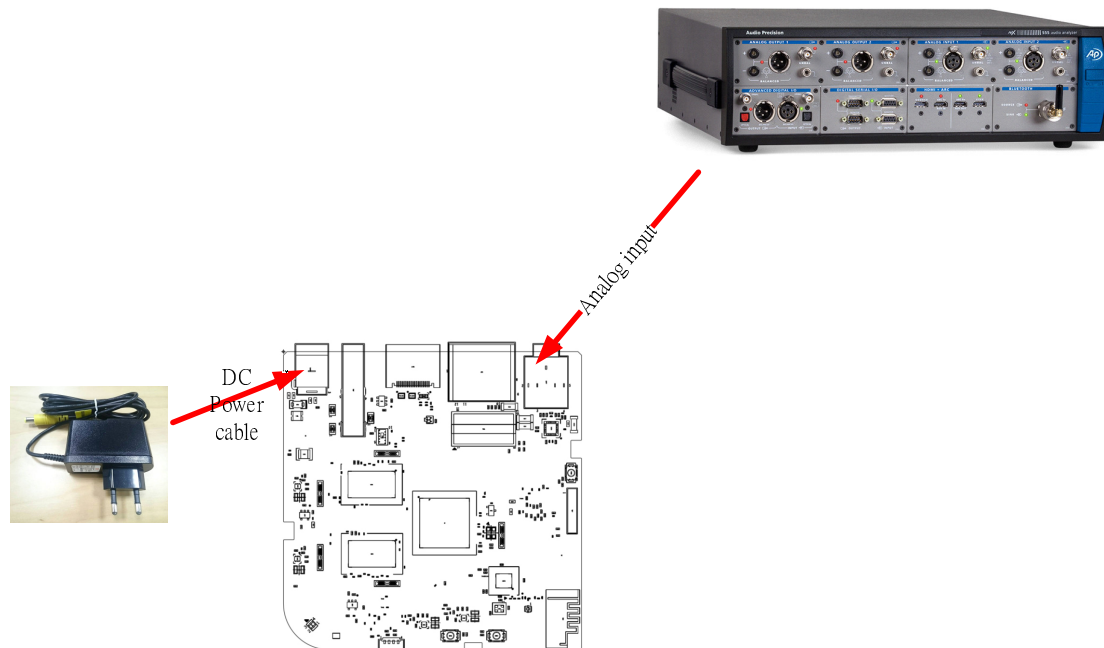


Hardware Unit Test Report

Audio Test

Hardware version	FW version	Sample No.	eMMC Flash P/N
V005	4.9.113 #1MonFeb 1122:40:43 CST 2019	S/N:	KLM8G1GETF-B041

1. Audio Test Setup

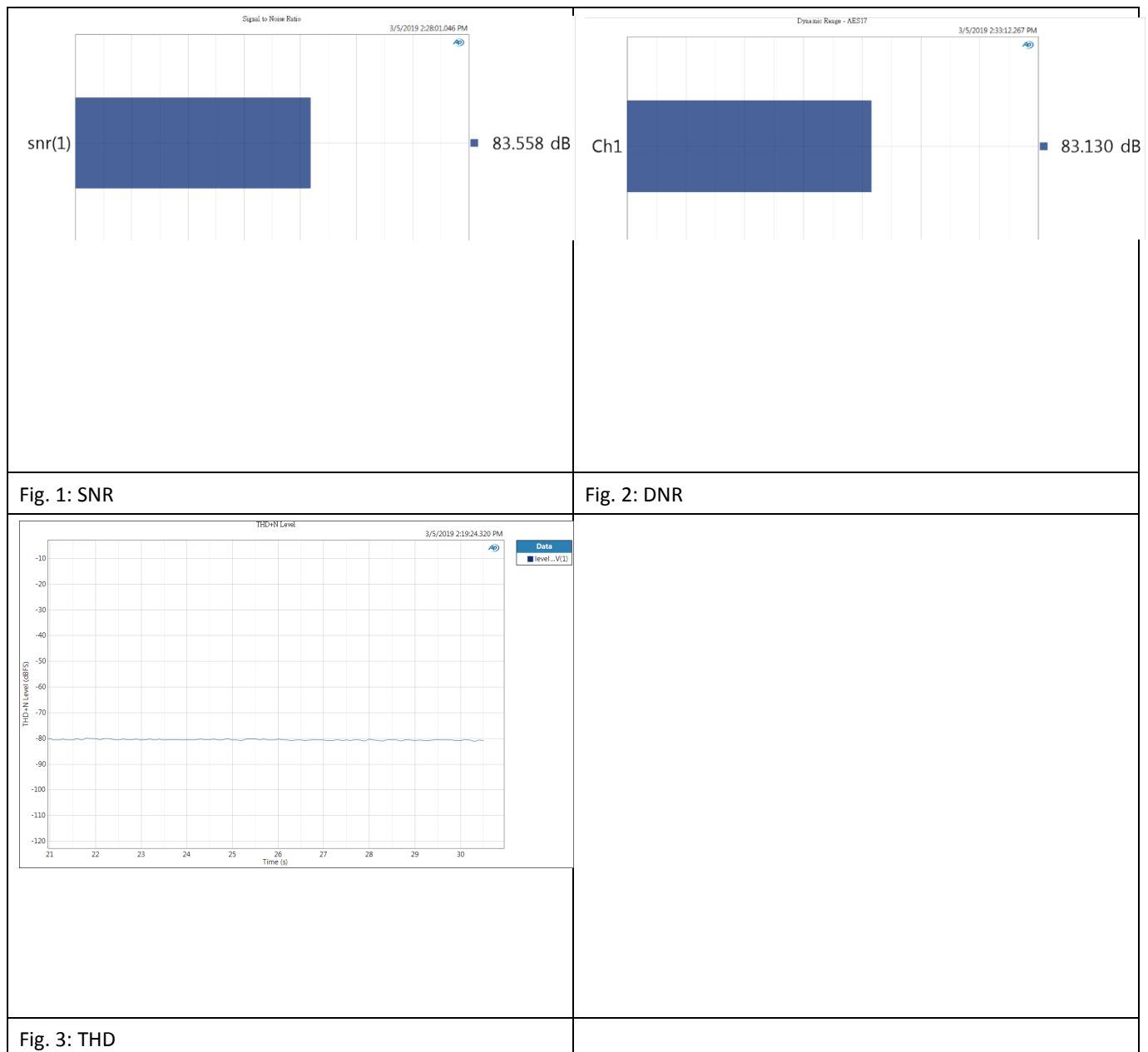


2. Test Condition

Use Audio precision send 1 KHz voice. The input signal level is 0.3086Vrms and the sample rate is 48 KHz.

3. Result and Picture

	Specification (dB)		Test Result (dB)	Figure	Pass/Fail
	Min.	Max.			
Signal-to-noise ratio (SNR)	80		83.558	Figure 1	Pass
Dynamic range (DNR)	80		83.130	Figure 2	Pass
Total harmonic distortion (THD)		-53.9	-79~-81	Figure 3	Pass



4. Frequency response

Fig. 4 shows 20~20 KHz frequency response. We can see the RMS Level is below -1db at 30~20 KHz. The normal microphone frequency response is 50~15 KHz.

4.1 Result and Picture

Frequency response Normal microphone 50~15 KHz	Specification (dB)		Test Result (dB)	Figure	Pass/Fail
	Min.	Max.			
RMS Level	-1		-0.5~0	Figure 4	Pass

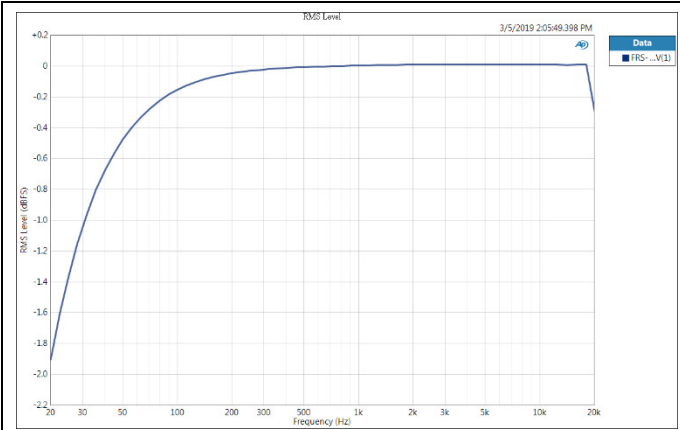


Fig. 4: 20~20 KHzfrequency response