

Summary

300 Ohm

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

Level and Gain	✔ 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 : 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.

10/10/2023 9:51 AM

• 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 : 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 (10/10/2023 9:41:14.097 AM)

Ch1 1.990 Vrms
Ch2 1.989 Vrms

300 Ohm : 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

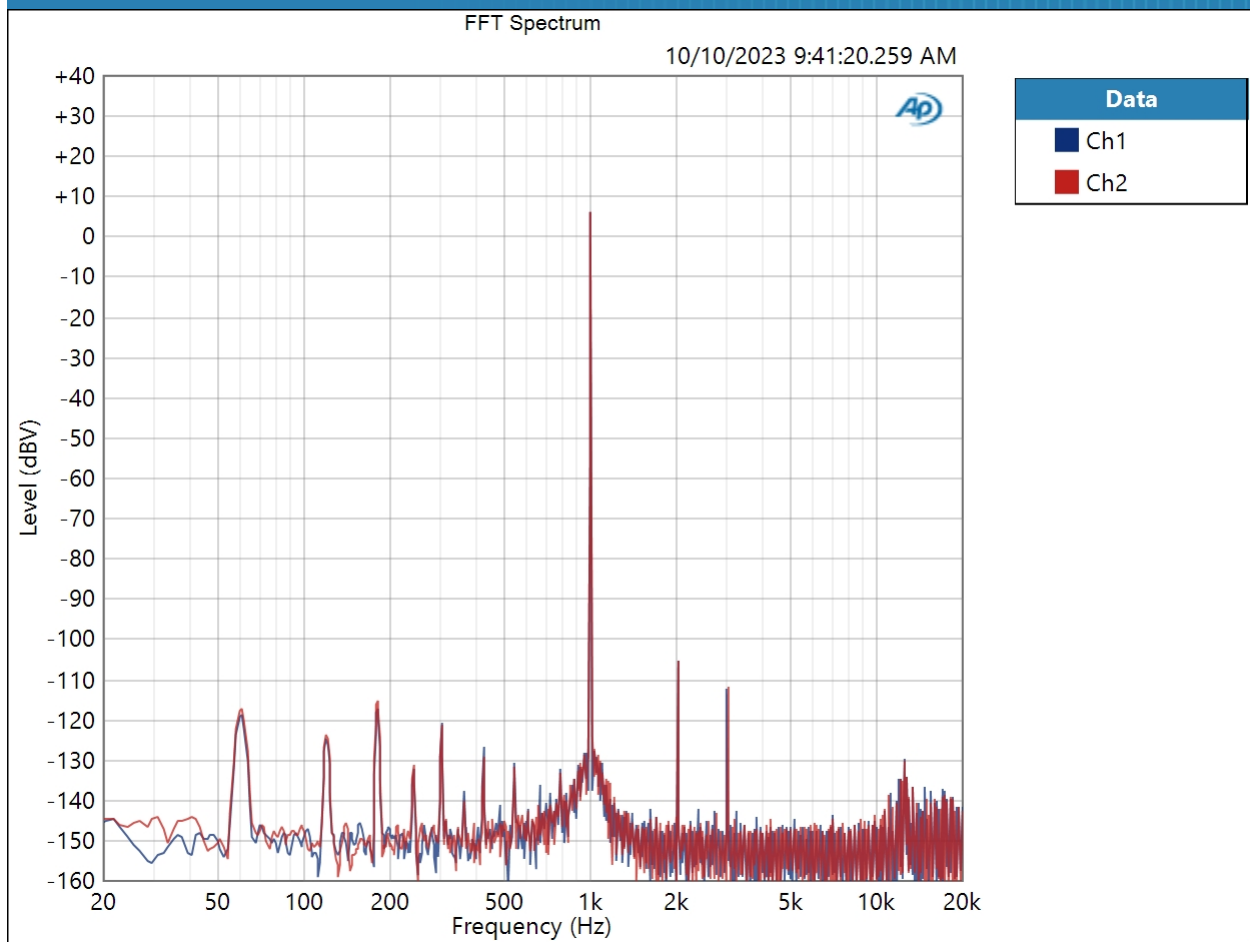
DC Level (10/10/2023 9:41:15.743 AM)

Ch1 -3.301 uV
Ch2 33.79 uV

300 Ohm : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 2.200 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/10/2023 9:41:20 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 (10/10/2023 9:41:20.259 AM)

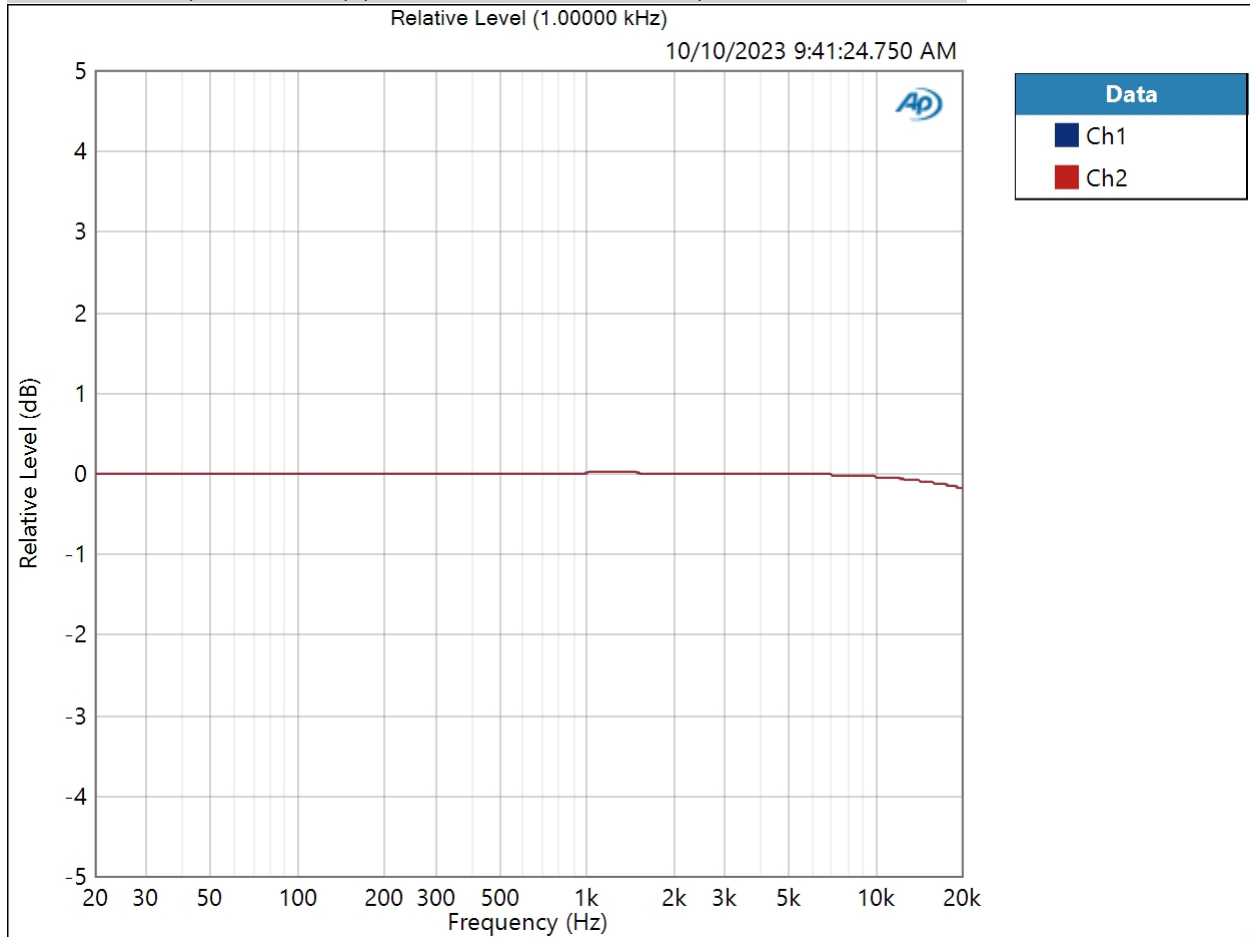


Result: PASSED

300 Ohm : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 210.0 mVrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 2.000 s
Secondary Source: None
Measured 1 10/10/2023 9:41:24 AM

Relative Level (1.00000 kHz) (10/10/2023 9:41:24.750 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) (10/10/2023 9:41:24.750 AM)

Ch1 ± 0.104 dB

Ch2 ± 0.106 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

300 Ohm : 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 (10/10/2023 9:41:27.653 AM)

Ch1 120.379 dB

Ch2 120.603 dB

300 Ohm : 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 (10/10/2023 9:41:30.925 AM)

Ch1 0.000345 %
 Ch2 0.000342 %

THD Ratio (10/10/2023 9:41:30.925 AM)

Ch1 0.000301 %
 Ch2 0.000296 %

Noise Ratio (10/10/2023 9:41:30.925 AM)

Ch1 0.000167 %
 Ch2 0.000174 %

Distortion Product Ratio (10/10/2023 9:41:30.925 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	-111.22	-118.29	-146.73	-151.64	-149.54	-148.75	-147.85	-150.48	-149.44
Ch2	-0.00	-111.49	-117.86	-147.59	-150.22	-145.88	-150.99	-145.85	-151.51	-148.66

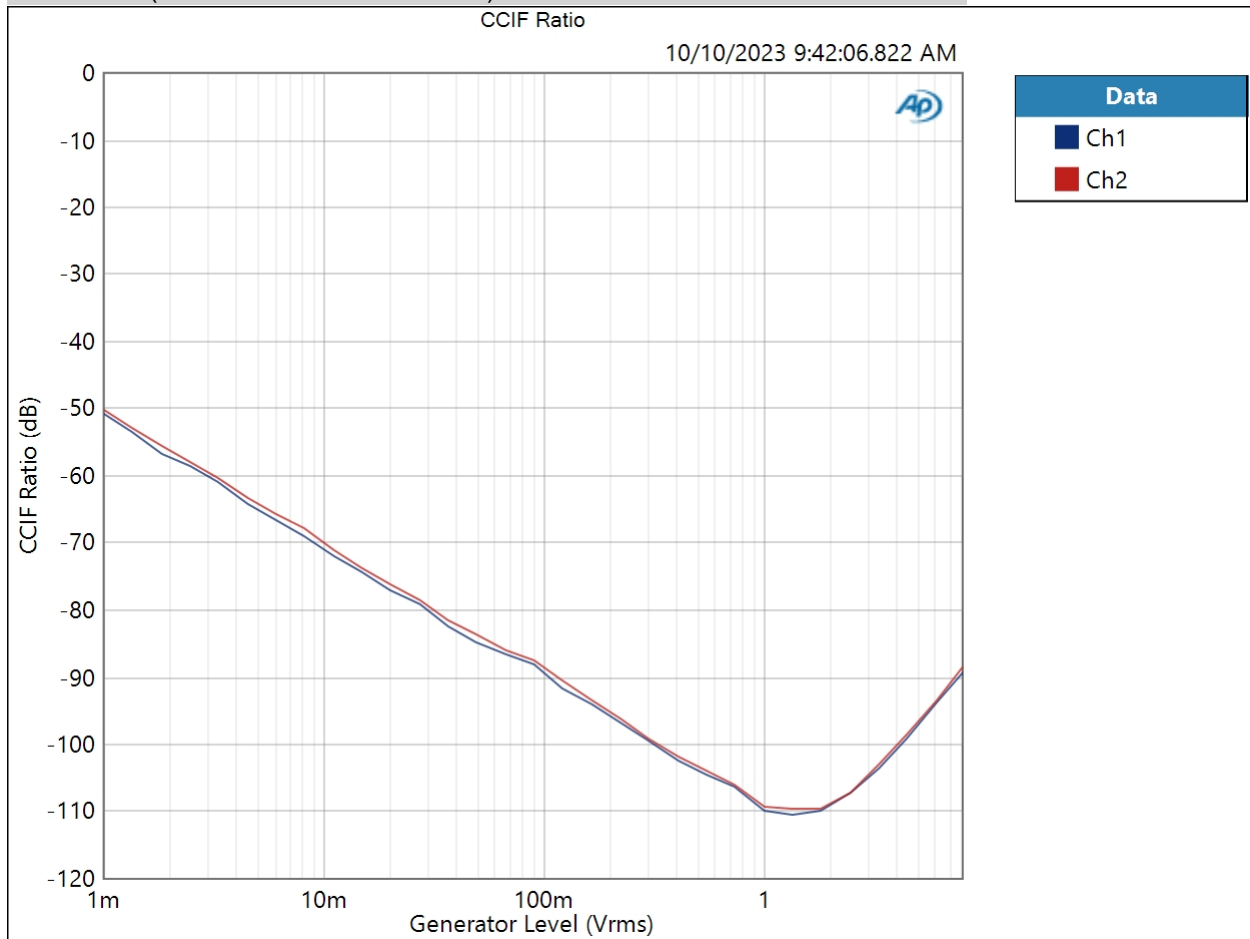
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

300 Ohm : 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: 8.000 Vrms
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 10/10/2023 9:42:06 AM

CCIF Ratio (10/10/2023 9:42:06.822 AM)



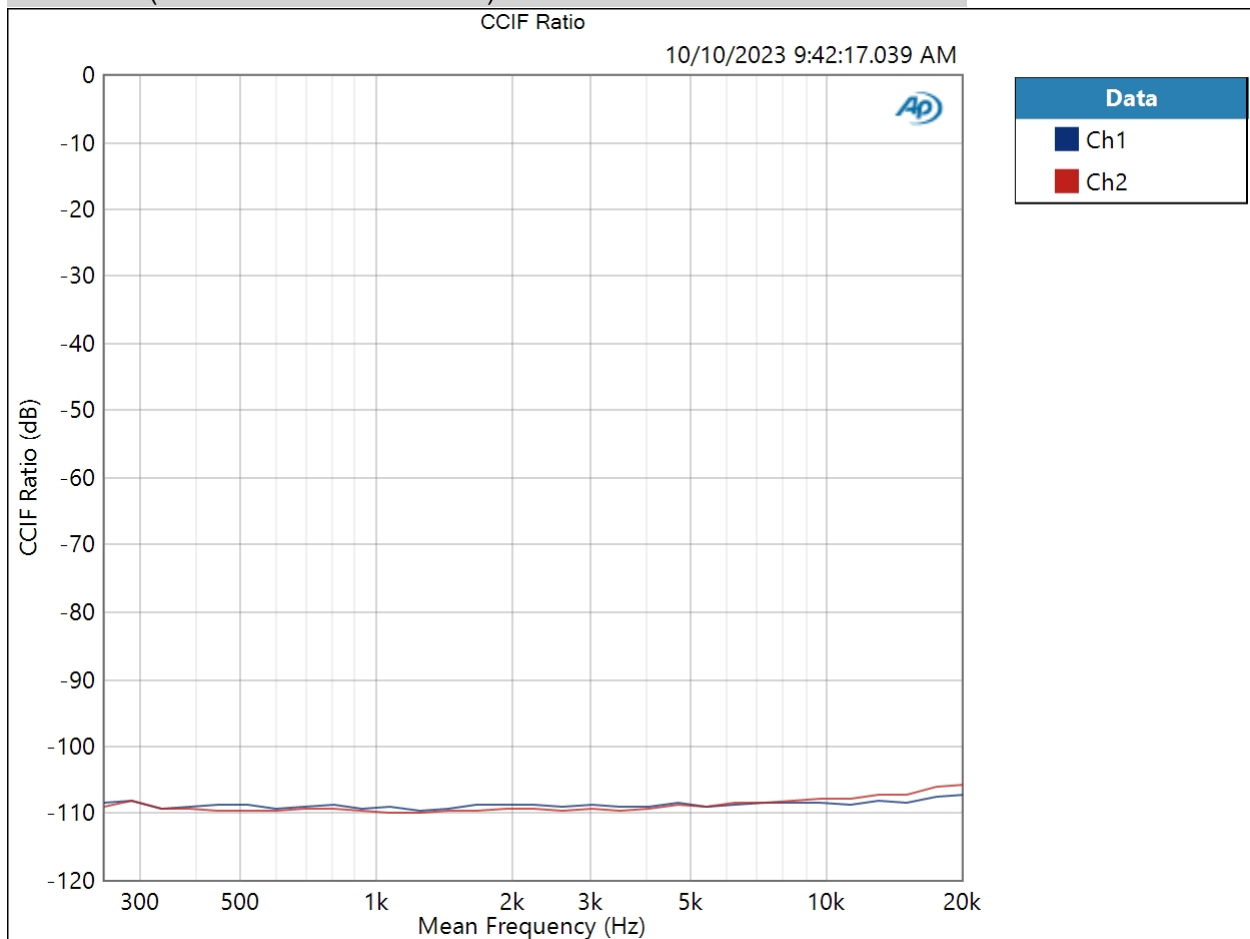
Result: PASSED

10/10/2023 9:51 AM

300 Ohm : IMD Frequency Sweep (CCIF)

Generator Level: 2.200 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 10/10/2023 9:42:17 AM

CCIF Ratio (10/10/2023 9:42:17.039 AM)

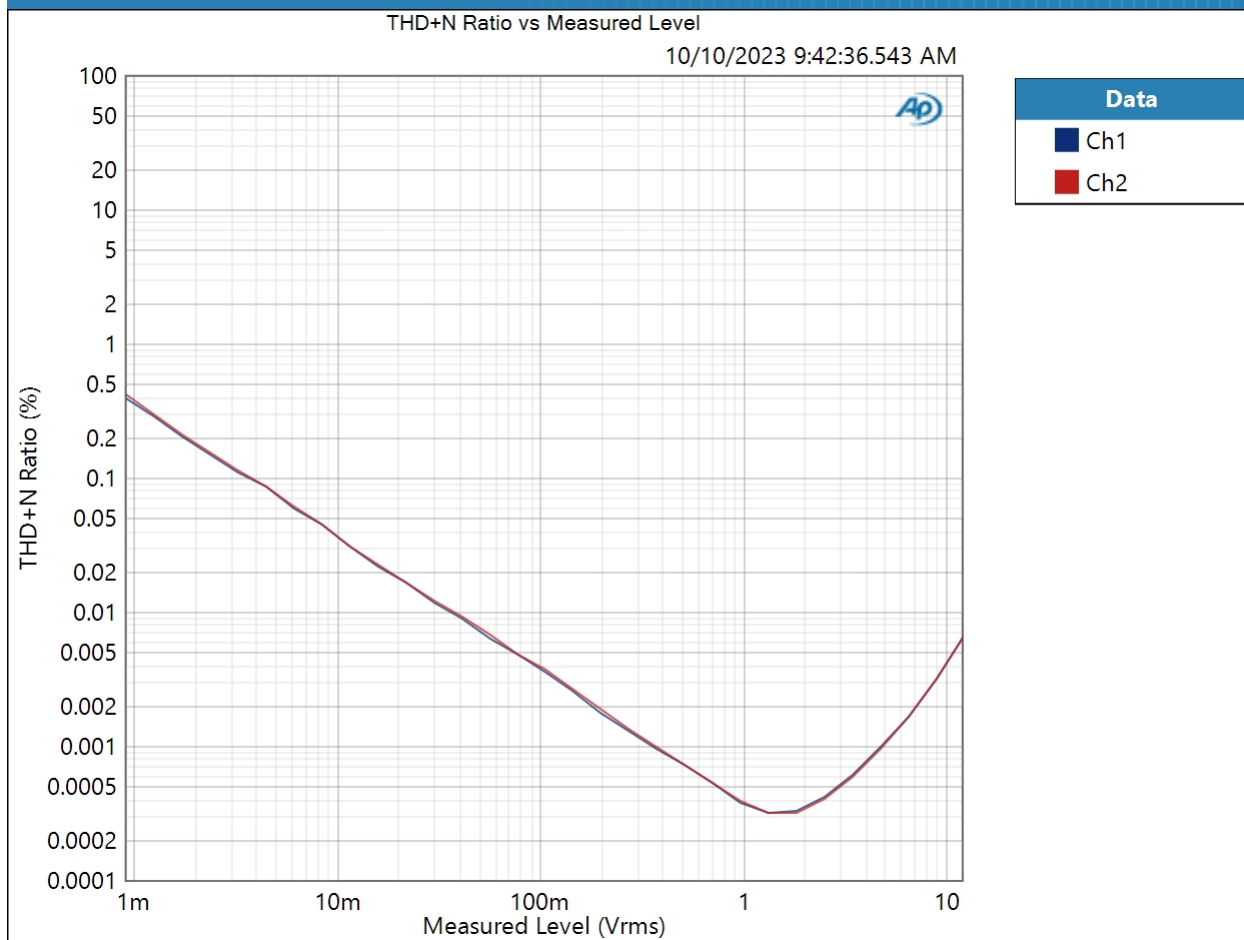


Result:  PASSED

300 Ohm : 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: 13.30 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 10/10/2023 9:42:36 AM

THD+N Ratio vs Measured Level (10/10/2023 9:42:36.543 AM)



Result:  PASSED

32 Ohm : 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

10/10/2023 9:51 AM

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 : 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

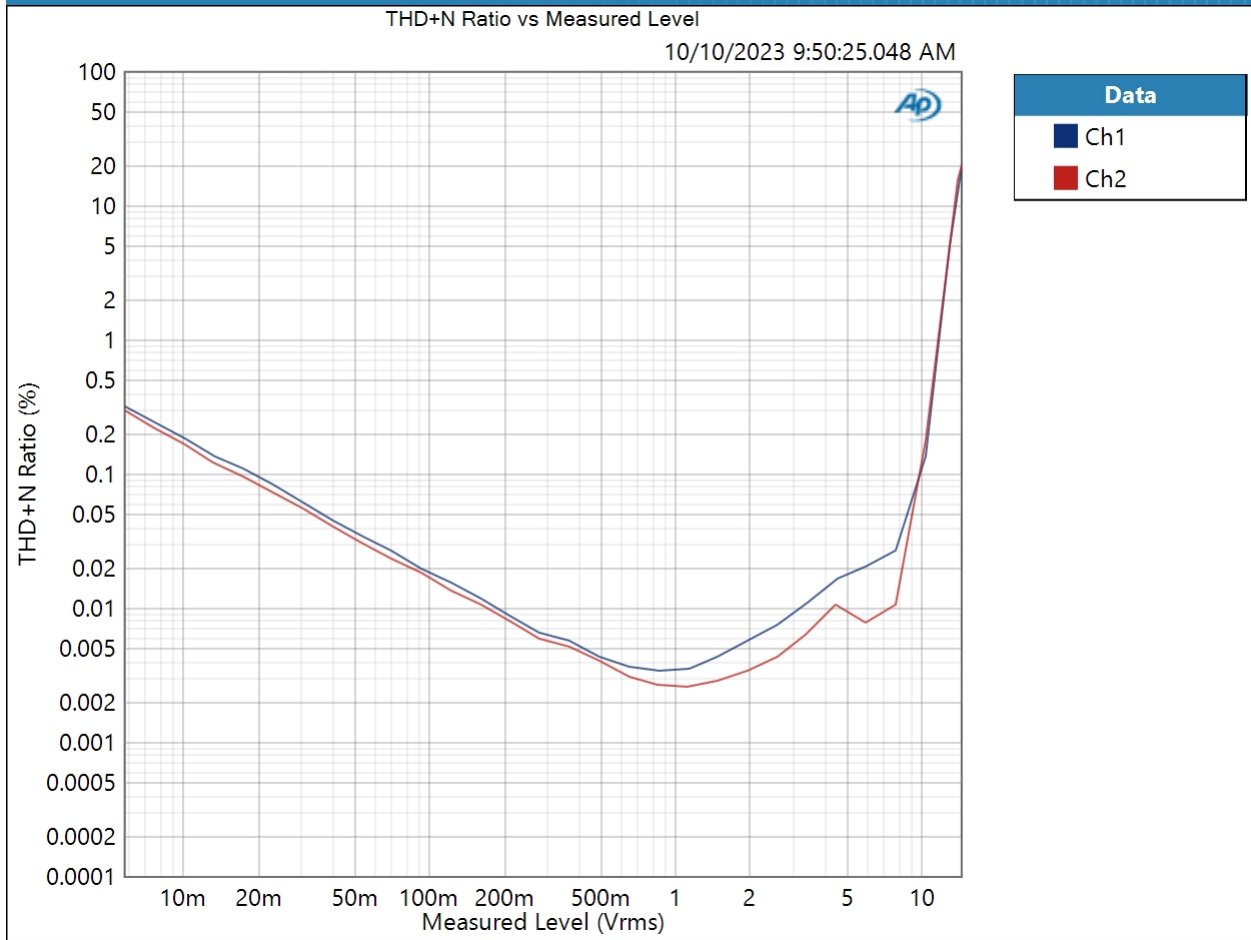
RMS Level (10/10/2023 9:47:12.964 AM)

Ch1 2.123 Vrms
Ch2 2.121 Vrms

32 Ohm : 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: 4.000 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 10/10/2023 9:50:25 AM

THD+N Ratio vs Measured Level (10/10/2023 9:50:25.048 AM)



Result: PASSED