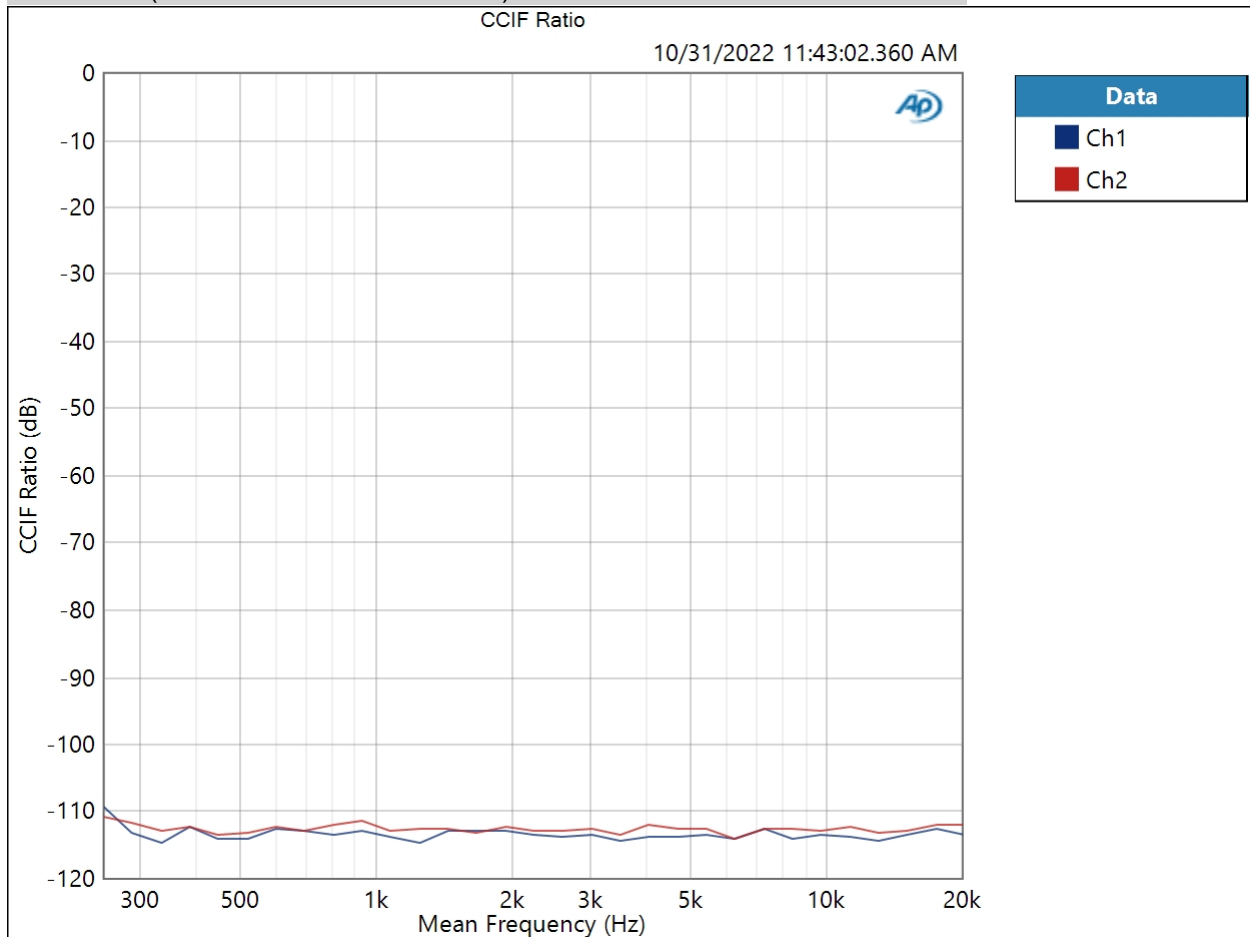
Result: PASSED

10/31/2022 1:09 PM

300 Ohm Negative Gain : IMD Frequency Sweep (CCIF)

Generator Level: 1.100 Vrms
 DC Offset: 0.000 V
 Sweep Frequency: Mean Frequency
 Diff Frequency: 80.0000 Hz
 IMD Split: False
 Start Frequency: 20.0000 kHz
 Stop Frequency: 250.000 Hz
 Step Type: Logarithmic
 Number of Points: 31
 Mode: d2+d3
 Measured 1 10/31/2022 11:43:02 AM

CCIF Ratio (10/31/2022 11:43:02.360 AM)



Result:  PASSED

300 Ohm Negative Gain : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 Vrms

Frequency: 1.00000 kHz

Crosstalk (10/31/2022 11:41:45.316 AM)

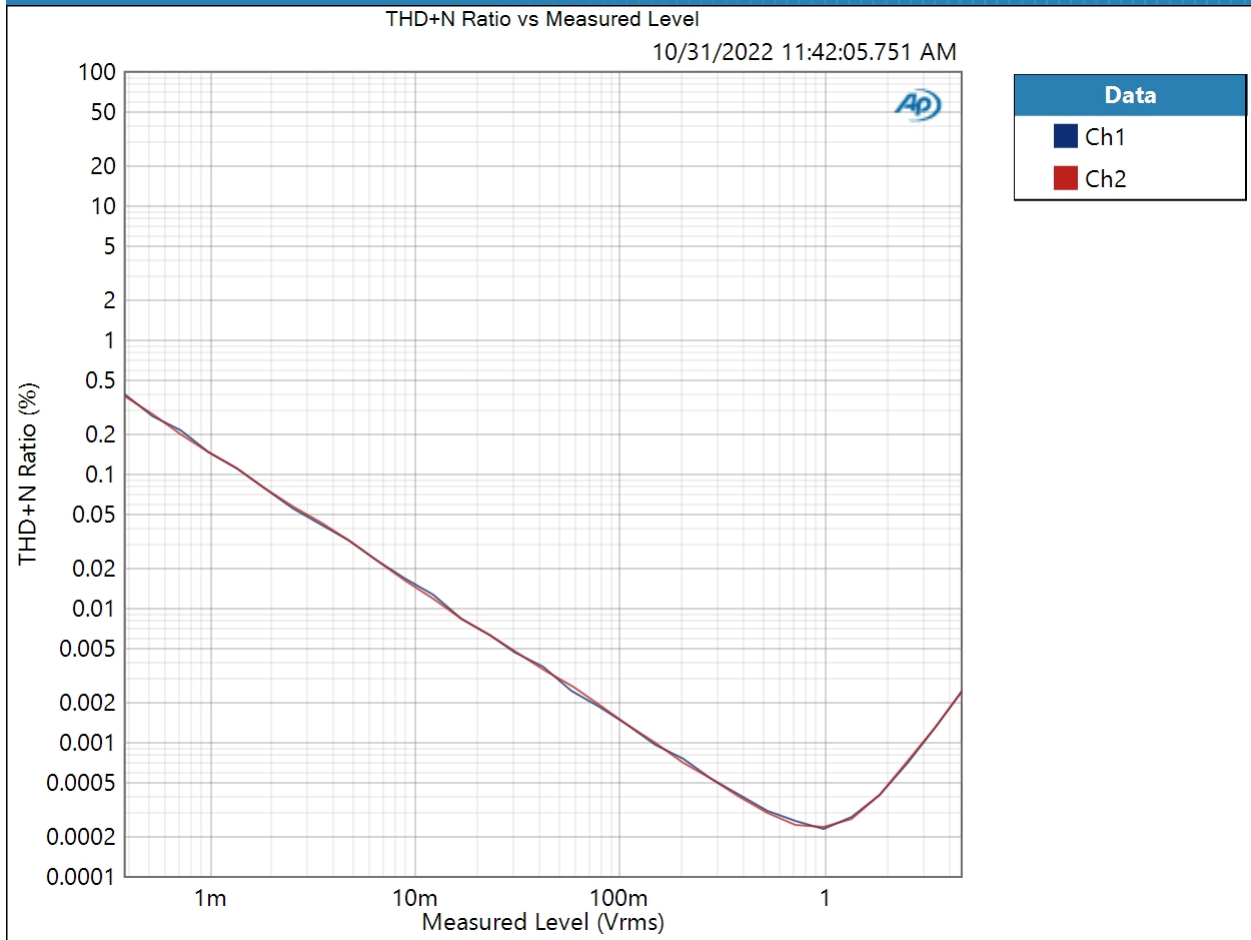
Ch1 88.345 dB

Ch2 88.572 dB

300 Ohm Negative Gain : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 12.00 Vrms
Step Type: Logarithmic
Number of Points: 31
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 10/31/2022 11:42:05 AM

THD+N Ratio vs Measured Level (10/31/2022 11:42:05.751 AM)



Result: PASSED

300 Ohm Low Gain : Signal Path Setup

| | |
|---------------------------------|------------------------------------|
| Output Connector: | Analog Unbalanced |
| Channels: | 2 |
| Generator Mode: | High Performance Sine Generator |
| Precision Tune: | Disabled |
| Source Impedance: | 20 ohm, 20 ohm |
| AG52 Generator Option: | Installed |
| Auto Range: | Enabled |
| Output EQ: | None |
| Input 1: | Analog Unbalanced |
| Input Bandwidth: | AC (<10 Hz) - 20 kHz (44.1 kHz SR) |
| Input EQ: | None |
| Channels: | 2 |
| Termination: | 300 ohm |
| High Performance Sine Analyzer: | Enabled |
| Input 2: | None |
| Device Delay: | 0.000 s |
| • References | |
| dBr G: | 100.0 mVrms |
| dBm (Output Power): | 600.0 ohm |
| W(watts) (Output Power): | 8.000 ohm |
| 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 |
| dB SPL1: | 10.00 mVrms |
| dB SPL2: | 10.00 mVrms |
| dB SPL1 Calibrator Level: | 94.000 dB SPL |
| dB SPL2 Calibrator Level: | 94.000 dB SPL |
| dBm (Input Power): | 600.0 ohm |
| W(watts) (Input Power): | 8.000 ohm |

• DCX

DCX is not detected.

• Clocks

10/31/2022 1:09 PM

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

300 Ohm Low Gain : Level and Gain

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.100 Vrms
 Frequency: 1.00000 kHz
 Low-pass Filter: Signal Path

RMS Level (10/31/2022 11:43:32.876 AM)

Ch1 0.998 Vrms
 Ch2 0.998 Vrms

300 Ohm Low Gain : DC Level

Waveform: Sine
 Generator Level: 0.000 Vrms
 DC Offset: 0.000 V
 Frequency: 1.00000 kHz
 Delay Time: 100.0 ms
 Acquisition Time: 333.0 ms

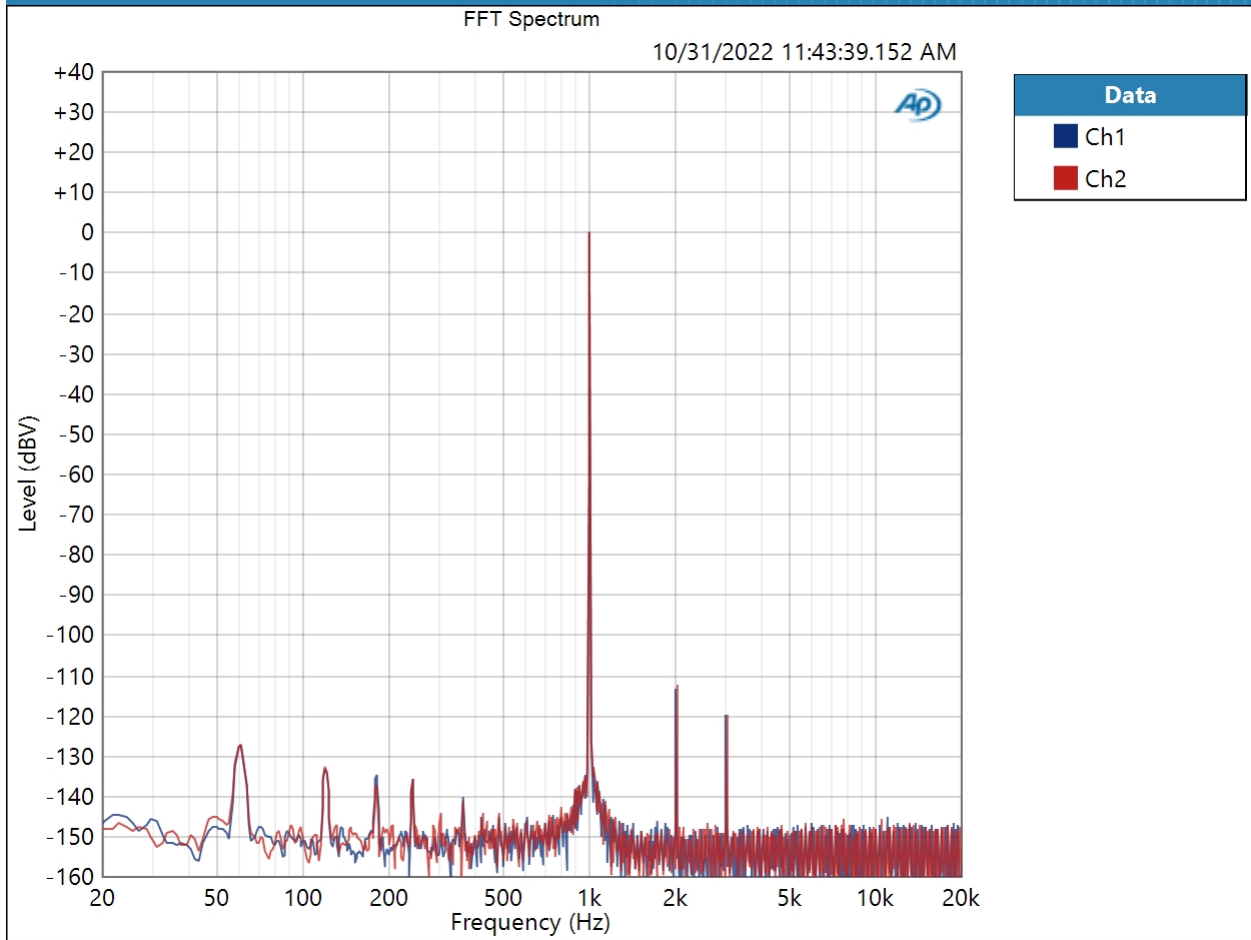
DC Level (10/31/2022 11:43:34.559 AM)

Ch1 -53.14 uV
 Ch2 -654.8 uV

300 Ohm Low Gain : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.100 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/31/2022 11:43:39 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/31/2022 11:43:39.152 AM)

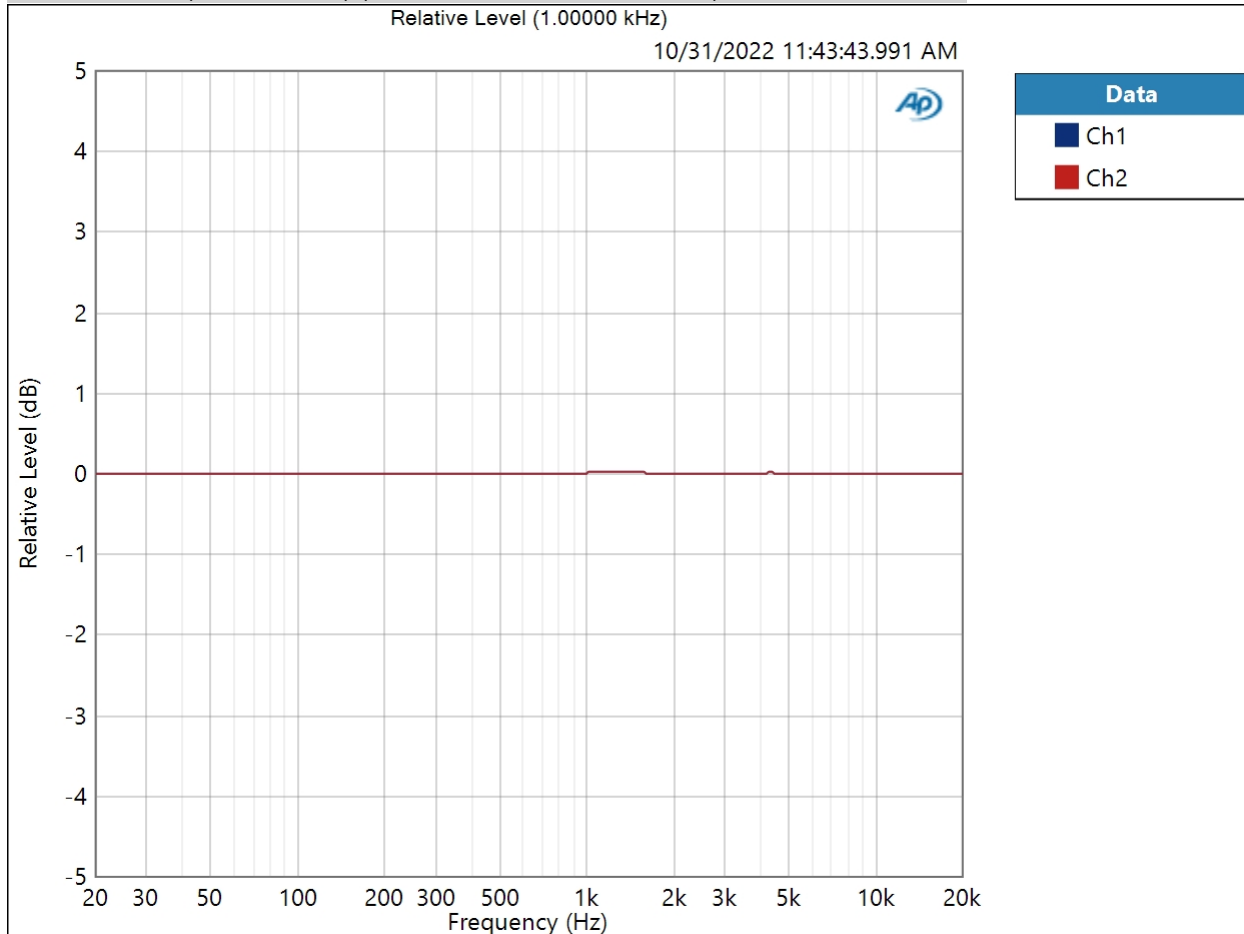


Result: PASSED

300 Ohm Low Gain : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.000 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 1.000 s
Secondary Source: None
Measured 1 10/31/2022 11:43:43 AM

Relative Level (1.00000 kHz) (10/31/2022 11:43:43.991 AM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference

Ref Frequency: 1.00000 kHz

Result:  PASSED

Deviation (20.0000 Hz - 20.0000 kHz) (10/31/2022 11:43:43.991 AM)

Ch1 ± 0.010 dB

Ch2 ± 0.009 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

300 Ohm Low Gain : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 2.200 Vrms

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 (10/31/2022 11:43:46.956 AM)

Ch1 121.565 dB

Ch2 121.526 dB

300 Ohm Low Gain : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.100 Vrms
 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 (10/31/2022 11:43:50.350 AM)

Ch1 -110.283 dB
 Ch2 -109.703 dB

THD Ratio (10/31/2022 11:43:50.350 AM)

Ch1 0.000241 %
 Ch2 0.000272 %

Noise Ratio (10/31/2022 11:43:50.350 AM)

Ch1 0.000188 %
 Ch2 0.000187 %

Distortion Product Ratio (10/31/2022 11:43:50.350 AM)

| 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 | -113.29 | -119.83 | -145.16 | -144.52 | -142.66 | -147.45 | -141.65 | -144.76 | -144.62 |
| Ch2 | -0.00 | -112.14 | -119.11 | -142.97 | -141.92 | -142.77 | -146.47 | -145.45 | -142.72 | -141.41 |

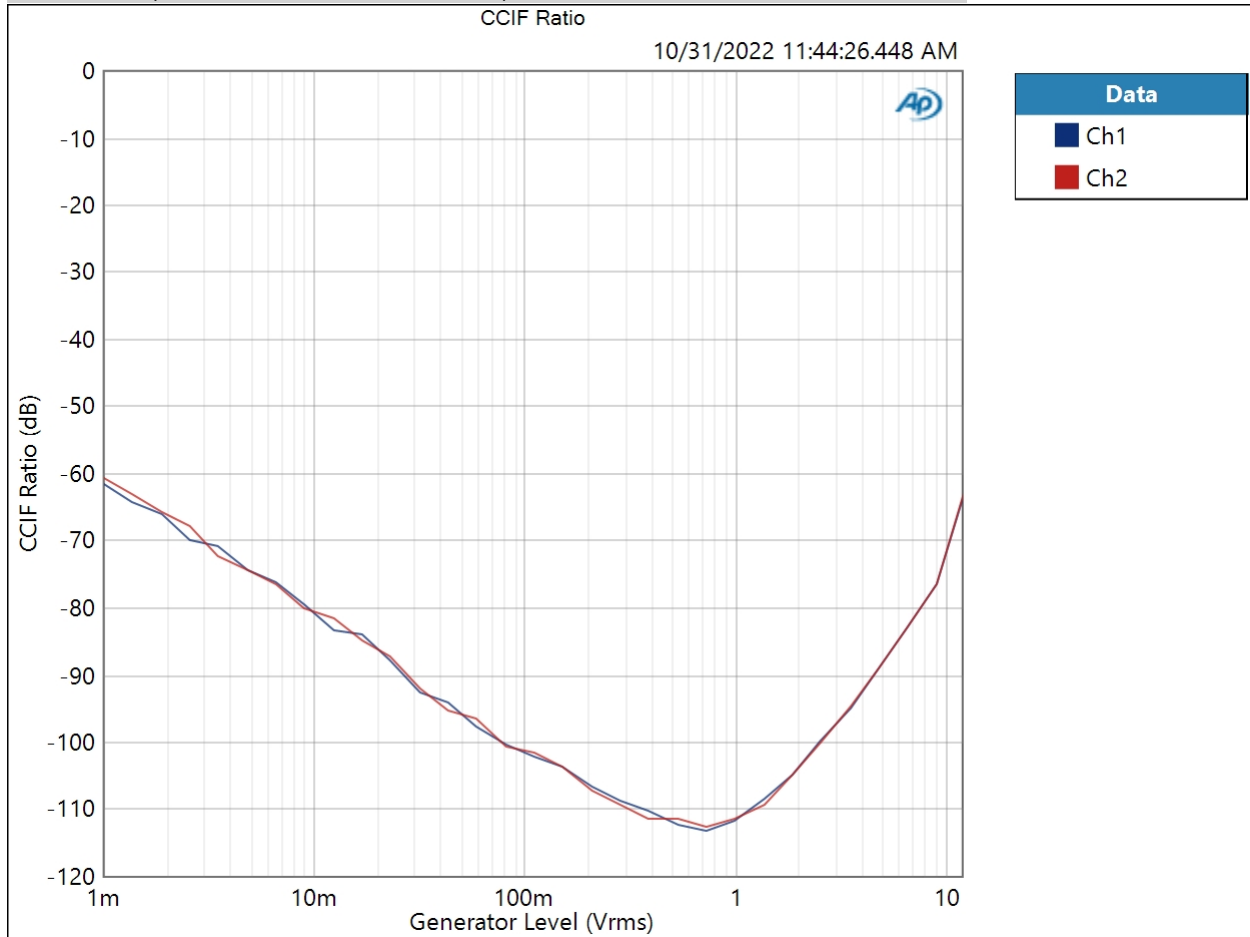
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

300 Ohm Low Gain : IMD Level Sweep (CCIF)

IMD Type: CCIF
Mean Frequency: 12.5000 kHz
Diff Frequency: 80.0000 Hz
IMD Split: False
Start Level: 1.000 mVrms
Stop Level: 12.00 Vrms
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 10/31/2022 11:44:26 AM

CCIF Ratio (10/31/2022 11:44:26.448 AM)



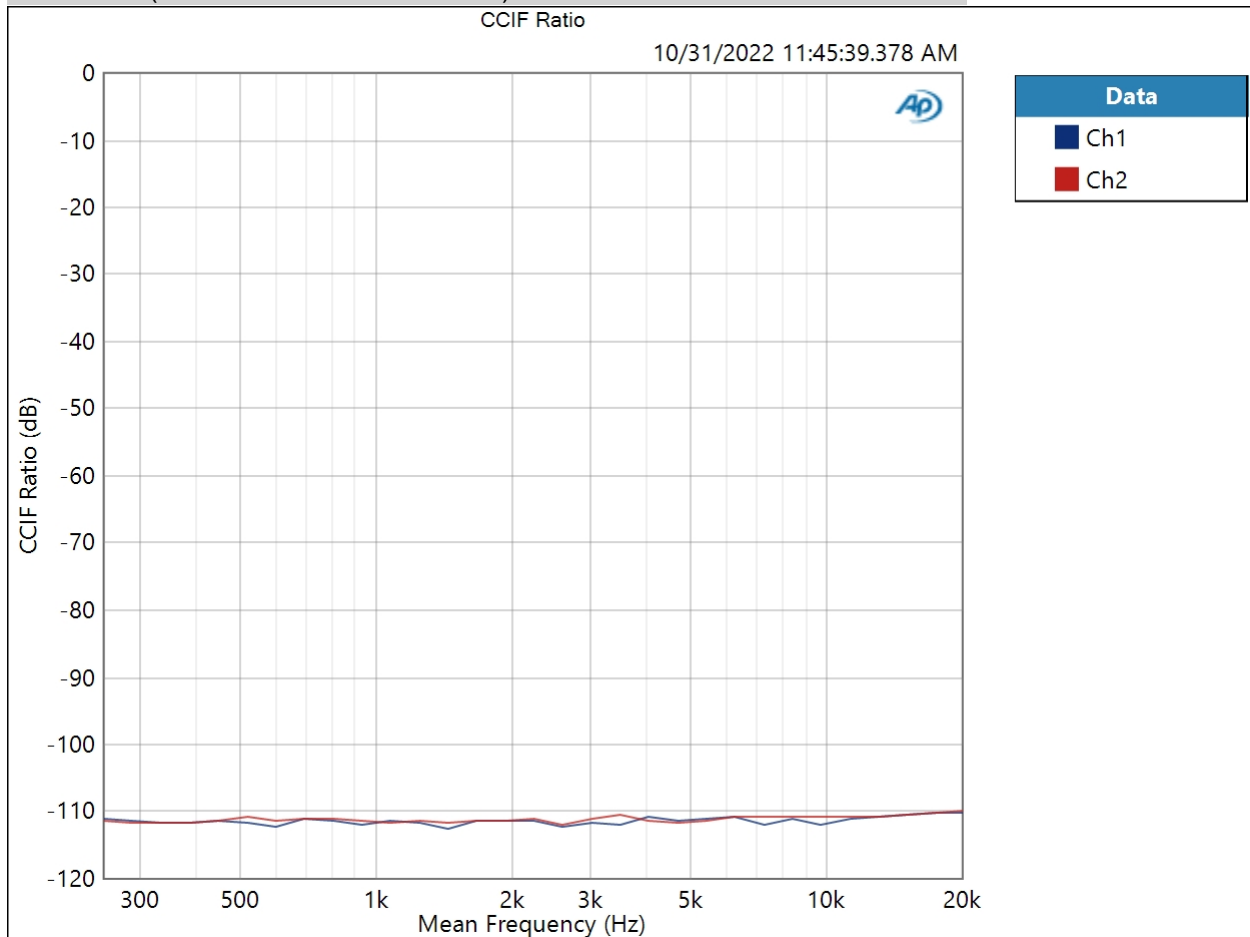
Result: PASSED

10/31/2022 1:09 PM

300 Ohm Low Gain : IMD Frequency Sweep (CCIF)

Generator Level: 1.100 Vrms
DC Offset: 0.000 V
Sweep Frequency: Mean Frequency
Diff Frequency: 80.0000 Hz
IMD Split: False
Start Frequency: 20.0000 kHz
Stop Frequency: 250.000 Hz
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 10/31/2022 11:45:39 AM

CCIF Ratio (10/31/2022 11:45:39.378 AM)



Result:  PASSED

300 Ohm Low Gain : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 Vrms

Frequency: 1.00000 kHz

Crosstalk (10/31/2022 11:44:39.428 AM)

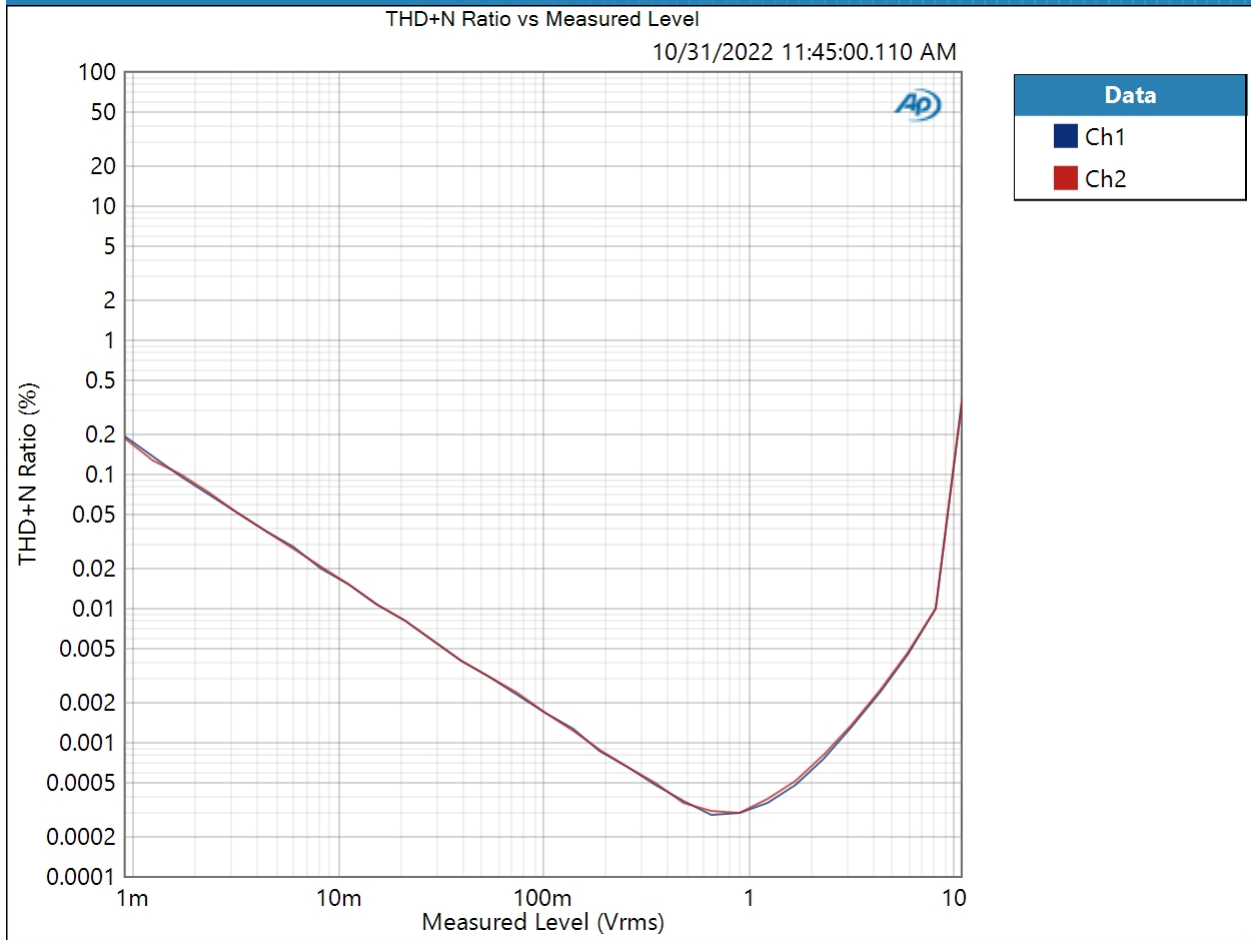
Ch1 89.795 dB

Ch2 90.996 dB

300 Ohm Low Gain : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 12.00 Vrms
Step Type: Logarithmic
Number of Points: 31
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 10/31/2022 11:45:00 AM

THD+N Ratio vs Measured Level (10/31/2022 11:45:00.110 AM)



Result: PASSED

300 Ohm High Gain : Signal Path Setup

| | |
|---------------------------------|------------------------------------|
| Output Connector: | Analog Unbalanced |
| Channels: | 2 |
| Generator Mode: | High Performance Sine Generator |
| Precision Tune: | Disabled |
| Source Impedance: | 20 ohm, 20 ohm |
| AG52 Generator Option: | Installed |
| Auto Range: | Enabled |
| Output EQ: | None |
| Input 1: | Analog Unbalanced |
| Input Bandwidth: | AC (<10 Hz) - 20 kHz (44.1 kHz SR) |
| Input EQ: | None |
| Channels: | 2 |
| Termination: | 300 ohm |
| High Performance Sine Analyzer: | Enabled |
| Input 2: | None |
| Device Delay: | 0.000 s |
| • References | |
| dBr G: | 100.0 mVrms |
| dBm (Output Power): | 600.0 ohm |
| W(watts) (Output Power): | 8.000 ohm |
| 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 |
| dB SPL1: | 10.00 mVrms |
| dB SPL2: | 10.00 mVrms |
| dB SPL1 Calibrator Level: | 94.000 dB SPL |
| dB SPL2 Calibrator Level: | 94.000 dB SPL |
| dBm (Input Power): | 600.0 ohm |
| W(watts) (Input Power): | 8.000 ohm |

• DCX

DCX is not detected.

• Clocks

10/31/2022 1:09 PM

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

300 Ohm High Gain : Level and Gain

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 350.0 mVrms
 Frequency: 1.00000 kHz
 Low-pass Filter: Signal Path

RMS Level (10/31/2022 11:46:55.085 AM)

Ch1 2.004 Vrms
 Ch2 2.006 Vrms

300 Ohm High Gain : DC Level

Waveform: Sine
 Generator Level: 0.000 Vrms
 DC Offset: 0.000 V
 Frequency: 1.00000 kHz
 Delay Time: 100.0 ms
 Acquisition Time: 333.0 ms

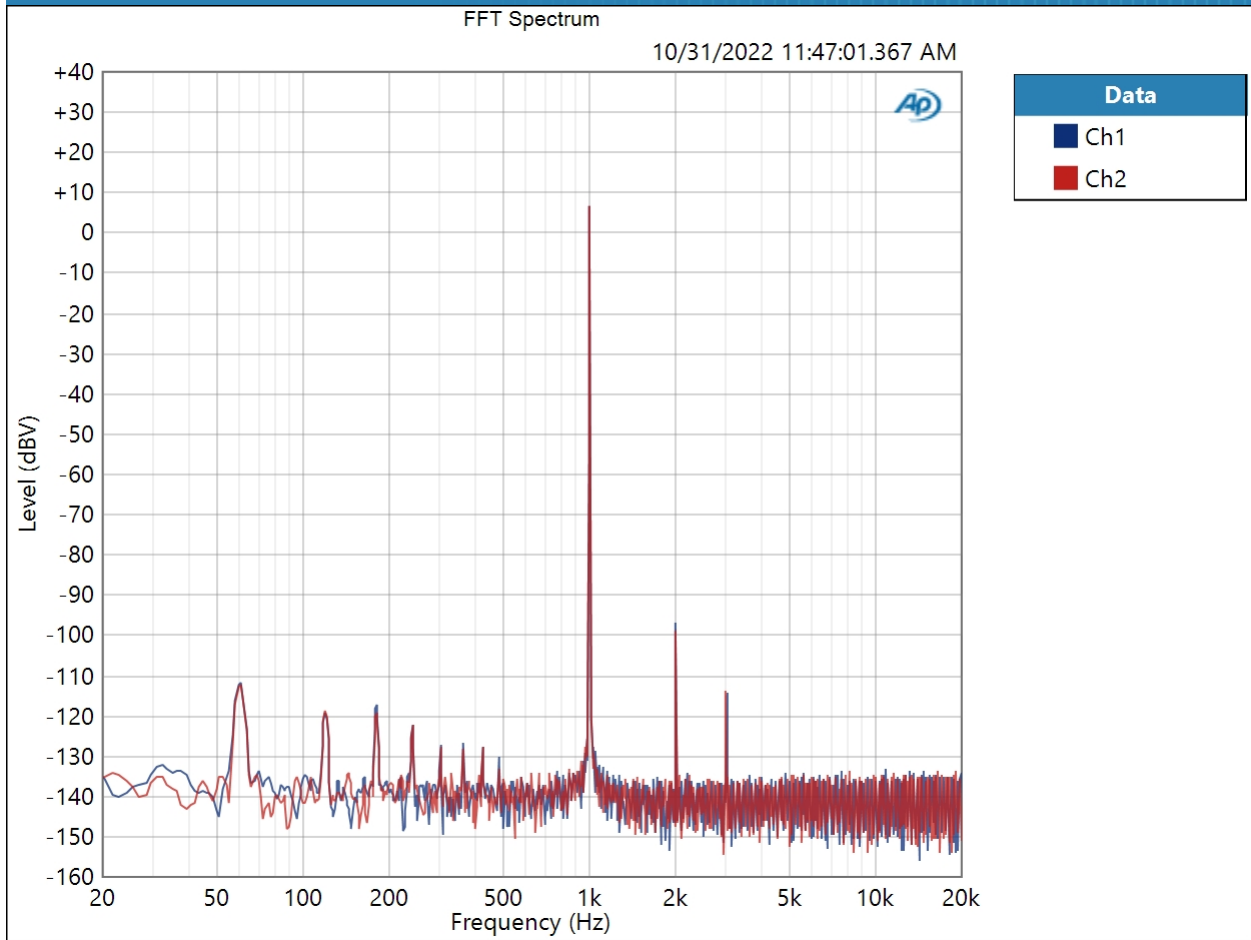
DC Level (10/31/2022 11:46:56.793 AM)

Ch1 -1.546 mV
 Ch2 -3.707 mV

300 Ohm High Gain : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 350.0 mVrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/31/2022 11:47:01 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/31/2022 11:47:01.367 AM)

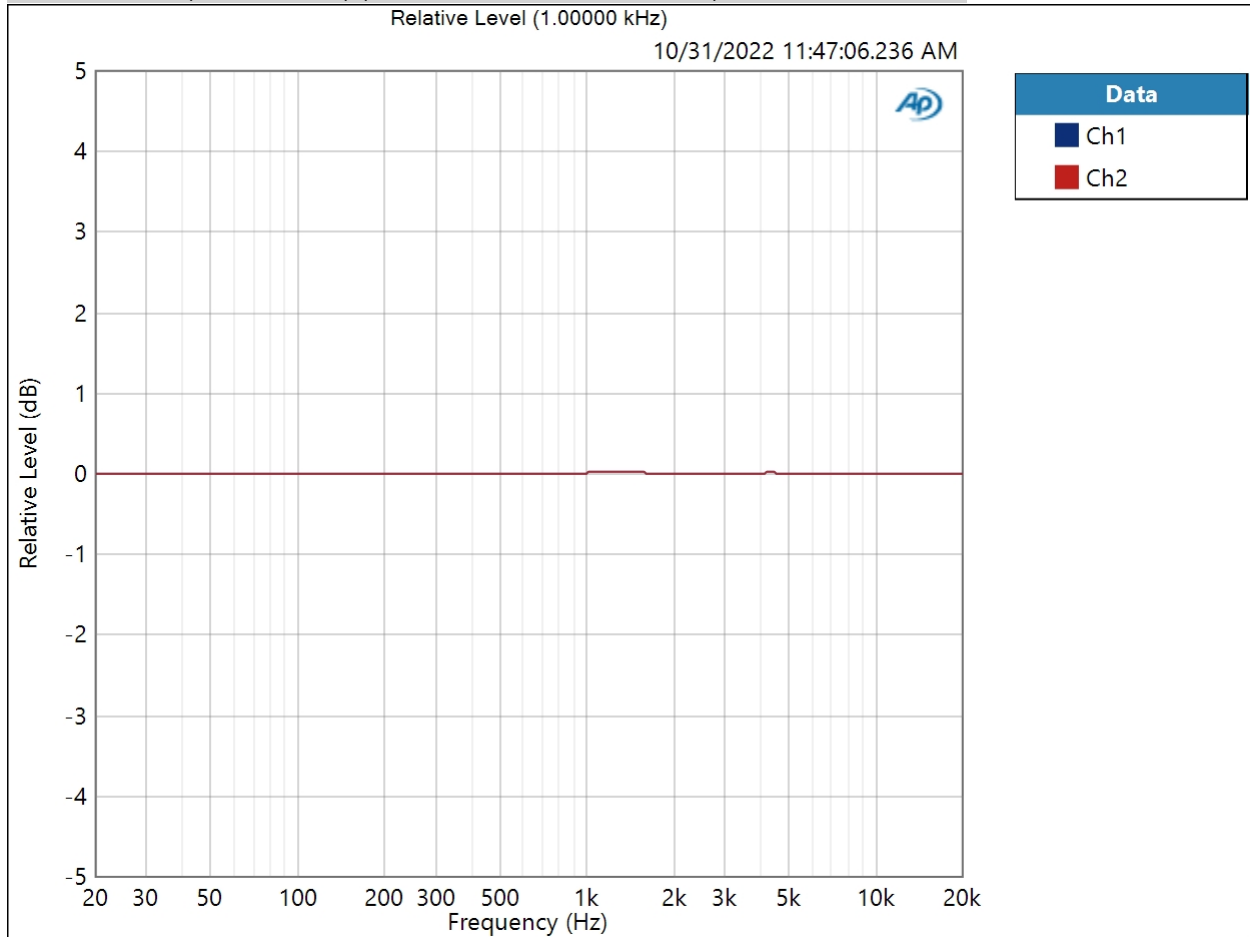


Result: PASSED

300 Ohm High Gain : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 350.0 mVrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 1.000 s
Secondary Source: None
Measured 1 10/31/2022 11:47:06 AM

Relative Level (1.00000 kHz) (10/31/2022 11:47:06.236 AM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference

Ref Frequency: 1.00000 kHz

Result:  PASSED

Deviation (20.0000 Hz - 20.0000 kHz) (10/31/2022 11:47:06.236 AM)

Ch1 ± 0.010 dB

Ch2 ± 0.009 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

300 Ohm High Gain : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 350.0 mVrms

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 (10/31/2022 11:47:09.167 AM)

Ch1 110.758 dB

Ch2 110.831 dB

300 Ohm High Gain : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 350.0 mVrms
 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 (10/31/2022 11:47:12.587 AM)

Ch1 -101.783 dB
 Ch2 -103.001 dB

THD Ratio (10/31/2022 11:47:12.587 AM)

Ch1 0.000716 %
 Ch2 0.000587 %

Noise Ratio (10/31/2022 11:47:12.587 AM)

Ch1 0.000388 %
 Ch2 0.000386 %

Distortion Product Ratio (10/31/2022 11:47:12.587 AM)

| 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 | -103.03 | -118.81 | -136.02 | -140.27 | -142.15 | -141.84 | -141.99 | -137.77 | -142.74 |
| Ch2 | -0.00 | -104.77 | -120.72 | -138.33 | -138.32 | -137.29 | -139.23 | -136.58 | -139.23 | -136.83 |

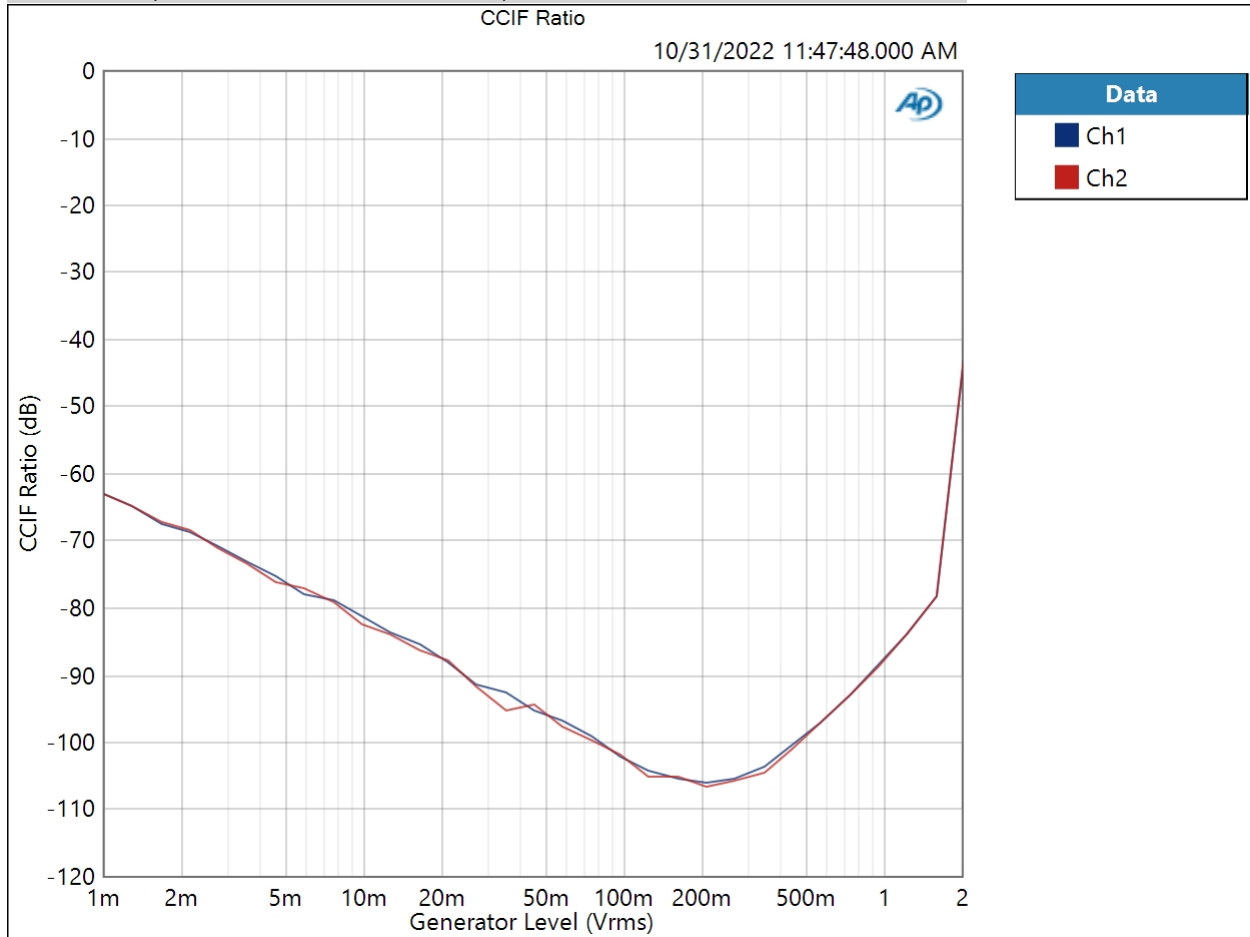
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

300 Ohm High Gain : IMD Level Sweep (CCIF)

IMD Type: CCIF
Mean Frequency: 12.5000 kHz
Diff Frequency: 80.0000 Hz
IMD Split: False
Start Level: 1.000 mVrms
Stop Level: 2.000 Vrms
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 10/31/2022 11:47:48 AM

CCIF Ratio (10/31/2022 11:47:48.000 AM)



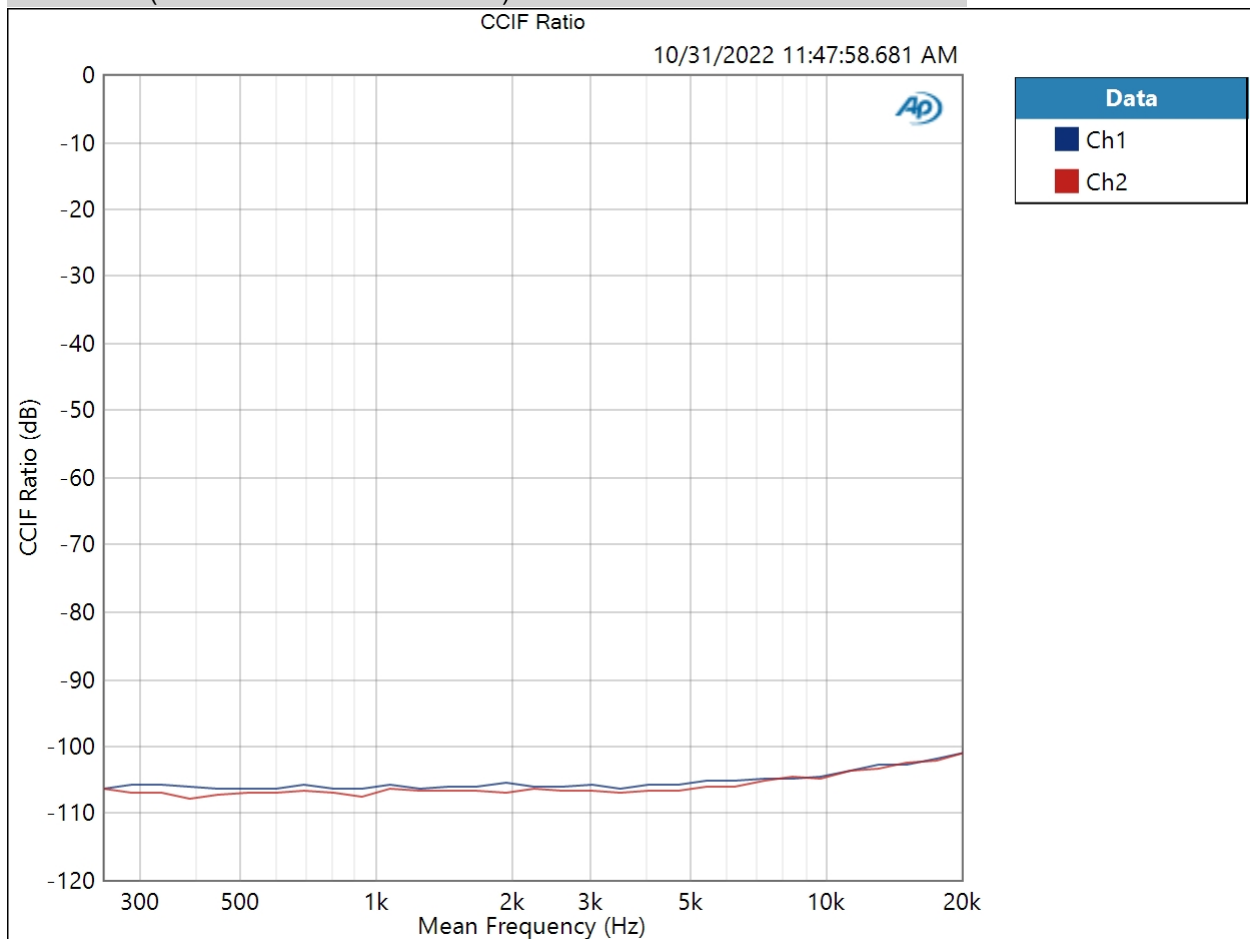
Result: PASSED

10/31/2022 1:09 PM

300 Ohm High Gain : IMD Frequency Sweep (CCIF)

Generator Level: 350.0 mVrms
DC Offset: 0.000 V
Sweep Frequency: Mean Frequency
Diff Frequency: 80.0000 Hz
IMD Split: False
Start Frequency: 20.0000 kHz
Stop Frequency: 250.000 Hz
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 10/31/2022 11:47:58 AM

CCIF Ratio (10/31/2022 11:47:58.681 AM)



Result:  PASSED

300 Ohm High Gain : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 175.0 mVrms

Frequency: 1.00000 kHz

Crosstalk (10/31/2022 11:48:01.358 AM)

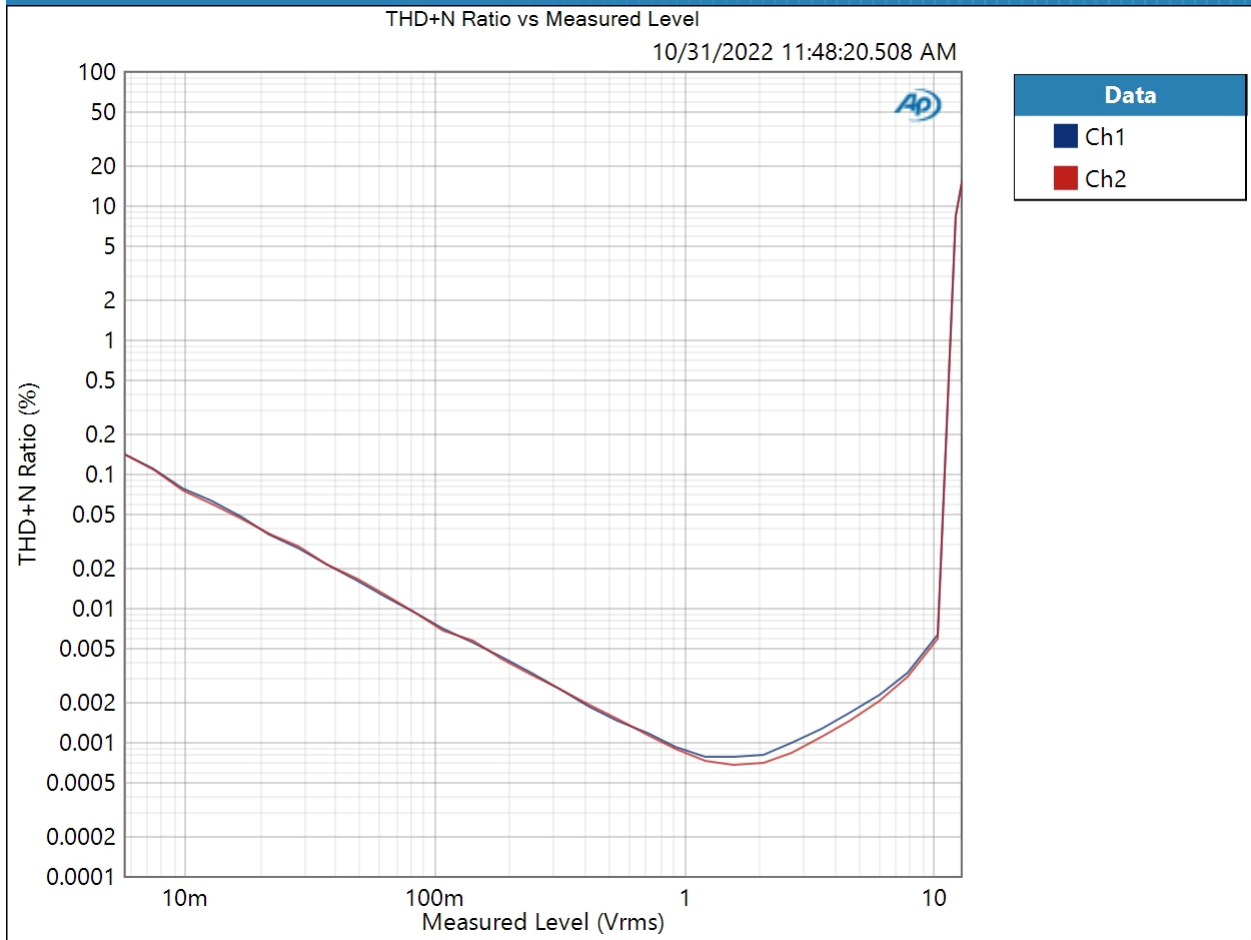
Ch1 84.544 dB

Ch2 84.864 dB

300 Ohm High Gain : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 3.000 Vrms
Step Type: Logarithmic
Number of Points: 31
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 10/31/2022 11:48:20 AM

THD+N Ratio vs Measured Level (10/31/2022 11:48:20.508 AM)



Result: PASSED

32 Ohm Negative Gain : Signal Path Setup

| | |
|---------------------------------|------------------------------------|
| Output Connector: | Analog Unbalanced |
| Channels: | 2 |
| Generator Mode: | High Performance Sine Generator |
| Precision Tune: | Disabled |
| Source Impedance: | 20 ohm, 20 ohm |
| AG52 Generator Option: | Installed |
| Auto Range: | Enabled |
| Output EQ: | None |
| Input 1: | Analog Unbalanced |
| Input Bandwidth: | AC (<10 Hz) - 20 kHz (44.1 kHz SR) |
| Input EQ: | None |
| Channels: | 2 |
| Termination: | 100 kohm |
| High Performance Sine Analyzer: | Enabled |
| Input 2: | None |
| Device Delay: | 0.000 s |
| • References | |
| dBr G: | 100.0 mVrms |
| dBm (Output Power): | 600.0 ohm |
| W(watts) (Output Power): | 8.000 ohm |
| 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 |
| dB SPL1: | 10.00 mVrms |
| dB SPL2: | 10.00 mVrms |
| dB SPL1 Calibrator Level: | 94.000 dB SPL |
| dB SPL2 Calibrator Level: | 94.000 dB SPL |
| dBm (Input Power): | 600.0 ohm |
| W(watts) (Input Power): | 8.000 ohm |

• DCX

DCX is not detected.

• Clocks

10/31/2022 1:09 PM

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

32 Ohm Negative Gain : Level and Gain

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.100 Vrms
 Frequency: 1.00000 kHz
 Low-pass Filter: Signal Path

RMS Level (10/31/2022 12:20:24.922 PM)

Ch1 423.2 mVrms
 Ch2 422.3 mVrms

32 Ohm Negative Gain : DC Level

Waveform: Sine
 Generator Level: 0.000 Vrms
 DC Offset: 0.000 V
 Frequency: 1.00000 kHz
 Delay Time: 100.0 ms
 Acquisition Time: 333.0 ms

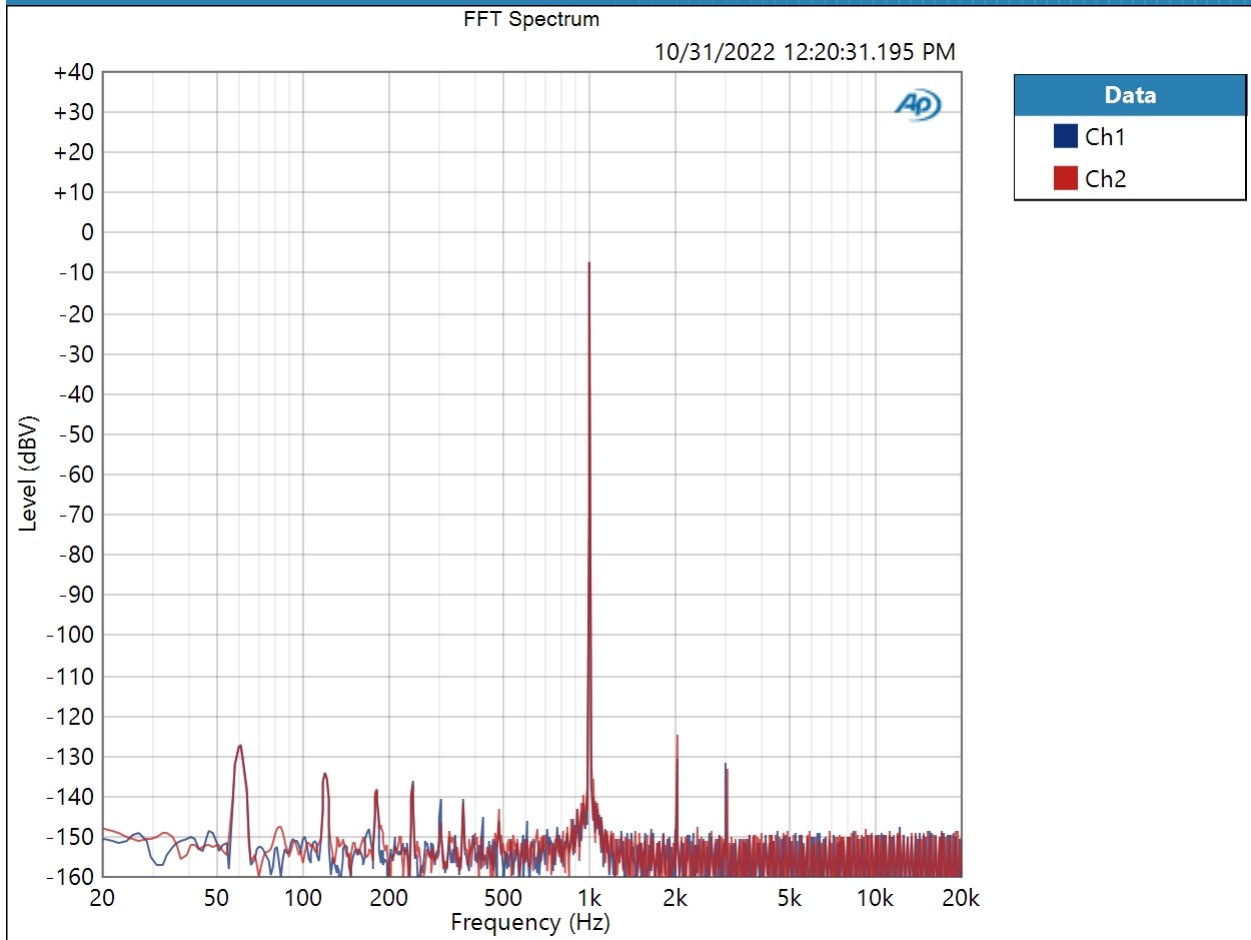
DC Level (10/31/2022 12:20:26.656 PM)

Ch1 291.1 uV
 Ch2 78.53 uV

32 Ohm Negative Gain : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.100 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/31/2022 12:20:31 PM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/31/2022 12:20:31.195 PM)

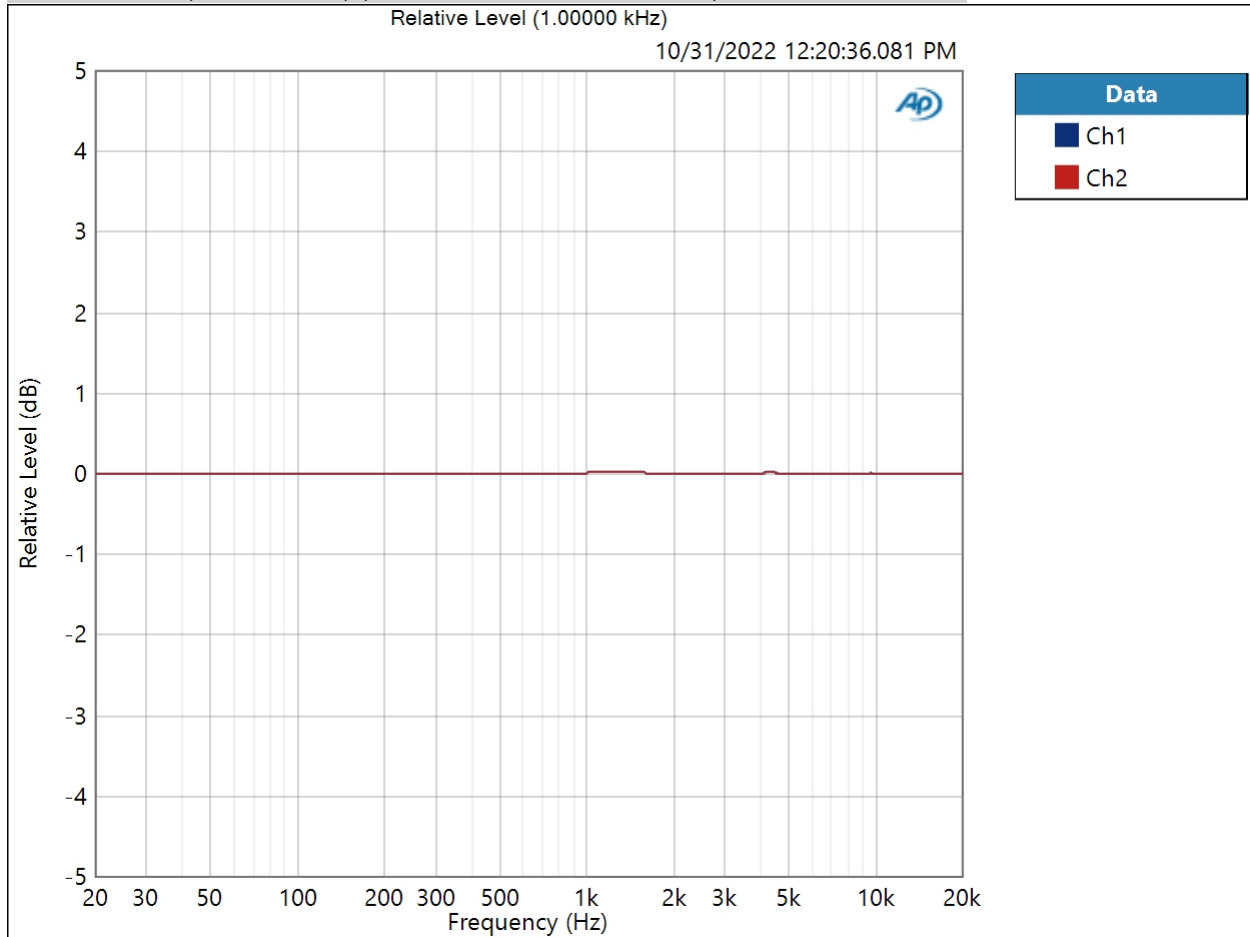


Result: PASSED

32 Ohm Negative Gain : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.100 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 1.000 s
Secondary Source: None
Measured 1 10/31/2022 12:20:36 PM

Relative Level (1.00000 kHz) (10/31/2022 12:20:36.081 PM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference

Ref Frequency: 1.00000 kHz

Result:  PASSED

Deviation (20.0000 Hz - 20.0000 kHz) (10/31/2022 12:20:36.081 PM)

Ch1 ± 0.008 dB

Ch2 ± 0.009 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

32 Ohm Negative Gain : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 5.200 Vrms

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 (10/31/2022 12:20:39.288 PM)

Ch1 125.075 dB

Ch2 125.020 dB

32 Ohm Negative Gain : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.100 Vrms
 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 (10/31/2022 12:20:42.617 PM)

Ch1 -108.377 dB
 Ch2 -107.998 dB

THD Ratio (10/31/2022 12:20:42.617 PM)

Ch1 0.000103 %
 Ch2 0.000160 %

Noise Ratio (10/31/2022 12:20:42.617 PM)

Ch1 0.000353 %
 Ch2 0.000353 %

Distortion Product Ratio (10/31/2022 12:20:42.617 PM)

| 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 | -124.05 | -124.71 | -137.45 | -134.81 | -141.60 | -138.66 | -137.56 | -138.23 | -137.30 |
| Ch2 | -0.00 | -117.07 | -124.87 | -136.65 | -136.26 | -139.93 | -140.05 | -137.20 | -135.89 | -141.03 |

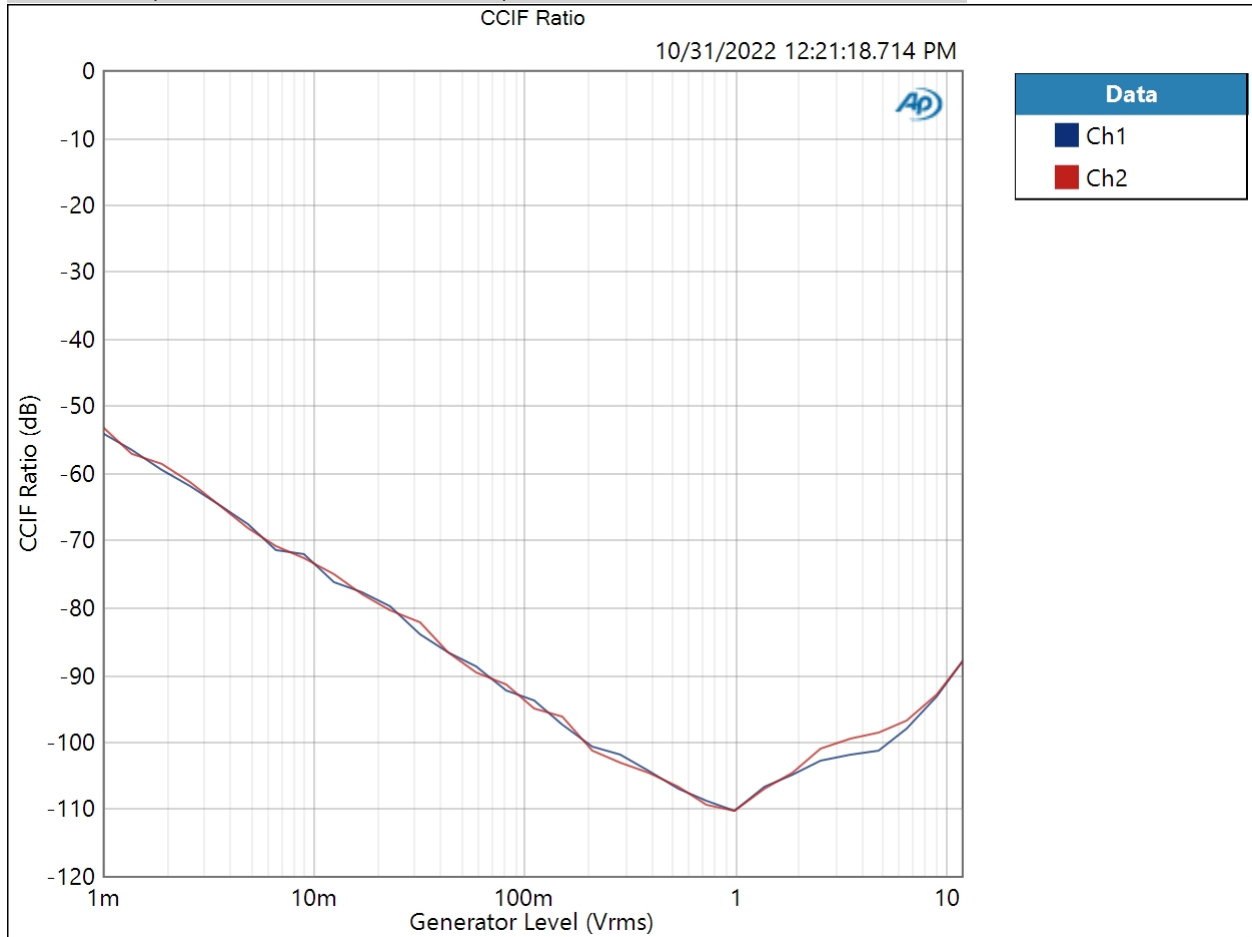
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

32 Ohm Negative Gain : IMD Level Sweep (CCIF)

IMD Type: CCIF
 Mean Frequency: 12.5000 kHz
 Diff Frequency: 80.0000 Hz
 IMD Split: False
 Start Level: 1.000 mVrms
 Stop Level: 12.00 Vrms
 Step Type: Logarithmic
 Number of Points: 31
 Mode: d2+d3
 Measured 1 10/31/2022 12:21:18 PM

CCIF Ratio (10/31/2022 12:21:18.714 PM)



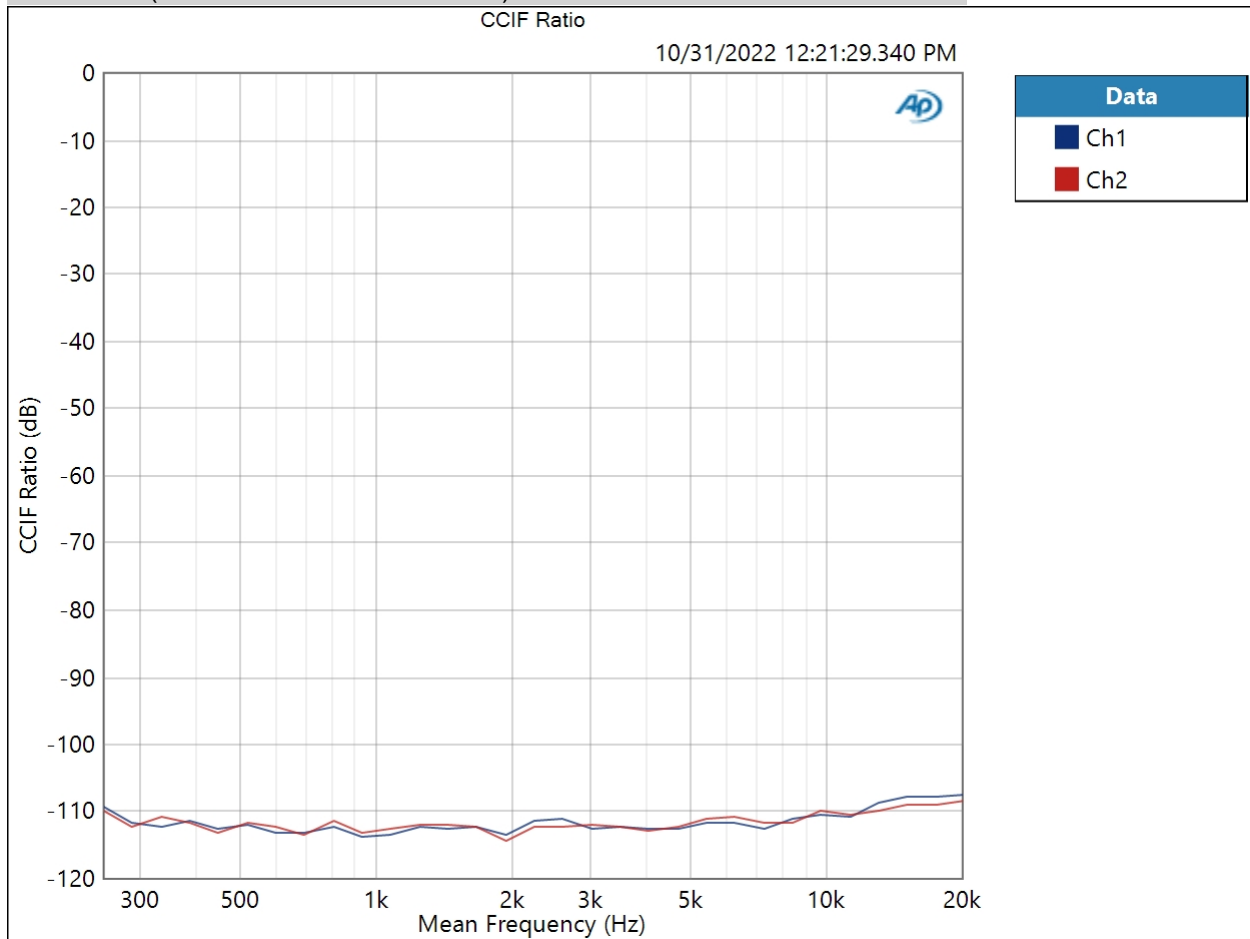
Result: PASSED

10/31/2022 1:09 PM

32 Ohm Negative Gain : IMD Frequency Sweep (CCIF)

Generator Level: 1.000 Vrms
DC Offset: 0.000 V
Sweep Frequency: Mean Frequency
Diff Frequency: 80.0000 Hz
IMD Split: False
Start Frequency: 20.0000 kHz
Stop Frequency: 250.000 Hz
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 10/31/2022 12:21:29 PM

CCIF Ratio (10/31/2022 12:21:29.340 PM)

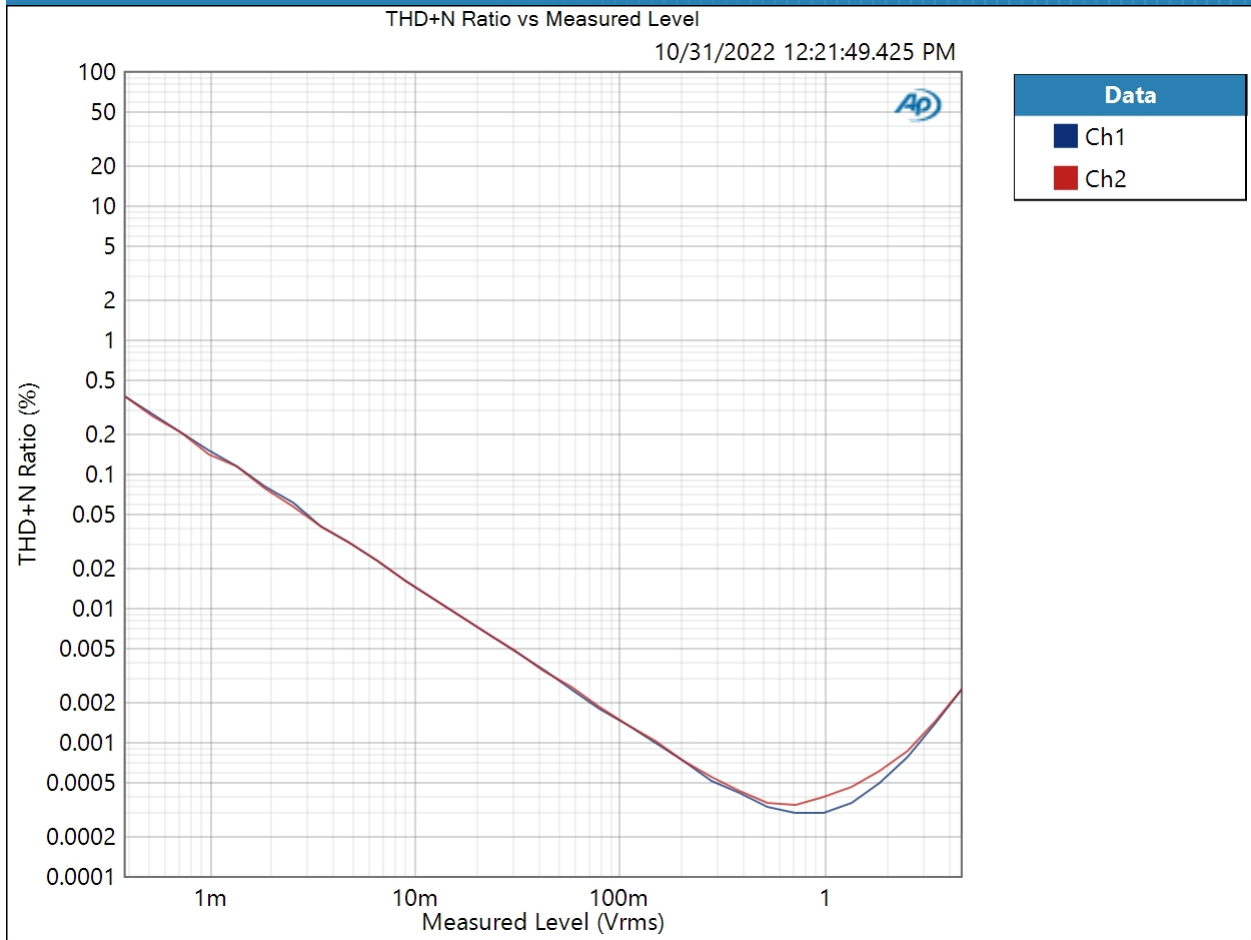


Result:  PASSED

32 Ohm Negative Gain : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 12.00 Vrms
Step Type: Logarithmic
Number of Points: 31
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 10/31/2022 12:21:49 PM

THD+N Ratio vs Measured Level (10/31/2022 12:21:49.425 PM)



Result: PASSED

32 Ohm Low Gain : Signal Path Setup

| | |
|---------------------------------|------------------------------------|
| Output Connector: | Analog Unbalanced |
| Channels: | 2 |
| Generator Mode: | High Performance Sine Generator |
| Precision Tune: | Disabled |
| Source Impedance: | 20 ohm, 20 ohm |
| AG52 Generator Option: | Installed |
| Auto Range: | Enabled |
| Output EQ: | None |
| Input 1: | Analog Unbalanced |
| Input Bandwidth: | AC (<10 Hz) - 20 kHz (44.1 kHz SR) |
| Input EQ: | None |
| Channels: | 2 |
| Termination: | 100 kohm |
| High Performance Sine Analyzer: | Enabled |
| Input 2: | None |
| Device Delay: | 0.000 s |
| • References | |
| dBr G: | 100.0 mVrms |
| dBm (Output Power): | 600.0 ohm |
| W(watts) (Output Power): | 8.000 ohm |
| 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 |
| dB SPL1: | 10.00 mVrms |
| dB SPL2: | 10.00 mVrms |
| dB SPL1 Calibrator Level: | 94.000 dB SPL |
| dB SPL2 Calibrator Level: | 94.000 dB SPL |
| dBm (Input Power): | 600.0 ohm |
| W(watts) (Input Power): | 8.000 ohm |

• DCX

DCX is not detected.

• Clocks

10/31/2022 1:09 PM

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

32 Ohm Low Gain : Level and Gain

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.100 Vrms
 Frequency: 1.00000 kHz
 Low-pass Filter: Signal Path

RMS Level (10/31/2022 12:18:29.424 PM)

Ch1 0.999 Vrms
 Ch2 0.998 Vrms

32 Ohm Low Gain : DC Level

Waveform: Sine
 Generator Level: 0.000 Vrms
 DC Offset: 0.000 V
 Frequency: 1.00000 kHz
 Delay Time: 100.0 ms
 Acquisition Time: 333.0 ms

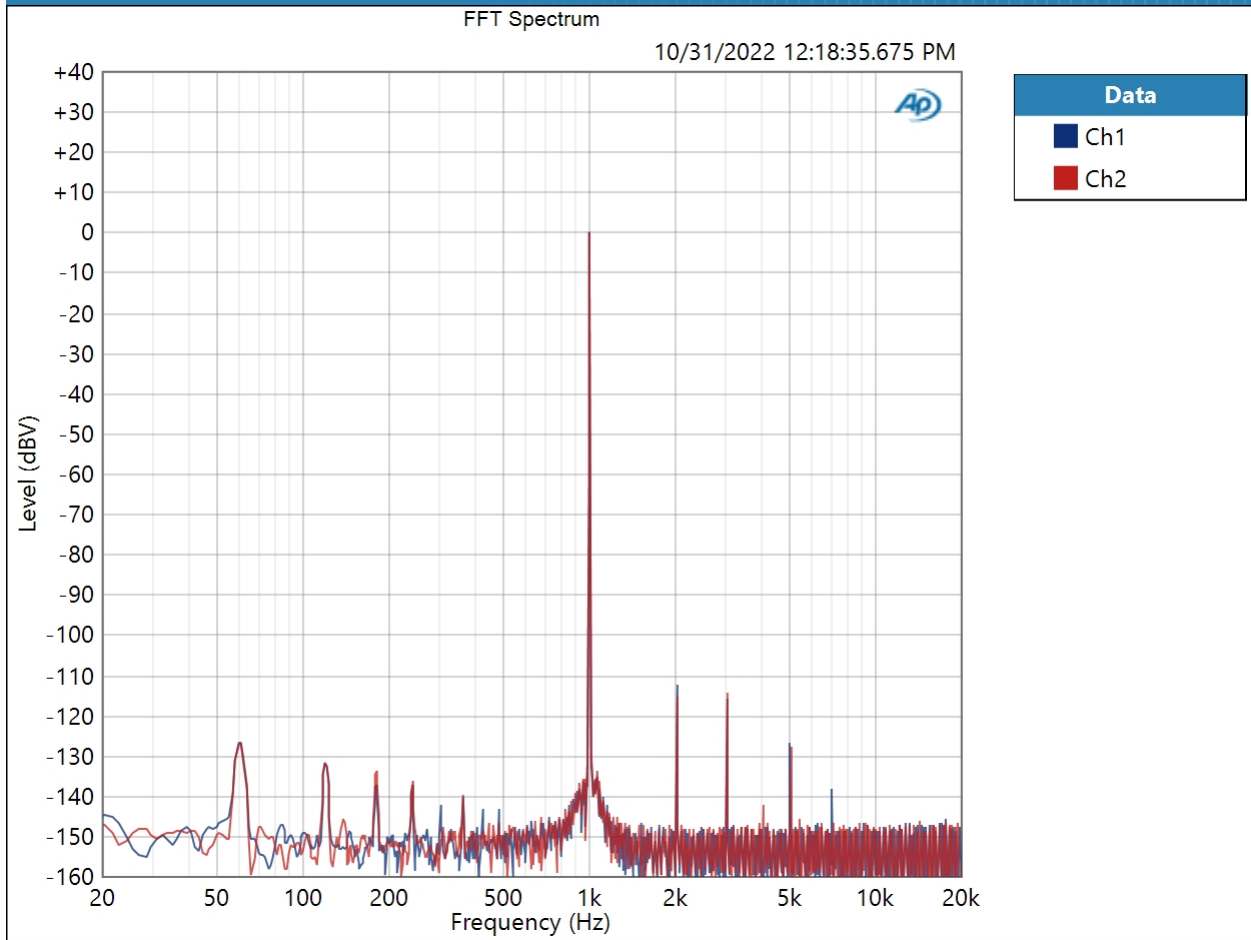
DC Level (10/31/2022 12:18:31.167 PM)

Ch1 865.5 uV
 Ch2 775.2 uV

32 Ohm Low Gain : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.100 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/31/2022 12:18:35 PM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/31/2022 12:18:35.675 PM)

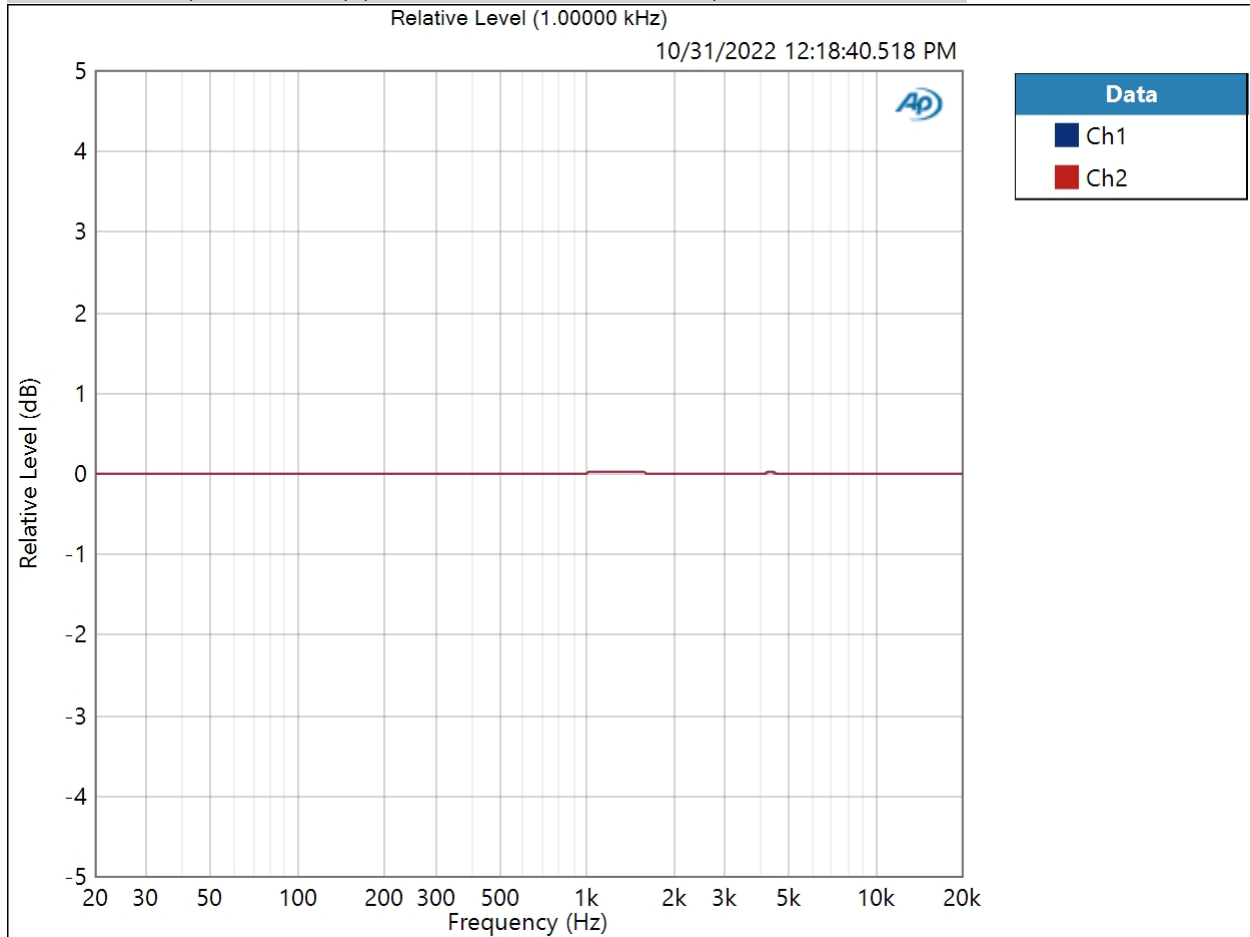


Result:  PASSED

32 Ohm Low Gain : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.100 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 1.000 s
Secondary Source: None
Measured 1 10/31/2022 12:18:40 PM

Relative Level (1.00000 kHz) (10/31/2022 12:18:40.518 PM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference

Ref Frequency: 1.00000 kHz

Result:  PASSED

Deviation (20.0000 Hz - 20.0000 kHz) (10/31/2022 12:18:40.518 PM)

Ch1 ± 0.009 dB

Ch2 ± 0.010 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

32 Ohm Low Gain : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 2.200 Vrms

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 (10/31/2022 12:18:43.445 PM)

Ch1 124.104 dB

Ch2 124.069 dB

32 Ohm Low Gain : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.100 Vrms
 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 (10/31/2022 12:18:46.749 PM)

Ch1 -109.223 dB
 Ch2 -109.876 dB

THD Ratio (10/31/2022 12:18:46.749 PM)

Ch1 0.000289 %
 Ch2 0.000259 %

Noise Ratio (10/31/2022 12:18:46.749 PM)

Ch1 0.000186 %
 Ch2 0.000183 %

Distortion Product Ratio (10/31/2022 12:18:46.749 PM)

| 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 | -112.74 | -115.64 | -142.45 | -127.59 | -137.90 | -135.64 | -144.87 | -143.65 | -145.29 |
| Ch2 | -0.00 | -115.44 | -114.43 | -136.91 | -128.18 | -141.63 | -141.99 | -143.16 | -143.25 | -146.32 |

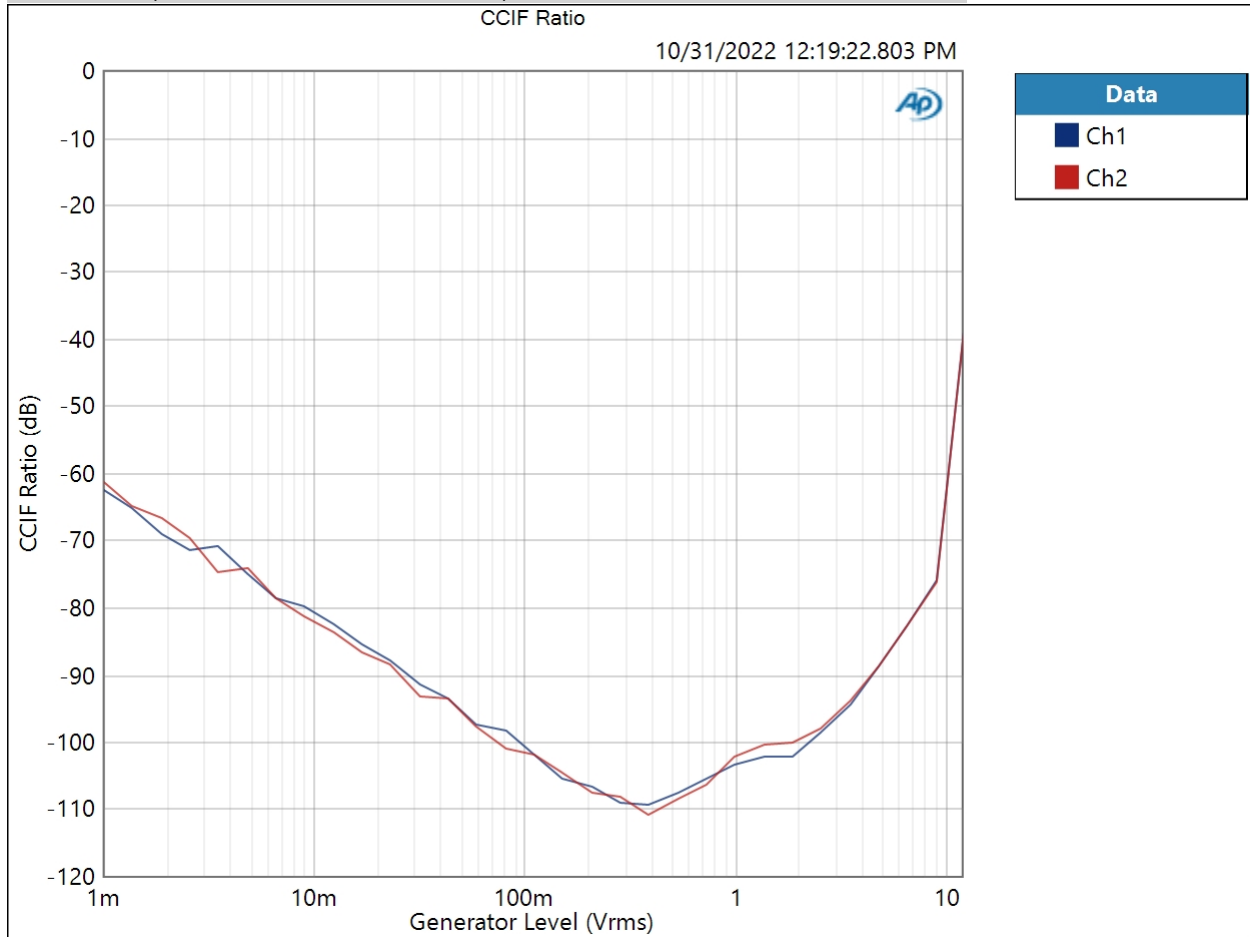
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

32 Ohm Low Gain : IMD Level Sweep (CCIF)

IMD Type: CCIF
Mean Frequency: 12.5000 kHz
Diff Frequency: 80.0000 Hz
IMD Split: False
Start Level: 1.000 mVrms
Stop Level: 12.00 Vrms
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 10/31/2022 12:19:22 PM

CCIF Ratio (10/31/2022 12:19:22.803 PM)



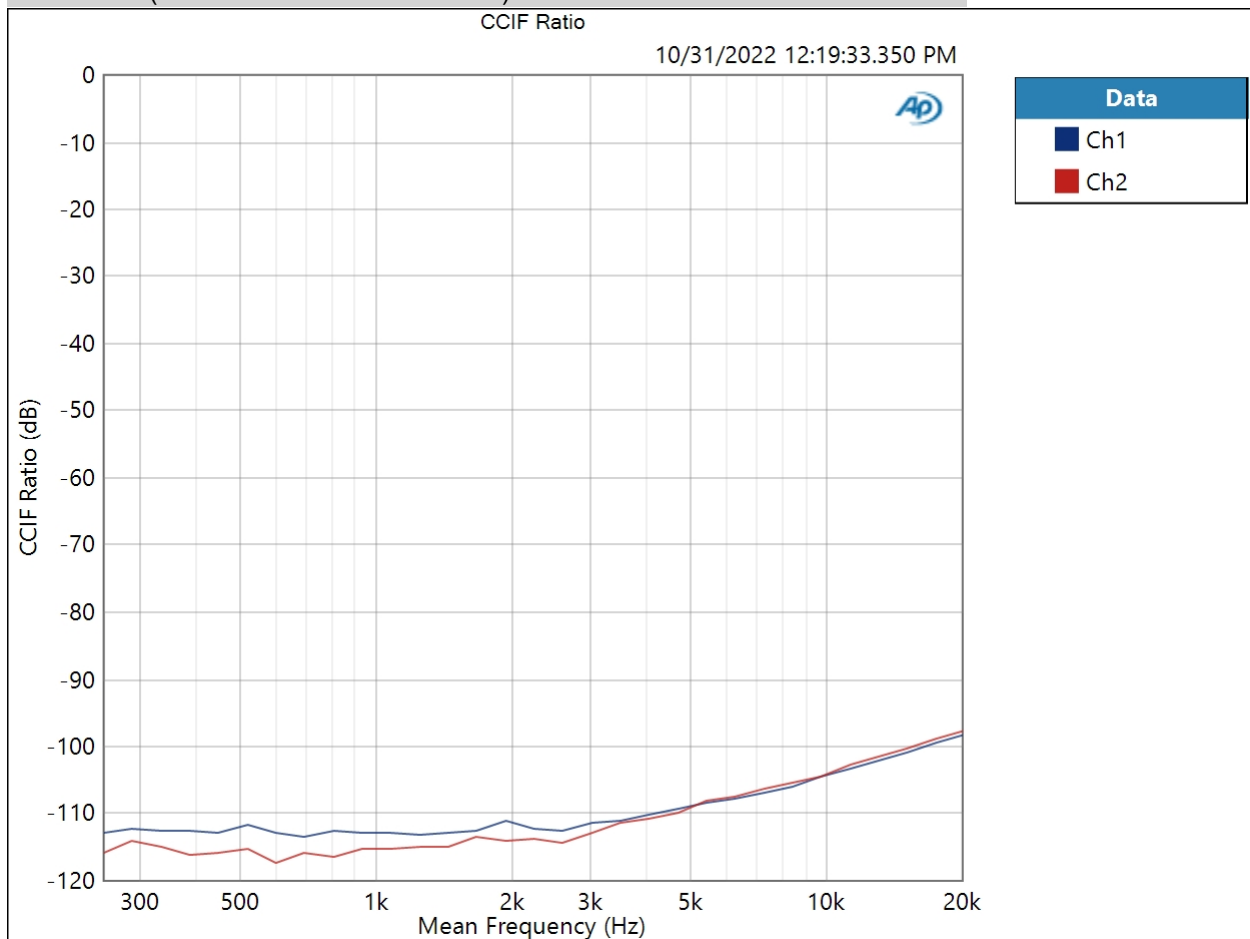
Result: PASSED

10/31/2022 1:09 PM

32 Ohm Low Gain : IMD Frequency Sweep (CCIF)

Generator Level: 1.000 Vrms
 DC Offset: 0.000 V
 Sweep Frequency: Mean Frequency
 Diff Frequency: 80.0000 Hz
 IMD Split: False
 Start Frequency: 20.0000 kHz
 Stop Frequency: 250.000 Hz
 Step Type: Logarithmic
 Number of Points: 31
 Mode: d2+d3
 Measured 1 10/31/2022 12:19:33 PM

CCIF Ratio (10/31/2022 12:19:33.350 PM)

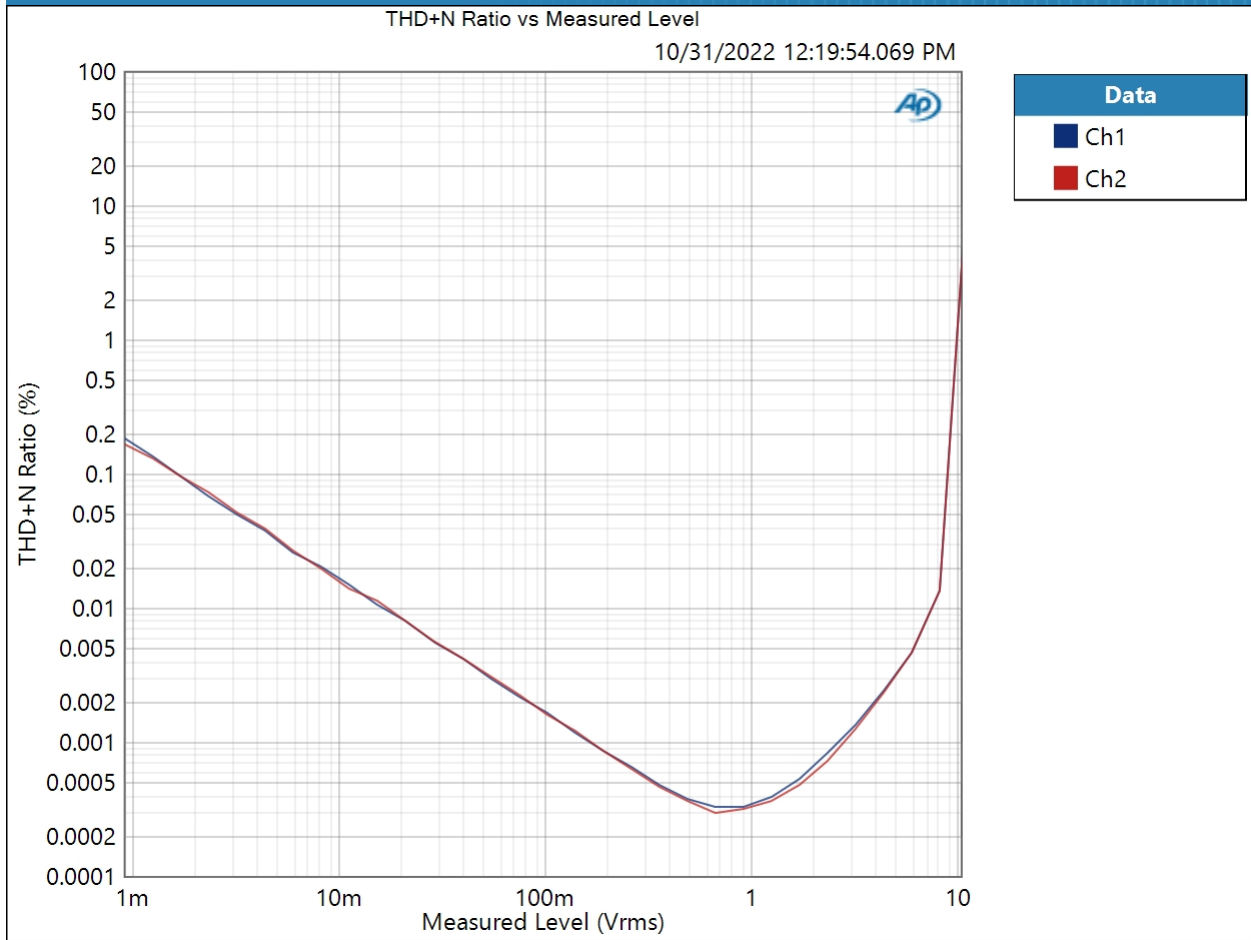


Result:  PASSED

32 Ohm Low Gain : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 12.00 Vrms
Step Type: Logarithmic
Number of Points: 31
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 10/31/2022 12:19:54 PM

THD+N Ratio vs Measured Level (10/31/2022 12:19:54.069 PM)



Result: PASSED

32 Ohm High Gain : Signal Path Setup

| | |
|---------------------------------|------------------------------------|
| Output Connector: | Analog Unbalanced |
| Channels: | 2 |
| Generator Mode: | High Performance Sine Generator |
| Precision Tune: | Disabled |
| Source Impedance: | 20 ohm, 20 ohm |
| AG52 Generator Option: | Installed |
| Auto Range: | Enabled |
| Output EQ: | None |
| Input 1: | Analog Unbalanced |
| Input Bandwidth: | AC (<10 Hz) - 20 kHz (44.1 kHz SR) |
| Input EQ: | None |
| Channels: | 2 |
| Termination: | 100 kohm |
| High Performance Sine Analyzer: | Enabled |
| Input 2: | None |
| Device Delay: | 0.000 s |
| • References | |
| dBr G: | 100.0 mVrms |
| dBm (Output Power): | 600.0 ohm |
| W(watts) (Output Power): | 8.000 ohm |
| 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 |
| dB SPL1: | 10.00 mVrms |
| dB SPL2: | 10.00 mVrms |
| dB SPL1 Calibrator Level: | 94.000 dB SPL |
| dB SPL2 Calibrator Level: | 94.000 dB SPL |
| dBm (Input Power): | 600.0 ohm |
| W(watts) (Input Power): | 8.000 ohm |

• DCX

DCX is not detected.

• Clocks

10/31/2022 1:09 PM

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

32 Ohm High Gain : Level and Gain

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 175.0 mVrms
 Frequency: 1.00000 kHz
 Low-pass Filter: Signal Path

RMS Level (10/31/2022 12:02:17.249 PM)

Ch1 0.958 Vrms
 Ch2 0.967 Vrms

32 Ohm High Gain : DC Level

Waveform: Sine
 Generator Level: 0.000 Vrms
 DC Offset: 0.000 V
 Frequency: 1.00000 kHz
 Delay Time: 100.0 ms
 Acquisition Time: 333.0 ms

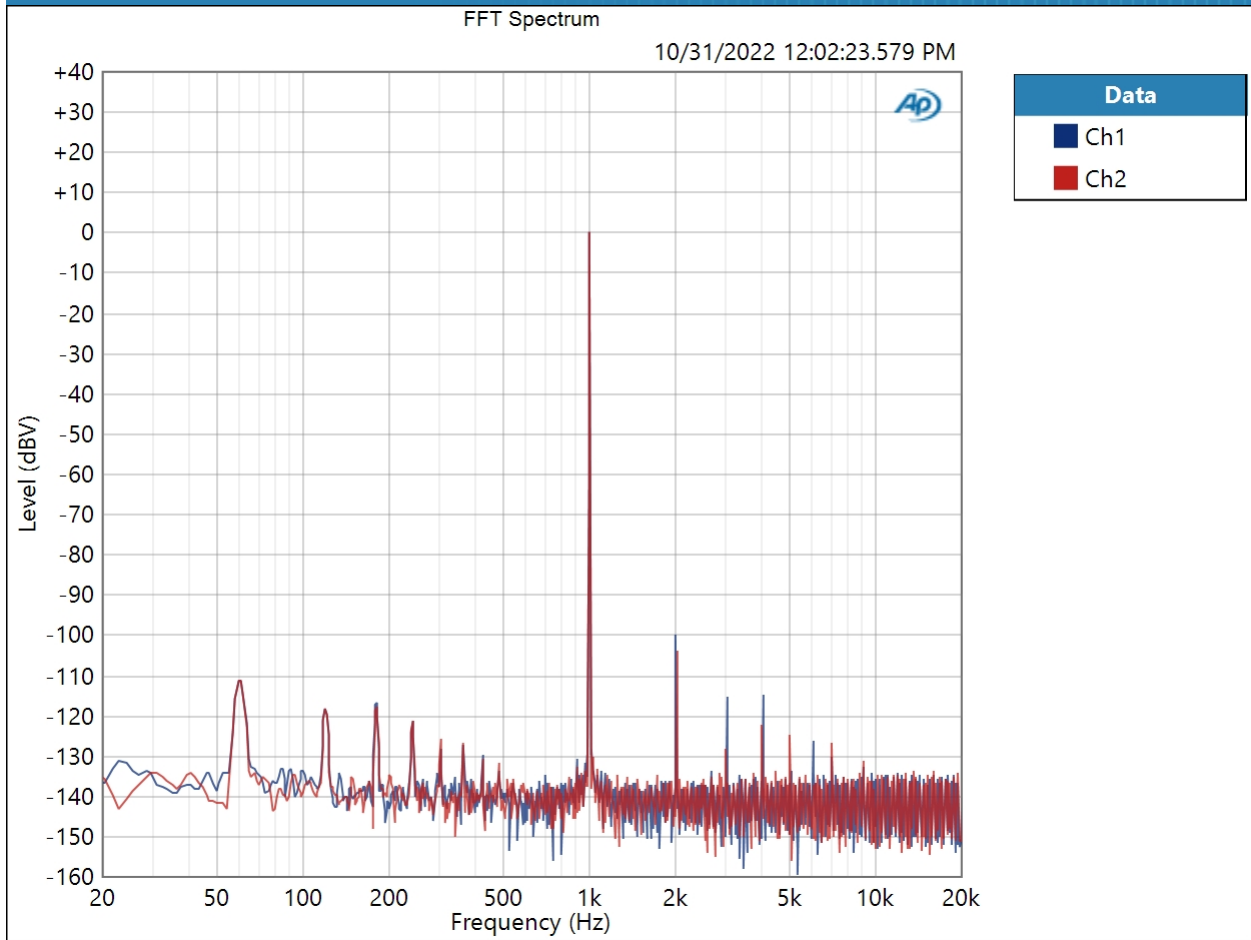
DC Level (10/31/2022 12:02:19.053 PM)

Ch1 -9.010 mV
 Ch2 -1.123 mV

32 Ohm High Gain : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 175.0 mVrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1: 10/31/2022 12:02:23 PM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/31/2022 12:02:23.579 PM)

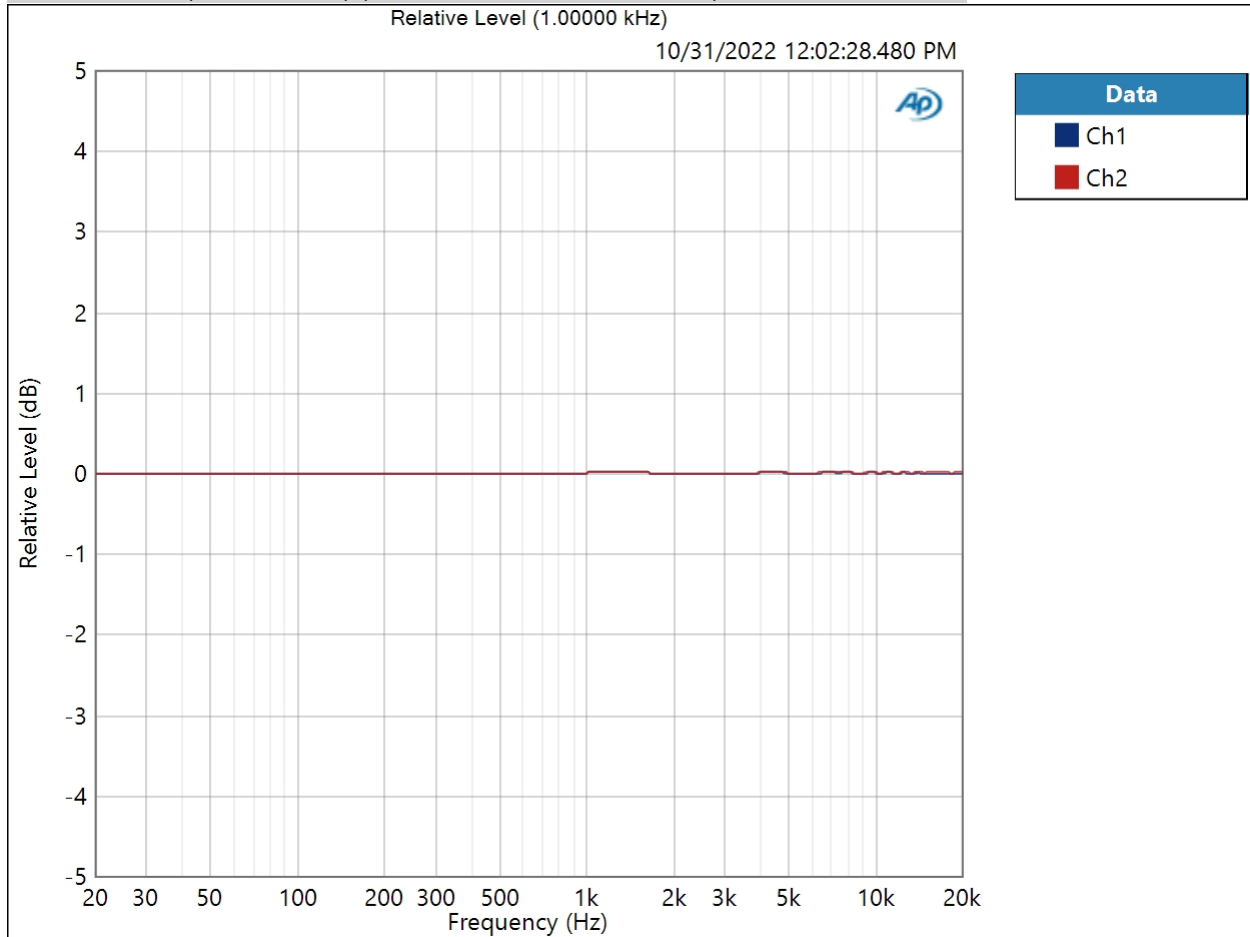


Result: PASSED

32 Ohm High Gain : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 175.0 mVrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 1.000 s
Secondary Source: None
Measured 1 10/31/2022 12:02:28 PM

Relative Level (1.00000 kHz) (10/31/2022 12:02:28.480 PM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference

Ref Frequency: 1.00000 kHz

Result:  PASSED

Deviation (20.0000 Hz - 20.0000 kHz) (10/31/2022 12:02:28.480 PM)

Ch1 ± 0.009 dB

Ch2 ± 0.008 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

32 Ohm High Gain : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 350.0 mVrms

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 (10/31/2022 12:02:31.422 PM)

Ch1 110.661 dB

Ch2 110.841 dB

32 Ohm High Gain : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 175.0 mVrms
 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 (10/31/2022 12:02:34.804 PM)

Ch1 -97.254 dB
 Ch2 -99.619 dB

THD Ratio (10/31/2022 12:02:34.804 PM)

Ch1 0.001110 %
 Ch2 0.000662 %

Noise Ratio (10/31/2022 12:02:34.804 PM)

Ch1 0.000843 %
 Ch2 0.000805 %

Distortion Product Ratio (10/31/2022 12:02:34.804 PM)

| 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 | -99.35 | -115.36 | -115.77 | -127.51 | -130.91 | -129.18 | -132.12 | -128.42 | -129.67 |
| Ch2 | -0.00 | -103.84 | -129.29 | -122.15 | -123.16 | -132.71 | -125.29 | -134.25 | -130.55 | -132.56 |

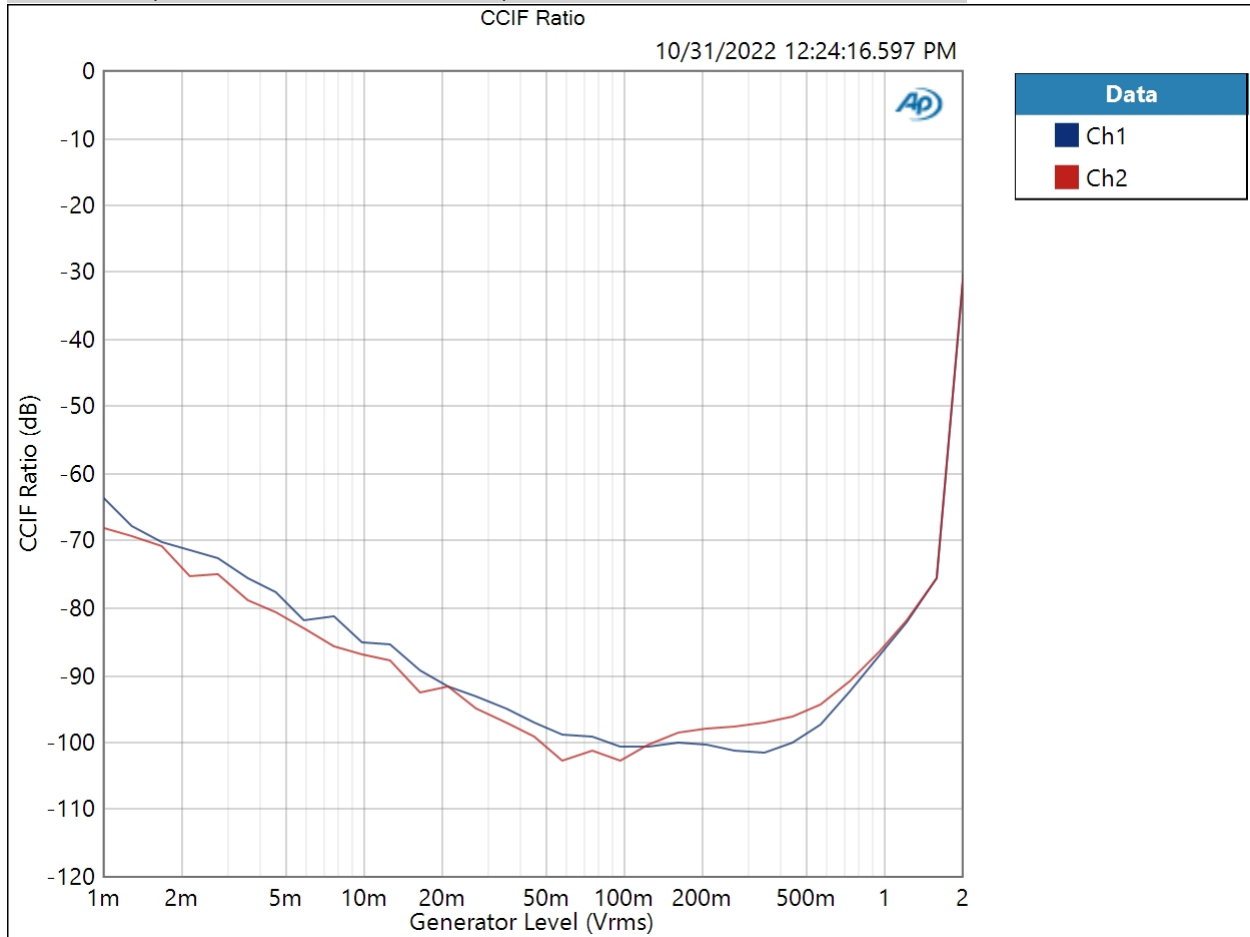
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

32 Ohm High Gain : IMD Level Sweep (CCIF)

IMD Type: CCIF
 Mean Frequency: 12.5000 kHz
 Diff Frequency: 80.0000 Hz
 IMD Split: False
 Start Level: 1.000 mVrms
 Stop Level: 2.000 Vrms
 Step Type: Logarithmic
 Number of Points: 31
 Mode: d2+d3
 Measured 1 10/31/2022 12:24:16 PM

CCIF Ratio (10/31/2022 12:24:16.597 PM)



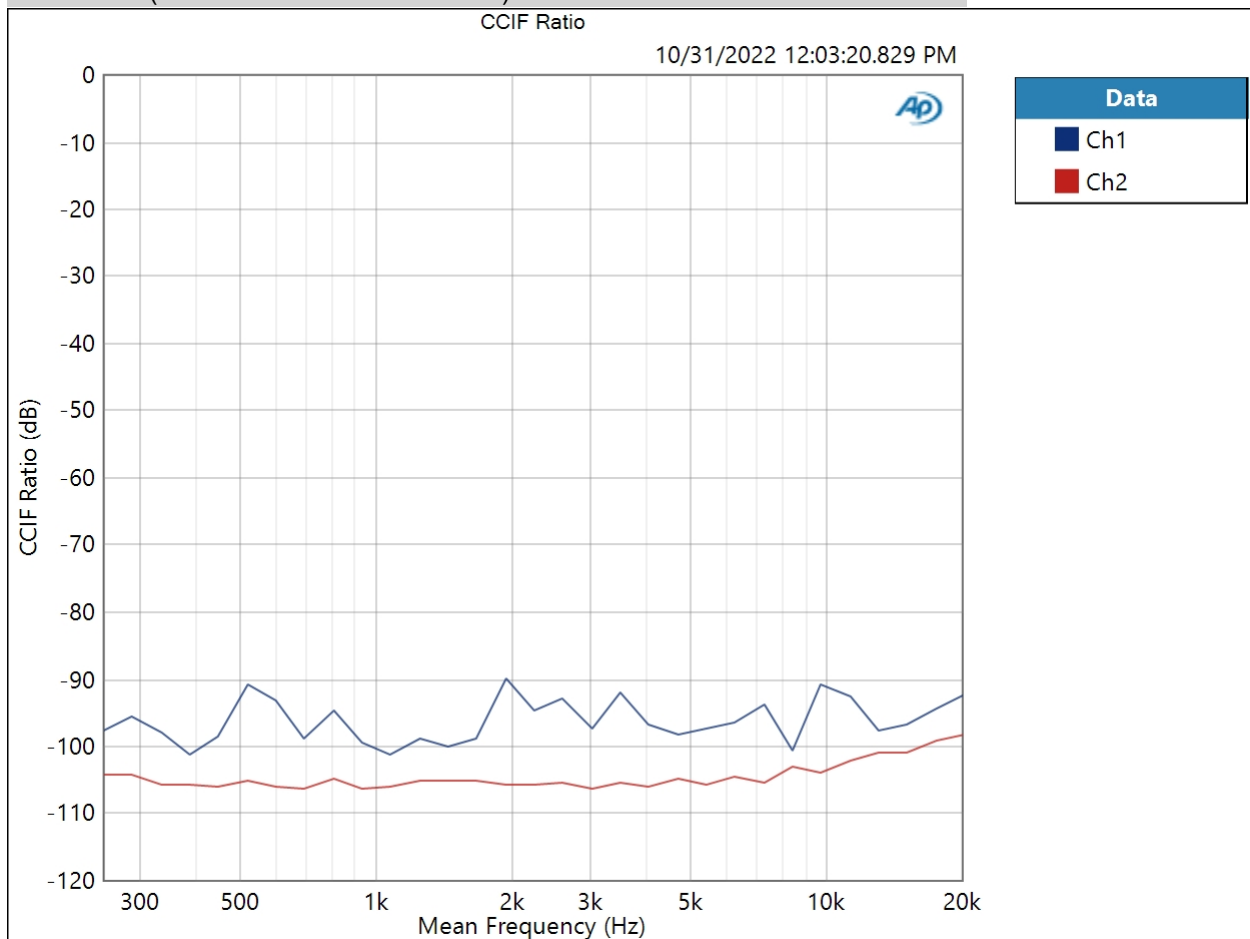
Result: PASSED

10/31/2022 1:09 PM

32 Ohm High Gain : IMD Frequency Sweep (CCIF)

Generator Level: 175.0 mVrms
 DC Offset: 0.000 V
 Sweep Frequency: Mean Frequency
 Diff Frequency: 80.0000 Hz
 IMD Split: False
 Start Frequency: 20.0000 kHz
 Stop Frequency: 250.000 Hz
 Step Type: Logarithmic
 Number of Points: 31
 Mode: d2+d3
 Measured 1 10/31/2022 12:03:20 PM

CCIF Ratio (10/31/2022 12:03:20.829 PM)

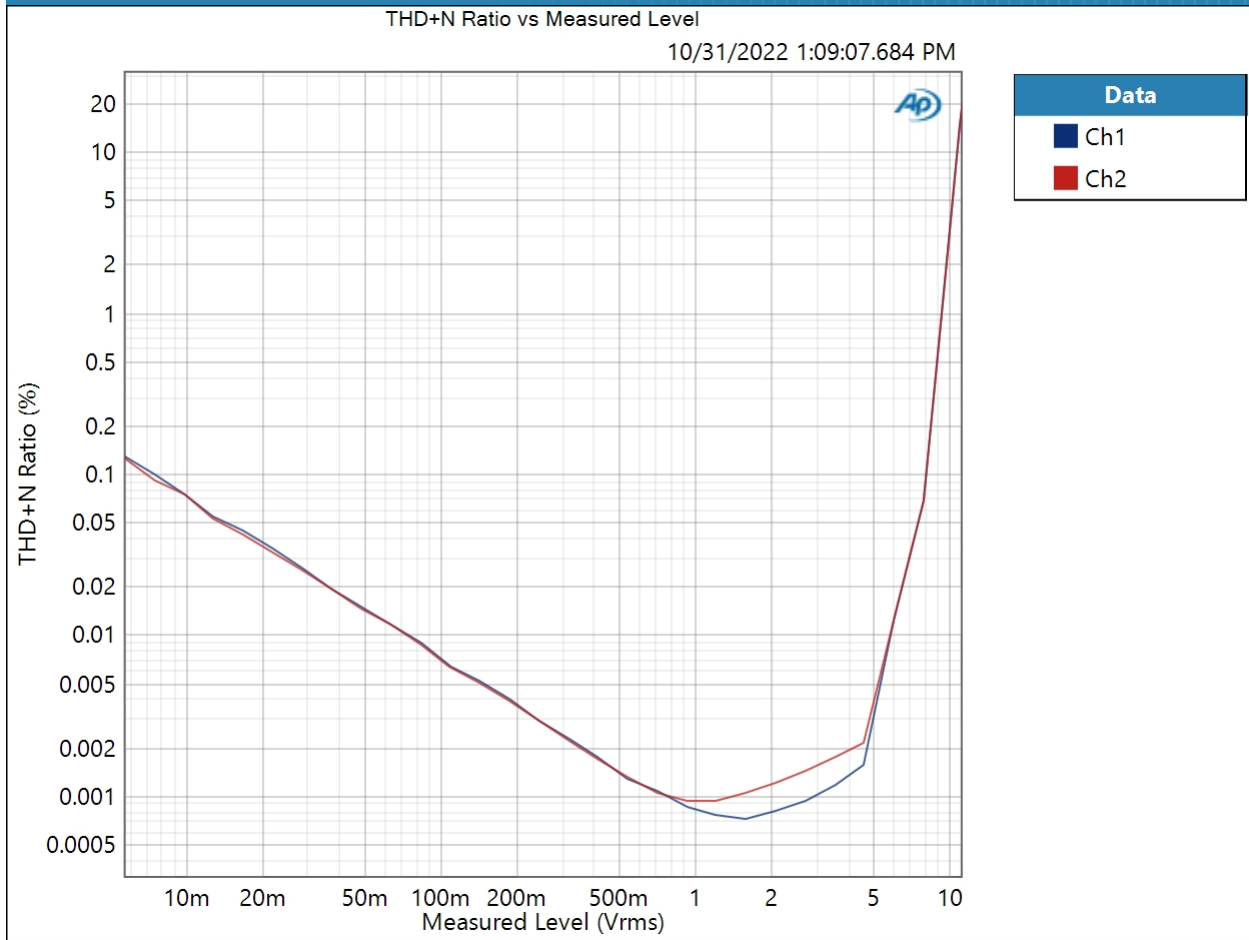


Result:  PASSED

32 Ohm High Gain : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 3.000 Vrms
Step Type: Logarithmic
Number of Points: 31
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 10/31/2022 1:09:07 PM

THD+N Ratio vs Measured Level (10/31/2022 1:09:07.684 PM)



Result: PASSED

Preamp : Signal Path Setup

| | |
|---------------------------------|------------------------------------|
| Output Connector: | Analog Unbalanced |
| Channels: | 2 |
| Generator Mode: | High Performance Sine Generator |
| Precision Tune: | Disabled |
| Source Impedance: | 20 ohm, 20 ohm |
| AG52 Generator Option: | Installed |
| Auto Range: | Enabled |
| Output EQ: | None |
| Input 1: | Analog Unbalanced |
| Input Bandwidth: | AC (<10 Hz) - 20 kHz (44.1 kHz SR) |
| Input EQ: | None |
| Channels: | 2 |
| Termination: | 100 kohm |
| High Performance Sine Analyzer: | Enabled |
| Input 2: | None |
| Device Delay: | 0.000 s |
| • References | |
| dBr G: | 100.0 mVrms |
| dBm (Output Power): | 600.0 ohm |
| W(watts) (Output Power): | 8.000 ohm |
| 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 |
| dB SPL1: | 10.00 mVrms |
| dB SPL2: | 10.00 mVrms |
| dB SPL1 Calibrator Level: | 94.000 dB SPL |
| dB SPL2 Calibrator Level: | 94.000 dB SPL |
| dBm (Input Power): | 600.0 ohm |
| W(watts) (Input Power): | 8.000 ohm |

• DCX

DCX is not detected.

• Clocks

10/31/2022 1:09 PM

| | |
|---------------------|-----------------|
| 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 |

Preamp : Level and Gain

| | |
|------------------|---------------------------------|
| Waveform: | Sine |
| Generator Mode: | High Performance Sine Generator |
| Precision Tune: | Disabled |
| Generator Level: | 2.200 Vrms |
| Frequency: | 1.00000 kHz |
| Low-pass Filter: | Signal Path |

RMS Level (10/31/2022 11:50:18.361 AM)

Ch1 2.000 Vrms
Ch2 2.000 Vrms

Preamp : DC Level

| | |
|-------------------|-------------|
| Waveform: | Sine |
| Generator Level: | 0.000 Vrms |
| DC Offset: | 0.000 V |
| Frequency: | 1.00000 kHz |
| Delay Time: | 100.0 ms |
| Acquisition Time: | 333.0 ms |

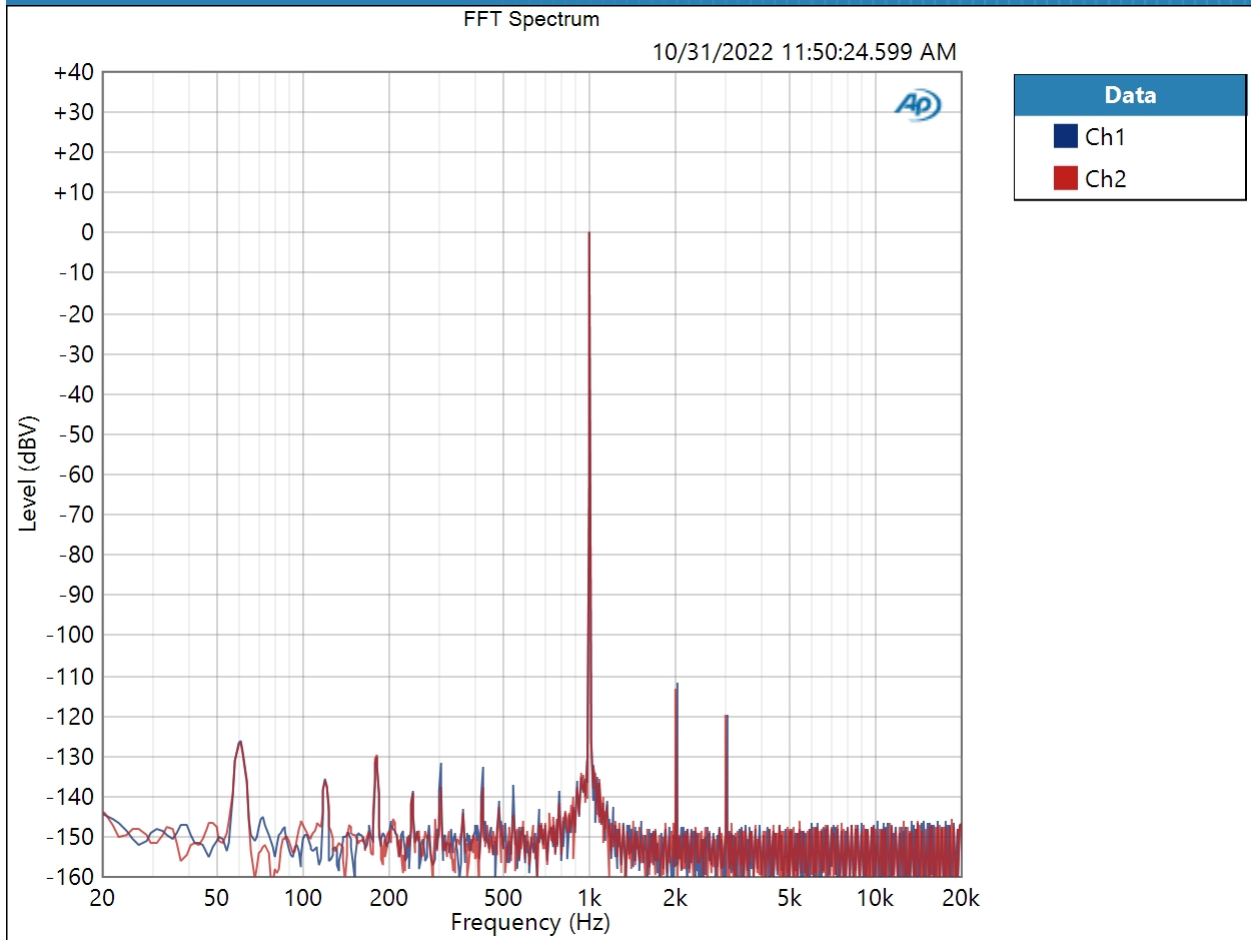
DC Level (10/31/2022 11:50:20.041 AM)

Ch1 606.6 uV
Ch2 546.0 uV

Preamp : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.100 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/31/2022 11:50:24 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/31/2022 11:50:24.599 AM)

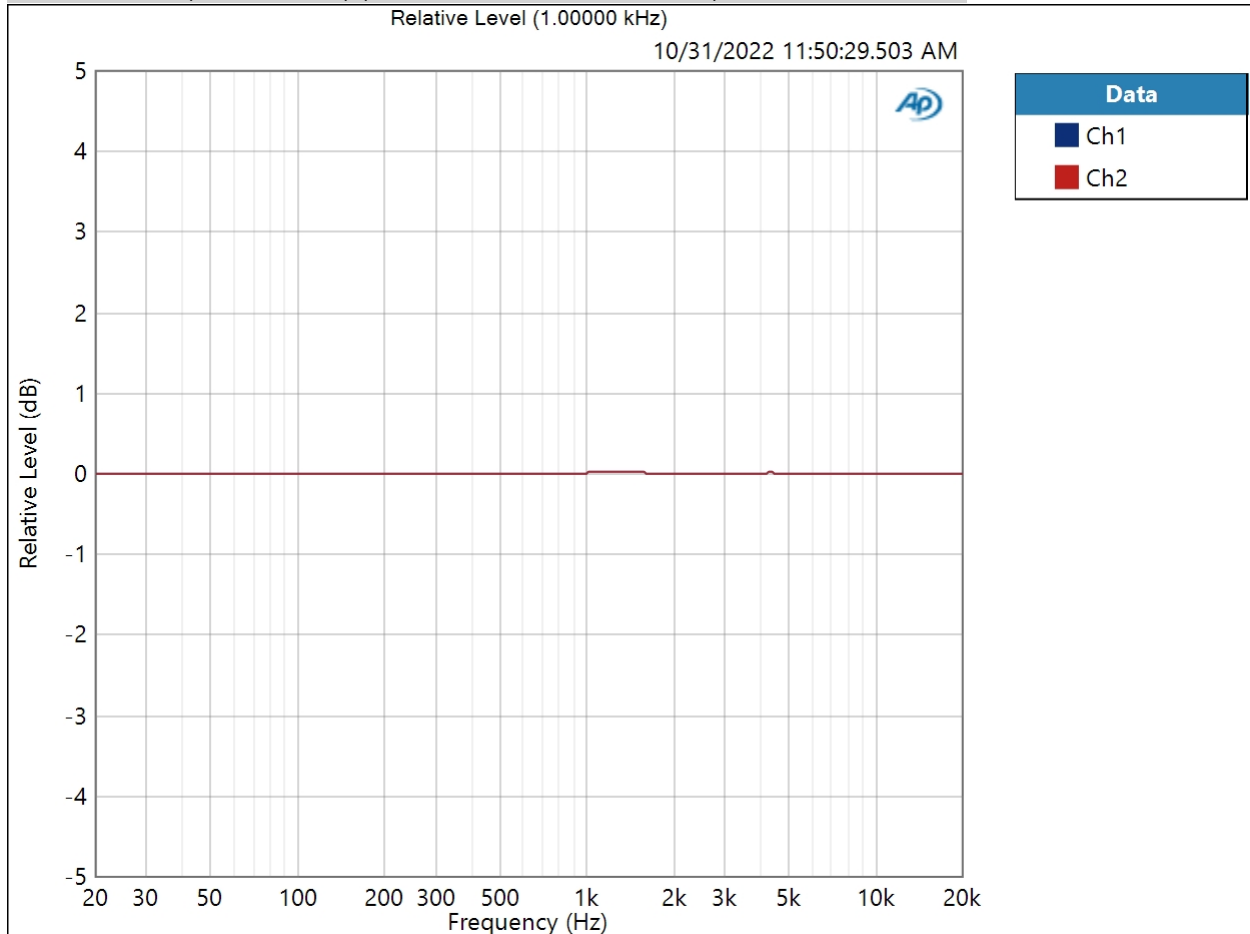


Result: PASSED

Preamp : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.000 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 1.000 s
Secondary Source: None
Measured 1 10/31/2022 11:50:29 AM

Relative Level (1.00000 kHz) (10/31/2022 11:50:29.503 AM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference

Ref Frequency: 1.00000 kHz

Result:  PASSED

Deviation (20.0000 Hz - 20.0000 kHz) (10/31/2022 11:50:29.503 AM)

Ch1 ± 0.009 dB

Ch2 ± 0.010 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Preamp : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 2.200 Vrms

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 (10/31/2022 11:50:32.466 AM)

Ch1 121.077 dB

Ch2 121.320 dB

Preamp : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.100 Vrms
 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 (10/31/2022 11:50:35.851 AM)

Ch1 -109.560 dB
 Ch2 -110.131 dB

THD Ratio (10/31/2022 11:50:35.851 AM)

Ch1 0.000274 %
 Ch2 0.000250 %

Noise Ratio (10/31/2022 11:50:35.851 AM)

Ch1 0.000190 %
 Ch2 0.000190 %

Distortion Product Ratio (10/31/2022 11:50:35.851 AM)

| 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 | -111.92 | -119.91 | -144.03 | -142.88 | -142.19 | -148.89 | -146.47 | -145.69 | -143.75 |
| Ch2 | -0.00 | -112.93 | -119.67 | -144.61 | -148.24 | -145.76 | -139.32 | -142.79 | -141.01 | -143.80 |

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Preamp : IMD Level Sweep (CCIF)

IMD Type: CCIF

Mean Frequency: 12.5000 kHz

Diff Frequency: 80.0000 Hz

IMD Split: False

Start Level: 1.000 mVrms

Stop Level: 12.00 Vrms

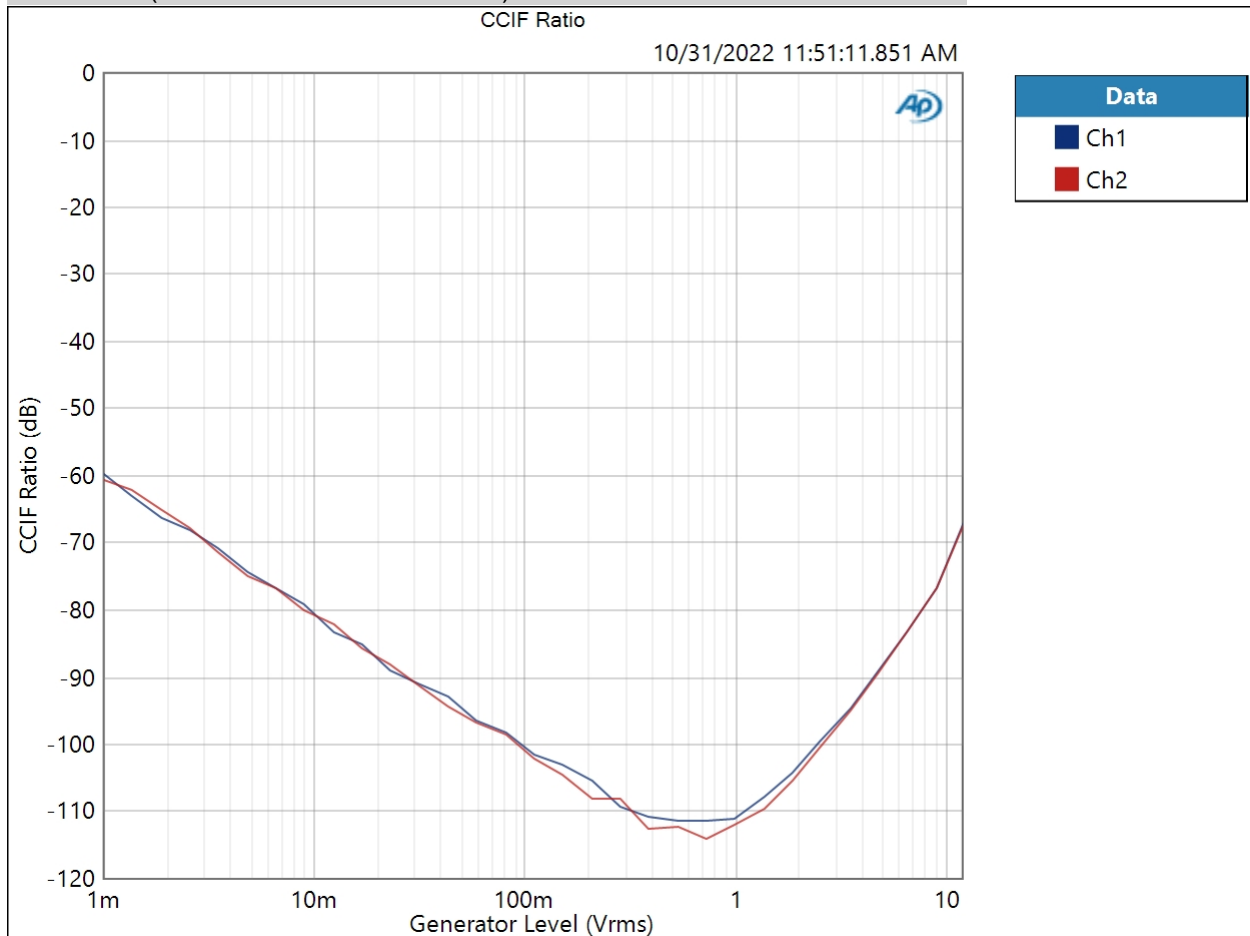
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 10/31/2022 11:51:11 AM

CCIF Ratio (10/31/2022 11:51:11.851 AM)



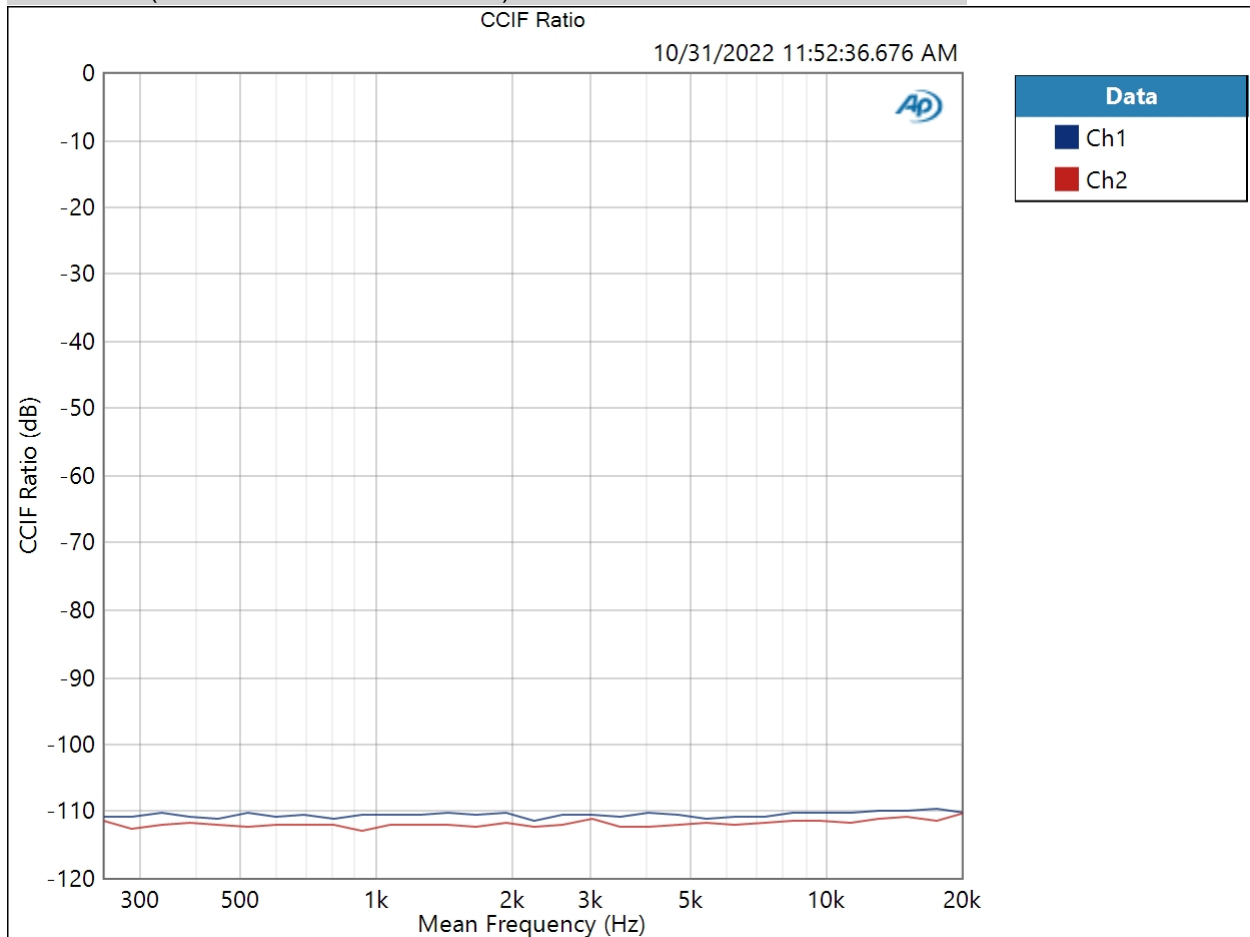
Result: PASSED

10/31/2022 1:09 PM

Preamp : IMD Frequency Sweep (CCIF)

Generator Level: 1.100 Vrms
DC Offset: 0.000 V
Sweep Frequency: Mean Frequency
Diff Frequency: 80.0000 Hz
IMD Split: False
Start Frequency: 20.0000 kHz
Stop Frequency: 250.000 Hz
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 10/31/2022 11:52:36 AM

CCIF Ratio (10/31/2022 11:52:36.676 AM)



Result:  PASSED

Preamp : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 Vrms

Frequency: 1.00000 kHz

Crosstalk (10/31/2022 11:51:24.940 AM)

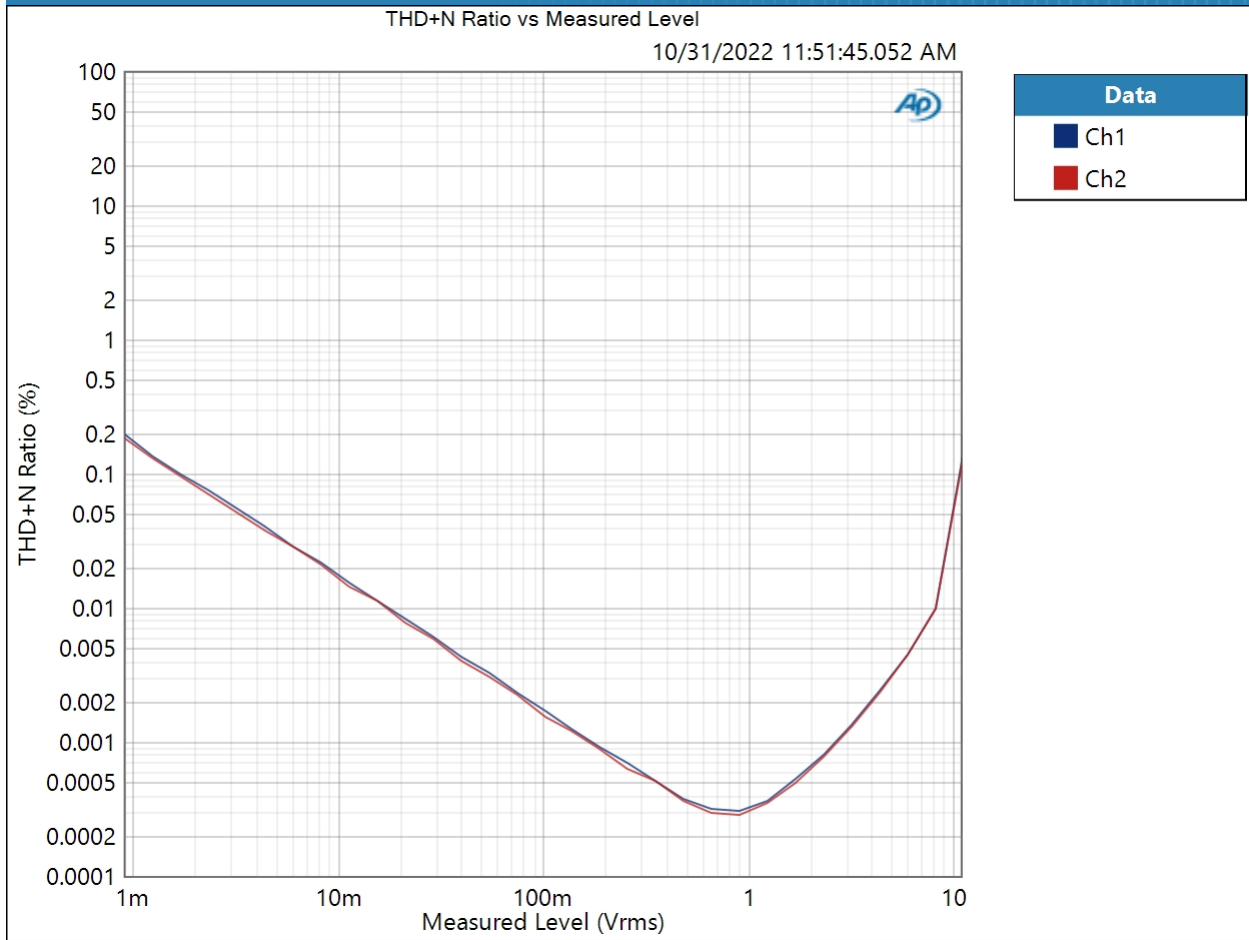
Ch1 -96.479 dB

Ch2 -106.319 dB

Preamp : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 12.00 Vrms
Step Type: Logarithmic
Number of Points: 31
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 10/31/2022 11:51:45 AM

THD+N Ratio vs Measured Level (10/31/2022 11:51:45.052 AM)



Result: PASSED