

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

Main

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

Center

Level and Gain	✓ PASSED
DC Level	✓ PASSED
Frequency Response	✓ PASSED
Signal to Noise Ratio	✓ PASSED
THD+N	✓ PASSED

Surround

Level and Gain	✓ PASSED
DC Level	✓ PASSED
Frequency Response	✓ PASSED
Signal to Noise Ratio	✓ PASSED
THD+N	✓ PASSED

Sub

Level and Gain	✓ PASSED
DC Level	✓ PASSED
Frequency Response	✓ PASSED
Signal to Noise Ratio	✓ PASSED
THD+N	✓ PASSED

Optical

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
Bandpass Level Sweep	✔ PASSED
Stepped Level Sweep	✔ PASSED

USB

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
Bandpass Level Sweep	✔ PASSED
Stepped Level Sweep	✔ PASSED

Sequence Result:

Sequence Result: ✔ PASSED

APx Instrument

Instrument ID:	100546525
Calibration Date:	2/10/2021
APx Version:	6.0.1.592.148673

Main : Signal Path Setup

Output Connector:	Analog Unbalanced
Channels:	2
Source Impedance:	20 ohm
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
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.

Main : Level and Gain

Waveform: Sine
Generator Level: 2.000 Vrms
DC Offset: 0.000 V
Frequency: 1.00000 kHz
Low-pass Filter: Signal Path

RMS Level (3/22/2023 9:25:17.093 AM)

Ch1 2.001 Vrms
Ch2 1.997 Vrms

Main : 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

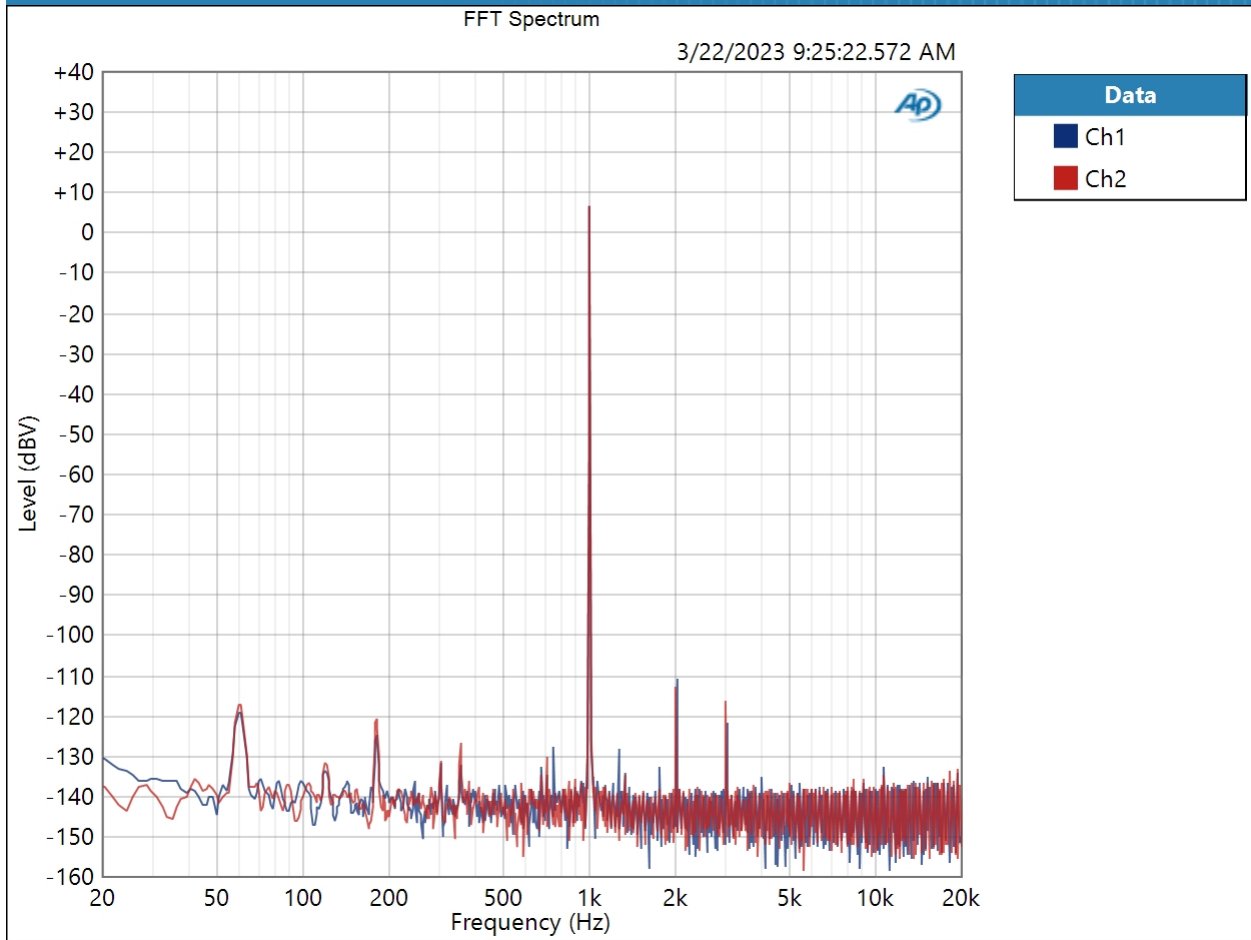
DC Level (3/22/2023 9:25:18.358 AM)

Ch1 305.0 uV
Ch2 -101.8 uV

Main : Signal Analyzer

Waveform: Sine
Generator Level: 2.000 Vrms
DC Offset: 0.000 V
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 3/22/2023 9:25:22 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 (3/22/2023 9:25:22.572 AM)

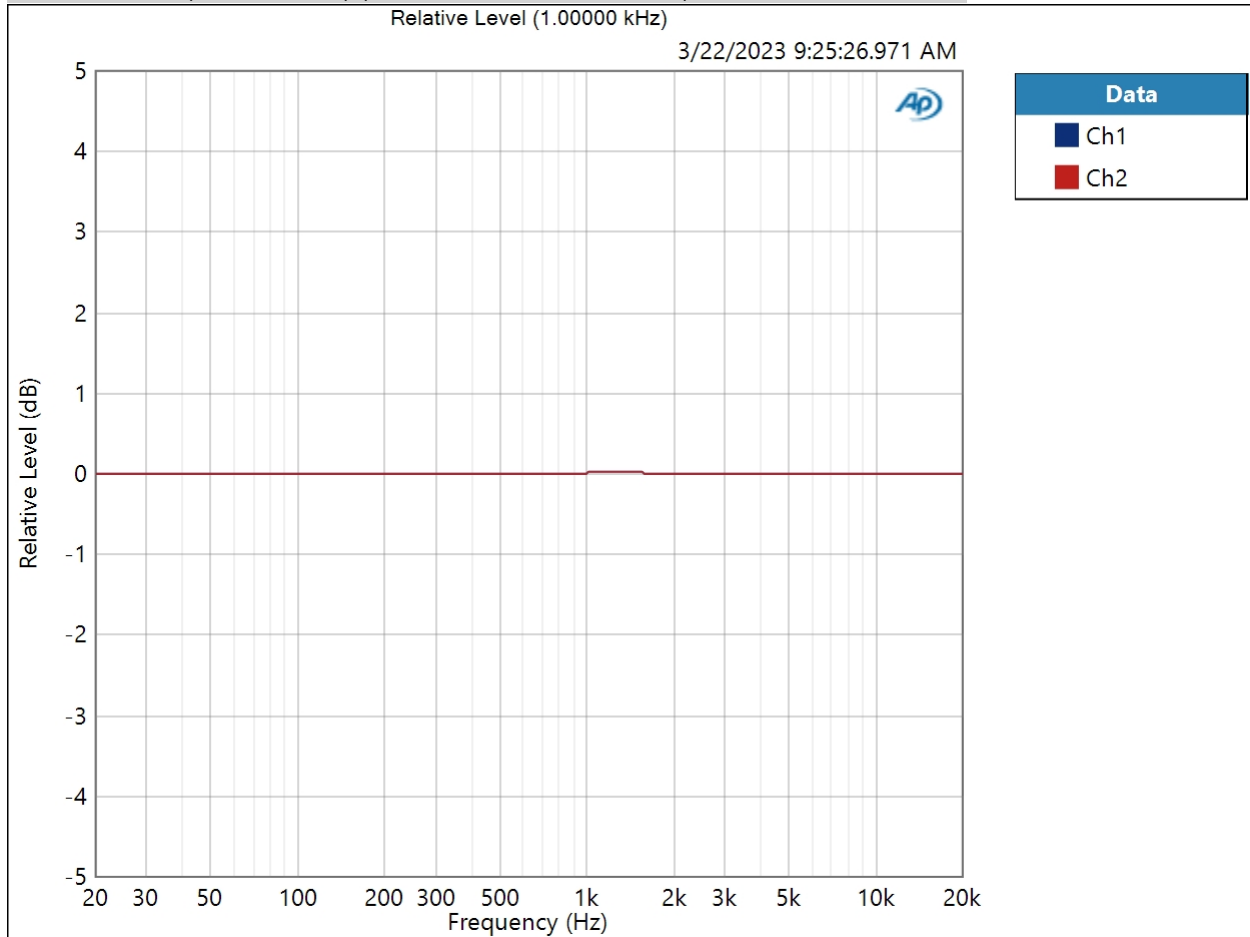


Result: PASSED

Main : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 2.000 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 3/22/2023 9:25:26 AM

Relative Level (1.00000 kHz) (3/22/2023 9:25:26.971 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) (3/22/2023 9:25:26.971 AM)

Ch1 ± 0.011 dB

Ch2 ± 0.011 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Main : Signal to Noise Ratio

Waveform: Sine
Generator Level: 2.000 Vrms
DC Offset: 0.000 V
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 (3/22/2023 9:27:58.187 AM)

Ch1 116.680 dB

Ch2 116.217 dB

Main : THD+N

Waveform: Sine
 Generator Level: 2.000 Vrms
 DC Offset: 0.000 V
 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 (3/22/2023 9:25:31.339 AM)

Ch1 0.000318 %
 Ch2 0.000326 %

THD Ratio (3/22/2023 9:25:31.339 AM)

Ch1 0.000159 %
 Ch2 0.000141 %

Noise Ratio (3/22/2023 9:25:31.339 AM)

Ch1 0.000279 %
 Ch2 0.000292 %

Distortion Product Ratio (3/22/2023 9:25:31.339 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	-116.81	-126.98	-139.54	-140.90	-140.10	-137.38	-137.21	-140.72	-142.75
Ch2	-0.00	-118.95	-123.15	-142.28	-141.22	-140.72	-139.77	-142.02	-143.21	-141.94

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Main : 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: 5.000 Vrms

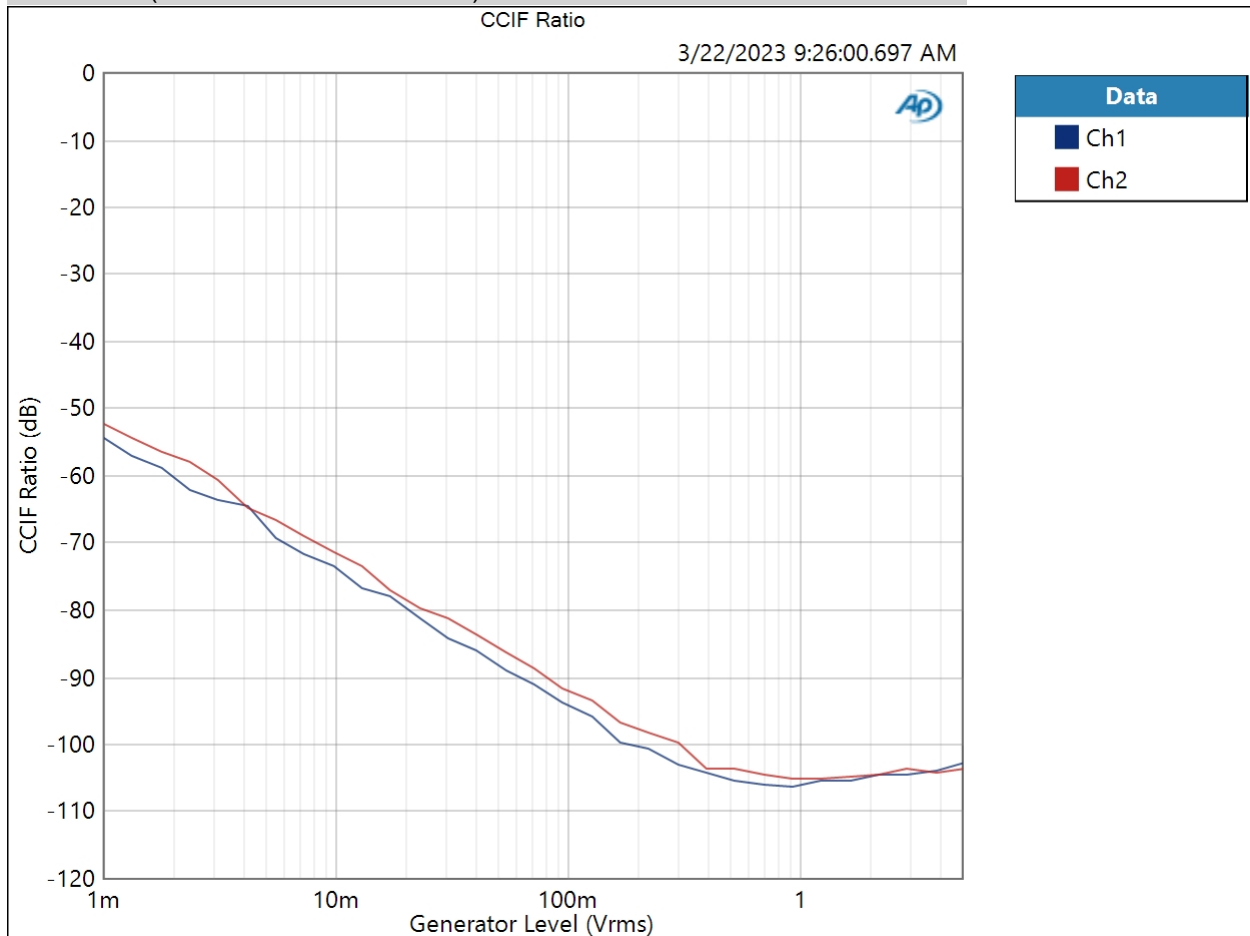
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 3/22/2023 9:26:00 AM

CCIF Ratio (3/22/2023 9:26:00.697 AM)

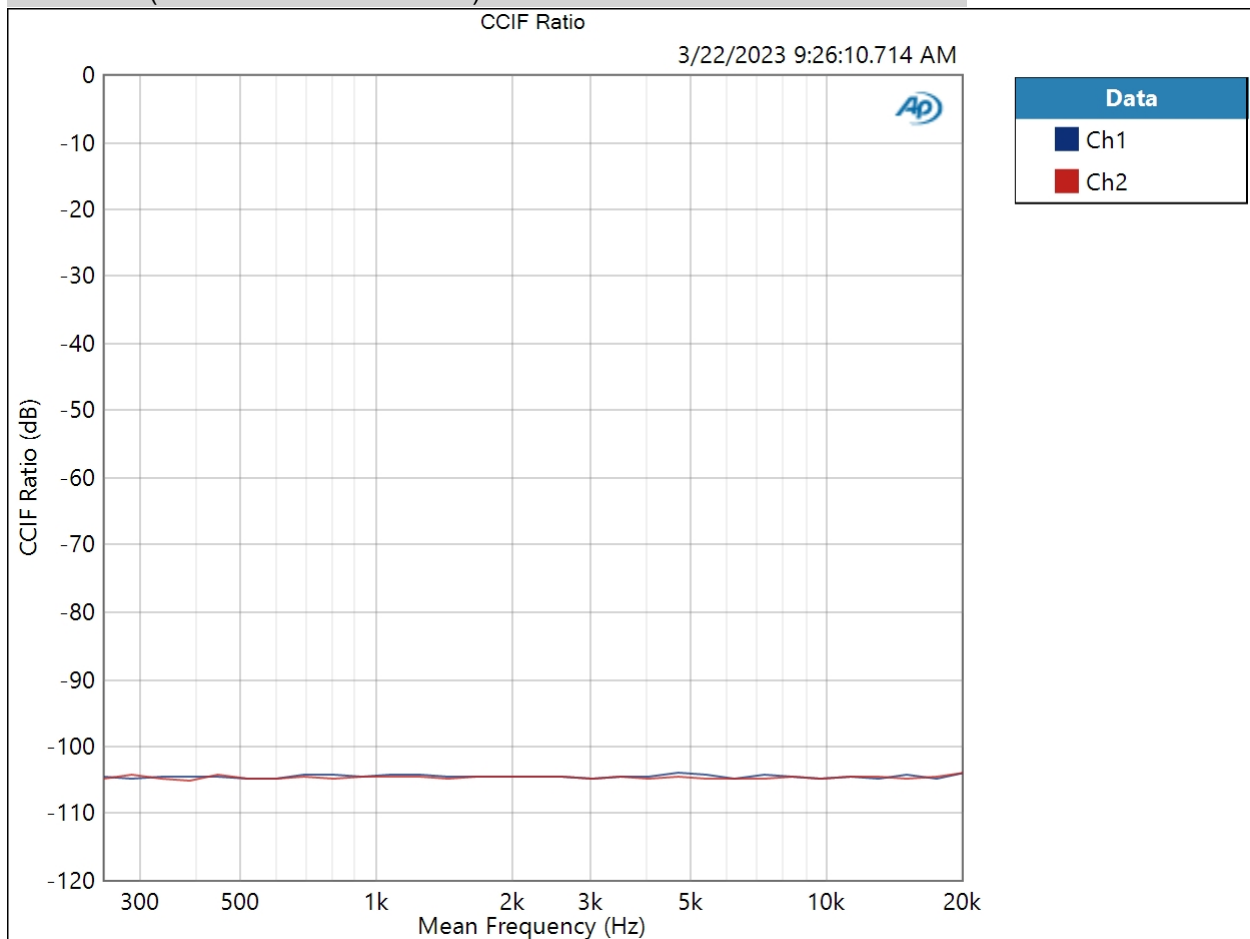


Result: PASSED

3/22/2023 10:04 AM

Main : IMD Frequency Sweep (CCIF)
Generator Level: 2.000 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 3/22/2023 9:26:10 AM

CCIF Ratio (3/22/2023 9:26:10.714 AM)



Result:  PASSED

Main : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Level: 2.000 Vrms

DC Offset: 0.000 V

Frequency: 10.0000 kHz

Crosstalk (3/22/2023 9:26:12.188 AM)

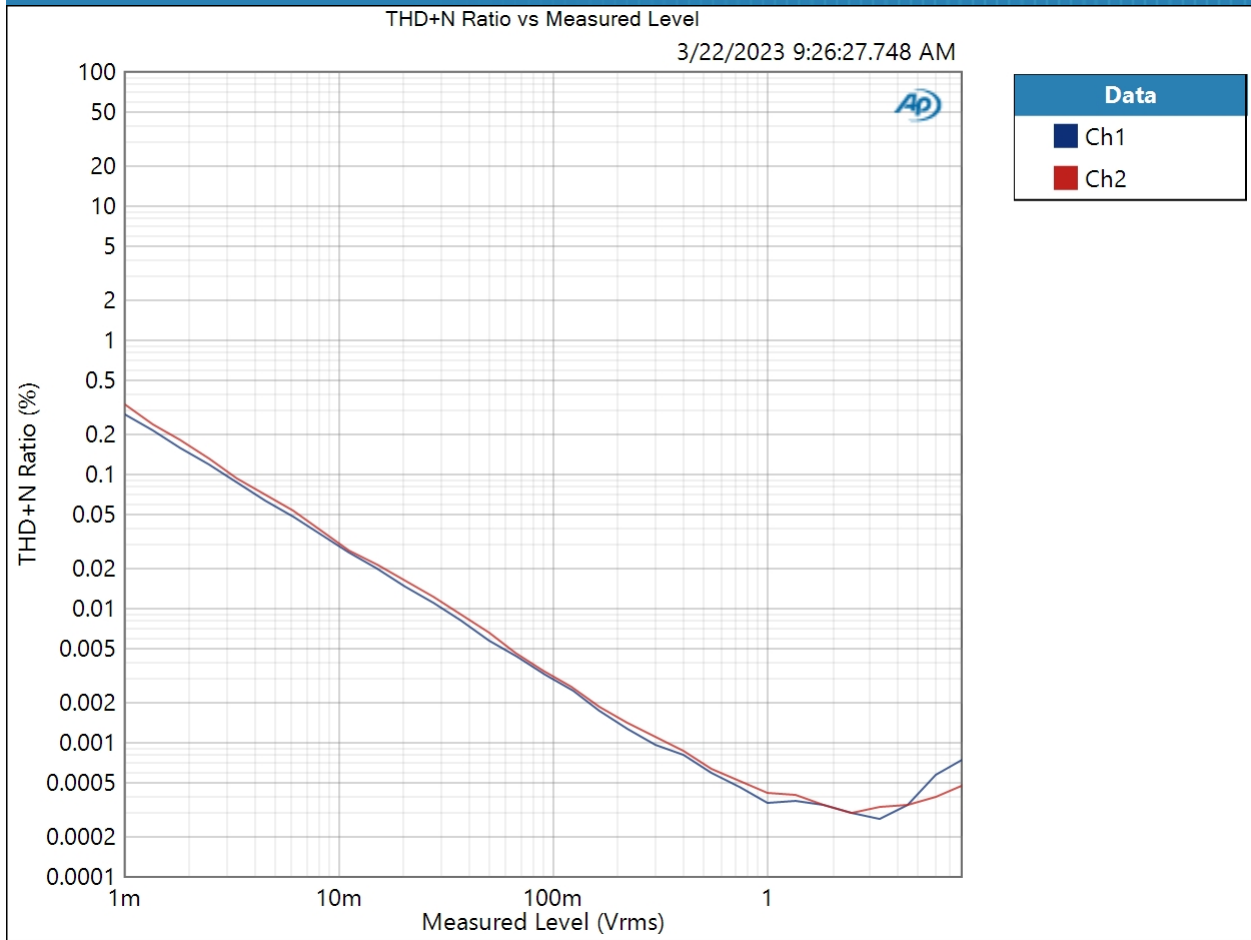
Ch1 85.727 dB

Ch2 79.544 dB

Main : Stepped Level Sweep

Waveform: Sine
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 8.000 Vrms
Step Type: Logarithmic
Number of Points: 31
Offset: 0.000 V
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 3/22/2023 9:26:27 AM

THD+N Ratio vs Measured Level (3/22/2023 9:26:27.748 AM)



Result: PASSED

Center : Signal Path Setup

Output Connector:	Analog Unbalanced
Channels:	2
Source Impedance:	20 ohm
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:	1
Channel:	Ch1
Termination:	100 kohm
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.

Center : Level and Gain

Waveform: Sine
Generator Level: 1.000 Vrms
DC Offset: 0.000 V
Frequency: 1.00000 kHz
Low-pass Filter: Signal Path

RMS Level (3/22/2023 9:28:47.327 AM)

Ch1 3.160 Vrms

Center : 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

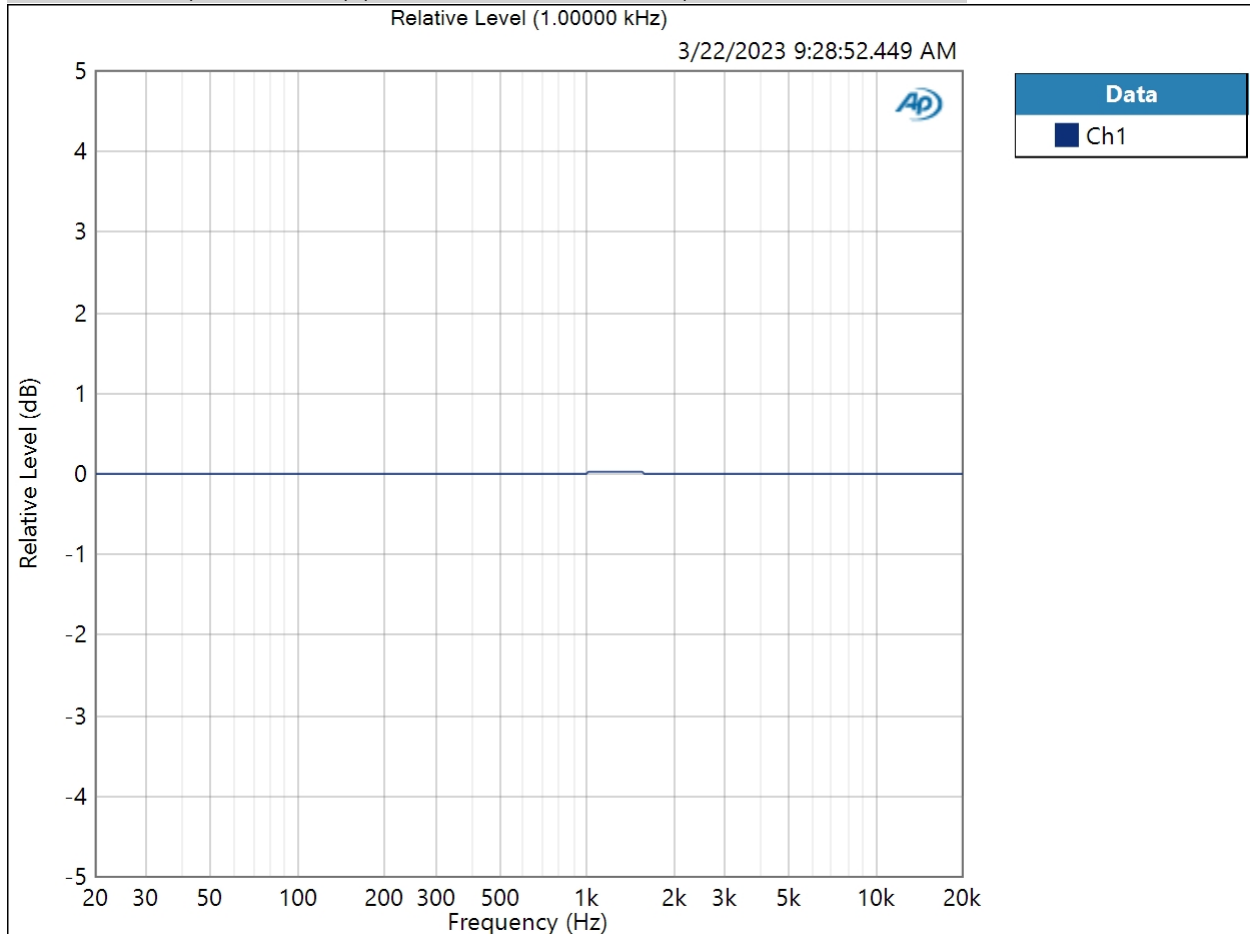
DC Level (3/22/2023 9:28:48.568 AM)

Ch1 -1.874 mV

Center : 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 3/22/2023 9:28:52 AM

Relative Level (1.00000 kHz) (3/22/2023 9:28:52.449 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) (3/22/2023 9:28:52.449 AM)

Ch1 ± 0.009 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Center : Signal to Noise Ratio

Waveform: Sine
Generator Level: 2.000 Vrms
DC Offset: 0.000 V
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 (3/22/2023 9:28:54.512 AM)

Ch1 113.191 dB

Center : THD+N

Waveform: Sine
 Generator Level: 1.000 Vrms
 DC Offset: 0.000 V
 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 (3/22/2023 9:28:56.426 AM)

Ch1 0.000570 %

THD Ratio (3/22/2023 9:28:56.426 AM)

Ch1 0.000341 %

Noise Ratio (3/22/2023 9:28:56.426 AM)

Ch1 0.000454 %

Distortion Product Ratio (3/22/2023 9:28:56.426 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	-125.57	-111.22	-129.78	-116.11	-130.49	-122.21	-128.21	-128.47	-130.34

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Surround : Signal Path Setup

Output Connector: Analog Unbalanced
 Channels: 1
 Source Impedance: 20 ohm
 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
 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.

Surround : Level and Gain

Waveform: Sine
Generator Level: 2.000 Vrms
DC Offset: 0.000 V
Frequency: 1.00000 kHz
Low-pass Filter: Signal Path

RMS Level (3/22/2023 9:30:26.766 AM)

Ch1 2.953 Vrms
Ch2 2.953 Vrms

Surround : 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

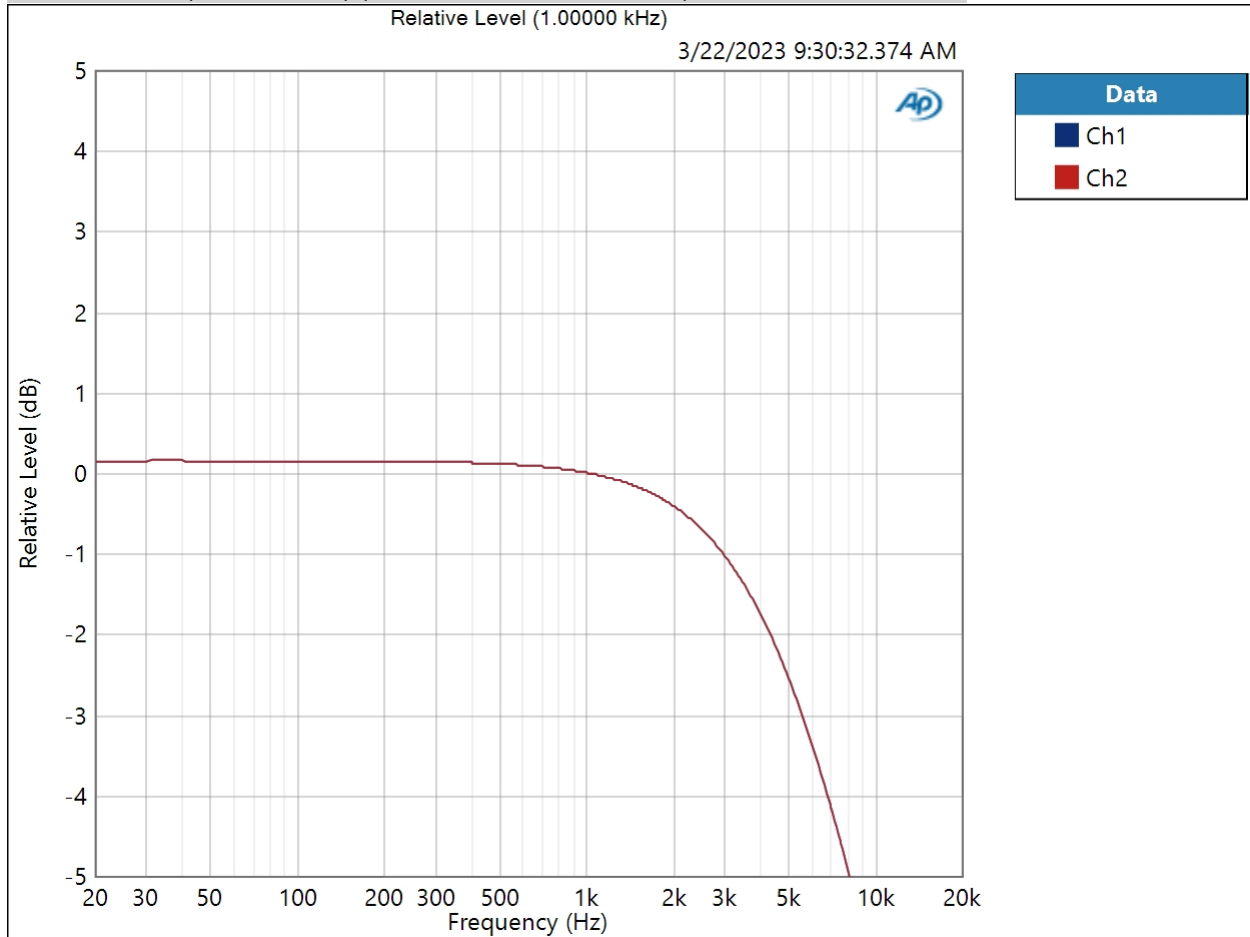
DC Level (3/22/2023 9:30:28.176 AM)

Ch1 -1.079 mV
Ch2 346.2 uV

Surround : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 2.000 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 3/22/2023 9:30:32 AM

Relative Level (1.00000 kHz) (3/22/2023 9:30:32.374 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) (3/22/2023 9:30:32.374 AM)

Ch1 ± 5.875 dB

Ch2 ± 5.875 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Surround : Signal to Noise Ratio

Waveform: Sine
Generator Level: 2.000 Vrms
DC Offset: 0.000 V
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 (3/22/2023 9:31:18.489 AM)

Ch1 114.684 dB

Ch2 121.098 dB

Surround : THD+N

Waveform: Sine
 Generator Level: 2.000 Vrms
 DC Offset: 0.000 V
 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 (3/22/2023 9:30:37.248 AM)

Ch1 0.000242 %
 Ch2 0.000209 %

THD Ratio (3/22/2023 9:30:37.248 AM)

Ch1 0.000059 %
 Ch2 0.000124 %

Noise Ratio (3/22/2023 9:30:37.248 AM)

Ch1 0.000233 %
 Ch2 0.000169 %

Distortion Product Ratio (3/22/2023 9:30:37.248 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	-131.77	-131.88	-136.28	-129.96	-138.69	-142.82	-144.41	-138.47	-143.63
Ch2	-0.00	-127.63	-119.99	-140.73	-125.89	-143.61	-135.56	-143.61	-140.42	-143.34

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Sub : Signal Path Setup

Output Connector:	Analog Unbalanced
Channels:	2
Source Impedance:	20 ohm
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:	1
Channel:	Ch1
Termination:	100 kohm
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.

Sub : Level and Gain

Waveform: Sine
Generator Level: 2.000 Vrms
DC Offset: 0.000 V
Frequency: 20.0000 Hz
Low-pass Filter: Signal Path

RMS Level (3/22/2023 9:31:56.297 AM)

Ch1 5.806 Vrms

Sub : 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

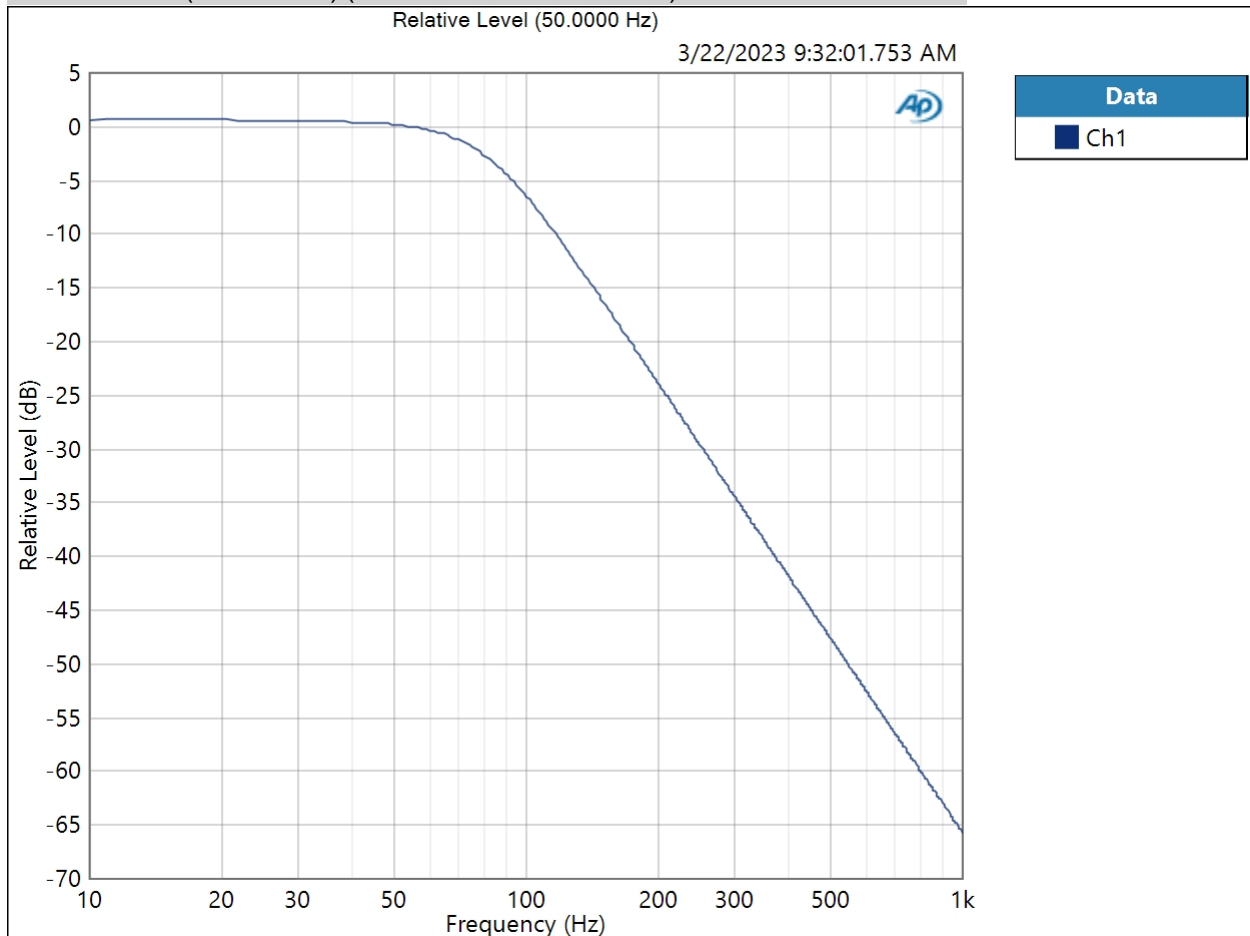
DC Level (3/22/2023 9:31:57.554 AM)

Ch1 -377.3 uV

Sub : Frequency Response

Start Frequency: 10.0000 Hz
 Stop Frequency: 1.00000 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 3/22/2023 9:32:01 AM

Relative Level (50.0000 Hz) (3/22/2023 9:32:01.753 AM)



Relative Level (50.0000 Hz) Parameters

Mode: Normalized at Reference

Ref Frequency: 50.0000 Hz

Result:  PASSED

Deviation (20.0000 Hz - 1.00000 kHz) (3/22/2023 9:32:01.753 AM)

Ch1 ± 33.254 dB

Deviation (20.0000 Hz - 1.00000 kHz) Parameters

Min: 20.0000 Hz

Max: 1.00000 kHz

Sub : Signal to Noise Ratio

Waveform: Sine
Generator Level: 2.000 Vrms
DC Offset: 0.000 V
Frequency: 50.0000 Hz
High-pass Filter: Elliptic
High-pass Frequency: 20 Hz
Low-pass Filter: Elliptic
Low-pass Frequency: 1 kHz
Weighting Filter: Signal Path

Signal to Noise Ratio (3/22/2023 9:32:03.869 AM)

Ch1 114.414 dB

Sub : THD+N

Waveform: Sine
 Generator Level: 2.000 Vrms
 DC Offset: 0.000 V
 Frequency: 50.0000 Hz
 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 (3/22/2023 9:32:06.163 AM)

Ch1 0.000420 %

THD Ratio (3/22/2023 9:32:06.163 AM)

Ch1 0.000364 %

Noise Ratio (3/22/2023 9:32:06.163 AM)

Ch1 0.000208 %

Distortion Product Ratio (3/22/2023 9:32:06.163 AM)

Channel	F	H2	H3	H4	H5	H6	H7	H8	H9	H10
	50.00	100.0	150.0	200.0	250.0	300.0	350.0	400.0	450.0	500.0
Ch1	-0.00	-124.26	-109.05	-137.34	-124.95	-139.14	-143.16	-142.08	-144.52	-145.36

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Headphone Amp : Signal Path Setup

Output Connector:	Analog Unbalanced
Channels:	2
Source Impedance:	20 ohm
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
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.

Optical : Signal Path Setup

Output Connector:	Digital Optical
Output Sample Rate:	48.0000 kHz
Output Bit Depth:	24
Dither:	Enabled
Output Mode:	Consumer
Status Bits:	Auto (Consumer)
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
Input 2:	None
Device Delay:	0.000 s

• References

dBr G:	-20.000 dBFS
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.

Optical : Level and Gain

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

RMS Level (3/22/2023 9:42:22.164 AM)

Ch1 1.793 Vrms
Ch2 1.790 Vrms

Optical : DC Level

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

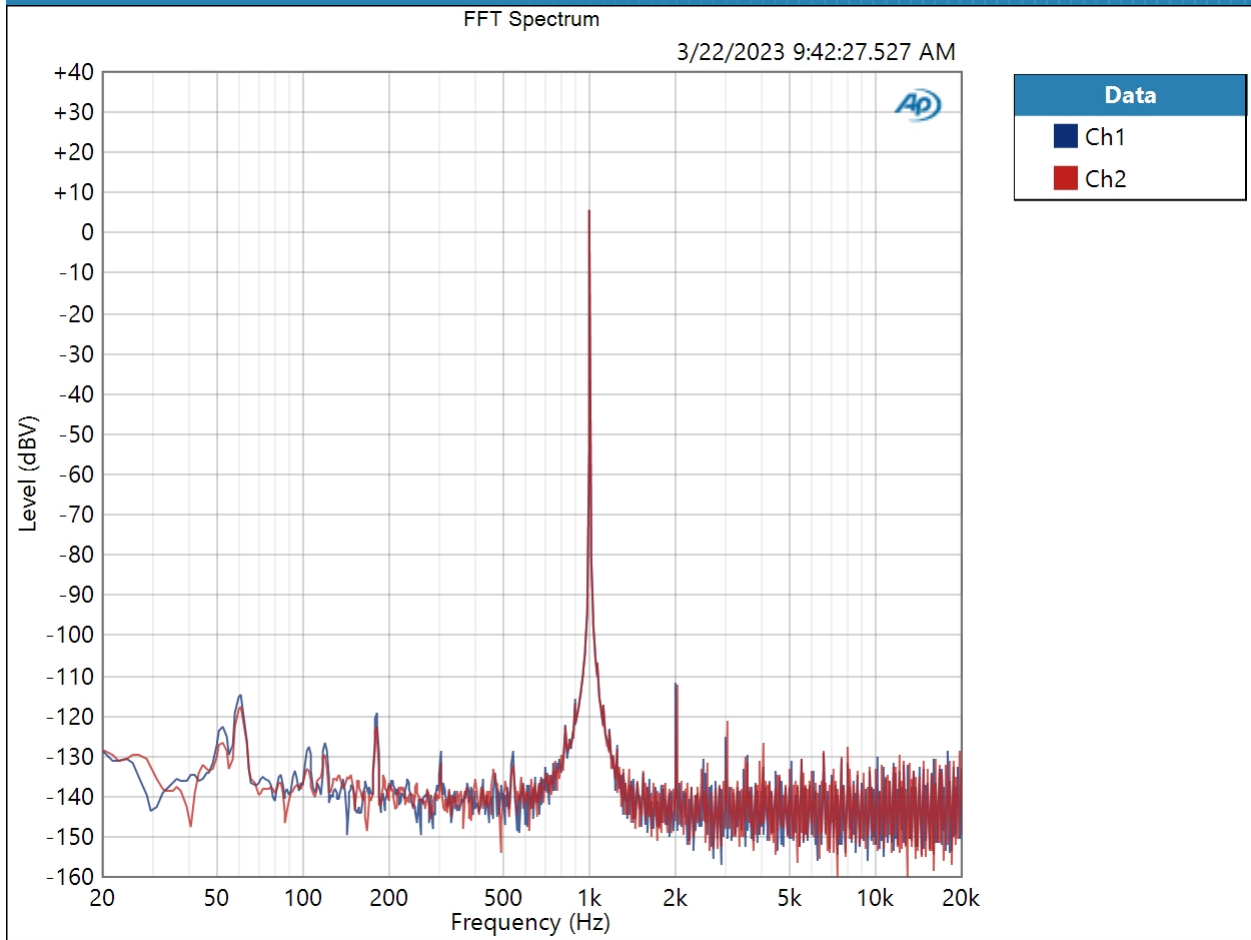
DC Level (3/22/2023 9:42:23.484 AM)

Ch1 -92.15 uV
Ch2 101.4 uV

Optical : Signal Analyzer

Waveform: Sine
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 3/22/2023 9:42:27 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 (3/22/2023 9:42:27.527 AM)

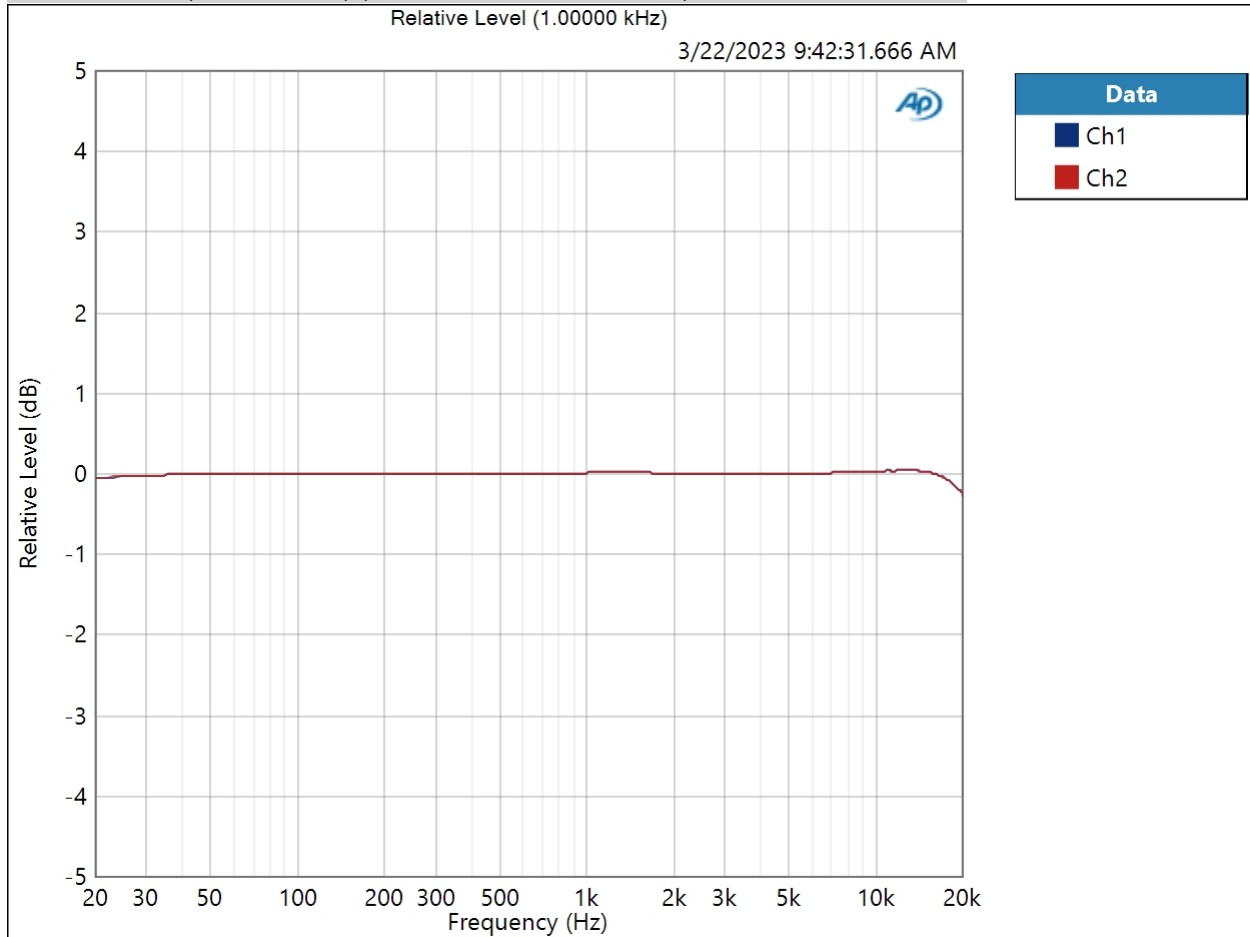


Result: PASSED

Optical : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 1.000 s
Secondary Source: None
Measured 1 3/22/2023 9:42:31 AM

Relative Level (1.00000 kHz) (3/22/2023 9:42:31.666 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) (3/22/2023 9:42:31.666 AM)

Ch1 ± 0.173 dB

Ch2 ± 0.173 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Optical : Signal to Noise Ratio

Waveform: Sine

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

High-pass Filter: Elliptic

High-pass Frequency: 20 Hz

Low-pass Filter: Elliptic

Low-pass Frequency: 20 kHz

Weighting Filter: A-wt.

Signal to Noise Ratio (3/22/2023 9:42:34.027 AM)

Ch1 114.845 dB

Ch2 114.415 dB

Optical : THD+N

Waveform: Sine
 Generator Level: -0.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz
 High-pass Filter: Elliptic
 High-pass Frequency: 20 Hz
 Low-pass Filter: Elliptic
 Low-pass Frequency: 20 kHz
 Weighting Filter: Signal Path
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (3/22/2023 9:42:36.464 AM)

Ch1 0.000398 %
 Ch2 0.000414 %

THD Ratio (3/22/2023 9:42:36.464 AM)

Ch1 0.000171 %
 Ch2 0.000170 %

Noise Ratio (3/22/2023 9:42:36.464 AM)

Ch1 0.000354 %
 Ch2 0.000379 %

Distortion Product Ratio (3/22/2023 9:42:36.464 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	-117.45	-126.68	-131.27	-128.37	-129.60	-133.96	-132.79	-126.93	-131.47
Ch2	-0.00	-117.09	-129.25	-134.66	-129.19	-133.31	-137.11	-132.76	-128.88	-137.91

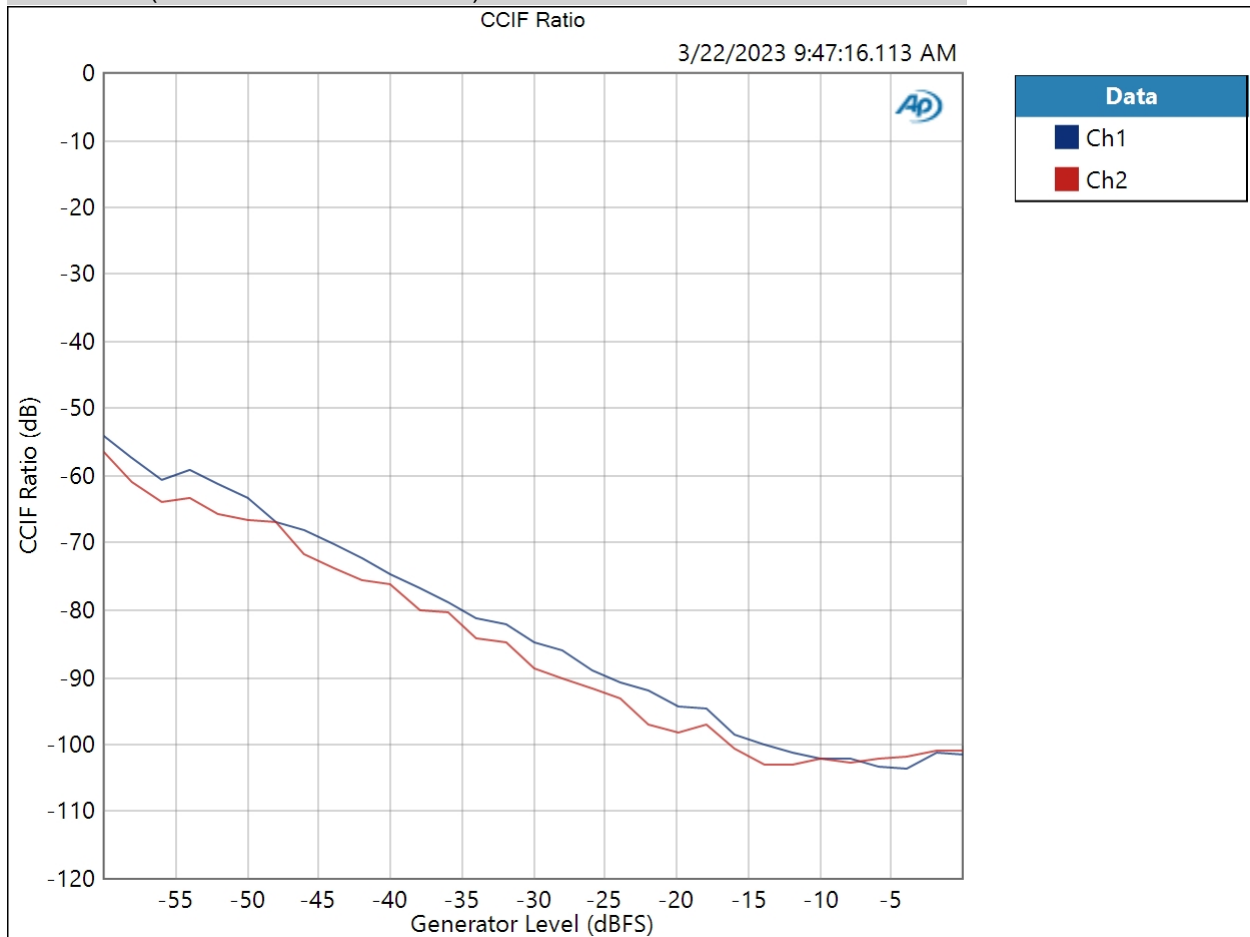
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Optical : IMD Level Sweep (CCIF)

IMD Type: CCIF
 Mean Frequency: 12.5000 kHz
 Diff Frequency: 80.0000 Hz
 IMD Split: False
 Start Level: -60.000 dBFS
 Stop Level: -0.000 dBFS
 Step Type: Linear
 Number of Points: 31
 Step Size: +2.000 dBFS
 Mode: d2
 Measured 1 3/22/2023 9:47:16 AM

CCIF Ratio (3/22/2023 9:47:16.113 AM)

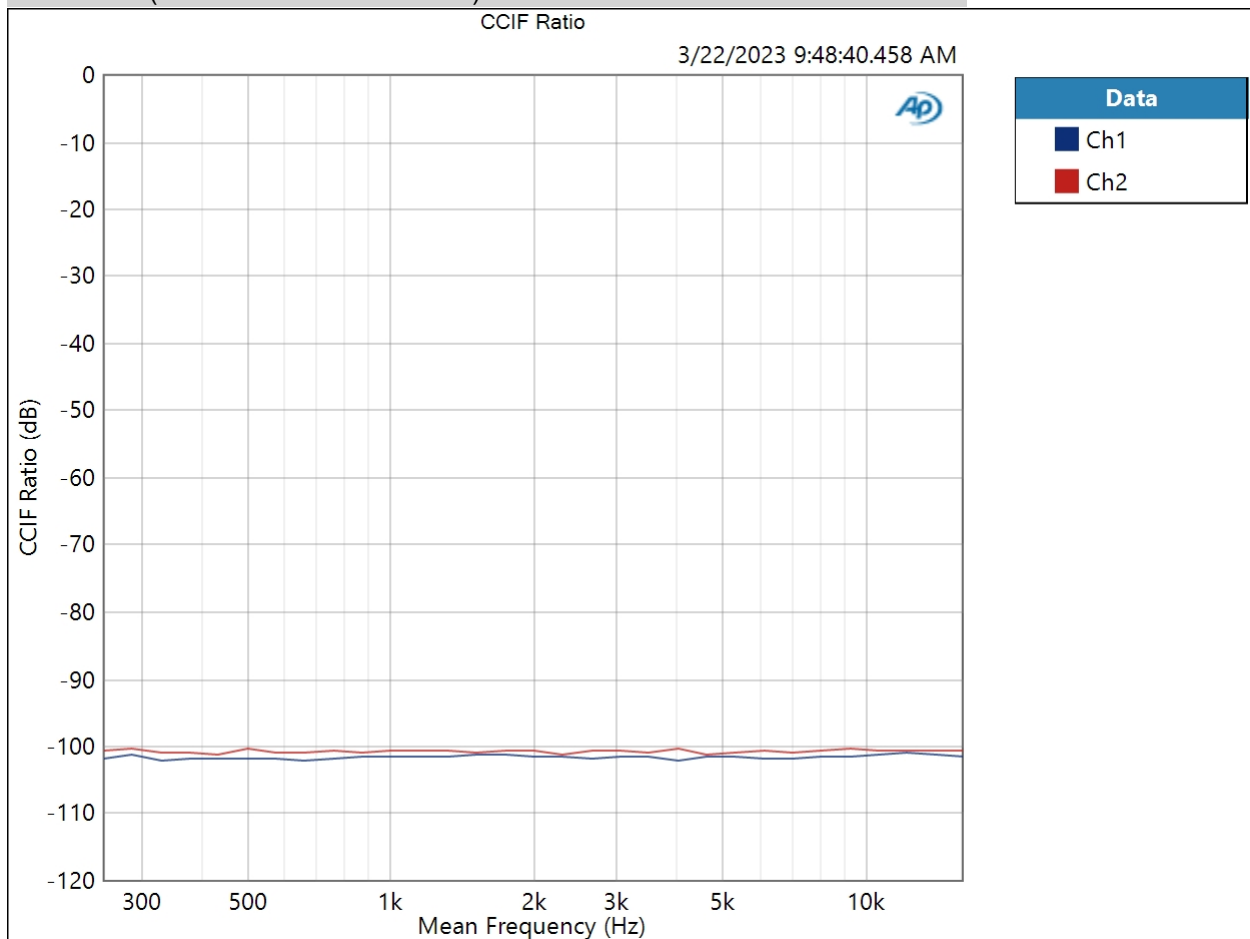


Result:  PASSED

Optical : IMD Frequency Sweep (CCIF)

Generator Level: -0.000 dBFS
DC Offset: 0.000 D
Sweep Frequency: Mean Frequency
Diff Frequency: 80.0000 Hz
IMD Split: False
Start Frequency: 15.9680 kHz
Stop Frequency: 250.000 Hz
Step Type: Logarithmic
Number of Points: 31
Mode: d2
Measured 1 3/22/2023 9:48:40 AM

CCIF Ratio (3/22/2023 9:48:40.458 AM)



Result:  PASSED

Optical : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Frequency: 10.0000 kHz

Crosstalk (3/22/2023 9:43:20.587 AM)

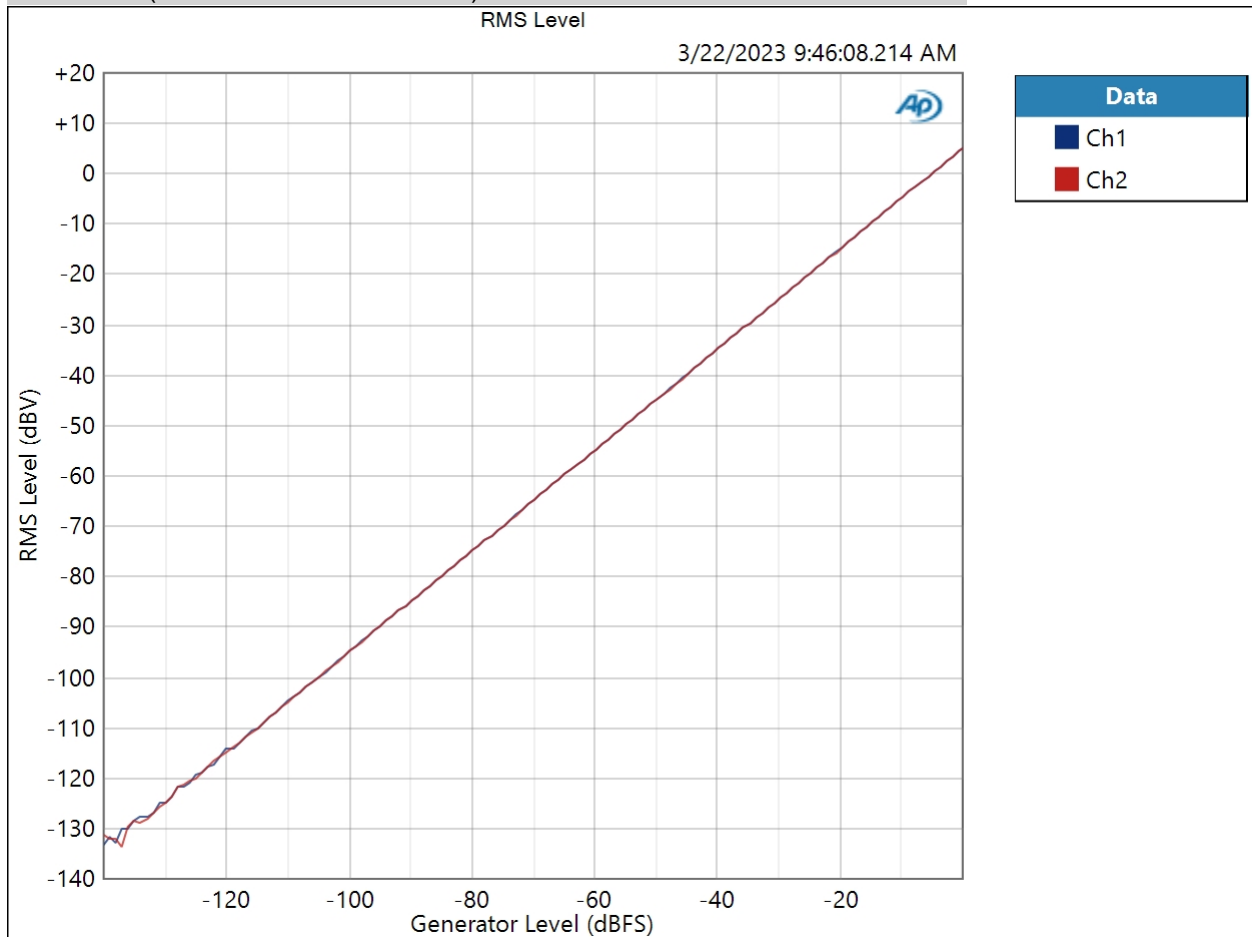
Ch1 -81.643 dB

Ch2 -90.612 dB

Optical : Bandpass Level Sweep

Waveform: Sine
Frequency: 1.00000 kHz
Start Level: -140.000 dBFS
Stop Level: -0.000 dBFS
Step Type: Linear
Number of Points: 141
Step Size: +1.000 dBFS
Offset: 0.000 D
Selectivity: Window width
Bandpass Tuning Mode: Generator Frequency
Measured 1 3/22/2023 9:46:08 AM

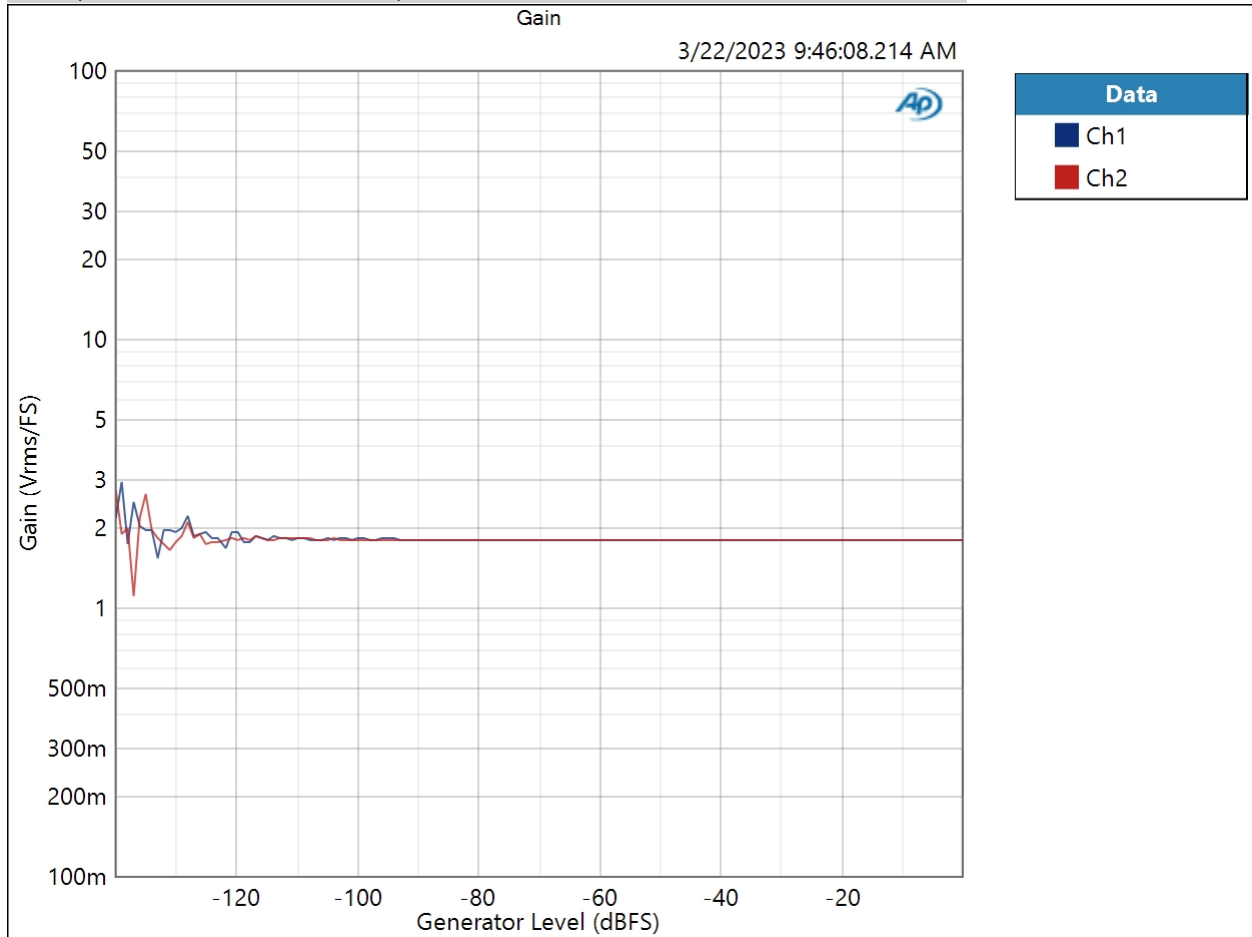
RMS Level (3/22/2023 9:46:08.214 AM)



Result: PASSED

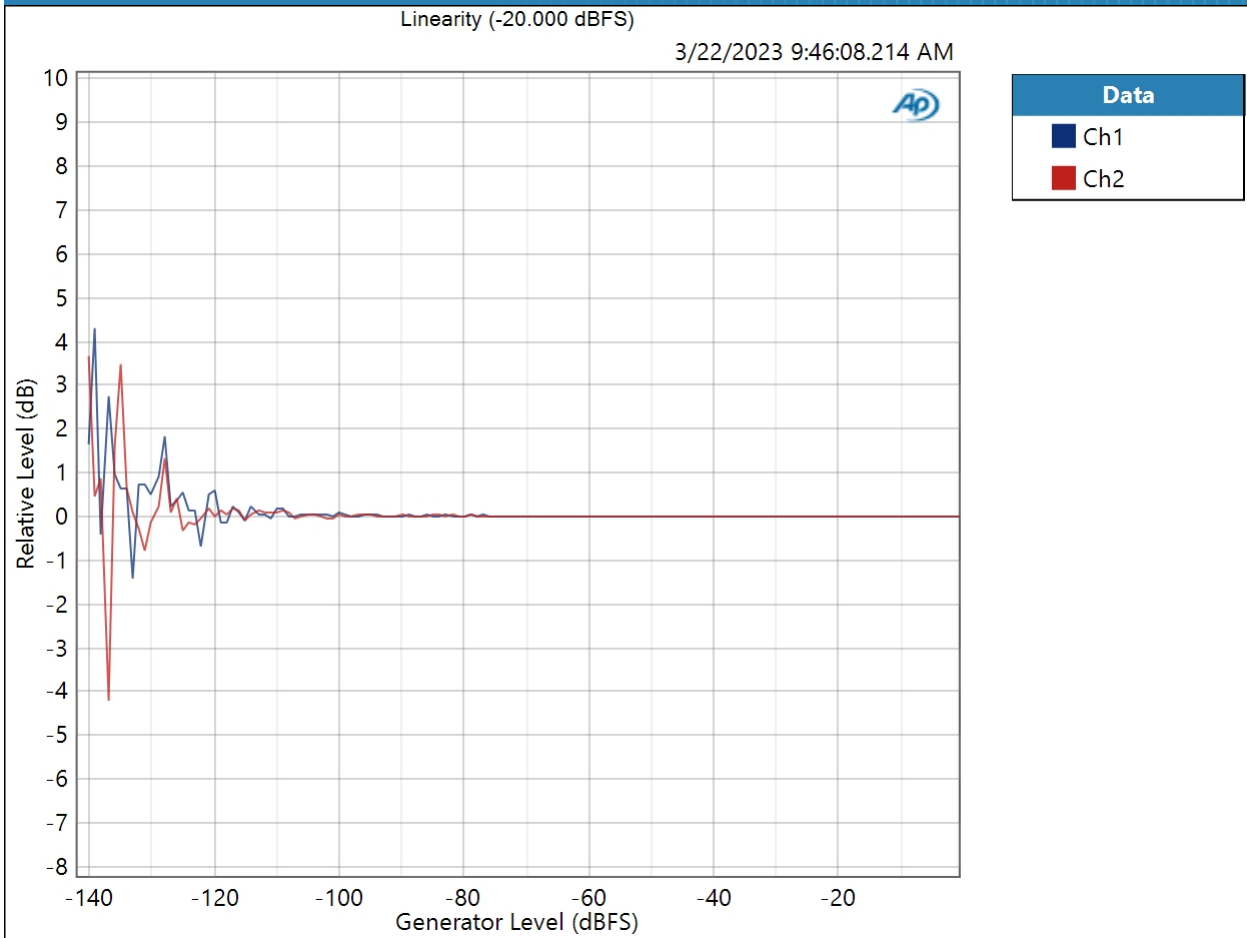
3/22/2023 10:04 AM

Gain (3/22/2023 9:46:08.214 AM)



Result: PASSED

Linearity (-20.000 dBFS) (3/22/2023 9:46:08.214 AM)



Linearity (-20.000 dBFS) Parameters

Mode: Normalized at Reference

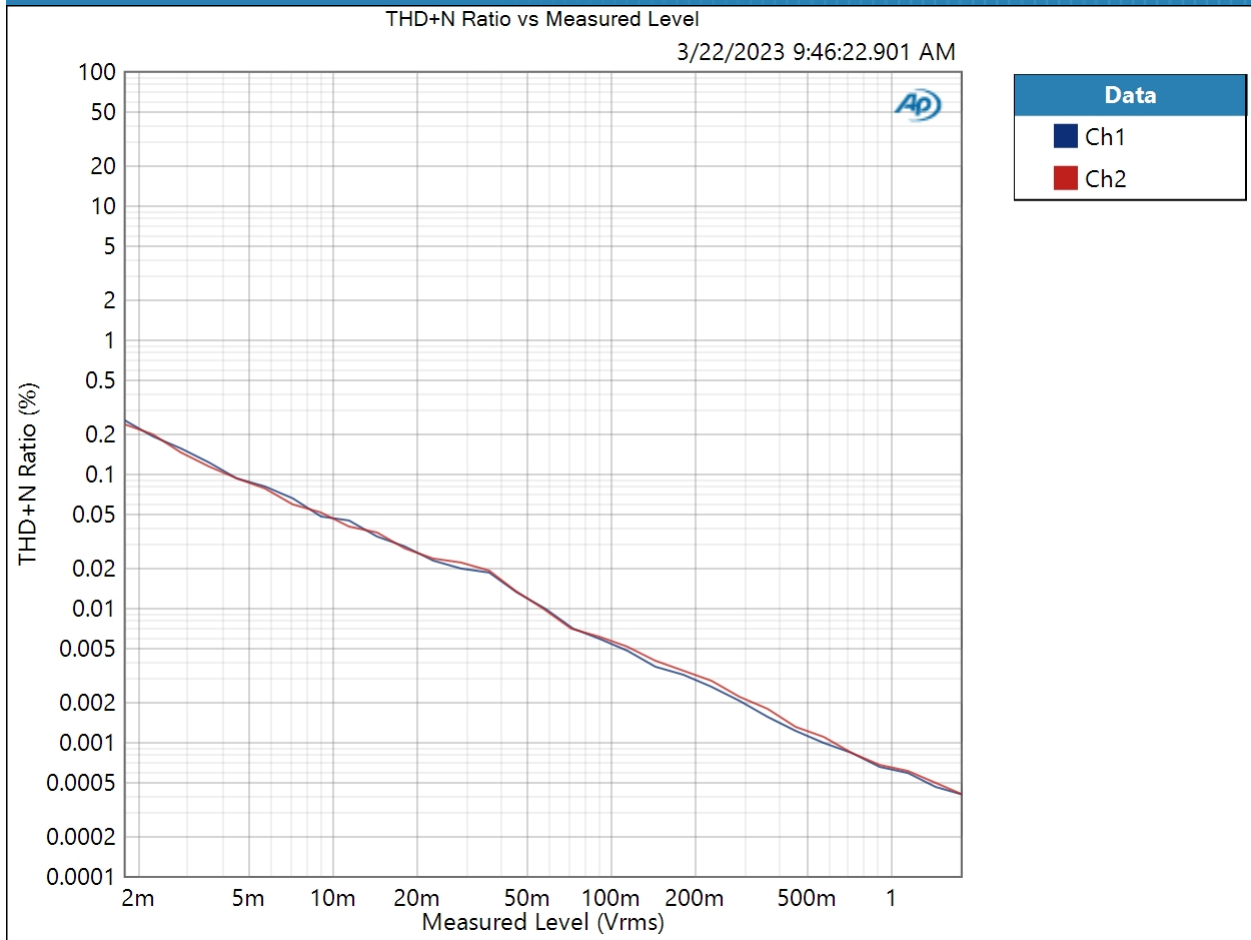
Relative Level: -20.000 dBFS

Result: PASSED

Optical : Stepped Level Sweep

Waveform: Sine
Frequency: 1.00000 kHz
Start Level: -60.000 dBFS
Stop Level: -0.000 dBFS
Step Type: Linear
Number of Points: 31
Step Size: +2.000 dBFS
Offset: 0.000 D
High-pass Filter: Elliptic
High-pass Frequency: 20 Hz
Low-pass Filter: Elliptic
Low-pass Frequency: 20 kHz
Weighting Filter: Signal Path
Notch Tuning Mode: Generator Frequency
Measured 1 3/22/2023 9:46:22 AM

THD+N Ratio vs Measured Level (3/22/2023 9:46:22.901 AM)



Result: PASSED

USB : Signal Path Setup

Output Connector:	ASIO
Asio Device:	ASIO2WASAPI
Scaling Mode:	Digital
Output Sample Rate:	48.0000 kHz
Output Latency:	Auto
Buffer Size:	4800
Clock Source:	Internal clock
Input 1:	Analog Unbalanced
Input Bandwidth:	AC (<10 Hz) - 20 kHz (44.1 kHz SR)
Input EQ:	None
Channels:	2
Termination:	100 kohm
Input 2:	None
Device Delay:	0.000 s
• References	
dBr G:	-20.000 dBFS
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.	

USB : Level and Gain

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

RMS Level (3/22/2023 9:56:37.043 AM)

Ch1 1.794 Vrms
Ch2 1.790 Vrms

USB : DC Level

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

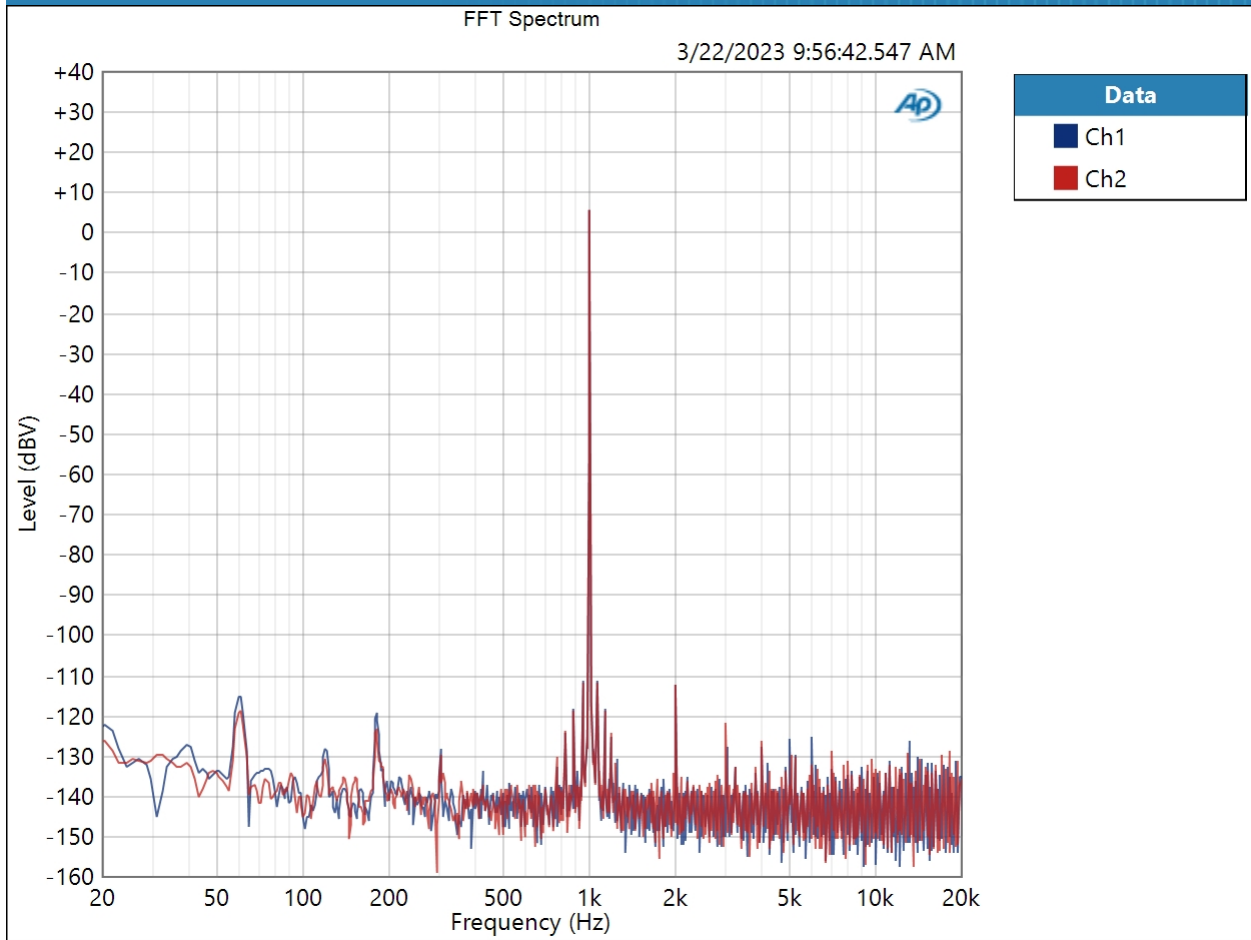
DC Level (3/22/2023 9:56:38.352 AM)

Ch1 -147.1 uV
Ch2 62.55 uV

USB : Signal Analyzer

Waveform: Sine
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1: 3/22/2023 9:56:42 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 (3/22/2023 9:56:42.547 AM)

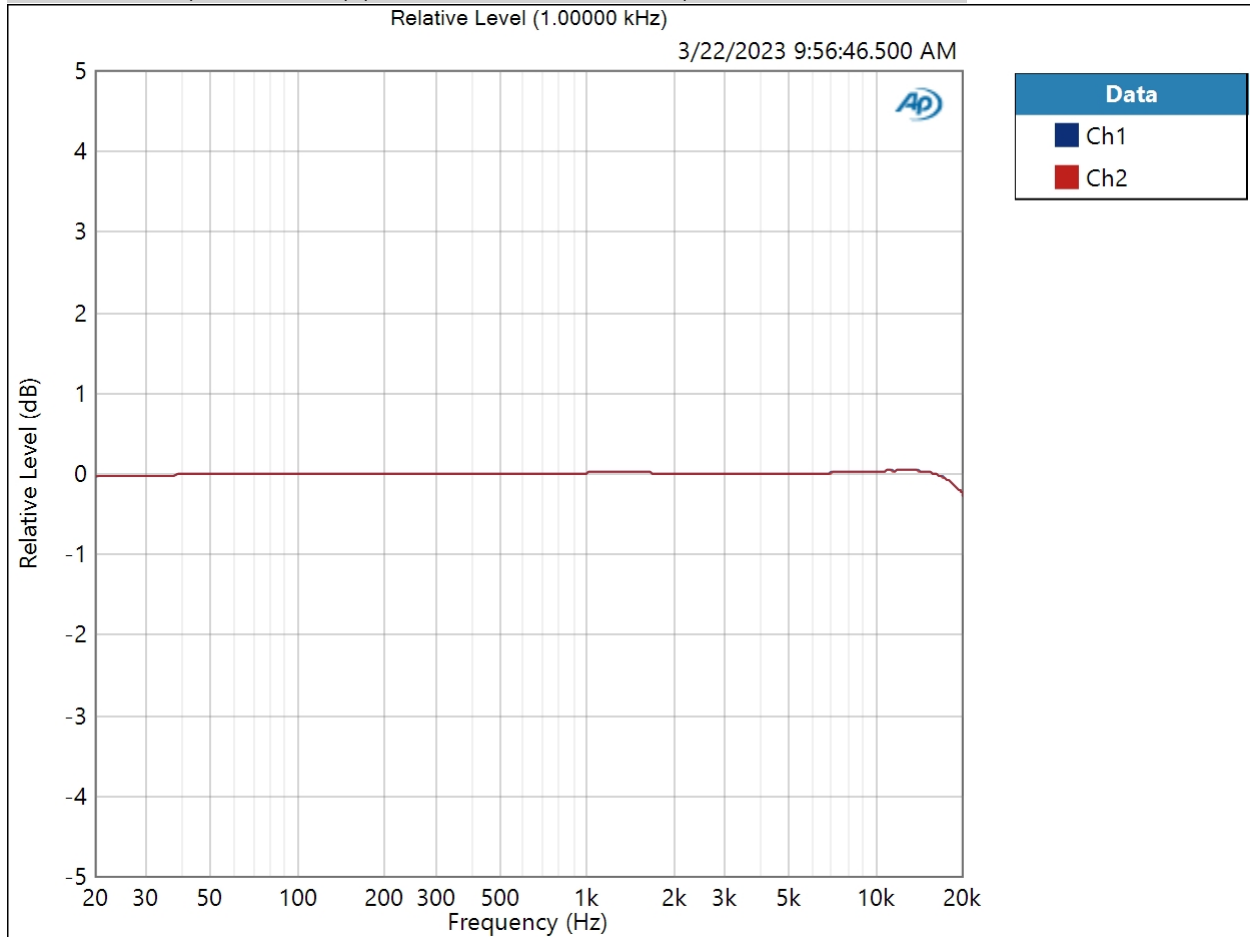


Result:  PASSED

USB : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 1.000 s
Secondary Source: None
Measured 1 3/22/2023 9:56:46 AM

Relative Level (1.00000 kHz) (3/22/2023 9:56:46.500 AM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference

Ref Frequency: 1.00000 kHz

Result:  PASSED

Deviation (20.0000 Hz - 16.0000 kHz) (3/22/2023 9:56:46.500 AM)

Ch1 ± 0.040 dB

Ch2 ± 0.038 dB

Deviation (20.0000 Hz - 16.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 16.0000 kHz

USB : Signal to Noise Ratio

Waveform: Sine
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
High-pass Filter: Elliptic
High-pass Frequency: 20 Hz
Low-pass Filter: Elliptic
Low-pass Frequency: 20 kHz
Weighting Filter: A-wt.

Signal to Noise Ratio (3/22/2023 9:56:48.759 AM)

Ch1 114.991 dB

Ch2 114.762 dB

USB : THD+N

Waveform: Sine
 Generator Level: -0.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz
 High-pass Filter: Elliptic
 High-pass Frequency: 20 Hz
 Low-pass Filter: Elliptic
 Low-pass Frequency: 20 kHz
 Weighting Filter: Signal Path
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (3/22/2023 9:56:51.744 AM)

Ch1 0.000382 %
 Ch2 0.000400 %

THD Ratio (3/22/2023 9:56:51.744 AM)

Ch1 0.000177 %
 Ch2 0.000189 %

Noise Ratio (3/22/2023 9:56:51.744 AM)

Ch1 0.000339 %
 Ch2 0.000349 %

Distortion Product Ratio (3/22/2023 9:56:51.744 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	-116.95	-130.69	-130.88	-129.51	-130.38	-131.60	-134.50	-133.54	-128.08
Ch2	-0.00	-117.14	-124.69	-132.92	-129.27	-133.26	-133.76	-131.48	-132.71	-134.30

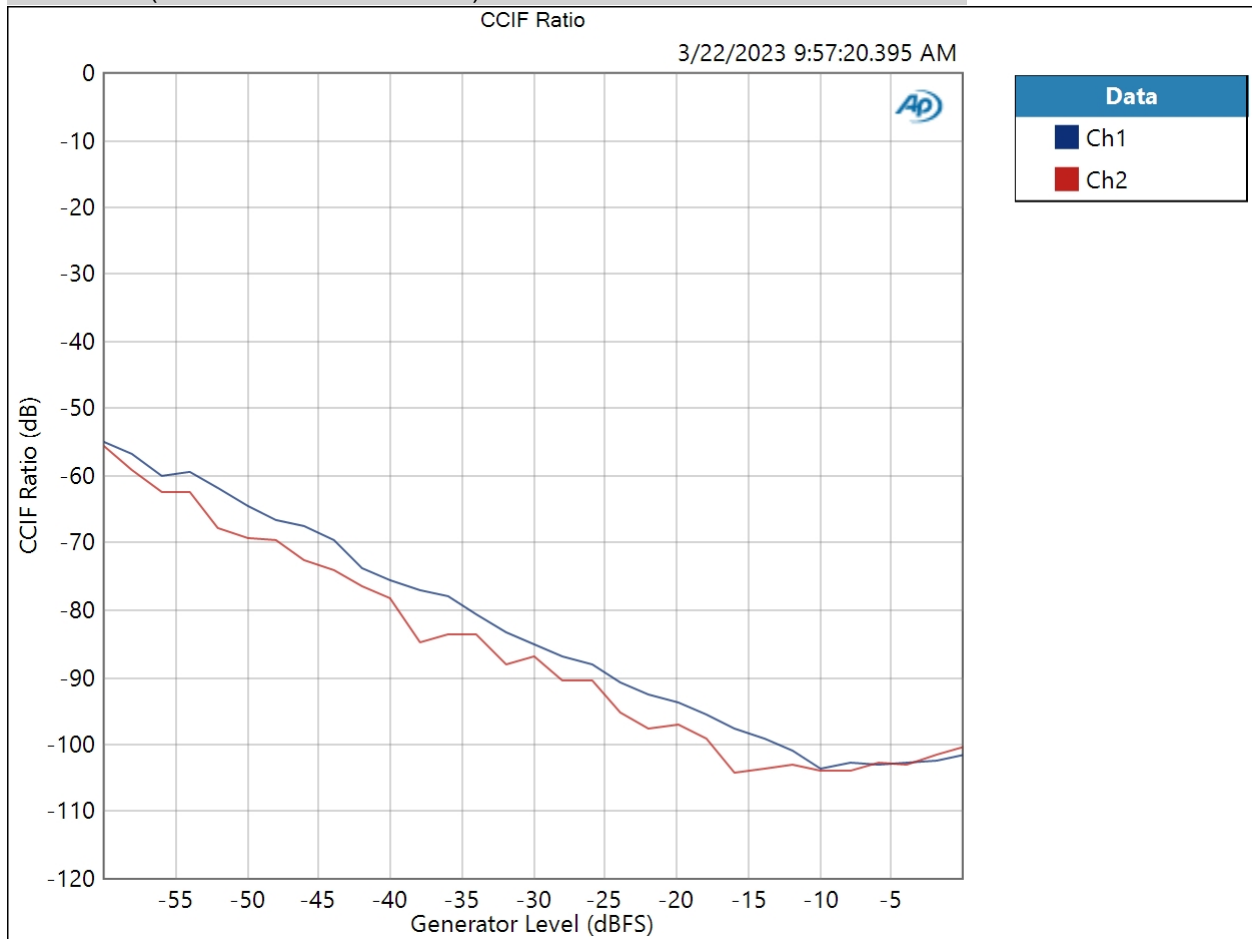
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

USB : IMD Level Sweep (CCIF)

IMD Type: CCIF
Mean Frequency: 12.5000 kHz
Diff Frequency: 80.0000 Hz
IMD Split: False
Start Level: -60.000 dBFS
Stop Level: -0.000 dBFS
Step Type: Linear
Number of Points: 31
Step Size: +2.000 dBFS
Mode: d2
Measured 1 3/22/2023 9:57:20 AM

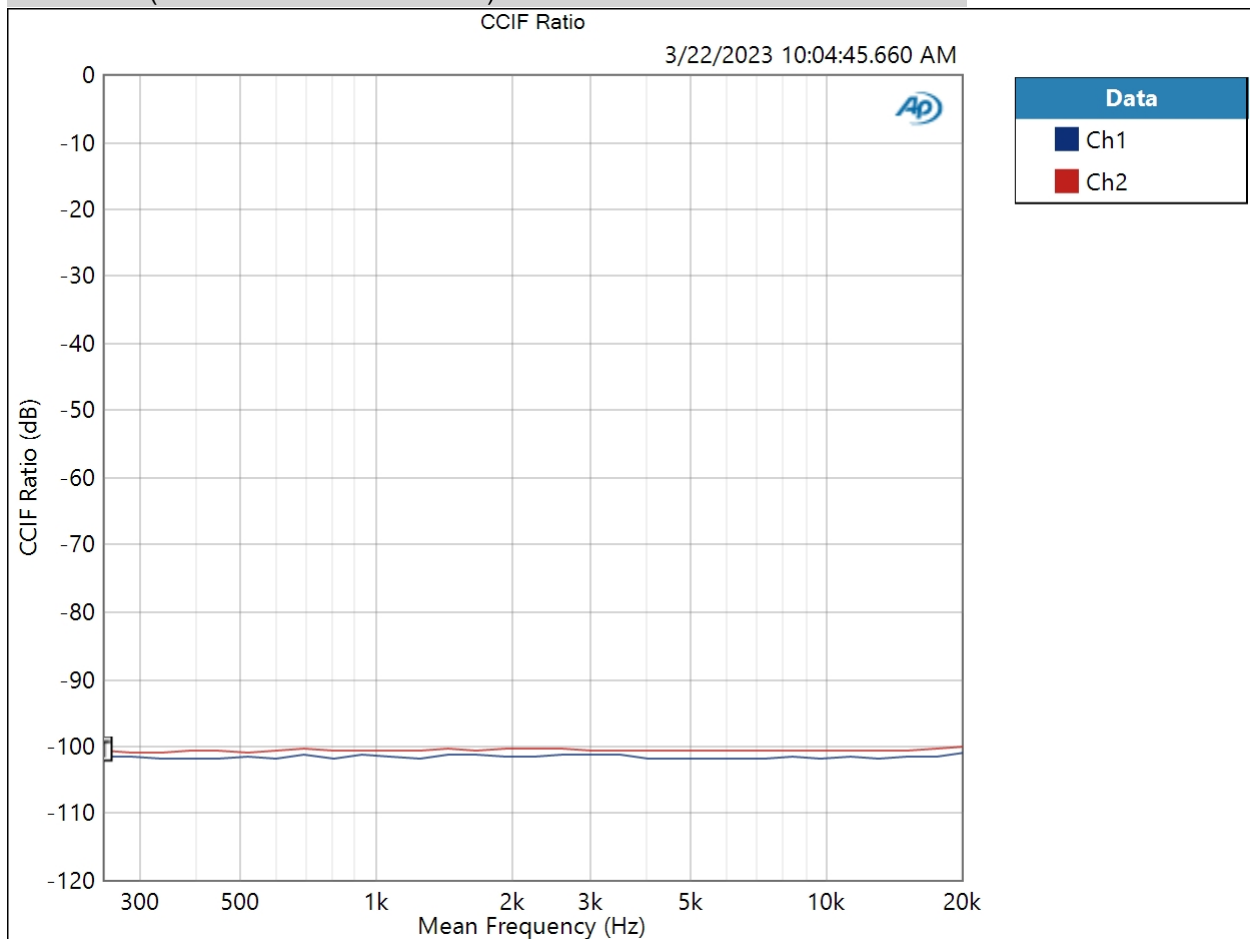
CCIF Ratio (3/22/2023 9:57:20.395 AM)



Result:  PASSED

USB : IMD Frequency Sweep (CCIF)
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
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
Measured 1 3/22/2023 10:04:45 AM

CCIF Ratio (3/22/2023 10:04:45.660 AM)



Result:  PASSED

USB : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Level: -20.000 dBFS

DC Offset: 0.000 D

Frequency: 10.0000 kHz

Crosstalk (3/22/2023 9:57:33.714 AM)

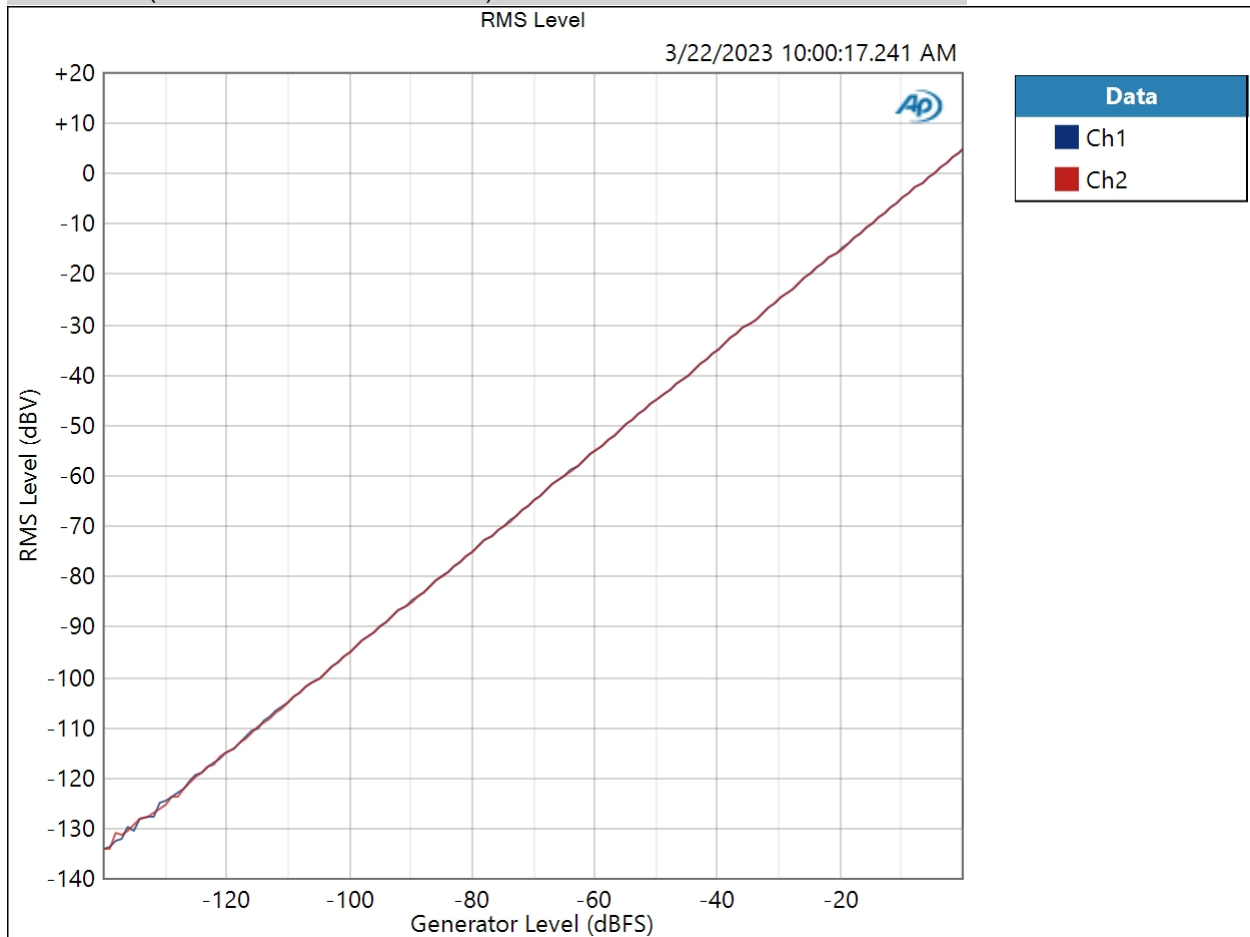
Ch1 -81.667 dB

Ch2 -90.603 dB

USB : Bandpass Level Sweep

Waveform: Sine
Frequency: 1.00000 kHz
Start Level: -140.000 dBFS
Stop Level: -0.000 dBFS
Step Type: Linear
Number of Points: 141
Step Size: +1.000 dBFS
Offset: 0.000 D
Selectivity: Window width
Bandpass Tuning Mode: Generator Frequency
Measured 1 3/22/2023 10:00:17 AM

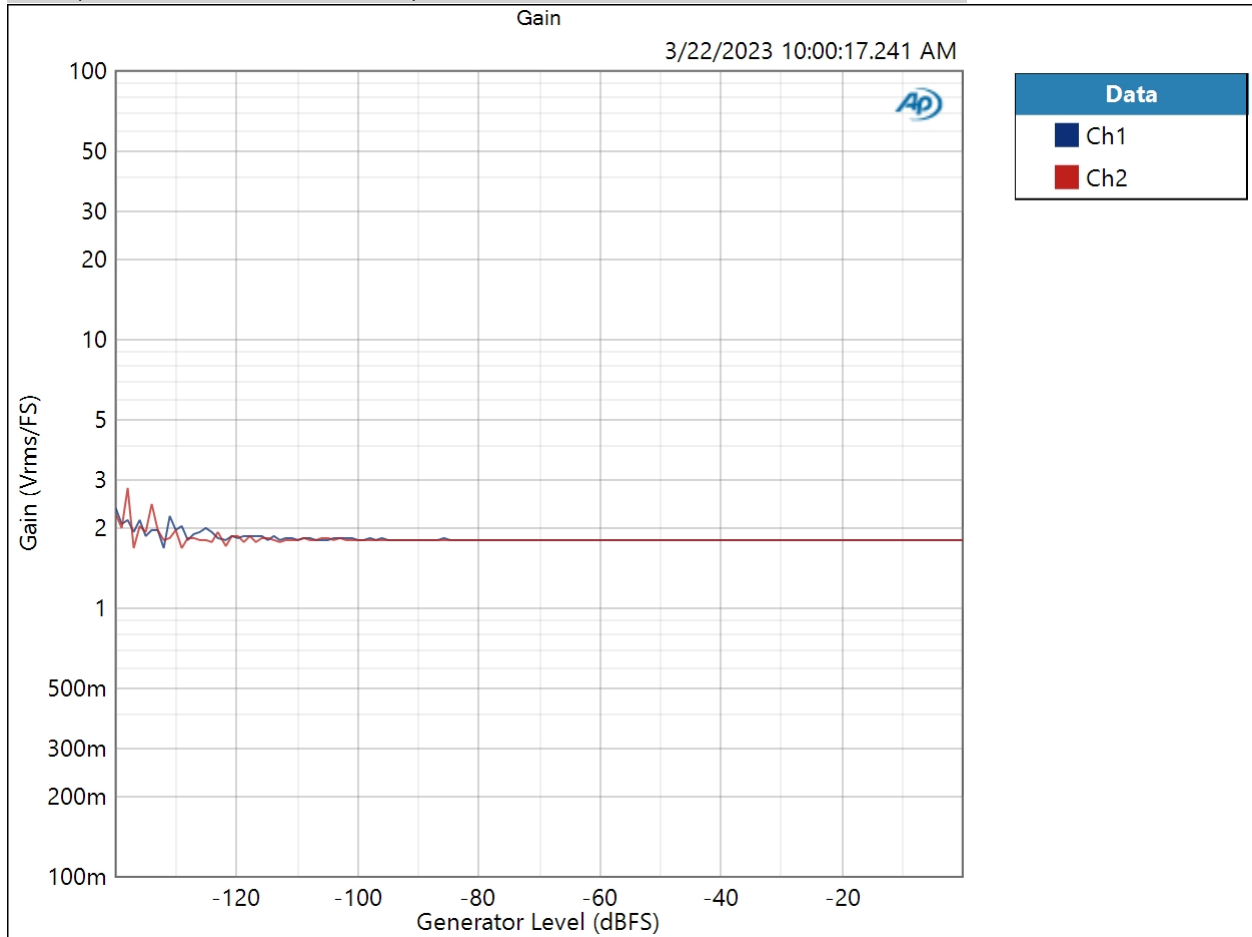
RMS Level (3/22/2023 10:00:17.241 AM)



Result: PASSED

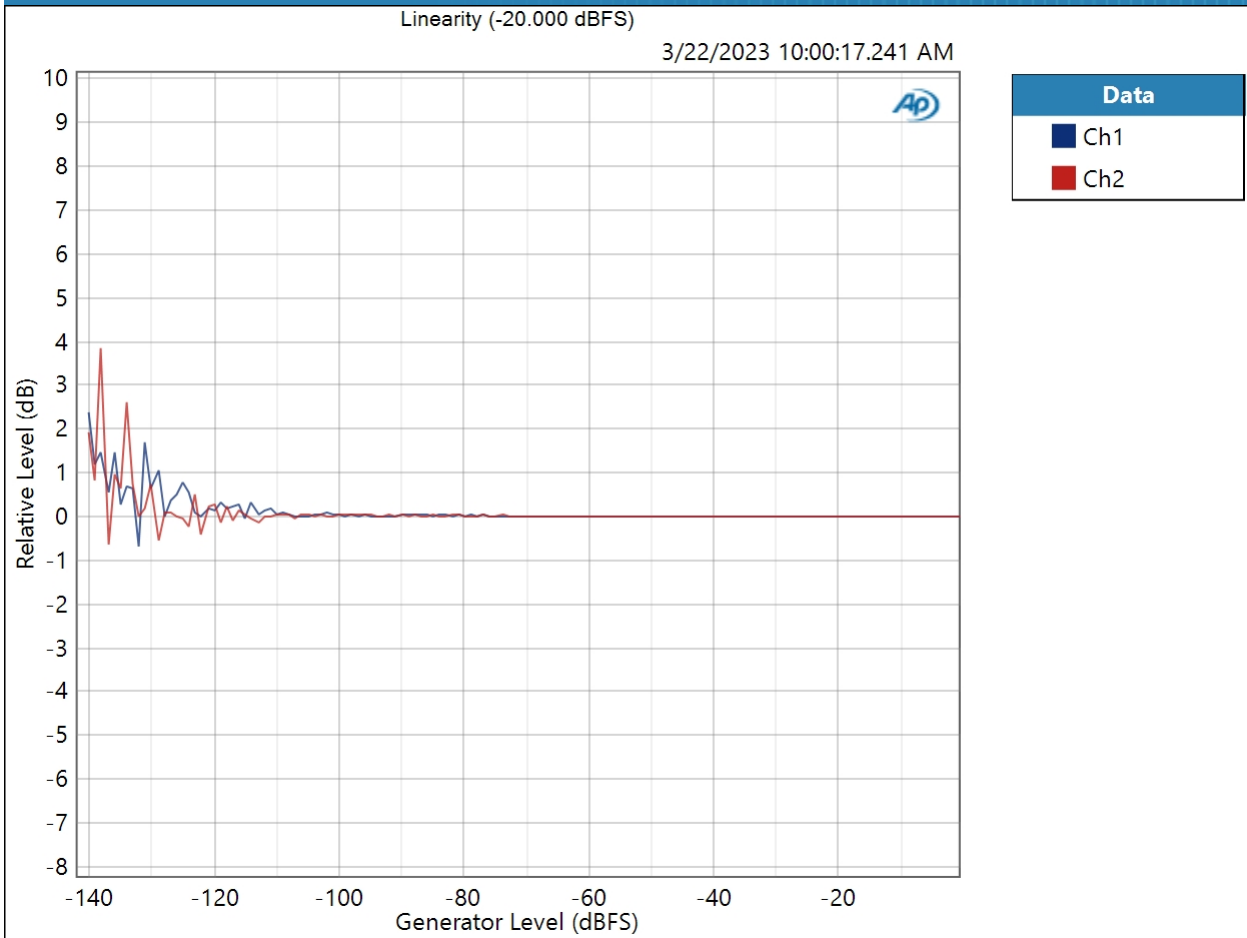
3/22/2023 10:04 AM

Gain (3/22/2023 10:00:17.241 AM)



Result: PASSED

Linearity (-20.000 dBFS) (3/22/2023 10:00:17.241 AM)



Linearity (-20.000 dBFS) Parameters

Mode: Normalized at Reference

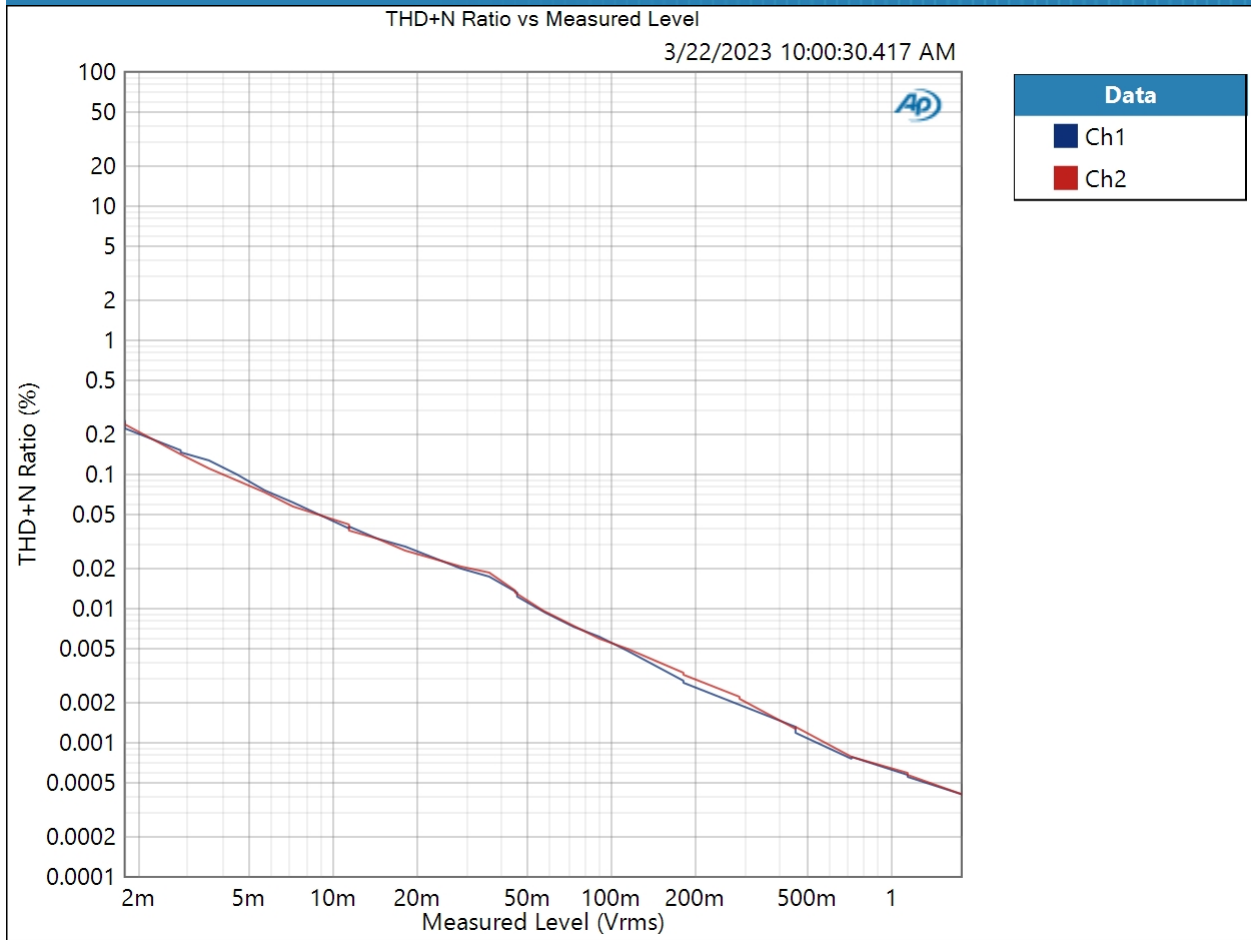
Relative Level: -20.000 dBFS

Result: PASSED

USB : Stepped Level Sweep

Waveform: Sine
Frequency: 1.00000 kHz
Start Level: -60.000 dBFS
Stop Level: -0.000 dBFS
Step Type: Linear
Number of Points: 31
Step Size: +2.000 dBFS
Offset: 0.000 D
High-pass Filter: Elliptic
High-pass Frequency: 20 Hz
Low-pass Filter: Elliptic
Low-pass Frequency: 20 kHz
Weighting Filter: Signal Path
Notch Tuning Mode: Generator Frequency
Measured 1 3/22/2023 10:00:30 AM

THD+N Ratio vs Measured Level (3/22/2023 10:00:30.417 AM)



Result: PASSED