

Schiit Amp APx555 Standard Test Suite: Tyr



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 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

4 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: 3/23/2021
APx Version: 6.0.2.600.149330

8 Ohm Mono : Signal Path Setup

Output Connector:	Analog Balanced
Channels:	2
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Configuration:	Normal (Differential), Normal (Differential)
Source Impedance:	40 ohm, 40 ohm
Channels Inverted:	None
AG52 Generator Option:	Installed
Auto Range:	Enabled
Output EQ:	None
Input 1:	Analog Balanced
Input Bandwidth:	AC (<10 Hz) - 20 kHz (44.1 kHz SR)
Input EQ:	None
Channels:	1
Channel:	Ch1
Termination:	200 kohm
High Performance Sine Analyzer:	Enabled
Input 2:	None
Device Delay:	0.000 s
• 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
Analog Input	
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

Precision Tune: Disabled

Generator Level: 42.00 mVrms

Frequency: 1.00000 kHz

Low-pass Filter: Signal Path

RMS Level (4/7/2022 10:57:37.311 AM)

Ch1 1.010 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

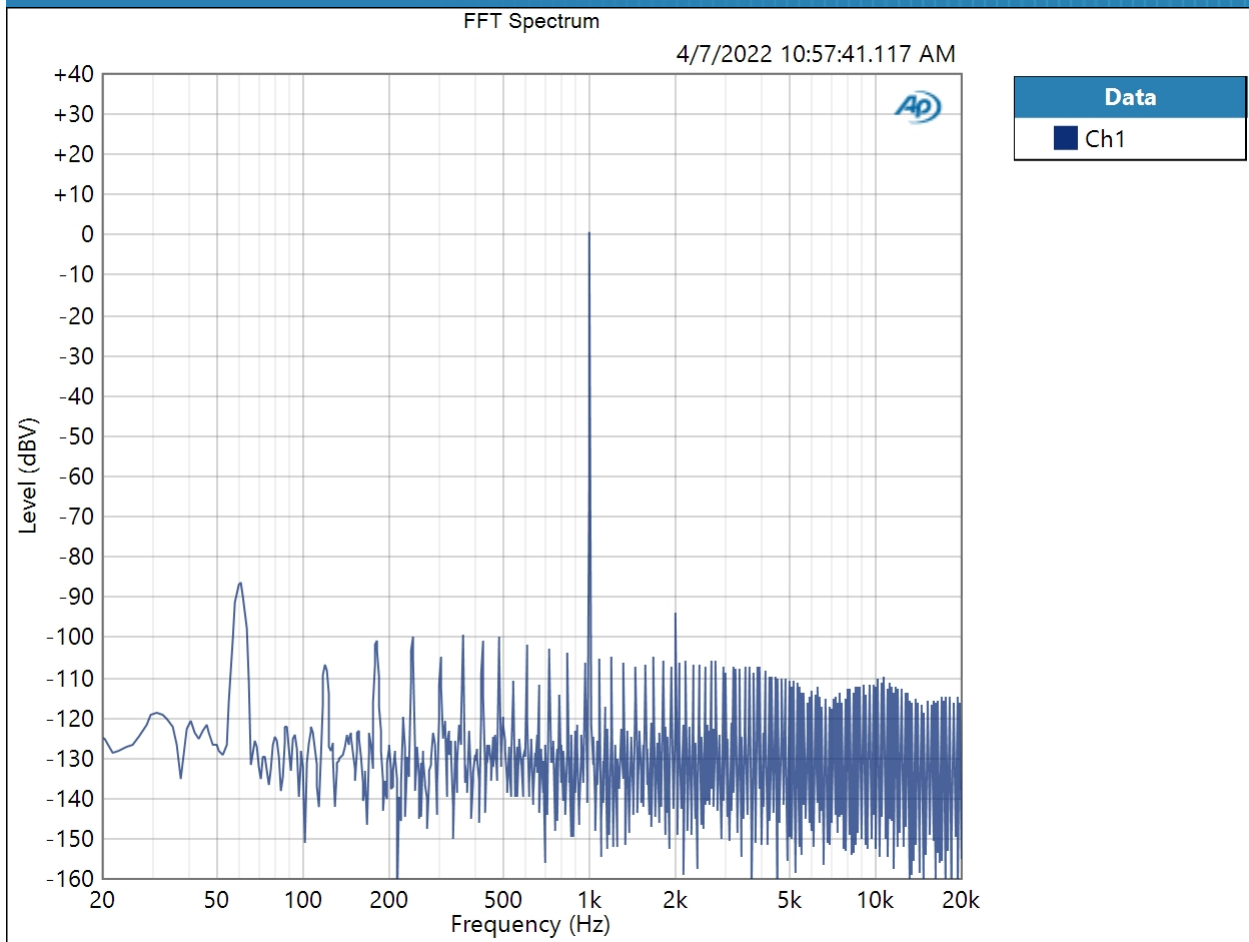
DC Level (4/7/2022 10:57:38.794 AM)

Ch1 -432.0 uV

8 Ohm Mono : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 42.00 mVrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 4/7/2022 10:57:41 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 (4/7/2022 10:57:41.117 AM)

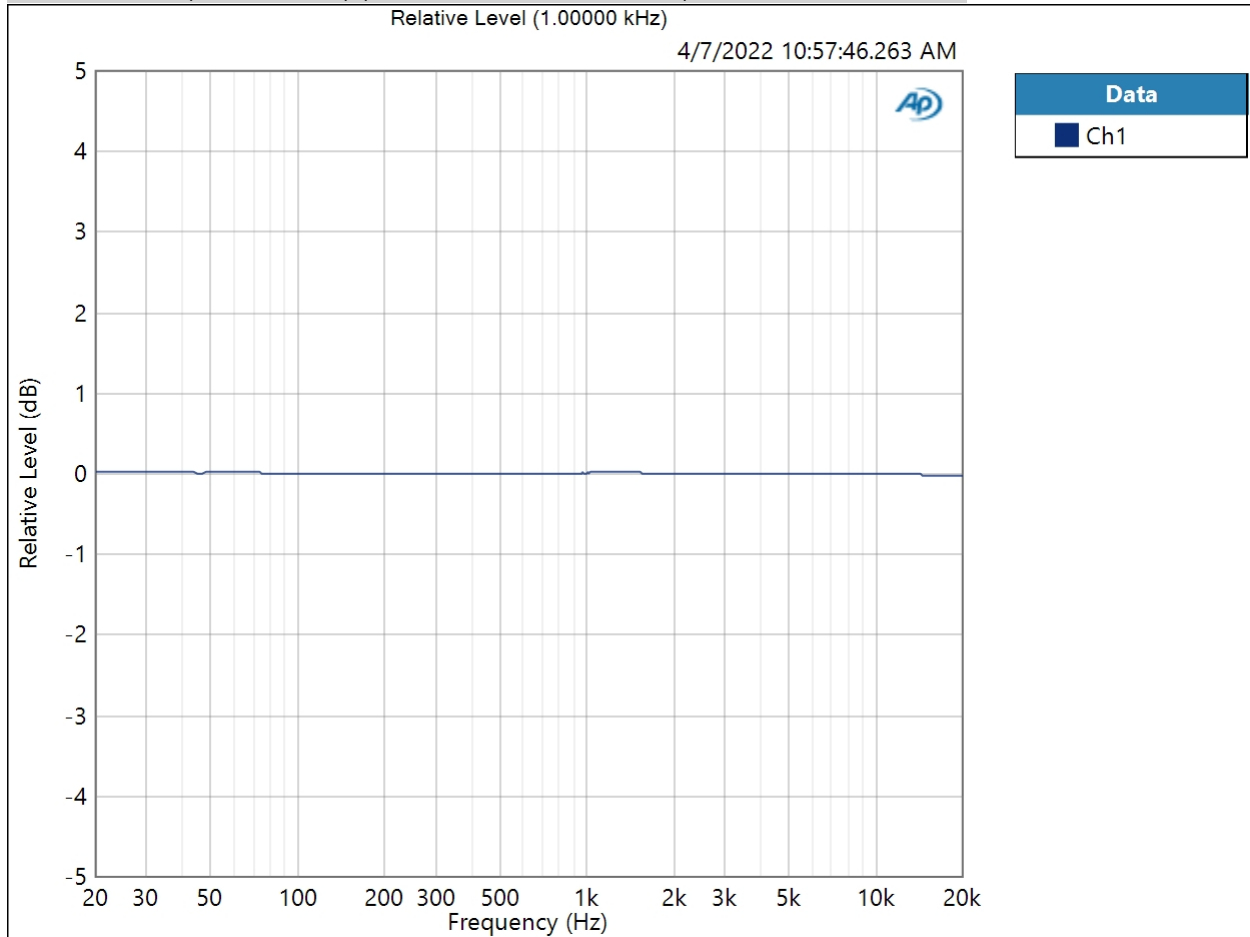


Result:  PASSED

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: 1.000 s
Secondary Source: None
Measured 1 4/7/2022 10:57:46 AM

Relative Level (1.00000 kHz) (4/7/2022 10:57:46.263 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) (4/7/2022 10:57:46.263 AM)

Ch1 ± 0.029 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
Precision Tune: Disabled
Generator Level: 1.650 Vrms
Frequency: 1.00000 kHz
High-pass Filter: Elliptic
High-pass Frequency: 20 Hz
Low-pass Filter: Elliptic
Low-pass Frequency: 20 kHz
Weighting Filter: A-wt.

Signal to Noise Ratio (4/7/2022 10:57:49.043 AM)

Ch1 119.534 dB

8 Ohm Mono : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 84.00 mVrms
 Frequency: 1.00000 kHz
 High-pass Filter: Elliptic
 High-pass Frequency: 20 Hz
 Low-pass Filter: Elliptic
 Low-pass Frequency: 20 kHz
 Weighting Filter: Signal Path
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (4/7/2022 10:57:52.344 AM)

Ch1 0.004707 %

THD Ratio (4/7/2022 10:57:52.344 AM)

Ch1 0.003226 %

Noise Ratio (4/7/2022 10:57:52.344 AM)

Ch1 0.003438 %

Distortion Product Ratio (4/7/2022 10:57:52.344 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	-89.93	-108.86	-116.58	-127.66	-121.33	-126.21	-127.43	-116.48	-128.51

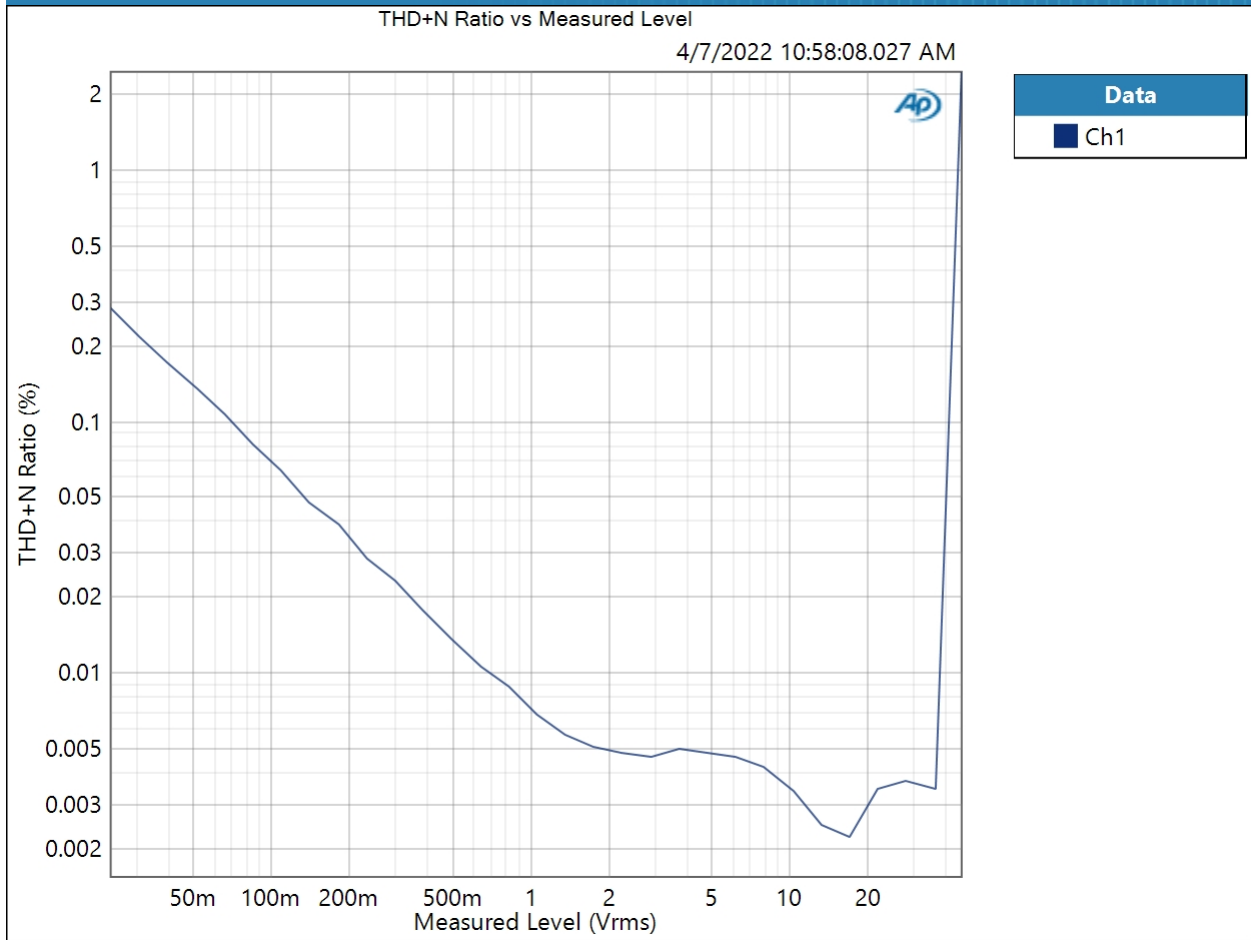
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

8 Ohm Mono : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 1.900 Vrms
Step Type: Logarithmic
Number of Points: 31
High-pass Filter: Elliptic
High-pass Frequency: 20 Hz
Low-pass Filter: Elliptic
Low-pass Frequency: 20 kHz
Weighting Filter: Signal Path
Notch Tuning Mode: Generator Frequency
Measured 1 4/7/2022 10:58:08 AM

THD+N Ratio vs Measured Level (4/7/2022 10:58:08.027 AM)



Result: PASSED

4 Ohm Mono : Signal Path Setup

Output Connector:	Analog Balanced
Channels:	2
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Configuration:	Normal (Differential), Normal (Differential)
Source Impedance:	40 ohm, 40 ohm
Channels Inverted:	None
AG52 Generator Option:	Installed
Auto Range:	Enabled
Output EQ:	None
Input 1:	Analog Balanced
Input Bandwidth:	AC (<10 Hz) - 20 kHz (44.1 kHz SR)
Input EQ:	None
Channels:	1
Channel:	Ch1
Termination:	200 kohm
High Performance Sine Analyzer:	Enabled
Input 2:	None
Device Delay:	0.000 s
• 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
Analog Input	
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
4/7/2022 11:01 AM	

- 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 Mono : Level and Gain

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	42.00 mVrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (4/7/2022 11:00:31.558 AM)

Ch1 1.007 Vrms

4 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

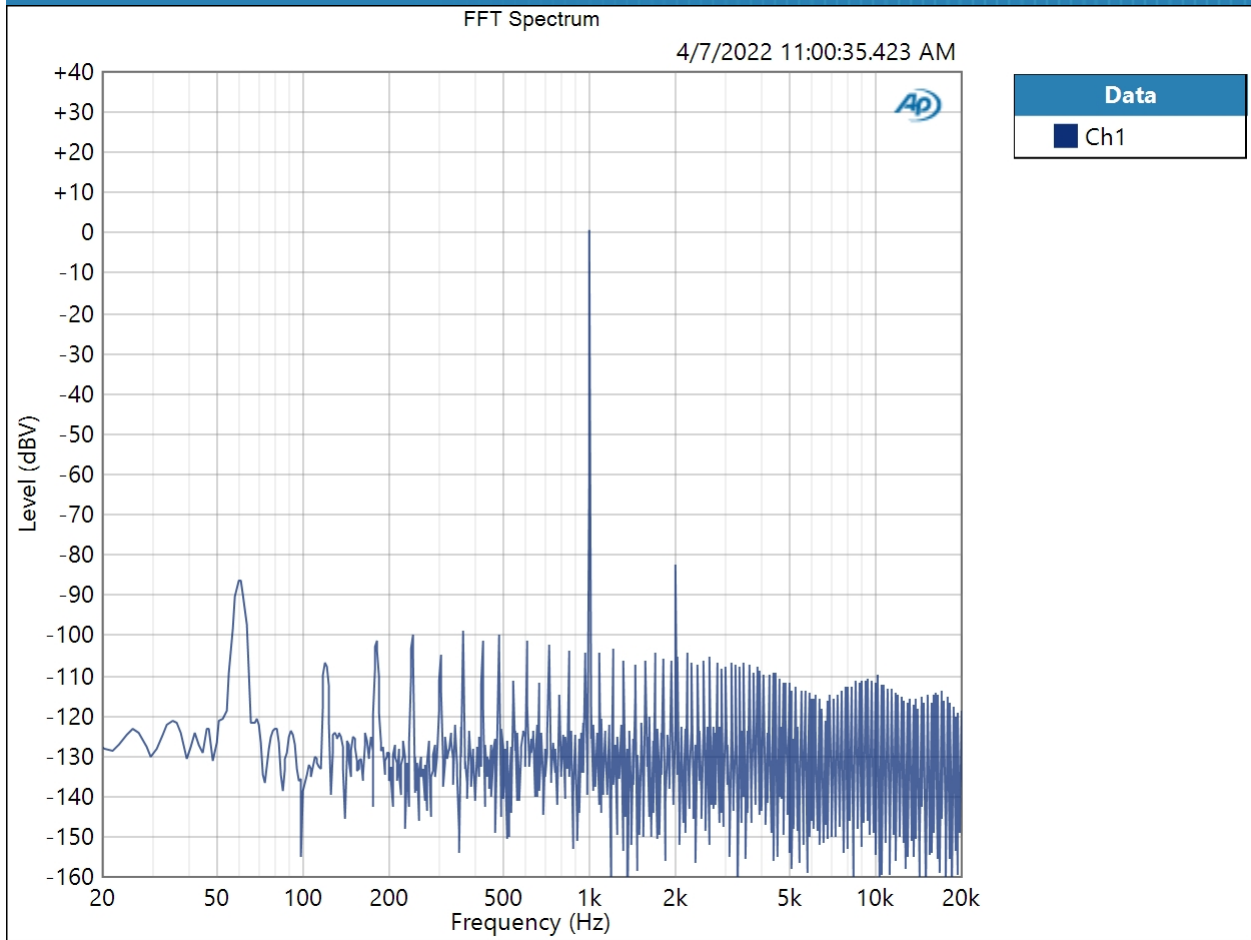
DC Level (4/7/2022 11:00:33.086 AM)

Ch1 -483.8 uV

4 Ohm Mono : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 42.00 mVrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1: 4/7/2022 11:00:35 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 (4/7/2022 11:00:35.423 AM)

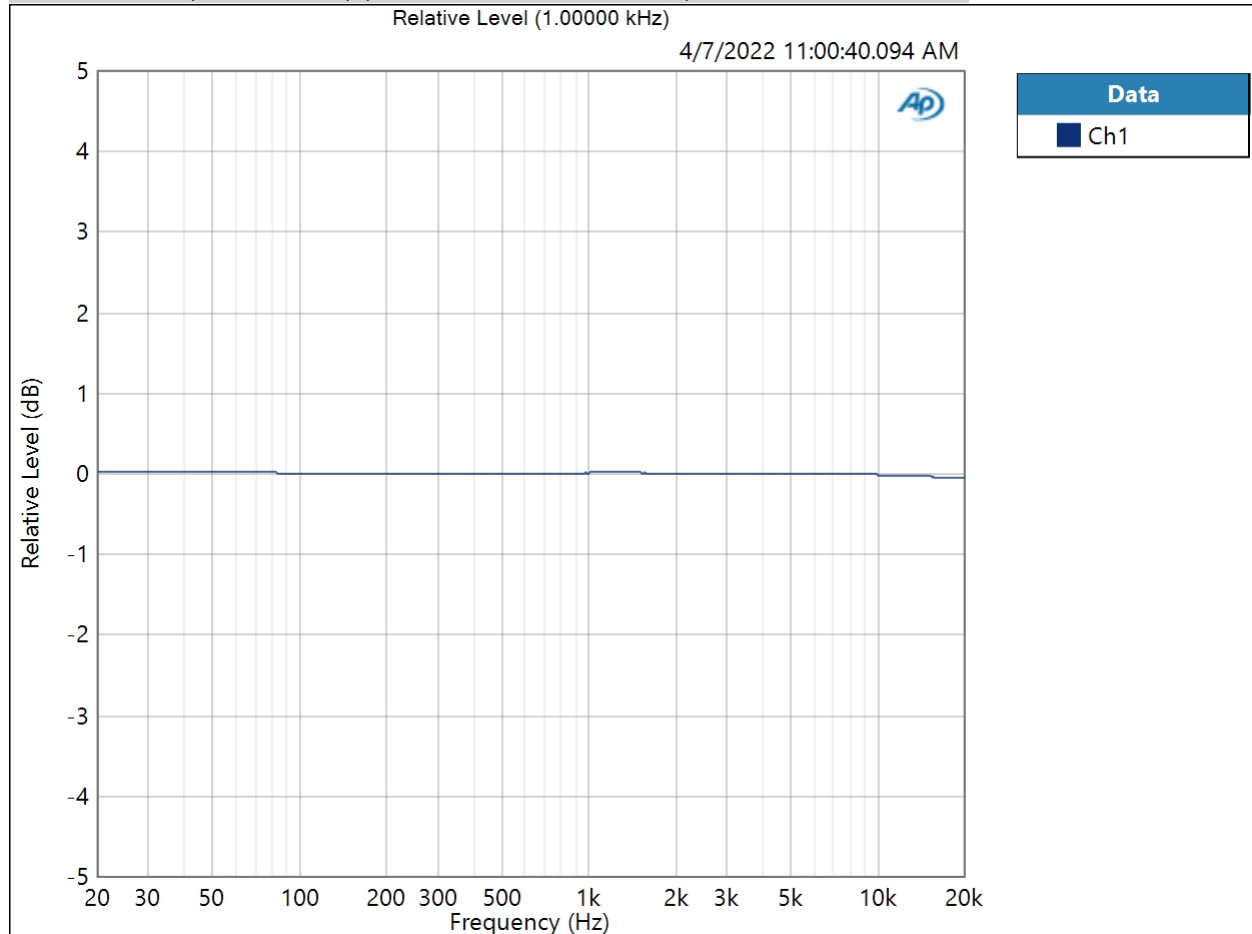


Result:  PASSED

4 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: 1.000 s
Secondary Source: None
Measured 1 4/7/2022 11:00:40 AM

Relative Level (1.00000 kHz) (4/7/2022 11:00:40.094 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) (4/7/2022 11:00:40.094 AM)

Ch1 ± 0.045 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

4 Ohm Mono : Signal to Noise Ratio

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.650 Vrms
Frequency: 1.00000 kHz
High-pass Filter: Elliptic
High-pass Frequency: 20 Hz
Low-pass Filter: Elliptic
Low-pass Frequency: 20 kHz
Weighting Filter: A-wt.

Signal to Noise Ratio (4/7/2022 11:00:43.050 AM)

Ch1 119.209 dB

4 Ohm Mono : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 84.00 mVrms
 Frequency: 1.00000 kHz
 High-pass Filter: Elliptic
 High-pass Frequency: 20 Hz
 Low-pass Filter: Elliptic
 Low-pass Frequency: 20 kHz
 Weighting Filter: Signal Path
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (4/7/2022 11:00:45.845 AM)

Ch1 0.009320 %

THD Ratio (4/7/2022 11:00:45.845 AM)

Ch1 0.008502 %

Noise Ratio (4/7/2022 11:00:45.845 AM)

Ch1 0.003655 %

Distortion Product Ratio (4/7/2022 11:00:45.845 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	-81.56	-98.25	-101.40	-112.69	-111.96	-124.29	-125.10	-116.16	-128.53

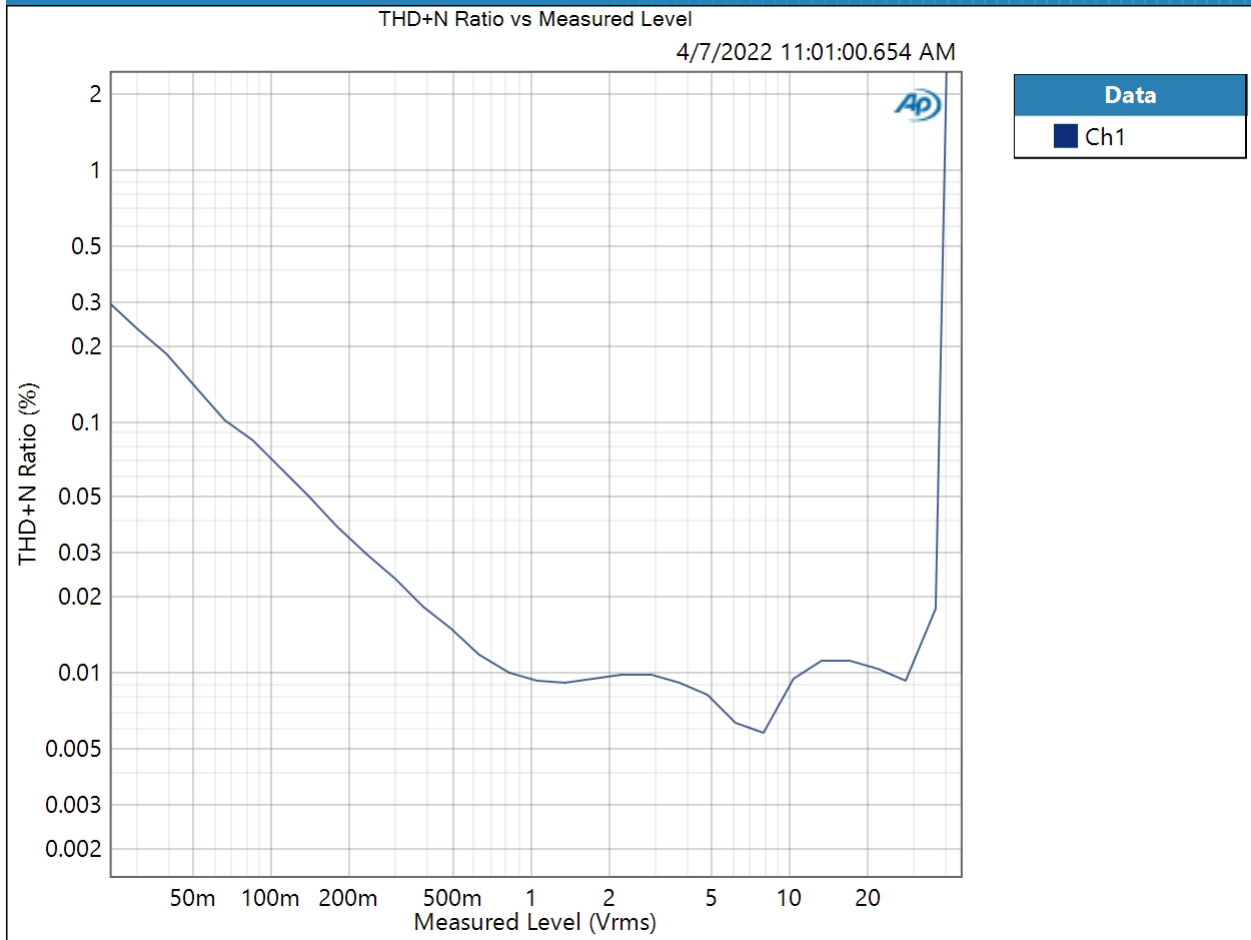
Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

4 Ohm Mono : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 1.900 Vrms
Step Type: Logarithmic
Number of Points: 31
High-pass Filter: Elliptic
High-pass Frequency: 20 Hz
Low-pass Filter: Elliptic
Low-pass Frequency: 20 kHz
Weighting Filter: Signal Path
Notch Tuning Mode: Generator Frequency
Measured 1 4/7/2022 11:01:00 AM

THD+N Ratio vs Measured Level (4/7/2022 11:01:00.654 AM)



Result: PASSED