

Schiit Amp APx555 Standard Test Suite: Aegir



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 12:50:36.101 PM)

Ch1 1.056 Vrms
Ch2 1.057 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

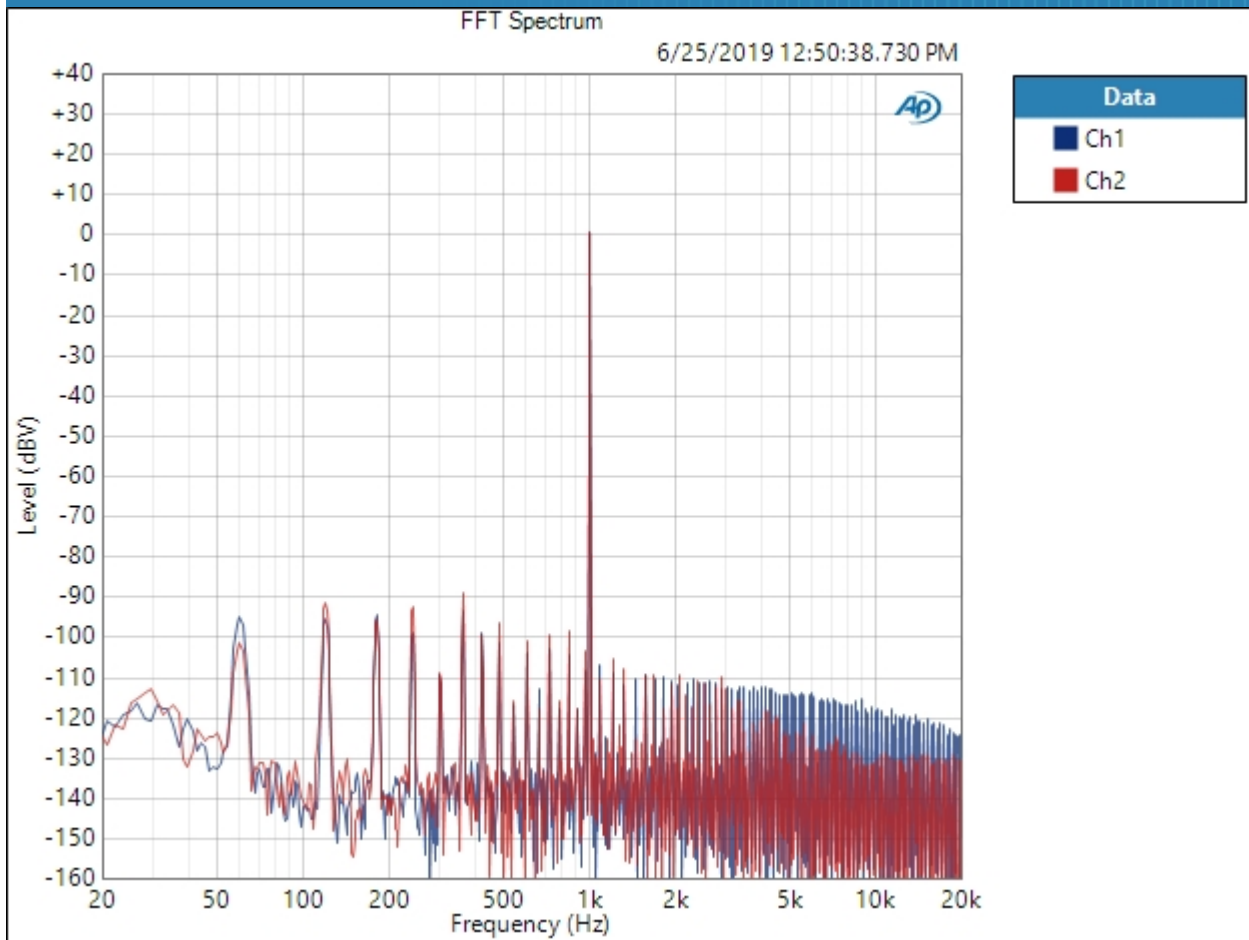
DC Level (6/25/2019 12:50:37.151 PM)

Ch1 -7.064 mV
Ch2 -12.14 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 12:50:38 PM
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 12:50:38.730 PM)

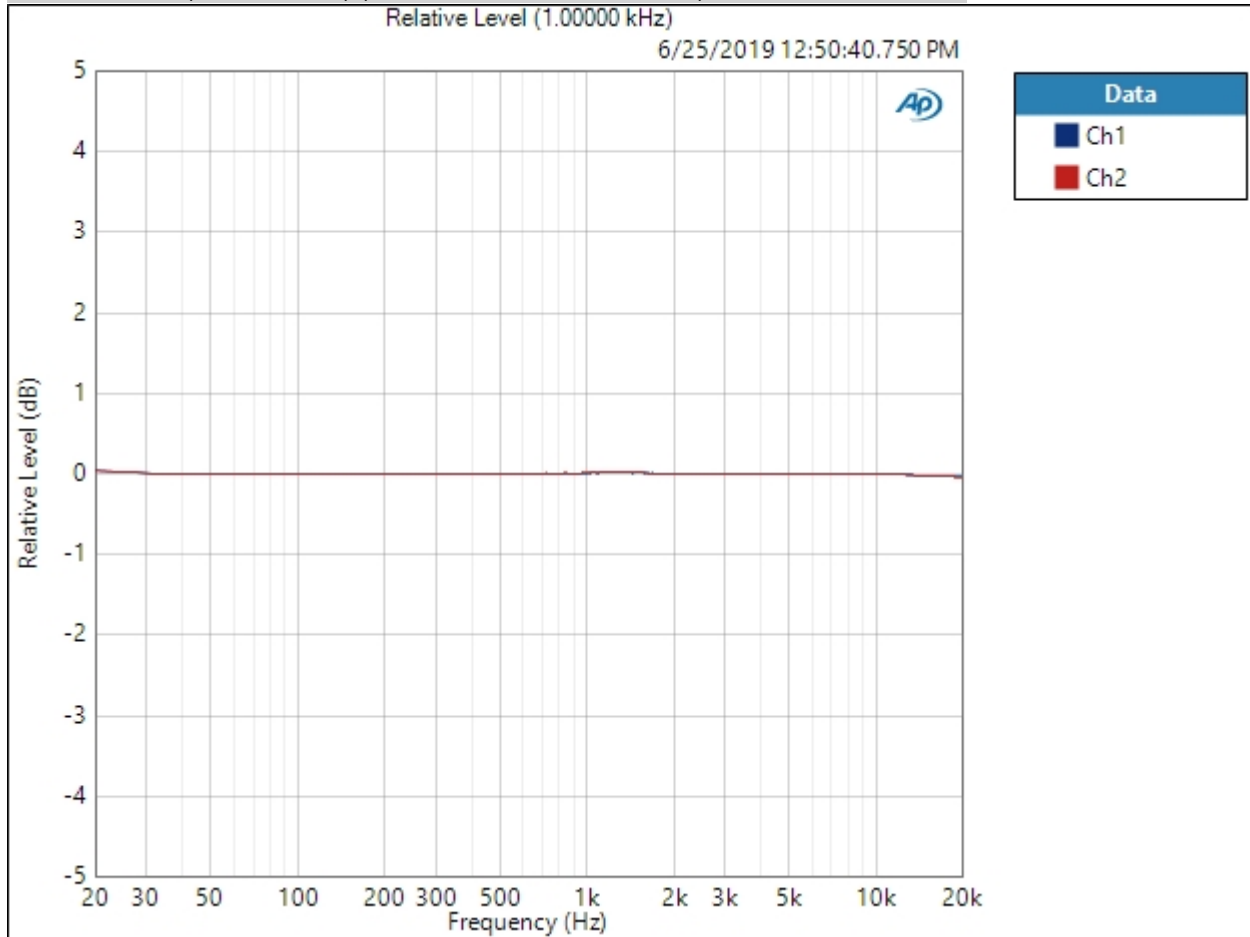


Result:  PASSED

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 12:50:40 PM

Relative Level (1.00000 kHz) (6/25/2019 12:50:40.750 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) (6/25/2019 12:50:40.750 PM)

Ch1 ± 0.044 dB

Ch2 ± 0.047 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 12:50:42.660 PM)

Ch1 114.299 dB

Ch2 112.612 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 12:50:45.169 PM)

Ch1 0.004527 %
 Ch2 0.005829 %

THD Ratio (6/25/2019 12:50:45.169 PM)

Ch1 0.000391 %
 Ch2 0.000281 %

Noise Ratio (6/25/2019 12:50:45.169 PM)

Ch1 0.004497 %
 Ch2 0.005840 %

Distortion Product Ratio (6/25/2019 12:50:45.169 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	-125.66	-111.65	-132.30	-135.28	-114.69	-130.21	-126.55	-117.61	-131.32
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-117.18	-113.80	-133.39	-132.48	-129.18	-129.28	-130.10	-132.16	-128.46

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 12:50:47.119 PM)

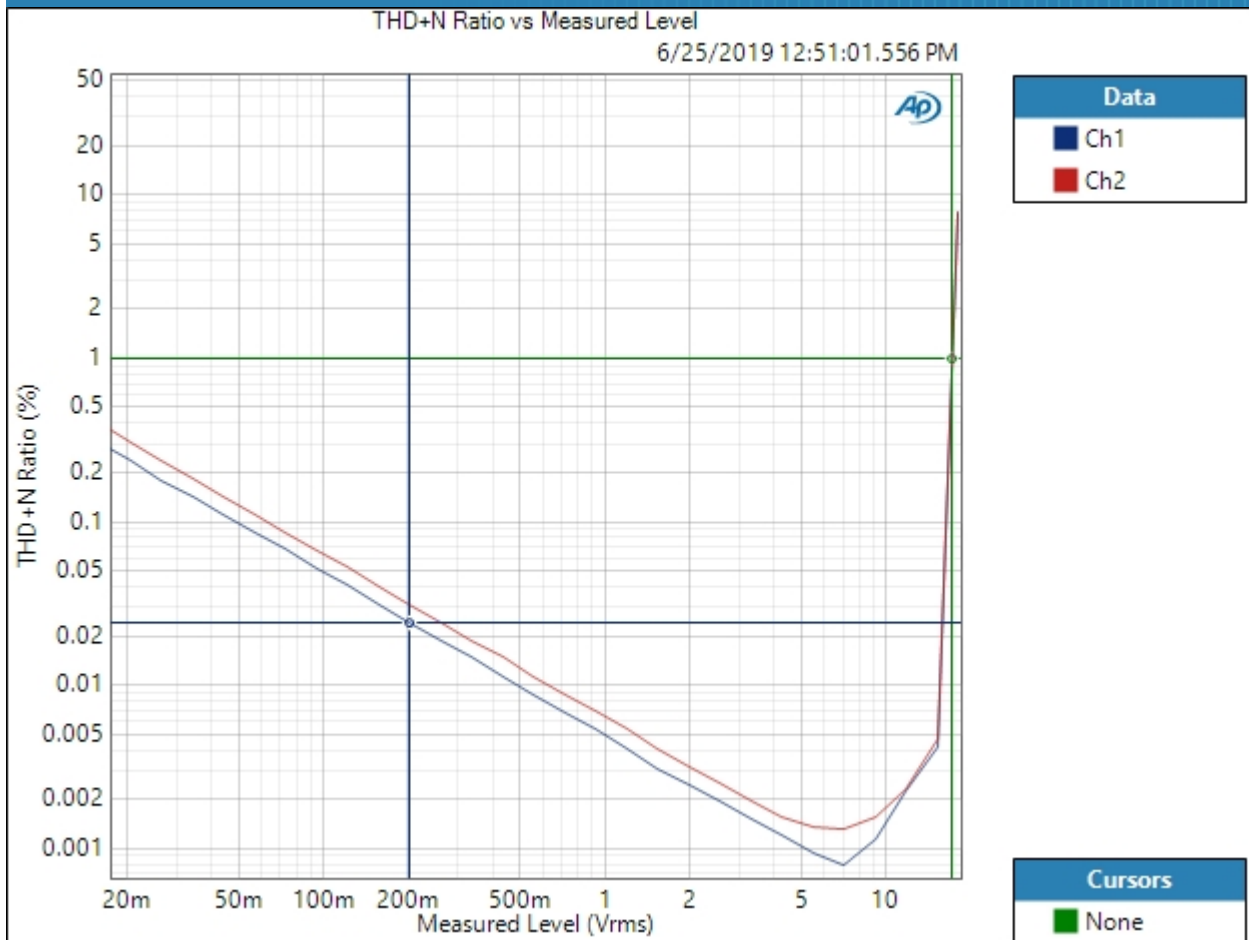
Ch1 87.964 dB

Ch2 85.815 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 12:51:01 PM

THD+N Ratio vs Measured Level (6/25/2019 12:51:01.556 PM)



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 12:57:02.717 PM)

Ch1 526.0 mVrms
Ch2 527.0 mVrms

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

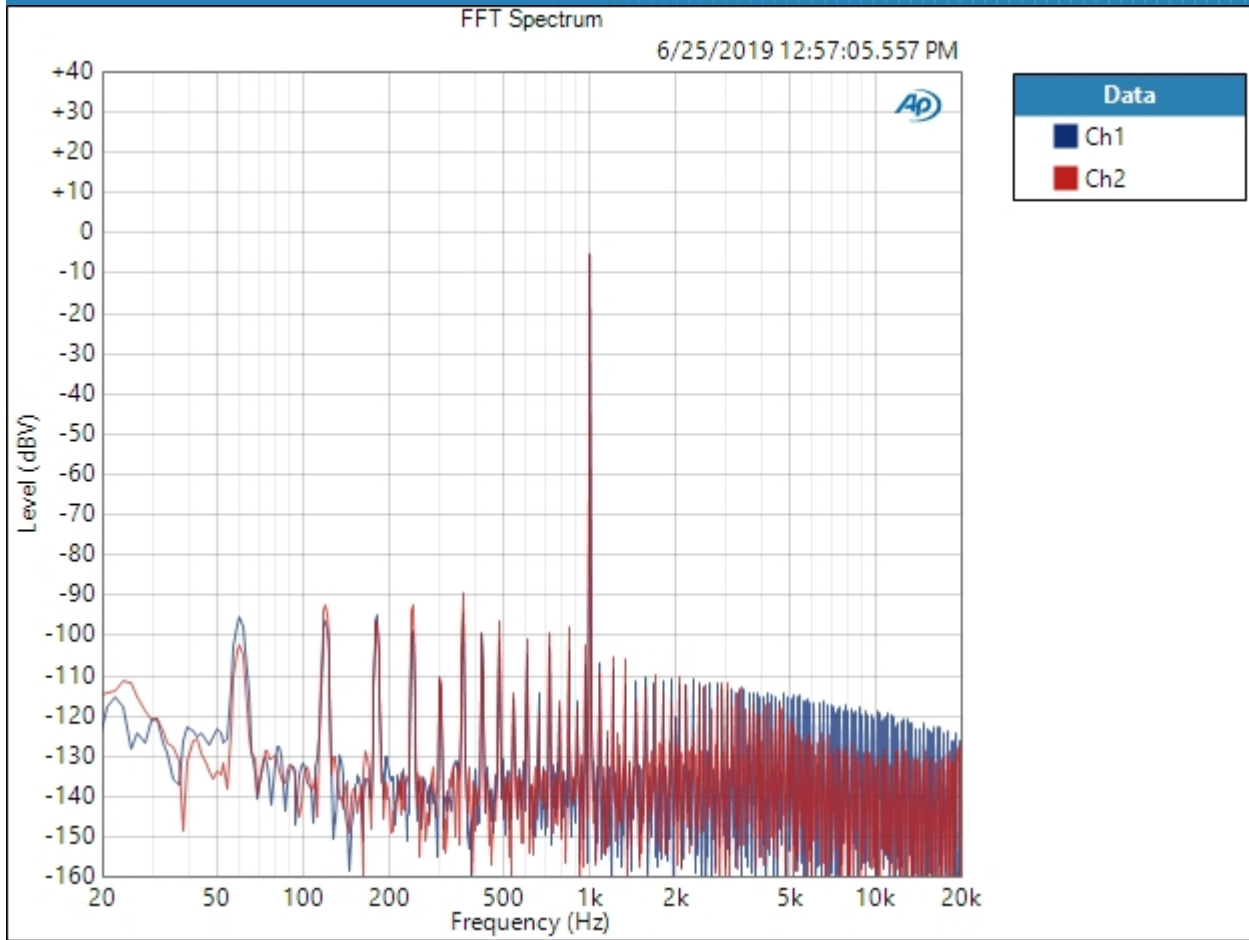
DC Level (6/25/2019 12:57:03.808 PM)

Ch1 -13.25 mV
Ch2 -18.80 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 12:57:05 PM
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 12:57:05.557 PM)

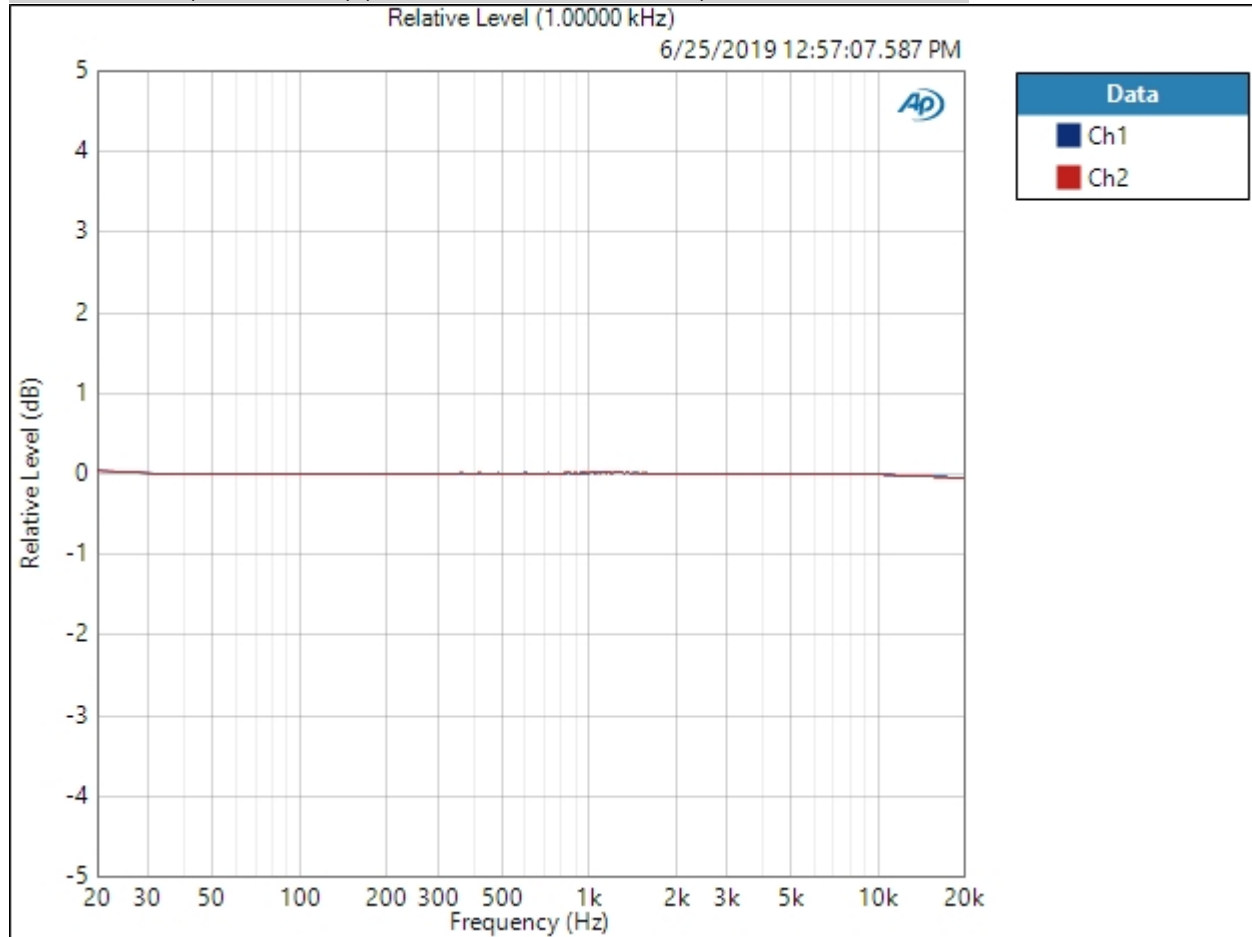


Result:  PASSED

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 12:57:07 PM

Relative Level (1.00000 kHz) (6/25/2019 12:57:07.587 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) (6/25/2019 12:57:07.587 PM)

Ch1 ± 0.053 dB

Ch2 ± 0.056 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 12:57:09.636 PM)

Ch1 114.345 dB

Ch2 111.857 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 12:57:12.425 PM)

Ch1 0.008826 %
 Ch2 0.011529 %

THD Ratio (6/25/2019 12:57:12.425 PM)

Ch1 0.000760 %
 Ch2 0.000459 %

Noise Ratio (6/25/2019 12:57:12.425 PM)

Ch1 0.008902 %
 Ch2 0.011523 %

Distortion Product Ratio (6/25/2019 12:57:12.425 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	-116.63	-105.95	-128.61	-124.00	-108.88	-126.61	-127.82	-112.59	-123.95
Ch2	-0.00	-120.32	-109.81	-125.59	-124.52	-116.54	-123.89	-122.77	-119.78	-123.27

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 12:57:14.045 PM)

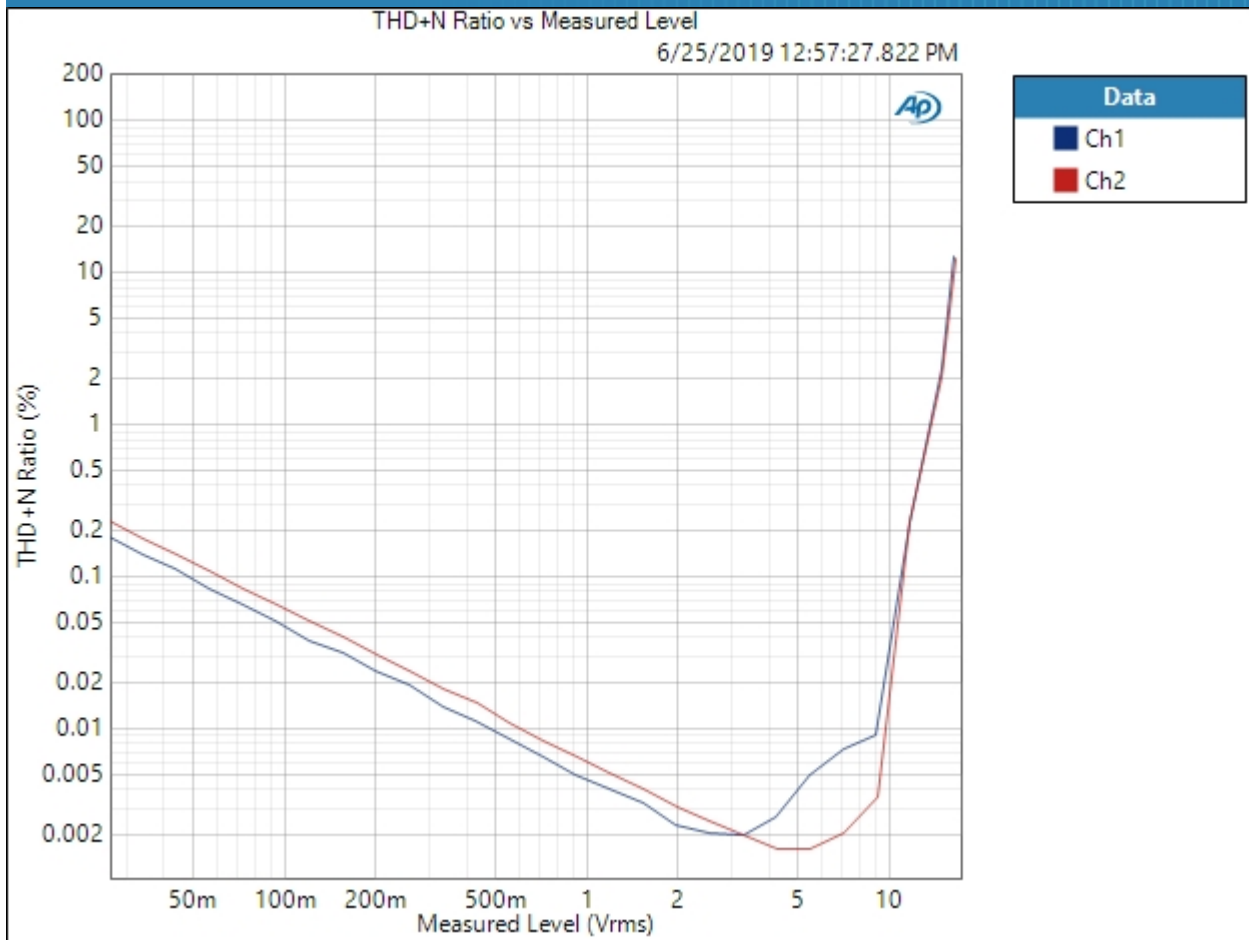
Ch1 74.643 dB

Ch2 75.159 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 12:57:27 PM

THD+N Ratio vs Measured Level (6/25/2019 12:57:27.822 PM)



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 1:00:33.869 PM)

Ch1 1.053 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

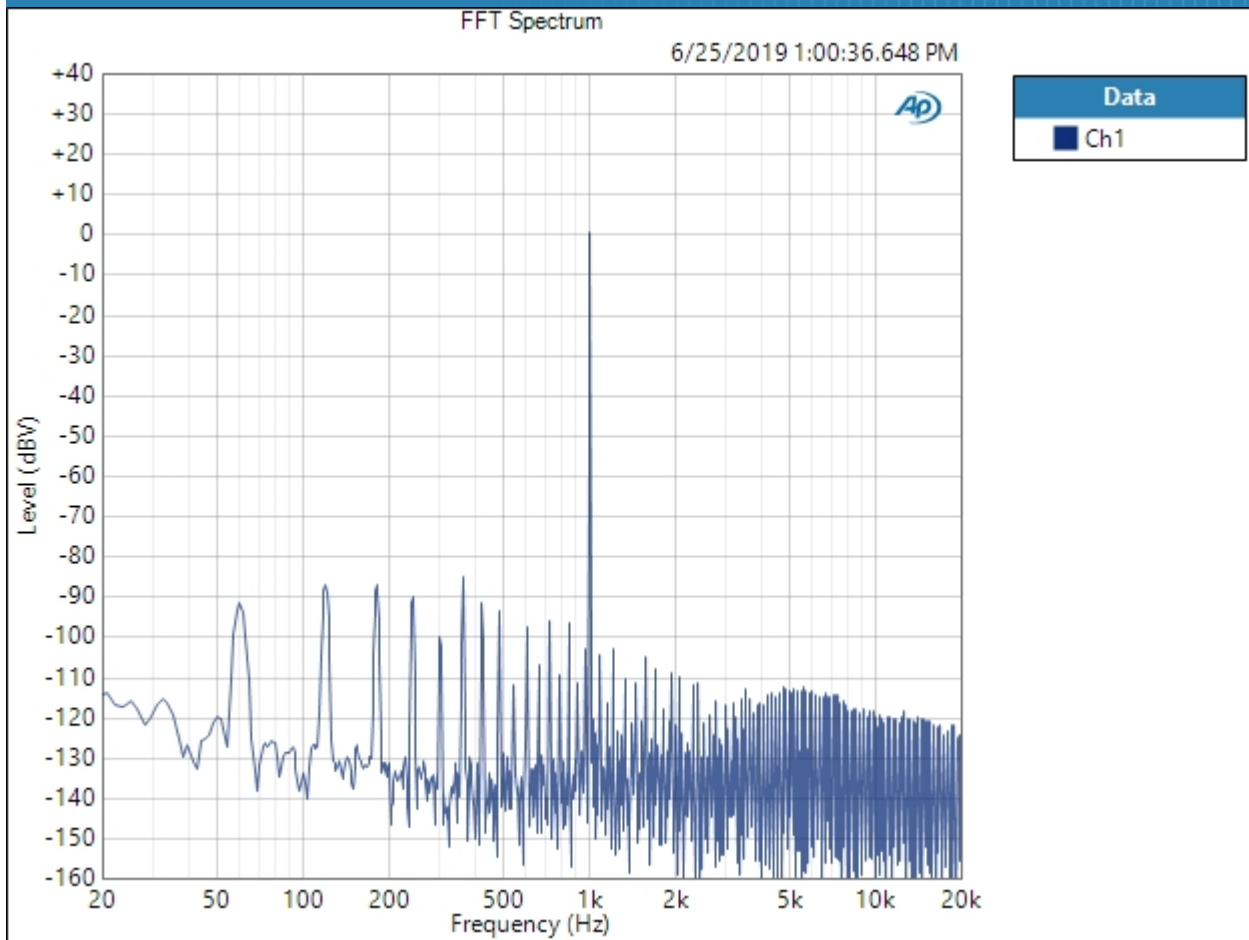
DC Level (6/25/2019 1:00:34.918 PM)

Ch1 3.968 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 1:00:36 PM
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 1:00:36.648 PM)

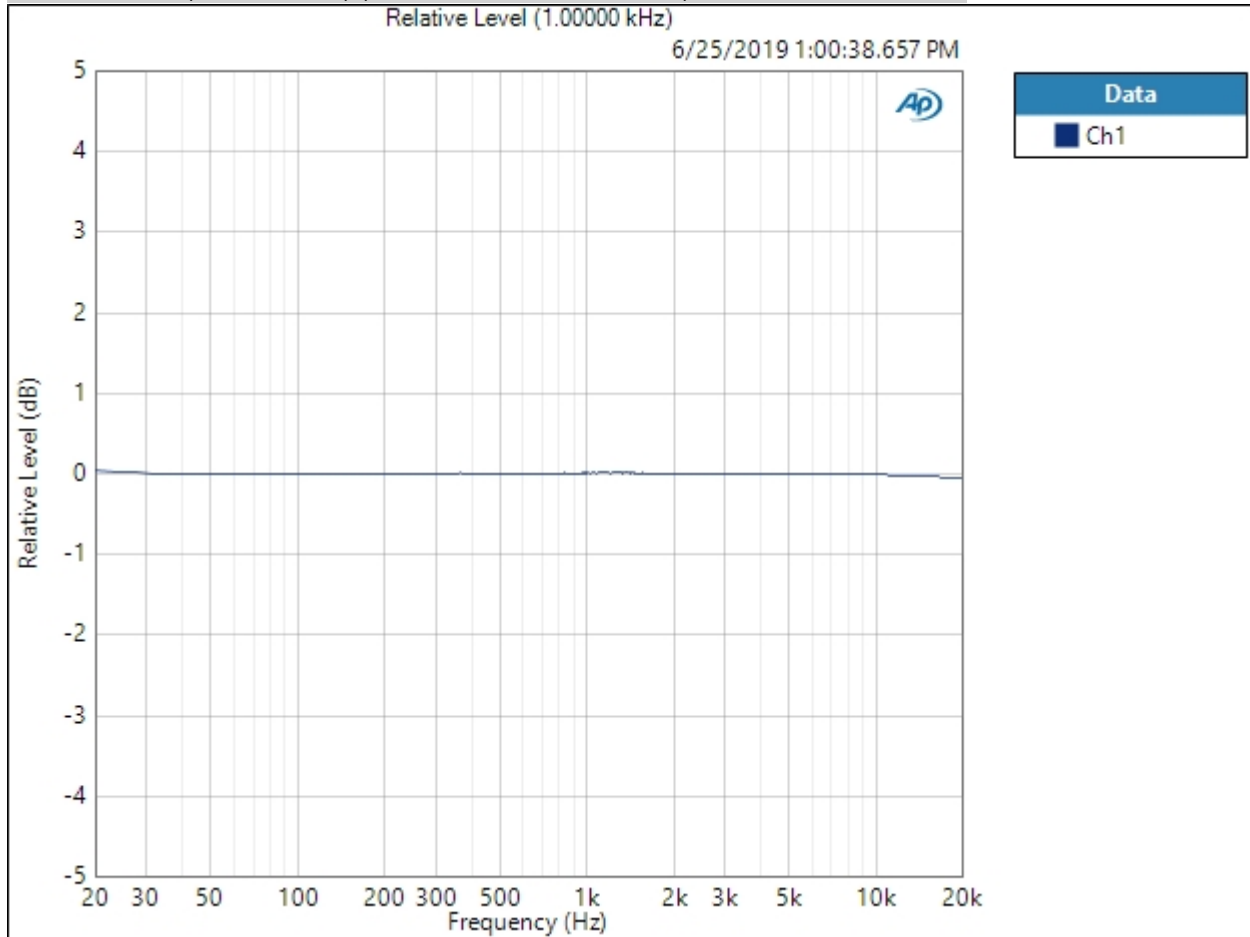


Result:  PASSED

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 1:00:38 PM

Relative Level (1.00000 kHz) (6/25/2019 1:00:38.657 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) (6/25/2019 1:00:38.657 PM)

Ch1 ± 0.053 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 1:00:40.567 PM)

Ch1 108.920 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 1:00:42.857 PM)

Ch1 0.009984 %

THD Ratio (6/25/2019 1:00:42.857 PM)

Ch1 0.000368 %

Noise Ratio (6/25/2019 1:00:42.857 PM)

Ch1 0.009924 %

Distortion Product Ratio (6/25/2019 1:00:42.857 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	-120.49	-115.27	-129.68	-128.81	-113.45	-127.16	-127.86	-119.71	-128.81

Distortion Product Ratio Parameters

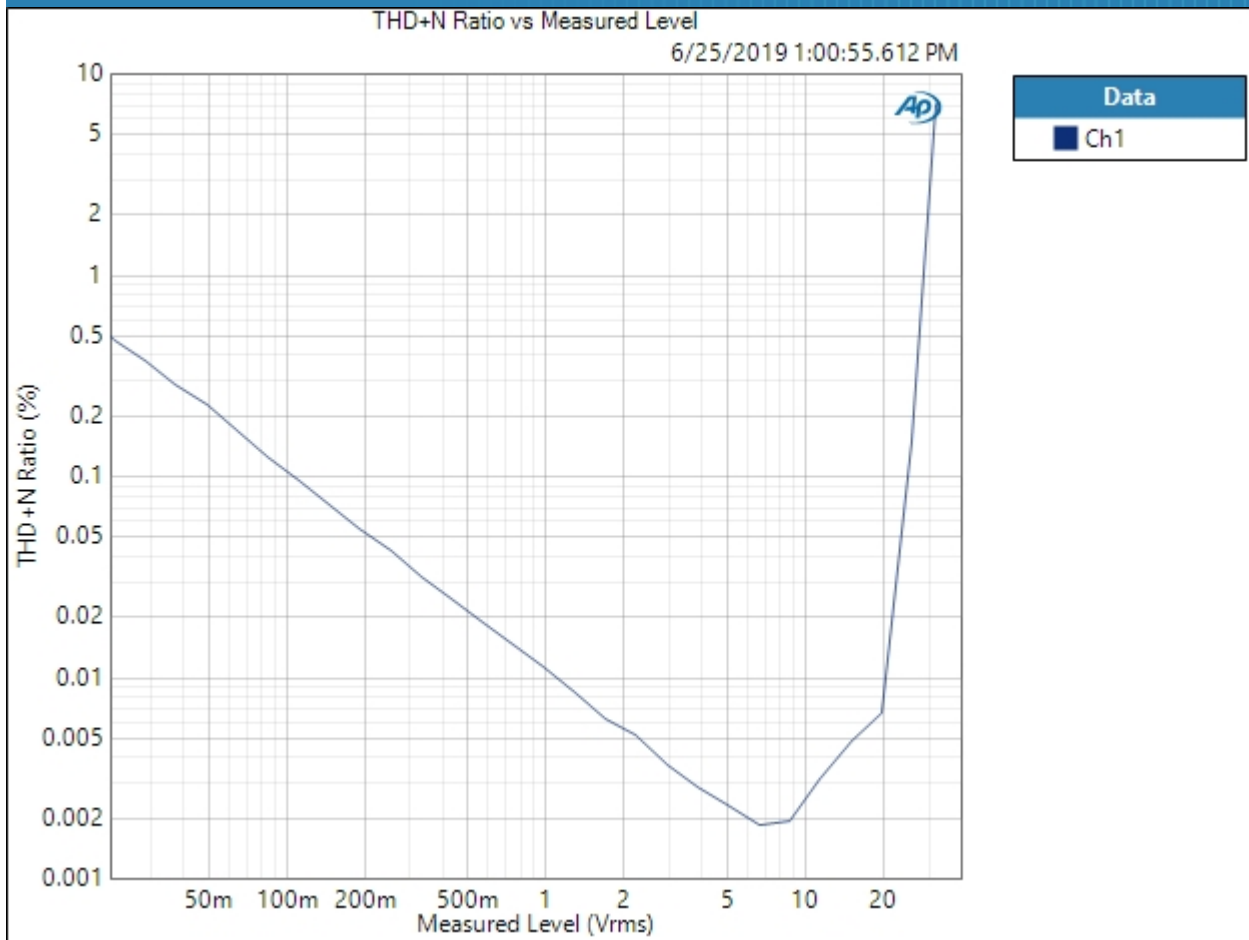
Frequency Unit: Hz

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 1:00:55 PM

THD+N Ratio vs Measured Level (6/25/2019 1:00:55.612 PM)



Result: PASSED