

## Notes:

This amplifier is intended only for the Raal/Requisite ribbon headphones, or other very low impedance, low voltage ribbon loads. All tests are done into the Raal/Requisite SR1a headphone load. 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

## Balanced Output

Level and Gain	✔ PASSED
DC Level	✔ PASSED
Signal Analyzer, 10mA	✔ PASSED
Signal Analyzer, 100mA	✔ PASSED
Signal Analyzer, 1A	✔ PASSED
Frequency Response, Flat	✔ PASSED
Frequency Response, Baffle Compensated	✔ PASSED
Signal to Noise Ratio	✔ 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: 5/8/2018  
APx Version: 5.0.0.105.133644

## Balanced Output : Signal Path Setup

Output Connector:	Analog Balanced
Channels:	2
Generator Mode:	High Performance Sine Generator
Configuration:	Normal (Differential)
Source Impedance:	40 ohm
AG52 Generator Option:	Installed
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:	100.0 mVrms
dBm (Output Power):	600.0 ohm
W(watts) (Output Power):	8.000 ohm
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 Output : Level and Gain

Waveform: Sine  
Generator Mode: High Performance Sine Generator  
Generator Level: 100.0 mVrms  
Frequency: 1.00000 kHz

RMS Level (1/19/2020 12:29:54.039 PM)

Ch1 235.6 mVrms  
Ch2 238.6 mVrms

Balanced Output : 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

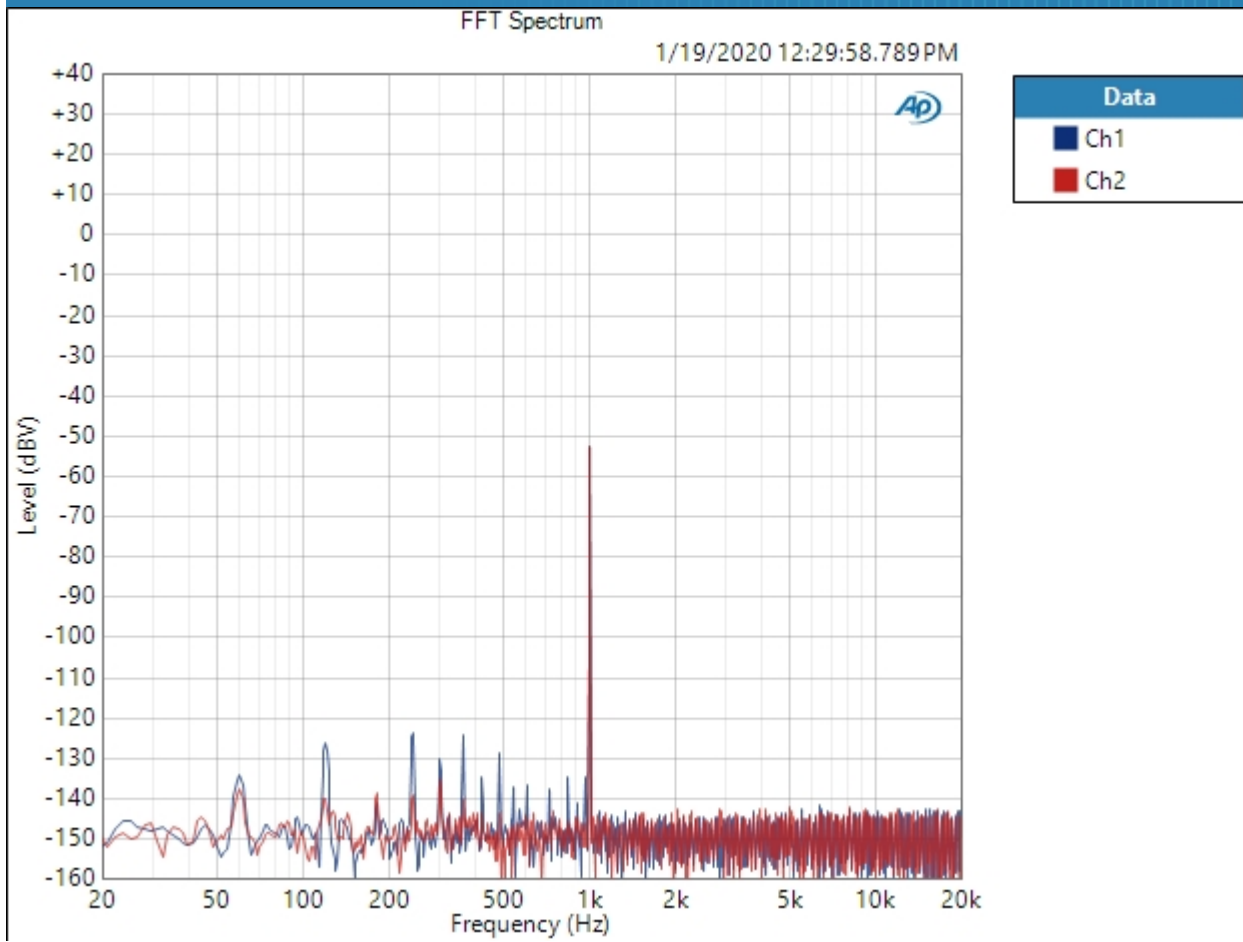
DC Level (1/19/2020 12:29:55.119 PM)

Ch1 -211.6 uV  
Ch2 93.53 uV

Balanced Output : Signal Analyzer, 10mA

Waveform: Sine  
Generator Mode: High Performance Sine Generator  
Generator Level: 1.000 mVrms  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1 1/19/2020 12:29:58 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 (1/19/2020 12:29:58.789 PM)

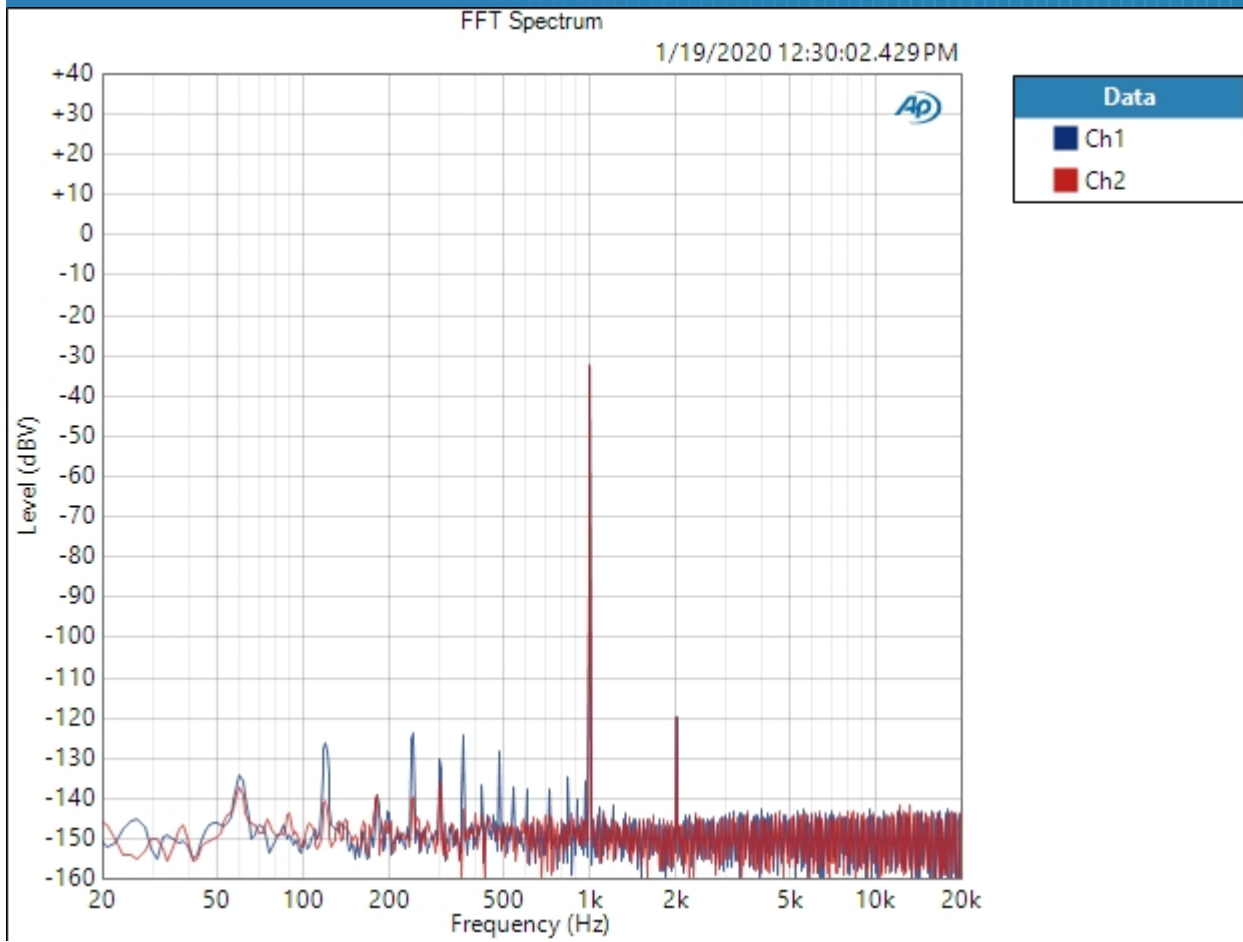


Result:  PASSED

Balanced Output : Signal Analyzer, 100mA

Waveform: Sine  
Generator Mode: High Performance Sine Generator  
Generator Level: 10.00 mVrms  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1 1/19/2020 12:30:02 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 (1/19/2020 12:30:02.429 PM)



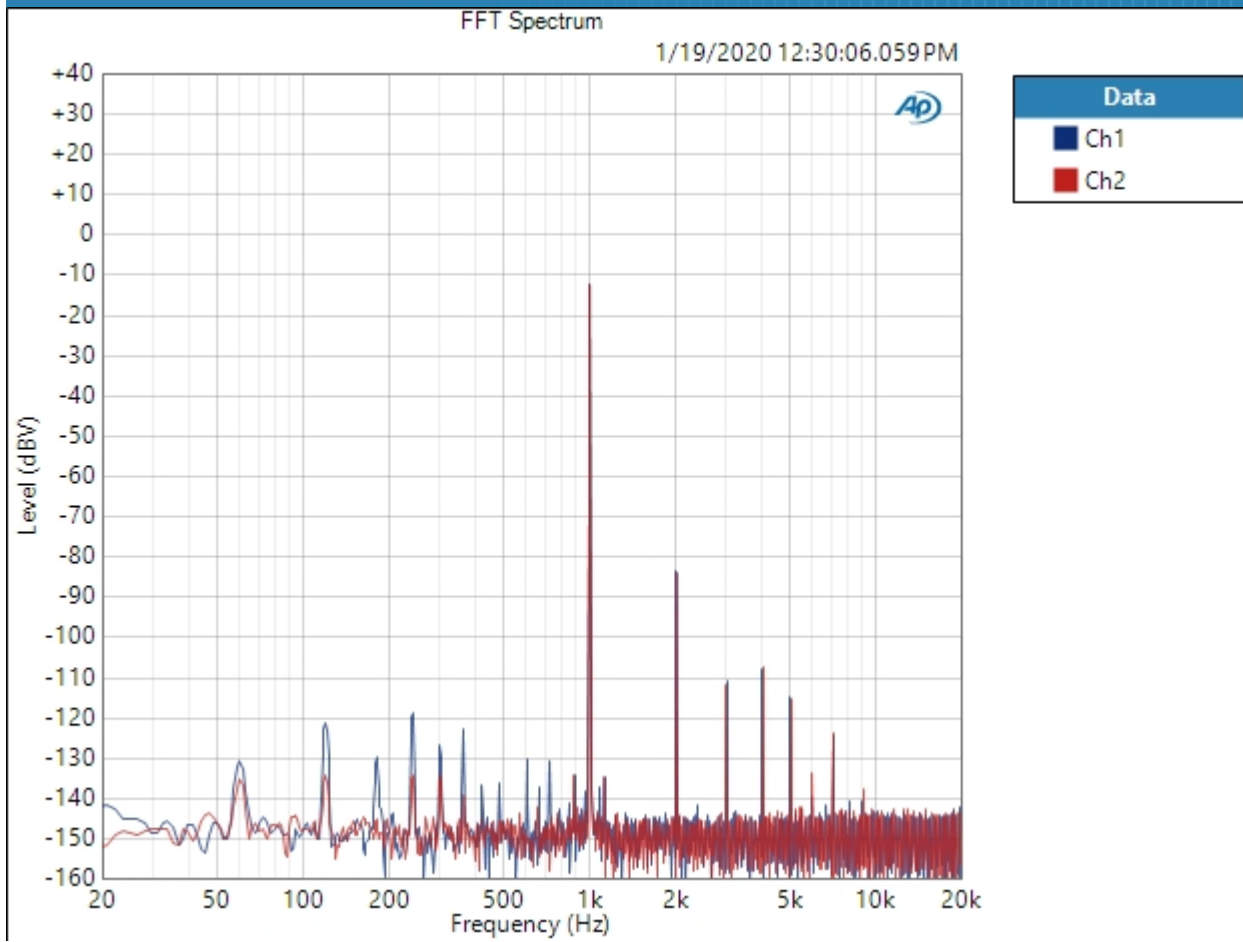
Result: PASSED

Balanced Output : Signal Analyzer, 1A

Waveform: Sine  
Generator Mode: High Performance Sine Generator  
Generator Level: 100.0 mVrms  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1 1/19/2020 12:30:06 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 (1/19/2020 12:30:06.059 PM)



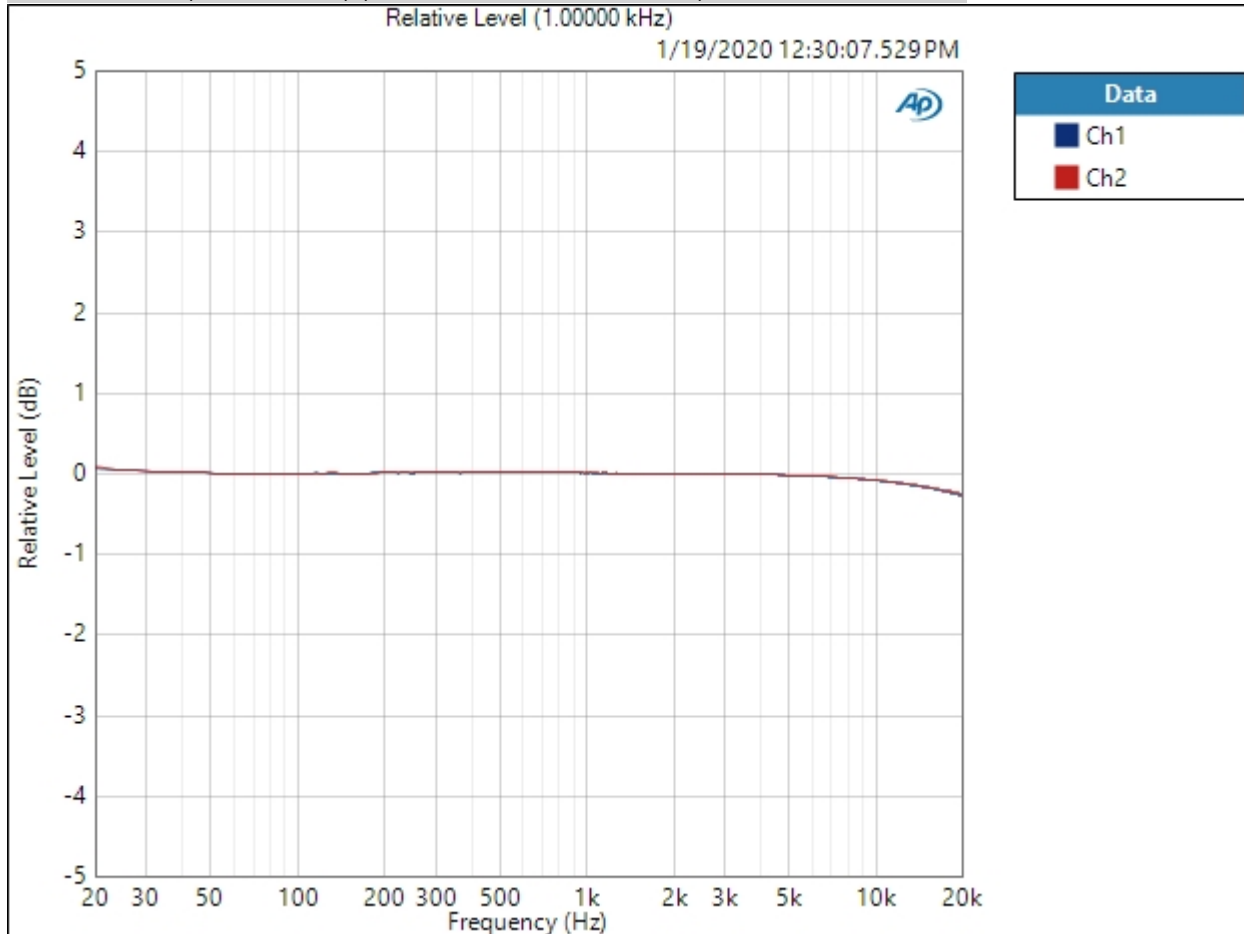


Result: PASSED

Balanced Output : Frequency Response, Flat

Start Frequency: 20.0000 Hz  
 Stop Frequency: 20.0000 kHz  
 Generator Level: 10.00 mVrms  
 DC Offset: 0.000 V  
 EQ: None  
 Pre-Sweep: 100.0 ms  
 Sweep: 350.0 ms  
 Extend Acquisition By: 50.00 ms  
 Secondary Source: None  
 Measured 1 1/19/2020 12:30:07 PM

Relative Level (1.00000 kHz) (1/19/2020 12:30:07.529 PM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference  
 Ref Frequency: 1.00000 kHz  
 1/19/2020 12:31 PM

Result:  PASSED

Deviation (20.0000 Hz - 20.0000 kHz) (1/19/2020 12:30:07.529 PM)

Ch1  $\pm 0.181$  dB

Ch2  $\pm 0.170$  dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

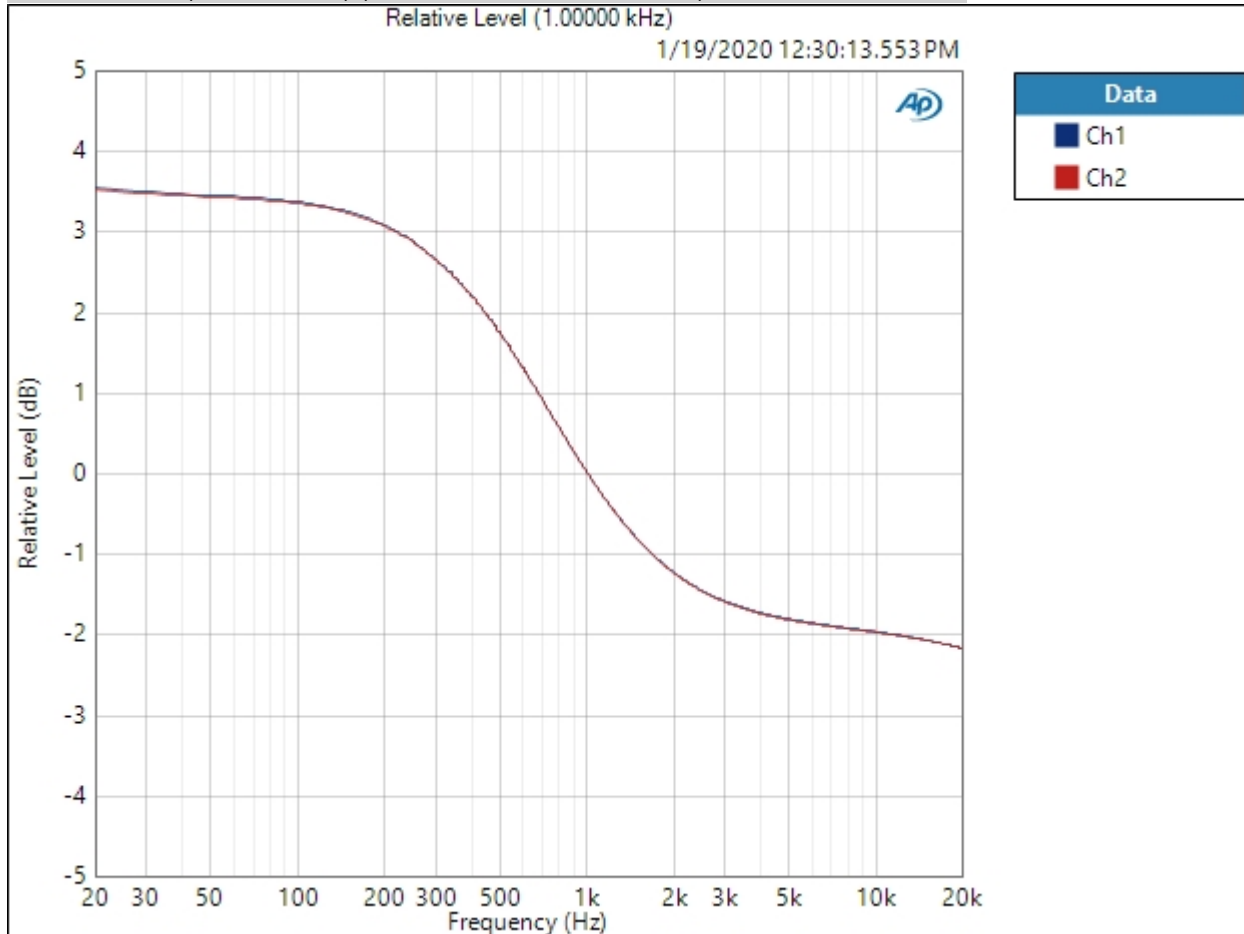
Min: 20.0000 Hz

Max: 20.0000 kHz

Balanced Output : Frequency Response, Baffle Compensated

Start Frequency: 20.0000 Hz  
 Stop Frequency: 20.0000 kHz  
 Generator Level: 10.00 mVrms  
 DC Offset: 0.000 V  
 EQ: None  
 Pre-Sweep: 100.0 ms  
 Sweep: 350.0 ms  
 Extend Acquisition By: 50.00 ms  
 Secondary Source: None  
 Measured 1 1/19/2020 12:30:13 PM

Relative Level (1.00000 kHz) (1/19/2020 12:30:13.553 PM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference  
 Ref Frequency: 1.00000 kHz  
 1/19/2020 12:31 PM

Result:  PASSED

Deviation (20.0000 Hz - 20.0000 kHz) (1/19/2020 12:30:13.553 PM)

Ch1  $\pm 2.857$  dB

Ch2  $\pm 2.844$  dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Balanced Output : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Generator Level: 330.0 mVrms

Frequency: 1.00000 kHz

Low-pass Filter: 20 kHz

Weighting Filter: A-wt.

High-pass Filter: 20 Hz

Signal to Noise Ratio (1/19/2020 12:30:21.116 PM)

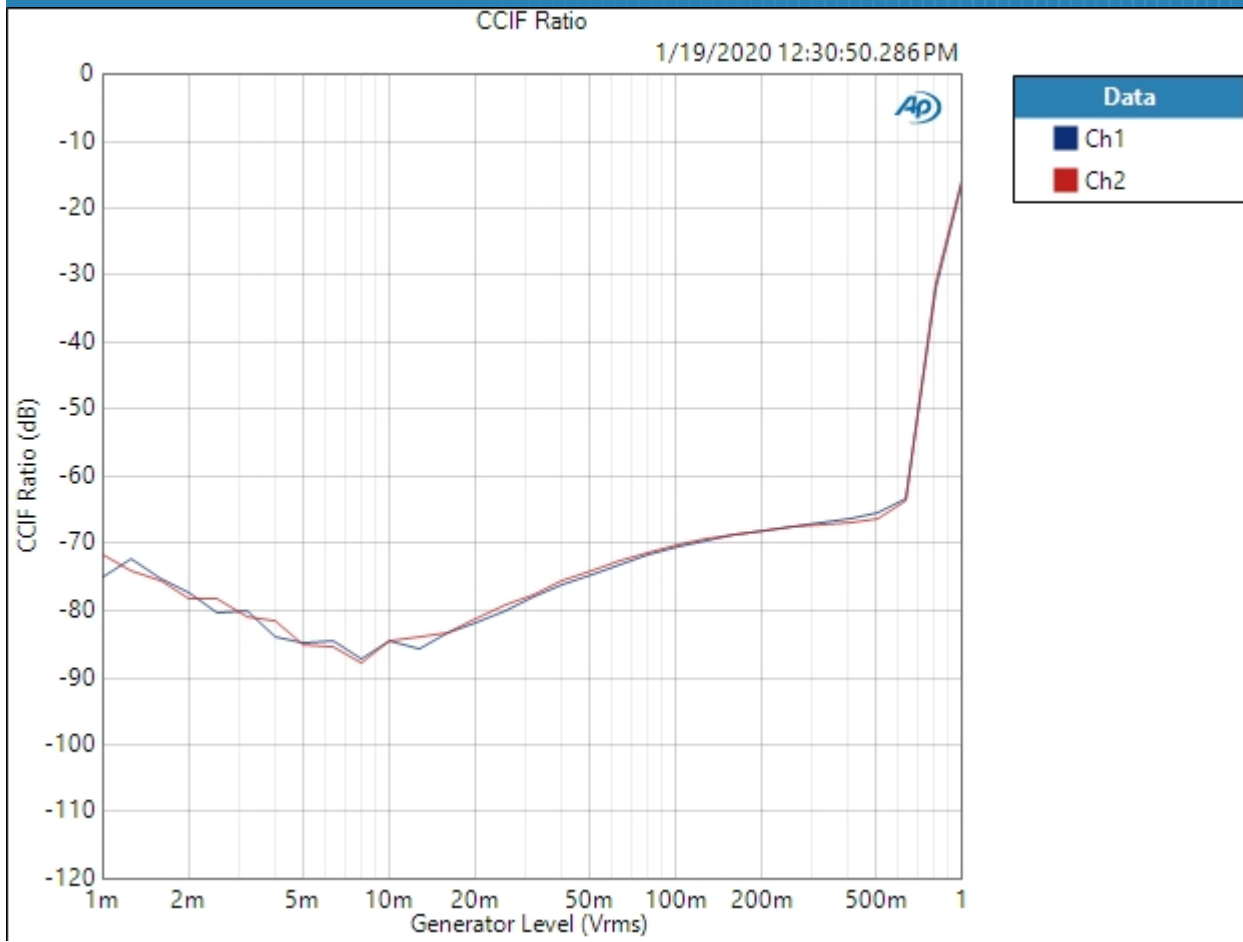
Ch1 111.032 dB

Ch2 111.354 dB

Balanced Output : IMD Level Sweep ( CCIF )

IMD Type: CCIF  
Waveform: IMD  
Generator Level: 1.000 Vrms  
DC Offset: 0.000 V  
Mean Frequency: 12.5000 kHz  
Diff Frequency: 80.0000 Hz  
IMD Split: False  
Start Level: 1.000 mVrms  
Stop Level: 1.000 Vrms  
Step Type: Logarithmic  
Number of Points: 31  
Mode: d2+d3  
Measured 1 1/19/2020 12:30:50 PM

CCIF Ratio (1/19/2020 12:30:50.286 PM)

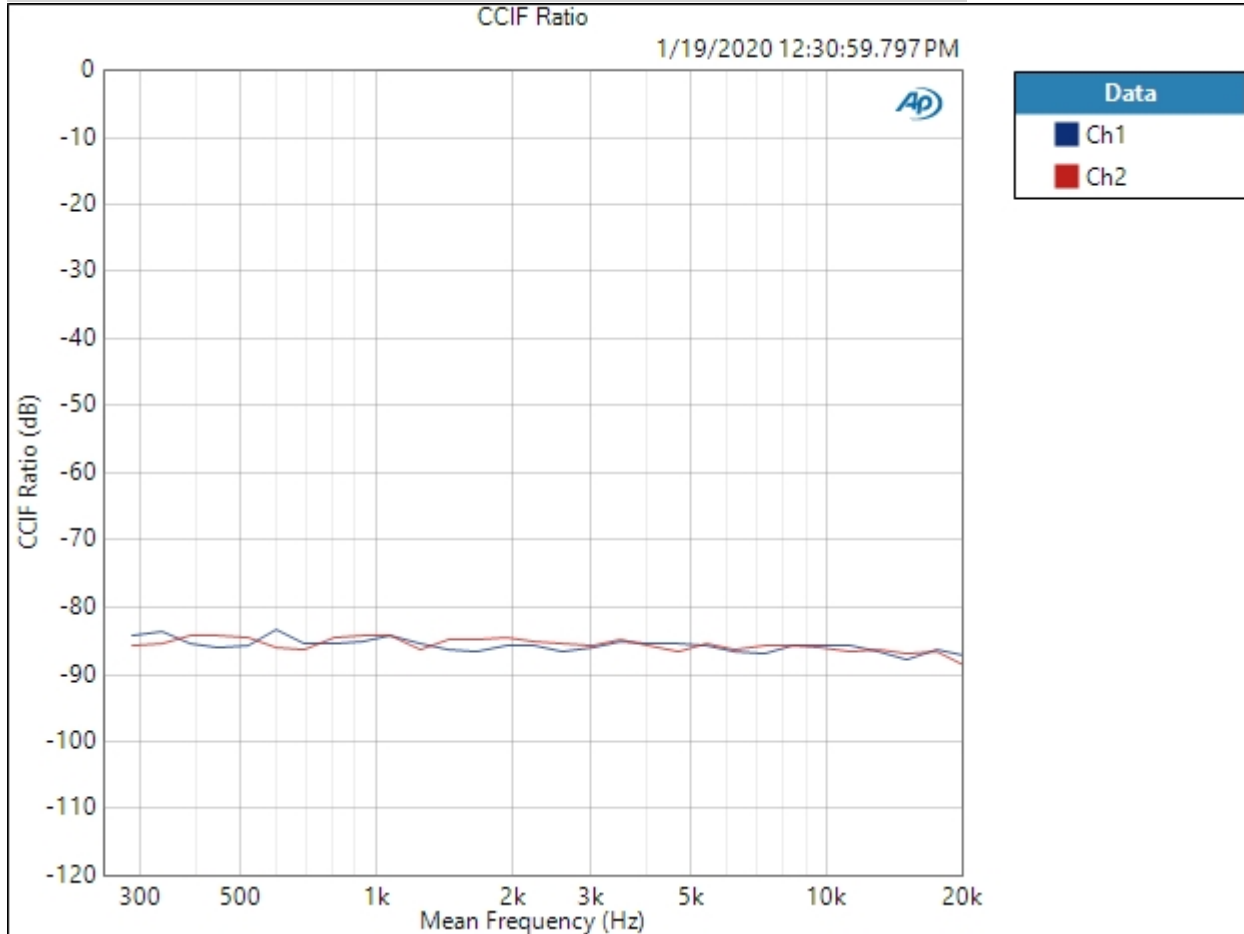


Result: PASSED

Balanced Output : IMD Frequency Sweep ( CCIF )

Generator Level: 10.00 mVrms  
DC Offset: 0.000 V  
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 1/19/2020 12:30:59 PM

CCIF Ratio (1/19/2020 12:30:59.797 PM)





Result:  PASSED

Balanced Output : Crosstalk, One Channel Undriven

Waveform: Sine  
Generator Mode: High Performance Sine Generator  
Generator Level: 100.0 mVrms  
Frequency: 10.0000 kHz

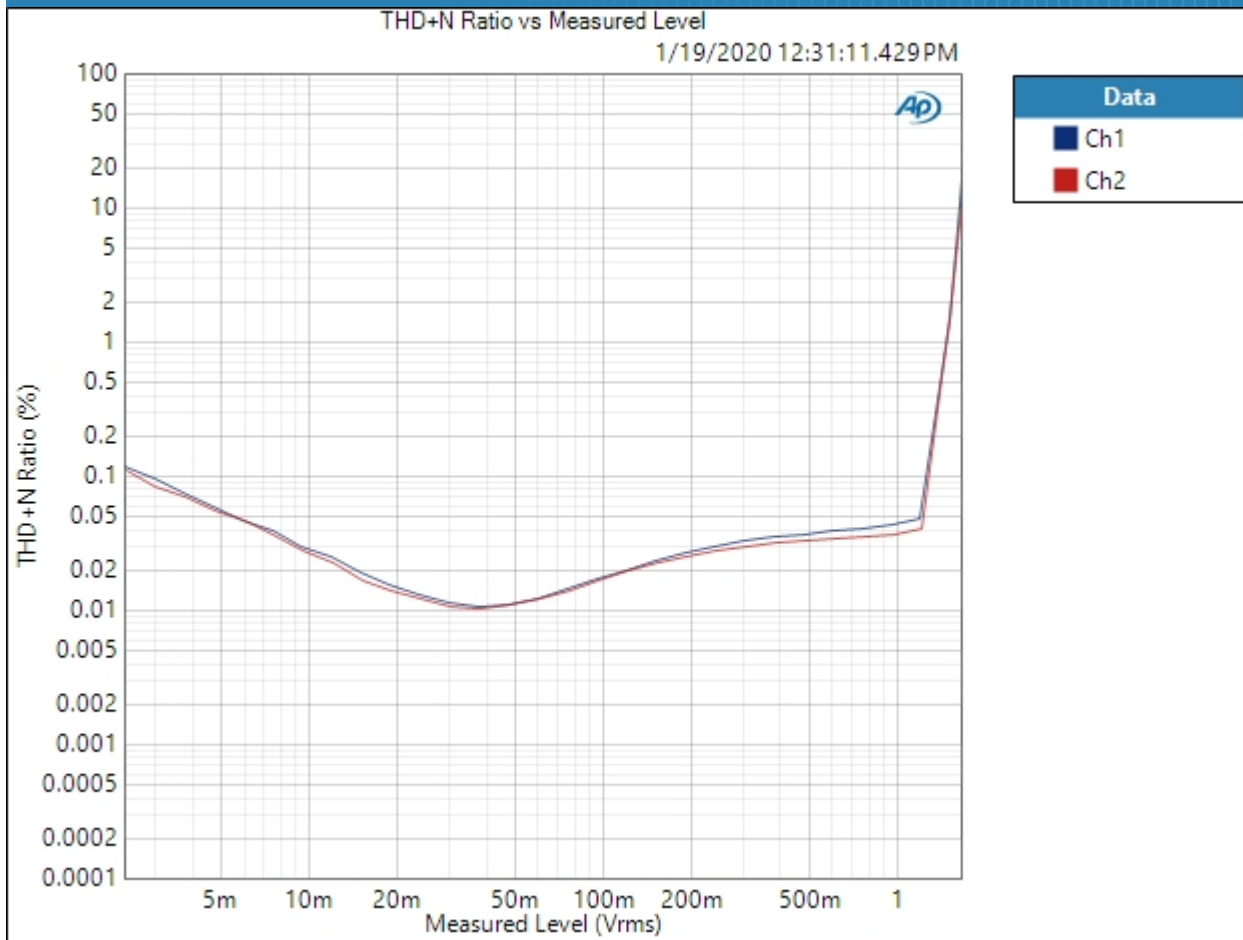
Crosstalk (1/19/2020 12:31:01.008 PM)

Ch1 -66.252 dB  
Ch2 -66.934 dB

Balanced Output : Stepped Level Sweep

Waveform: Sine  
Generator Mode: High Performance Sine Generator  
Generator Level: 100.0 mVrms  
Frequency: 1.00000 kHz  
Start Level: 1.000 mVrms  
Stop Level: 1.000 Vrms  
Step Type: Logarithmic  
Number of Points: 31  
Low-pass Filter: 20 kHz  
Weighting Filter: Signal Path  
High-pass Filter: 20 Hz  
Notch Tuning Mode: Generator Frequency  
Measured 1 1/19/2020 12:31:11 PM

THD+N Ratio vs Measured Level (1/19/2020 12:31:11.429 PM)



Result: ✔ PASSED