SAR Test Report

Report No.: AGC14246240701FH01

FCC ID	:	2AQRMA56
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	Smart phone
BRAND NAME	:	FOXX
MODEL NAME	:	A56
APPLICANT	:	Foxx Development Inc.
DATE OF ISSUE	:	Jul. 26, 2024
STANDARD(S)	:	IEEE Std. 1528:2013 FCC 47 CFR Part 2§2.1093 IEEE Std C95.1 ™-2005
REPORT VERSION	:	V1.0

Attestation of Global Compliance(Shenzhen) Co., Ltd.

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jul. 26, 2024	Valid	Initial Release

Test Report

Applicant Name	Foxx Development Inc.
Applicant Address	3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005，USA
Manufacturer Name	Foxx Development Inc.
Manufacturer Address	3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005，USA
Factory Name	N/A
Factory Address	N/A
Product Designation	Smart phone
Brand Name	FOXX
Model Name	A56 (SIM 1 and SIM 2 is a chipset unit and tested as single chipset, SIM 1 is used to tested.)
EUT Voltage	DC3.8V by battery
Applicable Standard	IEEE Std. 1528:2013 FCC 47 CFR Part 2§2.1093 IEEE Std C95.1 ™-2005
Date of receipt of test item	Jul. 12, 2024
Test Date	Jul. 12, 2024 to Jul. 19, 2024
Report Template	AGCRT-US-4G/SAR (2021-04-20)

Note: The results of testing in this report apply to the product/system which was tested only.

Prepared By Thea Huang

Thea Huang(Project Engineer) Jul. 26, 2024

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1. SUMMARY OF MAXIMUM SAR VALUE

The maximum results of Specific Absorption Rate (SAR) found during testing for EUT are as follows:

Frequency Band	Highest Reported 1g-SAR(W/kg)			SAR Test Limit (W/kg)
	Head	Body-worn(with 10mm separation)	Hotspot(with 10mm separation)	
GSM 850	0.251	0.329	0.329	1.6
PCS 1900	0.596	0.147	0.147	
UMTS Band II	1.107	0.333	0.333	
UMTS Band IV	0.541	0.195	0.195	
UMTS Band V	0.303	0.317	0.317	
LTE Band 2	1.269	0.293	0.293	
LTE Band 4	0.746	0.230	0.230	
LTE Band 5	0.200	0.233	0.233	
LTE Band 12	0.143	0.328	0.328	
LTE Band 17	0.118	0.201	0.201	
LTE Band 25	1.190	0.375	0.375	
LTE Band 26a	0.336	0.372	0.372	
LTE Band 26b	0.307	0.344	0.344	
LTE Band 41	0.139	0.271	0.271	
LTE Band 66	0.705	0.184	0.184	
LTE Band 71	0.104	0.249	0.249	
WIFI 2.4G	0.057	0.046	0.046	
Simultaneous Reported SAR	1.400			
SAR Test Result	PASS			

This device is compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6W/kg) specified in IEEE Std. 1528:2013; FCC 47CFR § 2.1093; IEEE/ANSI C95.1:2005 and the following specific FCC Test Procedures:

- KDB 447498 D01 General RF Exposure Guidance v06
- KDB 648474 D04 Handset SAR v01r03
- KDB 865664 D01 SAR Measurement 100MHz to 6GHz v01r04
- KDB 941225 D01 3G SAR Procedures v03r01
- KDB 941225 D06 Hotspot Mode v02r01
- KDB 248227 D01 802 11 Wi-Fi SAR v02r02
- KDB 941225 D05 SAR for LTE Devices v02r05

2. GENERAL INFORMATION

2.1. EUT Description

General Information	
Product Designation	Smart phone
Test Model	A56
Sample ID	240712107
Hardware Version	E64D_V1.0
Software Version	Android_FOXXD_A56_V1.0
Device Category	Portable
RF Exposure Environment	Uncontrolled
Antenna Type	Internal
GSM and GPRS& EGPRS	
Support Band	☒GSM 850 ☒PCS 1900 ☐GSM 900 ☐DCS 1800
GPRS & EGPRS Type	Class B
GPRS & EGPRS Class	Class 12(1Tx+4Rx, 2Tx+3Rx, 3Tx+2Rx, 4Tx+1Rx)
TX Frequency Range	GSM 850 : 820-850MHz; PCS 1900: 1850-1910MHz;
RX Frequency Range	GSM 850 : 869~894MHz; PCS 1900: 1930~1990MHz
Release Version	R99
Type of modulation	GMSK for GSM/GPRS; GMSK & 8-PSK for EGPRS
Antenna Gain	GSM850: 0.3dBi; PCS1900: 1.85dBi
Max. Conducted Power	GSM850: 32.95dBm; PCS1900: 29.32 dBm
WCDMA	
Support Band	☒UMTS FDD Band II ☒UMTS FDD Band V ☒UMTS FDD Band IV ☐UMTS FDD Band I ☐UMTS FDD Band III ☐UMTS FDD Band VIII
HS Type	HSPA(HSUPA/HSDPA)
TX Frequency Range	FDD Band II: 1850-1910MHz; FDD Band V: 824-849MHz FDD Band IV: 1710-1770MHz
RX Frequency Range	FDD Band II: 1930-1990MHz; FDD Band V: 869-894MHz FDD Band IV: 2110-2170MHz
Release Version	Release 6 and later
Type of modulation	HSDPA:QPSK/16QAM; HSUPA:BPSK; WCDMA:QPSK
Antenna Gain	Band II: 1.85dBi; Band IV: 1.35dBi; Band V: 0.3dBi
Max. Conducted Power	Band II: 22.49dBm; Band IV: 22.54dBm; Band V: 22.78dBm
Bluetooth	
Bluetooth Version	☒V4.2
Operation Frequency	2402~2480MHz
Type of modulation	☒GFSK ☒Π/4-DQPSK ☒8-DPSK
Max. Peak Conducted Power	4.35dBm
Antenna Gain	2.37dBi
WIFI	
WIFI Specification	☐802.11a ☒802.11b ☒802.11g ☒802.11n(20) ☐802.11n(40)
Operation Frequency	2412~2462MHz
Max. Peak Conducted Power	11b:15.78dBm,11g:14.7dBm,11n(20):12.99dBm
Antenna Gain	2.37dBi

EUT Description(Continue)

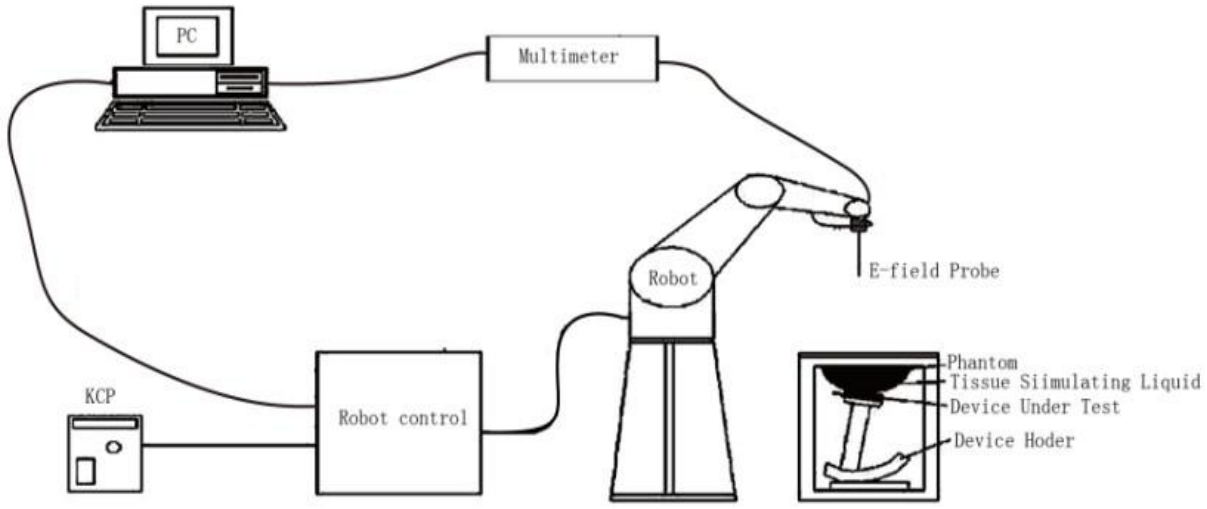
LTE	
Support Band	☒FDD Band 2 ☒FDD Band 4 ☒FDD Band 5 ☒FDD Band 12 ☒FDD Band 17 ☒FDD Band 25 ☒FDD Band 26 ☒TDD Band 41 ☒FDD Band 66 ☒FDD Band 71
TX Frequency Range	Band 2:1850-1910MHz; Band 4:1710-1755MHz;Band 5:824-849MHz; Band 7:2500-2570MHz; Band 12:699-716MHz; Band 17: 704-716MHz; Band 25: 1850-1915MHz; Band 26a: 824-849MHz; Band 26b: 814-824MHz; Band 41:2496-2690MHz; Band 66:1700-1780MHz; Band 71:663-698MHz
RX Frequency Range	Band 2:1930-1990MHz; Band 4:2110-2155MHz; Band 5:869-894MHz; Band 7:2620-2690MHz; Band 12: 729-746 MHz; Band 17: 734-746 MHz; Band 25: 1930-1995MHz; Band 26a: 869-894MHz; Band 26b: 859-869MHz; Band 41:2496-2690MHz; Band 66:2110-2200MHz; Band 71:617-652MHz
Type of modulation	QPSK, 16QAM
Antenna Gain	Band 2: 1.85dBi; Band 4: 1.35Bi; Band 5: 0.3dBi; Band 12: -0.25dBi; Band 17: -0.25dBi; Band 25: 1.85dBi; Band 26a: 0.3dBi; Band 26b: 0.3dBi; Band 41: 2.19dBi; Band 66: 1.35dBi; Band 71: -0.25dBi;
Max. Conducted Power	Band 2: 23.41dBm; Band 4: 23.31dBm; Band 5: 23.38dBm; Band 12: 22.73dBm; Band 17: 22.77 dBm; Band 25: 23.34dBm; Band 26a: 23.37dBm; Band 26b: 23.21 dBm; Band 41: 22.88dBm; Band 66: 23.26dBm; Band 71: 23.21dBm;
Accessories	
Battery	Brand name: FOXX Model No. : A55 Voltage and Capacitance: 3.8 V & 2000mAh
Earphone	Brand name: N/A Model No. : N/A

Note:1.CMU200 can measure the average power and Peak power at the same time
2.The sample used for testing is end product.
3. The test sample has no any deviation to the test method of standard mentioned in page 1.

Product	Type
	☒ Production unit ☐ Identical Prototype

3. SAR MEASUREMENT SYSTEM

3.1. The SATIMO system used for performing compliance tests consists of following items



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

- The PC. It controls most of the bench devices and stores measurement data.A computer running WinXP and the Opensar software.
- The E-Field probe. The probe is a 3-axis system made of 3 distinct dipoles. Each dipole returns a voltage in function of the ambient electric field.
- The Keithley multimeter measures each probe dipole voltages.
- The SAM phantom simulates a human head. The measurement of the electric field is made inside the phantom.
- The liquids simulate the dielectric properties of the human head tissues.
- The network emulator controls the mobile phone under test.
- The validation dipoles are used to measure a reference SAR. They are used to periodically check the bench to make sure that there is no drift of the system characteristics over time.
- The phantom, the device holder and other accessories according to the targeted measurement.

3.2. COMOSAR E-Field Probe

The SAR measurement is conducted with the dosimetric probe manufactured by SATIMO. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. SATIMO conducts the probe calibration in compliance with international and national standards (e.g. IEEE 1528 and relevant KDB files.) The calibration data are in Appendix D.

Isotropic E-Field Probe Specification

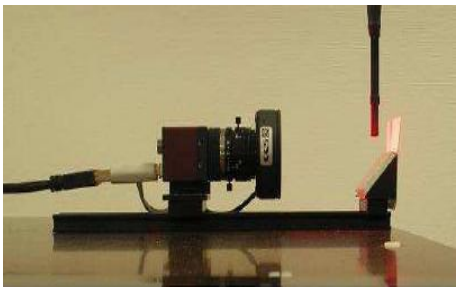
Model	SSE2	
Manufacture	MVG	
Identification No.	2023-EPGO-414	
Frequency	0.15GHz-7.5GHz Linearity:±0.08dB(0.15GHz-7.5GHz)	
Dynamic Range	0.01W/kg-100W/kg Linearity:±0.08dB	
Dimensions	Overall length:330mm Length of individual dipoles:2mm Maximum external diameter:8mm Probe Tip external diameter:2.5mm Distance between dipoles/ probe extremity:1mm	
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precisin of better 30%.	

3.3. Robot

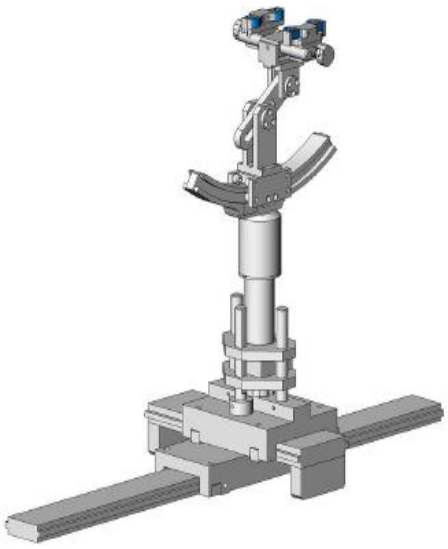
The COMOSAR system uses the KUKA robot from SATIMO SA (France).For the 6-axis controller COMOSAR system, the KUKA robot controller version from SATIMO is used.
The XL robot series have many features that are important for our application:

- High precision (repeatability 0.02 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)
- 6-axis controller

3.4. Video Positioning System

The video positioning system is used in OpenSAR to check the probe. Which is composed of a camera, LED, mirror and mechanical parts.The camera is piloted by the main computer with firewire link. During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip. The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.	

3.5. Device Holder

The COMOSAR device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR). Thus the device needs no repositioning when changing the angles. The COMOSAR device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity εr =3 and loss tangent δ = 0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.	

3.6. SAM Twin Phantom

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region where shell thickness increases to 6mm). It has three measurement areas: Left head Right head Flat phantom	

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. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

4. SAR MEASUREMENT PROCEDURE

4.1. Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in 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 occupational/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 given mass density (ρ). The equation description is as below:

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

SAR is expressed in units of Watts per kilogram (W/kg)
SAR can be obtained using either of the following equations:

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

$$SAR = c_h \left.\frac{dT}{dt}\right|_{t=0}$$

Where

SAR	is the specific absorption rate in watts per kilogram;
E	is the r.m.s. value of the electric field strength in the tissue in volts per meter;
σ	is the conductivity of the tissue in siemens per metre;
ρ	is the density of the tissue in kilograms per cubic metre;
c_h	is the heat capacity of the tissue in joules per kilogram and Kelvin;
$\frac{dT}{dt} \mid t = 0$	is the initial time derivative of temperature in the tissue in kelvins per second

4.2. SAR Measurement Procedure

Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurement are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface is 2.7mm This distance cannot be smaller than the distance os sensor calibration points to probe tip as `defined in the probe properties,

Step 2: Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in SATIMO software can find the maximum locations even in relatively coarse grids. When an Area Scan has measured all reachable points, it computes the field maximal found in the scanned area, within a range of the global maximum. The range (in db) is specified in the standards for compliance testing. For example, a 2db range is required in IEEE Standard 1528 standards, whereby 3db is a requirement when compliance is assessed in accordance with the ARIB standard (Japan) If one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximum are detected, the number of Zoom Scan has to be increased accordingly.

Area Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100MHz to 6GHz

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

Step 3: Zoom Scan

Zoom Scan are used to assess the peak spatial SAR value within a cubic average volume containing 1g abd 10g of simulated tissue. The Zoom Scan measures points(refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1g and 10g and displays these values next to the job's label.

Zoom Scan Parameters extracted from KDB865664 d01 SAR Measurement 100MHz to 6GHz

Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* 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 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

Step 4: Power Drift Measurement

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the same settings. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as Step 1.

4.3. RF Exposure Conditions

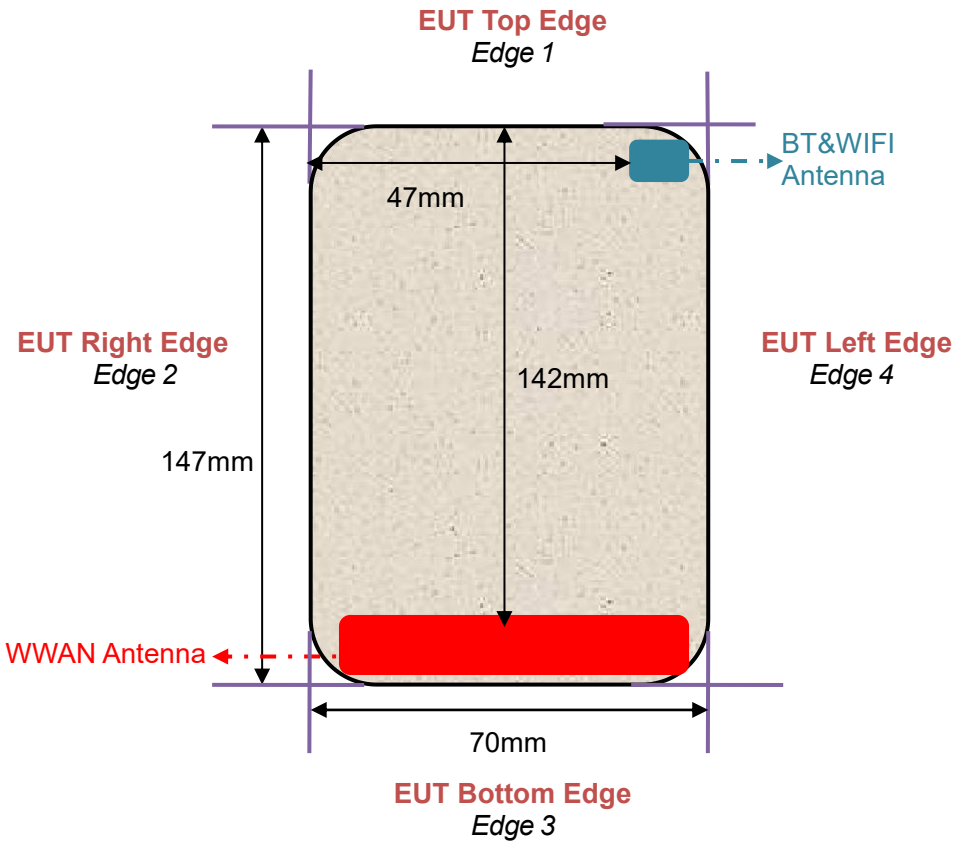
Test Configuration and setting:

The EUT is a model of GSM Portable Mobile Station (MS). It supports GSM/GPRS/EGPRS, WCDMA/HSPA, LTE, BT, WIFI, and support hot spot mode.

For WWAN SAR testing, the device was controlled by using a base station emulator. Communication between the device and the emulator were established by air link. The distance between the EUT and the antenna is larger than 50cm, and the output power radiated from the emulator antenna is at least 30db smaller than the output power of EUT.

For WLAN testing, the EUT is configured with the WLAN continuous TX tool through engineering command.

Antenna Location: (the back view)



For WWAN mode:

Test Configurations	Antenna to edges/surface	SAR required	Note
Head			
Left Touch		Yes	--
Left Tilt		Yes	--
Right Touch		Yes	--
Right Tilt		Yes	--
Body			
Back	<25mm	Yes	--
Front	<25mm	Yes	--
Hotspot			
Back	<25mm	Yes	--
Front	<25mm	Yes	--
Edge 1 (Top)	142mm	No	SAR is not required for the distance between the antenna and the edge is >25mm as per KDB 941225 D06 Hotspot SAR
Edge 2 (Right)	8mm	Yes	--
Edge 3 (Bottom)	2mm	Yes	--
Edge 4 (Left)	7mm	Yes	--

For WLAN mode:

Test Configurations	Antenna to edges/surface	SAR required	Note
Head			
Left Touch		Yes	--
Left Tilt		Yes	--
Right Touch		Yes	--
Right Tilt		Yes	--
Body			
Back	<25mm	Yes	--
Front	<25mm	Yes	--
Hotspot			
Back	<25mm	Yes	--
Front	<25mm	Yes	--
Edge 1 (Top)	2mm	Yes	--
Edge 2 (Right)	47mm	No	SAR is not required for the distance between the antenna and the edge is >25mm as per KDB 941225 D06 Hotspot SAR
Edge 3 (Bottom)	118mm	No	SAR is not required for the distance between the antenna and the edge is >25mm as per KDB 941225 D06 Hotspot SAR
Edge 4 (Left)	2mm	Yes	--

5. TISSUE 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 15cm. For head SAR testing the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15cm For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15cm.The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 10% are listed in 6.2

5.1. The composition of the tissue simulating liquid

Ingredient (% Weight) / Frequency (MHz)	Water	Nacl	Polysorbate 20	DGBE	1,2 Propanediol	Triton X-100
750 Head	35	2	0.0	0.0	63	0.0
835 Head	50.36	1.25	48.39	0.0	0.0	0.0
1750 Head	52.64	0.36	0.0	47	0.0	0.0
1900 Head	54.9	0.18	0.0	44.92	0.0	0.0
2450 Head	71.88	0.16	0.0	7.99	0.0	19.97
2600 Head	55.242	0.306	0	44.452	0	0

5.2. Tissue Dielectric Parameters for Head and Body Phantoms

The head and body tissue dielectric parameters recommended by the IEEE Std. 1528 have been incorporated in the following table.

Target Frequency (MHz)	head		body	
	εr	σ (S/m)	εr	σ (S/m)
300	45.3	0.87	45.3	0.87
450	43.5	0.87	43.5	0.87
750	**41.9**	**0.89**	**41.9**	**0.89**
835	**41.5**	**0.90**	**41.5**	**0.90**
900	41.5	0.97	41.5	0.97
915	41.5	1.01	41.5	1.01
1450	40.5	1.20	40.5	1.20
1610	40.3	1.29	40.3	1.29
1750	**40.1**	**1.37**	**40.1**	**1.37**
1800 – 2000	**40.0**	**1.40**	**40.0**	**1.40**
2300	39.5	1.67	39.5	1.67
2450	**39.2**	**1.80**	**39.2**	**1.80**
2600	**39.0**	**1.96**	**39.0**	**1.96**
3000	38.5	2.40	38.5	2.40

(εr = relative permittivity, σ = conductivity and ρ = 1000 kg/m3

5.3. Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using SATIMO Dielectric Probe Kit and R&S Network Analyzer ZVL6.

Tissue Stimulant Measurement for 750MHz					
	Fr. (MHz)	Dielectric Parameters (±10%)		Tissue Temp [°C]	Test time
		εr 41.9 (37.71-46.09)	δ[s/m] 0.89(0.801-0.979)		
Head	683	45.39	0.86	21.6	Jul. 15, 2024
	707.5	44.62	0.89		
	710	43.26	0.90		
	750	42.17	0.92		

Tissue Stimulant Measurement for 835MHz					
	Fr. (MHz)	Dielectric Parameters (±10%)		Tissue Temp [°C]	Test time
		εr 41.5 (37.35-45.65)	δ[s/m] 0.90(0.81-0.99)		
Head	819	42.36	0.95	21.9	Jul. 12, 2024
	835	41.42	0.92		
	836.4	40.66	0.95		
	836.5	40.66	0.95		
	836.6	40.66	0.95		

Tissue Stimulant Measurement for 1750MHz					
	Fr. (MHz)	Dielectric Parameters (±10%)		Tissue Temp [°C]	Test time
		εr 40.1 (36.09-44.11)	δ[s/m]1.37(1.233-1.507)		
Head	1732.4	40.36	1.36	19.9	Jul. 19, 2024
	1732.5	40.36	1.36		
	1750	39.70	1.39		
	1755	38.61	1.41		

Tissue Stimulant Measurement for 1900MHz					
	Fr. (MHz)	Dielectric Parameters (±10%)		Tissue Temp [°C]	Test time
		εr40.00(36.00-44.00)	δ[s/m]1.40(1.26-1.54)		
Head	1852.4	43.72	1.33	20.9	Jul. 16, 2024
	1860	42.69	1.34		
	1880	41.73	1.36		
	1882.5	40.36	1.37		
	1900	39.54	1.39		
	1905	38.69	1.41		
	1907.6	38.21	1.43		

Tissue Stimulant Measurement for 2450MHz					
Head	Fr. (MHz)	Dielectric Parameters (±10%)		Tissue Temp [°C]	Test time
		εr39.2(35.28-43.12)	δ[s/m]1.80(1.62-1.98)		
	2412	40.29	1.83	20.5	Jul. 17, 2024
	2450	39.34	1.85		

Tissue Stimulant Measurement for 2600MHz					
Head	Fr. (MHz)	Dielectric Parameters (±10%)		Tissue Temp [°C]	Test time
		εr39(35.1-42.9)	δ[s/m]1.96(1.764-2.156)		
	2535	41.68	1.93	20.1	Jul. 18, 2024
	2593	40.19	1.96		
	2600	39.69	1.98		

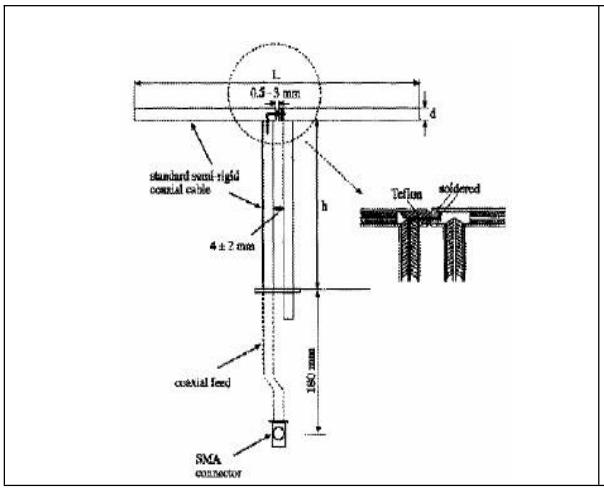
6. SAR SYSTEM CHECK PROCEDURE

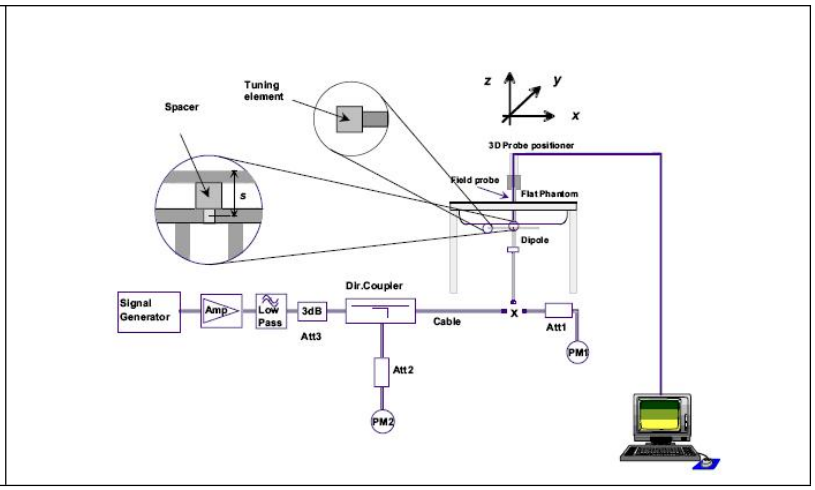
6.1. SAR System Check Procedures

SAR system check is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device. The same SAR probe(s) and tissue-equivalent media combinations used with each specific SAR system for system verification must be used for device testing. When multiple probe calibration points are required to cover substantially large transmission bands, independent system verifications are required for each probe calibration point. A system verification must be performed before each series of SAR measurements using the same probe calibration point and tissue-equivalent medium. Additional system verification should be considered according to the conditions of the tissue-equivalent medium and measured tissue dielectric parameters, typically every three to four days when the liquid parameters are remeasured or sooner when marginal liquid parameters are used at the beginning of a series of measurements.

Each SATIMO system is equipped with one or more system check kits. These units, together with the predefined measurement procedures within the SATIMO software, enable the user to conduct the system check and system validation. System kit includes a dipole, and dipole device holder.

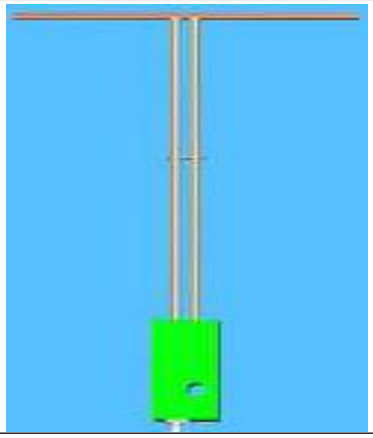
The system check verifies that the system operates within its specifications. It's performed daily or before every SAR measurement. The system check uses normal SAR measurement in the flat section of the phantom with a matched dipole at a specified distance. The system check setup is shown as below.





6.2. SAR System Check

6.2.1. Dipoles



The dipoles used is based on the IEEE-1528 standard, and is complied with mechanical and electrical specifications in line with the requirements of IEEE. the table below provides details for the mechanical and electrical
Specifications for the dipoles.

Frequency	L (mm)	h (mm)	d (mm)
750MHz	176	100	6.35
835MHz	161.0	89.8	3.6
1800MHz	71.6	41.7	3.6
1900MHz	68	39.5	3.6
2450MHz	51.5	30.4	3.6
2600MHz	48.5	28.8	3.6

6.2.2. System Check Result

System Performance Check at 750MHz&835MHz &1800MHz &1900MHz &2450MHz&2600MHz for Head Validation Kit: SN 22/16 DIP 0G750-417& SN 15/16 DIP 0G835-399& SN 46/11 DIP 1G800-186& SN 29/15 DIP 1G900-389& SN 29/15 DIP 2G450-393& SN 22/16 DIP 2G600-407								
Frequency [MHz]	Target Value(W/kg)		Reference Result (± 10%)		Tested Value(W/kg)		Tissue Temp. [°C]	Test time
	1g	10g	1g	10g	1g	10g		
750	8.33	5.44	7.497-9.163	4.896-5.984	8.21	5.19	21.6	Jul. 15, 2024
835	9.67	6.14	8.703-10.637	5.526-6.754	10.04	6.21	21.9	Jul. 12, 2024
1800	37.76	19.60	33.984-41.536	17.640-21.560	38.33	19.39	19.9	Jul. 19, 2024
1900	41.26	20.86	37.134-45.386	18.774-22.946	39.62	19.99	20.9	Jul. 16, 2024
2450	54.32	24.25	48.888-59.752	21.825-26.675	54.21	24.28	20.5	Jul. 17, 2024
2600	54.94	23.77	49.446-60.434	21.393-26.147	54.92	24.01	20.1	Jul. 18, 2024

Note:
(1) We use a CW signal of 18dBm for system check, and then all SAR value are normalized to 1W forward power. The result must be within ±10% of target value.

7. EUT TEST POSITION

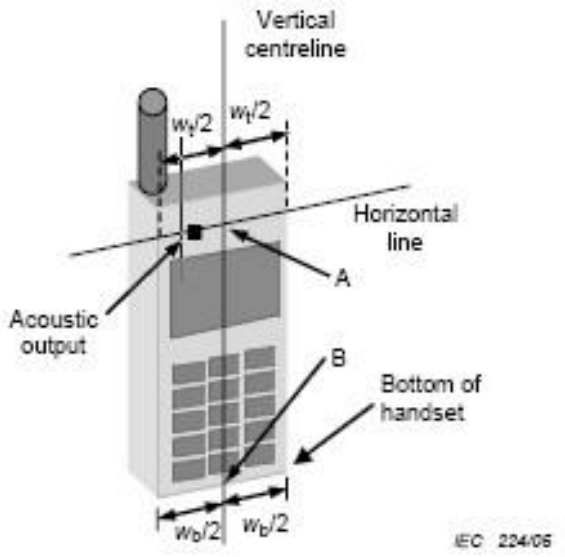
This EUT was tested in **Right Cheek, Right Tilted, Left Cheek, Left Tilted, Body back, Body front and 4 edges.**

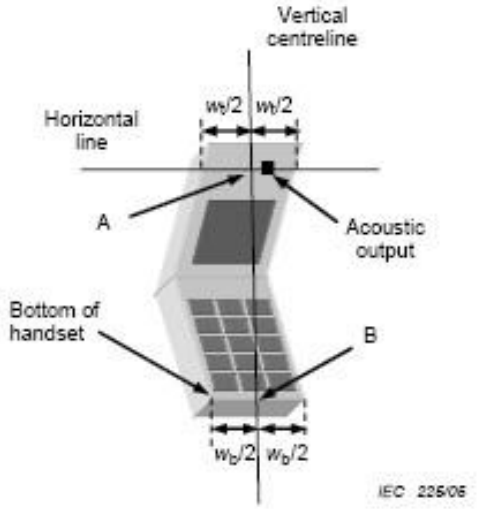
7.1. Define Two Imaginary Lines on the Handset

(1)The vertical centerline passes through two points on the front side of the handset the midpoint of the width wt of the handset at the level of the acoustic output, and the midpoint of the width wb of the handset.

(2)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.

(3)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 centerline is not necessarily to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.





7.2. Cheek Position

(1) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center picec 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 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.

(2) To move the device towards the phantom with the ear piece aligned with the the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with 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

7.3. Tilt Position

(1) To position the device in the “cheek” position described above.

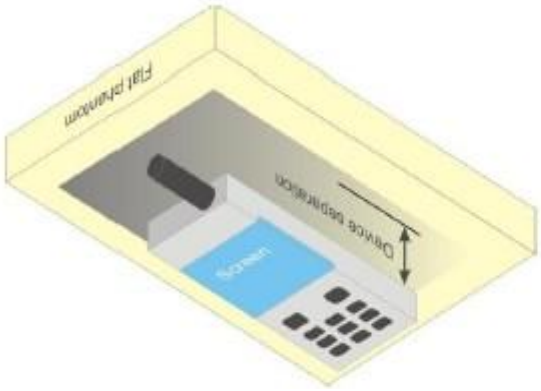
(2) While maintaining the device in the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until with the ear is lost.

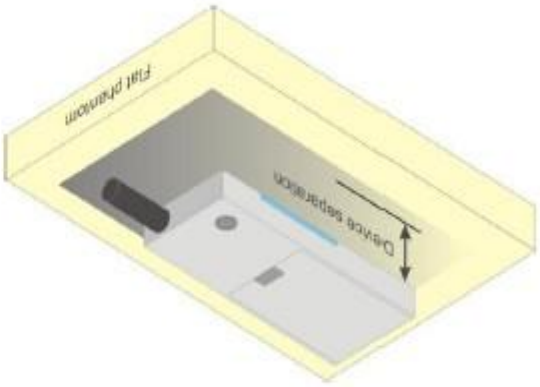
7.4. Body Worn Position

(1) To position the EUT parallel to the phantom surface.

(2) To adjust the EUT parallel to the flat phantom.

(3) To adjust the distance between the EUT surface and the flat phantom to **10mm.**





8. SAR EXPOSURE LIMITS

Limits for General Population/Uncontrolled Exposure (W/kg)

Type Exposure	Uncontrolled Environment Limit (W/kg)
Spatial Peak SAR (1g cube tissue for brain or body)	1.60
Spatial Average SAR (Whole body)	0.08
Spatial Peak SAR (Limbs)	4.0

9. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

10. TEST EQUIPMENT LIST

Equipment description	Manufacturer/ Model	Identification No.	Software version	Current calibration date	Next calibration date
SAR Probe	MVG	2023-EPGO-414	N/A	Apr. 30, 2024	Apr. 29, 2025
Phantom	SATIMO	SN_4511_SAM90	N/A	Validated. No cal required.	Validated. No cal required.
Liquid	SATIMO	N/A	N/A	Validated. No cal required.	Validated. No cal required.
Comm Tester	Agilent-8960	GB46200384	N/A	May 28, 2024	May 27, 2025
Comm Tester	R&S- CMW500	121209	V3.7.40	May 23, 2024	May 22, 2025
Multimeter	Keithley 2000	1350784	N/A	May 24, 2024	May 23, 2025
SAR Software	SATIMO-OpenSAR	N/A	OpenSAR V4_02_32	N/A	N/A
Dipole	SATIMO SID750	SN 22/16 DIP 0G750-417	N/A-	Apr. 28, 2022	Apr. 27, 2025
Dipole	SATIMO SID835	SN 15/16 DIP 0G835-399	N/A	Apr. 28, 2022	Apr. 27, 2025
Dipole	SATIMO SID1800	SN 46/11 DIP 1G800-186	N/A	Apr. 28, 2022	Apr. 27, 2025
Dipole	SATIMO SID1900	SN 29/15 DIP 1G900-389	N/A	Apr. 28, 2022	Apr. 27, 2025
Dipole	SATIMO SID2450	SN 29/15 DIP 2G450-393	N/A	Apr. 28, 2022	Apr. 27, 2025
Dipole	SATIMO SID2600	SN 22/16 DIP 2G600-407	N/A	Apr. 28, 2022	Apr. 27, 2025
Signal Generator	Agilent-E4438C	US41461365	V5.03	May 24, 2024	May 23, 2025
EXA Signal Analyzer	Agilent / N9010A	MY53470504	N/A	May 28, 2024	May 27, 2025
Network Analyzer	Rhode & Schwarz ZVL6	SN101443	3.2	Sep. 21, 2023	Sep. 20, 2024
Attenuator	Warison /WATT-6SR1211	S/N:WRJ34AYM2F1	N/A	June 06, 2024	June 05, 2025
Attenuator	Mini-circuits / VAT-10+	31405	N/A	June 06, 2024	June 05, 2025
Amplifier	AS0104-55_55	1004793	N/A	N/A	N/A
Directional Couple	Werlatone/ C5571-10	SN99463	N/A	Feb. 01, 2024	Jan. 31, 2026
Directional Couple	Werlatone/ C6026-10	SN99482	N/A	Feb. 01, 2024	Jan. 31, 2026
Power Sensor	NRP-Z21	1137.6000.02	N/A	Sep. 05, 2023	Sep. 04, 2024
Power Sensor	NRP-Z23	100323	N/A	Jun. 05, 2024	Jun. 04, 2025
Power Viewer	R&S	V2.3.1.0	N/A	N/A	N/A
Calibration standard parts for network sub - port	R&S/ ZV-Z132	N/A	V2.3.1.0	Nov. 11, 2023	Nov. 10, 2024

Note: Per KDB 865664 Dipole SAR Validation, AGC Lab has adopted 3 years calibration intervals. 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 is within 20% of calibrated measurement;
4. Impedance is within 5Ω of calibrated measurement.

11. MEASUREMENT UNCERTAINTY

SATIMO Uncertainty- 2023-EPGO-414 Measurement uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
Measurement System									
Probe calibration	E.2.1	7.000	N	1	1	1	7.000	7.000	∞
Axial Isotropy	E.2.2	0.090	R	√3	√0.5	√0.5	0.037	0.037	∞
Hemispherical Isotropy	E.2.2	0.090	R	√3	√0.5	√0.5	0.037	0.037	∞
Boundary effect	E.2.3	1.000	R	√3	1	1	0.577	0.577	∞
Linearity	E.2.4	0.890	R	√3	1	1	0.514	0.514	∞
System detection limits	E.2.4	1.000	R	√3	1	1	0.577	0.577	∞
Modulation response	E2.5	3.000	R	√3	1	1	1.732	1.732	∞
Readout Electronics	E.2.6	0.021	N	1	1	1	0.021	0.021	∞
Response Time	E.2.7	0.000	R	√3	1	1	0.000	0.000	∞
Integration Time	E.2.8	1.400	R	√3	1	1	0.808	0.808	∞
RF ambient conditions-Noise	E.6.1	3.000	R	√3	1	1	1.732	1.732	∞
RF ambient conditions-reflections	E.6.1	3.000	R	√3	1	1	1.732	1.732	∞
Probe positioner mechanical tolerance	E.6.2	1.400	R	√3	1	1	0.808	0.808	∞
Probe positioning with respect to phantom shell	E.6.3	1.400	R	√3	1	1	0.808	0.808	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.300	R	√3	1	1	1.328	1.328	∞
Test sample Related									
Test sample positioning	E.4.2	2.6	N	1	1	1	2.600	2.600	∞
Device holder uncertainty	E.4.1	3	N	1	1	1	3.000	3.000	∞
Output power variation—SAR drift measurement	E.2.9	5	R	√3	1	1	2.887	2.887	∞
SAR scaling	E.6.5	5	R	√3	1	1	2.887	2.887	∞
Phantom and tissue parameters									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	4	R	√3	1	1	2.309	2.309	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1	1	0.84	1.900	1.596	∞
Liquid conductivity measurement	E.3.3	4	R	√3	0.78	0.71	3.120	2.840	∞
Liquid permittivity measurement	E.3.3	5	N	1	0.78	0.71	1.150	1.300	M
Liquid conductivity—temperature uncertainty	E.3.4	2.5	R	√3	0.23	0.26	1.126	1.025	∞
Liquid permittivity—temperature uncertainty	E.3.4	2.5	N	1	0.23	0.26	0.332	0.375	M
Combined Standard Uncertainty			RSS				10.526	10.341	
Expanded Uncertainty (95% Confidence interval)			K=2				21.052	20.682	

SATIMO Uncertainty- 2023-EPGO-414 System Validation uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
Measurement System									
Probe calibration	E.2.1	7.000	N	1	1	1	7.000	7.000	∞
Axial Isotropy	E.2.2	0.090	R	$\sqrt{3}$	1	1	0.052	0.052	∞
Hemispherical Isotropy	E.2.2	0.090	R	$\sqrt{3}$	0	0	0.000	0.000	∞
Boundary effect	E.2.3	1.000	R	$\sqrt{3}$	1	1	0.577	0.577	∞
Linearity	E.2.4	0.890	R	$\sqrt{3}$	1	1	0.514	0.514	∞
System detection limits	E.2.4	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation response	E2.5	3.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Readout Electronics	E.2.6	0.021	N	1	1	1	0.021	0.021	∞
Response Time	E.2.7	0.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Integration Time	E.2.8	1.4	R	$\sqrt{3}$	0	0	0.00	0.00	∞
RF ambient conditions-Noise	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient conditions-reflections	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioner mechanical tolerance	E.6.2	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	E.6.3	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.3	R	$\sqrt{3}$	1	1	1.33	1.33	∞
System validation source									
Deviation of experimental dipole from numerical dipole	E.6.4	5.0	N	1	1	1	5.00	5.00	∞
Input power and SAR drift measurement	8,6.6.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Dipole axis to liquid distance	8,E.6.6	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Phantom and set-up									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	4.0	R	$\sqrt{3}$	1	1	2.31	2.31	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1	1	0.84	1.90	1.60	∞
Liquid conductivity（temperature uncertainty）	E.3.3	2.5	R	$\sqrt{3}$	0.78	0.71	1.13	1.02	∞
Liquid conductivity（measured）	E.3.3	4	N	1	0.78	0.71	3.12	2.84	M
Liquid permittivity（temperature uncertainty）	E.3.4	2.5	R	$\sqrt{3}$	0.23	0.26	0.33	0.38	∞
Liquid permittivity（measured）	E.3.4	5	N	1	0.23	0.26	1.15	1.30	M
Combined Standard Uncertainty			RSS				10.459	10.272	
Expanded Uncertainty (95% Confidence interval)			K=2				20.917	20.545	

SATIMO Uncertainty- 2023-EPGO-414 System Check uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
Measurement System									
Probe calibration drift	E.2.1.3	0.500	N	1	1	1	0.50	0.50	∞
Axial Isotropy	E.2.2	0.090	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Hemispherical Isotropy	E.2.2	0.090	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Boundary effect	E.2.3	1.000	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Linearity	E.2.4	0.890	R	$\sqrt{3}$	0	0	0.00	0.00	∞
System detection limits	E.2.4	1.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Modulation response	E2.5	3.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Readout Electronics	E.2.6	0.021	N	1	0	0	0.00	0.00	∞
Response Time	E.2.7	0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Integration Time	E.2.8	1.4	R	$\sqrt{3}$	0	0	0.00	0.00	∞
RF ambient conditions-Noise	E.6.1	3.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
RF ambient conditions-reflections	E.6.1	3.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Probe positioner mechanical tolerance	E.6.2	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	E.6.3	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.3	R	$\sqrt{3}$	0	0	0.00	0.00	∞
System check source (dipole)									
Deviation of experimental dipoles	E.6.4	2.0	N	1	1	1	2.00	2.00	∞
Input power and SAR drift measurement	8,6.6.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Dipole axis to liquid distance	8,E.6.6	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Phantom and tissue parameters									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	4	R	$\sqrt{3}$	1	1	2.31	2.31	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1	1	0.84	1.90	1.60	∞
Liquid conductivity measurement	E.3.3	4	R	$\sqrt{3}$	0.78	0.71	3.12	2.84	∞
Liquid permittivity measurement	E.3.3	5	N	1	0.78	0.71	1.15	1.30	M
Liquid conductivity—temperature uncertainty	E.3.4	2.5	R	$\sqrt{3}$	0.23	0.26	1.13	1.02	∞
Liquid permittivity—temperature uncertainty	E.3.4	2.5	N	1	0.23	0.26	0.33	0.38	M
Combined Standard Uncertainty			RSS				5.562	5.203	
Expanded Uncertainty (95% Confidence interval)			K=2				11.124	10.406	

12. CONDUCTED POWER MEASUREMENT

GSM BAND

Mode	Frequency(MHz)	Conducted Power (dBm)	Duty cycle Factor(dBm)	Frame Power(dBm)
Maximum Power <1>				
GSM 850	824.2	32.61	-9	23.61
	836.6	32.50	-9	23.50
	848.8	32.95	-9	23.95
GPRS 850 （1 Slot）	824.2	32.62	-9	23.62
	836.6	32.54	-9	23.54
	848.8	**32.95**	-9	23.95
GPRS 850 （2 Slot）	824.2	30.58	-6	24.58
	836.6	30.61	-6	24.61
	848.8	31.01	-6	**25.01**
GPRS 850 （3 Slot）	824.2	28.68	-4.26	24.42
	836.6	28.70	-4.26	24.44
	848.8	29.10	-4.26	24.84
GPRS 850 （4 Slot）	824.2	26.67	-3	23.67
	836.6	26.69	-3	23.69
	848.8	27.09	-3	24.09
EGPRS 850 （1 Slot）	824.2	25.27	-9	16.27
	836.6	24.76	-9	15.76
	848.8	24.32	-9	15.32
EGPRS 850 （2 Slot）	824.2	24.36	-6	18.36
	836.6	23.36	-6	17.36
	848.8	23.19	-6	17.19
EGPRS 850 （3 Slot）	824.2	21.85	-4.26	17.59
	836.6	21.05	-4.26	16.79
	848.8	21.01	-4.26	16.75
EGPRS 850 （4 Slot）	824.2	19.87	-3	16.87
	836.6	18.59	-3	15.59
	848.8	18.67	-3	15.67

GSM BAND CONTINUE

Mode	Frequency(MHz)	Conducted Power (dBm)	Duty cycle Factor(dBm)	Frame Power(dBm)
Maximum Power <1>				
PCS1900	1850.2	29.20	-9	20.20
	1880	29.24	-9	20.24
	1909.8	29.09	-9	20.09
GPRS1900 （1 Slot）	1850.2	29.30	-9	20.30
	1880	**29.32**	-9	20.32
	1909.8	29.18	-9	20.18
GPRS1900 （2 Slot）	1850.2	27.01	-6	21.01
	1880	27.08	-6	21.08
	1909.8	26.93	-6	20.93
GPRS1900 （3 Slot）	1850.2	25.55	-4.26	21.29
	1880	25.59	-4.26	**21.33**
	1909.8	25.48	-4.26	21.22
GPRS1900 （4 Slot）	1850.2	23.44	-3	20.44
	1880	23.53	-3	20.53
	1909.8	23.43	-3	20.43
EGPRS1900 （1 Slot）	1850.2	24.90	-9	15.90
	1880	24.76	-9	15.76
	1909.8	24.73	-9	15.73
EGPRS1900 （2 Slot）	1850.2	22.65	-6	16.65
	1880	22.85	-6	16.85
	1909.8	21.81	-6	15.81
EGPRS1900 （3 Slot）	1850.2	20.23	-4.26	15.97
	1880	19.85	-4.26	15.59
	1909.8	18.96	-4.26	14.70
EGPRS1900 （4 Slot）	1850.2	17.52	-3	14.52
	1880	16.99	-3	13.99
	1909.8	16.13	-3	13.13

Note 1:
The Frame Power (Source-based time-averaged Power) is scaled the maximum burst average power based on time slots. The calculated methods are show as following:
Frame Power = Max burst power (1 Up Slot) – 9 dB
Frame Power = Max burst power (2 Up Slot) – 6 dB
Frame Power = Max burst power (3 Up Slot) – 4.26 dB
Frame Power = Max burst power (4 Up Slot) – 3 dB

UMTS BAND
HSDPA Setup Configuration:

·The EUT was connected to Base Station Agilent-8960 referred to the Setup Configuration.

·The RF path losses were compensated into the measurements.

·A call was established between EUT and Based Station with following setting:

(1) Set Gain Factors(βc and βd) parameters set according to each

(2) Set RMC 12.2Kbps+HSDPA mode.

(3) Set Cell Power=-86dBm

(4) Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)

(5) Select HSDPA Uplink Parameters

(6) Set Delta ACK, Delta NACK and Delta CQI=8

(7) Set Ack - Nack Repetition Factor to 3

(8) Set CQI Feedback Cycle (k) to 4ms

(9) Set CQI Repetition Factor to 2

(10) Power Ctrl Mode=All Up bits

·The transmitted maximum output power was recorded.

Table C.10.2.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	βc (Note5)	βd	βd (SF)	βc/βd	βHS (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(Note 4)	15/15(Note 4)	64	12/15(Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: ΔACK, ΔNACK and ΔCQI = 30/15 with β_{hs} = 30/15 * β_c.
Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, ΔACK and ΔNACK = 30/15 with β_{hs} = 30/15 * β_c, and ΔCQI = 24/15 with β_{hs} = 24/15 * β_c.
Note 3: CM = 1 for βc/βd =12/15, hs/ c=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
Note 4: For subtest 2 the c/ d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to c = 11/15 and d = 15/15.

HSUPA Setup Configuration:

· The EUT was connected to Base Station Agilent-8960 referred to the Setup Configuration.

· The RF path losses were compensated into the measurements.

· A call was established between EUT and Base Station with following setting * :

(1) Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK

(2) Set the Gain Factors (βc and βd) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121

(3) Set Cell Power = -86 dBm

(4) Set Channel Type = 12.2k + HSPA

(5) Set UE Target Power

(6) Power Ctrl Mode= Alternating bits

(7) Set and observe the E-TFCI

(8) Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI

· The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	βc	βd	βd (SF)	βc/βd	βHS (Note 1)	βec	βed (Note 4) (Note 5)	βed (SF)	βed (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	βed1: 47/15 βed2: 47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, ΔACK, ΔNACK and ΔCQI = 30/15 with β_{hs} = 30/15 * β_c . For sub-test 5, ΔACK, ΔNACK and ΔCQI = 5/15 with β_{hs} = 5/15 * β_c .
Note 2: CM = 1 for β c/ β d =12/15, hs/ c=24/15. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
Note 3: For subtest 1 the c/ d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to c = 10/15 and d = 15/15.
Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.
Note 5: βed cannot be set directly; it is set by Absolute Grant Value.
Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

UMTS BAND II

Mode	Frequency (MHz)	Conducted Power (dBm)
WCDMA 1900 RMC	1852.4	22.34
	1880	22.47
	1907.6	**22.49**
HSDPA Subtest 1	1852.4	21.76
	1880	21.46
	1907.6	21.11
HSDPA Subtest 2	1852.4	20.58
	1880	21.82
	1907.6	21.63
HSDPA Subtest 3	1852.4	21.41
	1880	20.98
	1907.6	21.79
HSDPA Subtest 4	1852.4	21.41
	1880	21.24
	1907.6	21.27
HSUPA Subtest 1	1852.4	21.52
	1880	21.54
	1907.6	20.76
HSUPA Subtest 2	1852.4	21.51
	1880	21.30
	1907.6	21.89
HSUPA Subtest 3	1852.4	21.74
	1880	21.69
	1907.6	21.77
HSUPA Subtest 4	1852.4	21.72
	1880	21.67
	1907.6	21.79
HSUPA Subtest 5	1852.4	21.41
	1880	21.65
	1907.6	21.65

UMTS BAND IV

Mode	Frequency (MHz)	Conducted Power (dBm)
WCDMA 1700 RMC	1712.4	22.18
	1732.4	**22.54**
	1752.6	22.38
HSDPA Subtest 1	1712.4	21.14
	1732.4	20.72
	1752.6	20.63
HSDPA Subtest 2	1712.4	20.42
	1732.4	21.20
	1752.6	20.78
HSDPA Subtest 3	1712.4	20.49
	1732.4	20.62
	1752.6	20.71
HSDPA Subtest 4	1712.4	20.38
	1732.4	19.93
	1752.6	20.12
HSUPA Subtest 1	1712.4	21.04
	1732.4	20.94
	1752.6	20.60
HSUPA Subtest 2	1712.4	20.86
	1732.4	20.90
	1752.6	21.17
HSUPA Subtest 3	1712.4	21.18
	1732.4	20.66
	1752.6	21.21
HSUPA Subtest 4	1712.4	20.89
	1732.4	20.32
	1752.6	20.67
HSUPA Subtest 5	1712.4	20.67
	1732.4	20.66
	1752.6	20.46

UMTS BAND V

Mode	Frequency (MHz)	Conducted Power (dBm)
WCDMA 850 RMC	826.4	22.43
	836.4	22.35
	846.6	**22.78**
HSDPA Subtest 1	826.4	22.04
	836.4	21.76
	846.6	21.17
HSDPA Subtest 2	826.4	20.92
	836.4	21.69
	846.6	21.48
HSDPA Subtest 3	826.4	21.20
	836.4	21.15
	846.6	21.79
HSDPA Subtest 4	826.4	21.57
	836.4	21.52
	846.6	21.28
HSUPA Subtest 1	826.4	22.09
	836.4	21.92
	846.6	21.42
HSUPA Subtest 2	826.4	21.83
	836.4	21.41
	846.6	21.53
HSUPA Subtest 3	826.4	21.75
	836.4	21.46
	846.6	21.76
HSUPA Subtest 4	826.4	21.46
	836.4	21.66
	846.6	21.90
HSUPA Subtest 5	826.4	21.47
	836.4	21.83
	846.6	21.51

According to 3GPP 25.101 sub-clause 6.2.2 , the maximum output power is allowed to be reduced by following the table.

Table 6.1aA: UE maximum output power with HS-DPCCH and E-DCH

UE Transmit Channel Configuration	CM(db)	MPR(db)
For all combinations of ,DPDCH,DPCCH HS-DPDCH,E-DPDCH and E-DPCCH	0≤ CM≤3.5	MAX(CM-1,0)
Note: CM=1 for β_c/β_d=12/15, β_{hs}/β_c=24/15.For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.		

The device supports MPR to solve linearity issues (ACLR or SEM) due to the higher peak-to average ratios (PAR) of the HSUPA signal. This prevents saturating the full range of the TX DAC inside of device and provides a reduced power output to the RF transceiver chip according to the Cubic Metric (a function of the combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH).

When E-DPDCH channels are present the beta gains on those channels are reduced firsts to try to get the power under the allowed limit. If the beta gains are lowered as far as possible, then a hard limiting is applied at the maximum allowed level.

The SW currently recalculates the cubic metric every time the beta gains on the E-DPDCH are reduced. The cubic metric will likely get lower each time this is done .However, there is no reported reduction of maximum output power in the HSUPA mode since the device also provides a compensation for the power back-off by increasing the gain of TX_AGC in the transceiver (PA) device.

The end effect is that the DUT output power is identical to the case where there is no MPR in the device.

LTE Band

LTE (TDD) Considerations

For Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

SAR was tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7.

LTE TDD Band 41 supports 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Special subframe 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	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
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	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Table 4.2-2: Uplink-downlink configurations

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Calculated Duty Cycle

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-point Periodicity	Subframe Number										Calculated Duty Cycle(%)
		0	1	2	3	4	5	6	7	8	9	
0	5ms	D	S	U	U	U	D	S	U	U	U	63.33
1	5ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10ms	D	S	U	U	U	D	D	D	D	D	31.67
4	10ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5ms	D	S	U	U	U	D	S	U	U	D	53.33

Note：Calculated Duty Cycle = Extended cyclic prefix in uplink x (Ts) x # of S + # of U
Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:
Calculated Duty Cycle = 5120 x [1/(15000 x 2048)] x 2 + 6 ms = 63.33%
where
Ts = 1/(15000 x 2048) seconds

LTE Band

Conducted Power of LTE Band 2(dBm)							
Bandwidth	**Modulation**	**RB size**	**RB offset**	**Target MPR**	**Channel**	**Channel**	**Channel**
					18607	**18900**	**19193**
1.4MHz	QPSK	1	0	0	23.08	22.82	22.77
			3	0	23.13	22.94	22.84
			5	0	23.06	22.88	22.83
		3	0	0	22.95	22.98	22.82
			2	0	22.99	23.03	22.81
			3	0	22.93	22.96	22.88
		6	0	1	22.01	21.95	21.92
	16QAM	1	0	1	23.12	22.09	22.24
			3	1	23.05	22.05	22.05
			5	1	23.11	22.09	22.27
		3	0	1	22.24	22.03	22.38
			2	1	22.20	22.09	22.26
			3	1	22.23	22.00	22.33
		6	0	2	21.14	21.04	21.15
Bandwidth	**Modulation**	**RB size**	**RB offset**	**Target MPR**	**Channel**	**Channel**	**Channel**
					18615	**18900**	**19185**
3MHz	QPSK	1	0	0	22.95	22.97	22.90
			7	0	22.90	22.91	22.89
			14	0	22.93	22.98	22.84
		8	0	1	22.09	22.06	21.93
			4	1	22.14	22.02	21.95
			7	1	21.98	21.93	21.90
		15	0	1	21.94	22.06	21.93
	16QAM	1	0	1	23.17	22.02	22.41
			7	1	23.27	22.02	22.33
			14	1	23.25	21.98	22.39
		8	0	2	21.09	21.18	21.02
			4	2	21.03	21.23	21.01
			7	2	21.00	21.19	21.01
		15	0	2	21.29	20.99	21.10

Conducted Power of LTE Band 2(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 18625	Channel 18900	Channel 19175
5MHz	QPSK	1	0	0	22.99	23.01	22.90
			13	0	22.94	22.96	22.87
			24	0	22.97	22.98	22.83
		12	0	1	22.03	22.07	21.97
			6	1	22.12	22.07	21.82
			13	1	22.08	21.91	21.95
		25	0	1	22.04	21.94	21.92
	16QAM	1	0	1	22.21	21.73	22.00
			13	1	22.20	21.72	21.91
			24	1	22.23	21.75	21.90
		12	0	2	21.09	20.99	21.06
			6	2	21.02	21.04	20.99
			13	2	21.10	21.00	20.98
		25	0	2	21.23	21.13	20.99
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 18650	Channel 18900	Channel 19150
10MHz	QPSK	1	0	0	23.02	23.12	23.05
			25	0	23.04	23.19	22.93
			49	0	23.16	23.24	22.99
		25	0	1	21.97	21.99	22.02
			13	1	21.98	22.06	21.93
			25	1	22.10	22.01	21.88
		50	0	1	22.08	22.12	22.02
	16QAM	1	0	1	23.29	22.13	22.28
			25	1	23.30	22.12	22.20
			49	1	23.34	22.05	22.01
		25	0	2	20.99	21.17	21.06
			13	2	21.11	21.23	21.08
			25	2	21.07	21.14	21.06
		50	0	2	21.19	21.26	21.06

Conducted Power of LTE Band 2(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					18675	18900	19125
15MHz	QPSK	1	0	0	23.09	23.19	23.00
			38	0	23.06	23.20	22.91
			74	0	23.07	23.20	22.88
		36	0	1	22.08	21.96	22.03
			18	1	21.99	22.04	21.99
			39	1	22.10	22.13	21.90
		75	0	1	21.98	22.10	21.97
	16QAM	1	0	1	23.32	22.14	22.76
			38	1	23.32	22.14	22.70
			74	1	**23.41**	22.17	22.62
		36	0	2	21.12	21.32	21.15
			18	2	21.13	21.29	21.08
			39	2	21.24	21.25	21.09
		75	0	2	21.22	21.15	21.23
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					18700	18900	19100
20MHz	QPSK	1	0	0	23.05	23.20	23.15
			50	0	23.05	23.25	23.17
			99	0	23.11	23.16	23.08
		50	0	1	22.15	22.10	22.04
			25	1	22.14	22.15	22.09
			50	1	22.14	22.14	21.96
		100	0	1	22.01	22.10	22.15
	16QAM	1	0	1	21.83	21.82	22.07
			50	1	21.82	21.82	22.12
			99	1	21.81	21.84	21.97
		50	0	2	21.19	21.19	21.13
			25	2	21.23	21.19	21.14
			50	2	21.30	21.17	21.11
		100	0	2	21.22	21.18	21.19

Conducted Power of LTE Band 4(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					19957	20175	20393
1.4MHz	QPSK	1	0	0	23.02	23.02	**23.31**
			3	0	22.86	23.07	23.24
			5	0	22.84	23.01	23.24
		3	0	0	22.77	23.11	22.96
			2	0	22.81	23.04	23.01
			3	0	22.75	23.08	23.04
		6	0	1	21.80	22.11	22.09
	16QAM	1	0	1	22.94	22.79	22.66
			3	1	22.88	22.83	22.54
			5	1	22.90	22.87	22.71
		3	0	1	22.00	22.27	22.46
			2	1	22.04	22.19	22.50
			3	1	21.98	22.22	22.42
		6	0	2	20.99	21.15	21.27
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					19965	20175	20385
3MHz	QPSK	1	0	0	22.66	23.00	23.15
			7	0	22.61	23.05	23.27
			14	0	22.73	23.01	23.28
		8	0	1	21.77	22.01	22.06
			4	1	21.80	22.08	21.97
			7	1	21.76	22.06	22.04
		15	0	1	21.75	22.05	22.06
	16QAM	1	0	1	22.98	22.85	22.47
			7	1	22.92	22.80	22.60
			14	1	22.99	22.79	22.60
		8	0	2	20.81	21.43	21.15
			4	2	20.74	21.41	21.12
			7	2	20.82	21.46	21.15
		15	0	2	20.97	21.17	21.10

Conducted Power of LTE Band 4(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					19975	20175	20375
5MHz	QPSK	1	0	0	22.63	23.10	22.75
			13	0	22.63	23.08	22.75
			24	0	22.72	23.13	22.81
		12	0	1	21.81	22.03	21.96
			6	1	21.78	22.09	22.02
			13	1	21.80	22.08	21.99
		25	0	1	21.80	22.08	22.04
	16QAM	1	0	1	21.95	21.80	22.56
			13	1	22.05	21.85	22.56
			24	1	22.02	21.79	22.58
		12	0	2	20.71	21.04	21.08
			6	2	20.72	21.03	21.09
			13	2	20.74	21.10	21.11
		25	0	2	20.95	21.26	21.22
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					20000	20175	20350
10MHz	QPSK	1	0	0	22.77	23.09	22.96
			25	0	22.76	23.13	23.15
			49	0	22.91	23.11	23.10
		25	0	1	21.75	22.03	21.79
			13	1	21.84	22.13	22.10
			25	1	21.84	22.03	21.96
		50	0	1	21.72	22.09	22.02
	16QAM	1	0	1	22.93	22.06	22.11
			25	1	23.04	22.23	22.29
			49	1	23.13	22.13	22.38
		25	0	2	20.78	21.15	21.04
			13	2	20.77	21.26	21.17
			25	2	20.90	21.22	21.12
		50	0	2	20.90	21.28	21.18

Conducted Power of LTE Band 4(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 20025	Channel 20175	Channel 20325
15MHz	QPSK	1	0	0	22.69	23.00	23.12
			38	0	22.88	23.15	23.04
			74	0	22.97	23.10	23.18
		36	0	1	21.86	22.04	21.95
			18	1	21.79	22.05	21.79
			39	1	21.92	22.05	22.02
		75	0	1	21.86	22.07	21.98
	16QAM	1	0	1	22.91	22.74	22.76
			38	1	23.09	22.88	22.69
			74	1	23.25	22.79	22.89
		36	0	2	20.92	21.21	21.04
			18	2	20.96	21.23	20.98
			39	2	21.01	22.22	21.10
		75	0	2	20.96	21.23	21.01
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 20050	Channel 20175	Channel 20300
20MHz	QPSK	1	0	0	22.68	22.83	23.26
			50	0	22.82	23.08	22.93
			99	0	23.03	22.92	23.09
		50	0	1	21.69	22.01	22.00
			25	1	21.82	22.11	21.94
			50	1	22.06	22.14	21.97
		100	0	1	21.83	22.05	21.89
	16QAM	1	0	1	21.54	22.08	22.58
			50	1	21.61	22.31	22.34
			99	1	21.80	22.21	22.61
		50	0	2	20.96	21.15	21.16
			25	2	21.02	21.22	21.15
			50	2	21.11	21.14	21.22
		100	0	2	20.96	21.23	21.03

Conducted Power of LTE Band 5(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 20407	Channel 20525	Channel 20643
1.4MHz	QPSK	1	0	0	22.92	22.68	23.16
			3	0	22.93	22.75	23.19
			5	0	22.93	22.70	23.23
		3	0	0	22.80	22.79	23.12
			2	0	22.83	22.71	23.12
			3	0	22.76	22.81	23.23
		6	0	1	21.81	21.75	22.15
	16QAM	1	0	1	22.82	22.47	23.25
			3	1	22.82	22.45	23.25
			5	1	22.75	22.63	**23.38**
		3	0	1	22.01	21.87	22.56
			2	1	22.05	21.79	22.57
			3	1	21.99	21.84	22.55
		6	0	2	20.95	21.03	21.44
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 20415	Channel 20525	Channel 20635
3MHz	QPSK	1	0	0	22.73	22.64	23.12
			7	0	22.70	22.75	23.16
			14	0	22.74	22.68	23.24
		8	0	1	21.79	21.66	22.14
			4	1	21.80	21.70	22.17
			7	1	21.85	21.81	22.12
		15	0	1	21.74	21.79	22.23
	16QAM	1	0	1	22.85	22.39	23.03
			7	1	22.82	22.52	23.07
			14	1	22.85	22.55	23.10
		8	0	2	20.76	20.93	21.10
			4	2	20.75	21.38	21.20
			7	2	20.68	21.26	21.32
		15	0	2	20.90	21.14	21.18

Conducted Power of LTE Band 5(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					20425	20525	20625
5MHz	QPSK	1	0	0	22.56	22.66	23.01
			13	0	22.65	22.71	23.04
			24	0	22.61	22.84	23.09
		12	0	1	21.83	21.59	22.09
			6	1	21.71	21.74	22.10
			13	1	21.75	21.69	22.14
		25	0	1	21.84	21.81	22.13
	16QAM	1	0	1	21.98	21.26	22.04
			13	1	21.87	21.41	22.15
			24	1	21.92	21.56	22.10
		12	0	2	20.67	20.61	21.51
			6	2	20.68	21.03	21.08
			13	2	20.64	21.11	21.14
		25	0	2	20.82	21.23	21.10
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					20450	20525	20600
10MHz	QPSK	1	0	0	22.77	22.85	22.92
			25	0	22.65	22.86	23.02
			49	0	22.70	23.02	23.26
		25	0	1	21.83	21.59	21.86
			13	1	21.72	21.70	22.05
			25	1	21.71	21.84	22.21
		50	0	1	21.80	21.75	22.11
	16QAM	1	0	1	22.91	21.68	21.84
			25	1	22.87	21.78	21.96
			49	1	22.88	21.96	22.20
		25	0	2	20.67	20.78	21.01
			13	2	20.67	21.19	21.07
			25	2	20.61	20.91	21.17
		50	0	2	20.72	21.21	21.10

Conducted Power of LTE Band 12(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					23017	23095	23173
1.4MHz	QPSK	1	0	0	22.60	22.61	22.50
			3	0	22.60	22.72	22.52
			5	0	22.68	22.68	22.51
		3	0	0	22.61	22.45	22.32
			2	0	22.54	22.48	22.59
			3	0	22.63	22.52	22.52
		6	0	1	21.57	21.53	21.54
	16QAM	1	0	1	22.67	21.48	22.45
			3	1	22.59	21.48	22.46
			5	1	22.64	21.51	22.47
		3	0	1	21.73	21.48	21.86
			2	1	21.75	21.53	21.92
			3	1	21.82	21.42	21.82
		6	0	2	20.55	21.10	21.19
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					23025	23095	23165
3MHz	QPSK	1	0	0	22.45	22.48	22.52
			7	0	22.51	22.50	22.52
			14	0	22.51	22.61	22.54
		8	0	1	21.57	21.46	21.48
			4	1	21.64	21.35	21.55
			7	1	21.56	21.38	21.50
		15	0	1	21.49	21.48	21.53
	16QAM	1	0	1	22.50	22.15	22.44
			7	1	22.41	22.20	22.59
			14	1	22.39	22.15	22.51
		8	0	2	20.42	21.16	20.38
			4	2	20.45	21.11	20.52
			7	2	20.83	21.09	20.94
		15	0	2	20.63	20.89	20.54

Conducted Power of LTE Band 12(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					23035	23095	23155
5MHz	QPSK	1	0	0	22.35	22.38	22.37
			13	0	22.43	22.40	22.46
			24	0	22.37	22.39	22.48
		12	0	1	21.53	21.40	21.44
			6	1	21.49	21.37	21.51
			13	1	21.44	21.38	21.54
		25	0	1	21.50	21.43	21.52
	16QAM	1	0	1	21.62	21.10	21.34
			13	1	21.65	21.16	21.48
			24	1	21.58	21.21	21.42
		12	0	2	20.51	20.78	20.91
			6	2	20.89	20.77	20.45
			13	2	20.86	20.77	20.42
		25	0	2	21.00	21.01	20.51
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					23060	23095	23130
10MHz	QPSK	1	0	0	22.50	22.48	22.47
			25	0	22.43	22.45	22.54
			49	0	22.47	22.48	**22.73**
		25	0	1	21.47	21.35	21.49
			13	1	21.58	21.43	21.44
			25	1	21.58	21.50	21.70
		50	0	1	21.53	21.50	21.40
	16QAM	1	0	1	22.56	22.14	21.44
			25	1	22.53	22.14	21.48
			49	1	22.57	22.12	21.54
		25	0	2	20.88	20.89	20.87
			13	2	20.84	20.89	20.44
			25	2	20.85	20.59	20.53
		50	0	2	20.95	20.94	20.49

Conducted Power of LTE Band 17(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					23755	23790	23825
5MHz	QPSK	1	0	0	22.43	22.40	22.38
			13	0	22.32	22.31	22.47
			24	0	22.37	22.31	22.48
		12	0	1	21.54	21.38	21.36
			6	1	21.38	21.45	21.62
			13	1	21.36	21.52	21.56
		25	0	1	21.38	21.41	21.49
	16QAM	1	0	1	21.08	21.48	21.59
			13	1	21.13	21.43	21.74
			24	1	21.12	21.55	21.70
		12	0	2	20.73	20.88	20.80
			6	2	20.78	20.46	20.40
			13	2	20.78	20.89	20.44
		25	0	2	20.92	20.44	20.68
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					23780	23790	23800
10MHz	QPSK	1	0	0	22.48	22.52	22.51
			25	0	22.35	22.44	22.58
			49	0	22.46	22.55	**22.77**
		25	0	1	21.36	21.51	21.42
			13	1	21.31	21.41	21.47
			25	1	21.48	21.49	21.59
		50	0	1	21.34	21.44	21.51
	16QAM	1	0	1	22.46	21.41	21.43
			25	1	22.52	21.46	21.46
			49	1	22.65	21.72	21.56
		25	0	2	20.75	20.93	20.89
			13	2	20.67	20.42	20.46
			25	2	20.79	20.92	20.55
		50	0	2	20.87	20.52	20.48

Conducted Power of LTE Band 25(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					26047	26365	26683
1.4MHz	QPSK	1	0	0	23.01	22.89	22.73
			2	0	23.00	22.92	22.79
			5	0	23.04	22.87	22.83
		3	0	0	22.93	23.00	22.76
			1	0	22.86	23.05	22.81
			3	0	22.93	22.97	22.76
		6	0	1	22.03	21.95	21.93
	16QAM	1	0	1	23.04	22.11	22.23
			2	1	23.07	22.05	22.23
			5	1	23.13	22.08	22.17
		3	0	1	22.18	22.04	22.34
			1	1	22.26	22.06	22.28
			3	1	22.31	22.01	22.24
		6	0	2	21.26	21.03	21.08
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					26055	26365	26675
3MHz	QPSK	1	0	0	22.82	22.89	22.75
			8	0	22.92	22.88	22.76
			14	0	22.87	22.88	22.83
		8	0	1	21.99	22.11	21.82
			4	1	22.02	22.01	21.80
			7	1	21.99	21.97	21.76
		15	0	1	21.98	21.97	21.79
	16QAM	1	0	1	23.15	22.08	22.28
			8	1	23.12	22.02	22.28
			14	1	23.10	22.06	22.19
		8	0	2	21.01	21.04	20.92
			4	2	20.98	21.22	20.91
			7	2	21.02	21.16	20.95
		15	0	2	21.18	21.02	20.98

Conducted Power of LTE Band 25(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					26065	26365	26665
5MHz	QPSK	1	0	0	22.91	22.95	22.83
			12	0	22.92	22.97	22.78
			24	0	22.95	22.98	22.77
		12	0	1	21.93	22.00	21.80
			6	1	22.02	21.89	21.76
			13	1	22.04	21.96	21.86
		25	0	1	21.96	22.00	21.90
	16QAM	1	0	1	22.12	21.74	21.83
			12	1	22.08	21.74	21.86
			24	1	22.20	21.81	21.85
		12	0	2	21.03	21.01	20.94
			6	2	20.96	21.03	20.95
			13	2	20.98	21.02	20.91
		25	0	2	21.21	21.12	20.90
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					26090	26365	26640
10MHz	QPSK	1	0	0	22.91	23.00	22.99
			24	0	22.98	23.05	22.83
			49	0	23.13	23.01	22.82
		25	0	1	21.96	21.92	21.85
			12	1	21.99	21.92	21.85
			25	1	22.08	21.97	21.92
		50	0	1	22.06	21.90	21.83
	16QAM	1	0	1	23.17	22.12	21.98
			24	1	23.23	22.13	22.02
			49	1	23.30	22.17	21.96
		25	0	2	21.00	21.09	21.05
			12	2	21.05	21.10	20.95
			25	2	21.09	21.12	20.97
		50	0	2	21.05	21.21	21.05

Conducted Power of LTE Band 25(dBm)							
Bandwidth	**Modulation**	**RB size**	**RB offset**	**Target MPR**	**Channel**	**Channel**	**Channel**
					26115	**26365**	**26615**
15MHz	QPSK	1	0	0	22.90	23.04	22.95
			38	0	23.00	23.04	22.84
			74	0	23.08	23.04	22.80
		38	0	1	22.05	22.09	21.88
			18	1	21.97	21.97	21.99
			37	1	22.07	22.06	21.78
		75	0	1	21.95	22.06	21.95
	16QAM	1	0	1	23.18	22.16	22.67
			38	1	23.20	22.09	22.64
			74	1	**23.34**	22.20	22.62
		38	0	2	21.11	21.23	21.04
			18	2	21.08	21.23	21.04
			37	2	21.19	21.23	20.98
		75	0	2	21.20	21.13	21.14
Bandwidth	**Modulation**	**RB size**	**RB offset**	**Target MPR**	**Channel**	**Channel**	**Channel**
					26140	**26365**	**26590**
20MHz	QPSK	1	0	0	22.94	23.08	23.12
			49	0	22.97	23.15	23.05
			99	0	23.02	23.15	23.00
		50	0	1	22.01	21.93	21.96
			25	1	21.96	22.04	22.03
			50	1	22.02	22.00	21.91
		100	0	1	21.99	22.09	21.88
	16QAM	1	0	1	21.74	21.68	21.98
			49	1	21.76	21.71	21.90
			99	1	21.84	21.75	21.90
		50	0	2	21.23	21.19	21.12
			25	2	21.27	21.11	21.04
			50	2	21.26	21.12	20.99
		100	0	2	21.27	21.13	21.12

Conducted Power of LTE Band 26A(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					26797	26915	27033
1.4MHz	QPSK	1	0	0	23.04	22.76	23.19
			2	0	23.04	22.76	23.26
			5	0	22.96	22.70	23.26
		3	0	0	22.92	22.79	23.11
			1	0	22.95	22.87	23.24
			3	0	22.97	22.81	23.23
		6	0	1	21.84	21.75	22.28
	16QAM	1	0	1	22.89	22.51	23.35
			2	1	22.89	22.62	23.36
			5	1	22.90	22.56	**23.37**
		3	0	1	22.10	21.90	22.58
			1	1	22.06	21.81	22.65
			3	1	22.13	21.90	22.59
		6	0	2	21.51	20.79	21.79
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					26805	26915	27025
3MHz	QPSK	1	0	0	22.84	22.71	23.18
			8	0	22.80	22.75	23.18
			14	0	22.81	22.81	23.24
		8	0	1	21.94	21.81	22.25
			4	1	21.80	21.82	22.16
			7	1	21.85	21.74	22.27
		15	0	1	21.89	21.79	22.22
	16QAM	1	0	1	22.85	22.54	23.11
			8	1	22.82	22.52	23.22
			14	1	22.81	22.59	23.13
		8	0	2	21.24	21.02	21.24
			4	2	21.13	21.05	21.31
			7	2	21.17	21.05	21.61
		15	0	2	21.36	20.96	21.30

Conducted Power of LTE Band 26A(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					26815	26915	27015
5MHz	QPSK	1	0	0	22.75	22.66	23.12
			12	0	22.71	22.74	23.16
			24	0	22.75	22.85	23.22
		12	0	1	21.84	21.72	22.09
			6	1	21.88	21.84	22.26
			13	1	21.76	21.86	22.14
		25	0	1	21.85	21.82	22.29
	16QAM	1	0	1	21.99	21.41	22.21
			12	1	21.97	21.42	22.17
			24	1	21.96	21.57	22.25
		12	0	2	21.25	20.80	21.23
			6	2	21.16	20.68	21.26
			13	2	21.10	20.75	21.31
		25	0	2	21.28	20.91	21.26
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					26840	26915	26990
10MHz	QPSK	1	0	0	22.88	22.87	22.94
			24	0	22.80	22.86	23.06
			49	0	22.82	23.14	23.28
		25	0	1	21.86	21.72	22.04
			12	1	21.75	21.84	21.96
			25	1	21.77	21.87	22.24
		50	0	1	21.83	21.89	22.02
	16QAM	1	0	1	23.03	21.77	22.02
			24	1	22.91	21.88	22.01
			49	1	22.90	22.10	22.26
		25	0	2	21.13	20.80	21.03
			12	2	20.70	20.89	21.52
			25	2	20.63	20.98	21.31
		50	0	2	20.77	20.94	21.41

Conducted Power of LTE Band 26A(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 26865	Channel 26915	Channel 26965
15MHz	QPSK	1	0	0	22.83	22.80	22.72
			38	0	22.75	22.89	22.91
			74	0	22.96	23.23	23.21
		38	0	1	21.80	21.78	21.97
			18	1	21.79	21.72	21.92
			37	1	21.80	22.03	22.20
		75	0	1	21.88	21.88	21.91
	16QAM	1	0	1	23.01	21.73	22.39
			38	1	22.82	21.79	22.53
			74	1	23.03	22.11	22.94
		38	0	2	20.81	20.98	20.96
			18	2	20.78	21.03	21.02
			37	2	20.87	21.21	21.19
		75	0	2	20.85	20.96	21.10

Conducted Power of LTE Band 26B(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					26697	26740	26783
1.4MHz	QPSK	1	0	0	23.10	22.93	22.91
			2	0	23.10	23.00	22.87
			5	0	23.10	22.94	22.89
		3	0	0	23.07	23.01	22.88
			1	0	23.01	22.95	22.90
			3	0	22.98	22.89	22.87
		6	0	1	22.12	21.85	21.87
	16QAM	1	0	1	23.18	22.60	22.49
			2	1	23.20	22.56	22.43
			5	1	23.19	22.60	22.39
		3	0	1	22.28	22.00	22.41
			1	1	22.25	22.07	22.26
			3	1	22.26	22.03	22.30
		6	0	2	21.45	20.95	21.07
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					26705	26740	26775
3MHz	QPSK	1	0	0	22.97	22.93	22.84
			8	0	22.96	22.98	22.90
			14	0	23.02	22.94	22.88
		8	0	1	22.03	21.87	21.75
			4	1	22.10	21.94	21.85
			7	1	22.11	21.92	21.81
		15	0	1	22.06	21.91	21.94
	16QAM	1	0	1	**23.21**	22.50	22.48
			8	1	23.15	22.47	22.49
			14	1	23.14	22.46	22.49
		8	0	2	21.29	21.26	20.84
			4	2	21.25	21.23	20.94
			7	2	21.32	21.13	20.92
		15	0	2	21.51	21.01	20.96

Conducted Power of LTE Band 26B(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 26715	Channel 26740	Channel 26765
5MHz	QPSK	1	0	0	22.87	22.90	22.78
			12	0	22.87	22.84	22.76
			24	0	22.83	22.85	22.79
		12	0	1	22.00	21.91	21.80
			6	1	22.03	21.81	21.88
			13	1	21.97	21.81	21.85
		25	0	1	22.06	21.82	21.74
	16QAM	1	0	1	22.33	21.63	21.74
			12	1	22.34	21.55	21.79
			24	1	22.29	21.51	21.76
		12	0	2	21.22	21.24	20.89
			6	2	21.31	20.84	20.81
			13	2	21.26	20.85	20.82
		25	0	2	21.43	20.99	20.81
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 26740		
10MHz	QPSK	1	0	0	22.88		
			24	0	22.83		
			49	0	22.76		
		25	0	1	22.00		
			12	1	21.91		
			25	1	21.88		
		50	0	1	21.95		
	16QAM	1	0	1	23.06		
			24	1	22.97		
			49	1	22.97		
		25	0	2	21.25		
			12	2	20.90		
			25	2	20.83		
		50	0	2	20.93		

Conducted Power of LTE Band 41(dBm)							
Bandwidth	**Modulation**	**RB size**	**RB offset**	**Target MPR**	**Channel**	**Channel**	**Channel**
					39675	**40620**	**41565**
5MHz	QPSK	1	0	0	**22.88**	22.24	22.64
			12	0	22.55	22.18	22.50
			24	0	22.47	22.19	22.51
		12	0	1	21.50	21.28	21.67
			6	1	21.55	21.15	21.63
			13	1	21.46	21.19	21.61
		25	0	1	21.56	21.21	21.66
	16QAM	1	0	1	21.45	20.99	22.02
			12	1	21.54	20.97	22.01
			24	1	21.37	21.06	22.19
		12	0	2	20.75	20.21	20.73
			6	2	20.72	20.15	20.78
			13	2	20.81	20.24	20.81
		25	0	2	20.73	20.41	20.96
Bandwidth	**Modulation**	**RB size**	**RB offset**	**Target MPR**	**Channel**	**Channel**	**Channel**
					39700	**40620**	**41540**
10MHz	QPSK	1	0	0	22.31	21.87	22.16
			24	0	22.34	21.89	22.09
			49	0	22.24	21.97	22.21
		25	0	1	21.25	20.79	21.12
			12	1	21.22	20.86	21.18
			25	1	21.27	20.80	21.36
		50	0	1	21.23	20.76	21.24
	16QAM	1	0	1	21.92	20.64	21.61
			24	1	21.65	20.65	21.61
			49	1	21.81	20.69	21.80
		25	0	2	20.38	20.13	20.39
			12	2	20.39	20.07	20.42
			25	2	20.25	20.07	20.57
		50	0	2	20.46	20.05	20.45

Conducted Power of LTE Band 41(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 39725	Channel 40620	Channel 41515
15MHz	QPSK	1	0	0	22.27	21.86	22.05
			37	0	22.23	21.95	22.30
			74	0	22.11	22.02	22.35
		37	0	1	21.26	20.80	21.07
			19	1	21.14	20.74	21.30
			38	1	21.17	20.89	21.39
		75	0	1	21.08	20.82	21.27
	16QAM	1	0	1	21.60	20.47	21.27
			37	1	21.85	20.49	21.47
			74	1	21.43	20.59	21.53
		37	0	2	20.32	19.93	20.37
			19	2	20.37	19.94	20.37
			38	2	20.39	20.00	20.45
		75	0	2	20.30	19.93	20.52
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 39750	Channel 40620	Channel 41490
20MHz	QPSK	1	0	0	22.32	21.73	22.22
			49	0	22.13	21.66	22.31
			99	0	22.05	21.76	22.54
		50	0	1	21.11	20.81	21.09
			25	1	21.19	20.87	21.06
			50	1	21.08	20.91	21.23
		100	0	1	21.07	20.85	21.06
	16QAM	1	0	1	20.96	20.00	21.26
			49	1	20.79	20.21	21.55
			99	1	20.78	20.30	21.52
		50	0	2	20.54	19.99	20.28
			25	2	20.34	20.08	20.30
			50	2	20.31	20.07	20.41
		100	0	2	20.31	19.80	20.38

Conducted Power of LTE Band 66(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 131979	Channel 132422	Channel 132665
1.4MHz	QPSK	1	0	0	22.84	22.76	22.63
			2	0	22.77	22.81	22.62
			5	0	22.78	22.77	22.76
		3	0	0	22.70	22.84	22.66
			1	0	22.74	22.85	22.69
			3	0	22.68	22.99	22.70
		6	0	1	21.80	21.81	21.78
	16QAM	1	0	1	22.79	22.45	22.08
			2	1	22.81	22.46	22.08
			5	1	22.80	22.45	22.02
		3	0	1	21.98	22.23	22.16
			1	1	22.00	22.24	22.12
			3	1	22.05	22.27	22.12
		6	0	2	21.02	20.86	21.00
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 131987	Channel 132422	Channel 132657
3MHz	QPSK	1	0	0	22.70	22.76	22.77
			8	0	22.69	22.76	22.78
			14	0	22.74	22.78	22.69
		8	0	1	21.72	21.90	21.81
			4	1	21.75	21.87	21.70
			7	1	21.82	21.90	21.62
		15	0	1	21.81	21.98	21.66
	16QAM	1	0	1	22.88	22.53	21.84
			8	1	22.97	22.44	21.76
			14	1	22.98	22.53	21.79
		8	0	2	20.75	21.19	20.77
			4	2	20.74	21.17	20.78
			7	2	20.75	21.15	20.78
		15	0	2	20.96	21.07	20.91

Conducted Power of LTE Band 66(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 131997	Channel 132422	Channel 132647
5MHz	QPSK	1	0	0	22.64	22.93	22.75
			12	0	22.60	22.90	22.66
			24	0	22.73	22.95	22.62
		12	0	1	21.75	21.95	21.73
			6	1	21.76	21.96	21.70
			13	1	21.86	21.89	21.73
		25	0	1	21.74	21.84	21.75
	16QAM	1	0	1	21.99	21.73	21.83
			12	1	22.07	21.68	21.83
			24	1	22.04	21.76	21.72
		12	0	2	20.74	20.90	20.81
			6	2	20.76	20.85	20.79
			13	2	20.75	20.93	20.75
		25	0	2	20.87	21.04	20.81
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 132022	Channel 132422	Channel 132622
10MHz	QPSK	1	0	0	22.76	23.03	22.82
			24	0	22.79	23.00	22.72
			49	0	22.94	23.14	22.76
		25	0	1	21.68	22.00	21.86
			12	1	21.74	21.95	21.76
			25	1	21.91	21.92	21.73
		50	0	1	21.87	21.92	21.75
	16QAM	1	0	1	22.99	21.98	21.95
			24	1	23.03	21.93	21.83
			49	1	23.18	22.05	21.83
		25	0	2	20.78	21.05	20.98
			12	2	20.86	21.08	20.90
			25	2	20.91	21.08	20.91
		50	0	2	20.84	21.05	20.91

Conducted Power of LTE Band 66(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 132047	Channel 132422	Channel 132597
15MHz	QPSK	1	0	0	22.72	23.12	22.98
			38	0	22.80	23.00	22.77
			74	0	22.95	23.10	22.69
		38	0	1	21.71	22.02	21.83
			18	1	21.83	21.92	21.83
			37	1	21.89	21.99	21.83
		75	0	1	21.84	21.82	21.86
	16QAM	1	0	1	23.01	22.04	22.63
			38	1	23.05	21.92	22.49
			74	1	**23.26**	21.99	22.39
		38	0	2	20.88	21.25	20.95
			18	2	20.98	21.05	20.99
			37	2	21.00	21.27	20.89
		75	0	2	20.98	20.93	21.04
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 132072	Channel 132422	Channel 132572
20MHz	QPSK	1	0	0	22.74	23.14	23.06
			49	0	22.81	23.03	22.99
			99	0	23.08	23.16	22.92
		50	0	1	21.82	22.03	21.87
			25	1	21.94	21.94	21.83
			50	1	21.89	21.98	21.76
		100	0	1	21.92	21.90	21.92
	16QAM	1	0	1	21.49	22.22	22.03
			49	1	21.56	22.04	21.91
			99	1	21.81	22.14	21.74
		50	0	2	20.97	21.08	21.09
			25	2	21.10	20.99	21.02
			50	2	21.16	21.17	20.87
		100	0	2	21.00	21.03	20.98

Conducted Power of LTE Band 71(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 133147	Channel 133297	Channel 133447
5MHz	QPSK	1	0	0	22.77	22.92	22.77
			12	0	22.74	22.97	22.73
			24	0	22.87	22.90	22.63
		12	0	1	21.80	21.99	21.81
			6	1	21.81	21.97	21.84
			13	1	21.78	21.94	21.73
		25	0	1	21.78	22.06	21.81
	16QAM	1	0	1	21.48	21.97	21.90
			12	1	21.39	21.98	21.96
			24	1	21.47	22.03	22.02
		12	0	2	20.67	20.99	21.04
			6	2	21.08	21.02	20.62
			13	2	21.01	20.94	20.61
		25	0	2	21.25	20.90	20.93
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel 133172	Channel 133297	Channel 133422
10MHz	QPSK	1	0	0	22.83	22.93	22.91
			24	0	22.88	23.03	22.83
			49	0	22.99	23.10	22.77
		25	0	1	21.81	22.02	21.88
			12	1	21.76	22.06	21.86
			25	1	21.98	22.09	21.80
		50	0	1	21.88	22.08	21.80
	16QAM	1	0	1	22.90	21.91	21.91
			24	1	22.87	22.07	21.80
			49	1	22.98	22.03	21.84
		25	0	2	21.07	21.32	20.92
			12	2	20.71	21.01	21.08
			25	2	20.89	21.07	20.81
		50	0	2	20.85	21.05	21.12

Conducted Power of LTE Band 71(dBm)							
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					133197	133297	133397
15MHz	QPSK	1	0	0	22.73	22.87	22.93
			38	0	22.81	23.08	22.83
			74	0	23.01	23.04	22.79
		38	0	1	21.73	21.98	22.01
			18	1	21.92	22.06	21.96
			37	1	22.01	22.06	21.78
		75	0	1	21.96	22.01	21.97
	16QAM	1	0	1	22.82	21.81	22.48
			38	1	22.94	22.06	22.43
			74	1	23.11	22.09	22.30
		38	0	2	20.82	21.48	21.25
			18	2	20.95	21.29	20.98
			37	2	20.94	21.14	21.14
		75	0	2	20.98	20.99	21.02
Bandwidth	Modulation	RB size	RB offset	Target MPR	Channel	Channel	Channel
					133222	133322	133372
20MHz	QPSK	1	0	0	22.60	22.93	22.97
			49	0	22.71	**23.21**	22.95
			99	0	22.94	23.14	22.92
		50	0	1	21.73	21.91	21.92
			25	1	21.89	22.02	21.87
			50	1	22.04	22.09	21.88
		100	0	1	21.93	22.06	21.93
	16QAM	1	0	1	21.43	21.80	21.82
			49	1	21.51	22.04	21.92
			99	1	21.81	22.08	21.92
		50	0	2	20.93	21.32	20.93
			25	2	20.87	20.95	21.29
			50	2	21.48	21.00	21.17
		100	0	2	20.92	20.94	21.23

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.
UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3.3-1 of the 3GPP TS36.101.

Table 6.2.3.3-1 Maximum Power Reduction (MPR) for Power class3

Modulation	Maximum Power Reduction (MPR) for Power[RB]						MPR(dB)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	＞5	＞4	＞8	＞12	＞16	＞18	≤1
16QAM	≤5	≤4	≤8	≤12	≤16	≤18	≤1
16QAM	＞5	＞4	＞8	＞12	＞16	＞18	≤2

The allowed A-MPR values specified below in Table 6.2.4.3-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of “NS_01”.3

Table 6.2.4.3-1: Additional Maximum Power Reduction (A-MPR) / Spectrum Emission requirements

Network Signaling value	Requirements (sub-clause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.2-1	1.4,3,5,10,15,20	Table 5.4.2-1	N/A
NS_03	6.6.2.2.3.1	2,4,10, 23, 25,35,36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.3.2	41	5	>6	≤1
			10, 15, 20	Table 6.2.4.3-4	
NS_05	6.6.3.3.3.1	1	10,15,20	≥ 50	≤ 1
NS_06	6.6.2.2.3.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.4.2-1	N/A
NS_07	6.6.2.2.3.3 6.6.3.3.3.2	13	10	Table 6.2.4.3-2	Table 6.2.4.3-2
NS_08	6.6.3.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.3.4	21	10, 15	> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4.3-3	Table 6.2.4.3-3
NS_11	6.6.2.2.1 6.6.3.3.13	231	1.4, 3, 5, 10,15,20	Table 6.2.4.3-5	Table 6.2.4.3-5
NS_12	6.6.3.3.5	26	1.4, 3, 5	Table 6.2.4.3-6	Table 6.2.4.3-6
NS_13	6.6.3.3.6	26	5	Table 6.2.4.3-7	Table 6.2.4.3-7
NS_14	6.6.3.3.7	26	10, 15	Table 6.2.4.3-8	Table 6.2.4.3-8
NS_15	6.6.3.3.8	26	1.4, 3, 5, 10, 15	Table 6.2.4.3-9 Table 6.2.4.3-10	Table 6.2.4.3-9, Table 6.2.4.3-10
NS_16	6.6.3.3.9	27	3, 5, 10	Table 6.2.4.3-11, Table 6.2.4.3-12, Table 6.2.4.3-13	
NS_17	6.6.3.3.10 6.6.3.3.11	28 28	5, 10	Table 5.4.2-1	N/A
			5	≥ 2	≤ 1
NS_18			10, 15, 20	≥ 1	≤ 4
NS_19			10, 15, 20	Table 6.2.4.3-15	Table 6.2.4.3-15
NS_20			5, 10, 15, 20	Table 6.2.4.3-14	Table 6.2.4.3-14
…					
NS_20	-	-	-	-	-

WIFI

Mode	Data Rate (Mbps)	Channel	Frequency(MHz)	Peak Conducted Power (dBm)
802.11b	1	01	2412	**15.78**
		06	2437	9.44
		11	2462	11.46
802.11g	6	01	2412	14.7
		06	2437	9.06
		11	2462	10.2
802.11n(20)	6.5	01	2412	12.99
		06	2437	6.82
		11	2462	8.98

Bluetooth_V4.0(BR/EDR)

Modulation	Channel	Frequency(MHz)	Peak Conducted Power (dBm)
GFSK	0	2402	4.21
	39	2441	2.54
	78	2480	1.87
π /4-DQPSK	0	2402	4.1
	39	2441	2.95
	78	2480	2.4
8-DPSK	0	2402	**4.35**
	39	2441	3.24
	78	2480	2.64

Bluetooth_V4.0(BLE)

Modulation	Channel	Frequency(MHz)	Peak Conducted Power (dBm)
GFSK	0	2402	**-3.03**
	19	2440	-4.23
	39	2480	-4.06

13. TEST RESULTS

13.1. SAR Test Results Summary

13.1.1. Test position and configuration

Head SAR was performed with the device configured in the positions according to IEEE 1528-2013, Body-worn and 4 Edges SAR was performed with the device 10mm from the phantom.

13.1.2. Operation Mode

1. Per KDB 447498 D01 v06 ,for each exposure position, if the highest 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional.
2. Per KDB 865664 D01 v01r04,for each frequency band, if the measured SAR is ≥0.8W/kg, testing for repeated SAR measurement is required , that the highest measured SAR is only to be tested. When the SAR results are near the limit, the following procedures are required for each device to verify these types of SAR measurement related variation concerns by repeating the highest measured SAR configuration in each frequency band.
   (1) When the original highest measured SAR is ≥0.8W/kg, repeat that measurement once.
   (2) Perform a second repeated measurement only 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.
   (3) Perform a third repeated measurement only if the original, first and second repeated measurement is ≥1.5 W/kg and ratio of largest to smallest SAR for the original, first and second measurement is ≥ 1.20.
3. Body-worn exposure conditions are intended to voice call operations, therefore GSM voice call mode is selected to be test.
4. Per KDB 648474 D04 v01r03,when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤1.2W/kg, SAR testing with a headset connected is not required.
5. Per KDB 248227 D01v02r02,for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤1.2W/kg.
6. Per KDB 941225 D06 V02r01, When the same wireless mode transmission configurations for voice and data are required for SAR measurements, the more conservative configuration with a smaller separation distance should be tested for the overlapping SAR configurations.
7. Maximum Scaling SAR in order to calculate the Maximum SAR values to test under the standard Peak Power, Calculation method is as follows:
   Maximum Scaling SAR =tested SAR (Max.) ×[maximum turn-up power (mw)/ maximum measurement output power(mw)]
8. Proximity sensor, just for avoiding the wrong operation in the phone screen when call, and has no influence on output power or SAR result
9. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1RB allocation using the RB offset and required test channel combination with highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
10. Per KDB 941125 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
11. Per KDB 941125 D05v02r05. For QPSK with 100% RB allocation. SAR is not required when the highest maximum output power for 100% RB allocation is less than the highest maximum output power in 50% and

1RB allocation and the highest reported SAR is >1.45 W/kg, the remaining required test channels must also be tested.

12. Per KDB 941125 D05v02r05. 16QAM output power for each RB allocation configuration is not 1/2 dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤1.45W/kg, Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
13. Per KDB 941125 D05v02r05. Smaller bandwidth output power for each RB allocation configuration is >not 1/2 dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤1.45W/kg. Per KDB 941125 D05v02r05, smaller bandwidth SAR testing is not required.

13.1.3. Test Result

SAR MEASUREMENT									
Depth of Liquid (cm):>15				Relative Humidity (%): 45.9					
Product: Smart phone									
Test Mode: GSM850 with GMSK modulation									
Position	**Mode**	**Ch.**	**Fr. (MHz)**	**Power Drift (<±5%)**	**SAR (1g) (W/kg)**	**Max. Tune-up Power (dBm)**	**Meas. output Power (dBm)**	**Scaled SAR (W/kg)**	**Limit (W/kg)**
SIM 1 Card									
Left Cheek	voice	190	836.6	-0.09	**0.224**	33.00	32.50	**0.251**	1.6
Left Tilt	voice	190	836.6	0.12	0.195	33.00	32.50	0.219	1.6
Right Cheek	voice	190	836.6	-0.02	0.195	33.00	32.50	0.219	1.6
Right Tilt	voice	190	836.6	-0.08	0.172	33.00	32.50	0.193	1.6
Body back	voice	190	836.6	0.15	**0.287**	33.00	32.50	**0.322**	1.6
Body front	voice	190	836.6	-0.01	0.195	33.00	32.50	0.219	1.6
Body back	GPRS-2 slot	190	836.6	0.23	**0.268**	31.50	30.61	**0.329**	1.6
Body front	GPRS-2 slot	190	836.6	-0.28	0.183	31.50	30.61	0.225	1.6
Edge 2(Right)	GPRS-2 slot	190	836.6	-0.21	0.091	31.50	30.61	0.112	1.6
Edge 3(Bottom)	GPRS-2 slot	190	836.6	-0.20	0.138	31.50	30.61	0.169	1.6
Edge 4(Left)	GPRS-2 slot	190	836.6	-0.30	0.170	31.50	30.61	0.209	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT									
Depth of Liquid (cm):>15				Relative Humidity (%): 50.1					
Product: Smart phone									
Test Mode: PCS1900 with GMSK modulation									
Position	**Mode**	**Ch.**	**Fr. (MHz)**	**Power Drift (<±5%)**	**SAR (1g) (W/kg)**	**Max. Tune-up Power (dBm)**	**Meas. output Power (dBm)**	**Scaled SAR (W/kg)**	**Limit (W/kg)**
SIM 1 Card									
Left Cheek	voice	661	1880.0	-0.04	**0.561**	29.50	29.24	**0.596**	1.6
Left Tilt	voice	661	1880.0	-0.09	0.368	29.50	29.24	0.391	1.6
Right Cheek	voice	661	1880.0	0.01	0.292	29.50	29.24	0.310	1.6
Right Tilt	voice	661	1880.0	-0.31	0.301	29.50	29.24	0.320	1.6
Body back	voice	661	1880.0	-0.01	**0.118**	29.50	29.24	**0.125**	1.6
Body front	voice	661	1880.0	-0.12	0.053	29.50	29.24	0.056	1.6
Body back	GPRS-3 slot	661	1880	-0.19	**0.134**	26.00	25.59	**0.147**	1.6
Body front	GPRS-3 slot	661	1880.0	0.33	0.057	26.00	25.59	0.063	1.6
Edge 2(Right)	GPRS-3 slot	661	1880.0	0.22	0.076	26.00	25.59	0.084	1.6
Edge 3(Bottom)	GPRS-3 slot	661	1880.0	-0.18	0.019	26.00	25.59	0.021	1.6
Edge 4(Left)	GPRS-3 slot	661	1880.0	-0.17	0.030	26.00	25.59	0.033	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT									
Depth of Liquid (cm):>15				Relative Humidity (%): 50.1					
Product: Smart phone									
Test Mode: WCDMA Band II with QPSK modulation									
Position	**Mode**	**Ch.**	**Fr. (MHz)**	**Power Drift (<±5%)**	**SAR (1g) (W/kg)**	**Max. Tune-up Power (dBm)**	**Meas. output Power (dBm)**	**Scaled SAR (W/kg)**	**Limit (W/kg)**
Left Cheek	RMC 12.2kbps	9262	1852.4	-0.17	1.067	22.50	22.34	**1.107**	1.6
Left Cheek	RMC 12.2kbps	9400	1880	0.20	**1.081**	22.50	22.47	1.088	1.6
Left Cheek	RMC 12.2kbps	9538	1907.6	-0.27	1.063	22.50	22.49	1.065	1.6
Left Tilt	RMC 12.2kbps	9400	1880	-0.26	0.683	22.50	22.47	0.688	1.6
Right Cheek	RMC 12.2kbps	9400	1880	0.26	0.557	22.50	22.47	0.561	1.6
Right Tilt	RMC 12.2kbps	9400	1880	0.17	0.582	22.50	22.47	0.586	1.6
Body back	RMC 12.2kbps	9400	1880	0.06	**0.331**	22.50	22.47	**0.333**	1.6
Body front	RMC 12.2kbps	9400	1880	0.23	0.123	22.50	22.47	0.124	1.6
Edge 2(Right)	RMC 12.2kbps	9400	1880	-0.09	0.146	22.50	22.47	0.147	1.6
Edge 3(Bottom)	RMC 12.2kbps	9400	1880	0.03	0.042	22.50	22.47	0.042	1.6
Edge 4(Left)	RMC 12.2kbps	9400	1880	-0.04	0.056	22.50	22.47	0.056	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT									
Depth of Liquid (cm):>15				Relative Humidity (%): 48.9					
Product: Smart phone									
Test Mode: WCDMA Band IV with QPSK modulation									
Position	**Mode**	**Ch.**	**Fr. (MHz)**	**Power Drift (<±5%)**	**SAR (1g) (W/kg)**	**Max. Tune-up Power (dBm)**	**Meas. output Power (dBm)**	**Scaled SAR (W/kg)**	**Limit (W/kg)**
Left Cheek	RMC 12.2kbps	8662	1732.4	-0.14	**0.487**	23.00	22.54	**0.541**	1.6
Left Tilt	RMC 12.2kbps	8662	1732.4	-0.31	0.404	23.00	22.54	0.449	1.6
Right Cheek	RMC 12.2kbps	8662	1732.4	-0.30	0.360	23.00	22.54	0.400	1.6
Right Tilt	RMC 12.2kbps	8662	1732.4	0.11	0.300	23.00	22.54	0.334	1.6
Body back	RMC 12.2kbps	8662	1732.4	-0.25	**0.175**	23.00	22.54	**0.195**	1.6
Body front	RMC 12.2kbps	8662	1732.4	-0.26	0.147	23.00	22.54	0.163	1.6
Edge 2(Right)	RMC 12.2kbps	8662	1732.4	0.07	0.078	23.00	22.54	0.087	1.6
Edge 3(Bottom)	RMC 12.2kbps	8662	1732.4	0.16	0.008	23.00	22.54	0.009	1.6
Edge 4(Left)	RMC 12.2kbps	8662	1732.4	-0.09	0.032	23.00	22.54	0.036	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT									
Depth of Liquid (cm):>15				Relative Humidity (%): 45.9					
Product: Smart phone									
Test Mode: WCDMA Band V with QPSK modulation									
Position	**Mode**	**Ch.**	**Fr. (MHz)**	**Power Drift (<±5%)**	**SAR (1g) (W/kg)**	**Max. Tune-up Power (dBm)**	**Meas. output Power (dBm)**	**Scaled SAR (W/kg)**	**Limit (W/kg)**
Left Cheek	RMC 12.2kbps	4183	836.4	-0.16	**0.261**	23.00	22.35	**0.303**	1.6
Left Tilt	RMC 12.2kbps	4183	836.4	0.12	0.211	23.00	22.35	0.245	1.6
Right Cheek	RMC 12.2kbps	4183	836.4	-0.15	0.249	23.00	22.35	0.289	1.6
Right Tilt	RMC 12.2kbps	4183	836.4	-0.11	0.223	23.00	22.35	0.259	1.6
Body back	RMC 12.2kbps	4183	836.4	-0.42	**0.273**	23.00	22.35	**0.317**	1.6
Body front	RMC 12.2kbps	4183	836.4	0.18	0.190	23.00	22.35	0.221	1.6
Edge 2(Right)	RMC 12.2kbps	4183	836.4	-0.19	0.121	23.00	22.35	0.141	1.6
Edge 3(Bottom)	RMC 12.2kbps	4183	836.4	-0.41	0.116	23.00	22.35	0.135	1.6
Edge 4(Left)	RMC 12.2kbps	4183	836.4	0.13	0.178	23.00	22.35	0.207	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT												
Depth of Liquid (cm):>15					Relative Humidity (%): 50.1							
Product: Smart phone												
Test Mode: LTE Band 2												
BM MHz	MOD	Position	Test Mode		Ch.	Freq. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tune up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/kg)	Limit (W/kg)
			UL RB Allocation	UL RB START								
20	QPSK	Left Cheek	1	0	18700	1860	-0.28	1.059	23.50	23.05	1.175	1.6
		Left Cheek	1	0	18900	1880	0.28	1.080	23.50	23.20	1.157	1.6
		Left Cheek	1	0	19100	1900	-0.06	**1.171**	23.50	23.15	**1.269**	1.6
		Left Tilt	1	0	18900	1880	-0.17	0.732	23.50	23.20	0.784	1.6
		Right Cheek	1	0	18900	1880	0.28	0.639	23.50	23.20	0.685	1.6
		Right Tilt	1	0	18900	1880	-0.28	0.612	23.50	23.20	0.656	1.6
		Body back	1	0	18900	1880	-0.02	**0.273**	23.50	23.20	**0.293**	1.6
		Body front	1	0	18900	1880	0.18	0.249	23.50	23.20	0.267	1.6
		Edge 2(Right)	1	0	18900	1880	-0.17	0.173	23.50	23.20	0.185	1.6
		Edge 3(Bottom)	1	0	18900	1880	0.08	0.047	23.50	23.20	0.050	1.6
		Edge 4(Left)	1	0	18900	1880	-0.27	0.061	23.50	23.20	0.065	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT												
Depth of Liquid (cm):>15					Relative Humidity (%): 48.9							
Product: Smart phone												
Test Mode: LTE Band 4												
BM MHz	**MOD**	**Position**	**Test Mode**		**Ch.**	**Freq. (MHz)**	**Power Drift (<±5%)**	**SAR (1g) (W/kg)**	**Max. Tuneup Power (dBm)**	**Meas. output Power (dBm)**	**Scaled SAR (W/kg)**	**Limit (W/kg)**
			UL RB Allocation	**UL RB START**								
20	**QPSK**	Left Cheek	1	0	20175	1732.5	-0.27	**0.639**	23.50	22.83	**0.746**	1.6
		Left Tilt	1	0	20175	1732.5	0.30	0.458	23.50	22.83	0.534	1.6
		Right Cheek	1	0	20175	1732.5	-0.09	0.433	23.50	22.83	0.505	1.6
		Right Tilt	1	0	20175	1732.5	-0.21	0.430	23.50	22.83	0.502	1.6
		Body back	1	0	20175	1732.5	-0.01	0.182	23.50	22.83	0.212	1.6
		Body front	1	0	20175	1732.5	0.15	0.169	23.50	22.83	0.197	1.6
		Edge 2(Right)	1	0	20175	1732.5	-0.28	**0.197**	23.50	22.83	**0.230**	1.6
		Edge 3(Bottom)	1	0	20175	1732.5	-0.15	0.021	23.50	22.83	0.025	1.6
		Edge 4(Left)	1	0	20175	1732.5	0.04	0.025	23.50	22.83	0.029	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT												
Depth of Liquid (cm):>15					Relative Humidity (%): 45.9							
Product: Smart phone												
Test Mode: LTE Band 5												
BM MHz	MOD	Position	Test Mode		Ch.	Freq. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tuneup Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/kg)	Limit (W/kg)
			UL RB Allocation	UL RB START								
10	QPSK	Left Cheek	1	0	20525	836.5	-0.22	**0.172**	23.50	22.85	**0.200**	1.6
		Left Tilt	1	0	20525	836.5	0.05	0.142	23.50	22.85	0.165	1.6
		Right Cheek	1	0	20525	836.5	-0.31	0.157	23.50	22.85	0.182	1.6
		Right Tilt	1	0	20525	836.5	0.01	0.125	23.50	22.85	0.145	1.6
		Body back	1	0	20525	836.5	-0.33	**0.201**	23.50	22.85	**0.233**	1.6
		Body front	1	0	20525	836.5	-0.06	0.170	23.50	22.85	0.197	1.6
		Edge 2(Right)	1	0	20525	836.5	-0.06	0.095	23.50	22.85	0.110	1.6
		Edge 3(Bottom)	1	0	20525	836.5	0.33	0.098	23.50	22.85	0.114	1.6
		Edge 4(Left)	1	0	20525	836.5	-0.03	0.164	23.50	22.85	0.190	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT												
Depth of Liquid (cm):>15					Relative Humidity (%): 59.7							
Product: Smart phone												
Test Mode: LTE Band 12												
BM MHz	MOD	Position	Test Mode		Ch.	Freq. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tuneup Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/kg)	Limit (W/kg)
			UL RB Allocation	UL RB START								
10	QPSK	Left Cheek	1	0	23095	707.5	-0.02	0.117	23.00	22.48	0.132	1.6
		Left Tilt	1	0	23095	707.5	0.26	0.053	23.00	22.48	0.060	1.6
		Right Cheek	1	0	23095	707.5	0.09	**0.127**	23.00	22.48	**0.143**	1.6
		Right Tilt	1	0	23095	707.5	-0.28	0.064	23.00	22.48	0.072	1.6
		Body back	1	0	23095	707.5	-0.27	**0.291**	23.00	22.48	**0.328**	1.6
		Body front	1	0	23095	707.5	0.06	0.139	23.00	22.48	0.157	1.6
		Edge 2(Right)	1	0	23095	707.5	-0.18	0.182	23.00	22.48	0.205	1.6
		Edge 3(Bottom)	1	0	23095	707.5	-0.03	0.053	23.00	22.48	0.060	1.6
		Edge 4(Left)	1	0	23095	707.5	-0.20	0.224	23.00	22.48	0.252	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT												
Depth of Liquid (cm):>15					Relative Humidity (%): 59.7							
Product: Smart phone												
Test Mode: LTE Band 17												
BM MHz	MOD	Position	Test Mode		Ch.	Freq. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tuneup Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/kg)	Limit (W/kg)
			UL RB Allocation	UL RB START								
10	QPSK	Left Cheek	1	0	23790	710	-0.31	0.089	23.00	22.52	0.099	1.6
		Left Tilt	1	0	23790	710	-0.20	0.077	23.00	22.52	0.086	1.6
		Right Cheek	1	0	23790	710	0.31	**0.106**	23.00	22.52	**0.118**	1.6
		Right Tilt	1	0	23790	710	-0.03	0.090	23.00	22.52	0.101	1.6
		Body back	1	0	23790	710	-0.18	**0.180**	23.00	22.52	**0.201**	1.6
		Body front	1	0	23790	710	0.01	0.123	23.00	22.52	0.137	1.6
		Edge 2(Right)	1	0	23790	710	-0.05	0.056	23.00	22.52	0.063	1.6
		Edge 3(Bottom)	1	0	23790	710	-0.21	0.055	23.00	22.52	0.061	1.6
		Edge 4(Left)	1	0	23790	710	-0.13	0.059	23.00	22.52	0.066	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT											
Depth of Liquid (cm):>15				Relative Humidity (%): 50.1							
Product: Smart phone											
Test Mode: LTE Band 25											
BM MHz	MOD	Position	Test Mode		Ch.	Freq. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tuneup Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/kg)	Limit (W/kg)
			UL RB Allocation	UL RB START								
20	QPSK	Left Cheek	1	0	26140	1860	-0.23	0.944	23.50	22.94	1.074	1.6
		Left Cheek	1	0	26365	1882.5	0.02	**1.080**	23.50	23.08	**1.190**	1.6
		Left Cheek	1	0	26590	1905	-0.04	0.984	23.50	23.12	1.074	1.6
		Left Tilt	1	0	26365	1882.5	-0.30	0.449	23.50	23.08	0.495	1.6
		Right Cheek	1	0	26365	1882.5	0.29	0.665	23.50	23.08	0.733	1.6
		Right Tilt	1	0	26365	1882.5	-0.15	0.695	23.50	23.08	0.766	1.6
		Body back	1	0	26365	1882.5	-0.11	**0.340**	23.50	23.08	**0.375**	1.6
		Body front	1	0	26365	1882.5	0.08	0.130	23.50	23.08	0.143	1.6
		Edge 2(Right)	1	0	26365	1882.5	-0.28	0.161	23.50	23.08	0.177	1.6
		Edge 3(Bottom)	1	0	26365	1882.5	-0.09	0.070	23.50	23.08	0.077	1.6
		Edge 4(Left)	1	0	26365	1882.5	0.30	0.057	23.50	23.08	0.063	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT												
Depth of Liquid (cm):>15					Relative Humidity (%): 45.9							
Product: LTE smartphone												
Test Mode: LTE Band 26a												
BM MHz	MOD	Position	Test Mode		Ch.	Freq. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tuneup Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit (W/kg)
			UL RB Allocation	UL RB START								
15	QPSK	Left Cheek	1	0	26915	836.5	-0.25	**0.286**	23.50	22.80	**0.336**	1.6
		Left Tilt	1	0	26915	836.5	-0.00	0.174	23.50	22.80	0.204	1.6
		Right Cheek	1	0	26915	836.5	0.09	0.270	23.50	22.80	0.317	1.6
		Right Tilt	1	0	26915	836.5	-0.02	0.172	23.50	22.80	0.202	1.6
		Body back	1	0	26915	836.5	-0.11	**0.317**	23.50	22.80	**0.372**	1.6
		Body front	1	0	26915	836.5	-0.17	0.256	23.50	22.80	0.301	1.6
		Edge 2(Right)	1	0	26915	836.5	0.16	0.139	23.50	22.80	0.163	1.6
		Edge 3(Bottom)	1	0	26915	836.5	-0.16	0.142	23.50	22.80	0.167	1.6
		Edge 4(Left)	1	0	26915	836.5	-0.16	0.253	23.50	22.80	0.297	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT												
Depth of Liquid (cm):>15					Relative Humidity (%): 45.9							
Product: LTE smartphone												
Test Mode: LTE Band 26b												
BM MHz	MOD	Position	Test Mode		Ch.	Freq. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tuneup Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit (W/kg)
			UL RB Allocation	UL RB START								
10	QPSK	Left Cheek	1	0	26740	819	-0.07	**0.266**	23.50	22.88	**0.307**	1.6
		Left Tilt	1	0	26740	819	-0.22	0.159	23.50	22.88	0.183	1.6
		Right Cheek	1	0	26740	819	0.32	0.242	23.50	22.88	0.279	1.6
		Right Tilt	1	0	26740	819	-0.17	0.168	23.50	22.88	0.194	1.6
		Body back	1	0	26740	819	-0.24	**0.298**	23.50	22.88	**0.344**	1.6
		Body front	1	0	26740	819	0.16	0.271	23.50	22.88	0.313	1.6
		Edge 2(Right)	1	0	26740	819	-0.16	0.164	23.50	22.88	0.189	1.6
		Edge 3(Bottom)	1	0	26740	819	-0.25	0.095	23.50	22.88	0.110	1.6
		Edge 4(Left)	1	0	26740	819	0.12	0.265	23.50	22.88	0.306	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

SAR MEASUREMENT												
Depth of Liquid (cm):>15				Relative Humidity (%): 51.4								
Product: Smart phone												
Test Mode: LTE Band 41												
BW MHz	MOD	Position	Test Mode		Ch.	Freq. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tuneup Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/kg)	Limit (W/kg)
			UL RB Allocation	UL RB START								
20	QPSK	Left Cheek	1	0	40620	2593	-0.21	0.071	23.00	21.73	0.095	1.6
		Left Tilt	1	0	40620	2593	0.26	0.049	23.00	21.73	0.066	1.6
		Right Cheek	1	0	40620	2593	-0.05	**0.104**	23.00	21.73	**0.139**	1.6
		Right Tilt	1	0	40620	2593	-0.01	0.040	23.00	21.73	0.054	1.6
		Body back	1	0	40620	2593	-0.03	**0.202**	23.00	21.73	**0.271**	1.6
		Body front	1	0	40620	2593	-0.15	0.119	23.00	21.73	0.159	1.6
		Edge 2(Right)	1	0	40620	2593	0.30	0.111	23.00	21.73	0.149	1.6
		Edge 3(Bottom)	1	0	40620	2593	-0.22	0.110	23.00	21.73	0.147	1.6
		Edge 4(Left)	1	0	40620	2593	-0.16	0.061	23.00	21.73	0.082	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table

SAR MEASUREMENT												
Depth of Liquid (cm):>15					Relative Humidity (%): 48.9							
Product: LTE smartphone												
Test Mode: LTE Band 66												
BW MHz	MOD	Position	Test Mode		Ch.	Freq. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tuneup Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit (W/kg)
			UL RB Allocation	UL RB START								
20	QPSK	Left Cheek	1	0	132422	1755	-0.21	**0.649**	23.50	23.14	**0.705**	1.6
		Left Tilt	1	0	132422	1755	0.26	0.648	23.50	23.14	0.704	1.6
		Right Cheek	1	0	132422	1755	0.30	0.317	23.50	23.14	0.344	1.6
		Right Tilt	1	0	132422	1755	-0.32	0.344	23.50	23.14	0.374	1.6
		Body back	1	0	132422	1755	-0.10	**0.169**	23.50	23.14	**0.184**	1.6
		Body front	1	0	132422	1755	-0.15	0.061	23.50	23.14	0.066	1.6
		Edge 2(Right)	1	0	132422	1755	0.23	0.100	23.50	23.14	0.109	1.6
		Edge 3(Bottom)	1	0	132422	1755	-0.01	0.014	23.50	23.14	0.015	1.6
		Edge 4(Left)	1	0	132422	1755	0.29	0.013	23.50	23.14	0.014	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table

SAR MEASUREMENT												
Depth of Liquid (cm):>15					Relative Humidity (%): 59.7							
Product: LTE smartphone												
Test Mode: LTE Band 71												
BW MHz	MOD	Position	Test Mode		Ch.	Freq. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tuneup Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit (W/kg)
			UL RB Allocation	UL RB START								
20	QPSK	Left Cheek	1	0	133322	683	-0.18	0.090	23.50	22.93	0.103	1.6
		Left Tilt	1	0	133322	683	0.07	0.038	23.50	22.93	0.043	1.6
		Right Cheek	1	0	133322	683	-0.23	**0.091**	23.50	22.93	**0.104**	1.6
		Right Tilt	1	0	133322	683	-0.19	0.051	23.50	22.93	0.058	1.6
		Body back	1	0	133322	683	0.32	**0.218**	23.50	22.93	**0.249**	1.6
		Body front	1	0	133322	683	-0.16	0.135	23.50	22.93	0.154	1.6
		Edge 2(Right)	1	0	133322	683	-0.23	0.093	23.50	22.93	0.106	1.6
		Edge 3(Bottom)	1	0	133322	683	-0.23	0.030	23.50	22.93	0.034	1.6
		Edge 4(Left)	1	0	133322	683	0.27	0.111	23.50	22.93	0.127	1.6

Note:
· When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
·The test separation for body back, body front and 4 Edges is 10mm of all above table

SAR MEASUREMENT									
Depth of Liquid (cm):>15				Relative Humidity (%): 46.8					
Product: Smart phone									
Test Mode:802.11b									
Position	**Mode**	**Ch.**	**Fr. (MHz)**	**Power Drift (<±5%)**	**SAR (1g) (W/kg)**	**Max. Tune-up Power (dBm)**	**Meas. output Power (dBm)**	**Scaled SAR (W/kg)**	**Limit (W/kg)**
Left Cheek	DTS	01	2412	-0.15	0.035	16.00	15.78	0.037	1.6
Left Tilt	DTS	01	2412	0.04	0.034	16.00	15.78	0.036	1.6
Right Cheek	DTS	01	2412	0.11	**0.054**	16.00	15.78	**0.057**	1.6
Right Tilt	DTS	01	2412	-0.02	0.042	16.00	15.78	0.044	1.6
Body back	DTS	01	2412	-0.06	**0.044**	16.00	15.78	**0.046**	1.6
Body front	DTS	01	2412	0.32	0.022	16.00	15.78	0.023	1.6
Edge 1 (Top)	DTS	01	2412	-0.05	0.022	16.00	15.78	0.023	1.6
Edge 4(Left)	DTS	01	2412	0.24	0.026	16.00	15.78	0.027	1.6

Note:
· According to KDB248227, SAR is not required for 802.11n HT20/HT40 channels when the maximum average output power is less than 1/4 dB higher than that measured on the corresponding 802.11a/b channels.
· All of above “DTS” means data transmitters.
·The test separation for body back, body front and 4 Edges is 10mm of all above table.

Repeated SAR										
Product: Smart phone										
Test Mode: WCDMA Band II & LTE Band 2& LTE Band 25										
Position	**Mode**	**Ch.**	**Fr. (MHz)**	**Power Drift (<±5%)**	**Once SAR (1g) (W/kg)**	**Power Drift (<±5%)**	**Twice SAR (1g) (W/kg)**	**Power Drift (<±5%)**	**Third SAR (1g) (W/kg)**	**Limit W/kg**
Left Cheek	RMC 12.2kbps	9400	1880	0.15	1.049	--	--	--	--	1.6

Position	**Mode**		**Ch.**	**Fr. (MHz)**	**Power Drift (<±5%)**	**Once SAR (1g) (W/kg)**	**Power Drift (<±5%)**	**Twice SAR (1g) (W/kg)**	**Power Drift (<±5%)**	**Third SAR (1g) (W/kg)**	**Limit W/kg**
	UL RB Allocation	**UL RB START**									
Left Cheek	1	0	19100	1900	0.31	1.261	--	--	--	--	1.6
Left Cheek	1	0	26365	1882.5	-0.25	0.982	--	--	--	--	1.6

The second repeated SAR judge reference									
Product: Smart phone									
Band	**Position**	**Mode**		**Ch.**	**Fr. (MHz)**	**Original SAR (1g) (W/kg)**	**First SAR (1g) (W/kg)**	**Ratio**	**Limit**
WCDMA Band II	Left Cheek	RMC 12.2kbps		9400	1880	1.081	1.049	1.031	＜1.2
Band	**Position**	**Mode**		**Ch.**	**Fr. (MHz)**	**Original SAR (1g) (W/kg)**	**First SAR (1g) (W/kg)**	**Ratio**	**Limit**
		UL RB Allocation	**UL RB START**						
LTE Band 2	Left Cheek	1	0	19100	1900	1.171	1.261	1.077	＜1.2
LTE Band 25	Left Cheek	1	0	26365	1882.5	1.080	0.982	1.100	＜1.2

Simultaneous Multi-band Transmission Evaluation:

Application Simultaneous Transmission information:

NO	Simultaneous state	Portable Handset		
		Head	Body-worn	Hotspot
1	GSM(voice)+ WLAN 2.4GHz (data)	Yes	Yes	-
2	GSM(voice)+ Bluetooth(data)	Yes	Yes	-
3	GSM (Data) + WLAN 2.4GHz (data)	-	Yes	Yes
4	GSM (Data) + Bluetooth(data)	-	Yes	Yes
5	WCDMA+ WLAN 2.4GHz (data)	Yes	Yes	Yes
6	WCDMA+ Bluetooth(data)	Yes	Yes	Yes
7	LTE + WLAN 2.4GHz (data)	Yes	Yes	Yes
8	LTE + Bluetooth(data)	Yes	Yes	Yes

NOTE:

1. WIFI and BT share the same antenna, and cannot transmit simultaneously.
2. Simultaneous with every transmitter must be the same test position.
3. KDB 447498 D01, BT SAR is excluded as below table.
4. KDB 447498 D01, for handsets the test separation distance is determined by the smallest distance between the outer surface of the device and the user; which is 0mm for head SAR and 10mm for body-worn SAR.
5. According to KDB 447498 D01 4.3.1, Standalone SAR test exclusion is as follow:
   For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
   [(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] • [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR[30], where
   - f(GHz) is the RF channel transmit frequency in GHz
   - Power and distance are rounded to the nearest mW and mm before calculation[31]
   - The result is rounded to one decimal place for comparison
   - The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

   The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.
6. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
7. According to KDB 447498 D01 4.3.2, simultaneous transmission SAR test exclusion is as follow:
   (1) 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.
   (2) Any transmitters and antennas should be considered when calculating simultaneous mode.
   (3) For mobile phone and PC, it's the sum of all transmitters and antennas at the same mode with same position in each applicable exposure condition
   (4)When the standalone SAR test exclusion of section 4.3.2 is applied to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to the following to det
   (max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)/x] W/kg for test separation distances ≤ 50 mm;
   where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR.

8. When the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio. The simultaneous transmitting antennas in each operating mode and exposure condition combination must be considered one pair at a time to determine the SAR to peak location separation ratio to qualify for test exclusion. The ratio is determined by (SAR1 + SAR2)1.5/Ri, rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.

Estimated SAR		Max Power including Tune-up Tolerance		Separation Distance (mm)	Estimated SAR (W/kg)
		dBm	mW		
BT	Head	5	3.162	0	0.131
	Body	5	3.162	10	0.065

Sum of the SAR for GSM 850 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		GSM 850	WI-Fi DTS Band	Bluetooth		
Head (voice)	Left Touch	0.251	0.037		0.288	No
	Left Tilt	0.219	0.036		0.255	No
	Right Touch	0.219	0.057		0.276	No
	Right Tilt	0.193	0.044		0.237	No
Head (voice)	Left Touch	0.251		0.131	0.382	No
	Left Tilt	0.219		0.131	0.350	No
	Right Touch	0.219		0.131	0.350	No
	Right Tilt	0.193		0.131	0.324	No
Body-worn (voice)	Rear	0.322	0.046		0.368	No
		0.322		0.065	0.387	No
	Front	0.219	0.023		0.242	No
		0.219		0.065	0.284	No
Body-worn (Data)	Rear	0.329		0.065	0.394	No
		0.329	0.046		0.375	No
	Front	0.225		0.065	0.290	No
		0.225	0.023		0.248	No
Body-worn (Hotspot)	Edge 4	0.209	0.027		0.236	No
	Edge 4	0.209		0.065	0.274	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.

·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for GSM 1900 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		PCS 1900	WI-Fi DTS Band	Bluetooth		
Head (voice)	Left Touch	0.596	0.037		0.633	No
	Left Tilt	0.391	0.036		0.427	No
	Right Touch	0.310	0.057		0.367	No
	Right Tilt	0.320	0.044		0.364	No
Head (voice)	Left Touch	0.596		0.131	0.727	No
	Left Tilt	0.391		0.131	0.522	No
	Right Touch	0.310		0.131	0.441	No
	Right Tilt	0.320		0.131	0.451	No
Body-worn (voice)	Rear	0.125	0.046		0.171	No
		0.125		0.065	0.190	No
	Front	0.056	0.023		0.079	No
		0.056		0.065	0.121	No
Body-worn (Data)	Rear	0.147		0.065	0.212	No
		0.147	0.046		0.193	No
	Front	0.063		0.065	0.128	No
		0.063	0.023		0.086	No
Body-worn (Hotspot)	Edge 4	0.033	0.027		0.060	No
	Edge 4	0.033		0.065	0.098	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for WCDMA Band II &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		WCDMA Band II	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	1.107	0.037		1.144	No
	Left Tilt	0.688	0.036		0.724	No
	Right Touch	0.561	0.057		0.618	No
	Right Tilt	0.586	0.044		0.630	No
Head	Left Touch	1.107		0.131	1.238	No
	Left Tilt	0.688		0.131	0.819	No
	Right Touch	0.561		0.131	0.692	No
	Right Tilt	0.586		0.131	0.717	No
Body-worn	Rear	0.333	0.046		0.379	No
	Front	0.124	0.023		0.147	No
	Edge 4	0.056	0.027		0.083	No
	Rear	0.333		0.065	0.398	No
	Front	0.124		0.065	0.189	No
	Edge 4	0.056		0.065	0.121	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for WCDMA Band IV &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		WCDMA Band IV	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.541	0.037		0.578	No
	Left Tilt	0.449	0.036		0.485	No
	Right Touch	0.400	0.057		0.457	No
	Right Tilt	0.334	0.044		0.378	No
Head	Left Touch	0.541		0.131	0.672	No
	Left Tilt	0.449		0.131	0.580	No
	Right Touch	0.400		0.131	0.531	No
	Right Tilt	0.334		0.131	0.465	No
Body-worn	Rear	0.195	0.046		0.241	No
	Front	0.163	0.023		0.186	No
	Edge 4	0.036	0.027		0.063	No
	Rear	0.195		0.065	0.260	No
	Front	0.163		0.065	0.228	No
	Edge 4	0.036		0.065	0.101	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for WCDMA Band V &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		WCDMA Band V	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.303	0.037		0.340	No
	Left Tilt	0.245	0.036		0.281	No
	Right Touch	0.289	0.057		0.346	No
	Right Tilt	0.259	0.044		0.303	No
Head	Left Touch	0.303		0.131	0.434	No
	Left Tilt	0.245		0.131	0.376	No
	Right Touch	0.289		0.131	0.420	No
	Right Tilt	0.259		0.131	0.390	No
Body-worn	Rear	0.317	0.046		0.363	No
	Front	0.221	0.023		0.244	No
	Edge 4	0.207	0.027		0.234	No
	Rear	0.317		0.065	0.382	No
	Front	0.221		0.065	0.286	No
	Edge 4	0.207		0.065	0.272	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 2 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 2	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	1.269	0.037		1.306	No
	Left Tilt	0.784	0.036		0.820	No
	Right Touch	0.685	0.057		0.742	No
	Right Tilt	0.656	0.044		0.700	No
Head	Left Touch	1.269		0.131	**1.400**	No
	Left Tilt	0.784		0.131	0.915	No
	Right Touch	0.685		0.131	0.816	No
	Right Tilt	0.656		0.131	0.787	No
Body-worn	Rear	0.293	0.046		0.339	No
	Front	0.267	0.023		0.290	No
	Edge 4	0.065	0.027		0.092	No
	Rear	0.293		0.065	0.358	No
	Front	0.267		0.065	0.332	No
	Edge 4	0.065		0.065	0.130	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 4 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 4	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.746	0.037		0.783	No
	Left Tilt	0.534	0.036		0.570	No
	Right Touch	0.505	0.057		0.562	No
	Right Tilt	0.502	0.044		0.546	No
Head	Left Touch	0.746		0.131	0.877	No
	Left Tilt	0.534		0.131	0.665	No
	Right Touch	0.505		0.131	0.636	No
	Right Tilt	0.502		0.131	0.633	No
Body-worn	Rear	0.212	0.046		0.258	No
	Front	0.197	0.023		0.220	No
	Edge 4	0.029	0.027		0.056	No
	Rear	0.212		0.065	0.277	No
	Front	0.197		0.065	0.262	No
	Edge 4	0.029		0.065	0.094	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 5 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 5	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.200	0.037		0.237	No
	Left Tilt	0.165	0.036		0.201	No
	Right Touch	0.182	0.057		0.239	No
	Right Tilt	0.145	0.044		0.189	No
Head	Left Touch	0.200		0.131	0.331	No
	Left Tilt	0.165		0.131	0.296	No
	Right Touch	0.182		0.131	0.313	No
	Right Tilt	0.145		0.131	0.276	No
Body-worn	Rear	0.233	0.046		0.279	No
	Front	0.197	0.023		0.220	No
	Edge 4	0.190	0.027		0.217	No
	Rear	0.233		0.065	0.298	No
	Front	0.197		0.065	0.262	No
	Edge 4	0.190		0.065	0.255	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 12 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 12	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.132	0.037		0.169	No
	Left Tilt	0.060	0.036		0.096	No
	Right Touch	0.143	0.057		0.200	No
	Right Tilt	0.072	0.044		0.116	No
Head	Left Touch	0.132		0.131	0.263	No
	Left Tilt	0.060		0.131	0.191	No
	Right Touch	0.143		0.131	0.274	No
	Right Tilt	0.072		0.131	0.203	No
Body-worn	Rear	0.328	0.046		0.374	No
	Front	0.157	0.023		0.180	No
	Edge 4	0.252	0.027		0.279	No
	Rear	0.328		0.065	0.393	No
	Front	0.157		0.065	0.222	No
	Edge 4	0.252		0.065	0.317	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 17 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 17	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.099	0.037		0.136	No
	Left Tilt	0.086	0.036		0.122	No
	Right Touch	0.118	0.057		0.175	No
	Right Tilt	0.101	0.044		0.145	No
Head	Left Touch	0.099		0.131	0.230	No
	Left Tilt	0.086		0.131	0.217	No
	Right Touch	0.118		0.131	0.249	No
	Right Tilt	0.101		0.131	0.232	No
Body-worn	Rear	0.201	0.046		0.247	No
	Front	0.137	0.023		0.160	No
	Edge 4	0.066	0.027		0.093	No
	Rear	0.201		0.065	0.266	No
	Front	0.137		0.065	0.202	No
	Edge 4	0.066		0.065	0.131	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 25 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 25	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	1.190	0.037		1.227	No
	Left Tilt	0.495	0.036		0.531	No
	Right Touch	0.733	0.057		0.790	No
	Right Tilt	0.766	0.044		0.810	No
Head	Left Touch	1.190		0.131	1.321	No
	Left Tilt	0.495		0.131	0.626	No
	Right Touch	0.733		0.131	0.864	No
	Right Tilt	0.766		0.131	0.897	No
Body-worn	Rear	0.375	0.046		0.421	No
	Front	0.143	0.023		0.166	No
	Edge 4	0.063	0.027		0.090	No
	Rear	0.375		0.065	0.440	No
	Front	0.143		0.065	0.208	No
	Edge 4	0.063		0.065	0.128	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 26a &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 26a	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.336	0.037		0.373	No
	Left Tilt	0.204	0.036		0.240	No
	Right Touch	0.317	0.057		0.374	No
	Right Tilt	0.202	0.044		0.246	No
Head	Left Touch	0.336		0.131	0.467	No
	Left Tilt	0.204		0.131	0.335	No
	Right Touch	0.317		0.131	0.448	No
	Right Tilt	0.202		0.131	0.333	No
Body-worn	Rear	0.372	0.046		0.418	No
	Front	0.301	0.023		0.324	No
	Edge 4	0.297	0.027		0.324	No
	Rear	0.372		0.065	0.437	No
	Front	0.301		0.065	0.366	No
	Edge 4	0.297		0.065	0.362	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 26b &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 26b	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.307	0.037		0.344	No
	Left Tilt	0.183	0.036		0.219	No
	Right Touch	0.279	0.057		0.336	No
	Right Tilt	0.194	0.044		0.238	No
Head	Left Touch	0.307		0.131	0.438	No
	Left Tilt	0.183		0.131	0.314	No
	Right Touch	0.279		0.131	0.410	No
	Right Tilt	0.194		0.131	0.325	No
Body-worn	Rear	0.344	0.046		0.390	No
	Front	0.313	0.023		0.336	No
	Edge 4	0.306	0.027		0.333	No
	Rear	0.344		0.065	0.409	No
	Front	0.313		0.065	0.378	No
	Edge 4	0.306		0.065	0.371	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 41 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 41	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.095	0.037		0.132	No
	Left Tilt	0.066	0.036		0.102	No
	Right Touch	0.139	0.057		0.196	No
	Right Tilt	0.054	0.044		0.098	No
Head	Left Touch	0.095		0.131	0.226	No
	Left Tilt	0.066		0.131	0.197	No
	Right Touch	0.139		0.131	0.270	No
	Right Tilt	0.054		0.131	0.185	No
Body-worn	Rear	0.271	0.046		0.317	No
	Front	0.159	0.023		0.182	No
	Edge 4	0.082	0.027		0.109	No
	Rear	0.271		0.065	0.336	No
	Front	0.159		0.065	0.224	No
	Edge 4	0.082		0.065	0.147	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 66 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 66	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.705	0.037		0.742	No
	Left Tilt	0.704	0.036		0.740	No
	Right Touch	0.344	0.057		0.401	No
	Right Tilt	0.374	0.044		0.418	No
Head	Left Touch	0.705		0.131	0.836	No
	Left Tilt	0.704		0.131	0.835	No
	Right Touch	0.344		0.131	0.475	No
	Right Tilt	0.374		0.131	0.505	No
Body-worn	Rear	0.184	0.046		0.230	No
	Front	0.066	0.023		0.089	No
	Edge 4	0.014	0.027		0.041	No
	Rear	0.184		0.065	0.249	No
	Front	0.066		0.065	0.131	No
	Edge 4	0.014		0.065	0.079	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for LTE Band 71 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/kg)	SPLSR (Yes/No)
		LTE Band 71	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.103	0.037		0.140	No
	Left Tilt	0.043	0.036		0.079	No
	Right Touch	0.104	0.057		0.161	No
	Right Tilt	0.058	0.044		0.102	No
Head	Left Touch	0.103		0.131	0.234	No
	Left Tilt	0.043		0.131	0.174	No
	Right Touch	0.104		0.131	0.235	No
	Right Tilt	0.058		0.131	0.189	No
Body-worn	Rear	0.249	0.046		0.295	No
	Front	0.154	0.023		0.177	No
	Edge 4	0.127	0.027		0.154	No
	Rear	0.249		0.065	0.314	No
	Front	0.154		0.065	0.219	No
	Edge 4	0.127		0.065	0.192	No

Note:

·According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than1.6 W/kg, SPLSR assessment is not required.
·SPLSR mean is “The SAR to Peak Location Separation Ratio “

APPENDIX A. SAR SYSTEM CHECK DATA

Test Laboratory: AGC Lab **Date: Jul. 15, 2024**

System Check Head 750 MHz

DUT: Dipole 750 MHz Type: SID 750

Communication System CW; Communication System Band: D750 (750.0 MHz); Duty Cycle: 1:1; Conv.F=2.04

Frequency: 750 MHz; Medium parameters used: f = 750 MHz; σ=0.92 mho/m; εr =42.17; ρ= 1000 kg/m³ ;

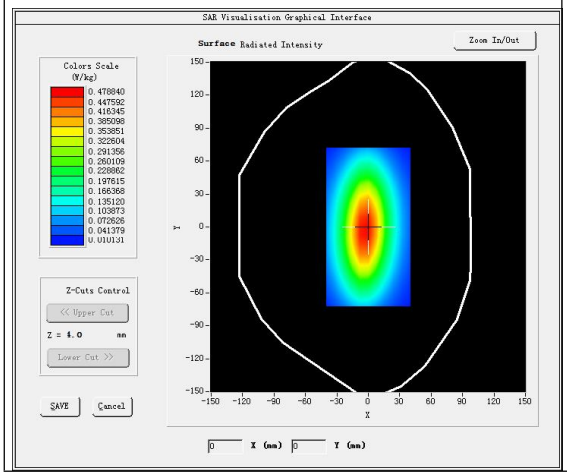
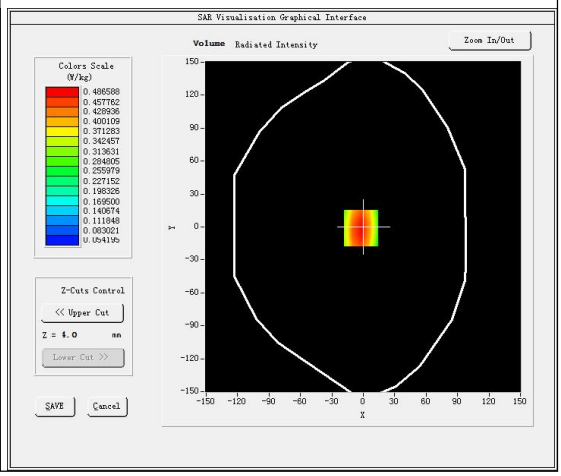
Phantom section: Flat Section; Input Power=18dBm

Ambient temperature (℃):21.7, Liquid temperature (℃): 21.6

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/System Check 750MHz Head/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/System Check 750MHz Head/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm

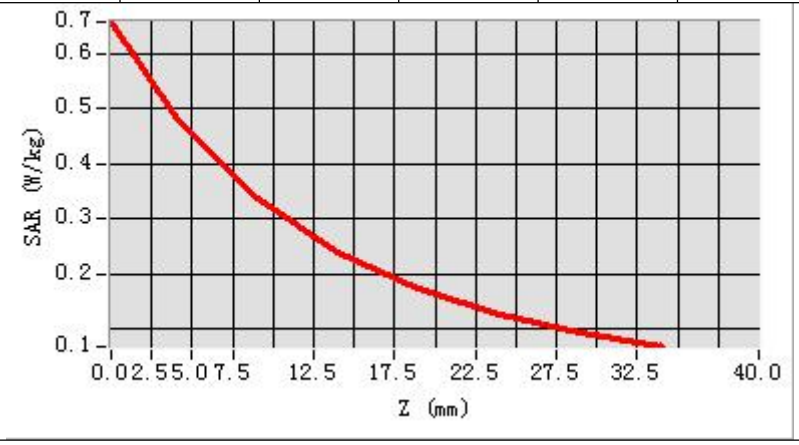
SURFACE SAR	VOLUME SAR
	

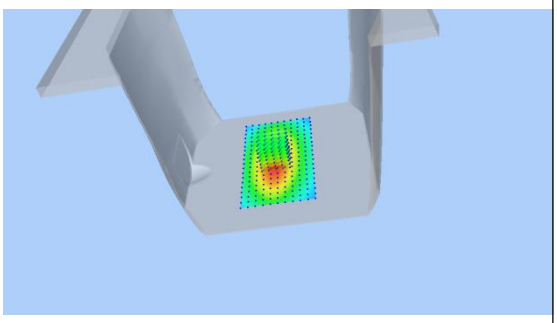
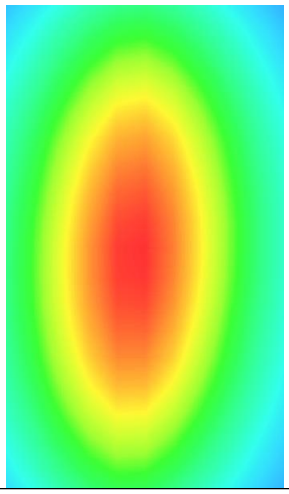
Maximum location: X=-2.00, Y=-1.00

SAR Peak: 0.67 W/kg

SAR 10g (W/Kg)	0.327490
SAR 1g (W/Kg)	0.518327

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.6592	0.4877	0.3385	0.2397	0.1734	0.1260	0.0938



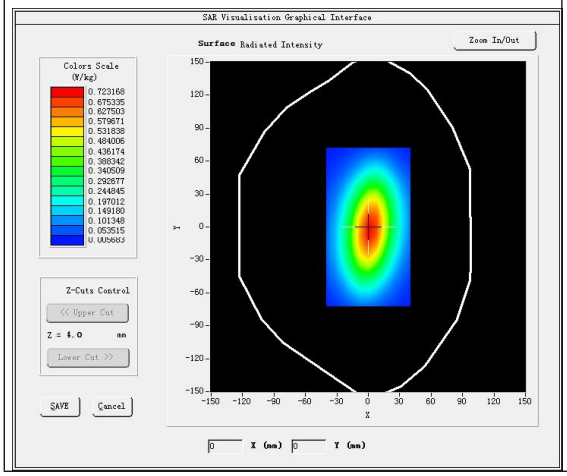
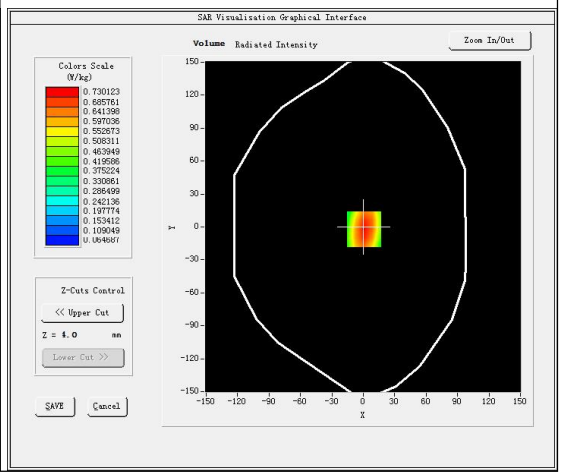
3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 12, 2024**
System Check Head 835 MHz
DUT: Dipole 835 MHz Type: SID 835
Communication System CW; Communication System Band: D835 (835.0 MHz); Duty Cycle: 1:1; Conv.F=1.89
Frequency: 835 MHz; Medium parameters used: f = 835 MHz; σ=0.92 mho/m; εr =41.42; ρ= 1000 kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (℃):22.2, Liquid temperature (℃): 21.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

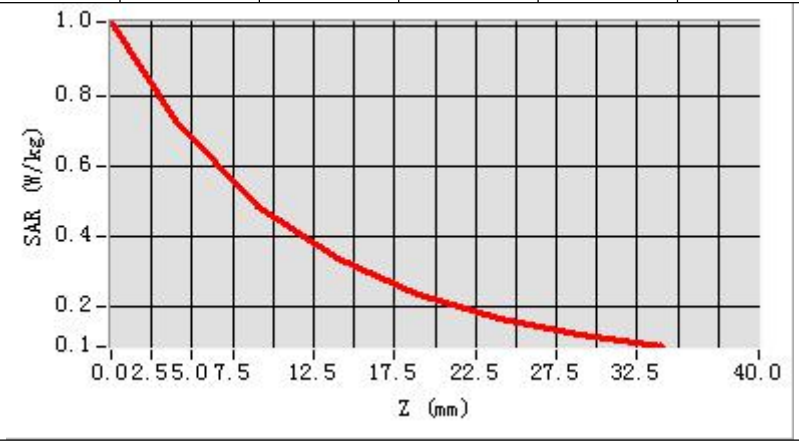
Configuration/System Check 835MHz Head/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/System Check 835MHz Head/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm

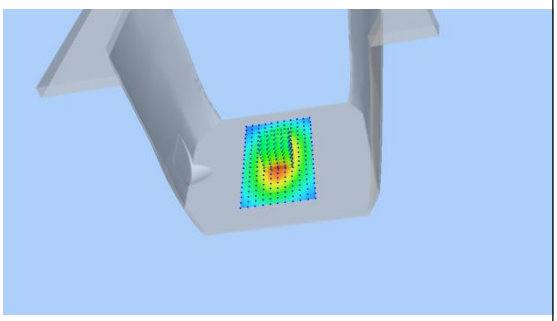
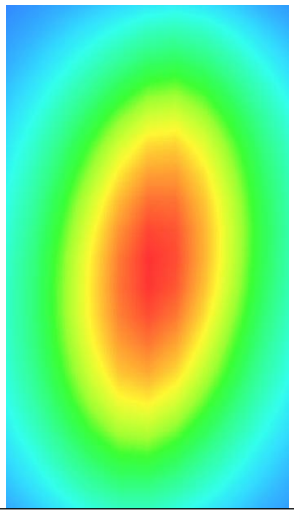
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=-2.00
SAR Peak: 1.02 W/kg

SAR 10g (W/Kg)	0.392044
SAR 1g (W/Kg)	0.633491

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.0147	0.7290	0.4893	0.3386	0.2371	0.1688	0.1198



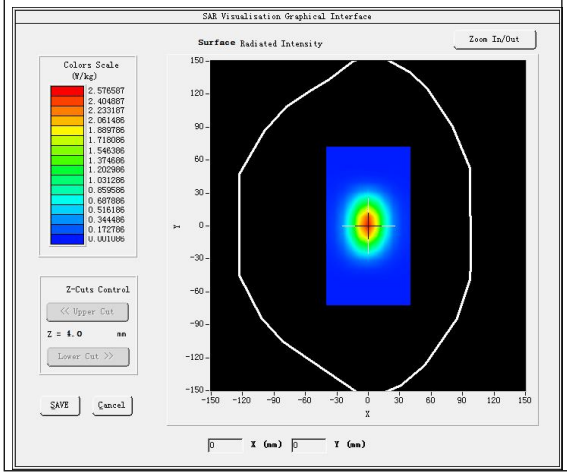
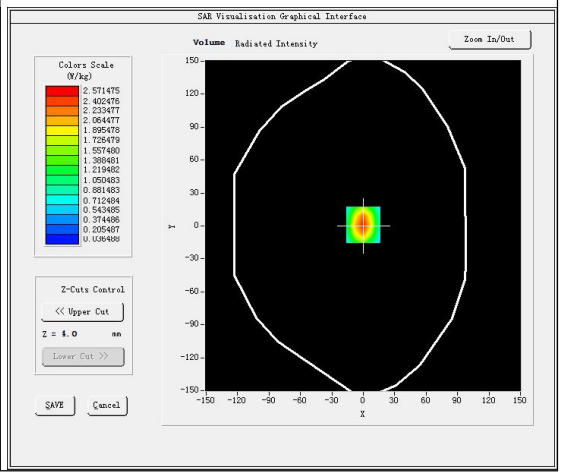
3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 19, 2024**
System Check Head 1750MHz
DUT: Dipole 1800 MHz; Type: SID 1800
Communication System: CW; Communication System Band: D1700 (1750.0 MHz); Duty Cycle:1:1; Conv.F=2.28
Frequency: 1750 MHz; Medium parameters used: f = 1750MHz; σ=1.39 mho/m; εr =39.70; ρ= 1000 kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (℃): 20.1, Liquid temperature (℃): 19.9

SATIMO Configuration:
Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

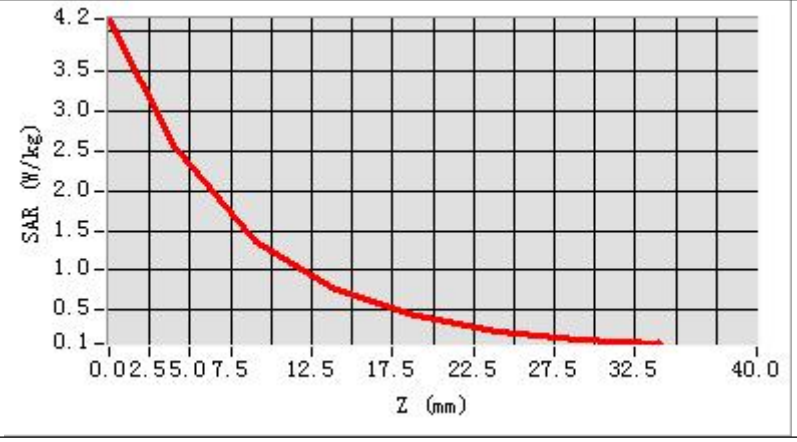
Configuration/System Check 1750MHz **Head/Area Scan:** Measurement grid: dx=8mm,dy=8mm
Configuration/System Check 1750MHz **Head/Zoom Scan:** Measurement grid: dx=8mm,dy=8mm, dz=5mm

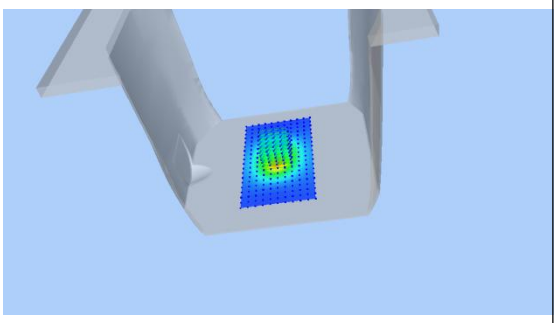
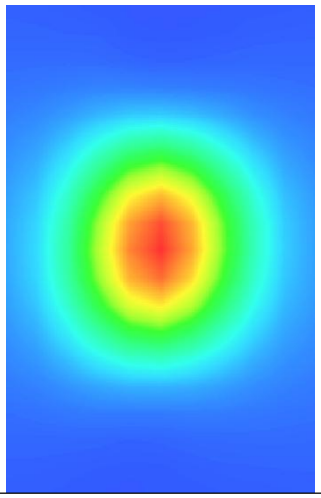
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=1.00
SAR Peak: 4.12 W/kg

SAR 10g (W/Kg)	1.223584
SAR 1g (W/Kg)	2.418542

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	4.1543	2.527	1.3686	0.7569	0.4264	0.2425	0.1373



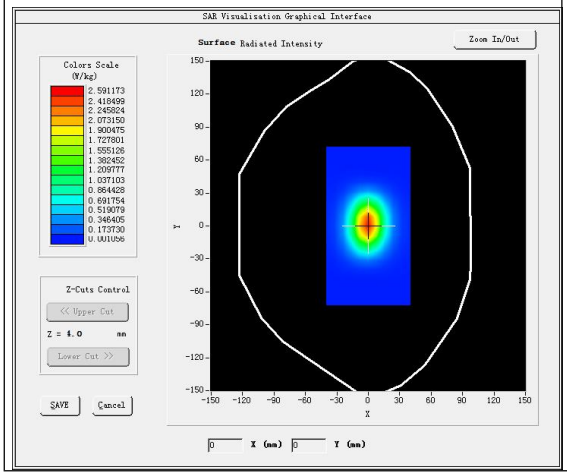
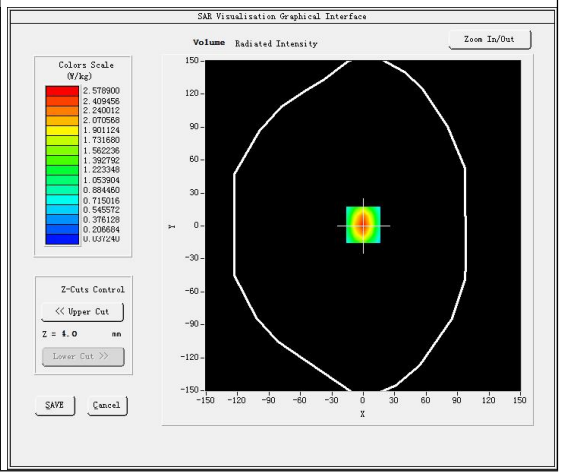
3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 16, 2024**
System Check Head 1900MHz
DUT: Dipole 1900 MHz; Type: SID 1900
Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Duty Cycle:1:1; Conv.F=2.08
Frequency: 1900 MHz; Medium parameters used: f = 1900 MHz; σ=1.39 mho/m; εr =39.54; ρ= 1000 kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (℃):21.3, Liquid temperature (℃): 20.9

SATIMO Configuration:
Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

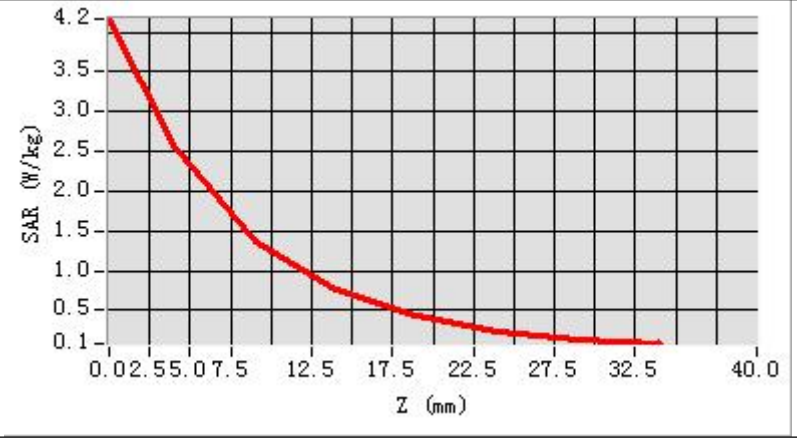
Configuration/System Check 1900MHz Head/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/System Check 1900MHz Head/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm

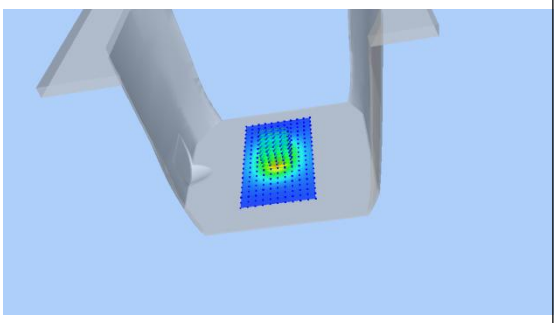
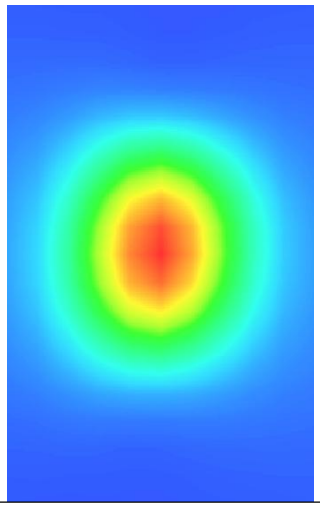
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=1.00
SAR Peak: 4.49 W/kg

SAR 10g (W/Kg)	1.261505
SAR 1g (W/Kg)	2.499748

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	4.1955	2.5993	1.4261	0.9368	0.6270	0.4052	0.1743



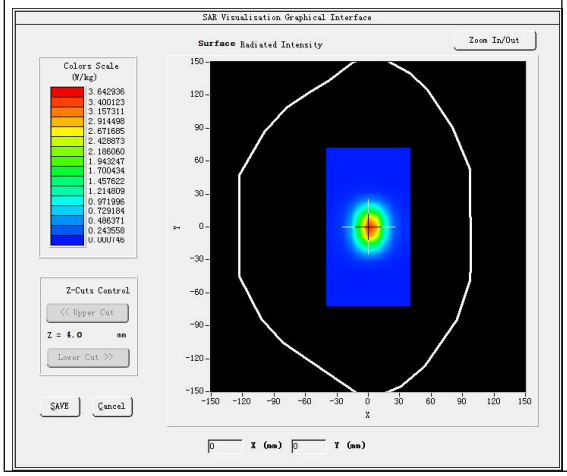
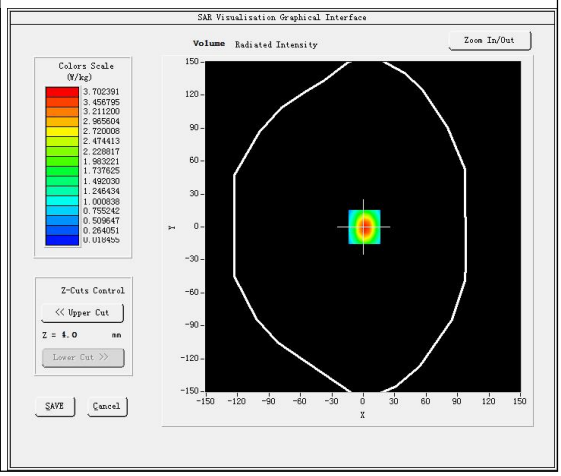
3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 17, 2024**
System Check Head 2450 MHz
DUT: Dipole 2450 MHz Type: SID 2450
Communication System CW; Communication System Band: D2450 (2450.0 MHz); Duty Cycle: 1:1; Conv.F=2.16
Frequency: 2450 MHz; Medium parameters used: f = 2450 MHz; σ=1.85 mho/m; εr =39.34; ρ= 1000 kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (℃):20.9, Liquid temperature (℃): 20.5

SATIMO Configuration

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

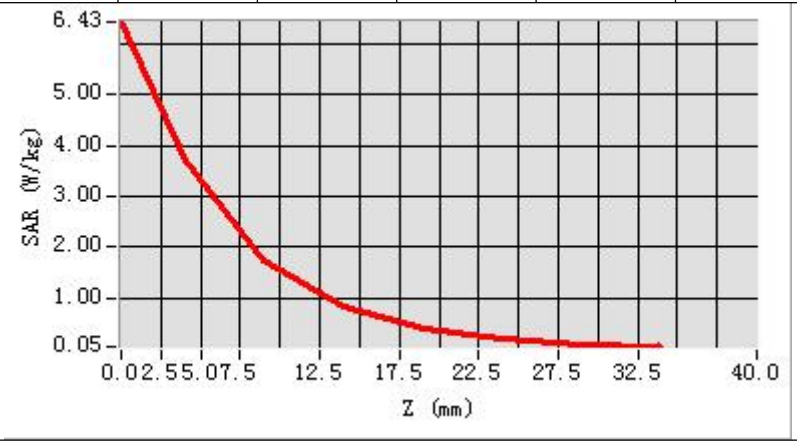
Configuration/System Check 2450MHz Head/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/System Check 2450MHz Head/Zoom Scan: Measurement grid: dx=5mm,dy=5mm, dz=5mm

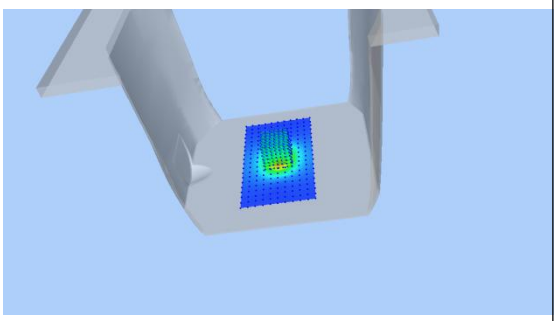
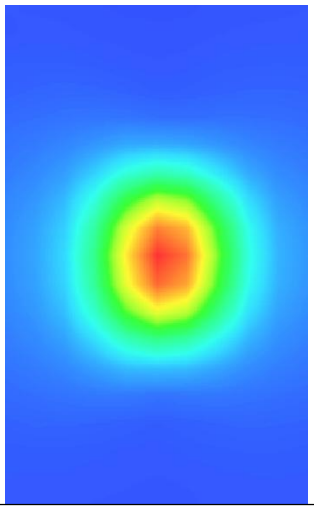
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=0.00
SAR Peak: 6.38 W/kg

SAR 10g (W/Kg)	1.532206
SAR 1g (W/Kg)	3.420183

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.4247	3.7019	1.7331	0.8340	0.4066	0.2007	0.0953



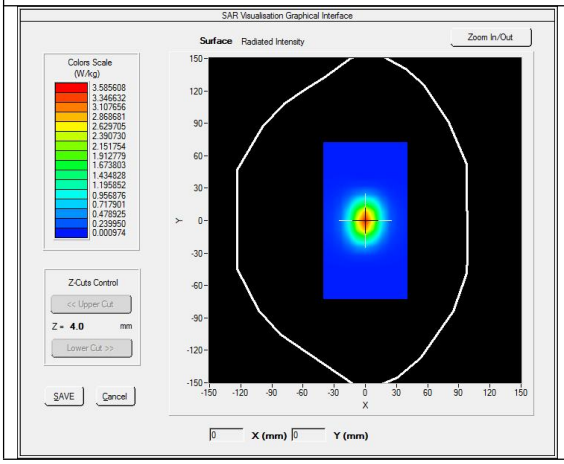
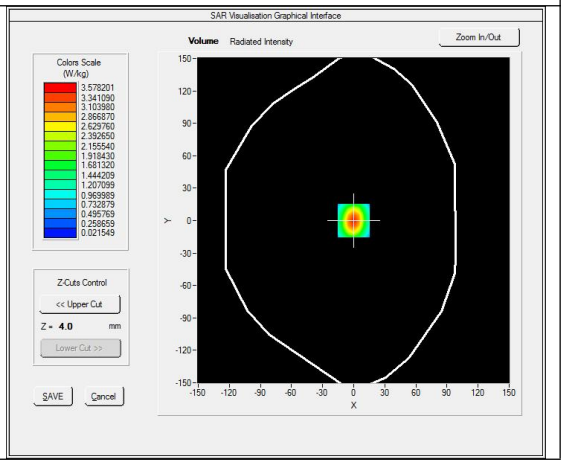
3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 18, 2024**
System Check Head 2600MHz
DUT: Dipole 2600 MHz; Type: SID 2600
Communication System: CW; Communication System Band: D2600 (2600.0 MHz); Duty Cycle: 1:1; Conv.F=2.06
Frequency:2600 MHz; Medium parameters used: f = 2600 MHz; σ=1.98 mho/m; εr =39.69; ρ= 1000 kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (℃): 20.5, Liquid temperature (℃): 20.1

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

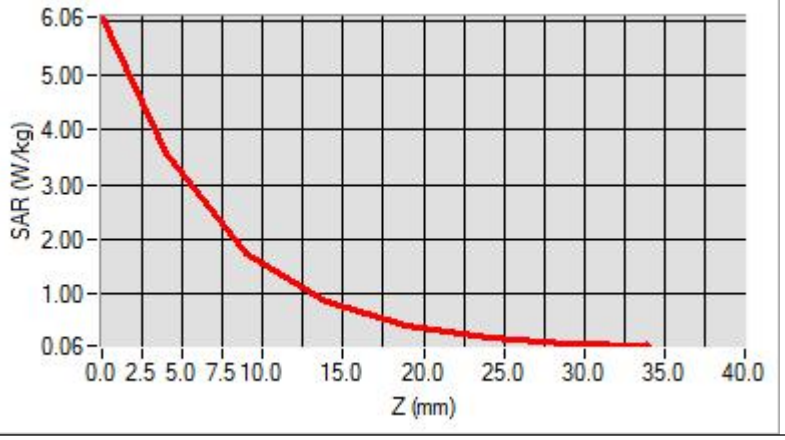
Configuration/System Check 2600 Head/Area Scan: Measurement grid: dx=8mm,dy=8mm
Configuration/System Check 2600 Head/Zoom Scan: Measurement grid: dx=5mm,dy=5mm, dz=5mm

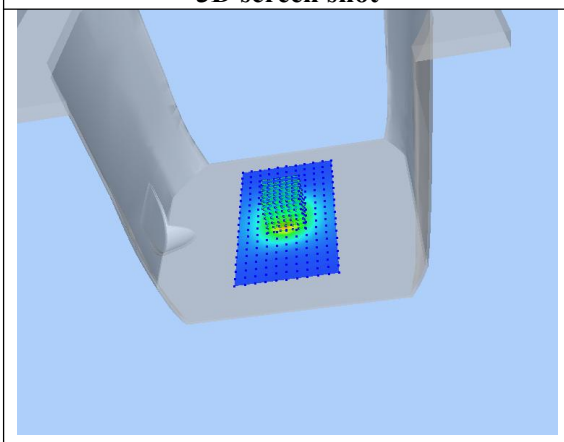
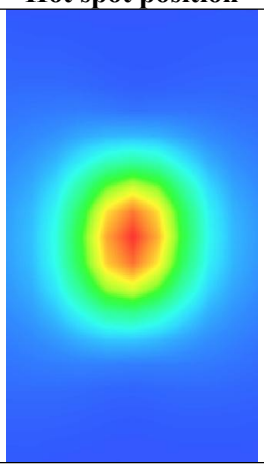
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=0.00
SAR Peak: 5.98 W/kg

SAR 10g (W/Kg)	1.515043
SAR 1g (W/Kg)	3.464935

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.0611	3.5750	1.7456	0.8638	0.4341	0.2203	0.1127



3D screen shot	Hot spot position
	

APPENDIX B. SAR MEASUREMENT DATA

Test Laboratory: AGC Lab **Date: Jul. 12, 2024**
GSM 850 Mid-Touch-Left <SIM 1>
DUT: Smart phone; Type: A56

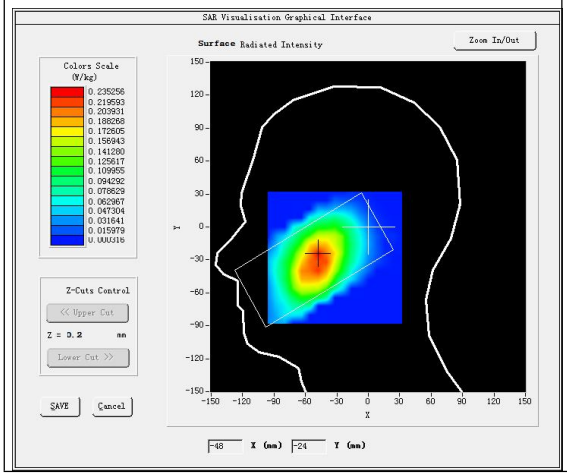
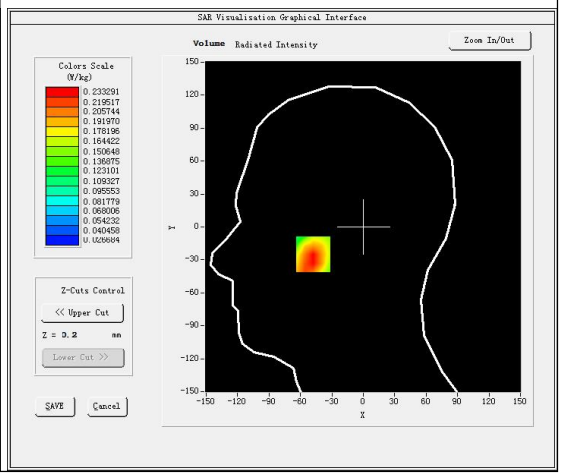
Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=1.89;
Frequency: 836.6 MHz; Medium parameters used: f = 835 MHz; σ=0.95 mho/m; εr =40.66; ρ= 1000 kg/m³;
Phantom section: Left Section
Ambient temperature (℃): 22.2, Liquid temperature (℃): 21.9

SATIMO Configuration

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/GSM 850 Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/GSM 850 Mid-Touch-Left/Zoom Scan : Measurement grid: dx=8mm,dy=8mm, dz=5mm

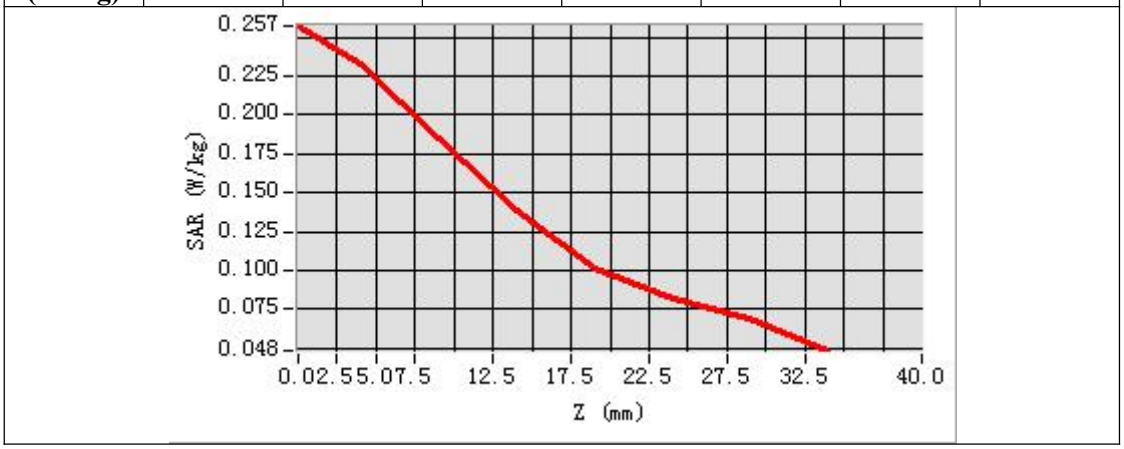
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Left head
Device Position	Cheek
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)

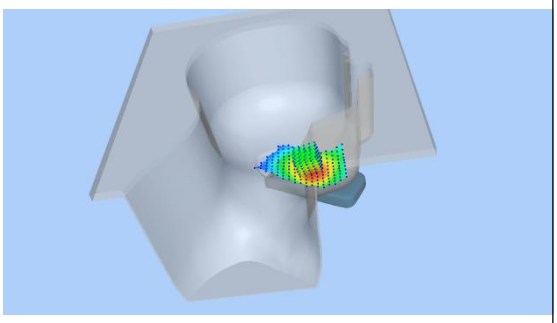
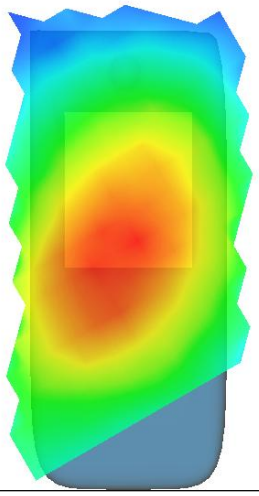
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-48.00, Y=-25.00
SAR Peak: 0.30 W/kg

SAR 10g (W/Kg)	0.160472
SAR 1g (W/Kg)	0.224478

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.2573	0.2333	0.1847	0.1387	0.1017	0.0817	0.0696



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 12, 2024**
GSM 850 Mid- Body- Back (MS)<SIM 1>
DUT: Smart phone; Type: A56

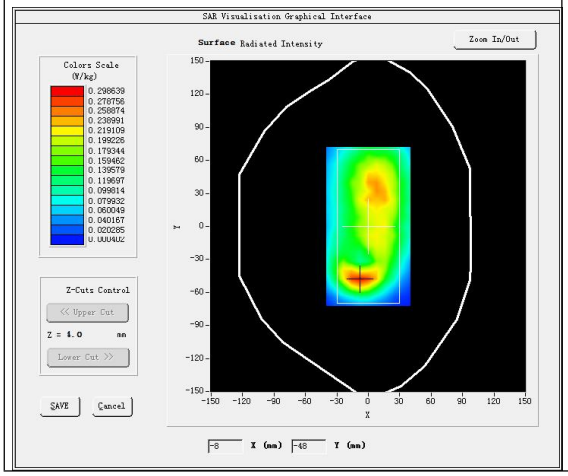
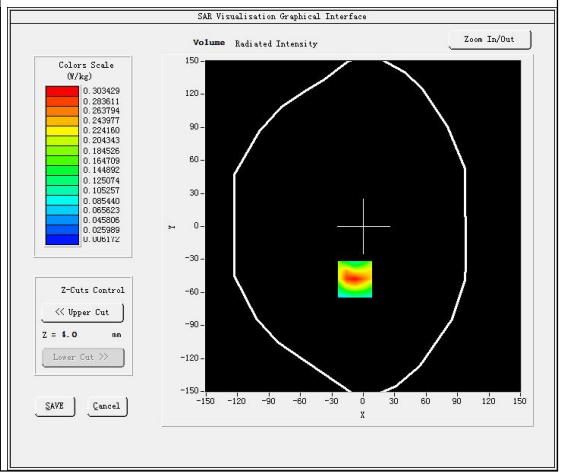
Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=1.89;
Frequency: 836.6 MHz; Medium parameters used: f = 835 MHz; σ= 0.95 mho/m; εr = 40.66; ρ= 1000 kg/m³ ;
Phantom section: Flat Section
Ambient temperature (℃): 22.2, Liquid temperature (℃): 21.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/GSM 850 Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/GSM 850 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

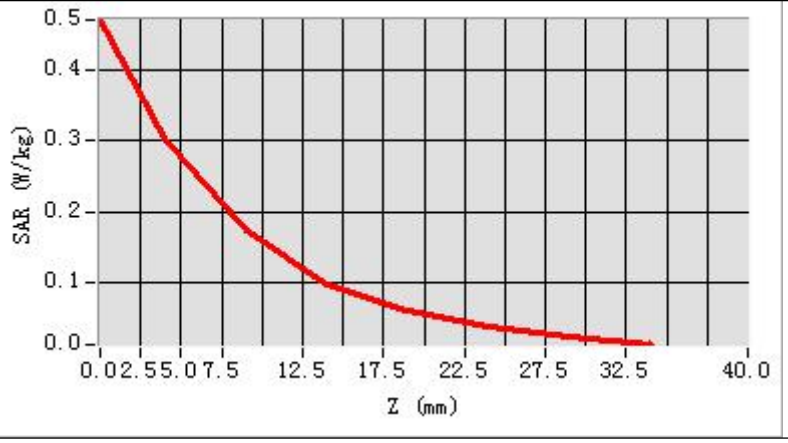
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)

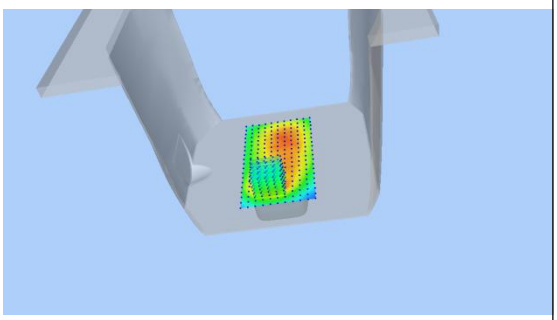
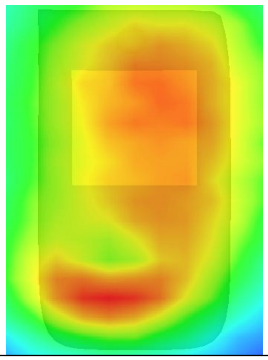
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-8.00, Y=-48.00
SAR Peak: 0.50 W/kg

SAR 10g (W/Kg)	0.150766
SAR 1g (W/Kg)	0.286569

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.4699	0.3034	0.1734	0.0977	0.0614	0.0398	0.0247



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 12, 2024**
GPRS 850 Mid- Body- Back (2up)
DUT: Smart phone; Type: A56

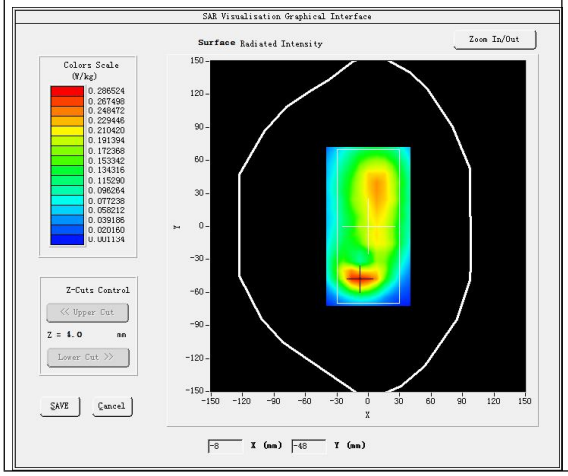
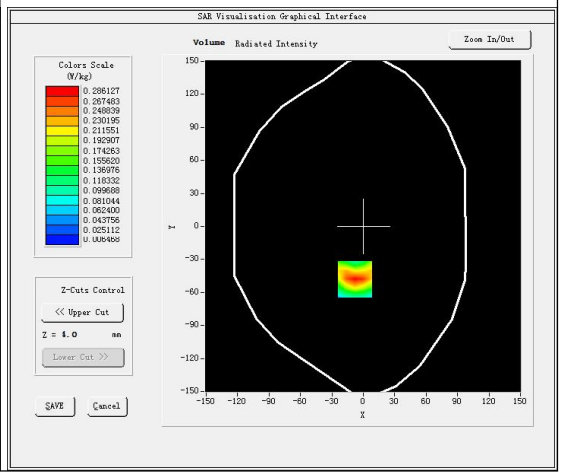
Communication System: GPRS-2 Slot; Communication System Band: GSM 850; Duty Cycle: 1:4.2; Conv.F=1.89;
Frequency: 836.6 MHz; Medium parameters used: f = 835 MHz; σ= 0.95 mho/m; εr = 40.66; ρ= 1000 kg/m^3 ;
Phantom section: Flat Section
Ambient temperature (℃): 22.2, Liquid temperature (℃): 21.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/GPRS 850 Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/GPRS 850 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

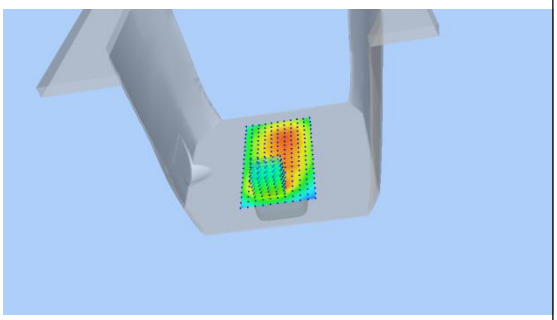
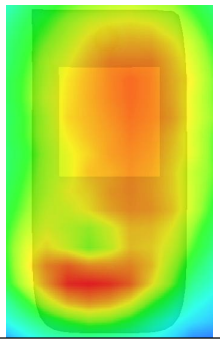
Area Scan	surf_sam_plan.txt, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 4.0)

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-8.00, Y=-48.00
SAR Peak: 0.44 W/kg

SAR 10g (W/Kg)	0.144619
SAR 1g (W/Kg)	0.267900

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.4436	0.2861	0.1627	0.0983	0.0623	0.0332	0.0244

3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 16, 2024**
PCS 1900 Mid-Touch- Left <SIM 1>
DUT: Smart phone; Type: A56

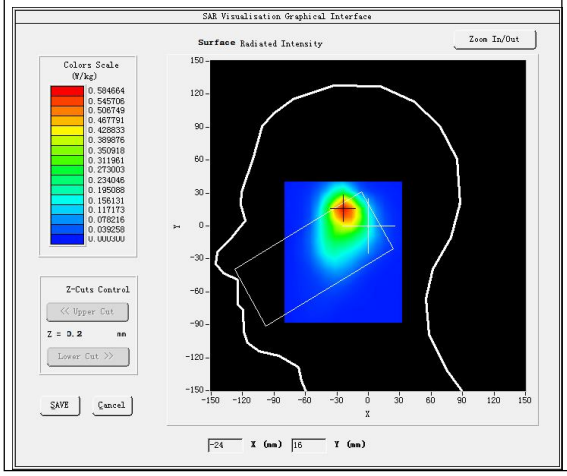
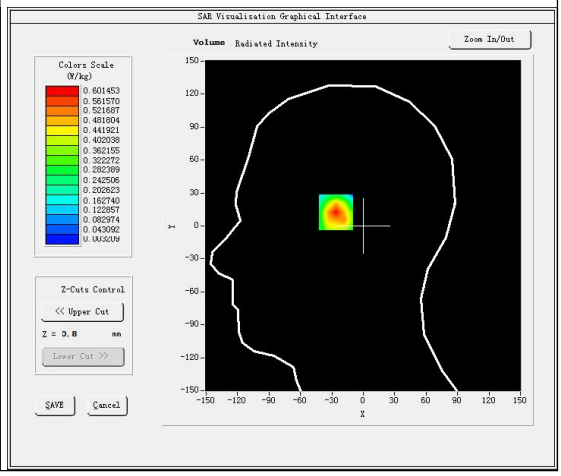
Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=2.08; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; σ= 1.36 mho/m; εr =41.73; ρ= 1000 kg/m³ ; Phantom section: Left Section
Ambient temperature (℃): 21.3, Liquid temperature (℃): 20.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/PCS1900 Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/PCS1900 Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

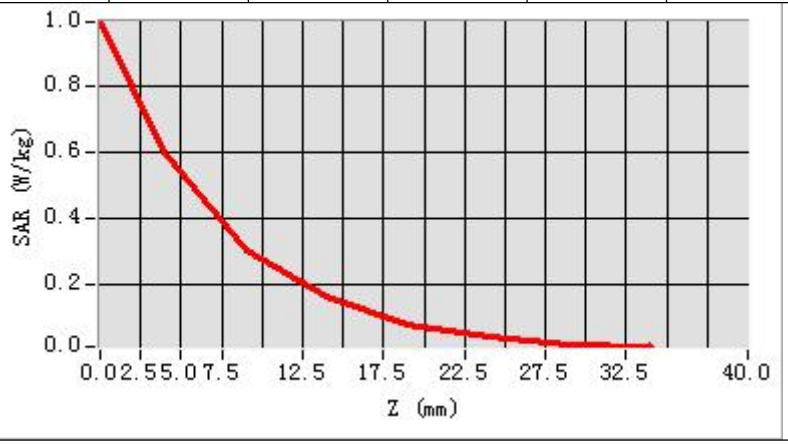
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Left head
Device Position	Cheek
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)

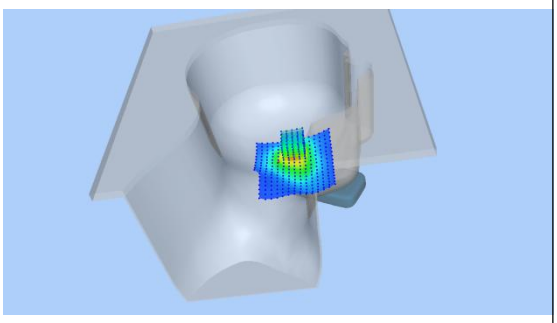
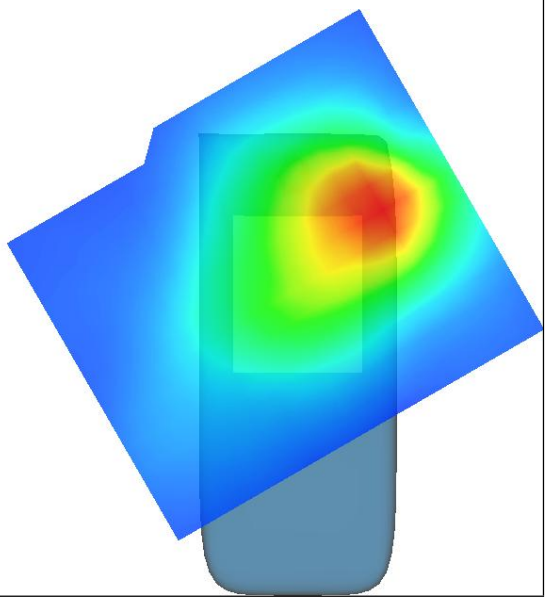
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-24.00, Y=15.00
SAR Peak: 1.00 W/kg

SAR 10g (W/Kg)	0.284294
SAR 1g (W/Kg)	0.561293

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.9932	0.6015	0.3053	0.1609	0.0796	0.0429	0.0211



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 16, 2024**
PCS 1900 Mid-Body-Back (MS)<SIM 1>
DUT: Smart phone; Type: A56

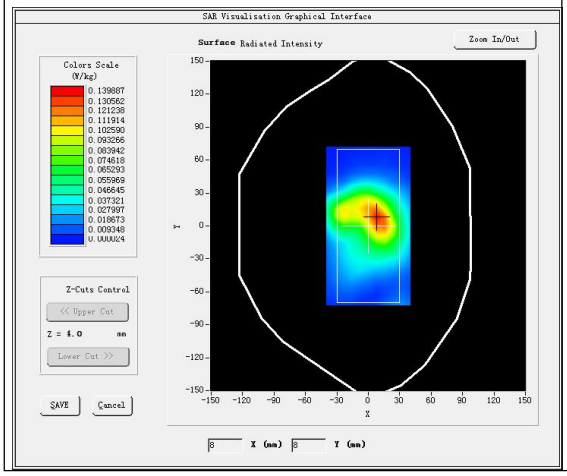
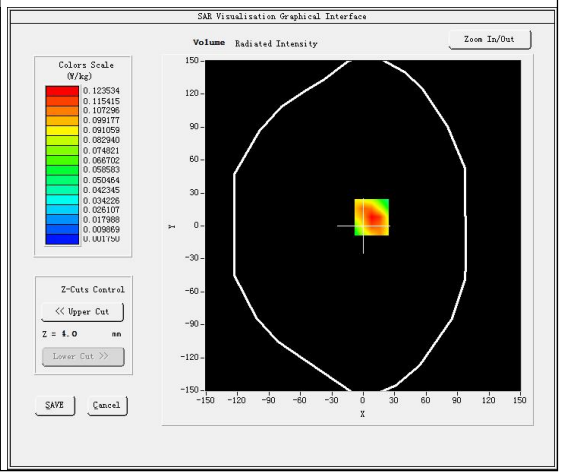
Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=2.08;
Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; σ= 1.36 mho/m; εr =41.73; ρ= 1000 kg/m^3 ;
Phantom section: Flat Section
Ambient temperature (℃): 21.3, Liquid temperature (℃): 20.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/PCS1900 Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/PCS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

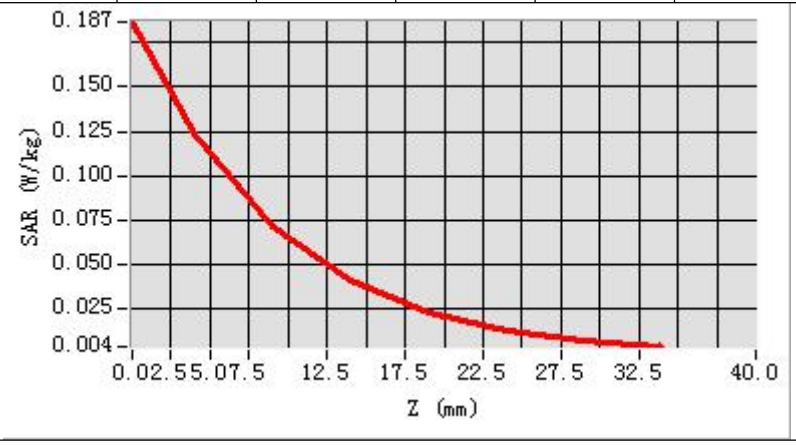
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body Back
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)

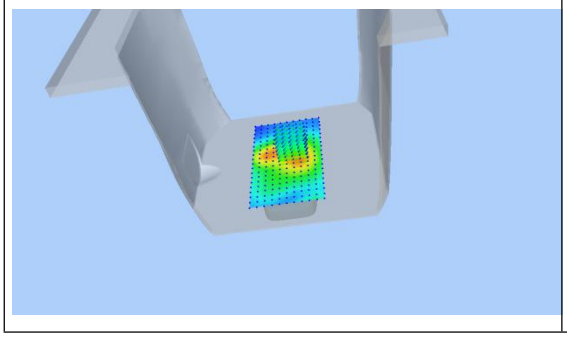
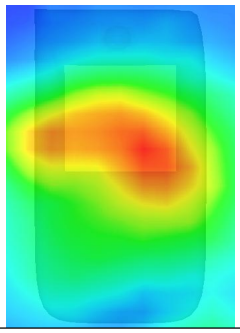
SURFACE SAR	VOLUME SAR
	

Maximum location: X=8.00, Y=8.00
SAR Peak: 0.19 W/kg

SAR 10g (W/Kg)	0.065298
SAR 1g (W/Kg)	0.117682

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.1866	0.1235	0.0710	0.0411	0.0226	0.0129	0.0076



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 16, 2024**
GPRS 1900 Mid-Body-Back (3up)
DUT: Smart phone; Type: A56

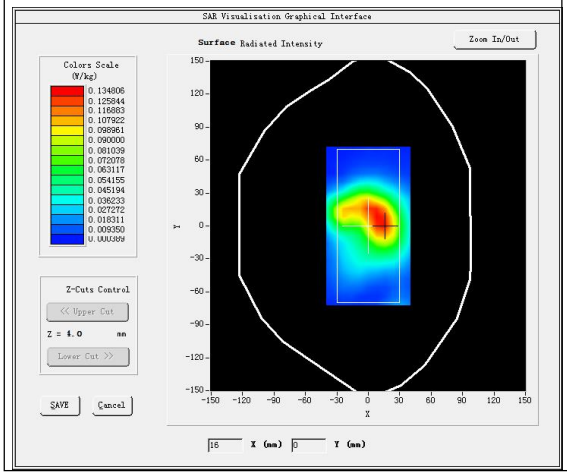
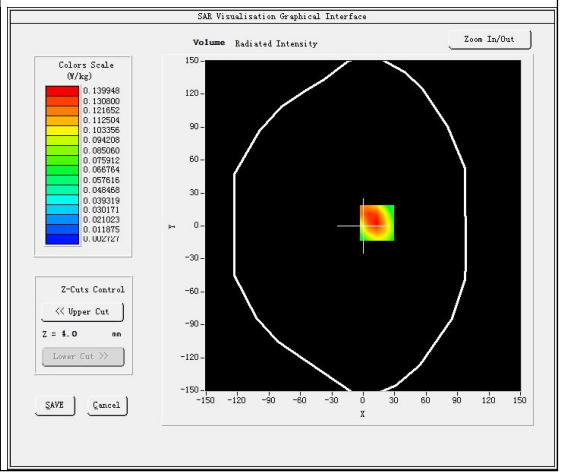
Communication System: GPRS-3Slot; Communication System Band: PCS 1900; Duty Cycle: 1:2.7; Conv.F=2.08;
Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; σ= 1.36 mho/m; εr =41.73; ρ= 1000 kg/m^3 ;
Phantom section: Flat Section
Ambient temperature (℃): 21.3, Liquid temperature (℃): 20.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/GPRS1900 Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/GPRS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

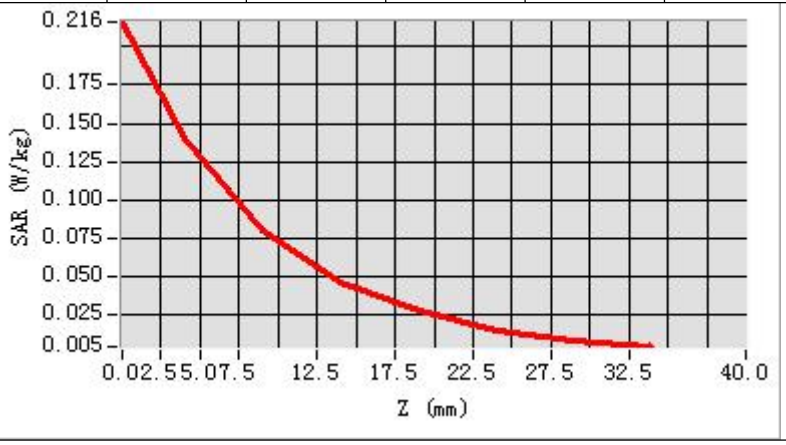
Area Scan	surf_sam_plan.txt, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body Back
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 2.7)

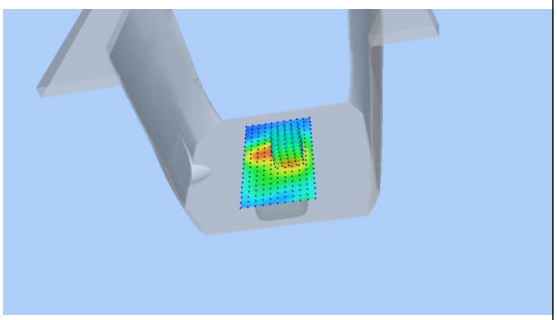
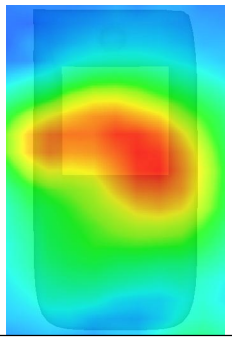
SURFACE SAR	VOLUME SAR
	

Maximum location: X=13.00, Y=3.00
SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.075050
SAR 1g (W/Kg)	0.133621

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.2161	0.1399	0.0803	0.0470	0.0286	0.0153	0.0088



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 16, 2024**
WCDMA Band II Low-Touch-Left (RMC)
DUT: Smart phone; Type: A56

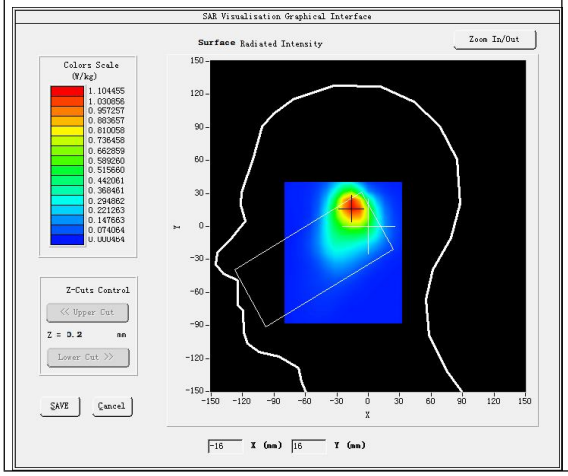
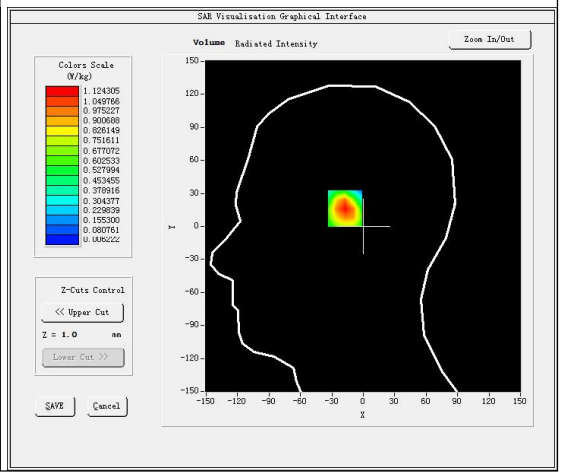
Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=2.08;
Frequency: 1852.4 MHz; Medium parameters used: f = 1900 MHz; σ= 1.33 mho/m; εr =43.72; ρ= 1000 kg/m³ ;
Phantom section: Left Section
Ambient temperature (℃): 21.3, Liquid temperature (℃): 20.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/ WCDMA Band II Low -Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ WCDMA Band II Low -Touch-Left/Zoom Scan: Measurement grid:dx=8mm,dy=8mm,dz=5mm;

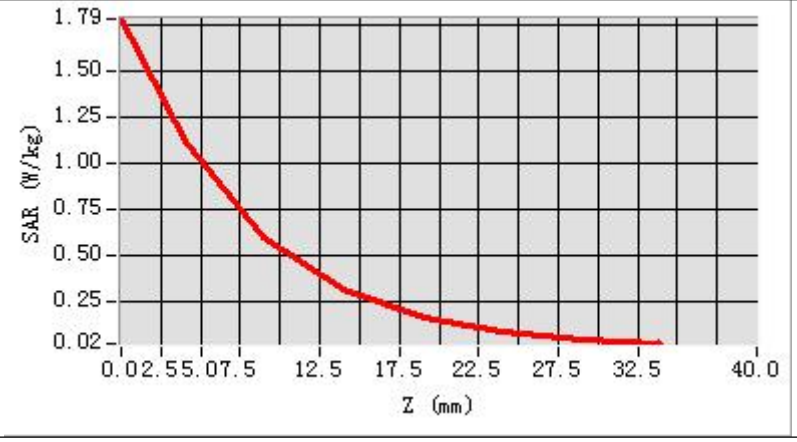
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Left head
Device Position	Cheek
Band	WCDMA Band II
Channels	Low
Signal	CDMA (Crest factor: 1.0)

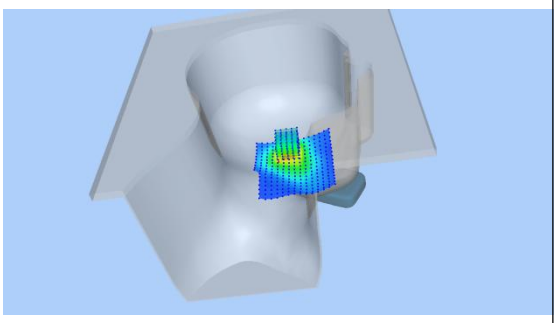
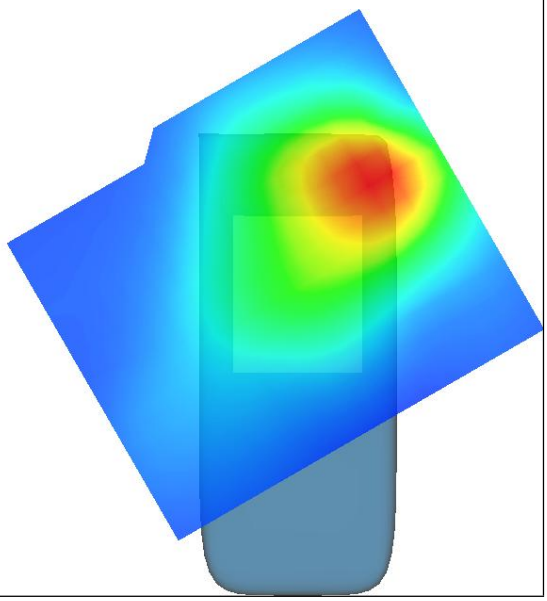
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-15.00, Y=18.00
SAR Peak: 1.86 W/kg

SAR 10g (W/Kg)	0.547690
SAR 1g (W/Kg)	1.066659

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.7877	1.1243	0.6014	0.3131	0.1616	0.0839	0.0435



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 16, 2024**
WCDMA Band II Mid-Touch-Left (RMC)
DUT: Smart phone; Type: A56

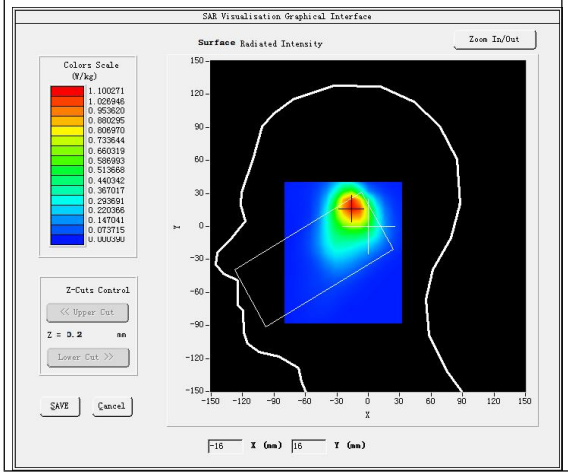
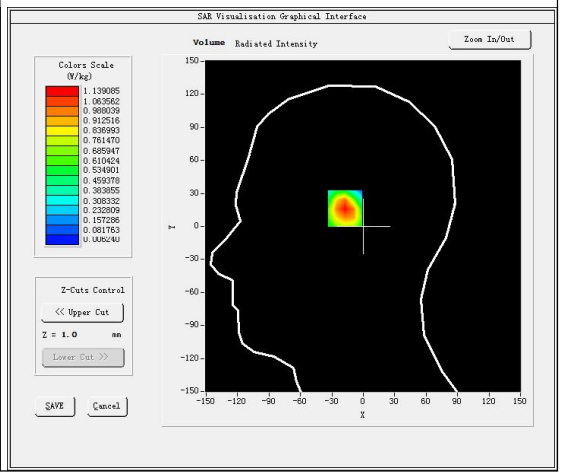
Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=2.08;
Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; σ= 1.36 mho/m; εr =41.73; ρ= 1000 kg/m³ ;
Phantom section: Left Section
Ambient temperature (℃): 21.3, Liquid temperature (℃): 20.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/ WCDMA Band II Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ WCDMA Band II Mid-Touch-Left/Zoom Scan: Measurement grid:dx=8mm,dy=8mm,dz=5mm;

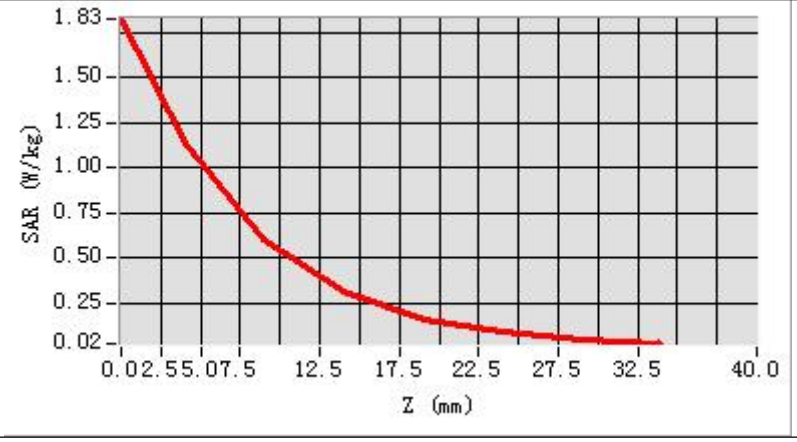
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Left head
Device Position	Cheek
Band	WCDMA Band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)

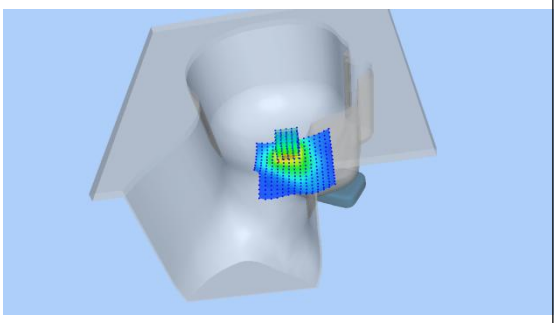
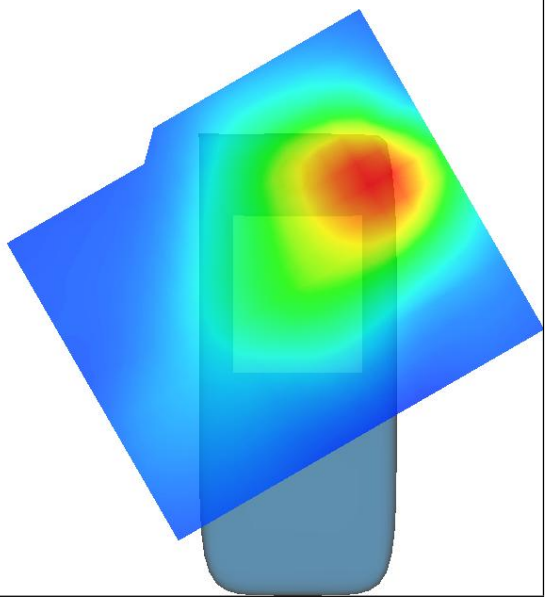
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-15.00, Y=18.00
SAR Peak: 1.90 W/kg

SAR 10g (W/Kg)	0.552798
SAR 1g (W/Kg)	1.080890

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.8273	1.1391	0.6017	0.3138	0.1598	0.0844	0.0431



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 16, 2024**
WCDMA Band II Mid-Body-Towards Grounds (RMC 12.2kbps)
DUT: Smart phone; Type: A56

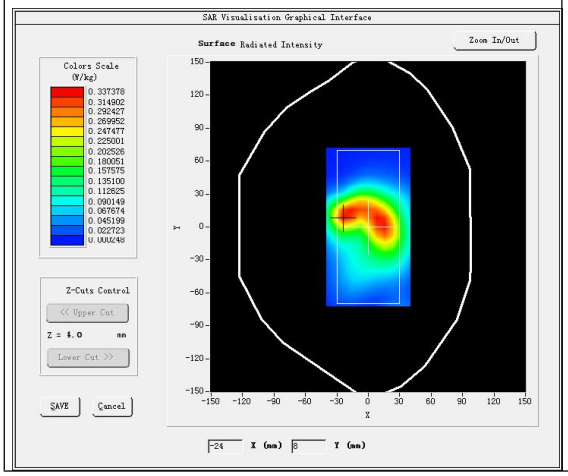
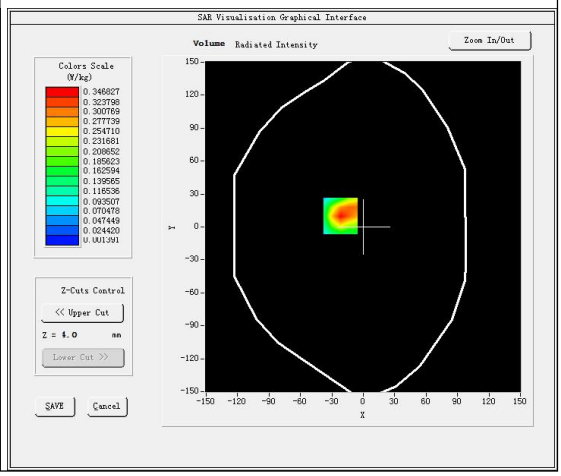
Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=2.08;
Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; σ=1.36 mho/m; εr =41.73; ρ= 1000 kg/m³ ;
Phantom section: Flat Section
Ambient temperature (℃): 21.3, Liquid temperature (℃): 20.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/ WCDMA band II Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ WCDMA band II Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5m;

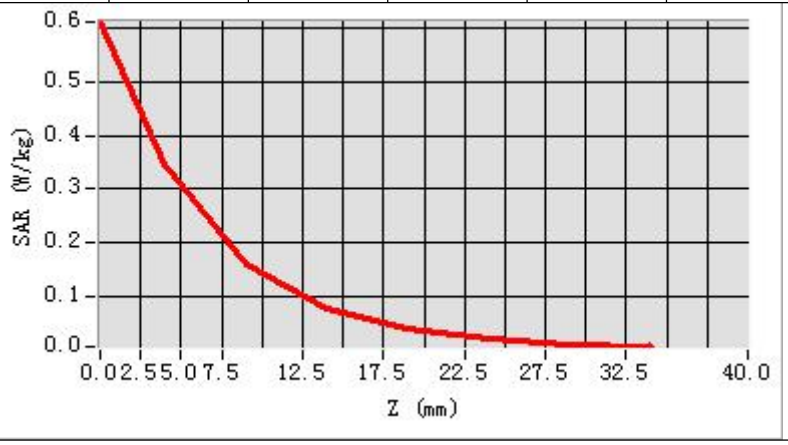
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body Back
Band	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)

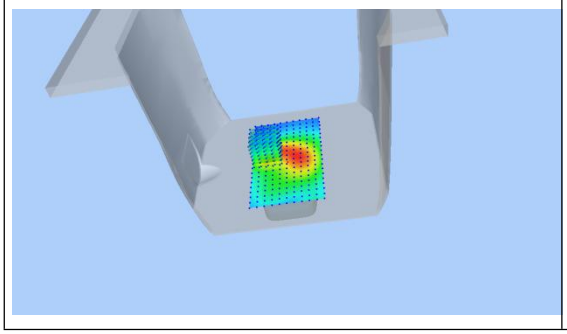
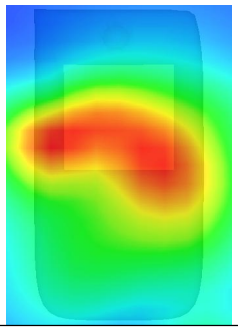
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-22.00, Y=10.00
SAR Peak: 0.61 W/kg

SAR 10g (W/Kg)	0.159168
SAR 1g (W/Kg)	0.330617

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.6129	0.3468	0.1580	0.0755	0.0367	0.0182	0.0091



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 19, 2024**
WCDMA Band IV Mid-Touch-Left (RMC)
DUT: Smart phone; Type: A56

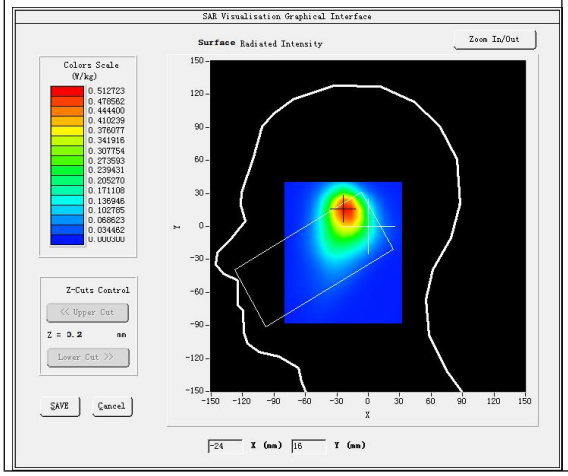
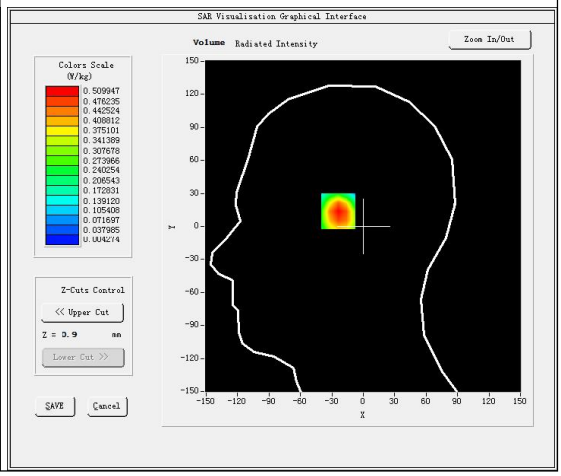
Communication System: UMTS; Communication System Band: BAND IV UTRA/FDD; Duty Cycle:1: 1; Conv.F=2.28; Frequency:1732.4 MHz; Medium parameters used: f =1800 MHz; σ= 1.36 mho/m; εr =40.36; ρ= 1000 kg/m³ ;
Phantom section: Left Section
Ambient temperature (℃): 20.1, Liquid temperature (℃): 19.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/ WCDMA Band IV Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ WCDMA Band IV Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm

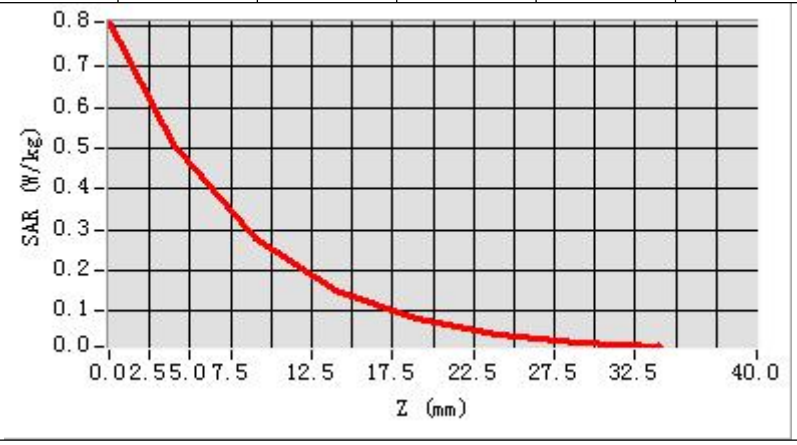
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Left head
Device Position	Cheek
Band	WCDMA Band IV
Channels	Middle
Signal	CDMA (Crest factor: 1.0)

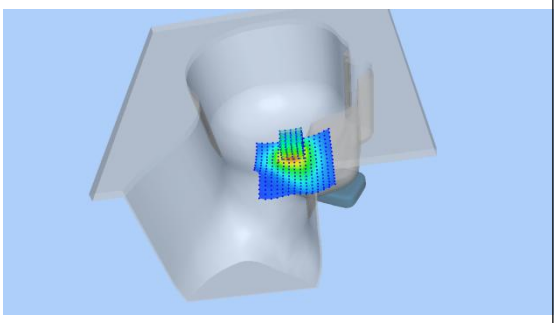
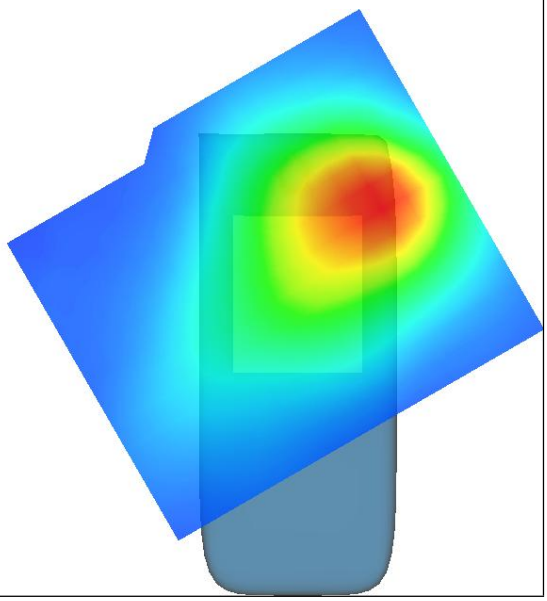
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-22.00, Y=16.00
SAR Peak: 0.83 W/kg

SAR 10g (W/Kg)	0.261378
SAR 1g (W/Kg)	0.486530

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.8095	0.5099	0.2760	0.1488	0.0805	0.0427	0.0228



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 19, 2024**
WCDMA Band IV Mid-Body-Towards Grounds (RMC)
DUT: Smart phone; Type: A56

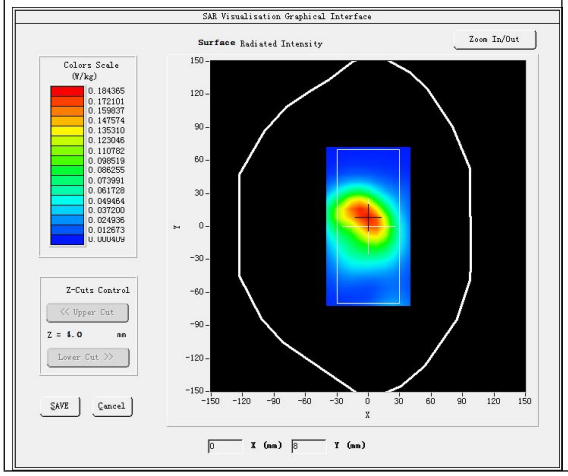
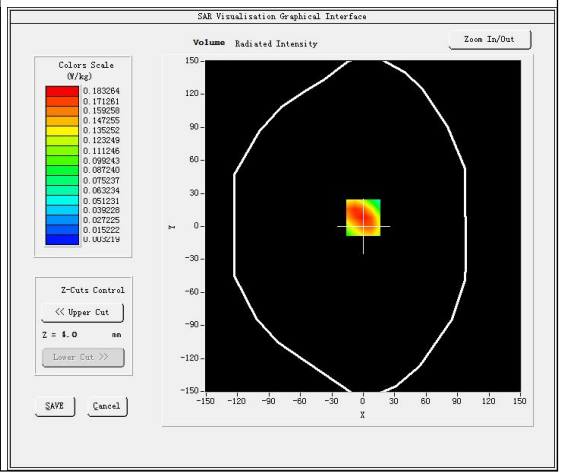
Communication System: UMTS; Communication System Band: BAND IV UTRA/FDD; Duty Cycle:1: 1; Conv.F=2.28; Frequency:1732.4 MHz; Medium parameters used: f = 1900 MHz; σ=1.36 mho/m; εr =40.36; ρ= 1000 kg/m³;
Phantom section: Flat Section
Ambient temperature (℃): 20.1, Liquid temperature (℃): 19.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/ WCDMA Band IV Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ WCDMA Band IV Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

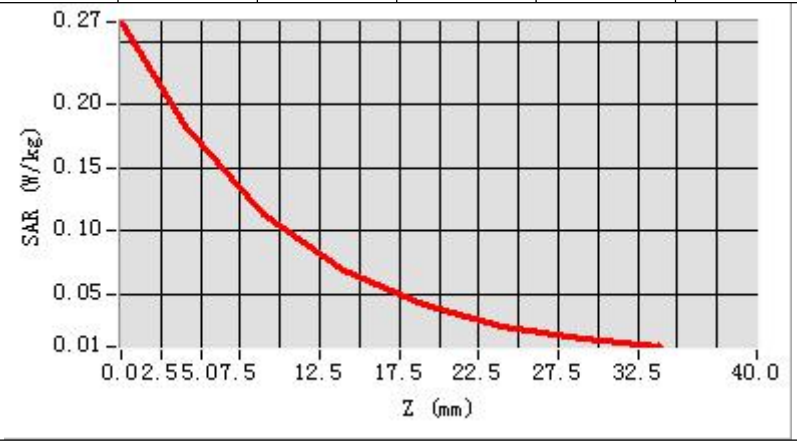
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body Back
Band	WCDMA Band IV
Channels	Middle
Signal	CDMA (Crest factor: 1.0)

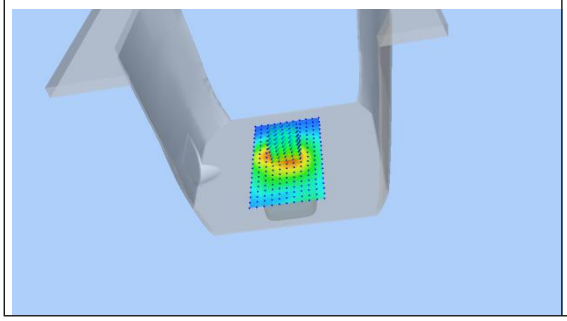
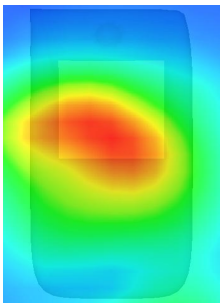
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=8.00
SAR Peak: 0.27 W/kg

SAR 10g (W/Kg)	0.102371
SAR 1g (W/Kg)	0.174708

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.2657	0.1833	0.1129	0.0692	0.0418	0.0246	0.0145



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab **Date: Jul. 12, 2024**

WCDMA Band Ⅴ Mid-Touch-Left (RMC)

DUT: Smart phone; Type: A56

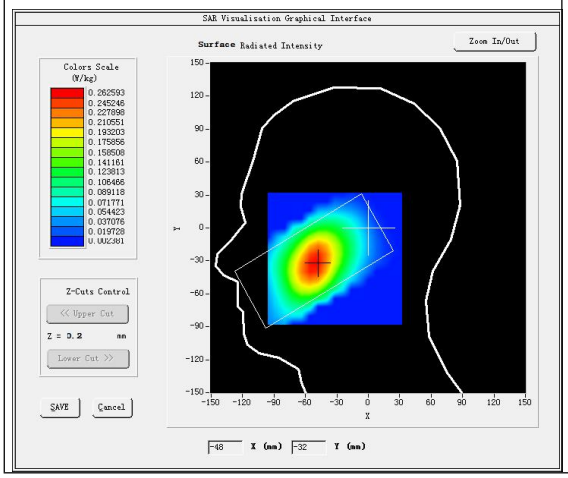
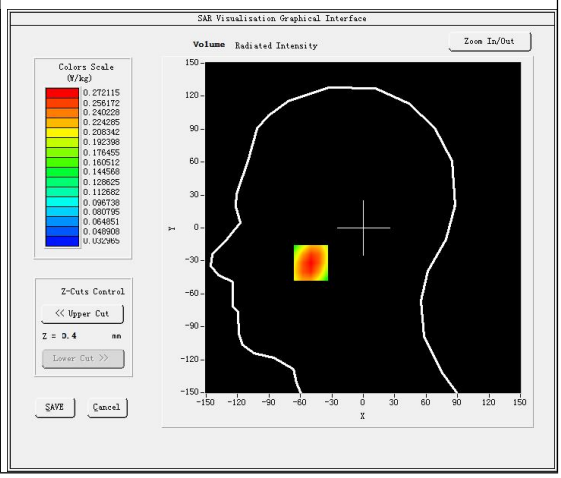
Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=1.89;
Frequency: 836.4 MHz; Medium parameters used: f = 835MHz; σ=0.95 mho/m; εr =40.66; ρ= 1000 kg/m³ ;
Phantom section: Left Section
Ambient temperature (℃): 22.2, Liquid temperature (℃): 21.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_32

Configuration/ WCDMA Band V Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ WCDMA Band V Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm

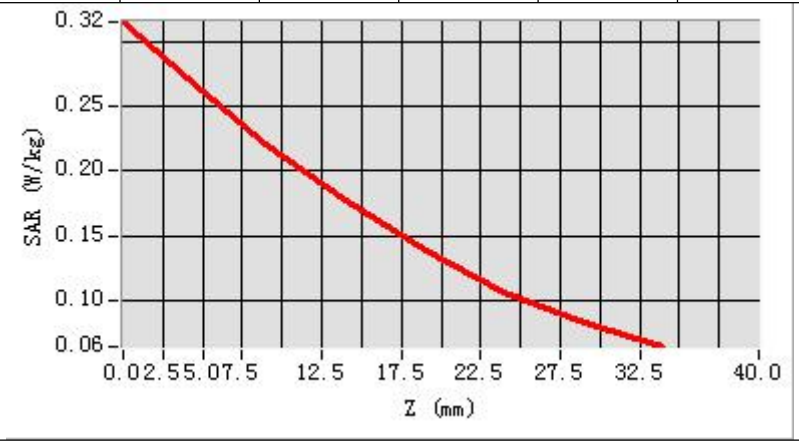
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Left head
Device Position	Cheek
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-50.00, Y=-32.00
SAR Peak: 0.32 W/kg

SAR 10g (W/Kg)	0.195292
SAR 1g (W/Kg)	0.261421

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.3160	0.2721	0.2211	0.1769	0.1381	0.1065	0.0823



3D screen shot	Hot spot position