Schiit Amp APx555 Standard Test Suite: Jotunheim

Notes:

This is a test of a representative sample. If you have measurements that differ significantly from these, first check your analyzer and setup carefully, and (ideally) see if you can replicate the results on another analyzer. If the odd results persist, contact info@schiit.com so we can have a look.

Summary

Multibit DAC Card

Level and Gain	PASSED
DC Level	PASSED
Signal Analyzer	PASSED
Frequency Response	PASSED
Signal to Noise Ratio	PASSED
THD+N	PASSED
IMD Level Sweep (CCIF)	PASSED
IMD Frequency Sweep (CCIF)	PASSED
Crosstalk, One Channel Undriven	PASSED
Bandpass Level Sweep	PASSED
Stepped Level Sweep	PASSED

Sequence Result:

Sequence Result: PASSED

APx Instrument

Instrument ID:	11571
Calibration Date:	5/8/2018
APx Version:	5.0.0.105.133644

Multibit DAC Card : Signal Path Setup

Output Connector:	ASIO
Output Sample Rate:	48.0000 kHz
Output EQ:	None
Input Connector:	Analog Balanced
Channels:	2
Termination:	200 kohm
High Performance Sine Analyzer:	Enabled
Input Bandwidth:	AC (<10 Hz) - 22.4k (48 kHz SR)
Device Delay:	0.000 s
Input EQ:	None

• References

dBr G:	-20.000 dBFS
Shared Frequency Reference:	1.00000 kHz
dBrA:	1.000 Vrms
dBrB:	1.000 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	0.000 dB
dBSPL1:	10.00 mVrms
dBSPL2:	10.00 mVrms
dBSPL1 Calibrator Level:	94.000 dBSPL
dBSPL2 Calibrator Level:	94.000 dBSPL
dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm

• DCX

DCX is not detected.

• Clocks

Output Rate:	Track Output SR
Sync Out Level:	3.300 V
Sync Out Polarity:	Normal
Timebase Reference:	Internal
Jitter:	Disabled

• Triggers

Source:	Off
Input Logic Level:	3.300 V

Edge: Rising

Multibit DAC Card : Level and Gain

Waveform: Sine

Generator Level: -20.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

RMS Level (5/21/2019 11:56:03.566 AM)

Ch1 570.8 mVrms

Ch2 571.0 mVrms

Multibit DAC Card : DC Level

Waveform: Sine

Generator Level: -∞ dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Delay Time: 100.0 ms

Acquisition Time: 333.0 ms

DC Level (5/21/2019 11:56:04.626 AM)

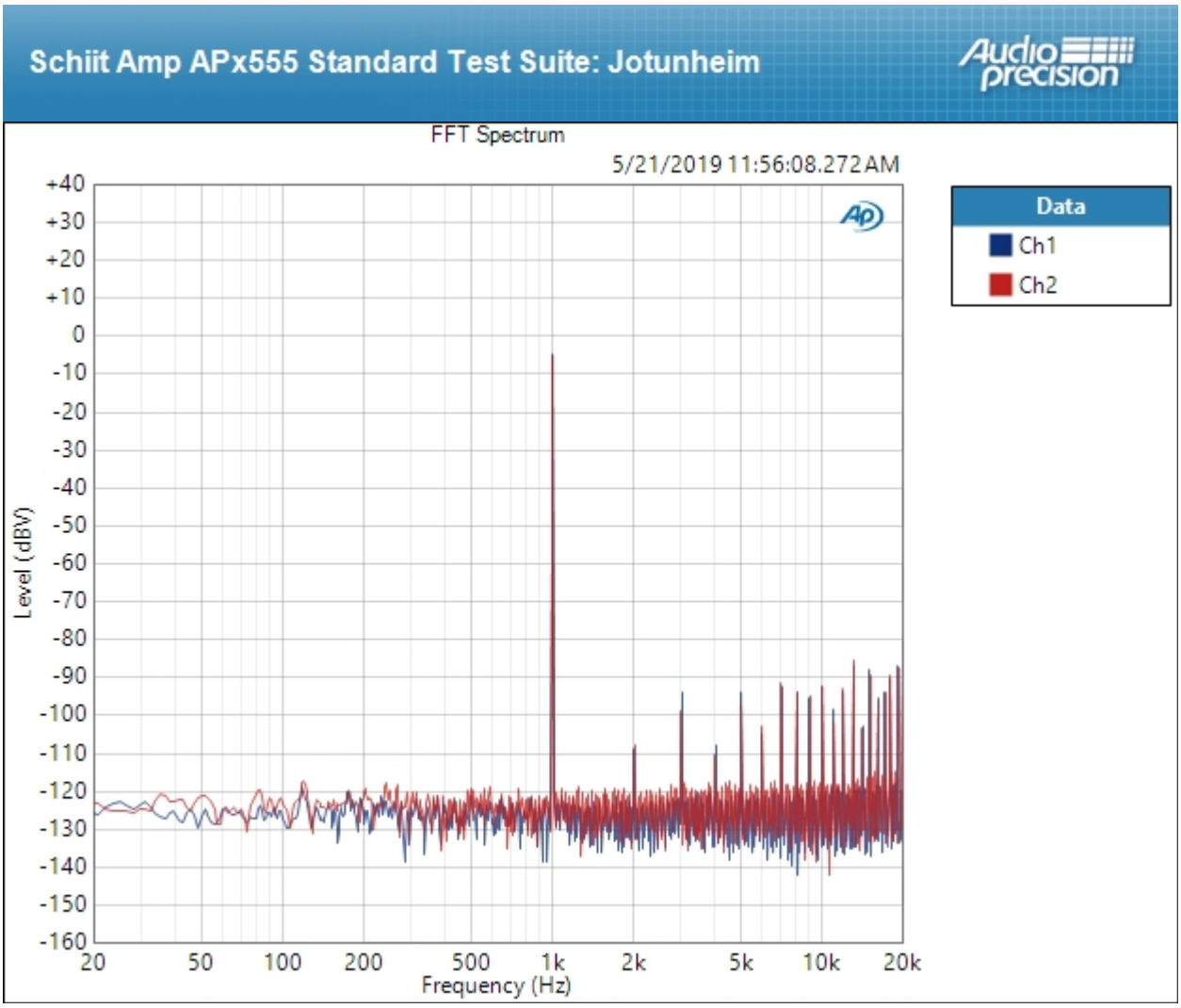
Ch1 6.219 mV

Ch2 1.910 mV

Multibit DAC Card : Signal Analyzer

Waveform:	Sine
Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Secondary Source:	None
Measured 1	5/21/2019 11:56:08 AM
Acquisition Type:	Auto
Trigger:	Free Run
Delay Time:	250.0 ms
Input Bandwidth:	Use Signal Path
FFT Length:	32K
Averaging:	Power
Averages:	3
Window:	AP-Equiripple
Record Acquisition:	False
Recording Type:	Multiple Mono PCM (.wav)

FFT Spectrum (5/21/2019 11:56:08.272 AM)

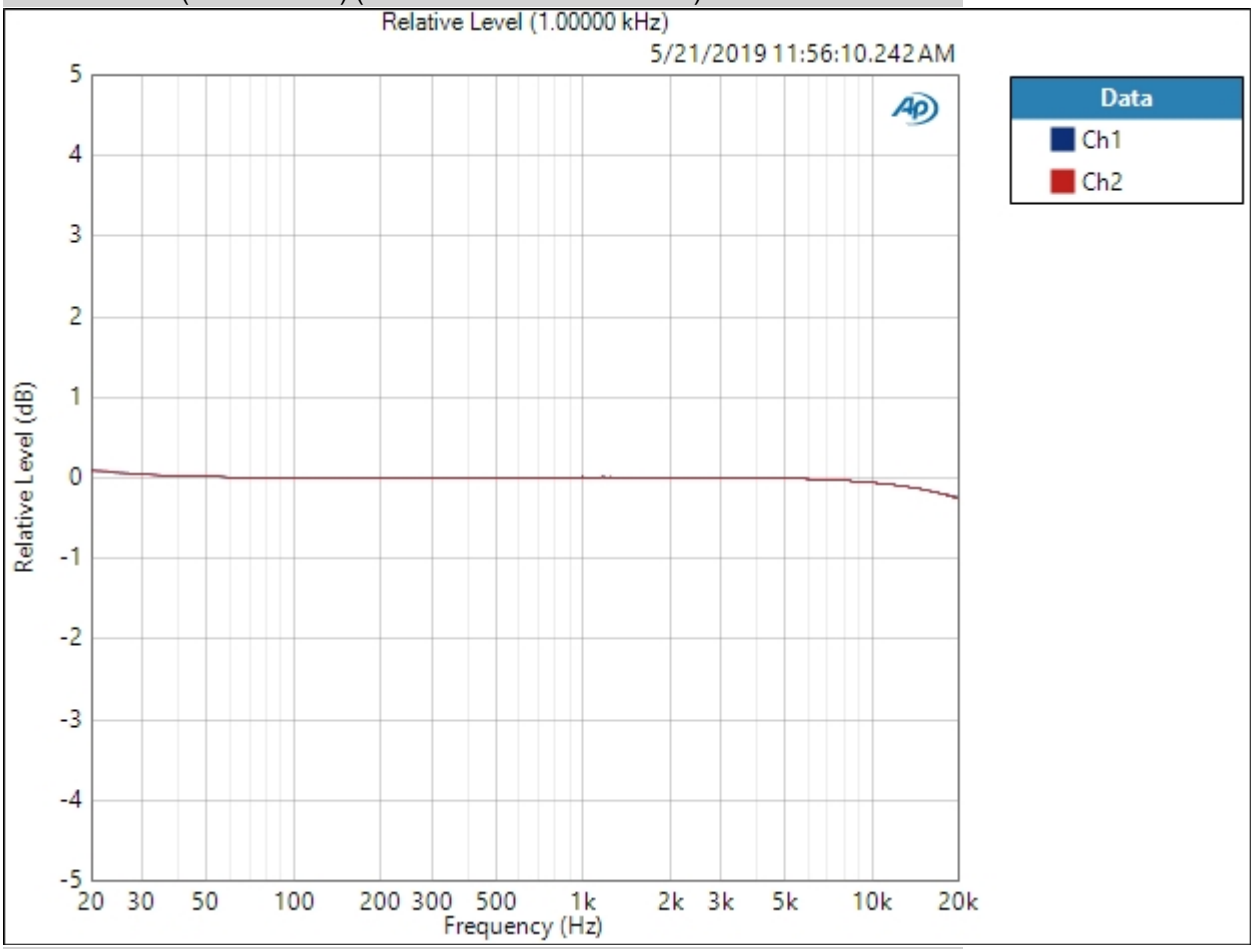


Result: PASSED

Multibit DAC Card : Frequency Response

Start Frequency:	20.0000 Hz
Stop Frequency:	20.0000 kHz
Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
EQ:	None
Pre-Sweep:	100.0 ms
Sweep:	350.0 ms
Extend Acquisition By:	50.00 ms
Secondary Source:	None
Measured 1	5/21/2019 11:56:10 AM

Relative Level (1.00000 kHz) (5/21/2019 11:56:10.242 AM)



Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference

Ref Frequency: 1.00000 kHz

Result: PASSED

Deviation (20.0000 Hz - 20.0000 kHz) (5/21/2019 11:56:10.242 AM)

Ch1 ±0.186 dB

Ch2 ±0.186 dB

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz

Max: 20.0000 kHz

Multibit DAC Card : Signal to Noise Ratio

Waveform:	Sine
Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Low-pass Filter:	20 kHz
Weighting Filter:	A-wt.
High-pass Filter:	20 Hz

Signal to Noise Ratio (5/21/2019 11:56:12.109 AM)

Ch1 85.953 dB

Ch2 84.959 dB

Multibit DAC Card : THD+N

Waveform:	Sine
Generator Level:	-3.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Low-pass Filter:	20 kHz
Weighting Filter:	Signal Path
High-pass Filter:	20 Hz
Notch Tuning Mode:	Measured Frequency

THD+N Ratio (5/21/2019 11:56:14.204 AM)

Ch1 0.003977 %

Ch2 0.004166 %

THD Ratio (5/21/2019 11:56:14.204 AM)

Ch1 0.003837 %

Ch2 0.003920 %

Noise Ratio (5/21/2019 11:56:14.204 AM)

Ch1 0.000999 %

Ch2 0.001401 %

Distortion Product Ratio (5/21/2019 11:56:14.204 AM)

Channel	F	H2	H3	H4	H5	H6	H7	H8	H9	H10
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch1	-0.00	-90.09	-109.70	-110.66	-112.33	-112.81	-111.14	-104.77	-104.72	-104.76
	1.000k	2.000k	3.000k	4.000k	5.000k	6.000k	7.000k	8.000k	9.000k	10.00k
Ch2	-0.00	-90.02	-104.73	-108.23	-115.93	-107.55	-113.41	-108.37	-104.94	-104.27

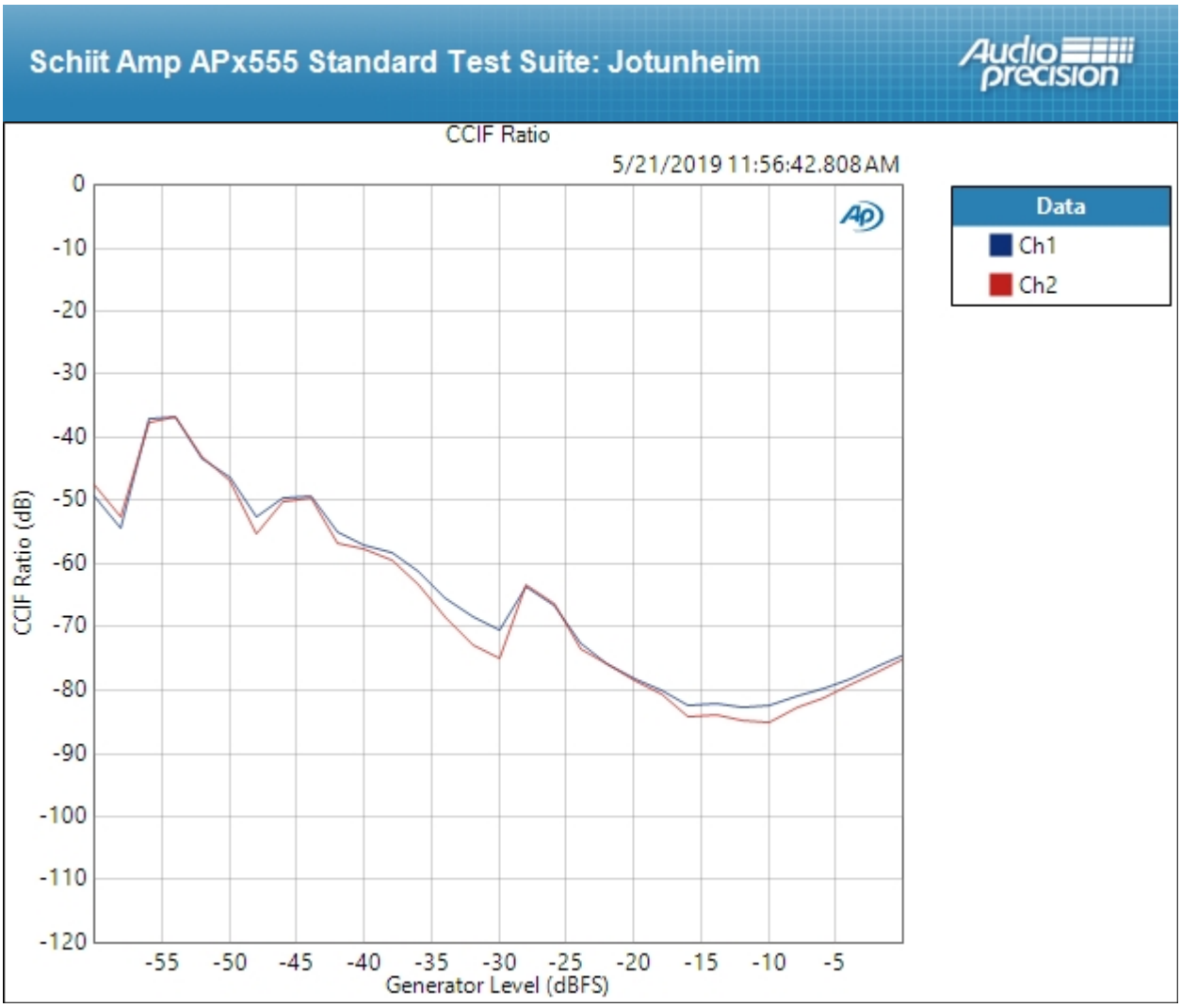
Distortion Product Ratio Parameters

Frequency Unit:	Hz
Ratio Unit:	dB

Multibit DAC Card : IMD Level Sweep (CCIF)

IMD Type:	CCIF
Waveform:	IMD
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
Mean Frequency:	12.5000 kHz
Diff Frequency:	80.0000 Hz
IMD Split:	False
Start Level:	-60.000 dBFS
Stop Level:	-0.000 dBFS
Step Type:	Linear
Number of Points:	31
Step Size:	+2.000 dBFS
Mode:	d2+d3
Measured 1	5/21/2019 11:56:42 AM

CCIF Ratio (5/21/2019 11:56:42.808 AM)

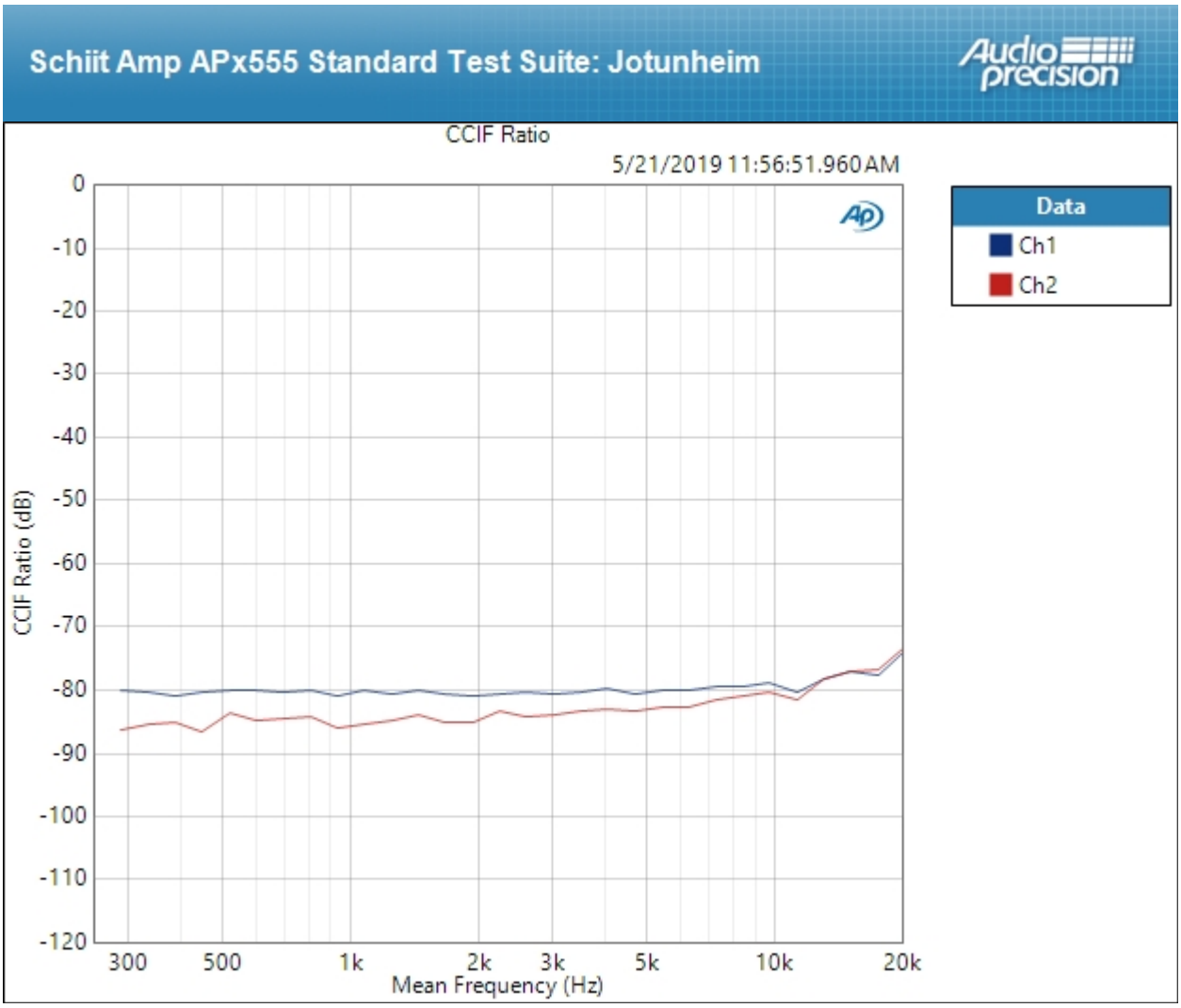


Result: PASSED

Multibit DAC Card : IMD Frequency Sweep (CCIF)

Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
Sweep Frequency:	Mean Frequency
Mean Frequency:	12.5000 kHz
Diff Frequency:	80.0000 Hz
IMD Split:	False
Start Frequency:	20.0000 kHz
Stop Frequency:	250.000 Hz
Step Type:	Logarithmic
Number of Points:	31
Mode:	d2+d3
Measured 1	5/21/2019 11:56:51 AM

CCIF Ratio (5/21/2019 11:56:51.960 AM)



Result: PASSED

Multibit DAC Card : Crosstalk, One Channel Undriven

Waveform:	Sine
Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
Frequency:	10.0000 kHz

Crosstalk (5/21/2019 11:56:56.824 AM)

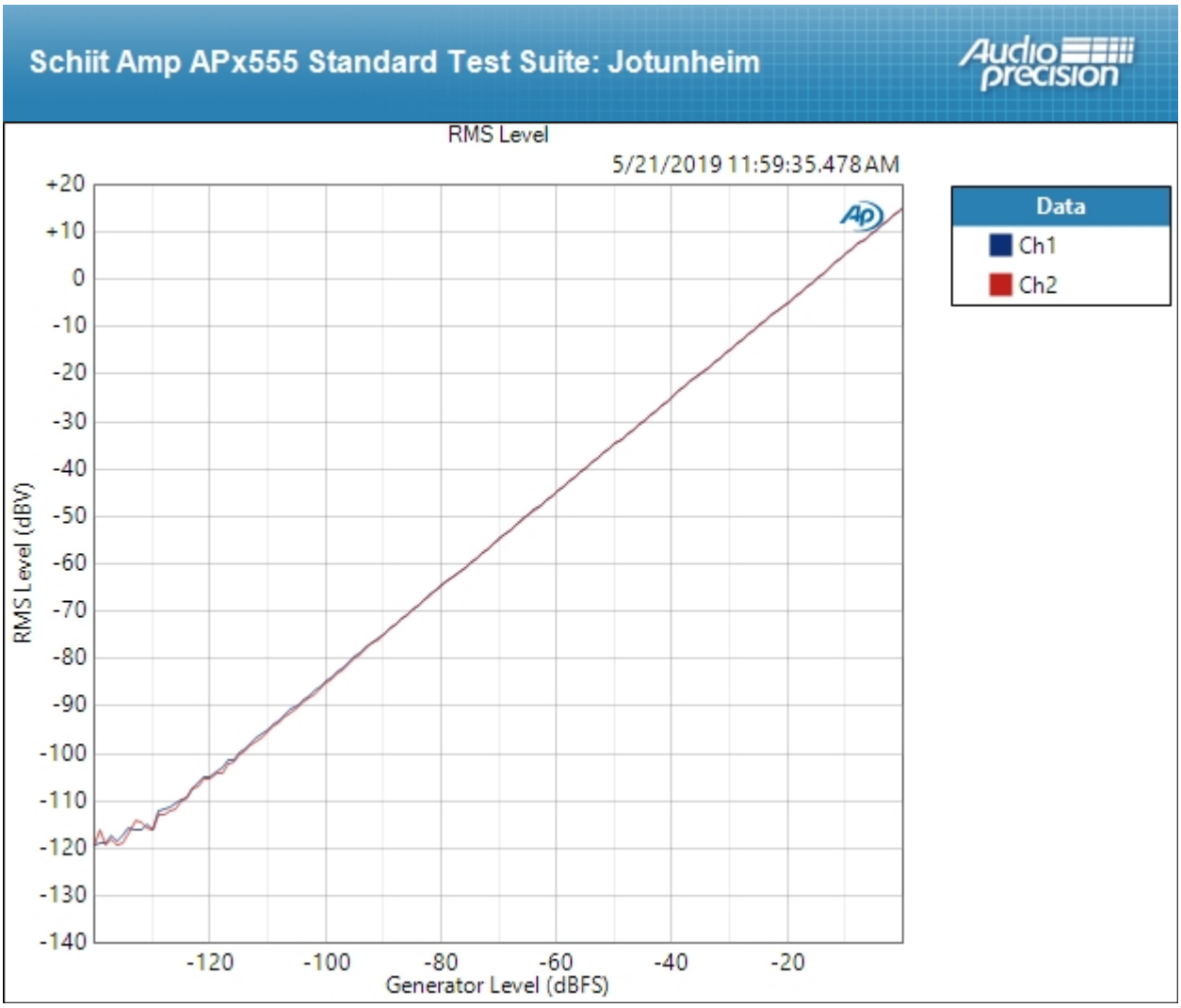
Ch1 -100.558 dB

Ch2 -101.314 dB

Multibit DAC Card : Bandpass Level Sweep

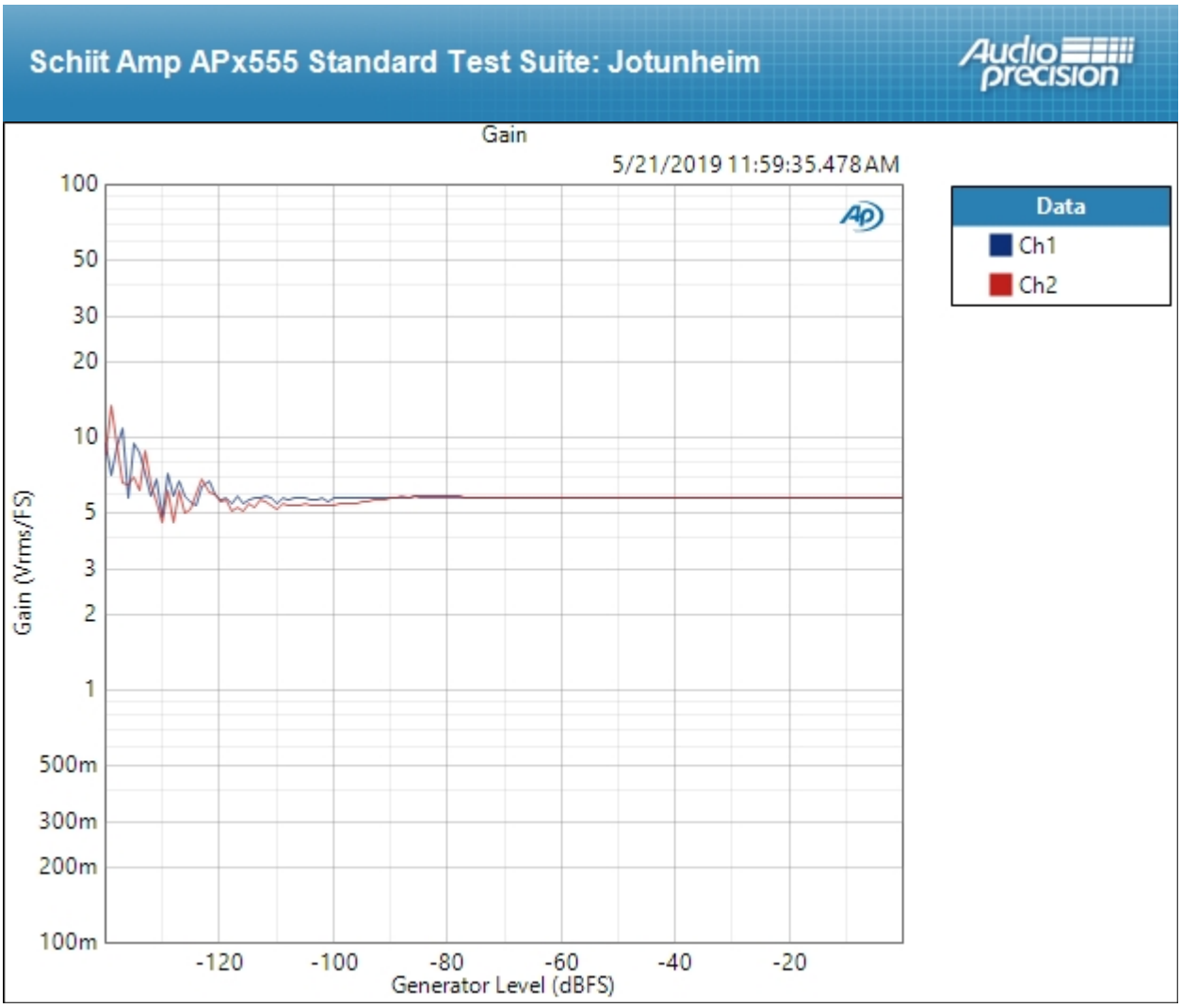
Waveform:	Sine
Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Start Level:	-140.000 dBFS
Stop Level:	-0.000 dBFS
Step Type:	Linear
Number of Points:	141
Step Size:	+1.000 dBFS
Offset:	0.000 D
Selectivity:	Window width
Bandpass Tuning Mode:	Generator Frequency
Measured 1	5/21/2019 11:59:35 AM

RMS Level (5/21/2019 11:59:35.478 AM)



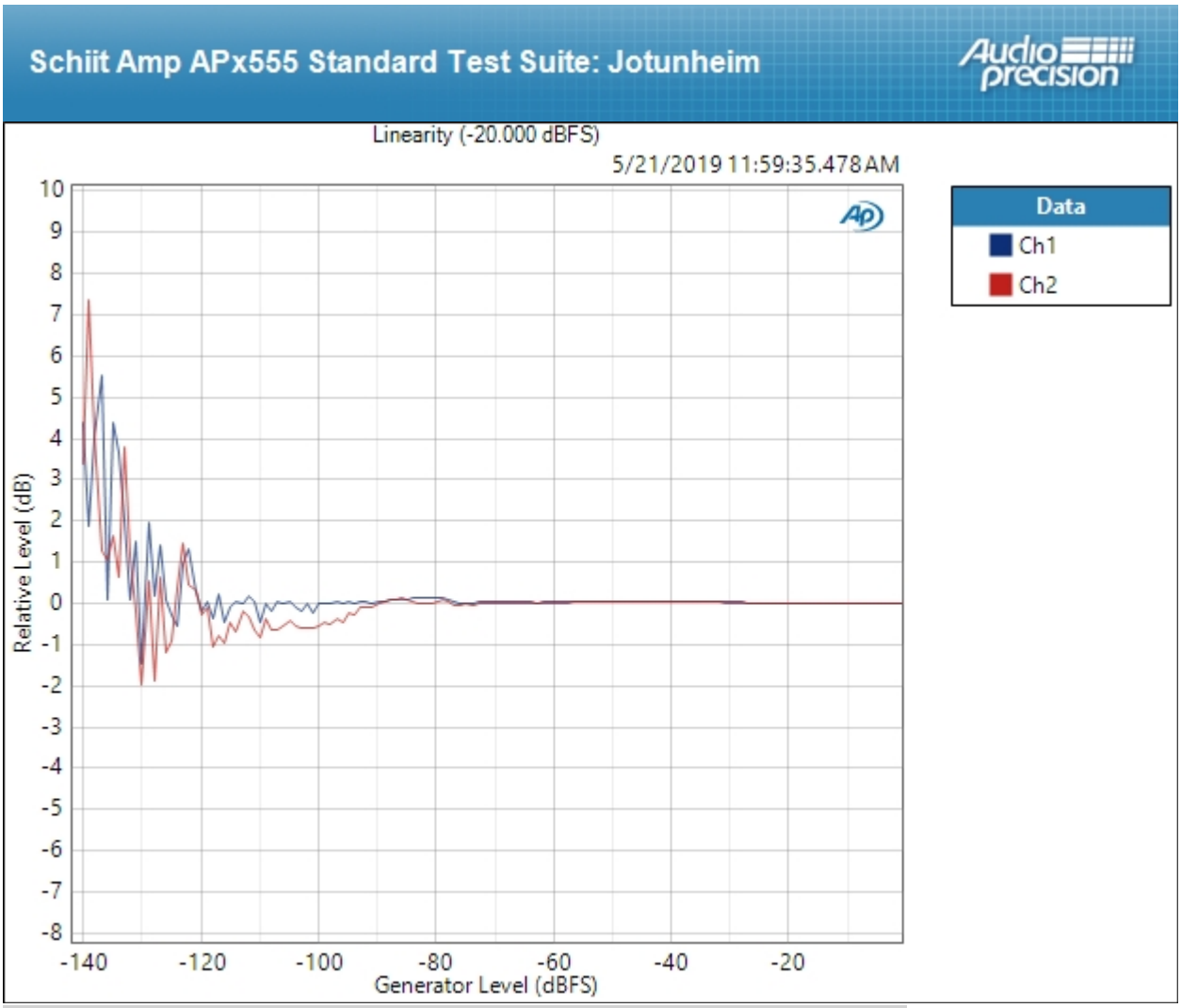
Result: PASSED

Gain (5/21/2019 11:59:35.478 AM)



Result: PASSED

Linearity (-20.000 dBFS) (5/21/2019 11:59:35.478 AM)



Linearity (-20.000 dBFS) Parameters

Mode: Normalized at Reference

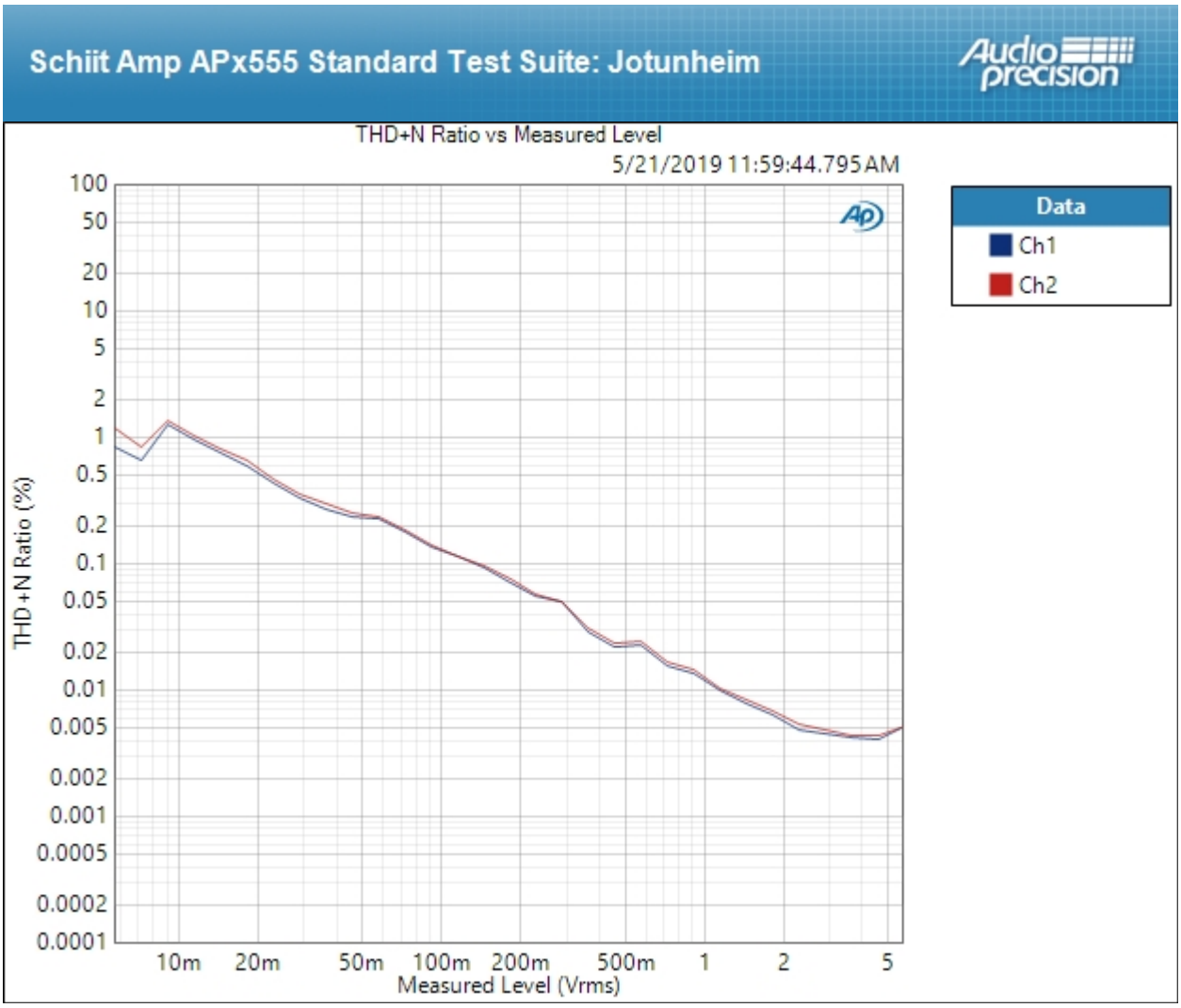
Relative Level: -20.000 dBFS

Result: PASSED

Multibit DAC Card : Stepped Level Sweep

Waveform:	Sine
Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Start Level:	-60.000 dBFS
Stop Level:	-0.000 dBFS
Step Type:	Linear
Number of Points:	31
Step Size:	+2.000 dBFS
Offset:	0.000 D
Low-pass Filter:	20 kHz
Weighting Filter:	Signal Path
High-pass Filter:	20 Hz
Notch Tuning Mode:	Generator Frequency
Measured 1	5/21/2019 11:59:44 AM

THD+N Ratio vs Measured Level (5/21/2019 11:59:44.795 AM)



Result: PASSED