

TEST REPORT

Applicant: SHANGHAI XIANGCHENG COMMUNICATION TECHNOLOGY CO., LTD
Address: 6th Floor, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai
Equipment Type: Intelligent Mobile Data Capture Terminal
Model Name: Ranger 3(refer to the section 2.3)
Brand Name: N/A
FCC ID: 2A2UU-MF-T2561
Test Standard: FCC 47 CFR Part 2.1093 (refer section 3.1)
Maximum SAR: Head (1 g@0 mm): 0.32 W/kg
Body-worn (1 g@ 10 mm): 0.80 W/kg
Hotspot (1 g@ 10mm): 0.80 W/kg
Extremity (10 g@ 0mm): 1.13 W/kg
Sample Arrival Date: Jul. 27, 2026
Test Date: Aug. 10, 2026 - Aug. 26, 2026
Date of Issue: Sep. 10, 2026

ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center

**Prepared by:** Huang Xiaoqin**Reviewed by:** Cai Xueguo**Approved by:** Zhang Yanqing
(Laboratory Manager)*Huang Xiaoqin**Cai Xueguo**Zhang Yanqing*

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 10, 2026</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name1	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Address1	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China

Name2	Shenzhen BALUN Technology Co., Ltd.
Address2	601, Building 2, Intelligent Connected Vehicle Industrial Park, No.55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen

1.2 Test Location

Name1	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Location1	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China
Accreditation Certificate1	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.

Name2	Shenzhen BALUN Technology Co., Ltd.
Location2	☐ Building 2, Intelligent Connected Vehicle Industrial Park, No.55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen, Guangdong
	☒ 1/F., Building B, Ganghongji High-Tech Intelligent Industrial Park, No.1008, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong

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	6th Floor, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai

2.2 Manufacturer Information

Manufacturer	SHANGHAI XIANGCHENG COMMUNICATION TECHNOLOGY CO.,LTD
Address	6th Floor, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai

2.3 General Description for Equipment under Test (EUT)

EUT Name	Intelligent Mobile Data Capture Terminal
Model Name Under Test	Ranger 3
Series Model Name	Ranger3 Nova, Ranger3 Ultra,Ranger3 Lite, Ranger 3C,S60,S60C, S67,S67C,T6,T6 Pro,T6 Lite,T6 SE,M7,M7 PRO,M7 Pro, M7 Lite,EM7 Pro,MF70C, MF70N,MF70P,MF70 Pro, MF70 SE,T25,T2561, T25X,TP25,TP70,TP80,T650,T700
Description of Model name differentiation	All the same except for the model name. (Information was provided by the applicant.
Sample Number	SC-SH25C0065-S02
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	L:170.15mm*W:76.9mm*H:12.6mm
Weight (Approx.)	281g

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	F50147MA
	Serial No.	N/A
	Capacity	5100 mAh
	Rated Voltage	3.91 V
	Limit Charge Voltage	4.50 V

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 3G Network WCDMA Band 2/4/5 4G Network LTE FDD Band 2/4/5/7/25/26/66 LTE TDD Band 38/40/41 Bluetooth 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40),802.11ax(HE20/40) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80),802.11ax(HE20/40/80) 6G WIFI 802.11ax(HE20/40/80) NFC, BDS, GPS, GLONASS, Galileo, QZSS, SBAS
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 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850~1910 MHz	RX: 1930~1990 MHz
	WCDMA Band 4	TX: 1710~1755 MHz	RX: 2110~2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850~1910 MHz	RX: 1930~1990 MHz
	LTE Band 4	TX: 1710~1755 MHz	RX: 2110~2155 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 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 40	TX: 2300 ~ 2400 MHz	RX: 2300 ~ 2400 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 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	
	6G WIFI	5925 ~ 6425 MHz	

		6425 ~ 6525 MHz
		6525 ~ 6875 MHz
		6875 ~ 7125 MHz
	Bluetooth	2402 ~ 2480 MHz
	NFC	13.56MHz
Antenna Type	WWAN	PIFA
	WLAN	PIFA
	Bluetooth	PIFA
	NFC	PIFA
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
7	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
8	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	KDB 865664 D02 v01r02	RF Exposure Reporting
10	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
11	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

Band	Maximum Scaled SAR (W/kg)				Maximum Report SAR (W/kg)			
	Head	Body-worn	Hotspot	Extremity	Head	Body-worn	Hotspot	Extremity
	(0mm)	(10mm)	(10mm)	(0mm)	(0mm)	(10mm)	(10mm)	(0mm)
	1g SAR			10g SAR	1g SAR			10g SAR
GSM 850	0.21	0.22	0.22	N/A	0.32	0.80	0.80	1.13
GSM 1900	0.06	0.17	0.17	N/A				
WCDMA B2	0.10	0.29	0.29	N/A				
WCDMA B4	0.12	0.35	0.35	N/A				
WCDMA B5	0.09	0.10	0.10	N/A				
LTE B7	0.12	0.46	0.46	N/A				
LTE B25	0.13	0.58	0.58	N/A				
LTE B26	0.10	0.16	0.16	N/A				
LTE B66	0.12	0.44	0.44	N/A				
LTE B40	0.10	0.22	0.22	N/A				
LTE B41	0.09	0.23	0.23	N/A				
Wi-Fi2.4G	0.13	0.26	0.26	N/A				
Wi-Fi5.2G	0.26	0.62	0.62	N/A				
Wi-Fi5.3G	0.26	0.62	N/A	0.85				
Wi-Fi5.6G	0.32	0.80	N/A	1.13				
Wi-Fi5.8G	0.19	0.80	0.80	N/A				
Wi-Fi6G	0.06	0.54	N/A	0.30				
Bluetooth	0.01	0.00	0.02	N/A				
Limit (W/kg)	1.6			4	1.6			4
Verdict	Pass							
Note1: The SAR data related to WIFI6G comes from Shenzhen BALUN Technology Co., Ltd.								
Note2: This device supports LTE B25/B26/B41/B66 and LTE B2/B5/B38/B4, Since the supported frequency span for LTE B2/B5/B38/B4 falls completely within the supports frequency span for LTE B25/B26/B41/B66, these LTE bands share the same transmission path, and LTE B2/B5/B38/B4 have lower or the same target power as LTE B25/B26/B41/B66; Therefore, SAR was only assessed for LTE B25/B26/B41/B66.								

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)			
	Head 1g (0mm)	Body-worn 1g (10mm)	Hotspot 1g (10mm)	Extremity 10g (0mm)
PCE	0.51	1.38	1.38	/
Limit (W/kg)	1.60	1.60	1.60	4.00
Verdict	Pass			
Note: The highest simultaneous SAR please refer section 11				

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 0.80 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 1.13 W/kg, which is lower than 3.75 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

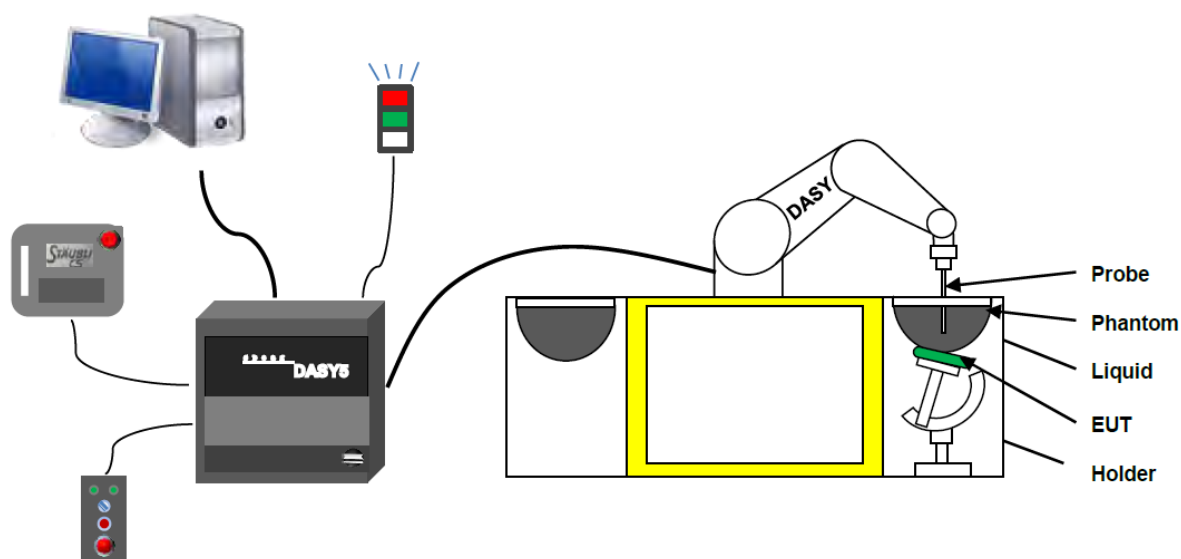
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

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

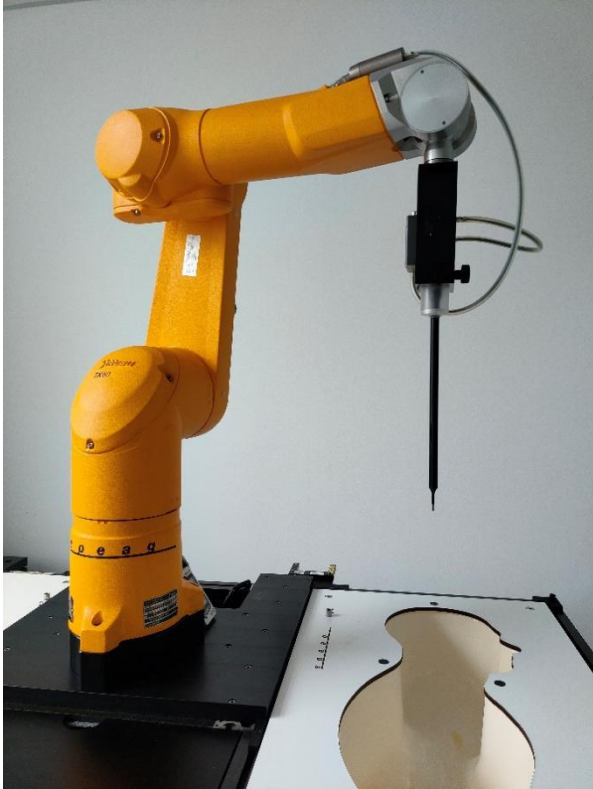


The DASY5 system for performing compliance tests consists of the following items:

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., glycolether)
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

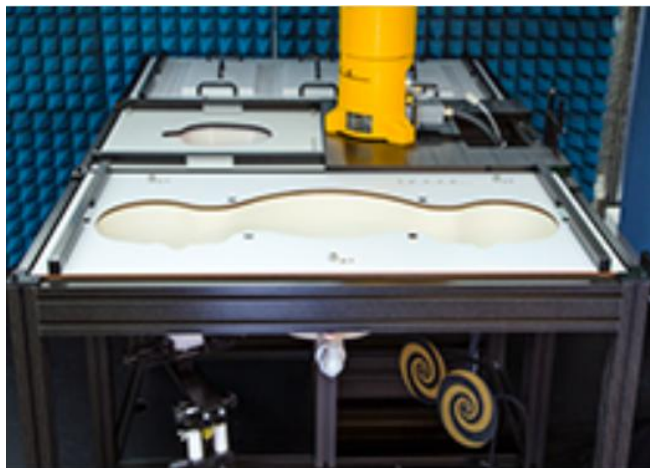
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



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.

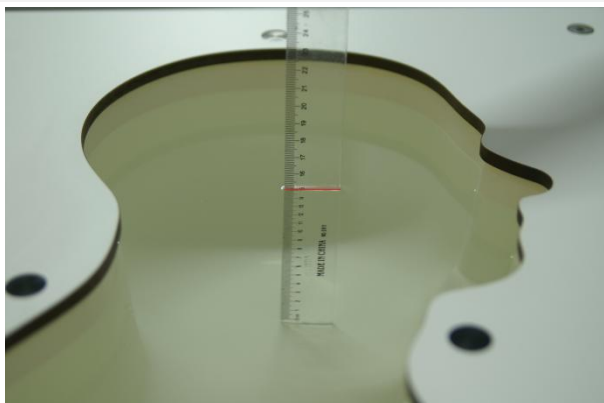


The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than 1° .

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

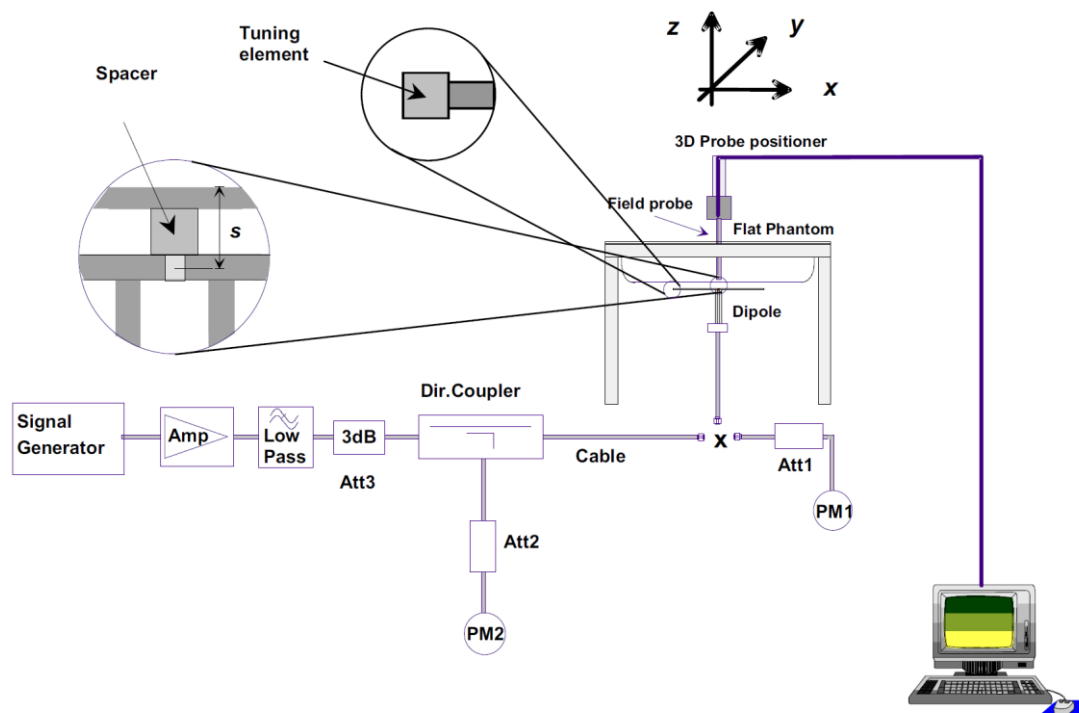
5 SYSTEM VERIFICATION

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

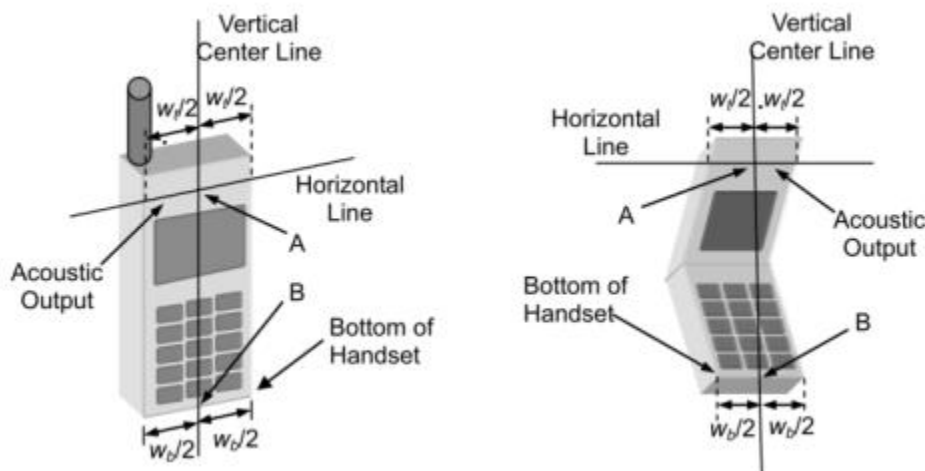
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

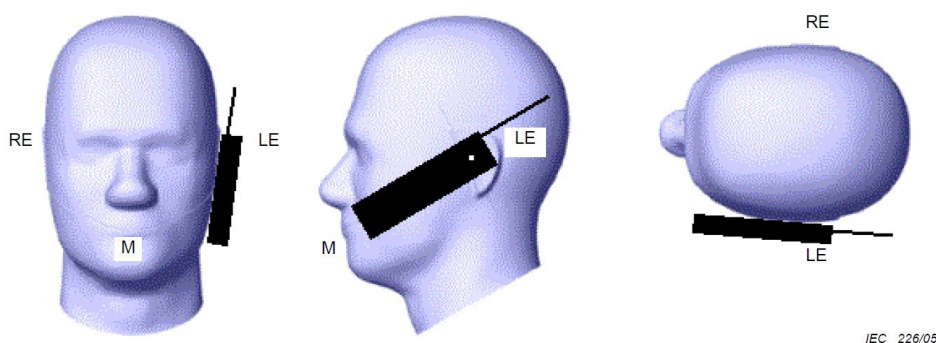
6.1.1 Two Imaginary Lines on the Handset

- The vertical center line passes through two points on the front side of the handset - the midpoint of the width w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b of the bottom of the handset.
- The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



6.1.2 Cheek Position

- (a) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- (b) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost.



6.1.3 Tilted Position

- (a) To position the device in the “cheek” position described above.
- (b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.

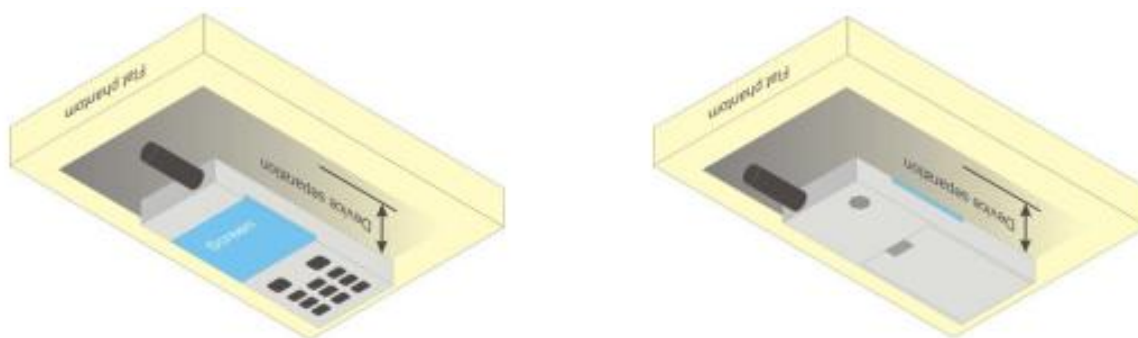


6.2 Body-worn Position Conditions

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.

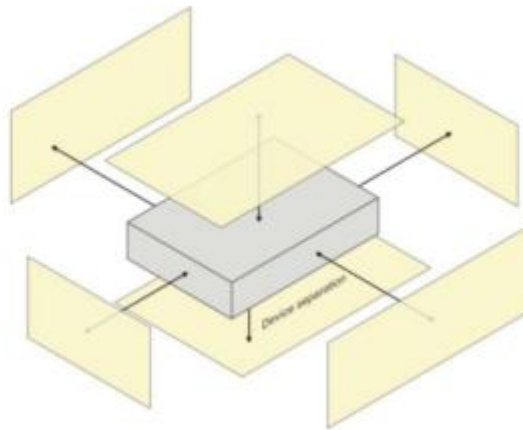
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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



6.3 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).



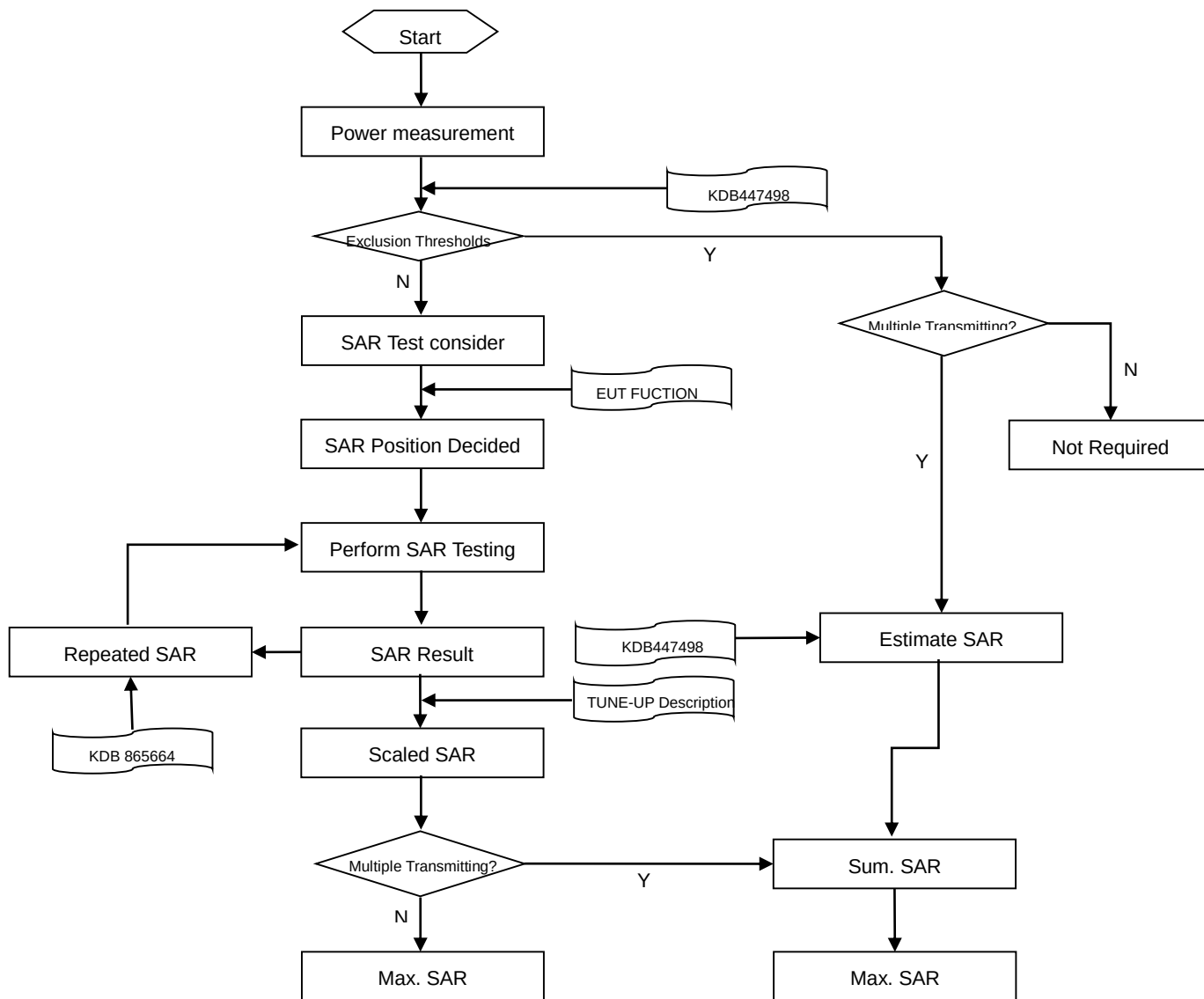
6.4 Product Specific 10g Exposure Consideration

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.

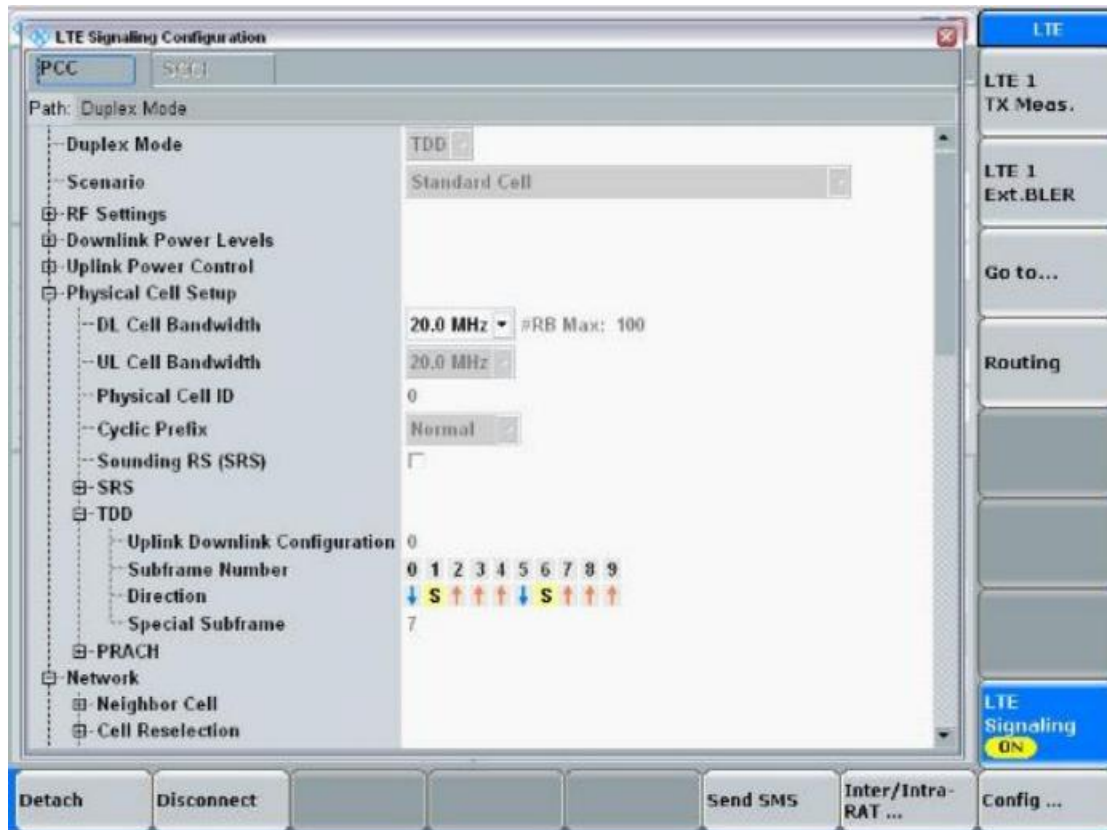
7.4 Area & Zoom Scan Procedure

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.

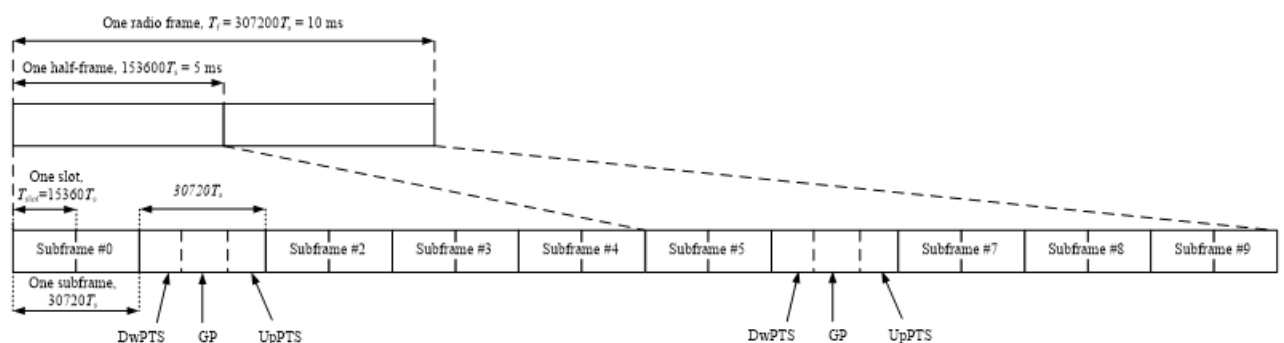
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

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 "BL-SH2670015-AP.pdf".

8.2 WCDMA

Please refer the document "BL-SH2670015-AP.pdf".

8.3 LTE

Please refer the document "BL-SH2670015-AP.pdf".

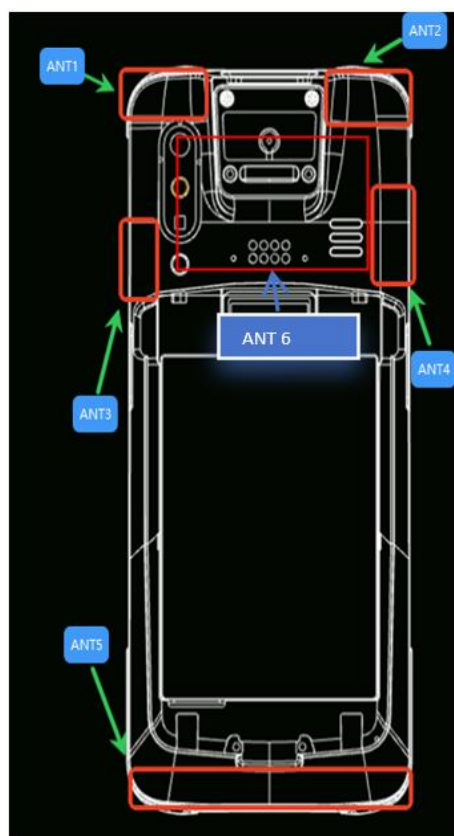
8.4 WIFI

Please refer the document "BL-SH2670015-AP.pdf".

8.5 Bluetooth

Please refer the document "BL-SH2670015-AP.pdf".

9 Antenna Location



Antenna	Support Bands
Ant.1	Wi-Fi2.4G/Wi-Fi5G/Wi-Fi6G
Ant.2	BT
Ant.3	Only RX
Ant.4	Wi-Fi2.4G/Wi-Fi5G/Wi-Fi6G
Ant.5	GSM 850/1900 WCDMA B2/B4/B5 LTE B2/B4/B5/B7/B25/B26/B66/B38/B40/B41
Ant6	NFC

10 TEST RESULT

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

10.12G/3G/4G/WIFI/Bluetooth SAR

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head												
GSM 850	Ant.5	Left cheek	0mm	GPRS 4TX	190	836.6	-0.13	0.167	27.60	28.50	1.230	0.205	1
GSM 850	Ant.5	Left tilt	0mm		190	836.6	-0.09	0.077	27.60	28.50	1.230	0.095	/
GSM 850	Ant.5	Right cheek	0mm		190	836.6	-0.07	0.127	27.60	28.50	1.230	0.156	/
GSM 850	Ant.5	Right tilt	0mm		190	836.6	-0.13	0.092	27.60	28.50	1.230	0.113	/
	Body-worn&Hotspot												
GSM 850	Ant.5	Front side	10mm	GPRS 4TX	190	836.6	-0.19	0.153	27.60	28.50	1.230	0.188	/
GSM 850	Ant.5	Back side	10mm		190	836.6	0.07	0.180	27.60	28.50	1.230	0.221	2
GSM 850	Ant.5	Left side	10mm		190	836.6	-0.1	0.174	27.60	28.50	1.230	0.214	/
GSM 850	Ant.5	Right side	10mm		190	836.6	-0.15	0.142	27.60	28.50	1.230	0.175	/
GSM 850	Ant.5	Top side	10mm		190	836.6	0.03	0.032	27.60	28.50	1.230	0.039	/
GSM 850	Ant.5	Bottom side	10mm		190	836.6	-0.05	0.144	27.60	28.50	1.230	0.177	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head												
GSM 1900	Ant.5	Left cheek	0mm	GPRS 4TX	661	1880	-0.07	0.047	24.05	25.00	1.245	0.058	3
GSM 1900	Ant.5	Left tilt	0mm		661	1880	0.06	0.029	24.05	25.00	1.245	0.036	/
GSM 1900	Ant.5	Right cheek	0mm		661	1880	-0.18	0.032	24.05	25.00	1.245	0.040	/
GSM 1900	Ant.5	Right tilt	0mm		661	1880	0.02	0.020	24.05	25.00	1.245	0.025	/
	Body-worn&Hotspot												
GSM 1900	Ant.5	Front side	10mm	GPRS 4TX	661	1880	0.04	0.093	24.05	25.00	1.245	0.116	/
GSM 1900	Ant.5	Back side	10mm		661	1880	-0.06	0.137	24.05	25.00	1.245	0.170	4
GSM 1900	Ant.5	Left side	10mm		661	1880	-0.04	0.049	24.05	25.00	1.245	0.061	/
GSM 1900	Ant.5	Right side	10mm		661	1880	0.06	0.025	24.05	25.00	1.245	0.031	/
GSM 1900	Ant.5	Top side	10mm		661	1880	0.04	0.020	24.05	25.00	1.245	0.025	/
GSM 1900	Ant.5	Bottom side	10mm		661	1880	0.13	0.092	24.05	25.00	1.245	0.114	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head												
WCDMA B2	Ant.5	Left cheek	0mm	RMC 12.2Kbps	9400	1880	-0.09	0.084	22.17	23.00	1.211	0.101	5
WCDMA B2	Ant.5	Left tilt	0mm		9400	1880	0.11	0.046	22.17	23.00	1.211	0.056	/
WCDMA B2	Ant.5	Right cheek	0mm		9400	1880	0.05	0.059	22.17	23.00	1.211	0.071	/
WCDMA B2	Ant.5	Right tilt	0mm		9400	1880	0.09	0.043	22.17	23.00	1.211	0.052	/
	Body-worn&Hotspot												
WCDMA B2	Ant.5	Front side	10mm	RMC 12.2Kbps	9400	1880	0.11	0.165	22.17	23.00	1.211	0.200	/
WCDMA B2	Ant.5	Back side	10mm		9400	1880	0.07	0.242	22.17	23.00	1.211	0.293	6
WCDMA B2	Ant.5	Left side	10mm		9400	1880	-0.07	0.125	22.17	23.00	1.211	0.151	/
WCDMA B2	Ant.5	Right side	10mm		9400	1880	0.04	0.053	22.17	23.00	1.211	0.064	/
WCDMA B2	Ant.5	Top side	10mm		9400	1880	0.02	0.032	22.17	23.00	1.211	0.039	/
WCDMA B2	Ant.5	Bottom side	10mm		9400	1880	-0.08	0.234	22.17	23.00	1.211	0.283	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head												
WCDMA B4	Ant.5	Left cheek	0mm	RMC 12.2Kbps	1413	1732.6	-0.17	0.101	22.14	23.00	1.219	0.123	7
WCDMA B4	Ant.5	Left tilt	0mm		1413	1732.6	-0.05	0.065	22.14	23.00	1.219	0.079	/
WCDMA B4	Ant.5	Right cheek	0mm		1413	1732.6	0.13	0.100	22.14	23.00	1.219	0.122	/
WCDMA B4	Ant.5	Right tilt	0mm		1413	1732.6	0.19	0.072	22.14	23.00	1.219	0.088	/
	Body-worn&Hotspot												
WCDMA B4	Ant.5	Front side	10mm	RMC 12.2Kbps	1413	1732.6	-0.08	0.205	22.14	23.00	1.219	0.250	/
WCDMA B4	Ant.5	Back side	10mm		1413	1732.6	0.07	0.290	22.14	23.00	1.219	0.354	8
WCDMA B4	Ant.5	Left side	10mm		1413	1732.6	0.07	0.114	22.14	23.00	1.219	0.139	/
WCDMA B4	Ant.5	Right side	10mm		1413	1732.6	0.14	0.054	22.14	23.00	1.219	0.066	/
WCDMA B4	Ant.5	Top side	10mm		1413	1732.6	-0.18	0.024	22.14	23.00	1.219	0.029	/
WCDMA B4	Ant.5	Bottom side	10mm		1413	1732.6	-0.19	0.246	22.14	23.00	1.219	0.300	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head												
WCDMA B5	Ant.5	Left cheek	0mm	RMC 12.2Kbps	4182	836.4	0.04	0.073	22.26	23.00	1.186	0.086	9
WCDMA B5	Ant.5	Left tilt	0mm		4182	836.4	-0.11	0.039	22.26	23.00	1.186	0.046	/
WCDMA B5	Ant.5	Right cheek	0mm		4182	836.4	0.17	0.060	22.26	23.00	1.186	0.071	/
WCDMA B5	Ant.5	Right tilt	0mm		4182	836.4	0.16	0.043	22.26	23.00	1.186	0.051	/
	Body-worn&Hotspot												
WCDMA B5	Ant.5	Front side	10mm	RMC 12.2Kbps	4182	836.4	-0.02	0.073	22.26	23.00	1.186	0.087	/
WCDMA B5	Ant.5	Back side	10mm		4182	836.4	0.07	0.082	22.26	23.00	1.186	0.097	10
WCDMA B5	Ant.5	Left side	10mm		4182	836.4	0.13	0.076	22.26	23.00	1.186	0.090	/
WCDMA B5	Ant.5	Right side	10mm		4182	836.4	-0.19	0.046	22.26	23.00	1.186	0.055	/
WCDMA B5	Ant.5	Top side	10mm		4182	836.4	-0.12	0.032	22.26	23.00	1.186	0.038	/
WCDMA B5	Ant.5	Bottom side	10mm		4182	836.4	0.01	0.079	22.26	23.00	1.186	0.094	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B7	Ant.5	Left cheek	0mm	QPSK-20MHz	21100	2535	1	0	0.14	0.098	23.16	24.00	1.213	0.119	11
LTE B7	Ant.5	Left tilt	0mm		21100	2535	1	0	0.01	0.058	23.16	24.00	1.213	0.070	/
LTE B7	Ant.5	Right cheek	0mm		21100	2535	1	0	-0.09	0.078	23.16	24.00	1.213	0.095	/
LTE B7	Ant.5	Right tilt	0mm		21100	2535	1	0	-0.14	0.054	23.16	24.00	1.213	0.066	/
LTE B7	Ant.5	Left cheek	0mm		21100	2535	50	0	0.04	0.084	22.18	23.00	1.208	0.101	/
LTE B7	Ant.5	Left tilt	0mm		21100	2535	50	0	0.12	0.047	22.18	23.00	1.208	0.057	/
LTE B7	Ant.5	Right cheek	0mm		21100	2535	50	0	-0.04	0.056	22.18	23.00	1.208	0.068	/
LTE B7	Ant.5	Right tilt	0mm		21100	2535	50	0	0.04	0.044	22.18	23.00	1.208	0.053	/
	Body-worn&Hotspot														
LTE B7	Ant.5	Front side	10mm	QPSK-20MHz	21100	2535	1	0	0.12	0.095	23.16	24.00	1.213	0.115	/
LTE B7	Ant.5	Back side	10mm		21100	2535	1	0	0.03	0.382	23.16	24.00	1.213	0.464	12
LTE B7	Ant.5	Left side	10mm		21100	2535	1	0	-0.18	0.168	23.16	24.00	1.213	0.204	/
LTE B7	Ant.5	Right side	10mm		21100	2535	1	0	-0.19	0.033	23.16	24.00	1.213	0.040	/
LTE B7	Ant.5	Top side	10mm		21100	2535	1	0	0.03	0.030	23.16	24.00	1.213	0.036	/
LTE B7	Ant.5	Bottom side	10mm		21100	2535	1	0	-0.09	0.110	23.16	24.00	1.213	0.133	/
LTE B7	Ant.5	Front side	10mm		21100	2535	50	0	0.17	0.079	22.18	23.00	1.208	0.095	/
LTE B7	Ant.5	Back side	10mm		21100	2535	50	0	0.11	0.342	22.18	23.00	1.208	0.413	/
LTE B7	Ant.5	Left side	10mm		21100	2535	50	0	-0.11	0.127	22.18	23.00	1.208	0.153	/
LTE B7	Ant.5	Right side	10mm		21100	2535	50	0	0.13	0.028	22.18	23.00	1.208	0.034	/
LTE B7	Ant.5	Top side	10mm		21100	2535	50	0	-0.16	0.025	22.18	23.00	1.208	0.030	/
LTE B7	Ant.5	Bottom side	10mm		21100	2535	50	0	-0.19	0.091	22.18	23.00	1.208	0.110	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Head															
LTE B25	Ant.5	Left cheek	0mm	QPSK-20MHz	26365	1882.5	1	0	0.08	0.099	22.88	24.00	1.294	0.128	13
LTE B25	Ant.5	Left tilt	0mm		26365	1882.5	1	0	0.08	0.054	22.88	24.00	1.294	0.070	/
LTE B25	Ant.5	Right cheek	0mm		26365	1882.5	1	0	-0.18	0.065	22.88	24.00	1.294	0.084	/
LTE B25	Ant.5	Right tilt	0mm		26365	1882.5	1	0	-0.14	0.056	22.88	24.00	1.294	0.072	/
LTE B25	Ant.5	Left cheek	0mm		26365	1882.5	50	0	0.16	0.069	21.96	23.00	1.271	0.088	/
LTE B25	Ant.5	Left tilt	0mm		26365	1882.5	50	0	0.08	0.046	21.96	23.00	1.271	0.058	/
LTE B25	Ant.5	Right cheek	0mm		26365	1882.5	50	0	-0.01	0.049	21.96	23.00	1.271	0.062	/
LTE B25	Ant.5	Right tilt	0mm		26365	1882.5	50	0	-0.14	0.046	21.96	23.00	1.271	0.058	/
Body-worn&Hotspot															
LTE B25	Ant.5	Front side	10mm	QPSK-20MHz	26365	1882.5	1	0	-0.04	0.177	22.88	24.00	1.294	0.229	/
LTE B25	Ant.5	Back side	10mm		26365	1882.5	1	0	-0.09	0.295	22.88	24.00	1.294	0.382	/
LTE B25	Ant.5	Left side	10mm		26365	1882.5	1	0	-0.17	0.117	22.88	24.00	1.294	0.151	/
LTE B25	Ant.5	Right side	10mm		26365	1882.5	1	0	-0.14	0.047	22.88	24.00	1.294	0.061	/
LTE B25	Ant.5	Top side	10mm		26365	1882.5	1	0	-0.19	0.032	22.88	24.00	1.294	0.041	/
LTE B25	Ant.5	Bottom side	10mm		26365	1882.5	1	0	0.09	0.280	22.88	24.00	1.294	0.362	/
LTE B25	Ant.5	Front side	10mm		26365	1882.5	50	0	0.11	0.157	21.96	23.00	1.271	0.199	/
LTE B25	Ant.5	Back side	10mm		26365	1882.5	50	0	-0.03	0.456	21.96	23.00	1.271	0.579	14
LTE B25	Ant.5	Left side	10mm		26365	1882.5	50	0	0.15	0.088	21.96	23.00	1.271	0.112	/
LTE B25	Ant.5	Right side	10mm		26365	1882.5	50	0	-0.09	0.042	21.96	23.00	1.271	0.053	/
LTE B25	Ant.5	Top side	10mm		26365	1882.5	50	0	0.08	0.028	21.96	23.00	1.271	0.036	/
LTE B25	Ant.5	Bottom side	10mm		26365	1882.5	50	0	0.11	0.217	21.96	23.00	1.271	0.276	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Head															
LTE B26	Ant.5	Left cheek	0mm	QPSK-15MHz	26865	831.5	1	0	0.11	0.081	23.16	24.00	1.213	0.098	15
LTE B26	Ant.5	Left tilt	0mm		26865	831.5	1	0	0.17	0.024	23.16	24.00	1.213	0.029	/
LTE B26	Ant.5	Right cheek	0mm		26865	831.5	1	0	0.16	0.069	23.16	24.00	1.213	0.084	/
LTE B26	Ant.5	Right tilt	0mm		26865	831.5	1	0	0.02	0.053	23.16	24.00	1.213	0.064	/
LTE B26	Ant.5	Left cheek	0mm		26865	831.5	36	0	0.03	0.060	22.14	23.00	1.219	0.073	/
LTE B26	Ant.5	Left tilt	0mm		26865	831.5	36	0	0.04	0.029	22.14	23.00	1.219	0.035	/
LTE B26	Ant.5	Right cheek	0mm		26865	831.5	36	0	0.02	0.057	22.14	23.00	1.219	0.069	/
LTE B26	Ant.5	Right tilt	0mm		26865	831.5	36	0	-0.07	0.044	22.14	23.00	1.219	0.054	/
Body-worn&Hotspot															
LTE B26	Ant.5	Front side	10mm	QPSK-15MHz	26865	831.5	1	0	-0.18	0.075	23.16	24.00	1.213	0.091	/
LTE B26	Ant.5	Back side	10mm		26865	831.5	1	0	0.07	0.128	23.16	24.00	1.213	0.155	16
LTE B26	Ant.5	Left side	10mm		26865	831.5	1	0	-0.06	0.102	23.16	24.00	1.213	0.124	/
LTE B26	Ant.5	Right side	10mm		26865	831.5	1	0	0.09	0.080	23.16	24.00	1.213	0.097	/
LTE B26	Ant.5	Top side	10mm		26865	831.5	1	0	0.13	0.030	23.16	24.00	1.213	0.036	/
LTE B26	Ant.5	Bottom side	10mm		26865	831.5	1	0	0.03	0.087	23.16	24.00	1.213	0.106	/
LTE B26	Ant.5	Front side	10mm		26865	831.5	36	0	-0.05	0.060	22.14	23.00	1.219	0.073	/
LTE B26	Ant.5	Back side	10mm		26865	831.5	36	0	0.05	0.124	22.14	23.00	1.219	0.151	/
LTE B26	Ant.5	Left side	10mm		26865	831.5	36	0	0.06	0.079	22.14	23.00	1.219	0.096	/
LTE B26	Ant.5	Right side	10mm		26865	831.5	36	0	-0.18	0.052	22.14	23.00	1.219	0.063	/
LTE B26	Ant.5	Top side	10mm		26865	831.5	36	0	0.02	0.028	22.14	23.00	1.219	0.034	/
LTE B26	Ant.5	Bottom side	10mm		26865	831.5	36	0	0.17	0.070	22.14	23.00	1.219	0.085	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B66	Ant.5	Left cheek	0mm	QPSK-20MHz	132322	1745	1	0	-0.03	0.094	22.93	24.00	1.279	0.120	17
LTE B66	Ant.5	Left tilt	0mm		132322	1745	1	0	-0.18	0.055	22.93	24.00	1.279	0.070	
LTE B66	Ant.5	Right cheek	0mm		132322	1745	1	0	0.19	0.093	22.93	24.00	1.279	0.119	
LTE B66	Ant.5	Right tilt	0mm		132322	1745	1	0	-0.18	0.039	22.93	24.00	1.279	0.050	
LTE B66	Ant.5	Left cheek	0mm		132322	1745	50	0	-0.16	0.075	22.18	23.00	1.208	0.091	
LTE B66	Ant.5	Left tilt	0mm		132322	1745	50	0	0.16	0.044	22.18	23.00	1.208	0.053	/
LTE B66	Ant.5	Right cheek	0mm		132322	1745	50	0	0.19	0.084	22.18	23.00	1.208	0.101	/
LTE B66	Ant.5	Right tilt	0mm		132322	1745	50	0	0.15	0.033	22.18	23.00	1.208	0.040	/
	Body-worn&Hotspot														
LTE B66	Ant.5	Front side	10mm	QPSK-20MHz	132322	1745	1	0	-0.07	0.167	22.93	24.00	1.279	0.214	
LTE B66	Ant.5	Back side	10mm		132322	1745	1	0	0.12	0.342	22.93	24.00	1.279	0.438	18
LTE B66	Ant.5	Left side	10mm		132322	1745	1	0	-0.04	0.128	22.93	24.00	1.279	0.164	
LTE B66	Ant.5	Right side	10mm		132322	1745	1	0	-0.01	0.045	22.93	24.00	1.279	0.058	
LTE B66	Ant.5	Top side	10mm		132322	1745	1	0	0.1	0.000	22.93	24.00	1.279	0.000	/
LTE B66	Ant.5	Bottom side	10mm		132322	1745	1	0	-0.19	0.257	22.93	24.00	1.279	0.329	/
LTE B66	Ant.5	Front side	10mm		132322	1745	50	0	-0.07	0.134	22.18	23.00	1.208	0.162	/
LTE B66	Ant.5	Back side	10mm		132322	1745	50	0	0.07	0.283	22.18	23.00	1.208	0.342	/
LTE B66	Ant.5	Left side	10mm		132322	1745	50	0	0.17	0.098	22.18	23.00	1.208	0.118	/
LTE B66	Ant.5	Right side	10mm		132322	1745	50	0	0.04	0.036	22.18	23.00	1.208	0.043	/
LTE B66	Ant.5	Top side	10mm		132322	1745	50	0	0.01	0.050	22.18	23.00	1.208	0.060	/
LTE B66	Ant.5	Bottom side	10mm		132322	1745	50	0	0.02	0.196	22.18	23.00	1.208	0.237	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B40	Ant.5	Left cheek	0mm	QPSK-20MHz	39150	2350	1	0	-0.19	0.066	14.54	15.50	1.247	0.082	/
LTE B40	Ant.5	Left tilt	0mm		39150	2350	1	0	-0.01	0.025	14.54	15.50	1.247	0.031	/
LTE B40	Ant.5	Right cheek	0mm		39150	2350	1	0	-0.14	0.038	14.54	15.50	1.247	0.047	/
LTE B40	Ant.5	Right tilt	0mm		39150	2350	1	0	0.08	0.033	14.54	15.50	1.247	0.041	/
LTE B40	Ant.5	Left cheek	0mm		39150	2350	50	0	-0.1	0.080	13.46	14.50	1.271	0.102	19
LTE B40	Ant.5	Left tilt	0mm		39150	2350	50	0	-0.09	0.030	13.46	14.50	1.271	0.038	/
LTE B40	Ant.5	Right cheek	0mm		39150	2350	50	0	0.04	0.045	13.46	14.50	1.271	0.057	/
LTE B40	Ant.5	Right tilt	0mm		39150	2350	50	0	0.15	0.039	13.46	14.50	1.271	0.050	/
	Body-worn&Hotspot														
LTE B40	Ant.5	Front side	10mm	QPSK-20MHz	39150	2350	1	0	0.16	0.046	14.54	15.50	1.247	0.057	/
LTE B40	Ant.5	Back side	10mm		39150	2350	1	0	-0.19	0.162	14.54	15.50	1.247	0.202	/
LTE B40	Ant.5	Left side	10mm		39150	2350	1	0	0.14	0.097	14.54	15.50	1.247	0.121	/
LTE B40	Ant.5	Right side	10mm		39150	2350	1	0	-0.15	0.011	14.54	15.50	1.247	0.014	/
LTE B40	Ant.5	Top side	10mm		39150	2350	1	0	-0.15	0.010	14.54	15.50	1.247	0.012	/
LTE B40	Ant.5	Bottom side	10mm		39150	2350	1	0	0.13	0.044	14.54	15.50	1.247	0.055	/
LTE B40	Ant.5	Front side	10mm		39150	2350	50	0	-0.01	0.045	13.46	14.50	1.271	0.057	/
LTE B40	Ant.5	Back side	10mm		39150	2350	50	0	-0.08	0.170	13.46	14.50	1.271	0.216	20
LTE B40	Ant.5	Left side	10mm		39150	2350	50	0	-0.06	0.102	13.46	14.50	1.271	0.130	/
LTE B40	Ant.5	Right side	10mm		39150	2350	50	0	0.1	0.010	13.46	14.50	1.271	0.013	/
LTE B40	Ant.5	Top side	10mm		39150	2350	50	0	-0.09	0.009	13.46	14.50	1.271	0.011	/
LTE B40	Ant.5	Bottom side	10mm		39150	2350	50	0	0.14	0.044	13.46	14.50	1.271	0.056	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B41	Ant.5	Left cheek	0mm	QPSK-20MHz	40620	2593	1	49	0.07	0.055	23.12	24.00	1.225	0.067	/
LTE B41	Ant.5	Left tilt	0mm		40620	2593	1	49	0.14	0.029	23.12	24.00	1.225	0.036	/
LTE B41	Ant.5	Right cheek	0mm		40620	2593	1	49	-0.01	0.050	23.12	24.00	1.225	0.061	/
LTE B41	Ant.5	Right tilt	0mm		40620	2593	1	49	-0.06	0.039	23.12	24.00	1.225	0.048	/
LTE B41	Ant.5	Left cheek	0mm		40620	2593	50	25	-0.13	0.069	22.04	23.00	1.247	0.086	21
LTE B41	Ant.5	Left tilt	0mm		40620	2593	50	25	-0.06	0.026	22.04	23.00	1.247	0.032	/
LTE B41	Ant.5	Right cheek	0mm		40620	2593	50	25	-0.19	0.046	22.04	23.00	1.247	0.057	/
LTE B41	Ant.5	Right tilt	0mm		40620	2593	50	25	-0.17	0.042	22.04	23.00	1.247	0.052	/
	Body-worn&Hotspot														
LTE B41	Ant.5	Front side	10mm	QPSK-20MHz	40620	2593	1	49	-0.13	0.047	23.12	24.00	1.225	0.058	/
LTE B41	Ant.5	Back side	10mm		40620	2593	1	49	-0.06	0.158	23.12	24.00	1.225	0.193	/
LTE B41	Ant.5	Left side	10mm		40620	2593	1	49	-0.15	0.059	23.12	24.00	1.225	0.072	/
LTE B41	Ant.5	Right side	10mm		40620	2593	1	49	-0.09	0.036	23.12	24.00	1.225	0.044	/
LTE B41	Ant.5	Top side	10mm		40620	2593	1	49	-0.12	0.033	23.12	24.00	1.225	0.040	/
LTE B41	Ant.5	Bottom side	10mm		40620	2593	1	49	0.07	0.048	23.12	24.00	1.225	0.059	/
LTE B41	Ant.5	Front side	10mm		40620	2593	50	25	-0.13	0.069	22.04	23.00	1.247	0.086	/
LTE B41	Ant.5	Back side	10mm		40620	2593	50	25	0.11	0.180	22.04	23.00	1.247	0.225	22
LTE B41	Ant.5	Left side	10mm		40620	2593	50	25	0.19	0.106	22.04	23.00	1.247	0.132	/
LTE B41	Ant.5	Right side	10mm		40620	2593	50	25	-0.03	0.032	22.04	23.00	1.247	0.040	/
LTE B41	Ant.5	Top side	10mm		40620	2593	50	25	-0.01	0.030	22.04	23.00	1.247	0.037	/
LTE B41	Ant.5	Bottom side	10mm		40620	2593	50	25	0.16	0.089	22.04	23.00	1.247	0.111	/

Test Band	Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq.(MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head														
WLAN 2.4G	Ant.1	Left cheek	0mm	802.11b	11	2462	-0.16	0.106	17.97	19.00	1.269	100.00	1.000	0.134	23
WLAN 2.4G	Ant.1	Left tilt	0mm		11	2462	0.09	0.079	17.97	19.00	1.269	100.00	1.000	0.100	
WLAN 2.4G	Ant.1	Right cheek	0mm		11	2462	-0.16	0.086	17.97	19.00	1.269	100.00	1.000	0.109	
WLAN 2.4G	Ant.1	Right tilt	0mm		11	2462	-0.03	0.070	17.97	19.00	1.269	100.00	1.000	0.089	
WLAN 2.4G	Ant.4	Left cheek	0mm	802.11b	6	2437	-0.04	0.053	19.15	20.00	1.217	100.00	1.000	0.065	
WLAN 2.4G	Ant.4	Left tilt	0mm		6	2437	-0.18	0.030	19.15	20.00	1.217	100.00	1.000	0.037	
WLAN 2.4G	Ant.4	Right cheek	0mm		6	2437	-0.03	0.072	19.15	20.00	1.217	100.00	1.000	0.088	
WLAN 2.4G	Ant.4	Right tilt	0mm		6	2437	-0.18	0.032	19.15	20.00	1.217	100.00	1.000	0.039	
WLAN 2.4G	MIMO	Left cheek	0mm	802.11b	6	2437	-0.03	0.091	21.49	22.50	1.263	100.00	1.000	0.115	
WLAN 2.4G	MIMO	Left tilt	0mm		6	2437	0.16	0.085	21.49	22.50	1.263	100.00	1.000	0.107	
WLAN 2.4G	MIMO	Right cheek	0mm		6	2437	-0.14	0.066	21.49	22.50	1.263	100.00	1.000	0.083	
WLAN 2.4G	MIMO	Right tilt	0mm		6	2437	0.16	0.071	21.49	22.50	1.263	100.00	1.000	0.090	
Body-worn&Hotspot															
WLAN 2.4G	Ant.1	Front side	10mm	802.11b	11	2462	-0.15	0.048	17.97	19.00	1.269	100.00	1.000	0.061	
WLAN 2.4G	Ant.1	Back side	10mm		11	2462	0.14	0.195	17.97	19.00	1.269	100.00	1.000	0.247	
WLAN 2.4G	Ant.1	Left side	10mm		11	2462	0.14	0.032	17.97	19.00	1.269	100.00	1.000	0.041	
WLAN 2.4G	Ant.1	Right side	10mm		11	2462	-0.16	0.067	17.97	19.00	1.269	100.00	1.000	0.085	
WLAN 2.4G	Ant.1	Top side	10mm	802.11b	11	2462	-0.01	0.085	17.97	19.00	1.269	100.00	1.000	0.108	
WLAN 2.4G	Ant.1	Bottom side	10mm		11	2462	-0.01	0.032	17.97	19.00	1.269	100.00	1.000	0.041	
WLAN 2.4G	Ant.4	Front side	10mm		6	2437	0.04	0.036	19.15	20.00	1.217	100.00	1.000	0.044	
WLAN 2.4G	Ant.4	Back side	10mm		6	2437	-0.19	0.182	19.15	20.00	1.217	100.00	1.000	0.222	
WLAN 2.4G	Ant.4	Left side	10mm	802.11b	6	2437	0.01	0.148	19.15	20.00	1.217	100.00	1.000	0.180	
WLAN 2.4G	Ant.4	Right side	10mm		6	2437	0.12	0.030	19.15	20.00	1.217	100.00	1.000	0.037	
WLAN 2.4G	Ant.4	Top side	10mm		6	2437	-0.12	0.028	19.15	20.00	1.217	100.00	1.000	0.034	
WLAN 2.4G	Ant.4	Bottom side	10mm		6	2437	0.15	0.026	19.15	20.00	1.217	100.00	1.000	0.032	
WLAN 2.4G	MIMO	Front side	10mm	802.11b	6	2437	0.08	0.030	21.49	22.50	1.263	100.00	1.000	0.038	
WLAN 2.4G	MIMO	Back side	10mm		6	2437	-0.04	0.209	21.49	22.50	1.263	100.00	1.000	0.264	24
WLAN 2.4G	MIMO	Left side	10mm		6	2437	-0.04	0.131	21.49	22.50	1.263	100.00	1.000	0.165	
WLAN 2.4G	MIMO	Right side	10mm		6	2437	0.07	0.056	21.49	22.50	1.263	100.00	1.000	0.071	
WLAN 2.4G	MIMO	Top side	10mm	802.11b	6	2437	-0.13	0.096	21.49	22.50	1.263	100.00	1.000	0.121	
WLAN 2.4G	MIMO	Bottom side	10mm		6	2437	-0.05	0.032	21.49	22.50	1.263	100.00	1.000	0.040	

Test Band	Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq.(MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	Reported 1g SAR (W/kg)	Meas. No.
Head															
WLAN 5.2G	Ant.1	Left cheek	0mm	802.11ax (HE20)	36	5180	-0.13	0.175	15.14	16.00	1.219	100.00	1.000	0.213	
WLAN 5.2G	Ant.1	Left tilt	0mm		36	5180	-0.1	0.177	15.14	16.00	1.219	100.00	1.000	0.216	
WLAN 5.2G	Ant.1	Right cheek	0mm		36	5180	0.14	0.171	15.14	16.00	1.219	100.00	1.000	0.208	
WLAN 5.2G	Ant.1	Right tilt	0mm		36	5180	0.14	0.157	15.14	16.00	1.219	100.00	1.000	0.191	
WLAN 5.2G	Ant.4	Left cheek	0mm	802.11ax (HE20)	36	5180	-0.05	0.058	15.79	17.00	1.321	100.00	1.000	0.077	
WLAN 5.2G	Ant.4	Left tilt	0mm		36	5180	0.11	0.055	15.79	17.00	1.321	100.00	1.000	0.073	
WLAN 5.2G	Ant.4	Right cheek	0mm		36	5180	-0.06	0.144	15.79	17.00	1.321	100.00	1.000	0.190	
WLAN 5.2G	Ant.4	Right tilt	0mm		36	5180	-0.01	0.087	15.79	17.00	1.321	100.00	1.000	0.115	
WLAN 5.2G	MIMO	Left cheek	0mm	802.11ax (HE20)	36	5180	0.1	0.186	18.49	19.50	1.263	100.00	1.000	0.235	
WLAN 5.2G	MIMO	Left tilt	0mm		36	5180	0.05	0.209	18.49	19.50	1.263	100.00	1.000	0.264	25
WLAN 5.2G	MIMO	Right cheek	0mm		36	5180	0.01	0.151	18.49	19.50	1.263	100.00	1.000	0.191	
WLAN 5.2G	MIMO	Right tilt	0mm		36	5180	0.03	0.180	18.49	19.50	1.263	100.00	1.000	0.227	
WLAN 5.3G	Ant.1	Left cheek	0mm	802.11ax (HE80)	58	5290	-0.04	0.169	15.24	16.00	1.191	100.00	1.000	0.201	
WLAN 5.3G	Ant.1	Left tilt	0mm		58	5290	-0.17	0.160	15.24	16.00	1.191	100.00	1.000	0.191	
WLAN 5.3G	Ant.1	Right cheek	0mm		58	5290	0.07	0.215	15.24	16.00	1.191	100.00	1.000	0.256	26
WLAN 5.3G	Ant.1	Right tilt	0mm		58	5290	0.08	0.145	15.24	16.00	1.191	100.00	1.000	0.173	
WLAN 5.3G	Ant.4	Left cheek	0mm	802.11ax (HE20)	60	5300	0.02	0.057	15.26	16.50	1.330	100.00	1.000	0.076	
WLAN 5.3G	Ant.4	Left tilt	0mm		60	5300	0.16	0.063	15.26	16.50	1.330	100.00	1.000	0.084	
WLAN 5.3G	Ant.4	Right cheek	0mm		60	5300	0.13	0.141	15.26	16.50	1.330	100.00	1.000	0.188	
WLAN 5.3G	Ant.4	Right tilt	0mm		60	5300	0.1	0.064	15.26	16.50	1.330	100.00	1.000	0.085	
WLAN 5.3G	MIMO	Left cheek	0mm	802.11ax (HE80)	58	5290	0.02	0.139	18.05	19.00	1.243	100.00	1.000	0.173	
WLAN 5.3G	MIMO	Left tilt	0mm		58	5290	0.09	0.143	18.05	19.00	1.243	100.00	1.000	0.178	
WLAN 5.3G	MIMO	Right cheek	0mm		58	5290	-0.13	0.130	18.05	19.00	1.243	100.00	1.000	0.162	
WLAN 5.3G	MIMO	Right tilt	0mm		58	5290	-0.02	0.131	18.05	19.00	1.243	100.00	1.000	0.163	
WLAN 5.6G	Ant.1	Left cheek	0mm	802.11ax (HE80)	122	5610	-0.04	0.084	16.05	17.00	1.245	100.00	1.000	0.105	
WLAN 5.6G	Ant.1	Left tilt	0mm		122	5610	0.18	0.097	16.05	17.00	1.245	100.00	1.000	0.121	
WLAN 5.6G	Ant.1	Right cheek	0mm		122	5610	0.13	0.088	16.05	17.00	1.245	100.00	1.000	0.110	
WLAN 5.6G	Ant.1	Right tilt	0mm		122	5610	-0.19	0.096	16.05	17.00	1.245	100.00	1.000	0.119	
WLAN 5.6G	Ant.4	Left cheek	0mm	802.11ac (VHT40)	134	5670	0.13	0.104	16.18	17.00	1.208	100.00	1.000	0.126	
WLAN 5.6G	Ant.4	Left tilt	0mm		134	5670	-0.06	0.068	16.18	17.00	1.208	100.00	1.000	0.082	
WLAN 5.6G	Ant.4	Right cheek	0mm		134	5670	-0.15	0.119	16.18	17.00	1.208	100.00	1.000	0.144	
WLAN 5.6G	Ant.4	Right tilt	0mm		134	5670	-0.16	0.078	16.18	17.00	1.208	100.00	1.000	0.094	
WLAN 5.6G	MIMO	Left cheek	0mm	802.11ax (HE80)	122	5610	0.17	0.236	18.49	19.50	1.262	100.00	1.000	0.298	
WLAN 5.6G	MIMO	Left tilt	0mm		122	5610	-0.16	0.113	18.49	19.50	1.262	100.00	1.000	0.143	
WLAN 5.6G	MIMO	Right cheek	0mm		122	5610	0.02	0.250	18.49	19.50	1.262	100.00	1.000	0.316	27
WLAN 5.6G	MIMO	Right tilt	0mm		122	5610	-0.12	0.203	18.49	19.50	1.262	100.00	1.000	0.256	
WLAN 5.8G	Ant.1	Left cheek	0mm	802.11ac (VHT40)	159	5795	-0.06	0.087	14.51	15.50	1.256	100.00	1.000	0.109	
WLAN 5.8G	Ant.1	Left tilt	0mm		159	5795	0.08	0.095	14.51	15.50	1.256	100.00	1.000	0.119	
WLAN 5.8G	Ant.1	Right cheek	0mm		159	5795	0.03	0.141	14.51	15.50	1.256	100.00	1.000	0.177	
WLAN 5.8G	Ant.1	Right tilt	0mm		159	5795	0.04	0.125	14.51	15.50	1.256	100.00	1.000	0.157	
WLAN 5.8G	Ant.4	Left cheek	0mm	802.11ax (HE20)	157	5785	-0.02	0.102	15.81	16.50	1.172	100.00	1.000	0.120	
WLAN 5.8G	Ant.4	Left tilt	0mm		157	5785	0.1	0.138	15.81	16.50	1.172	100.00	1.000	0.162	
WLAN 5.8G	Ant.4	Right cheek	0mm		157	5785	-0.03	0.102	15.81	16.50	1.172	100.00	1.000	0.120	
WLAN 5.8G	Ant.4	Right tilt	0mm		157	5785	0.14	0.116	15.81	16.50	1.172	100.00	1.000	0.136	
WLAN 5.8G	MIMO	Left cheek	0mm	802.11ac (VHT40)	159	5795	0.02	0.142	17.71	18.50	1.198	100.00	1.000	0.170	
WLAN 5.8G	MIMO	Left tilt	0mm		159	5795	0.07	0.132	17.71	18.50	1.198	100.00	1.000	0.158	
WLAN 5.8G	MIMO	Right cheek	0mm		159	5795	0.16	0.153	17.71	18.50	1.198	100.00	1.000	0.183	28
WLAN 5.8G	MIMO	Right tilt	0mm		159	5795	-0.14	0.129	17.71	18.50	1.198	100.00	1.000	0.155	
Body-worn&Hotspot															
WLAN 5.2G	Ant.1	Front side	10mm	802.11ax (HE20)	36	5180	-0.08	0.065	15.14	16.00	1.219	100.00	1.000	0.079	
WLAN 5.2G	Ant.1	Back side	10mm		36	5180	-0.12	0.507	15.14	16.00	1.219	100.00	1.000	0.618	29
WLAN 5.2G	Ant.1	Left side	10mm		36	5180	-0.18	0.028	15.14	16.00	1.219	100.00	1.000	0.034	
WLAN 5.2G	Ant.1	Right side	10mm		36	5180	-0.19	0.094	15.14	16.00	1.219	100.00	1.000	0.115	
WLAN 5.2G	Ant.1	Top side	10mm	802.11ax (HE20)	36	5180	-0.05	0.244	15.14	16.00	1.219	100.00	1.000	0.297	
WLAN 5.2G	Ant.1	Bottom side	10mm		36	5180	-0.09	0.022	15.14	16.00	1.219	100.00	1.000	0.027	
WLAN 5.2G	Ant.4	Front side	10mm		36	5180	-0.12	0.064	15.79	17.00	1.321	100.00	1.000	0.085	
WLAN 5.2G	Ant.4	Back side	10mm		36	5180	-0.12	0.122	15.79	17.00	1.321	100.00	1.000	0.161	
WLAN 5.2G	Ant.4	Left side	10mm	802.11ax (HE20)	36	5180	0.13	0.136	15.79	17.00	1.321	100.00	1.000	0.180	
WLAN 5.2G	Ant.4	Right side	10mm		36	5180	-0.04	0.068	15.79	17.00	1.321	100.00	1.000	0.090	
WLAN 5.2G	Ant.4	Top side	10mm		36	5180	0.01	0.031	15.79	17.00	1.321	100.00	1.000	0.041	
WLAN 5.2G	Ant.4	Bottom side	10mm		36	5180	-0.01	0.021	15.79	17.00	1.321	100.00	1.000	0.028	
WLAN 5.2G	MIMO	Front side	10mm	802.11ax (HE20)	36	5180	0.1	0.089	18.49	19.50	1.263	100.00	1.000	0.112	
WLAN 5.2G	MIMO	Back side	10mm		36	5180	0.14	0.469	18.49	19.50	1.263	100.00	1.000	0.592	
WLAN 5.2G	MIMO	Left side	10mm		36	5180	0.13	0.125	18.49	19.50	1.263	100.00	1.000	0.158	
WLAN 5.2G	MIMO	Right side	10mm		36	5180	0.11	0.076	18.49	19.50	1.263	100.00	1.000	0.096	
WLAN 5.2G	MIMO	Top side	10mm	802.11ax (HE80)	36	5180	-0.01	0.210	18.49	19.50	1.263	100.00	1.000	0.265	
WLAN 5.2G	MIMO	Bottom side	10mm		36	5180	-0.04	0.026	18.49	19.50	1.263	100.00	1.000	0.033	
WLAN 5.3G	Ant.1	Front side	10mm		58	5290	0.07	0.084	15.24	16.00	1.191	100.00	1.000	0.100	
WLAN 5.3G	Ant.1	Back side	10mm		58	5290	0.19	0.523	15.24	16.00	1.191	100.00	1.000	0.623	30
WLAN 5.3G	Ant.4	Front side	10mm	802.11ax (HE20)	60	5300	-0.1	0.076	15.26	16.50	1.330	100.00	1.000	0.101	
WLAN 5.3G	Ant.4	Back side	10mm		60	5300	0.14	0.114	15.26	16.50	1.330	100.00	1.000	0.152	
WLAN 5.3G	MIMO	Front side	10mm		58	5290	-0.19	0.074	18.05	19.00	1.243	100.00	1.000	0.092	
WLAN 5.3G	MIMO	Back side	10mm		58	5290	0.1	0.465	18.05	19.00	1.243	100.00	1.000	0.578	
WLAN 5.6G	Ant.1	Front side	10mm	802.11ax (HE80)	122	5610	0.1	0.042	16.05	17.00	1.245	100.00	1.000	0.052	
WLAN 5.6G	Ant.1	Back side	10mm		122	5610	0.01								

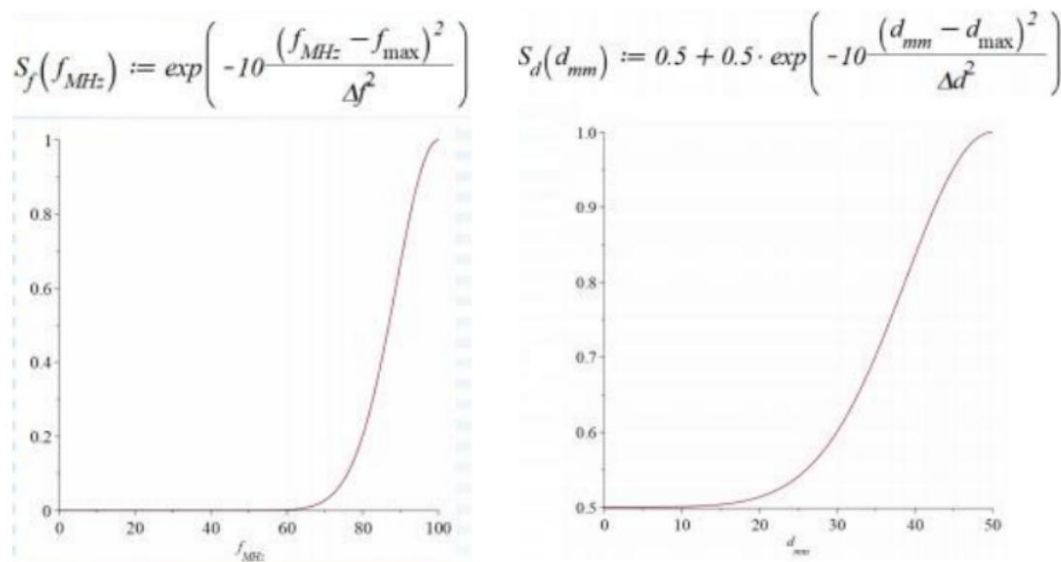
Test Band	Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq.(MHz)	Power Drift(dB)	Measured 10g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	Reported 10g SAR (W/kg)	Meas. No.
Limb															
WLAN 5.3G	Ant.1	Front side	0mm	802.11ax (HE80)	58	5290	0.02	0.097	15.24	16.00	1.191	100.00	1.000	0.116	
WLAN 5.3G	Ant.1	Back side	0mm		58	5290	0.05	0.253	15.24	16.00	1.191	100.00	1.000	0.301	
WLAN 5.3G	Ant.1	Left side	0mm		58	5290	-0.16	0.034	15.24	16.00	1.191	100.00	1.000	0.041	
WLAN 5.3G	Ant.1	Right side	0mm		58	5290	0.11	0.073	15.24	16.00	1.191	100.00	1.000	0.087	
WLAN 5.3G	Ant.1	Top side	0mm		58	5290	0.04	0.195	15.24	16.00	1.191	100.00	1.000	0.232	
WLAN 5.3G	Ant.1	Bottom side	0mm	802.11ax (HE20)	58	5290	-0.03	0.021	15.24	16.00	1.191	100.00	1.000	0.025	
WLAN 5.3G	Ant.4	Front side	0mm		60	5300	0.07	0.078	15.26	16.50	1.330	100.00	1.000	0.104	
WLAN 5.3G	Ant.4	Back side	0mm		60	5300	-0.03	0.067	15.26	16.50	1.330	100.00	1.000	0.089	
WLAN 5.3G	Ant.4	Left side	0mm		60	5300	0.03	0.642	15.26	16.50	1.330	100.00	1.000	0.854	33
WLAN 5.3G	Ant.4	Right side	0mm		60	5300	-0.06	0.011	15.26	16.50	1.330	100.00	1.000	0.015	
WLAN 5.3G	Ant.4	Top side	0mm	802.11ax (HE80)	60	5300	0.12	0.043	15.26	16.50	1.330	100.00	1.000	0.057	
WLAN 5.3G	Ant.4	Bottom side	0mm		60	5300	-0.03	0.009	15.26	16.50	1.330	100.00	1.000	0.012	
WLAN 5.3G	MIMO	Front side	0mm		58	5290	0.15	0.102	18.05	19.00	1.243	100.00	1.000	0.127	
WLAN 5.3G	MIMO	Back side	0mm		58	5290	0.17	0.249	18.05	19.00	1.243	100.00	1.000	0.310	
WLAN 5.3G	MIMO	Left side	0mm		58	5290	-0.09	0.211	18.05	19.00	1.243	100.00	1.000	0.262	
WLAN 5.3G	MIMO	Right side	0mm	802.11ax (HE80)	58	5290	-0.09	0.074	18.05	19.00	1.243	100.00	1.000	0.092	
WLAN 5.3G	MIMO	Top side	0mm		58	5290	0.16	0.177	18.05	19.00	1.243	100.00	1.000	0.220	
WLAN 5.3G	MIMO	Bottom side	0mm		58	5290	0.1	0.021	18.05	19.00	1.243	100.00	1.000	0.026	
WLAN 5.6G	Ant.1	Front side	0mm	802.11ax (HE80)	122	5610	0.02	0.067	16.05	17.00	1.245	100.00	1.000	0.083	
WLAN 5.6G	Ant.1	Back side	0mm		122	5610	-0.05	0.324	16.05	17.00	1.245	100.00	1.000	0.403	
WLAN 5.6G	Ant.1	Left side	0mm		122	5610	0.02	0.023	16.05	17.00	1.245	100.00	1.000	0.029	
WLAN 5.6G	Ant.1	Right side	0mm		122	5610	0.05	0.062	16.05	17.00	1.245	100.00	1.000	0.077	
WLAN 5.6G	Ant.1	Top side	0mm		122	5610	-0.08	0.227	16.05	17.00	1.245	100.00	1.000	0.283	
WLAN 5.6G	Ant.1	Bottom side	0mm	802.11ac (VHT40)	122	5610	-0.06	0.017	16.05	17.00	1.245	100.00	1.000	0.021	
WLAN 5.6G	Ant.4	Front side	0mm		134	5670	0.03	0.042	16.18	17.00	1.208	100.00	1.000	0.051	
WLAN 5.6G	Ant.4	Back side	0mm		134	5670	-0.05	0.032	16.18	17.00	1.208	100.00	1.000	0.039	
WLAN 5.6G	Ant.4	Left side	0mm		134	5670	0.13	0.173	16.18	17.00	1.208	100.00	1.000	0.209	
WLAN 5.6G	Ant.4	Right side	0mm		134	5670	-0.1	0.016	16.18	17.00	1.208	100.00	1.000	0.019	
WLAN 5.6G	Ant.4	Top side	0mm	802.11ax (HE80)	134	5670	-0.02	0.014	16.18	17.00	1.208	100.00	1.000	0.017	
WLAN 5.6G	Ant.4	Bottom side	0mm		134	5670	-0.04	0.008	16.18	17.00	1.208	100.00	1.000	0.010	
WLAN 5.6G	MIMO	Front side	0mm		122	5610	0.13	0.149	18.49	19.50	1.262	100.00	1.000	0.188	
WLAN 5.6G	MIMO	Back side	0mm		122	5610	0.06	0.389	18.49	19.50	1.262	100.00	1.000	0.491	
WLAN 5.6G	MIMO	Left side	0mm		122	5610	0.15	0.893	18.49	19.50	1.262	100.00	1.000	1.127	34
WLAN 5.6G	MIMO	Right side	0mm	802.11ax (HE80)	122	5610	-0.05	0.057	18.49	19.50	1.262	100.00	1.000	0.072	
WLAN 5.6G	MIMO	Top side	0mm		122	5610	0.07	0.201	18.49	19.50	1.262	100.00	1.000	0.254	
WLAN 5.6G	MIMO	Bottom side	0mm		122	5610	-0.08	0.016	18.49	19.50	1.262	100.00	1.000	0.020	

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1-g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
Bluetooth	Ant.2	Left cheek	0mm	8-DPSK	39	2441	-0.09	0.002	10.13	11.00	1.222	57.11	1.751	0.005	35
Bluetooth	Ant.2	Left tilt	0mm		39	2441	-0.07	0.000	10.13	11.00	1.222	57.11	1.751	0.000	
Bluetooth	Ant.2	Right cheek	0mm		39	2441	0.19	0.000	10.13	11.00	1.222	57.11	1.751	0.000	
Bluetooth	Ant.2	Right tilt	0mm		39	2441	0.06	0.000	10.13	11.00	1.222	57.11	1.751	0.000	
	Body-worn&Hotspot														
Bluetooth	Ant.2	Front side	10mm	8-DPSK	39	2441	0.11	0.000	10.13	11.00	1.222	57.11	1.751	0.000	
Bluetooth	Ant.2	Back side	10mm		39	2441	-0.01	0.000	10.13	11.00	1.222	57.11	1.751	0.000	
Bluetooth	Ant.2	Right side	10mm		39	2441	-0.04	0.011	10.13	11.00	1.222	57.11	1.751	0.024	36
Bluetooth	Ant.2	Left side	10mm		39	2441	0.16	0.000	10.13	11.00	1.222	57.11	1.751	0.000	
Bluetooth	Ant.2	Top side	10mm		39	2441	-0.07	0.000	10.13	11.00	1.222	57.11	1.751	0.000	
Bluetooth	Ant.2	Bottom side	10mm		39	2441	-0.13	0.000	10.13	11.00	1.222	57.11	1.751	0.000	

Band	Antenna	Mode	Position	Dist.(mm)	Test Channel	Freq.(MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	1g Scaled SAR (W/kg)	Measured APD4cm2 (W/m2)	Meas. uncertainty Scaling Factor	Scaled APD (W/m2)	Meas. No.
Head																		
6G WIFI	ANT1	11ax80	Left Cheek	0	183	6865	0.17	0.016	12.40	13.00	1.148	100.00	1.000	0.018	0.138	1.028	0.163	/
6G WIFI	ANT1	11ax80	Left Tilt	0	183	6865	0.18	0.019	12.40	13.00	1.148	100.00	1.000	0.022	0.166	1.028	0.196	/
6G WIFI	ANT1	11ax80	Right Cheek	0	183	6865	-0.10	0.025	12.40	13.00	1.148	100.00	1.000	0.029	0.215	1.028	0.264	/
6G WIFI	ANT1	11ax80	Right Tilt	0	183	6865	0.01	0.022	12.40	13.00	1.148	100.00	1.000	0.025	0.193	1.028	0.228	/
6G WIFI	ANT4	11ax80	Left Cheek	0	119	6545	0.17	0.027	12.71	13.00	1.069	100.00	1.000	0.029	0.231	1.028	0.254	/
6G WIFI	ANT4	11ax80	Left Tilt	0	119	6545	0.19	0.024	12.71	13.00	1.069	100.00	1.000	0.026	0.205	1.028	0.225	/
6G WIFI	ANT4	11ax80	Right Cheek	0	119	6545	-0.12	0.019	12.71	13.00	1.069	100.00	1.000	0.020	0.161	1.028	0.177	/
6G WIFI	ANT4	11ax80	Right Tilt	0	119	6545	0.17	0.018	12.71	13.00	1.069	100.00	1.000	0.019	0.159	1.028	0.175	/
6G WIFI	MIMO	11ax80	Left Cheek	0	183	6865	-0.07	0.043	15.44	15.50	1.014	100.00	1.000	0.044	0.375	1.028	0.391	/
6G WIFI	MIMO	11ax80	Left Tilt	0	183	6865	0.02	0.028	15.44	15.50	1.014	100.00	1.000	0.028	0.247	1.028	0.257	/
6G WIFI	MIMO	11ax80	Right Cheek	0	183	6865	0.18	0.023	15.44	15.50	1.014	100.00	1.000	0.023	0.206	1.028	0.215	/
6G WIFI	MIMO	11ax80	Right Tilt	0	183	6865	-0.08	0.024	15.44	15.50	1.014	100.00	1.000	0.024	0.212	1.028	0.221	/
6G WIFI	MIMO	11ax80	Left Cheek	0	7	5985	0.14	0.048	14.03	14.50	1.114	100.00	1.000	0.053	0.419	1.028	0.480	/
6G WIFI	MIMO	11ax80	Left Tilt	0	39	6145	-0.17	0.026	13.51	14.50	1.256	100.00	1.000	0.033	0.225	1.028	0.231	/
6G WIFI	MIMO	11ax80	Left Cheek	0	87	6385	-0.02	0.021	13.93	14.50	1.140	100.00	1.000	0.024	0.187	1.028	0.219	/
6G WIFI	MIMO	11ax80	Left Cheek	0	103	6465	-0.15	0.059	14.30	14.50	1.047	100.00	1.000	0.062	0.513	1.028	0.552	37
6G WIFI	MIMO	11ax80	Left Cheek	0	119	6545	-0.10	0.031	14.30	14.50	1.047	100.00	1.000	0.032	0.274	1.028	0.295	/
6G WIFI	MIMO	11ax80	Left Cheek	0	135	6625	-0.06	0.053	13.92	14.50	1.143	100.00	1.000	0.061	0.460	1.028	0.541	/
6G WIFI	MIMO	11ax80	Left Cheek	0	151	6705	-0.19	0.017	14.46	14.50	1.009	100.00	1.000	0.017	0.145	1.028	0.150	/
6G WIFI	MIMO	11ax80	Left Cheek	0	167	6785	-0.18	0.013	13.72	14.50	1.197	100.00	1.000	0.016	0.117	1.028	0.144	/
6G WIFI	MIMO	11ax80	Left Cheek	0	199	6945	-0.18	0.048	14.58	15.50	1.236	100.00	1.000	0.059	0.419	1.028	0.532	/
6G WIFI	MIMO	11ax80	Left Cheek	0	215	7025	-0.12	0.023	14.99	15.50	1.125	100.00	1.000	0.026	0.201	1.028	0.232	/
Band	Antenna	Mode	Position	Dist.(mm)	Test Channel	Freq.(MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	1g Scaled SAR (W/kg)	Measured APD4cm2 (W/m2)	Meas. uncertainty Scaling Factor	Scaled APD (W/m2)	Meas. No.
Body-worn																		
6G WIFI	ANT1	11ax80	Front Side	10	183	6865	0.02	0.076	12.40	13.00	1.148	100.00	1.000	0.087	0.638	1.028	0.753	/
6G WIFI	ANT1	11ax80	Back Side	10	183	6865	-0.15	0.180	12.40	13.00	1.148	100.00	1.000	0.207	0.153	1.028	0.181	/
6G WIFI	ANT4	11ax80	Front Side	10	119	6545	0.17	0.094	12.71	13.00	1.069	100.00	1.000	0.100	0.795	1.028	0.874	/
6G WIFI	ANT4	11ax80	Back Side	10	119	6545	0.02	0.431	12.71	13.00	1.069	100.00	1.000	0.461	3.640	1.028	4.000	/
6G WIFI	MIMO	11ax80	Front Side	10	183	6865	0.17	0.102	15.44	15.50	1.014	100.00	1.000	0.103	0.856	1.028	0.892	/
6G WIFI	MIMO	11ax80	Back Side	10	183	6865	0.12	0.453	15.44	15.50	1.014	100.00	1.000	0.459	3.800	1.028	3.961	/
6G WIFI	MIMO	11ax80	Back Side	10	7	5985	-0.17	0.307	14.03	14.50	1.114	100.00	1.000	0.342	2.560	1.028	2.932	/
6G WIFI	MIMO	11ax80	Back Side	10	39	6145	0.10	0.359	13.51	14.50	1.256	100.00	1.000	0.451	3.040	1.028	3.925	/
6G WIFI	MIMO	11ax80	Back Side	10	87	6385	0.01	0.363	13.93	14.50	1.140	100.00	1.000	0.414	3.060	1.028	3.586	/
6G WIFI	MIMO	11ax80	Back Side	10	103	6465	0.19	0.421	14.30	14.50	1.047	100.00	1.000	0.441	3.570	1.028	3.842	/
6G WIFI	MIMO	11ax80	Back Side	10	119	6545	0.01	0.518	14.30	14.50	1.047	100.00	1.000	0.542	4.370	1.028	4.704	38
6G WIFI	MIMO	11ax80	Back Side	10	135	6625	0.03	0.326	13.92	14.50	1.143	100.00	1.000	0.373	2.760	1.028	3.243	/
6G WIFI	MIMO	11ax80	Back Side	10	151	6705	0.04	0.363	14.46	14.50	1.009	100.00	1.000	0.366	3.070	1.028	3.184	/
6G WIFI	MIMO	11ax80	Back Side	10	167	6785	0.06	0.336	13.72	14.50	1.197	100.00	1.000	0.402	2.840	1.028	3.495	/
6G WIFI	MIMO	11ax80	Back Side	10	199	6945	0.17	0.189	14.58	15.50	1.236	100.00	1.000	0.234	1.610	1.028	2.046	/
6G WIFI	MIMO	11ax80	Back Side	10	215	7025	0.10	0.197	14.99	15.50	1.125	100.00	1.000	0.222	1.680	1.028	1.943	/
Band	Antenna	Mode	Position	Dist.(mm)	Test Channel	Freq.(MHz)	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	10g Scaled SAR (W/kg)	Measured APD4cm2 (W/m2)	Meas. uncertainty Scaling Factor	Scaled APD (W/m2)	Meas. No.
Limbs																		
6G WIFI	ANT1	11ax80	Front Side	0	183	6865	0.05	0.056	12.40	13.00	1.148	100.00	1.000	0.064	1.250	1.028	1.475	/
6G WIFI	ANT1	11ax80	Back Side	0	183	6865	0.08	0.122	12.40	13.00	1.148	100.00	1.000	0.140	2.710	1.028	3.198	/
6G WIFI	ANT1	11ax80	Right Edge	0	183	6865	0.18	0.015	12.40	13.00	1.148	100.00	1.000	0.017	0.348	1.028	0.411	/
6G WIFI	ANT1	11ax80	Left Edge	0	183	6865	-0.16	0.035	12.40	13.00	1.148	100.00	1.000	0.040	0.793	1.028	0.936	/
6G WIFI	ANT1	11ax80	Top Edge	0	183	6865	0.01	0.085	12.40	13.00	1.148	100.00	1.000	0.098	1.940	1.028	2.289	/
6G WIFI	ANT1	11ax80	Bottom Edge	0	183	6865	-0.09	0.066	12.40	13.00	1.148	100.00	1.000	0.076	1.450	1.028	1.711	/
6G WIFI	ANT4	11ax80	Front Side	0	119	6545	-0.19	0.035	12.71	13.00	1.069	100.00	1.000	0.037	0.794	1.028	0.873	/
6G WIFI	ANT4	11ax80	Back Side	0	119	6545	-0.15	0.226	12.71	13.00	1.069	100.00	1.000	0.242	5.130	1.028	5.638	/
6G WIFI	ANT4	11ax80	Right Edge	0	119	6545	-0.06	0.069	12.71	13.00	1.069	100.00	1.000	0.074	1.580	1.028	1.736	/
6G WIFI	ANT4	11ax80	Left Edge	0	119	6545	-0.04	0.012	12.71	13.00	1.069	100.00	1.000	0.013	0.274	1.028	0.301	/
6G WIFI	ANT4	11ax80	Top Edge	0	119	6545	-0.12	0.013	12.71	13.00	1.069	100.00	1.000	0.014	0.293	1.028	0.322	/
6G WIFI	ANT4	11ax80	Bottom Edge	0	119	6545	-0.05	0.010	12.71	13.00	1.069	100.00	1.000	0.011	0.237	1.028	0.260	/
6G WIFI	MIMO	11ax80	Front Side	0	183	6865	-0.06	0.051	15.44	15.50	1.014	100.00	1.000	0.052	1.150	1.028	1.199	/
6G WIFI	MIMO	11ax80	Back Side	0	183	6865	0.19	0.233	15.44	15.50	1.014	100.00	1.000	0.236	5.270	1.028	5.493	/
6G WIFI	MIMO	11ax80	Right Edge	0	183	6865	0.11	0.046	15.44	15.50	1.014	100.00	1.000	0.047	1.060	1.028	1.105	/
6G WIFI	MIMO	11ax80	Left Edge	0	183	6865	0.08	0.042	15.44	15.50	1.014	100.00	1.000	0.043	0.958	1.028	0.999	/
6G WIFI	MIMO	11ax80	Top Edge	0	183	6865	-0.15	0.105	15.44	15.50	1.014	100.00	1.000	0.106	2.370	1.028	2.470	/
6G WIFI	MIMO	11ax80	Bottom Edge	0	183	6865	0.07	0.038	15.44	15.50	1.014	100.00	1.000	0.039	0.867	1.028	0.904	/
6G WIFI	MIMO	11ax80	Back Side	0	7	5985	0.10	0.206	14.03	14.50	1.114	100.00	1.000	0.229	4.840	1.028	5.314	/
6G WIFI	MIMO	11ax80	Back Side	0	39	6145	-0.11	0.211	13.51	14.50	1.256	100.00	1.000	0.265	4.720	1.028	6.094	/
6G WIFI	MIMO	11ax80	Back Side	0	87	6385	-0.19	0.176	13.93	14.50	1.140	100.00	1.000	0.201	3.940	1.028	4.617	/
6G WIFI	MIMO	11ax80	Back Side	0	103	6465	-0.01	0.169	14.30	14.50	1.047	100.00	1.000	0.177	3.850	1.028	4.144	/
6G WIFI	MIMO	11ax80	Back Side	0	119	6545	-0.06	0.229	14.30	14.50	1.047	100.00	1.000	0.240	5.120	1.028	5.511	/
6G WIFI	MIMO	11ax80	Back Side	0	135	6625	-0.13	0.135	13.92	14.50	1.143	100.00	1.000	0.154	3.070	1.028	3.607	/
6G WIFI	MIMO	11ax80	Back Side	0	151	6705	-0.14	0.194	14.46	14.50	1.009	100.00	1.000	0.196	4.330	1.028	4.491	/
6G WIFI	MIMO	11ax80	Back Side	0	167	6785	-0.13	0.247	13.72	14.50	1.197	100.00	1.000	0.296	5.640	1.028	6.940	39

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

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



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 (13.56MHz)	13.56	30.19	3	6	-59.07
Note: 1. Add the appropriate maximum ground reflection factor to the ERP level (6 dB for frequencies ≤ 30 MHz). 2. $ERP = 30.19 + 20 \cdot \log(3) - 104.8 + 6 = -59.07$ (dBm)					

According to the FCC KDB 447498 D04

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

Estimated SAR	$1.6 \cdot P_{ant} / P_{th}$ [W/kg]		
P _{meas.} (dBm)	-59.07	P _{meas.} (mW)	0.000001
P _{th.} (mW)	443.13		
NFC Estimated 1g SAR [W/kg]	<0.01		

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	Head	Body-worn	Hotspot
1	WWAN+Wi-Fi+BT	Yes	Yes	Yes

Note:

1. 2G&3G&4G share the same antenna and can't transmit simultaneously.
2. 2.4G WLAN can't transmit simultaneously with 5G WLAN or 6GWLAN.
3. The maximum SAR summation is calculated based on the same configuration and test position.

11.2 Sum SAR of Simultaneous Transmission

11.2.1 Head Simultaneous Transmission SAR Evaluation for WWAN Antenna with WIFI and Bluetooth

Band	Antenna	Dist.	Position	Stand alone SAR					SUM SAR		
				1	2	3	4	5	1+2+5	1+3+5	1+4+5
				WWAN	Wi-Fi2.4G	Wi-Fi5G	Wi-Fi6G	Bluetooth			
GSM 850	Ant.5	0mm	Left Cheek	0.205	0.134	0.298	0.062	0.005	0.344	0.508	0.272
GSM 850	Ant.5	0mm	Left Tilt	0.095	0.107	0.264	0.028	0.000	0.202	0.359	0.123
GSM 850	Ant.5	0mm	Right Cheek	0.156	0.109	0.316	0.029	0.000	0.265	0.472	0.185
GSM 850	Ant.5	0mm	Right Tilt	0.113	0.090	0.256	0.025	0.000	0.203	0.369	0.138
GSM 1900	Ant.5	0mm	Left Cheek	0.058	0.134	0.298	0.062	0.005	0.197	0.361	0.125
GSM 1900	Ant.5	0mm	Left Tilt	0.036	0.107	0.264	0.028	0.000	0.143	0.300	0.064
GSM 1900	Ant.5	0mm	Right Cheek	0.040	0.109	0.316	0.029	0.000	0.149	0.356	0.069
GSM 1900	Ant.5	0mm	Right Tilt	0.025	0.090	0.256	0.025	0.000	0.115	0.281	0.050
WCDMA B2	Ant.5	0mm	Left Cheek	0.101	0.134	0.298	0.062	0.005	0.240	0.404	0.168
WCDMA B2	Ant.5	0mm	Left Tilt	0.056	0.107	0.264	0.028	0.000	0.163	0.320	0.084
WCDMA B2	Ant.5	0mm	Right Cheek	0.071	0.109	0.316	0.029	0.000	0.180	0.387	0.100
WCDMA B2	Ant.5	0mm	Right Tilt	0.052	0.090	0.256	0.025	0.000	0.142	0.308	0.077
WCDMA B4	Ant.5	0mm	Left Cheek	0.123	0.134	0.298	0.062	0.005	0.262	0.426	0.190
WCDMA B4	Ant.5	0mm	Left Tilt	0.079	0.107	0.264	0.028	0.000	0.186	0.343	0.107
WCDMA B4	Ant.5	0mm	Right Cheek	0.122	0.109	0.316	0.029	0.000	0.231	0.438	0.151
WCDMA B4	Ant.5	0mm	Right Tilt	0.088	0.090	0.256	0.025	0.000	0.178	0.344	0.113
WCDMA B5	Ant.5	0mm	Left Cheek	0.086	0.134	0.298	0.062	0.005	0.225	0.389	0.153
WCDMA B5	Ant.5	0mm	Left Tilt	0.046	0.107	0.264	0.028	0.000	0.153	0.310	0.074
WCDMA B5	Ant.5	0mm	Right Cheek	0.071	0.109	0.316	0.029	0.000	0.180	0.387	0.100
WCDMA B5	Ant.5	0mm	Right Tilt	0.051	0.090	0.256	0.025	0.000	0.141	0.307	0.076
LTE B7	Ant.5	0mm	Left Cheek	0.119	0.134	0.298	0.062	0.005	0.258	0.422	0.186
LTE B7	Ant.5	0mm	Left Tilt	0.070	0.107	0.264	0.028	0.000	0.177	0.334	0.098
LTE B7	Ant.5	0mm	Right Cheek	0.095	0.109	0.316	0.029	0.000	0.204	0.411	0.124
LTE B7	Ant.5	0mm	Right Tilt	0.066	0.090	0.256	0.025	0.000	0.156	0.322	0.091
LTE B25	Ant.5	0mm	Left Cheek	0.128	0.134	0.298	0.062	0.005	0.267	0.431	0.195
LTE B25	Ant.5	0mm	Left Tilt	0.070	0.107	0.264	0.028	0.000	0.177	0.334	0.098
LTE B25	Ant.5	0mm	Right Cheek	0.084	0.109	0.316	0.029	0.000	0.193	0.400	0.113
LTE B25	Ant.5	0mm	Right Tilt	0.072	0.090	0.256	0.025	0.000	0.162	0.328	0.097
LTE B26	Ant.5	0mm	Left Cheek	0.098	0.134	0.298	0.062	0.005	0.237	0.401	0.165
LTE B26	Ant.5	0mm	Left Tilt	0.035	0.107	0.264	0.028	0.000	0.142	0.299	0.063
LTE B26	Ant.5	0mm	Right Cheek	0.084	0.109	0.316	0.029	0.000	0.193	0.400	0.113
LTE B26	Ant.5	0mm	Right Tilt	0.064	0.090	0.256	0.025	0.000	0.154	0.320	0.089
LTE B66	Ant.5	0mm	Left Cheek	0.120	0.134	0.298	0.062	0.005	0.259	0.423	0.187
LTE B66	Ant.5	0mm	Left Tilt	0.070	0.107	0.264	0.028	0.000	0.177	0.334	0.098
LTE B66	Ant.5	0mm	Right Cheek	0.119	0.109	0.316	0.029	0.000	0.228	0.435	0.148
LTE B66	Ant.5	0mm	Right Tilt	0.050	0.090	0.256	0.025	0.000	0.140	0.306	0.075
LTE B40	Ant.5	0mm	Left Cheek	0.102	0.134	0.298	0.062	0.005	0.241	0.405	0.169
LTE B40	Ant.5	0mm	Left Tilt	0.038	0.107	0.264	0.028	0.000	0.145	0.302	0.066
LTE B40	Ant.5	0mm	Right Cheek	0.057	0.109	0.316	0.029	0.000	0.166	0.373	0.086
LTE B40	Ant.5	0mm	Right Tilt	0.050	0.090	0.256	0.025	0.000	0.140	0.306	0.075
LTE B41	Ant.5	0mm	Left Cheek	0.086	0.134	0.298	0.062	0.005	0.225	0.389	0.153
LTE B41	Ant.5	0mm	Left Tilt	0.036	0.107	0.264	0.028	0.000	0.143	0.300	0.064
LTE B41	Ant.5	0mm	Right Cheek	0.061	0.109	0.316	0.029	0.000	0.170	0.377	0.090
LTE B41	Ant.5	0mm	Right Tilt	0.052	0.090	0.256	0.025	0.000	0.142	0.308	0.077

Note:

1: The simultaneous transmission combinations of the antennas contain combinations of five antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 0.508 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

11.2.2 Body-worn Simultaneous Transmission SAR Evaluation for WWAN Antenna with Wi-Fi and Bluetooth

Band	Antenna	Dist.	Position	Stand alone SAR					SUM SAR		
				1	2	3	4	5	1+2+4	1+3+4	1+3+4
				WWAN	Wi-Fi2.4G	Wi-Fi5G	Wi-Fi6G	Bluetooth			
GSM 850	Ant.5	10mm	Front Side	0.188	0.061	0.164	0.103	0.000	0.249	0.352	0.291
GSM 850	Ant.5	10mm	Back Side	0.221	0.264	0.804	0.542	0.000	0.485	1.025	0.763
GSM 1900	Ant.5	10mm	Front Side	0.116	0.061	0.164	0.103	0.000	0.177	0.280	0.219
GSM 1900	Ant.5	10mm	Back Side	0.170	0.264	0.804	0.542	0.000	0.434	0.974	0.712
WCDMA B2	Ant.5	10mm	Front Side	0.200	0.061	0.164	0.103	0.000	0.261	0.364	0.303
WCDMA B2	Ant.5	10mm	Back Side	0.293	0.264	0.804	0.542	0.000	0.557	1.097	0.835
WCDMA B4	Ant.5	10mm	Front Side	0.250	0.061	0.164	0.103	0.000	0.311	0.414	0.353
WCDMA B4	Ant.5	10mm	Back Side	0.354	0.264	0.804	0.542	0.000	0.618	1.158	0.896
WCDMA B5	Ant.5	10mm	Front Side	0.087	0.061	0.164	0.103	0.000	0.148	0.251	0.190
WCDMA B5	Ant.5	10mm	Back Side	0.097	0.264	0.804	0.542	0.000	0.361	0.901	0.639
LTE B7	Ant.5	10mm	Front Side	0.115	0.061	0.164	0.103	0.000	0.176	0.279	0.218
LTE B7	Ant.5	10mm	Back Side	0.464	0.264	0.804	0.542	0.000	0.728	1.268	1.006
LTE B25	Ant.5	10mm	Front Side	0.229	0.061	0.164	0.103	0.000	0.290	0.393	0.332
LTE B25	Ant.5	10mm	Back Side	0.579	0.264	0.804	0.542	0.000	0.843	1.383	1.121
LTE B26	Ant.5	10mm	Front Side	0.091	0.061	0.164	0.103	0.000	0.152	0.255	0.194
LTE B26	Ant.5	10mm	Back Side	0.155	0.264	0.804	0.542	0.000	0.419	0.959	0.697
LTE B66	Ant.5	10mm	Front Side	0.214	0.061	0.164	0.103	0.000	0.275	0.378	0.317
LTE B66	Ant.5	10mm	Back Side	0.438	0.264	0.804	0.542	0.000	0.702	1.242	0.980
LTE B40	Ant.5	10mm	Front Side	0.057	0.061	0.164	0.103	0.000	0.118	0.221	0.160
LTE B40	Ant.5	10mm	Back Side	0.216	0.264	0.804	0.542	0.000	0.480	1.020	0.758
LTE B41	Ant.5	10mm	Front Side	0.086	0.061	0.164	0.103	0.000	0.147	0.250	0.189
LTE B41	Ant.5	10mm	Back Side	0.225	0.264	0.804	0.542	0.000	0.489	1.029	0.767

Note:

1: The simultaneous transmission combinations of the antennas contain combinations of five antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 1.383 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

11.2.3 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Antenna with Wi-Fi and Bluetooth

Band	Antenna	Dist.	Position	Stand alone SAR				SUM SAR	
				1	2	3	4	1+2+4	1+3+4
				WWAN	Wi-Fi2.4G	Wi-Fi5G	Bluetooth		
GSM 850	Ant.5	10mm	Front Side	0.188	0.061	0.164	0.000	0.249	0.352
GSM 850	Ant.5	10mm	Back Side	0.221	0.264	0.804	0.000	0.485	1.025
GSM 850	Ant.5	10mm	Left Side	0.214	0.180	0.180	0.000	0.394	0.394
GSM 850	Ant.5	10mm	Right Side	0.175	0.085	0.121	0.024	0.284	0.320
GSM 850	Ant.5	10mm	Top Side	0.039	0.121	0.297	0.000	0.160	0.336
GSM 850	Ant.5	10mm	Bottom Side	0.177	0.041	0.053	0.000	0.218	0.230
GSM 1900	Ant.5	10mm	Front Side	0.116	0.061	0.164	0.000	0.177	0.280
GSM 1900	Ant.5	10mm	Back Side	0.170	0.264	0.804	0.000	0.434	0.974
GSM 1900	Ant.5	10mm	Left Side	0.061	0.180	0.180	0.000	0.241	0.241
GSM 1900	Ant.5	10mm	Right Side	0.031	0.085	0.121	0.024	0.140	0.176
GSM 1900	Ant.5	10mm	Top Side	0.025	0.121	0.297	0.000	0.146	0.322
GSM 1900	Ant.5	10mm	Bottom Side	0.114	0.041	0.053	0.000	0.155	0.167
WCDMA B2	Ant.5	10mm	Front Side	0.200	0.061	0.164	0.000	0.261	0.364
WCDMA B2	Ant.5	10mm	Back Side	0.293	0.264	0.804	0.000	0.557	1.097
WCDMA B2	Ant.5	10mm	Left Side	0.151	0.180	0.180	0.000	0.331	0.331
WCDMA B2	Ant.5	10mm	Right Side	0.064	0.085	0.121	0.024	0.173	0.209
WCDMA B2	Ant.5	10mm	Top Side	0.039	0.121	0.297	0.000	0.160	0.336
WCDMA B2	Ant.5	10mm	Bottom Side	0.283	0.041	0.053	0.000	0.324	0.336
WCDMA B4	Ant.5	10mm	Front Side	0.250	0.061	0.164	0.000	0.311	0.414
WCDMA B4	Ant.5	10mm	Back Side	0.354	0.264	0.804	0.000	0.618	1.158
WCDMA B4	Ant.5	10mm	Left Side	0.139	0.180	0.180	0.000	0.319	0.319
WCDMA B4	Ant.5	10mm	Right Side	0.066	0.085	0.121	0.024	0.175	0.211
WCDMA B4	Ant.5	10mm	Top Side	0.029	0.121	0.297	0.000	0.150	0.326
WCDMA B4	Ant.5	10mm	Bottom Side	0.300	0.041	0.053	0.000	0.341	0.353
WCDMA B5	Ant.5	10mm	Front Side	0.087	0.061	0.164	0.000	0.148	0.251
WCDMA B5	Ant.5	10mm	Back Side	0.097	0.264	0.804	0.000	0.361	0.901
WCDMA B5	Ant.5	10mm	Left Side	0.090	0.180	0.180	0.000	0.270	0.270
WCDMA B5	Ant.5	10mm	Right Side	0.055	0.085	0.121	0.024	0.164	0.200
WCDMA B5	Ant.5	10mm	Top Side	0.038	0.121	0.297	0.000	0.159	0.335
WCDMA B5	Ant.5	10mm	Bottom Side	0.094	0.041	0.053	0.000	0.135	0.147

11.2.3 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Antenna with Wi-Fi and Bluetooth

Band	Antenna	Dist.	Position	Stand alone SAR				SUM SAR	
				1	2	3	4	1+2+4	1+3+4
				WWAN	Wi-Fi2.4G	Wi-Fi5G	Bluetooth		
LTE B7	Ant.5	10mm	Front Side	0.115	0.061	0.164	0.000	0.176	0.279
LTE B7	Ant.5	10mm	Back Side	0.464	0.264	0.804	0.000	0.728	1.268
LTE B7	Ant.5	10mm	Left Side	0.204	0.180	0.180	0.000	0.384	0.384
LTE B7	Ant.5	10mm	Right Side	0.040	0.085	0.121	0.024	0.149	0.185
LTE B7	Ant.5	10mm	Top Side	0.036	0.121	0.297	0.000	0.157	0.333
LTE B7	Ant.5	10mm	Bottom Side	0.133	0.041	0.053	0.000	0.174	0.186
LTE B25	Ant.5	10mm	Front Side	0.229	0.061	0.164	0.000	0.290	0.393
LTE B25	Ant.5	10mm	Back Side	0.579	0.264	0.804	0.000	0.843	1.383
LTE B25	Ant.5	10mm	Left Side	0.151	0.180	0.180	0.000	0.331	0.331
LTE B25	Ant.5	10mm	Right Side	0.061	0.085	0.121	0.024	0.170	0.206
LTE B25	Ant.5	10mm	Top Side	0.041	0.121	0.297	0.000	0.162	0.338
LTE B25	Ant.5	10mm	Bottom Side	0.362	0.041	0.053	0.000	0.403	0.415
LTE B26	Ant.5	10mm	Front Side	0.091	0.061	0.164	0.000	0.152	0.255
LTE B26	Ant.5	10mm	Back Side	0.155	0.264	0.804	0.000	0.419	0.959
LTE B26	Ant.5	10mm	Left Side	0.124	0.180	0.180	0.000	0.304	0.304
LTE B26	Ant.5	10mm	Right Side	0.097	0.085	0.121	0.024	0.206	0.242
LTE B26	Ant.5	10mm	Top Side	0.036	0.121	0.297	0.000	0.157	0.333
LTE B26	Ant.5	10mm	Bottom Side	0.106	0.041	0.053	0.000	0.147	0.159
LTE B66	Ant.5	10mm	Front Side	0.214	0.061	0.164	0.000	0.275	0.378
LTE B66	Ant.5	10mm	Back Side	0.438	0.264	0.804	0.000	0.702	1.242
LTE B66	Ant.5	10mm	Left Side	0.164	0.180	0.180	0.000	0.344	0.344
LTE B66	Ant.5	10mm	Right Side	0.058	0.085	0.121	0.024	0.167	0.203
LTE B66	Ant.5	10mm	Top Side	0.060	0.121	0.297	0.000	0.181	0.357
LTE B66	Ant.5	10mm	Bottom Side	0.329	0.041	0.053	0.000	0.370	0.382
LTE B40	Ant.5	10mm	Front Side	0.057	0.061	0.164	0.000	0.118	0.221
LTE B40	Ant.5	10mm	Back Side	0.216	0.264	0.804	0.000	0.480	1.020
LTE B40	Ant.5	10mm	Left Side	0.130	0.180	0.180	0.000	0.310	0.310
LTE B40	Ant.5	10mm	Right Side	0.014	0.085	0.121	0.024	0.123	0.159
LTE B40	Ant.5	10mm	Top Side	0.012	0.121	0.297	0.000	0.133	0.309
LTE B40	Ant.5	10mm	Bottom Side	0.056	0.041	0.053	0.000	0.097	0.109
LTE B41	Ant.5	10mm	Front Side	0.086	0.061	0.164	0.000	0.147	0.250
LTE B41	Ant.5	10mm	Back Side	0.225	0.264	0.804	0.000	0.489	1.029
LTE B41	Ant.5	10mm	Left Side	0.132	0.180	0.180	0.000	0.312	0.312
LTE B41	Ant.5	10mm	Right Side	0.044	0.085	0.121	0.024	0.153	0.189
LTE B41	Ant.5	10mm	Top Side	0.040	0.121	0.297	0.000	0.161	0.337
LTE B41	Ant.5	10mm	Bottom Side	0.111	0.041	0.053	0.000	0.152	0.164

Note:

1: The simultaneous transmission combinations of the antennas contain combinations of five antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 1.383 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

11.3 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 1.38 [W/kg]. Therefore, the worst TER = (1.38+0.01)/1.6 = 0.87, the NFC SAR transmit simultaneously Pass.

12 TEST EQUIPMENTS LIST

These devices are from Shanghai Tejet Communications Technology Co., Ltd. Testing Center.

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
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
2300MHz Validation Dipole	Speag	D2300V2	1111	2024/09/03	2027/09/03
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	1389	2026/05/08	2027/05/08
E-Field Probe	Speag	EX3DV4	7986	2026/04/07	2027/04/07
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	165568	2026/02/04	2027/02/04
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	220718792	2026/01/28	2027/01/28
Thermometer	Elitech	RC-4HC	EF7247001260	2026/01/28	2027/01/28
Power Amplifier	COM-MW	PAO.4	201704001	N/A	N/A
Phantom	Speag	SAM	SN: 1473	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.

These devices are from Shenzhen BALUN Technology Co., Ltd.

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY8	16.2.2.1588	N/A	N/A
6.5GHz Validation Dipole	Speag	D6.5GHzV2	SN: 1037	2024/05/28	2027/05/27
Data Acquisition Electronics	Speag	DAE4	SN: 878	2026/03/23	2027/03/22
E-Field Probe	Speag	EX3DV4	SN: 7893	2026/07/30	2027/07/29
Signal Generator	Keysight	N5173B	MY62150163	2026/06/22	2027/06/21
Power Meter	R&S	NRVD-B2	835843/014	2026/06/23	2027/06/22
Power Sensor	R&S	NRV-Z4	100381	2026/06/23	2027/06/22
Power Sensor	R&S	NRV-Z2	100211	2026/06/23	2027/06/22
Network Analyzer	Agilent	E5071C	MY46103472	2026/07/14	2027/07/13
Thermometer	Elitech	RC-4HC	EF720B004813	2025/10/30	2026/10/29
Thermometer	Elitech	RC-4HC	EF720B004817	2025/10/30	2026/10/29
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: 2090	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 an 85070E and DAK3.5 Dielectric Probe Kit.

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2026.8.11	Head	835	21.4	0.907	42.202	0.90	41.50	0.78	1.69
2026.8.13	Head	1750	21.3	1.339	39.545	1.37	40.08	-2.26	-1.33
2026.8.12	Head	1900	21.6	1.429	39.268	1.40	40.00	2.07	-1.83
2026.8.14	Head	2300	21.5	1.672	40.408	1.67	39.47	0.12	2.38
2026.8.14	Head	2450	21.5	1.784	40.227	1.80	39.20	-0.89	2.62
2026.8.10	Head	2600	21.3	1.907	40.039	1.96	39.01	-2.70	2.64
2026.8.25	Head	5200	21.0	4.744	36.147	4.66	35.99	1.80	0.44
2026.8.25	Head	5300	21.0	4.862	35.945	4.76	35.87	2.14	0.21
2026.8.26	Head	5600	21.1	5.236	35.261	5.07	35.53	3.27	-0.76
2026.8.26	Head	5800	21.1	5.498	34.827	5.27	35.30	4.33	-1.34
2026.08.20	Head	6500	21.7	6.087	34.581	6.07	34.46	0.28	0.35
2026.08.21	Head	6500	21.5	6.160	34.700	6.07	34.46	1.48	0.70
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 (%)
2026.8.11	Head	835	100	0.938	9.38	9.59	-2.19
2026.8.13	Head	1750	100	3.520	35.20	36.50	-3.56
2026.8.12	Head	1900	100	4.040	40.40	39.90	1.25
2026.8.14	Head	2300	100	4.980	49.80	49.10	1.43
2026.8.14	Head	2450	100	5.450	54.50	52.60	3.61
2026.8.10	Head	2600	100	5.680	56.80	55.30	2.71
2026.8.25	Head	5200	100	7.890	78.90	77.80	1.41
2026.8.25	Head	5300	100	8.250	82.50	79.00	4.43
2026.8.26	Head	5600	100	8.730	87.30	82.80	5.43
2026.8.26	Head	5800	100	8.230	82.30	78.50	4.84
2026.08.20	Head	6500	100	29.100	291.00	299.00	-2.68
2026.08.21	Head	6500	100	30.200	302.00	299.00	1.00

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

Head liquid 10g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Meas. SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2026.8.25	Head	5300	100	2.350	23.50	23.00	2.17
2026.8.26	Head	5600	100	2.590	25.90	24.00	7.92
2026.08.20	Head	6500	100	5.440	54.40	55.20	-1.45
2026.08.21	Head	6500	100	5.330	53.30	55.20	-3.44

ANNEX C TEST DATA

Please refer the document “BL-SH2670015-ATD.pdf”.

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SH2670015-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SH2670015-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SH2670015-AC.pdf”.

Statement

1. The Testing Center guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. For the report with Accreditation Symbol, the items marked with "☆" are not within the accredited scope.
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6. Any objection shall be raised to the Testing Center within 30 days after receiving the report.

--END OF REPORT--