TEST REPORT

Applicant:	SHENZHEN WATER WORLD CO., LTD.
Address:	Room 1201, 12F, Block B, Qinghua Information Port No.1, Songpingshan Xindong Road, Songpingshan Community, Xili Subdistrict, Nanshan District, Shenzhen
Equipment Type:	Mobile phone
Model Name:	BLK-L03
Brand Name:	iotapk
FCC ID:	2BR4O-BLK-L03
Test Standard:	FCC 47 CFR Part 2.1093 (refer to section 3.1)
Maximum SAR:	Head (1 g@0mm): 0.90 W/kg Body-worn (1 g@10mm): 0.78 W/kg Hotspot (1 g@10mm): 0.78 W/kg Specific (10 g@0mm): 0.38 W/kg
Sample Arrival Date:	Mar. 09, 2026
Test Date:	Mar. 13, 2026
Date of Issue:	Apr. 17, 2026

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Song Gui **Checked by:** Xu Rui **Approved by:** Tolan Tu

(Testing Director)

Revision History

Version	Issue Date	Revisions Content
Rev. 01	Apr. 08, 2026	Initial Issue
Rev. 02	Apr. 17, 2026	Update the equipment list in Chapter 14

TABLE OF CONTENTS

1 GENERAL INFORMATION 5
1.1 Test Laboratory 5
1.2 Test Location 5
1.3 Test Environment Condition 5
2 PRODUCT INFORMATION 6
2.1 Applicant Information 6
2.2 Manufacturer Information 6
2.3 General Description for Equipment under Test (EUT) 6
2.4 Ancillary Equipment 7
2.5 Technical Information 8
3 SUMMARY OF TEST RESULT 10
3.1 Test Standards 10
3.2 Device Category and SAR Limit 11
3.3 Test Result Summary 12
3.4 Test Uncertainty 14
4 MEASUREMENT SYSTEM 15
4.1 Specific Absorption Rate (SAR) Definition 15
4.2 DASY SAR System 16
5 SYSTEM VERIFICATION 23
5.1 Purpose of System Check 23
5.2 System Check Setup 23
6 TEST POSITION CONFIGURATIONS 24
6.1 Head Exposure Conditions 24
6.2 Body-worn Position Conditions 26

6.3 Hotspot Mode Exposure Position Conditions 27
6.4 Product Specific 10g Exposure Consideration 28
7 MEASUREMENT PROCEDURE 29
7.1 Measurement Process Diagram 29
7.2 SAR Scan General Requirement 30
7.3 Measurement Procedure 31
7.4 Area & Zoom Scan Procedure 31
7.5 Area & Zoom Scan Procedure 32
8 CONDUCTED RF OUTPUT POWER 34
8.1 Power Reduction List 34
8.2 GSM 37
8.3 WCDMA 37
8.4 LTE 37
8.5 WIFI 37
8.6 Bluetooth 37
9 PROXIMITY SENSOR TRIGGERING TEST 38
9.1 Procedures for determining proximity sensor distance 38
9.2 Procedures for determining EUT tilt angle influences to proximity sensor triggering ... 40
10 TEST EXCLUSION CONSIDERATION 41
11 TEST RESULT 43
11.1 GSM 850 43
11.2 GSM 1900 44
11.3 WCDMA Band 2 45
11.4 WCDMA Band 4 46
11.5 WCDMA Band 5 47
11.6 LTE Band 2 (20MHz Bandwidth) 48
11.7 LTE Band 4 (20MHz Bandwidth) 50
11.8 LTE Band 5 (10MHz Bandwidth) 52
11.9 LTE Band 7 (20MHz Bandwidth) 54
11.10 LTE Band 13 (10MHz Bandwidth) 56

11.11 LTE Band 26 (15MHz Bandwidth) 57
11.12 LTE Band 66 (20MHz Bandwidth) 59
11.13 LTE Band 38 (20MHz Bandwidth) 61
11.14 LTE Band 41 (20MHz Bandwidth) 63
11.15 WIFI 2.4GHz 65
11.16 WIFI 5GHz 66
11.17 Bluetooth 69
11.18 Worse Case for LTE Band 38 (20MHz Bandwidth) 70
11.19 Worse Case for LTE Band 66 (20MHz Bandwidth) 70
11.20 Worse Case for WIFI 5GHz 70
12 SAR Measurement Variability 71
13 SIMULTANEOUS TRANSMISSION 72
13.1 Simultaneous Transmission Mode Consider 72
13.2 Sum SAR of Simultaneous Transmission 72
14 TEST EQUIPMENTS LIST 73
ANNEX A SIMULATING LIQUID VERIFICATION RESULT 74
ANNEX B SYSTEM CHECK RESULT 75
ANNEX C TEST DATA 76
ANNEX D EUT EXTERNAL PHOTOS 76
ANNEX E SAR TEST SETUP PHOTOS 76
ANNEX F CALIBRATION REPORT 76
ANNEX G TUNE-UP PROCEDURE 76

1 GENERAL INFORMATION

1.1 Test Laboratory

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

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☐ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☑ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

1.3 Test Environment Condition

Ambient Temperature	18℃ to 25℃
Ambient Relative Humidity	30% to 70%

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	SHENZHEN WATER WORLD CO., LTD.
Address	Room 1201, 12F, Block B, Qinghua Information Port No.1, Songpingshan Xindong Road, Songpingshan Community, Xili Subdistrict, Nanshan District, Shenzhen

2.2 Manufacturer Information

Manufacturer	SHENZHEN WATER WORLD CO., LTD.
Address	Room 1201, 12F, Block B, Qinghua Information Port No.1, Songpingshan Xindong Road, Songpingshan Community, Xili Subdistrict, Nanshan District, Shenzhen

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile phone
Model Name Under Test	BLK-L03
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	FS310-MB-V0.5
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery 1	
	Brand Name	N/A
	Model No.	WX07AA
	Serial No.	N/A
	Capacity	4900 mAh
	Rated Voltage	3.87 V
	Limit Charge Voltage	4.45 V
Ancillary Equipment 2	Battery 2	
	Brand Name	N/A
	Model No.	456591
	Serial No.	N/A
	Capacity	4900mAh
	Rated Voltage	3.87 V
	Limit Charge Voltage	N/A

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/13/17/26/66 TDD LTE Band 38/41 Bluetooth (BR+EDR+BLE) WIFI 802.11a, 802.11b, 802.11g, 802.11n and 802.11ac GPS, GLONASS, FM receiver
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, 2.4G WIFI, 5G WIFI, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850~1910 MHz	RX: 1930~1990 MHz
	WCDMA Band 4	TX: 1710~1755 MHz	RX: 2110~2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850~1910 MHz	RX: 1930~1990 MHz
	LTE Band 4	TX: 1710~1755 MHz	RX: 2110~2115 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 13	TX: 777-787 MHz	RX: 746~756 MHz
	LTE Band 26	TX: 814~849 MHz	RX: 859~894 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	802.11b/g /n(HT20/HT40)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40 /VHT80)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	Bluetooth	2402 ~ 2480 MHz	
Antenna Type	WWAN: FPC Antenna WIFI: FPC Antenna Bluetooth: FPC Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		

Product Type	Portable Device	
EUT Type	☒ Production unit	☐ Identical prototype
Note: 1. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4G transmitter for held-to-ear exposure conditions. 2. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4G transmitter for near to body exposure conditions.		

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI/IEEE C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	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 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

Note: Compared with the EUT of test report BL-SZ2570845-701, the changes of the EUT of this report as below:

1. Add secondary battery, adapter, camera, memory.

Other hardware circuit and software are the same as EUT referred in test report BL-SZ2570845-701. Therefore, only added the worst case spot check test data in section 11.18/11.19/11.20/14 and ANNEX A/B/C/E/F/G, others test data and EUT information are derived from the report BL-SZ2570845-701, which was issued by Shenzhen BALUN Technology Co., Ltd. on Sep. 11, 2025.

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/ ControlledExposure
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

Equipment Class	Band	Maximum Scaled SAR (W/kg)				Maximum Report SAR (W/kg)			
		Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Specific (0mm)	Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Specific (0mm)
		1g SAR			10g SAR	1g SAR			10g SAR
PCE	GSM 850	0.29	0.32	0.32	/	**0.90**	**0.78**	**0.78**	**0.38**
	GSM 1900	0.80	0.56	0.56	/				
	WCDMA Band 2	0.58	0.27	0.27	/				
	WCDMA Band 4	0.72	0.30	0.30	/				
	WCDMA Band 5	0.25	0.29	0.29	/				
	LTE Band 2	0.52	0.29	0.29	/				
	LTE Band 4	0.37	0.12	0.12	/				
	LTE Band 5	0.22	0.24	0.24	/				
	LTE Band 7	0.78	0.37	0.43	/				
	LTE Band 13	0.28	0.30	0.30	/				
	LTE Band 26	0.28	0.24	0.24	/				
	LTE Band 66	0.58	**0.78**	**0.78**	/				
	LTE Band 38	**0.90**	0.30	0.36	/				
	LTE Band 41	0.66	0.23	0.23	/				
DTS	2.4G WIFI	0.46	0.03	0.03	/				
NII	5.2G WIFI	/	/	0.17	/				
	5.3G WIFI	0.12	0.06	/	0.08				
	5.6G WIFI	0.43	0.06	/	**0.38**				
	5.8G WIFI	0.39	0.09	0.13	/				
DSS	Bluetooth	0.18	0.08	0.08	/				
Limit (W/kg)		1.60		1.60	4.00	1.60		1.60	4.00
Verdict		Pass							

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)	
	Head 1g (0mm)	Body-worn& Hotspot 1g (10mm)
PCE	**1.04**	**1.03**
DTS	1.02	0.80
NII	**1.04**	**1.03**
DSS	**1.04**	**1.03**
Limit (W/Kg)	1.60	1.60
Verdict	Pass	
Note: The highest simultaneous SAR please refer section 13.2.		

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 0.90 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 0.38 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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

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

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

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

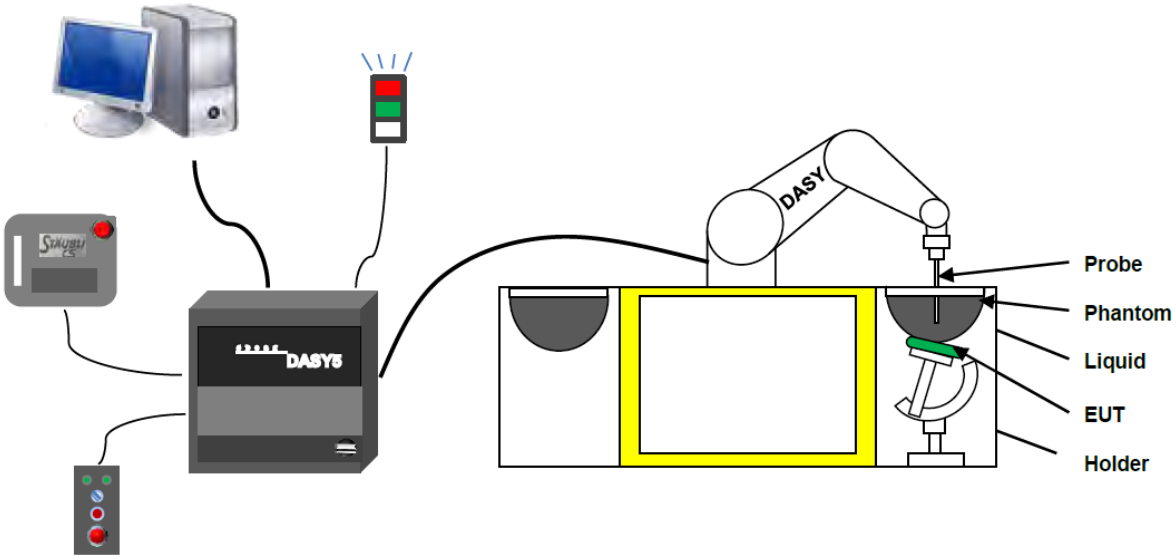
$$\mathbf{SAR} = \frac{\sigma E^2}{\rho}$$

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.

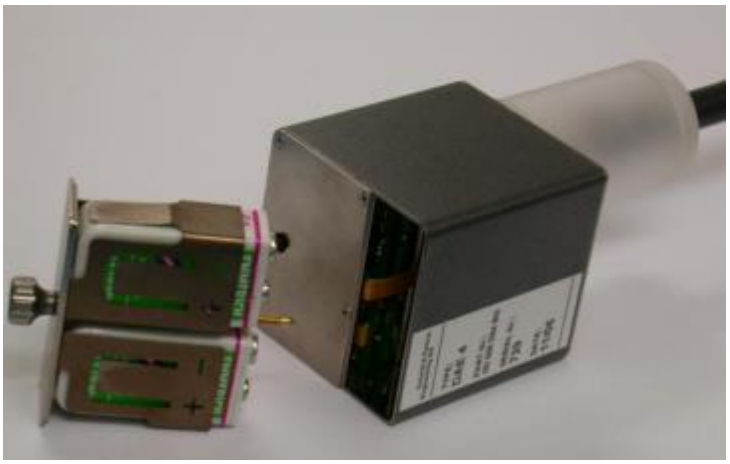
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection systemBuilt-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz;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

E-Field Probe Calibration Process

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

4.2.4 Data Acquisition Electronics

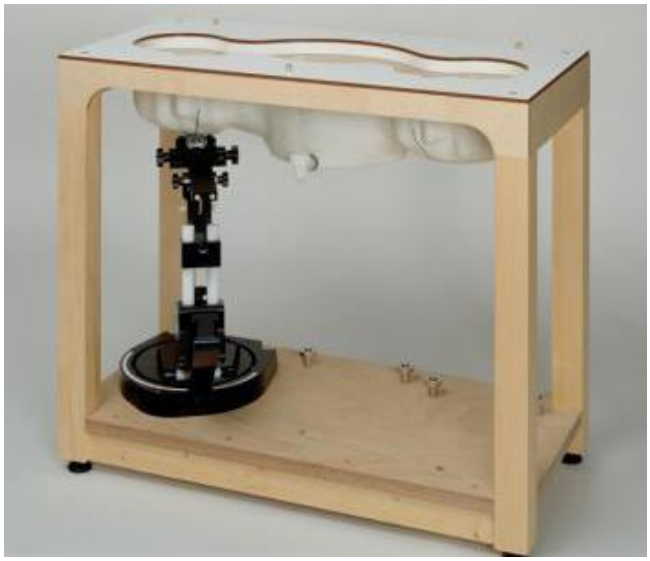
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



- Input Impedance: 200MOhm
- 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

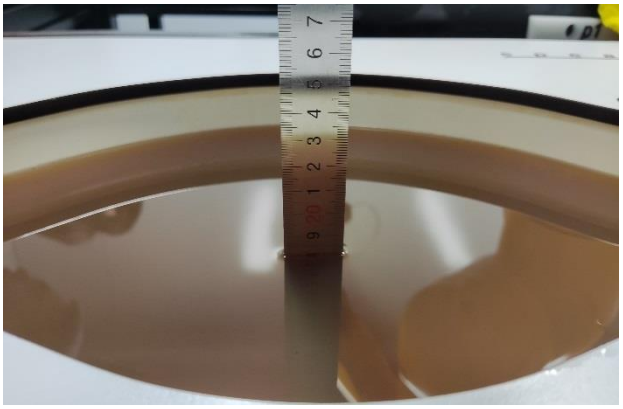
4.2.6 Device Holder

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

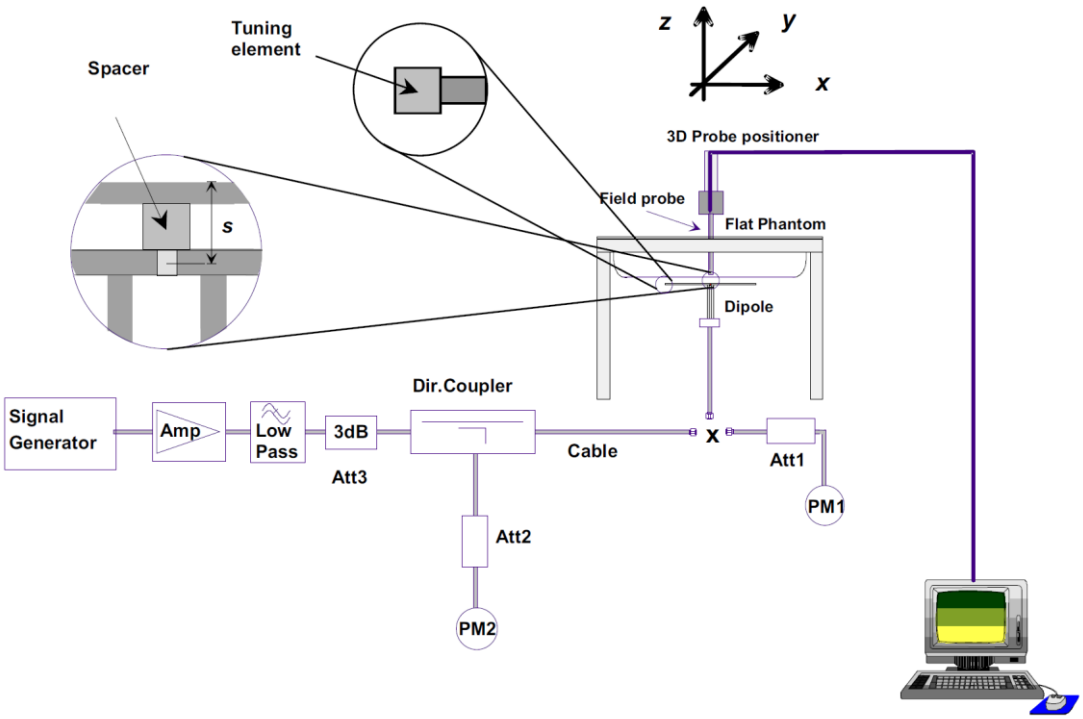
5 SYSTEM VERIFICATION

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

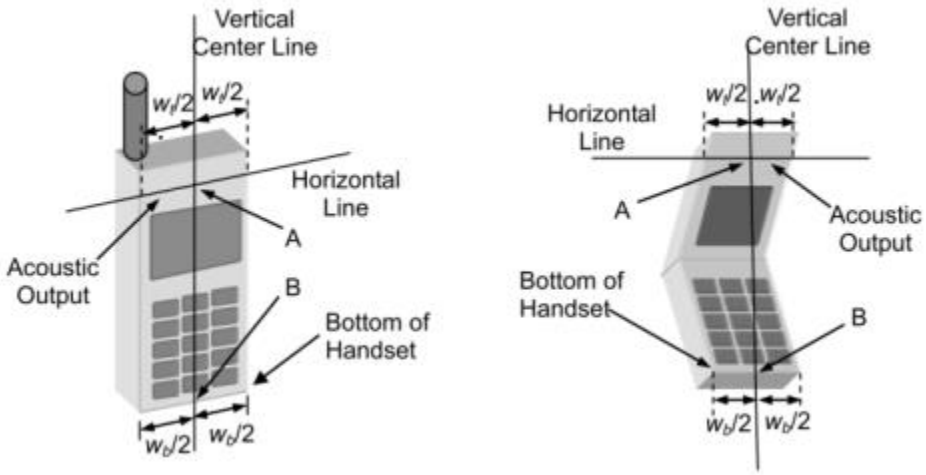
Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

6.1.1 Two Imaginary Lines on the Handset

(a) 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.

(b) 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.

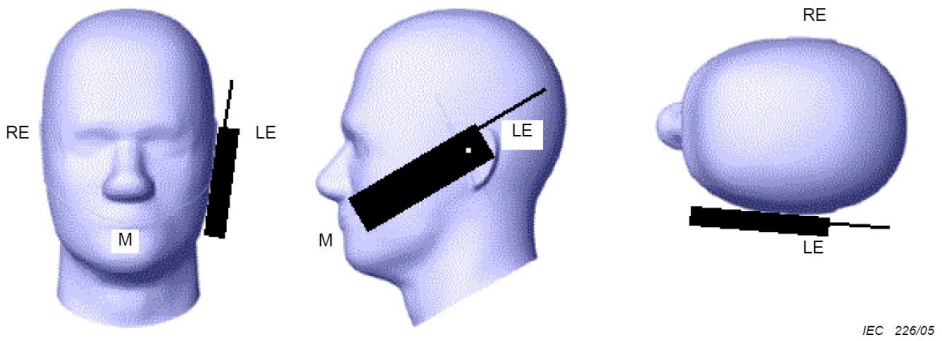
(c) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset, 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.

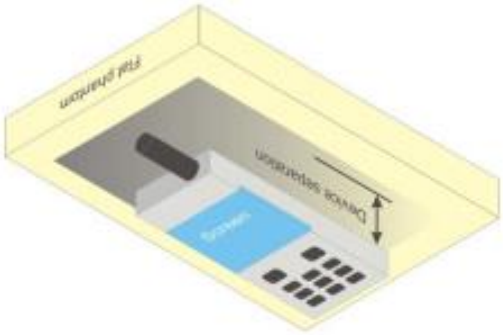
(b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.

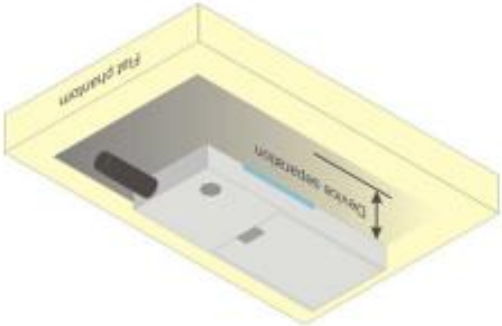
6.2 Body-worn Position Conditions

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.

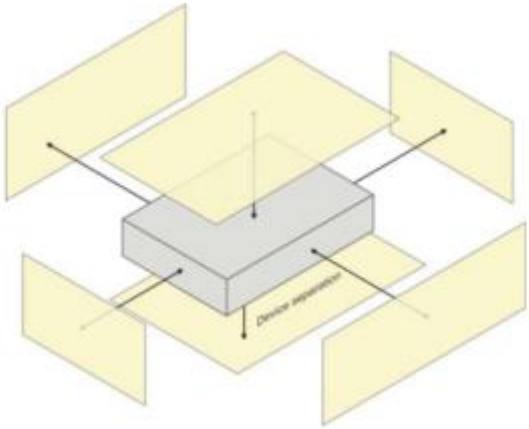
Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice 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).



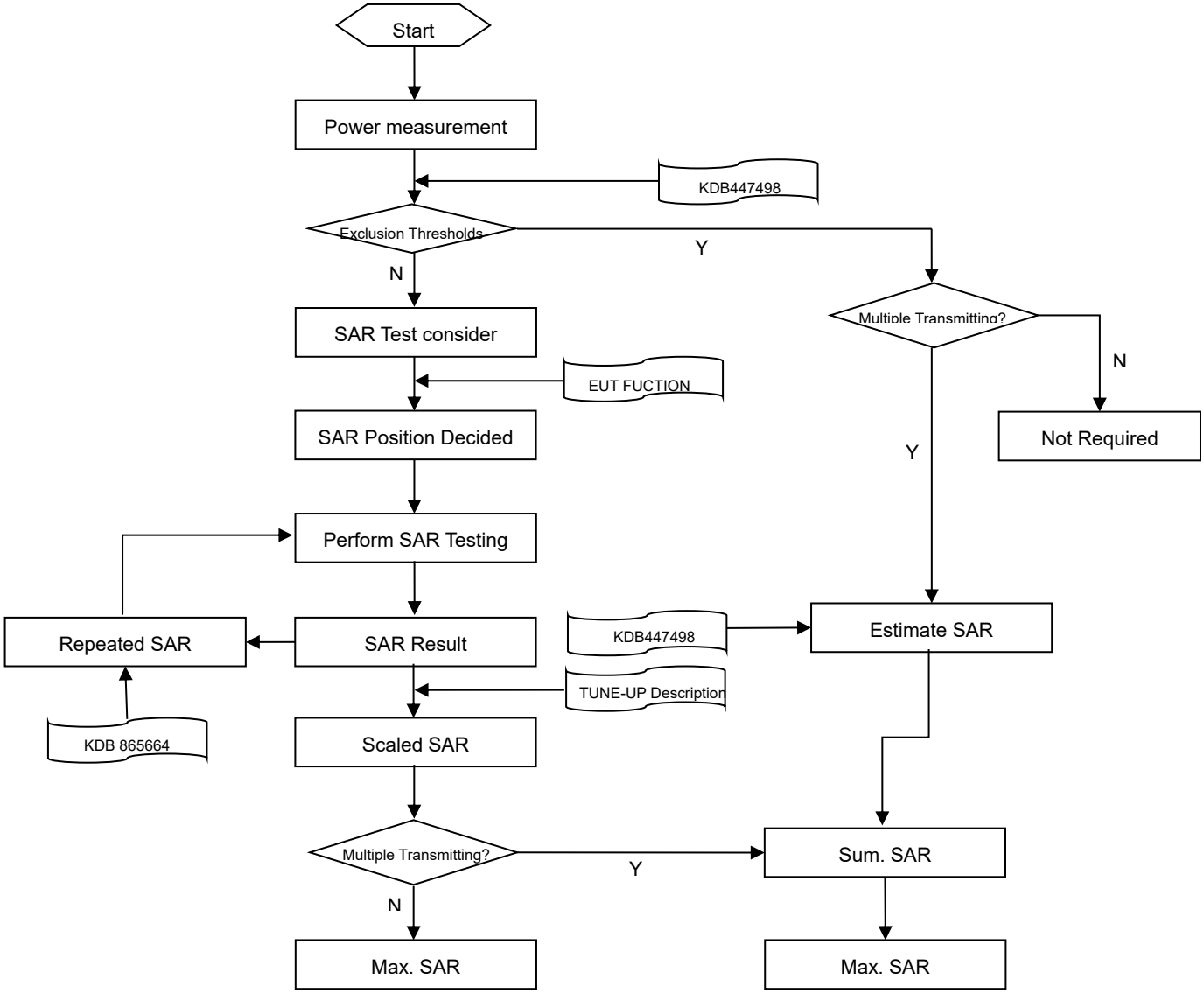
6.4 Product Specific 10g Exposure Consideration

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. Boththe 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.

<table>
<tr><th colspan="3"></th><th>≤3GHz</th><th>>3GHz</th></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5±1 mm</td><td>½·δ·ln(2)±0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30°±1°</td><td>20°±1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan spatial resolution: Δx Area , Δy Area</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3–4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">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.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom</td><td>≤ 2 GHz: ≤ 8 mm
2 –3 GHz: ≤ 5 mm*</td><td>3–4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="6">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2" rowspan="3">uniform grid: Δz Zoom (n)</td><td rowspan="3">≤ 5 mm</td><td>3–4 GHz: ≤ 4 mm</td></tr>
<tr><td>4–5 GHz: ≤ 3 mm</td></tr>
<tr><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="3">graded grid</td><td rowspan="2">Δz Zoom (1): between 1st two points closest to phantom surface</td><td rowspan="3">≤ 4 mm</td><td>3–4 GHz: ≤ 3 mm</td></tr>
<tr><td>4–5 GHz: ≤ 2.5 mm</td></tr>
<tr><td>Δz Zoom (n>1): between subsequent points</td><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td colspan="2">≤ 1.5·Δz Zoom (n-1)</td></tr>
<tr><td rowspan="3">Minimum zoom scan volume</td><td colspan="2" rowspan="3">x, y, z</td><td rowspan="3">≥30 mm</td><td>3–4 GHz: ≥ 28 mm</td></tr>
<tr><td>4–5 GHz: ≥ 25 mm</td></tr>
<tr><td>5–6 GHz: ≥ 22 mm</td></tr>
</table>

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 to16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
d. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 *32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

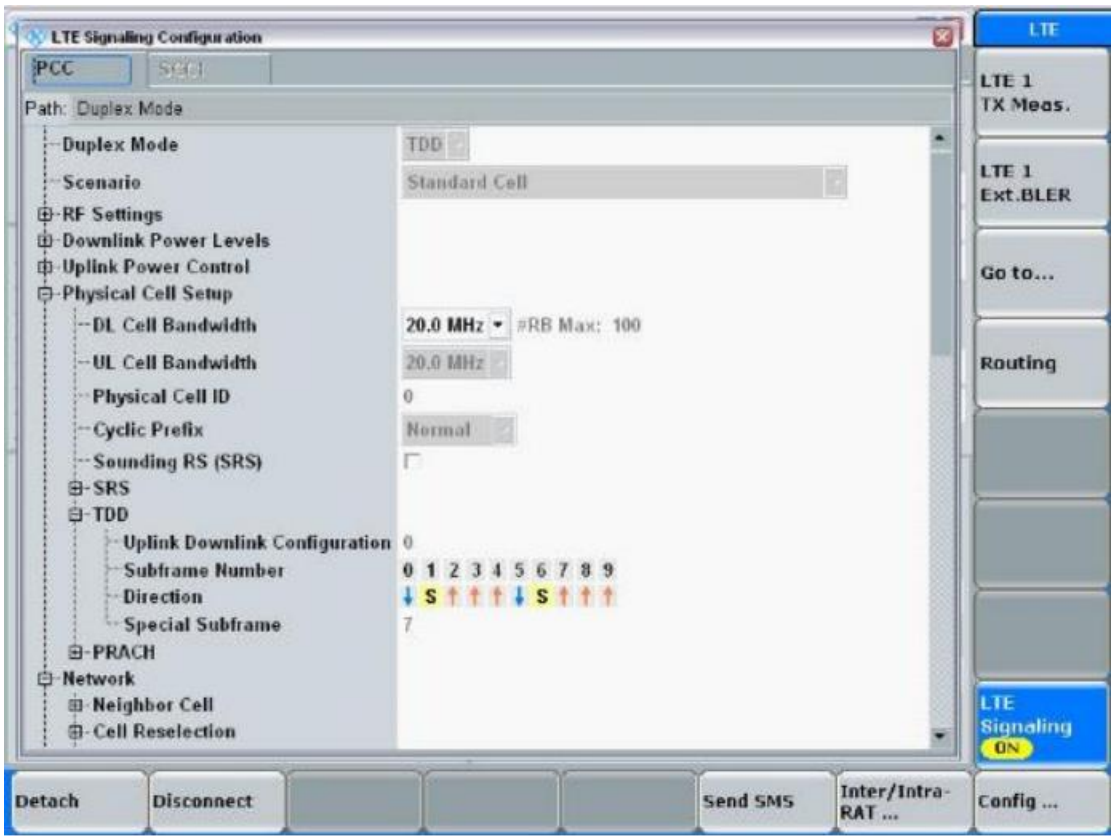
7.4 Area & Zoom Scan Procedure

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

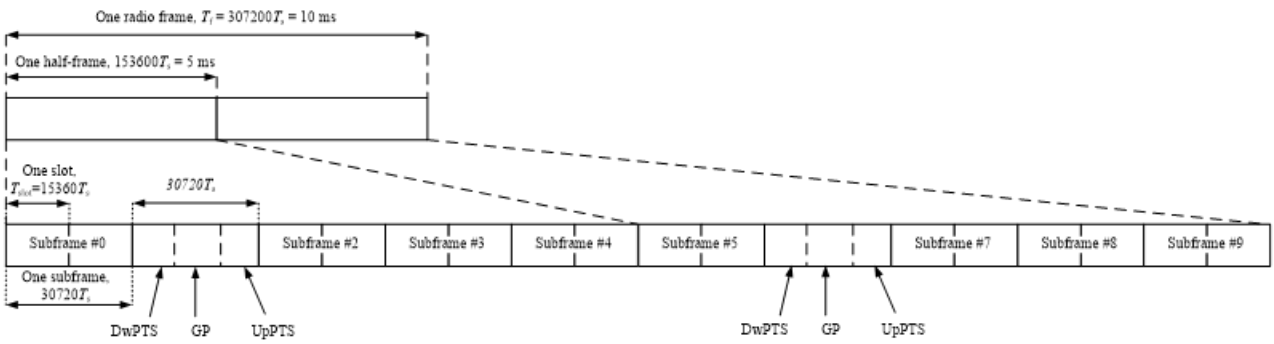
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

7.5 Area & Zoom Scan Procedure

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



According to 3GPP Per 3GPP TS 36.211. Each radio frame of length (Tf=307200*TS =10ms) of two half-frames of length (153600*TS =5ms). Each half-frame consists of five sub-frames of length (30720*TS =1ms)



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*T_S =1ms.

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	$26336 \cdot T_s$			$7680 \cdot T_s$	$2560 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
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.Ts/30720.Ts*1ms=0.167ms

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*1 ms+2*0.167 ms=6.334ms**
So, the duty cycle for TDD-LTE is: **6.334ms/10ms =1: 1.58**

8 CONDUCTED RF OUTPUT POWER

8.1 Power Reduction List

1.The device employs proximity sensors that detect the presence of the user's body and Product Specific of the device. When these conditions are detected, Body and Limb reduced power will be active.
2.When the proximity sensor invalid, the power is reduced to the corresponding Minimum power scenario.

WWAN Reduced Power Level Table

Sensor State	Transmitting Conditions	Antenna	Bands
ON	WWAN Use Only; WWAN+WLAN2.4G; WWAN+WLAN5G+BT;	Ant.1	GSM1900 WCDMA B2/ B4 LTE B2/4/7/66/38/41
		Ant.2	GSM850 WCDMA B5 LTE B5/13/26
OFF	WWAN Use Only; WWAN+WLAN2.4G; WWAN+WLAN5G+BT;	Ant.1	GSM1900 WCDMA B2/ B4 LTE B2/4/7/66/38/41
		Ant.2	GSM850 WCDMA B5 LTE B5/13/26

Mode	Antenna	Sensor off	Sensor on
		Full Power	
GSM 850	Ant.2	33.50	33.50
GPRS900 1 Tx Slot	Ant.2	33.50	33.50
GPRS900 2 Tx Slot	Ant.2	31.50	31.50
GPRS900 3 Tx Slot	Ant.2	29.50	29.50
GPRS900 4 Tx Slot	Ant.2	27.50	27.50
EGPRS900 1 Tx Slot	Ant.2	27.00	27.00
EGPRS900 2 Tx Slot	Ant.2	25.00	25.00
EGPRS900 3 Tx Slot	Ant.2	22.00	22.00
EGPRS900 4 Tx Slot	Ant.2	20.00	20.00
GSM1900	Ant.1	30.50	30.50
GPRS1800 1 Tx Slot	Ant.1	30.50	30.50
GPRS1800 2 Tx Slot	Ant.1	28.50	28.50
GPRS1800 3 Tx Slot	Ant.1	26.50	26.50
GPRS1800 4 Tx Slot	Ant.1	24.50	24.50
EGPRS1800 1 Tx Slot	Ant.1	27.00	27.00
EGPRS1800 2 Tx Slot	Ant.1	24.00	24.00
EGPRS1800 3 Tx Slot	Ant.1	22.00	22.00
EGPRS1800 4 Tx Slot	Ant.1	20.00	20.00
WCDMA Band2 AMR	Ant.1	23.50	18.50
WCDMA Band2 RMC	Ant.1	23.50	18.50
HSDPA Subtest-1	Ant.1	23.00	18.00
HSDPA Subtest-2	Ant.1	23.00	18.00
HSDPA Subtest-3	Ant.1	22.00	17.00
HSDPA Subtest-4	Ant.1	22.00	17.00
HSUPA Subtest-1	Ant.1	21.00	16.00
HSUPA Subtest-2	Ant.1	21.00	16.00
HSUPA Subtest-3	Ant.1	21.00	16.00
HSUPA Subtest-4	Ant.1	21.00	16.00
HSUPA Subtest-5	Ant.1	23.00	18.00
WCDMA Band4 AMR	Ant.1	23.50	19.50
WCDMA Band4 RMC	Ant.1	23.50	19.50
HSDPA Subtest-1	Ant.1	23.00	19.00
HSDPA Subtest-2	Ant.1	23.00	19.00
HSDPA Subtest-3	Ant.1	23.00	19.00
HSDPA Subtest-4	Ant.1	23.00	19.00
HSUPA Subtest-1	Ant.1	23.00	19.00

HSUPA Subtest-2	Ant.1	22.00	18.00
HSUPA Subtest-3	Ant.1	22.00	18.00
HSUPA Subtest-4	Ant.1	22.00	18.00
HSUPA Subtest-5	Ant.1	23.00	19.00
WCDMA Band5 AMR	Ant.2	23.50	23.50
WCDMA Band5 RMC	Ant.2	23.50	23.50
HSDPA Subtest-1	Ant.2	22.00	22.00
HSDPA Subtest-2	Ant.2	22.00	22.00
HSDPA Subtest-3	Ant.2	22.00	22.00
HSDPA Subtest-4	Ant.2	22.00	22.00
HSUPA Subtest-1	Ant.2	21.00	21.00
HSUPA Subtest-2	Ant.2	21.00	21.00
HSUPA Subtest-3	Ant.2	21.00	21.00
HSUPA Subtest-4	Ant.2	21.00	21.00
HSUPA Subtest-5	Ant.2	23.00	23.00
LTE Band2	Ant.1	24.00	18.00
LTE Band4	Ant.1	24.00	18.00
LTE Band5	Ant.2	24.00	24.00
LTE Band7	Ant.1	24.00	16.00
LTE Band13	Ant.2	24.00	24.00
LTE Band26	Ant.2	24.00	24.00
LTE Band66	Ant.1	24.00	19.00
LTE Band38	Ant.1	24.00	16.00
LTE Band41	Ant.1	24.00	16.00

8.2 GSM

Please refer the document “TI-EE26020341-AP.pdf”.

8.3 WCDMA

Please refer the document “TI-EE26020341-AP.pdf”.

8.4 LTE

Please refer the document “TI-EE26020341-AP.pdf”.

8.5 WIFI

Please refer the document “TI-EE26020341-AP.pdf”.

8.6 Bluetooth

Please refer the document “TI-EE26020341-AP.pdf”.

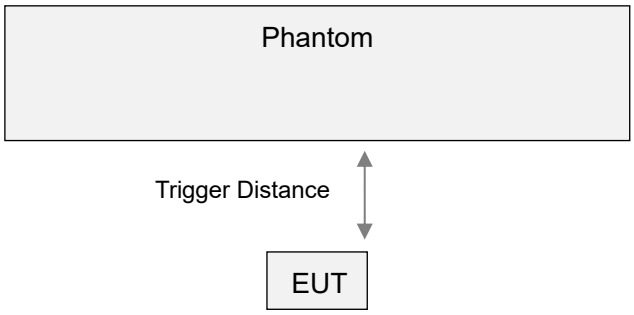
9 PROXIMITY SENSOR TRIGGERING TEST

9.1 Procedures for determining proximity sensor distance

The device uses one proximity sensors to reduce the maximum output power in selected wireless mode and operating configurations to ensure SAR compliance. The sensor implementation can identify and facilitate triggering different max power levels for different scenarios including the device held by hand(Extremity) and different exposure test positions test positions when the device is closed to a user's body.

Proximity sensor triggering distance testing was performed, EUT moving further away from the phantom and EUT moving toward the phantom were both assessed, and the shortest triggering distances were reported and used for SAR assessment. Note that while sensor is failed and it sets the output power to the lowest one in the sensor trigger state ,to make sure the SAR requirements can still be satisfied.

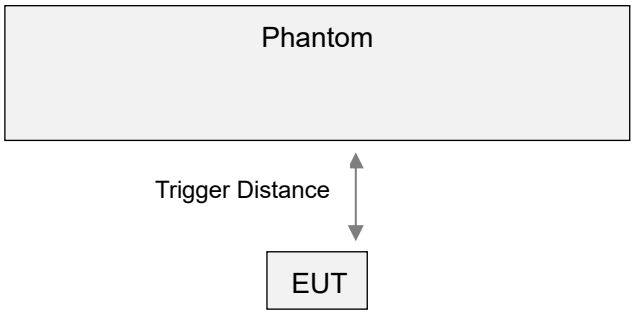
9.1.1 proximity sensor channel-1



EUT moving toward Phantom and EUT moving away from Phantom

Distance in mm	1~9	10	11	12	13	14	15	16	17	18	19
Front Side	On	On	On	On	On	On	On	Off	Off	Off	Off
Back Side	On	On	On	On	On	On	On	Off	Off	Off	Off
Top Edge	On	On	On	On	On	On	On	Off	Off	Off	Off
Left Edge	On	On	On	On	On	On	On	Off	Off	Off	Off
Note: Power reduction is only applicable for Ant.1											

9.1.2 proximity sensor channel-2



EUT moving toward Phantom and EUT moving away from Phantom

Distance in mm	1~9	10	11	12	13	14	15	16	17	18	19
Front Side	On	On	On	On	On	On	On	Off	Off	Off	Off
Back Side	On	On	On	On	On	On	On	Off	Off	Off	Off
Bottom Edge	On	On	On	On	On	On	On	Off	Off	Off	Off
Left Edge	On	On	On	On	On	On	On	Off	Off	Off	Off
Right Edge	On	On	On	On	On	On	On	Off	Off	Off	Off
Note: Power reduction is only applicable for Ant.2											

To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is nece ssary, and use the smallest distance for EUT moving toward the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

Ant1 of proximity sensor channel-1

EUT Sides	Additional SAR test Distance in mm
Front Side	14
Back Side	14
Top Edge	14
Left Edge	14

Ant2 of proximity sensor channel-2

EUT Sides	Additional SAR test Distance in mm
Front Side	14
Back Side	14
Bottom Edge	14
Left Edge	14
Right Edge	14

9.2 Procedures for determining EUT tilt angle influences to proximity sensor triggering

The influence of EUT tilt angles to proximity sensor channel-1 triggering was determined by positioning each EUT edge that contains a transmitting antenna 0, perpendicular to the flat phantom, at 15 mm separation for the left edge and 15 mm separation for the top edge.
The influence of EUT tilt angles to proximity sensor channel-2 triggering was determined by positioning each EUT edge that contains a transmitting antenna 1, perpendicular to the flat phantom, at 15 mm separation for the left edge ,15 mm separation for the right edge,15 mm separation for the bottom edge Rotating the EUT around the edge next to the phantom in ⩽ 10° increments until the EUT is ± 45° from the vertical position at 0°, and the maximum output power remains in the reduced mode.

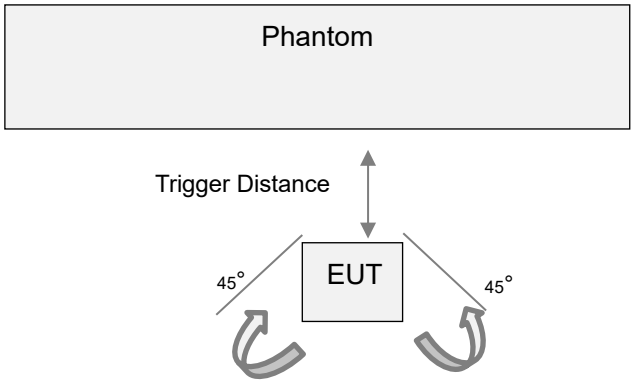
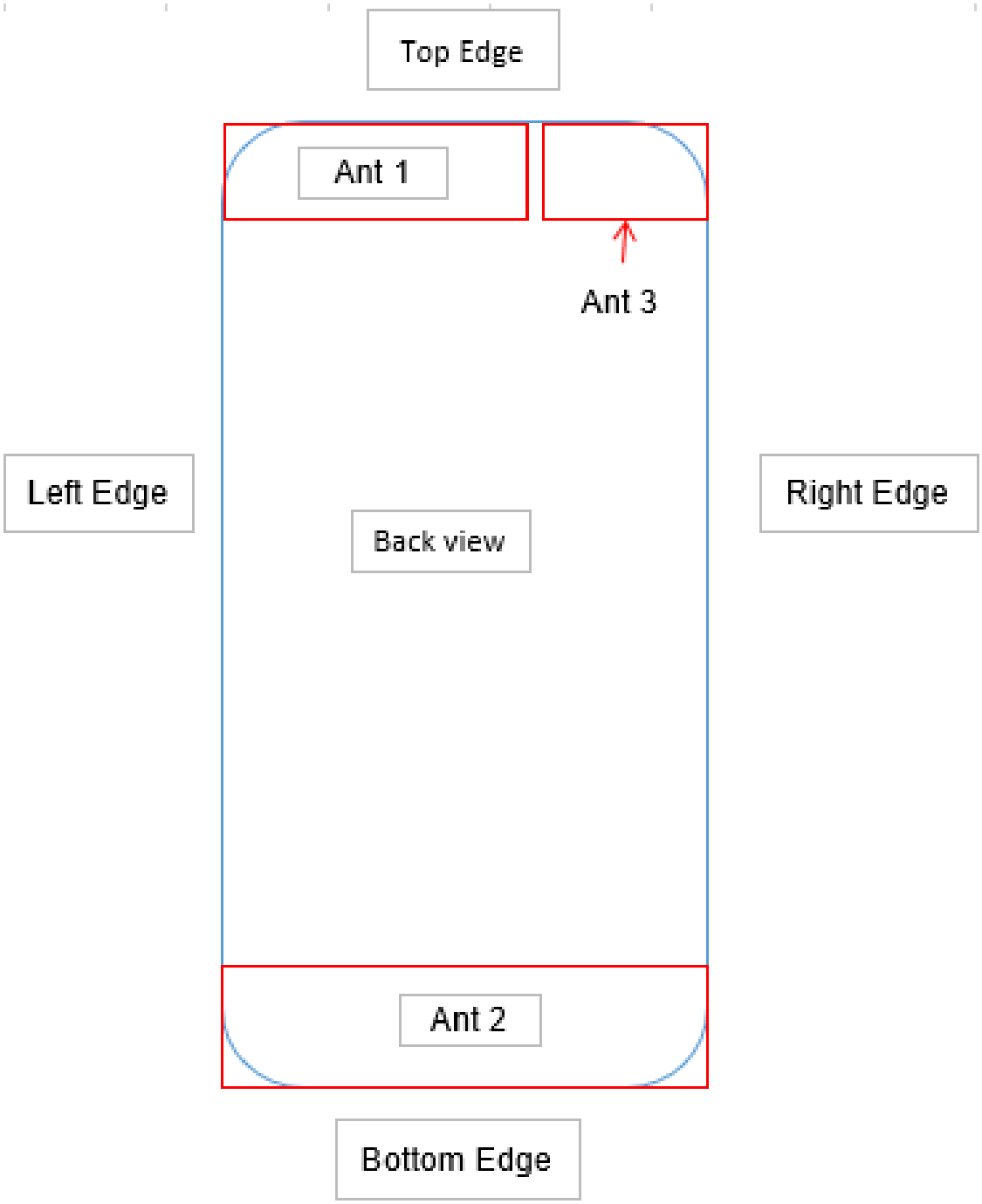


Table: Summary of Phone Tilt Angle Influence to Proximity Sensor Triggering(Left/Right/Top/Bottom edge)

Antenna	Posltion	Minimum trigger distance at which power reduction was maintained over ±45°	Power Reduction Status										
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°
ANT1	Top edge	15mm	on	on	on	on	on	on	on	on	on	on	on
ANT1	Left edge	15mm	on	on	on	on	on	on	on	on	on	on	on
ANT2	Right edge	15mm	on	on	on	on	on	on	on	on	on	on	on
ANT2	Left edge	15mm	on	on	on	on	on	on	on	on	on	on	on
ANT2	Bottom edge	15mm	on	on	on	on	on	on	on	on	on	on	on

10 TEST EXCLUSION CONSIDERATION



Antenna	Support Bands
Ant 1	GSM1900 WCDMA B2/ B4 LTE B2/4/7/66/38/41
Ant 2	GSM850 WCDMA B5 LTE B5/13/26
Ant 3	WIFI 2.4G&WIFI 5G&Bluetooth

Antenna	Front Side(mm)	Back Side(mm)	Left Edge(mm)	Right Edge(mm)	Top Edge(mm)	Bottom Edge(mm)
Ant.1	<25	<25	<25	>25	<25	>25
Ant.2	<25	<25	<25	<25	>25	<25
Ant.3	<25	<25	>25	<25	<25	>25
Note: 1.Per KDB 941225 DO6,When the overall length and width of a device is > 9 cm *5 cm, a test separation distance of 10 mm is required for hotspot mode SAR measurements and hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.						

11 TEST RESULT

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

11.1 GSM 850

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Left Cheek	0	128	824.2	-0.04	0.149	30.39	31.50	1.291	0.193	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Left Tilt	0	128	824.2	0.06	0.094	30.39	31.50	1.291	0.122	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Right Cheek	0	128	824.2	0.07	0.186	30.39	31.50	1.291	0.240	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Right Tilt	0	128	824.2	0.13	0.119	30.39	31.50	1.291	0.153	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Right Cheek	0	190	836.6	0.16	0.204	30.30	31.50	1.318	0.269	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Right Cheek	0	251	848.8	0.18	0.216	30.28	31.50	1.324	**0.286**	1#
Body-worn&Hotspot														
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Front Side	10	128	824.2	-0.14	0.157	30.39	31.50	1.291	0.202	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Back Side	10	128	824.2	0.07	0.196	30.39	31.50	1.291	0.253	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Left Edge	10	128	824.2	-0.13	0.136	30.39	31.50	1.291	0.176	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Right Edge	10	128	824.2	-0.02	0.089	30.39	31.50	1.291	0.114	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Bottom Edge	10	128	824.2	0.05	0.140	30.39	31.50	1.291	0.180	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Back Side	10	190	836.6	0.17	0.221	30.30	31.50	1.318	0.292	/
GSM850	Sensor ON	Ant 2	GPRS-2Slot	Back Side	10	251	848.8	0.02	0.240	30.28	31.50	1.324	**0.318**	2#
Sensor n-1														
GSM850	Sensor OFF	Ant 2	GPRS-2Slot	Front Side	14	128	824.2	0.01	0.166	30.39	31.50	1.291	0.214	/
GSM850	Sensor OFF	Ant 2	GPRS-2Slot	Back Side	14	128	824.2	-0.15	0.155	30.39	31.50	1.291	0.200	/
GSM850	Sensor OFF	Ant 2	GPRS-2Slot	Left Edge	14	128	824.2	-0.08	0.106	30.39	31.50	1.291	0.137	/
GSM850	Sensor OFF	Ant 2	GPRS-2Slot	Right Edge	14	128	824.2	0.15	0.062	30.39	31.50	1.291	0.080	/
GSM850	Sensor OFF	Ant 2	GPRS-2Slot	Bottom Edge	14	128	824.2	-0.18	0.055	30.39	31.50	1.291	0.071	/
GSM850	Sensor OFF	Ant 2	GPRS-2Slot	Front Side	14	190	836.6	0.15	0.174	30.30	31.50	1.318	0.229	/
GSM850	Sensor OFF	Ant 2	GPRS-2Slot	Front Side	14	251	848.8	0.02	0.191	30.28	31.50	1.324	0.253	/

11.2 GSM 1900

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Left Cheek	0	512	1850.2	-0.06	0.341	27.48	28.50	1.265	0.431	/
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Left Tilt	0	512	1850.2	0.09	0.327	27.48	28.50	1.265	0.414	/
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Right Cheek	0	512	1850.2	0.02	0.630	27.48	28.50	1.265	**0.797**	3#
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Right Tilt	0	512	1850.2	0.08	0.523	27.48	28.50	1.265	0.662	/
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Right Cheek	0	661	1880	-0.15	0.580	27.16	28.50	1.361	0.790	/
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Right Cheek	0	810	1909.8	0.05	0.514	26.80	28.50	1.481	0.761	/
Body-worn&Hotspot														
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Front Side	10	512	1850.2	0.03	0.213	27.48	28.50	1.265	0.270	/
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Back Side	10	512	1850.2	-0.03	0.442	27.48	28.50	1.265	**0.559**	4#
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Left Edge	10	512	1850.2	0.14	0.063	27.48	28.50	1.265	0.080	/
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Top Edge	10	512	1850.2	0.15	0.256	27.48	28.50	1.265	0.323	/
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Back Side	10	661	1880	0.09	0.343	27.16	28.50	1.361	0.467	/
GSM1900	Sensor ON	Ant 1	GPRS-2Slot	Back Side	10	810	1909.8	-0.13	0.281	26.80	28.50	1.481	0.416	/
Sensor n-1														
GSM1900	Sensor OFF	Ant 1	GPRS-2Slot	Front Side	14	512	1850.2	-0.16	0.169	27.48	28.50	1.265	0.214	/
GSM1900	Sensor OFF	Ant 1	GPRS-2Slot	Back Side	14	512	1850.2	0.14	0.346	27.48	28.50	1.265	0.438	/
GSM1900	Sensor OFF	Ant 1	GPRS-2Slot	Left Edge	14	512	1850.2	-0.03	0.048	27.48	28.50	1.265	0.061	/
GSM1900	Sensor OFF	Ant 1	GPRS-2Slot	Top Edge	14	512	1850.2	-0.14	0.186	27.48	28.50	1.265	0.235	/
GSM1900	Sensor OFF	Ant 1	GPRS-2Slot	Back Side	14	661	1880	0.13	0.288	27.16	28.50	1.361	0.392	/
GSM1900	Sensor OFF	Ant 1	GPRS-2Slot	Back Side	14	810	1909.8	-0.11	0.221	26.80	28.50	1.481	0.327	/

11.3 WCDMA Band 2

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
WCDMAB2	Sensor ON	Ant 1	RMC	Left Cheek	0	9538	1907.6	-0.12	0.214	17.18	18.50	1.355	0.290	/
WCDMAB2	Sensor ON	Ant 1	RMC	Left Tilt	0	9538	1907.6	-0.13	0.243	17.18	18.50	1.355	0.329	/
WCDMAB2	Sensor ON	Ant 1	RMC	Right Cheek	0	9538	1907.6	0.07	0.425	17.18	18.50	1.355	**0.576**	5#
WCDMAB2	Sensor ON	Ant 1	RMC	Right Tilt	0	9538	1907.6	0.08	0.339	17.18	18.50	1.355	0.459	/
WCDMAB2	Sensor ON	Ant 1	RMC	Right Cheek	0	9262	1852.4	-0.04	0.400	17.15	18.50	1.365	0.546	/
WCDMAB2	Sensor ON	Ant 1	RMC	Right Cheek	0	9400	1880	-0.02	0.375	17.06	18.50	1.393	0.522	/
Body-worn&Hotspot														
WCDMAB2	Sensor ON	Ant 1	RMC	Front Side	10	9538	1907.6	0.13	0.084	17.18	18.50	1.355	0.114	/
WCDMAB2	Sensor ON	Ant 1	RMC	Back Side	10	9538	1907.6	-0.18	0.189	17.18	18.50	1.355	0.256	/
WCDMAB2	Sensor ON	Ant 1	RMC	Left Edge	10	9538	1907.6	0.19	0.020	17.18	18.50	1.355	0.027	/
WCDMAB2	Sensor ON	Ant 1	RMC	Top Edge	10	9538	1907.6	-0.02	0.101	17.18	18.50	1.355	0.137	/
WCDMAB2	Sensor ON	Ant 1	RMC	Back Side	10	9262	1852.4	0.11	0.196	17.15	18.50	1.365	**0.267**	6#
WCDMAB2	Sensor ON	Ant 1	RMC	Back Side	10	9400	1880	0.08	0.188	17.06	18.50	1.393	0.261	/
Sensor n-1														
WCDMAB2	Sensor OFF	Ant 1	RMC	Front Side	14	9538	1907.6	0.13	0.234	22.56	23.50	1.242	0.291	/
WCDMAB2	Sensor OFF	Ant 1	RMC	Back Side	14	9538	1907.6	0.02	0.323	22.56	23.50	1.242	0.401	/
WCDMAB2	Sensor OFF	Ant 1	RMC	Left Edge	14	9538	1907.6	0.09	0.065	22.56	23.50	1.242	0.081	/
WCDMAB2	Sensor OFF	Ant 1	RMC	Top Edge	14	9538	1907.6	0.01	0.278	22.56	23.50	1.242	0.345	/
WCDMAB2	Sensor OFF	Ant 1	RMC	Back Side	14	9262	1852.4	-0.02	0.490	22.53	23.50	1.250	0.613	/
WCDMAB2	Sensor OFF	Ant 1	RMC	Back Side	14	9400	1880	-0.18	0.452	22.48	23.50	1.265	0.572	/

11.4WCDMA Band 4

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
WCDMAB4	Sensor ON	Ant 1	RMC	Left Cheek	0	1513	1752.6	-0.13	0.281	18.09	19.50	1.384	0.389	/
WCDMAB4	Sensor ON	Ant 1	RMC	Left Tilt	0	1513	1752.6	-0.01	0.294	18.09	19.50	1.384	0.407	/
WCDMAB4	Sensor ON	Ant 1	RMC	Right Cheek	0	1513	1752.6	-0.19	0.519	18.09	19.50	1.384	**0.718**	7#
WCDMAB4	Sensor ON	Ant 1	RMC	Right Tilt	0	1513	1752.6	-0.17	0.404	18.09	19.50	1.384	0.560	/
WCDMAB4	Sensor ON	Ant 1	RMC	Right Cheek	0	1412	1732.4	0.19	0.462	18.03	19.50	1.403	0.648	/
WCDMAB4	Sensor ON	Ant 1	RMC	Right Cheek	0	1312	1712.4	-0.04	0.440	18.09	19.50	1.384	0.609	/
Body-worn&Hotspot														
WCDMAB4	Sensor ON	Ant 1	RMC	Front Side	10	1513	1752.6	-0.03	0.101	18.09	19.50	1.384	0.139	/
WCDMAB4	Sensor ON	Ant 1	RMC	Back Side	10	1513	1752.6	0.06	0.219	18.09	19.50	1.384	**0.303**	8#
WCDMAB4	Sensor ON	Ant 1	RMC	Left Edge	10	1513	1752.6	-0.18	0.036	18.09	19.50	1.384	0.049	/
WCDMAB4	Sensor ON	Ant 1	RMC	Top Edge	10	1513	1752.6	-0.11	0.113	18.09	19.50	1.384	0.156	/
WCDMAB4	Sensor ON	Ant 1	RMC	Back Side	10	1412	1732.4	-0.04	0.202	18.03	19.50	1.403	0.283	/
WCDMAB4	Sensor ON	Ant 1	RMC	Back Side	10	1312	1712.4	0.05	0.187	18.09	19.50	1.384	0.259	/
Sensor n-1														
WCDMAB4	Sensor OFF	Ant 1	RMC	Front Side	14	1513	1752.6	-0.06	0.171	22.51	23.50	1.256	0.215	/
WCDMAB4	Sensor OFF	Ant 1	RMC	Back Side	14	1513	1752.6	-0.04	0.400	22.51	23.50	1.256	0.502	/
WCDMAB4	Sensor OFF	Ant 1	RMC	Left Edge	14	1513	1752.6	0.18	0.084	22.51	23.50	1.256	0.106	/
WCDMAB4	Sensor OFF	Ant 1	RMC	Top Edge	14	1513	1752.6	-0.13	0.218	22.51	23.50	1.256	0.274	/
WCDMAB4	Sensor OFF	Ant 1	RMC	Back Side	14	1412	1732.4	-0.03	0.355	22.35	23.50	1.303	0.463	/
WCDMAB4	Sensor OFF	Ant 1	RMC	Back Side	14	1312	1712.4	0.00	0.324	22.41	23.50	1.285	0.416	/

11.5 WCDMA Band 5

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
WCDMAB5	Sensor ON	Ant 2	RMC	Left Cheek	0	4233	846.6	0.08	0.169	22.50	23.50	1.259	0.212	/
WCDMAB5	Sensor ON	Ant 2	RMC	Left Tilt	0	4233	846.6	0.15	0.165	22.50	23.50	1.259	0.208	/
WCDMAB5	Sensor ON	Ant 2	RMC	Right Cheek	0	4233	846.6	0.01	0.199	22.50	23.50	1.259	**0.251**	9#
WCDMAB5	Sensor ON	Ant 2	RMC	Right Tilt	0	4233	846.6	-0.02	0.127	22.50	23.50	1.259	0.160	/
WCDMAB5	Sensor ON	Ant 2	RMC	Right Cheek	0	4182	836.6	0.05	0.190	22.39	23.50	1.291	0.245	/
WCDMAB5	Sensor ON	Ant 2	RMC	Right Cheek	0	4132	826.4	-0.17	0.183	22.44	23.50	1.276	0.234	/
Body-worn&Hotspot														
WCDMAB5	Sensor ON	Ant 2	RMC	Front Side	10	4233	846.6	0.06	0.152	22.50	23.50	1.259	0.192	/
WCDMAB5	Sensor ON	Ant 2	RMC	Back Side	10	4233	846.6	-0.04	0.226	22.50	23.50	1.259	**0.285**	10#
WCDMAB5	Sensor ON	Ant 2	RMC	Left Edge	10	4233	846.6	-0.05	0.172	22.50	23.50	1.259	0.217	/
WCDMAB5	Sensor ON	Ant 2	RMC	Right Edge	10	4233	846.6	-0.05	0.094	22.50	23.50	1.259	0.119	/
WCDMAB5	Sensor ON	Ant 2	RMC	Bottom Edge	10	4233	846.6	0.02	0.160	22.50	23.50	1.259	0.201	/
WCDMAB5	Sensor ON	Ant 2	RMC	Back Side	10	4182	836.6	-0.10	0.186	22.39	23.50	1.291	0.241	/
WCDMAB5	Sensor ON	Ant 2	RMC	Back Side	10	4132	826.4	0.07	0.178	22.44	23.50	1.276	0.227	/
Sensor n-1														
WCDMAB5	Sensor OFF	Ant 2	RMC	Front Side	14	4233	846.6	-0.10	0.176	22.50	23.50	1.259	0.222	/
WCDMAB5	Sensor OFF	Ant 2	RMC	Back Side	14	4233	846.6	-0.19	0.136	22.50	23.50	1.259	0.171	/
WCDMAB5	Sensor OFF	Ant 2	RMC	Left Edge	14	4233	846.6	0.08	0.155	22.50	23.50	1.259	0.195	/
WCDMAB5	Sensor OFF	Ant 2	RMC	Right Edge	14	4233	846.6	0.02	0.081	22.50	23.50	1.259	0.102	/
WCDMAB5	Sensor OFF	Ant 2	RMC	Bottom Edge	14	4233	846.6	0.03	0.103	22.50	23.50	1.259	0.130	/
WCDMAB5	Sensor OFF	Ant 2	RMC	Front Side	14	4182	836.6	0.17	0.165	22.39	23.50	1.291	0.213	/
WCDMAB5	Sensor OFF	Ant 2	RMC	Front Side	14	4132	826.4	0.08	0.160	22.44	23.50	1.276	0.204	/

11.6 LTE Band 2 (20MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
LTEB2	Sensor ON	Ant 1	QPSK	Left Cheek	0	18900	1880	20	1	HIGH	0.17	0.214	16.75	18.00	1.334	0.285	/
LTEB2	Sensor ON	Ant 1	QPSK	Left Tilt	0	18900	1880	20	1	HIGH	0.15	0.233	16.75	18.00	1.334	0.311	/
LTEB2	Sensor ON	Ant 1	QPSK	Right Cheek	0	18900	1880	20	1	HIGH	0.19	0.390	16.75	18.00	1.334	**0.520**	11#
LTEB2	Sensor ON	Ant 1	QPSK	Right Tilt	0	18900	1880	20	1	HIGH	-0.05	0.314	16.75	18.00	1.334	0.418	/
LTEB2	Sensor ON	Ant 1	QPSK	Right Cheek	0	18700	1860	20	1	HIGH	-0.15	0.340	16.72	18.00	1.343	0.456	/
LTEB2	Sensor ON	Ant 1	QPSK	Right Cheek	0	19100	1900	20	1	MID	-0.07	0.355	16.47	18.00	1.422	0.505	/
LTEB2	Sensor ON	Ant 1	QPSK	Left Cheek	0	18900	1880	20	50	LOW	-0.11	0.184	16.32	17.00	1.169	0.215	/
LTEB2	Sensor ON	Ant 1	QPSK	Left Tilt	0	18900	1880	20	50	LOW	0.08	0.191	16.32	17.00	1.169	0.223	/
LTEB2	Sensor ON	Ant 1	QPSK	Right Cheek	0	18900	1880	20	50	LOW	0.02	0.329	16.32	17.00	1.169	0.385	/
LTEB2	Sensor ON	Ant 1	QPSK	Right Tilt	0	18900	1880	20	50	LOW	0.15	0.251	16.32	17.00	1.169	0.293	/
LTEB2	Sensor ON	Ant 1	QPSK	Right Cheek	0	18700	1860	20	50	LOW	0.16	0.325	15.91	17.00	1.285	0.417	/
LTEB2	Sensor ON	Ant 1	QPSK	Right Cheek	0	19100	1900	20	50	LOW	-0.06	0.333	16.39	17.00	1.151	0.384	/
Body-worn&Hotspot																	
LTEB2	Sensor ON	Ant 1	QPSK	Front Side	10	18900	1880	20	1	HIGH	-0.17	0.113	16.75	18.00	1.334	0.150	/
LTEB2	Sensor ON	Ant 1	QPSK	Back Side	10	18900	1880	20	1	HIGH	0.15	0.218	16.75	18.00	1.334	**0.291**	12#
LTEB2	Sensor ON	Ant 1	QPSK	Left Edge	10	18900	1880	20	1	HIGH	0.17	0.021	16.75	18.00	1.334	0.028	/
LTEB2	Sensor ON	Ant 1	QPSK	Top Edge	10	18900	1880	20	1	HIGH	0.05	0.111	16.75	18.00	1.334	0.148	/
LTEB2	Sensor ON	Ant 1	QPSK	Back Side	10	18700	1860	20	1	HIGH	-0.10	0.209	16.72	18.00	1.343	0.280	/
LTEB2	Sensor ON	Ant 1	QPSK	Back Side	10	19100	1900	20	1	MID	0.01	0.175	16.47	18.00	1.422	0.249	/
LTEB2	Sensor ON	Ant 1	QPSK	Front Side	10	18900	1880	20	50	LOW	0.13	0.095	16.32	17.00	1.169	0.111	/
LTEB2	Sensor ON	Ant 1	QPSK	Back Side	10	18900	1880	20	50	LOW	0.01	0.180	16.32	17.00	1.169	0.211	/
LTEB2	Sensor ON	Ant 1	QPSK	Left Edge	10	18900	1880	20	50	LOW	-0.08	0.020	16.32	17.00	1.169	0.024	/
LTEB2	Sensor ON	Ant 1	QPSK	Top Edge	10	18900	1880	20	50	LOW	0.14	0.096	16.32	17.00	1.169	0.112	/
LTEB2	Sensor ON	Ant 1	QPSK	Back Side	10	18700	1860	20	50	LOW	0.18	0.169	15.91	17.00	1.285	0.217	/
LTEB2	Sensor ON	Ant 1	QPSK	Back Side	10	19100	1900	20	50	LOW	-0.06	0.174	16.39	17.00	1.151	0.201	/
Sensor n-1																	
LTEB2	Sensor OFF	Ant 1	QPSK	Front Side	14	18900	1880	20	1	LOW	-0.13	0.328	23.19	24.00	1.205	0.395	/
LTEB2	Sensor OFF	Ant 1	QPSK	Back Side	14	18900	1880	20	1	LOW	-0.02	0.603	23.19	24.00	1.205	0.727	/
LTEB2	Sensor OFF	Ant 1	QPSK	Left Edge	14	18900	1880	20	1	LOW	0.04	0.100	23.19	24.00	1.205	0.121	/
LTEB2	Sensor OFF	Ant 1	QPSK	Top Edge	14	18900	1880	20	1	LOW	0.12	0.342	23.19	24.00	1.205	0.412	/
LTEB2	Sensor OFF	Ant 1	QPSK	Back Side	14	18700	1860	20	1	HIGH	-0.06	0.524	22.91	24.00	1.285	0.673	/
LTEB2	Sensor OFF	Ant 1	QPSK	Back Side	14	19100	1900	20	1	HIGH	0.10	0.585	23.11	24.00	1.227	0.718	/
LTEB2	Sensor OFF	Ant 1	QPSK	Front Side	14	18900	1880	20	50	HIGH	0.17	0.284	22.51	23.00	1.119	0.318	/
LTEB2	Sensor OFF	Ant 1	QPSK	Back Side	14	18900	1880	20	50	HIGH	-0.12	0.535	22.51	23.00	1.119	0.599	/
LTEB2	Sensor OFF	Ant 1	QPSK	Left Edge	14	18900	1880	20	50	HIGH	0.11	0.092	22.51	23.00	1.119	0.103	/
LTEB2	Sensor OFF	Ant 1	QPSK	Top Edge	14	18900	1880	20	50	HIGH	0.08	0.328	22.51	23.00	1.119	0.367	/

LTEB2	Sensor OFF	Ant 1	QPSK	Back Side	14	18700	1860	20	50	MID	0.07	0.522	22.51	23.00	1.119	0.584	/
LTEB2	Sensor OFF	Ant 1	QPSK	Back Side	14	19100	1900	20	50	HIGH	0.02	0.555	22.45	23.00	1.135	0.630	/

11.7 LTE Band 4 (20MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
LTEB4	Sensor ON	Ant 1	QPSK	Left Cheek	0	20300	1745	20	1	HIGH	0.18	0.164	17.45	18.00	1.135	0.186	/
LTEB4	Sensor ON	Ant 1	QPSK	Left Tilt	0	20300	1745	20	1	HIGH	0.04	0.167	17.45	18.00	1.135	0.189	/
LTEB4	Sensor ON	Ant 1	QPSK	Right Cheek	0	20300	1745	20	1	HIGH	0.16	0.266	17.45	18.00	1.135	0.302	/
LTEB4	Sensor ON	Ant 1	QPSK	Right Tilt	0	20300	1745	20	1	HIGH	0.01	0.218	17.45	18.00	1.135	0.248	/
LTEB4	Sensor ON	Ant 1	QPSK	Right Cheek	0	20050	1720	20	1	HIGH	-0.02	0.303	17.17	18.00	1.211	**0.367**	13#
LTEB4	Sensor ON	Ant 1	QPSK	Right Cheek	0	20175	1732.5	20	1	HIGH	-0.11	0.293	17.35	18.00	1.161	0.340	/
LTEB4	Sensor ON	Ant 1	QPSK	Left Cheek	0	20300	1745	20	50	HIGH	-0.07	0.164	16.43	17.00	1.140	0.187	/
LTEB4	Sensor ON	Ant 1	QPSK	Left Tilt	0	20300	1745	20	50	HIGH	-0.06	0.162	16.43	17.00	1.140	0.185	/
LTEB4	Sensor ON	Ant 1	QPSK	Right Cheek	0	20300	1745	20	50	HIGH	-0.04	0.284	16.43	17.00	1.140	0.324	/
LTEB4	Sensor ON	Ant 1	QPSK	Right Tilt	0	20300	1745	20	50	HIGH	-0.08	0.184	16.43	17.00	1.140	0.210	/
LTEB4	Sensor ON	Ant 1	QPSK	Right Cheek	0	20050	1720	20	50	HIGH	0.05	0.268	16.34	17.00	1.164	0.312	/
LTEB4	Sensor ON	Ant 1	QPSK	Right Cheek	0	20175	1732.5	20	50	HIGH	0.07	0.278	16.58	17.00	1.102	0.307	/
Body-worn&Hotspot																	
LTEB4	Sensor ON	Ant 1	QPSK	Front Side	10	20300	1745	20	1	HIGH	-0.05	0.054	17.45	18.00	1.135	0.062	/
LTEB4	Sensor ON	Ant 1	QPSK	Back Side	10	20300	1745	20	1	HIGH	0.03	0.109	17.45	18.00	1.135	**0.124**	14#
LTEB4	Sensor ON	Ant 1	QPSK	Left Edge	10	20300	1745	20	1	HIGH	0.02	0.019	17.45	18.00	1.135	0.021	/
LTEB4	Sensor ON	Ant 1	QPSK	Top Edge	10	20300	1745	20	1	HIGH	0.13	0.068	17.45	18.00	1.135	0.077	/
LTEB4	Sensor ON	Ant 1	QPSK	Back Side	10	20050	1720	20	1	HIGH	-0.15	0.098	17.17	18.00	1.211	0.118	/
LTEB4	Sensor ON	Ant 1	QPSK	Back Side	10	20175	1732.5	20	1	HIGH	0.07	0.106	17.35	18.00	1.161	0.123	/
LTEB4	Sensor ON	Ant 1	QPSK	Front Side	10	20300	1745	20	50	HIGH	0.10	0.051	16.43	17.00	1.140	0.059	/
LTEB4	Sensor ON	Ant 1	QPSK	Back Side	10	20300	1745	20	50	HIGH	-0.06	0.103	16.43	17.00	1.140	0.117	/
LTEB4	Sensor ON	Ant 1	QPSK	Left Edge	10	20300	1745	20	50	HIGH	0.02	0.017	16.43	17.00	1.140	0.019	/
LTEB4	Sensor ON	Ant 1	QPSK	Top Edge	10	20300	1745	20	50	HIGH	-0.08	0.059	16.43	17.00	1.140	0.067	/
LTEB4	Sensor ON	Ant 1	QPSK	Back Side	10	20050	1720	20	50	HIGH	0.16	0.103	16.34	17.00	1.164	0.119	/
LTEB4	Sensor ON	Ant 1	QPSK	Back Side	10	20175	1732.5	20	50	HIGH	0.11	0.099	16.58	17.00	1.102	0.110	/
Sensor n-1																	
LTEB4	Sensor OFF	Ant 1	QPSK	Front Side	14	20300	1745	20	1	HIGH	-0.15	0.183	22.97	24.00	1.268	0.232	/
LTEB4	Sensor OFF	Ant 1	QPSK	Back Side	14	20300	1745	20	1	HIGH	0.10	0.351	22.97	24.00	1.268	0.445	/
LTEB4	Sensor OFF	Ant 1	QPSK	Left Edge	14	20300	1745	20	1	HIGH	0.10	0.078	22.97	24.00	1.268	0.099	/
LTEB4	Sensor OFF	Ant 1	QPSK	Top Edge	14	20300	1745	20	1	HIGH	-0.08	0.232	22.97	24.00	1.268	0.294	/
LTEB4	Sensor OFF	Ant 1	QPSK	Back Side	14	20050	1720	20	1	HIGH	0.16	0.346	22.88	24.00	1.294	0.448	/
LTEB4	Sensor OFF	Ant 1	QPSK	Back Side	14	20175	1732.5	20	1	HIGH	0.11	0.365	22.89	24.00	1.291	0.471	/
LTEB4	Sensor OFF	Ant 1	QPSK	Front Side	14	20300	1745	20	50	MID	-0.14	0.178	22.42	23.00	1.143	0.203	/
LTEB4	Sensor OFF	Ant 1	QPSK	Back Side	14	20300	1745	20	50	MID	0.07	0.347	22.42	23.00	1.143	0.397	/
LTEB4	Sensor OFF	Ant 1	QPSK	Left Edge	14	20300	1745	20	50	MID	0.09	0.071	22.42	23.00	1.143	0.081	/
LTEB4	Sensor OFF	Ant 1	QPSK	Top Edge	14	20300	1745	20	50	MID	0.06	0.218	22.42	23.00	1.143	0.249	/

LTEB4	Sensor OFF	Ant 1	QPSK	Back Side	14	20050	1720	20	50	LOW	0.13	0.321	22.27	23.00	1.183	0.380	/
LTEB4	Sensor OFF	Ant 1	QPSK	Back Side	14	20175	1732.5	20	50	MID	-0.13	0.330	22.26	23.00	1.186	0.391	/

11.8 LTE Band 5 (10MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
LTEB5	Sensor ON	Ant 2	QPSK	Left Cheek	0	20525	836.5	10	1	LOW	-0.11	0.162	23.04	24.00	1.247	0.202	/
LTEB5	Sensor ON	Ant 2	QPSK	Left Tilt	0	20525	836.5	10	1	LOW	-0.18	0.088	23.04	24.00	1.247	0.110	/
LTEB5	Sensor ON	Ant 2	QPSK	Right Cheek	0	20525	836.5	10	1	LOW	-0.11	0.175	23.04	24.00	1.247	0.218	/
LTEB5	Sensor ON	Ant 2	QPSK	Right Tilt	0	20525	836.5	10	1	LOW	-0.18	0.115	23.04	24.00	1.247	0.143	/
LTEB5	Sensor ON	Ant 2	QPSK	Right Cheek	0	20450	829	10	1	LOW	-0.05	0.153	22.66	24.00	1.361	0.208	/
LTEB5	Sensor ON	Ant 2	QPSK	Right Cheek	0	20600	844	10	1	LOW	-0.07	0.152	22.57	24.00	1.390	0.211	/
LTEB5	Sensor ON	Ant 2	QPSK	Left Cheek	0	20525	836.5	10	25	HIGH	0.16	0.159	22.31	23.00	1.172	0.186	/
LTEB5	Sensor ON	Ant 2	QPSK	Left Tilt	0	20525	836.5	10	25	HIGH	-0.03	0.101	22.31	23.00	1.172	0.118	/
LTEB5	Sensor ON	Ant 2	QPSK	Right Cheek	0	20525	836.5	10	25	HIGH	0.07	0.191	22.31	23.00	1.172	**0.224**	15#
LTEB5	Sensor ON	Ant 2	QPSK	Right Tilt	0	20525	836.5	10	25	HIGH	0.16	0.122	22.31	23.00	1.172	0.144	/
LTEB5	Sensor ON	Ant 2	QPSK	Right Cheek	0	20450	829	10	25	HIGH	-0.04	0.180	22.35	23.00	1.161	0.209	/
LTEB5	Sensor ON	Ant 2	QPSK	Right Cheek	0	20600	844	10	25	LOW	-0.07	0.177	22.09	23.00	1.233	0.218	/
Body-worn&Hotspot																	
LTEB5	Sensor ON	Ant 2	QPSK	Front Side	10	20525	836.5	10	1	LOW	-0.05	0.141	23.04	24.00	1.247	0.176	/
LTEB5	Sensor ON	Ant 2	QPSK	Back Side	10	20525	836.5	10	1	LOW	-0.04	0.194	23.04	24.00	1.247	**0.242**	16#
LTEB5	Sensor ON	Ant 2	QPSK	Left Edge	10	20525	836.5	10	1	LOW	0.12	0.141	23.04	24.00	1.247	0.176	/
LTEB5	Sensor ON	Ant 2	QPSK	Right Edge	10	20525	836.5	10	1	LOW	-0.10	0.008	23.04	24.00	1.247	0.010	/
LTEB5	Sensor ON	Ant 2	QPSK	Bottom Edge	10	20525	836.5	10	1	LOW	-0.07	0.127	23.04	24.00	1.247	0.159	/
LTEB5	Sensor ON	Ant 2	QPSK	Back Side	10	20450	829	10	1	LOW	-0.11	0.158	22.66	24.00	1.361	0.215	/
LTEB5	Sensor ON	Ant 2	QPSK	Back Side	10	20600	844	10	1	LOW	0.06	0.172	22.57	24.00	1.390	0.239	/
LTEB5	Sensor ON	Ant 2	QPSK	Front Side	10	20525	836.5	10	25	HIGH	-0.12	0.121	22.31	23.00	1.172	0.142	/
LTEB5	Sensor ON	Ant 2	QPSK	Back Side	10	20525	836.5	10	25	HIGH	-0.05	0.174	22.31	23.00	1.172	0.204	/
LTEB5	Sensor ON	Ant 2	QPSK	Left Edge	10	20525	836.5	10	25	HIGH	0.03	0.124	22.31	23.00	1.172	0.146	/
LTEB5	Sensor ON	Ant 2	QPSK	Right Edge	10	20525	836.5	10	25	HIGH	0.08	0.071	22.31	23.00	1.172	0.084	/
LTEB5	Sensor ON	Ant 2	QPSK	Bottom Edge	10	20525	836.5	10	25	HIGH	-0.17	0.116	22.31	23.00	1.172	0.136	/
LTEB5	Sensor ON	Ant 2	QPSK	Back Side	10	20450	829	10	25	HIGH	-0.17	0.150	22.35	23.00	1.161	0.174	/
LTEB5	Sensor ON	Ant 2	QPSK	Back Side	10	20600	844	10	25	LOW	0.09	0.166	22.09	23.00	1.233	0.205	/
Sensor n-1																	
LTEB5	Sensor OFF	Ant 2	QPSK	Front Side	14	20525	836.5	14	1	LOW	-0.18	0.163	23.04	24.00	1.247	0.203	/
LTEB5	Sensor OFF	Ant 2	QPSK	Back Side	14	20525	836.5	14	1	LOW	0.14	0.166	23.04	24.00	1.247	0.207	/
LTEB5	Sensor OFF	Ant 2	QPSK	Left Edge	14	20525	836.5	14	1	LOW	-0.04	0.122	23.04	24.00	1.247	0.152	/
LTEB5	Sensor OFF	Ant 2	QPSK	Right Edge	14	20525	836.5	14	1	LOW	0.10	0.071	23.04	24.00	1.247	0.089	/
LTEB5	Sensor OFF	Ant 2	QPSK	Bottom Edge	14	20525	836.5	14	1	LOW	-0.01	0.092	23.04	24.00	1.247	0.115	/
LTEB5	Sensor OFF	Ant 2	QPSK	Back Side	14	20450	829	14	1	LOW	-0.15	0.131	22.66	24.00	1.361	0.178	/
LTEB5	Sensor OFF	Ant 2	QPSK	Back Side	14	20600	844	14	1	LOW	0.10	0.174	22.57	24.00	1.390	0.242	/
LTEB5	Sensor OFF	Ant 2	QPSK	Front Side	14	20525	836.5	14	25	HIGH	-0.03	0.151	22.31	23.00	1.172	0.177	/

LTEB5	Sensor OFF	Ant 2	QPSK	Back Side	14	20525	836.5	14	25	HIGH	0.18	0.152	22.31	23.00	1.172	0.178	/
LTEB5	Sensor OFF	Ant 2	QPSK	Left Edge	14	20525	836.5	14	25	HIGH	-0.17	0.133	22.31	23.00	1.172	0.156	/
LTEB5	Sensor OFF	Ant 2	QPSK	Right Edge	14	20525	836.5	14	25	HIGH	0.09	0.066	22.31	23.00	1.172	0.077	/
LTEB5	Sensor OFF	Ant 2	QPSK	Bottom Edge	14	20525	836.5	14	25	HIGH	-0.02	0.083	22.31	23.00	1.172	0.097	/
LTEB5	Sensor OFF	Ant 2	QPSK	Back Side	14	20450	829	14	25	HIGH	0.01	0.153	22.35	23.00	1.161	0.178	/
LTEB5	Sensor OFF	Ant 2	QPSK	Back Side	14	20600	844	14	25	LOW	-0.09	0.160	22.09	23.00	1.233	0.197	/

11.9 LTE Band 7 (20MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
LTEB7	Sensor ON	Ant 1	QPSK	Left Cheek	0	21350	2560	20	1	LOW	0.18	0.252	15.84	16.00	1.038	0.261	/
LTEB7	Sensor ON	Ant 1	QPSK	Left Tilt	0	21350	2560	20	1	LOW	-0.11	0.334	15.84	16.00	1.038	0.347	/
LTEB7	Sensor ON	Ant 1	QPSK	Right Cheek	0	21350	2560	20	1	LOW	0.12	0.590	15.84	16.00	1.038	0.612	/
LTEB7	Sensor ON	Ant 1	QPSK	Right Tilt	0	21350	2560	20	1	LOW	-0.04	0.740	15.84	16.00	1.038	0.768	/
LTEB7	Sensor ON	Ant 1	QPSK	Right Tilt	0	20850	2510	20	1	LOW	0.07	0.576	14.86	16.00	1.300	0.749	/
LTEB7	Sensor ON	Ant 1	QPSK	Right Tilt	0	21100	2535	20	1	HIGH	-0.05	0.717	15.83	16.00	1.040	0.746	/
LTEB7	Sensor ON	Ant 1	QPSK	Left Cheek	0	21350	2560	20	50	LOW	-0.19	0.280	14.97	15.00	1.007	0.282	/
LTEB7	Sensor ON	Ant 1	QPSK	Left Tilt	0	21350	2560	20	50	LOW	0.07	0.420	14.97	15.00	1.007	0.422	/
LTEB7	Sensor ON	Ant 1	QPSK	Right Cheek	0	21350	2560	20	50	LOW	-0.19	0.607	14.97	15.00	1.007	0.611	/
LTEB7	Sensor ON	Ant 1	QPSK	Right Tilt	0	21350	2560	20	50	LOW	0.04	0.771	14.97	15.00	1.007	**0.776**	17#
LTEB7	Sensor ON	Ant 1	QPSK	Right Tilt	0	20850	2510	20	50	LOW	0.17	0.590	14.98	15.00	1.005	0.592	/
LTEB7	Sensor ON	Ant 1	QPSK	Right Tilt	0	21100	2535	20	50	LOW	-0.04	0.574	14.26	15.00	1.186	0.681	/
Body-worn&Hotspot																	
LTEB7	Sensor ON	Ant 1	QPSK	Front Side	10	21350	2560	20	1	LOW	-0.07	0.155	15.84	16.00	1.038	0.161	/
LTEB7	Sensor ON	Ant 1	QPSK	Back Side	10	21350	2560	20	1	LOW	0.12	0.352	15.84	16.00	1.038	0.366	/
LTEB7	Sensor ON	Ant 1	QPSK	Left Edge	10	21350	2560	20	1	LOW	-0.08	0.001	15.84	16.00	1.038	0.001	/
LTEB7	Sensor ON	Ant 1	QPSK	Top Edge	10	21350	2560	20	1	LOW	-0.07	0.412	15.84	16.00	1.038	**0.427**	18#
LTEB7	Sensor ON	Ant 1	QPSK	Top Edge	10	20850	2510	20	1	LOW	-0.18	0.323	14.86	16.00	1.300	0.420	/
LTEB7	Sensor ON	Ant 1	QPSK	Top Edge	10	21100	2535	20	1	LOW	-0.03	0.396	15.83	16.00	1.040	0.412	/
LTEB7	Sensor ON	Ant 1	QPSK	Front Side	10	21350	2560	20	50	LOW	0.19	0.142	14.97	15.00	1.007	0.143	/
LTEB7	Sensor ON	Ant 1	QPSK	Back Side	10	21350	2560	20	50	LOW	0.18	0.316	14.97	15.00	1.007	0.319	/
LTEB7	Sensor ON	Ant 1	QPSK	Left Edge	10	21350	2560	20	50	LOW	-0.13	0.003	14.97	15.00	1.007	0.003	/
LTEB7	Sensor ON	Ant 1	QPSK	Top Edge	10	21350	2560	20	50	LOW	0.13	0.382	14.97	15.00	1.007	0.385	/
LTEB7	Sensor ON	Ant 1	QPSK	Top Edge	10	20850	2510	20	50	LOW	-0.15	0.342	14.98	15.00	1.005	0.344	/
LTEB7	Sensor ON	Ant 1	QPSK	Top Edge	10	21100	2535	20	50	LOW	0.14	0.345	14.26	15.00	1.186	0.409	/
Sensor n-1																	
LTEB7	Sensor OFF	Ant 1	QPSK	Front Side	14	21350	2560	20	1	HIGH	-0.15	0.210	22.92	24.00	1.282	0.269	/
LTEB7	Sensor OFF	Ant 1	QPSK	Back Side	14	21350	2560	20	1	HIGH	-0.10	0.419	22.92	24.00	1.282	0.537	/
LTEB7	Sensor OFF	Ant 1	QPSK	Left Edge	14	21350	2560	20	1	HIGH	-0.11	0.000	22.92	24.00	1.282	0.000	/
LTEB7	Sensor OFF	Ant 1	QPSK	Top Edge	14	21350	2560	20	1	HIGH	0.04	0.581	22.92	24.00	1.282	0.745	/
LTEB7	Sensor OFF	Ant 1	QPSK	Top Edge	14	20850	2510	20	1	LOW	0.08	0.417	22.81	24.00	1.315	0.548	/
LTEB7	Sensor OFF	Ant 1	QPSK	Top Edge	14	21100	2535	20	1	HIGH	-0.04	0.537	22.86	24.00	1.300	0.698	/
LTEB7	Sensor OFF	Ant 1	QPSK	Front Side	14	21350	2560	20	50	HIGH	-0.16	0.184	22.21	23.00	1.199	0.221	/
LTEB7	Sensor OFF	Ant 1	QPSK	Back Side	14	21350	2560	20	50	HIGH	0.11	0.352	22.21	23.00	1.199	0.422	/
LTEB7	Sensor OFF	Ant 1	QPSK	Left Edge	14	21350	2560	20	50	HIGH	-0.15	0.000	22.21	23.00	1.199	0.000	/
LTEB7	Sensor OFF	Ant 1	QPSK	Top Edge	14	21350	2560	20	50	HIGH	-0.03	0.526	22.21	23.00	1.199	0.631	/

LTEB7	Sensor OFF	Ant 1	QPSK	Top Edge	14	20850	2510	20	50	LOW	0.17	0.410	22.30	23.00	1.175	0.481	/
LTEB7	Sensor OFF	Ant 1	QPSK	Top Edge	14	21100	2535	20	50	LOW	0.15	0.455	22.25	23.00	1.189	0.541	/

11.10 LTE Band 13 (10MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
LTEB13	Sensor ON	Ant 2	QPSK	Left Cheek	0	23230	782	10	1	MID	-0.18	0.181	22.72	24.00	1.343	0.243	/
LTEB13	Sensor ON	Ant 2	QPSK	Left Tilt	0	23230	782	10	1	MID	-0.12	0.123	22.72	24.00	1.343	0.165	/
LTEB13	Sensor ON	Ant 2	QPSK	Right Cheek	0	23230	782	10	1	MID	0.02	0.208	22.72	24.00	1.343	**0.279**	19#
LTEB13	Sensor ON	Ant 2	QPSK	Right Tilt	0	23230	782	10	1	MID	0.08	0.144	22.72	24.00	1.343	0.193	/
LTEB13	Sensor ON	Ant 2	QPSK	Left Cheek	0	23230	782	10	25	HIGH	-0.07	0.171	22.71	23.00	1.069	0.183	/
LTEB13	Sensor ON	Ant 2	QPSK	Left Tilt	0	23230	782	10	25	HIGH	-0.14	0.114	22.71	23.00	1.069	0.122	/
LTEB13	Sensor ON	Ant 2	QPSK	Right Cheek	0	23230	782	10	25	HIGH	0.14	0.198	22.71	23.00	1.069	0.212	/
LTEB13	Sensor ON	Ant 2	QPSK	Right Tilt	0	23230	782	10	25	HIGH	-0.17	0.134	22.71	23.00	1.069	0.143	/
Body-worn&Hotspot																	
LTEB13	Sensor ON	Ant 2	QPSK	Front Side	10	23230	782	10	1	MID	-0.09	0.196	22.72	24.00	1.343	0.263	/
LTEB13	Sensor ON	Ant 2	QPSK	Back Side	10	23230	782	10	1	MID	-0.04	0.225	22.72	24.00	1.343	**0.302**	20#
LTEB13	Sensor ON	Ant 2	QPSK	Left Edge	10	23230	782	10	1	MID	-0.18	0.222	22.72	24.00	1.343	0.298	/
LTEB13	Sensor ON	Ant 2	QPSK	Right Edge	10	23230	782	10	1	MID	0.09	0.141	22.72	24.00	1.343	0.189	/
LTEB13	Sensor ON	Ant 2	QPSK	Bottom Edge	10	23230	782	10	1	MID	0.03	0.135	22.72	24.00	1.343	0.182	/
LTEB13	Sensor ON	Ant 2	QPSK	Front Side	10	23230	782	10	25	HIGH	0.11	0.133	22.71	23.00	1.069	0.142	/
LTEB13	Sensor ON	Ant 2	QPSK	Back Side	10	23230	782	10	25	HIGH	-0.06	0.223	22.71	23.00	1.069	0.238	/
LTEB13	Sensor ON	Ant 2	QPSK	Left Edge	10	23230	782	10	25	HIGH	0.12	0.187	22.71	23.00	1.069	0.200	/
LTEB13	Sensor ON	Ant 2	QPSK	Right Edge	10	23230	782	10	25	HIGH	0.16	0.102	22.71	23.00	1.069	0.109	/
LTEB13	Sensor ON	Ant 2	QPSK	Bottom Edge	10	23230	782	10	25	HIGH	0.05	0.113	22.71	23.00	1.069	0.121	/
Sensor n-1																	
LTEB13	Sensor OFF	Ant 2	QPSK	Front Side	14	23230	782	10	1	MID	0.06	0.185	22.72	24.00	1.343	0.248	/
LTEB13	Sensor OFF	Ant 2	QPSK	Back Side	14	23230	782	10	1	MID	-0.13	0.195	22.72	24.00	1.343	0.262	/
LTEB13	Sensor OFF	Ant 2	QPSK	Left Edge	14	23230	782	10	1	MID	0.15	0.165	22.72	24.00	1.343	0.222	/
LTEB13	Sensor OFF	Ant 2	QPSK	Right Edge	14	23230	782	10	1	MID	-0.10	0.102	22.72	24.00	1.343	0.137	/
LTEB13	Sensor OFF	Ant 2	QPSK	Bottom Edge	14	23230	782	10	1	MID	-0.19	0.071	22.72	24.00	1.343	0.095	/
LTEB13	Sensor OFF	Ant 2	QPSK	Front Side	14	23230	782	10	25	HIGH	0.17	0.169	22.71	23.00	1.069	0.181	/
LTEB13	Sensor OFF	Ant 2	QPSK	Back Side	14	23230	782	10	25	HIGH	-0.06	0.179	22.71	23.00	1.069	0.191	/
LTEB13	Sensor OFF	Ant 2	QPSK	Left Edge	14	23230	782	10	25	HIGH	0.18	0.143	22.71	23.00	1.069	0.153	/
LTEB13	Sensor OFF	Ant 2	QPSK	Right Edge	14	23230	782	10	25	HIGH	0.16	0.090	22.71	23.00	1.069	0.096	/
LTEB13	Sensor OFF	Ant 2	QPSK	Bottom Edge	14	23230	782	10	25	HIGH	0.18	0.068	22.71	23.00	1.069	0.073	/

11.11 LTE Band 26 (15MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
LTEB26	Sensor ON	Ant 2	QPSK	Left Cheek	0	26865	831.5	15	1	LOW	-0.14	0.178	22.87	24.00	1.297	0.231	/
LTEB26	Sensor ON	Ant 2	QPSK	Left Tilt	0	26865	831.5	15	1	LOW	-0.07	0.114	22.87	24.00	1.297	0.147	/
LTEB26	Sensor ON	Ant 2	QPSK	Right Cheek	0	26865	831.5	15	1	LOW	0.11	0.200	22.87	24.00	1.297	0.260	/
LTEB26	Sensor ON	Ant 2	QPSK	Right Tilt	0	26865	831.5	15	1	LOW	-0.13	0.127	22.87	24.00	1.297	0.165	/
LTEB26	Sensor ON	Ant 2	QPSK	Right Cheek	0	26765	821.5	15	1	LOW	0.01	0.195	22.78	24.00	1.324	0.259	/
LTEB26	Sensor ON	Ant 2	QPSK	Right Cheek	0	26965	841.5	15	1	LOW	-0.04	0.205	22.63	24.00	1.371	**0.281**	21#
LTEB26	Sensor ON	Ant 2	QPSK	Left Cheek	0	26865	831.5	15	36	MID	-0.15	0.167	22.25	23.00	1.189	0.198	/
LTEB26	Sensor ON	Ant 2	QPSK	Left Tilt	0	26865	831.5	15	36	MID	-0.17	0.104	22.25	23.00	1.189	0.124	/
LTEB26	Sensor ON	Ant 2	QPSK	Right Cheek	0	26865	831.5	15	36	MID	-0.13	0.189	22.25	23.00	1.189	0.224	/
LTEB26	Sensor ON	Ant 2	QPSK	Right Tilt	0	26865	831.5	15	36	MID	0.02	0.116	22.25	23.00	1.189	0.138	/
LTEB26	Sensor ON	Ant 2	QPSK	Right Cheek	0	26765	821.5	15	36	LOW	0.11	0.174	22.42	23.00	1.143	0.199	/
LTEB26	Sensor ON	Ant 2	QPSK	Right Cheek	0	26965	841.5	15	36	LOW	0.08	0.181	22.03	23.00	1.250	0.226	/
Body-worn&Hotspot																	
LTEB26	Sensor OFF	Ant 2	QPSK	Front Side	10	26865	831.5	15	1	LOW	0.15	0.125	22.87	24.00	1.297	0.163	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	10	26865	831.5	15	1	LOW	0.19	0.168	22.87	24.00	1.297	0.218	/
LTEB26	Sensor OFF	Ant 2	QPSK	Left Edge	10	26865	831.5	15	1	LOW	-0.11	0.128	22.87	24.00	1.297	0.166	/
LTEB26	Sensor OFF	Ant 2	QPSK	Right Edge	10	26865	831.5	15	1	LOW	0.01	0.078	22.87	24.00	1.297	0.101	/
LTEB26	Sensor OFF	Ant 2	QPSK	Bottom Edge	10	26865	831.5	15	1	LOW	0.08	0.111	22.87	24.00	1.297	0.144	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	10	26765	821.5	15	1	LOW	-0.04	0.169	22.78	24.00	1.324	0.224	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	10	26965	841.5	15	1	LOW	-0.01	0.175	22.63	24.00	1.371	**0.240**	22#
LTEB26	Sensor OFF	Ant 2	QPSK	Front Side	10	26865	831.5	15	36	MID	-0.13	0.114	22.25	23.00	1.189	0.136	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	10	26865	831.5	15	36	MID	0.10	0.155	22.25	23.00	1.189	0.184	/
LTEB26	Sensor OFF	Ant 2	QPSK	Left Edge	10	26865	831.5	15	36	MID	-0.13	0.112	22.25	23.00	1.189	0.133	/
LTEB26	Sensor OFF	Ant 2	QPSK	Right Edge	10	26865	831.5	15	36	MID	-0.10	0.064	22.25	23.00	1.189	0.076	/
LTEB26	Sensor OFF	Ant 2	QPSK	Bottom Edge	10	26865	831.5	15	36	MID	-0.13	0.100	22.25	23.00	1.189	0.119	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	10	26765	821.5	15	36	LOW	0.06	0.149	22.42	23.00	1.143	0.170	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	10	26965	841.5	15	36	LOW	-0.17	0.168	22.03	23.00	1.250	0.210	/
Sensor n-1																	
LTEB26	Sensor OFF	Ant 2	QPSK	Front Side	14	26865	831.5	15	1	LOW	0.05	0.114	22.87	24.00	1.297	0.148	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	14	26865	831.5	15	1	LOW	-0.14	0.164	22.87	24.00	1.297	0.213	/
LTEB26	Sensor OFF	Ant 2	QPSK	Left Edge	14	26865	831.5	15	1	LOW	0.12	0.074	22.87	24.00	1.297	0.096	/
LTEB26	Sensor OFF	Ant 2	QPSK	Right Edge	14	26865	831.5	15	1	LOW	-0.11	0.019	22.87	24.00	1.297	0.025	/
LTEB26	Sensor OFF	Ant 2	QPSK	Bottom Edge	14	26865	831.5	15	1	LOW	0.13	0.030	22.87	24.00	1.297	0.039	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	14	26765	821.5	15	1	LOW	-0.06	0.133	22.78	24.00	1.324	0.176	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	14	26965	841.5	15	1	LOW	0.01	0.154	22.63	24.00	1.371	0.211	/
LTEB26	Sensor OFF	Ant 2	QPSK	Front Side	14	26865	831.5	15	36	MID	-0.06	0.103	22.25	23.00	1.189	0.122	/

LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	14	26865	831.5	15	36	MID	-0.01	0.144	22.25	23.00	1.189	0.171	/
LTEB26	Sensor OFF	Ant 2	QPSK	Left Edge	14	26865	831.5	15	36	MID	-0.06	0.068	22.25	23.00	1.189	0.081	/
LTEB26	Sensor OFF	Ant 2	QPSK	Right Edge	14	26865	831.5	15	36	MID	0.09	0.016	22.25	23.00	1.189	0.019	/
LTEB26	Sensor OFF	Ant 2	QPSK	Bottom Edge	14	26865	831.5	15	36	MID	0.09	0.036	22.25	23.00	1.189	0.043	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	14	26765	821.5	15	36	LOW	-0.08	0.131	22.42	23.00	1.143	0.150	/
LTEB26	Sensor OFF	Ant 2	QPSK	Back Side	14	26965	841.5	15	36	LOW	0.09	0.143	22.03	23.00	1.250	0.179	/

11.12 LTE Band 66 (20MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
LTEB66	Sensor ON	Ant 1	QPSK	Left Cheek	0	132322	1745	20	1	HIGH	-0.07	0.244	18.08	19.00	1.236	0.302	/
LTEB66	Sensor ON	Ant 1	QPSK	Left Tilt	0	132322	1745	20	1	HIGH	-0.06	0.248	18.08	19.00	1.236	0.307	/
LTEB66	Sensor ON	Ant 1	QPSK	Right Cheek	0	132322	1745	20	1	HIGH	0.15	0.395	18.08	19.00	1.236	0.488	/
LTEB66	Sensor ON	Ant 1	QPSK	Right Tilt	0	132322	1745	20	1	HIGH	-0.12	0.332	18.08	19.00	1.236	0.410	/
LTEB66	Sensor ON	Ant 1	QPSK	Right Cheek	0	132072	1720	20	1	HIGH	0.02	0.427	17.87	19.00	1.297	0.553	/
LTEB66	Sensor ON	Ant 1	QPSK	Right Cheek	0	132572	1770	20	1	HIGH	0.10	0.467	18.05	19.00	1.245	**0.581**	23#
LTEB66	Sensor ON	Ant 1	QPSK	Left Cheek	0	132322	1745	20	50	HIGH	-0.19	0.234	17.20	18.00	1.202	0.282	/
LTEB66	Sensor ON	Ant 1	QPSK	Left Tilt	0	132322	1745	20	50	HIGH	0.11	0.219	17.20	18.00	1.202	0.263	/
LTEB66	Sensor ON	Ant 1	QPSK	Right Cheek	0	132322	1745	20	50	HIGH	-0.01	0.409	17.20	18.00	1.202	0.492	/
LTEB66	Sensor ON	Ant 1	QPSK	Right Tilt	0	132322	1745	20	50	HIGH	0.18	0.297	17.20	18.00	1.202	0.357	/
LTEB66	Sensor ON	Ant 1	QPSK	Right Cheek	0	132072	1720	20	50	HIGH	-0.02	0.369	17.35	18.00	1.161	0.429	/
LTEB66	Sensor ON	Ant 1	QPSK	Right Cheek	0	132572	1770	20	50	HIGH	0.09	0.392	17.37	18.00	1.156	0.453	/
Body-worn&Hotspot																	
LTEB66	Sensor ON	Ant 1	QPSK	Front Side	10	132322	1745	20	1	MID	-0.17	0.252	18.08	19.00	1.236	0.311	/
LTEB66	Sensor ON	Ant 1	QPSK	Back Side	10	132322	1745	20	1	MID	-0.11	0.551	18.08	19.00	1.236	0.681	/
LTEB66	Sensor ON	Ant 1	QPSK	Left Edge	10	132322	1745	20	1	MID	-0.04	0.089	18.08	19.00	1.236	0.110	/
LTEB66	Sensor ON	Ant 1	QPSK	Top Edge	10	132322	1745	20	1	MID	-0.14	0.321	18.08	19.00	1.236	0.396	/
LTEB66	Sensor ON	Ant 1	QPSK	Back Side	10	132072	1720	20	1	HIGH	-0.04	0.484	17.87	19.00	1.297	0.627	/
LTEB66	Sensor ON	Ant 1	QPSK	Back Side	10	132572	1770	20	1	HIGH	0.02	0.624	18.05	19.00	1.245	**0.777**	24#
LTEB66	Sensor ON	Ant 1	QPSK	Front Side	10	132322	1745	20	50	MID	0.09	0.256	17.20	18.00	1.202	0.308	/
LTEB66	Sensor ON	Ant 1	QPSK	Back Side	10	132322	1745	20	50	MID	0.07	0.505	17.20	18.00	1.202	0.607	/
LTEB66	Sensor ON	Ant 1	QPSK	Left Edge	10	132322	1745	20	50	MID	-0.09	0.080	17.20	18.00	1.202	0.096	/
LTEB66	Sensor ON	Ant 1	QPSK	Top Edge	10	132322	1745	20	50	MID	0.13	0.283	17.20	18.00	1.202	0.340	/
LTEB66	Sensor ON	Ant 1	QPSK	Back Side	10	132072	1720	20	50	HIGH	0.19	0.483	17.35	18.00	1.161	0.561	/
LTEB66	Sensor ON	Ant 1	QPSK	Back Side	10	132572	1770	20	50	HIGH	-0.05	0.602	17.37	18.00	1.156	0.696	/
Sensor n-1																	
LTEB66	Sensor OFF	Ant 1	QPSK	Front Side	14	132322	1745	20	1	MID	0.12	0.177	23.11	24.00	1.227	0.217	/
LTEB66	Sensor OFF	Ant 1	QPSK	Back Side	14	132322	1745	20	1	MID	-0.16	0.366	23.11	24.00	1.227	0.449	/
LTEB66	Sensor OFF	Ant 1	QPSK	Left Edge	14	132322	1745	20	1	MID	0.17	0.075	23.11	24.00	1.227	0.092	/
LTEB66	Sensor OFF	Ant 1	QPSK	Top Edge	14	132322	1745	20	1	MID	0.05	0.232	23.11	24.00	1.227	0.285	/
LTEB66	Sensor OFF	Ant 1	QPSK	Back Side	14	132072	1720	20	1	HIGH	-0.07	0.343	22.90	24.00	1.288	0.442	/
LTEB66	Sensor OFF	Ant 1	QPSK	Back Side	14	132572	1770	20	1	HIGH	0.13	0.437	23.08	24.00	1.236	0.540	/
LTEB66	Sensor OFF	Ant 1	QPSK	Front Side	14	132322	1745	20	50	MID	-0.03	0.182	22.39	23.00	1.151	0.209	/
LTEB66	Sensor OFF	Ant 1	QPSK	Back Side	14	132322	1745	20	50	MID	0.19	0.334	22.39	23.00	1.151	0.384	/
LTEB66	Sensor OFF	Ant 1	QPSK	Left Edge	14	132322	1745	20	50	MID	0.13	0.062	22.39	23.00	1.151	0.071	/
LTEB66	Sensor OFF	Ant 1	QPSK	Top Edge	14	132322	1745	20	50	MID	-0.17	0.206	22.39	23.00	1.151	0.237	/

LTEB66	Sensor OFF	Ant 1	QPSK	Back Side	14	132072	1720	20	50	MID	0.14	0.282	22.31	23.00	1.172	0.331	/
LTEB66	Sensor OFF	Ant 1	QPSK	Back Side	14	132572	1770	20	50	LOW	0.08	0.385	22.40	23.00	1.148	0.442	/

11.13 LTE Band 38 (20MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
LTEB38	Sensor ON	Ant 1	QPSK	Left Cheek	0	38150	2610	20	1	HIGH	0.01	0.245	14.53	16.00	1.403	0.343	/
LTEB38	Sensor ON	Ant 1	QPSK	Left Tilt	0	38150	2610	20	1	HIGH	-0.14	0.300	14.53	16.00	1.403	0.420	/
LTEB38	Sensor ON	Ant 1	QPSK	Right Cheek	0	38150	2610	20	1	HIGH	-0.06	0.519	14.53	16.00	1.403	0.729	/
LTEB38	Sensor ON	Ant 1	QPSK	Right Tilt	0	38150	2610	20	1	HIGH	0.04	0.641	14.53	16.00	1.403	**0.899**	25#
LTEB38	Sensor ON	Ant 1	QPSK	Right Tilt	0	37850	2580	20	1	HIGH	-0.02	0.570	14.33	16.00	1.469	0.837	/
LTEB38	Sensor ON	Ant 1	QPSK	Right Tilt	0	38000	2595	20	1	HIGH	0.08	0.587	14.52	16.00	1.406	0.825	/
LTEB38	Sensor ON	Ant 1	QPSK	Left Cheek	0	38150	2610	20	50	MID	-0.06	0.201	13.78	15.00	1.324	0.266	/
LTEB38	Sensor ON	Ant 1	QPSK	Left Tilt	0	38150	2610	20	50	MID	0.15	0.271	13.78	15.00	1.324	0.358	/
LTEB38	Sensor ON	Ant 1	QPSK	Right Cheek	0	38150	2610	20	50	MID	-0.01	0.442	13.78	15.00	1.324	0.586	/
LTEB38	Sensor ON	Ant 1	QPSK	Right Tilt	0	38150	2610	20	50	MID	0.03	0.591	13.78	15.00	1.324	0.782	/
LTEB38	Sensor ON	Ant 1	QPSK	Right Tilt	0	37850	2580	20	50	MID	-0.05	0.564	13.73	15.00	1.340	0.755	/
LTEB38	Sensor ON	Ant 1	QPSK	Right Tilt	0	38000	2595	20	50	MID	0.06	0.611	13.69	15.00	1.352	0.827	/
LTEB38	Sensor ON	Ant 1	QPSK	Right Tilt	0	37850	2610	20	100	MID	-0.04	0.574	13.73	15.00	1.340	0.769	/
LTEB38	Sensor ON	Ant 1	QPSK	Right Tilt	0	37850	2580	20	100	MID	0.02	0.542	13.73	15.00	1.340	0.726	/
LTEB38	Sensor ON	Ant 1	QPSK	Right Tilt	0	38000	2595	20	100	MID	0.08	0.611	13.69	15.00	1.352	0.826	/
Body-worn&Hotspot																	
LTEB38	Sensor ON	Ant 1	QPSK	Front Side	10	38150	2610	20	1	HIGH	0.01	0.096	14.53	16.00	1.403	0.135	/
LTEB38	Sensor ON	Ant 1	QPSK	Back Side	10	38150	2610	20	1	HIGH	-0.18	0.212	14.53	16.00	1.403	0.298	/
LTEB38	Sensor ON	Ant 1	QPSK	Left Edge	10	38150	2610	20	1	HIGH	0.01	0.009	14.53	16.00	1.403	0.013	/
LTEB38	Sensor ON	Ant 1	QPSK	Top Edge	10	38150	2610	20	1	HIGH	0.05	0.257	14.53	16.00	1.403	**0.361**	26#
LTEB38	Sensor ON	Ant 1	QPSK	Top Edge	10	37850	2580	20	1	HIGH	0.03	0.233	14.33	16.00	1.469	0.343	/
LTEB38	Sensor ON	Ant 1	QPSK	Top Edge	10	38000	2595	20	1	HIGH	-0.13	0.253	14.52	16.00	1.406	0.356	/
LTEB38	Sensor ON	Ant 1	QPSK	Front Side	10	38150	2610	20	50	MID	0.13	0.089	13.78	15.00	1.324	0.118	/
LTEB38	Sensor ON	Ant 1	QPSK	Back Side	10	38150	2610	20	50	MID	-0.12	0.222	13.78	15.00	1.324	0.294	/
LTEB38	Sensor ON	Ant 1	QPSK	Left Edge	10	38150	2610	20	50	MID	0.19	0.011	13.78	15.00	1.324	0.014	/
LTEB38	Sensor ON	Ant 1	QPSK	Top Edge	10	38150	2610	20	50	MID	-0.02	0.234	13.78	15.00	1.324	0.310	/
LTEB38	Sensor ON	Ant 1	QPSK	Top Edge	10	37850	2580	20	50	MID	-0.17	0.212	13.73	15.00	1.340	0.285	/
LTEB38	Sensor ON	Ant 1	QPSK	Top Edge	10	38000	2595	20	50	MID	-0.18	0.234	13.69	15.00	1.352	0.316	/
Sensor n-1																	
LTEB38	Sensor OFF	Ant 1	QPSK	Front Side	14	38150	2610	20	1	HIGH	-0.01	0.259	23.18	24.00	1.208	0.313	/
LTEB38	Sensor OFF	Ant 1	QPSK	Back Side	14	38150	2610	20	1	HIGH	0.06	0.503	23.18	24.00	1.208	0.608	/
LTEB38	Sensor OFF	Ant 1	QPSK	Left Edge	14	38150	2610	20	1	HIGH	-0.08	0.000	23.18	24.00	1.208	0.000	/
LTEB38	Sensor OFF	Ant 1	QPSK	Top Edge	14	38150	2610	20	1	HIGH	0.02	0.584	23.18	24.00	1.208	0.705	/
LTEB38	Sensor OFF	Ant 1	QPSK	Top Edge	14	37850	2580	20	1	MID	-0.12	0.533	22.99	24.00	1.262	0.673	/
LTEB38	Sensor OFF	Ant 1	QPSK	Top Edge	14	38000	2595	20	1	HIGH	-0.15	0.547	22.79	24.00	1.321	0.723	/
LTEB38	Sensor OFF	Ant 1	QPSK	Front Side	14	38150	2610	20	50	HIGH	-0.16	0.226	22.56	23.00	1.107	0.250	/

LTEB38	Sensor OFF	Ant 1	QPSK	Back Side	14	38150	2610	20	50	HIGH	0.04	0.473	22.56	23.00	1.107	0.523	/
LTEB38	Sensor OFF	Ant 1	QPSK	Left Edge	14	38150	2610	20	50	HIGH	-0.03	0.003	22.56	23.00	1.107	0.003	/
LTEB38	Sensor OFF	Ant 1	QPSK	Top Edge	14	38150	2610	20	50	HIGH	0.18	0.643	22.56	23.00	1.107	0.712	/
LTEB38	Sensor OFF	Ant 1	QPSK	Top Edge	14	37850	2580	20	50	HIGH	-0.15	0.498	22.36	23.00	1.159	0.577	/
LTEB38	Sensor OFF	Ant 1	QPSK	Top Edge	14	38000	2595	20	50	HIGH	0.17	0.512	22.49	23.00	1.125	0.576	/

11.14 LTE Band 41 (20MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
LTEB41	Sensor ON	Ant 1	QPSK	Left Cheek	0	41055	2636.5	20	1	MID	-0.14	0.141	14.87	16.00	1.297	0.183	/
LTEB41	Sensor ON	Ant 1	QPSK	Left Tilt	0	41055	2636.5	20	1	MID	0.08	0.190	14.87	16.00	1.297	0.247	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Cheek	0	41055	2636.5	20	1	MID	0.07	0.318	14.87	16.00	1.297	0.413	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Tilt	0	41055	2636.5	20	1	MID	-0.14	0.436	14.87	16.00	1.297	0.565	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Tilt	0	39750	2506	20	1	MID	0.04	0.300	14.63	16.00	1.371	0.411	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Tilt	0	40185	2549.5	20	1	MID	-0.17	0.359	14.63	16.00	1.371	0.492	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Tilt	0	40620	2593	20	1	HIGH	-0.05	0.432	14.39	16.00	1.449	0.626	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Tilt	0	41490	2680	20	1	LOW	0.05	0.442	14.25	16.00	1.496	**0.661**	27#
LTEB41	Sensor ON	Ant 1	QPSK	Left Cheek	0	41055	2636.5	20	50	MID	0.07	0.139	13.82	15.00	1.312	0.183	/
LTEB41	Sensor ON	Ant 1	QPSK	Left Tilt	0	41055	2636.5	20	50	MID	-0.18	0.175	13.82	15.00	1.312	0.230	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Cheek	0	41055	2636.5	20	50	MID	0.11	0.306	13.82	15.00	1.312	0.402	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Tilt	0	41055	2636.5	20	50	MID	0.06	0.387	13.82	15.00	1.312	0.508	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Tilt	0	39750	2506	20	50	MID	0.08	0.288	13.93	15.00	1.279	0.368	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Tilt	0	40185	2549.5	20	50	MID	-0.12	0.345	13.95	15.00	1.274	0.439	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Tilt	0	40620	2593	20	50	MID	0.19	0.416	13.76	15.00	1.330	0.553	/
LTEB41	Sensor ON	Ant 1	QPSK	Right Tilt	0	41490	2680	20	50	MID	-0.06	0.403	13.32	15.00	1.472	0.594	/
Body-worn&Hotspot																	
LTEB41	Sensor ON	Ant 1	QPSK	Front Side	10	41055	2636.5	20	1	MID	-0.15	0.053	14.87	16.00	1.297	0.069	/
LTEB41	Sensor ON	Ant 1	QPSK	Back Side	10	41055	2636.5	20	1	MID	0.05	0.145	14.87	16.00	1.297	0.187	/
LTEB41	Sensor ON	Ant 1	QPSK	Left Edge	10	41055	2636.5	20	1	MID	0.07	0.002	14.87	16.00	1.297	0.003	/
LTEB41	Sensor ON	Ant 1	QPSK	Top Edge	10	41055	2636.5	20	1	MID	0.12	0.145	14.87	16.00	1.297	0.187	/
LTEB41	Sensor ON	Ant 1	QPSK	Back Side	10	39750	2506	20	1	MID	0.19	0.075	14.63	16.00	1.371	0.103	/
LTEB41	Sensor ON	Ant 1	QPSK	Back Side	10	40185	2549.5	20	1	MID	-0.19	0.094	14.63	16.00	1.371	0.129	/
LTEB41	Sensor ON	Ant 1	QPSK	Back Side	10	40620	2593	20	1	HIGH	-0.17	0.118	14.39	16.00	1.449	0.170	/
LTEB41	Sensor ON	Ant 1	QPSK	Back Side	10	41490	2680	20	1	LOW	0.01	0.154	14.25	16.00	1.496	**0.230**	28#
LTEB41	Sensor ON	Ant 1	QPSK	Front Side	10	41055	2636.5	20	50	MID	0.06	0.051	13.82	15.00	1.312	0.067	/
LTEB41	Sensor ON	Ant 1	QPSK	Back Side	10	41055	2636.5	20	50	MID	-0.02	0.128	13.82	15.00	1.312	0.168	/
LTEB41	Sensor ON	Ant 1	QPSK	Left Edge	10	41055	2636.5	20	50	MID	0.01	0.002	13.82	15.00	1.312	0.003	/
LTEB41	Sensor ON	Ant 1	QPSK	Top Edge	10	41055	2636.5	20	50	MID	0.11	0.093	13.82	15.00	1.312	0.122	/
LTEB41	Sensor ON	Ant 1	QPSK	Back Side	10	39750	2506	20	50	MID	-0.06	0.073	13.93	15.00	1.279	0.094	/
LTEB41	Sensor ON	Ant 1	QPSK	Back Side	10	40185	2549.5	20	50	MID	0.19	0.091	13.95	15.00	1.274	0.116	/
LTEB41	Sensor ON	Ant 1	QPSK	Back Side	10	40620	2593	20	50	MID	-0.15	0.111	13.76	15.00	1.330	0.147	/
LTEB41	Sensor ON	Ant 1	QPSK	Back Side	10	41490	2680	20	50	MID	0.19	0.139	13.32	15.00	1.472	0.205	/
Sensor n-1																	
LTEB41	Sensor OFF	Ant 1	QPSK	Front Side	14	41055	2636.5	20	1	LOW	-0.10	0.235	23.39	24.00	1.151	0.270	/
LTEB41	Sensor OFF	Ant 1	QPSK	Back Side	14	41055	2636.5	20	1	LOW	-0.05	0.524	23.39	24.00	1.151	0.603	/

LTEB41	Sensor OFF	Ant 1	QPSK	Left Edge	14	41055	2636.5	20	1	LOW	0.18	0.002	23.39	24.00	1.151	0.002	/
LTEB41	Sensor OFF	Ant 1	QPSK	Top Edge	14	41055	2636.5	20	1	LOW	0.05	0.583	23.39	24.00	1.151	0.671	/
LTEB41	Sensor OFF	Ant 1	QPSK	Top Edge	14	39750	2506	20	1	LOW	0.16	0.512	23.02	24.00	1.253	0.642	/
LTEB41	Sensor OFF	Ant 1	QPSK	Top Edge	14	40185	2549.5	20	1	LOW	-0.12	0.533	23.12	24.00	1.225	0.653	/
LTEB41	Sensor OFF	Ant 1	QPSK	Top Edge	14	40620	2593	20	1	MID	0.19	0.512	22.91	24.00	1.285	0.658	/
LTEB41	Sensor OFF	Ant 1	QPSK	Top Edge	14	41490	2680	20	1	HIGH	0.14	0.502	23.36	24.00	1.159	0.582	/
LTEB41	Sensor OFF	Ant 1	QPSK	Front Side	14	41055	2636.5	20	50	MID	0.17	0.216	22.68	23.00	1.076	0.233	/
LTEB41	Sensor OFF	Ant 1	QPSK	Back Side	14	41055	2636.5	20	50	MID	0.04	0.522	22.68	23.00	1.076	0.562	/
LTEB41	Sensor OFF	Ant 1	QPSK	Left Edge	14	41055	2636.5	20	50	MID	0.16	0.002	22.68	23.00	1.076	0.002	/
LTEB41	Sensor OFF	Ant 1	QPSK	Top Edge	14	41055	2636.5	20	50	MID	0.09	0.613	22.68	23.00	1.076	0.660	/
LTEB41	Sensor OFF	Ant 1	QPSK	Top Edge	14	39750	2506	20	50	LOW	-0.02	0.482	22.63	23.00	1.089	0.525	/
LTEB41	Sensor OFF	Ant 1	QPSK	Top Edge	14	40185	2549.5	20	50	LOW	0.11	0.499	22.50	23.00	1.122	0.560	/
LTEB41	Sensor OFF	Ant 1	QPSK	Top Edge	14	40620	2593	20	50	HIGH	-0.06	0.498	22.52	23.00	1.117	0.556	/
LTEB41	Sensor OFF	Ant 1	QPSK	Top Edge	14	41490	2680	20	50	LOW	-0.18	0.470	22.72	23.00	1.067	0.501	/

11.15 WIFI 2.4GHz

Band	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
2.4G WIFI	Ant 3	11b	Left Cheek	0	11	2462	-0.13	0.276	16.42	17.00	1.143	97.09	1.030	0.325	/
2.4G WIFI	Ant 3	11b	Left Tilt	0	11	2462	-0.08	0.230	16.42	17.00	1.143	97.09	1.030	0.271	/
2.4G WIFI	Ant 3	11b	Right Cheek	0	11	2462	-0.14	0.101	16.42	17.00	1.143	97.09	1.030	0.119	/
2.4G WIFI	Ant 3	11b	Right Tilt	0	11	2462	0.04	0.100	16.42	17.00	1.143	97.09	1.030	0.118	/
2.4G WIFI	Ant 3	11b	Left Cheek	0	1	2412	-0.09	0.307	15.39	17.00	1.449	97.09	1.030	**0.458**	29#
2.4G WIFI	Ant 3	11b	Left Cheek	0	6	2437	-0.06	0.188	16.01	17.00	1.257	97.09	1.030	0.243	/
Body-worn&Hotspot															
2.4G WIFI	Ant 3	11b	Front Side	10	11	2437	0.11	0.015	16.42	17.00	1.143	97.09	1.030	0.017	/
2.4G WIFI	Ant 3	11b	Back Side	10	11	2437	0.04	0.018	16.42	17.00	1.143	97.09	1.030	0.021	/
2.4G WIFI	Ant 3	11b	Right Edge	10	11	2437	-0.07	0.002	16.42	17.00	1.143	97.09	1.030	0.002	/
2.4G WIFI	Ant 3	11b	Top Edge	10	11	2437	0.16	0.009	16.42	17.00	1.143	97.09	1.030	0.010	/
2.4G WIFI	Ant 3	11b	Back Side	10	1	2412	0.01	0.019	15.39	17.00	1.449	97.09	1.030	**0.028**	30#
2.4G WIFI	Ant 3	11b	Back Side	10	6	2462	-0.11	0.013	16.01	17.00	1.257	97.09	1.030	0.017	/

11.16 WIFI 5GHz

Band	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
5.3G WIFI	Ant 3	11a	Left Cheek	0	64	5320	-0.19	0.071	13.77	14.00	1.054	78.88	1.268	0.095	/
5.3G WIFI	Ant 3	11a	Left Tilt	0	64	5320	-0.10	0.081	13.77	14.00	1.054	78.88	1.268	0.108	/
5.3G WIFI	Ant 3	11a	Right Cheek	0	64	5320	-0.02	0.054	13.77	14.00	1.054	78.88	1.268	0.072	/
5.3G WIFI	Ant 3	11a	Right Tilt	0	64	5320	0.15	0.061	13.77	14.00	1.054	78.88	1.268	0.081	/
5.3G WIFI	Ant 3	11a	Left Tilt	0	52	5260	0.09	0.079	13.69	14.00	1.074	78.88	1.268	0.107	/
5.3G WIFI	Ant 3	11a	Left Tilt	0	60	5300	0.06	0.089	13.68	14.00	1.076	78.88	1.268	**0.121**	31#
Body-worn															
5.3G WIFI	Ant 3	11a	Front Side	10	64	5320	-0.10	0.030	13.77	14.00	1.054	78.88	1.268	0.040	/
5.3G WIFI	Ant 3	11a	Back Side	10	64	5320	0.06	0.041	13.77	14.00	1.054	78.88	1.268	0.055	/
5.3G WIFI	Ant 3	11a	Back Side	10	52	5260	0.08	0.044	13.69	14.00	1.074	78.88	1.268	**0.060**	32#
5.3G WIFI	Ant 3	11a	Back Side	10	60	5300	-0.15	0.043	13.68	14.00	1.076	78.88	1.268	0.059	/
Hotspot															
5.2G WIFI	Ant 3	11a	Front Side	10	44	5220	0.05	0.070	13.70	14.00	1.072	78.88	1.268	0.095	/
5.2G WIFI	Ant 3	11a	Back Side	10	44	5220	0.17	0.118	13.70	14.00	1.072	78.88	1.268	0.160	/
5.2G WIFI	Ant 3	11a	Right Edge	10	44	5220	0.14	0.002	13.70	14.00	1.072	78.88	1.268	0.003	/
5.2G WIFI	Ant 3	11a	Top Edge	10	44	5220	-0.11	0.082	13.70	14.00	1.072	78.88	1.268	0.112	/
5.2G WIFI	Ant 3	11a	Back Side	10	36	5180	0.08	0.122	13.58	14.00	1.102	78.88	1.268	**0.170**	33#
5.2G WIFI	Ant 3	11a	Back Side	10	48	5240	-0.01	0.089	13.67	14.00	1.079	78.88	1.268	0.121	/

Band	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Specific															
5.3G WIFI	Ant 3	11a	Front Side	0	64	5320	-0.11	0.033	13.77	14.00	1.054	78.88	1.268	0.044	/
5.3G WIFI	Ant 3	11a	Back Side	0	64	5320	-0.12	0.042	13.77	14.00	1.054	78.88	1.268	0.056	/
5.3G WIFI	Ant 3	11a	Right Edge	0	64	5320	0.07	0.003	13.77	14.00	1.054	78.88	1.268	0.004	/
5.3G WIFI	Ant 3	11a	Top Edge	0	64	5320	0.19	0.042	13.77	14.00	1.054	78.88	1.268	0.056	/
5.3G WIFI	Ant 3	11a	Top Edge	0	52	5260	0.06	0.055	13.69	14.00	1.074	78.88	1.268	**0.075**	34#
5.3G WIFI	Ant 3	11a	Top Edge	0	60	5300	0.19	0.043	13.68	14.00	1.076	78.88	1.268	0.059	/

Band	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
5.6G WIFI	Ant 3	11a	Left Cheek	0	140	5700	0.03	0.194	15.92	16.00	1.018	78.88	1.268	0.250	/
5.6G WIFI	Ant 3	11a	Left Tilt	0	140	5700	-0.17	0.187	15.92	16.00	1.018	78.88	1.268	0.242	/
5.6G WIFI	Ant 3	11a	Right Cheek	0	140	5700	-0.14	0.088	15.92	16.00	1.018	78.88	1.268	0.113	/
5.6G WIFI	Ant 3	11a	Right Tilt	0	140	5700	-0.14	0.086	15.92	16.00	1.018	78.88	1.268	0.111	/
5.6G WIFI	Ant 3	11a	Left Cheek	0	100	5500	0.09	0.270	15.06	16.00	1.242	78.88	1.268	**0.425**	35#
5.6G WIFI	Ant 3	11a	Left Cheek	0	116	5580	0.14	0.267	15.49	16.00	1.125	78.88	1.268	0.380	/
Body-worn															
5.6G WIFI	Ant 3	11a	Front Side	10	140	5700	0.14	0.014	15.92	16.00	1.018	78.88	1.268	0.018	/
5.6G WIFI	Ant 3	11a	Back Side	10	140	5700	0.06	0.024	15.92	16.00	1.018	78.88	1.268	0.031	/
5.6G WIFI	Ant 3	11a	Back Side	10	100	5500	0.09	0.037	15.06	16.00	1.242	78.88	1.268	0.058	36#
5.6G WIFI	Ant 3	11a	Back Side	10	116	5580	-0.16	0.028	15.49	16.00	1.125	78.88	1.268	0.040	/

Band	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Specific															
5.6G WIFI	Ant 3	11a	Front Side	0	140	5700	0.11	0.074	15.92	16.00	1.018	78.88	1.268	0.096	/
5.6G WIFI	Ant 3	11a	Back Side	0	140	5700	-0.04	0.103	15.92	16.00	1.018	78.88	1.268	0.133	/
5.6G WIFI	Ant 3	11a	Right Edge	0	140	5700	0.04	0.214	15.92	16.00	1.018	78.88	1.268	0.276	/
5.6G WIFI	Ant 3	11a	Top Edge	0	140	5700	0.06	0.112	15.92	16.00	1.018	78.88	1.268	0.145	/
5.6G WIFI	Ant 3	11a	Right Edge	0	100	5500	0.07	0.241	15.06	16.00	1.242	78.88	1.268	**0.379**	37#
5.6G WIFI	Ant 3	11a	Right Edge	0	116	5580	-0.19	0.227	15.49	16.00	1.125	78.88	1.268	0.324	/

Band	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
5.8G WIFI	Ant 3	11a	Left Cheek	0	157	5785	0.04	0.219	16.55	17.00	1.109	78.88	1.268	0.308	/
5.8G WIFI	Ant 3	11a	Left Tilt	0	157	5785	0.18	0.218	16.55	17.00	1.109	78.88	1.268	0.306	/
5.8G WIFI	Ant 3	11a	Right Cheek	0	157	5785	-0.16	0.101	16.55	17.00	1.109	78.88	1.268	0.143	/
5.8G WIFI	Ant 3	11a	Right Tilt	0	157	5785	0.10	0.099	16.55	17.00	1.109	78.88	1.268	0.139	/
5.8G WIFI	Ant 3	11a	Left Cheek	0	149	5745	0.09	0.274	16.45	17.00	1.135	78.88	1.268	**0.394**	38#
5.8G WIFI	Ant 3	11a	Left Cheek	0	165	5825	-0.16	0.233	16.54	17.00	1.112	78.88	1.268	0.328	/
Body-worn&Hotspot															
5.8G WIFI	Ant 3	11a	Front Side	10	157	5785	0.02	0.035	16.55	17.00	1.109	78.88	1.268	0.049	/
5.8G WIFI	Ant 3	11a	Back Side	10	157	5785	0.14	0.063	16.55	17.00	1.109	78.88	1.268	0.089	/
5.8G WIFI	Ant 3	11a	Right Edge	10	157	5785	0.11	0.074	16.55	17.00	1.109	78.88	1.268	0.104	/
5.8G WIFI	Ant 3	11a	Top Edge	10	157	5785	-0.17	0.048	16.55	17.00	1.109	78.88	1.268	0.067	/
5.8G WIFI	Ant 3	11a	Right Edge	10	149	5745	0.02	0.110	16.45	17.00	1.135	78.88	1.268	**0.158**	39#
5.8G WIFI	Ant 3	11a	Right Edge	10	165	5825	0.18	0.072	16.54	17.00	1.112	78.88	1.268	0.102	/

11.17 Bluetooth

Band	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Meas. Power (dBm)	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Bluetooth	Ant 3	DH5	Left Cheek	0	39	2441	0.18	0.091	6.63	7.50	1.222	77.41	1.292	0.144	/
Bluetooth	Ant 3	DH5	Left Tilt	0	39	2441	-0.12	0.074	6.63	7.50	1.222	77.41	1.292	0.117	/
Bluetooth	Ant 3	DH5	Right Cheek	0	39	2441	0.07	0.015	6.63	7.50	1.222	77.41	1.292	0.024	/
Bluetooth	Ant 3	DH5	Right Tilt	0	39	2441	-0.01	0.002	6.63	7.50	1.222	77.41	1.292	0.003	/
Bluetooth	Ant 3	DH5	Left Cheek	0	0	2402	0.09	0.109	6.41	7.50	1.285	77.41	1.292	**0.181**	40#
Bluetooth	Ant 3	DH5	Left Cheek	0	78	2480	0.02	0.074	6.23	7.50	1.340	77.41	1.292	0.128	/
Body-worn															
Bluetooth	Ant 3	DH5	Front Side	10	39	2441	0.05	0.032	6.63	7.50	1.222	77.41	1.292	0.051	/
Bluetooth	Ant 3	DH5	Back Side	10	39	2441	0.05	0.051	6.63	7.50	1.222	77.41	1.292	**0.081**	41#
Bluetooth	Ant 3	DH5	Right Edge	10	39	2441	0.13	0.002	6.63	7.50	1.222	77.41	1.292	0.003	/
Bluetooth	Ant 3	DH5	Top Edge	10	39	2441	0.10	0.015	6.63	7.50	1.222	77.41	1.292	0.024	/
Bluetooth	Ant 3	DH5	Back Side	10	0	2402	0.08	0.042	6.41	7.50	1.285	77.41	1.292	0.070	/
Bluetooth	Ant 3	DH5	Back Side	10	78	2480	0.01	0.039	6.23	7.50	1.340	77.41	1.292	0.068	/

11.18 Worse Case for LTE Band 38 (20MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head-Battery 2																	
LTEB38	Sensor ON	Ant 1	QPSK	Right Tilt	0	38150	2610	20	1	HIGH	0.15	0.584	14.53	16.00	1.403	**0.819**	42#

11.19 Worse Case for LTE Band 66 (20MHz Bandwidth)

Band	Sensor	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Band width	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Body-worn & Hotspot -Battery 2																	
LTEB66	Sensor ON	Ant 1	QPSK	Back Side	10	132572	1770	20	1	HIGH	0.05	0.594	18.05	19.00	1.245	**0.739**	43#

11.20 Worse Case for WIFI 5GHz

Band	Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Specific-Battery 2															
5.6G WIFI	Ant 3	11a	Right Edge	0	100	5500	0.06	0.236	15.06	16.00	1.242	78.88	1.268	**0.371**	44#

12 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Note 1: For 1g SAR, the highest measured 1g SAR is 0.711＜0.80 W/kg, repeated measurement is not required.
Note 2: For product specific 10g SAR, the highest measured 10g SAR is 1.15 < 2.0 W/kg, repeated measurement is not required.

13 SIMULTANEOUS TRANSMISSION

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

13.1 Simultaneous Transmission Mode Consider

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

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

13.2 Sum SAR of Simultaneous Transmission

Please refer the document “TI-EE26020341-AST.pdf”.

14 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1208	2024/08/19	2027/08/18
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2024/05/08	2027/05/07
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2024/05/08	2027/05/07
1950MHz Validation Dipole	Speag	D1950V3	SN: 1240	2024/08/22	2027/08/21
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2024/05/07	2027/05/06
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2024/05/08	2027/05/07
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2024/05/09	2027/05/08
Data Acquisition Electronics	Speag	DAE4	SN: 878	2025/03/05	2026/03/04
E-Field Probe	Speag	EX3DV4	SN: 7664	2025/06/30	2026/06/29
Signal Generator	Keysight	N5173B	MY62150163	2025/07/15	2026/07/14
Power Meter	R&S	NRVD-B2	835843/014	2025/07/15	2026/07/14
Power Sensor	R&S	NRV-Z4	100381	2025/07/15	2026/07/14
Power Sensor	R&S	NRV-Z2	100211	2025/07/15	2026/07/14
Wireless Communication Test Set	Anritsu	MT8820C	6201144551	2025/04/30	2026/04/29
Wireless Communication Test Set	R&S	CMW500	126646	2024/10/30	2025/10/29
Network Analyzer	Agilent	E5071C	MY46103472	2024/09/11	2025/09/10
Thermometer	Elitech	RC-4HC	EF7216002985	2024/10/31	2025/10/30
Thermometer	Elitech	RC-4HC	EF720B004811	2024/10/31	2025/10/30
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: 1576	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
Data Acquisition Electronics	Speag	DAE4	SN: 1711	2025/11/11	2026/11/10
E-Field Probe	Speag	EX3DV4	SN: 7510	2025/11/11	2026/11/10
Network Analyzer	Agilent	E5071C	MY46103472	2025/08/13	2026/08/12
Wireless Communication Test Set	R&S	CMW500	126646	2025/09/15	2026/09/14
Thermometer	Elitech	RC-4HC	EF7216002985	2025/10/30	2026/10/29
Thermometer	Elitech	RC-4HC	EF720B004811	2025/09/16	2026/09/15

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

1. There is no physical damage on the dipole;
2. System validation with specific dipole is within 10% of calibrated value;
3. Return-loss in within 20% of calibrated measurement.
4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

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

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (℃)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ε)	Target Conductivity (σ) (S/m)	Target Permittivity (ε)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2025.08.05	Head	750	21.4	0.90	41.90	0.89	41.94	1.12	-0.10
2025.08.06	Head	835	21.5	0.91	41.67	0.90	41.50	1.11	0.41
2025.08.07	Head	835	21.5	0.89	42.00	0.90	41.50	-1.11	1.20
2025.08.08	Head	835	22.3	0.91	41.55	0.90	41.50	1.11	0.12
2025.08.09	Head	1750	21.5	1.37	40.07	1.37	40.08	0.00	-0.03
2025.08.10	Head	1750	21.8	1.42	38.09	1.37	40.08	3.65	-4.97
2025.08.11	Head	1750	21.8	1.40	39.63	1.37	40.08	2.19	-1.12
2025.08.12	Head	1950	22.1	1.41	39.63	1.40	40.00	0.71	-0.93
2025.08.13	Head	1950	22.1	1.46	38.62	1.40	40.00	4.29	-3.45
2025.08.09	Head	2450	21.5	1.83	39.41	1.80	39.20	1.67	0.54
2025.08.15	Head	2600	22.4	1.93	38.65	1.96	39.01	-1.53	-0.92
2025.08.16	Head	2600	21.3	1.97	38.39	1.96	39.01	0.51	-1.59
2025.08.17	Head	2600	21.9	1.97	38.56	1.96	39.01	0.51	-1.15
2025.08.18	Head	5250	21.4	4.71	35.80	4.71	35.93	0.00	-0.36
2025.08.19	Head	5600	21.9	5.17	34.48	5.07	35.53	1.97	-2.96
2025.08.20	Head	5750	21.5	5.18	35.53	5.22	35.36	-0.77	0.48
2026.03.13	Head	1750	21.8	1.35	40.66	1.37	40.08	-1.46	1.45
2026.03.13	Head	2600	21.8	1.93	39.83	1.96	39.01	-1.53	2.10
2026.03.13	Head	5600	21.8	4.95	36.07	5.07	35.53	-2.37	1.52
Note: The tolerance limit of Conductivity and Permittivity is± 5%.									

ANNEX B SYSTEM CHECK RESULT

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

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2025.08.05	Head	750	100	0.833	8.33	8.46	-1.54
2025.08.06	Head	835	100	0.899	8.99	9.74	-7.70
2025.08.07	Head	835	100	0.955	9.55	9.74	-1.95
2025.08.08	Head	835	100	1.010	10.10	9.74	3.70
2025.08.09	Head	1750	100	3.540	35.40	37.00	-4.32
2025.08.10	Head	1750	100	3.580	35.80	37.00	-3.24
2025.08.11	Head	1750	100	3.720	37.20	37.00	0.54
2025.08.12	Head	1950	100	4.180	41.80	41.70	0.24
2025.08.13	Head	1950	100	4.190	41.90	41.70	0.48
2025.08.09	Head	2450	100	5.550	55.50	52.60	5.51
2025.08.15	Head	2600	100	5.580	55.80	55.90	-0.18
2025.08.16	Head	2600	100	5.610	56.10	55.90	0.36
2025.08.17	Head	2600	100	5.490	54.90	55.90	-1.79
2025.08.18	Head	5250	100	7.730	77.30	77.70	-0.51
2025.08.19	Head	5600	100	8.140	81.40	81.30	0.12
2025.08.20	Head	5750	100	7.630	76.30	77.60	-1.68
2026.03.13	Head	1750	100	3.860	38.60	37.00	4.32
2026.03.13	Head	2600	100	5.740	57.40	55.90	2.68
Note: The tolerance limit of System validation ±10%.							

Head liquid 10g

Date	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2025.08.18	5250	100	2.250	22.50	22.00	2.27
2025.08.19	5600	100	2.330	23.30	23.10	0.87
2026.03.13	5600	100	2.250	22.50	23.10	-2.60
Note: The tolerance limit of System validation ±10%.						

Please refer the document “TI-EE26020341-ASC.pdf”.

ANNEX C TEST DATA

Please refer the document “TI-EE26020341-ATD.pdf”.

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “Ti-EE26020341-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “TI-EE26020341-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “TI-EE26020341-AS.pdf”.

ANNEX G TUNE-UP PROCEDURE

Please refer the document “TI-EE26020341-AT.pdf”.

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