

# Common Amplifier Format

## Any-amp 600

Serial #:	abc123
Configuration:	Mono-mode
# Channels:	2
Ch. Driven:	1
Minimum Load Z:	2 ohms
Input Sensitivity:	24 dBu
Range Selectable:	Yes
Variable:	No
Setting:	NA

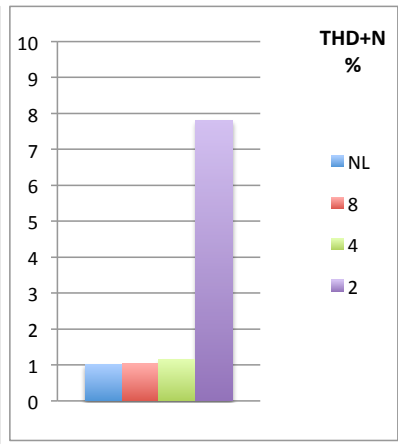
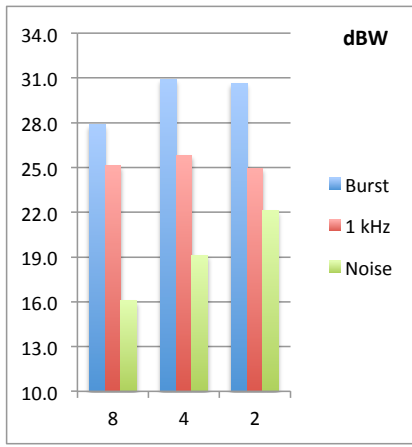
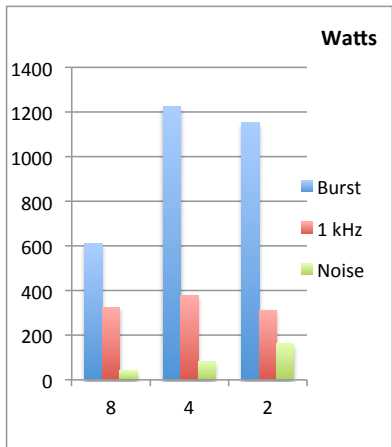
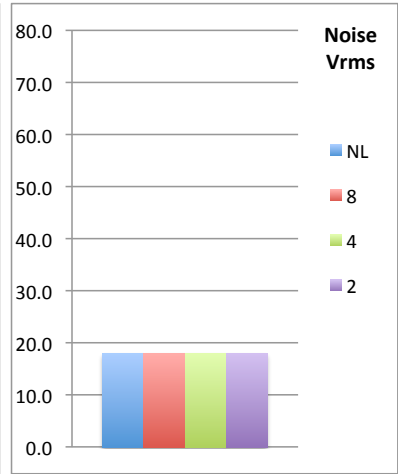
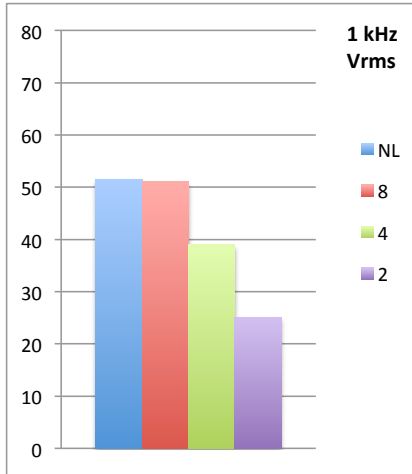
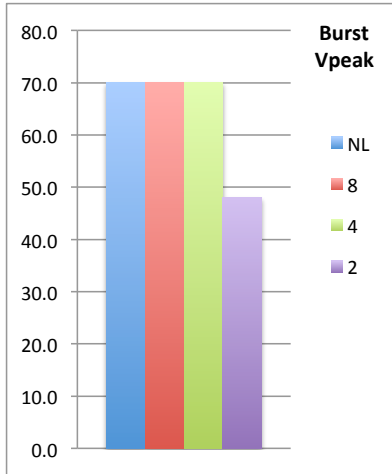
**Rated Design Power:**    **300** W@8 ohms  
                                      **600** W@4 ohms  
                                      **500** W@2 ohms

Instrumentation:  
Audio Precision APX515 Analyzer  
Picoscope 3425 Differential Oscilloscope  
Resistive Dummy Load



Ref	Specification:	
1	Input Sensitivity	12.3/21.8/24 Vrms/dBV/dBu
2	Voltage Gain	12.3 dB
3	Maximum Output Voltage (1 kHz)	51/72 Vrms/Vpeak
4	Maximum Input Voltage/Level	12.3/21.8/24 Vrms/dBV/dBu
5	Noise Floor (1 kHz Drive)	-52/-53 dBV-Z/dBV-A
6	Dynamic Range (AES-17)(@ Ref. Sens.)	73/100 dBZ/dBA
7	Frequency Response Deviation (20 Hz - 20 kHz)	+/- 0.8 dB
8	Latency	1 ms

	Load Impedance (ohms)	No Load	8	4	2
9	Measured Burst Voltage (1%THD+Noise) Vrms/dBV	70.0	70	70	48.0
		36.9	36.9	36.9	33.6
10	Measured Sine Wave Voltage (10 sec 1 kHz)	51.5	51.0	39.0	25.0
		34.2	34.2	31.8	28.0
11	Measured Noise Voltage (IEC 268-1) Vrms/dBV	18.0	18.0	18.0	18.0
		25.1	25.1	25.1	25.1
12	Calculated Burst Power (1% THD+Noise) watts/dBW		613	1225	1152
			27.9	30.9	30.6
13	Calculated Sine Wave Power (10 sec 1 kHz)		325	380	313
			25.1	25.8	24.9
14	Calculated Noise Power (IEC 268-1)		41	81	162
			16.1	19.1	22.1
15	THD+N Ratio (%)(Ref. Sens)(20-20 kHz)(Mean)	1.02	1.03	1.15	7.80
	Standard Deviation(+/- %)	0.76	0.37	0.41	4.83



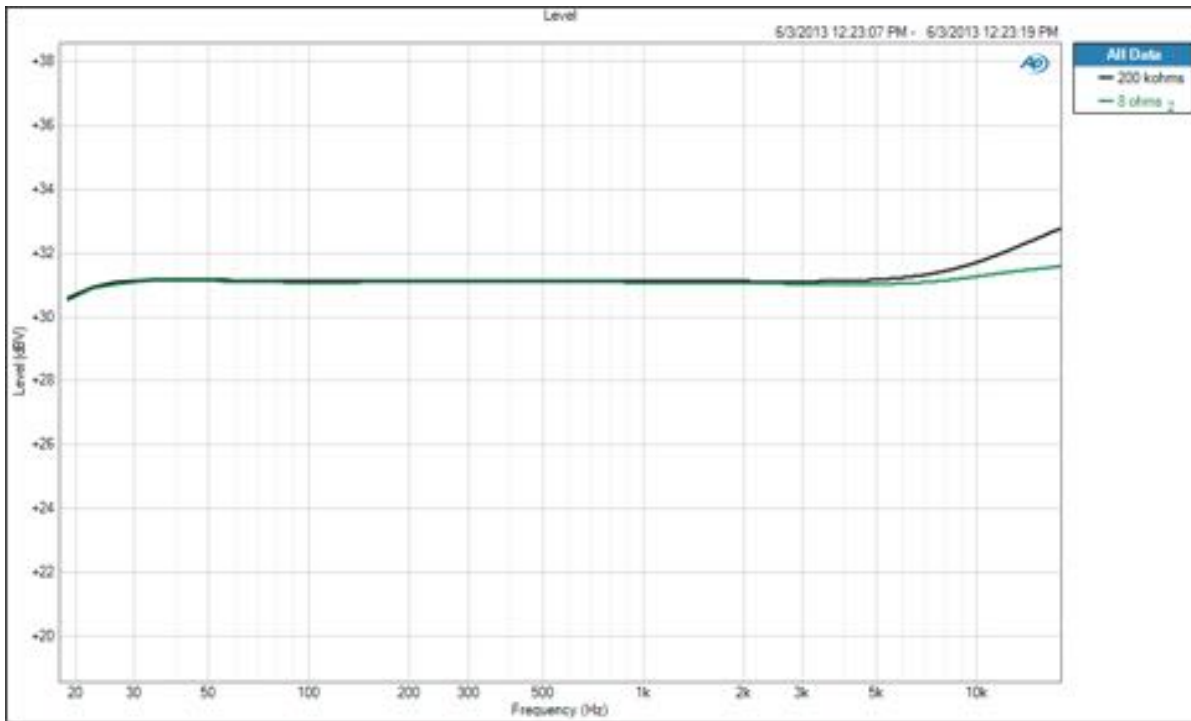
## Plots

- 16 Output Level vs. Freq (@ -3 dB re. Sens.)
- 17 Output Level vs. Freq (2 Hz - 80 kHz)(@ -3 dB re. Sens.)
- 18 THD Ratio vs. Freq (@-3 dB re. Sens.)
- 19 IMD Difference Frequency Dist. (@-3 dB re. Sens.)
- 20 Phase Response
- 21 Group Delay vs. Freq
- 22 Crosstalk (1-ch driven)
- 23 Noise Floor Spectrum
- 24 Pin 1 Response (60 Hz Square Wave @ 10 Vrms) as per AES-48
- 25 Broadband Output Spectrum (No Signal)
- 26 1 kHz Square-Wave Response
- 27 Output Voltage (Power) - 0.5 Hz Pulse
- 28 Output Voltage (Power) - 1 kHz 10 sec @ Max Linear Drive Level
- 29 Output Voltage (Power) - IEC Noise @ Clip
- 30 Short-Circuit Behavior (IEC Noise into 0.5 ohm)

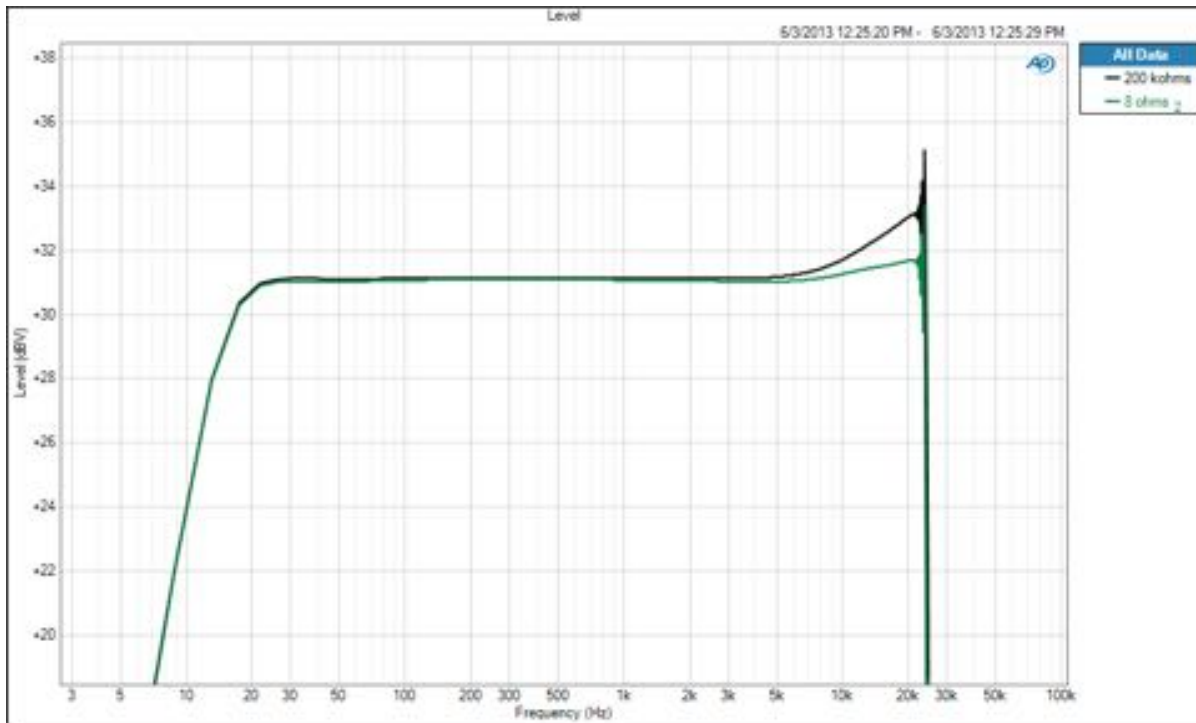
FD: Frequency Domain

TD: Time Domain

**16** Output Level vs. Freq (@ -3 dB re. Sens.)

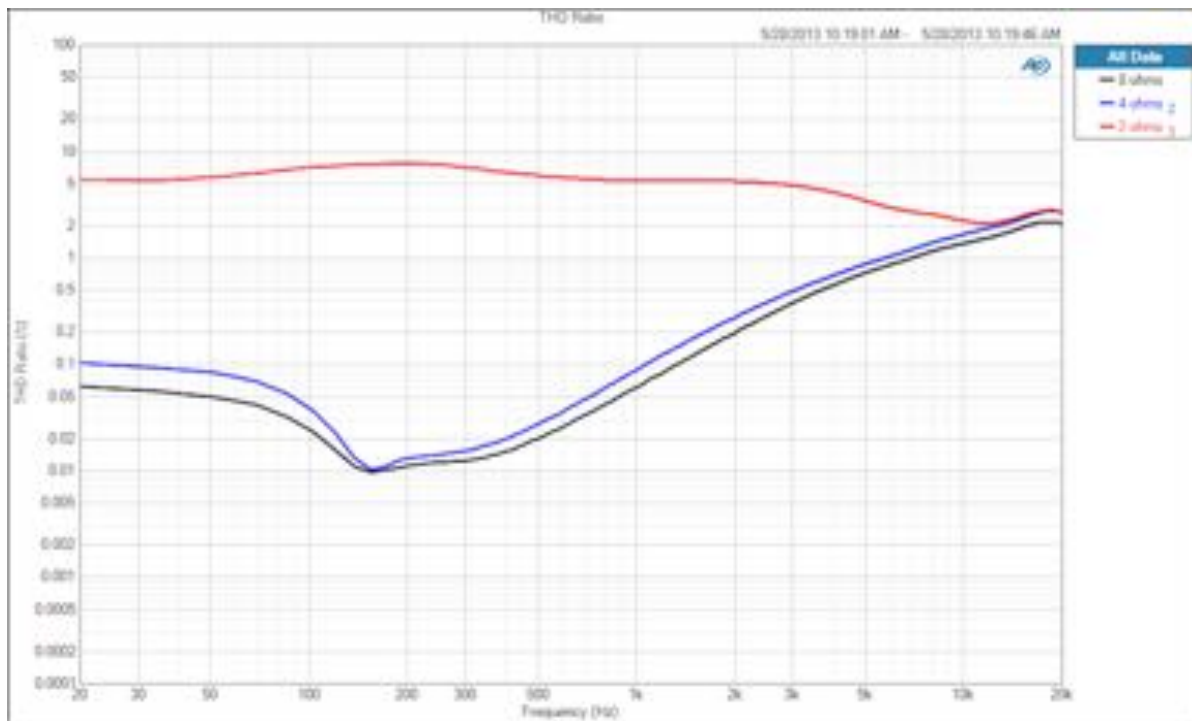


**17** Output Level vs. Freq (2 Hz - 80 kHz)(@ -3 dB re. Sens.)

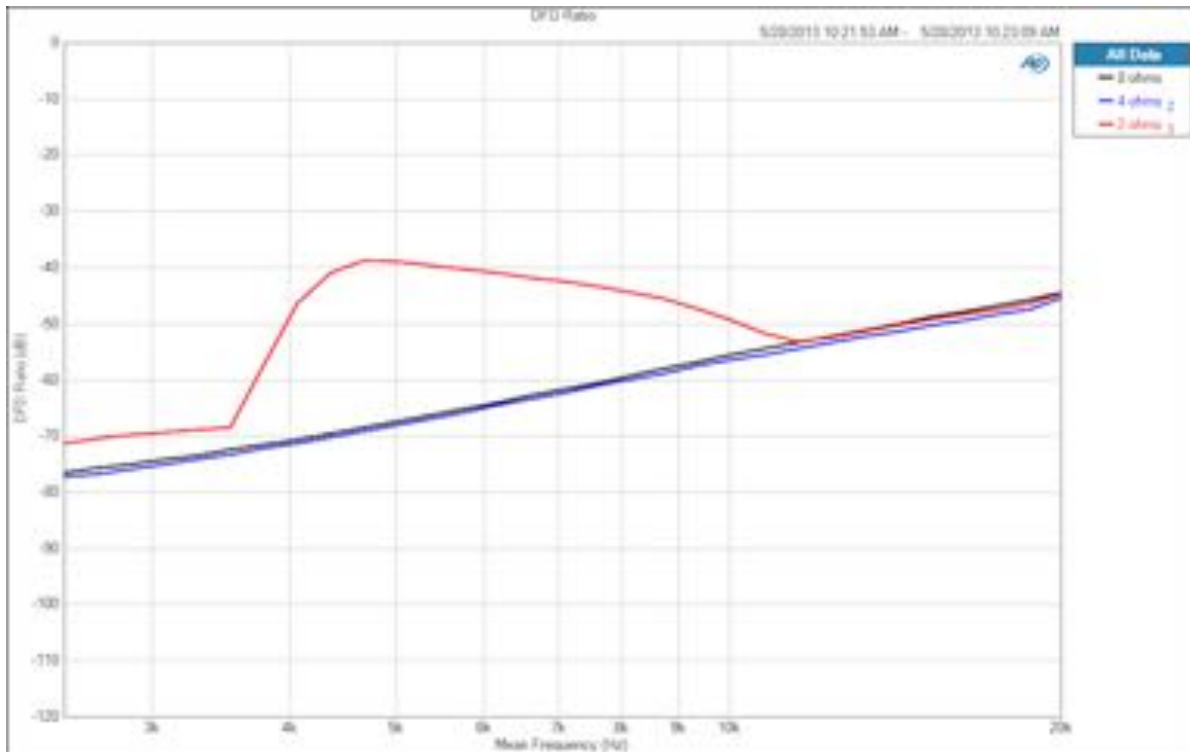


Log Sweep (2 Hz - 80 kHz) - This test measures the bandwidth of the DUT with strong out-of-band frequency content as part of the input signal.

**18** THD Ratio vs. Freq (@-3 dB re. Sens.)

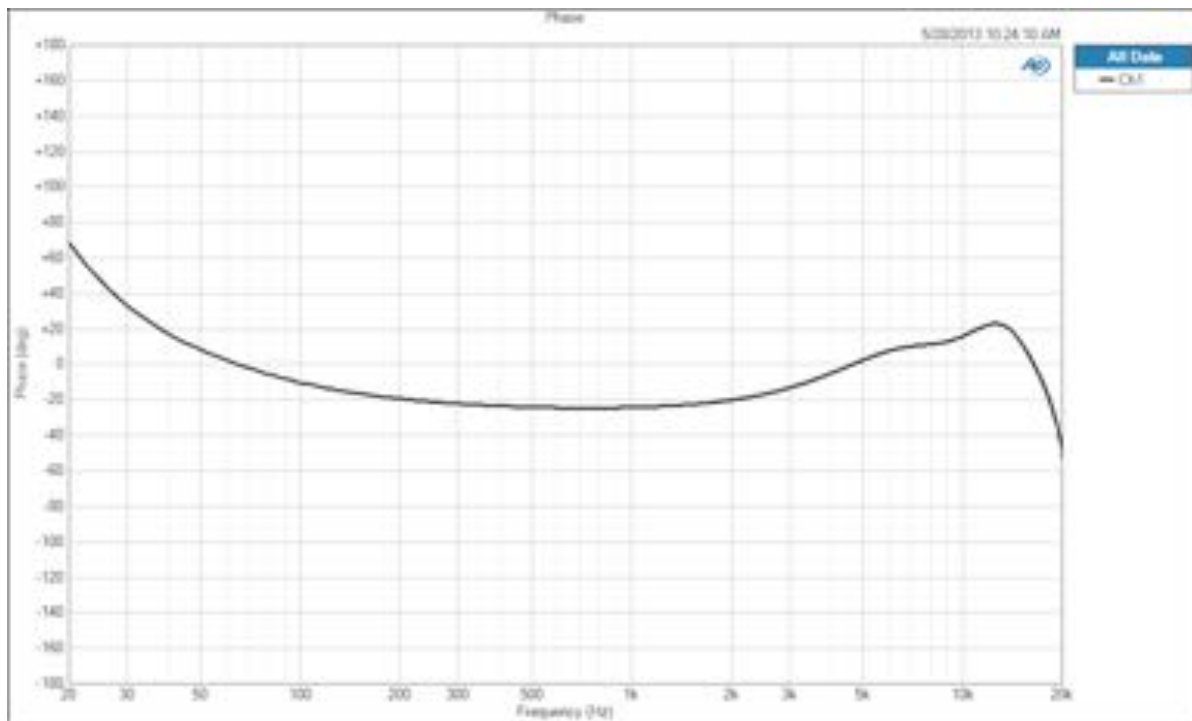


**19**      **IMD Difference Frequency Dist. (@-3 dB re. Sens.)**

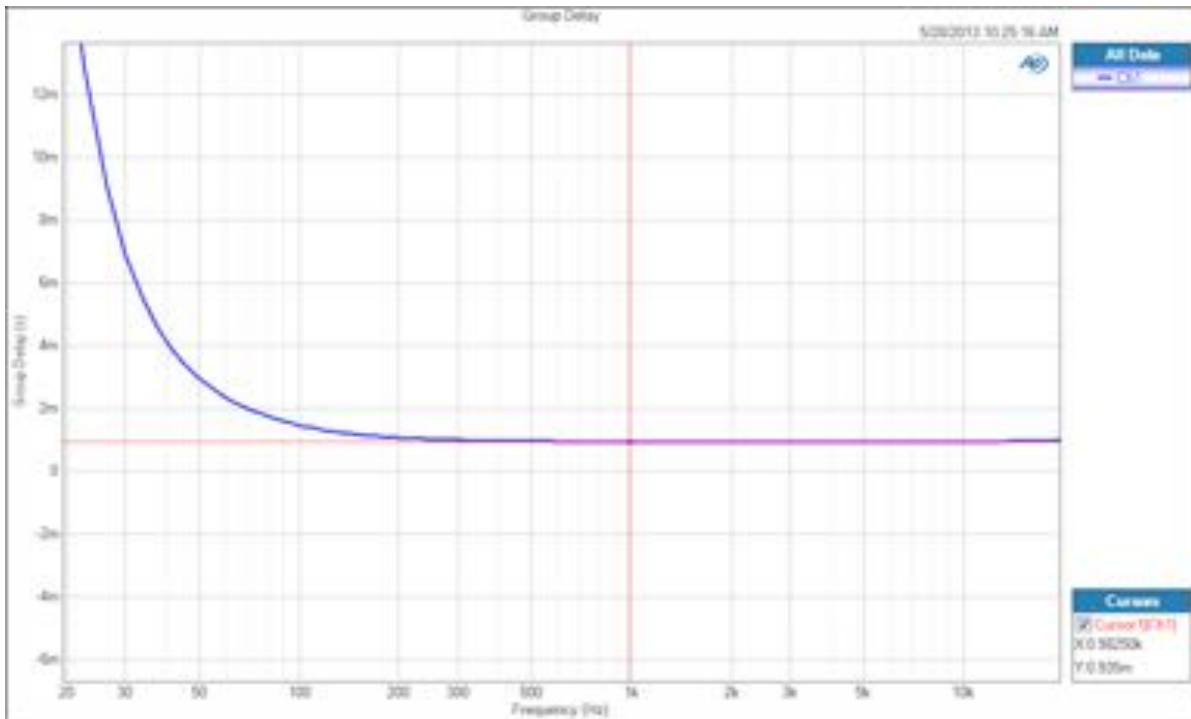




15 Phase Response

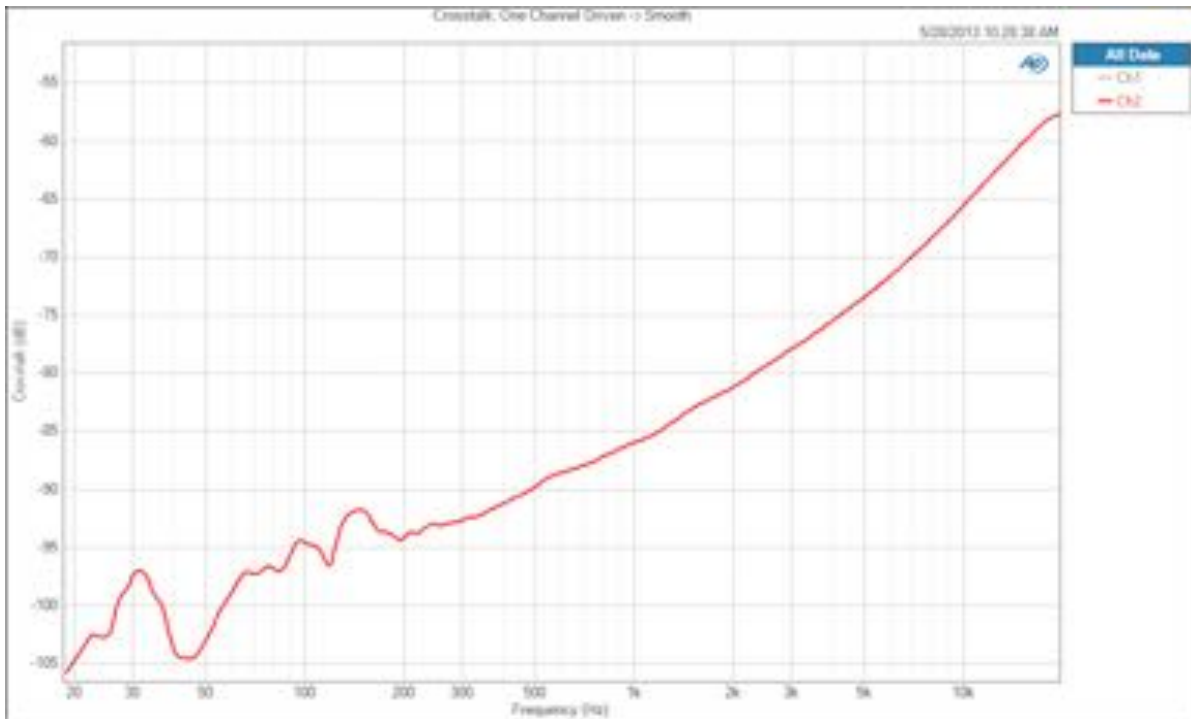


**16** Group Delay vs. Freq



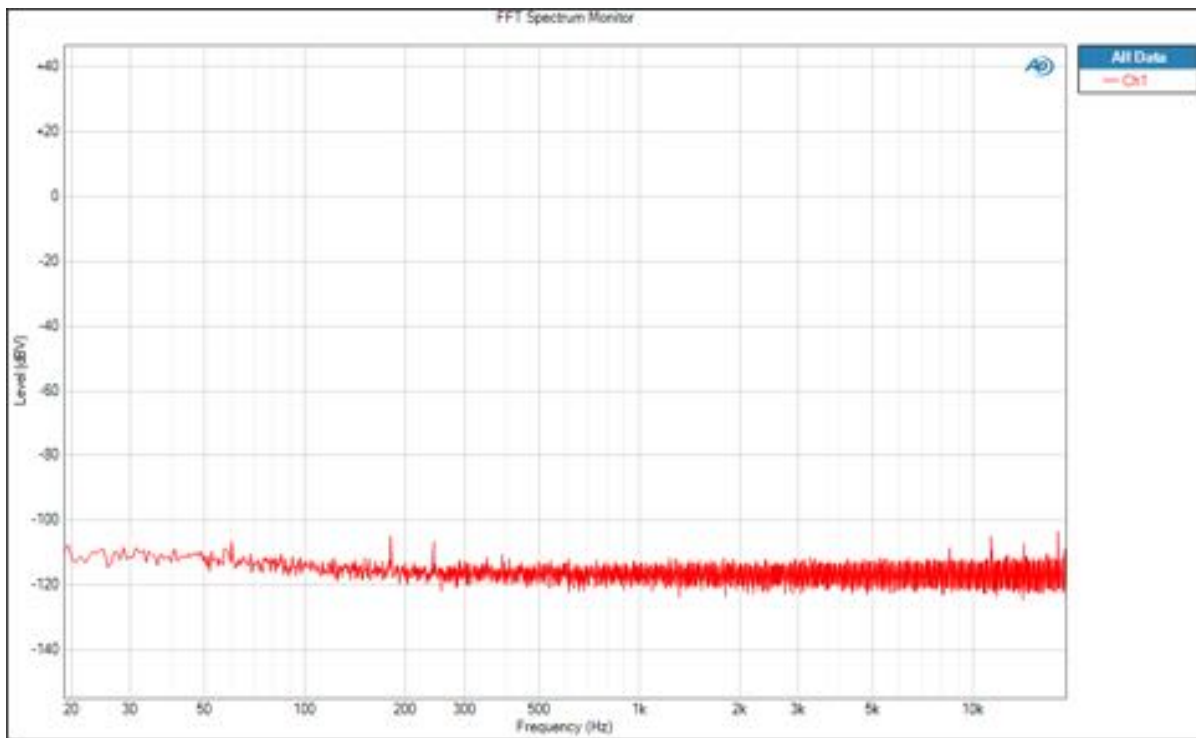
Shows broadband latency + frequency-dependent delay due to high pass response

## 22 Crosstalk (1-ch driven)



Measures output of Ch2 with broadband sweep applied to Ch1

## 23 Noise Floor Spectrum



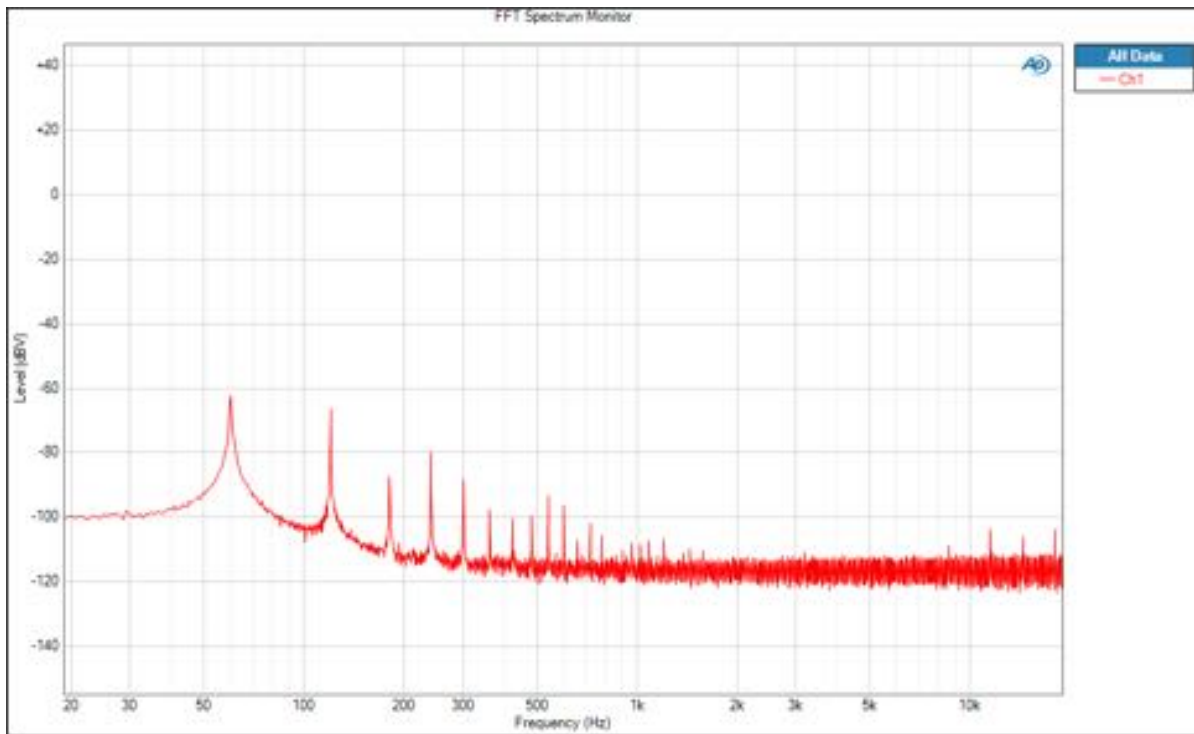
Measures no-signal output of DUT with input terminated

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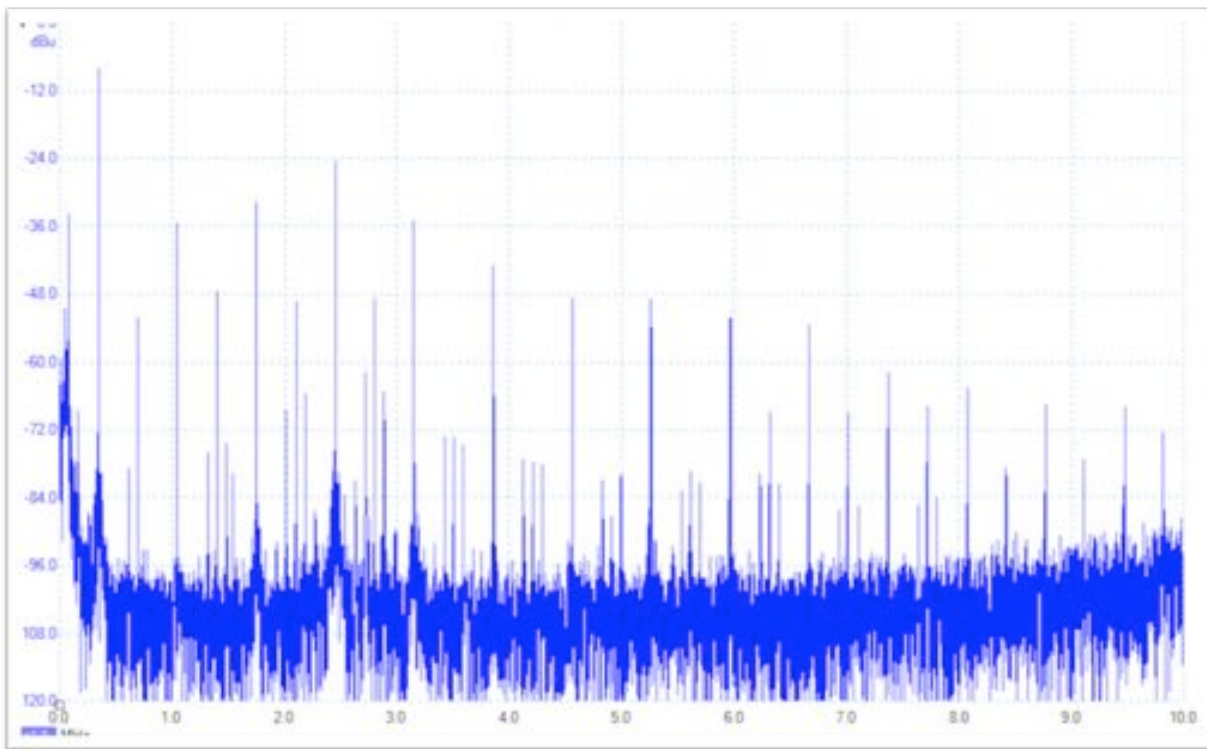
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**24** Pin 1 Response (60 Hz Square Wave @ 10 Vrms) as per AES-48



**25**      **Broadband Output Spectrum (No Signal)**

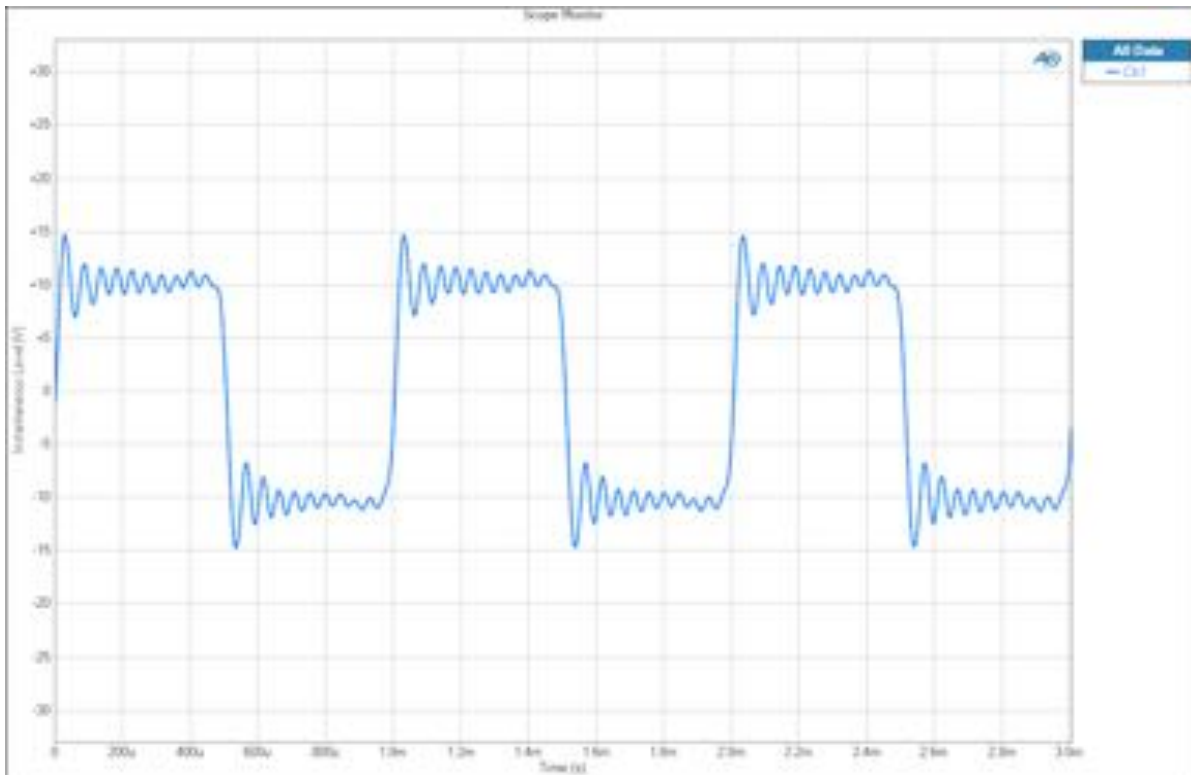


Measures RF output of DUT with no input signal present

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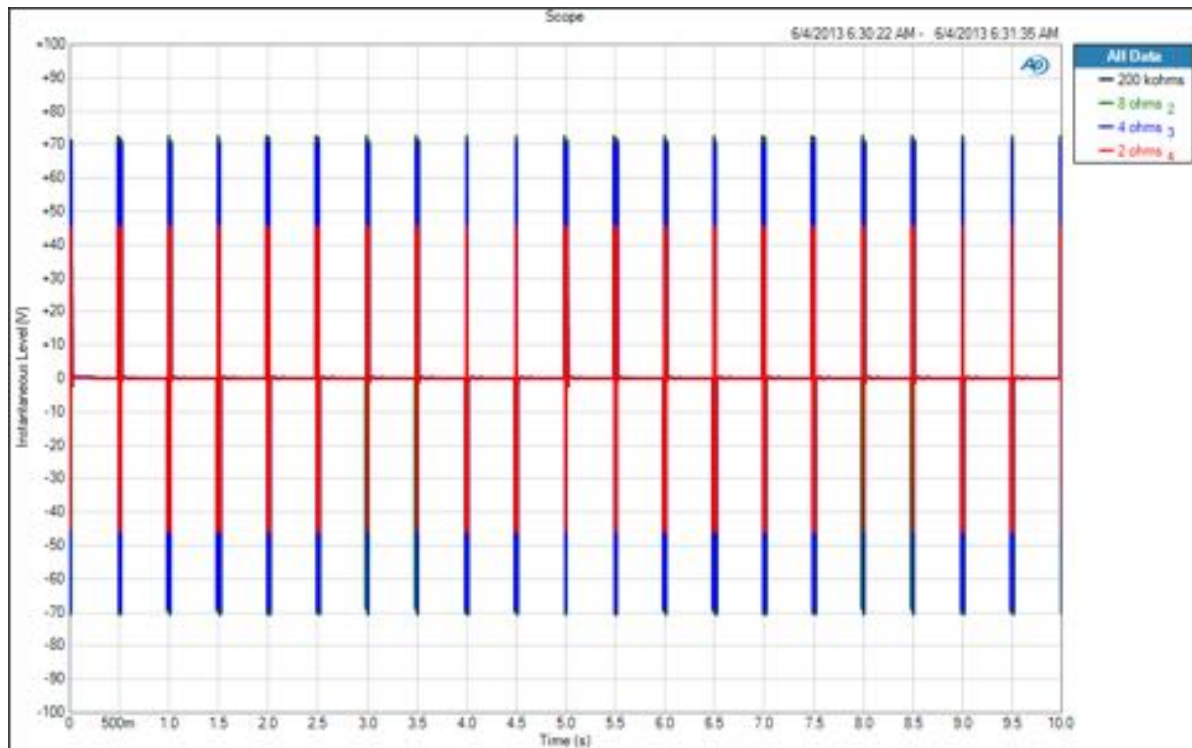
Common Amplifier Format - CAF

## 26 1 kHz Square-Wave Response



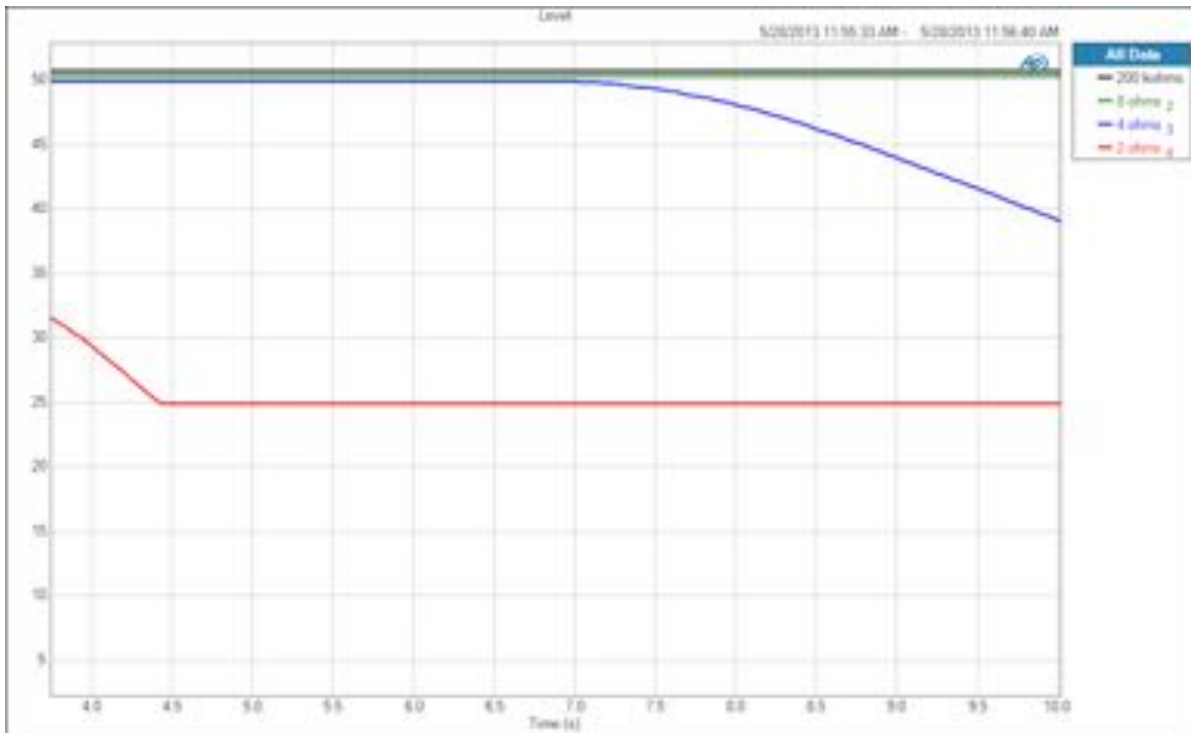
Measures slew rate and waveshape preservation of DUT

**27** Output Voltage (Power) - 0.5 Hz Pulse

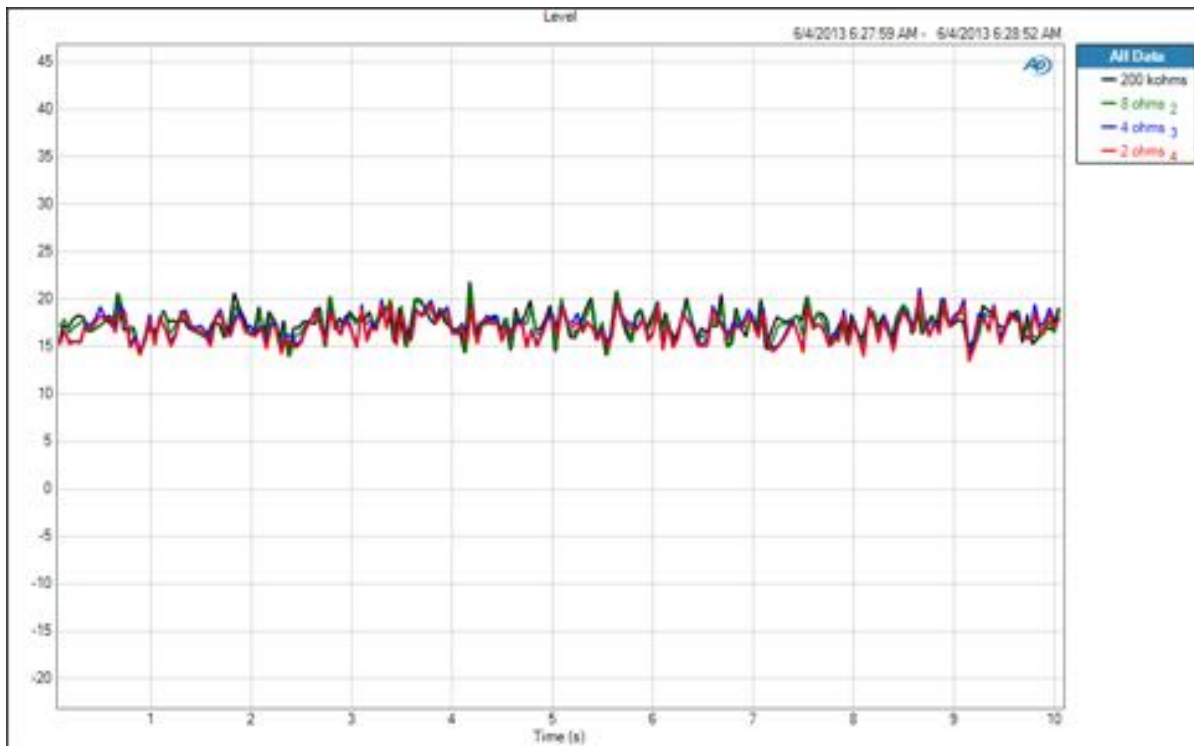




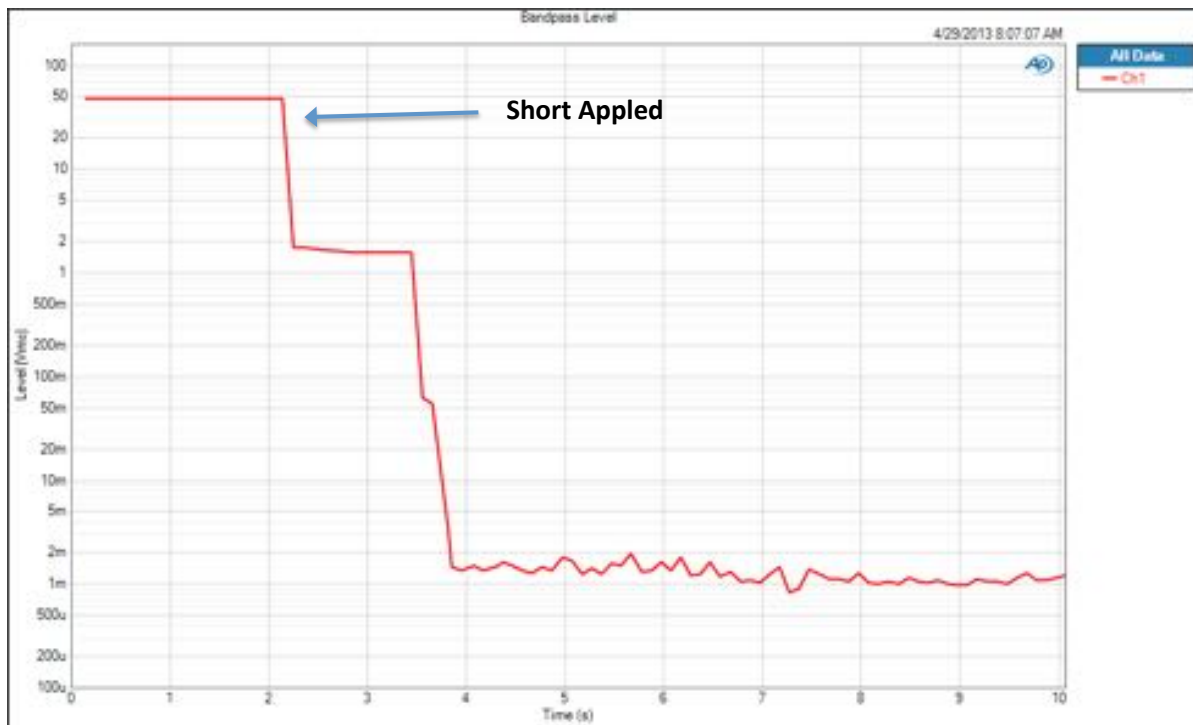
**28** Output Voltage (Power) - 1 kHz 10 sec @ Max Linear Drive Level



**29**      **Output Voltage (Power) - IEC Noise @ Clip**



**30** Short-Circuit Behavior (IEC Noise into 0.5 ohm)



Amplifier Recovered from short after clearing **Fault** indicator