

TEST REPORT

Applicant: TARRAN INNOVATION LIMITED
Address: 19H Maxgrand plaza, No.3 Tai Yau Street, San Po Kong, Kowloon, Hong Kong
Equipment Type: Control Unit
Model Name: TCU01
Brand Name: TARRAN
FCC ID: 2BTMKTCU01
Test Standard: FCC 47 CFR Part 2.1093 (refer to section 3.1)
Maximum SAR: Body (1 g@20mm): 0.99 W/kg
Sample Arrival Date: Mar. 31, 2026
Test Date: Apr. 26, 2026 - Apr. 30, 2026
Date of Issue: Jun. 29, 2026

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Song Gui**Checked by:** Xu Rui**Approved by:** Liao Jianming
(Technical Director)

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>May 29, 2026</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Jun. 17, 2026</u>	<u>Updated the EUT name, model name and ANNEX D EUT EXTERNAL PHOTOS.</u> <u>Updated the Network and Wireless connectivity in Chapter 2.4.</u> <u>Updated the Highest Total Exposure Ratio Evaluation in Chapter 3.3.2.</u> <u>Update the synchronization transmission results in Chapter 14.</u>
<u>Rev. 03</u>	<u>Jun. 29, 2026</u>	<u>Deleted the data of NFC and FMCW.</u> <u>Updated the EUT name, model name and ANNEX D.</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 25°C
Ambient Relative Humidity	30% to 70%

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	TARRAN INNOVATION LIMITED
Address	19H Maxgrand plaza, No.3 Tai Yau Street, San Po Kong, Kowloon, Hong Kong

2.2 Manufacturer Information

Manufacturer	TARRAN INNOVATION LIMITED
Address	19H Maxgrand plaza, No.3 Tai Yau Street, San Po Kong, Kowloon, Hong Kong

2.3 General Description for Equipment under Test (EUT)

EUT Name	Control Unit
Model Name Under Test	TCU01
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	V2.1
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Note: Not applicable.

2.5 Technical Information

Network and Wireless connectivity	2G Network GPRS 850/1900
	3G Network WCDMA/HSDPA/HSUPA Band 2/4/5
	4G Network FDD LTE Band 2/4/5/7/12/13/25/26/66
	TDD LTE Band 38/41
	Bluetooth (BR+EDR+BLE)
	WIFI 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac and 802.11ax
	GPS

The requirement for the following technical information of the EUT was tested in this report:

Module 1

Operating Mode	GSM; WCDMA; LTE; WIFI; 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 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 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 25	TX: 1850 ~ 1915 MHz	RX: 1930 ~ 1995 MHz
	LTE Band 26	TX: 814 ~ 849 MHz	RX: 859 ~ 894 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 1710 ~ 1780 MHz
	802.11b/g	2400 ~ 2483.5 MHz	
	802.11n(HT20)	2400 ~ 2483.5 MHz	
	802.11ax(HE20)	2400 ~ 2483.5 MHz	
	802.11a	5150 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	802.11n(HT20/HT40)	5150 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	802.11ac (VHT20/VHT40/VHT80)	5150 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	802.11ax (HE20/HE40/HE80)	5150 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	

	Bluetooth	2400 ~ 2483.5 MHz
Antenna Type	WWAN	PCB Antenna
	WIFI	FPC Antenna
	Bluetooth	FPC Antenna
Exposure Category	General Population/Uncontrolled exposure	
EUT Type	Portable Device	

Module 2

Operating Mode	Bluetooth	
Frequency Range	Bluetooth	2400 ~ 2483.5 MHz
Antenna Type	Bluetooth	FPC Antenna
Exposure Category	General Population/Uncontrolled exposure	
EUT Type	Portable Device	

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI/IEEE Std. C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
4	KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
5	KDB 941225 D05 v02r05	SAR EVALUATION CONSIDERATIONS FOR LTE DEVICES
6	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
7	KDB 865664 D02 v01r02	RF Exposure Reporting
8	KDB 248227 D01 v02r02	SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters

3.2 Device Category and SAR Limit

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user.

Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

Table of Exposure Limits:

Body Position	SAR Value (W/Kg)	
	General Population/ Uncontrolled Exposure	Occupational/ Controlled Exposure
Whole-Body SAR (averaged over the entire body)	0.08	0.4
Partial-Body SAR (averaged over any 1 gram of tissue)	1.60	8.0
SAR for hands, wrists, feet and ankles (averaged over any 10 grams of tissue)	4.0	20.0

NOTE:

General Population/Uncontrolled Exposure: Locations where there is the exposure of individuals who have no knowledge or control of their exposure. General population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Occupational/Controlled Exposure: Locations where there is exposure that may be incurred by persons who are aware of the potential for exposure. In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

3.3 Test Result Summary

3.3.1 Highest SAR

Equipment Class	Band	Maximum Scaled SAR (W/kg)
		1g SAR
		20mm
		Body
PCB	GSM 850	0.91
	GSM 1900	0.90
	WCDMA Band 2	0.95
	WCDMA Band 4	0.87
	WCDMA Band 5	0.38
	LTE Band 2	0.99
	LTE Band 4	0.45
	LTE Band 5	0.34
	LTE Band 7	0.52
	LTE Band 12	0.10
	LTE Band 13	0.18
	LTE Band 25	0.95
	LTE Band 26	0.36
	LTE Band 66	0.42
	LTE Band 38	0.35
	LTE Band 41	0.32
DTS	2.4G WIFI	0.04
NII	5.3G WIFI	0.05
	5.6G WIFI	0.05
	5.8G WIFI	0.03
DSS	Bluetooth	0.06
Limit (W/kg)		1.60
Verdict		Pass

3.3.2 Highest Total Exposure Ratio Evaluation

Equipment Class	Maximum Simultaneous Transmission SAR (W/kg)
	20mm
	Body
PCB	1.03
DTS	1.02
NII	1.03
DSS	1.03
Limit (W/Kg)	1.60
Verdict	Pass

Note: The Total Exposure Ratio Evaluation detail please refer to section 12.

3.4 Test Uncertainty

According to KDB 865664 D01, when the highest measured 1 g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis is not required in SAR reports submitted for equipment approval.

The maximum 1 g SAR for the EUT in this report is 0.99 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$SAR = \frac{d}{dt} \left(\frac{dW}{dm} \right) = \frac{d}{dt} \left(\frac{dW}{\rho dv} \right)$$

SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

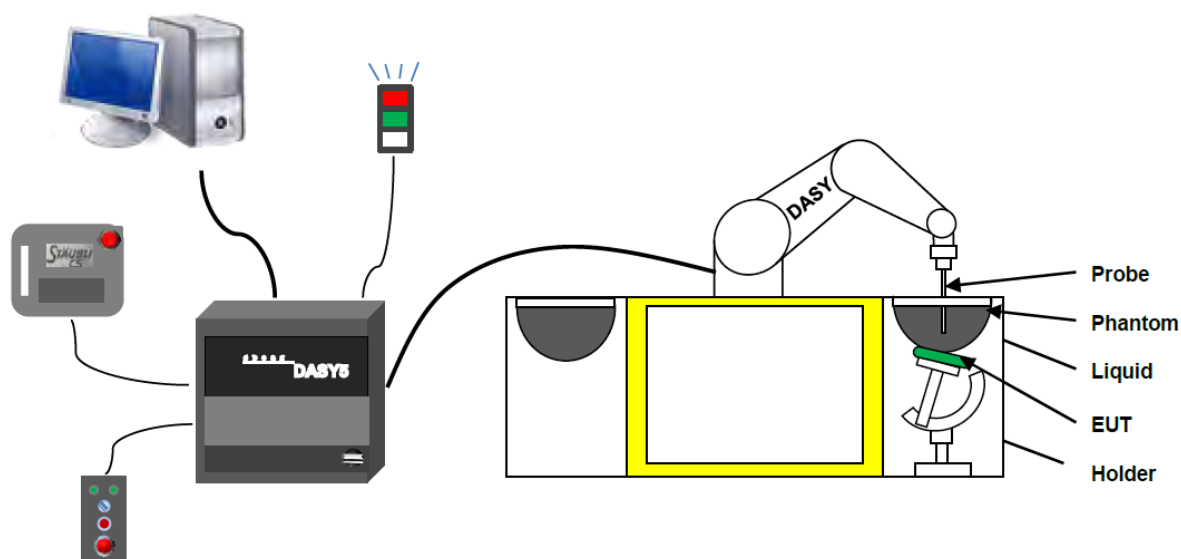
$$SAR = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

ρ is the mass density of the tissue and E is the RMS electrical field strength.

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



The DASY5 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 dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
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 DASY5 measurement server.
6. The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASY5 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 generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

4.2.2 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)

4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4 with following specifications is used.

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz; Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)



E-Field Probe Calibration Process

Probe calibration is realized, in compliance with CENELEC EN 62209-1/-2 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the EN 62209-1/2 annexe technique using reference guide at the five frequencies.

4.2.4 Data Acquisition Electronics

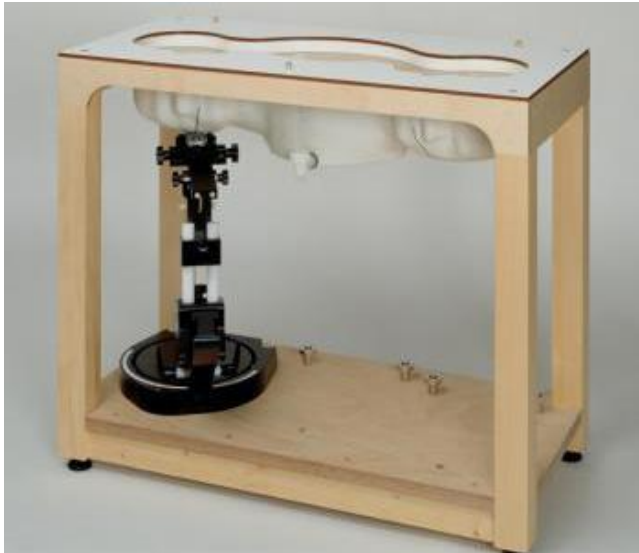
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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

4.2.5 Phantoms

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.



- Left hand
- Right hand
- Flat phantom



4.2.6 Device Holder

The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA's only. If necessary an additional support of polystyrene material is used. Larger DUT's (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.



The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than 1° .

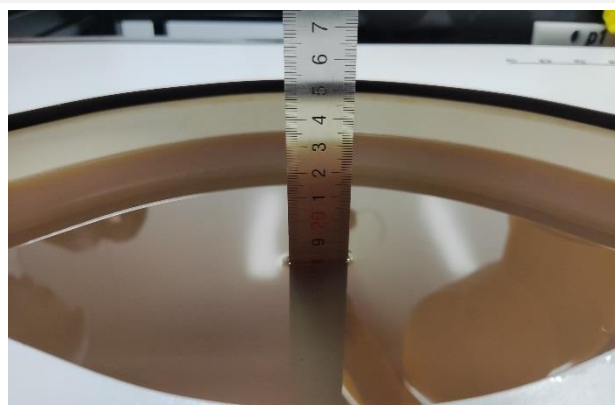
4.2.7 Simulating Liquid

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5%.

Head Liquid Depth



Body Liquid Depth



The following table gives the recipes for tissue simulating liquid.

TSL	Manufacturer / Model	Freq Range (MHz)	Main Ingredients
Head WideBand	SPEAG HBBL600-10000V6	600-10000	Ethenediol, Sodium petroleum sulfonate, Hexylene Glycol / 2-Methyl-pentane-2.4-diol, Alkoxylated alcohol

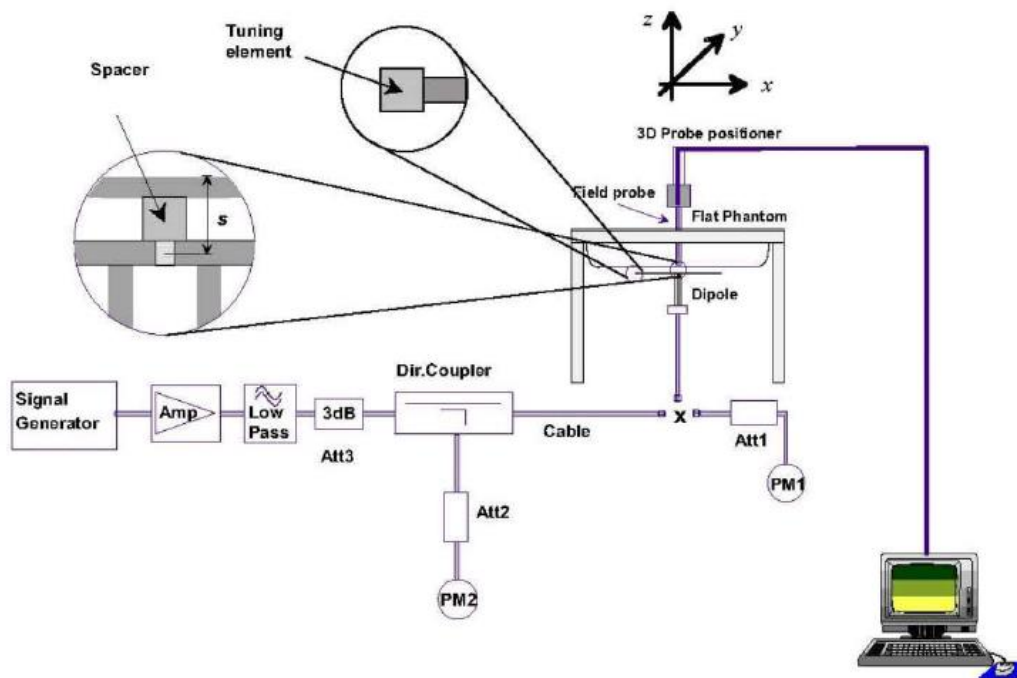
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

5.2 System Check Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



6 TEST POSITION CONFIGURATIONS

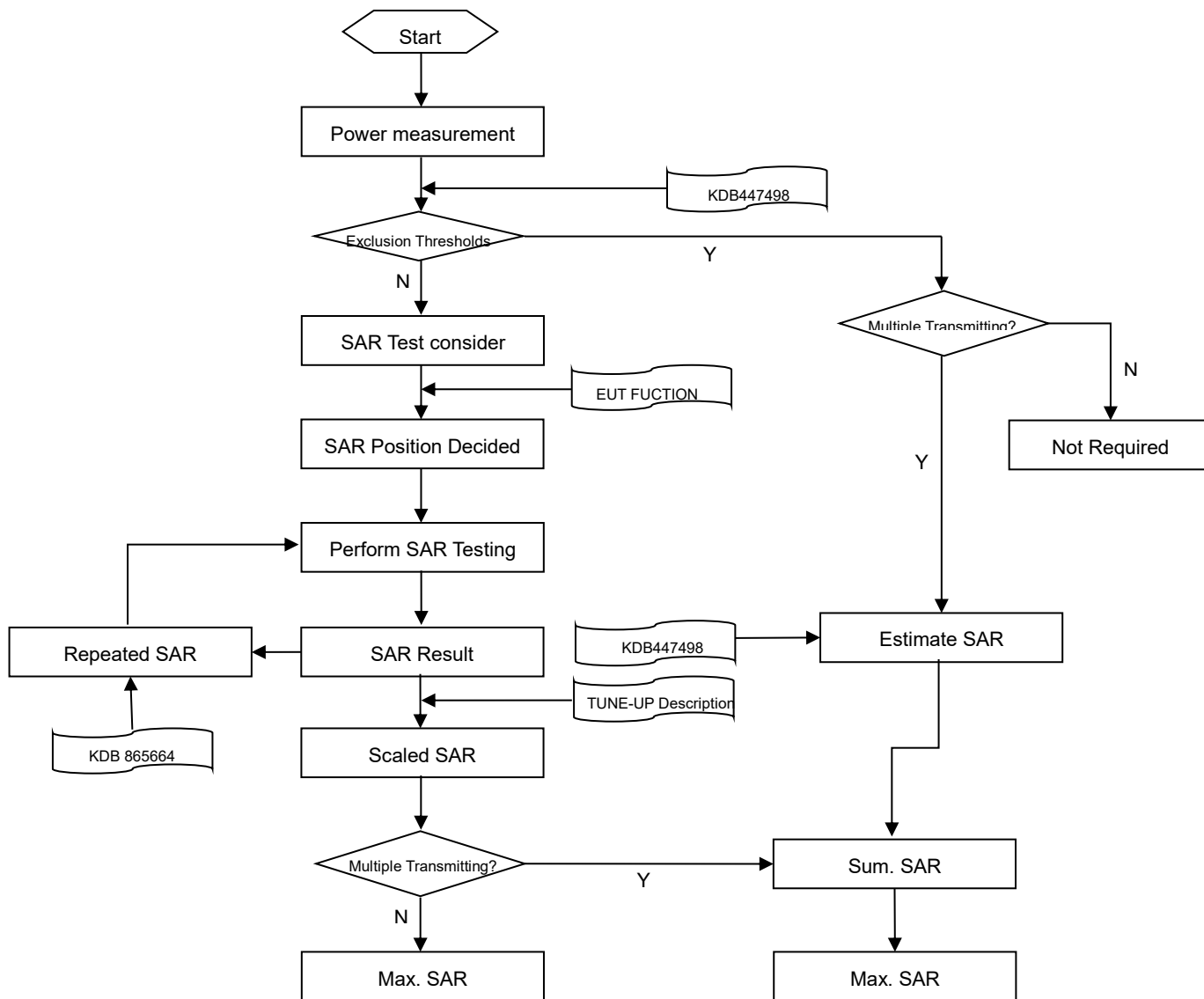
6.1 Body-worn Position Conditions

Devices that support transmission while used with body-worn accessories must be tested for SAR compliance related to each body-worn condition of use. SAR evaluation is required for body-worn accessories supplied with the device they are attached to.

The general informing principle is that the selected test configurations must conservatively capture the various body-worn accessory use conditions expected by users. For instance, devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, must be tested for SAR compliance using a conservative minimum test separation distance not to exceed 5 mm for all use conditions required by the device.

7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1 g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.

			≤3GHz	>3GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5±1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30°±1°	20°±1°
Maximum area scan spatial resolution: Δx Area , Δy Area			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3–4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom			≤ 2 GHz: ≤ 8 mm 2 –3 GHz: ≤ 5 mm*	3–4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: Δz Zoom (n)		≤ 5 mm	3–4 GHz: ≤ 4 mm
				4–5 GHz: ≤ 3 mm
				5–6 GHz: ≤ 2 mm
	graded grid	Δz Zoom (1): between 1st two points closest to phantom surface	≤ 4 mm	3–4 GHz: ≤ 3 mm
				4–5 GHz: ≤ 2.5 mm
		Δz Zoom (n>1): between subsequent points	≤ 1.5·Δz Zoom (n-1)	
Minimum zoom scan volume	x, y, z		≥30 mm	3–4 GHz: ≥ 28 mm
				4–5 GHz: ≥ 25 mm
				5–6 GHz: ≥ 22 mm

Note:

1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

7.3 Measurement Procedure

The following steps are used for each test position

- a. Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- b. Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- c. Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- d. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

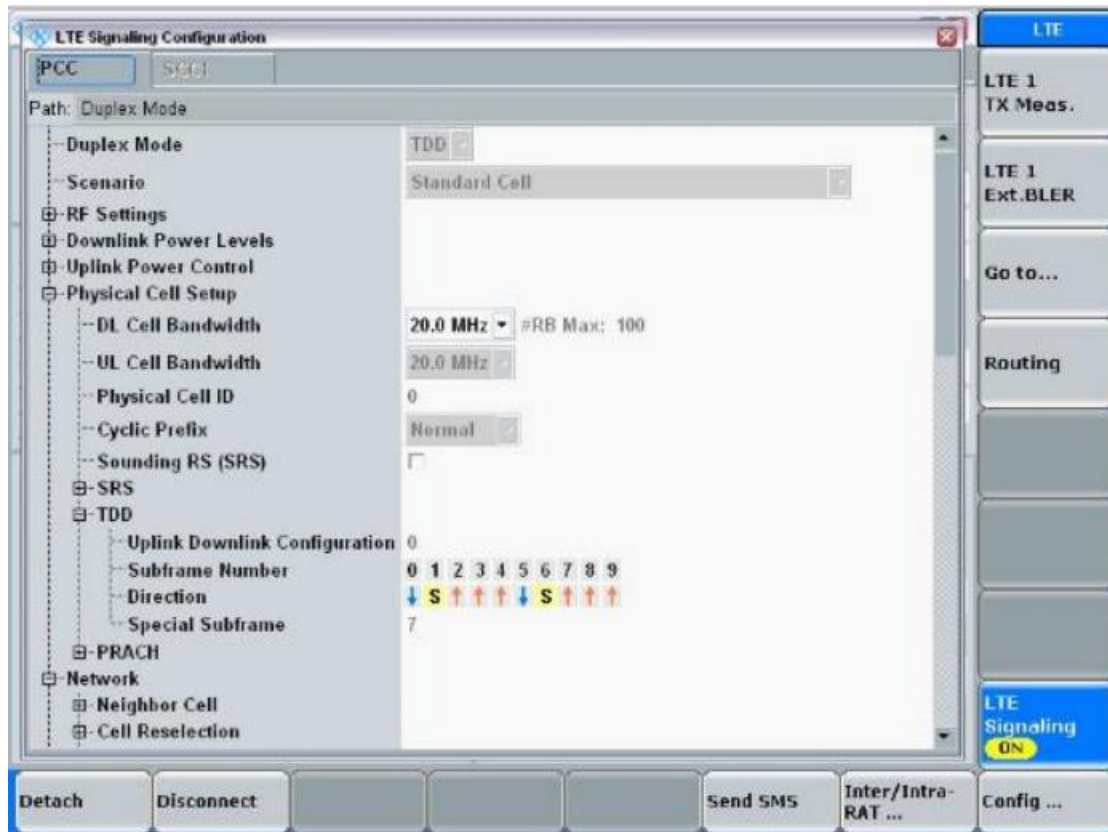
7.4 Area & Zoom Scan Procedure

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 quoted below.

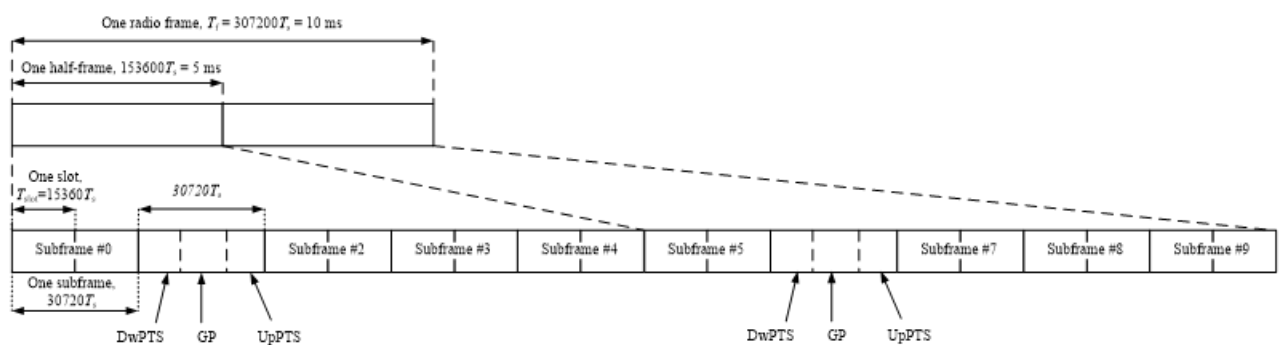
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

7.5 LTE (TDD) Considerations

During TDD-LTE SAR testing, the EUT was commanded to transmit on maximum output power and maximum transmitting bandwidth. The uplink and downlink slot configuration as below in one radio frame.



According to 3GPP Per 3GPP TS 36.211. Each radio frame of length ($T_f = 307200 \cdot T_s = 10\text{ms}$) of two half-frames of length ($153600 \cdot T_s = 5\text{ms}$). Each half-frame consists of five sub-frames of length ($30720 \cdot T_s = 1\text{ms}$)



And the special sub-frame with the three fields DwPTS, GP and UpPTS.

The length of DwPTS and UpPTS is given by below table subject to the total length of DwPTS, GP and UpPTS being equal to $30720 \cdot T_s = 1\text{ms}$.

Configuration of special sub-frame (lengths of DwPTS/GP/UpPTS)

Special sub-frame configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21592 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$7680 \cdot T_s$	$2560 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$			$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21592 \cdot T_s$			$12800 \cdot T_s$	-	-
8	$24144 \cdot T_s$			-		
9	$13168 \cdot T_s$			-	-	-

For special sub-frame uplink time we used the largest cyclic prefix for duty cycle calculate;

Maximum uplink time of one special sub-frame=(largest cyclic prefix)/(one sub-frame of length)* time of one sub-frame= $5120 \cdot T_s / 30720 \cdot T_s \cdot 1\text{ms} = 0.167\text{ms}$

One radio frame with 6 uplink sub-frames and two special sub-frame,

there for the maximum Uplink time in one radio frame is: **$6 \cdot 1\text{ ms} + 2 \cdot 0.167\text{ ms} = 6.334\text{ms}$**

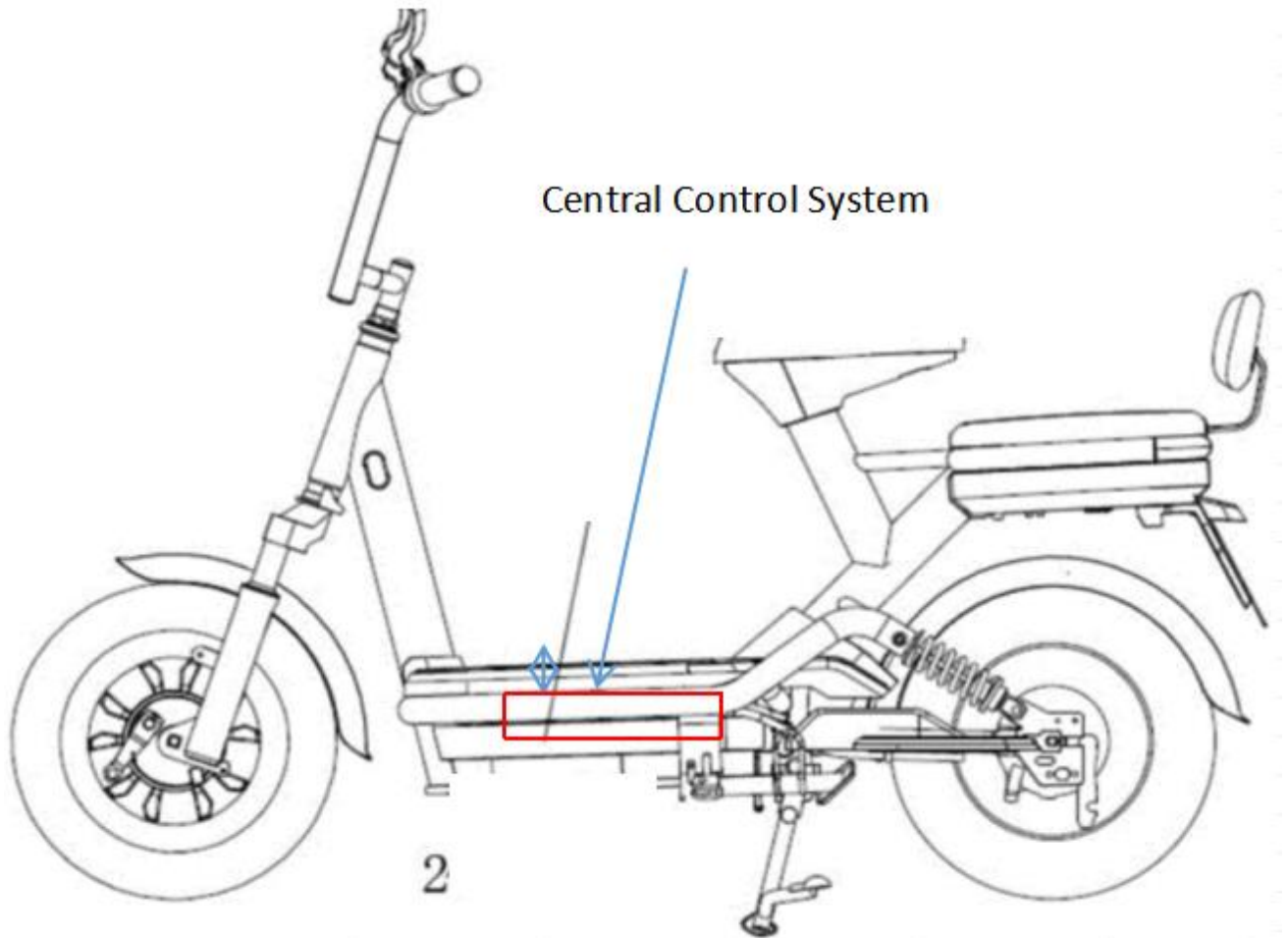
So, the duty cycle for TDD-LTE is: **$6.334\text{ms} / 10\text{ms} = 1 : 1.58$**

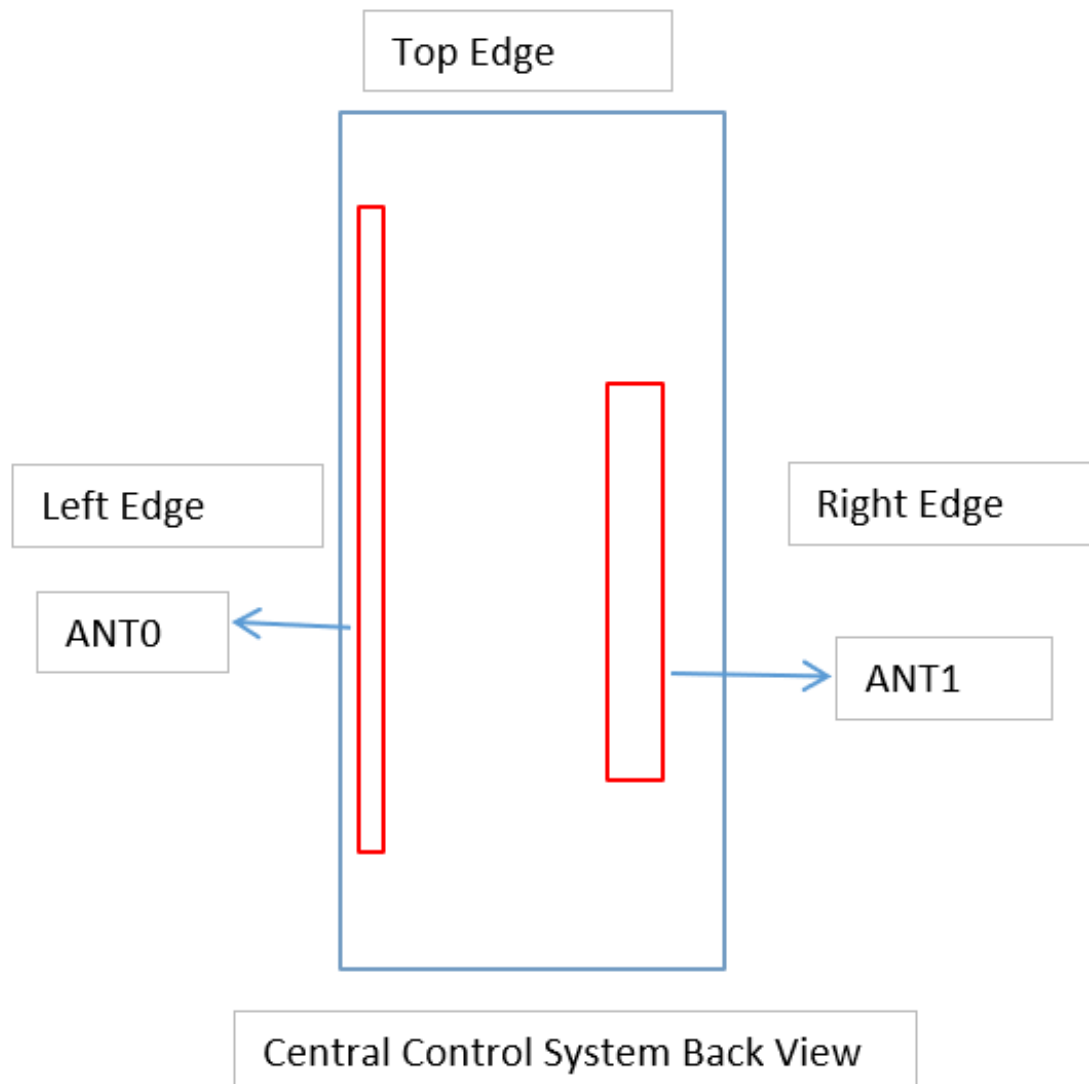
8 CONDUCTED RF OUTPUT POWER

Please refer the document “BL-SZ2610221-AP.pdf”.

9 TEST EXCLUSION CONSIDERATION

9.1 Antenna location sketch





Antenna	Support Bands
ANT0	GSM 850/1900 WCDMA Band 2/4/5 LTE Band 2/4/5/7/12/13/25/26/66/38/41
ANT1	WIFI 2.4G&WIFI 5G&Bluetooth

9.2 SAR Test Consideration Table

According with FCC KDB 447498 D04, Appendix B, The SAR-based exemption formula applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). The following table shows the power threshold from 5mm to 50mm.

Power Thresholds (mW)					
Frequency (MHz)	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
300	39 mW	65 mW	88 mW	110 mW	129 mW
450	22 mW	44 mW	67 mW	89 mW	112 mW
835	9 mW	25 mW	44 mW	66 mW	90 mW
1900	3 mW	12 mW	26 mW	44 mW	66 mW
2450	3 mW	10 mW	22 mW	38 mW	59 mW
3600	2 mW	8 mW	18 mW	32 mW	49 mW
5800	1 mW	6 mW	14 mW	25 mW	40 mW
Frequency (MHz)	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of 50 mm
300	148 mW	166 mW	184 mW	201 mW	217 mW
450	135 mW	158 mW	180 mW	203 mW	226 mW
835	116 mW	145 mW	175 mW	207 mW	240 mW
1900	92 mW	122 mW	157 mW	195 mW	236 mW
2450	83 mW	111 mW	143 mW	179 mW	219 mW
3600	71 mW	96 mW	125 mW	158 mW	195 mW
5800	58 mW	80 mW	106 mW	136 mW	169 mW

9.2.1 SAR Test Consideration

This host is a Control Unit, under normal use the RF exposure scenarios are shown in the table below:

RF Exposure Position	RF Exposure Scenarios
Front Side	Body
Back Side	Body
Left Edge	Body
Right Edge	Body
Top Edge	Body
Bottom Edge	Body

Note: The distance from the EUT to the human body for use is 20 millimeters.

Body RF exposure scenarios

Positon	Band	Calculated Frequency (Ghz)	Distance to User (mm)	Exclusion Threshold (mW)	Max. Peak Power (dBm)	Max. Peak Power (mW)	SAR Test
Front Side	GSM850	0.849	15	43.23	30.00	1000.00	Yes
	GSM1900	1.910	15	25.51	30.00	1000.00	Yes
	WCDMA Band 2	1.908	15	25.53	25.00	316.23	Yes
	WCDMA Band 4	1.753	15	26.77	24.50	281.84	Yes
	WCDMA Band 5	0.843	15	43.43	24.00	251.19	Yes
	LTE Band 2	1.910	15	25.51	24.50	281.84	Yes
	LTE Band 4	1.755	15	26.76	24.00	251.19	Yes
	LTE Band 5	0.849	15	43.22	24.00	251.19	Yes
	LTE Band 7	2.562	15	21.63	24.00	251.19	Yes
	LTE Band 12	0.716	15	48.59	24.00	251.19	Yes
	LTE Band 13	0.787	15	45.53	24.00	251.19	Yes
	LTE Band 25	1.915	15	25.47	24.50	281.84	Yes
	LTE Band 26	0.849	15	43.22	24.00	251.19	Yes
	LTE Band 66	1.800	15	26.38	24.00	251.19	Yes
	LTE Band 38	2.620	15	21.36	23.50	223.87	Yes
	LTE Band 41	2.690	15	21.04	23.50	223.87	Yes
	Bluetooth(Module 1)	2.48	50	218.23	8.50	7.08	Yes
	Bluetooth(Module 2)	2.480	50	218.23	5.60	3.63	Yes
	2.4G WIFI	2.462	50	218.71	22.00	158.49	Yes
	5.3G WIFI	5.320	50	173.44	20.00	100.00	Yes
	5.6G WIFI	5.710	50	169.78	18.50	70.79	Yes
	5.8G WIFI	5.825	50	168.77	18.00	63.10	Yes
Back Side	GSM850	0.849	30	116.04	30.00	1000.00	Yes
	GSM1900	1.910	30	91.85	30.00	1000.00	Yes
	WCDMA Band 2	1.908	30	91.89	25.00	316.23	Yes

	WCDMA Band 4	1.753	30	95.15	24.50	281.84	Yes
	WCDMA Band 5	0.843	30	116.23	24.00	251.19	Yes
	LTE Band 2	1.910	30	91.85	24.50	281.84	Yes
	LTE Band 4	1.755	30	95.11	24.00	251.19	Yes
	LTE Band 5	0.849	30	116.04	24.00	251.19	Yes
	LTE Band 7	2.562	30	81.38	24.00	251.19	Yes
	LTE Band 12	0.716	30	120.80	24.00	251.19	Yes
	LTE Band 13	0.787	30	118.13	24.00	251.19	Yes
	LTE Band 25	1.915	30	91.75	24.50	281.84	Yes
	LTE Band 26	0.849	30	116.04	24.00	251.19	Yes
	LTE Band 66	1.800	30	94.12	24.00	251.19	Yes
	LTE Band 38	2.620	30	80.63	23.50	223.87	Yes
	LTE Band 41	2.690	30	79.76	23.50	223.87	Yes
	Bluetooth(Module 1)	2.48	5	2.72	8.50	7.08	Yes
	Bluetooth(Module 2)	2.480	5	2.72	5.60	3.63	Yes
	2.4G WIFI	2.462	5	2.73	22.00	158.49	Yes
	5.3G WIFI	5.320	5	1.47	20.00	100.00	Yes
	5.6G WIFI	5.710	5	1.39	18.50	70.79	Yes
	5.8G WIFI	5.825	5	1.37	18.00	63.10	Yes
Left Edge	GSM850	0.849	3	4.36	30.00	1000.00	Yes
	GSM1900	1.910	3	1.30	30.00	1000.00	Yes
	WCDMA Band 2	1.908	3	1.30	25.00	316.23	Yes
	WCDMA Band 4	1.753	3	1.41	24.50	281.84	Yes
	WCDMA Band 5	0.843	3	4.42	24.00	251.19	Yes
	LTE Band 2	1.910	3	1.30	24.50	281.84	Yes
	LTE Band 4	1.755	3	1.41	24.00	251.19	Yes
	LTE Band 5	0.849	3	4.36	24.00	251.19	Yes
	LTE Band 7	2.562	3	1.00	24.00	251.19	Yes
	LTE Band 12	0.716	3	5.86	24.00	251.19	Yes
	LTE Band 13	0.787	3	4.98	24.00	251.19	Yes
	LTE Band 25	1.915	3	1.30	24.50	281.84	Yes
	LTE Band 26	0.849	3	4.36	24.00	251.19	Yes
	LTE Band 66	1.800	3	1.38	24.00	251.19	Yes
	LTE Band 38	2.620	3	0.98	23.50	223.87	Yes
	LTE Band 41	2.690	3	0.95	23.50	223.87	Yes
	Bluetooth(Module 1)	2.48	66	370.33	8.50	7.08	Yes
	Bluetooth(Module 2)	2.480	66	370.33	5.60	3.63	Yes
	2.4G WIFI	2.462	66	370.98	22.00	158.49	Yes
	5.3G WIFI	5.320	66	308.17	20.00	100.00	Yes

	5.6G WIFI	5.710	66	302.97	18.50	70.79	Yes
	5.8G WIFI	5.825	66	301.52	18.00	63.10	Yes
Right Edge	GSM850	0.849	110	738.81	30.00	1000.00	Yes
	GSM1900	1.910	110	1013.67	30.00	1000.00	Yes
	WCDMA Band 2	1.908	110	1013.82	25.00	316.23	Yes
	WCDMA Band 4	1.753	110	1025.00	24.50	281.84	Yes
	WCDMA Band 5	0.843	110	735.73	24.00	251.19	Yes
	LTE Band 2	1.910	110	1013.65	24.50	281.84	Yes
	LTE Band 4	1.755	110	1024.85	24.00	251.19	Yes
	LTE Band 5	0.849	110	738.92	24.00	251.19	Yes
	LTE Band 7	2.562	110	975.73	24.00	251.19	Yes
	LTE Band 12	0.716	110	665.92	24.00	251.19	Yes
	LTE Band 13	0.787	110	705.49	24.00	251.19	Yes
	LTE Band 25	1.915	110	1013.31	24.50	281.84	Yes
	LTE Band 26	0.849	110	738.92	24.00	251.19	Yes
	LTE Band 66	1.800	110	1021.49	24.00	251.19	Yes
	LTE Band 38	2.620	110	972.90	23.50	223.87	Yes
	LTE Band 41	2.690	110	969.58	23.50	223.87	Yes
	Bluetooth(Module 1)	2.48	45	178.55	8.50	7.08	Yes
	Bluetooth(Module 2)	2.480	45	178.55	5.60	3.63	Yes
	2.4G WIFI	2.462	45	178.97	22.00	158.49	Yes
	5.3G WIFI	5.320	45	139.44	20.00	100.00	Yes
	5.6G WIFI	5.710	45	136.28	18.50	70.79	Yes
	5.8G WIFI	5.825	45	135.41	18.00	63.10	Yes
Top Edge	GSM850	0.849	170	1373.66	30.00	1000.00	No
	GSM1900	1.910	170	2266.12	30.00	1000.00	No
	WCDMA Band 2	1.908	170	2266.21	25.00	316.23	No
	WCDMA Band 4	1.753	170	2272.98	24.50	281.84	No
	WCDMA Band 5	0.843	170	1365.27	24.00	251.19	No
	LTE Band 2	1.910	170	2266.11	24.50	281.84	No
	LTE Band 4	1.755	170	2272.89	24.00	251.19	No
	LTE Band 5	0.849	170	1373.95	24.00	251.19	No
	LTE Band 7	2.562	170	2242.75	24.00	251.19	No
	LTE Band 12	0.716	170	1179.81	24.00	251.19	No
	LTE Band 13	0.787	170	1283.88	24.00	251.19	No
	LTE Band 25	1.915	170	2265.90	24.50	281.84	No
	LTE Band 26	0.849	170	1373.95	24.00	251.19	No
	LTE Band 66	1.800	170	2270.86	24.00	251.19	No
	LTE Band 38	2.620	170	2240.98	23.50	223.87	No

	LTE Band 41	2.690	170	2238.89	23.50	223.87	No
	Bluetooth(Module 1)	2.48	185	2637.72	8.50	7.08	No
	Bluetooth(Module 2)	2.480	185	2637.72	5.60	3.63	No
	2.4G WIFI	2.462	185	2638.04	22.00	158.49	No
	5.3G WIFI	5.320	185	2603.86	20.00	100.00	No
	5.6G WIFI	5.710	185	2600.74	18.50	70.79	No
	5.8G WIFI	5.825	185	2599.86	18.00	63.10	No
Bottom Edge	GSM850	0.849	50	240.26	30.00	1000.00	Yes
	GSM1900	1.910	50	236.09	30.00	1000.00	Yes
	WCDMA Band 2	1.908	50	236.17	25.00	316.23	Yes
	WCDMA Band 4	1.753	50	242.26	24.50	281.84	Yes
	WCDMA Band 5	0.843	50	240.10	24.00	251.19	Yes
	LTE Band 2	1.910	50	236.08	24.50	281.84	Yes
	LTE Band 4	1.755	50	242.17	24.00	251.19	Yes
	LTE Band 5	0.849	50	240.27	24.00	251.19	Yes
	LTE Band 7	2.562	50	216.11	24.00	251.19	Yes
	LTE Band 12	0.716	50	236.33	24.00	251.19	Yes
	LTE Band 13	0.787	50	238.51	24.00	251.19	Yes
	LTE Band 25	1.915	50	235.90	24.50	281.84	Yes
	LTE Band 26	0.849	50	240.27	24.00	251.19	Yes
	LTE Band 66	1.800	50	240.34	24.00	251.19	Yes
	LTE Band 38	2.620	50	214.65	23.50	223.87	Yes
	LTE Band 41	2.690	50	212.96	23.50	223.87	Yes
	Bluetooth(Module 1)	2.48	115	1066.44	8.50	7.08	Yes
	Bluetooth(Module 2)	2.480	115	1066.44	5.60	3.63	Yes
	2.4G WIFI	2.462	115	1067.38	22.00	158.49	Yes
	5.3G WIFI	5.320	115	972.99	20.00	100.00	Yes
	5.6G WIFI	5.710	115	964.75	18.50	70.79	Yes
	5.8G WIFI	5.825	115	962.44	18.00	63.10	Yes

Note:

1. Maximum power is the source-based time-average power and represents the maximum RF output power including tune-up tolerance among production units
2. Per KDB 447498 D04, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. Per KDB 447498 D04, standalone SAR test exclusion threshold is applied; If the distance of the antenna to the user is < 5mm, 5mm is used to determine SAR exclusion threshold
4. Per KDB 447498 D04, for separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive), the threshold Pth (mW) is given by Following:

$$P_{th}(mW) = \begin{cases} ERP_{20cm}(d/20cm)^x & d \leq 20cm \\ ERP_{20cm} & 20cm < d \leq 40cm \end{cases}$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20cm}\sqrt{f}} \right)$$

- a. f(GHz) is the RF channel transmit frequency in GHz
- b. d is the separation distance (cm), The result is rounded to one decimal place for comparison
- c. ERP_{20cm} are determined by:

$$ERP_{20cm}(mW) = f(x) = \begin{cases} 2040f & 0.3GHz \leq f < 1.5GHz \\ 3060 & 1.5GHz \leq f \leq 6GHz \end{cases}$$

5. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion.8. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4dB higher than those measured at the lowest data rate
6. Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
 - a. When KDB Publication 447498 D04 SAR test exclusion applies to the OFDM configuration.
 - b. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
7. Per KDB 248227 D01 SAR is not required for the following U-NII-1 and U-NII-2A bands conditions.
 - a. When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.
 - b. When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.

10 TEST RESULT

10.1WWAN Body SAR

Band	Antenna	Mode	Position	Dist. (mm)	Bandwi dth	Ch.	Freq. (MHz)	RB Size	RB offset	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Body																
GSM850	ANT0	GPRS 3Slots	Front Side	20	/	190	836.6	/	/	0.00	0.087	29.28	30.00	1.180	0.103	/
GSM850	ANT0	GPRS 3Slots	Back Side	20	/	190	836.6	/	/	0.16	0.089	29.28	30.00	1.180	0.105	/
GSM850	ANT0	GPRS 3Slots	Left Edge	20	/	190	836.6	/	/	-0.01	0.715	29.28	30.00	1.180	0.844	/
GSM850	ANT0	GPRS 3Slots	Right Edge	20	/	190	836.6	/	/	-0.10	0.023	29.28	30.00	1.180	0.027	/
GSM850	ANT0	GPRS 3Slots	Bottom Edge	20	/	190	836.6	/	/	0.14	0.020	29.28	30.00	1.180	0.024	/
GSM850	ANT0	GPRS 3Slots	Left Edge	20	/	128	824.2	/	/	-0.10	0.765	29.25	30.00	1.189	0.910	1#
GSM850	ANT0	GPRS 3Slots	Left Edge	20	/	251	848.8	/	/	-0.06	0.587	29.12	30.00	1.225	0.719	/
GSM1900	ANT0	GPRS 2Slots	Front Side	20	/	661	1880	/	/	-0.02	0.131	29.35	30.00	1.161	0.152	/
GSM1900	ANT0	GPRS 2Slots	Back Side	20	/	661	1880	/	/	0.04	0.081	29.35	30.00	1.161	0.094	/
GSM1900	ANT0	GPRS 2Slots	Left Edge	20	/	661	1880	/	/	0.18	0.491	29.35	30.00	1.161	0.570	/
GSM1900	ANT0	GPRS 2Slots	Right Edge	20	/	661	1880	/	/	-0.05	0.020	29.35	30.00	1.161	0.023	/
GSM1900	ANT0	GPRS 2Slots	Bottom Edge	20	/	661	1880	/	/	-0.18	0.019	29.35	30.00	1.161	0.022	/
GSM1900	ANT0	GPRS 2Slots	Left Edge	20	/	512	1850.2	/	/	0.18	0.675	28.75	30.00	1.334	0.900	2#
GSM1900	ANT0	GPRS 2Slots	Left Edge	20	/	810	1909.8	/	/	0.12	0.557	29.34	30.00	1.164	0.648	/
WCDMA B2	ANT0	RMC	Front Side	20	/	9400	1880	/	/	-0.11	0.253	24.47	25.00	1.130	0.286	/
WCDMA B2	ANT0	RMC	Back Side	20	/	9400	1880	/	/	0.12	0.105	24.47	25.00	1.130	0.119	/
WCDMA B2	ANT0	RMC	Left Edge	20	/	9400	1880	/	/	0.15	0.661	24.47	25.00	1.130	0.747	/
WCDMA B2	ANT0	RMC	Right Edge	20	/	9400	1880	/	/	0.15	0.022	24.47	25.00	1.130	0.025	/
WCDMA B2	ANT0	RMC	Bottom Edge	20	/	9400	1880	/	/	-0.05	0.016	24.47	25.00	1.130	0.018	/
WCDMA B2	ANT0	RMC	Left Edge	20	/	9262	1852.4	/	/	0.08	0.697	24.27	25.00	1.183	0.825	/
WCDMA B2	ANT0	RMC	Left Edge	20	/	9538	1907.6	/	/	0.03	0.830	24.44	25.00	1.138	0.945	3#
WCDMA B4	ANT0	RMC	Front Side	20	/	1412	1732.4	/	/	0.14	0.142	23.95	24.50	1.135	0.161	/
WCDMA B4	ANT0	RMC	Back Side	20	/	1412	1732.4	/	/	-0.14	0.083	23.95	24.50	1.135	0.094	/
WCDMA B4	ANT0	RMC	Left Edge	20	/	1412	1732.4	/	/	-0.05	0.512	23.95	24.50	1.135	0.581	/
WCDMA B4	ANT0	RMC	Right Edge	20	/	1412	1732.4	/	/	0.08	0.013	23.95	24.50	1.135	0.015	/
WCDMA B4	ANT0	RMC	Bottom Edge	20	/	1412	1732.4	/	/	0.05	0.025	23.95	24.50	1.135	0.028	/
WCDMA B4	ANT0	RMC	Left Edge	20	/	1312	1712.4	/	/	0.08	0.762	23.93	24.50	1.140	0.869	4#
WCDMA B4	ANT0	RMC	Left Edge	20	/	1513	1752.6	/	/	0.06	0.431	23.93	24.50	1.140	0.491	/
WCDMA B5	ANT0	RMC	Front Side	20	/	4183	836.6	/	/	-0.02	0.012	23.74	24.00	1.062	0.013	/
WCDMA B5	ANT0	RMC	Back Side	20	/	4183	836.6	/	/	-0.14	0.016	23.74	24.00	1.062	0.017	/
WCDMA B5	ANT0	RMC	Left Edge	20	/	4183	836.6	/	/	0.16	0.298	23.74	24.00	1.062	0.316	/

WCDMA B5	ANT0	RMC	Right Edge	20	/	4183	836.6	/	/	0.06	0.015	23.74	24.00	1.062	0.016	/
WCDMA B5	ANT0	RMC	Bottom Edge	20	/	4183	836.6	/	/	-0.06	0.021	23.74	24.00	1.062	0.022	/
WCDMA B5	ANT0	RMC	Left Edge	20	/	4132	826.4	/	/	-0.14	0.260	23.74	24.00	1.062	0.276	/
WCDMA B5	ANT0	RMC	Left Edge	20	/	4233	846.6	/	/	0.06	0.337	23.51	24.00	1.119	0.377	5#
LTE B2	ANT0	QPSK	Front Side	20	20	18900	1880	1	0	-0.17	0.203	23.89	24.50	1.151	0.234	/
LTE B2	ANT0	QPSK	Back Side	20	20	18900	1880	1	0	-0.09	0.112	23.89	24.50	1.151	0.129	/
LTE B2	ANT0	QPSK	Left Edge	20	20	18900	1880	1	0	0.13	0.863	23.89	24.50	1.151	0.993	6#
LTE B2	ANT0	QPSK	Right Edge	20	20	18900	1880	1	0	-0.05	0.022	23.89	24.50	1.151	0.025	/
LTE B2	ANT0	QPSK	Bottom Edge	20	20	18900	1880	1	0	-0.09	0.025	23.89	24.50	1.151	0.029	/
LTE B2	ANT0	QPSK	Front Side	20	20	18900	1880	50	0	0.05	0.172	23.27	23.50	1.054	0.181	/
LTE B2	ANT0	QPSK	Back Side	20	20	18900	1880	50	0	0.03	0.105	23.27	23.50	1.054	0.111	/
LTE B2	ANT0	QPSK	Left Edge	20	20	18900	1880	50	0	0.02	0.707	23.27	23.50	1.054	0.745	/
LTE B2	ANT0	QPSK	Right Edge	20	20	18900	1880	50	0	0.11	0.016	23.27	23.50	1.054	0.017	/
LTE B2	ANT0	QPSK	Bottom Edge	20	20	18900	1880	50	0	0.05	0.012	23.27	23.50	1.054	0.013	/
LTE B2	ANT0	QPSK	Left Edge	20	20	18700	1860	1	49	-0.18	0.647	23.79	24.50	1.178	0.762	/
LTE B2	ANT0	QPSK	Left Edge	20	20	19100	1900	1	49	-0.10	0.691	23.88	24.50	1.153	0.797	/
LTE B2	ANT0	QPSK	Left Edge	20	20	18700	1860	50	25	0.17	0.535	23.15	24.50	1.365	0.730	/
LTE B2	ANT0	QPSK	Left Edge	20	20	19100	1900	50	25	0.17	0.585	23.18	24.50	1.355	0.793	/
LTE B2	ANT0	QPSK	Left Edge	20	20	18900	1880	100	0	0.18	0.559	23.26	23.50	1.057	0.591	/
LTE B4	ANT0	QPSK	Front Side	20	20	20175	1732.5	1	0	-0.18	0.114	23.79	24.00	1.050	0.120	/
LTE B4	ANT0	QPSK	Back Side	20	20	20175	1732.5	1	0	0.13	0.022	23.79	24.00	1.050	0.023	/
LTE B4	ANT0	QPSK	Left Edge	20	20	20175	1732.5	1	0	-0.14	0.337	23.79	24.00	1.050	0.354	/
LTE B4	ANT0	QPSK	Right Edge	20	20	20175	1732.5	1	0	-0.07	0.018	23.79	24.00	1.050	0.019	/
LTE B4	ANT0	QPSK	Bottom Edge	20	20	20175	1732.5	1	0	0.08	0.015	23.79	24.00	1.050	0.016	/
LTE B4	ANT0	QPSK	Front Side	20	20	20175	1732.5	50	0	0.17	0.090	22.57	23.00	1.104	0.099	/
LTE B4	ANT0	QPSK	Back Side	20	20	20175	1732.5	50	0	-0.10	0.013	22.57	23.00	1.104	0.014	/
LTE B4	ANT0	QPSK	Left Edge	20	20	20175	1732.5	50	0	-0.04	0.234	22.57	23.00	1.104	0.258	/
LTE B4	ANT0	QPSK	Right Edge	20	20	20175	1732.5	50	0	0.15	0.021	22.57	23.00	1.104	0.023	/
LTE B4	ANT0	QPSK	Bottom Edge	20	20	20175	1732.5	50	0	-0.17	0.013	22.57	23.00	1.104	0.014	/
LTE B4	ANT0	QPSK	Left Edge	20	20	20050	1720	1	49	0.05	0.376	23.22	24.00	1.197	0.450	7#
LTE B4	ANT0	QPSK	Left Edge	20	20	20300	1745	1	49	-0.11	0.312	23.72	24.00	1.067	0.333	/
LTE B4	ANT0	QPSK	Left Edge	20	20	20050	1720	50	25	0.08	0.255	22.49	23.00	1.125	0.287	/
LTE B4	ANT0	QPSK	Left Edge	20	20	20300	1745	50	25	-0.02	0.204	22.56	23.00	1.107	0.226	/
LTE B4	ANT0	QPSK	Left Edge	20	20	20175	1732.5	100	0	-0.10	0.222	22.44	23.00	1.138	0.253	/
LTE B5	ANT0	QPSK	Front Side	20	10	20525	836.5	1	0	-0.15	0.024	23.52	24.00	1.117	0.027	/
LTE B5	ANT0	QPSK	Back Side	20	10	20525	836.5	1	0	-0.09	0.025	23.52	24.00	1.117	0.028	/
LTE B5	ANT0	QPSK	Left Edge	20	10	20525	836.5	1	0	-0.04	0.268	23.52	24.00	1.117	0.299	/
LTE B5	ANT0	QPSK	Right Edge	20	10	20525	836.5	1	0	0.11	0.010	23.52	24.00	1.117	0.011	/
LTE B5	ANT0	QPSK	Bottom Edge	20	10	20525	836.5	1	0	-0.01	0.010	23.52	24.00	1.117	0.011	/

LTE B5	ANT0	QPSK	Front Side	20	10	20525	836.5	25	0	0.05	0.014	22.85	23.00	1.035	0.014	/
LTE B5	ANT0	QPSK	Back Side	20	10	20525	836.5	25	0	0.19	0.014	22.85	23.00	1.035	0.014	/
LTE B5	ANT0	QPSK	Left Edge	20	10	20525	836.5	25	0	0.16	0.234	22.85	23.00	1.035	0.242	/
LTE B5	ANT0	QPSK	Right Edge	20	10	20525	836.5	25	0	0.09	0.017	22.85	23.00	1.035	0.018	/
LTE B5	ANT0	QPSK	Bottom Edge	20	10	20525	836.5	25	0	-0.08	0.012	22.85	23.00	1.035	0.012	/
LTE B5	ANT0	QPSK	Left Edge	20	10	20450	829	1	0	0.18	0.261	23.23	24.00	1.194	0.312	/
LTE B5	ANT0	QPSK	Left Edge	20	10	20600	844	1	24	0.16	0.292	23.41	24.00	1.146	0.335	8#
LTE B5	ANT0	QPSK	Left Edge	20	10	20450	829	25	0	-0.19	0.219	22.81	23.00	1.045	0.229	/
LTE B5	ANT0	QPSK	Left Edge	20	10	20600	844	25	0	-0.14	0.229	22.26	23.00	1.186	0.272	/
LTE B7	ANT0	QPSK	Front Side	20	20	21100	2535	1	0	-0.11	0.283	23.49	24.00	1.125	0.318	/
LTE B7	ANT0	QPSK	Back Side	20	20	21100	2535	1	0	0.14	0.042	23.49	24.00	1.125	0.047	/
LTE B7	ANT0	QPSK	Left Edge	20	20	21100	2535	1	0	0.06	0.464	23.49	24.00	1.125	0.522	9#
LTE B7	ANT0	QPSK	Right Edge	20	20	21100	2535	1	0	0.17	0.010	23.49	24.00	1.125	0.011	/
LTE B7	ANT0	QPSK	Bottom Edge	20	20	21100	2535	1	0	0.16	0.021	23.49	24.00	1.125	0.024	/
LTE B7	ANT0	QPSK	Front Side	20	20	21100	2535	50	0	0.04	0.200	22.36	23.00	1.159	0.232	/
LTE B7	ANT0	QPSK	Back Side	20	20	21100	2535	50	0	-0.01	0.039	22.36	23.00	1.159	0.045	/
LTE B7	ANT0	QPSK	Left Edge	20	20	21100	2535	50	0	0.05	0.352	22.36	23.00	1.159	0.408	/
LTE B7	ANT0	QPSK	Right Edge	20	20	21100	2535	50	0	0.08	0.010	22.36	23.00	1.159	0.012	/
LTE B7	ANT0	QPSK	Bottom Edge	20	20	21100	2535	50	0	0.11	0.016	22.36	23.00	1.159	0.019	/
LTE B7	ANT0	QPSK	Left Edge	20	20	20850	2510	1	0	0.12	0.415	23.02	24.00	1.253	0.520	/
LTE B7	ANT0	QPSK	Left Edge	20	20	21350	2560	1	0	-0.07	0.434	23.31	24.00	1.172	0.509	/
LTE B7	ANT0	QPSK	Left Edge	20	20	20850	2510	50	0	0.02	0.355	22.18	23.00	1.208	0.429	/
LTE B7	ANT0	QPSK	Left Edge	20	20	21350	2560	50	0	-0.11	0.349	22.11	23.00	1.227	0.428	/
LTE B12	ANT0	QPSK	Front Side	20	10	23095	707.5	1	0	-0.15	0.011	23.72	24.00	1.067	0.012	/
LTE B12	ANT0	QPSK	Back Side	20	10	23095	707.5	1	0	-0.13	0.021	23.72	24.00	1.067	0.022	/
LTE B12	ANT0	QPSK	Left Edge	20	10	23095	707.5	1	0	0.14	0.072	23.72	24.00	1.067	0.077	/
LTE B12	ANT0	QPSK	Right Edge	20	10	23095	707.5	1	0	0.16	0.016	23.72	24.00	1.067	0.017	/
LTE B12	ANT0	QPSK	Bottom Edge	20	10	23095	707.5	1	0	0.13	0.015	23.72	24.00	1.067	0.016	/
LTE B12	ANT0	QPSK	Front Side	20	10	23095	707.5	25	0	0.02	0.016	22.59	23.00	1.099	0.018	/
LTE B12	ANT0	QPSK	Back Side	20	10	23095	707.5	25	0	-0.01	0.014	22.59	23.00	1.099	0.015	/
LTE B12	ANT0	QPSK	Left Edge	20	10	23095	707.5	25	0	-0.11	0.066	22.59	23.00	1.099	0.073	/
LTE B12	ANT0	QPSK	Right Edge	20	10	23095	707.5	25	0	-0.19	0.021	22.59	23.00	1.099	0.023	/
LTE B12	ANT0	QPSK	Bottom Edge	20	10	23095	707.5	25	0	-0.02	0.016	22.59	23.00	1.099	0.018	/
LTE B12	ANT0	QPSK	Left Edge	20	10	23060	704	1	0	-0.15	0.083	23.04	24.00	1.247	0.104	10#
LTE B12	ANT0	QPSK	Left Edge	20	10	23130	711	1	24	0.14	0.081	23.72	24.00	1.067	0.086	/
LTE B12	ANT0	QPSK	Left Edge	20	10	23060	704	25	25	0.13	0.063	22.27	23.00	1.183	0.075	/
LTE B12	ANT0	QPSK	Left Edge	20	10	23130	711	25	12	-0.14	0.066	22.58	23.00	1.102	0.073	/
LTE B13	ANT0	QPSK	Front Side	20	10	23230	782	1	0	-0.03	0.013	23.36	24.00	1.159	0.015	/
LTE B13	ANT0	QPSK	Back Side	20	10	23230	782	1	0	-0.10	0.010	23.36	24.00	1.159	0.012	/

LTE B13	ANT0	QPSK	Left Edge	20	10	23230	782	1	0	0.11	0.159	23.36	24.00	1.159	0.184	11#
LTE B13	ANT0	QPSK	Right Edge	20	10	23230	782	1	0	0.11	0.025	23.36	24.00	1.159	0.029	/
LTE B13	ANT0	QPSK	Bottom Edge	20	10	23230	782	1	0	-0.16	0.023	23.36	24.00	1.159	0.027	/
LTE B13	ANT0	QPSK	Front Side	20	10	23230	782	25	0	-0.10	0.011	22.23	23.00	1.194	0.013	/
LTE B13	ANT0	QPSK	Back Side	20	10	23230	782	25	0	0.06	0.013	22.23	23.00	1.194	0.016	/
LTE B13	ANT0	QPSK	Left Edge	20	10	23230	782	25	0	-0.01	0.122	22.23	23.00	1.194	0.146	/
LTE B13	ANT0	QPSK	Right Edge	20	10	23230	782	25	0	0.06	0.011	22.23	23.00	1.194	0.013	/
LTE B13	ANT0	QPSK	Bottom Edge	20	10	23230	782	25	0	0.05	0.016	22.23	23.00	1.194	0.019	/
LTE B25	ANT0	QPSK	Front Side	20	20	26365	1882.5	1	0	-0.18	0.203	23.88	24.50	1.153	0.234	/
LTE B25	ANT0	QPSK	Back Side	20	20	26365	1882.5	1	0	-0.03	0.112	23.88	24.50	1.153	0.129	/
LTE B25	ANT0	QPSK	Left Edge	20	20	26365	1882.5	1	0	0.13	0.823	23.88	24.50	1.153	0.949	12#
LTE B25	ANT0	QPSK	Right Edge	20	20	26365	1882.5	1	0	0.12	0.024	23.88	24.50	1.153	0.028	/
LTE B25	ANT0	QPSK	Bottom Edge	20	20	26365	1882.5	1	0	-0.16	0.013	23.88	24.50	1.153	0.015	/
LTE B25	ANT0	QPSK	Front Side	20	20	26365	1882.5	50	25	-0.11	0.173	22.75	23.50	1.189	0.206	/
LTE B25	ANT0	QPSK	Back Side	20	20	26365	1882.5	50	25	-0.02	0.101	22.75	23.50	1.189	0.120	/
LTE B25	ANT0	QPSK	Left Edge	20	20	26365	1882.5	50	25	0.16	0.632	22.75	23.50	1.189	0.751	/
LTE B25	ANT0	QPSK	Right Edge	20	20	26365	1882.5	50	25	0.03	0.022	22.75	23.50	1.189	0.026	/
LTE B25	ANT0	QPSK	Bottom Edge	20	20	26365	1882.5	50	25	0.02	0.025	22.75	23.50	1.189	0.030	/
LTE B25	ANT0	QPSK	Left Edge	20	20	26140	1860	1	0	0.04	0.720	23.46	24.50	1.271	0.915	/
LTE B25	ANT0	QPSK	Left Edge	20	20	26590	1905	1	0	-0.13	0.732	23.57	24.50	1.239	0.907	/
LTE B25	ANT0	QPSK	Left Edge	20	20	26140	1860	50	0	-0.07	0.562	22.65	23.50	1.216	0.683	/
LTE B25	ANT0	QPSK	Left Edge	20	20	26590	1905	50	0	0.12	0.639	22.72	23.50	1.197	0.765	/
LTE B25	ANT0	QPSK	Left Edge	20	20	26365	1882.5	100	0	0.12	0.647	22.65	23.50	1.216	0.787	/
LTE B26	ANT0	QPSK	Front Side	20	15	26865	831.5	1	37	-0.11	0.014	23.45	24.00	1.135	0.016	/
LTE B26	ANT0	QPSK	Back Side	20	15	26865	831.5	1	37	0.03	0.017	23.45	24.00	1.135	0.019	/
LTE B26	ANT0	QPSK	Left Edge	20	15	26865	831.5	1	37	0.09	0.271	23.45	24.00	1.135	0.308	/
LTE B26	ANT0	QPSK	Right Edge	20	15	26865	831.5	1	37	0.07	0.025	23.45	24.00	1.135	0.028	/
LTE B26	ANT0	QPSK	Bottom Edge	20	15	26865	831.5	1	37	0.07	0.012	23.45	24.00	1.135	0.014	/
LTE B26	ANT0	QPSK	Front Side	20	15	26865	831.5	36	19	-0.09	0.016	22.25	23.00	1.189	0.019	/
LTE B26	ANT0	QPSK	Back Side	20	15	26865	831.5	36	19	-0.10	0.011	22.25	23.00	1.189	0.013	/
LTE B26	ANT0	QPSK	Left Edge	20	15	26865	831.5	36	19	-0.13	0.216	22.25	23.00	1.189	0.257	/
LTE B26	ANT0	QPSK	Right Edge	20	15	26865	831.5	36	19	-0.09	0.012	22.25	23.00	1.189	0.014	/
LTE B26	ANT0	QPSK	Bottom Edge	20	15	26865	831.5	36	19	-0.03	0.012	22.25	23.00	1.189	0.014	/
LTE B26	ANT0	QPSK	Left Edge	20	15	26765	821.5	1	37	0.15	0.241	23.34	24.00	1.164	0.281	/
LTE B26	ANT0	QPSK	Left Edge	20	15	26965	841.5	1	37	0.00	0.293	23.10	24.00	1.230	0.360	13#
LTE B26	ANT0	QPSK	Left Edge	20	15	26765	821.5	36	0	-0.14	0.194	22.24	23.00	1.191	0.231	/
LTE B26	ANT0	QPSK	Left Edge	20	15	26965	841.5	36	0	0.06	0.233	22.05	23.00	1.245	0.290	/
LTE B66	ANT0	QPSK	Front Side	20	20	132322	1745	1	0	0.06	0.064	23.47	24.00	1.130	0.072	/
LTE B66	ANT0	QPSK	Back Side	20	20	132322	1745	1	0	0.13	0.023	23.47	24.00	1.130	0.026	/

LTE B66	ANT0	QPSK	Left Edge	20	20	132322	1745	1	0	-0.14	0.232	23.47	24.00	1.130	0.262	/
LTE B66	ANT0	QPSK	Right Edge	20	20	132322	1745	1	0	-0.19	0.018	23.47	24.00	1.130	0.020	/
LTE B66	ANT0	QPSK	Bottom Edge	20	20	132322	1745	1	0	0.08	0.025	23.47	24.00	1.130	0.028	/
LTE B66	ANT0	QPSK	Front Side	20	20	132322	1745	50	25	-0.09	0.050	22.26	23.00	1.186	0.059	/
LTE B66	ANT0	QPSK	Back Side	20	20	132322	1745	50	25	0.08	0.013	22.26	23.00	1.186	0.015	/
LTE B66	ANT0	QPSK	Left Edge	20	20	132322	1745	50	25	-0.13	0.204	22.26	23.00	1.186	0.242	/
LTE B66	ANT0	QPSK	Right Edge	20	20	132322	1745	50	25	-0.04	0.024	22.26	23.00	1.186	0.028	/
LTE B66	ANT0	QPSK	Bottom Edge	20	20	132322	1745	50	25	0.13	0.019	22.26	23.00	1.186	0.023	/
LTE B66	ANT0	QPSK	Left Edge	20	20	132072	1720	1	49	0.19	0.359	23.34	24.00	1.164	0.418	14#
LTE B66	ANT0	QPSK	Left Edge	20	20	132572	1770	1	49	-0.12	0.302	23.10	24.00	1.230	0.371	/
LTE B66	ANT0	QPSK	Left Edge	20	20	132072	1720	50	0	-0.09	0.292	22.24	23.00	1.191	0.348	/
LTE B66	ANT0	QPSK	Left Edge	20	20	132572	1770	50	0	0.08	0.272	22.05	23.00	1.245	0.339	/
LTE B66	ANT0	QPSK	Left Edge	20	20	132322	1745	100	0	0.13	0.222	22.19	23.00	1.205	0.268	/
LTE B38	ANT0	QPSK	Front Side	20	20	38000	2595	1	99	-0.07	0.147	22.91	23.50	1.146	0.168	/
LTE B38	ANT0	QPSK	Back Side	20	20	38000	2595	1	99	0.06	0.012	22.91	23.50	1.146	0.014	/
LTE B38	ANT0	QPSK	Left Edge	20	20	38000	2595	1	99	0.07	0.275	22.91	23.50	1.146	0.315	/
LTE B38	ANT0	QPSK	Right Edge	20	20	38000	2595	1	99	-0.11	0.012	22.91	23.50	1.146	0.014	/
LTE B38	ANT0	QPSK	Bottom Edge	20	20	38000	2595	1	99	0.03	0.017	22.91	23.50	1.146	0.019	/
LTE B38	ANT0	QPSK	Front Side	20	20	38000	2595	50	0	0.16	0.119	21.69	22.50	1.205	0.143	/
LTE B38	ANT0	QPSK	Back Side	20	20	38000	2595	50	0	0.13	0.013	21.69	22.50	1.205	0.016	/
LTE B38	ANT0	QPSK	Left Edge	20	20	38000	2595	50	0	-0.09	0.230	21.69	22.50	1.205	0.277	/
LTE B38	ANT0	QPSK	Right Edge	20	20	38000	2595	50	0	0.03	0.025	21.69	22.50	1.205	0.030	/
LTE B38	ANT0	QPSK	Bottom Edge	20	20	38000	2595	50	0	0.01	0.011	21.69	22.50	1.205	0.013	/
LTE B38	ANT0	QPSK	Left Edge	20	20	37850	2580	1	0	0.15	0.270	22.65	23.50	1.216	0.328	/
LTE B38	ANT0	QPSK	Left Edge	20	20	38150	2610	1	0	0.02	0.282	22.58	23.50	1.236	0.349	15#
LTE B38	ANT0	QPSK	Left Edge	20	20	37850	2580	50	0	-0.19	0.230	21.35	22.50	1.303	0.300	/
LTE B38	ANT0	QPSK	Left Edge	20	20	38150	2610	50	25	-0.16	0.235	21.57	22.50	1.239	0.291	/
LTE B41	ANT0	QPSK	Front Side	20	20	40620	2593	1	0	0.01	0.025	22.93	23.50	1.140	0.029	/
LTE B41	ANT0	QPSK	Back Side	20	20	40620	2593	1	0	0.18	0.020	22.93	23.50	1.140	0.023	/
LTE B41	ANT0	QPSK	Left Edge	20	20	40620	2593	1	0	0.04	0.283	22.93	23.50	1.140	0.323	16#
LTE B41	ANT0	QPSK	Right Edge	20	20	40620	2593	1	0	0.18	0.013	22.93	23.50	1.140	0.015	/
LTE B41	ANT0	QPSK	Bottom Edge	20	20	40620	2593	1	0	-0.10	0.010	22.93	23.50	1.140	0.011	/
LTE B41	ANT0	QPSK	Front Side	20	20	40620	2593	50	25	0.12	0.140	21.75	22.50	1.189	0.166	/
LTE B41	ANT0	QPSK	Back Side	20	20	40620	2593	50	25	0.07	0.022	21.75	22.50	1.189	0.026	/
LTE B41	ANT0	QPSK	Left Edge	20	20	40620	2593	50	25	0.03	0.248	21.75	22.50	1.189	0.295	/
LTE B41	ANT0	QPSK	Right Edge	20	20	40620	2593	50	25	-0.07	0.011	21.75	22.50	1.189	0.013	/
LTE B41	ANT0	QPSK	Bottom Edge	20	20	40620	2593	50	25	-0.07	0.010	21.75	22.50	1.189	0.012	/
LTE B41	ANT0	QPSK	Left Edge	20	20	39750	2506	1	0	-0.11	0.225	22.67	23.50	1.211	0.272	/
LTE B41	ANT0	QPSK	Left Edge	20	20	41490	2680	1	0	-0.05	0.261	22.60	23.50	1.230	0.321	/

LTE B41	ANT0	QPSK	Left Edge	20	20	40185	2549.5	1	0	-0.04	0.241	22.33	23.50	1.309	0.315	/
LTE B41	ANT0	QPSK	Left Edge	20	20	40155	2546.5	1	0	0.03	0.258	22.83	23.50	1.167	0.301	/
LTE B41	ANT0	QPSK	Left Edge	20	20	39750	2506	50	0	-0.05	0.221	21.33	22.50	1.309	0.289	/
LTE B41	ANT0	QPSK	Left Edge	20	20	41490	2680	50	0	0.04	0.215	21.60	22.50	1.230	0.264	/
LTE B41	ANT0	QPSK	Left Edge	20	20	40185	2549.5	50	0	-0.15	0.211	21.26	22.50	1.330	0.281	/
LTE B41	ANT0	QPSK	Left Edge	20	20	40155	2546.5	50	25	0.08	0.216	21.71	22.50	1.199	0.259	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.

10.2 Bluetooth&WLAN Body SAR

Band	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Body															
Bluetooth(Module 1)	ANT1	2DH5	Front Side	20	39	2441	-0.04	0.018	8.03	8.50	1.114	76.610	1.305	0.026	/
Bluetooth(Module 1)	ANT1	2DH5	Back Side	20	39	2441	0.03	0.042	8.03	8.50	1.114	76.610	1.305	0.061	17#
Bluetooth(Module 1)	ANT1	2DH5	Left Edge	20	39	2441	-0.16	0.021	8.03	8.50	1.114	76.610	1.305	0.031	/
Bluetooth(Module 1)	ANT1	2DH5	Right Edge	20	39	2441	0.18	0.020	8.03	8.50	1.114	76.610	1.305	0.029	/
Bluetooth(Module 1)	ANT1	2DH5	Bottom Edge	20	39	2441	-0.13	0.011	8.03	8.50	1.114	76.610	1.305	0.016	/
Bluetooth(Module 1)	ANT1	2DH5	Back Side	20	0	2402	0.07	0.035	7.90	8.50	1.148	76.610	1.305	0.052	/
Bluetooth(Module 1)	ANT1	2DH5	Back Side	20	78	2480	0.12	0.024	5.78	8.50	1.871	76.610	1.305	0.059	/
Bluetooth(Module 1)	ANT1	BLE 1M	Front Side	20	39	2441	0.08	0.019	8.04	8.50	1.112	64.430	1.552	0.033	/
Bluetooth(Module 1)	ANT1	BLE 1M	Back Side	20	39	2441	0.03	0.033	8.04	8.50	1.112	64.430	1.552	0.057	/
Bluetooth(Module 1)	ANT1	BLE 1M	Left Edge	20	39	2441	0.15	0.022	8.04	8.50	1.112	64.430	1.552	0.038	/
Bluetooth(Module 1)	ANT1	BLE 1M	Right Edge	20	39	2441	0.04	0.021	8.04	8.50	1.112	64.430	1.552	0.036	/
Bluetooth(Module 1)	ANT1	BLE 1M	Bottom Edge	20	39	2441	0.08	0.010	8.04	8.50	1.112	64.430	1.552	0.017	/
Bluetooth(Module 1)	ANT1	BLE 1M	Back Side	20	0	2402	-0.10	0.029	6.94	8.00	1.276	64.430	1.552	0.057	/
Bluetooth(Module 1)	ANT1	BLE 1M	Back Side	20	78	2480	0.14	0.034	8.01	8.50	1.119	64.430	1.552	0.059	/
Bluetooth(Module 2)	ANT2	BLE 1M	Front Side	20	0	2402	0.10	0.009	5.60	6.00	1.096	90.830	1.101	0.011	/
Bluetooth(Module 2)	ANT2	BLE 1M	Back Side	20	0	2402	-0.14	0.025	5.60	6.00	1.096	90.830	1.101	0.030	/
Bluetooth(Module 2)	ANT2	BLE 1M	Left Edge	20	0	2402	0.14	0.008	5.60	6.00	1.096	90.830	1.101	0.010	/
Bluetooth(Module 2)	ANT2	BLE 1M	Right Edge	20	0	2402	0.00	0.008	5.60	6.00	1.096	90.830	1.101	0.010	/
Bluetooth(Module 2)	ANT2	BLE 1M	Bottom Edge	20	0	2402	-0.19	0.005	5.60	6.00	1.096	90.830	1.101	0.006	/
Bluetooth(Module 2)	ANT2	BLE 1M	Back Side	20	39	2441	-0.18	0.021	4.36	5.00	1.159	90.830	1.101	0.027	/
Bluetooth(Module 2)	ANT2	BLE 1M	Back Side	20	78	2480	-0.01	0.018	2.60	4.00	1.380	90.830	1.101	0.027	/
2.4G WIFI	ANT1	802.11b	Front Side	20	6	2437	-0.18	0.034	22.45	22.00	0.902	99.120	1.009	0.031	/
2.4G WIFI	ANT1	802.11b	Back Side	20	6	2437	-0.19	0.045	22.45	22.00	0.902	99.120	1.009	0.041	18#
2.4G WIFI	ANT1	802.11b	Left Edge	20	6	2437	-0.12	0.030	22.45	22.00	0.902	99.120	1.009	0.027	/
2.4G WIFI	ANT1	802.11b	Right Edge	20	6	2437	-0.14	0.024	22.45	22.00	0.902	99.120	1.009	0.022	/
2.4G WIFI	ANT1	802.11b	Bottom Edge	20	6	2437	0.13	0.016	22.45	22.00	0.902	99.120	1.009	0.015	/
2.4G WIFI	ANT1	802.11b	Back Side	20	2	2417	-0.04	0.033	21.30	22.00	1.175	99.120	1.009	0.039	/
2.4G WIFI	ANT1	802.11b	Back Side	20	10	2457	0.06	0.034	21.47	22.00	1.130	99.120	1.009	0.039	/
5.3G WIFI	ANT1	802.11n20	Front Side	20	60	5300	-0.17	0.028	19.87	20.00	1.030	99.630	1.004	0.029	/
5.3G WIFI	ANT1	802.11n20	Back Side	20	60	5300	0.03	0.048	19.87	20.00	1.030	99.630	1.004	0.050	19#
5.3G WIFI	ANT1	802.11n20	Left Edge	20	60	5300	-0.07	0.021	19.87	20.00	1.030	99.630	1.004	0.022	/
5.3G WIFI	ANT1	802.11n20	Right Edge	20	60	5300	0.08	0.015	19.87	20.00	1.030	99.630	1.004	0.016	/
5.3G WIFI	ANT1	802.11n20	Bottom Edge	20	60	5300	0.03	0.011	19.87	20.00	1.030	99.630	1.004	0.011	/

5.3G WIFI	ANT1	802.11n20	Back Side	20	52	5260	0.05	0.041	19.29	20.00	1.178	99.630	1.004	0.048	/
5.3G WIFI	ANT1	802.11n20	Back Side	20	64	5320	-0.05	0.037	17.03	18.00	1.250	99.630	1.004	0.046	/
5.6G WIFI	ANT1	802.11n40	Front Side	20	118	5590	0.00	0.021	17.87	18.50	1.156	99.230	1.008	0.024	/
5.6G WIFI	ANT1	802.11n40	Back Side	20	118	5590	0.15	0.039	17.87	18.50	1.156	99.230	1.008	0.045	20#
5.6G WIFI	ANT1	802.11n40	Left Edge	20	118	5590	-0.07	0.012	17.87	18.50	1.156	99.230	1.008	0.014	/
5.6G WIFI	ANT1	802.11n40	Right Edge	20	118	5590	0.11	0.014	17.87	18.50	1.156	99.230	1.008	0.016	/
5.6G WIFI	ANT1	802.11n40	Bottom Edge	20	118	5590	-0.05	0.007	17.87	18.50	1.156	99.230	1.008	0.008	/
5.6G WIFI	ANT1	802.11n40	Back Side	20	134	5670	0.05	0.037	17.75	18.50	1.189	99.230	1.008	0.044	/
5.6G WIFI	ANT1	802.11n40	Back Side	20	142	5710	0.18	0.035	17.60	18.50	1.230	99.230	1.008	0.043	/
5.8G WIFI	ANT1	802.11n40	Front Side	20	151	5755	-0.15	0.015	17.34	18.00	1.164	99.230	1.008	0.018	/
5.8G WIFI	ANT1	802.11n40	Back Side	20	151	5755	0.05	0.023	17.34	18.00	1.164	99.230	1.008	0.027	21#
5.8G WIFI	ANT1	802.11n40	Left Edge	20	151	5755	-0.05	0.012	17.34	18.00	1.164	99.230	1.008	0.014	/
5.8G WIFI	ANT1	802.11n40	Right Edge	20	151	5755	-0.11	0.011	17.34	18.00	1.164	99.230	1.008	0.013	/
5.8G WIFI	ANT1	802.11n40	Bottom Edge	20	151	5755	0.17	0.004	17.34	18.00	1.164	99.230	1.008	0.005	/
5.8G WIFI	ANT1	802.11n40	Back Side	20	159	5795	-0.15	0.022	17.28	18.00	1.180	99.230	1.008	0.026	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are ≤ 1.45 W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is ≤ 1.10 , the highest SAR configuration for either head or body tissue-equivalent medium may be used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

1. When the highest measured SAR is < 0.80 W/kg, repeated measurement is not required.
2. When the highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3. If the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 , or when the original or repeated measurement is ≥ 1.45 W/kg, perform a second repeated measurement.
4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 , and the original, first or second repeated measurement is ≥ 1.5 W/kg, perform a third repeated measurement.

Frequency Band (MHz)	Wireless Band	Antenna	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1907.6	WCDMA B2	ANT0	Body	Left Edge	0.830	Yes	0.803	1.03
1880	LTE B2	ANT0	Body	Left Edge	0.863	Yes	0.841	1.03
1882.5	LTE B25	ANT0	Body	Left Edge	0.823	Yes	0.808	1.02
Note: The ratio of largest to smallest SAR for the original and first repeated measurements is < 1.20 , the second repeated measurement is not required.								

12 SIMULTANEOUS TRANSMISSION

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR 1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR 1g 1.6 W/kg), SAR test exclusion is determined by the SAR to Peak Location Ratio (SPLSR).

According KDB 447498 D04, simultaneous transmission:

- a) $SPLSR = (SAR1 + SAR2)^{1.5} / R_i$ (min. separation distance, mm), and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
SAR1 is the highest reported or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition.
SAR2 is the highest reported or estimated SAR for the second of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition as the first.
- b) If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
- c) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.

12.1 Simultaneous Transmission Mode Considerations

No.	Simultaneous Tx Combination	Body
1	WWAN + Bluetooth(Module 1)	Yes
2	WWAN + 2.4GWIF	Yes
3	WWAN + 5G WIFI + Bluetooth(Module 2)	Yes

Note:

1. WiFi 2.4G and Bluetooth share the same antenna, and can't transmit simultaneously.
2. When stand-alone SAR is not required for a side of antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
3. The maximum SAR summation is calculated based on the same configuration and test position.
4. The simultaneous transmission combinations of the more antennas contain combinations of less antennas, so only the worst simultaneous transmission combinations is shown in this report.

12.2 Body Simultaneous Total Exposure Ratio Evaluation

Band	Position	Dist.(mm)	Stand alone SAR					SUM SAR		
			1	2	3	4	5	1+2	1+4	1+3+5
			WWAN	2.4G WIFI	5G WIFI Max	Bluetooth (Module 1)	Bluetooth (Module 2)			
GSM850	Front Side	20	0.091	0.031	0.029	0.033	0.011	0.122	0.124	0.131
	Back Side	20	0.093	0.041	0.050	0.061	0.030	0.134	0.154	0.173
	Left Edge	20	0.805	0.027	0.022	0.038	0.010	0.832	0.843	0.837
	Right Edge	20	0.024	0.022	0.016	0.036	0.010	0.046	0.060	0.050
	Top Edge	20	0.017	0.017	0.010	0.021	0.007	0.034	0.038	0.034
	Bottom Edge	20	0.021	0.015	0.011	0.017	0.006	0.036	0.038	0.038
GSM1900	Front Side	20	0.152	0.031	0.029	0.033	0.011	0.183	0.185	0.192
	Back Side	20	0.094	0.041	0.050	0.061	0.030	0.135	0.155	0.174
	Left Edge	20	0.900	0.027	0.022	0.038	0.010	0.927	0.938	0.932
	Right Edge	20	0.023	0.022	0.016	0.036	0.010	0.045	0.059	0.049
	Top Edge	20	0.029	0.017	0.010	0.021	0.007	0.046	0.050	0.046
	Bottom Edge	20	0.022	0.015	0.011	0.017	0.006	0.037	0.039	0.039
WCDMA B2	Front Side	20	0.286	0.031	0.029	0.033	0.011	0.317	0.319	0.326
	Back Side	20	0.119	0.041	0.050	0.061	0.030	0.160	0.180	0.199
	Left Edge	20	0.945	0.027	0.022	0.038	0.010	0.972	0.983	0.977
	Right Edge	20	0.025	0.022	0.016	0.036	0.010	0.047	0.061	0.051
	Top Edge	20	0.012	0.017	0.010	0.021	0.007	0.029	0.033	0.029
	Bottom Edge	20	0.018	0.015	0.011	0.017	0.006	0.033	0.035	0.035
WCDMA B4	Front Side	20	0.161	0.031	0.029	0.033	0.011	0.192	0.194	0.201
	Back Side	20	0.094	0.041	0.050	0.061	0.030	0.135	0.155	0.174
	Left Edge	20	0.869	0.027	0.022	0.038	0.010	0.896	0.907	0.901
	Right Edge	20	0.015	0.022	0.016	0.036	0.010	0.037	0.051	0.041
	Top Edge	20	0.027	0.017	0.010	0.021	0.007	0.044	0.048	0.044
	Bottom Edge	20	0.028	0.015	0.011	0.017	0.006	0.043	0.045	0.045
WCDMA B5	Front Side	20	0.013	0.031	0.029	0.033	0.011	0.044	0.046	0.053
	Back Side	20	0.017	0.041	0.050	0.061	0.030	0.058	0.078	0.097
	Left Edge	20	0.377	0.027	0.022	0.038	0.010	0.404	0.415	0.409
	Right Edge	20	0.016	0.022	0.016	0.036	0.010	0.038	0.052	0.042
	Top Edge	20	0.012	0.017	0.010	0.021	0.007	0.029	0.033	0.029
	Bottom Edge	20	0.022	0.015	0.011	0.017	0.006	0.037	0.039	0.039
LTE B2	Front Side	20	0.234	0.031	0.029	0.033	0.011	0.265	0.267	0.274
	Back Side	20	0.129	0.041	0.050	0.061	0.030	0.170	0.190	0.209
	Left Edge	20	0.993	0.027	0.022	0.038	0.010	1.020	1.031	1.025
	Right Edge	20	0.025	0.022	0.016	0.036	0.010	0.047	0.061	0.051
	Top Edge	20	0.016	0.017	0.010	0.021	0.007	0.033	0.037	0.033
	Bottom Edge	20	0.029	0.015	0.011	0.017	0.006	0.044	0.046	0.046
LTE B4	Front Side	20	0.120	0.031	0.029	0.033	0.011	0.151	0.153	0.160

	Back Side	20	0.023	0.041	0.050	0.061	0.030	0.064	0.084	0.103
	Left Edge	20	0.450	0.027	0.022	0.038	0.010	0.477	0.488	0.482
	Right Edge	20	0.023	0.022	0.016	0.036	0.010	0.045	0.059	0.049
	Top Edge	20	0.022	0.017	0.010	0.021	0.007	0.039	0.043	0.039
	Bottom Edge	20	0.016	0.015	0.011	0.017	0.006	0.031	0.033	0.033
LTE B5	Front Side	20	0.027	0.031	0.029	0.033	0.011	0.058	0.060	0.067
	Back Side	20	0.028	0.041	0.050	0.061	0.030	0.069	0.089	0.108
	Left Edge	20	0.335	0.027	0.022	0.038	0.010	0.362	0.373	0.367
	Right Edge	20	0.018	0.022	0.016	0.036	0.010	0.040	0.054	0.044
	Top Edge	20	0.021	0.017	0.010	0.021	0.007	0.038	0.042	0.038
	Bottom Edge	20	0.012	0.015	0.011	0.017	0.006	0.027	0.029	0.029
LTE B7	Front Side	20	0.318	0.031	0.029	0.033	0.011	0.349	0.351	0.358
	Back Side	20	0.047	0.041	0.050	0.061	0.030	0.088	0.108	0.127
	Left Edge	20	0.522	0.027	0.022	0.038	0.010	0.549	0.560	0.554
	Right Edge	20	0.012	0.022	0.016	0.036	0.010	0.034	0.048	0.038
	Top Edge	20	0.027	0.017	0.010	0.021	0.007	0.044	0.048	0.044
	Bottom Edge	20	0.024	0.015	0.011	0.017	0.006	0.039	0.041	0.041
LTE B12	Front Side	20	0.018	0.031	0.029	0.033	0.011	0.049	0.051	0.058
	Back Side	20	0.022	0.041	0.050	0.061	0.030	0.063	0.083	0.102
	Left Edge	20	0.104	0.027	0.022	0.038	0.010	0.131	0.142	0.136
	Right Edge	20	0.023	0.022	0.016	0.036	0.010	0.045	0.059	0.049
	Top Edge	20	0.022	0.017	0.010	0.021	0.007	0.039	0.043	0.039
	Bottom Edge	20	0.018	0.015	0.011	0.017	0.006	0.033	0.035	0.035
LTE B13	Front Side	20	0.015	0.031	0.029	0.033	0.011	0.046	0.048	0.055
	Back Side	20	0.016	0.041	0.050	0.061	0.030	0.057	0.077	0.096
	Left Edge	20	0.184	0.027	0.022	0.038	0.010	0.211	0.222	0.216
	Right Edge	20	0.029	0.022	0.016	0.036	0.010	0.051	0.065	0.055
	Top Edge	20	0.020	0.017	0.010	0.021	0.007	0.037	0.041	0.037
	Bottom Edge	20	0.027	0.015	0.011	0.017	0.006	0.042	0.044	0.044
LTE B25	Front Side	20	0.234	0.031	0.029	0.033	0.011	0.265	0.267	0.274
	Back Side	20	0.129	0.041	0.050	0.061	0.030	0.170	0.190	0.209
	Left Edge	20	0.949	0.027	0.022	0.038	0.010	0.976	0.987	0.981
	Right Edge	20	0.028	0.022	0.016	0.036	0.010	0.050	0.064	0.054
	Top Edge	20	0.023	0.017	0.010	0.021	0.007	0.040	0.044	0.040
	Bottom Edge	20	0.030	0.015	0.011	0.017	0.006	0.045	0.047	0.047
LTE B26	Front Side	20	0.019	0.031	0.029	0.033	0.011	0.050	0.052	0.059
	Back Side	20	0.019	0.041	0.050	0.061	0.030	0.060	0.080	0.099
	Left Edge	20	0.360	0.027	0.022	0.038	0.010	0.387	0.398	0.392
	Right Edge	20	0.028	0.022	0.016	0.036	0.010	0.050	0.064	0.054
	Top Edge	20	0.019	0.017	0.010	0.021	0.007	0.036	0.040	0.036
	Bottom Edge	20	0.014	0.015	0.011	0.017	0.006	0.029	0.031	0.031
LTE B66	Front Side	20	0.072	0.031	0.029	0.033	0.011	0.103	0.105	0.112
	Back Side	20	0.026	0.041	0.050	0.061	0.030	0.067	0.087	0.106

	Left Edge	20	0.418	0.027	0.022	0.038	0.010	0.445	0.456	0.450
	Right Edge	20	0.028	0.022	0.016	0.036	0.010	0.050	0.064	0.054
	Top Edge	20	0.025	0.017	0.010	0.021	0.007	0.042	0.046	0.042
	Bottom Edge	20	0.028	0.015	0.011	0.017	0.006	0.043	0.045	0.045
LTE B38	Front Side	20	0.168	0.031	0.029	0.033	0.011	0.199	0.201	0.208
	Back Side	20	0.016	0.041	0.050	0.061	0.030	0.057	0.077	0.096
	Left Edge	20	0.349	0.027	0.022	0.038	0.010	0.376	0.387	0.381
	Right Edge	20	0.030	0.022	0.016	0.036	0.010	0.052	0.066	0.056
	Top Edge	20	0.017	0.017	0.010	0.021	0.007	0.034	0.038	0.034
	Bottom Edge	20	0.019	0.015	0.011	0.017	0.006	0.034	0.036	0.036
LTE B41	Front Side	20	0.166	0.031	0.029	0.033	0.011	0.197	0.199	0.206
	Back Side	20	0.026	0.041	0.050	0.061	0.030	0.067	0.087	0.106
	Left Edge	20	0.323	0.027	0.022	0.038	0.010	0.350	0.361	0.355
	Right Edge	20	0.015	0.022	0.016	0.036	0.010	0.037	0.051	0.041
	Top Edge	20	0.027	0.017	0.010	0.021	0.007	0.044	0.048	0.044
	Bottom Edge	20	0.012	0.015	0.011	0.017	0.006	0.027	0.029	0.029
Note: 1: The highest Summed 1g SAR is W/Kg 1.031 < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.										

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1208	2024/08/19	2027/08/18
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2024/05/08	2027/05/07
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2024/05/08	2027/05/07
1950MHz Validation Dipole	Speag	D1950V3	SN: 1240	2024/08/22	2027/08/21
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2024/05/07	2027/05/06
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2024/05/08	2027/05/07
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2024/05/09	2027/05/08
Data Acquisition Electronics	Speag	DAE4	SN: 878	2026/03/23	2027/03/22
E-Field Probe	Speag	EX3DV4	SN: 7664	2025/06/30	2026/06/29
Signal Generator	Keysight	N5173B	MY62150163	2025/07/15	2026/07/14
Power Meter	R&S	NRVD-B2	835843/014	2025/07/15	2026/07/14
Power Sensor	R&S	NRV-Z4	100381	2025/07/15	2026/07/14
Power Sensor	R&S	NRV-Z2	100211	2025/07/15	2026/07/14
Wireless Communication Test Set	Anritsu	MT8820C	6201524635	2025/07/28	2026/07/27
Network Analyzer	Agilent	E5071C	MY46103472	2025/08/13	2026/08/12
Thermometer	Elitech	RC-4HC	EF7239002652	2025/09/04	2026/09/03
Thermometer	Elitech	RC-4	EF5238001629	2025/09/16	2026/09/15
Power Amplifier	Mini-Circuits	ZVA-183W-S+	932502132	N/A	N/A
Dielectric Probe Kit	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	Speag	SAM	SN: 1858	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;
2. System validation with specific dipole is within 10% of calibrated value;
3. Return-loss in within 20% of calibrated measurement.
4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using a DAK3.5

Dielectric Probe Kit.

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2026.04.23	Head	750	21.3	0.90	41.48	0.89	41.94	1.12	-1.10
2026.04.23	Head	835	21.3	0.90	42.11	0.90	41.50	0.00	1.47
2026.04.26	Head	835	21.5	0.91	41.08	0.90	41.50	1.11	-1.01
2026.04.26	Head	1750	21.5	1.36	40.78	1.37	40.08	-0.73	1.75
2026.04.27	Head	1950	21.3	1.44	38.80	1.40	40.00	2.86	-3.00
2026.04.28	Head	2450	21.5	1.78	38.63	1.80	39.20	-1.11	-1.45
2026.04.29	Head	2600	21.4	1.98	39.26	1.96	39.01	1.02	0.64
2026.04.30	Head	5250	21.2	4.59	36.71	4.71	35.93	-2.55	2.17
2026.04.30	Head	5600	21.2	5.12	35.47	5.07	35.53	0.99	-0.17
2026.04.30	Head	5750	21.2	5.25	35.15	5.22	35.36	0.57	-0.59

Note: The tolerance limit of Conductivity and Permittivity is $\pm 5\%$.

ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by SPEAG, the validation data should be within its specification of 10 % (for 1 g).

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2026.04.23	Head	750	100	0.822	8.22	8.46	-2.84
2026.04.23	Head	835	100	0.989	9.89	9.74	1.54
2026.04.26	Head	835	100	0.975	9.75	9.74	0.10
2026.04.26	Head	1750	100	3.950	39.50	37.00	6.76
2026.04.27	Head	1950	100	4.410	44.10	41.70	5.76
2026.04.28	Head	2450	100	5.580	55.80	52.60	6.08
2026.04.29	Head	2600	100	5.420	54.20	55.90	-3.04
2026.04.30	Head	5250	100	7.880	78.80	77.70	1.42
2026.04.30	Head	5600	100	8.150	81.50	81.30	0.25
2026.04.30	Head	5750	100	7.530	75.30	77.60	-2.96
Note: The tolerance limit of System validation $\pm 10\%$.							

Please refer the document "BL-SZ2610221-ASC.pdf".

ANNEX C TEST DATA

Please refer the document “BL-SZ2610221-ATD.pdf”.

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2610221-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ2610221-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ2610221-AC.pdf”.

ANNEX G TUNE-UP PROCEDURE

Please refer the document “BL-SZ2610221-AT.pdf”.

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--END OF REPORT--