

# curcio audio engineering

*High Resolution Vacuum Tube Audio Systems*

## Sequence Report



### Summary

#### PAS Line Amp Suite

Signal Path Setup	✓ PASSED
Level and Gain	✓ PASSED
Signal to Noise Ratio	✓ PASSED
Crosstalk Sweep, One Channel Driven	✓ PASSED
Stepped Frequency Sweep	✓ PASSED
IMD Frequency Sweep (SMPTE)	✓ PASSED
IMD (SMPTE)	✓ PASSED
Signal Analyzer	✓ PASSED

#### Sequence Result:

Sequence Result: ✓ PASSED

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### PAS Line Amp Suite : Signal Path Setup

Output Connector:	Analog Unbalanced
Channels:	2
Source Impedance:	20 ohm
AG52 Generator Option:	Installed
Output EQ:	None
Input Connector:	Analog Balanced
Channels:	2
Termination:	200 kohm
Input Bandwidth:	AC (<10 Hz) - 90k (192 kHz SR)
Device Delay:	0.000 s
Input EQ:	None

#### • References

dBr G:	149.8 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.

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### PAS Line Amp Suite : Verify Connections

Waveform: Sine  
Generator Level: 149.8 mVrms  
DC Offset: 0.000 V  
Frequency: 1.00000 kHz

### PAS Line Amp Suite : Level and Gain

Waveform: Sine  
Generator Level: -0.000 dBrG (@149.8 mVrms)  
DC Offset: 0.000 V  
Frequency: 1.00000 kHz

### RMS Level (3/5/2017 12:08:11.537 PM)

Left 1.000 Vrms  
Right 1.026 Vrms

### Gain (3/5/2017 12:08:11.537 PM)

Left 16.492 dB  
Right 16.714 dB

### PAS Line Amp Suite : Signal to Noise Ratio

Waveform: Sine  
Generator Level: -0.000 dBrG (@149.8 mVrms)  
DC Offset: 0.000 V  
Frequency: 1.00000 kHz  
Low-pass Filter: 20 kHz  
Weighting Filter: Signal Path  
High-pass Filter: 20 Hz

### Signal to Noise Ratio (3/5/2017 12:08:13.441 PM)

Channel	Lower Limit	Value	Upper Limit	
Left	60.215 dB	80.114 dB	---- dB	✓
Right	60.215 dB	78.943 dB	---- dB	✓

Result: ✓ PASSED

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PAS Line Amp Suite : Crosstalk Sweep, One Channel Driven

Generator Level: 100.0 mVrms

DC Offset: 0.000 V

Start Frequency: 20.0000 kHz

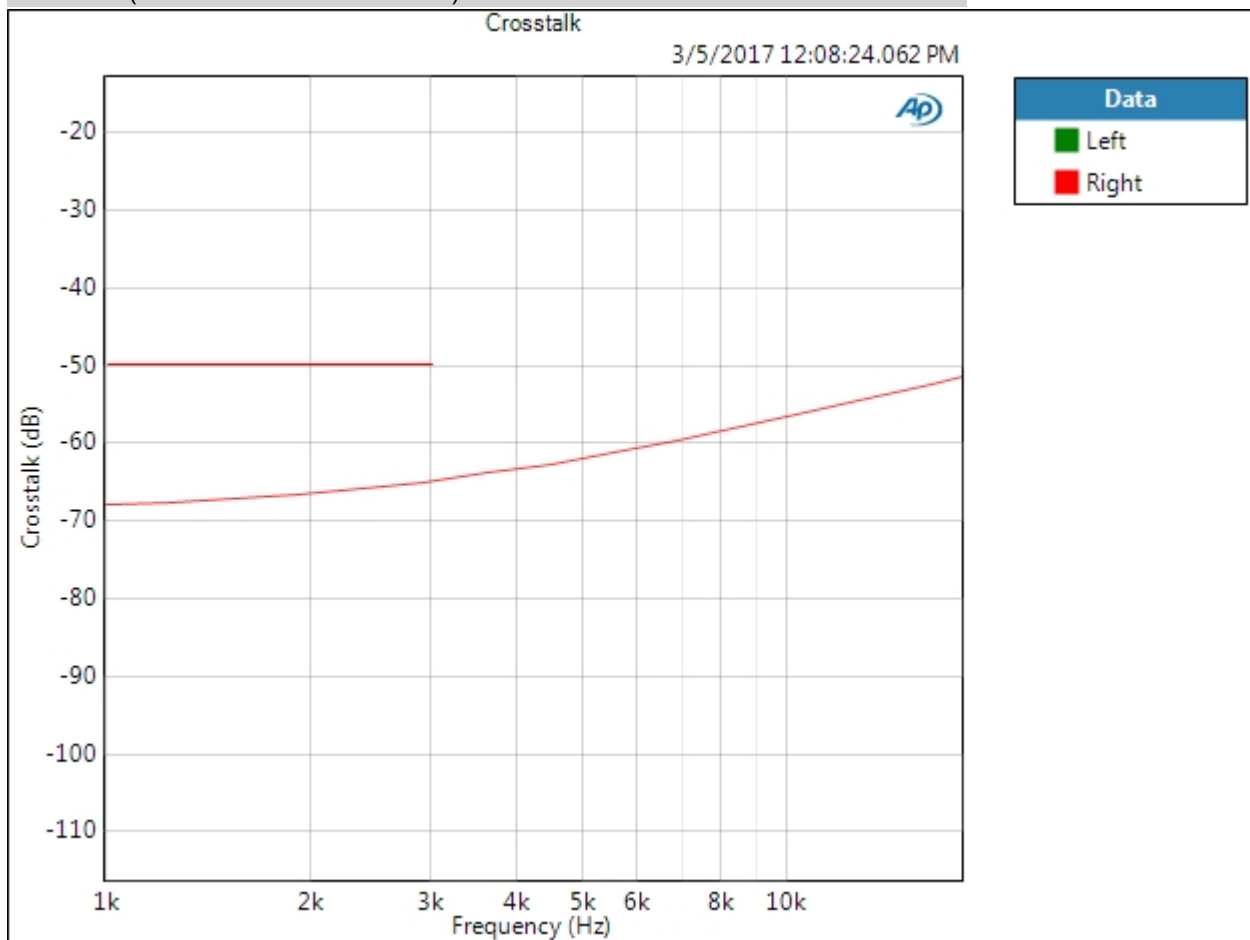
Stop Frequency: 1.00000 kHz

Step Type: Logarithmic

Number of Points: 15

Measured 1 3/5/2017 12:08:24 PM

Crosstalk (3/5/2017 12:08:24.062 PM)



Left  PASSED

3/5/2017 12:09 PM

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## Sequence Report



Right  PASSED

Crosstalk Parameters

Source: Ch1

Result:  PASSED

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## Sequence Report



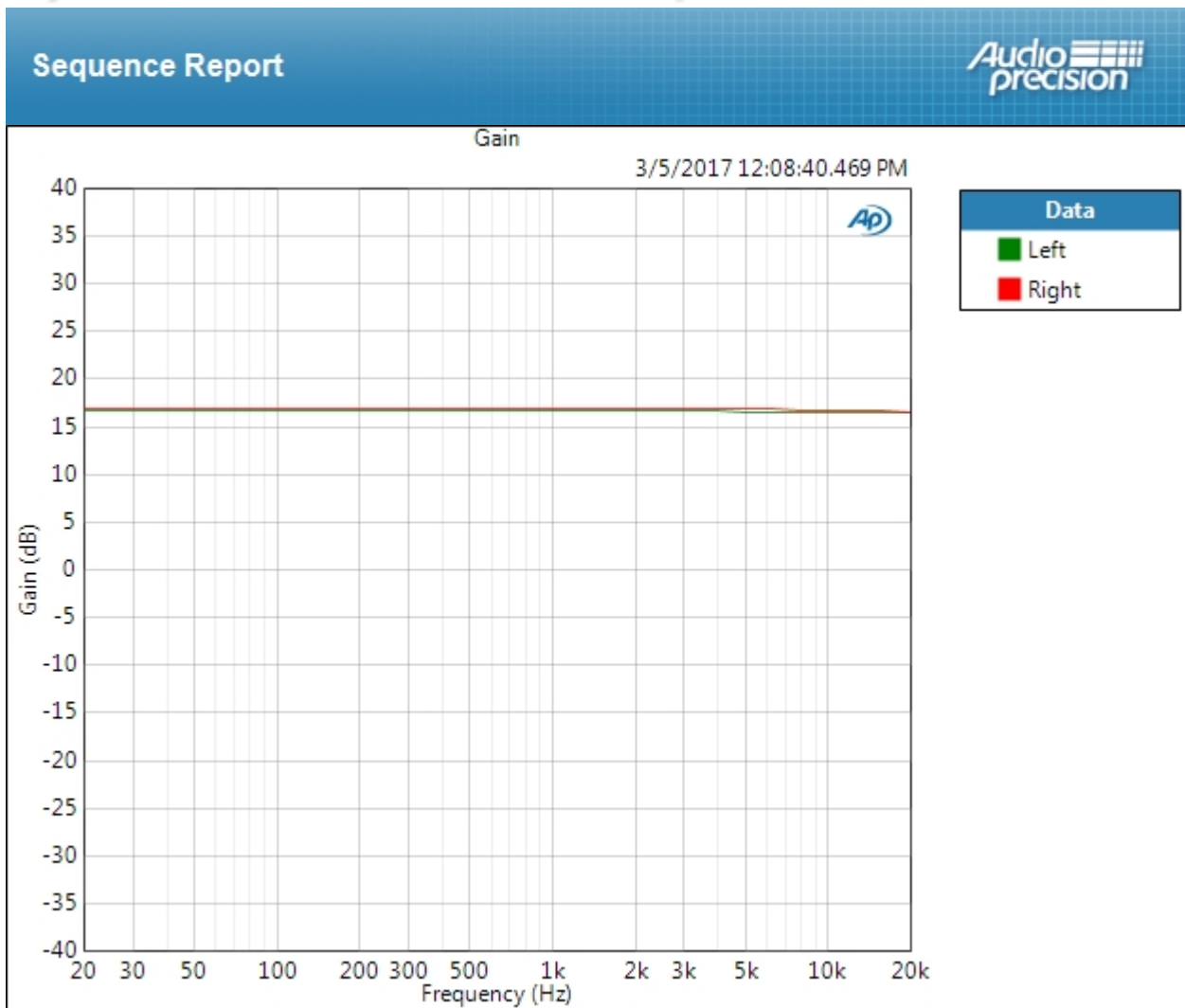
PAS Line Amp Suite : Stepped Frequency Sweep

Generator Level: 1.000 Vrms  
DC Offset: 0.000 V  
EQ: None  
Start Frequency: 20.0000 kHz  
Stop Frequency: 20.0000 Hz  
Step Type: Logarithmic  
Number of Points: 31  
Weighting Filter: Signal Path  
High-pass Filter: 20 Hz  
Phase Ref Channel: Ch1  
Measured 1 3/5/2017 12:08:40 PM

Gain (3/5/2017 12:08:40.469 PM)

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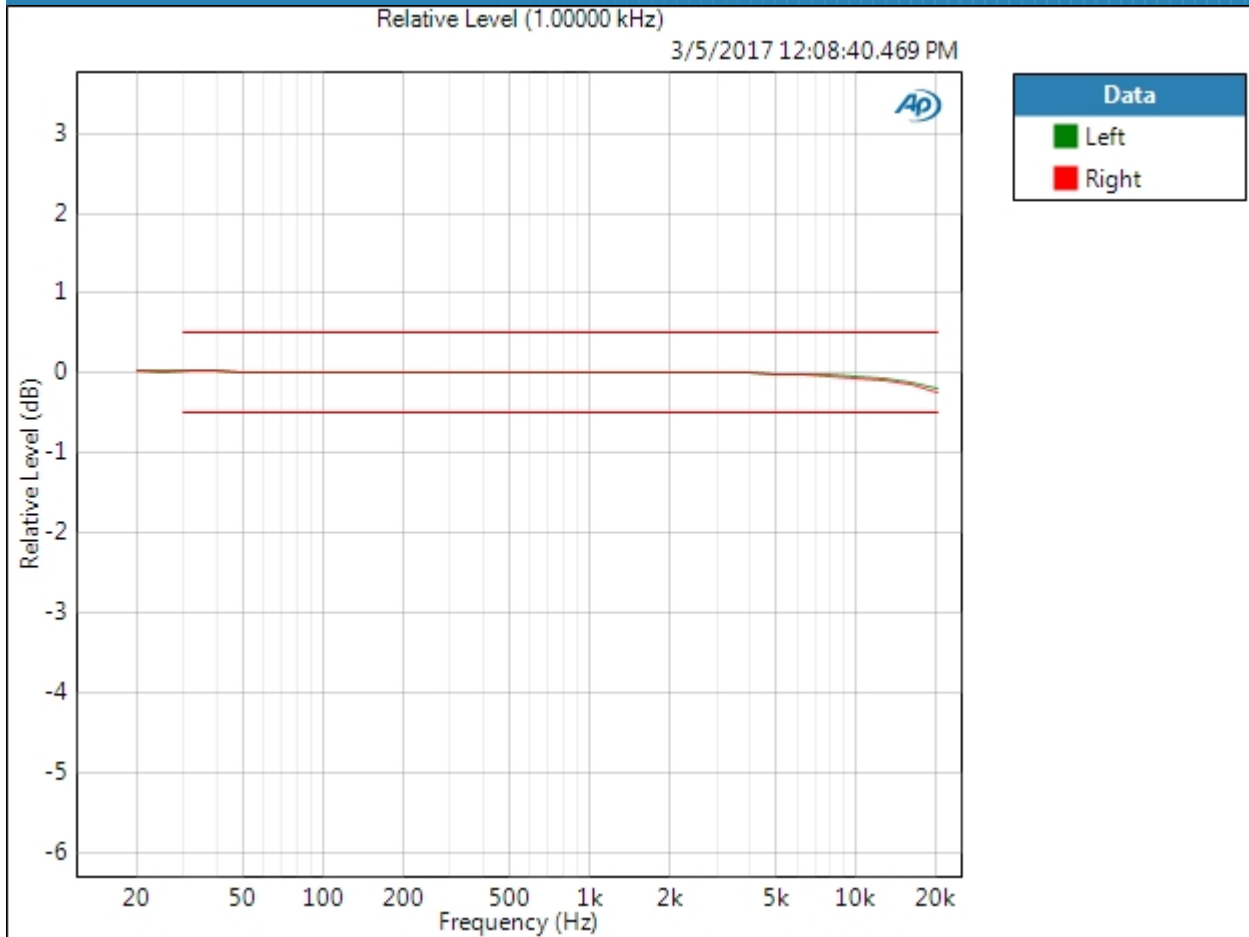
Result: ✔ PASSED

Relative Level (1.00000 kHz) (3/5/2017 12:08:40.469 PM)

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## Sequence Report



Left  PASSED

Right  PASSED

### Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference

Ref Frequency: 1.00000 kHz

Result:  PASSED

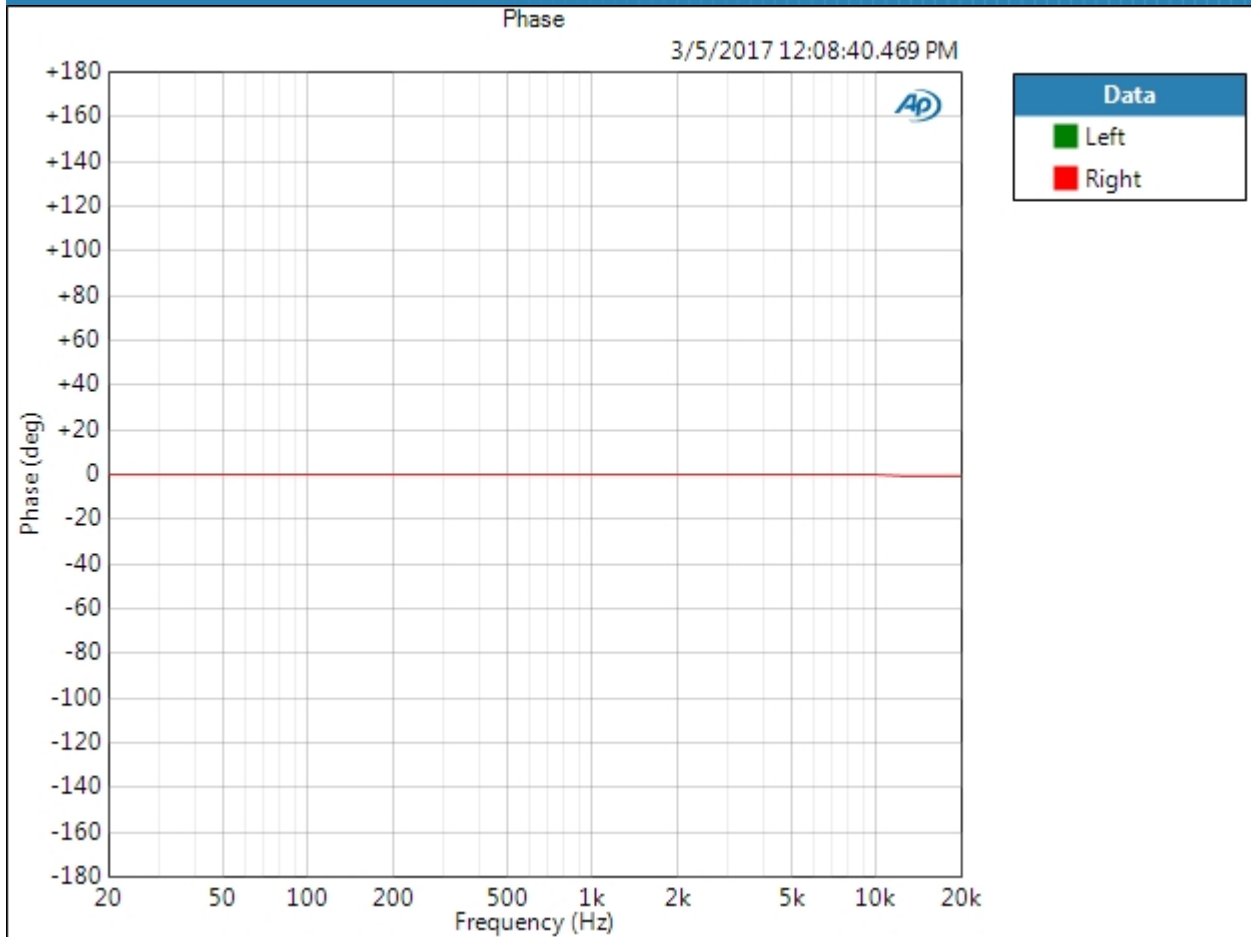
Phase (3/5/2017 12:08:40.469 PM)



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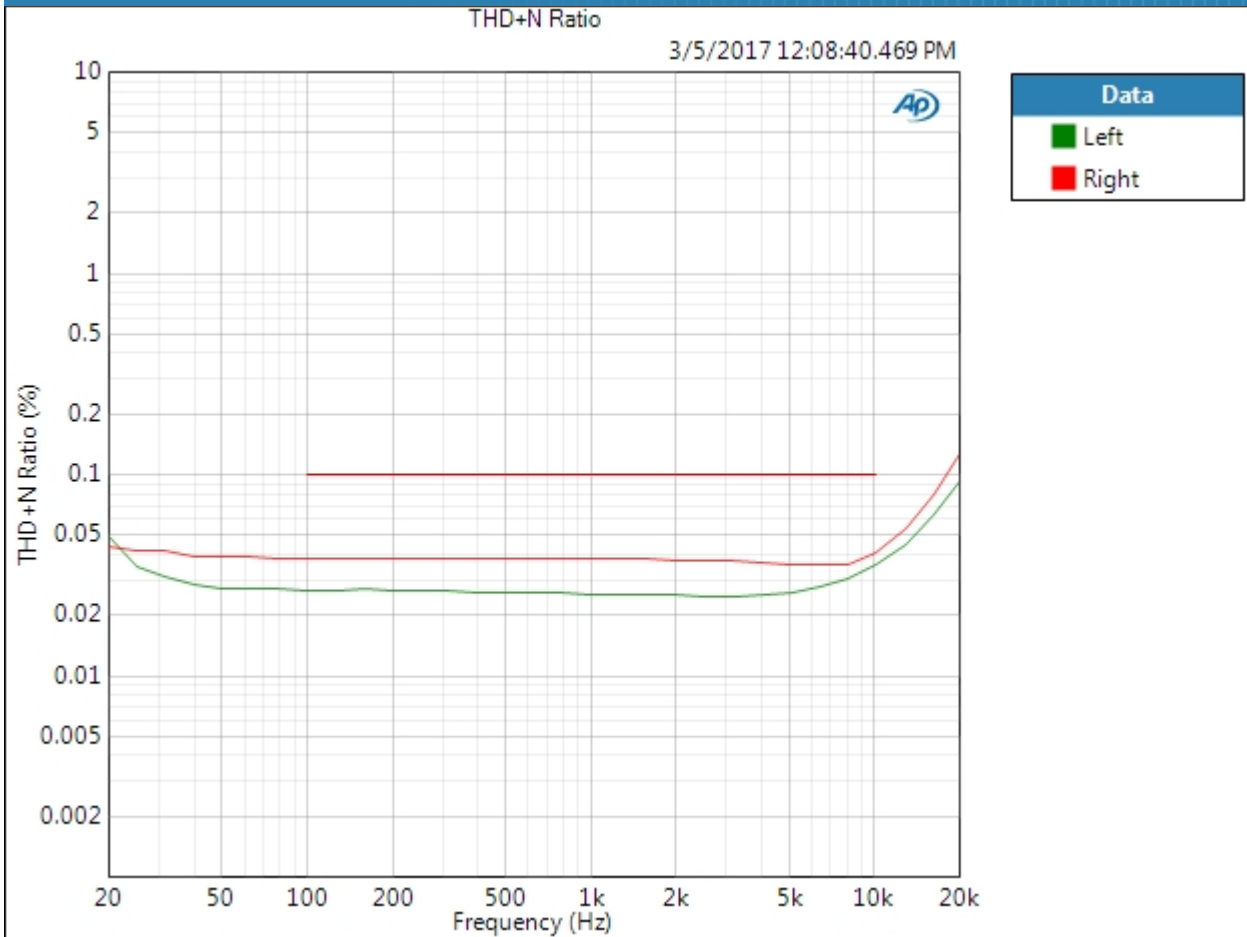
Result: PASSED

THD+N Ratio (3/5/2017 12:08:40.469 PM)

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## Sequence Report



Left  PASSED  
Right  PASSED  
Result:  PASSED

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## Sequence Report



PAS Line Amp Suite : IMD Frequency Sweep (SMPTE)

Generator Level: -3.000 dBrG (@149.8 mVrms)

DC Offset: 0.000 V

Sweep Frequency: Frequency 1

Frequency 1: 60.0000 Hz

Frequency 2: 7.00000 kHz

Frequency Ratio: 4:1

IMD Split: False

Start Frequency: 1.00000 kHz

Stop Frequency: 40.0000 Hz

Step Type: Logarithmic

Number of Points: 31

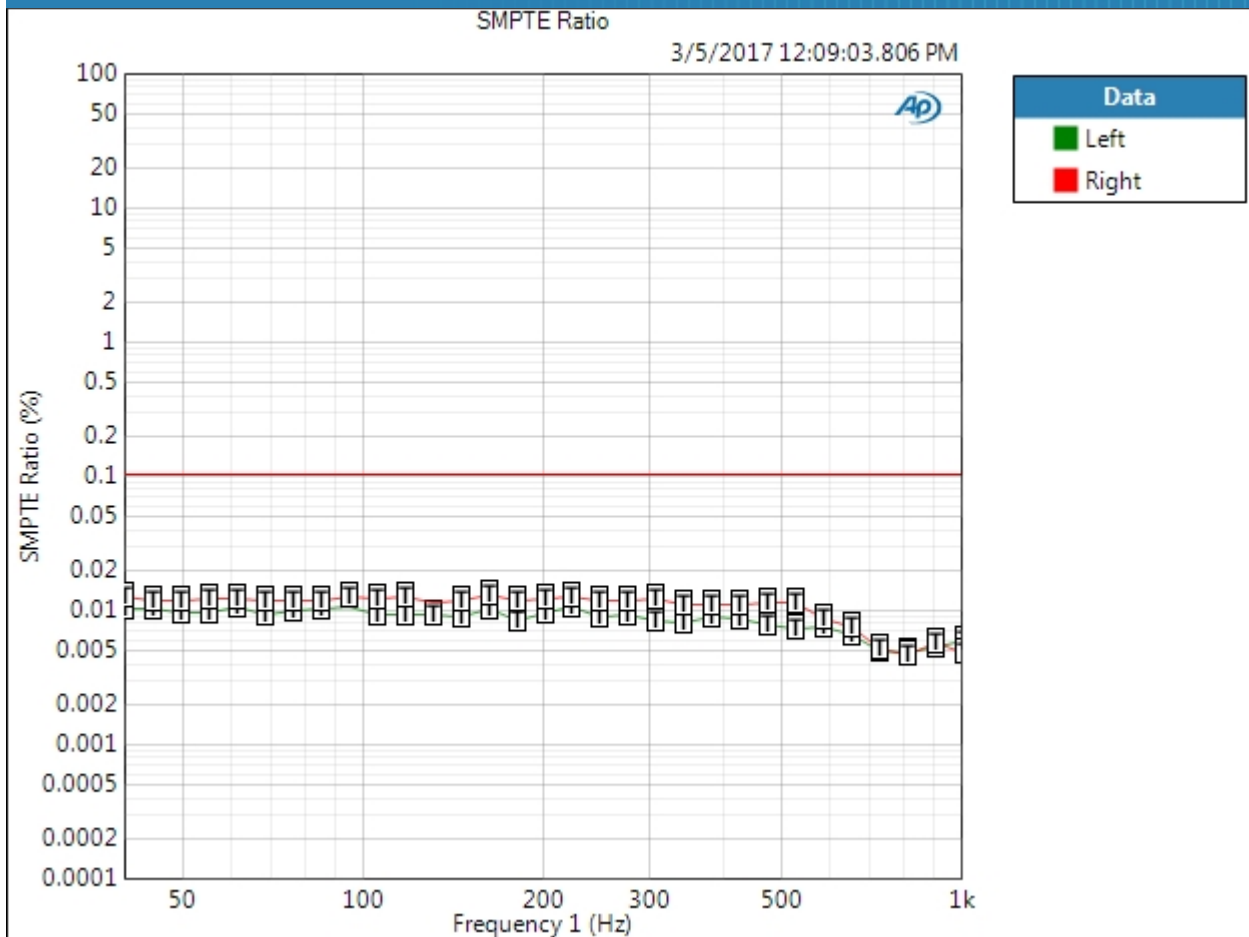
Measured 1 3/5/2017 12:09:03 PM

SMPTE Ratio (3/5/2017 12:09:03.806 PM)

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Left  PASSED  
Right  PASSED  
Result:  PASSED

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### PAS Line Amp Suite : IMD (SMPTE)

IMD Type: SMPTE  
Waveform: IMD  
Generator Level: -3.000 dBrG (@149.8 mVrms)  
DC Offset: 0.000 V  
Frequency 1: 60.0000 Hz  
Frequency 2: 16.0000 kHz  
Frequency Ratio: 4:1  
IMD Split: False

### SMPTE Ratio (3/5/2017 12:09:05.231 PM)

Channel	Lower Limit	Value	Upper Limit	
Right	---- %	0.008603 %	0.101408 %	✓
Left	---- %	0.010180 %	0.101408 %	✓

Result: ✓ PASSED

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PAS Line Amp Suite : Signal Analyzer

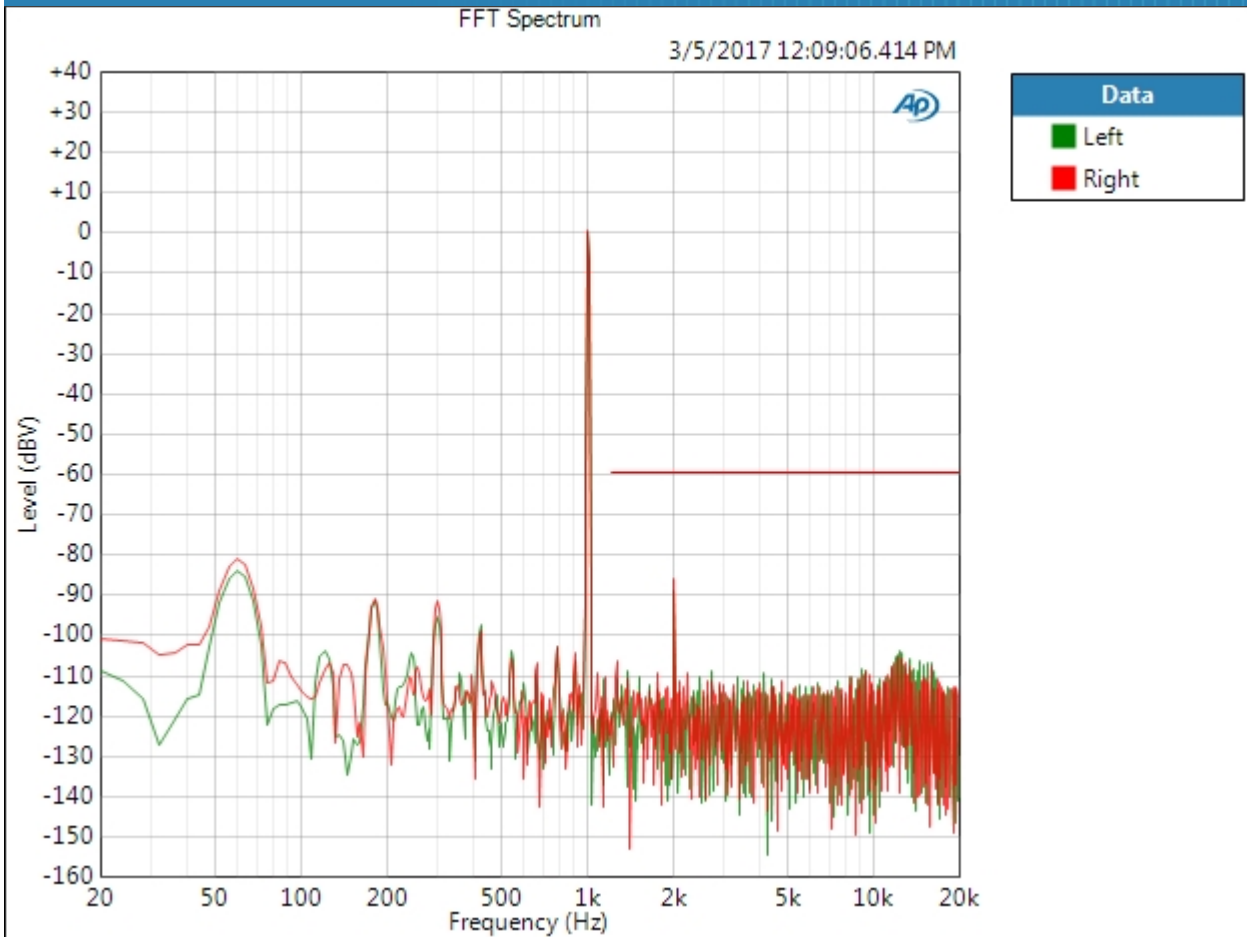
Waveform: Sine  
Generator Level: -0.000 dBrG (@149.8 mVrms)  
DC Offset: 0.000 V  
Frequency: 1.00000 kHz  
Secondary Source: None  
Measured 1: 3/5/2017 12:09:06 PM  
Acquisition Type: Auto  
Trigger: Free Run  
Delay Time: 250.0 ms  
Input Bandwidth: Use Signal Path  
FFT Length: 48K  
Averaging: Power  
Averages: 1  
Window: AP-Equiripple  
Record Acquisition: False

FFT Spectrum (3/5/2017 12:09:06.414 PM)

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Left  PASSED  
Right  PASSED  
Result:  PASSED