



TEST REPORT

No.24B01N001531-003-Audio

For

DIALN PRODUCTS INC

Smart Phone

Model Name: X68

With

Hardware Version: YK310-MB-V6.0

Software Version: Dialn_X68_Generic_V4.0_20240829_1900

FCC ID: 2BAHU2024021

Issued Date: 2024-09-18

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

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Revision Version

Report Number	Revision	Description	Issued Date	
24B01N001531-003-Audio	Rev.0	1st edition	2024-09-18	

NOTE: The previous version of the report is invalid for this revised edition.



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1. Summary of Test Report

1.1. Test Items

Description Smart Phone

Model Name X68

Applicant's name DIALN PRODUCTS INC Manufacturer's Name DIALN PRODUCTS INC

1.2. <u>Test Standards</u>

ANSI C63.19 2019 ANSI/TIA-5050 2018

1.3. Test Result

All test items are passed. Please refer to "5.2 Summary of Test Results" for detail.

1.4. Testing Location

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China518000

1.5. Project Data

Project Leader Liang Shuzhen
Testing Start Date: 2024-07-29
Testing End Date: 2024-08-20

1.6. Signature

Li Yuhui

(Prepared this test report)

Huang Qiuqin

(Reviewed this test report)

Zhang Hao

(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: DIALN PRODUCTS INC

Address/Post: 2000 Walton Road, Saint Louis, Missouri 63114, United States

Contact: /
Email: /
Telephone: /
Fax: /

2.2. Manufacturer Information

Company Name: DIALN PRODUCTS INC

Address/Post: 2000 Walton Road, Saint Louis, Missouri 63114, United States

Contact: /
Email: /
Telephone: /
Fax: /



3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description Smart Phone

Model Name X68
Brand Name DIALN

GSM 850/1900,

WCDMA Band 2/4/5,

Frequency Bands: LTE Band 2/4/5/12/13/17/41/66/71,

Bluetooth, WLAN 2.4GHz/5GHz

Condition of EUT as received No abnormality in appearance

Note: Photographs of EUT are shown in ANNEX A of this test report. Components list, please refer to documents of the manufacturer; it is also included in the original test record of Shenzhen Academy of Information and Communications Technology.

3.2. Internal Identification of EUT

EUT ID*	SN or IMEI	HW Version	SW Version	Sample Arrival Date
		YK310-MB	Dialn_X68_Generi	
UT01aa	55451200030126	V6.0	c_V4.0_20240829	2024-08-07
			_1900	
		YK310-MB	Dialn_X68_Generi	
UT02aa	11222223333316	V6.0	c_V4.0_20240829	2024-07-16
		VO.0	_1900	

^{*}EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE Used During The Test

AE:

AEID* /
Description /
Type /
Manufacturer /

3.4. General Description

Equipment undertest (EUT) is a Smart Phone with integrated antenna. Manual and specifications of the EUT were provided to fulfil the test. Samples undergoing test were selected by the Client.

^{*}AE ID: is used to identify the test sample in the lab internally.



4. Reference Documents for Testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
	American National Standard Methods of Measurement of	
ANSI C63.19	Compatibility between Wireless Communications	2019
	Devicesand Hearing Aids	
	Telecommunications	
ANSI/TIA-5050	Communications Products	2018
ANSI/11A-5050	Receve Volume Control Requirements for Wireless	2010
	(Mobile) Devices	
KDB 285076 D05v01	HAC COMPLIANCE UNDER WAIVER DA 23-914	2023



5. Test Results

Abbreviations used in this clause:

P Passed

F Failed

NA not applicable

NM not measured

5.1. <u>Testing Environment</u>

Normal Temperature: 15-35°C Relative Humidity: 20-75% Local Bottom noise: 12.5dB

5.2. Summary of Test Results

See ANNEX C for detail

Summary of Test Results	VERDICT				
Summary of fest Results	NA	Р	F	NM	
Receive Volume Control Performance		Р			
Receive Distrotion and Noise Performance		Р			
Receive Acoustic Frequence Response Performance		Р			

5.3. Statement

Since the information of samples in this report is provided by the client, the laboratory is not responsible for the authenticity of sample information.

This report takes measured values as criterion of test conclusion. The test conlusion meets the limit requirements.



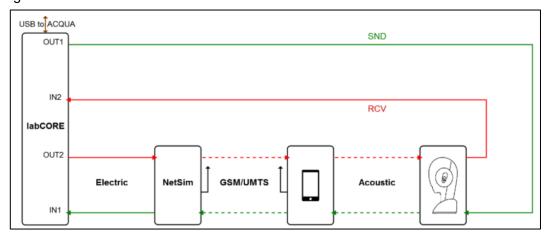
6. Test Equipments Utilized

6.1. Test Equipments

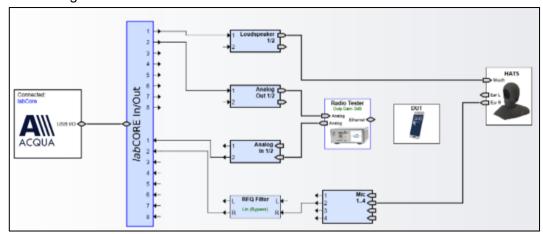
Hard	lware			Acoustics Lab			
No.	Name		Туре	SN	Manufacturer	Cal.Due Date	
1	Measurement F	rontend	lebCORE	77000455	HEAD acoustics	2026-07-23	
2	Artificial Head		HMS II.3	12306254	HEAD acoustics	2025-05-18	
3	Anechoic Cham	hor	5.10m×4.1	20170802	Landtop	2027 09 04	
3 Anechoic Cham		bei	0m×2.50m	20170002	Landtop	2027-08-04	
4	Universal Radio		CMW500	129146	R&S	2025-04-10	
4	Communication Tester		CIVIVV300	129140	Νασ	2023-04-10	
5	Universal Radio		CMW500	152499	R&S	2025-07-11	
3	Communication Tester		CIVIVV300	132499	Νασ	2023-07-11	
Soft	ware						
Nam	е	Version					
ACQ	UA	V6.0.200					

6.2. GSM and WCDMA Test Connection Diagrams

Test signal connection:



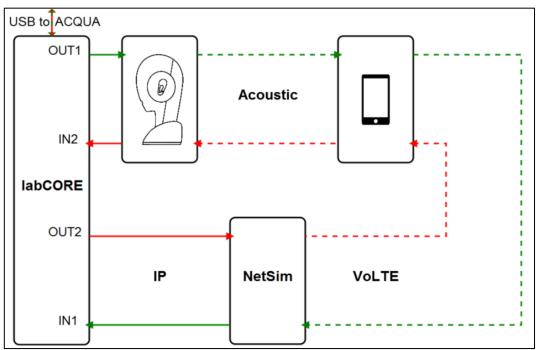
Hardware Configuration connection:



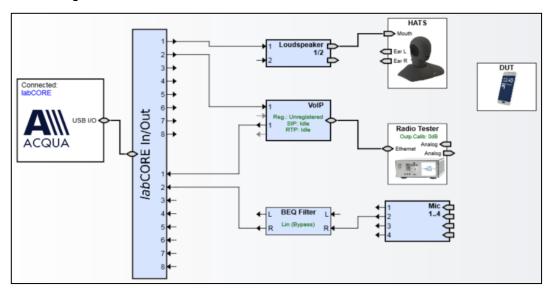


6.3. <u>LTE Test Connection Diagrams</u>

Test signal connection:



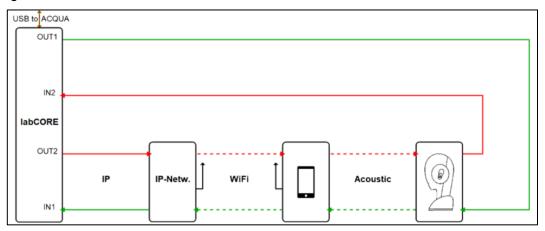
Hardware Configuration connection:



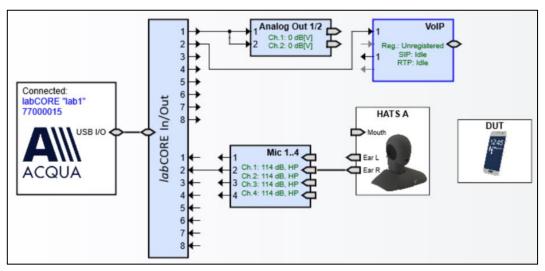


6.4. WiFi Test Connection Diagrams

Test signal connection:

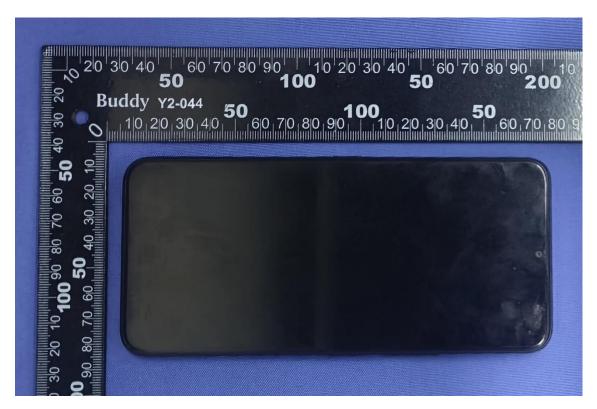


Hardware Configuration connection:





ANNEX A EUT photograph



Pic A-1 EUT (Front Side)



Pic A-2 EUT (Rear Side)



ANNEX B Test Method and requirements

B.1 Receive Volume Control Performance

Test Method:

- 1. Configure the DUT with a mounting force of 8N and test equipment in anactive call state with the applicable codec for the transmission mode under test.
- 2. Set the DUT volume control to the maximum setting.
- 3. 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.
- 4. Over the applicable frequency band, determine the ASL in dBSPL for the resulting sound pressurelevel 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.
- 5. Calculate the Conversational Gain by subtracting 70 dB from the measured dBSPL [Conversational Gain=(Measured dBSPL Level -70 dBSPL) dB]
- 6. Repeat steps 2-5 with a mounting force of 2N.

Test requirement:

According to KDB 285076 D05v01, only CMRS narrowband and CMRS wideband voice codecs are required to comply with the volume control requirements of the TIA 5050-2018 Volume Control Standard as amended as follows:

- 1. For the 2N mounting force test, one narrowband and one wideband voice codec embedded with the handset must pass with at least one volume control setting with a conversational gain of ≥ 6 dB for all voice services, bands of operation and air interfaces over which it operates using one codec bit rate of the applicant's choosing.
- 2. For the 8N mounting force test, one narrowband and one wideband voice codec embedded with the handset must pass with at least one volume control setting with a conversational gain of ≥ 6 dB for all voice services, bands of operation and air interfaces over which they operate but is not required to meet or exceed the full 18 dB of conversational gain specified in section 5.1.1 of the TIA 5050 Volume Control Standard using one codec bit rate of the applicant's choosing.



B.2 Receive Distrotion and Noise Performance

Test Method:

- 1. Configure the DUT with a mounting force of 8N and test equipment in anactive call state with the applicable codec for the transmission mode under test with the volumecontrol at the setting determined in B.1.
- 2. Receive distortion and noise is measured using the PN-SDNR procedure.
- 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 firequency PN test signal in TIA 5050 Table A.1 based on thenarrowband or wideband operating mode. Measure the acoustic output at the DRP over the completesequence of the PN test signal.
- 4.Translate the measurement made at the DRP to the FF using the translation data in TIA 5050 Annex B.
- 5. Calculate the acoustic output unweighted total signal power of the stimulus measurement band asdescribed in TIA 5050 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 TIA 5050 A-1.
- 8. Repeat for each of the remaining 1/3 octave center frequencies in TIA 5050 Table A.I based on the narrowband or wideband operating mode.
- 9. Repeat steps 2-8 with a mounting force of 2N.

Test 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 \geq 20 dB when tested over the range of 1/3 octaveband center frequencies:

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



B.3 Receive Acoustic Frequence Response Performance

Test Method:

- 1. Configure the DUT with a mounting force of 8N and test equipment in anactive call state with the applicable codec for the transmission mode under test with the volumecontrol at the setting determined in B.1.
- 2. Apply the real speech test signal with a level of -20 dBm0 at the RETP.
- 3. 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 thefrequency range from 100 Hz to 8000 Hz for wideband measurements, averaged over the entireduration of the test signal.
- 4. Transform the DRP frequency spectrum measurement to the FF or DF (see TIA 5050 Annex B).
- **5.** Divide the 1/12 octave measurement data by the 1/12 octave frequency spectrum of the test signal atthe RETP and present the measurement in terms of dB(Pa/V).
- 6. Apply the applicable frequency response limits to determine compliance.
- 7. Repeat with a mounting force of 2N.

Test requirement:

For the volume control settings determined in B.1 with a mounting force of 8N and 2N, the receive frequency response shall be measured at the DRP in 1/12 octave bands. After translation to the FF or DF, it shall fall between the applicable upper and lower limits.

a. 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 B.3-1 and shown in Figure 1

Table B.3-1 – Narrowband Receive Frequency Response LimitsLower Limit
Frequency (Hz)Lower Limit (dB)Upper Limit
Frequency (Hz)Upper Limit (dB)300-6100+63400-64000+6

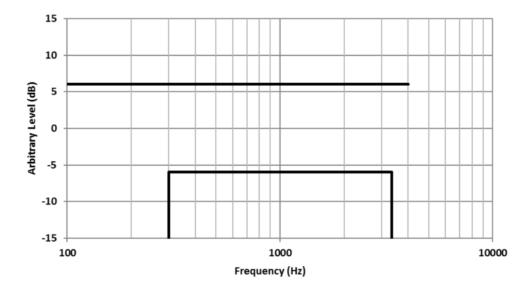




Figure 1 - Narrowband Receive Frequency Response Limits

b. 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 B.3-2 and shown in Figure 2.

Table B.3-2 - Wideband Receive Frequency Response Limits

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

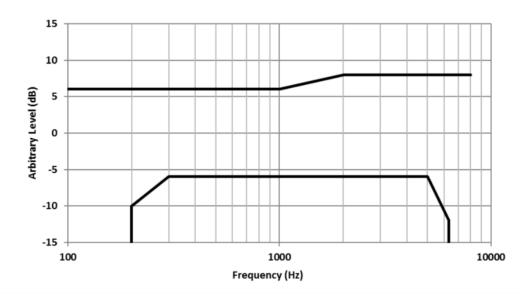


Figure 2 – Wideband Receive Frequency Response Limits



ANNEX C Detailed Test Results

C.1. GSM Test Results

<EUT Supported Codec>

	AMR-NB Bit Rate
	4.75 Kbps
	5.15 Kbps
	5.90 Kbps
GSM (AMR Codec)	6.60 Kbps
	7.40 Kbps
	7.95 Kbps
	10.20 Kbps
	12.20 Kbps

<Summary Tests Results>

GSM Band	Channel	Volune Level	Codec	Voice Bandwith	2N/8N	Receive Volume Control [dBSPL]	Conversational Gain [dB]	Receive Distrotion	Receive Acoustic Frequence Response
GSM850	162	Max	AMR	NB	2N	80. 31	10.31	Pass	Pass
GSM850	162	Max	AMR	NB	8N	83. 38	13.38	Pass	Pass
GSM1900	600	Max	AMR	NB	2N	80. 15	10.15	Pass	Pass
GSM1900	600	Max	AMR	NB	8N	83. 99	13.99	Pass	Pass



C.2. WCDMA Test Results

<EUT Supported Codec>

Zo: eappoints cours								
	AMR-NB Bit Rate	AMR-WB Bit Rate						
	4.75 Kbps	6.60 Kbps						
	5.15 Kbps	8.85 Kbps						
	5.90 Kbps	12.65 Kbps						
MCDMA (AMD Codes)	6.60 Kbps	14.25 Kbps						
WCDMA (AMR Codec)	7.40 Kbps	15.85 Kbps						
	7.95 Kbps	18.25 Kbps						
	10.20 Kbps	19.85 Kbps						
	12.20 Kbps	23.05 Kbps						
	1	23.85 Kbps						

<Summary Tests Results>

WCDMA Band	Channal	Volune Level	Codec	Voice	Bit Rate	2N/8	Receive Volume	Conversational	Receive	Receive Acoustic
WCDMA Dand	Channel	volune Level	Codec	Bandwith	[kbps]	N	Control [dBSPL]	Gain [dB]	Distrotion	Frequence Response
Band 2	9262	Max	AMR	NB	12. 2	2N	78.80	8.80	Pass	Pass
Band 2	9262	Max	AMR	NB	12. 2	8N	82. 99	12. 99	Pass	Pass
Band 2	9262	Max	AMR	WB	23.85	2N	84. 74	14. 74	Pass	Pass
Band 2	9262	Max	AMR	WB	23.85	8N	88. 37	18. 37	Pass	Pass
Band 4	1312	Max	AMR	NB	12. 2	2N	80.01	10.01	Pass	Pass
Band 4	1312	Max	AMR	NB	12. 2	8N	82.72	12.72	Pass	Pass
Band 4	1312	Max	AMR	WB	23.85	2N	85.04	15.04	Pass	Pass
Band 4	1312	Max	AMR	WB	23.85	8N	87. 73	17. 73	Pass	Pass
Band 5	4132	Max	AMR	NB	12. 2	2N	80.03	10.03	Pass	Pass



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WCDMA Band	Channel	Volune Level	Codec	Voice Bandwith	Bit Rate [kbps]	2N/8 N	Receive Volume Control [dBSPL]	Conversational Gain [dB]	Receive Distrotion	Receive Acoustic Frequence Response
Band 5	4132	Max	AMR	NB	12.2	8N	83. 10	13. 10	Pass	Pass
Band 5	4132	Max	AMR	WB	23. 85	2N	84. 96	14.96	Pass	Pass
Band 5	4132	Max	AMR	WB	23. 85	8N	87. 95	17. 95	Pass	Pass



C.3. LTE Test Results

<EUT Supported Codec>

Ed. Gapponta Godeo		
	AMR-NB Bit Rate	AMR-WB Bit Rate
	4.75 Kbps	6.60 Kbps
	5.15 Kbps	8.85 Kbps
	5.90 Kbps	12.65 Kbps
Vol.TE (AMD Codos)	6.60 Kbps	14.25 Kbps
VoLTE (AMR Codec)	7.40 Kbps	15.85 Kbps
	7.95 Kbps	18.25 Kbps
	10.20 Kbps	19.85 Kbps
	12.20 Kbps	23.05 Kbps
	I	23.85 Kbps

An investigation was performed to determine the modulation, the bandwidth configuration and RB configuration to be used for testing. For LTE bands, 10MHz BW, QPSK, 1RB, ORB offset was used for the testing as the worst-case configuration for the handset. See below table for comparisons between different radios configurations:

< Radio Configuration Investigation>

LTE	Channal	Bandwidth	Madulation	RB	RB Off	Volune	Codoo	ND /WD	Bit Rate	2N/8N	Minimum Distortion	
Band	Channel	[MHz]	Modulation	Size	Size	Level	Codec	NB/WB	[kbps]	ZIV/ OIV	[Hz]	[dB]
Band 2	18900	20	QPSK	1	0	Max	AMR	WB	23.85	8N	250	20. 95
Band 2	18900	20	QPSK	50	0	Max	AMR	WB	23.85	8N	250	21.04
Band 2	18900	20	QPSK	100	0	Max	AMR	WB	23.85	8N	250	21. 14
Band 2	18900	20	16QAM	1	0	Max	AMR	WB	23.85	8N	250	21. 13
Band 2	18900	15	QPSK	1	0	Max	AMR	WB	23.85	8N	250	20. 96
Band 2	18900	10	QPSK	1	0	Max	AMR	WB	23. 85	8N	250	20. 92



LTE	Channal	Bandwidth	Modulation	RB RB Off Volume Codes NR/WR		NB/WB	Bit Rate	2N/8N	Minimum Distortion			
Band	Channel	[MHz]	Modulation	Size	Size	Leve1	Codec	ND/ WD	[kbps]	ZIV/ OIV	[Hz]	[dB]
Band 2	18900	5	QPSK	1	0	Max	AMR	WB	23.85	8N	250	20. 99
Band 2	18900	3	QPSK	1	0	Max	AMR	WB	23.85	8N	250	21.05
Band 2	18900	1.4	QPSK	1	0	Max	AMR	WB	23. 85	8N	250	20. 96

<Summary Tests Results>

LTE Band	Channe1	Volune Level	Codec	Voice Bandwith	Bit Rate [kbps]	2N/8N	Receive Volume Control [dBSPL]	Conversational Gain [dB]	Receive Distrotion	Receive Acoustic Frequence Response
Band 2	18900	Max	AMR	NB	12.2	2N	78.68	8.68	Pass	Pass
Band 2	18900	Max	AMR	NB	12.2	8N	83.05	13.05	Pass	Pass
Band 2	18900	Max	AMR	WB	23.85	2N	85. 48	15. 48	Pass	Pass
Band 2	18900	Max	AMR	WB	23.85	8N	88. 42	18. 42	Pass	Pass
Band 4	20175	Max	AMR	NB	12.2	2N	78. 22	8. 22	Pass	Pass
Band 4	20175	Max	AMR	NB	12.2	8N	81.59	11.59	Pass	Pass
Band 4	20175	Max	AMR	WB	23.85	2N	85. 15	15. 15	Pass	Pass
Band 4	20175	Max	AMR	WB	23.85	8N	88. 34	18.34	Pass	Pass
Band 5	20525	Max	AMR	NB	12.2	2N	78. 47	8. 47	Pass	Pass
Band 5	20525	Max	AMR	NB	12.2	8N	81. 17	11. 17	Pass	Pass
Band 5	20525	Max	AMR	WB	23.85	2N	84.90	14.90	Pass	Pass
Band 5	20525	Max	AMR	WB	23.85	8N	86.72	16.72	Pass	Pass
Band 12	23095	Max	AMR	NB	12.2	2N	79. 41	9.41	Pass	Pass
Band 12	23095	Max	AMR	NB	12.2	8N	80.97	10.97	Pass	Pass
Band 12	23095	Max	AMR	WB	23.85	2N	84.65	14.65	Pass	Pass
Band 12	23095	Max	AMR	WB	23.85	8N	86.69	16.69	Pass	Pass



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LTE Band	Channel	Volune Level	Codec	Voice Bandwith	Bit Rate [kbps]	2N/8N	Receive Volume Control [dBSPL]	Conversational Gain [dB]	Receive Distrotion	Receive Acoustic Frequence Response
Band 13	23230	Max	AMR	NB	12.2	2N	79.03	9.03	Pass	Pass
Band 13	23230	Max	AMR	NB	12.2	8N	81.15	11.15	Pass	Pass
Band 13	23230	Max	AMR	WB	23.85	2N	84. 94	14. 94	Pass	Pass
Band 13	23230	Max	AMR	WB	23.85	8N	86. 78	16. 78	Pass	Pass
Band 17	23790	Max	AMR	NB	12.2	2N	79. 49	9. 49	Pass	Pass
Band 17	23790	Max	AMR	NB	12.2	8N	81.20	11.2	Pass	Pass
Band 17	23790	Max	AMR	WB	23.85	2N	84.86	14.86	Pass	Pass
Band 17	23790	Max	AMR	WB	23.85	8N	86. 75	16. 75	Pass	Pass
Band 41	41140	Max	AMR	NB	12.2	2N	80.07	10.07	Pass	Pass
Band 41	41140	Max	AMR	NB	12.2	8N	83.03	13.03	Pass	Pass
Band 41	41140	Max	AMR	WB	23.85	2N	85. 73	15. 73	Pass	Pass
Band 41	41140	Max	AMR	WB	23.85	8N	88. 28	18. 28	Pass	Pass
Band 66	132322	Max	AMR	NB	12.2	2N	78. 93	8.93	Pass	Pass
Band 66	132322	Max	AMR	NB	12.2	8N	82. 55	12. 55	Pass	Pass
Band 66	132322	Max	AMR	WB	23.85	2N	85.64	15. 64	Pass	Pass
Band 66	132322	Max	AMR	WB	23.85	8N	88. 14	18. 14	Pass	Pass
Band 71	133297	Max	AMR	NB	12.2	2N	79. 56	9. 56	Pass	Pass
Band 71	133297	Max	AMR	NB	12.2	8N	82.66	12.66	Pass	Pass
Band 71	133297	Max	AMR	WB	23.85	2N	85. 73	15. 73	Pass	Pass
Band 71	133297	Max	AMR	WB	23.85	8N	88. 15	18. 15	Pass	Pass



C.4. WiFi Test Results

<EUT Supported Codec>

	AMR-NB Bit Rate	AMR-WB Bit Rate
	4.75 Kbps	6.60 Kbps
	5.15 Kbps	8.85 Kbps
	5.90 Kbps	12.65 Kbps
VoWiFi (AMR Codec)	6.60 Kbps	14.25 Kbps
VOVVIFI (AIVIR Codec)	7.40 Kbps	15.85 Kbps
	7.95 Kbps	18.25 Kbps
	10.20 Kbps	19.85 Kbps
	12.20 Kbps	23.05 Kbps
	1	23.85 Kbps

<Summary Tests Results>

WLAN Band	WLAN Standard	Channel	Volune Level	Codec	Voice Bandwith	Bit Rate [kbps]	2N/8N	Receive Volume Control [dBSPL]	Conversational Gain [dB]	Receive Distrotion	Receive Acoustic Frequence Response
2.4GHz	IEEE 802.11b	7	Max	AMR	NB	12. 2	2N	78. 73	8. 73	Pass	Pass
2.4GHz	IEEE 802.11b	7	Max	AMR	NB	12.2	8N	81.30	11.3	Pass	Pass
2.4GHz	IEEE 802.11b	7	Max	AMR	WB	23.85	2N	84. 58	14. 58	Pass	Pass
2.4GHz	IEEE 802.11b	7	Max	AMR	WB	23.85	8N	86.62	16.62	Pass	Pass
UNII-1	IEEE 802.11a	40	Max	AMR	NB	12.2	2N	78. 79	8. 79	Pass	Pass
UNII-1	IEEE 802.11a	40	Max	AMR	NB	12.2	8N	82.40	12. 4	Pass	Pass
UNII-1	IEEE 802.11a	40	Max	AMR	WB	23.85	2N	82.86	12.86	Pass	Pass
UNII-1	IEEE 802.11a	40	Max	AMR	WB	23.85	8N	86. 93	16. 93	Pass	Pass



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WLAN Band	WLAN Standard	Channel	Volune Level	Codec	Voice Bandwith	Bit Rate [kbps]	2N/8N	Receive Volume Control [dBSPL]	Conversational Gain [dB]	Receive Distrotion	Receive Acoustic Frequence Response
UNII-2A	IEEE 802.11a	64	Max	AMR	NB	12. 2	2N	76. 59	6. 59	Pass	Pass
UNII-2A	IEEE 802.11a	64	Max	AMR	NB	12.2	8N	81.71	11.71	Pass	Pass
UNII-2A	IEEE 802.11a	64	Max	AMR	WB	23.85	2N	82. 78	12. 78	Pass	Pass
UNII-2A	IEEE 802.11a	64	Max	AMR	WB	23.85	8N	87. 29	17. 29	Pass	Pass
UNII-2C	IEEE 802.11a	120	Max	AMR	NB	12.2	2N	78.61	8. 61	Pass	Pass
UNII-2C	IEEE 802.11a	120	Max	AMR	NB	12.2	8N	82. 26	12. 26	Pass	Pass
UNII-2C	IEEE 802.11a	120	Max	AMR	WB	23.85	2N	82.86	12.86	Pass	Pass
UNII-2C	IEEE 802.11a	120	Max	AMR	WB	23.85	8N	87. 29	17. 29	Pass	Pass
UNII-3	IEEE 802.11a	157	Max	AMR	NB	12.2	2N	77.02	7. 02	Pass	Pass
UNII-3	IEEE 802.11a	157	Max	AMR	NB	12.2	8N	81.64	11.64	Pass	Pass
UNII-3	IEEE 802.11a	157	Max	AMR	WB	23.85	2N	83.89	13.89	Pass	Pass
UNII-3	IEEE 802.11a	157	Max	AMR	WB	23.85	8N	87. 82	17.82	Pass	Pass

The lowest conversational gain is 6.59dB with a hearing aid.

Turn off the accessibility feature - hearing aid function in the phone, and test with the same configuration.

WLAN Band	WLAN Standard	Channal	Volune Level	Codec	Voice	Bit Rate	2N/8N	Receive Volume Control	Conversational Gain
WLAN Danu	WLAN Standard	Channel	volume Level	Codec	Bandwith	[kbps]	ZIV/ OIV	[dBSPL]	[dB]
UNII-2A	IEEE 802.11a	64	Max	AMR	NB	12.2	2N	80.40	10.40



ANNEX D Test Setup Diagrams

Test Diagrams

Artificial Ea	ar Type	3.3
Pressure F	orce [N]	2/8
Center For	rk Offset [°]	/
	Postior	١
Xe [°]	Ye [°]	Ze [°]
Н	+5	Н



Pic C-1 Test Layout (Handset)

END OF REPORT