

## 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](mailto:info@schiiit.com) so we can have a look.

## Summary

## 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

## 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

## Process SE

Level and Gain	✓ PASSED
DC Level	✓ PASSED
Signal Analyzer	✓ PASSED
Frequency Response--Flat	✓ PASSED
Frequency Response--20Hz	✓ PASSED
Frequency Response--120Hz	✓ PASSED
Frequency Response--400Hz	✓ PASSED
Frequency Response--2kHz	✓ PASSED
Frequency Response--6kHz	✓ PASSED
Frequency Response--16kHz	✓ 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
Frequency Response--20Hz	✔ PASSED
Frequency Response--120Hz	✔ PASSED
Frequency Response--400Hz	✔ PASSED
Frequency Response--2kHz	✔ PASSED
Frequency Response--6kHz	✔ PASSED
Frequency Response--16kHz	✔ 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 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.

8/20/2021 10:11 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

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 (8/20/2021 10:09:50.447 AM)

Ch1 0.999 Vrms  
 Ch2 0.999 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

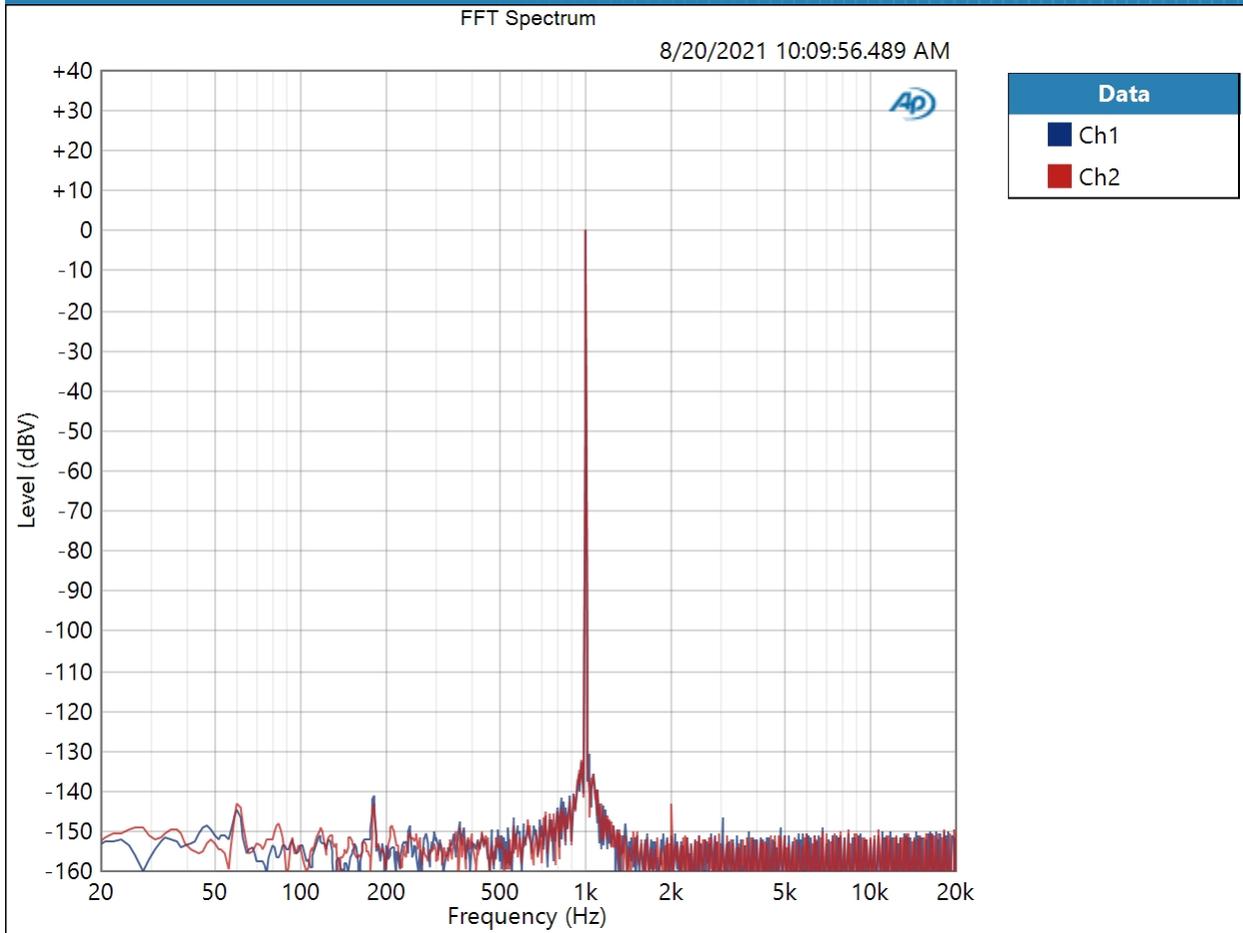
DC Level (8/20/2021 10:09:52.115 AM)

Ch1 2.854 uV  
 Ch2 75.05 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 8/20/2021 10:09:56 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 (8/20/2021 10:09:56.489 AM)

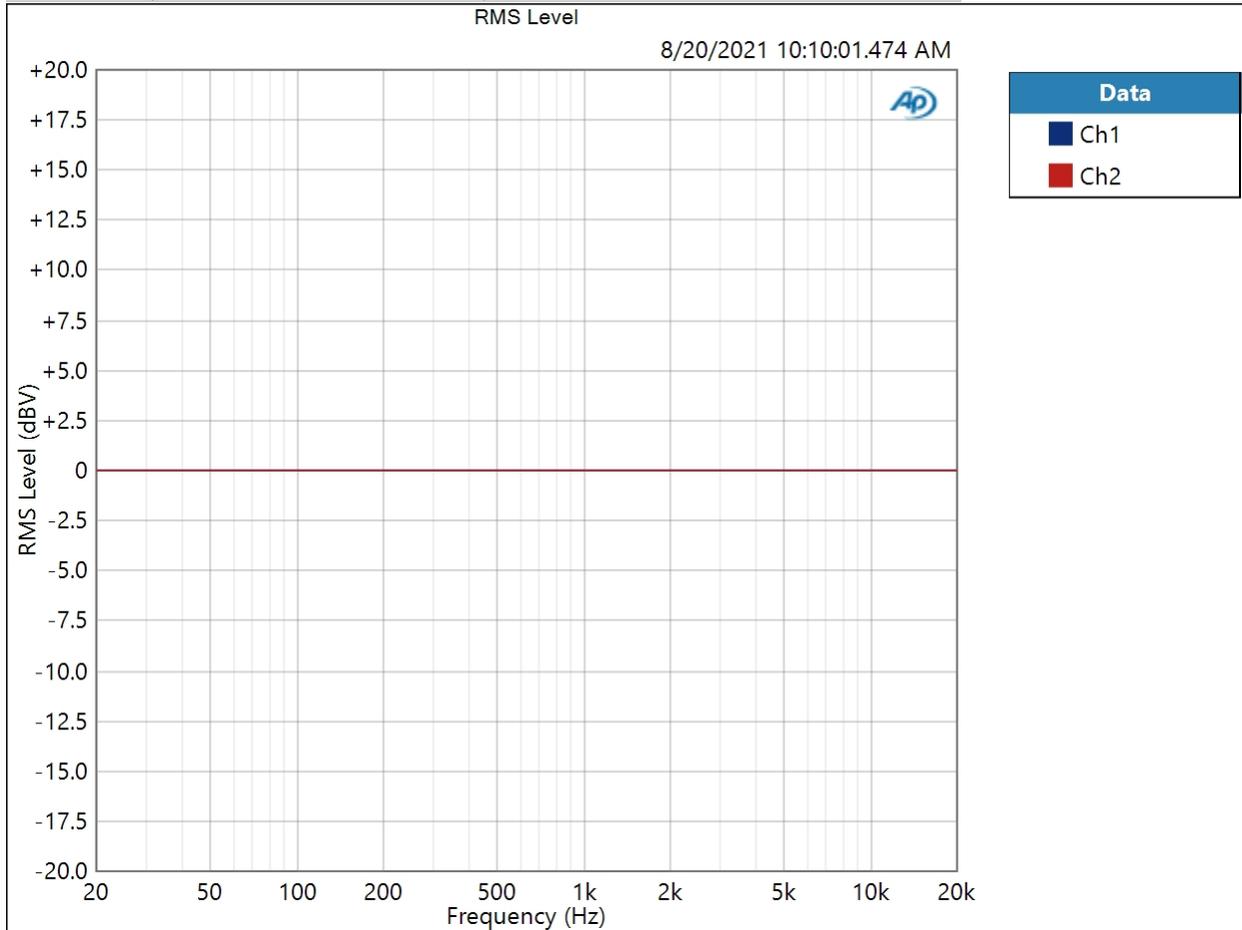


Result:  PASSED

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 8/20/2021 10:10:01 AM

RMS Level (8/20/2021 10:10:01.474 AM)



Result: PASSED

8/20/2021 10:11 AM

Bypass SE : Signal to Noise Ratio

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: A-wt.

Signal to Noise Ratio (8/20/2021 10:10:04.420 AM)

Ch1 123.163 dB  
Ch2 123.303 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 (8/20/2021 10:10:07.663 AM)

Ch1 0.000116 %  
 Ch2 0.000115 %

THD Ratio (8/20/2021 10:10:07.663 AM)

Ch1 0.000020 %  
 Ch2 0.000022 %

Noise Ratio (8/20/2021 10:10:07.663 AM)

Ch1 0.000113 %  
 Ch2 0.000112 %

Distortion Product Ratio (8/20/2021 10:10:07.663 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	-147.57	-150.02	-145.03	-147.89	-146.48	-145.25	-144.68	-147.95	-148.59
Ch2	-0.00	-140.35	-146.63	-146.29	-147.21	-144.54	-147.53	-148.07	-146.24	-149.20

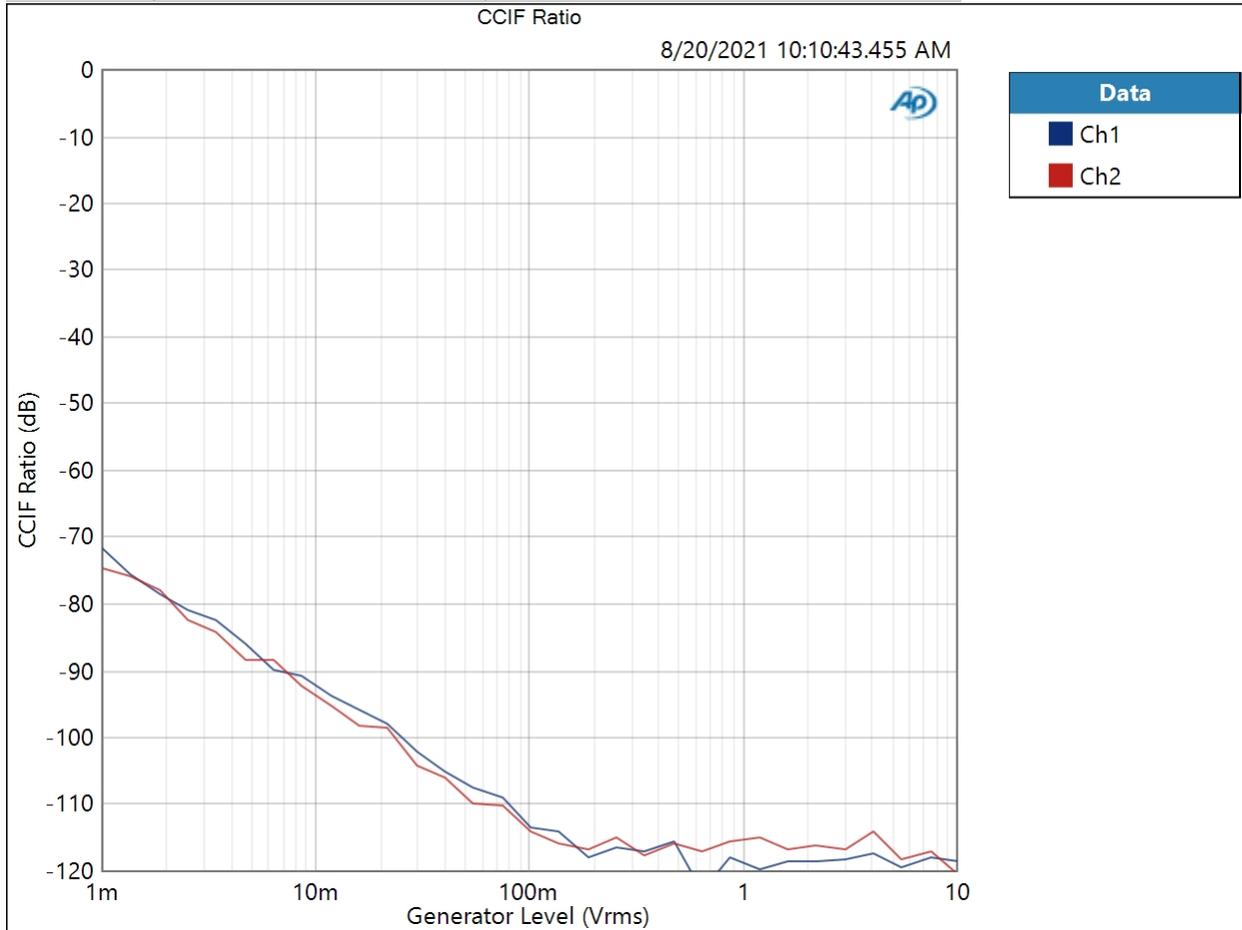
Distortion Product Ratio Parameters

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 8/20/2021 10:10:43 AM

CCIF Ratio (8/20/2021 10:10:43.455 AM)



Result: PASSED

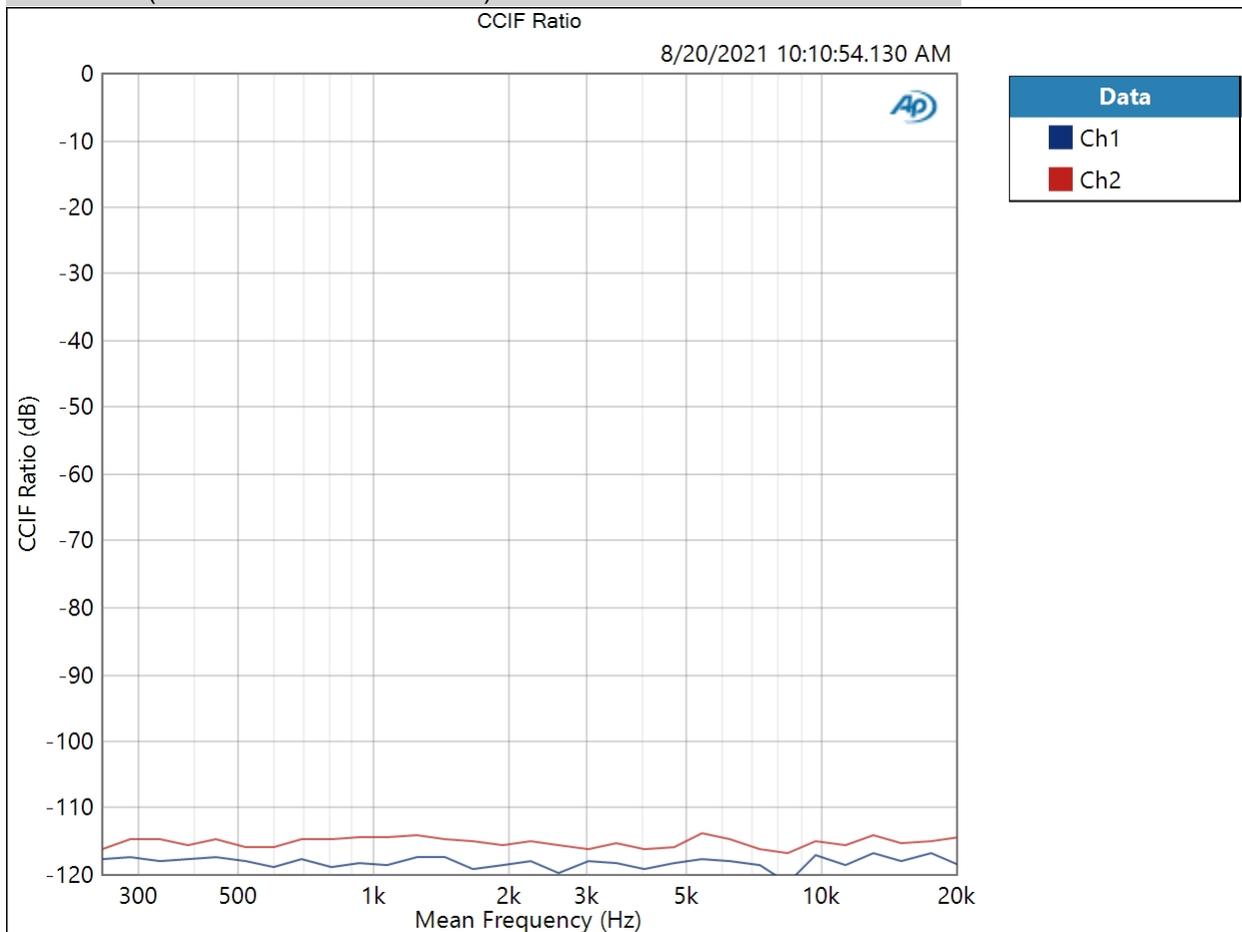
8/20/2021 10:11 AM



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 8/20/2021 10:10:54 AM

CCIF Ratio (8/20/2021 10:10:54.130 AM)



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

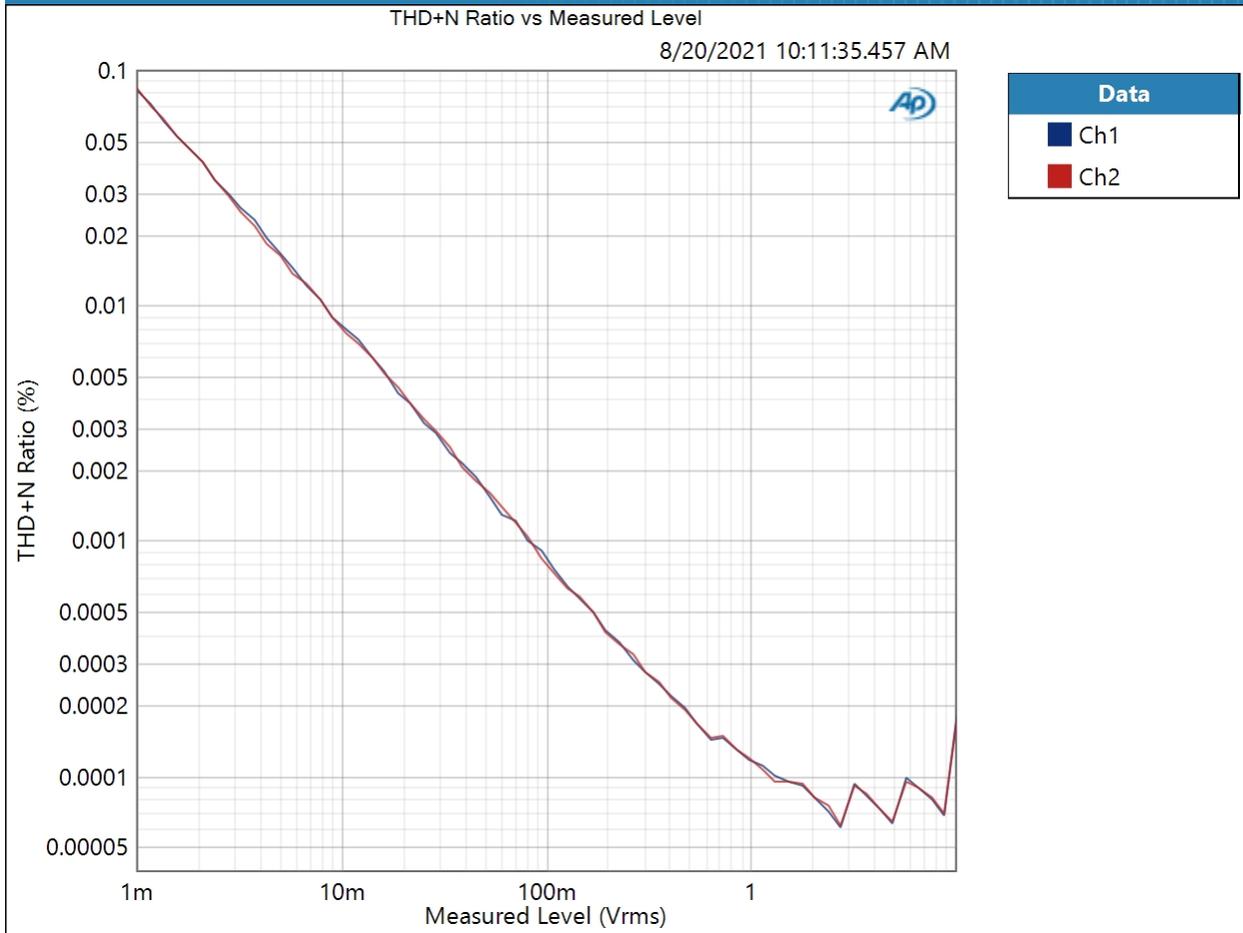
Crosstalk (8/20/2021 10:10:58.329 AM)

Ch1 -116.236 dB  
Ch2 -111.717 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 8/20/2021 10:11:35 AM

THD+N Ratio vs Measured Level (8/20/2021 10:11:35.457 AM)



Result: PASSED

## 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

8/20/2021 10:11 AM

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 (8/20/2021 10:06:58.427 AM)

Ch1 1.000 Vrms  
Ch2 1.000 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

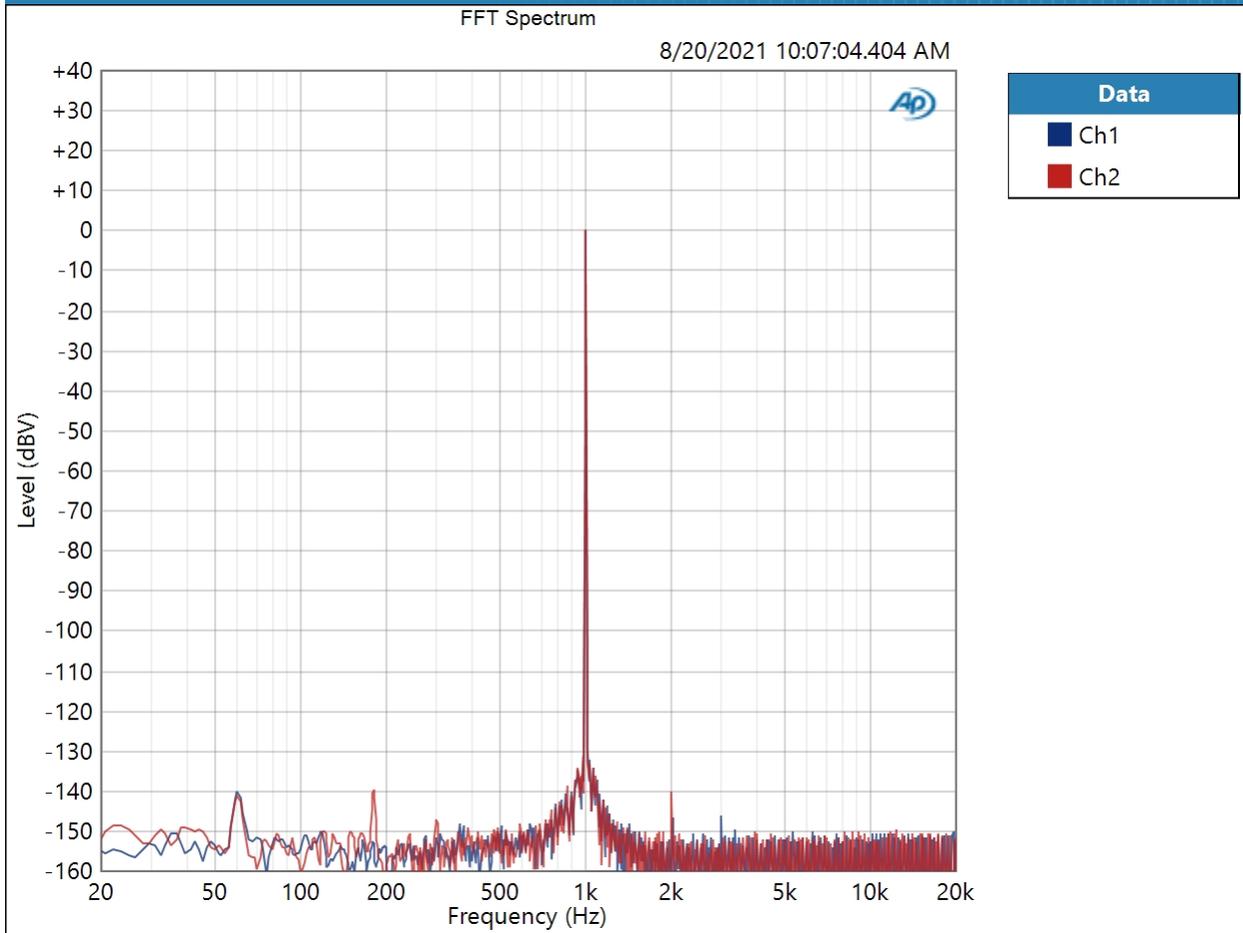
DC Level (8/20/2021 10:07:00.057 AM)

Ch1 -95.94 uV  
Ch2 -23.11 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 8/20/2021 10:07:04 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 (8/20/2021 10:07:04.404 AM)

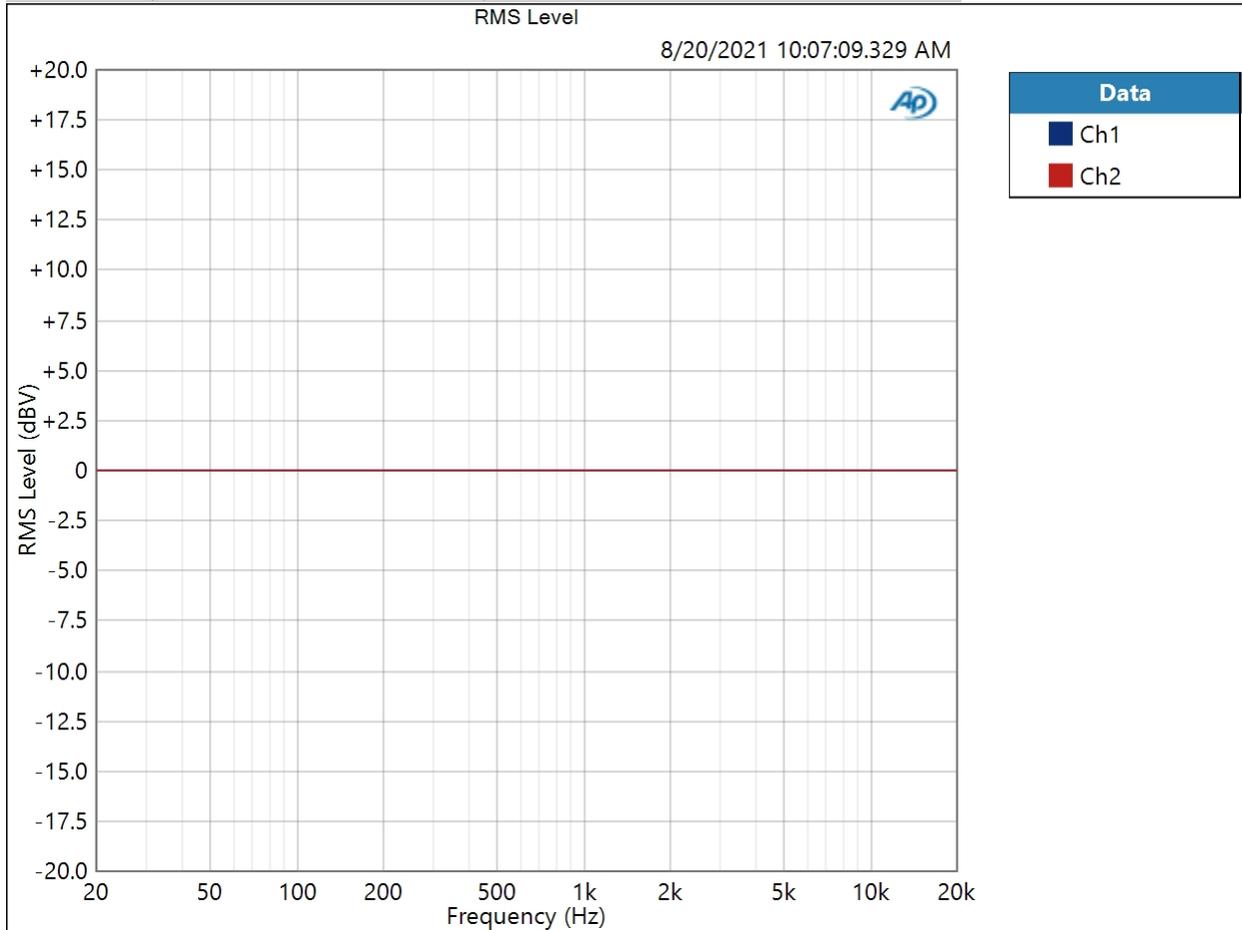


Result: PASSED

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 8/20/2021 10:07:09 AM

RMS Level (8/20/2021 10:07:09.329 AM)



Result: PASSED

8/20/2021 10:11 AM

Bypass Balanced : Signal to Noise Ratio

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: A-wt.

Signal to Noise Ratio (8/20/2021 10:07:12.299 AM)

Ch1 123.623 dB  
Ch2 123.425 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 (8/20/2021 10:07:15.517 AM)

Ch1 0.000113 %  
 Ch2 0.000114 %

THD Ratio (8/20/2021 10:07:15.517 AM)

Ch1 0.000019 %  
 Ch2 0.000019 %

Noise Ratio (8/20/2021 10:07:15.517 AM)

Ch1 0.000111 %  
 Ch2 0.000112 %

Distortion Product Ratio (8/20/2021 10:07:15.517 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	-146.74	-143.87	-148.49	-151.01	-154.21	-144.03	-144.95	-151.99	-144.91
Ch2	-0.00	-142.73	-152.06	-149.60	-148.08	-151.08	-145.84	-148.61	-149.65	-149.82

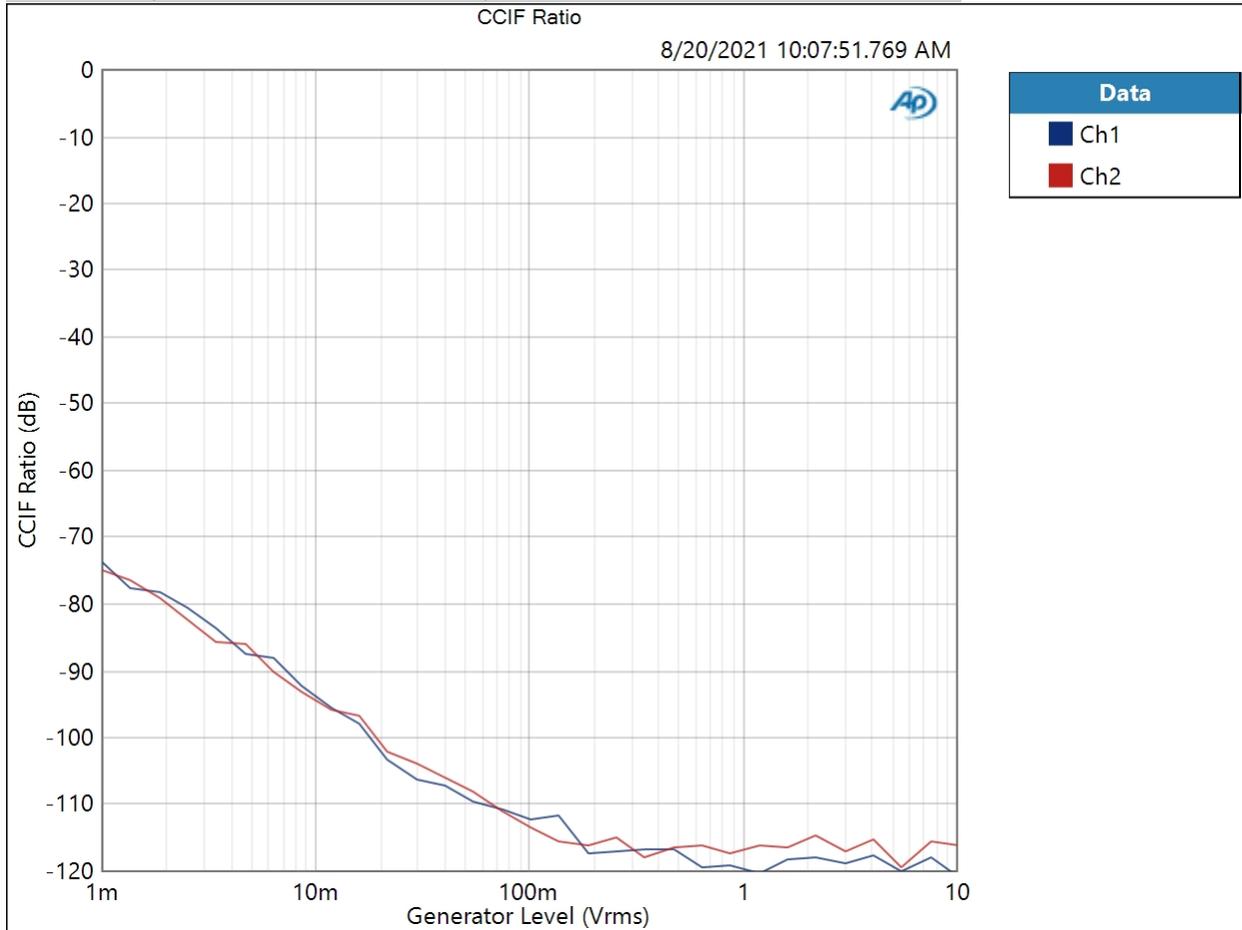
Distortion Product Ratio Parameters

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 8/20/2021 10:07:51 AM

CCIF Ratio (8/20/2021 10:07:51.769 AM)



Result: PASSED

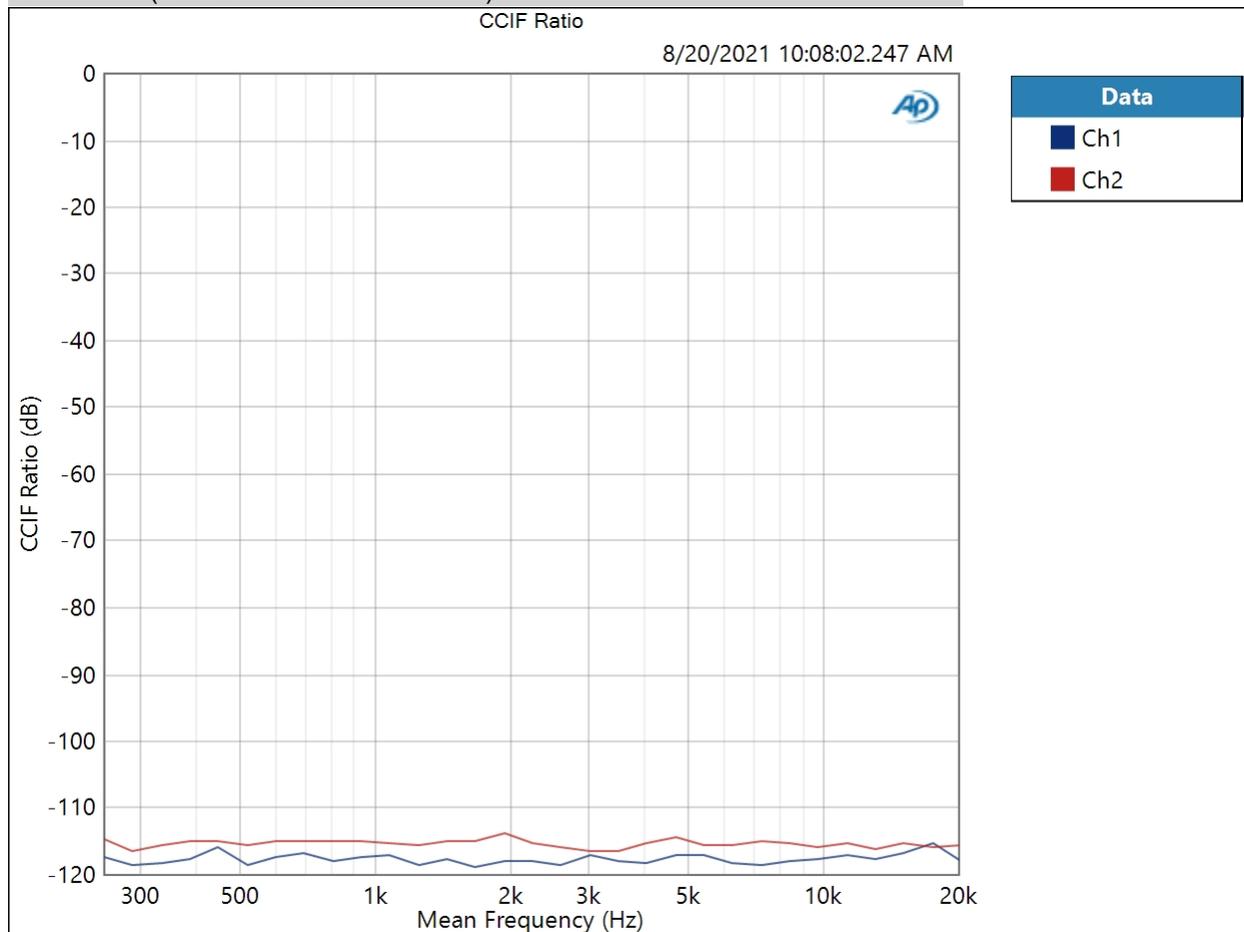
8/20/2021 10:11 AM



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 8/20/2021 10:08:02 AM

CCIF Ratio (8/20/2021 10:08:02.247 AM)



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 (8/20/2021 10:08:08.045 AM)

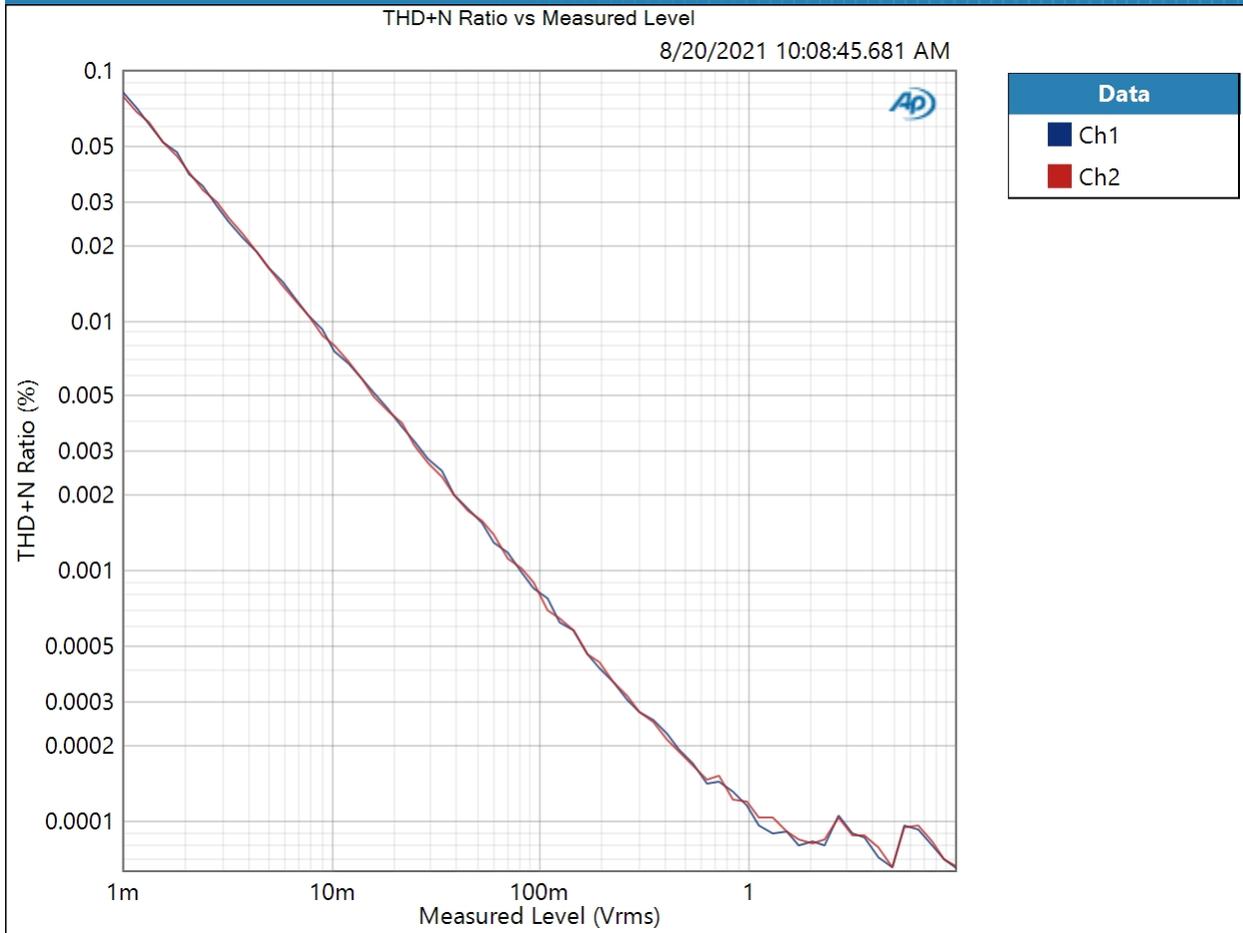
Ch1 -118.957 dB

Ch2 -127.547 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 8/20/2021 10:08:45 AM

THD+N Ratio vs Measured Level (8/20/2021 10:08:45.681 AM)



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

8/20/2021 10:11 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

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 (8/20/2021 9:59:21.782 AM)

Ch1 1.044 Vrms  
Ch2 1.027 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

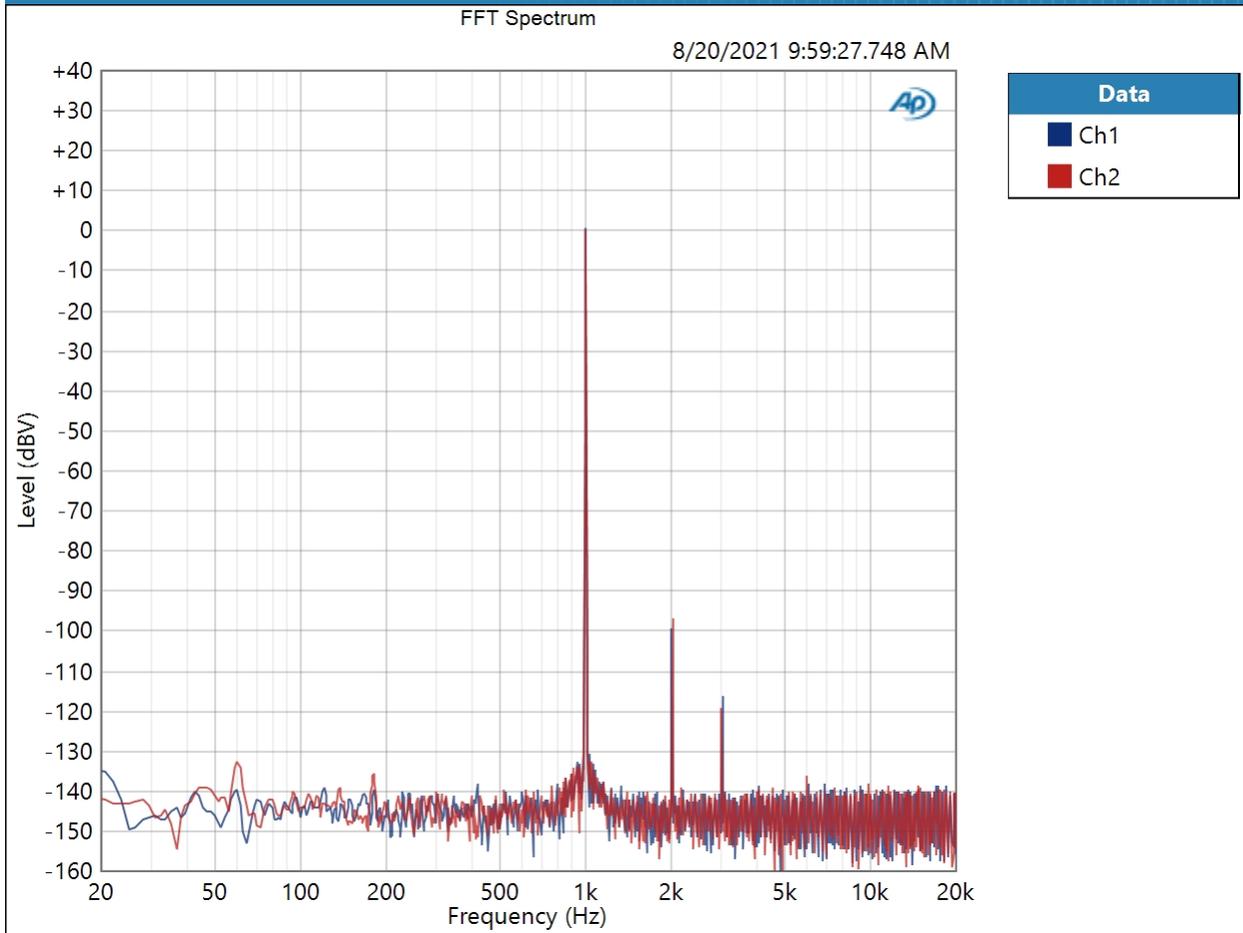
DC Level (8/20/2021 9:59:23.431 AM)

Ch1 -0.925 mV  
Ch2 -579.5 uV

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 8/20/2021 9:59:27 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 (8/20/2021 9:59:27.748 AM)

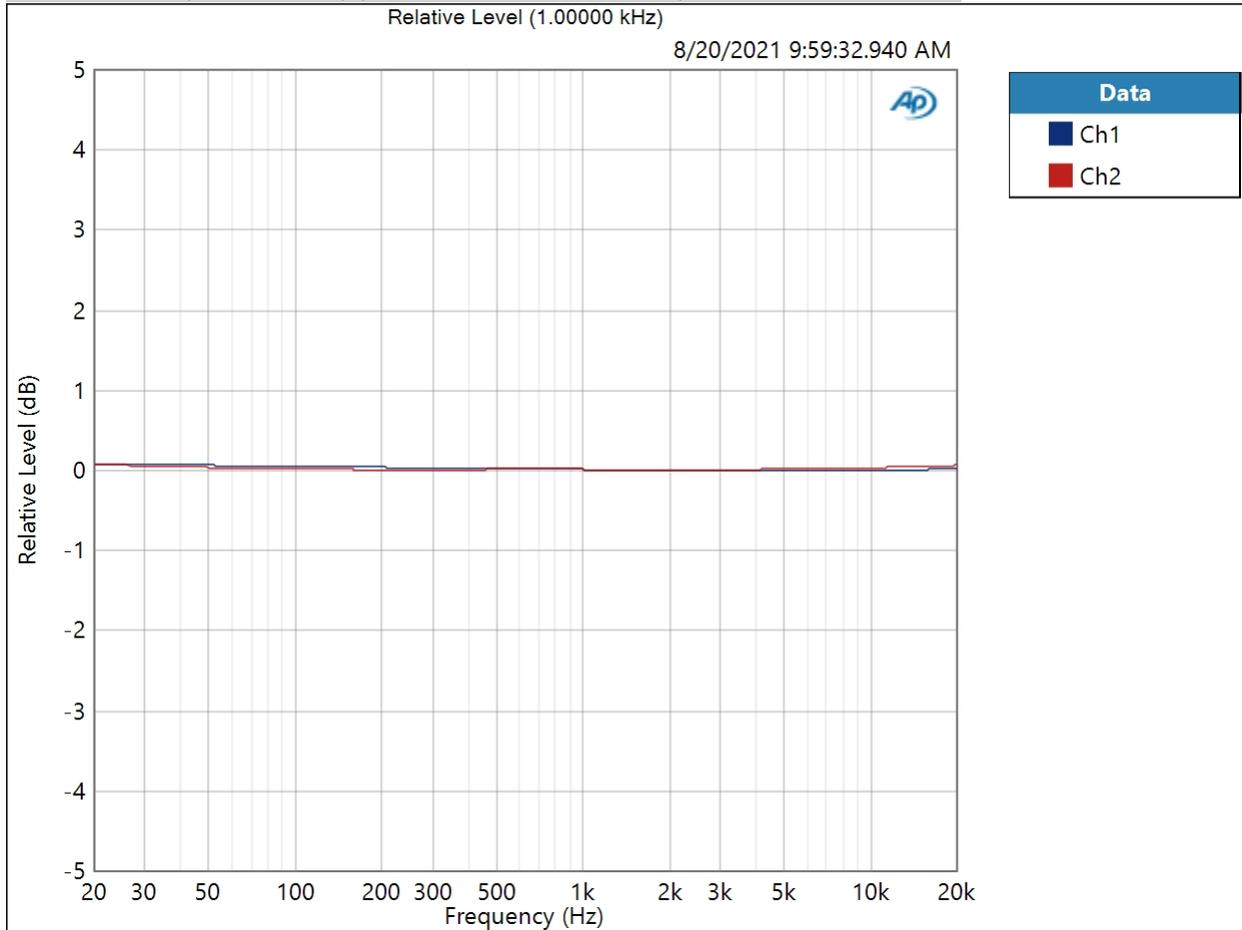


Result:  PASSED

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 8/20/2021 9:59:32 AM

Relative Level (1.00000 kHz) (8/20/2021 9:59:32.940 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) (8/20/2021 9:59:32.940 AM)

Ch1  $\pm 0.043$  dB

Ch2  $\pm 0.033$  dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

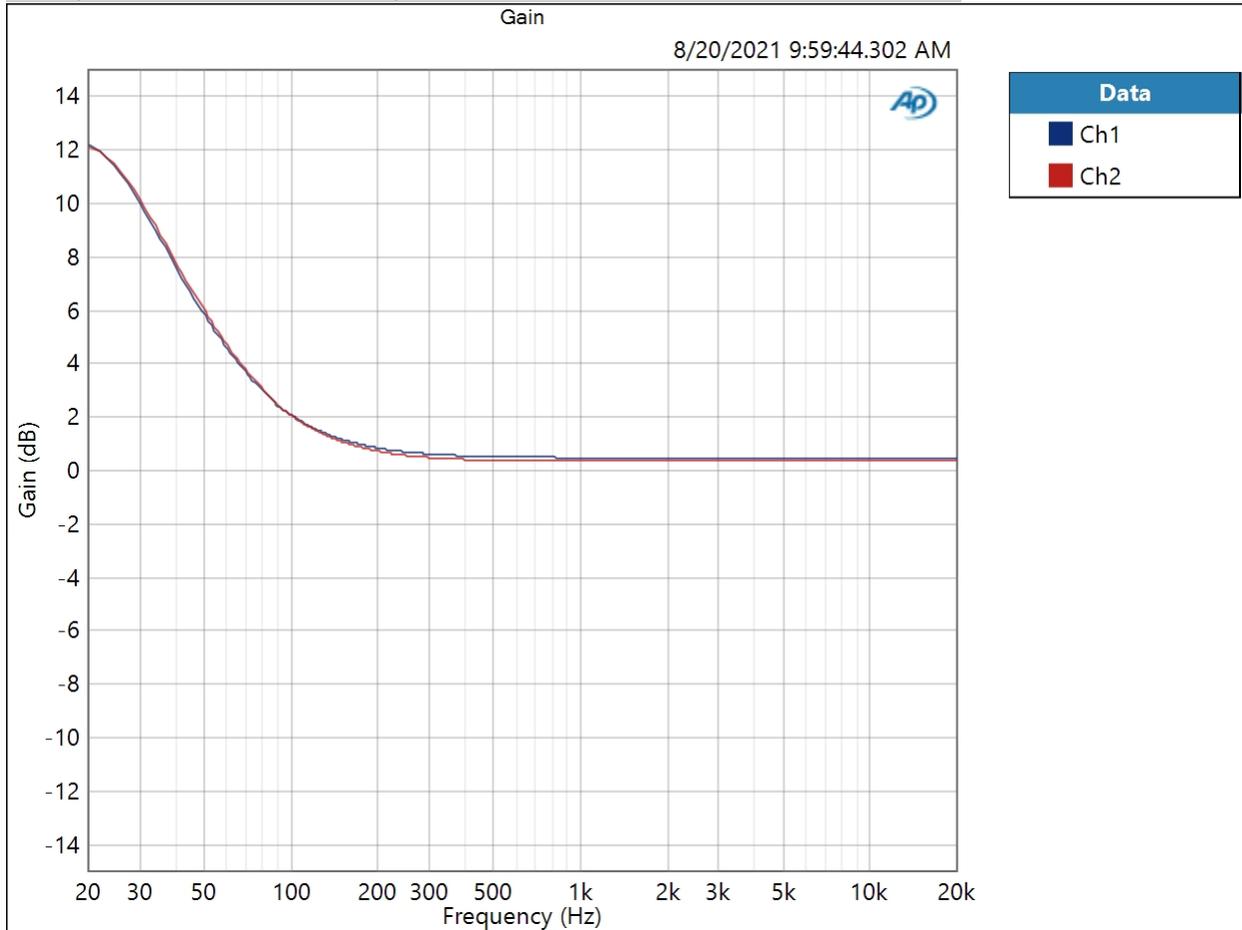
Min: 20.0000 Hz

Max: 20.0000 kHz

Process SE : Frequency Response--20Hz

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 8/20/2021 9:59:44 AM

Gain (8/20/2021 9:59:44.302 AM)



Result: PASSED

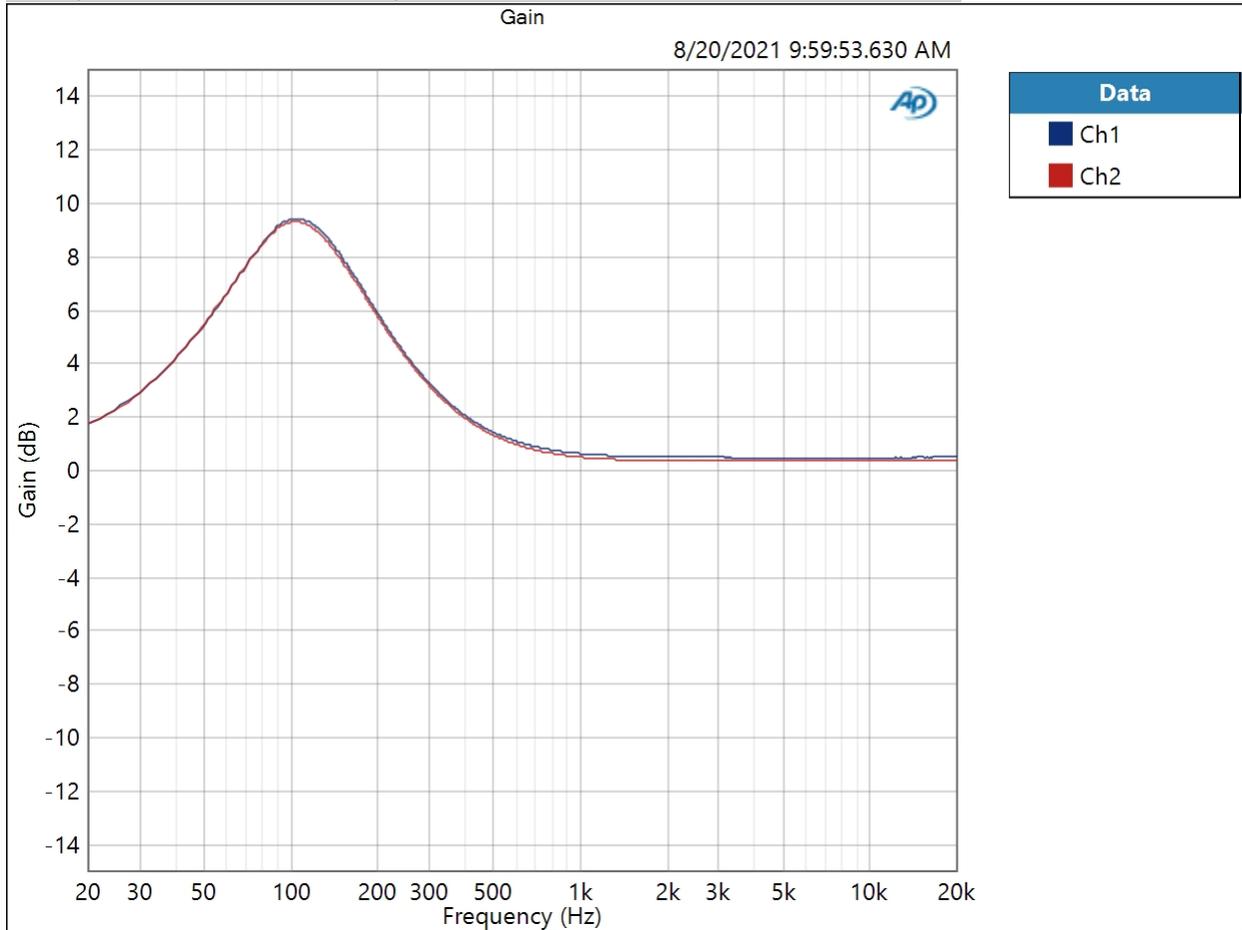
8/20/2021 10:11 AM



Process SE : Frequency Response--120Hz

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 8/20/2021 9:59:53 AM

Gain (8/20/2021 9:59:53.630 AM)



Result: PASSED

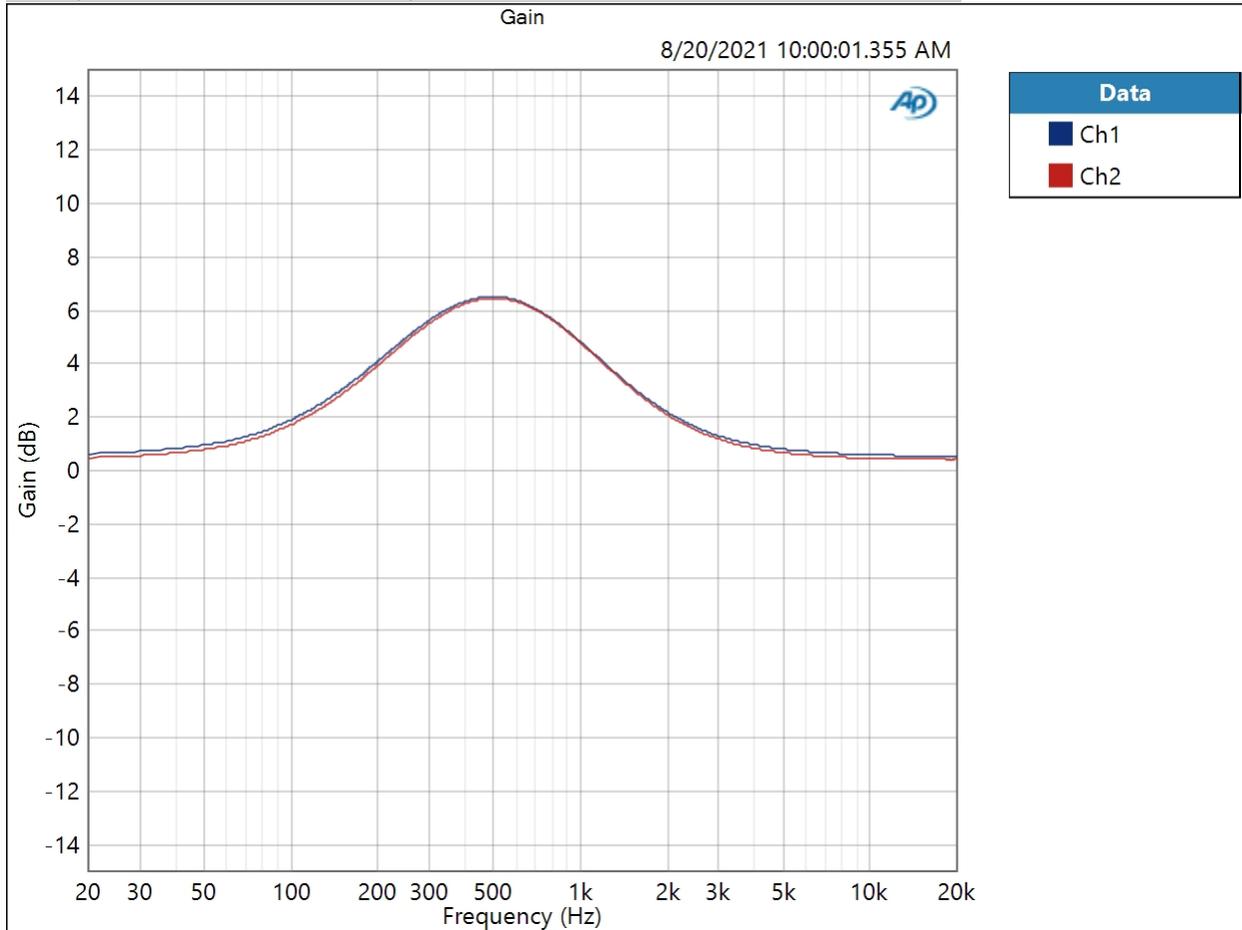
8/20/2021 10:11 AM



## Process SE : Frequency Response--400Hz

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 8/20/2021 10:00:01 AM

## Gain (8/20/2021 10:00:01.355 AM)



Result: PASSED

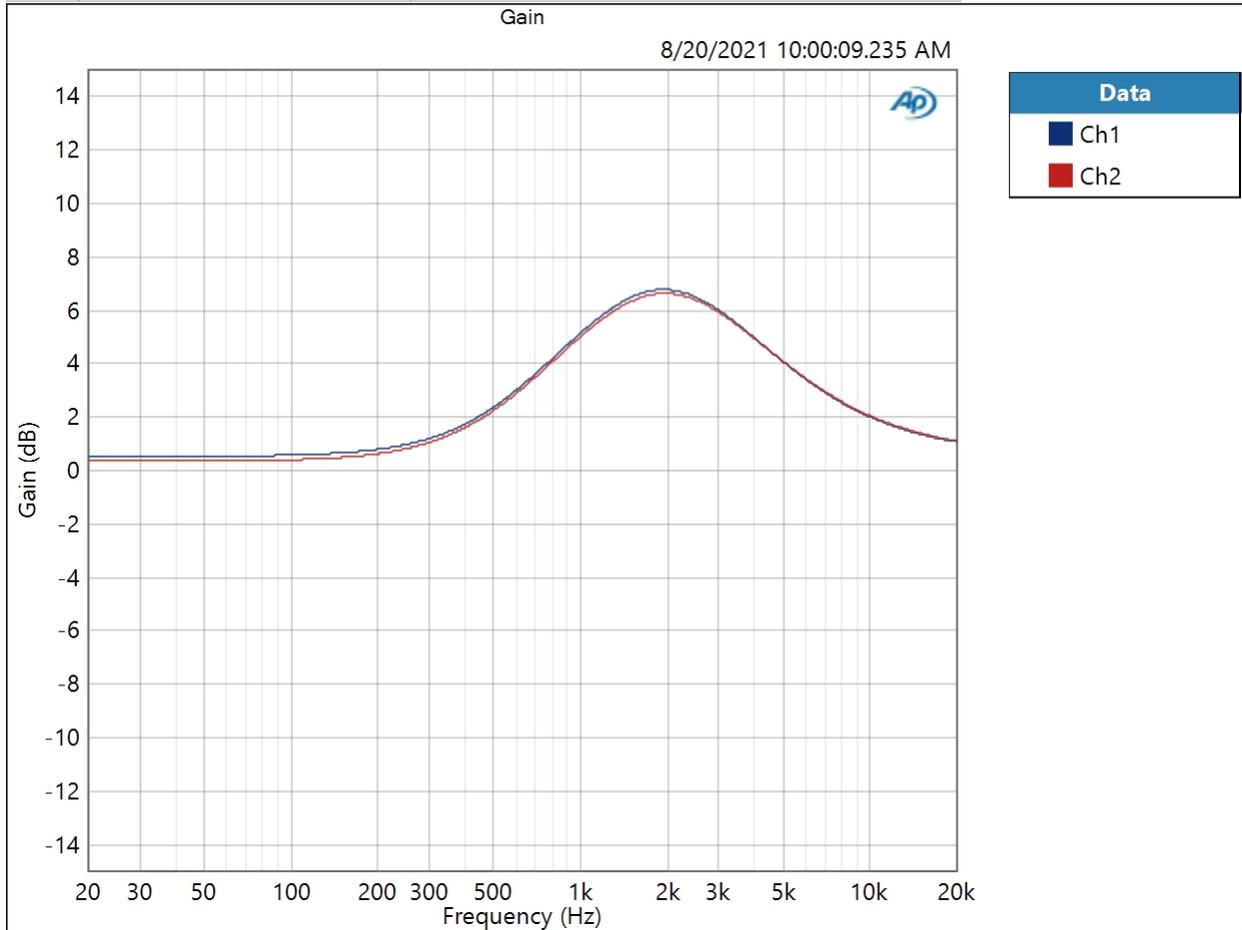
8/20/2021 10:11 AM



Process SE : Frequency Response--2kHz

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 8/20/2021 10:00:09 AM

Gain (8/20/2021 10:00:09.235 AM)



Result: PASSED

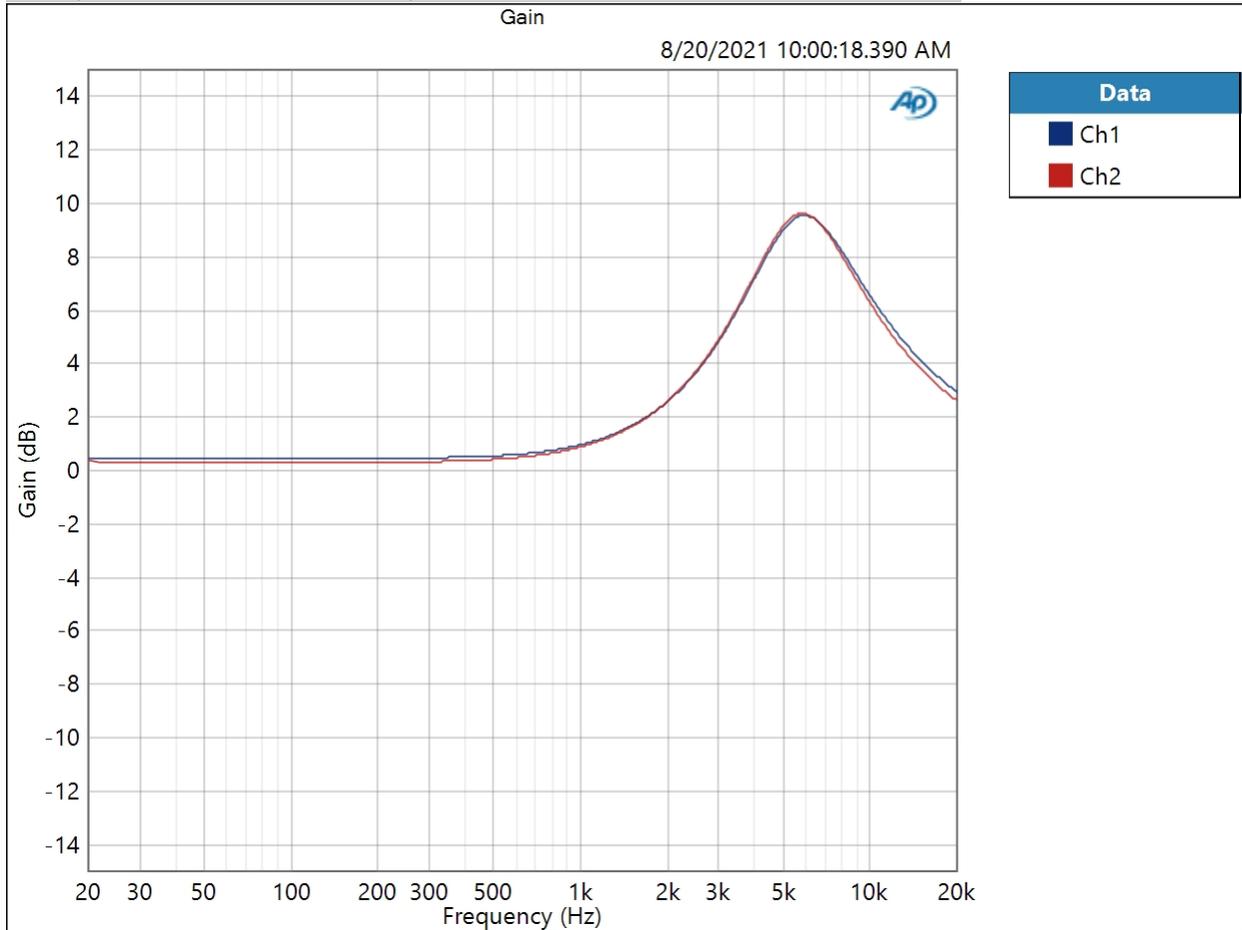
8/20/2021 10:11 AM



Process SE : Frequency Response--6kHz

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 8/20/2021 10:00:18 AM

Gain (8/20/2021 10:00:18.390 AM)



Result: PASSED

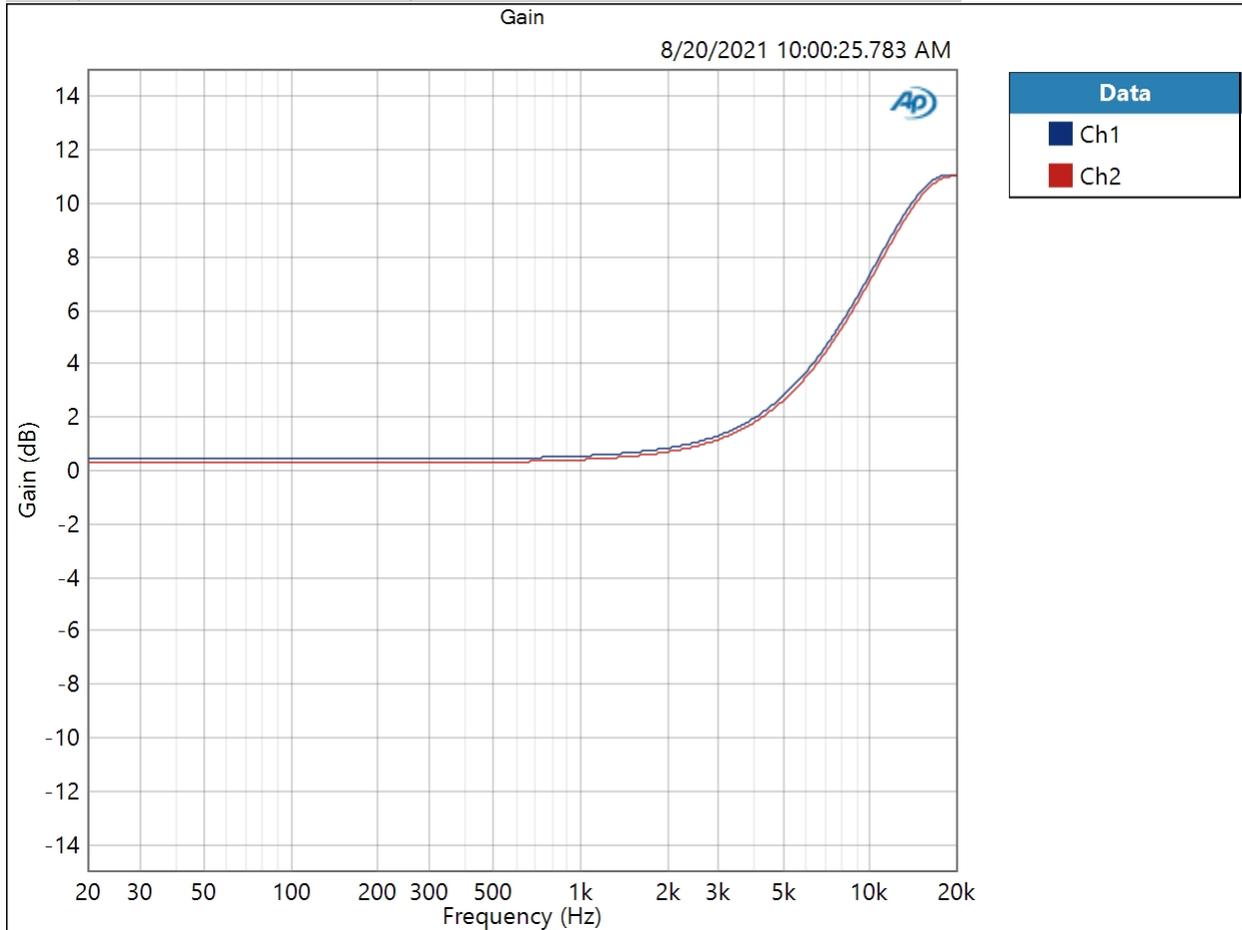
8/20/2021 10:11 AM



Process SE : Frequency Response--16kHz

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 8/20/2021 10:00:25 AM

Gain (8/20/2021 10:00:25.783 AM)



Result: PASSED

8/20/2021 10:11 AM

Process SE : Signal to Noise Ratio

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: A-wt.

Signal to Noise Ratio (8/20/2021 10:01:25.076 AM)

Ch1 110.453 dB  
Ch2 110.368 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 (8/20/2021 10:01:28.268 AM)

Ch1 0.001145 %  
 Ch2 0.001452 %

THD Ratio (8/20/2021 10:01:28.268 AM)

Ch1 0.001078 %  
 Ch2 0.001396 %

Noise Ratio (8/20/2021 10:01:28.268 AM)

Ch1 0.000380 %  
 Ch2 0.000384 %

Distortion Product Ratio (8/20/2021 10:01:28.268 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	-99.44	-116.97	-137.25	-135.02	-133.14	-134.44	-136.06	-135.62	-136.31
Ch2	-0.00	-97.14	-118.70	-135.06	-134.69	-132.54	-137.62	-134.47	-138.98	-141.31

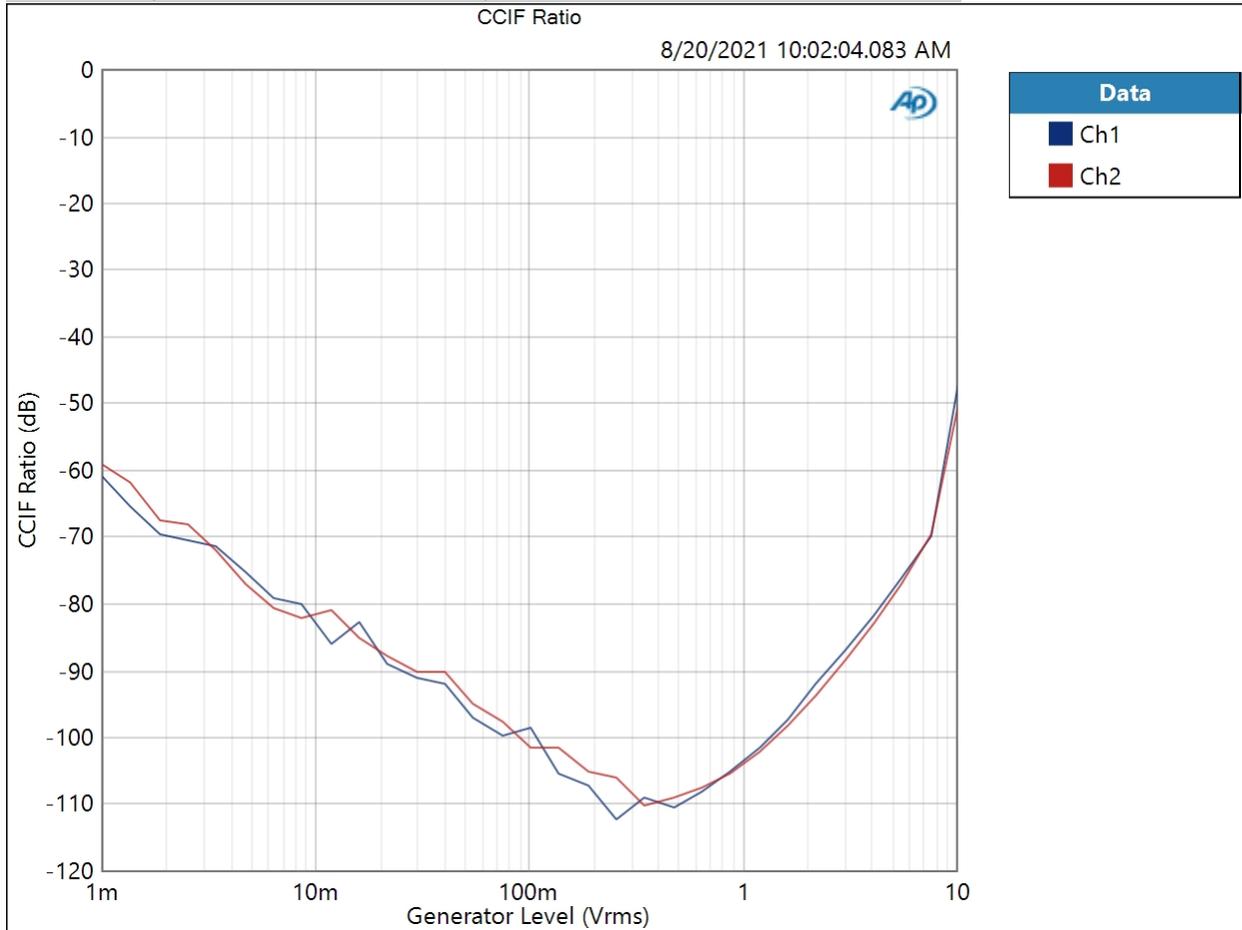
Distortion Product Ratio Parameters

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 8/20/2021 10:02:04 AM

CCIF Ratio (8/20/2021 10:02:04.083 AM)



Result: PASSED

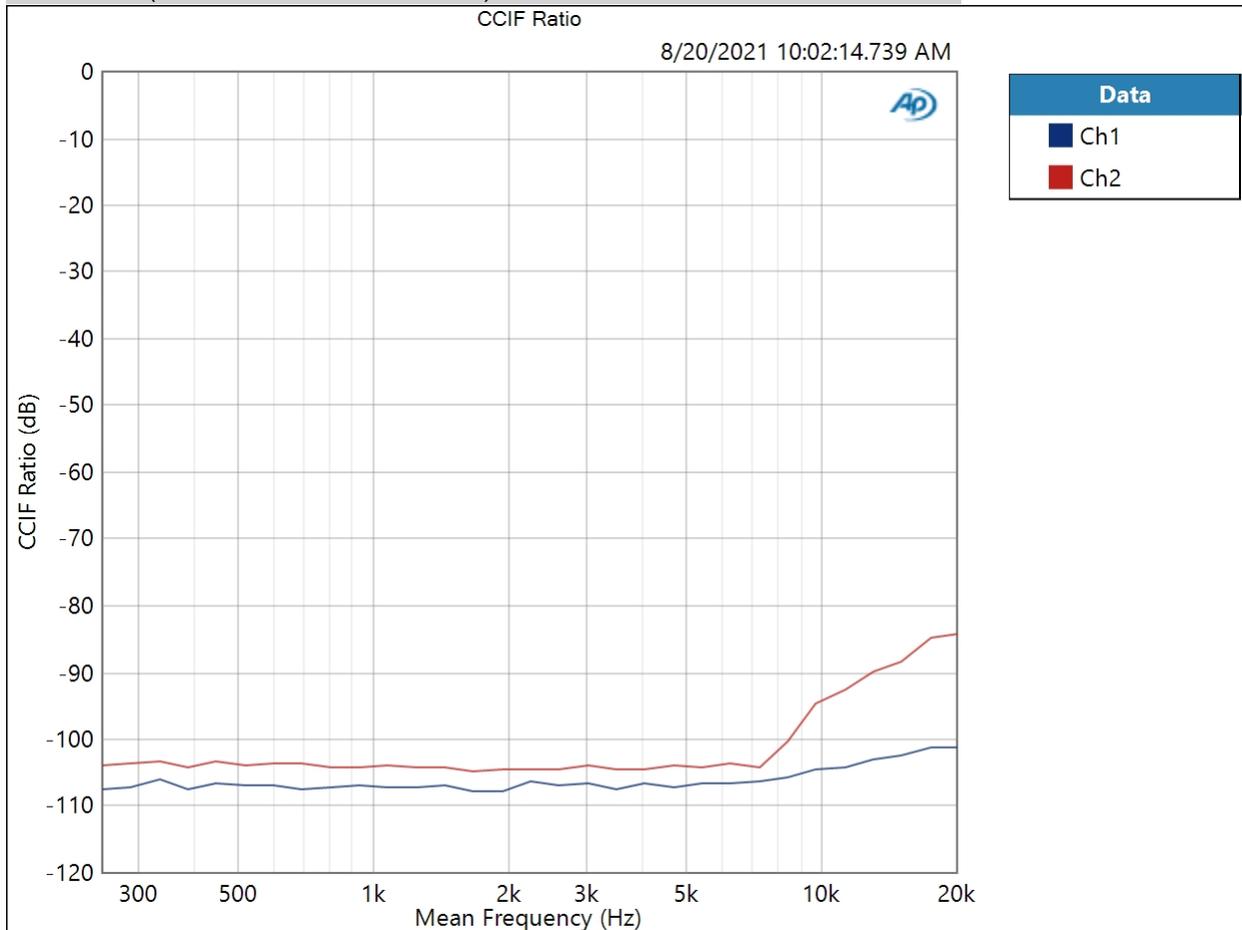
8/20/2021 10:11 AM



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 8/20/2021 10:02:14 AM

CCIF Ratio (8/20/2021 10:02:14.739 AM)



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

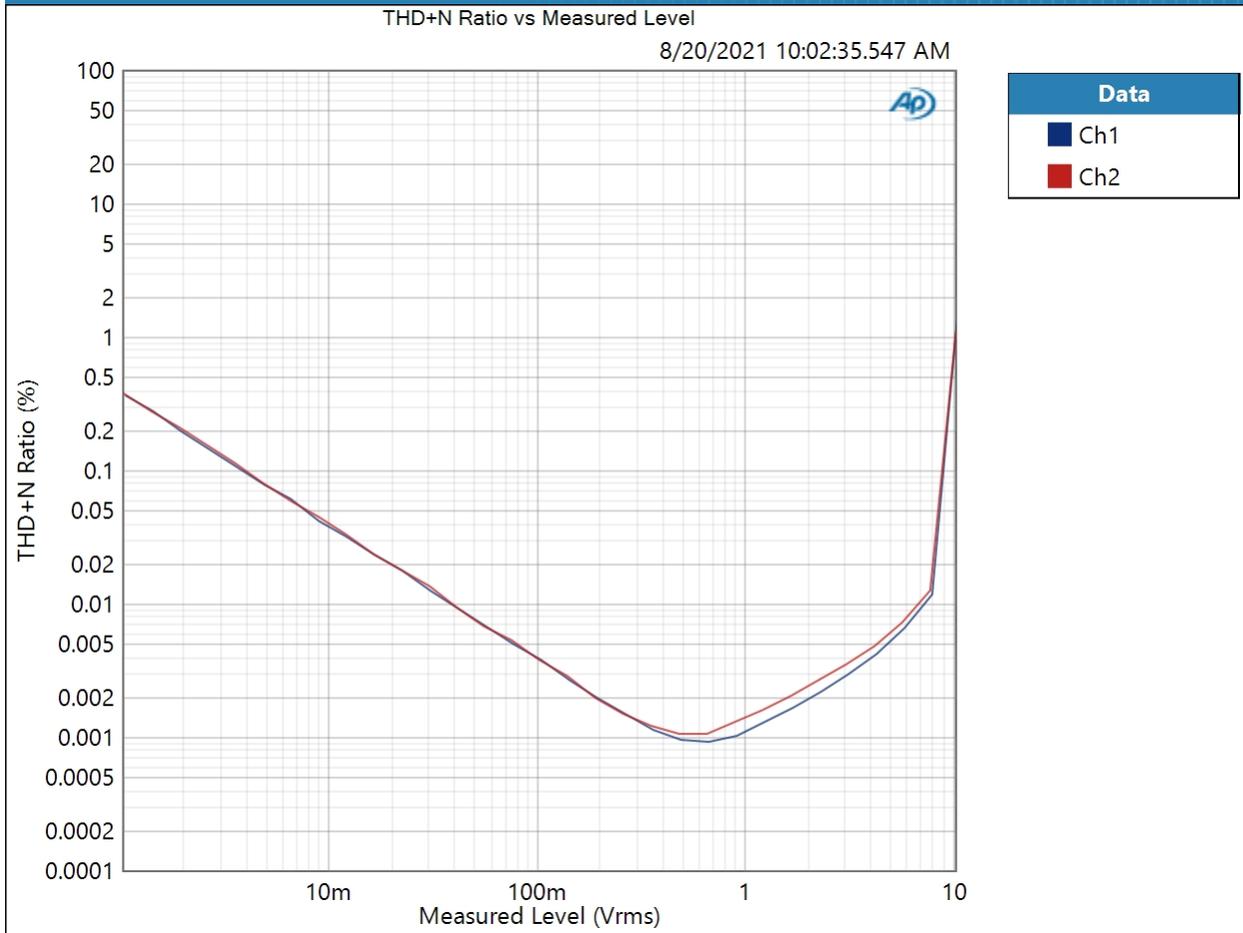
Crosstalk (8/20/2021 10:02:17.177 AM)

Ch1 -70.827 dB  
Ch2 -65.541 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 8/20/2021 10:02:35 AM

THD+N Ratio vs Measured Level (8/20/2021 10:02:35.547 AM)



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

8/20/2021 10:11 AM

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 (8/20/2021 10:03:54.038 AM)

Ch1 1.048 Vrms  
Ch2 1.033 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

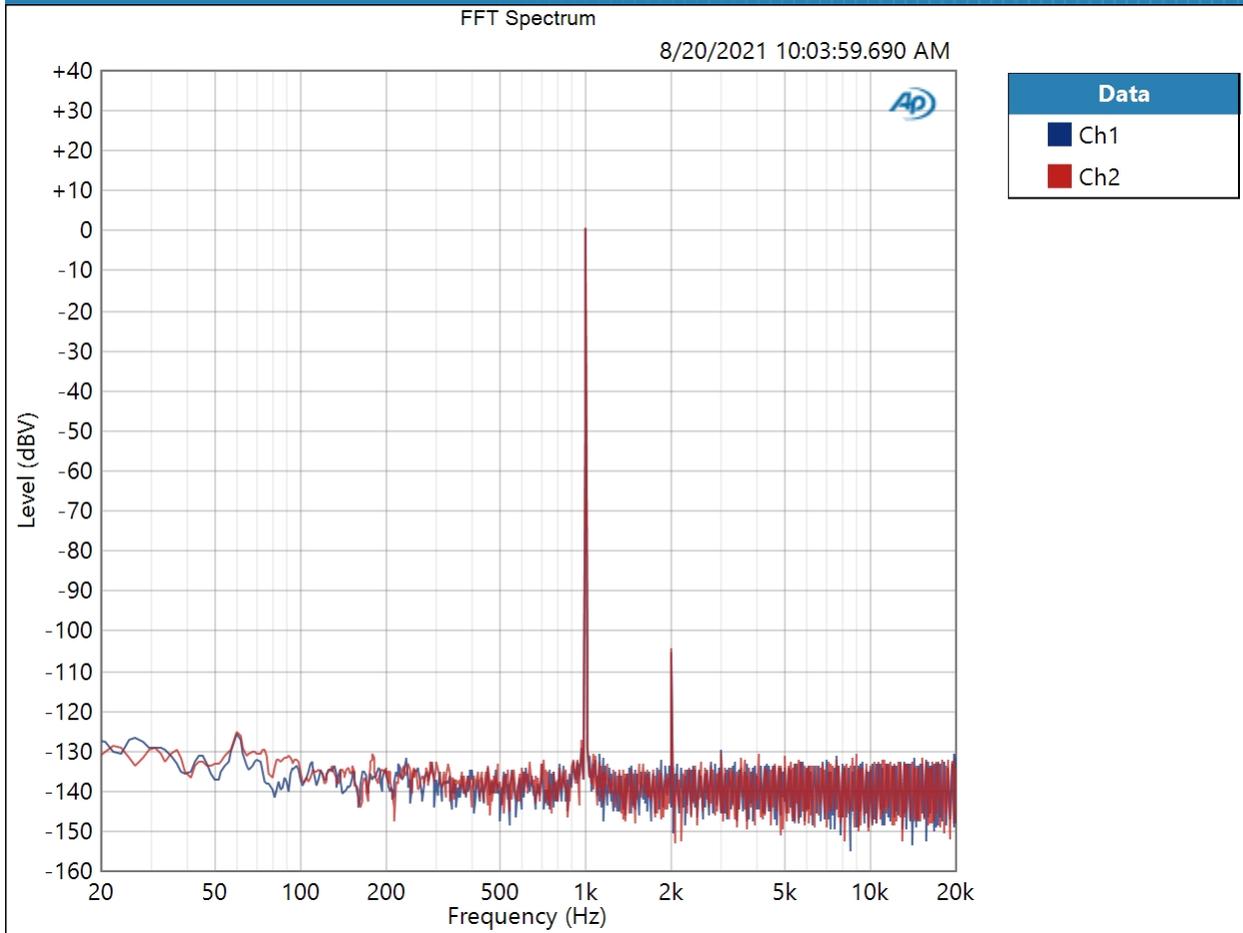
DC Level (8/20/2021 10:03:55.572 AM)

Ch1 -0.964 mV  
Ch2 -443.1 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 8/20/2021 10:03:59 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 (8/20/2021 10:03:59.690 AM)



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

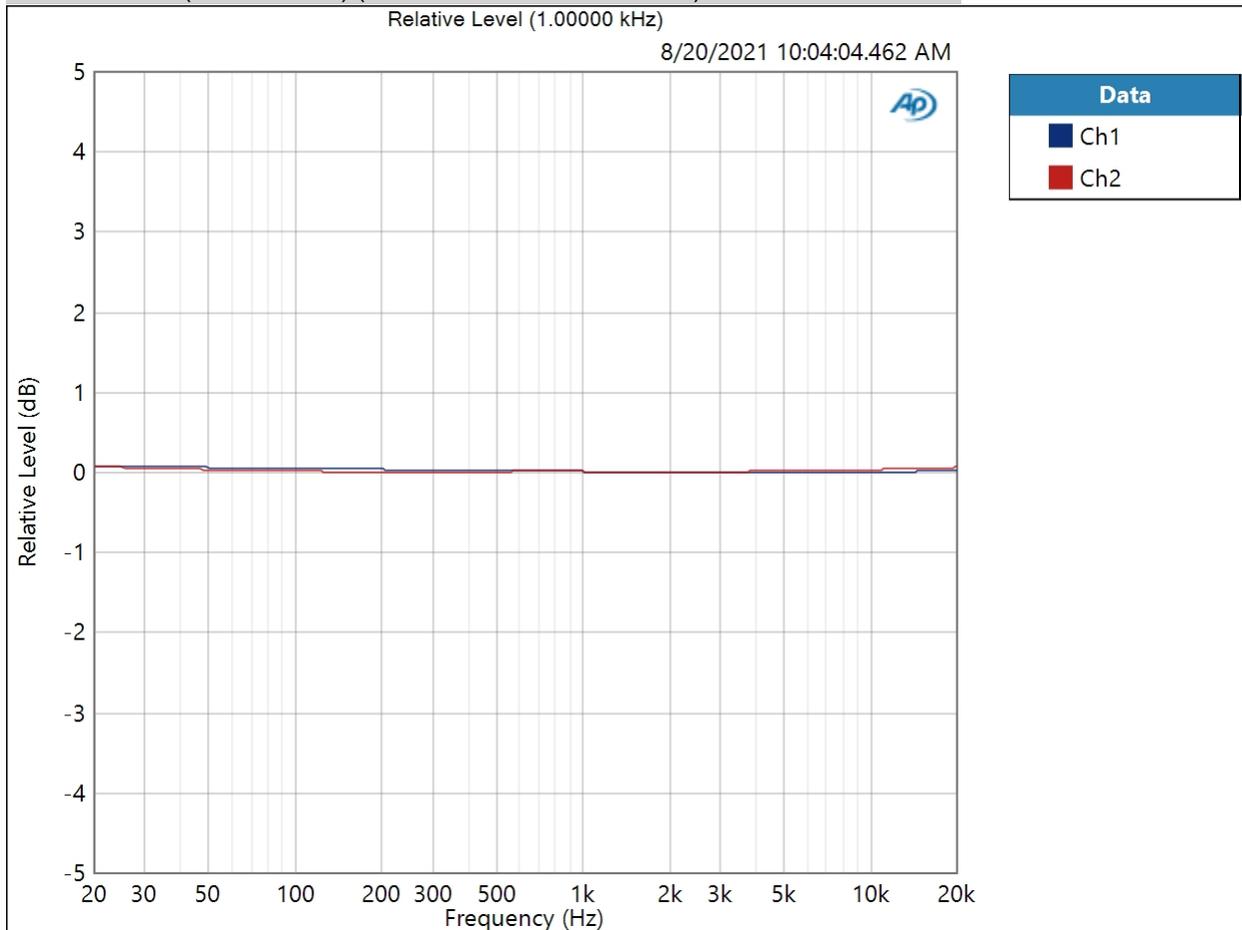
Sweep: 350.0 ms

Extend Acquisition By: 1.000 s

Secondary Source: None

Measured 1 8/20/2021 10:04:04 AM

Relative Level (1.00000 kHz) (8/20/2021 10:04:04.462 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) (8/20/2021 10:04:04.462 AM)

Ch1  $\pm 0.041$  dB

Ch2  $\pm 0.032$  dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Process Balanced : Frequency Response--20Hz

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

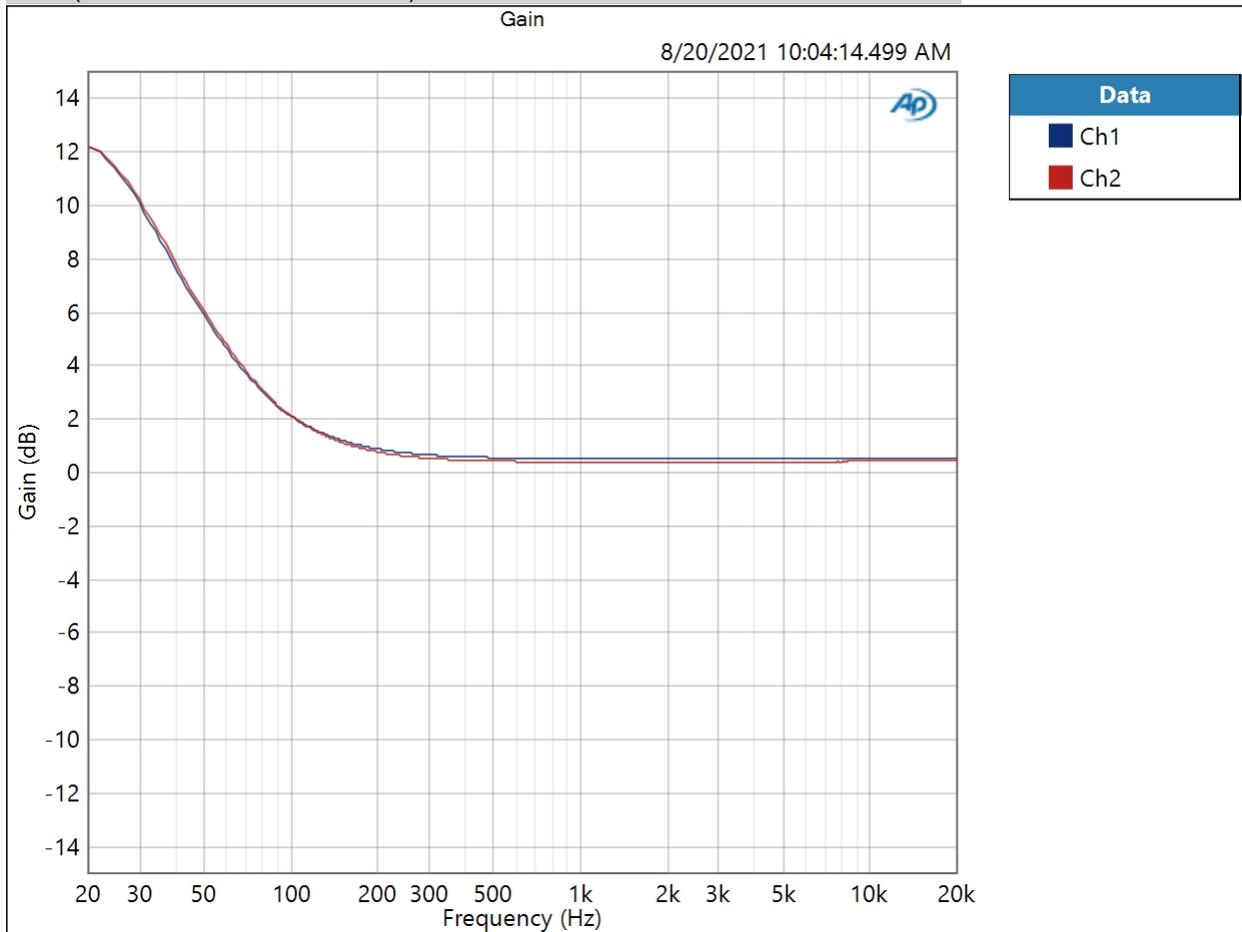
Sweep: 350.0 ms

Extend Acquisition By: 1.000 s

Secondary Source: None

Measured 1 8/20/2021 10:04:14 AM

Gain (8/20/2021 10:04:14.499 AM)



Result: PASSED

8/20/2021 10:11 AM



Process Balanced : Frequency Response--120Hz

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

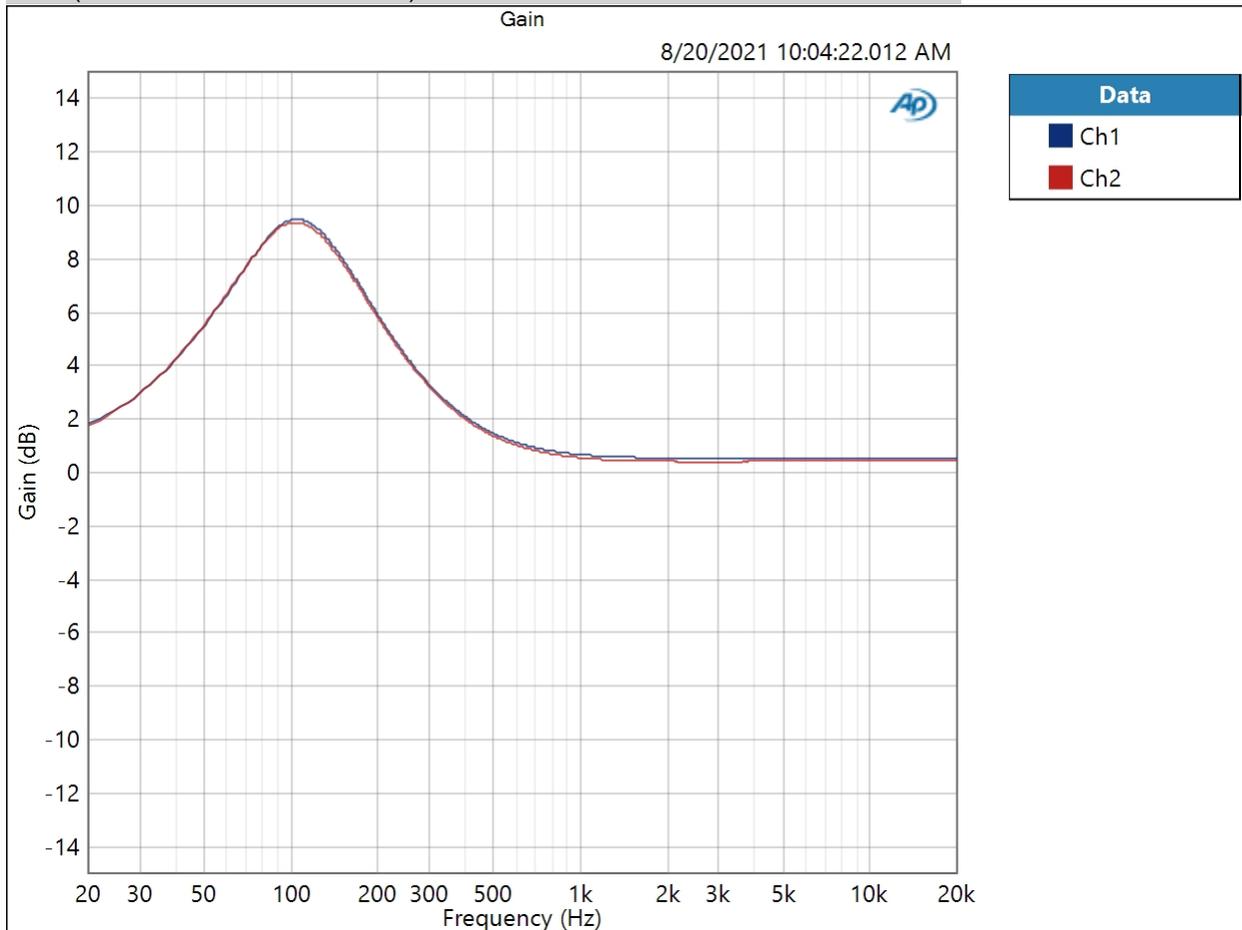
Sweep: 350.0 ms

Extend Acquisition By: 1.000 s

Secondary Source: None

Measured 1 8/20/2021 10:04:22 AM

Gain (8/20/2021 10:04:22.012 AM)



Result: PASSED

8/20/2021 10:11 AM



Process Balanced : Frequency Response--400Hz

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

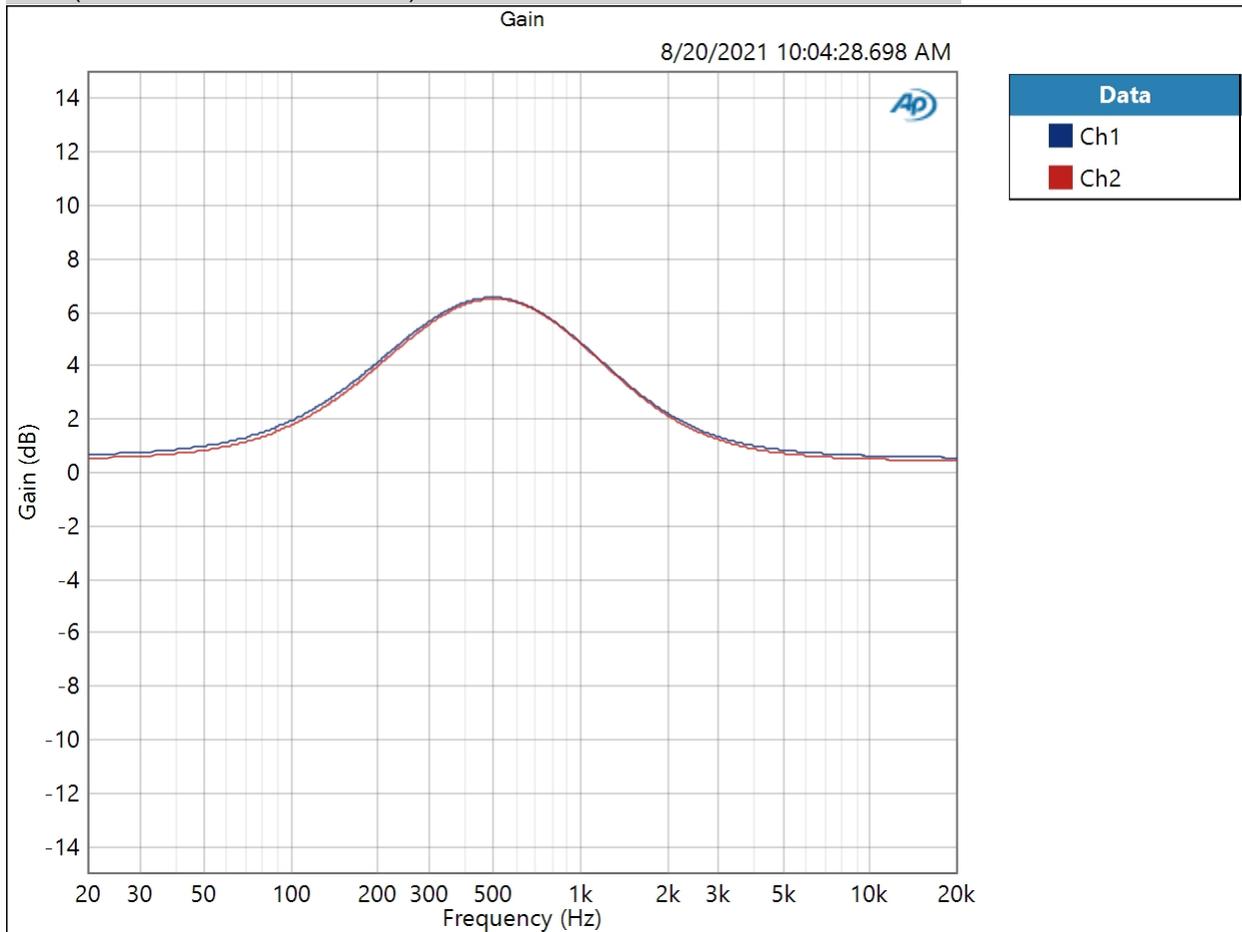
Sweep: 350.0 ms

Extend Acquisition By: 1.000 s

Secondary Source: None

Measured 1 8/20/2021 10:04:28 AM

Gain (8/20/2021 10:04:28.698 AM)



Result: PASSED

8/20/2021 10:11 AM



Process Balanced : Frequency Response--2kHz

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

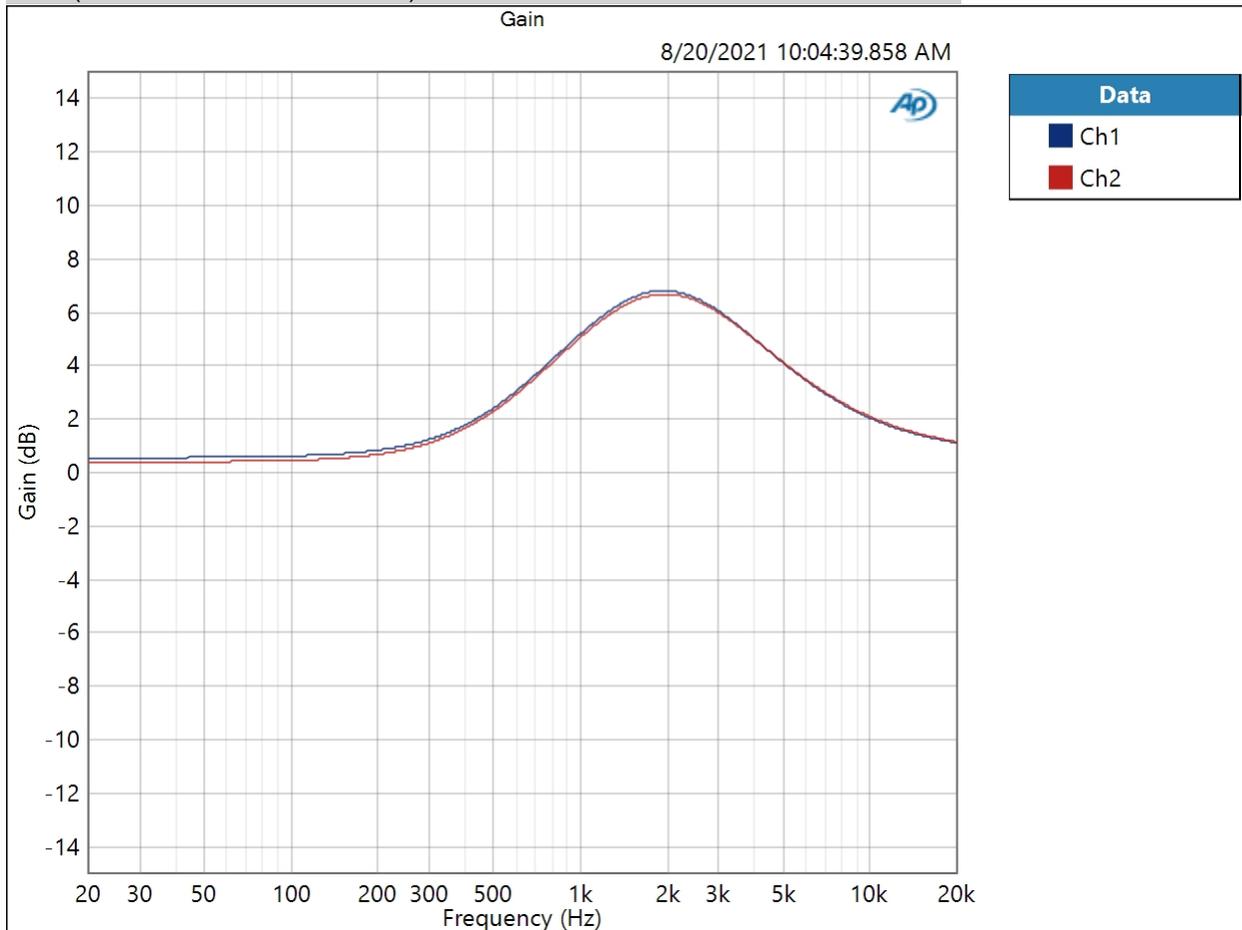
Sweep: 350.0 ms

Extend Acquisition By: 1.000 s

Secondary Source: None

Measured 1 8/20/2021 10:04:39 AM

Gain (8/20/2021 10:04:39.858 AM)



Result: PASSED

8/20/2021 10:11 AM



Process Balanced : Frequency Response--6kHz

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

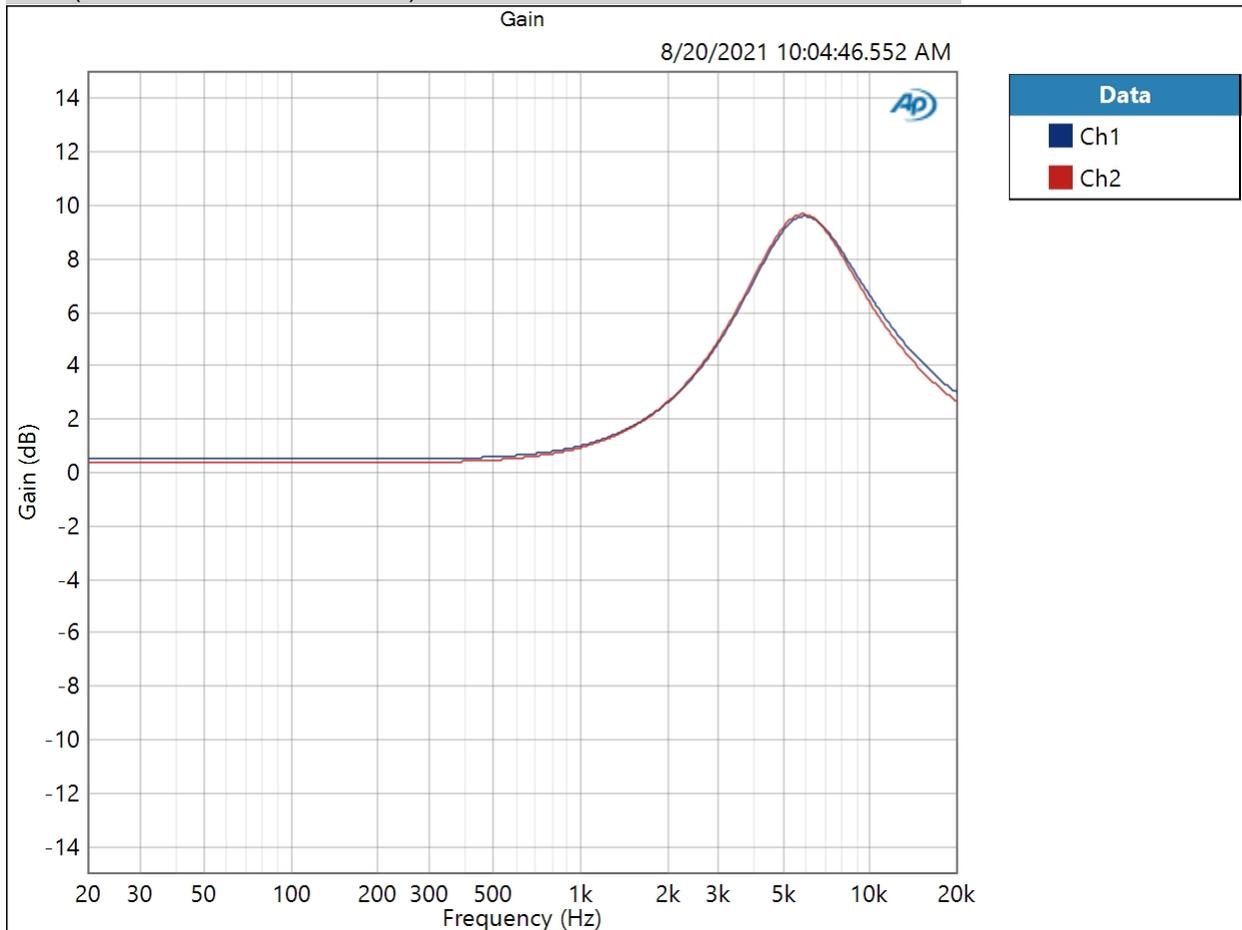
Sweep: 350.0 ms

Extend Acquisition By: 1.000 s

Secondary Source: None

Measured 1 8/20/2021 10:04:46 AM

Gain (8/20/2021 10:04:46.552 AM)



Result: PASSED

8/20/2021 10:11 AM



Process Balanced : Frequency Response--16kHz

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

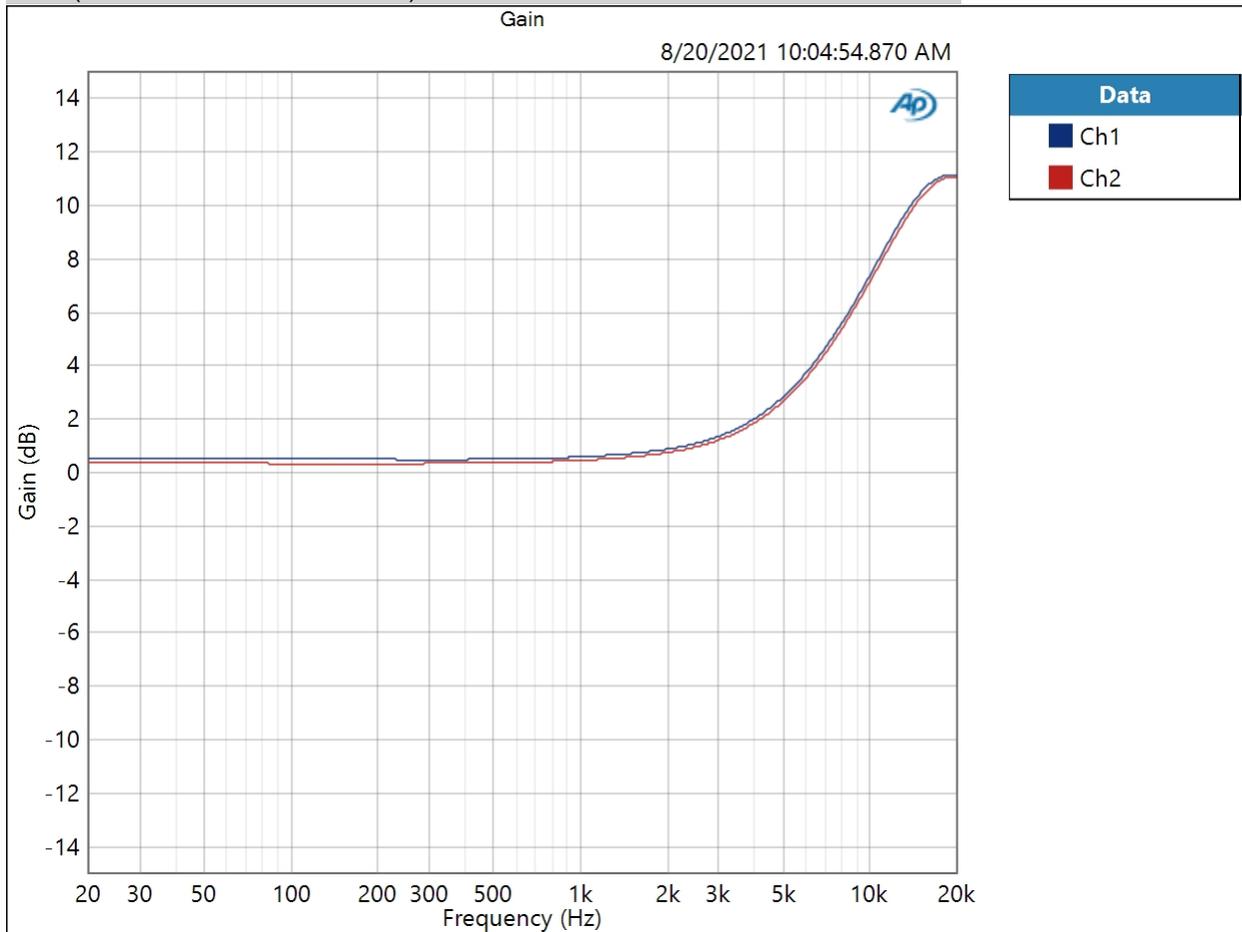
Sweep: 350.0 ms

Extend Acquisition By: 1.000 s

Secondary Source: None

Measured 1 8/20/2021 10:04:54 AM

Gain (8/20/2021 10:04:54.870 AM)



Result: PASSED

8/20/2021 10:11 AM

Process Balanced : Signal to Noise Ratio

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: A-wt.

Signal to Noise Ratio (8/20/2021 10:05:22.304 AM)

Ch1 103.291 dB  
Ch2 103.051 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 (8/20/2021 10:05:25.301 AM)

Ch1 0.001006 %  
 Ch2 0.001070 %

THD Ratio (8/20/2021 10:05:25.301 AM)

Ch1 0.000553 %  
 Ch2 0.000631 %

Noise Ratio (8/20/2021 10:05:25.301 AM)

Ch1 0.000851 %  
 Ch2 0.000865 %

Distortion Product Ratio (8/20/2021 10:05:25.301 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	-105.49	-128.35	-127.71	-130.75	-128.31	-128.87	-129.15	-132.29	-128.15
Ch2	-0.00	-104.25	-126.99	-127.00	-130.12	-128.83	-129.97	-131.32	-128.58	-130.30

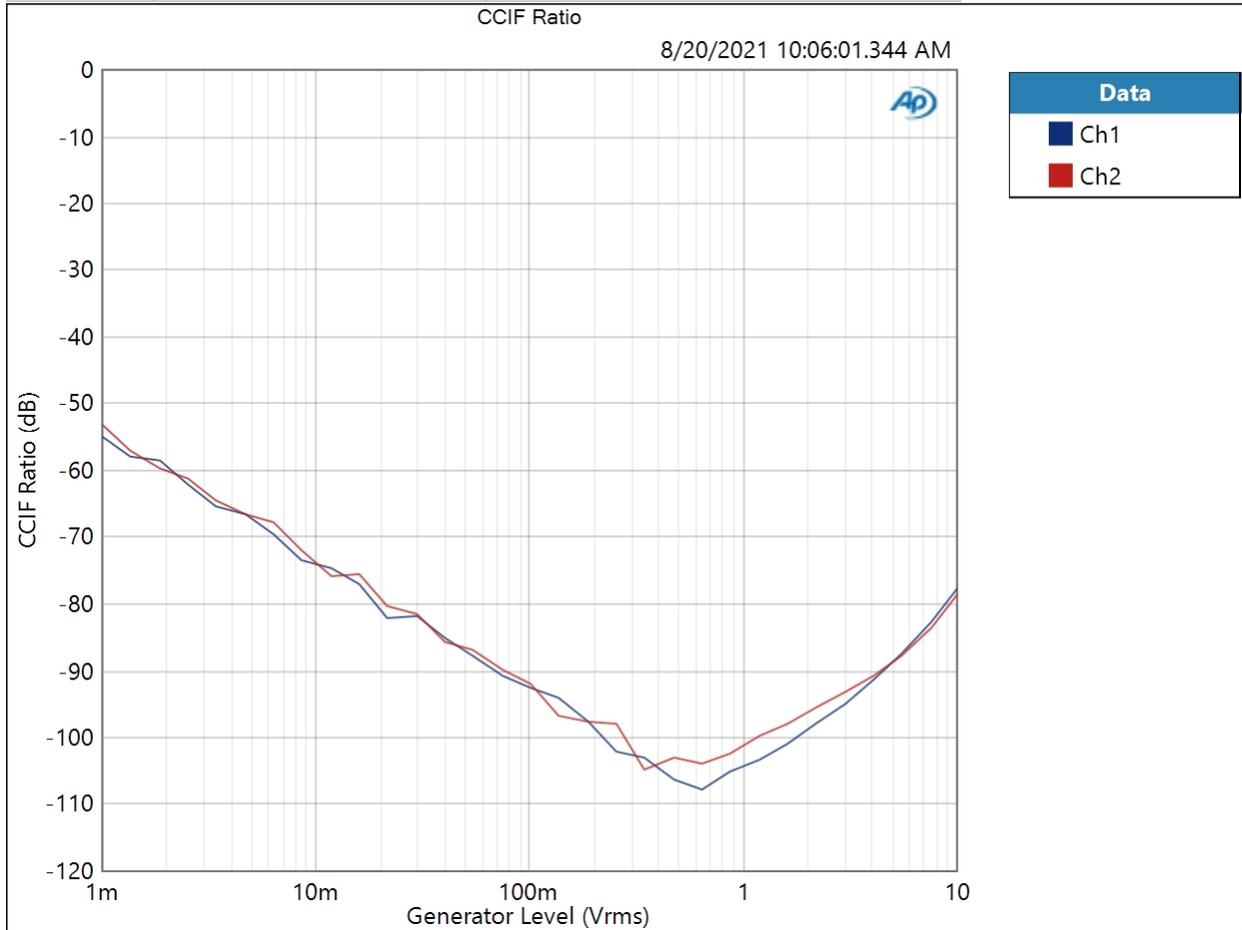
Distortion Product Ratio Parameters

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 8/20/2021 10:06:01 AM

CCIF Ratio (8/20/2021 10:06:01.344 AM)



Result: PASSED

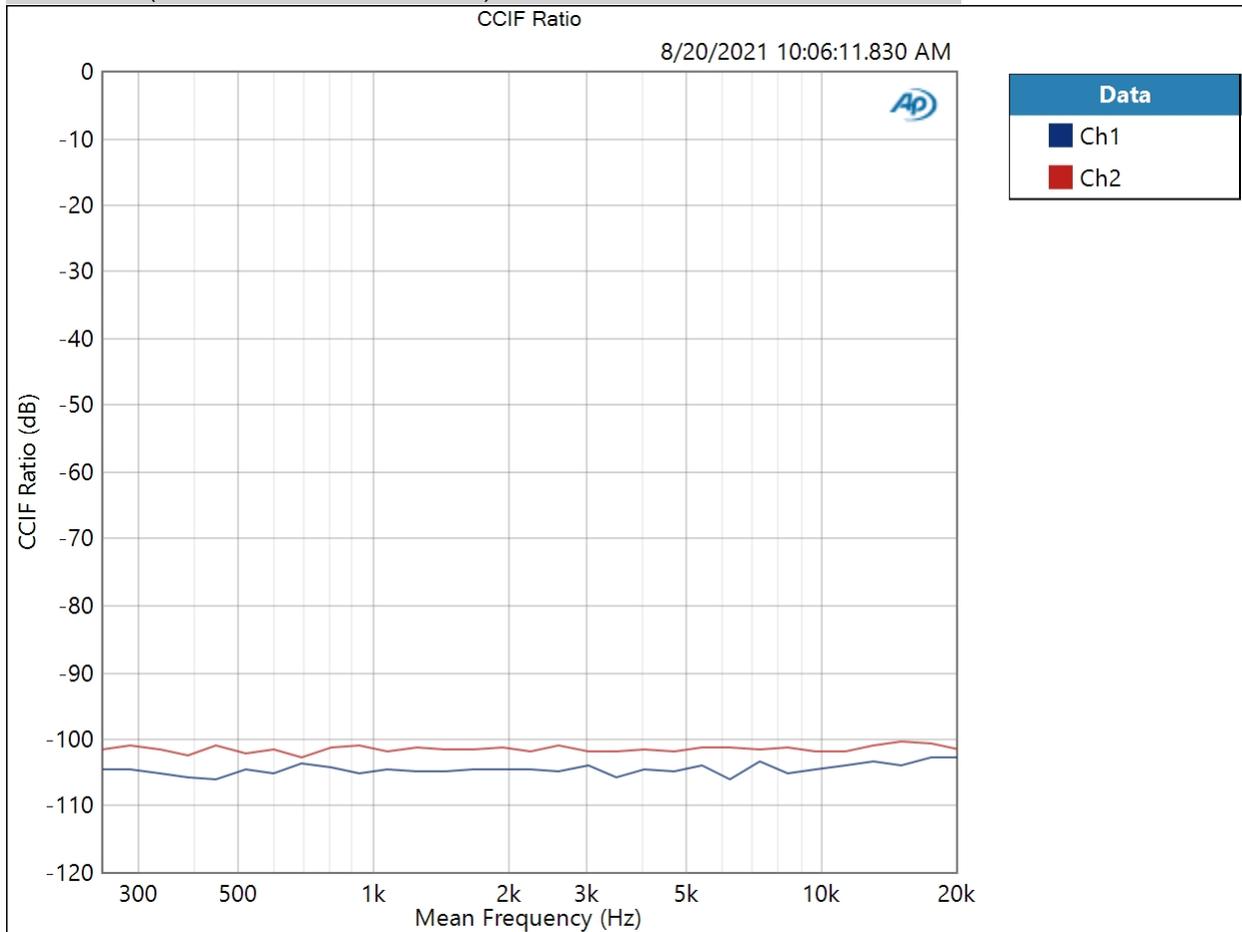
8/20/2021 10:11 AM



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 8/20/2021 10:06:11 AM

CCIF Ratio (8/20/2021 10:06:11.830 AM)



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 (8/20/2021 10:06:14.209 AM)

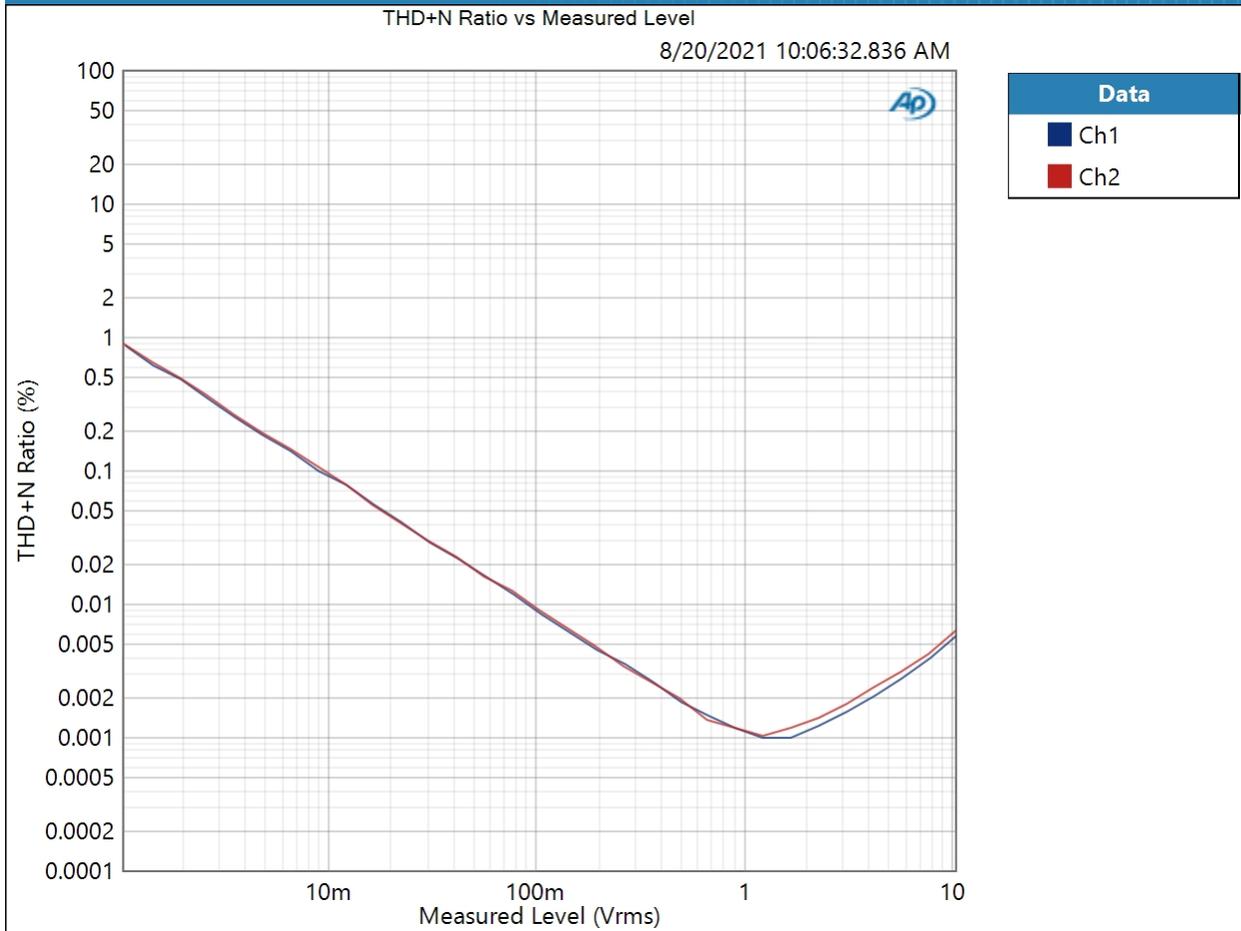
Ch1 -70.931 dB

Ch2 -65.599 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 8/20/2021 10:06:32 AM

THD+N Ratio vs Measured Level (8/20/2021 10:06:32.836 AM)



Result: PASSED