



Common Amplifier Format

Rane RAD24*

*Note: This amplifier module requires a Rane HAL host DSP. Some specs include the HAL response.

As Measured
As Given

General	
Serial #:	844017
# Channels:	1
Topology:	Class D Switch-mode
Sample Rate:	48 kHz
Mfg Website:	www.rane.com
Physical	
Height:	2 Gang
Depth:	0.5/3.3 in./cm.
AC Mains:	100-240 VRMS
Power Draw:	55 W Max
Weight:	.182/6.4 kg/oz
UL Wire Class:	CAT5e
Tested by	
Company:	www.etcinc.us
Tech:	Pat Brown
Date:	JUL 2014
Instrumentation	
Audio Precision APx515 Voltmeter	
Hioki 3334 Power Analyzer	
NTI XL2 SLM	
NTI MA220 Preamp	
ACO 7052 Microphone	

Ref	Plot	Specification		
1.1	A	Input Sensitivity (1 kHz, 8 ohms, user-selectable)	NA Vrms	NA dBu
1.2	A	Voltage Gain (Sensitivity-dependent)	NA dB	
1.3	A	Maximum Output Voltage	2.5 Vrms	4 Vpeak
1.4		Maximum Input Voltage (@ min sens)	NA Vrms	NA dBu
1.5	K	Noise Floor (20 Hz - 20 kHz)	-42 dBu	
1.6		Dynamic Range (1 kHz A-wtd)	83 dB	
1.7	C	Frequency Response Deviation (20 Hz - 20 kHz 8 ohms)	+/-0.5 dB	
1.8	G	Latency (1 kHz)	2.3 ms	
1.9	I	CMRR @ 1 kHz (see Plot H)	NA dB	
1.10		Input Impedance (1 kHz)	NA kohms	
1.11		Damping Factor	47	
1.12	L	Fan Noise - Maximum (Front)	NA dBA-Slow ref. 1 m	

Plots		I/O Matrix
A	Input vs. Output Level	Mono (1ch)
B	Frequency Response (20 Hz - 20 kHz)	
C	Frequency Response (2 Hz - 80 kHz)	
D	THD Ratio vs. Frequency	
E	IMD Difference Frequency Distortion	
F	Excess Phase Response	
G	Group Delay vs. Frequency	
H	Crosstalk	
I	Common-Mode Rejection Ratio (CMRR)	Links to Data
J	Noise Floor Spectrum	
K	Pin 1 Response	
M	Short-Circuit Behavior	

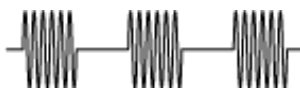
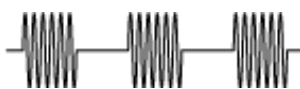
I/O Matrix

Mode: Mono

Channels: 1

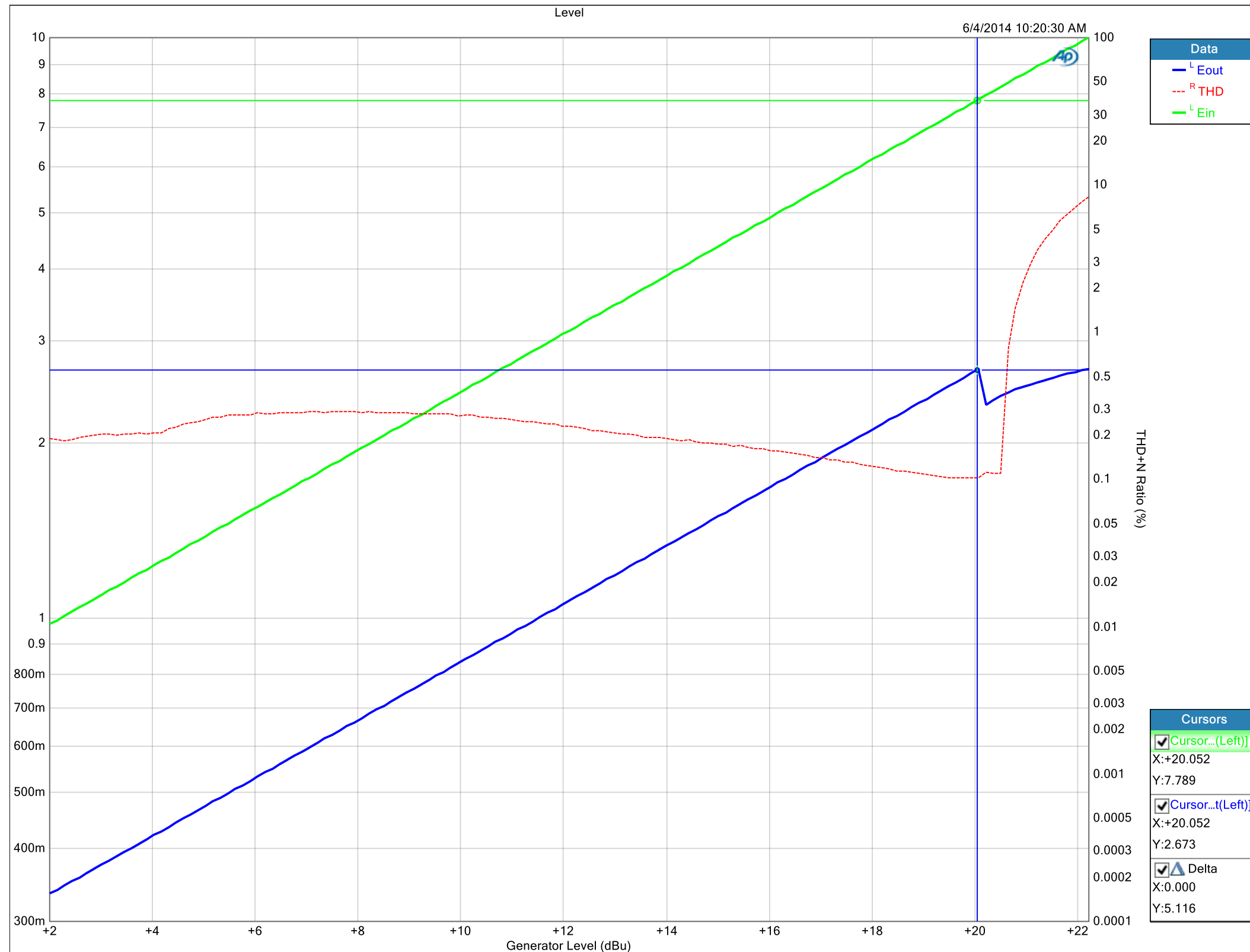
Line Vrms: 120

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Ref			A	B	C	D	E	F	G	H	I	J	K	L	M
Audio (per channel)										Supply (total)			Thermal Output		
	Stimulus	Stimulus	Crest Factor	Load R	dBu In	Vrms Out	Loading Eff. (dB)	Rated Watts	Meas. Watts	Meas. dBW	Amps	Watts	Power Factor	BTU/hr	kCal/hr
2.1	Burst	CEA2006 1 kHz	17	8	20.6	2.5	0	1	1	-1.1					
	1% THD			4											
				2											
2.2	Burst	CEA2006 50 Hz	17	8	21.0	2	0		1	-1.8					
	1% THD			4											
				2											
2.3	Tone	1 kHz 15 sec	3	8	21.0	2.5	0		1	-1.1	0.37	29	0.66	97	25
				4											
				2											
2.4	Tone	50 Hz 15 sec	3	8	21.0	2.4	0		1	-1.4	0.37	29	0.66	98	25
				4											
				2											
2.5	Noise	Pink 60 sec	9	8	16	1.3	0		0.21	-6.8	0.35	28	0.66	94	24
	1/4 Power			4											
				2											
2.6	Noise	Pink 60 sec	12	8	13	1.0	0		0.13	-9.0	0.4	28	0.66	94	24
	1/8 Power			4											
				2											
2.7	Inrush Current														
2.8	Idle ("On" but no signal)										0.26	20	0.65	69	17
2.9	Standby											0			
Ref			A	B	C	D	E	F	G	H	I	J	K	L	M

A Input vs. Output Voltage

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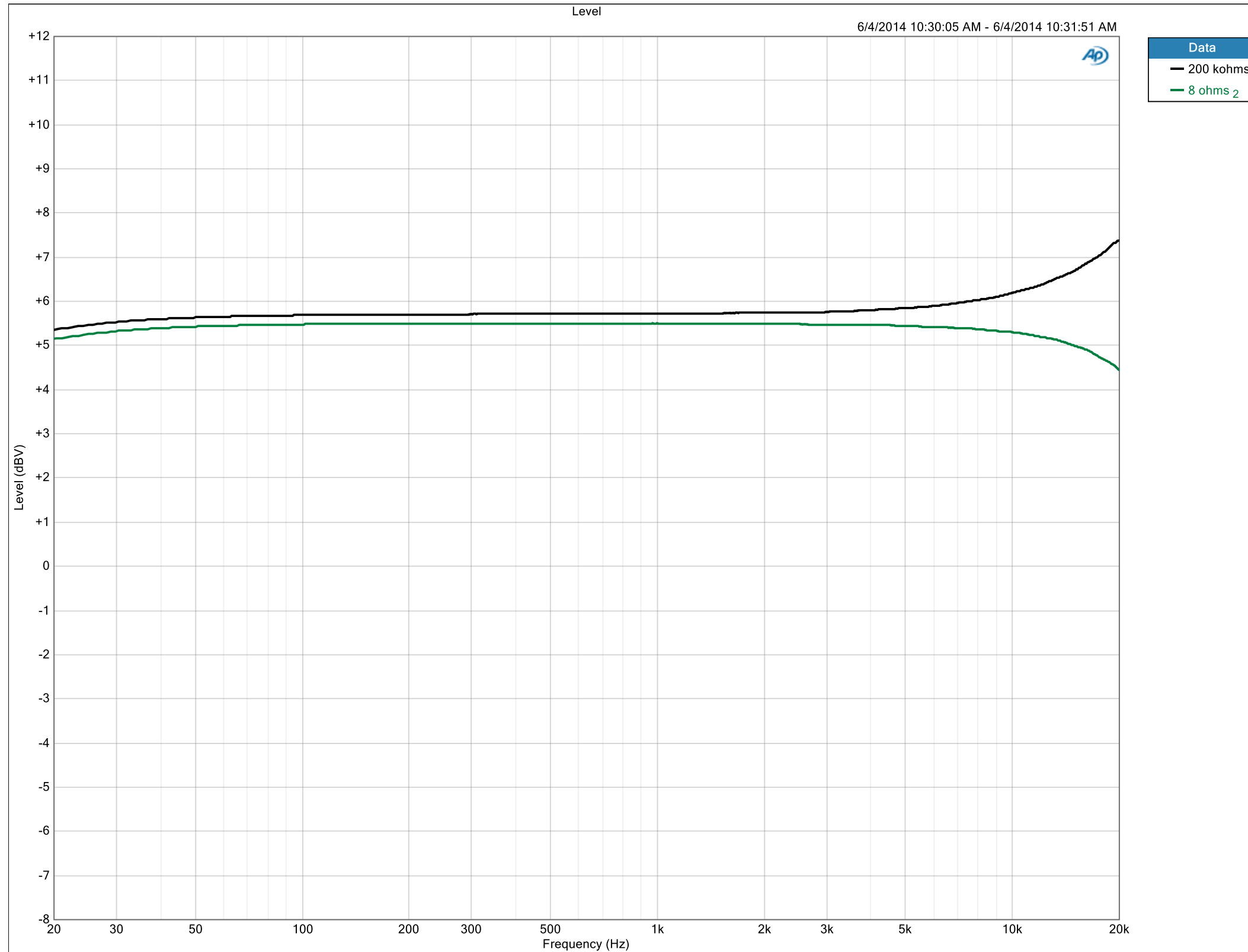


Note: The cursors are set for the determination of input sensitivity, maximum linear output voltage, and voltage gain.

See CAF Reference for measurement setup.

B Frequency Response Magnitude (20 Hz - 20 kHz at -3 dB re. rated sensitivity)

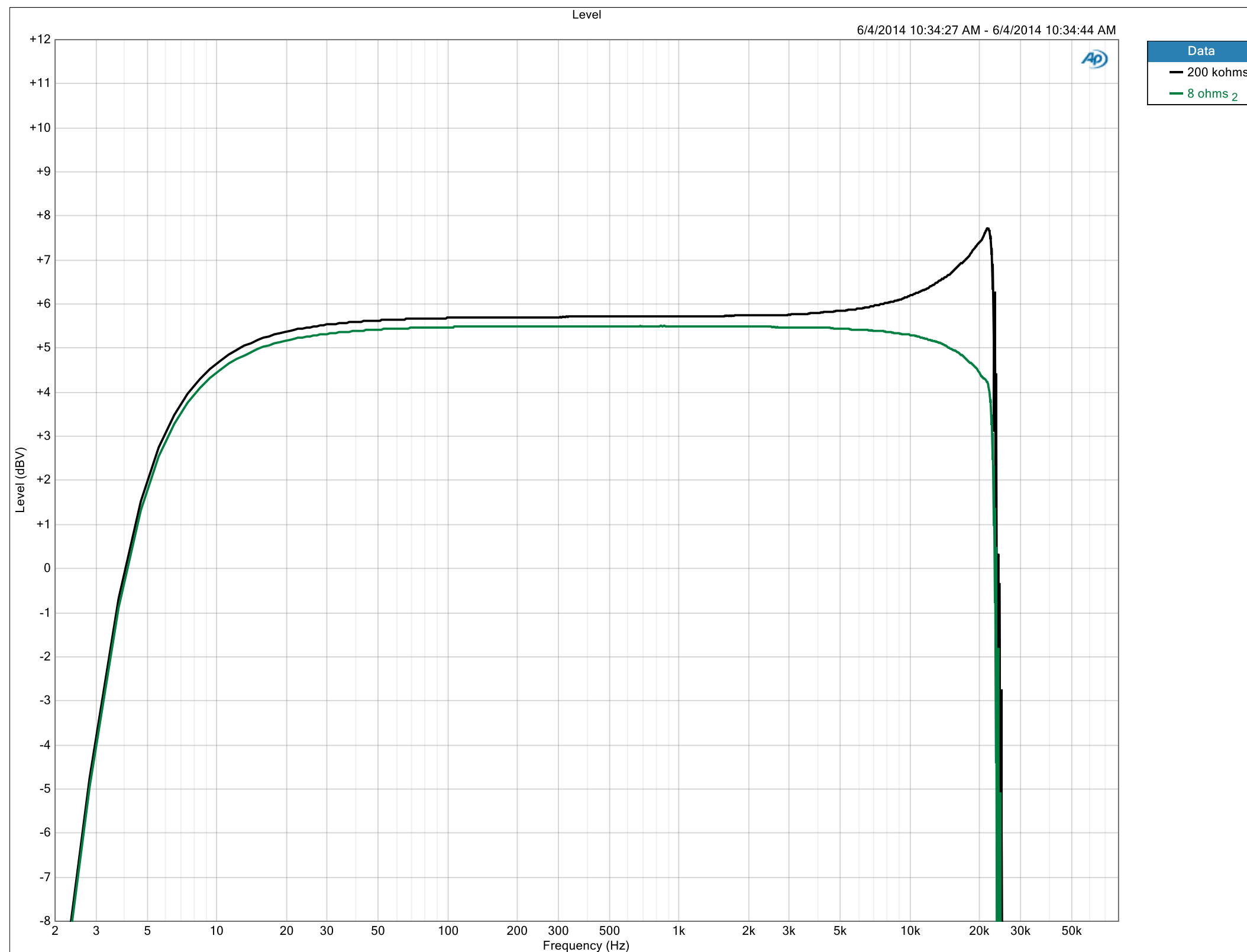
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See CAF Reference for measurement setup.

C Frequency Response Magnitude (2 Hz - 80 kHz at -3 dB re. rated sensitivity)

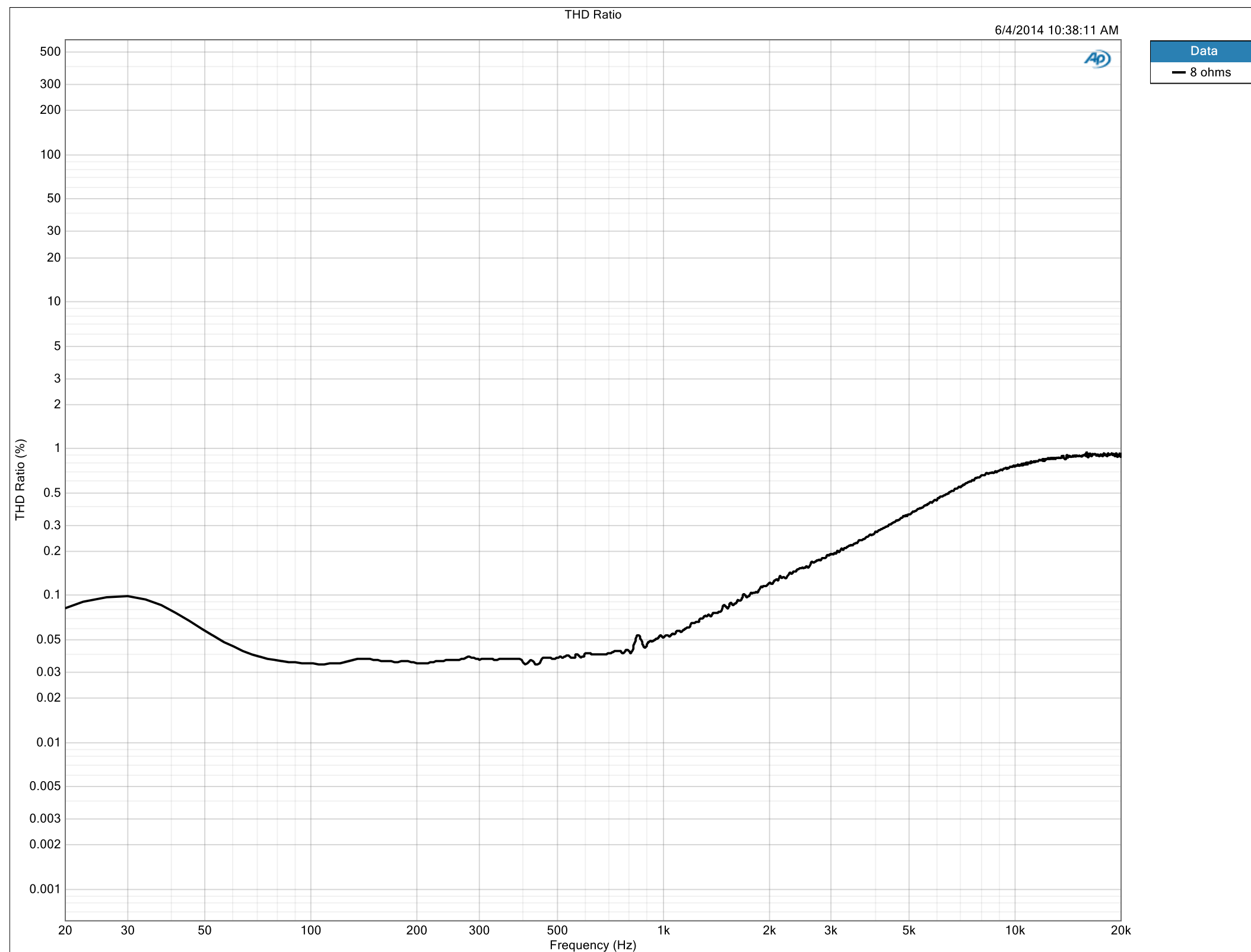
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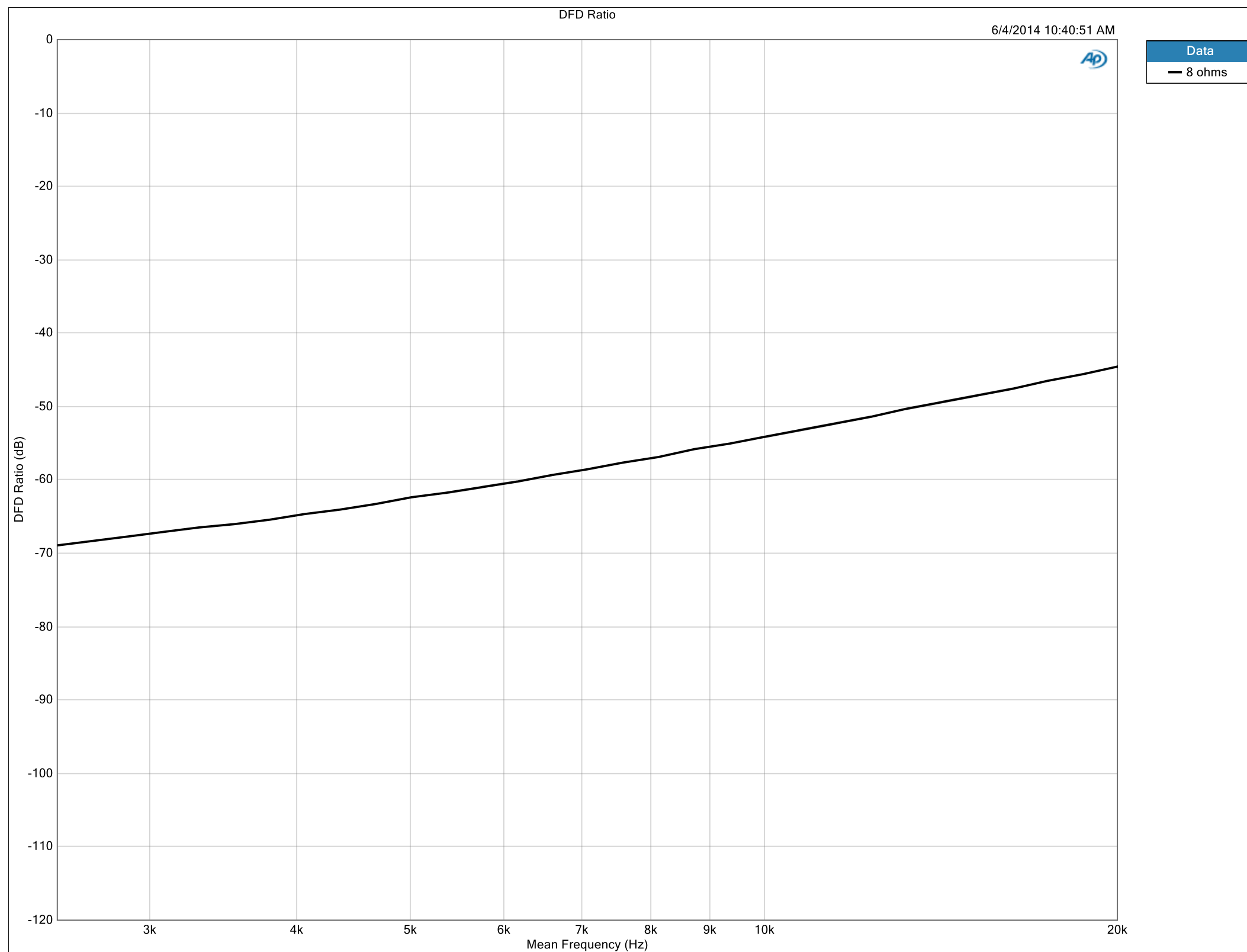
See CAF Reference for measurement setup.

D THD Ratio vs. Frequency (20 Hz - 20 kHz at -3 dB re. rated sensitivity)

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See CAF Reference for measurement setup.

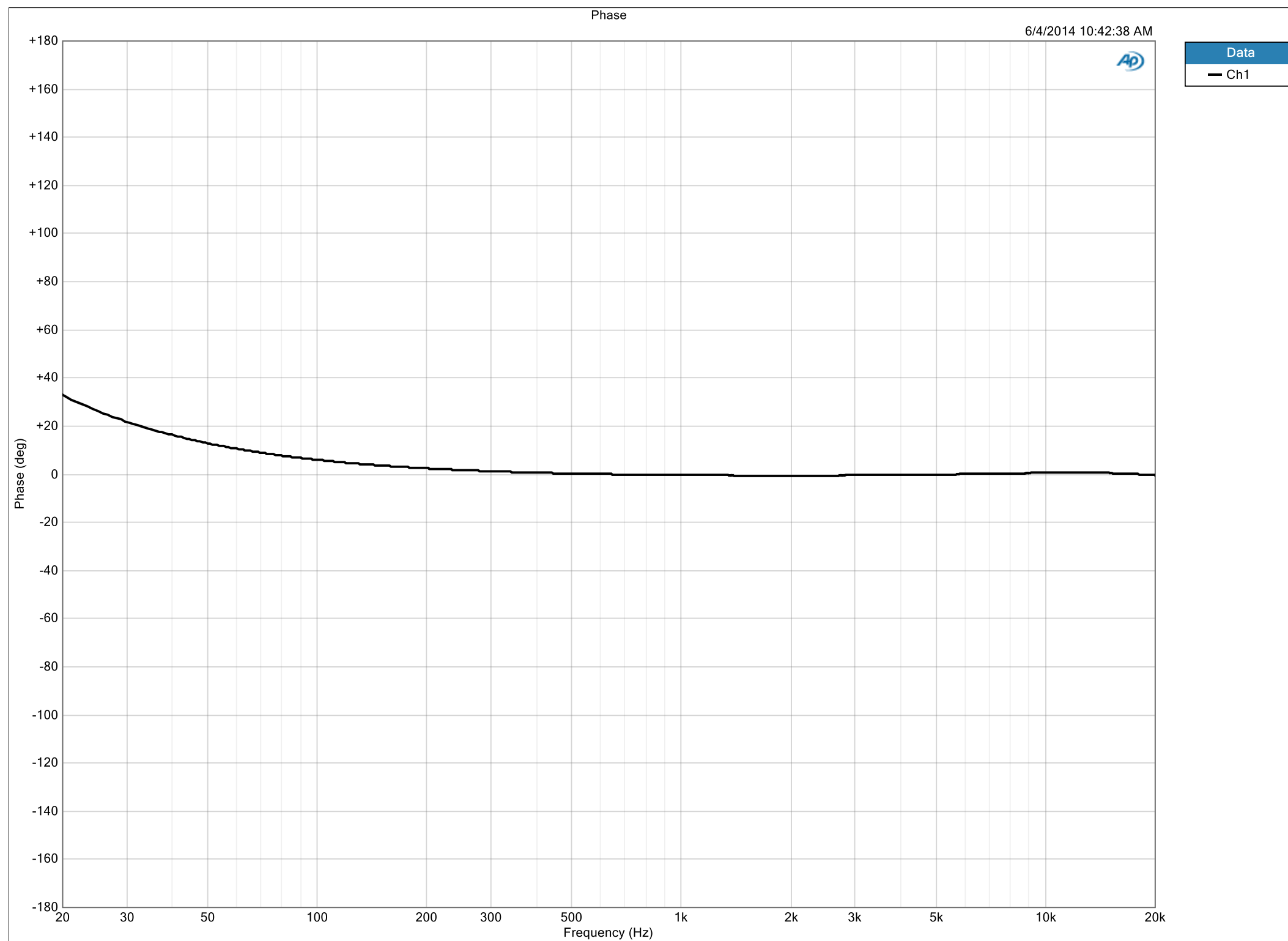


See CAF Reference for measurement setup.

F

Excess Phase (20 Hz - 20 kHz at -3 dB re. rated sensitivity)

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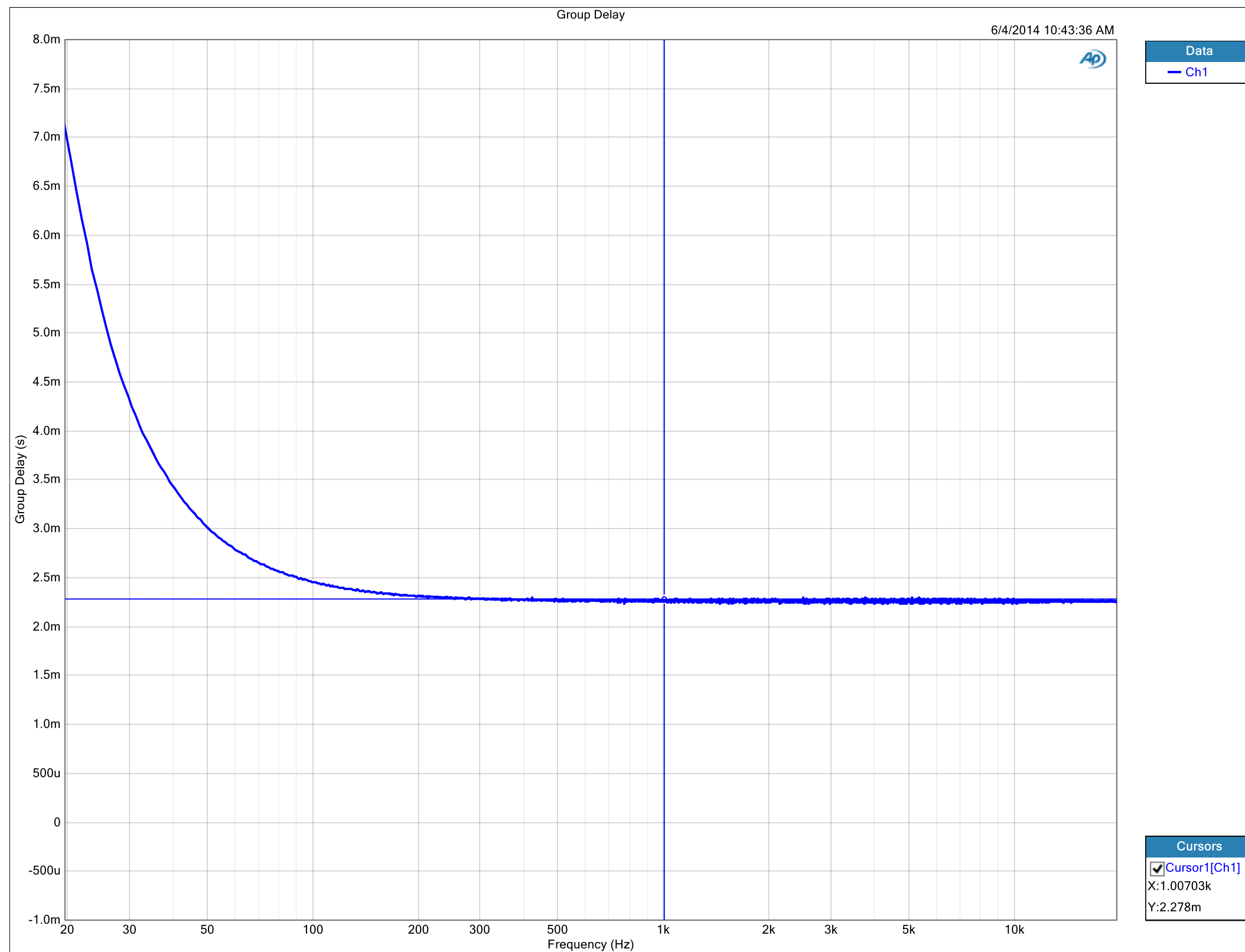


See CAF Reference for measurement setup.

G

Group Delay (20 Hz - 20 kHz at -3 dB re. rated sensitivity)

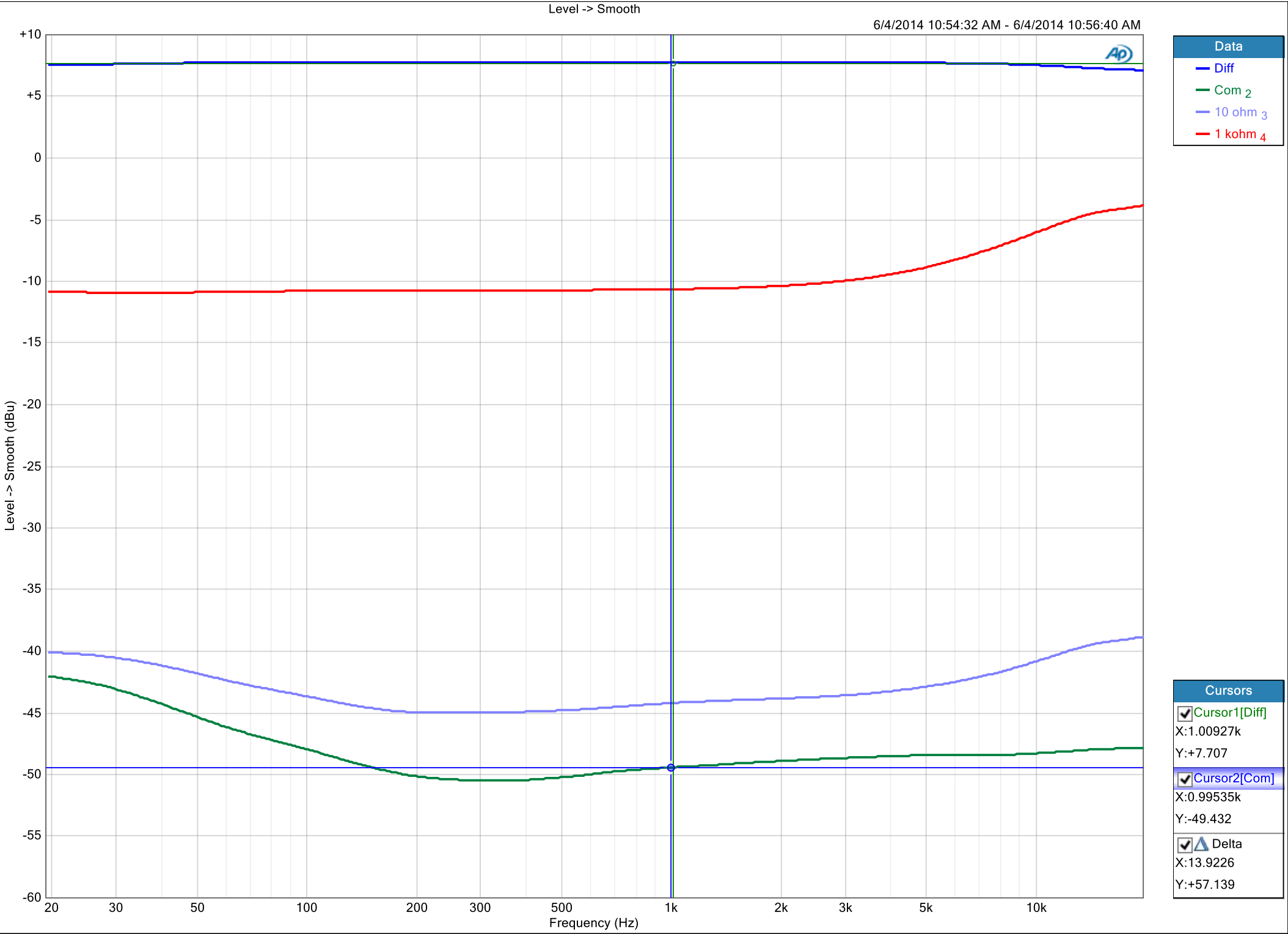
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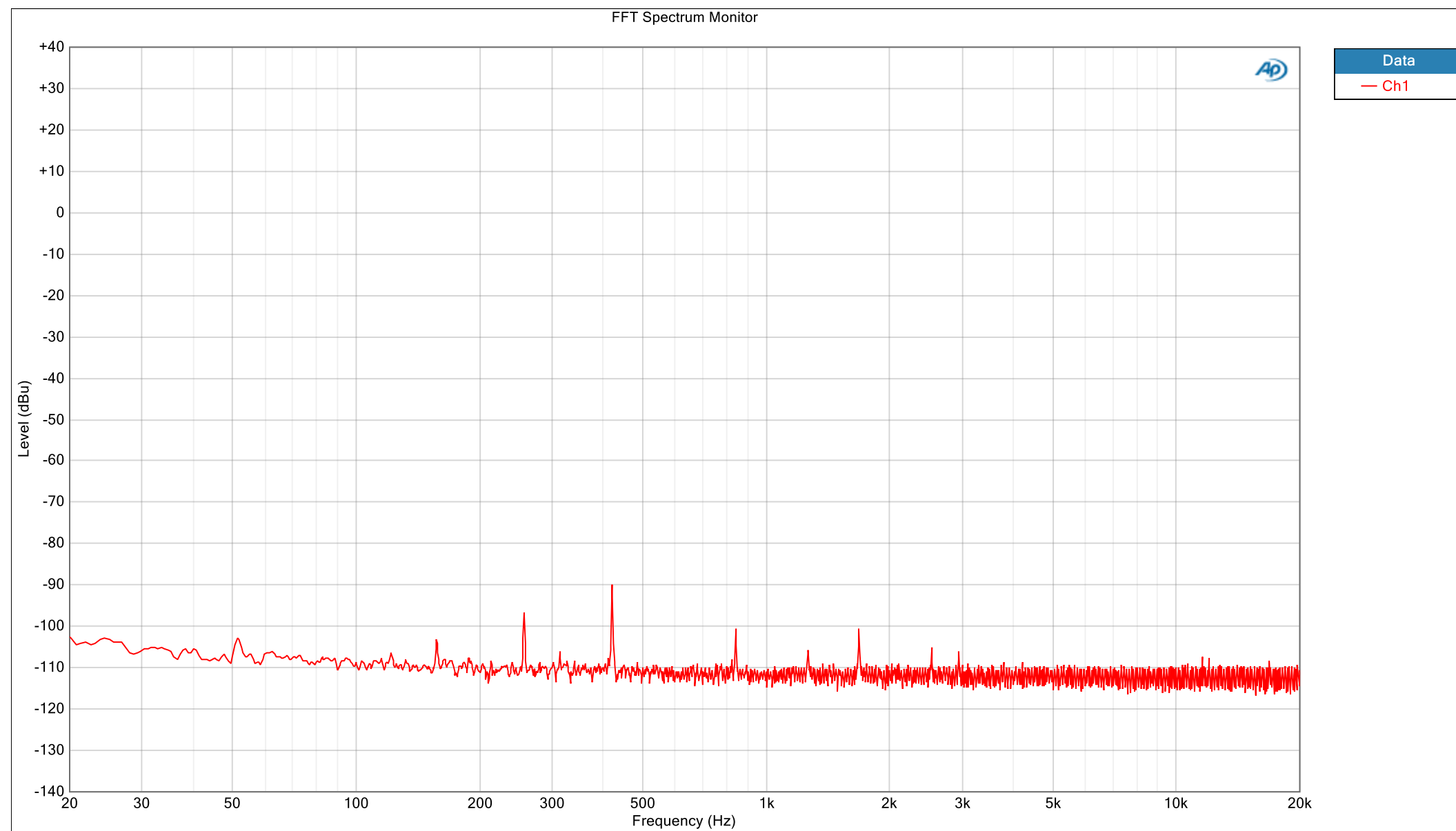
See CAF Reference for measurement setup.

NA

See CAF Reference for measurement setup.

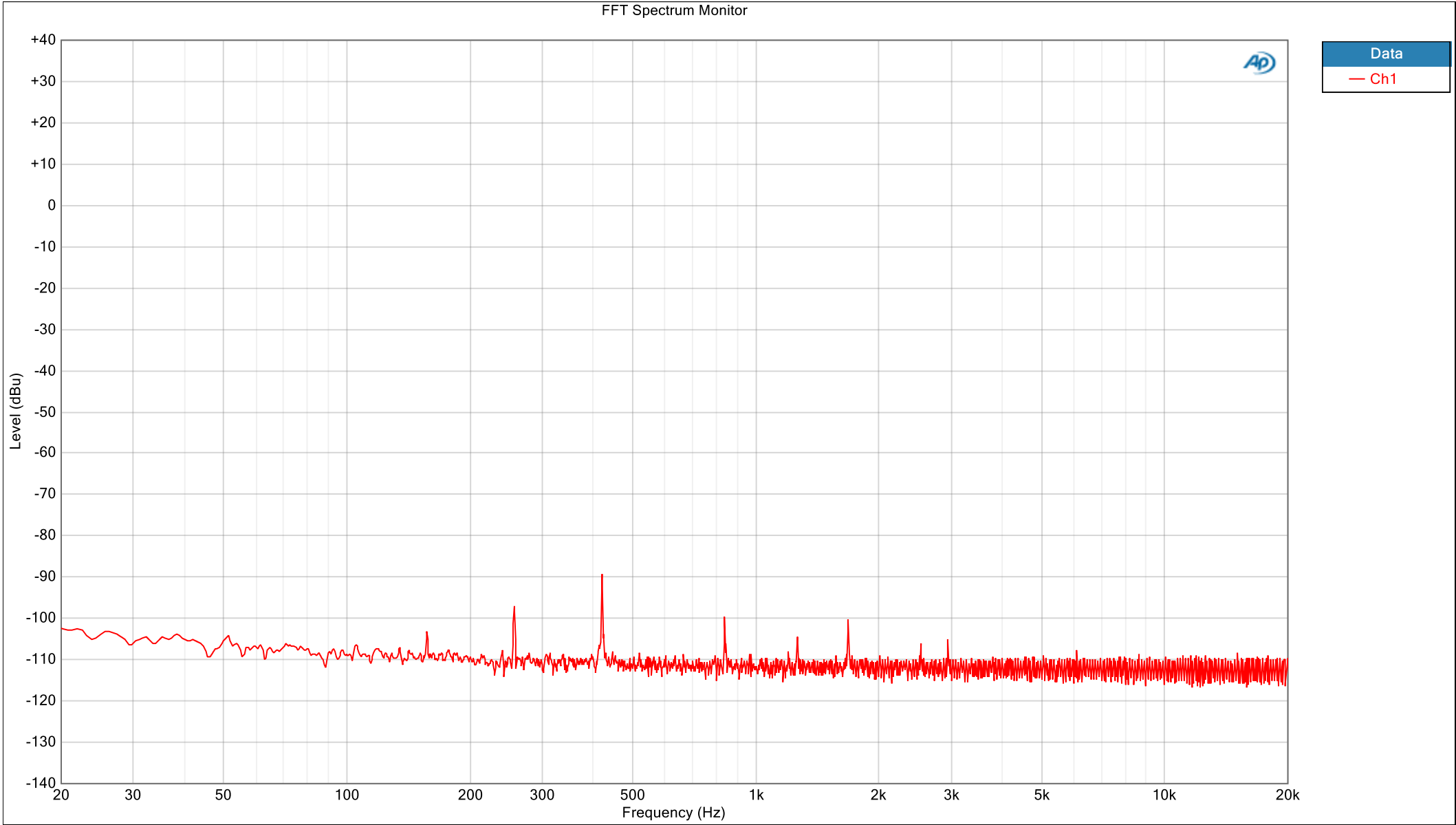


See CAF Reference for measurement setup.



FFT Size: 300k
#Averages: 20
Window: AP-Equiripple

See CAF Reference for measurement setup.

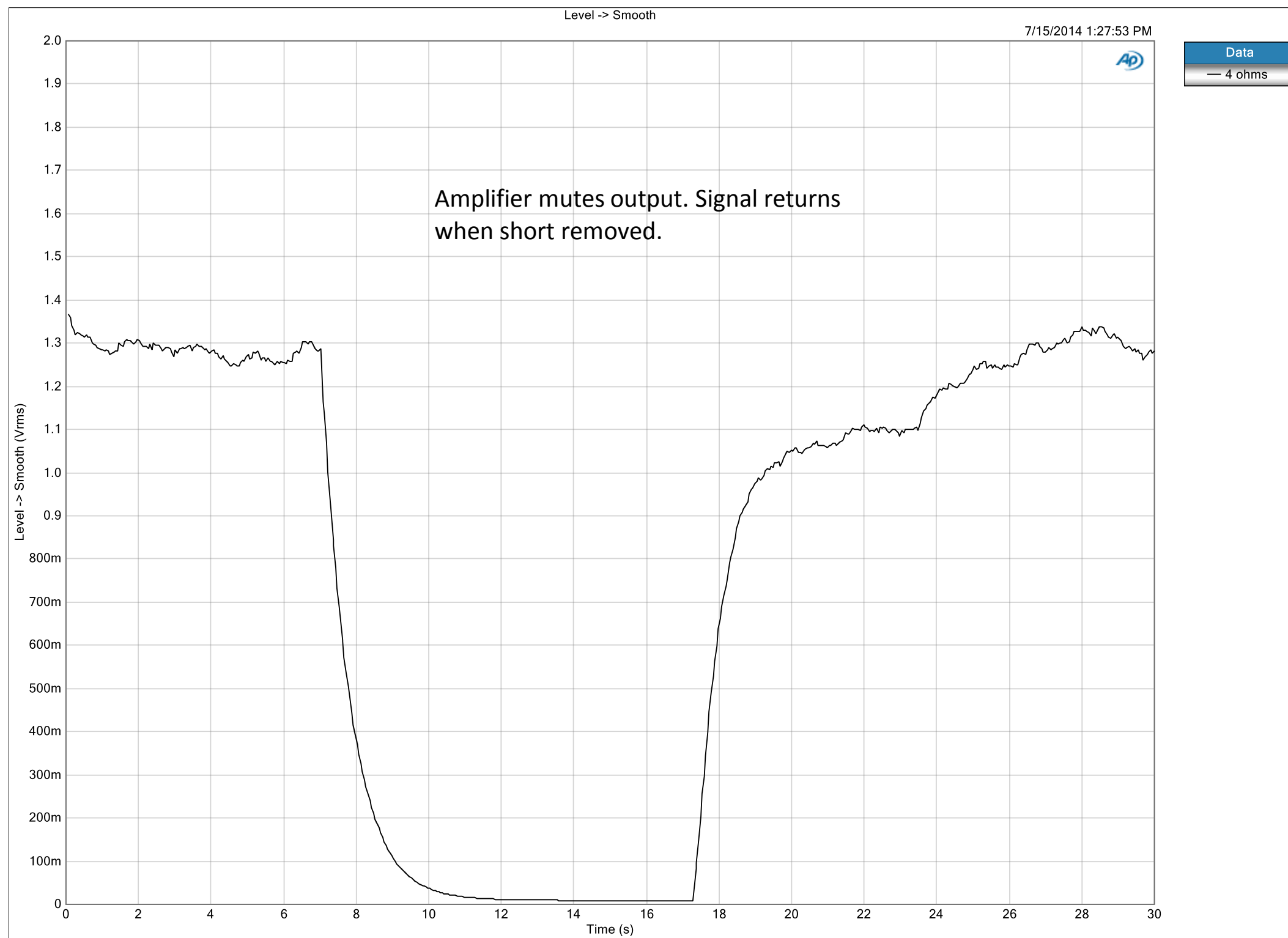


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#Averages: 20
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See CAF Reference for measurement setup.

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See CAF Reference for measurement setup.



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