

Notes:

This is a test of a representative production line sample. If you have difficulties reproducing these results, check your analyzer set-up and ancillary equipment carefully. ensure your analyzer has had a recent calibration, and contact the analyzer manufacturer for help if necessary. If you still have significantly different results, please contact info@schiiit.com with a copy of your results so we can bring back your product and check it against our standard.

Summary

Low Gain, 300 Ohm

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

Low Gain, 32 Ohm

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

High Gain, 300 Ohm

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

High Gain, 32 Ohm

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

Sequence Result:

Sequence Result: ✔ PASSED

APx Instrument

Instrument ID: 100308515
Calibration Date: 9/9/2019
APx Version: 5.0.0.105.133644

Low Gain, 300 Ohm : Signal Path Setup

Output Connector: ASIO
 Output Sample Rate: 48.0000 kHz
 Output EQ: None
 Input Connector: Analog Unbalanced
 Channels: 2
 Termination: 100 kohm
 Input Bandwidth: AC (<10 Hz) - 22.4k (48 kHz SR)
 Device Delay: 0.000 s
 Input EQ: None

• References

dBr G: -20.000 dBFS
 Shared Frequency Reference: 1.00000 kHz
 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.

Low Gain, 300 Ohm : Level and Gain

Waveform: Sine
 Generator Level: -2.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz

RMS Level (3/24/2021 4:29:23.098 PM)

Ch1 1.033 Vrms
 Ch2 1.033 Vrms

Low Gain, 300 Ohm : DC Level

Waveform: Sine

Generator Level: $-\infty$ dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Delay Time: 100.0 ms

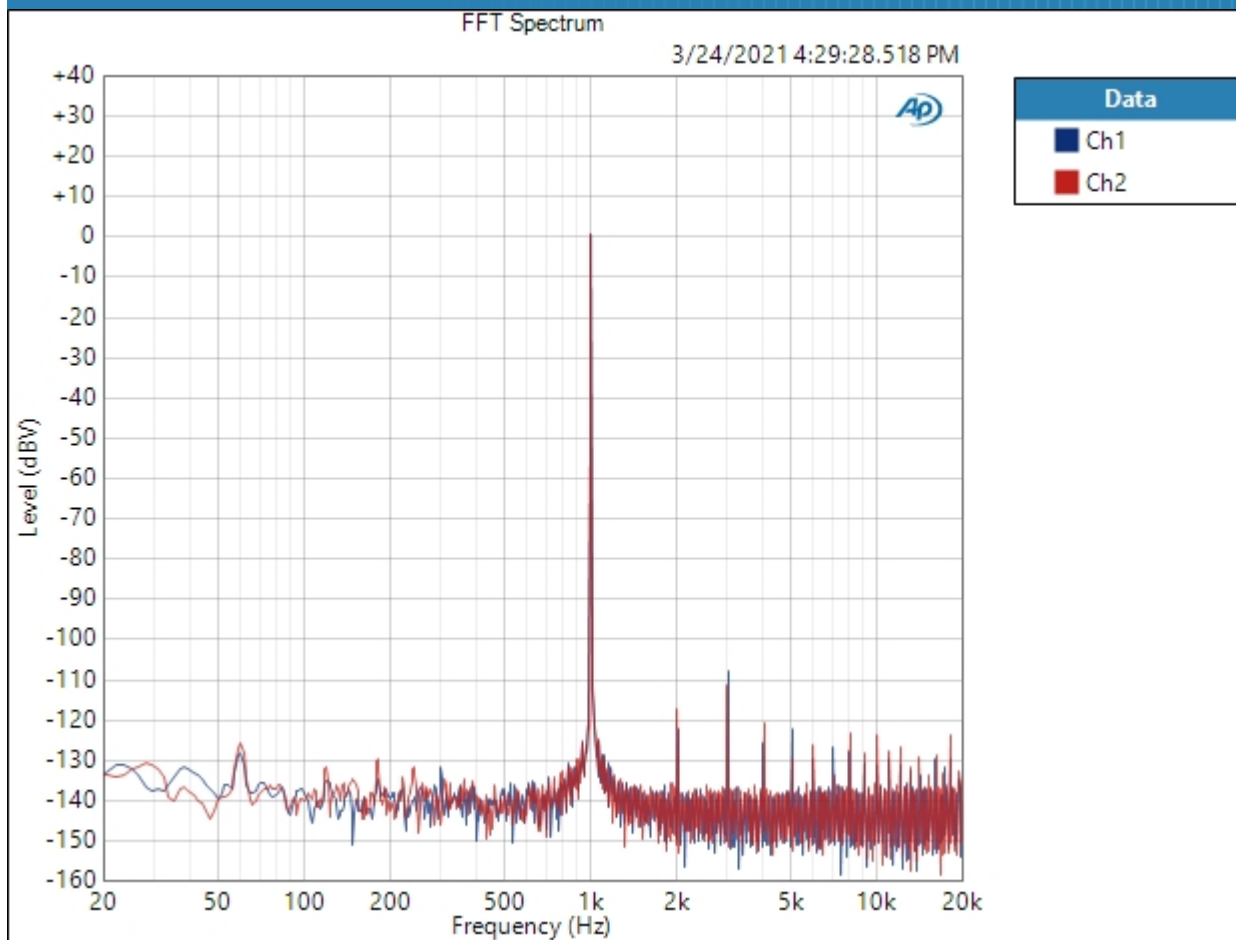
Acquisition Time: 333.0 ms

DC Level (3/24/2021 4:29:24.428 PM)

Ch1 -1.329 mV

Ch2 -2.406 mV

Low Gain, 300 Ohm : Signal Analyzer
Waveform: Sine
Generator Level: -2.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 3/24/2021 4:29:28 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 (3/24/2021 4:29:28.518 PM)

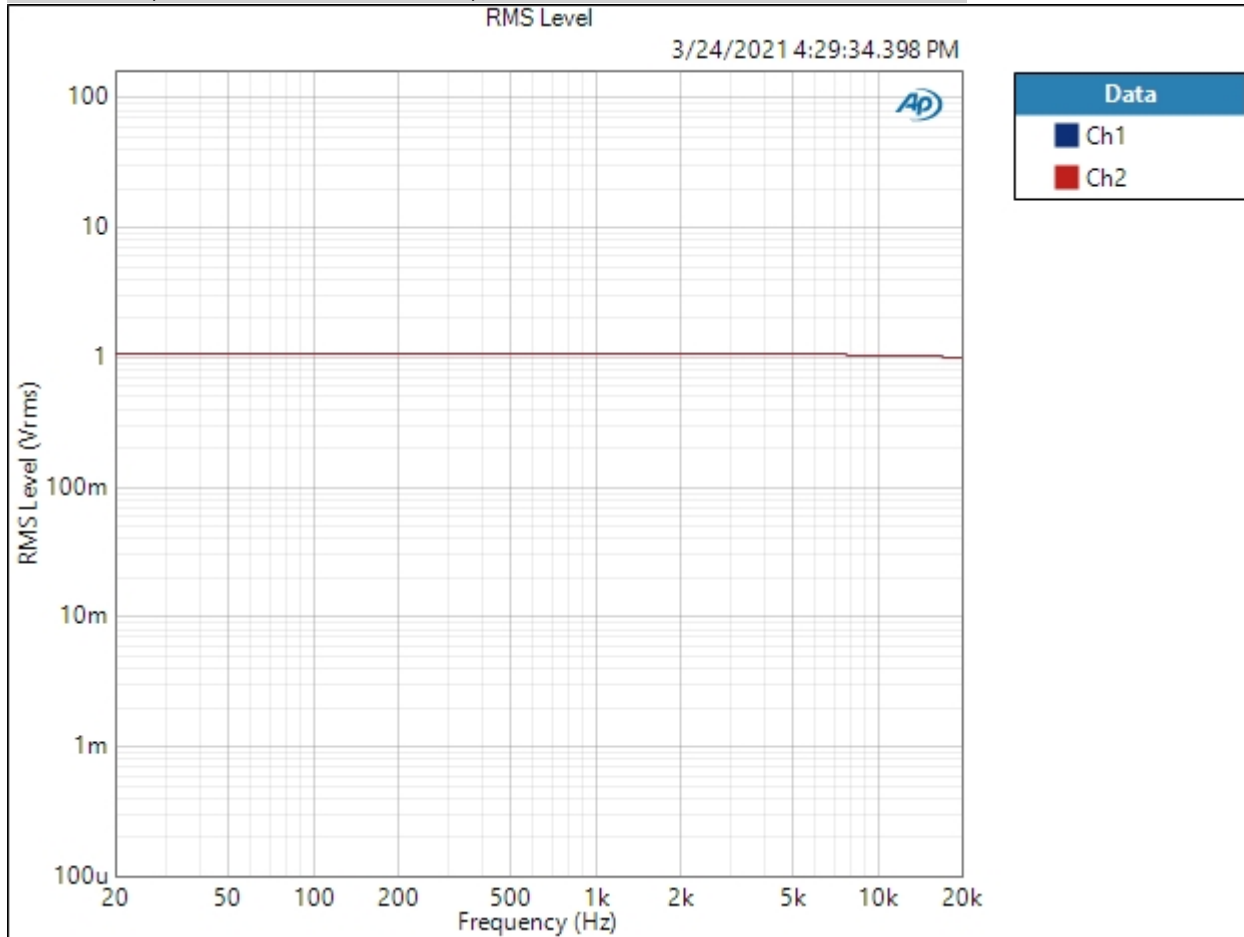


Result:  PASSED

Low Gain, 300 Ohm : Frequency Response

Start Frequency: 20.0000 Hz
 Stop Frequency: 20.0000 kHz
 Generator Level: -2.000 dBFS
 DC Offset: 0.000 D
 EQ: None
 Pre-Sweep: 500.0 ms
 Sweep: 1.000 s
 Extend Acquisition By: 3.000 s
 Secondary Source: None
 Measured 1 3/24/2021 4:29:34 PM

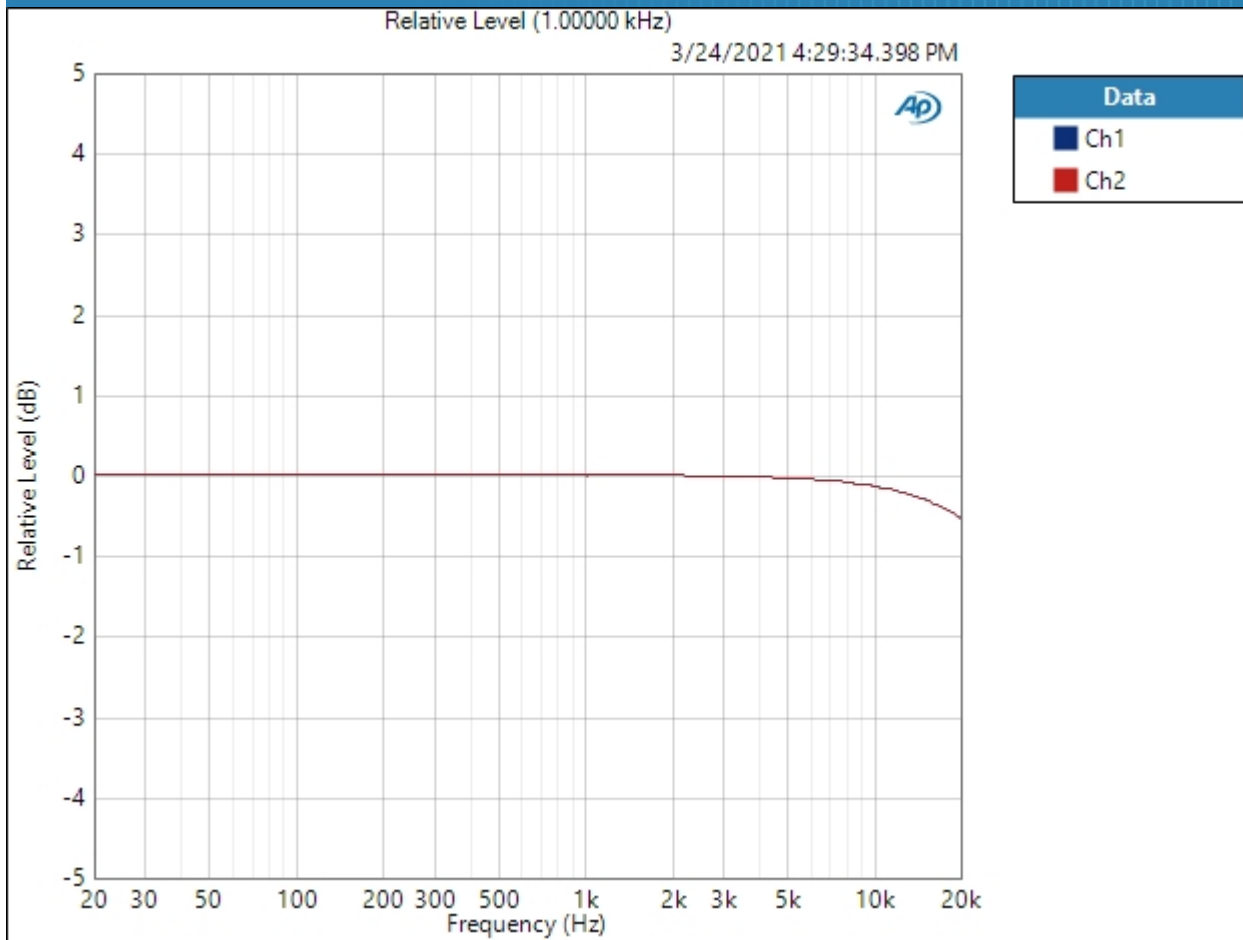
RMS Level (3/24/2021 4:29:34.398 PM)



Result: PASSED

Relative Level (1.00000 kHz) (3/24/2021 4:29:34.398 PM)

3/24/2021 4:44 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) (3/24/2021 4:29:34.398 PM)

Ch1 ± 0.275 dB

Ch2 ± 0.276 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Low Gain, 300 Ohm : Signal to Noise Ratio

Waveform: Sine

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Low-pass Filter: 20 kHz

Weighting Filter: Signal Path

High-pass Filter: 20 Hz

Signal to Noise Ratio (3/24/2021 4:29:36.787 PM)

Ch1 112.224 dB

Ch2 112.106 dB

Low Gain, 300 Ohm : THD+N

Waveform: Sine
 Generator Level: -2.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz
 Low-pass Filter: 20 kHz
 Weighting Filter: Signal Path
 High-pass Filter: 20 Hz
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (3/24/2021 4:29:39.582 PM)

Ch1 0.000690 %
 Ch2 0.000673 %

THD Ratio (3/24/2021 4:29:39.582 PM)

Ch1 0.000420 %
 Ch2 0.000369 %

Noise Ratio (3/24/2021 4:29:39.582 PM)

Ch1 0.000539 %
 Ch2 0.000565 %

Distortion Product Ratio (3/24/2021 4:29:39.582 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	-121.28	-108.61	-129.49	-121.16	-132.39	-124.23	-122.99	-134.06	-126.06
Ch2	-0.00	-119.84	-111.18	-122.06	-125.37	-130.63	-127.87	-118.67	-130.96	-124.09

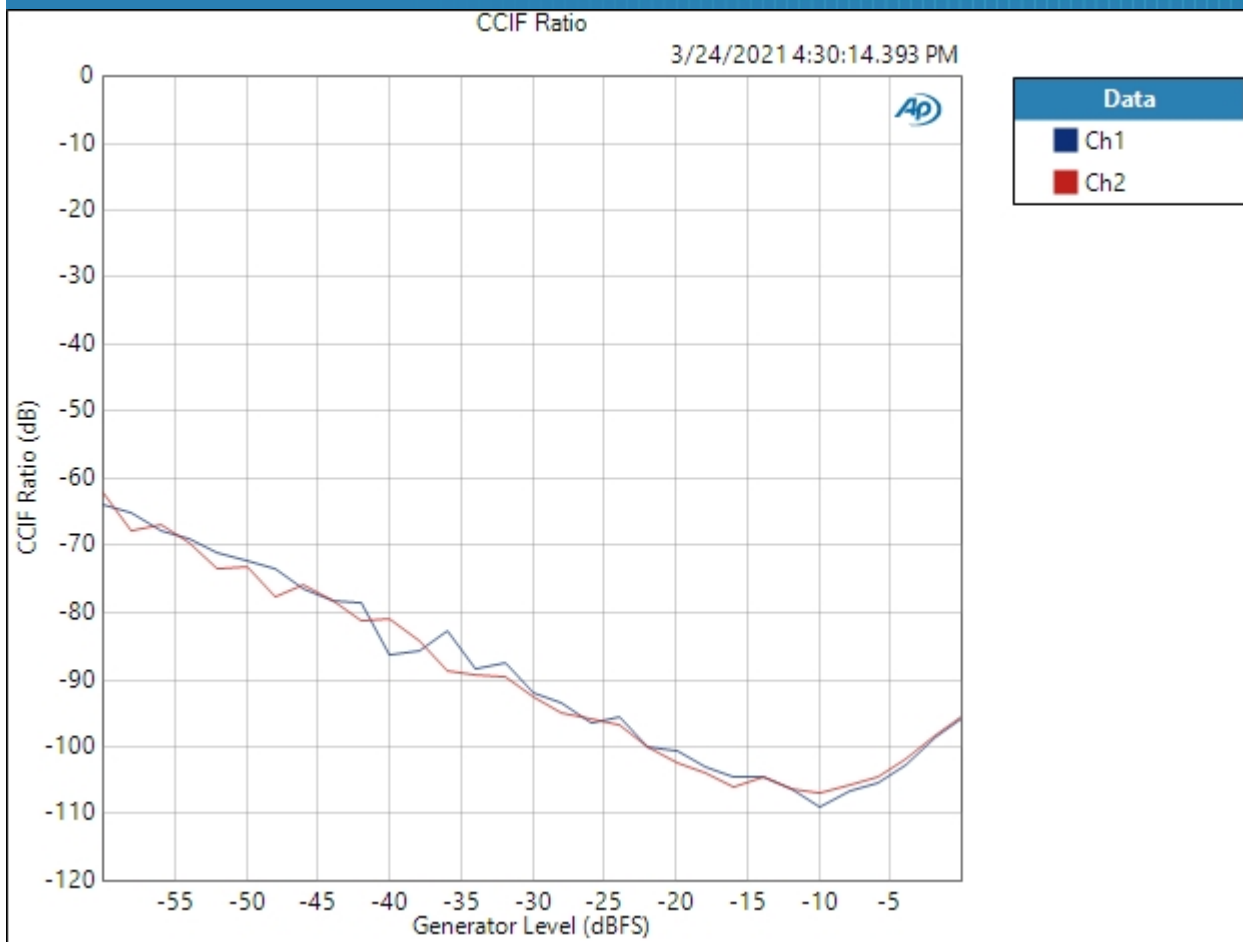
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB

Low Gain, 300 Ohm : IMD Level Sweep (CCIF)

IMD Type: CCIF
Waveform: IMD
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
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+d3
Measured 1 3/24/2021 4:30:14 PM

CCIF Ratio (3/24/2021 4:30:14.393 PM)



Result: PASSED

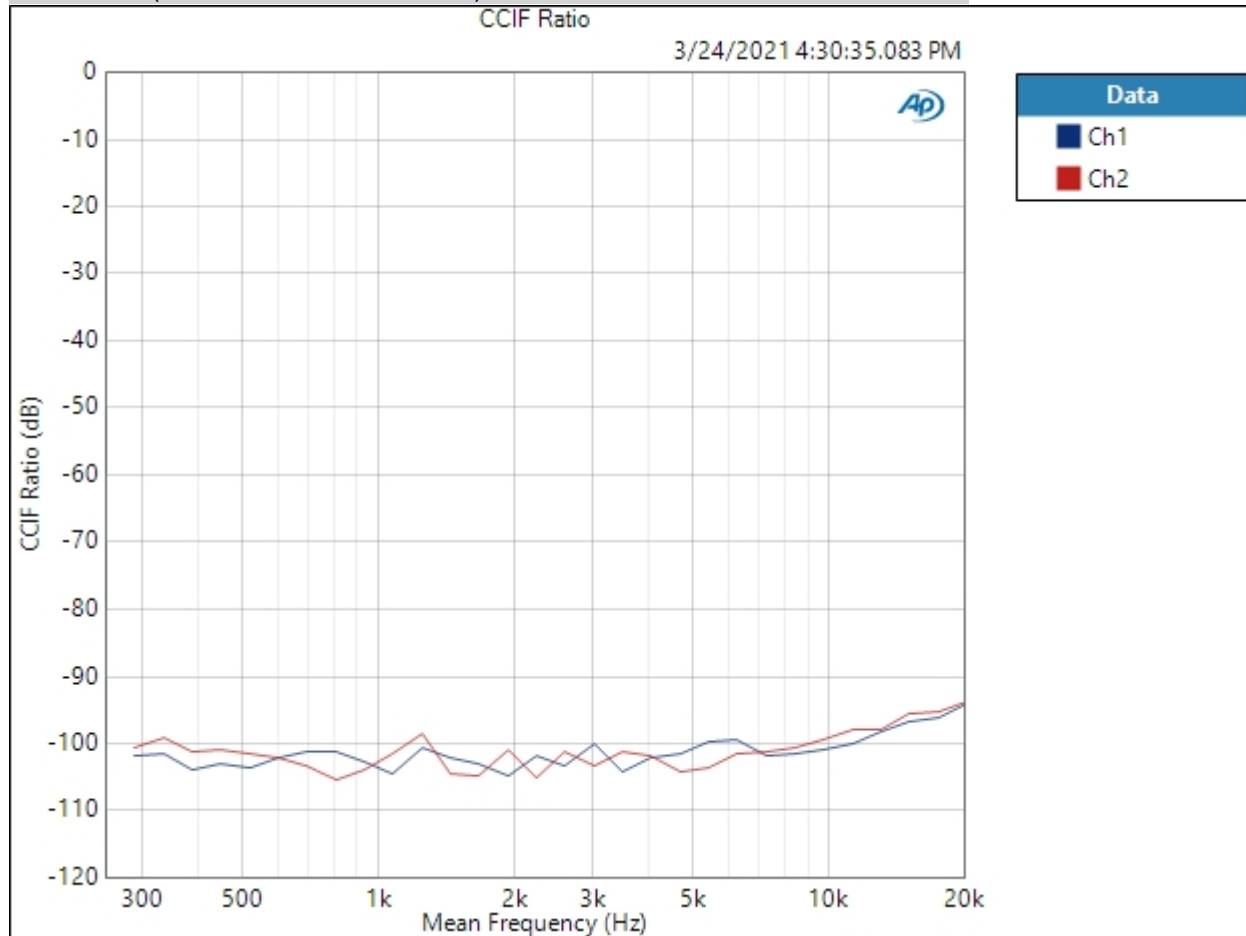
Schiit DAC APx Standard Test Suite: Hel 2



Low Gain, 300 Ohm : IMD Frequency Sweep (CCIF)

Generator Level: -2.000 dBFS
DC Offset: 0.000 D
Sweep Frequency: Mean Frequency
Mean Frequency: 12.5000 kHz
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 3/24/2021 4:30:35 PM

CCIF Ratio (3/24/2021 4:30:35.083 PM)



3/24/2021 4:44 PM

Result:  PASSED

Low Gain, 300 Ohm : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Level: -2.000 dBFS

DC Offset: 0.000 D

Frequency: 10.0000 kHz

Crosstalk (3/24/2021 4:30:39.193 PM)

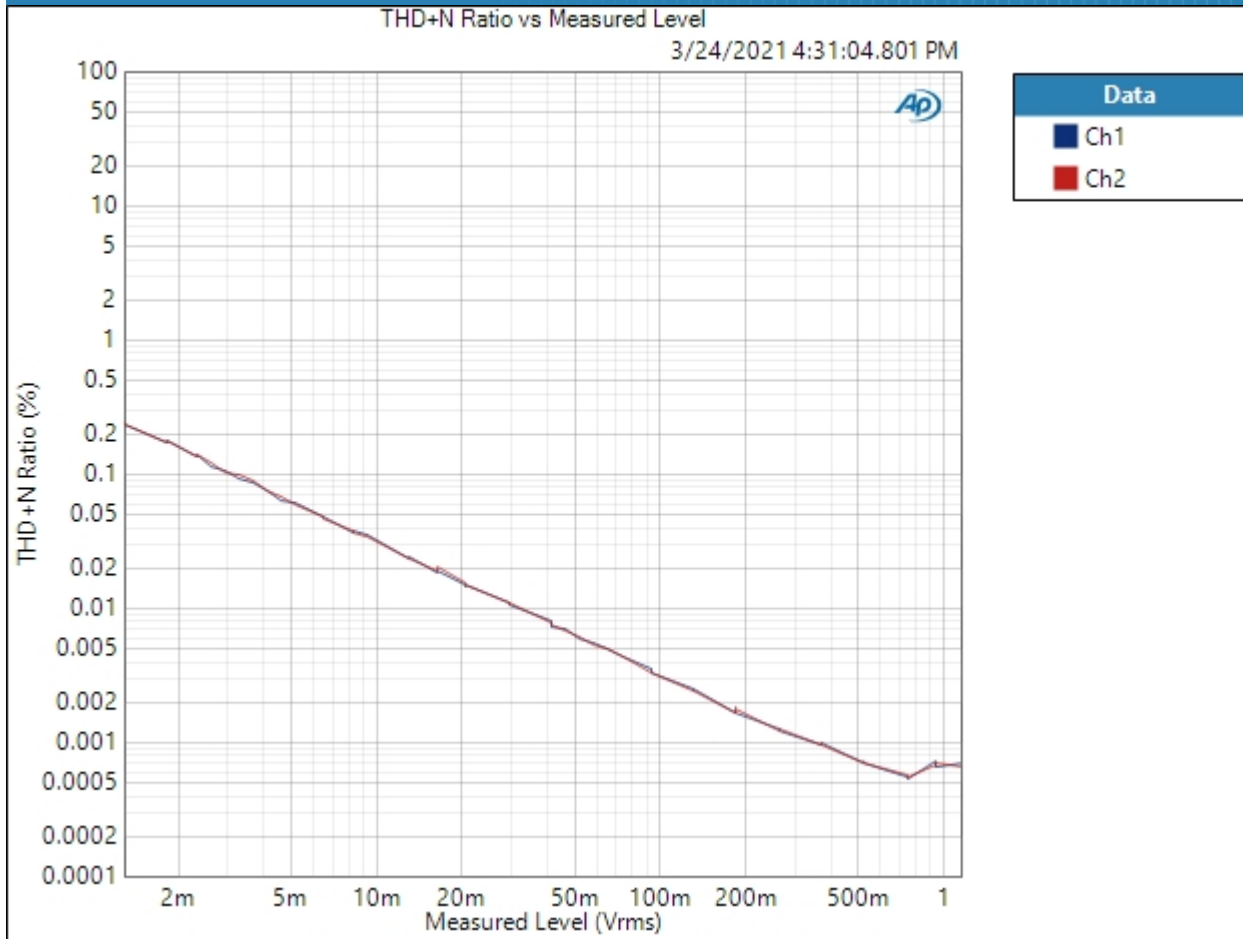
Ch1 -79.080 dB

Ch2 -81.482 dB

Low Gain, 300 Ohm : Stepped Level Sweep

Waveform: Sine
Generator Level: -20.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Start Level: -60.000 dBFS
Stop Level: -0.000 dBFS
Step Type: Linear
Number of Points: 61
Step Size: +1.000 dBFS
Offset: 0.000 D
Low-pass Filter: 20 kHz
Weighting Filter: Signal Path
High-pass Filter: 20 Hz
Notch Tuning Mode: Generator Frequency
Measured 1 3/24/2021 4:31:04 PM

THD+N Ratio vs Measured Level (3/24/2021 4:31:04.801 PM)



Result: PASSED

Low Gain, 32 Ohm : Signal Path Setup

Output Connector: ASIO
 Output Sample Rate: 48.0000 kHz
 Output EQ: None
 Input Connector: Analog Unbalanced
 Channels: 2
 Termination: 100 kohm
 Input Bandwidth: AC (<10 Hz) - 22.4k (48 kHz SR)
 Device Delay: 0.000 s
 Input EQ: None

• References

dBr G: -20.000 dBFS
 Shared Frequency Reference: 1.00000 kHz
 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.

Low Gain, 32 Ohm : Level and Gain

Waveform: Sine
 Generator Level: -2.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz

RMS Level (3/24/2021 4:31:28.506 PM)

Ch1 1.021 Vrms
 Ch2 1.021 Vrms

Low Gain, 32 Ohm : 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 (3/24/2021 4:31:29.816 PM)

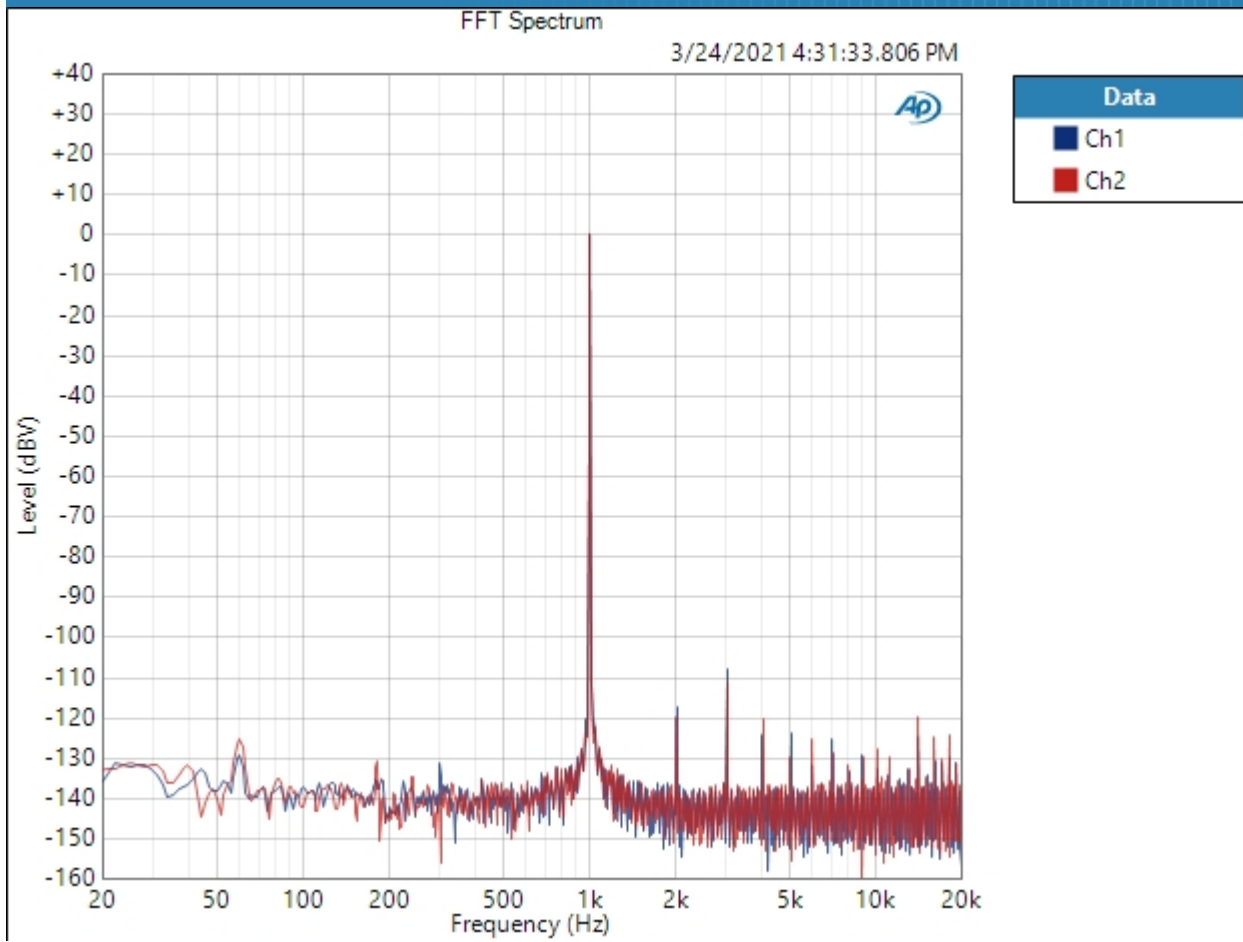
Ch1 -1.312 mV

Ch2 -2.378 mV

Low Gain, 32 Ohm : Signal Analyzer

Waveform: Sine
Generator Level: -2.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 3/24/2021 4:31:33 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 (3/24/2021 4:31:33.806 PM)

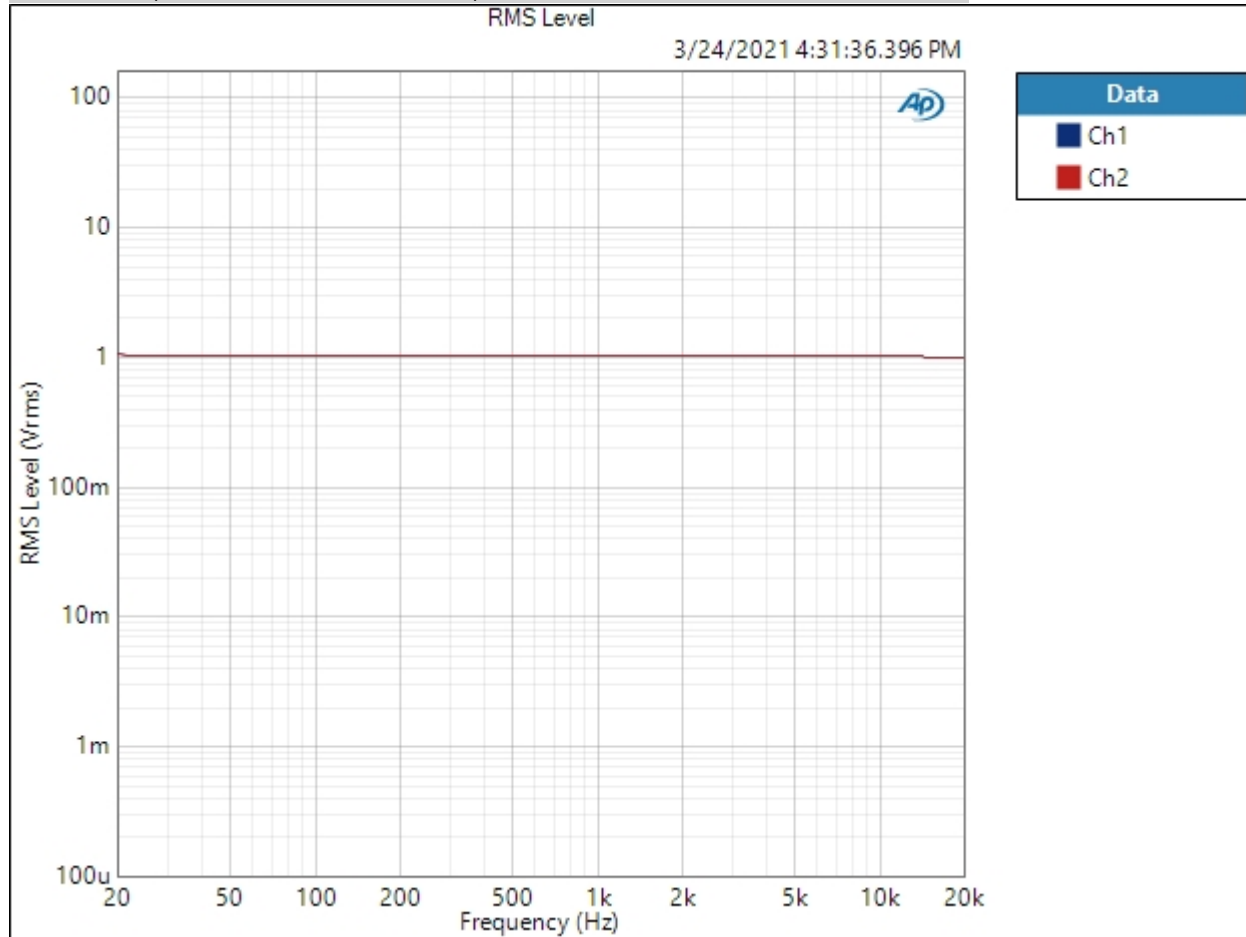


Result: PASSED

Low Gain, 32 Ohm : Frequency Response

Start Frequency: 20.0000 Hz
 Stop Frequency: 20.0000 kHz
 Generator Level: -2.000 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 3/24/2021 4:31:36 PM

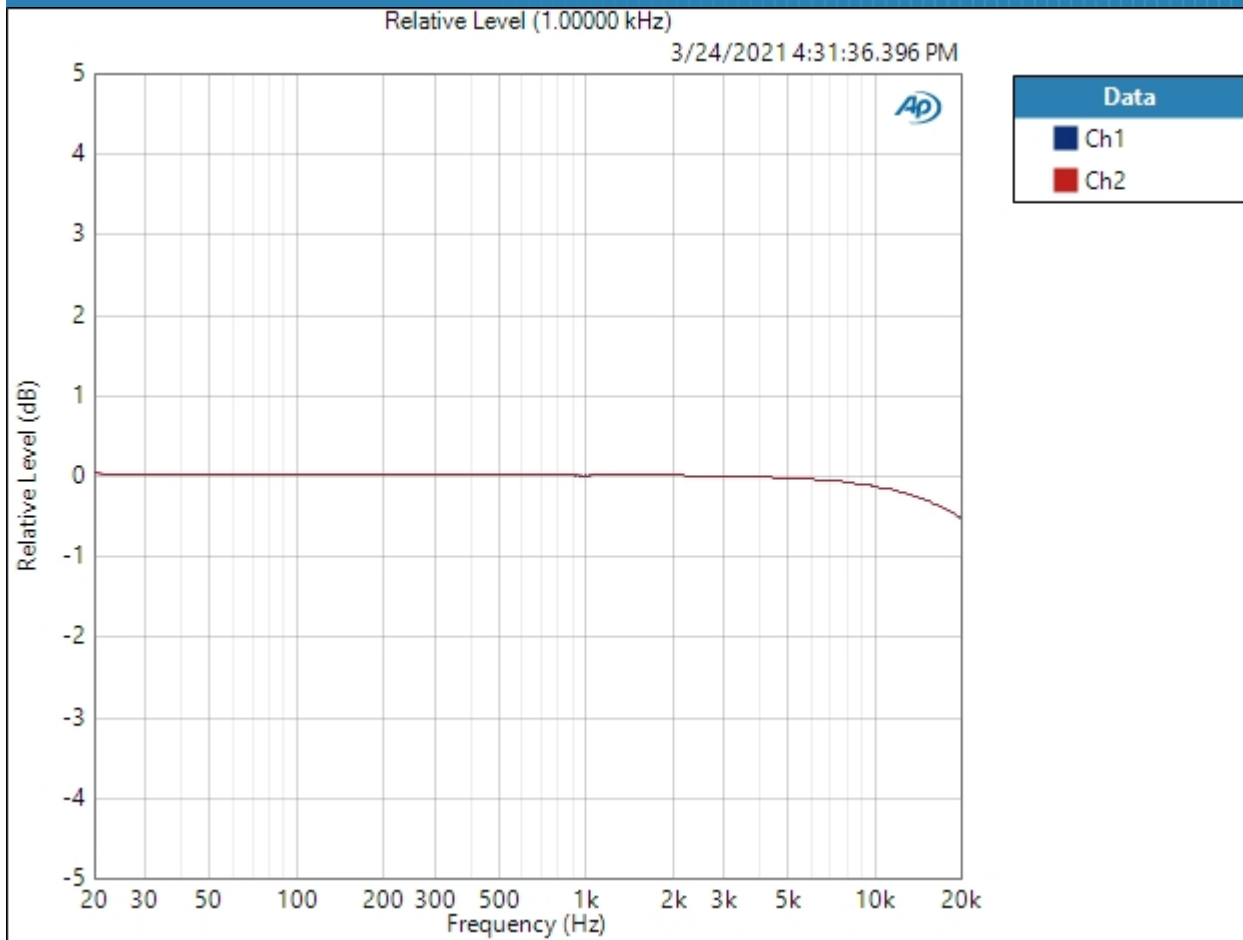
RMS Level (3/24/2021 4:31:36.396 PM)



Result: PASSED

Relative Level (1.00000 kHz) (3/24/2021 4:31:36.396 PM)

3/24/2021 4:44 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) (3/24/2021 4:31:36.396 PM)

Ch1 ± 0.285 dB

Ch2 ± 0.286 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Low Gain, 32 Ohm : Signal to Noise Ratio

Waveform: Sine

Generator Level: -2.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Low-pass Filter: 20 kHz

Weighting Filter: Signal Path

High-pass Filter: 20 Hz

Signal to Noise Ratio (3/24/2021 4:31:38.687 PM)

Ch1 110.250 dB

Ch2 110.107 dB

Low Gain, 32 Ohm : THD+N

Waveform: Sine
 Generator Level: -2.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz
 Low-pass Filter: 20 kHz
 Weighting Filter: Signal Path
 High-pass Filter: 20 Hz
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (3/24/2021 4:31:41.227 PM)

Ch1 0.000707 %
 Ch2 0.000671 %

THD Ratio (3/24/2021 4:31:41.227 PM)

Ch1 0.000439 %
 Ch2 0.000358 %

Noise Ratio (3/24/2021 4:31:41.227 PM)

Ch1 0.000544 %
 Ch2 0.000563 %

Distortion Product Ratio (3/24/2021 4:31:41.227 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	-116.66	-108.45	-123.43	-122.79	-130.79	-128.61	-132.66	-126.51	-131.61
Ch2	-0.00	-119.61	-111.52	-118.80	-125.78	-125.27	-130.62	-131.74	-125.07	-126.11

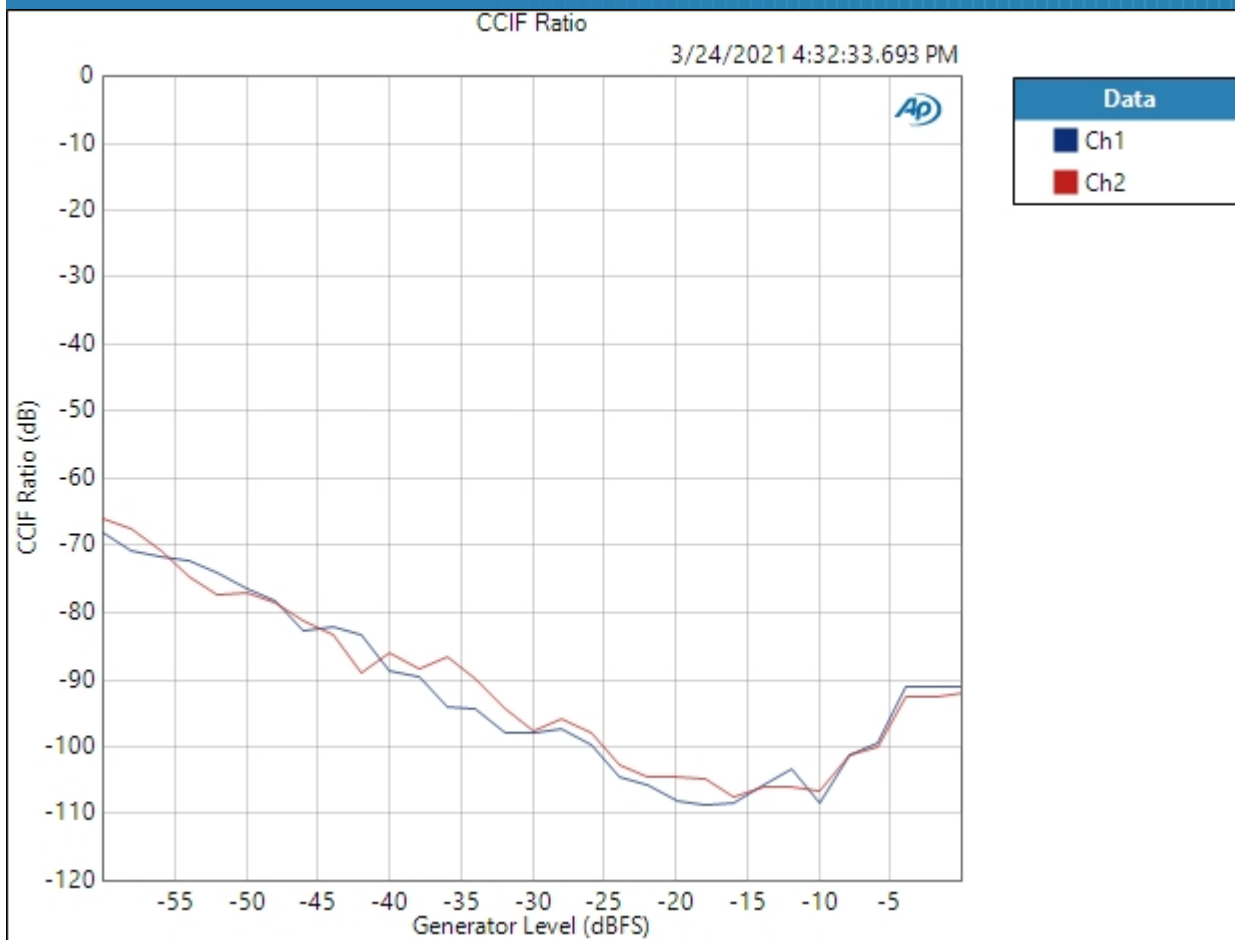
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB

Low Gain, 32 Ohm : IMD Level Sweep (CCIF)

IMD Type: CCIF
Waveform: IMD
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
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+d3
Measured 1 3/24/2021 4:32:33 PM

CCIF Ratio (3/24/2021 4:32:33.693 PM)

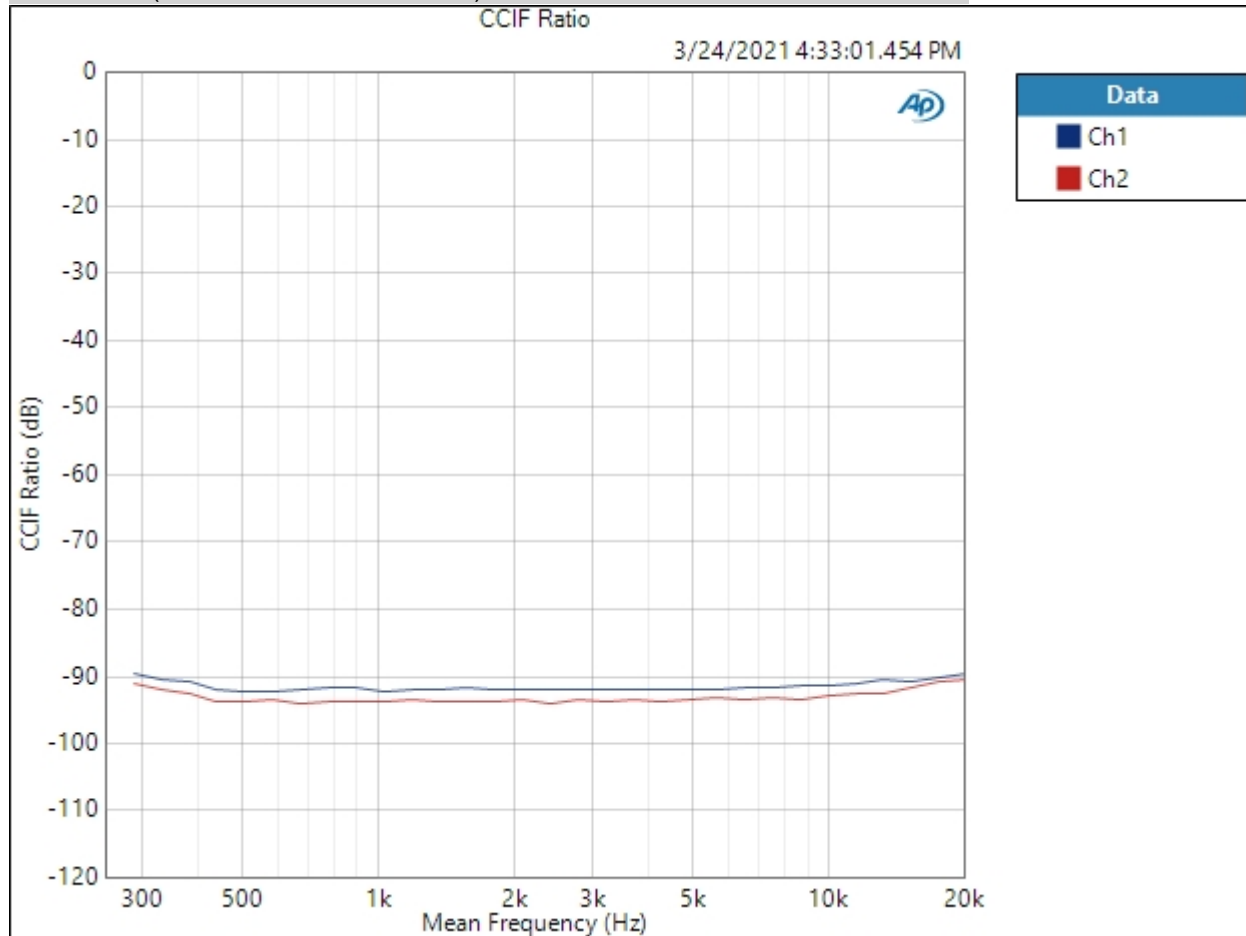


Result: PASSED

Low Gain, 32 Ohm : IMD Frequency Sweep (CCIF)

Generator Level: -2.000 dBFS
 DC Offset: 0.000 D
 Sweep Frequency: Mean Frequency
 Mean Frequency: 12.5000 kHz
 Diff Frequency: 80.0000 Hz
 IMD Split: False
 Start Frequency: 20.0000 kHz
 Stop Frequency: 250.000 Hz
 Step Type: Logarithmic
 Number of Points: 32
 Mode: d2+d3
 Measured 1 3/24/2021 4:33:01 PM

CCIF Ratio (3/24/2021 4:33:01.454 PM)



Result:  PASSED

Low Gain, 32 Ohm : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Level: -2.000 dBFS

DC Offset: 0.000 D

Frequency: 10.0000 kHz

Crosstalk (3/24/2021 4:33:05.496 PM)

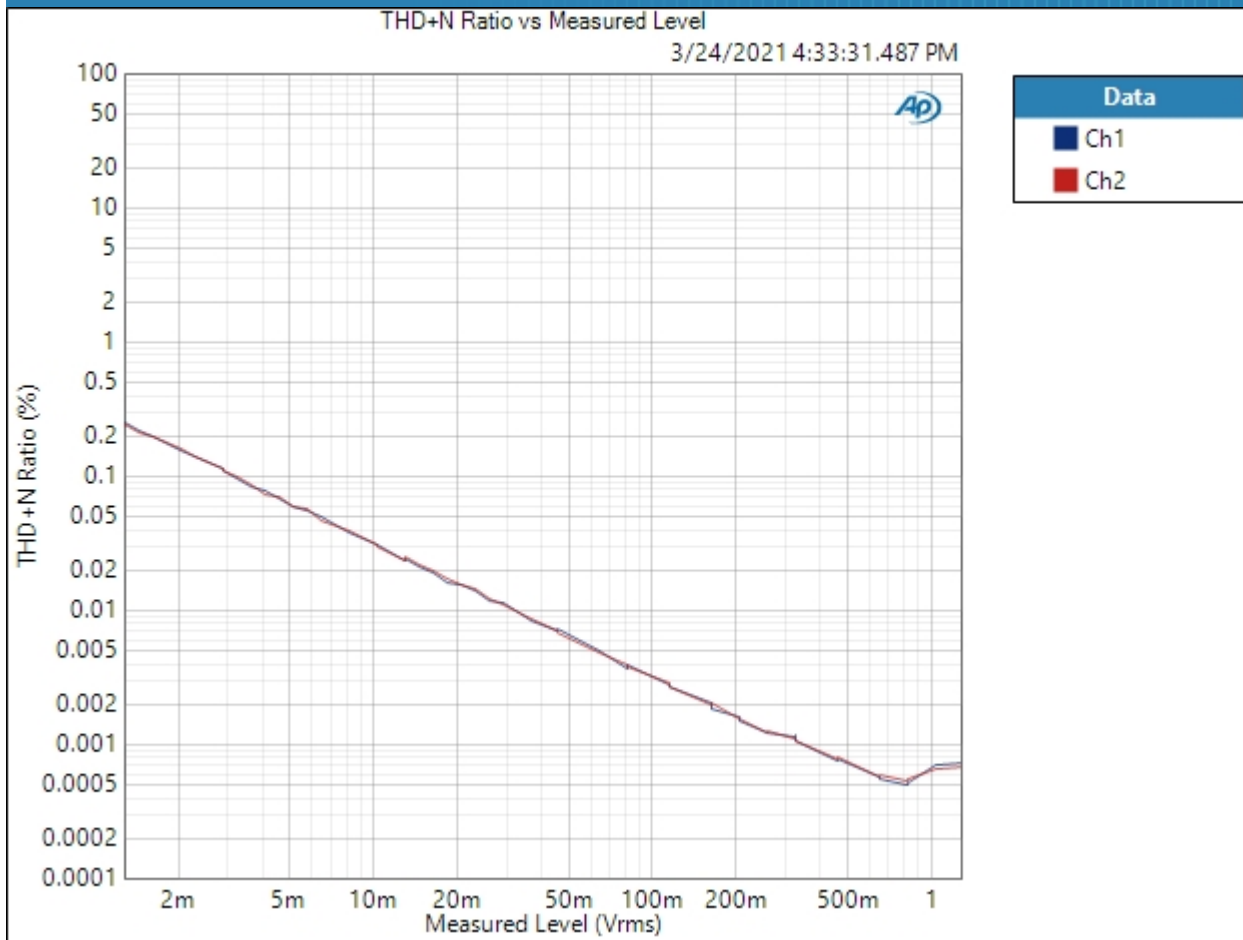
Ch1 -68.480 dB

Ch2 -69.108 dB

Low Gain, 32 Ohm : Stepped Level Sweep

Waveform: Sine
Generator Level: -20.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Start Level: -60.000 dBFS
Stop Level: -0.000 dBFS
Step Type: Linear
Number of Points: 61
Step Size: +1.000 dBFS
Offset: 0.000 D
Low-pass Filter: 20 kHz
Weighting Filter: Signal Path
High-pass Filter: 20 Hz
Notch Tuning Mode: Generator Frequency
Measured 1 3/24/2021 4:33:31 PM

THD+N Ratio vs Measured Level (3/24/2021 4:33:31.487 PM)



Result: PASSED

High Gain, 300 Ohm : Signal Path Setup

Output Connector: ASIO
 Output Sample Rate: 48.0000 kHz
 Output EQ: None
 Input Connector: Analog Unbalanced
 Channels: 2
 Termination: 100 kohm
 Input Bandwidth: AC (<10 Hz) - 22.4k (48 kHz SR)
 Device Delay: 0.000 s
 Input EQ: None

• References

dBr G: -20.000 dBFS
 Shared Frequency Reference: 1.00000 kHz
 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.

High Gain, 300 Ohm : Level and Gain

Waveform: Sine
 Generator Level: -12.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz

RMS Level (3/24/2021 4:33:52.497 PM)

Ch1 2.038 Vrms
 Ch2 2.038 Vrms

High Gain, 300 Ohm : DC Level

Waveform: Sine

Generator Level: $-\infty$ dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Delay Time: 100.0 ms

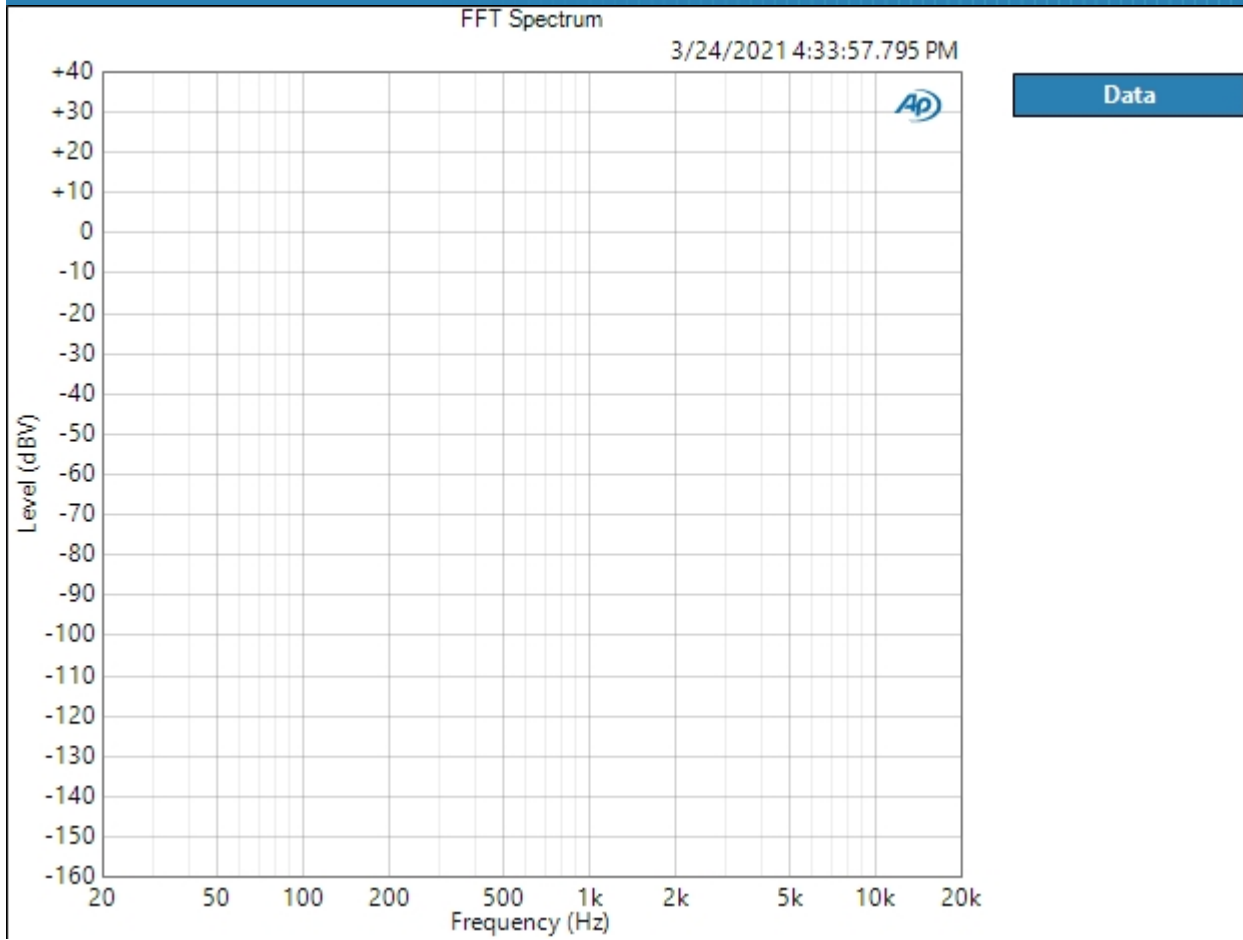
Acquisition Time: 333.0 ms

DC Level (3/24/2021 4:33:53.815 PM)

Ch1 -8.762 mV

Ch2 -15.28 mV

High Gain, 300 Ohm : Signal Analyzer
Waveform: Sine
Generator Level: -12.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 3/24/2021 4:33:57 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 (3/24/2021 4:33:57.795 PM)

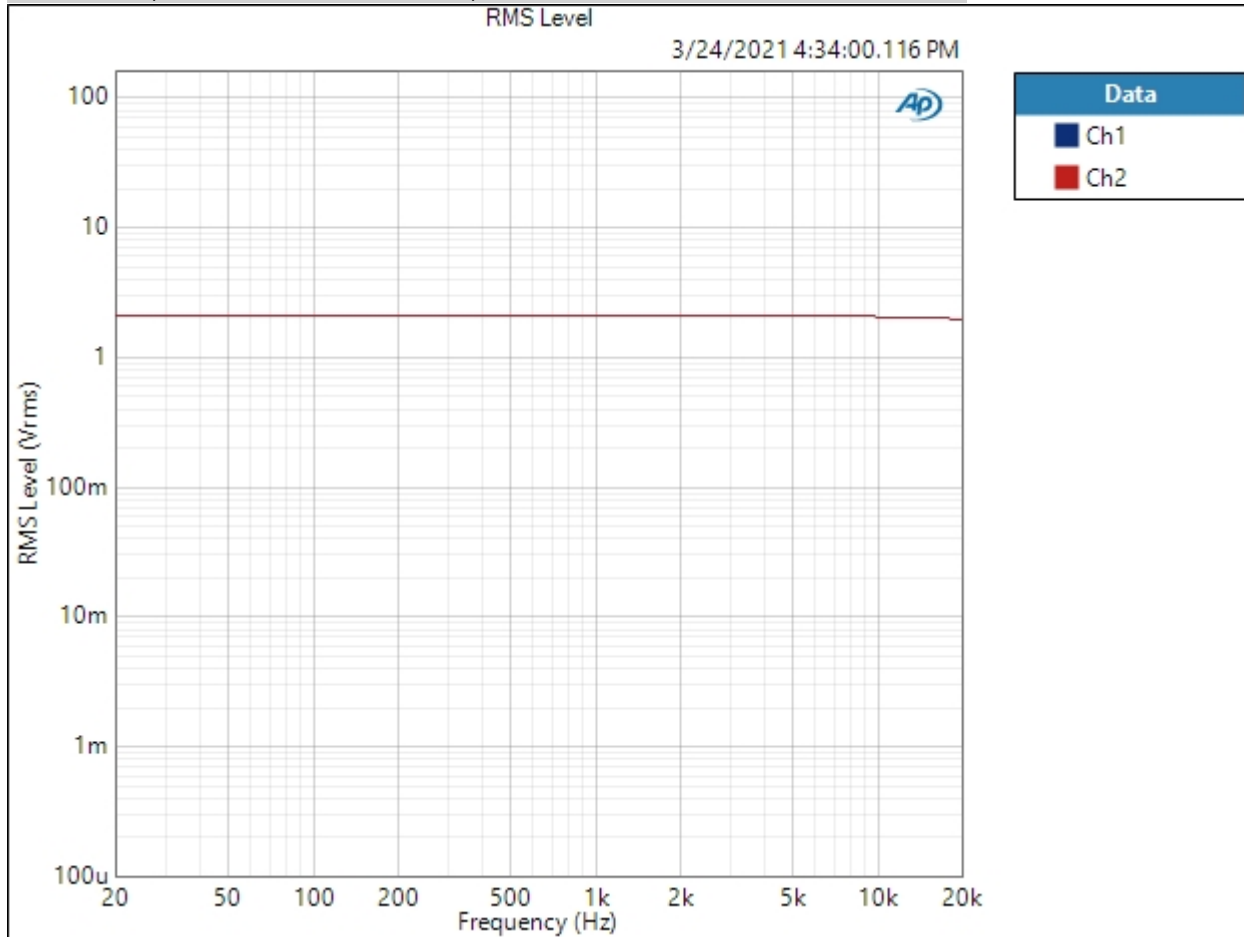


Result:  PASSED

High Gain, 300 Ohm : Frequency Response

Start Frequency: 20.0000 Hz
 Stop Frequency: 20.0000 kHz
 Generator Level: -12.000 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 3/24/2021 4:34:00 PM

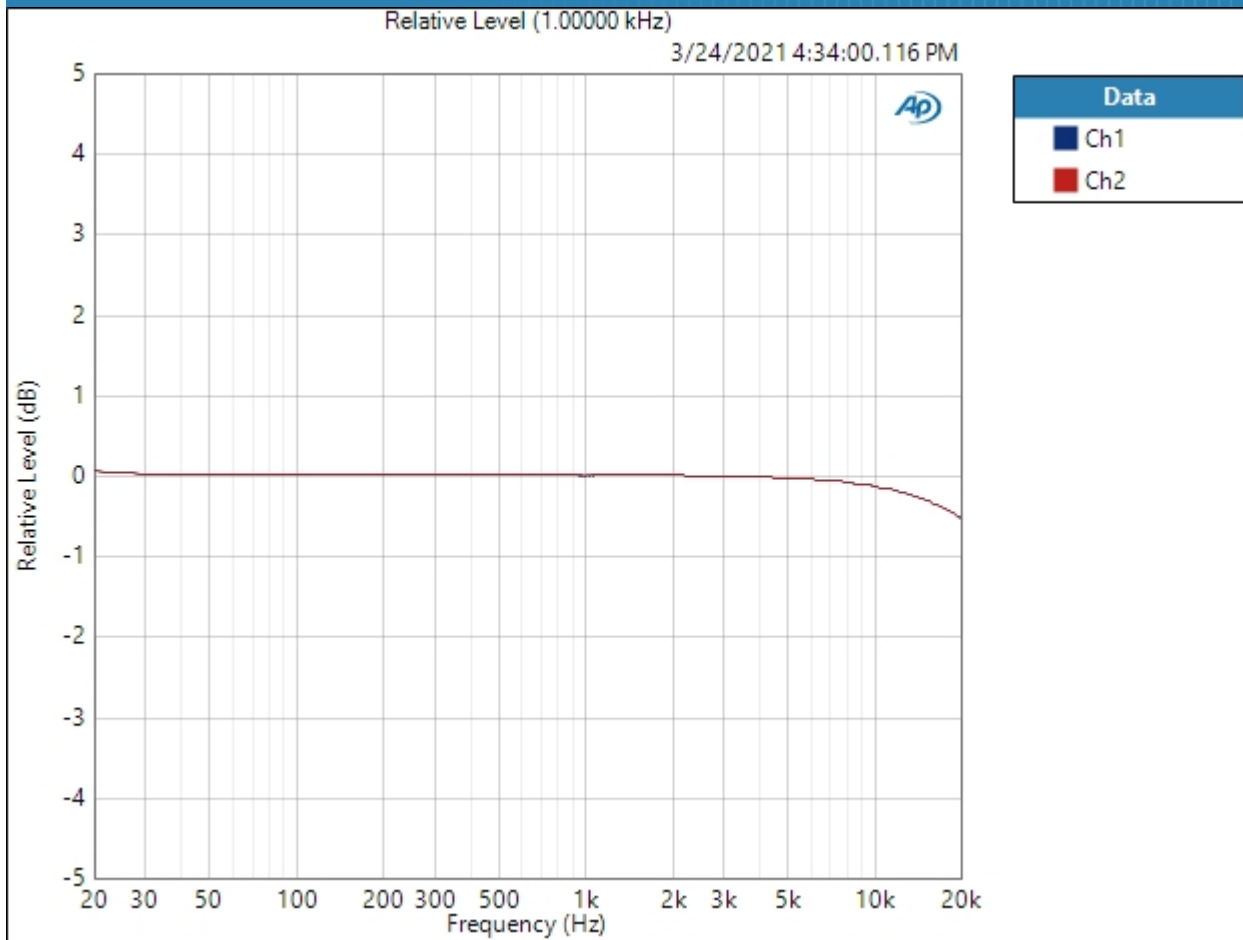
RMS Level (3/24/2021 4:34:00.116 PM)



Result: PASSED

Relative Level (1.00000 kHz) (3/24/2021 4:34:00.116 PM)

3/24/2021 4:44 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) (3/24/2021 4:34:00.116 PM)

Ch1 ±0.298 dB

Ch2 ±0.299 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

High Gain, 300 Ohm : Signal to Noise Ratio

Waveform: Sine

Generator Level: -12.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Low-pass Filter: 20 kHz

Weighting Filter: Signal Path

High-pass Filter: 20 Hz

Signal to Noise Ratio (3/24/2021 4:34:02.386 PM)

Ch1 101.284 dB

Ch2 101.453 dB

High Gain, 300 Ohm : THD+N
 Waveform: Sine
 Generator Level: -12.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz
 Low-pass Filter: 20 kHz
 Weighting Filter: Signal Path
 High-pass Filter: 20 Hz
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (3/24/2021 4:34:04.636 PM)

Ch1 0.000898 %
 Ch2 0.000899 %

THD Ratio (3/24/2021 4:34:04.636 PM)

Ch1 0.000198 %
 Ch2 0.000188 %

Noise Ratio (3/24/2021 4:34:04.636 PM)

Ch1 0.000882 %
 Ch2 0.000887 %

Distortion Product Ratio (3/24/2021 4:34:04.636 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	-117.56	-130.37	-128.53	-127.87	-131.16	-129.47	-131.82	-125.33	-127.22
Ch2	-0.00	-128.77	-123.83	-126.10	-125.04	-127.37	-125.70	-134.00	-126.63	-127.08

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB

High Gain, 300 Ohm : IMD Level Sweep (CCIF)

IMD Type: CCIF

Waveform: IMD

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

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

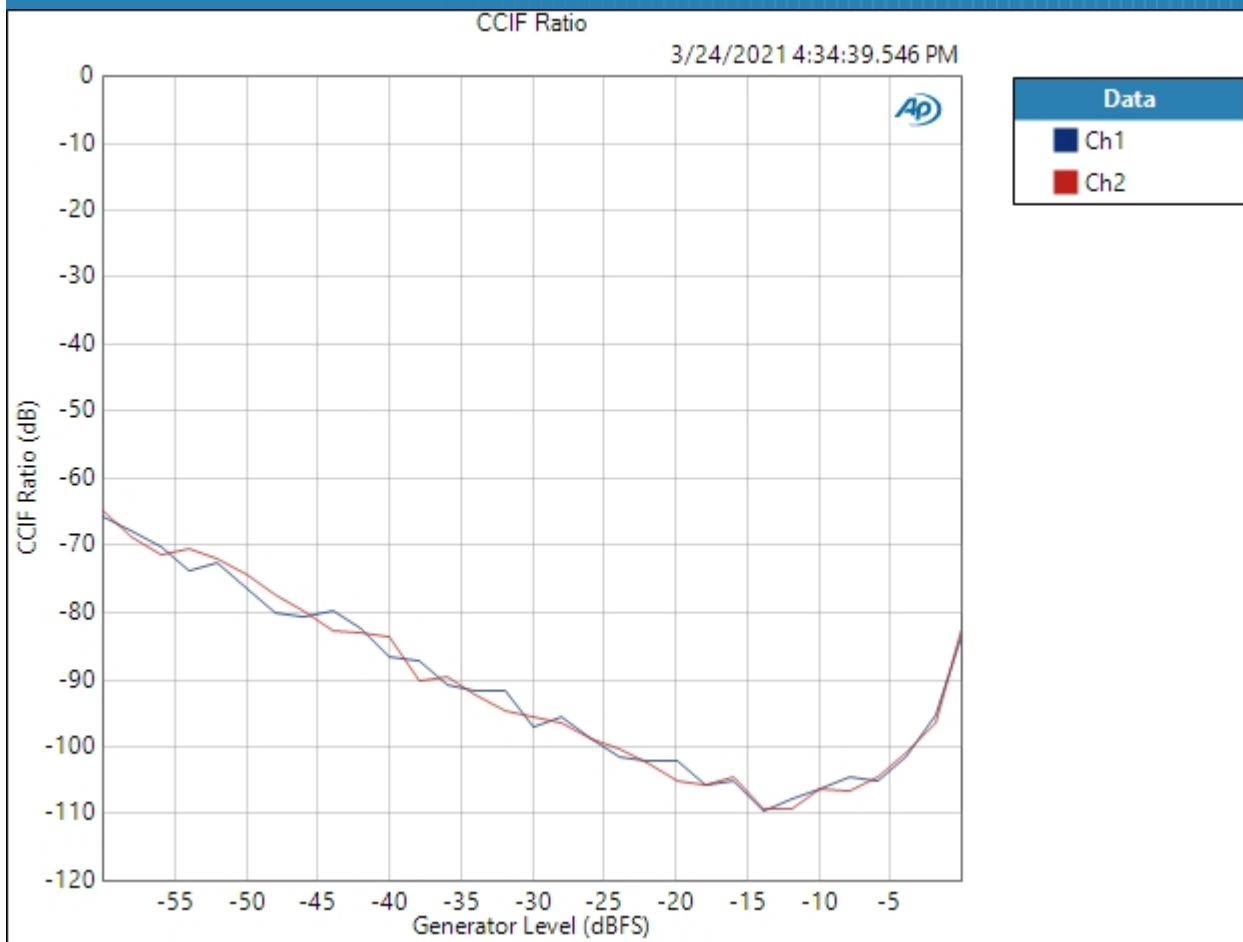
Number of Points: 31

Step Size: +2.000 dBFS

Mode: d2+d3

Measured 1 3/24/2021 4:34:39 PM

CCIF Ratio (3/24/2021 4:34:39.546 PM)



Result: PASSED

Schiit DAC APx Standard Test Suite: Hel 2



High Gain, 300 Ohm : IMD Frequency Sweep (CCIF)

Generator Level: -12.000 dBFS

DC Offset: 0.000 D

Sweep Frequency: Mean Frequency

Mean Frequency: 12.5000 kHz

Diff Frequency: 80.0000 Hz

IMD Split: False

Start Frequency: 20.0000 kHz

Stop Frequency: 250.000 Hz

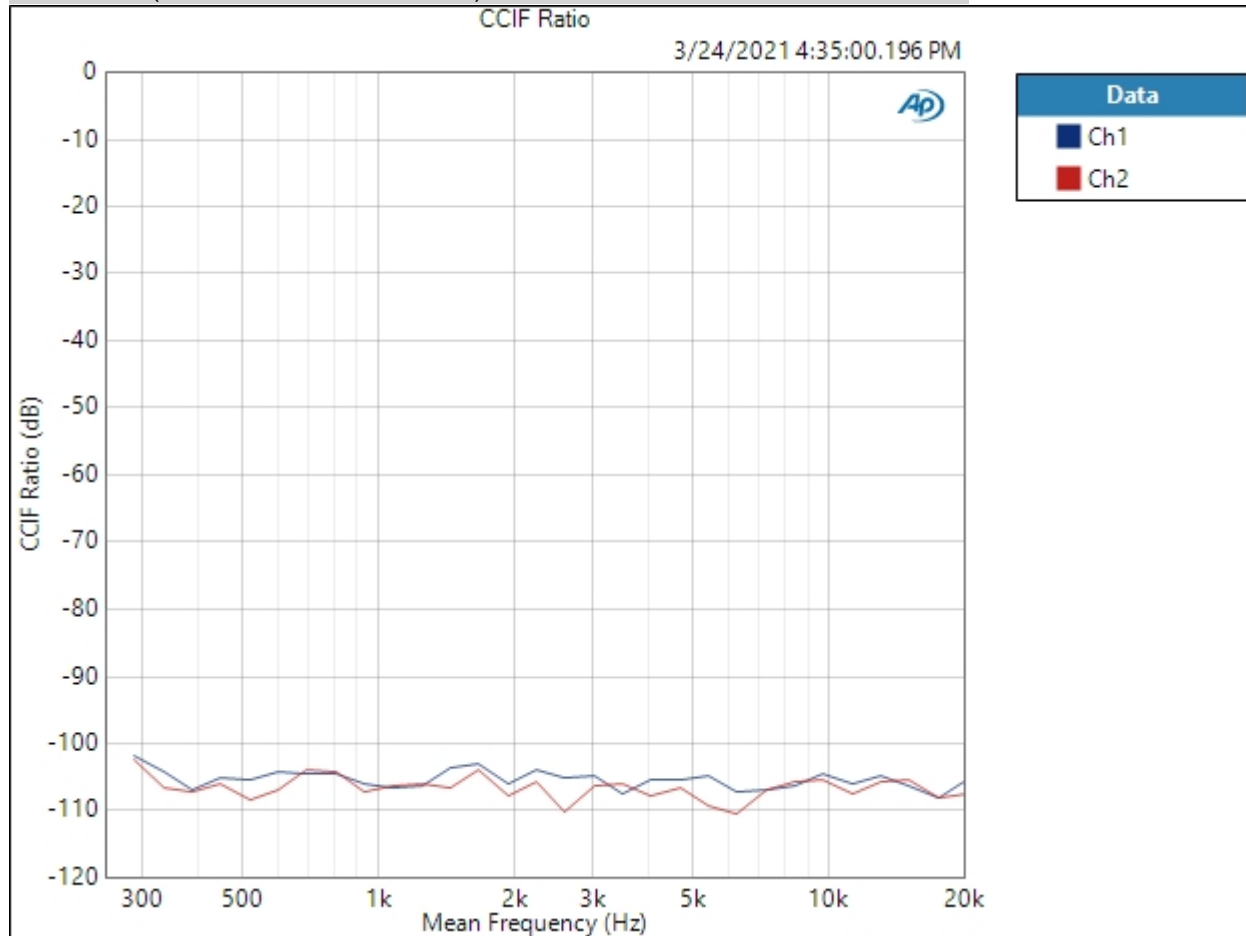
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 3/24/2021 4:35:00 PM

CCIF Ratio (3/24/2021 4:35:00.196 PM)



3/24/2021 4:44 PM

Result:  PASSED

High Gain, 300 Ohm : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Level: -12.000 dBFS

DC Offset: 0.000 D

Frequency: 10.0000 kHz

Crosstalk (3/24/2021 4:35:04.297 PM)

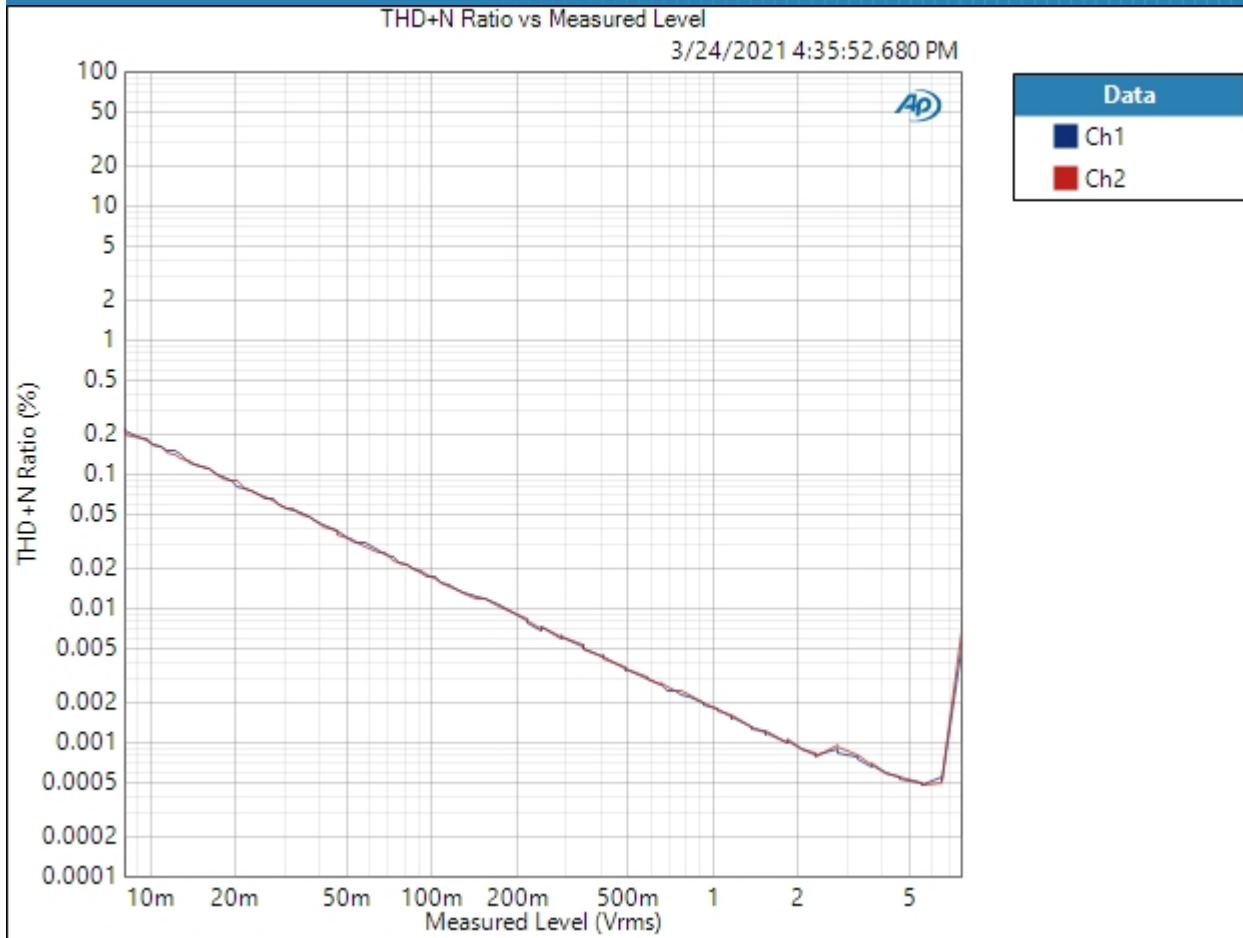
Ch1 -87.400 dB

Ch2 -85.925 dB

High Gain, 300 Ohm : Stepped Level Sweep

Waveform: Sine
Generator Level: -20.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Start Level: -60.000 dBFS
Stop Level: -0.000 dBFS
Step Type: Linear
Number of Points: 121
Step Size: +0.500 dBFS
Offset: 0.000 D
Low-pass Filter: 20 kHz
Weighting Filter: Signal Path
High-pass Filter: 20 Hz
Notch Tuning Mode: Generator Frequency
Measured 1 3/24/2021 4:35:52 PM

THD+N Ratio vs Measured Level (3/24/2021 4:35:52.680 PM)



Result: ✔ PASSED

High Gain, 32 Ohm : Signal Path Setup

Output Connector: ASIO
 Output Sample Rate: 48.0000 kHz
 Output EQ: None
 Input Connector: Analog Unbalanced
 Channels: 2
 Termination: 100 kohm
 Input Bandwidth: AC (<10 Hz) - 22.4k (48 kHz SR)
 Device Delay: 0.000 s
 Input EQ: None

• References

dBr G: -20.000 dBFS
 Shared Frequency Reference: 1.00000 kHz
 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.

High Gain, 32 Ohm : Level and Gain

Waveform: Sine
 Generator Level: -18.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz

RMS Level (3/24/2021 4:36:21.601 PM)

Ch1 1.011 Vrms
 Ch2 1.011 Vrms

High Gain, 32 Ohm : 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 (3/24/2021 4:36:22.921 PM)

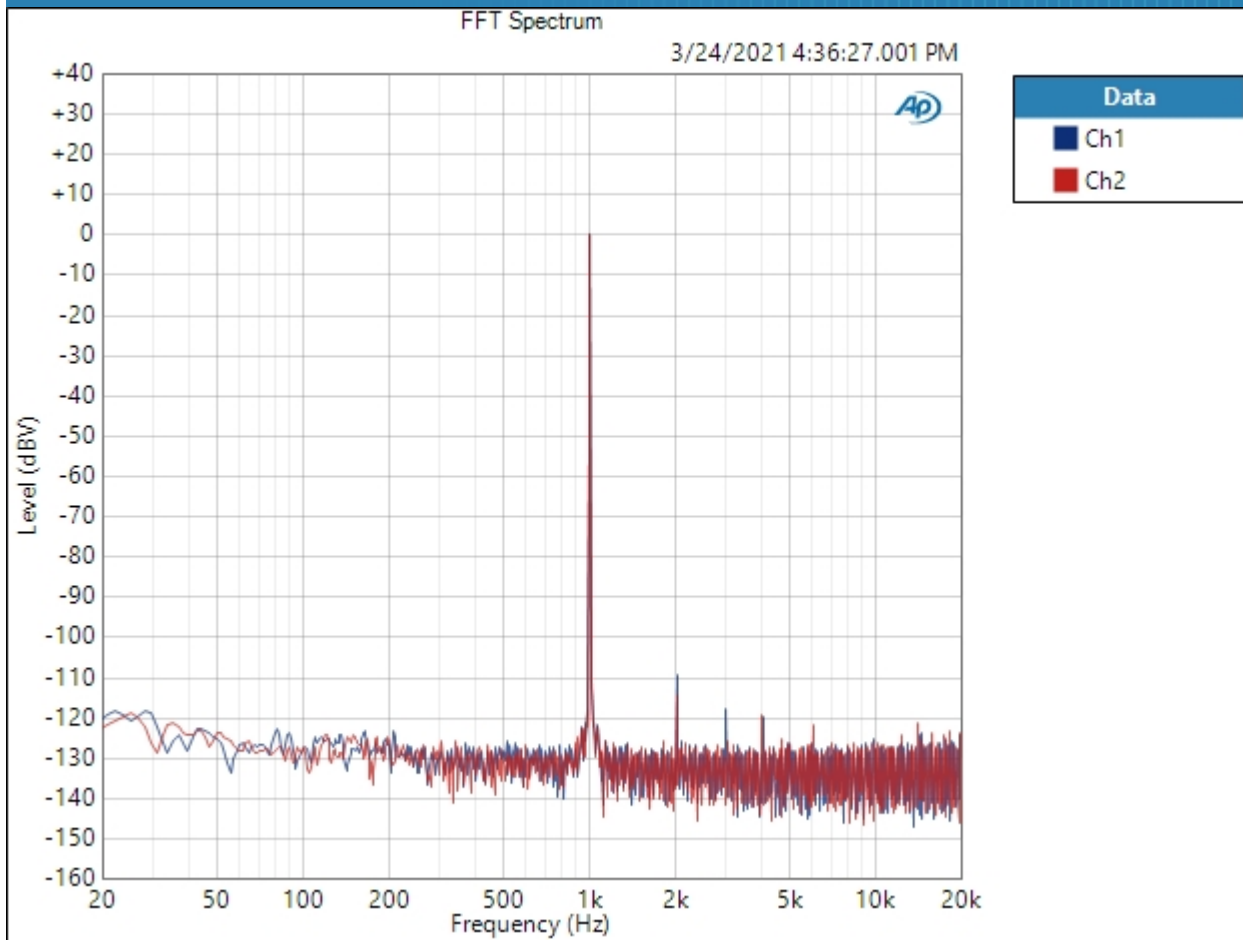
Ch1 -8.663 mV

Ch2 -15.15 mV

High Gain, 32 Ohm : Signal Analyzer

Waveform: Sine
Generator Level: -18.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1: 3/24/2021 4:36:27 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)

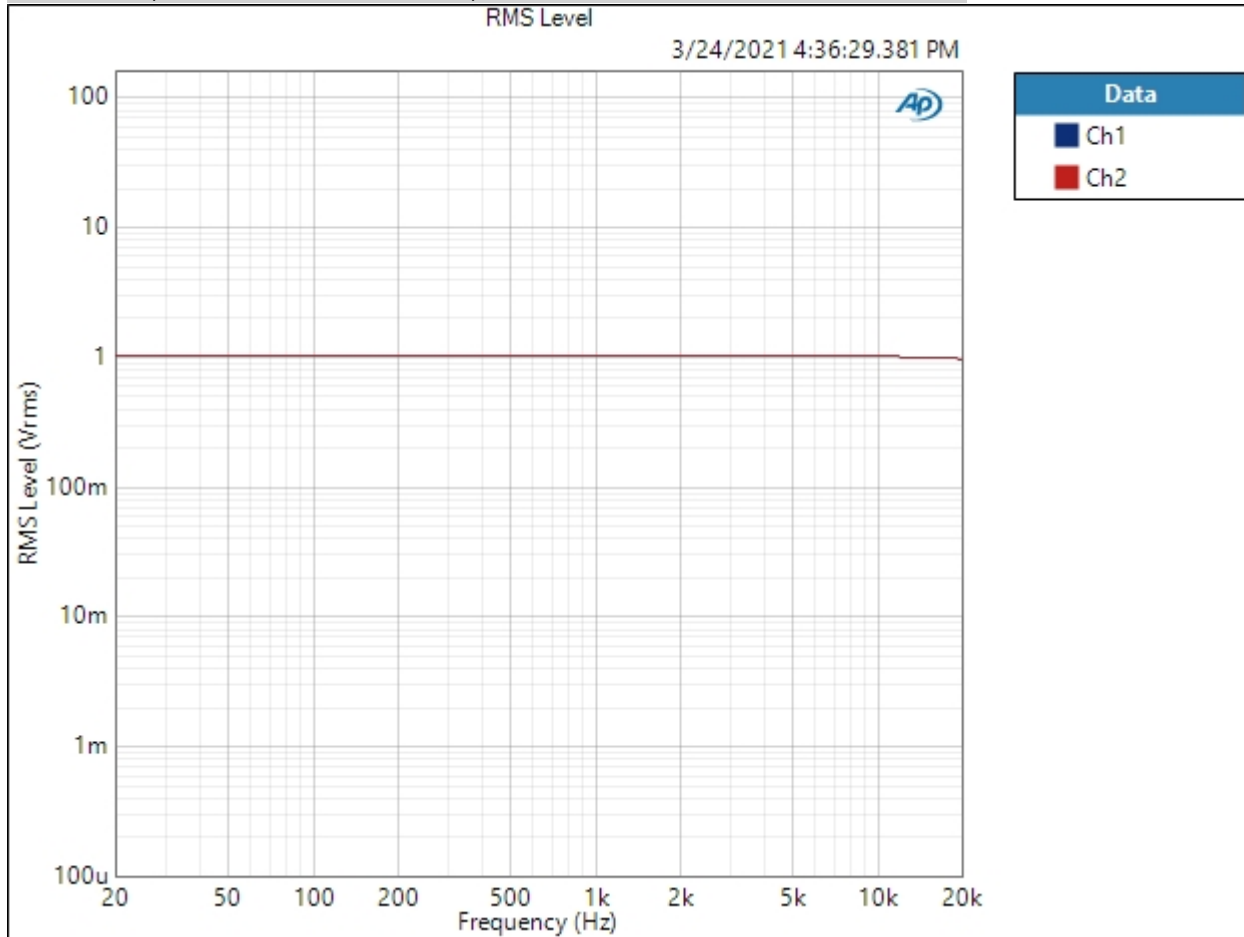
FFT Spectrum (3/24/2021 4:36:27.001 PM)



Result:  PASSED

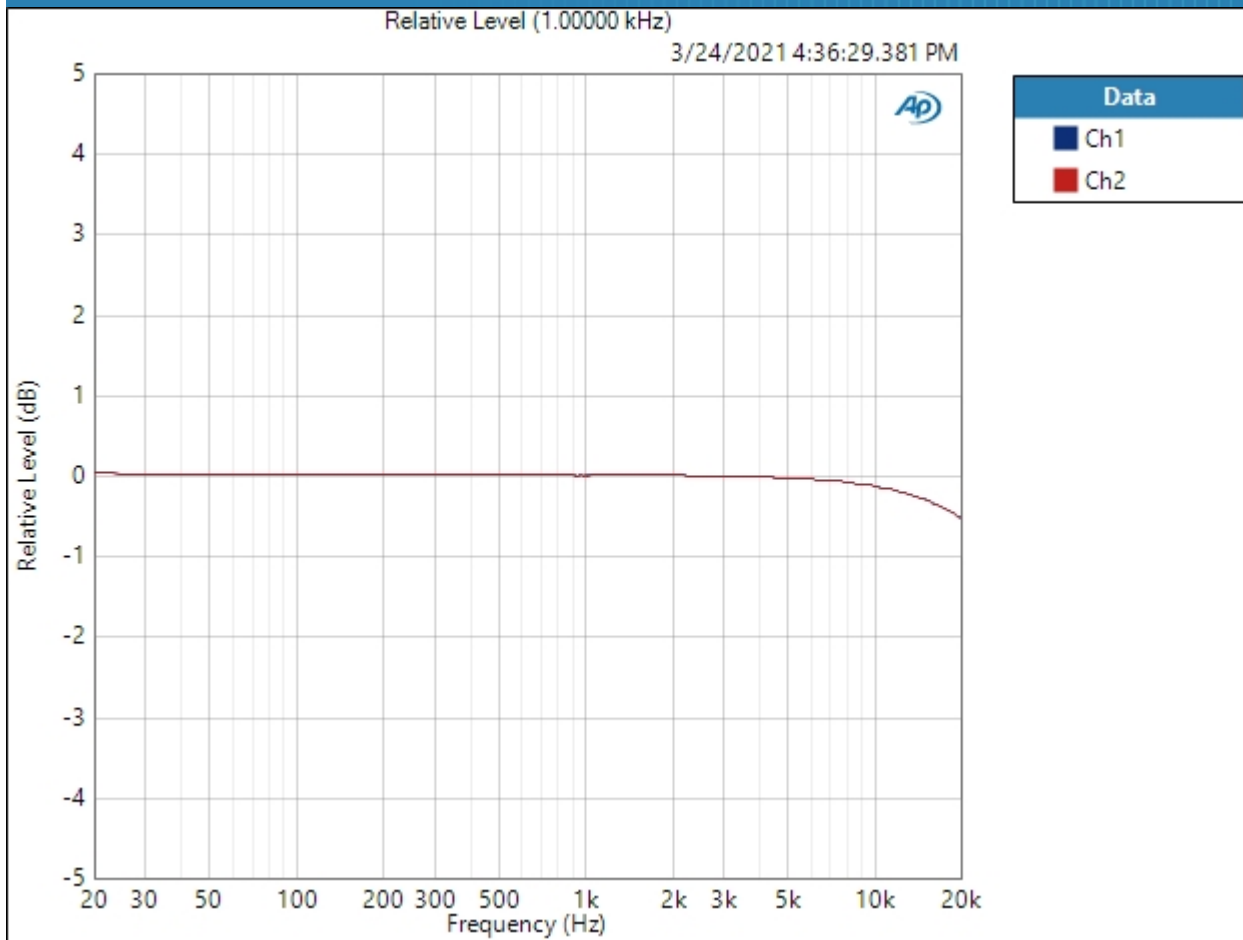
High Gain, 32 Ohm : Frequency Response
 Start Frequency: 20.0000 Hz
 Stop Frequency: 20.0000 kHz
 Generator Level: -18.000 dBFS
 DC Offset: 0.000 D
 EQ: None
 Pre-Sweep: 100.0 ms
 Sweep: 350.0 ms
 Extend Acquisition By: 1.000 s
 Secondary Source: None
 Measured 1 3/24/2021 4:36:29 PM

RMS Level (3/24/2021 4:36:29.381 PM)



Result: PASSED

Relative Level (1.00000 kHz) (3/24/2021 4:36:29.381 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) (3/24/2021 4:36:29.381 PM)

Ch1 ± 0.288 dB

Ch2 ± 0.289 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

High Gain, 32 Ohm : Signal to Noise Ratio

Waveform: Sine

Generator Level: -12.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Low-pass Filter: 20 kHz

Weighting Filter: Signal Path

High-pass Filter: 20 Hz

Signal to Noise Ratio (3/24/2021 4:36:31.717 PM)

Ch1 101.414 dB

Ch2 101.401 dB

High Gain, 32 Ohm : THD+N

Waveform: Sine
 Generator Level: -18.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz
 Low-pass Filter: 20 kHz
 Weighting Filter: Signal Path
 High-pass Filter: 20 Hz
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (3/24/2021 4:36:34.802 PM)

Ch1 0.001783 %
 Ch2 0.001787 %

THD Ratio (3/24/2021 4:36:34.802 PM)

Ch1 0.000471 %
 Ch2 0.000440 %

Noise Ratio (3/24/2021 4:36:34.802 PM)

Ch1 0.001720 %
 Ch2 0.001725 %

Distortion Product Ratio (3/24/2021 4:36:34.802 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	-109.35	-114.69	-120.44	-125.15	-127.26	-125.64	-122.93	-124.34	-122.00
Ch2	-0.00	-111.52	-121.52	-115.58	-125.31	-124.75	-121.84	-119.88	-120.90	-120.86

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB

High Gain, 32 Ohm : IMD Level Sweep (CCIF)

IMD Type: CCIF

Waveform: IMD

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

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

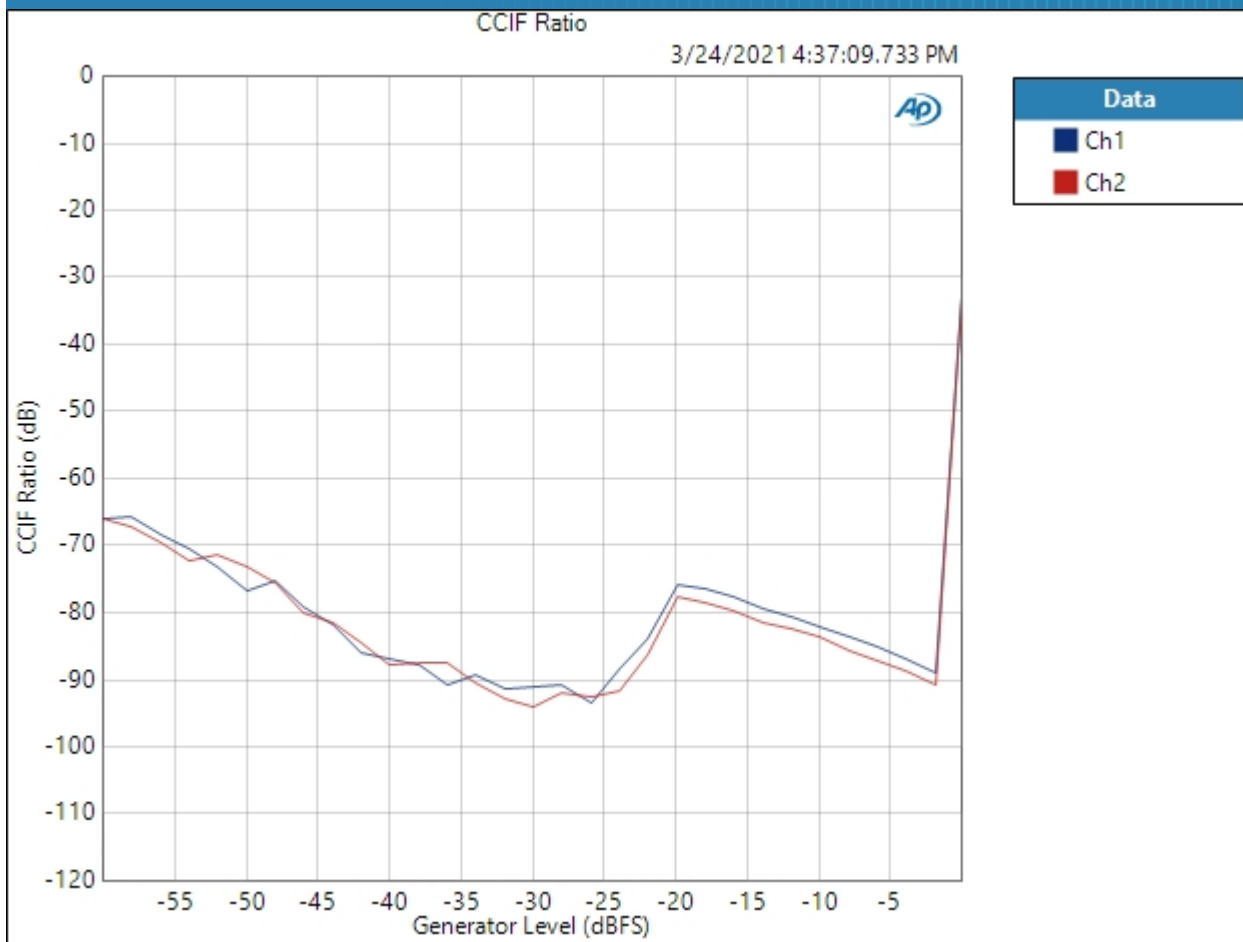
Number of Points: 31

Step Size: +2.000 dBFS

Mode: d2+d3

Measured 1 3/24/2021 4:37:09 PM

CCIF Ratio (3/24/2021 4:37:09.733 PM)

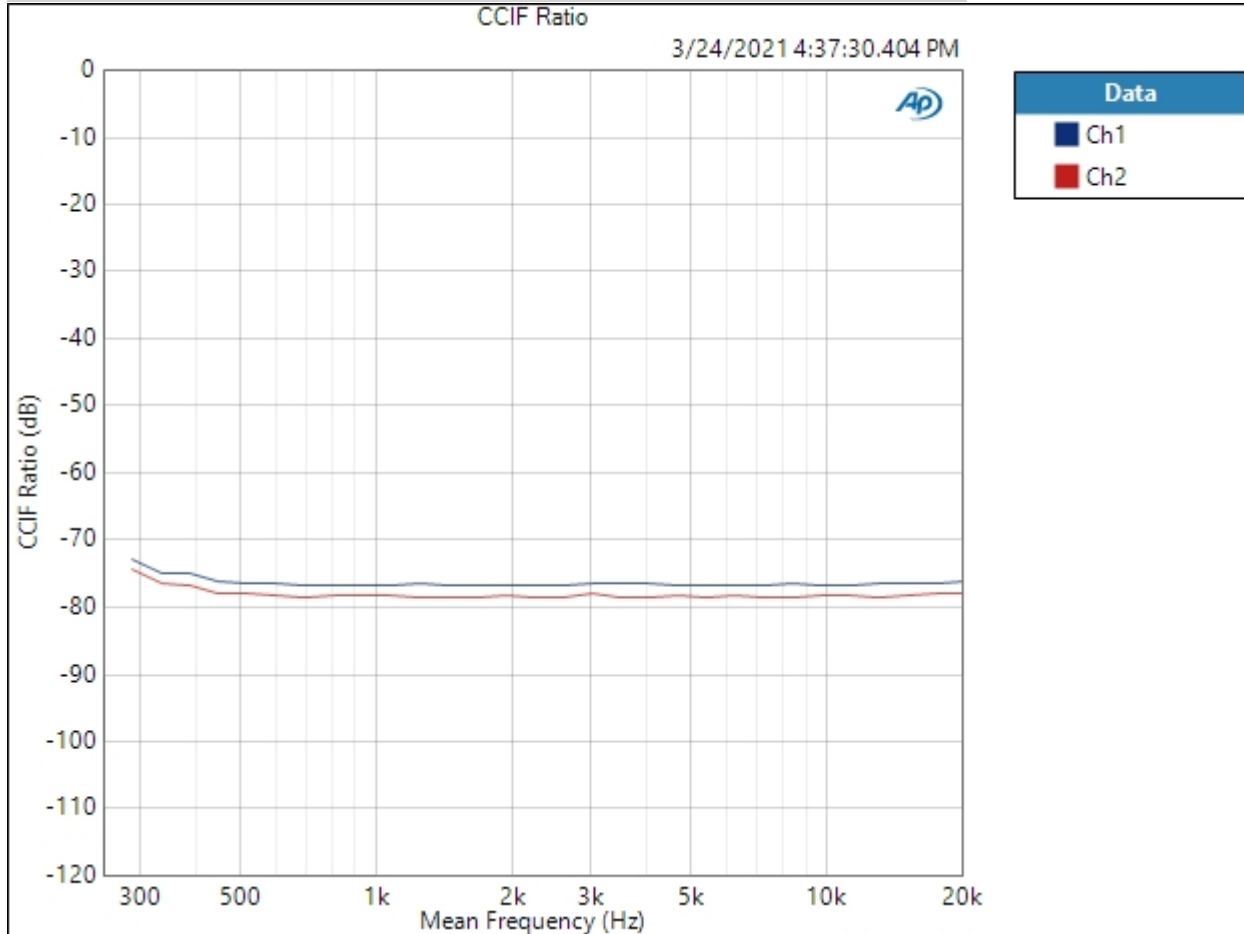


Result: PASSED

High Gain, 32 Ohm : IMD Frequency Sweep (CCIF)

Generator Level: -18.000 dBFS
 DC Offset: 0.000 D
 Sweep Frequency: Mean Frequency
 Mean Frequency: 12.5000 kHz
 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 3/24/2021 4:37:30 PM

CCIF Ratio (3/24/2021 4:37:30.404 PM)



Result:  PASSED

High Gain, 32 Ohm : Crosstalk, One Channel Undriven

Waveform: Sine
Generator Level: -18.000 dBFS
DC Offset: 0.000 D
Frequency: 10.0000 kHz

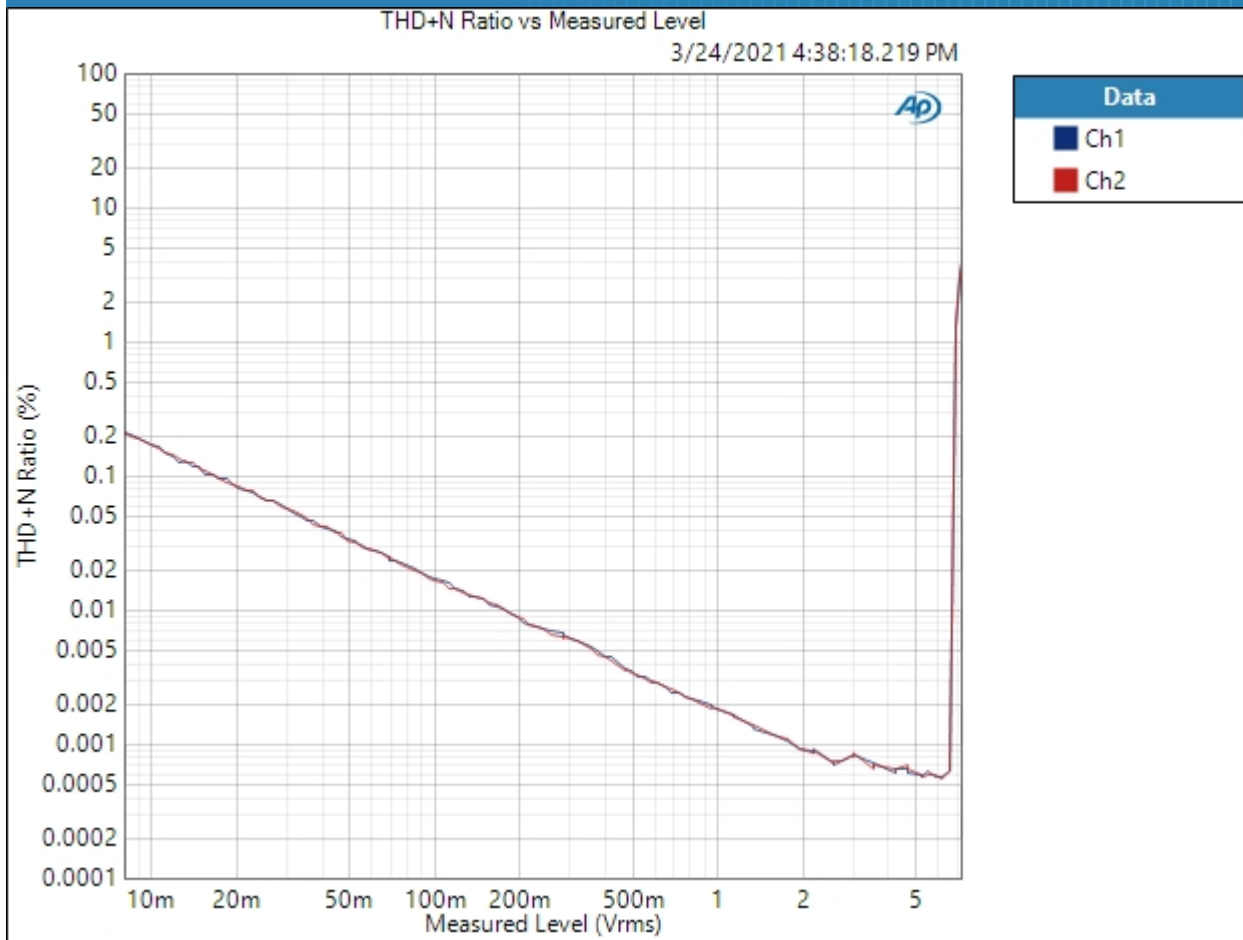
Crosstalk (3/24/2021 4:37:34.494 PM)

Ch1 -68.559 dB
Ch2 -68.437 dB

High Gain, 32 Ohm : Stepped Level Sweep

Waveform: Sine
Generator Level: -20.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Start Level: -60.000 dBFS
Stop Level: -0.000 dBFS
Step Type: Linear
Number of Points: 127
Step Size: +0.476 dBFS
Offset: 0.000 D
Low-pass Filter: 20 kHz
Weighting Filter: Signal Path
High-pass Filter: 20 Hz
Notch Tuning Mode: Generator Frequency
Measured 1 3/24/2021 4:38:18 PM

THD+N Ratio vs Measured Level (3/24/2021 4:38:18.219 PM)



Result: ✔ PASSED

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)
Output EQ:	None
Input Connector:	Analog Unbalanced
Channels:	2
Termination:	100 kohm
Input Bandwidth:	AC (<10 Hz) - 22.4k (48 kHz SR)
Device Delay:	0.000 s
Input EQ:	None

• References

dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
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: -2.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz

RMS Level (3/24/2021 4:40:50.238 PM)

Ch1 1.035 Vrms
Ch2 1.034 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

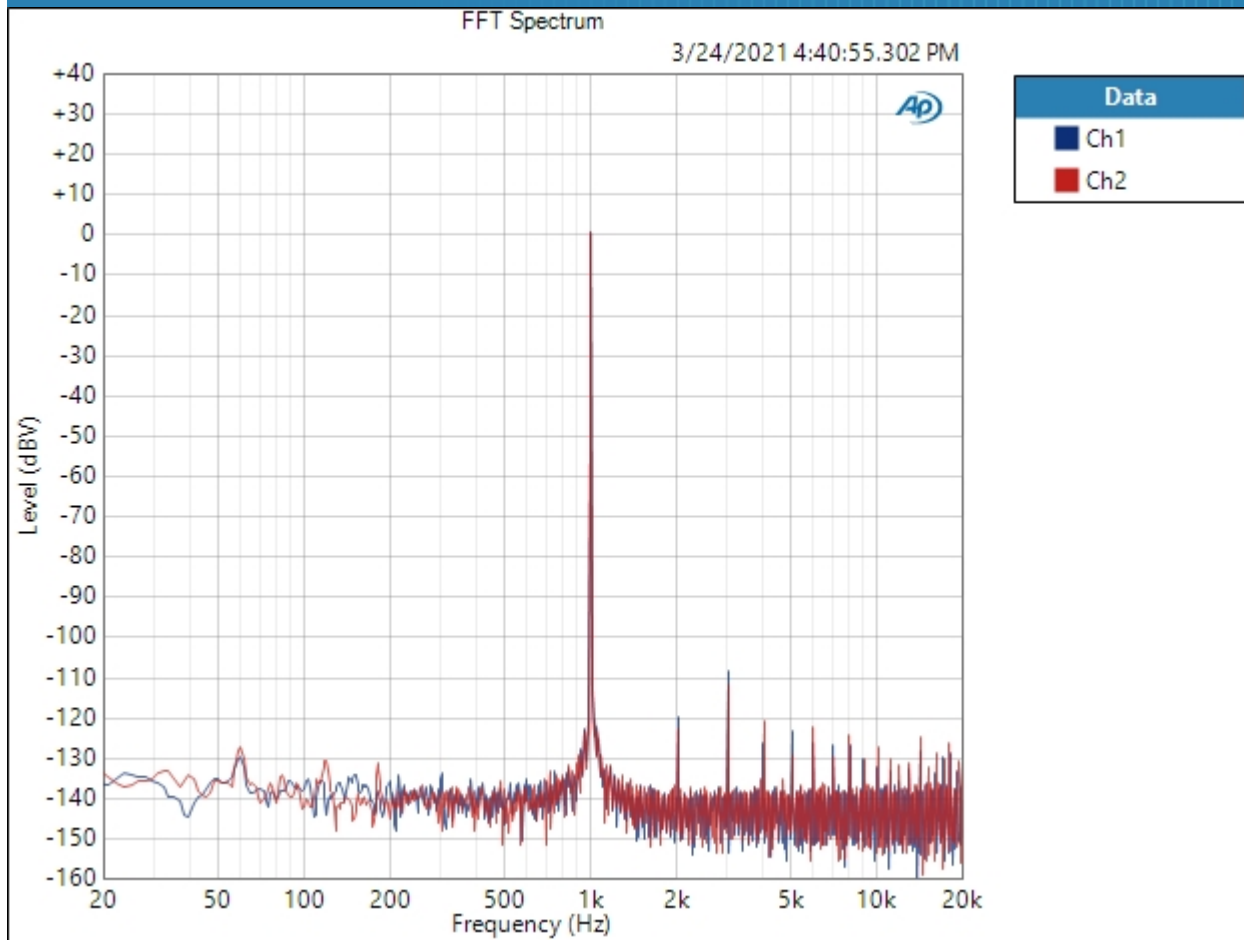
DC Level (3/24/2021 4:40:51.438 PM)

Ch1 -1.328 mV
Ch2 -2.403 mV

Optical : Signal Analyzer

Waveform: Sine
Generator Level: -2.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 3/24/2021 4:40:55 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 (3/24/2021 4:40:55.302 PM)

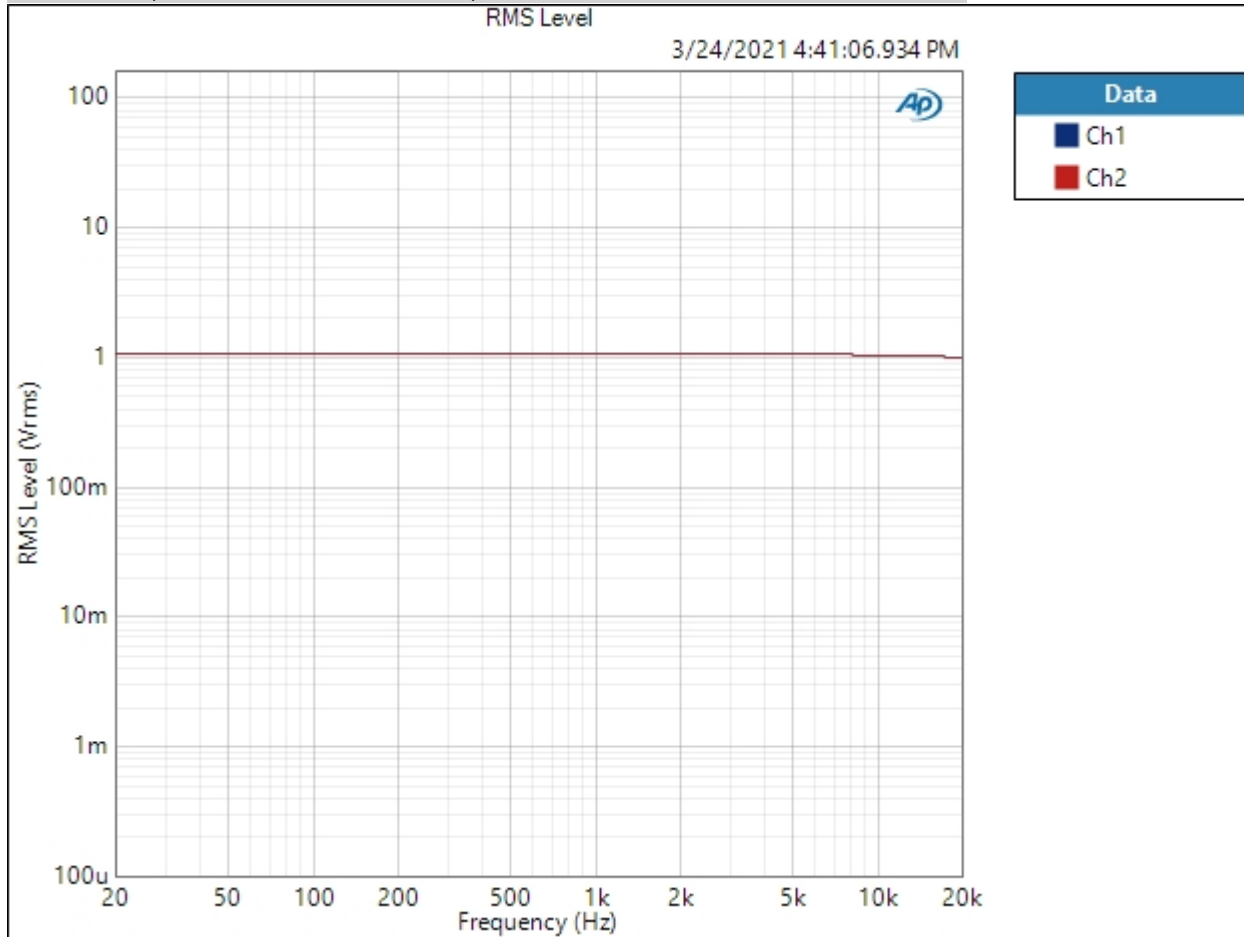


Result:  PASSED

Optical : Frequency Response

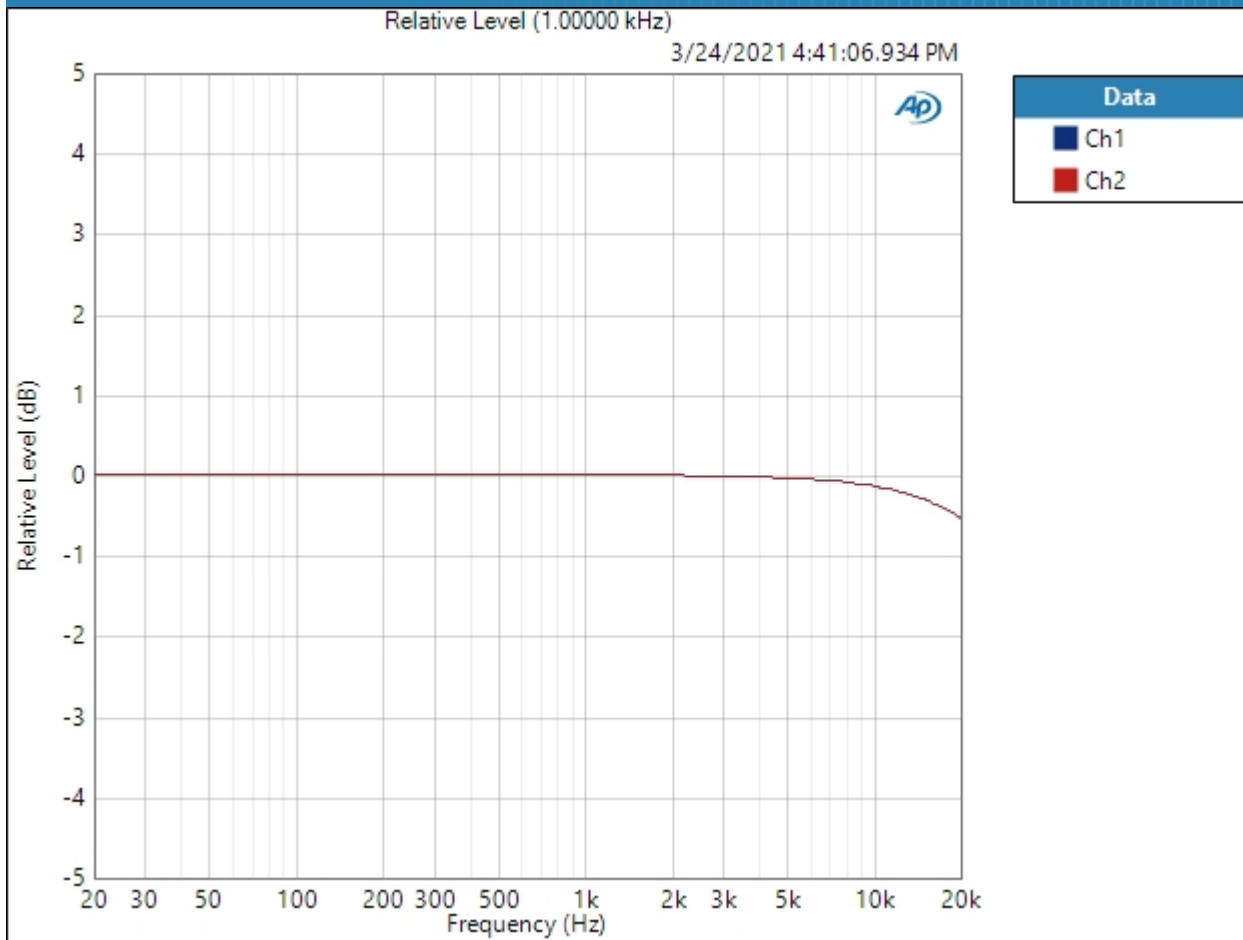
Start Frequency: 20.0000 Hz
 Stop Frequency: 20.0000 kHz
 Generator Level: -2.000 dBFS
 DC Offset: 0.000 D
 EQ: None
 Pre-Sweep: 200.0 ms
 Sweep: 2.000 s
 Extend Acquisition By: 3.000 s
 Secondary Source: None
 Measured 1 3/24/2021 4:41:06 PM

RMS Level (3/24/2021 4:41:06.934 PM)



Result: PASSED

Relative Level (1.00000 kHz) (3/24/2021 4:41:06.934 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) (3/24/2021 4:41:06.934 PM)

Ch1 ± 0.274 dB

Ch2 ± 0.276 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
Low-pass Filter: 20 kHz
Weighting Filter: Signal Path
High-pass Filter: 20 Hz

Signal to Noise Ratio (3/24/2021 4:41:09.336 PM)

Ch1 112.216 dB
Ch2 112.163 dB

Optical : THD+N

Waveform: Sine
 Generator Level: -2.000 dBFS
 DC Offset: 0.000 D
 Frequency: 1.00000 kHz
 Low-pass Filter: 20 kHz
 Weighting Filter: Signal Path
 High-pass Filter: 20 Hz
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (3/24/2021 4:41:11.636 PM)

Ch1 0.000690 %
 Ch2 0.000635 %

THD Ratio (3/24/2021 4:41:11.636 PM)

Ch1 0.000431 %
 Ch2 0.000321 %

Noise Ratio (3/24/2021 4:41:11.636 PM)

Ch1 0.000536 %
 Ch2 0.000554 %

Distortion Product Ratio (3/24/2021 4:41:11.636 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	-118.19	-108.30	-134.82	-124.46	-124.45	-124.50	-125.94	-128.43	-131.37
Ch2	-0.00	-123.06	-112.29	-127.89	-126.77	-119.91	-127.79	-122.82	-129.48	-125.72

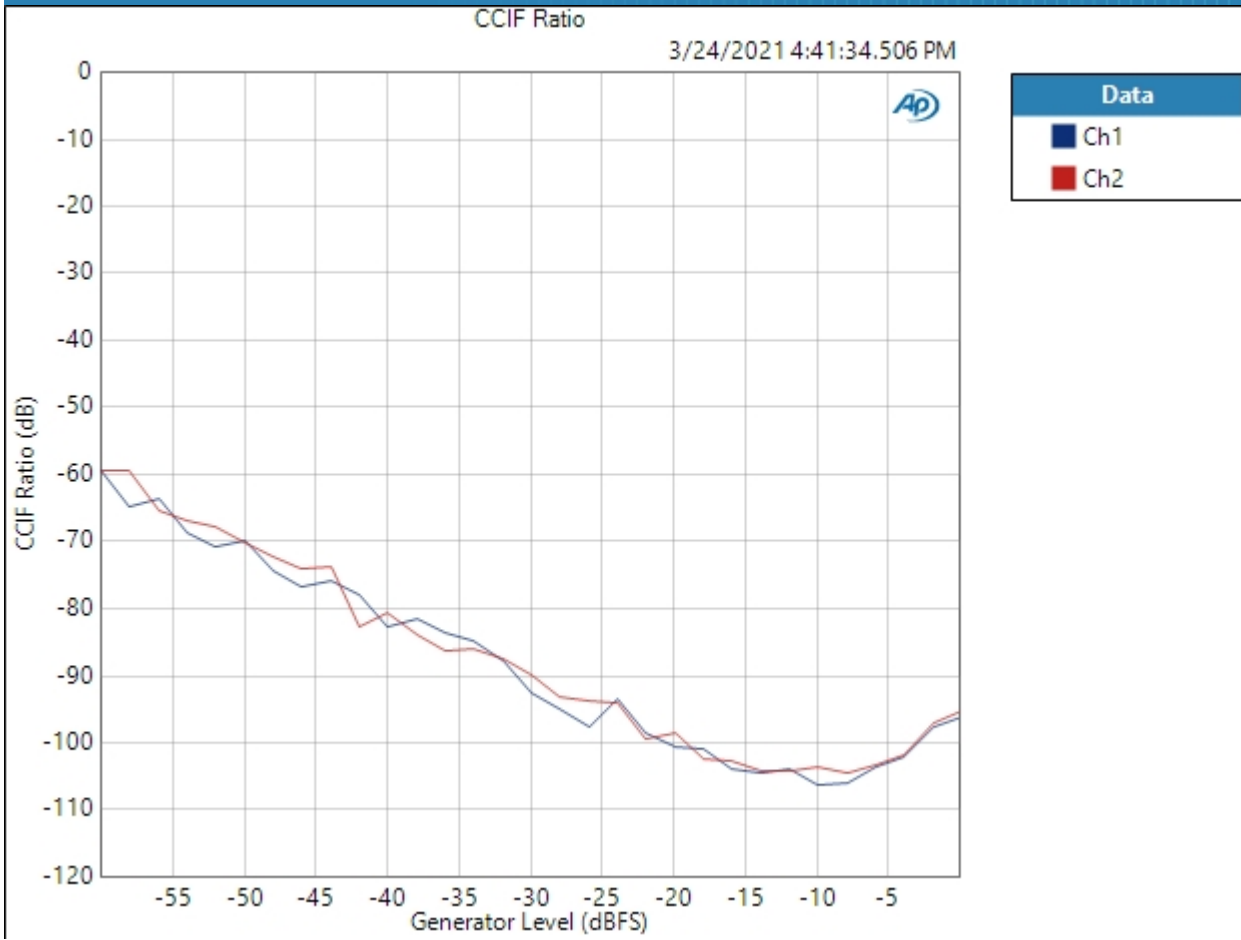
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB

Optical : IMD Level Sweep (CCIF)

IMD Type: CCIF
Waveform: IMD
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
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+d3
Measured 1 3/24/2021 4:41:34 PM

CCIF Ratio (3/24/2021 4:41:34.506 PM)



Result: PASSED

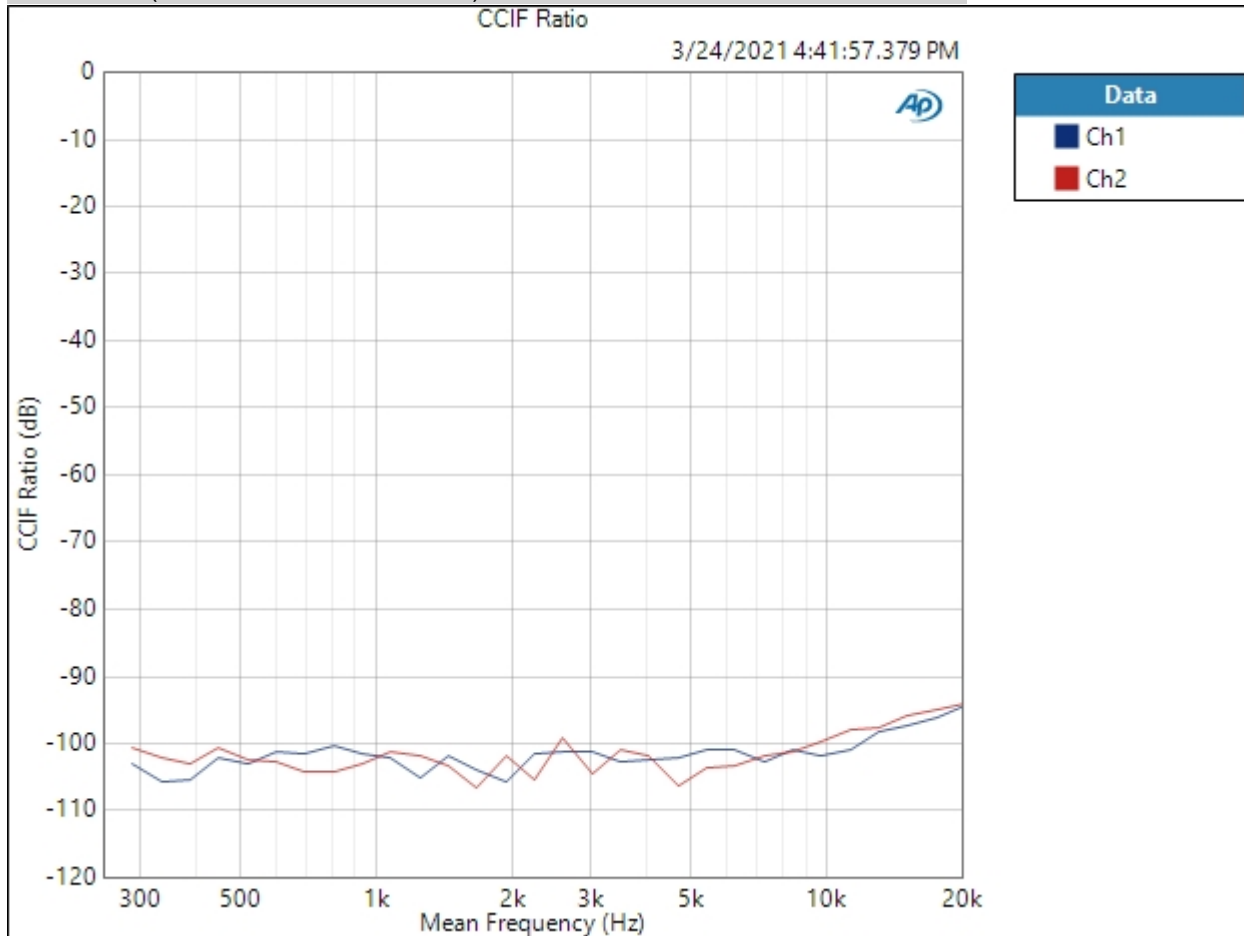
Schiit DAC APx Standard Test Suite: Hel 2



Optical : IMD Frequency Sweep (CCIF)

Generator Level: -2.000 dBFS
DC Offset: 0.000 D
Sweep Frequency: Mean Frequency
Mean Frequency: 12.5000 kHz
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 3/24/2021 4:41:57 PM

CCIF Ratio (3/24/2021 4:41:57.379 PM)



3/24/2021 4:44 PM

Result:  PASSED

Optical : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Level: -14.000 dBFS

DC Offset: 0.000 D

Frequency: 10.0000 kHz

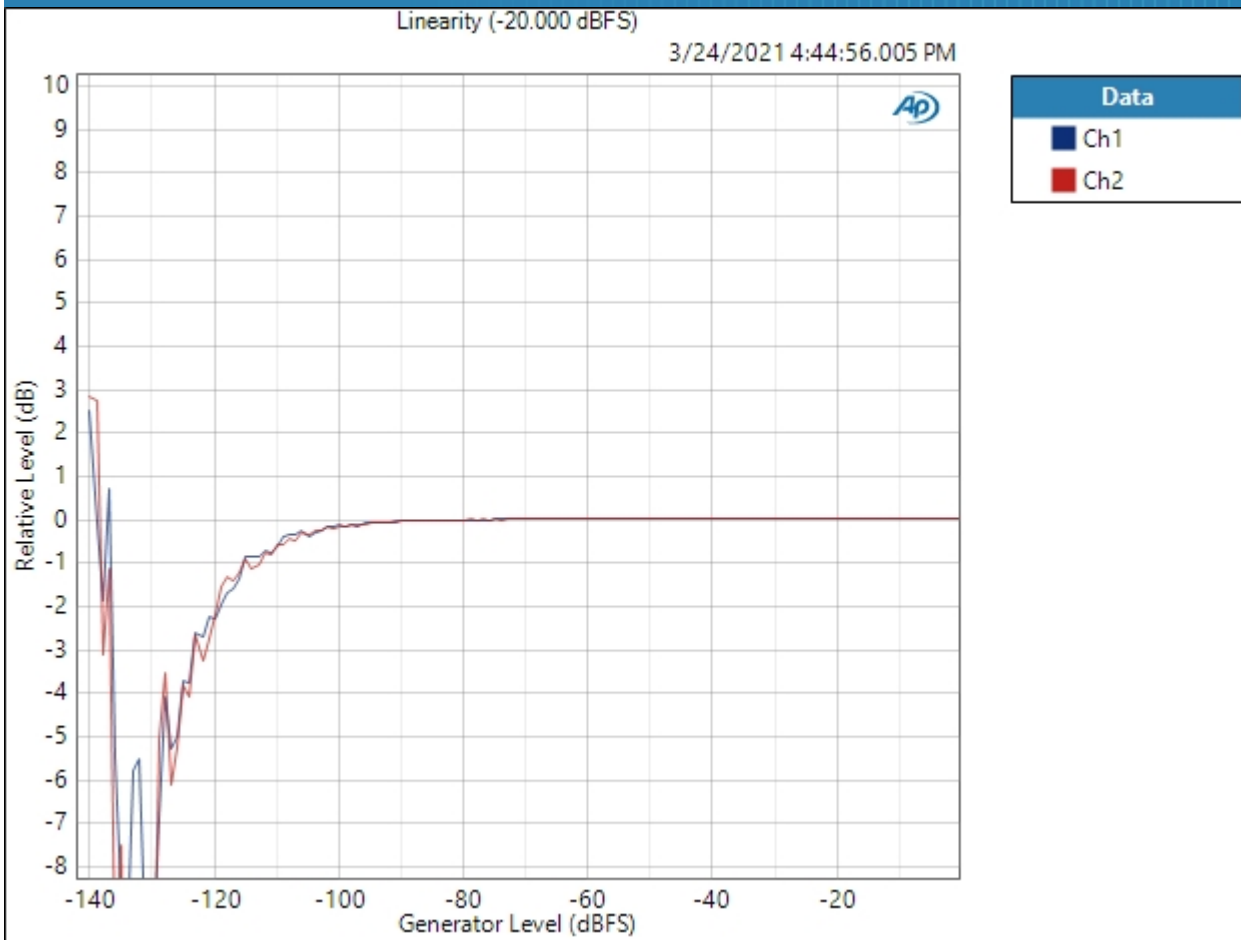
Crosstalk (3/24/2021 4:42:00.689 PM)

Ch1 -79.475 dB

Ch2 -82.124 dB

Optical : Bandpass Level Sweep

Waveform: Sine
Generator Level: -20.000 dBFS
DC Offset: 0.000 D
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 3/24/2021 4:44:56 PM
Linearity (-20.000 dBFS) (3/24/2021 4:44:56.005 PM)



Linearity (-20.000 dBFS) Parameters

Mode: Normalized at Reference

Relative Level: -20.000 dBFS

Result: PASSED