

TEST REPORT

Applicant: TENG INTERNACIONAL TRADING LIMITED
Address: 4f 299 QRC NOS 287 299 QUEENS RD CENTRAL,
HONG KONG
Equipment Type: Pos Terminal
Model Name: S8
Brand Name: TENG INTERNACIONAL
FCC ID: 2BTGQ-S8
Test Standard: FCC 47 CFR Part 2.1093
(refer to section 3.1)
Maximum SAR: Body (1 g@5mm): 1.06 W/kg
Limbs (10 g@0mm): 1.22 W/kg
Sample Arrival Date: Dec. 04, 2025
Test Date: Dec. 06, 2025 - Jan. 29, 2026
Date of Issue: Jan. 30, 2026

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Xu Rui*Xu Rui***Checked by:** Zong Liyao*Zong Liyao***Approved by:** Tolan Tu

(Testing Director)

Tolan Tu

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Jan. 26, 2026</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Jan. 30, 2026</u>	<u>Update the test date;</u> <u>Update the data in Chapter 11.4;</u> <u>Update the contents of Chapter 13.2 and</u> <u>Chapter 13.3;</u> <u>Update the liquid inspection in ANNEX A;</u> <u>Update the system check of ANNEX B.</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☐ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☒ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
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	TENG INTERNACIONAL TRADING LIMITED
Address	4f 299 QRC NOS 287 299 QUEENS RD CENTRAL, HONG KONG

2.2 Manufacturer Information

Manufacturer	TENG INTERNACIONAL TRADING LIMITED
Address	4f 299 QRC NOS 287 299 QUEENS RD CENTRAL, HONG KONG

2.3 General Description for Equipment under Test (EUT)

EUT Name	Pos Terminal
Model Name Under Test	S8
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	V3
Software Version	SP7997B_V022_20251112_debug
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	SP7997A
	Serial No.	N/A
	Capacity	5100 mAh
	Rated Voltage	3.6 V
	Limit Charge Voltage	4.2 V

2.5 Technical Information

Network and Wireless connectivity	2G Network GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/5 4G Network LTE FDD Band 5/7 Bluetooth (BR+EDR+BLE) WIFI 802.11a, 802.11b, 802.11g, 802.11n and 802.11ac NFC
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The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	GSM; WCDMA; LTE; WIFI; Bluetooth; NFC		
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 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	802.11b/g	2412 ~ 2462 MHz	
	802.11n(HT20/HT40)	2412 ~ 2462 MHz	
	802.11a	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	802.11n(HT20/HT40)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	802.11ac (VHT20/VHT40/VHT80)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	Bluetooth	2402 ~ 2480 MHz	
	NFC	13.56 MHz	
Antenna Type	WWAN	PIFA Antenna	
	WIFI	PIFA Antenna	
	Bluetooth	PIFA Antenna	
	NFC	Coil 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 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)		Maximum Report SAR (W/kg)	
		1g SAR	10g SAR	1g SAR	10g SAR
		Body (5mm)	Limbs (0mm)	Body (5mm)	Limbs (0mm)
PCB	GSM 850	0.82	0.81	1.06	1.22
	GSM 1900	1.06	1.22		
	WCDMA Band 2	0.40	0.36		
	WCDMA Band 5	0.36	0.43		
	LTE Band 5	0.24	0.45		
	LTE Band 7	0.39	0.41		
DTS	2.4G WIFI	0.53	1.20		
NII	5.3G WIFI	0.20	0.20		
	5.6G WIFI	0.22	0.20		
	5.8G WIFI	0.23	0.21		
DSS	Bluetooth	0.03	0.07		
Limit (W/kg)		1.60	4.00	1.60	4.00
Verdict		Pass			

3.3.2 Highest Simultaneous Transmission SAR

Equipment Class	Maximum Simultaneous Transmission SAR (W/kg)	
	1g SAR	10g SAR
	Body (5mm)	Limbs (0mm)
PCB	1.18	1.50
DTS	1.18	1.50
NII	1.18	1.50
DSS	1.10	1.25
Limit (W/Kg)	1.60	4.00
Verdict	Pass	

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 1.06 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

The maximum 10 g SAR for the EUT in this report is 1.22 W/kg, which is lower than 3.75 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

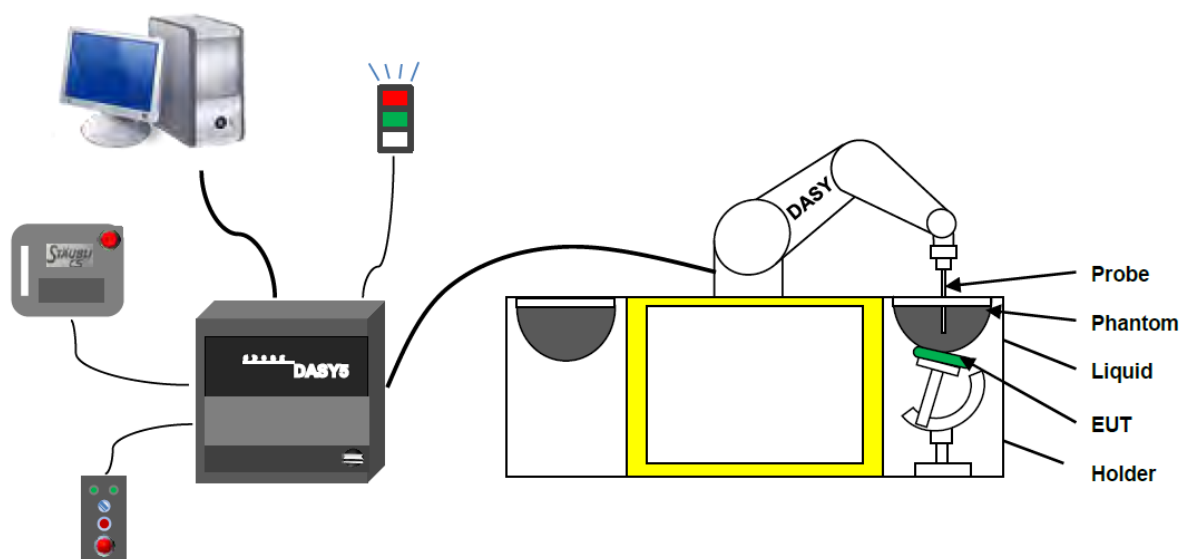
$$SAR = \frac{\sigma E^2}{\rho}$$

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

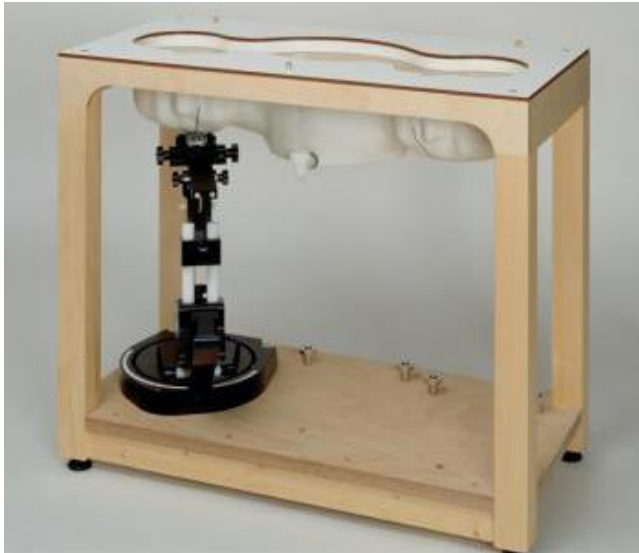
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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

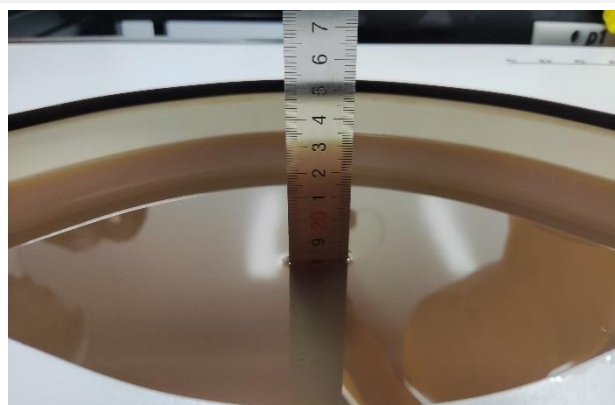
4.2.7 Simulating Liquid

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

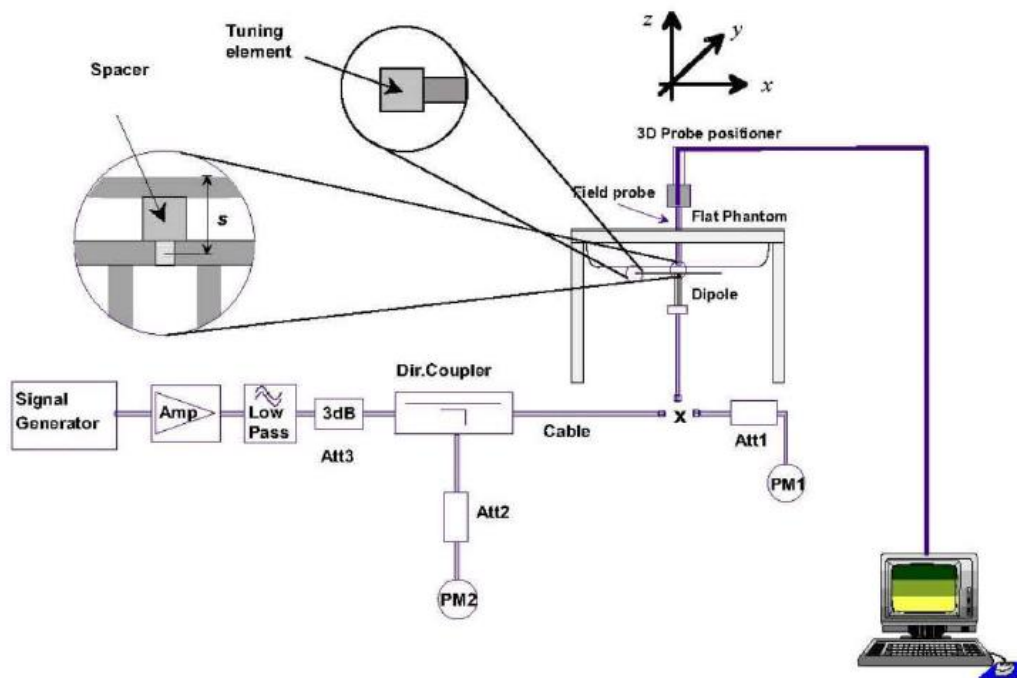
5 SYSTEM VERIFICATION

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.

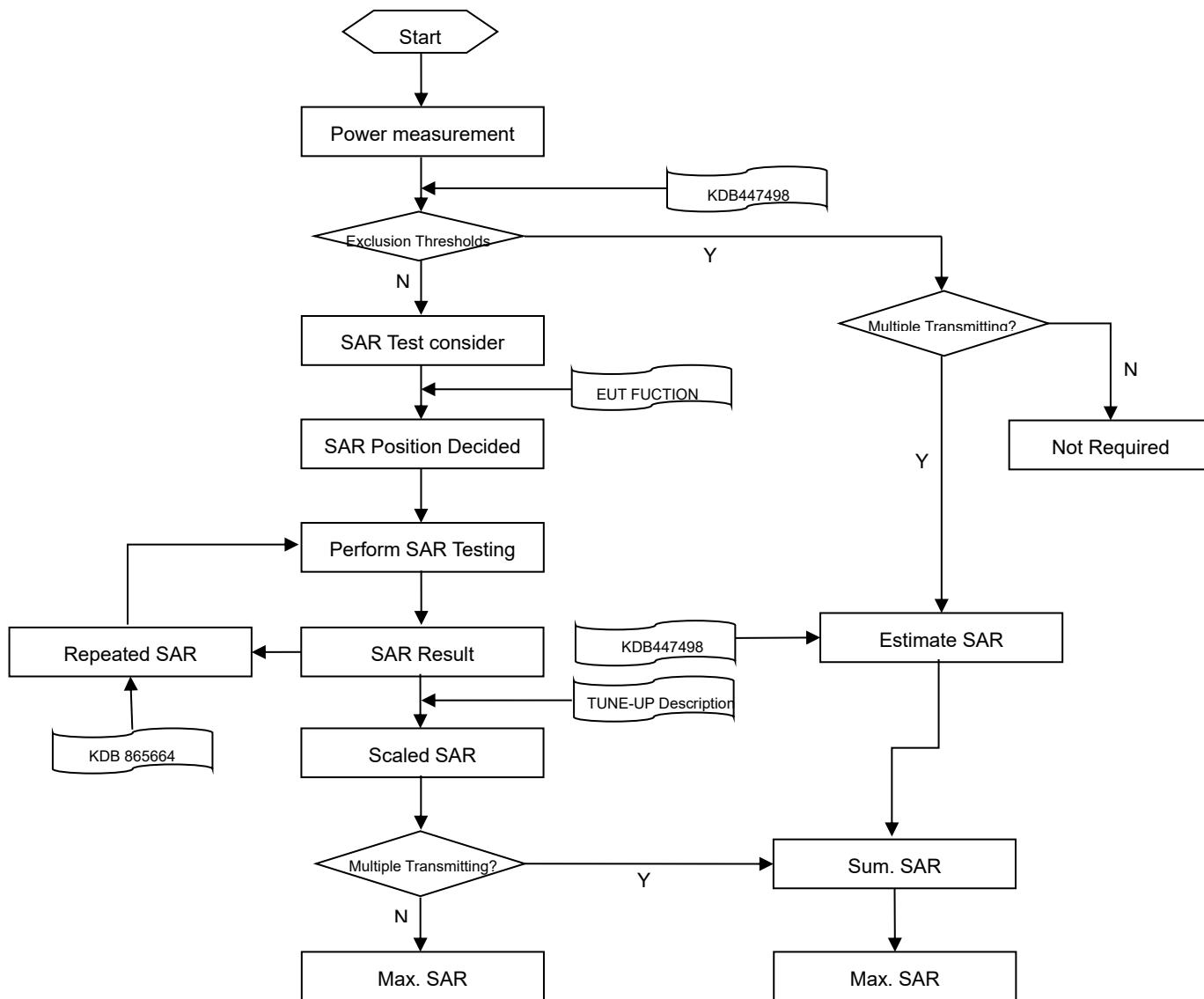
6.2 Product Specific 10g Exposure Consideration

According with FCC KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance;

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

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.

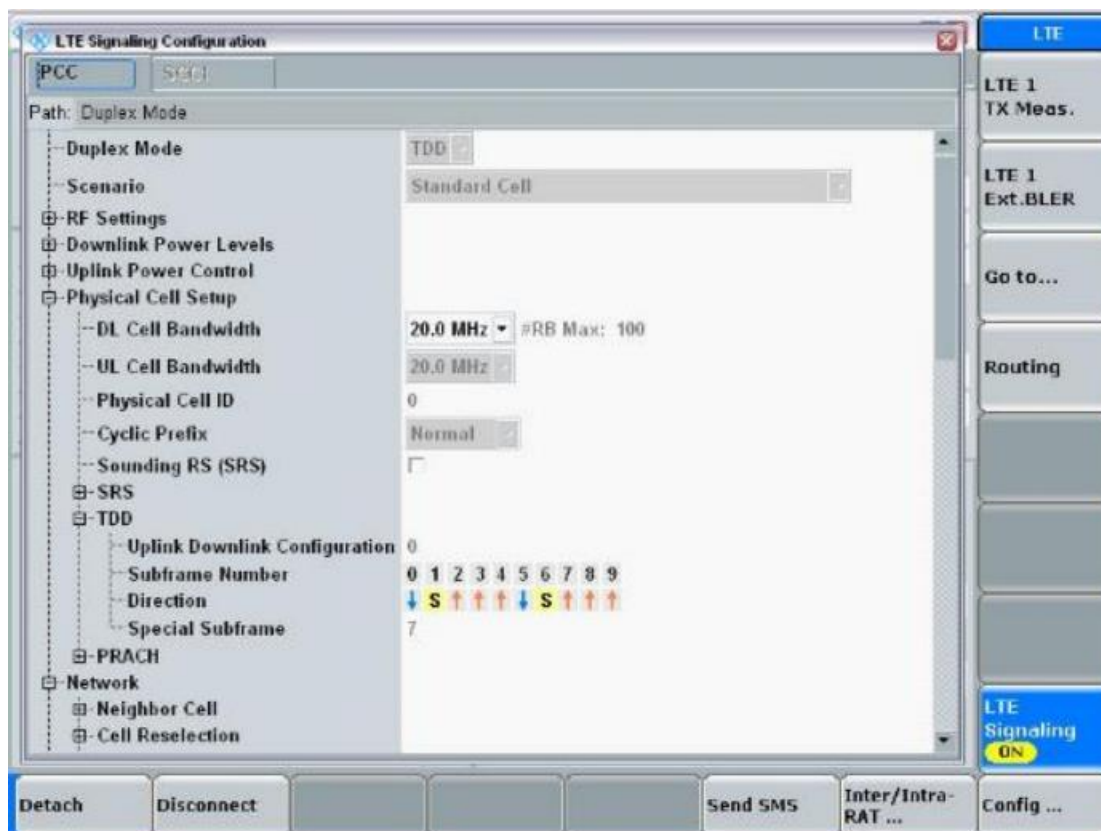
7.4 Area & Zoom Scan Procedure

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.

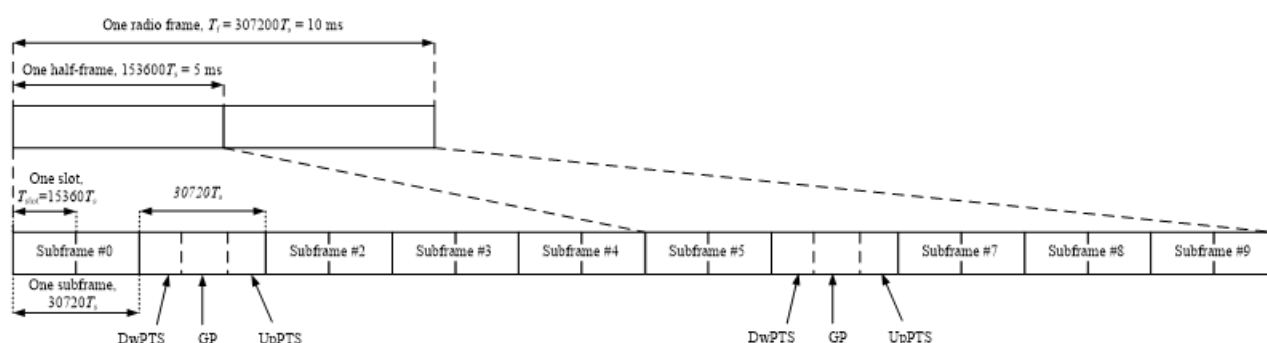
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

7.5 Area & Zoom Scan Procedure

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: **$6 \cdot 1\text{ ms} + 2 \cdot 0.167\text{ ms} = 6.334\text{ms}$**

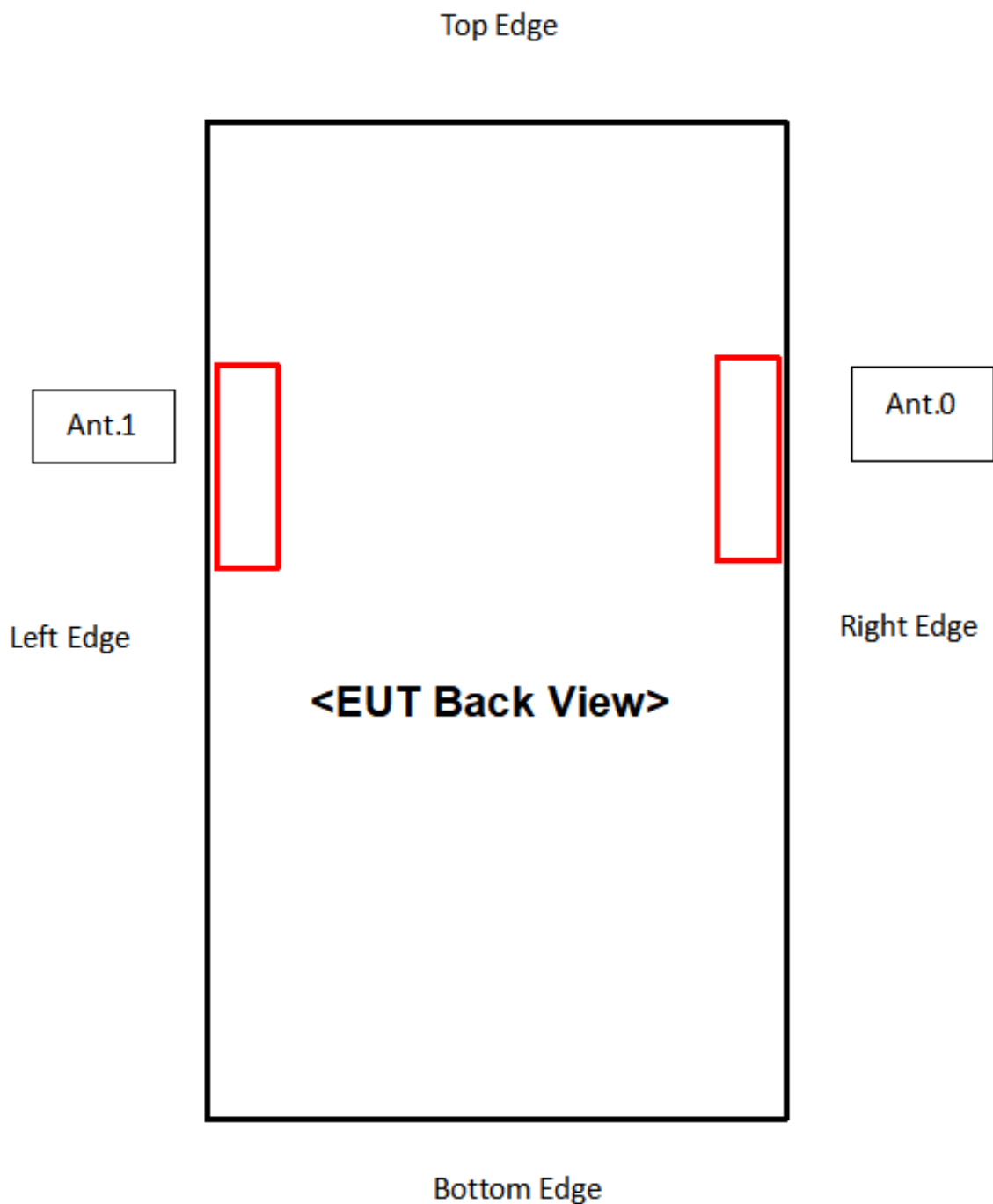
So, the duty cycle for TDD-LTE is: **$6.334\text{ms} / 10\text{ms} = 1: 1.58$**

8 CONDUCTED RF OUTPUT POWER

Please refer the document “BL-SZ25B1343-AP.pdf”.

9 TEST EXCLUSION CONSIDERATION

9.1 Antenna location sketch



Antenna	Support Bands
Ant.0	GSM: 850/1900 WCDMA: B2/5 LTE: B5/7
Ant.1	WLAN2.4G&WLAN5G&Bluetooth

10 NFC SAR

According to the ANSI C63.10 clause 11.12.2.2:

The value of maximum peak output power is according to the method described in ANSI C63.10 clause 11.12.2.2 General procedure for conducted measurements in restricted bands:

- a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see guidance on determining the applicable antenna gain)
- c) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies $\leq$ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies $>$ 1000 MHz).
- d) For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).
- e) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship: $E = \text{EIRP} - 20\log D + 104.8$

where:

E = electric field strength in dB μ V/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

Mode	f (MHz)	Max. E-Field strength (dB μ V/m)	D (m)	Ground reflection factor (dB)	ERP (dBm)
NFC (13.56MHz)	13.56	65.56	3	6	-23.70

Note:

1. Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies $\leq$ 30 MHz).
2. ERP = $66.12 + 20 \cdot \log(3) - 104.8 + 6 = -23.70$ (dBm)

According to the FCC KDB 447498 D04

Estimated SAR: SAR test = $1.6 \cdot P_{\text{ant}} / P_{\text{th}}$ [W/kg]

Estimated SAR	$1.6 \cdot P_{\text{ant}} / P_{\text{th}}$ [W/kg]		
P _{meas.} (dBm)	-23.70	P _{meas.} (mW)	0.0043
P _{th.} (mW)	443.13		
NFC Estimated 1g SAR [W/kg]	<0.001		

10.1 Highest Total Exposure Ratio of Simultaneous Transmission

NFC multi-transmit requires the use of the TER formula:

$$TER = \sum_{k=1}^{N_s} \left(\frac{SAR_k}{SAR_{lim}} \right) + \sum_{k=1}^{N_f} \left(\frac{MPE_{field, k}}{MPE_{field, lim}} \right)^2 + \sum_{k=1}^{N_{PD}} \left(\frac{MPE_{PD, k}}{MPE_{PD, lim}} \right)$$

The maximum SAR value for Simultaneous Transmission is 0.001 [W/kg], SAR test exemption may be considered by applying a factor of 2.5 to the SAR-based exemption thresholds. Therefore, the worst TER $= (1.56 + 0.001) / 1.6 = 0.9756 < 1$, the NFC SAR transmit simultaneously Pass.

11 TEST RESULT

11.1 GSM 850

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	1g Scaled SAR (W/kg)	Meas. No.
Body												
ANT 0	GPRS 4Slots	Front Side	5	251	848.8	-0.17	0.315	25.05	26.00	1.245	0.392	/
		Back Side	5	251	848.8	-0.07	0.164	25.05	26.00	1.245	0.204	/
		Left Edge	5	251	848.8	-0.14	0.084	25.05	26.00	1.245	0.105	/
		Right Edge	5	251	848.8	0.06	0.597	25.05	26.00	1.245	0.743	/
		Top Edge	5	251	848.8	0.03	0.051	25.05	26.00	1.245	0.063	/
		Bottom Edge	5	251	848.8	0.17	0.037	25.05	26.00	1.245	0.046	/
		Right Edge	5	128	824.2	-0.08	0.654	25.03	26.00	1.250	0.818	1#
		Right Edge	5	190	836.6	-0.02	0.635	25.04	26.00	1.247	0.792	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs												
ANT 0	GPRS 4Slots	Front Side	0	251	848.8	-0.07	0.283	25.05	26.00	1.245	0.352	/
		Back Side	0	251	848.8	0.01	0.153	25.05	26.00	1.245	0.190	/
		Left Edge	0	251	848.8	-0.14	0.077	25.05	26.00	1.245	0.096	/
		Right Edge	0	251	848.8	0.13	0.652	25.05	26.00	1.245	0.812	3#
		Top Edge	0	251	848.8	-0.07	0.059	25.05	26.00	1.245	0.073	/
		Bottom Edge	0	251	848.8	0.03	0.041	25.05	26.00	1.245	0.051	/
		Right Edge	0	128	824.2	-0.19	0.648	25.03	26.00	1.250	0.810	/
		Right Edge	0	190	836.6	0.05	0.642	25.04	26.00	1.247	0.801	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

11.2 GSM 1900

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	1g Scaled SAR (W/kg)	Meas. No.
Body												
ANT 0	GPRS 4Slots	Front Side	5	810	1909.8	0.19	0.100	22.12	22.50	1.091	0.109	/
		Back Side	5	810	1909.8	-0.14	0.090	22.12	22.50	1.091	0.098	/
		Left Edge	5	810	1909.8	-0.07	0.038	22.12	22.50	1.091	0.041	/
		Right Edge	5	810	1909.8	0.01	0.975	22.12	22.50	1.091	1.064	2#
		Top Edge	5	810	1909.8	0.00	0.074	22.12	22.50	1.091	0.081	/
		Bottom Edge	5	810	1909.8	0.16	0.020	22.12	22.50	1.091	0.022	/
		Right Edge	5	512	1850.2	0.17	0.813	21.88	22.50	1.153	0.937	/
		Right Edge	5	661	1880	0.01	0.815	21.90	22.50	1.148	0.936	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs												
ANT 0	GPRS 4Slots	Front Side	0	810	1909.8	-0.17	0.183	22.12	22.50	1.091	0.200	/
		Back Side	0	810	1909.8	-0.14	0.092	22.12	22.50	1.091	0.100	/
		Left Edge	0	810	1909.8	-0.01	0.053	22.12	22.50	1.091	0.058	/
		Right Edge	0	810	1909.8	0.08	1.120	22.12	22.50	1.091	1.222	4#
		Top Edge	0	810	1909.8	0.00	0.115	22.12	22.50	1.091	0.125	/
		Bottom Edge	0	810	1909.8	-0.06	0.031	22.12	22.50	1.091	0.034	/
		Right Edge	0	512	1850.2	-0.15	0.995	21.88	22.50	1.153	1.147	/
		Right Edge	0	661	1880	0.04	1.020	21.90	22.50	1.148	1.171	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

11.3WCDMA Band 2

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	1g Scaled SAR (W/kg)	Meas. No.
Body												
ANT 0	RMC	Front Side	5	9400	1880	0.12	0.038	22.95	23.00	1.012	0.038	/
		Back Side	5	9400	1880	0.01	0.001	22.95	23.00	1.012	0.001	/
		Left Edge	5	9400	1880	0.06	0.002	22.95	23.00	1.012	0.002	/
		Right Edge	5	9400	1880	0.09	0.391	22.95	23.00	1.012	0.396	5#
		Top Edge	5	9400	1880	-0.07	0.005	22.95	23.00	1.012	0.005	/
		Bottom Edge	5	9400	1880	0.10	0.003	22.95	23.00	1.012	0.003	/
		Right Edge	5	9262	1852.4	-0.16	0.342	22.89	23.00	1.026	0.351	/
		Right Edge	5	9538	1907.6	-0.05	0.355	22.88	23.00	1.028	0.365	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs												
ANT 0	RMC	Front Side	0	9400	1880	0.01	0.055	22.95	23.00	1.012	0.056	/
		Back Side	0	9400	1880	-0.13	0.029	22.95	23.00	1.012	0.029	/
		Left Edge	0	9400	1880	0.08	0.012	22.95	23.00	1.012	0.012	/
		Right Edge	0	9400	1880	0.12	0.355	22.95	23.00	1.012	0.359	7#
		Top Edge	0	9400	1880	-0.15	0.031	22.95	23.00	1.012	0.031	/
		Bottom Edge	0	9400	1880	0.02	0.013	22.95	23.00	1.012	0.013	/
		Right Edge	0	9262	1852.4	0.02	0.312	22.89	23.00	1.026	0.320	/
		Right Edge	0	9538	1907.6	-0.03	0.324	22.88	23.00	1.028	0.333	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

11.4WCDMA Band 5

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	1g Scaled SAR (W/kg)	Meas. No.
Body												
ANT 0	RMC	Front Side	5	4233	846.6	0.05	0.153	22.80	23.00	1.047	0.160	/
		Back Side	5	4233	846.6	0.08	0.082	22.80	23.00	1.047	0.086	/
		Left Edge	5	4233	846.6	0.04	0.049	22.80	23.00	1.047	0.051	/
		Right Edge	5	4233	846.6	0.14	0.339	22.80	23.00	1.047	0.355	6#
		Top Edge	5	4233	846.6	0.02	0.008	22.80	23.00	1.047	0.008	/
		Bottom Edge	5	4233	846.6	0.05	0.005	22.80	23.00	1.047	0.005	/
		Right Edge	5	4132	826.4	0.14	0.322	22.77	23.00	1.054	0.339	/
		Right Edge	5	4182	836.4	-0.10	0.311	22.74	23.00	1.062	0.330	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs												
ANT 0	RMC	Front Side	0	4233	846.6	0.03	0.142	22.80	23.00	1.047	0.149	/
		Back Side	0	4233	846.6	-0.02	0.093	22.80	23.00	1.047	0.097	/
		Left Edge	0	4233	846.6	0.05	0.039	22.80	23.00	1.047	0.041	/
		Right Edge	0	4233	846.6	0.16	0.406	22.80	23.00	1.047	0.425	8#
		Top Edge	0	4233	846.6	0.05	0.036	22.80	23.00	1.047	0.038	/
		Bottom Edge	0	4233	846.6	0.02	0.011	22.80	23.00	1.047	0.012	/
		Right Edge	0	4132	826.4	0.02	0.392	22.77	23.00	1.054	0.413	/
		Right Edge	0	4182	836.4	-0.11	0.372	22.74	23.00	1.062	0.395	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

11.5LTE Band 5 (10MHz Bandwidth)

Antenn a	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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														
ANT 0	QPSK	Front Side	5	20525	836.5	1	MID	-0.10	0.130	22.85	23.00	1.035	0.135	/
		Back Side	5	20525	836.5	1	MID	-0.08	0.095	22.85	23.00	1.035	0.098	/
		Left Edge	5	20525	836.5	1	MID	-0.12	0.062	22.85	23.00	1.035	0.064	/
		Right Edge	5	20525	836.5	1	MID	0.11	0.232	22.85	23.00	1.035	0.240	9#
		Top Edge	5	20525	836.5	1	MID	0.18	0.007	22.85	23.00	1.035	0.007	/
		Bottom Edge	5	20525	836.5	1	MID	0.06	0.006	22.85	23.00	1.035	0.006	/
		Front Side	5	20600	844	25	LOW	-0.01	0.109	21.77	22.00	1.054	0.115	/
		Back Side	5	20600	844	25	LOW	-0.05	0.078	21.77	22.00	1.054	0.082	/
		Left Edge	5	20600	844	25	LOW	0.03	0.050	21.77	22.00	1.054	0.053	/
		Right Edge	5	20600	844	25	LOW	0.13	0.182	21.77	22.00	1.054	0.192	/
		Top Edge	5	20600	844	25	LOW	0.00	0.002	21.77	22.00	1.054	0.002	/
		Bottom Edge	5	20600	844	25	LOW	0.14	0.003	21.77	22.00	1.054	0.003	/
		Right Edge	5	20450	829	1	MID	0.02	0.222	22.82	23.00	1.042	0.231	/
		Right Edge	5	20600	844	1	MID	-0.03	0.212	22.73	23.00	1.064	0.226	/
		Right Edge	5	20525	836.5	25	MID	0.04	0.196	21.72	22.00	1.067	0.209	/
		Right Edge	5	20600	844	25	LOW	0.05	0.185	21.72	22.00	1.067	0.197	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenn a	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs														
ANT 0	QPSK	Front Side	0	20525	836.5	1	MID	0.15	0.155	22.85	23.00	1.035	0.160	/
		Back Side	0	20525	836.5	1	MID	-0.18	0.089	22.85	23.00	1.035	0.092	/
		Left Edge	0	20525	836.5	1	MID	0.07	0.046	22.85	23.00	1.035	0.048	/
		Right Edge	0	20525	836.5	1	MID	0.07	0.431	22.85	23.00	1.035	0.446	11#
		Top Edge	0	20525	836.5	1	MID	-0.18	0.032	22.85	23.00	1.035	0.033	/
		Bottom Edge	0	20525	836.5	1	MID	-0.13	0.004	22.85	23.00	1.035	0.004	/
		Front Side	0	20600	844	25	LOW	-0.14	0.133	21.77	22.00	1.054	0.140	/
		Back Side	0	20600	844	25	LOW	-0.09	0.071	21.77	22.00	1.054	0.075	/
		Left Edge	0	20600	844	25	LOW	-0.19	0.036	21.77	22.00	1.054	0.038	/
		Right Edge	0	20600	844	25	LOW	-0.10	0.327	21.77	22.00	1.054	0.345	/
		Top Edge	0	20600	844	25	LOW	0.07	0.015	21.77	22.00	1.054	0.016	/
		Bottom Edge	0	20600	844	25	LOW	0.13	0.001	21.77	22.00	1.054	0.001	/
		Right Edge	0	20450	829	1	MID	-0.01	0.421	22.82	23.00	1.042	0.439	/
		Right Edge	0	20600	844	1	MID	0.11	0.411	22.73	23.00	1.064	0.437	/
		Right Edge	0	20525	836.5	25	MID	0.01	0.362	21.72	22.00	1.067	0.386	/
		Right Edge	0	20600	844	25	LOW	-0.05	0.322	21.72	22.00	1.067	0.344	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.6LTE Band 7 (20MHz Bandwidth)

Antenn a	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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														
ANT 0	QPSK	Front Side	5	20850	2510	1	MID	0.14	0.011	22.36	23.00	1.159	0.013	/
		Back Side	5	20850	2510	1	MID	0.10	0.050	22.36	23.00	1.159	0.058	/
		Left Edge	5	20850	2510	1	MID	-0.18	0.006	22.36	23.00	1.159	0.007	/
		Right Edge	5	20850	2510	1	MID	0.03	0.334	22.36	23.00	1.159	0.387	10#
		Top Edge	5	20850	2510	1	MID	0.16	0.004	22.36	23.00	1.159	0.005	/
		Bottom Edge	5	20850	2510	1	MID	0.09	0.005	22.36	23.00	1.159	0.006	/
		Front Side	5	21350	2560	50	LOW	0.19	0.009	20.87	22.00	1.297	0.012	/
		Back Side	5	21350	2560	50	LOW	-0.07	0.040	20.87	22.00	1.297	0.052	/
		Left Edge	5	21350	2560	50	LOW	-0.08	0.001	20.87	22.00	1.297	0.001	/
		Right Edge	5	21350	2560	50	LOW	-0.01	0.258	20.87	22.00	1.297	0.335	/
		Top Edge	5	21350	2560	50	LOW	-0.18	0.002	20.87	22.00	1.297	0.003	/
		Bottom Edge	5	21350	2560	50	LOW	0.02	0.003	20.87	22.00	1.297	0.004	/
		Right Edge	5	21100	2535	1	MID	0.01	0.306	22.04	23.00	1.247	0.382	/
		Right Edge	5	21350	2560	1	MID	-0.01	0.305	22.00	23.00	1.259	0.384	/
		Right Edge	5	20850	2510	50	MID	0.03	0.286	20.74	22.00	1.337	0.382	/
		Right Edge	5	21100	2535	50	LOW	0.02	0.268	20.75	22.00	1.334	0.358	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenn a	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs														
ANT 0	QPSK	Front Side	0	20850	2510	1	MID	-0.01	0.047	22.36	23.00	1.159	0.054	/
		Back Side	0	20850	2510	1	MID	0.19	0.042	22.36	23.00	1.159	0.049	/
		Left Edge	0	20850	2510	1	MID	-0.11	0.009	22.36	23.00	1.159	0.010	/
		Right Edge	0	20850	2510	1	MID	0.13	0.353	22.36	23.00	1.159	0.409	12#
		Top Edge	0	20850	2510	1	MID	0.12	0.047	22.36	23.00	1.159	0.054	/
		Bottom Edge	0	20850	2510	1	MID	-0.02	0.008	22.36	23.00	1.159	0.009	/
		Front Side	0	21350	2560	50	LOW	0.12	0.038	20.87	22.00	1.297	0.049	/
		Back Side	0	21350	2560	50	LOW	-0.07	0.036	20.87	22.00	1.297	0.047	/
		Left Edge	0	21350	2560	50	LOW	-0.07	0.004	20.87	22.00	1.297	0.005	/
		Right Edge	0	21350	2560	50	LOW	0.14	0.300	20.87	22.00	1.297	0.389	/
		Top Edge	0	21350	2560	50	LOW	0.07	0.039	20.87	22.00	1.297	0.051	/
		Bottom Edge	0	21350	2560	50	LOW	0.08	0.002	20.87	22.00	1.297	0.003	/
		Right Edge	0	21100	2535	1	MID	0.05	0.324	22.04	23.00	1.247	0.404	/
		Right Edge	0	21350	2560	1	MID	0.11	0.320	22.00	23.00	1.259	0.403	/
		Right Edge	0	20850	2510	50	MID	-0.12	0.292	20.74	22.00	1.337	0.390	/
		Right Edge	0	21100	2535	50	LOW	0.05	0.288	20.75	22.00	1.334	0.384	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.7 Bluetooth

Antenn a	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														
ANT 1	2DH5	Front Side	5	78	2480	-0.15	0.009	6.64	7.00	1.086	77.03	1.298	0.013	/
		Back Side	5	78	2480	0.17	0.005	6.64	7.00	1.086	77.03	1.298	0.007	/
		Left Edge	5	78	2480	0.04	0.015	6.64	7.00	1.086	77.03	1.298	0.021	/
		Right Edge	5	78	2480	-0.08	0.004	6.64	7.00	1.086	77.03	1.298	0.006	/
		Top Edge	5	78	2480	-0.18	0.003	6.64	7.00	1.086	77.03	1.298	0.004	/
		Bottom Edge	5	78	2480	-0.18	0.001	6.64	7.00	1.086	77.03	1.298	0.001	/
		Left Edge	5	0	2402	0.08	0.014	5.88	7.00	1.294	77.03	1.298	0.024	/
		Left Edge	5	39	2441	0.04	0.021	6.39	7.00	1.151	77.03	1.298	0.031	13#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenn a	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs														
ANT 1	2DH5	Front Side	0	78	2480	0.02	0.019	6.64	7.00	1.086	77.03	1.298	0.027	/
		Back Side	0	78	2480	-0.02	0.015	6.64	7.00	1.086	77.03	1.298	0.021	/
		Left Edge	0	78	2480	0.19	0.035	6.64	7.00	1.086	77.03	1.298	0.049	/
		Right Edge	0	78	2480	0.19	0.005	6.64	7.00	1.086	77.03	1.298	0.007	/
		Top Edge	0	78	2480	0.09	0.006	6.64	7.00	1.086	77.03	1.298	0.008	/
		Bottom Edge	0	78	2480	0.19	0.009	6.64	7.00	1.086	77.03	1.298	0.013	/
		Left Edge	0	0	2402	-0.11	0.032	5.88	7.00	1.294	77.03	1.298	0.054	/
		Left Edge	0	39	2441	0.02	0.047	6.39	7.00	1.151	77.03	1.298	0.070	18#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.8WIFI 2.4GHz

Antenn a	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														
ANT 1	802.11 b	Front Side	5	1	2412	-0.16	0.163	17.91	18.00	1.021	99.34	1.007	0.168	/
		Back Side	5	1	2412	-0.16	0.119	17.91	18.00	1.021	99.34	1.007	0.122	/
		Left Edge	5	1	2412	-0.13	0.519	17.91	18.00	1.021	99.34	1.007	0.534	14#
		Right Edge	5	1	2412	-0.01	0.082	17.91	18.00	1.021	99.34	1.007	0.084	/
		Top Edge	5	1	2412	0.19	0.055	17.91	18.00	1.021	99.34	1.007	0.057	/
		Bottom Edge	5	1	2412	-0.12	0.005	17.91	18.00	1.021	99.34	1.007	0.005	/
		Left Edge	5	6	2437	-0.19	0.462	17.53	18.00	1.114	99.34	1.007	0.518	/
		Left Edge	5	11	2462	0.13	0.477	17.62	18.00	1.091	99.34	1.007	0.524	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenn a	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs														
ANT 1	802.11 b	Front Side	0	1	2412	0.13	0.181	17.91	18.00	1.021	99.34	1.007	0.186	/
		Back Side	0	1	2412	-0.05	0.085	17.91	18.00	1.021	99.34	1.007	0.087	/
		Left Edge	0	1	2412	-0.04	0.878	17.91	18.00	1.021	99.34	1.007	0.903	/
		Right Edge	0	1	2412	-0.06	0.037	17.91	18.00	1.021	99.34	1.007	0.038	/
		Top Edge	0	1	2412	-0.19	0.055	17.91	18.00	1.021	99.34	1.007	0.057	/
		Bottom Edge	0	1	2412	-0.11	0.023	17.91	18.00	1.021	99.34	1.007	0.024	/
		Left Edge	0	6	2437	-0.07	0.820	17.53	18.00	1.114	99.34	1.007	0.920	/
		Left Edge	0	11	2462	0.17	1.090	17.62	18.00	1.091	99.34	1.007	1.198	19#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.9WIFI 5GHz

Fre. 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															
5.3G	ANT 1	802.11 a	Front Side	5	52	5260	0.14	0.046	13.48	14.00	1.127	97.00	1.031	0.053	/
			Back Side	5	52	5260	-0.04	0.047	13.48	14.00	1.127	97.00	1.031	0.055	/
			Left Edge	5	52	5260	0.09	0.147	13.48	14.00	1.127	97.00	1.031	0.171	/
			Right Edge	5	52	5260	-0.09	0.008	13.48	14.00	1.127	97.00	1.031	0.009	/
			Top Edge	5	52	5260	-0.04	0.004	13.48	14.00	1.127	97.00	1.031	0.005	/
			Bottom Edge	5	52	5260	-0.18	0.003	13.48	14.00	1.127	97.00	1.031	0.003	/
			Left Edge	5	60	5300	0.12	0.146	13.35	14.00	1.161	97.00	1.031	0.175	/
			Left Edge	5	64	5320	-0.01	0.166	13.36	14.00	1.159	97.00	1.031	0.198	15#
5.6G	ANT 1	802.11 a	Front Side	5	140	5700	0.07	0.063	13.71	14.00	1.069	97.00	1.031	0.069	/
			Back Side	5	140	5700	-0.07	0.075	13.71	14.00	1.069	97.00	1.031	0.083	/
			Left Edge	5	140	5700	0.01	0.202	13.71	14.00	1.069	97.00	1.031	0.223	16#
			Right Edge	5	140	5700	-0.03	0.004	13.71	14.00	1.069	97.00	1.031	0.004	/
			Top Edge	5	140	5700	-0.13	0.006	13.71	14.00	1.069	97.00	1.031	0.007	/
			Bottom Edge	5	140	5700	-0.01	0.002	13.71	14.00	1.069	97.00	1.031	0.002	/
			Left Edge	5	100	5500	-0.01	0.163	13.53	14.00	1.114	97.00	1.031	0.187	/
			Left Edge	5	116	5580	-0.09	0.182	13.56	14.00	1.107	97.00	1.031	0.208	/
5.8G	ANT 1	802.11 a	Front Side	5	149	5745	-0.19	0.064	13.71	14.00	1.069	97.00	1.031	0.071	/
			Back Side	5	149	5745	0.03	0.049	13.71	14.00	1.069	97.00	1.031	0.054	/
			Left Edge	5	149	5745	-0.10	0.170	13.71	14.00	1.069	97.00	1.031	0.187	/
			Right Edge	5	149	5745	0.16	0.026	13.71	14.00	1.069	97.00	1.031	0.029	/
			Top Edge	5	149	5745	-0.07	0.006	13.71	14.00	1.069	97.00	1.031	0.007	/
			Bottom Edge	5	149	5745	0.14	0.003	13.71	14.00	1.069	97.00	1.031	0.003	/
			Left Edge	5	157	5785	0.19	0.190	13.29	14.00	1.178	97.00	1.031	0.231	17#
			Left Edge	5	165	5825	0.03	0.188	13.45	14.00	1.135	97.00	1.031	0.220	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Fre. Band	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs															
5.3G	ANT 1	802.11 a	Front Side	0	52	52	0.01	0.032	13.48	14.00	1.127	97.00	1.031	0.037	/
			Back Side	0	52	52	-0.16	0.028	13.48	14.00	1.127	97.00	1.031	0.033	/
			Left Edge	0	52	52	0.07	0.171	13.48	14.00	1.127	97.00	1.031	0.199	20#
			Right Edge	0	52	52	0.04	0.014	13.48	14.00	1.127	97.00	1.031	0.016	/
			Top Edge	0	52	52	-0.07	0.009	13.48	14.00	1.127	97.00	1.031	0.010	/
			Bottom Edge	0	52	52	0.14	0.006	13.48	14.00	1.127	97.00	1.031	0.007	/
			Left Edge	0	60	60	-0.10	0.151	13.35	14.00	1.161	97.00	1.031	0.181	/
			Left Edge	0	64	64	-0.17	0.164	13.36	14.00	1.159	97.00	1.031	0.196	/
5.6G	ANT 1	802.11 a	Front Side	0	116	140	0.10	0.040	13.71	14.00	1.069	97.00	1.031	0.044	/
			Back Side	0	116	140	-0.07	0.048	13.71	14.00	1.069	97.00	1.031	0.053	/
			Left Edge	0	116	140	0.05	0.181	13.71	14.00	1.069	97.00	1.031	0.199	21#
			Right Edge	0	116	140	-0.08	0.009	13.71	14.00	1.069	97.00	1.031	0.010	/
			Top Edge	0	116	140	0.19	0.005	13.71	14.00	1.069	97.00	1.031	0.006	/
			Bottom Edge	0	116	140	0.02	0.004	13.71	14.00	1.069	97.00	1.031	0.004	/
			Left Edge	0	100	100	-0.17	0.166	13.53	14.00	1.114	97.00	1.031	0.191	/
			Left Edge	0	140	116	-0.14	0.171	13.56	14.00	1.107	97.00	1.031	0.195	/
5.8G	ANT 1	802.11 a	Front Side	0	149	5745	0.06	0.042	13.71	14.00	1.069	97.00	1.031	0.046	/
			Back Side	0	149	5745	0.13	0.036	13.71	14.00	1.069	97.00	1.031	0.040	/
			Left Edge	0	149	5745	-0.15	0.154	13.71	14.00	1.069	97.00	1.031	0.170	/
			Right Edge	0	149	5745	0.11	0.005	13.71	14.00	1.069	97.00	1.031	0.006	/
			Top Edge	0	149	5745	-0.06	0.004	13.71	14.00	1.069	97.00	1.031	0.004	/
			Bottom Edge	0	149	5745	0.15	0.001	13.71	14.00	1.069	97.00	1.031	0.001	/
			Left Edge	0	157	5785	0.11	0.170	13.29	14.00	1.178	97.00	1.031	0.206	22#
			Left Edge	0	165	5825	-0.14	0.164	13.45	14.00	1.135	97.00	1.031	0.192	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

12 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
810	GSM 1900	ANT 0	Body	Right Edge	0.975	Yes	0.947	1.03
512	GSM 1900	ANT 0	Body	Right Edge	0.813	Yes	0.786	1.03
661	GSM 1900	ANT 0	Body	Right Edge	0.815	Yes	0.791	1.03

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.

13 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.

13.1 Simultaneous Transmission Mode Considerations

No.	Simultaneous Tx Combination	Body	Limbs
1	WWAN + WLAN2.4G + WLAN5G	Yes	Yes
2	WWAN + WLAN5G + BT	Yes	Yes

Note:

1. WiFi 2.4G and Bluetooth share the same antenna, and can't transmit simultaneously.
2. The maximum SAR summation is calculated based on the same configuration and test position.
3. 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.

13.2 Body Simultaneous Transmission SAR Evaluation

Band	Position	Stand alone SAR				SUM SAR	
		1	2	3	4	WWAN + WLAN2.4G + WLAN5G (1+2+3)	WWAN + WLAN5G + BT (1+3+4)
		WWAN	2.4GWIFI	5GWIFI Max	Bluetooth		
GSM850	Front Side 5mm	0.392	0.168	0.071	0.013	0.631	0.476
	Back Side 5mm	0.204	0.122	0.083	0.007	0.409	0.294
	Left Edge 5mm	0.104	0.534	0.231	0.031	0.869	0.366
	Right Edge 5mm	0.817	0.084	0.029	0.006	0.930	0.852
	Top Edge 5mm	0.063	0.057	0.007	0.004	0.127	0.074
	Bottom Edge 5mm	0.046	0.005	0.003	0.001	0.054	0.050
GSM1900	Front Side 5mm	0.109	0.168	0.071	0.013	0.348	0.193
	Back Side 5mm	0.098	0.122	0.083	0.007	0.303	0.188
	Left Edge 5mm	0.041	0.534	0.231	0.031	0.806	0.303
	Right Edge 5mm	1.064	0.084	0.029	0.006	1.177	1.099
	Top Edge 5mm	0.081	0.057	0.007	0.004	0.145	0.092
	Bottom Edge 5mm	0.022	0.005	0.003	0.001	0.030	0.026
WCDMA B2	Front Side 5mm	0.038	0.168	0.071	0.013	0.277	0.122
	Back Side 5mm	0.001	0.122	0.083	0.007	0.206	0.091
	Left Edge 5mm	0.002	0.534	0.231	0.031	0.767	0.264
	Right Edge 5mm	0.396	0.084	0.029	0.006	0.509	0.431
	Top Edge 5mm	0.005	0.057	0.007	0.004	0.069	0.016
	Bottom Edge 5mm	0.003	0.005	0.003	0.001	0.011	0.007
WCDMA B5	Front Side 5mm	0.160	0.168	0.071	0.013	0.399	0.244
	Back Side 5mm	0.086	0.122	0.083	0.007	0.291	0.176
	Left Edge 5mm	0.051	0.534	0.231	0.031	0.816	0.313
	Right Edge 5mm	0.355	0.084	0.029	0.006	0.468	0.390
	Top Edge 5mm	0.008	0.057	0.007	0.004	0.072	0.019
	Bottom Edge 5mm	0.005	0.005	0.003	0.001	0.013	0.009
LTE B5	Front Side 5mm	0.135	0.168	0.071	0.013	0.374	0.219
	Back Side 5mm	0.098	0.122	0.083	0.007	0.303	0.188
	Left Edge 5mm	0.064	0.534	0.231	0.031	0.829	0.326
	Right Edge 5mm	0.240	0.084	0.029	0.006	0.353	0.275
	Top Edge 5mm	0.007	0.057	0.007	0.004	0.071	0.018
	Bottom Edge 5mm	0.006	0.005	0.003	0.001	0.014	0.010
LTE B7	Front Side 5mm	0.013	0.168	0.071	0.013	0.252	0.097
	Back Side 5mm	0.058	0.122	0.083	0.007	0.263	0.148

	Left Edge 5mm	0.007	0.534	0.231	0.031	0.772	0.269
	Right Edge 5mm	0.387	0.084	0.029	0.006	0.500	0.422
	Top Edge 5mm	0.005	0.057	0.007	0.004	0.069	0.016
	Bottom Edge 5mm	0.006	0.005	0.003	0.001	0.014	0.010

Note:

1: The highest Summed 1g SAR is W/Kg 1.177 < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

13.3 Limbs Simultaneous Transmission SAR Evaluation

Band	Position	Stand alone SAR				SUM SAR	
		1	2	3	4	WWAN + WLAN2.4G + WLAN5G (1+2+3)	WWAN + WLAN5G + BT (1+3+4)
		WWAN	2.4GWIFI	5GWIFI Max	Bluetooth		
GSM850	Front Side 0mm	0.352	0.186	0.046	0.027	0.584	0.425
	Back Side 0mm	0.190	0.087	0.053	0.021	0.330	0.264
	Left Edge 0mm	0.096	1.198	0.206	0.070	1.500	0.372
	Right Edge 0mm	0.811	0.038	0.016	0.007	0.865	0.834
	Top Edge 0mm	0.073	0.057	0.010	0.008	0.140	0.091
	Bottom Edge 0mm	0.051	0.024	0.007	0.013	0.082	0.071
GSM1900	Front Side 0mm	0.200	0.186	0.046	0.027	0.432	0.273
	Back Side 0mm	0.100	0.087	0.053	0.021	0.240	0.174
	Left Edge 0mm	0.058	1.198	0.206	0.070	1.462	0.334
	Right Edge 0mm	1.222	0.038	0.016	0.007	1.276	1.245
	Top Edge 0mm	0.126	0.057	0.010	0.008	0.193	0.144
	Bottom Edge 0mm	0.034	0.024	0.007	0.013	0.065	0.054
WCDMA B2	Front Side 0mm	0.056	0.186	0.046	0.027	0.288	0.129
	Back Side 0mm	0.029	0.087	0.053	0.021	0.169	0.103
	Left Edge 0mm	0.012	1.198	0.206	0.070	1.416	0.288
	Right Edge 0mm	0.359	0.038	0.016	0.007	0.413	0.382
	Top Edge 0mm	0.031	0.057	0.010	0.008	0.098	0.049
	Bottom Edge 0mm	0.013	0.024	0.007	0.013	0.044	0.033
WCDMA B5	Front Side 0mm	0.149	0.186	0.046	0.027	0.381	0.222
	Back Side 0mm	0.097	0.087	0.053	0.021	0.237	0.171
	Left Edge 0mm	0.041	1.198	0.206	0.070	1.445	0.317
	Right Edge 0mm	0.425	0.038	0.016	0.007	0.479	0.448
	Top Edge 0mm	0.038	0.057	0.010	0.008	0.105	0.056
	Bottom Edge 0mm	0.012	0.024	0.007	0.013	0.043	0.032
LTE B5	Front Side 0mm	0.160	0.186	0.046	0.027	0.392	0.233

	Back Side 0mm	0.092	0.087	0.053	0.021	0.232	0.166
	Left Edge 0mm	0.048	1.198	0.206	0.070	1.452	0.324
	Right Edge 0mm	0.446	0.038	0.016	0.007	0.500	0.469
	Top Edge 0mm	0.033	0.057	0.010	0.008	0.100	0.051
	Bottom Edge 0mm	0.004	0.024	0.007	0.013	0.035	0.024
LTE B7	Front Side 0mm	0.054	0.186	0.046	0.027	0.286	0.127
	Back Side 0mm	0.049	0.087	0.053	0.021	0.189	0.123
	Left Edge 0mm	0.010	1.198	0.206	0.070	1.414	0.286
	Right Edge 0mm	0.409	0.038	0.016	0.007	0.463	0.432
	Top Edge 0mm	0.054	0.057	0.010	0.008	0.121	0.072
	Bottom Edge 0mm	0.009	0.024	0.007	0.013	0.040	0.029

Note:

1: The highest Summed 10g SAR is W/Kg $1.500 < 4.0$ W/kg, so Simultaneous Transmission SAR test is not required.

14 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
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	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	2025/03/05	2026/03/04
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	6201144551	2025/04/30	2026/04/29
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 (%)
2025.12.06	Head	835	21.2	0.90	41.78	0.90	41.50	0.00	0.67
2025.12.07	Head	835	21.3	0.89	41.95	0.90	41.50	-1.11	1.08
2025.12.07	Head	1950	21.3	1.42	39.11	1.40	40.00	1.43	-2.23
2025.12.08	Head	2450	21.8	1.80	39.58	1.80	39.20	0.00	0.97
2025.12.09	Head	2600	21.6	1.97	38.56	1.96	39.01	0.51	-1.15
2025.12.09	Head	5250	21.6	4.70	35.74	4.71	35.93	-0.21	-0.53
2025.12.19	Head	5600	21.9	5.05	35.23	5.07	35.53	-0.39	-0.84
2025.12.19	Head	5750	21.9	5.17	35.39	5.22	35.36	-0.96	0.08
2026.01.29	Head	835	21.5	0.89	40.05	0.90	41.50	-1.11	-3.49

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 (%)
2025.12.06	Head	835	100	0.959	9.59	9.74	-1.54
2025.12.07	Head	835	100	0.988	9.88	9.74	1.44
2025.12.07	Head	1950	100	4.050	40.50	41.70	-2.88
2025.12.08	Head	2450	100	5.480	54.80	52.60	4.18
2025.12.09	Head	2600	100	5.520	55.20	55.90	-1.25
2025.12.09	Head	5250	100	7.830	78.30	77.70	0.77
2025.12.19	Head	5600	100	8.270	82.70	81.30	1.72
2025.12.19	Head	5750	100	7.680	76.80	77.60	-1.03
2026.01.29	Head	835	100	0.964	9.64	9.74	-1.03

Note: The tolerance limit of System validation $\pm 10\%$.

Head liquid 10g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2025.12.06	Head	835	100	0.642	6.42	6.43	-0.16
2025.12.07	Head	835	100	0.663	6.63	6.43	3.11
2025.12.07	Head	1950	100	2.210	22.10	21.70	1.84
2025.12.08	Head	2450	100	2.570	25.70	24.70	4.05
2025.12.09	Head	2600	100	2.530	25.30	25.40	-0.39
2025.12.09	Head	5250	100	2.240	22.40	22.00	1.82
2025.12.19	Head	5600	100	2.340	23.40	23.10	1.30
2025.12.19	Head	5750	100	2.110	21.10	21.90	-3.65
2026.01.29	Head	835	100	0.633	6.33	6.43	-1.56

Note: The tolerance limit of System validation $\pm 10\%$.

Please refer the document "BL-SZ25B1343-ASC.pdf".

ANNEX C TEST DATA

Please refer the document “BL-SZ25B1343-ATD.pdf”.

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ25B1343-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ25B1343-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ25B1343-AC.pdf”.

ANNEX G TUNE-UP PROCEDURE

Please refer the document “BL-SZ25B1343-AT.pdf”.

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--END OF REPORT--