

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@schitt.com so we can have a look.

Summary

Passive

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

SS Low

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

SS High

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

Tube Low

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

Tube High

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

Half Tube Low

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

Half Tube High

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

Passive : 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:	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
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

Passive : Level and Gain

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	1.000 Vrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (9/29/2026 9:18:21.428 AM)

Ch1 0.995 Vrms

Ch2 0.995 Vrms

Passive : 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 (9/29/2026 9:18:23.073 AM)

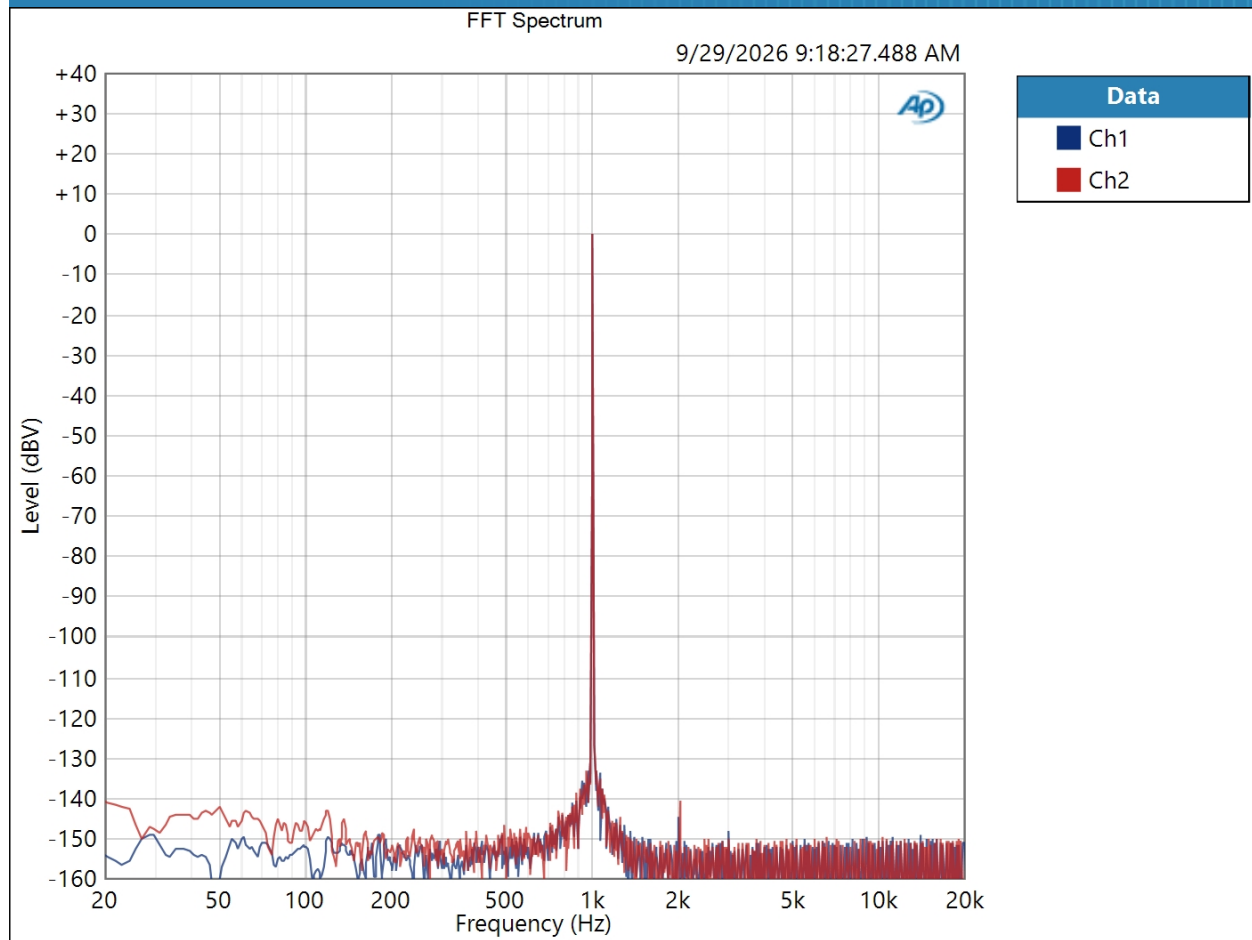
Ch1 -90.96 uV

Ch2 -24.00 uV

Passive : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 9/29/2026 9:18:27 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (9/29/2026 9:18:27.488 AM)

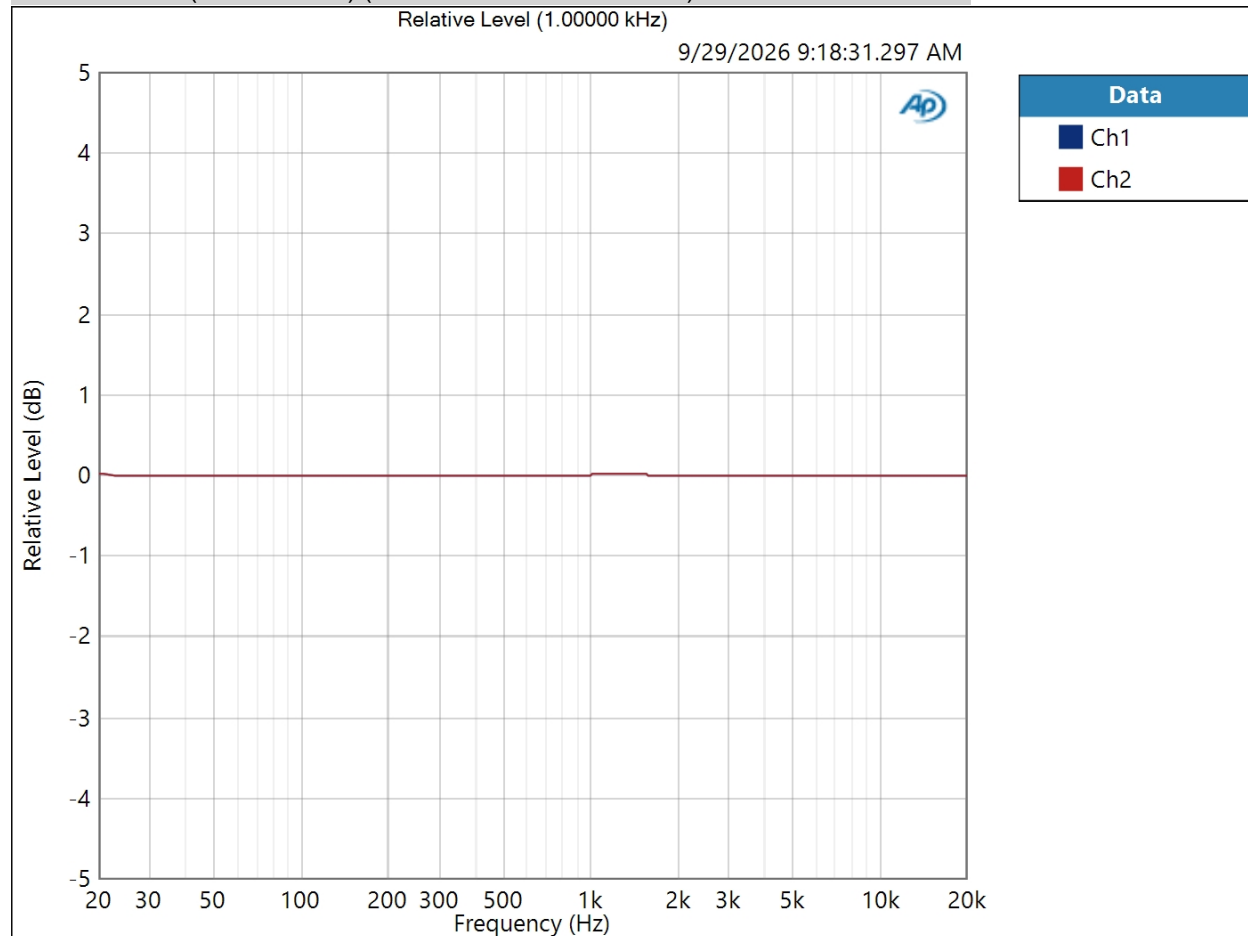


Result: PASSED

Passive : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.000 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 500.0 ms
Secondary Source: None
Measured 1 9/29/2026 9:18:31 AM

Relative Level (1.00000 kHz) (9/29/2026 9:18:31.297 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) (9/29/2026 9:18:31.297 AM)

Ch1 ± 0.009 dB

Ch2 ± 0.010 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Passive : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 4.000 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: Signal Path

Signal to Noise Ratio (9/29/2026 9:18:34.192 AM)

Ch1 132.300 dB

Ch2 132.264 dB

Passive : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.000 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: Signal Path
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (9/29/2026 9:18:37.603 AM)

Ch1 0.000121 %

Ch2 0.000126 %

THD Ratio (9/29/2026 9:18:37.603 AM)

Ch1 0.000020 %

Ch2 0.000020 %

Noise Ratio (9/29/2026 9:18:37.603 AM)

Ch1 0.000120 %

Ch2 0.000124 %

Distortion Product Ratio (9/29/2026 9:18:37.603 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	-146.49	-143.89	-144.70	-149.68	-149.00	-149.92	-147.04	-149.34	-148.24
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-139.79	-146.93	-146.01	-147.04	-145.33	-148.25	-154.30	-149.67	-147.22

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Passive : IMD Level Sweep (CCIF)

IMD Type: CCIF

Mean Frequency: 12.5000 kHz

Diff Frequency: 80.0000 Hz

IMD Split: False

Start Level: 1.000 mVrms

Stop Level: 4.000 Vrms

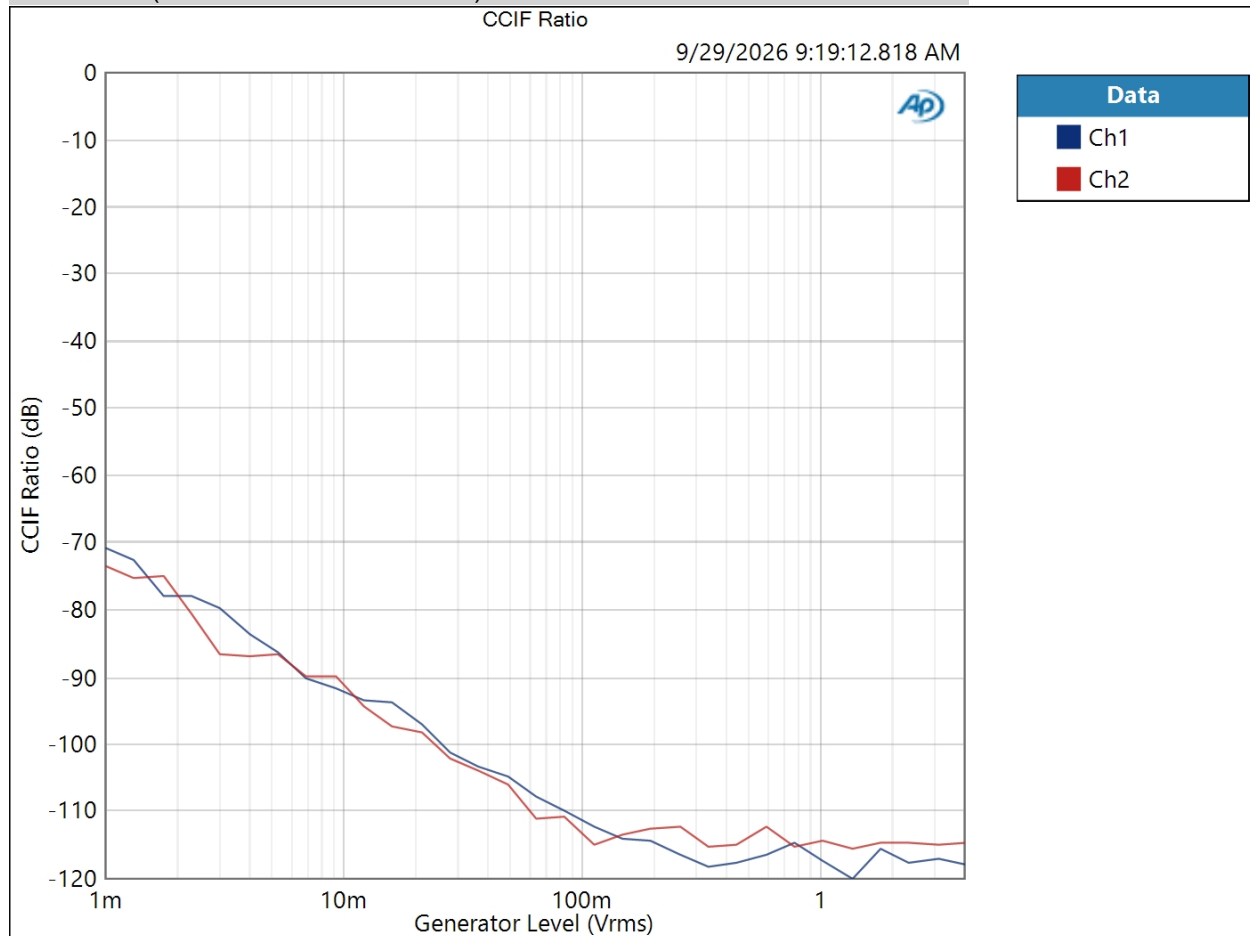
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 9/29/2026 9:19:12 AM

CCIF Ratio (9/29/2026 9:19:12.818 AM)



Result: PASSED

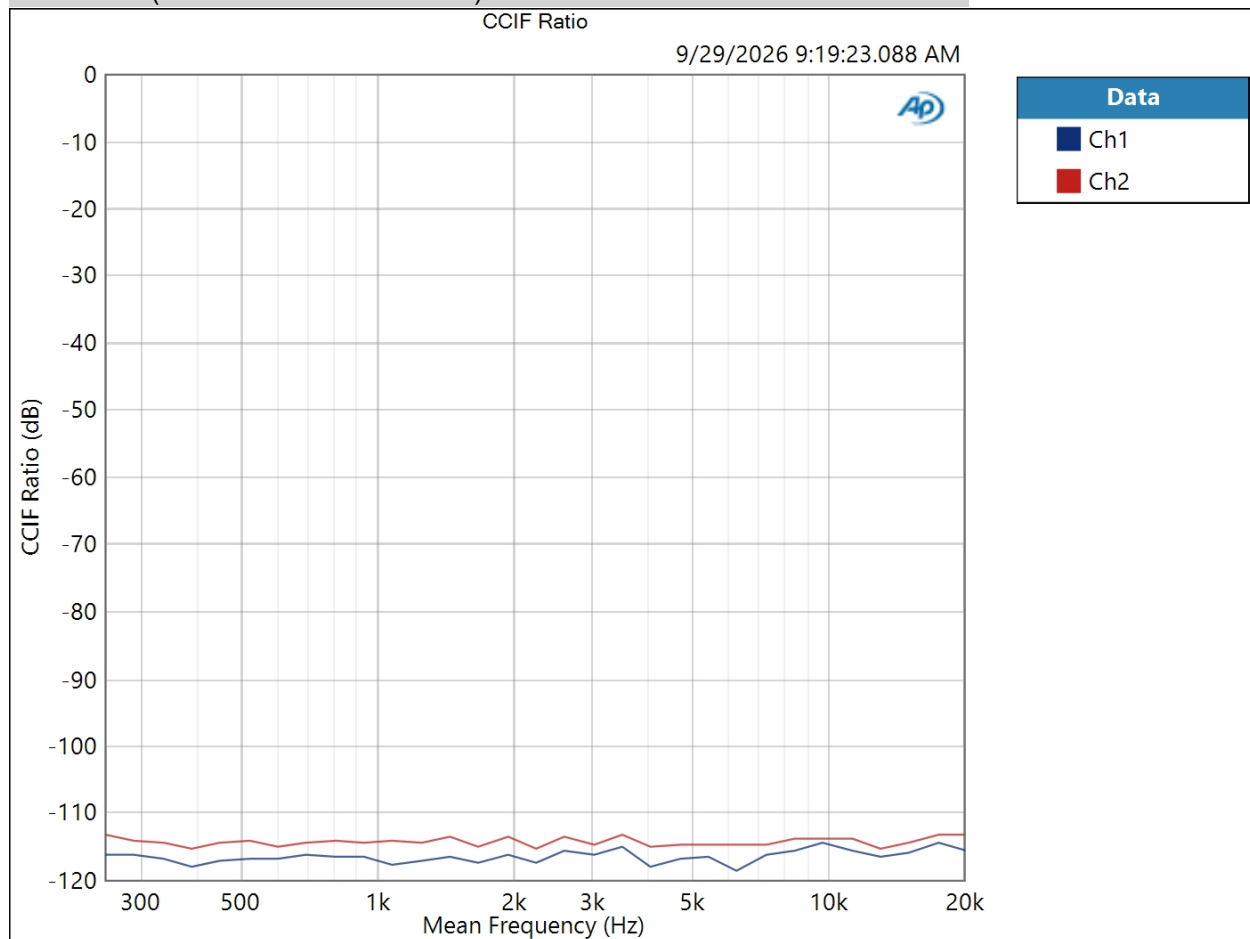
9/29/2026 9:50 AM

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Passive : IMD Frequency Sweep (CCIF)

Generator Level: 1.000 Vrms
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 9/29/2026 9:19:23 AM

CCIF Ratio (9/29/2026 9:19:23.088 AM)



Result:  PASSED

Passive : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 Vrms

Frequency: 10.0000 kHz

Crosstalk (9/29/2026 9:19:25.452 AM)

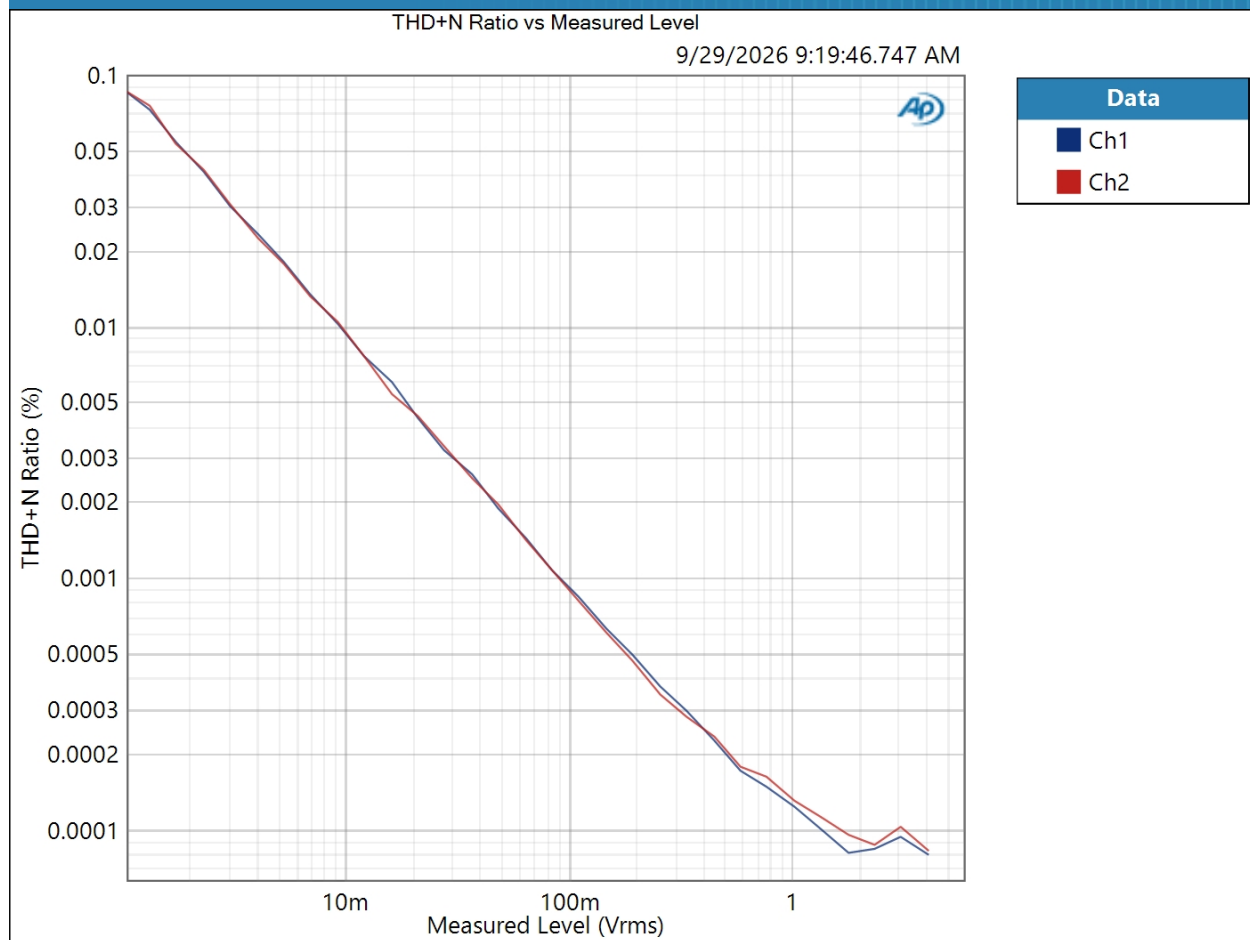
Ch1 -102.322 dB

Ch2 -102.336 dB

Passive : 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: 4.000 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 9/29/2026 9:19:46 AM

THD+N Ratio vs Measured Level (9/29/2026 9:19:46.747 AM)



Result: PASSED

SS Low : 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:	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
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

9/29/2026 9:50 AM

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

SS Low : Level and Gain

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	1.000 Vrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (9/29/2026 9:23:09.047 AM)

Ch1 1.024 Vrms

Ch2 1.025 Vrms

SS Low : 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 (9/29/2026 9:23:10.597 AM)

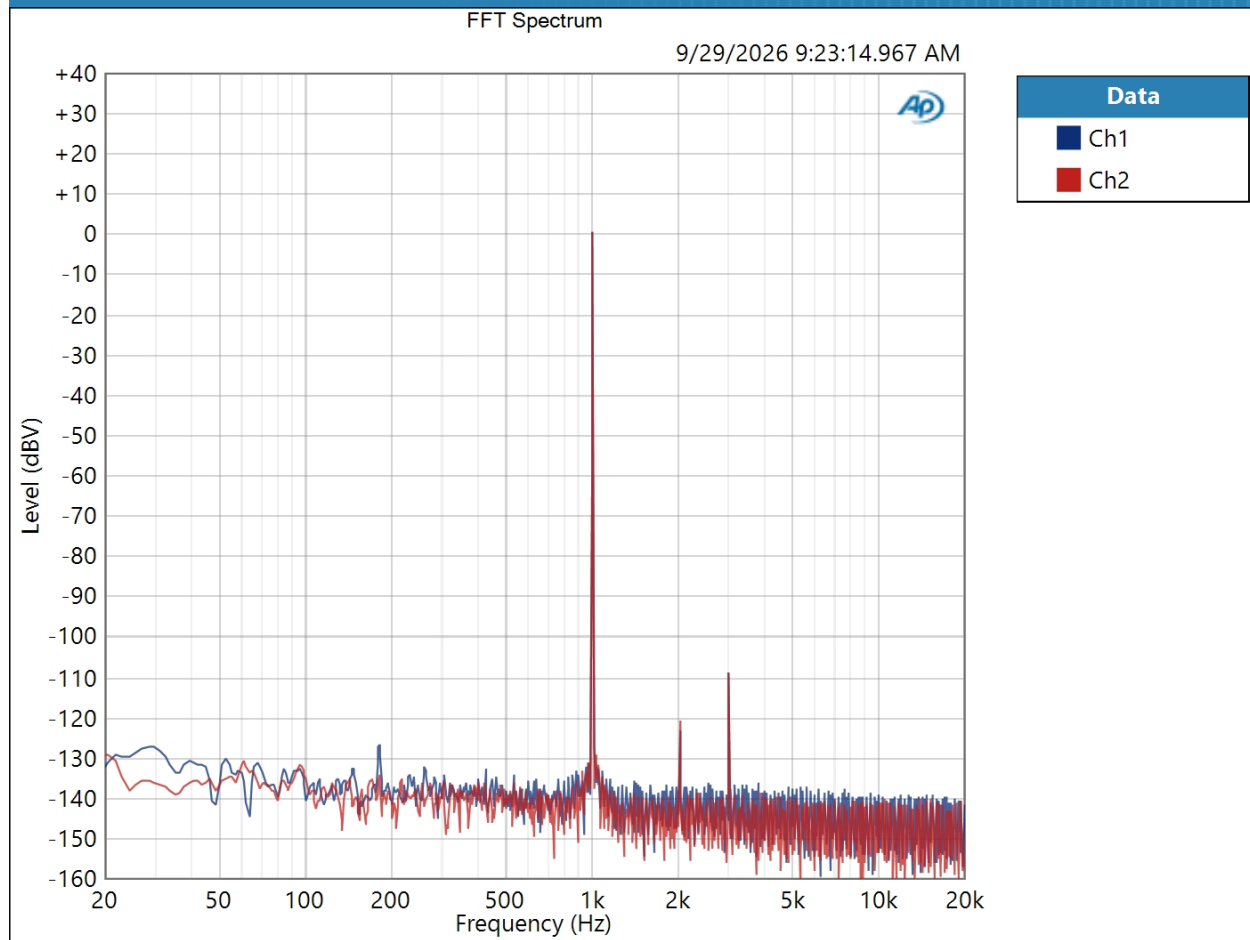
Ch1 77.45 uV

Ch2 -28.90 uV

SS Low : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 9/29/2026 9:23:14 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (9/29/2026 9:23:14.967 AM)

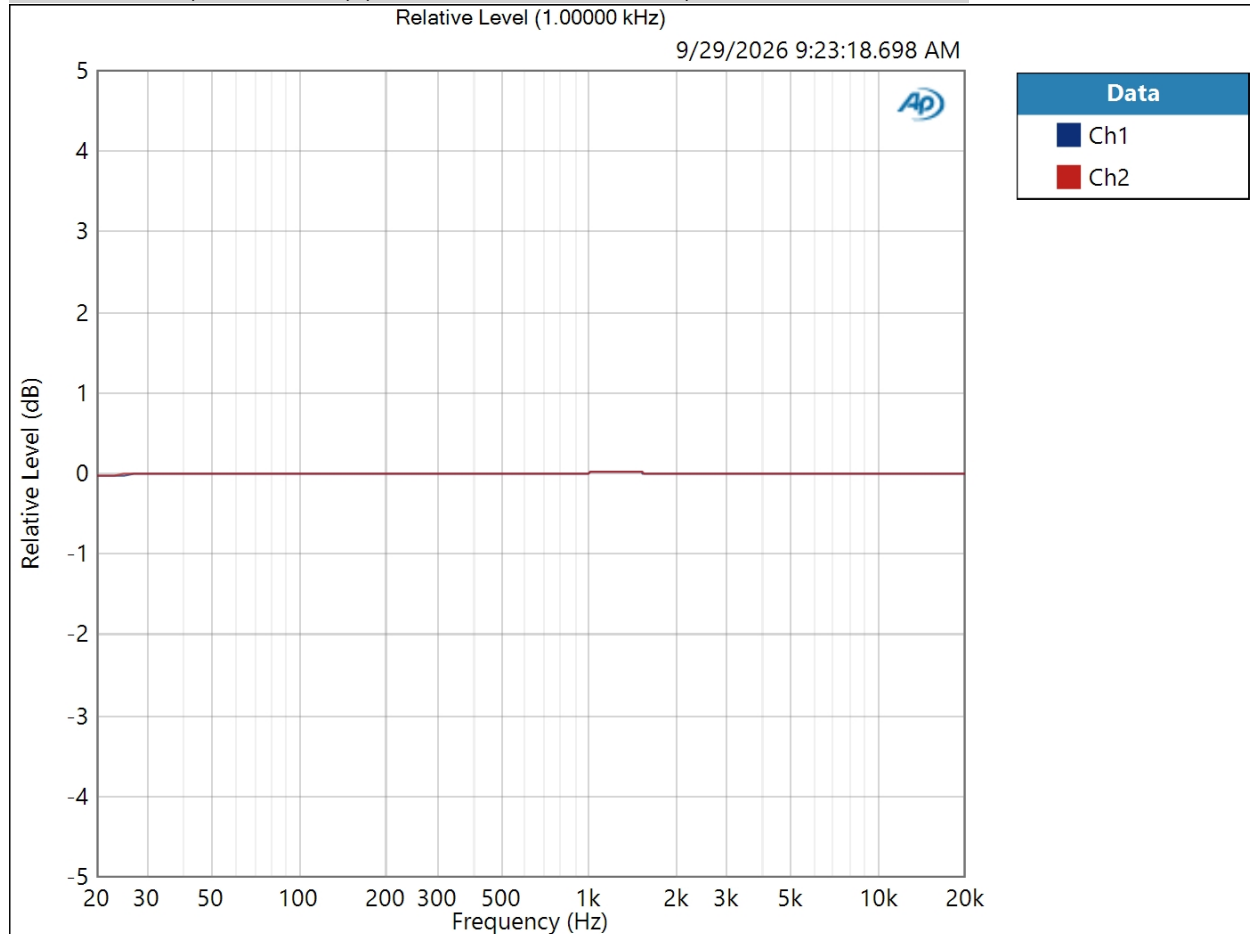


Result:  PASSED

SS Low : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.000 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 500.0 ms
Secondary Source: None
Measured 1 9/29/2026 9:23:18 AM

Relative Level (1.00000 kHz) (9/29/2026 9:23:18.698 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) (9/29/2026 9:23:18.698 AM)

Ch1 ± 0.015 dB

Ch2 ± 0.015 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

SS Low : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 4.000 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 (9/29/2026 9:23:21.462 AM)

Ch1 119.481 dB

Ch2 121.942 dB

SS Low : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.000 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: Signal Path
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (9/29/2026 9:23:24.638 AM)

Ch1 0.000620 %

Ch2 0.000539 %

THD Ratio (9/29/2026 9:23:24.638 AM)

Ch1 0.000371 %

Ch2 0.000377 %

Noise Ratio (9/29/2026 9:23:24.638 AM)

Ch1 0.000490 %

Ch2 0.000383 %

Distortion Product Ratio (9/29/2026 9:23:24.638 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	-121.98	-108.99	-132.46	-136.87	-132.57	-136.08	-139.15	-137.63	-142.31
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-121.30	-108.80	-137.56	-135.71	-135.76	-137.92	-140.44	-141.20	-137.07

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

SS Low : IMD Level Sweep (CCIF)

IMD Type: CCIF

Mean Frequency: 12.5000 kHz

Diff Frequency: 80.0000 Hz

IMD Split: False

Start Level: 1.000 mVrms

Stop Level: 4.000 Vrms

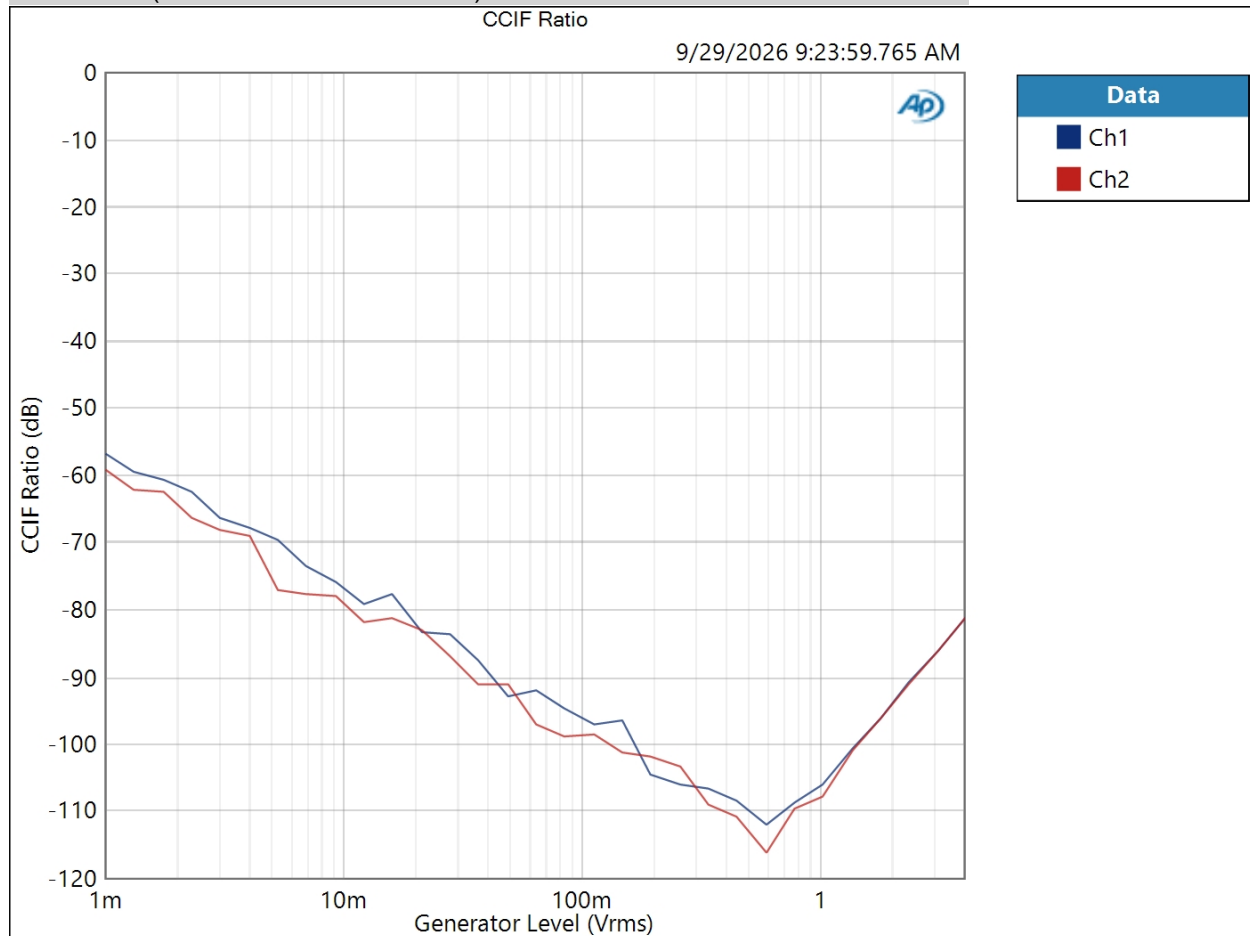
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 9/29/2026 9:23:59 AM

CCIF Ratio (9/29/2026 9:23:59.765 AM)



Result: PASSED

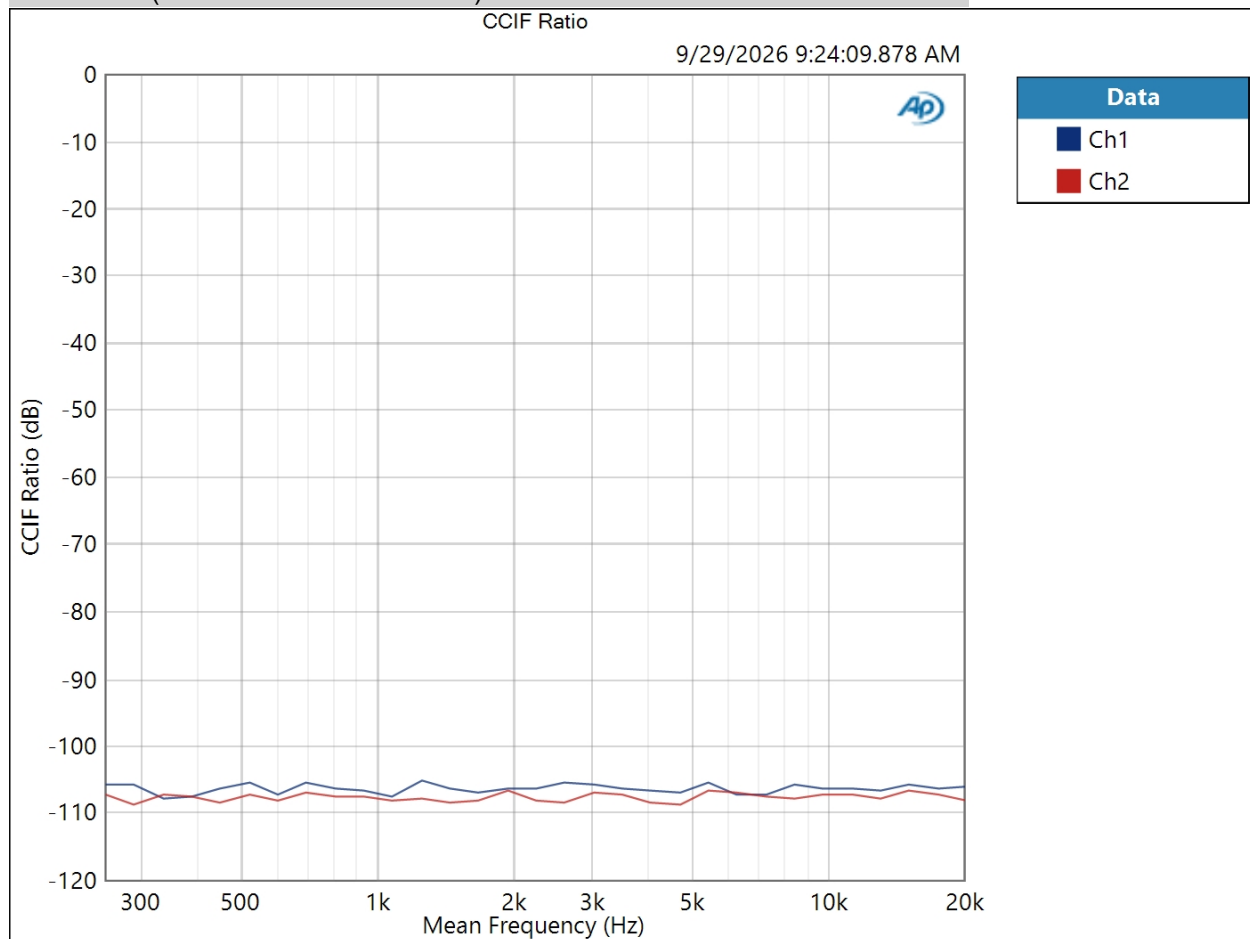
9/29/2026 9:50 AM

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SS Low : IMD Frequency Sweep (CCIF)

Generator Level: 1.000 Vrms
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 9/29/2026 9:24:09 AM

CCIF Ratio (9/29/2026 9:24:09.878 AM)



Result:  PASSED

SS Low : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 Vrms

Frequency: 10.0000 kHz

Crosstalk (9/29/2026 9:24:14.001 AM)

Ch1 -124.994 dB

Ch2 -90.036 dB

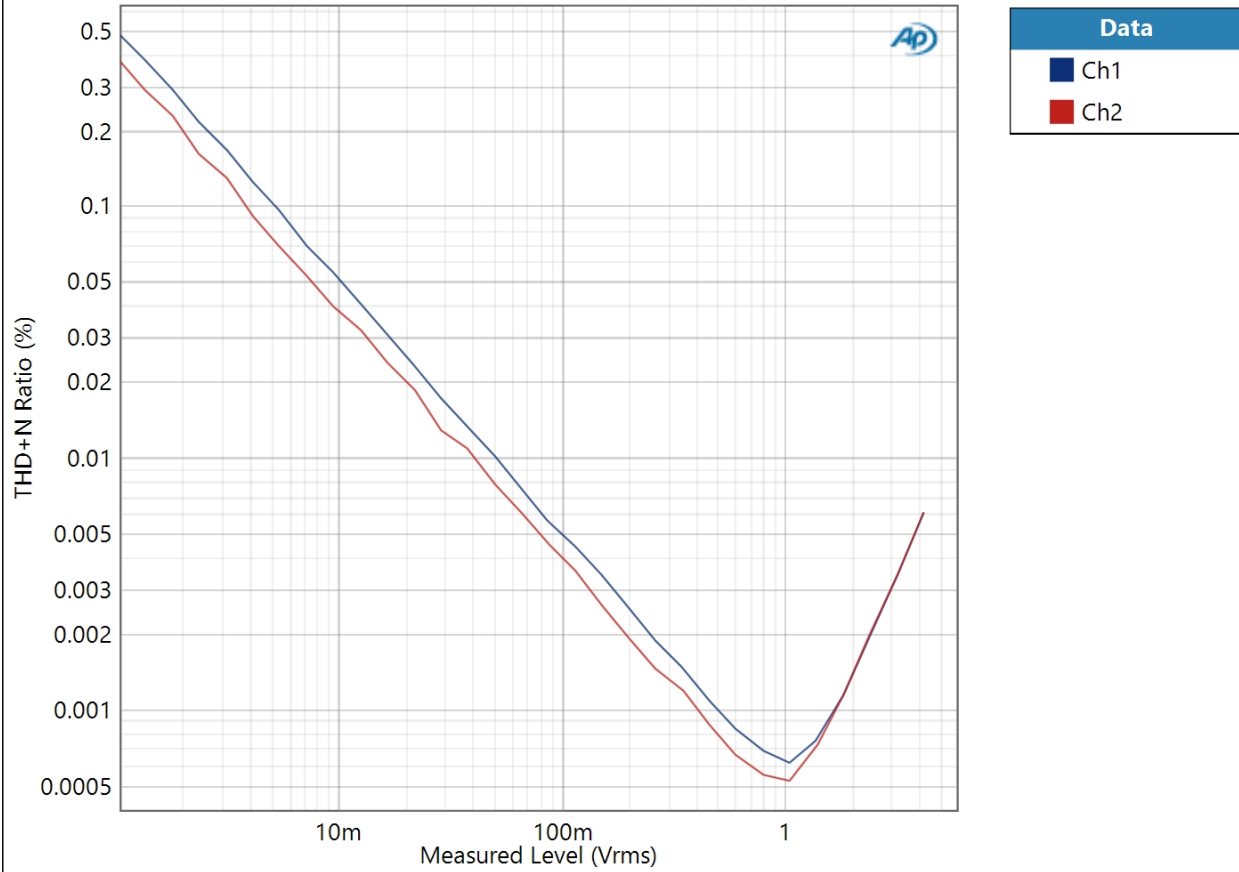
SS Low : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 4.000 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 9/29/2026 9:24:32 AM

THD+N Ratio vs Measured Level (9/29/2026 9:24:32.560 AM)

THD+N Ratio vs Measured Level

9/29/2026 9:24:32.560 AM



Result: PASSED

SS High : 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:	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
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

9/29/2026 9:50 AM

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

SS High : Level and Gain

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	1.000 Vrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (9/29/2026 9:26:29.335 AM)

Ch1 4.444 Vrms
Ch2 4.451 Vrms

SS High : 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

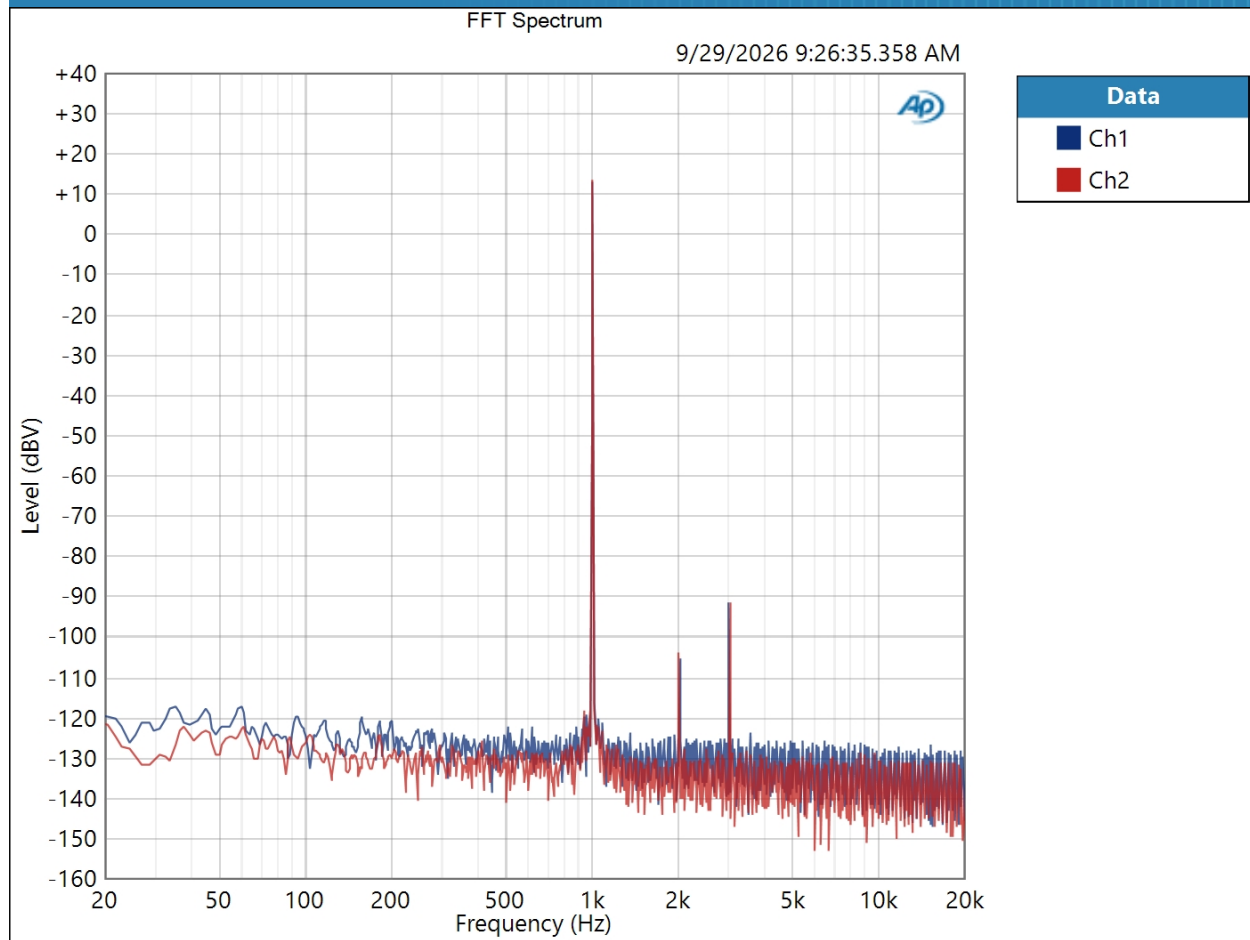
DC Level (9/29/2026 9:26:30.896 AM)

Ch1 -41.59 uV
Ch2 -15.79 uV

SS High : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 9/29/2026 9:26:35 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (9/29/2026 9:26:35.358 AM)

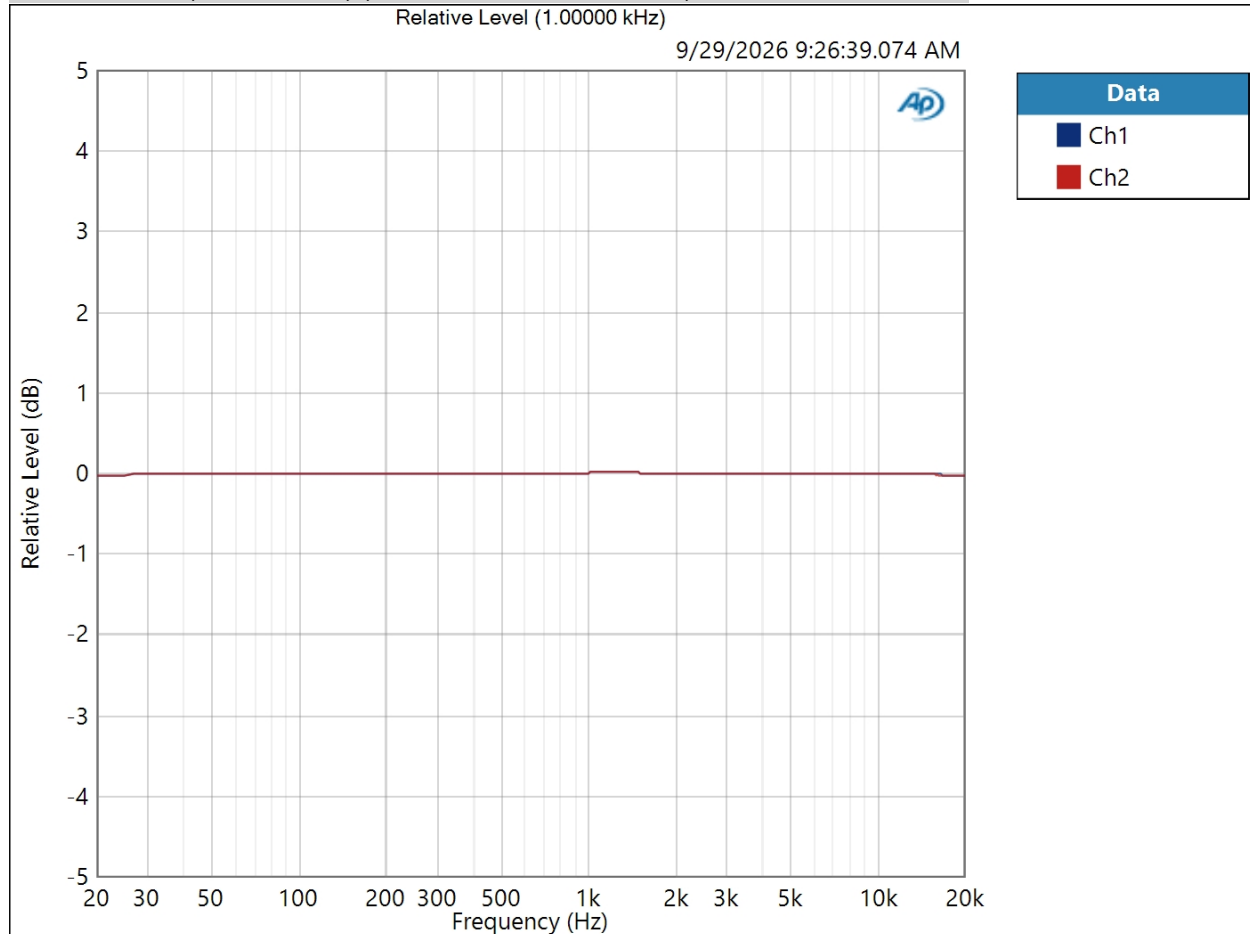


Result:  PASSED

SS High : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.000 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 500.0 ms
Secondary Source: None
Measured 1 9/29/2026 9:26:39 AM

Relative Level (1.00000 kHz) (9/29/2026 9:26:39.074 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) (9/29/2026 9:26:39.074 AM)

Ch1 ± 0.024 dB

Ch2 ± 0.024 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

SS High : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 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 (9/29/2026 9:43:13.460 AM)

Ch1 108.642 dB

Ch2 112.636 dB

SS High : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.000 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: Signal Path
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (9/29/2026 9:26:45.221 AM)

Ch1 0.000758 %

Ch2 0.000691 %

THD Ratio (9/29/2026 9:26:45.221 AM)

Ch1 0.000628 %

Ch2 0.000625 %

Noise Ratio (9/29/2026 9:26:45.221 AM)

Ch1 0.000428 %

Ch2 0.000288 %

Distortion Product Ratio (9/29/2026 9:26:45.221 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	-117.63	-104.29	-138.02	-137.06	-131.95	-132.59	-134.01	-139.63	-134.51
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-117.40	-104.31	-141.18	-139.44	-137.44	-141.27	-143.50	-140.99	-138.43

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

SS High : IMD Level Sweep (CCIF)

IMD Type: CCIF

Mean Frequency: 12.5000 kHz

Diff Frequency: 80.0000 Hz

IMD Split: False

Start Level: 1.000 mVrms

Stop Level: 4.000 Vrms

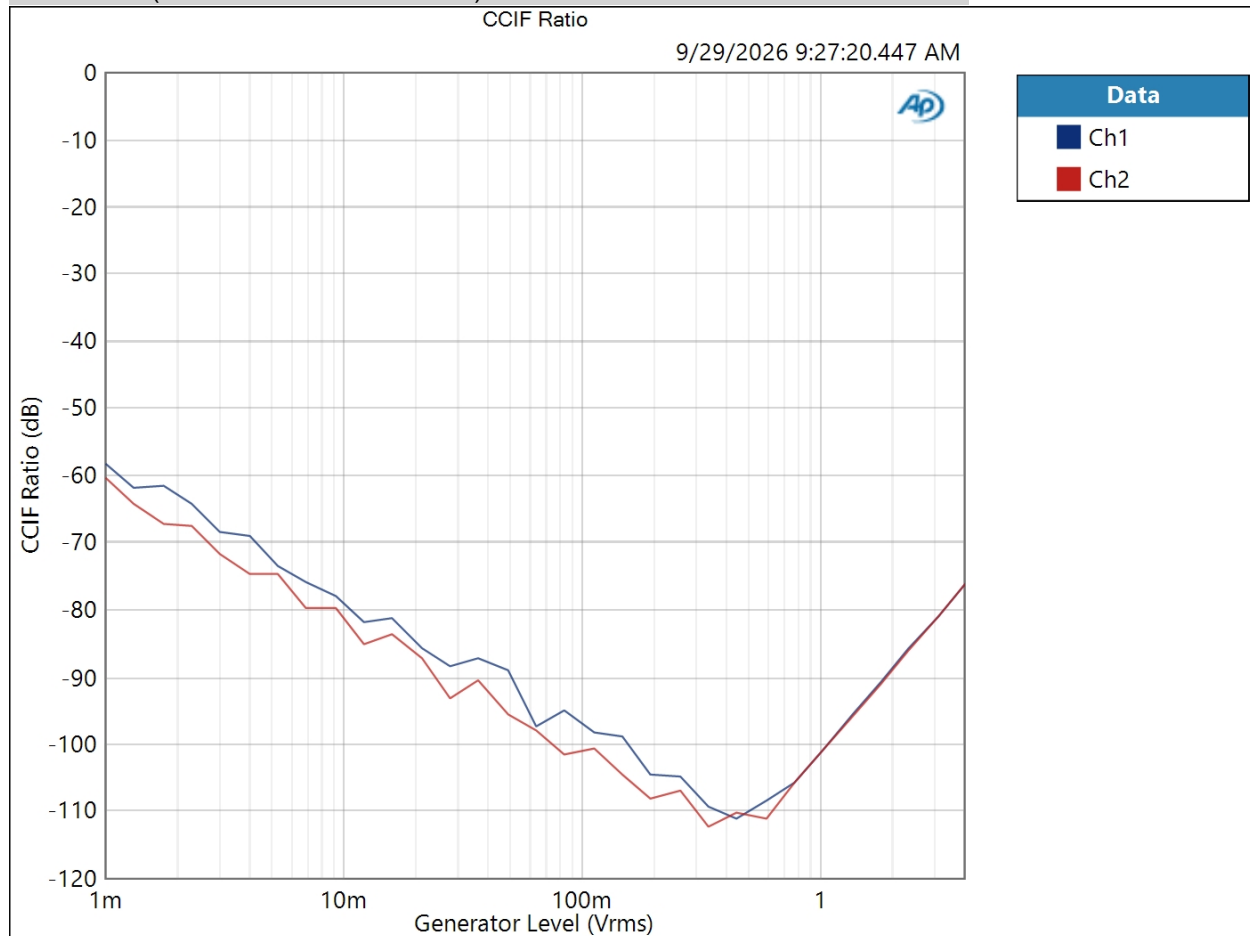
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 9/29/2026 9:27:20 AM

CCIF Ratio (9/29/2026 9:27:20.447 AM)



Result: PASSED

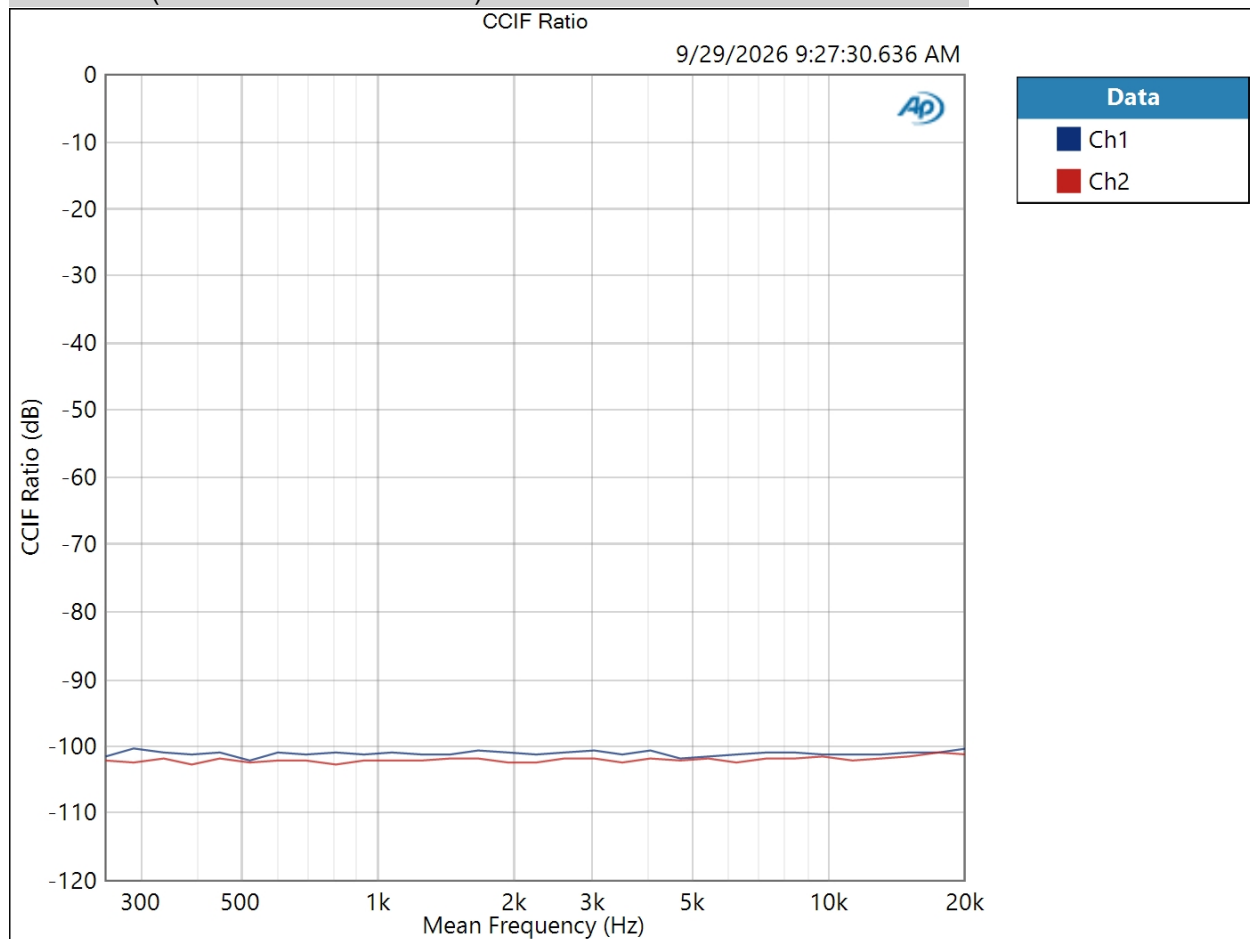
9/29/2026 9:50 AM

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SS High : IMD Frequency Sweep (CCIF)

Generator Level: 1.000 Vrms
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 9/29/2026 9:27:30 AM

CCIF Ratio (9/29/2026 9:27:30.636 AM)



Result:  PASSED

SS High : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 Vrms

Frequency: 10.0000 kHz

Crosstalk (9/29/2026 9:27:34.752 AM)

Ch1 -89.724 dB

Ch2 -108.282 dB

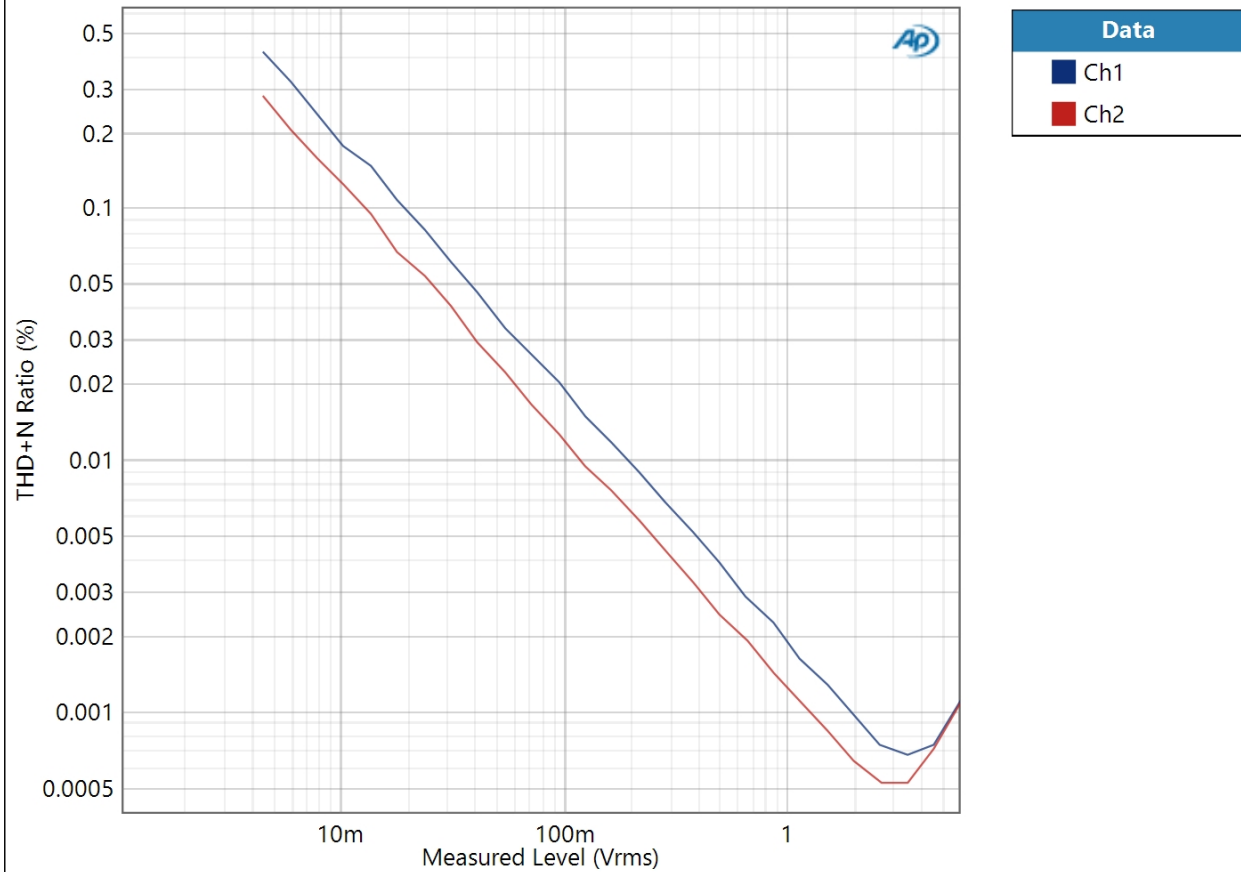
SS High : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 4.000 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 9/29/2026 9:27:53 AM

THD+N Ratio vs Measured Level (9/29/2026 9:27:53.540 AM)

THD+N Ratio vs Measured Level

9/29/2026 9:27:53.540 AM



Result: PASSED

Tube Low : 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:	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
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

9/29/2026 9:50 AM

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

Tube Low : Level and Gain

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	1.000 Vrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (9/29/2026 9:40:22.946 AM)

Ch1 1.115 Vrms

Ch2 1.087 Vrms

Tube Low : 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 (9/29/2026 9:40:24.567 AM)

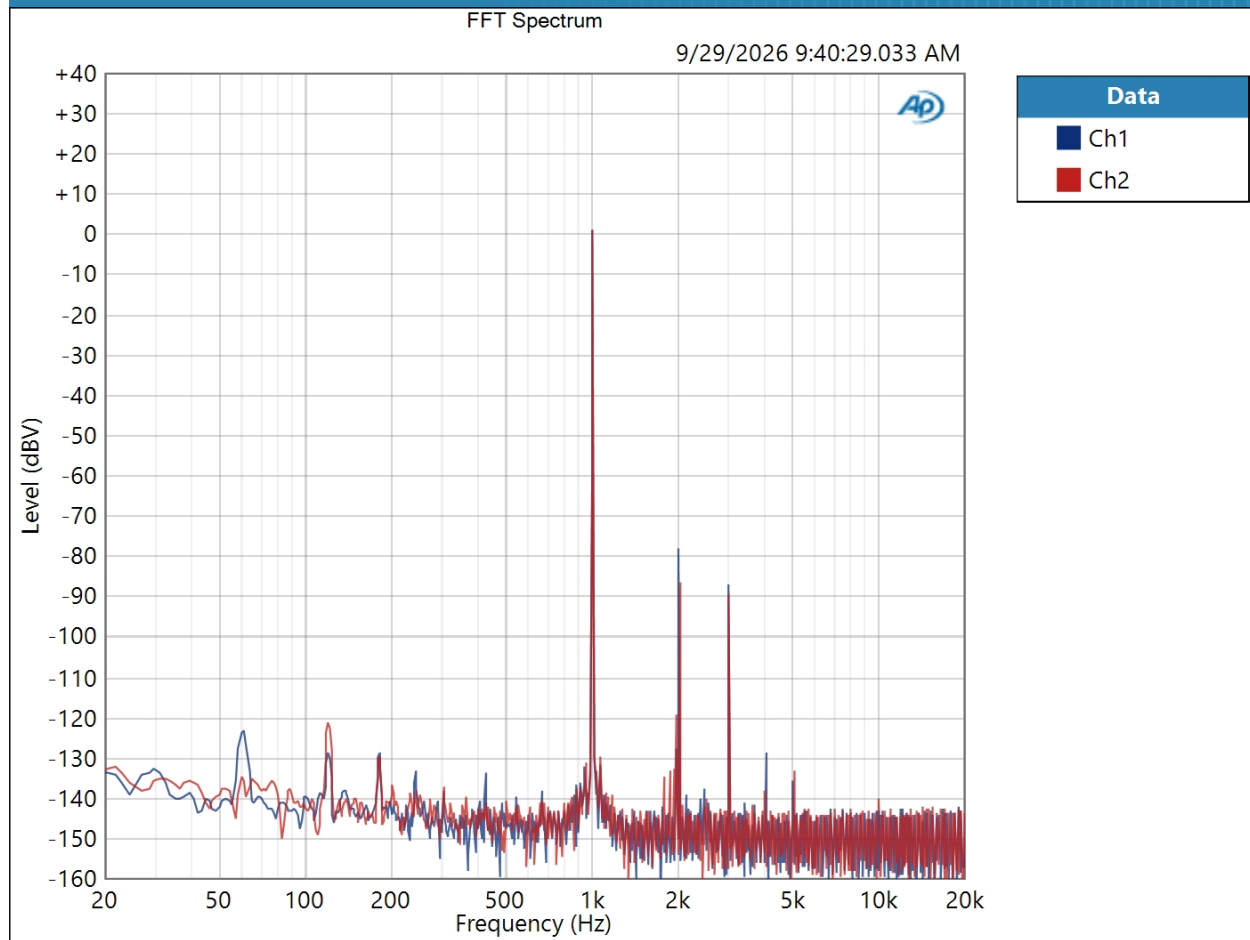
Ch1 67.23 uV

Ch2 -101.3 uV

Tube Low : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 9/29/2026 9:40:29 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (9/29/2026 9:40:29.033 AM)

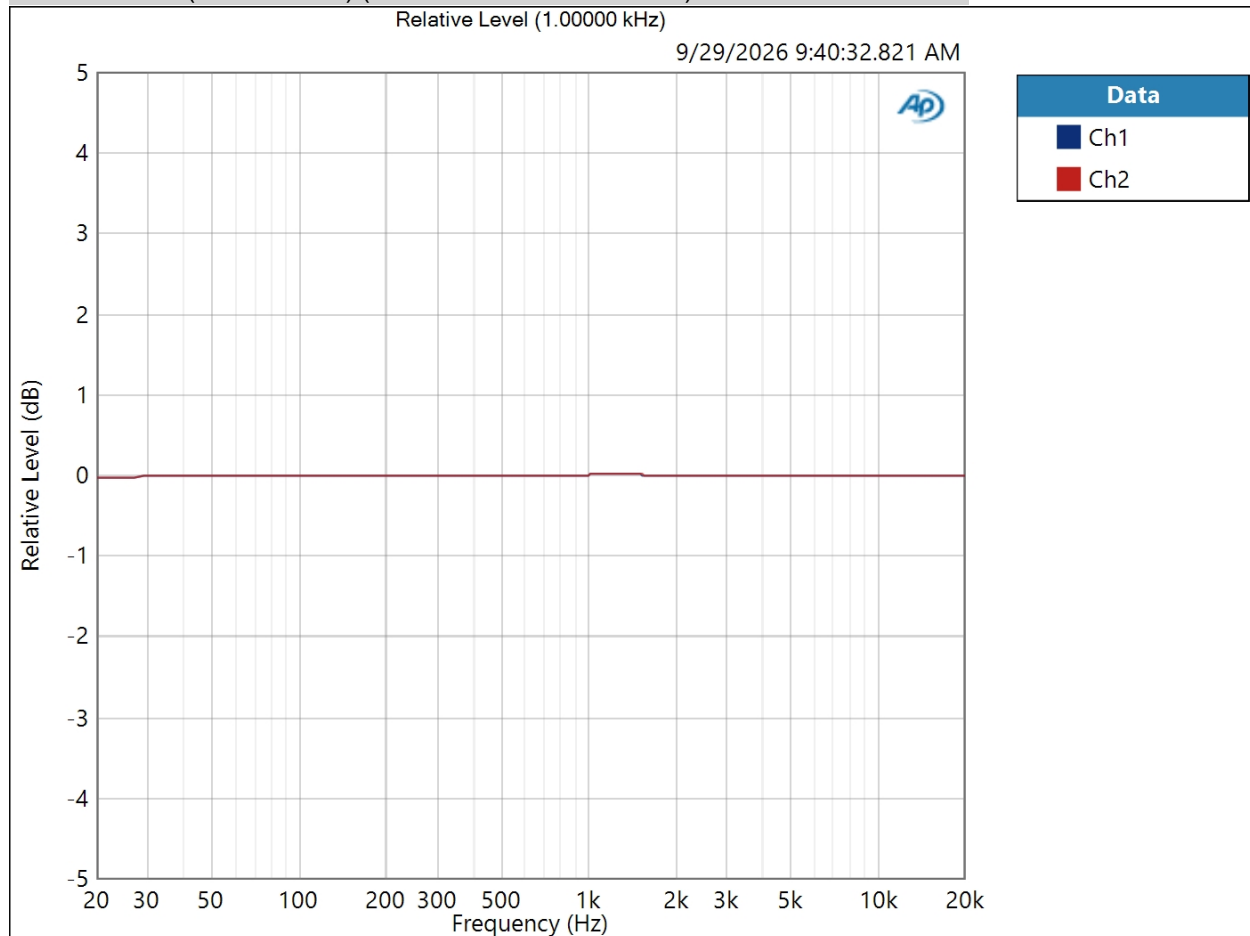


Result:  PASSED

Tube Low : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.000 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 500.0 ms
Secondary Source: None
Measured 1 9/29/2026 9:40:32 AM

Relative Level (1.00000 kHz) (9/29/2026 9:40:32.821 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) (9/29/2026 9:40:32.821 AM)

Ch1 ± 0.016 dB

Ch2 ± 0.015 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Tube Low : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 4.000 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 (9/29/2026 9:40:35.693 AM)

Ch1 125.268 dB

Ch2 124.722 dB

Tube Low : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 1.000 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: Signal Path
 Notch Tuning Mode: Measured Frequency

THD+N Ratio (9/29/2026 9:40:38.655 AM)

Ch1 0.012108 %

Ch2 0.005288 %

THD Ratio (9/29/2026 9:40:38.655 AM)

Ch1 0.012098 %

Ch2 0.005266 %

Noise Ratio (9/29/2026 9:40:38.655 AM)

Ch1 0.000240 %

Ch2 0.000278 %

Distortion Product Ratio (9/29/2026 9:40:38.655 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	-78.88	-87.75	-128.73	-140.84	-140.18	-140.50	-142.52	-142.27	-139.34
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-87.43	-90.16	-139.10	-131.16	-140.85	-144.43	-140.45	-142.19	-139.02

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Tube Low : IMD Level Sweep (CCIF)

IMD Type: CCIF

Mean Frequency: 12.5000 kHz

Diff Frequency: 80.0000 Hz

IMD Split: False

Start Level: 1.000 mVrms

Stop Level: 4.000 Vrms

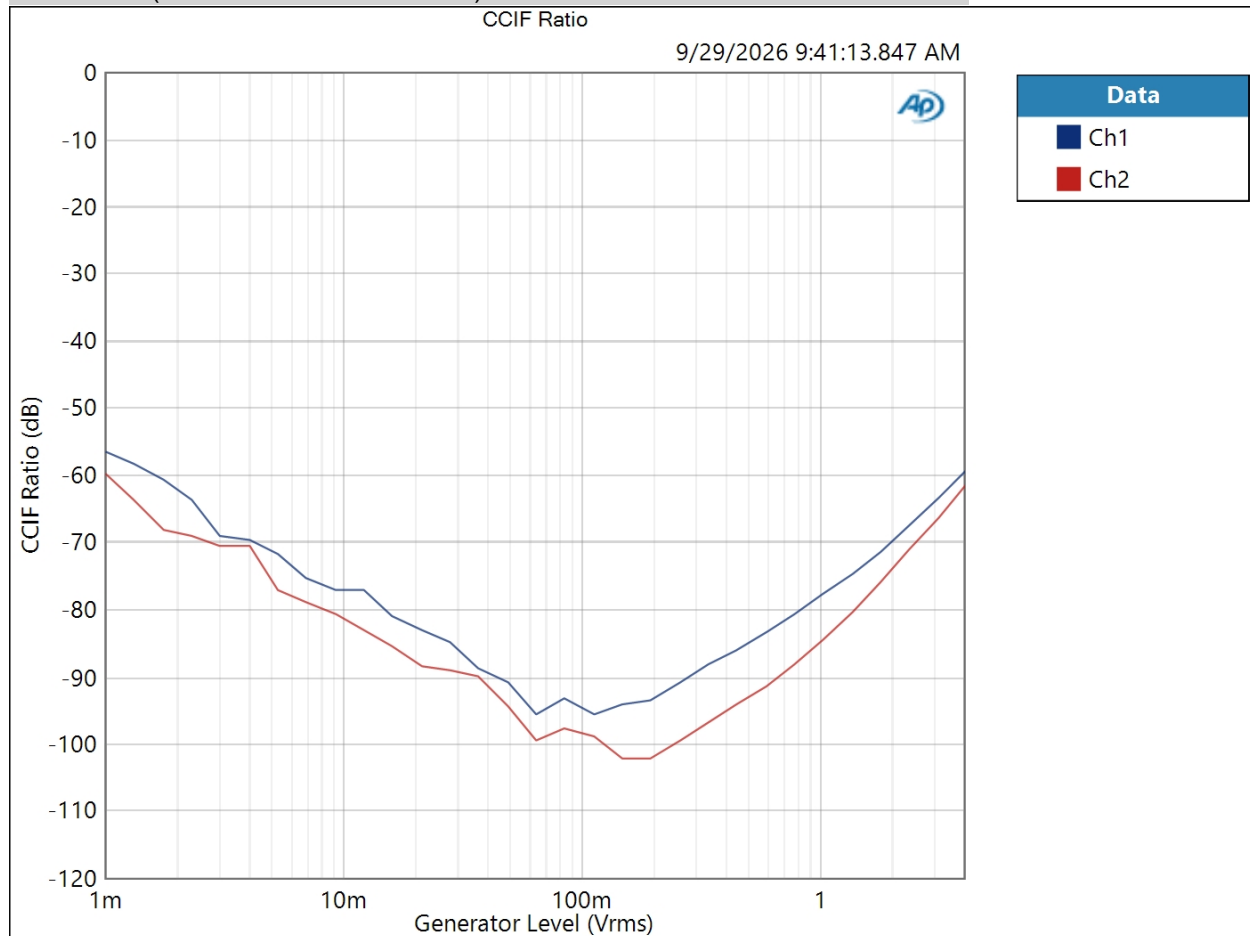
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 9/29/2026 9:41:13 AM

CCIF Ratio (9/29/2026 9:41:13.847 AM)



Result: PASSED

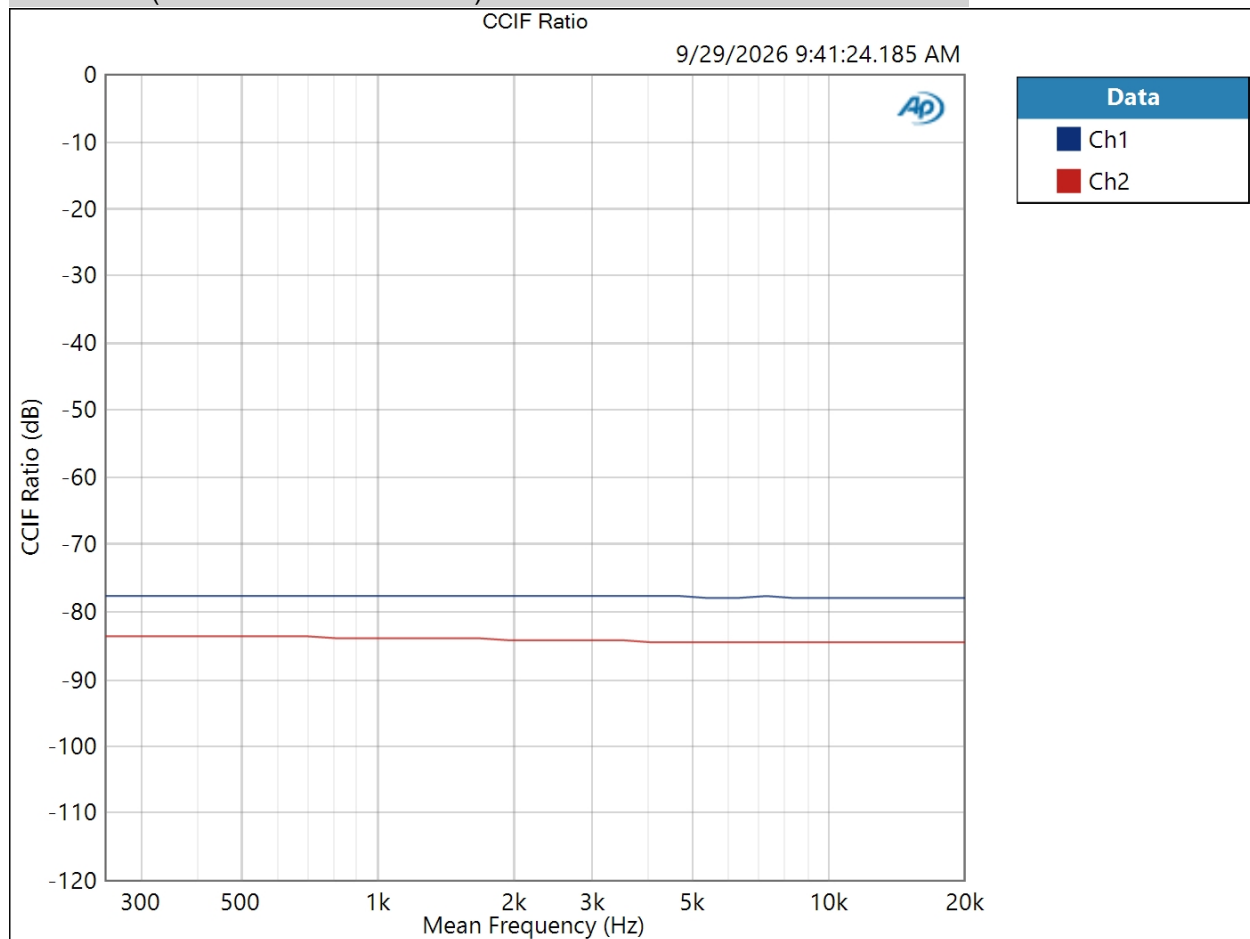
9/29/2026 9:50 AM

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Tube Low : IMD Frequency Sweep (CCIF)

Generator Level: 1.000 Vrms
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 9/29/2026 9:41:24 AM

CCIF Ratio (9/29/2026 9:41:24.185 AM)



Result:  PASSED

Tube Low : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 Vrms

Frequency: 10.0000 kHz

Crosstalk (9/29/2026 9:41:26.809 AM)

Ch1 -112.462 dB

Ch2 -92.506 dB

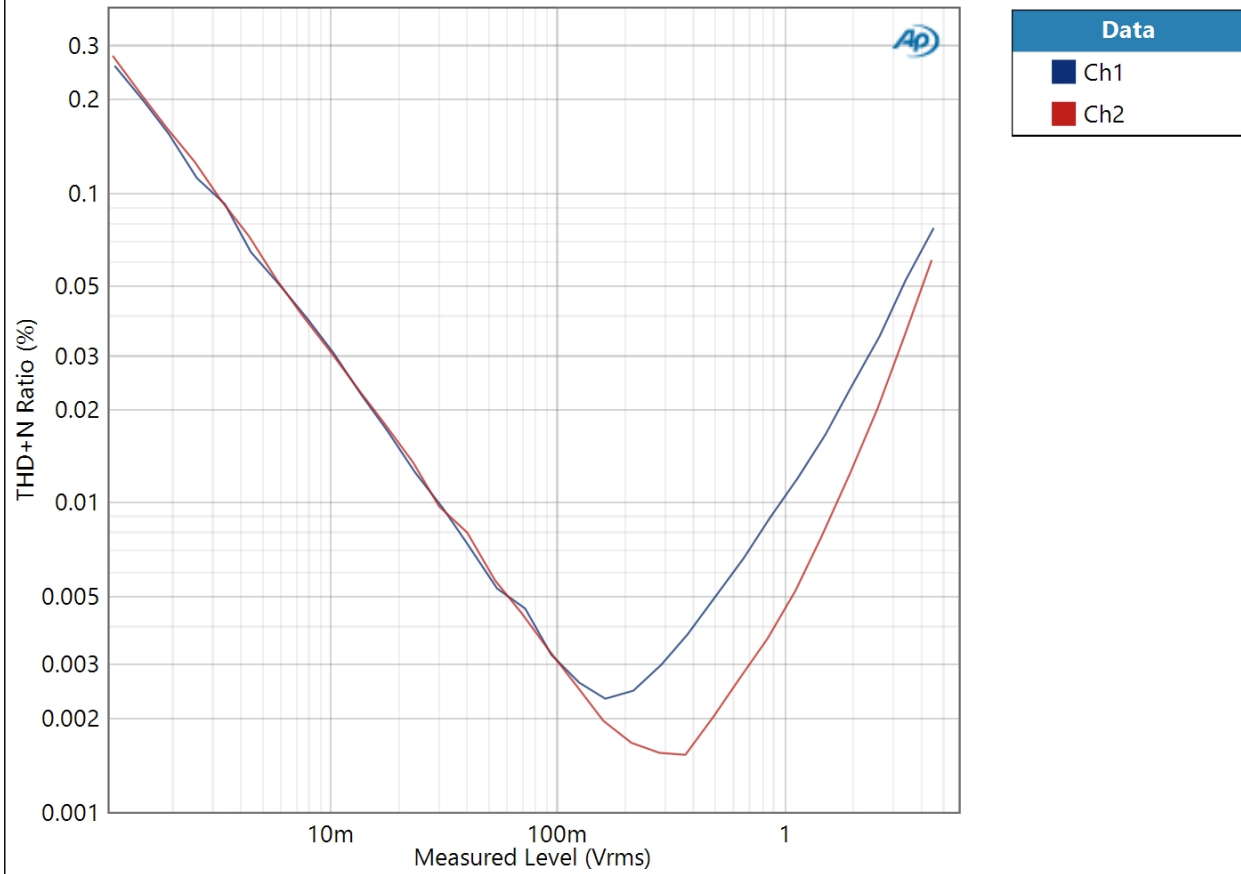
Tube Low : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 4.000 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 9/29/2026 9:41:44 AM

THD+N Ratio vs Measured Level (9/29/2026 9:41:44.759 AM)

THD+N Ratio vs Measured Level

9/29/2026 9:41:44.759 AM



Result: PASSED

Tube High : 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:	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
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

9/29/2026 9:50 AM

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

Tube High : Level and Gain

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	1.000 Vrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (9/29/2026 9:36:43.579 AM)

Ch1 4.026 Vrms

Ch2 3.935 Vrms

Tube High : 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 (9/29/2026 9:36:45.163 AM)

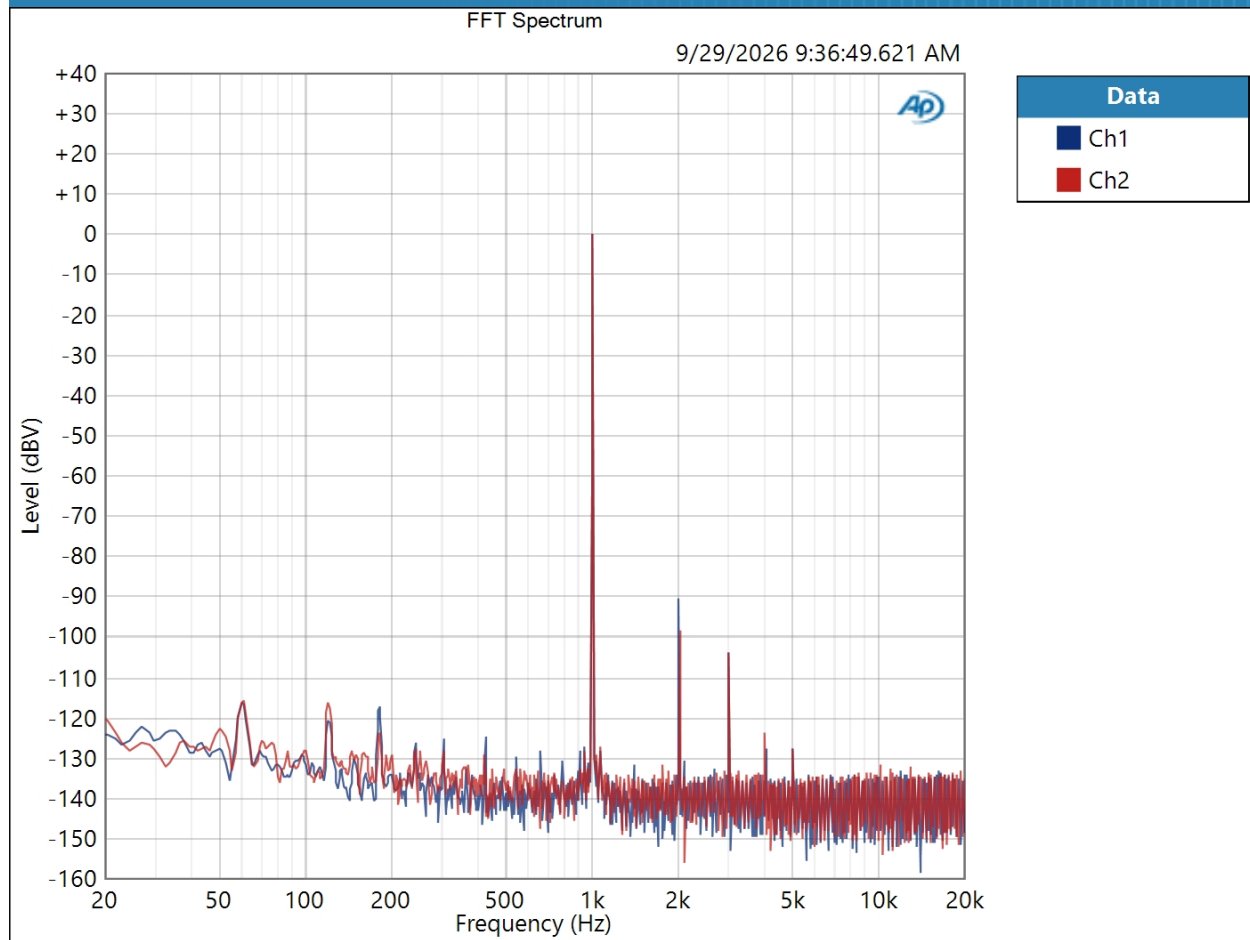
Ch1 56.95 uV

Ch2 -189.8 uV

Tube High : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 250.0 mVrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 9/29/2026 9:36:49 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (9/29/2026 9:36:49.621 AM)

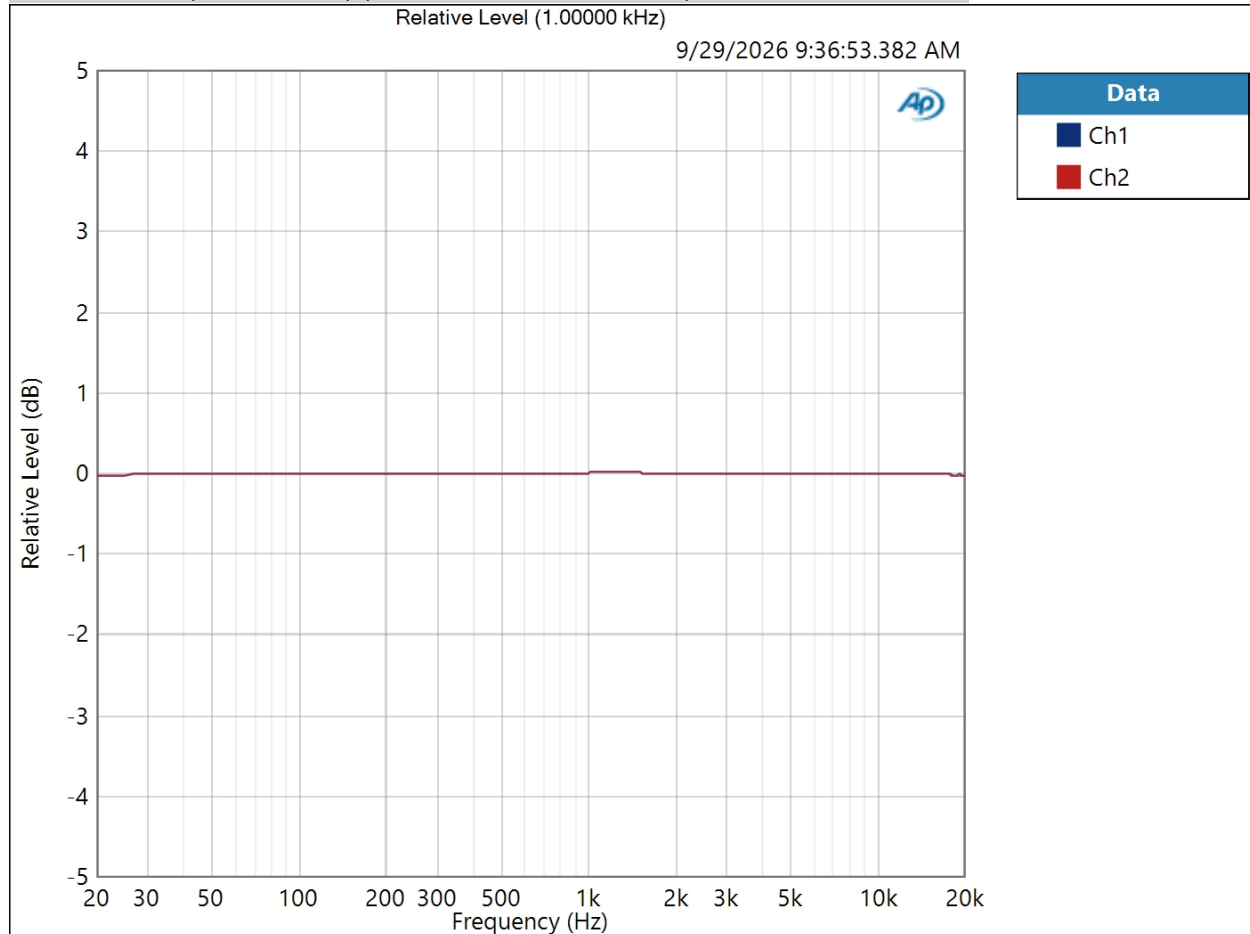


Result: PASSED

Tube High : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.000 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 500.0 ms
Secondary Source: None
Measured 1 9/29/2026 9:36:53 AM

Relative Level (1.00000 kHz) (9/29/2026 9:36:53.382 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) (9/29/2026 9:36:53.382 AM)

Ch1 ± 0.021 dB

Ch2 ± 0.022 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Tube High : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 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 (9/29/2026 9:36:56.199 AM)

Ch1 116.277 dB

Ch2 115.381 dB

Tube High : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 250.0 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 (9/29/2026 9:36:59.393 AM)

Ch1 0.003216 %

Ch2 0.001670 %

THD Ratio (9/29/2026 9:36:59.393 AM)

Ch1 0.003121 %

Ch2 0.001389 %

Noise Ratio (9/29/2026 9:36:59.393 AM)

Ch1 0.000804 %

Ch2 0.000893 %

Distortion Product Ratio (9/29/2026 9:36:59.393 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	-90.31	-103.85	-132.68	-128.61	-135.36	-133.94	-131.70	-130.79	-131.44
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-98.19	-104.05	-123.87	-126.10	-128.41	-128.35	-130.03	-129.95	-134.23

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Tube High : IMD Level Sweep (CCIF)

IMD Type: CCIF

Mean Frequency: 12.5000 kHz

Diff Frequency: 80.0000 Hz

IMD Split: False

Start Level: 1.000 mVrms

Stop Level: 4.000 Vrms

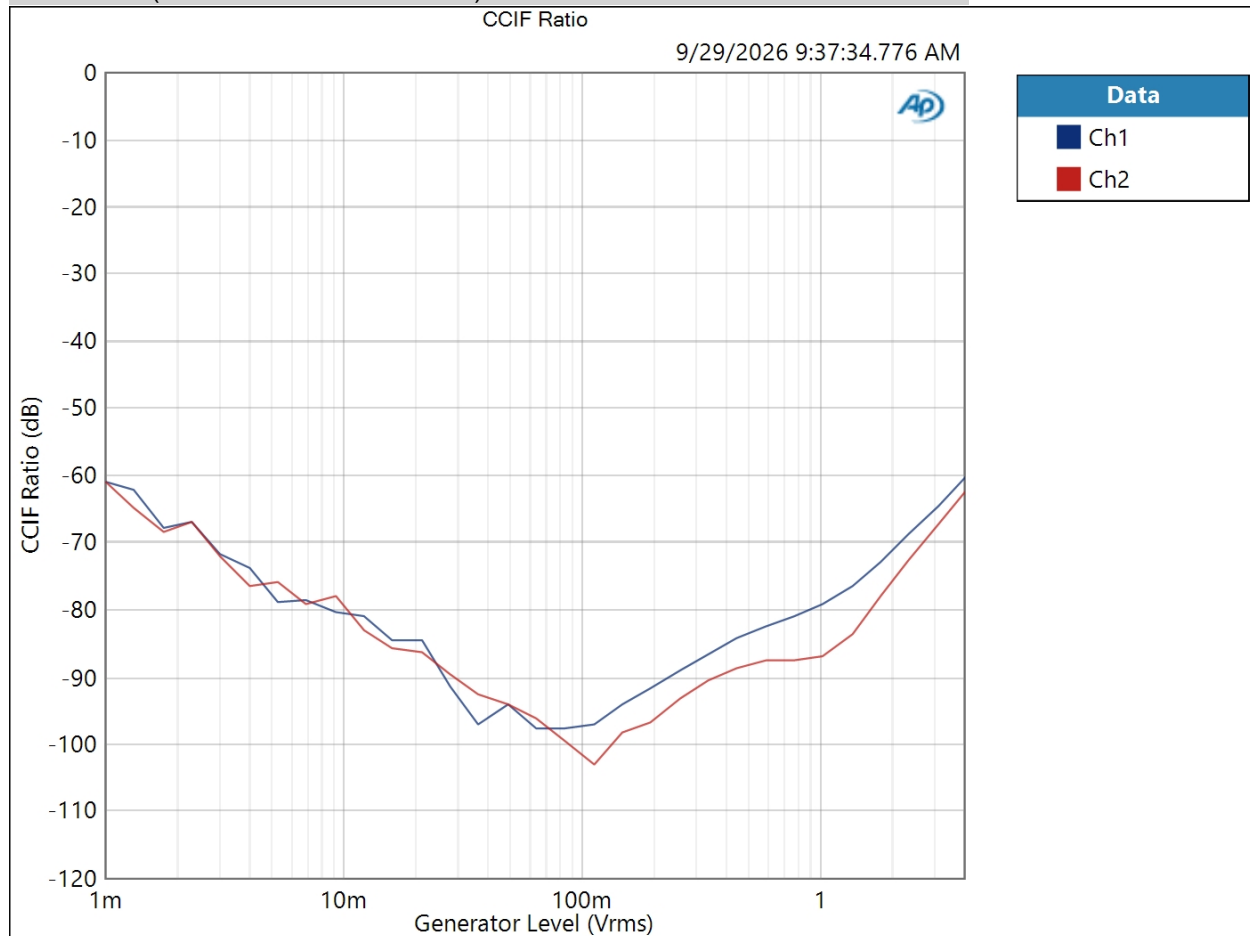
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 9/29/2026 9:37:34 AM

CCIF Ratio (9/29/2026 9:37:34.776 AM)



Result: PASSED

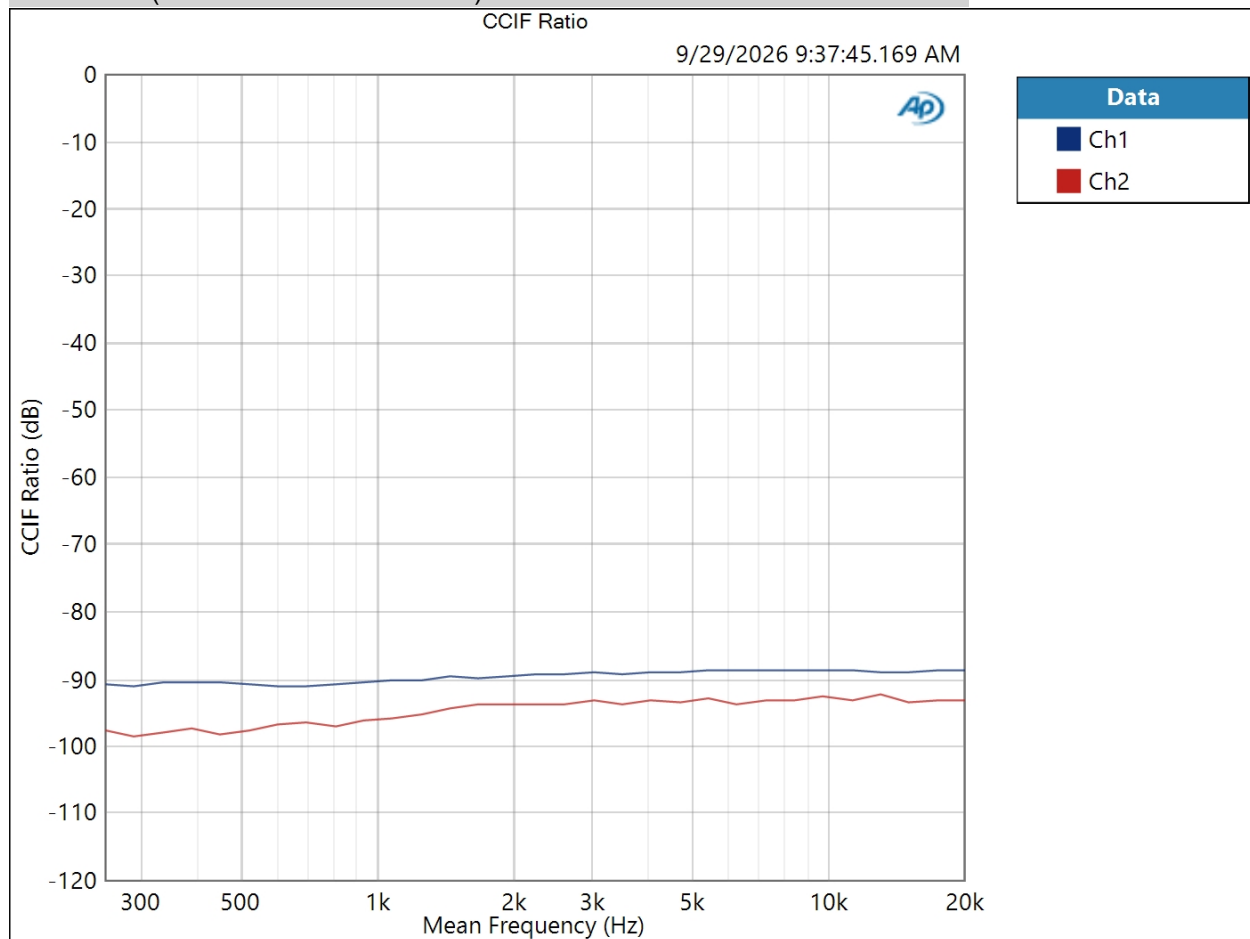
9/29/2026 9:50 AM

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Tube High : IMD Frequency Sweep (CCIF)

Generator Level: 250.0 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 9/29/2026 9:37:45 AM

CCIF Ratio (9/29/2026 9:37:45.169 AM)



Result:  PASSED

Tube High : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 250.0 mVrms

Frequency: 10.0000 kHz

Crosstalk (9/29/2026 9:37:49.621 AM)

Ch1 -106.443 dB

Ch2 -90.404 dB

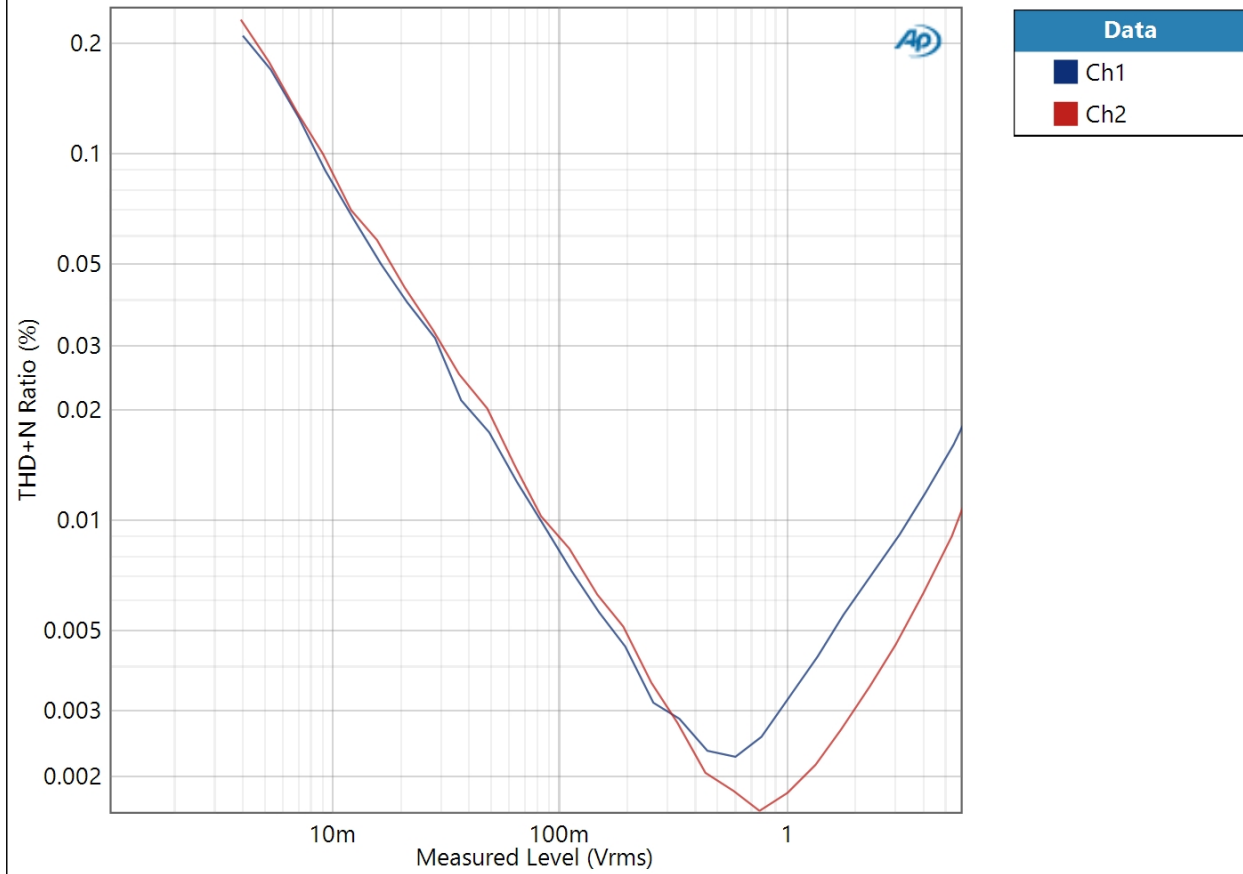
Tube High : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 4.000 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 9/29/2026 9:38:08 AM

THD+N Ratio vs Measured Level (9/29/2026 9:38:08.480 AM)

THD+N Ratio vs Measured Level

9/29/2026 9:38:08.480 AM



Result: PASSED

Half Tube Low : 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:	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
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

9/29/2026 9:50 AM

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

Half Tube Low : Level and Gain

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	1.000 Vrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (9/29/2026 9:49:24.207 AM)

Ch1 1.219 Vrms

Ch2 1.189 Vrms

Half Tube Low : 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 (9/29/2026 9:49:25.851 AM)

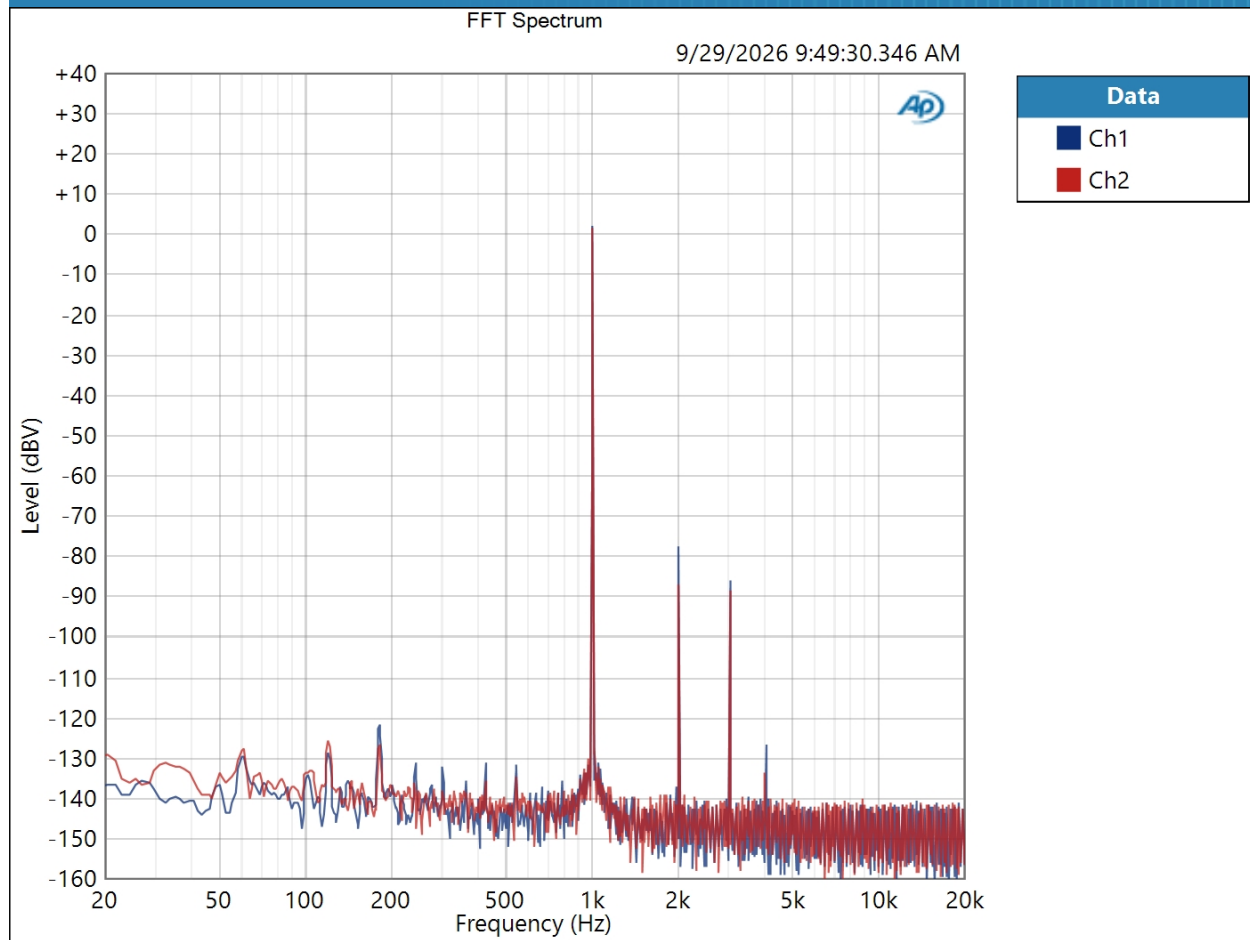
Ch1 186.5 μ V

Ch2 -40.87 μ V

Half Tube Low : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 1.000 Vrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 9/29/2026 9:49:30 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (9/29/2026 9:49:30.346 AM)

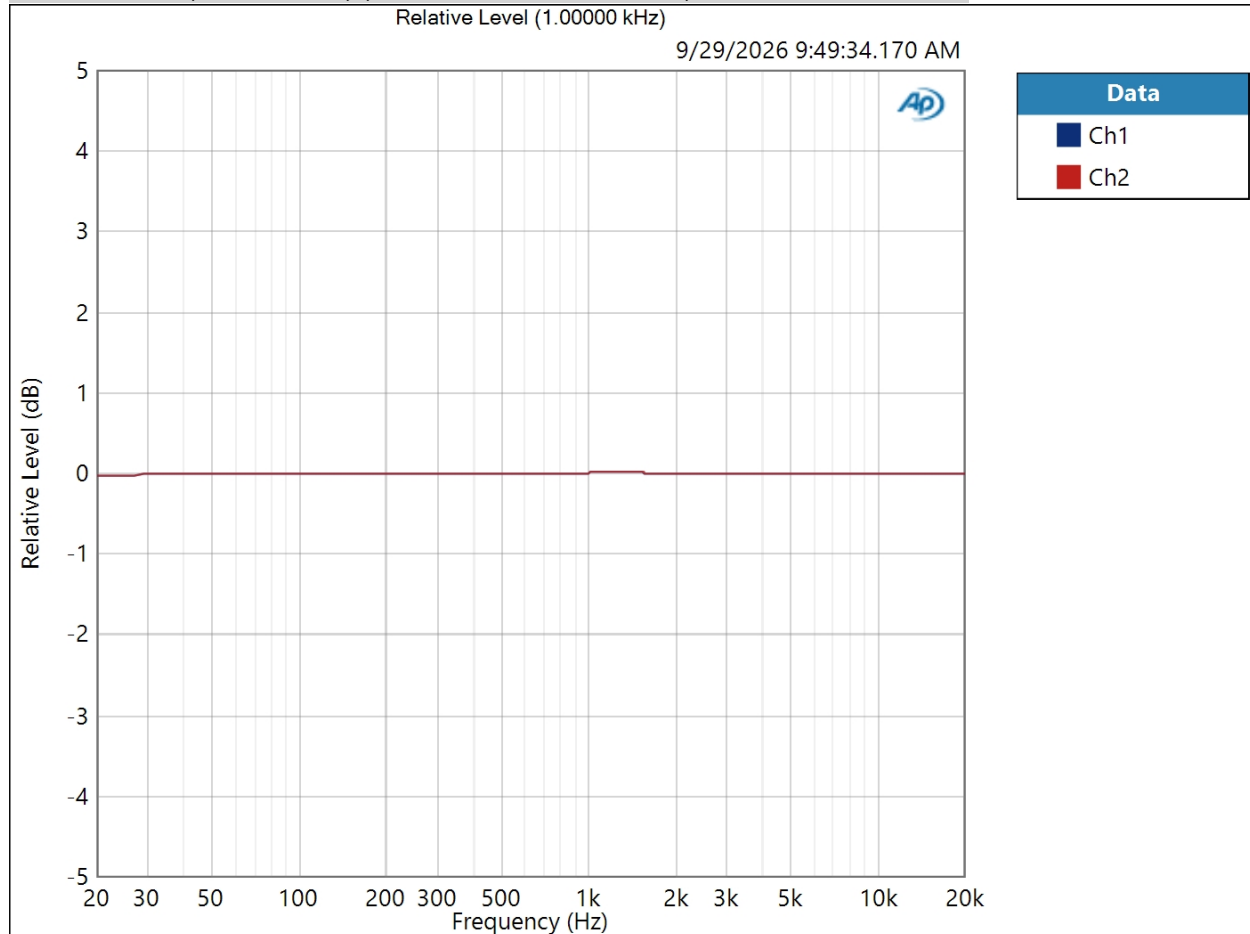


Result: PASSED

Half Tube Low : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.000 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 500.0 ms
Secondary Source: None
Measured 1 9/29/2026 9:49:34 AM

Relative Level (1.00000 kHz) (9/29/2026 9:49:34.170 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) (9/29/2026 9:49:34.170 AM)

Ch1 ± 0.017 dB

Ch2 ± 0.017 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Half Tube Low : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 4.000 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 (9/29/2026 9:49:37.031 AM)

Ch1 124.821 dB

Ch2 123.861 dB

Half Tube Low : THD+N

Waveform: Sine
 Generator Mode: High Performance Sine Generator
 Precision Tune: Disabled
 Generator Level: 250.0 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 (9/29/2026 9:49:39.733 AM)

Ch1 0.002954 %

Ch2 0.001600 %

THD Ratio (9/29/2026 9:49:39.733 AM)

Ch1 0.002748 %

Ch2 0.001013 %

Noise Ratio (9/29/2026 9:49:39.733 AM)

Ch1 0.001149 %

Ch2 0.001267 %

Distortion Product Ratio (9/29/2026 9:49:39.733 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	-91.28	-112.13	-125.57	-129.55	-126.28	-123.39	-123.70	-127.34	-124.66
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-100.22	-113.55	-125.03	-129.56	-124.59	-129.18	-128.60	-129.07	-126.95

Distortion Product Ratio Parameters

Frequency Unit: Hz
 Ratio Unit: dB
 Channel: Ch1

Half Tube Low : IMD Level Sweep (CCIF)

IMD Type: CCIF

Mean Frequency: 12.5000 kHz

Diff Frequency: 80.0000 Hz

IMD Split: False

Start Level: 1.000 mVrms

Stop Level: 4.000 Vrms

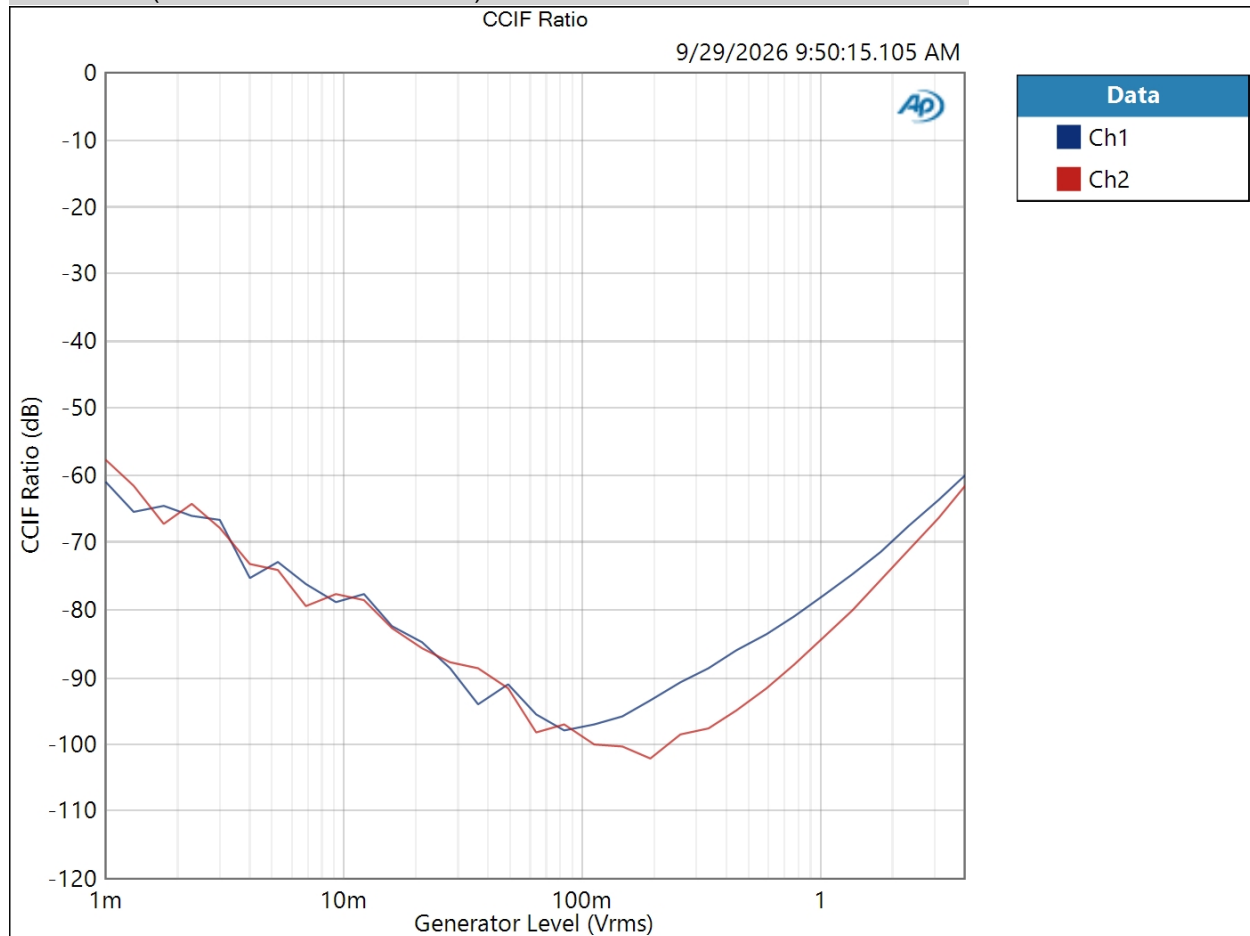
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 9/29/2026 9:50:15 AM

CCIF Ratio (9/29/2026 9:50:15.105 AM)



Result: PASSED

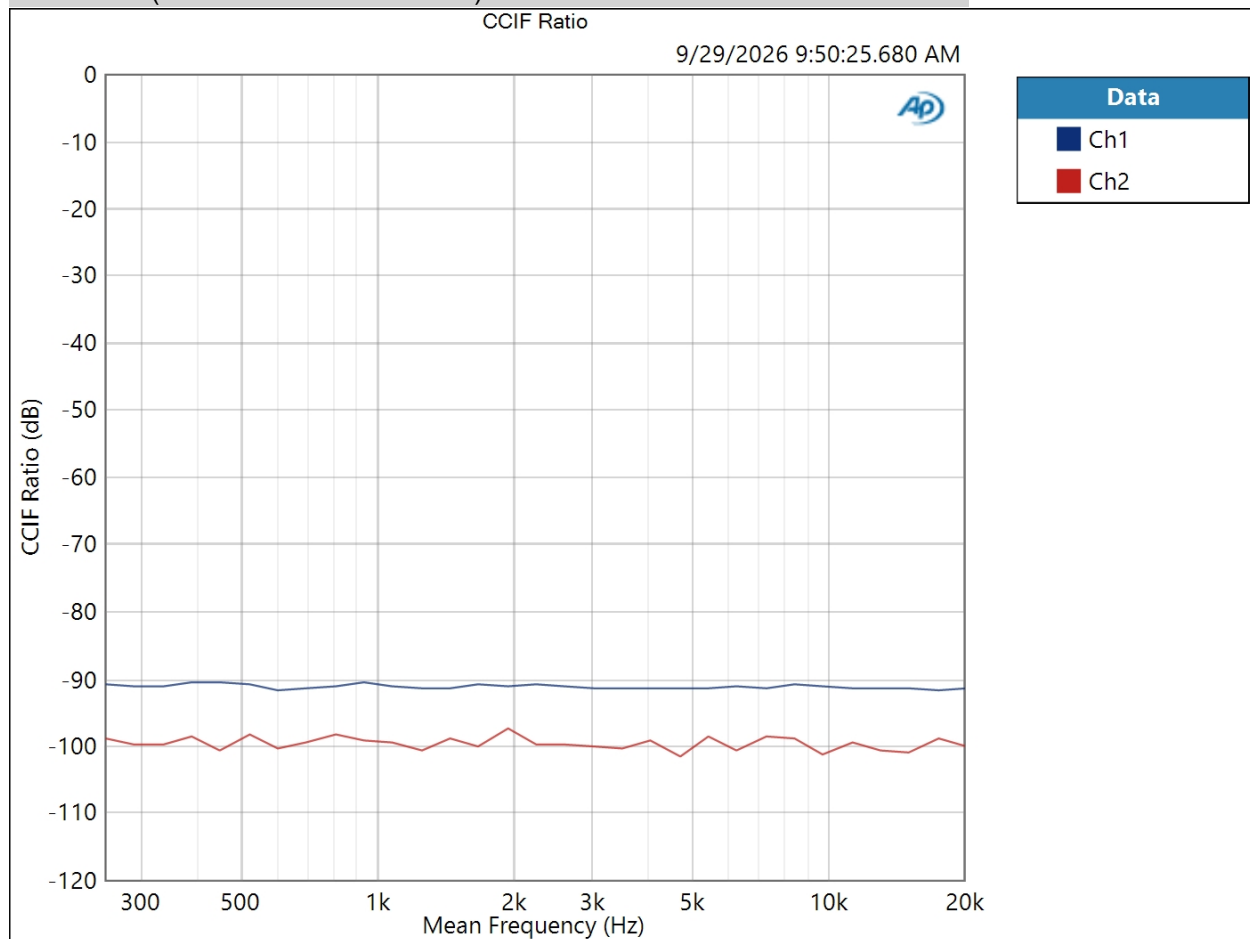
9/29/2026 9:50 AM

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Half Tube Low : IMD Frequency Sweep (CCIF)

Generator Level: 250.0 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 9/29/2026 9:50:25 AM

CCIF Ratio (9/29/2026 9:50:25.680 AM)



Result:  PASSED

Half Tube Low : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 250.0 mVrms

Frequency: 10.0000 kHz

Crosstalk (9/29/2026 9:50:29.975 AM)

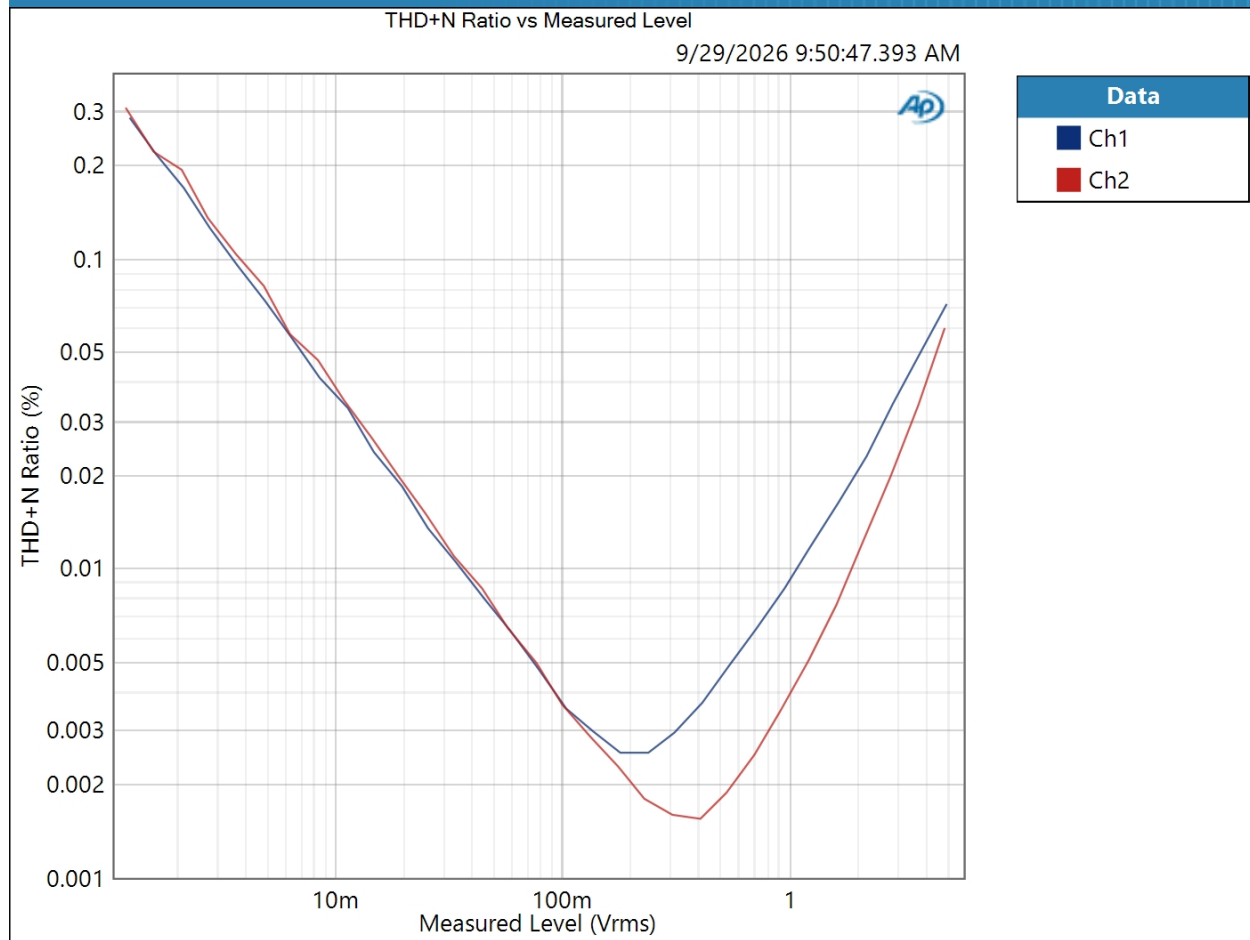
Ch1 -111.570 dB

Ch2 -92.099 dB

Half Tube Low : 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: 4.000 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 9/29/2026 9:50:47 AM

THD+N Ratio vs Measured Level (9/29/2026 9:50:47.393 AM)



Result: PASSED

Half Tube High : 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:	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
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

9/29/2026 9:50 AM

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

Half Tube High : Level and Gain

Waveform:	Sine
Generator Mode:	High Performance Sine Generator
Precision Tune:	Disabled
Generator Level:	1.000 Vrms
Frequency:	1.00000 kHz
Low-pass Filter:	Signal Path

RMS Level (9/29/2026 9:45:55.431 AM)

Ch1 4.403 Vrms
Ch2 4.302 Vrms

Half Tube High : 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

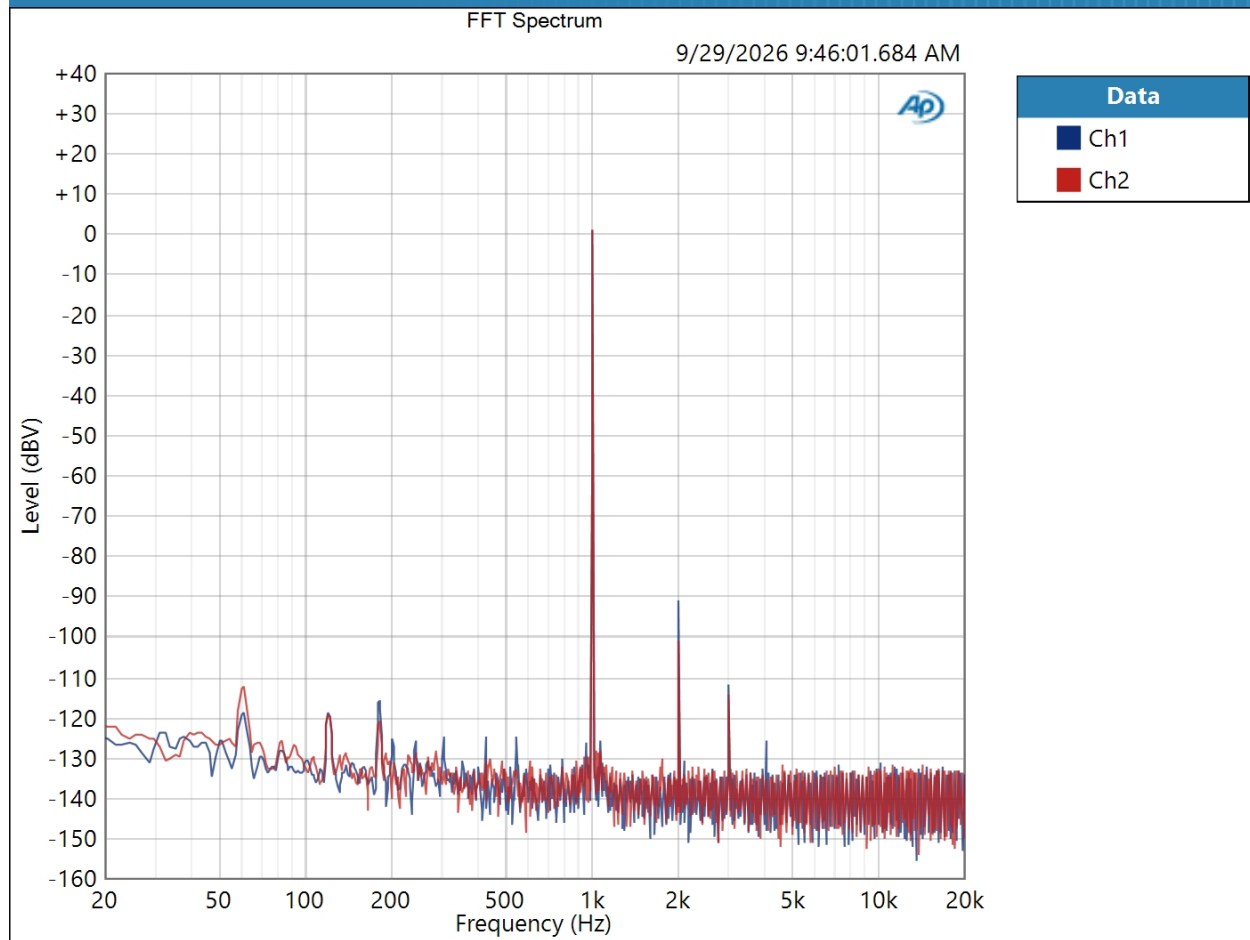
DC Level (9/29/2026 9:45:57.037 AM)

Ch1 228.4 μ V
Ch2 -144.4 μ V

Half Tube High : Signal Analyzer

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Generator Level: 250.0 mVrms
Frequency: 1.00000 kHz
Secondary Source: None
Measured 1 9/29/2026 9:46:01 AM
Acquisition Type: Auto
Trigger: Free Run
Delay Time: 250.0 ms
Input Bandwidth: Use Signal Path
FFT Length: 32K
Averaging: Power
Averages: 3
Window: AP-Equiripple
Record Acquisition: False
Recording Type: Multiple Mono PCM (.wav)

FFT Spectrum (9/29/2026 9:46:01.684 AM)

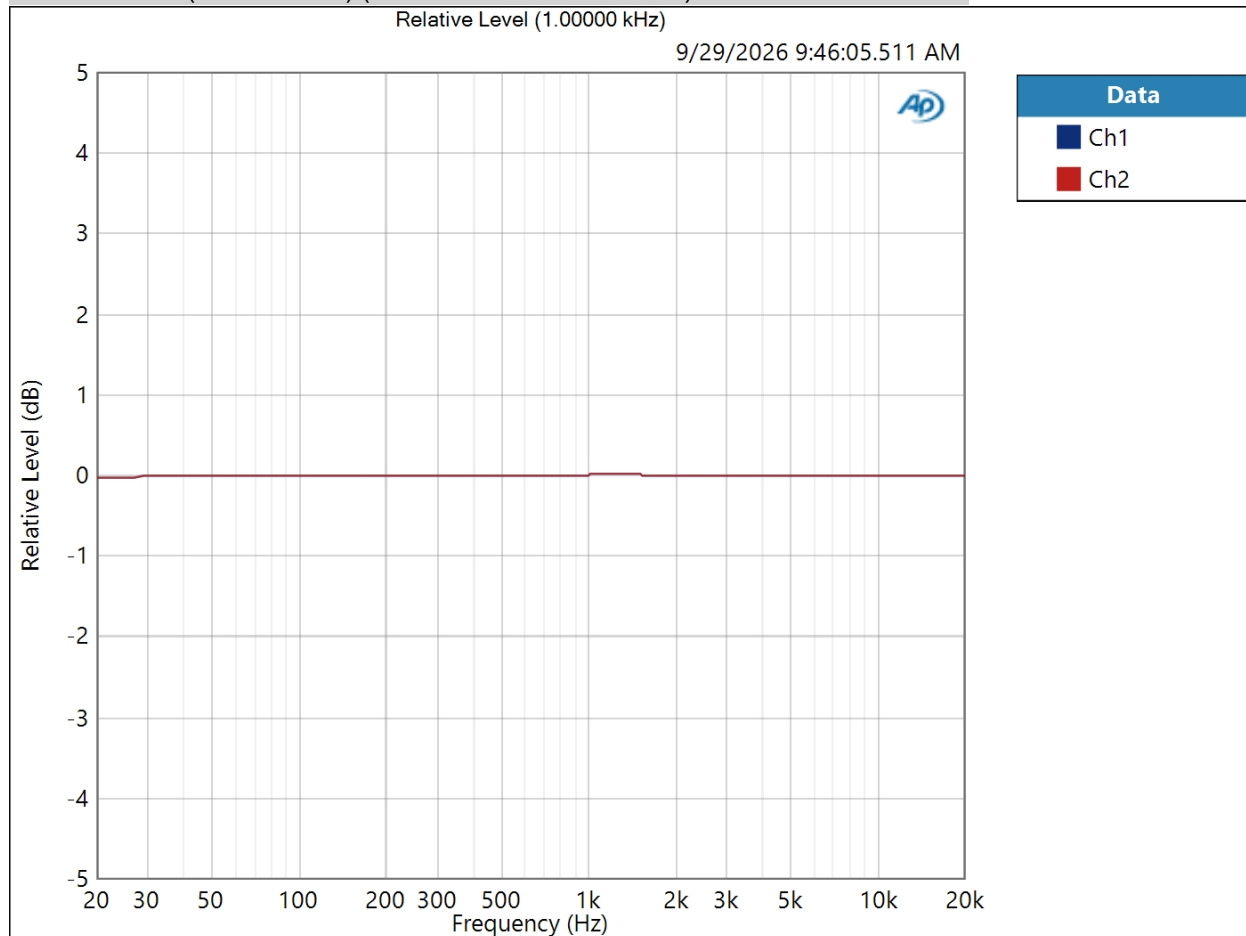


Result: PASSED

Half Tube High : Frequency Response

Start Frequency: 20.0000 Hz
Stop Frequency: 20.0000 kHz
Generator Level: 1.000 Vrms
DC Offset: 0.000 V
EQ: None
Pre-Sweep: 100.0 ms
Sweep: 350.0 ms
Extend Acquisition By: 500.0 ms
Secondary Source: None
Measured 1 9/29/2026 9:46:05 AM

Relative Level (1.00000 kHz) (9/29/2026 9:46:05.511 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) (9/29/2026 9:46:05.511 AM)

Ch1 ± 0.018 dB

Ch2 ± 0.019 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Half Tube High : Signal to Noise Ratio

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 1.000 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 (9/29/2026 9:46:08.394 AM)

Ch1 115.846 dB

Ch2 115.108 dB

Half Tube High : THD+N

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 250.0 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 (9/29/2026 9:46:11.655 AM)

Ch1 0.002691 %

Ch2 0.001272 %

THD Ratio (9/29/2026 9:46:11.655 AM)

Ch1 0.002530 %

Ch2 0.000908 %

Noise Ratio (9/29/2026 9:46:11.655 AM)

Ch1 0.000820 %

Ch2 0.000907 %

Distortion Product Ratio (9/29/2026 9:46:11.655 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	-91.98	-112.95	-124.76	-134.14	-129.89	-130.67	-135.93	-130.70	-132.00
Ch2	-0.00	-101.13	-114.79	-123.10	-136.34	-131.64	-129.27	-134.35	-130.39	-128.25

Distortion Product Ratio Parameters

Frequency Unit: Hz

Ratio Unit: dB

Channel: Ch1

Half Tube High : IMD Level Sweep (CCIF)

IMD Type: CCIF

Mean Frequency: 12.5000 kHz

Diff Frequency: 80.0000 Hz

IMD Split: False

Start Level: 1.000 mVrms

Stop Level: 4.000 Vrms

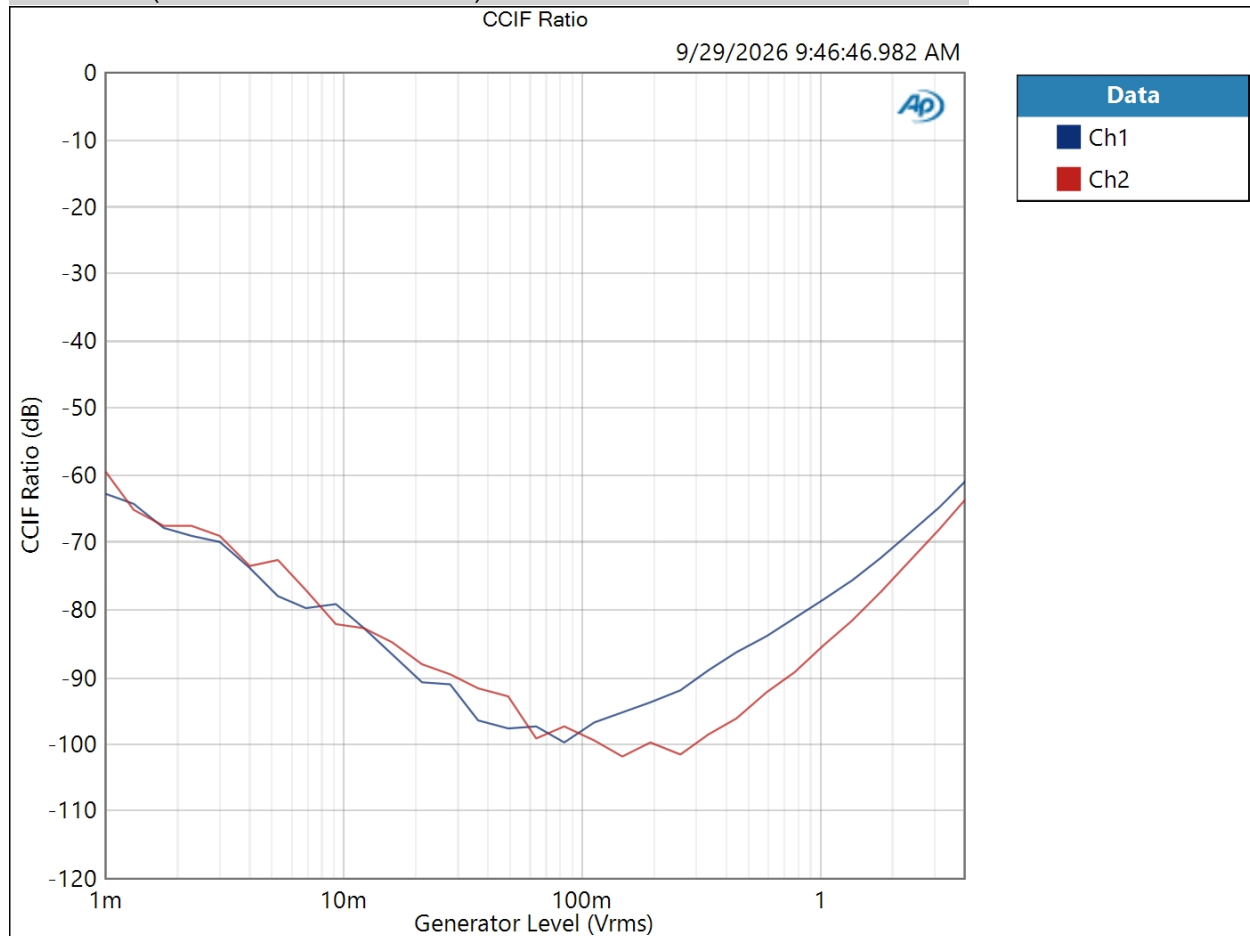
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 9/29/2026 9:46:46 AM

CCIF Ratio (9/29/2026 9:46:46.982 AM)



Result: PASSED

9/29/2026 9:50 AM

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Half Tube High : IMD Frequency Sweep (CCIF)

Generator Level: 250.0 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

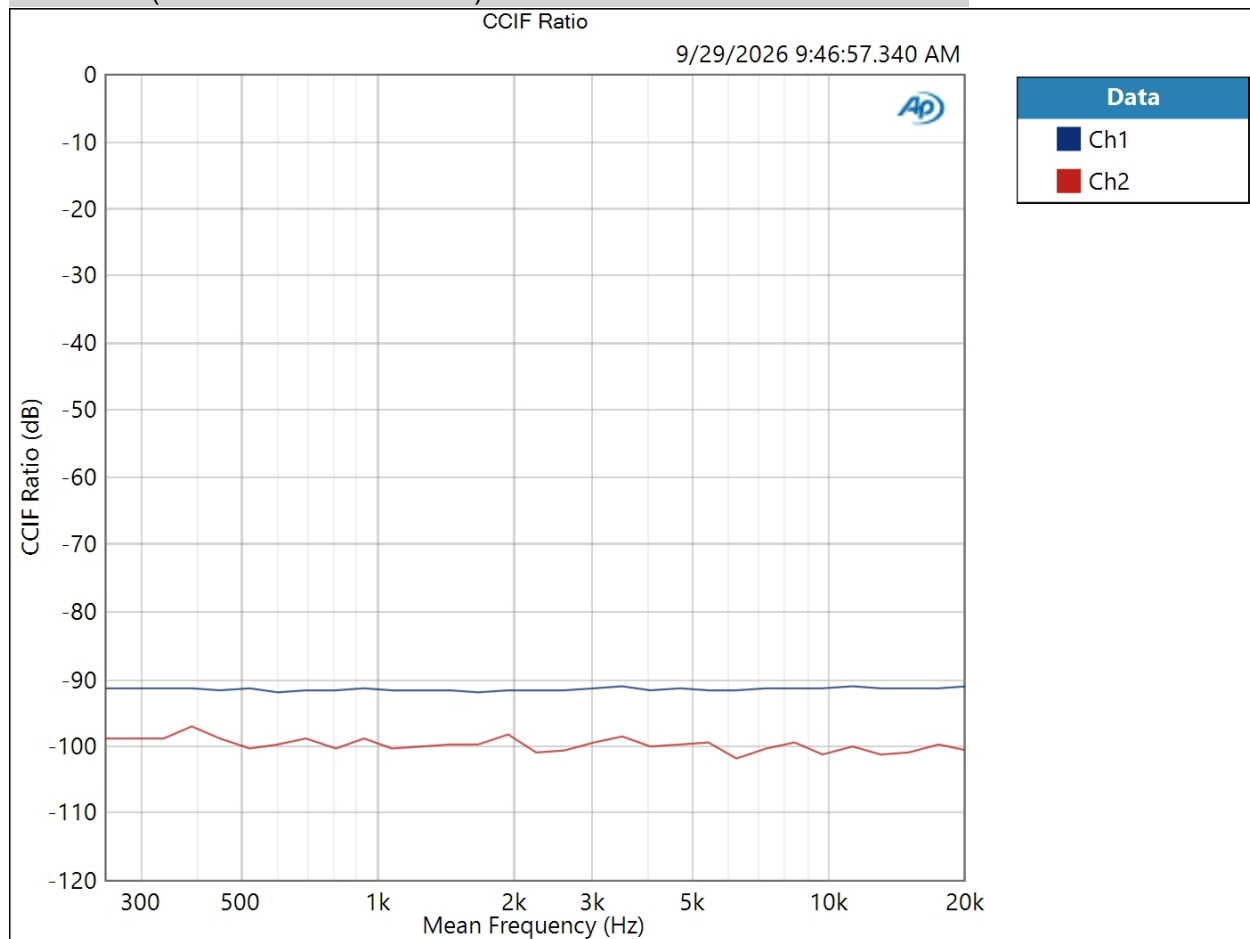
Step Type: Logarithmic

Number of Points: 31

Mode: d2+d3

Measured 1 9/29/2026 9:46:57 AM

CCIF Ratio (9/29/2026 9:46:57.340 AM)



Result:  PASSED

Half Tube High : Crosstalk, One Channel Undriven

Waveform: Sine

Generator Mode: High Performance Sine Generator

Precision Tune: Disabled

Generator Level: 250.0 mVrms

Frequency: 10.0000 kHz

Crosstalk (9/29/2026 9:47:01.466 AM)

Ch1 -114.549 dB

Ch2 -90.694 dB

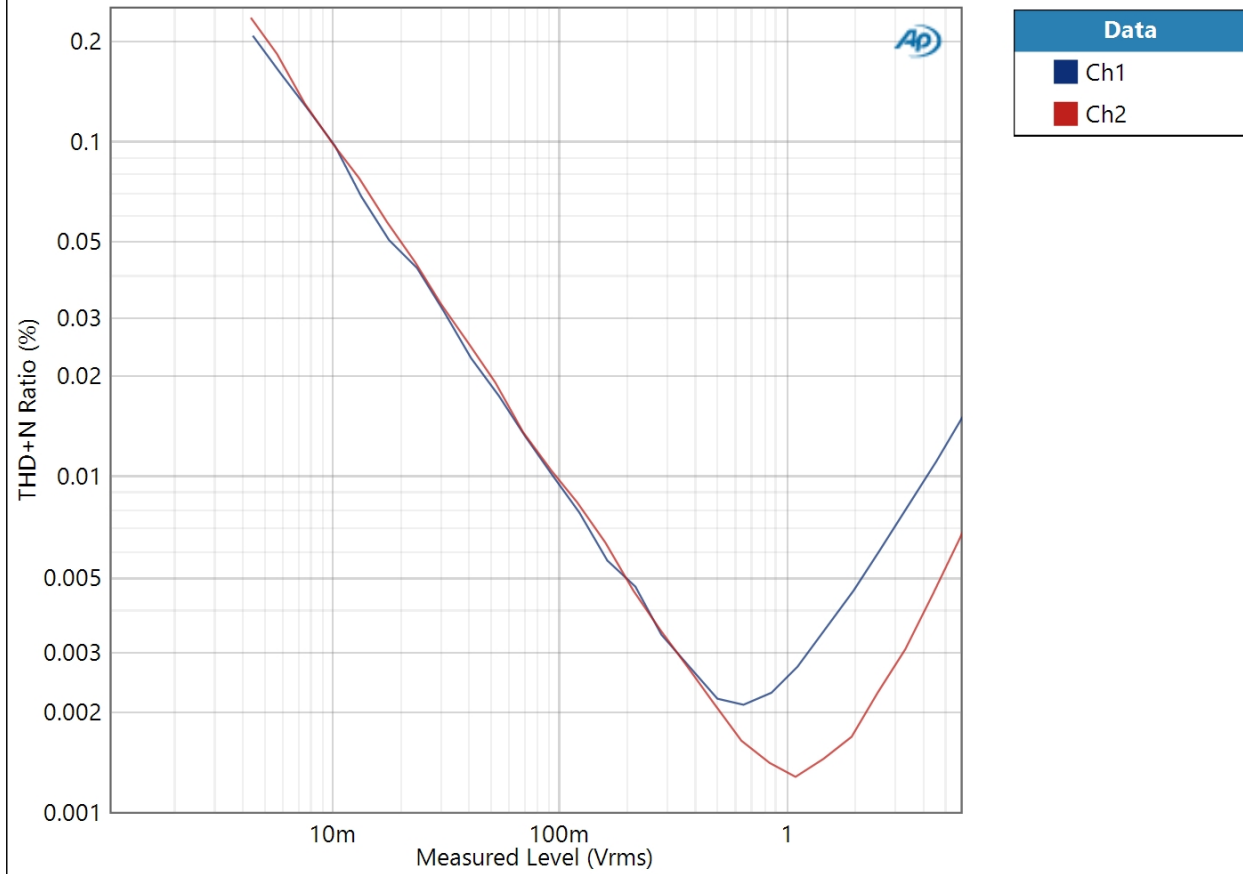
Half Tube High : Stepped Level Sweep

Waveform: Sine
Generator Mode: High Performance Sine Generator
Precision Tune: Disabled
Frequency: 1.00000 kHz
Start Level: 1.000 mVrms
Stop Level: 4.000 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 9/29/2026 9:47:19 AM

THD+N Ratio vs Measured Level (9/29/2026 9:47:19.647 AM)

THD+N Ratio vs Measured Level

9/29/2026 9:47:19.647 AM



Result: PASSED