

Notes:

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.

APx Instrument

Instrument ID:	11571
Calibration Date:	5/8/2018
APx Version:	5.0.0.105.133644

Balanced : Signal Path Setup

Output Connector:	ASIO
Output Sample Rate:	48.0000 kHz
Output EQ:	None
Input Connector:	Analog Balanced
Channels:	2
Termination:	200 kohm
High Performance Sine Analyzer:	Enabled
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.	
• 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

Balanced : Level and Gain

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

RMS Level (10/8/2019 2:42:21.846 PM)

Ch1 4.292 Vrms
Ch2 4.286 Vrms

Balanced : 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

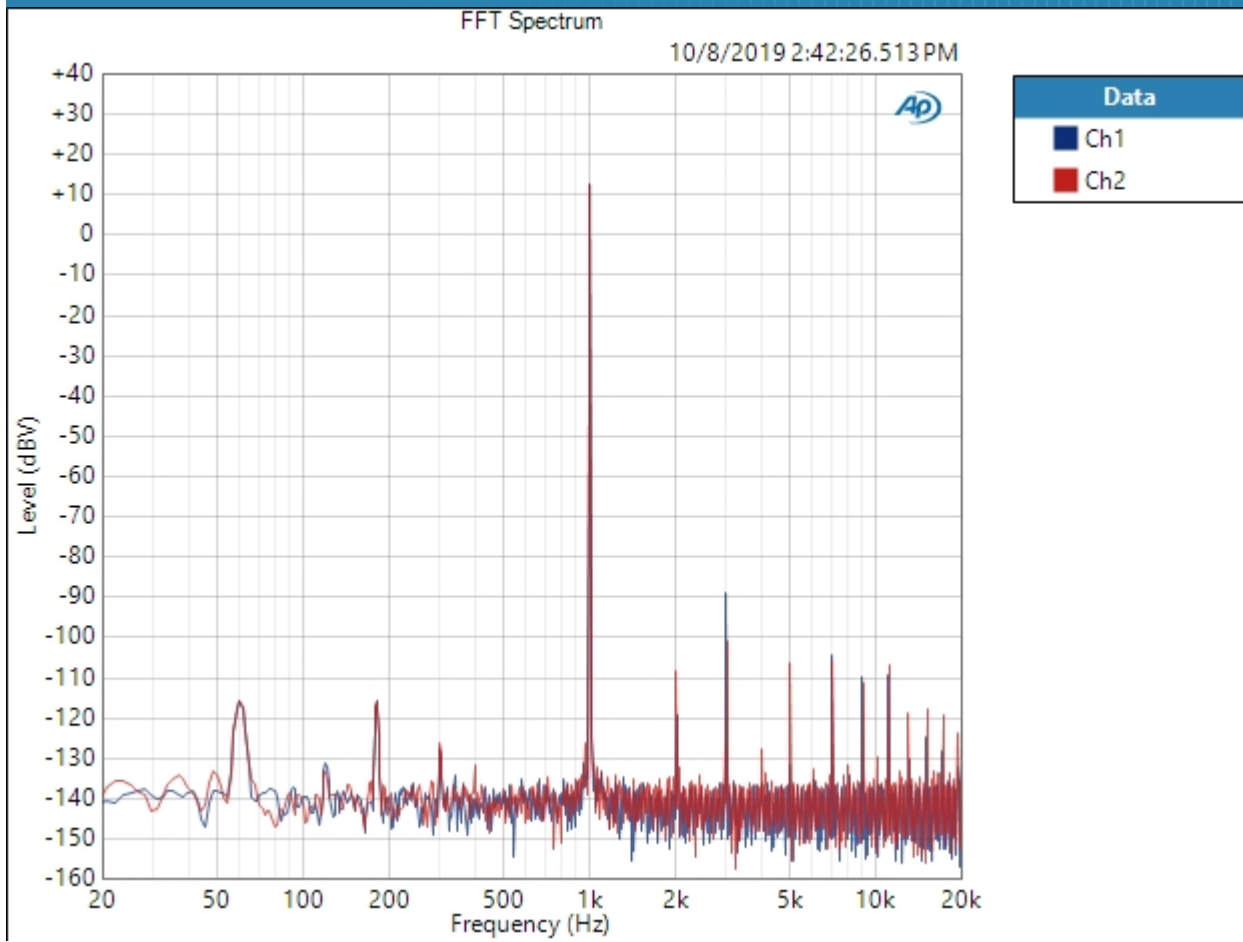
DC Level (10/8/2019 2:42:22.889 PM)

Ch1 2.547 mV
Ch2 3.290 mV

Balanced : Signal Analyzer 0dB

Waveform: Sine
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/8/2019 2:42:26 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 (10/8/2019 2:42:26.513 PM)

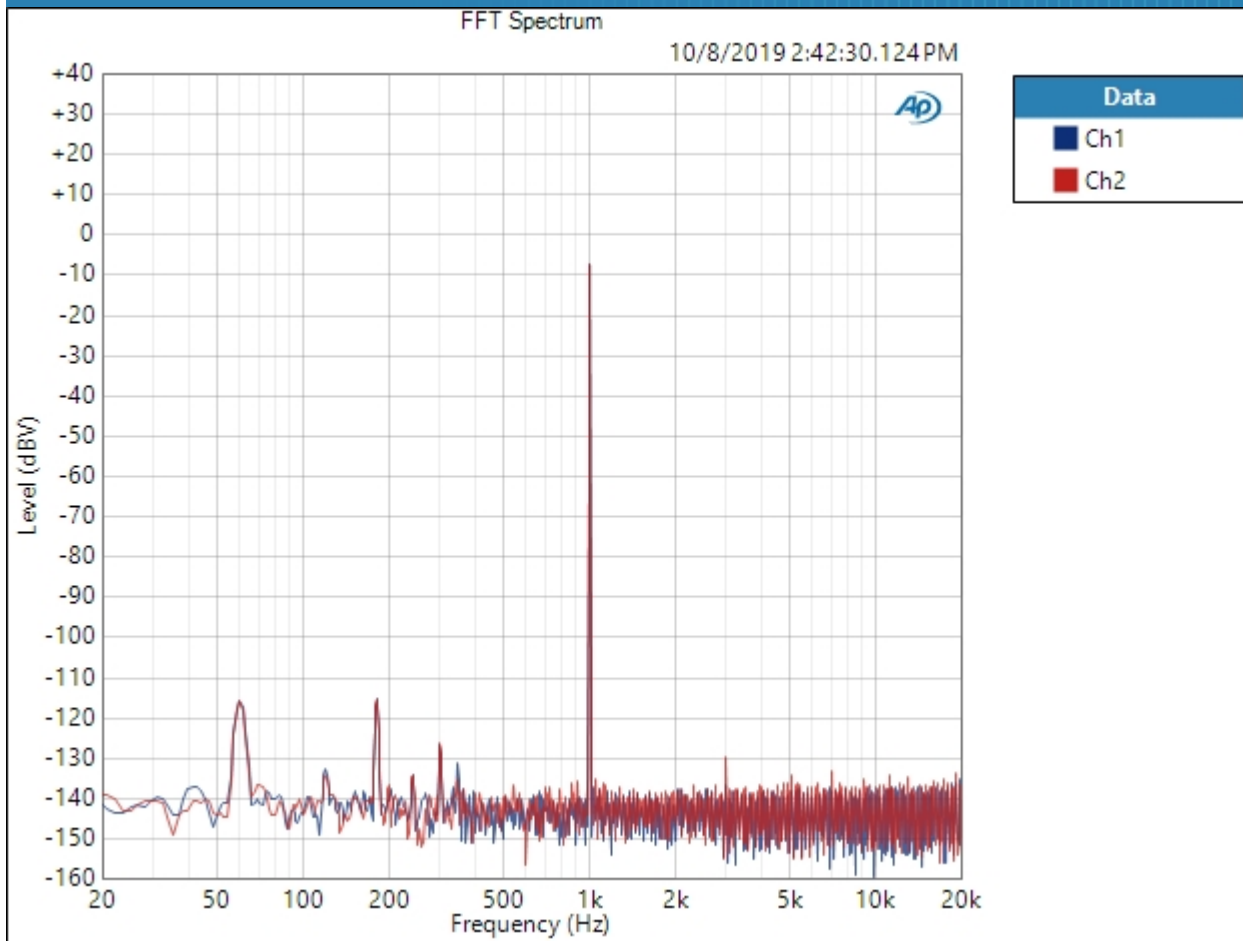


Result:  PASSED

Balanced : Signal Analyzer -20dB

Waveform: Sine
Generator Level: -20.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/8/2019 2:42:30 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 (10/8/2019 2:42:30.124 PM)

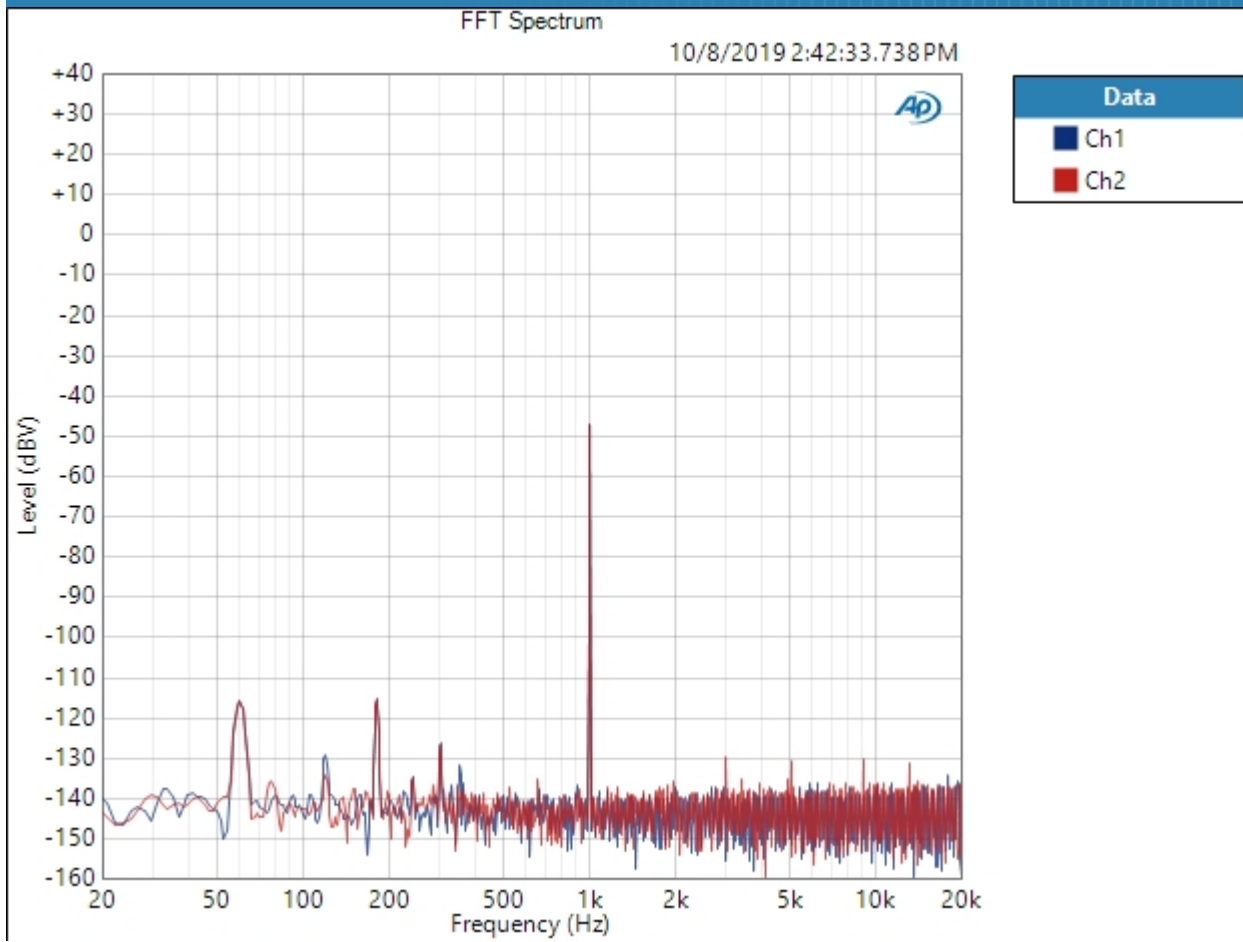


Result:  PASSED

Balanced : Signal Analyzer -60dB

Waveform: Sine
Generator Level: -60.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/8/2019 2:42:33 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 (10/8/2019 2:42:33.738 PM)

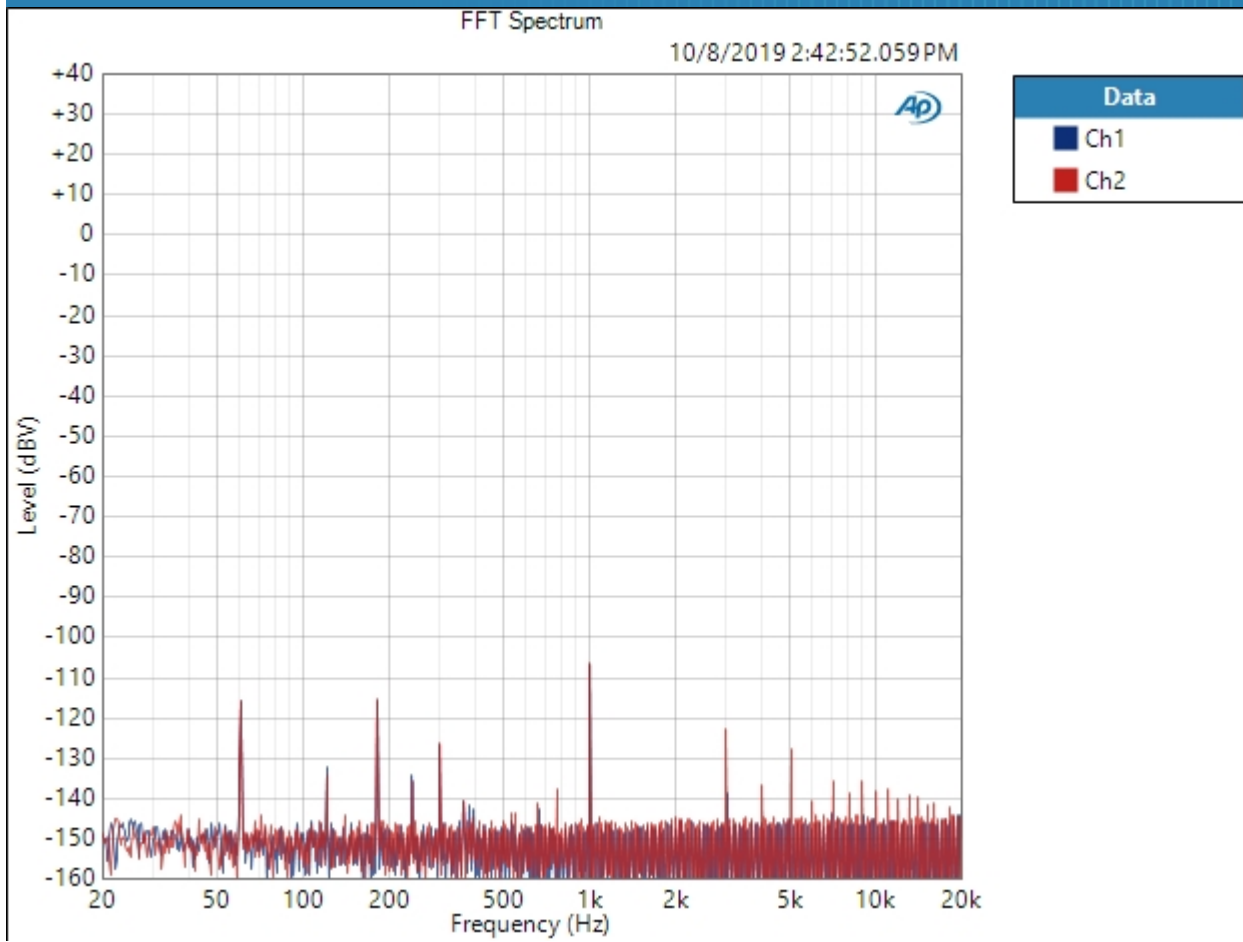


Result: PASSED

Balanced : Signal Analyzer -120dB

Waveform: Sine
Generator Level: -120.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/8/2019 2:42:52 PM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 256K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/8/2019 2:42:52.059 PM)

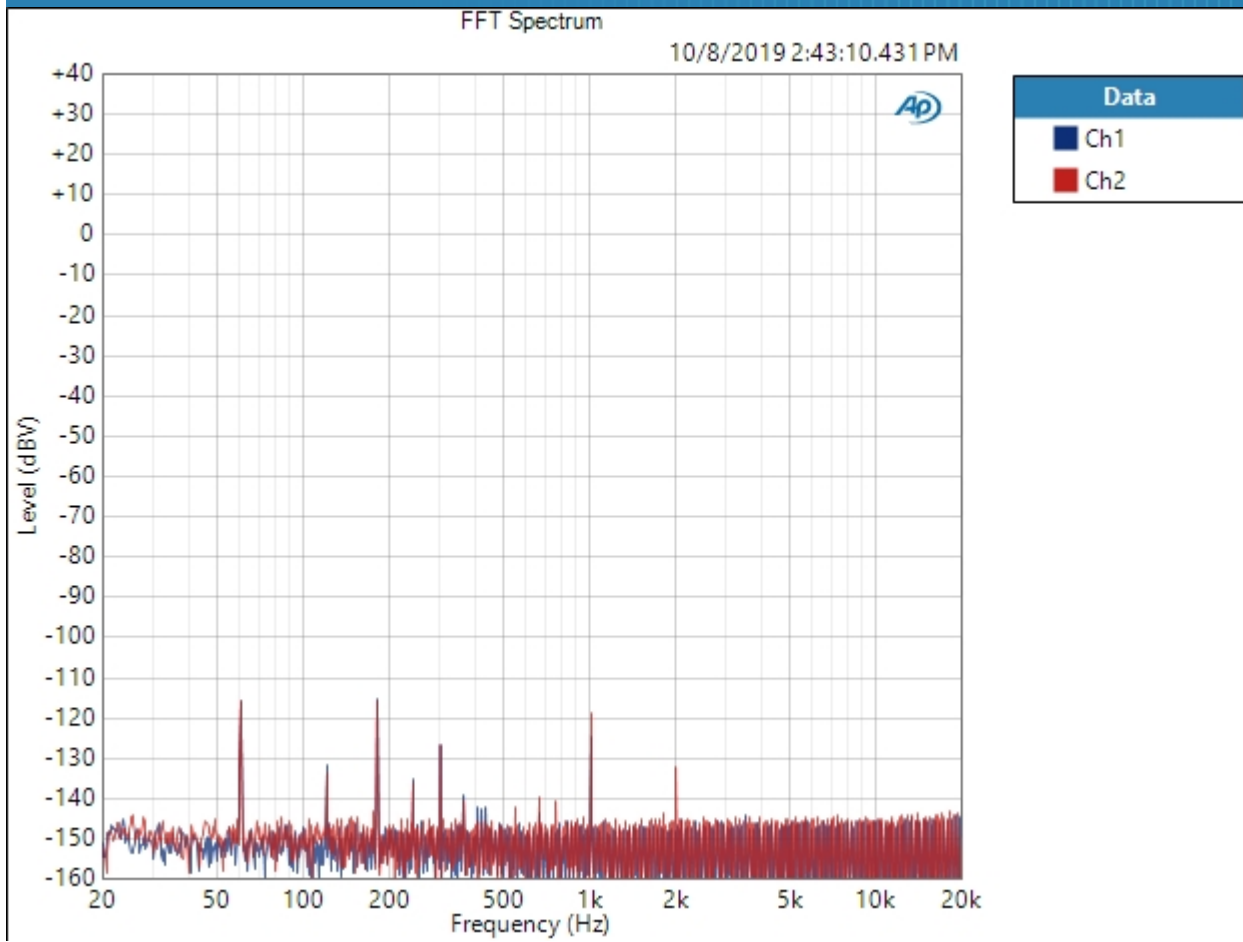


Result: PASSED

Balanced : Signal Analyzer -144dB

Waveform: Sine
Generator Level: -144.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/8/2019 2:43:10 PM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 256K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/8/2019 2:43:10.431 PM)

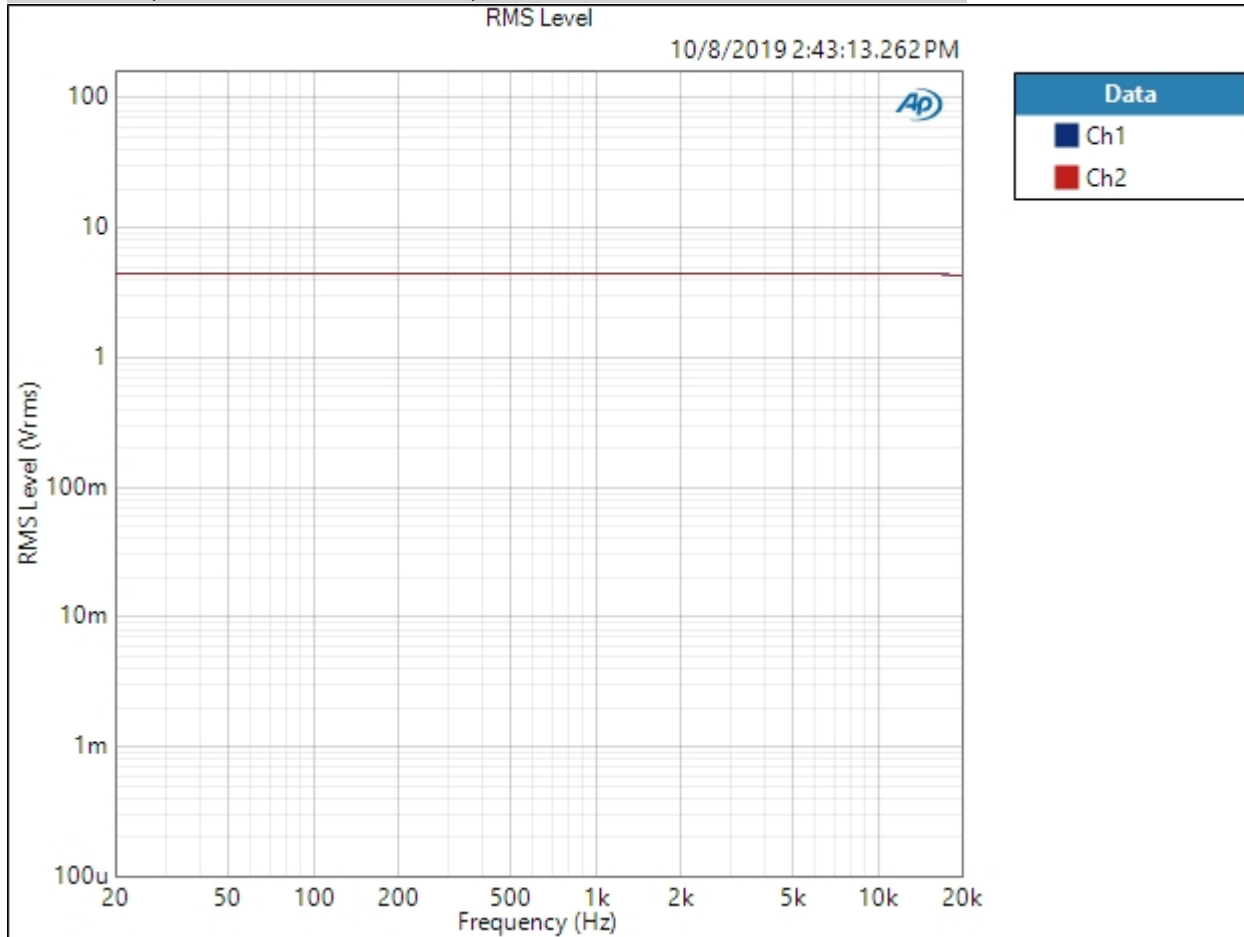


Result: PASSED

Balanced : 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: 500.0 ms
 Secondary Source: None
 Measured 1 10/8/2019 2:43:13 PM

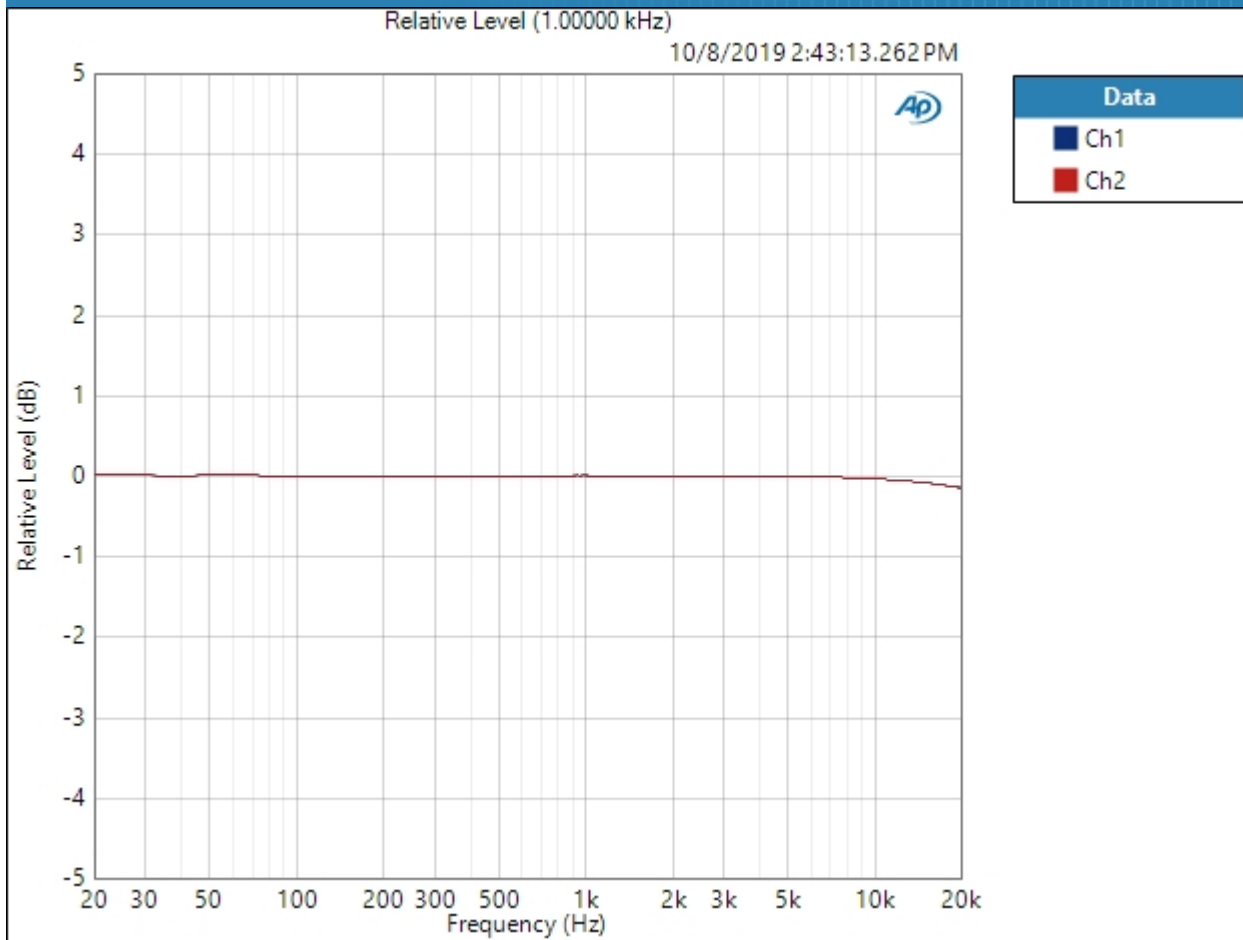
RMS Level (10/8/2019 2:43:13.262 PM)



Result: PASSED

Relative Level (1.00000 kHz) (10/8/2019 2:43:13.262 PM)

10/8/2019 2:51 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) (10/8/2019 2:43:13.262 PM)

Ch1 ± 0.088 dB

Ch2 ± 0.089 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Balanced : 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 (10/8/2019 2:43:15.145 PM)

Ch1 117.275 dB

Ch2 116.530 dB

Balanced : THD+N

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
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (10/8/2019 2:43:17.501 PM)

Ch1 0.000823 %
 Ch2 0.000329 %

THD Ratio (10/8/2019 2:43:17.501 PM)

Ch1 0.000813 %
 Ch2 0.000288 %

Noise Ratio (10/8/2019 2:43:17.501 PM)

Ch1 0.000147 %
 Ch2 0.000172 %

Distortion Product Ratio (10/8/2019 2:43:17.501 PM)

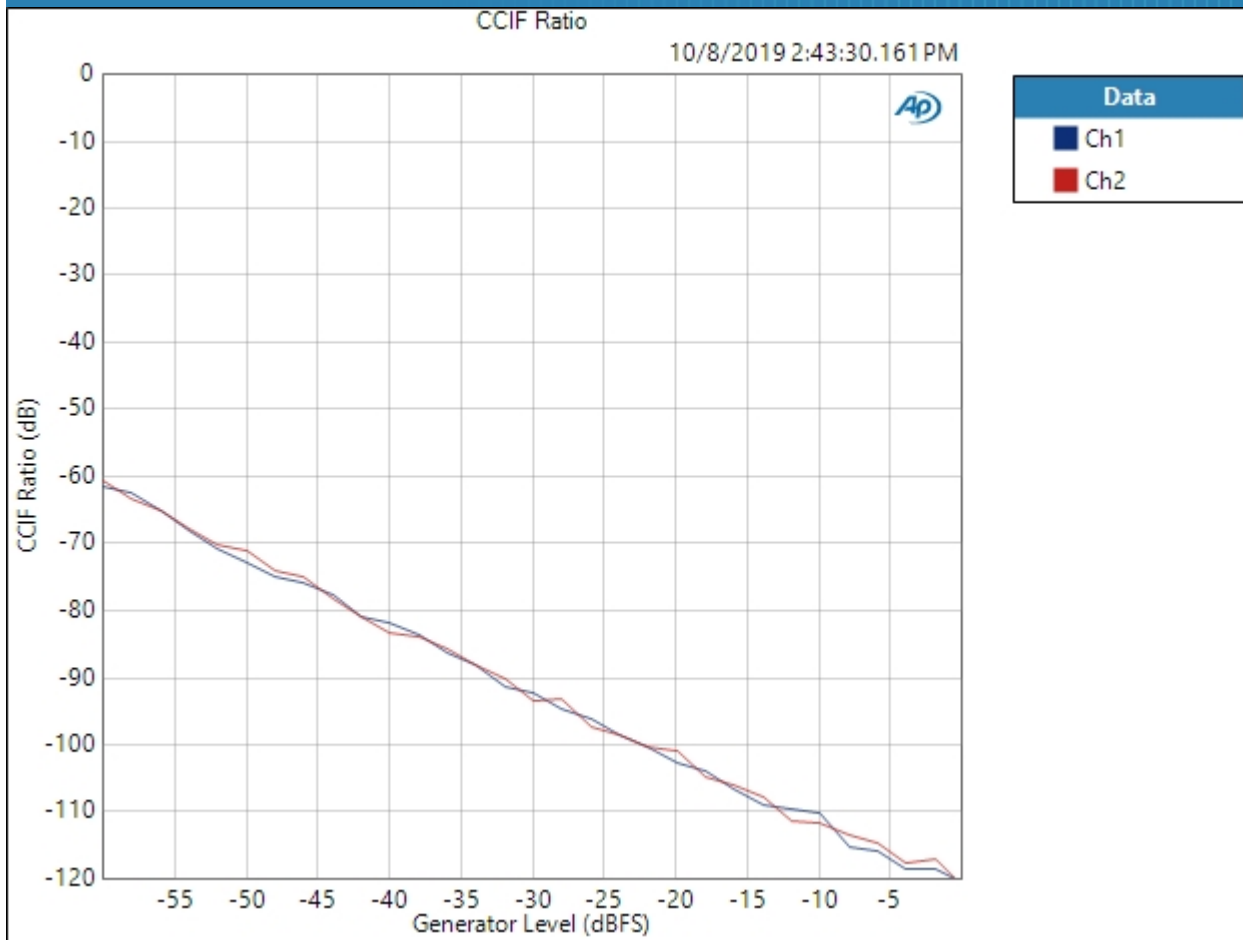
Channel	F	H2	H3	H4	H5	H6	H7	H8	H9	H10
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch1	-0.00	-132.29	-102.03	-144.75	-134.79	-144.75	-116.60	-143.21	-123.72	-148.43
Ch2	-0.00	-120.74	-114.96	-135.46	-119.16	-141.63	-117.61	-138.65	-127.29	-143.46

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB

Balanced : 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
Measured 1 10/8/2019 2:43:30 PM

CCIF Ratio (10/8/2019 2:43:30.161 PM)

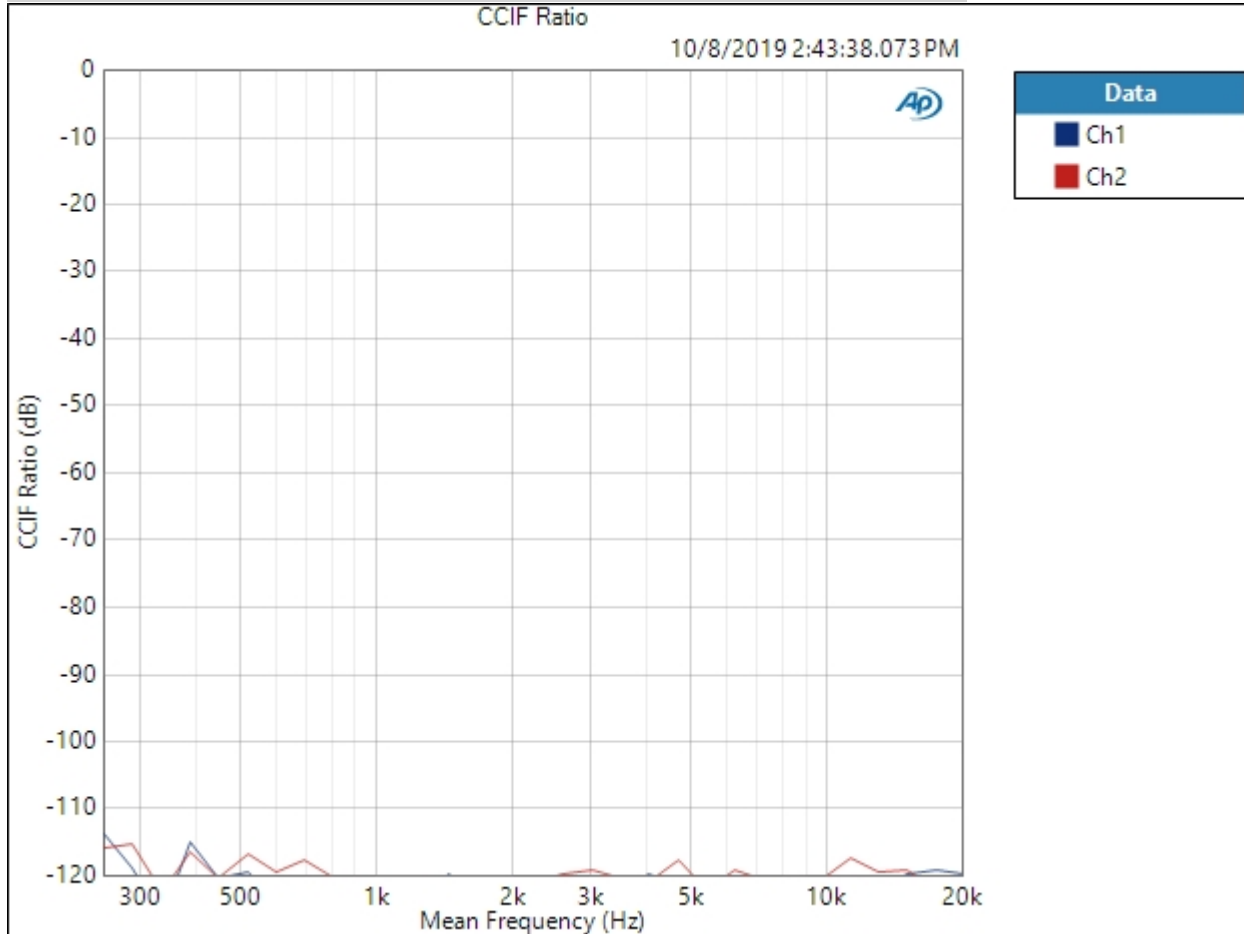


Result: PASSED

Balanced : IMD Frequency Sweep (CCIF)

Generator Level: -0.000 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
 Measured 1 10/8/2019 2:43:38 PM

CCIF Ratio (10/8/2019 2:43:38.073 PM)



Result:  PASSED

Balanced : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Frequency: 10.0000 kHz

Crosstalk (10/8/2019 2:43:40.104 PM)

Ch1 -114.004 dB

Ch2 -102.220 dB

Balanced : Crosstalk Sweep, One Channel Driven

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Start Frequency: 20.0000 kHz

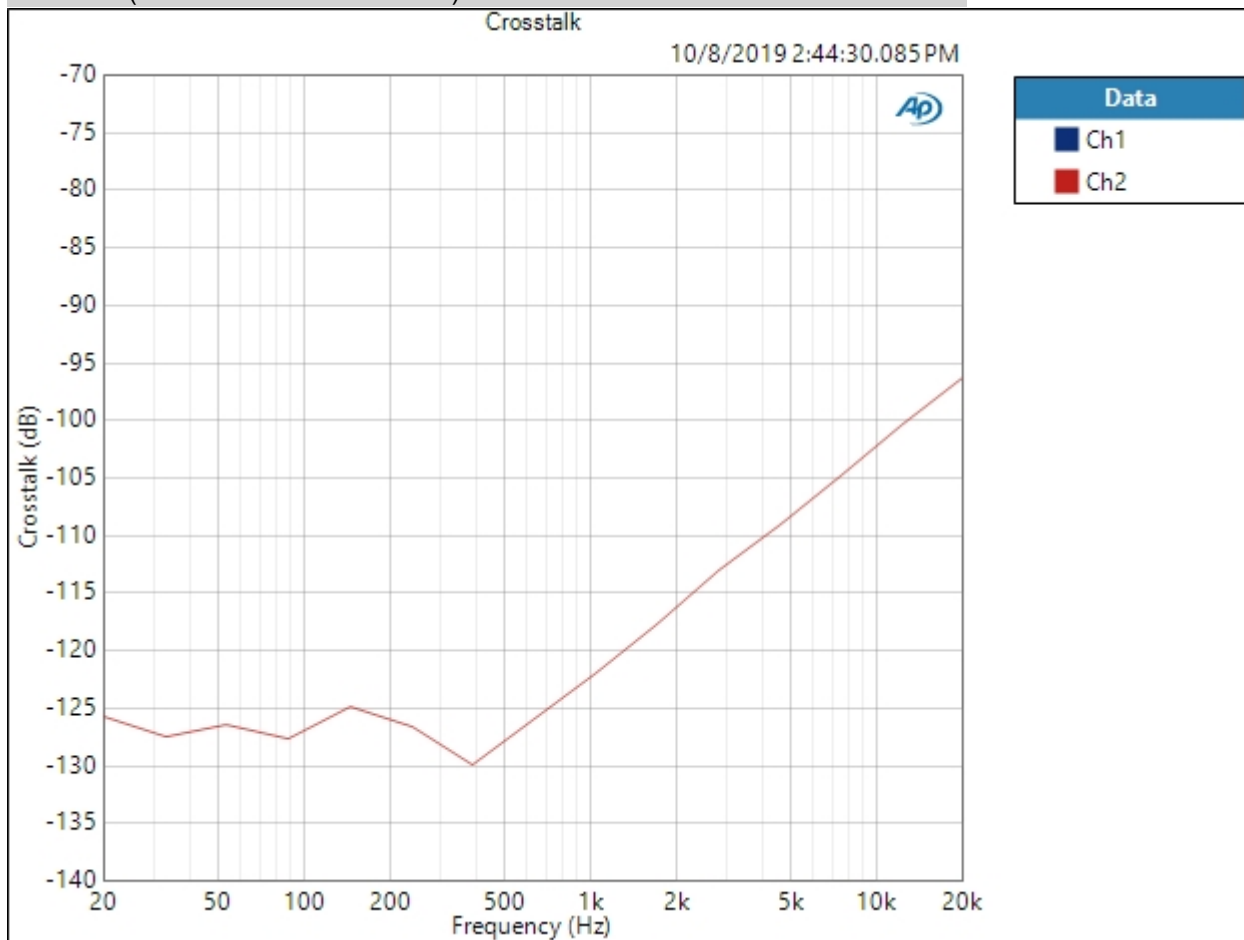
Stop Frequency: 20.0000 Hz

Step Type: Logarithmic

Number of Points: 15

Measured 1 10/8/2019 2:44:30 PM

Crosstalk (10/8/2019 2:44:30.085 PM)



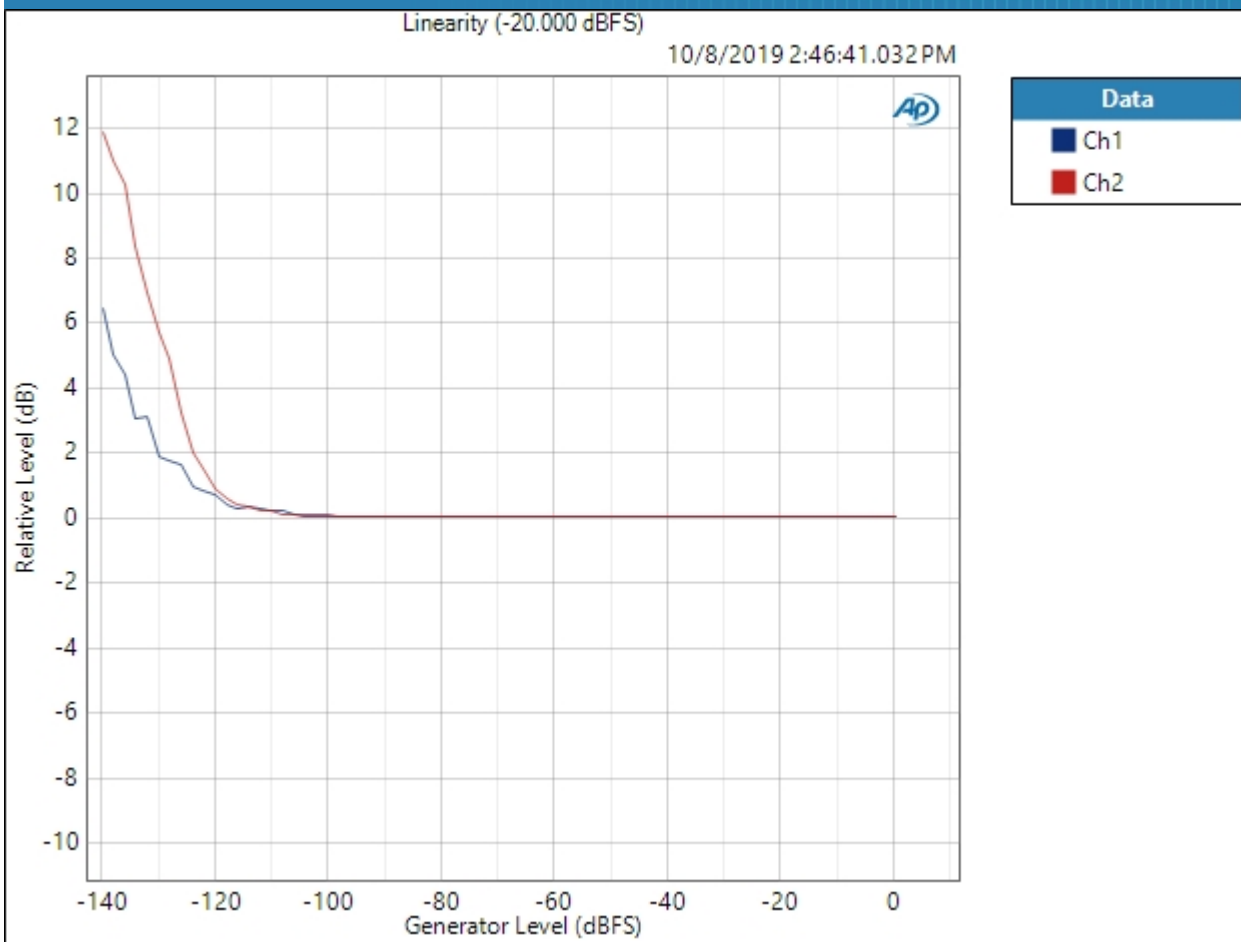
Crosstalk Parameters

Source: Ch1

Result: PASSED

Balanced : 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: 71
Step Size: +2.000 dBFS
Offset: 0.000 D
Selectivity: Window width
Bandpass Tuning Mode: Generator Frequency
Measured 1 10/8/2019 2:46:41 PM
Linearity (-20.000 dBFS) (10/8/2019 2:46:41.032 PM)



Linearity (-20.000 dBFS) Parameters

Mode: Normalized at Reference

Relative Level: -20.000 dBFS

Result: PASSED

Single Ended : Signal Path Setup

Output Connector:	ASIO
Output Sample Rate:	48.0000 kHz
Output EQ:	None
Input Connector:	Analog Unbalanced
Channels:	2
Termination:	100 kohm
High Performance Sine Analyzer:	Enabled
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.	
• 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

Single Ended : Level and Gain

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

RMS Level (10/8/2019 2:46:47.325 PM)

Ch1 1.937 Vrms
Ch2 1.934 Vrms

Single Ended : 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

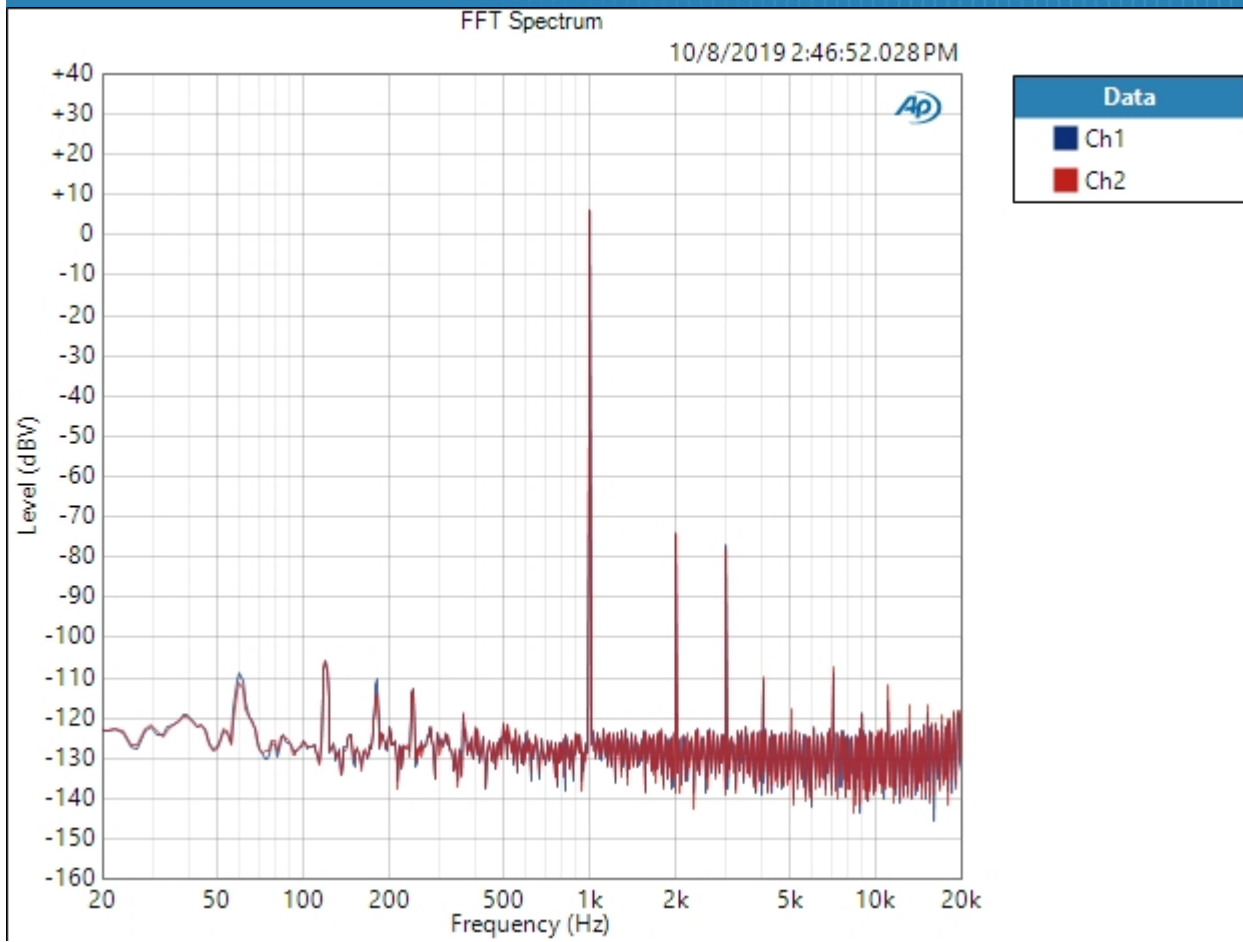
DC Level (10/8/2019 2:46:48.383 PM)

Ch1 -1.966 mV
Ch2 -1.376 mV

Single Ended : Signal Analyzer 0dB

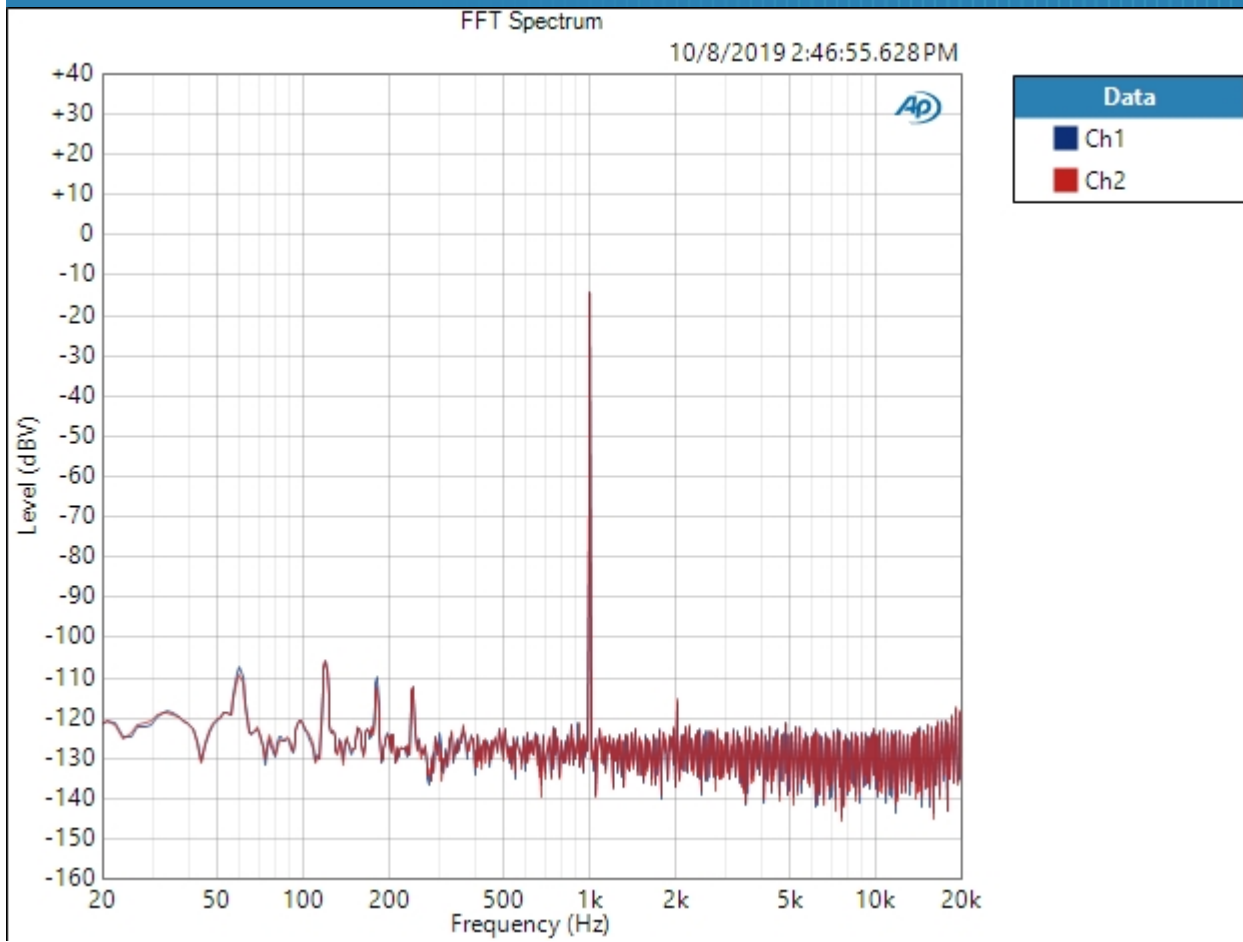
Waveform: Sine
Generator Level: -0.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/8/2019 2:46:52 PM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/8/2019 2:46:52.028 PM)



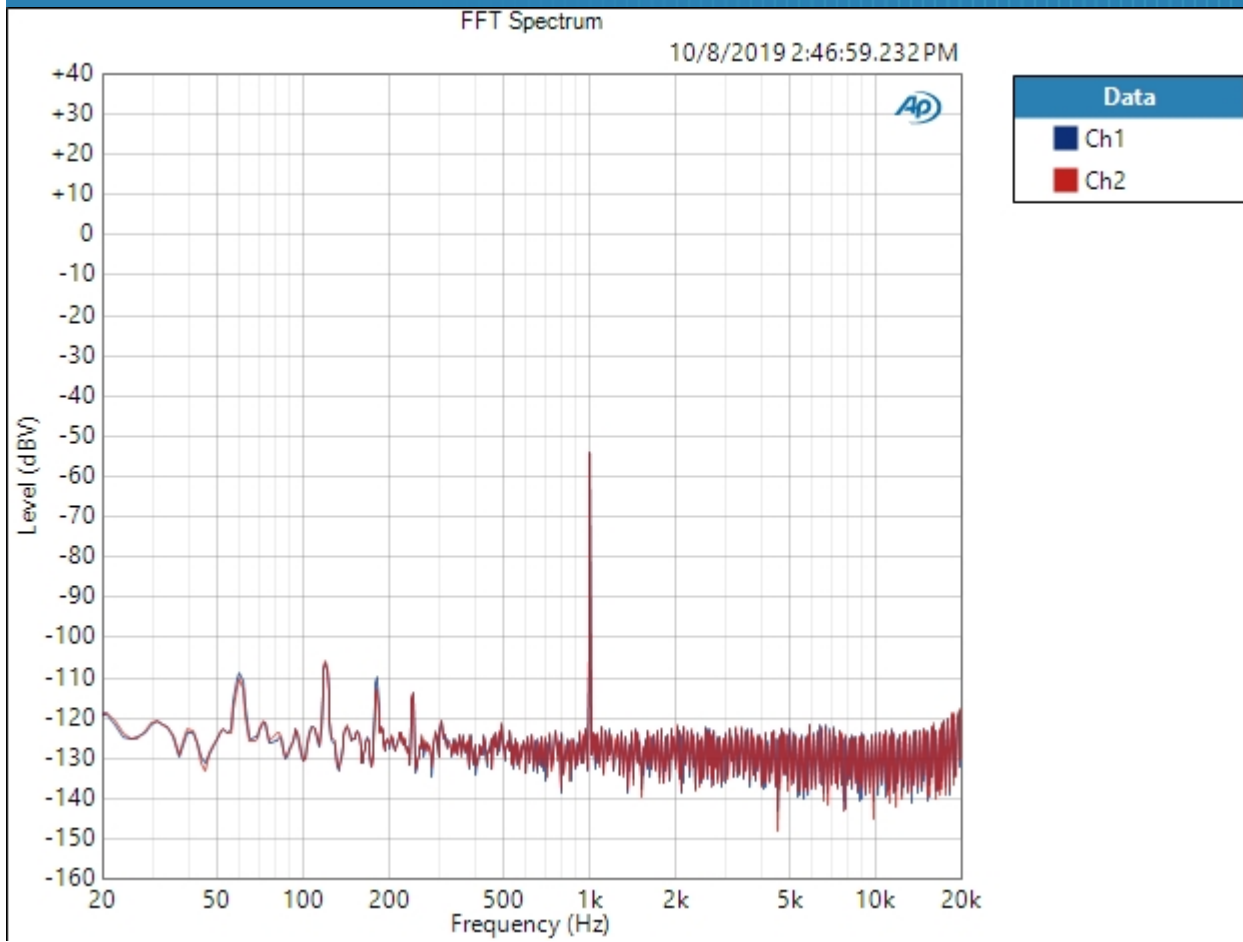
Result:  PASSED

Single Ended : Signal Analyzer -20dB
Waveform: Sine
Generator Level: -20.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/8/2019 2:46:55 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 (10/8/2019 2:46:55.628 PM)



Result:  PASSED

Single Ended : Signal Analyzer -60dB
Waveform: Sine
Generator Level: -60.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/8/2019 2:46:59 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 (10/8/2019 2:46:59.232 PM)

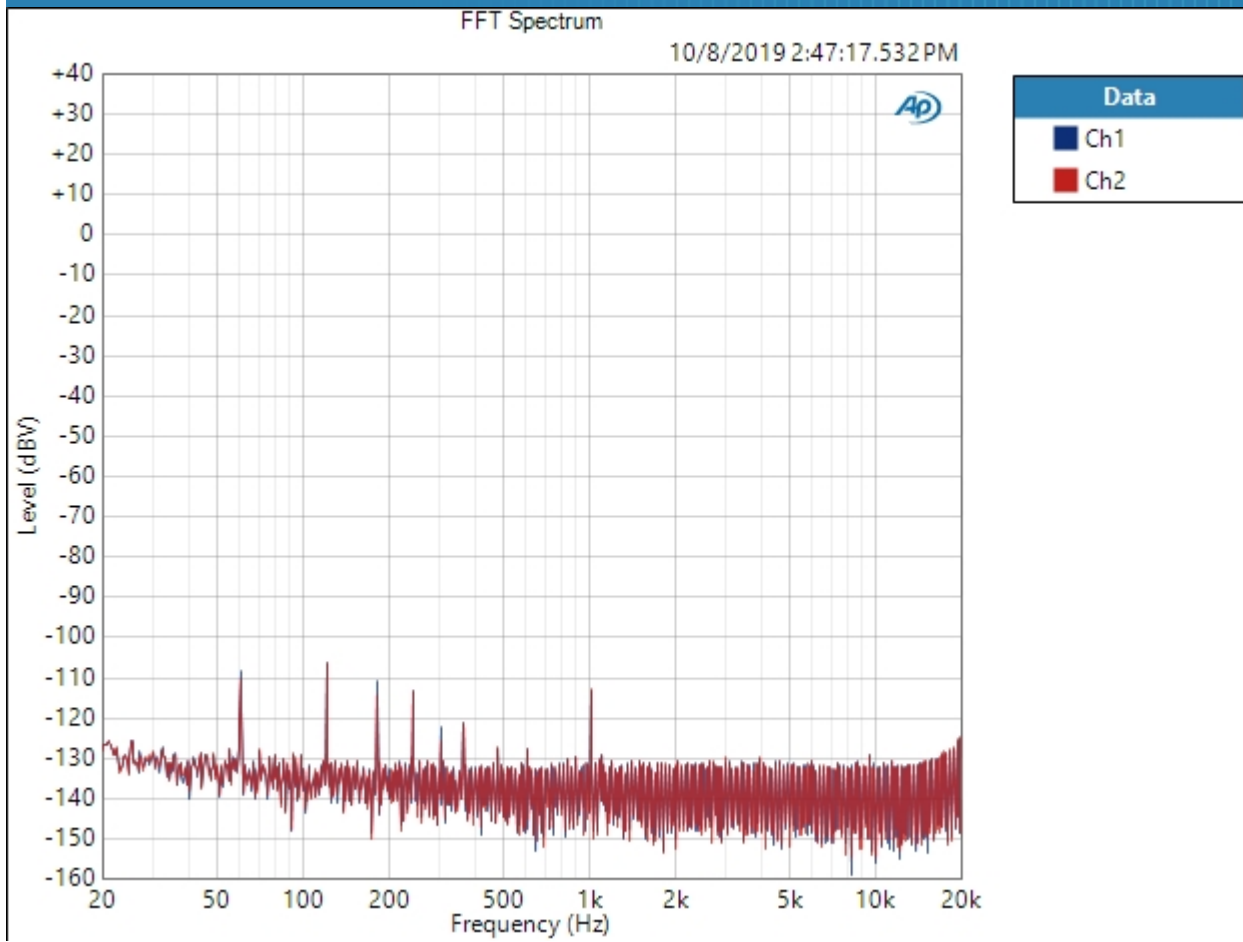


Result:  PASSED

Single Ended : Signal Analyzer -120dB

Waveform: Sine
Generator Level: -120.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/8/2019 2:47:17 PM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 256K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/8/2019 2:47:17.532 PM)

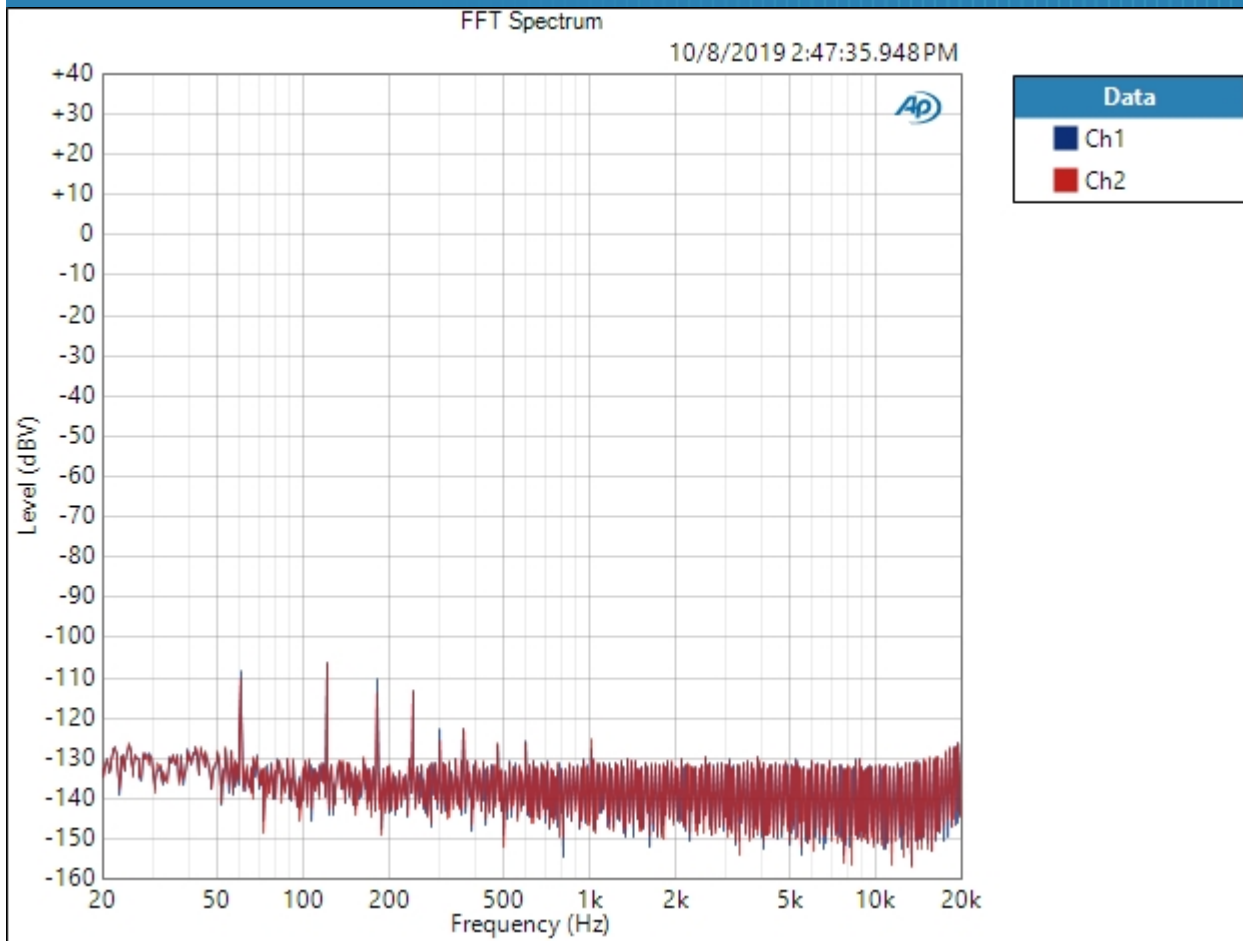


Result: PASSED

Single Ended : Signal Analyzer -144dB

Waveform: Sine
Generator Level: -144.000 dBFS
DC Offset: 0.000 D
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 10/8/2019 2:47:35 PM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 256K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (10/8/2019 2:47:35.948 PM)

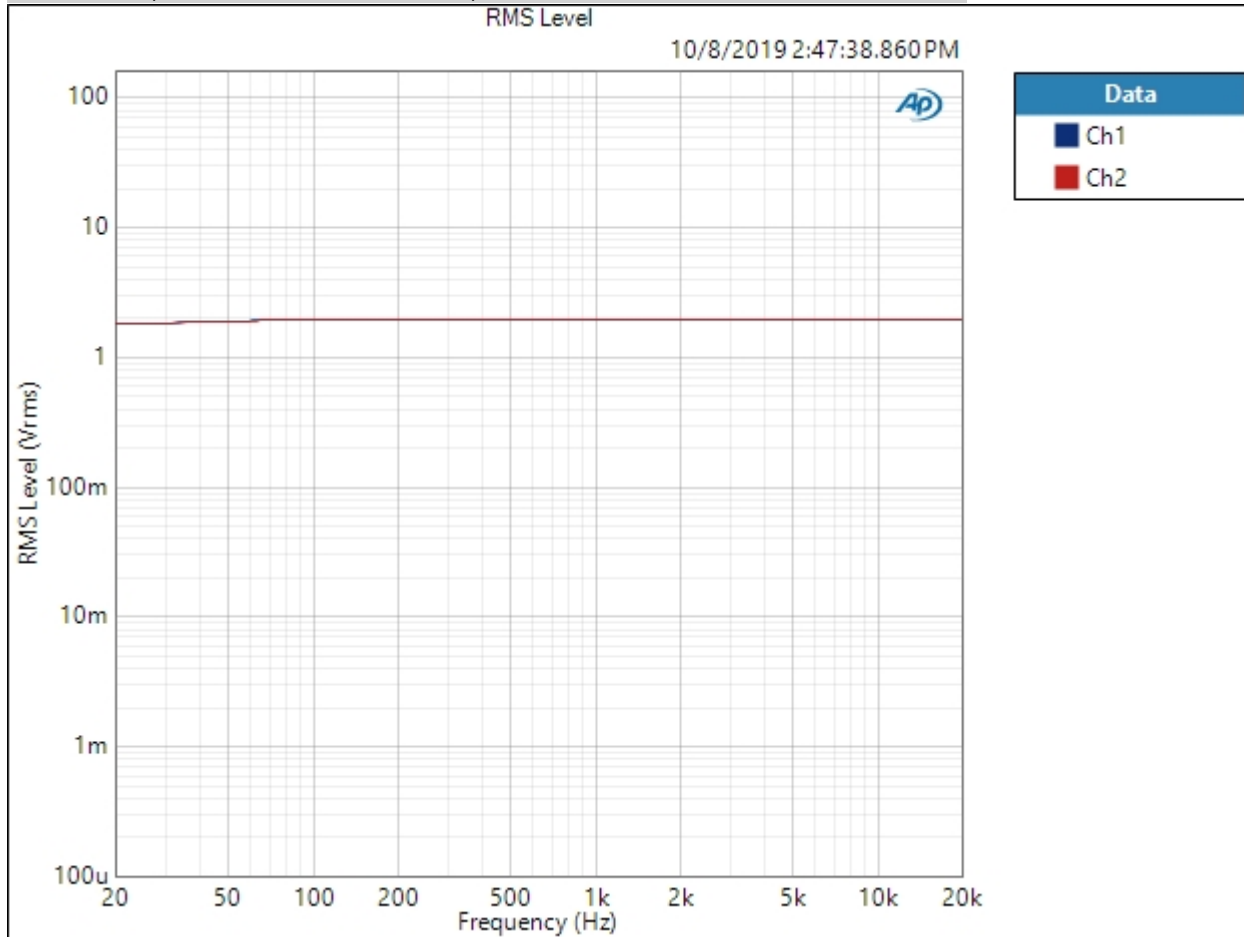


Result: PASSED

Single Ended : 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: 500.0 ms
 Secondary Source: None
 Measured 1 10/8/2019 2:47:38 PM

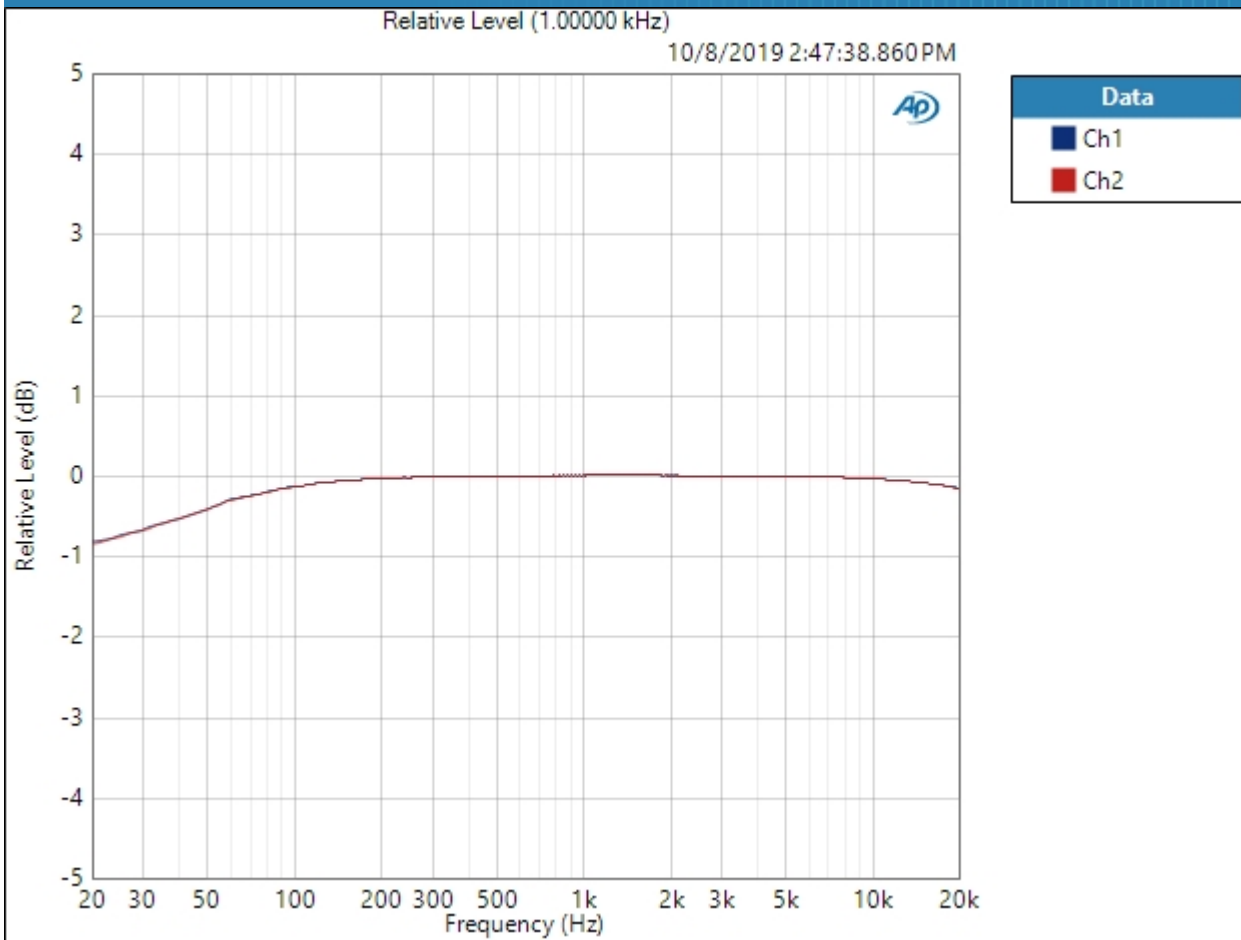
RMS Level (10/8/2019 2:47:38.860 PM)



Result: PASSED

Relative Level (1.00000 kHz) (10/8/2019 2:47:38.860 PM)

10/8/2019 2:51 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) (10/8/2019 2:47:38.860 PM)

Ch1 ± 0.413 dB

Ch2 ± 0.417 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Single Ended : 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: A-wt.
High-pass Filter: 20 Hz

Signal to Noise Ratio (10/8/2019 2:47:40.732 PM)

Ch1 98.422 dB
Ch2 98.448 dB

Single Ended : THD+N

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
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (10/8/2019 2:47:42.839 PM)

Ch1 0.012269 %
 Ch2 0.012412 %

THD Ratio (10/8/2019 2:47:42.839 PM)

Ch1 0.012158 %
 Ch2 0.012300 %

Noise Ratio (10/8/2019 2:47:42.839 PM)

Ch1 0.001651 %
 Ch2 0.001662 %

Distortion Product Ratio (10/8/2019 2:47:42.839 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	-80.07	-83.08	-116.82	-123.26	-125.09	-112.56	-124.50	-119.43	-131.79
Ch2	-0.00	-79.51	-84.07	-116.01	-121.91	-124.36	-111.25	-125.12	-126.18	-130.71

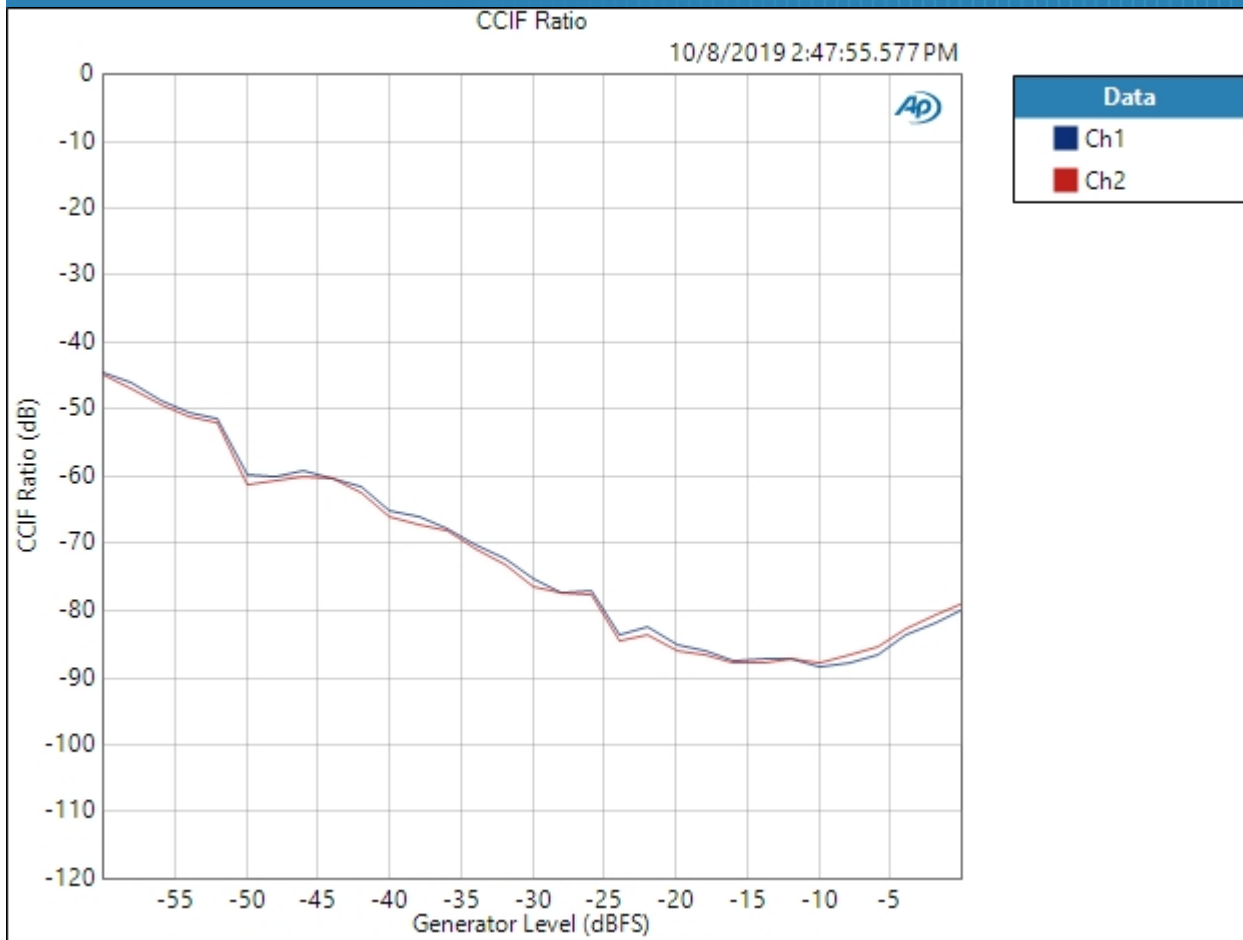
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB

Single Ended : 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
Measured 1 10/8/2019 2:47:55 PM

CCIF Ratio (10/8/2019 2:47:55.577 PM)

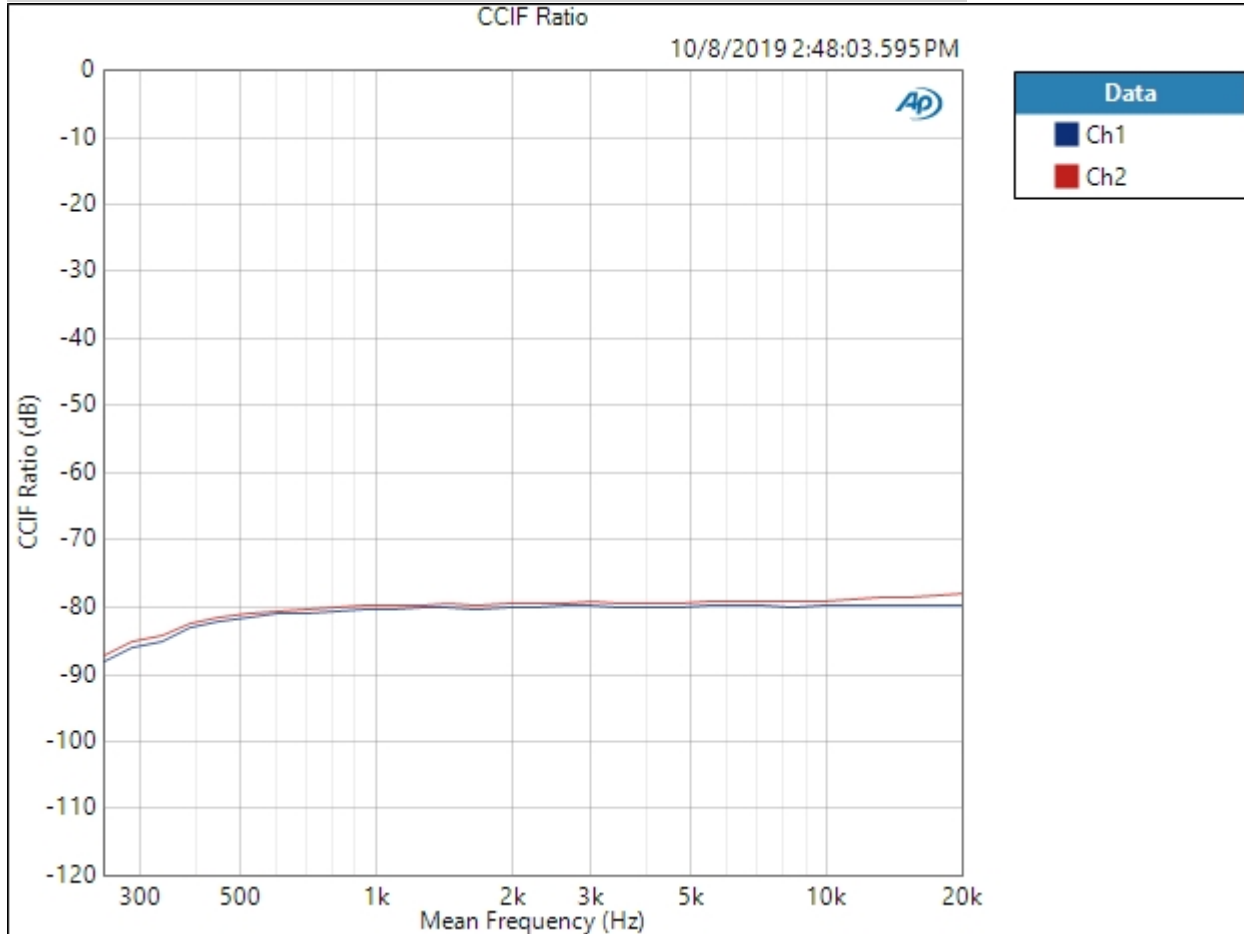


Result: PASSED

Single Ended : IMD Frequency Sweep (CCIF)

Generator Level: -0.000 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
 Measured 1 10/8/2019 2:48:03 PM

CCIF Ratio (10/8/2019 2:48:03.595 PM)



Result:  PASSED

Single Ended : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Frequency: 10.0000 kHz

Crosstalk (10/8/2019 2:48:04.906 PM)

Ch1 -82.338 dB

Ch2 -84.060 dB

Single Ended : Crosstalk Sweep, One Channel Driven

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Start Frequency: 20.0000 kHz

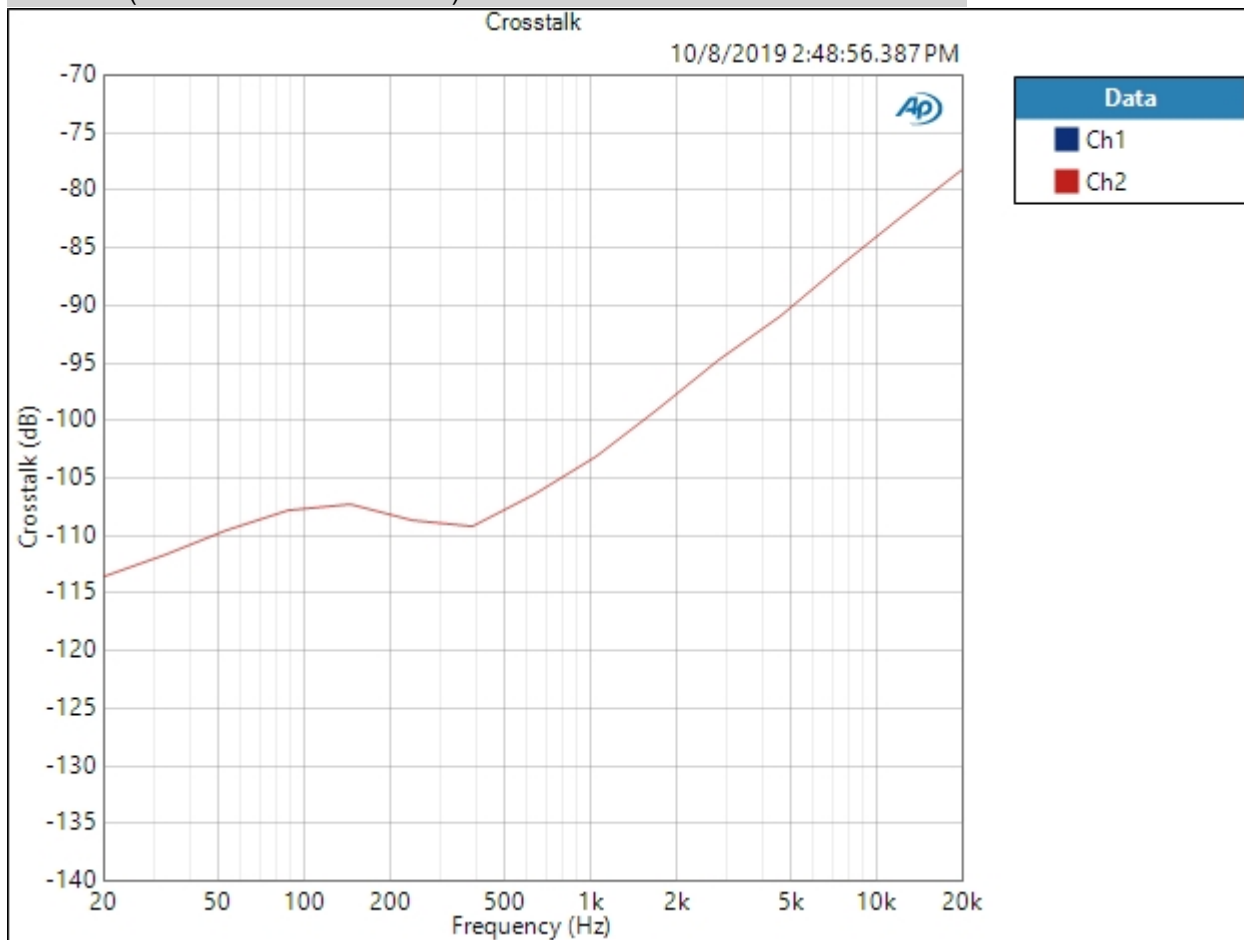
Stop Frequency: 20.0000 Hz

Step Type: Logarithmic

Number of Points: 15

Measured 1 10/8/2019 2:48:56 PM

Crosstalk (10/8/2019 2:48:56.387 PM)



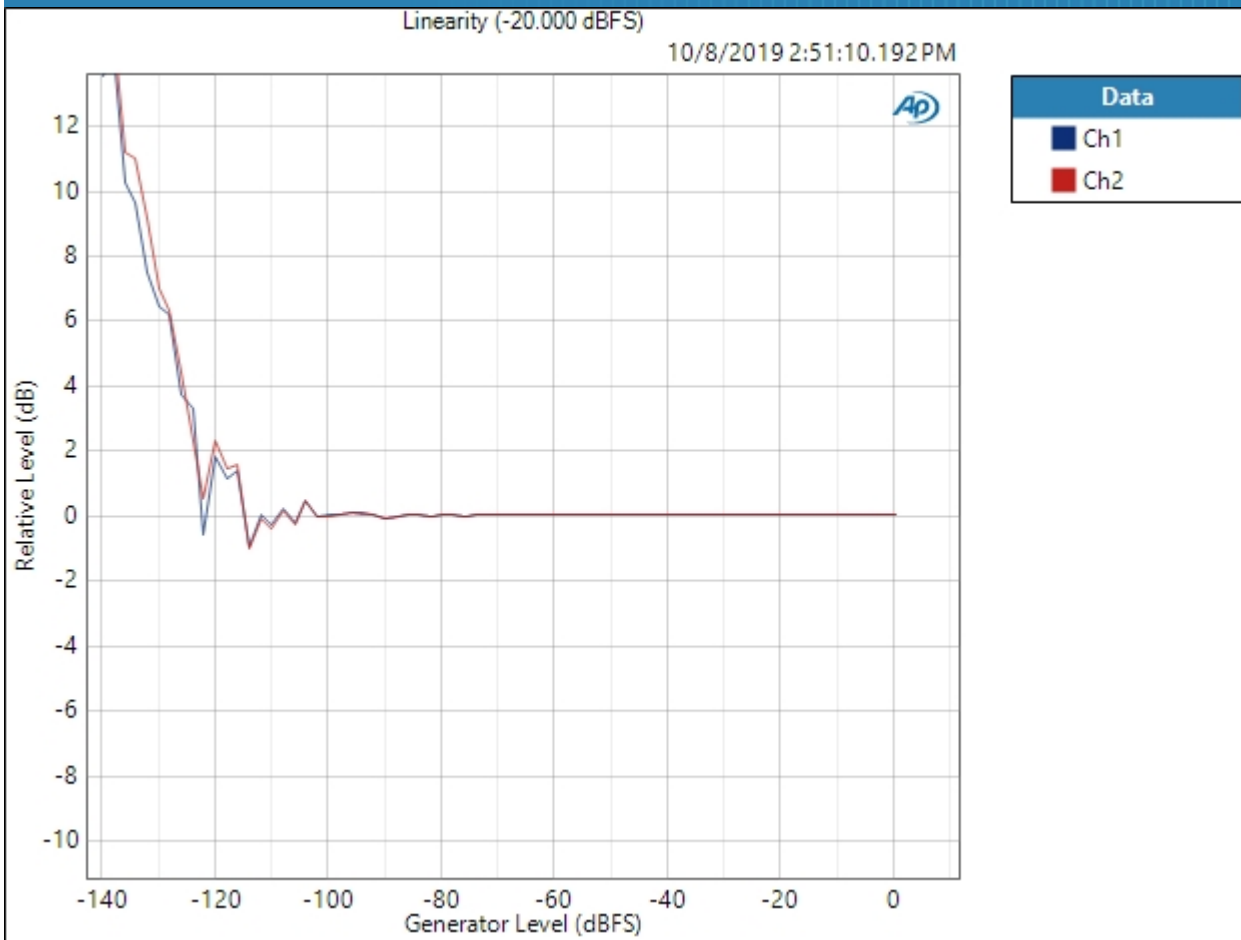
Crosstalk Parameters

Source: Ch1

Result: PASSED

Single Ended : 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:	71
Step Size:	+2.000 dBFS
Offset:	0.000 D
Selectivity:	Window width
Bandpass Tuning Mode:	Generator Frequency
Measured 1	10/8/2019 2:51:10 PM
Linearity (-20.000 dBFS) (10/8/2019 2:51:10.192 PM)	



Linearity (-20.000 dBFS) Parameters

Mode: Normalized at Reference

Relative Level: -20.000 dBFS

Result: PASSED

Jitter : Signal Path Setup

Output Connector:	Digital Optical
Output Sample Rate:	44.1000 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
High Performance Sine Analyzer:	Disabled
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.	
• 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

Jitter : Jitter Level Sweep

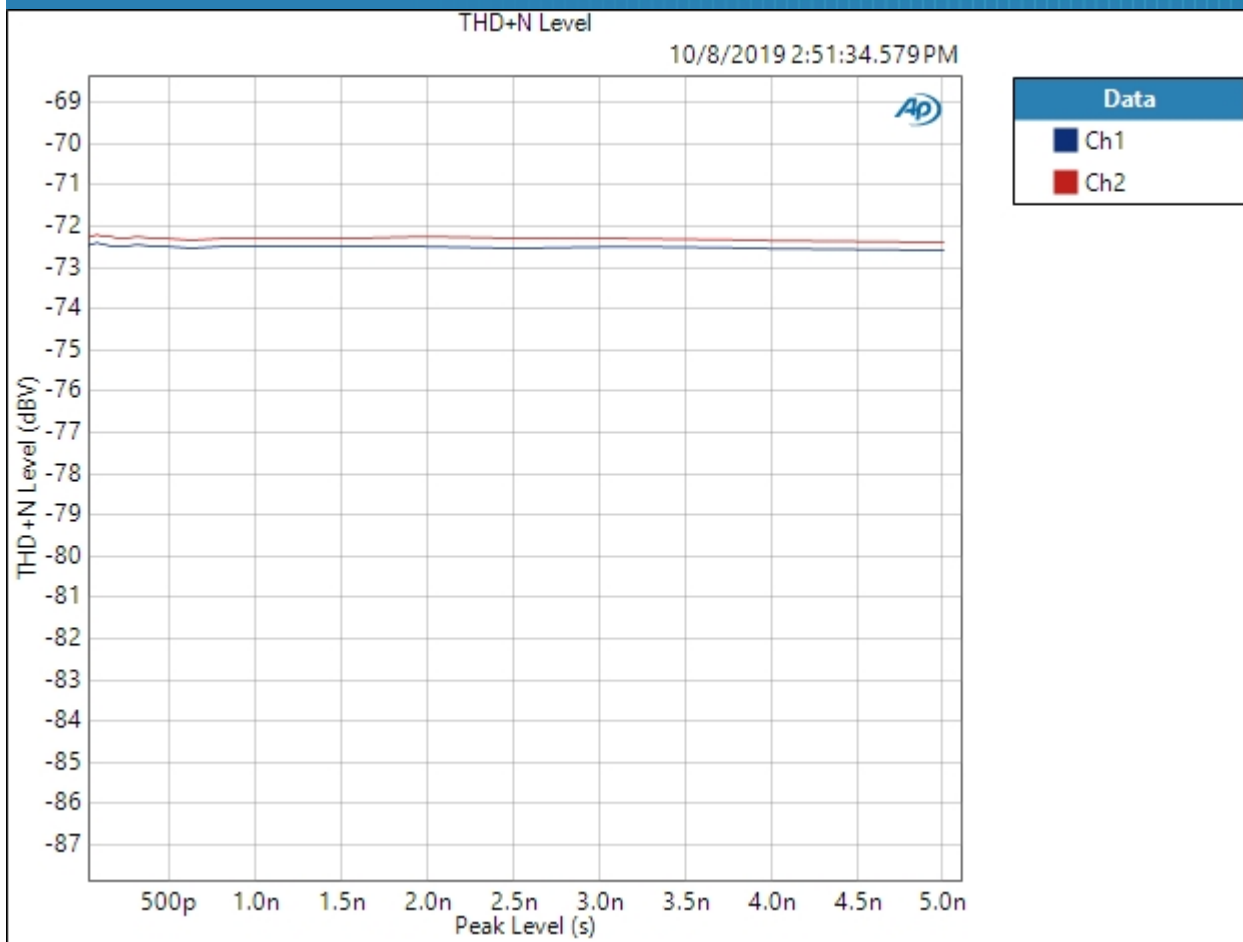
• Audio Generator

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

• Jitter Generator

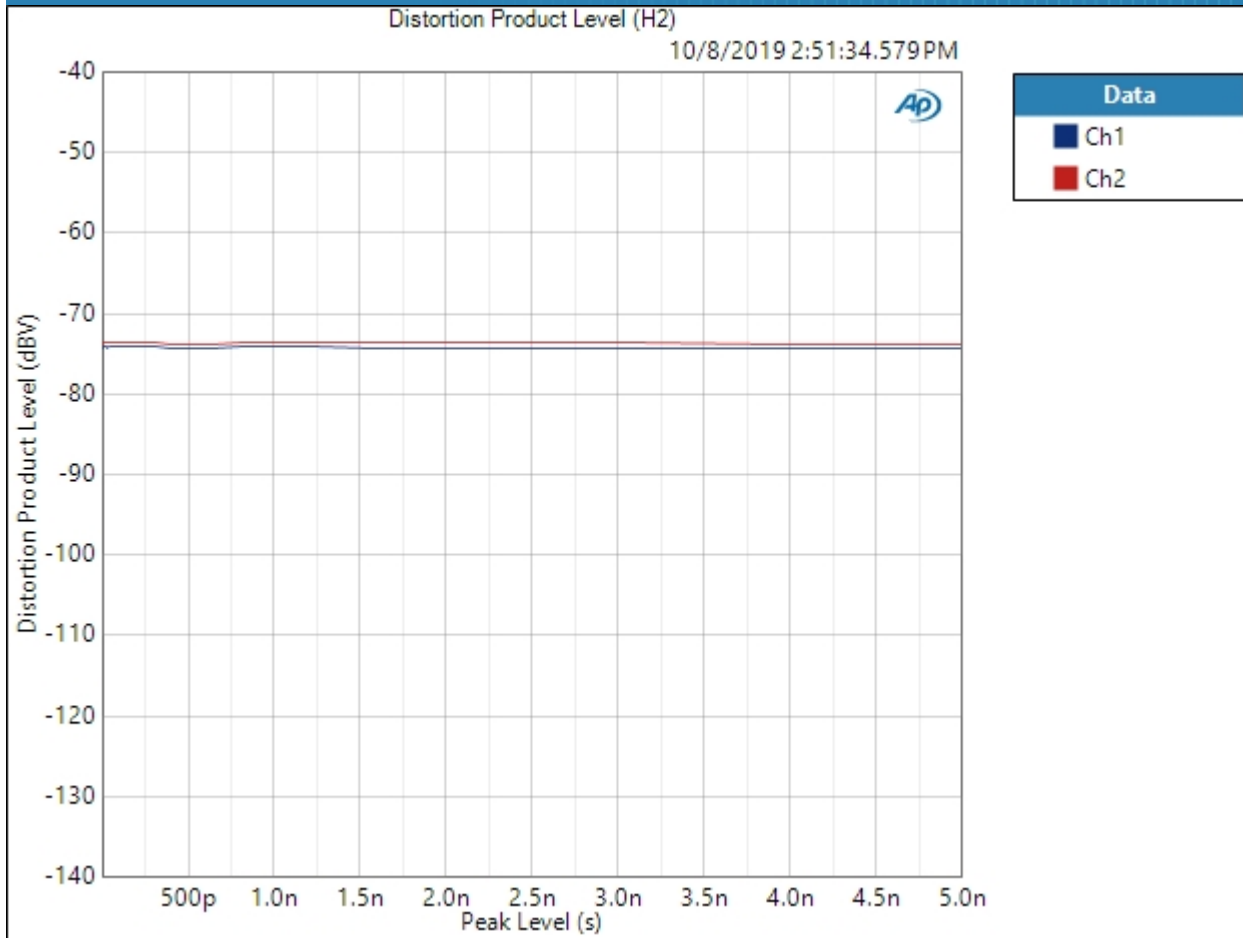
Jitter Waveform: Sine
Start Level: 5.000 ps
Stop Level: 5.000 ns
Step Type: Logarithmic
Number of Points: 31
Jitter Frequency: 1.00000 kHz
Low-pass Filter: 20 kHz
Weighting Filter: Signal Path
High-pass Filter: 20 Hz
Notch Tuning Mode: Generator Frequency
Secondary Source: None
Measured 1 10/8/2019 2:51:34 PM

THD+N Level (10/8/2019 2:51:34.579 PM)



Result: PASSED

Distortion Product Level (H2) (10/8/2019 2:51:34.579 PM)



Distortion Product Level (H2) Parameters

Harmonics: Single Harmonic

Harmonic Number: 2

Result: PASSED