

Taboo mkiv TS EL84 32R 0dBu Hi gain UNBAL REPORT

Overall Result: **PASS**

SUMMARY:	RESULT
A01 Ampl, Phase, Gain	✓
A02 Ampl, Phase vs Freq	✓
A03 Gain vs Ampl	✓
A04 THD+N, THD, nth-HD 2 3 4 - THD+N minus 2nd and 3rd harmonics	✓
A05 THD+N vs Freq	✓
A06 THD+N vs Ampl	✓
A07 Noise, SNR	✓
A08 Crosstalk A to B	✓
A09 Crosstalk B to A	✓
A10 Crosstalk A to B vs Freq	✓
A11 Crosstalk B to A vs Freq	✓
A12 FFT 1000 Hz THD+N	✓
A13 FFT 50+7000Hz	✓
A14 FFT 600+1700 Hz	✓
A15 FFT 19+20 KHz	✓
A16 FFT residual noise	✓

KEY: ✓ = Test passes, ✗ = Test fails, OK = Test has run but has no limit checking, (✗) = Test has failed to run or has not completed, [✓] = Test passes but is not required, [✗] = Test fails but is not required, ? = Test is required but has not been run.
- = Test is not required.

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A01 Ampl, Phase, Gain: **PASSED**

Measured at 11/4/2022 3:54:35 PM

Generator Settings		
Channel A:	sine, 0 dBu at 1000 Hz	
Channel B:	sine, 0 dBu at 1000 Hz	

Signal Analyzer Readings		
RMS amplitude (Channel A)	-0.000 dBu	< 3 dBu > -3 dBu
RMS amplitude (Channel B)	0.003 dBu	< 3 dBu > -3 dBu
Inter-channel phase	-0.07 °	< 10 ° > -10 °

CTA Readings		
Gain (Channel A RMS)	-0.000 dB	< 3 dB > -3 dB
Gain (Channel B RMS)	0.002 dB	< 3 dB > -3 dB
Settings: Generator relative, 22 Hz - 22 kHz, unweighted RMS with 1/3rd octave band-pass filter at the generator frequency		

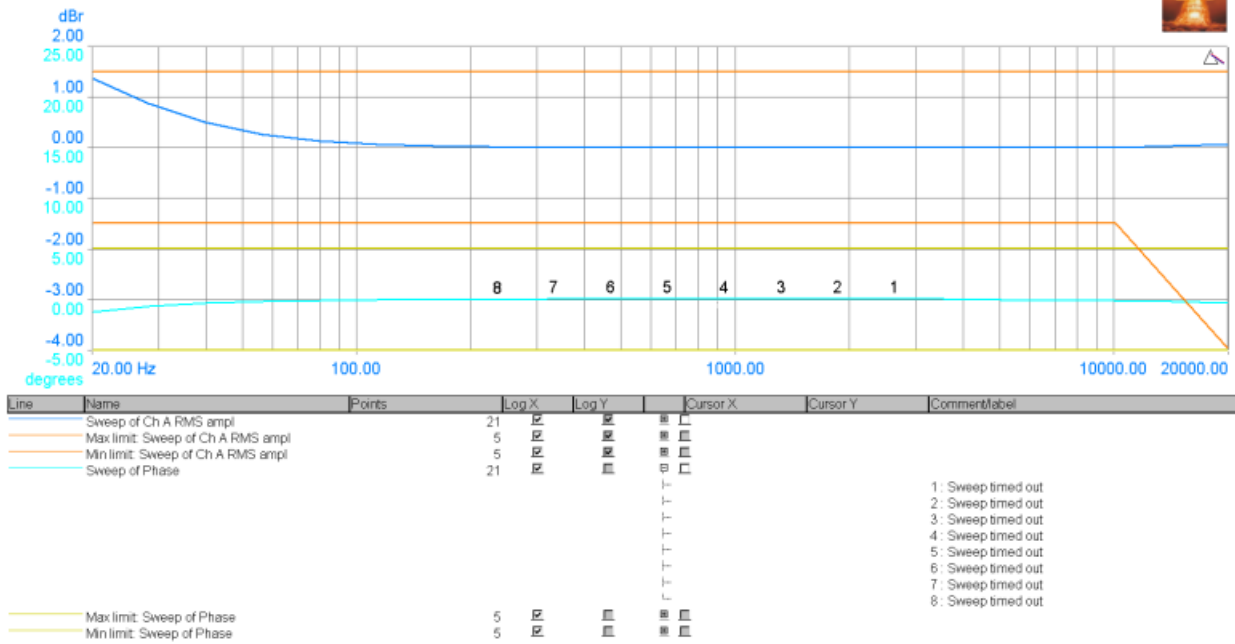
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A02 Ampl, Phase vs Freq: **PASSED**

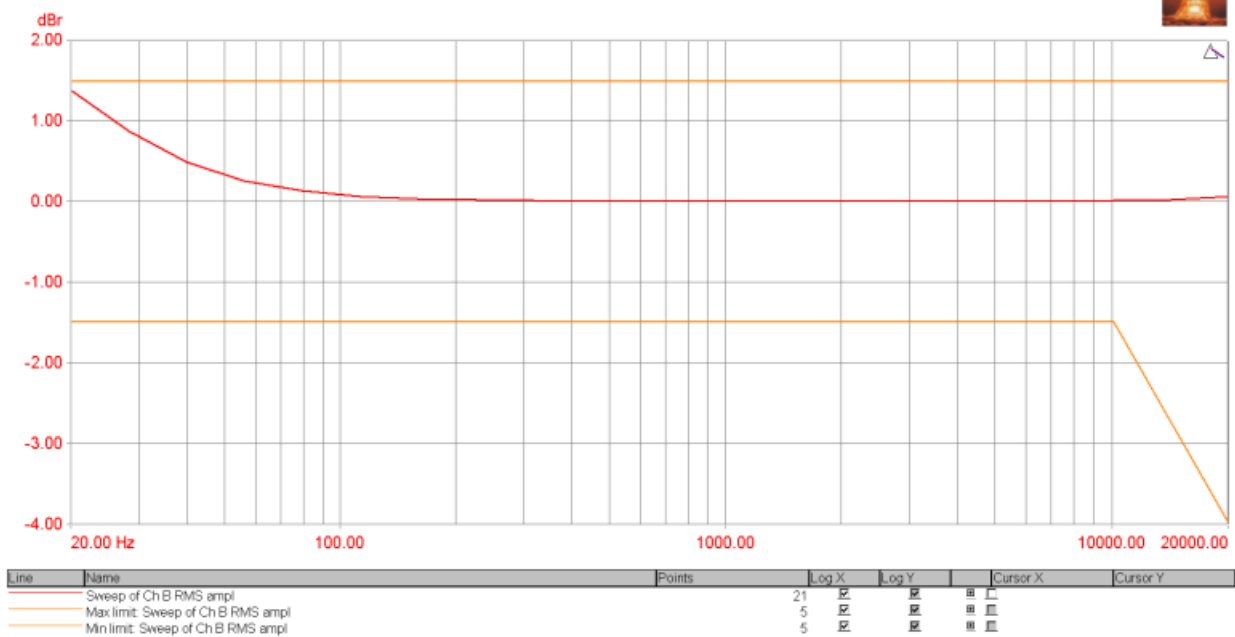
Measured at 11/4/2022 3:54:40 PM

Generator Settings		
Channel A:	sine, -3 dBFS at 1000 Hz	
Channel B:	sine, -3 dBFS at 1000 Hz	

Frequency Response and Inter-channel Phase



Frequency Response and Inter-channel Phase



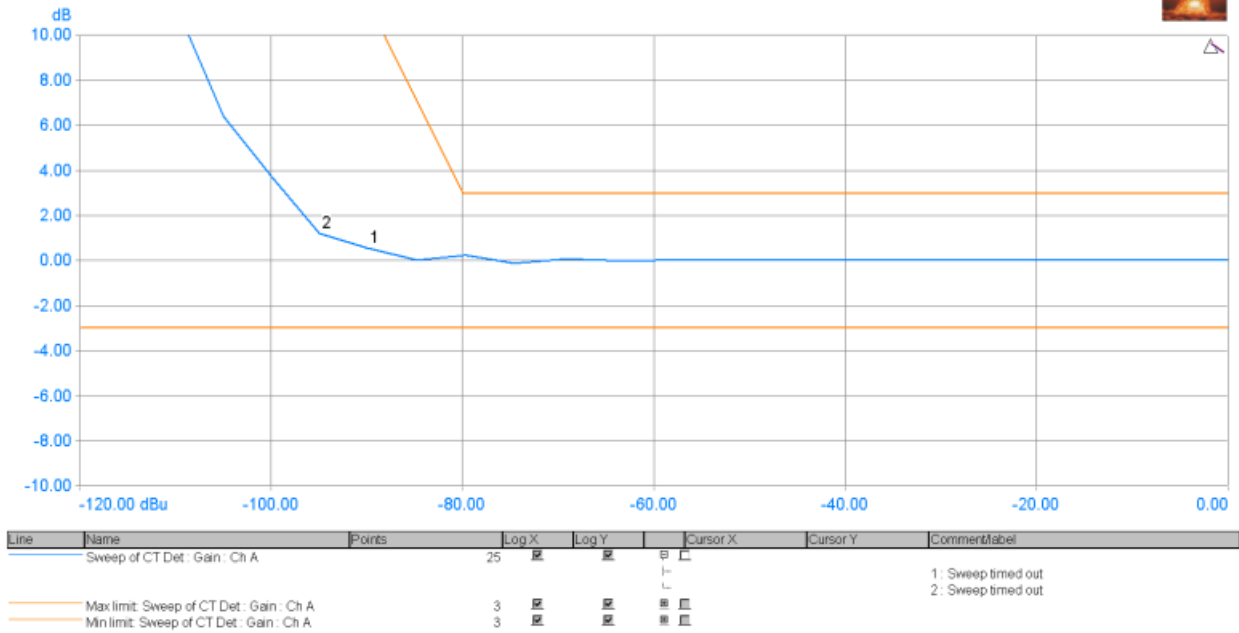
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A03 Gain vs Ampl: PASSED

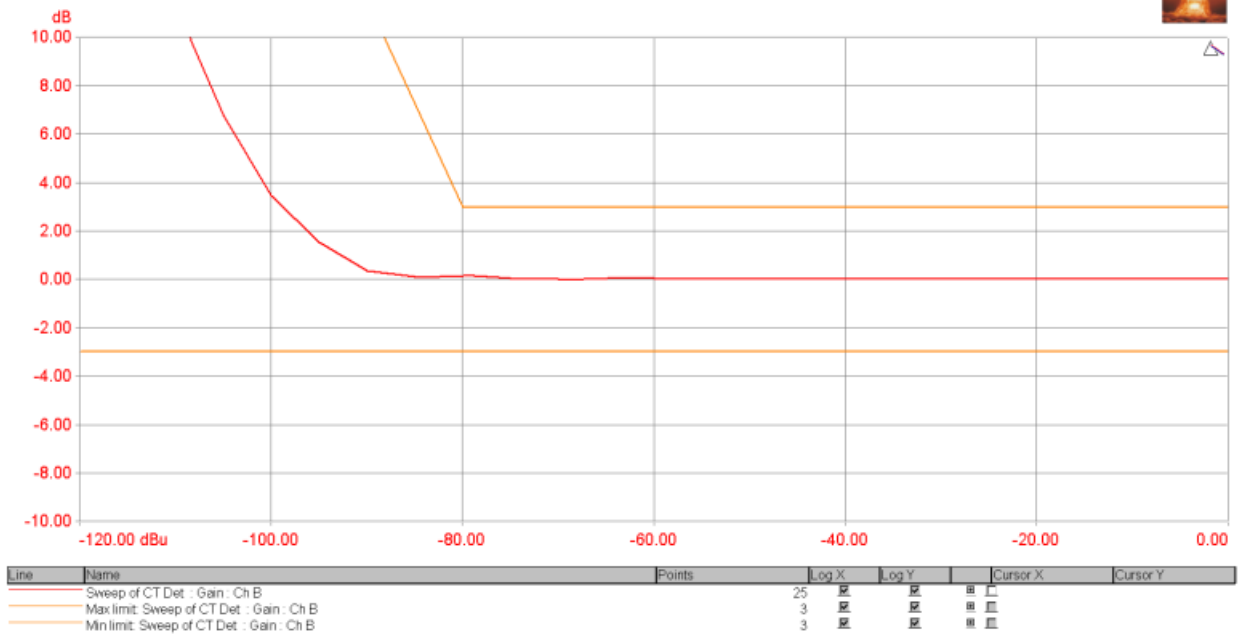
Measured at 11/4/2022 3:55:06 PM

Generator Settings	
Channel A:	sine, 0 dBu at 1000 Hz
Channel B:	sine, 0 dBu at 1000 Hz

Gain vs Amplitude



Gain vs Amplitude



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A04 THD+N,THD, nth-HD 2 3 4 - THD+N minus 2nd and 3rd harmonics: **PASSED**

Measured at 11/4/2022 4:05:00 PM

Generator Settings	
Channel A:	sine, 0 dBu at 1000 Hz
Channel B:	sine, 0 dBu at 1000 Hz

Signal Analyzer Readings		
RMS amplitude (Channel A)	-0.003 dBu	Not limit checked.
RMS amplitude (Channel B)	0.000 dBu	Not limit checked.

CTA Readings		
THD+N - relative (Channel A RMS)	0.05157 %	<200 % >0 %
THD+N - relative (Channel B RMS)	0.04298 %	<200 % >0 %
Settings: Self relative, 22 Hz - 22 kHz, unweighted RMS with 1/3rd octave band-reject filter at the input frequency		

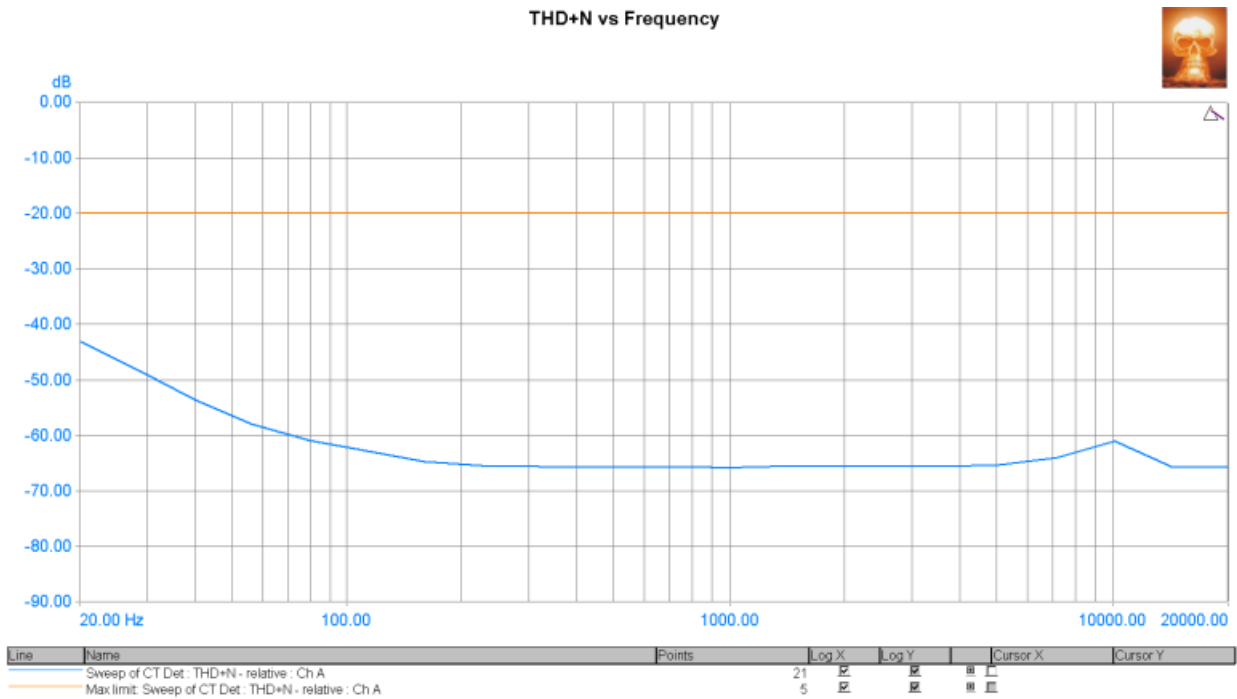
FFT Detector Readings		
THD (Channel A)	0.01801 %	<200 % >0 %
THD (Channel B)	0.00525 %	<200 % >0 %
FFTD 1 Settings: Self relative, 22 Hz - 22 kHz, unweighted with band-pass notch filters from the 2nd to 10th harmonics		
2nd Harmonic Distortion (Channel A)	0.01721 %	<200 % >0 %
2nd Harmonic Distortion (Channel B)	0.00327 %	<200 % >0 %
FFTD 2 Settings: Self relative, 22 Hz - 22 kHz, unweighted with band-pass notch filter at the 2nd harmonic		
3rd Harmonic Distortion (Channel A)	0.00509 %	<200 % >0 %
3rd Harmonic Distortion (Channel B)	0.00291 %	<200 % >0 %
FFTD 3 Settings: Self relative, 22 Hz - 22 kHz, unweighted with band-pass notch filter at the 3rd harmonic		
4th Harmonic Distortion (Channel A)	0.00018 %	Not limit checked.
4th Harmonic Distortion (Channel B)	0.00076 %	Not limit checked.
FFTD 4 Settings: Self relative, 22 Hz - 22 kHz, unweighted with band-pass notch filter at the 4th harmonic		
5th Harmonic Distortion (Channel A)	0.00069 %	Not limit checked.
5th Harmonic Distortion (Channel B)	0.00082 %	Not limit checked.
FFTD 5 Settings: Self relative, 22 Hz - 22 kHz, unweighted with band-pass notch filter at the 5th harmonic		
4+HD + N (Channel A)	0.02263 %	<0.05 % >0 %
4+HD + N (Channel B)	0.01993 %	<0.05 % >0 %
FFTD 6 Settings: Self relative, 22 Hz - 22 kHz, unweighted with band-reject notch filters, fundamental to the 3rd harmonic		
Hum (Channel A)	0.01970 %	<0.05 % >0 %
Hum (Channel B)	0.01887 %	<0.05 % >0 %
FFTD 7 Settings: Self relative, 22 Hz - 22 kHz, unweighted with window notch (14 bins) band-pass filter at 60 Hz		
Noise (residual) (Channel A)	0.02258 %	<0.05 % >0 %
Noise (residual) (Channel B)	0.01971 %	<0.05 % >0 %
FFTD 8 Settings: Self relative, 22 Hz - 22 kHz, unweighted with band-reject notch filters, fundamental to the 10th harmonic		

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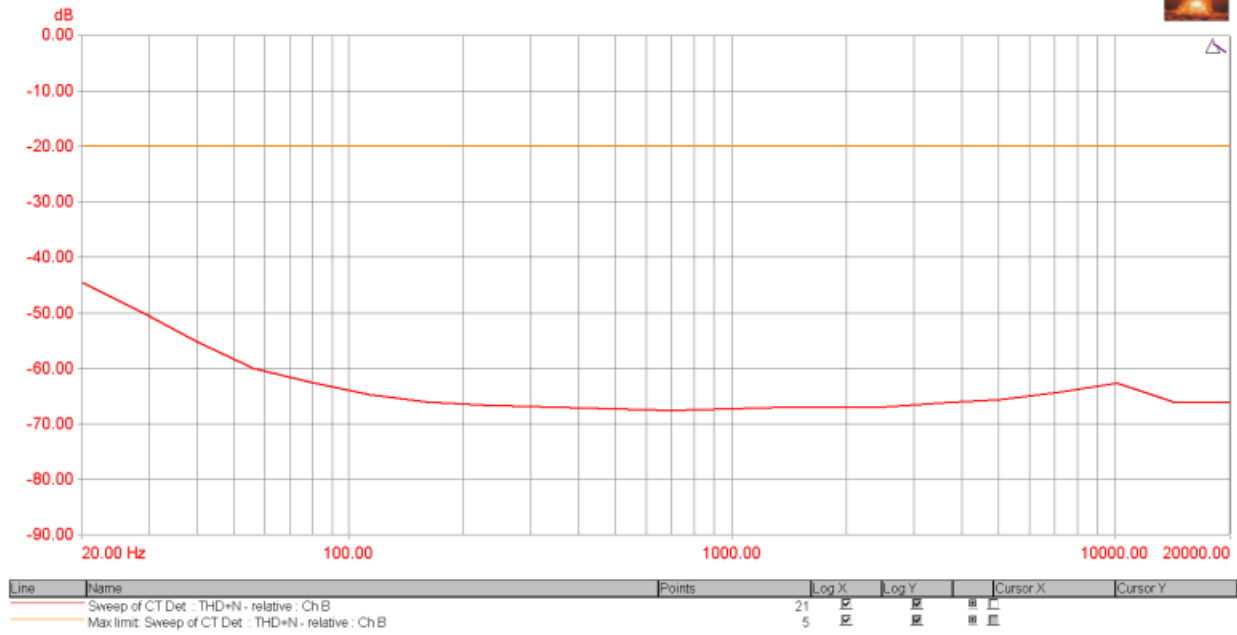
A05 THD+N vs Freq: PASSED

Measured at 11/4/2022 3:56:24 PM

Generator Settings	
Channel A:	sine, 0 dBu at 1000 Hz
Channel B:	sine, 0 dBu at 1000 Hz



THD+N vs Frequency



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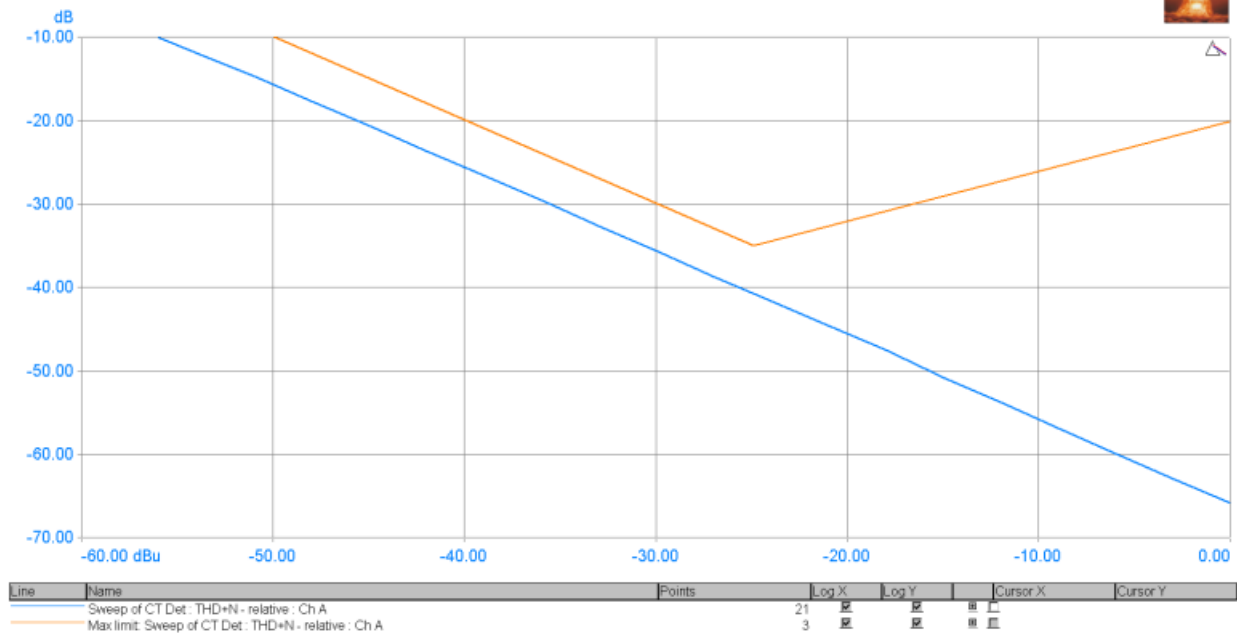
A06 THD+N vs Ampl: **PASSED**

Measured at 11/4/2022 4:07:26 PM

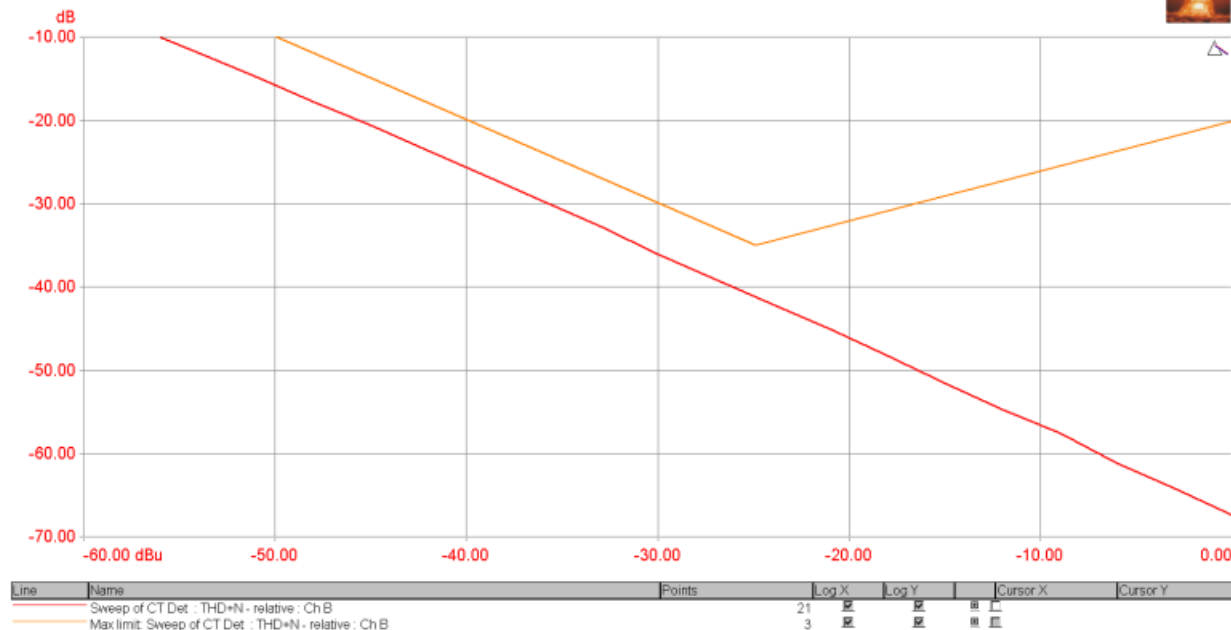
Generator Settings

Channel A:	sine, 0 dBu at 1000 Hz
Channel B:	sine, 0 dBu at 1000 Hz

THD+N vs Amplitude



THD+N vs Amplitude



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A07 Noise, SNR: PASSED

Measured at 11/4/2022 3:56:42 PM

Generator Settings			
Channel A:	sine, -60 dBFS at 1000 Hz		
Channel B:	sine, -60 dBFS at 1000 Hz		

FFT Detector Readings			
Noise (unweighted) (Channel A)	-83.824 dBr	< 200 dBr	> -200 dBr
Noise (unweighted) (Channel B)	-83.964 dBr	< 200 dBr	> -200 dBr
FFTD 1 Settings: 22 Hz - 22 kHz, unweighted with window notch (14 bins) band-reject filter at the generator frequency			
SNR (Channel A)	-83.845 dBr	< 200 dBr	> -200 dBr
SNR (Channel B)	-83.975 dBr	< 200 dBr	> -200 dBr
FFTD 2 Settings: 22 Hz - 22 kHz, unweighted with 1/3rd octave band-reject filter at the generator frequency			

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A08 Crosstalk A to B: PASSED

Measured at 11/4/2022 3:56:44 PM

Generator Settings			
Channel A:	sine, 0 dBu at 1000 Hz		
Channel B:	sine, 0 dBu at 1000 Hz		

CTA Readings			
Cross-talk (Channel B RMS)	-86.095 dB	< -45 dB	
Settings: Channel relative, 22 Hz - 22 kHz, unweighted RMS with 1/24th octave band-pass filter at the opposite channel generator frequency			

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A09 Crosstalk B to A: PASSED

Measured at 11/4/2022 3:56:47 PM

Generator Settings			
Channel A:	sine, 0 dBu at 1000 Hz		
Channel B:	sine, 0 dBu at 1000 Hz		

CTA Readings

Cross-talk (Channel ARMS)

-88.388 dB

< -45 dB

Settings: Channel relative, 22 Hz - 22 kHz, unweighted RMS with 1/24th octave band-pass filter at the opposite channel generator frequency

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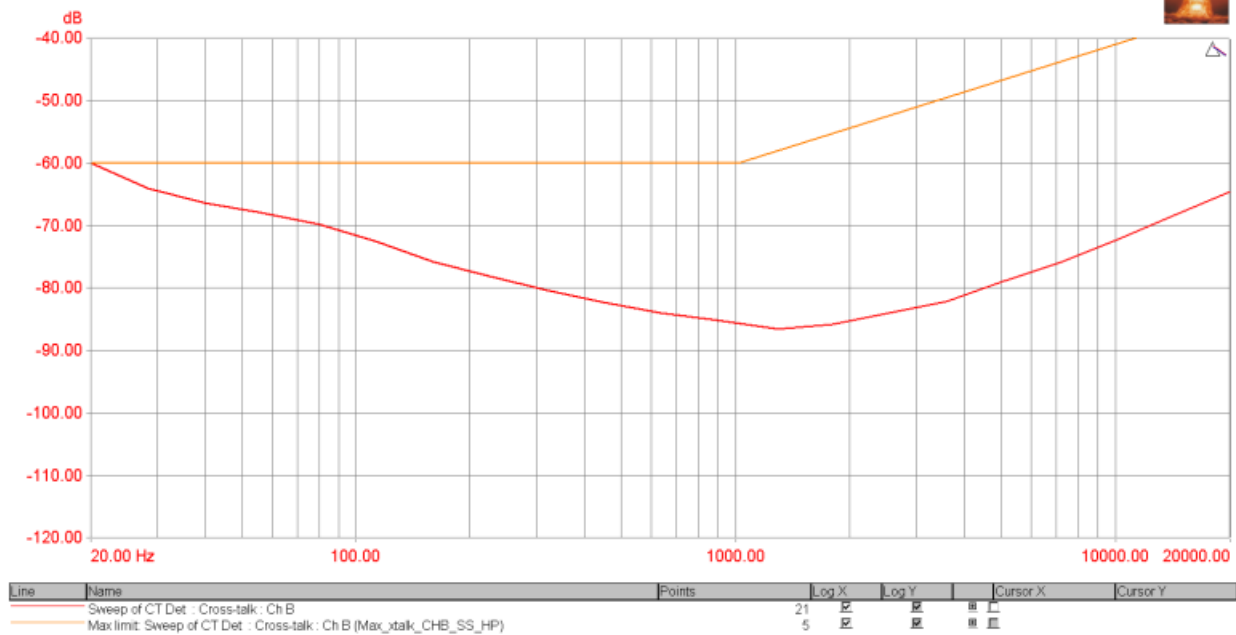
A10 Crosstalk A to B vs Freq: PASSED

Measured at 11/4/2022 3:56:49 PM

Generator Settings

Channel A:	sine, 0 dBu at 1000 Hz
Channel B:	sine, 0 dBu at 1000 Hz

Cross-talk A to B vs Frequency



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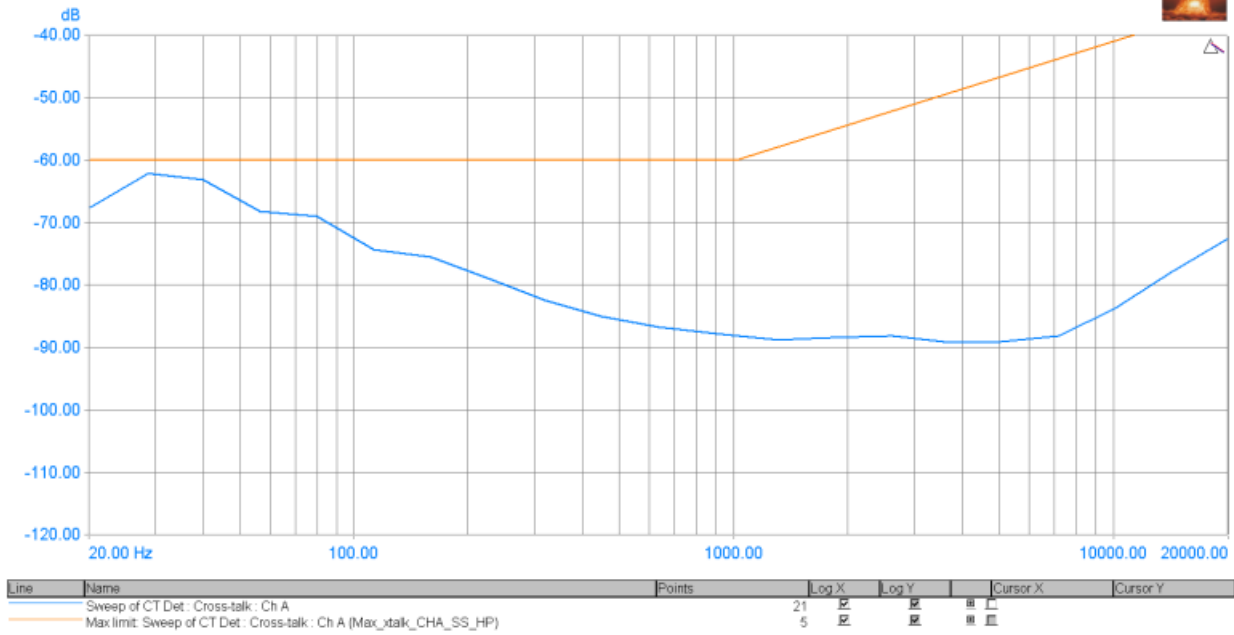
A11 Crosstalk B to A vs Freq: PASSED

Measured at 11/4/2022 4:08:00 PM

Generator Settings

Channel A:	sine, 0 dBu at 1000 Hz
Channel B:	sine, 0 dBu at 1000 Hz

Cross-talk B to A vs Frequency



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A12 FFT 1000 Hz THD+N: PASSED

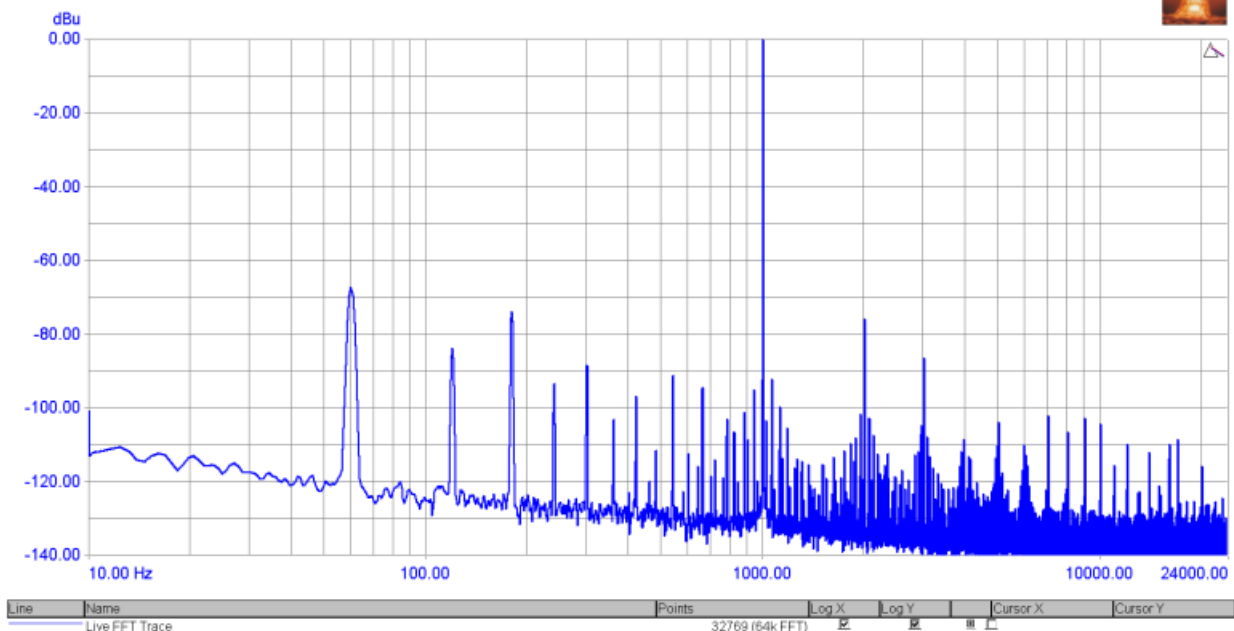
Measured at 11/4/2022 3:57:04 PM

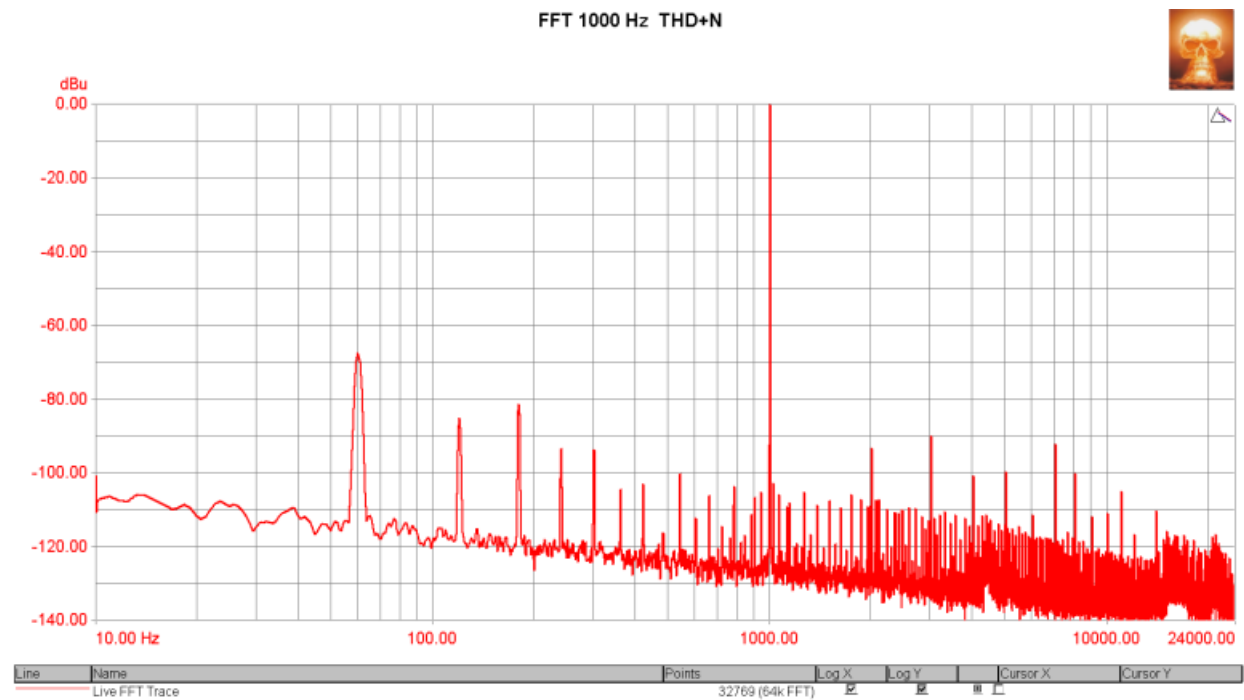
Generator Settings	
Channel A:	sine, 0 dBu at 1000 Hz
Channel B:	sine, 0 dBu at 1000 Hz

Signal Analyzer Readings		
RMS amplitude (Selected : Ch A)	-0.001 dBu	Not limit checked.
RMS amplitude (Non-selected : Ch A)	0.002 dBu	Not limit checked.

CTA Readings		
THD+N - relative (Selected : Ch ARMS)	0.05031 %	< 5 %
THD+N - relative (Non-selected : Ch ARMS)	0.04299 %	< 5 %
Settings: Self relative, 22 Hz - 22 kHz, unweighted RMS with 1/3rd octave band-reject filter at the input frequency		

FFT 1000 Hz THD+N





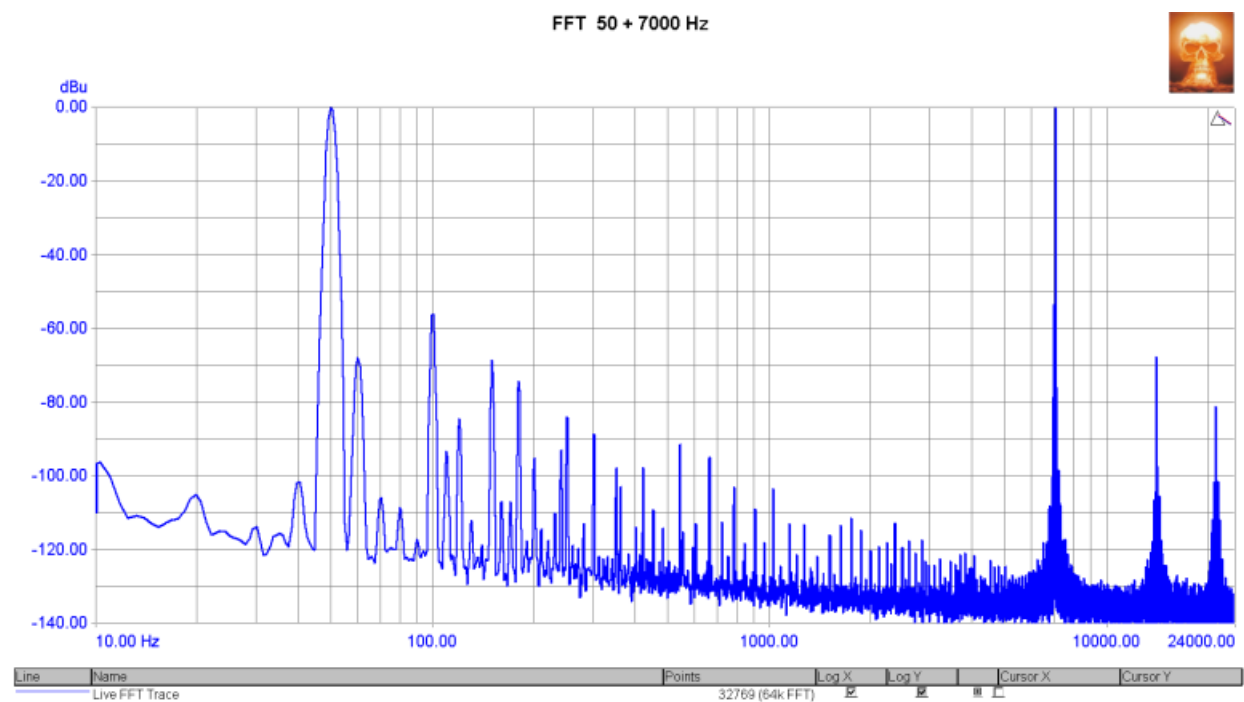
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A13 FFT 50+7000Hz: PASSED

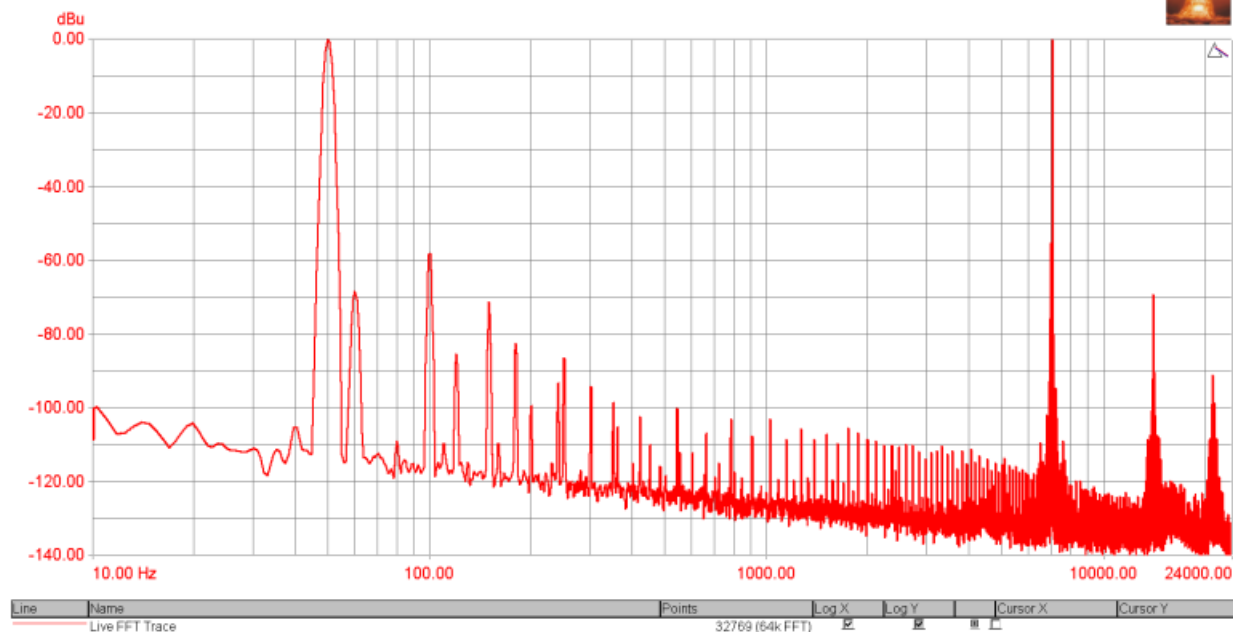
Measured at 11/4/2022 3:57:27 PM

Generator Settings	
Channel A:	Twin-tone, 0 dBu at 50 Hz and 1 amplitude ratio at 7000Hz
Channel B:	Twin-tone, 0 dBu at 50 Hz and 1 amplitude ratio at 7000Hz

Signal Analyzer Readings		
RMS amplitude (Channel A)	3.172 dBu	Not limit checked.
RMS amplitude (Channel B)	3.172 dBu	Not limit checked.



FFT 50 + 7000 Hz



FFT Detector Readings

IMD SMPTE-DIN (Channel A)	0.18052 %	≤ 7%
IMD SMPTE-DIN (Channel B)	0.14754 %	≤ 7%
FFTD 1 Settings: Self relative, 22 Hz - 22 kHz, unweighted with intermodulation notch band reject		

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A14 FFT 600+1700 Hz: PASSED

Measured at 11/4/2022 3:57:50 PM

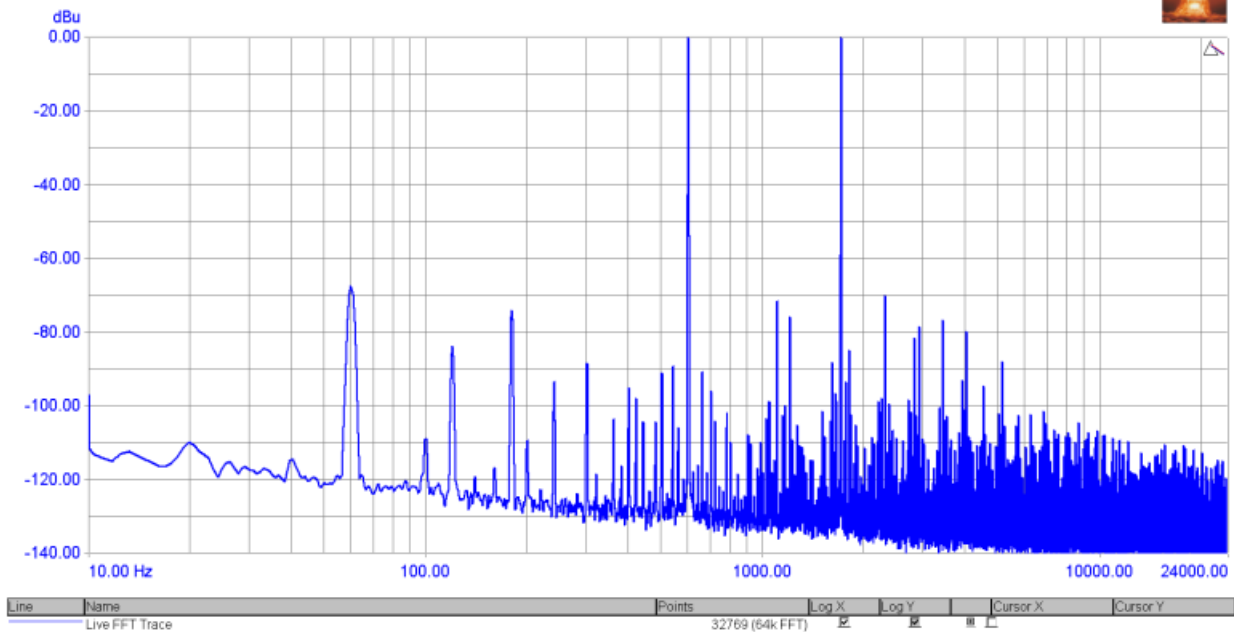
Generator Settings

Channel A:	Twin-tone, 0 dBu at 600 Hz and 1 amplitude ratio at 1700Hz
Channel B:	Twin-tone, 0 dBu at 600 Hz and 1 amplitude ratio at 1700Hz

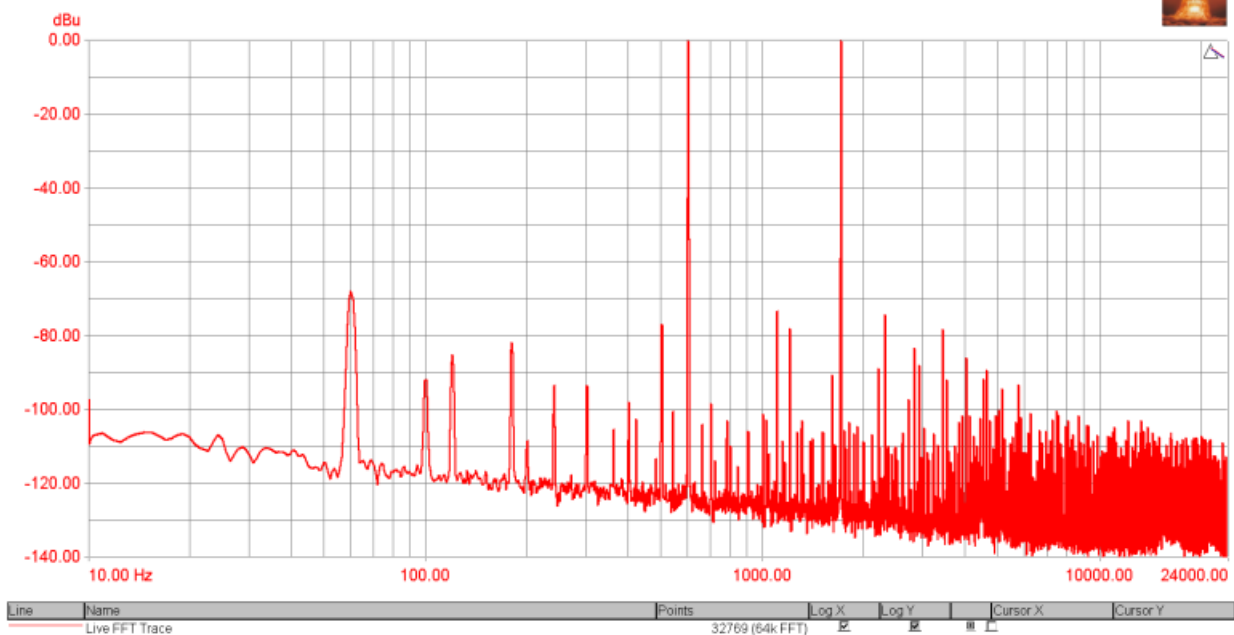
Signal Analyzer Readings

RMS amplitude (Channel A)	2.989 dBu	Not limit checked.
RMS amplitude (Channel B)	2.995 dBu	Not limit checked.

FFT 600 + 1700 Hz



FFT 600 + 1700 Hz



FFT Detector Readings

IMD SMPTE-DIN (Channel A)	0.03109 %	<7% >0%
IMD SMPTE-DIN (Channel B)	0.02225 %	<7% >0%

FFTD 1 Settings: Self relative, 22 Hz - 22 kHz, unweighted with intermodulation notch band reject

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A15 FFT 19+20 KHz: PASSED

Measured at 11/4/2022 3:58:12 PM

Generator Settings

Channel A:	Twin-tone, -16 dBu at 19000 Hz and 1 amplitude ratio at 1000 Hz offset
Channel B:	Twin-tone, -16 dBu at 19000 Hz and 1 amplitude ratio at 1000 Hz offset

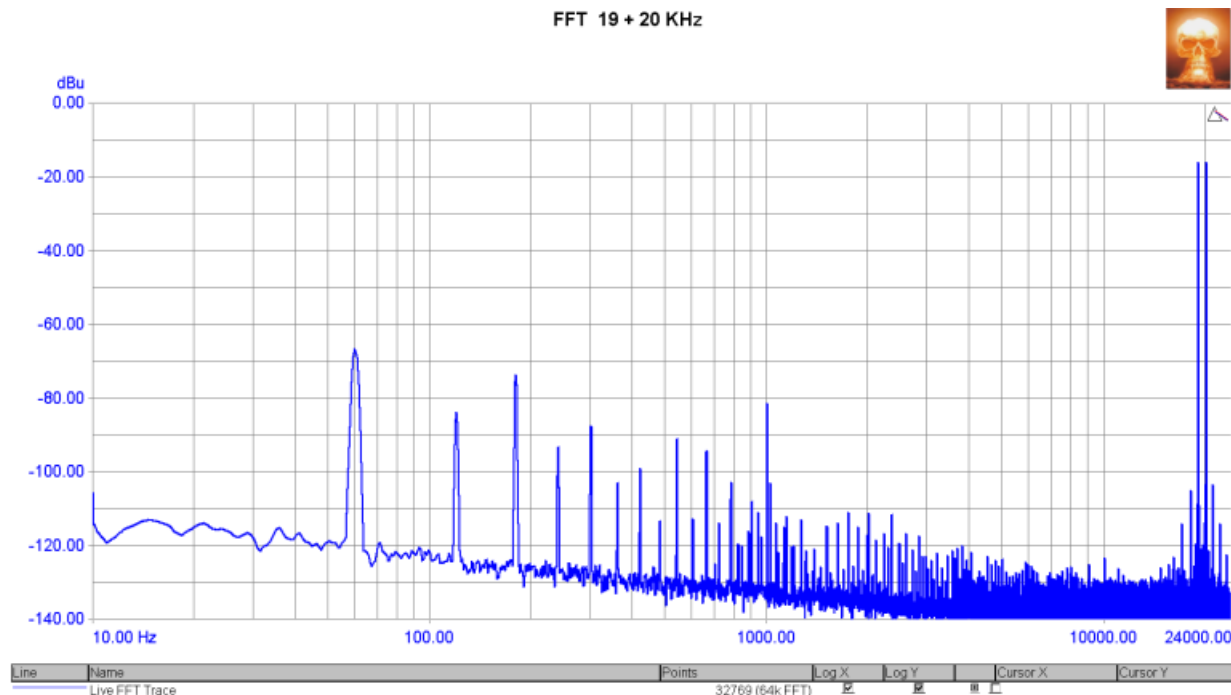
Signal Analyzer Readings

RMS amplitude (Channel A)	-12.970 dBu	Not limit checked.
RMS amplitude (Channel B)	-12.907 dBu	Not limit checked.

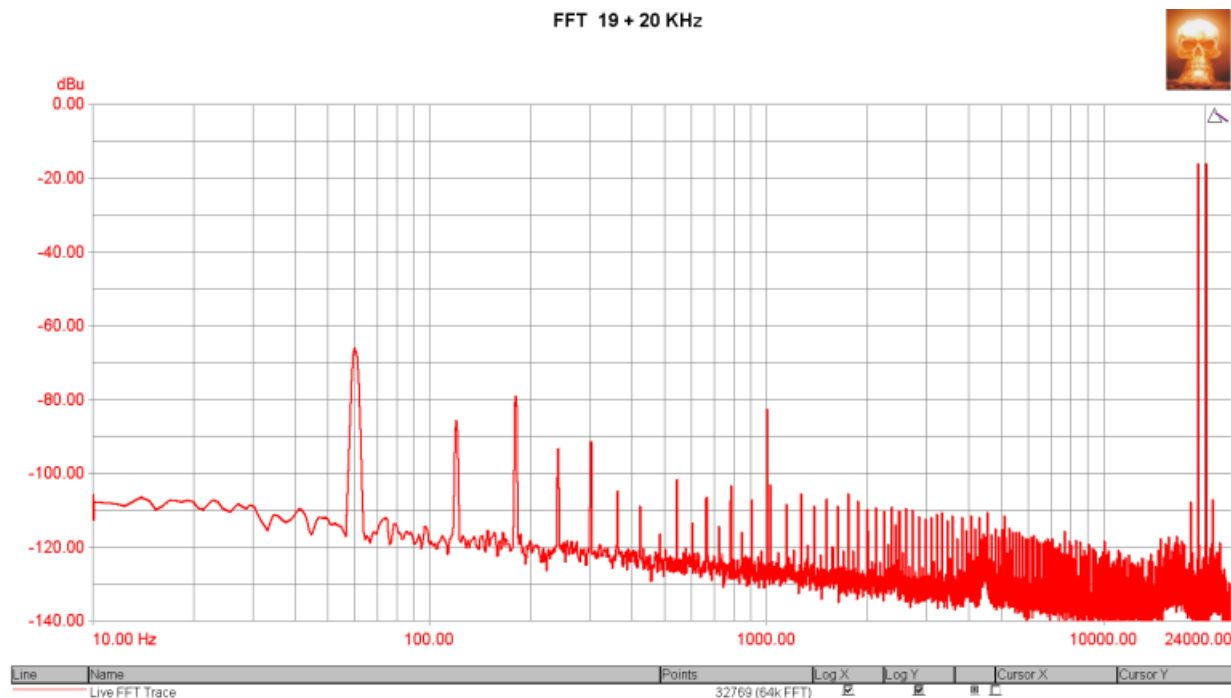
CTA Readings

IMD CCIF (Channel A RMS)	0.03818 %	< 1 %
IMD CCIF (Channel B RMS)	0.03451 %	< 1 %
Settings: Self relative, 22 Hz - 22 kHz, unweighted RMS with 1/24th octave band-pass filter at the intermodulation difference frequency		

FFT 19 + 20 KHz



FFT 19 + 20 KHz



FFT Detector Readings

IMD CCIF (Channel A)	0.03834 %	< 1 %
IMD CCIF (Channel B)	0.03344 %	< 1 %
FFTD 1 Settings: Self relative, 22 Hz - 22 kHz, unweighted with window notch (14 bins) band-pass filter at the intermodulation difference frequency		

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A16 FFT residual noise: PASSED

Measured at 11/4/2022 4:08:19 PM

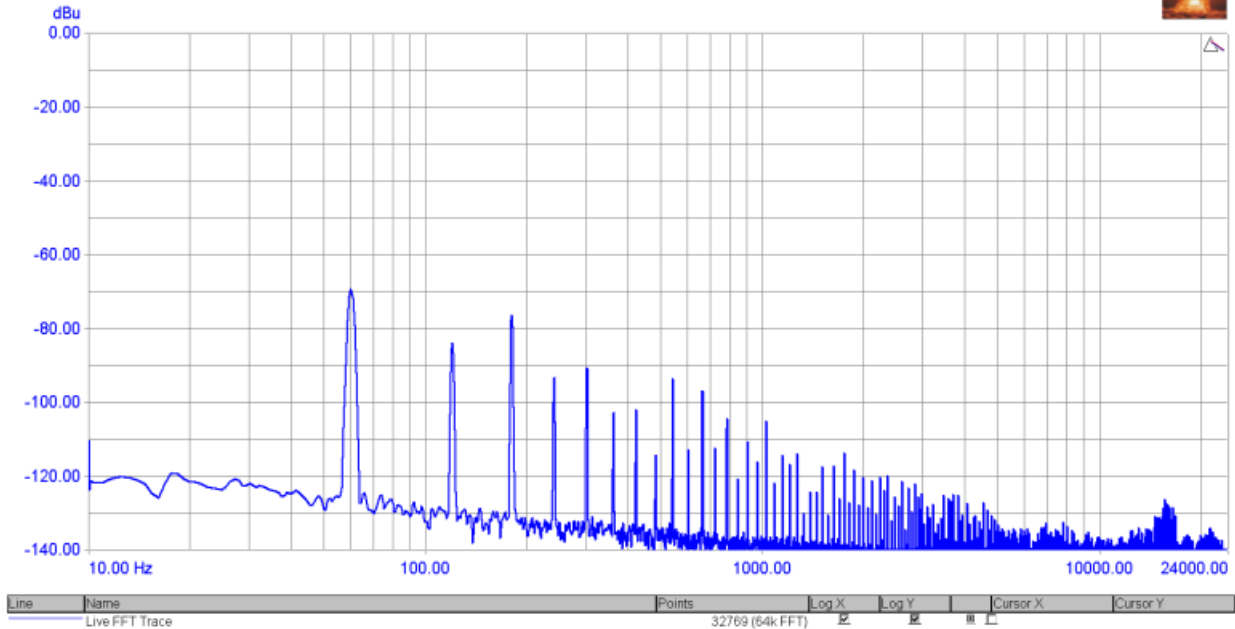
Generator Settings

Channel A:	Off
Channel B:	Off

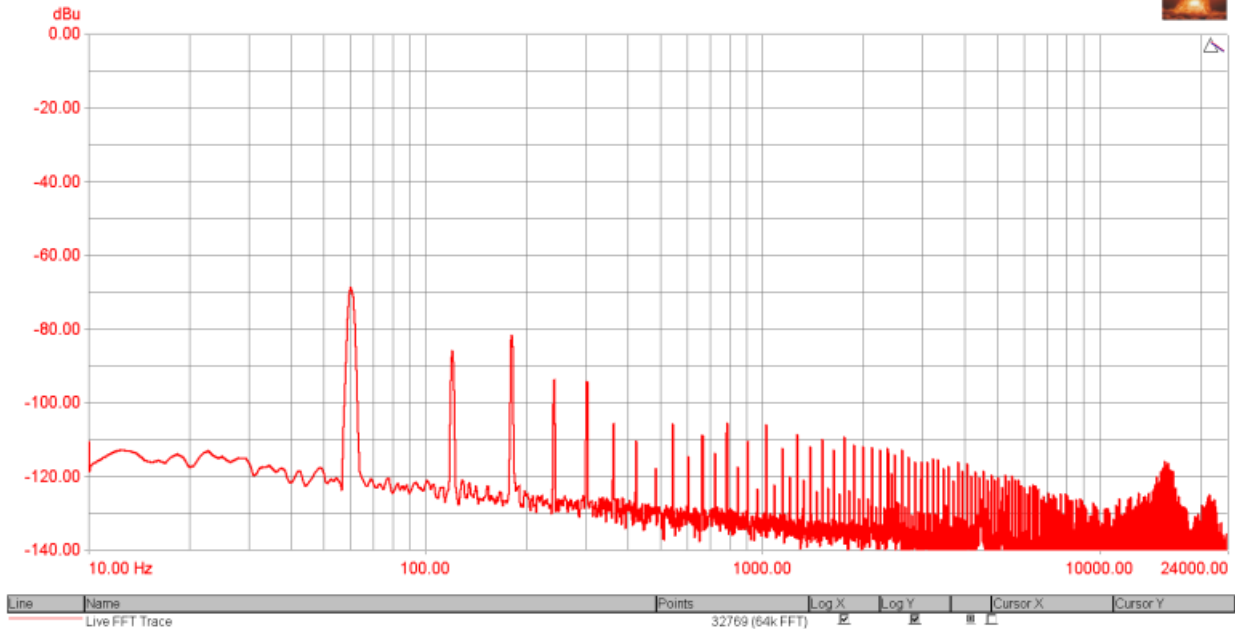
Signal Analyzer Readings

RMS amplitude (Channel A)	-65.621 dBu	Not limit checked.
RMS amplitude (Channel B)	-65.812 dBu	Not limit checked.

FFT residual noise



FFT residual noise



FFT Detector Readings

Noise (residual) (Channel A)	-94.071 dBu	< -80 dBu > -140 dBu
Noise (residual) (Channel B)	-92.221 dBu	< -80 dBu > -140 dBu

FFTD 1 Settings: 22 Hz - 22 kHz, unweighted with band-reject notch filters, fundamental to the 10th harmonic