

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

Bypass Balanced

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

Bypass SE

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

Process Balanced

Level and Gain	✓ PASSED
DC Level	✓ PASSED
Signal Analyzer	✓ PASSED
Frequency Response--Flat	✓ 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

Process SE

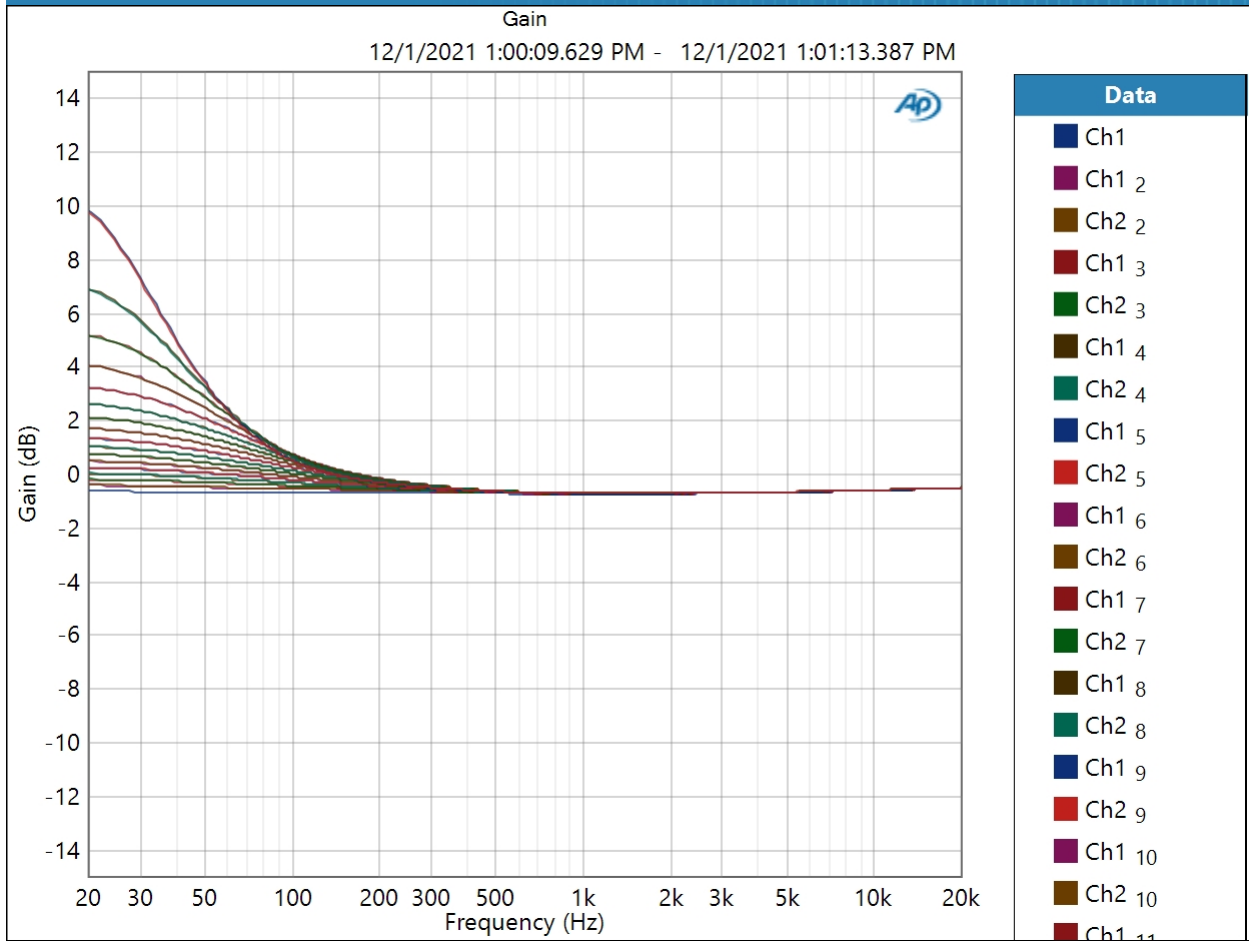
Level and Gain	✔ PASSED
DC Level	✔ PASSED
Signal Analyzer	✔ PASSED
Frequency Response--Flat	✔ PASSED
Signal to Noise Ratio	✔ PASSED
THD+N	✔ PASSED
IMD Level Sweep (CCIF)	✔ PASSED
IMD Frequency Sweep (CCIF)	✔ PASSED
Crosstalk, One Channel Undriven	✔ PASSED
Stepped Level Sweep	✔ PASSED

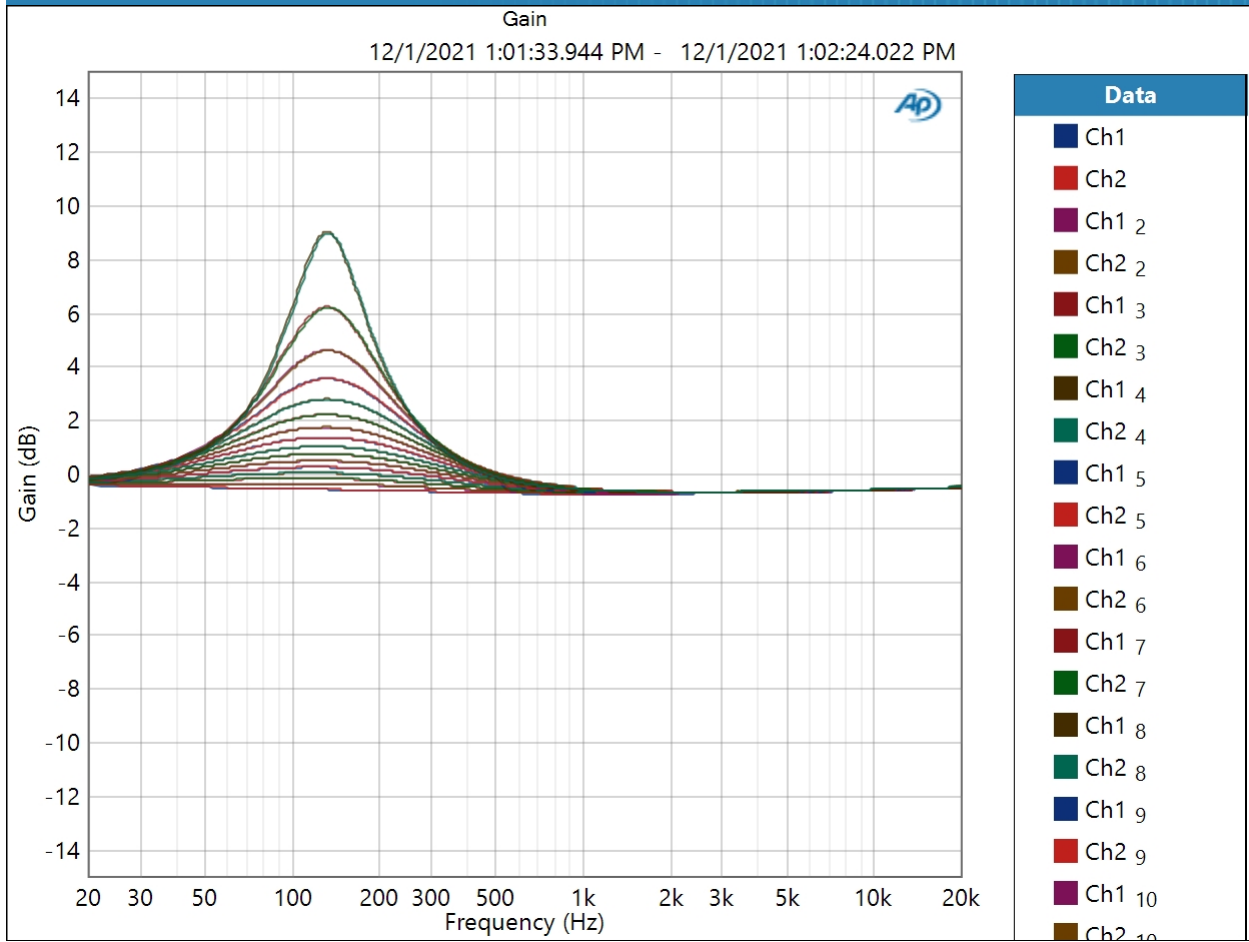
Sequence Result:

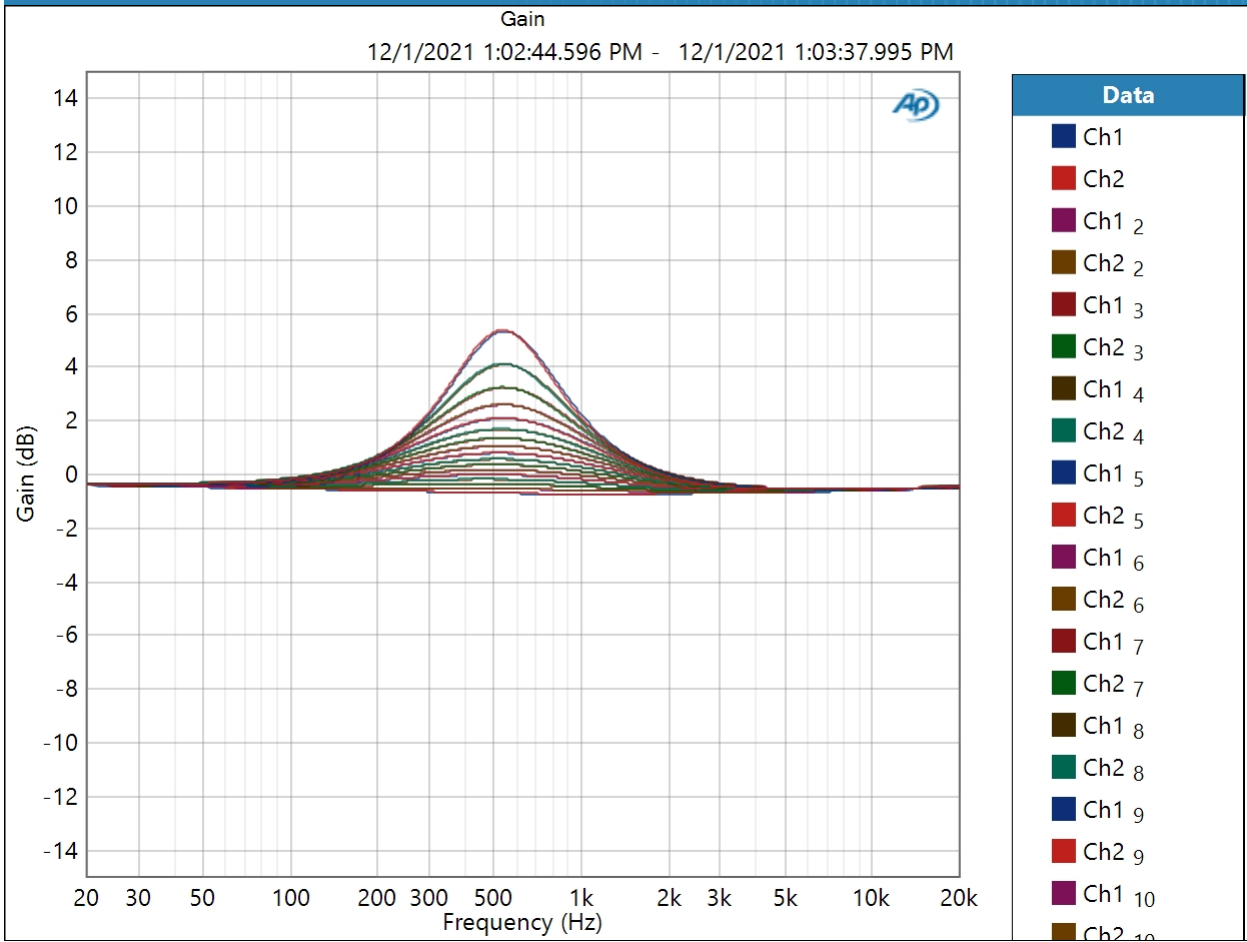
Sequence Result: ✔ PASSED

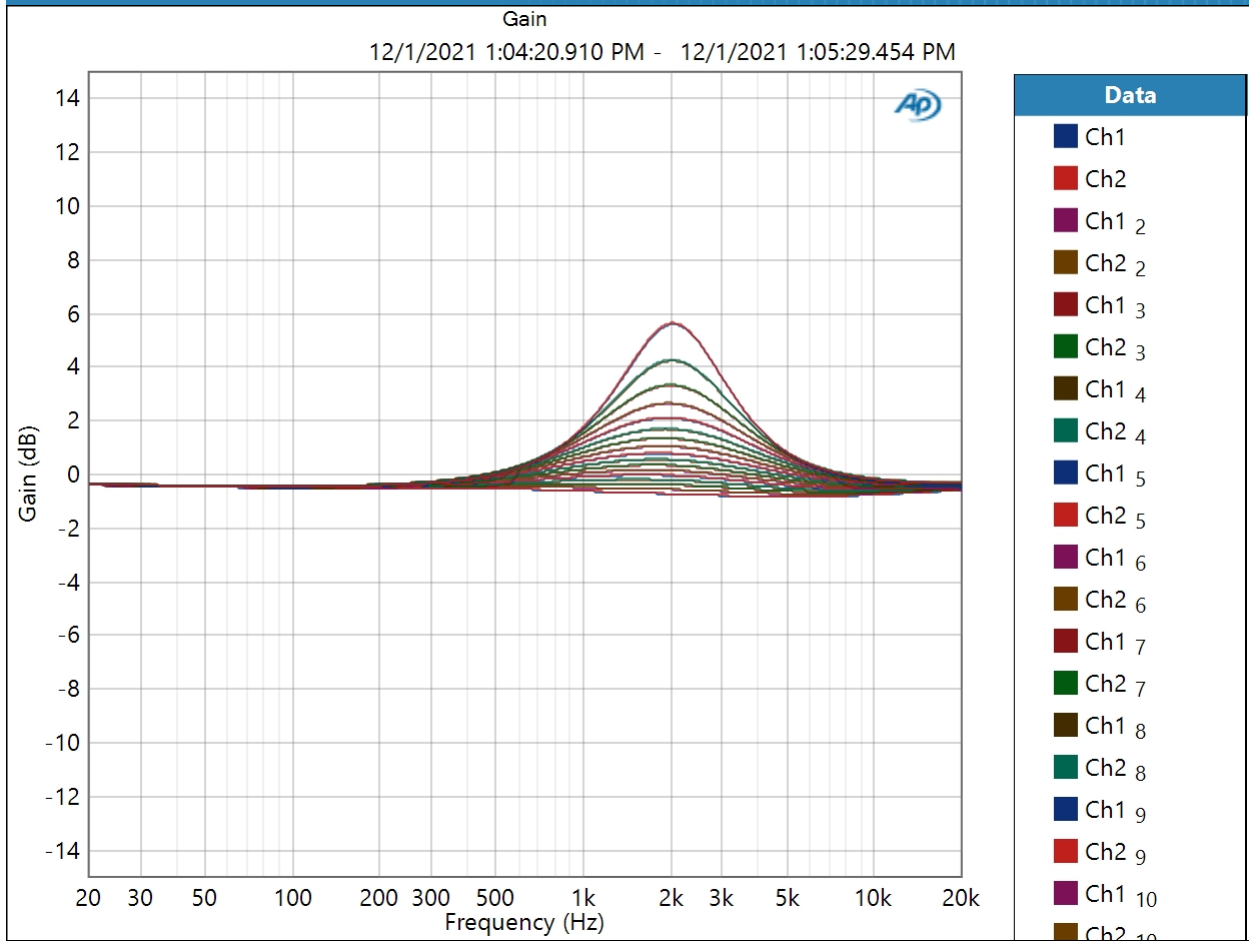
APx Instrument

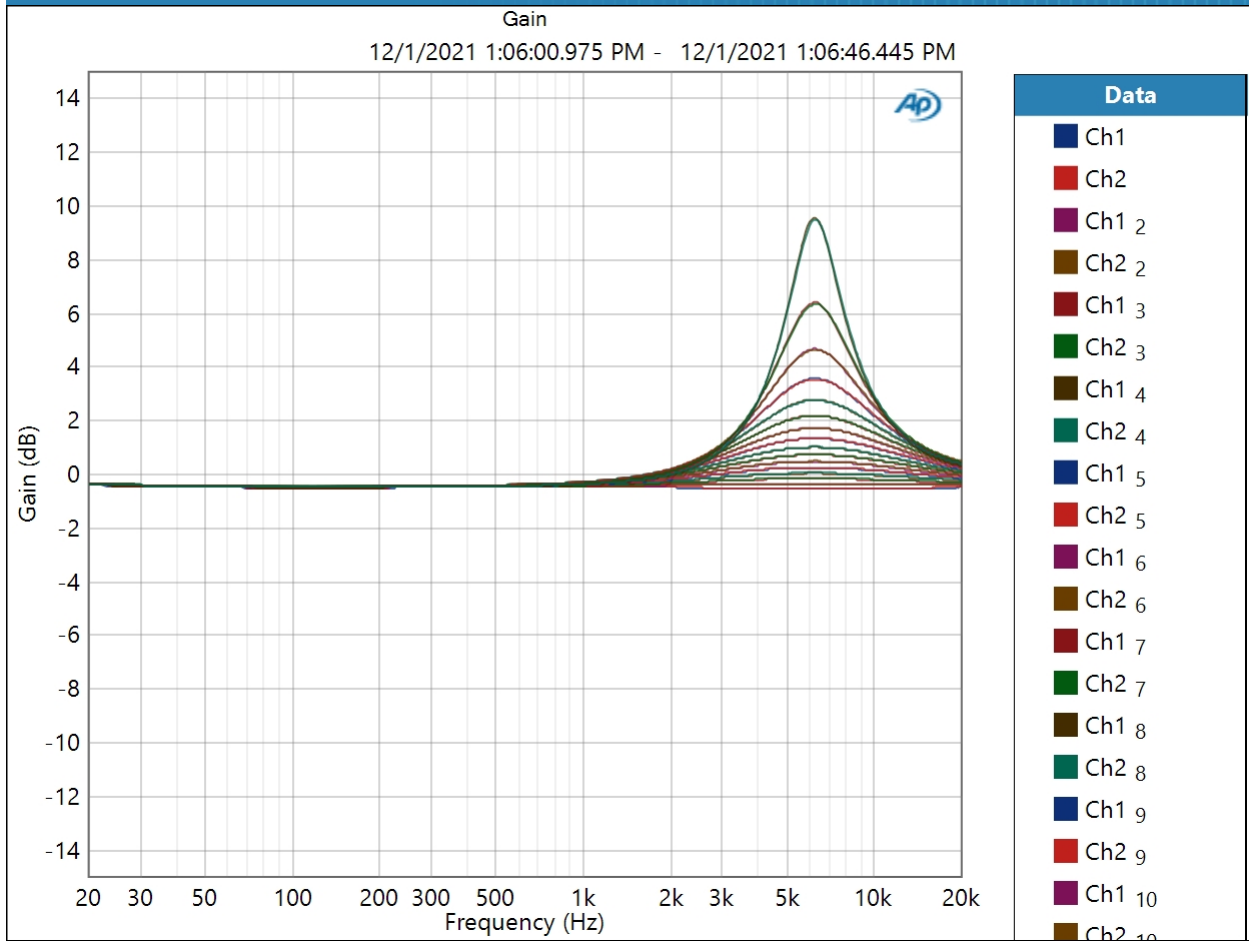
Instrument ID:	11571
Calibration Date:	3/23/2021
APx Version:	6.0.2.600.149330

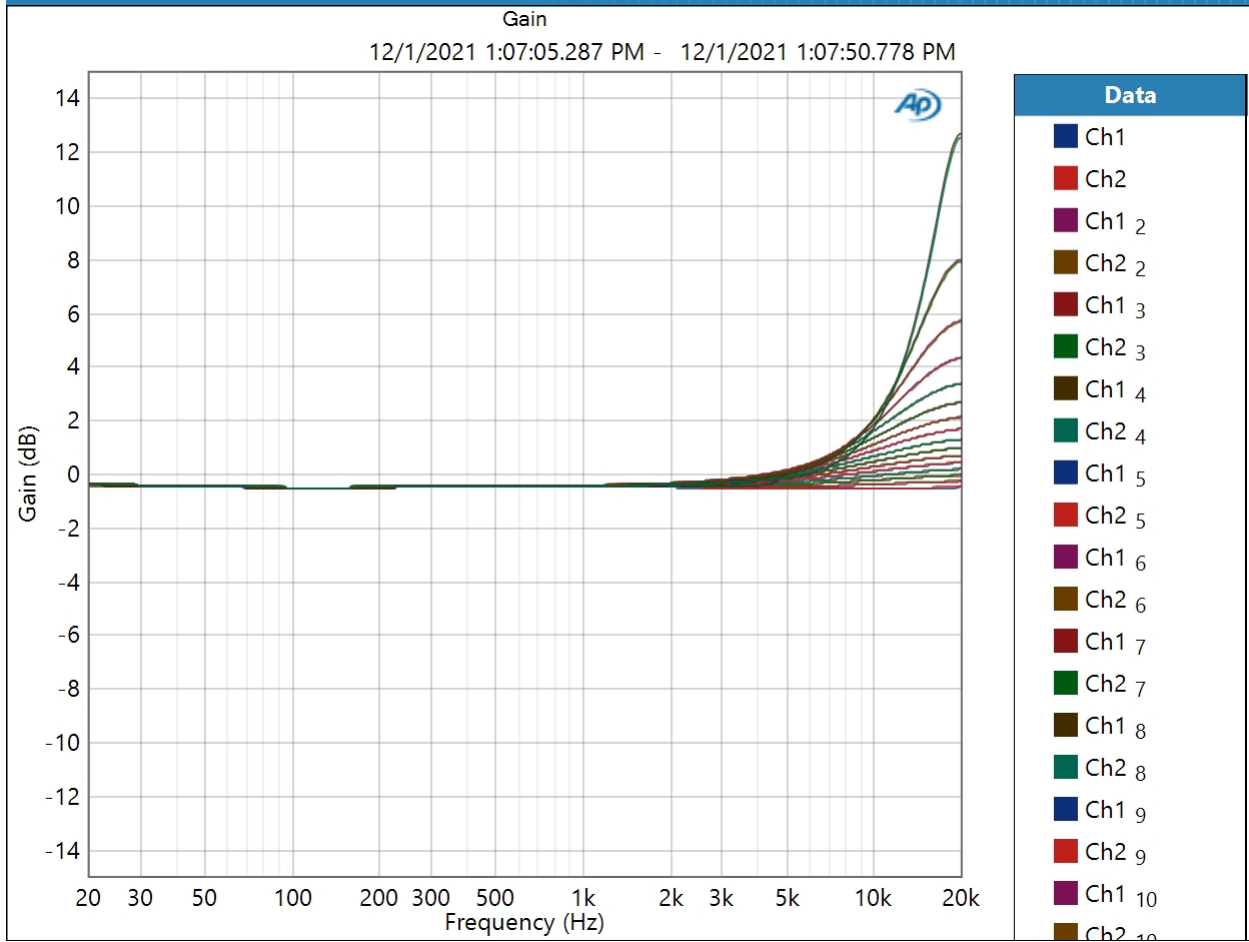












Bypass Balanced : Signal Path Setup

Output Connector:	Analog Balanced
Channels:	2
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Configuration:	Normal (Differential), Normal (Differential)
Source Impedance:	40 ohm, 40 ohm
Channels Inverted:	None
AG52 Generator Option:	Installed
Auto Range:	Enabled
Output EQ:	None
Input 1:	Analog Balanced
Input Bandwidth:	AC (<10 Hz) - 22.4k (48 kHz SR)
Input EQ:	None
Channels:	2
Termination:	200 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

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

Bypass Balanced : Level and Gain

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	1.000 Vrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (12/1/2021 1:15:08.903 PM)

Ch1 0.997 Vrms
Ch2 0.997 Vrms

Bypass Balanced : 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

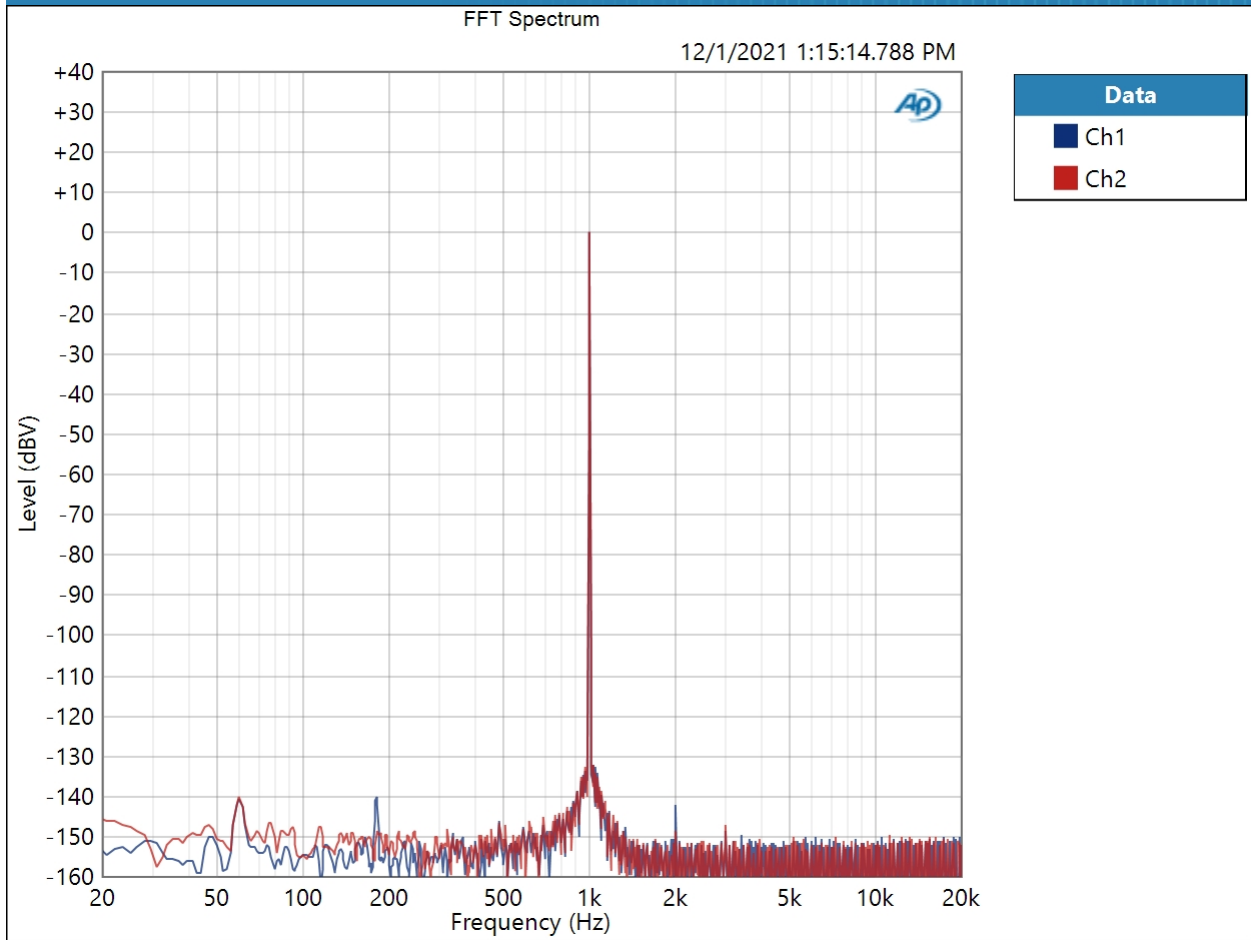
DC Level (12/1/2021 1:15:10.555 PM)

Ch1 -100.3 uV
Ch2 -23.48 uV

Bypass Balanced : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 12/1/2021 1:15:14 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 (12/1/2021 1:15:14.788 PM)

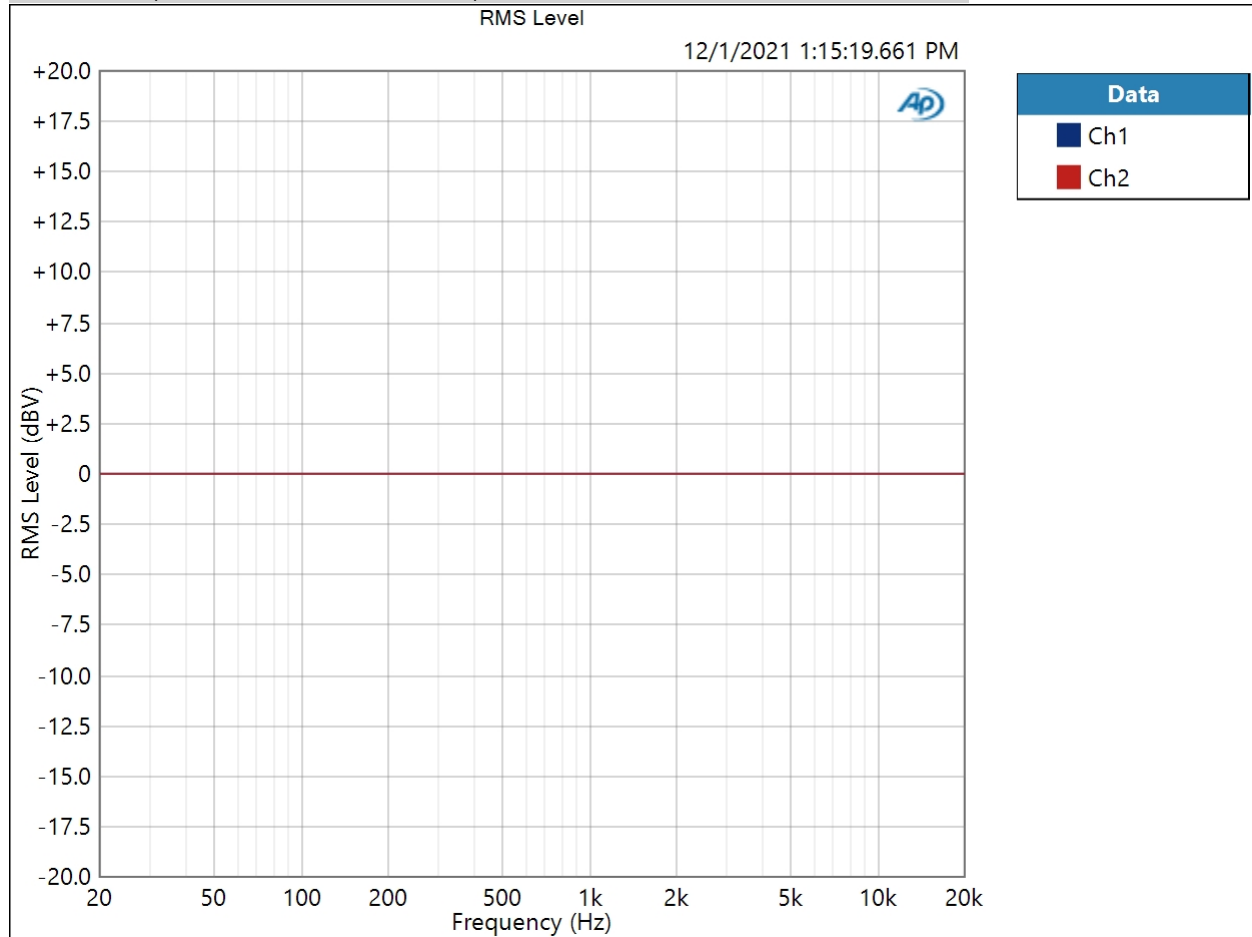


Result: PASSED

Bypass Balanced : 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 12/1/2021 1:15:19 PM

RMS Level (12/1/2021 1:15:19.661 PM)



Result: PASSED

12/1/2021 1:23 PM

Bypass Balanced : Signal to Noise Ratio

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 4.000 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 (12/1/2021 1:15:22.500 PM)

Ch1 135.268 dB
Ch2 135.172 dB

Bypass Balanced : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.000 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 (12/1/2021 1:15:25.644 PM)

Ch1 0.000178 %
 Ch2 0.000195 %

THD Ratio (12/1/2021 1:15:25.644 PM)

Ch1 0.000022 %
 Ch2 0.000021 %

Noise Ratio (12/1/2021 1:15:25.644 PM)

Ch1 0.000116 %
 Ch2 0.000116 %

Distortion Product Ratio (12/1/2021 1:15:25.644 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	-139.69	-143.75	-148.83	-146.96	-148.46	-150.33	-145.23	-151.15	-149.37
Ch2	-0.00	-143.44	-141.07	-148.62	-147.49	-149.02	-143.05	-148.94	-148.28	-145.26

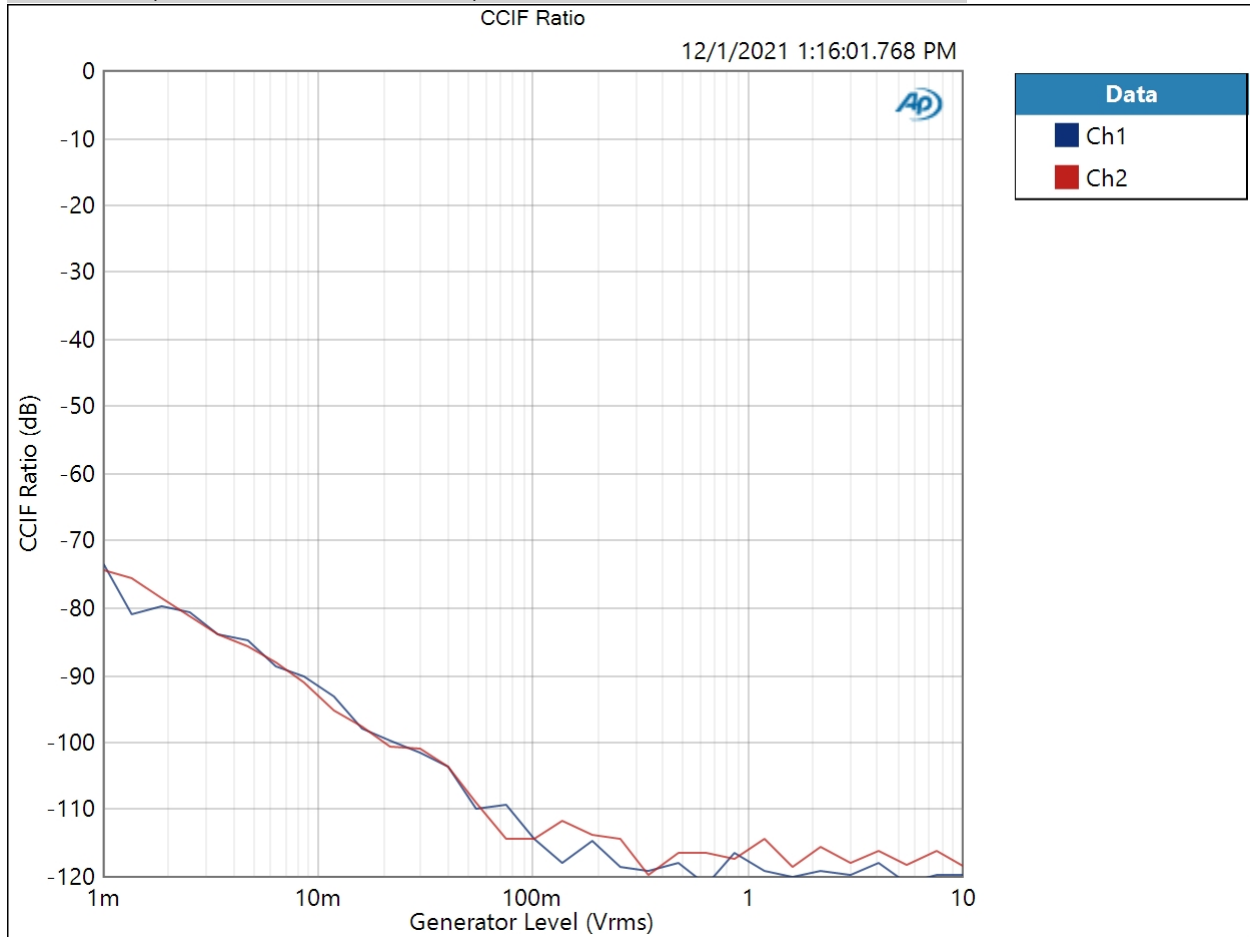
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Bypass Balanced : 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: 10.00 Vrms
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 12/1/2021 1:16:01 PM

CCIF Ratio (12/1/2021 1:16:01.768 PM)



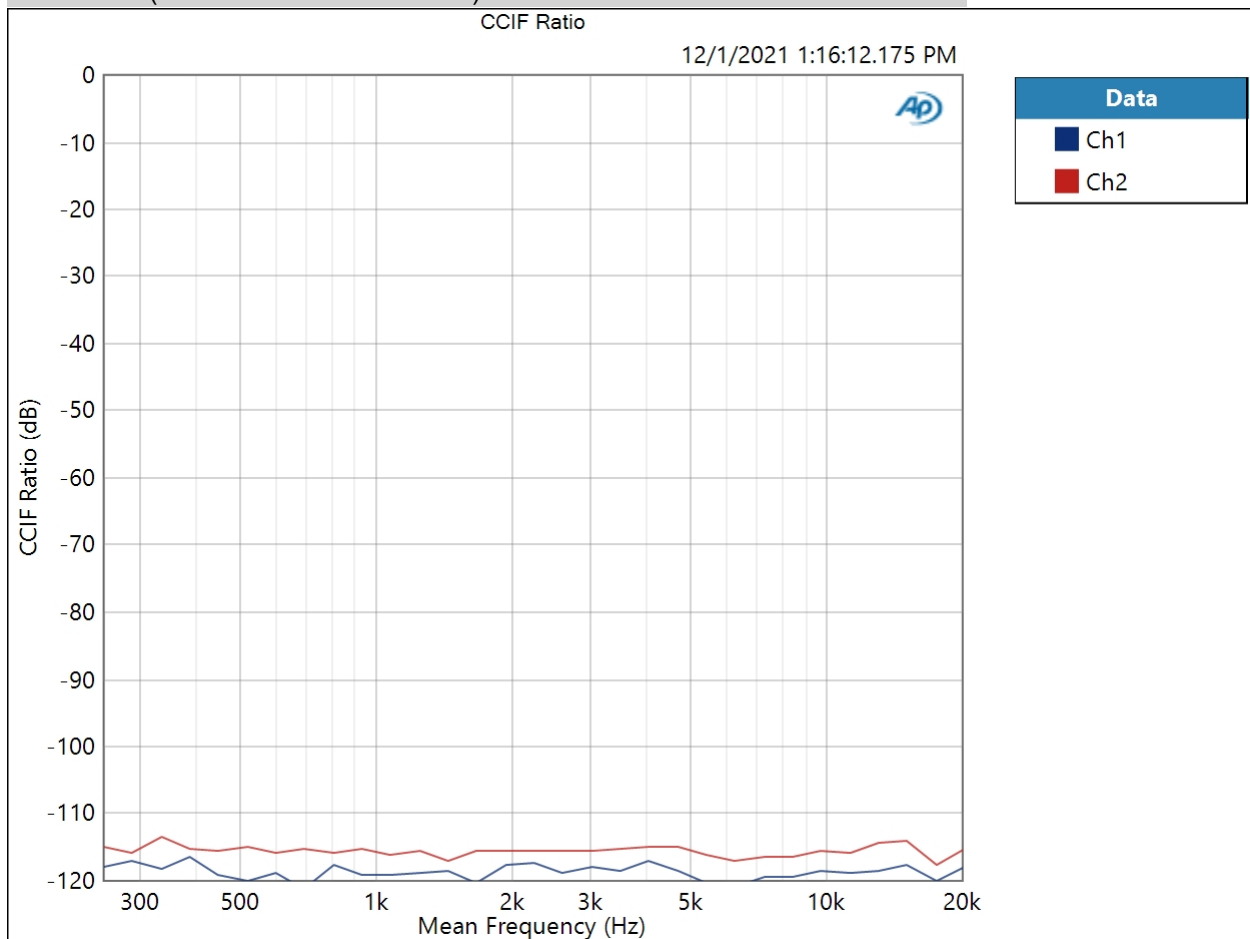
Result: PASSED

12/1/2021 1:23 PM

Bypass Balanced : 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 12/1/2021 1:16:12 PM

CCIF Ratio (12/1/2021 1:16:12.175 PM)



Result:  PASSED

Bypass Balanced : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 Vrms

Frequency: 10.0000 kHz

Crosstalk (12/1/2021 1:16:17.773 PM)

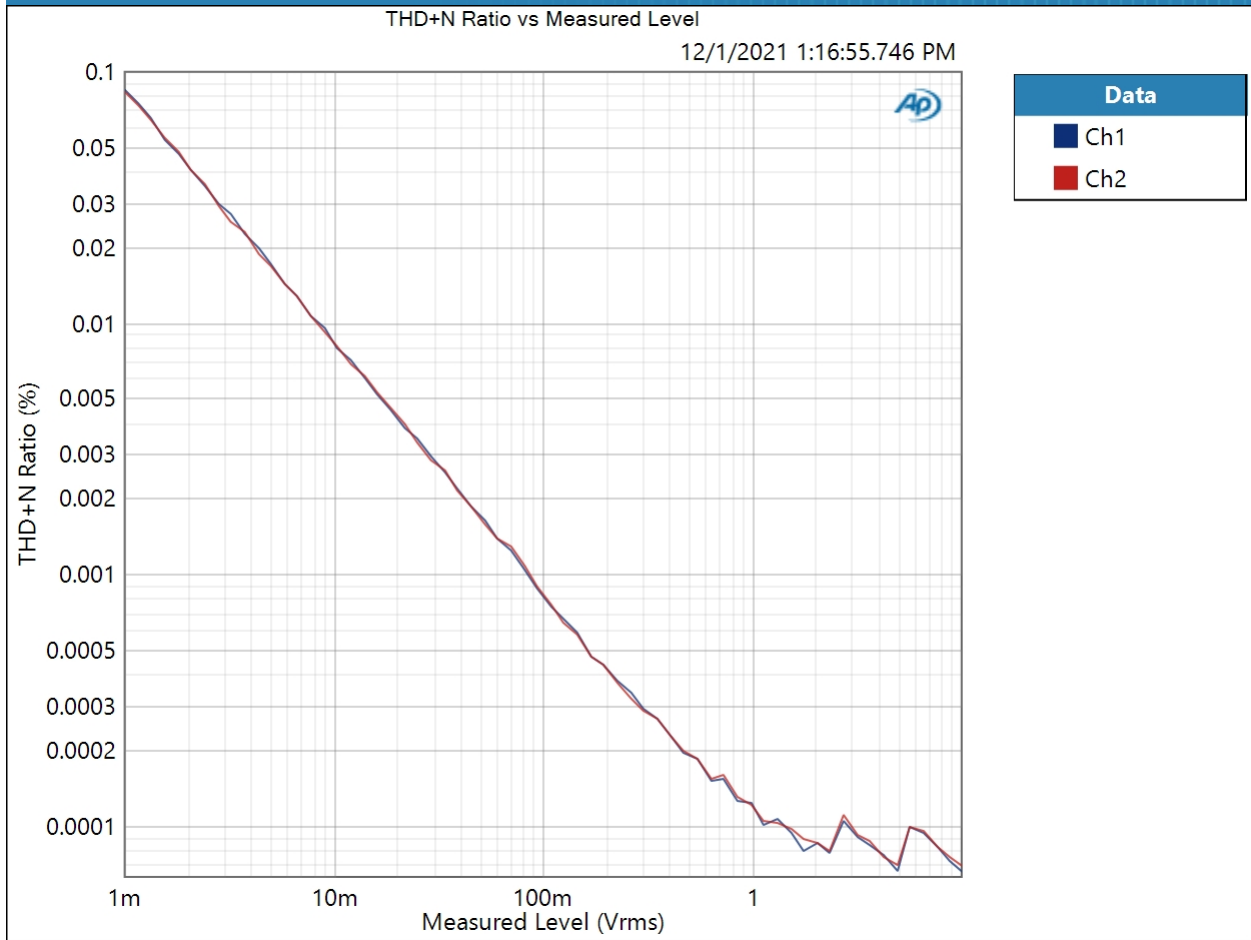
Ch1 130.926 dB

Ch2 117.736 dB

Bypass Balanced : 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: 10.00 Vrms
Step Type: Logarithmic
Number of Points: 64
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 12/1/2021 1:16:55 PM

THD+N Ratio vs Measured Level (12/1/2021 1:16:55.746 PM)



Result: PASSED

Bypass SE : 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) - 22.4k (48 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

12/1/2021 1:23 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

Bypass SE : Level and Gain

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.000 Vrms
 Frequency: 1.00000 kHz
 Low-pass Filter: Signal Path

RMS Level (12/1/2021 1:11:47.209 PM)

Ch1 0.997 Vrms
 Ch2 0.997 Vrms

Bypass SE : 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

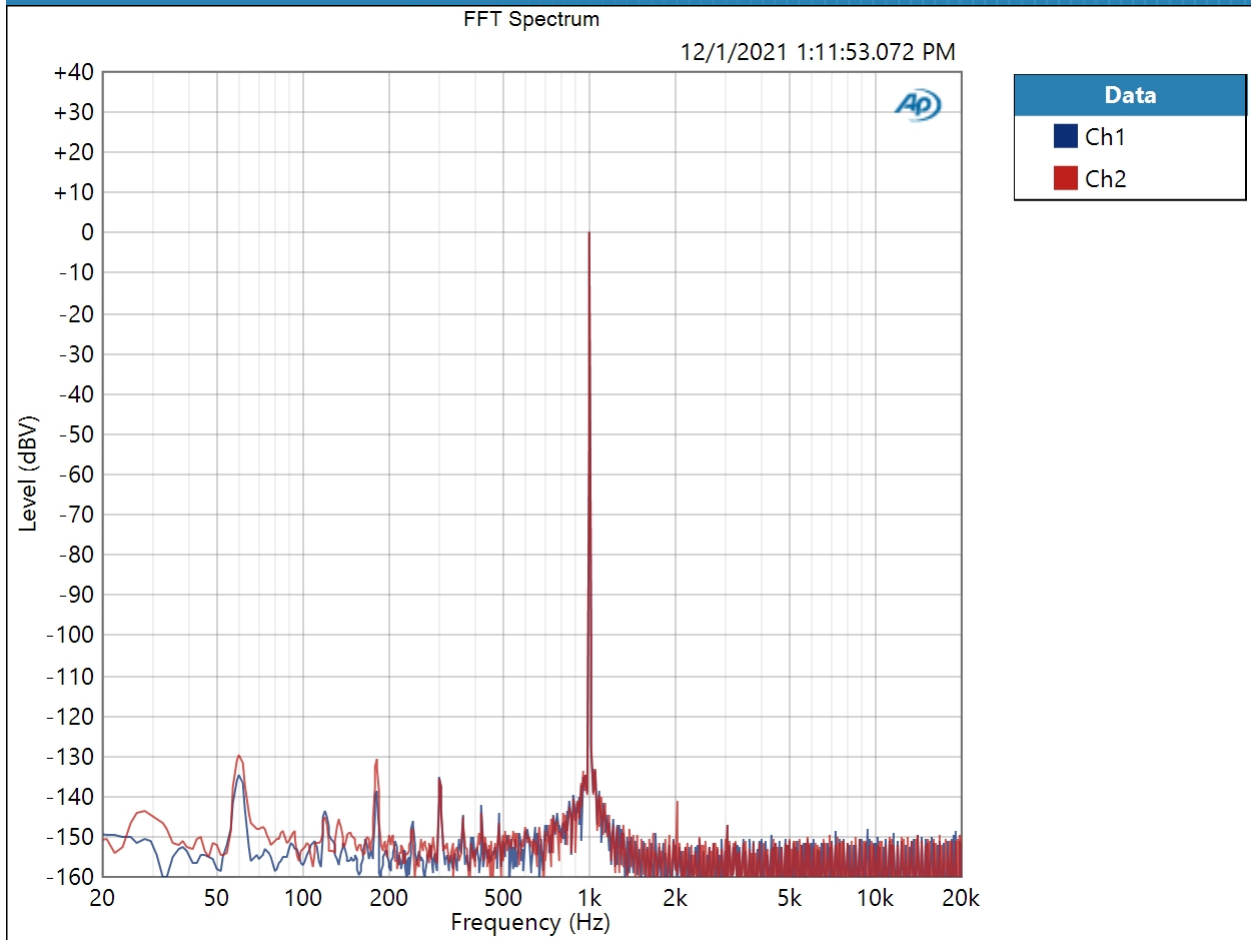
DC Level (12/1/2021 1:11:48.821 PM)

Ch1 -29.52 uV
 Ch2 53.23 uV

Bypass SE : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 12/1/2021 1:11:53 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 (12/1/2021 1:11:53.072 PM)

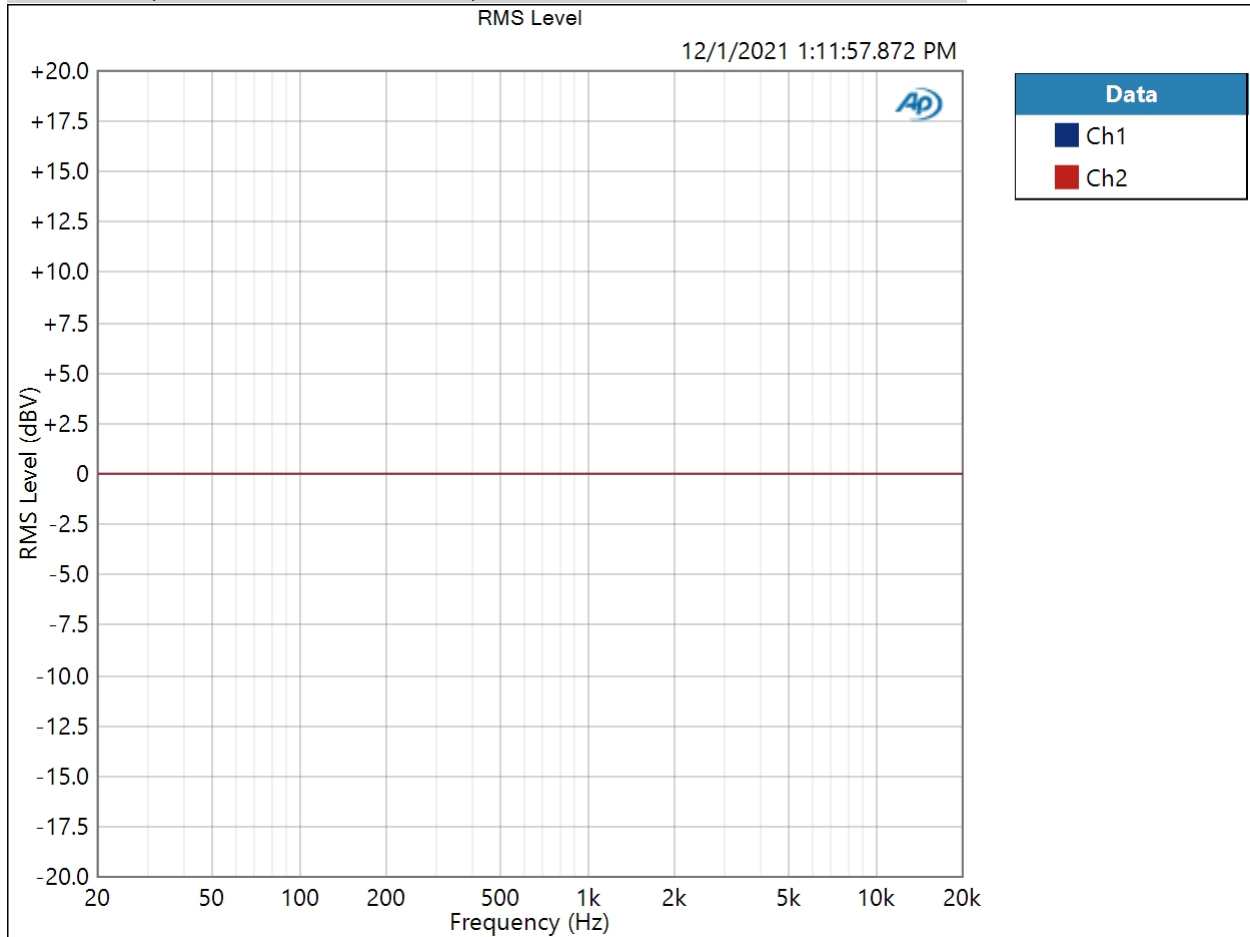


Result: PASSED

Bypass SE : 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 12/1/2021 1:11:57 PM

RMS Level (12/1/2021 1:11:57.872 PM)



Result: PASSED

12/1/2021 1:23 PM

Bypass SE : Signal to Noise Ratio

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 2.000 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 (12/1/2021 1:12:00.711 PM)

Ch1 129.210 dB
Ch2 129.251 dB

Bypass SE : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.000 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 (12/1/2021 1:12:03.604 PM)

Ch1 0.000120 %
 Ch2 0.000125 %

THD Ratio (12/1/2021 1:12:03.604 PM)

Ch1 0.000021 %
 Ch2 0.000024 %

Noise Ratio (12/1/2021 1:12:03.604 PM)

Ch1 0.000119 %
 Ch2 0.000122 %

Distortion Product Ratio (12/1/2021 1:12:03.604 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	-150.98	-142.92	-143.73	-148.47	-144.57	-148.93	-149.61	-147.60	-150.12
Ch2	-0.00	-138.02	-144.93	-151.94	-145.69	-146.72	-150.30	-142.19	-145.12	-147.22

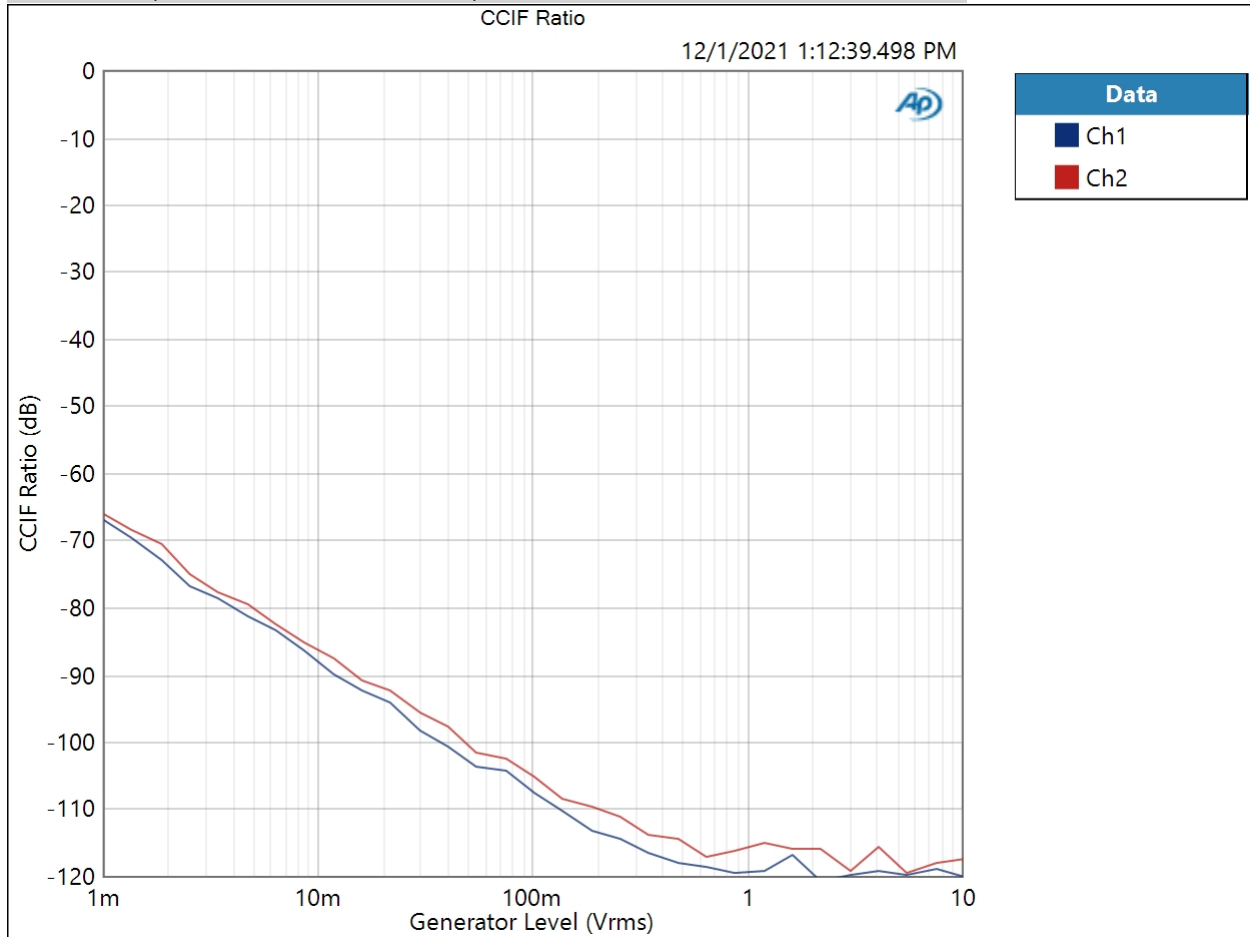
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Bypass SE : 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: 10.00 Vrms
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 12/1/2021 1:12:39 PM

CCIF Ratio (12/1/2021 1:12:39.498 PM)



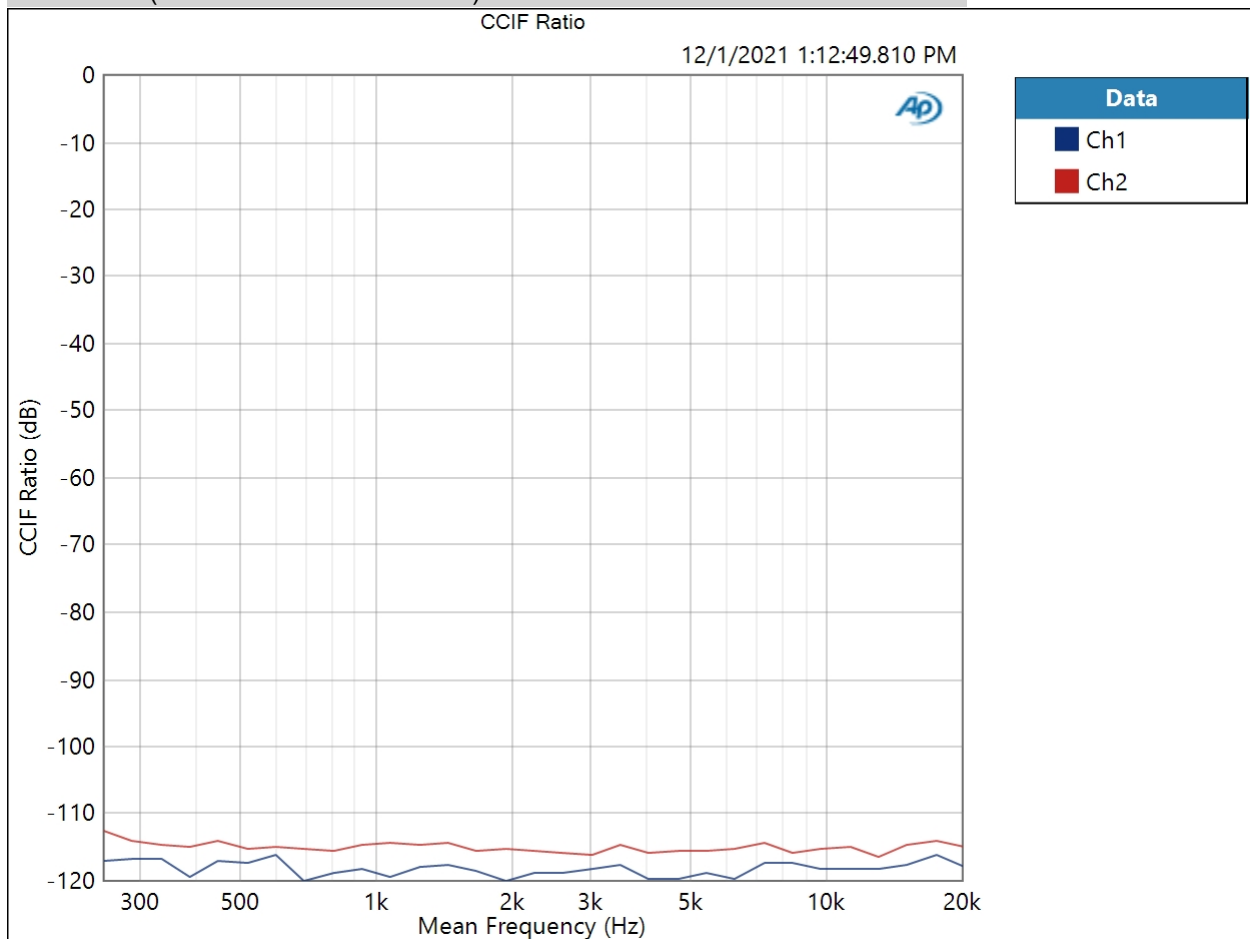
Result: PASSED

12/1/2021 1:23 PM

Bypass SE : 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 12/1/2021 1:12:49 PM

CCIF Ratio (12/1/2021 1:12:49.810 PM)



Result:  PASSED

Bypass SE : Crosstalk, One Channel Undriven

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 10.0000 kHz

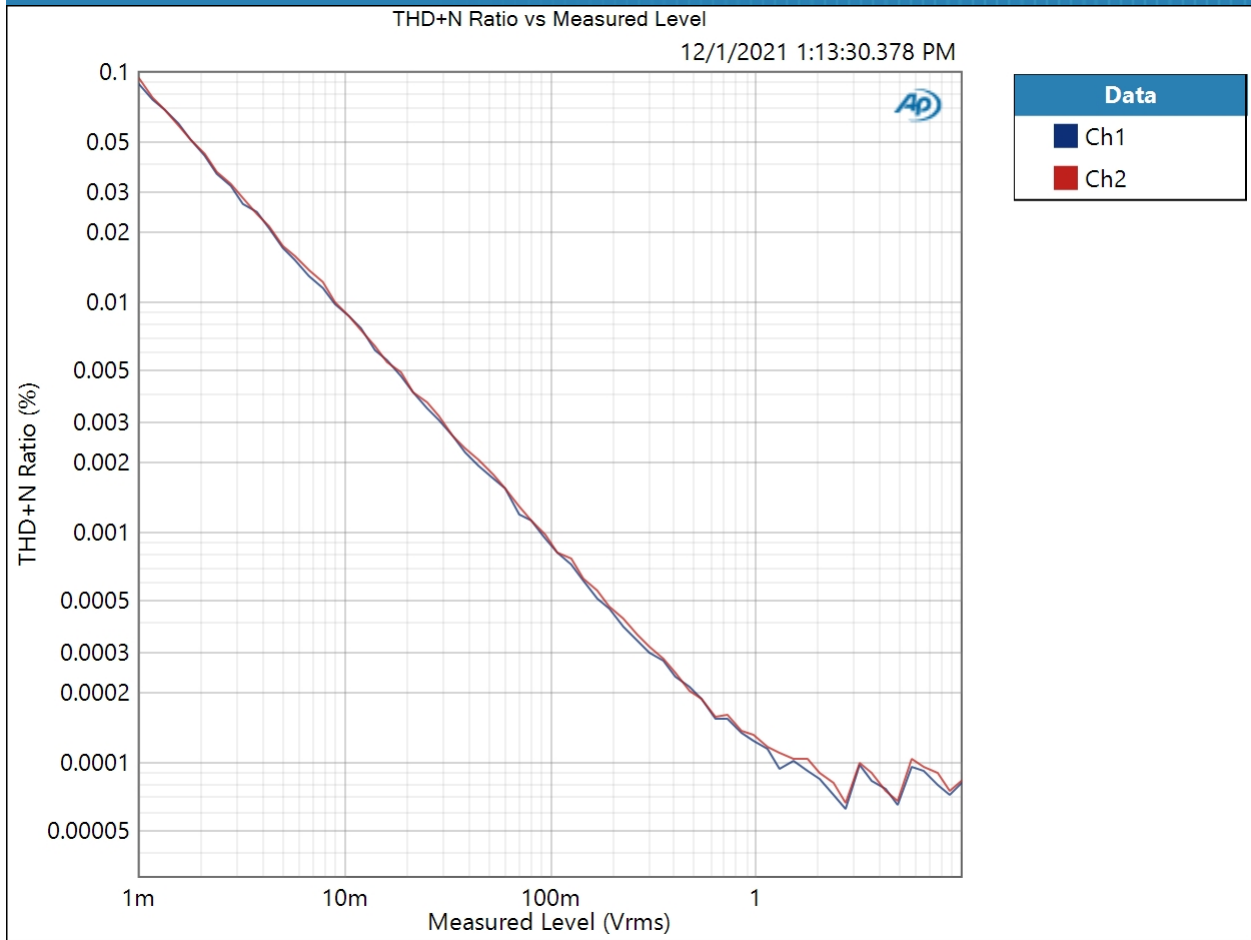
Crosstalk (12/1/2021 1:12:52.121 PM)

Ch1 -96.938 dB
Ch2 -97.646 dB

Bypass SE : 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: 10.00 Vrms
Step Type: Logarithmic
Number of Points: 64
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 12/1/2021 1:13:30 PM

THD+N Ratio vs Measured Level (12/1/2021 1:13:30.378 PM)



Result: PASSED

Process Balanced : Signal Path Setup

Output Connector:	Analog Balanced
Channels:	2
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Configuration:	Normal (Differential), Normal (Differential)
Source Impedance:	40 ohm, 40 ohm
Channels Inverted:	None
AG52 Generator Option:	Installed
Auto Range:	Enabled
Output EQ:	None
Input 1:	Analog Balanced
Input Bandwidth:	AC (<10 Hz) - 22.4k (48 kHz SR)
Input EQ:	None
Channels:	2
Termination:	200 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

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

Process Balanced : Level and Gain

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	1.000 Vrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (12/1/2021 1:18:58.612 PM)

Ch1 0.944 Vrms
Ch2 0.945 Vrms

Process Balanced : 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

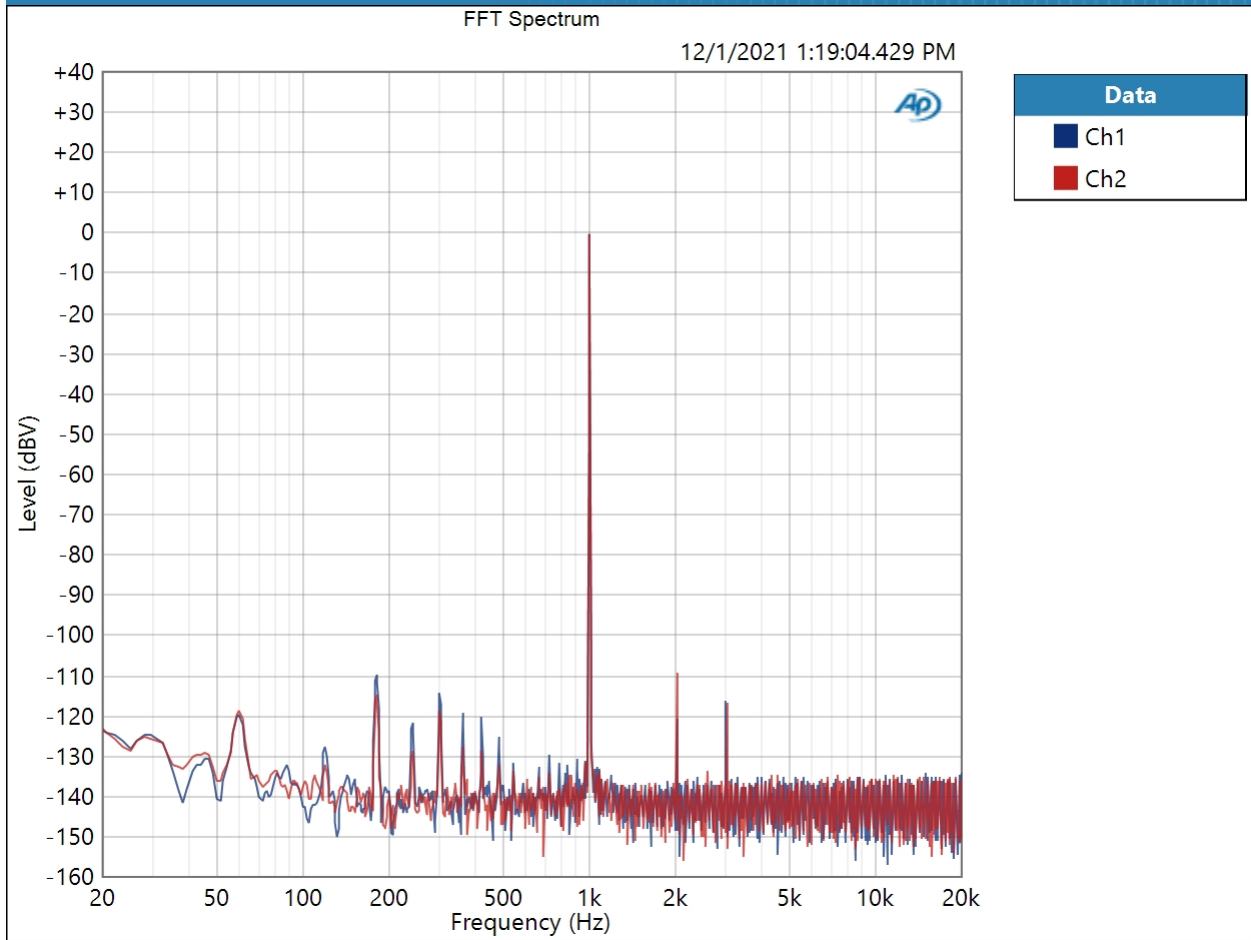
DC Level (12/1/2021 1:19:00.183 PM)

Ch1 -737.5 uV
Ch2 494.2 uV

Process Balanced : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 12/1/2021 1:19:04 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 (12/1/2021 1:19:04.429 PM)



Result: PASSED

Process Balanced : Frequency Response--Flat

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

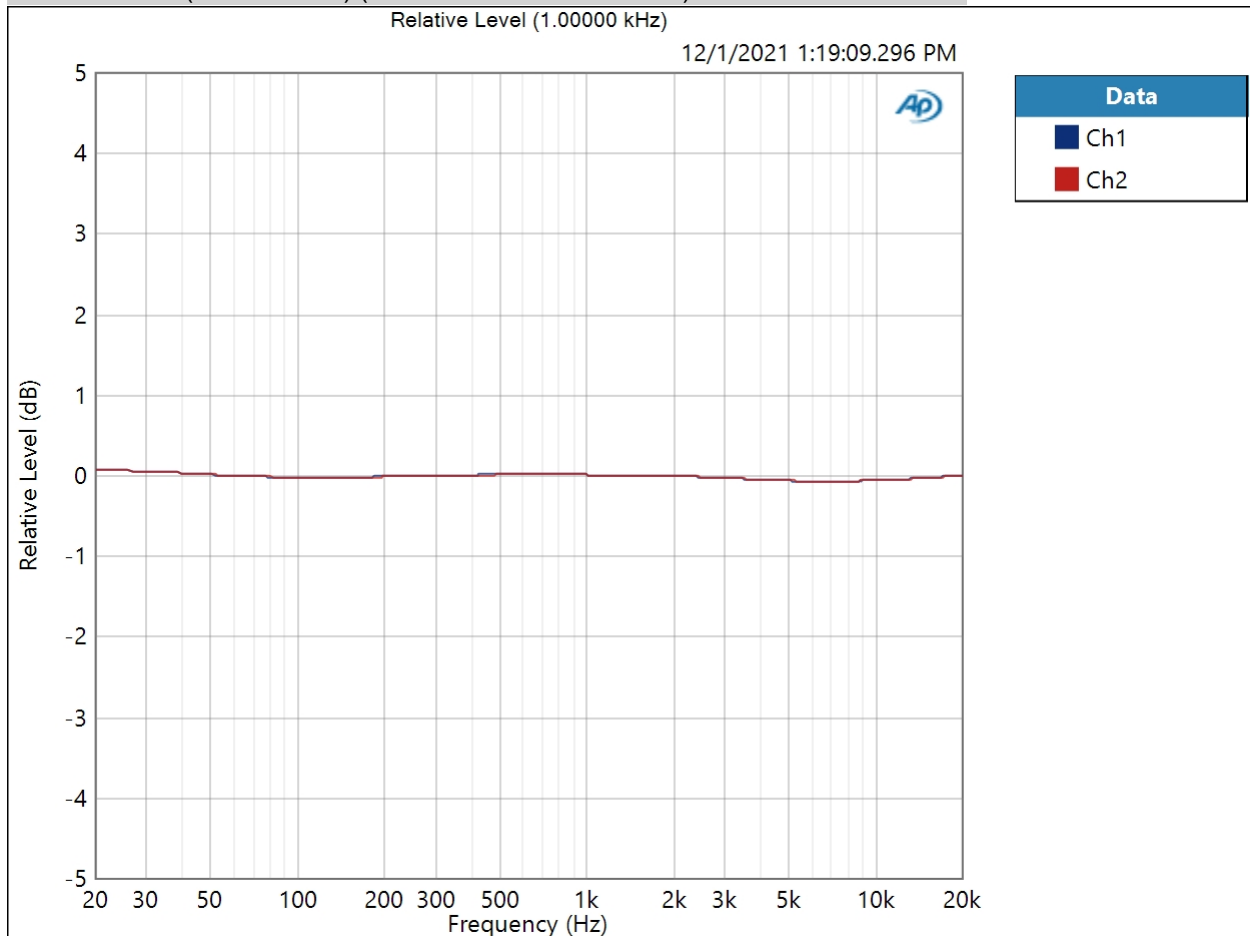
Sweep: 350.0 ms

Extend Acquisition By: 1.000 s

Secondary Source: None

Measured 1 12/1/2021 1:19:09 PM

Relative Level (1.00000 kHz) (12/1/2021 1:19:09.296 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) (12/1/2021 1:19:09.296 PM)

Ch1 ± 0.072 dB

Ch2 ± 0.070 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Process Balanced : Signal to Noise Ratio

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 4.000 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 (12/1/2021 1:19:12.164 PM)

Ch1 116.897 dB

Ch2 117.265 dB

Process Balanced : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.000 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 (12/1/2021 1:19:15.430 PM)

Ch1 0.000857 %
 Ch2 0.000824 %

THD Ratio (12/1/2021 1:19:15.430 PM)

Ch1 0.000226 %
 Ch2 0.000390 %

Noise Ratio (12/1/2021 1:19:15.430 PM)

Ch1 0.000824 %
 Ch2 0.000721 %

Distortion Product Ratio (12/1/2021 1:19:15.430 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	-121.23	-115.28	-128.91	-134.08	-131.89	-133.00	-130.63	-131.61	-127.10
Ch2	-0.00	-109.47	-115.89	-129.97	-129.41	-129.37	-129.64	-130.94	-130.24	-133.66

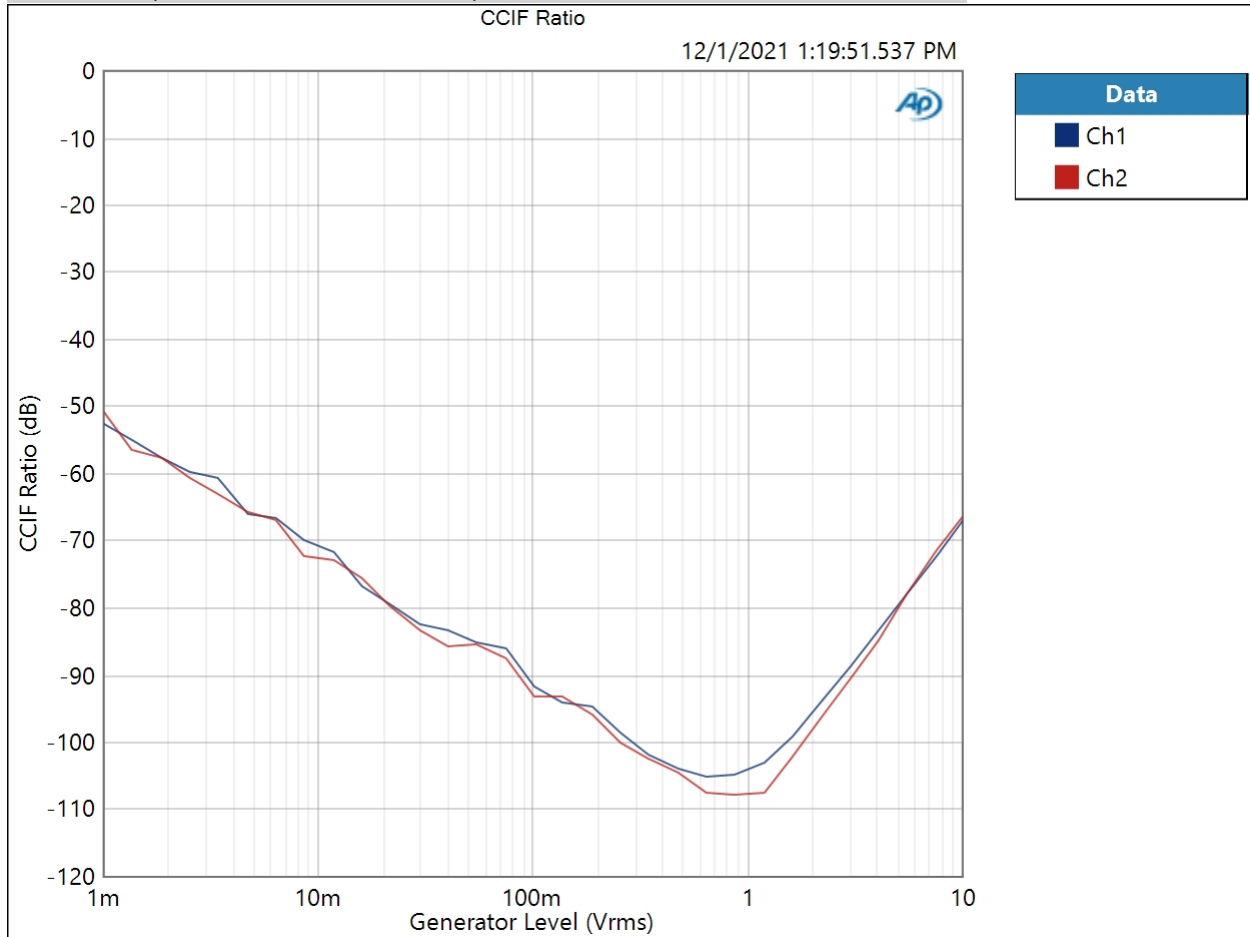
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Process Balanced : 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: 10.00 Vrms
Step Type: Logarithmic
Number of Points: 31
Mode: d2+d3
Measured 1 12/1/2021 1:19:51 PM

CCIF Ratio (12/1/2021 1:19:51.537 PM)



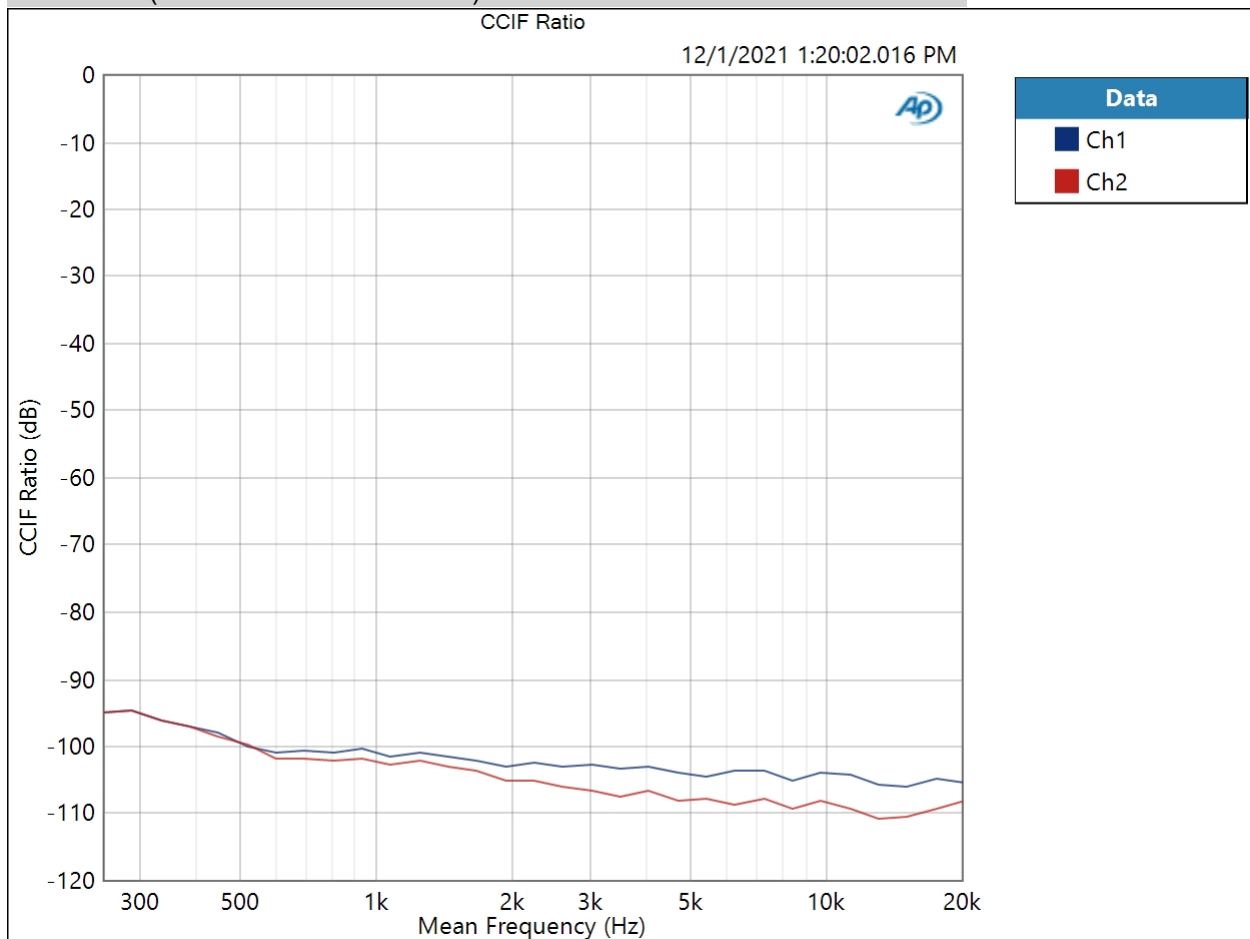
Result: PASSED

12/1/2021 1:23 PM

Process Balanced : 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 12/1/2021 1:20:02 PM

CCIF Ratio (12/1/2021 1:20:02.016 PM)



Result:  PASSED

Process Balanced : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 Vrms

Frequency: 10.0000 kHz

Crosstalk (12/1/2021 1:20:04.265 PM)

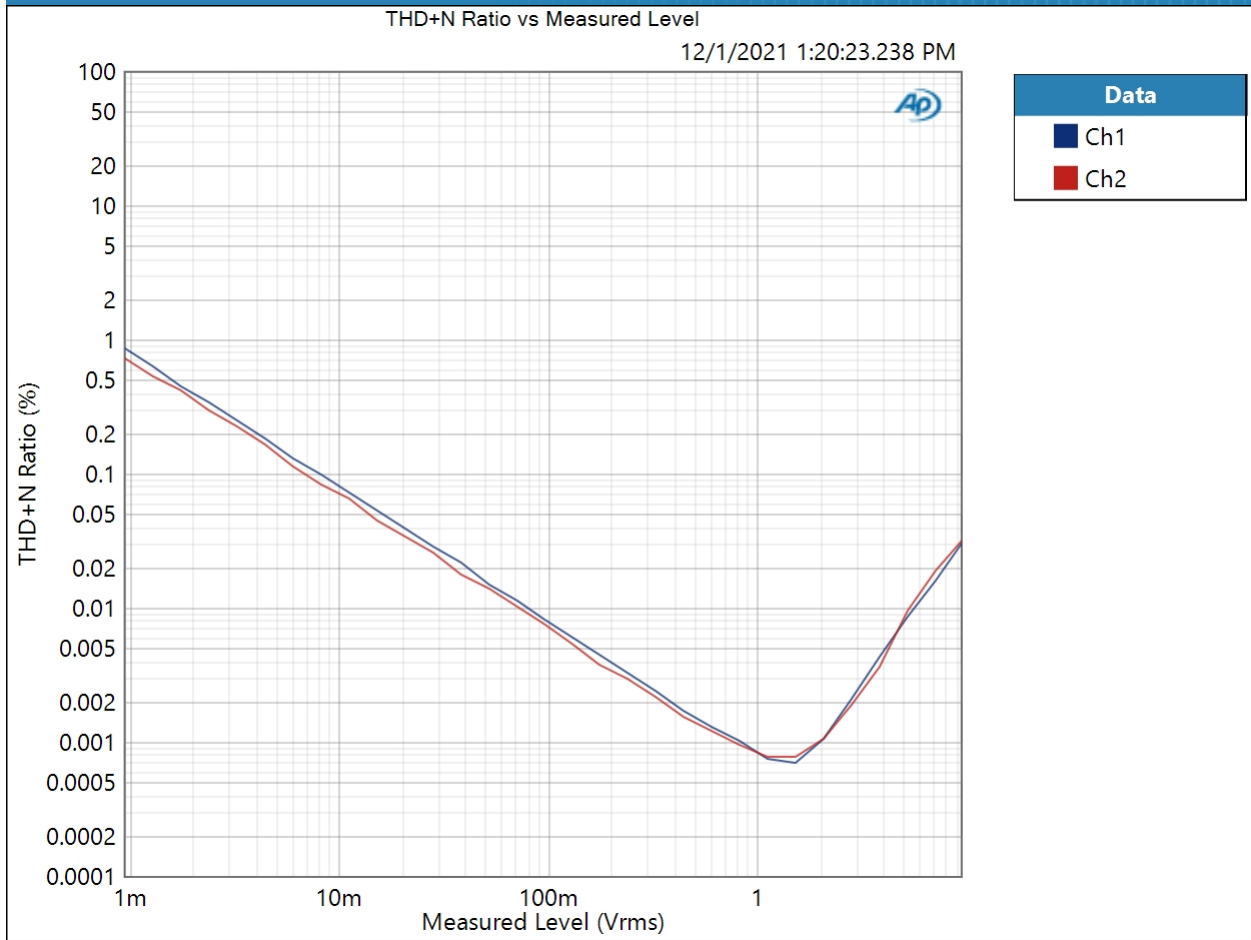
Ch1 69.187 dB

Ch2 63.480 dB

Process Balanced : 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: 10.00 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 12/1/2021 1:20:23 PM

THD+N Ratio vs Measured Level (12/1/2021 1:20:23.238 PM)



Result: PASSED

Process SE : 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) - 22.4k (48 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

12/1/2021 1:23 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

Process SE : Level and Gain

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.000 Vrms
 Frequency: 1.00000 kHz
 Low-pass Filter: Signal Path

RMS Level (12/1/2021 1:22:04.982 PM)

Ch1 1.019 Vrms
 Ch2 1.018 Vrms

Process SE : 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

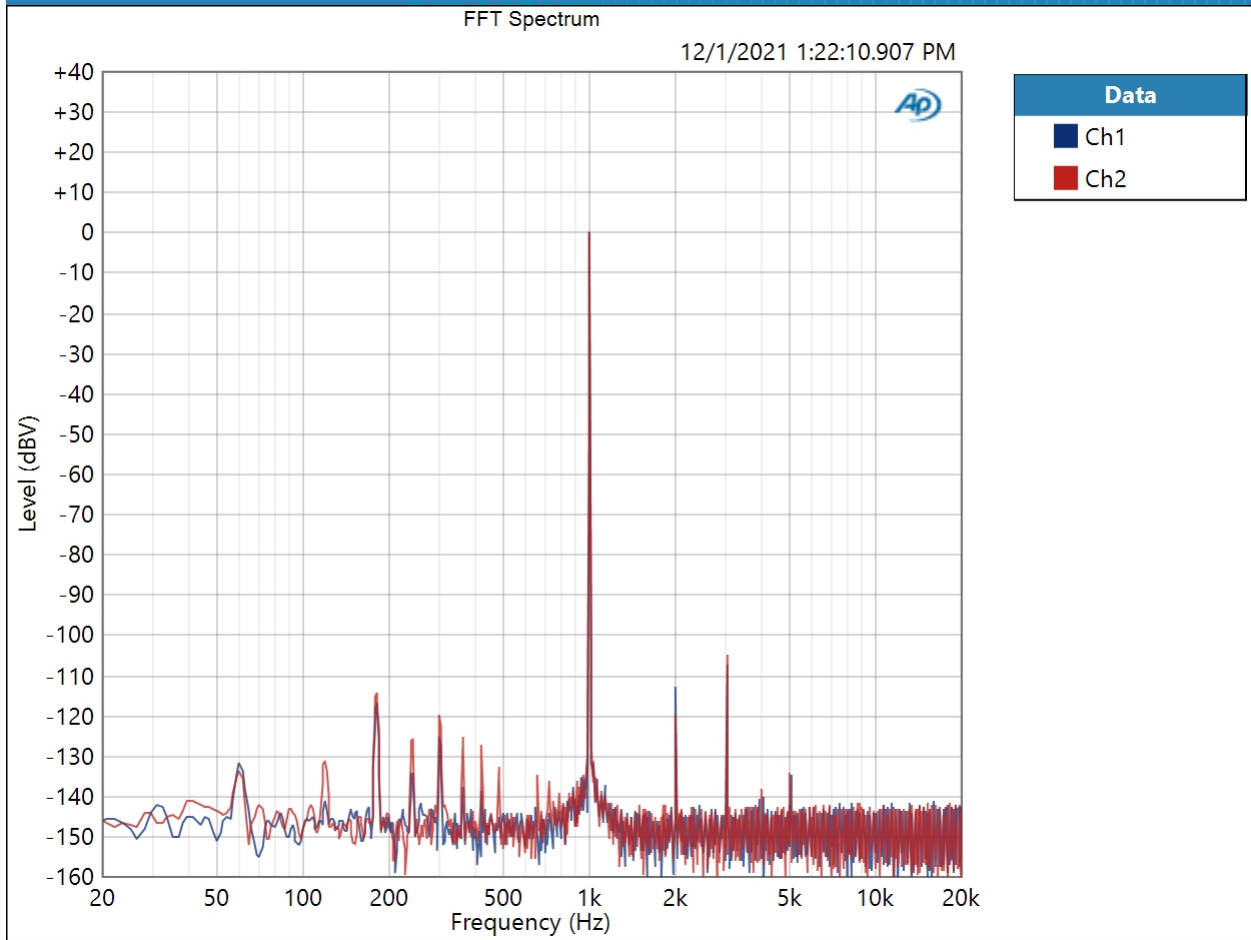
DC Level (12/1/2021 1:22:06.542 PM)

Ch1 -1.899 mV
 Ch2 -2.991 mV

Process SE : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 12/1/2021 1:22:10 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 (12/1/2021 1:22:10.907 PM)

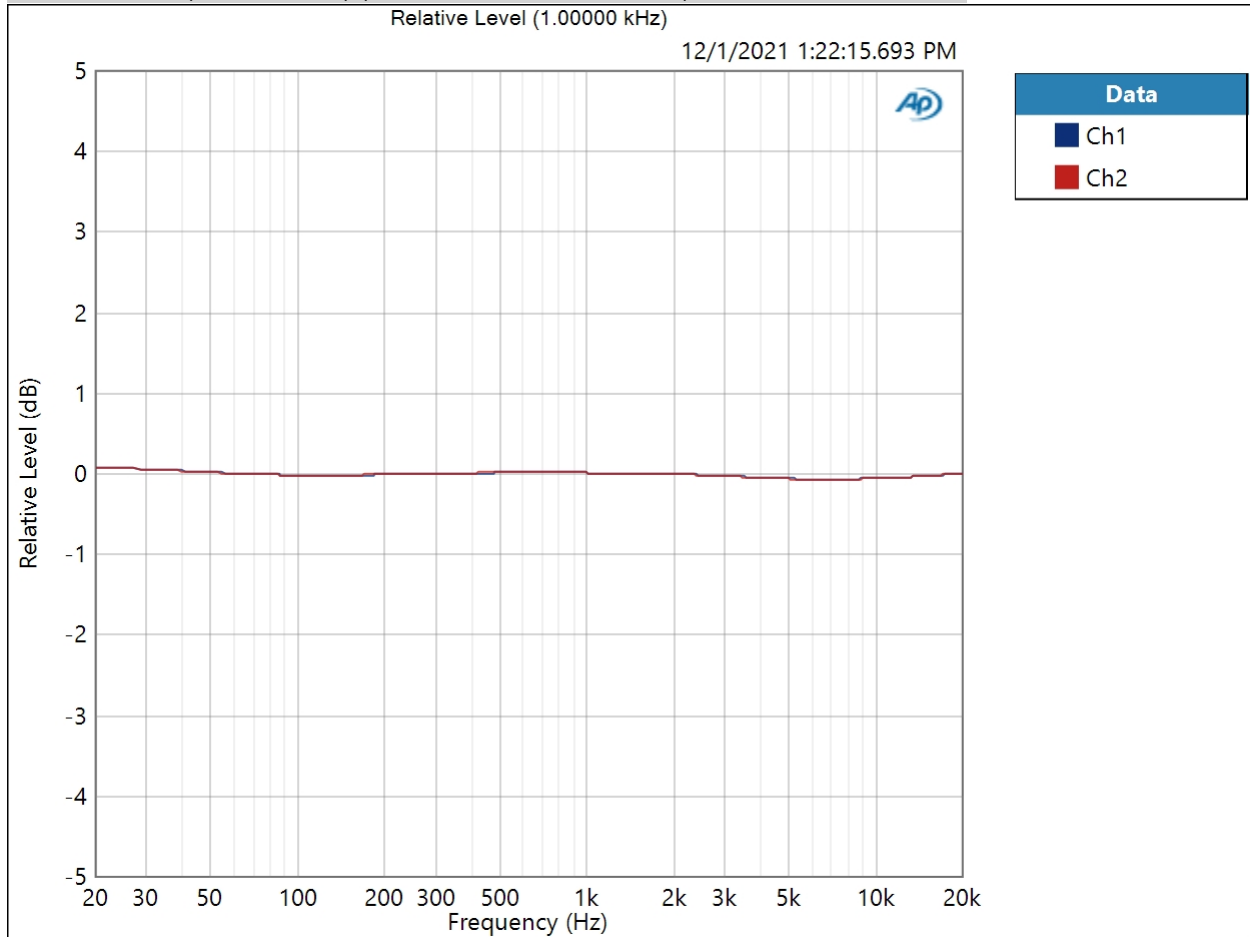


Result: PASSED

Process SE : Frequency Response--Flat

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 12/1/2021 1:22:15 PM

Relative Level (1.00000 kHz) (12/1/2021 1:22:15.693 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) (12/1/2021 1:22:15.693 PM)

Ch1 ± 0.072 dB

Ch2 ± 0.073 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Process SE : Signal to Noise Ratio

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 2.000 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 (12/1/2021 1:22:18.563 PM)

Ch1 118.780 dB

Ch2 118.385 dB

Process SE : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.000 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 (12/1/2021 1:22:21.652 PM)

Ch1 0.000633 %
 Ch2 0.000702 %

THD Ratio (12/1/2021 1:22:21.652 PM)

Ch1 0.000523 %
 Ch2 0.000570 %

Noise Ratio (12/1/2021 1:22:21.652 PM)

Ch1 0.000325 %
 Ch2 0.000372 %

Distortion Product Ratio (12/1/2021 1:22:21.652 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	-110.41	-107.46	-134.65	-134.87	-135.01	-139.78	-144.63	-144.79	-139.02
Ch2	-0.00	-118.47	-105.11	-132.13	-131.54	-135.18	-144.52	-143.33	-137.99	-137.85

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Process SE : 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: 10.00 Vrms

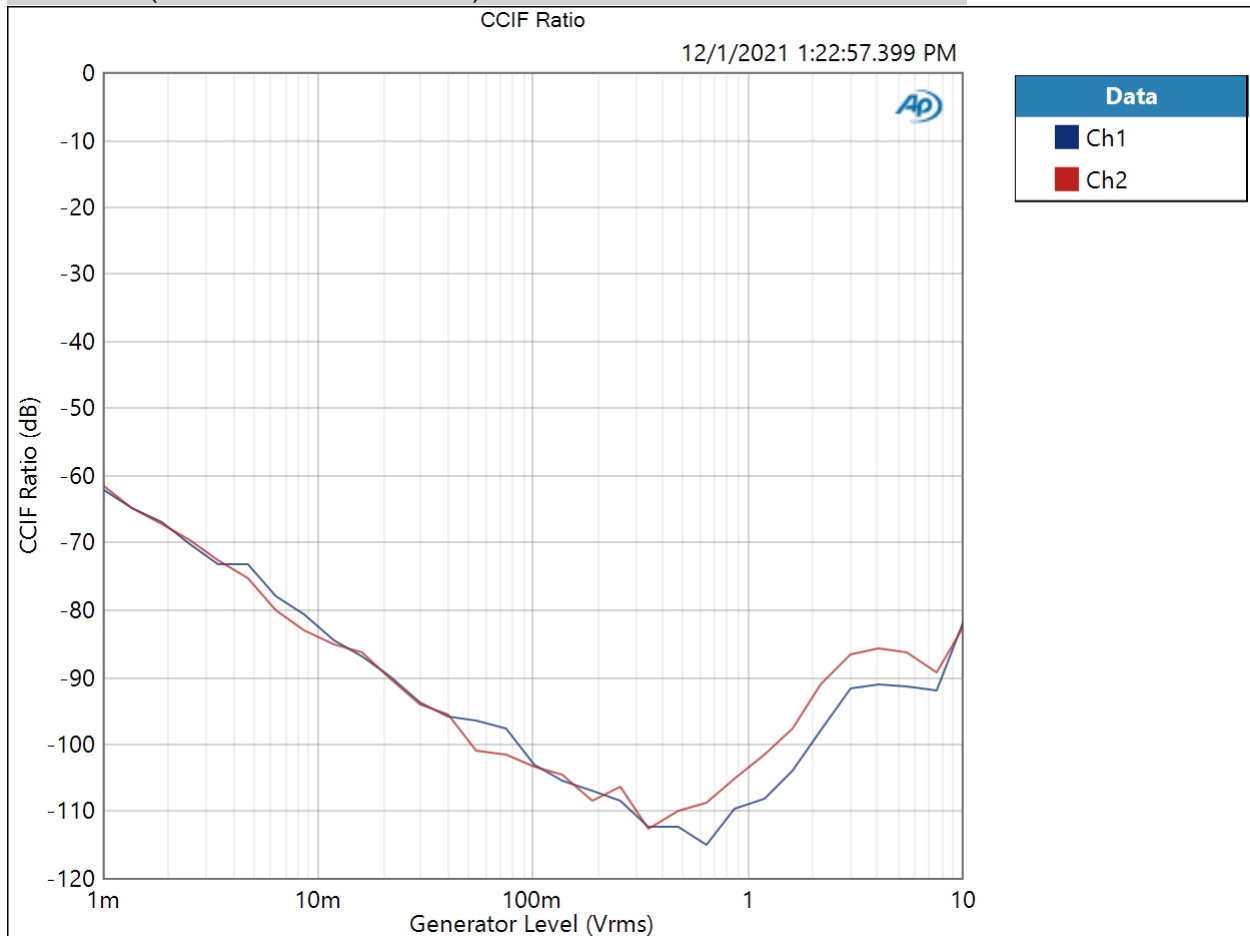
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 12/1/2021 1:22:57 PM

CCIF Ratio (12/1/2021 1:22:57.399 PM)



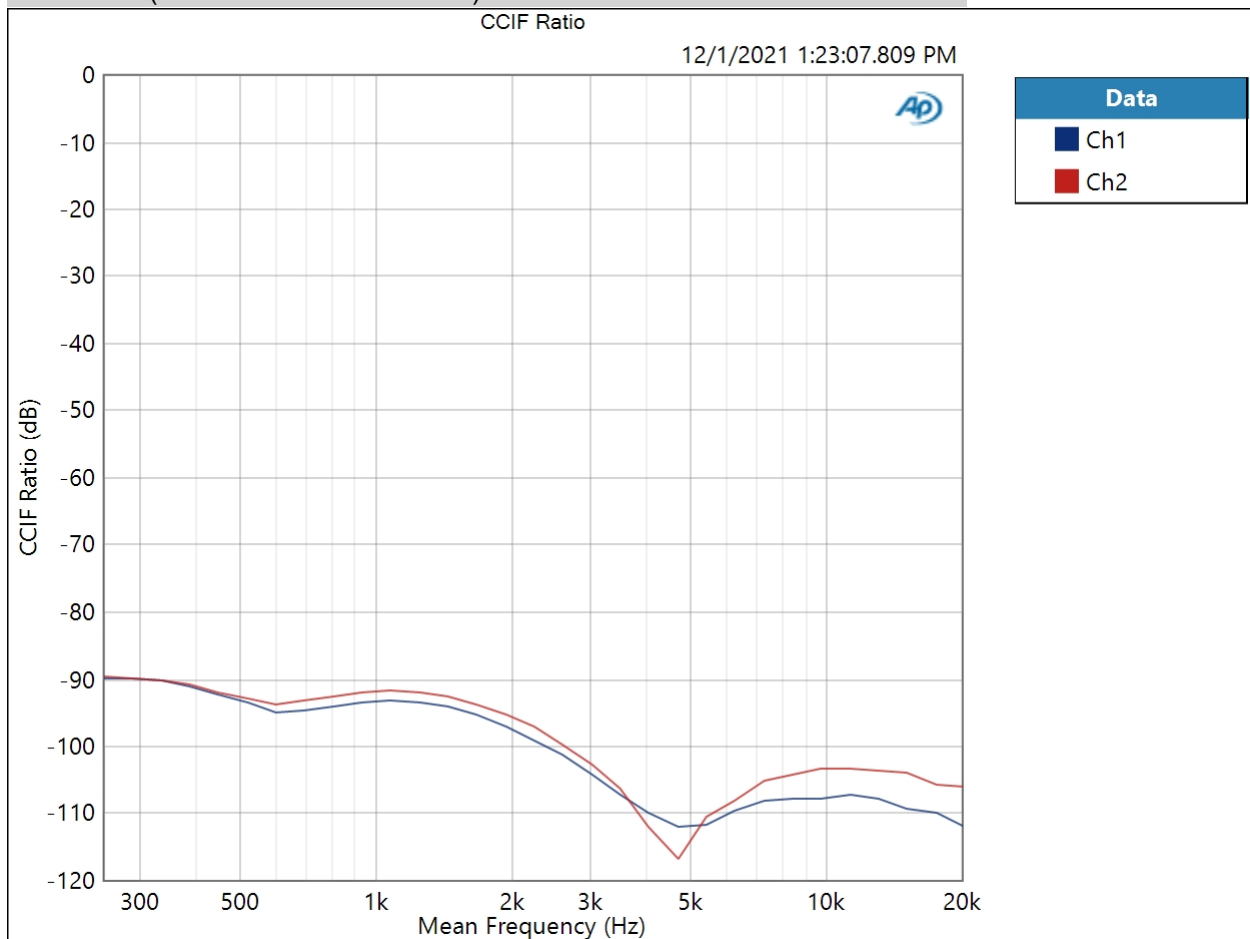
Result: PASSED

12/1/2021 1:23 PM

Process SE : 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 12/1/2021 1:23:07 PM

CCIF Ratio (12/1/2021 1:23:07.809 PM)



Result:  PASSED

Process SE : Crosstalk, One Channel Undriven

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 10.0000 kHz

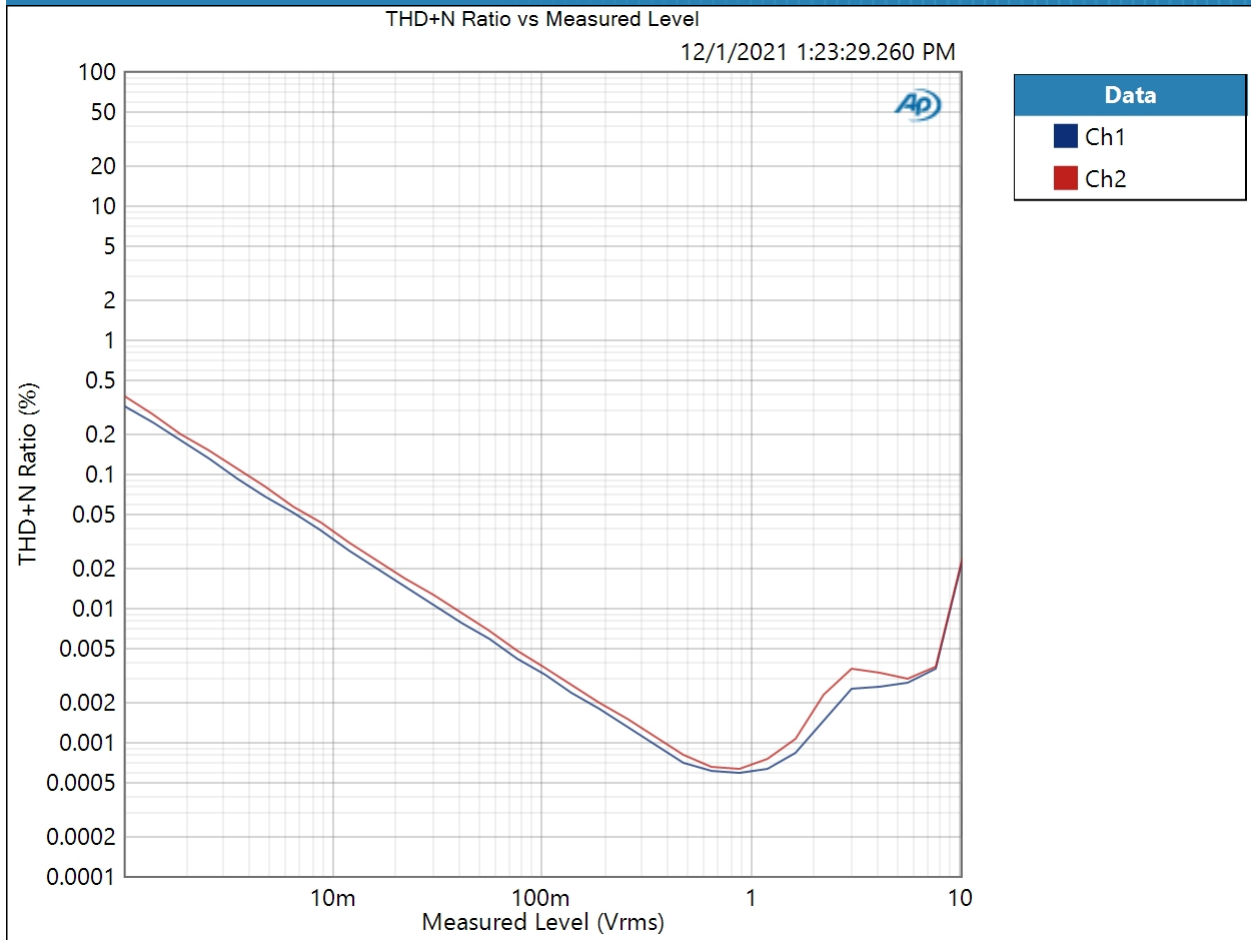
Crosstalk (12/1/2021 1:23:10.092 PM)

Ch1 -68.332 dB
Ch2 -65.528 dB

Process SE : 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: 10.00 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 12/1/2021 1:23:29 PM

THD+N Ratio vs Measured Level (12/1/2021 1:23:29.260 PM)



Result: PASSED