

TEST REPORT

Reference No...... : WTX20X09068188W
FCC ID : 2AI3KCM17XA
Applicant : Cyrus Technology GmbH
Address : Hergelsbendenstrasse 49, D-52080 Aachen, Germany
Product Name : Rugged Phone
Test Model : CM17XA
FCC Part 2.1093
Standards : ANSI / IEEE C95.1 : 2005+A1:2010
ANSI / IEEE C95.3 : 2002(R2008)
IEEE 1528 :2013
Date of Receipt sample : Sep.24, 2020
Date of Test..... : Oct.13, 2020 to Oct.26, 2020
Date of Issue : Oct.27, 2020
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 compiler and 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

Tested by:

Reviewed By:

Approved & Authorized By:

Jack Sun

Lion Cai

Silin Chen

Jack Sun / Project Engineer

Lion Cai / RF Manager

Silin Chen / Manager

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1. General Information

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Cyrus Technology GmbH
Address of applicant: Hergelsbendenstrasse 49, D-52080 Aachen, Germany

Manufacturer: Cyrus Technology GmbH
Address of manufacturer: Hergelsbendenstrasse 49, D-52080 Aachen, Germany

General Description of EUT:	
Product Name:	Rugged Phone
Brand Name:	CYRUS
Model No.:	CM17XA
Adding Model(s):	/
Rated Voltage:	DC3.8V by Battery
Battery:	/
Device Category:	Portable Device
Software Version:	CM17XA_ROW_1_1.0
Hardware Version:	L925_MB_V1.1
Note: The test data is gathered from a production sample provided by the manufacturer.	

Technical Characteristics of EUT:	
2G	
Support Networks:	GSM, GPRS, EDGE
Support Band:	GSM850/PCS1900
Uplink Frequency:	GSM/GPRS/EDGE 850: 824~849MHz GSM/GPRS/EDGE 1900: 1850~1910MHz
Downlink Frequency:	GSM/GPRS/EDGE 850: 869~894MHz GSM/GPRS/EDGE 1900: 1930~1990MHz
RF Output Power:	GSM850: 31.76dBm, GSM1900: 28.63dBm EDGE850: 26.70dBm, EDGE1900: 25.4dBm
Type of Modulation:	GMSK, 8PSK
Type of Antenna:	Integral Antenna
Antenna Gain:	GSM850: 1.15dBi; GSM1900: 1.11dBi
GPRS/EDGE Class:	Class 12
3G	
Support Networks:	WCDMA, HSDPA, HSUPA
Support Band:	WCDMA Band 2, WCDMA Band 4, WCDMA Band 5
Uplink Frequency:	WCDMA Band 2: 1850~1910MHz WCDMA Band 4: 1710~1755MHz WCDMA Band 5: 824~849MHz
Downlink Frequency:	WCDMA Band 2: 1930~1990MHz WCDMA Band 4: 2110~2155MHz WCDMA Band 5: 869~894MHz
RF Output Power:	WCDMA Band 2: 21.66dBm, WCDMA Band 4: 22.00dBm WCDMA Band 5: 22.31dBm
Type of Modulation:	BPSK
Antenna Type:	Integral Antenna
Antenna Gain:	WCDMA Band 2: 1.35dBi, WCDMA Band 4: 1.14dBi, WCDMA Band 5: 1.35dBi
4G	
Support Networks:	FDD-LTE, TDD-LTE
Support Band:	FDD-LTE Band 2, 4, 5, 7, 12, 13, 17, 25, 26, 30, 66; TDD-LTE Band 40
Uplink Frequency:	FDD-LTE Band 2: Tx: 1850-1910MHz, FDD-LTE Band 4: Tx: 1710-1755MHz, FDD-LTE Band 5: Tx: 824-849MHz, FDD-LTE Band 7: Tx: 2500-2570MHz, FDD-LTE Band 12: Tx: 699-716MHz, FDD-LTE Band 13: Tx: 777-787MHz,

	FDD-LTE Band 17: Tx: 704-716MHz FDD-LTE Band 25: Tx: 1850-1915MHz FDD-LTE Band 26: Tx: 814-849MHz FDD-LTE Band 30: Tx: 2305-2315MHz TDD-LTE Band 40: Tx: 2300-2400MHz FDD-LTE Band 66: Tx: 1710-1780MHz
Downlink Frequency:	FDD-LTE Band 2: Rx: 1930-1990MHz, FDD-LTE Band 4: Rx: 2110-2155MHz, FDD-LTE Band 5: Rx: 869-894MHz, FDD-LTE Band 7: Rx: 2620-2690MHz, FDD-LTE Band 12: Rx: 729-746MHz, FDD-LTE Band 13: Rx: 746-756MHz, FDD-LTE Band 17: Rx: 734-746MHz FDD-LTE Band 25: Rx: 1930-1995MHz FDD-LTE Band 26: Rx: 859-894MHz FDD-LTE Band 30: Rx: 2350-2360MHz TDD-LTE Band 40: Rx: 2300-2400MHz FDD-LTE Band 66: Rx: 2110-2200MHz
RF Output Power:	FDD-LTE Band 2: 24.10dBm FDD-LTE Band 4: 23.33dBm FDD-LTE Band 5: 23.67dBm FDD-LTE Band 7: 24.15dBm FDD-LTE Band 12: 23.90dBm FDD-LTE Band 13: 23.66dBm FDD-LTE Band 17: 23.66dBm FDD-LTE Band 25: 24.44dBm FDD-LTE Band 26(814-824MHz): 23.81dBm FDD-LTE Band 26(824-849MHz): 22.37dBm FDD-LTE Band 30: 22.56dBm TDD-LTE Band 40(2305-2315MHz): 22.68dBm TDD-LTE Band 40(2350-2360MHz): 22.99dBm FDD-LTE Band 66: 23.03dBm
Type of Modulation:	QPSK, 16QAM
Antenna Type:	Integral Antenna
Antenna Gain:	FDD-LTE Band 2: 1.18dBi, FDD-LTE Band 4: 1.35dBi, FDD-LTE Band 5: 1.11dBi, FDD-LTE Band 7: 1.51dBi, FDD-LTE Band 12: 1.28dBi, FDD-LTE Band 13: 1.22dBi, FDD-LTE Band 17: 1.05dBi FDD-LTE Band 25: 1.11dBi, FDD-LTE Band 26: 1.18dBi,

	FDD-LTE Band 30: 1.41dBi, TDD-LTE Band 40: 1.28dBi, FDD-LTE Band 66: 1.28dBi
WIFI(2.4G)	
Support Standards:	802.11b, 802.11g, 802.11n
Frequency Range:	2412-2462MHz for 802.11b/g/n-HT20 2422-2452MHz for 802.11n-HT40
RF Output Power:	15.15dBm (Conducted)
Type of Modulation:	DBPSK,BPSK,DQPSK,QPSK,16QAM,64QAM
Data Rate:	1-11Mbps, 6-54Mbps, up to 150Mbps
Quantity of Channels:	11 for 802.11b/g/n-HT20 7 for 802.11n-HT40
Channel Separation:	5MHz
Antenna Type:	Integral Antenna
Antenna Gain:	1.88dBi
Bluetooth	
Bluetooth Version:	V4.2
Frequency Range:	2402-2480MHz
RF Output Power:	5.178dBm (Conducted)
Data Rate:	1Mbps, 2Mbps, 3Mbps
Modulation:	GFSK, Pi/4 QDPSK, 8DPSK
Quantity of Channels:	79/40
Channel Separation:	1MHz/2MHz
Antenna Type:	Integral Antenna
Antenna Gain:	1.88dBi
WIFI(5G)	
Support Standards:	802.11a, 802.11n-HT20/40
Frequency Range:	Band 1: 5180-5240MHz,Band 2: 5260-5320MHz, Band 3: 5500-5700MHz,Band 4: 5745-5825MHz
RF Output Power:	12.21dBm (Conducted)
Type of Modulation:	BPSK, QPSK,16QAM,64QAM
Type of Antenna:	Integral Antenna
Antenna Gain:	0.62dBi

1.2 Test Standards

The following report is prepared on behalf of the **Cyrus Technology GmbH** in accordance with FCC 47 CFR Part 2.1093, ANSI/IEEE C95.1-2005, ANSI / IEEE C95.3 :2002, 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 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	Head SAR	Body-worn (10mm Gap)	Hotspot (10mm Gap)	SAR _{1g} Limit (W/kg)
	Maximum SAR _{1g} (W/kg)	Maximum SAR _{1g} (W/kg)	Maximum SAR _{1g} (W/kg)	
GSM	0.381	0.357	0.776	1.6
WCDMA	0.848	1.093	1.093	1.6
LTE	0.755	1.143	1.143	1.6
WLAN 2.4G	0.350	0.165	0.165	1.6
WLAN 5G	0.433	0.453	0.533	1.6
Simultaneous Transmission	1.198	1.577	1.577	1.6

Remark:

*The highest reported SAR values for head, body-worn, router(hotspot), and simultaneous transmission conditions are **0.848W/kg**, **1.143W/kg**, **1.143W/kg**, and **1.577W/kg** respectively.*

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 ANSI/IEEE C95.1-2005, 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:

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

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be either related to the temperature elevation in tissue by

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

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

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

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

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

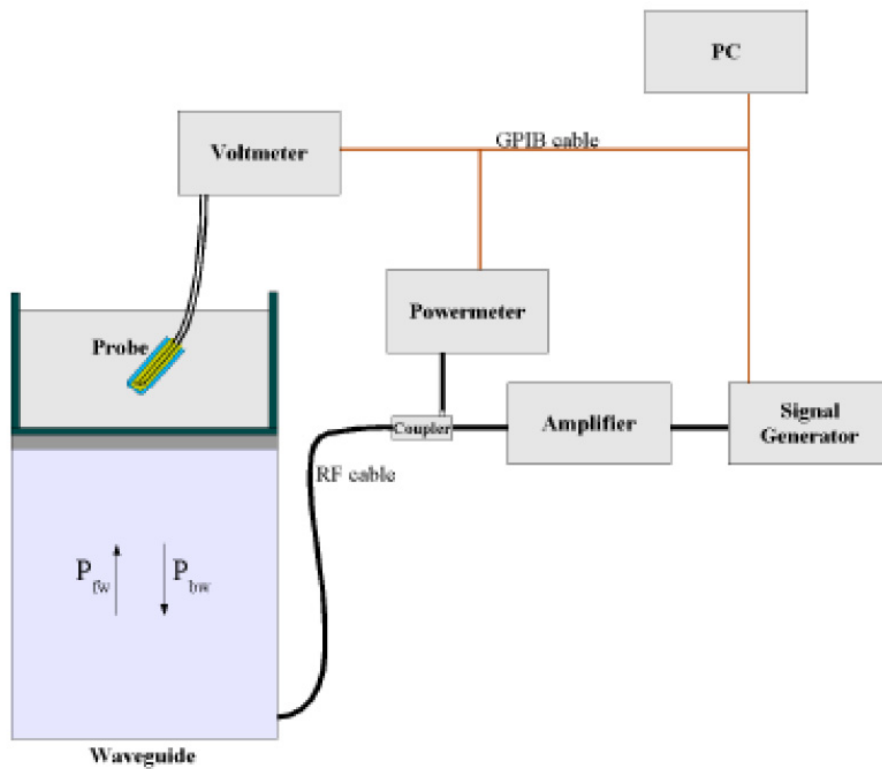
For the measurements the Specific Dosimetric E-Field Probe SSE2 SN 45/15 EPGO280 with following specifications is used

- Dynamic range: 0.01-100 W/kg
- Probe Length: 330 mm
- Length of Individual Dipoles: 4.5 mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter : 5 mm

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- Distance between dipoles / probe extremity: 2.7mm
- Probe linearity: <0.25 dB
- Axial Isotropy: <0.25 dB
- Spherical Isotropy: <0.50 dB
- Calibration range: 700 to 3000MHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°

Probe calibration is realized, in compliance with EN 62209-1 and IEEE 1528 STD, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the EN 62209-1 annexe 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 :

P_{fw} = Forward Power

P_{bw} = Backward Power

a and b = Waveguide dimensions

δ = 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.

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The calibration factors, CF(N), for the 3 sensors corresponding to dipole 1, dipole 2 and dipole 3 are:

$$CF(N)=SAR(N)/V_{lin}(N) \quad (N=1,2,3)$$

The linearised output voltage $V_{lin}(N)$ is obtained from the displayed output voltage $V(N)$ using

$$V_{lin}(N)=V(N)*(1+V(N)/DCP(N)) \quad (N=1,2,3)$$

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.

Where:

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

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,

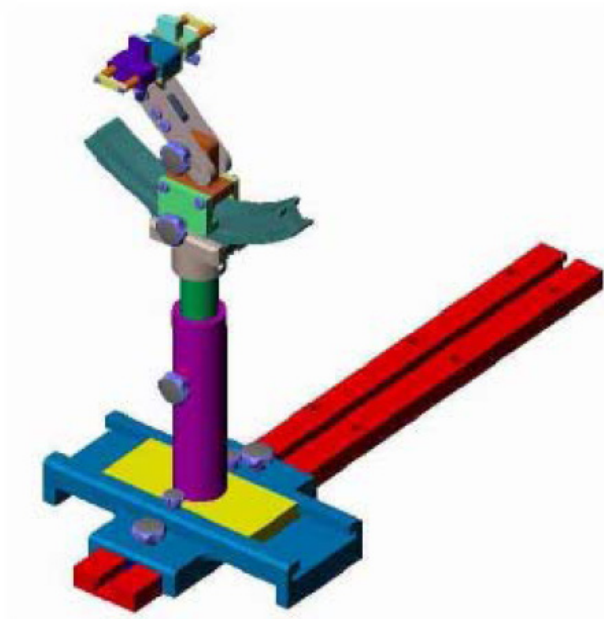
ρ = Tissue density (1.25 g/cm³ for brain tissue)

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

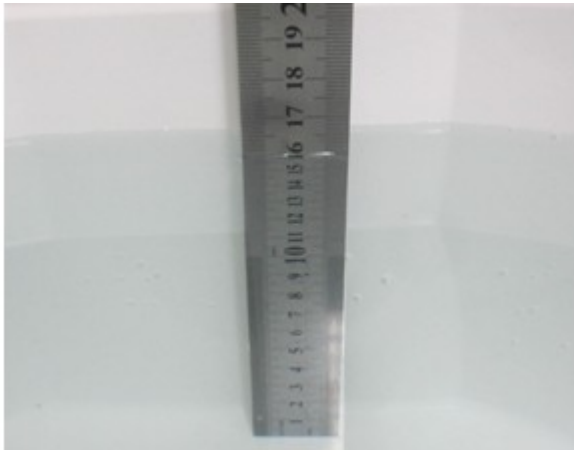
4.6 Test Equipment List

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
E-Field Probe	MVG	SSE2	SN 45/15 EPGO280	2020-07-03	2021-07-02
750MHz Dipole	MVG	SID750	SN 47/12 DIP 0G750-203	2020-03-11	2021-03-10
835MHz Dipole	MVG	SID835	SN 47/12 DIP 0G835-204	2020-03-11	2021-03-10
1800MHz Dipole	MVG	SID1800	SN 47/12 DIP 1G800-206	2020-03-11	2021-03-10
1900MHz Dipole	MVG	SID1900	SN 47/12 DIP 1G900-207	2020-03-11	2021-03-10
2450MHz Dipole	MVG	SID2450	SN 13/15 DIP 2G450-364	2020-03-11	2021-03-10
2600MHz Dipole	MVG	SID2600	SN 13/15 DIP 2G600-365	2020-03-11	2021-03-10
5 GHz Waveguide	MVG	SWG5500	SN 49/16 WGA45	2020-07-03	2021-07-02
Dielectric Probe Kit	MVG	SCLMP	SN 47/12 OCPG49	2020-03-11	2021-03-10
SAM Phantom	MVG	SAM	SN/ 47/12 SAM95	N/A	N/A
MULTIMETER	KEITHLEY	Keithley 2000	4006367	2020-04-28	2021-04-27
Signal Generator	Rohde & Schwarz	SMR20	100047	2020-04-28	2021-04-27
Universal Tester	Rohde & Schwarz	CMU200	112012	2020-04-28	2021-04-27
Communications Tester	Rohde & Schwarz	CMW500	148650	2020-04-28	2021-04-27
Network Analyzer	HP	8753C	2901A00831	2020-04-28	2021-04-27
Directional Couplers	Agilent	778D	20160	2020-04-28	2021-04-27

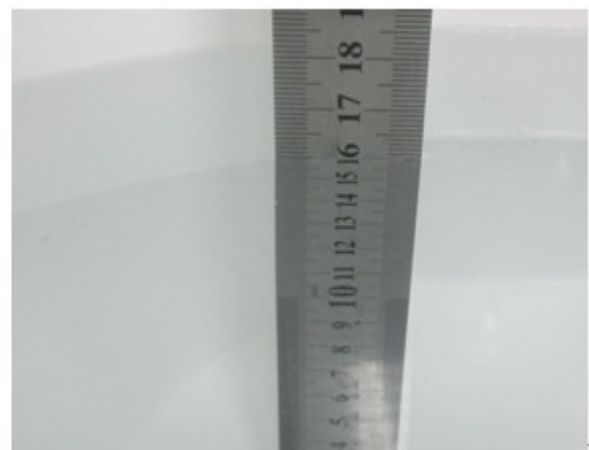
5. Tissue Simulating Liquids

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 SAR



Liquid Height for Body SAR

The Composition of Tissue Simulating Liquid

Frequency (MHz)	Water (%)	Salt (%)	Sugar (%)	HEC (%)	Preventol (%)	DGBE (%)
Head						
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
2450	55.0	0.1	0	0	0	44.9
2600	54.9	0.1	0	0	0	45.0
Body						
750	50.0	0.8	48.8	0.2	0.2	0
835	50.8	0.9	48.1	0.1	0.1	0
1700-1900	70.2	0.4	0	0	0	29.4
2450	68.6	0.1	0	0	0	31.3
2600	68.2	0.1	0	0	0	31.7

Frequency (MHz)	Water (%)	Hexyl Carbitol (%)	Triton X-100 (%)
Head			
5000-6000	65.52	17.24	17.24
Body			

5000-6000	78.6	10.7	10.7
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5.2 Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

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
1750	1.37	40.1	1.49	53.4
1800-2000	1.40	40.0	1.52	53.3
2450	1.80	39.2	1.95	52.7
3000	2.40	38.5	2.73	52.0
5200	4.66	36.0	5.30	49.0
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

Head Tissue Simulating Liquid									
Freq. MHz.	Temp. (°C)	Conductivity			Permittivity			Limit (%)	Date
		Reading (σ)	Target (σ)	Delta (%)	Reading (ϵ_r)	Target (ϵ_r)	Delta (%)		
750	21.2	0.86	0.89	-3.37	41.32	41.90	-1.38	±5	2020-10-22
835	21.2	0.87	0.90	-3.33	41.11	41.50	-0.94	±5	2020-10-22
1750	21.3	1.37	1.37	0.00	39.02	40.1	-2.69	±5	2020-10-24
1900	21.3	1.38	1.40	-1.43	38.56	40.00	-3.60	±5	2020-10-24
2450	21.3	1.74	1.80	-3.33	38.15	39.20	-2.68	±5	2020-10-26
2600	21.3	1.93	1.96	-1.53	38.63	39.0	-0.95	±5	2020-10-26
5200	22.3	4.87	4.66	4.51	35.6	36.0	-1.11	±5	2020-10-13
5400	22.3	4.74	4.86	-2.47	35.6	35.8	-0.56	±5	2020-10-13
5600	22.3	5.21	5.07	2.76	35.3	35.5	-0.56	±5	2020-10-13
5800	22.3	5.21	5.27	-1.14	35.1	35.3	-0.57	±5	2020-10-13

Body Tissue Simulating Liquid									
Freq. MHz.	Temp. (°C)	Conductivity			Permittivity			Limit (%)	Date
		Reading (σ)	Target (σ)	Delta (%)	Reading (ϵ_r)	Target (ϵ_r)	Delta (%)		
750	21.2	0.93	0.96	-3.12	54.96	55.50	-0.97	±5	2020-10-22
835	21.2	0.95	0.97	-2.06	54.85	55.20	-0.63	±5	2020-10-22
1750	21.3	1.46	1.49	-2.01	51.22	53.40	-4.08	±5	2020-10-24
1900	21.3	1.50	1.52	-1.32	52.42	53.30	-1.65	±5	2020-10-24
2450	21.3	1.91	1.95	-2.05	52.01	52.70	-1.31	±5	2020-10-26
2600	21.3	2.12	2.16	-1.85	52.24	52.50	-0.50	±5	2020-10-26
5200	21.3	5.16	5.30	-2.64	48.50	49.0	-1.02	±5	2020-10-13
5300	21.3	5.26	5.42	-2.95	48.50	48.9	-0.82	±5	2020-10-13
5600	21.3	5.52	5.77	-4.33	48.30	48.5	-0.41	±5	2020-10-13
5800	21.3	5.76	6.00	-4.00	48.50	48.2	0.62	±5	2020-10-13

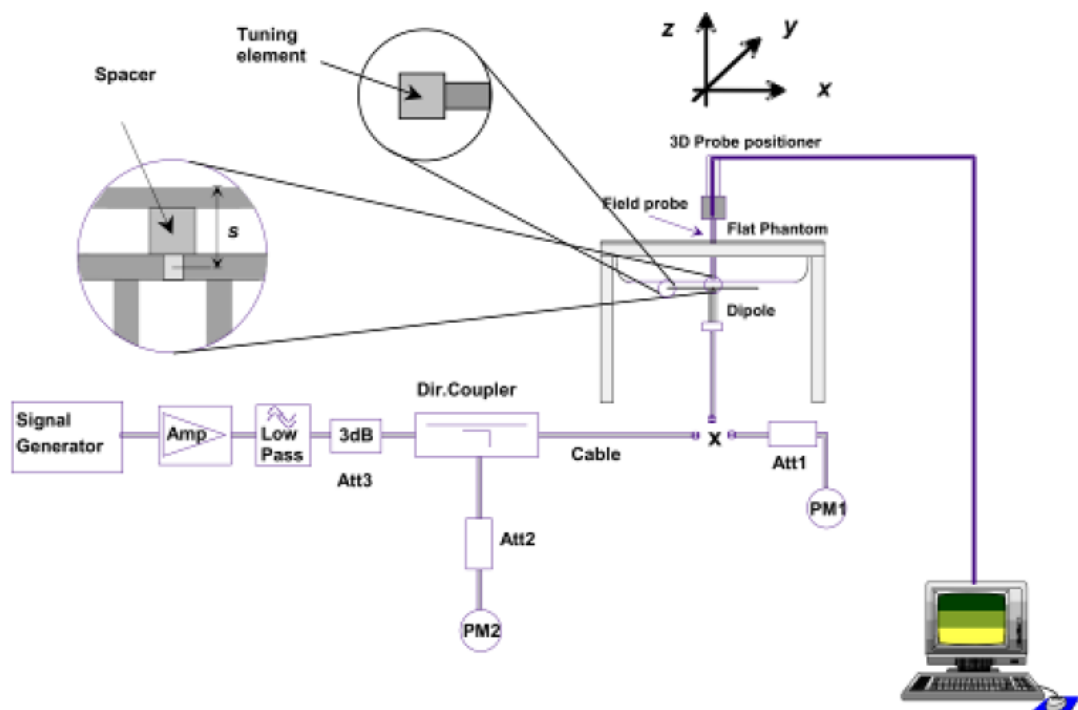
6. SAR Measurement Evaluation

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)	(%)	
Head					
750	8.40	2.16	8.64	2.86	2020-10-22
835	9.65	2.41	9.64	-0.10	2020-10-22
1800	38.49	9.61	38.44	-0.13	2020-10-24
1900	39.59	9.91	39.64	0.13	2020-10-24
2450	53.76	13.45	53.8	0.07	2020-10-26
2600	55.07	13.67	54.68	-0.71	2020-10-26
5200	161.23	16.946	169.95	5.41	2020-10-13
5400	165.58	17.681	176.81	6.78	2020-10-13
5600	173.58	18.604	186.04	7.18	2020-10-13
5800	179.32	18.604	186.04	3.75	2020-10-13
Body					

750	8.40	2.12	8.48	0.95	2020-10-22
835	9.36	2.35	9.4	0.43	2020-10-22
1800	38.29	9.58	38.32	0.08	2020-10-24
1900	39.01	9.78	39.12	0.28	2020-10-24
2450	50.33	12.59	50.36	0.06	2020-10-26
2600	53.92	13.43	53.72	-0.37	2020-10-26
5200	154.45	16.681	166.81	8.00	2020-10-13
5400	163.31	17.329	173.29	6.11	2020-10-13
5600	165.72	17.111	171.11	3.25	2020-10-13
5800	170.71	16.681	166.81	-2.28	2020-10-13

Remark: Referring to IEEE 1528-2013, Section 8.2, The system check shall be performed at a test frequency that is within $\pm 10\%$ 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.

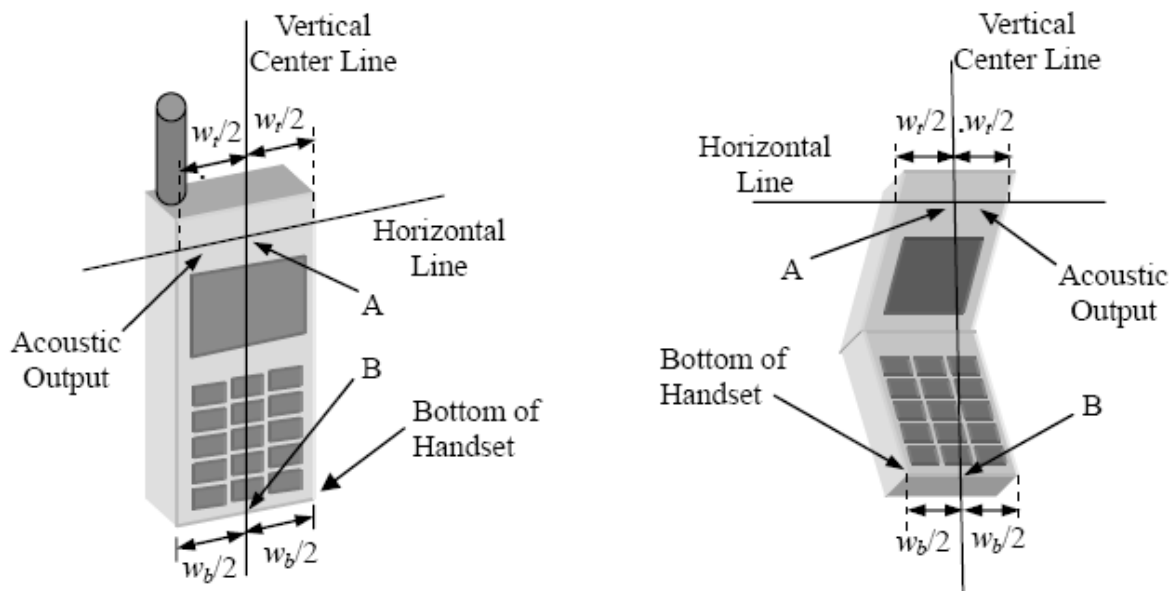


Illustration for Handset Vertical and Horizontal Reference Lines

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).

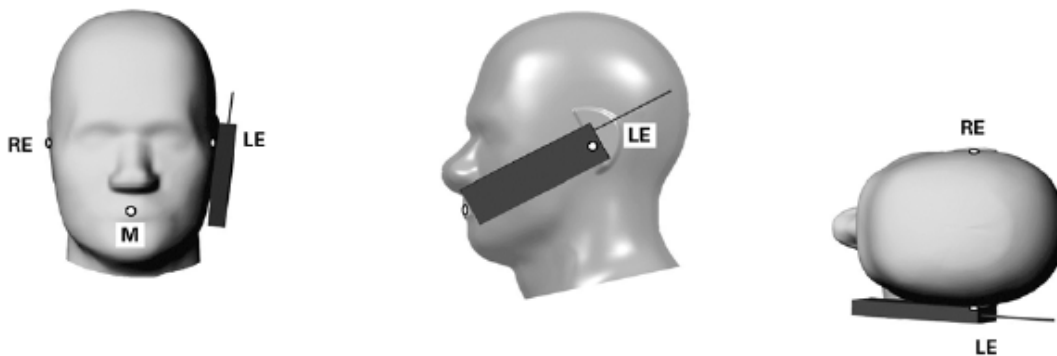


Illustration for Cheek Position

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).

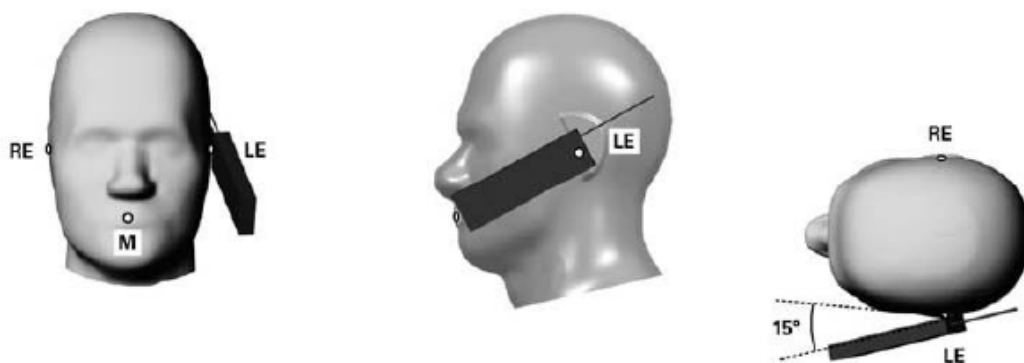


Illustration for Tilted Position

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 10mm.

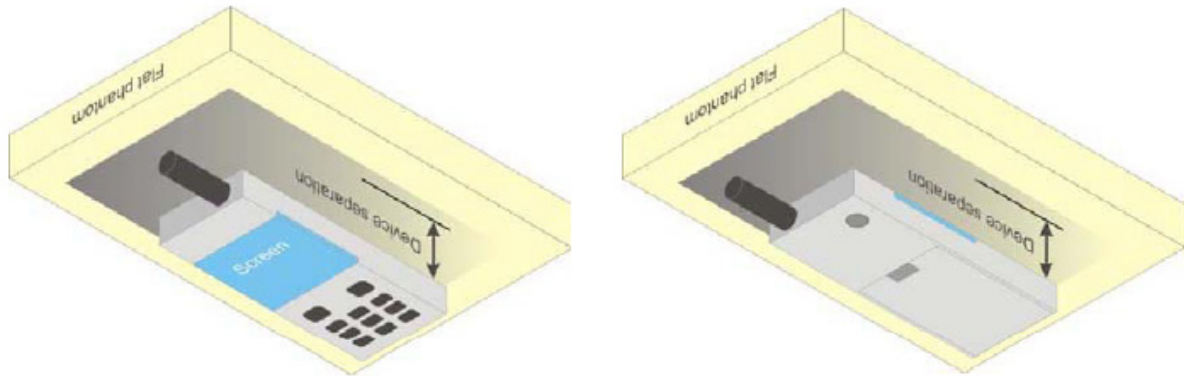
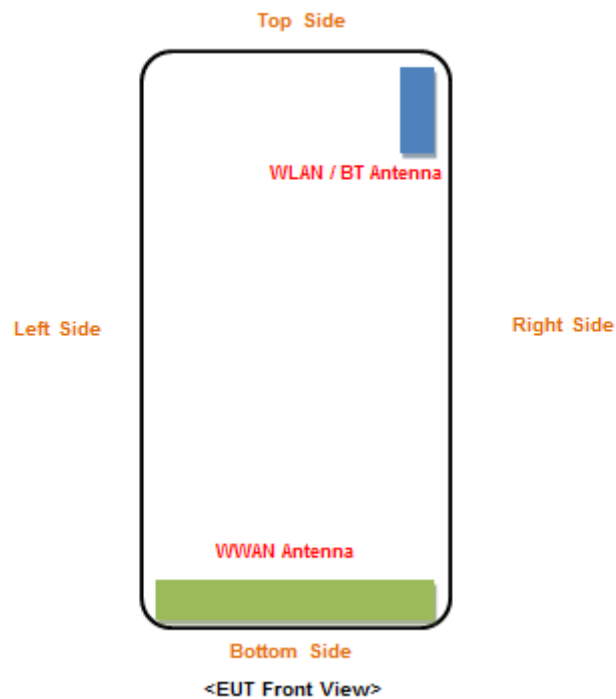


Illustration for Body Position

7.5 EUT Antenna Position



Block Diagram for EUT Antenna Position

Distance of EUT antenna-to-edge/surface(mm), Test distance:10mm						
Antennas	Back side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
WWAN	<25	<25	<25	<25	130	<25
WLAN	<25	<25	50	<25	<25	130
Bluetooth	<25	<25	50	<25	<25	130

7.6 EUT Testing Position

Head/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:

Head SAR tests				
Antennas	Right Cheek	Left Cheek	Right Tilted	Left Tilted
WWAN	Yes	Yes	Yes	Yes
WLAN	Yes	Yes	Yes	Yes

Body SAR tests, Test distance: 10mm						
Antennas	Front	Back	Left Side	Right Side	Top Side	Bottom Side
WWAN	Yes	Yes	Yes	Yes	No	Yes
WLAN	Yes	Yes	No	Yes	Yes	No

Body-worn SAR tests, Test distance: 10mm		
Antennas	Front	Back
WWAN	Yes	Yes
WLAN	Yes	Yes

Remark:

- Referring to KDB 941225 D06, when the overall device length and width are $\geq 9\text{cm} \times 5\text{cm}$, the test separation distances is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.
- Referring to KDB 648474 D04 Handset SAR v01r03, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR $> 1.2\text{ W/kg}$

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 from 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	31.62	31.76	31.61	32.0	28.61	28.52	28.53	29.0
GPRS (1 slot)	31.64	31.76	31.65	32.0	28.63	28.52	28.57	29.0
GPRS (2 slots)	31.16	31.26	31.17	31.5	27.90	27.78	27.82	28.0
GPRS (3 slots)	29.68	29.78	29.70	30.0	26.20	26.07	26.09	26.5
GPRS (4 slots)	28.63	28.75	28.64	29.0	25.09	24.98	25.02	25.5
EDGE (1 slot)	26.70	26.66	26.59	27.0	25.26	25.18	25.40	25.5
EDGE (2 slots)	25.46	25.48	25.41	25.5	23.97	23.90	24.14	24.5
EDGE (3 slots)	23.24	23.16	23.13	23.5	21.70	21.55	21.80	22.0
EDGE (4 slots)	22.05	22.01	21.93	22.5	20.45	20.43	20.64	21.0

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	22.62	22.76	22.61	23.0	19.61	19.52	19.53	20.0
GPRS (1 slot)	22.64	22.76	22.65	23.0	19.63	19.52	19.57	20.0
GPRS (2 slots)	25.16	25.26	25.17	25.5	21.90	21.78	21.82	22.0
GPRS (3 slots)	25.43	25.53	25.45	26.0	21.95	21.82	21.84	22.0
GPRS (4 slots)	25.63	25.75	25.64	26.0	22.09	21.98	22.02	22.5
EDGE (1 slot)	17.70	17.66	17.59	18.0	16.26	16.18	16.40	16.5
EDGE (2 slots)	19.46	19.48	19.41	19.5	17.97	17.90	18.14	18.5
EDGE (3 slots)	18.99	18.91	18.88	19.0	17.45	17.30	17.55	18.0
EDGE (4 slots)	19.05	19.01	18.93	19.5	17.45	17.43	17.64	18.0

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 Head SAR testing, GSM should be evaluated, therefore the EUT was set in GSM for GSM850 and GSM1900 due to its highest source-based time-average power.
2. For Body SAR testing, GPRS should be evaluated, therefore the EUT was set in GPRS (4TX slots) for GSM850 and

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GPRS (4TX slots) for GSM1900 due to its highest source-based time-average power.

3. Per KDB 447498 D01 v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.

4. The DUT do not support DTM function.

5. 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)	4132	4183	4233	Tune-up power (dBm)
Frequency (MHz)	1852.4	1880.0	1907.6		826.4	836.4	846.6	
RMC 12.2k	21.46	21.50	21.66	22.0	22.25	22.31	22.09	22.5
HSDPA Subtest-1	21.17	21.22	21.36	21.5	21.99	22.03	21.82	22.5
HSDPA Subtest-2	21.15	21.19	21.34	21.5	21.96	22.01	21.78	22.5
HSDPA Subtest-3	21.14	21.18	21.35	21.5	21.97	22.02	21.78	22.5
HSDPA Subtest-4	21.15	21.19	21.35	21.5	21.96	22.01	21.78	22.5
HSUPA Subtest-1	21.05	21.16	21.35	21.5	22.00	22.02	21.77	22.5
HSUPA Subtest-2	21.03	21.15	21.32	21.5	21.96	22.01	21.75	22.5
HSUPA Subtest-3	21.04	21.14	21.33	21.5	21.97	22.00	21.74	22.5
HSUPA Subtest-4	21.04	21.14	21.34	21.5	21.98	22.01	21.75	22.5
HSUPA Subtest-5	21.02	21.13	21.34	21.5	21.98	22.01	21.74	22.5

WCDMA - Average Power (dBm)				
Band	WCDMA Band IV			
Channel	1312	1412	1513	Tune-up power (dBm)
Frequency (MHz)	1712.4	1732.4	1752.6	
RMC 12.2k	21.98	21.96	22.00	22.5
HSDPA Subtest-1	21.71	21.71	21.81	22.0
HSDPA Subtest-2	21.68	21.67	21.78	22.0
HSDPA Subtest-3	21.68	21.68	21.79	22.0
HSDPA Subtest-4	21.69	21.69	21.78	22.0
HSUPA Subtest-1	21.70	21.64	21.76	22.0
HSUPA Subtest-2	21.68	21.62	21.75	22.0
HSUPA Subtest-3	21.69	21.61	21.74	22.0
HSUPA Subtest-4	21.67	21.62	21.74	22.0
HSUPA Subtest-5	21.68	21.61	21.73	22.0

Remark:

- per KDB 941225 D01 v03, The 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ 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

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FDD-LTE Band 2:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.54	0
		1	3	23.64	0
		1	5	23.52	0
		3	0	23.53	0
		3	2	23.54	0
		3	3	23.48	0
		6	0	22.59	1
	MCH	1	0	23.49	0
		1	3	23.60	0
		1	5	23.46	0
		3	0	23.45	0
		3	2	23.46	0
		3	3	23.44	0
		6	0	22.49	1
	HCH	1	0	23.46	0
		1	3	23.66	0
		1	5	23.48	0
		3	0	23.52	0
		3	2	23.54	0
		3	3	23.52	0
		6	0	22.55	1
16QAM	LCH	1	0	22.67	1
		1	3	22.89	1
		1	5	22.65	1
		3	0	22.60	1
		3	2	22.62	1
		3	3	22.52	1
		6	0	21.49	2
	MCH	1	0	22.70	1
		1	3	22.84	1
		1	5	22.72	1
		3	0	22.38	1
		3	2	22.43	1
		3	3	22.37	1
		6	0	21.36	2
	HCH	1	0	22.68	1
		1	3	22.93	1

		1	5	22.69	1
		3	0	22.50	1
		3	2	22.53	1
		3	3	22.45	1
		6	0	21.58	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.47	0
		1	7	23.92	0
		1	14	23.49	0
		8	0	22.45	1
		8	4	22.48	1
		8	7	22.44	1
		15	0	22.40	1
	MCH	1	0	23.48	0
		1	7	23.64	0
		1	14	23.42	0
		8	0	22.39	1
		8	4	22.45	1
		8	7	22.39	1
		15	0	22.33	1
	HCH	1	0	23.52	0
		1	7	23.64	0
		1	14	23.48	0
		8	0	22.46	1
		8	4	22.51	1
		8	7	22.45	1
		15	0	22.40	1
16QAM	LCH	1	0	22.69	1
		1	7	22.94	1
		1	14	22.66	1
		8	0	21.42	2
		8	4	21.45	2
		8	7	21.40	2
		15	0	21.31	2
	MCH	1	0	22.74	1
		1	7	22.95	1
		1	14	22.69	1
		8	0	21.33	2
		8	4	21.32	2

		8	7	21.32	2
		15	0	21.27	2
	HCH	1	0	22.71	1
		1	7	22.93	1
		1	14	22.67	1
		8	0	21.32	2
		8	4	21.35	2
		8	7	21.35	2
		15	0	21.34	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.43	0
		1	12	23.80	0
		1	24	23.41	0
		12	0	22.33	1
		12	6	22.44	1
		12	13	22.47	1
		25	0	22.41	1
	MCH	1	0	23.44	0
		1	12	23.68	0
		1	24	23.36	0
		12	0	22.36	1
		12	6	22.39	1
		12	13	22.37	1
		25	0	22.39	1
	HCH	1	0	23.51	0
		1	12	23.80	0
		1	24	23.46	0
		12	0	22.41	1
		12	6	22.46	1
		12	13	22.40	1
		25	0	22.44	1
16QAM	LCH	1	0	22.61	1
		1	12	22.96	1
		1	24	22.59	1
		12	0	21.34	2
		12	6	21.41	2
		12	13	21.43	2
		25	0	21.31	2
	MCH	1	0	22.60	1

		1	12	22.89	1
		1	24	22.50	1
		12	0	21.39	2
		12	6	21.43	2
		12	13	21.37	2
		25	0	21.31	2
	HCH	1	0	22.58	1
		1	12	22.80	1
		1	24	22.58	1
		12	0	21.34	2
		12	6	21.42	2
		12	13	21.33	2
		25	0	21.38	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.50	0
		1	24	23.63	0
		1	49	23.31	0
		25	0	22.35	1
		25	12	22.45	1
		25	25	22.54	1
		50	0	22.76	1
	MCH	1	0	23.12	0
		1	24	23.14	0
		1	49	22.76	0
		25	0	21.99	1
		25	12	21.93	1
		25	25	21.94	1
		50	0	21.92	1
	HCH	1	0	23.42	0
		1	24	23.89	0
		1	49	23.88	0
		25	0	22.54	1
		25	12	22.72	1
		25	25	22.77	1
		50	0	22.64	1
16QAM	LCH	1	0	22.69	1
		1	24	22.85	1
		1	49	22.52	1
		25	0	21.24	2

		25	12	21.36	2
		25	25	21.78	2
		50	0	21.72	2
	MCH	1	0	22.42	1
		1	24	22.39	1
		1	49	22.06	1
		25	0	20.94	2
		25	12	20.83	2
		25	25	20.88	2
		50	0	20.90	2
	HCH	1	0	22.63	1
		1	24	23.09	1
		1	49	23.08	1
		25	0	21.50	2
		25	12	21.63	2
		25	25	21.69	2
		50	0	21.57	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.73	0
		1	37	24.08	0
		1	74	23.52	0
		37	0	22.79	1
		37	18	22.85	1
		37	38	22.81	1
		75	0	22.83	1
	MCH	1	0	23.18	0
		1	37	23.16	0
		1	74	22.68	0
		37	0	22.13	1
		37	18	21.98	1
		37	38	21.93	1
		75	0	22.06	1
	HCH	1	0	23.12	0
		1	37	23.74	0
		1	74	23.81	0
		37	0	22.42	1
		37	18	22.55	1
		37	38	22.72	1
		75	0	22.58	1

16QAM	LCH	1	0	22.91	1
		1	37	23.19	1
		1	74	22.74	1
		37	0	21.71	2
		37	18	21.80	2
		37	38	21.79	2
		75	0	21.76	2
	MCH	1	0	22.43	1
		1	37	22.39	1
		1	74	21.90	1
		37	0	21.07	2
		37	18	20.91	2
		37	38	20.91	2
		75	0	21.00	2
	HCH	1	0	22.32	1
		1	37	23.00	1
		1	74	23.01	1
		37	0	21.36	2
		37	18	21.49	2
		37	38	21.66	2
		75	0	21.49	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.67	0
		1	49	24.10	0
		1	99	23.31	0
		50	0	22.61	1
		50	25	22.77	1
		50	50	22.53	1
		100	0	22.57	1
	MCH	1	0	23.24	0
		1	49	23.15	0
		1	99	22.59	0
		50	0	22.13	1
		50	25	21.93	1
		50	50	21.97	1
		100	0	22.00	1
	HCH	1	0	22.60	0
		1	49	23.47	0
		1	99	23.52	0

		50	0	22.28	1
		50	25	22.36	1
		50	50	22.52	1
		100	0	22.36	1
16QAM	LCH	1	0	22.76	1
		1	49	23.15	1
		1	99	22.39	1
		50	0	21.51	2
		50	25	21.67	2
		50	50	21.53	2
		100	0	21.53	2
	MCH	1	0	22.54	1
		1	49	22.40	1
		1	99	21.88	1
		50	0	21.07	2
		50	25	20.89	2
		50	50	20.92	2
		100	0	20.98	2
	HCH	1	0	21.83	1
		1	49	22.71	1
		1	99	22.76	1
		50	0	21.25	2
		50	25	21.33	2
		50	50	21.46	2
		100	0	21.34	2

FDD-LTE Band 4:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.01	0
		1	3	23.17	0
		1	5	23.02	0
		3	0	23.06	0
		3	2	23.09	0
		3	3	23.07	0
		6	0	22.05	1
	MCH	1	0	22.76	0
		1	3	22.85	0
		1	5	22.74	0
		3	0	22.83	0
		3	2	22.78	0
		3	3	22.84	0
		6	0	21.77	1
	HCH	1	0	22.69	0
		1	3	22.81	0
		1	5	22.64	0
		3	0	22.69	0
		3	2	22.74	0
		3	3	22.73	0
		6	0	21.66	1
16QAM	LCH	1	0	22.17	1
		1	3	22.39	1
		1	5	22.19	1
		3	0	22.21	1
		3	2	22.20	1
		3	3	22.16	1
		6	0	21.02	2
	MCH	1	0	22.05	1
		1	3	22.21	1
		1	5	22.05	1
		3	0	21.78	1
		3	2	21.79	1
		3	3	21.79	1
		6	0	20.74	2
	HCH	1	0	21.90	1
		1	3	22.10	1

		1	5	21.89	1
		3	0	21.74	1
		3	2	21.76	1
		3	3	21.79	1
		6	0	20.81	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.02	0
		1	7	23.23	0
		1	14	22.99	0
		8	0	22.00	1
		8	4	22.03	1
		8	7	21.97	1
		15	0	21.96	1
	MCH	1	0	22.80	0
		1	7	23.09	0
		1	14	22.71	0
		8	0	21.77	1
		8	4	21.82	1
		8	7	21.75	1
		15	0	21.71	1
	HCH	1	0	22.71	0
		1	7	22.91	0
		1	14	22.69	0
		8	0	21.65	1
		8	4	21.67	1
		8	7	21.63	1
		15	0	21.64	1
16QAM	LCH	1	0	22.28	1
		1	7	22.54	1
		1	14	22.22	1
		8	0	21.08	2
		8	4	21.14	2
		8	7	21.05	2
		15	0	20.96	2
	MCH	1	0	22.12	1
		1	7	22.32	1
		1	14	22.09	1
		8	0	20.81	2
		8	4	20.80	2

		8	7	20.74	2
		15	0	20.75	2
	HCH	1	0	21.96	1
		1	7	22.19	1
		1	14	21.92	1
		8	0	20.63	2
		8	4	20.68	2
		8	7	20.60	2
		15	0	20.68	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.02	0
		1	12	23.27	0
		1	24	22.91	0
		12	0	21.90	1
		12	6	21.98	1
		12	13	21.93	1
		25	0	21.97	1
	MCH	1	0	22.76	0
		1	12	23.04	0
		1	24	22.66	0
		12	0	21.77	1
		12	6	21.79	1
		12	13	21.63	1
		25	0	21.74	1
	HCH	1	0	22.66	0
		1	12	23.00	0
		1	24	22.64	0
		12	0	21.62	1
		12	6	21.68	1
		12	13	21.62	1
		25	0	21.64	1
16QAM	LCH	1	0	22.22	1
		1	12	22.55	1
		1	24	22.14	1
		12	0	21.03	2
		12	6	21.10	2
		12	13	21.04	2
		25	0	20.98	2
	MCH	1	0	21.96	1

		1	12	22.29	1
		1	24	21.87	1
		12	0	20.88	2
		12	6	20.94	2
		12	13	20.82	2
		25	0	20.82	2
	HCH	1	0	21.82	1
		1	12	22.15	1
		1	24	21.79	1
		12	0	20.69	2
		12	6	20.74	2
		12	13	20.64	2
		25	0	20.73	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.05	0
		1	24	23.17	0
		1	49	22.89	0
		25	0	21.99	1
		25	12	22.00	1
		25	25	22.11	1
		50	0	22.02	1
	MCH	1	0	22.82	0
		1	24	22.89	0
		1	49	22.65	0
		25	0	21.87	1
		25	12	21.78	1
		25	25	21.70	1
		50	0	21.78	1
	HCH	1	0	22.61	0
		1	24	22.83	0
		1	49	22.64	0
		25	0	21.75	1
		25	12	21.67	1
		25	25	21.67	1
		50	0	21.73	1
16QAM	LCH	1	0	22.32	1
		1	24	22.44	1
		1	49	22.14	1
		25	0	21.04	2

		25	12	21.02	2
		25	25	21.12	2
		50	0	21.01	2
	MCH	1	0	22.15	1
		1	24	22.26	1
		1	49	21.98	1
		25	0	20.92	2
		25	12	20.84	2
		25	25	20.75	2
		50	0	20.87	2
	HCH	1	0	21.86	1
		1	24	22.06	1
		1	49	21.90	1
		25	0	20.76	2
		25	12	20.73	2
		25	25	20.69	2
		50	0	20.77	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.96	0
		1	37	23.12	0
		1	74	22.72	0
		37	0	21.92	1
		37	18	21.98	1
		37	38	21.97	1
		75	0	21.97	1
	MCH	1	0	22.75	0
		1	37	23.00	0
		1	74	22.54	0
		37	0	21.79	1
		37	18	21.79	1
		37	38	21.73	1
		75	0	21.81	1
	HCH	1	0	22.64	0
		1	37	22.81	0
		1	74	22.58	0
		37	0	21.74	1
		37	18	21.70	1
		37	38	21.61	1
		75	0	21.72	1

16QAM	LCH	1	0	22.19	1
		1	37	22.39	1
		1	74	21.92	1
		37	0	20.95	2
		37	18	20.99	2
		37	38	20.99	2
		75	0	20.98	2
	MCH	1	0	22.02	1
		1	37	22.17	1
		1	74	21.78	1
		37	0	20.84	2
		37	18	20.87	2
		37	38	20.76	2
		75	0	20.79	2
	HCH	1	0	21.84	1
		1	37	21.97	1
		1	74	21.79	1
		37	0	20.73	2
		37	18	20.72	2
		37	38	20.66	2
		75	0	20.74	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.07	0
		1	49	23.33	0
		1	99	22.62	0
		50	0	21.29	1
		50	25	21.17	1
		50	50	21.06	1
		100	0	21.15	1
	MCH	1	0	21.75	0
		1	49	22.13	0
		1	99	22.25	0
		50	0	20.94	1
		50	25	20.99	1
		50	50	20.99	1
		100	0	20.94	1
	HCH	1	0	21.81	0
		1	49	22.84	0
		1	99	22.90	0

		50	0	21.55	1
		50	25	21.77	1
		50	50	21.96	1
		100	0	21.77	1
16QAM	LCH	1	0	21.98	1
		1	49	21.53	1
		1	99	20.82	1
		50	0	20.61	2
		50	25	20.52	2
		50	50	20.46	2
		100	0	20.67	2
	MCH	1	0	21.06	1
		1	49	21.41	1
		1	99	21.59	1
		50	0	20.51	2
		50	25	20.57	2
		50	50	20.56	2
		100	0	20.99	2
	HCH	1	0	21.03	1
		1	49	22.10	1
		1	99	22.16	1
		50	0	20.61	2
		50	25	20.83	2
		50	50	20.97	2
		100	0	20.78	2

FDD-LTE Band 5:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.37	0
		1	3	23.44	0
		1	5	23.34	0
		3	0	23.36	0
		3	2	23.47	0
		3	3	23.40	0
		6	0	22.41	1
	MCH	1	0	23.02	0
		1	3	23.06	0
		1	5	23.05	0
		3	0	23.05	0
		3	2	23.04	0
		3	3	23.04	0
		6	0	22.07	1
	HCH	1	0	22.86	0
		1	3	23.03	0
		1	5	22.98	0
		3	0	22.95	0
		3	2	23.01	0
		3	3	22.94	0
		6	0	21.97	1
16QAM	LCH	1	0	22.56	1
		1	3	22.69	1
		1	5	22.55	1
		3	0	22.53	1
		3	2	22.49	1
		3	3	22.43	1
		6	0	21.34	2
	MCH	1	0	22.37	1
		1	3	22.50	1
		1	5	22.40	1
		3	0	22.03	1
		3	2	22.02	1
		3	3	22.05	1
		6	0	20.97	2
	HCH	1	0	22.02	1
		1	3	22.20	1

		1	5	21.99	1
		3	0	21.96	1
		3	2	21.99	1
		3	3	21.95	1
		6	0	20.99	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.38	0
		1	7	23.58	0
		1	14	23.30	0
		8	0	22.36	1
		8	4	22.41	1
		8	7	22.36	1
		15	0	22.33	1
	MCH	1	0	23.09	0
		1	7	23.29	0
		1	14	23.04	0
		8	0	22.00	1
		8	4	22.07	1
		8	7	21.98	1
		15	0	21.97	1
	HCH	1	0	22.98	0
		1	7	23.19	0
		1	14	23.00	0
		8	0	21.87	1
		8	4	21.95	1
		8	7	21.85	1
		15	0	21.88	1
16QAM	LCH	1	0	22.71	1
		1	7	22.82	1
		1	14	22.53	1
		8	0	21.42	2
		8	4	21.46	2
		8	7	21.34	2
		15	0	21.24	2
	MCH	1	0	22.48	1
		1	7	22.65	1
		1	14	22.41	1
		8	0	21.00	2
		8	4	21.04	2

		8	7	20.95	2
		15	0	20.94	2
	HCH	1	0	22.26	1
		1	7	22.38	1
		1	14	22.04	1
		8	0	20.79	2
		8	4	20.89	2
		8	7	20.77	2
		15	0	20.80	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.39	0
		1	12	23.63	0
		1	24	23.23	0
		12	0	22.39	1
		12	6	22.37	1
		12	13	22.18	1
		25	0	22.32	1
	MCH	1	0	23.11	0
		1	12	23.30	0
		1	24	22.97	0
		12	0	21.95	1
		12	6	22.09	1
		12	13	21.91	1
		25	0	21.96	1
	HCH	1	0	22.98	0
		1	12	23.32	0
		1	24	23.02	0
		12	0	21.73	1
		12	6	21.97	1
		12	13	21.80	1
		25	0	21.77	1
16QAM	LCH	1	0	22.61	1
		1	12	22.76	1
		1	24	22.37	1
		12	0	21.43	2
		12	6	21.42	2
		12	13	21.20	2
		25	0	21.35	2
	MCH	1	0	22.31	1

		1	12	22.68	1
		1	24	22.21	1
		12	0	20.95	2
		12	6	21.15	2
		12	13	21.03	2
		25	0	20.93	2
	HCH	1	0	22.10	1
		1	12	22.40	1
		1	24	22.04	1
		12	0	20.67	2
		12	6	20.94	2
		12	13	20.77	2
		25	0	20.81	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.67	0
		1	24	23.42	0
		1	49	23.07	0
		25	0	22.58	1
		25	12	22.32	1
		25	25	22.37	1
		50	0	22.47	1
	MCH	1	0	23.15	0
		1	24	23.22	0
		1	49	23.04	0
		25	0	21.90	1
		25	12	22.05	1
		25	25	21.77	1
		50	0	21.81	1
	HCH	1	0	23.03	0
		1	24	23.16	0
		1	49	22.98	0
		25	0	22.36	1
		25	12	22.04	1
		25	25	22.30	1
		50	0	22.33	1
16QAM	LCH	1	0	22.63	1
		1	24	22.62	1
		1	49	22.36	1
		25	0	21.57	2

		25	12	21.28	2
		25	25	21.31	2
		50	0	21.43	2
	MCH	1	0	22.54	1
		1	24	22.62	1
		1	49	22.21	1
		25	0	20.89	2
		25	12	21.09	2
		25	25	20.77	2
		50	0	20.83	2
	HCH	1	0	22.19	1
		1	24	22.34	1
		1	49	22.08	1
		25	0	21.31	2
		25	12	21.03	2
		25	25	21.29	2
		50	0	21.32	2

FDD-LTE Band 7:

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.56	0
		1	12	23.88	0
		1	24	23.56	0
		12	0	22.56	1
		12	6	22.64	1
		12	13	22.59	1
		25	0	22.63	1
	MCH	1	0	23.42	0
		1	12	23.77	0
		1	24	23.60	0
		12	0	22.50	1
		12	6	22.52	1
		12	13	22.47	1
		25	0	22.57	1
	HCH	1	0	23.56	0
		1	12	23.68	0
		1	24	23.21	0
		12	0	22.53	1
		12	6	22.49	1
		12	13	22.23	1
		25	0	22.41	1
16QAM	LCH	1	0	22.78	1
		1	12	23.06	1
		1	24	22.75	1
		12	0	21.59	2
		12	6	21.68	2
		12	13	21.59	2
		25	0	21.58	2
	MCH	1	0	22.61	1
		1	12	22.95	1
		1	24	22.80	1
		12	0	21.60	2
		12	6	21.60	2
		12	13	21.59	2
		25	0	21.52	2
	HCH	1	0	22.63	1
		1	12	22.79	1

		1	24	22.31	1
		12	0	21.48	2
		12	6	21.42	2
		12	13	21.22	2
		25	0	21.42	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.54	0
		1	24	23.72	0
		1	49	23.49	0
		25	0	22.64	1
		25	12	22.60	1
		25	25	22.70	1
		50	0	22.67	1
	MCH	1	0	23.34	0
		1	24	23.64	0
		1	49	23.70	0
		25	0	22.59	1
		25	12	22.50	1
		25	25	22.54	1
		50	0	22.59	1
	HCH	1	0	23.93	0
		1	24	23.68	0
		1	49	23.22	0
		25	0	22.81	1
		25	12	22.65	1
		25	25	22.37	1
		50	0	22.56	1
16QAM	LCH	1	0	22.80	1
		1	24	22.92	1
		1	49	22.71	1
		25	0	21.59	2
		25	12	21.55	2
		25	25	21.66	2
		50	0	21.59	2
	MCH	1	0	22.72	1
		1	24	22.97	1
		1	49	23.02	1
		25	0	21.58	2
		25	12	21.53	2

		25	25	21.54	2
		50	0	21.59	2
	HCH	1	0	23.09	1
		1	24	22.89	1
		1	49	22.38	1
		25	0	21.75	2
		25	12	21.57	2
		25	25	21.32	2
		50	0	21.59	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.51	0
		1	37	23.71	0
		1	74	23.29	0
		37	0	22.64	1
		37	18	22.67	1
		37	38	22.68	1
		75	0	22.69	1
	MCH	1	0	23.26	0
		1	37	23.75	0
		1	74	23.70	0
		37	0	22.60	1
		37	18	22.58	1
		37	38	22.64	1
		75	0	22.66	1
	HCH	1	0	24.13	0
		1	37	24.07	0
		1	74	23.14	0
		37	0	23.17	1
		37	18	22.98	1
		37	38	22.62	1
		75	0	22.90	1
16QAM	LCH	1	0	22.75	1
		1	37	22.99	1
		1	74	22.51	1
		37	0	21.55	2
		37	18	21.61	2
		37	38	21.63	2
		75	0	21.59	2
	MCH	1	0	22.50	1

		1	37	22.93	1
		1	74	22.98	1
		37	0	21.55	2
		37	18	21.59	2
		37	38	21.66	2
		75	0	21.59	2
	HCH	1	0	23.23	1
		1	37	23.15	1
		1	74	22.30	1
		37	0	22.01	2
		37	18	21.87	2
		37	38	21.54	2
		75	0	21.80	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.40	0
		1	49	23.77	0
		1	99	23.12	0
		50	0	22.45	1
		50	25	22.51	1
		50	50	22.56	1
		100	0	22.52	1
	MCH	1	0	23.12	0
		1	49	23.73	0
		1	99	23.73	0
		50	0	22.59	1
		50	25	22.57	1
		50	50	22.56	1
		100	0	22.58	1
	HCH	1	0	23.93	0
		1	49	24.15	0
		1	99	22.93	0
		50	0	22.95	1
		50	25	22.99	1
		50	50	22.61	1
		100	0	22.74	1
16QAM	LCH	1	0	22.56	1
		1	49	22.88	1
		1	99	22.23	1
		50	0	21.38	2

		50	25	21.42	2
		50	50	21.52	2
		100	0	21.46	2
	MCH	1	0	22.41	1
		1	49	23.03	1
		1	99	23.04	1
		50	0	21.59	2
		50	25	21.61	2
		50	50	21.56	2
		100	0	21.55	2
	HCH	1	0	23.11	1
		1	49	23.23	1
		1	99	22.17	1
		50	0	21.89	2
		50	25	21.92	2
		50	50	21.58	2
		100	0	21.72	2

FDD-LTE Band 12:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.47	0
		1	3	23.56	0
		1	5	23.50	0
		3	0	23.50	0
		3	2	23.54	0
		3	3	23.52	0
		6	0	22.38	1
	MCH	1	0	23.45	0
		1	3	23.58	0
		1	5	23.46	0
		3	0	23.55	0
		3	2	23.57	0
		3	3	23.54	0
		6	0	22.52	1
	HCH	1	0	23.47	0
		1	3	23.54	0
		1	5	23.45	0
		3	0	23.56	0
		3	2	23.52	0
		3	3	23.52	0
		6	0	22.43	1
16QAM	LCH	1	0	22.66	1
		1	3	22.87	1
		1	5	22.74	1
		3	0	22.56	1
		3	2	22.61	1
		3	3	22.61	1
		6	0	21.50	2
	MCH	1	0	22.64	1
		1	3	22.71	1
		1	5	22.67	1
		3	0	22.63	1
		3	2	22.62	1
		3	3	22.63	1
		6	0	21.46	2
	HCH	1	0	22.76	1
		1	3	22.87	1

		1	5	22.78	1
		3	0	22.51	1
		3	2	22.48	1
		3	3	22.52	1
		6	0	21.40	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.40	0
		1	7	23.59	0
		1	14	23.38	0
		8	0	22.39	1
		8	4	22.46	1
		8	7	22.43	1
		15	0	22.41	1
	MCH	1	0	23.48	0
		1	7	23.75	0
		1	14	23.49	0
		8	0	22.47	1
		8	4	22.54	1
		8	7	22.48	1
		15	0	22.47	1
	HCH	1	0	23.49	0
		1	7	23.72	0
		1	14	23.49	0
		8	0	22.51	1
		8	4	22.53	1
		8	7	22.48	1
		15	0	22.49	1
16QAM	LCH	1	0	22.71	1
		1	7	22.90	1
		1	14	22.70	1
		8	0	21.50	2
		8	4	21.55	2
		8	7	21.47	2
		15	0	21.41	2
	MCH	1	0	22.81	1
		1	7	23.03	1
		1	14	22.85	1
		8	0	21.46	2
		8	4	21.49	2

		8	7	21.48	2
		15	0	21.46	2
	HCH	1	0	22.72	1
		1	7	22.97	1
		1	14	22.69	1
		8	0	21.43	2
		8	4	21.47	2
		8	7	21.43	2
		15	0	21.44	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.42	0
		1	12	23.58	0
		1	24	23.40	0
		12	0	22.42	1
		12	6	22.45	1
		12	13	22.43	1
		25	0	22.50	1
	MCH	1	0	23.42	0
		1	12	23.82	0
		1	24	23.44	0
		12	0	22.48	1
		12	6	22.54	1
		12	13	22.48	1
		25	0	22.50	1
	HCH	1	0	23.53	0
		1	12	23.77	0
		1	24	23.51	0
		12	0	22.48	1
		12	6	22.52	1
		12	13	22.42	1
		25	0	22.52	1
16QAM	LCH	1	0	22.64	1
		1	12	22.94	1
		1	24	22.60	1
		12	0	21.55	2
		12	6	21.56	2
		12	13	21.48	2
		25	0	21.49	2
	MCH	1	0	22.61	1

		1	12	23.03	1
		1	24	22.69	1
		12	0	21.56	2
		12	6	21.63	2
		12	13	21.54	2
		25	0	21.49	2
	HCH	1	0	22.64	1
		1	12	22.94	1
		1	24	22.60	1
		12	0	21.49	2
		12	6	21.55	2
		12	13	21.40	2
		25	0	21.50	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.43	0
		1	24	23.90	0
		1	49	23.50	0
		25	0	22.49	1
		25	12	22.50	1
		25	25	22.52	1
		50	0	22.48	1
	MCH	1	0	23.40	0
		1	24	23.64	0
		1	49	23.46	0
		25	0	22.45	1
		25	12	22.52	1
		25	25	22.51	1
		50	0	22.49	1
	HCH	1	0	23.53	0
		1	24	23.68	0
		1	49	23.51	0
		25	0	22.58	1
		25	12	22.56	1
		25	25	22.45	1
		50	0	22.49	1
16QAM	LCH	1	0	22.76	1
		1	24	22.83	1
		1	49	22.75	1
		25	0	21.50	2

		25	12	21.48	2
		25	25	21.52	2
		50	0	21.47	2
	MCH	1	0	22.77	1
		1	24	22.99	1
		1	49	22.87	1
		25	0	21.50	2
		25	12	21.51	2
		25	25	21.56	2
		50	0	21.48	2
	HCH	1	0	22.71	1
		1	24	22.92	1
		1	49	22.74	1
		25	0	21.57	2
		25	12	21.54	2
		25	25	21.46	2
		50	0	21.51	2

FDD-LTE Band 13:

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.16	0
		1	12	23.47	0
		1	24	23.18	0
		12	0	22.13	1
		12	6	22.23	1
		12	13	22.26	1
		25	0	22.24	1
	MCH	1	0	23.20	0
		1	12	23.35	0
		1	24	23.16	0
		12	0	22.14	1
		12	6	22.20	1
		12	13	22.11	1
		25	0	22.17	1
	HCH	1	0	23.18	0
		1	12	23.59	0
		1	24	23.23	0
		12	0	22.13	1
		12	6	22.25	1
		12	13	22.16	1
		25	0	22.22	1
16QAM	LCH	1	0	22.38	1
		1	12	22.74	1
		1	24	22.40	1
		12	0	21.22	2
		12	6	21.36	2
		12	13	21.37	2
		25	0	21.26	2
	MCH	1	0	22.46	1
		1	12	22.68	1
		1	24	22.40	1
		12	0	21.25	2
		12	6	21.37	2
		12	13	21.26	2
		25	0	21.17	2
	HCH	1	0	22.37	1
		1	12	22.47	1

		1	24	22.40	1
		12	0	21.21	2
		12	6	21.27	2
		12	13	21.24	2
		25	0	21.26	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
	MCH	1	0	23.66	0
		1	24	23.42	0
		1	49	23.22	0
		25	0	22.11	1
		25	12	22.24	1
		25	25	22.29	1
		50	0	22.20	1
	HCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
16QAM	LCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2
	MCH	1	0	22.44	1
		1	24	22.67	1
		1	49	22.47	1
		25	0	21.18	2
		25	12	21.27	2

		25	25	21.31	2
		50	0	21.20	2
	HCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2

FDD-LTE Band 17:

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.16	0
		1	12	23.47	0
		1	24	23.18	0
		12	0	22.13	1
		12	6	22.23	1
		12	13	22.26	1
		25	0	22.24	1
	MCH	1	0	23.20	0
		1	12	23.35	0
		1	24	23.16	0
		12	0	22.14	1
		12	6	22.20	1
		12	13	22.11	1
		25	0	22.17	1
	HCH	1	0	23.18	0
		1	12	23.59	0
		1	24	23.23	0
		12	0	22.13	1
		12	6	22.25	1
		12	13	22.16	1
		25	0	22.22	1
16QAM	LCH	1	0	22.38	1
		1	12	22.74	1
		1	24	22.40	1
		12	0	21.22	2
		12	6	21.36	2
		12	13	21.37	2

	MCH	25	0	21.26	2
		1	0	22.46	1
		1	12	22.68	1
		1	24	22.40	1
		12	0	21.25	2
		12	6	21.37	2
		12	13	21.26	2
		25	0	21.17	2
	HCH	1	0	22.37	1
		1	12	22.47	1
		1	24	22.40	1
		12	0	21.21	2
		12	6	21.27	2
		12	13	21.24	2
		25	0	21.26	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.66	0
		1	24	23.42	0
		1	49	23.22	0
		25	0	22.11	1
		25	12	22.24	1
		25	25	22.29	1
		50	0	22.20	1
	MCH	1	0	23.14	0
		1	24	23.39	0
		1	49	23.20	0
		25	0	22.13	1
		25	12	22.23	1
		25	25	22.24	1
		50	0	22.16	1
	HCH	1	0	23.16	0
		1	24	23.37	0
		1	49	23.23	0
		25	0	22.14	1
		25	12	22.24	1
		25	25	22.28	1
		50	0	22.15	1
16QAM	LCH	1	0	22.44	1
		1	24	22.67	1

		1	49	22.47	1
		25	0	21.18	2
		25	12	21.27	2
		25	25	21.31	2
		50	0	21.20	2
	MCH	1	0	22.44	1
		1	24	22.65	1
		1	49	22.52	1
		25	0	21.19	2
		25	12	21.31	2
		25	25	21.31	2
		50	0	21.18	2
	HCH	1	0	22.43	1
		1	24	22.68	1
		1	49	22.49	1
		25	0	21.16	2
		25	12	21.29	2
		25	25	21.31	2
		50	0	21.19	2

FDD-LTE Band 25:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.70	0
		1	3	23.91	0
		1	5	23.69	0
		3	0	23.69	0
		3	2	23.73	0
		3	3	23.66	0
		6	0	22.75	1
	MCH	1	0	22.81	0
		1	3	22.83	0
		1	5	22.79	0
		3	0	22.81	0
		3	2	22.80	0
		3	3	22.78	0
		6	0	21.84	1
	HCH	1	0	24.03	0
		1	3	24.20	0
		1	5	24.09	0
		3	0	24.05	0
		3	2	24.12	0
		3	3	24.05	0
		6	0	23.20	1
16QAM	LCH	1	0	22.79	1
		1	3	22.98	1
		1	5	22.81	1
		3	0	22.73	1
		3	2	22.77	1
		3	3	22.72	1
		6	0	21.66	2
	MCH	1	0	22.06	1
		1	3	22.35	1
		1	5	22.03	1
		3	0	21.71	1
		3	2	21.74	1
		3	3	21.72	1
		6	0	20.75	2
	HCH	1	0	23.09	1
		1	3	23.25	1

		1	5	23.11	1
		3	0	23.02	1
		3	2	23.03	1
		3	3	22.99	1
		6	0	22.16	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.66	0
		1	7	23.98	0
		1	14	23.70	0
		8	0	22.66	1
		8	4	22.73	1
		8	7	22.70	1
		15	0	22.65	1
	MCH	1	0	22.84	0
		1	7	22.86	0
		1	14	22.74	0
		8	0	21.79	1
		8	4	21.80	1
		8	7	21.76	1
		15	0	21.71	1
	HCH	1	0	23.98	0
		1	7	24.26	0
		1	14	24.04	0
		8	0	23.02	1
		8	4	23.10	1
		8	7	23.03	1
		15	0	23.00	1
16QAM	LCH	1	0	22.86	1
		1	7	23.10	1
		1	14	22.89	1
		8	0	21.66	2
		8	4	21.71	2
		8	7	21.67	2
		15	0	21.53	2
	MCH	1	0	22.10	1
		1	7	22.31	1
		1	14	22.07	1
		8	0	20.70	2
		8	4	20.72	2

		8	7	20.68	2
		15	0	20.60	2
	HCH	1	0	23.14	1
		1	7	23.33	1
		1	14	23.09	1
		8	0	21.91	2
		8	4	21.97	2
		8	7	21.88	2
		15	0	21.92	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.66	0
		1	12	23.89	0
		1	24	23.69	0
		12	0	22.60	1
		12	6	22.71	1
		12	13	22.67	1
		25	0	22.67	1
	MCH	1	0	22.87	0
		1	12	23.16	0
		1	24	22.71	0
		12	0	21.74	1
		12	6	21.76	1
		12	13	21.75	1
		25	0	21.75	1
	HCH	1	0	23.88	0
		1	12	24.33	0
		1	24	24.04	0
		12	0	22.95	1
		12	6	22.99	1
		12	13	22.87	1
		25	0	22.93	1
16QAM	LCH	1	0	22.80	1
		1	12	23.22	1
		1	24	22.82	1
		12	0	21.56	2
		12	6	21.66	2
		12	13	21.66	2
		25	0	21.59	2
	MCH	1	0	21.98	1

		1	12	22.23	1
		1	24	21.88	1
		12	0	20.72	2
		12	6	20.78	2
		12	13	20.75	2
		25	0	20.66	2
	HCH	1	0	22.94	1
		1	12	23.33	1
		1	24	23.08	1
		12	0	21.90	2
		12	6	21.93	2
		12	13	21.86	2
		25	0	21.88	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.67	0
		1	24	23.88	0
		1	49	23.67	0
		25	0	22.68	1
		25	12	22.75	1
		25	25	22.83	1
		50	0	22.72	1
	MCH	1	0	22.99	0
		1	24	22.95	0
		1	49	22.71	0
		25	0	21.81	1
		25	12	21.78	1
		25	25	21.86	1
		50	0	21.82	1
	HCH	1	0	23.70	0
		1	24	24.04	0
		1	49	24.00	0
		25	0	22.86	1
		25	12	22.88	1
		25	25	22.86	1
		50	0	22.84	1
16QAM	LCH	1	0	22.86	1
		1	24	23.05	1
		1	49	22.84	1
		25	0	21.58	2

		25	12	21.67	2
		25	25	21.75	2
		50	0	21.65	2
	MCH	1	0	22.26	1
		1	24	22.20	1
		1	49	21.99	1
		25	0	20.75	2
		25	12	20.71	2
		25	25	20.81	2
		50	0	20.76	2
	HCH	1	0	22.85	1
		1	24	23.21	1
		1	49	23.09	1
		25	0	21.77	2
		25	12	21.80	2
		25	25	21.80	2
		50	0	21.78	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.62	0
		1	37	23.92	0
		1	74	23.42	0
		37	0	22.70	1
		37	18	22.77	1
		37	38	22.79	1
		75	0	22.73	1
	MCH	1	0	23.02	0
		1	37	23.06	0
		1	74	22.63	0
		37	0	21.93	1
		37	18	21.84	1
		37	38	21.86	1
		75	0	21.89	1
	HCH	1	0	23.32	0
		1	37	24.00	0
		1	74	23.93	0
		37	0	22.60	1
		37	18	22.82	1
		37	38	22.89	1
		75	0	22.77	1

16QAM	LCH	1	0	22.82	1
		1	37	23.08	1
		1	74	22.63	1
		37	0	21.64	2
		37	18	21.67	2
		37	38	21.72	2
		75	0	21.63	2
	MCH	1	0	22.26	1
		1	37	22.28	1
		1	74	21.85	1
		37	0	20.91	2
		37	18	20.82	2
		37	38	20.87	2
		75	0	20.81	2
	HCH	1	0	22.51	1
		1	37	23.17	1
		1	74	23.02	1
		37	0	21.52	2
		37	18	21.72	2
		37	38	21.82	2
		75	0	21.71	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.96	0
		1	49	24.44	0
		1	99	23.20	0
		50	0	22.55	1
		50	25	22.67	1
		50	50	22.49	1
		100	0	22.53	1
	MCH	1	0	23.07	0
		1	49	23.02	0
		1	99	22.59	0
		50	0	21.90	1
		50	25	21.79	1
		50	50	21.88	1
		100	0	21.86	1
	HCH	1	0	22.76	0
		1	49	23.72	0
		1	99	23.71	0

		50	0	22.41	1
		50	25	22.58	1
		50	50	22.63	1
		100	0	22.49	1
16QAM	LCH	1	0	22.66	1
		1	49	23.01	1
		1	99	22.30	1
		50	0	21.43	2
		50	25	21.59	2
		50	50	21.41	2
		100	0	21.40	2
	MCH	1	0	22.31	1
		1	49	22.27	1
		1	99	21.87	1
		50	0	20.85	2
		50	25	20.77	2
		50	50	20.84	2
		100	0	20.79	2
	HCH	1	0	22.00	1
		1	49	22.94	1
		1	99	22.85	1
		50	0	21.36	2
		50	25	21.56	2
		50	50	21.58	2
		100	0	21.44	2

FDD-LTE Band 26(814-824MHz):

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.81	0
		1	3	22.88	0
		1	5	22.75	0
		3	0	22.81	0
		3	2	22.85	0
		3	3	22.77	0
		6	0	21.78	1
	MCH	1	0	22.87	0
		1	3	23.02	0
		1	5	22.92	0
		3	0	22.90	0
		3	2	22.94	0
		3	3	22.88	0
		6	0	21.98	1
	HCH	1	0	23.04	0
		1	3	23.25	0
		1	5	23.04	0
		3	0	23.10	0
		3	2	23.20	0
		3	3	23.14	0
		6	0	22.10	1
16QAM	LCH	1	0	22.00	1
		1	3	22.21	1
		1	5	21.93	1
		3	0	21.94	1
		3	2	21.94	1
		3	3	21.90	1
		6	0	20.78	2
	MCH	1	0	22.06	1
		1	3	22.21	1
		1	5	22.09	1
		3	0	21.81	1
		3	2	21.84	1
		3	3	21.81	1
		6	0	20.86	2
	HCH	1	0	22.17	1
		1	3	22.41	1

		1	5	22.24	1
		3	0	22.14	1
		3	2	22.19	1
		3	3	22.20	1
		6	0	21.22	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.75	0
		1	7	23.07	0
		1	14	22.78	0
		8	0	21.73	1
		8	4	21.85	1
		8	7	21.79	1
		15	0	21.76	1
	MCH	1	0	22.87	0
		1	7	23.24	0
		1	14	22.99	0
		8	0	21.93	1
		8	4	22.00	1
		8	7	21.95	1
		15	0	21.90	1
	HCH	1	0	23.06	0
		1	7	23.37	0
		1	14	23.14	0
		8	0	22.08	1
		8	4	22.09	1
		8	7	22.09	1
		15	0	22.04	1
16QAM	LCH	1	0	22.08	1
		1	7	22.27	1
		1	14	21.99	1
		8	0	20.83	2
		8	4	20.96	2
		8	7	20.86	2
		15	0	20.83	2
	MCH	1	0	22.12	1
		1	7	22.36	1
		1	14	22.19	1
		8	0	20.91	2
		8	4	20.94	2

		8	7	20.95	2
		15	0	20.91	2
	HCH	1	0	22.17	1
		1	7	22.45	1
		1	14	22.31	1
		8	0	21.00	2
		8	4	21.13	2
		8	7	21.06	2
		15	0	21.09	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.75	0
		1	12	23.15	0
		1	24	22.88	0
		12	0	21.55	1
		12	6	21.79	1
		12	13	21.67	1
		25	0	21.67	1
	MCH	1	0	22.76	0
		1	12	23.20	0
		1	24	22.99	0
		12	0	21.92	1
		12	6	21.93	1
		12	13	21.78	1
		25	0	21.86	1
	HCH	1	0	22.97	0
		1	12	23.47	0
		1	24	23.15	0
		12	0	22.05	1
		12	6	22.08	1
		12	13	22.06	1
		25	0	22.03	1
16QAM	LCH	1	0	22.02	1
		1	12	22.31	1
		1	24	21.98	1
		12	0	20.72	2
		12	6	20.92	2
		12	13	20.78	2
		25	0	20.72	2
	MCH	1	0	21.91	1

		1	12	22.32	1
		1	24	22.05	1
		12	0	21.08	2
		12	6	21.06	2
		12	13	20.91	2
		25	0	20.91	2
	HCH	1	0	21.96	1
		1	12	22.39	1
		1	24	22.23	1
		12	0	21.07	2
		12	6	21.08	2
		12	13	21.13	2
		25	0	21.12	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
	MCH	1	0	23.81	0
		1	24	23.05	0
		1	49	23.06	0
		25	0	21.81	1
		25	12	21.90	1
		25	25	21.93	1
		50	0	21.86	1
	HCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
16QAM	LCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2

		25	12	/	2
		25	25	/	2
		50	0	/	2
	MCH	1	0	22.07	1
		1	24	22.17	1
		1	49	22.26	1
		25	0	20.84	2
		25	12	20.95	2
		25	25	20.97	2
		50	0	20.85	2
	HCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2

FDD-LTE Band 26(824-849MHz):

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.97	0
		1	3	22.08	0
		1	5	21.97	0
		3	0	22.04	0
		3	2	22.09	0
		3	3	22.02	0
		6	0	21.00	1
	MCH	1	0	21.87	0
		1	3	21.97	0
		1	5	21.90	0
		3	0	21.98	0
		3	2	21.99	0
		3	3	21.98	0
		6	0	20.92	1
	HCH	1	0	21.90	0
		1	3	22.11	0
		1	5	21.95	0
		3	0	21.94	0
		3	2	22.02	0

		3	3	21.98	0
		6	0	20.97	1
16QAM	LCH	1	0	21.11	1
		1	3	21.29	1
		1	5	21.16	1
		3	0	21.11	1
		3	2	21.14	1
		3	3	21.10	1
		6	0	20.92	2
	MCH	1	0	21.24	1
		1	3	21.37	1
		1	5	21.21	1
		3	0	20.92	1
		3	2	20.99	1
		3	3	20.97	1
		6	0	20.94	2
	HCH	1	0	21.10	1
		1	3	21.21	1
		1	5	21.05	1
		3	0	20.99	1
		3	2	21.04	1
		3	3	21.05	1
		6	0	20.54	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.98	0
		1	7	22.28	0
		1	14	22.01	0
		8	0	21.03	1
		8	4	21.06	1
		8	7	21.03	1
		15	0	21.02	1
	MCH	1	0	21.98	0
		1	7	22.23	0
		1	14	21.96	0
		8	0	20.95	1
		8	4	20.99	1
		8	7	20.95	1
		15	0	20.96	1
	HCH	1	0	21.98	0

		1	7	22.25	0
		1	14	21.96	0
		8	0	20.96	1
		8	4	21.00	1
		8	7	20.91	1
		15	0	20.94	1
16QAM	LCH	1	0	21.21	1
		1	7	21.50	1
		1	14	21.26	1
		8	0	20.54	2
		8	4	20.67	2
		8	7	20.74	2
		15	0	20.83	2
	MCH	1	0	21.31	1
		1	7	21.45	1
		1	14	21.34	1
		8	0	20.90	2
		8	4	20.62	2
		8	7	20.97	2
		15	0	20.50	2
	HCH	1	0	21.19	1
		1	7	21.44	1
		1	14	21.12	1
		8	0	20.84	2
		8	4	20.94	2
		8	7	20.85	2
		15	0	20.92	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.96	0
		1	12	22.34	0
		1	24	22.02	0
		12	0	20.98	1
		12	6	21.06	1
		12	13	21.05	1
		25	0	21.06	1
	MCH	1	0	21.91	0
		1	12	22.26	0
		1	24	21.92	0
		12	0	20.95	1

		12	6	20.98	1
		12	13	20.92	1
		25	0	20.94	1
	HCH	1	0	22.03	0
		1	12	22.22	0
		1	24	21.95	0
		12	0	20.91	1
		12	6	20.93	1
		12	13	20.87	1
		25	0	20.97	1
16QAM	LCH	1	0	21.18	1
		1	12	21.40	1
		1	24	21.24	1
		12	0	20.60	2
		12	6	20.80	2
		12	13	20.56	2
		25	0	20.51	2
	MCH	1	0	21.14	1
		1	12	21.55	1
		1	24	21.11	1
		12	0	20.63	2
		12	6	20.58	2
		12	13	20.76	2
		25	0	20.72	2
	HCH	1	0	21.13	1
		1	12	21.31	1
		1	24	21.04	1
		12	0	20.91	2
		12	6	20.91	2
		12	13	20.91	2
		25	0	20.96	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.00	0
		1	24	22.17	0
		1	49	21.94	0
		25	0	21.09	1
		25	12	21.07	1
		25	25	21.13	1
		50	0	21.07	1

	MCH	1	0	21.95	0
		1	24	22.10	0
		1	49	21.94	0
		25	0	21.09	1
		25	12	21.01	1
		25	25	20.93	1
		50	0	20.98	1
	HCH	1	0	22.00	0
		1	24	22.24	0
		1	49	21.96	0
		25	0	21.21	1
		25	12	21.03	1
		25	25	21.13	1
		50	0	21.16	1
16QAM	LCH	1	0	21.27	1
		1	24	21.47	1
		1	49	21.22	1
		25	0	20.50	2
		25	12	20.62	2
		25	25	20.95	2
		50	0	20.89	2
	MCH	1	0	21.37	1
		1	24	21.46	1
		1	49	21.20	1
		25	0	20.53	2
		25	12	20.78	2
		25	25	20.96	2
		50	0	20.68	2
	HCH	1	0	21.20	1
		1	24	21.38	1
		1	49	21.17	1
		25	0	20.52	2
		25	12	20.57	2
		25	25	20.66	2
		50	0	20.82	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.37	0
		1	37	22.27	0
		1	74	21.79	0

		37	0	21.01	1
		37	18	21.08	1
		37	38	20.97	1
		75	0	21.03	1
	MCH	1	0	21.99	0
		1	37	22.13	0
		1	74	21.87	0
		37	0	20.98	1
		37	18	21.04	1
		37	38	20.94	1
		75	0	21.04	1
	HCH	1	0	21.91	0
		1	37	22.09	0
		1	74	21.80	0
		37	0	21.08	1
		37	18	21.06	1
		37	38	21.06	1
		75	0	21.11	1
16QAM	LCH	1	0	21.19	1
		1	37	21.37	1
		1	74	21.05	1
		37	0	20.78	2
		37	18	20.50	2
		37	38	20.62	2
		75	0	20.91	2
	MCH	1	0	21.26	1
		1	37	21.33	1
		1	74	21.07	1
		37	0	20.52	2
		37	18	20.56	2
		37	38	20.66	2
		75	0	20.81	2
	HCH	1	0	21.14	1
		1	37	21.26	1
		1	74	20.96	1
		37	0	20.68	2
		37	18	20.65	2
		37	38	20.73	2
		75	0	20.52	2

FDD-LTE Band 30:

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.15	0
		1	12	22.44	0
		1	24	22.13	0
		12	0	21.11	1
		12	6	21.19	1
		12	13	21.19	1
		25	0	21.19	1
	MCH	1	0	22.17	0
		1	12	22.49	0
		1	24	22.21	0
		12	0	21.14	1
		12	6	21.22	1
		12	13	21.18	1
		25	0	21.16	1
	HCH	1	0	22.13	0
		1	12	22.52	0
		1	24	22.17	0
		12	0	21.15	1
		12	6	21.20	1
		12	13	21.19	1
		25	0	21.17	1
16QAM	LCH	1	0	21.33	1
		1	12	21.59	1
		1	24	21.31	1
		12	0	20.68	2
		12	6	20.85	2
		12	13	20.54	2
		25	0	20.66	2
	MCH	1	0	21.49	1
		1	12	21.76	1
		1	24	21.48	1
		12	0	20.65	2
		12	6	20.50	2
		12	13	20.69	2
		25	0	20.78	2
	HCH	1	0	21.37	1
		1	12	21.71	1

		1	24	21.38	1
		12	0	20.57	2
		12	6	20.41	2
		12	13	20.50	2
		25	0	20.57	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
	MCH	1	0	22.56	0
		1	24	22.44	0
		1	49	22.17	0
		25	0	21.08	1
		25	12	21.18	1
		25	25	21.18	1
		50	0	21.14	1
	HCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
16QAM	LCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2
	MCH	1	0	21.39	1
		1	24	21.41	1
		1	49	21.45	1
		25	0	20.45	2
		25	12	20.51	2

		25	25	20.68	2
		50	0	20.71	2
	HCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2

FDD-LTE Band 40(2305-2315MHz):

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.23	0
		1	12	22.53	0
		1	24	22.15	0
		12	0	21.23	1
		12	6	21.30	1
		12	13	21.28	1
		25	0	21.30	1
	MCH	1	0	22.25	0
		1	12	22.60	0
		1	24	22.29	0
		12	0	21.26	1
		12	6	21.25	1
		12	13	21.26	1
		25	0	21.29	1
	HCH	1	0	22.25	0
		1	12	22.62	0
		1	24	22.28	0
		12	0	21.27	1
		12	6	21.31	1
		12	13	21.29	1
		25	0	21.29	1
16QAM	LCH	1	0	21.42	1
		1	12	21.71	1
		1	24	21.39	1
		12	0	20.58	2
		12	6	20.53	2
		12	13	20.37	2
		25	0	20.48	2
	MCH	1	0	21.56	1
		1	12	21.87	1
		1	24	21.57	1
		12	0	20.44	2
		12	6	20.41	2
		12	13	20.40	2
		25	0	20.42	2
	HCH	1	0	21.47	1
		1	12	21.81	1

		1	24	21.48	1
		12	0	20.57	2
		12	6	20.57	2
		12	13	20.51	2
		25	0	20.40	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
	MCH	1	0	22.68	0
		1	24	22.33	0
		1	49	22.32	0
		25	0	21.21	1
		25	12	21.31	1
		25	25	21.30	1
		50	0	21.26	1
	HCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
16QAM	LCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2
	MCH	1	0	21.52	1
		1	24	21.55	1
		1	49	21.52	1
		25	0	20.69	2
		25	12	20.52	2

		25	25	20.73	2
		50	0	20.77	2
	HCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2

FDD-LTE Band 40(2350 MHz -2360 MHz):

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.69	0
		1	12	22.96	0
		1	24	22.66	0
		12	0	21.66	1
		12	6	21.68	1
		12	13	21.69	1
		25	0	21.72	1
	MCH	1	0	22.66	0
		1	12	22.94	0
		1	24	22.63	0
		12	0	21.63	1
		12	6	21.66	1
		12	13	21.66	1
		25	0	21.67	1
	HCH	1	0	22.62	0
		1	12	22.90	0
		1	24	22.59	0
		12	0	21.59	1
		12	6	21.68	1
		12	13	21.67	1
		25	0	21.69	1
16QAM	LCH	1	0	21.87	1
		1	12	22.16	1
		1	24	21.84	1
		12	0	20.73	2
		12	6	20.78	2
		12	13	20.75	2

	MCH	25	0	20.72	2
		1	0	22.00	1
		1	12	22.26	1
		1	24	21.99	1
		12	0	20.74	2
		12	6	20.77	2
		12	13	20.77	2
		25	0	20.67	2
	HCH	1	0	21.90	1
		1	12	22.16	1
		1	24	21.89	1
		12	0	20.61	2
		12	6	20.68	2
		12	13	20.70	2
		25	0	20.72	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
	MCH	1	0	22.99	0
		1	24	22.79	0
		1	49	22.75	0
		25	0	21.76	1
		25	12	21.77	1
		25	25	21.84	1
		50	0	21.79	1
	HCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
16QAM	LCH	1	0	/	1
		1	24	/	1

		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2
	MCH	1	0	22.05	1
		1	24	22.05	1
		1	49	21.96	1
		25	0	20.75	2
		25	12	20.76	2
		25	25	20.82	2
		50	0	20.77	2
	HCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2

FDD-LTE Band 66:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.63	0
		1	3	22.80	0
		1	5	22.60	0
		3	0	22.64	0
		3	2	22.69	0
		3	3	22.66	0
		6	0	21.65	1
	MCH	1	0	22.32	0
		1	3	22.47	0
		1	5	22.33	0
		3	0	22.42	0
		3	2	22.39	0
		3	3	22.38	0
		6	0	21.36	1
	HCH	1	0	21.62	0
		1	3	21.79	0
		1	5	21.64	0
		3	0	21.65	0
		3	2	21.66	0
		3	3	21.65	0
		6	0	20.65	1
16QAM	LCH	1	0	21.83	1
		1	3	22.06	1
		1	5	21.83	1
		3	0	21.82	1
		3	2	21.82	1
		3	3	21.79	1
		6	0	20.66	2
	MCH	1	0	21.68	1
		1	3	21.88	1
		1	5	21.63	1
		3	0	21.39	1
		3	2	21.39	1
		3	3	21.42	1
		6	0	20.57	2
	HCH	1	0	20.84	1
		1	3	21.05	1

		1	5	20.84	1
		3	0	20.68	1
		3	2	20.68	1
		3	3	20.66	1
		6	0	20.68	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.75	0
		1	7	22.76	0
		1	14	22.77	0
		8	0	21.73	1
		8	4	21.74	1
		8	7	21.73	1
		15	0	21.72	1
	MCH	1	0	22.47	0
		1	7	22.46	0
		1	14	22.44	0
		8	0	21.46	1
		8	4	21.50	1
		8	7	21.43	1
		15	0	21.40	1
	HCH	1	0	21.81	0
		1	7	21.79	0
		1	14	21.75	0
		8	0	20.76	1
		8	4	20.74	1
		8	7	20.72	1
		15	0	20.70	1
16QAM	LCH	1	0	22.02	1
		1	7	22.01	1
		1	14	22.03	1
		8	0	20.80	2
		8	4	20.87	2
		8	7	20.82	2
		15	0	20.73	2
	MCH	1	0	21.83	1
		1	7	21.84	1
		1	14	21.81	1
		8	0	20.44	2
		8	4	20.41	2

		8	7	20.39	2
		15	0	20.39	2
	HCH	1	0	21.03	1
		1	7	20.99	1
		1	14	20.97	1
		8	0	20.62	2
		8	4	20.67	2
		8	7	20.57	2
		15	0	20.60	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.78	0
		1	12	23.02	0
		1	24	22.75	0
		12	0	21.72	1
		12	6	21.73	1
		12	13	21.72	1
		25	0	21.76	1
	MCH	1	0	22.48	0
		1	12	22.76	0
		1	24	22.40	0
		12	0	21.48	1
		12	6	21.50	1
		12	13	21.39	1
		25	0	21.45	1
	HCH	1	0	21.71	0
		1	12	22.01	0
		1	24	21.72	0
		12	0	20.65	1
		12	6	20.72	1
		12	13	20.70	1
		25	0	20.68	1
16QAM	LCH	1	0	22.01	1
		1	12	22.30	1
		1	24	21.98	1
		12	0	20.88	2
		12	6	20.91	2
		12	13	20.88	2
		25	0	20.78	2
	MCH	1	0	21.72	1

		1	12	22.02	1
		1	24	21.59	1
		12	0	20.55	2
		12	6	20.52	2
		12	13	20.42	2
		25	0	20.43	2
	HCH	1	0	20.95	1
		1	12	21.19	1
		1	24	20.92	1
		12	0	30.73	2
		12	6	20.78	2
		12	13	20.77	2
		25	0	20.64	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.80	0
		1	24	22.91	0
		1	49	22.73	0
		25	0	21.80	1
		25	12	21.77	1
		25	25	21.84	1
		50	0	21.81	1
	MCH	1	0	22.54	0
		1	24	22.64	0
		1	49	22.41	0
		25	0	21.64	1
		25	12	21.51	1
		25	25	21.42	1
		50	0	21.56	1
	HCH	1	0	21.97	0
		1	24	22.04	0
		1	49	21.77	0
		25	0	20.75	1
		25	12	20.77	1
		25	25	20.87	1
		50	0	20.78	1
16QAM	LCH	1	0	22.05	1
		1	24	22.20	1
		1	49	21.97	1
		25	0	20.84	2

		25	12	20.78	2
		25	25	20.89	2
		50	0	20.84	2
	MCH	1	0	21.90	1
		1	24	22.00	1
		1	49	21.77	1
		25	0	20.68	2
		25	12	20.54	2
		25	25	20.45	2
		50	0	20.59	2
	HCH	1	0	21.15	1
		1	24	21.23	1
		1	49	21.02	1
		25	0	20.70	2
		25	12	20.72	2
		25	25	20.82	2
		50	0	20.74	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.74	0
		1	37	22.81	0
		1	74	22.57	0
		37	0	21.80	1
		37	18	21.77	1
		37	38	21.82	1
		75	0	21.83	1
	MCH	1	0	22.53	0
		1	37	22.49	0
		1	74	22.30	0
		37	0	21.71	1
		37	18	21.55	1
		37	38	21.42	1
		75	0	21.59	1
	HCH	1	0	22.02	0
		1	37	21.88	0
		1	74	21.67	0
		37	0	20.92	1
		37	18	20.89	1
		37	38	20.90	1
		75	0	20.86	1

16QAM	LCH	1	0	22.02	1
		1	37	22.07	1
		1	74	21.84	1
		37	0	20.82	2
		37	18	20.86	2
		37	38	20.87	2
		75	0	20.84	2
	MCH	1	0	21.81	1
		1	37	21.75	1
		1	74	21.52	1
		37	0	20.66	2
		37	18	20.54	2
		37	38	20.39	2
		75	0	20.57	2
	HCH	1	0	21.27	1
		1	37	21.12	1
		1	74	20.90	1
		37	0	20.89	2
		37	18	20.89	2
		37	38	20.92	2
		75	0	20.82	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.66	0
		1	49	23.03	0
		1	99	22.55	0
		50	0	21.69	1
		50	25	21.73	1
		50	50	21.83	1
		100	0	21.81	1
	MCH	1	0	22.43	0
		1	49	22.71	0
		1	99	22.14	0
		50	0	21.80	1
		50	25	21.60	1
		50	50	21.32	1
		100	0	21.56	1
	HCH	1	0	21.86	0
		1	49	22.05	0
		1	99	21.42	0

		50	0	20.97	1
		50	25	20.95	1
		50	50	20.90	1
		100	0	20.95	1
16QAM	LCH	1	0	21.84	1
		1	49	22.18	1
		1	99	21.66	1
		50	0	20.72	2
		50	25	20.71	2
		50	50	20.74	2
		100	0	20.74	2
	MCH	1	0	21.77	1
		1	49	22.03	1
		1	99	21.47	1
		50	0	20.84	2
		50	25	20.62	2
		50	50	20.31	2
		100	0	20.54	2
	HCH	1	0	21.17	1
		1	49	21.33	1
		1	99	20.69	1
		50	0	20.94	2
		50	25	20.92	2
		50	50	20.88	2
		100	0	20.88	2

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(2.4G) - Maximum Average Power					
Test Mode	Data Rate	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up power (dBm)
802.11b	1Mbps	CH 01	2412	15.15	15.5
		CH 06	2437	15.00	15.5
		CH 11	2462	14.79	15.5
802.11g	6Mbps	CH 01	2412	13.98	14.5
		CH 06	2437	14.08	14.5
		CH 11	2462	13.71	14.5
802.11n (20MHz)	MCS0	CH 01	2412	14.38	15.0
		CH 06	2437	14.53	15.0
		CH 11	2462	13.35	15.0
802.11n (40MHz)	MCS0	CH 03	2422	13.11	13.5
		CH 06	2437	13.10	13.5
		CH 09	2452	13.17	13.5

WLAN(5.2G) – Conducted Power				
Test Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up power (dBm)
802.11a	CH 36	5180	12.21	12.5
	CH 40	5200	11.56	12.5
	CH 48	5240	11.12	12.5
802.11n (HT20)	CH 36	5180	11.44	11.5
	CH 40	5200	11.02	11.5
	CH 48	5240	11.24	11.5
802.11n (HT40)	CH 38	5190	10.96	11.5
	CH 46	5230	11.49	11.5

WLAN(5.3G) – Conducted Power				
Test Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up power (dBm)
802.11a	CH 52	5260	11.49	11.5
	CH 56	5280	11.49	11.5
	CH 64	5320	11.04	11.5
802.11n (HT20)	CH 52	5260	10.33	12.0

802.11n (HT40)	CH 56	5280	10.94	12.0
	CH 64	5320	11.89	12.0
	CH 54	5270	11.11	11.5
	CH 62	5310	11.08	11.5

WLAN(5.6G) – Conducted Power				
Test Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up power (dBm)
802.11a	CH 100	5500	10.38	10.5
	CH 120	5600	10.10	10.5
	CH 140	5700	9.75	10.5
802.11n (HT20)	CH 100	5500	10.09	10.5
	CH 120	5600	9.42	10.5
	CH 140	5700	9.11	10.5
802.11n (HT40)	CH 102	5510	10.45	11.5
	CH 118	5590	11.18	11.5
	CH 134	5670	9.22	11.5

WLAN(5.8G) – Conducted Power				
Test Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up power (dBm)
802.11a	CH 149	5745	11.14	11.5
	CH 157	5785	10.70	11.5
	CH 165	5825	10.11	11.5
802.11n (HT20)	CH 149	5745	10.11	10.5
	CH 157	5785	10.42	10.5
	CH 165	5825	10.49	10.5
802.11n (HT40)	CH 151	5755	10.96	11.0
	CH 159	5795	10.49	11.0

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 ≤ 1.2 W/kg.
4. Per KDB 248227 D01 v02r02, When multiple channel bandwidth configurations in a frequency band have the same

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specified maximum output power, the initial test configuration is determined by applying the following steps sequentially.

- 1) The largest channel bandwidth configuration is selected among the multiple configurations in a frequency band with the same specified maximum output power.
- 2) If multiple configurations have the same specified maximum output power and largest channel bandwidth, the lowest order modulation among the largest channel bandwidth configurations is selected.
- 3) If multiple configurations have the same specified maximum output power, largest channel bandwidth and lowest order modulation, the lowest data rate configuration among these configurations is selected.
- 4) When multiple transmission modes (802.11a/g/n/ac) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11a is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n.

Bluetooth - Maximum Average Power			
Test Mode	Data Rate	Average Power(dBm)	Tune-up power (dBm)
GFSK	1Mbps	5.178	5.5
Pi/4 QDPSK	2Mbps	4.530	5.5
8DPSK	3Mbps	4.703	5.5

Bluetooth - Maximum Average Power					
Test Mode	Data Rate	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up power (dBm)
BLE	1Mbps	CH 00	2402	5.173	5.5
		CH 19	2440	4.922	5.5
		CH 39	2480	4.019	5.5

Remark:

Bluetooth maximum output power is 5.178dBm and Maximum Tune-Up output power is 5.5dBm,. Per KDB 447498 D01 V06, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g

SAR and ≤ 7.5 for 10-g extremity SAR,16 where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz

- Power and distance are rounded to the nearest mW and mm before calculation¹⁷

- The result is rounded to one decimal place for comparison

Bluetooth:

Tune-Up Power (dBm)	Max. Power (mW)	Distance (mm)	Frequency (GHz)	Result	Limit
5.5	3.55	5	2.402	1.10	3

The exclusion thresholds is $1.10 < 3$, therefore, the RF exposure evaluation is not required.

9.2 Test Results for Standalone SAR Test

Head SAR

GSM850 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
1.	GSM	Right Cheek	190	836.6	31.76	32.0	1.057	0.195	0.206
2.	GSM	Right Tilted	190	836.6	31.76	32.0	1.057	0.102	0.108
3.	GSM	Left Cheek	190	836.6	31.76	32.0	1.057	0.207	0.219
4.	GSM	Left Tilted	190	836.6	31.76	32.0	1.057	0.114	0.120

GSM1900 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	M Hz					
5.	GSM	Right Cheek	512	1850.2	28.61	29.0	1.094	0.139	0.152
6.	GSM	Right Tilted	512	1850.2	28.61	29.0	1.094	0.078	0.085
7.	GSM	Left Cheek	512	1850.2	28.61	29.0	1.094	0.160	0.175
8.	GSM	Left Tilted	512	1850.2	28.61	29.0	1.094	0.092	0.101

GPRS850 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
9.	GPRS_4TX	Right Cheek	190	836.6	28.75	29.0	1.059	0.360	0.381
10.	GPRS_4TX	Right Tilted	190	836.6	28.75	29.0	1.059	0.195	0.207
11.	GPRS_4TX	Left Cheek	190	836.6	28.75	29.0	1.059	0.323	0.342
12.	GPRS_4TX	Left Tilted	190	836.6	28.75	29.0	1.059	0.173	0.183

GPRS1900 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	M Hz					
13.	GPRS_4TX	Right Cheek	512	1850.2	25.09	25.5	1.099	0.275	0.302
14.	GPRS_4TX	Right Tilted	512	1850.2	25.09	25.5	1.099	0.150	0.165
15.	GPRS_4TX	Left Cheek	512	1850.2	25.09	25.5	1.099	0.320	0.352
16.	GPRS_4TX	Left Tilted	512	1850.2	25.09	25.5	1.099	0.177	0.195

WCDMA Band 2 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
17.	RMC	Right Cheek	9538	1907.6	21.66	22.0	1.081	0.186	0.201
18.	RMC	Right Tilted	9538	1907.6	21.66	22.0	1.081	0.102	0.110
19.	RMC	Left Cheek	9538	1907.6	21.66	22.0	1.081	0.197	0.213
20.	RMC	Left Tilted	9538	1907.6	21.66	22.0	1.081	0.115	0.124

WCDMA Band 4 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
21.	RMC	Right Cheek	1513	1752.6	22.00	22.5	1.122	0.654	0.734
22.	RMC	Right Tilted	1513	1752.6	22.00	22.5	1.122	0.375	0.421
23.	RMC	Left Cheek	1513	1752.6	22.00	22.5	1.122	0.756	0.848
24.	RMC	Left Tilted	1513	1752.6	22.00	22.5	1.122	0.402	0.451
25.	RMC	Left Cheek	1312	1712.4	21.98	22.5	1.127	0.743	0.838
26.	RMC	Left Cheek	1412	1732.4	21.96	22.5	1.132	0.702	0.795

WCDMA Band 5 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
27.	RMC	Right Cheek	4183	836.4	22.31	22.5	1.045	0.219	0.229
28.	RMC	Right Tilted	4183	836.4	22.31	22.5	1.045	0.123	0.129
29.	RMC	Left Cheek	4183	836.4	22.31	22.5	1.045	0.208	0.217
30.	RMC	Left Tilted	4183	836.4	22.31	22.5	1.045	0.112	0.117

LTE Band 2– Head SAR Test								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Head	MHz	(dBm)	(dBm)			
31.	QPSK 20MHz 1RB	Right Cheek	1860.0	24.10	24.5	1.096	0.222	0.243
32.	QPSK 20MHz 1RB	Right Tilted	1860.0	24.10	24.5	1.096	0.125	0.137
33.	QPSK 20MHz 1RB	Left Cheek	1860.0	24.10	24.5	1.096	0.288	0.316
34.	QPSK 20MHz 1RB	Left Tilted	1860.0	24.10	24.5	1.096	0.156	0.171
35.	QPSK 20MHz 50%RB	Right Cheek	1860.0	24.10	24.5	1.096	0.183	0.201
36.	QPSK 20MHz 50%RB	Right Tilted	1860.0	24.10	24.5	1.096	0.104	0.114
37.	QPSK 20MHz 50%RB	Left Cheek	1860.0	24.10	24.5	1.096	0.235	0.258
38.	QPSK 20MHz 50%RB	Left Tilted	1860.0	24.10	24.5	1.096	0.137	0.150

LTE Band 4– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
39.	QPSK 20MHz 1RB	Right Cheek	1720.0	23.33	23.5	1.040	0.542	0.564
40.	QPSK 20MHz 1RB	Right Tilted	1720.0	23.33	23.5	1.040	0.288	0.299
41.	QPSK 20MHz 1RB	Left Cheek	1720.0	23.33	23.5	1.040	0.726	0.755
42.	QPSK 20MHz 1RB	Left Tilted	1720.0	23.33	23.5	1.040	0.376	0.391
43.	QPSK 20MHz 50%RB	Right Cheek	1720.0	23.33	23.5	1.040	0.412	0.428
44.	QPSK 20MHz 50%RB	Right Tilted	1720.0	23.33	23.5	1.040	0.231	0.240
45.	QPSK 20MHz 50%RB	Left Cheek	1720.0	23.33	23.5	1.040	0.597	0.621
46.	QPSK 20MHz 50%RB	Left Tilted	1720.0	23.33	23.5	1.040	0.315	0.328

LTE Band 5– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
47.	QPSK 10MHz 1RB	Right Cheek	829	23.67	24.0	1.079	0.267	0.288
48.	QPSK 10MHz 1RB	Right Tilted	829	23.67	24.0	1.079	0.145	0.156
49.	QPSK 10MHz 1RB	Left Cheek	829	23.67	24.0	1.079	0.262	0.283
50.	QPSK 10MHz 1RB	Left Tilted	829	23.67	24.0	1.079	0.140	0.151
51.	QPSK 10MHz 50%RB	Right Cheek	829	23.67	24.0	1.079	0.201	0.217
52.	QPSK 10MHz 50%RB	Right Tilted	829	23.67	24.0	1.079	0.116	0.125
53.	QPSK 10MHz 50%RB	Left Cheek	829	23.67	24.0	1.079	0.192	0.207
54.	QPSK 10MHz 50%RB	Left Tilted	829	23.67	24.0	1.079	0.103	0.111

LTE Band 7– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
55.	QPSK 20MHz 1RB	Right Cheek	2560	24.15	24.5	1.084	0.192	0.208
56.	QPSK 20MHz 1RB	Right Tilted	2560	24.15	24.5	1.084	0.105	0.114
57.	QPSK 20MHz 1RB	Left Cheek	2560	24.15	24.5	1.084	0.261	0.283
58.	QPSK 20MHz 1RB	Left Tilted	2560	24.15	24.5	1.084	0.142	0.154
59.	QPSK 20MHz 50%RB	Right Cheek	2560	24.15	24.5	1.084	0.165	0.179
60.	QPSK 20MHz 50%RB	Right Tilted	2560	24.15	24.5	1.084	0.091	0.099
61.	QPSK 20MHz 50%RB	Left Cheek	2560	24.15	24.5	1.084	0.234	0.254
62.	QPSK 20MHz 50%RB	Left Tilted	2560	24.15	24.5	1.084	0.125	0.135

LTE Band 12– Head SAR Test								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g

	Modulation, Bandwidth	Head	MHz	(dBm)	(dBm)			(W/kg)
63.	QPSK 10MHz 1RB	Right Cheek	704	23.90	24.0	1.023	0.157	0.161
64.	QPSK 10MHz 1RB	Right Tilted	704	23.90	24.0	1.023	0.075	0.077
65.	QPSK 10MHz 1RB	Left Cheek	704	23.90	24.0	1.023	0.148	0.151
66.	QPSK 10MHz 1RB	Left Tilted	704	23.90	24.0	1.023	0.068	0.070
67.	QPSK 10MHz 50%RB	Right Cheek	704	23.90	24.0	1.023	0.126	0.129
68.	QPSK 10MHz 50%RB	Right Tilted	704	23.90	24.0	1.023	0.06	0.061
69.	QPSK 10MHz 50%RB	Left Cheek	704	23.90	24.0	1.023	0.114	0.117
70.	QPSK 10MHz 50%RB	Left Tilted	704	23.90	24.0	1.023	0.058	0.059

LTE Band 13– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
71.	QPSK 10MHz 1RB	Right Cheek	782	23.66	24.0	1.081	0.144	0.156
72.	QPSK 10MHz 1RB	Right Tilted	782	23.66	24.0	1.081	0.083	0.090
73.	QPSK 10MHz 1RB	Left Cheek	782	23.66	24.0	1.081	0.144	0.156
74.	QPSK 10MHz 1RB	Left Tilted	782	23.66	24.0	1.081	0.078	0.084
75.	QPSK 10MHz 50%RB	Right Cheek	782	23.66	24.0	1.081	0.106	0.115
76.	QPSK 10MHz 50%RB	Right Tilted	782	23.66	24.0	1.081	0.054	0.058
77.	QPSK 10MHz 50%RB	Left Cheek	782	23.66	24.0	1.081	0.102	0.110
78.	QPSK 10MHz 50%RB	Left Tilted	782	23.66	24.0	1.081	0.051	0.055

LTE Band 25– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
79.	QPSK 20MHz 1RB	Right Cheek	1860	24.44	24.5	1.014	0.227	0.230
80.	QPSK 20MHz 1RB	Right Tilted	1860	24.44	24.5	1.014	0.135	0.137
81.	QPSK 20MHz 1RB	Left Cheek	1860	24.44	24.5	1.014	0.267	0.271
82.	QPSK 20MHz 1RB	Left Tilted	1860	24.44	24.5	1.014	0.154	0.156
83.	QPSK 20MHz 50%RB	Right Cheek	1860	24.44	24.5	1.014	0.197	0.200
84.	QPSK 20MHz 50%RB	Right Tilted	1860	24.44	24.5	1.014	0.110	0.112
85.	QPSK 20MHz 50%RB	Left Cheek	1860	24.44	24.5	1.014	0.226	0.229
86.	QPSK 20MHz 50%RB	Left Tilted	1860	24.44	24.5	1.014	0.132	0.134

LTE Band 26– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
87.	QPSK 10MHz 1RB	Right Cheek	831	23.81	24.0	1.045	0.214	0.224
88.	QPSK 10MHz 1RB	Right Tilted	831	23.81	24.0	1.045	0.115	0.120

89.	QPSK 10MHz 1RB	Left Cheek	831	23.81	24.0	1.045	0.222	0.232
90.	QPSK 10MHz 1RB	Left Tilted	831	23.81	24.0	1.045	0.121	0.126
91.	QPSK 15MHz 1RB	Right Cheek	821.5	22.37	22.5	1.030	0.226	0.233
92.	QPSK 15MHz 1RB	Right Tilted	821.5	22.37	22.5	1.030	0.124	0.128
93.	QPSK 15MHz 1RB	Left Cheek	821.5	22.37	22.5	1.030	0.228	0.235
94.	QPSK 15MHz 1RB	Left Tilted	821.5	22.37	22.5	1.030	0.130	0.134
95.	QPSK 15MHz 50%RB	Right Cheek	821.5	22.37	22.5	1.030	0.172	0.177
96.	QPSK 15MHz 50%RB	Right Tilted	821.5	22.37	22.5	1.030	0.091	0.094
97.	QPSK 15MHz 50%RB	Left Cheek	821.5	22.37	22.5	1.030	0.185	0.191
98.	QPSK 15MHz 50%RB	Left Tilted	821.5	22.37	22.5	1.030	0.102	0.105

LTE Band 30– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
99.	QPSK 10MHz 1RB	Right Cheek	2310	22.56	23.0	1.107	0.156	0.173
100.	QPSK 10MHz 1RB	Right Tilted	2310	22.56	23.0	1.107	0.085	0.094
101.	QPSK 10MHz 1RB	Left Cheek	2310	22.56	23.0	1.107	0.224	0.248
102.	QPSK 10MHz 1RB	Left Tilted	2310	22.56	23.0	1.107	0.118	0.131
103.	QPSK 10MHz 50%RB	Right Cheek	2310	22.56	23.0	1.107	0.102	0.113
104.	QPSK 10MHz 50%RB	Right Tilted	2310	22.56	23.0	1.107	0.056	0.062
105.	QPSK 10MHz 50%RB	Left Cheek	2310	22.56	23.0	1.107	0.168	0.186
106.	QPSK 10MHz 50%RB	Left Tilted	2310	22.56	23.0	1.107	0.09	0.100

LTE Band 40– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
107.	QPSK 10MHz 1RB	Right Cheek	2350	22.99	23.0	1.002	0.107	0.107
108.	QPSK 10MHz 1RB	Right Tilted	2350	22.99	23.0	1.002	0.061	0.061
109.	QPSK 10MHz 1RB	Left Cheek	2350	22.99	23.0	1.002	0.181	0.181
110.	QPSK 10MHz 1RB	Left Tilted	2350	22.99	23.0	1.002	0.098	0.098
111.	QPSK 10MHz 50%RB	Right Cheek	2350	22.99	23.0	1.002	0.076	0.076
112.	QPSK 10MHz 50%RB	Right Tilted	2350	22.99	23.0	1.002	0.040	0.040
113.	QPSK 10MHz 50%RB	Left Cheek	2350	22.99	23.0	1.002	0.143	0.143
114.	QPSK 10MHz 50%RB	Left Tilted	2350	22.99	23.0	1.002	0.079	0.079

LTE Band 66– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
115.	QPSK 10MHz 1RB	Right Cheek	1720	23.03	23.5	1.114	0.121	0.135
116.	QPSK 10MHz 1RB	Right Tilted	1720	23.03	23.5	1.114	0.075	0.084
117.	QPSK 10MHz 1RB	Left Cheek	1720	23.03	23.5	1.114	0.249	0.277
118.	QPSK 10MHz 1RB	Left Tilted	1720	23.03	23.5	1.114	0.132	0.147
119.	QPSK 10MHz 50%RB	Right Cheek	1720	23.03	23.5	1.114	0.106	0.118
120.	QPSK 10MHz 50%RB	Right Tilted	1720	23.03	23.5	1.114	0.06	0.067
121.	QPSK 10MHz 50%RB	Left Cheek	1720	23.03	23.5	1.114	0.218	0.243
122.	QPSK 10MHz 50%RB	Left Tilted	1720	23.03	23.5	1.114	0.110	0.123

WLAN 2.4GHz – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
123.	802.11b	Right Cheek	01	2412	15.15	15.5	1.084	0.211	0.229
124.	802.11b	Right Tilted	01	2412	15.15	15.5	1.084	0.196	0.212
125.	802.11b	Left Cheek	01	2412	15.15	15.5	1.084	0.323	0.350
126.	802.11b	Left Tilted	01	2412	15.15	15.5	1.084	0.301	0.326

WLAN 5GHz(Band 1) – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
127.	802.11a	Right Cheek	36	5180	12.21	12.5	1.069	0.191	0.204
128.	802.11a	Right Tilted	36	5180	12.21	12.5	1.069	0.168	0.180
129.	802.11a	Left Cheek	36	5180	12.21	12.5	1.069	0.141	0.151
130.	802.11a	Left Tilted	36	5180	12.21	12.5	1.069	0.120	0.128

WLAN 5GHz(Band 2) – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
131.	802.11n (HT20)	Right Cheek	64	5320	11.89	12.0	1.026	0.194	0.199
132.	802.11n (HT20)	Right Tilted	64	5320	11.89	12.0	1.026	0.171	0.175
133.	802.11n (HT20)	Left Cheek	64	5320	11.89	12.0	1.026	0.222	0.228
134.	802.11n (HT20)	Left Tilted	64	5320	11.89	12.0	1.026	0.208	0.213

WLAN 5GHz(Band 3) – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
135.	802.11n (HT40)	Right Cheek	118	5590	11.18	11.5	1.076	0.224	0.241
136.	802.11n (HT40)	Right Tilted	118	5590	11.18	11.5	1.076	0.215	0.231
137.	802.11n (HT40)	Left Cheek	118	5590	11.18	11.5	1.076	0.103	0.111
138.	802.11n (HT40)	Left Tilted	118	5590	11.18	11.5	1.076	0.090	0.097

WLAN 5GHz(Band 4) – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
139.	802.11a	Right Cheek	149	5745	11.14	11.5	1.086	0.399	0.433
140.	802.11a	Right Tilted	149	5745	11.14	11.5	1.086	0.356	0.387
141.	802.11a	Left Cheek	149	5745	11.14	11.5	1.086	0.132	0.143
142.	802.11a	Left Tilted	149	5745	11.14	11.5	1.086	0.122	0.133

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.

Body-worn SAR

GSM850 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
143.	GSM	Back	190	836.6	31.76	32.0	1.057	0.338	0.357
144.	GSM	Front	190	836.6	31.76	32.0	1.057	0.225	0.238

GSM1900 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
145.	GSM	Back	512	1850.2	28.61	29.0	1.094	0.150	0.164
146.	GSM	Front	512	1850.2	28.61	29.0	1.094	0.168	0.184

WCDMA Band 2 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
147.	RMC 12.2k	Back Side	9538	1907.6	21.66	22.0	1.081	0.233	0.252
148.	RMC 12.2k	Front Face	9538	1907.6	21.66	22.0	1.081	0.192	0.208

WCDMA Band 4 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
149.	RMC 12.2k	Back Side	1513	1752.6	22.00	22.5	1.122	0.703	0.789
150.	RMC 12.2k	Front Side	1513	1752.6	22.00	22.5	1.122	0.974	1.093
151.	RMC 12.2k	Front Side	1312	1712.4	21.98	22.5	1.127	0.825	0.930
152.	RMC 12.2k	Front Side	1412	1732.4	21.96	22.5	1.132	0.703	0.796

WCDMA Band 5 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
153.	RMC 12.2k	Back Side	4183	836.4	22.31	22.5	1.045	0.341	0.356
154.	RMC 12.2k	Front Side	4183	836.4	22.31	22.5	1.045	0.228	0.238

LTE Band 2–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
155.	QPSK 20MHz 1RB	Back Side	1860.0	24.10	24.5	1.096	0.334	0.366
156.	QPSK 20MHz 1RB	Front Side	1860.0	24.10	24.5	1.096	0.273	0.299
157.	QPSK 20MHz 50%RB	Back Side	1860.0	24.10	24.5	1.096	0.275	0.302
158.	QPSK 20MHz 50%RB	Front Side	1860.0	24.10	24.5	1.096	0.218	0.239

LTE Band 4–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
159.	QPSK 20MHz 1RB	Back Side	1720.0	23.33	23.5	1.040	0.576	0.599
160.	QPSK 20MHz 1RB	Front Side	1720.0	23.33	23.5	1.040	0.906	0.942
161.	QPSK 20MHz 50%RB	Back Side	1720.0	23.33	23.5	1.040	0.435	0.452
162.	QPSK 20MHz 50%RB	Front Side	1720.0	23.33	23.5	1.040	0.742	0.772
163.	QPSK 20MHz 1RB	Front Side	1732.5	22.25	23.5	1.334	0.857	1.143
164.	QPSK 20MHz 1RB	Front Side	1745.0	22.90	23.5	1.148	0.769	0.883

LTE Band 5–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
165.	QPSK 10MHz 1RB	Back Side	829	23.67	24.0	1.079	0.381	0.411
166.	QPSK 10MHz 1RB	Front Side	829	23.67	24.0	1.079	0.297	0.320
167.	QPSK 10MHz 50%RB	Back Side	829	23.67	24.0	1.079	0.312	0.337
168.	QPSK 10MHz 50%RB	Front Side	829	23.67	24.0	1.079	0.234	0.252

LTE Band 7–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
169.	QPSK 20MHz 1RB	Back Side	2560	24.15	24.5	1.084	0.978	1.060
170.	QPSK 20MHz 1RB	Front Side	2560	24.15	24.5	1.084	0.187	0.203
171.	QPSK 20MHz 50%RB	Back Side	2560	24.15	24.5	1.084	0.735	0.797
172.	QPSK 20MHz 50%RB	Front Side	2560	24.15	24.5	1.084	0.121	0.131
173.	QPSK 20MHz 1RB	Back Side	2510	23.77	24.5	1.183	0.927	1.097
174.	QPSK 20MHz 1RB	Back Side	2535	23.73	24.5	1.194	0.941	1.124

LTE Band 12–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
175.	QPSK 10MHz 1RB	Back Side	704	23.90	24.0	1.023	0.300	0.307
176.	QPSK 10MHz 1RB	Front Side	704	23.90	24.0	1.023	0.223	0.228
177.	QPSK 10MHz 50%RB	Back Side	704	23.90	24.0	1.023	0.238	0.244
178.	QPSK 10MHz 50%RB	Front Side	704	23.90	24.0	1.023	0.176	0.180

LTE Band 13–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
179.	QPSK 10MHz 1RB	Back Side	782	23.66	24.0	1.081	0.336	0.363
180.	QPSK 10MHz 1RB	Front Side	782	23.66	24.0	1.081	0.161	0.174
181.	QPSK 10MHz 50%RB	Back Side	782	23.66	24.0	1.081	0.254	0.275
182.	QPSK 10MHz 50%RB	Front Side	782	23.66	24.0	1.081	0.128	0.138

LTE Band 25–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
183.	QPSK 20MHz 1RB	Back Side	1860	24.44	24.5	1.014	0.34	0.345
184.	QPSK 20MHz 1RB	Front Side	1860	24.44	24.5	1.014	0.288	0.292
185.	QPSK 20MHz 50%RB	Back Side	1860	24.44	24.5	1.014	0.271	0.275
186.	QPSK 20MHz 50%RB	Front Side	1860	24.44	24.5	1.014	0.232	0.235

LTE Band 26–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
187.	QPSK 10MHz 1RB	Back Side	831	23.81	24.0	1.045	0.393	0.411
188.	QPSK 10MHz 1RB	Front Side	831	23.81	24.0	1.045	0.265	0.277
189.	QPSK 15MHz 1RB	Back Side	821.5	22.37	22.5	1.030	0.415	0.428
190.	QPSK 15MHz 1RB	Front Side	821.5	22.37	22.5	1.030	0.283	0.292
191.	QPSK 15MHz 50%RB	Back Side	821.5	22.37	22.5	1.030	0.342	0.352
192.	QPSK 15MHz 50%RB	Front Side	821.5	22.37	22.5	1.030	0.217	0.224

LTE Band 30–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					

193.	QPSK 10MHz 1RB	Back Side	2310	22.56	23.0	1.107	0.214	0.237
194.	QPSK 10MHz 1RB	Front Side	2310	22.56	23.0	1.107	0.128	0.142
195.	QPSK 10MHz 50%RB	Back Side	2310	22.56	23.0	1.107	0.171	0.189
196.	QPSK 10MHz 50%RB	Front Side	2310	22.56	23.0	1.107	0.095	0.105

LTE Band 40–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
197.	QPSK 10MHz 1RB	Back Side	2350	22.99	23.0	1.002	0.267	0.268
198.	QPSK 10MHz 1RB	Front Side	2350	22.99	23.0	1.002	0.094	0.094
199.	QPSK 10MHz 50%RB	Back Side	2350	22.99	23.0	1.002	0.198	0.198
200.	QPSK 10MHz 50%RB	Front Side	2350	22.99	23.0	1.002	0.097	0.097

LTE Band 66–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
201.	QPSK 20MHz 1RB	Back Side	1720	23.03	23.5	1.114	0.283	0.315
202.	QPSK 20MHz 1RB	Front Side	1720	23.03	23.5	1.114	0.343	0.382
203.	QPSK 20MHz 50%RB	Back Side	1720	23.03	23.5	1.114	0.216	0.241
204.	QPSK 20MHz 50%RB	Front Side	1720	23.03	23.5	1.114	0.265	0.295

WLAN 2.4GHz –Body SAR Test									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
205.	802.11b	Back Side	01	2412	15.15	15.5	1.084	0.152	0.165
206.	802.11b	Front Side	01	2412	15.15	15.5	1.084	0.097	0.105

WLAN 5GHz(Band 1) –Body SAR Test									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
207.	802.11a	Back Side	36	5180	12.21	12.5	1.069	0.424	0.453
208.	802.11a	Front Side	36	5180	12.21	12.5	1.069	0.190	0.203

WLAN 5GHz(Band 2) –Body SAR Test									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
209.	802.11 n (HT20)	Back Side	64	5320	11.89	12.0	1.026	0.191	0.196
210.	802.11 n (HT20)	Front Side	64	5320	11.89	12.0	1.026	0.137	0.141

WLAN 5GHz(Band 3) –Body SAR Test									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
211.	802.11 n (HT40)	Back Side	118	5590	11.18	11.5	1.076	0.114	0.123
212.	802.11 n (HT40)	Front Side	118	5590	11.18	11.5	1.076	0.142	0.153

WLAN 5GHz(Band 4) –Body SAR Test									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
213.	802.11a	Back Side	149	5745	11.14	11.5	1.086	0.137	0.149
214.	802.11a	Front Side	149	5745	11.14	11.5	1.086	0.123	0.134

Hotspot SAR

GSM850 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
215.	GPRS_4TX	Back Side	190	836.6	28.75	29.0	1.059	0.733	0.776
216.	GPRS_4TX	Front Side	190	836.6	28.75	29.0	1.059	0.341	0.361
217.	GPRS_4TX	Right side	190	836.6	28.75	29.0	1.059	0.119	0.126
218.	GPRS_4TX	Left side	190	836.6	28.75	29.0	1.059	0.209	0.221
219.	GPRS_4TX	Bottom side	190	836.6	28.75	29.0	1.059	0.112	0.119

GSM1900 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
220.	GPRS_4TX	Back Side	512	1850.2	25.09	25.5	1.099	0.425	0.467
221.	GPRS_4TX	Front Side	512	1850.2	25.09	25.5	1.099	0.281	0.309
222.	GPRS_4TX	Right side	512	1850.2	25.09	25.5	1.099	0.101	0.111
223.	GPRS_4TX	Left side	512	1850.2	25.09	25.5	1.099	0.158	0.174
224.	GPRS_4TX	Bottom side	512	1850.2	25.09	25.5	1.099	0.636	0.699

WCDMA Band 2 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
225.	RMC 12.2k	Back Side	9538	1907.6	21.66	22.0	1.081	0.233	0.252
226.	RMC 12.2k	Front Face	9538	1907.6	21.66	22.0	1.081	0.192	0.208
227.	RMC 12.2k	Right side	9538	1907.6	21.66	22.0	1.081	0.072	0.078
228.	RMC 12.2k	Left side	9538	1907.6	21.66	22.0	1.081	0.119	0.129
229.	RMC 12.2k	Bottom Side	9538	1907.6	21.66	22.0	1.081	0.465	0.503

WCDMA Band 4 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
230.	RMC 12.2k	Back Side	1513	1752.6	22.00	22.5	1.122	0.703	0.789
231.	RMC 12.2k	Front Side	1513	1752.6	22.00	22.5	1.122	0.974	1.093
232.	RMC 12.2k	Right side	1513	1752.6	22.00	22.5	1.122	0.243	0.273
233.	RMC 12.2k	Left side	1513	1752.6	22.00	22.5	1.122	0.492	0.552
234.	RMC 12.2k	Bottom side	1513	1752.6	22.00	22.5	1.122	0.851	0.955
235.	RMC 12.2k	Front Side	1312	1712.4	21.98	22.5	1.127	0.825	0.930

236.	RMC 12.2k	Front Side	1412	1732.4	21.96	22.5	1.132	0.703	0.796
237.	RMC 12.2k	Bottom side	1312	1712.4	21.98	22.5	1.127	0.843	0.950
238.	RMC 12.2k	Bottom side	1412	1732.4	21.96	22.5	1.132	0.798	0.904

WCDMA Band 5 – Body SAR Test (Gap: 10mm)

Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
239.	RMC 12.2k	Back Side	4183	836.4	22.31	22.5	1.045	0.341	0.356
240.	RMC 12.2k	Front Side	4183	836.4	22.31	22.5	1.045	0.228	0.238
241.	RMC 12.2k	Right side	4183	836.4	22.31	22.5	1.045	0.056	0.059
242.	RMC 12.2k	Left side	4183	836.4	22.31	22.5	1.045	0.115	0.120
243.	RMC 12.2k	Bottom side	4183	836.4	22.31	22.5	1.045	0.067	0.070

LTE Band 2–Body SAR Test (Gap: 10mm)

Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
244.	QPSK 20MHz 1RB	Back Side	1860.0	24.10	24.5	1.096	0.334	0.366
245.	QPSK 20MHz 1RB	Front Side	1860.0	24.10	24.5	1.096	0.273	0.299
246.	QPSK 20MHz 1RB	Right side	1860.0	24.10	24.5	1.096	0.117	0.128
247.	QPSK 20MHz 1RB	Left side	1860.0	24.10	24.5	1.096	0.127	0.139
248.	QPSK 20MHz 1RB	Bottom side	1860.0	24.10	24.5	1.096	0.420	0.461
249.	QPSK 20MHz 50%RB	Back Side	1860.0	24.10	24.5	1.096	0.275	0.302
250.	QPSK 20MHz 50%RB	Front Side	1860.0	24.10	24.5	1.096	0.218	0.239
251.	QPSK 20MHz 50%RB	Right side	1860.0	24.10	24.5	1.096	0.096	0.105
252.	QPSK 20MHz 50%RB	Left side	1860.0	24.10	24.5	1.096	0.102	0.112
253.	QPSK 20MHz 50%RB	Bottom side	1860.0	24.10	24.5	1.096	0.366	0.401

LTE Band 4–Body SAR Test (Gap: 10mm)

Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
254.	QPSK 20MHz 1RB	Back Side	1720.0	23.33	23.5	1.040	0.576	0.599
255.	QPSK 20MHz 1RB	Front Side	1720.0	23.33	23.5	1.040	0.906	0.942
256.	QPSK 20MHz 1RB	Right side	1720.0	23.33	23.5	1.040	0.295	0.307
257.	QPSK 20MHz 1RB	Left side	1720.0	23.33	23.5	1.040	0.328	0.341
258.	QPSK 20MHz 1RB	Bottom side	1720.0	23.33	23.5	1.040	0.677	0.704
259.	QPSK 20MHz 50%RB	Back Side	1720.0	23.33	23.5	1.040	0.435	0.452
260.	QPSK 20MHz 50%RB	Front Side	1720.0	23.33	23.5	1.040	0.742	0.772
261.	QPSK 20MHz 50%RB	Right side	1720.0	23.33	23.5	1.040	0.201	0.209
262.	QPSK 20MHz 50%RB	Left side	1720.0	23.33	23.5	1.040	0.227	0.236

263.	QPSK 20MHz 50%RB	Bottom side	1720.0	23.33	23.5	1.040	0.558	0.580
264.	QPSK 20MHz 1RB	Front Side	1732.5	22.25	23.5	1.334	0.857	1.143
265.	QPSK 20MHz 1RB	Front Side	1745.0	22.90	23.5	1.148	0.769	0.883

LTE Band 5–Body SAR Test (Gap: 10mm)

Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
266.	QPSK 10MHz 1RB	Back Side	829	23.67	24.0	1.079	0.381	0.411
267.	QPSK 10MHz 1RB	Front Side	829	23.67	24.0	1.079	0.297	0.320
268.	QPSK 10MHz 1RB	Right side	829	23.67	24.0	1.079	0.122	0.132
269.	QPSK 10MHz 1RB	Left side	829	23.67	24.0	1.079	0.156	0.168
270.	QPSK 10MHz 1RB	Bottom side	829	23.67	24.0	1.079	0.080	0.086
271.	QPSK 10MHz 50%RB	Back Side	829	23.67	24.0	1.079	0.312	0.337
272.	QPSK 10MHz 50%RB	Front Side	829	23.67	24.0	1.079	0.234	0.252
273.	QPSK 10MHz 50%RB	Right side	829	23.67	24.0	1.079	0.085	0.092
274.	QPSK 10MHz 50%RB	Left side	829	23.67	24.0	1.079	0.109	0.118
275.	QPSK 10MHz 50%RB	Bottom side	829	23.67	24.0	1.079	0.062	0.067

LTE Band 7–Body SAR Test (Gap: 10mm)

Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
276.	QPSK 20MHz 1RB	Back Side	2560	24.15	24.5	1.084	0.978	1.060
277.	QPSK 20MHz 1RB	Front Side	2560	24.15	24.5	1.084	0.187	0.203
278.	QPSK 20MHz 1RB	Right side	2560	24.15	24.5	1.084	0.048	0.052
279.	QPSK 20MHz 1RB	Left side	2560	24.15	24.5	1.084	0.265	0.287
280.	QPSK 20MHz 1RB	Bottom side	2560	24.15	24.5	1.084	0.720	0.780
281.	QPSK 20MHz 50%RB	Back Side	2560	24.15	24.5	1.084	0.735	0.797
282.	QPSK 20MHz 50%RB	Front Side	2560	24.15	24.5	1.084	0.121	0.131
283.	QPSK 20MHz 50%RB	Right side	2560	24.15	24.5	1.084	0.030	0.033
284.	QPSK 20MHz 50%RB	Left side	2560	24.15	24.5	1.084	0.201	0.218
285.	QPSK 20MHz 50%RB	Bottom side	2560	24.15	24.5	1.084	0.586	0.635
286.	QPSK 20MHz 1RB	Back Side	2510	23.77	24.5	1.183	0.927	1.097
287.	QPSK 20MHz 1RB	Back Side	2535	23.73	24.5	1.194	0.941	1.124

LTE Band 12–Body SAR Test (Gap: 10mm)

Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
288.	QPSK 10MHz 1RB	Back Side	704	23.90	24.0	1.023	0.300	0.307
289.	QPSK 10MHz 1RB	Front Side	704	23.90	24.0	1.023	0.223	0.228

290.	QPSK 10MHz 1RB	Right side	704	23.90	24.0	1.023	0.057	0.058
291.	QPSK 10MHz 1RB	Left side	704	23.90	24.0	1.023	0.066	0.068
292.	QPSK 10MHz 1RB	Bottom side	704	23.90	24.0	1.023	0.054	0.055
293.	QPSK 10MHz 50%RB	Back Side	704	23.90	24.0	1.023	0.238	0.244
294.	QPSK 10MHz 50%RB	Front Side	704	23.90	24.0	1.023	0.176	0.180
295.	QPSK 10MHz 50%RB	Right side	704	23.90	24.0	1.023	0.042	0.043
296.	QPSK 10MHz 50%RB	Left side	704	23.90	24.0	1.023	0.053	0.054
297.	QPSK 10MHz 50%RB	Bottom side	704	23.90	24.0	1.023	0.040	0.041

LTE Band 13–Body SAR Test (Gap: 10mm)

Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
298.	QPSK 10MHz 1RB	Back Side	782	23.66	24.0	1.081	0.336	0.363
299.	QPSK 10MHz 1RB	Front Side	782	23.66	24.0	1.081	0.161	0.174
300.	QPSK 10MHz 1RB	Right side	782	23.66	24.0	1.081	0.072	0.078
301.	QPSK 10MHz 1RB	Left side	782	23.66	24.0	1.081	0.094	0.102
302.	QPSK 10MHz 1RB	Bottom side	782	23.66	24.0	1.081	0.06	0.065
303.	QPSK 10MHz 50%RB	Back Side	782	23.66	24.0	1.081	0.254	0.275
304.	QPSK 10MHz 50%RB	Front Side	782	23.66	24.0	1.081	0.128	0.138
305.	QPSK 10MHz 50%RB	Right side	782	23.66	24.0	1.081	0.055	0.059
306.	QPSK 10MHz 50%RB	Left side	782	23.66	24.0	1.081	0.072	0.078
307.	QPSK 10MHz 50%RB	Bottom side	782	23.66	24.0	1.081	0.051	0.055

LTE Band 25–Body SAR Test (Gap: 10mm)

Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
308.	QPSK 20MHz 1RB	Back Side	1860	24.44	24.5	1.014	0.34	0.345
309.	QPSK 20MHz 1RB	Front Side	1860	24.44	24.5	1.014	0.288	0.292
310.	QPSK 20MHz 1RB	Right side	1860	24.44	24.5	1.014	0.109	0.111
311.	QPSK 20MHz 1RB	Left side	1860	24.44	24.5	1.014	0.089	0.090
312.	QPSK 20MHz 1RB	Bottom side	1860	24.44	24.5	1.014	0.455	0.461
313.	QPSK 20MHz 50%RB	Back Side	1860	24.44	24.5	1.014	0.271	0.275
314.	QPSK 20MHz 50%RB	Front Side	1860	24.44	24.5	1.014	0.232	0.235
315.	QPSK 20MHz 50%RB	Right side	1860	24.44	24.5	1.014	0.084	0.085
316.	QPSK 20MHz 50%RB	Left side	1860	24.44	24.5	1.014	0.071	0.072
317.	QPSK 20MHz 50%RB	Bottom side	1860	24.44	24.5	1.014	0.364	0.369

LTE Band 26–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
318.	QPSK 10MHz 1RB	Back Side	831	23.81	24.0	1.045	0.393	0.411
319.	QPSK 10MHz 1RB	Front Side	831	23.81	24.0	1.045	0.265	0.277
320.	QPSK 10MHz 1RB	Right side	831	23.81	24.0	1.045	0.119	0.124
321.	QPSK 10MHz 1RB	Left side	831	23.81	24.0	1.045	0.171	0.179
322.	QPSK 10MHz 1RB	Bottom side	831	23.81	24.0	1.045	0.084	0.088
323.	QPSK 15MHz 1RB	Back Side	821.5	22.37	22.5	1.030	0.415	0.428
324.	QPSK 15MHz 1RB	Front Side	821.5	22.37	22.5	1.030	0.283	0.292
325.	QPSK 15MHz 1RB	Right side	821.5	22.37	22.5	1.030	0.124	0.128
326.	QPSK 15MHz 1RB	Left side	821.5	22.37	22.5	1.030	0.182	0.188
327.	QPSK 15MHz 1RB	Bottom side	821.5	22.37	22.5	1.030	0.081	0.083
328.	QPSK 15MHz 50%RB	Back Side	821.5	22.37	22.5	1.030	0.342	0.352
329.	QPSK 15MHz 50%RB	Front Side	821.5	22.37	22.5	1.030	0.217	0.224
330.	QPSK 15MHz 50%RB	Right side	821.5	22.37	22.5	1.030	0.084	0.087
331.	QPSK 15MHz 50%RB	Left side	821.5	22.37	22.5	1.030	0.105	0.108
332.	QPSK 15MHz 50%RB	Bottom side	821.5	22.37	22.5	1.030	0.070	0.072

LTE Band 30–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
333.	QPSK 10MHz 1RB	Back Side	2310	22.56	23.0	1.107	0.214	0.237
334.	QPSK 10MHz 1RB	Front Side	2310	22.56	23.0	1.107	0.128	0.142
335.	QPSK 10MHz 1RB	Right side	2310	22.56	23.0	1.107	0.025	0.028
336.	QPSK 10MHz 1RB	Left side	2310	22.56	23.0	1.107	0.110	0.122
337.	QPSK 10MHz 1RB	Bottom side	2310	22.56	23.0	1.107	0.388	0.429
338.	QPSK 10MHz 50%RB	Back Side	2310	22.56	23.0	1.107	0.171	0.189
339.	QPSK 10MHz 50%RB	Front Side	2310	22.56	23.0	1.107	0.095	0.105
340.	QPSK 10MHz 50%RB	Right side	2310	22.56	23.0	1.107	0.018	0.020
341.	QPSK 10MHz 50%RB	Left side	2310	22.56	23.0	1.107	0.087	0.096
342.	QPSK 10MHz 50%RB	Bottom side	2310	22.56	23.0	1.107	0.314	0.347

LTE Band 40–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
343.	QPSK 10MHz 1RB	Back Side	2350	22.99	23.0	1.002	0.267	0.268
344.	QPSK 10MHz 1RB	Front Side	2350	22.99	23.0	1.002	0.094	0.094
345.	QPSK 10MHz 1RB	Right side	2350	22.99	23.0	1.002	0.018	0.018

346.	QPSK 10MHz 1RB	Left side	2350	22.99	23.0	1.002	0.096	0.096
347.	QPSK 10MHz 1RB	Bottom side	2350	22.99	23.0	1.002	0.385	0.386
348.	QPSK 10MHz 50%RB	Back Side	2350	22.99	23.0	1.002	0.198	0.198
349.	QPSK 10MHz 50%RB	Front Side	2350	22.99	23.0	1.002	0.097	0.097
350.	QPSK 10MHz 50%RB	Right side	2350	22.99	23.0	1.002	0.019	0.019
351.	QPSK 10MHz 50%RB	Left side	2350	22.99	23.0	1.002	0.091	0.091
352.	QPSK 10MHz 50%RB	Bottom side	2350	22.99	23.0	1.002	0.326	0.327

LTE Band 66–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
353.	QPSK 20MHz 1RB	Back Side	1720	23.03	23.5	1.114	0.283	0.315
354.	QPSK 20MHz 1RB	Front Side	1720	23.03	23.5	1.114	0.343	0.382
355.	QPSK 20MHz 1RB	Right side	1720	23.03	23.5	1.114	0.150	0.167
356.	QPSK 20MHz 1RB	Left side	1720	23.03	23.5	1.114	0.164	0.183
357.	QPSK 20MHz 1RB	Bottom side	1720	23.03	23.5	1.114	0.398	0.443
358.	QPSK 20MHz 50%RB	Back Side	1720	23.03	23.5	1.114	0.216	0.241
359.	QPSK 20MHz 50%RB	Front Side	1720	23.03	23.5	1.114	0.265	0.295
360.	QPSK 20MHz 50%RB	Right side	1720	23.03	23.5	1.114	0.102	0.114
361.	QPSK 20MHz 50%RB	Left side	1720	23.03	23.5	1.114	0.108	0.120
362.	QPSK 20MHz 50%RB	Bottom side	1720	23.03	23.5	1.114	0.325	0.362

WLAN 2.4GHz –Body SAR Test									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
363.	802.11b	Back Side	01	2412	15.15	15.5	1.084	0.152	0.165
364.	802.11b	Front Side	01	2412	15.15	15.5	1.084	0.097	0.105
365.	802.11b	Right side	01	2412	15.15	15.5	1.084	0.087	0.094
366.	802.11b	Top side	01	2412	15.15	15.5	1.084	0.133	0.144

WLAN 5GHz(Band 1) –Body SAR Test									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
367.	802.11a	Back Side	36	5180	12.21	12.5	1.069	0.424	0.453
368.	802.11a	Front Side	36	5180	12.21	12.5	1.069	0.190	0.203
369.	802.11a	Right side	36	5180	12.21	12.5	1.069	0.234	0.250
370.	802.11a	Top side	36	5180	12.21	12.5	1.069	0.148	0.158

WLAN 5GHz(Band 2) –Body SAR Test									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
371.	802.11 n (HT20)	Back Side	64	5320	11.89	12.0	1.026	0.191	0.196
372.	802.11 n (HT20)	Front Side	64	5320	11.89	12.0	1.026	0.137	0.141
373.	802.11 n (HT20)	Right side	64	5320	11.89	12.0	1.026	0.189	0.194
374.	802.11 n (HT20)	Top side	64	5320	11.89	12.0	1.026	0.177	0.182

WLAN 5GHz(Band 3) –Body SAR Test									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
375.	802.11 n (HT40)	Back Side	118	5590	11.18	11.5	1.076	0.114	0.123
376.	802.11 n (HT40)	Front Side	118	5590	11.18	11.5	1.076	0.142	0.153
377.	802.11 n (HT40)	Right side	118	5590	11.18	11.5	1.076	0.225	0.242
378.	802.11 n (HT40)	Top side	118	5590	11.18	11.5	1.076	0.161	0.173

WLAN 5GHz(Band 4) –Body SAR Test									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
379.	802.11a	Back Side	149	5745	11.14	11.5	1.086	0.137	0.149
380.	802.11a	Front Side	149	5745	11.14	11.5	1.086	0.123	0.134
381.	802.11a	Right side	149	5745	11.14	11.5	1.086	0.491	0.533
382.	802.11a	Top side	149	5745	11.14	11.5	1.086	0.124	0.135

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	Head SAR	Body SAR
1	GSM(Voice/Data) + WLAN(2.4G)(Data)	Yes	Yes
2	WCDMA (Voice/Data)+ (2.4G)(Data)	Yes	Yes
3	LTE(Data) + (2.4G)(Data)	Yes	Yes
4	GSM(Voice/Data) + WLAN(5G)(Data)	Yes	Yes
5	WCDMA (Voice/Data)+ (5G)(Data)	Yes	Yes
6	LTE(Data) + (5G)(Data)	Yes	Yes
7	GSM(Voice/Data) + Bluetooth(Data)	Yes	Yes
8	WCDMA (Voice/Data) + Bluetooth(Data)	Yes	Yes
9	LTE(Data) + Bluetooth(Data)	Yes	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:

$$(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})}/x] \text{ W/kg}$$
for test separation distances $\leq 50 \text{ mm}$;
where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.
For simultaneous transmission analysis, Bluetooth SAR is estimated per KDB 447498 D01 v06 as below:

Bluetooth:

Tune-Up Power (dBm)	Max. Power (mW)	Distance (mm)	Frequency (GHz)	X	SAR(1g) 5mm	SAR(1g) 10mm
5.5	3.55	5/10	2.402	5.5	0.200	0.100

4. The maximum SAR summation is calculated based on the same configuration and test position.

Head SAR**WWAN and WLAN**

	WWAN		WLAN(2.4G)	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Right Cheek	WCDMA Band 4	0.734	0.229	0.963
Right Tilted	WCDMA Band 4	0.421	0.212	0.633
Left Cheek	WCDMA Band 4	0.848	0.350	1.198
Left Tilted	WCDMA Band 4	0.451	0.326	0.777

	WWAN		WLAN(2.4G)	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Right Cheek	WCDMA Band 4	0.734	0.433	1.167
Right Tilted	WCDMA Band 4	0.421	0.387	0.808
Left Cheek	WCDMA Band 4	0.848	0.228	1.076
Left Tilted	WCDMA Band 4	0.451	0.213	0.664

WWAN and Bluetooth

	WWAN		Bluetooth	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Right Cheek	WCDMA Band 4	0.734	0.200	0.934
Right Tilted	WCDMA Band 4	0.421	0.200	0.621
Left Cheek	WCDMA Band 4	0.848	0.200	1.048
Left Tilted	WCDMA Band 4	0.451	0.200	0.651

Body-worn SAR**WWAN and WLAN**

	WWAN		WLAN(2.4G)	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Back	LTE Band 7	1.124	0.165	1.289
Front	LTE Band 4	1.143	0.105	1.248

	WWAN		WLAN(5G)	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Back	LTE Band 7	1.124	0.453	1.577
Front	LTE Band 4	1.143	0.203	1.346

WWAN and Bluetooth

	WWAN		Bluetooth	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Back	LTE Band 7	1.124	0.100	1.224
Front	LTE Band 4	1.143	0.100	1.243

Hotspot SAR**WWAN and WLAN**

	WWAN		WLAN(2.4G)	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Back	LTE Band 7	1.124	0.165	1.289
Front	LTE Band 4	1.143	0.105	1.248
Right side	LTE Band 4	0.307	0.094	0.401
Left side	LTE Band 4	0.341	-	0.341
Bottom side	LTE Band 7	0.780	-	0.780
Top side	-	-	0.144	0.144

	WWAN		WLAN(5G)	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Back	LTE Band 7	1.124	0.453	1.577
Front	LTE Band 4	1.143	0.203	1.346
Right side	LTE Band 4	0.307	0.533	0.840
Left side	LTE Band 4	0.341	-	0.341
Bottom side	LTE Band 7	0.780	-	0.780
Top side	-	-	0.182	0.182

WWAN and Bluetooth

	WWAN		Bluetooth	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Back	LTE Band 7	1.124	0.100	1.224
Front	LTE Band 4	1.143	0.100	1.243
Right side	LTE Band 4	0.307	0.100	0.407
Left side	LTE Band 4	0.341	-	0.341
Bottom side	LTE Band 7	0.780	-	0.780
Top side	-	-	0.100	0.100

10. Measurement Uncertainty

10.1 Uncertainty for EUT 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	1	7.00	7.00	∞
Axial Isotropy	E.2.2	2.5	R	$\sqrt{3}$	$(1_{Cp})^{1/2}$	$(1_{Cp})^{1/2}$	1.02	1.02	∞
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$	$(Cp)^{1/2}$	$(Cp)^{1/2}$	1.63	1.63	∞
Boundary effect	E.2.3	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	E.2.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
System detection limits	E.2.5	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.02	∞
Reponse Time	E.2.7	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Integration Time	E.2.8	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
RF ambient Conditions – Noise	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient Conditions - Reflections	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	E.5	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Test Sample Related									
Test sample positioning	E.4.2	0.03	N	1	1	1	0.03	0.03	N-1
Device Holder Uncertainty	E.4.1	5.00	N	1	1	1	5.00	5.00	
Output power Variation - SAR drift measurement	E.2.9	12.02	R	$\sqrt{3}$	1	1	6.94	6.94	∞
SAR scaling	E6.5	0.0	R	$\sqrt{3}$	1	1	0.0	0.0	∞
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E3.2	1.9	R	$\sqrt{3}$	1	0.84	1.10	0.90	∞

Liquid conductivity - deviation from target value	E.3.2	5.00	R	$\sqrt{3}$	0.64	0.43	1.85	1.24	∞
Liquid conductivity - measurement uncertainty	E.3.3	5.00	N	1	0.64	0.43	3.20	2.15	∞
Liquid permittivity - deviation from target value	E.3.2	0.37	R	$\sqrt{3}$	0.6	0.49	0.13	0.10	∞
Liquid permittivity - measurement uncertainty	E.3.3	10.00	N	1	0.6	0.49	6.00	4.90	∞
Combined Standard Uncertainty			RSS				12.98	12.53	
Expanded Uncertainty (95% Confidence interval)			K=2				25.32	24.43	

10.2 Uncertainty for System Performance Check

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	1	7.00	7.00	∞
Axial Isotropy	E.2.2	2.5	R	$\sqrt{3}$	$(1_Cp)^{1/2}$	$(1_Cp)^{1/2}$	1.02	1.02	∞
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$	$(Cp)^{1/2}$	$(Cp)^{1/2}$	1.63	1.63	∞
Boundary effect	E.2.3	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	E.2.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
System detection limits	E.2.5	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation response	E.2.5	0	R	$\sqrt{3}$	0	0	0.0	0.0	∞
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.02	∞
Reponse Time	E.2.7	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Integration Time	E.2.8	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
RF ambient Conditions – Noise	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient Conditions - Reflections	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Extrapolation, interpolation and	E.5.2	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞

integration Algorithms for Max. SAR Evaluation									
Dipole									
Dipole axis to liquid Distance	8,E.4.2	1.00	N	$\sqrt{3}$	1	1	0.58	0.58	N-1
Input power and SAR drift measurement	8,6.6.2	12.02	R	$\sqrt{3}$	1	1	6.94	6.94	∞
Deviation of experimental dipole from numerical dipole	E.6.4	5.5	R	$\sqrt{3}$	1	1	3.20	3.20	∞
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E3.2	2.0	R	$\sqrt{3}$	1	0.84	1.10	1.10	∞
Liquid conductivity - deviation from target value	E.3.2	5.00	R	$\sqrt{3}$	0.64	0.43	1.85	1.24	
Liquid conductivity - measurement uncertainty	E.3.3	5.00	N	1	0.64	0.43	3.20	2.15	
Liquid permittivity - deviation from target value	E.3.2	0.37	R	$\sqrt{3}$	0.6	0.49	0.13	0.10	
Liquid permittivity - measurement uncertainty	E.3.3	10.00	N	1	0.6	0.49	6.00	4.90	M
Combined Standard Uncertainty			RSS				12.00	11.50	
Expanded Uncertainty (95% Confidence interval)			K=2				23.39	22.43	

Annex A. Plots of System Performance Check

MEASUREMENT 1

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 7 minutes 21 seconds

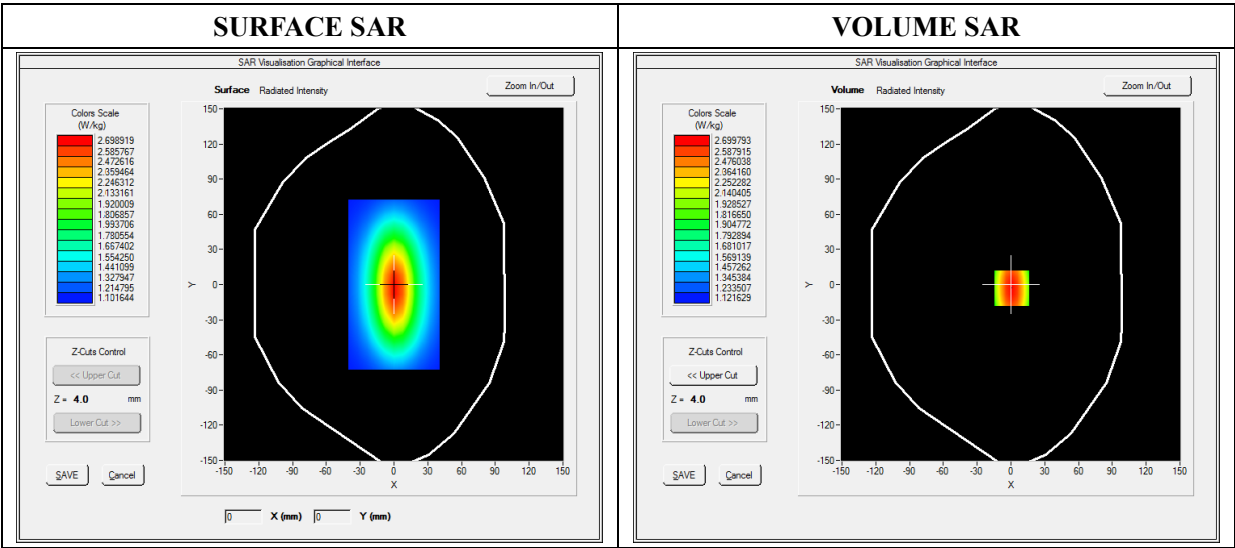
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW750
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	750.000000
Relative Permittivity (real part)	41.320574
Conductivity (S/m)	0.862373
Power Variation (%)	0.038363
Ambient Temperature	21.1
Liquid Temperature	21.3

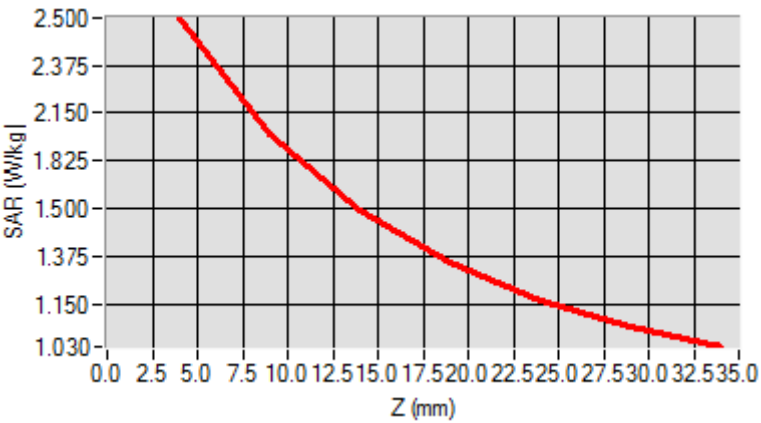


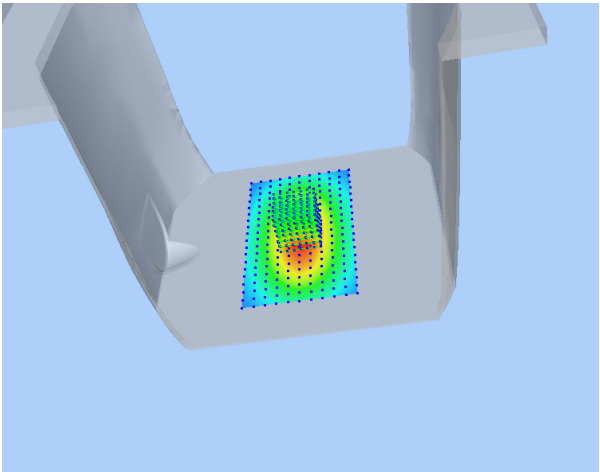
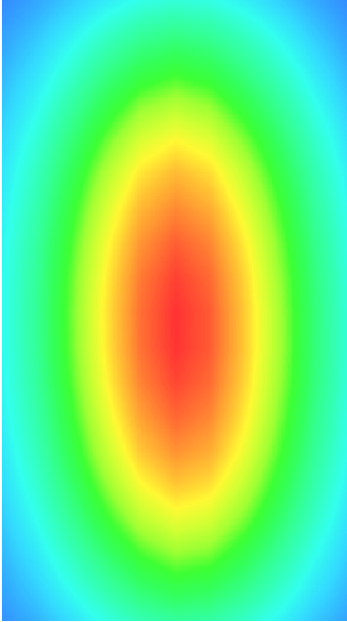
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.042744
SAR 1g (W/Kg)	2.164534

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	2.3634	1.8023	1.4523	1.2514	1.1005	1.0245



3D screen shot	Hot spot position
	

MEASUREMENT 2

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 7 minutes 21 seconds

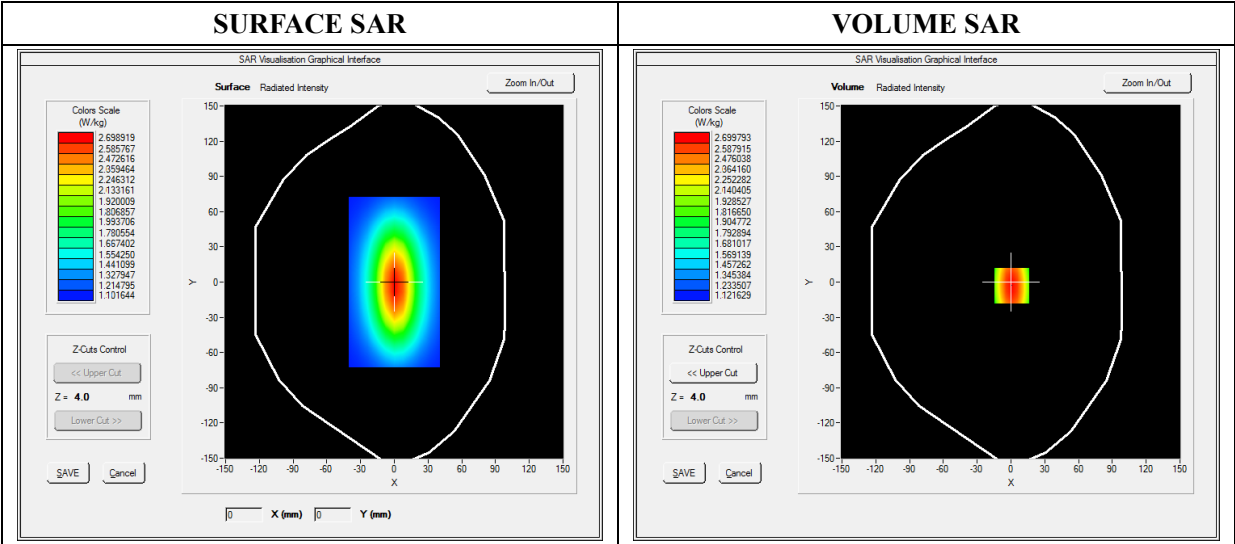
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	41.110245
Conductivity (S/m)	0.871245
Power Variation (%)	0.038437
Ambient Temperature	21.1
Liquid Temperature	21.3

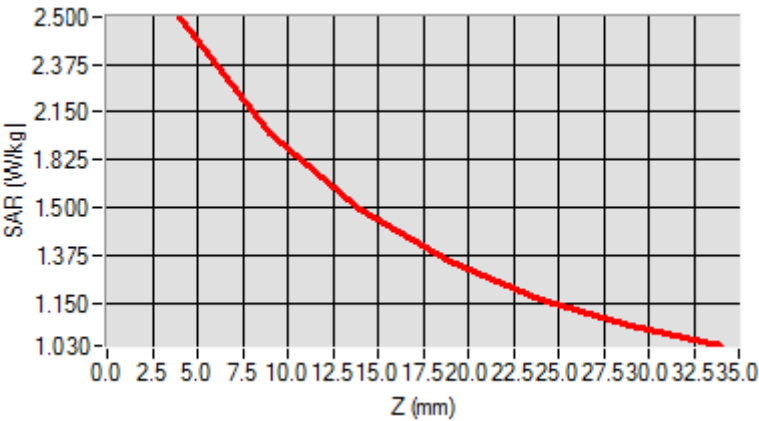


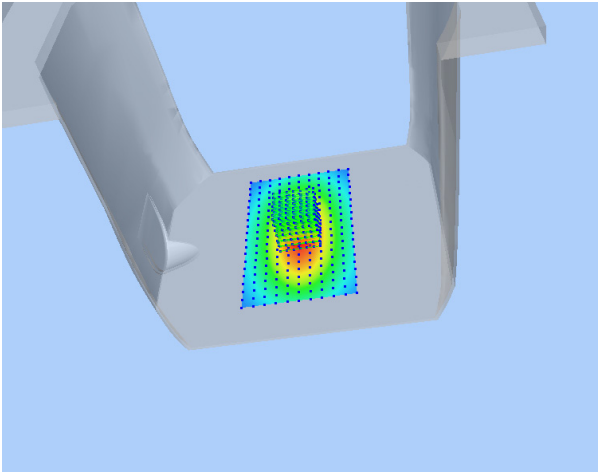
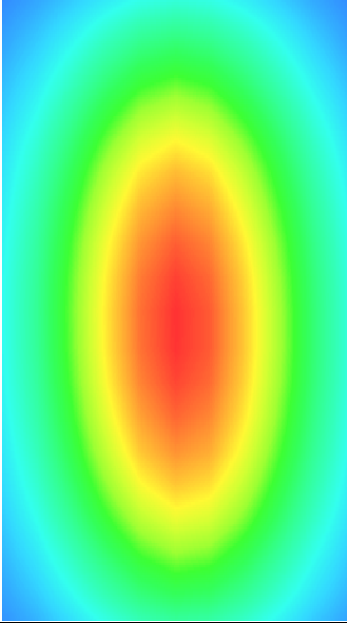
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.519489
SAR 1g (W/Kg)	2.411253

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 3

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

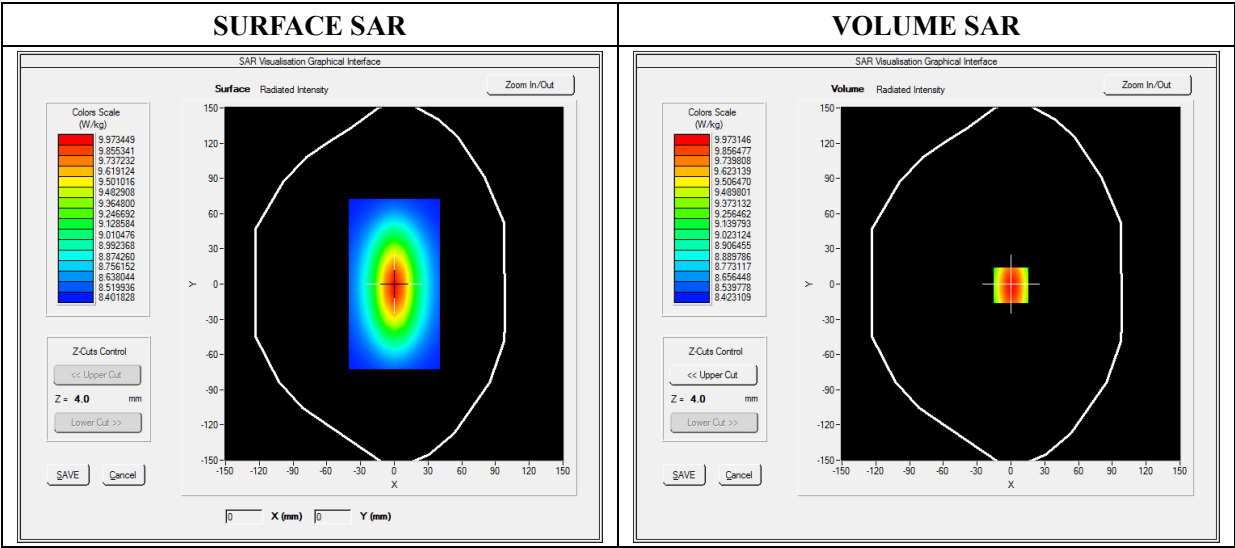
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	39.024890
Conductivity (S/m)	1.371250
Power Variation (%)	1.401232
Ambient Temperature	21.1
Liquid Temperature	21.2

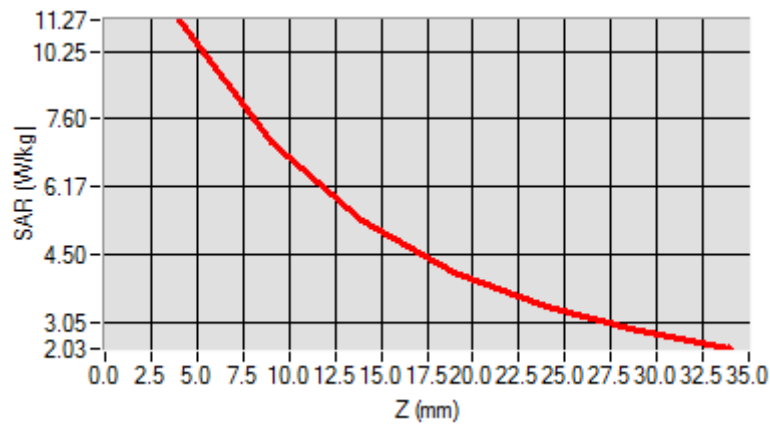


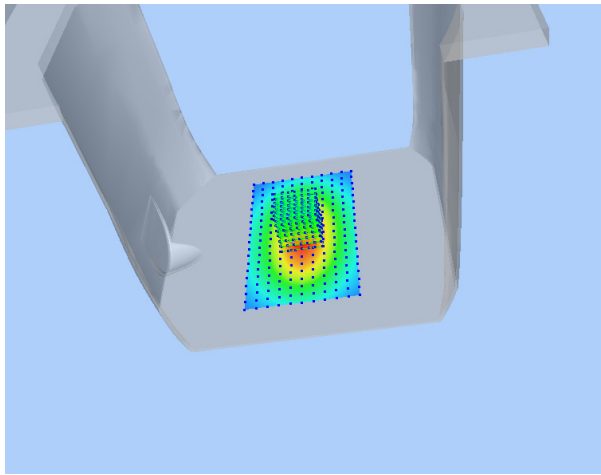
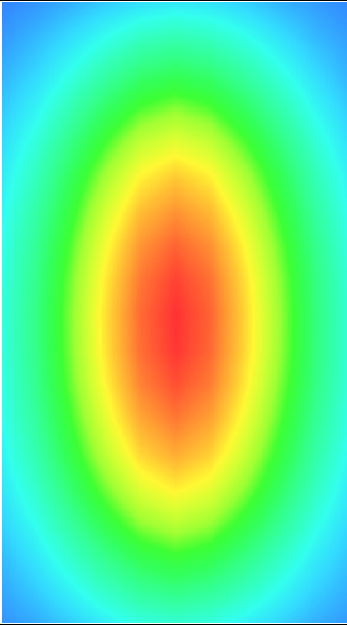
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	5.171252
SAR 1g (W/Kg)	9.611250

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 4

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

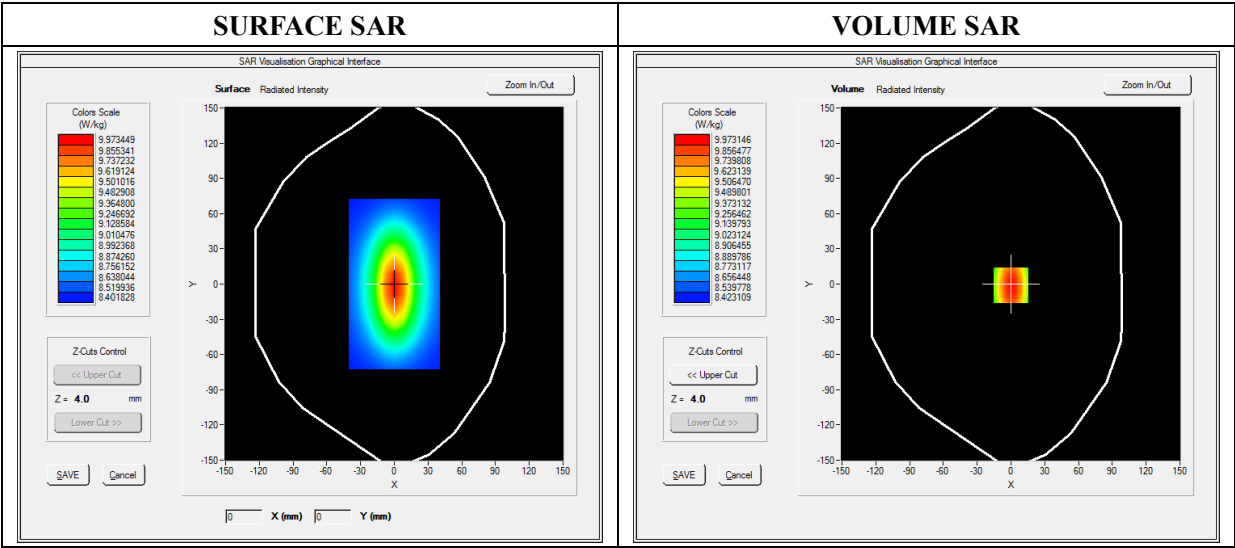
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	38.560124
Conductivity (S/m)	1.380369
Power Variation (%)	1.022540
Ambient Temperature	21.1
Liquid Temperature	21.3

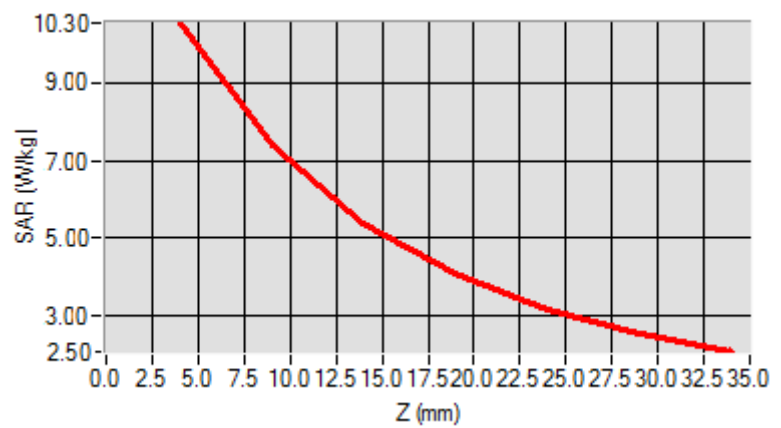


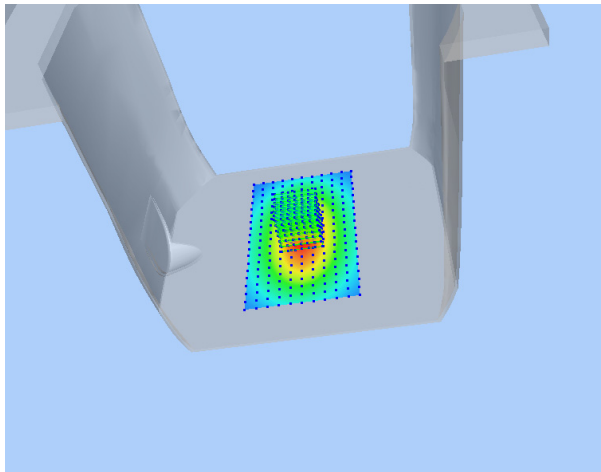
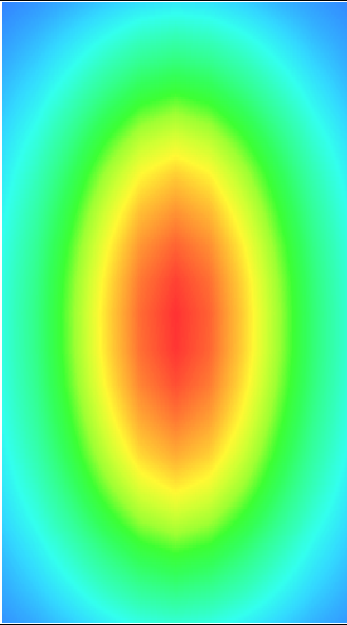
Maximum location: X=0.00, Y=0.00

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 5

For Head Liquid

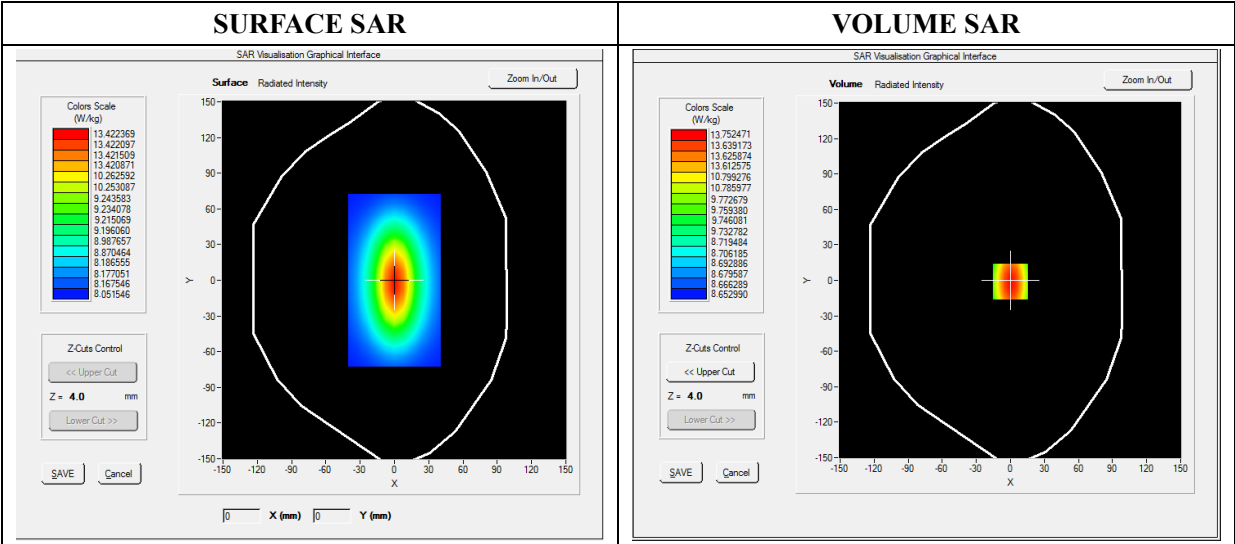
Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	38.153660
Conductivity (S/m)	1.740236
Power Variation (%)	1.141452
Ambient Temperature	21.1
Liquid Temperature	21.2

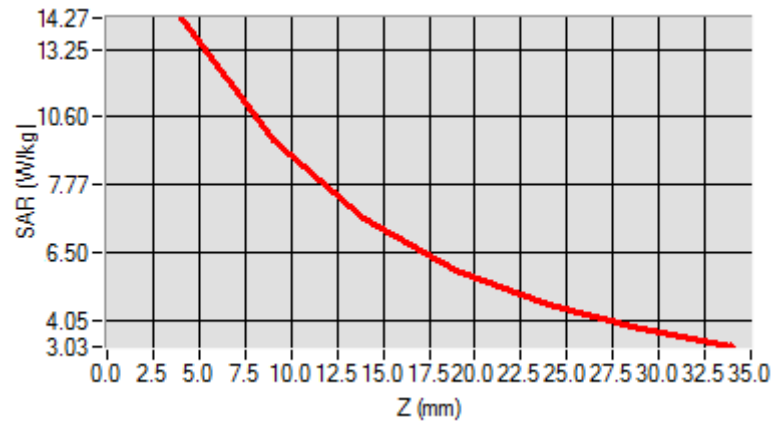


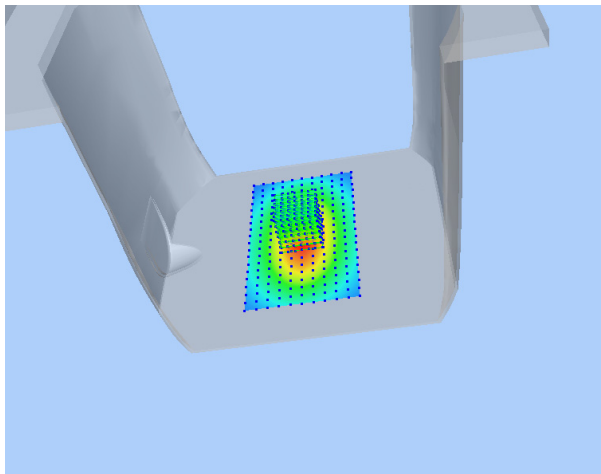
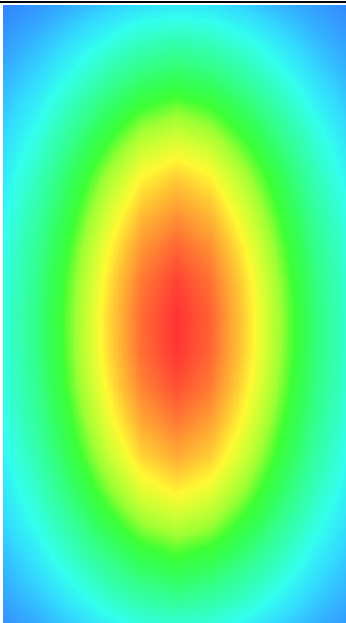
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	8.020427
SAR 1g (W/Kg)	13.452457

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	14.1034	12.0012	10.2624	7.4715	5.9022	4.5114



3D screen shot	Hot spot position
	

MEASUREMENT 6

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

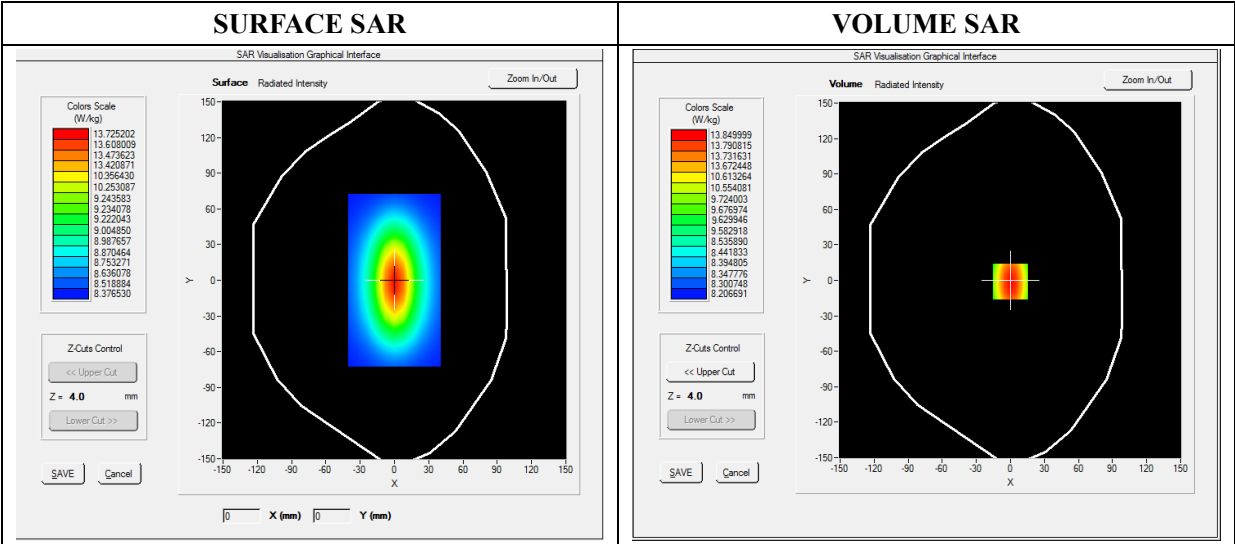
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	38.631092
Conductivity (S/m)	1.930182
Power Variation (%)	1.028221
Ambient Temperature	21.1
Liquid Temperature	21.2

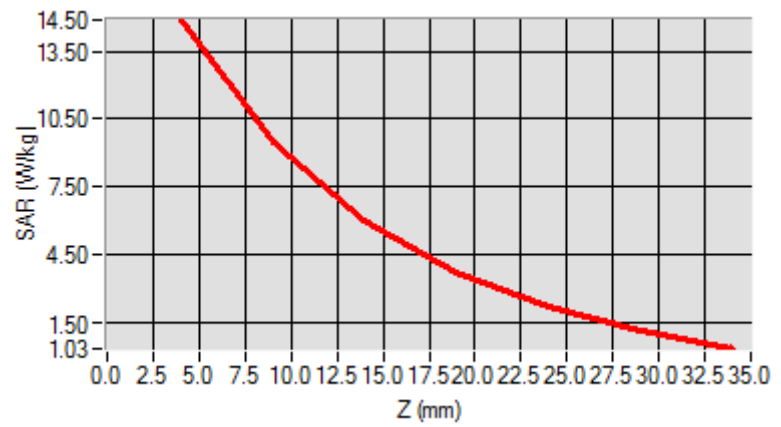


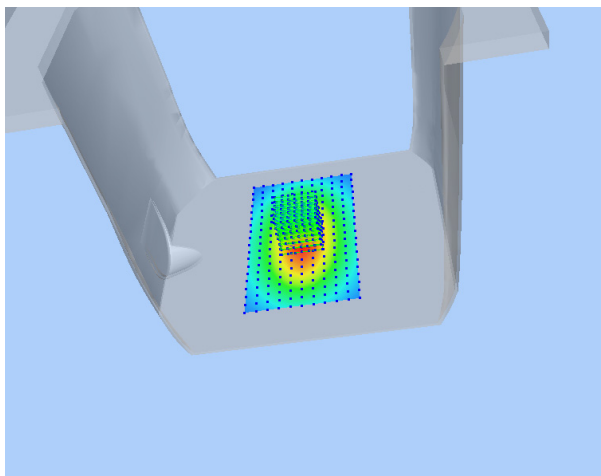
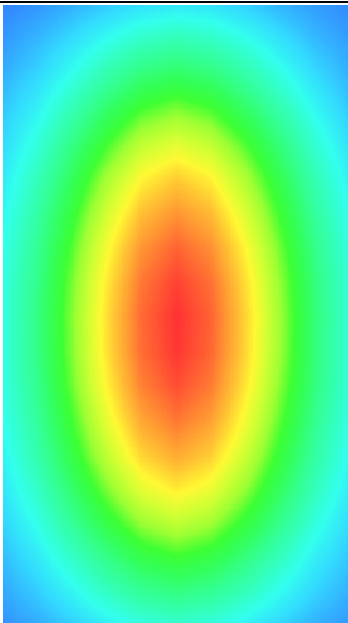
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	8.270822
SAR 1g (W/Kg)	13.670282

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 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SN 45/15 EPGO280; ConvF: 5.64; Calibrated: 2020-07-03

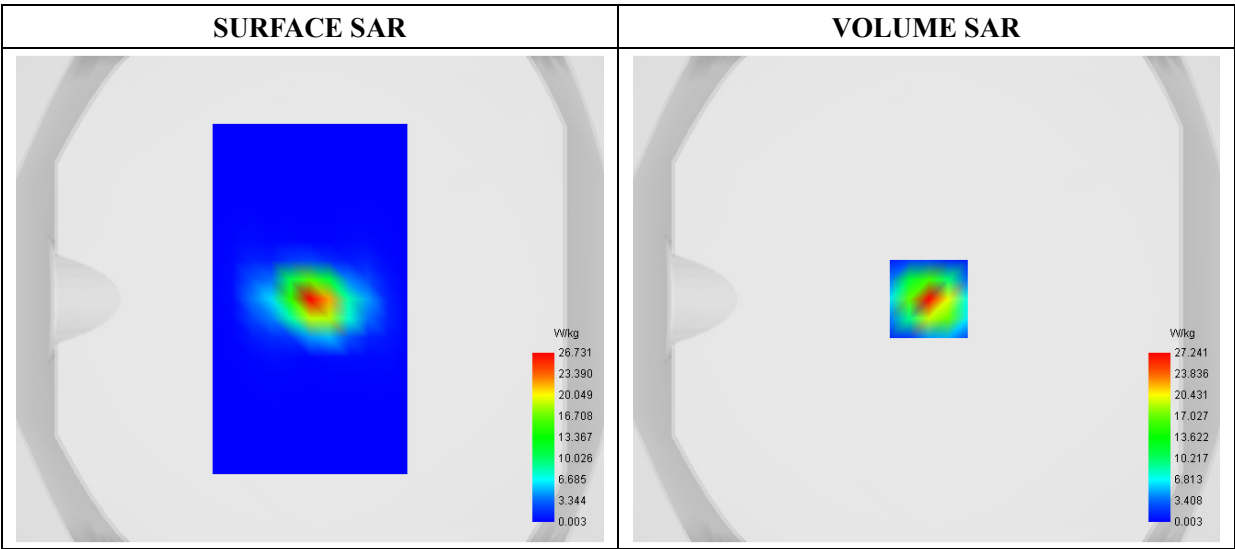
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5200
Signal	CW (Crest factor: 1.0)

B. SAR Measurement Results

Frequency (MHz)	5200.000000
Relative Permittivity (real part)	35.612911
Conductivity (S/m)	4.871483
Power Variation (%)	0.943782
Ambient Temperature	22.0
Liquid Temperature	22.3

C. SAR Surface and Volume



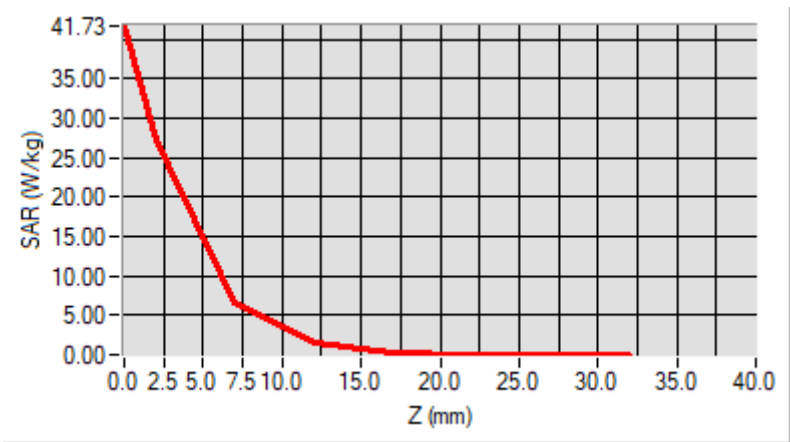
Maximum location: X=1.00, Y=0.00

D. SAR 1g & 10g

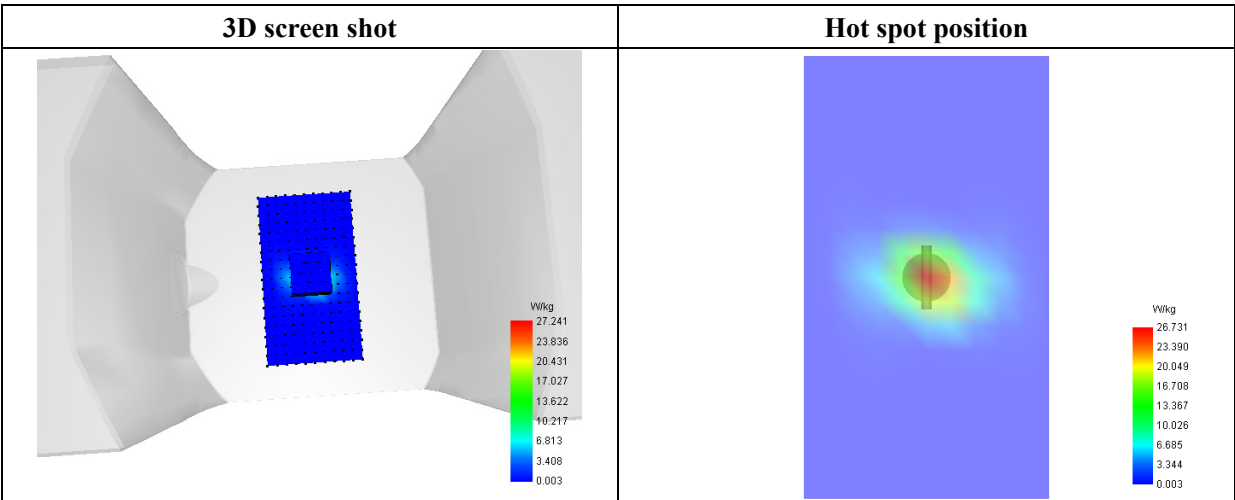
SAR 10g (W/Kg)	5.310334
SAR 1g (W/Kg)	16.946226

E. Z Axis Scan

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	41.7264	27.2408	6.5746	1.6234	0.3765	0.0793	0.0129



F. 3D Image



MEASUREMENT 8

Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SN 45/15 EPGO280; ConvF: 5.64; Calibrated: 2020-07-03

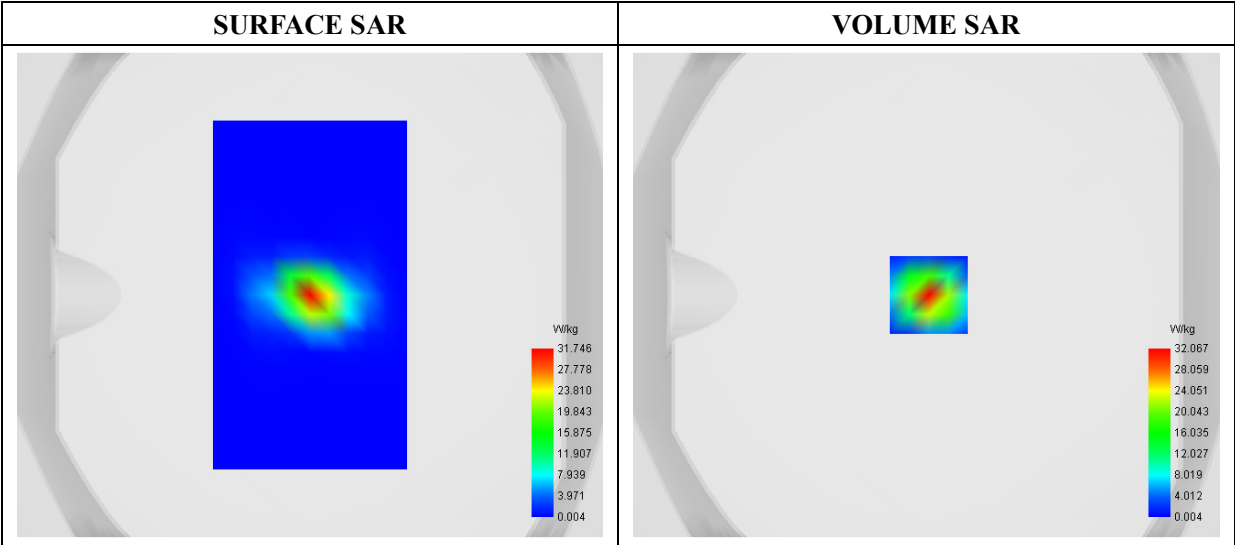
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	35.620839
Conductivity (S/m)	4.740192
Power Variation (%)	1.028731
Ambient Temperature	22.0
Liquid Temperature	22.3

C. SAR Surface and Volume



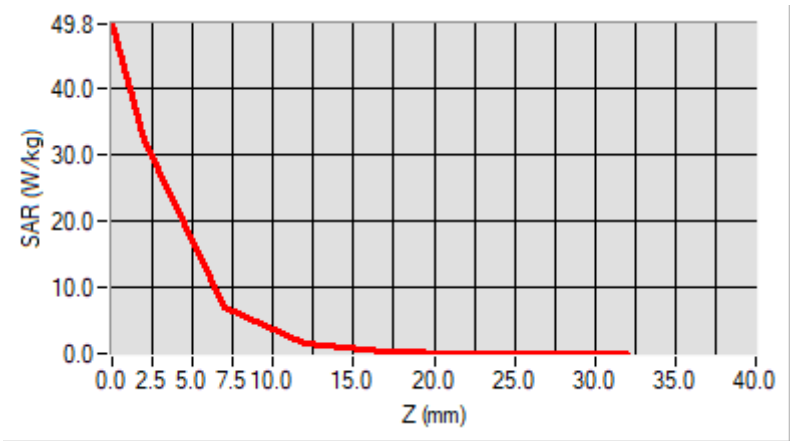
Maximum location: X=1.00, Y=0.00

D. SAR 1g & 10g

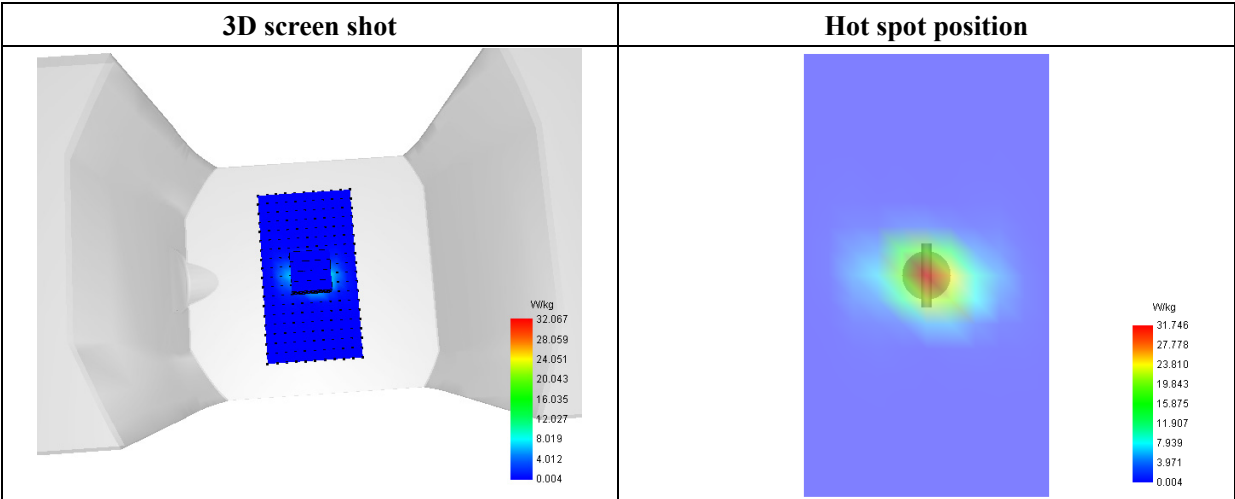
SAR 10g (W/Kg)	6.047588
SAR 1g (W/Kg)	17.681175

E. Z Axis Scan

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



F. 3D Image



MEASUREMENT 9

Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SN 45/15 EPGO280; ConvF: 5.64; Calibrated: 2020-07-03

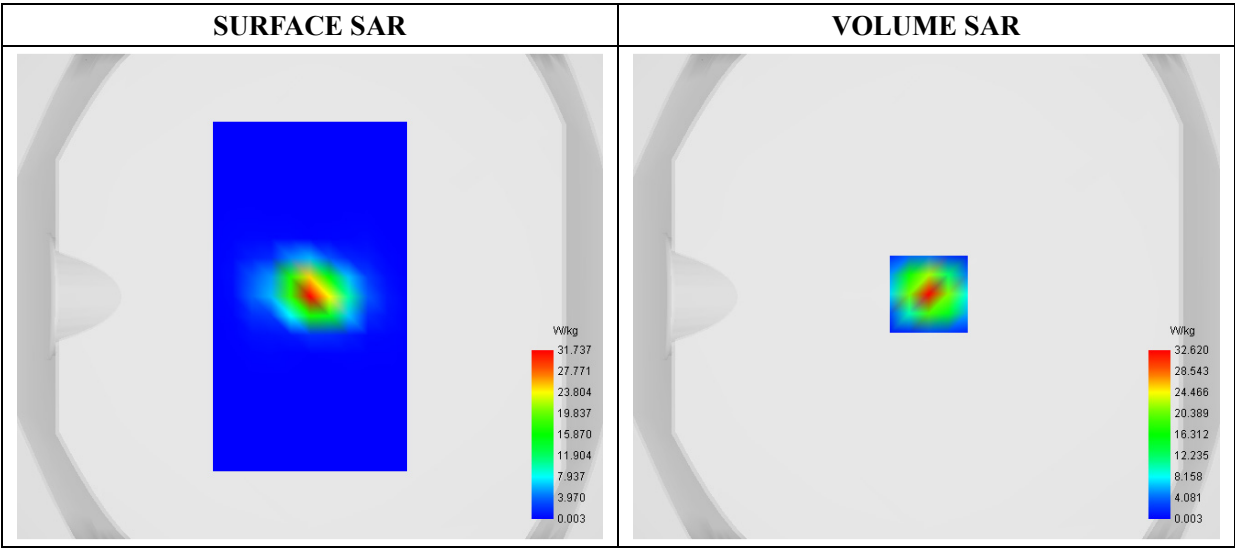
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5600
Signal	CW (Crest factor: 1.0)

B. SAR Measurement Results

Frequency (MHz)	5600.000000
Relative Permittivity (real part)	35.301254
Conductivity (S/m)	5.210512
Power Variation (%)	1.643281
Ambient Temperature	22.0
Liquid Temperature	22.3

C. SAR Surface and Volume



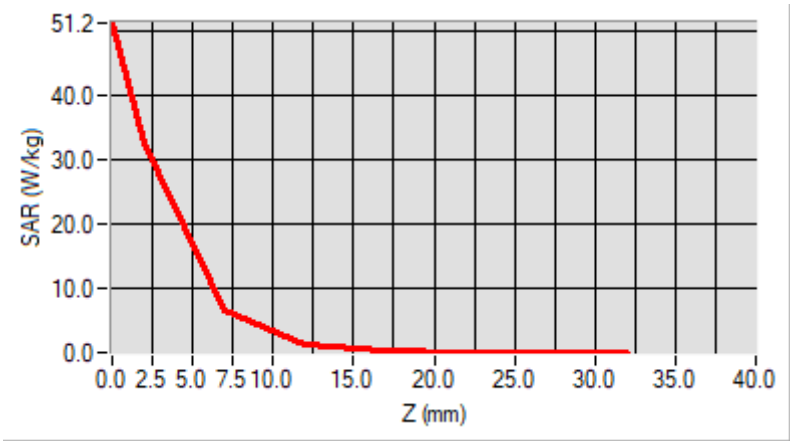
Maximum location: X=1.00, Y=1.00

D. SAR 1g & 10g

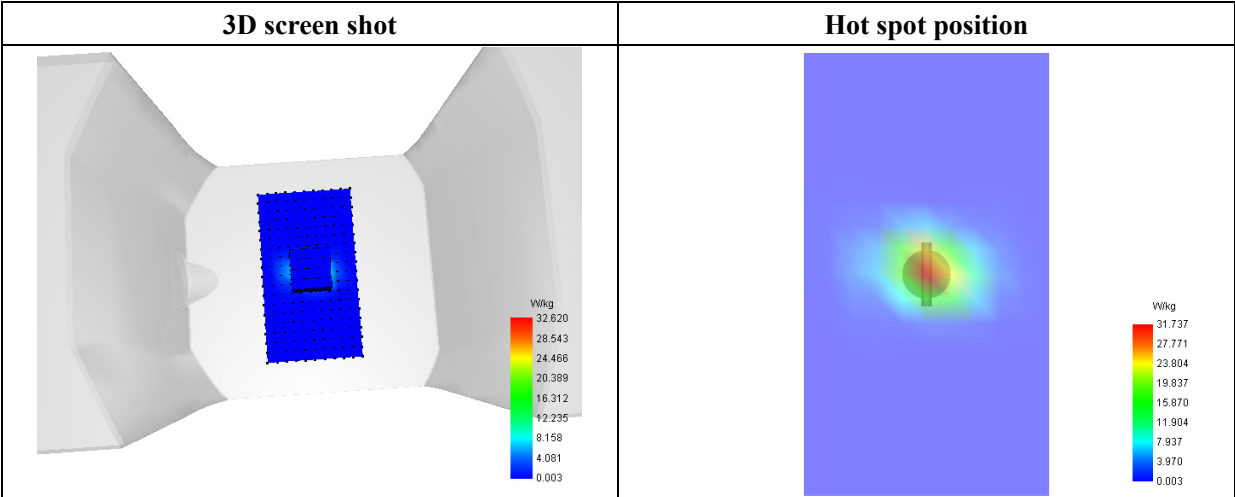
SAR 10g (W/Kg)	5.922791
SAR 1g (W/Kg)	18.604052

E. Z Axis Scan

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	51.2061	32.6198	6.6166	1.3486	0.2638	0.0509	0.0050



F. 3D Image



MEASUREMENT 10

Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SN 45/15 EPGO280; ConvF: 5.64; Calibrated: 2020-07-03

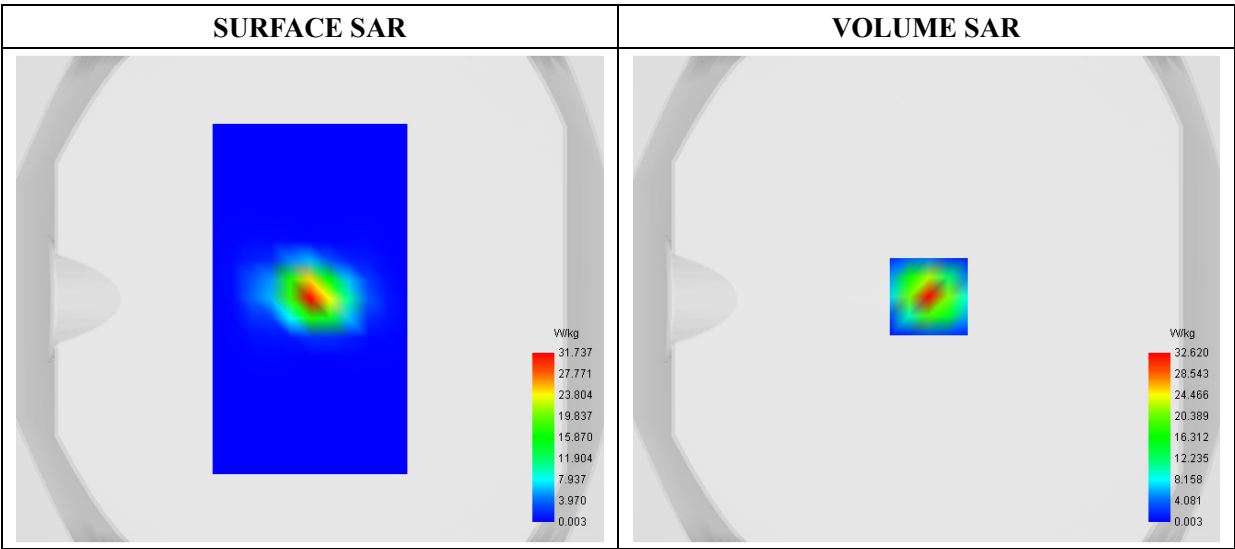
A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5800
Signal	CW (Crest factor: 1.0)

B. SAR Measurement Results

Frequency (MHz)	5800.000000
Relative Permittivity (real part)	35.301254
Conductivity (S/m)	5.210512
Power Variation (%)	1.643281
Ambient Temperature	22.0
Liquid Temperature	22.3

C. SAR Surface and Volume



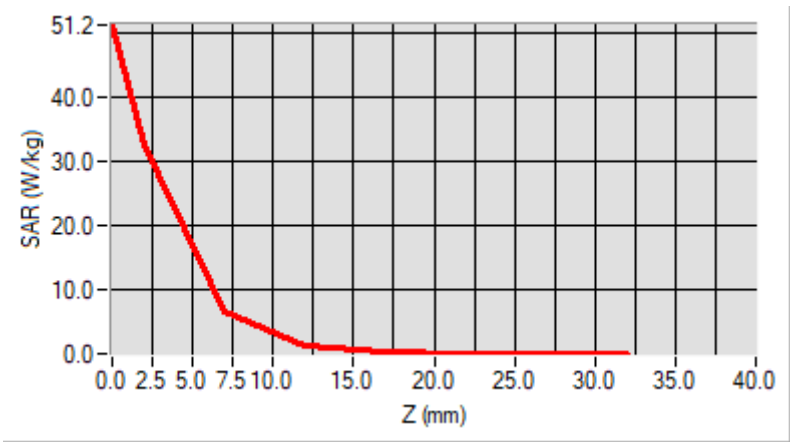
Maximum location: X=1.00, Y=1.00

D. SAR 1g & 10g

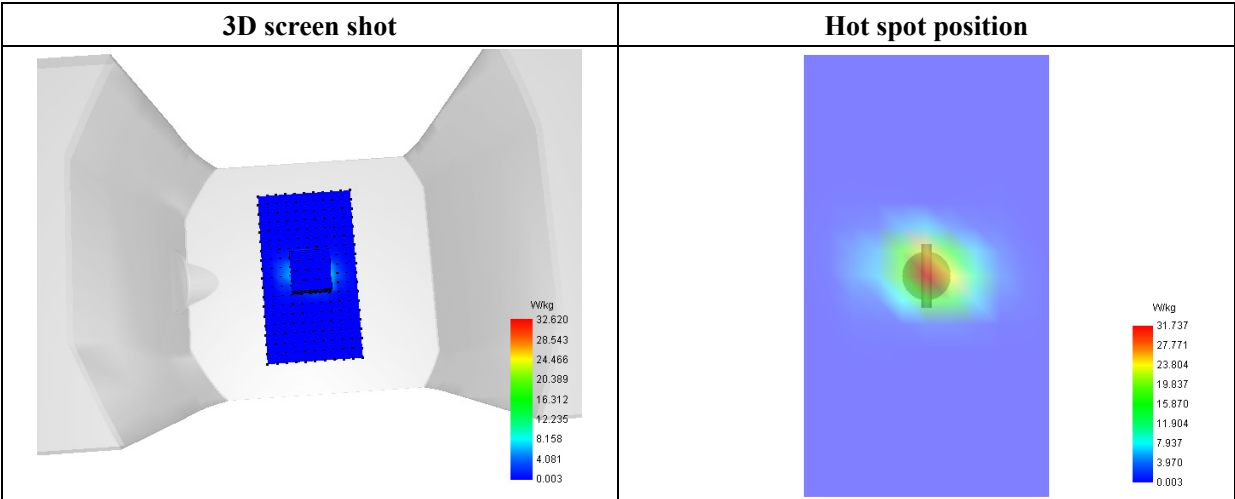
SAR 10g (W/Kg)	5.922791
SAR 1g (W/Kg)	18.604052

E. Z Axis Scan

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	51.2061	32.6198	6.6166	1.3486	0.2638	0.0509	0.0050



F. 3D Image



MEASUREMENT 11

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

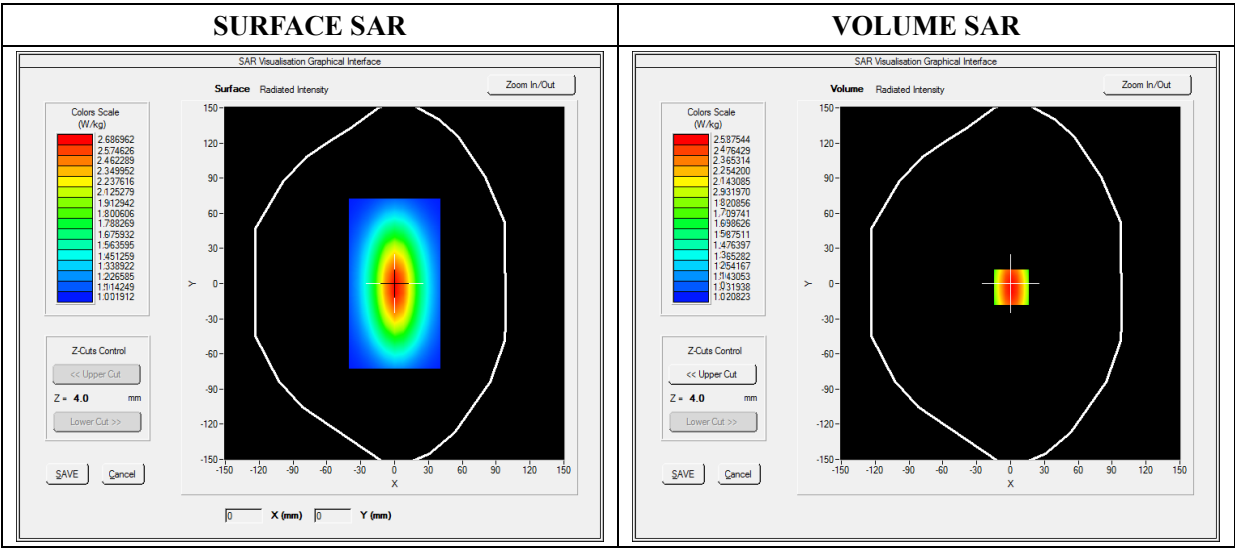
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW750
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	750.000000
Relative Permittivity (real part)	54.964739
Conductivity (S/m)	0.931048
Power Variation (%)	0.034745
Ambient Temperature	21.1
Liquid Temperature	21.3

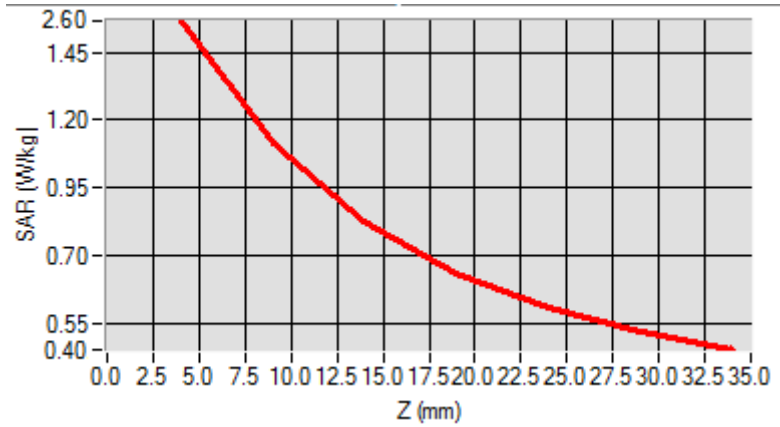


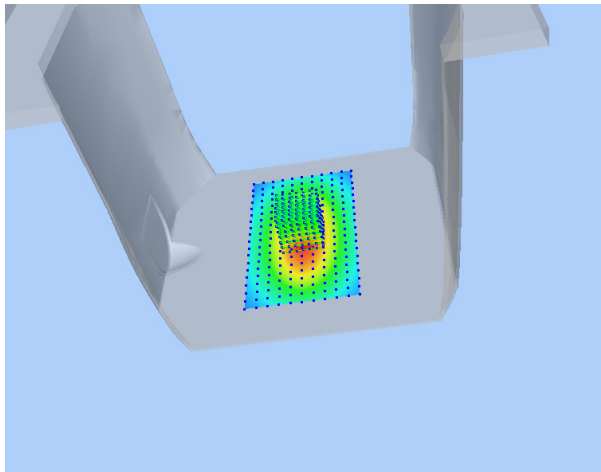
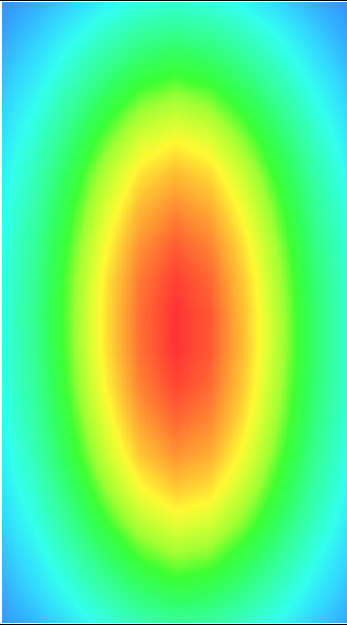
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.000865
SAR 1g (W/Kg)	2.124211

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	2.5132	1.1087	0.8214	0.5160	0.4875	0.4864



3D screen shot	Hot spot position
	

MEASUREMENT 12

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

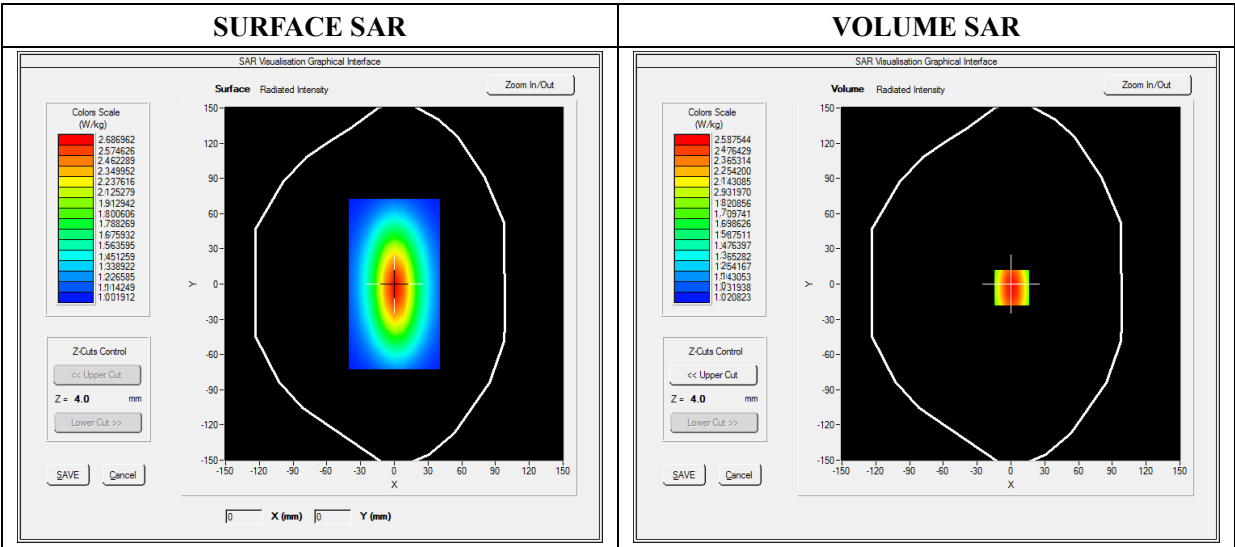
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	54.851214
Conductivity (S/m)	0.951454
Power Variation (%)	0.901472
Ambient Temperature	21.1
Liquid Temperature	21.3

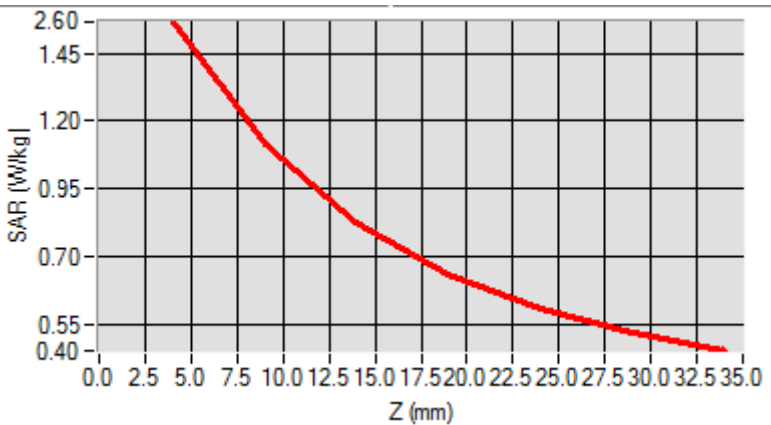


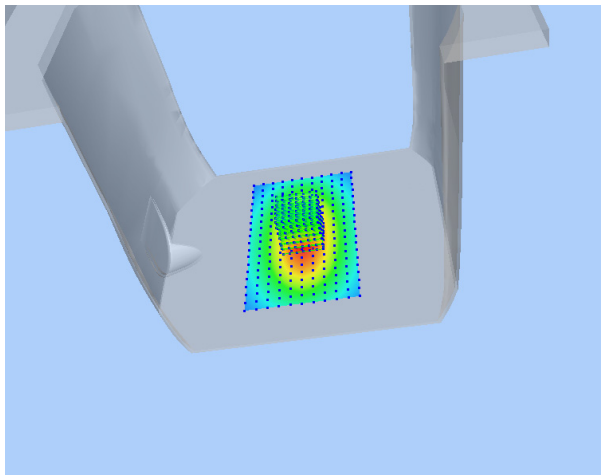
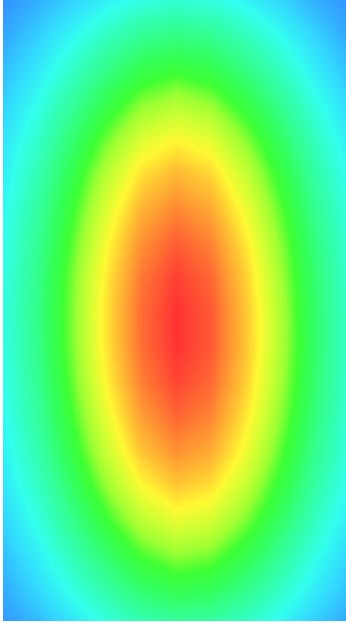
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.028956
SAR 1g (W/Kg)	2.354211

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	2.5789	1.1300	0.8795	0.5940	0.5011	0.5100



3D screen shot	Hot spot position
	

MEASUREMENT 13

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

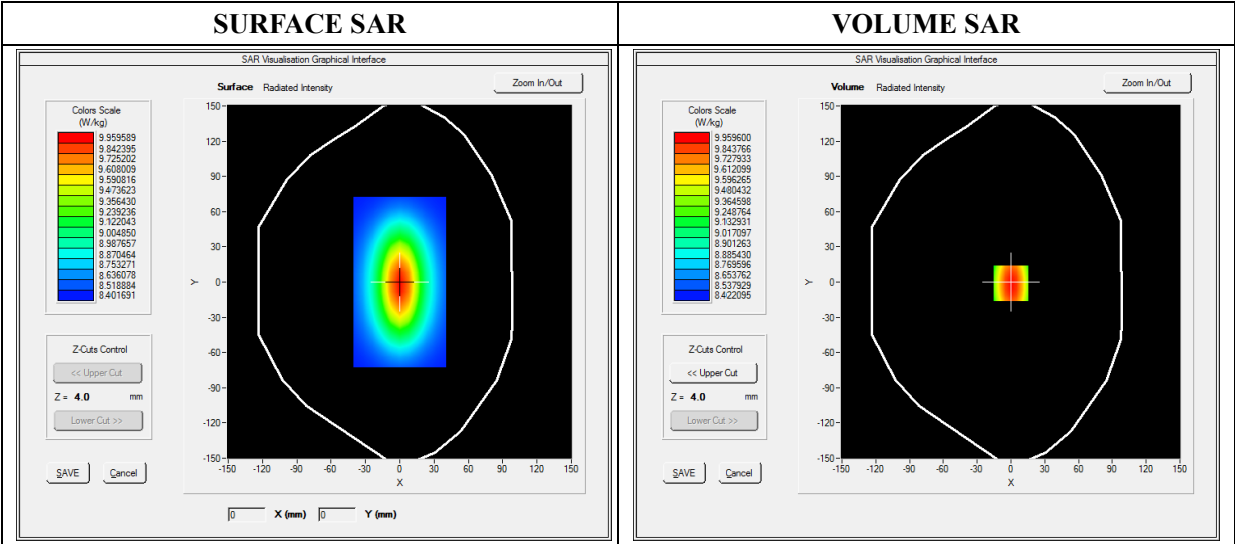
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	51.224510
Conductivity (S/m)	1.461261
Power Variation (%)	0.845690
Ambient Temperature	21.1
Liquid Temperature	21.2

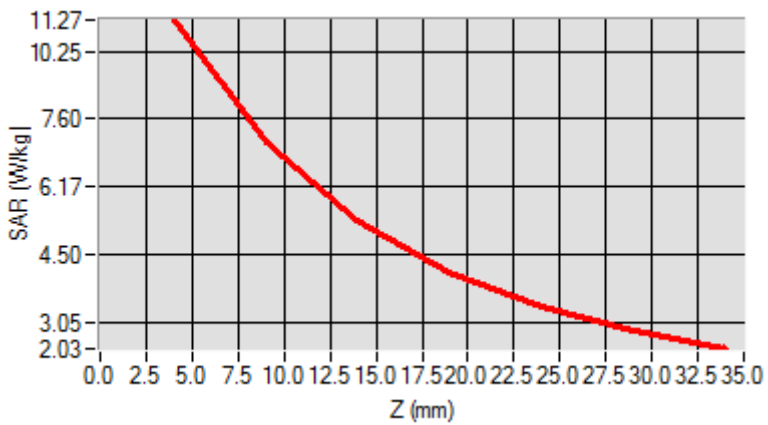


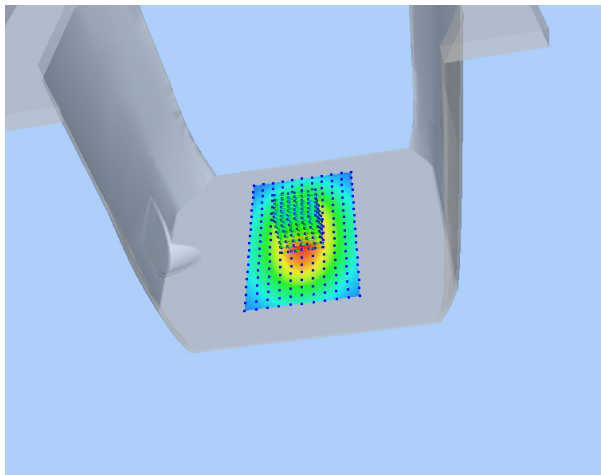
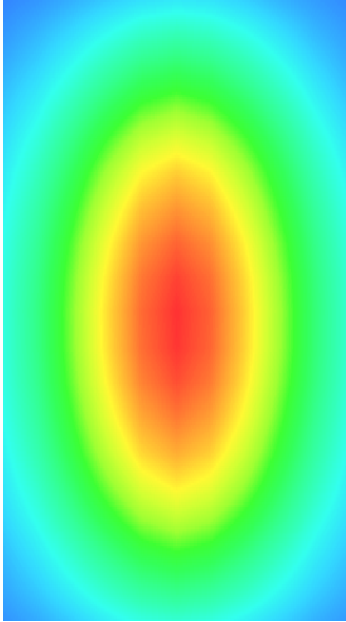
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	5.221202
SAR 1g (W/Kg)	9.582560

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	11.2425	9.4123	8.0345	6.9125	6.3092	3.9460



3D screen shot	Hot spot position
	

MEASUREMENT 14

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

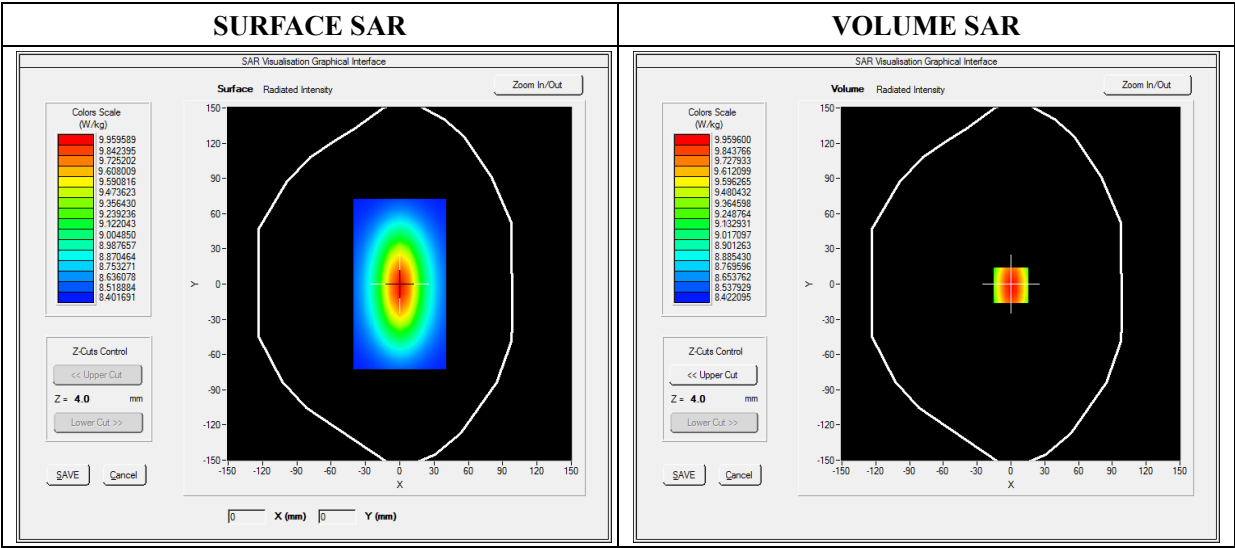
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	52.420415
Conductivity (S/m)	1.501966
Power Variation (%)	0.541872
Ambient Temperature	21.1
Liquid Temperature	21.3

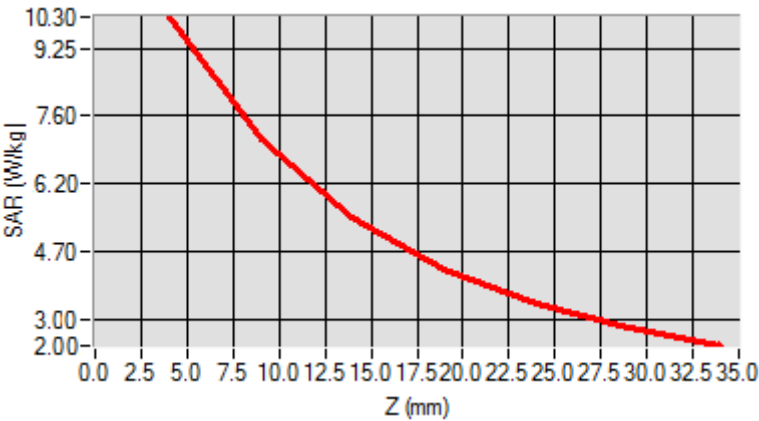


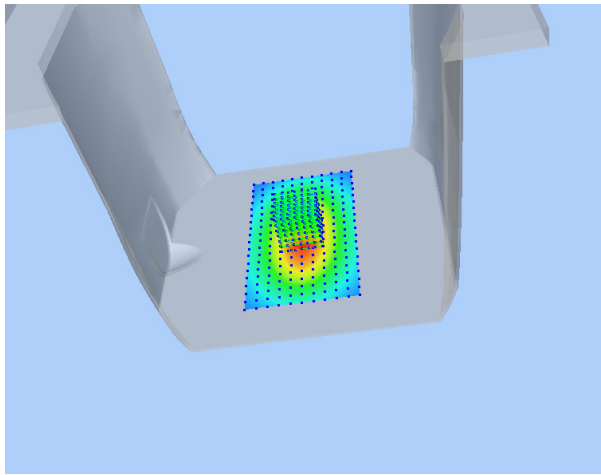
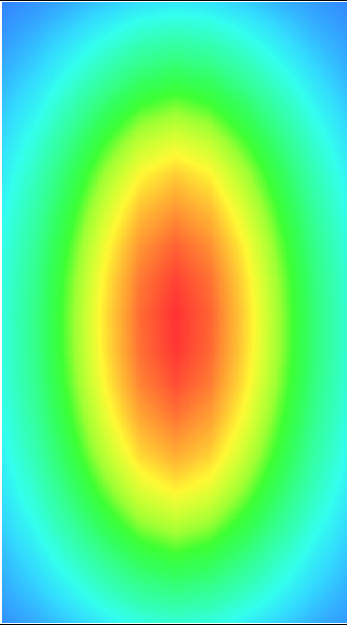
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	5.134651
SAR 1g (W/Kg)	9.781550

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	10.2031	6.43001	4.9011	4.5325	3.1201	2.5024



3D screen shot	Hot spot position
	

MEASUREMENT 15

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

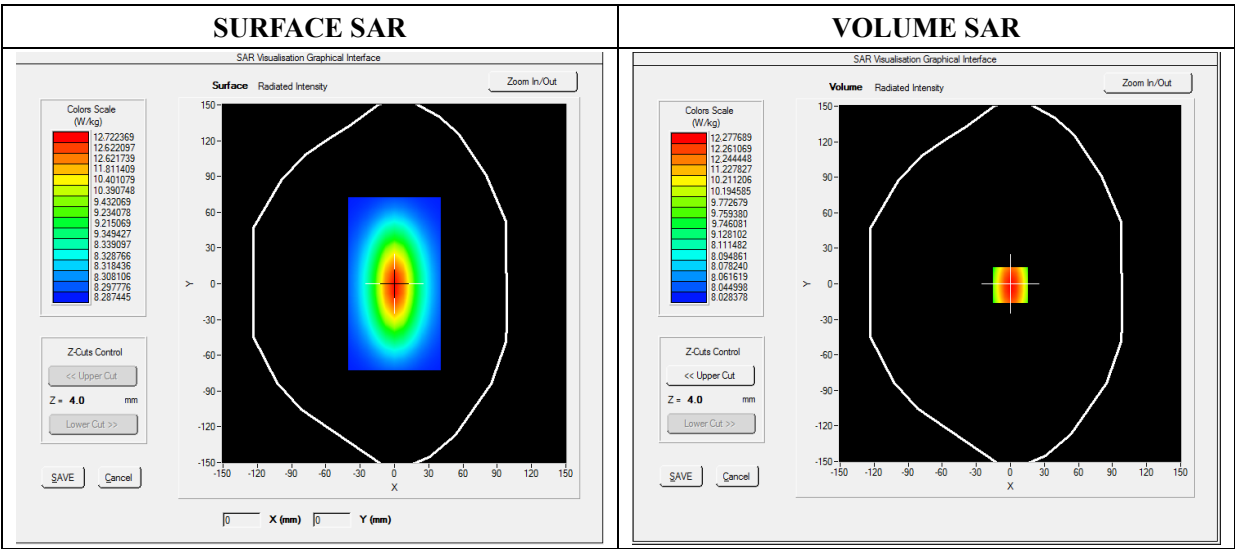
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	52.010212
Conductivity (S/m)	1.910255
Power Variation (%)	1.369745
Ambient Temperature	21.1
Liquid Temperature	21.2

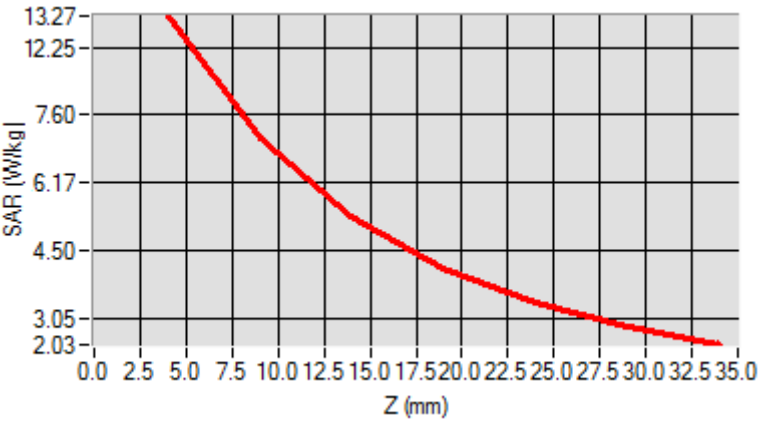


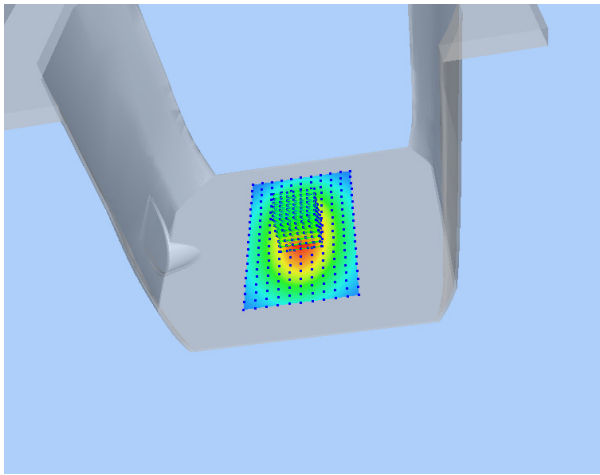
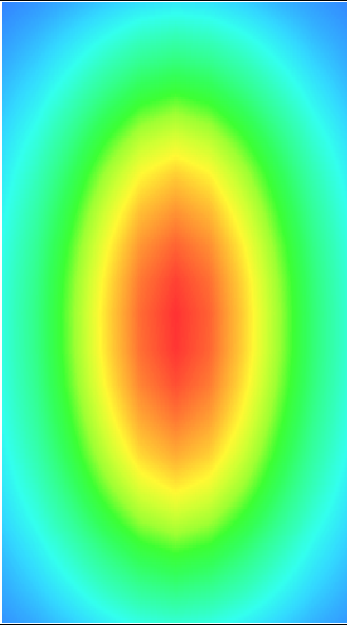
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	7.119522
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 16

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

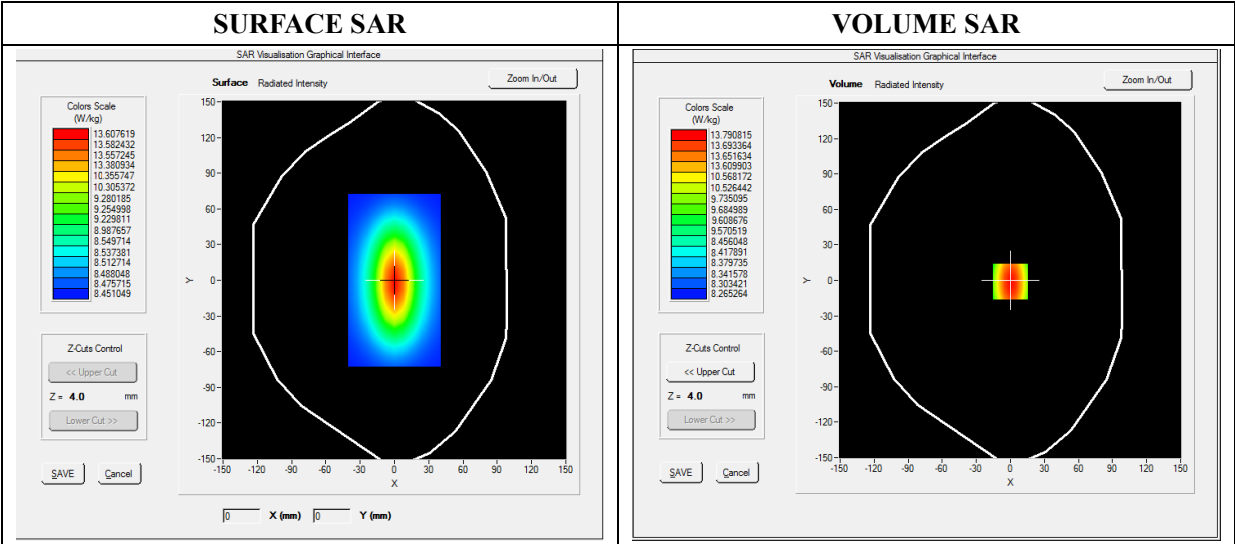
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07.03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
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)	52.241202
Conductivity (S/m)	2.120943
Power Variation (%)	1.038832
Ambient Temperature	21.1
Liquid Temperature	21.2

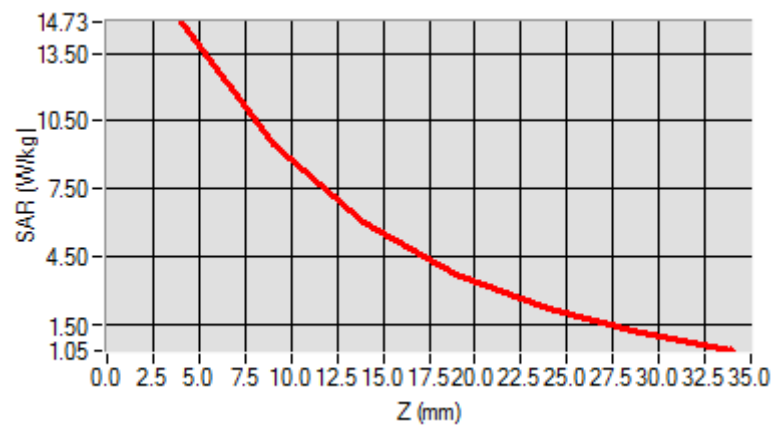


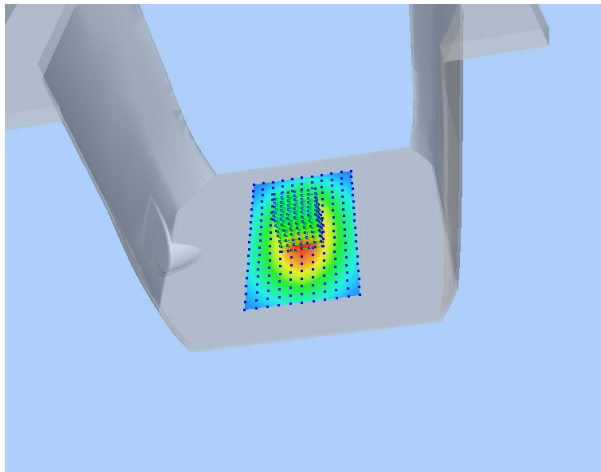
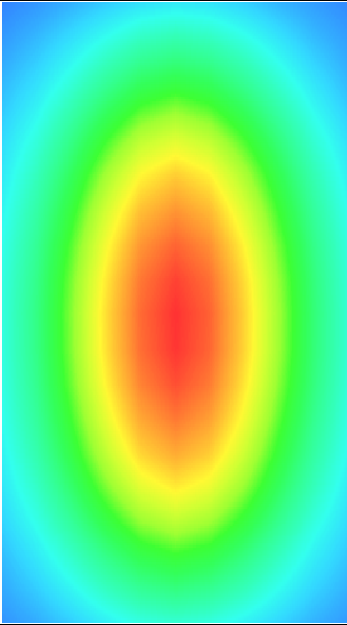
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	6.083781
SAR 1g (W/Kg)	13.430481

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	13.6473	11.8441	9.3627	8.5782	6.4357	4.6342



3D screen shot	Hot spot position
	

MEASUREMENT 17

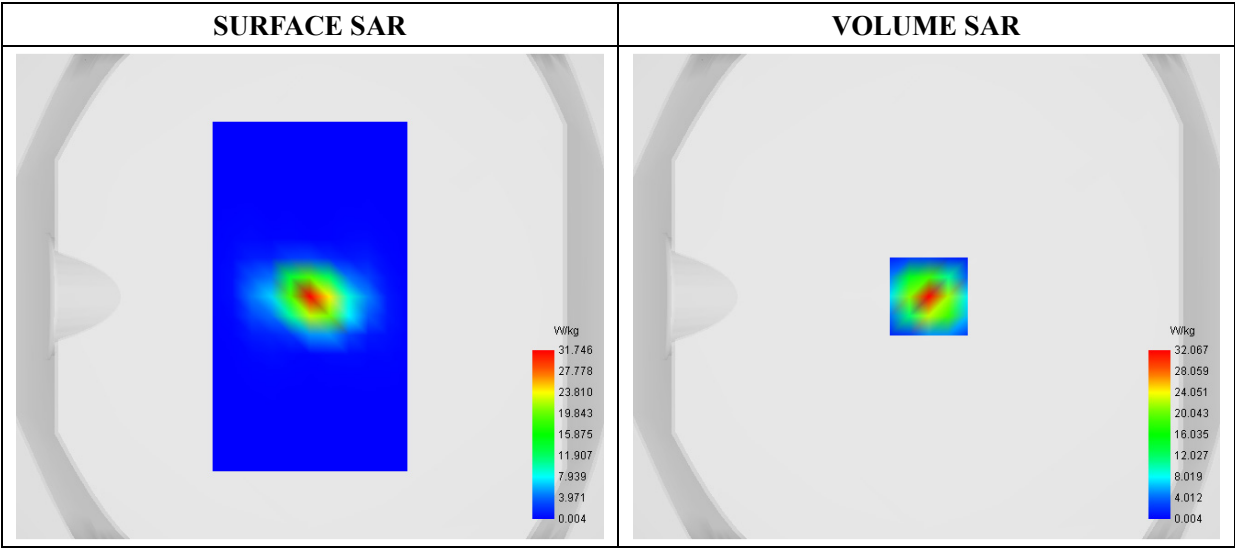
Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

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

B. SAR Measurement Results

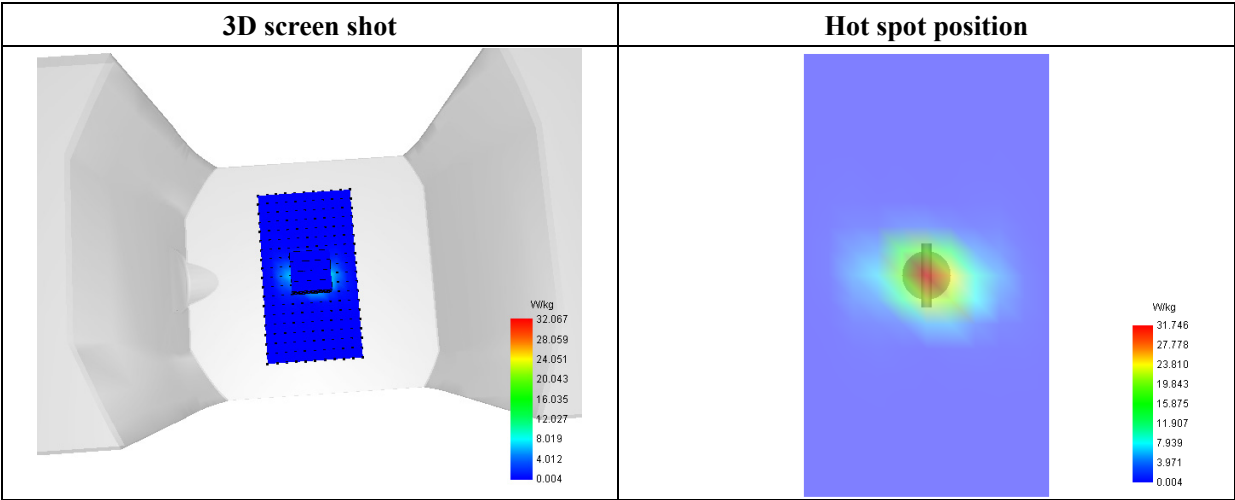
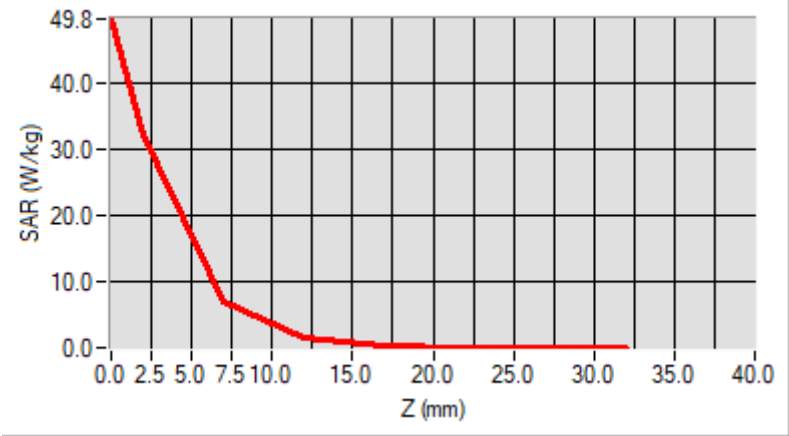
Frequency (MHz)	5200.000000
Relative Permittivity (real part)	48.501241
Conductivity (S/m)	5.160213
Power Variation (%)	0.749201
Ambient Temperature	21.1
Liquid Temperature	21.2



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



MEASUREMENT 18

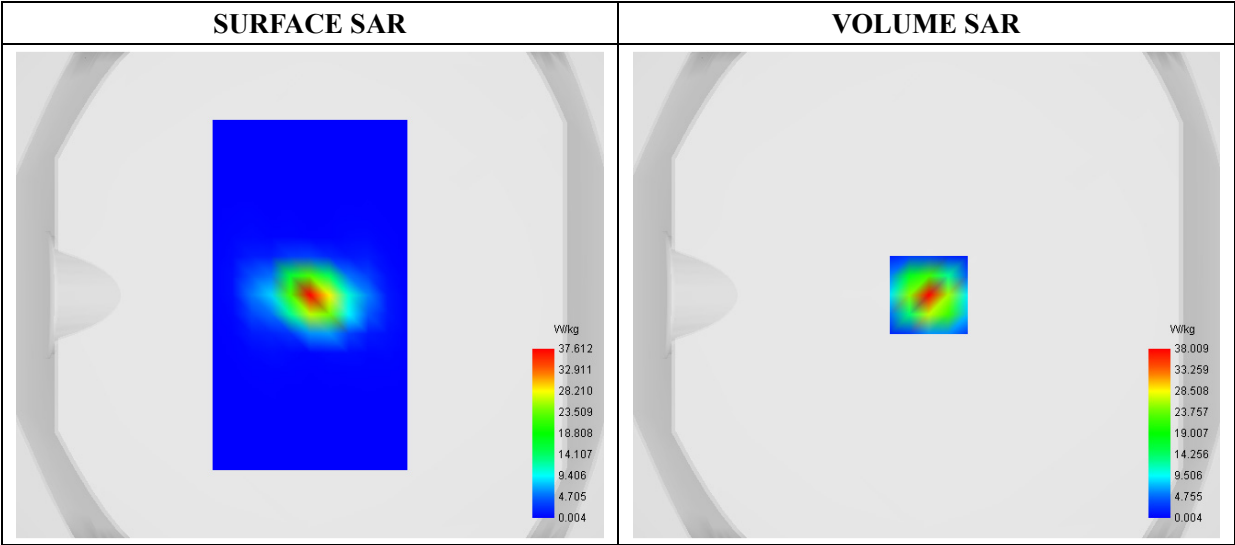
Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5400
Signal	CW (Crest factor: 1.0)

B. SAR Measurement Results

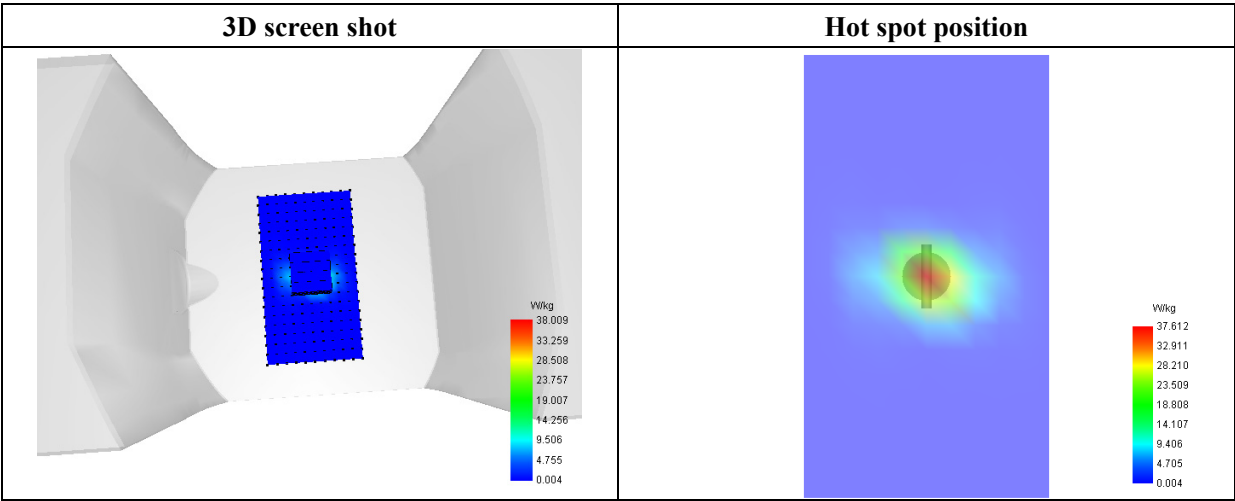
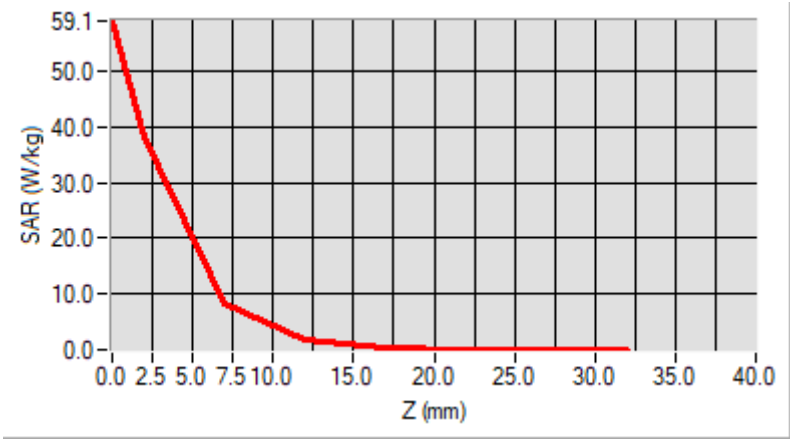
Frequency (MHz)	5400.000000
Relative Permittivity (real part)	48.502911
Conductivity (S/m)	5.261483
Power Variation (%)	0.943782
Ambient Temperature	21.1
Liquid Temperature	21.2



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



MEASUREMENT 19

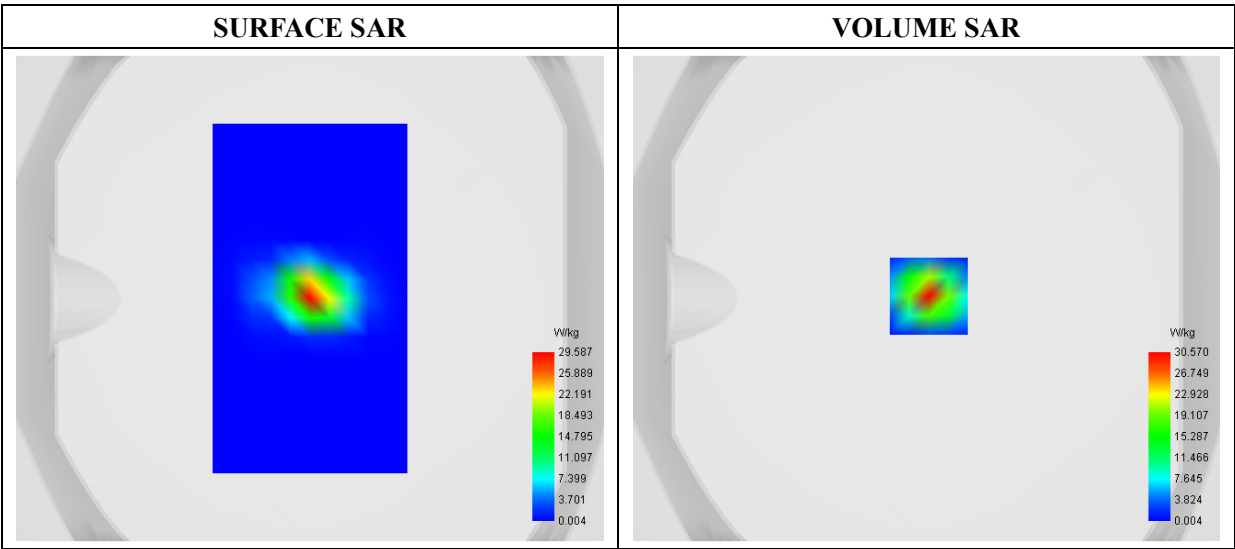
Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020/07/03

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5600
Signal	Duty Cycle 1:1

B. SAR Measurement Results

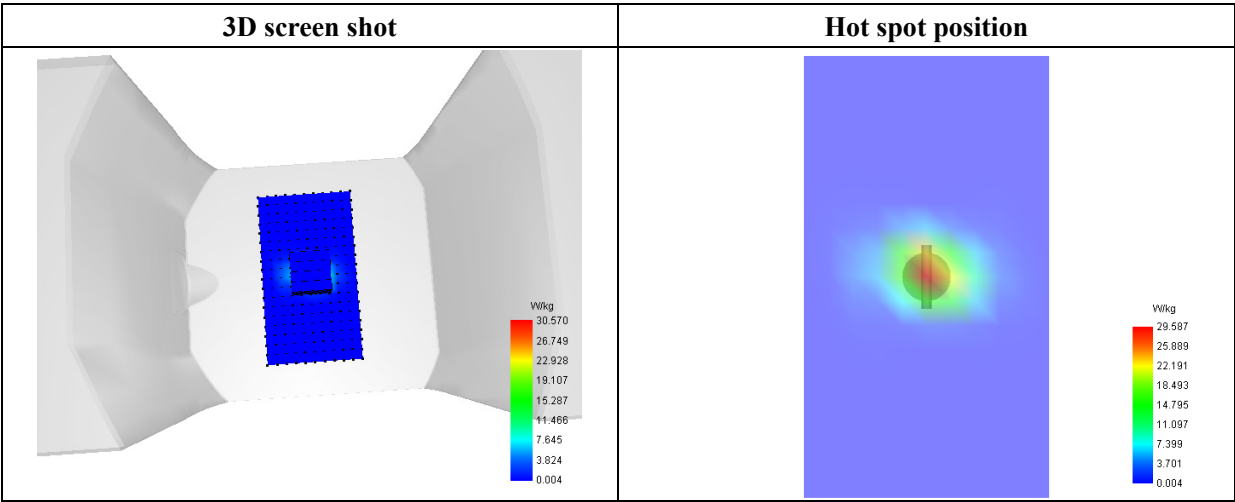
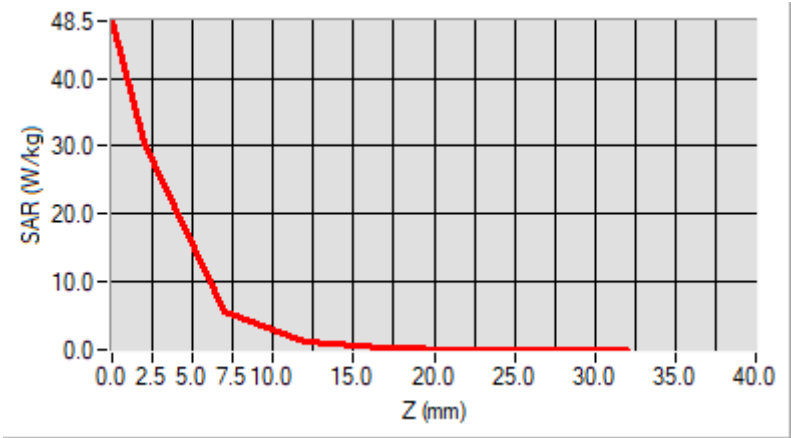
Frequency (MHz)	5600.000000
Relative Permittivity (real part)	48.302143
Conductivity (S/m)	5.521688
Power Variation (%)	0.749201
Ambient Temperature	21.1
Liquid Temperature	21.2



Maximum location: X=1.00, Y=1.00

SAR 10g (W/Kg)	5.912341
SAR 1g (W/Kg)	17.110732

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	48.4695	30.5699	5.7100	1.0698	0.1906	0.0364	0.0052



MEASUREMENT 20

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

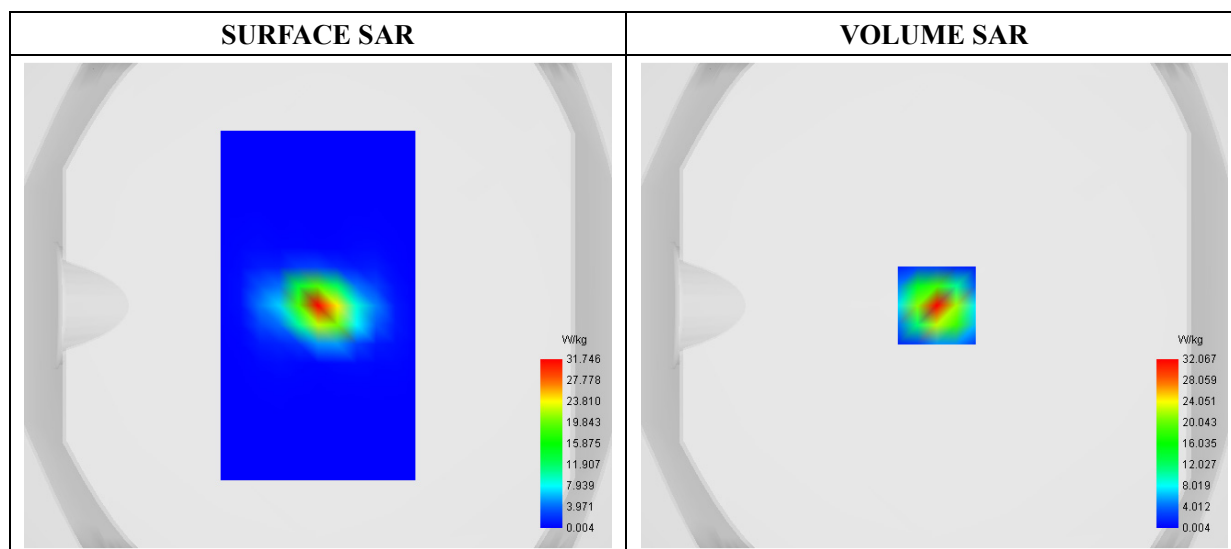
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020/07/03

A. Experimental conditions

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

B. SAR Measurement Results

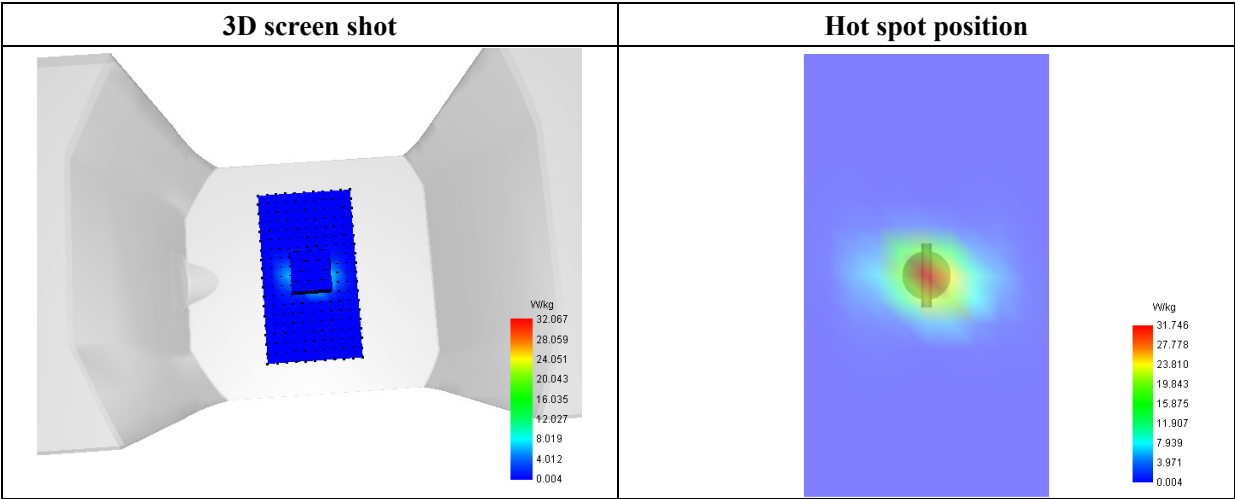
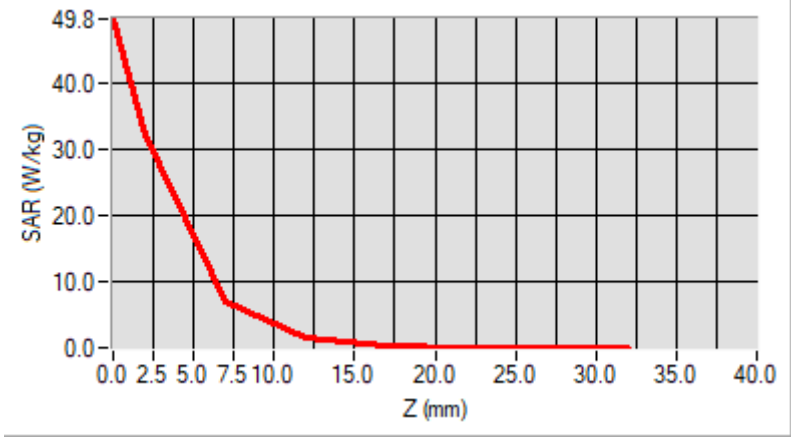
Frequency (MHz)	5800.000000
Relative Permittivity (real part)	48.501939
Conductivity (S/m)	5.761487
Power Variation (%)	0.749201
Ambient Temperature	21.1
Liquid Temperature	21.2



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



Annex B. Plots of SAR Measurement

<u>TYPE</u>	<u>BAND</u>	<u>PARAMETERS</u>
Phone	GSM850	Measurement 3: Left Head with Cheek device position on Middle Channel in GSM mode
Phone	GSM1900	Measurement 7: Left Head with Cheek device position on Low Channel in GSM mode
Phone	GPRS850_4TX	Measurement 9: Right Head with Cheek device position on Middle Channel in GPRS mode
Phone	GPRS1900_4TX	Measurement 15: Left Head with Cheek device position on Low Channel in GPRS mode
Phone	WCDMA1900_RMC	Measurement 19: Left Head with Cheek device position on High Channel in WCDMA mode
Phone	WCDMA1700_RMC	Measurement 23: Left Head with Cheek device position on High Channel in WCDMA mode
Phone	WCDMA850_RMC	Measurement 27: Right Head with Cheek device position on Middle Channel in WCDMA mode
Phone	LTE Band 2_ QPSK	Measurement 33: Left Head with Cheek device position on Low Channel in LTE mode
Phone	LTE Band 4_ QPSK	Measurement 41: Left Head with Cheek device position on Low Channel in LTE mode
Phone	LTE Band 5_ QPSK	Measurement 47: Right Head with Cheek device position on Low Channel in LTE mode
Phone	LTE Band 7_ QPSK	Measurement 57: Left Head with Cheek device position on High Channel in LTE mode
Phone	LTE Band 12_ QPSK	Measurement 63: Right Head with Cheek device position on Low Channel in LTE mode
Phone	LTE Band 13_ QPSK	Measurement 71: Right Head with Cheek device position on Middle Channel in LTE mode
Phone	LTE Band 25_ QPSK	Measurement 81: Left Head with Cheek device position on Low Channel in LTE mode
Phone	LTE Band 26_ QPSK	Measurement 93: Left Head with Cheek device position on Low Channel in LTE mode
Phone	LTE Band 30_ QPSK	Measurement 101: Left Head with Cheek device position on Middle Channel in LTE mode
Phone	LTE Band 40_ QPSK	Measurement 109: Left Head with Cheek device position on Middle Channel in LTE mode
Phone	LTE Band 66_ QPSK	Measurement 117: Left Head with Cheek device position on Low Channel in LTE mode
Phone	2.4G WiFi_802.11b	Measurement 125: Left Head with Cheek device position on Low Channel in 802.11b mode

Phone	5.2G WiFi_802.11a	Measurement 127: Right Head with Cheek device position on Low Channel in 802.11a mode
Phone	5.3G WiFi_802.11n20	Measurement 133: Left Head with Cheek device position on High Channel in 802.11n mode
Phone	5.6G WiFi_802.11n40	Measurement 135: Right Head with Cheek device position on Middle Channel in 802.11n mode
Phone	5.8G WiFi_802.11a	Measurement 139: Right Head with Cheek device position on Low Channel in 802.11a mode
Phone	GSM850	Measurement 143: Flat Plane with Back device position on Middle Channel in GSM mode
Phone	GSM1900	Measurement 146: Flat Plane with Front device position on Low Channel in GSM mode
Phone	WCDMA1900_RMC	Measurement 147: Flat Plane with Back side device position on High Channel in WCDMA mode
Phone	LTE Band 2_ QPSK	Measurement 155: Flat Plane with Back device position on Low Channel in LTE mode
Phone	LTE Band 25_ QPSK	Measurement 183: Flat Plane with Back device position on Low Channel in LTE mode
Phone	LTE Band 30_ QPSK	Measurement 193: Flat Plane with Back device position on Middle Channel in LTE mode
Phone	LTE Band 40_ QPSK	Measurement 197: Flat Plane with Back device position on Middle Channel in LTE mode
Phone	LTE Band 66_ QPSK	Measurement 202: Flat Plane with Front device position on Low Channel in LTE mode
Phone	5.6G WiFi_802.11n40	Measurement 212: Flat Plane with Front device position on Middle Channel in WiFi_802.11n mode
Phone	5.8G WiFi_802.11a	Measurement 213: Flat Plane with Back device position on Low Channel in WiFi_802.11a mode
Phone	GPRS850_4TX	Measurement 215: Flat Plane with Back device position on Middle Channel in GPRS mode
Phone	GPRS1900_4TX	Measurement 224: Flat Plane with Bottom device position on Low Channel in GPRS mode
Phone	WCDMA1900_RMC	Measurement 229: Flat Plane with Bottom side device position on High Channel in WCDMA mode
Phone	WCDMA1700_RMC	Measurement 150/231: Flat Plane with Front side device position on High Channel in WCDMA mode
Phone	WCDMA850_RMC	Measurement 153/239: Flat Plane with Back side device position on Middle Channel in WCDMA mode
Phone	LTE Band 2_ QPSK	Measurement 248: Flat Plane with Bottom device position on Low Channel in LTE mode
Phone	LTE Band 4_ QPSK	Measurement 163/264: Flat Plane with Front device position on Middle Channel in LTE mode

Phone	LTE Band 5_ QPSK	<u>Measurement 165/266</u> : Flat Plane with Back device position on Low Channel in LTE mode
Phone	LTE Band 7_ QPSK	<u>Measurement 174/287</u> : Flat Plane with Back device position on Middle Channel in LTE mode
Phone	LTE Band 12_ QPSK	<u>Measurement 175/288</u> : Flat Plane with Back device position on Low Channel in LTE mode
Phone	LTE Band 13_ QPSK	<u>Measurement 179/298</u> : Flat Plane with Back device position on Middle Channel in LTE mode
Phone	LTE Band 25_ QPSK	<u>Measurement 312</u> : Flat Plane with Bottom device position on Low Channel in LTE mode
Phone	LTE Band 26_ QPSK	<u>Measurement 189/323</u> : Flat Plane with Back device position on Low Channel in LTE mode
Phone	LTE Band 30_ QPSK	<u>Measurement 337</u> : Flat Plane with Bottom device position on Middle Channel in LTE mode
Phone	LTE Band 40_ QPSK	<u>Measurement 347</u> : Flat Plane with Bottom device position on Middle Channel in LTE mode
Phone	LTE Band 66_ QPSK	<u>Measurement 357</u> : Flat Plane with Bottom device position on Low Channel in LTE mode
Phone	WiFi_802.11b	<u>Measurement 363</u> : Flat Plane with Back device position on Low Channel in WiFi_802.11b mode
Phone	5.2G WiFi_802.11a	<u>Measurement 367</u> : Flat Plane with Back device position on Low Channel in WiFi_802.11a mode
Phone	5.3G WiFi_802.11n20	<u>Measurement 371</u> : Flat Plane with Back device position on High Channel in WiFi_802.11n mode
Phone	5.6G WiFi_802.11n40	<u>Measurement 377</u> : Flat Plane with Right device position on Middle Channel in WiFi_802.11n mode
Phone	5.8G WiFi_802.11a	<u>Measurement 381</u> : Flat Plane with Right device position on Low Channel in WiFi_802.11a mode
<i>Remark: SAR plot is showed the highest measured SAR in each exposure configuration, wireless mode and frequency band combination.</i>		

MEASUREMENT 3

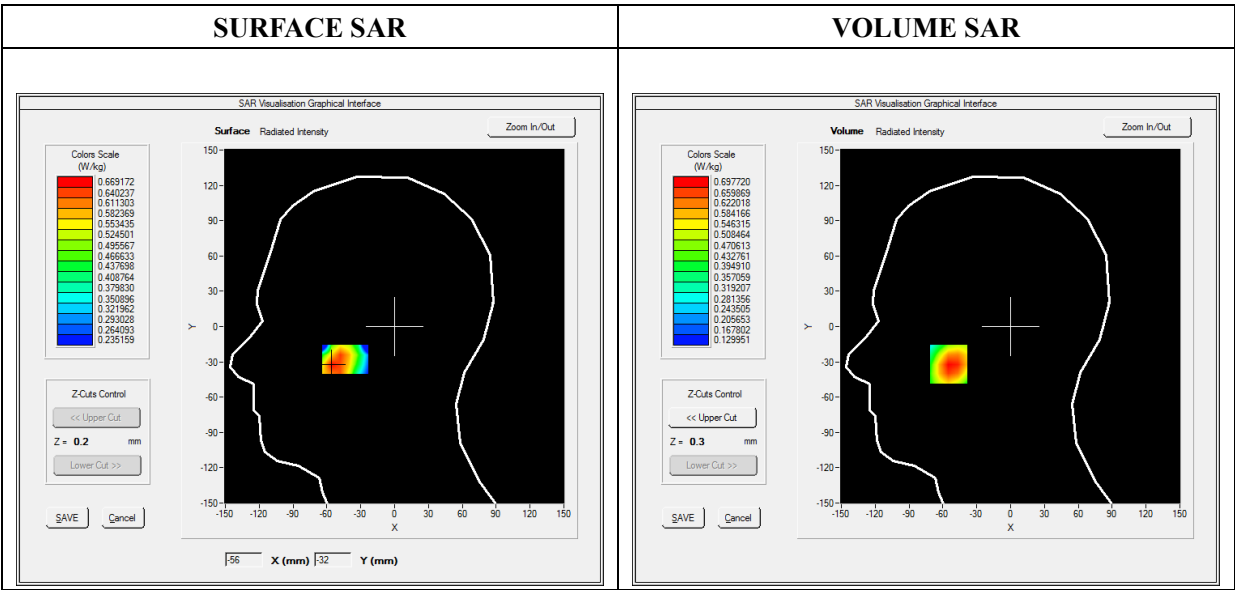
Type: Phone measurement (Complete)
Date of measurement: 2020-10-22
Measurement duration: 11 minutes 48 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)

B. SAR Measurement Results

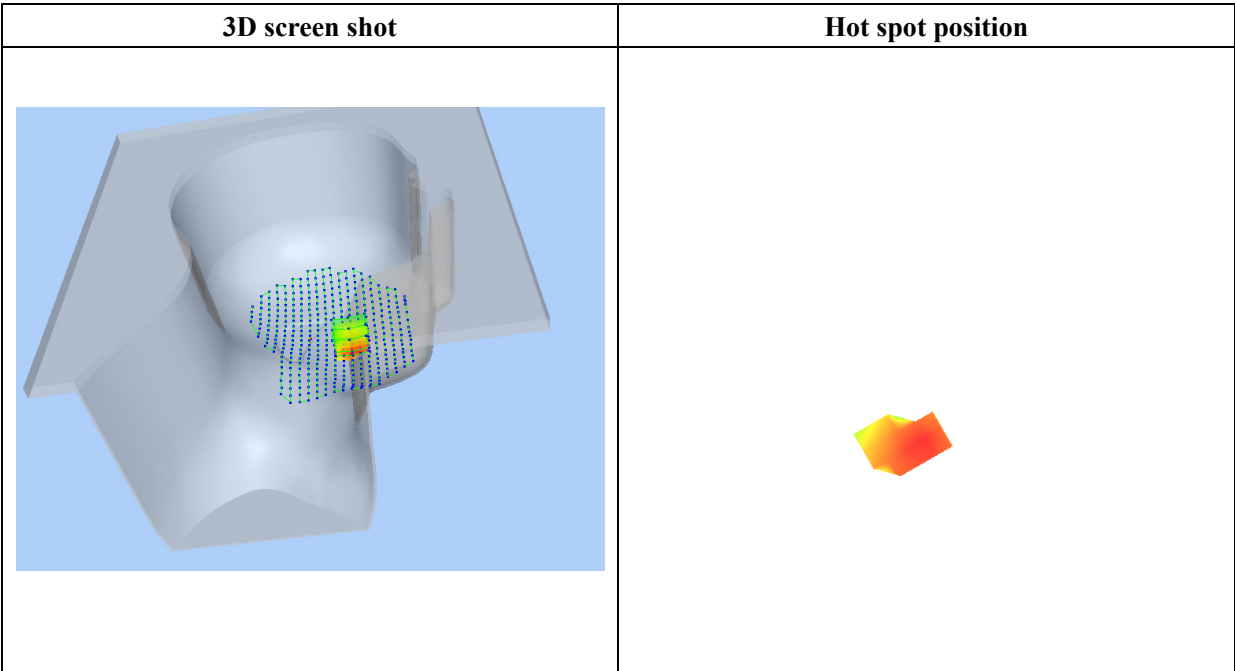
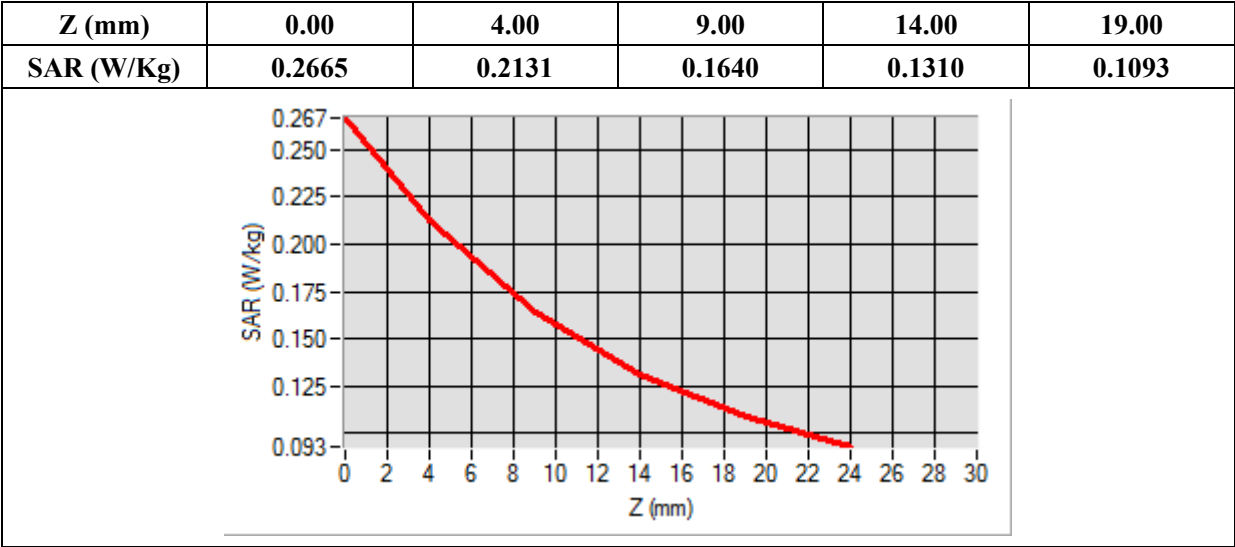
Frequency (MHz)	836.599976
Relative Permittivity (real part)	41.110245
Conductivity (S/m)	0.871245
Power Variation (%)	1.144536
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-41.00, Y=-17.00

SAR Peak: 0.27 W/kg

SAR 10g (W/Kg)	0.153123
SAR 1g (W/Kg)	0.206719



MEASUREMENT 7

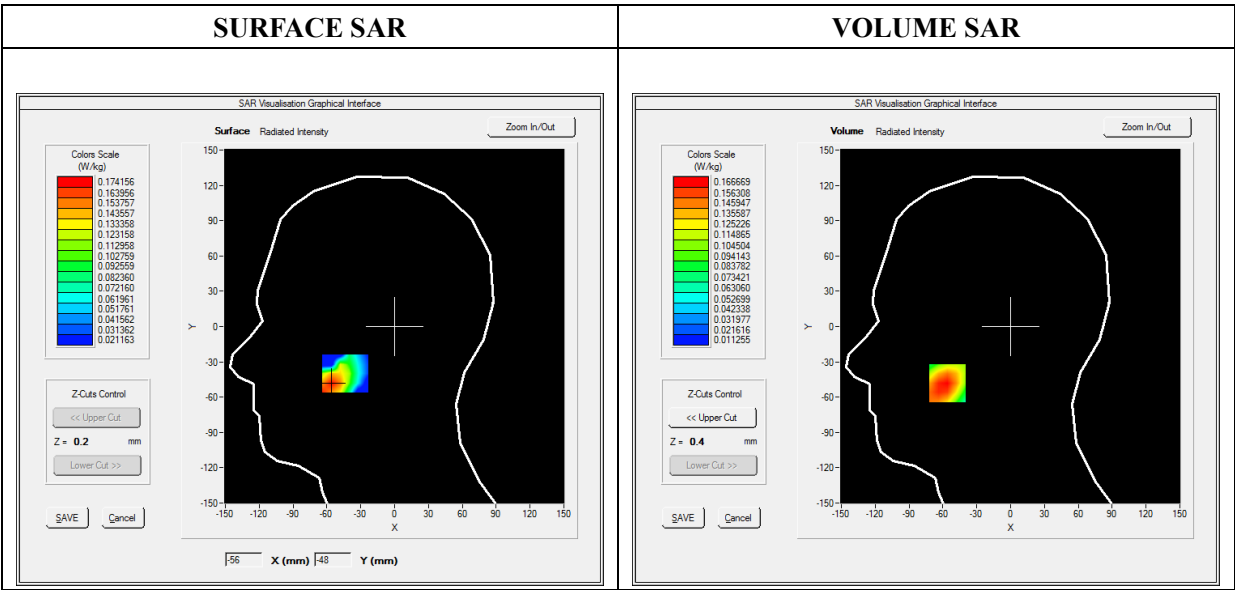
Type: Phone measurement (Complete)
Date of measurement: 2020-10.24
Measurement duration: 11 minutes 48 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	TDMA (Crest factor: 8.0)

B. SAR Measurement Results

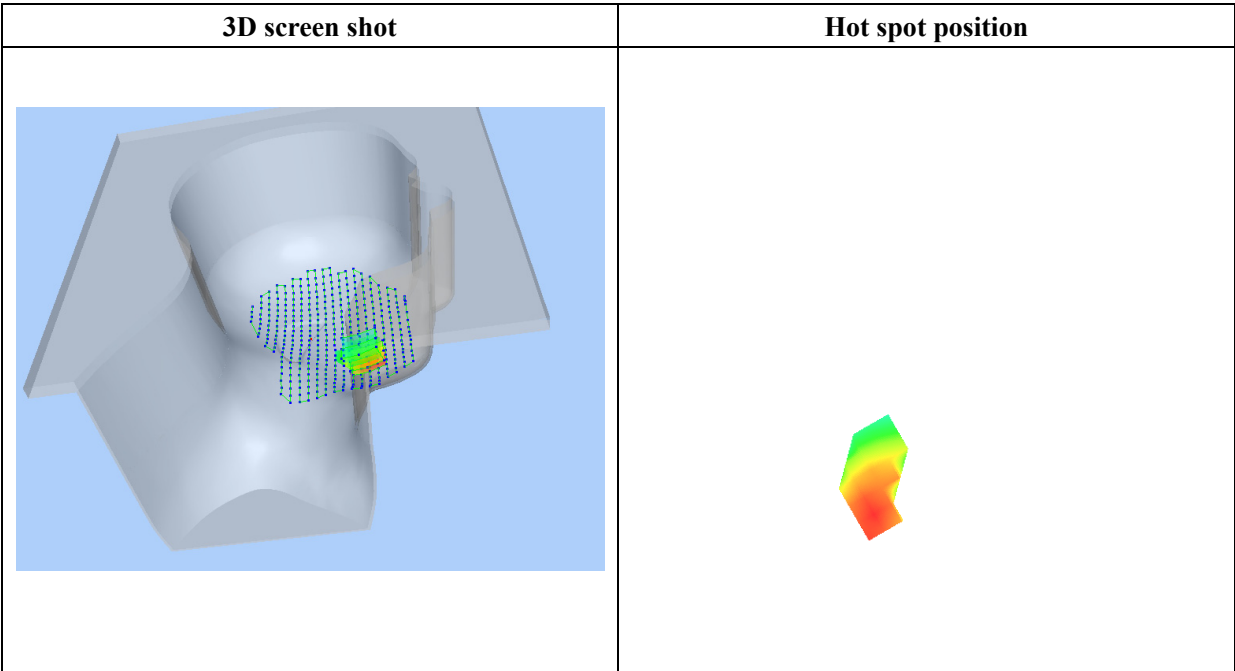
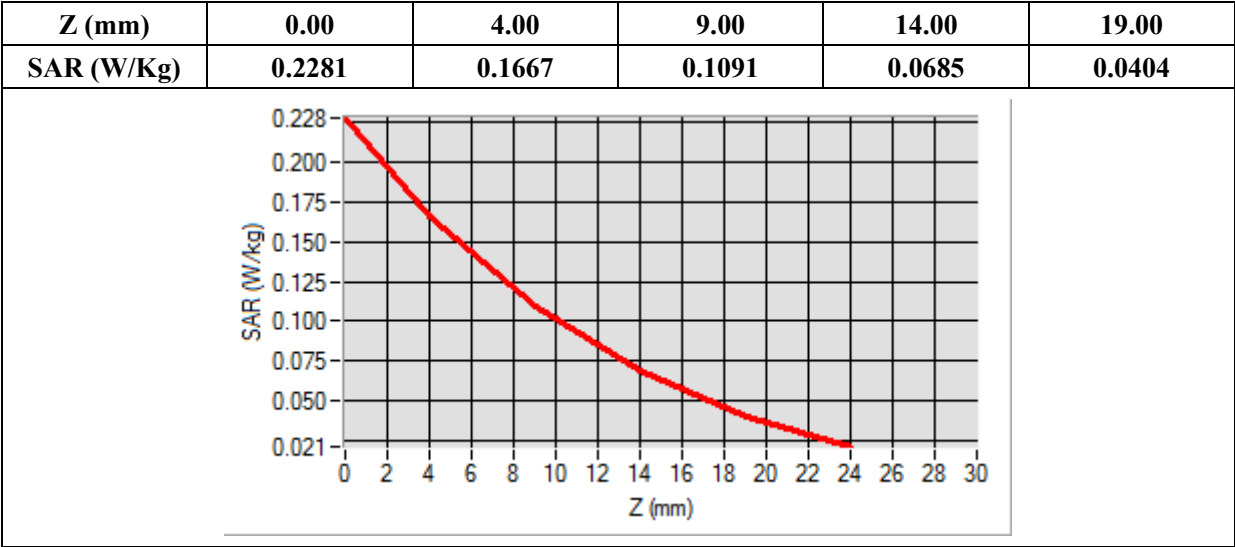
Frequency (MHz)	1850.200000
Relative Permittivity (real part)	38.560124
Conductivity (S/m)	1.380369
Power Variation (%)	1.442440
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-56.00, Y=-48.00

SAR Peak: 0.24 W/kg

SAR 10g (W/Kg)	0.098567
SAR 1g (W/Kg)	0.160059



MEASUREMENT 9

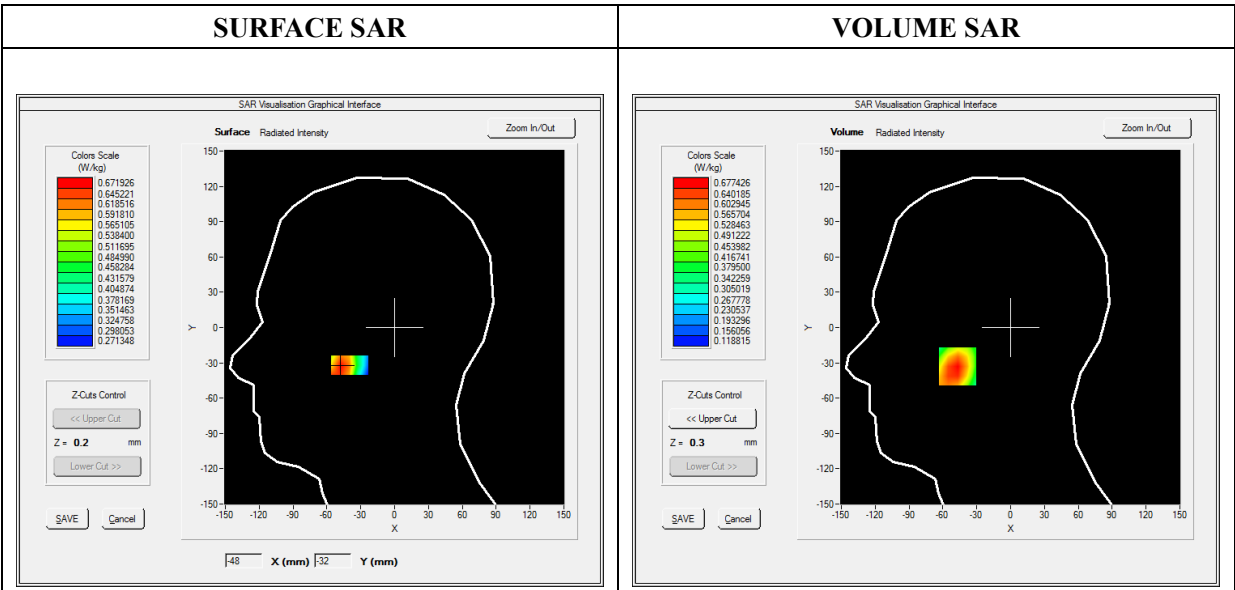
Type: Phone measurement (Complete)
Date of measurement: 2020-10-22
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GPRS850_4TX
Channels	Middle
Signal	Duty Cycle: 1:4

B. SAR Measurement Results

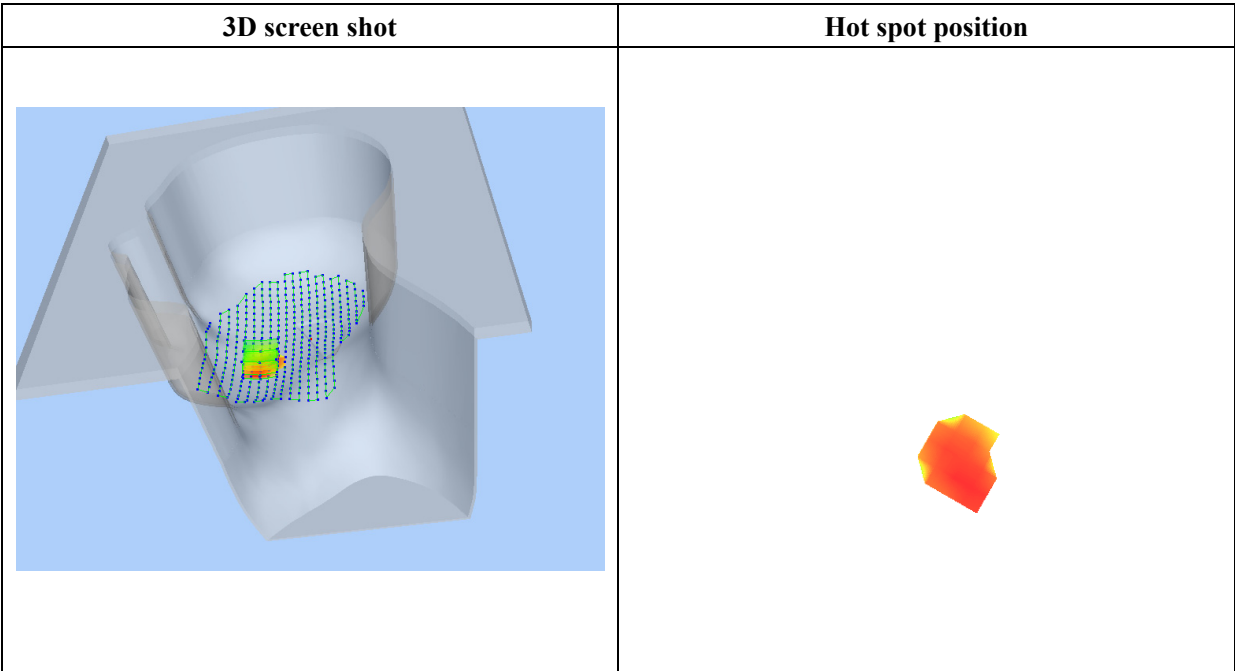
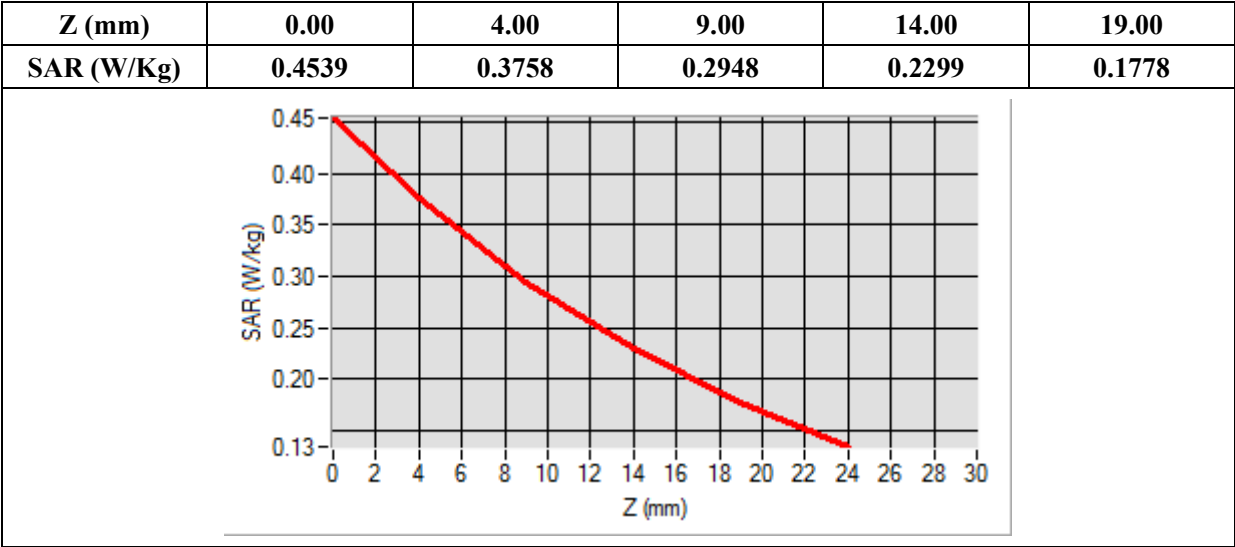
Frequency (MHz)	836.599976
Relative Permittivity (real part)	41.110245
Conductivity (S/m)	0.871245
Power Variation (%)	1.536272
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-47.00, Y=-35.00

SAR Peak: 0.46 W/kg

SAR 10g (W/Kg)	0.258675
SAR 1g (W/Kg)	0.359596



MEASUREMENT 15

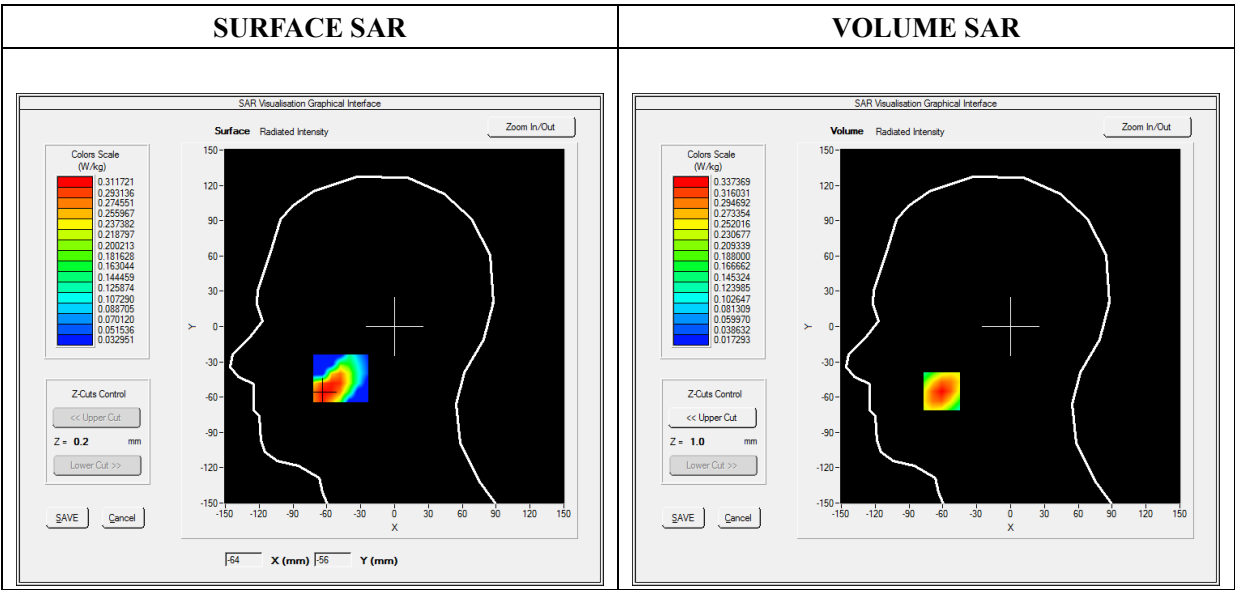
Type: Phone measurement (Complete)
Date of measurement: 2020-10-24
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	GPRS1900_4TX
Channels	Low
Signal	Duty Cycle: 1:4

B. SAR Measurement Results

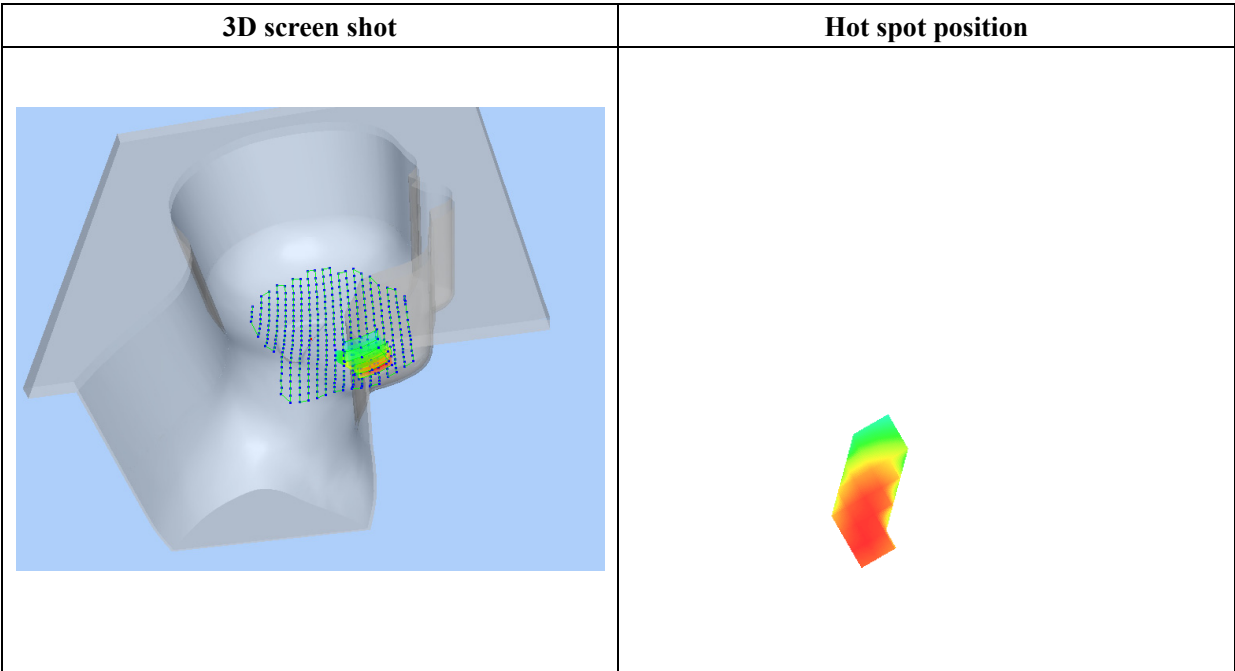
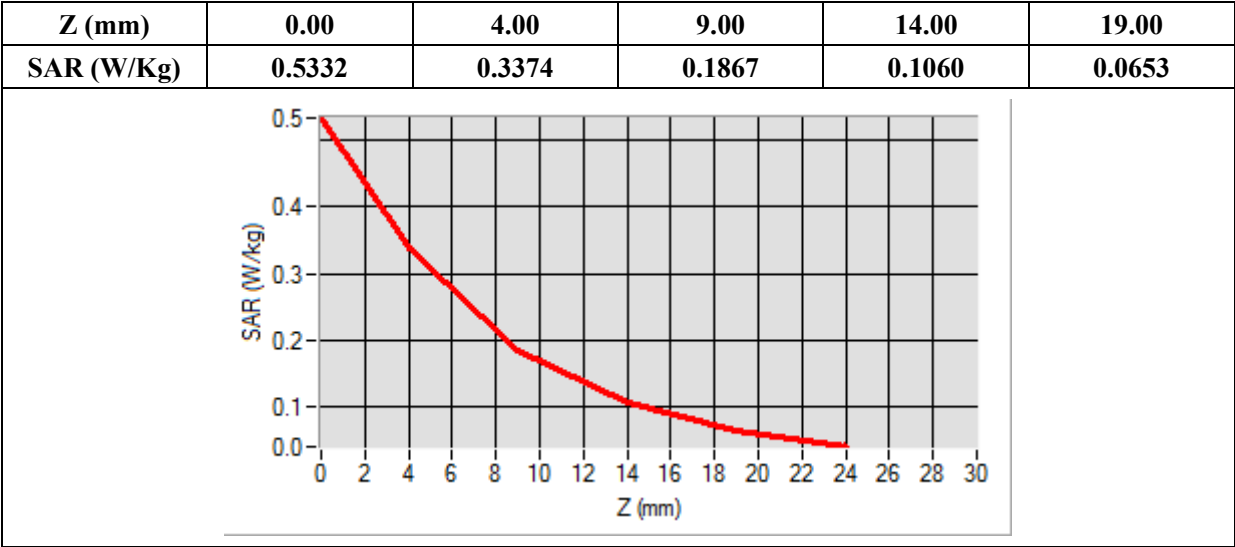
Frequency (MHz)	1850.200000
Relative Permittivity (real part)	38.560124
Conductivity (S/m)	1.380369
Power Variation (%)	1.536272
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-61.00, Y=-55.00

SAR Peak: 0.53 W/kg

SAR 10g (W/Kg)	0.182743
SAR 1g (W/Kg)	0.319808



MEASUREMENT 19

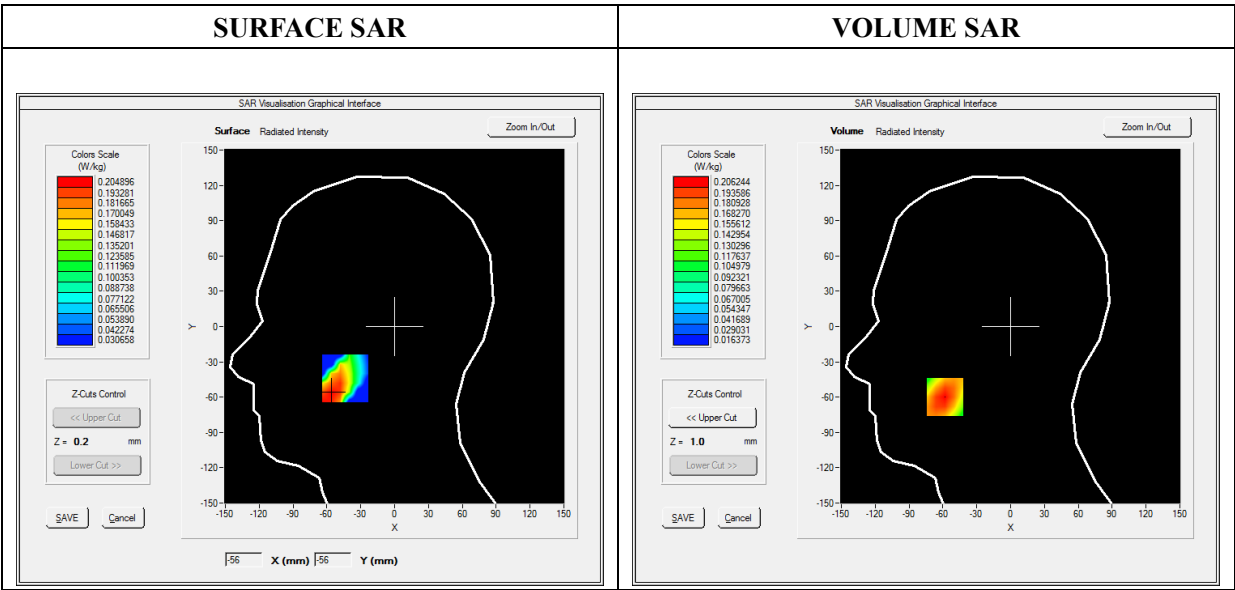
Type: Phone measurement (Complete)
Date of measurement: 2020-10-24
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	WCDMA1900_RMC
Channels	High
Signal	Duty Cycle 1:1

B. SAR Measurement Results

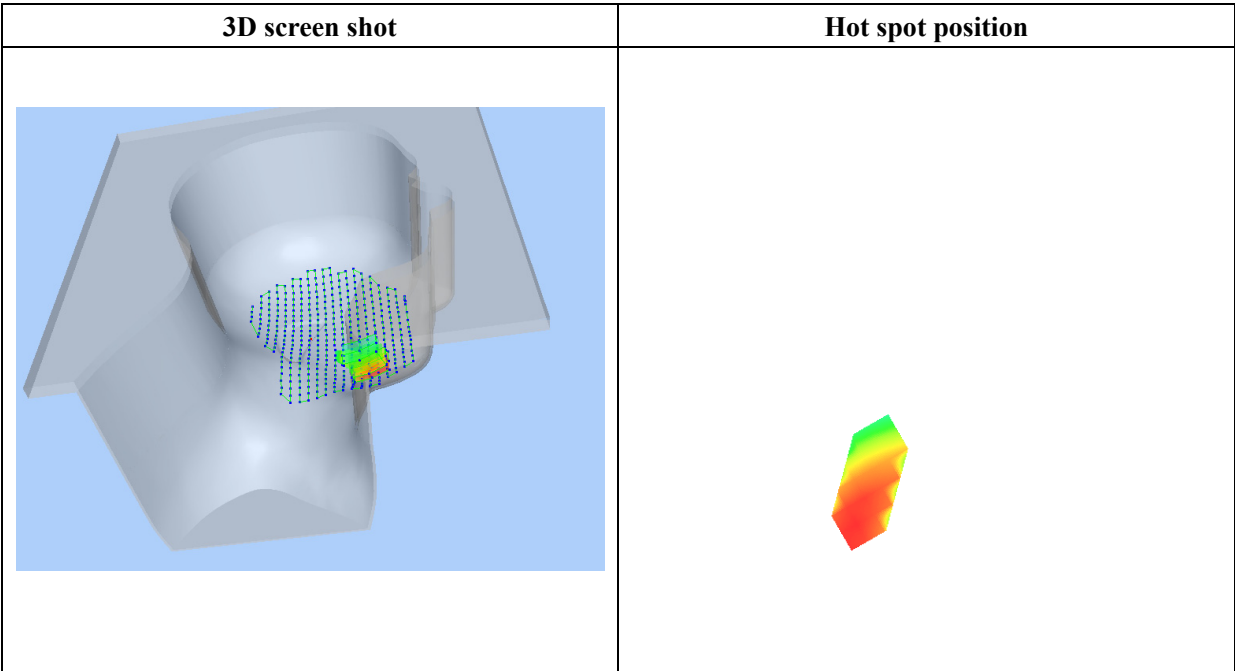
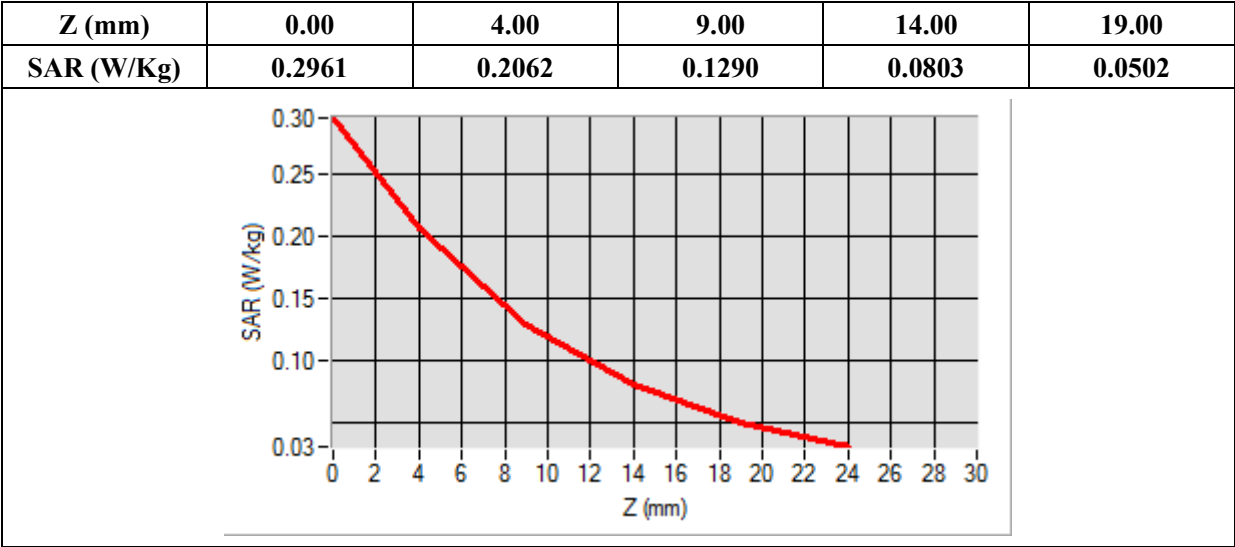
Frequency (MHz)	1907.600000
Relative Permittivity (real part)	38.560124
Conductivity (S/m)	1.380369
Power Variation (%)	1.524540
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-58.00, Y=-60.00

SAR Peak: 0.30 W/kg

SAR 10g (W/Kg)	0.121756
SAR 1g (W/Kg)	0.196521



MEASUREMENT 23

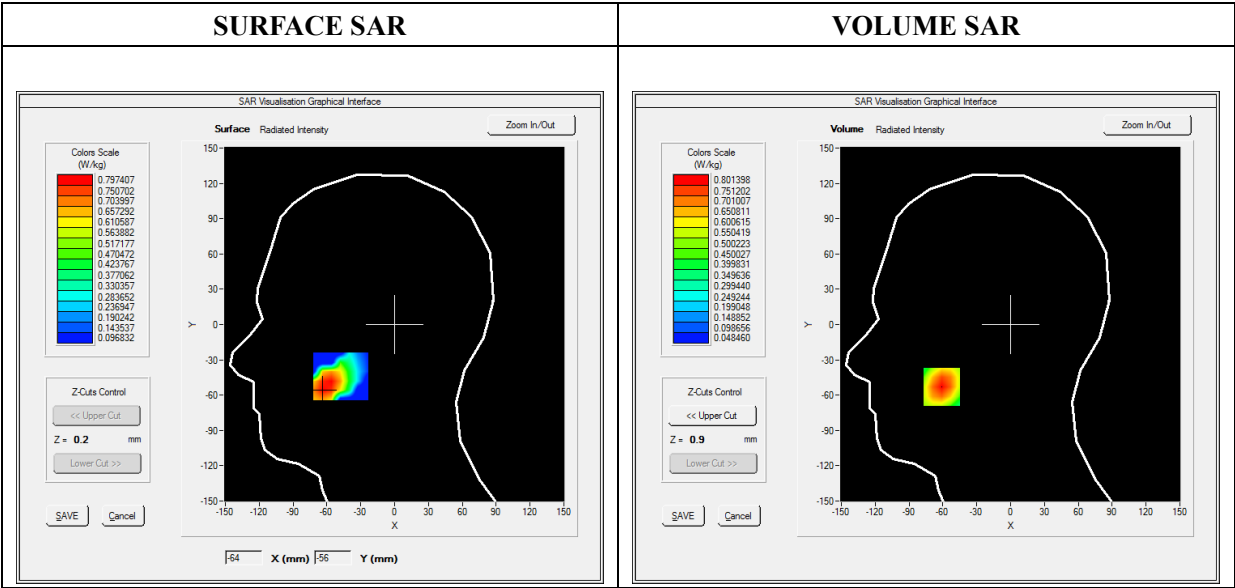
Type: Phone measurement (Complete)
Date of measurement: 2020-10-24
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	WCDMA1700_RMC
Channels	High
Signal	Duty Cycle 1:1

B. SAR Measurement Results

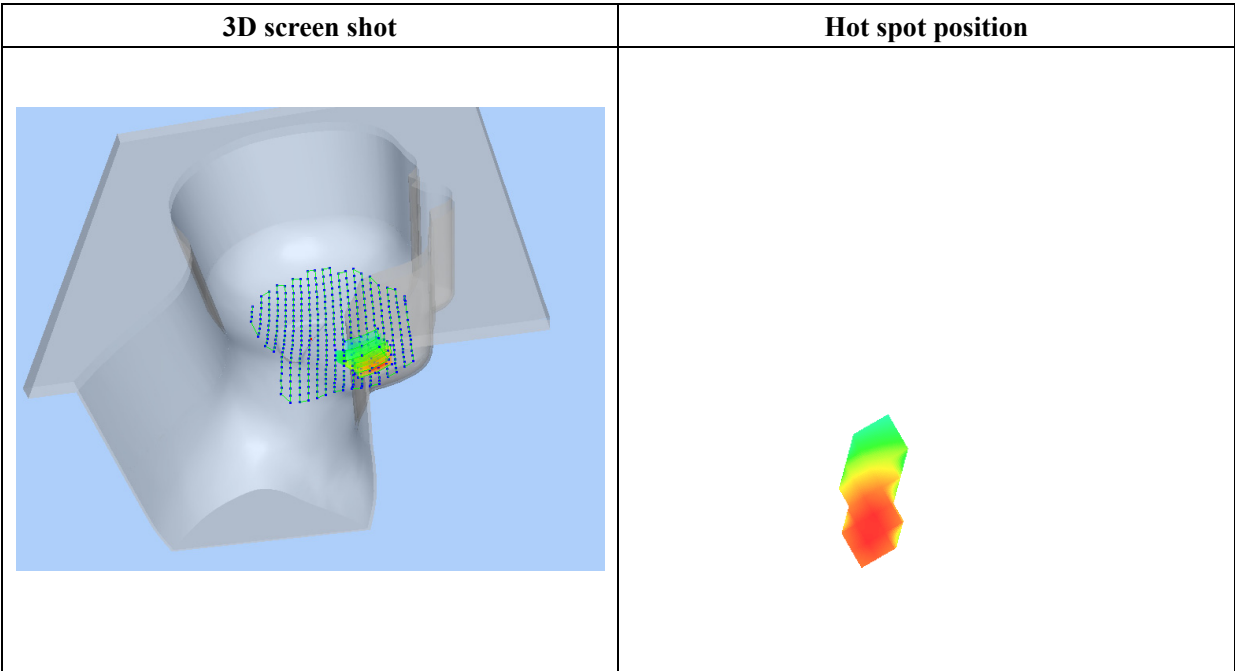
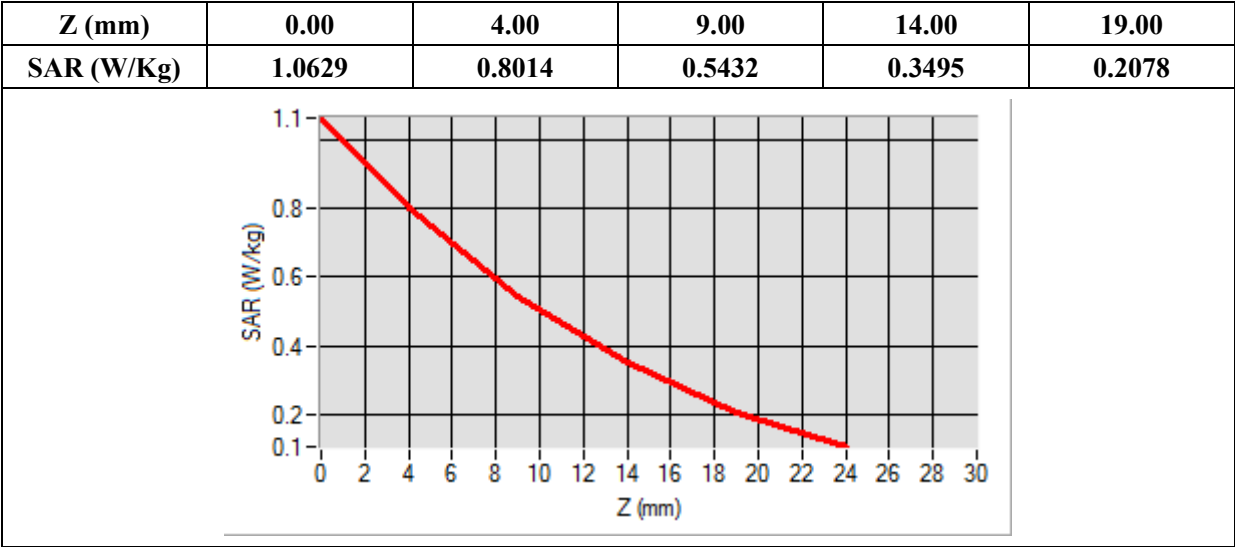
Frequency (MHz)	1752.600000
Relative Permittivity (real part)	39.024890
Conductivity (S/m)	1.371250
Power Variation (%)	1.374628
Ambient Temperature	21.1
Liquid Temperature	21.2



Maximum location: X=-61.00, Y=-53.00

SAR Peak: 1.07 W/kg

SAR 10g (W/Kg)	0.468718
SAR 1g (W/Kg)	0.756005



MEASUREMENT 27

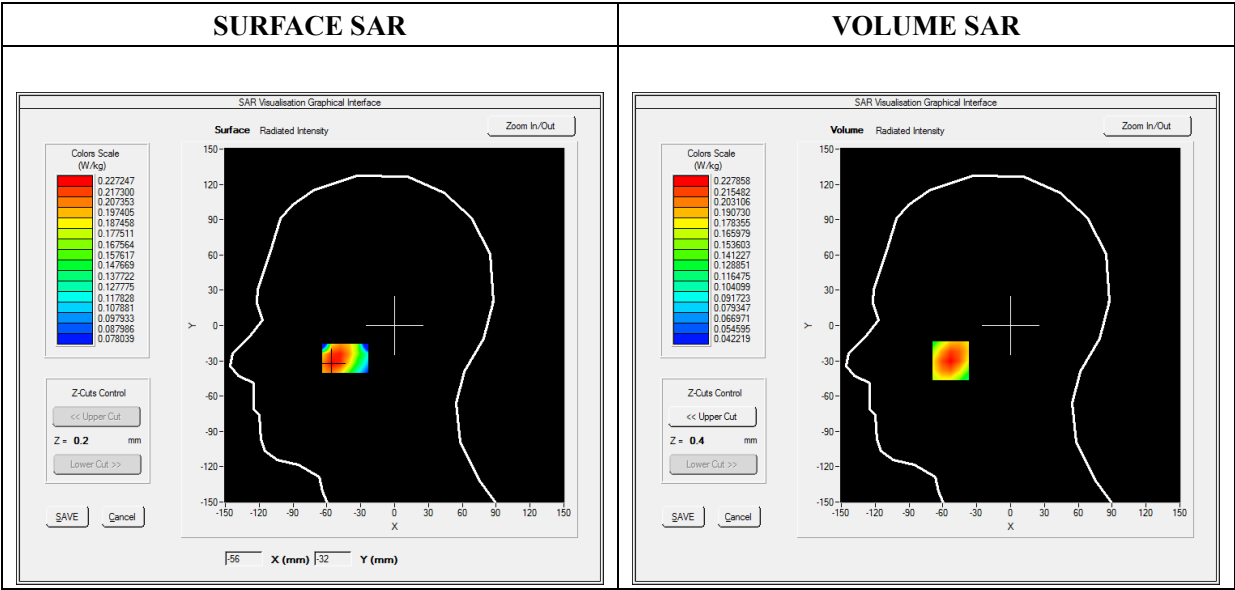
Type: Phone measurement (Complete)
Date of measurement: 2020-10-22
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	WCDMA850_RMC
Channels	Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

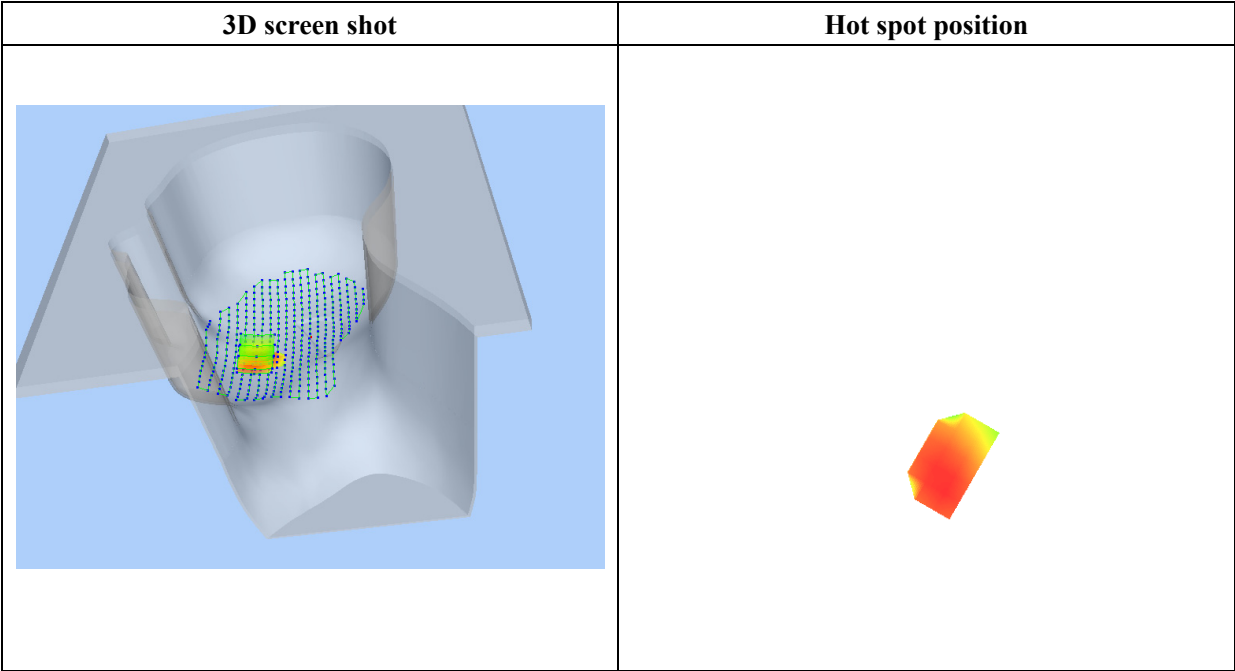
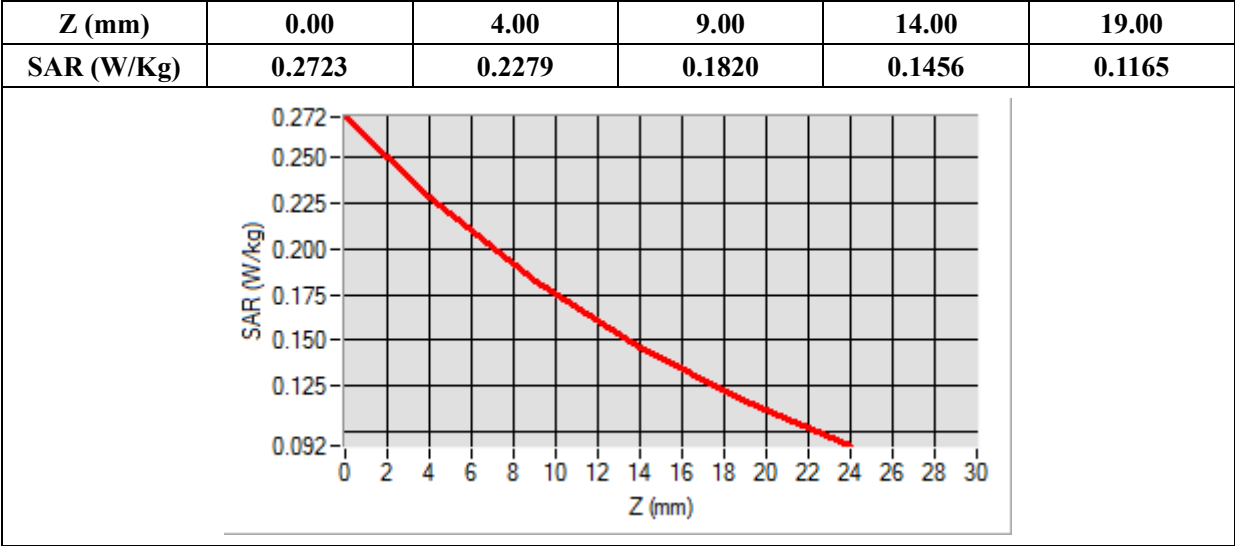
Frequency (MHz)	836.400000
Relative Permittivity (real part)	41.110245
Conductivity (S/m)	0.871245
Power Variation (%)	1.342427
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-53.00, Y=-30.00

SAR Peak: 0.27 W/kg

SAR 10g (W/Kg)	0.161600
SAR 1g (W/Kg)	0.218899



MEASUREMENT 33

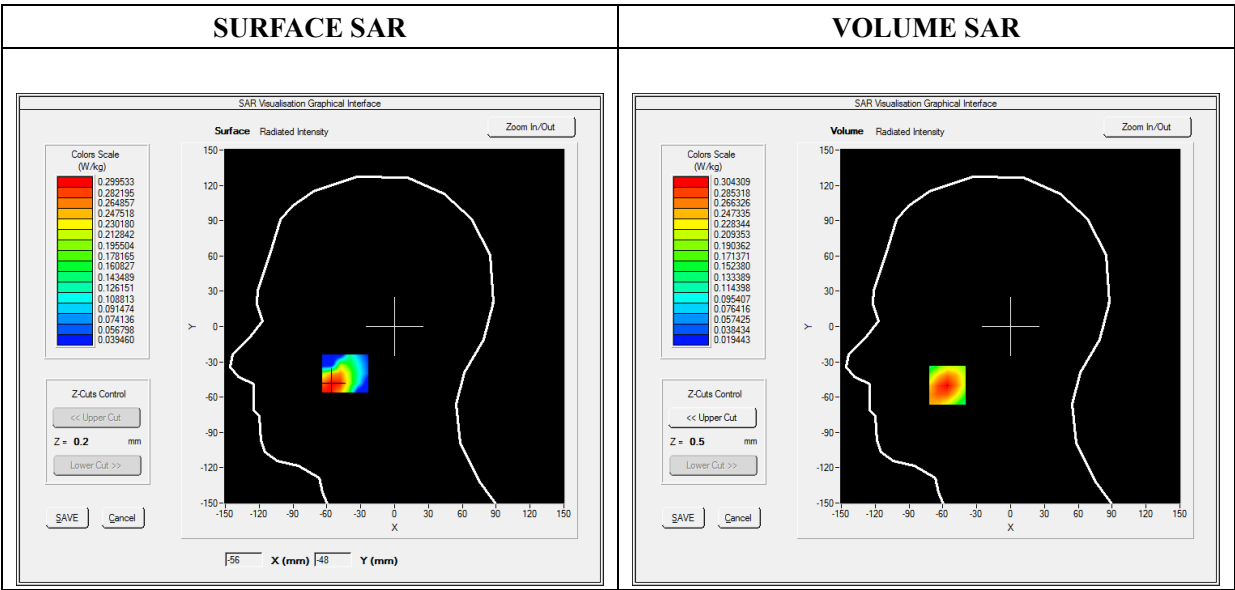
Type: Phone measurement (Complete)
Date of measurement: 2020-10-24
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	LTE Band 2
Channels	QPSK, 20MHz, 1RB,Low
Signal	Duty Cycle: 1:4

B. SAR Measurement Results

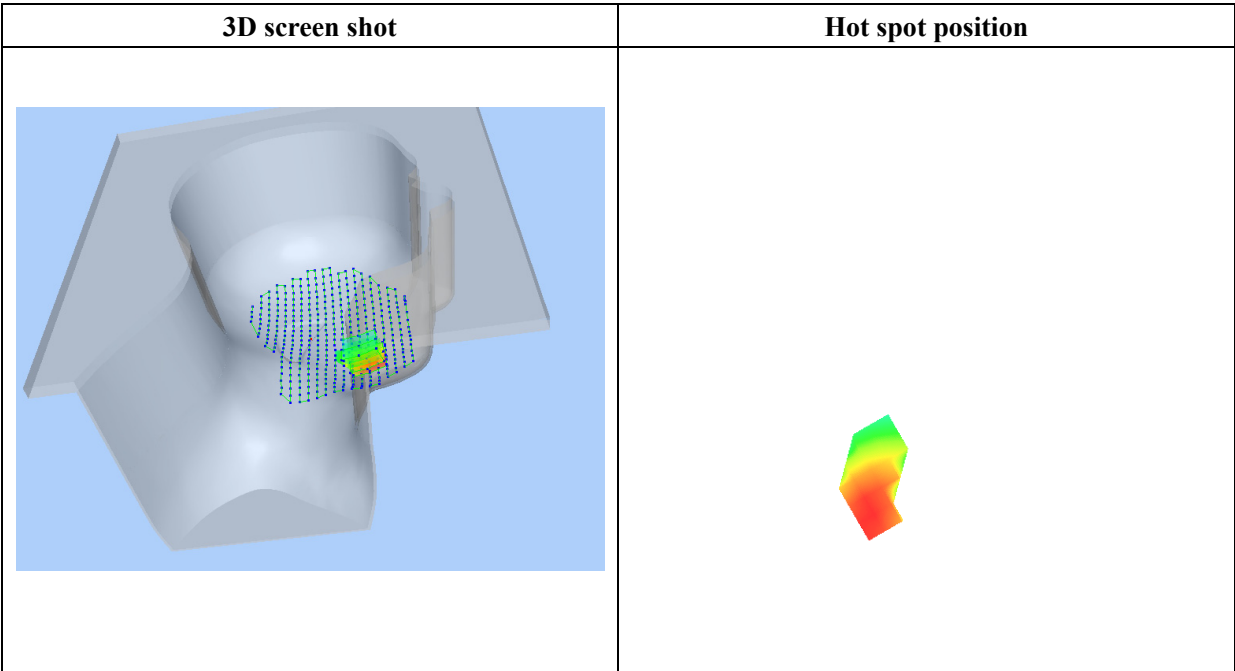
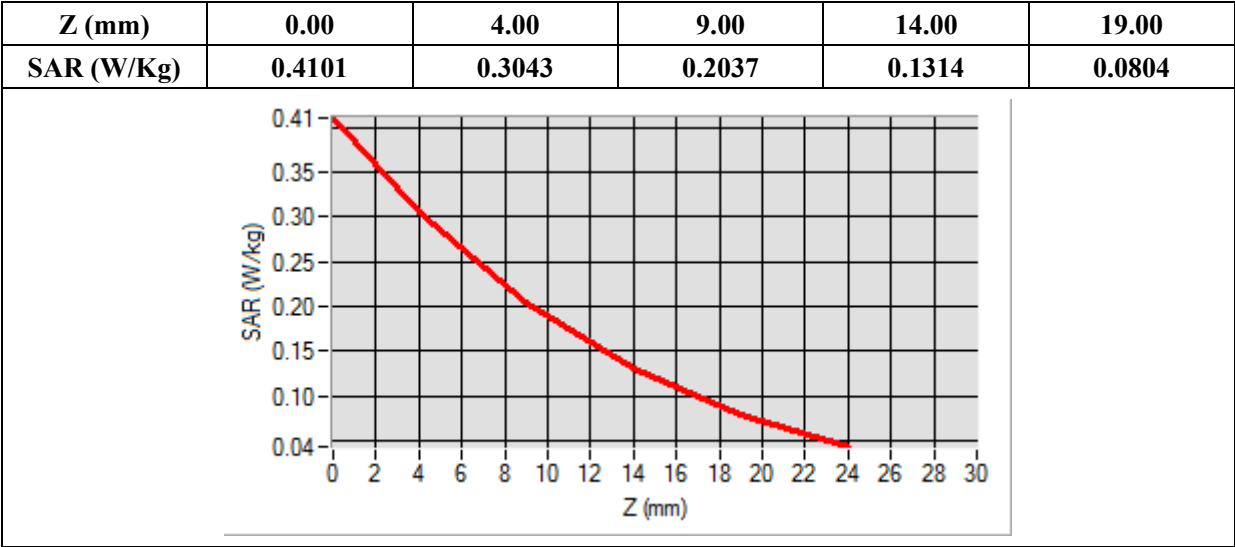
Frequency (MHz)	1860.000000
Relative Permittivity (real part)	38.560124
Conductivity (S/m)	1.380369
Power Variation (%)	1.536272
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-56.00, Y=-50.00

SAR Peak: 0.41 W/kg

SAR 10g (W/Kg)	0.178855
SAR 1g (W/Kg)	0.288346



MEASUREMENT 41

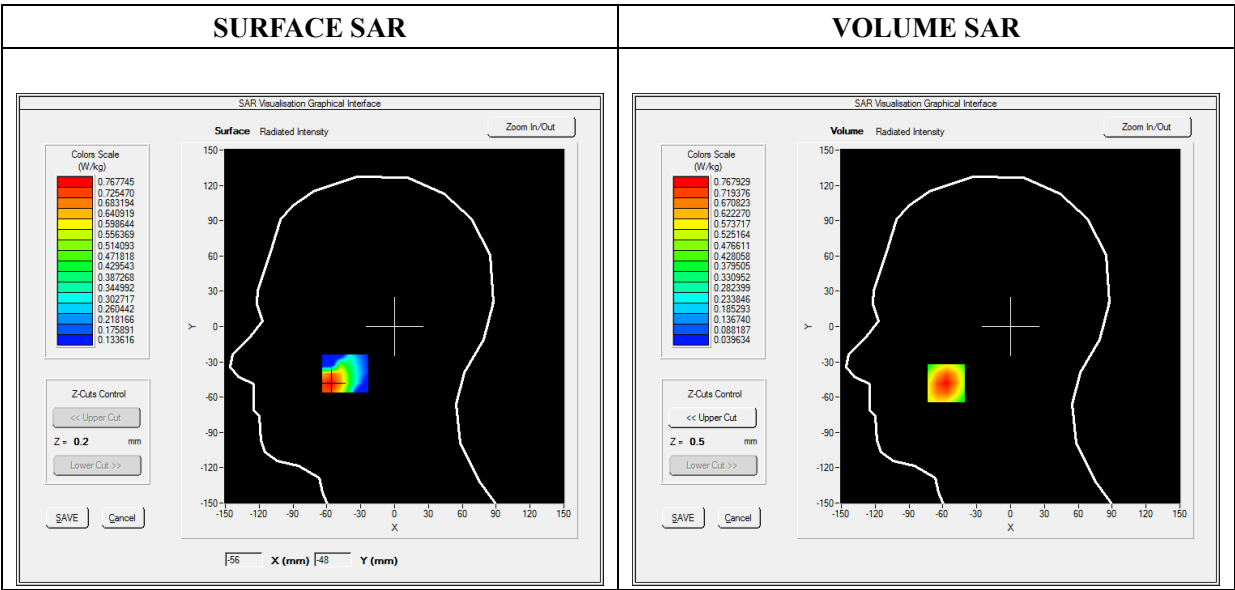
Type: Phone measurement (Complete)
Date of measurement: 2020-10-24
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	LTE Band 4
Channels	QPSK, 20MHz, 1RB,Low
Signal	Duty Cycle 1:1

B. SAR Measurement Results

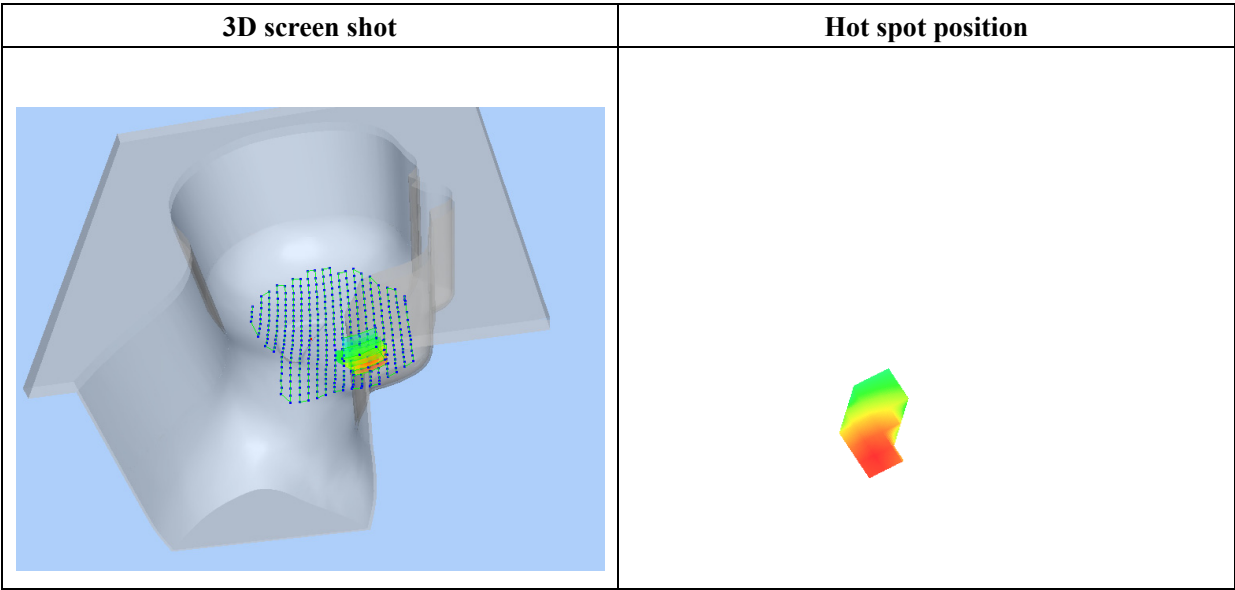
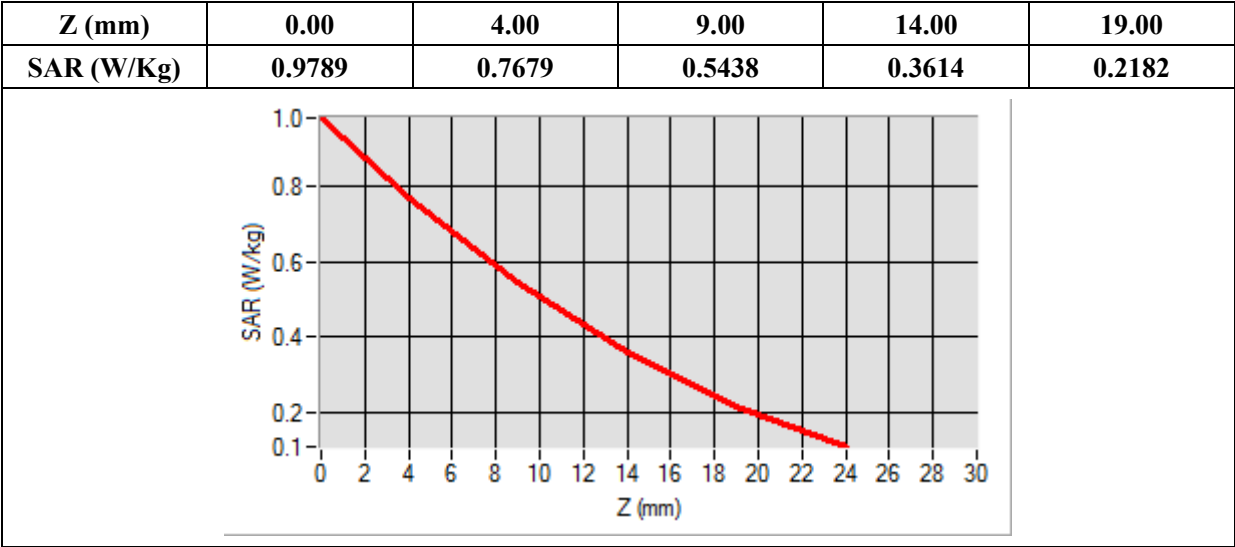
Frequency (MHz)	1720.000000
Relative Permittivity (real part)	39.024890
Conductivity (S/m)	1.371250
Power Variation (%)	1.374628
Ambient Temperature	21.1
Liquid Temperature	21.2



Maximum location: X=-57.00, Y=-48.00

SAR Peak: 0.99 W/kg

SAR 10g (W/Kg)	0.459389
SAR 1g (W/Kg)	0.725535



MEASUREMENT 47

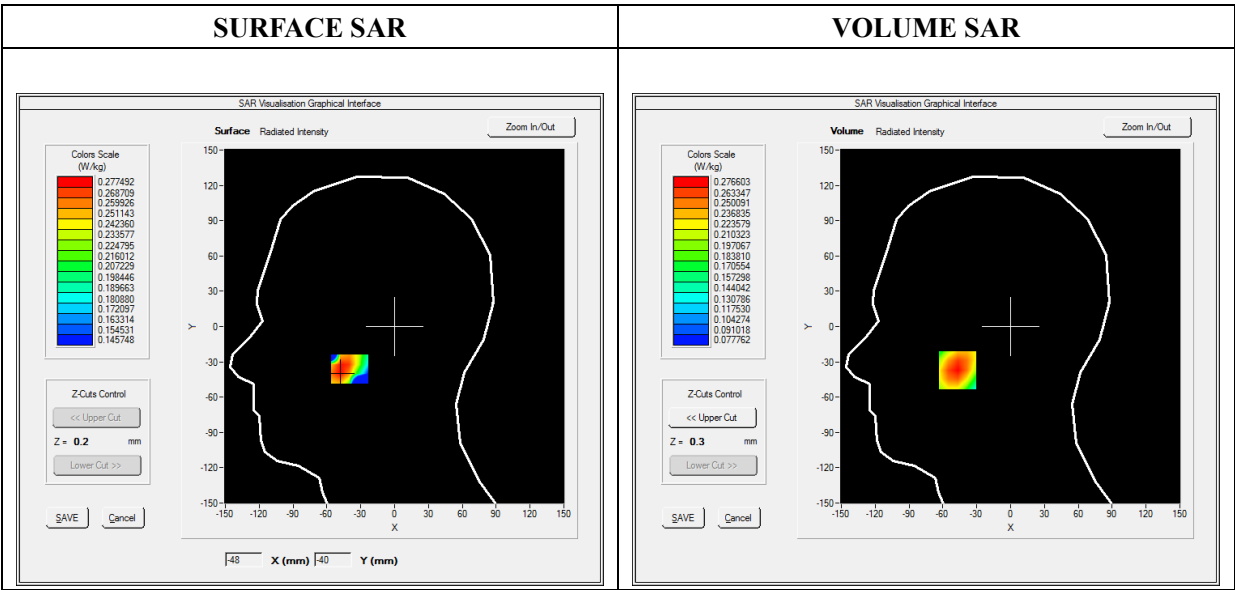
Type: Phone measurement (Complete)
Date of measurement: 2020-10-22
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	LTE Band 5
Channels	QPSK, 10MHz, 1RB, Low
Signal	Duty Cycle 1:1

B. SAR Measurement Results

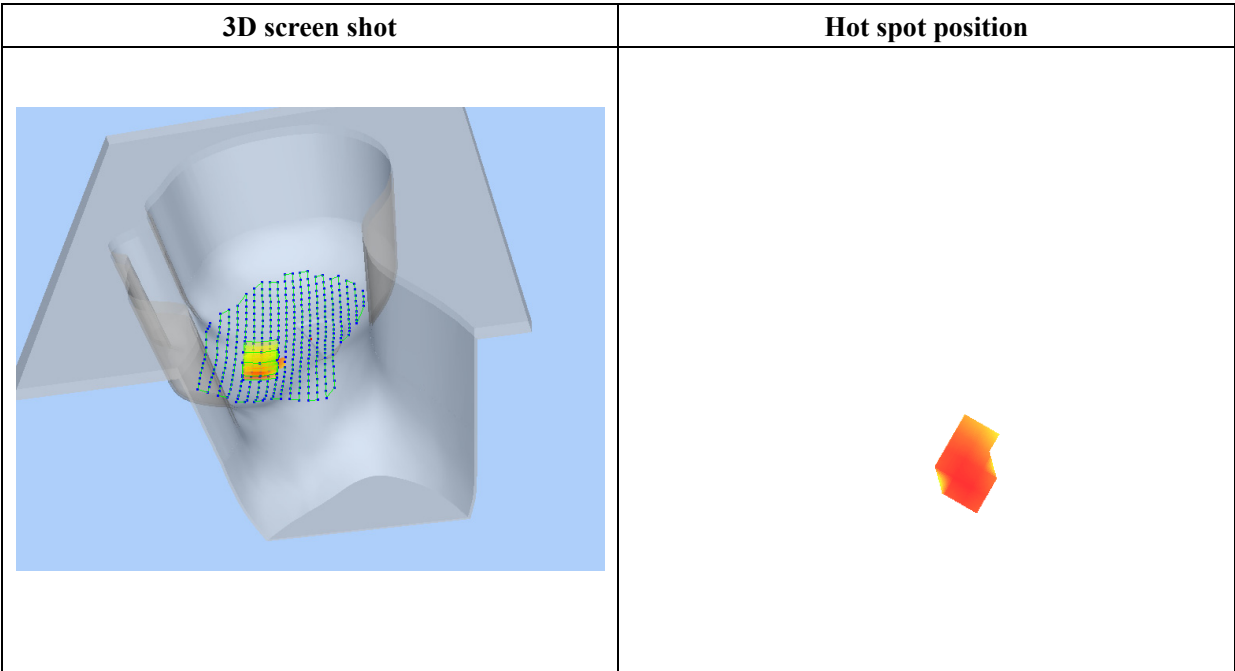
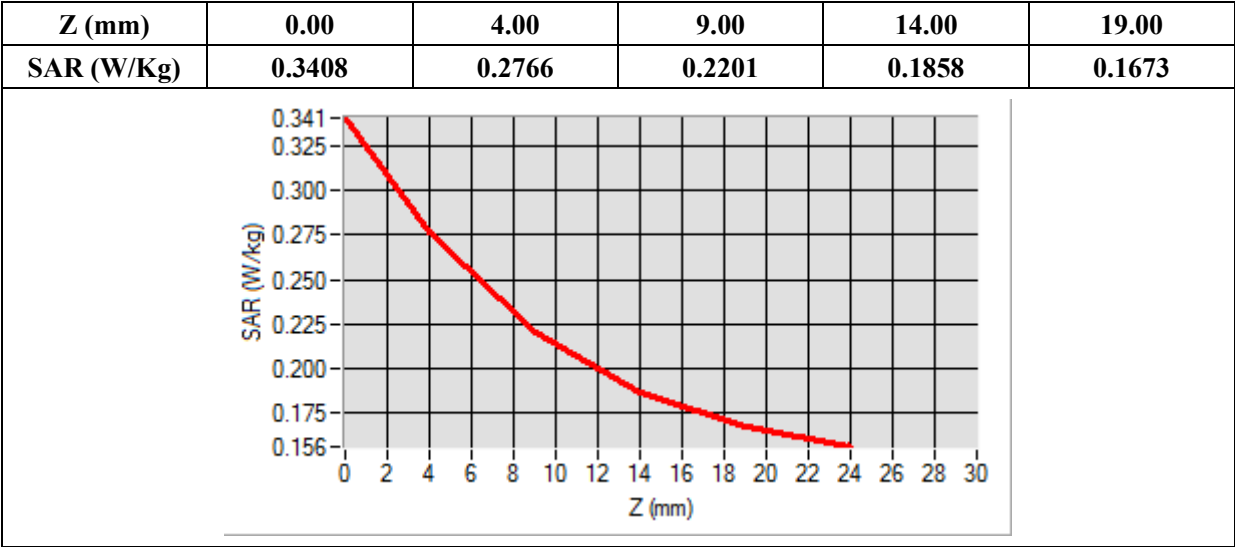
Frequency (MHz)	829.000000
Relative Permittivity (real part)	41.110245
Conductivity (S/m)	0.871245
Power Variation (%)	0.924535
Ambient Temperature	21.1
Liquid Temperature	21.2



Maximum location: X=-47.00, Y=-37.00

SAR Peak: 0.34 W/kg

SAR 10g (W/Kg)	0.206319
SAR 1g (W/Kg)	0.267494



MEASUREMENT 57

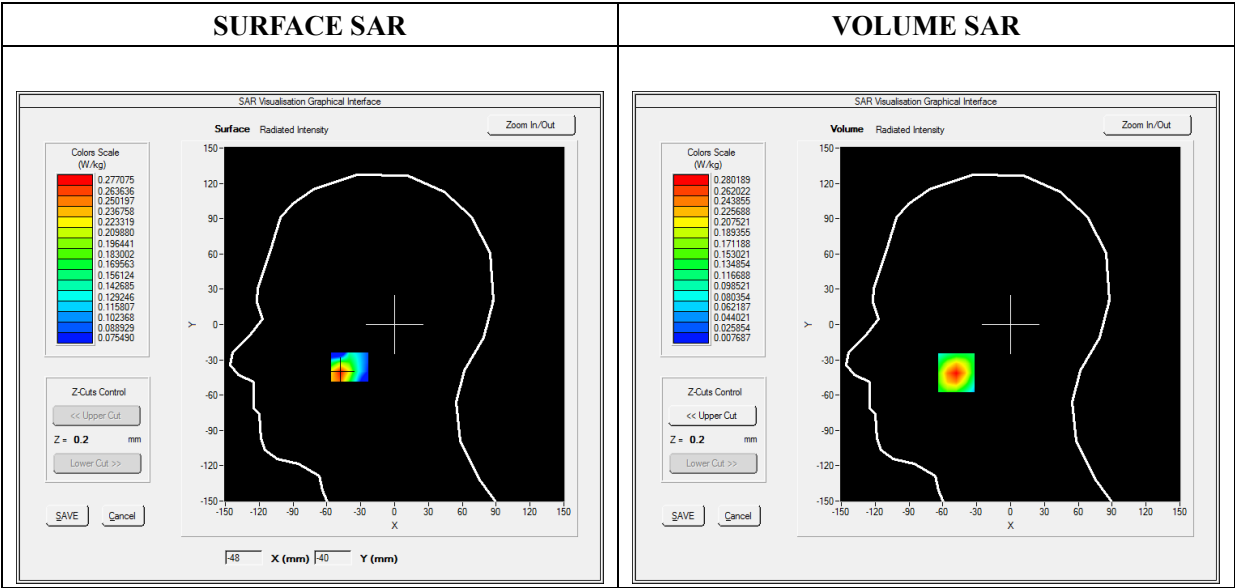
Type: Phone measurement (Complete)
Date of measurement: 2020-10-26
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	LTE Band 7
Channels	QPSK, 20MHz, 1RB, High
Signal	Duty Cycle 1:1

B. SAR Measurement Results

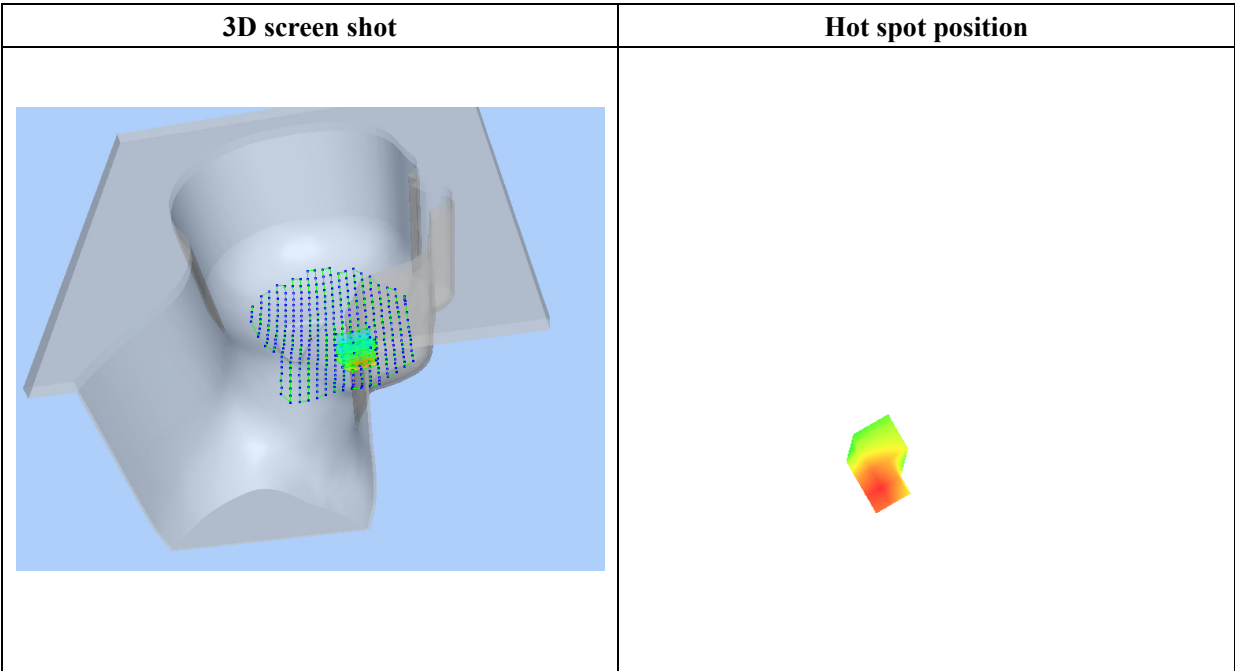
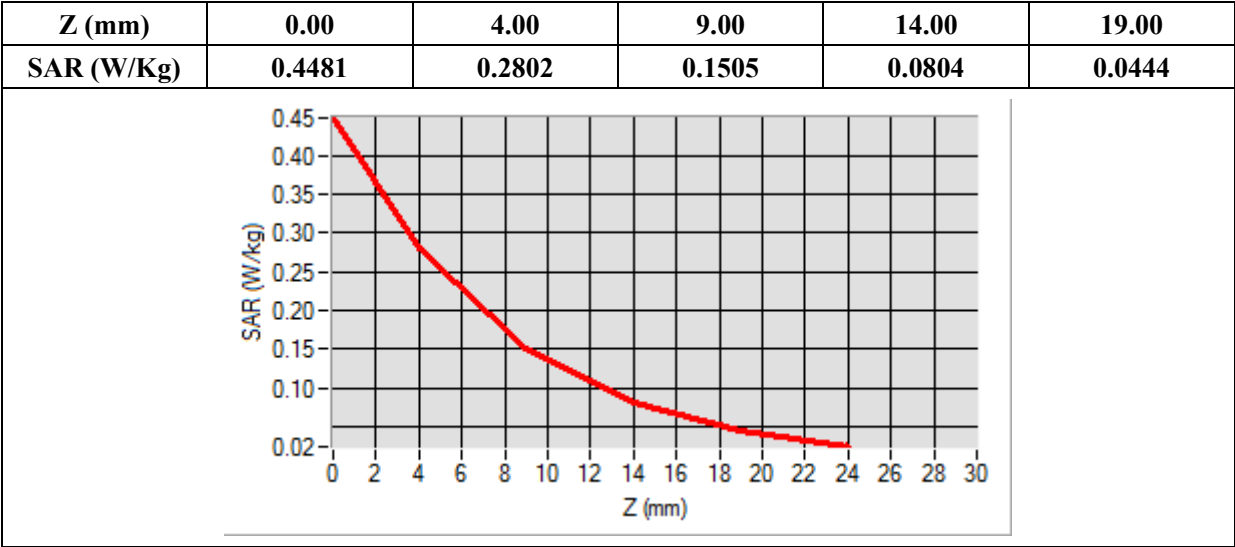
Frequency (MHz)	2560.000000
Relative Permittivity (real part)	38.631092
Conductivity (S/m)	1.930182
Power Variation (%)	0.924535
Ambient Temperature	21.1
Liquid Temperature	21.2



Maximum location: X=-48.00, Y=-41.00

SAR Peak: 0.45 W/kg

SAR 10g (W/Kg)	0.133489
SAR 1g (W/Kg)	0.260648



MEASUREMENT 63

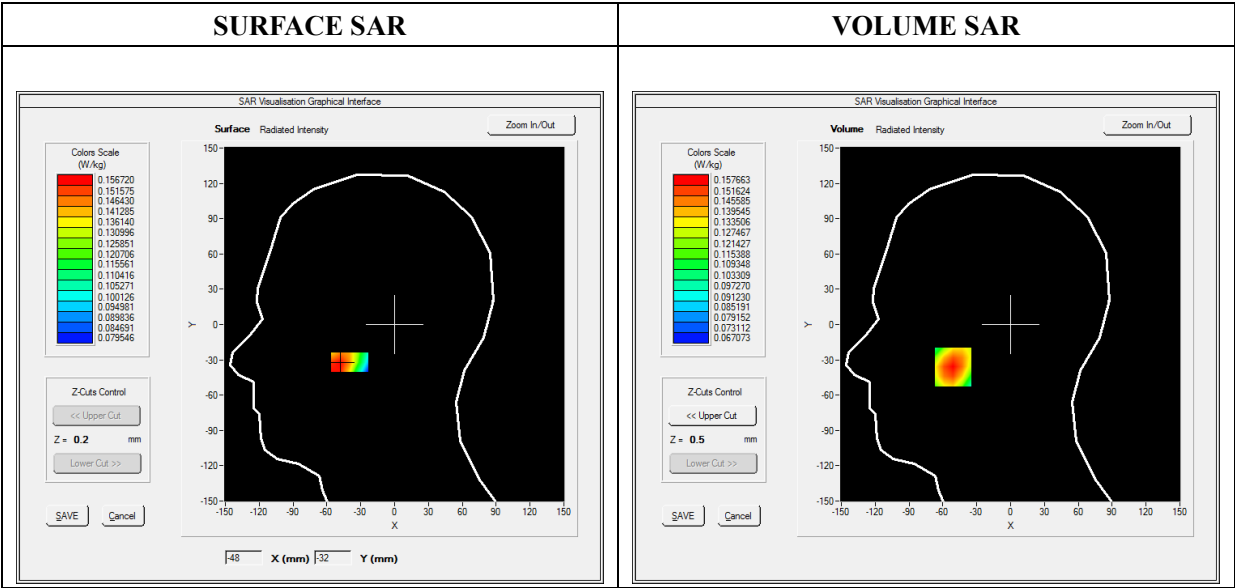
Type: Phone measurement (Complete)
Date of measurement: 2020-10-22
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	LTE Band 12
Channels	QPSK, 10MHz, 1RB, Low
Signal	Duty Cycle 1:1

B. SAR Measurement Results

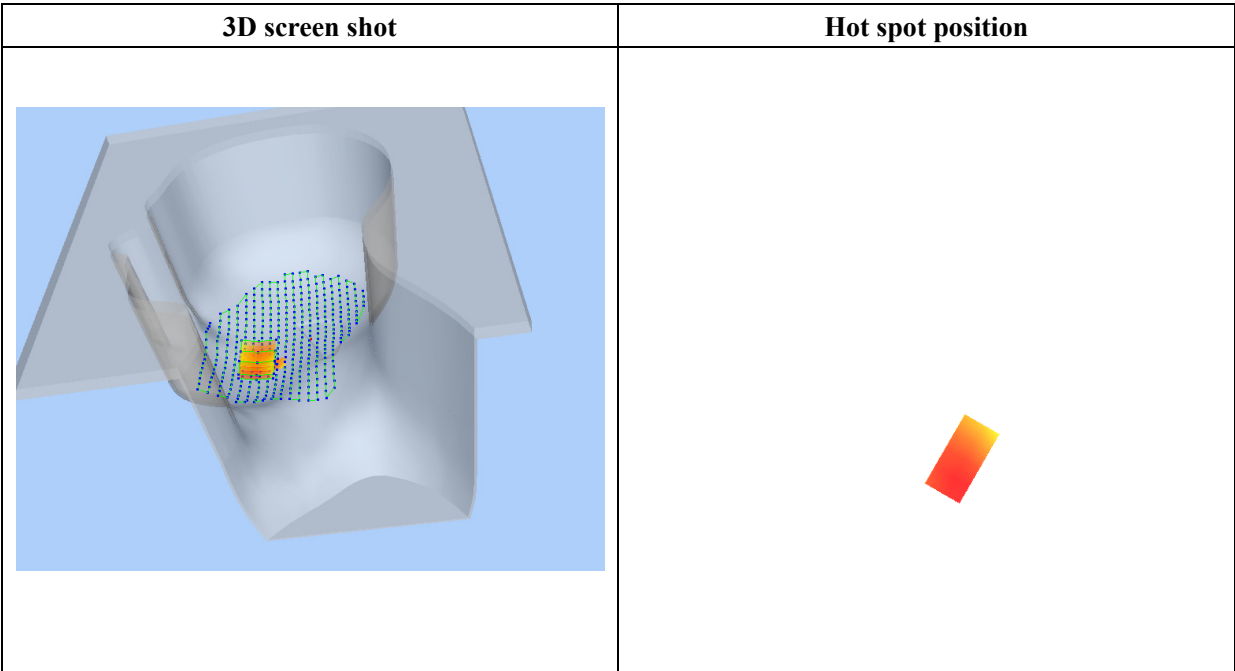
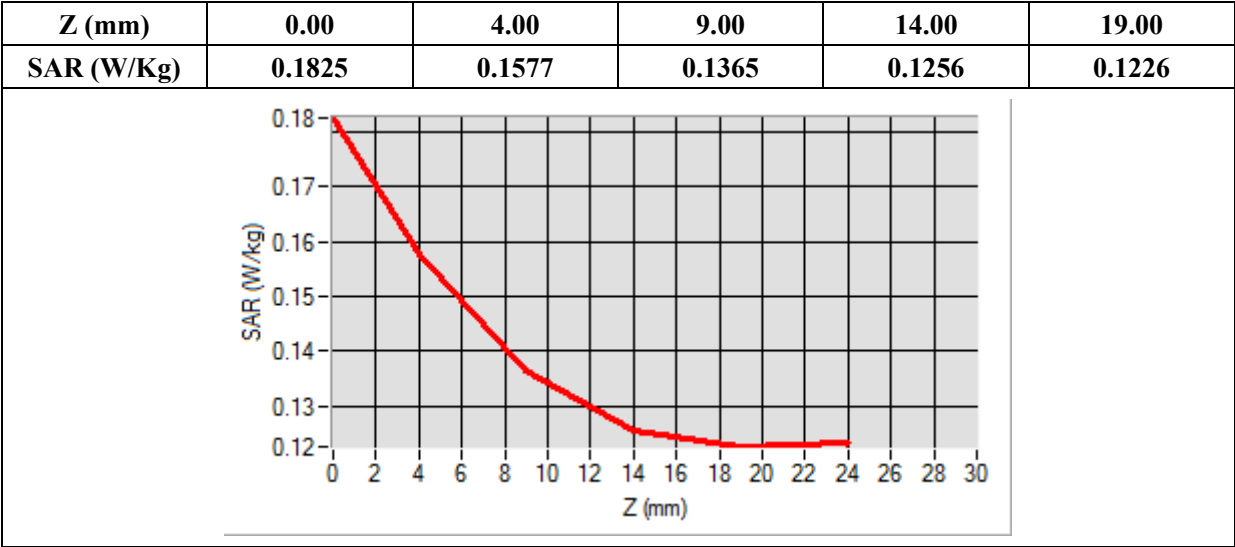
Frequency (MHz)	704.000000
Relative Permittivity (real part)	42.110245
Conductivity (S/m)	0.861245
Power Variation (%)	0.924535
Ambient Temperature	21.1
Liquid Temperature	21.2



Maximum location: X=-51.00, Y=-36.00

SAR Peak: 0.18 W/kg

SAR 10g (W/Kg)	0.133200
SAR 1g (W/Kg)	0.156776



MEASUREMENT 71

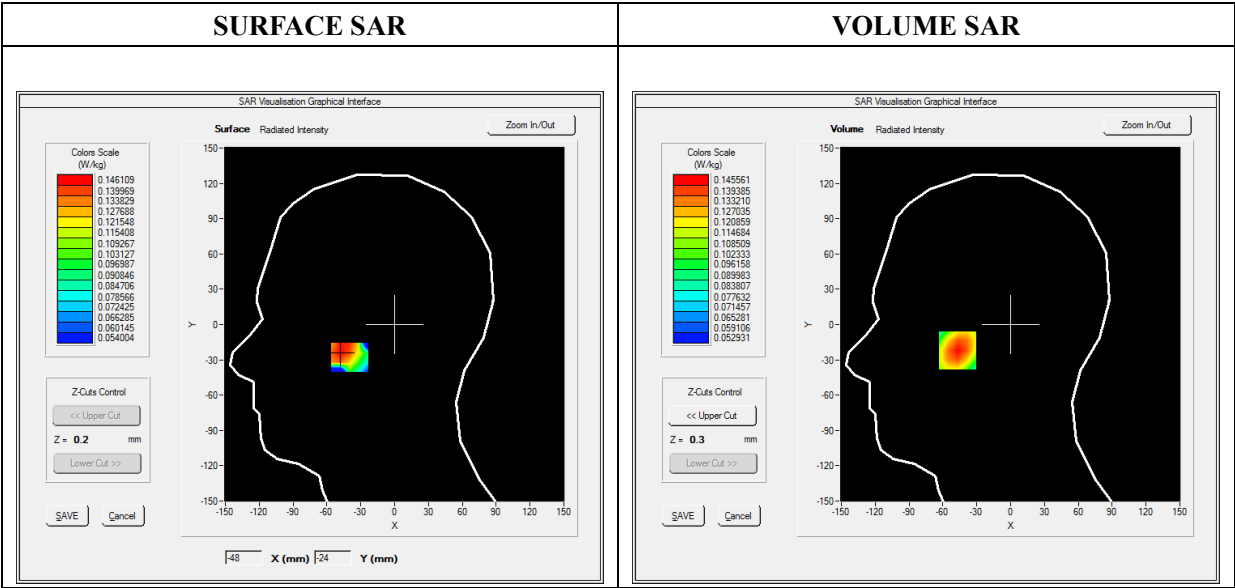
Type: Phone measurement (Complete)
Date of measurement: 2020-10-22
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	LTE Band 13
Channels	QPSK, 10MHz, 1RB, Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

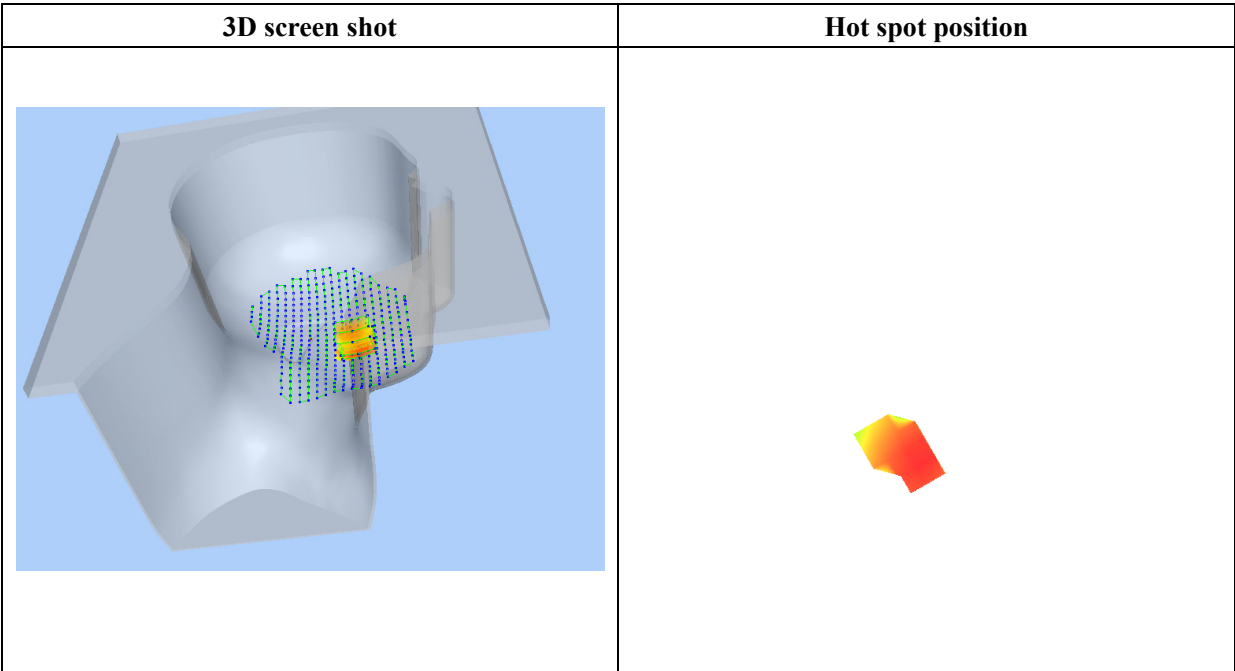
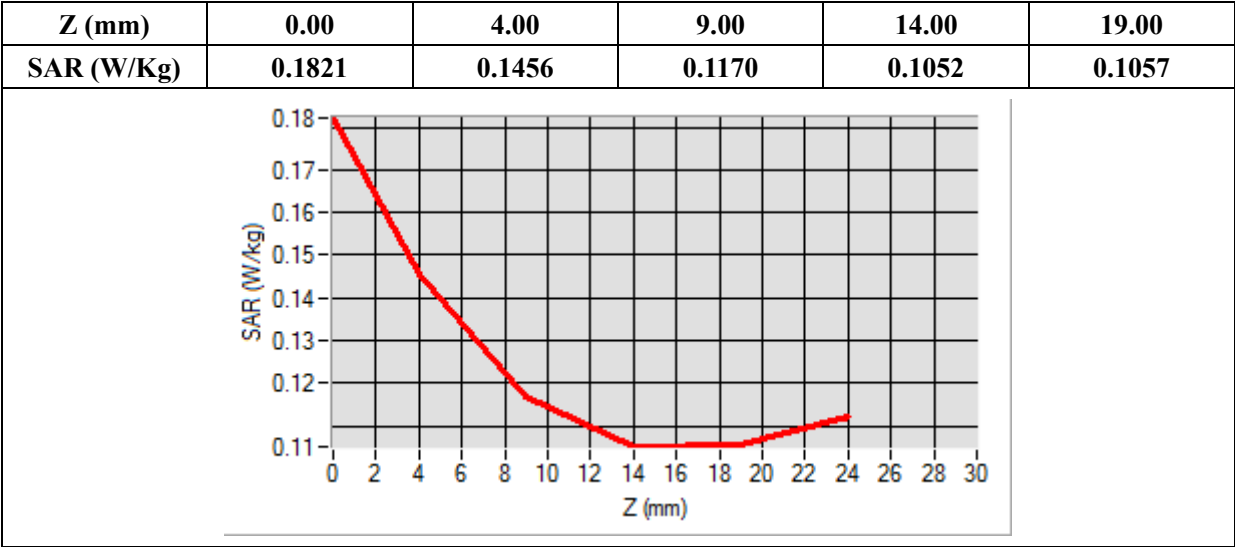
Frequency (MHz)	782.000000
Relative Permittivity (real part)	41.900245
Conductivity (S/m)	0.866245
Power Variation (%)	0.924535
Ambient Temperature	21.1
Liquid Temperature	21.2



Maximum location: X=-47.00, Y=-22.00

SAR Peak: 0.18 W/kg

SAR 10g (W/Kg)	0.117087
SAR 1g (W/Kg)	0.144235



MEASUREMENT 81

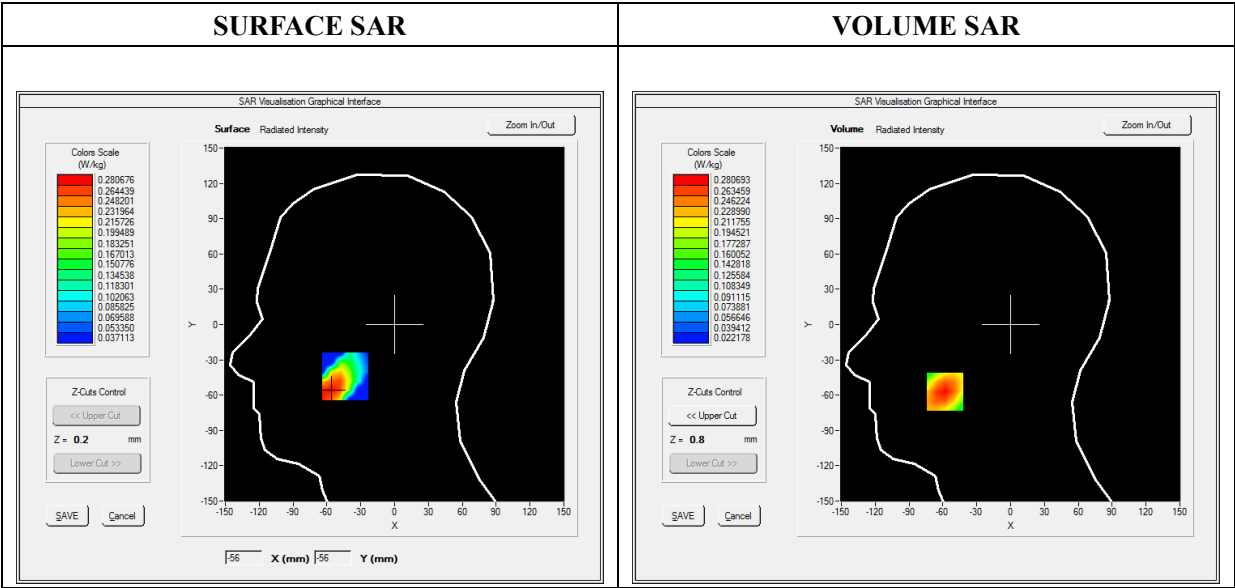
Type: Phone measurement (Complete)
Date of measurement: 2020-10-24
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	LTE Band 25
Channels	QPSK, 20MHz, 1RB,Low
Signal	Duty Cycle: 1:4

B. SAR Measurement Results

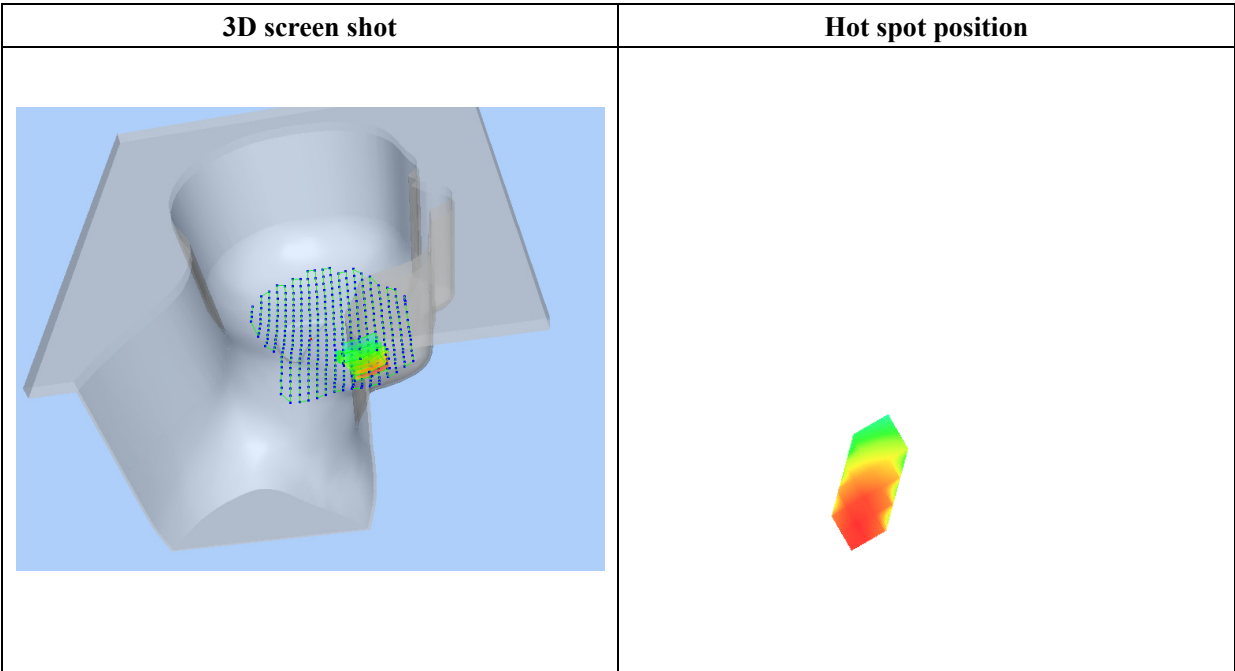
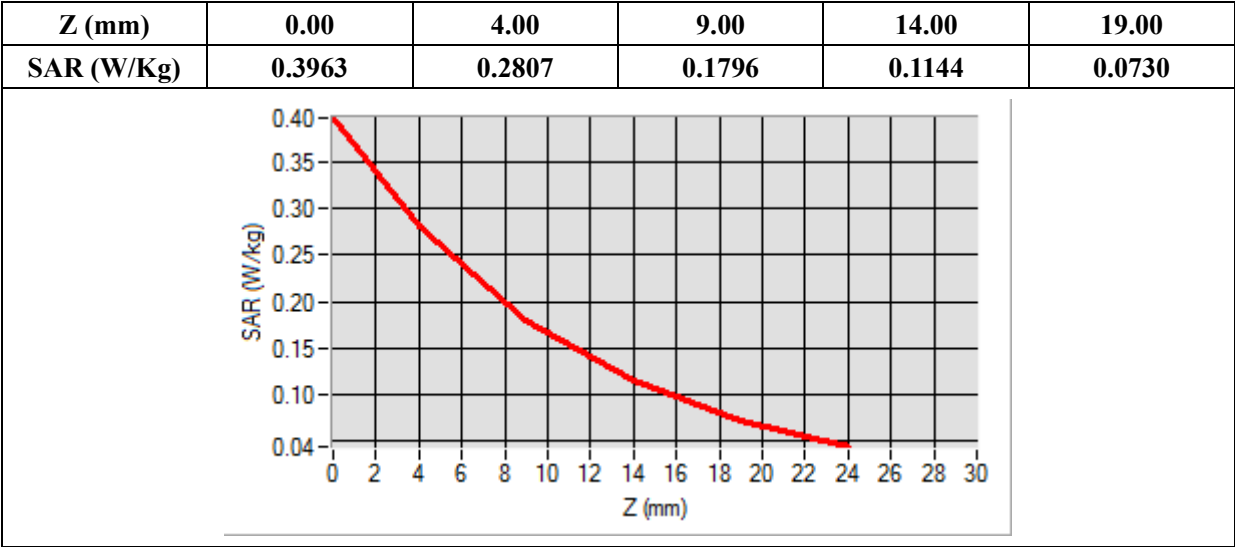
Frequency (MHz)	1860.000000
Relative Permittivity (real part)	38.560124
Conductivity (S/m)	1.380369
Power Variation (%)	1.536272
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-58.00, Y=-57.00

SAR Peak: 0.40 W/kg

SAR 10g (W/Kg)	0.165842
SAR 1g (W/Kg)	0.267144



MEASUREMENT 93

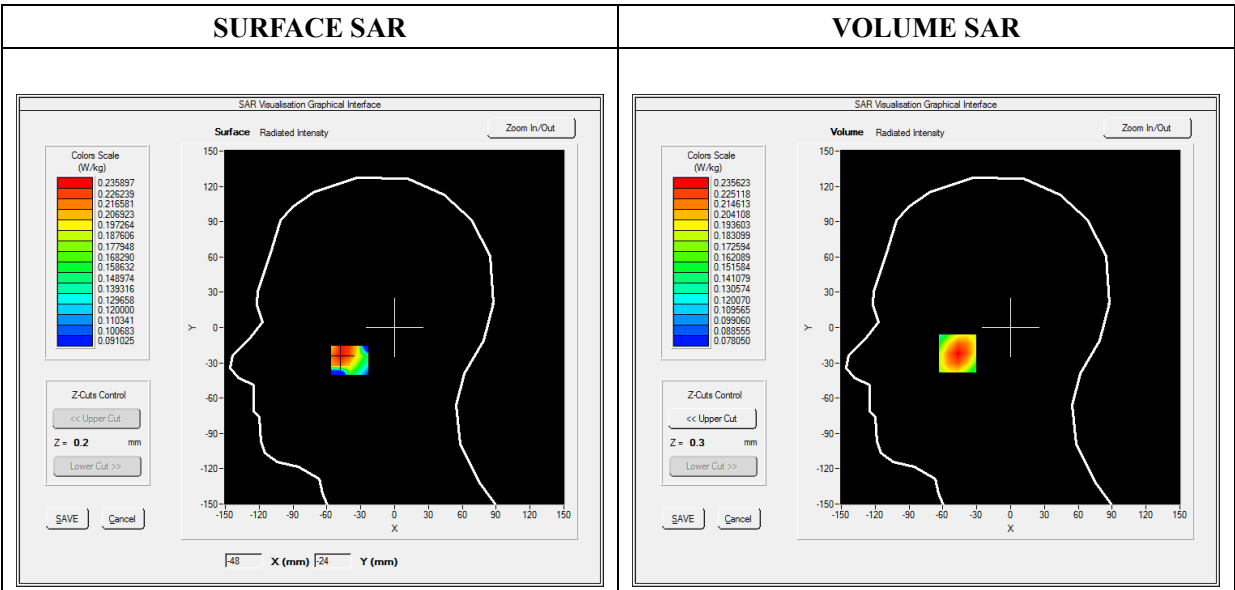
Type: Phone measurement (Complete)
Date of measurement: 2020-10-22
Measurement duration: 11 minutes 48 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	LTE Band 26
Channels	QPSK, 15MHz, 1RB,Low
Signal	TDMA (Crest factor: 8.0)

B. SAR Measurement Results

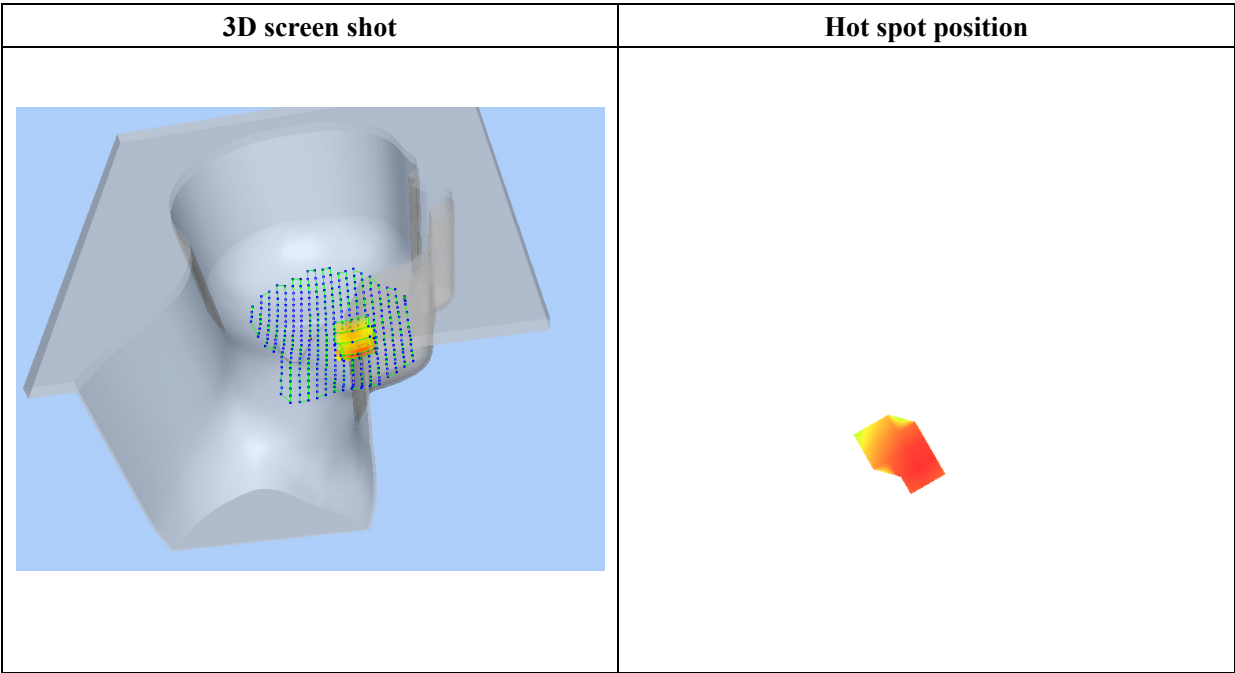
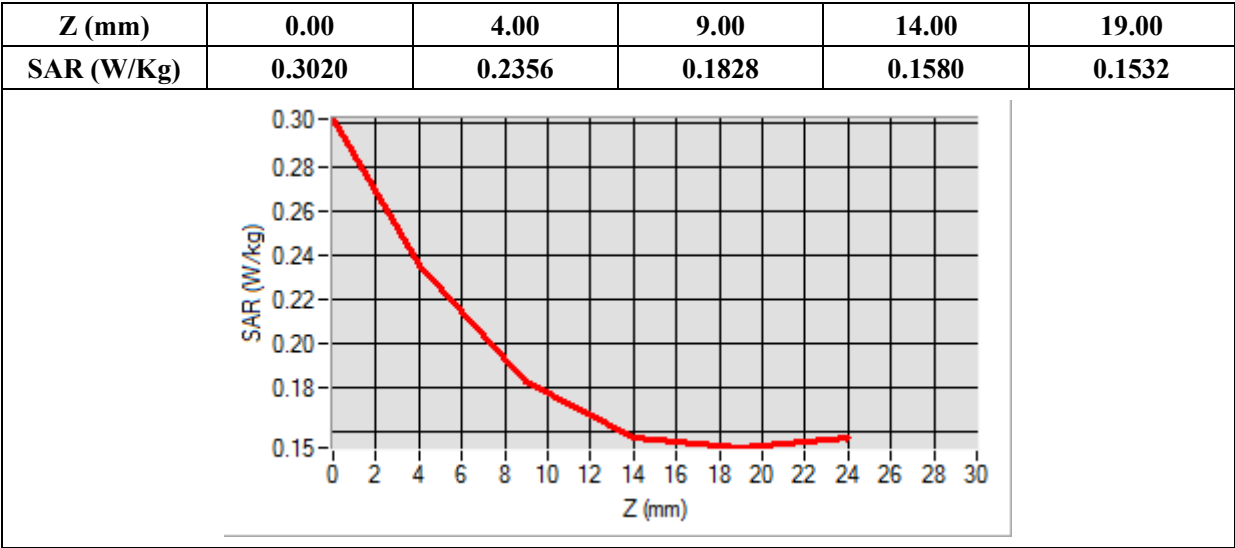
Frequency (MHz)	821.599976
Relative Permittivity (real part)	41.110245
Conductivity (S/m)	0.871245
Power Variation (%)	1.144536
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-47.00, Y=-22.00

SAR Peak: 0.30 W/kg

SAR 10g (W/Kg)	0.178072
SAR 1g (W/Kg)	0.228238



MEASUREMENT 101

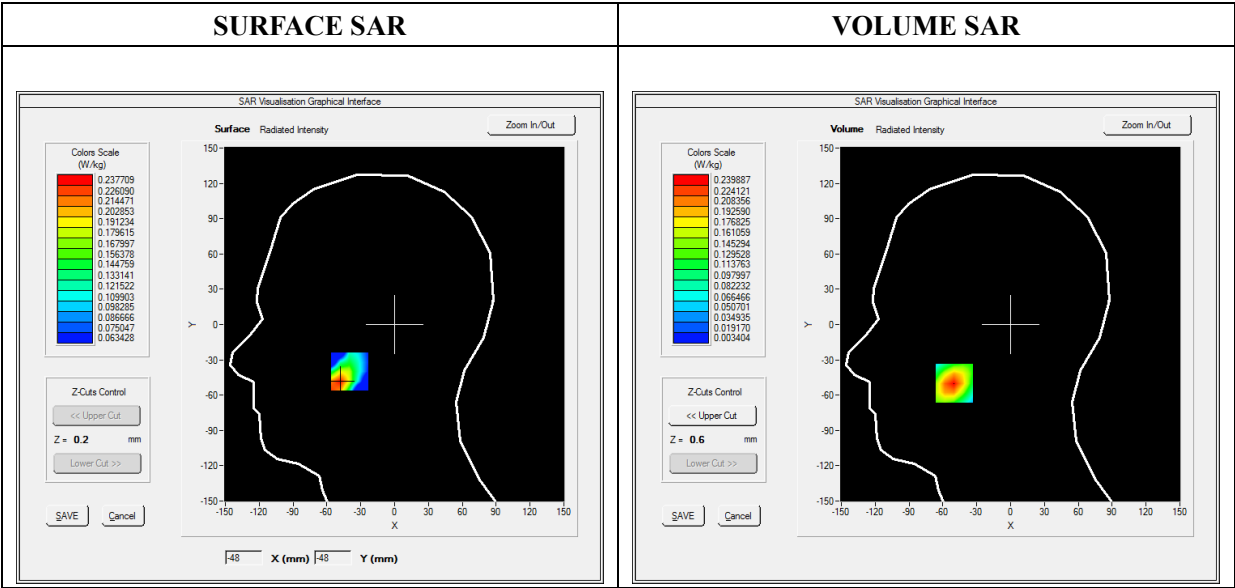
Type: Phone measurement (Complete)
Date of measurement: 2020-10-26
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	LTE Band 30
Channels	QPSK, 10MHz, 1RB,Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

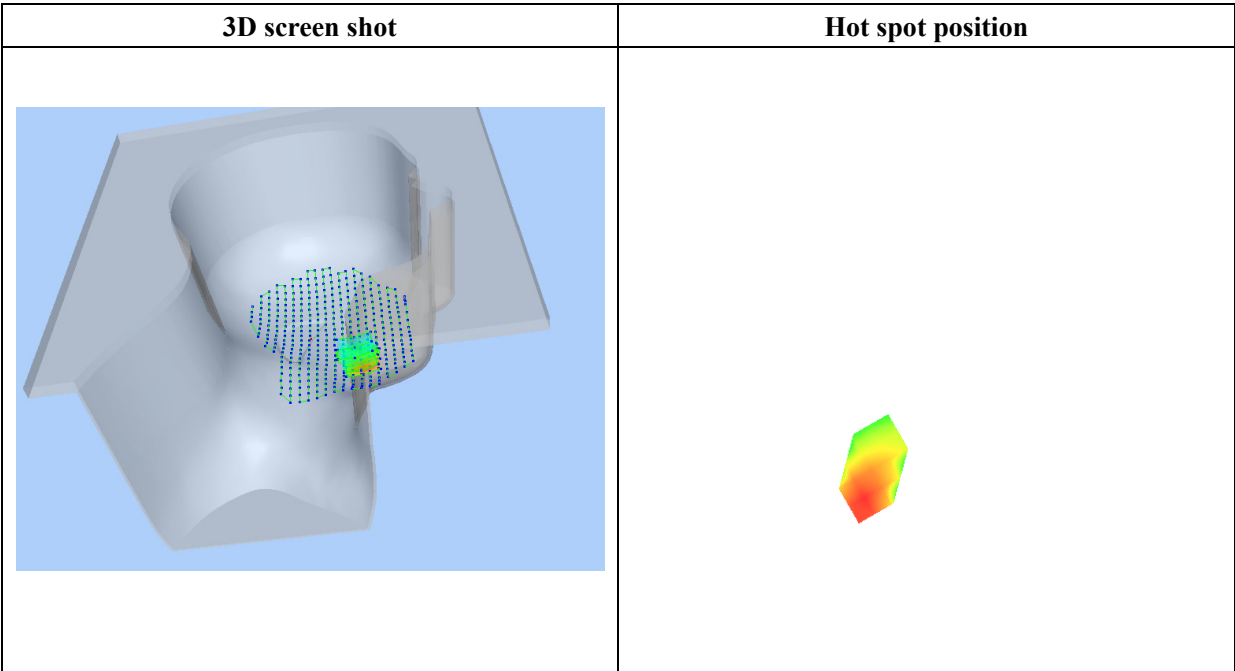
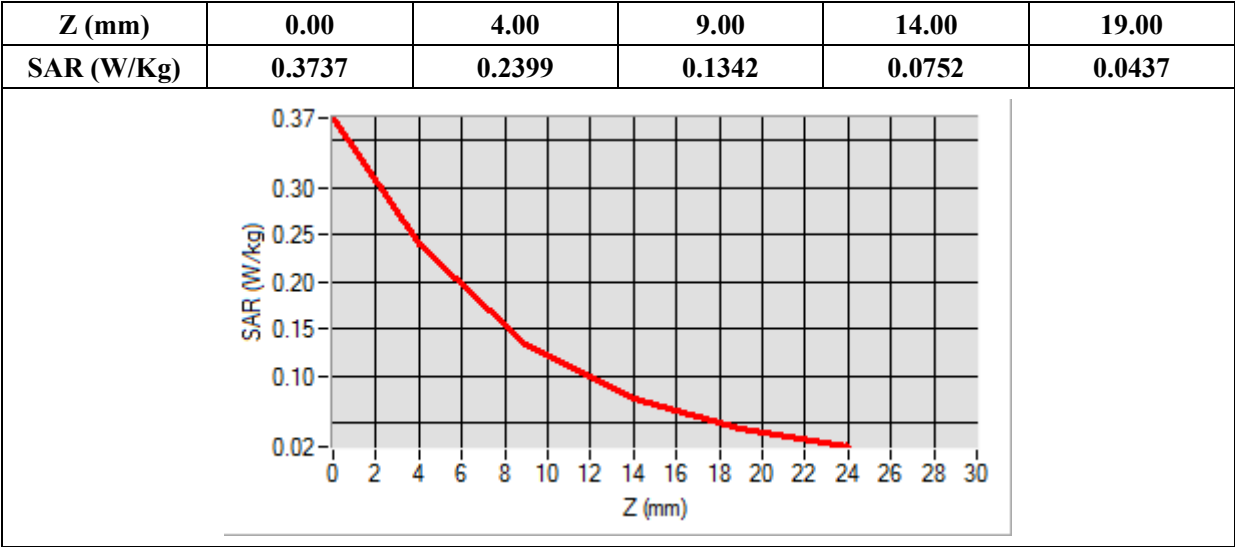
Frequency (MHz)	2310.000000
Relative Permittivity (real part)	38.353660
Conductivity (S/m)	1.720236
Power Variation (%)	3.234772
Ambient Temperature	21.1
Liquid Temperature	21.2



Maximum location: X=-50.00, Y=-50.00

SAR Peak: 0.38 W/kg

SAR 10g (W/Kg)	0.119414
SAR 1g (W/Kg)	0.224119



MEASUREMENT 109

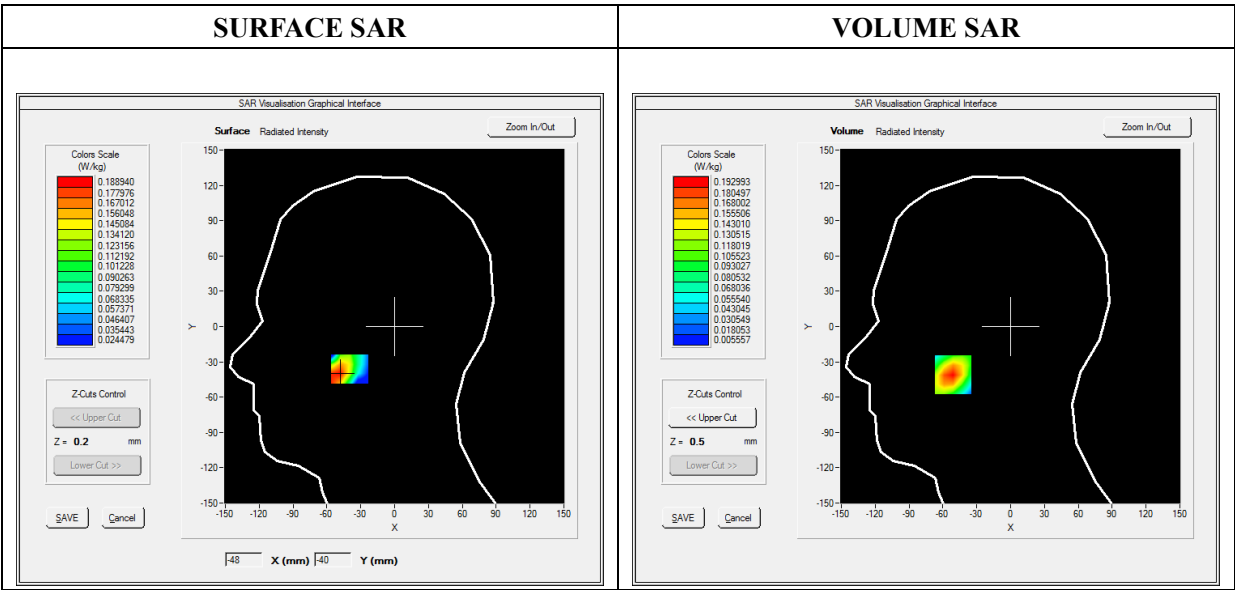
Type: Phone measurement (Complete)
Date of measurement: 2020-10-26
Measurement duration: 12 minutes 3 seconds
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: Refer to the Calibration Certificate; Calibrated: 2020-07-03

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	LTE Band 40
Channels	QPSK, 10MHz, 1RB,Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2350.000000
Relative Permittivity (real part)	38.353660
Conductivity (S/m)	1.720236
Power Variation (%)	3.234772
Ambient Temperature	21.1
Liquid Temperature	21.2



Maximum location: X=-51.00, Y=-41.00

SAR Peak: 0.30 W/kg

SAR 10g (W/Kg)	0.096606
SAR 1g (W/Kg)	0.180722

