



HAC Receive Volume Control Test Report

For

Applicant Name: Sun Cupid Technology (HK) Ltd.
Address: 16/F, CEO Tower, 77 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
EUT Name: LTE Smart Phone
Model Number: S6605L
Series Model Number: N10 Plus, NUU N10 Plus

Issued By

Company Name: BTF Testing Lab (Shenzhen) Co., Ltd.
Address: Plant 101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China

Report Number: BTF260623R00503
Test Standards: ANSI C63.19:2019 FCC 47 CFR §20.19 TIA-5050:2018
FCC ID: 2ADINS6605L

Test Conclusion: Pass
Test Date: 2026-07-08 to 2026-07-27
Date of Issue: 2026-09-15
Tested By: Birch Zhang

Date: 2026-07-30
Tested By: Birch Zhang / Tester

Reviewed By: Amenda Zhong

Date: 2026-09-15
Reviewed By: Amenda Zhong / Project Engineer

Approved By: Ryan.CJ

Date: 2026-09-15
Approved By: Ryan.CJ / EMC Manager



Note: All the test results in this report only related to the testing samples. Which can be duplicated completely for the legal use with approval of applicant; it shall not be reproduced except in full without the written approval of BTF Testing Lab (Shenzhen) Co., Ltd., All the objections should be raised within thirty days from the date of issue. To validate the report, you can contact us.

Revision History		
Version	Issue Date	Revisions Content
Rev_V0	2026-07-30	Original
Rev_V1	2026-09-15	Update Report
Note:Once the revision has been made, then previous versions reports are replaced by the latest version.		

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1. Introduction

1.1 Identification of Testing Laboratory

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	Plant 101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130

1.2 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1409**
BTF Testing Lab (Shenzhen) Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The test firm Registration No. is 695374.
- **CNAS - Registration No.: CNAS L17568**
BTF Testing Lab (Shenzhen) Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L17568.
- **A2LA - Registration No.: 6660.01**
BTF Testing Lab (Shenzhen) Co., Ltd. is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.

1.3 Laboratory Condition

Ambient Temperature:	18°C to 25°C
Ambient Relative Humidity:	32% to 49%
Ambient Pressure:	100 kPa to 102 kPa

1.4 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2. Product Information

2.1 Application Information

Company Name:	Sun Cupid Technology (HK) Ltd.
Address:	16/F, CEO Tower, 77 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

2.2 Manufacturer Information

Company Name:	Sun Cupid Technology (HK) Ltd.
Address:	16/F, CEO Tower, 77 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

2.3 General Description of Equipment under Test (EUT)

EUT Name	LTE Smart Phone
Under Test Model Name	S6605L
Series Model Name	N10 Plus, NUU N10 Plus
Description of Model name differentiation	N10 Plus, NUU N10 Plus have the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction with S6605L. The difference lies only the model number. all these changes do not degrade the unwanted emissions of the certified product.
Dimensions (Approx.)	164*76*8mm
Weight (Approx.)	217g

2.4 Equipment under Test Ancillary Equipment

Ancillary Equipment 1	Rechargeable Battery	
	Rated Capacity	4900mAh
	Rated Voltage	3.87V

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EGPRS 850/1900 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/12/13/25/26/66/71 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40) 5G WIFI 802.11a, 802.11n(HT20/40),802.11ac(VHT20/40/80) BT (EDR+BLE)
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2.6 Equipment under Test (EUT) Description

Operating Mode	GSM, WCDMA, LTE, WLAN, Bluetooth	
Frequency Range	GSM 850	TX: 824 ~ 849 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz
	LTE Band 5	TX: 824 ~ 849 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz
	LTE Band 12	TX: 698 ~ 716 MHz
	LTE Band 13	TX: 777 ~ 787 MHz
	LTE Band 25	TX: 1850 ~ 1915 MHz
	LTE Band 26 (814-824)	TX: 814.7 ~ 823.3 MHz
	LTE Band 26 (824-849)	TX: 824.7 ~ 848.3 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz
	LTE Band 71	TX: 663 ~ 698 MHz
	2.4GHz WiFi	2412 ~ 2462 MHz for 802.11b/g/n (HT20/40)
	5G WiFi	U-NII Band 1 :5150 ~ 5250 MHz U-NII Band 2A :5250 ~ 5350 MHz U-NII Band 2C :5470 ~ 5725 MHz U-NII Band 3 :5725 ~ 5850 MHz (for 802.11 a/n/ac Includes bandwidth of 20/40/80MHz)
	Bluetooth	2402 ~ 2480 MHz
Modulation Mode	GSM: GMSK EDGE (GPRS+EGPRS): GMSK, 8PSK WCDMA: QPSK, 16QAM LTE: QPSK, 16QAM, 64QAM 802.11b: DSSS 802.11a/g: OFDM 802.11n-HT20/HT40: OFDM 802.11ac-VHT20/40/80: OFDM BR+EDR: GFSK, $\pi/4$ -DQPSK, 8-DPSK Bluetooth BLE: GFSK	

3. Summary of Test Results

3.1 Test Standards

No.	Identity	Document Title
1	ANSI C63.19-2019	American National Standard for Methods of Measurement of Compatibility between Wireless Communication Devices and Hearing Aids
2	FCC 47 CFR §20.19	Hearing Aid Compatible Mobile Headsets
3	TIA-5050:2018	Telecommunications Communications Products Receive Volume Control Requirements for Wireless (Mobile) Devices
4	KDB 285076 D05v01	CG Interim Waiver DA 23-914
5	KDB 285076 D04v02	Volume Control
6	KDB 285076 D01v06r04	HAC Guidance
7	KDB 285076 D03 v01r05	HAC FAQ

3.2 Air Interfaces / Bands Indicating Operating Modes

Air Interface	Band	Type	Simultaneous Transmitter	Name of Service
GSM	850	VO	WLAN & BT	CMRS Voice
	1900	VO	WLAN & BT	CMRS Voice
	GPRS/EGPRS	VD/DT	WLAN & BT	Google Meet
WCDMA	Band II	VO	WLAN & BT	CMRS Voice
	Band IV	VO	WLAN & BT	CMRS Voice
	Band V	VO	WLAN & BT	CMRS Voice
	HSPA	VD/DT	WLAN & BT	Google Meet
LTE	Band 2	VD	WLAN & BT	VoLTE & Google Meet
	Band 4	VD	WLAN & BT	VoLTE & Google Meet
	Band 5	VD	WLAN & BT	VoLTE & Google Meet
	Band 7	VD	WLAN & BT	VoLTE & Google Meet
	Band 12	VD	WLAN & BT	VoLTE & Google Meet
	Band 13	VD	WLAN & BT	VoLTE & Google Meet
	Band 25	VD	WLAN & BT	VoLTE & Google Meet
	Band 26 (814-824)	VD	WLAN & BT	VoLTE & Google Meet
	Band 26 (824-849)	VD	WLAN & BT	VoLTE & Google Meet
	Band 66	VD	WLAN & BT	VoLTE & Google Meet
	Band 71	VD	WLAN & BT	VoLTE & Google Meet
WLAN	2.4GHz	DT	WWAN	N/A
	U-NII 1	DT	WWAN	N/A
	U-NII 2A	DT	WWAN	N/A
	U-NII 2C	DT	WWAN	N/A
	U-NII 3	DT	WWAN	N/A
BT	2.4GHz	DT	WWAN	N/A

NA: Not Applicable

VO: Voice Only

VD: CMRS and IP Voice Service over Digital Transport

DT: Digital Transport Only

Note: The hearing aid compatibility mode of the prototype was turned on during testing, and all tests were performed in HAC mode.

3.3 Statement of Volume Control

The lowest conversational gain found during test as bellows:

Mounting Force	Lowest Conversational Gain (dB)
2N	8.20
8N	18.17

Note:

1. This device is in compliance with compliance with HAC requirement specified in FCC 47 CFR Part 20.19 and ANSI C63.19-2019 and tested in accordance with the measurement methods and procedures specified in ANSI/TIA-5050-2018 and FCC KDB publications.

2. The 2N force is used for testing requirements related to use by persons with hearing devices and the 8N force is used for testing requirements related to use by persons without hearing devices.

4. Uncertainty Assessment

The component of uncertainty may generally be categorized according to the methods used to evaluate them. The evaluation of uncertainty by the statistical analysis of a series of observations is termed a Type A evaluation of uncertainty. The evaluation of uncertainty by means other than the statistical analysis of a series of observation is termed a Type B evaluation of uncertainty. Each component of uncertainty, however evaluated, is represented by an estimated standard deviation, termed standard uncertainty, which is determined by the positive square root of the estimated variance.

The combined standard uncertainty of the measurement result represents the estimated standard deviation of the result. It is obtained by combining the individual standard uncertainties of both Type A and Type B evaluation using the usual "root-sum-squares" (RSS) methods of combining standard deviations by taking the positive square root of the estimated variances. Expanded uncertainty is a measure of uncertainty that defines an interval about the measurement result within which the measured value is confidently believed to lie. It is obtained by multiplying the combined standard uncertainty by a coverage factor. For purpose of this document, a coverage factor two is used, which corresponds to confidence interval of about 95 %.

The judgment of conformity in the report is based on the measurement results excluding the measurement uncertainty.

Declaration of Conformity:

The test results with all measurement uncertainty excluded is presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations.

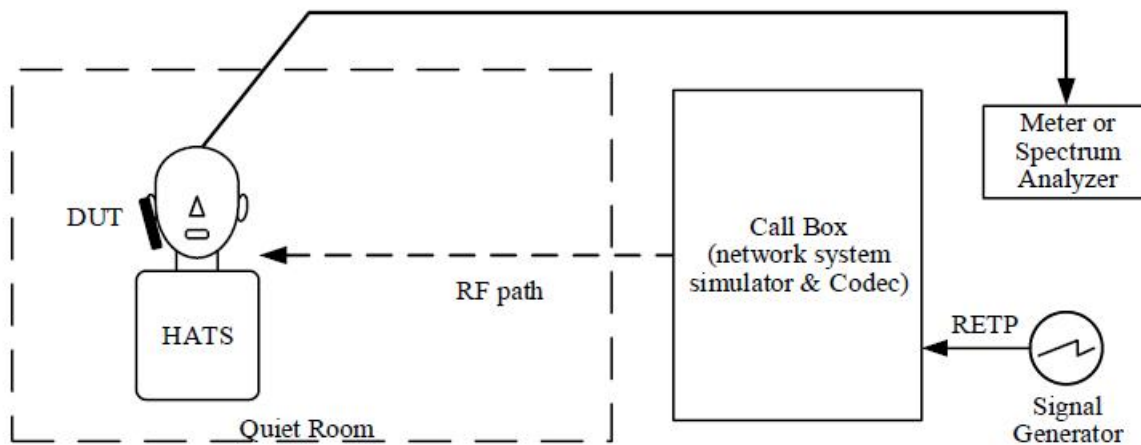
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Component	Standard Uncertainty (dB)	U ² (%)
Generator Accuracy To enable harmonic distortion measurements to 0.1%, the generator distortion must be <0.05%. This is equivalent to a standard uncertainty of 0.043 dB.	0.043	0.25
Ear Simulator Pressure Sensitivity (incl. Measurement Mic.) The uncertainty of the ear simulator as per the standards and quoted on its calibration certificate is 0.3 dB with a coverage factor of k= 2. This is equivalent to a standard uncertainty of 0.3/2 = 0.15 dB	0.15	3.03
Microphone Preamplifier The manufacturer quotes the preamp to be within + 0.02 dB with a 95% probability or 2σ. This is equivalent to a standard uncertainty of 0.0212 = 0.01 dB.	0.01	0.01
Analysis System/RMS Detector Typical measurement system detector accuracy is 0.1 dB with a coverage factor of k= 2. This is equivalent to a standard uncertainty of 0.1/2 = 0.05 dB	0.05	0.33
Effect of Positioning on Mid-Band Sensitivity For a handset, with the HATS positioning jig, the typical standard deviation estimated from a statistically significant number of measurements is +2 dB. This is equivalent to a standard uncertainty of 2 dB.	2	670.42
Time Varying Effects of the Mouth Simulator for Send & Sidetone For a receive measurement on a handset, the mouth simulator is not used (its uncertainty is zero), The standard uncertainty of 0 dB	0	0
Total Standard Uncertainty (%)	25.06	
UMAX(k=2)(%)	51.9	
UMAX(k=2)(dB)	3.6	

5. Measurement System

5.1 MEASUREMENT SET-UP

The general test arrangement is shown in Figure 1. The Call Box passes the voice channel stream to the DUT without modification. There is no gain or loss in the voice channel stream due to the Call Box interface.



NOTES:

1. Additional information related to the air interface for the various RF technologies is specified in several 3GPP documents. A list of these can be found in 3GPP TS 26.132 V14.0.0 clause 4
2. Additional information related to the test setup can be found in 3GPP TS 26.132, V14.0.0 clause 5.1.
3. The RETP (receive electrical test point) is the point in the device test arrangement where signals are applied to the DUT in the receive direction.

6. Evaluation of Test

6.1 RECEIVE VOLUME CONTROL PERFORMANCE

6.1.1 Requirement

1. With a mounting force of 8N, the DUT shall have at least one volume control setting that will produce a conversational gain of ≥ 18 dB with the output distortion and the frequency response meeting the requirements in clause 5.2.1 & 5.3.1 respectively.
2. With a mounting force of 2N, the DUT shall have at least one volume control setting that will produce a conversational gain of ≥ 6 dB with the output distortion and the frequency response meeting the requirements in clause 5.2.1 & 5.3.1 respectively.

NOTE: Other acoustic receive features may be available such as additional amplification, tone control, automatic gain control, etc. ANSI/TIA-4953-B contains performance requirements for output levels and tone control operation for amplified devices.

6.1.2 Method of Measurement

1. Configure the DUT with a mounting force of 8N and test equipment as shown in Figure 1 in an active call state with the applicable codec for the transmission mode under test.
2. Set the DUT volume control to the maximum setting.
3. If the DUT has an adjustable tone control feature, a tone control setting that meets the frequency response requirements in section 5.3.1 shall be used.
4. Apply the real speech test signal at a level of -20 dBm0 at the RETP and measure the acoustic output at the Drum Reference Point (DRP) over one complete sequence of the test signal.
5. Translate the measurement made at the DRP to the Free Field (FF) using the translation data in Annex B.
6. Over the applicable frequency band, determine the ASL in dBSPL for the resulting sound pressure level in accordance with Method B of ITU-T Recommendation P.56:
 - a. Narrowband 100 Hz through 4000 Hz.
 - b. Wideband 100 Hz through 7720 Hz.
7. Calculate the Conversational Gain by subtracting 70 dB from the measured dBSPL.
[Conversational Gain = (Measured dBSPL Level – 70 dBSPL) dB]
8. Measure the output distortion per clause 5.2. If a distortion failure occurs at the maximum volume control setting, reduce the volume control setting and repeat the measurement to determine if a setting can be found for which the conversational gain requirement is met without a distortion failure.
9. Repeat steps 2-8 with a mounting force of 2N.

6.1.3 Test Result

Refer to Part Nine test result.

Remark: The report only reflects the test data plots of worst mode (for GSM 850, WCDMA Band 2, LTE Band 2)

6.1.4 Test Conclusion

PASS.

6.2 RECEIVE DISTORTION AND NOISE PERFORMANCE

6.2.1 Requirement

With a mounting force of 8N and 2N, the ratio of the stimulus signal power to the 100 Hz to 8000 Hz total A-weighted distortion and noise power shall be ≥ 20 dB when tested over the range of 1/3 octave band center frequencies:

1. Narrowband transmission mode: Each 1/3 octave band center frequency from 400 Hz to 3150 Hz.
2. Wideband transmission mode: Each 1/3 octave band center frequency from 250 Hz to 5000 Hz.

6.2.2 Method of Measurement

1. Configure the DUT with a mounting force of 8N and test equipment as shown in Figure 1 in an active call state with the applicable codec for the transmission mode under test with the volume control at the setting determined in 5.1.1.
2. Receive distortion and noise is measured using the PN-SDNR procedure as described in Annex A.
3. To ensure DUT activation, apply the real speech test signal at a level of -20 dBm0 followed immediately by the initial 1/3 octave center frequency PN test signal in Table A.1 based on the narrowband or wideband operating mode. Measure the acoustic output at the DRP over the complete sequence of the PN test signal.
4. Translate the measurement made at the DRP to the FF using the translation data in Annex B.
5. Calculate the acoustic output unweighted total signal power of the stimulus measurement band as described in A.2.
6. Calculate the notched A-weighting distortion and noise components as described in A.3.
7. Calculate the ratio of the signal power to the total A-weighted distortion and noise power using Eq A-1.
8. Repeat for each of the remaining 1/3 octave center frequencies in Table A.1 based on the narrowband or wideband operating mode.
9. Repeat steps 2-8 with a mounting force of 2N.

6.2.3 Test Result

Refer to test Annex A.

Remark: The report only reflects the test data plots of worst mode (for GSM 850, WCDMA Band 2, LTE Band 2)

6.2.4 Test Conclusion

PASS.

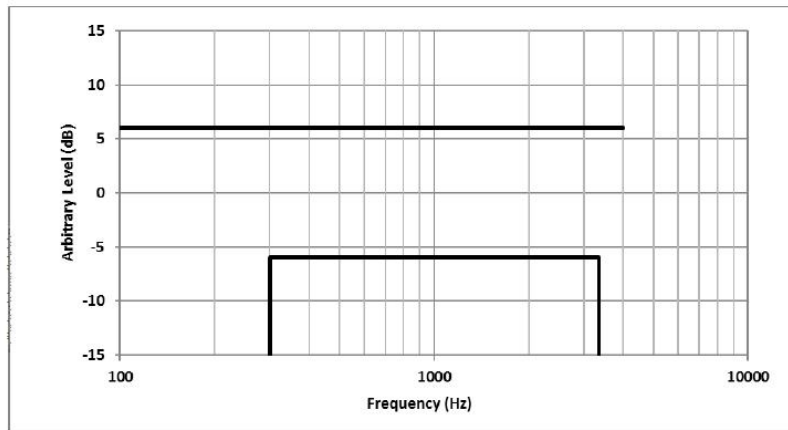
6.3 RECEIVE ACOUSTIC FREQUENCY RESPONSE PERFORMANCE

6.3.1 Requirement

1. Narrowband: The 1/12 octave band frequency response after translation to the FF or DF shall fall between the upper and lower limits given in Table 1 and shown in Figure below.

Table 1 – Narrowband Receive Frequency Response Limits

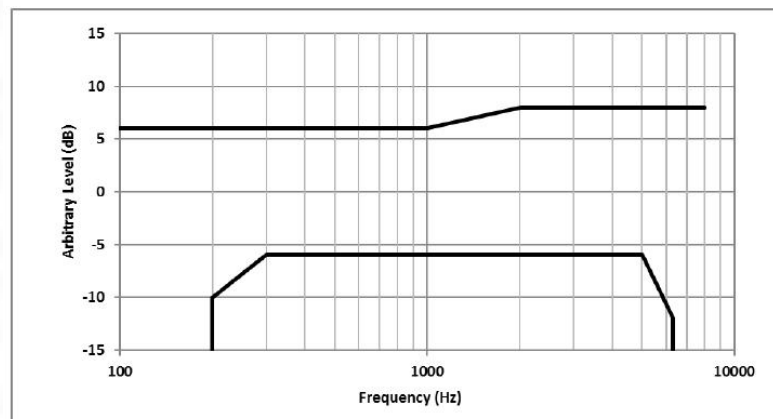
Lower Limit Frequency (Hz)	Lower Limit (dB)	Upper Limit Frequency (Hz)	Upper Limit (dB)
300	-6	100	+6
3400	-6	4000	+6



2. Wideband: The 1/12 octave band frequency response after translation to the FF or DF shall fall between the upper and lower limits given in Table 2 and shown in Figure below.

Table 2 – Wideband Receive Frequency Response Limits

Lower Limit Frequency (Hz)	Lower Limit (dB)	Upper Limit Frequency (Hz)	Upper Limit (dB)
200	-10	100	+6
300	-6	1000	+6
5000	-6	2000	+8
6300	-12	8000	+8



6.3.2 Method of Measurement

1. Configure the DUT with a mounting force of 8N and test equipment as shown in Figure 1 in an active call state with the applicable codec for the transmission mode under test with the volume control at the setting determined in 5.1.1.
2. If the DUT has an adjustable tone control feature the initial measurement is to be performed with the default tone control setting.
3. Apply the real speech test signal with a level of -20 dBm0 at the RETP.
4. Capture the frequency spectrum at the DRP of the HATS using real-time analysis with 1/12 octave bands over the frequency range from 100 Hz to 4000 Hz for narrowband measurements, or over the frequency range from 100 Hz to 8000 Hz for wideband measurements, averaged over the entire duration of the test signal.
5. Transform the DRP frequency spectrum measurement to the FF or DF (see Annex B).
6. Divide the 1/12 octave measurement data by the 1/12 octave frequency spectrum of the test signal at the RETP and present the measurement in terms of dB(Pa/V).
7. Apply the applicable frequency response limits to determine compliance.
8. If the default tone control setting does not meet the requirement, repeat the above steps for other tone control settings to determine a tone control setting that meets the requirements.
9. Repeat with a mounting force of 2N.

6.3.3 Test Result

Refer to test Annex A.

Remark: The report only reflects the test data plots of worst mode (for GSM 850, WCDMA Band 2, LTE Band 2)

6.3.4 Test Conclusion

PASS.

7. Test Equipment List

Description	Manufacturer	Model	Internal number	Cal. Date	Cal. Due
WIDEBAND RADIO COMMUNICATION TESTER	ROHDE&SCHWARZ	CMW500	BTF-EM-023	2025/10/17	2026/10/16
Conditioning Amplifier	Brule&Kjaer	Type -2690--030	BTF-EM- 146	2026/01/19	2027/01/18
Head and Torso Simulator	Brule&Kjaer	Type 4128C	BTF-EM- 148	2026/01/19	2027/01/18
Sound Calibration	Brule&Kjaer	Type 4231	BTF-EM- 149	2026/01/19	2027/01/18
Anechoic Test Chamber	MEC	Type 115	BTF-EM- 150	N/A	N/A

8. Air Interfaces / Bands used for testing

Air-interface	Band	Tested Codec	Tested Rate(kbps)
GSM	850/1900	EFR	/
WCDMA(UMTS)	Band 2/4/5	AMR-NB	4.75/12.2
		AMR-WB	6.6/23.85
		EVS-NB	5.9/24.4
		EVS-WB	5.9/24.4
VoLTE	Band 2/4/5/7/12/13/25/26/66/71	AMR-NB	4.75/12.2
		AMR-WB	6.6/23.85
		EVS-NB	5.9/24.4
		EVS-WB	5.9/24.4
Note:We only select one codec type for the test, narrowband and wideband.			

9. Test Result

9.1 Receive volume control, distortion and noise performance

Plot No.	Mode	Channel/Freq.	BW	Codec B itrate	Volume Level	Codec T ype	Codec B andwidth h	Mountin g Force (N)	Freque ncy(H Z)	Min PN-SDNR(d B)	PN-SDN R Limit (dB)	Speech Level (dBSPL)	Convers ational Gain	FCC CG Limit (d B)	Verdi ct
1	GSM850	190/836.6MHz	/	/	Max	EFR	NB	8N	2500	20.64	20.00	88.17	18.17	18.00	Pass
			/	/	Max	EFR	NB	2N	3150	21.54	20.00	79.83	9.83	6.00	
2	PCS1900	661/1880.0MHz	/	/	Max	EFR	NB	8N	2500	21.36	20.00	89.41	19.41	18.00	Pass
			/	/	Max	EFR	NB	2N	3150	21.75	20.00	80.36	10.36	6.00	
3	WCDMA Band II	9400/1880.0MHz	/	12.20	Max	AMR	NB	8N	3150	21.93	20.00	90.56	20.56	18.00	Pass
			/	12.20	Max	AMR	NB	2N	3150	22.61	20.00	82.37	12.37	6.00	
			/	23.85	Max	AMR	WB	8N	5000	20.54	20.00	90.57	20.57	18.00	
			/	23.85	Max	AMR	WB	2N	5000	20.99	20.00	82.76	12.76	6.00	
4	WCDMA Band IV	1413/1732.6MHz	/	12.20	Max	AMR	NB	8N	3150	20.67	20.00	91.34	21.34	18.00	Pass
			/	12.20	Max	AMR	NB	2N	3150	21.37	20.00	81.36	11.36	6.00	
			/	23.85	Max	AMR	WB	8N	5000	21.22	20.00	90.84	20.84	18.00	
			/	23.85	Max	AMR	WB	2N	5000	22.26	20.00	80.94	10.94	6.00	
5	WCDMA Band V	4183/836.6MHz	/	12.20	Max	AMR	NB	8N	3150	21.39	20.00	92.14	22.14	18.00	Pass
			/	12.20	Max	AMR	NB	2N	3150	21.75	20.00	81.31	11.31	6.00	
			/	23.85	Max	AMR	WB	8N	5000	21.33	20.00	90.86	20.86	18.00	
			/	23.85	Max	AMR	WB	2N	5000	22.04	20.00	82.39	12.39	6.00	
6	LTE FDD Band 2	18900/1880MHz	20MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	3150	21.31	20.00	90.55	20.55	18.00	Pass
				12.20	Max	AMR	NB	2N	3150	21.17	20.00	78.20	8.20	6.00	
				23.85	Max	AMR	WB	8N	5000	21.56	20.00	88.55	18.55	18.00	
				23.85	Max	AMR	WB	2N	5000	21.04	20.00	78.26	8.26	6.00	
7	LTE FDD Band 4	20175/1732.5MHz	20MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	3150	21.36	20.00	89.72	19.72	18.00	Pass
				12.20	Max	AMR	NB	2N	3150	21.85	20.00	82.35	12.35	6.00	
				23.85	Max	AMR	WB	8N	5000	22.03	20.00	91.71	21.71	18.00	
				23.85	Max	AMR	WB	2N	5000	21.97	20.00	81.36	11.36	6.00	
8	LTE FDD Band 5	20525/836.5MHz	10MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	3150	21.96	20.00	92.52	22.52	18.00	Pass
				12.20	Max	AMR	NB	2N	3150	22.00	20.00	80.34	10.34	6.00	
				23.85	Max	AMR	WB	8N	5000	21.77	20.00	91.36	21.36	18.00	
				23.85	Max	AMR	WB	2N	5000	21.67	20.00	80.43	10.43	6.00	
9	LTE FDD Band 7	21100/2535MHz	20MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	2500	22.36	20.00	91.76	21.76	18.00	Pass
				12.20	Max	AMR	NB	2N	2500	22.34	20.00	82.34	12.34	6.00	
				23.85	Max	AMR	WB	8N	5000	23.16	20.00	92.63	22.63	18.00	
				23.85	Max	AMR	WB	2N	5000	22.42	20.00	81.42	11.42	6.00	
10	LTE FDD Band 12	23095/707.5MHz	10MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	3150	22.63	20.00	82.44	12.44	18.00	Pass
				12.20	Max	AMR	NB	2N	3150	23.42	20.00	91.76	21.76	6.00	
				23.85	Max	AMR	WB	8N	5000	21.52	20.00	92.63	22.63	18.00	
				23.85	Max	AMR	WB	2N	5000	21.75	20.00	81.73	11.73	6.00	
11	LTE FDD Band 13	23230/782MHz	10MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	3150	22.34	20.00	89.02	19.02	18.00	Pass
				12.20	Max	AMR	NB	2N	3150	21.47	20.00	79.65	9.65	6.00	
				23.85	Max	AMR	WB	8N	5000	22.36	20.00	91.50	21.50	18.00	
				23.85	Max	AMR	WB	2N	5000	22.42	20.00	83.22	13.22	6.00	

Plot No.	Mode	Channel/Freq.	BW	Codec B itrate	Volume Level	Codec T ype	Codec B andwidt h	Mountin g Force (N)	Frequen cy(H Z)	Min PN-SDNR(d B)	PN-SDN R Limit (dB)	Speech Level (dBSPL)	Convers ational Gain	FCC CG Limit (d B)	Verdi ct
12	LTE FDD Band 25	26365/1882.5MHz	20MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	3150	21.73	20.00	91.33	21.33	18.00	Pass
				12.20	Max	AMR	NB	2N	2500	22.36	20.00	82.85	12.85	6.00	
				23.85	Max	AMR	WB	8N	5000	22.24	20.00	91.56	21.56	18.00	
				23.85	Max	AMR	WB	2N	5000	24.31	20.00	81.42	11.42	6.00	
13	LTE FDD Band 26 part 90	26740/819MHz	10MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	3150	21.85	20.00	91.75	21.75	18.00	Pass
				12.20	Max	AMR	NB	2N	3150	22.64	20.00	80.63	10.63	6.00	
				23.85	Max	AMR	WB	8N	5000	21.76	20.00	91.43	21.43	18.00	
				23.85	Max	AMR	WB	2N	5000	22.03	20.00	82.34	12.34	6.00	
14	LTE FDD Band 26 part 22	26915/836.5MHz	15MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	2500	21.76	20.00	93.43	23.43	18.00	Pass
				12.20	Max	AMR	NB	2N	3150	21.63	20.00	81.76	11.76	6.00	
				23.85	Max	AMR	WB	8N	5000	21.73	20.00	91.85	21.85	18.00	
				23.85	Max	AMR	WB	2N	5000	22.39	20.00	82.36	12.36	6.00	
15	LTE FDD Band 66	132322/1745MHz	20MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	3150	21.63	20.00	92.41	22.41	18.00	Pass
				12.20	Max	AMR	NB	2N	2500	21.43	20.00	82.76	12.76	6.00	
				23.85	Max	AMR	WB	8N	5000	22.52	20.00	94.36	24.36	18.00	
				23.85	Max	AMR	WB	2N	5000	22.14	20.00	83.46	13.46	6.00	
16	LTE FDD Band 71	133322/683MHz	20MHz_QPSK_1_0	12.20	Max	AMR	NB	8N	3150	21.64	20.00	92.43	22.43	18.00	Pass
				12.20	Max	AMR	NB	2N	2000	22.53	20.00	84.25	14.25	6.00	
				23.85	Max	AMR	WB	8N	5000	21.46	20.00	93.16	23.16	18.00	
				23.85	Max	AMR	WB	2N	5000	22.19	20.00	81.24	11.24	6.00	
Note: 1.This device does not support VoWiFi, so VoWiFi is not tested and evaluated. 2.With a mounting force of 8N, the DUT shall have at least one volume control setting that will produce a conversational gain of ≥ 18 dB with the output distortion and the frequency response. 3.With a mounting force of 2N, the DUT shall have at least one volume control setting that will produce a conversational gain of ≥ 6 dB with the output distortion and the frequency response. 4.With a mounting force of 8N and 2N, the ratio of the stimulus signal power to the 100 Hz to 8000 Hz total A-weighted distortion and noise power shall be ≥ 20 dB.															

9.2 Receive acoustic frequency response performance

Plot No.	Mode	Channel	BW	Volume Level	Codec Type	Codec Bandwidth	Mounting Force (N)	RFR
								Test Result
1	GSM850	251/848.8MHz	/	Max	EFR	NB	2N	Pass
				Max	EFR	NB	8N	
2	PCS1900	512/1850.2MHz	/	Max	EFR	NB	2N	Pass
				Max	EFR	NB	8N	
3	WCDMA Band II	9538/1907.6MHz	/	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
4	WCDMA Band IV	1513/1752.6MHz	/	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
5	WCDMA Band V	4233/846.6MHz	/	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
6	LTE FDD Band 2	18700/1860.0MHz	20MHz_QPSK_1_0	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
7	LTE FDD Band 4	20300/1745.0MHz	20MHz_QPSK_1_50	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
8	LTE FDD Band 5	20600/844MHz	10MHz_QPSK_1_49	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
9	LTE FDD Band 12	23130/711.0MHz	10MHz_QPSK_1_49	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
10	LTE FDD Band 13	23230/782.0MHz	10MHz_QPSK_1_49	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
11	LTE FDD Band 14	23330/793.0MHz	10MHz_QPSK_1_25	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
12	LTE FDD Band 25	26140/1860.0MHz	20MHz_QPSK_1_50	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	

Plot No.	Mode	Channel/Freq.	BW	Volume Level	Codec Type	Codec Bandwidth	Mounting Force (N)	RFR
								Test Result
13	LTE FDD Band 26 part 90	26740/819MHz	10MHz_QPSK_1_49	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
14	LTE FDD Band 26 part 22	26915/836.5MHz	15MHz_QPSK_1_38	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
15	LTE FDD Band 66	132572/1770MHz	20MHz_QPSK_1_0	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	
16	LTE FDD Band 71	133322/683.0MHz	20MHz_QPSK_1_99	Max	AMR	NB	2N	Pass
				Max	AMR	NB	8N	
				Max	AMR	WB	2N	
				Max	AMR	WB	8N	

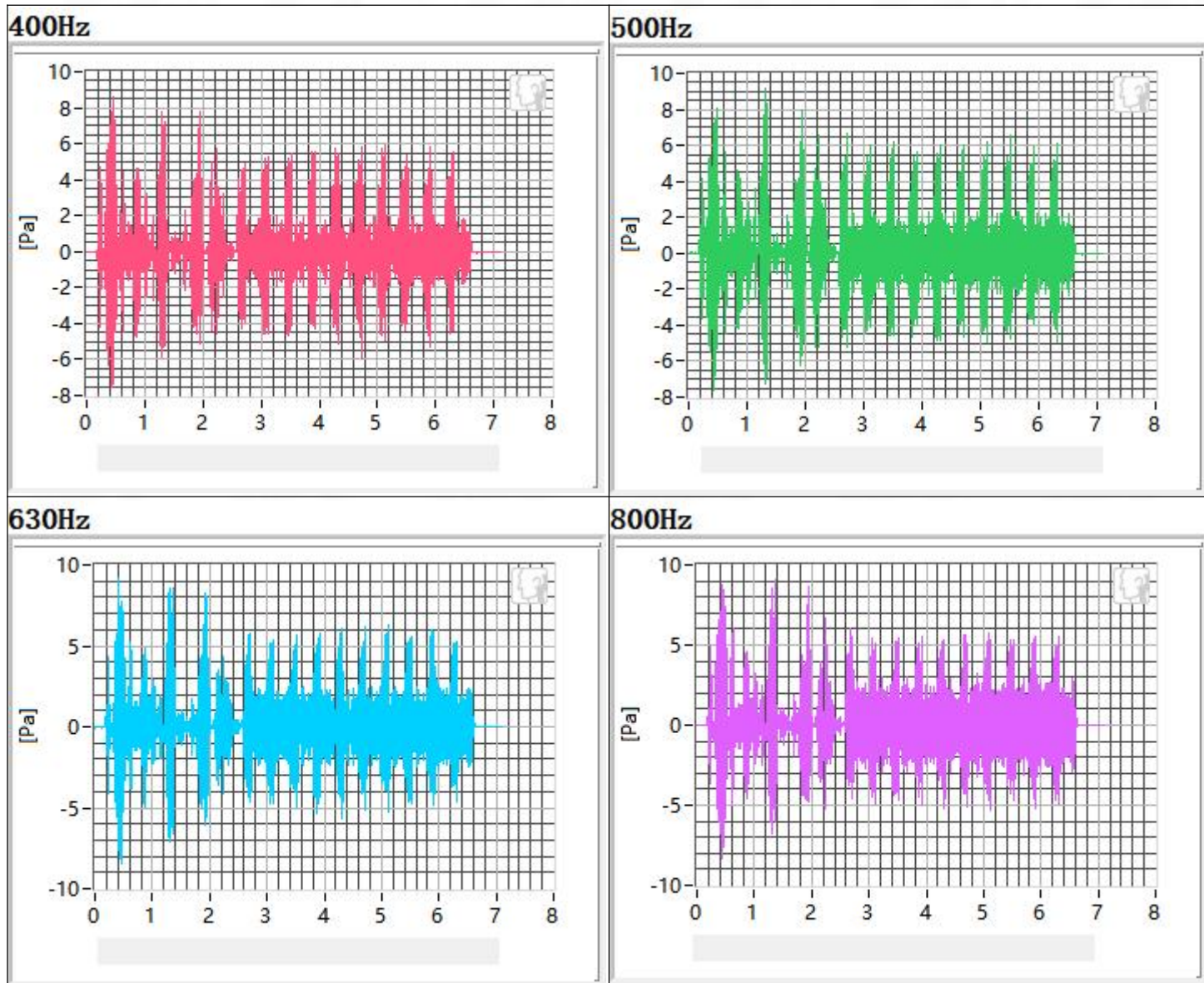
Volume Control Verification Test Results

Date of Testing	Test Location	Air Interface Equipment	Acoustical Calibrator	HATS Sens.(dB)	Ambient Noise(dBA)
16/7/2026	JB HATS R	CMW 500	B&K 4231 & UA1546	97.14	33.82
19/7/2026	JB HATS R	CMW 500	B&K 4231 & UA1546	97.12	34.27
21/7/2026	JB HATS R	CMW 500	B&K 4231 & UA1546	97.13	33.32
26/7/2026	JB HATS R	CMW 500	B&K 4231 & UA1546	97.12	33.77
27/7/2026	JB HATS R	CMW 500	B&K 4231 & UA1546	97.13	34.37
Note: A room with background noise no greater than 40 dBA.					

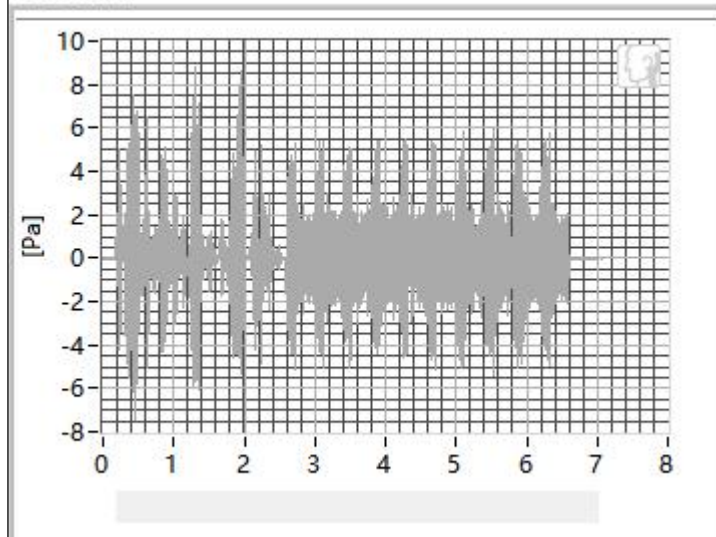
ANNEX A Test Data

1. GSM 850 in channel 251

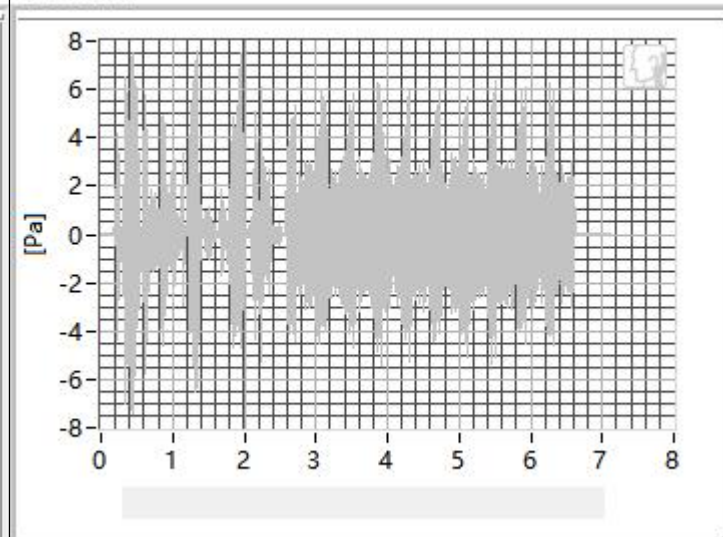
1.1 Receive Distortion and Noise 8N NB



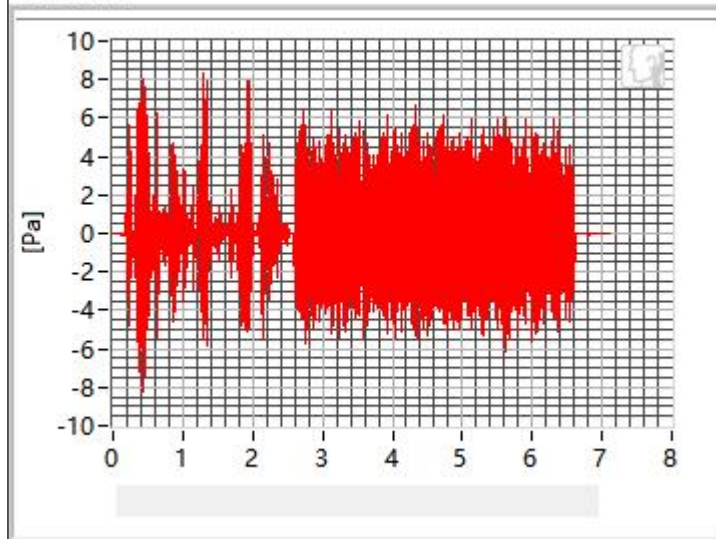
1000Hz



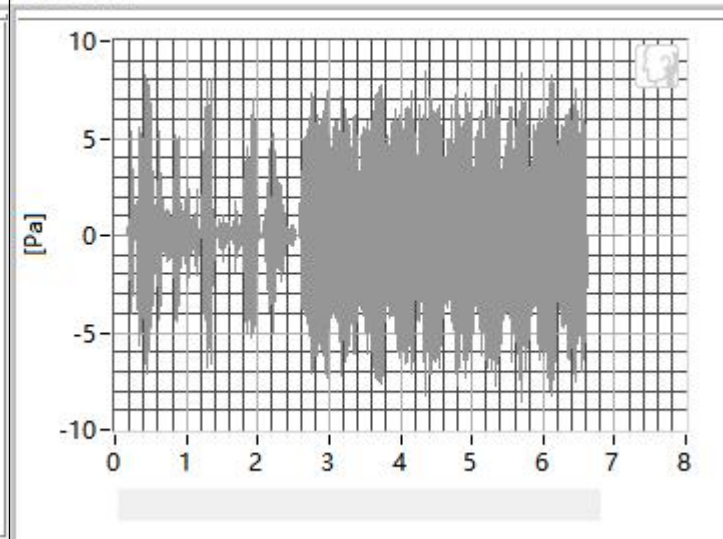
1250Hz



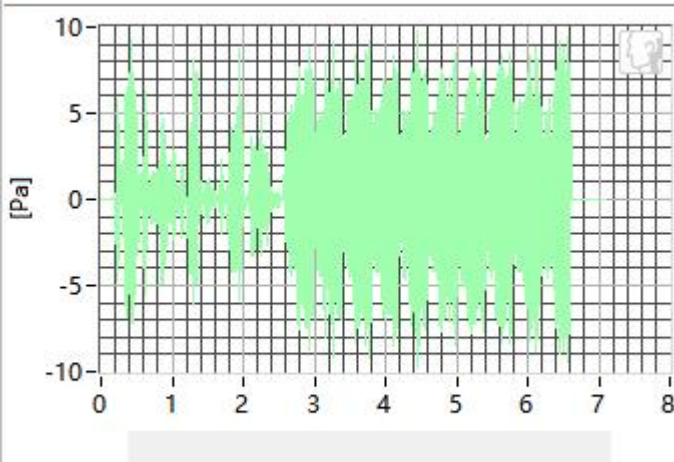
1600Hz



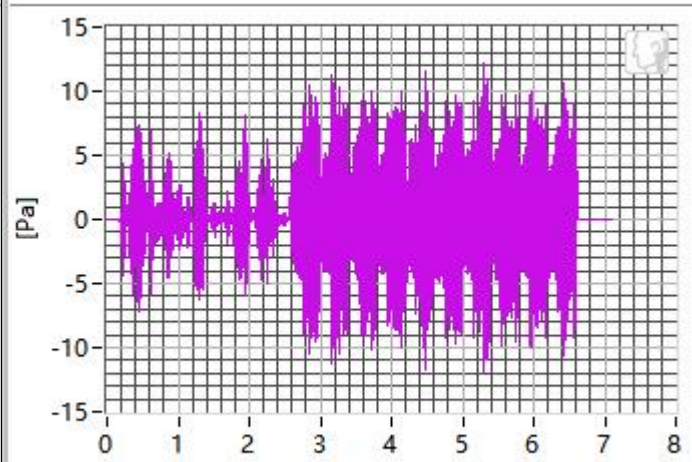
2000Hz



2500Hz



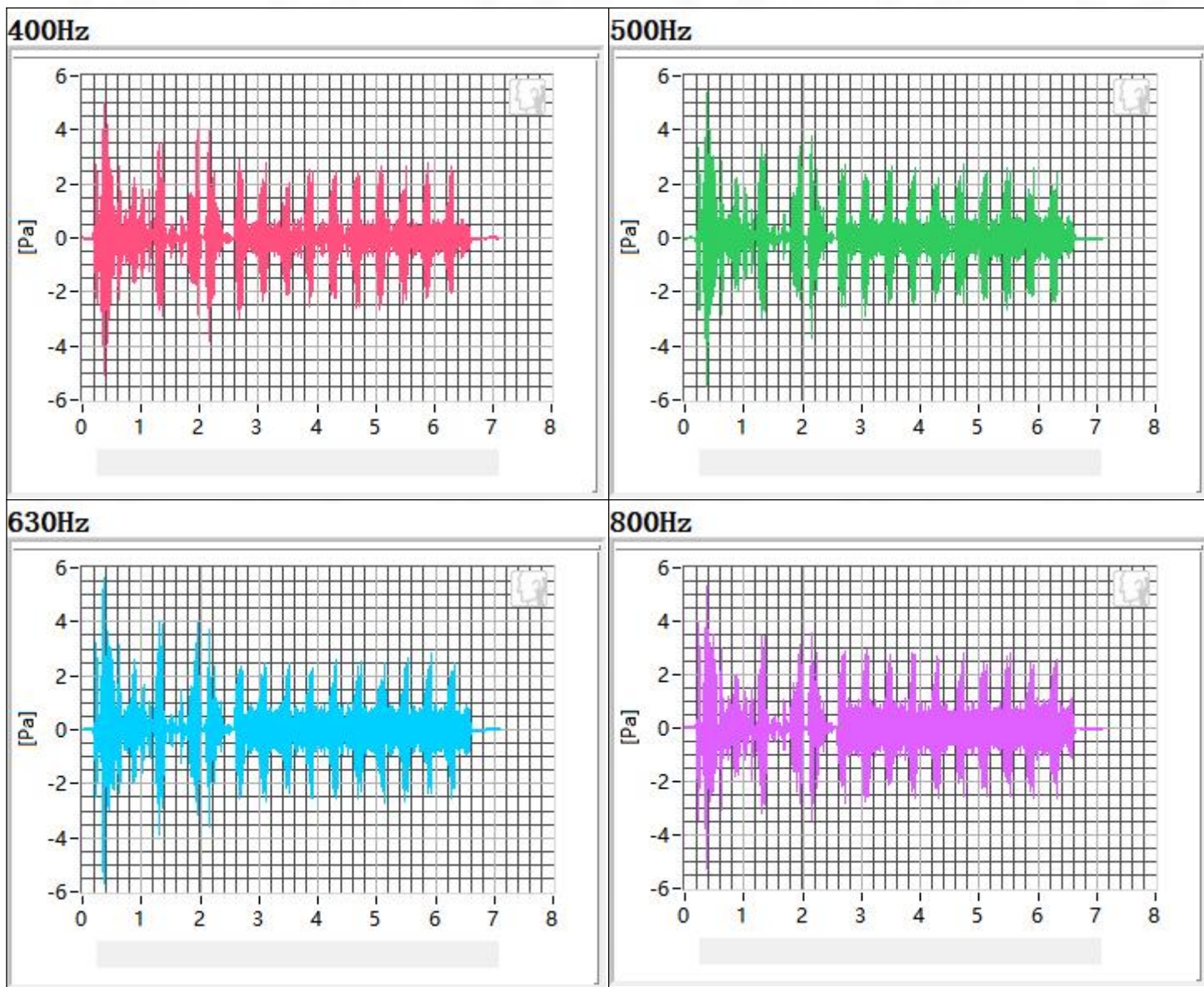
3150Hz



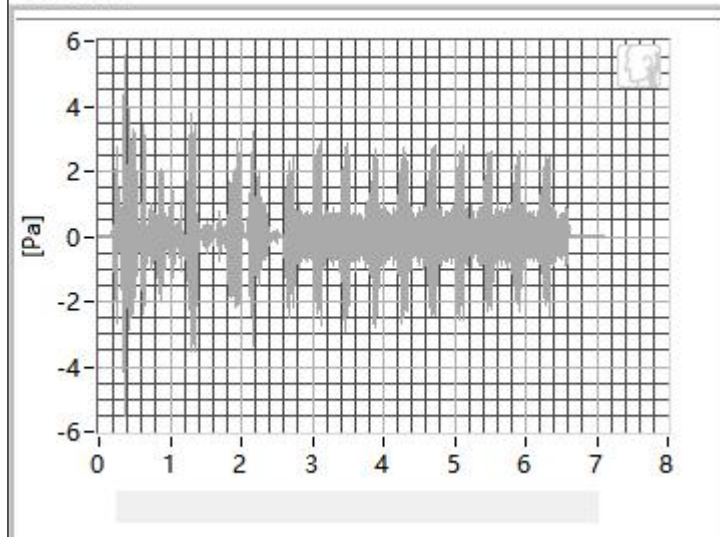
Frequency	SDNR	Frequency	SDNR
400Hz	30.94dB	1250Hz	25.06dB
500Hz	29.88dB	1600Hz	23.82dB
630Hz	25.92dB	2000Hz	25.55dB
800Hz	21.97dB	2500Hz	20.64dB
1000Hz	24.93dB	3150Hz	20.88dB

All SDNRs were greater than 20.0 dB, requirement was met. Smallest SDNR was 20.64 dB at 2500Hz.

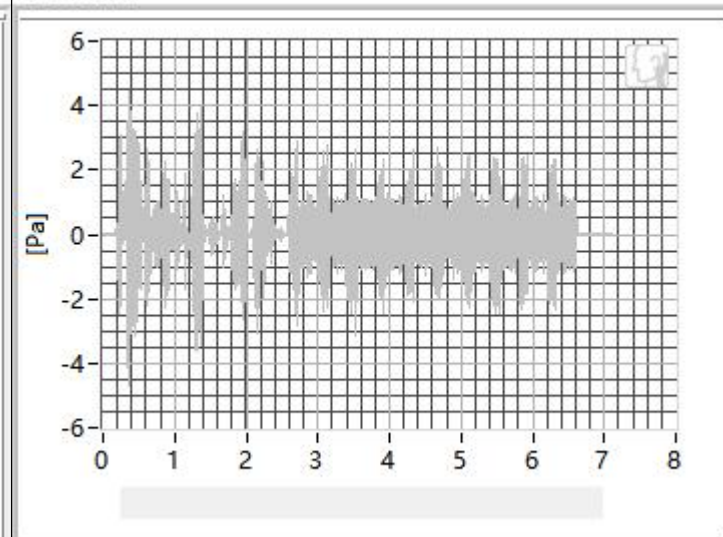
1.2 Receive Distortion and Noise 2N NB



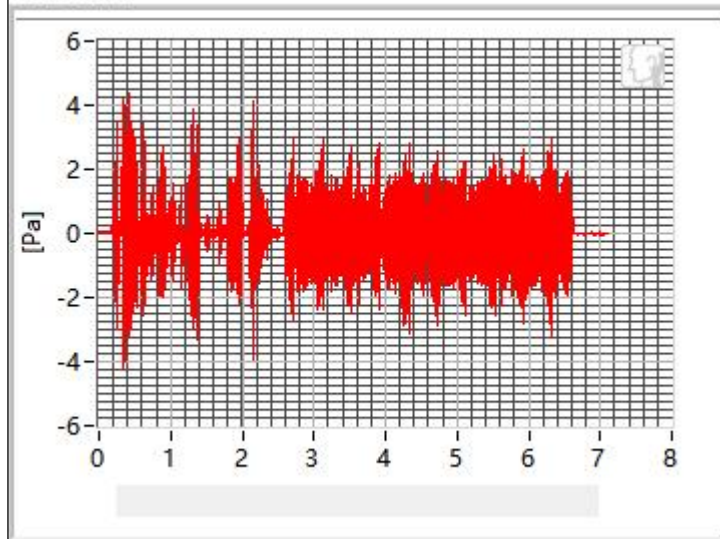
1000Hz



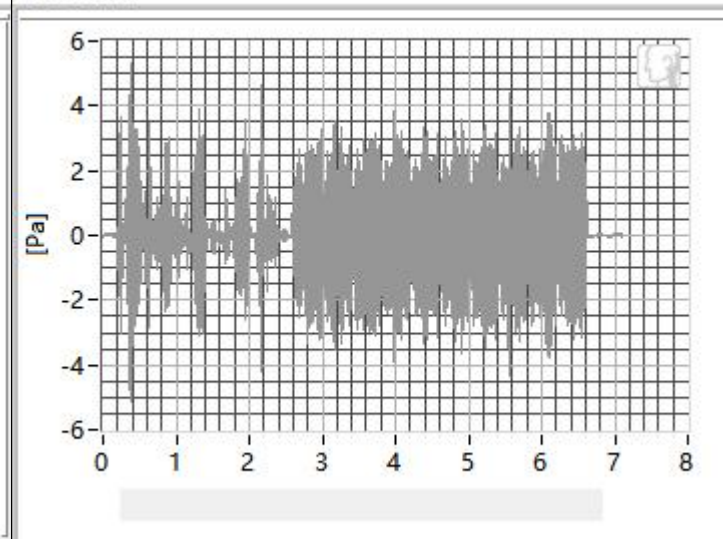
1250Hz



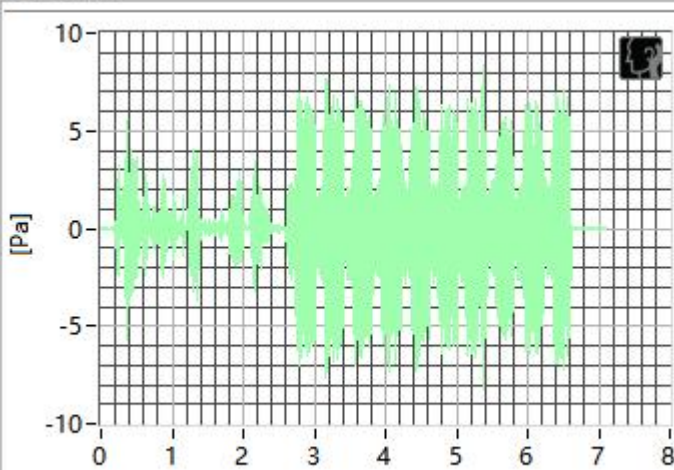
1600Hz



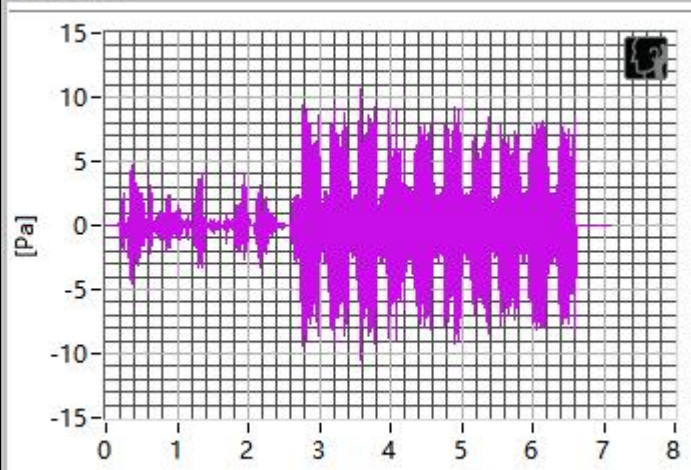
2000Hz



2500Hz



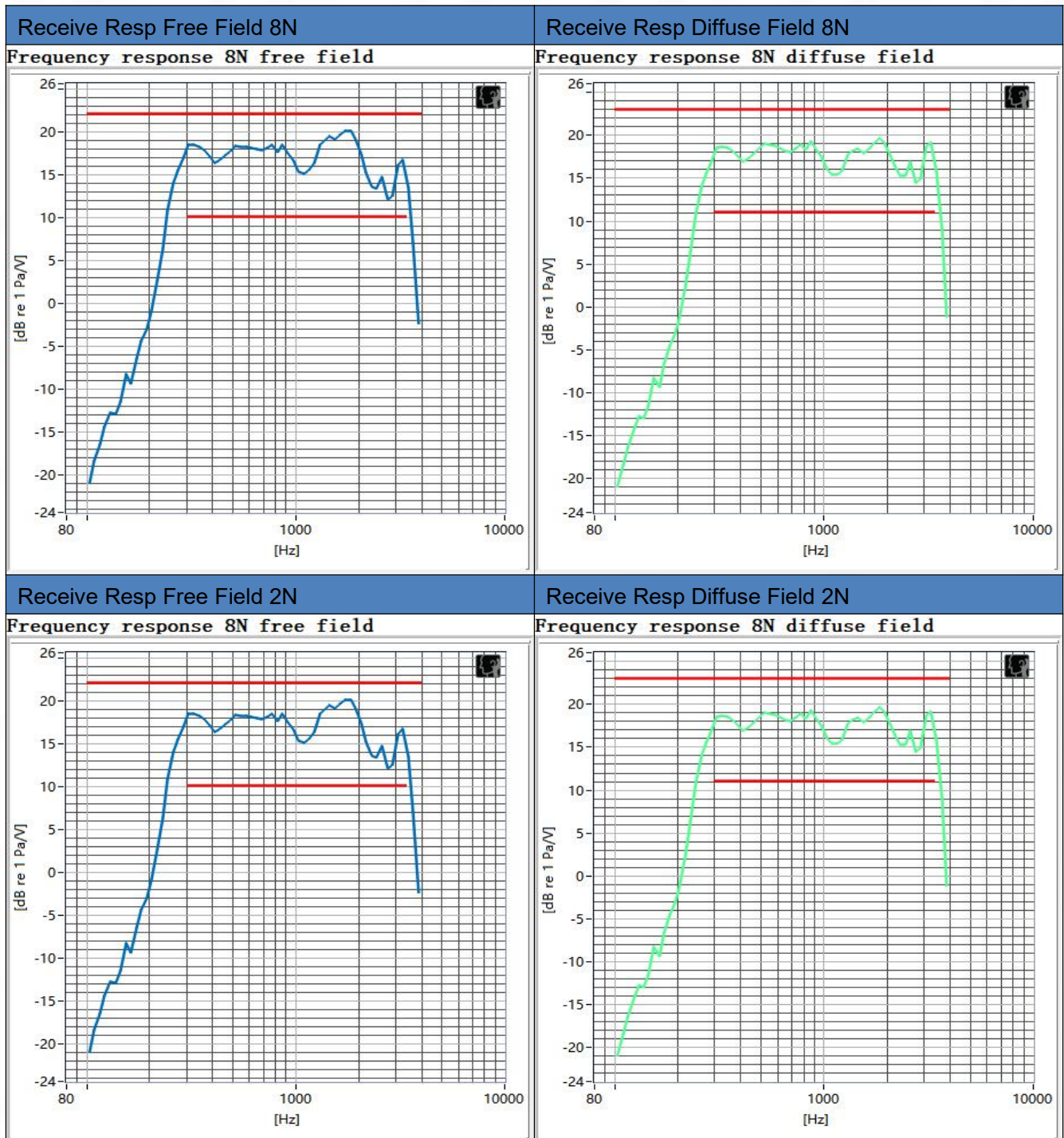
3150Hz



Frequency	SDNR	Frequency	SDNR
400Hz	31.49dB	1250Hz	24.33dB
500Hz	29.27dB	1600Hz	24.71dB
630Hz	27.32dB	2000Hz	24.48dB
800Hz	22.58dB	2500Hz	22.61dB
1000Hz	25.71dB	3150Hz	21.54dB

All SDNRs were greater than 20.0 dB, requirement was met. Smallest SDNR was 21.54dB at 3150Hz.

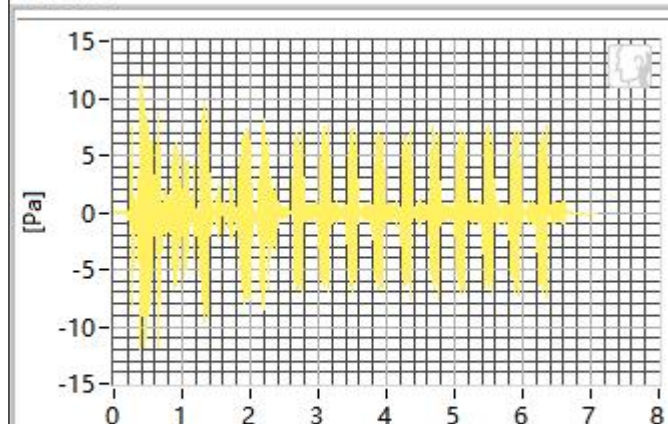
1.3 Receive Frequency Response



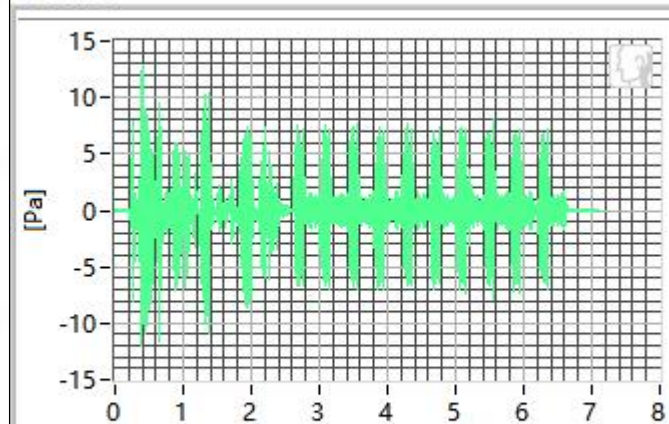
2. WCDMA band 2 in channel 9400

2.1 Receive Distortion and Noise 8N WB

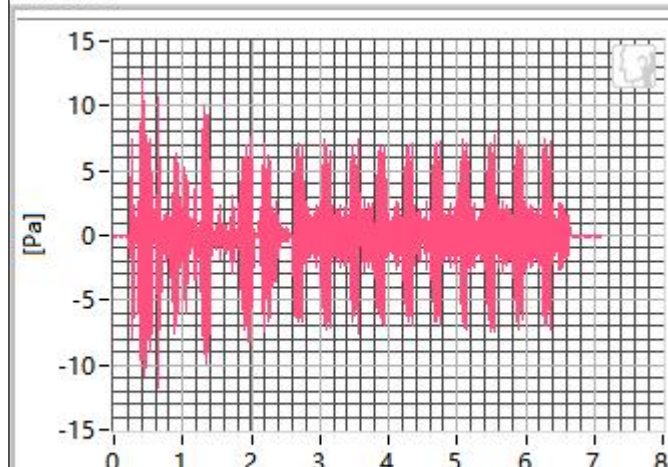
250Hz



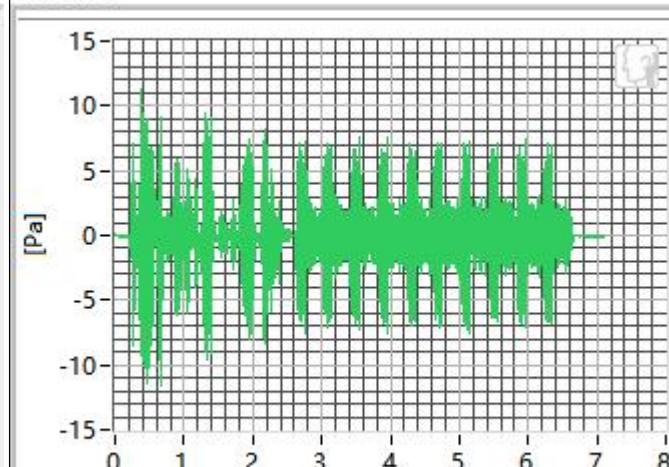
315Hz



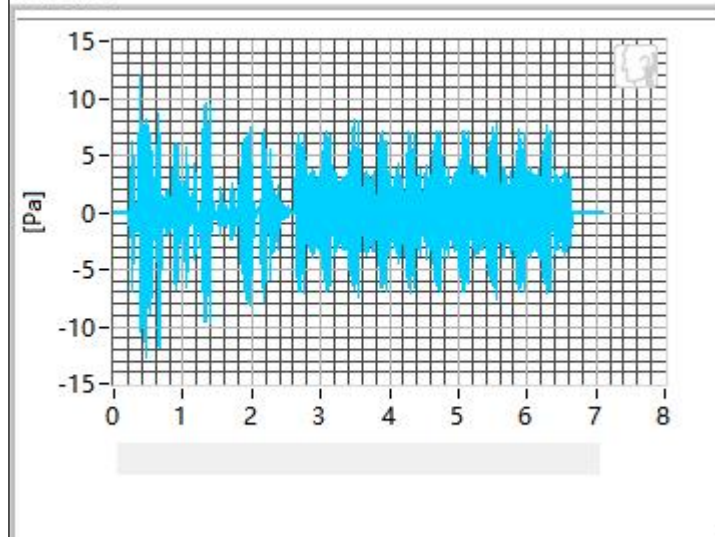
400Hz



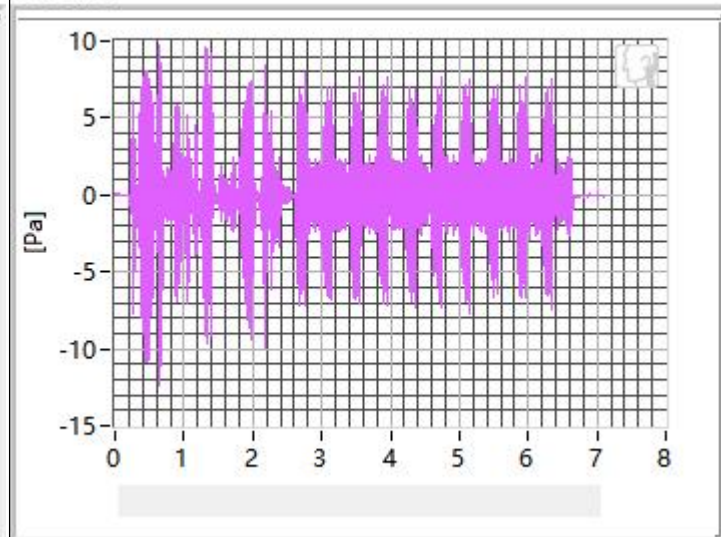
500Hz



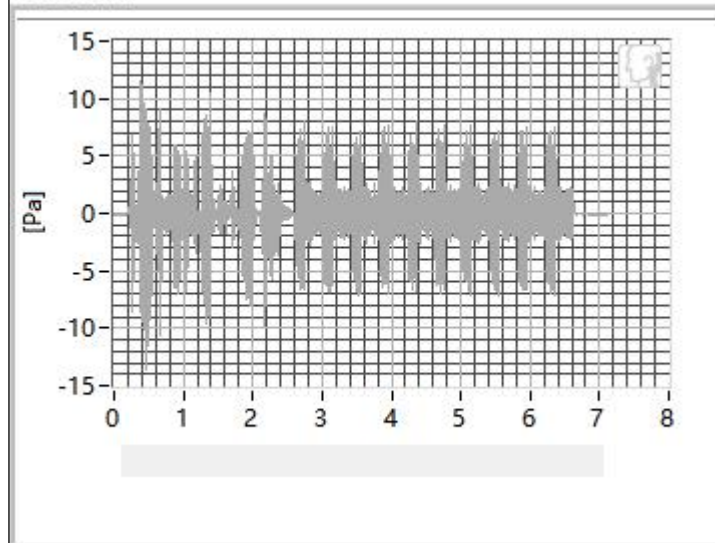
630Hz



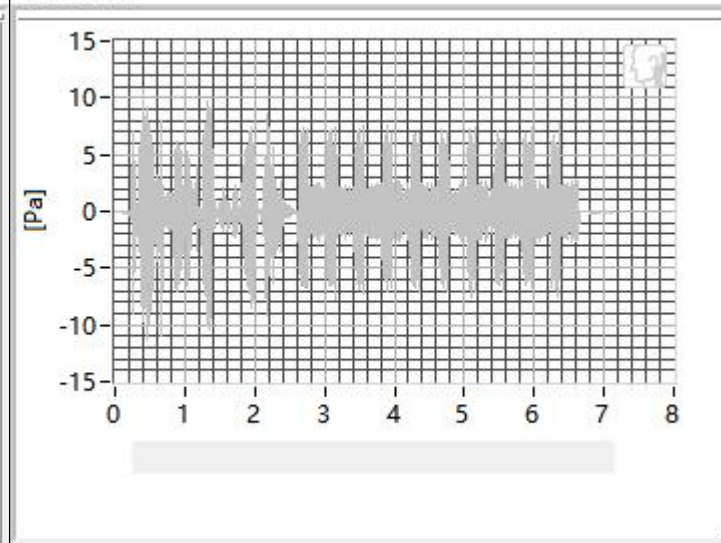
800Hz



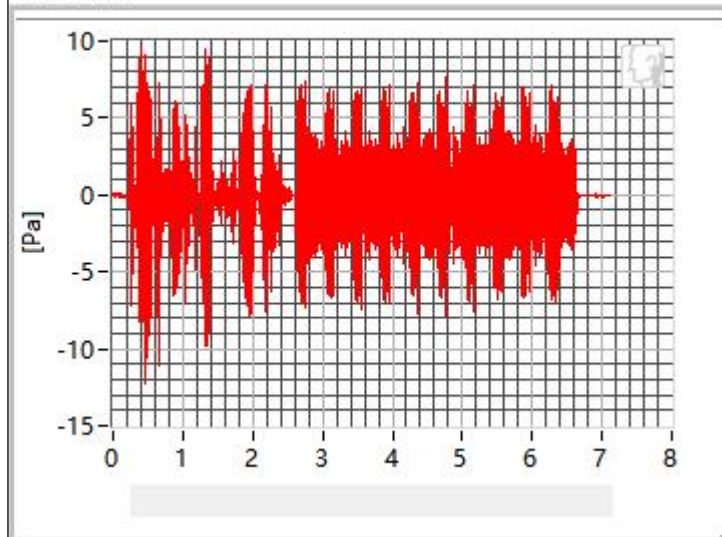
1000Hz



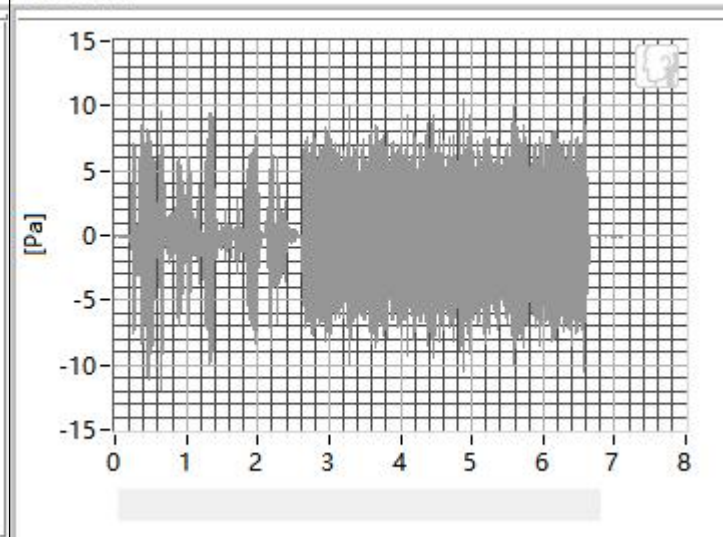
1250Hz



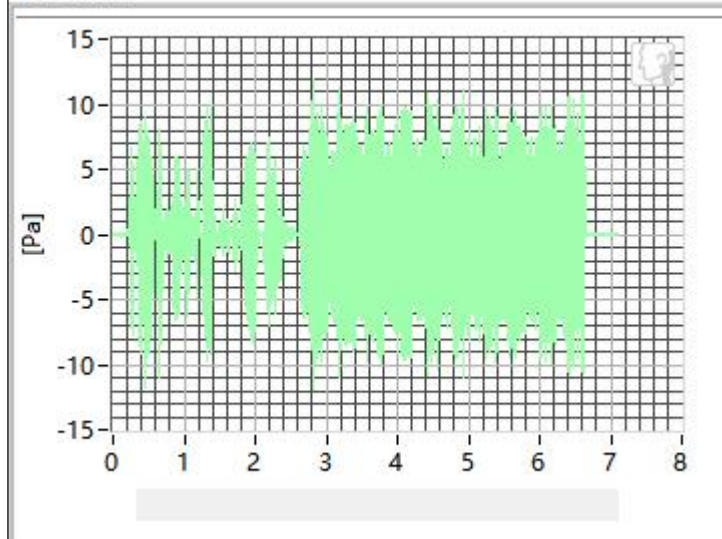
1600Hz



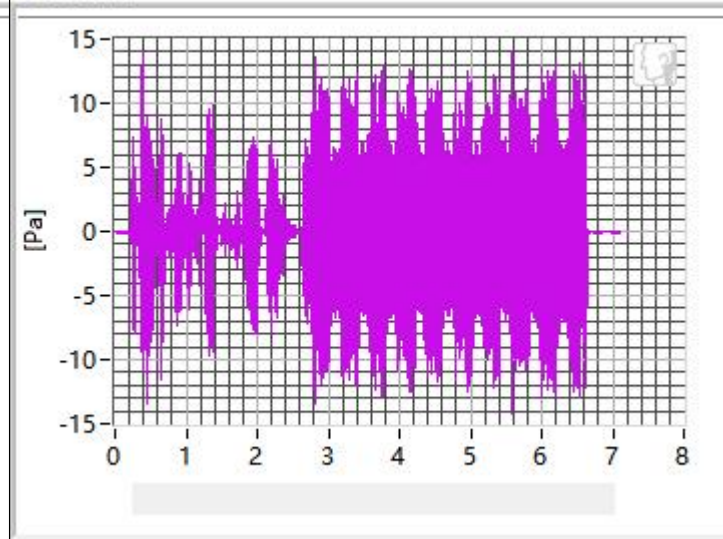
2000Hz



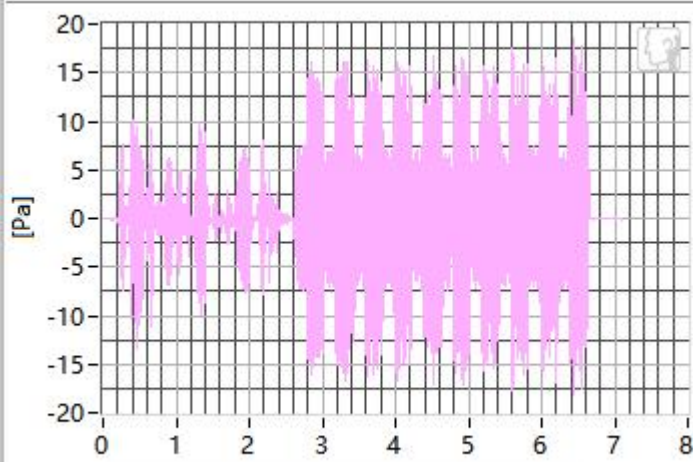
2500Hz



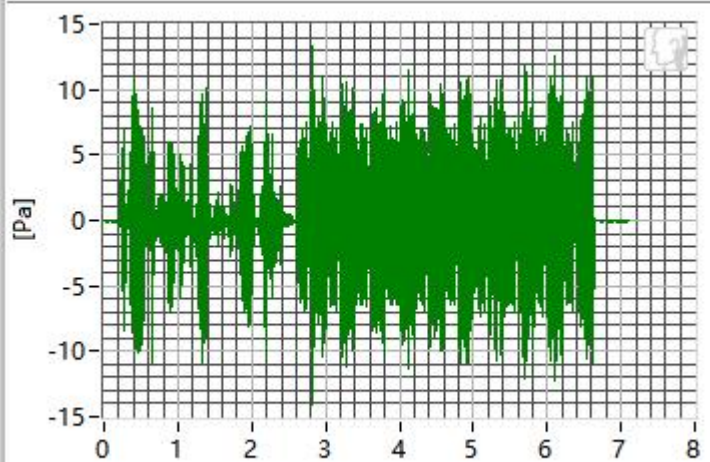
3150Hz



4000Hz



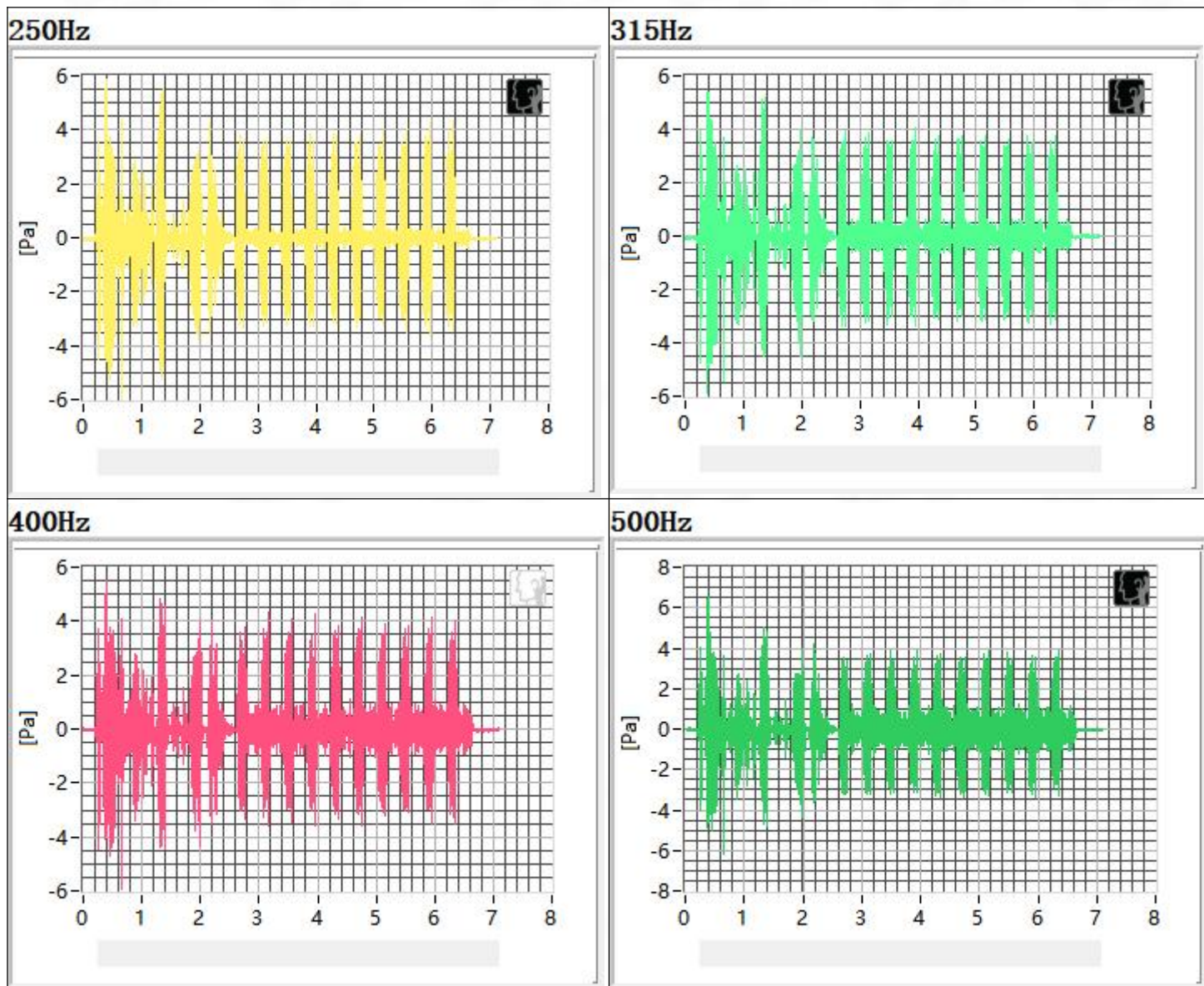
5000Hz



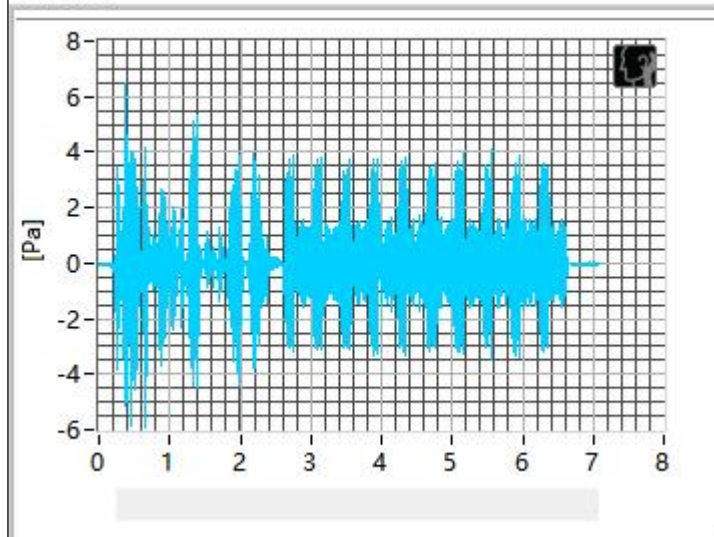
Frequency	SDNR	Frequency	SDNR
250Hz	26.10dB	1250Hz	22.00dB
315Hz	29.76dB	1600Hz	22.68dB
400Hz	29.50dB	2000Hz	22.10dB
500Hz	30.66dB	2500Hz	21.55dB
630Hz	34.66dB	3150Hz	23.84dB
800Hz	26.46dB	4000Hz	26.30dB
1000Hz	26.06dB	5000Hz	20.54dB

All SDNRs were greater than 20.0 dB, requirement was met. Smallest SDNR was 20.54dB at 5000Hz.

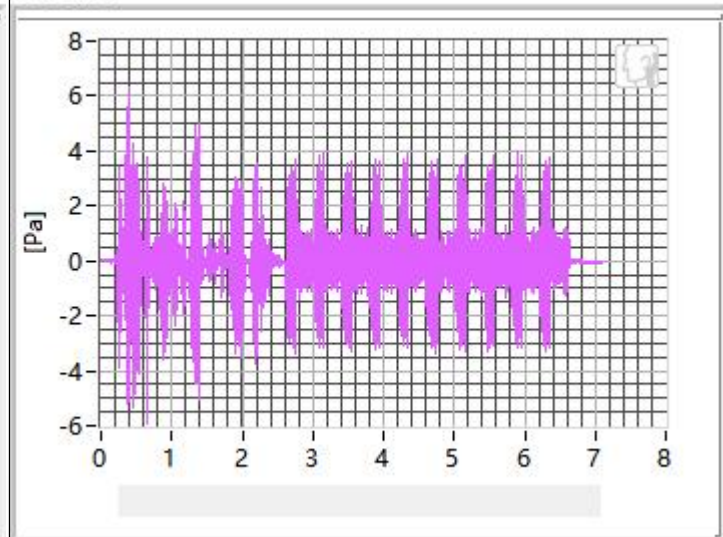
2.2 Receive Distortion and Noise 2N WB



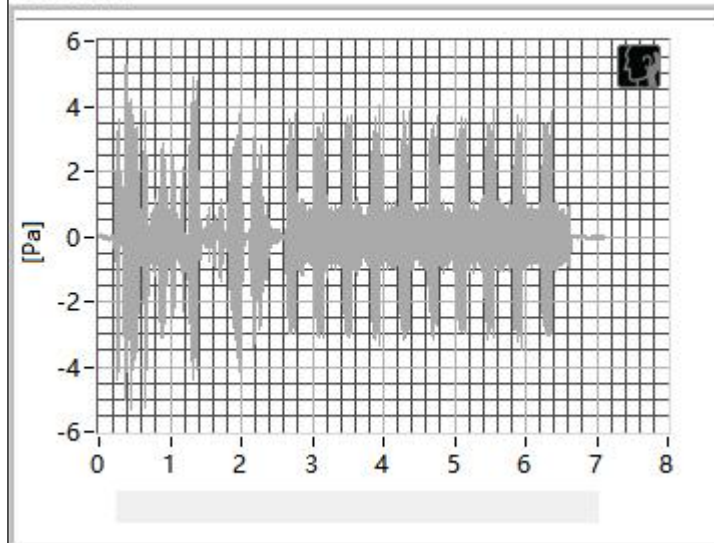
630Hz



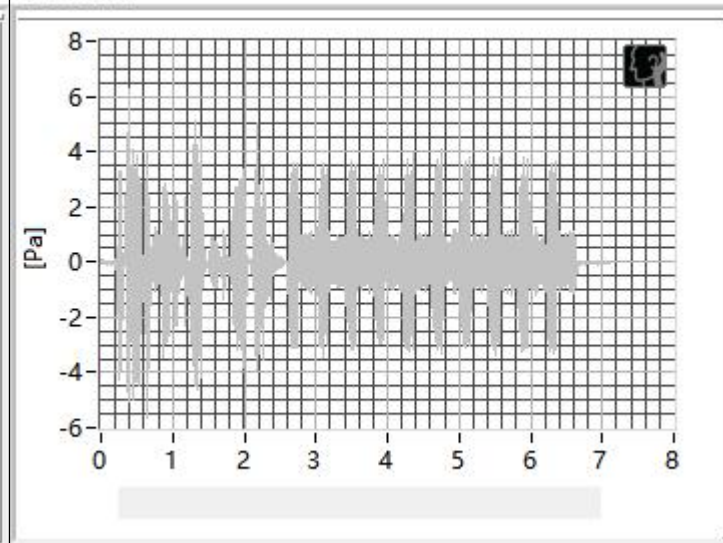
800Hz



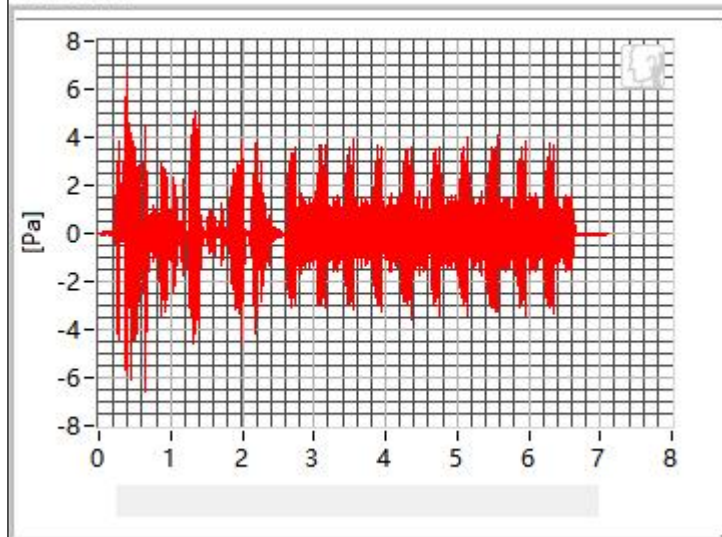
1000Hz



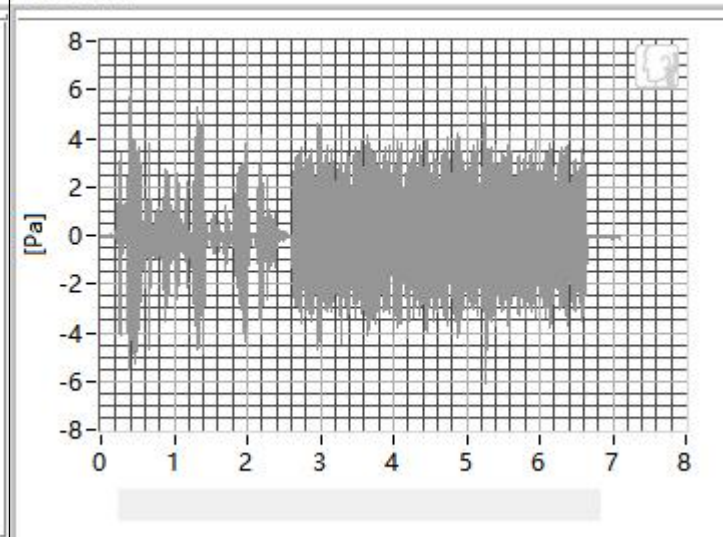
1250Hz



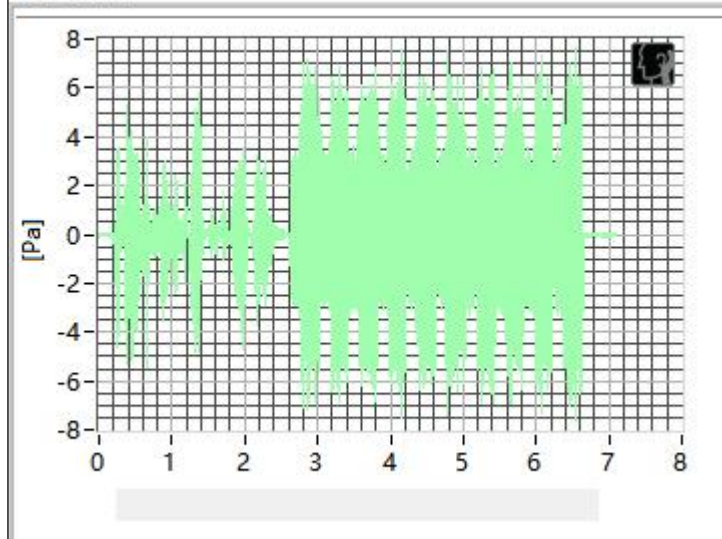
1600Hz



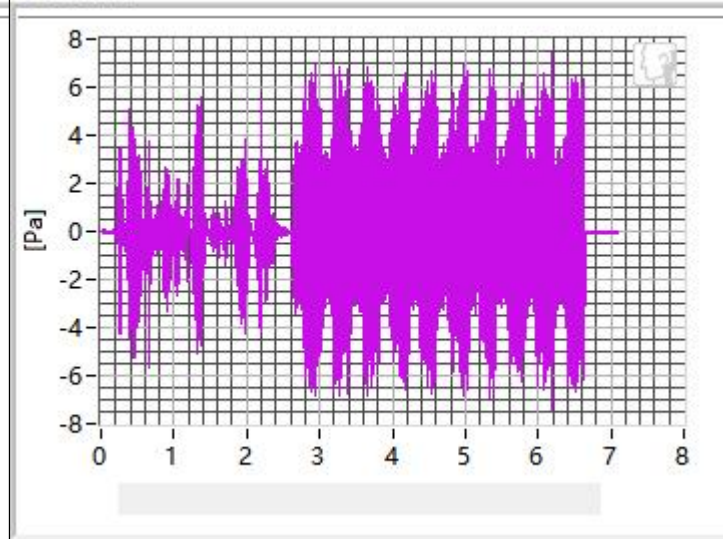
2000Hz

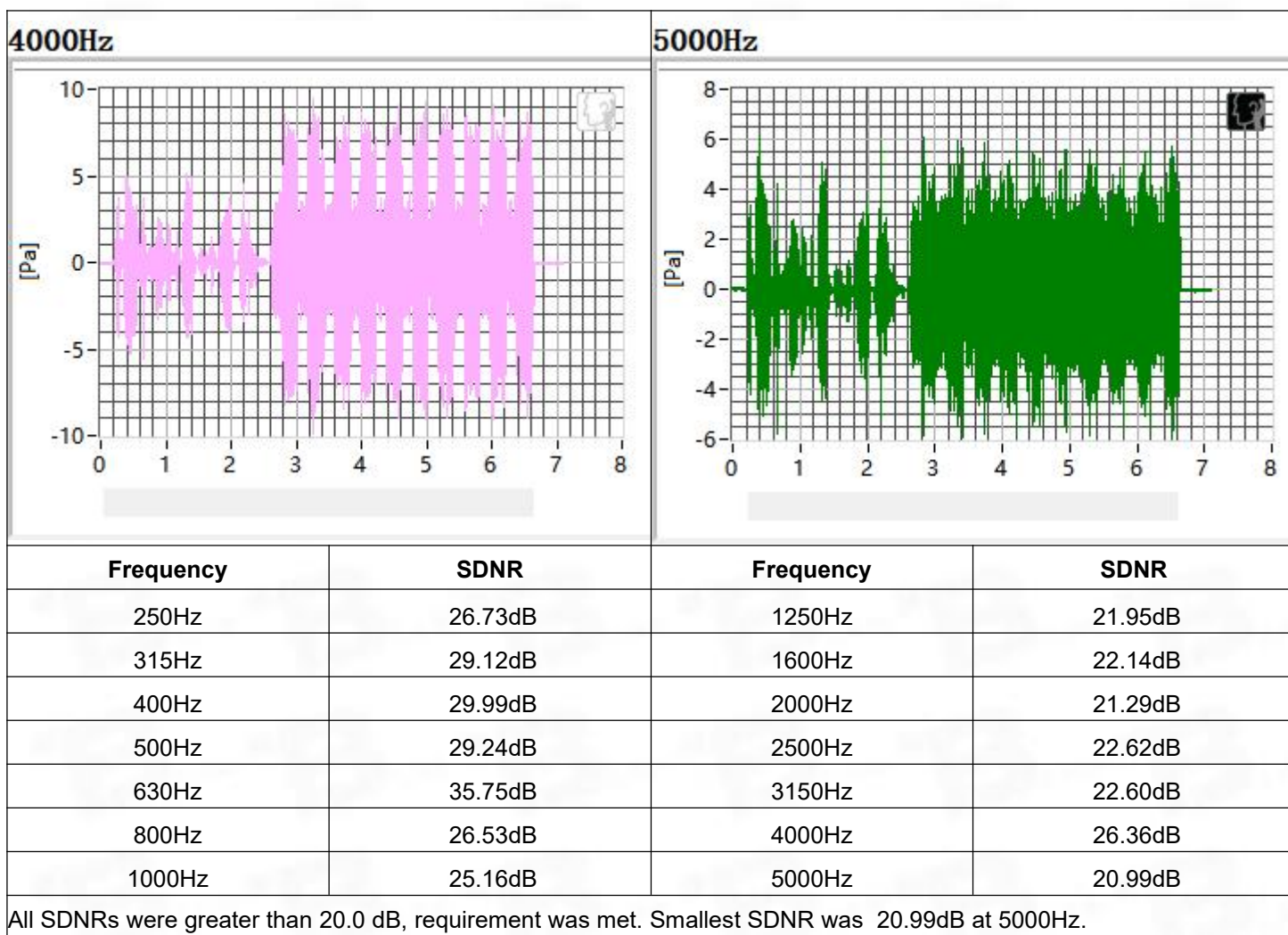


2500Hz

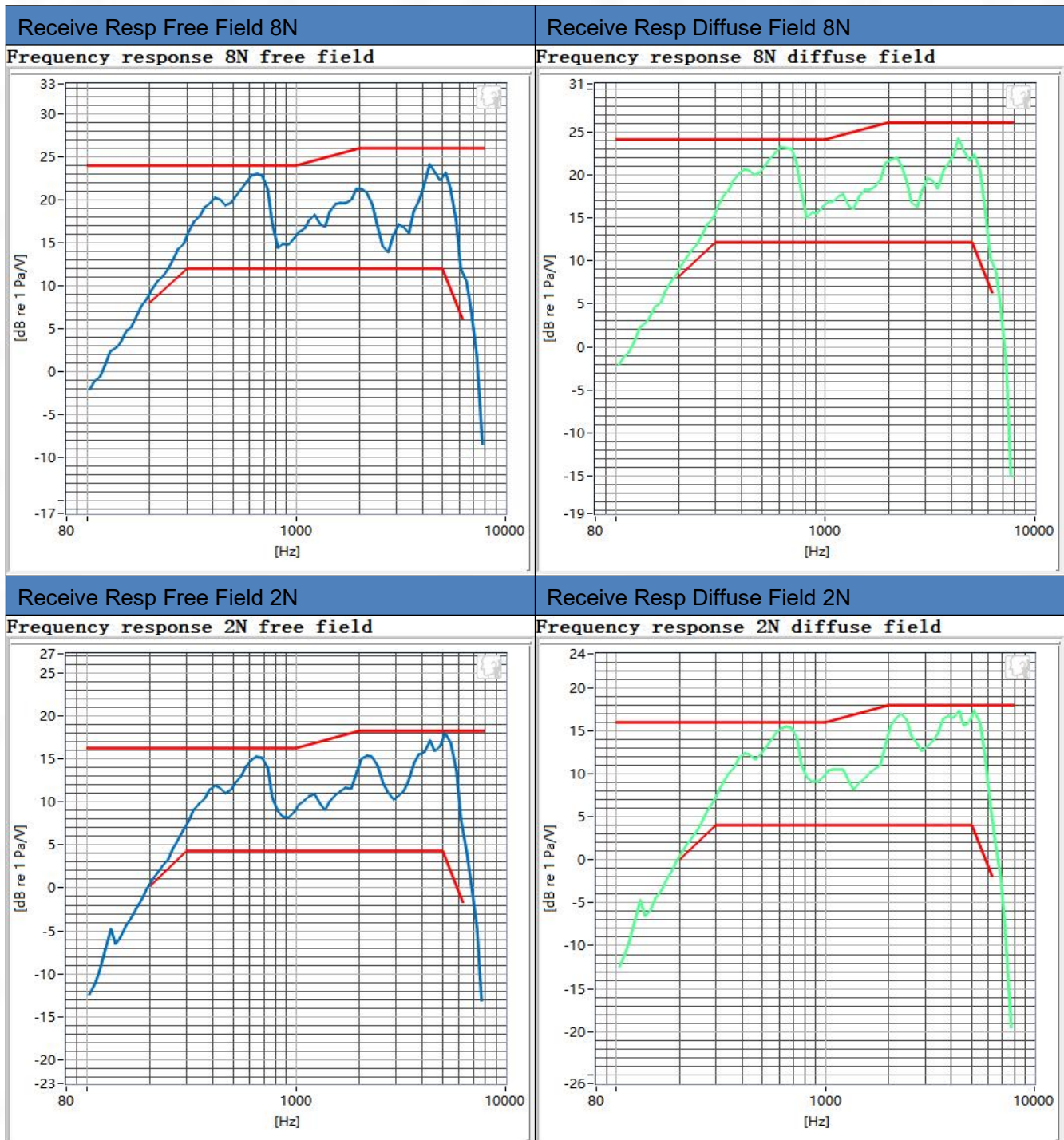


3150Hz



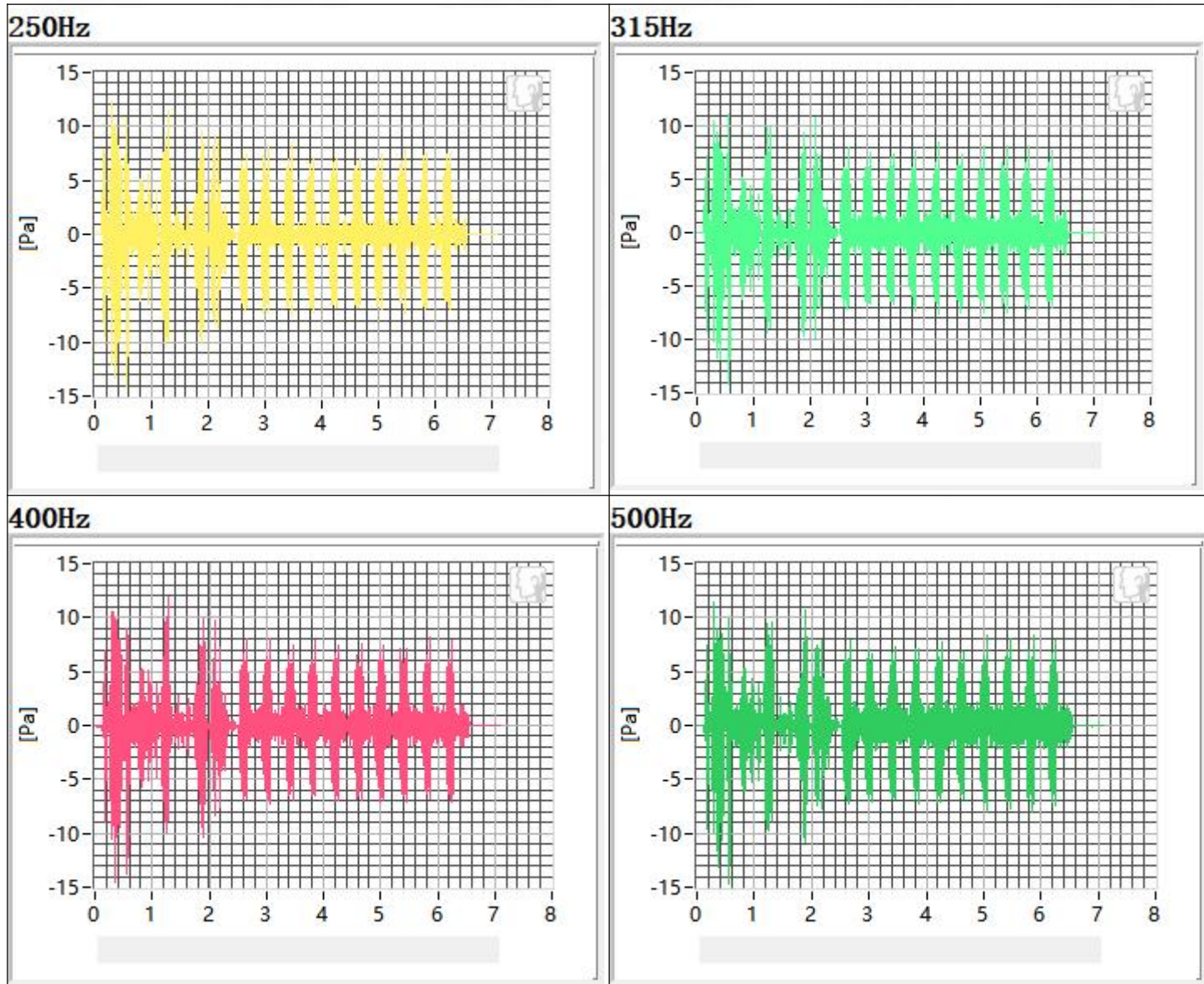


2.3 Receive Frequency Response

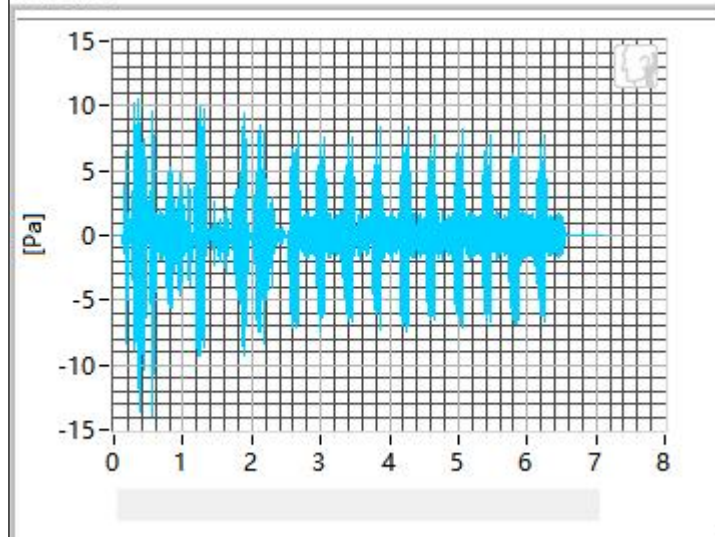


3. LTE band 2 in channel 18700

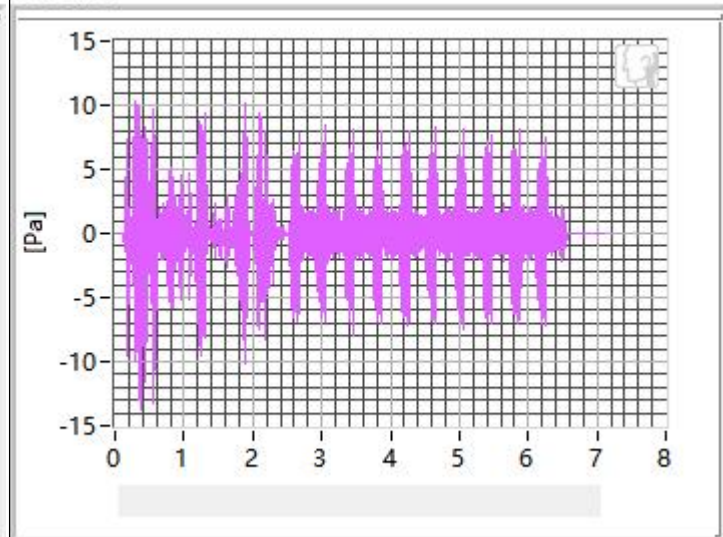
3.1 Receive Distortion and Noise 8N WB



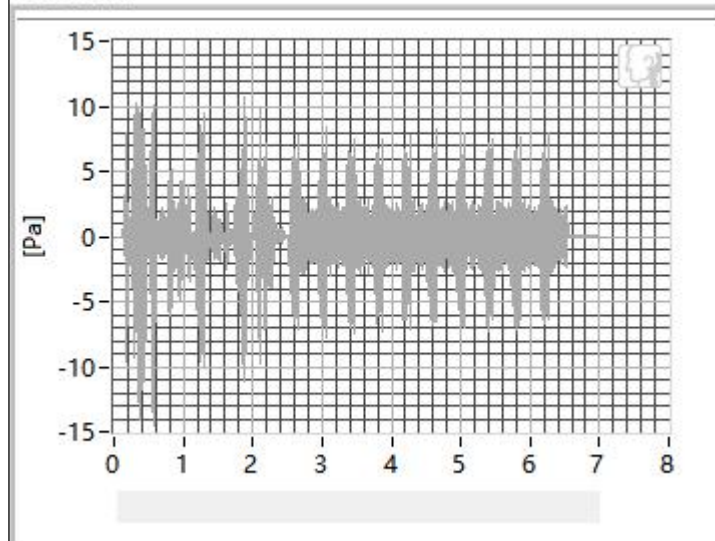
630Hz



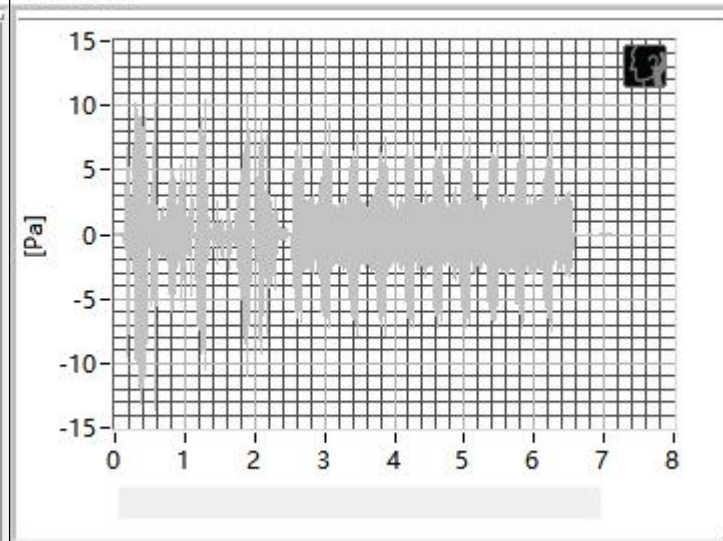
800Hz



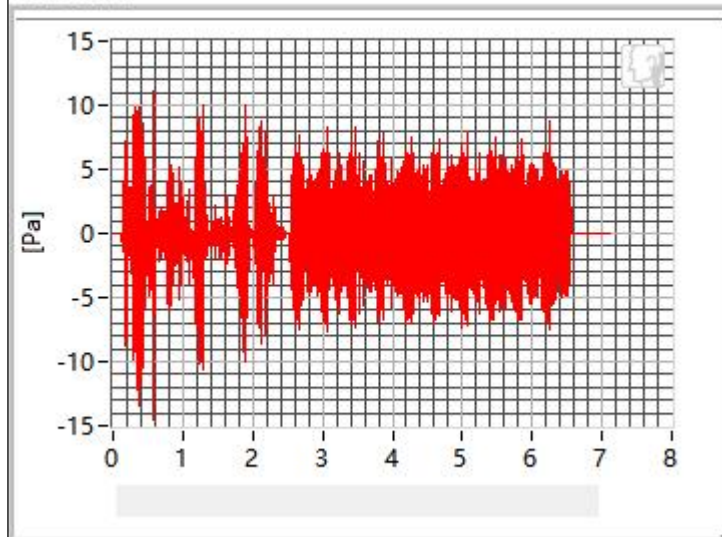
1000Hz



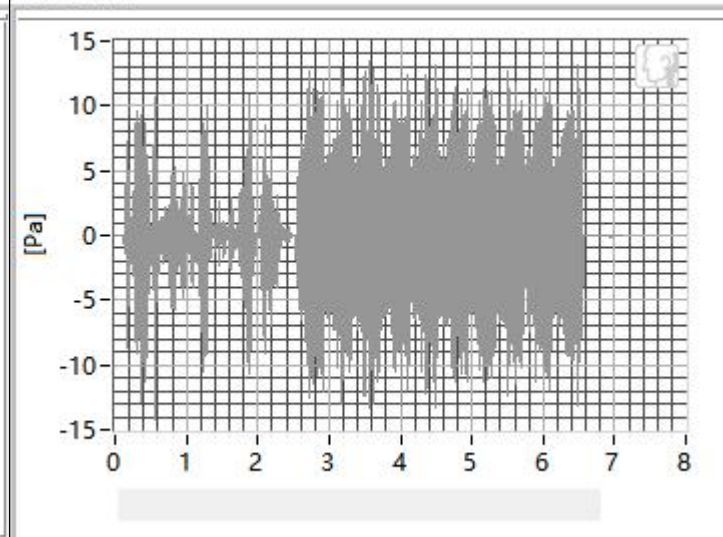
1250Hz



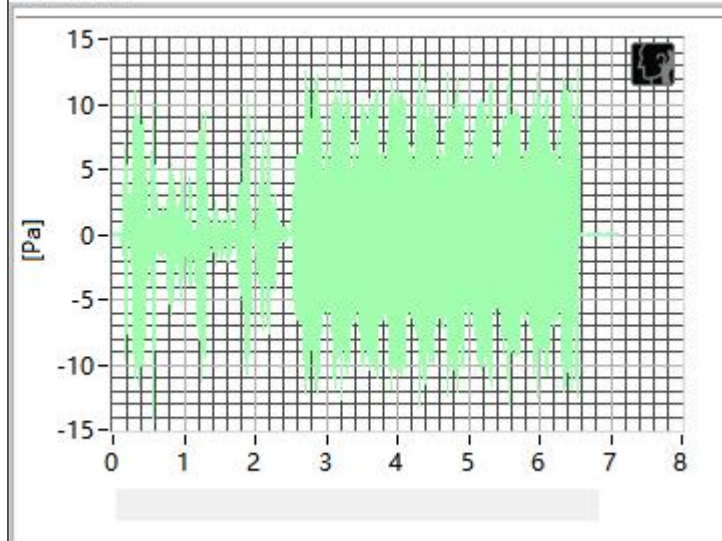
1600Hz



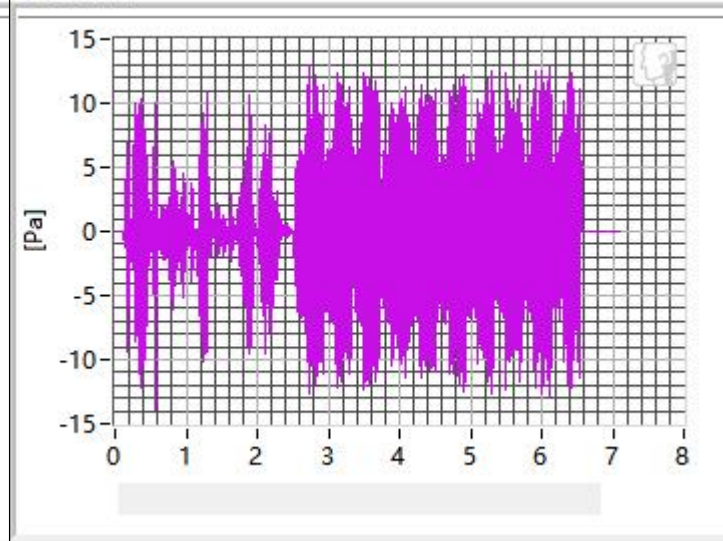
2000Hz



2500Hz



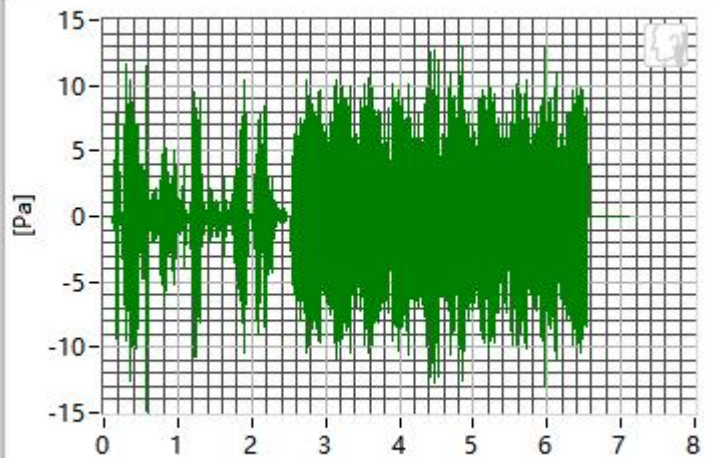
3150Hz



4000Hz



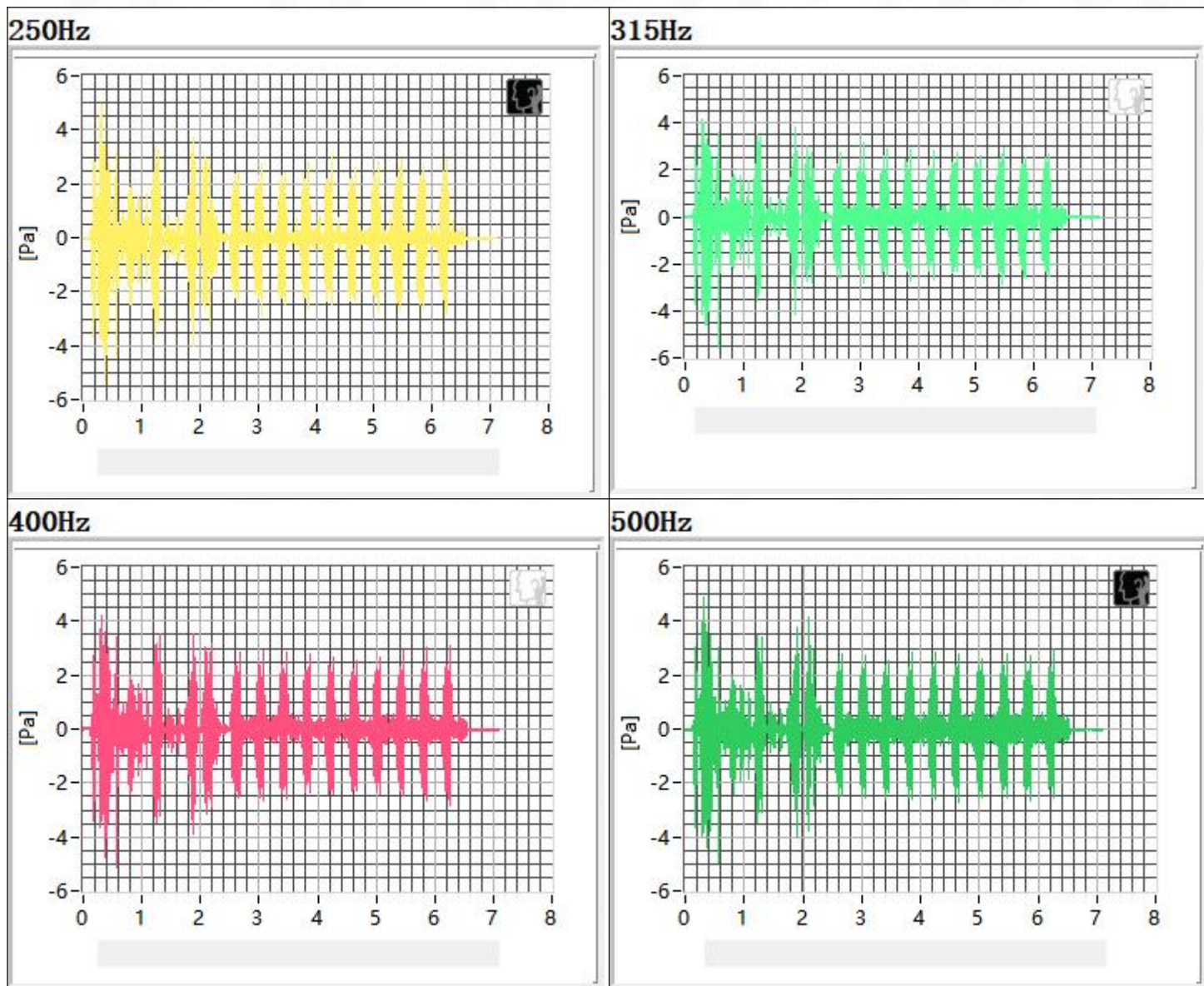
5000Hz



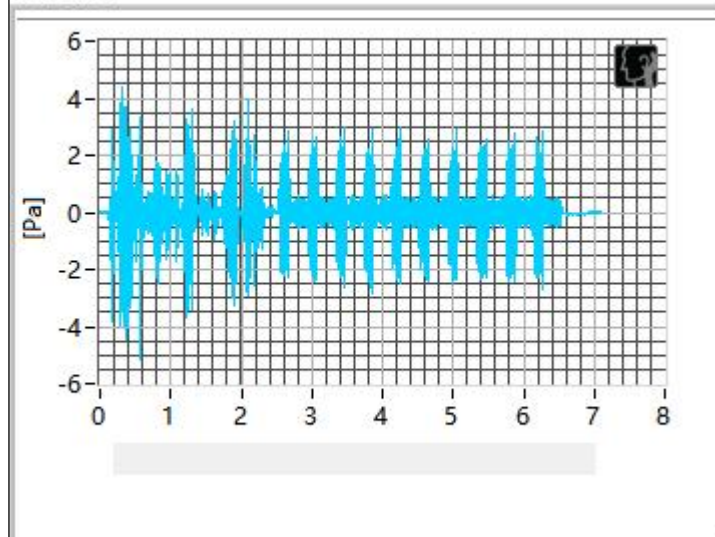
Frequency	SDNR	Frequency	SDNR
250Hz	21.67dB	1250Hz	23.57dB
315Hz	26.70dB	1600Hz	21.96dB
400Hz	29.65dB	2000Hz	22.83dB
500Hz	32.66dB	2500Hz	21.99dB
630Hz	30.42dB	3150Hz	22.97dB
800Hz	28.51dB	4000Hz	25.17dB
1000Hz	24.70dB	5000Hz	21.56dB

All SDNRs were greater than 20.0 dB, requirement was met. Smallest SDNR was 21.56dB at 5000 Hz.

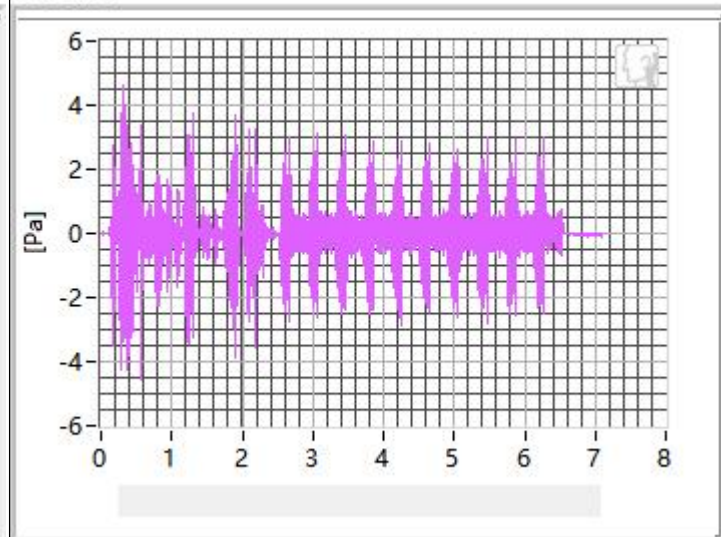
3.2 Receive Distortion and Noise 2N WB



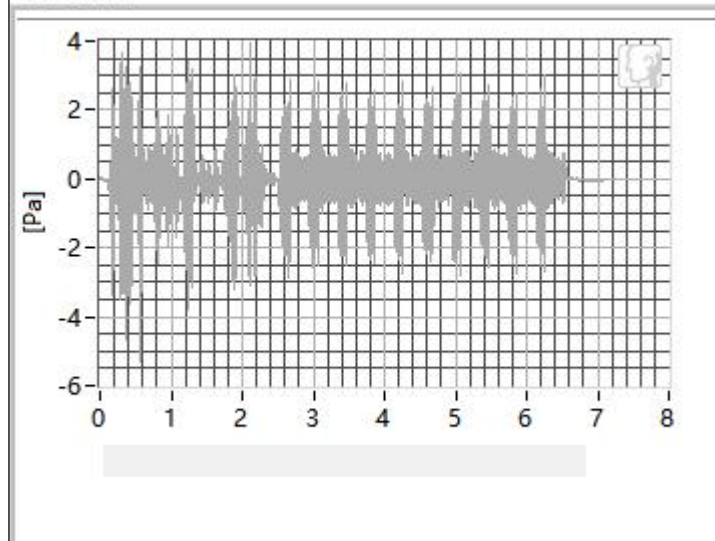
630Hz



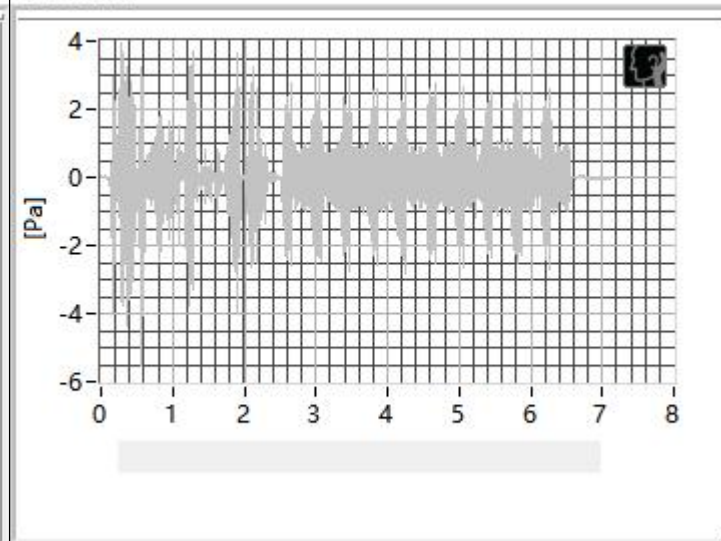
800Hz



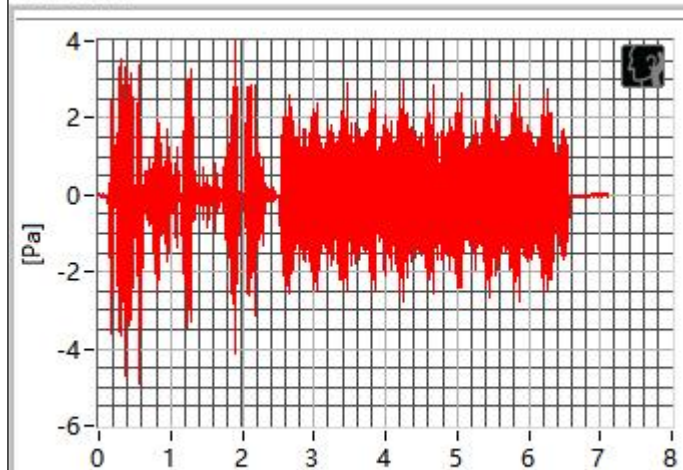
1000Hz



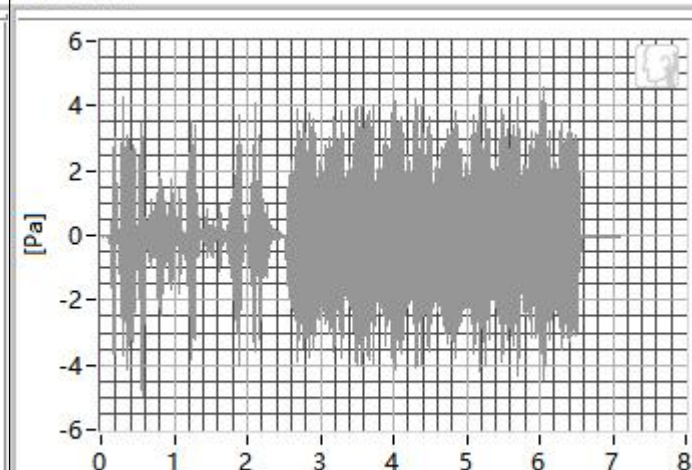
1250Hz



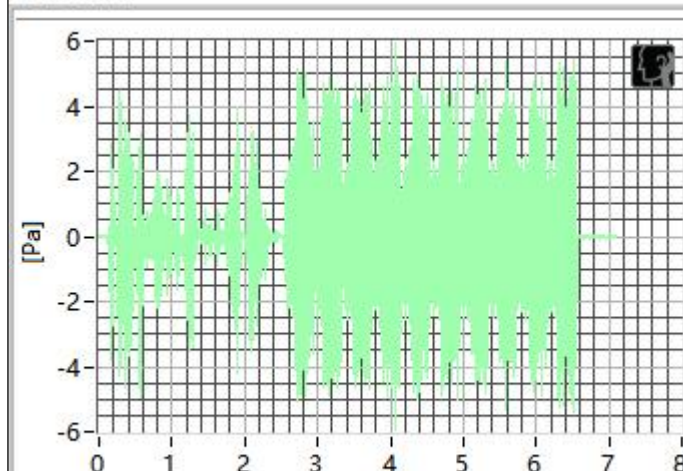
1600Hz



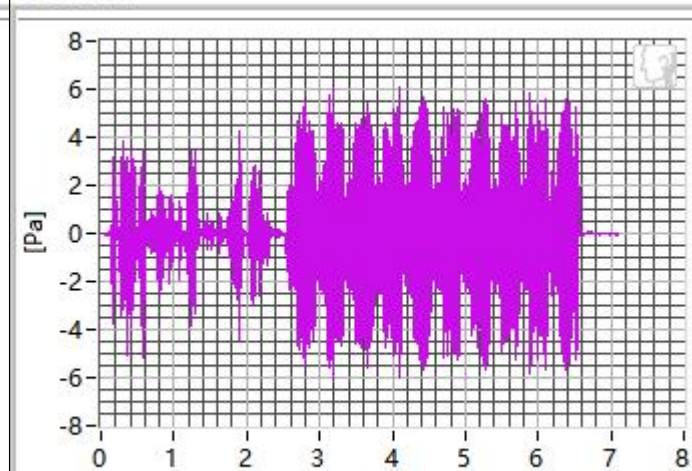
2000Hz



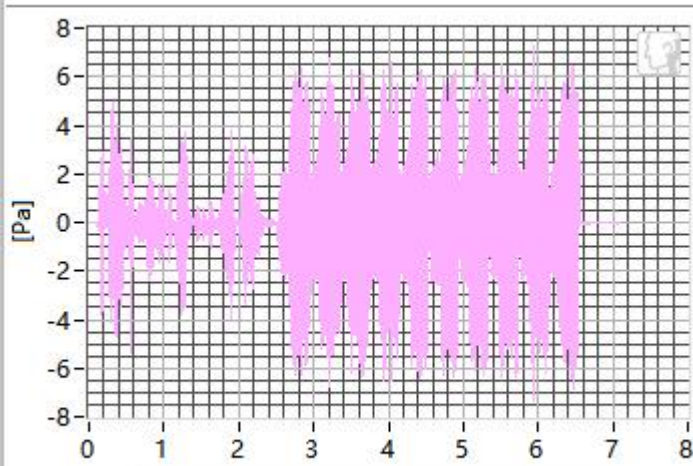
2500Hz



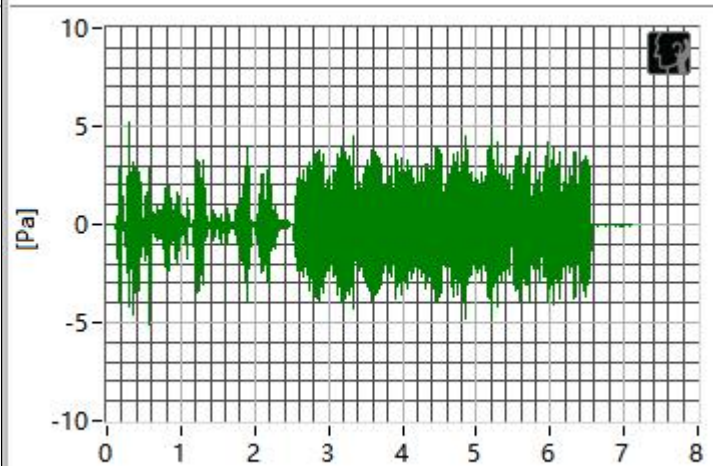
3150Hz



4000Hz



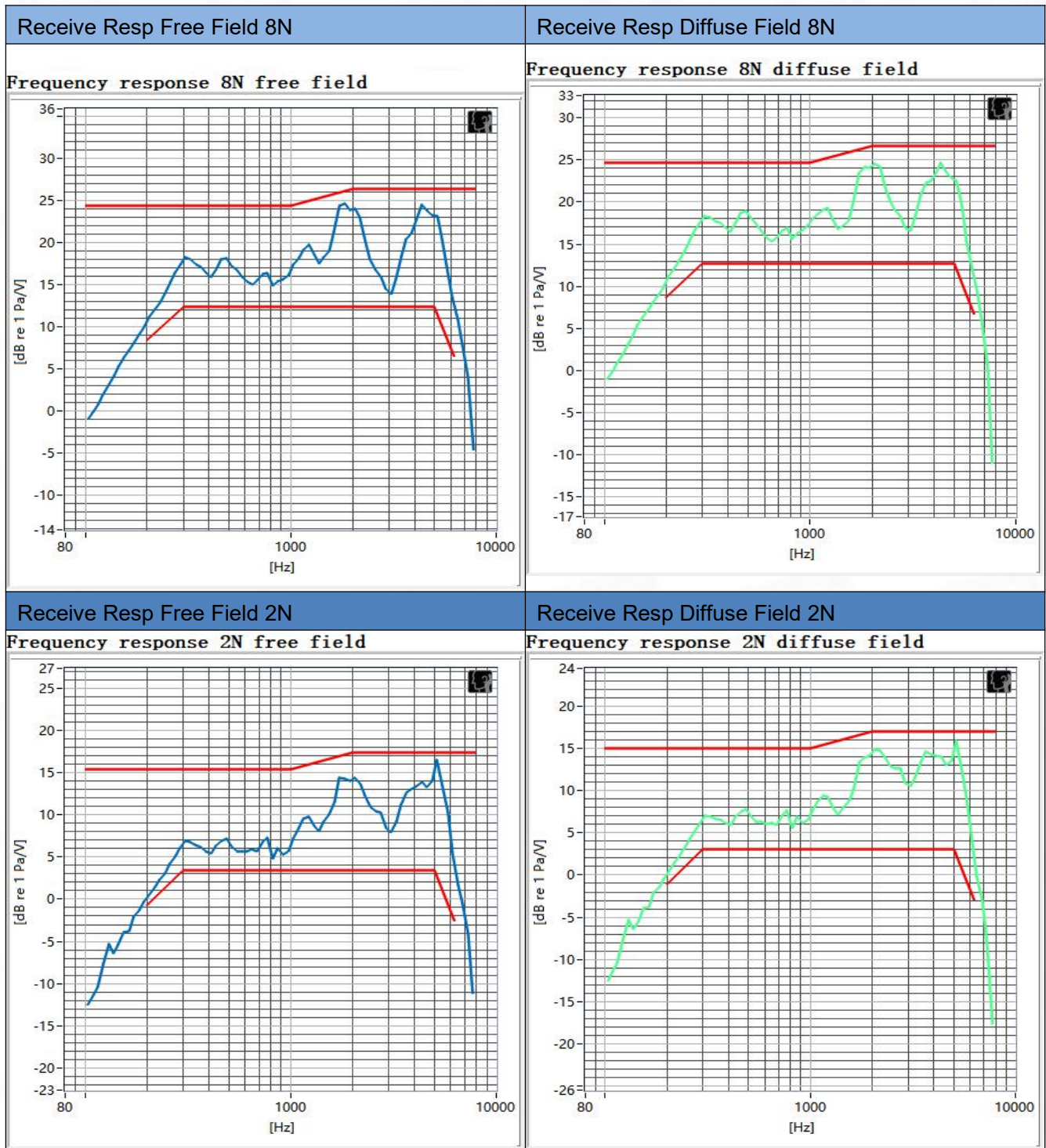
5000Hz



Frequency	SDNR	Frequency	SDNR
250Hz	26.64dB	1250Hz	21.93dB
315Hz	29.24dB	1600Hz	22.75dB
400Hz	30.71dB	2000Hz	22.26dB
500Hz	31.35dB	2500Hz	21.73dB
630Hz	30.37dB	3150Hz	23.28dB
800Hz	28.58dB	4000Hz	26.92dB
1000Hz	25.14dB	5000Hz	21.04dB

All SDNRs were greater than 20.0 dB, requirement was met. Smallest SDNR was 21.04dB at 5000Hz.

3.3 Receive Frequency Response



ANNEX B Test Setup Photo

Please refer to the document “ANNEX B Test Setup Photo_VC.pdf”.

ANNEX C CALIBRATION REPORT

Please refer to the document “CALIBRATION REPORT.pdf”.



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