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TEST REPORT

ACCORDING TO: Australian Standard

AS/CA S004:2013

Voice performance requirements for Customer Equipment

AS/ACIF S040:2001

Requirements for Customer Equipment for use with the Standard Telephone Service — Features for special needs of persons with disabilities

FOR:

Fanvil Technology Co.,Ltd

IP Phone

X5G

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Report Issued History

Issued No.	Description	Issued Date
BTL-RCM-1-T1505C099	Original Issue.	5/27/2015

1 Client information

Client name:	Fanvil Technology Co.,Ltd
Address:	3F,Block A,Gaoxinqi Building,Anhua Industrial Park,Qianjin 1st Rd. 35th Dist.,Bao'An, Shenzhen,518101,China
Telephone:	+86-755-26402199
Fax:	+86-755-26402618
E-mail:	benedict.chen@fanvil.com
Contact name:	Benedict Chen

2 Equipment Under Test

2.1 Information of Equipment Model

Product name:	IP Phone
Brand name:	Fanvil
Model(s):	X5G
Receipt date	5/19/2015

2.2 Information of the Power Supply Unit

Product Name	Manufacturer	Model Name	Input Rating	Output Rating
Switching Mode Power Adaptor	FRECOM	F05W-050100SPAS	100-240V~ 50/60Hz, 190mA	5Vdc,1A

3 Manufacturer information

Manufacturer name:	Fanvil Technology Co.,Ltd
Address:	3F,Block A,Gaoxinqi Building,Anhua Industrial Park,Qianjin 1st Rd. 35th Dist.,Bao'An, Shenzhen,518101,China

4 Test project performance

Project ID:	1505C099
Location:	B1, No. 37, Lane 365, YangGuang St., NeiHu District 114., Taipei, Taiwan
Test started:	5/19/2015
Test completed:	5/19/2015
Test specification(s):	AS/CA S004:2013 Voice performance requirements for Customer Equipment AS/ACIF S040:2001 Requirements for Customer Equipment for use with the Standard Telephone Service — Features for special needs of persons with disabilities
Test suite:	AS/CA S004:2013 (Acoustic) AS/ACIF S040:2001 (HAC)




5 Test report summary

Testing was completed against all relevant requirements of the test standard. And, results obtained indicate that the product under test complies in full with the requirements tested.

The test results relate only to the items tested.

A summary of the test status of the product under test with respect to each test requirement of the standard is provided in section 8 on page 6 of this report.

Detailed test results are presented in section 9 following page 7 of this report.

	Name	Date	Signature
Tested by:	Mr. Josh Lin	5/26/2015	
Reviewed by:	Mr. Vic Chiu	5/26/2015	
Approved by:	Mr. Steven Lu	5/26/2015	

6 Test laboratory description

BTL is a specialized laboratory of RF, SAFETY, and EMC testing and approval.

BTL's laboratory quality assurance procedures are in compliance with the ISO Guide 17025 requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. BTL shall have no liability for any declarations, inferences or generalizations drawn by the client or others from BTL issued reports.

Test Site Location:

B1, No. 37, Lane 365, YangGuang St., NeiHu District 114., Taipei, Taiwan

7 Test equipment used

Description	Brand name	Model	S/N	Due Calibration
Telecom Conformance Analyzer	Hermon Laboratories	TCA 8200	8793	1/16/2016

8 Test results summary

Test	Status
AS/CA S004:2013 (Acoustics)	
5.4.3 Customer Equipment incorporating a handset and/or headset	
5.4.3.1 Send frequency response	
5.4.3.1.2 (a) CE with digital network interfaces (VoIP) with a handset	Pass
5.4.3.2 Receive frequency response	
5.4.3.2.2 (a) CE with digital network interfaces (VoIP) with a handset	Pass
5.4.3.3 Send and receive loudness ratings	
5.4.3.3.2 CE with digital network interfaces	
5.4.3.3.2 Send loudness rating of the CE with digital network interfaces (VoIP)	Pass
5.4.3.3.2 Receive loudness rating of the CE with digital network interfaces (VoIP)	Pass
5.4.3.4 Sidetone	
5.4.3.4.2 Sidetone masking rating (STMR) of the CE with digital network interfaces	Pass
5.4.3.5 Weighted Terminal Coupling Loss (TCLw)	
5.4.3.5 (a) Weighted Terminal Coupling Loss (TCLw) of the VoIP CE	Pass
5.4.3.7 Acoustic shock	
5.4.3.8 Maximum sound pressure level	
5.4.3.8.3 CE with a digital network interface - RMS output levels	Pass
5.4.3.10 Distortion	
5.4.3.10 CE with digital network interfaces	
5.4.3.10.1 Sending distortion of the CE with digital network interfaces	Pass
5.4.3.10.2 Receiving distortion of the CE with digital network interfaces	Pass
AS/ACIF S040:2001 (HAC)	
5 Requirements	
5.1 Hearing aid coupling	
5.1 Magnetic field strength measurements and recommended values (digital (VoIP) phones)	
5.1 Calibration of acoustic receive level (-14 dBPa) of digital (VoIP) telephones	Pass
5.1.2 Frequency characteristics (VoIP)	Pass
5.1.3 Magnetic field strength level (VoIP)	Pass



9 Detailed test results

AS/CA S004

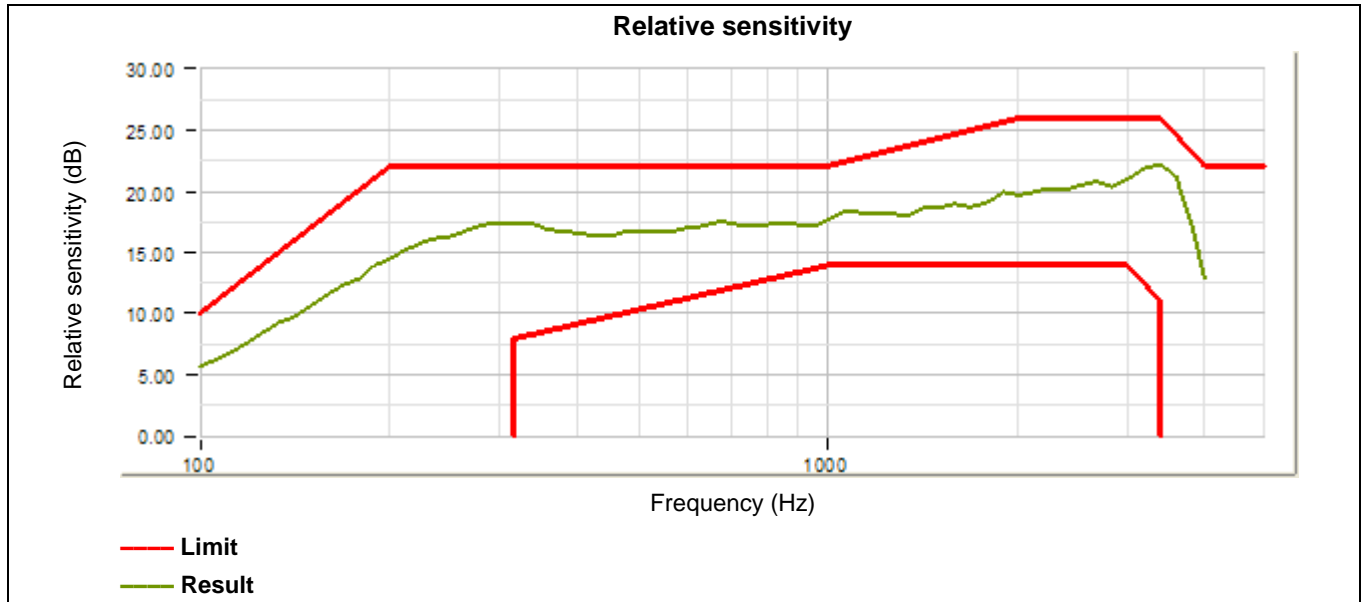
Test specification:	5.4.3.1.2 (a) CE with digital network interfaces (VoIP) with a handset		
Test purpose:	To check that the CE with digital network interfaces that has a G.711 codec and incorporates a handset complies with the send frequency response limits as shown in Figure 4.		
Test mode:	Evaluation	Verdict:	PASS
Date & Time:	5/19/2015 3:39:33 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Measurement uncertainty

Expanded Uncertainty, k=2 (95% confidence)
Sensitivity = ±0.85 dB

General parameters

Parameter	Value
Acoustic test setup	Test head
Stimulus	Level value = -4.7dBPa
Stimulus freq.	100...4000



Sensitivity, Relative sensitivity

Frequency	Sending sensitivity	Relative sensitivity	Limit min	Limit max	Verdict
100 Hz	-28.27 dBV/Pa	5.66 dB	-	10 dB	Pass
106 Hz	-27.66 dBV/Pa	6.27 dB	-	11.01 dB	Pass
112 Hz	-27.11 dBV/Pa	6.82 dB	-	11.96 dB	Pass

AS/CA S004

Test specification:	5.4.3.1.2 (a) CE with digital network interfaces (VoIP) with a handset		
Test purpose:	To check that the CE with digital network interfaces that has a G.711 codec and incorporates a handset complies with the send frequency response limits as shown in Figure 4.		
Test mode:	Evaluation	Verdict:	PASS
Date & Time:	5/19/2015 3:39:33 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Frequency	Sending sensitivity	Relative sensitivity	Limit min	Limit max	Verdict
119 Hz	-26.23 dBV/Pa	7.70 dB	-	13.01 dB	Pass
126 Hz	-25.46 dBV/Pa	8.47 dB	-	14 dB	Pass
133 Hz	-24.56 dBV/Pa	9.37 dB	-	14.94 dB	Pass
141 Hz	-24.22 dBV/Pa	9.71 dB	-	15.95 dB	Pass
150 Hz	-23.32 dBV/Pa	10.61 dB	-	17.02 dB	Pass
159 Hz	-22.38 dBV/Pa	11.55 dB	-	18.03 dB	Pass
168 Hz	-21.66 dBV/Pa	12.27 dB	-	18.98 dB	Pass
178 Hz	-21.08 dBV/Pa	12.85 dB	-	19.98 dB	Pass
189 Hz	-20.01 dBV/Pa	13.92 dB	-	21.02 dB	Pass
200 Hz	-19.42 dBV/Pa	14.51 dB	-	22 dB	Pass
212 Hz	-18.73 dBV/Pa	15.20 dB	-	22 dB	Pass
224 Hz	-18.2 dBV/Pa	15.73 dB	-	22 dB	Pass
238 Hz	-17.78 dBV/Pa	16.15 dB	-	22 dB	Pass
252 Hz	-17.54 dBV/Pa	16.39 dB	-	22 dB	Pass
267 Hz	-16.98 dBV/Pa	16.95 dB	-	22 dB	Pass
283 Hz	-16.63 dBV/Pa	17.30 dB	-	22 dB	Pass
300 Hz	-16.42 dBV/Pa	17.51 dB	-	22 dB	Pass
317 Hz	-16.5 dBV/Pa	17.43 dB	8.03 dB	22 dB	Pass
336 Hz	-16.44 dBV/Pa	17.49 dB	8.34 dB	22 dB	Pass
356 Hz	-16.99 dBV/Pa	16.94 dB	8.64 dB	22 dB	Pass
378 Hz	-17.14 dBV/Pa	16.79 dB	8.95 dB	22 dB	Pass
400 Hz	-17.28 dBV/Pa	16.65 dB	9.24 dB	22 dB	Pass
424 Hz	-17.58 dBV/Pa	16.35 dB	9.54 dB	22 dB	Pass
449 Hz	-17.59 dBV/Pa	16.34 dB	9.84 dB	22 dB	Pass
476 Hz	-17.13 dBV/Pa	16.80 dB	10.14 dB	22 dB	Pass
504 Hz	-17.25 dBV/Pa	16.68 dB	10.44 dB	22 dB	Pass
534 Hz	-17.17 dBV/Pa	16.76 dB	10.74 dB	22 dB	Pass
566 Hz	-17.19 dBV/Pa	16.74 dB	11.04 dB	22 dB	Pass
599 Hz	-16.96 dBV/Pa	16.97 dB	11.34 dB	22 dB	Pass
635 Hz	-16.78 dBV/Pa	17.15 dB	11.64 dB	22 dB	Pass
673 Hz	-16.38 dBV/Pa	17.55 dB	11.94 dB	22 dB	Pass
713 Hz	-16.58 dBV/Pa	17.35 dB	12.24 dB	22 dB	Pass
755 Hz	-16.6 dBV/Pa	17.33 dB	12.54 dB	22 dB	Pass
800 Hz	-16.67 dBV/Pa	17.26 dB	12.84 dB	22 dB	Pass

AS/CA S004

Test specification:	5.4.3.1.2 (a) CE with digital network interfaces (VoIP) with a handset		
Test purpose:	To check that the CE with digital network interfaces that has a G.711 codec and incorporates a handset complies with the send frequency response limits as shown in Figure 4.		
Test mode:	Evaluation	Verdict:	PASS
Date & Time:	5/19/2015 3:39:33 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Frequency	Sending sensitivity	Relative sensitivity	Limit min	Limit max	Verdict
848 Hz	-16.55 dBV/Pa	17.38 dB	13.14 dB	22 dB	Pass
898 Hz	-16.68 dBV/Pa	17.25 dB	13.44 dB	22 dB	Pass
951 Hz	-16.74 dBV/Pa	17.19 dB	13.74 dB	22 dB	Pass
1008 Hz	-16.24 dBV/Pa	17.69 dB	14 dB	22.05 dB	Pass
1068 Hz	-15.56 dBV/Pa	18.37 dB	14 dB	22.38 dB	Pass
1131 Hz	-15.68 dBV/Pa	18.25 dB	14 dB	22.71 dB	Pass
1199 Hz	-15.64 dBV/Pa	18.29 dB	14 dB	23.05 dB	Pass
1270 Hz	-15.86 dBV/Pa	18.07 dB	14 dB	23.38 dB	Pass
1345 Hz	-15.92 dBV/Pa	18.01 dB	14 dB	23.71 dB	Pass
1425 Hz	-15.29 dBV/Pa	18.64 dB	14 dB	24.04 dB	Pass
1510 Hz	-15.29 dBV/Pa	18.64 dB	14 dB	24.38 dB	Pass
1600 Hz	-14.89 dBV/Pa	19.04 dB	14 dB	24.71 dB	Pass
1695 Hz	-15.22 dBV/Pa	18.71 dB	14 dB	25.05 dB	Pass
1796 Hz	-14.8 dBV/Pa	19.13 dB	14 dB	25.38 dB	Pass
1903 Hz	-13.94 dBV/Pa	19.99 dB	14 dB	25.71 dB	Pass
2016 Hz	-14.2 dBV/Pa	19.73 dB	14 dB	26 dB	Pass
2136 Hz	-14.03 dBV/Pa	19.90 dB	14 dB	26 dB	Pass
2263 Hz	-13.76 dBV/Pa	20.17 dB	14 dB	26 dB	Pass
2397 Hz	-13.79 dBV/Pa	20.14 dB	14 dB	26 dB	Pass
2540 Hz	-13.36 dBV/Pa	20.57 dB	14 dB	26 dB	Pass
2691 Hz	-13.17 dBV/Pa	20.76 dB	14 dB	26 dB	Pass
2851 Hz	-13.5 dBV/Pa	20.43 dB	14 dB	26 dB	Pass
3020 Hz	-12.82 dBV/Pa	21.11 dB	13.84 dB	26 dB	Pass
3200 Hz	-11.97 dBV/Pa	21.96 dB	12.45 dB	26 dB	Pass
3390 Hz	-11.77 dBV/Pa	22.16 dB	11.07 dB	26 dB	Pass
3592 Hz	-12.73 dBV/Pa	21.20 dB	-	24.65 dB	Pass
3805 Hz	-16.68 dBV/Pa	17.25 dB	-	23.23 dB	Pass
4000 Hz	-21.09 dBV/Pa	12.84 dB	-	22 dB	Pass

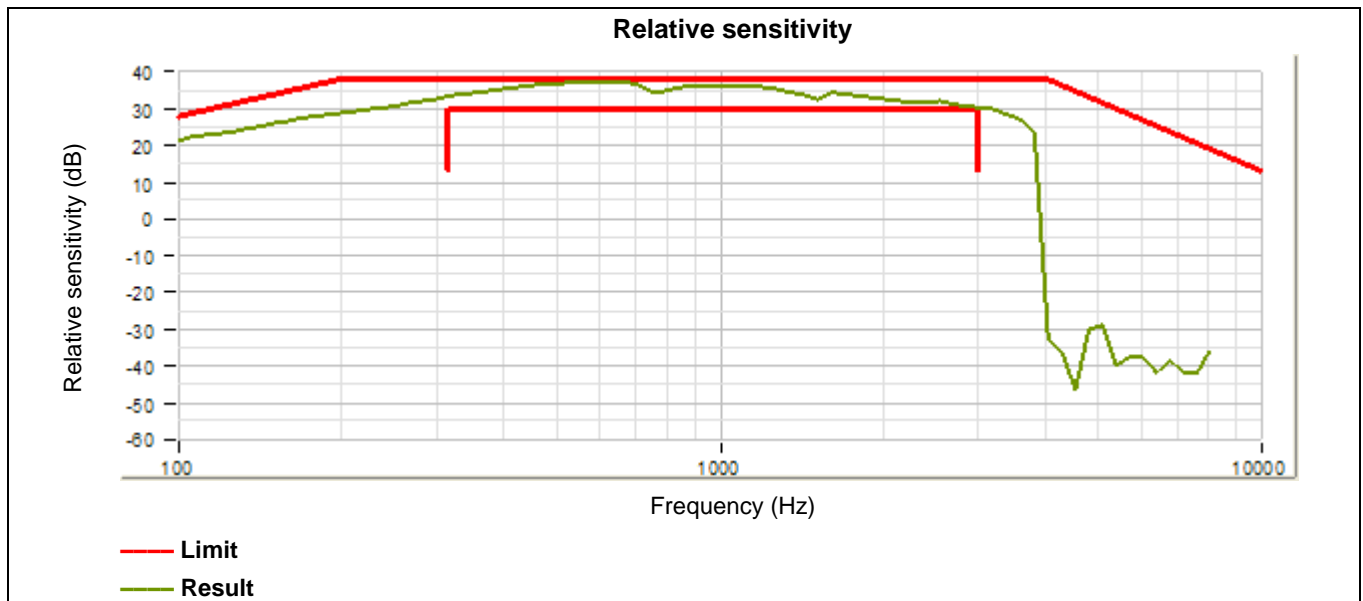
Test specification:	5.4.3.2.2 (a) CE with digital network interfaces (VoIP) with a handset		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec and incorporates a handset complies with the receive frequency response limits as shown in Figure 6.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:46:56 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Measurement uncertainty

Expanded Uncertainty, k=2 (95% confidence)
Sensitivity = ±0.23 dB

General parameters

Parameter	Value
EUT state	Handset position. Nominal VC
Microphone type	T4185_OES
Acoustic test setup	Test head
Stimulus	Level value = -12dBV
Stimulus freq.	100...8000



Sensitivity, Relative sensitivity

Frequency	Receiving sensitivity	Relative sensitivity	Limit min	Limit max	Verdict
100 Hz	-2.53 dBPa/V	21.44 dB	-	28 dB	Pass

Test specification:	5.4.3.2.2 (a) CE with digital network interfaces (VoIP) with a handset		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec and incorporates a handset complies with the receive frequency response limits as shown in Figure 6.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:46:56 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Frequency	Receiving sensitivity	Relative sensitivity	Limit min	Limit max	Verdict
106 Hz	-1.79 dBPpa/V	22.18 dB	-	28.84 dB	Pass
112 Hz	-1.4 dBPpa/V	22.57 dB	-	29.63 dB	Pass
119 Hz	-0.54 dBPpa/V	23.43 dB	-	30.51 dB	Pass
126 Hz	-0.12 dBPpa/V	23.85 dB	-	31.33 dB	Pass
133 Hz	0.58 dBPpa/V	24.56 dB	-	32.11 dB	Pass
141 Hz	1.32 dBPpa/V	25.3 dB	-	32.96 dB	Pass
150 Hz	1.99 dBPpa/V	25.96 dB	-	33.85 dB	Pass
159 Hz	2.73 dBPpa/V	26.7 dB	-	34.69 dB	Pass
168 Hz	3.26 dBPpa/V	27.23 dB	-	35.48 dB	Pass
178 Hz	3.93 dBPpa/V	27.9 dB	-	36.32 dB	Pass
189 Hz	4.5 dBPpa/V	28.47 dB	-	37.18 dB	Pass
200 Hz	4.96 dBPpa/V	28.94 dB	-	38 dB	Pass
212 Hz	5.43 dBPpa/V	29.4 dB	-	38 dB	Pass
224 Hz	5.89 dBPpa/V	29.86 dB	-	38 dB	Pass
238 Hz	6.43 dBPpa/V	30.4 dB	-	38 dB	Pass
252 Hz	6.8 dBPpa/V	30.77 dB	-	38 dB	Pass
267 Hz	7.45 dBPpa/V	31.42 dB	-	38 dB	Pass
283 Hz	8.19 dBPpa/V	32.17 dB	-	38 dB	Pass
300 Hz	8.71 dBPpa/V	32.68 dB	-	38 dB	Pass
317 Hz	9.38 dBPpa/V	33.35 dB	30 dB	38 dB	Pass
336 Hz	9.91 dBPpa/V	33.88 dB	30 dB	38 dB	Pass
356 Hz	10.55 dBPpa/V	34.52 dB	30 dB	38 dB	Pass
378 Hz	10.88 dBPpa/V	34.85 dB	30 dB	38 dB	Pass
400 Hz	11.56 dBPpa/V	35.53 dB	30 dB	38 dB	Pass
424 Hz	11.93 dBPpa/V	35.9 dB	30 dB	38 dB	Pass
449 Hz	12.27 dBPpa/V	36.24 dB	30 dB	38 dB	Pass
476 Hz	12.67 dBPpa/V	36.64 dB	30 dB	38 dB	Pass
504 Hz	12.77 dBPpa/V	36.74 dB	30 dB	38 dB	Pass
534 Hz	13.06 dBPpa/V	37.03 dB	30 dB	38 dB	Pass
566 Hz	13.31 dBPpa/V	37.28 dB	30 dB	38 dB	Pass
599 Hz	13.19 dBPpa/V	37.16 dB	30 dB	38 dB	Pass
635 Hz	13.41 dBPpa/V	37.39 dB	30 dB	38 dB	Pass
673 Hz	13.23 dBPpa/V	37.2 dB	30 dB	38 dB	Pass
713 Hz	12.37 dBPpa/V	36.34 dB	30 dB	38 dB	Pass
755 Hz	10.49 dBPpa/V	34.47 dB	30 dB	38 dB	Pass

Test specification:	5.4.3.2.2 (a) CE with digital network interfaces (VoIP) with a handset		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec and incorporates a handset complies with the receive frequency response limits as shown in Figure 6.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:46:56 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Frequency	Receiving sensitivity	Relative sensitivity	Limit min	Limit max	Verdict
800 Hz	10.96 dBPa/V	34.93 dB	30 dB	38 dB	Pass
848 Hz	11.77 dBPa/V	35.74 dB	30 dB	38 dB	Pass
898 Hz	12.14 dBPa/V	36.11 dB	30 dB	38 dB	Pass
951 Hz	12.27 dBPa/V	36.24 dB	30 dB	38 dB	Pass
1008 Hz	12.27 dBPa/V	36.24 dB	30 dB	38 dB	Pass
1068 Hz	12.41 dBPa/V	36.39 dB	30 dB	38 dB	Pass
1131 Hz	12.32 dBPa/V	36.29 dB	30 dB	38 dB	Pass
1199 Hz	11.76 dBPa/V	35.73 dB	30 dB	38 dB	Pass
1270 Hz	11.59 dBPa/V	35.56 dB	30 dB	38 dB	Pass
1345 Hz	10.63 dBPa/V	34.6 dB	30 dB	38 dB	Pass
1425 Hz	9.86 dBPa/V	33.83 dB	30 dB	38 dB	Pass
1510 Hz	8.57 dBPa/V	32.55 dB	30 dB	38 dB	Pass
1600 Hz	10.6 dBPa/V	34.58 dB	30 dB	38 dB	Pass
1695 Hz	10.18 dBPa/V	34.15 dB	30 dB	38 dB	Pass
1796 Hz	9.67 dBPa/V	33.64 dB	30 dB	38 dB	Pass
1903 Hz	9 dBPa/V	32.97 dB	30 dB	38 dB	Pass
2016 Hz	8.75 dBPa/V	32.72 dB	30 dB	38 dB	Pass
2136 Hz	8.18 dBPa/V	32.15 dB	30 dB	38 dB	Pass
2263 Hz	7.74 dBPa/V	31.72 dB	30 dB	38 dB	Pass
2397 Hz	7.61 dBPa/V	31.58 dB	30 dB	38 dB	Pass
2540 Hz	8.1 dBPa/V	32.07 dB	30 dB	38 dB	Pass
2691 Hz	7.22 dBPa/V	31.19 dB	30 dB	38 dB	Pass
2851 Hz	6.64 dBPa/V	30.61 dB	30 dB	38 dB	Pass
3020 Hz	6.11 dBPa/V	30.08 dB	-	38 dB	Pass
3200 Hz	5.61 dBPa/V	29.59 dB	-	38 dB	Pass
3390 Hz	4.61 dBPa/V	28.58 dB	-	38 dB	Pass
3592 Hz	2.97 dBPa/V	26.94 dB	-	38 dB	Pass
3805 Hz	-0.62 dBPa/V	23.35 dB	-	38 dB	Pass
4032 Hz	-56.75 dBPa/V	-32.78 dB	-	37.78 dB	Pass
4271 Hz	-60.34 dBPa/V	-36.37 dB	-	36.21 dB	Pass
4525 Hz	-70.39 dBPa/V	-46.42 dB	-	34.64 dB	Pass
4795 Hz	-54.36 dBPa/V	-30.39 dB	-	33.05 dB	Pass
5080 Hz	-52.64 dBPa/V	-28.67 dB	-	31.48 dB	Pass
5382 Hz	-63.97 dBPa/V	-40 dB	-	29.9 dB	Pass
5702 Hz	-61.65 dBPa/V	-37.68 dB	-	28.33 dB	Pass

Test specification:	5.4.3.2.2 (a) CE with digital network interfaces (VoIP) with a handset		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec and incorporates a handset complies with the receive frequency response limits as shown in Figure 6.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:46:56 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Frequency	Receiving sensitivity	Relative sensitivity	Limit min	Limit max	Verdict
6041 Hz	-61.51 dBPa/V	-37.53 dB	-	26.75 dB	Pass
6400 Hz	-65.94 dBPa/V	-41.97 dB	-	25.18 dB	Pass
6781 Hz	-62.73 dBPa/V	-38.76 dB	-	23.6 dB	Pass
7184 Hz	-65.82 dBPa/V	-41.85 dB	-	22.02 dB	Pass
7611 Hz	-66.03 dBPa/V	-42.06 dB	-	20.45 dB	Pass
8000 Hz	-60.22 dBPa/V	-36.25 dB	-	19.09 dB	Pass

Test specification:	5.4.3.3.2 Send loudness rating of the CE with digital network interfaces (VoIP)		
Test purpose:	To check that the CE with digital network interfaces that has a G.711 codec complies with the short term limits for Send Loudness Rating (11 dB > SLR > 5 dB) as specified in ITU-T Rec. P.310 [12].		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:46:10 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Measurement uncertainty

Expanded Uncertainty, k=2 (95% confidence)
Sensitivity = ±0.85 dB

General parameters

Parameter	Value
Acoustic test setup	Test head
Stimulus	Level value = -4.7dBPa
Stimulus freq.	100...8175

Send loudness rating

Send loudness rating	Limit min	Limit max	Verdict
10.59 dB	5 dB	11 dB	Pass

Sensitivity

Frequency	Sending sensitivity	Verdict
100 Hz	-28.28 dBV/Pa	-
125 Hz	-25.61 dBV/Pa	-
160 Hz	-22.07 dBV/Pa	-
200 Hz	-19.42 dBV/Pa	-
250 Hz	-17.37 dBV/Pa	-
315 Hz	-16.34 dBV/Pa	-
410 Hz	-17.44 dBV/Pa	-
516 Hz	-17.17 dBV/Pa	-
649 Hz	-16.7 dBV/Pa	-
818 Hz	-16.7 dBV/Pa	-
972 Hz	-16.54 dBV/Pa	-
1029 Hz	-15.93 dBV/Pa	-
1090 Hz	-15.61 dBV/Pa	-

Test specification:	5.4.3.3.2 Send loudness rating of the CE with digital network interfaces (VoIP)		
Test purpose:	To check that the CE with digital network interfaces that has a G.711 codec complies with the short term limits for Send Loudness Rating (11 dB > SLR > 5 dB) as specified in ITU-T Rec. P.310 [12].		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:46:10 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Frequency	Sending sensitivity	Verdict
1155 Hz	-15.69 dBV/Pa	-
1223 Hz	-15.6 dBV/Pa	-
1296 Hz	-16.21 dBV/Pa	-
1372 Hz	-16.36 dBV/Pa	-
1454 Hz	-15.28 dBV/Pa	-
1540 Hz	-15.23 dBV/Pa	-
1631 Hz	-15.03 dBV/Pa	-
1728 Hz	-15.75 dBV/Pa	-
1830 Hz	-14.65 dBV/Pa	-
1939 Hz	-14.03 dBV/Pa	-
2053 Hz	-14.67 dBV/Pa	-
2175 Hz	-13.5 dBV/Pa	-
2304 Hz	-13.45 dBV/Pa	-
2441 Hz	-13.31 dBV/Pa	-
2585 Hz	-13.15 dBV/Pa	-
2738 Hz	-12.89 dBV/Pa	-
2901 Hz	-12.91 dBV/Pa	-
3073 Hz	-12.44 dBV/Pa	-
3255 Hz	-11.93 dBV/Pa	-
3652 Hz	-13.86 dBV/Pa	-
4340 Hz	14.7 dBV/Pa	-
4597 Hz	14.7 dBV/Pa	-
5158 Hz	14.7 dBV/Pa	-
5788 Hz	14.7 dBV/Pa	-
6494 Hz	14.7 dBV/Pa	-
7286 Hz	14.7 dBV/Pa	-
8175 Hz	14.7 dBV/Pa	-

Test specification:	5.4.3.3.2 Receive loudness rating of the CE with digital network interfaces (VoIP)		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec complies with the limits for Receive Loudness Rating (5 dB > RLR > -1 dB) as specified in ITU-T Rec. P.310 [12].		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:45:29 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Measurement uncertainty

Expanded Uncertainty, k=2 (95% confidence)

Sensitivity = ±0.23 dB

General parameters

Parameter	Value
EUT state	Handset position. Nominal VC
Microphone type	T4185_OES
Acoustic test setup	Test head
Stimulus	Level value = -12dBV
Stimulus freq.	100...8175

Loudness rating

Volume control position	Loudness rating	Limit min	Limit max	Verdict
Reference	0.02 dB	-1 dB	5 dB	Pass

Sensitivity

Frequency	Receiving sensitivity	Verdict
100 Hz	-2.55 dBPa/V	-
125 Hz	-0.04 dBPa/V	-
160 Hz	2.78 dBPa/V	-
200 Hz	4.91 dBPa/V	-
250 Hz	6.91 dBPa/V	-
315 Hz	9.28 dBPa/V	-
410 Hz	11.67 dBPa/V	-
516 Hz	12.98 dBPa/V	-
649 Hz	13.4 dBPa/V	-
818 Hz	11.27 dBPa/V	-
972 Hz	12.24 dBPa/V	-

Test specification:	5.4.3.3.2 Receive loudness rating of the CE with digital network interfaces (VoIP)		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec complies with the limits for Receive Loudness Rating (5 dB > RLR > -1 dB) as specified in ITU-T Rec. P.310 [12].		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:45:29 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Frequency	Receiving sensitivity	Verdict
1029 Hz	12.4 dBPa/V	-
1090 Hz	12.47 dBPa/V	-
1155 Hz	12.05 dBPa/V	-
1223 Hz	11.8 dBPa/V	-
1296 Hz	11.22 dBPa/V	-
1372 Hz	10.49 dBPa/V	-
1454 Hz	9.21 dBPa/V	-
1540 Hz	9.51 dBPa/V	-
1631 Hz	10.53 dBPa/V	-
1728 Hz	9.97 dBPa/V	-
1830 Hz	9.45 dBPa/V	-
1939 Hz	9 dBPa/V	-
2053 Hz	8.56 dBPa/V	-
2175 Hz	8.24 dBPa/V	-
2304 Hz	7.55 dBPa/V	-
2441 Hz	7.57 dBPa/V	-
2585 Hz	8.01 dBPa/V	-
2738 Hz	6.99 dBPa/V	-
2901 Hz	6.43 dBPa/V	-
3073 Hz	5.88 dBPa/V	-
3255 Hz	5.31 dBPa/V	-
3652 Hz	2.65 dBPa/V	-
4340 Hz	-59.51 dBPa/V	-
4597 Hz	-58.45 dBPa/V	-
5158 Hz	-59.78 dBPa/V	-
5788 Hz	-62.13 dBPa/V	-
6494 Hz	-59.92 dBPa/V	-
7286 Hz	-62.57 dBPa/V	-
8175 Hz	-55.65 dBPa/V	-

Test specification:	5.4.3.4.2 Sidetone masking rating (STMR) of the CE with digital network interfaces		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec complies with the minimum short term limit for Sidetone Masking Rating (STMR > 10 dB)		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:55:27 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks:			

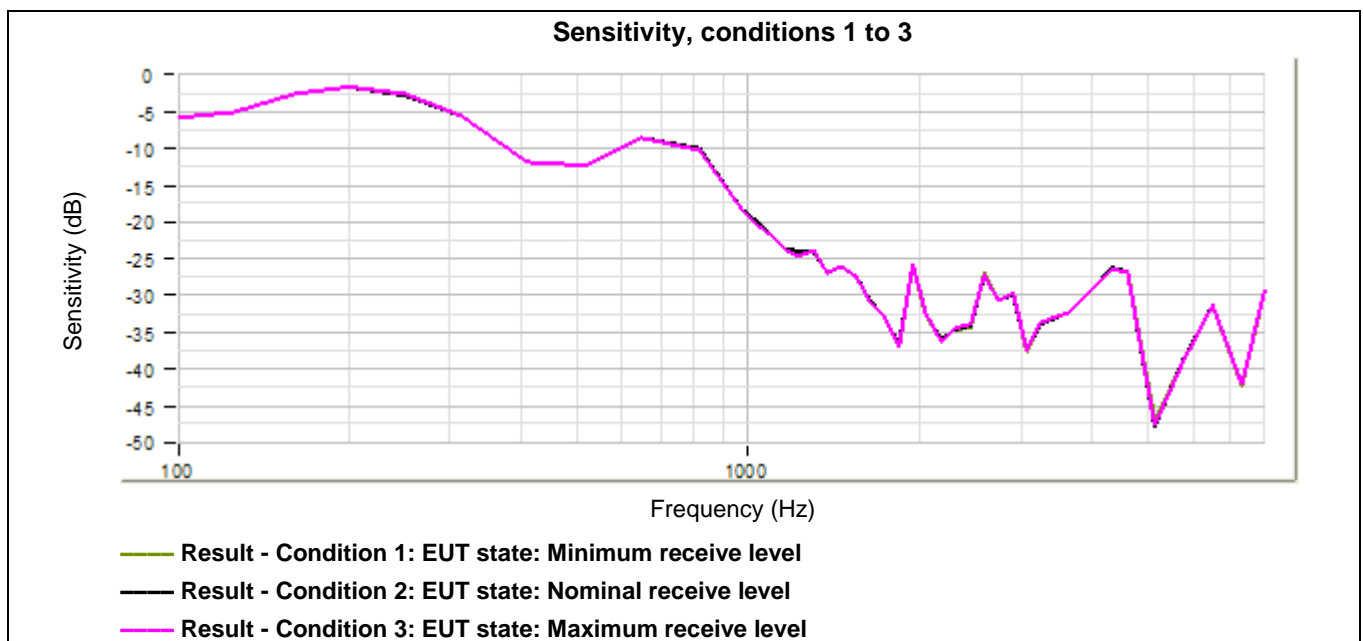
Measurement uncertainty

Expanded Uncertainty, k=2 (95% confidence):

Sensitivity = ±0.92 dB

General parameters

Parameter	Value
Microphone type	T4185_OES
Acoustic test setup	Test head
Handset bandwidth	Narrowband
Stimulus (units)	Level value = -4.7dBPa



Sidetone masking ratio

STMR	Limit	Verdict
Condition 1: EUT state: Minimum receive level		Pass
26.45 dB	10 dB	Pass

Test specification:	5.4.3.4.2 Sidetone masking rating (STMR) of the CE with digital network interfaces		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec complies with the minimum short term limit for Sidetone Masking Rating (STMR > 10 dB)		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:55:27 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks:			

STMR	Limit	Verdict
Condition 2: EUT state: Nominal receive level		Pass
26.40 dB	10 dB	Pass
Condition 3: EUT state: Maximum receive level		Pass
26.48 dB	10 dB	Pass

Sensitivity

Frequency	Sensitivity	Verdict
Condition 1: EUT state: Minimum receive level		-
100 Hz	-5.8 dB	-
125 Hz	-5.04 dB	-
160 Hz	-2.57 dB	-
200 Hz	-1.69 dB	-
250 Hz	-2.69 dB	-
315 Hz	-5.56 dB	-
410 Hz	-11.85 dB	-
516 Hz	-12.4 dB	-
649 Hz	-8.61 dB	-
818 Hz	-10.11 dB	-
972 Hz	-18.36 dB	-
1029 Hz	-19.95 dB	-
1090 Hz	-21.69 dB	-
1155 Hz	-23.71 dB	-
1223 Hz	-24.44 dB	-
1296 Hz	-24.02 dB	-
1372 Hz	-26.93 dB	-
1454 Hz	-26.04 dB	-
1540 Hz	-27.35 dB	-
1631 Hz	-30.7 dB	-
1728 Hz	-32.82 dB	-
1830 Hz	-36.81 dB	-
1939 Hz	-25.79 dB	-
2053 Hz	-32.69 dB	-
2175 Hz	-36.22 dB	-

Test specification:	5.4.3.4.2 Sidetone masking rating (STMR) of the CE with digital network interfaces		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec complies with the minimum short term limit for Sidetone Masking Rating (STMR > 10 dB)		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:55:27 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks:			

Frequency	Sensitivity	Verdict
2304 Hz	-34.57 dB	-
2441 Hz	-34.53 dB	-
2585 Hz	-27.07 dB	-
2738 Hz	-30.79 dB	-
2901 Hz	-29.9 dB	-
3073 Hz	-37.65 dB	-
3255 Hz	-33.83 dB	-
3652 Hz	-32.31 dB	-
4340 Hz	-26.42 dB	-
4597 Hz	-26.74 dB	-
5158 Hz	-47.08 dB	-
5788 Hz	-38.73 dB	-
6494 Hz	-31.39 dB	-
7286 Hz	-42.23 dB	-
8175 Hz	-27.02 dB	-
Condition 2: EUT state: Nominal receive level		-
100 Hz	-5.79 dB	-
125 Hz	-5.03 dB	-
160 Hz	-2.55 dB	-
200 Hz	-1.65 dB	-
250 Hz	-2.68 dB	-
315 Hz	-5.53 dB	-
410 Hz	-11.84 dB	-
516 Hz	-12.38 dB	-
649 Hz	-8.55 dB	-
818 Hz	-10.02 dB	-
972 Hz	-18.32 dB	-
1029 Hz	-19.82 dB	-
1090 Hz	-21.73 dB	-
1155 Hz	-23.61 dB	-
1223 Hz	-23.94 dB	-
1296 Hz	-24.16 dB	-
1372 Hz	-26.93 dB	-
1454 Hz	-26.01 dB	-

Test specification:	5.4.3.4.2 Sidetone masking rating (STMR) of the CE with digital network interfaces		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec complies with the minimum short term limit for Sidetone Masking Rating (STMR > 10 dB)		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:55:27 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks:			

Frequency	Sensitivity	Verdict
1540 Hz	-27.36 dB	-
1631 Hz	-30.74 dB	-
1728 Hz	-32.75 dB	-
1830 Hz	-36.74 dB	-
1939 Hz	-25.77 dB	-
2053 Hz	-32.6 dB	-
2175 Hz	-36.16 dB	-
2304 Hz	-34.54 dB	-
2441 Hz	-34.07 dB	-
2585 Hz	-27.26 dB	-
2738 Hz	-30.66 dB	-
2901 Hz	-29.9 dB	-
3073 Hz	-37.48 dB	-
3255 Hz	-33.88 dB	-
3652 Hz	-32.35 dB	-
4340 Hz	-26.38 dB	-
4597 Hz	-26.74 dB	-
5158 Hz	-48 dB	-
5788 Hz	-38.64 dB	-
6494 Hz	-31.38 dB	-
7286 Hz	-42.04 dB	-
8175 Hz	-26.97 dB	-
Condition 3: EUT state: Maximum receive level		-
100 Hz	-5.79 dB	-
125 Hz	-5.03 dB	-
160 Hz	-2.56 dB	-
200 Hz	-1.68 dB	-
250 Hz	-2.67 dB	-
315 Hz	-5.55 dB	-
410 Hz	-11.83 dB	-
516 Hz	-12.39 dB	-
649 Hz	-8.6 dB	-
818 Hz	-10.25 dB	-
972 Hz	-18.41 dB	-

Test specification:	5.4.3.4.2 Sidetone masking rating (STMR) of the CE with digital network interfaces		
Test purpose:	To verify that the CE with digital network interfaces that has a G.711 codec complies with the minimum short term limit for Sidetone Masking Rating (STMR > 10 dB)		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:55:27 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks:			

Frequency	Sensitivity	Verdict
1029 Hz	-20.16 dB	-
1090 Hz	-21.59 dB	-
1155 Hz	-23.7 dB	-
1223 Hz	-24.66 dB	-
1296 Hz	-23.91 dB	-
1372 Hz	-26.91 dB	-
1454 Hz	-26 dB	-
1540 Hz	-27.33 dB	-
1631 Hz	-30.82 dB	-
1728 Hz	-32.73 dB	-
1830 Hz	-36.9 dB	-
1939 Hz	-25.77 dB	-
2053 Hz	-32.62 dB	-
2175 Hz	-36.35 dB	-
2304 Hz	-34.4 dB	-
2441 Hz	-34 dB	-
2585 Hz	-27.26 dB	-
2738 Hz	-30.64 dB	-
2901 Hz	-29.84 dB	-
3073 Hz	-37.46 dB	-
3255 Hz	-33.81 dB	-
3652 Hz	-32.38 dB	-
4340 Hz	-26.4 dB	-
4597 Hz	-26.74 dB	-
5158 Hz	-47.66 dB	-
5788 Hz	-38.76 dB	-
6494 Hz	-31.32 dB	-
7286 Hz	-42 dB	-
8175 Hz	-26.96 dB	-

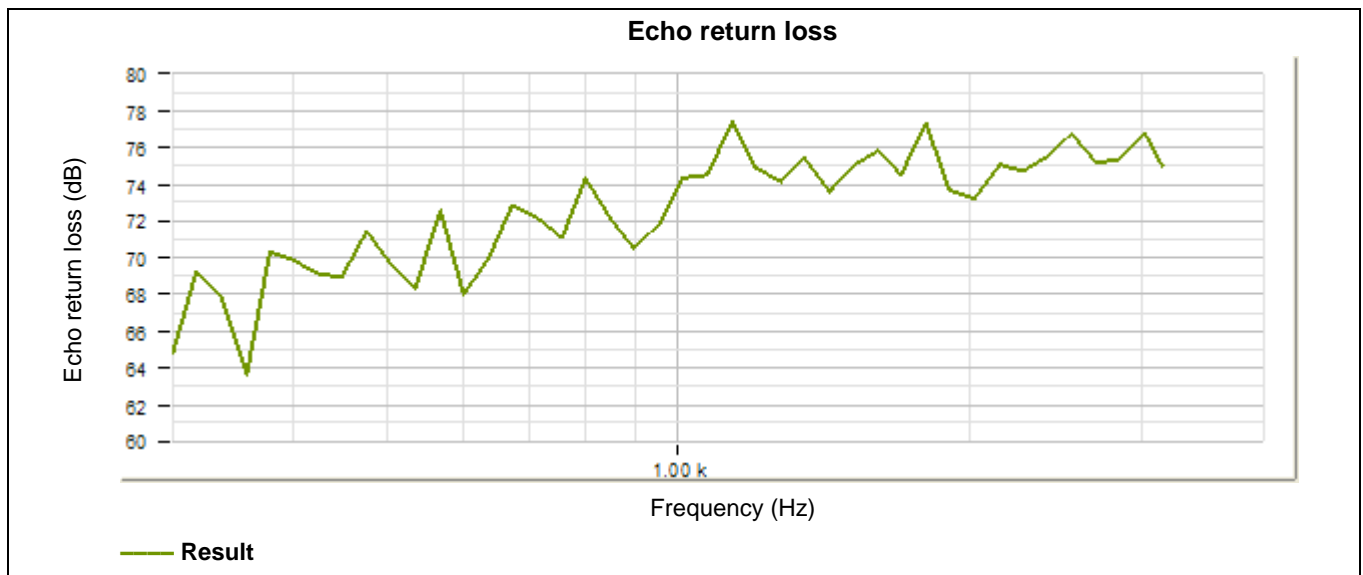
Test specification:	5.4.3.5 (a) Weighted Terminal Coupling Loss (TCLw) of the VoIP CE		
Test purpose:	To verify that the Weighted Terminal Coupling Loss (TCLw) of the VoIP CE exceed the 55 dB limit		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:51:36 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Measurement uncertainty

Expanded uncertainty, k=2 (95% confidence):
Stability loss = ±0.38 dB

General parameters

Parameter	Value
EUT state	Handset position. Nominal VC
Freq. histogram	300...3150
Noise signal	White noise -10dBm0 0.1-4KHz 0.25s/0.15s
Measured RLR	0.02dB
Measured SLR	10.59dB



Measured TCLw, Normalized TCLw

Measured TCLw	Normalized TCLw	Limit	Verdict
72.43 dB	71.82 dB	55 dB	Pass

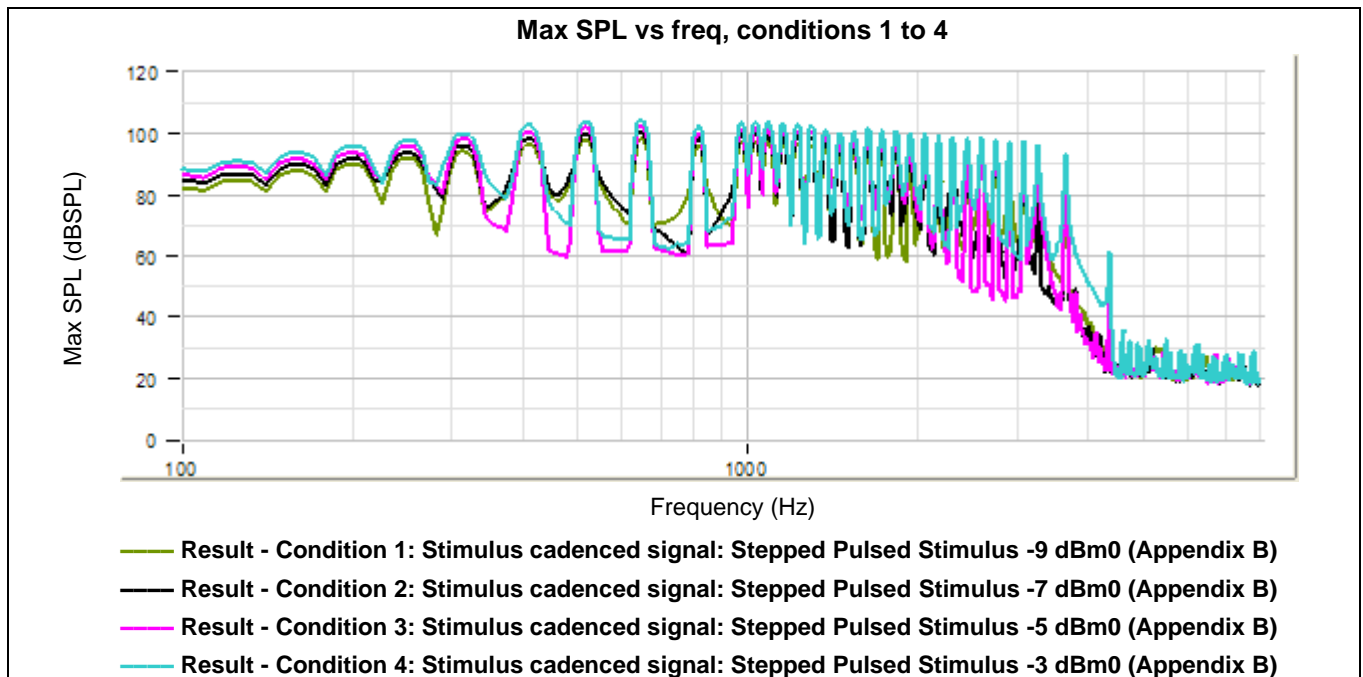
Test specification:	5.4.3.8.3 CE with a digital network interface - RMS output levels		
Test purpose:	To check the maximum output sound pressure level determined by varying a digitally encoded sinusoidal signal with a level: (a) over the range -9 dBm0 to +3.14 dBm0; and (b) at +10 dBm0, (i) While varying the frequency between 100 Hz and 8 kHz in a swept or continuous manner, and (ii) While varying the frequency in a stepped pulsed manner by applying 500 ms pulses		
Test mode:	Evaluation	Verdict:	PASS
Date & Time:	5/19/2015 4:20:23 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks:			

Measurement uncertainty

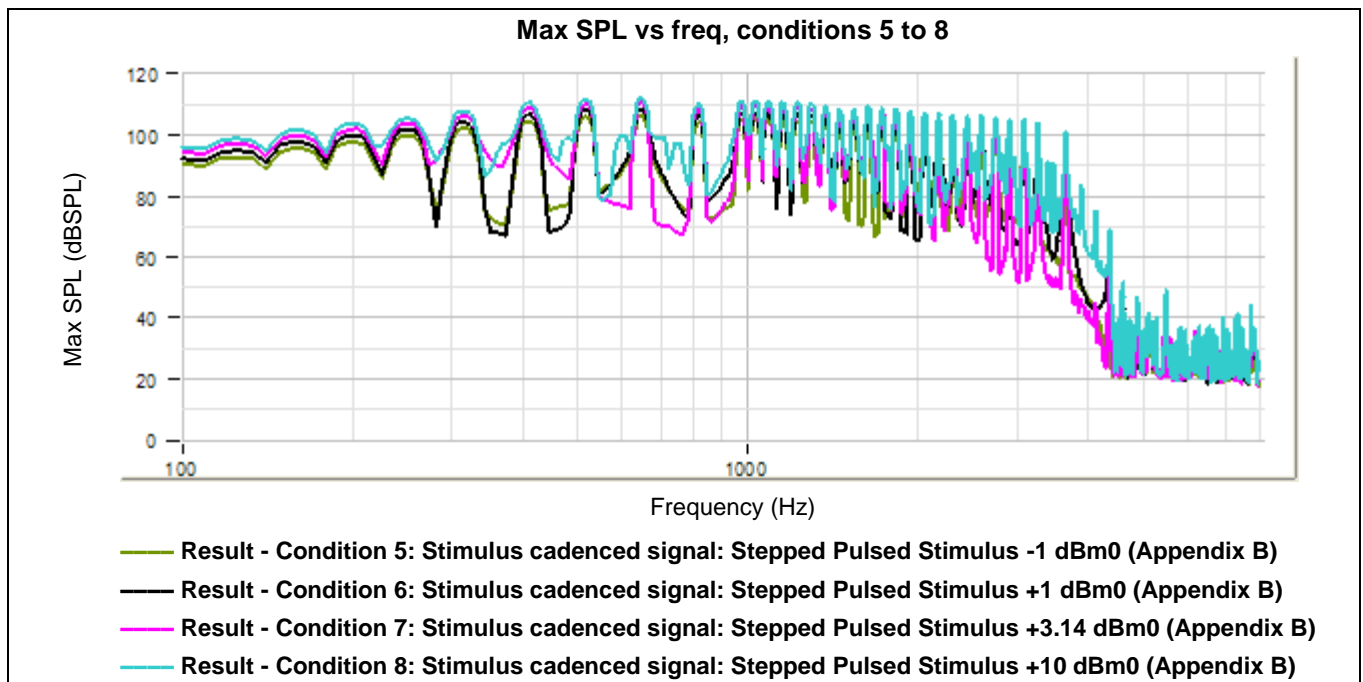
Expanded Uncertainty, k=2 (95% confidence):
SPL ±0.23 dB

General parameters

Parameter	Value
Microphone type	T4185_OES
Acoustic test setup	Test head



Test specification:	5.4.3.8.3 CE with a digital network interface - RMS output levels		
Test purpose:	To check the maximum output sound pressure level determined by varying a digitally encoded sinusoidal signal with a level: (a) over the range -9 dBm0 to +3.14 dBm0; and (b) at +10 dBm0, (i) While varying the frequency between 100 Hz and 8 kHz in a swept or continuous manner, and (ii) While varying the frequency in a stepped pulsed manner by applying 500 ms pulses		
Test mode:	Evaluation	Verdict:	PASS
Date & Time:	5/19/2015 4:20:23 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks:			



Max sound pressure

Max SPL	Limit	Verdict
Condition 1: Stimulus cadenced signal: Stepped Pulsed Stimulus -9 dBm0 (Appendix B)		Pass
98.24 dBSPL	120 dBSPL	Pass
Condition 2: Stimulus cadenced signal: Stepped Pulsed Stimulus -7 dBm0 (Appendix B)		Pass
100.26 dBSPL	120 dBSPL	Pass
Condition 3: Stimulus cadenced signal: Stepped Pulsed Stimulus -5 dBm0 (Appendix B)		Pass
102.27 dBSPL	120 dBSPL	Pass
Condition 4: Stimulus cadenced signal: Stepped Pulsed Stimulus -3 dBm0 (Appendix B)		Pass
104.25 dBSPL	120 dBSPL	Pass
Condition 5: Stimulus cadenced signal: Stepped Pulsed Stimulus -1 dBm0 (Appendix B)		Pass
106.23 dBSPL	120 dBSPL	Pass

Test specification:	5.4.3.8.3 CE with a digital network interface - RMS output levels		
Test purpose:	To check the maximum output sound pressure level determined by varying a digitally encoded sinusoidal signal with a level: (a) over the range -9 dBm0 to +3.14 dBm0; and (b) at +10 dBm0, (i) While varying the frequency between 100 Hz and 8 kHz in a swept or continuous manner, and (ii) While varying the frequency in a stepped pulsed manner by applying 500 ms pulses		
Test mode:	Evaluation	Verdict:	PASS
Date & Time:	5/19/2015 4:20:23 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks:			

Max SPL	Limit	Verdict
Condition 6: Stimulus cadenced signal: Stepped Pulsed Stimulus +1 dBm0 (Appendix B)		Pass
108.26 dBSPL	120 dBSPL	Pass
Condition 7: Stimulus cadenced signal: Stepped Pulsed Stimulus +3.14 dBm0 (Appendix B)		Pass
110.38 dBSPL	120 dBSPL	Pass
Condition 8: Stimulus cadenced signal: Stepped Pulsed Stimulus +10 dBm0 (Appendix B)		Pass
112.14 dBSPL	120 dBSPL	Pass

Test specification:	5.4.3.10.1 Sending distortion of the CE with digital network interfaces		
Test purpose:	To check that the total sending harmonic distortion (summed up to the 5th harmonic) not exceed 7 % when measured with an input of -4.7 dBPa, at a loop current of 20 mA.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:48:29 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Measurement uncertainty

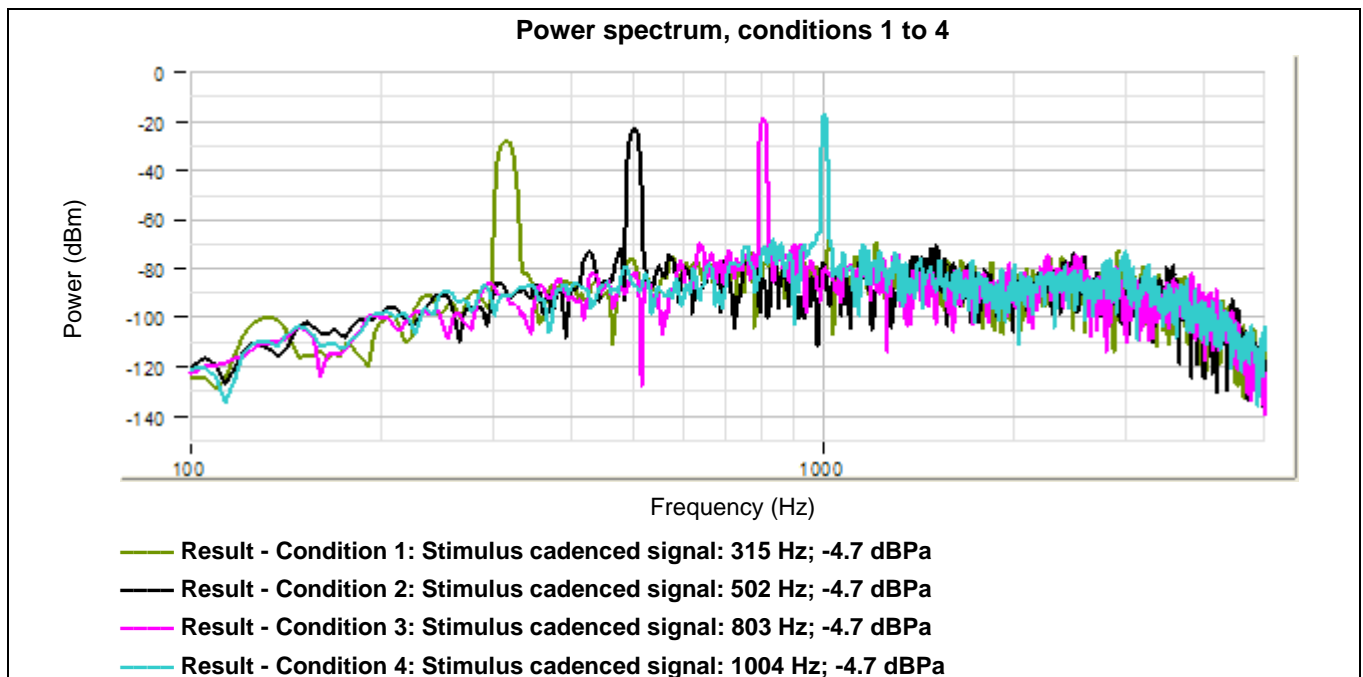
Expanded Uncertainty, k=2 (95% confidence):
Sending distortion and noise ±0.85 dB

General parameters

Parameter	Value
Microphone type	T4185_OES

Test ranges

Frequency		Acquisition settings	Transfer function
Start	Stop		
100.00 Hz	5.00 kHz	Acquisition time = 500 ms, Overall meas. time = 5 s	Psophometric ITU-T



Test specification:	5.4.3.10.1 Sending distortion of the CE with digital network interfaces		
Test purpose:	To check that the total sending harmonic distortion (summed up to the 5th harmonic) not exceed 7 % when measured with an input of -4.7 dBPa, at a loop current of 20 mA.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:48:29 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Total harmonic distortion

Sound pressure	Total harmonic distortion	Limit	Verdict
Condition 1: Stimulus cadenced signal: 315 Hz; -4.7 dBPa			
-4.70 dBPa	1.9 %	7 %	Pass
Condition 2: Stimulus cadenced signal: 502 Hz; -4.7 dBPa			
-4.70 dBPa	1.09 %	7 %	Pass
Condition 3: Stimulus cadenced signal: 803 Hz; -4.7 dBPa			
-4.70 dBPa	0.57 %	7 %	Pass
Condition 4: Stimulus cadenced signal: 1004 Hz; -4.7 dBPa			
-4.70 dBPa	0.45 %	7 %	Pass

Test specification:	5.4.3.10.2 Receiving distortion of the CE with digital network interfaces		
Test purpose:	To check that the total receiving harmonic distortion (summed up to the 5th harmonic) not exceed 7 % when measured with an input signal level of 251 mV r.m.s. (-12 dBV) at a loop current of 20 mA.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:50:13 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Measurement uncertainty

Expanded Uncertainty, k=2 (95% confidence):

Signal-to-total distortion and noise ratio ± 0.23 dB

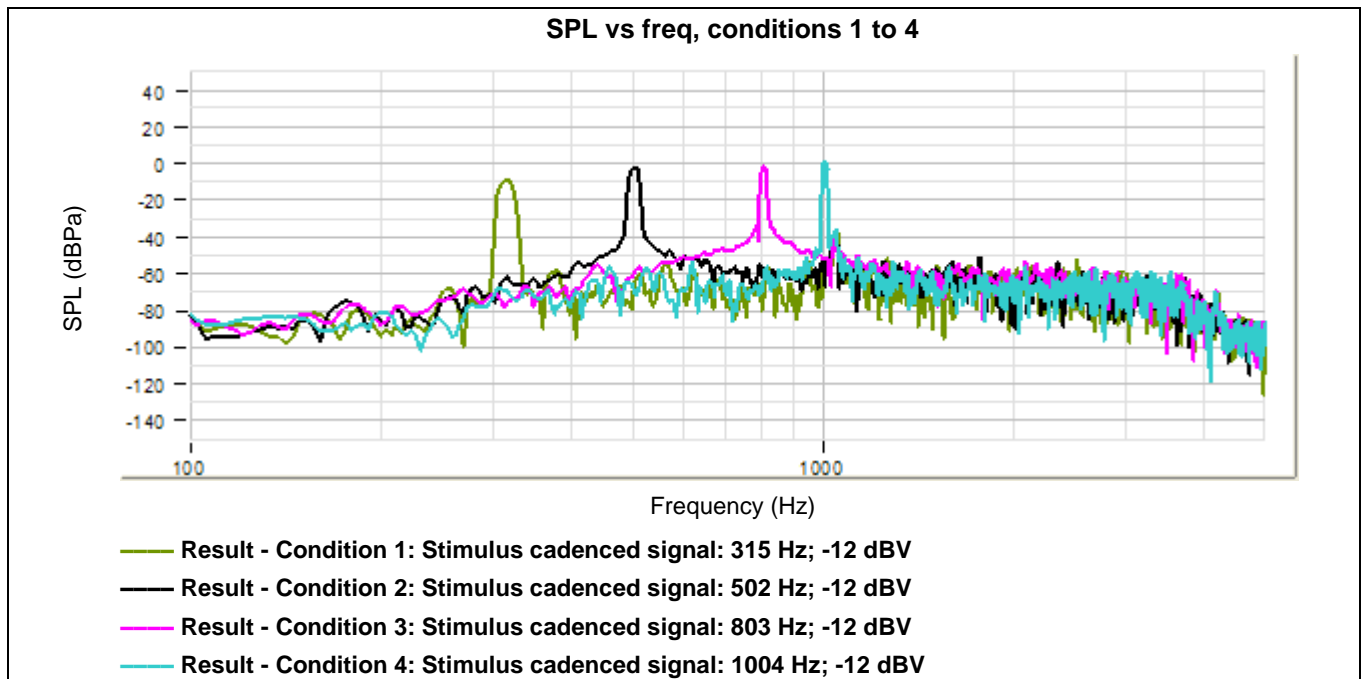
General parameters

Parameter	Value
Initialize state	Handset position. Nominal VC
Microphone type	T4185_OES
Acoustic test setup	Test head

Test ranges

Frequency		Acquisition settings	Transfer function
Start	Stop		
100.00 Hz	5.00 kHz	Acquisition time = 500 ms, Overall meas. time = 5 s	A-weighting

Test specification:	5.4.3.10.2 Receiving distortion of the CE with digital network interfaces		
Test purpose:	To check that the total receiving harmonic distortion (summed up to the 5th harmonic) not exceed 7 % when measured with an input signal level of 251 mV r.m.s. (-12 dBV) at a loop current of 20 mA.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 3:50:13 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			



Total harmonic distortion

Stimulus level	Total harmonic distortion	Limit	Verdict
Condition 1: Stimulus cadenced signal: 315 Hz; -12 dBV			Pass
-12.00 dBV	1.86 %	7 %	Pass
Condition 2: Stimulus cadenced signal: 502 Hz; -12 dBV			Pass
-12.00 dBV	1.98 %	7 %	Pass
Condition 3: Stimulus cadenced signal: 803 Hz; -12 dBV			Pass
-12.00 dBV	0.68 %	7 %	Pass
Condition 4: Stimulus cadenced signal: 1004 Hz; -12 dBV			Pass
-12.00 dBV	0.46 %	7 %	Pass

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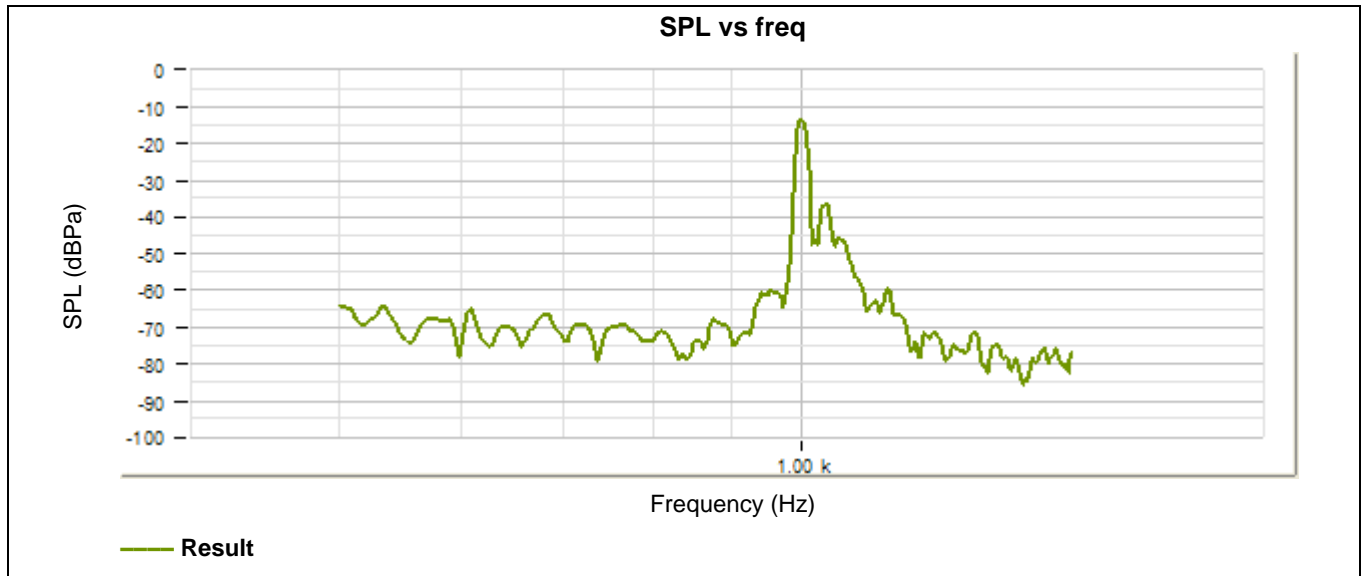
Test specification:	5.1 Calibration of acoustic receive level (-14 dBPa) of digital (VoIP) telephones		
Test purpose:	To determine the level of the 1 kHz sine-wave signal applied at the digital interface which corresponds to a -14 dBPa sound pressure at the acoustic output of the handset (4.2.1 of ITU-T Rec. P.370).		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 4:41:44 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Measurement uncertainty

Expanded Uncertainty, k=2 (95% confidence) ± 0.38 dB

General parameters

Parameter	Value
EUT state	HATS position, Nominal VC.
Microphone type	T4158C-HATS-OR
Stimulus (units)	Stimulus level = -14dBPa



Reference level, Sound pressure

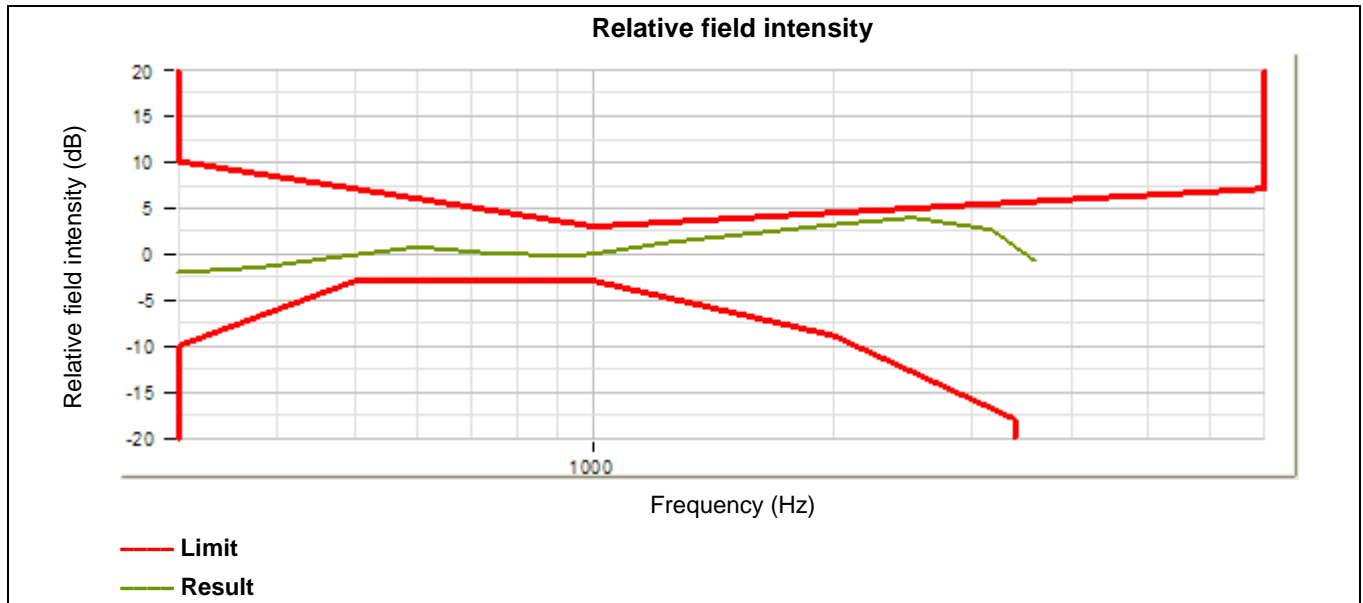
Reference level	SPL	Limit min	Limit max	Verdict
-32.71 dBV	-13.87 dBPa	-14.5 dBPa	-13.5 dBPa	Pass

Test specification:	5.1.2 Frequency characteristics (VoIP)		
Test purpose:	To verify that the frequency characteristic of the magnetic field strength complies with the limits shown in Figure 3/P.370 of ITU-T Rec.P.370.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 5:09:29 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Measurement uncertainty

Expanded uncertainty, k=2 (95% confidence):

Signal level (200 Hz - 4 kHz) ±0.2 dB



Field intensity, Relative field intensity

Frequency	Field intensity	Relative field intensity	Limit min	Limit max	Verdict
300 Hz	-30.53 dB A/m	-2.07 dB	-20 dB	20 dB	Pass
378 Hz	-29.9 dB A/m	-1.43 dB	-6.83 dB	8.66 dB	Pass
476 Hz	-28.81 dB A/m	-0.35 dB	-3.67 dB	7.32 dB	Pass
600 Hz	-27.67 dB A/m	0.79 dB	-3 dB	5.97 dB	Pass
756 Hz	-28.46 dB A/m	-0 dB	-3 dB	4.63 dB	Pass
953 Hz	-28.68 dB A/m	-0.22 dB	-3 dB	3.28 dB	Pass
1000 Hz	-28.46 dB A/m	0 dB	-3 dB	3 dB	Pass
1260 Hz	-27.17 dB A/m	1.29 dB	-5 dB	3.47 dB	Pass
1588 Hz	-26.26 dB A/m	2.2 dB	-7 dB	3.95 dB	Pass
2000 Hz	-25.35 dB A/m	3.12 dB	-9 dB	4.42 dB	Pass

Test specification:	5.1.2 Frequency characteristics (VoIP)		
Test purpose:	To verify that the frequency characteristic of the magnetic field strength complies with the limits shown in Figure 3/P.370 of ITU-T Rec.P.370.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 5:09:29 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Frequency	Field intensity	Relative field intensity	Limit min	Limit max	Verdict
2520 Hz	-24.5 dB A/m	3.97 dB	-12.92 dB	4.9 dB	Pass
3176 Hz	-25.82 dB A/m	2.64 dB	-16.84 dB	5.38 dB	Pass
3600 Hz	-29.25 dB A/m	-0.78 dB	-	5.64 dB	Pass

Test specification:	5.1.3 Magnetic field strength level (VoIP)		
Test purpose:	To verify the magnetic field strength at 1000 Hz for an electrical drive to the telephone that gives a sound pressure level of - 14 dBPa at the artificial ear.		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/19/2015 5:42:06 PM		
Temperature: 25°C	Air Pressure: 1010hPa	Relative Humidity: 69%	Mains Power Supply: 240V/50Hz
Product name: IP Phone	Product type: IP Phone	Product model: X5G	Product serial: NA
Remarks: nonimal=4			

Measurement uncertainty

Expanded uncertainty, k=2 (95% confidence):

Signal level (200 Hz - 4 kHz) ±0.2 dB

General parameters

Parameter	Value
EUT state	Handset on the Axial HAC probe.
Stimulus level	-32.71 dBV
Stimulus frequency	1.00 kHz

Field intensity vs probe position

HAC Probe position	Field Intensity	Limit min	Limit max	Verdict
				Pass
Axial normal mode	-27.84 dB A/m	-30 dB A/m	-17 dB A/m	Pass

10 Photos

(1) EUT Photos

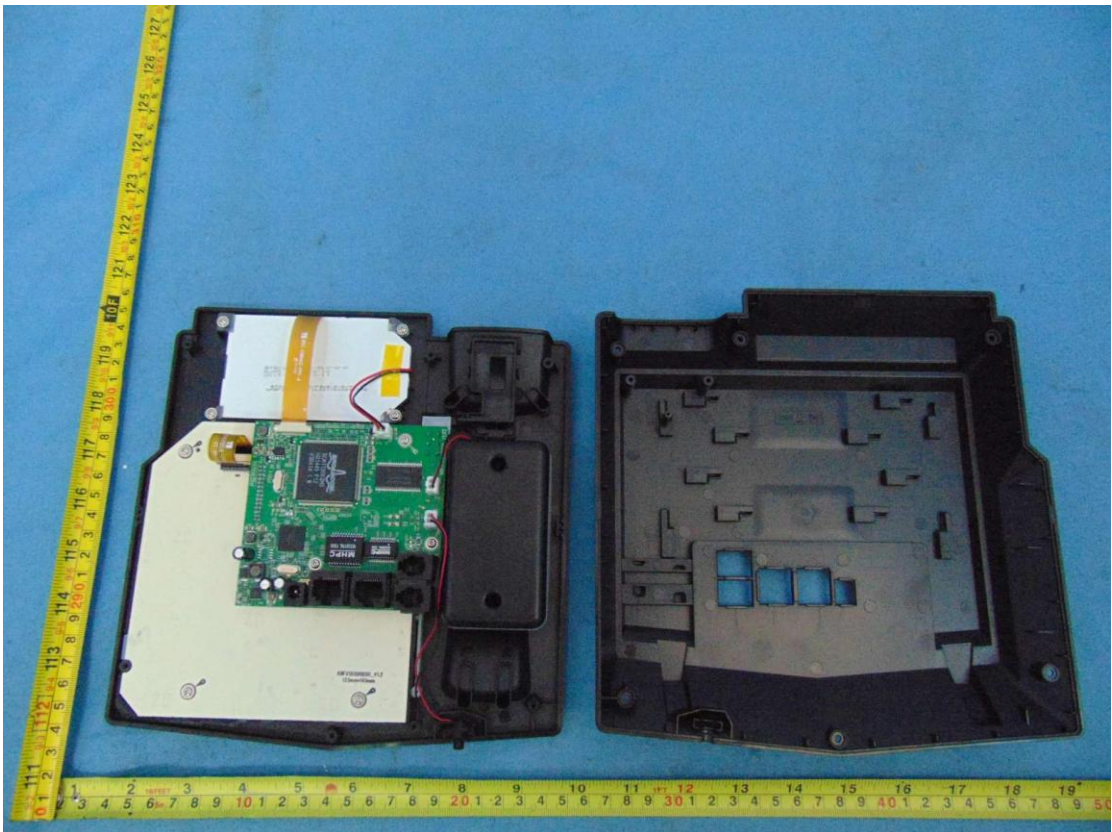


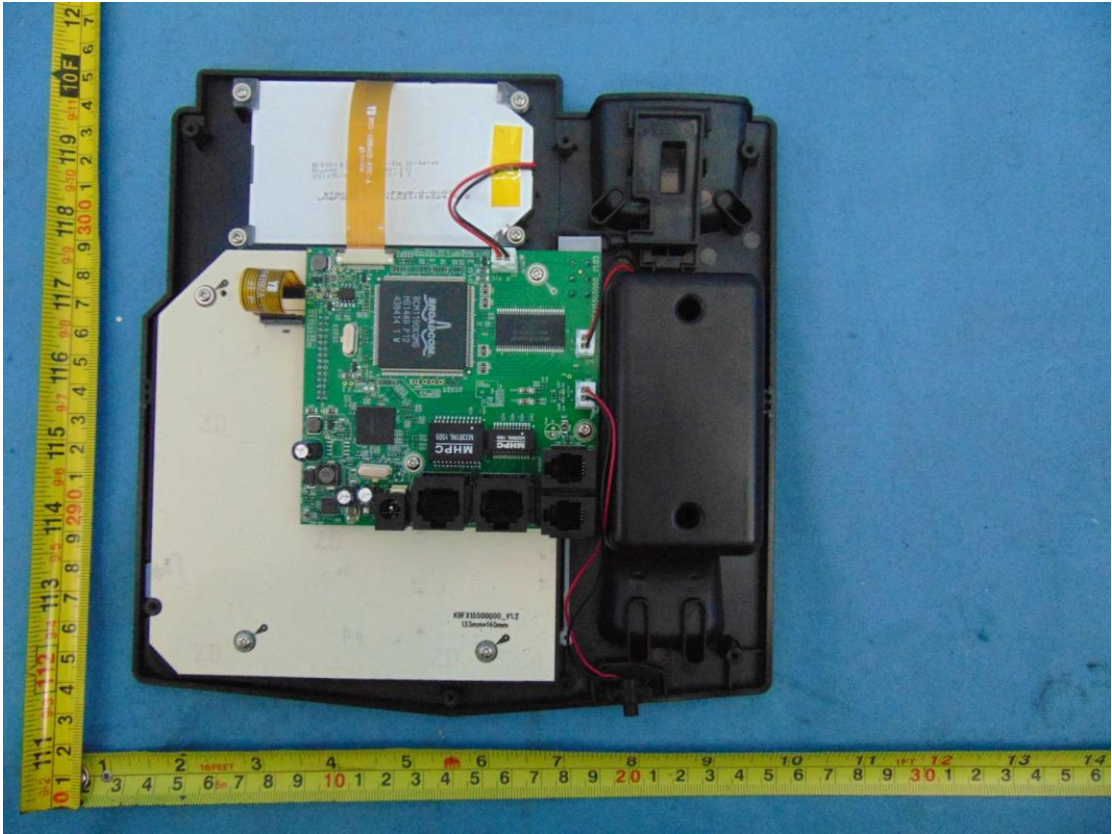


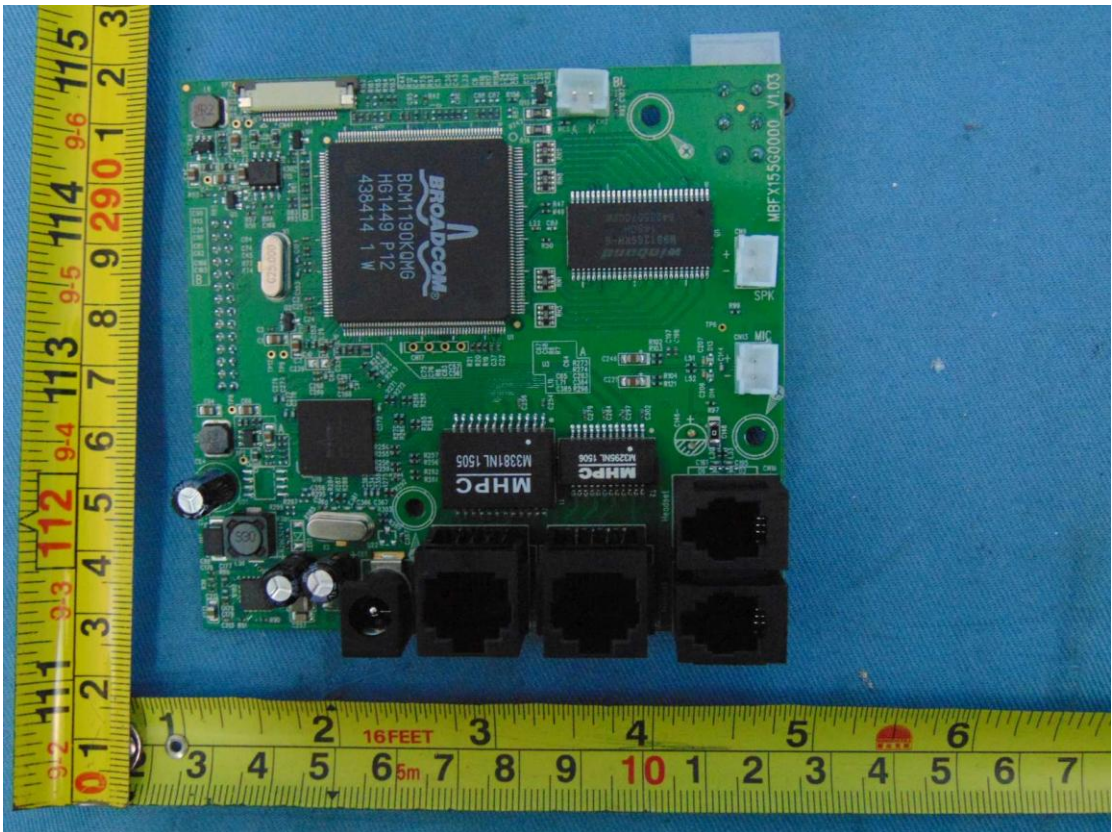


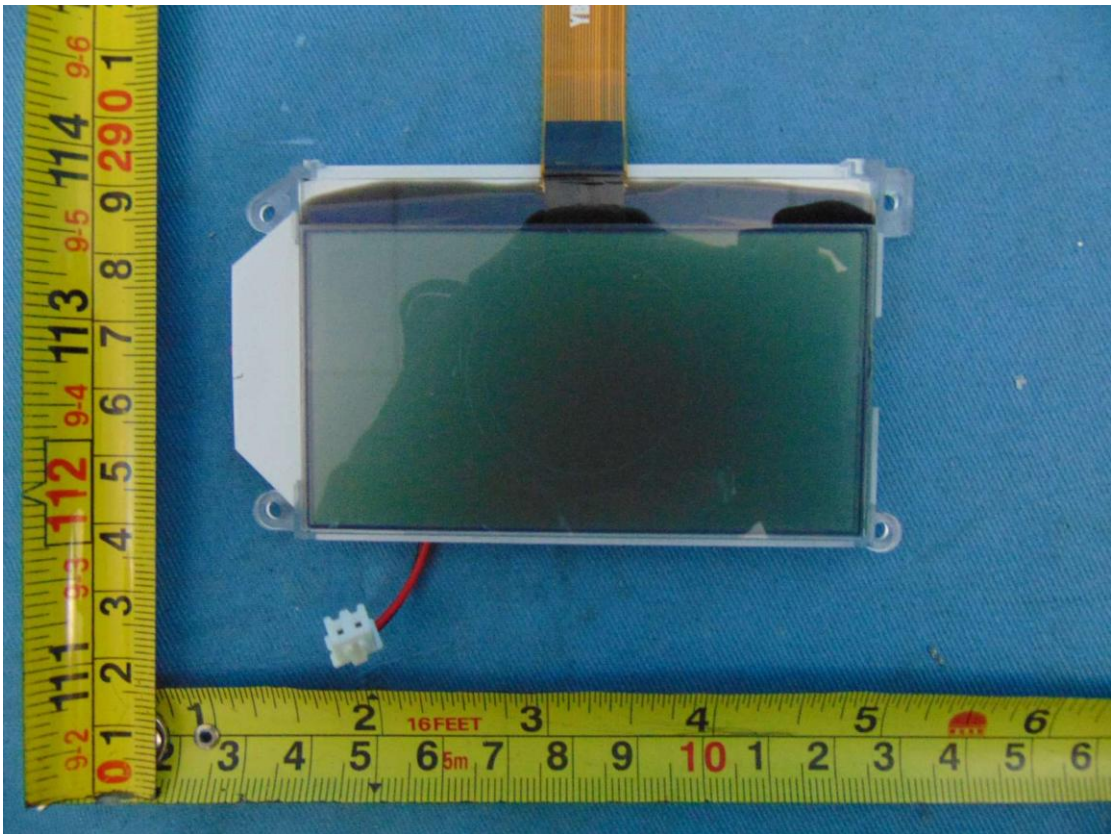
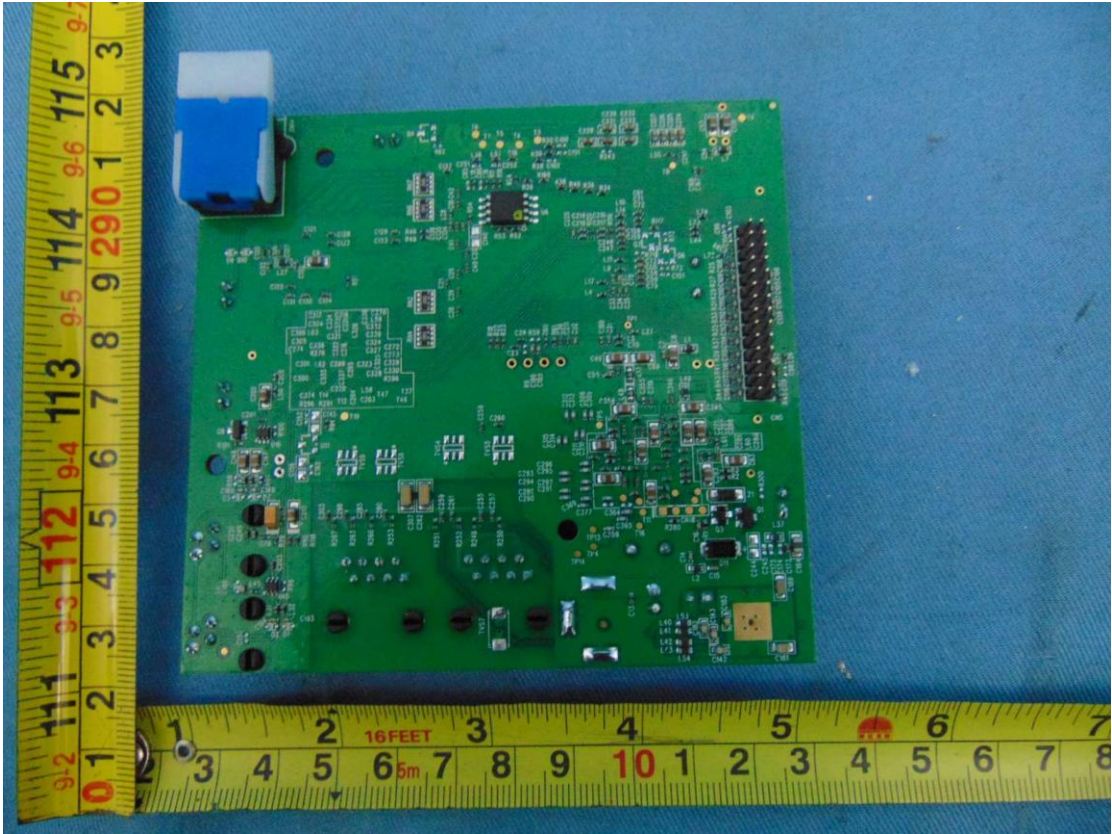


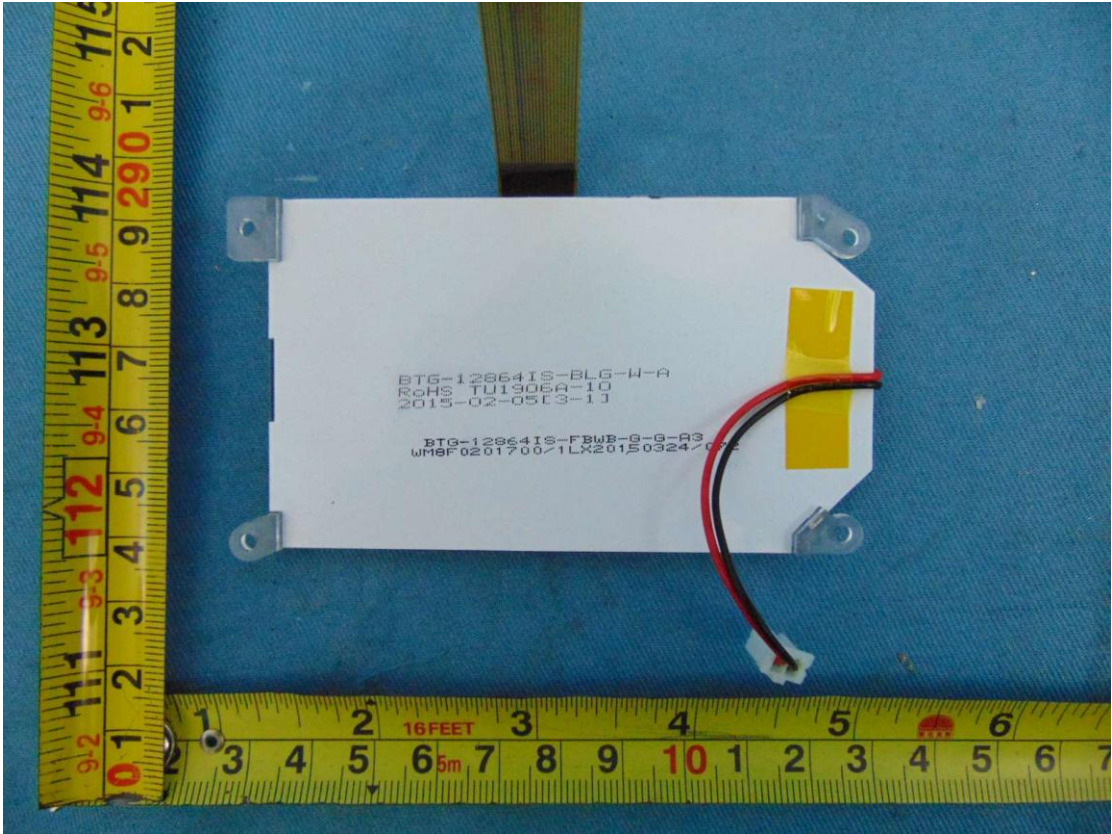


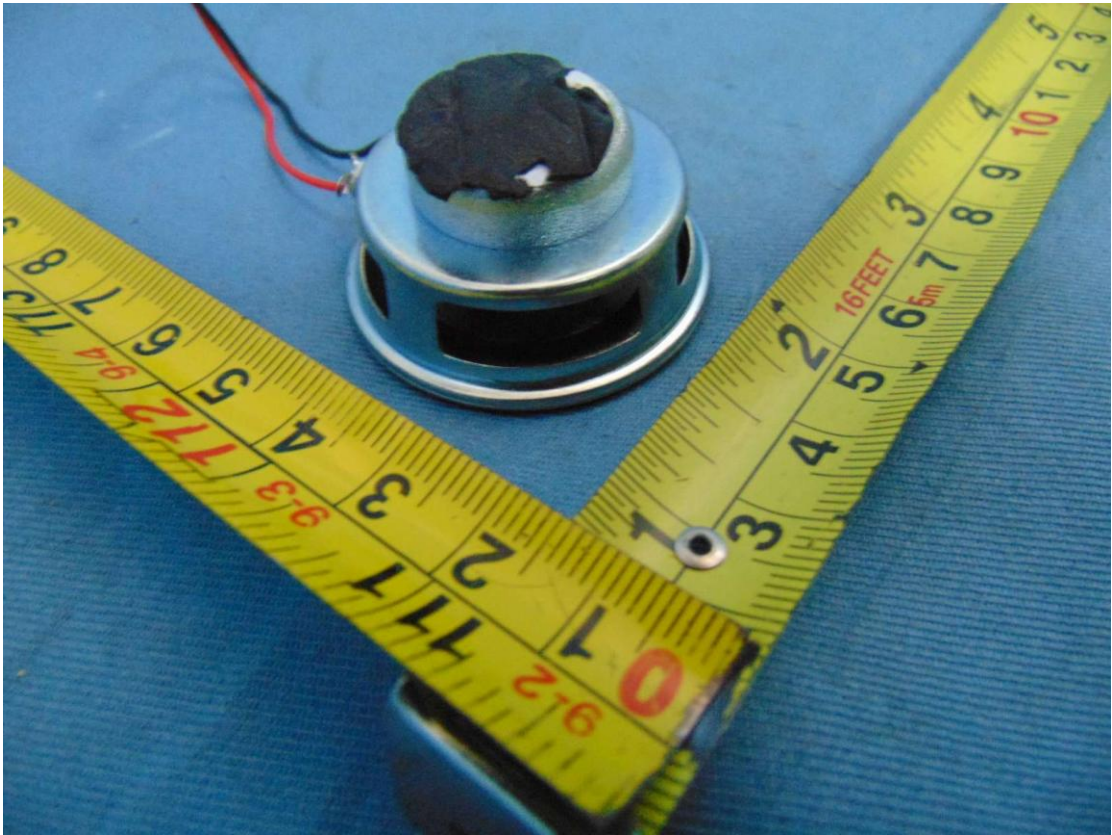












(2) Adaptor Photos



