

TEST REPORT

Applicant: Shanghai Xiangcheng Communication Technology Co., Ltd
Address: 5F-6F, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai City, China
Equipment Type: A6Go Smart Payment Terminal
Model Name: K1152
Brand Name: KOZEN
FCC ID: 2A2UU-K1152
Test Standard: FCC 47 CFR Part 2.1093 (refer section 3.1)
Maximum SAR: Body-worn (1 g@10 mm): 0.70 W/kg
Hotspot (1 g@10 mm): 0.70W/kg
Sample Arrival Date: Aug. 17, 2026
Test Date: Aug. 31, 2026 - Sep. 02, 2026
Date of Issue: Sep. 30, 2026

ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center

**Prepared by:** Huang Xiaoqin**Reviewed by:** Cai Xueguo**Approved by:** Zhang Yanqing
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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 18, 2026</u>	<u>Initial Issue.</u>
<u>Rev. 02</u>	<u>Sep. 29, 2026</u>	<u>Updated the equipment class in Chapter 3.3.1.</u>
<u>Rev. 03</u>	<u>Sep. 30, 2026</u>	<u>Updated the equipment class in Chapter 3.3.2.</u>
		<u>The original report is invalid.</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Address	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China

1.2 Test Location

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Location	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1352. The laboratory is a testing organization accredited by ISED as a accredited testing laboratory. The company number is 29671 and CAB identifier number is CN0142.

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	Shanghai Xiangcheng Communication Technology Co., Ltd
Address	5F-6F, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai City, China

2.2 Manufacturer Information

Manufacturer	Shanghai Xiangcheng Communication Technology Co., Ltd
Address	5F-6F, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai City, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	A6Go Smart Payment Terminal
Model Name Under Test	K1152
Series Model Name	N/A
Description of Model name differentiation	N/A
Sample Number	CC26080004-001-S02 (SAR) CC26080004-001-S07(Conducted Power)
Hardware Version	V1.0T
Software Version	p0516_kozen_combo_kos_20260723
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	F50225AA
	Serial No.	N/A
	Capacity	3850 mAh
	Rated Voltage	3.85 V
	Limit Charge Voltage	4.4 V

2.5 Technical Information

Network and Wireless connectivity	2G Network GPRS 850/1900 3G Network WCDMA Band 2/4/5 4G Network LTE FDD Band 2/4/5/7/12/17/25/26/66 LTE TDD Band 38/41 Bluetooth 2.4G WIFI 802.11b, 802.11g, 802.11n HT20/40 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80) NFC, GPS, Glonass, BDS, Galileo
Note: The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA and LTE, and both SIM share the same transmitting electro circuit, NV parameters, so only SIM1 was tested in this report.	

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

Operating Mode	GSM; WCDMA; LTE; WLAN; Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 900	TX: 880 ~ 915 MHz	RX: 925 ~ 960 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: 2110~2155 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 17	TX: 704-716 MHz	RX: 734~746 MHz
	LTE Band 25	TX: 1850~1915 MHz	RX: 1930~1995 MHz
	LTE Band 26	TX: 814~849 MHz	RX: 859~894 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2535 ~ 2655 MHz	RX: 2535 ~ 2655 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2200 MHz
	2.4G WIFI	2412 ~ 2462 MHz	
	5G WIFI	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	Bluetooth	2402 ~ 2480 MHz	
	NFC	13.56MHz	
Antenna Type	WWAN	PIFA	

	WLAN	PIFA
	Bluetooth	PIFA
	NFC	FPC
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 C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
5	KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
7	KDB 941225 D05A v01r02	REL. 10 LTE SAR TEST GUIDANCE AND KDB INQUIRIES
8	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
9	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
10	KDB 865664 D02 v01r02	RF Exposure Reporting
11	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
12	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 Values

Frequency Band		Maximum Scaled SAR		Maximum Report SAR (W/kg)	
		1 g(W/kg)		1 g(W/kg)	
		Body-worn	Hotspot	Body-worn	Hotspot
		(Separation 10 mm)	(Separation 10 mm)	(Separation 10 mm)	(Separation 10 mm)
PCT	GSM 850	0.55	0.55	0.70	0.70
	GSM 1900	0.70	0.70		
	WCDMA B2	0.59	0.59		
	WCDMA B4	0.57	0.57		
	WCDMA B5	0.40	0.40		
	LTE B7	0.47	0.47		
	LTE B12	0.51	0.51		
	LTE B25	0.66	0.66		
	LTE B26	0.40	0.40		
	LTE B66	0.57	0.57		
	LTE B41	0.23	0.23		
DTS	2.4G WIFI	0.44	0.44		
NII	5G WIFI	0.49	0.49		
DSS	Bluetooth	0.05	0.05		
Limits (W/kg)		1.6		1.6	
Test Verdict		Pass			
Note: This device supports LTE B2/B4/B5/B17/B38 and LTE B25/B66/B26/B12/B41. Since the supported frequency span for LTE B2/B4/B5/B17/B38 falls completely within the supports frequency span for LTE B25/B66/B26/B12/B41, these LTE bands share the same transmission path, and LTE B2/B4/B5/B17/B38 have lower or the same target power as LTE B25/B66/B26/B12/B41; Therefore, SAR was only assessed for LTE B25/B66/B26/B12/B41.					

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)	
	Body-worn	Hotspot
	1g (10mm)	1g (10mm)
PCT	1.24	1.24
Limit (W/kg)	1.6	1.6
Note: The highest simultaneous SAR please refer section 11.2		

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

3.5 Decision Rule

- ☐ No Need
- ☒ Use General Conformity Decision Rule
- ☐ Use Special Conformity Decision Rule

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:

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

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

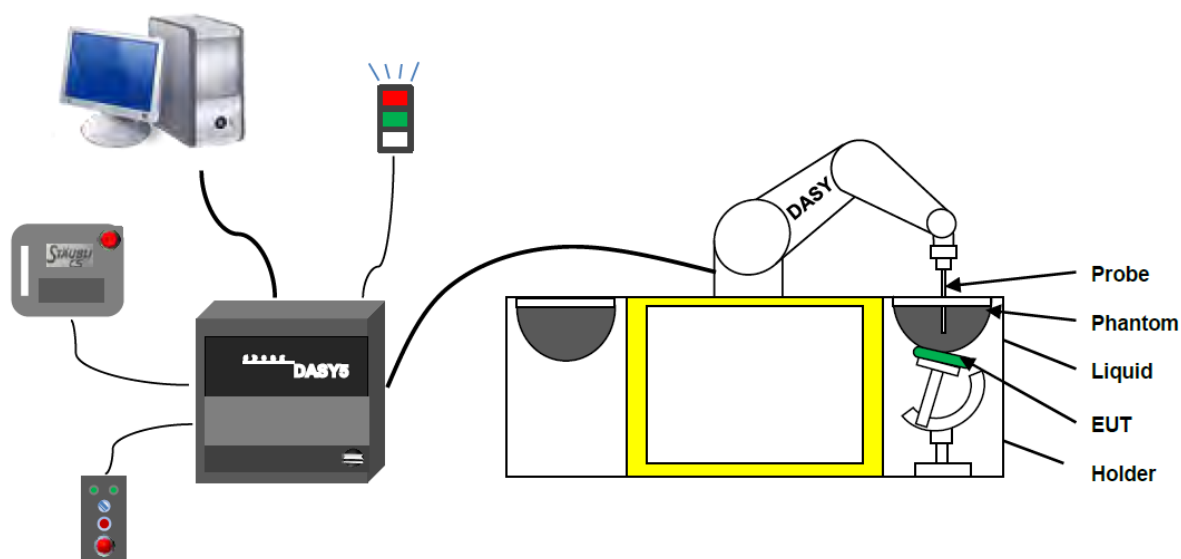
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

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

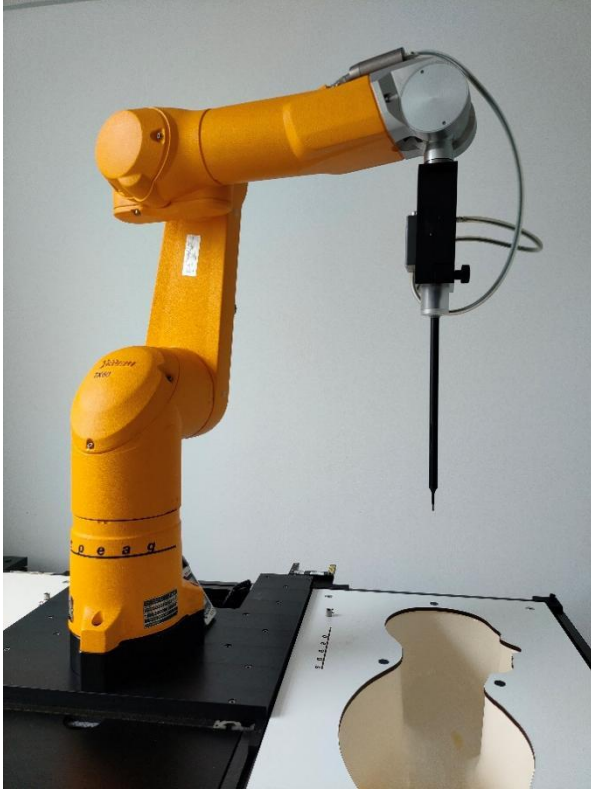


The DASY5 system for performing compliance tests consists of the following items:

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., glycoether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	4 MHz to 10 GHz; Linearity: ± 0.2 dB
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 IEC/IEEE 62209-1528 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the IEC/IEEE 62209-1528 annexe technique using reference guide at the five frequencies.

4.2.4 Data Acquisition Electronics

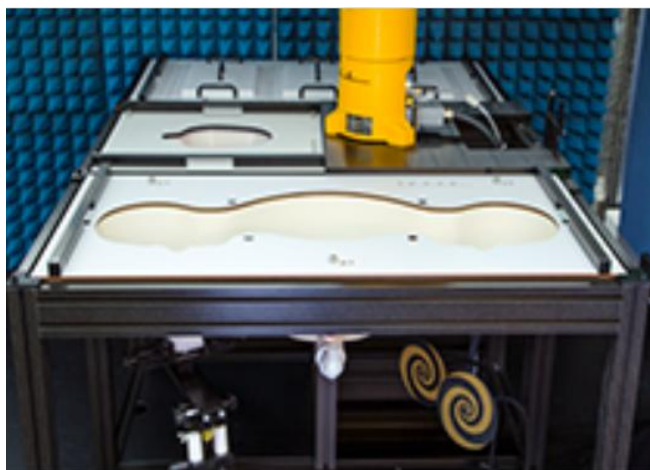
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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

Photo of Phantom



Serial Number	Material	Length	Height
SAM1	Vinylester, glass fiber reinforced	1000	500

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.

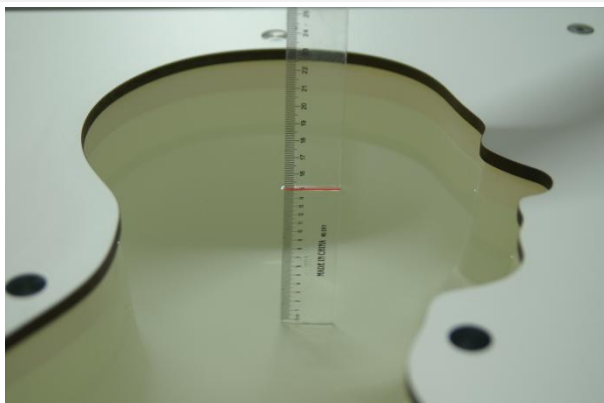


The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than 1° .

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	Ethanediol, Sodium petroleum sulfonate, Hexylene Glycol / 2-Methyl-pentane-2.4-diol, Alkoxylated alcohol

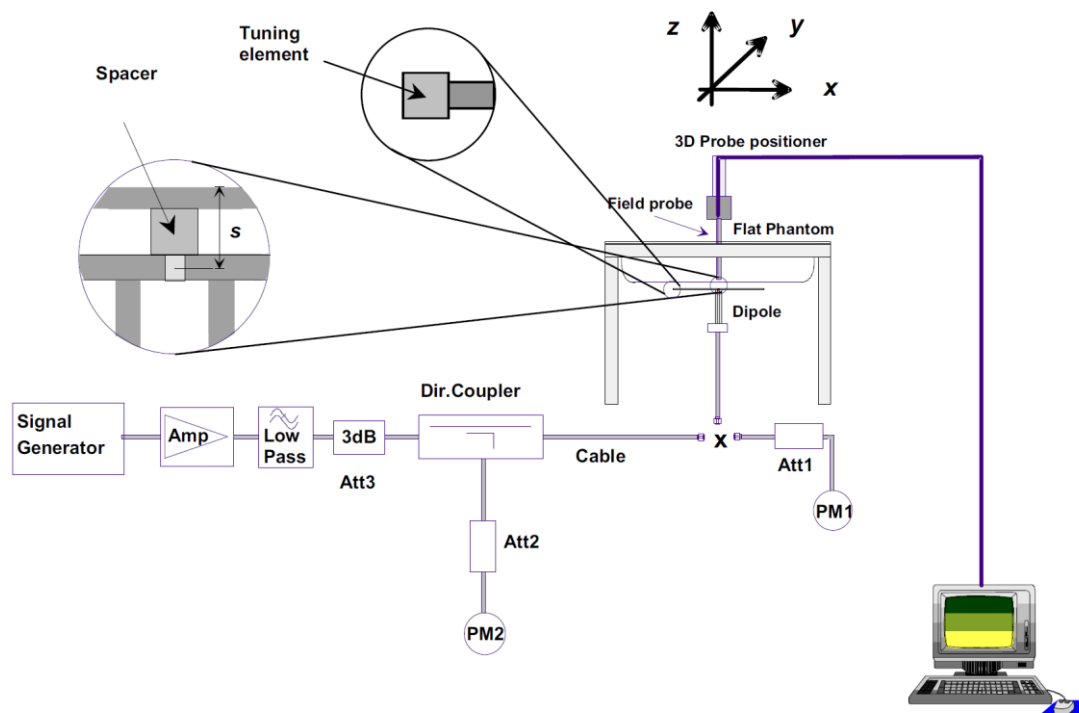
5 SYSTEM VERIFICATION

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

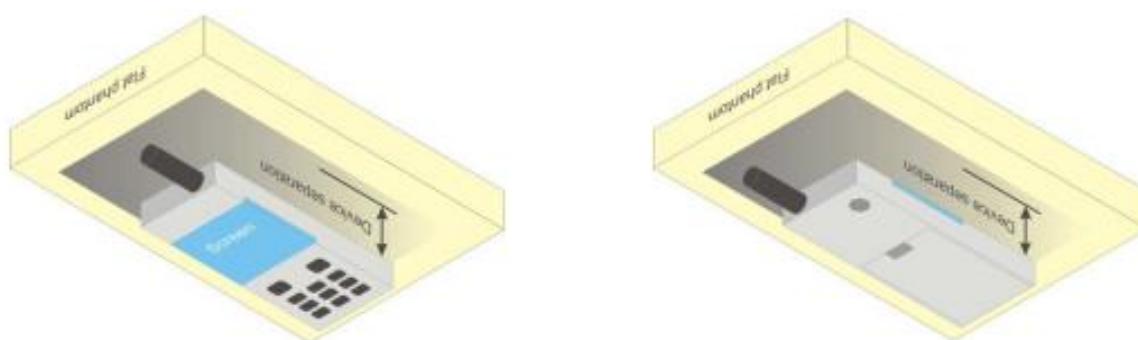
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Body-worn Position Conditions

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB 447498 are used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode. When the reported SAR for a body-worn accessory.

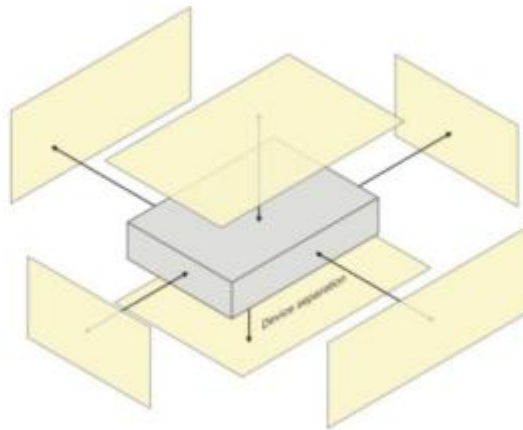
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. All body-worn accessories containing metallic components are tested in conjunction with the host device.

Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice only operations in its normal and expected use conditions, testing of data mode for body-worn compliance is not required. A conservative minimum test separation distance for supporting off-the-shelf body-worn accessories that may be acquired by users of consumer handsets is used to test for body-worn accessory SAR compliance. This distance is determined by the handset manufacturer, according to the requirements of Supplement C 01-01. Devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, will be tested using a conservative minimum test separation distance ≤ 5 mm to support compliance.



6.2 Hotspot Mode Exposure Position Conditions

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing functions, the relevant hand and body exposure conditions are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surfaces and edges with a transmitting antenna located within 25 mm from that surface or edge. When the form factor of a handset is smaller than 9 cm x 5 cm, a test separation distance of 5 mm (instead of 10 mm) is required for testing hotspot mode. When the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).



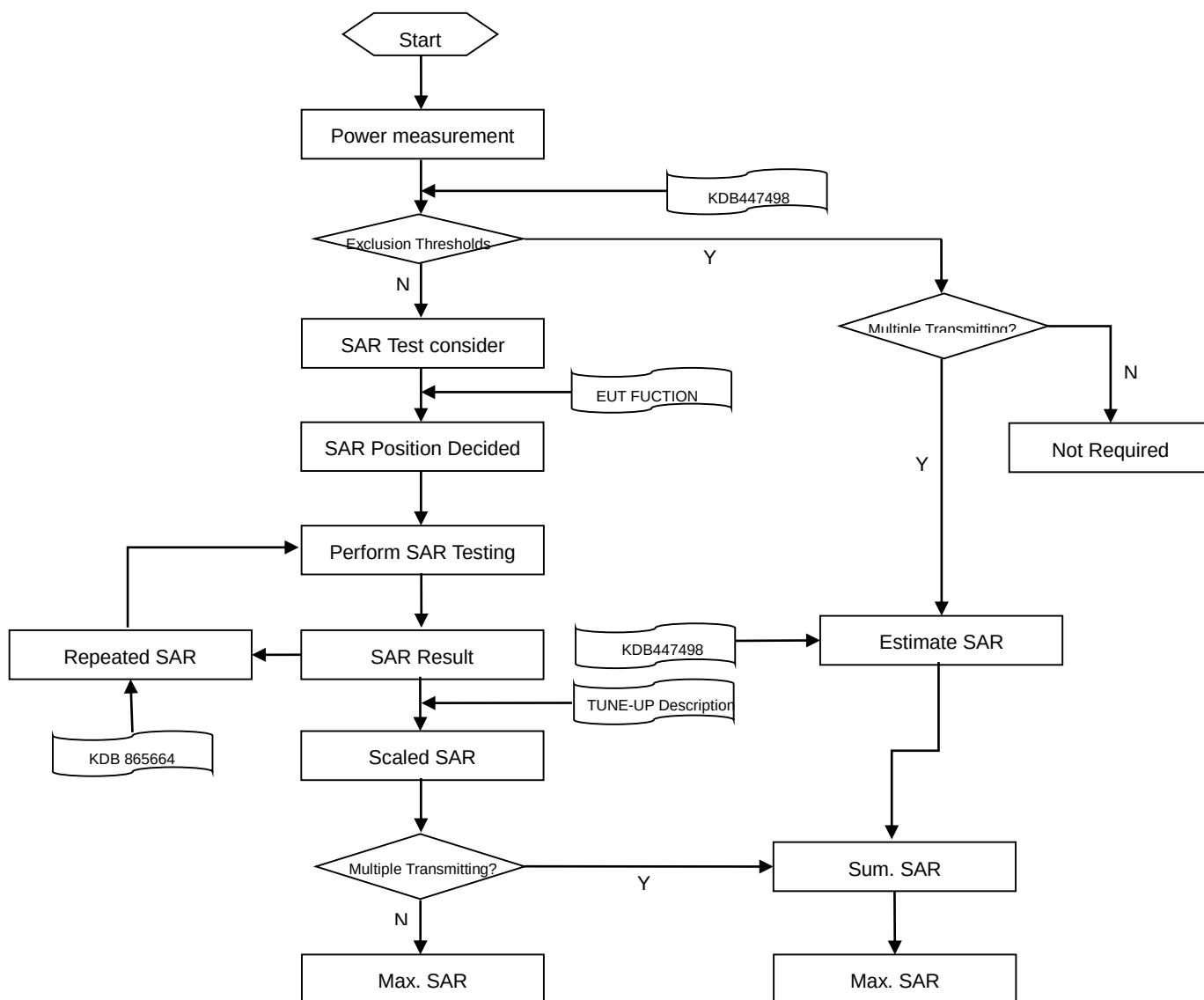
6.3 Product Specific 10g Exposure Consideration

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	½·δ·ln(2)±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.

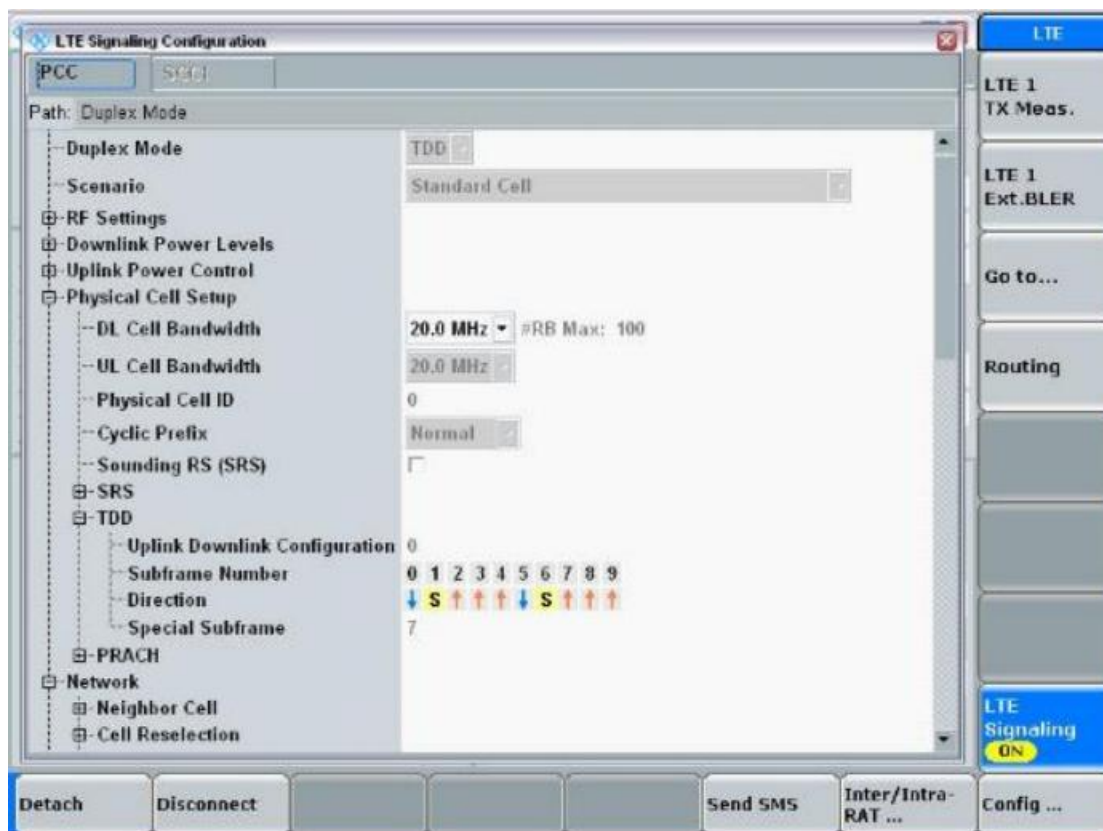
7.4 Area & Zoom Scan Procedure

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.

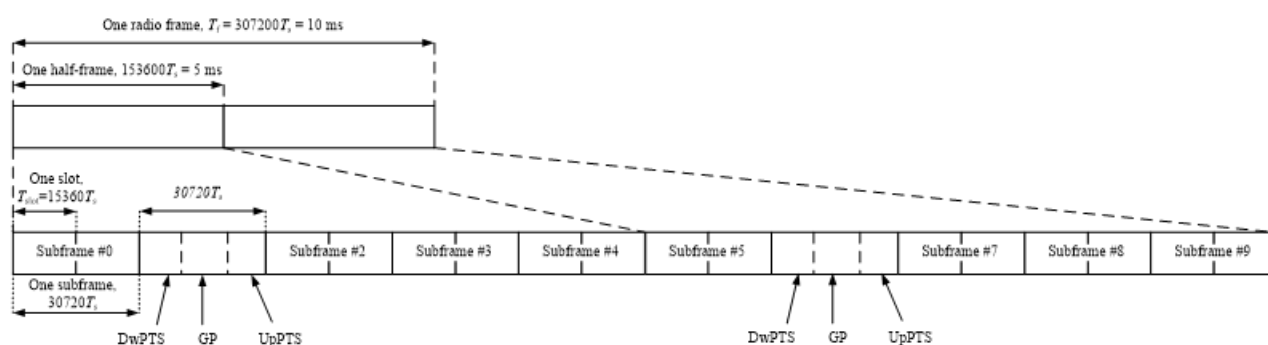
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

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 OUPUT POWER

8.1 GSM

Please refer the document "Ti-CC26080119-AP.pdf".

8.2 WCDMA

Please refer the document "Ti-CC26080119-AP.pdf".

8.3 LTE

Please refer the document "Ti-CC26080119-AP.pdf".

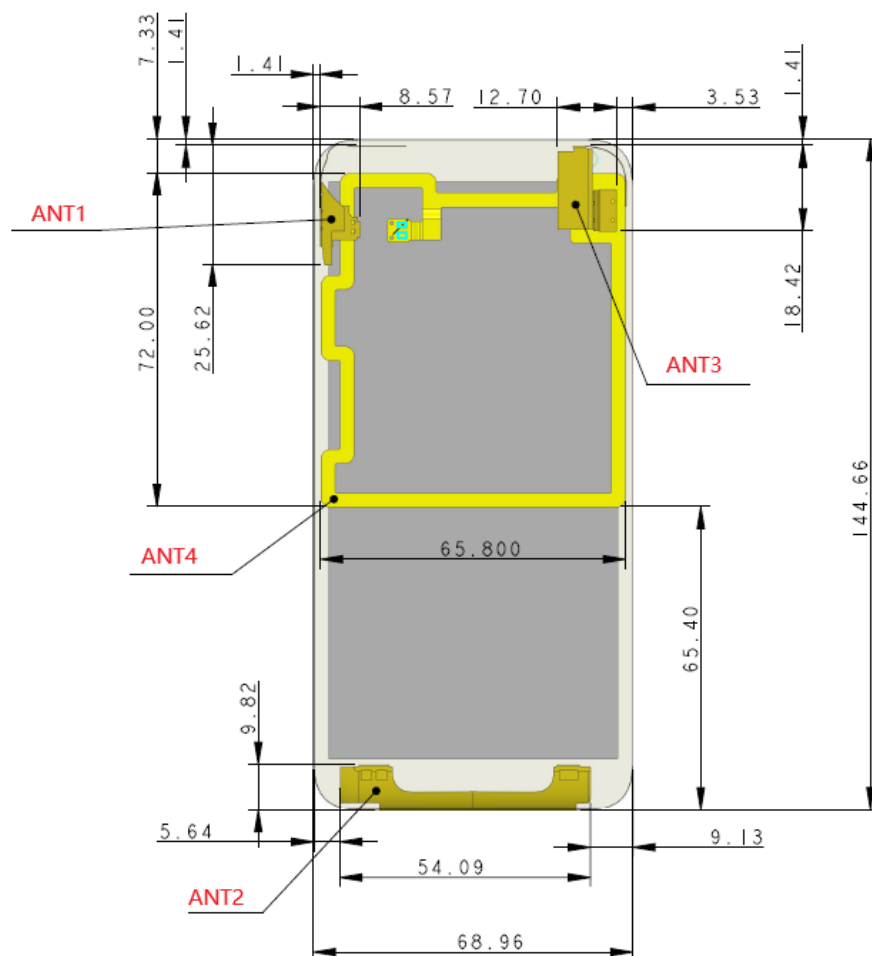
8.4 WIFI

Please refer the document "Ti-CC26080119-AP.pdf".

8.5 Bluetooth

Please refer the document "Ti-CC26080119-AP.pdf".

9 Antenna Location



Antenna	Support Bands
ANT1	RX Only
ANT2	GSM 850/1900; WCDMA B2/4/5 LTE B2/4/5/7/12/17/25/26/66/38/41
ANT3	WiFi 2.4G/5G; BT
ANT4	NFC

10 TEST RESULT

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

10.1.1 GSM/WCDMA/LTE/WIFI/BT SAR

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
GSM 850	Body-worn& Hotspot												
GSM 850	ANT2	Front side	10mm	GPRS 4TX	190	836.6	-0.12	0.233	27.15	28.00	1.216	0.283	/
GSM 850	ANT2	Back side	10mm		190	836.6	0.08	0.451	27.15	28.00	1.216	0.548	1
GSM 850	ANT2	Left side	10mm		190	836.6	0.06	0.360	27.15	28.00	1.216	0.438	/
GSM 850	ANT2	Right side	10mm		190	836.6	0.03	0.178	27.15	28.00	1.216	0.216	/
GSM 850	ANT2	Top side	10mm		190	836.6	-0.12	0.058	27.15	28.00	1.216	0.071	/
GSM 850	ANT2	Bottom side	10mm		190	836.6	-0.16	0.171	27.15	28.00	1.216	0.208	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
GSM 1900	Body-worn& Hotspot												
GSM 1900	ANT2	Front side	10mm	GPRS 4TX	661	1880	-0.13	0.114	24.06	25.00	1.242	0.142	/
GSM 1900	ANT2	Back side	10mm		661	1880	0.02	0.566	24.06	25.00	1.242	0.703	2
GSM 1900	ANT2	Left side	10mm		661	1880	0.05	0.117	24.06	25.00	1.242	0.145	/
GSM 1900	ANT2	Right side	10mm		661	1880	-0.05	0.173	24.06	25.00	1.242	0.215	/
GSM 1900	ANT2	Top side	10mm		661	1880	0.01	0.063	24.06	25.00	1.242	0.078	/
GSM 1900	ANT2	Bottom side	10mm		661	1880	0.06	0.521	24.06	25.00	1.242	0.647	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
WCDMA B2	Body-worn& Hotspot												
WCDMA B2	ANT2	Front side	10mm	RMC	9400	1880	-0.15	0.154	22.09	23.00	1.233	0.190	/
WCDMA B2	ANT2	Back side	10mm		9400	1880	-0.03	0.475	22.09	23.00	1.233	0.586	3
WCDMA B2	ANT2	Left side	10mm		9400	1880	0.11	0.108	22.09	23.00	1.233	0.133	/
WCDMA B2	ANT2	Right side	10mm		9400	1880	0.04	0.213	22.09	23.00	1.233	0.263	/
WCDMA B2	ANT2	Top side	10mm		9400	1880	-0.18	0.024	22.09	23.00	1.233	0.030	/
WCDMA B2	ANT2	Bottom side	10mm		9400	1880	-0.15	0.468	22.09	23.00	1.233	0.577	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
WCDMA B4	Body-worn& Hotspot												
WCDMA B4	ANT2	Front side	10mm	RMC	1412	1732.4	0.10	0.084	20.37	21.50	1.297	0.109	/
WCDMA B4	ANT2	Back side	10mm		1412	1732.4	0.12	0.441	20.37	21.50	1.297	0.572	4
WCDMA B4	ANT2	Left side	10mm		1412	1732.4	0.03	0.042	20.37	21.50	1.297	0.054	/
WCDMA B4	ANT2	Right side	10mm		1412	1732.4	-0.08	0.109	20.37	21.50	1.297	0.141	/
WCDMA B4	ANT2	Top side	10mm		1412	1732.4	-0.01	0.034	20.37	21.50	1.297	0.044	/
WCDMA B4	ANT2	Bottom side	10mm		1412	1732.4	-0.18	0.417	20.37	21.50	1.297	0.541	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
WCDMA B5	Body-worn& Hotspot												
WCDMA B5	ANT2	Front side	10mm	RMC	4183	836.6	-0.13	0.098	22.53	23.50	1.250	0.123	/
WCDMA B5	ANT2	Back side	10mm		4183	836.6	-0.03	0.320	22.53	23.50	1.250	0.400	5
WCDMA B5	ANT2	Left side	10mm		4183	836.6	-0.09	0.175	22.53	23.50	1.250	0.219	/
WCDMA B5	ANT2	Right side	10mm		4183	836.6	-0.04	0.077	22.53	23.50	1.250	0.096	/
WCDMA B5	ANT2	Top side	10mm		4183	836.6	0.15	0.020	22.53	23.50	1.250	0.025	/
WCDMA B5	ANT2	Bottom side	10mm		4183	836.6	0.15	0.126	22.53	23.50	1.250	0.158	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Bandwidth	RB num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
LTE B7	Body-worn& Hotspot															
LTE B7	ANT2	Front side	10mm	QPSK	21100	2535	20	1	0	-0.1	0.095	23.67	24.50	1.211	0.115	/
LTE B7	ANT2	Back side	10mm		21100	2535	20	1	0	0.02	0.390	23.67	24.50	1.211	0.472	6
LTE B7	ANT2	Left side	10mm		21100	2535	20	1	0	0.1	0.035	23.67	24.50	1.211	0.042	/
LTE B7	ANT2	Right side	10mm		21100	2535	20	1	0	-0.16	0.156	23.67	24.50	1.211	0.189	/
LTE B7	ANT2	Top side	10mm		21100	2535	20	1	0	-0.08	0.027	23.67	24.50	1.211	0.033	/
LTE B7	ANT2	Bottom side	10mm	QPSK	21100	2535	20	1	0	0.17	0.180	23.67	24.50	1.211	0.218	/
LTE B7	ANT2	Front side	10mm		21100	2535	20	50	0	0.14	0.080	22.78	23.50	1.180	0.094	/
LTE B7	ANT2	Back side	10mm		21100	2535	20	50	0	-0.02	0.327	22.78	23.50	1.180	0.386	/
LTE B7	ANT2	Left side	10mm		21100	2535	20	50	0	0.02	0.032	22.78	23.50	1.180	0.038	/
LTE B7	ANT2	Right side	10mm		21100	2535	20	50	0	0.05	0.135	22.78	23.50	1.180	0.159	/
LTE B7	ANT2	Top side	10mm	QPSK	21100	2535	20	50	0	-0.05	0.024	22.78	23.50	1.180	0.028	/
LTE B7	ANT2	Bottom side	10mm		21100	2535	20	50	0	-0.04	0.150	22.78	23.50	1.180	0.177	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Bandwidth	RB num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
LTE B12	Body-worn& Hotspot															
LTE B12	ANT2	Front side	10mm	QPSK	23095	707.5	10	1	0	-0.02	0.227	23.17	24.00	1.211	0.275	/
LTE B12	ANT2	Back side	10mm		23095	707.5	10	1	0	0.1	0.421	23.17	24.00	1.211	0.510	7
LTE B12	ANT2	Left side	10mm		23095	707.5	10	1	0	0.15	0.226	23.17	24.00	1.211	0.274	/
LTE B12	ANT2	Right side	10mm		23095	707.5	10	1	0	0.18	0.214	23.17	24.00	1.211	0.259	/
LTE B12	ANT2	Top side	10mm		23095	707.5	10	1	0	0.09	0.020	23.17	24.00	1.211	0.024	/
LTE B12	ANT2	Bottom side	10mm	QPSK	23095	707.5	10	1	0	0.19	0.077	23.17	24.00	1.211	0.093	/
LTE B12	ANT2	Front side	10mm		23095	707.5	10	25	0	-0.09	0.209	22.13	23.00	1.222	0.255	/
LTE B12	ANT2	Back side	10mm		23095	707.5	10	25	0	0.18	0.401	22.13	23.00	1.222	0.490	/
LTE B12	ANT2	Left side	10mm		23095	707.5	10	25	0	-0.13	0.249	22.13	23.00	1.222	0.304	/
LTE B12	ANT2	Right side	10mm		23095	707.5	10	25	0	0.18	0.240	22.13	23.00	1.222	0.293	/
LTE B12	ANT2	Top side	10mm	QPSK	23095	707.5	10	25	0	0.15	0.021	22.13	23.00	1.222	0.026	/
LTE B12	ANT2	Bottom side	10mm		23095	707.5	10	25	0	-0.01	0.079	22.13	23.00	1.222	0.097	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Bandwidth	RB num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
LTE B25	Body-worn& Hotspot															
LTE B25	ANT2	Front side	10mm	QPSK	26365	1882.5	20	1	0	-0.03	0.178	23.38	24.00	1.153	0.205	/
LTE B25	ANT2	Back side	10mm		26365	1882.5	20	1	0	0.18	0.573	23.38	24.00	1.153	0.661	8
LTE B25	ANT2	Left side	10mm		26365	1882.5	20	1	0	0.11	0.137	23.38	24.00	1.153	0.158	/
LTE B25	ANT2	Right side	10mm		26365	1882.5	20	1	0	-0.16	0.258	23.38	24.00	1.153	0.298	/
LTE B25	ANT2	Top side	10mm		26365	1882.5	20	1	0	0.14	0.026	23.38	24.00	1.153	0.030	/
LTE B25	ANT2	Bottom side	10mm	QPSK	26365	1882.5	20	1	0	0.15	0.551	23.38	24.00	1.153	0.636	/
LTE B25	ANT2	Front side	10mm		26365	1882.5	20	50	0	0.11	0.154	22.37	23.00	1.156	0.178	/
LTE B25	ANT2	Back side	10mm		26365	1882.5	20	50	0	-0.14	0.520	22.37	23.00	1.156	0.601	/
LTE B25	ANT2	Left side	10mm		26365	1882.5	20	50	0	0.11	0.115	22.37	23.00	1.156	0.133	/
LTE B25	ANT2	Right side	10mm		26365	1882.5	20	50	0	-0.11	0.215	22.37	23.00	1.156	0.249	/
LTE B25	ANT2	Top side	10mm	QPSK	26365	1882.5	20	50	0	-0.16	0.023	22.37	23.00	1.156	0.027	/
LTE B25	ANT2	Bottom side	10mm		26365	1882.5	20	50	0	-0.07	0.505	22.37	23.00	1.156	0.584	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Bandwidth	RB num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
LTE B26	Body-worn& Hotspot															
LTE B26	ANT2	Front side	10mm	QPSK	26865	831.5	15	1	0	-0.13	0.161	23.45	24.00	1.135	0.183	/
LTE B26	ANT2	Back side	10mm		26865	831.5	15	1	0	-0.05	0.350	23.45	24.00	1.135	0.397	9
LTE B26	ANT2	Left side	10mm		26865	831.5	15	1	0	0.13	0.245	23.45	24.00	1.135	0.278	/
LTE B26	ANT2	Right side	10mm		26865	831.5	15	1	0	0.08	0.114	23.45	24.00	1.135	0.129	/
LTE B26	ANT2	Top side	10mm		26865	831.5	15	1	0	-0.07	0.027	23.45	24.00	1.135	0.031	/
LTE B26	ANT2	Bottom side	10mm	QPSK	26865	831.5	15	1	0	0.07	0.120	23.45	24.00	1.135	0.136	/
LTE B26	ANT2	Front side	10mm		26865	831.5	15	36	0	-0.11	0.133	22.36	23.00	1.159	0.154	/
LTE B26	ANT2	Back side	10mm		26865	831.5	15	36	0	-0.07	0.316	22.36	23.00	1.159	0.366	/
LTE B26	ANT2	Left side	10mm		26865	831.5	15	36	0	-0.19	0.202	22.36	23.00	1.159	0.234	/
LTE B26	ANT2	Right side	10mm		26865	831.5	15	36	0	-0.11	0.091	22.36	23.00	1.159	0.105	/
LTE B26	ANT2	Top side	10mm	QPSK	26865	831.5	15	36	0	0.14	0.024	22.36	23.00	1.159	0.028	/
LTE B26	ANT2	Bottom side	10mm		26865	831.5	15	36	0	0.17	0.104	22.36	23.00	1.159	0.121	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Bandwidth	RB num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
LTE B66	Body-worn& Hotspot															
LTE B66	ANT2	Front side	10mm	QPSK	132322	1745	20	1	0	-0.11	0.080	20.67	21.50	1.211	0.097	/
LTE B66	ANT2	Back side	10mm		132322	1745	20	1	0	0.09	0.473	20.67	21.50	1.211	0.573	10
LTE B66	ANT2	Left side	10mm		132322	1745	20	1	0	-0.05	0.046	20.67	21.50	1.211	0.056	/
LTE B66	ANT2	Right side	10mm		132322	1745	20	1	0	0.16	0.108	20.67	21.50	1.211	0.131	/
LTE B66	ANT2	Top side	10mm		132322	1745	20	1	0	0.17	0.032	20.67	21.50	1.211	0.039	/
LTE B66	ANT2	Bottom side	10mm		132322	1745	20	1	0	0.13	0.433	20.67	21.50	1.211	0.524	/
LTE B66	ANT2	Front side	10mm	QPSK	132322	1745	20	50	0	0.14	0.073	19.81	20.50	1.172	0.086	/
LTE B66	ANT2	Back side	10mm		132322	1745	20	50	0	-0.04	0.471	19.81	20.50	1.172	0.552	/
LTE B66	ANT2	Left side	10mm		132322	1745	20	50	0	-0.11	0.031	19.81	20.50	1.172	0.036	/
LTE B66	ANT2	Right side	10mm		132322	1745	20	50	0	-0.09	0.095	19.81	20.50	1.172	0.111	/
LTE B66	ANT2	Top side	10mm		132322	1745	20	50	0	0.05	0.024	19.81	20.50	1.172	0.028	/
LTE B66	ANT2	Bottom side	10mm		132322	1745	20	50	0	0.12	0.408	19.81	20.50	1.172	0.478	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Bandwidth	RB num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
LTE B41	Body-worn& Hotspot															
LTE B41	ANT2	Front side	10mm	QPSK	40640	2595	20	1	0	-0.1	0.064	23.51	24.50	1.256	0.080	/
LTE B41	ANT2	Back side	10mm		40640	2595	20	1	0	0.03	0.184	23.51	24.50	1.256	0.231	11
LTE B41	ANT2	Left side	10mm		40640	2595	20	1	0	-0.13	0.022	23.51	24.50	1.256	0.028	/
LTE B41	ANT2	Right side	10mm		40640	2595	20	1	0	-0.03	0.092	23.51	24.50	1.256	0.116	/
LTE B41	ANT2	Top side	10mm		40640	2595	20	1	0	0.06	0.024	23.51	24.50	1.256	0.030	/
LTE B41	ANT2	Bottom side	10mm		40640	2595	20	1	0	-0.04	0.107	23.51	24.50	1.256	0.134	/
LTE B41	ANT2	Front side	10mm	QPSK	40640	2595	20	50	0	-0.15	0.056	22.97	23.50	1.130	0.063	/
LTE B41	ANT2	Back side	10mm		40640	2595	20	50	0	-0.01	0.136	22.97	23.50	1.130	0.154	/
LTE B41	ANT2	Left side	10mm		40640	2595	20	50	0	-0.1	0.018	22.97	23.50	1.130	0.020	/
LTE B41	ANT2	Right side	10mm		40640	2595	20	50	0	0.18	0.069	22.97	23.50	1.130	0.078	/
LTE B41	ANT2	Top side	10mm		40640	2595	20	50	0	-0.08	0.019	22.97	23.50	1.130	0.021	/
LTE B41	ANT2	Bottom side	10mm		40640	2595	20	50	0	0.07	0.083	22.97	23.50	1.130	0.094	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	1g Scaled SAR (W/kg)	Meas. No.
Bluetooth	Body-worn& Hotspot														
	ANT3	Front side	10mm	DH5	0	2402	0.14	0.020	13.47	14.50	1.268	76.88	1.301	0.033	/
	ANT3	Back side	10mm		0	2402	0.09	0.031	13.47	14.50	1.268	76.88	1.301	0.051	12
	ANT3	Left side	10mm		0	2402	-0.12	0.022	13.47	14.50	1.268	76.88	1.301	0.036	/
	ANT3	Right side	10mm		0	2402	0.11	0.019	13.47	14.50	1.268	76.88	1.301	0.031	/
	ANT3	Top side	10mm		0	2402	-0.13	0.015	13.47	14.50	1.268	76.88	1.301	0.025	/
	ANT3	Bottom side	10mm		0	2402	0.06	0.022	13.47	14.50	1.268	76.88	1.301	0.036	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq.(MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	1g Scaled SAR (W/kg)	Meas. No.
2.4G WIFI	Body-worn& Hotspot														
	ANT3	Front Side	10mm	802.11b	1	2412	0.09	0.082	19.82	20.50	1.169	98.91	1.011	0.097	/
	ANT3	Back Side	10mm		1	2412	-0.06	0.370	19.82	20.50	1.169	98.91	1.011	0.437	13
	ANT3	Left Side	10mm		1	2412	0.15	0.150	19.82	20.50	1.169	98.91	1.011	0.177	/
	ANT3	Right Side	10mm		1	2412	0.13	0.037	19.82	20.50	1.169	98.91	1.011	0.044	/
	ANT3	Top Side	10mm		1	2412	0.11	0.117	19.82	20.50	1.169	98.91	1.011	0.138	/
	ANT3	Bottom Side	10mm		1	2412	0.18	0.022	19.82	20.50	1.169	98.91	1.011	0.026	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq.(MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	1g Scaled SAR (W/kg)	Meas. No.
5.2G WIFI	Body-worn& Hotspot														
	ANT3	Front side	10mm	802.11n20	36	5180	0.05	0.110	14.57	15.50	1.239	99.16	1.008	0.137	/
	ANT3	Back side	10mm		36	5180	-0.08	0.390	14.57	15.50	1.239	99.16	1.008	0.487	14
	ANT3	Left side	10mm		36	5180	0.07	0.207	14.57	15.50	1.239	99.16	1.008	0.258	/
	ANT3	Right side	10mm		36	5180	0.14	0.151	14.57	15.50	1.239	99.16	1.008	0.189	/
	ANT3	Top side	10mm		36	5180	-0.09	0.129	14.57	15.50	1.239	99.16	1.008	0.161	/
	ANT3	Bottom side	10mm		36	5180	-0.13	0.024	14.57	15.50	1.239	99.16	1.008	0.030	/
5.3G WIFI	ANT3	Front side	10mm	802.11a	52	5260	0.06	0.076	14.70	15.50	1.202	99.15	1.009	0.092	/
	ANT3	Back side	10mm		52	5260	0.07	0.330	14.70	15.50	1.202	99.15	1.009	0.400	15
	ANT3	Left side	10mm		52	5260	-0.13	0.191	14.70	15.50	1.202	99.15	1.009	0.232	/
	ANT3	Right side	10mm		52	5260	-0.02	0.110	14.70	15.50	1.202	99.15	1.009	0.133	/
	ANT3	Top side	10mm		52	5260	0.02	0.107	14.70	15.50	1.202	99.15	1.009	0.130	/
	ANT3	Bottom side	10mm		52	5260	-0.03	0.034	14.70	15.50	1.202	99.15	1.009	0.041	/
5.6G WIFI	ANT3	Front side	10mm	802.11a	116	5580	-0.04	0.123	19.81	21.00	1.315	99.15	1.009	0.163	/
	ANT3	Back side	10mm		116	5580	0.11	0.247	19.81	21.00	1.315	99.15	1.009	0.328	/
	ANT3	Left side	10mm		116	5580	-0.09	0.228	19.81	21.00	1.315	99.15	1.009	0.303	/
	ANT3	Right side	10mm		116	5580	0.02	0.120	19.81	21.00	1.315	99.15	1.009	0.159	/
	ANT3	Top side	10mm		116	5580	0.03	0.312	19.81	21.00	1.315	99.15	1.009	0.414	16
	ANT3	Bottom side	10mm		116	5580	0.18	0.141	19.81	21.00	1.315	99.15	1.009	0.187	/
5.8G WIFI	ANT3	Front side	10mm	802.11a	149	5745	-0.07	0.132	19.62	20.50	1.225	99.15	1.009	0.163	/
	ANT3	Back side	10mm		149	5745	0.19	0.253	19.62	20.50	1.225	99.15	1.009	0.313	/
	ANT3	Left side	10mm		149	5745	0.09	0.209	19.62	20.50	1.225	99.15	1.009	0.258	/
	ANT3	Right side	10mm		149	5745	0.16	0.123	19.62	20.50	1.225	99.15	1.009	0.152	/
	ANT3	Top side	10mm		149	5745	0.08	0.312	19.62	20.50	1.225	99.15	1.009	0.386	17
	ANT3	Bottom side	10mm		149	5745	0.14	0.132	19.62	20.50	1.225	99.15	1.009	0.163	/

10.1.2 NFC SAR

1. According to the 2022.04 TCBC Workshop meeting, the power threshold is $\leq 100\text{MHz}$, refer to P6s.

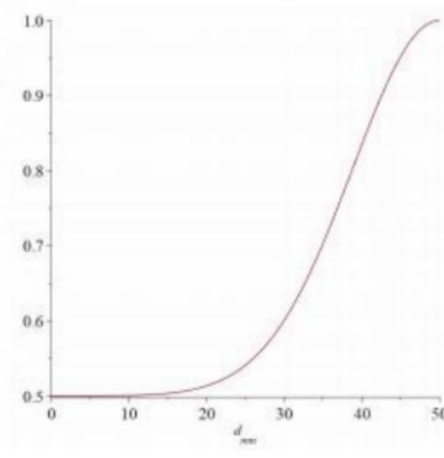
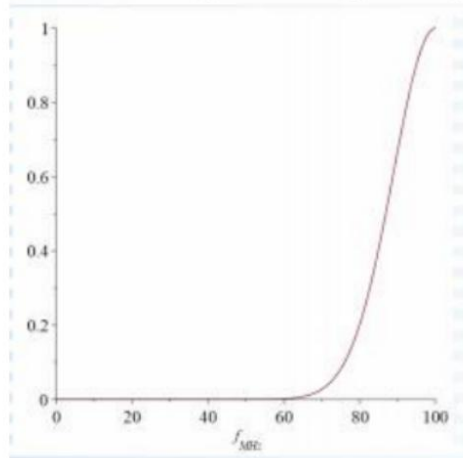
$$P_{7X}(d_{mm}, f_{MHz}) := \begin{cases} P_{6S}(d_{mm}, f_{MHz}) & f_{MHz} \leq 100 \\ P_{6to7}(d_{mm}, f_{MHz}) & 100 < f_{MHz} \leq 300 \\ P_7(d_{mm}, f_{MHz}) & 300 < f_{MHz} \end{cases}$$

2. For portable products, when using a distance of $\leq 50\text{mm}$, such as mobile phone NFC, P6s is calculated with the following formula calculate.

$$S_f(f_{MHz}) \cdot P_{431a}(d_{mm}, f_{MHz}) + (1 - S_f(f_{MHz})) \cdot S_d(d_{mm}) P_{431b1}(50., 100.) \cdot \left(1 + \log_{10}\left(\frac{100.}{f_{MHz}}\right)\right) \quad d_{mm} \leq 50 \text{ and } f_{MHz} \leq 100$$

3. The smoothing functions Sf and Sd in P6s calculate the limits based on KDB 447498 V06 and are calculated as follows.

$$S_f(f_{MHz}) := \exp\left(-10 \frac{(f_{MHz} - f_{max})^2}{\Delta f^2}\right) \quad S_d(d_{mm}) := 0.5 + 0.5 \cdot \exp\left(-10 \frac{(d_{mm} - d_{max})^2}{\Delta d^2}\right)$$



d≤50mm				
f Max(MHz)	100		d Max(mm)	50
f MHz	13.56		d(mm)	5
△f(MHz)	100		△d	50
S _f (f _{MHz})	0.000568861		S _d (dmm)	0.50015177
P6s(mW)	443.1257378			
Note: SAR testing is required when the distance is 5mm and the power is greater than 443.13mW.				

4. 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 ERP level (see guidance on determining the applicable antenna gain)
- c) Add the appropriate maximum ground reflection factor to the ERP level (6 dB for frequencies ≤ 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 ERP of all chains in linear terms (e.g., Watts, mW).
- e) Convert the resultant ERP level to an equivalent electric field strength using the following relationship: $E = ERP - 20\log D + 104.8$

where:

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

ERP = 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	13.56	65.39	3	6	-13.41
Note:					
1. Add the appropriate maximum ground reflection factor to the ERP level (6 dB for frequencies ≤ 30 MHz).					
2. $ERP = 65.39 + 20 \cdot \log(10) - 104.8 + 6 = -13.41$ (dBm)					

According to the FCC KDB 447498 D04

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

Estimated SAR	1.6 · Pant / Pth [W/kg]		
Pmeas.(dBm)	-13.41	Pmeas.(mW)	0.046
Pth.(mW)	443.13		
NFC Estimated 1g SAR [W/kg]	<0.001		

11 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).

11.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Body-worn	Hotspot
1	WWAN + 2.4G WIFI + BT	Yes	Yes
2	WWAN + 5G WIFI + BT	Yes	Yes

Note:

1. 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.
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.

11.2 Sum SAR of Simultaneous Transmission

11.2.1 Sum Body-worn SAR of Simultaneous Transmission

Band	Position	Dist.	Standalone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4G WIFI	5G WIFI	Bluetooth	1+2+4	1+3+4
GSM 850	Front Side	10mm	0.283	0.097	0.163	0.033	0.413	0.479
GSM 850	Back Side	10mm	0.548	0.437	0.487	0.052	1.037	1.087
GSM 1900	Front Side	10mm	0.142	0.097	0.163	0.033	0.272	0.338
GSM 1900	Back Side	10mm	0.703	0.437	0.487	0.052	1.192	1.242
WCDMA B2	Front Side	10mm	0.190	0.097	0.163	0.033	0.320	0.386
WCDMA B2	Back Side	10mm	0.586	0.437	0.487	0.052	1.075	1.125
WCDMA B4	Front Side	10mm	0.109	0.097	0.163	0.033	0.239	0.305
WCDMA B4	Back Side	10mm	0.572	0.437	0.487	0.052	1.061	1.111
WCDMA B5	Front Side	10mm	0.123	0.097	0.163	0.033	0.253	0.319
WCDMA B5	Back Side	10mm	0.400	0.437	0.487	0.052	0.889	0.939
LTE B7	Front Side	10mm	0.115	0.097	0.163	0.033	0.245	0.311
LTE B7	Back Side	10mm	0.472	0.437	0.487	0.052	0.961	1.011

Band	Position	Dist.	Standalone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	5G WIFI	Bluetooth	1+2+4	1+3+4
LTE B12	Front Side	10mm	0.275	0.097	0.163	0.033	0.405	0.471
LTE B12	Back Side	10mm	0.510	0.437	0.487	0.052	0.999	1.049
LTE B25	Front Side	10mm	0.205	0.097	0.163	0.033	0.335	0.401
LTE B25	Back Side	10mm	0.661	0.437	0.487	0.052	1.150	1.200
LTE B26	Front Side	10mm	0.183	0.097	0.163	0.033	0.313	0.379
LTE B26	Back Side	10mm	0.397	0.437	0.487	0.052	0.886	0.936
LTE B66	Front Side	10mm	0.097	0.097	0.163	0.033	0.227	0.293
LTE B66	Back Side	10mm	0.573	0.437	0.487	0.052	1.062	1.112
LTE B41	Front Side	10mm	0.080	0.097	0.163	0.033	0.210	0.276
LTE B41	Back Side	10mm	0.231	0.437	0.487	0.052	0.720	0.770
Note:								
1: The simultaneous transmission combinations of the antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.								
2: The highest Summed 1g SAR is 1.242 W/kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.								

11.2.2 Sum Hotspot mode SAR of Simultaneous Transmission

Band	Position	Dist.	Standalone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	5G WIFI	Bluetooth	1+2+4	1+3+4
GSM 850	Front Side	10mm	0.283	0.097	0.163	0.033	0.413	0.479
GSM 850	Back Side	10mm	0.548	0.437	0.487	0.052	1.037	1.087
GSM 850	Left Side	10mm	0.438	0.177	0.303	0.037	0.652	0.778
GSM 850	Right Side	10mm	0.216	0.044	0.189	0.032	0.292	0.437
GSM 850	Top Side	10mm	0.071	0.138	0.414	0.025	0.234	0.510
GSM 850	Bottom Side	10mm	0.208	0.026	0.187	0.037	0.271	0.432
GSM 1900	Front Side	10mm	0.142	0.097	0.163	0.033	0.272	0.338
GSM 1900	Back Side	10mm	0.703	0.437	0.487	0.052	1.192	1.242
GSM 1900	Left Side	10mm	0.145	0.177	0.303	0.037	0.359	0.485
GSM 1900	Right Side	10mm	0.215	0.044	0.189	0.032	0.291	0.436
GSM 1900	Top Side	10mm	0.078	0.138	0.414	0.025	0.241	0.517
GSM 1900	Bottom Side	10mm	0.647	0.026	0.187	0.037	0.710	0.871
WCDMA B2	Front Side	10mm	0.190	0.097	0.163	0.033	0.320	0.386
WCDMA B2	Back Side	10mm	0.586	0.437	0.487	0.052	1.075	1.125
WCDMA B2	Left Side	10mm	0.133	0.177	0.303	0.037	0.347	0.473
WCDMA B2	Right Side	10mm	0.263	0.044	0.189	0.032	0.339	0.484
WCDMA B2	Top Side	10mm	0.030	0.138	0.414	0.025	0.193	0.469

Band	Position	Dist.	Standalone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	5G WIFI	Bluetooth	1+2+4	1+3+4
WCDMA B2	Bottom Side	10mm	0.577	0.026	0.187	0.037	0.640	0.801
WCDMA B4	Front Side	10mm	0.109	0.097	0.163	0.033	0.239	0.305
WCDMA B4	Back Side	10mm	0.572	0.437	0.487	0.052	1.061	1.111
WCDMA B4	Left Side	10mm	0.054	0.177	0.303	0.037	0.268	0.394
WCDMA B4	Right Side	10mm	0.141	0.044	0.189	0.032	0.217	0.362
WCDMA B4	Top Side	10mm	0.044	0.138	0.414	0.025	0.207	0.483
WCDMA B4	Bottom Side	10mm	0.541	0.026	0.187	0.037	0.604	0.765
WCDMA B5	Front Side	10mm	0.123	0.097	0.163	0.033	0.253	0.319
WCDMA B5	Back Side	10mm	0.400	0.437	0.487	0.052	0.889	0.939
WCDMA B5	Left Side	10mm	0.219	0.177	0.303	0.037	0.433	0.559
WCDMA B5	Right Side	10mm	0.096	0.044	0.189	0.032	0.172	0.317
WCDMA B5	Top Side	10mm	0.025	0.138	0.414	0.025	0.188	0.464
WCDMA B5	Bottom Side	10mm	0.158	0.026	0.187	0.037	0.221	0.382
LTE B7	Front Side	10mm	0.115	0.097	0.163	0.033	0.245	0.311
LTE B7	Back Side	10mm	0.472	0.437	0.487	0.052	0.961	1.011
LTE B7	Left Side	10mm	0.042	0.177	0.303	0.037	0.256	0.382
LTE B7	Right Side	10mm	0.189	0.044	0.189	0.032	0.265	0.410
LTE B7	Top Side	10mm	0.033	0.138	0.414	0.025	0.196	0.472
LTE B7	Bottom Side	10mm	0.218	0.026	0.187	0.037	0.281	0.442
LTE B12	Front Side	10mm	0.275	0.097	0.163	0.033	0.405	0.471
LTE B12	Back Side	10mm	0.510	0.437	0.487	0.052	0.999	1.049
LTE B12	Left Side	10mm	0.304	0.177	0.303	0.037	0.518	0.644
LTE B12	Right Side	10mm	0.293	0.044	0.189	0.032	0.369	0.514
LTE B12	Top Side	10mm	0.026	0.138	0.414	0.025	0.189	0.465
LTE B12	Bottom Side	10mm	0.097	0.026	0.187	0.037	0.160	0.321
LTE B25	Front Side	10mm	0.205	0.097	0.163	0.033	0.335	0.401
LTE B25	Back Side	10mm	0.661	0.437	0.487	0.052	1.150	1.200
LTE B25	Left Side	10mm	0.158	0.177	0.303	0.037	0.372	0.498
LTE B25	Right Side	10mm	0.298	0.044	0.189	0.032	0.374	0.519
LTE B25	Top Side	10mm	0.030	0.138	0.414	0.025	0.193	0.469
LTE B25	Bottom Side	10mm	0.636	0.026	0.187	0.037	0.699	0.860
LTE B26	Front Side	10mm	0.183	0.097	0.163	0.033	0.313	0.379
LTE B26	Back Side	10mm	0.397	0.437	0.487	0.052	0.886	0.936
LTE B26	Left Side	10mm	0.278	0.177	0.303	0.037	0.492	0.618
LTE B26	Right Side	10mm	0.129	0.044	0.189	0.032	0.205	0.350
LTE B26	Top Side	10mm	0.031	0.138	0.414	0.025	0.194	0.470
LTE B26	Bottom Side	10mm	0.136	0.026	0.187	0.037	0.199	0.360
LTE B66	Front Side	10mm	0.097	0.097	0.163	0.033	0.227	0.293
LTE B66	Back Side	10mm	0.573	0.437	0.487	0.052	1.062	1.112

Band	Position	Dist.	Standalone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	5G WIFI	Bluetooth	1+2+4	1+3+4
LTE B66	Left Side	10mm	0.056	0.177	0.303	0.037	0.270	0.396
LTE B66	Right Side	10mm	0.131	0.044	0.189	0.032	0.207	0.352
LTE B66	Top Side	10mm	0.039	0.138	0.414	0.025	0.202	0.478
LTE B66	Bottom Side	10mm	0.524	0.026	0.187	0.037	0.587	0.748
LTE B41	Front Side	10mm	0.080	0.097	0.163	0.033	0.210	0.276
LTE B41	Back Side	10mm	0.231	0.437	0.487	0.052	0.720	0.770
LTE B41	Left Side	10mm	0.028	0.177	0.303	0.037	0.242	0.368
LTE B41	Right Side	10mm	0.116	0.044	0.189	0.032	0.192	0.337
LTE B41	Top Side	10mm	0.030	0.138	0.414	0.025	0.193	0.469
LTE B41	Bottom Side	10mm	0.134	0.026	0.187	0.037	0.197	0.358
Note: 1: The simultaneous transmission combinations of the antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table. 2: The highest Summed 1g SAR is 1.242 W/kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.								

11.2.3 Highest Total Exposure Ratio of Simultaneous Transmission

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

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

maximum SAR value for Simultaneous Transmission is 1.565 [W/kg]. Therefore, the worst TER = (1.242 + 0.001)/1.6 = 0.777 < 1, the NFC SAR transmit simultaneously Pass.

12 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	52.10.4.1535	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	1201	2024/09/03	2027/09/03
835MHz Validation Dipole	Speag	D835V2	4d277	2024/08/30	2027/08/30
1750MHz Validation Dipole	Speag	D1750V2	1183	2024/09/03	2027/09/03
1900MHz Validation Dipole	Speag	D1900V2	5d155	2024/09/02	2027/09/02
2450MHz Validation Dipole	Speag	D2450V2	1065	2024/09/05	2027/09/05
2600MHz Validation Dipole	Speag	D2600V2	1184	2024/08/30	2027/08/30
5GHz Validation Dipole	Speag	D5GHZV2	1333	2024/09/04	2027/09/04
Data Acquisition Electronics	Speag	DAE4	540	2026/07/13	2027/07/13
E-Field Probe	Speag	EX3DV4	3748	2026/07/13	2027/07/13
Signal Generator	R&S	SMB100A	182635	2026/02/03	2027/02/03
Power Meter	Agilent	E4419B	MY45104512	2026/02/03	2027/02/03
Power Sensor	Agilent	E9304A	MY41499059	2026/02/03	2027/02/03
Power Sensor	Agilent	E9304A	MY41499060	2026/02/03	2027/02/03
Wireless Communication Test Set	R&S	CMW500	161880	2026/02/05	2027/02/05
Wireless Communication Test Set	Anritsu	MT8820C	6201061029	2026/02/05	2027/02/05
Network Analyzer	Agilent	E5071C	MY56301409	2026/02/03	2027/02/03
Test Software	Agilent	85070	E04.02.13	N/A	N/A
Dielectric Probe Kit	Keysight	85070E	MY44300524	N/A	N/A
Thermometer	CEM	DT-322	210402350	2026/01/28	2027/01/28
Thermometer	Elitech	RC-4HC	EF7247001275	2026/01/28	2027/01/28
Power Amplifier	COM-MW	PAO.4	201704001	N/A	N/A
Phantom	Speag	SAM	1857	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, Tejet 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 an 85070E 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 (%)
2026.8.31	Head	750	21.5	0.87	42.48	0.89	41.94	-2.25	1.29
2026.8.31	Head	835	21.5	0.91	42.13	0.90	41.50	1.11	1.52
2026.8.31	Head	1750	21.5	1.34	39.55	1.37	40.08	-2.19	-1.32
2026.9.1	Head	1900	21.4	1.43	39.27	1.40	40.00	2.14	-1.83
2026.9.2	Head	2450	21.0	1.78	40.16	1.80	39.20	-1.11	2.45
2026.9.1	Head	2600	21.4	1.91	39.97	1.96	39.01	-2.55	2.46
2026.9.2	Head	5200	21.0	4.74	36.15	4.66	35.99	1.72	0.44
2026.9.2	Head	5600	21.0	5.24	35.26	5.07	35.53	3.35	-0.76
2026.9.2	Head	5800	21.0	5.50	34.83	5.27	35.30	4.36	-1.33

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 (%)
2026.8.31	Head	750	100	0.847	8.47	8.46	0.12
2026.8.31	Head	835	100	0.938	9.38	9.59	-2.19
2026.8.31	Head	1750	100	3.650	36.50	36.50	0.00
2026.9.1	Head	1900	100	3.750	37.50	39.90	-6.02
2026.9.2	Head	2450	100	5.030	50.30	52.60	-4.37
2026.9.1	Head	2600	100	5.810	58.10	55.90	3.94
2026.9.2	Head	5200	100	7.560	75.60	77.80	-2.83
2026.9.2	Head	5600	100	8.430	84.30	82.80	1.81
2026.9.2	Head	5800	100	8.330	83.30	78.50	6.11
Note: The tolerance limit of System validation $\pm 10\%$.							

Please refer the document "Ti-CC26080119-ASC.pdf".

ANNEX C TEST DATA

Please refer the document "Ti-CC26080119-ATD.pdf".

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document "Ti-CC26080119-AW.pdf".

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document "Ti-CC26080119-AS.pdf".

ANNEX F CALIBRATION REPORT

Please refer the document "Ti-CC26080119-AC.pdf".

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--END OF REPORT--