KTE May spdif 44K SE 160 dBFS scale 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	√
A05 THD+N vs Freq	√
A06 THD+N vs Ampl	√
A07 Noise, DNR	√
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	√
A17 FFT -90 dBFS	OK
A18 FFT -90 dBFS 16 bit	OK
A19 FFT imaging	OK
A20 FFT inferred jitter	OK

KEY: √ = Test passes, X = Test fails, OK = Test has run but has no limit checking, (X) = Test has failed to run or has not completed,
[√] = Test passes but is not required, [X] = 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 2/7/2020 12:40:30 PM

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

Signal Analyzer Readings		
RMS amplitude (Channel A)	11.450 dBu	< 24 dBu > -20 dBu
RMS amplitude (Channel B)	11.472 dBu	< 24 dBu > -20 dBu
Inter-channel phase	0.05 °	< 10 ° > -10 °

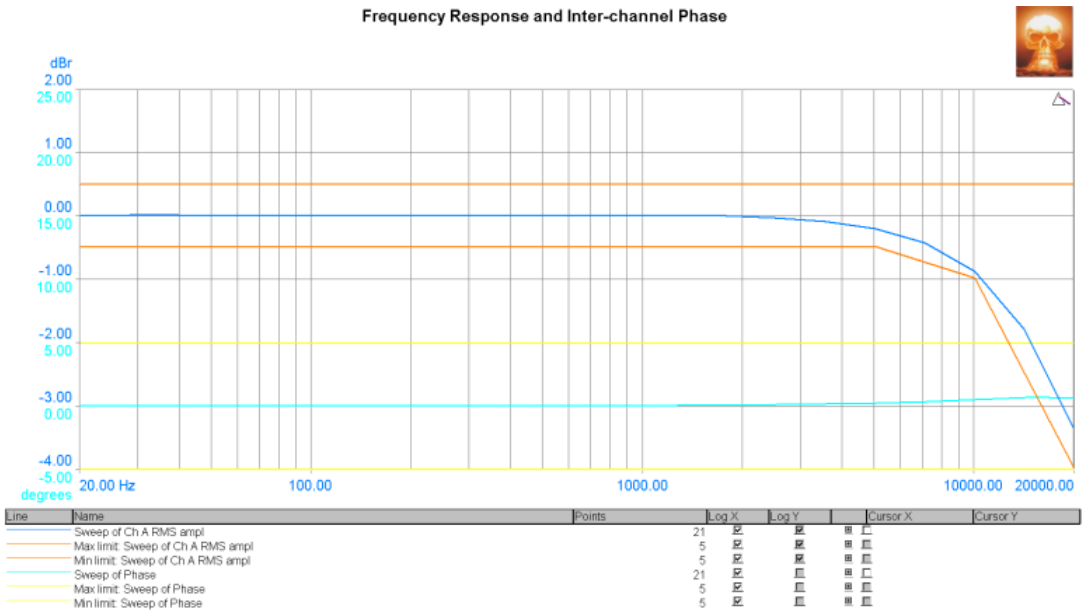
CTA Readings		
Gain (Channel A RMS)	-0.000 dB	< 20 dB > -40 dB
Gain (Channel B RMS)	0.022 dB	< 20 dB > -40 dB
Settings: Generator relative, 22 Hz - 22 kHz, unweighted RMS with 1/3rd octave band-pass filter at the generator frequency		

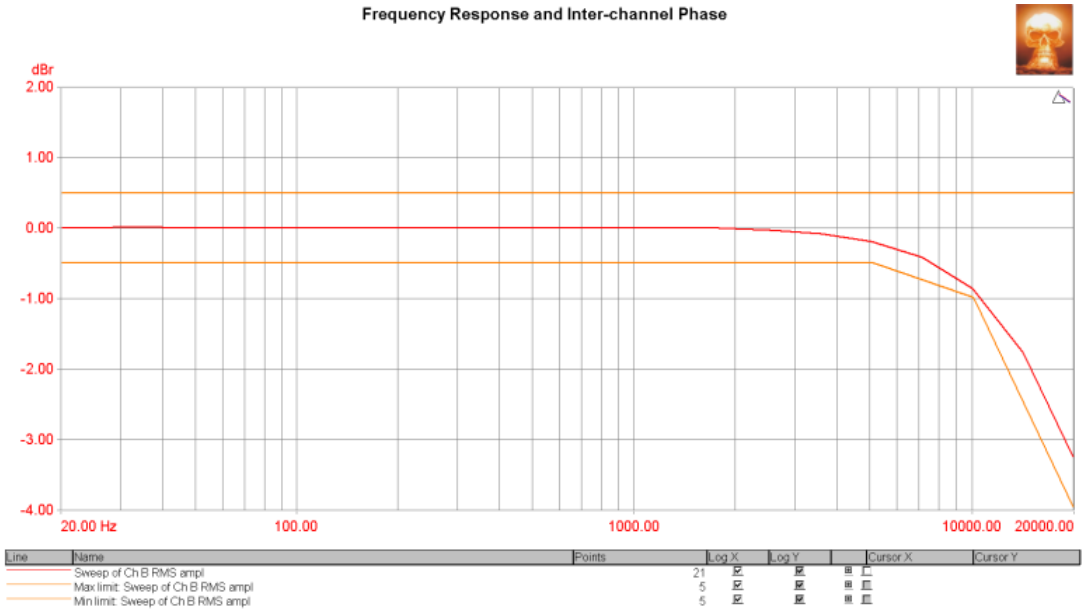
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A02 Ampl, Phase vs Freq: PASSED

Measured at 2/7/2020 12:40:32 PM

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



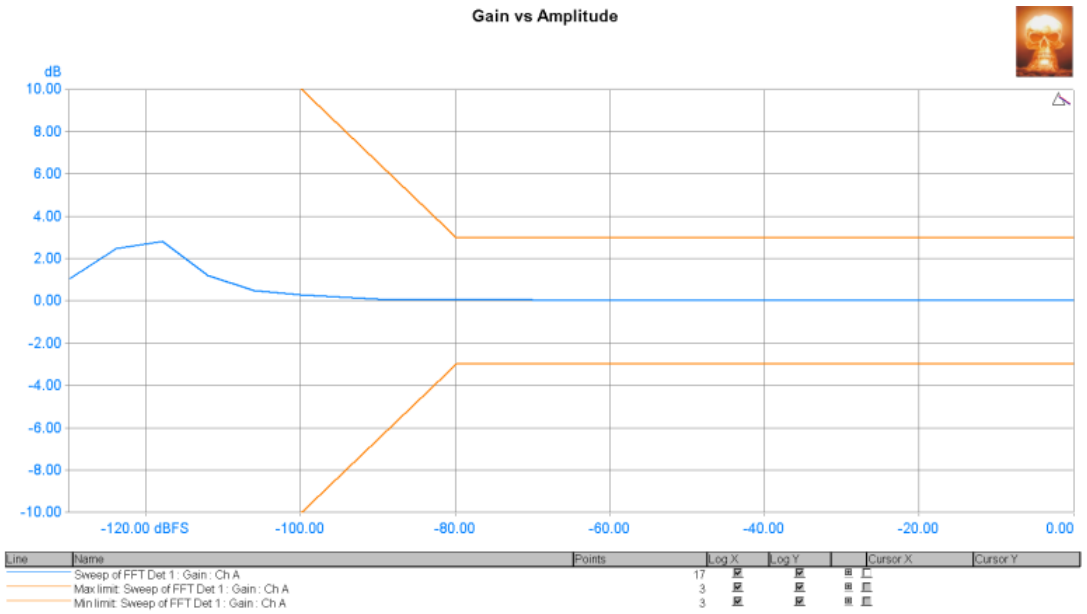


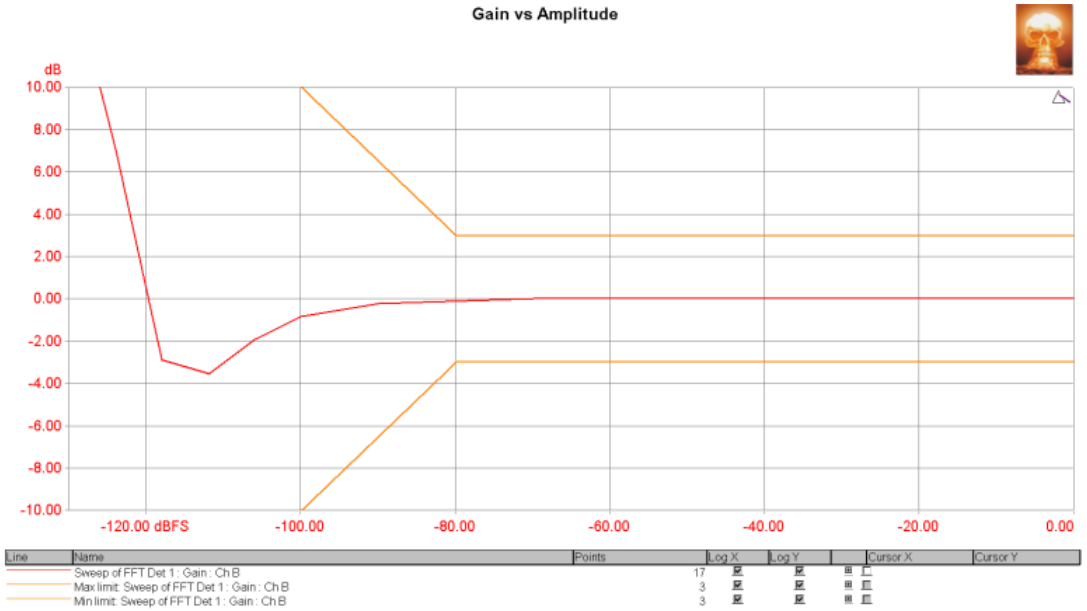
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A03 Gain vs Ampl: PASSED

Measured at 2/7/2020 12:40:40 PM

Generator Settings	
Channel A:	sine, -6 dBFS at 1000 Hz
Channel B:	sine, -6 dBFS at 1000 Hz





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A04 THD+N,THD, nth-HD: PASSED

Measured at 2/7/2020 12:41:41 PM

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

CTA Readings		
THD+N - relative (Channel A RMS)	0.00090 %	< 200 % > 0 %
THD+N - relative (Channel B RMS)	0.00085 %	< 200 % > 0 %
Settings: Self relative, 22 Hz - 20kHz AES17, unweighted RMS with 1/12th octave band-reject filter at the generator frequency		

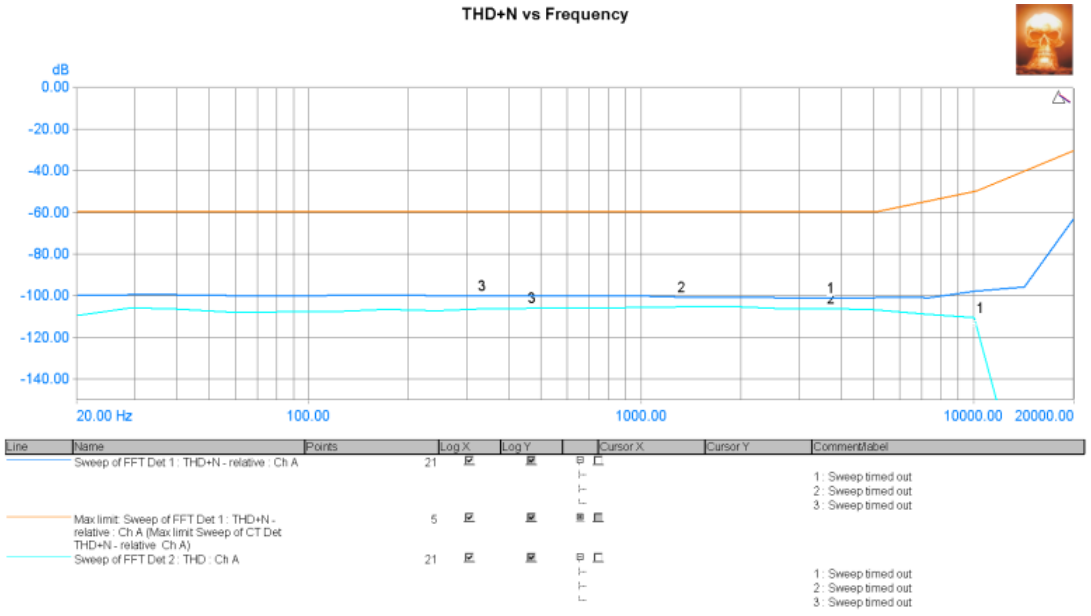
FFT Detector Readings		
THD (Channel A)	0.00073 %	< 200 % > 0 %
THD (Channel B)	0.00070 %	< 200 % > 0 %
FFTD 1 Settings: Self relative, 22 Hz - 20kHz AES17, unweighted with band-pass notch filters from the 2nd to 10th harmonics		
2nd Harmonic Distortion (Channel A)	0.00057 %	< 200 % > 0 %
2nd Harmonic Distortion (Channel B)	0.00058 %	< 200 % > 0 %
FFTD 2 Settings: Self relative, 22 Hz - 20kHz AES17, unweighted with band-pass notch filter at the 2nd harmonic		
3rd Harmonic Distortion (Channel A)	0.00011 %	< 200 % > 0 %
3rd Harmonic Distortion (Channel B)	0.00005 %	< 200 % > 0 %
FFTD 3 Settings: Self relative, 22 Hz - 20kHz AES17, unweighted with band-pass notch filter at the 3rd harmonic		
THD+N - relative (Channel A)	0.00076 %	< 200 % > 0 %
THD+N - relative (Channel B)	0.00072 %	< 200 % > 0 %
FFTD 4 Settings: Self relative, 22 Hz - 20kHz AES17, unweighted with window notch (14 bins) band-reject filter at the input frequency		

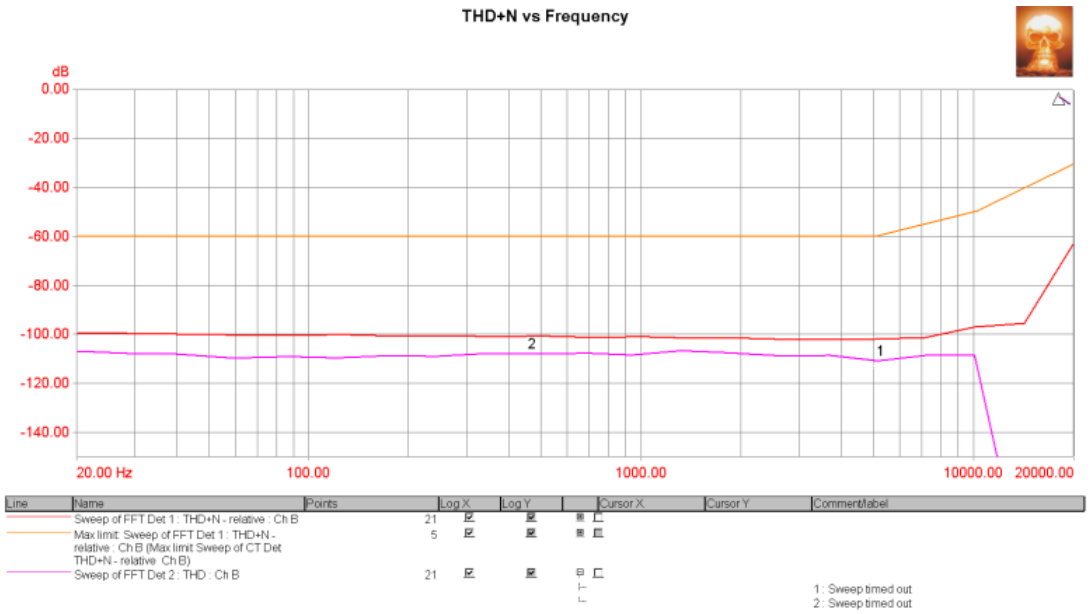
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A05 THD+N vs Freq: PASSED

Measured at 2/7/2020 12:41:53 PM

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



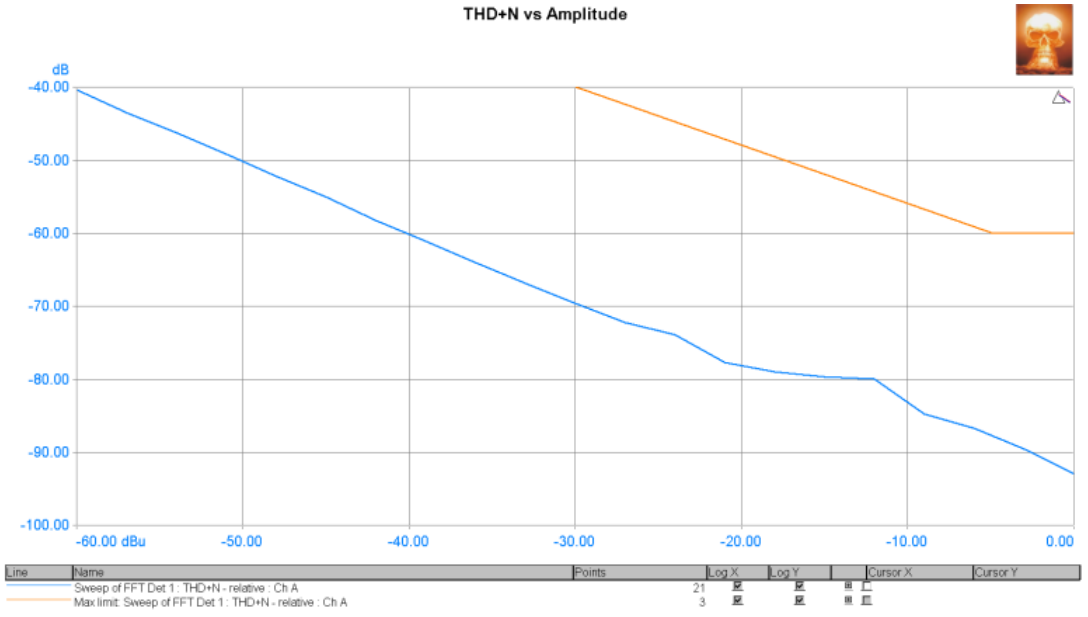


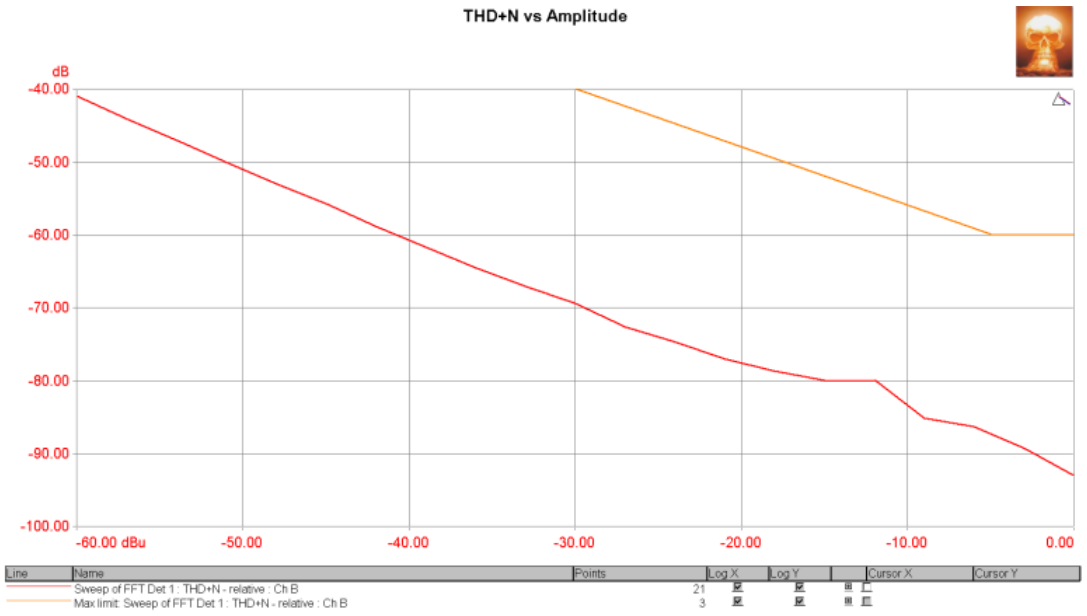
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A06 THD+N vs Ampl: PASSED

Measured at 2/7/2020 12:43:23 PM

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





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A07 Noise, DNR: PASSED

Measured at 2/7/2020 12:43:47 PM

Generator Settings	
Channel A:	sine, -60 dBFS at 1000.488 Hz
Channel B:	sine, -60 dBFS at 1000.488 Hz

FFT Detector Readings		
Noise (unweighted) (Channel A)	-110.359 dBr	Not limit checked.
Noise (unweighted) (Channel B)	-109.620 dBr	Not limit checked.
FFTD 1 Settings: 22 Hz - 20kHz AES17, unweighted with window notch (14 bins) band-reject filter at the generator frequency		
Noise (unweighted) (Channel A)	-110.407 dBr	Not limit checked.
Noise (unweighted) (Channel B)	-109.695 dBr	Not limit checked.
FFTD 2 Settings: 22 Hz - 20kHz AES17, unweighted with 1/3rd octave band-reject filter at the generator frequency		
DAC DNR Residual Async	122.001 dB	< 150 dB > 60 dB
DAC DNR Residual Async	121.206 dB	< 150 dB > 60 dB
FFTD 3 Settings: User: DAC SNR Residual Async		

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A08 Crosstalk A to B: PASSED

Measured at 2/7/2020 12:44:03 PM

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

CTA Readings		
Cross-talk (Channel B RMS)	-119.627 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 2/7/2020 12:44:06 PM

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

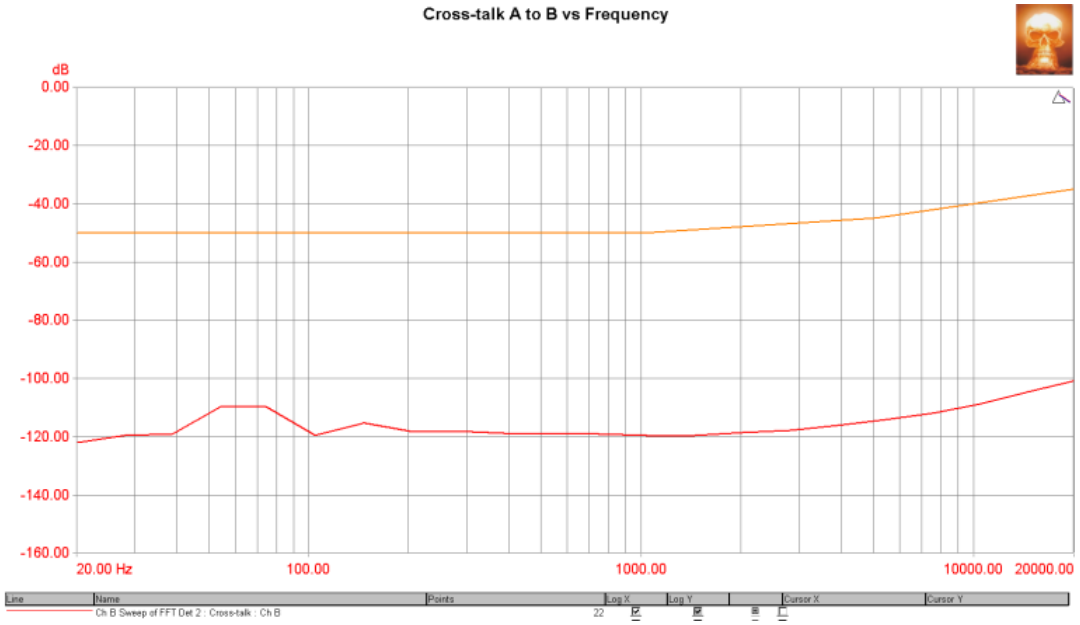
CTA Readings		
Cross-talk (Channel A RMS)	-118.720 dB	< -45 dB
Settings: Channel relative, 22 Hz - 22 kHz, unweighted RMS with 1/24th octave band-pass filter at the opposite channel generator frequency		

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A10 Crosstalk A to B vs Freq: PASSED

Measured at 2/7/2020 12:44:08 PM

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

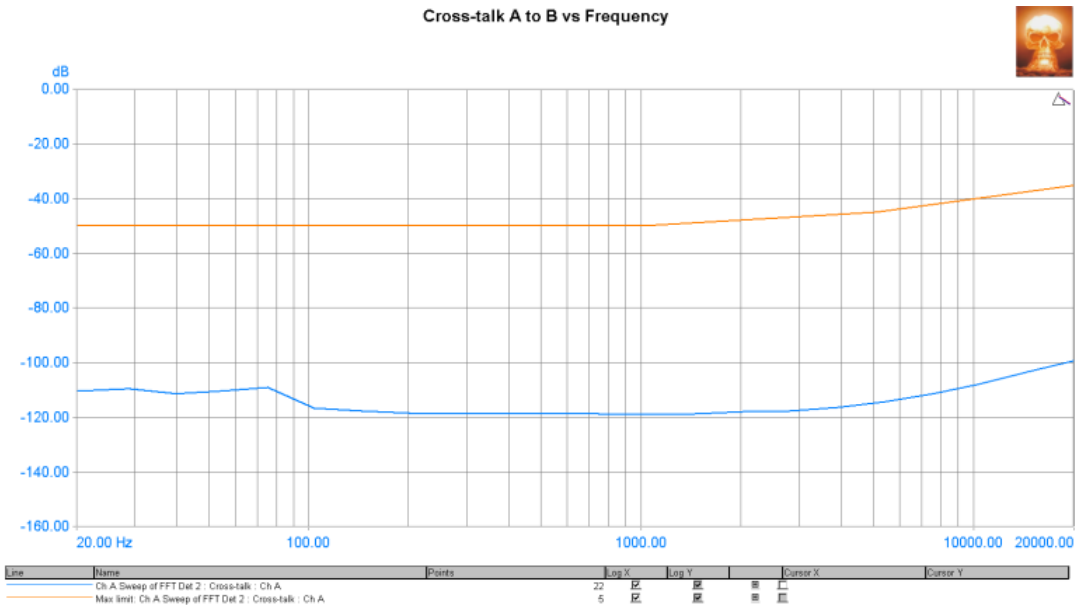


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A11 Crosstalk B to A vs Freq: PASSED

Measured at 2/7/2020 12:45:01 PM

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



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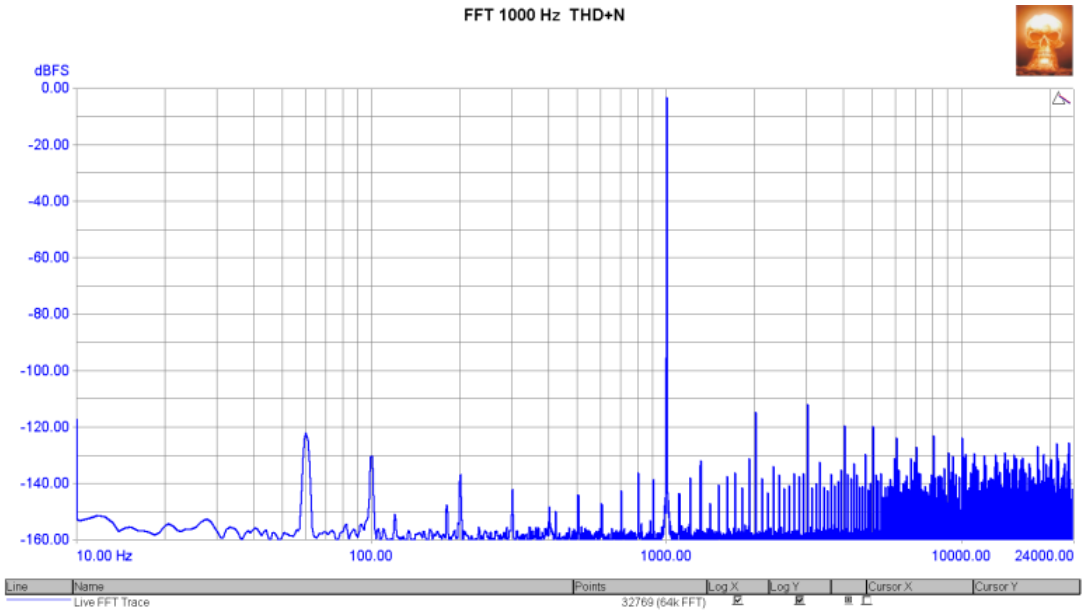
A12 FFT 1000 Hz THD+N: PASSED

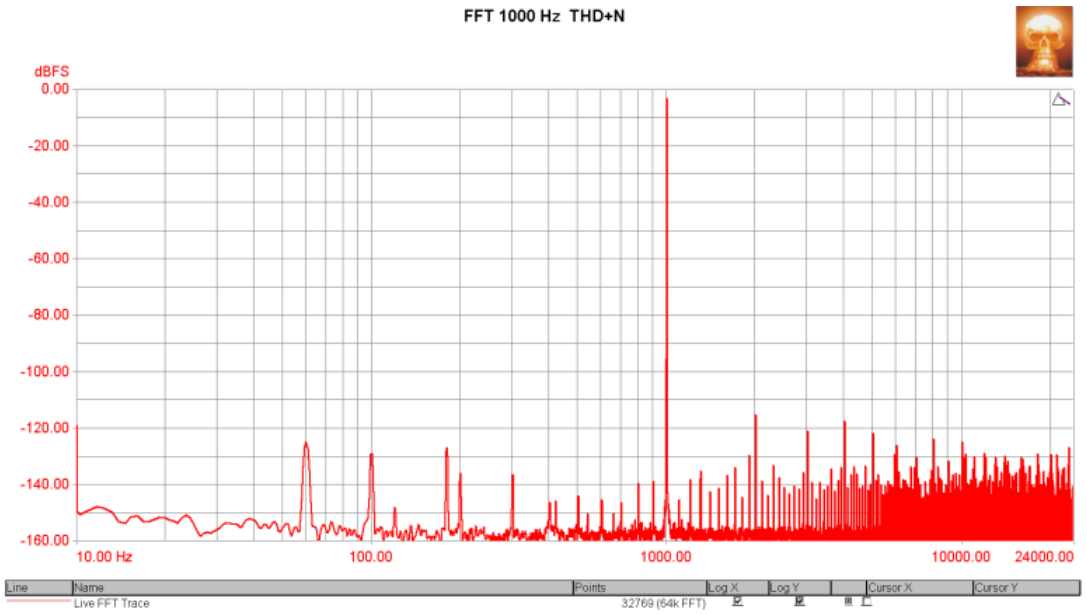
Measured at 2/7/2020 12:45:54 PM

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

Signal Analyzer Readings		
RMS amplitude (Selected : Ch A)	8.450 dBu	Not limit checked.
RMS amplitude (Non-selected : Ch A)	8.473 dBu	Not limit checked.

CTA Readings		
THD+N - relative (Selected : Ch A RMS)	0.00090 %	< 0.075 % > 0.00000001 %
THD+N - relative (Non-selected : Ch A RMS)	0.00080 %	< 0.075 % > 0.00000001 %
Settings: Self relative, 22 Hz - 20kHz AES17, unweighted RMS with 1/3rd octave band-reject filter at the input frequency		





FFT Detector Readings		
THD+N - relative (Channel A)	0.00063 %	Not limit checked.
THD+N - relative (Channel B)	0.00053 %	Not limit checked.
FFTD 1 Settings: Self relative, 22 Hz - 20kHz AES17, unweighted with window notch (14 bins) band-reject filter at the input frequency		

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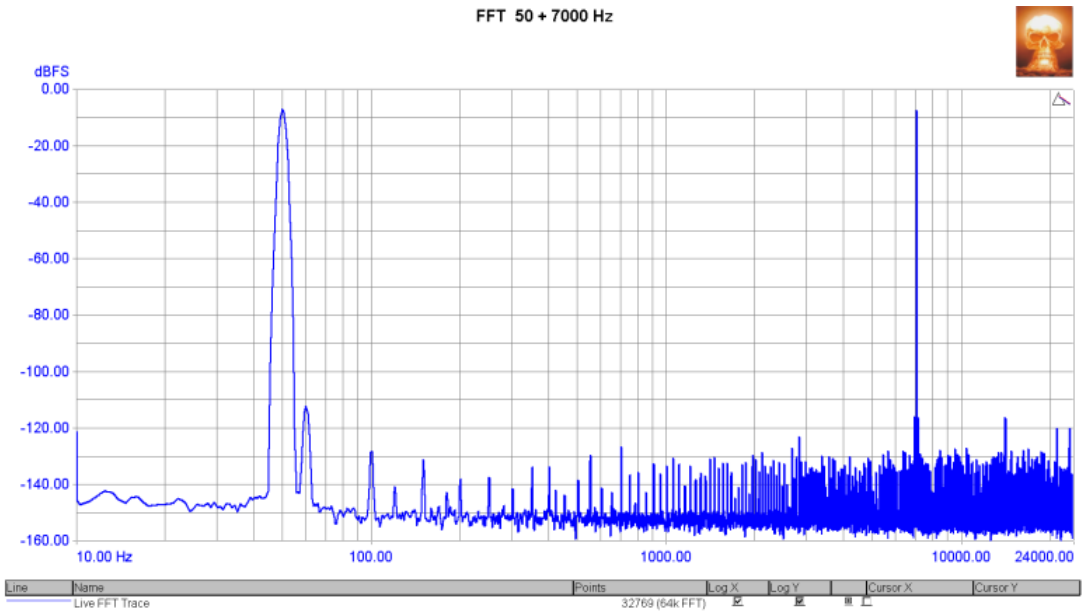
A13 FFT 50+7000Hz: PASSED

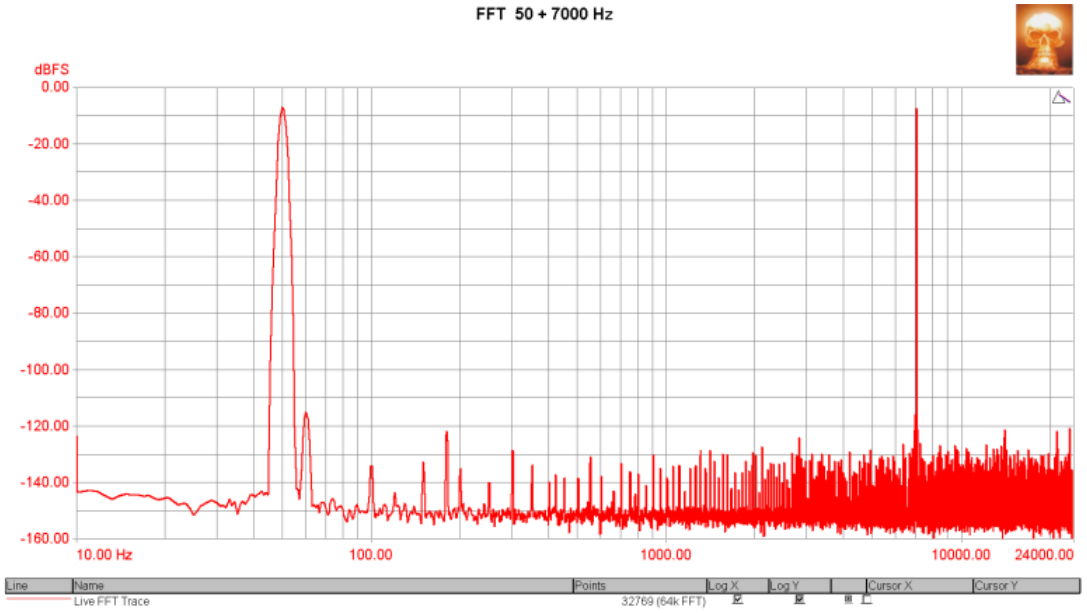
Measured at 2/7/2020 12:47:15 PM

Generator Settings	
Channel A:	Twin-tone, -7 dBFS at 50 Hz and 1 amplitude ratio at 7000Hz
Channel B:	Twin-tone, -7 dBFS at 50 Hz and 1 amplitude ratio at 7000Hz

Signal Analyzer Readings		
RMS amplitude (Channel A)	7.257 dBu	Not limit checked.
RMS amplitude (Channel B)	7.284 dBu	Not limit checked.

CTA Readings		
IMD SMPTE-DIN (Channel A RMS)	0.00044 %	< 0.05 % > 0 %
IMD SMPTE-DIN (Channel B RMS)	0.00038 %	< 0.05 % > 0 %
Settings: Self relative, 22 Hz - 22 kHz, unweighted RMS using SMPTE-DIN IMD demodulation.		





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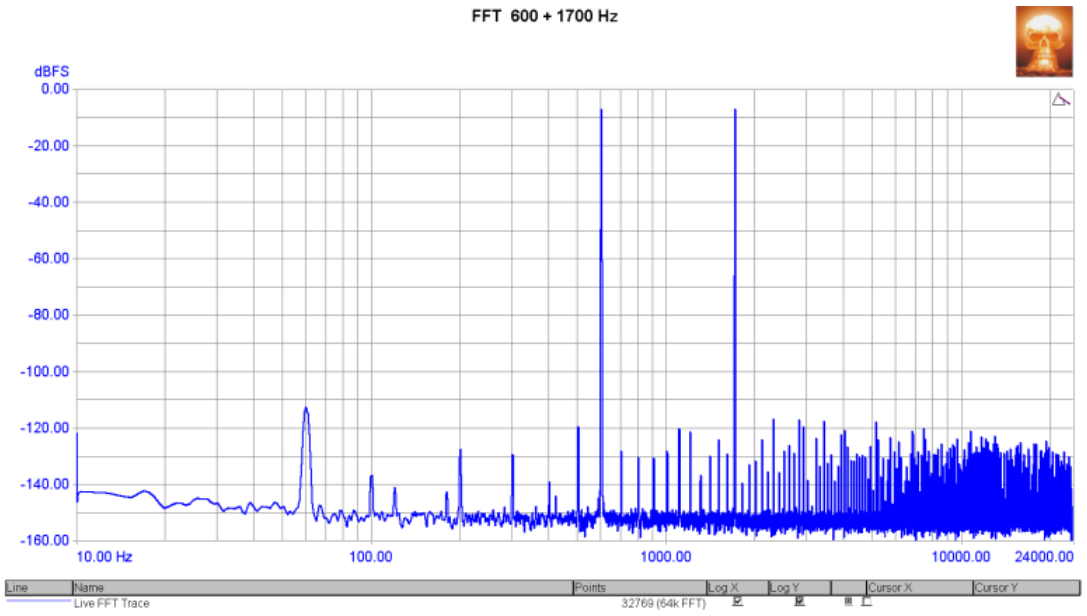
A14 FFT 600+1700 Hz: PASSED

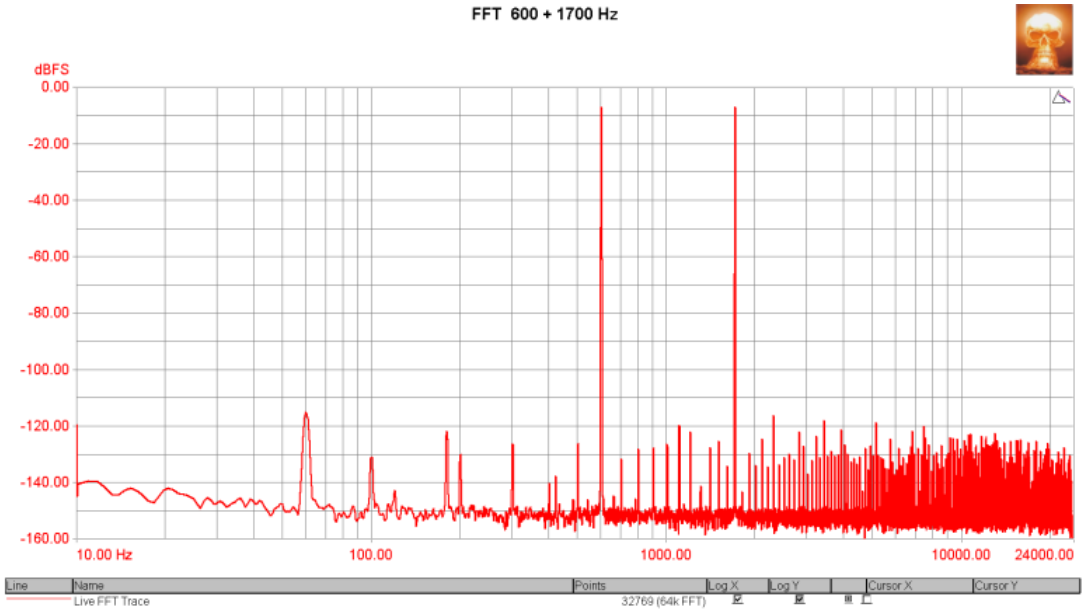
Measured at 2/7/2020 12:47:38 PM

Generator Settings	
Channel A:	Twin-tone, -7 dBFS at 600 Hz and 1 amplitude ratio at 1700Hz
Channel B:	Twin-tone, -7 dBFS at 600 Hz and 1 amplitude ratio at 1700Hz

Signal Analyzer Readings		
RMS amplitude (Channel A)	7.443 dBu	Not limit checked.
RMS amplitude (Channel B)	7.467 dBu	Not limit checked.

CTA Readings		
IMD SMPTE-DIN (Channel A RMS)	0.01274 %	< 0.02 % > 0 %
IMD SMPTE-DIN (Channel B RMS)	0.01275 %	< 0.02 % > 0 %
Settings: Self relative, 22 Hz - 22 kHz, unweighted RMS using SMPTE-DIN IMD demodulation.		





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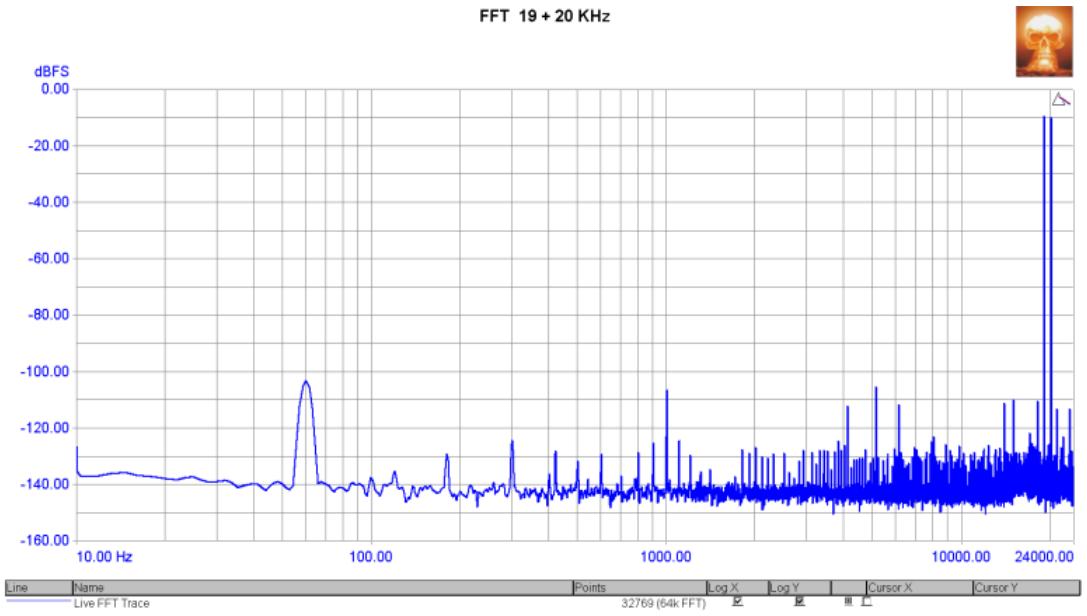
A15 FFT 19+20 KHz: PASSED

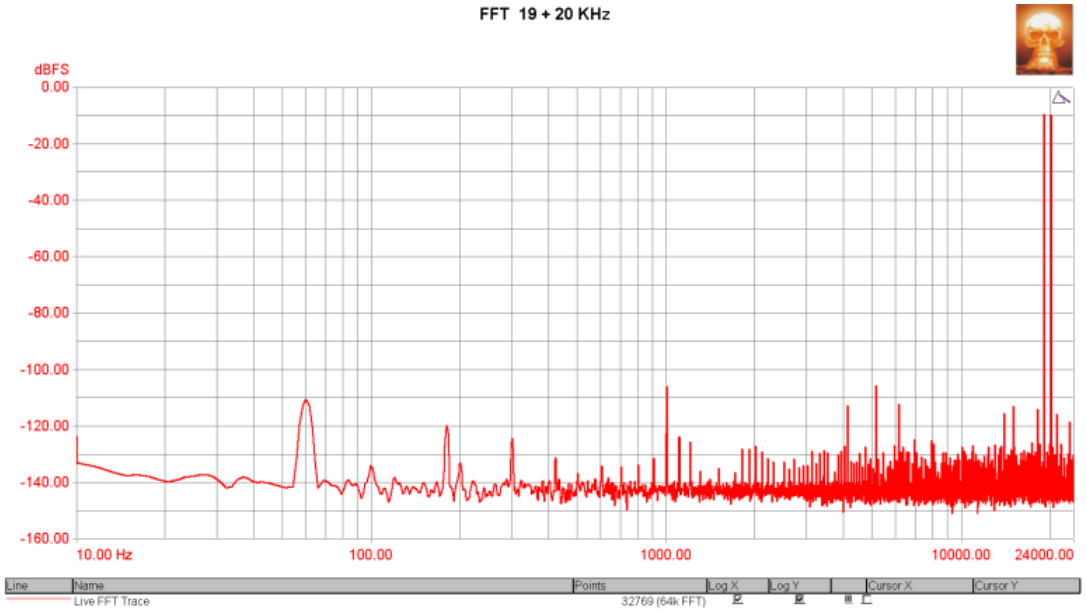
Measured at 2/7/2020 12:48:00 PM

Generator Settings	
Channel A:	Twin-tone, -6.03 dBFS at 19000 Hz and 0 dB offset at 1000 Hz offset
Channel B:	Twin-tone, -6.03 dBFS at 19000 Hz and 0 dB offset at 1000 Hz offset

Signal Analyzer Readings		
RMS amplitude (Channel A)	6.869 dBu	Not limit checked.
RMS amplitude (Channel B)	6.924 dBu	Not limit checked.

CTA Readings		
IMD CCIF (Channel A RMS)	0.00084 %	< 0.1 %
IMD CCIF (Channel B RMS)	0.00090 %	< 0.1 %
Settings: Self relative, 22 Hz - 22 kHz, unweighted RMS with 1/24th octave band-pass filter at the intermodulation difference frequency		





FFT Detector Readings		
IMD CCIF (Channel A)	0.00080 %	< 0.1 %
IMD CCIF (Channel B)	0.00083 %	< 0.1 %

FFTD 1 Settings: Self relative, 22 Hz - 22 kHz, unweighted with window notch (14 bins) band-pass filter at the intermodulation difference frequency

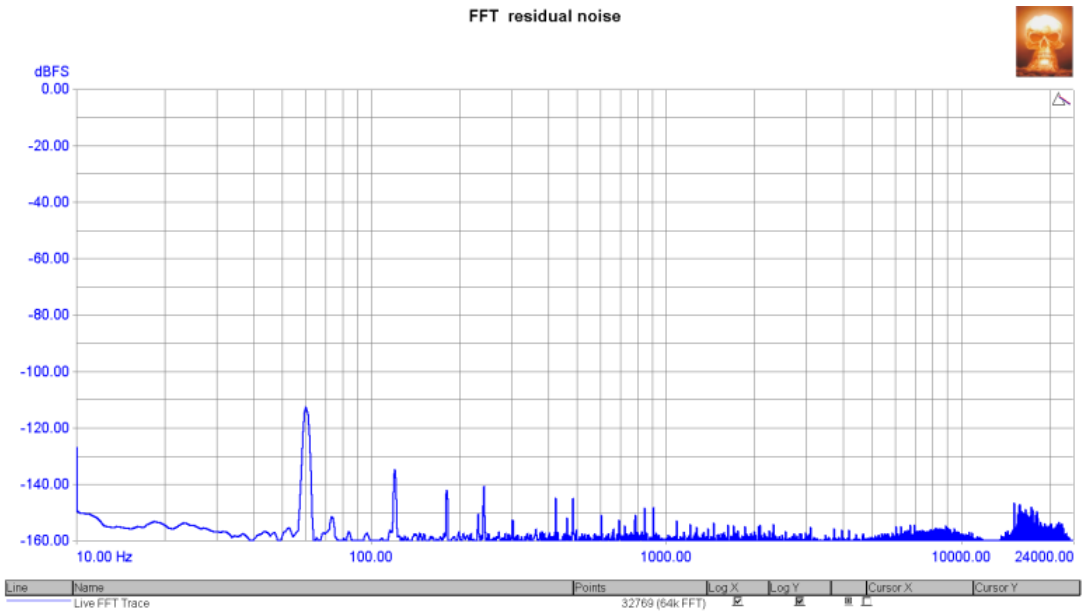
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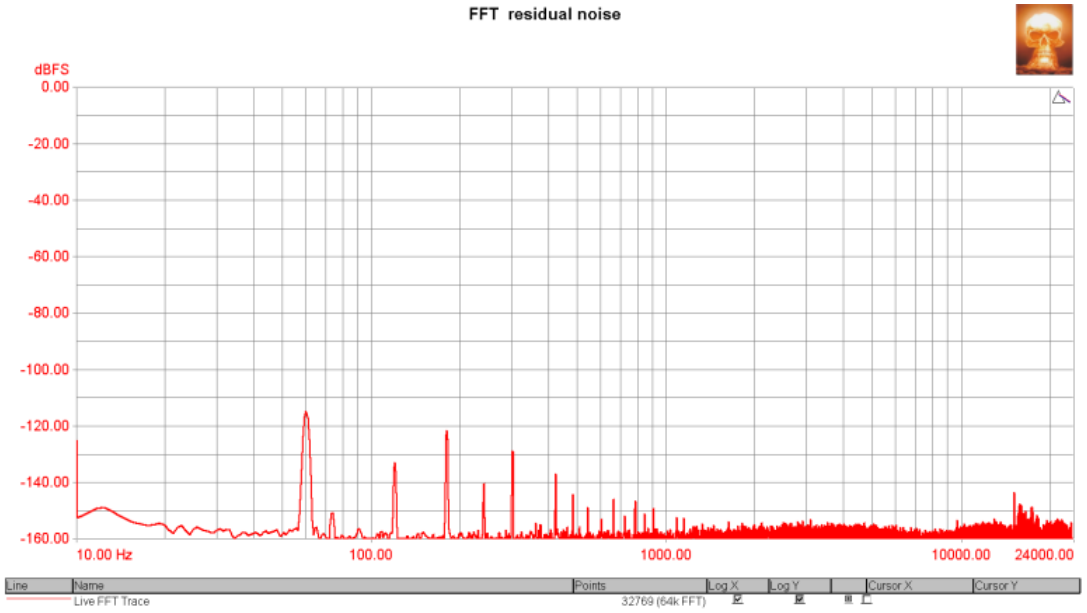
A16 FFT residual noise: PASSED

Measured at 2/7/2020 12:48:21 PM

Generator Settings	
Channel A:	Off
Channel B:	Off

Signal Analyzer Readings		
RMS amplitude (Channel A)	-100.523 dBu	Not limit checked.
RMS amplitude (Channel B)	-100.360 dBu	Not limit checked.





FFT Detector Readings		
Noise (residual) (Channel A)	-111.928 dBFS	< -60 dBFS > -150 dBFS
Noise (residual) (Channel B)	-112.496 dBFS	< -60 dBFS > -150 dBFS
FFTD 1 Settings: 22 Hz - 22 kHz, unweighted with band-reject notch filters, fundamental to the 10th harmonic		

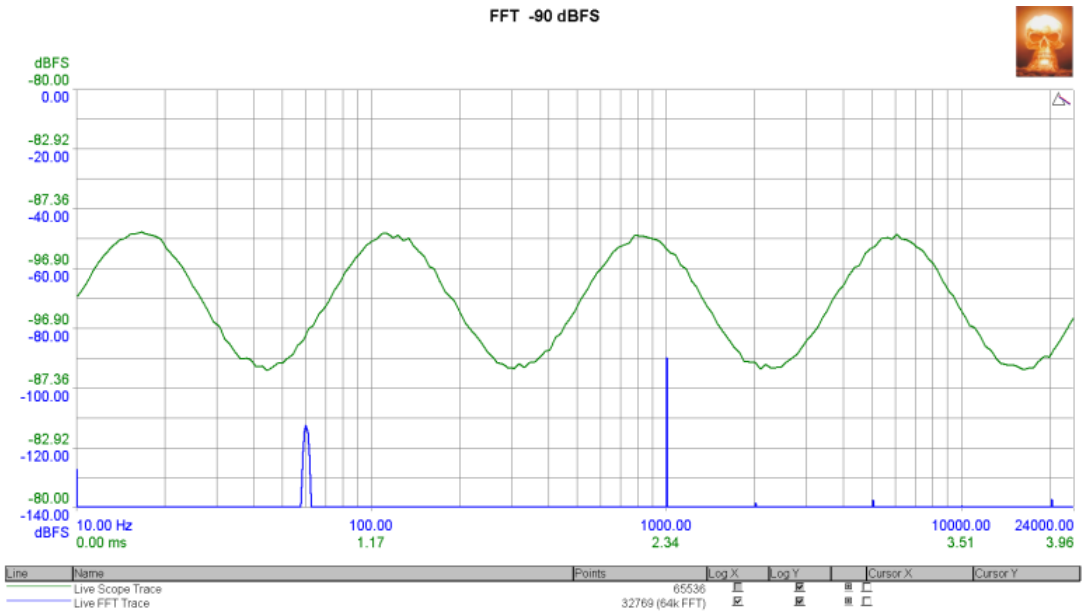
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A17 FFT -90 dBFS: Not limit checked.

Measured at 2/7/2020 12:48:44 PM

Generator Settings	
Channel A:	sine, -90 dBFS at 1000 Hz
Channel B:	sine, -90 dBFS at 1000 Hz

Signal Analyzer Readings		
RMS amplitude (Selected : Ch A)	-78.462 dBu	Not limit checked.



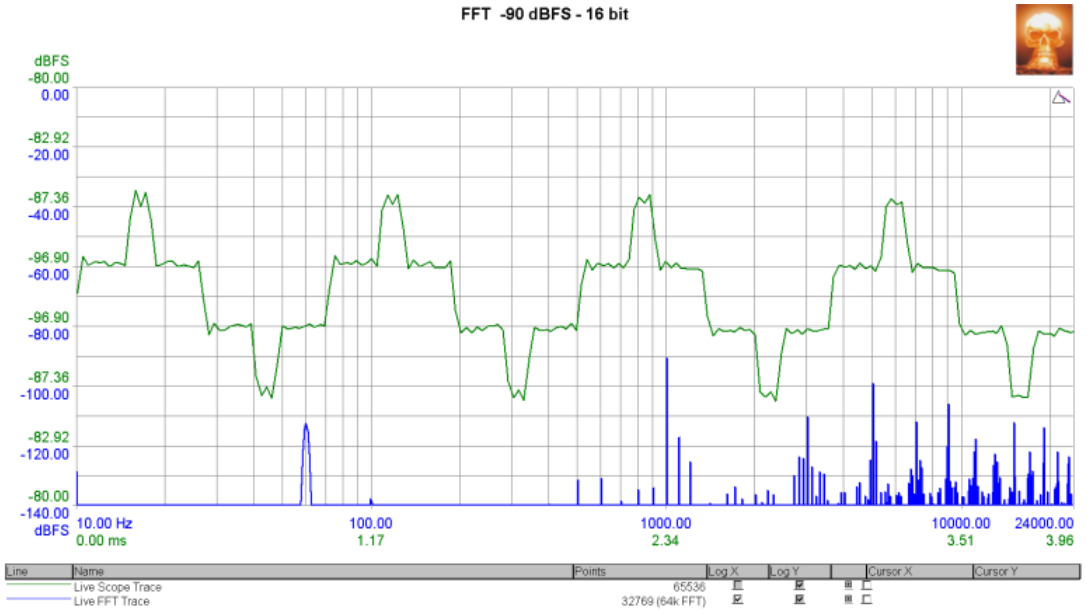
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A18 FFT -90 dBFS 16 bit: Not limit checked.

Measured at 2/7/2020 12:48:57 PM

Generator Settings	
Channel A:	sine, -90 dBFS at 1000 Hz
Channel B:	sine, -90 dBFS at 1000 Hz

Signal Analyzer Readings		
RMS amplitude (Selected : Ch A)	-78.161 dBu	Not limit checked.

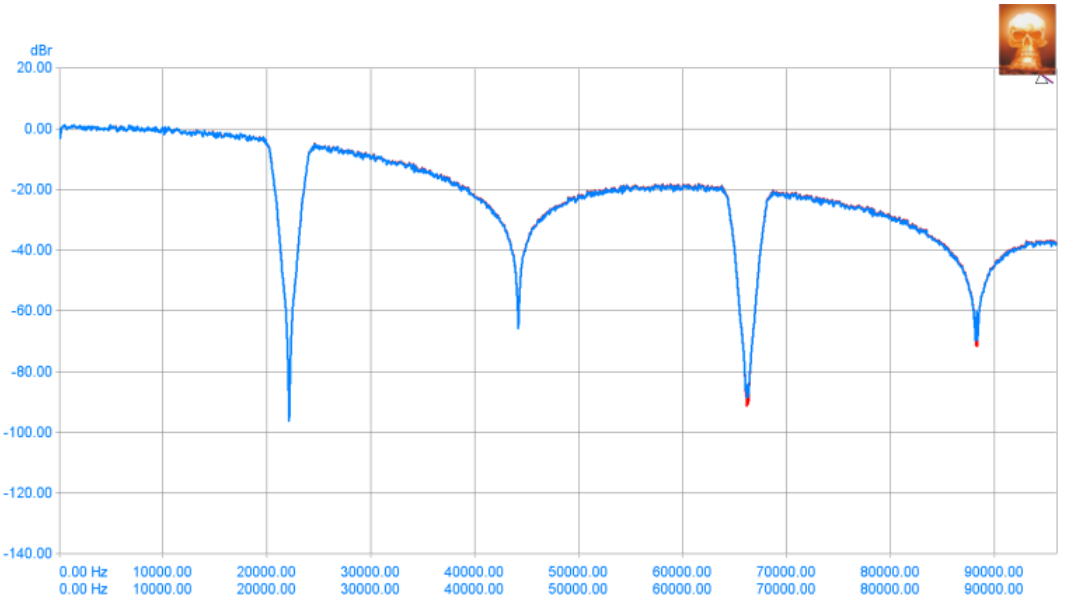


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A19 FFT imaging: Not limit checked.

Measured at 2/7/2020 12:49:11 PM

Generator Settings	
Channel A:	white noise, -6 dBFS
Channel B:	white noise, -6 dBFS (inverted)



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A20 FFT inferred jitter: Not limit checked.

Measured at 2/7/2020 12:49:33 PM

Generator Settings	
Channel A:	sine, -6 dBFS at 11025 Hz
Channel B:	sine, -6 dBFS at 11025 Hz (inverted)

