Schiit Amp APx555 Standard Test Suite: Vidar 2

Audio precision

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@schiit.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
IMD Frequency Sweep (CCIF)	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:	3/23/2021
APx Version:	6.0.2.600.149330

8 Ohm Stereo : Signal Path Setup

Output Connector:	Analog Unbalanced
Channels:	2
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Source Impedance:	20 ohm, 20 ohm
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:	2
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
dBSPL1:	10.00 mVrms
dBSPL2:	10.00 mVrms
dBSPL1 Calibrator Level:	94.000 dBSPL
dBSPL2 Calibrator Level:	94.000 dBSPL
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
Precision Tune:	Disabled
Generator Level:	110.0 mVrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (11/3/2022 11:54:57.025 AM)

Ch1 2.014 Vrms
Ch2 2.014 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

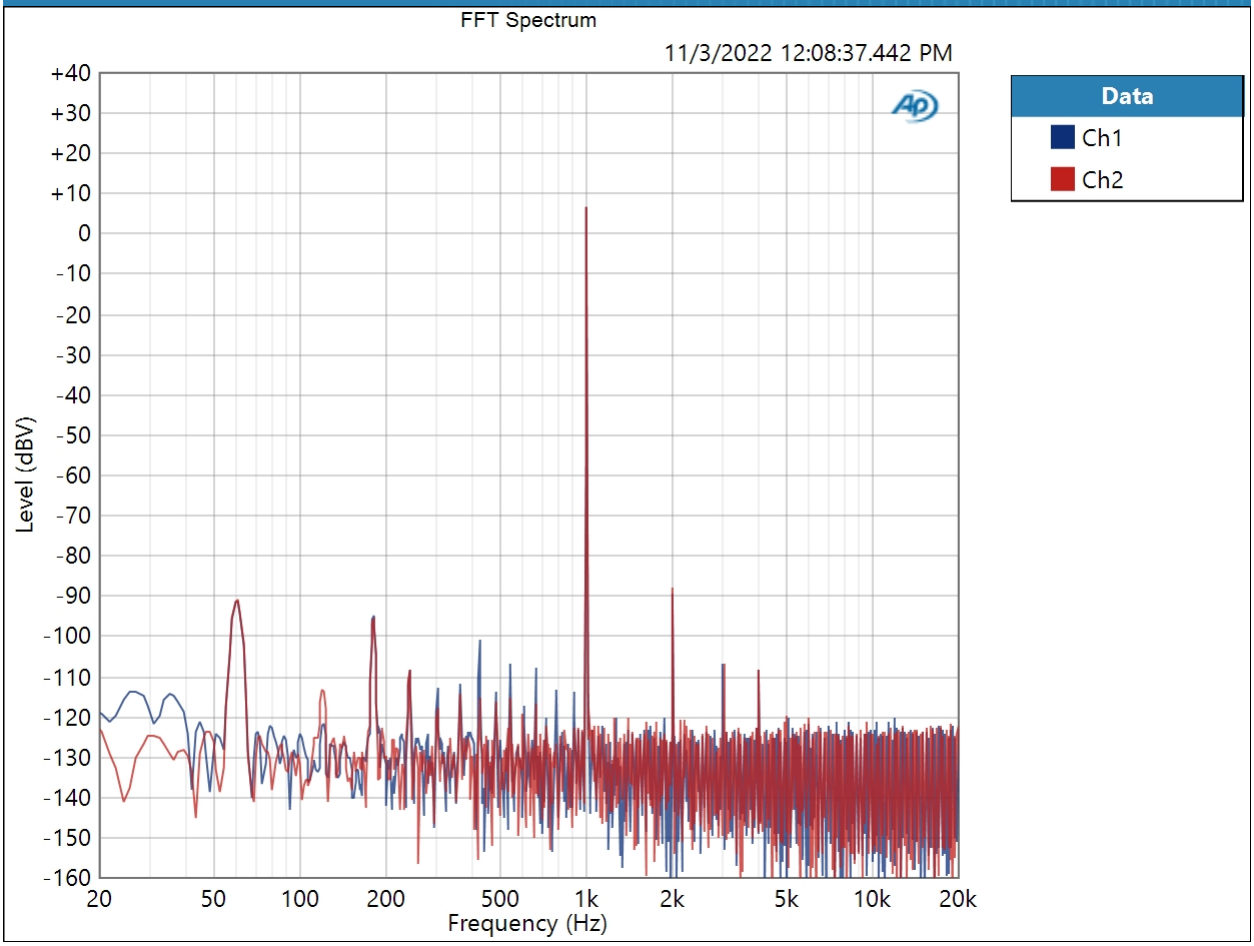
DC Level (11/3/2022 11:54:58.812 AM)

Ch1 -442.2 uV
Ch2 610.0 uV

8 Ohm Stereo : Signal Analyzer

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	110.0 mVrms
Frequency:	1.00000 kHz
Secondary Source:	None
Measured 1	11/3/2022 12:08:37 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 (11/3/2022 12:08:37.442 PM)

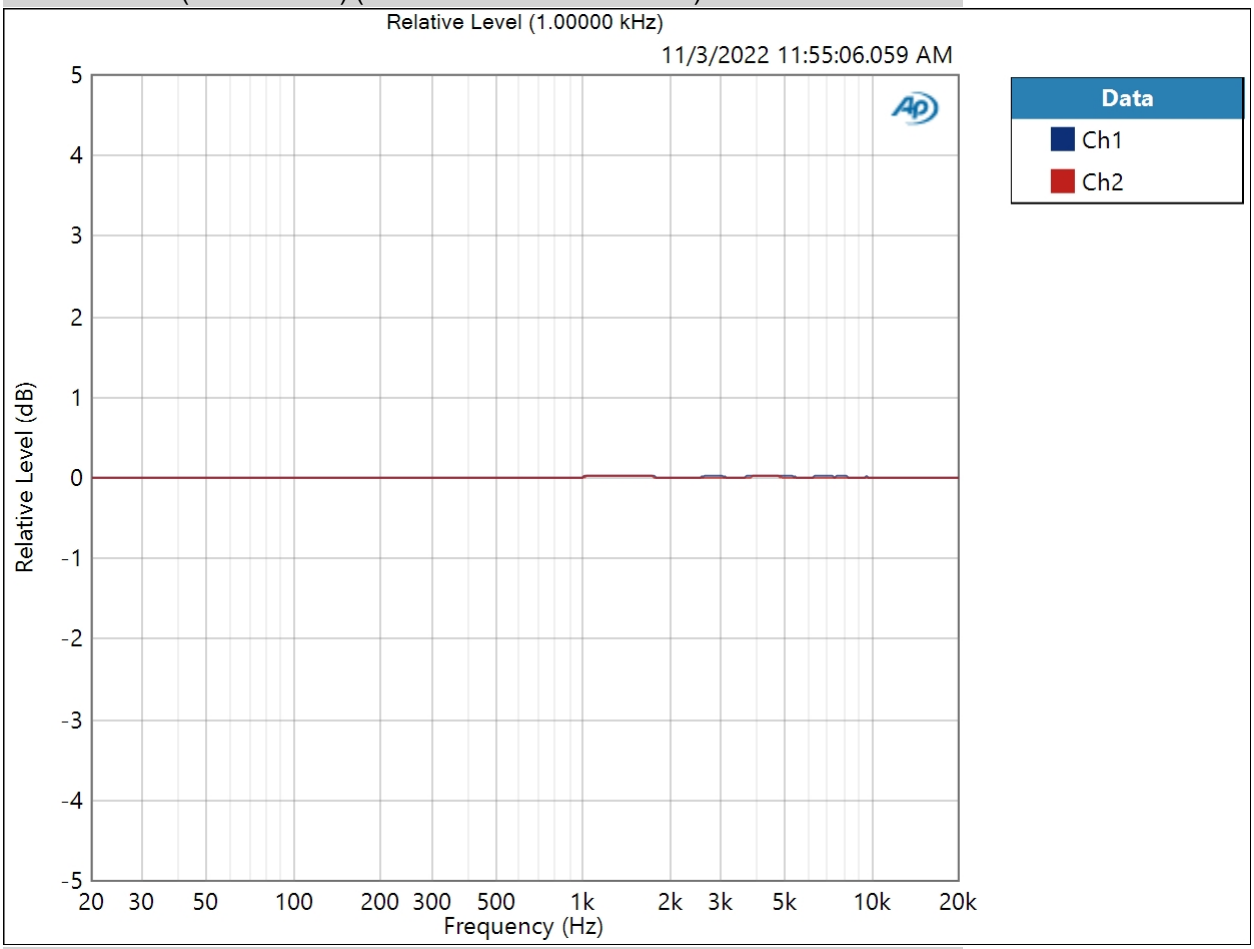


Result: PASSED

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:	1.000 s
Secondary Source:	None
Measured 1	11/3/2022 11:55:06 AM

Relative Level (1.00000 kHz) (11/3/2022 11:55:06.059 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) (11/3/2022 11:55:06.059 AM)

Ch1 ±0.015 dB

Ch2 ±0.019 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
Precision Tune:	Disabled
Generator Level:	1.600 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 (11/3/2022 11:55:09.016 AM)

Ch1 123.896 dB

Ch2 123.698 dB

8 Ohm Stereo : THD+N

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	110.0 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 (11/3/2022 11:55:12.870 AM)

Ch1 0.002624 %

Ch2 0.002692 %

THD Ratio (11/3/2022 11:55:12.870 AM)

Ch1 0.001666 %

Ch2 0.001780 %

Noise Ratio (11/3/2022 11:55:12.870 AM)

Ch1 0.002038 %

Ch2 0.001998 %

Distortion Product Ratio (11/3/2022 11:55:12.870 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	-95.77	-112.66	-114.30	-126.60	-123.27	-130.78	-128.60	-127.28	-125.41
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-95.14	-113.31	-115.37	-122.70	-124.44	-124.58	-123.98	-129.31	-128.28

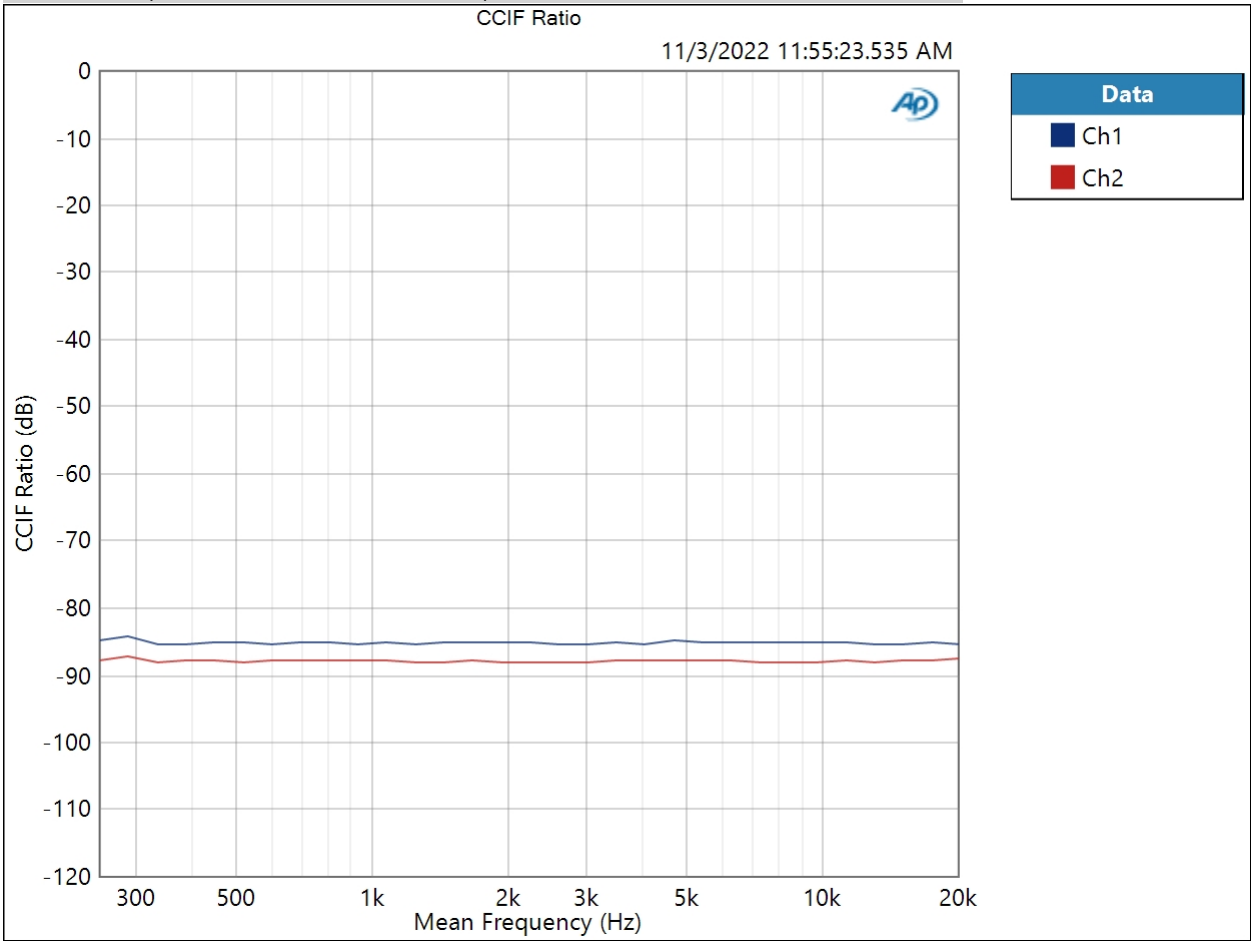
Distortion Product Ratio Parameters

Frequency Unit:	Hz
Ratio Unit:	dB
Channel:	Ch1

8 Ohm Stereo : IMD Frequency Sweep (CCIF)

Generator Level:	110.0 mVrms
DC Offset:	0.000 V
Sweep Frequency:	Mean Frequency
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	11/3/2022 11:55:23 AM

CCIF Ratio (11/3/2022 11:55:23.535 AM)



Result: PASSED

8 Ohm Stereo : Crosstalk, One Channel Undriven

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	110.0 mVrms
Frequency:	10.0000 kHz

Crosstalk (11/3/2022 11:55:26.652 AM)

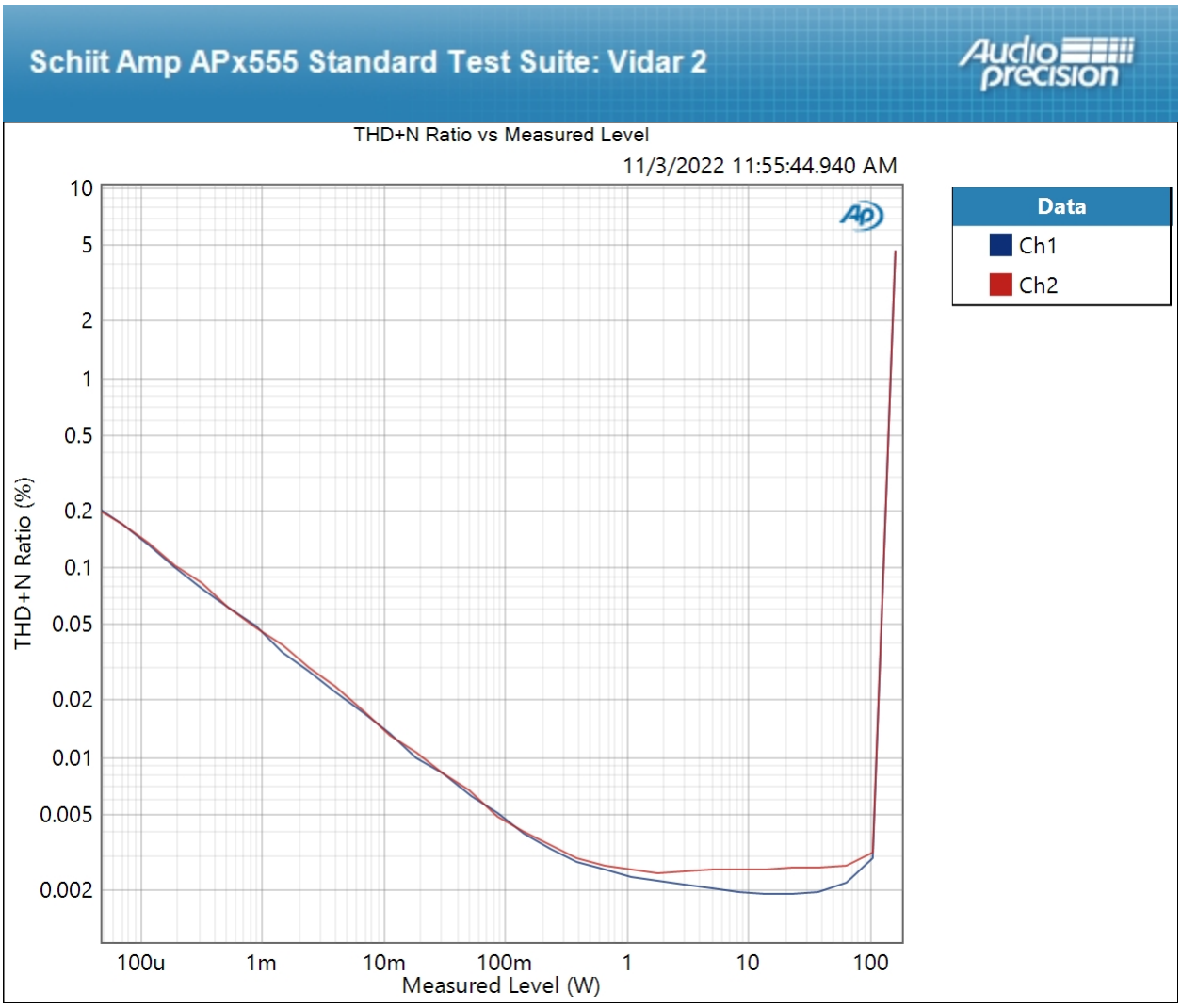
Ch1 91.924 dB

Ch2 87.583 dB

8 Ohm Stereo : 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:	2.000 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	11/3/2022 11:55:44 AM

THD+N Ratio vs Measured Level (11/3/2022 11:55:44.940 AM)



Result: PASSED

4 Ohm Stereo : Signal Path Setup

Output Connector:	Analog Unbalanced
Channels:	2
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Source Impedance:	20 ohm, 20 ohm
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:	2
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):	4.000 ohm
Shared Frequency Reference:	1.00000 kHz

Analog Input

dBrA:	250.0 mVrms
dBrB:	1.000 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	0.000 dB
dBSPL1:	10.00 mVrms
dBSPL2:	10.00 mVrms
dBSPL1 Calibrator Level:	94.000 dBSPL
dBSPL2 Calibrator Level:	94.000 dBSPL
dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	4.000 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
Precision Tune:	Disabled
Generator Level:	55.00 mVrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (11/3/2022 11:57:46.654 AM)

Ch1 1.005 Vrms
Ch2 1.005 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

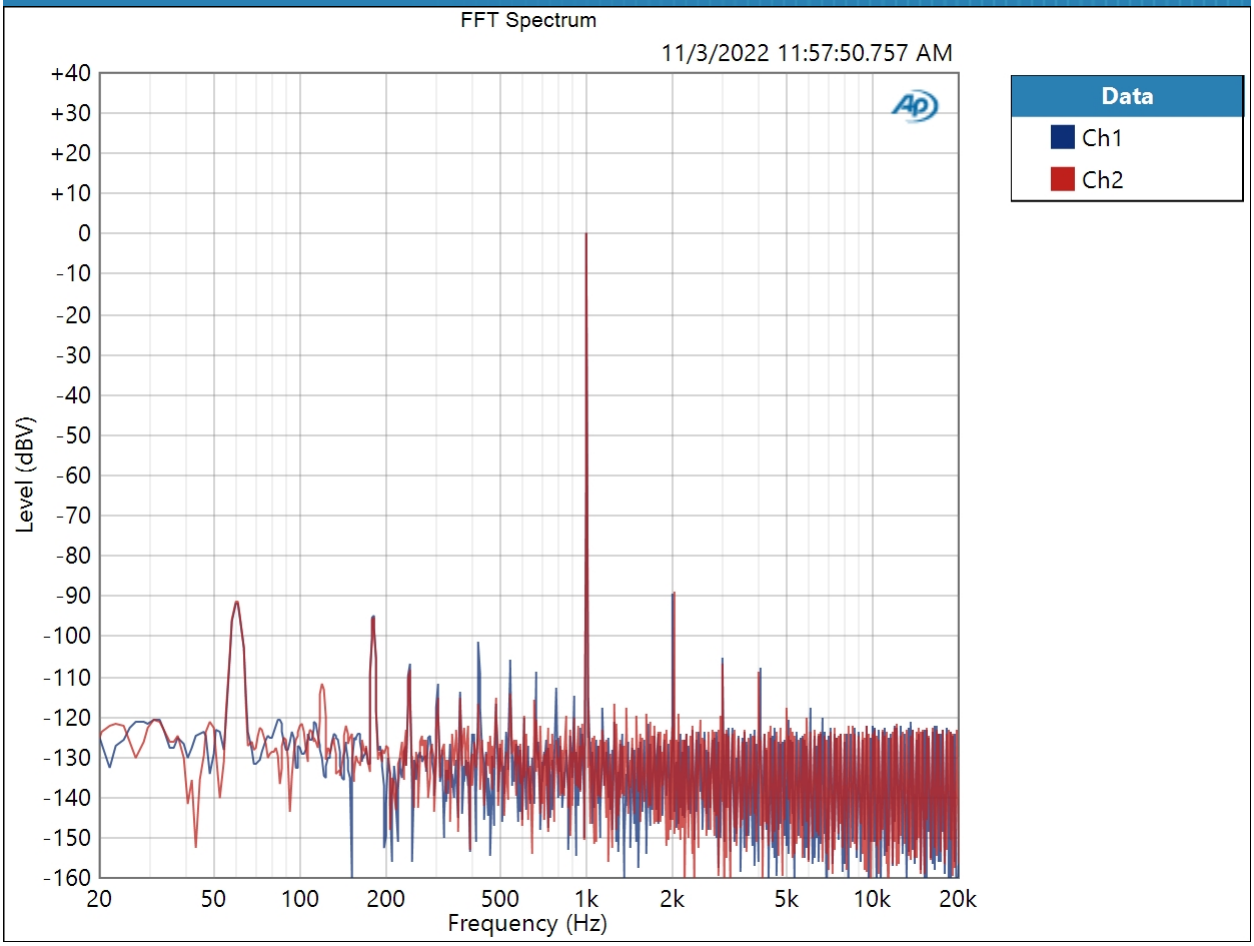
DC Level (11/3/2022 12:05:24.597 PM)

Ch1 -1.789 mV
Ch2 12.60 uV

4 Ohm Stereo : Signal Analyzer

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	55.00 mVrms
Frequency:	1.00000 kHz
Secondary Source:	None
Measured 1	11/3/2022 11:57:50 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 (11/3/2022 11:57:50.757 AM)

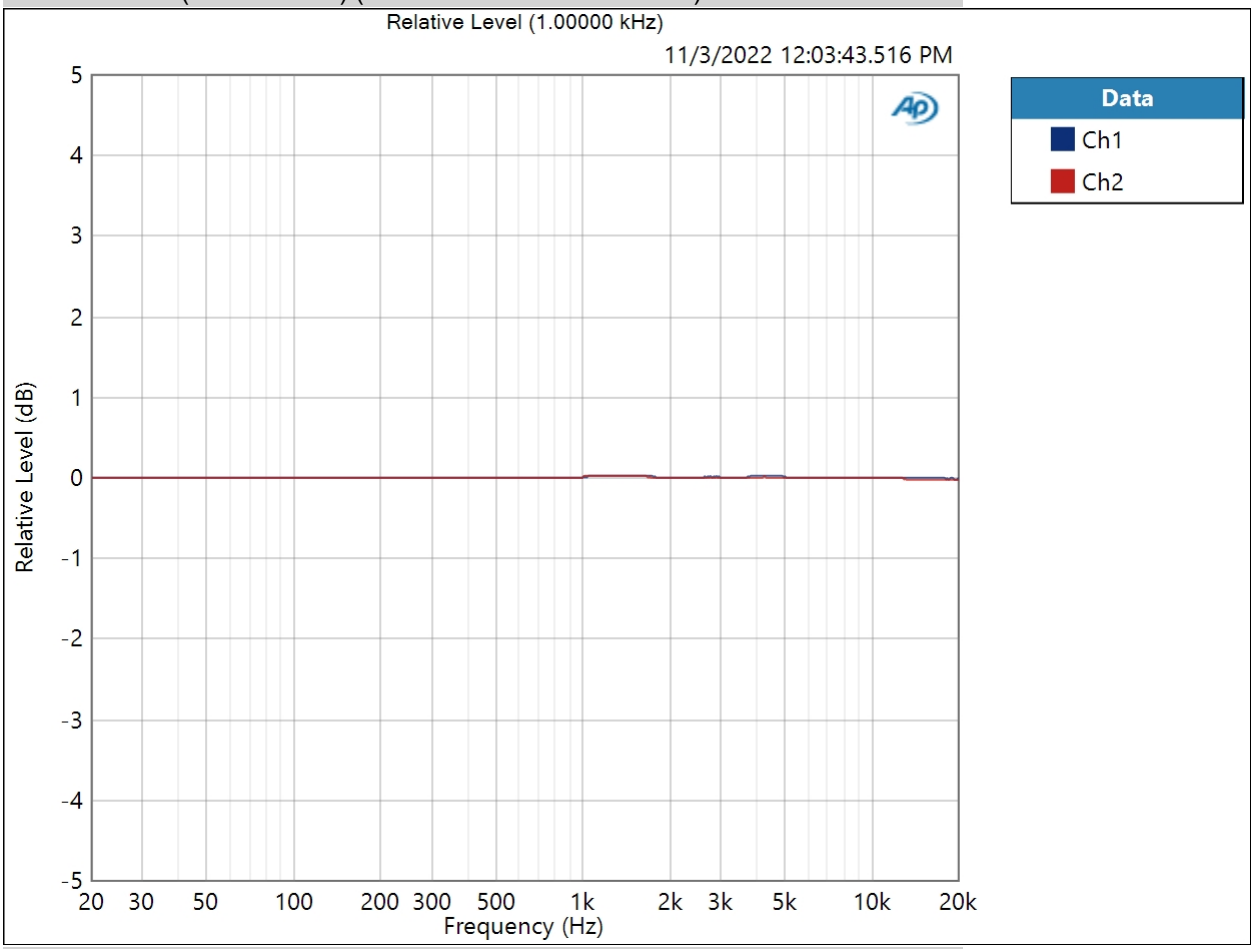


Result: PASSED

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:	1.000 s
Secondary Source:	None
Measured 1	11/3/2022 12:03:43 PM

Relative Level (1.00000 kHz) (11/3/2022 12:03:43.516 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) (11/3/2022 12:03:43.516 PM)

Ch1 ±0.021 dB

Ch2 ±0.031 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
Precision Tune:	Disabled
Generator Level:	1.600 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 (11/3/2022 11:57:56.812 AM)

Ch1 123.698 dB

Ch2 123.683 dB

4 Ohm Stereo : THD+N

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	55.00 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 (11/3/2022 11:58:00.568 AM)

Ch1 0.005194 %

Ch2 0.005405 %

THD Ratio (11/3/2022 11:58:00.568 AM)

Ch1 0.003199 %

Ch2 0.003662 %

Noise Ratio (11/3/2022 11:58:00.568 AM)

Ch1 0.004044 %

Ch2 0.003931 %

Distortion Product Ratio (11/3/2022 11:58:00.568 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	-90.12	-106.81	-108.17	-119.22	-116.79	-120.51	-120.42	-120.10	-121.01
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-88.83	-107.96	-111.17	-121.38	-121.09	-119.77	-120.88	-121.65	-125.82

Distortion Product Ratio Parameters

Frequency Unit:	Hz
Ratio Unit:	dB
Channel:	Ch1

4 Ohm Stereo : Crosstalk, One Channel Undriven

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	55.00 mVrms
Frequency:	10.0000 kHz

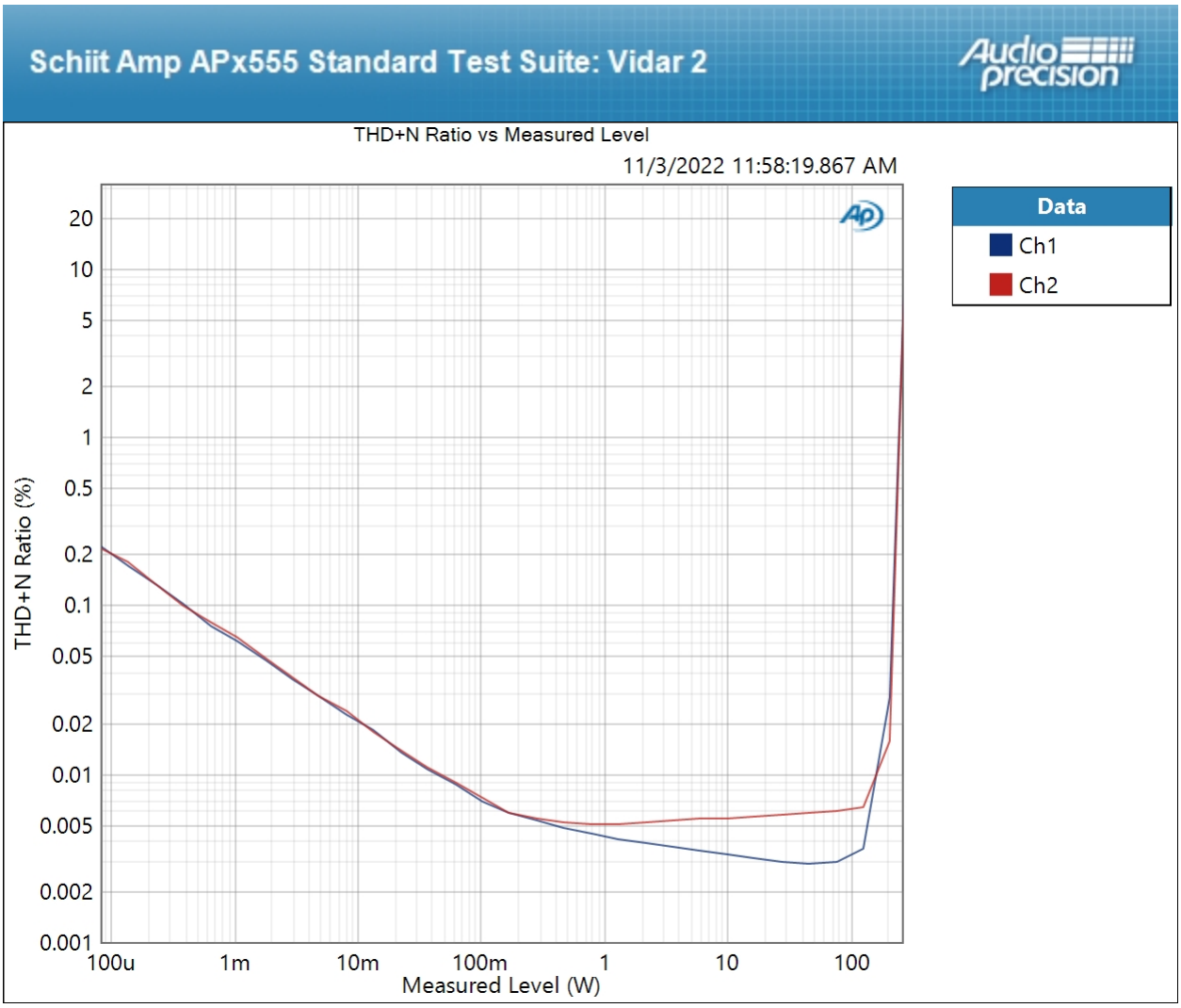
Crosstalk (11/3/2022 11:58:02.918 AM)

Ch1 75.056 dB
Ch2 72.190 dB

4 Ohm Stereo : 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:	2.000 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	11/3/2022 11:58:19 AM

THD+N Ratio vs Measured Level (11/3/2022 11:58:19.867 AM)



Result: PASSED

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
dBSPL1:	10.00 mVrms
dBSPL2:	10.00 mVrms
dBSPL1 Calibrator Level:	94.000 dBSPL
dBSPL2 Calibrator Level:	94.000 dBSPL
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:	110.0 mVrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (11/3/2022 12:00:57.839 PM)

Ch1 2.011 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

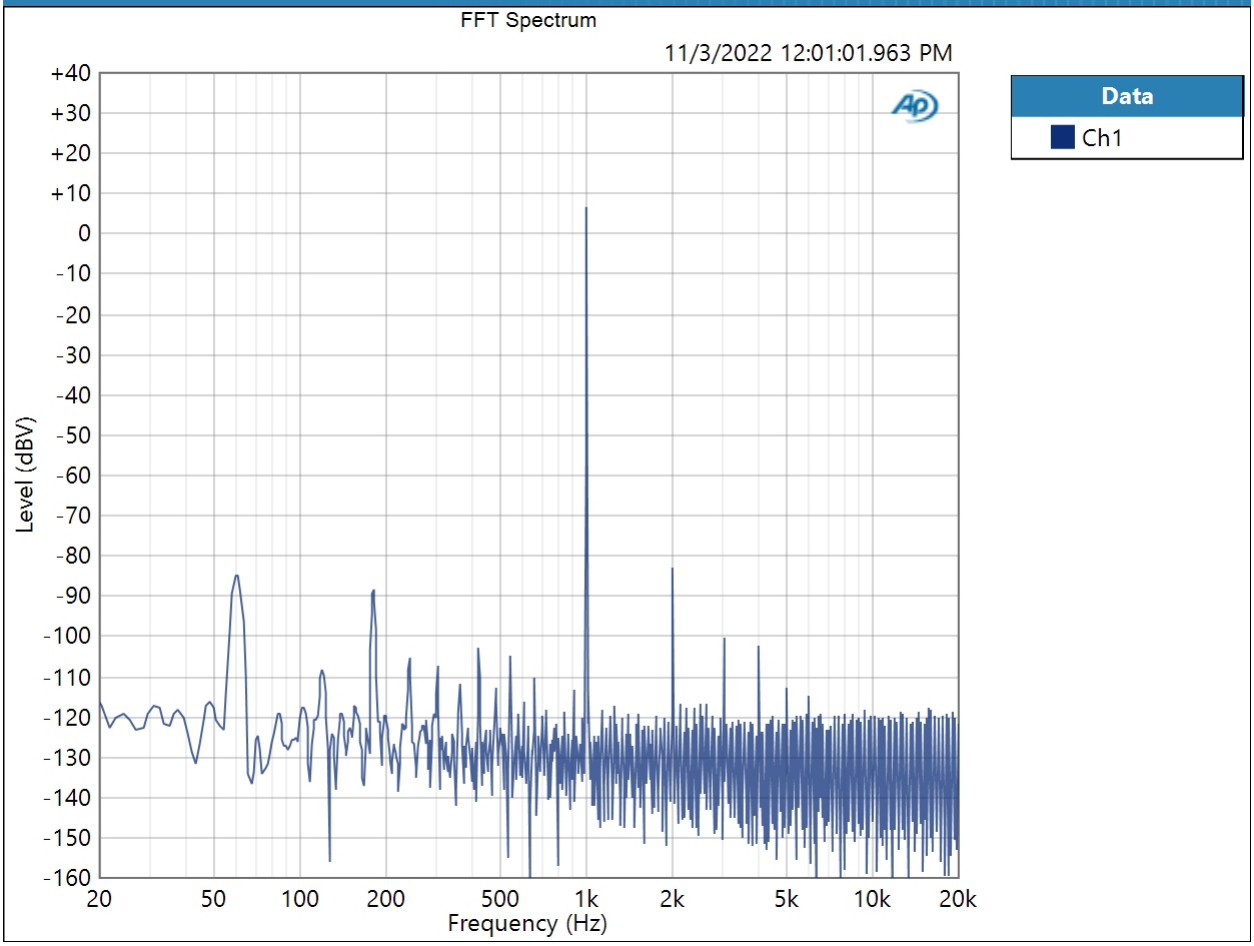
DC Level (11/3/2022 12:00:59.433 PM)

Ch1 1.311 mV

8 Ohm Mono : Signal Analyzer

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	110.0 mVrms
Frequency:	1.00000 kHz
Secondary Source:	None
Measured 1	11/3/2022 12:01:01 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 (11/3/2022 12:01:01.963 PM)

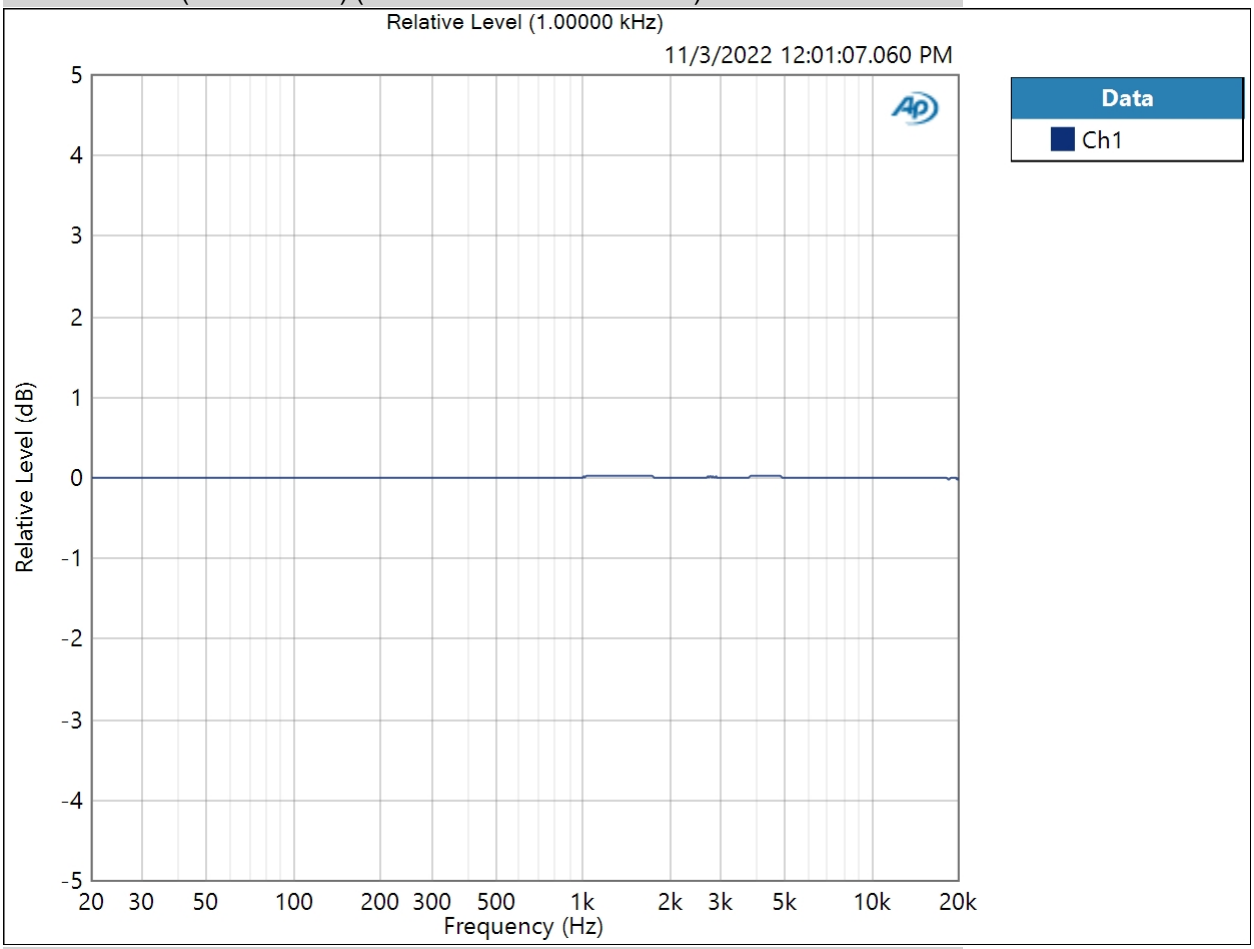


Result: PASSED

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:	1.000 s
Secondary Source:	None
Measured 1	11/3/2022 12:01:07 PM

Relative Level (1.00000 kHz) (11/3/2022 12:01:07.060 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) (11/3/2022 12:01:07.060 PM)

Ch1 ±0.020 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:	1.600 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 (11/3/2022 12:01:09.948 PM)

Ch1 120.371 dB

8 Ohm Mono : THD+N

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	110.0 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 (11/3/2022 12:01:12.781 PM)

Ch1 0.005136 %

THD Ratio (11/3/2022 12:01:12.781 PM)

Ch1 0.003353 %

Noise Ratio (11/3/2022 12:01:12.781 PM)

Ch1 0.003813 %

Distortion Product Ratio (11/3/2022 12:01:12.781 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	-89.61	-108.10	-110.89	-123.62	-122.98	-125.69	-128.54	-122.22	-122.99

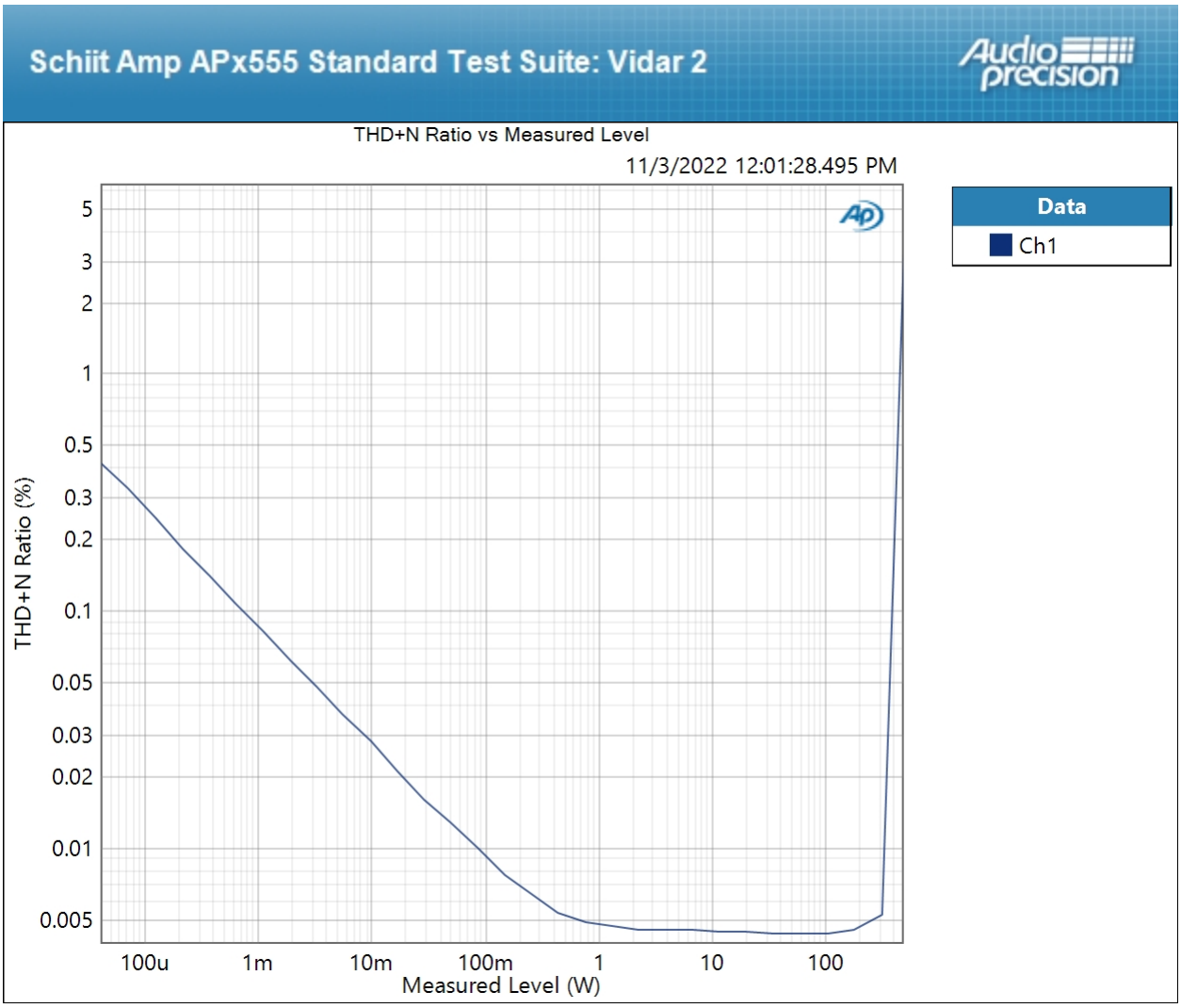
Distortion Product Ratio Parameters

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:	3.500 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	11/3/2022 12:01:28 PM

THD+N Ratio vs Measured Level (11/3/2022 12:01:28.495 PM)



Result: PASSED