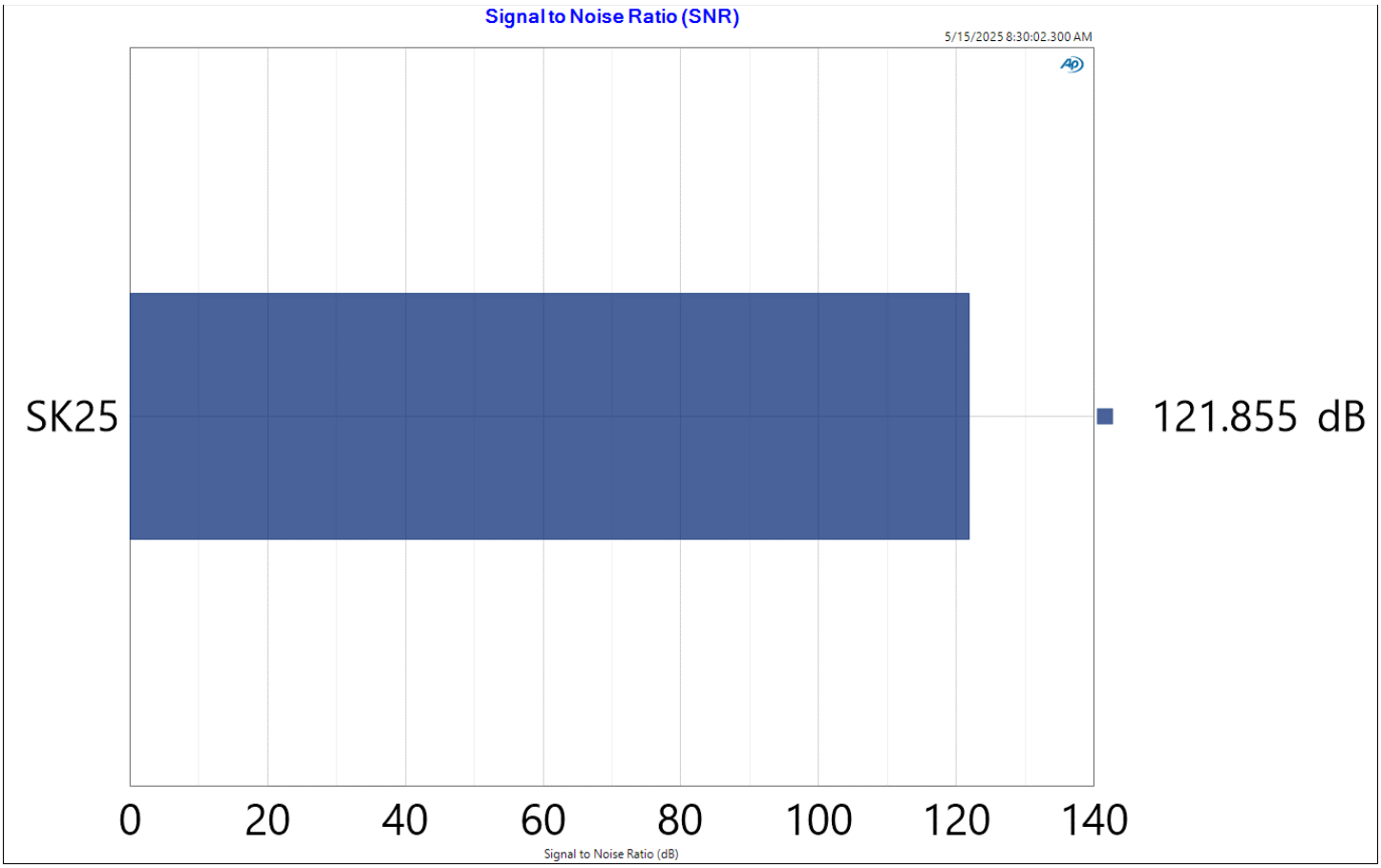
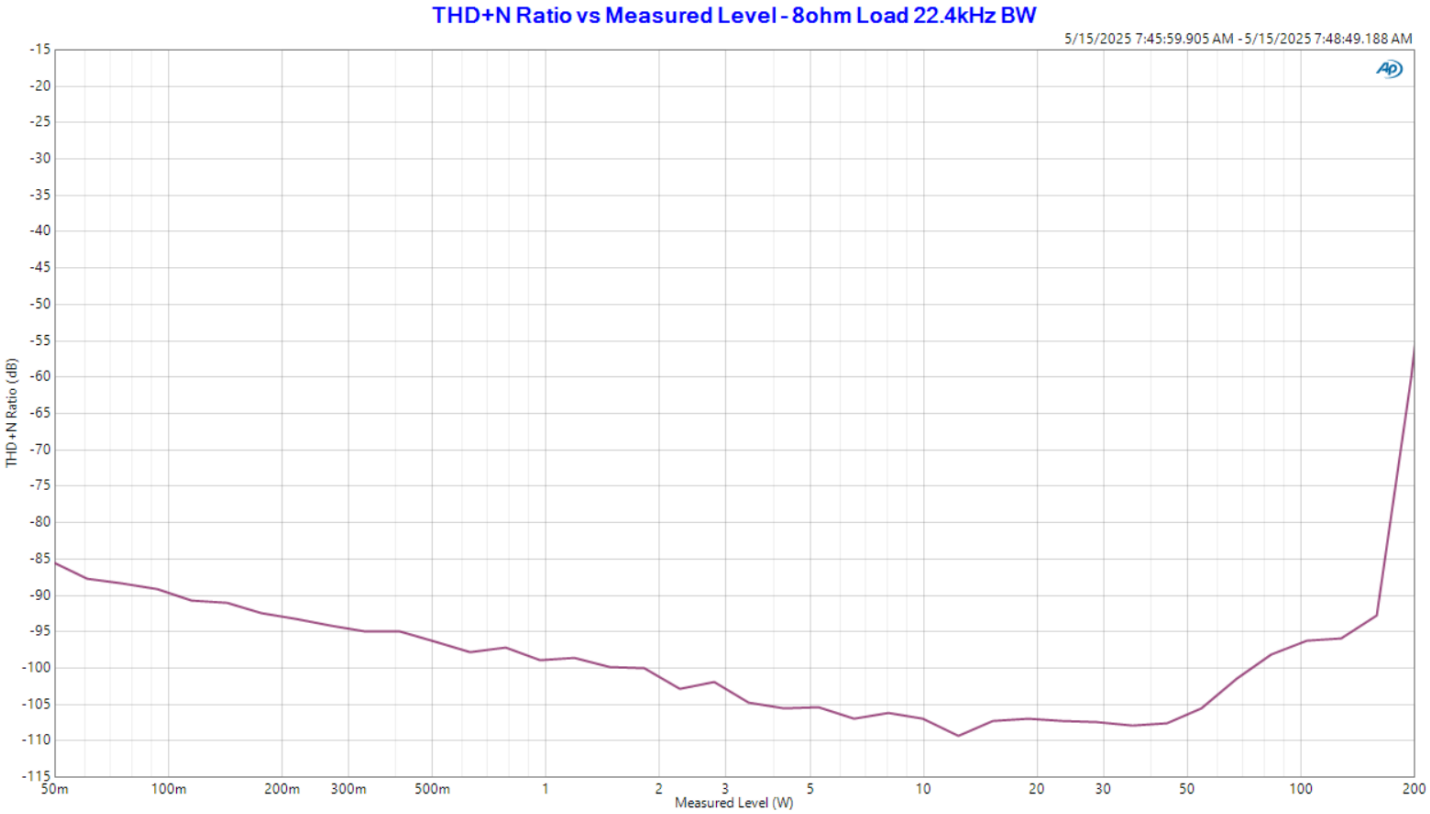
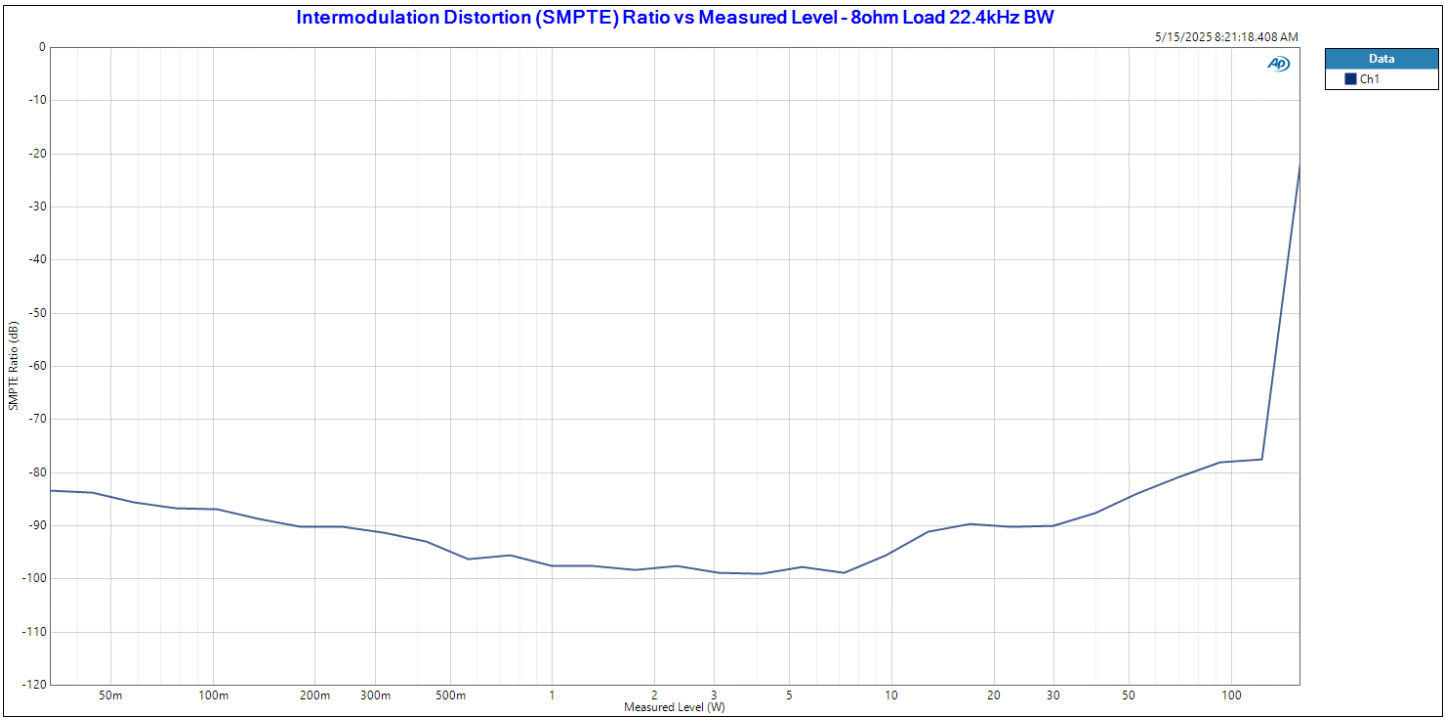
Starkrimson® 25 Specification & Test Results

Gain: 16.8dB or 21.5dB
Signal-to-Noise Ratio (SNR): > 121.5dB (A-weighted, 22.4kHz BW)
Residual Noise: < 29.15µV (A-weighted, 22.4kHz BW)
SINAD @ 5W 1kHz: 105dB into 8Ω (22kHz BW)
THD @ 0.25W: <0.0040% for 20Hz – 22kHz into 8Ω (45kHz BW)
THD @ 10W: <0.0018% for 20Hz – 22kHz into 8Ω (45kHz BW)
THD @ 20W: <0.0018% for 20Hz – 22kHz into 8Ω (45kHz BW)
THD @ 40W: <0.0033% for 20Hz – 22kHz into 8Ω (45kHz BW)
THD @ 80W: <0.010% for 20Hz – 22kHz into 8Ω (45kHz BW)
THD @ 150W: <0.050% for 20Hz – 22kHz into 8Ω (45kHz BW)
Frequency Response: DC – 80kHz+
Sensitivity: $5V_{IN}$ for 150W into 8Ω (16.8dB Gain)
Sensitivity: $4.1V_{IN}$ for 200W into 4Ω (16.8dB Gain)
Sensitivity: $2.9V_{IN}$ for 150W into 8Ω (21.5dB Gain)
Sensitivity: 2.4 V_{IN} for 200W into 4Ω (21.5dB Gain)
Balanced Input Impedance: 44kΩ
Rated Power (8Ω): $150W_{RMS}$ ($300W_{PEAK}$)
Rated Power (4Ω): $200W_{RMS}$ ($400W_{PEAK}$)
Rated Power (2Ω): $100W_{RMS}$ ($200W_{PEAK}$)
Max Power (8Ω) (CEA-2006) (1% SINAD): $198W_{RMS}$ ($396W_{PEAK}$)
Max Power (4Ω) (CEA-2006) (1% SINAD): $388W_{RMS}$ ($776W_{PEAK}$)
Damping Factor: > 700 @ 1kHz

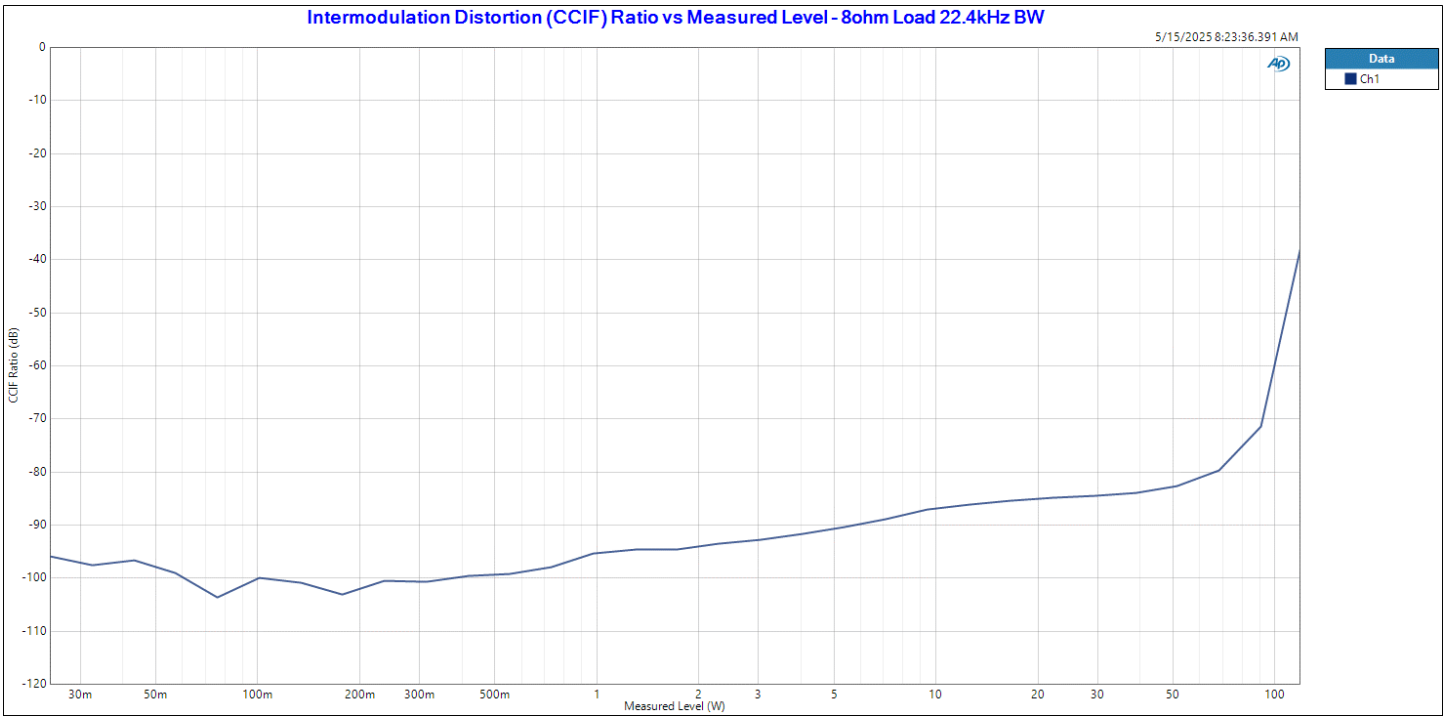
All of the test results below are done using an Audio Precision APX-525 with a **Starkrimson 25 Mono Premium** amplifier.



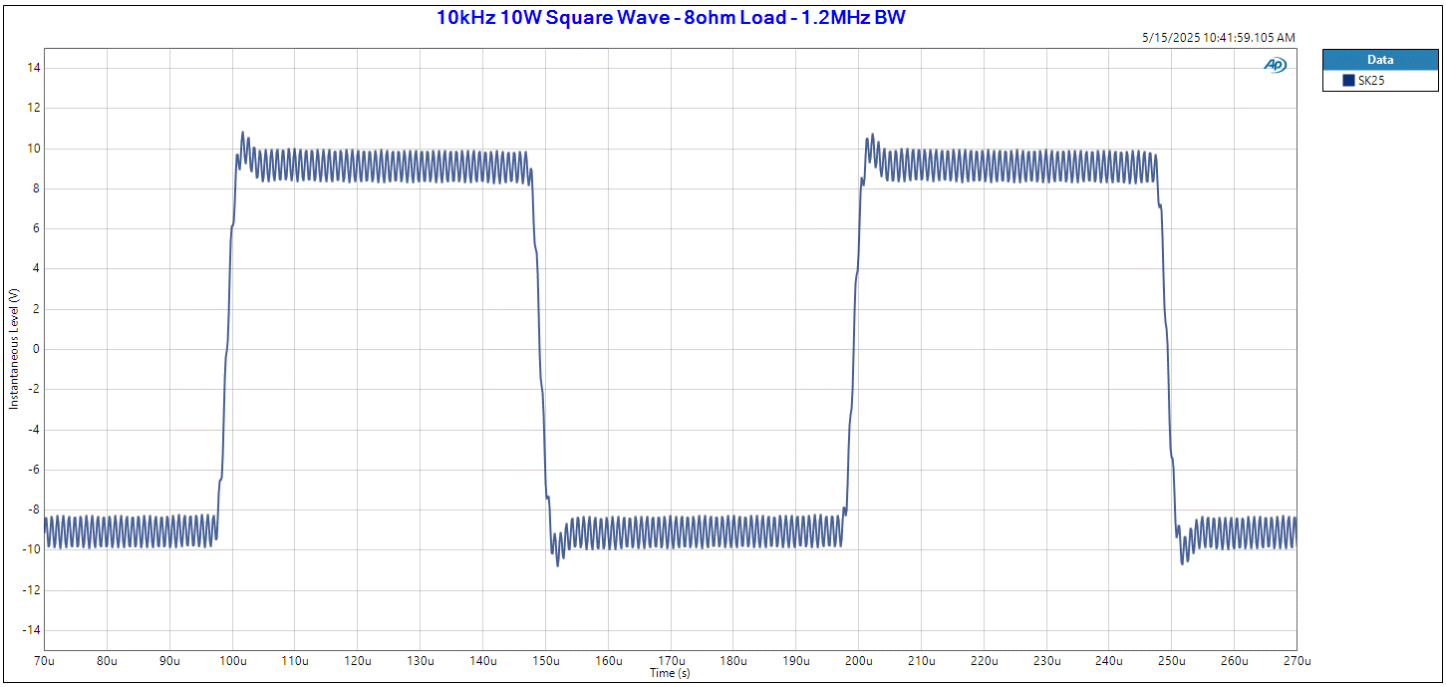

THD+N Ratio vs Measured Level - 8ohm Load 22.4kHz BW
5/15/2025 7:45:59.905 AM - 5/15/2025 7:48:49.188 AM
THD+N Ratio (dB)
-15
-20
-25
-30
-35
-40
-45
-50
-55
-60
-65
-70
-75
-80
-85
-90
-95
-100
-105
-110
-115
50m
100m
200m
300m
500m
1
2
3
5
10
20
30
50
100
200
Measured Level (W)

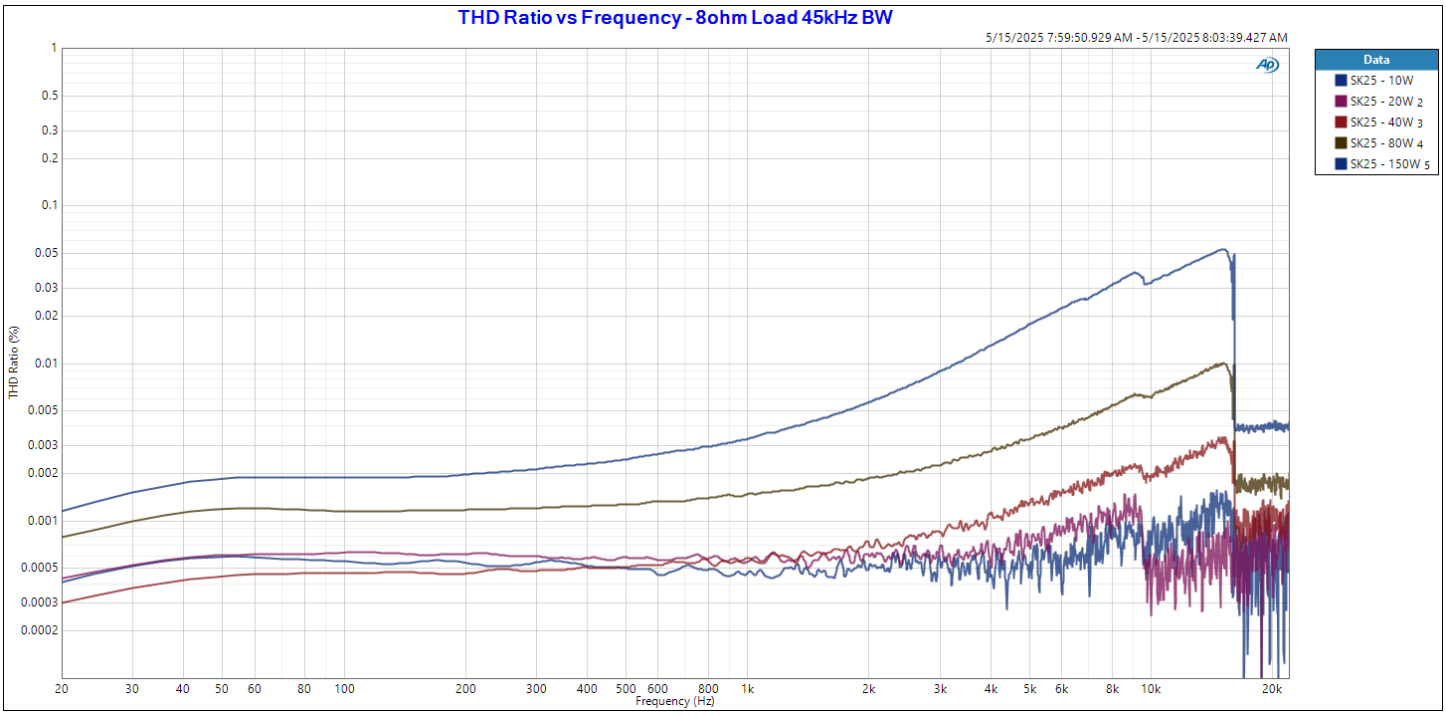

Intermodulation Distortion (SMPTE) Ratio vs Measured Level - 8ohm Load 22.4kHz BW
5/15/2025 8:21:18.408 AM
Data
Ch1
SMPTE Ratio (dB)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
-110
-120
50m
100m
200m
300m
500m
1
2
3
5
10
20
30
50
100
Measured Level (W)

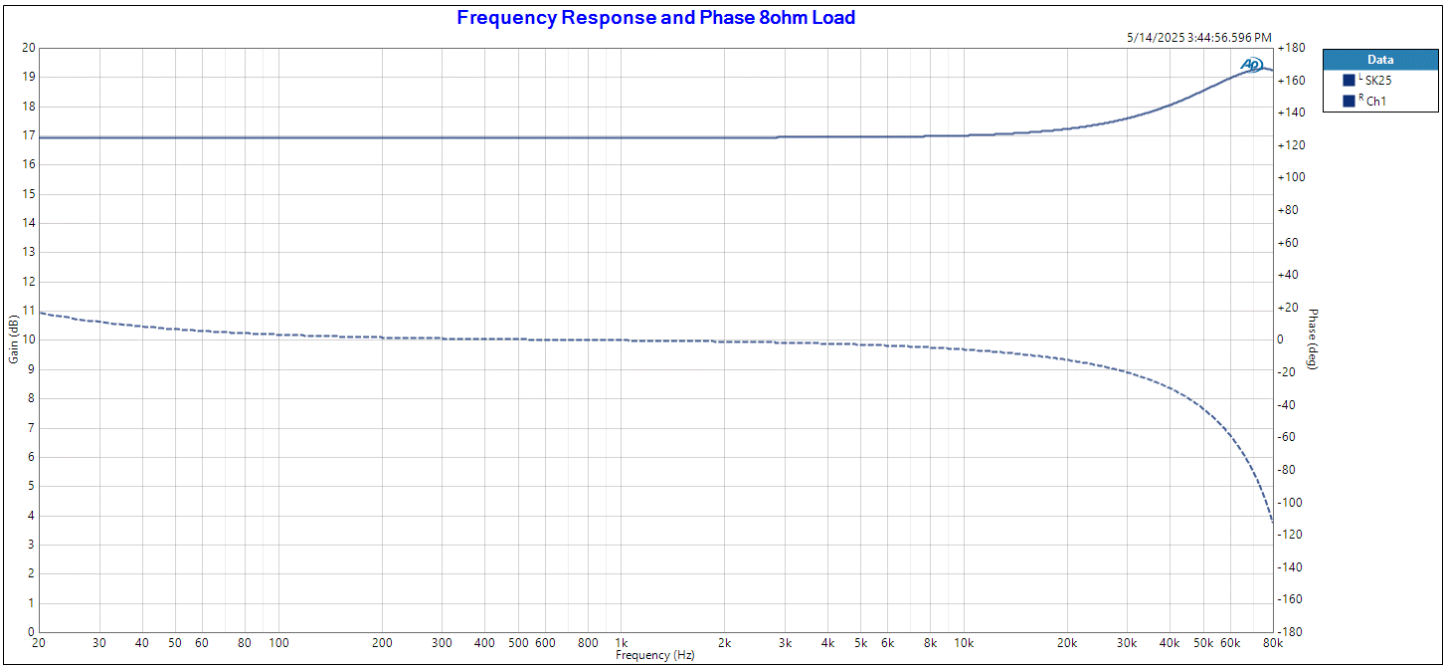
Rev 1.1

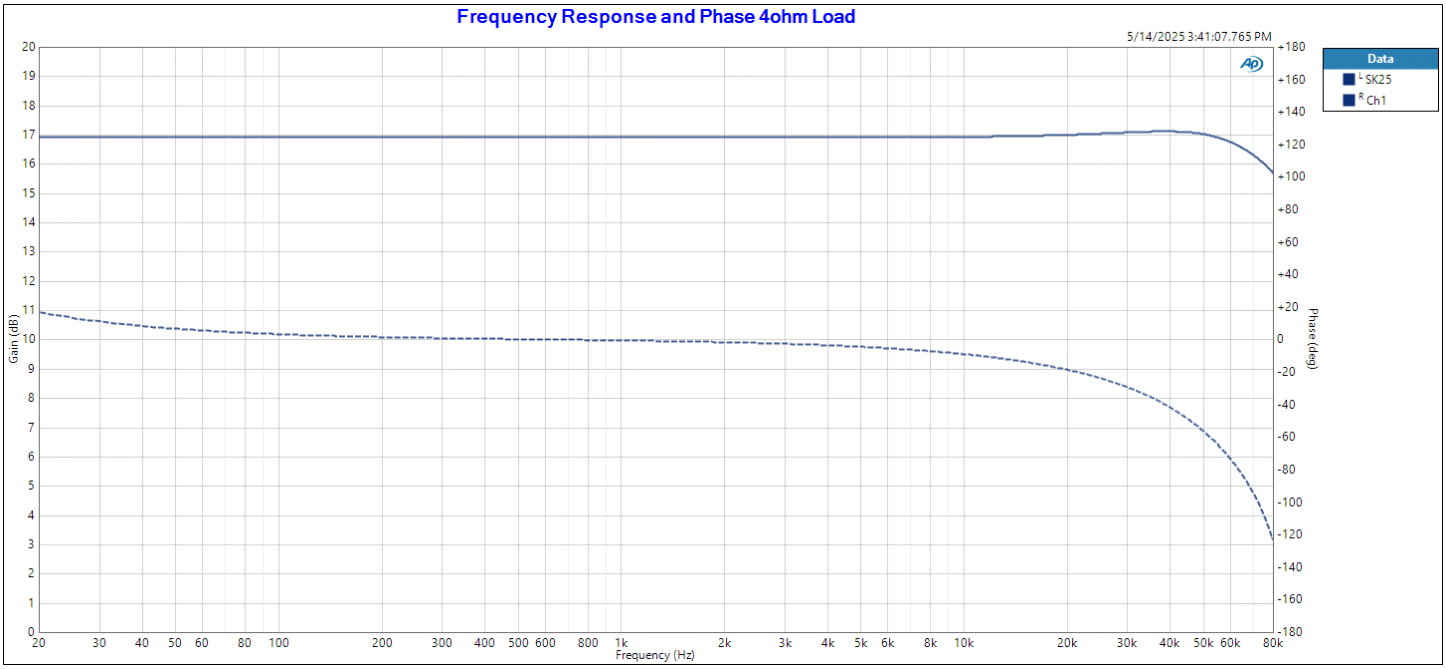

Intermodulation Distortion (CCIF) Ratio vs Measured Level - 8ohm Load 22.4kHz BW
5/15/2025 8:23:36.391 AM
Data
Ch1
CCIF Ratio (dB)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
-110
-120
30m
50m
100m
200m
300m
500m
1
2
3
5
10
20
30
50
100
Measured Level (W)

Rev 1.1

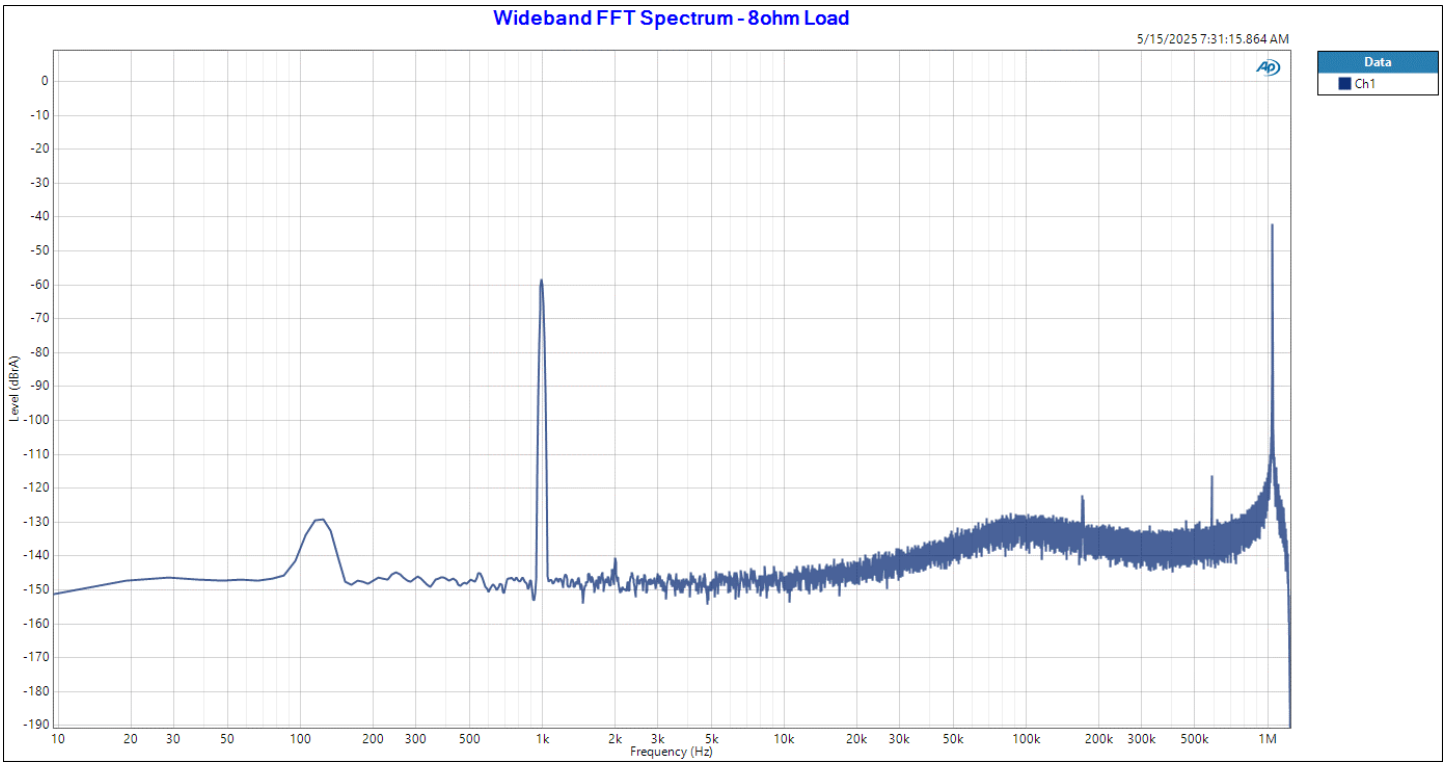

10kHz 10W Square Wave - 8ohm Load - 1.2MHz BW
5/15/2025 10:41:59.105 AM
Data
SK25
Instantaneous Level (V)
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
70u
80u
90u
100u
110u
120u
130u
140u
150u
160u
170u
180u
190u
200u
210u
220u
230u
240u
250u
260u
270u
Time (s)

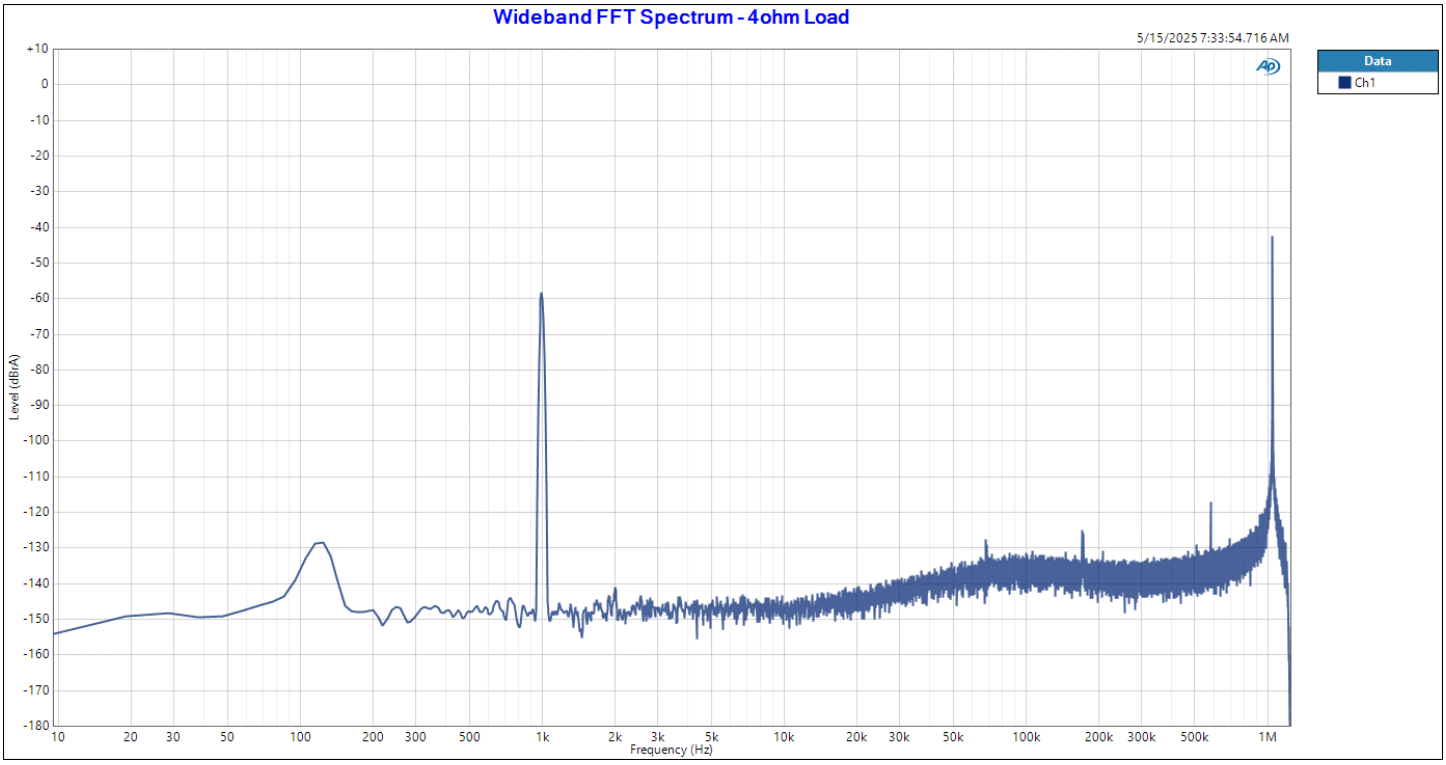

THD Ratio vs Frequency - 8ohm Load 45kHz BW
5/15/2025 7:59:50.929 AM - 5/15/2025 8:03:39.427 AM
Data
SK25 - 10W
SK25 - 20W 2
SK25 - 40W 3
SK25 - 80W 4
SK25 - 150W 5
THD Ratio (%)
1
0.5
0.3
0.2
0.1
0.05
0.03
0.02
0.01
0.005
0.003
0.002
0.001
0.0005
0.0003
0.0002
20
30
40
50
60
80
100
200
300
400
500
600
800
1k
2k
3k
4k
5k
6k
8k
10k
20k
Frequency (Hz)

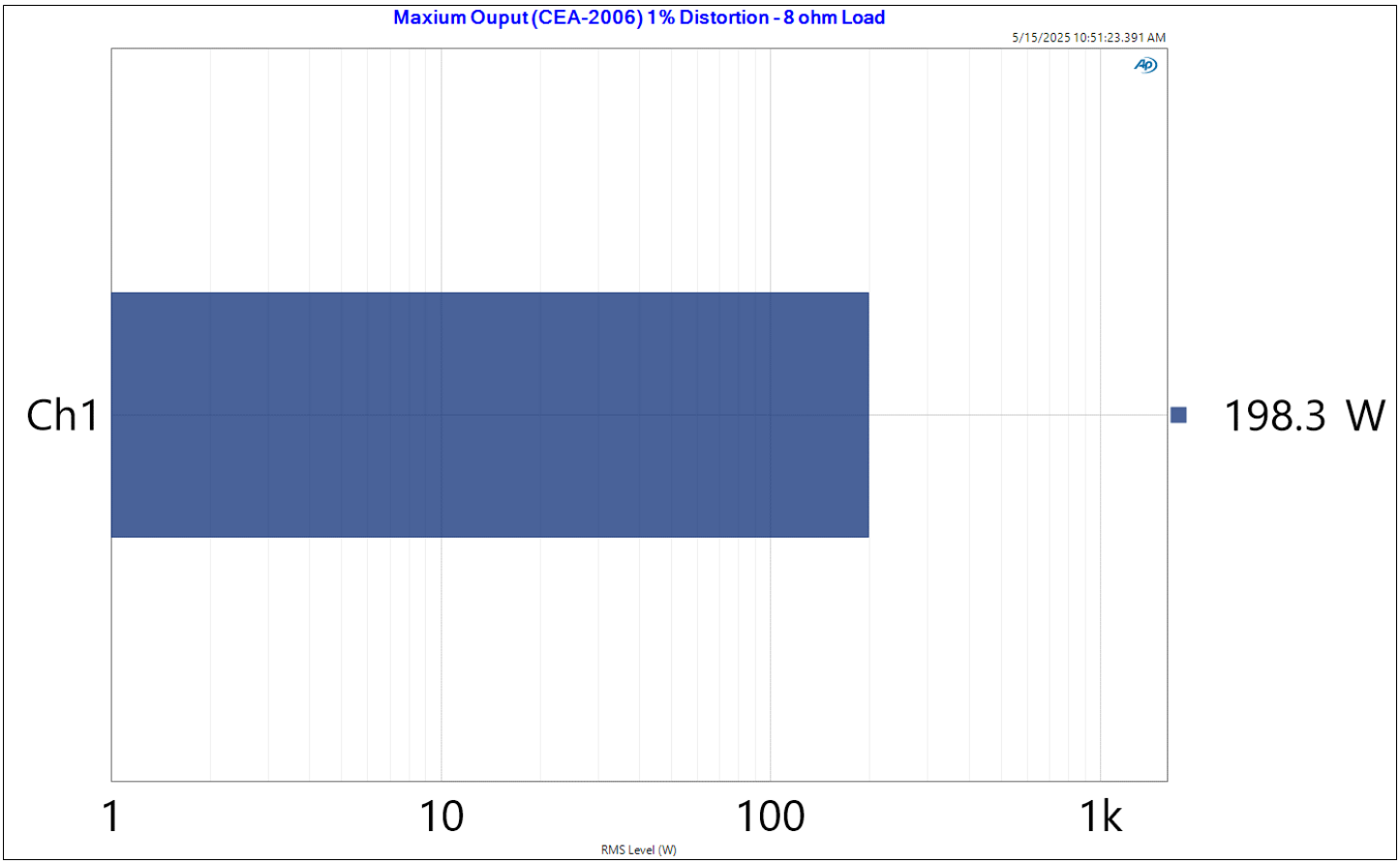

Frequency Response and Phase 8ohm Load
5/14/2025 3:44:56.596 PM
Data
L SK25
R Ch1
Gain (dB)
Phase (deg)
Frequency (Hz)


Frequency Response and Phase 4ohm Load
5/14/2025 3:41:07.765 PM
Data
L SK25
R Ch1
Gain (dB)
Phase (deg)
Frequency (Hz)

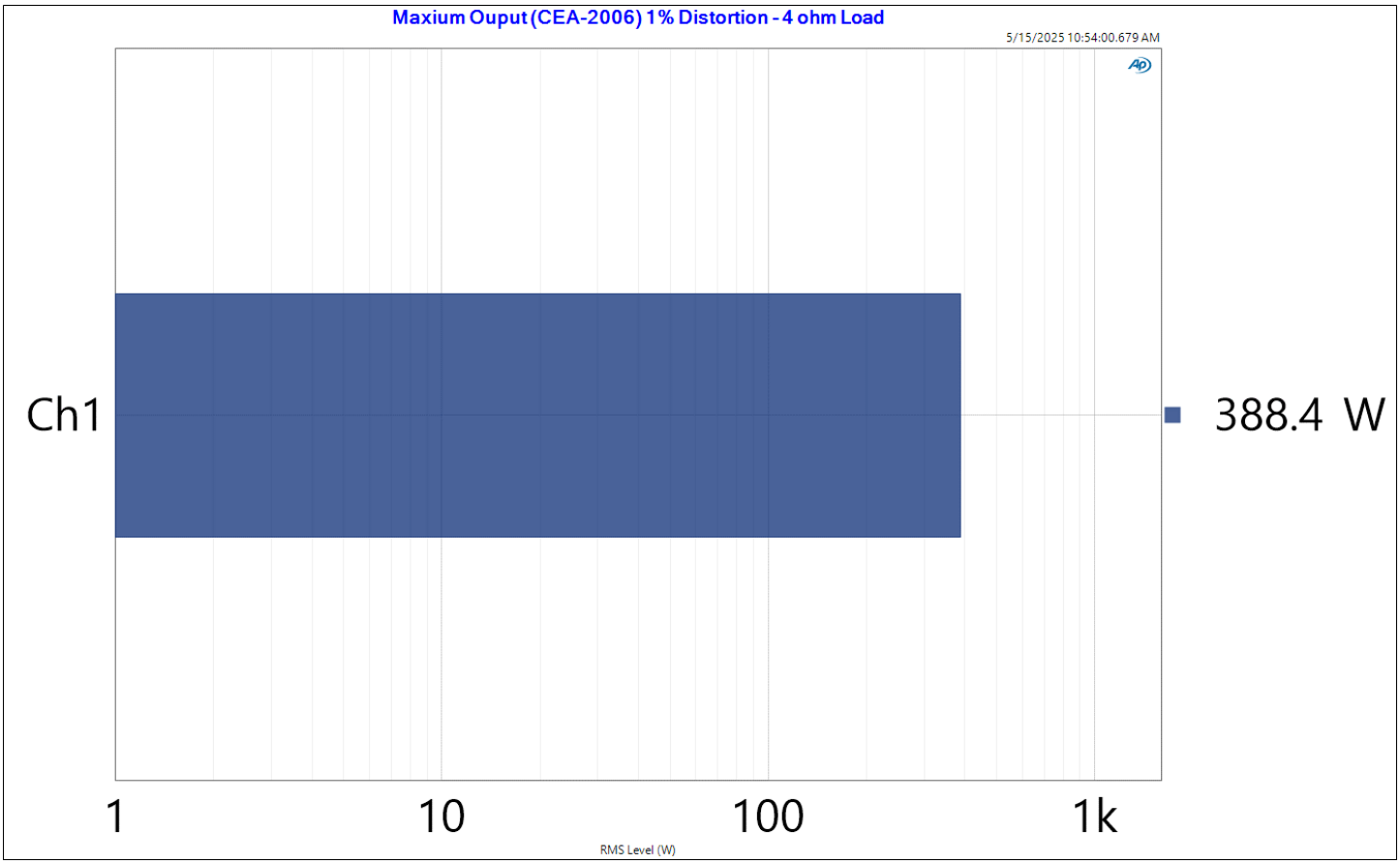
Rev 1.1


Wideband FFT Spectrum - 8ohm Load
5/15/2025 7:31:15.864 AM
Data
Ch1
Level (dBrA)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
10
20
30
50
100
200
300
500
1k
2k
3k
5k
10k
20k
30k
50k
100k
200k
300k
500k
1M
Frequency (Hz)

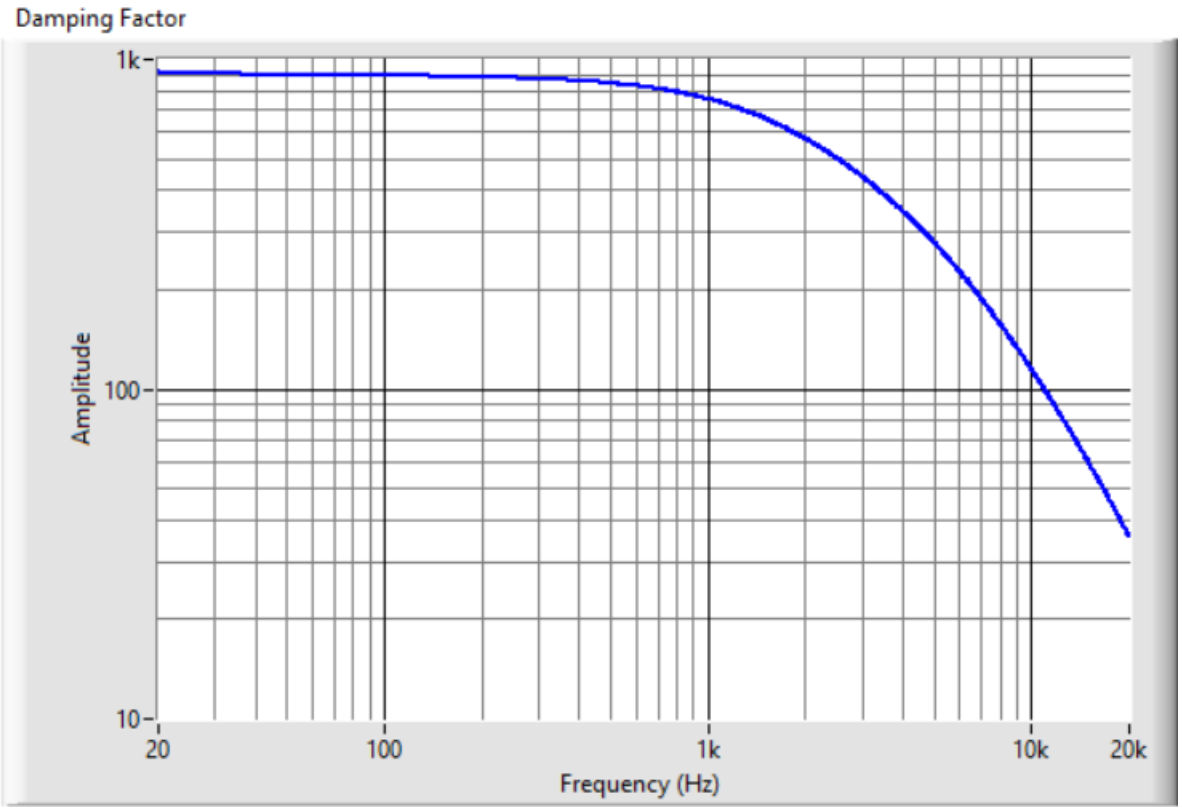

Wideband FFT Spectrum - 4ohm Load
5/15/2025 7:33:54.716 AM
Data
Ch1
Level (dBrA)
+10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
-110
-120
-130
-140
-150
-160
-170
-180
10
20
30
50
100
200
300
500
1k
2k
3k
5k
10k
20k
30k
50k
100k
200k
300k
500k
1M
Frequency (Hz)


Maxium Ouput (CEA-2006) 1% Distortion - 8 ohm Load
5/15/2025 10:51:23.391 AM
Ch1
198.3 W
1
10
100
1k
RMS Level (W)

Rev 1.1


Maxium Ouput (CEA-2006) 1% Distortion - 4 ohm Load
5/15/2025 10:54:00.679 AM
Ch1
388.4 W
1
10
100
1k
RMS Level (W)

Rev 1.1


Damping Factor
1k
100
10
Amplitude
20
100
1k
10k
20k
Frequency (Hz)