

HAC RF EMISSIONS TEST REPORT

Applicant: FlexSource
Address: 1250 Shames Drive, Westbury, NY 11590, USA
Equipment Type: Smart phone
Model Name: SC6513
Brand Name: Sense Go
FCC ID: 2BWV2-SC6513
Test Standard: FCC 47 CFR Part 20.19 / ANSI C63.19-2019
(refer section 3.1)
HAC Compliance: PASS
Sample Arrival Date: Jul. 14, 2026
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ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.



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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 02, 2026</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	601, Building 2, Intelligent Connected Vehicle Industrial Park, No.55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☐ Building 2, Intelligent Connected Vehicle Industrial Park, No.55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen, Guangdong
	☒ 1/F., Building B, Ganghongji High-Tech Intelligent Industrial Park, No.1008, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

1.3 Test Environment Condition

Ambient Temperature	18°C to 28°C
Ambient Relative Humidity	0% to 80%
Ambient noise is checked and found very low and in compliance with requirement of standards.	

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	FlexSource
Address	1250 Shames Drive, Westbury, NY 11590, USA

2.2 Manufacturer Information

Manufacturer	FlexSource
Address	1250 Shames Drive, Westbury, NY 11590, USA

2.3 General Description for Equipment under Test (EUT)

EUT Name	Smart phone
Model Name Under Test	SC6513
Series Model Name	Sense Go
Description of Model name differentiation	The only differences are appearance, trade name, and model number for trading purposes. (this information provided by the applicant)
Hardware Version	A306_M_V2.0
Software Version	SC6513_v1.0.0_20260609
Dimensions (Approx.)	165*76.8*10.2mm
Weight (Approx.)	193g
EUT ID	CC26050177-001: S14
SN or IMEI Number	CC26050177-001-S14 IMEI 990019122712005

2.4 Ancillary Equipment

Ancillary Equipment 1	Li-Polymer Battery	
	Brand Name	N/A
	Model No.	BTE-4003
	Serial No.	N/A
	Capacitance	Rated: 4000mAh Typical: 4050mAh
	Rated Voltage	3.85 V
	Limited Voltage	4.4 V
	Manufacturer	PHENIX NEW ENERGY(HUIZHOU)CO.,LTD.

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 3G Network WCDMA/HSDPA/HSUPA+ Band 2/4/5 4G Network LTE FDD Band 2/4/5/12/13/17/25/26/66/71 LTE TDD Band 41 Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80)
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The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	GSM, WCDMA, LTE, WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850~1910 MHz	RX: 1930~1990 MHz
	LTE Band 4	TX: 1710~1755 MHz	RX: 2110~2115 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 12	TX: 699-716 MHz	RX: 729~746 MHz
	LTE Band 13	TX: 777-787 MHz	RX: 746~756 MHz
	LTE Band 17	TX: 704-716 MHz	RX: 734~746 MHz
	LTE Band 25	TX: 1850~1915 MHz	RX: 1930~1995 MHz
	LTE Band 26	TX: 814~849 MHz	RX: 859~894 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2200 MHz
	LTE Band 71	TX: 663 ~ 698 MHz	RX: 617 ~ 652 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2200 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	802.11b/g/n(HT20/HT40)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40)	5150 ~ 5250 MHz	
	/ac(VHT20/VHT40 /VHT80)	5725 ~ 5850 MHz	

	Bluetooth	2402 ~ 2480 MHz
Antenna Type	FPC Antenna	
DTM	N/A	
Hotspot Function	Support	
Power Reduction	Support	
Exposure Category	General Population/Uncontrolled exposure	
Product Type	Portable Device	
EUT Type	☒ Production unit	☐ Identical prototype

2.6 EUT Air Interface and Operating Modes

Air Interface	Bands	Type	C63.19 Tested	Simultaneous Transmitter	Name of Voice Service	Power Mode	Power Reduction
GSM	850	VO	Yes	BT/WiFi	CMRS Voice	Off	Pmax; Full
	1900					Off	Pmax; Full
	EDGE	VD	No ⁽²⁾	BT/WiFi	Google Meet	Off	Pmax; Full
WCDMA	Band 2	VO	No ⁽¹⁾	BT/WiFi	CMRS Voice	Off	Pmax; Full
	Band 4					Off	Pmax; Full
	Band 5					Off	Pmax; Full
	HSPA	VD	No ⁽¹⁾	BT/WiFi	Google Meet	Off	Pmax; Full
LTE (FDD)	Band 2	VD	No ⁽¹⁾	5G NR/BT/WiFi	VoLTE/Google Meet	Off	Pmax; Full
	Band 4					Off	Pmax; Full
	Band 5					Off	Pmax; Full
	Band 12					Off	Pmax; Full
	Band 13					Off	Pmax; Full
	Band 17					Off	Pmax; Full
	Band 25					Off	Pmax; Full
	Band 26					Off	Pmax; Full
	Band 66					Off	Pmax; Full
	Band 71					Off	Pmax; Full
LTE (TDD)	Band 41	VD	No ⁽¹⁾	5G NR/BT/WiFi	VoLTE/Google Meet	Off	Pmax; Full
WiFi	2.4G	VD	No ⁽¹⁾	WWAN/BT	CMRS Voice/Google Meet	Off	Pmax; Full
	U-NII-1					Off	Pmax; Full
	U-NII-2A					Off	Pmax; Full
	U-NII-2C					Off	Pmax; Full
	U-NII-3					Off	Pmax; Full
Bluetooth	2.4G	DT	N/A	WWAN/WiFi	N/A	N/A	N/A

VO: Voice Only

DT: Digital Transport only (no voice)

VD:CMRS and/or IP Voice Service over Digital Transport

Note1: Evaluated for WD RFAIPL power level requirements.

Note2: EGPRS data modes is not necessary due the GSM Voice mode is the worst case.

Note3: For all air interfaces, the maximum WWAN&WLAN output power was used for the RFAIL evaluation.

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 20.19	Hearing aid-compatible mobile handsets.
2	ANSI C63.19-2019	American National Standard Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids
3	KDB 285076 D01 HAC Guidance v06r04	Provides equipment authorization guidance for mobile handsets subject to the requirements of Section 20.19 for hearing aid compatibility

3.2 HAC Test Configuration and Setting

For HAC RF emission testing, the EUT was linked and controlled by wireless communication test set. Communication between the EUT and the wireless communication test set was established by air link. The distance between the EUT and the communicating antenna of the test set is larger than 50 cm and the output power radiated from the wireless communication test set antenna is at least 30 dB smaller than the output power of EUT. The EUT was set from the wireless communication test set to radiate maximum output power during HAC testing.

3.3 RF Emission Results

Mode	Band	Maximum Audio Interference Level RF AIL (dBV/m)	Results
GSM CMRS Voice	GSM850	28.21	PASS
	GSM1900	18.06	PASS
UMTS CMRS Voice	Band2	N/A	PASS
	Band4	N/A	PASS
	Band5	N/A	PASS
Vo LTE	Band2	N/A	PASS
	Band4	N/A	PASS
	Band5	N/A	PASS
	Band12	N/A	PASS
	Band13	N/A	PASS
	Band17	N/A	PASS
	Band25	N/A	PASS
	Band26	N/A	PASS
	Band66	N/A	PASS
	Band71	N/A	PASS
Vo WiFi	2.4G	N/A	PASS
	U-NII-1	N/A	PASS
	U-NII-3	N/A	PASS
Note1: The HAC RF emission limit is specified in FCC 47 CFR part 20.19 and ANSI C63.19. Note2: The device RF emission rating is determined by the minimum rating. Note3: HAC RF Emission Test for low power exemption according to ANSI C63.19-2019 and HAC RF Emission rating is PASS.			

3.4 ANSI C63.19 HAC RF Categories

3.4.1 WD Emission Requirements

The WD's conducted power must be at or below either the stated RF_{AIPL} (Table 2.1) or the stated peak power level (Table 2.2), or the average near-field emissions over the measurement area must be at or below the stated RF_{AIL} (Table 2.3), or the stated peak field strength (Table 2.4). The WD may demonstrate compliance by meeting any of these four requirements, but it must do so in each of its operating bands at its established worst-case normal speech-mode operating condition.

Table 2.1—Wireless device RF audio interference power level	
Frequency range (MHz)	RF_{AIPL} (dBm)
<960	29
960–2000	26
>2000	25

Table 2.2—Wireless device RF peak power level	
Frequency range (MHz)	$RF_{Peak\ Power}$ (dBm)
<960	35
960–2000	32
>2000	31

Table 2.3—Wireless device RF audio interference level	
Frequency range (MHz)	RF_{AIL} [dB(V/m)]
<960	39
960–2000	36
>2000	35

Table 2.4—Wireless device RF peak near-field level	
Frequency range (MHz)	RF_{peak} [dB(V/m)]
<960	45
960–2000	42
>2000	41

3.5 HAC Test Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in ANSI C 63.19:2019. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

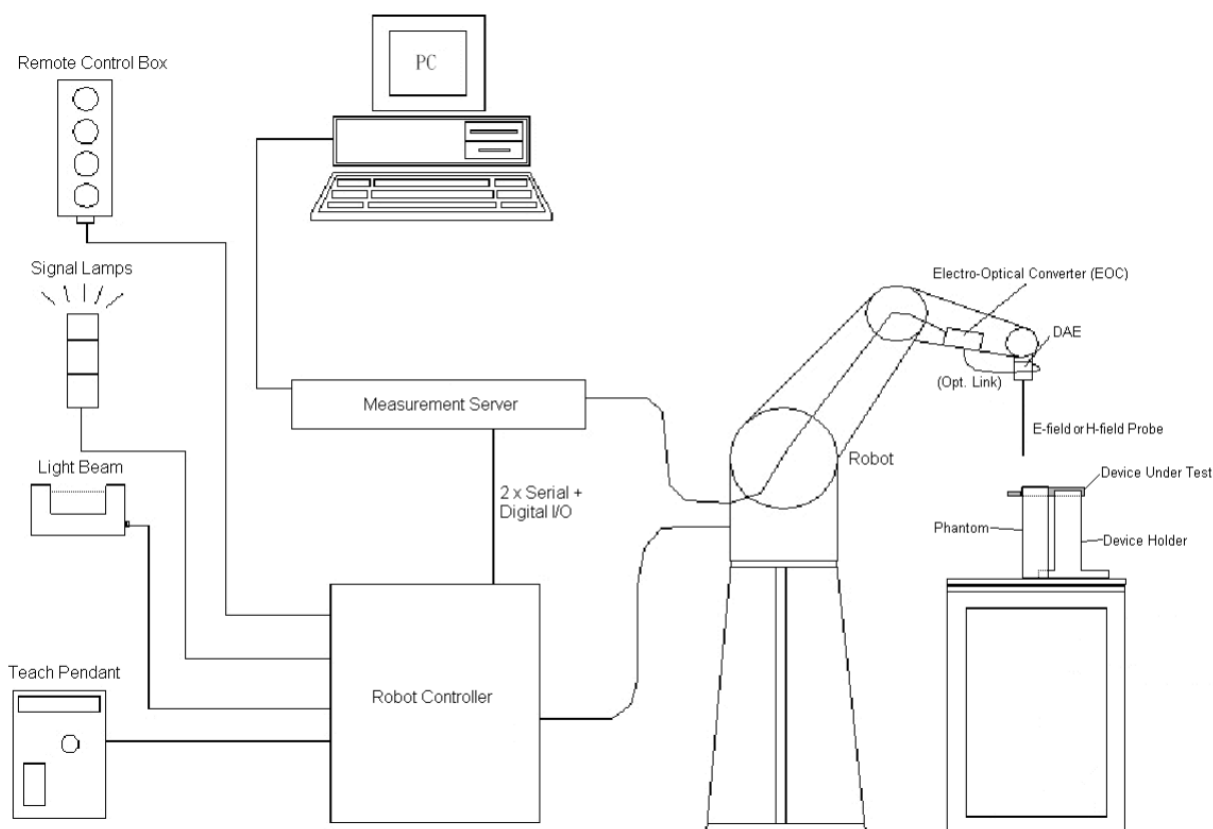
Uncertainty Component	Uncertainty Value (%)	Probability Distribution	Divisor	ci €	Standard Uncertainty € (%)
Measurement system					
Probe calibration	±5.1	N	1	1	±5.1
Axial isotropy	±4.7	R	$\sqrt{3}$	1	±2.7
Sensor Displacement	±7.2	R	$\sqrt{3}$	1	±4.2
Boundary effect	±2.4	R	$\sqrt{3}$	1	±1.4
Phantom Boundary Effect	±7.2	R	$\sqrt{3}$	1	±4.1
Linearity	±4.7	R	$\sqrt{3}$	1	±2.7
Scaling with PMR calibration	±10.0	R	$\sqrt{3}$	1	±5.8
System Detection limit	±1.0	R	$\sqrt{3}$	1	±0.6
Readout Electronics	±0.3	N	1	1	±0.3
Response time	±2.6	R	$\sqrt{3}$	1	±1.5
Integration time	±2.6	R	$\sqrt{3}$	1	±1.5
RF ambient conditions	±3.0	R	$\sqrt{3}$	1	±1.7
RF reflection	±12.0	R	$\sqrt{3}$	1	±6.9
Probe positioner	±1.2	R	$\sqrt{3}$	1	±0.7
Probe positioning	±4.7	R	$\sqrt{3}$	1	±2.7
Extrapolation and interpolation	±1.0	R	$\sqrt{3}$	1	±0.6
Related to test samples					
Device Positioning Vertical	±4.7	R	$\sqrt{3}$	1	±2.7
Device Positioning Lateral	±1.0	R	$\sqrt{3}$	1	±0.6
Device Holder and Phantom	±2.4	R	$\sqrt{3}$	1	±1.4
Power drift	±5.0	R	$\sqrt{3}$	1	±2.9
Phantom and Setup Related					
Phantom Thickness	±2.4	R	$\sqrt{3}$	1	±1.4
Combined Std. Uncertainty					±14.0

Expanded Std. Uncertainty on Power (K=2)	±28.0
Expanded Std. Uncertainty on Field (K=2)	±14.0

4 MEASUREMENT SYSTEM

4.1 DASY HAC System

4.1.1 DASY HAC System Diagram:



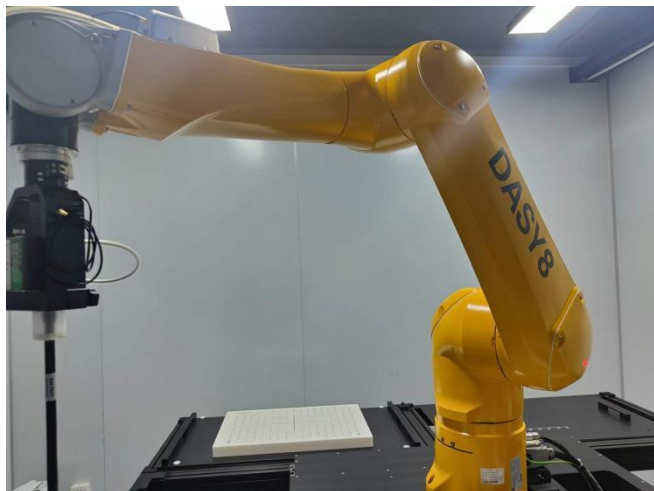
The DASY system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A E-field probe, the DASY software can define the area that is detected by the probe.
3. A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY8 measurement server.
6. The DASY measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASY8 software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The device holder for handheld mobile phones.

System validation dipoles allowing to validate the proper functioning of the system.

4.1.2 Robot

The Dasy SAR system uses the high precision robots. Symmetrical design with triangular core Built-in optical fiber for surface detection system For the 6-axis controller system, Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents). The robot series have many features that are important for our application:



- High precision
(repeatability ± 0.02 mm)
- High reliability
(industrial design)
- Low maintenance costs
(virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements
(brush less synchron motors; no stepper motors)
- Low ELF interference
(motor control _elds shielded via the closed metallic construction shields)

4.1.3 HAC E-Field Probe



Serial Number:	EF3DV3
Construction	One dipole parallel, two dipoles normal to probe axis Built-in shielding against static charges
Frequency	30 MHz to 5.8 GHz, Linearity: ± 0.2 dB
Directivity	± 0.2 dB in air (rotation around probe axis) ± 0.4 dB in air (rotation normal to probe axis)
Dynamic Range	2 V/m to 1000 V/m; Linearity: ± 0.2 dB
Dimensions	Overall length: 337mm(Tip: 25mm) Tip diameter: 4 mm Distance from probe tip to dipole centers: 1.5 mm

4.1.4 Data Acquisition Electronics

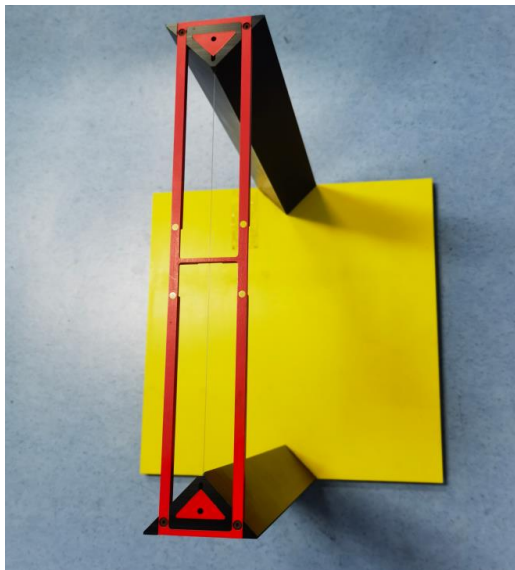
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.



- Input Impedance: 200M Ω m
- The Inputs: Symmetrical and Floating
- Commom Mode Rejection: Above 80dB

4.1.5 Test Arch

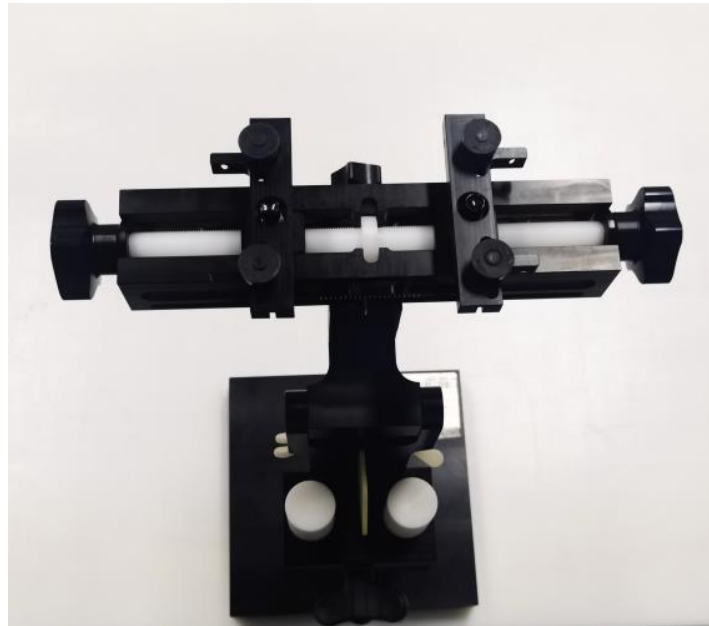
For the measurements the test Arch is able to easily and well defined positioning of the phone and validation dipoles as well as simple teaching of the robot.



- Length: 370mm
- Width: 370mm
- Height: 370mm

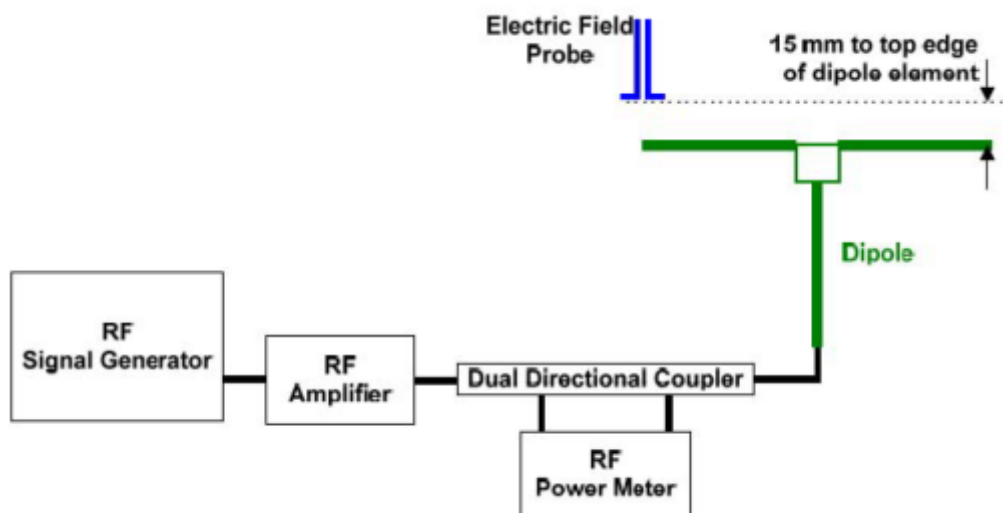
4.1.6 Phone Holder

The Mounting Device enables the rotation of the mounted transmitter device in spherical coordinates. Rotation point is the ear opening point. Transmitter devices can be easily and accurately positioned according to ANSI C63.19.



5 SYSTEM VERIFICATION

5.1 System Validation Setup



Place a dipole antenna meeting the requirements given in ANSI C63.19:2019 in the normally occupied by the WD. The dipole antenna serves as a known source for an electrical and magnetic output. Position the E-field probe so that the following occurs:

- . The probes and their cables are parallel to the coaxial feed of the dipole antenna
- . The probe cables and the coaxial feed of the dipole antenna approach the measurement area from opposite directions
- . The center point of the probe element(s) is 15 mm from the closest surface of the dipole elements.
- . The signal generator is adjusted for the desired forward power, 100 mW (20 dBm) at the dipole connector and the RF power meter is read at that level.
- . After connecting the cable to the dipole, the signal generator is readjusted for the same reading at RF power meter.
- . After system check testing, the E-field result will be compared with the reference value derived from validation dipole certificate report.

5.2 System Validation Results

Comparing to the original HAC value provided by DASY, the validation data should be within its specification of 18 %.

Frequency	Input Power (dBm)	E-field Result (V/m)	Target Field (V/m)	Tolerance (%)	Date
835 MHz	20.0	113.0	108.9	3.76	2026/8/25
1880 MHz	20.0	83.0	85.7	-3.15	2026/8/25

Note:

Delta % = $100 \times (\text{measured peak minus calculated}) \text{ divided by calculated}$. Values within $\pm 18\%$ are acceptable, of which 12% is deviation and 13% is measurement uncertainty.

6 Modulation Interference Factor (MIF)

The HAC Standard ANSI C63.19-2019 defines a new scaling using the Modulation Interference Factor (MIF). For any specific fixed and repeatable modulated signal, a modulation interference factor (MIF, expressed in dB) may be developed that relates its interference potential to its steady-state rms signal level or average power level. This factor is a function only of the audio-frequency amplitude modulation characteristics of the signal and is the same for field-strength and conducted power measurements. It is important to emphasize that the MIF is valid only for a specific repeatable audio-frequency amplitude modulation characteristic. Any change in modulation characteristic requires determination and application of a new MIF.

The MIF may be determined using a radiated RF field, a conducted RF signal, or in a preliminary stage, a mathematical analysis of a modeled RF signal:

- a) Verify the slope accuracy and dynamic range capability over the desired operating frequency band of a fast probe or sensor, square-law detector, as specified in D.3, and weighting system as specified in D.4 and D.5. For the probe and instrumentation included in the measurement of MIF, additional calibration and application of calibration factors are not required.
- b) Using RF illumination or conducted coupling, apply the specific modulated signal in question to the measurement system at a level within its confirmed operating dynamic range.
- c) Measure the steady-state rms level at the output of the fast probe or sensor.
- d) Measure the steady-state average level at the weighting output.
- e) Without changing the square-law detector or weighting system, and using RF illumination or conducted coupling, substitute for the specific modulated signal a 1kHz, 80% amplitude-modulated carrier at the same frequency and adjust its strength until the level at the weighting output equals the step d) measurement.
- f) Without changing the carrier level from step e), remove the 1 kHz modulation and again measure the steady-state rms level indicated at the output of the fast probe or sensor.
- g) The MIF for the specific modulation characteristic is provided by the ratio of the step f) measurement to the step c) measurement, expressed in dB ($20 \times \log(\text{step f})/\text{step c})$).

In practice, step e) and step f) need not be repeated for each MIF determination if the relationship between the two measurements has been preestablished for the measurement system over the operating frequency and dynamic ranges.

UID	Reversion	Communication System Name	MIF (dB)
10021	DAC	GSM-FDD (TDMA, GMSK)	3.63
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	3.75
10460	AAA	UMTS-FDD (WCDMA, AMR)	-25.43
10225	CAB	UMTS-FDD (HSPA+)	-20.39
10169	CAD	LTE-FDD(SC-FDMA,1RB,20MHz, QPSK)	-15.63
10170	CAD	LTE-FDD(SC-FDMA,1RB,20MHz,16-QAM)	-9.76
10181	CAD	LTE-FDD(SC-FDMA,1RB,15MHz, QPSK)	-15.63
10175	CAE	LTE-FDD(SC-FDMA,1RB,10MHz, QPSK)	-15.63
10172	CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	-1.62
10173	CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	-1.44
10240	CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	-1.62
10237	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	-1.62
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	-2.02
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	0.12
10427	AAD	IEEE 802.11n (HT Greenfiled, 150 Mbps, 64-QAM)	-13.44
10069	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	-3.15
10616	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	-5.57

NOTE: The MIF values applied in this test report were provided by the HAC equipment provider of SPEAG.

7 HAC RF IMMUNITY MEASUREMENT PROCEDURES

7.1 HAC Measurement Process Diagram

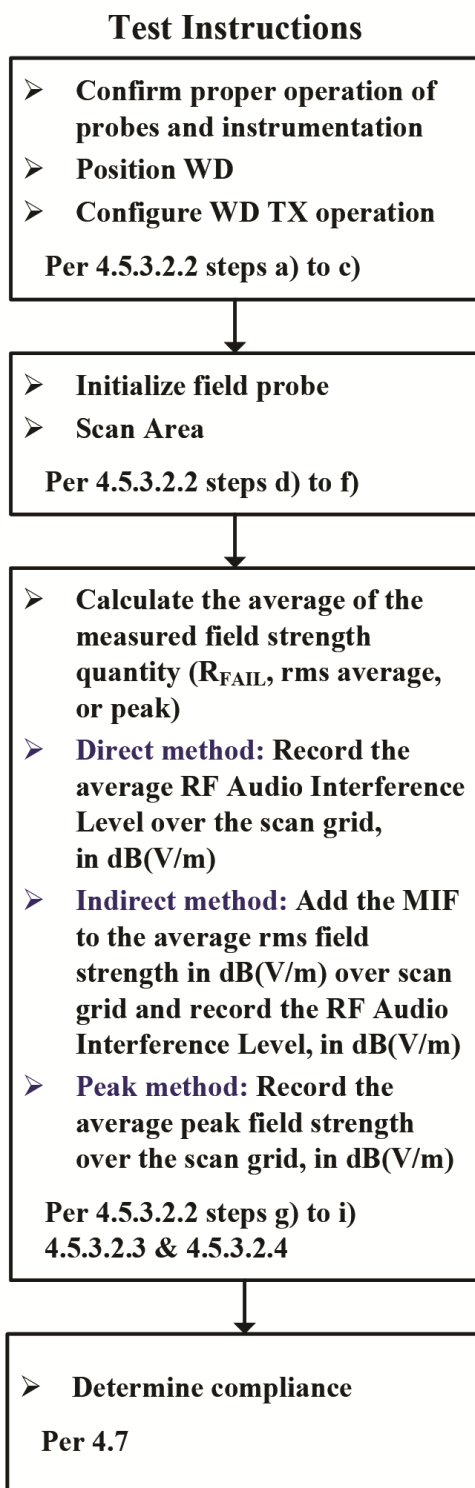


Figure of WD near-field emission scan flowchart according to ANSI C63.19:2019

7.2 HAC RF Test Setup

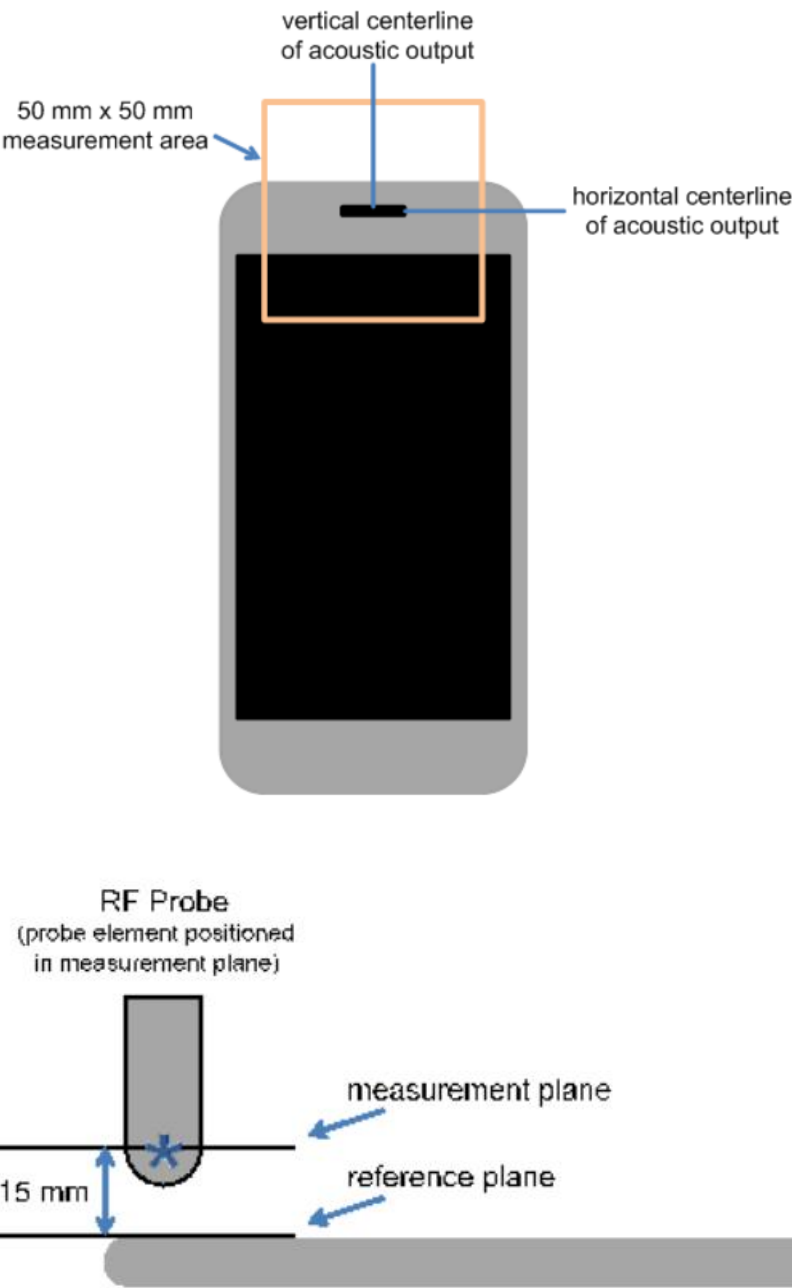


Figure 6.1—WD measurement and reference planes for RF emission measurements

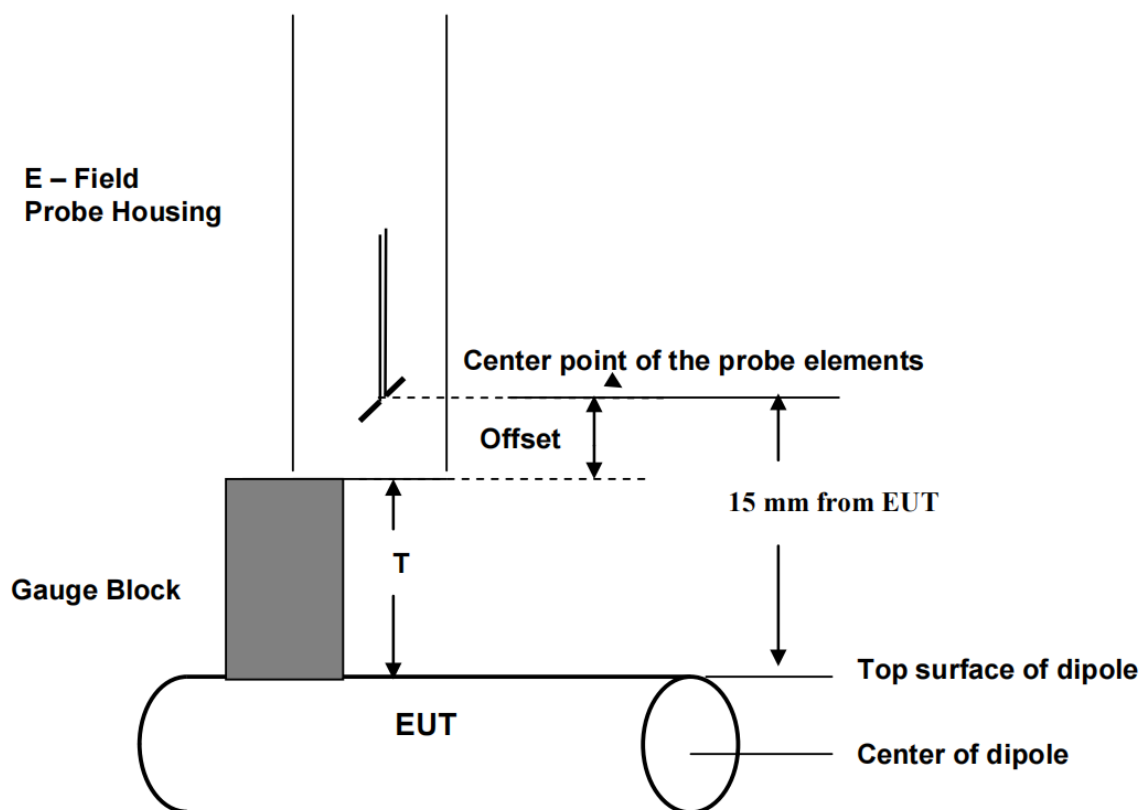


Figure 6.2—Gauge block with E-field probe

7.3 RF Emission Measurement Procedure

The following illustrate a typical RF emissions test scan over a wireless communications device:

- Confirm proper operation of the field probe, probe measurement system, spectral and temporal weighting filters, and the positioning system.
- Position the WD in its intended test position.
- Set the WD to transmit a fixed and repeatable combination of signal power and modulation characteristic that is representative of the worst case (highest interference potential) encountered in normal use. Transiently occurring start-up, changeover, or termination conditions, or other operation likely to occur less than 1% of the time during normal operation, may be excluded from consideration.
- The measurement area shall be centered on the acoustic output or the T-Coil mode measurement reference point, as appropriate. Locate the field probe at the initial test position in the 50 mm by 50 mm measurement area, which is contained in the measurement plane, illustrated in Figure 6.1. If the field alignment method is used, align the probe for maximum field reception.
- Record the reading at the output of the measurement system.
- Scan the entire 50 mm by 50 mm measurement area in equally spaced step sizes and record the reading at each measurement point. The step size shall meet the specification for step size of ≤ 10 mm shall be used.
- Calculate the average of the measurements taken in Step f.
- Convert the average value found in Step g) to RF audio interference level, in volts per meter, by taking the square root of the reading and then dividing it by the measurement system transfer function. Convert the result to dB(V/m) by taking the base-10 logarithm and multiplying it by 20.
- Compare this RF audio interference level to the limits in ANSI C63.19-2019 Section 4.7 and record the result.

8 MAXIMUM CONDUCTED RF OUTPUT POWER

8.1 WWAN Tune-up Power Table

Mode	Antenna	WWAN Antenna	
		Full Power	Receiver on
			Head
			Standalone & Simultaneous transmission
		Off	DSI1
LTE Band25	Ant.1	24.00	24.00
LTE Band26	Ant.1	24.00	24.00
LTE Band41	Ant.1	25.00	25.00

Note: Other test power data please refer to report AGC16736250901FH01, which was issued by Attestation of Global Compliance (Shenzhen) Co. Ltd. On Oct. 24,2025.

8.2 WLAN Tune-up Power Table

Mode	WLAN 2.4G/5G Antenna	
	Full Power	Head
		Standalone& Simultaneous transmission
2.4G WLAN 802.11b	6.00	6.00
2.4G WLAN 802.11g	6.00	6.00
2.4G WLAN 802.11n20	6.00	6.00
2.4G WLAN 802.11n40	6.00	6.00
5.2G WLAN 802.11a	7.00	7.00
5.2G WLAN 802.11n20	7.00	7.00
5.2G WLAN 802.11n40	7.00	7.00
5.2G WLAN 802.11ac20	7.00	7.00
5.2G WLAN 802.11ac40	7.00	7.00
5.2G WLAN 802.11ac80	7.00	7.00
5.8G WLAN 802.11a	6.00	6.00
5.8G WLAN 802.11n20	6.00	6.00
5.8G WLAN 802.11n40	6.00	6.00
5.8G WLAN 802.11ac20	6.00	6.00
5.8G WLAN 802.11ac40	6.00	6.00
5.8G WLAN 802.11ac80	6.00	6.00

9 Evaluation for RF Audio Interference Power Level (RFAIPL)

An RF air interface technology of a device is exempt from testing when its average antenna input power plus its MIF is at or below the RF_{AIPL} listed in the table below (from ANSI C63.19 2019 section 4.7) for any of its operating modes

If a device supports multiple RF air interfaces, each RF air interface shall be evaluated individually.

Note1: Use maximum power plus worst case MIF to determine whether it complies with RF_{AIPL}

Note2: If maximum power plus worst case MIF does not complies with RF_{AIPL} , then further evaluation RF_{AIL} include in section 9.

Note3: According to ANSI C63.19 2019, if maximum power plus worst case MIF is complies with RFAIPL, means compliance with VD emission requirements.

9.1 F_{AIPL} Evaluation

Mode	Antenna	Max Average power(dBm)	Worce Case MIF (dB)	Power + MIF(dB)	C63.19 Lowest RF_{AIPL} (dBm)	C63.19
						Test Required(2019)?
GSM 850	WWAN	32.80	3.63	36.43	29	Yes
GSM 1900	WWAN	29.60	3.63	33.23	26	Yes
WCDMA Band2	WWAN	22.10	-25.43	-3.33	26	No
WCDMA Band4	WWAN	21.90	-25.43	-3.53	26	No
WCDMA Band5	WWAN	22.20	-25.43	-3.23	29	No
LTE Band2	WWAN	22.20	-9.76	12.44	26	No
LTE Band4	WWAN	23.00	-9.76	13.24	26	No
LTE Band5	WWAN	23.10	-9.76	13.34	29	No
LTE Band12	WWAN	22.90	-9.76	13.14	29	No
LTE Band13	WWAN	23.60	-9.76	13.84	29	No
LTE Band17	WWAN	23.00	-9.76	13.24	29	No
LTE Band25	WWAN	24.00	-9.76	14.24	26	No
LTE Band26	WWAN	24.00	-9.76	14.24	29	No
LTE Band66	WWAN	22.70	-9.76	12.94	26	No
LTE Band71	WWAN	22.70	-9.76	12.94	29	No
LTE Band41	WWAN	25.00	-1.44	23.56	25	No
802.11b	WLAN	6.00	-2.02	3.98	25	No
802.11g	WLAN	6.00	0.12	6.12	25	No
802.11n (HT20)	WLAN	6.00	-13.44	-7.44	25	No
802.11n (HT40)	WLAN	6.00	-13.44	-7.44	25	No
802.11a	WLAN	6.00	-3.15	2.85	25	No
802.11n (HT20)	WLAN	6.00	-13.44	-7.44	25	No
802.11n (HT40)	WLAN	6.00	-13.44	-7.44	25	No
802.11ac (VHT20)	WLAN	6.00	-5.57	0.43	25	No
802.11ac (VHT40)	WLAN	6.00	-5.57	0.43	25	No
802.11ac (VHT80)	WLAN	6.00	-5.57	0.43	25	No

Note1: Average Antenna input power = Average Frame power in order to account for the Operating Duty cycles for each respective Air interface.

Note2: For operating modes where Average Antenna input power plus MIF is below RFAIPL, they are compliant to RF_{AIPL} requirements. For operating modes where Average Antenna input power plus MIF is above RFAIPL, they were evaluated to RF_{AIPL} requirements.

10 TEST EQUIPMENTS LIST

Note1: The HAC measurement system applies MIF value onto the measured RMS E-field, which is indirect method in ANSI C63.19 2019 version, and reports the RF audio interference level.

Note2: Phone Condition: Mute on; Backlight off; Max Volume.

Band	Antenna	Mode	Ch.	Freq. (MHz)	Meas. RFAIL (dB V/m)	RFAIL Limit (dB V/m)	Meas. No.
GSM 850	1	Voice	128	824.20	26.18	39	1#
GSM 850	1	Voice	190	836.60	26.43	39	2#
GSM 850	1	Voice	251	848.80	28.21	39	3#
GSM 1900	1	Voice	512	1850.2	17.02	36	4#
GSM 1900	1	Voice	661	1880.0	17.27	36	5#
GSM 1900	1	Voice	810	1909.8	18.06	36	6#
Note: The detail RF Emission results please refer to appendix B.							

11 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY8	1.2.4.4345	N/A	N/A
835MHz Validation Dipole	Speag	CD835V3	SN: 1069	2024/06/03	2027/06/02
1880MHz Validation Dipole	Speag	CD1880V3	SN: 1056	2024/06/03	2027/06/02
Data Acquisition Electronics	Speag	DAE4	SN: 1710	2026/01/12	2027/01/11
E-Field Probe	Speag	EF3DV3	SN: 4092	2026/07/30	2027/07/29
Signal Generator	Keysight	N5173B	MY62150163	2026/06/22	2027/06/21
Power Meter	R&S	NRVD-B2	835843/014	2026/06/23	2027/06/22
Power Sensor	R&S	NRV-Z4	100381	2026/06/23	2027/06/22
Power Sensor	R&S	NRV-Z2	100211	2026/06/23	2027/06/22
Wireless Communication Test Set	R&S	CMW500	167190	2026/03/24	2027/03/23
Thermometer	Elitech	RC-4HC	EF7239002655	2025/10/29	2026/10/28
Power Amplifier	Mini-Circuits	ZVA-183W-S+	932502132	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

Note: For dipole antennas, BALUN has adopted 3 years as calibration intervals, and on annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole;
3. The return loss is < -20dB, within 20% of prior calibration.
4. Impedance (real or imaginary parts) is within 5 Ohms of calibrated measurement.

12 REFERENCES

- 1 FCC 47 CFR Part 20.19 "Hearing aid-compatible mobile handsets."
- 2 ANSI C 63.19:2019 "American National Standard Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids", 19 August 2019
- 3 KDB 285076 D01 HAC Guidance v06, "provides equipment authorization guidance for mobile handsets subject to the requirements of Section 20.19 for hearing aid compatibility
- 4 KDB 285076 D02, T-Coil testing for CMRS IP v01r01 provides guidance for T-Coil tests for voice-over-IP (e.g. LTE and Wi-Fi) CMRS based Telephone Services.

ANNEX A HAC TEST RESULT OF SYSTEM VERIFICATION

Please refer the document "Ti-CC26050326-ASC-2.pdf".

ANNEX B HAC RF MEASUREMENT RESULT

Please refer the document "Ti-CC26050326-ETD.pdf".

ANNEX C TEST SETUP PHOTO

Please refer the document "Ti-CC26050326-AS-2.pdf".

ANNEX D EUT EXTERNAL PHOTO

Please refer the document "Ti-CC26050326-AW.pdf".

ANNEX E CALIBRATION REPORT

Please refer the document "Ti-CC26050326-AC-2.pdf".

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