TEST REPORT

Reference No.	:	WTX22X11232506W
FCC ID	:	2AMY3ONE10T9-1212L
Applicant	:	Acer India Pvt Ltd.
Address	:	Embassy Heights 6th Floor, No.13, Magrath Road, (Next to Hosmat Hospital), Bangalore, India
Manufacturer		The same as Applicant
Address		The same as Applicant
Product Name	:	Tablet
Model No.	:	Acer One 10 T9-1212L
Standards	:	FCC Part 2.1093 IEEE Std C95.1: 2019 IEEE Std C95.3: 2002 + Rev. 2008 IEEE 1528:2013
Date of Receipt sample	:	2022-11-21
Date of Test	:	2022-11-21 to 2022-12-20
Date of Issue	:	2022-12-20
Test Report Form No.	:	WTX_IEEE_1528_2013W
Test Result	:	**Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

Prepared By:

Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

Tel.: +86-755-33663308 Fax.: +86-755-33663309 Email: sem@waltek.com.cn

Tested by: Jack Sun

Jack Sun

Approved by: Silin Chen

Silin Chen

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Report version

Version No.	Date of issue	Description
Rev.00	2022-12-20	Original
/	/	/

1. General Information

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT:	
Product Name:	Tablet
Brand Name:	ACER
Model No.:	Acer One 10 T9-1212L
Adding Model(s):	/
Rated Voltage:	DC 9V(Powered by adaptor)
Battery:	7100mAh, 3.85Vdc, 27.40Wh
Software Version:	M300Y.WH.211.S0..G.2022120521.C951232A9AD.USERDEBUG
Hardware Version:	R200
Note: The test data is gathered from a production sample provided by the manufacturer.	

Technical Characteristics of EUT:	
2G	
Support Networks:	GSM, GPRS
Support Band:	GSM850/PCS1900
Uplink Frequency:	GSM/GPRS 850: 824~849MHz GSM/GPRS 1900: 1850~1910MHz
Downlink Frequency:	GSM/GPRS 850: 869~894MHz GSM/GPRS 1900: 1930~1990MHz
Max RF Output Power:	GSM850: 30.76dBm; 1900: 27.00dBm
Type of Modulation:	GMSK
Type of Antenna:	FPC Antenna
Antenna Gain:	GSM850: 0.8dBi; GSM1900: 1.1dBi
GPRS/EDGE Class:	Class 12
3G	
Support Networks:	WCDMA, HSDPA, HSUPA
Support Band:	WCDMA Band 2, WCDMA Band 5
Uplink Frequency:	WCDMA Band 2: 1850~1910MHz WCDMA Band 5: 824~849MHz
Downlink Frequency:	WCDMA Band 2: 1930~1990MHz WCDMA Band 5: 869~894MHz
RF Output Power:	WCDMA Band 2: 20.42dBm, WCDMA Band 5: 21.45dBm
Type of Modulation:	BPSK, QPSK, 16QAM
Antenna Type:	FPC Antenna

Antenna Gain:	WCDMA Band 2: 1.1dBi, WCDMA Band 5: 0.8dBi
4G	
Support Networks:	FDD-LTE, TDD-LTE
Support Band:	FDD-LTE Band 5, TDD-LTE Band 40, 41
Uplink Frequency:	FDD-LTE Band 5: Tx: 824-849MHz, TDD-LTE Band 40-1: Tx: 2305-2315MHz, TDD-LTE Band 40-2: Tx: 2350-2360MHz, TDD-LTE Band 41: Tx: 2555-2655MHz
Downlink Frequency:	FDD-LTE Band 5: Rx: 869-894MHz, TDD-LTE Band 40-1: Rx: 2305-2315MHz, TDD-LTE Band 40-2: Rx: 2350-2360MHz, TDD-LTE Band 41: Rx: 2555-2655MHz
RF Output Power:	FDD-LTE Band 5: 21.35dBm, TDD-LTE Band 40 (2305-2315MHz): 17.21dBm, TDD-LTE Band 40 (2350-2360 MHz): 16.30dBm, TDD-LTE Band 41: 14.97dBm
Type of Modulation:	QPSK, 16QAM
Antenna Type:	FPC Antenna
Antenna Gain:	FDD-LTE Band 5: 0.8dBi, TDD-LTE Band 40 (2305-2315MHz):1.4dBi, TDD-LTE Band 40 (2350-2360MHz):1.4dBi, TDD-LTE Band 41:1.6dBi
Wi-Fi(5GHz)	
Support Standards:	802.11a, 802.11n-HT20/40, 802.11ac-HT20/40/80
Frequency Range:	Band 1: 5180-5240MHz,Band 2: 5260-5320MHz, Band 4: 5745-5825MHz
RF Output Power:	5180-5240MHz: 10.58dBm 5260-5320MHz: 9.93dBm 5745-5825MHz: 9.930dBm
Type of Modulation:	OFDM
Type of Antenna:	FPC Antenna
Antenna Gain:	5180-5240MHz: 0.72dBi; 5260-5320MHz: 0.95dBi; 5745-5825MHz: 0.56dBi
WIFI(2.4GHz)	
Support Standards:	802.11b, 802.11g, 802.11n
Frequency Range:	2412-2462MHz for 11b/g/n(HT20) 2422-2452MHz for 11n(HT40)
RF Output Power:	16.54dBm (Conducted)
Type of Modulation:	OFDM
Quantity of Channels:	11 for 802.11b/g/n(HT20); 7 for 802.11n(HT40)
Channel Separation:	5MHz
Antenna Type:	FPC Antenna

Antenna Gain:	3.92dBi
Bluetooth	
Bluetooth Version:	V5.0
Frequency Range:	2402-2480MHz
RF Output Power:	7.18dBm (Conducted)
Data Rate:	1Mbps, 2Mbps, 3Mbps
Modulation:	GFSK, π/4 DQPSK, 8DPSK
Quantity of Channels:	79/40
Channel Separation:	1MHz/2MHz
Antenna Type:	FPC Antenna
Antenna Gain:	3.96dBi
Note: The Antenna Gain is provided by the customer and can affect the validity of results.	

1.2 Test Standards

The following report is accordance with FCC 47 CFR Part 2.1093, IEEE Std C95.1: 2019, IEEE Std C95.3: 2002 + Rev. 2008, IEEE 1528:2013, KDB 447498 D01 v06, KDB 648474 D04 v01r03, KDB 248227 D01 v02r02, KDB 941225 D01 v03r01, KDB 941225 D05 v02r05 , and KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02.

The objective is to determine compliance with FCC Part 2.1093 of the Federal Communication Commissions rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which is result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02. The public notice KDB 447498 D01 v06 for Mobile and Portable Devices RF Exposure Procedure also.

1.4 Test Facility

Address of the test laboratory
Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.
Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road,Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990
Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. The Designation Number is CN5010.Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A
The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

2. Summary of Test Results

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

Frequency Band	Body (0mm Gap) Maximum SAR_{1g} (W/kg)	SAR_{1g} Limit (W/kg)
GSM	0.626	1.6
WCDMA	0.366	1.6
LTE	0.689	1.6
WLAN 5GHz	**0.696**	1.6
WLAN 2.4GHz	0.523	1.6
Bluetooth	0.190	1.6
Simultaneous Transmission	**1.385**	1.6

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR Part 2.1093 and IEEE Std C95.1: 2019 and had been tested in accordance with the measurement methods and procedure specified in IEEE 1528:2013 and KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02.

3. Specific Absorption Rate (SAR)

3.1 Introduction

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

3.2 SAR Definition

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

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

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

$$\mathbf{SAR} = \mathbf{C}\left(\frac{\mathbf{\delta T}}{\mathbf{\delta t}}\right)$$

Where: C is the specific heat capacity, δ T is the temperature rise and δ t is the exposure duration, or related to the
electrical field in the tissue by

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

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

4. SAR Measurement System

4.1 The Measurement System

Comosar is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The Comosar system consists of the following items:

- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue

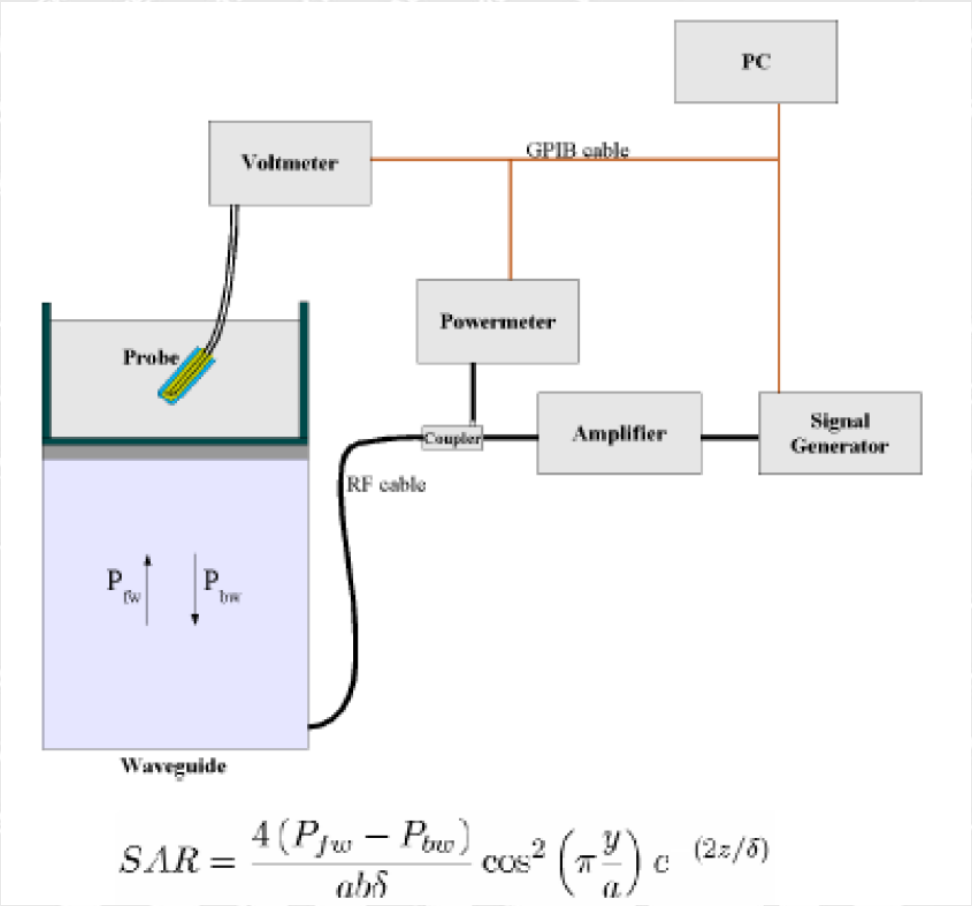
The following figure shows the system.

The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The OpenSAR software computes the results to give a SAR value in a 1g or 10g mass.

4.2 Probe

For the measurements the Specific Dosimetric E-Field Probe SSE2 SN 18/21 EPGO356, and refer to the calibration report for probe parameters.

Probe calibration is realized, in compliance with EN 62209-1 and IEEE 1528:2013 STD, with CALISAR, Antenna proprietary calibration system. The calibration is performed with the EN 62209-1 annexes technique using reference guide at the five frequencies.



$$SAR = \frac{4\,(P_{fw} - P_{bw})}{ab\delta} \cos^2\left(\pi \frac{y}{a}\right) e^{-(2z/\delta)}$$

Where :

Pfw = Forward Power

Pbw = Backward Power

a and b =Waveguide dimensions

I = Skin depth

Keithley configuration:

Rate = Medium; Filter = ON; RDGS = 10; Filter type = Moving Average; Range auto after each calibration, a SAR measurement is performed on a validation dipole and compared with a NPL calibrated probe, to verify it. The calibration factors, CF(N), for the 3 sensors corresponding to dipole 1, dipole 2 and dipole 3 are:

CF(N)=SAR(N)/Vlin(N) (N=1,2,3)

The linearised output voltage Vlin(N) is obtained from the displayed output voltage V(N) using

Vlin(N)=V(N)*(1+V(N)/DCP(N)) (N=1,2,3)

where DCP is the diode compression point in mV.

4.3 Probe Calibration Process

Dosimetric Assessment Procedure

Each E-Probe/Probe Amplifier combination has unique calibration parameters. SATIMO Probe calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm2) using an with CALISAR, Antenna proprietary calibration system.

Free Space Assessment Procedure

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1mW/cm2.

Temperature Assessment Procedure

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated head tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C\frac{\Delta T}{\Delta t}$$

Where:

Δt = exposure time (30 seconds),

C = heat capacity of tissue (brain or muscle),

ΔT = temperature increase due to RF exposure.

SAR is proportional to $\Delta T/\Delta t$, the initial rate of tissue heating, before thermal diffusion takes place. The electric field in the simulated tissue can be used to estimate SAR by equating the thermally derived SAR to that with the E- field component.

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

Where:

σ = simulated tissue conductivity,

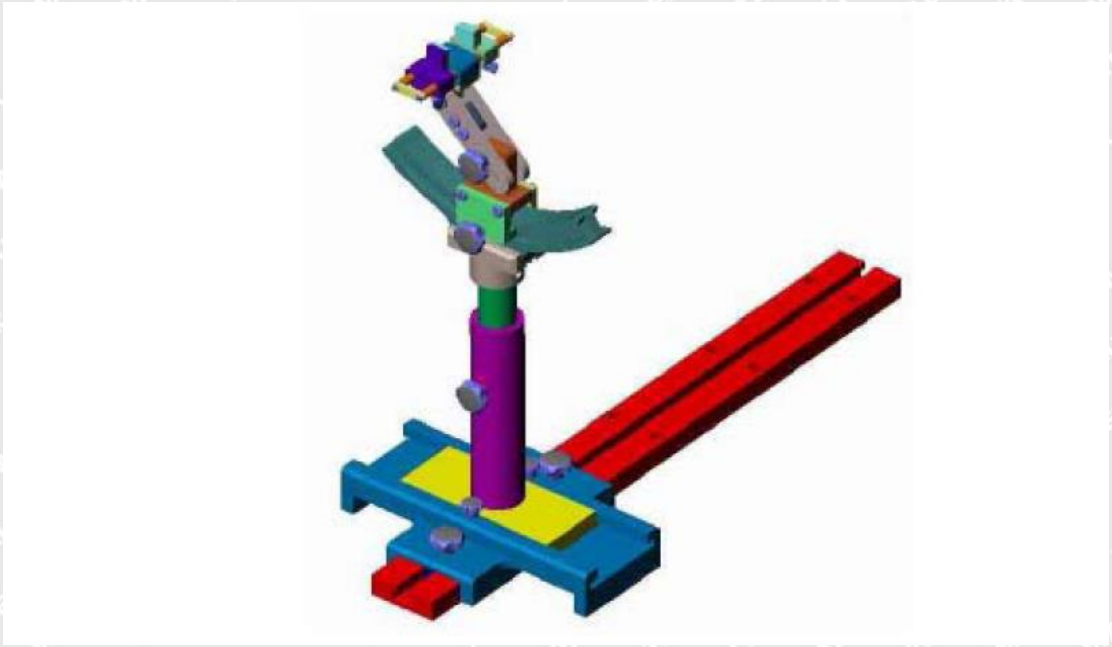
ρ = Tissue density (1.25 g/cm3 for brain tissue)

4.4 Phantom

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

4.5 Device Holder

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



System Material	Permittivity	Loss Tangent
Delrin	3.7	0.005

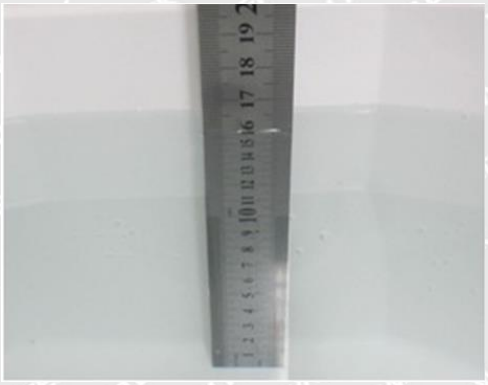
4.6 Test Equipment List

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
E-Field Probe	MVG	SSE2	SN 18/21 EPGO356	2022-07-08	2023-07-07
750MHz Dipole	MVG	SID750	SN 47/12 DIP 0G750-203	2020-03-11	2023-03-10
835MHz Dipole	MVG	SID835	SN 47/12 DIP 0G835-204	2020-03-11	2023-03-10
900MHz Dipole	MVG	SID900	SN 47/12 DIP 0G900-205	2020-03-11	2023-03-10
1800MHz Dipole	MVG	SID1800	SN 47/12 DIP 1G800-206	2020-03-11	2023-03-10
1900MHz Dipole	MVG	SID1900	SN 47/12 DIP 1G900-207	2020-03-11	2023-03-10
2000MHz Dipole	MVG	SID2000	SN 47/12 DIP 2G000-208	2020-03-11	2023-03-10
2300 MHz Dipole	MVG	SID2300	SN 50/20 DIP 2G300-513	2021-01-14	2024-01-13
2450MHz Dipole	MVG	SID2450	SN 13/15 DIP 2G450-364	2020-03-11	2023-03-10
2600MHz Dipole	MVG	SID2600	SN 28/21 DIP 2G600-590	2021-07-16	2024-07-15
5 GHz Dipole	MVG	SWG5500	SN 49/16 WGA45	2020-07-03	2023-07-02
Dielectric Probe	SATIMO	SCLMP	SN 47/12 OCPG49	2022-03-22	2023-03-21
SAM Phantom	SATIMO	SAM	SN/ 47/12 SAM95	N/A	N/A
Multi Meter	Keithley	Keithley 2000	4006367	2022-03-22	2023-03-21
Power meter	Keithley	3500	JC-2017-09-001	2022-03-22	2023-03-21
Power meter	Keithley	3500	JC-2017-09-001	2022-03-22	2023-03-21
Power Sensor	HP	11636B	JC-2017-10-002	2022-03-22	2023-03-21
MXG X-Series RF Vector Signal Generato	KEYSIGHT	N5182B	MY57300664	2022-03-22	2023-03-21
Universal Tester	Rohde & Schwarz	CMU200	112315	2022-03-22	2023-03-21
Universal Radio Communication Tester	Rohde & Schwarz	CMW500	148650	2022-03-22	2023-03-21
Network Analyzer	HP	8753C	2901A00831	2022-03-22	2023-03-21

5. Tissue Simulating Liquids

5.1 Composition of Tissue Simulating Liquid

For the measurement of the field distribution inside the SAM phantom with SMTIMO, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. Please see the following photos for the liquid height.



Liquid Height for Head/Body SAR

The Composition of Tissue Simulating Liquid

Frequency (MHz)	Water (%)	Salt (%)	Sugar (%)	HEC (%)	Preventol (%)	DGBE (%)
Body						
750	41.1	1.4	57.0	0.2	0.3	0
835	40.3	1.4	57.9	0.2	0.2	0
1700-1900	55.2	0.3	0	0	0	44.5
2300	68.6	0.1	0	0	0	31.3
2450	55.0	0.1	0	0	0	44.9
2600	54.9	0.1	0	0	0	45.0

Frequency (MHz)	Water (%)	Hexyl Carbitol (%)	Triton X-100 (%)
Body			
5200-5800	78.6	10.7	10.7

5.2 Tissue Dielectric Parameters for Head and Body Phantoms

According to FCC KDBs, IEEE 1528:2013 and CEI/IEC 62209 standards state that the system validation measurements must be performed using a reference dipole meeting the fore mentioned return loss and mechanical dimension requirements. The validation measurement must be performed against a liquid filled flat phantom, with the phantom constructed as outlined in the fore mentioned standards. Per the standards, the dipole shall be positioned below the bottom of the phantom, with the dipole length centered and parallel to the longest dimension of the flat phantom, with the top surface of the dipole at the described distance from the bottom surface of the phantom.

Target Frequency (MHz)	Head		Body	
	Conductivity (σ)	Permittivity (ε_r)	Conductivity (σ)	Permittivity (ε_r)
150	0.76	52.3	0.80	61.9
300	0.87	45.3	0.92	58.2
450	0.87	43.5	0.94	56.7
750	0.89	41.9	0.96	55.5
835	**0.90**	**41.5**	**0.97**	**55.2**
900	0.97	41.5	1.05	55.0
915	0.98	41.5	1.06	55.0
1450	1.20	40.5	1.30	54.0
1610	1.29	40.3	1.40	53.8
1800-2000	**1.40**	**40.0**	**1.52**	**53.3**
2300	**1.67**	**39.5**	**1.81**	**52.9**
2450	**1.80**	**39.2**	**1.95**	**52.7**
2600	**1.96**	**39.0**	**2.16**	**52.5**
3000	2.40	38.5	2.73	52.0
5200	**4.66**	**36.0**	**5.30**	**49.0**
5400	**4.86**	**35.8**	**5.53**	**48.7**
5600	5.07	35.5	5.77	48.5
5800	**5.27**	**35.3**	**6.00**	**48.2**

5.3 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using COMOSAR Dielectric Probe Kit and an Agilent Network Analyzer.

Calibration Result for Dielectric Parameters of Tissue Simulating Liquid

Body Tissue Simulating Liquid									
Freq. MHz.	Temp. (℃)	Conductivity			Permittivity			Limit (%)	Date
		Reading (σ)	Target (σ)	Delta (%)	Reading (ε r)	Target (ε r)	Delta (%)		
835	23.5	0.95	0.97	-2.06	53.34	55.2	-3.37	±5	2022-11-22
1800	23.2	1.51	1.52	-0.66	52.11	53.3	-2.23	±5	2022-11-23
1900	23.2	1.50	1.52	-1.32	52.42	53.3	-1.65	±5	2022-12-07
2300	23.2	1.78	1.81	-1.66	51.26	52.9	-3.10	±5	2022-12-07
2450	23.4	1.94	1.95	-0.51	53.68	52.7	1.86	±5	2022-12-07
2600	23.4	2.12	2.16	-1.85	52.24	52.5	-0.50	±5	2022-12-07
5200	23.6	5.26	5.30	-0.75	48.58	49.0	-0.86	±5	2022-12-08
5400	23.6	5.56	5.53	0.54	48.64	48.7	-0.12	±5	2022-12-08
5800	23.6	5.89	6.00	-1.83	48.36	48.2	0.33	±5	2022-12-08

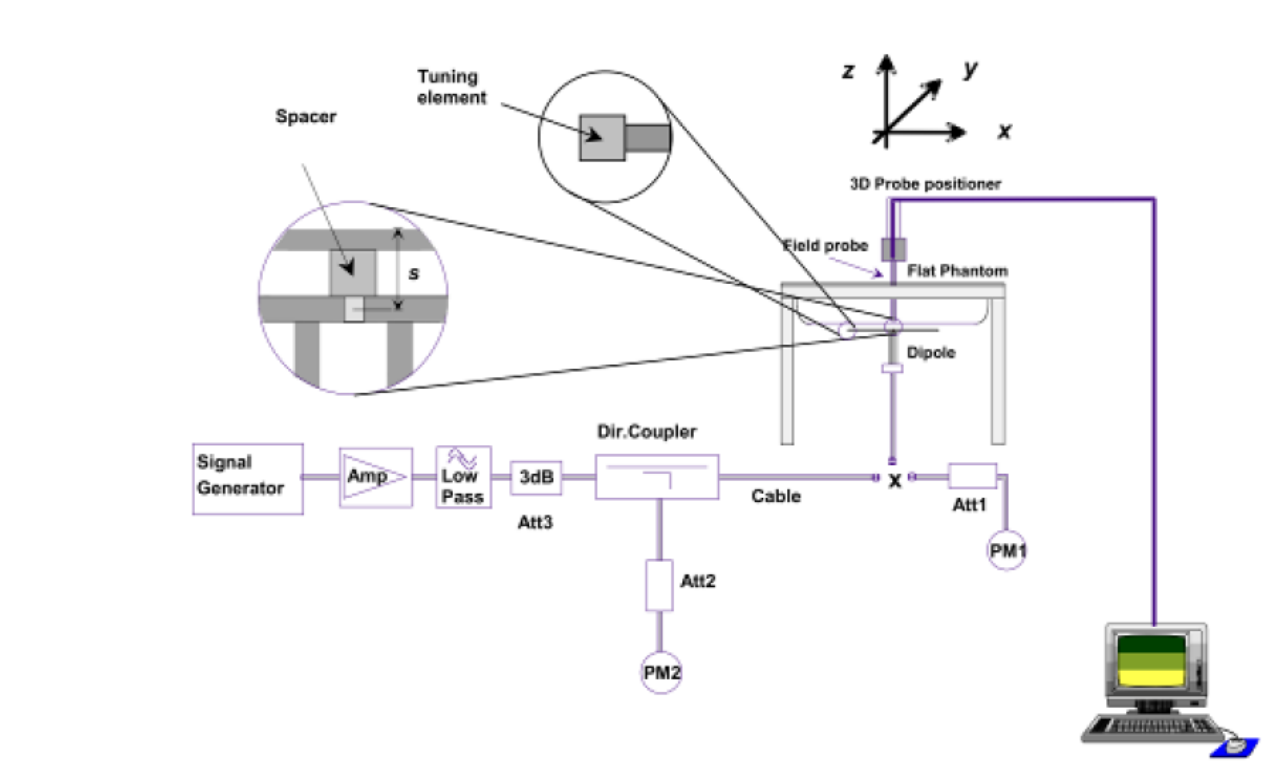
6. SAR Measurement Evaluation

6.1 Purpose of System Performance Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

6.2 System Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave which comes from a signal generator at frequency 835MHz ,1800MHz, 1900MHz 2450MHz,2600MHz,and 5GHz. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom.



System Verification Setup Block Diagram

Setup Photo of Dipole Antenna

The output power on dipole port must be calibrated to 24 dBm(250 mW) before dipole is connected.
The output power on 5 GHz Waveguide must be calibrated to 20 dBm (100mW) before 5 GHz Waveguide is connected.

6.3 Validation Results

Comparing to the original SAR value provided by SATIMO, the validation data should be within its specification of 10 %. Table 6.1 shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion.

Frequency	Targeted SAR_{1g}	Measured SAR_{1g}	Normalized SAR_{1g}	Tolerance	Date
MHz	(W/kg)	(W/kg)	(W/kg)	(%)	
Body					
835	9.36	2.51	10.04	7.26	2022-11-22
1800	38.29	9.46	37.84	-1.18	2022-11-23
1900	39.01	9.91	39.64	1.61	2022-12-07
2300	50.42	12.51	50.04	-0.75	2022-12-07
2450	50.33	12.59	50.36	0.06	2022-12-07
2600	55.79	13.54	54.16	-2.92	2022-12-07
5200	154.45	16.681	166.81	7.41	2022-12-08
5400	163.31	17.330	173.33	6.14	2022-12-08
5800	170.71	16.681	166.81	-2.34	2022-12-08

Remark: Referring to IEEE 1528:2013 Section 8.2, the system check shall be performed at a test frequency that is within ±10% or ±100 MHz of the compliance test mid-band frequency, so the 1750 MHz system verification is made of 1800MHz Dipole.

Targeted and Measurement SAR

Please refer to Annex A for the plots of system performance check.

7. EUT Testing Position

7.1 Define Two Imaginary Lines on The Handset

(a) The vertical centerline passes through two points on the front side of the handset - the midpoint of the width w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b of the bottom of the handset.

(b) The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.

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

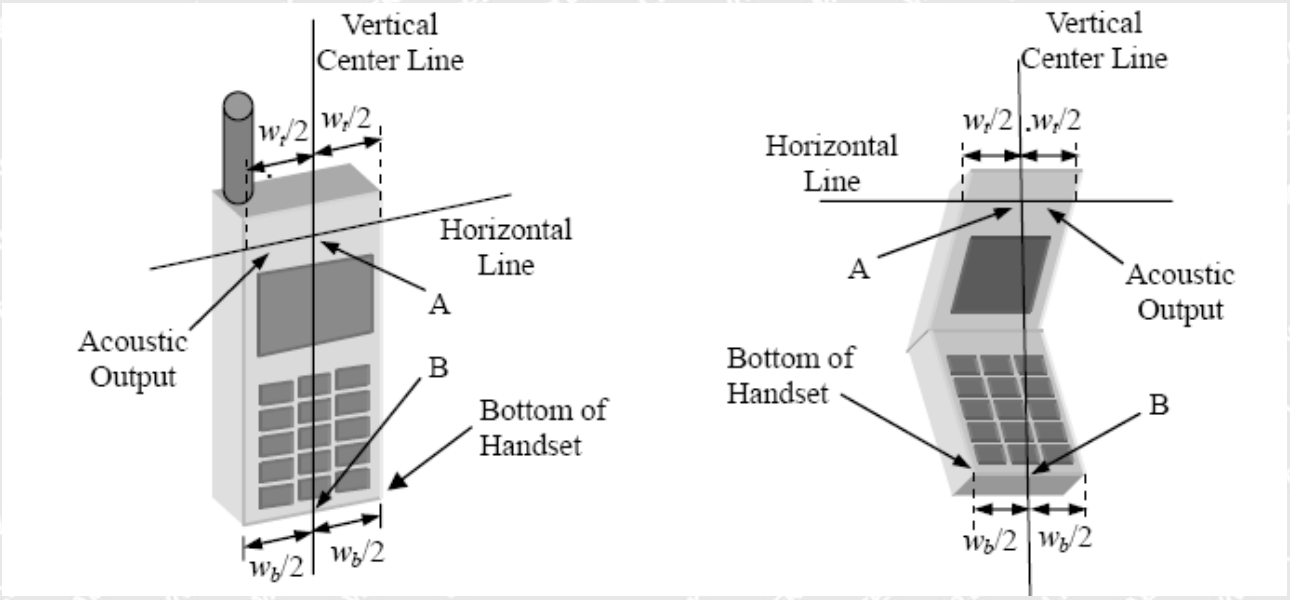


Illustration for Handset Vertical and Horizontal Reference Lines

7.2 Cheek Position

(a) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
(b) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost (see Fig. 7.2).

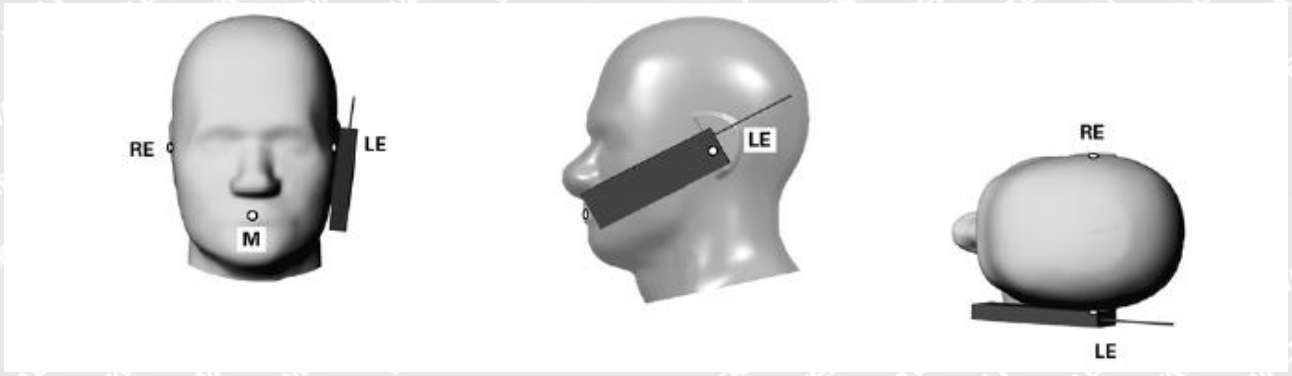


Illustration for Cheek Position

7.3 Tilted Position

(a) To position the device in the “cheek” position described above.
(b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost (see Fig. 7.3).

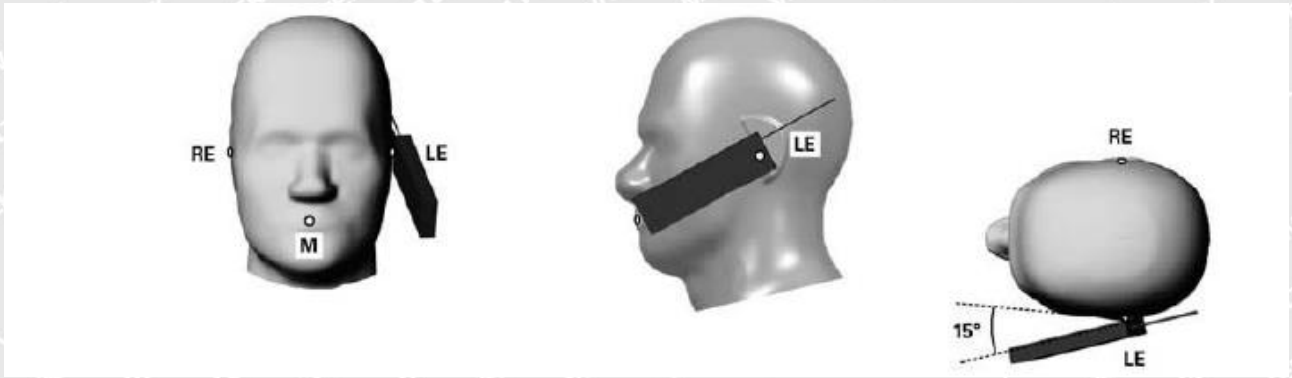


Illustration for Tilted Position

7.4 Body Position

(a) To position the device parallel to the phantom surface with each side.
(b) To adjust the device parallel to the flat phantom.
(c) To adjust the distance between the device surface and the flat phantom to 0mm.

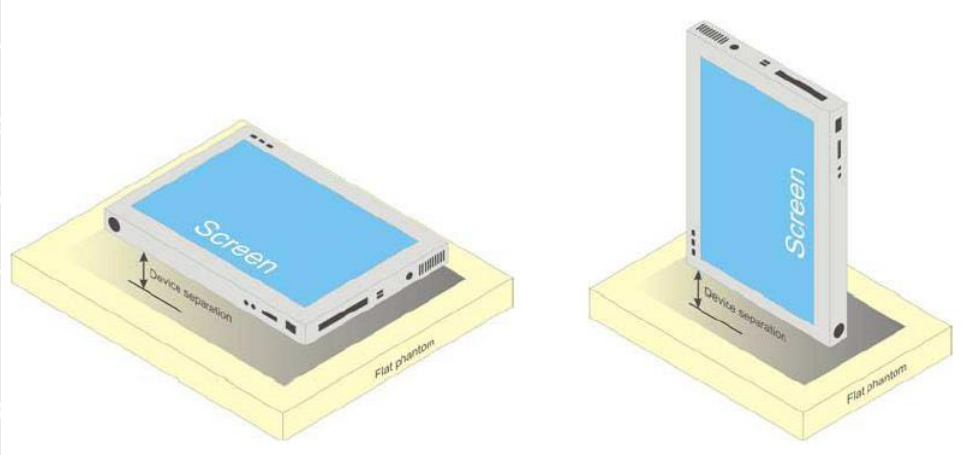
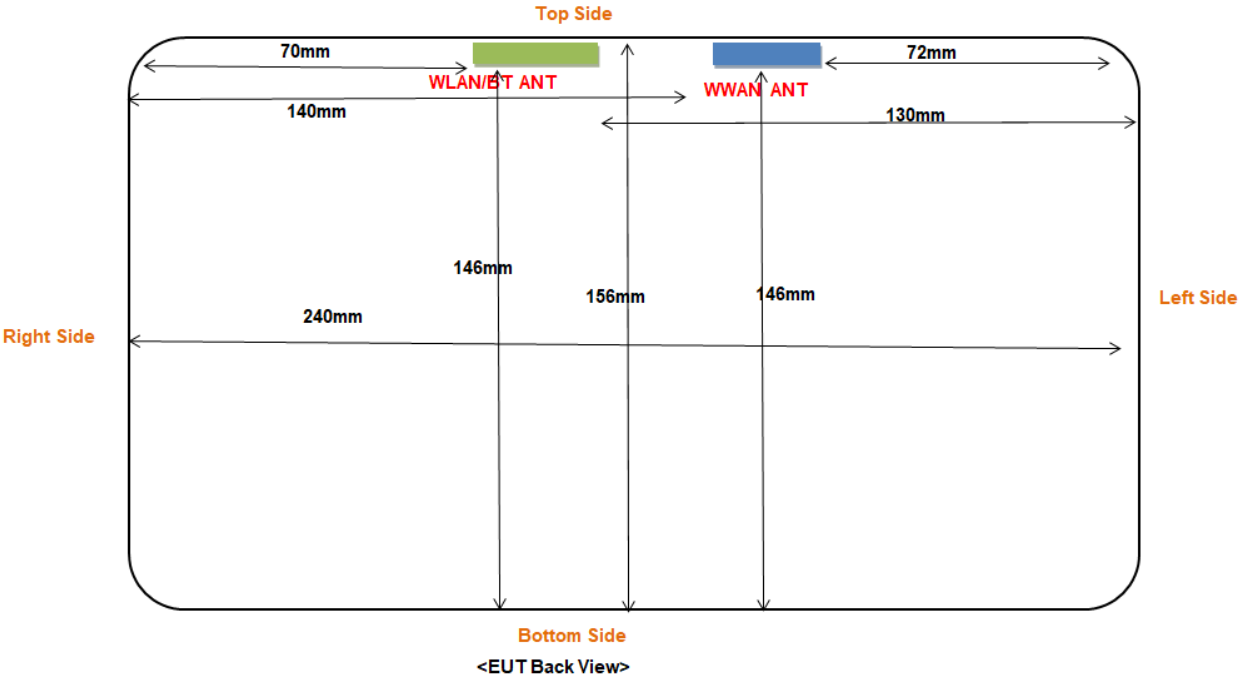


Illustration for Body Position

7.5 EUT Antenna Position



Block Diagram for EUT Antenna Position

Distance of EUT antenna-to-edge/surface(mm), Test distance:0mm						
Antennas	Back side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
WWAN	<25	<25	72	140	<25	146
WLAN/ Bluetooth	<25	<25	130	70	<25	146

7.6 EUT Testing Position

Body mode SAR assessments are required for this device. This EUT was tested in different positions for different SAR test modes, more information as below:

Body SAR tests, Test distance: 0mm						
Antennas	**Front**	**Back**	**Right Side**	**Left Side**	**Top Side**	**Bottom Side**
WWAN	/	Yes	No	No	Yes	No
WLAN/ Bluetooth	/	Yes	No	No	Yes	No

Remark:

1. Referring to KDB 616217 D04 v01r02, KDB 248227 D01 v02r02 and KDB 447498 D01 v06, this device is overall diagonal dimension(>20cm) tablet, tested in direct contact (no gap) with flat phantom.
2. Referring to KDB 616217 D04 v01r02, Exposures from antennas through the front (top) surface of the display section of a full-size tablet, away from the edges, are generally limited to the user's hands. Exposures to hands for typical consumer transmitters used in tablets are not expected to exceed the extremity SAR limit; therefore, SAR evaluation for the front surface of tablet display screens are generally not necessary.

Please refer to Annex D for the EUT test setup photos.

8. SAR Measurement Procedures

8.1 Measurement Procedures

The measurement procedures are as follows:
(a) Use base station simulator (if applicable) or engineering software to transmit RF power continuously (continuous Tx) in the highest power channel.
(b) Keep EUT to radiate maximum output power or 100% factor (if applicable)
(c) Measure output power through RF cable and power meter.
(d) Place the EUT in the positions as Annex D demonstrates.
(e) Set scan area, grid size and other setting on the SATIMO software.
(f) Measure SAR results for the highest power channel on each testing position.
(g) Find out the largest SAR result on these testing positions of each band
(h) Measure SAR results for other channels in worst SAR testing position if the SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:
(a) Power reference measurement
(b) Area scan
(c) Zoom scan
(d) Power drift measurement

8.2 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The SATIMO software includes all numerical procedures necessary to evaluate the spatial peak SAR value.
The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.
The entire evaluation of the spatial peak values is performed within the post-processing engine. The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:
(a) Extraction of the measured data (grid and values) from the Zoom Scan
(b) Calculation of the SAR value at every measurement point based on all stored data
(c) Generation of a high-resolution mesh within the measured volume
(d) Interpolation of all measured values form the measurement grid to the high-resolution grid
(e) Extrapolation of the entire 3D field distribution to the phantom surface over the distance from sensor to surface
(f) Calculation of the averaged SAR within masses of 1g and 10g

8.3 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures 5x5x7 points with step size 8, 8 and 5 mm for 300 MHz to 3 GHz, and 8x8x8 points with step size 4, 4 and 2.5 mm for 3 GHz to 6 GHz. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

8.4 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency
bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will
be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing (step-size is 4, 4 and 2.5 mm). When all volume scan were completed, the software can combine and subsequently superpose these measurement data to calculating the multiband SAR.

8.5 SAR Averaged Methods

The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimize measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1mm step.

The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR averaged over 10g and 1 g requires a very fine resolution in the three dimensional scanned data array.

8.6 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In SATIMO measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drift more than 5%, the SAR will be retested.

9. SAR Test Result

9.1 Conducted RF Output Power

GSM - Burst Average Power (dBm)								
Band	**GSM850**			**Tune-up power (dBm)**	**PCS1900**			**Tune-up power (dBm)**
Channel	**128**	**190**	**251**		**512**	**661**	**810**	
Frequency (MHz)	**824.2**	**836.6**	**848.8**		**1850.2**	**1880**	**1909.8**	
GSM	29.88	**30.02**	29.88	30.5	**27.00**	26.73	26.33	27.5
GPRS (1 slot)	30.66	30.76	30.13	31.0	26.99	26.76	26.35	27.0
GPRS (2 slots)	29.70	**29.75**	29.69	30.0	26.49	26.35	26.09	26.5
GPRS (3 slots)	27.65	27.77	27.68	28.0	24.85	25.08	24.94	25.5
GPRS (4 slots)	26.44	26.46	26.42	26.5	23.78	**24.08**	24.05	24.5

GSM - Source-Based Time-Average Power (dBm)								
Band	**GSM850**			**Tune-up power (dBm)**	**PCS1900**			**Tune-up power (dBm)**
Channel	**128**	**190**	**251**		**512**	**661**	**810**	
Frequency (MHz)	**824.2**	**836.6**	**848.8**		**1850.2**	**1880**	**1909.8**	
GSM	20.88	21.02	20.88	21.5	18.00	17.73	17.33	18.5
GPRS (1 slot)	21.66	21.76	21.13	22.0	17.99	17.76	17.35	18.0
GPRS (2 slots)	23.70	**23.75**	23.69	24.0	20.49	20.35	20.09	20.5
GPRS (3 slots)	23.40	23.52	23.43	24.0	20.60	20.83	20.69	21.0
GPRS (4 slots)	23.44	23.46	23.42	23.5	20.78	**21.08**	21.05	21.5
Note: The source-based time-averaged power is linearly scaled the maximum burst averaged power based on time slots. The calculated method are shown as below: Source based time-average power = Burst averaged power - Duty cycle factor in dB Duty cycle factor = 9 dB for 1 Tx slot, 6 dB for 2 Tx slots, 4.25 dB for 3 Tx slots, 3 dB for 4 Tx slots								

Remark:

1. For Body SAR testing, GPRS should be evaluated; therefore the EUT was set in GPRS (2X slots) for GSM850 and GPRS (4TX slots) for GSM1900 due to its highest source-based time-average power.
2. Per KDB 447498 D01 v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
3. The DUT do not support DTM function.
4. The DUT do not support Hotspot function.

WCDMA - Average Power (dBm)								
Band	**WCDMA Band II**				**WCDMA Band V**			
Channel	**9262**	**9400**	**9538**	**Tune-up power (dBm)**	**4121**	**4183**	**4244**	**Tune-up power (dBm)**
Frequency (MHz)	**1852.4**	**1880.0**	**1907.6**		**824.2**	**836.6**	**848.8**	
RMC 12.2k	20.35	**20.42**	20.05	20.5	**21.45**	21.44	21.28	21.5
HSDPA Subtest-1	19.34	19.73	19.46	20.0	20.32	20.2	20.14	20.5
HSDPA Subtest-2	19.22	19.57	19.26	20.0	20.18	20.04	20.03	20.5
HSDPA Subtest-3	19.39	19.80	19.64	20.0	20.36	20.36	20.30	20.5
HSDPA Subtest-4	19.41	19.82	19.50	20.0	20.41	20.32	20.18	20.5
HSUPA Subtest-1	20.08	19.04	19.10	20.0	20.08	20.36	20.07	20.5
HSUPA Subtest-2	20.01	19.04	19.00	20.0	20.24	20.38	20.17	20.5
HSUPA Subtest-3	20.13	19.09	19.29	20.0	20.12	20.31	19.93	20.5
HSUPA Subtest-4	20.15	19.12	19.28	20.0	20.14	20.49	20.13	20.5
HSUPA Subtest-5	19.95	19.05	19.02	20.0	20.04	20.35	20.09	20.5

Remark:

1. Per KDB 941225 D01 v03, the 12.2kbps RMC mode was selected for SAR testing (the primary mode).
2. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤1/4 dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Tune-up power (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	20.97	21.5	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	21.08	21.5	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	20.89	21.5	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	21.12	21.5	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	20.95	21.5	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	21.11	21.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	20.90	21.5	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	20.42	21.5	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	20.50	21.5	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	20.44	21.5	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	20.32	21.5	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	20.51	21.5	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	20.39	21.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	20.48	21.5	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	20.92	21.5	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	21.05	21.5	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	20.96	21.5	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	20.80	21.5	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	21.03	21.5	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	20.88	21.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	20.96	21.5	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	19.83	21.5	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	19.92	21.5	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	19.97	21.5	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	19.78	21.5	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	20.01	21.5	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	19.74	21.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	20.02	21.5	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	19.48	21.5	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	19.50	21.5	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	19.51	21.5	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	19.31	21.5	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	19.62	21.5	PASS

Band5	1.4MHz	16QAM	20525	3RB#3	19.39	21.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	19.59	21.5	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	20.07	21.5	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	20.25	21.5	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	20.08	21.5	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	20.01	21.5	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	20.07	21.5	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	20.03	21.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	20.25	21.5	PASS
Band5	3MHz	QPSK	20415	1RB#0	21.05	21.5	PASS
Band5	3MHz	QPSK	20415	1RB#8	21.17	21.5	PASS
Band5	3MHz	QPSK	20415	1RB#14	21.11	21.5	PASS
Band5	3MHz	QPSK	20415	8RB#0	20.94	21.5	PASS
Band5	3MHz	QPSK	20415	8RB#4	21.24	21.5	PASS
Band5	3MHz	QPSK	20415	8RB#7	21.01	21.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	21.08	21.5	PASS
Band5	3MHz	QPSK	20525	1RB#0	20.41	21.5	PASS
Band5	3MHz	QPSK	20525	1RB#8	20.60	21.5	PASS
Band5	3MHz	QPSK	20525	1RB#14	20.41	21.5	PASS
Band5	3MHz	QPSK	20525	8RB#0	20.29	21.5	PASS
Band5	3MHz	QPSK	20525	8RB#4	20.48	21.5	PASS
Band5	3MHz	QPSK	20525	8RB#7	20.32	21.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	20.50	21.5	PASS
Band5	3MHz	QPSK	20635	1RB#0	20.06	21.5	PASS
Band5	3MHz	QPSK	20635	1RB#8	20.17	21.5	PASS
Band5	3MHz	QPSK	20635	1RB#14	20.15	21.5	PASS
Band5	3MHz	QPSK	20635	8RB#0	19.97	21.5	PASS
Band5	3MHz	QPSK	20635	8RB#4	20.14	21.5	PASS
Band5	3MHz	QPSK	20635	8RB#7	20.04	21.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	20.07	21.5	PASS
Band5	3MHz	16QAM	20415	1RB#0	20.04	21.5	PASS
Band5	3MHz	16QAM	20415	1RB#8	20.04	21.5	PASS
Band5	3MHz	16QAM	20415	1RB#14	20.06	21.5	PASS
Band5	3MHz	16QAM	20415	8RB#0	19.92	21.5	PASS
Band5	3MHz	16QAM	20415	8RB#4	20.19	21.5	PASS
Band5	3MHz	16QAM	20415	8RB#7	19.90	21.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	20.08	21.5	PASS

Band5	3MHz	16QAM	20525	1RB#0	19.20	21.5	PASS
Band5	3MHz	16QAM	20525	1RB#8	19.32	21.5	PASS
Band5	3MHz	16QAM	20525	1RB#14	19.34	21.5	PASS
Band5	3MHz	16QAM	20525	8RB#0	19.04	21.5	PASS
Band5	3MHz	16QAM	20525	8RB#4	19.38	21.5	PASS
Band5	3MHz	16QAM	20525	8RB#7	19.02	21.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	19.29	21.5	PASS
Band5	3MHz	16QAM	20635	1RB#0	19.12	21.5	PASS
Band5	3MHz	16QAM	20635	1RB#8	19.28	21.5	PASS
Band5	3MHz	16QAM	20635	1RB#14	19.17	21.5	PASS
Band5	3MHz	16QAM	20635	8RB#0	18.93	21.5	PASS
Band5	3MHz	16QAM	20635	8RB#4	19.16	21.5	PASS
Band5	3MHz	16QAM	20635	8RB#7	18.93	21.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	19.14	21.5	PASS
Band5	5MHz	QPSK	20425	1RB#0	21.21	21.5	PASS
Band5	5MHz	QPSK	20425	1RB#12	21.28	21.5	PASS
Band5	5MHz	QPSK	20425	1RB#24	**21.35**	21.5	PASS
Band5	5MHz	QPSK	20425	12RB#0	21.16	21.5	PASS
Band5	5MHz	QPSK	20425	12RB#6	21.31	21.5	PASS
Band5	5MHz	QPSK	20425	12RB#13	21.16	21.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	21.24	21.5	PASS
Band5	5MHz	QPSK	20525	1RB#0	21.10	21.5	PASS
Band5	5MHz	QPSK	20525	1RB#12	21.18	21.5	PASS
Band5	5MHz	QPSK	20525	1RB#24	21.26	21.5	PASS
Band5	5MHz	QPSK	20525	12RB#0	20.91	21.5	PASS
Band5	5MHz	QPSK	20525	12RB#6	21.29	21.5	PASS
Band5	5MHz	QPSK	20525	12RB#13	20.96	21.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	21.12	21.5	PASS
Band5	5MHz	QPSK	20625	1RB#0	20.55	21.5	PASS
Band5	5MHz	QPSK	20625	1RB#12	20.56	21.5	PASS
Band5	5MHz	QPSK	20625	1RB#24	20.61	21.5	PASS
Band5	5MHz	QPSK	20625	12RB#0	20.41	21.5	PASS
Band5	5MHz	QPSK	20625	12RB#6	20.68	21.5	PASS
Band5	5MHz	QPSK	20625	12RB#13	20.41	21.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	20.55	21.5	PASS
Band5	5MHz	16QAM	20425	1RB#0	20.25	21.5	PASS
Band5	5MHz	16QAM	20425	1RB#12	20.42	21.5	PASS

Band5	5MHz	16QAM	20425	1RB#24	20.37	21.5	PASS
Band5	5MHz	16QAM	20425	12RB#0	20.20	21.5	PASS
Band5	5MHz	16QAM	20425	12RB#6	20.29	21.5	PASS
Band5	5MHz	16QAM	20425	12RB#13	20.15	21.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	20.44	21.5	PASS
Band5	5MHz	16QAM	20525	1RB#0	20.21	21.5	PASS
Band5	5MHz	16QAM	20525	1RB#12	20.25	21.5	PASS
Band5	5MHz	16QAM	20525	1RB#24	20.22	21.5	PASS
Band5	5MHz	16QAM	20525	12RB#0	20.21	21.5	PASS
Band5	5MHz	16QAM	20525	12RB#6	20.22	21.5	PASS
Band5	5MHz	16QAM	20525	12RB#13	20.05	21.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	20.25	21.5	PASS
Band5	5MHz	16QAM	20625	1RB#0	19.54	21.0	PASS
Band5	5MHz	16QAM	20625	1RB#12	19.73	21.0	PASS
Band5	5MHz	16QAM	20625	1RB#24	19.71	21.0	PASS
Band5	5MHz	16QAM	20625	12RB#0	19.43	21.0	PASS
Band5	5MHz	16QAM	20625	12RB#6	19.56	21.0	PASS
Band5	5MHz	16QAM	20625	12RB#13	19.41	21.0	PASS
Band5	5MHz	16QAM	20625	25RB#0	19.74	21.0	PASS
Band5	10MHz	QPSK	20450	1RB#0	21.15	21.5	PASS
Band5	10MHz	QPSK	20450	1RB#24	21.18	21.5	PASS
Band5	10MHz	QPSK	20450	1RB#49	21.15	21.5	PASS
Band5	10MHz	QPSK	20450	25RB#0	21.15	21.5	PASS
Band5	10MHz	QPSK	20450	25RB#12	**21.30**	21.5	PASS
Band5	10MHz	QPSK	20450	25RB#25	21.04	21.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	21.23	21.5	PASS
Band5	10MHz	QPSK	20525	1RB#0	20.35	21.5	PASS
Band5	10MHz	QPSK	20525	1RB#24	20.39	21.5	PASS
Band5	10MHz	QPSK	20525	1RB#49	20.40	21.5	PASS
Band5	10MHz	QPSK	20525	25RB#0	20.18	21.5	PASS
Band5	10MHz	QPSK	20525	25RB#12	20.47	21.5	PASS
Band5	10MHz	QPSK	20525	25RB#25	20.29	21.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	20.47	21.5	PASS
Band5	10MHz	QPSK	20600	1RB#0	20.62	21.5	PASS
Band5	10MHz	QPSK	20600	1RB#24	20.76	21.5	PASS
Band5	10MHz	QPSK	20600	1RB#49	20.77	21.5	PASS
Band5	10MHz	QPSK	20600	25RB#0	20.53	21.5	PASS

Band5	10MHz	QPSK	20600	25RB#12	20.80	21.5	PASS
Band5	10MHz	QPSK	20600	25RB#25	20.54	21.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	20.68	21.5	PASS
Band5	10MHz	16QAM	20450	1RB#0	20.18	21.5	PASS
Band5	10MHz	16QAM	20450	1RB#24	20.31	21.5	PASS
Band5	10MHz	16QAM	20450	1RB#49	20.35	21.5	PASS
Band5	10MHz	16QAM	20450	25RB#0	20.02	21.5	PASS
Band5	10MHz	16QAM	20450	25RB#12	20.26	21.5	PASS
Band5	10MHz	16QAM	20450	25RB#25	20.10	21.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	20.19	21.5	PASS
Band5	10MHz	16QAM	20525	1RB#0	19.37	21.5	PASS
Band5	10MHz	16QAM	20525	1RB#24	19.45	21.5	PASS
Band5	10MHz	16QAM	20525	1RB#49	19.48	21.5	PASS
Band5	10MHz	16QAM	20525	25RB#0	19.22	21.5	PASS
Band5	10MHz	16QAM	20525	25RB#12	19.49	21.5	PASS
Band5	10MHz	16QAM	20525	25RB#25	19.34	21.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	19.45	21.5	PASS
Band5	10MHz	16QAM	20600	1RB#0	19.70	21.5	PASS
Band5	10MHz	16QAM	20600	1RB#24	19.76	21.5	PASS
Band5	10MHz	16QAM	20600	1RB#49	19.80	21.5	PASS
Band5	10MHz	16QAM	20600	25RB#0	19.54	21.5	PASS
Band5	10MHz	16QAM	20600	25RB#12	19.73	21.5	PASS
Band5	10MHz	16QAM	20600	25RB#25	19.57	21.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	19.74	21.5	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Tune-up power (dBm)	Verdict
Band40	5MHz	QPSK	38725	1RB#0	17.09	17.5	PASS
Band40	5MHz	QPSK	38725	1RB#12	**17.21**	17.5	PASS
Band40	5MHz	QPSK	38725	1RB#24	16.90	17.5	PASS
Band40	5MHz	QPSK	38725	12RB#0	17.09	17.5	PASS
Band40	5MHz	QPSK	38725	12RB#6	16.93	17.5	PASS
Band40	5MHz	QPSK	38725	12RB#13	17.18	17.5	PASS
Band40	5MHz	QPSK	38725	25RB#0	17.03	17.5	PASS
Band40	5MHz	QPSK	38750	1RB#0	16.09	17.5	PASS
Band40	5MHz	QPSK	38750	1RB#12	16.15	17.5	PASS
Band40	5MHz	QPSK	38750	1RB#24	16.17	17.5	PASS
Band40	5MHz	QPSK	38750	12RB#0	15.94	17.5	PASS
Band40	5MHz	QPSK	38750	12RB#6	16.25	17.5	PASS
Band40	5MHz	QPSK	38750	12RB#13	15.90	17.5	PASS
Band40	5MHz	QPSK	38750	25RB#0	16.12	17.5	PASS
Band40	5MHz	QPSK	38775	1RB#0	16.50	17.5	PASS
Band40	5MHz	QPSK	38775	1RB#12	16.60	17.5	PASS
Band40	5MHz	QPSK	38775	1RB#24	16.51	17.5	PASS
Band40	5MHz	QPSK	38775	12RB#0	16.42	17.5	PASS
Band40	5MHz	QPSK	38775	12RB#6	16.66	17.5	PASS
Band40	5MHz	QPSK	38775	12RB#13	16.40	17.5	PASS
Band40	5MHz	QPSK	38775	25RB#0	16.69	17.5	PASS
Band40	5MHz	16QAM	38725	1RB#0	16.12	17.5	PASS
Band40	5MHz	16QAM	38725	1RB#12	16.06	17.5	PASS
Band40	5MHz	16QAM	38725	1RB#24	15.93	17.5	PASS
Band40	5MHz	16QAM	38725	12RB#0	16.01	17.5	PASS
Band40	5MHz	16QAM	38725	12RB#6	16.05	17.5	PASS
Band40	5MHz	16QAM	38725	12RB#13	16.09	17.5	PASS
Band40	5MHz	16QAM	38725	25RB#0	15.99	17.5	PASS
Band40	5MHz	16QAM	38750	1RB#0	15.94	17.5	PASS
Band40	5MHz	16QAM	38750	1RB#12	15.87	17.5	PASS
Band40	5MHz	16QAM	38750	1RB#24	15.98	17.5	PASS
Band40	5MHz	16QAM	38750	12RB#0	15.94	17.5	PASS
Band40	5MHz	16QAM	38750	12RB#6	15.89	17.5	PASS

Band40	5MHz	16QAM	38750	12RB#13	15.95	17.5	PASS
Band40	5MHz	16QAM	38750	25RB#0	15.94	17.5	PASS
Band40	5MHz	16QAM	38775	1RB#0	15.42	17.5	PASS
Band40	5MHz	16QAM	38775	1RB#12	15.43	17.5	PASS
Band40	5MHz	16QAM	38775	1RB#24	15.46	17.5	PASS
Band40	5MHz	16QAM	38775	12RB#0	15.29	17.5	PASS
Band40	5MHz	16QAM	38775	12RB#6	15.53	17.5	PASS
Band40	5MHz	16QAM	38775	12RB#13	15.40	17.5	PASS
Band40	5MHz	16QAM	38775	25RB#0	15.46	17.5	PASS
Band40	10MHz	QPSK	38750	1RB#0	15.94	16.5	PASS
Band40	10MHz	QPSK	38750	1RB#24	16.11	16.5	PASS
Band40	10MHz	QPSK	38750	1RB#49	16.00	16.5	PASS
Band40	10MHz	QPSK	38750	25RB#0	15.88	16.5	PASS
Band40	10MHz	QPSK	38750	25RB#12	16.05	16.5	PASS
Band40	10MHz	QPSK	38750	25RB#25	15.91	16.5	PASS
Band40	10MHz	QPSK	38750	50RB#0	16.01	16.5	PASS
Band40	10MHz	16QAM	38750	1RB#0	15.42	16.5	PASS
Band40	10MHz	16QAM	38750	1RB#24	15.54	16.5	PASS
Band40	10MHz	16QAM	38750	1RB#49	15.50	16.5	PASS
Band40	10MHz	16QAM	38750	25RB#0	15.39	16.5	PASS
Band40	10MHz	16QAM	38750	25RB#12	15.58	16.5	PASS
Band40	10MHz	16QAM	38750	25RB#25	15.41	16.5	PASS
Band40	10MHz	16QAM	38750	50RB#0	15.59	16.5	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Tune-up power (dBm)	Verdict
Band40	5MHz	QPSK	39175	1RB#0	15.93	16.5	PASS
Band40	5MHz	QPSK	39175	1RB#12	15.89	16.5	PASS
Band40	5MHz	QPSK	39175	1RB#24	15.85	16.5	PASS
Band40	5MHz	QPSK	39175	12RB#0	15.83	16.5	PASS
Band40	5MHz	QPSK	39175	12RB#6	15.83	16.5	PASS
Band40	5MHz	QPSK	39175	12RB#13	16.12	16.5	PASS
Band40	5MHz	QPSK	39175	25RB#0	15.89	16.5	PASS
Band40	5MHz	QPSK	39200	1RB#0	16.17	16.5	PASS
Band40	5MHz	QPSK	39200	1RB#12	16.18	16.5	PASS

Band40	5MHz	QPSK	39200	1RB#24	16.21	16.5	PASS
Band40	5MHz	QPSK	39200	12RB#0	16.12	16.5	PASS
Band40	5MHz	QPSK	39200	12RB#6	16.21	16.5	PASS
Band40	5MHz	QPSK	39200	12RB#13	16.02	16.5	PASS
Band40	5MHz	QPSK	39200	25RB#0	**16.30**	16.5	PASS
Band40	5MHz	QPSK	39225	1RB#0	15.78	16.5	PASS
Band40	5MHz	QPSK	39225	1RB#12	15.92	16.5	PASS
Band40	5MHz	QPSK	39225	1RB#24	15.79	16.5	PASS
Band40	5MHz	QPSK	39225	12RB#0	15.62	16.5	PASS
Band40	5MHz	QPSK	39225	12RB#6	15.96	16.5	PASS
Band40	5MHz	QPSK	39225	12RB#13	15.59	16.5	PASS
Band40	5MHz	QPSK	39225	25RB#0	15.86	16.5	PASS
Band40	5MHz	16QAM	39175	1RB#0	14.79	16.5	PASS
Band40	5MHz	16QAM	39175	1RB#12	14.93	16.5	PASS
Band40	5MHz	16QAM	39175	1RB#24	14.87	16.5	PASS
Band40	5MHz	16QAM	39175	12RB#0	14.60	16.5	PASS
Band40	5MHz	16QAM	39175	12RB#6	14.81	16.5	PASS
Band40	5MHz	16QAM	39175	12RB#13	14.71	16.5	PASS
Band40	5MHz	16QAM	39175	25RB#0	14.94	16.5	PASS
Band40	5MHz	16QAM	39200	1RB#0	14.48	16.5	PASS
Band40	5MHz	16QAM	39200	1RB#12	14.58	16.5	PASS
Band40	5MHz	16QAM	39200	1RB#24	14.50	16.5	PASS
Band40	5MHz	16QAM	39200	12RB#0	14.45	16.5	PASS
Band40	5MHz	16QAM	39200	12RB#6	14.65	16.5	PASS
Band40	5MHz	16QAM	39200	12RB#13	14.29	16.5	PASS
Band40	5MHz	16QAM	39200	25RB#0	14.50	16.5	PASS
Band40	5MHz	16QAM	39225	1RB#0	14.93	16.5	PASS
Band40	5MHz	16QAM	39225	1RB#12	14.95	16.5	PASS
Band40	5MHz	16QAM	39225	1RB#24	15.08	16.5	PASS
Band40	5MHz	16QAM	39225	12RB#0	14.87	16.5	PASS
Band40	5MHz	16QAM	39225	12RB#6	15.11	16.5	PASS
Band40	5MHz	16QAM	39225	12RB#13	14.74	16.5	PASS
Band40	5MHz	16QAM	39225	25RB#0	15.04	16.5	PASS
Band40	10MHz	QPSK	39200	1RB#0	15.58	16.5	PASS
Band40	10MHz	QPSK	39200	1RB#24	15.70	16.5	PASS
Band40	10MHz	QPSK	39200	1RB#49	15.67	16.5	PASS
Band40	10MHz	QPSK	39200	25RB#0	15.51	16.5	PASS

Band40	10MHz	QPSK	39200	25RB#12	15.59	16.5	PASS
Band40	10MHz	QPSK	39200	25RB#25	15.54	16.5	PASS
Band40	10MHz	QPSK	39200	50RB#0	15.71	16.5	PASS
Band40	10MHz	16QAM	39200	1RB#0	14.64	16.5	PASS
Band40	10MHz	16QAM	39200	1RB#24	14.75	16.5	PASS
Band40	10MHz	16QAM	39200	1RB#49	14.79	16.5	PASS
Band40	10MHz	16QAM	39200	25RB#0	14.63	16.5	PASS
Band40	10MHz	16QAM	39200	25RB#12	14.69	16.5	PASS
Band40	10MHz	16QAM	39200	25RB#25	14.62	16.5	PASS
Band40	10MHz	16QAM	39200	50RB#0	14.65	16.5	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Tune-up power (dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	14.25	15.0	PASS
Band41	5MHz	QPSK	39675	1RB#12	14.38	15.0	PASS
Band41	5MHz	QPSK	39675	1RB#24	14.20	15.0	PASS
Band41	5MHz	QPSK	39675	12RB#0	14.15	15.0	PASS
Band41	5MHz	QPSK	39675	12RB#6	14.19	15.0	PASS
Band41	5MHz	QPSK	39675	12RB#13	14.27	15.0	PASS
Band41	5MHz	QPSK	39675	25RB#0	14.11	15.0	PASS
Band41	5MHz	QPSK	40620	1RB#0	13.86	15.0	PASS
Band41	5MHz	QPSK	40620	1RB#12	13.88	15.0	PASS
Band41	5MHz	QPSK	40620	1RB#24	13.98	15.0	PASS
Band41	5MHz	QPSK	40620	12RB#0	13.77	15.0	PASS
Band41	5MHz	QPSK	40620	12RB#6	14.02	15.0	PASS
Band41	5MHz	QPSK	40620	12RB#13	13.70	15.0	PASS
Band41	5MHz	QPSK	40620	25RB#0	13.96	15.0	PASS
Band41	5MHz	QPSK	41565	1RB#0	14.48	15.0	PASS
Band41	5MHz	QPSK	41565	1RB#12	14.54	15.0	PASS
Band41	5MHz	QPSK	41565	1RB#24	14.50	15.0	PASS
Band41	5MHz	QPSK	41565	12RB#0	14.34	15.0	PASS
Band41	5MHz	QPSK	41565	12RB#6	14.53	15.0	PASS
Band41	5MHz	QPSK	41565	12RB#13	14.39	15.0	PASS
Band41	5MHz	QPSK	41565	25RB#0	14.56	15.0	PASS

Band41	5MHz	16QAM	39675	1RB#0	13.48	15.0	PASS
Band41	5MHz	16QAM	39675	1RB#12	13.66	15.0	PASS
Band41	5MHz	16QAM	39675	1RB#24	13.49	15.0	PASS
Band41	5MHz	16QAM	39675	12RB#0	13.41	15.0	PASS
Band41	5MHz	16QAM	39675	12RB#6	13.50	15.0	PASS
Band41	5MHz	16QAM	39675	12RB#13	13.42	15.0	PASS
Band41	5MHz	16QAM	39675	25RB#0	13.61	15.0	PASS
Band41	5MHz	16QAM	40620	1RB#0	13.04	15.0	PASS
Band41	5MHz	16QAM	40620	1RB#12	13.08	15.0	PASS
Band41	5MHz	16QAM	40620	1RB#24	13.11	15.0	PASS
Band41	5MHz	16QAM	40620	12RB#0	12.94	15.0	PASS
Band41	5MHz	16QAM	40620	12RB#6	13.16	15.0	PASS
Band41	5MHz	16QAM	40620	12RB#13	12.90	15.0	PASS
Band41	5MHz	16QAM	40620	25RB#0	13.10	15.0	PASS
Band41	5MHz	16QAM	41565	1RB#0	13.60	15.0	PASS
Band41	5MHz	16QAM	41565	1RB#12	13.77	15.0	PASS
Band41	5MHz	16QAM	41565	1RB#24	13.73	15.0	PASS
Band41	5MHz	16QAM	41565	12RB#0	13.59	15.0	PASS
Band41	5MHz	16QAM	41565	12RB#6	13.66	15.0	PASS
Band41	5MHz	16QAM	41565	12RB#13	13.42	15.0	PASS
Band41	5MHz	16QAM	41565	25RB#0	13.68	15.0	PASS
Band41	10MHz	QPSK	39700	1RB#0	14.62	15.0	PASS
Band41	10MHz	QPSK	39700	1RB#24	14.79	15.0	PASS
Band41	10MHz	QPSK	39700	1RB#49	14.80	15.0	PASS
Band41	10MHz	QPSK	39700	25RB#0	14.52	15.0	PASS
Band41	10MHz	QPSK	39700	25RB#12	14.64	15.0	PASS
Band41	10MHz	QPSK	39700	25RB#25	14.47	15.0	PASS
Band41	10MHz	QPSK	39700	50RB#0	14.79	15.0	PASS
Band41	10MHz	QPSK	40620	1RB#0	14.60	15.0	PASS
Band41	10MHz	QPSK	40620	1RB#24	14.74	15.0	PASS
Band41	10MHz	QPSK	40620	1RB#49	14.66	15.0	PASS
Band41	10MHz	QPSK	40620	25RB#0	14.58	15.0	PASS
Band41	10MHz	QPSK	40620	25RB#12	14.63	15.0	PASS
Band41	10MHz	QPSK	40620	25RB#25	14.43	15.0	PASS
Band41	10MHz	QPSK	40620	50RB#0	14.70	15.0	PASS
Band41	10MHz	QPSK	41540	1RB#0	14.41	15.0	PASS
Band41	10MHz	QPSK	41540	1RB#24	14.43	15.0	PASS

Band41	10MHz	QPSK	41540	1RB#49	14.55	15.0	PASS
Band41	10MHz	QPSK	41540	25RB#0	14.36	15.0	PASS
Band41	10MHz	QPSK	41540	25RB#12	14.43	15.0	PASS
Band41	10MHz	QPSK	41540	25RB#25	14.32	15.0	PASS
Band41	10MHz	QPSK	41540	50RB#0	14.53	15.0	PASS
Band41	10MHz	16QAM	39700	1RB#0	13.50	15.0	PASS
Band41	10MHz	16QAM	39700	1RB#24	13.68	15.0	PASS
Band41	10MHz	16QAM	39700	1RB#49	13.69	15.0	PASS
Band41	10MHz	16QAM	39700	25RB#0	13.46	15.0	PASS
Band41	10MHz	16QAM	39700	25RB#12	13.67	15.0	PASS
Band41	10MHz	16QAM	39700	25RB#25	13.40	15.0	PASS
Band41	10MHz	16QAM	39700	50RB#0	13.61	15.0	PASS
Band41	10MHz	16QAM	40620	1RB#0	13.63	15.0	PASS
Band41	10MHz	16QAM	40620	1RB#24	13.68	15.0	PASS
Band41	10MHz	16QAM	40620	1RB#49	13.75	15.0	PASS
Band41	10MHz	16QAM	40620	25RB#0	13.53	15.0	PASS
Band41	10MHz	16QAM	40620	25RB#12	13.79	15.0	PASS
Band41	10MHz	16QAM	40620	25RB#25	13.53	15.0	PASS
Band41	10MHz	16QAM	40620	50RB#0	13.73	15.0	PASS
Band41	10MHz	16QAM	41540	1RB#0	13.48	15.0	PASS
Band41	10MHz	16QAM	41540	1RB#24	13.63	15.0	PASS
Band41	10MHz	16QAM	41540	1RB#49	13.52	15.0	PASS
Band41	10MHz	16QAM	41540	25RB#0	13.32	15.0	PASS
Band41	10MHz	16QAM	41540	25RB#12	13.60	15.0	PASS
Band41	10MHz	16QAM	41540	25RB#25	13.39	15.0	PASS
Band41	10MHz	16QAM	41540	50RB#0	13.51	15.0	PASS
Band41	15MHz	QPSK	39725	1RB#0	14.22	15.0	PASS
Band41	15MHz	QPSK	39725	1RB#38	14.35	15.0	PASS
Band41	15MHz	QPSK	39725	1RB#74	14.38	15.0	PASS
Band41	15MHz	QPSK	39725	38RB#0	14.16	15.0	PASS
Band41	15MHz	QPSK	39725	38RB#18	14.27	15.0	PASS
Band41	15MHz	QPSK	39725	38RB#37	14.16	15.0	PASS
Band41	15MHz	QPSK	39725	75RB#0	14.30	15.0	PASS
Band41	15MHz	QPSK	40620	1RB#0	14.69	15.0	PASS
Band41	15MHz	QPSK	40620	1RB#38	14.87	15.0	PASS
Band41	15MHz	QPSK	40620	1RB#74	14.78	15.0	PASS
Band41	15MHz	QPSK	40620	38RB#0	14.49	15.0	PASS

Band41	15MHz	QPSK	40620	38RB#18	14.80	15.0	PASS
Band41	15MHz	QPSK	40620	38RB#37	14.60	15.0	PASS
Band41	15MHz	QPSK	40620	75RB#0	14.86	15.0	PASS
Band41	15MHz	QPSK	41515	1RB#0	14.81	15.0	PASS
Band41	15MHz	QPSK	41515	1RB#38	14.93	15.0	PASS
Band41	15MHz	QPSK	41515	1RB#74	14.84	15.0	PASS
Band41	15MHz	QPSK	41515	38RB#0	14.69	15.0	PASS
Band41	15MHz	QPSK	41515	38RB#18	14.93	15.0	PASS
Band41	15MHz	QPSK	41515	38RB#37	14.63	15.0	PASS
Band41	15MHz	QPSK	41515	75RB#0	**14.97**	15.0	PASS
Band41	15MHz	16QAM	39725	1RB#0	13.10	15.0	PASS
Band41	15MHz	16QAM	39725	1RB#38	13.24	15.0	PASS
Band41	15MHz	16QAM	39725	1RB#74	13.26	15.0	PASS
Band41	15MHz	16QAM	39725	38RB#0	13.02	15.0	PASS
Band41	15MHz	16QAM	39725	38RB#18	13.27	15.0	PASS
Band41	15MHz	16QAM	39725	38RB#37	12.91	15.0	PASS
Band41	15MHz	16QAM	39725	75RB#0	13.22	15.0	PASS
Band41	15MHz	16QAM	40620	1RB#0	13.67	15.0	PASS
Band41	15MHz	16QAM	40620	1RB#38	13.78	15.0	PASS
Band41	15MHz	16QAM	40620	1RB#74	13.77	15.0	PASS
Band41	15MHz	16QAM	40620	38RB#0	13.54	15.0	PASS
Band41	15MHz	16QAM	40620	38RB#18	13.85	15.0	PASS
Band41	15MHz	16QAM	40620	38RB#37	13.48	15.0	PASS
Band41	15MHz	16QAM	40620	75RB#0	13.82	15.0	PASS
Band41	15MHz	16QAM	41515	1RB#0	13.22	15.0	PASS
Band41	15MHz	16QAM	41515	1RB#38	13.24	15.0	PASS
Band41	15MHz	16QAM	41515	1RB#74	13.28	15.0	PASS
Band41	15MHz	16QAM	41515	38RB#0	13.07	15.0	PASS
Band41	15MHz	16QAM	41515	38RB#18	13.35	15.0	PASS
Band41	15MHz	16QAM	41515	38RB#37	13.11	15.0	PASS
Band41	15MHz	16QAM	41515	75RB#0	13.41	15.0	PASS
Band41	20MHz	QPSK	39750	1RB#0	13.86	14.5	PASS
Band41	20MHz	QPSK	39750	1RB#49	13.90	14.5	PASS
Band41	20MHz	QPSK	39750	1RB#99	14.01	14.5	PASS
Band41	20MHz	QPSK	39750	50RB#0	13.69	14.5	PASS
Band41	20MHz	QPSK	39750	50RB#25	14.05	14.5	PASS
Band41	20MHz	QPSK	39750	50RB#50	13.76	14.5	PASS

Band41	20MHz	QPSK	39750	100RB#0	14.04	14.5	PASS
Band41	20MHz	QPSK	40620	1RB#0	13.91	14.5	PASS
Band41	20MHz	QPSK	40620	1RB#49	14.01	14.5	PASS
Band41	20MHz	QPSK	40620	1RB#99	14.10	14.5	PASS
Band41	20MHz	QPSK	40620	50RB#0	13.85	14.5	PASS
Band41	20MHz	QPSK	40620	50RB#25	14.00	14.5	PASS
Band41	20MHz	QPSK	40620	50RB#50	13.91	14.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	14.09	14.5	PASS
Band41	20MHz	QPSK	41490	1RB#0	14.23	14.5	PASS
Band41	20MHz	QPSK	41490	1RB#49	14.32	14.5	PASS
Band41	20MHz	QPSK	41490	1RB#99	14.27	14.5	PASS
Band41	20MHz	QPSK	41490	50RB#0	14.19	14.5	PASS
Band41	20MHz	QPSK	41490	50RB#25	**14.38**	14.5	PASS
Band41	20MHz	QPSK	41490	50RB#50	14.03	14.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	14.29	14.5	PASS
Band41	20MHz	16QAM	39750	1RB#0	12.87	14.5	PASS
Band41	20MHz	16QAM	39750	1RB#49	12.97	14.5	PASS
Band41	20MHz	16QAM	39750	1RB#99	12.95	14.5	PASS
Band41	20MHz	16QAM	39750	50RB#0	12.81	14.5	PASS
Band41	20MHz	16QAM	39750	50RB#25	12.87	14.5	PASS
Band41	20MHz	16QAM	39750	50RB#50	12.74	14.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	13.00	14.5	PASS
Band41	20MHz	16QAM	40620	1RB#0	13.00	14.5	PASS
Band41	20MHz	16QAM	40620	1RB#49	13.07	14.5	PASS
Band41	20MHz	16QAM	40620	1RB#99	13.11	14.5	PASS
Band41	20MHz	16QAM	40620	50RB#0	12.95	14.5	PASS
Band41	20MHz	16QAM	40620	50RB#25	13.16	14.5	PASS
Band41	20MHz	16QAM	40620	50RB#50	12.82	14.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	13.02	14.5	PASS
Band41	20MHz	16QAM	41490	1RB#0	13.26	14.5	PASS
Band41	20MHz	16QAM	41490	1RB#49	13.40	14.5	PASS
Band41	20MHz	16QAM	41490	1RB#99	13.43	14.5	PASS
Band41	20MHz	16QAM	41490	50RB#0	13.09	14.5	PASS
Band41	20MHz	16QAM	41490	50RB#25	13.33	14.5	PASS
Band41	20MHz	16QAM	41490	50RB#50	13.24	14.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	13.26	14.5	PASS

Remark:

1. Per KDB941225 D05 v02r05, Start with the largest channel bandwidth then measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle, and lower edge of each required test channel. When the reported SAR is≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. 6 When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.
2. Per KDB941225 D05 v02r05, the procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.
3. Per KDB941225 D05 v02r05, 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 1 RB allocations, and
the highest reported SAR for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB941225 D05 v02r05, for each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in 5.2.1, 5.2.2, and 5.2.3 to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

WLAN(2.4GHz)					
Test Mode	**Data Rate**	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11b	11Mbps	CH 01	2412	14.24	14.5
		CH 06	2437	13.92	14.0
		CH 11	2462	14.01	14.5
802.11g	54Mbps	CH 01	2412	16.00	16.5
		CH 06	2437	15.80	16.0
		CH 11	2462	16.06	16.5
802.11n (20MHz)	MCS7	CH 01	2412	15.99	16.0
		CH 06	2437	15.80	16.0
		CH 11	2462	15.90	16.0
802.11n (40MHz)	MCS7	CH 03	2422	**16.54**	17.0
		CH 06	2437	16.34	16.5
		CH 09	2452	16.23	16.5

WLAN(5.2GHz)				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 36	5180	10.08	10.5
	CH 40	5200	9.43	9.5
	CH 48	5240	9.14	9.5
802.11ac(VHT20)	CH 36	5180	**10.58**	11.0
	CH 40	5200	9.67	10.0
	CH 48	5240	9.42	9.5
802.11ac (VHT40)	CH 38	5190	10.05	10.5
	CH 46	5230	9.29	9.5
802.11ac (VHT80)	CH 42	5210	9.41	9.5
802.11n (HT20)	CH 36	5180	10.02	10.5
	CH 40	5200	9.15	9.5
	CH 48	5240	8.98	9.0
802.11n (HT40)	CH 38	5190	9.52	10.0
	CH 46	5230	8.79	9.0

WLAN(5.3GHz)				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 52	5260	**9.93**	10.0
	CH 60	5300	9.44	9.5
	CH 64	5320	8.48	8.5
802.11ac(VHT20)	CH 52	5260	9.33	9.5
	CH 60	5300	9.19	9.5
	CH 64	5320	9.35	9.5
802.11ac (VHT40)	CH 54	5270	9.74	10.0
	CH 62	5310	9.19	9.5
802.11ac (VHT80)	CH 58	5290	9.56	10.0
802.11n (HT20)	CH 52	5260	9.77	10.0
	CH 60	5300	9.30	9.5
	CH 64	5320	9.29	9.5
802.11n (HT40)	CH 54	5270	9.70	10.0
	CH 62	5310	8.96	9.0

WLAN(5.8GHz)				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 149	5745	9.171	9.5
	CH 157	5785	**9.930**	10.0
	CH 165	5825	8.800	9.0
802.11ac(VHT20)	CH 149	5745	8.744	9.0
	CH 157	5785	9.751	10.0
	CH 165	5825	9.391	9.5
802.11ac (VHT40)	CH 151	5755	8.966	9.0
	CH 159	5795	9.389	9.5
802.11ac (VHT80)	CH155	5775	9.277	9.5
802.11n (HT20)	CH 149	5745	9.053	9.5
	CH 157	5785	9.288	9.5
	CH 165	5825	8.947	9.0
802.11n (HT40)	CH 151	5755	8.437	8.5
	CH 159	5795	9.921	10.0

Remark:

1. Per KDB 248227 D01 v02r02, for 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions.
2. Per KDB 248227 D01 v02r02, For 802.11b DSSS SAR measurements ,when the reported SAR of the highest measured maximum output power channel (see 3.1) for the exposure configuration is ≤ 0.8 W/kg, no

further SAR testing is required for 802.11b DSSS in that exposure configuration. When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

3 .For OFDM modes (802.11g/n), SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and it is <= 1.2W/kg.

Bluetooth					
Test Mode	Data Rate	Conducted Power (dBm)			Tune-up power (dBm)
		Low	Middle	High	
GFSK	1Mbps	4.76	5.53	3.60	6.0
4*π4DQPSK	2Mbps	7.13	7.11	6.02	7.5
8DPSK	3Mbps	7.10	**7.18**	6.11	7.5

Bluetooth					
Test Mode	Data Rate	Channel	Frequency (MHz)	Conducted Power (dBm)	Tune-up power (dBm)
BLE	1Mbps	CH 00	2402	2.932	3.0
		CH 19	2440	**3.782**	4.0
		CH 39	2480	2.816	3.0

Note:

The GSM/WCDMA/LTE/WIFI/BT Output power are provided by Global United Technology Services Co., Ltd.

9.2 Test Results for Standalone SAR Test

Body SAR

GSM850 – Body SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
	GSM	Back Face	190	836.6	30.02	30.5	1.117	0.414	0.462
1.	GSM	Back Face	128	824.2	29.88	30.5	1.153	0.543	**0.626**
	GSM	Back Face	251	848.8	29.88	30.5	1.153	0.313	0.361
	GPRS_2TX	Back Face	190	836.6	29.75	30.0	1.059	0.319	0.338
	GPRS_2TX	Top Side	190	836.6	29.75	30.0	1.059	0.240	0.254
	GPRS_2TX	Back Face	128	824.2	29.70	30.0	1.072	0.529	0.567
	GPRS_2TX	Back Face	251	848.8	29.69	30.0	1.074	0.393	0.422

GSM1900 – Body SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
	GSM	Back Face	512	1850.2	27.00	27.5	1.122	0.194	0.218
	GSM	Back Face	661	1880	26.73	27.5	1.194	0.188	0.224
2.	GSM	Back Face	810	1909.8	26.33	27.5	1.309	0.203	**0.266**
	GPRS_4TX	Back Face	661	1880	24.08	24.5	1.102	0.209	0.230
	GPRS_4TX	Top Side	661	1880	24.08	24.5	1.102	0.159	0.175
	GPRS_4TX	Back Face	512	1850.2	23.78	24.5	1.180	0.136	0.161
	GPRS_4TX	Back Face	810	1909.8	24.05	24.5	1.109	0.170	0.189

WCDMA Band 2 – Body SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
	RMC 12.2k	Back Face	9400	1880.0	20.42	20.5	1.019	0.312	0.318
	RMC 12.2k	Top Side	9400	1880.0	20.42	20.5	1.019	0.185	0.188
	RMC 12.2k	Back Face	9262	1852.4	20.35	20.5	1.035	0.274	0.284
3.	RMC 12.2k	Back Face	9538	1907.6	20.05	20.5	1.109	0.330	**0.366**

WCDMA Band 5 – Body SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
4.	RMC 12.2k	Back Face	4121	824.2	21.45	21.5	1.012	0.319	**0.323**
	RMC 12.2k	Top Side	4121	824.2	21.45	21.5	1.012	0.188	0.190
	RMC 12.2k	Back Face	4183	836.6	21.44	21.5	1.014	0.298	0.302
	RMC 12.2k	Back Face	4244	848.8	21.28	21.5	1.052	0.276	0.290

LTE Band 5–Body SAR Test (Gap: 0mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 5MHz 1RB	Back Face	826.5	21.35	21.5	1.035	0.158	0.165
	QPSK 5MHz 1RB	Top Side	826.5	21.35	21.5	1.035	0.162	0.170
	QPSK 5MHz 1RB	Back Face	836.5	21.29	21.5	1.050	0.145	0.184
	QPSK 5MHz 1RB	Back Face	846.5	20.68	21.0	1.208	0.144	0.169
	QPSK 5MHz 50%RB	Back Face	826.5	21.35	21.5	1.035	0.153	0.160
	QPSK 5MHz 50%RB	Top Side	826.5	21.35	21.5	1.035	0.147	0.154
	QPSK 5MHz 50%RB	Back Face	836.5	21.29	21.5	1.050	0.134	0.170
	QPSK 5MHz 50%RB	Back Face	846.5	20.68	21.5	1.208	0.136	0.160
	QPSK 10MHz 1RB	Back Face	829.0	21.30	21.5	1.047	0.222	0.232
	QPSK 10MHz 1RB	Top Side	829.0	21.30	21.5	1.047	0.202	0.212
5.	QPSK 10MHz 1RB	Back Face	836.5	20.47	21.5	1.268	0.199	**0.252**
	QPSK 10MHz 1RB	Back Face	844	20.80	21.5	1.175	0.194	0.228
	QPSK 10MHz 50%RB	Back Face	829.0	21.30	21.5	1.047	0.201	0.210
	QPSK 10MHz 50%RB	Top Side	829.0	21.30	21.5	1.047	0.198	0.207
	QPSK 10MHz 50%RB	Back Face	836.5	20.47	21.5	1.268	0.184	0.233
	QPSK 10MHz 50%RB	Back Face	844	20.80	21.5	1.175	0.176	0.207

LTE Band 40(2305-2315MHz)–Body SAR Test (Gap: 0mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 5MHz 1RB	Back Face	2307.5	17.21	17.5	1.069	0.623	0.666
	QPSK 5MHz 1RB	Top Side	2307.5	17.21	17.5	1.069	0.576	0.616
	QPSK 5MHz 1RB	Back Face	2310.0	16.25	17.5	1.334	0.515	0.687
	QPSK 5MHz 1RB	Back Face	2312.5	16.69	17.5	1.205	0.527	0.635
	QPSK 5MHz 50%RB	Back Face	2307.5	17.21	17.5	1.069	0.579	0.619
	QPSK 5MHz 50%RB	Top Side	2307.5	17.21	17.5	1.069	0.421	0.450
	QPSK 5MHz 50%RB	Back Face	2310.0	16.25	17.5	1.334	0.492	0.656
	QPSK 5MHz 50%RB	Back Face	2312.5	16.69	17.5	1.205	0.501	0.604
6.	QPSK 10MHz 1RB	Back Face	2310	16.11	16.5	1.094	0.630	**0.689**
	QPSK 10MHz 1RB	Top Side	2310	16.11	16.5	1.094	0.582	0.637
	QPSK 10MHz 50%RB	Back Face	2310	16.11	16.5	1.094	0.583	0.638
	QPSK 10MHz 50%RB	Top Side	2310	16.11	16.5	1.094	0.431	0.471

LTE Band 40(2350-2360MHz)–Body SAR Test (Gap: 0mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 5MHz 1RB	Back Face	2355	16.30	16.5	1.047	0.419	0.439
	QPSK 5MHz 1RB	Top Side	2355	16.30	16.5	1.047	0.354	0.371
	QPSK 5MHz 1RB	Back Face	2352.5	16.12	16.5	1.091	0.409	0.446
	QPSK 5MHz 1RB	Back Face	2357.5	15.96	16.5	1.132	0.428	0.485
	QPSK 5MHz 50%RB	Back Face	2355	16.30	16.5	1.047	0.311	0.326
	QPSK 5MHz 50%RB	Top Side	2355	16.30	16.5	1.047	0.264	0.276
	QPSK 5MHz 50%RB	Back Face	2352.5	16.12	16.5	1.091	0.302	0.330
	QPSK 5MHz 50%RB	Back Face	2357.5	15.96	16.5	1.132	0.330	0.374
7.	QPSK 10MHz 1RB	Back Face	2355	15.71	16.5	1.199	0.426	**0.511**
	QPSK 10MHz 1RB	Top Side	2355	15.71	16.5	1.199	0.338	0.405
	QPSK 10MHz 50%RB	Back Face	2355	15.71	16.5	1.199	0.320	0.384
	QPSK 10MHz 50%RB	Top Side	2355	15.71	16.5	1.199	0.225	0.270

LTE Band 41–Body SAR Test (Gap: 0mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 15MHz 1RB	Back Face	2682.5	14.97	15.0	1.007	0.368	0.371
	QPSK 15MHz 1RB	Top Side	2682.5	14.97	15.0	1.007	0.241	0.243
	QPSK 15MHz 1RB	Back Face	2503.5	14.38	15.0	1.153	0.382	0.441
	QPSK 15MHz 1RB	Back Face	2593.0	14.87	15.0	1.030	0.395	0.407
	QPSK 15MHz 50%RB	Back Face	2682.5	14.97	15.0	1.007	0.241	0.243
	QPSK 15MHz 50%RB	Top Side	2682.5	14.97	15.0	1.007	0.118	0.119
	QPSK 15MHz 50%RB	Back Face	2503.5	14.38	15.0	1.153	0.305	0.352
	QPSK 15MHz 50%RB	Back Face	2593.0	14.87	15.0	1.030	0.311	0.320
	QPSK 20MHz 1RB	Back Face	2680.0	14.38	14.5	1.028	0.383	0.394
	QPSK 20MHz 1RB	Top Side	2680.0	14.38	14.5	1.028	0.246	0.253
8.	QPSK 20MHz 1RB	Back Face	2506.0	14.05	14.5	1.109	0.401	**0.445**
	QPSK 20MHz 1RB	Back Face	2593.0	14.10	14.5	1.096	0.403	0.442
	QPSK 20MHz 50%RB	Back Face	2680.0	14.38	14.5	1.028	0.253	0.260
	QPSK 20MHz 50%RB	Top Side	2680.0	14.38	14.5	1.028	0.121	0.124
	QPSK 20MHz 50%RB	Back Face	2506.0	14.05	14.5	1.109	0.311	0.345
	QPSK 20MHz 50%RB	Back Face	2593.0	14.10	14.5	1.096	0.321	0.352

WLAN 2.4GHz –Body SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
	802.11b	Back Face	CH 01	2412	14.24	14.5	1.062	0.440	0.467
	802.11b	Top Side	CH 01	2412	14.24	14.5	1.062	0.295	0.313
9.	802.11b	Back Face	CH 06	2437	13.92	14.0	1.019	0.513	**0.523**
	802.11b	Back Face	CH 11	2462	14.01	14.5	1.119	0.361	0.404
	802.11n (40MHz)	Back Face	CH 03	2422	16.54	17.0	1.112	0.444	0.494
	802.11n (40MHz)	Top Side	CH 03	2422	16.54	17.0	1.112	0.299	0.332
	802.11n (40MHz)	Back Face	CH 06	2437	16.34	16.5	1.038	0.503	0.522
	802.11n (40MHz)	Back Face	CH 09	2452	16.23	16.5	1.064	0.349	0.371

Bluetooth–Body SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
	BR/EDR	Back Face	39	2441	7.18	7.5	1.076	0.145	0.156
	BR/EDR	Top Side	39	2441	7.18	7.5	1.076	0.066	0.071
	BR/EDR	Back Face	00	2402	7.10	7.5	1.096	0.114	0.125
10.	BR/EDR	Back Face	78	2480	6.11	7.5	1.377	0.138	**0.190**

WLAN 5.2GHz– Body SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
	802.11ac(VHT20)	Back Side	36	5180	10.58	11.0	1.102	0.479	0.528
	802.11ac(VHT20)	Top Side	36	5180	10.58	11.0	1.102	0.468	0.516
	802.11ac(VHT20)	Back Side	40	5200	9.67	10.0	1.079	0.529	0.571
11.	802.11ac(VHT20)	Back Side	48	5240	9.42	9.5	1.019	0.635	**0.647**

WLAN 5.3GHz– Body SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
	802.11a	Back Side	52	5260	9.93	10.0	1.016	0.625	0.635
	802.11a	Top Side	52	5260	9.93	10.0	1.016	0.418	0.425
12.	802.11a	Back Side	60	5300	9.44	9.5	1.014	0.686	**0.696**
	802.11a	Back Side	64	5320	8.48	8.5	1.005	0.671	0.674

WLAN 5.8GHz– Body SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
	802.11a	Back Side	157	5785	9.930	10.0	1.016	0.404	0.411
	802.11a	Top Side	157	5785	9.930	10.0	1.016	0.300	0.305
	802.11a	Back Side	149	5745	9.171	9.5	1.079	0.380	0.410
13.	802.11a	Back Side	165	5825	8.800	9.0	1.047	0.398	**0.417**

Remark: Per KDB 447498 D01 v06, if the highest output channel SAR for each exposure position ≤ 0.8 W/kg other channels SAR tests are not necessary.

9.3 Simultaneous Multi-band Transmission SAR Analysis

List of Mode for Simultaneous Multi-band Transmission

No.	Configurations	Body SAR
1	GSM(Voice/Data) + WLAN(2.4GHz)(Data)	Yes
2	WCDMA (Voice/Data)+ WLAN(2.4GHz)(Data)	Yes
3	LTE(Data) + WLAN(2.4GHz)(Data)	Yes
4	GSM(Voice/Data) + WLAN(5GHz)(Data)	Yes
5	WCDMA (Voice/Data)+ WLAN(5GHz)(Data)	Yes
6	LTE(Data) + WLAN(5GHz)(Data)	Yes
7	GSM(Voice/Data) + Bluetooth(Data)	Yes
8	WCDMA (Voice/Data) + Bluetooth(Data)	Yes
9	LTE(Data) + Bluetooth(Data)	Yes

Remark:

1. GSM, WCDMA and LTE share the same antenna, and cannot transmit simultaneously.
2. WLAN and Bluetooth share the same antenna, and cannot transmit simultaneously.
3. According to the KDB 447498 D01 v06, when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:
(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.
4. The maximum SAR summation is calculated based on the same configuration and test position.

Body SAR

WWAN and WLAN

	WWAN		WLAN(2.4GHz/5GHz)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM	**0.626**	**0.696**	1.322
Front	GSM	--	--	--
Right side	GSM	--	--	--
Left side	GSM	--	--	--
Bottom side	GSM	--	--	--
Top side	GSM	0.254	0.516	0.770
Back	WCDMA	**0.366**	**0.696**	1.062
Front	WCDMA	--	--	--
Right side	WCDMA	--	--	--
Left side	WCDMA	--	--	--
Bottom side	WCDMA	--	--	--
Top side	WCDMA	0.190	0.516	0.706
Back	LTE	**0.689**	**0.696**	**1.385**
Front	LTE	--	--	--
Right side	LTE	--	--	--
Left side	LTE	--	--	--
Bottom side	LTE	--	--	--
Top side	LTE	0.637	0.516	1.153

Note:

1. WWAN + Bluetooth test result less than the WWAN + WLAN (2.4GHz/5GHz) test result, so the WWAN + Bluetooth test result is not show in the test report.

10. Measurement Uncertainty

10.1 Uncertainty for SAR Test

a	b	c	d	e= f(d,k)	f	g	h= c*f/e	i= c*g/e	k
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	Vi
Measurement System									
Probe calibration	E.2.1	7.0	N		1	1	7.00	7.00	
Axial Isotropy	E.2.2	2.5	R		(1_Cp)^1/	(1_Cp)^1/2	1.02	1.02	
Hemispherical Isotropy	E.2.2	4.0	R		(Cp)^1/2	(Cp)^1/2	1.63	1.63	
Boundary effect	E.2.3	1.0	R		1	1	0.58	0.58	
Linearity	E.2.4	5.0	R		1	1	2.89	2.89	
System detection limits	E.2.5	1.0	R		1	1	0.58	0.58	
Readout Electronics	E.2.6	0.02	N		1	1	0.02	0.02	
Reponse Time	E.2.7	3.0	R		1	1	1.73	1.73	
Integration Time	E.2.8	2.0	R		1	1	1.15	1.15	
RF ambient Conditions –	E.6.1	0	R		1	1	1.73	1.73	
RF ambient Conditions - Reflections	E.6.1	0	R		1	1	1.73	1.73	
Probe positioner Mechanical Tolerance	E.6.2	2.0	R		1	1	1.15	1.15	
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R		1	1	0.03	0.03	
Extrapolation, interpolation and integration Algoritms for Max. SAR Evaluation	E.5	5.0	R		1	1	2.89	2.89	
Test Sample Related									
Test sample positioning	E.4.2	0.03	N		1	1	0.03	0.03	
Device Holder Uncertainty	E.4.1	5.00	N		1	1	5.00	5.00	
Output power Variation - SAR drift measurement	E.2.9	12.02	R		1	1	6.94	6.94	
SAR scaling	E6.5	0.0	R		1	1	0.0	0.0	
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R		1	1	0.03	0.03	

Uncertainty in SAR correction for deviations in permittivity and conductivity	E3.2	1.9	R		1	0.84	1.10	0.90	
Liquid conductivity - deviation from target value	E.3.2	5.00	R		0.64	0.43	1.85	1.24	
Liquid conductivity - measurement uncertainty	E.3.3	5.00	N		0.64	0.43	3.20	2.15	
Liquid permittivity - deviation from target value	E.3.2	0.37	R		0.6	0.49	0.13	0.10	
Liquid permittivity - measurement uncertainty	E.3.3	10.00	N		0.6	0.49	6.00	4.90	
Combined Standard Uncertainty			RSS				10.20	10.00	
Expanded Uncertainty (95% Confidence interval)			K=2				20.40	20.00	

Annex A. Plots of System Performance Check

MEASUREMENT 1

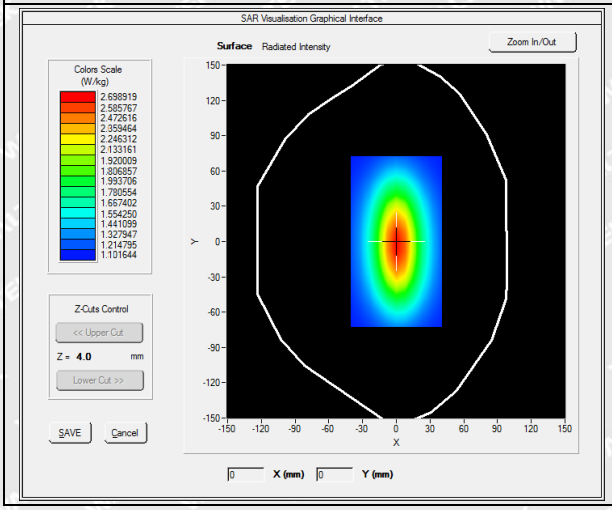
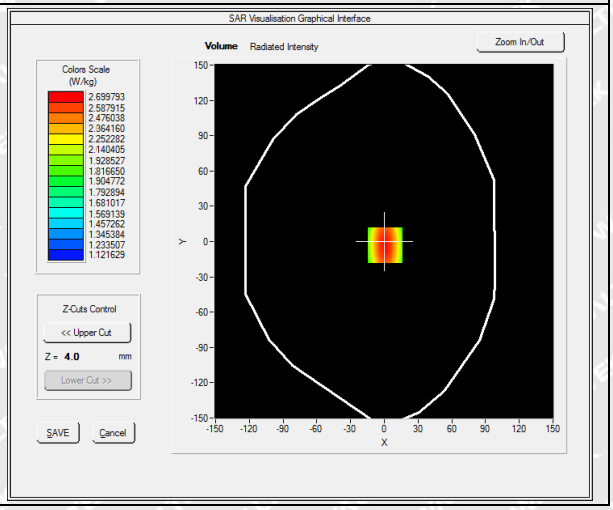
Type: Validation measurement (Fast, 75.00 %)
Date of measurement: 2022-11-22
Measurement duration: 7 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 1.78; Calibrated: 2022-07-08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Dipole
Band	CW835
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	835.000000
Relative Permittivity (real part)	53.340245
Conductivity (S/m)	0.951245
Power Variation (%)	0.428437
Ambient Temperature	23.5
Liquid Temperature	23.5

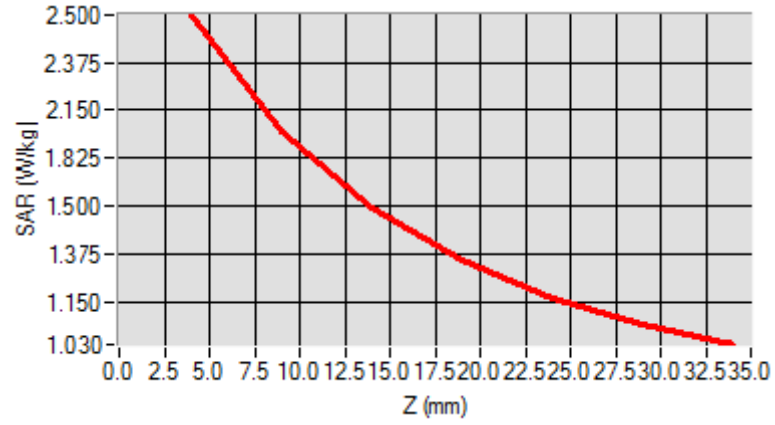
SURFACE SAR	VOLUME SAR
	

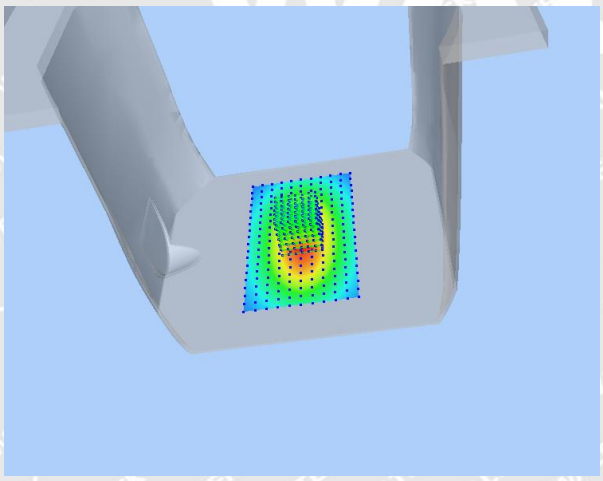
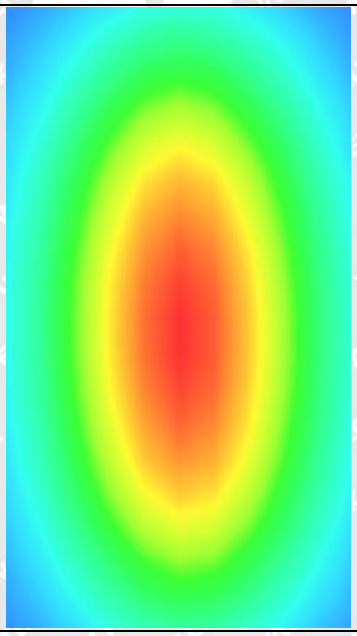
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.519489
SAR 1g (W/Kg)	2.511253

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	2.4900	1.8942	1.4811	1.3541	1.1123	1.0539



3D screen shot	Hot spot position
	

MEASUREMENT 2

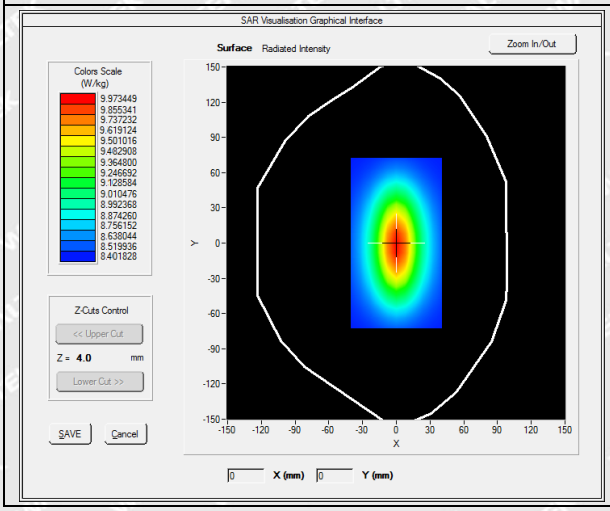
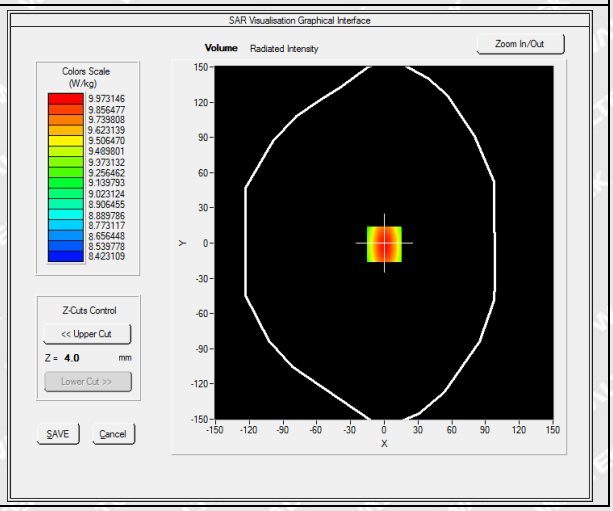
Type: Validation measurement (Fast, 75.00 %)
Date of measurement: 2022-11-23
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.15; Calibrated: 2022-07-08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Signal	CW (Crest factor: 1.0)

B. SAR Measurement Results

Frequency (MHz)	1800.000000
Relative Permittivity (real part)	52.111090
Conductivity (S/m)	1.512510
Power Variation (%)	1.041232
Ambient Temperature	23.2
Liquid Temperature	23.2

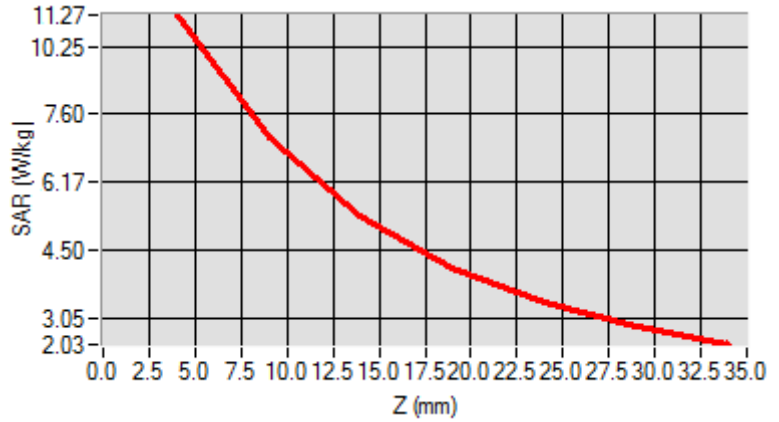
SURFACE SAR	VOLUME SAR
	

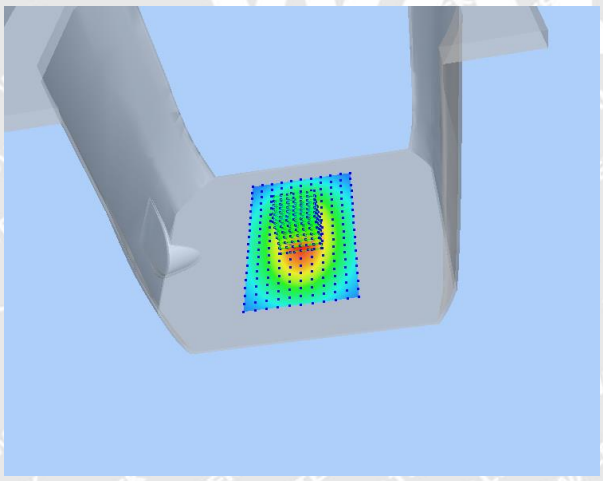
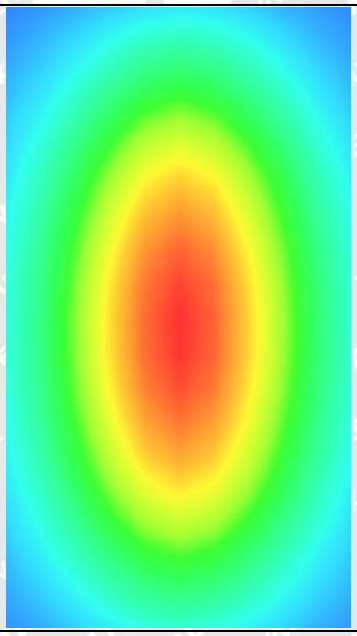
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	5.081252
SAR 1g (W/Kg)	9.461217

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	10.3455	7.1125	5.1026	3.425	3.0242	2.1125



3D screen shot	Hot spot position
	

MEASUREMENT 3

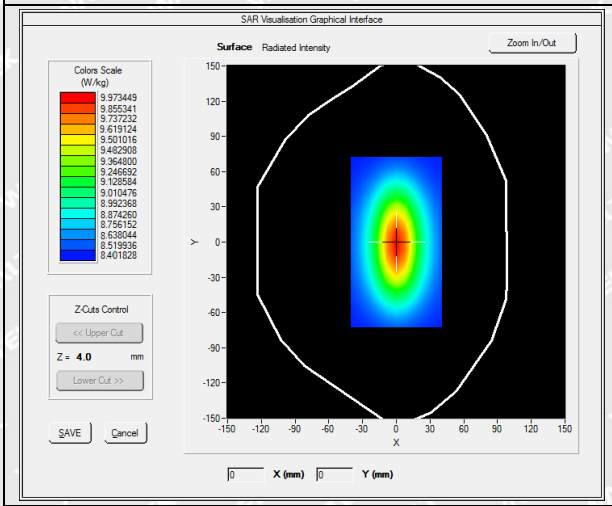
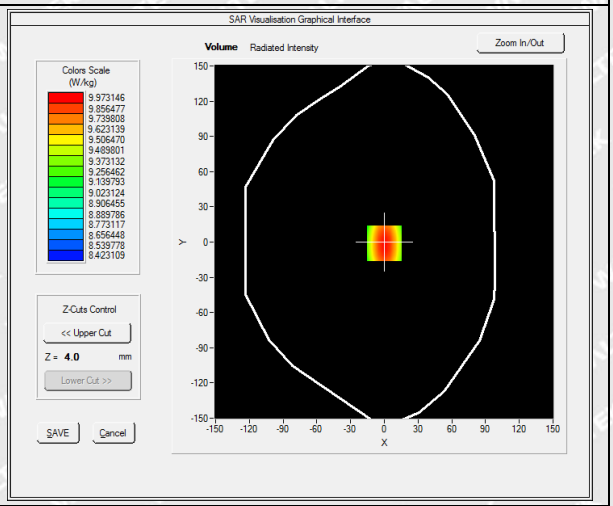
Type: Validation measurement (Fast, 75.00 %)
Date of measurement: 2022-12-07
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.30; Calibrated: 2022-07-08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative Permittivity (real part)	52.421245
Conductivity (S/m)	1.503607
Power Variation (%)	1.022540
Ambient Temperature	23.2
Liquid Temperature	23.2

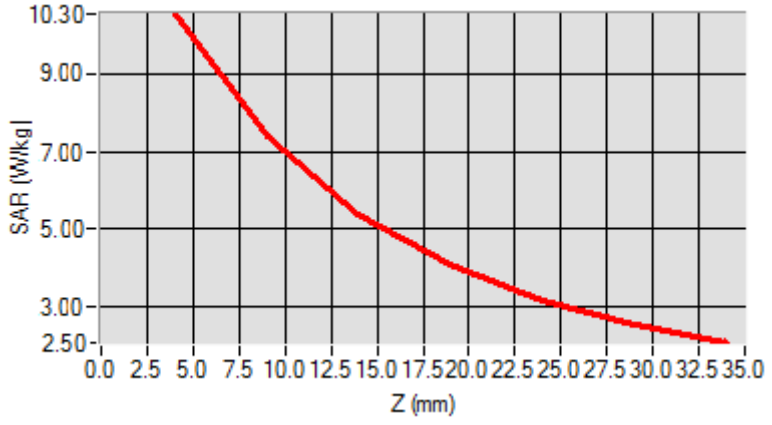
SURFACE SAR	VOLUME SAR
	

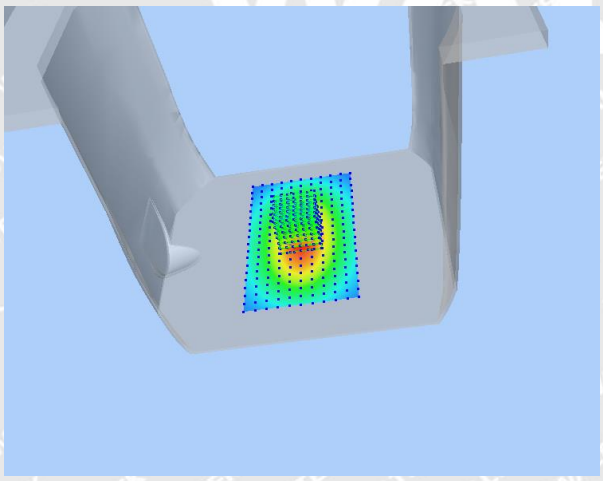
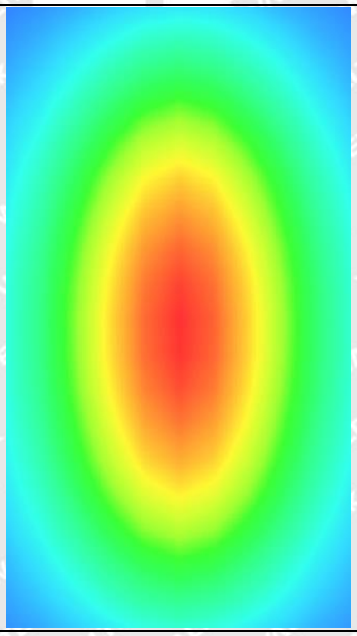
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	5.174526
SAR 1g (W/Kg)	9.913214

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	10.2354	6.8400	5.0121	4.1189	3.0522	2.8424



3D screen shot	Hot spot position
	

MEASUREMENT 4

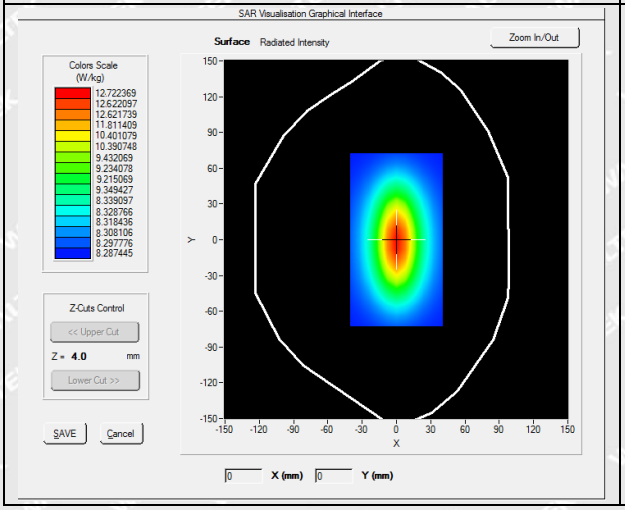
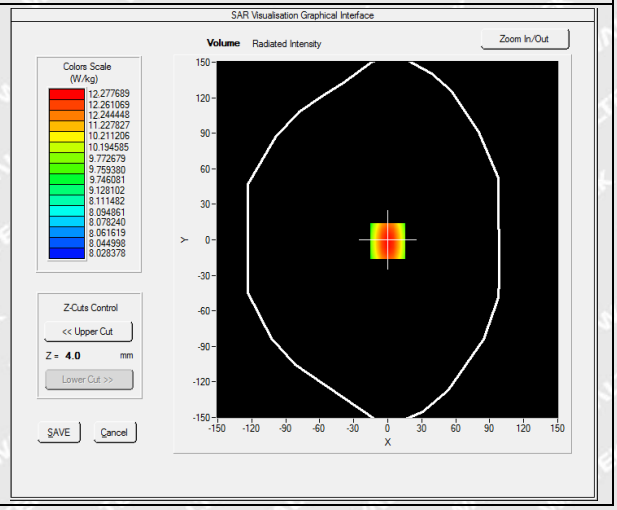
Type: Validation measurement (Fast, 75.00 %)
Date of measurement: 2022-12-07
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.60; Calibrated: 2022-07-08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2300
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2300.000000
Relative Permittivity (real part)	51.262124
Conductivity (S/m)	1.782554
Power Variation (%)	1.097451
Ambient Temperature	23.2
Liquid Temperature	23.2

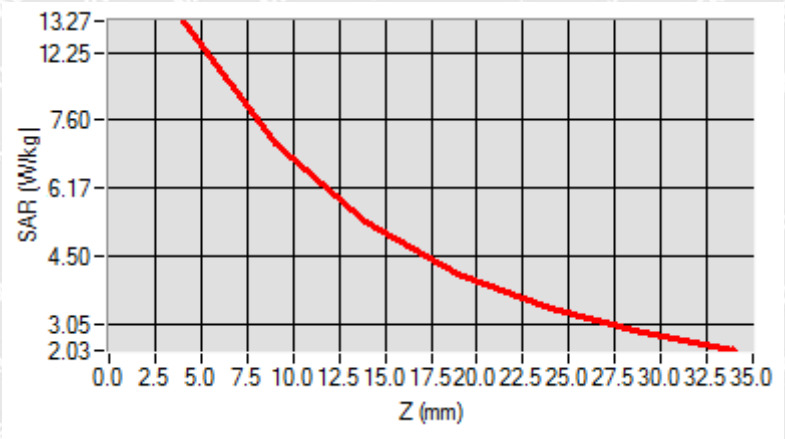
SURFACE SAR	VOLUME SAR
	

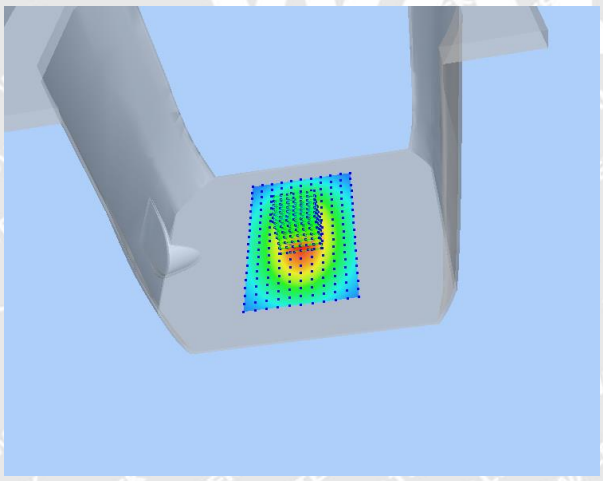
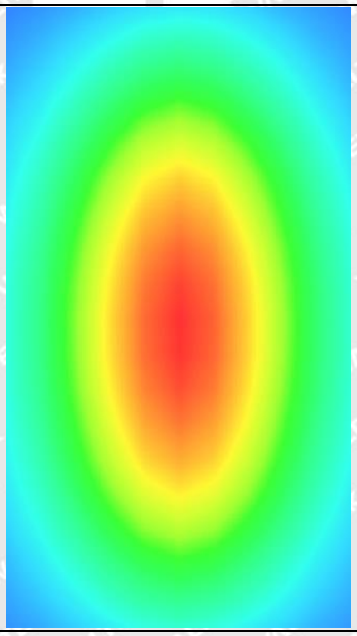
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	6.114210
SAR 1g (W/Kg)	12.505243

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	13.1891	11.7779	9.2852	8.5315	6.3698	4.6231



3D screen shot	Hot spot position
	

MEASUREMENT 5

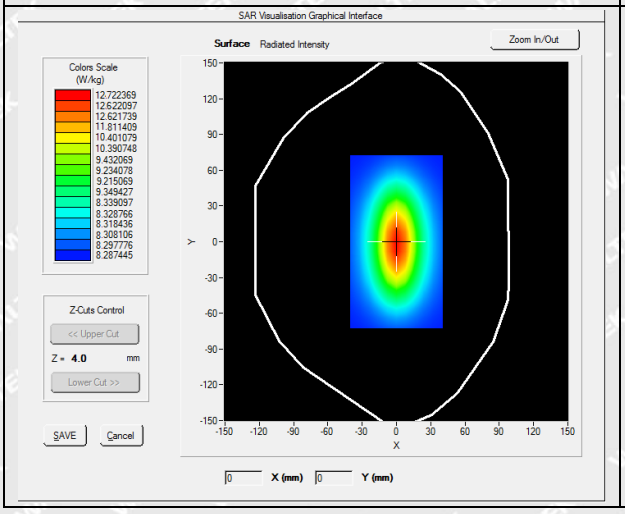
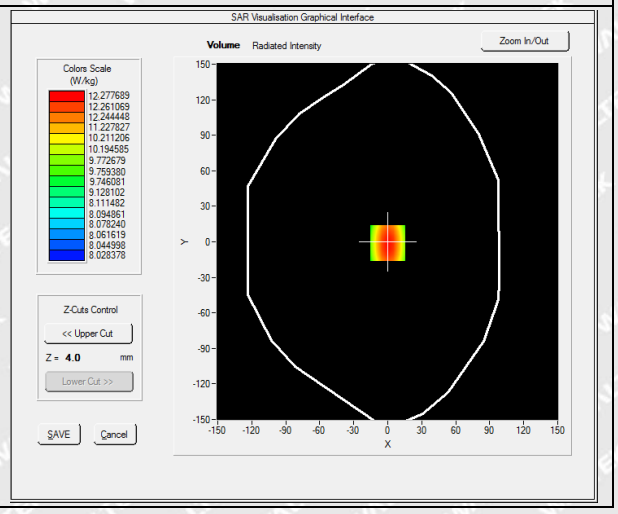
Type: Validation measurement (Fast, 75.00 %)
Date of measurement: 2022-12-07
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.60; Calibrated: 2022-07-08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2450
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2450.000000
Relative Permittivity (real part)	53.682128
Conductivity (S/m)	1.942655
Power Variation (%)	1.369745
Ambient Temperature	23.4
Liquid Temperature	23.4

SURFACE SAR	VOLUME SAR
	

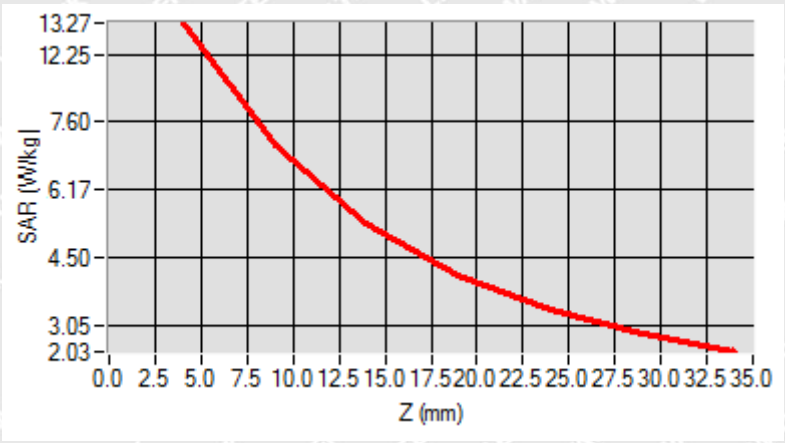
Maximum location: X=0.00, Y=0.00

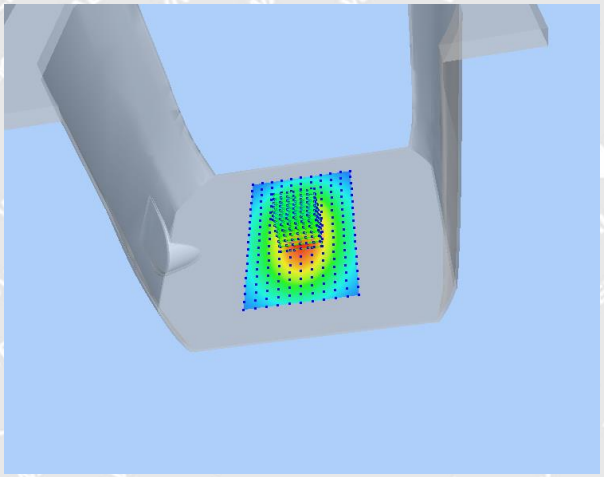
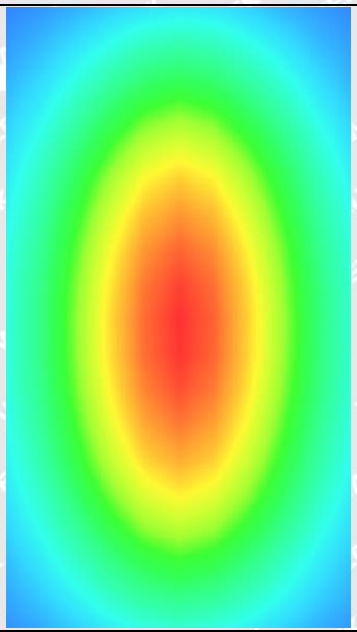
SAR 10g (W/Kg)	**6.119522**

SAR 1g (W/Kg)	12.592360

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	13.1911	11.7951	9.2945	8.5400	6.3712	4.6225



3D screen shot	Hot spot position
	

MEASUREMENT 6

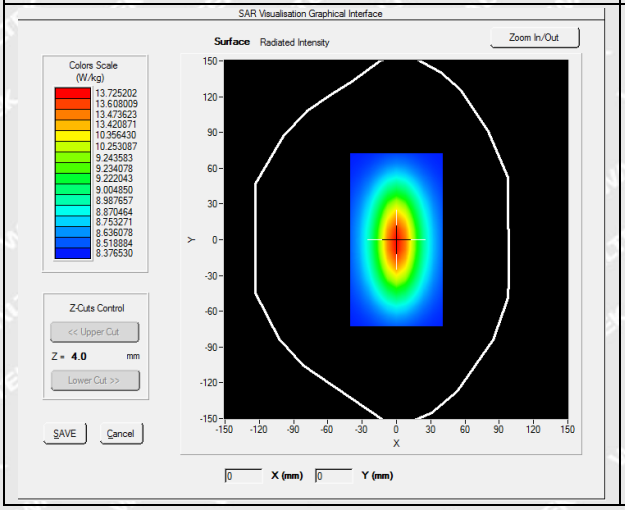
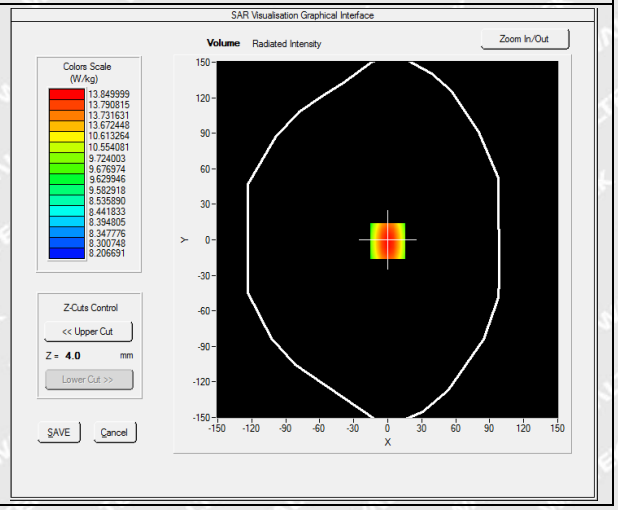
Type: Validation measurement (Fast, 75.00 %)
Date of measurement: 2022-12-07
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.41; Calibrated: 2022-07-08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2600
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2600.000000
Relative Permittivity (real part)	52.244092
Conductivity (S/m)	2.123182
Power Variation (%)	0.886021
Ambient Temperature	23.4
Liquid Temperature	23.4

SURFACE SAR	VOLUME SAR
	

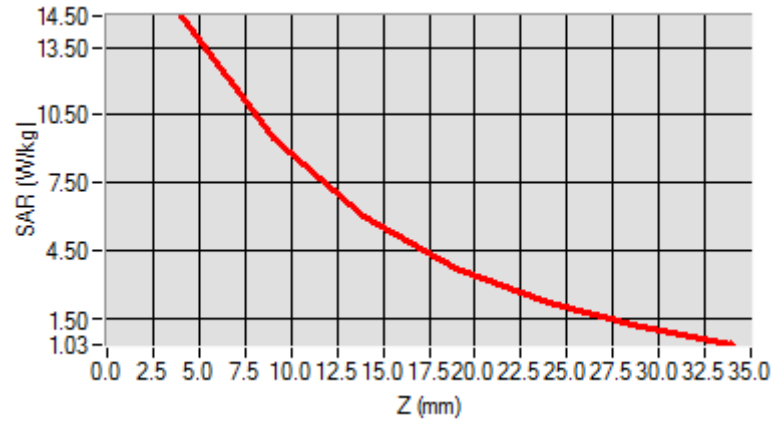
Maximum location: X=0.00, Y=0.00

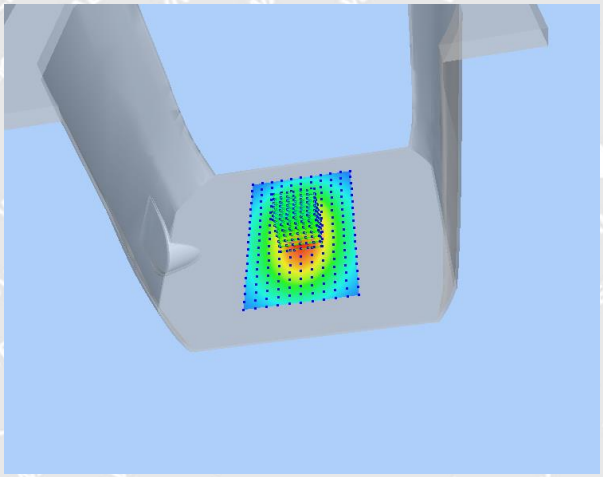
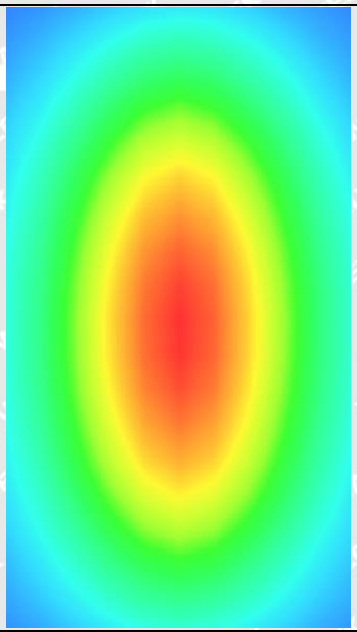
SAR 10g (W/Kg)	**8.230801**

SAR 1g (W/Kg)	13.539282

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	14.0426	12.1354	10.2965	7.4854	5.9354	4.5186



3D screen shot	Hot spot position
	

MEASUREMENT 7

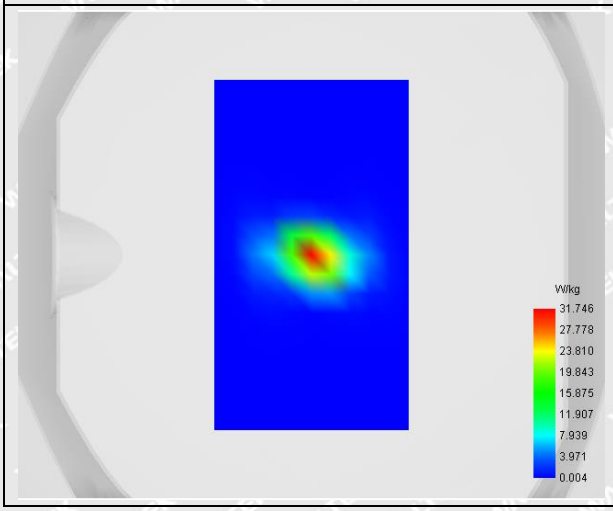
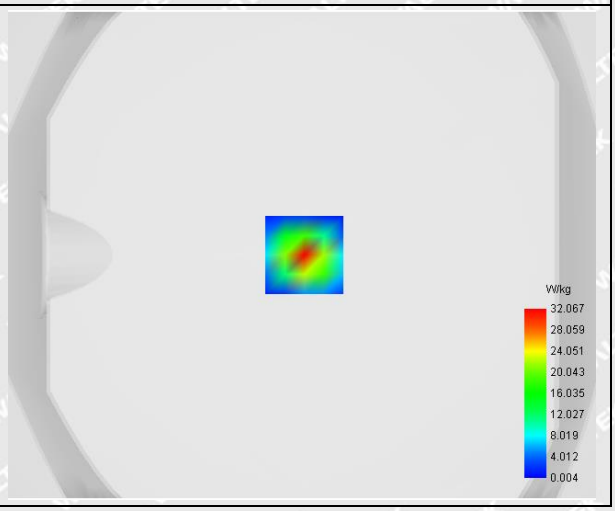
Type: Validation measurement (Fast, 75.00 %)
Date of measurement: 2022-12-08
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 1.84; Calibrated: 2022-07-08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5200
Signal	Duty Cycle 1:1

B. SAR Measurement Results

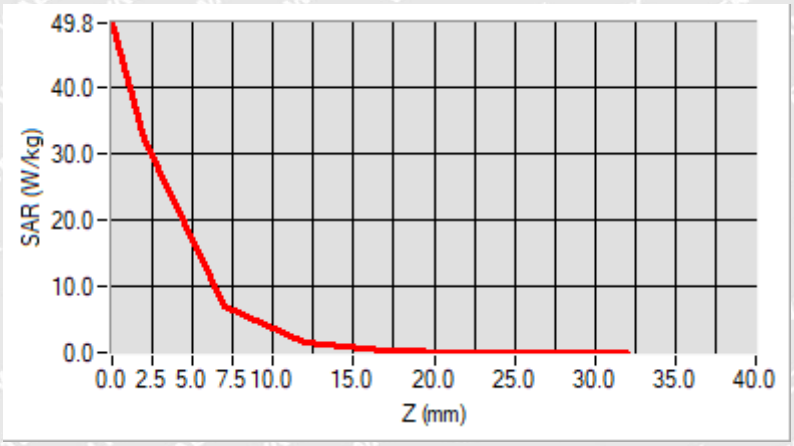
Frequency (MHz)	5200.000000
Relative Permittivity (real part)	48.582415
Conductivity (S/m)	5.262135
Power Variation (%)	0.749201
Ambient Temperature	23.6
Liquid Temperature	23.6

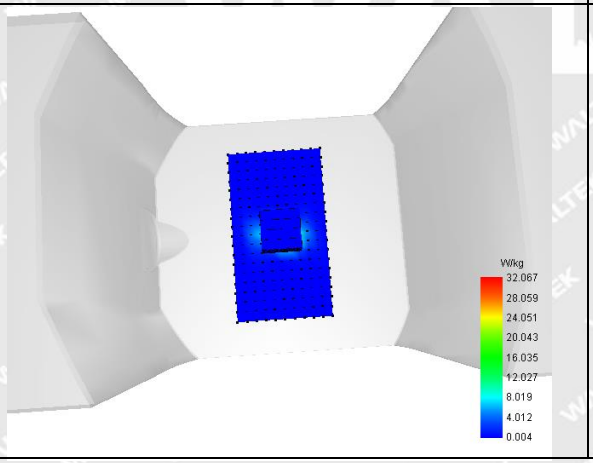
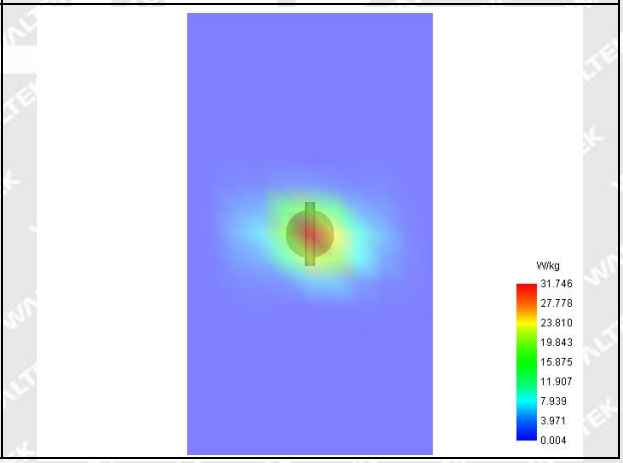
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	6.047588
SAR 1g (W/Kg)	16.681175

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	49.8193	32.0669	7.0244	1.5969	0.3410	0.0635	0.0070



3D screen shot	Hot spot position
	

MEASUREMENT 8

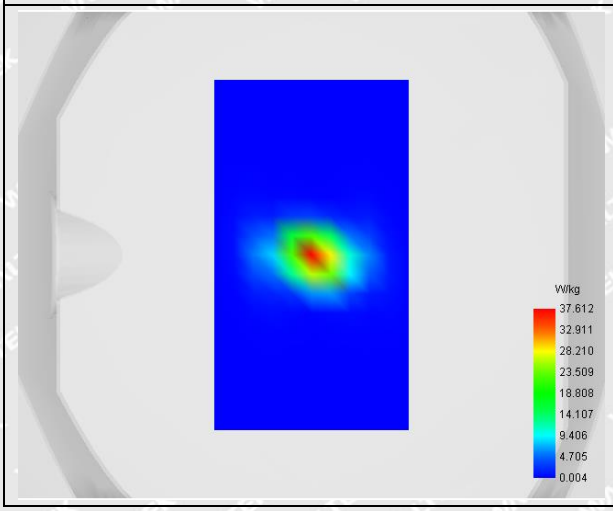
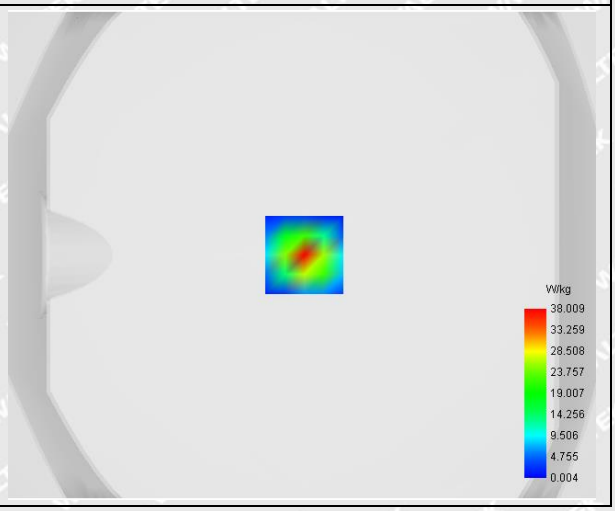
Type: Validation measurement (Fast, 75.00 %)
Date of measurement: 2022-12-08
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.02; Calibrated: 2022-07-08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5400
Signal	CW (Crest factor: 1.0)

B. SAR Measurement Results

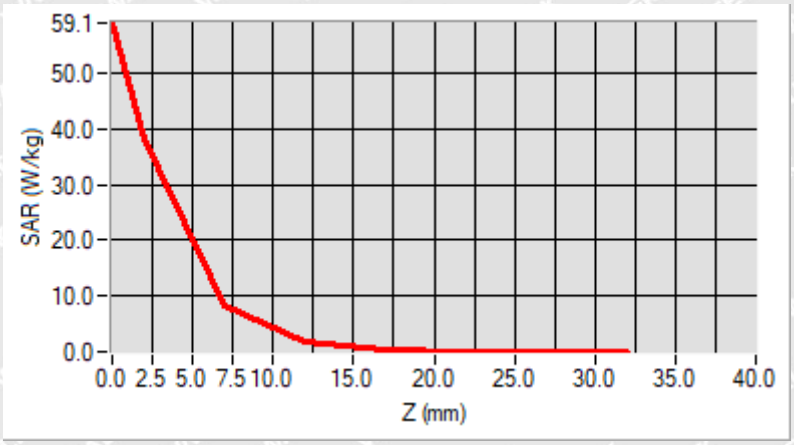
Frequency (MHz)	5400.000000
Relative Permittivity (real part)	48.643911
Conductivity (S/m)	5.564833
Power Variation (%)	0.943782
Ambient Temperature	23.6
Liquid Temperature	23.6

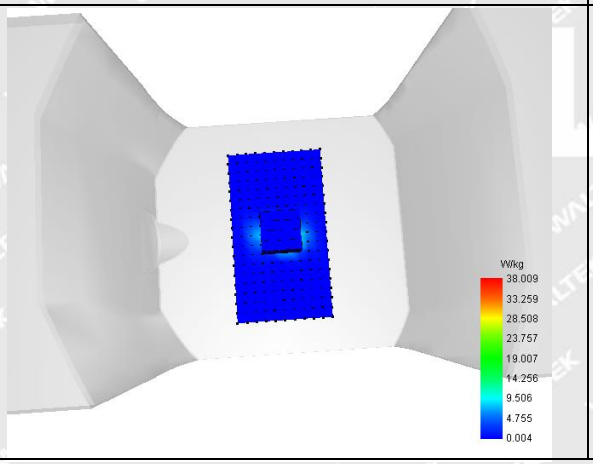
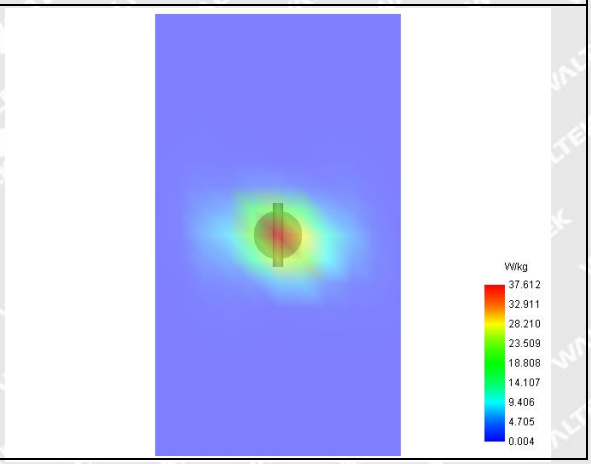
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	5.872241
SAR 1g (W/Kg)	17.329716

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	59.0521	38.0093	8.3284	1.8732	0.3993	0.0816	0.0132



3D screen shot	Hot spot position
	

MEASUREMENT 9

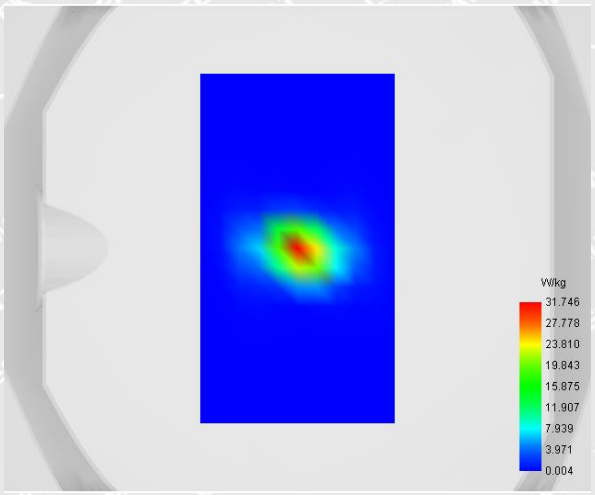
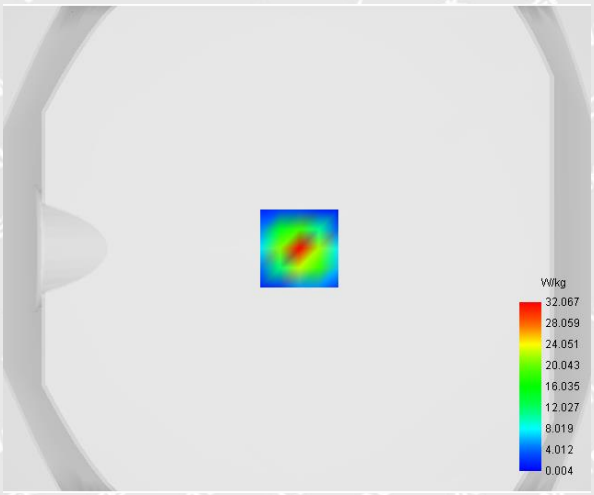
Type: Validation measurement (Fast, 75.00 %)
Date of measurement: 2022-12-08
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.11; Calibrated: 2022-07-08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5800
Signal	Duty Cycle 1:1

B. SAR Measurement Results

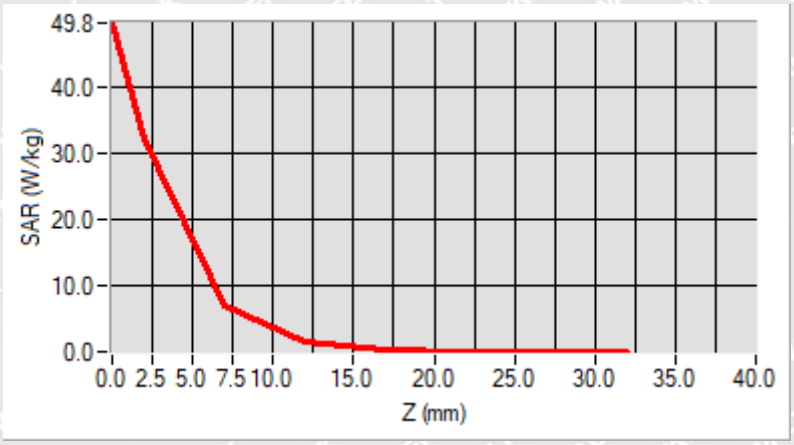
Frequency (MHz)	5800.000000
Relative Permittivity (real part)	48.361939
Conductivity (S/m)	5.891487
Power Variation (%)	0.749201
Ambient Temperature	23.6
Liquid Temperature	23.6

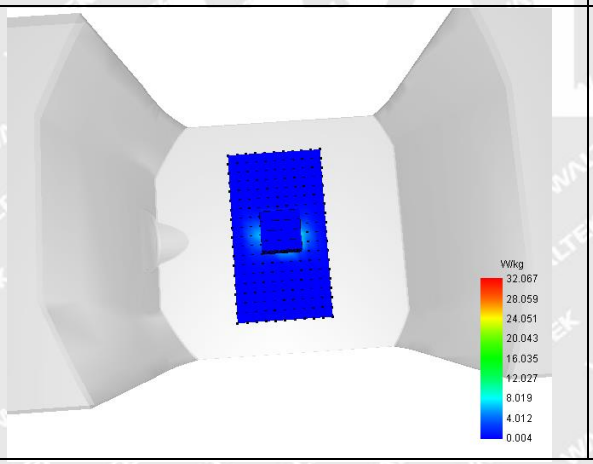
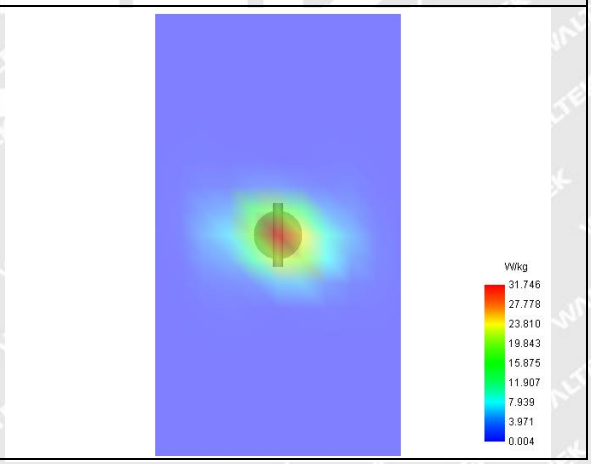
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	6.047588
SAR 1g (W/Kg)	16.681175

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	49.8193	32.0669	7.0244	1.5969	0.3410	0.0635	0.0070



3D screen shot	Hot spot position
	

Annex B. Plots of SAR Measurement

MEASUREMENT 1

Type: Phone measurement (Complete)
Date of measurement: 2022-11-22
Measurement duration: 11 minutes 48 seconds

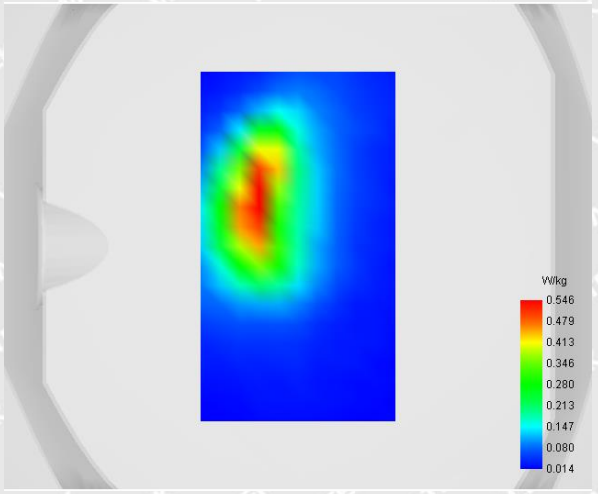
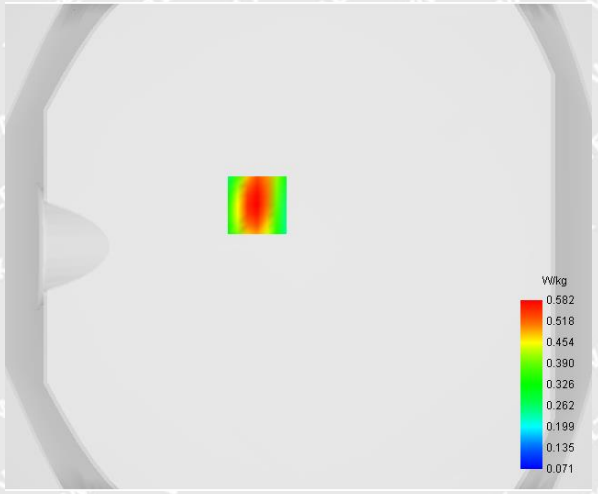
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat plane
Device Position	Back
Band	GSM850
Channels	Low
Signal	TDMA (Crest factor: 8.0)

B. SAR Measurement Results

Frequency (MHz)	824.200000
Relative Permittivity (real part)	53.342485
Conductivity (S/m)	0.951245
Power Variation (%)	1.070000
Ambient Temperature	23.5
Liquid Temperature	23.5

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

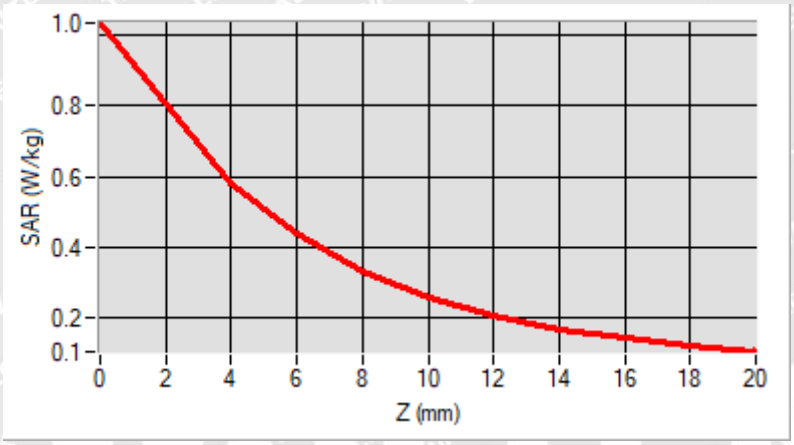
Maximum location: X=-17.00, Y=17.00

D. SAR 1g & 10g

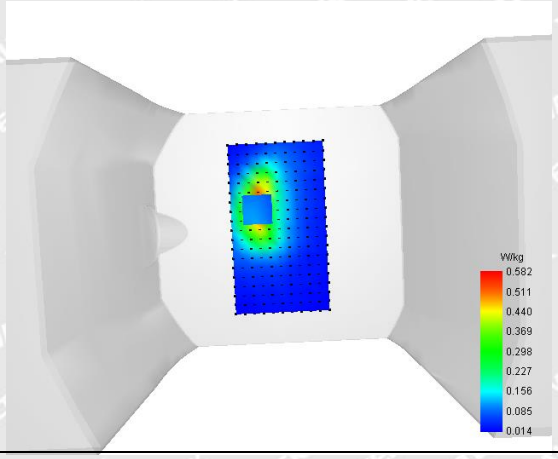
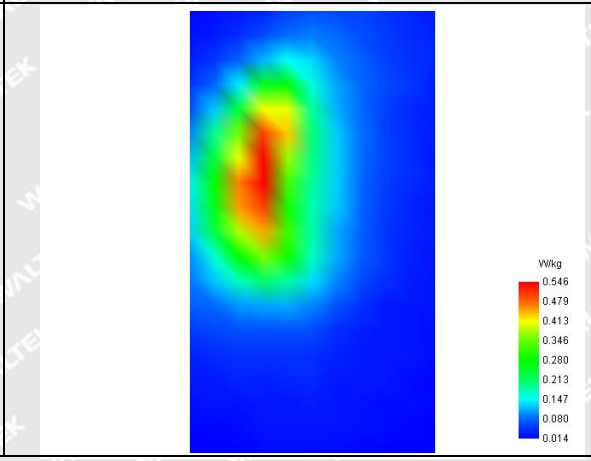
SAR 10g (W/Kg)	**0.291710**
SAR 1g (W/Kg)	**0.542751**

E. Z Axis Scan

Z (mm)	**0.00**	**4.00**	**6.00**	**8.00**	**10.00**	**12.00**	**14.00**	**16.00**	**18.00**
SAR (W/Kg)	**1.0347**	**0.5819**	**0.4382**	**0.3330**	**0.2592**	**0.2072**	**0.1702**	**0.1432**	**0.1224**



F. 3D Image

3D screen shot	**Hot spot position**
	

MEASUREMENT 2

Type: Phone measurement (Complete)
Date of measurement: 2022-12-07
Measurement duration: 11 minutes 48 seconds

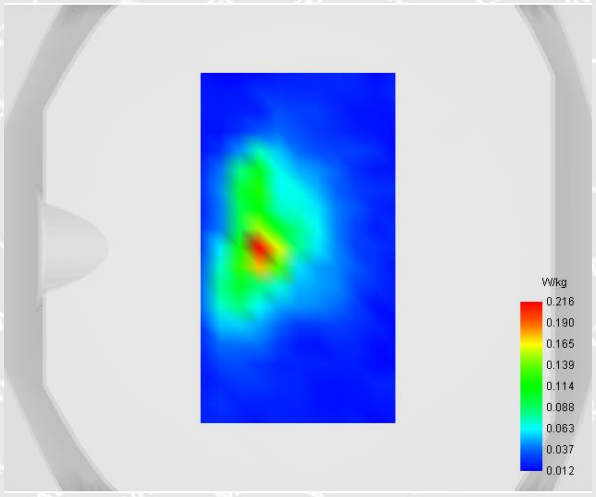
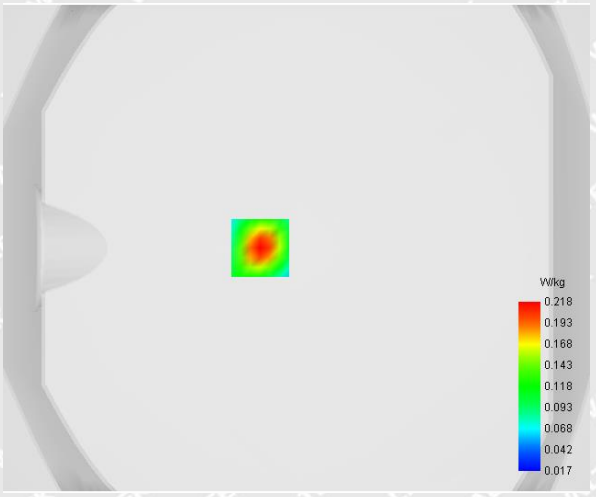
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat plane
Device Position	Back
Band	GSM1900
Channels	High
Signal	TDMA (Crest factor: 8.0)

B. SAR Measurement Results

Frequency (MHz)	1909.800000
Relative Permittivity (real part)	52.421248
Conductivity (S/m)	1.503692
Power Variation (%)	-0.150000
Ambient Temperature	23.2
Liquid Temperature	23.2

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

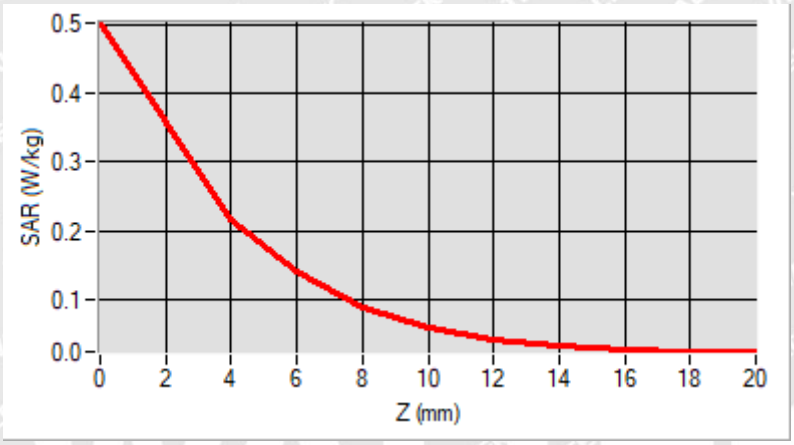
Maximum location: X=-15.00, Y=0.00

D. SAR 1g & 10g

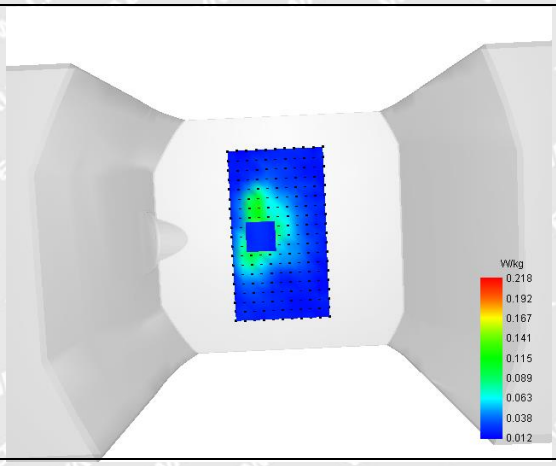
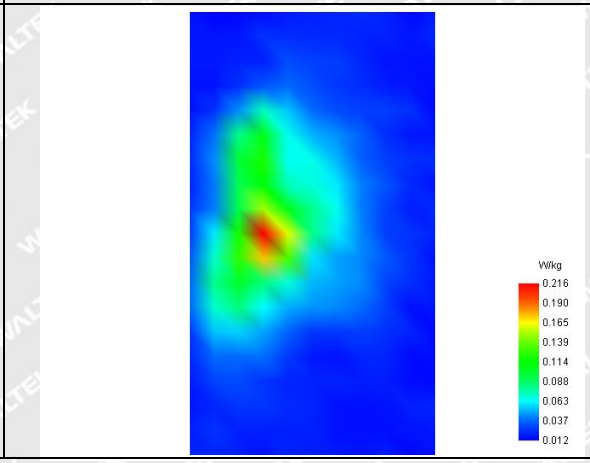
SAR 10g (W/Kg)	0.087765
SAR 1g (W/Kg)	0.203405

E. Z Axis Scan

Z (mm)	0.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00
SAR (W/Kg)	0.5018	0.2181	0.1399	0.0899	0.0604	0.0434	0.0339	0.0289	0.0264



F. 3D Image

3D screen shot	Hot spot position
	

MEASUREMENT 3

Type: Phone measurement (Complete)
Date of measurement: 2022-12-07
Measurement duration: 12 minutes 3 seconds

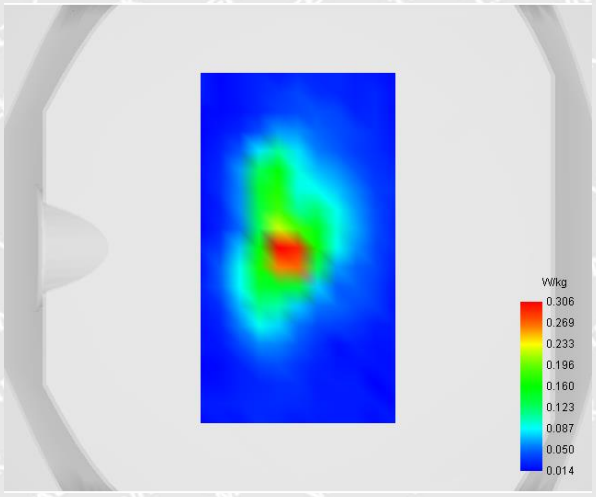
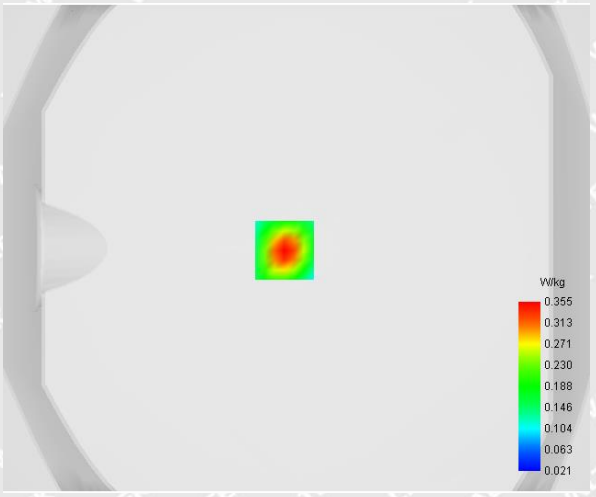
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	WCDMA1900_RMC
Channels	High
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	1907.600000
Relative Permittivity (real part)	52.421247
Conductivity (S/m)	1.503607
Power Variation (%)	0.820000
Ambient Temperature	23.2
Liquid Temperature	23.2

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

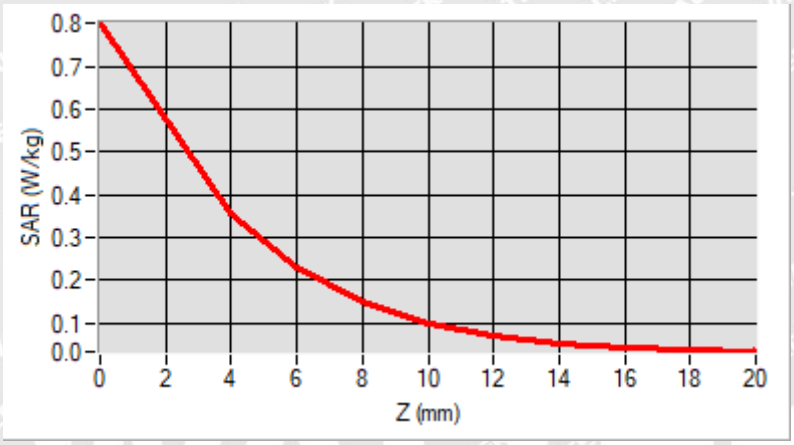
Maximum location: X=-5.00, Y=-1.00

D. SAR 1g & 10g

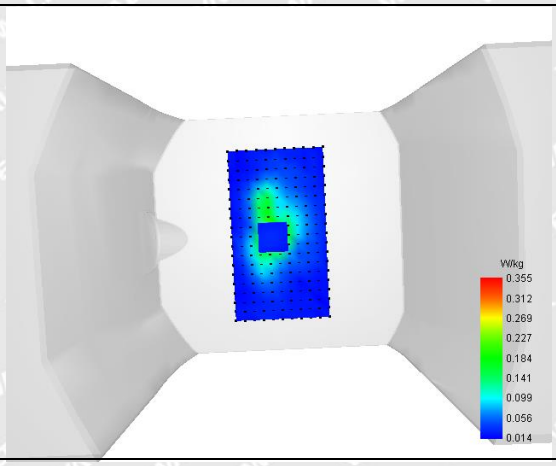
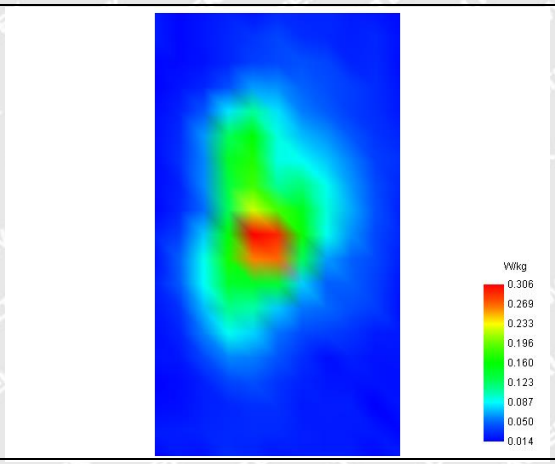
SAR 10g (W/Kg)	0.139485
SAR 1g (W/Kg)	0.329566

E. Z Axis Scan

Z (mm)	0.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00
SAR (W/Kg)	0.8019	0.3547	0.2297	0.1485	0.0994	0.0702	0.0531	0.0431	0.0372



F. 3D Image

3D screen shot	Hot spot position
	

MEASUREMENT 4

Type: Phone measurement (Complete)
Date of measurement: 2022-11-22
Measurement duration: 12 minutes 3 seconds

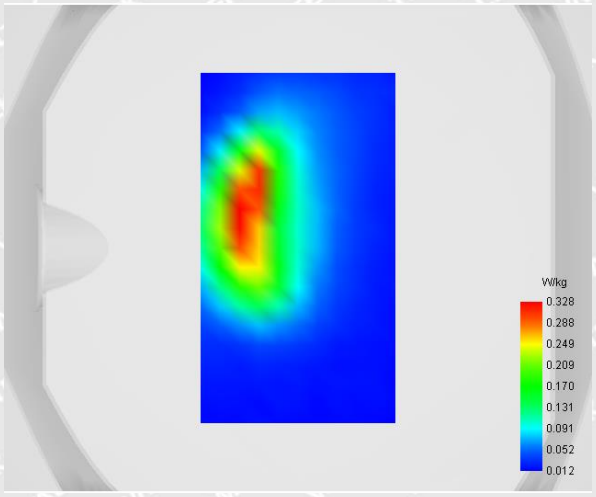
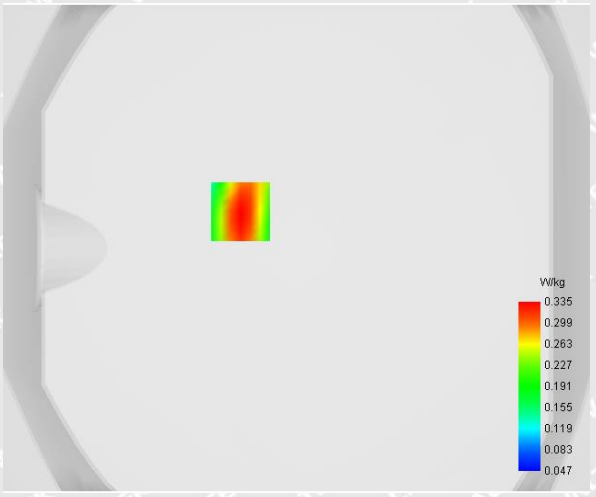
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	WCDMA850_RMC
Channels	Low
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	824.200000
Relative Permittivity (real part)	53.340124
Conductivity (S/m)	0.953607
Power Variation (%)	0.820000
Ambient Temperature	23.5
Liquid Temperature	23.5

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

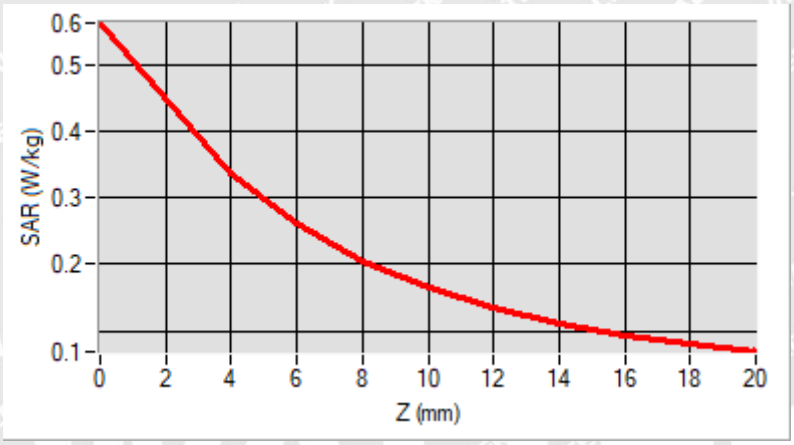
Maximum location: X=-23.00, Y=15.00

D. SAR 1g & 10g

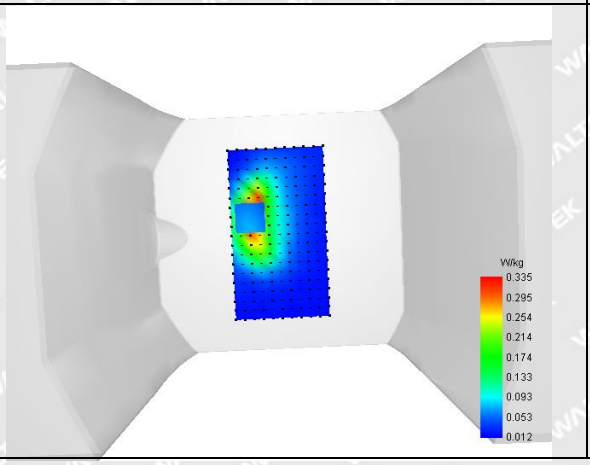
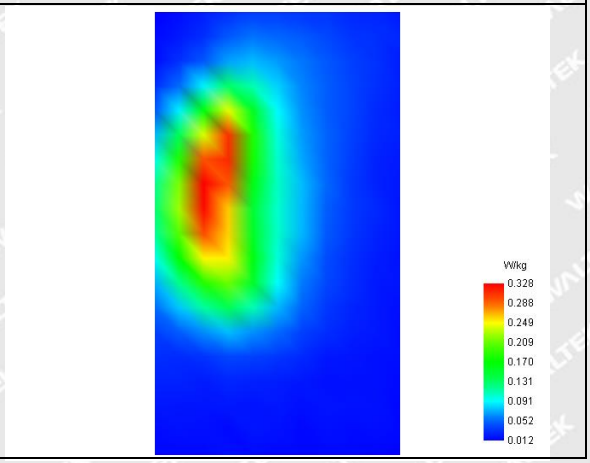
SAR 10g (W/Kg)	**0.177516**
SAR 1g (W/Kg)	**0.318888**

E. Z Axis Scan

Z (mm)	**0.00**	**4.00**	**6.00**	**8.00**	**10.00**	**12.00**	**14.00**	**16.00**	**18.00**
SAR (W/Kg)	**0.5617**	**0.3352**	**0.2607**	**0.2046**	**0.1636**	**0.1336**	**0.1113**	**0.0943**	**0.0806**



F. 3D Image

3D screen shot	**Hot spot position**
	

MEASUREMENT 5

Type: Phone measurement (Complete)
Date of measurement: 2022-11-22
Measurement duration: 12 minutes 3 seconds

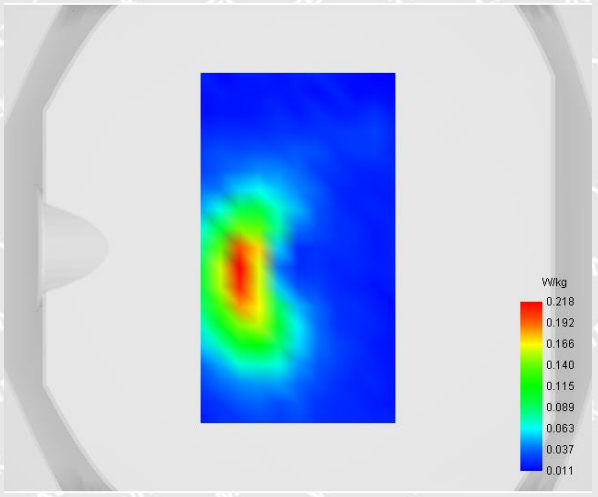
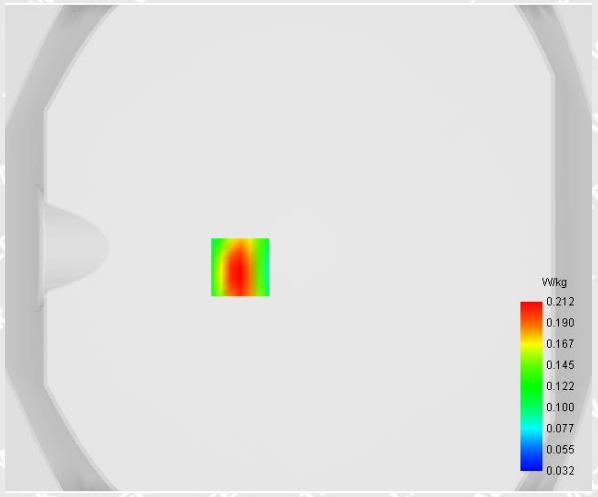
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	LTE Band 5
Channels	QPSK, 10MHz, 1RB,Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	836.500000
Relative Permittivity (real part)	53.341274
Conductivity (S/m)	0.953679
Power Variation (%)	-1.340000
Ambient Temperature	23.5
Liquid Temperature	23.5

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

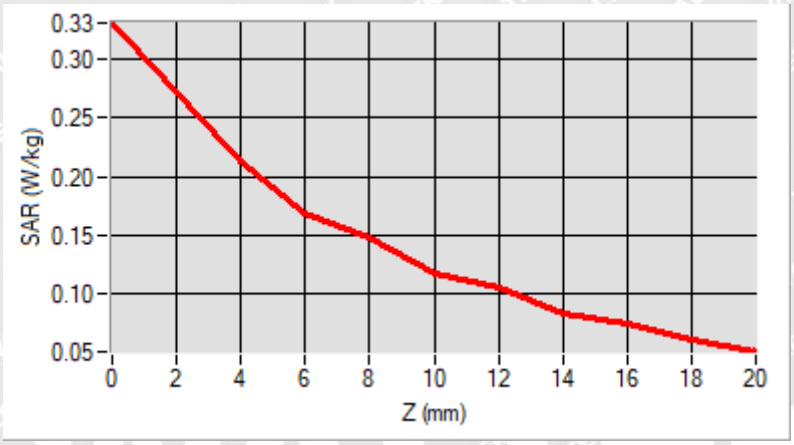
Maximum location: X=-24.00, Y=-8.00

D. SAR 1g & 10g

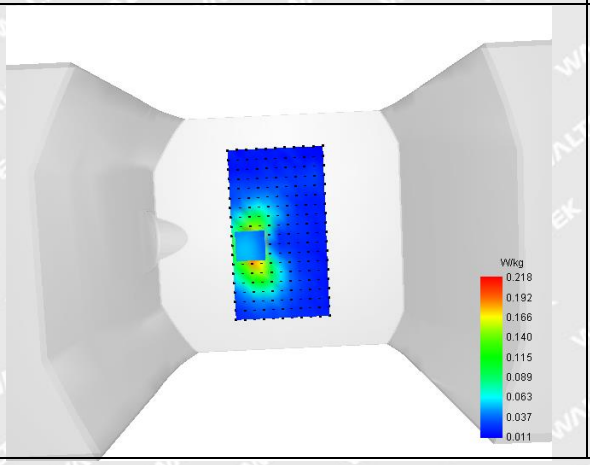
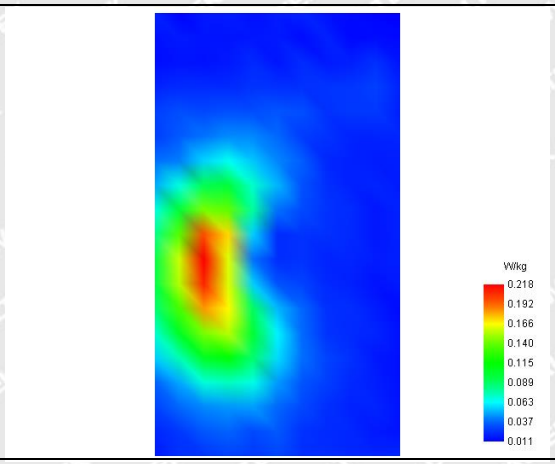
SAR 10g (W/Kg)	**0.115252**
SAR 1g (W/Kg)	**0.199128**

E. Z Axis Scan

Z (mm)	**0.00**	**4.00**	**6.00**	**8.00**	**10.00**	**12.00**	**14.00**	**16.00**	**18.00**
SAR (W/Kg)	**0.3299**	**0.2122**	**0.1683**	**0.1486**	**0.1169**	**0.1053**	**0.0831**	**0.0747**	**0.0624**



F. 3D Image

3D screen shot	**Hot spot position**
	

MEASUREMENT 6

Type: Phone measurement (Complete)
Date of measurement: 2022-12-07
Measurement duration: 12 minutes 3 seconds

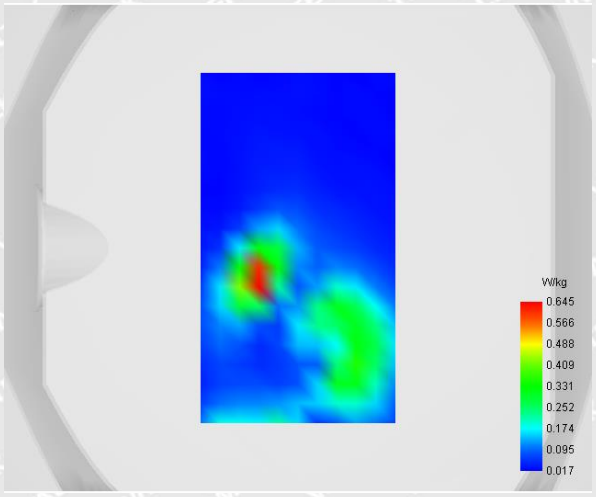
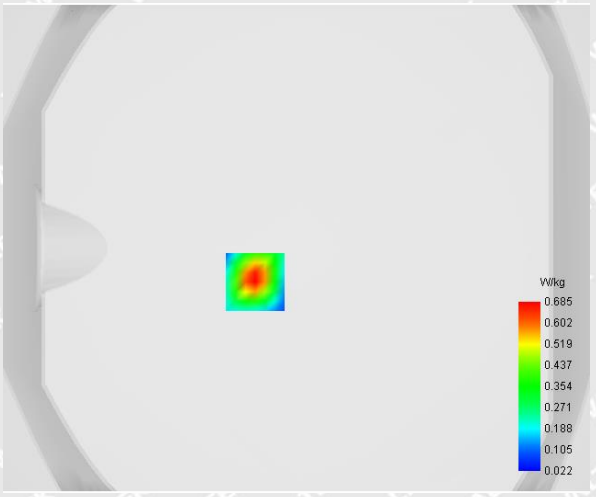
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	LTE Band 40(2305-2315MHz)
Channels	QPSK 10MHz 1RB, Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2310.000000
Relative Permittivity (real part)	51.262275
Conductivity (S/m)	1.782987
Power Variation (%)	3.080000
Ambient Temperature	23.2
Liquid Temperature	23.2

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

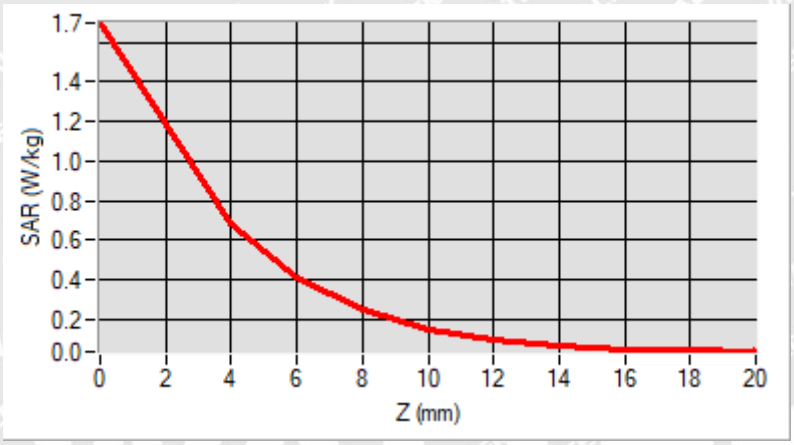
Maximum location: X=-17.00, Y=-14.00

D. SAR 1g & 10g

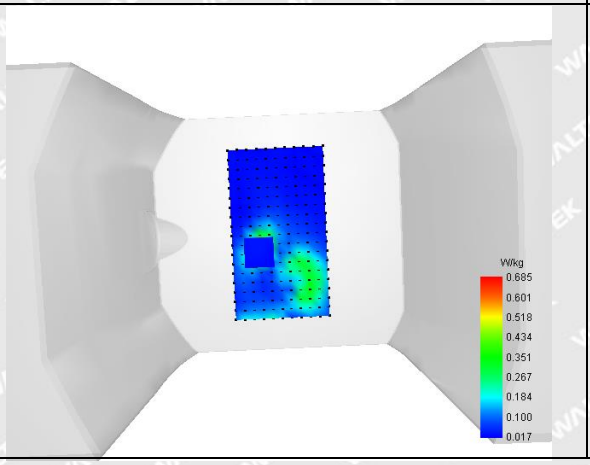
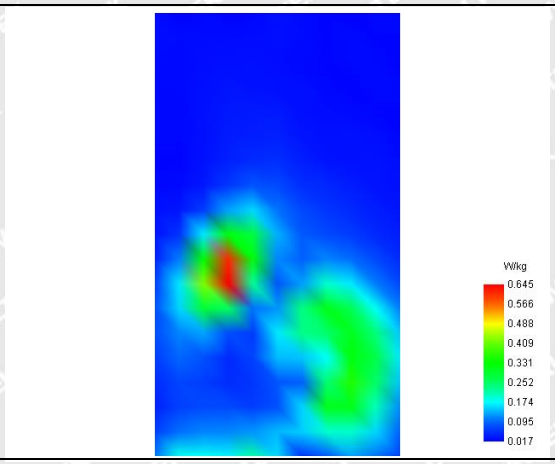
SAR 10g (W/Kg)	0.227155
SAR 1g (W/Kg)	0.630267

E. Z Axis Scan

Z (mm)	0.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00
SAR (W/Kg)	1.6994	0.6851	0.4131	0.2442	0.1475	0.0937	0.0644	0.0486	0.0401



F. 3D Image

3D screen shot	Hot spot position
	

MEASUREMENT 7

Type: Phone measurement (Complete)
Date of measurement: 2022-12-07
Measurement duration: 12 minutes 3 seconds

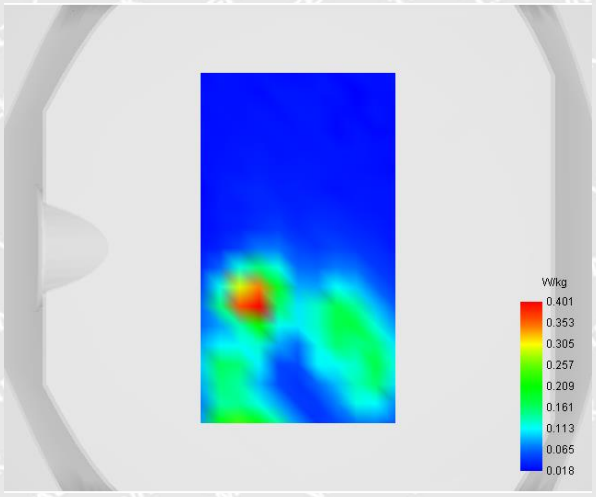
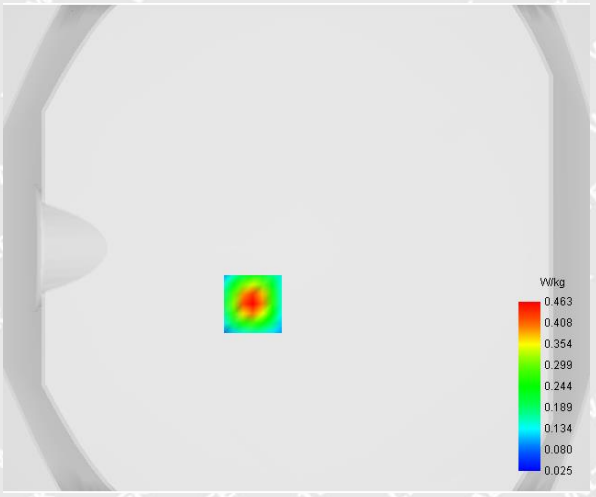
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	LTE Band 40(2350-2360MHz)
Channels	QPSK, 10MHz, 1RB, Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2355.000000
Relative Permittivity (real part)	51.262459
Conductivity (S/m)	1.781245
Power Variation (%)	-0.870000
Ambient Temperature	23.2
Liquid Temperature	23.2

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

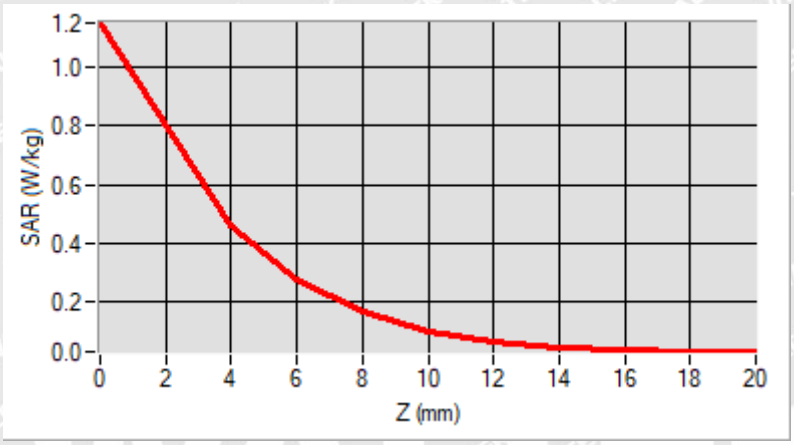
Maximum location: X=-18.00, Y=-23.00

D. SAR 1g & 10g

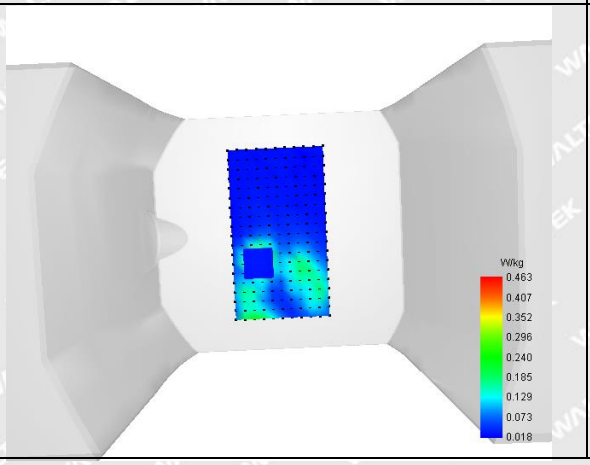
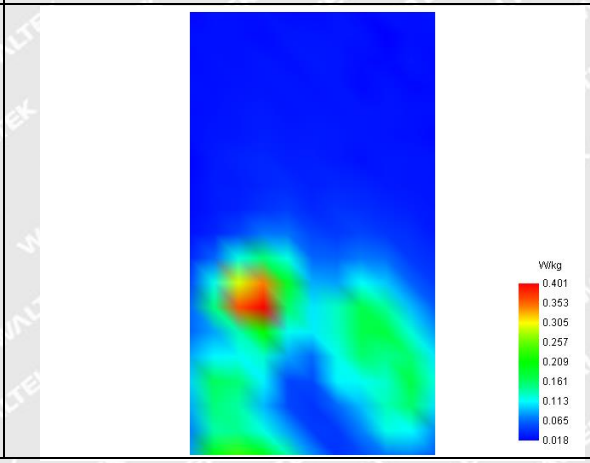
SAR 10g (W/Kg)	0.161366
SAR 1g (W/Kg)	0.426069

E. Z Axis Scan

Z (mm)	0.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00
SAR (W/Kg)	1.1516	0.4631	0.2796	0.1663	0.1021	0.0669	0.0481	0.0386	0.0341



F. 3D Image

3D screen shot	Hot spot position
	

MEASUREMENT 8

Type: Phone measurement (Complete)
Date of measurement: 2022-12-07
Measurement duration: 12 minutes 3 seconds

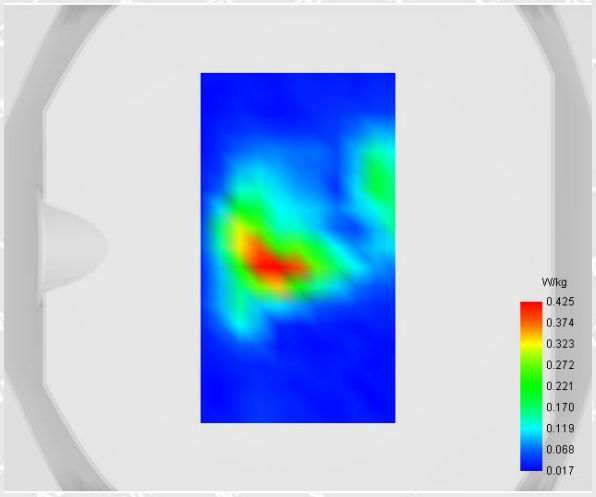
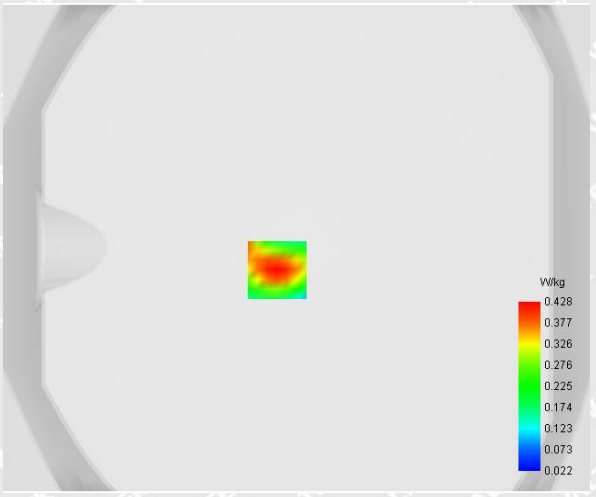
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	LTE Band 41
Channels	QPSK, 20MHz, 1RB, Low
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2506.000000
Relative Permittivity (real part)	52.242667
Conductivity (S/m)	2.121828
Power Variation (%)	-2.1700000
Ambient Temperature	23.4
Liquid Temperature	23.4

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

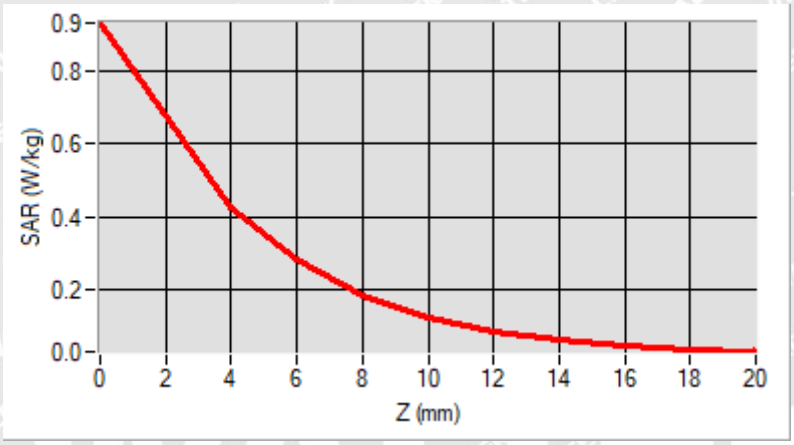
Maximum location: X=-8.00, Y=-9.00

D. SAR 1g & 10g

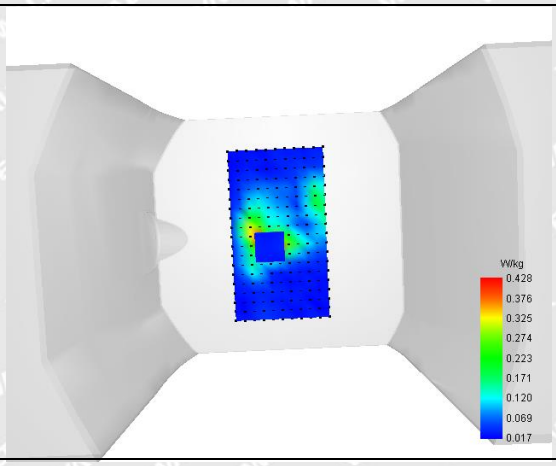
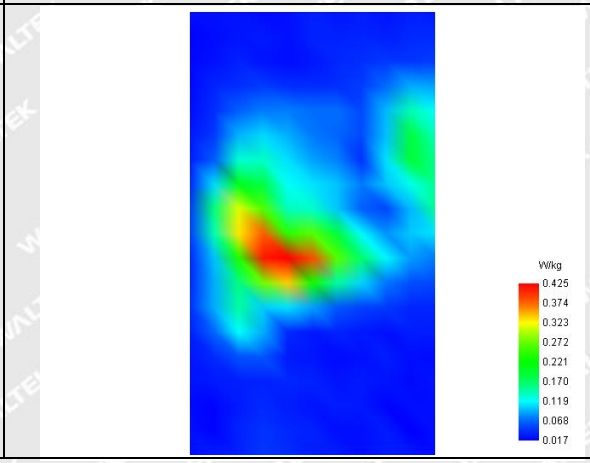
SAR 10g (W/Kg)	0.178171
SAR 1g (W/Kg)	0.400615

E. Z Axis Scan

Z (mm)	0.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00
SAR (W/Kg)	0.9289	0.4277	0.2836	0.1872	0.1265	0.0886	0.0650	0.0500	0.0399



F. 3D Image

3D screen shot	Hot spot position
	

MEASUREMENT 9

Type: Phone measurement (Complete)
Date of measurement: 2022-12-07
Measurement duration: 12 minutes 3 seconds

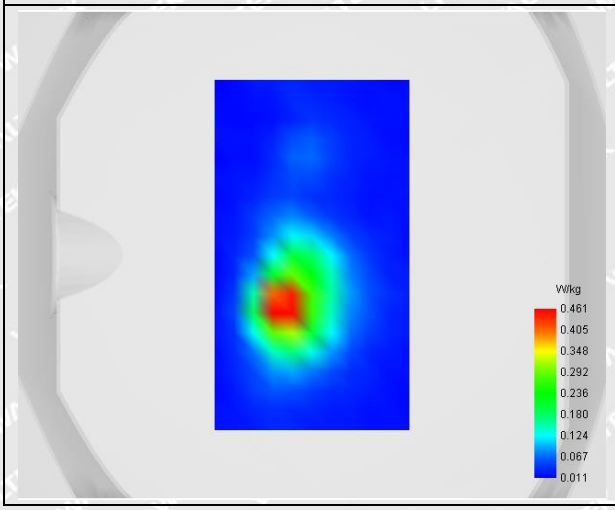
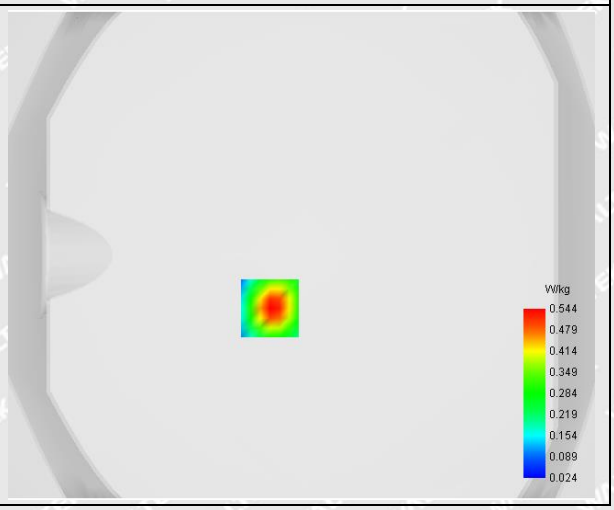
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	WiFi_802.11b
Channels	Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2437.000000
Relative Permittivity (real part)	53.682129
Conductivity (S/m)	1.942575
Power Variation (%)	2.430000
Ambient Temperature	23.4
Liquid Temperature	23.4

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

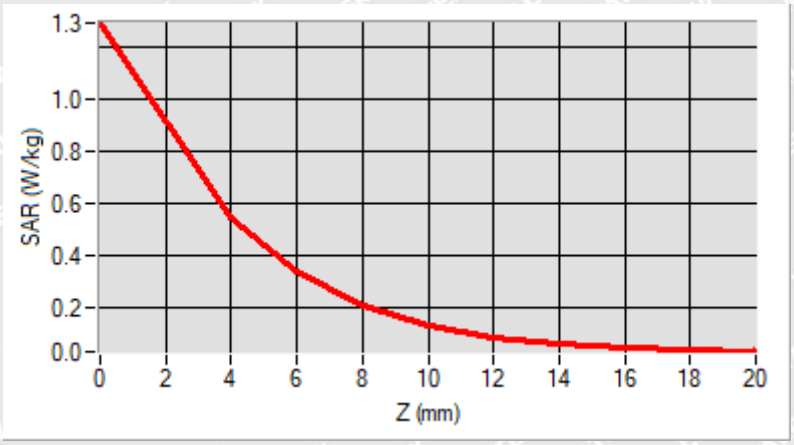
Maximum location: X=-13.00, Y=-22.00

D. SAR 1g & 10g

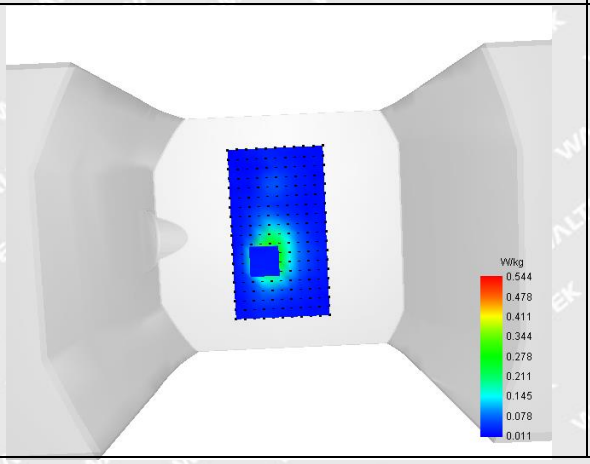
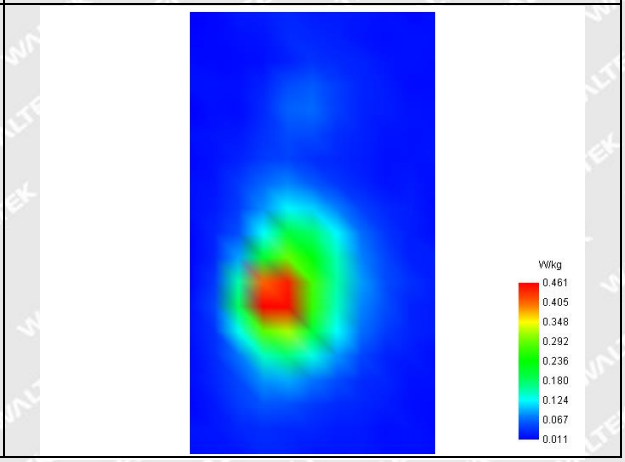
SAR 10g (W/Kg)	0.202600
SAR 1g (W/Kg)	0.512973

E. Z Axis Scan

Z (mm)	0.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00
SAR (W/Kg)	1.2884	0.5444	0.3397	0.2089	0.1312	0.0859	0.0598	0.0447	0.0355



F. 3D Image

3D screen shot	Hot spot position
	

MEASUREMENT 10

Type: Phone measurement (Complete)
Date of measurement: 2022-12-07
Measurement duration: 12 minutes 3 seconds

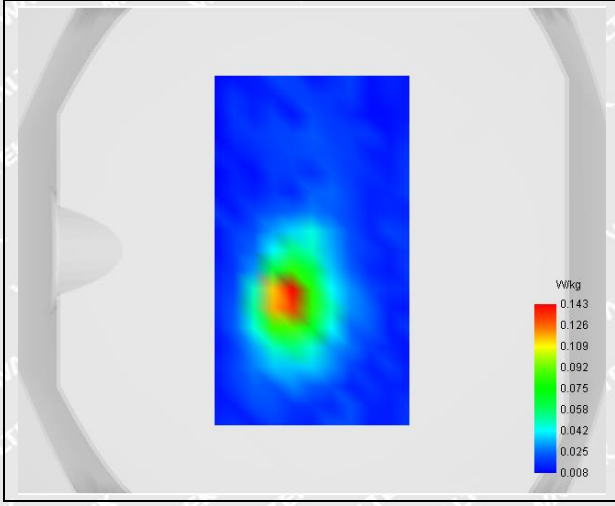
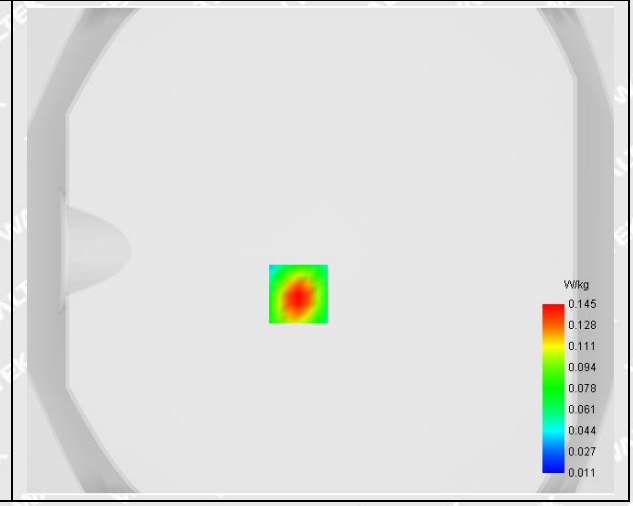
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	Bluetooth_ BR/EDR
Channels	High
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2480.000000
Relative Permittivity (real part)	53.681278
Conductivity (S/m)	1.942535
Power Variation (%)	2.370000
Ambient Temperature	23.4
Liquid Temperature	23.4

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

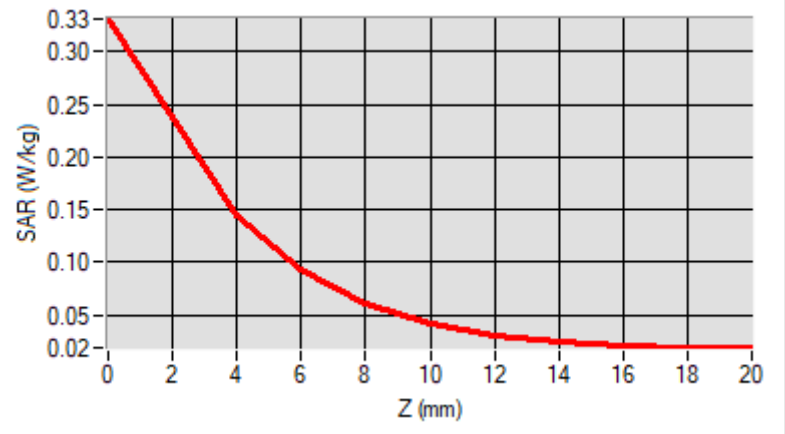
Maximum location: X=-9.00, Y=-18.00

D. SAR 1g & 10g

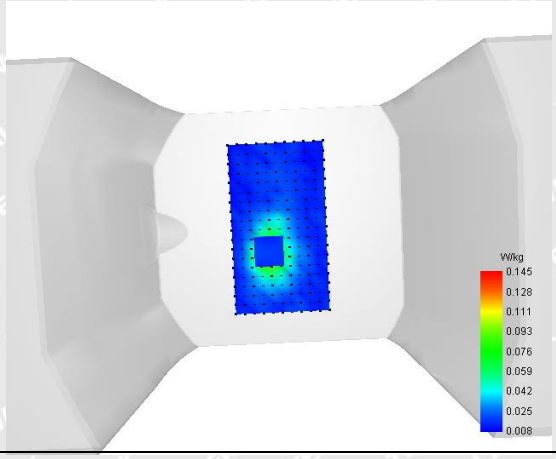
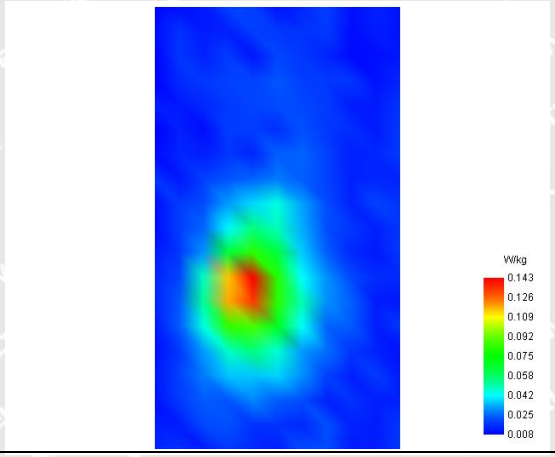
SAR 10g (W/Kg)	0.062046
SAR 1g (W/Kg)	0.138034

E. Z Axis Scan

Z (mm)	0.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00
SAR (W/Kg)	0.3314	0.1448	0.0934	0.0606	0.0412	0.0301	0.0240	0.0209	0.0195



F. 3D Image

3D screen shot	Hot spot position
	

MEASUREMENT 11

Type: Phone measurement (Complete)
Date of measurement: 2022-12-08
Measurement duration: 12 minutes 3 seconds

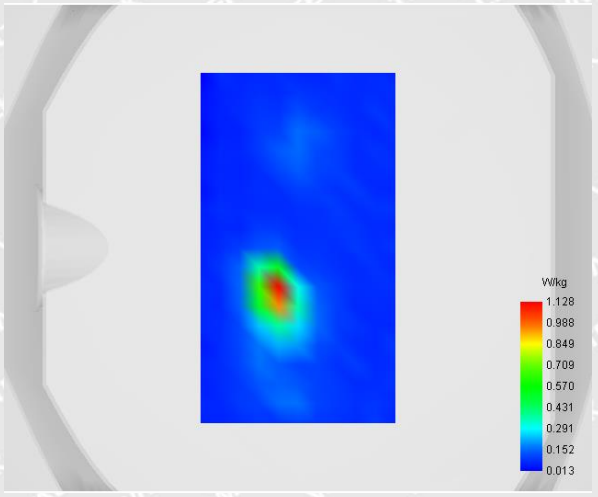
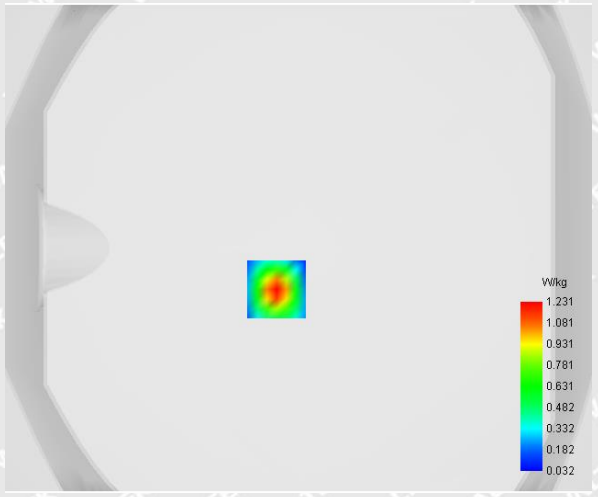
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	WLAN(5.2GHz)_ 802.11ac(VHT20)
Channels	High
Signal	Duty Cycle: 1:1

B. SAR Measurement Results

Frequency (MHz)	5240.000000
Relative Permittivity (real part)	48.582911
Conductivity (S/m)	5.261483
Power Variation (%)	0.542660
Ambient Temperature	23.6
Liquid Temperature	23.6

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

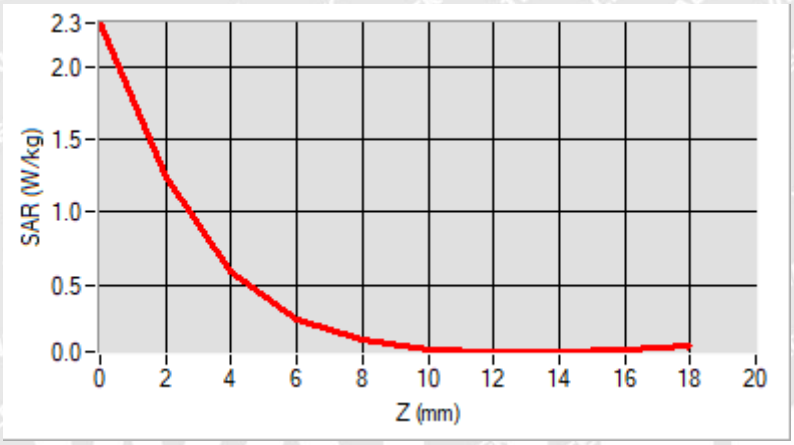
Maximum location: X=-9.00, Y=-17.00

D. SAR 1g & 10g

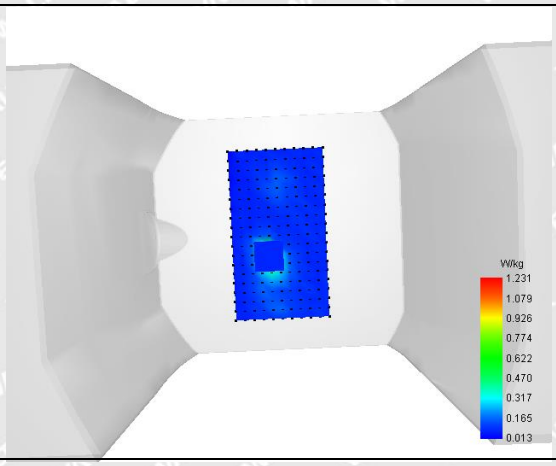
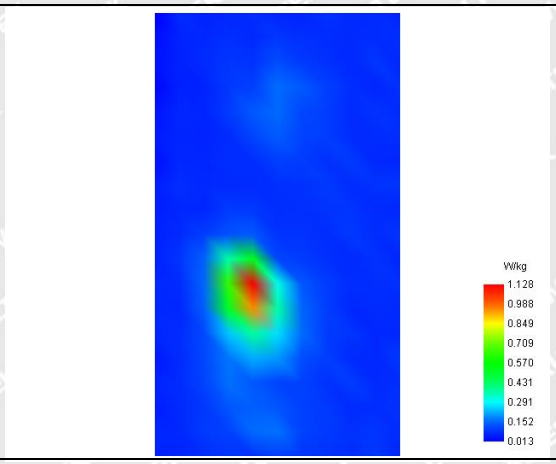
SAR 10g (W/Kg)	0.202902
SAR 1g (W/Kg)	0.635170

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00
SAR (W/Kg)	2.2964	1.2310	0.5922	0.2615	0.1155	0.0579	0.0396	0.0403	0.0536



F. 3D Image

3D screen shot	Hot spot position
	

MEASUREMENT 12

Type: Phone measurement (Complete)
Date of measurement: 2022-12-08
Measurement duration: 12 minutes 3 seconds

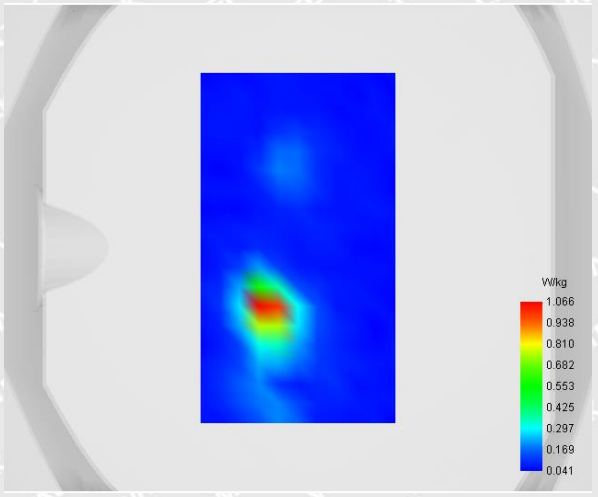
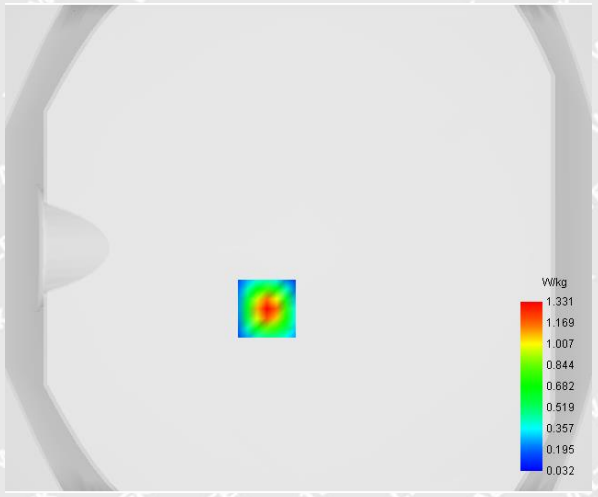
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	WLAN(5.3GHz)_802.11a
Channels	Middle
Signal	Duty Cycle: 1:1

B. SAR Measurement Results

Frequency (MHz)	5300.000000
Relative Permittivity (real part)	48.643839
Conductivity (S/m)	5.561932
Power Variation (%)	0.370000
Ambient Temperature	23.6
Liquid Temperature	23.6

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

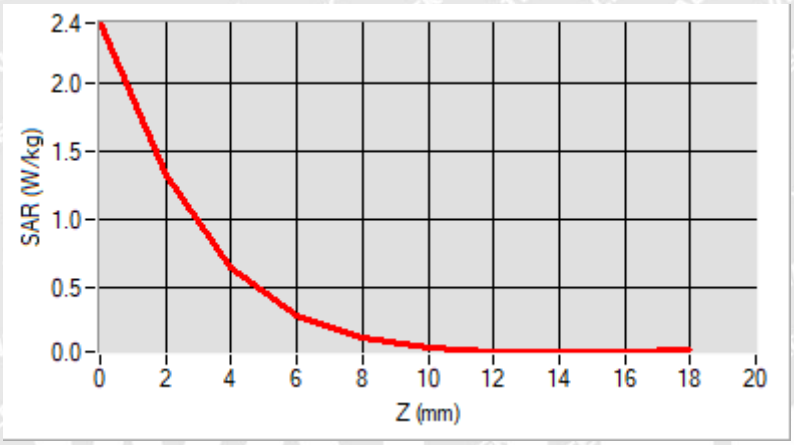
Maximum location: X=-13.00, Y=-25.00

D. SAR 1g & 10g

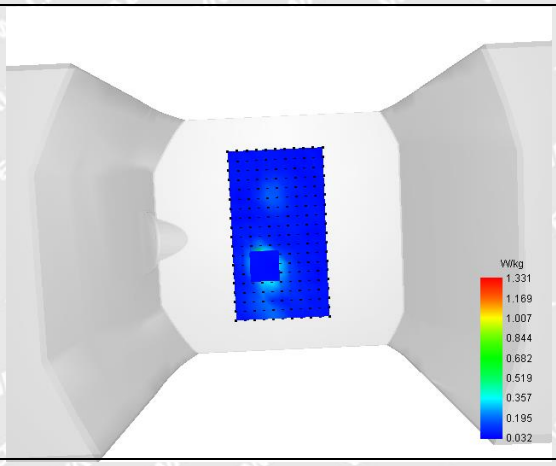
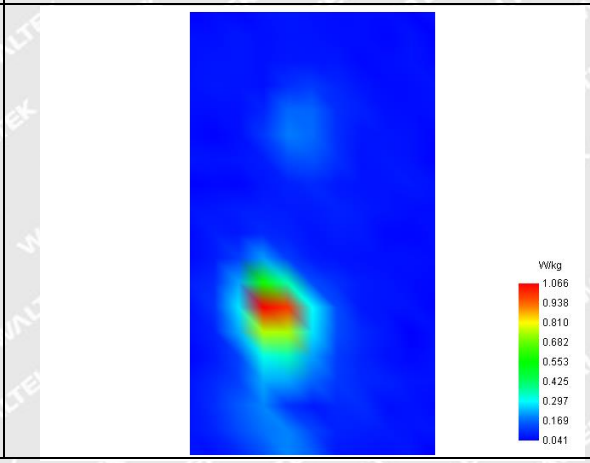
SAR 10g (W/Kg)	0.203896
SAR 1g (W/Kg)	0.685889

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00
SAR (W/Kg)	2.4444	1.3315	0.6569	0.2981	0.1332	0.0643	0.0391	0.0338	0.0390



F. 3D Image

3D screen shot	Hot spot position
	

MEASUREMENT 13

Type: Phone measurement (Complete)
Date of measurement: 2022-12-08
Measurement duration: 12 minutes 3 seconds

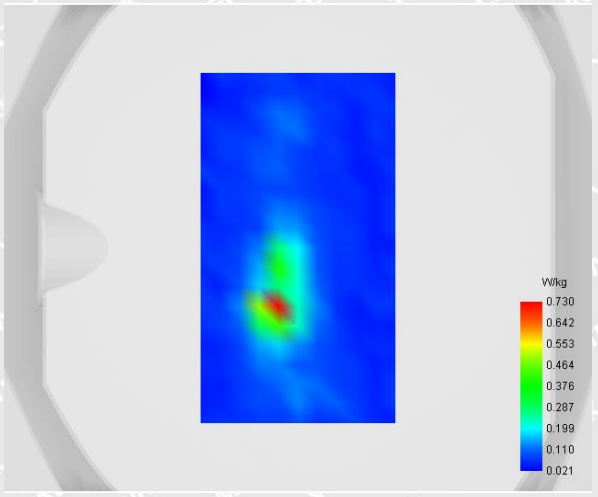
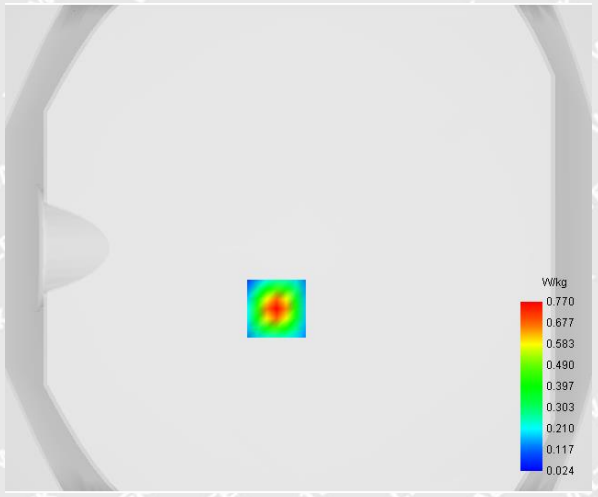
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Flat Plane
Device Position	Back
Band	WLAN(5.8GHz)_802.11a
Channels	High
Signal	Duty Cycle: 1:1

B. SAR Measurement Results

Frequency (MHz)	5825.000000
Relative Permittivity (real part)	48.361832
Conductivity (S/m)	5.891249
Power Variation (%)	1.210000
Ambient Temperature	23.6
Liquid Temperature	23.6

C. SAR Surface and Volume

SURFACE SAR	VOLUME SAR
	

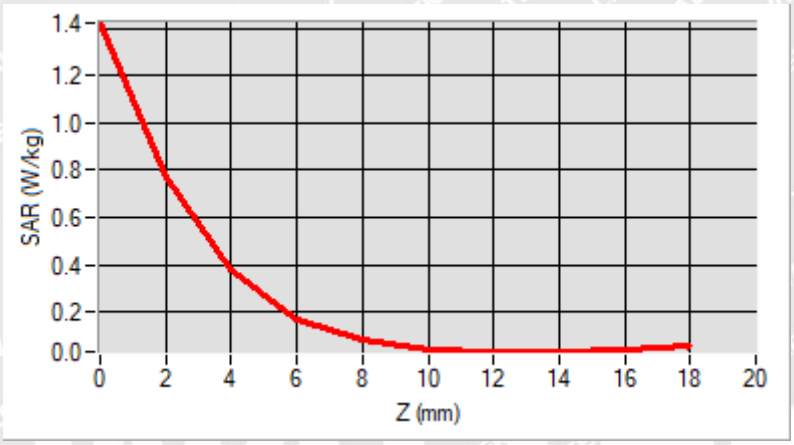
Maximum location: X=-9.00, Y=-25.00

D. SAR 1g & 10g

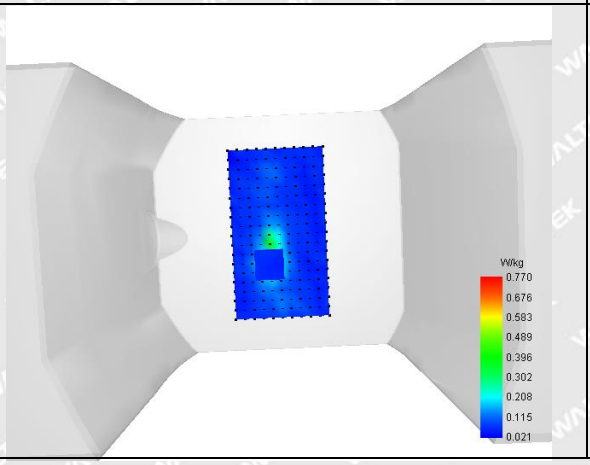
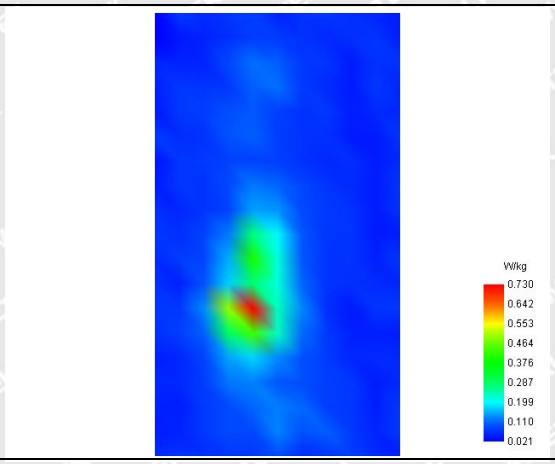
SAR 10g (W/Kg)	0.132474
SAR 1g (W/Kg)	0.397800

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00
SAR (W/Kg)	1.4248	0.7700	0.3759	0.1704	0.0785	0.0417	0.0301	0.0312	0.0410

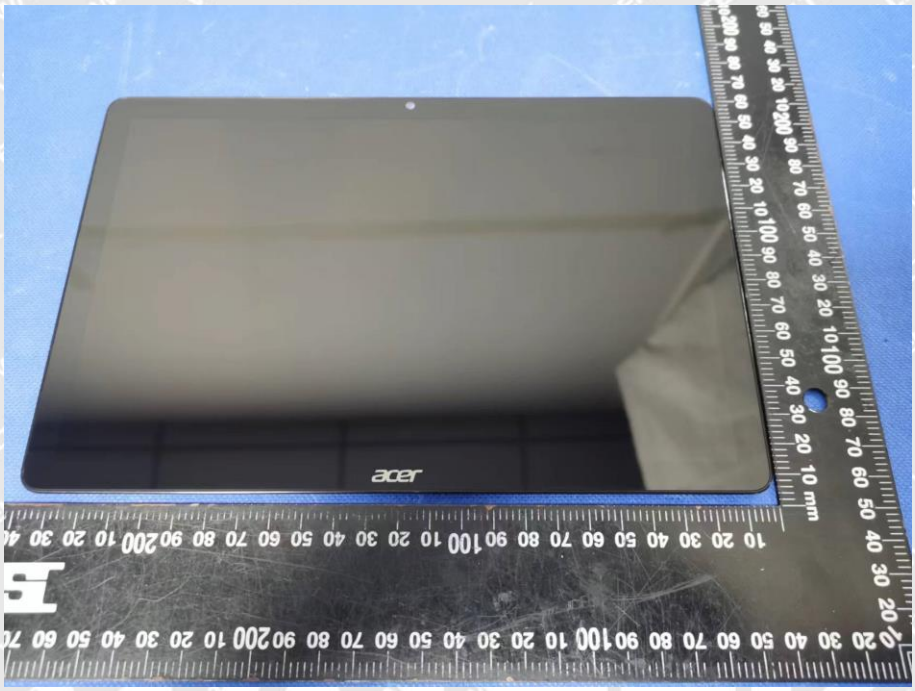


F. 3D Image

3D screen shot	Hot spot position
	

Annex C. EUT Photos

EUT View 1



EUT View 2

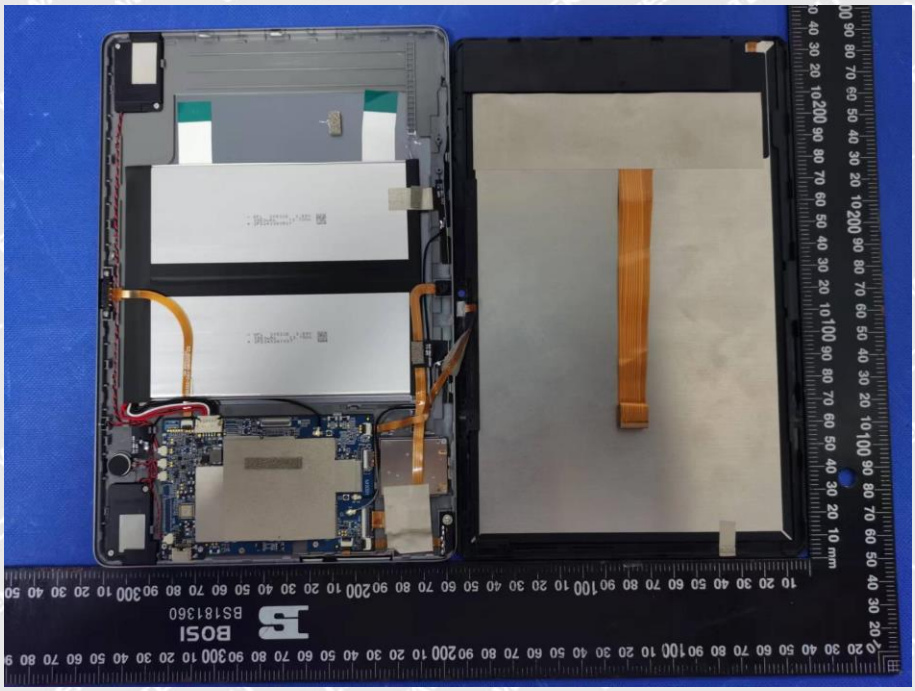
EUT View 3

EUT View 4

EUT View 5

EUT View 6

EUT Housing and Board View 1

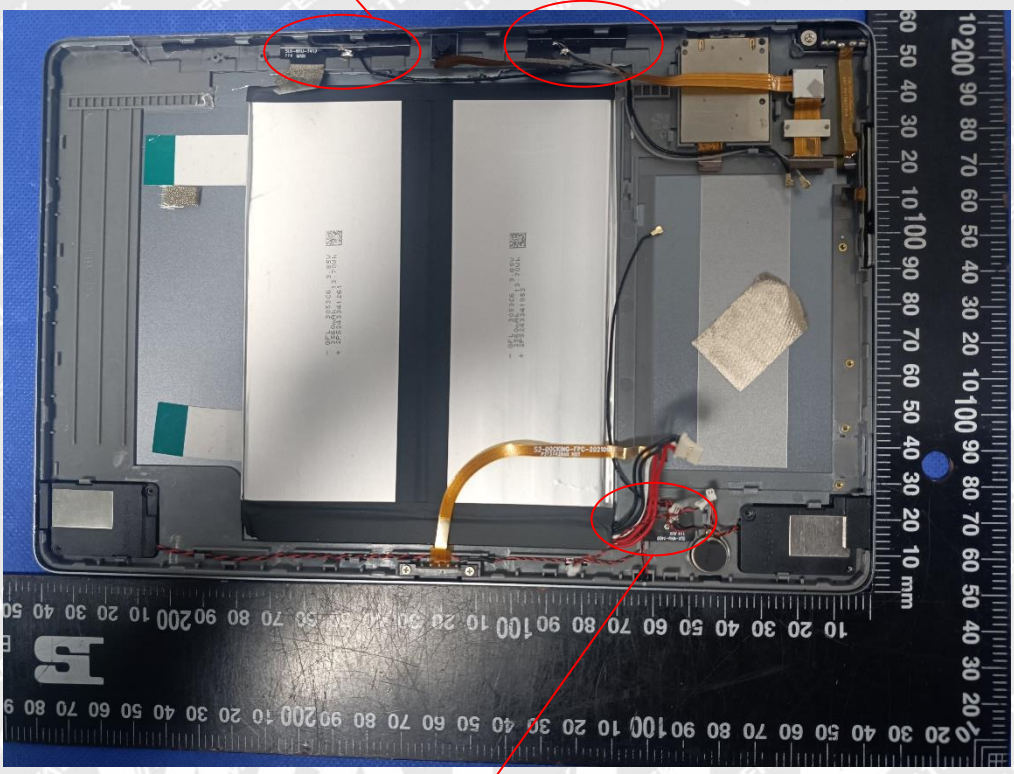


EUT Housing and Board View 2

Antenna View

GSM/WCDMA/LTE Main Antenna

WIFI/BT/GPS Antenna

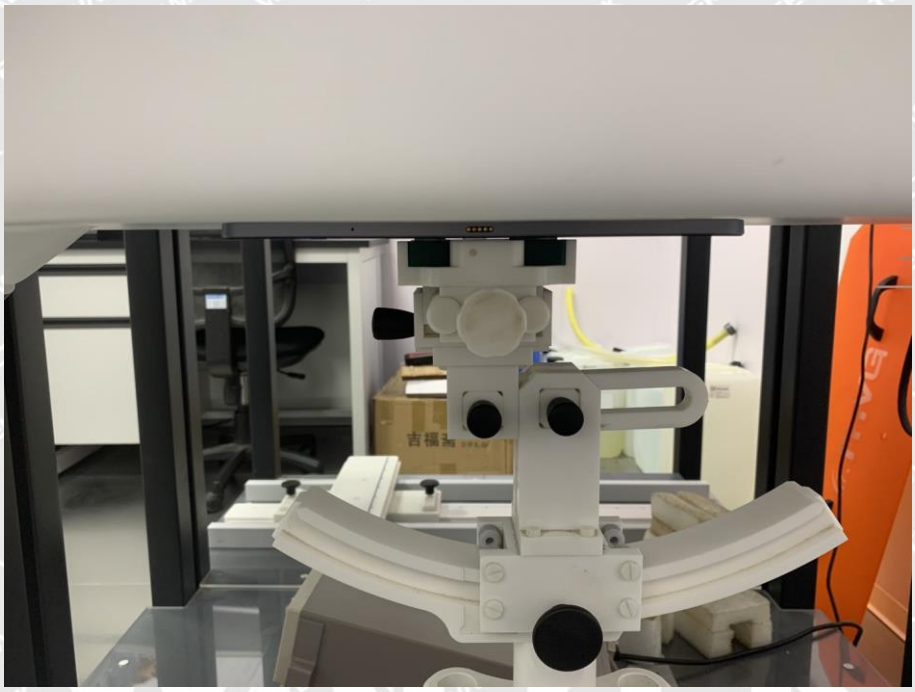


GSM/WCDMA/LTE AUX Antenna

Annex D. Test Setup Photos

Body mode Exposure Conditions
Test distance: 0mm

Body Back



Body Top

Annex E. Calibration Certificate

Please refer to the exhibit for the calibration certificate

******* END OF REPORT *******