

Schiit Amp APx555 Standard Test Suite: Vidar



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

8 Ohm Stereo

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

4 Ohm Stereo

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

8 Ohm Mono

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

8 Ohm Stereo : Signal Path Setup

Output Connector:	Analog Unbalanced
Channels:	2
Generator Mode:	High Performance Sine Generator
Source Impedance:	20 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

8 Ohm Stereo : Level and Gain

Waveform: Sine
Generator Mode: High Performance Sine Generator
Generator Level: 110.0 mVrms
Frequency: 1.00000 kHz

RMS Level (6/25/2019 10:20:09.383 AM)

Ch1 2.005 Vrms
Ch2 2.006 Vrms

8 Ohm Stereo : 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

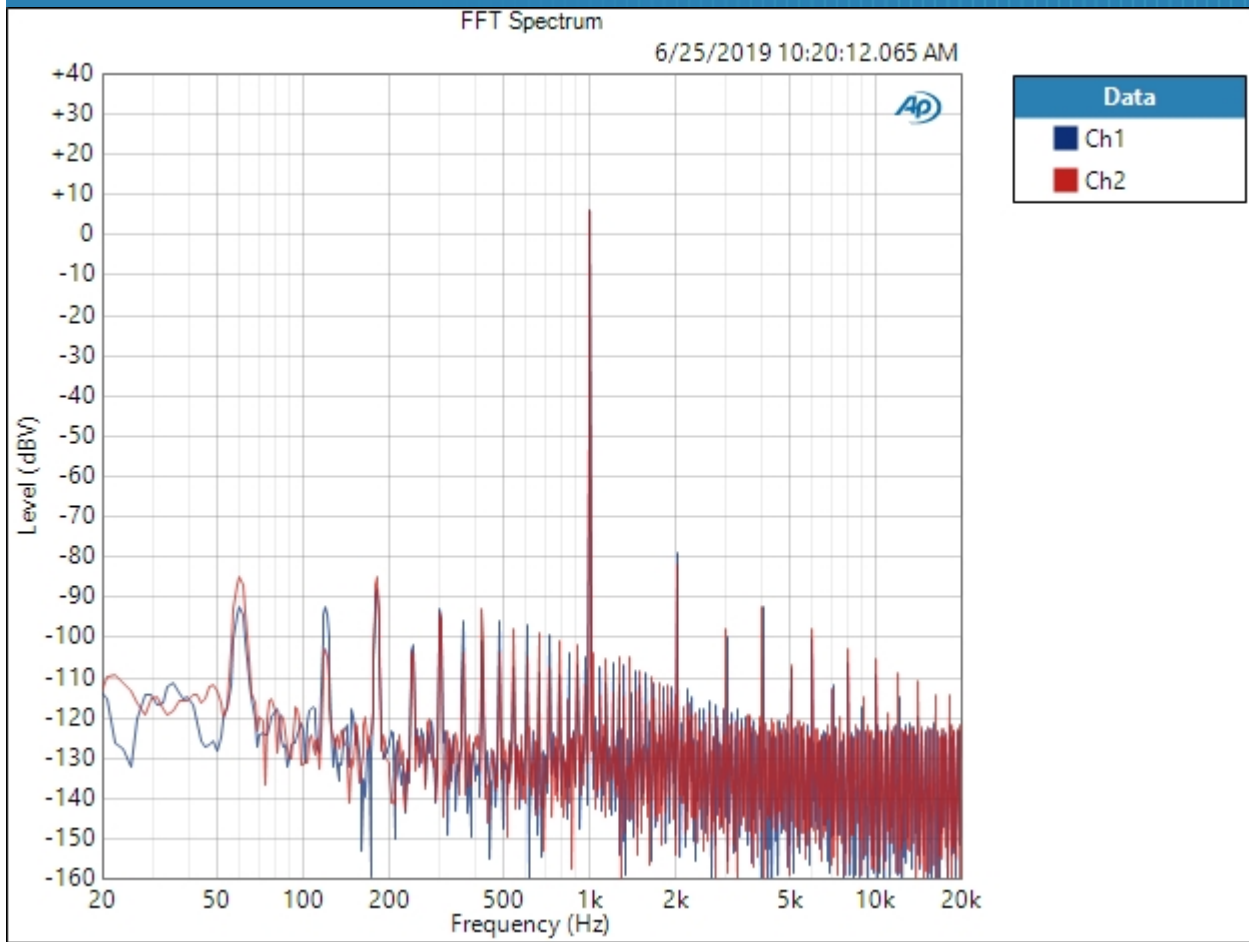
DC Level (6/25/2019 10:20:10.443 AM)

Ch1 10.89 mV
Ch2 5.238 mV

8 Ohm Stereo : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Generator Level: 110.0 mVrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1: 6/25/2019 10:20:12 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 100.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 1
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (6/25/2019 10:20:12.065 AM)

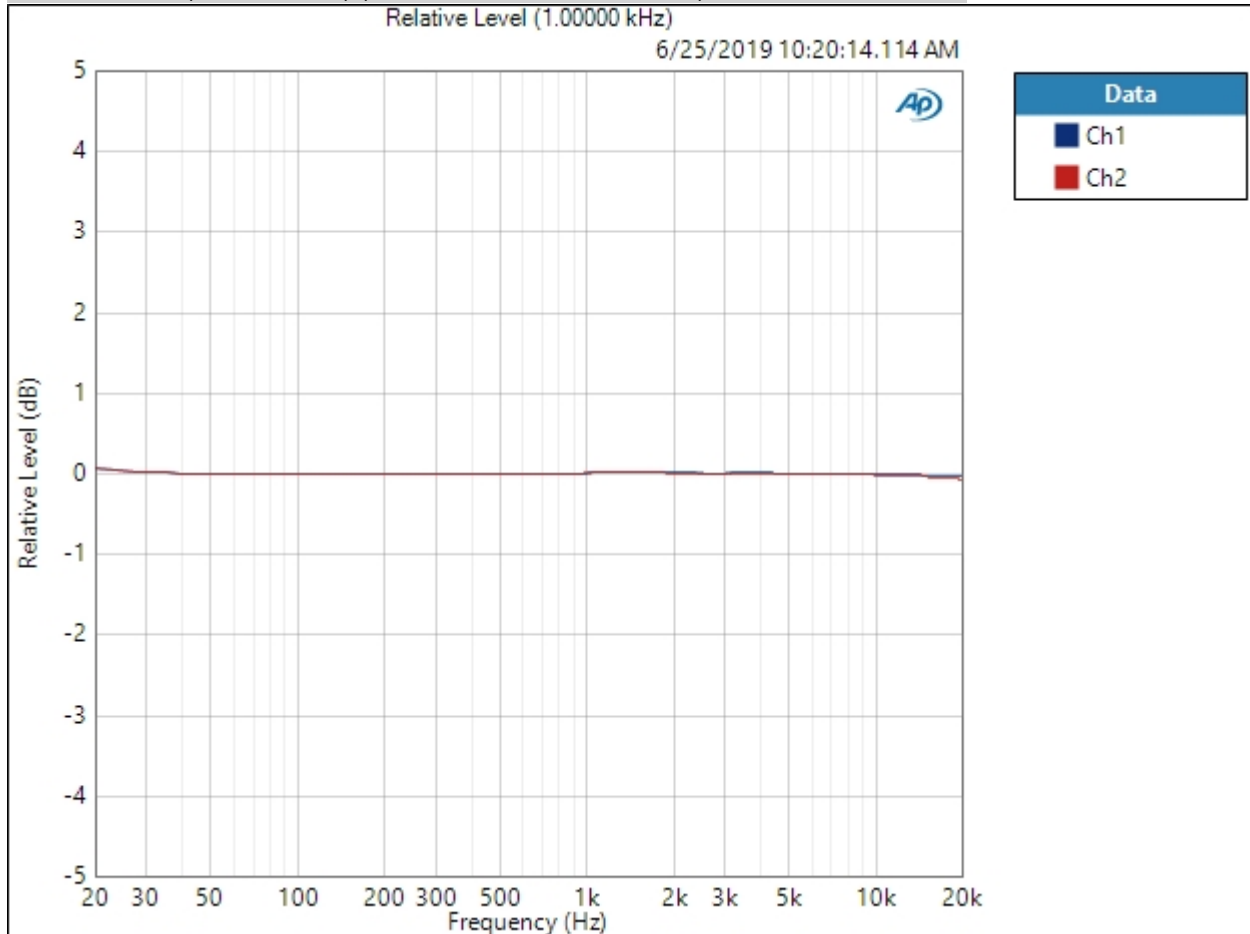


Result:  PASSED

8 Ohm Stereo : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 110.0 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 6/25/2019 10:20:14 AM

Relative Level (1.00000 kHz) (6/25/2019 10:20:14.114 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) (6/25/2019 10:20:14.114 AM)

Ch1 ± 0.053 dB

Ch2 ± 0.070 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

8 Ohm Stereo : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Generator Level: 1.600 Vrms

Frequency: 1.00000 kHz

Low-pass Filter: 20 kHz

Weighting Filter: A-wt.

High-pass Filter: 20 Hz

Signal to Noise Ratio (6/25/2019 10:20:16.022 AM)

Ch1 120.630 dB

Ch2 120.122 dB

8 Ohm Stereo : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Generator Level: 110.0 mVrms
 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 (6/25/2019 10:20:18.813 AM)

Ch1 0.007187 %
 Ch2 0.006326 %

THD Ratio (6/25/2019 10:20:18.813 AM)

Ch1 0.005836 %
 Ch2 0.004259 %

Noise Ratio (6/25/2019 10:20:18.813 AM)

Ch1 0.003909 %
 Ch2 0.004772 %

Distortion Product Ratio (6/25/2019 10:20:18.813 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	-84.91	-105.85	-99.29	-114.58	-107.47	-122.29	-112.05	-120.26	-117.73
Ch2	-0.00	-88.00	-104.52	-98.76	-114.17	-104.59	-119.70	-109.56	-126.24	-113.99

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB

8 Ohm Stereo : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Generator Level: 110.0 mVrms

Frequency: 10.0000 kHz

Crosstalk (6/25/2019 10:20:20.011 AM)

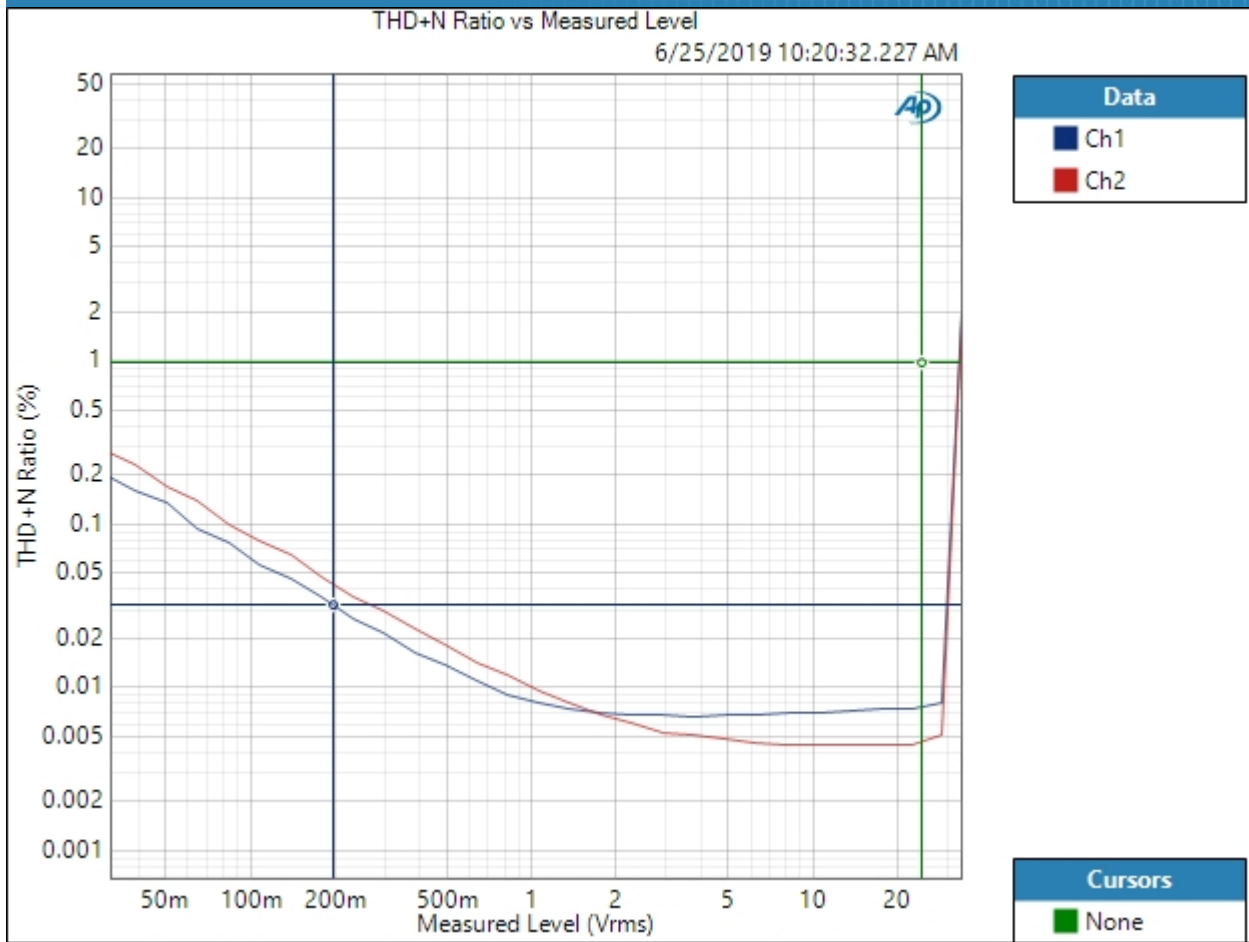
Ch1 79.289 dB

Ch2 74.480 dB

8 Ohm Stereo : 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: 2.000 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 6/25/2019 10:20:32 AM

THD+N Ratio vs Measured Level (6/25/2019 10:20:32.227 AM)



Result: PASSED

4 Ohm Stereo : Signal Path Setup

Output Connector:	Analog Unbalanced
Channels:	2
Generator Mode:	High Performance Sine Generator
Source Impedance:	20 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

4 Ohm Stereo : Level and Gain

Waveform: Sine
Generator Mode: High Performance Sine Generator
Generator Level: 55.00 mVrms
Frequency: 1.00000 kHz

RMS Level (6/25/2019 10:47:24.443 AM)

Ch1 1.001 Vrms
Ch2 1.001 Vrms

4 Ohm Stereo : 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

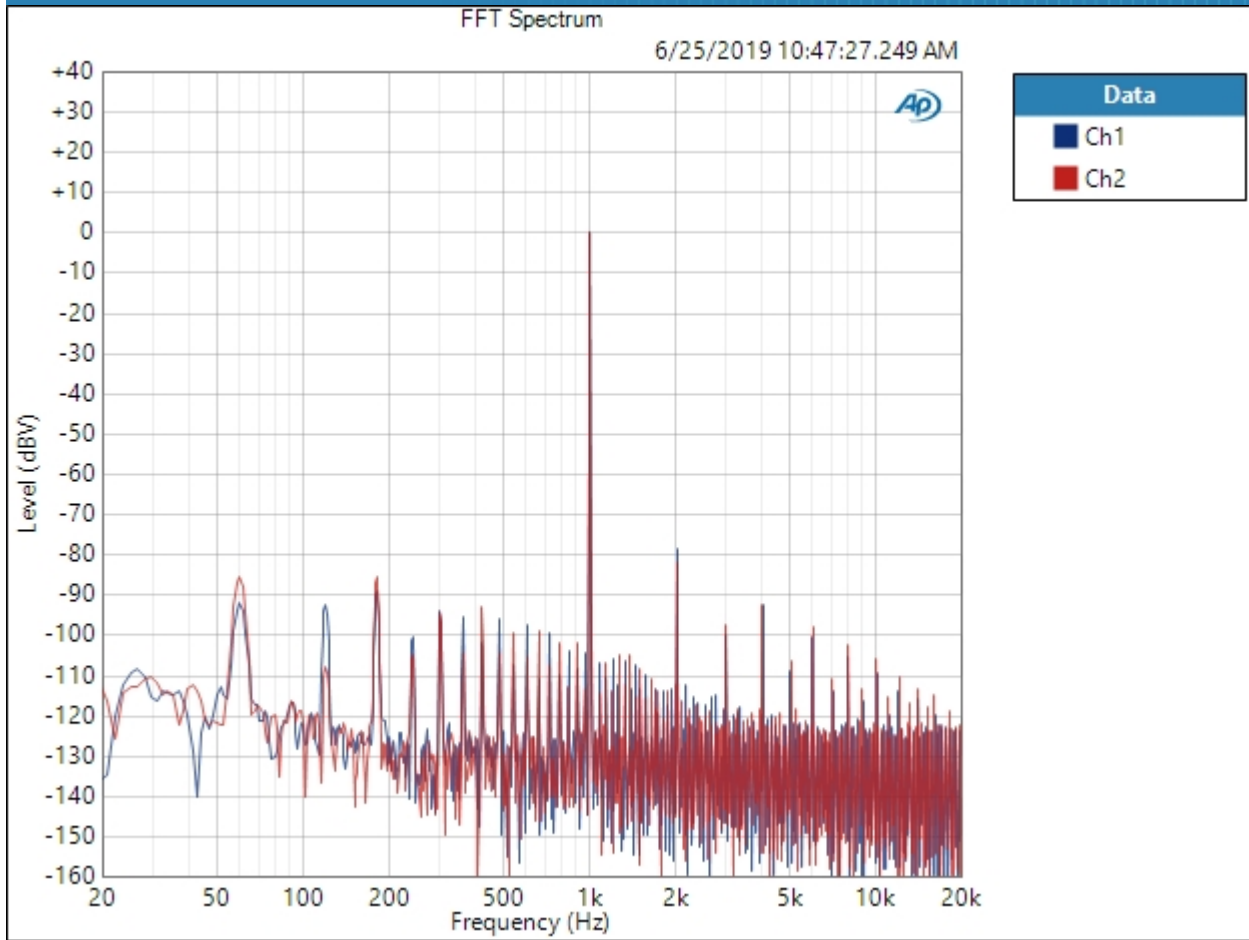
DC Level (6/25/2019 10:47:25.515 AM)

Ch1 9.717 mV
Ch2 4.710 mV

4 Ohm Stereo : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Generator Level: 55.00 mVrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1: 6/25/2019 10:47:27 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 1
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (6/25/2019 10:47:27.249 AM)

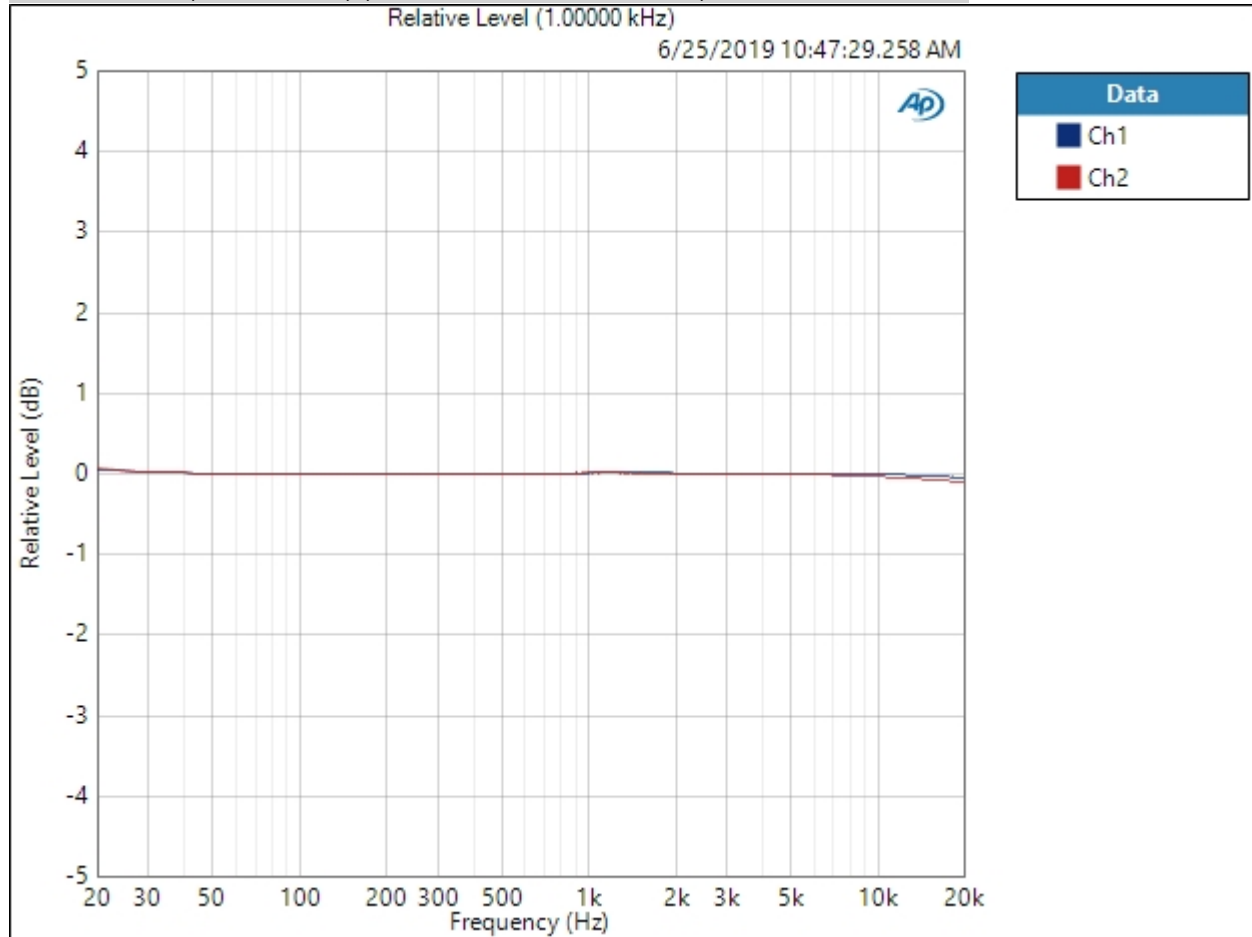


Result:  PASSED

4 Ohm Stereo : Frequency Response

Start Frequency: 20.0000 Hz
 Stop Frequency: 20.0000 kHz
 Generator Level: 55.00 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 6/25/2019 10:47:29 AM

Relative Level (1.00000 kHz) (6/25/2019 10:47:29.258 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) (6/25/2019 10:47:29.258 AM)

Ch1 ± 0.052 dB

Ch2 ± 0.087 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

4 Ohm Stereo : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Generator Level: 1.600 Vrms

Frequency: 1.00000 kHz

Low-pass Filter: 20 kHz

Weighting Filter: A-wt.

High-pass Filter: 20 Hz

Signal to Noise Ratio (6/25/2019 10:47:31.206 AM)

Ch1 120.870 dB

Ch2 120.466 dB

4 Ohm Stereo : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Generator Level: 55.00 mVrms
 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 (6/25/2019 10:47:34.024 AM)

Ch1 0.015415 %
 Ch2 0.013536 %

THD Ratio (6/25/2019 10:47:34.024 AM)

Ch1 0.012048 %
 Ch2 0.008421 %

Noise Ratio (6/25/2019 10:47:34.024 AM)

Ch1 0.012012 %
 Ch2 0.012501 %

Distortion Product Ratio (6/25/2019 10:47:34.024 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	-78.60	-100.64	-92.91	-111.33	-101.26	-116.38	-108.19	-119.25	-113.12
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-82.11	-97.96	-92.72	-107.24	-99.15	-112.12	-103.30	-109.96	-107.88

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB

4 Ohm Stereo : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Generator Level: 55.00 mVrms

Frequency: 10.0000 kHz

Crosstalk (6/25/2019 10:47:35.239 AM)

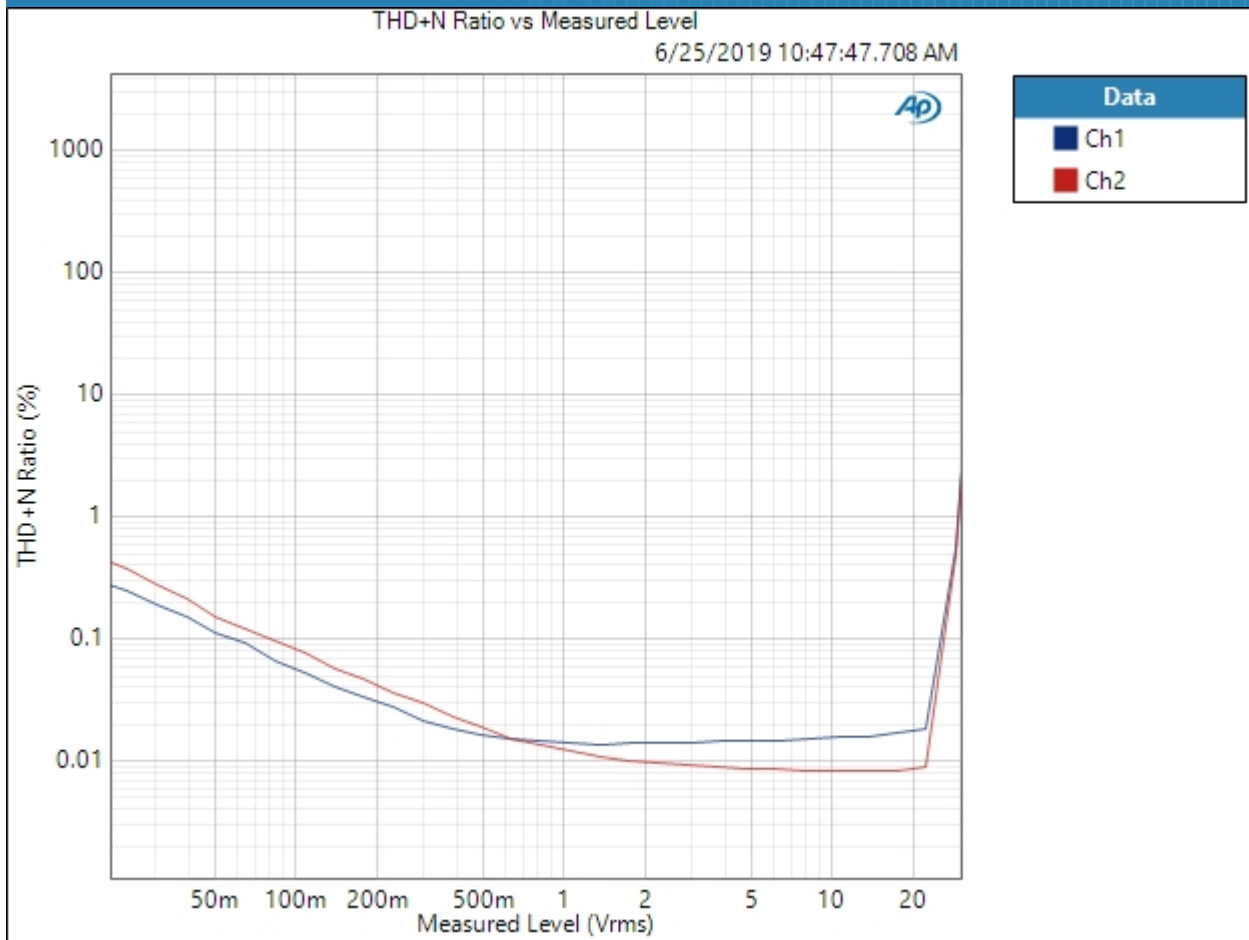
Ch1 70.344 dB

Ch2 66.368 dB

4 Ohm Stereo : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Generator Level: 0.000 Vrms
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 2.000 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 6/25/2019 10:47:47 AM

THD+N Ratio vs Measured Level (6/25/2019 10:47:47.708 AM)



Result: PASSED

8 Ohm Mono : 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:	1
Channel:	Ch1
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

8 Ohm Mono : Level and Gain

Waveform: Sine
Generator Mode: High Performance Sine Generator
Generator Level: 110.0 mVrms
Frequency: 1.00000 kHz

RMS Level (6/25/2019 10:42:47.569 AM)

Ch1 2.003 Vrms

8 Ohm Mono : 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

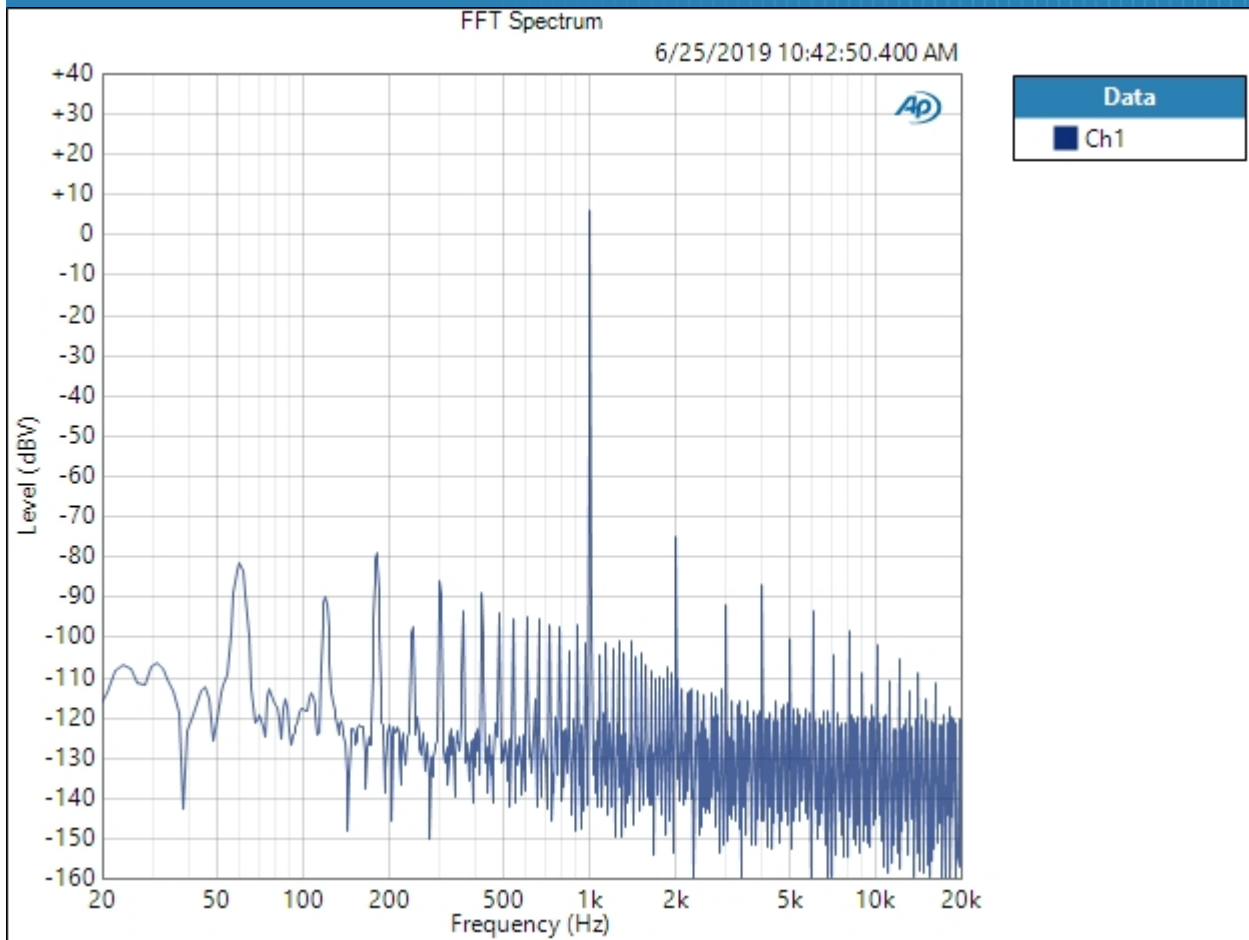
DC Level (6/25/2019 10:42:48.649 AM)

Ch1 -3.226 mV

8 Ohm Mono : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Generator Level: 110.0 mVrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1: 6/25/2019 10:42:50 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 1
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (6/25/2019 10:42:50.400 AM)

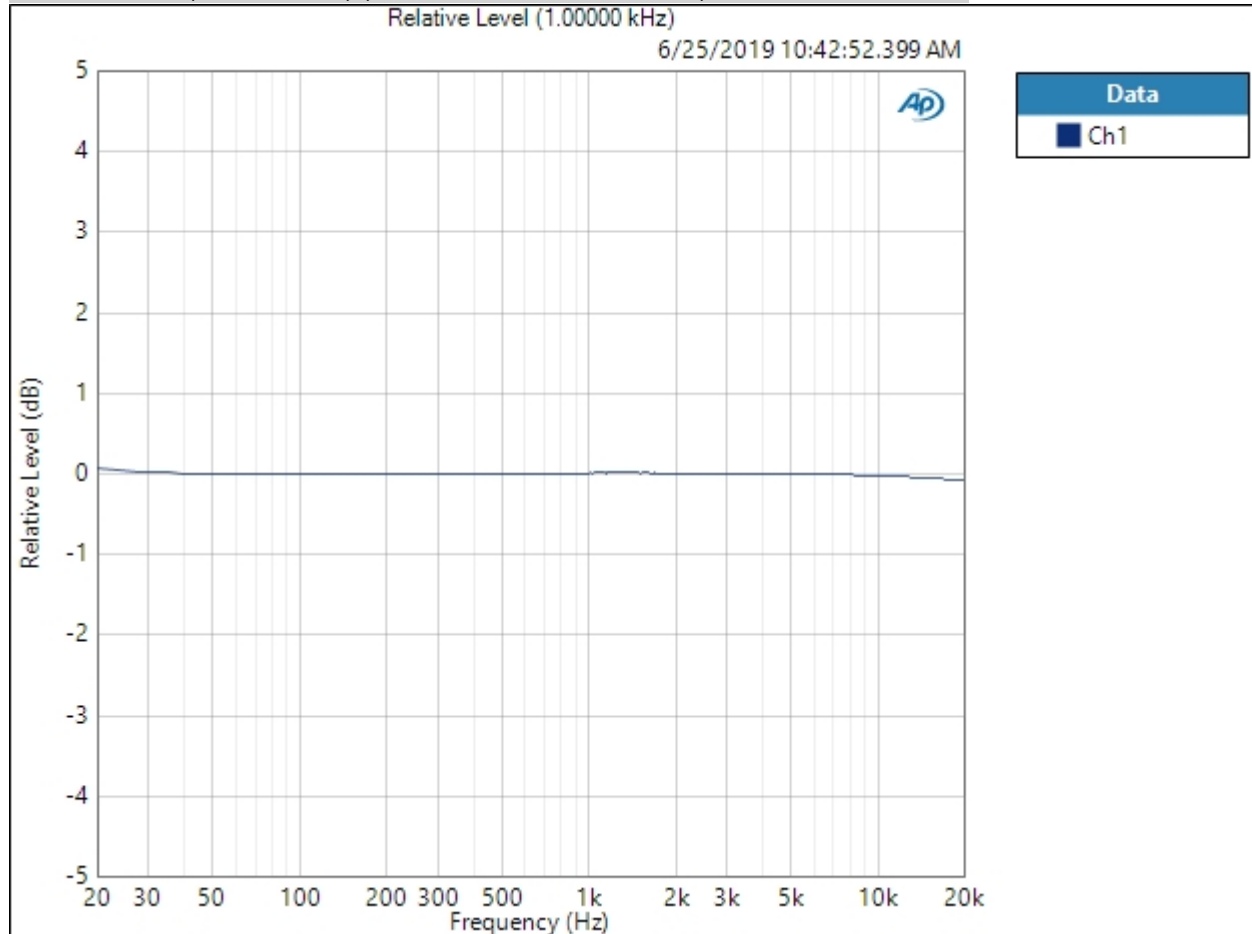


Result:  PASSED

8 Ohm Mono : Frequency Response

Start Frequency: 20.0000 Hz
 Stop Frequency: 20.0000 kHz
 Generator Level: 110.0 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 6/25/2019 10:42:52 AM

Relative Level (1.00000 kHz) (6/25/2019 10:42:52.399 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) (6/25/2019 10:42:52.399 AM)

Ch1 ± 0.082 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

8 Ohm Mono : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Generator Level: 1.600 Vrms

Frequency: 1.00000 kHz

Low-pass Filter: 20 kHz

Weighting Filter: A-wt.

High-pass Filter: 20 Hz

Signal to Noise Ratio (6/25/2019 10:42:54.337 AM)

Ch1 114.862 dB

8 Ohm Mono : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Generator Level: 110.0 mVrms
 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 (6/25/2019 10:42:56.629 AM)

Ch1 0.012487 %

THD Ratio (6/25/2019 10:42:56.629 AM)

Ch1 0.009426 %

Noise Ratio (6/25/2019 10:42:56.629 AM)

Ch1 0.008180 %

Distortion Product Ratio (6/25/2019 10:42:56.629 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	-80.88	-99.41	-93.53	-109.07	-100.28	-115.67	-105.65	-118.07	-111.48

Distortion Product Ratio Parameters

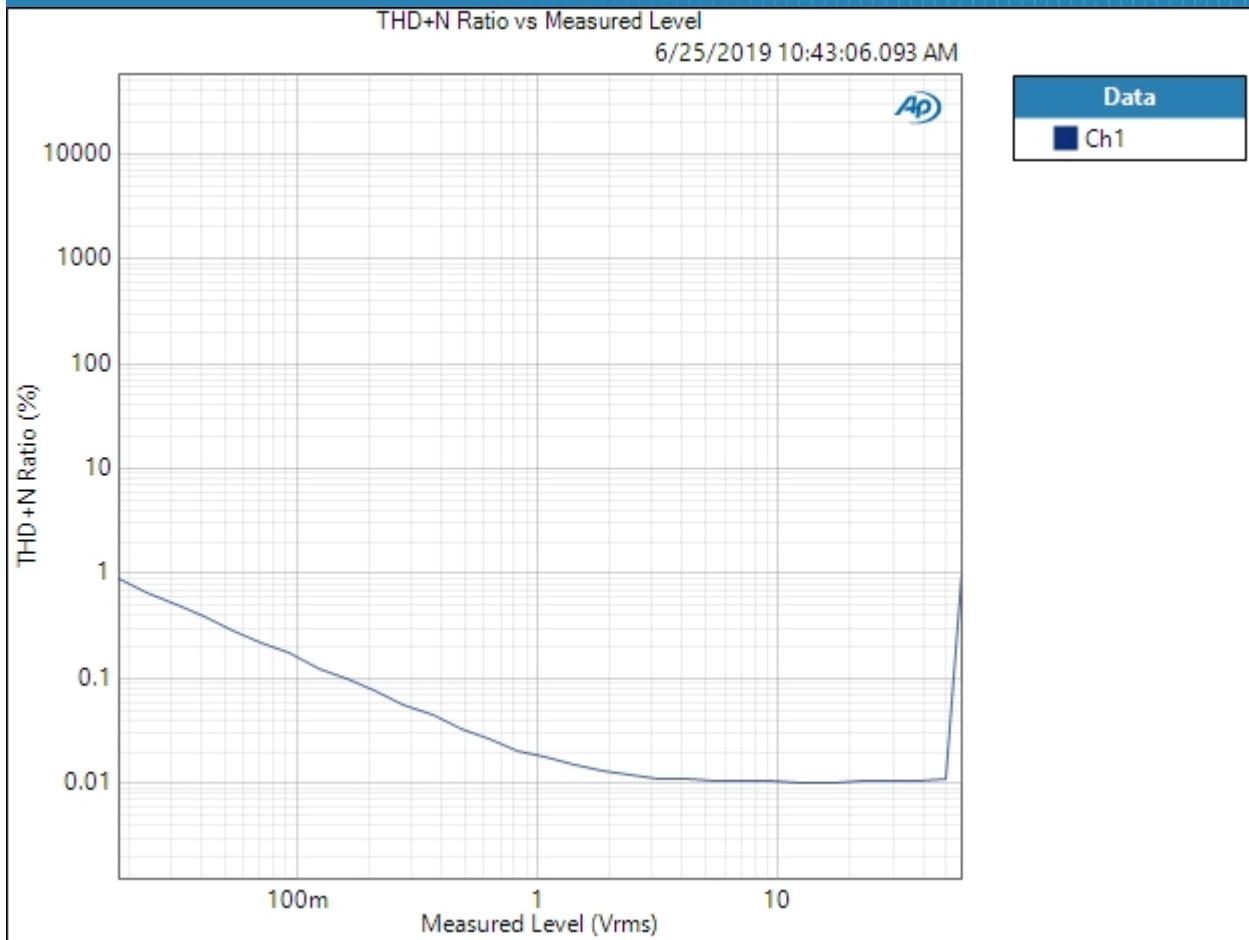
Frequency Unit: Hz

Ratio Unit: dB

8 Ohm Mono : 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: 3.500 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 6/25/2019 10:43:06 AM

THD+N Ratio vs Measured Level (6/25/2019 10:43:06.093 AM)



Result: PASSED