

HEARING AID COMPATIBILITY

Applicant Name:

Samsung Electronics Co., Ltd.
129, Samsung-ro, Maetan dong,
Yeongtong-gu, Suwon-si
Gyeonggi-do 16677, Korea

Date of Testing:

5/26/2026 - 5/27/2026

Test Site/Location:

Element Washington DC LLC,
Columbia, MD, USA

Test Report Serial No.:

1M2605130037-02.A3L

Date of Issue:

5/27/2026

FCC ID:

A3LSMA576U

APPLICANT:

SAMSUNG ELECTRONICS CO., LTD.

Scope of Test:

Audio Band Magnetic Testing (T-Coil)

Application Type:

Class II Permissive Change

FCC Rule Part(s):

CFR §20.19(b)

HAC Standard:

ANSI C63.19-2019

285076 D01 HAC Guidance v06r02

285076 D02 T-Coil testing for CMRS IP v04

DUT Type:

Portable Handset

Model:

SM-A576U1

Additional Model(s):

SM-A576U

Test Device Serial No.:

[S/N: 3788M]

HAC Compliance:

Pass

This report only pertains to LTE Band 71 and NR Band n71 on antenna E of this wireless portable device. This wireless portable device has been shown to be hearing-aid compatible as specified in ANSI/IEEE Std. C63.19-2019 and has been tested in accordance with the specified measurement procedures. Test results reported herein relate only to the item(s) tested. Hearing-Aid Compatibility is based on the assumption that all production units will be designed electrically identical to the device tested in this report. North American Bands only.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.



RJ Ortanez
Executive Vice President



FCC ID: A3LSMA576U		HAC (T-COIL) TEST REPORT	Approved by: Technical Manager
Filename: 1M2605130037-02.A3L	DUT Type: Portable Handset	This report is Blockchain Verified. To verify the report authenticity, please visit https://www.blockchain-verified.com or by clicking on the Blockchain logo. 	Page 1 of 42

TEST REPORT REVISION HISTORY

Rev. No.	Report S/N	Description	Issue Date
A	1M2605130037-02.A3L	Initial Release	5/28/2026
B	1M2605130037-02.A3L	Editorial Changes	5/29/2026
C	1M2605130037-02.A3L	Editorial Changes	5/29/2026
D	1M2605130037-02.A3L	Editorial Changes	5/29/2026

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1. INTRODUCTION

On July 10, 2003, the Federal Communications Commission (FCC) adopted new rules requiring wireless manufacturers and service providers to provide digital wireless phones that are compatible with hearing aids. The FCC has modified the exemption for wireless phones under the Hearing Aid Compatibility Act of 1998 (HAC Act) in WT Docket 01-309 RM-8658¹ to extend the benefits of wireless telecommunications to individuals with hearing disabilities. These benefits encompass business, social and emergency communications, which increase the value of the wireless network for everyone. An estimated more than 10% of the population in the United States show signs of hearing impairment and of that fraction, almost 80% use hearing aids. Approximately 500 million people worldwide and 30 million people in the United States suffer from hearing loss.

Ambient Conditions

- Ambient temperature: 23 °C ± 5 °C
- Relative humidity (RH): 0% < RH < 80%
- Baseband magnetic ambient noise: >10 dB below the measurement level, where applicable

Compatibility Tests Involved:

The standard calls for wireless communications devices to be measured for:

- RF Electric-field emissions
- T-coil mode, magnetic-signal strength in the audio band
- T-coil mode, magnetic-signal frequency response through the audio band
- T-coil mode, magnetic-signal and noise articulation index
- Volume Control, receive volume control performance
- Volume Control, receive distortion and noise performance
- Volume Control, receive acoustic frequency response performance

The hearing aid must be measured for:

- RF immunity in microphone mode
- RF immunity in T-coil mode

In the following tests and results, this report includes the evaluation for a wireless communications device.

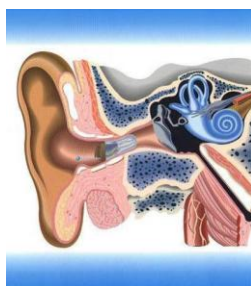


Figure 1-1 Hearing Aid *in-vitu*

¹ FCC Rule & Order, WT Docket 01-309 RM-8658

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2. DUT DESCRIPTION

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Applicant: Samsung Electronics Co., Ltd.
129, Samsung-ro, Maetan dong,
Yeongtong-gu, Suwon-si
Gyeonggi-do 16677, Korea
Model: SM-A576U1
Additional Models: SM-A576U
Serial Number: 3788M
HW Version: REV1.0
SW Version: A576U1.001
Antenna: Internal Antenna
DUT Type: Portable Handset

I. Band Selection

This device supports LTE/NR capabilities with overlapping transmission frequency ranges. When the supported frequency range of a band falls completely within a band with a larger transmission frequency range, both bands have the same target power (or the band with the larger transmission frequency range has a higher target power), and both bands share the same transmission path and signal characteristics, hearing-aid compatibility compliance was only assessed for the band with the larger transmission frequency range. However, overlapped LTE bands which are anchor bands for dual connectivity (EN-DC) scenarios between LTE and NR were evaluated as independent LTE bands.

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Table 2-1
A3LSMA576U HAC Air Interfaces

Air-Interface	Band (MHz)	Type Transport	HAC Tested	Simultaneous But Not Tested	Name of Voice Service	Audio Codec Evaluated
GSM	850	VO	No ⁵	Yes: WIFI or BT	CMRS Voice ¹	EFR
	1900					
	GPRS/EDGE	VD	No ⁵	Yes: WIFI or BT	Google Meet ²	OPUS
UMTS	850	VD	No ⁵	Yes: WIFI or BT	CMRS Voice ¹	NB AMR, WB AMR
	1700					
	1900					
	HSPA	VD	No ⁵	Yes: WIFI or BT	Google Meet ²	OPUS
LTE (FDD)	680 (B71)	VD	Yes	Yes: NR, WIFI or BT	VoLTE ¹ , Google Meet ²	VoLTE: NB AMR, WB AMR, EVS Google Meet: OPUS
	700 (B12)		No ⁵			
	780 (B13)					
	790 (B14)					
	850 (B5)					
	850 (B26)					
	1700 (B4)					
	1700 (B66)					
	1900 (B2)					
	1900 (B25)					
	2300 (B30)					
	2500 (B7)					
LTE (TDD)	2600 (B41)	VD	No ⁵	Yes: NR, WIFI or BT	VoLTE ¹ , Google Meet ²	VoLTE: NB AMR, WB AMR, EVS Google Meet: OPUS
	2600 (B38)					
	3600 (B48)					
NR (FDD)	680 (n71)	VD	Yes	Yes: LTE, WIFI or BT	VoNR ¹ , Google Meet ²	VoNR: NB AMR, WB AMR, EVS Google Meet: OPUS
	850 (n5)		No ⁵			
	1700 (n70)					
	1700 (n66)					
	1900 (n2)					
	1900 (n25)					
	2300 (n30)					
NR (TDD)	2600 (n41)	VD	No ⁵	Yes: LTE, WIFI or BT	VoNR ¹ , Google Meet ²	VoNR: NB AMR, WB AMR, EVS Google Meet: OPUS
	3500 (n77, DoD)					
	3500 (n78, DoD)					
	3600 (n48)					
	3700 (n77)					
	3800 (n78)					
WIFI	2450	VD	No ⁵	Yes: GSM, UMTS, LTE, or NR	VoWIFI ¹ , Google Meet ²	VoWIFI: NB AMR, WB AMR, EVS Google Meet: OPUS
	5200 (U-NII 1)					
	5300 (U-NII 2A)					
	5500 (U-NII 2C)					
	5800 (U-NII 3)		No ⁵			
	5900 (U-NII 4)					
	6175 (U-NII 5)		No ^{4,5}			
	6475 (U-NII 6)					
	6700 (U-NII 7)					
7000 (U-NII 8)						
BT	2450	DT	No	Yes: GSM, UMTS, LTE, or NR	N/A	N/A
Type Transport VO = Voice Only DT = Digital Data - Not intended for Voice Services VD = CMRS and/or IP Voice over Data Transport			Notes: 1. Reference level in accordance with 6.4.3.2 of ANSI C63.19-2019 2. n258, n260, and n261 are currently outside the scope of ANSI C63.19 and FCC HAC regulations therefore they were not evaluated. 3. WIFI U-NII band 5 was evaluated for operations which are entirely below 6 GHz. Operations partially or entirely above 6 GHz were not evaluated due to equipment limitations and being outside the scope of ANSI C63.19 and FCC HAC regulations. 4. WIFI U-NII bands 6 through 8 were not evaluated due to equipment limitations and being outside the scope of ANSI C63.19 and FCC HAC regulations. 5. This report only pertains to LTE Band 71 and NR Band n71 on antenna E of this wireless portable device. For full data, please refer to the original certification test report.			

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3. ANSI C63.19-2019 COMPLIANCE REQUIREMENTS

The ANSI Standard provides guidance on measuring the baseband (audio frequency) magnetic T-Coil signal from a wireless device (WD) when coupled with a hearing aid's telecoil. This report will cover the measurement and evaluation of the field strength of the desired signal at the center of the audio band (desired ABM signal), the frequency response of the desired signal measured across the audio band and the field strength of the undesired audio band magnetic field.

I. MAGNETIC COUPLING

Qualifying Field Strengths

Per C63.19-2019 §6.6.2, there are two groups of qualifying measurement points:

Primary group: A qualifying measurement point shall have magnetic field strength (desired ABM signal, ≥ -18 dB(A/m) at 1 kHz, in a 1/3 octave band filter. Additionally, the qualifying measurement point shall have weighted magnetic noise, undesired ABM field, ≤ -38 dB(A/m)).

Secondary group: A qualifying measurement point shall have weighted magnetic noise ≤ -38 dB(A/m). This group inherently includes all the members of the primary group.

Desired ABM Signal, undesired ABM field Qualification Requirements

The below requirements ensure an adequate area where desired ABM signal is sufficiently strong to be heard and a larger area where undesired ABM field is sufficiently low as to avoid undue annoyance.

Non-2G GSM Operating Modes

Both the primary and secondary group requirements shall be met:

- The primary group shall include at least 75 measurement points.
- The secondary group shall include at least 300 contiguous measurement points.

Additionally, the secondary group shall include at least one longitudinal column of at least 10 contiguous qualifying points and at least one transverse row containing at least 15 contiguous qualifying points.

2G GSM Operating Modes Requirements

Both the primary and secondary group requirements shall be met:

- The primary group shall include at least 25 measurement points.
- The secondary group shall include at least 125 contiguous measurement points.

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Frequency Response

The frequency response of the magnetic field shall follow the response curve specified in EIA RS-504-1983, over the frequency range 300 Hz – 3000 Hz per §6.6.3.

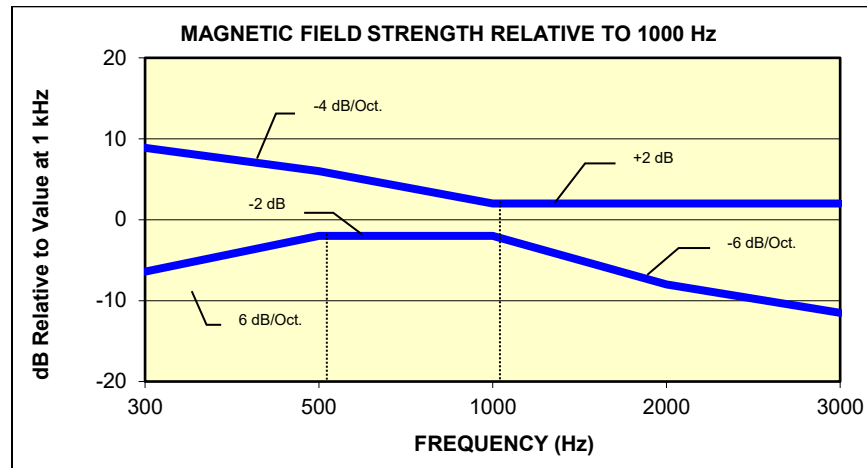


Figure 3-1

Magnetic field frequency response for Wireless Devices with a maximum field strength ≤ -15 dB(A/m) at 1 kHz

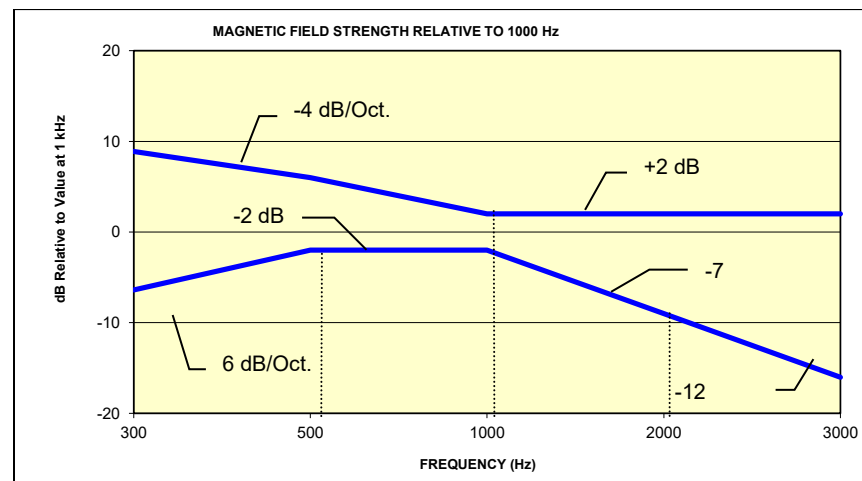


Figure 3-2

Magnetic Field frequency response for wireless devices with a maximum field strength that exceeds -15 dB(A/m) at 1 kHz

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4. METHOD OF MEASUREMENT

I. Test Setup

The equipment was connected as shown in an RF-shielded chamber:

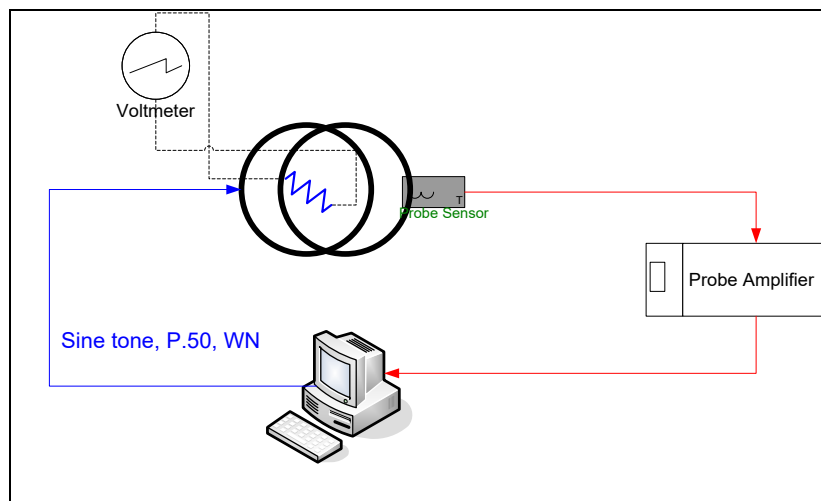


Figure 4-1
Validation Setup with Helmholtz Coil

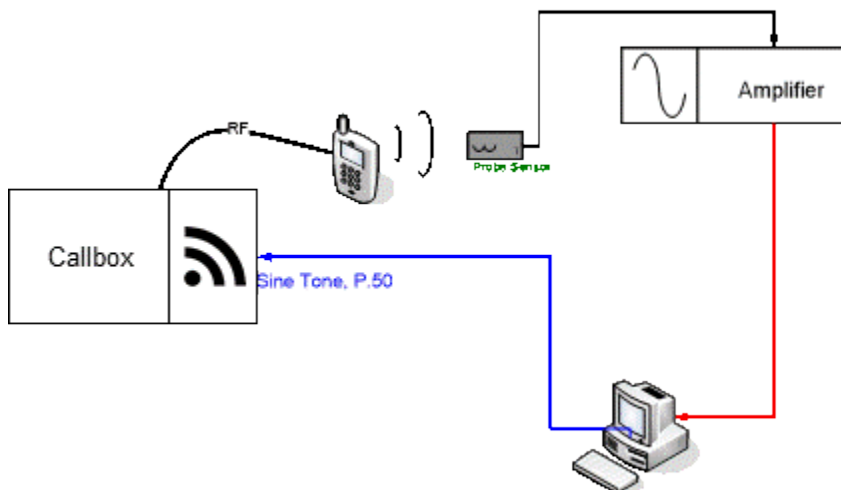


Figure 4-2
T-Coil Test Setup

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II. ITU-T P.50 Artificial Voice

Manufacturer: ITU-T
 Active Frequency Range: 100 Hz – 8 kHz
 Stimulus Type: Male and Female, no spaces
 Single Sample Duration: 20.96 seconds
 Activity Level: 100%

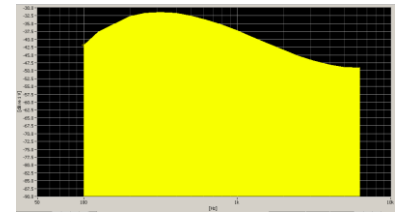


Figure 4-3
Spectral Characteristic of full P.50

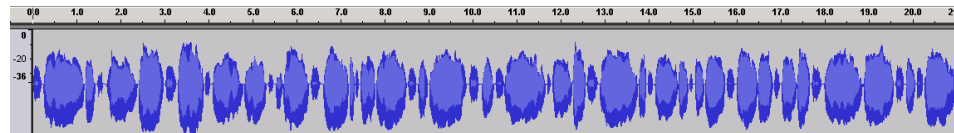


Figure 4-4
Temporal Characteristic of full P.50

III. Test Procedure

1. Ambient Noise Check per C63.19-2019 §6.3.2
 - a. Ambient interference was monitored using a Real-Time Analyzer between 100-10,000 Hz with 1/3 octave filtering.
 - b. Spectral/temporal weighting per C63.19-2019 Annex D.4 to D.6 was applied.
 - c. Since this measurement was measured using the same method as undesired ABM field measurements, this level was verified to be more than 10 dB below the lowest measurement signal (which is the highest undesired ABM field measurement for a compliant WD). Therefore the maximum noise level for a compliant WD is:
 $-38 - 10 = -48 \text{ dB (A/m)}$

2. Measurement System Validation (See Figure 4-1)
 - a. The measurement system including the probe, pre-amplifier and acquisition system were validated as an entire system to ensure the reliability of test measurements.
 - b. Desired ABM Signal Validation
 The magnetic field at the center of the Helmholtz coil is given by the equation (per C63.19-2019 Annex D.10.1):

$$H_c = \frac{NI}{r\sqrt{1.25^3}} = \frac{N\left(\frac{V}{R}\right)}{r\sqrt{1.25^3}}$$

Where H_c = magnetic field strength in amperes per meter

N = number of turns per coil

Therefore, a pure tone of 1kHz was applied into the coils such that was observed across the resistor. The voltmeter used for measurement was verified to be capable of measurements in the audio band range. This theoretically generates an expected field of -10 dB(A/m) in the center of the Helmholtz coil which was used to validate the probe measurement at -10dB(A/m). This was verified to be within ± 0.5 dB of the -10dB(A/m) value (see Page 52).

- c. Frequency Response Validation
 The frequency response through the Helmholtz Coil was verified to be within 0.5 dB relative to 1kHz, between 300 – 3000 Hz using the Normal signal as shown below:

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d. Undesired ABM Field Strength Measurement Validation

WD noise measurements are filtered with spectral/temporal weighting over a frequency range of 100Hz – 10kHz to process undesired ABM field strength measurements.

3. Point Measurement Test Setup

a. Fine scan above the WD

- i. A multitone signal was applied to the handset such that the phone acoustic output was stable within 1dB over the probe settling time and with the acoustic output level at the C63.19 specified levels (below). The measurement step size was in 2 mm increments at a distance of 10 mm between the surface of the wireless device as shown below (note that in **Figure 4-6**, the grid is not to scale but merely a graphical representation of the coordinate system in use):

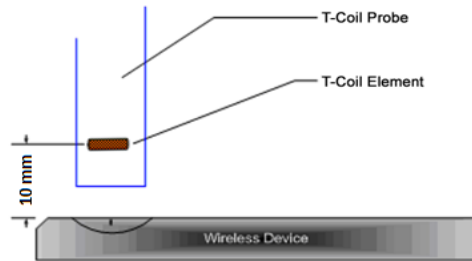


Figure 4-5
Measurement Distance

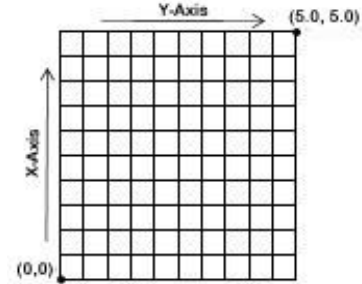


Figure 4-6
Measurement Grid

- ii. After scanning, the planar field maximum point was determined. The position of the probe was moved to this location to setup the test using the SoundCheck system.

b. Speech Signal Setup to Base Station Simulator

- i. C63.19 Table 6-1 states audio reference input levels for various technologies:

Standard	Technology	Input Level (dBm0)
J-STD-007	GSM (217)	-16
T1/T1P1/3GPP	UMTS (WCDMA)	-16
iDEN™	TDMA (22 and 11 Hz)	-16
VoIP	Voice over Internet Protocol	-16

- i. See Section 5 and 7 for more information regarding CMW500 audio level settings for Voice Over LTE (VoLTE) and Voice Over WIFI (VoWIFI) testing.
 - ii. See Section 6 for more information regarding CMW500 and CMX500 audio level settings for Voice Over NR (VoNR) testing.
 - iii. See Section 7 for more information regarding audio level settings for Over-The-Top (OTT) Voice Over IP (VoIP) Testing.
- b. Real-Time Analyzer (RTA)
- i. The Real-Time Analyzer was configured to analyze measurements using 1/3 Octave band weighted filtering.
- c. WD Radio Configuration Selection
- i. The device was chosen to be tested in the condition resulting in the worst-case undesired ABM field (See Section 8 and 9 for more information regarding worst-case configurations for GSM and UMTS. LTE configuration information can be found in Section 5 and 7. NR configuration information can be found in Section 6 and 7. WIFI configuration information can be found in Section 7 and 7.)

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4. Signal Quality Data Analysis
 - a. Narrow-band Magnetic Intensity
 - i. The standard specifies a 1kHz 1/3 octave band minimum field intensity for a sine tone. The desired ABM signal measurements were evaluated at 1kHz with 1/3 octave band filtering over an averaged period of 10 seconds.
 - b. Frequency Response
 - ii. The appropriate frequency response curve was measured to curves in Figure 3-1 or Figure 3-2 between 300 – 3000 Hz using digital linear averaging (limit lines chosen according to measurement found in step 4a). A linear average over 3x the length of the artificial voice signal (3x sampling) was performed. A 10 second delay was configured in the measurement process of the stimulus to ensure handset vocoder latency effects and echo cancellation devices (if any) were appropriately stabilized during measurements.
 - iii. The appropriate post-processing was applied according to the system processing chain described in C63.19-2019. All R10 frequencies were plotted with respect to 0dB at 1kHz value and aligned with respect to the EIA-504 mask.
 - c. Signal Quality Index
 - i. Ensuring the WD was at maximum RF power, maximum volume, backlight off, display on, maximum contrast setting, keypad lights on (when possible) with no audio signal through the vocoder, the WD was measured over at least 100 Hz – 10,000 Hz, maximized over 5 seconds with a 50ms sample time for the undesired ABM field measurement (5 second time period is used in noise measurements under standards such as IEEE 269, etc.).
 - ii. Measure the broadband undesired T-Coil noise at the locations where desired ABM signal strength was just measured. The measurement shall be made using the specified spectral and temporal weighted filter, applied to the half-band integrated probe coil signal (T-Coil response), as described in C63.19-2019 Annex D.9.2. Any additional bandwidth-limiting filtering that might be applied shall not affect frequencies within the range of at least 100 Hz to 10 kHz. Set the measurement system averaging interval duration to be long enough so as to enable an accurate steady state reading. The resulting reading represents the “1 kHz equivalent” value of the broadband weighted T-Coil response magnetic noise (undesired ABM field) for each measurement position. All results should be reported in dB(A/m).
 - iii. This result was subtracted from the desired ABM signal result in step a, to obtain the Signal Quality.
5. Signal Compliance Analysis
 - a. Fine scan above the WD
 - i. The worst-case signal quality index configuration for each wireless communication technology was used to evaluate the respective qualifying measurement points over a 50 mm square measurement area. The measurement step size was in 4 mm increments at 10 mm from the surface of the wireless device.
 - ii. At each step, a multitone signal was applied to the handset such that the phone acoustic output was stable within 1 dB over the probe settling time and with the acoustic output level at the C63.19 specified level. The desired ABM signal was measured, and the multitone signal was subsequently disabled before measuring the weighted magnitude of the undesired ABM field.
 - iii. The above steps were repeated for all supported wireless communication technologies.

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IV. Test Setup

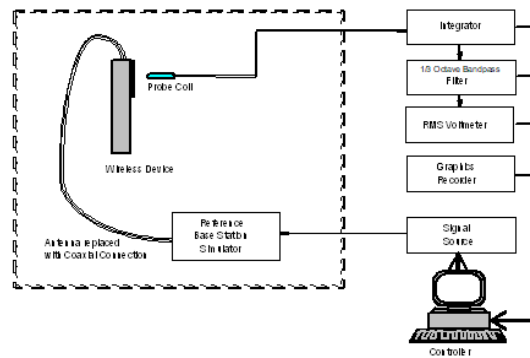


Figure 4-7
Audio Magnetic Field Test Setup

Environmental conditions such as temperature and relative humidity are monitored to ensure there are no impacts on system specifications. Proper voltage and power line frequency conditions are maintained with three phase power sources. Environmental noise and reflections are monitored through system checks.

V. Deviation from C63.19 Test Procedure

Non-conducted RF connection due to inaccessible RF ports.

VI. Air Interface Technologies Tested

All air interfaces which support voice capabilities over a managed CMRS or pre-installed OTT VoIP applications were tested for T-coil unless otherwise noted. See Table 2-1 for more details regarding which modes were tested.

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VII. Wireless Device Channels and Frequencies

1. 4G (LTE) Modes

The middle channel for every band and maximum bandwidth combination was tested at the planar field maximum point. Please see the original report for the full test data.

2. 5G (NR) Modes

The middle channel for every band and maximum bandwidth combination was tested at the planar field maximum point. Please see the original report for the full test data.

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VIII. Test Flow

The flow diagram below was followed (From C63.19):

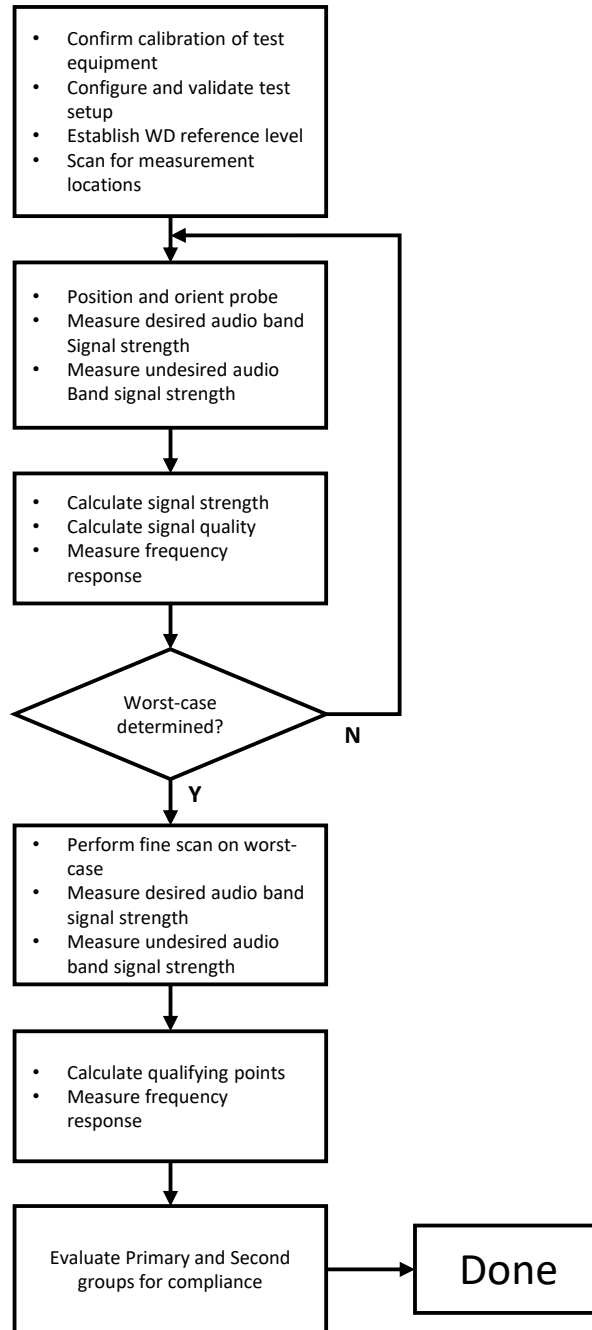


Figure 4-8
C63.19 T-Coil Signal Test Process

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5. VOLTE TEST SYSTEM SETUP AND DUT CONFIGURATION

I. Test System Setup for VoLTE over IMS T-coil Testing

1. Equipment Setup

The general test setup used for VoLTE over IMS is shown below. The callbox used when performing VoLTE over IMS T-coil measurements is a CMW500. The Data Application Unit (DAU) of the CMW500 was used to simulate the IP Multimedia Subsystem (IMS) server.

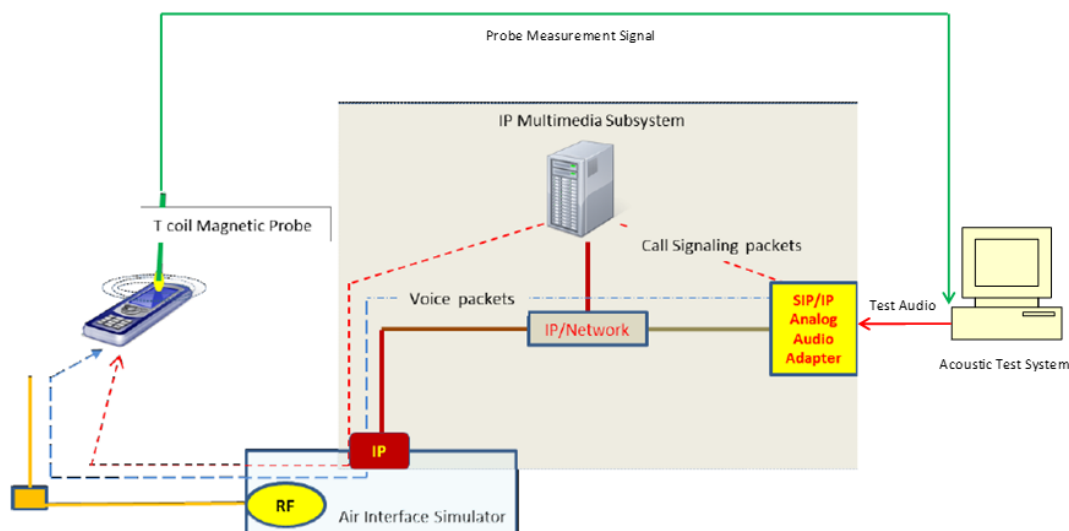


Figure 5-1
Test Setup for VoLTE over IMS T-Coil Measurements

2. Audio Level Settings

Per C63.19 Table 6-1, -16dBm0 shall be used as the normal speech input level for VoLTE over IMS T-coil testing. The CMW500 base station simulator was manually configured to ensure that the settings for speech input and full scale levels resulted in the -16dBm0 speech input level to the DUT for the VoLTE over IMS connection.

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II. DUT Configuration for VoLTE over IMS T-coil Testing

1. Radio Configuration

An investigation was performed to determine the modulation and RB configuration to be used for testing. The effects of modulation and RB configuration were found to be independent of band and bandwidth; therefore, only one band and bandwidth were used for this investigation. 16QAM, 1RB, 0RB offset was used for the testing as the worst-case configuration for the handset. See below table for SNNR comparison between different radio configurations:

Table 5-1
VoLTE over IMS SNNR by Radio Configuration

Band	Frequency [MHz]	Channel	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Desired [dB(A/m)]	Undesired [dB(A/m)]	SNNR [dB]
66	1745.0	132322	20	QPSK	100	0	4.08	-48.91	52.99
66	1745.0	132322	20	16QAM	1	0	4.14	-45.55	49.69
66	1745.0	132322	20	16QAM	1	50	4.16	-46.40	50.56
66	1745.0	132322	20	16QAM	1	99	4.12	-45.83	49.95
66	1745.0	132322	20	16QAM	50	0	4.01	-45.92	49.93
66	1745.0	132322	20	16QAM	50	25	4.10	-46.04	50.14
66	1745.0	132322	20	16QAM	50	50	4.10	-45.92	50.02
66	1745.0	132322	20	16QAM	100	0	4.09	-48.30	52.39
66	1745.0	132322	20	64QAM	100	0	4.09	-48.79	52.88
66	1745.0	132322	20	256QAM	100	0	4.07	-48.93	53.00

2. Codec Configuration

An investigation was performed to determine the audio codec configuration to be used for testing. The effects of codec configuration were found to be independent of radio configuration; therefore, only one radio configuration was used for this investigation. The EVS Primary SWB 9.60kbps setting was used for the audio codec on the CMW500 for VoLTE over IMS T-coil testing. See below table for comparisons between different codecs and codec data rates:

Table 5-2
AMR Codec Investigation – VoLTE over IMS

Codec Setting:	WB AMR 23.85kbps	WB AMR 6.60kbps	NB AMR 12.2kbps	NB AMR 4.75kbps	Orientation	Band / BW	Channel
Desired (dBA/m)	6.62	5.94	8.27	7.92	Radial	LTE B66 20MHz	132322
Undesired (dBA/m)	-48.66	-49.00	-48.97	-48.65			
Frequency Response	Pass	Pass	Pass	Pass			
S+N/N (dB)	55.28	54.94	57.24	56.57			

Table 5-3
EVS Codec Investigation - VoLTE over IMS

Codec Setting:	EVS Primary SWB 13.2kbps	EVS Primary SWB 9.6kbps	EVS Primary WB 13.2kbps	EVS Primary WB 5.9kbps	EVS Primary NB 13.2kbps	EVS Primary NB 5.9kbps	Orientation	Band / BW	Channel
Desired (dBA/m)	6.45	4.08	7.84	7.95	9.26	7.01	Radial	LTE B66 20MHz	132322
Undesired (dBA/m)	-48.63	-48.91	-48.73	-48.68	-48.65	-48.62			
Frequency Response	Pass	Pass	Pass	Pass	Pass	Pass			
S+N/N (dB)	55.08	52.99	56.57	56.63	57.91	55.63			

- Mute on; Backlight off; Max Volume; Max Contrast
- TPC = "Max Power"

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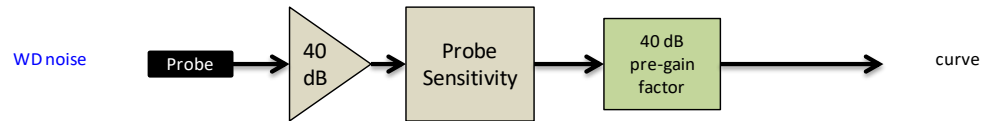


Figure 5-2
Audio Band Magnetic Curve Measurement Block Diagram

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II. DUT Configuration for VoNR over IMS T-coil Testing

1. Radio Configuration

An investigation was performed to determine the waveform, modulation, and RB configuration to be used for testing. The effects of waveform, modulation, and RB configuration were found to be independent of band and bandwidth; therefore, only one band and bandwidth were used for this investigation. DFT-s-OFDM, 16QAM, 1RB, 1RB offset was used for the testing as the worst-case configuration for the handset. See below table for SNNR comparison between different radio configurations:

Table 6-1
VoNR over IMS SNNR by Radio Configuration (CP-OFDM)

Band	Frequency [MHz]	Channel	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Desired [dB(A/m)]	Undesired [dB(A/m)]	SNNR [dB]
n66	1745.00	349000	40	CP-OFDM	QPSK	1	1	6.01	-43.76	49.77
n66	1745.00	349000	40	CP-OFDM	16QAM	1	1	6.08	-44.39	50.47
n66	1745.00	349000	40	CP-OFDM	64QAM	1	1	5.97	-45.42	51.39
n66	1745.00	349000	40	CP-OFDM	256QAM	1	1	6.06	-44.79	50.85

Table 6-2
VoNR over IMS SNNR by Radio Configuration (DFT-s-OFDM)

Band	Frequency [MHz]	Channel	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Desired [dB(A/m)]	Undesired [dB(A/m)]	SNNR [dB]
n66	1745.00	349000	40	DFT-s-OFDM	$\pi/2$ -BPSK	1	1	6.03	-46.01	52.04
n66	1745.00	349000	40	DFT-s-OFDM	QPSK	1	1	5.99	-45.91	51.90
n66	1745.00	349000	40	DFT-s-OFDM	16QAM	1	1	6.02	-40.93	46.95
n66	1745.00	349000	40	DFT-s-OFDM	16QAM	1	108	5.91	-47.87	53.78
n66	1745.00	349000	40	DFT-s-OFDM	16QAM	1	214	6.10	-41.61	47.71
n66	1745.00	349000	40	DFT-s-OFDM	16QAM	108	0	5.94	-47.30	53.24
n66	1745.00	349000	40	DFT-s-OFDM	16QAM	108	54	6.03	-46.84	52.87
n66	1745.00	349000	40	DFT-s-OFDM	16QAM	108	108	5.98	-46.96	52.94
n66	1745.00	349000	40	DFT-s-OFDM	16QAM	216	0	5.95	-46.75	52.70
n66	1745.00	349000	40	DFT-s-OFDM	64QAM	1	1	5.92	-46.44	52.36
n66	1745.00	349000	40	DFT-s-OFDM	256QAM	1	1	5.99	-45.36	51.35

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2. Codec Configuration

An investigation was performed to determine the audio codec configuration to be used for testing. The effects of codec configuration were found to be independent of radio configuration; therefore, only one radio configuration was used for this investigation. The WB AMR 6.60kbps setting was used for the audio codec on the CMX500 for VoNR over IMS T-coil testing. See below table for comparisons between different codecs and codec data rates:

Table 6-3
AMR Codec Investigation – VoNR over IMS

Codec Setting:	WB AMR 23.85kbps	WB AMR 6.60kbps	NB AMR 12.2kbps	NB AMR 4.75kbps	Orientation	Band / BW	Channel
Desired (dBA/m)	5.90	5.25	7.39	7.46	Radial	NR n66 40MHz	349000
Undesired (dBA/m)	-45.49	-45.20	-45.14	-43.50			
Frequency Response	Pass	Pass	Pass	Pass			
S+N/N (dB)	51.39	50.45	52.53	50.96			

Table 6-4
EVS Codec Investigation - VoNR over IMS

Codec Setting:	EVS Primary SWB 13.2kbps	EVS Primary SWB 9.6kbps	EVS Primary WB 13.2kbps	EVS Primary WB 5.9kbps	EVS Primary NB 13.2kbps	EVS Primary NB 5.9kbps	Orientation	Band / BW	Channel
Desired (dBA/m)	4.67	4.80	6.51	5.58	8.47	7.51	Radial	NR n66 40MHz	349000
Undesired (dBA/m)	-46.16	-46.28	-46.11	-46.28	-46.12	-46.05			
Frequency Response	Pass	Pass	Pass	Pass	Pass	Pass			
S+N/N (dB)	50.83	51.08	52.62	51.86	54.59	53.56			

- Mute on; Backlight off; Max Volume; Max Contrast
- TPC = “Max Power”

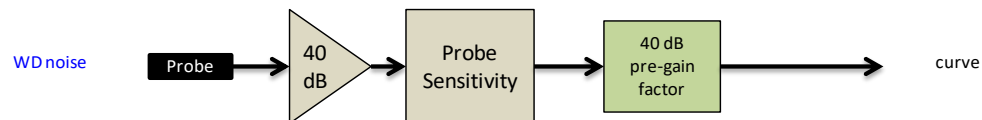


Figure 6-2
Audio Band Magnetic Curve Measurement Block Diagram

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7. T-COIL TEST SUMMARY

Table 7-1
Consolidated Tabled Results

	Primary Pts	Secondary Pts	Contiguous Longitudinal	Contiguous Transverse	Freq. Response Margin	C63.19 Compliance
LTE FDD	PASS	PASS	PASS	PASS	PASS	PASS
NR FDD	PASS	PASS	PASS	PASS	PASS	PASS

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I. Raw Handset Data

Table 7-2
Raw Data Results for LTE B71

Mode	Orientation	Bandwidth	Channel	Device SN	Primary Pts	Secondary Pts	Contiguous Longitudinal	Contiguous Transverse	Frequency Response Margin (dB)	Verdict	Frequency Response Coordinates
C63.19-2019 T-Coil Scan											
LTE Band 71	Radial	20MHz	133297	03788M	513	650	26	26	1.86	PASS	14.0, -7.0

Table 7-3
Raw Data Results for LTE B71 VoIP

Mode	Orientation	Bandwidth	Channel	Device SN	Primary Pts	Secondary Pts	Contiguous Longitudinal	Contiguous Transverse	Frequency Response Margin (dB)	Verdict	Frequency Response Coordinates
C63.19-2019 T-Coil Scan											
LTE Band 71	Radial	20MHz	133297	03788M	411	619	26	26	2	PASS	14.0, -7.0

Table 7-4
Raw Data Results for NR n71

Mode	Orientation	Bandwidth	Channel	Device SN	Primary Pts	Secondary Pts	Contiguous Longitudinal	Contiguous Transverse	Frequency Response Margin (dB)	Verdict	Frequency Response Coordinates
C63.19-2019 T-Coil Scan											
NR n71	Radial	20MHz	136100	03788M	495	629	26	26	1.92	PASS	14.0, -7.0

Table 7-5
Raw Data Results for NR n71 VoIP

Mode	Orientation	Bandwidth	Channel	Device SN	Primary Pts	Secondary Pts	Contiguous Longitudinal	Contiguous Transverse	Frequency Response Margin (dB)	Verdict	Frequency Response Coordinates
C63.19-2019 T-Coil Scan											
NR n71	Radial	20MHz	136100	03788M	413	621	26	26	2	PASS	14.0, -7.0

II. Test Notes

A. General

1. Phone Condition: Mute on; Backlight off; Max Volume; Max Contrast
2. 'Radial' orientation refers to radial transverse.
3. Hearing Aid Mode (Phone > Call settings > Other Call Settings > Hearing aid compatibility) was set to ON for Frequency Response compliance
4. Speech Signal: ITU-T P.50 Artificial Voice
5. Bluetooth and WIFI were disabled while testing 4G/5G modes.
6. The number of passing points and frequency response value shown in the scan result table satisfy the limit for compliance.

B. LTE

1. Please see original certification for worst-case LTE configuration investigation.

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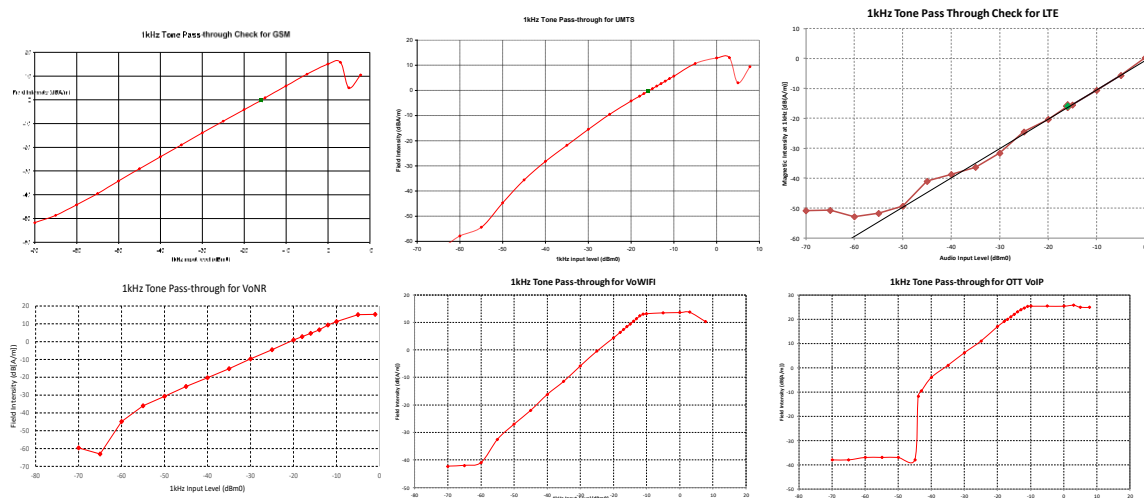
C. NR

1. Please see original certification for worst-case NR configuration investigation.

D. OTT VoIP

1. Vocoder Configuration: 6kbps
2. LTE Configuration:
 - a. Please see original certification for worst-case LTE configuration investigation.
3. NR Configuration
 - a. Please see original certification for worst-case NR configuration investigation.

III. 1 kHz Vocoder Application Check



This model was verified to be within the linear region for Desired ABM measurements at -16 dBm0 for GSM, UMTS, VoLTE over IMS, and VoNR over IMS. This model was verified to be within the linear region for Desired ABM measurements at -16 dBm0 for VoWiFi over IMS, and OTT VoIP. This measurement was taken in the Radial configuration above the maximum location.

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IV. T-Coil Validation Test Results

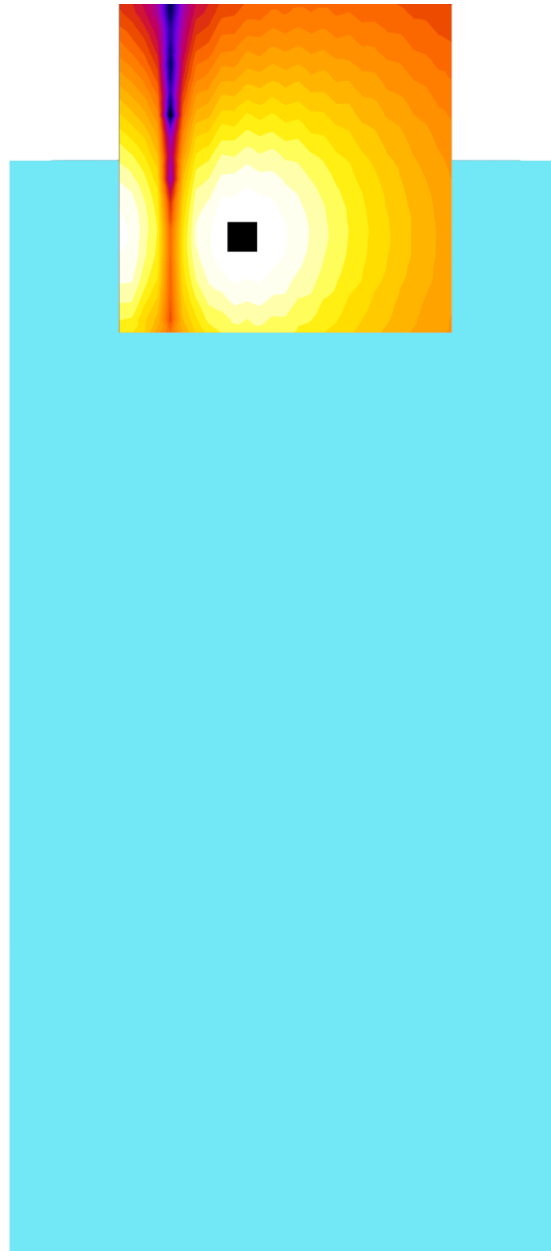
Table 7-6
Helmholtz Coil Verification Table of Results - SPEAG

Date	AMD Probe	Coil Channel [V]	Probe Channel [V]	Probe Sensitivity [mV/(A/m)]	Calibrated angle [deg]
5/26/2026	3079	2.37	1.33	7.49	123.75

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V. ABM1 Magnetic Field Distribution Scan Overlays



Radial (Transverse)

Figure 7-1
T-Coil Scan Overlay Magnetic Field Distributions

Notes:

1. Final measurement location is indicated by a cursor on the contour plot.
2. See Test Setup Photographs for actual WD overlay.

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8. MEASUREMENT UNCERTAINTY

Table 8-1
Uncertainty Estimation Table

Contribution	Data +/- %	Data +/- dB	Data Type	Probability distribution	Divisor	Standard uncertainty	Standard Uncertainty (dB)
ABM Noise	7.0%	0.29	Std. Dev.	Normal k=1	1.00	7.0%	
RF Reflections	4.7%	0.20	Specification	Rectangular	1.73	2.7%	
Reference Signal Level	12.2%	0.50	Specification	Rectangular	1.73	7.0%	
Positioning Accuracy	10.0%	0.41	Uncertainty	Rectangular	1.73	5.8%	
Probe Coil Sensitivity	12.2%	0.50	Specification	Rectangular	1.73	7.0%	
Probe Linearity	2.4%	0.10	Std. Dev.	Normal k=1	1.00	2.4%	
Cable Loss	2.8%	0.12	Specification	Rectangular	1.73	1.6%	
Frequency Analyzer	5.0%	0.21	Specification	Rectangular	1.73	2.9%	
System Repeatability	5.0%	0.21	Std. Dev.	Normal k=1	1.00	5.0%	
WD Repeatability	9.0%	0.37	Std. Dev.	Normal k=1	1.00	9.0%	
Positioner Accuracy	5.3%	0.22	Specification	Rectangular	1.73	3.1%	
Combined standard uncertainty, uc (k=1)						17.9%	0.72
Expanded uncertainty (k=2), 95% confidence level						35.8%	1.33

Notes:

1. Test equipments are calibrated according to techniques outlined in NIS81, NIS3003 and NIST Tech Note 1297.
2. All equipments have traceability according to NIST. Measurement Uncertainties are defined in further detail in NIS 81 and NIST Tech Note 1297 and UKAS M3003.

Measurement uncertainty reflects the quality and accuracy of a measured result as compared to the true value. Such statements are generally required when stating results of measurements so that it is clear to the intended audience that the results may differ when reproduced by different facilities. Measurement results vary due to the measurement uncertainty of the instrumentation, measurement technique, and test engineer. Most uncertainties are calculated using the tolerances of the instrumentation used in the measurement, the measurement setup variability, and the technique used in performing the test. While not generally included, the variability of the equipment under test also figures into the overall measurement uncertainty. Another component of the overall uncertainty is based on the variability of repeated measurements (so-called Type A uncertainty). This may mean that the Hearing Aid compatibility tests may have to be repeated by taking down the test setup and resetting it up so that there are a statistically significant number of repeat measurements to identify the measurement uncertainty. By combining the repeat measurement results with that of the instrumentation chain using the technique contained in NIS 81 and NIS 3003, the overall measurement uncertainty was estimated.

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9. EQUIPMENT LIST

**Table 9-1
Equipment List**

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/7/2026	Annual	1/7/2027	1530
SPEAG	AM1DV3	Audio Magnetic Field Probe	1/8/2026	Annual	1/8/2027	3079
Listen	SoundConnect	Microphone Power Supply	8/6/2024	Biennial	8/6/2026	PS2612
RME	Fireface UC	Soundcheck Acoustic Analyzer External Audio Interface	8/8/2024	Biennial	8/8/2026	23528889
Rohde & Schwarz	CMW500	Radio Communication Tester	N/A		N/A	140144
Rohde & Schwarz	CMW500	Radio Communication Tester	N/A		N/A	162125
Rohde & Schwarz	CMW500	Radio Communication Tester	N/A		N/A	101037
Rohde & Schwarz	CMX500	Radio Communication Tester	N/A		N/A	100298
Seekonk	NC-100	Torque Wrench	5/29/2025	Biennial	5/29/2027	3176
YellowTec	YT4211	USB Audio Interface	N/A		N/A	20000365
Netgear	XS708E	Ethernet Switch	N/A		N/A	4FU3875C001A8

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10. TEST DATA (SCAN MEASUREMENT)

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
513	650	26	26

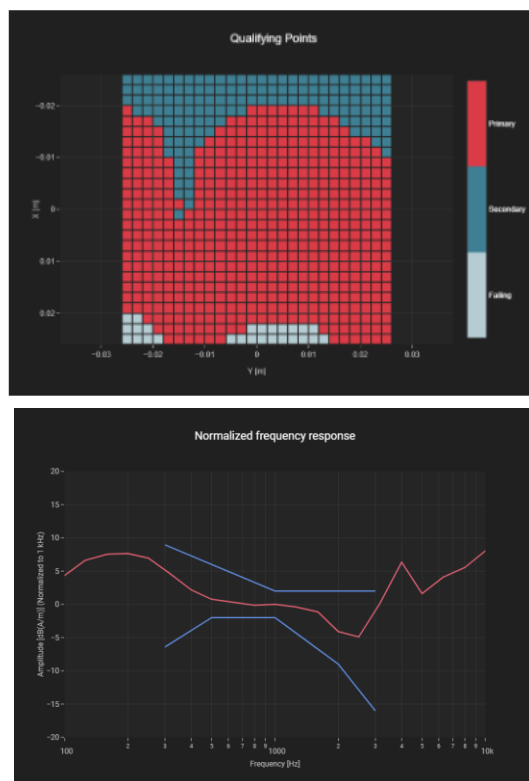


Table 10-1
VoLTE Test Results
VoLTE FDD Band 71, ANT E, CH.133297, EVS Primary SWB 9.6kbps

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Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
411	619	26	26

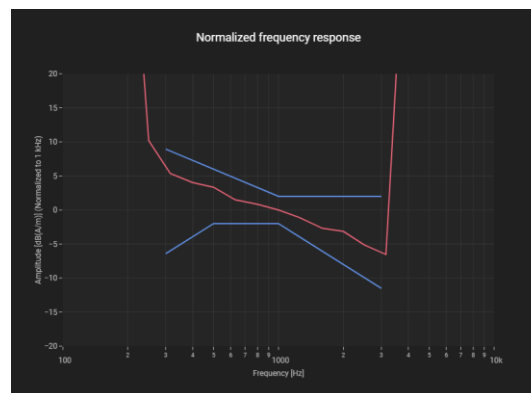
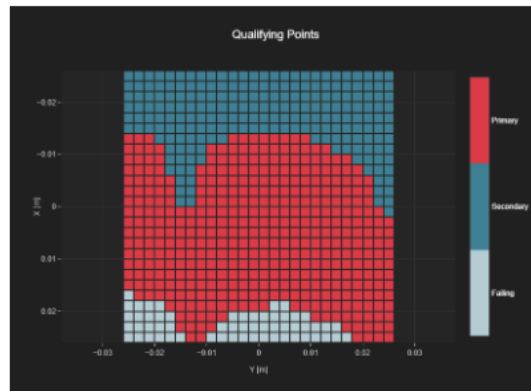


Table 10-2
Worst-Case Scan Results for LTE
VoIP FDD Band 71 Meet, ANT E, CH.133297, EVS SWB 6KBPS

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Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
495	629	26	26

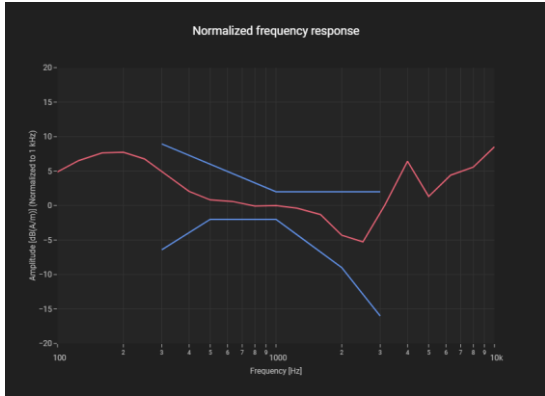
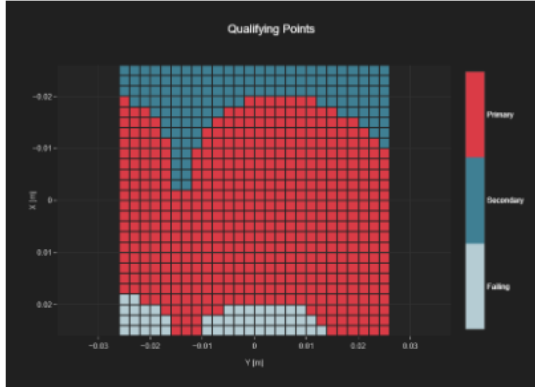


Table 10-3
Worst-Case Scan Results for NR
VoNR FDD Band n71, CH.136100, WB AMR 6.60KBPS

FCC ID: A3LSMA576U		HAC (T-COIL) TEST REPORT	Approved by: Technical Manager
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Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
413	621	26	26

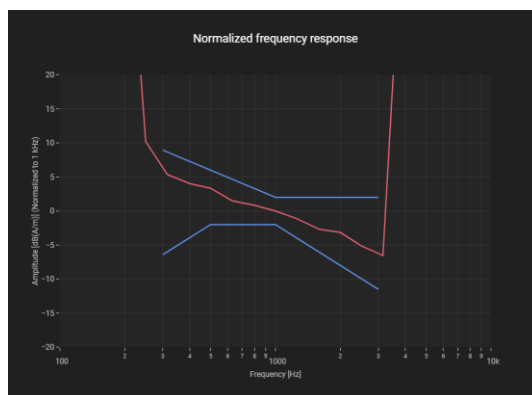
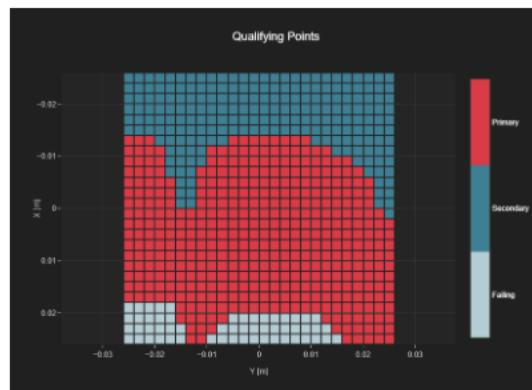


Table 10-4
Worst-Case Scan Results for NR
VoIP FDD Band n71 Meet, CH.136100, EVS SWB 6KBPS

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11. CALIBRATION CERTIFICATES

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West Caldwell Calibration Laboratories Inc.

Certificate of Conformance

for

Manufactured by: RADIAL T COIL PROBE
Model No: TEM CONSULTING, LP
Serial No: RADIAL T COIL PROBE
Calibration Recall No: TEM-1129 35670

Submitted By:

Customer: Tae Kim
Company: Element Materials Technology
Address: 7185 Oaklands Mills Road
Columbia

✓ TK
1/28/25

MD 21046

The subject instrument was calibrated to the indicated specification using standards traceable to the SI through the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No RADIAL T COIL PROBE TEM CONSULTING,

Upon receipt for Calibration, the instrument was found to be:

Within (X)

tolerance of the indicated specification. See attached Report of Calibration.

The information supplied certifies that the item listed above meets acceptance criteria under the decision rule:

$A = (L - (U95))$, where A is the acceptance limit, L is the tolerance limit, and U95 is the expanded uncertainty. This minimizes the probability of false accept about less than 2.5%. Measurements marked with (*) are not covered by the scope of accreditation.

The expanded uncertainty is based of the standard uncertainty multiplied by a coverage factor $k=2$ providing a level of confidence of approximately 95%. West Caldwell Calibration Laboratories' calibration control systems meets the requirements of ANSI/NCCL Z540-1, ISO 9001, and ISO 17025.

Note: With this Certificate, Report of Calibration is included

Approved by:

Calibration Date: 08-Jan-25
Certificate Issue Date: 23-Jan-25
Certificate No: 35670 - 3

James Zhu

Quality Manager
ISO/IEC 17025

QA Doc. #1051 Rev. 4.0 02/02/24

Certificate Page 1 of 1

West Caldwell
Calibration
Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.



Calibration Lab. Cert. # 1533.01

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REPORT OF CALIBRATION

for

TEM Consulting LP Radial T Coil Probe
Company: Element Materials Technology

Model No.: Radial T Coil Probe

Serial No.: TEM-1129
I. D. No.: XXXX

Calibration results:

Probe Sensitivity measured with Helmholtz Coil

Helmholtz Coil;
the number of turns on each coil; 10 No.
the radius of each coil, in meters; 0.204 m
the current in the coils, in amperes; 0.08 A
Helmholtz Coil Constant; 6.90 A/m/V
Helmholtz Coil magnetic field; 5.70 A/m

Before & after data same: ...X...

Laboratory Environment:
Ambient Temperature: 20.3 °C
Ambient Humidity: 25.4 % RH
Ambient Pressure: 99.598 kPa
Calibration Date: 8-Jan-2025
Re-calibration Due: 8-Jan-2026
Report Number: 35670 -3
Control Number: 35670

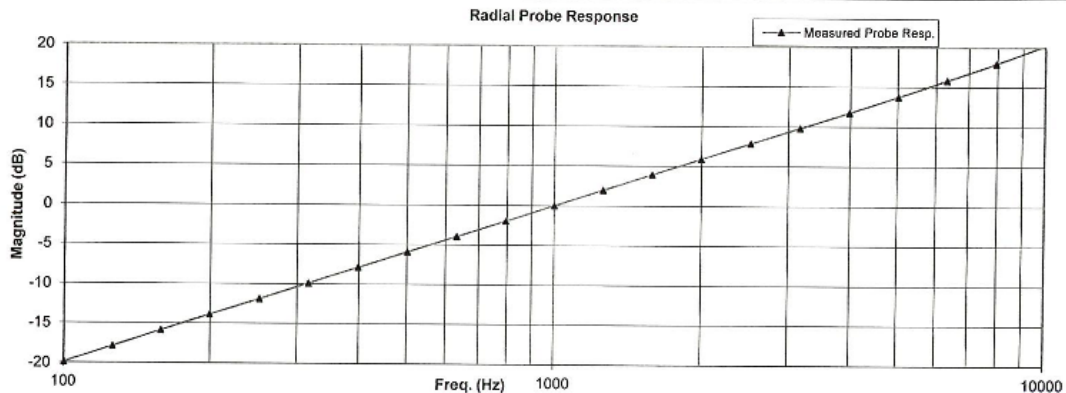
Probe Sensitivity at 1000 Hz.
was -59.76 dBV/A/m
1.028 mV/A/m
Probe resistance 886 Ohms

The above listed instrument meets or exceeds the tested manufacturer's specifications.

This Calibration is traceable through NIST test numbers: .682636

The expanded uncertainty of calibration: 0.30dB at 95% confidence level with a coverage factor of k=2.

Graph represents Probes Frequency Response.



The above listed instrument was checked using calibration procedure documented in West Caldwell

Calibration Laboratories Inc. procedure :

Rev. 8.0 Feb. 08, 2024 Doc. # 1038 HCRTEMC

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures

intended to implement the requirements of ANSI/NCISL Z540-1, ISO 9001, and ISO 17025.

Cal. Date: 8-Jan-2025

Calibrated on WCCL system type 9700

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Measurements performed by:

James Zhu

Rev. 8.0 Feb. 08, 2024 Doc. # 1038 HCRTEMC

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HCRTEMC_TEM-1129_Jan-08-2025

West Caldwell Calibration Laboratories Inc.

1575 State Route 98, Victor NY 14564

Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

TEM Consulting LP Radial T Coil Probe
Company: Element Materials Technology

for
Model No.: Radial T Coil Probe

Serial No.: TEM-1129

Test	Function	Tolerance	Measured values		
			Before	Out	Remarks
1.0	Probe Sensitivity at	1000 Hz, dBV/A/m	-59.76		
2.0	Probe Level Linearity	dB			
		6	6.03		
		0	0.00		
		-6	-6.03		
		-12	-12.05		
3.0	Probe Frequency Response	Hz			
		100	-19.9		
		126	-17.9		
		158	-15.9		
		200	-13.9		
		251	-11.9		
		316	-9.9		
		398	-7.9		
		501	-5.9		
		631	-4.0		
		794	-2.0		
		Ref. (0 dB) 1000	0.0		
		1259	2.0		
		1585	3.9		
		1995	5.9		
		2512	7.8		
		3162	9.8		
		3981	11.8		
		5012	13.8		
		6310	15.8		
		7943	18.0		
		10000	20.2		

Instruments used for calibration:			Date of Cal.	Traceability No.	Due Date
HP	34401A	S/N US360641	24-Jun-2024	,682636	31-Jul-2025
HP	34401A	S/N US361024	24-Jun-2024	,682636	31-Jul-2025
HP	33120A	S/N US360437	24-Jun-2024	,682636	31-Jul-2025
B&K	2133	S/N 1583254	25-Jun-2024	,682636	31-Jul-2025

Cal. Date: 8-Jan-2025

Tested by: James Zhu

Calibrated on WCCL system type 9700

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Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client **Element**
Columbia, USA

Certificate No. **AM1DV3-3057_Sep25**

CALIBRATION CERTIFICATE

Object **AM1DV3 - SN: 3057**

Calibration procedure(s) **QA CAL-24.v4**
Calibration procedure for AM1D magnetic field probes and TMFS in the
audio range

Calibration date: **September 10, 2025**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Keithley Multimeter Type 2001	SN: 0810278	15-Aug-25 (No. 43873)	Aug-26
Reference Probe AM1DV3	SN: 3000	25-Sep-24 (No. AM1DV3-3000_Sep24)	Sep-25
DAE4	SN: 781	07-Feb-25 (No. DAE4-781_Feb25)	Feb-26
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
AMCC	SN: 1050	01-Oct-13 (in house check Sep-24)	Sep-25
AMMI Audio Measuring Instrument	SN: 1062	26-Sep-12 (in house check Sep-24)	Sep-25

Calibrated by: **Name** **Function**
Claudio Leubler **Laboratory Technician**

Approved by: **Sven Kühn** **Technical Manager**

Issued: September 10, 2025

Certificate No: AM1DV3-3057_Sep25

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References

- [1] ANSI-C63.19-2007
American National Standard for Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids.
- [2] ANSI-C63.19-2019 (ANSI-C63.19-2011)
American National Standard, Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids.
- [3] DASY System Handbook

Description of the AM1D probe

The AM1D Audio Magnetic Field Probe is a fully shielded magnetic field probe for the frequency range from 100 Hz to 20 kHz. The pickup coil is compliant with the dimensional requirements of [1+2]. The probe includes a symmetric low noise amplifier for the signal available at the shielded 3 pin connector at the side. Power is supplied via the same connector (phantom power supply) and monitored via the LED near the connector. The 7 pin connector at the end of the probe does not carry any signals, but determines the angle of the sensor when mounted on the DAE. The probe supports mechanical detection of the surface. The single sensor in the probe is arranged in a tilt angle allowing measurement of 3 orthogonal field components when rotating the probe by 120° around its axis. It is aligned with the perpendicular component of the field, if the probe axis is tilted nominally 35.3° above the measurement plane, using the connector rotation and sensor angle stated below. The probe is fully RF shielded when operated with the matching signal cable (shielded) and allows measurement of audio magnetic fields in the close vicinity of RF emitting wireless devices according to [1+2] without additional shielding.

Handling of the item

The probe is manufactured from stainless steel. In order to maintain the performance and calibration of the probe, it must not be opened. The probe is designed for operation in air and shall not be exposed to humidity or liquids. For proper operation of the surface detection and emergency stop functions in a DASY system, the probe must be operated with the special probe cup provided (larger diameter).

Methods Applied and Interpretation of Parameters

- *Coordinate System:* The AM1D probe is mounted in the DASY system for operation with a HAC Test Arch phantom with AMCC Helmholtz calibration coil according to [3], with the tip pointing to "southwest" orientation.
- *Functional Test:* The functional test preceding calibration includes test of Noise level
RF immunity (1kHz AM modulated signal). The shield of the probe cable must be well connected. Frequency response verification from 100 Hz to 10 kHz.
- *Connector Rotation:* The connector at the end of the probe does not carry any signals and is used for fixation to the DAE only. The probe is operated in the center of the AMCC Helmholtz coil using a 1 kHz magnetic field signal. Its angle is determined from the two minima at nominally +120° and -120° rotation, so the sensor in the tip of the probe is aligned to the vertical plane in z-direction, corresponding to the field maximum in the AMCC Helmholtz calibration coil.
- *Sensor Angle:* The sensor tilting in the vertical plane from the ideal vertical direction is determined from the two minima at nominally +120° and -120°. DASY system uses this angle to align the sensor for radial measurements to the x and y axis in the horizontal plane.

Sensitivity: With the probe sensor aligned to the z-field in the AMCC, the output of the probe is compared to the magnetic field in the AMCC at 1 kHz. The field in the AMCC Helmholtz coil is given by the geometry and the current through the coil, which is monitored on the precision shunt resistor of the coil.

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AM1D probe identification and configuration data

Item	AM1DV3 Audio Magnetic 1D Field Probe
Type No	SP AM1 001 BA
Serial No	3057

Overall length	296 mm
Tip diameter	6.0 mm (at the tip)
Sensor offset	3.0 mm (centre of sensor from tip)
Internal Amplifier	20 dB

Manufacturer / Origin	Schmid & Partner Engineering AG, Zurich, Switzerland
-----------------------	--

Calibration data

Connector rotation angle	(in DASY system)	37.2°	+/- 3.6 ° (k=2)
Sensor angle	(in DASY system)	0.26°	+/- 0.5 ° (k=2)
Sensitivity at 1 kHz	(in DASY system)	0.00740 V/(A/m)	+/- 2.2 % (k=2)

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

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12. CONCLUSION

The measurements indicate that the wireless communications device complies with the HAC limits specified in accordance with the ANSI C63.19 Standard and FCC WT Docket No. 01-309 RM-8658. Precise laboratory measures were taken to assure repeatability of the tests. The tested device complies with the requirements in respect to all parameters specific to the test. The test results and statements relate only to the item(s) tested.

The measurement system and techniques presented in this evaluation are proposed in the ANSI standard as a means of best approximating wireless device compatibility with a hearing-aid. The literature is under continual re-construction.

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