

TEST REPORT

Reference No...... : WTX22X04067195W
FCC ID : 2A4WI-SPACE2
Applicant : Sosmart Spa (SoyMomo SA)
Address : Ricardo Lyon 1688, Providencia, Santiago, Chile
Manufacturer : SHENZHEN IWONLEX TECHNOLOGY CO.,LTD
Address : 13A01, Building 4, Tangwei City Garden, Tangwei Community, Fuhai Street,
Baoan District, Shenzhen
Product Name : Kids GPS watch
Model No...... : Space 2.0
FCC Part 2.1093
Standards : IEEE Std C95.1: 2019
IEEE Std C95.3: 2002 + Rev. 2008
IEC/IEEE 62209-1528:2020
Date of Receipt sample : 2022-04-13
Date of Test..... : 2022-04-14 to 2022-05-20
Date of Issue : 2022-05-23
Test Report Form No. : WTX_IEEE62209_1528_2020W
Test Result..... : **Pass**

Remarks:

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

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Report version

Version No.	Date of issue	Description
Rev.00	2022-05-23	Original
/	/	/

1. General Information

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT:	
Product Name:	Kids GPS watch
Trade Name:	/
Model No.:	Space 2.0
Adding Model(s):	/
Rated Voltage:	DC3.8V
Battery Capacity:	/
Software Version:	G4CM_EMMC_ZMD_Soymomo_Es_N_D_ 2021.09.01_21.39.00_0901_2228
Hardware Version:	G4C_MB
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
Max RF Output Power:	GSM850: 33.19dBm, GSM1900: 29.65dBm EDGE850: 25.57dBm, EDGE1900: 25.36dBm
Type of Modulation:	GMSK, 8PSK
Type of Antenna:	Integral Antenna
Antenna Gain:	GSM850: 0.5dBi; GSM1900: 0.5dBi
GPRS/EDGE Class:	Class 12
3G	
Support Networks:	WCDMA, HSDPA, HSUPA
Support Band:	WCDMA Band 2, WCDMA Band 5
Uplink Frequency:	WCDMA Band 2: 1850~1910MHz WCDMA Band 5: 824~849MHz
Downlink Frequency:	WCDMA Band 2: 1930~1990MHz WCDMA Band 5: 869~894MHz
RF Output Power:	WCDMA Band 2: 22.82dBm, WCDMA Band 5: 22.98dBm
Type of Modulation:	BPSK, QPSK, 16QAM
Antenna Type:	Integral Antenna
Antenna Gain:	WCDMA Band 2: 0.5dBi, WCDMA Band 5: 0.5dBi
4G	
Support Networks:	FDD-LTE, TDD-LTE
Support Band:	FDD-LTE Band 2, 4, 5, 7, 12
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,
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,
RF Output Power:	FDD-LTE Band 2: 24.11dBm, FDD-LTE Band 4: 23.78dBm, FDD-LTE Band 5: 23.49dBm, FDD-LTE Band 7: 23.69dBm,

	FDD-LTE Band 12: 23.65dBm
Type of Modulation:	QPSK, 16QAM
Antenna Type:	Integral Antenna
Antenna Gain:	FDD-LTE Band 2: 0.5dBi, FDD-LTE Band 4: 0.5dBi, FDD-LTE Band 5: 0.5dBi, FDD-LTE Band 7: 0.5dBi, FDD-LTE Band 12: 0.5dBi,
WIFI(2.4GHz)	
Support Standards:	802.11b, 802.11g, 802.11n
Frequency Range:	2412-2462MHz for 11b/g/n(HT20)
RF Output Power:	15.97dBm (Conducted)
Type of Modulation:	DBPSK,BPSK,DQPSK,QPSK,16QAM,64QAM
Quantity of Channels:	11 for 802.11b/g/n(HT20)
Channel Separation:	5MHz
Antenna Type:	Integral Antenna
Antenna Gain:	0.5dBi
Bluetooth	
Bluetooth Version:	V4.2
Frequency Range:	2402-2480MHz
RF Output Power:	5.17dBm (Conducted)
Data Rate:	1Mbps, 2Mbps, 3Mbps
Modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Quantity of Channels:	79/40
Channel Separation:	1MHz/2MHz
Antenna Type:	Integral Antenna
Antenna Gain:	0.5dBi
<i>Note: The Antenna Gain is provided by the customer and can affect the validity of results.</i>	

1.2 Test Standards

The following report is accordance with FCC 47 CFR Part 2.1093, IEEE Std C95.1: 2019, IEEE Std C95.3: 2002 + Rev. 2008, IEC/IEEE 62209-1528:2020, 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:

Near to Mouth(10mm Gap)

Frequency Band	Maximum SAR _{1g} (W/kg)	SAR _{1g} Limit (W/kg)
GSM	0.874	1.6
WCDMA	0.645	1.6
FDD-LTE	1.378	1.6
WLAN 2.4GHz	0.079	1.6
BT	0.023	1.6
Simultaneous Transmission	1.457	1.6

Wrist-worn(0mm Gap)

Frequency Band	Maximum SAR _{10g} (W/kg)	SAR _{10g} Limit (W/kg)
GSM	1.003	4.0
WCDMA	1.268	4.0
FDD-LTE	1.314	4.0
WLAN 2.4GHz	0.058	4.0
BT	0.035	4.0
Simultaneous Transmission	1.372	4.0

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR Part 2.1093 and IEEE Std C95.1: 2019, and had been tested in accordance with the measurement methods and procedure specified in IEC/IEEE 62209-1528:2020 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

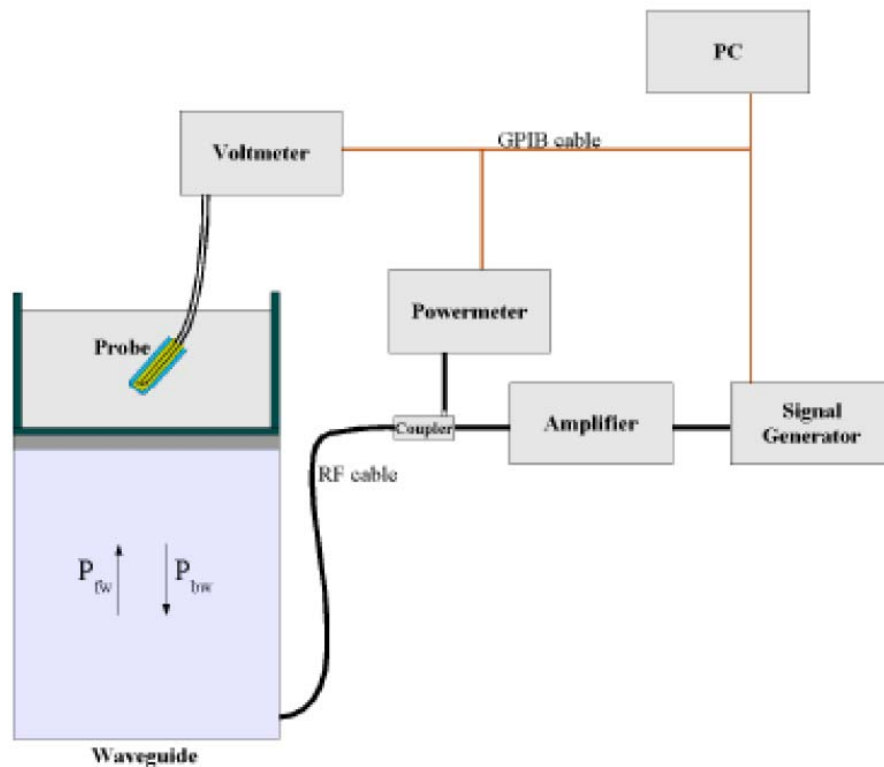
- Dynamic range: 0.01-100 W/kg
- Probe Length: 330 mm
- Length of Individual Dipoles: 4.5 mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter : 5 mm

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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,

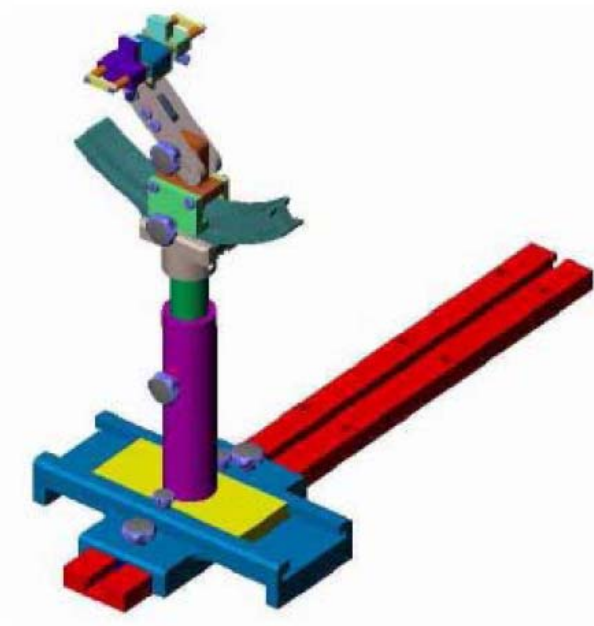
ρ = Tissue density (1.25 g/cm³ for brain tissue)

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

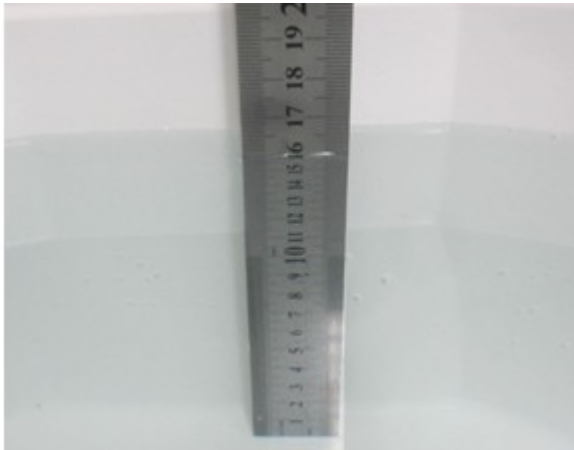
4.6 Test Equipment List

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

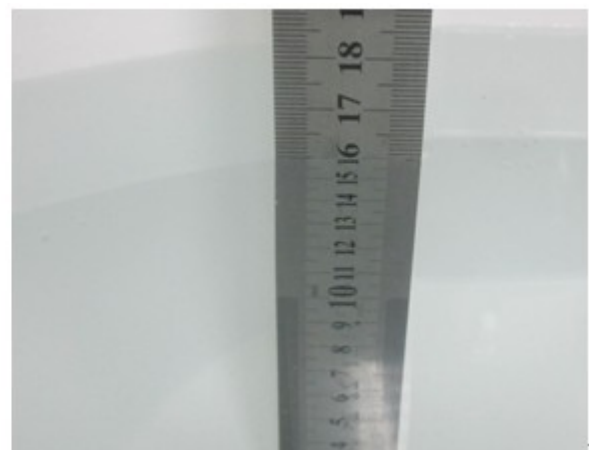
5. Tissue Simulating Liquids

5.1 Composition of Tissue Simulating Liquid

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



Liquid Height for Head 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
2300	55.0	0.2	0	0	0	44.8
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
2300	68.6	0.3	0	0	0	31.1
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

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
1800-2000	1.40	40.0	1.52	53.3
2450	1.80	39.2	1.95	52.7
2600	1.96	39.0	2.16	52.5
3000	2.40	38.5	2.73	52.0
5200	4.66	36.0	5.30	49.0
5400	4.86	35.8	5.53	48.7
5600	5.07	35.5	5.77	48.5
5800	5.27	35.3	6.00	48.2

5.3 Tissue Calibration Result

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

Calibration Result for Dielectric Parameters of Tissue Simulating Liquid

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	2022-05-16
835	21.2	0.87	0.90	-3.33	41.11	41.50	-0.94	± 5	2022-05-16
1800	21.3	1.37	1.37	0.00	39.02	40.1	-2.69	± 5	2022-05-18
1900	21.3	1.38	1.40	-1.43	38.56	40.0	-3.60	± 5	2022-05-18
2450	21.3	1.74	1.80	-3.33	38.15	39.20	-2.68	± 5	2022-05-13
2600	21.3	1.99	1.96	1.53	39.22	39.0	0.56	± 5	2022-05-18

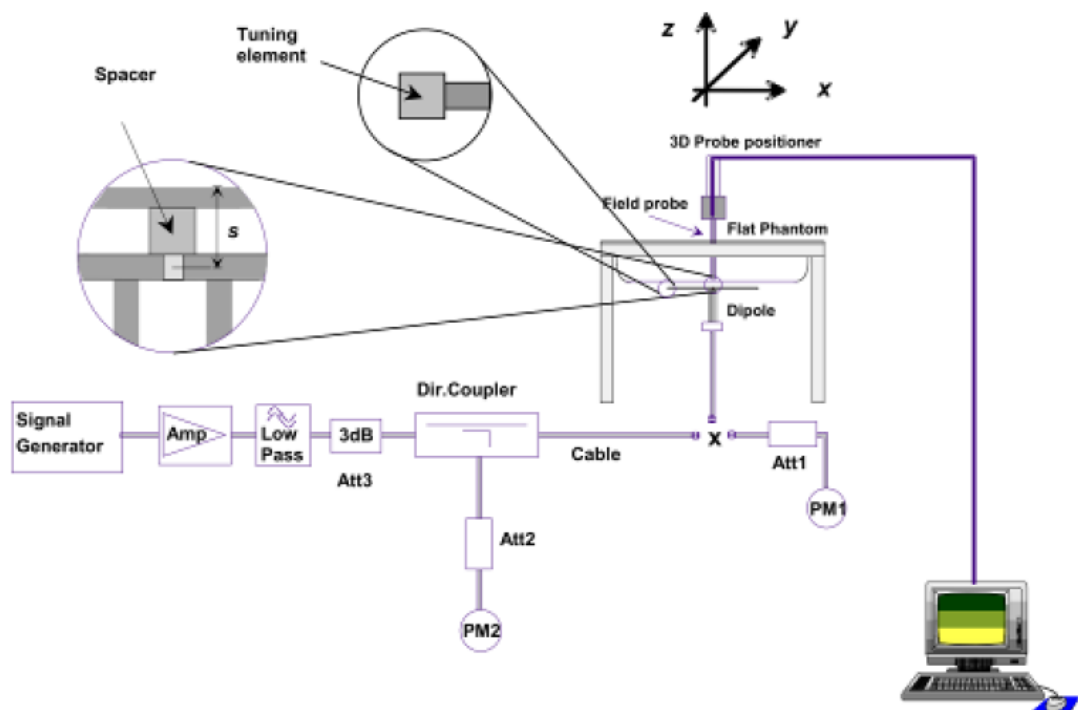
6. SAR Measurement Evaluation

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	2022-05-16
835	9.65	2.41	9.64	-0.10	2022-05-16
1800	38.49	9.61	38.44	-0.13	2022-05-18
1900	39.59	9.50	38.00	-4.02	2022-05-18
2450	53.76	13.45	53.8	0.07	2022-05-13
2600	56.81	13.67	54.68	-3.75	2022-05-18

Frequency	Targeted SAR _{10g}	Measured SAR _{10g}	Normalized SAR _{10g}	Tolerance	Date
MHz	(W/kg)	(W/kg)	(W/kg)	(%)	
Head					
750	5.51	1.34	5.36	-2.72	2022-05-16
835	6.26	1.45	5.8	-7.35	2022-05-16
1800	20.67	5.17	20.68	0.05	2022-05-18
1900	20.73	5.07	20.28	-2.17	2022-05-18
2450	24.32	6.02	24.08	-0.99	2022-05-13
2600	24.63	6.17	24.68	0.20	2022-05-18

Remark: Referring to IEC/IEEE 62209-1528:2020, 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

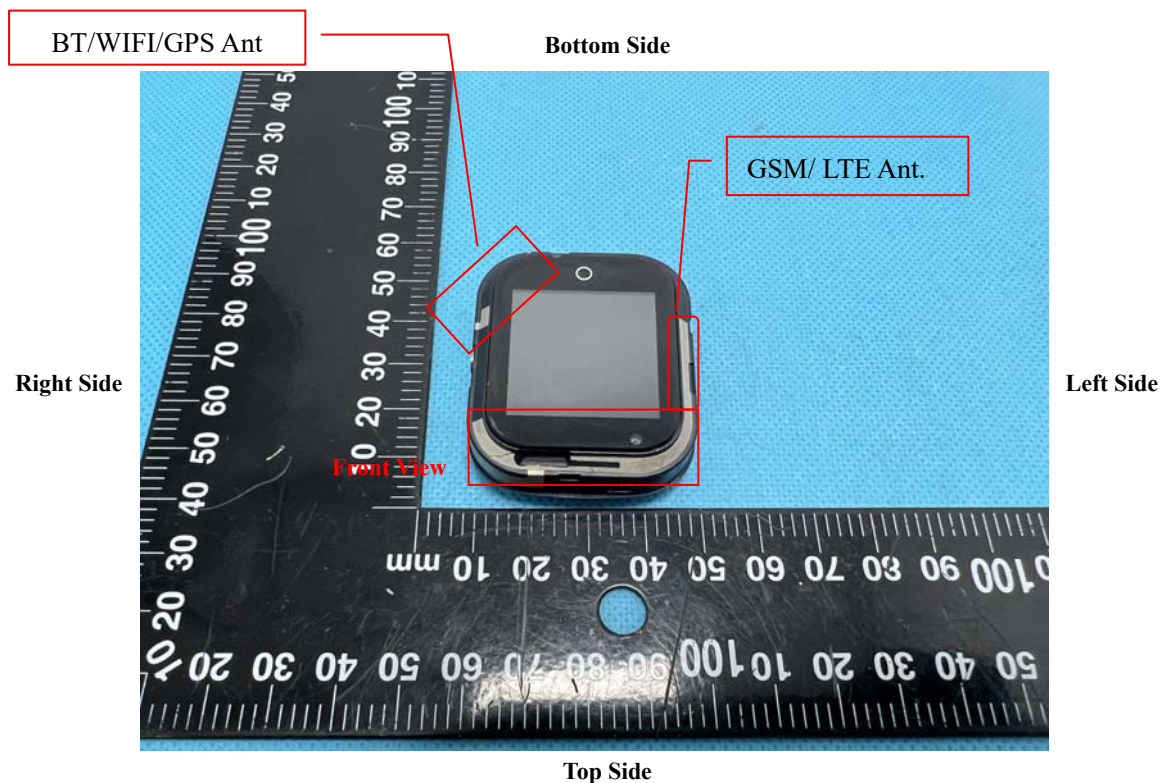
Please refer to Annex A for the plots of system performance check.

7. EUT Testing Position

7.1 Wrist-worn device

- (a) Transmitters that are built-in within a wrist watch or similar wrist-worn devices typically operate in speaker mode for voice communication, with the device worn on the wrist and positioned next to the mouth. Next to the mouth exposure requires 1-g SAR, and the wrist-worn condition requires 10-g extremity SAR.
- (b) The 10-g extremity and 1-g SAR test exclusions may be applied to the wrist and face exposure conditions. When SAR evaluation is required, next to the mouth use is evaluated with the front of the device positioned at 10 mm from a flat phantom filled with head tissue-equivalent medium.
- (c) For wrist-worn condition, 10g SAR value should be measured for the inner wrist band at a separation of 0mm. The design of the hard wrist band prevents opening it to a flat shape to be placed under the flat phantom.
- (d) Next to the mouth use is evaluated with the front of the device positioned at 10 mm from a flat phantom filled with head tissue-equivalent medium. SAR for wrist exposure is evaluated with the back of the devices positioned in direct contact against a flat phantom fill with body tissue-equivalent medium.

7.2 EUT Antenna Position



Block Diagram for EUT Antenna Position

Body SAR tests, Wrist-worn SAR Test distance: 0mm						
Antennas	Front	Back	Right Side	Left Side	Top Side	Bottom
WWAN	No	Yes	No	No	No	No
WLAN	No	Yes	No	No	No	No
Body SAR tests, Near to Mouth SAR, Test distance: 10mm						
Antennas	Front	Back	Right Side	Left Side	Top Side	Bottom
WWAN	Yes	No	No	No	No	No
WLAN	Yes	No	No	No	No	No

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	32.82	33.01	33.19	33.5	29.34	29.47	29.57	30.0
GPRS (1 slot)	32.8	33.03	33.14	33.5	29.41	29.52	29.65	30.0
GPRS (2 slots)	30.69	30.83	30.86	31.0	27.24	27.09	26.99	27.5
GPRS (3 slots)	28.82	28.84	28.91	29.0	25.71	25.59	25.45	26.0
GPRS (4 slots)	26.69	26.76	26.79	27.0	23.53	23.39	23.22	24.0
EDGE (1 slot)	25.34	25.57	25.41	26.0	24.21	25.36	24.89	25.0
EDGE (2 slots)	24.06	24.31	24.10	24.5	22.42	23.62	23.03	24.0
EDGE (3 slots)	21.36	21.63	21.49	22.0	19.36	20.72	19.98	21.0
EDGE (4 slots)	19.04	19.39	19.21	19.5	17.99	19.06	18.35	19.5

GSM - Source-Based Time-Average Power (dBm)								
Band	GSM850			Tune-up power (dBm)	PCS1900			Tune-up power (dBm)
Channel	128	190	251		512	661	810	
Frequency (MHz)	824.2	836.6	848.8		1850.2	1880	1909.8	
GSM	23.82	24.01	24.19	24.5	20.34	20.47	20.57	21.0
GPRS (1 slot)	23.80	24.03	24.14	24.5	20.41	20.52	20.65	21.0
GPRS (2 slots)	24.69	24.83	24.86	25.0	21.24	21.09	20.99	21.5
GPRS (3 slots)	24.57	24.59	24.66	25.0	21.46	21.34	21.20	21.5
GPRS (4 slots)	23.69	23.76	23.79	24.0	20.53	20.39	20.22	21.0
EDGE (1 slot)	16.34	16.57	16.41	17.0	15.21	16.36	15.89	16.5
EDGE (2 slots)	18.06	18.31	18.10	18.5	16.42	17.62	17.03	18.0
EDGE (3 slots)	17.11	17.38	17.24	17.5	15.11	16.47	15.73	16.5
EDGE (4 slots)	16.04	16.39	16.21	16.5	14.99	16.06	15.35	16.5

Note: The source-based time-averaged power is linearly scaled the maximum burst averaged power based on time slots. The calculated method are shown as below:

Source based time-average power = Burst averaged power - Duty cycle factor in dB

Duty cycle factor = 9 dB for 1 Tx slot, 6 dB for 2 Tx slots, 4.25 dB for 3 Tx slots, 3 dB for 4 Tx slots

Remark:

1. For Near to Mouth 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 Wrist-worn SAR testing, GPRS should be evaluated; therefore the EUT was set in GPRS (2TX slots) for GSM850

and GPRS (3TX 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.

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	22.64	22.71	22.82	23.0	22.98	22.96	22.91	23.0
HSDPA Subtest-1	21.49	21.92	22.17	22.5	22.29	22.61	22.34	23.0
HSDPA Subtest-2	21.43	21.91	22.13	22.5	22.24	22.57	22.31	23.0
HSDPA Subtest-3	21.44	21.89	22.15	22.5	22.28	22.56	22.32	23.0
HSDPA Subtest-4	21.46	21.87	22.14	22.5	22.26	22.55	22.3	23.0
HSUPA Subtest-1	21.51	21.85	22.12	22.5	22.4	22.67	22.33	23.0
HSUPA Subtest-2	21.47	21.82	22.09	22.5	22.38	22.63	22.3	23.0
HSUPA Subtest-3	21.45	21.83	22.08	22.5	22.34	22.64	22.29	23.0
HSUPA Subtest-4	21.43	21.81	22.07	22.5	22.36	22.65	22.27	23.0
HSUPA Subtest-5	21.47	21.82	22.11	22.5	22.37	22.65	22.26	23.0

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.

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#0	23.65	PASS
Band2	1.4MHz	QPSK	18607	1RB#2	23.69	PASS
Band2	1.4MHz	QPSK	18607	1RB#5	23.69	PASS
Band2	1.4MHz	QPSK	18607	3RB#0	23.84	PASS
Band2	1.4MHz	QPSK	18607	3RB#1	23.89	PASS
Band2	1.4MHz	QPSK	18607	3RB#3	23.88	PASS
Band2	1.4MHz	QPSK	18607	6RB#0	22.65	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	23.77	PASS
Band2	1.4MHz	QPSK	18900	1RB#2	23.94	PASS
Band2	1.4MHz	QPSK	18900	1RB#5	23.77	PASS
Band2	1.4MHz	QPSK	18900	3RB#0	23.96	PASS
Band2	1.4MHz	QPSK	18900	3RB#1	23.93	PASS
Band2	1.4MHz	QPSK	18900	3RB#3	24.00	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	22.71	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	23.92	PASS
Band2	1.4MHz	QPSK	19193	1RB#2	23.96	PASS
Band2	1.4MHz	QPSK	19193	1RB#5	23.92	PASS
Band2	1.4MHz	QPSK	19193	3RB#0	24.06	PASS
Band2	1.4MHz	QPSK	19193	3RB#1	24.07	PASS
Band2	1.4MHz	QPSK	19193	3RB#3	24.06	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	22.99	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	22.56	PASS
Band2	1.4MHz	16QAM	18607	1RB#2	22.74	PASS
Band2	1.4MHz	16QAM	18607	1RB#5	22.58	PASS
Band2	1.4MHz	16QAM	18607	3RB#0	22.72	PASS
Band2	1.4MHz	16QAM	18607	3RB#1	22.69	PASS
Band2	1.4MHz	16QAM	18607	3RB#3	22.71	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	21.64	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	22.58	PASS
Band2	1.4MHz	16QAM	18900	1RB#2	22.72	PASS
Band2	1.4MHz	16QAM	18900	1RB#5	22.57	PASS
Band2	1.4MHz	16QAM	18900	3RB#0	22.76	PASS
Band2	1.4MHz	16QAM	18900	3RB#1	22.72	PASS
Band2	1.4MHz	16QAM	18900	3RB#3	22.76	PASS
Band2	1.4MHz	16QAM	18900	6RB#0	21.80	PASS

Band2	1.4MHz	16QAM	19193	1RB#0	22.75	PASS
Band2	1.4MHz	16QAM	19193	1RB#2	22.87	PASS
Band2	1.4MHz	16QAM	19193	1RB#5	22.76	PASS
Band2	1.4MHz	16QAM	19193	3RB#0	22.86	PASS
Band2	1.4MHz	16QAM	19193	3RB#1	22.88	PASS
Band2	1.4MHz	16QAM	19193	3RB#3	22.84	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	21.98	PASS
Band2	3MHz	QPSK	18615	1RB#0	23.72	PASS
Band2	3MHz	QPSK	18615	1RB#8	23.74	PASS
Band2	3MHz	QPSK	18615	1RB#14	23.64	PASS
Band2	3MHz	QPSK	18615	8RB#0	22.34	PASS
Band2	3MHz	QPSK	18615	8RB#4	22.24	PASS
Band2	3MHz	QPSK	18615	8RB#7	22.25	PASS
Band2	3MHz	QPSK	18615	15RB#0	22.28	PASS
Band2	3MHz	QPSK	18900	1RB#0	23.28	PASS
Band2	3MHz	QPSK	18900	1RB#8	23.28	PASS
Band2	3MHz	QPSK	18900	1RB#14	23.33	PASS
Band2	3MHz	QPSK	18900	8RB#0	22.22	PASS
Band2	3MHz	QPSK	18900	8RB#4	22.24	PASS
Band2	3MHz	QPSK	18900	8RB#7	22.29	PASS
Band2	3MHz	QPSK	18900	15RB#0	22.27	PASS
Band2	3MHz	QPSK	19185	1RB#0	23.53	PASS
Band2	3MHz	QPSK	19185	1RB#8	23.48	PASS
Band2	3MHz	QPSK	19185	1RB#14	23.50	PASS
Band2	3MHz	QPSK	19185	8RB#0	22.52	PASS
Band2	3MHz	QPSK	19185	8RB#4	22.50	PASS
Band2	3MHz	QPSK	19185	8RB#7	22.45	PASS
Band2	3MHz	QPSK	19185	15RB#0	22.51	PASS
Band2	3MHz	16QAM	18615	1RB#0	22.76	PASS
Band2	3MHz	16QAM	18615	1RB#8	22.81	PASS
Band2	3MHz	16QAM	18615	1RB#14	22.50	PASS
Band2	3MHz	16QAM	18615	8RB#0	21.28	PASS
Band2	3MHz	16QAM	18615	8RB#4	21.30	PASS
Band2	3MHz	16QAM	18615	8RB#7	21.33	PASS
Band2	3MHz	16QAM	18615	15RB#0	21.33	PASS
Band2	3MHz	16QAM	18900	1RB#0	22.28	PASS
Band2	3MHz	16QAM	18900	1RB#8	22.16	PASS

Band2	3MHz	16QAM	18900	1RB#14	22.16	PASS
Band2	3MHz	16QAM	18900	8RB#0	21.29	PASS
Band2	3MHz	16QAM	18900	8RB#4	21.33	PASS
Band2	3MHz	16QAM	18900	8RB#7	21.27	PASS
Band2	3MHz	16QAM	18900	15RB#0	21.26	PASS
Band2	3MHz	16QAM	19185	1RB#0	22.29	PASS
Band2	3MHz	16QAM	19185	1RB#8	22.26	PASS
Band2	3MHz	16QAM	19185	1RB#14	22.25	PASS
Band2	3MHz	16QAM	19185	8RB#0	21.52	PASS
Band2	3MHz	16QAM	19185	8RB#4	21.54	PASS
Band2	3MHz	16QAM	19185	8RB#7	21.49	PASS
Band2	3MHz	16QAM	19185	15RB#0	21.46	PASS
Band2	5MHz	QPSK	18625	1RB#0	23.73	PASS
Band2	5MHz	QPSK	18625	1RB#12	23.40	PASS
Band2	5MHz	QPSK	18625	1RB#24	23.32	PASS
Band2	5MHz	QPSK	18625	12RB#0	22.38	PASS
Band2	5MHz	QPSK	18625	12RB#6	22.34	PASS
Band2	5MHz	QPSK	18625	12RB#13	22.33	PASS
Band2	5MHz	QPSK	18625	25RB#0	22.39	PASS
Band2	5MHz	QPSK	18900	1RB#0	23.15	PASS
Band2	5MHz	QPSK	18900	1RB#12	23.39	PASS
Band2	5MHz	QPSK	18900	1RB#24	23.21	PASS
Band2	5MHz	QPSK	18900	12RB#0	22.32	PASS
Band2	5MHz	QPSK	18900	12RB#6	22.34	PASS
Band2	5MHz	QPSK	18900	12RB#13	22.34	PASS
Band2	5MHz	QPSK	18900	25RB#0	22.35	PASS
Band2	5MHz	QPSK	19175	1RB#0	23.48	PASS
Band2	5MHz	QPSK	19175	1RB#12	23.61	PASS
Band2	5MHz	QPSK	19175	1RB#24	23.47	PASS
Band2	5MHz	QPSK	19175	12RB#0	22.52	PASS
Band2	5MHz	QPSK	19175	12RB#6	22.52	PASS
Band2	5MHz	QPSK	19175	12RB#13	22.48	PASS
Band2	5MHz	QPSK	19175	25RB#0	22.54	PASS
Band2	5MHz	16QAM	18625	1RB#0	22.67	PASS
Band2	5MHz	16QAM	18625	1RB#12	22.39	PASS
Band2	5MHz	16QAM	18625	1RB#24	22.31	PASS
Band2	5MHz	16QAM	18625	12RB#0	21.32	PASS

Band2	5MHz	16QAM	18625	12RB#6	21.32	PASS
Band2	5MHz	16QAM	18625	12RB#13	21.33	PASS
Band2	5MHz	16QAM	18625	25RB#0	21.43	PASS
Band2	5MHz	16QAM	18900	1RB#0	22.34	PASS
Band2	5MHz	16QAM	18900	1RB#12	22.45	PASS
Band2	5MHz	16QAM	18900	1RB#24	22.36	PASS
Band2	5MHz	16QAM	18900	12RB#0	21.44	PASS
Band2	5MHz	16QAM	18900	12RB#6	21.44	PASS
Band2	5MHz	16QAM	18900	12RB#13	21.47	PASS
Band2	5MHz	16QAM	18900	25RB#0	21.43	PASS
Band2	5MHz	16QAM	19175	1RB#0	22.44	PASS
Band2	5MHz	16QAM	19175	1RB#12	22.47	PASS
Band2	5MHz	16QAM	19175	1RB#24	22.34	PASS
Band2	5MHz	16QAM	19175	12RB#0	21.62	PASS
Band2	5MHz	16QAM	19175	12RB#6	21.59	PASS
Band2	5MHz	16QAM	19175	12RB#13	21.51	PASS
Band2	5MHz	16QAM	19175	25RB#0	21.60	PASS
Band2	10MHz	QPSK	18650	1RB#0	23.76	PASS
Band2	10MHz	QPSK	18650	1RB#24	23.77	PASS
Band2	10MHz	QPSK	18650	1RB#49	23.38	PASS
Band2	10MHz	QPSK	18650	25RB#0	22.47	PASS
Band2	10MHz	QPSK	18650	25RB#12	22.49	PASS
Band2	10MHz	QPSK	18650	25RB#25	22.47	PASS
Band2	10MHz	QPSK	18650	50RB#0	22.47	PASS
Band2	10MHz	QPSK	18900	1RB#0	23.34	PASS
Band2	10MHz	QPSK	18900	1RB#24	23.42	PASS
Band2	10MHz	QPSK	18900	1RB#49	23.35	PASS
Band2	10MHz	QPSK	18900	25RB#0	22.47	PASS
Band2	10MHz	QPSK	18900	25RB#12	22.43	PASS
Band2	10MHz	QPSK	18900	25RB#25	22.41	PASS
Band2	10MHz	QPSK	18900	50RB#0	22.46	PASS
Band2	10MHz	QPSK	19150	1RB#0	23.56	PASS
Band2	10MHz	QPSK	19150	1RB#24	23.68	PASS
Band2	10MHz	QPSK	19150	1RB#49	23.50	PASS
Band2	10MHz	QPSK	19150	25RB#0	22.65	PASS
Band2	10MHz	QPSK	19150	25RB#12	22.64	PASS
Band2	10MHz	QPSK	19150	25RB#25	22.55	PASS

Band2	10MHz	QPSK	19150	50RB#0	22.63	PASS
Band2	10MHz	16QAM	18650	1RB#0	22.82	PASS
Band2	10MHz	16QAM	18650	1RB#24	22.67	PASS
Band2	10MHz	16QAM	18650	1RB#49	22.42	PASS
Band2	10MHz	16QAM	18650	25RB#0	21.50	PASS
Band2	10MHz	16QAM	18650	25RB#12	21.53	PASS
Band2	10MHz	16QAM	18650	25RB#25	21.48	PASS
Band2	10MHz	16QAM	18650	50RB#0	21.53	PASS
Band2	10MHz	16QAM	18900	1RB#0	22.27	PASS
Band2	10MHz	16QAM	18900	1RB#24	22.30	PASS
Band2	10MHz	16QAM	18900	1RB#49	22.23	PASS
Band2	10MHz	16QAM	18900	25RB#0	21.54	PASS
Band2	10MHz	16QAM	18900	25RB#12	21.55	PASS
Band2	10MHz	16QAM	18900	25RB#25	21.52	PASS
Band2	10MHz	16QAM	18900	50RB#0	21.48	PASS
Band2	10MHz	16QAM	19150	1RB#0	22.38	PASS
Band2	10MHz	16QAM	19150	1RB#24	22.34	PASS
Band2	10MHz	16QAM	19150	1RB#49	22.26	PASS
Band2	10MHz	16QAM	19150	25RB#0	21.77	PASS
Band2	10MHz	16QAM	19150	25RB#12	21.77	PASS
Band2	10MHz	16QAM	19150	25RB#25	21.66	PASS
Band2	10MHz	16QAM	19150	50RB#0	21.72	PASS
Band2	15MHz	QPSK	18675	1RB#0	23.72	PASS
Band2	15MHz	QPSK	18675	1RB#38	23.34	PASS
Band2	15MHz	QPSK	18675	1RB#74	23.26	PASS
Band2	15MHz	QPSK	18675	38RB#0	22.29	PASS
Band2	15MHz	QPSK	18675	38RB#18	22.42	PASS
Band2	15MHz	QPSK	18675	38RB#37	22.35	PASS
Band2	15MHz	QPSK	18675	75RB#0	22.41	PASS
Band2	15MHz	QPSK	18900	1RB#0	23.14	PASS
Band2	15MHz	QPSK	18900	1RB#38	23.18	PASS
Band2	15MHz	QPSK	18900	1RB#74	23.19	PASS
Band2	15MHz	QPSK	18900	38RB#0	22.39	PASS
Band2	15MHz	QPSK	18900	38RB#18	22.41	PASS
Band2	15MHz	QPSK	18900	38RB#37	22.41	PASS
Band2	15MHz	QPSK	18900	75RB#0	22.36	PASS
Band2	15MHz	QPSK	19125	1RB#0	23.51	PASS

Band2	15MHz	QPSK	19125	1RB#38	23.56	PASS
Band2	15MHz	QPSK	19125	1RB#74	23.42	PASS
Band2	15MHz	QPSK	19125	38RB#0	22.31	PASS
Band2	15MHz	QPSK	19125	38RB#18	22.39	PASS
Band2	15MHz	QPSK	19125	38RB#37	22.16	PASS
Band2	15MHz	QPSK	19125	75RB#0	22.65	PASS
Band2	15MHz	16QAM	18675	1RB#0	22.57	PASS
Band2	15MHz	16QAM	18675	1RB#38	22.46	PASS
Band2	15MHz	16QAM	18675	1RB#74	22.38	PASS
Band2	15MHz	16QAM	18675	38RB#0	22.31	PASS
Band2	15MHz	16QAM	18675	38RB#18	22.45	PASS
Band2	15MHz	16QAM	18675	38RB#37	22.36	PASS
Band2	15MHz	16QAM	18675	75RB#0	21.42	PASS
Band2	15MHz	16QAM	18900	1RB#0	22.43	PASS
Band2	15MHz	16QAM	18900	1RB#38	22.41	PASS
Band2	15MHz	16QAM	18900	1RB#74	22.37	PASS
Band2	15MHz	16QAM	18900	38RB#0	22.41	PASS
Band2	15MHz	16QAM	18900	38RB#18	22.44	PASS
Band2	15MHz	16QAM	18900	38RB#37	22.33	PASS
Band2	15MHz	16QAM	18900	75RB#0	21.42	PASS
Band2	15MHz	16QAM	19125	1RB#0	22.35	PASS
Band2	15MHz	16QAM	19125	1RB#38	22.36	PASS
Band2	15MHz	16QAM	19125	1RB#74	22.16	PASS
Band2	15MHz	16QAM	19125	38RB#0	22.30	PASS
Band2	15MHz	16QAM	19125	38RB#18	22.38	PASS
Band2	15MHz	16QAM	19125	38RB#37	22.20	PASS
Band2	15MHz	16QAM	19125	75RB#0	21.64	PASS
Band2	20MHz	QPSK	18700	1RB#0	23.53	PASS
Band2	20MHz	QPSK	18700	1RB#49	24.11	PASS
Band2	20MHz	QPSK	18700	1RB#99	23.11	PASS
Band2	20MHz	QPSK	18700	50RB#0	22.50	PASS
Band2	20MHz	QPSK	18700	50RB#25	22.49	PASS
Band2	20MHz	QPSK	18700	50RB#50	22.44	PASS
Band2	20MHz	QPSK	18700	100RB#0	22.44	PASS
Band2	20MHz	QPSK	18900	1RB#0	23.09	PASS
Band2	20MHz	QPSK	18900	1RB#49	23.37	PASS
Band2	20MHz	QPSK	18900	1RB#99	23.14	PASS

Band2	20MHz	QPSK	18900	50RB#0	22.35	PASS
Band2	20MHz	QPSK	18900	50RB#25	22.39	PASS
Band2	20MHz	QPSK	18900	50RB#50	22.31	PASS
Band2	20MHz	QPSK	18900	100RB#0	22.36	PASS
Band2	20MHz	QPSK	19100	1RB#0	23.17	PASS
Band2	20MHz	QPSK	19100	1RB#49	23.58	PASS
Band2	20MHz	QPSK	19100	1RB#99	23.15	PASS
Band2	20MHz	QPSK	19100	50RB#0	22.61	PASS
Band2	20MHz	QPSK	19100	50RB#25	22.65	PASS
Band2	20MHz	QPSK	19100	50RB#50	22.49	PASS
Band2	20MHz	QPSK	19100	100RB#0	22.59	PASS
Band2	20MHz	16QAM	18700	1RB#0	22.53	PASS
Band2	20MHz	16QAM	18700	1RB#49	22.43	PASS
Band2	20MHz	16QAM	18700	1RB#99	22.10	PASS
Band2	20MHz	16QAM	18700	50RB#0	21.51	PASS
Band2	20MHz	16QAM	18700	50RB#25	21.52	PASS
Band2	20MHz	16QAM	18700	50RB#50	21.48	PASS
Band2	20MHz	16QAM	18700	100RB#0	21.52	PASS
Band2	20MHz	16QAM	18900	1RB#0	22.38	PASS
Band2	20MHz	16QAM	18900	1RB#49	22.52	PASS
Band2	20MHz	16QAM	18900	1RB#99	22.33	PASS
Band2	20MHz	16QAM	18900	50RB#0	21.45	PASS
Band2	20MHz	16QAM	18900	50RB#25	21.45	PASS
Band2	20MHz	16QAM	18900	50RB#50	21.42	PASS
Band2	20MHz	16QAM	18900	100RB#0	21.42	PASS
Band2	20MHz	16QAM	19100	1RB#0	22.04	PASS
Band2	20MHz	16QAM	19100	1RB#49	22.46	PASS
Band2	20MHz	16QAM	19100	1RB#99	22.03	PASS
Band2	20MHz	16QAM	19100	50RB#0	21.78	PASS
Band2	20MHz	16QAM	19100	50RB#25	21.75	PASS
Band2	20MHz	16QAM	19100	50RB#50	21.66	PASS
Band2	20MHz	16QAM	19100	100RB#0	21.65	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	23.12	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	23.32	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	23.14	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	23.30	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	23.30	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	23.30	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	22.22	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	22.90	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	23.09	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	22.89	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	23.02	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	23.02	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	23.02	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	21.87	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	23.12	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	23.22	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	23.10	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	23.29	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	23.30	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	23.29	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	22.21	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	22.11	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	22.26	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	22.07	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	22.13	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	22.10	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	22.13	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	21.23	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	21.76	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	21.94	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	21.72	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	21.83	PASS
Band4	1.4MHz	16QAM	20175	3RB#1	21.84	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	21.83	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	20.79	PASS

Band4	1.4MHz	16QAM	20393	1RB#0	22.09	PASS
Band4	1.4MHz	16QAM	20393	1RB#2	22.19	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	22.04	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	22.10	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	22.09	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	22.12	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	21.25	PASS
Band4	3MHz	QPSK	19965	1RB#0	23.69	PASS
Band4	3MHz	QPSK	19965	1RB#8	23.23	PASS
Band4	3MHz	QPSK	19965	1RB#14	23.20	PASS
Band4	3MHz	QPSK	19965	8RB#0	22.22	PASS
Band4	3MHz	QPSK	19965	8RB#4	22.18	PASS
Band4	3MHz	QPSK	19965	8RB#7	22.19	PASS
Band4	3MHz	QPSK	19965	15RB#0	22.24	PASS
Band4	3MHz	QPSK	20175	1RB#0	22.98	PASS
Band4	3MHz	QPSK	20175	1RB#8	22.96	PASS
Band4	3MHz	QPSK	20175	1RB#14	22.90	PASS
Band4	3MHz	QPSK	20175	8RB#0	21.90	PASS
Band4	3MHz	QPSK	20175	8RB#4	21.90	PASS
Band4	3MHz	QPSK	20175	8RB#7	21.84	PASS
Band4	3MHz	QPSK	20175	15RB#0	21.89	PASS
Band4	3MHz	QPSK	20385	1RB#0	23.20	PASS
Band4	3MHz	QPSK	20385	1RB#8	23.22	PASS
Band4	3MHz	QPSK	20385	1RB#14	23.19	PASS
Band4	3MHz	QPSK	20385	8RB#0	22.21	PASS
Band4	3MHz	QPSK	20385	8RB#4	22.22	PASS
Band4	3MHz	QPSK	20385	8RB#7	22.20	PASS
Band4	3MHz	QPSK	20385	15RB#0	22.18	PASS
Band4	3MHz	16QAM	19965	1RB#0	22.28	PASS
Band4	3MHz	16QAM	19965	1RB#8	22.29	PASS
Band4	3MHz	16QAM	19965	1RB#14	22.28	PASS
Band4	3MHz	16QAM	19965	8RB#0	21.26	PASS
Band4	3MHz	16QAM	19965	8RB#4	21.28	PASS
Band4	3MHz	16QAM	19965	8RB#7	21.30	PASS
Band4	3MHz	16QAM	19965	15RB#0	21.28	PASS
Band4	3MHz	16QAM	20175	1RB#0	21.80	PASS
Band4	3MHz	16QAM	20175	1RB#8	21.74	PASS

Band4	3MHz	16QAM	20175	1RB#14	21.72	PASS
Band4	3MHz	16QAM	20175	8RB#0	20.94	PASS
Band4	3MHz	16QAM	20175	8RB#4	20.97	PASS
Band4	3MHz	16QAM	20175	8RB#7	20.87	PASS
Band4	3MHz	16QAM	20175	15RB#0	20.85	PASS
Band4	3MHz	16QAM	20385	1RB#0	22.24	PASS
Band4	3MHz	16QAM	20385	1RB#8	22.25	PASS
Band4	3MHz	16QAM	20385	1RB#14	22.19	PASS
Band4	3MHz	16QAM	20385	8RB#0	21.28	PASS
Band4	3MHz	16QAM	20385	8RB#4	21.28	PASS
Band4	3MHz	16QAM	20385	8RB#7	21.25	PASS
Band4	3MHz	16QAM	20385	15RB#0	21.25	PASS
Band4	5MHz	QPSK	19975	1RB#0	23.29	PASS
Band4	5MHz	QPSK	19975	1RB#12	23.32	PASS
Band4	5MHz	QPSK	19975	1RB#24	23.16	PASS
Band4	5MHz	QPSK	19975	12RB#0	22.20	PASS
Band4	5MHz	QPSK	19975	12RB#6	22.12	PASS
Band4	5MHz	QPSK	19975	12RB#13	22.24	PASS
Band4	5MHz	QPSK	19975	25RB#0	22.28	PASS
Band4	5MHz	QPSK	20175	1RB#0	22.86	PASS
Band4	5MHz	QPSK	20175	1RB#12	22.88	PASS
Band4	5MHz	QPSK	20175	1RB#24	22.71	PASS
Band4	5MHz	QPSK	20175	12RB#0	21.88	PASS
Band4	5MHz	QPSK	20175	12RB#6	21.90	PASS
Band4	5MHz	QPSK	20175	12RB#13	21.82	PASS
Band4	5MHz	QPSK	20175	25RB#0	21.89	PASS
Band4	5MHz	QPSK	20375	1RB#0	23.14	PASS
Band4	5MHz	QPSK	20375	1RB#12	23.32	PASS
Band4	5MHz	QPSK	20375	1RB#24	23.17	PASS
Band4	5MHz	QPSK	20375	12RB#0	22.19	PASS
Band4	5MHz	QPSK	20375	12RB#6	22.22	PASS
Band4	5MHz	QPSK	20375	12RB#13	22.08	PASS
Band4	5MHz	QPSK	20375	25RB#0	22.19	PASS
Band4	5MHz	16QAM	19975	1RB#0	22.07	PASS
Band4	5MHz	16QAM	19975	1RB#12	22.26	PASS
Band4	5MHz	16QAM	19975	1RB#24	22.11	PASS
Band4	5MHz	16QAM	19975	12RB#0	21.18	PASS

Band4	5MHz	16QAM	19975	12RB#6	21.13	PASS
Band4	5MHz	16QAM	19975	12RB#13	21.27	PASS
Band4	5MHz	16QAM	19975	25RB#0	21.34	PASS
Band4	5MHz	16QAM	20175	1RB#0	21.94	PASS
Band4	5MHz	16QAM	20175	1RB#12	22.03	PASS
Band4	5MHz	16QAM	20175	1RB#24	21.89	PASS
Band4	5MHz	16QAM	20175	12RB#0	20.97	PASS
Band4	5MHz	16QAM	20175	12RB#6	20.99	PASS
Band4	5MHz	16QAM	20175	12RB#13	20.89	PASS
Band4	5MHz	16QAM	20175	25RB#0	20.90	PASS
Band4	5MHz	16QAM	20375	1RB#0	22.09	PASS
Band4	5MHz	16QAM	20375	1RB#12	22.16	PASS
Band4	5MHz	16QAM	20375	1RB#24	22.10	PASS
Band4	5MHz	16QAM	20375	12RB#0	21.28	PASS
Band4	5MHz	16QAM	20375	12RB#6	21.25	PASS
Band4	5MHz	16QAM	20375	12RB#13	21.16	PASS
Band4	5MHz	16QAM	20375	25RB#0	21.29	PASS
Band4	10MHz	QPSK	20000	1RB#0	23.20	PASS
Band4	10MHz	QPSK	20000	1RB#24	23.30	PASS
Band4	10MHz	QPSK	20000	1RB#49	23.11	PASS
Band4	10MHz	QPSK	20000	25RB#0	22.20	PASS
Band4	10MHz	QPSK	20000	25RB#12	22.17	PASS
Band4	10MHz	QPSK	20000	25RB#25	22.28	PASS
Band4	10MHz	QPSK	20000	50RB#0	22.19	PASS
Band4	10MHz	QPSK	20175	1RB#0	22.98	PASS
Band4	10MHz	QPSK	20175	1RB#24	22.94	PASS
Band4	10MHz	QPSK	20175	1RB#49	22.83	PASS
Band4	10MHz	QPSK	20175	25RB#0	22.03	PASS
Band4	10MHz	QPSK	20175	25RB#12	22.01	PASS
Band4	10MHz	QPSK	20175	25RB#25	21.80	PASS
Band4	10MHz	QPSK	20175	50RB#0	21.96	PASS
Band4	10MHz	QPSK	20350	1RB#0	23.06	PASS
Band4	10MHz	QPSK	20350	1RB#24	23.30	PASS
Band4	10MHz	QPSK	20350	1RB#49	23.13	PASS
Band4	10MHz	QPSK	20350	25RB#0	22.14	PASS
Band4	10MHz	QPSK	20350	25RB#12	22.17	PASS
Band4	10MHz	QPSK	20350	25RB#25	22.12	PASS

Band4	10MHz	QPSK	20350	50RB#0	22.18	PASS
Band4	10MHz	16QAM	20000	1RB#0	22.22	PASS
Band4	10MHz	16QAM	20000	1RB#24	22.35	PASS
Band4	10MHz	16QAM	20000	1RB#49	22.16	PASS
Band4	10MHz	16QAM	20000	25RB#0	21.26	PASS
Band4	10MHz	16QAM	20000	25RB#12	21.27	PASS
Band4	10MHz	16QAM	20000	25RB#25	21.34	PASS
Band4	10MHz	16QAM	20000	50RB#0	21.31	PASS
Band4	10MHz	16QAM	20175	1RB#0	21.77	PASS
Band4	10MHz	16QAM	20175	1RB#24	21.85	PASS
Band4	10MHz	16QAM	20175	1RB#49	21.71	PASS
Band4	10MHz	16QAM	20175	25RB#0	21.09	PASS
Band4	10MHz	16QAM	20175	25RB#12	21.09	PASS
Band4	10MHz	16QAM	20175	25RB#25	20.90	PASS
Band4	10MHz	16QAM	20175	50RB#0	20.96	PASS
Band4	10MHz	16QAM	20350	1RB#0	22.13	PASS
Band4	10MHz	16QAM	20350	1RB#24	22.28	PASS
Band4	10MHz	16QAM	20350	1RB#49	22.16	PASS
Band4	10MHz	16QAM	20350	25RB#0	21.19	PASS
Band4	10MHz	16QAM	20350	25RB#12	21.23	PASS
Band4	10MHz	16QAM	20350	25RB#25	21.20	PASS
Band4	10MHz	16QAM	20350	50RB#0	21.26	PASS
Band4	15MHz	QPSK	20025	1RB#0	23.63	PASS
Band4	15MHz	QPSK	20025	1RB#38	23.17	PASS
Band4	15MHz	QPSK	20025	1RB#74	22.96	PASS
Band4	15MHz	QPSK	20025	38RB#0	22.19	PASS
Band4	15MHz	QPSK	20025	38RB#18	22.27	PASS
Band4	15MHz	QPSK	20025	38RB#37	21.99	PASS
Band4	15MHz	QPSK	20025	75RB#0	22.22	PASS
Band4	15MHz	QPSK	20175	1RB#0	22.91	PASS
Band4	15MHz	QPSK	20175	1RB#38	22.84	PASS
Band4	15MHz	QPSK	20175	1RB#74	22.64	PASS
Band4	15MHz	QPSK	20175	38RB#0	22.01	PASS
Band4	15MHz	QPSK	20175	38RB#18	22.02	PASS
Band4	15MHz	QPSK	20175	38RB#37	21.85	PASS
Band4	15MHz	QPSK	20175	75RB#0	21.97	PASS
Band4	15MHz	QPSK	20325	1RB#0	23.00	PASS

Band4	15MHz	QPSK	20325	1RB#38	23.13	PASS
Band4	15MHz	QPSK	20325	1RB#74	23.05	PASS
Band4	15MHz	QPSK	20325	38RB#0	22.04	PASS
Band4	15MHz	QPSK	20325	38RB#18	22.23	PASS
Band4	15MHz	QPSK	20325	38RB#37	22.13	PASS
Band4	15MHz	QPSK	20325	75RB#0	22.18	PASS
Band4	15MHz	16QAM	20025	1RB#0	22.18	PASS
Band4	15MHz	16QAM	20025	1RB#38	22.29	PASS
Band4	15MHz	16QAM	20025	1RB#74	21.99	PASS
Band4	15MHz	16QAM	20025	38RB#0	22.21	PASS
Band4	15MHz	16QAM	20025	38RB#18	22.27	PASS
Band4	15MHz	16QAM	20025	38RB#37	22.00	PASS
Band4	15MHz	16QAM	20025	75RB#0	21.19	PASS
Band4	15MHz	16QAM	20175	1RB#0	22.02	PASS
Band4	15MHz	16QAM	20175	1RB#38	21.99	PASS
Band4	15MHz	16QAM	20175	1RB#74	21.83	PASS
Band4	15MHz	16QAM	20175	38RB#0	22.08	PASS
Band4	15MHz	16QAM	20175	38RB#18	21.96	PASS
Band4	15MHz	16QAM	20175	38RB#37	21.86	PASS
Band4	15MHz	16QAM	20175	75RB#0	20.97	PASS
Band4	15MHz	16QAM	20325	1RB#0	22.05	PASS
Band4	15MHz	16QAM	20325	1RB#38	22.25	PASS
Band4	15MHz	16QAM	20325	1RB#74	22.16	PASS
Band4	15MHz	16QAM	20325	38RB#0	22.03	PASS
Band4	15MHz	16QAM	20325	38RB#18	22.24	PASS
Band4	15MHz	16QAM	20325	38RB#37	22.15	PASS
Band4	15MHz	16QAM	20325	75RB#0	21.14	PASS
Band4	20MHz	QPSK	20050	1RB#0	23.78	PASS
Band4	20MHz	QPSK	20050	1RB#49	23.38	PASS
Band4	20MHz	QPSK	20050	1RB#99	22.72	PASS
Band4	20MHz	QPSK	20050	50RB#0	22.14	PASS
Band4	20MHz	QPSK	20050	50RB#25	22.14	PASS
Band4	20MHz	QPSK	20050	50RB#50	22.06	PASS
Band4	20MHz	QPSK	20050	100RB#0	22.06	PASS
Band4	20MHz	QPSK	20175	1RB#0	22.87	PASS
Band4	20MHz	QPSK	20175	1RB#49	23.11	PASS
Band4	20MHz	QPSK	20175	1RB#99	22.66	PASS

Band4	20MHz	QPSK	20175	50RB#0	22.12	PASS
Band4	20MHz	QPSK	20175	50RB#25	22.13	PASS
Band4	20MHz	QPSK	20175	50RB#50	21.79	PASS
Band4	20MHz	QPSK	20175	100RB#0	21.98	PASS
Band4	20MHz	QPSK	20300	1RB#0	22.79	PASS
Band4	20MHz	QPSK	20300	1RB#49	23.23	PASS
Band4	20MHz	QPSK	20300	1RB#99	22.94	PASS
Band4	20MHz	QPSK	20300	50RB#0	22.14	PASS
Band4	20MHz	QPSK	20300	50RB#25	22.19	PASS
Band4	20MHz	QPSK	20300	50RB#50	22.19	PASS
Band4	20MHz	QPSK	20300	100RB#0	22.20	PASS
Band4	20MHz	16QAM	20050	1RB#0	21.89	PASS
Band4	20MHz	16QAM	20050	1RB#49	22.15	PASS
Band4	20MHz	16QAM	20050	1RB#99	21.64	PASS
Band4	20MHz	16QAM	20050	50RB#0	21.25	PASS
Band4	20MHz	16QAM	20050	50RB#25	21.18	PASS
Band4	20MHz	16QAM	20050	50RB#50	21.09	PASS
Band4	20MHz	16QAM	20050	100RB#0	21.17	PASS
Band4	20MHz	16QAM	20175	1RB#0	22.02	PASS
Band4	20MHz	16QAM	20175	1RB#49	22.20	PASS
Band4	20MHz	16QAM	20175	1RB#99	21.80	PASS
Band4	20MHz	16QAM	20175	50RB#0	21.21	PASS
Band4	20MHz	16QAM	20175	50RB#25	21.22	PASS
Band4	20MHz	16QAM	20175	50RB#50	20.90	PASS
Band4	20MHz	16QAM	20175	100RB#0	21.02	PASS
Band4	20MHz	16QAM	20300	1RB#0	21.70	PASS
Band4	20MHz	16QAM	20300	1RB#49	22.28	PASS
Band4	20MHz	16QAM	20300	1RB#99	21.90	PASS
Band4	20MHz	16QAM	20300	50RB#0	21.25	PASS
Band4	20MHz	16QAM	20300	50RB#25	21.27	PASS
Band4	20MHz	16QAM	20300	50RB#50	21.28	PASS
Band4	20MHz	16QAM	20300	100RB#0	21.21	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	22.81	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	22.93	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	22.80	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	22.89	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	22.87	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	22.86	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	21.93	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	22.91	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.02	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	22.94	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	22.94	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	22.98	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	23.01	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	21.97	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	22.88	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.07	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	22.82	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.05	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.04	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.06	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	21.95	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	21.74	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	21.82	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	21.73	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	21.69	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	21.67	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	21.66	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	20.95	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	21.77	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	21.91	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	21.77	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	21.80	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	21.76	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	21.77	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	20.87	PASS

Band5	1.4MHz	16QAM	20643	1RB#0	21.90	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.00	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	21.90	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	21.92	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	21.85	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	21.81	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.08	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.38	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.38	PASS
Band5	3MHz	QPSK	20415	1RB#14	23.34	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.40	PASS
Band5	3MHz	QPSK	20415	8RB#4	22.19	PASS
Band5	3MHz	QPSK	20415	8RB#7	22.10	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.15	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.00	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.12	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.04	PASS
Band5	3MHz	QPSK	20525	8RB#0	21.93	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.00	PASS
Band5	3MHz	QPSK	20525	8RB#7	21.92	PASS
Band5	3MHz	QPSK	20525	15RB#0	21.91	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.06	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.01	PASS
Band5	3MHz	QPSK	20635	1RB#14	22.97	PASS
Band5	3MHz	QPSK	20635	8RB#0	21.97	PASS
Band5	3MHz	QPSK	20635	8RB#4	21.99	PASS
Band5	3MHz	QPSK	20635	8RB#7	21.97	PASS
Band5	3MHz	QPSK	20635	15RB#0	21.95	PASS
Band5	3MHz	16QAM	20415	1RB#0	22.42	PASS
Band5	3MHz	16QAM	20415	1RB#8	22.41	PASS
Band5	3MHz	16QAM	20415	1RB#14	22.06	PASS
Band5	3MHz	16QAM	20415	8RB#0	21.44	PASS
Band5	3MHz	16QAM	20415	8RB#4	21.46	PASS
Band5	3MHz	16QAM	20415	8RB#7	21.30	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.03	PASS
Band5	3MHz	16QAM	20525	1RB#0	21.93	PASS
Band5	3MHz	16QAM	20525	1RB#8	21.81	PASS

Band5	3MHz	16QAM	20525	1RB#14	21.83	PASS
Band5	3MHz	16QAM	20525	8RB#0	21.03	PASS
Band5	3MHz	16QAM	20525	8RB#4	20.93	PASS
Band5	3MHz	16QAM	20525	8RB#7	21.15	PASS
Band5	3MHz	16QAM	20525	15RB#0	20.86	PASS
Band5	3MHz	16QAM	20635	1RB#0	22.09	PASS
Band5	3MHz	16QAM	20635	1RB#8	22.01	PASS
Band5	3MHz	16QAM	20635	1RB#14	22.03	PASS
Band5	3MHz	16QAM	20635	8RB#0	21.09	PASS
Band5	3MHz	16QAM	20635	8RB#4	21.09	PASS
Band5	3MHz	16QAM	20635	8RB#7	21.06	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.05	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.38	PASS
Band5	5MHz	QPSK	20425	1RB#12	23.47	PASS
Band5	5MHz	QPSK	20425	1RB#24	23.37	PASS
Band5	5MHz	QPSK	20425	12RB#0	22.20	PASS
Band5	5MHz	QPSK	20425	12RB#6	22.24	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.18	PASS
Band5	5MHz	QPSK	20425	25RB#0	21.92	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.05	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.01	PASS
Band5	5MHz	QPSK	20525	1RB#24	22.89	PASS
Band5	5MHz	QPSK	20525	12RB#0	21.93	PASS
Band5	5MHz	QPSK	20525	12RB#6	21.96	PASS
Band5	5MHz	QPSK	20525	12RB#13	21.95	PASS
Band5	5MHz	QPSK	20525	25RB#0	21.94	PASS
Band5	5MHz	QPSK	20625	1RB#0	23.01	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.09	PASS
Band5	5MHz	QPSK	20625	1RB#24	22.98	PASS
Band5	5MHz	QPSK	20625	12RB#0	22.04	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.07	PASS
Band5	5MHz	QPSK	20625	12RB#13	21.99	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.02	PASS
Band5	5MHz	16QAM	20425	1RB#0	22.35	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.41	PASS
Band5	5MHz	16QAM	20425	1RB#24	22.24	PASS
Band5	5MHz	16QAM	20425	12RB#0	21.35	PASS

Band5	5MHz	16QAM	20425	12RB#6	21.25	PASS
Band5	5MHz	16QAM	20425	12RB#13	20.91	PASS
Band5	5MHz	16QAM	20425	25RB#0	21.13	PASS
Band5	5MHz	16QAM	20525	1RB#0	21.94	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.05	PASS
Band5	5MHz	16QAM	20525	1RB#24	21.96	PASS
Band5	5MHz	16QAM	20525	12RB#0	20.96	PASS
Band5	5MHz	16QAM	20525	12RB#6	20.96	PASS
Band5	5MHz	16QAM	20525	12RB#13	20.92	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.09	PASS
Band5	5MHz	16QAM	20625	1RB#0	21.91	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.06	PASS
Band5	5MHz	16QAM	20625	1RB#24	21.96	PASS
Band5	5MHz	16QAM	20625	12RB#0	21.13	PASS
Band5	5MHz	16QAM	20625	12RB#6	21.06	PASS
Band5	5MHz	16QAM	20625	12RB#13	21.02	PASS
Band5	5MHz	16QAM	20625	25RB#0	21.08	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.41	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.49	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.41	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.16	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.15	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.35	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.14	PASS
Band5	10MHz	QPSK	20525	1RB#0	22.94	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.14	PASS
Band5	10MHz	QPSK	20525	1RB#49	22.95	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.04	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.00	PASS
Band5	10MHz	QPSK	20525	25RB#25	21.97	PASS
Band5	10MHz	QPSK	20525	50RB#0	21.93	PASS
Band5	10MHz	QPSK	20600	1RB#0	22.95	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.07	PASS
Band5	10MHz	QPSK	20600	1RB#49	22.91	PASS
Band5	10MHz	QPSK	20600	25RB#0	22.12	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.09	PASS
Band5	10MHz	QPSK	20600	25RB#25	21.98	PASS

Band5	10MHz	QPSK	20600	50RB#0	22.10	PASS
Band5	10MHz	16QAM	20450	1RB#0	22.39	PASS
Band5	10MHz	16QAM	20450	1RB#24	22.59	PASS
Band5	10MHz	16QAM	20450	1RB#49	22.13	PASS
Band5	10MHz	16QAM	20450	25RB#0	21.34	PASS
Band5	10MHz	16QAM	20450	25RB#12	21.27	PASS
Band5	10MHz	16QAM	20450	25RB#25	20.99	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.14	PASS
Band5	10MHz	16QAM	20525	1RB#0	21.76	PASS
Band5	10MHz	16QAM	20525	1RB#24	22.01	PASS
Band5	10MHz	16QAM	20525	1RB#49	21.83	PASS
Band5	10MHz	16QAM	20525	25RB#0	21.05	PASS
Band5	10MHz	16QAM	20525	25RB#12	21.04	PASS
Band5	10MHz	16QAM	20525	25RB#25	21.00	PASS
Band5	10MHz	16QAM	20525	50RB#0	20.95	PASS
Band5	10MHz	16QAM	20600	1RB#0	22.00	PASS
Band5	10MHz	16QAM	20600	1RB#24	22.26	PASS
Band5	10MHz	16QAM	20600	1RB#49	22.08	PASS
Band5	10MHz	16QAM	20600	25RB#0	21.16	PASS
Band5	10MHz	16QAM	20600	25RB#12	21.16	PASS
Band5	10MHz	16QAM	20600	25RB#25	20.98	PASS
Band5	10MHz	16QAM	20600	50RB#0	21.09	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	23.27	PASS
Band7	5MHz	QPSK	20775	1RB#12	23.40	PASS
Band7	5MHz	QPSK	20775	1RB#24	23.25	PASS
Band7	5MHz	QPSK	20775	12RB#0	22.29	PASS
Band7	5MHz	QPSK	20775	12RB#6	22.22	PASS
Band7	5MHz	QPSK	20775	12RB#13	22.34	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.32	PASS
Band7	5MHz	QPSK	21100	1RB#0	23.42	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.59	PASS
Band7	5MHz	QPSK	21100	1RB#24	23.45	PASS
Band7	5MHz	QPSK	21100	12RB#0	22.49	PASS
Band7	5MHz	QPSK	21100	12RB#6	22.48	PASS
Band7	5MHz	QPSK	21100	12RB#13	22.55	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.46	PASS
Band7	5MHz	QPSK	21425	1RB#0	23.53	PASS
Band7	5MHz	QPSK	21425	1RB#12	23.73	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.56	PASS
Band7	5MHz	QPSK	21425	12RB#0	22.59	PASS
Band7	5MHz	QPSK	21425	12RB#6	22.60	PASS
Band7	5MHz	QPSK	21425	12RB#13	22.61	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.66	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.24	PASS
Band7	5MHz	16QAM	20775	1RB#12	22.32	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.20	PASS
Band7	5MHz	16QAM	20775	12RB#0	21.24	PASS
Band7	5MHz	16QAM	20775	12RB#6	21.25	PASS
Band7	5MHz	16QAM	20775	12RB#13	21.32	PASS
Band7	5MHz	16QAM	20775	25RB#0	21.41	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.38	PASS
Band7	5MHz	16QAM	21100	1RB#12	22.53	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.40	PASS
Band7	5MHz	16QAM	21100	12RB#0	21.45	PASS
Band7	5MHz	16QAM	21100	12RB#6	21.45	PASS
Band7	5MHz	16QAM	21100	12RB#13	21.49	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.62	PASS

Band7	5MHz	16QAM	21425	1RB#0	22.52	PASS
Band7	5MHz	16QAM	21425	1RB#12	22.66	PASS
Band7	5MHz	16QAM	21425	1RB#24	22.51	PASS
Band7	5MHz	16QAM	21425	12RB#0	21.64	PASS
Band7	5MHz	16QAM	21425	12RB#6	21.64	PASS
Band7	5MHz	16QAM	21425	12RB#13	21.67	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.77	PASS
Band7	10MHz	QPSK	20800	1RB#0	23.32	PASS
Band7	10MHz	QPSK	20800	1RB#24	23.45	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.24	PASS
Band7	10MHz	QPSK	20800	25RB#0	22.37	PASS
Band7	10MHz	QPSK	20800	25RB#12	22.34	PASS
Band7	10MHz	QPSK	20800	25RB#25	22.46	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.37	PASS
Band7	10MHz	QPSK	21100	1RB#0	23.44	PASS
Band7	10MHz	QPSK	21100	1RB#24	23.71	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.48	PASS
Band7	10MHz	QPSK	21100	25RB#0	22.58	PASS
Band7	10MHz	QPSK	21100	25RB#12	22.53	PASS
Band7	10MHz	QPSK	21100	25RB#25	22.66	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.66	PASS
Band7	10MHz	QPSK	21400	1RB#0	23.51	PASS
Band7	10MHz	QPSK	21400	1RB#24	23.64	PASS
Band7	10MHz	QPSK	21400	1RB#49	23.58	PASS
Band7	10MHz	QPSK	21400	25RB#0	22.66	PASS
Band7	10MHz	QPSK	21400	25RB#12	22.69	PASS
Band7	10MHz	QPSK	21400	25RB#25	22.71	PASS
Band7	10MHz	QPSK	21400	50RB#0	22.72	PASS
Band7	10MHz	16QAM	20800	1RB#0	22.40	PASS
Band7	10MHz	16QAM	20800	1RB#24	22.47	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.32	PASS
Band7	10MHz	16QAM	20800	25RB#0	21.36	PASS
Band7	10MHz	16QAM	20800	25RB#12	21.35	PASS
Band7	10MHz	16QAM	20800	25RB#25	21.42	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.42	PASS
Band7	10MHz	16QAM	21100	1RB#0	22.48	PASS
Band7	10MHz	16QAM	21100	1RB#24	22.71	PASS

Band7	10MHz	16QAM	21100	1RB#49	22.59	PASS
Band7	10MHz	16QAM	21100	25RB#0	21.58	PASS
Band7	10MHz	16QAM	21100	25RB#12	21.59	PASS
Band7	10MHz	16QAM	21100	25RB#25	21.69	PASS
Band7	10MHz	16QAM	21100	50RB#0	21.66	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.58	PASS
Band7	10MHz	16QAM	21400	1RB#24	22.73	PASS
Band7	10MHz	16QAM	21400	1RB#49	22.64	PASS
Band7	10MHz	16QAM	21400	25RB#0	21.68	PASS
Band7	10MHz	16QAM	21400	25RB#12	21.71	PASS
Band7	10MHz	16QAM	21400	25RB#25	21.73	PASS
Band7	10MHz	16QAM	21400	50RB#0	21.74	PASS
Band7	15MHz	QPSK	20825	1RB#0	23.22	PASS
Band7	15MHz	QPSK	20825	1RB#38	23.31	PASS
Band7	15MHz	QPSK	20825	1RB#74	23.10	PASS
Band7	15MHz	QPSK	20825	38RB#0	22.34	PASS
Band7	15MHz	QPSK	20825	38RB#18	22.36	PASS
Band7	15MHz	QPSK	20825	38RB#37	22.14	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.31	PASS
Band7	15MHz	QPSK	21100	1RB#0	23.29	PASS
Band7	15MHz	QPSK	21100	1RB#38	23.49	PASS
Band7	15MHz	QPSK	21100	1RB#74	23.34	PASS
Band7	15MHz	QPSK	21100	38RB#0	22.31	PASS
Band7	15MHz	QPSK	21100	38RB#18	22.56	PASS
Band7	15MHz	QPSK	21100	38RB#37	22.37	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.57	PASS
Band7	15MHz	QPSK	21375	1RB#0	23.37	PASS
Band7	15MHz	QPSK	21375	1RB#38	23.52	PASS
Band7	15MHz	QPSK	21375	1RB#74	23.46	PASS
Band7	15MHz	QPSK	21375	38RB#0	22.51	PASS
Band7	15MHz	QPSK	21375	38RB#18	22.63	PASS
Band7	15MHz	QPSK	21375	38RB#37	22.55	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.57	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.32	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.33	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.13	PASS
Band7	15MHz	16QAM	20825	38RB#0	22.34	PASS

Band7	15MHz	16QAM	20825	38RB#18	22.40	PASS
Band7	15MHz	16QAM	20825	38RB#37	22.09	PASS
Band7	15MHz	16QAM	20825	75RB#0	21.28	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.35	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.57	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.45	PASS
Band7	15MHz	16QAM	21100	38RB#0	22.36	PASS
Band7	15MHz	16QAM	21100	38RB#18	22.55	PASS
Band7	15MHz	16QAM	21100	38RB#37	22.47	PASS
Band7	15MHz	16QAM	21100	75RB#0	21.53	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.44	PASS
Band7	15MHz	16QAM	21375	1RB#38	22.63	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.52	PASS
Band7	15MHz	16QAM	21375	38RB#0	22.48	PASS
Band7	15MHz	16QAM	21375	38RB#18	22.65	PASS
Band7	15MHz	16QAM	21375	38RB#37	22.59	PASS
Band7	15MHz	16QAM	21375	75RB#0	21.52	PASS
Band7	20MHz	QPSK	20850	1RB#0	23.12	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.32	PASS
Band7	20MHz	QPSK	20850	1RB#99	22.95	PASS
Band7	20MHz	QPSK	20850	50RB#0	22.15	PASS
Band7	20MHz	QPSK	20850	50RB#25	22.19	PASS
Band7	20MHz	QPSK	20850	50RB#50	22.11	PASS
Band7	20MHz	QPSK	20850	100RB#0	22.21	PASS
Band7	20MHz	QPSK	21100	1RB#0	23.10	PASS
Band7	20MHz	QPSK	21100	1RB#49	23.69	PASS
Band7	20MHz	QPSK	21100	1RB#99	23.13	PASS
Band7	20MHz	QPSK	21100	50RB#0	22.47	PASS
Band7	20MHz	QPSK	21100	50RB#25	22.45	PASS
Band7	20MHz	QPSK	21100	50RB#50	22.64	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.55	PASS
Band7	20MHz	QPSK	21350	1RB#0	23.21	PASS
Band7	20MHz	QPSK	21350	1RB#49	23.59	PASS
Band7	20MHz	QPSK	21350	1RB#99	23.36	PASS
Band7	20MHz	QPSK	21350	50RB#0	22.46	PASS
Band7	20MHz	QPSK	21350	50RB#25	22.48	PASS
Band7	20MHz	QPSK	21350	50RB#50	22.47	PASS

Band7	20MHz	QPSK	21350	100RB#0	22.52	PASS
Band7	20MHz	16QAM	20850	1RB#0	21.99	PASS
Band7	20MHz	16QAM	20850	1RB#49	22.39	PASS
Band7	20MHz	16QAM	20850	1RB#99	21.86	PASS
Band7	20MHz	16QAM	20850	50RB#0	21.20	PASS
Band7	20MHz	16QAM	20850	50RB#25	21.19	PASS
Band7	20MHz	16QAM	20850	50RB#50	21.10	PASS
Band7	20MHz	16QAM	20850	100RB#0	21.18	PASS
Band7	20MHz	16QAM	21100	1RB#0	21.98	PASS
Band7	20MHz	16QAM	21100	1RB#49	22.47	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.08	PASS
Band7	20MHz	16QAM	21100	50RB#0	21.55	PASS
Band7	20MHz	16QAM	21100	50RB#25	21.50	PASS
Band7	20MHz	16QAM	21100	50RB#50	21.68	PASS
Band7	20MHz	16QAM	21100	100RB#0	21.65	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.15	PASS
Band7	20MHz	16QAM	21350	1RB#49	22.48	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.27	PASS
Band7	20MHz	16QAM	21350	50RB#0	21.51	PASS
Band7	20MHz	16QAM	21350	50RB#25	21.51	PASS
Band7	20MHz	16QAM	21350	50RB#50	21.55	PASS
Band7	20MHz	16QAM	21350	100RB#0	21.54	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.02	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.15	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.03	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.19	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.20	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.19	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.14	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.05	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.23	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.03	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.15	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.16	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.21	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.06	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	22.91	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.10	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	22.94	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.13	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	23.08	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.04	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.04	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.26	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.01	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.04	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.02	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	21.99	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.20	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	21.97	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.19	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	21.98	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.06	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	22.04	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.04	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	20.99	PASS

Band12	1.4MHz	16QAM	23173	1RB#0	21.81	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	21.93	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	21.82	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	21.88	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	21.87	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	21.85	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.06	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.61	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.31	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.07	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.10	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.10	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.15	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.16	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.13	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.03	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.10	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.07	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.02	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.02	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.08	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.02	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.03	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.00	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.04	PASS
Band12	3MHz	QPSK	23165	8RB#4	22.08	PASS
Band12	3MHz	QPSK	23165	8RB#7	22.10	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.06	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.73	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.24	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.16	PASS
Band12	3MHz	16QAM	23025	8RB#0	21.20	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.16	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.20	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.17	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.08	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.04	PASS

Band12	3MHz	16QAM	23095	1RB#14	21.92	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.11	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.08	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.04	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.06	PASS
Band12	3MHz	16QAM	23165	1RB#0	21.81	PASS
Band12	3MHz	16QAM	23165	1RB#8	21.83	PASS
Band12	3MHz	16QAM	23165	1RB#14	21.86	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.06	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.08	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.04	PASS
Band12	3MHz	16QAM	23165	15RB#0	20.96	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.57	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.45	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.07	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.19	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.21	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.14	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.23	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.00	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.01	PASS
Band12	5MHz	QPSK	23095	1RB#24	22.97	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.11	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.05	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.16	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.20	PASS
Band12	5MHz	QPSK	23155	1RB#0	22.89	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.06	PASS
Band12	5MHz	QPSK	23155	1RB#24	22.92	PASS
Band12	5MHz	QPSK	23155	12RB#0	22.07	PASS
Band12	5MHz	QPSK	23155	12RB#6	22.10	PASS
Band12	5MHz	QPSK	23155	12RB#13	21.94	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.02	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.56	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.15	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.09	PASS
Band12	5MHz	16QAM	23035	12RB#0	21.14	PASS

Band12	5MHz	16QAM	23035	12RB#6	21.15	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.12	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.19	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.20	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.30	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.14	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.12	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.18	PASS
Band12	5MHz	16QAM	23095	12RB#13	21.16	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.14	PASS
Band12	5MHz	16QAM	23155	1RB#0	21.89	PASS
Band12	5MHz	16QAM	23155	1RB#12	21.97	PASS
Band12	5MHz	16QAM	23155	1RB#24	21.93	PASS
Band12	5MHz	16QAM	23155	12RB#0	21.10	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.10	PASS
Band12	5MHz	16QAM	23155	12RB#13	20.95	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.11	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.65	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.58	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.06	PASS
Band12	10MHz	QPSK	23060	25RB#0	22.26	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.21	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.28	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.29	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.16	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.22	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.08	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.21	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.22	PASS
Band12	10MHz	QPSK	23095	25RB#25	22.20	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.19	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.10	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.16	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.00	PASS
Band12	10MHz	QPSK	23130	25RB#0	22.12	PASS
Band12	10MHz	QPSK	23130	25RB#12	22.08	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.08	PASS

Band12	10MHz	QPSK	23130	50RB#0	22.04	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.66	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.39	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.17	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.25	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.26	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.32	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.29	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.07	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.19	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.00	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.24	PASS
Band12	10MHz	16QAM	23095	25RB#12	21.27	PASS
Band12	10MHz	16QAM	23095	25RB#25	21.25	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.27	PASS
Band12	10MHz	16QAM	23130	1RB#0	21.94	PASS
Band12	10MHz	16QAM	23130	1RB#24	21.99	PASS
Band12	10MHz	16QAM	23130	1RB#49	21.85	PASS
Band12	10MHz	16QAM	23130	25RB#0	21.11	PASS
Band12	10MHz	16QAM	23130	25RB#12	21.12	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.14	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.12	PASS

Remark:

1. Per KDB941225 D05 v02r05, Start with the largest channel bandwidth then measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle, and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. 6 When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.
2. Per KDB941225 D05 v02r05, The procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.
3. Per KDB941225 D05 v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations, and the highest reported SAR for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB941225 D05 v02r05, For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures
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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 $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

WLAN(2.4GHz) - Maximum Average Power					
Test Mode	Data Rate	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up power (dBm)
802.11b	11Mbps	CH 01	2412	14.91	15.0
		CH 06	2437	15.97	16.0
		CH 11	2462	15.69	16.0
802.11g	54Mbps	CH 01	2412	12.41	12.5
		CH 06	2437	14.31	14.5
		CH 11	2462	14.03	14.5
802.11n (20MHz)	MCS7	CH 01	2412	13.16	13.5
		CH 06	2437	12.62	13.0
		CH 11	2462	12.59	13.0

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 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	2.89	3.0
Pi/4 QDPSK	2Mbps	4.77	5.0
8DPSK	3Mbps	5.17	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	-4.97	-4.5
		CH 19	2440	-3.56	-3.5
		CH 39	2480	-4.71	-4.5

9.2 Test Results for Standalone SAR Test

Near to Mouth SAR

GSM850 –Near to Mouth 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					
1.	GSM	Front side	251	848.8	33.19	33.5	1.074	0.063	0.068

GSM1900 –Near to Mouth 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					
2.	GSM	Front side	810	1909.8	29.57	30.0	1.104	0.792	0.874

WCDMA Band 2 –Near to Mouth 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					
3.	RMC 12.2k	Front Side	9538	1907.6	22.82	23.0	1.042	0.619	0.645

WCDMA Band 5 –Near to Mouth 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					
4.	RMC 12.2k	Front Side	4183	836.4	22.96	23.0	1.009	0.075	0.076

LTE Band 2–Near to Mouth SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Freque ncy	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Bandwidth, RB		MHz					
5.	QPSK 20MHz 1RB	Front Side	1860	24.11	24.5	1.094	1.260	1.378
	QPSK 20MHz 1RB	Front Side	1880	23.37	23.5	1.030	1.046	1.078
	QPSK 20MHz 1RB	Front Side	1900	23.58	24.0	1.102	1.145	1.261
	QPSK 20MHz 50%RB	Front Side	1860	24.11	24.5	1.094	0.988	1.081
	QPSK 20MHz 50%RB	Front Side	1880	23.37	23.5	1.030	1.088	1.121
	QPSK 20MHz 50%RB	Front Side	1900	23.58	24.0	1.102	1.101	1.213

LTE Band 4–Near to Mouth 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)
	Bandwidth, RB		MHz					
6.	QPSK 20MHz 1RB	Front Side	1720	23.78	24.0	1.052	0.443	0.466
	QPSK 20MHz 50%RB	Front Side	1720	23.78	24.0	1.052	0.383	0.403

LTE Band 5–Near to Mouth 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)
	Bandwidth, RB		MHz					
7.	QPSK 10MHz 1RB	Front Side	829	23.49	23.5	1.002	0.077	0.077
	QPSK 10MHz 50%RB	Front Side	829	23.49	23.5	1.002	0.064	0.064

LTE Band 7–Near to Mouth 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)
	Bandwidth, RB		MHz					
	QPSK 20MHz 1RB	Front Side	2535	23.69	24.0	1.074	0.981	1.054
	QPSK 20MHz 1RB	Front Side	2510	23.32	23.5	1.042	0.994	1.036
8.	QPSK 20MHz 1RB	Front Side	2560	23.59	24.0	1.099	0.973	1.069
	QPSK 20MHz 50%RB	Front Side	2535	23.69	24.0	1.074	0.800	0.859
	QPSK 20MHz 50%RB	Front Side	2510	23.32	23.5	1.042	0.799	0.833
	QPSK 20MHz 50%RB	Front Side	2560	23.59	24.0	1.099	0.904	0.994

LTE Band 12–Near to Mouth 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)
	Bandwidth, RB		MHz					
9.	QPSK 10MHz 1RB	Front Side	704	23.65	24.0	1.084	0.263	0.285
	QPSK 10MHz 50%RB	Front Side	704	23.65	24.0	1.084	0.225	0.244

WLAN 2.4GHz –Near to Mouth 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					
10.	802.11b	Front Side	06	2437	15.97	16.0	1.007	0.078	0.079

Bluetooth –Near to Mouth SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position Body	Frequency (MHz)	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
11.	Bluetooth	Front Side	2480	5.17	5.5	1.079	0.021	0.023

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.

Wrist-worn SAR

GSM850 –Wrist-worn SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10 g (W/kg)	Scaled SAR10 g (W/kg)
			CH.	MHz					
12.	GPRS_2TX	Back Side	251	848.8	30.86	31.0	1.033	0.219	0.226

GSM1900 –Wrist-worn SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10 g (W/kg)	Scaled SAR10 g (W/kg)
			CH.	MHz					
13.	GPRS_3TX	Back Side	810	1909.8	29.57	30.0	1.104	0.908	1.003

WCDMA Band 2 –Wrist-worn SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10 g (W/kg)	Scaled SAR10 g (W/kg)
			CH.	MHz					
	RMC 12.2k	Back Side	9538	1907.6	22.82	23.0	1.042	1.039	1.083
	RMC 12.2k	Back Side	9262	1852.4	22.64	23.0	1.086	1.067	1.159
14.	RMC 12.2k	Back Side	9400	1880.0	22.71	23.0	1.069	1.186	1.268

WCDMA Band 5 –Wrist-worn SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10 g (W/kg)	Scaled SAR10 g (W/kg)
			CH.	MHz					
15.	RMC 12.2k	Back Side	4183	836.4	22.96	23.0	1.009	0.280	0.283

LTE Band 2–Wrist-worn SAR Test (Gap: 0mm)								
Plot No.	Mode	Test Position Body	Freque ncy	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10 g (W/kg)	Scaled SAR10 g (W/kg)
	Bandwidth, RB		MHz					
	QPSK 20MHz 1RB	Back Side	1860	24.11	24.5	1.094	1.036	1.133
	QPSK 20MHz 1RB	Back Side	1880	23.37	23.5	1.030	1.094	1.127
16.	QPSK 20MHz 1RB	Back Side	1900	23.58	24.0	1.102	1.193	1.314
	QPSK 20MHz 50%RB	Back Side	1860	24.11	24.5	1.094	0.713	0.780

LTE Band 4–Wrist-worn SAR Test (Gap: 0mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10 g (W/kg)	Scaled SAR10 g (W/kg)
	Bandwidth, RB		MHz					
17.	QPSK 20MHz 1RB	Back Side	1720	23.78	24.0	1.052	0.263	0.277
	QPSK 20MHz 50%RB	Back Side	1720	23.78	24.0	1.052	0.224	0.236

LTE Band 5–Wrist-worn SAR Test (Gap: 0mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10 g (W/kg)	Scaled SAR10 g (W/kg)
	Bandwidth, RB		MHz					
18.	QPSK 10MHz 1RB	Back Side	829	23.49	23.5	1.002	0.278	0.279
	QPSK 10MHz 50%RB	Back Side	829	23.49	23.5	1.002	0.223	0.224

LTE Band 7–Wrist-worn SAR Test (Gap: 0mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10 g (W/kg)	Scaled SAR10 g (W/kg)
	Bandwidth, RB		MHz					
19.	QPSK 20MHz 1RB	Back Side	2535	23.69	24.0	1.074	0.708	0.760
	QPSK 20MHz 50%RB	Back Side	2535	23.69	24.0	1.074	0.595	0.639

LTE Band 12–Wrist-worn SAR Test (Gap: 0mm)								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10 g (W/kg)	Scaled SAR10 g (W/kg)
	Bandwidth, RB		MHz					
20.	QPSK 10MHz 1RB	Back Side	704	23.65	24.0	1.084	0.434	0.470
	QPSK 10MHz 50%RB	Back Side	704	23.65	24.0	1.084	0.371	0.402

WLAN 2.4GHz –Wrist-worn SAR Test (Gap: 0mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10g (W/kg)	Scaled SAR10g (W/kg)
			CH.	MHz					
21.	802.11b	Back Side	06	2437	15.97	16.0	1.007	0.058	0.058

Bluetooth –Wrist-worn SAR Test (Gap: 0mm)								
Plot No.	Mode	Test Position Body	Frequency (MHz)	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR10g (W/kg)	Scaled SAR10g (W/kg)
22.	Bluetooth	Back Side	2480	5.17	5.5	1.079	0.035	0.038

Remark: Per 447498 D01 General RF Exposure Guidance v06, if the highest output channel SAR for each exposure position ≤ 2.0 W/kg other channels SAR tests are not necessary.

Repeated SAR

Remark:

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

9.3 Simultaneous Multi-band Transmission SAR Analysis

List of Mode for Simultaneous Multi-band Transmission

No.	Configurations	Near to Mouth SAR	Wrist-worn SAR
1	GSM(Voice/Data) + WLAN(2.4GHz)(Data)	Yes	Yes
2	WCDMA (Voice/Data)+ (2.4GHz)(Data)	Yes	Yes
3	LTE(Data) + (2.4GHz)(Data)	Yes	Yes
4	GSM(Voice/Data) + Bluetooth(Data)	Yes	Yes
5	WCDMA (Voice/Data) + Bluetooth(Data)	Yes	Yes
6	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.
4. The maximum SAR summation is calculated based on the same configuration and test position.

Near to Mouth SAR**WWAN and WLAN**

	WWAN		WLAN(2.4GHz)	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Front	GSM850	0.068	0.079	0.147
Front	GSM1900	0.874	0.079	0.953
Front	WCDMA Band 2	0.645	0.079	0.724
Front	WCDMA Band 5	0.076	0.079	0.155
Front	LTE Band 2	1.378	0.079	1.457
Front	LTE Band 4	0.466	0.079	0.545
Front	LTE Band 5	0.077	0.079	0.156
Front	LTE Band 7	1.069	0.079	1.148
Front	LTE Band 12	0.285	0.079	0.364

WWAN and BT

	WWAN		BT	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Front	GSM850	0.068	0.023	0.091
Front	GSM1900	0.874	0.023	0.897
Front	WCDMA Band 2	0.645	0.023	0.668
Front	WCDMA Band 5	0.076	0.023	0.099
Front	LTE Band 2	1.378	0.023	1.401
Front	LTE Band 4	0.466	0.023	0.489
Front	LTE Band 5	0.077	0.023	0.100
Front	LTE Band 7	1.069	0.023	1.092
Front	LTE Band 12	0.285	0.023	0.308

Wrist-worn SAR**WWAN and WLAN**

	WWAN		WLAN(2.4GHz)	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Back	GSM850	0.226	0.058	0.284
Back	GSM1900	1.003	0.058	1.061
Back	WCDMA Band 2	1.268	0.058	1.326
Back	WCDMA Band 5	0.283	0.058	0.341
Back	LTE Band 2	1.314	0.058	1.372
Back	LTE Band 4	0.277	0.058	0.335
Back	LTE Band 5	0.279	0.058	0.337
Back	LTE Band 7	0.760	0.058	0.818
Back	LTE Band 12	0.470	0.058	0.528

WWAN and BT

	WWAN		BT	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Back	GSM850	0.226	0.035	0.261
Back	GSM1900	1.003	0.035	1.038
Back	WCDMA Band 2	1.268	0.035	1.303
Back	WCDMA Band 5	0.283	0.035	0.318
Back	LTE Band 2	1.314	0.035	1.349
Back	LTE Band 4	0.277	0.035	0.312
Back	LTE Band 5	0.279	0.035	0.314
Back	LTE Band 7	0.760	0.035	0.795
Back	LTE Band 12	0.470	0.035	0.505

10. Measurement Uncertainty

10.1 Uncertainty for SAR Test

a	b	c	d	e= f(d,k)	f	g	h= c*f/e	i= c*g/e	k
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	Vi
Measurement System									
Probe calibration	E.2.1	7.0	N	1	1	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	0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient Conditions - Reflections	E.6.1	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				10.20	10.00	
Expanded Uncertainty (95% Confidence interval)			K=2				20.40	20.00	

Annex A. Plots of System Performance Check

MEASUREMENT 1

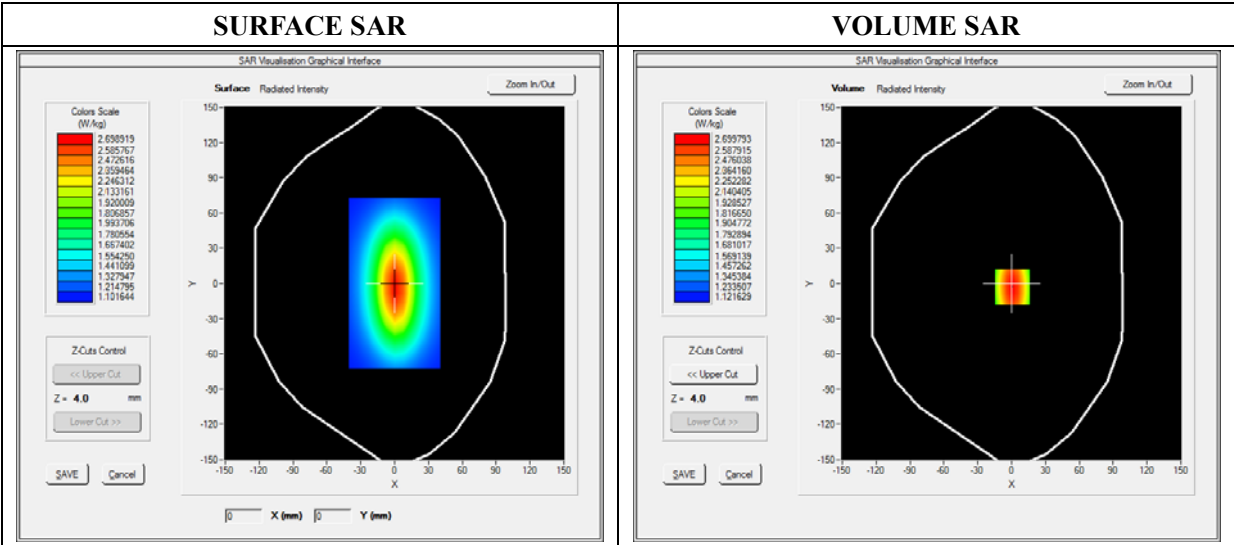
Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 7 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPG0356; ConvF: 1.67; Calibrated: 2021-07-16

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
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	21.2
Liquid Temperature	21.2

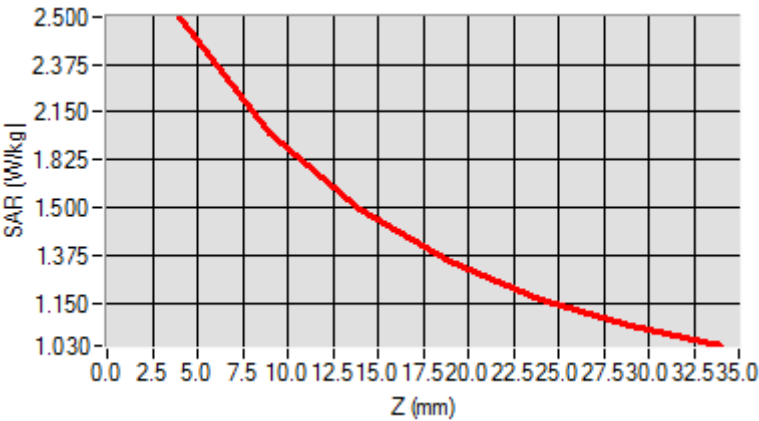


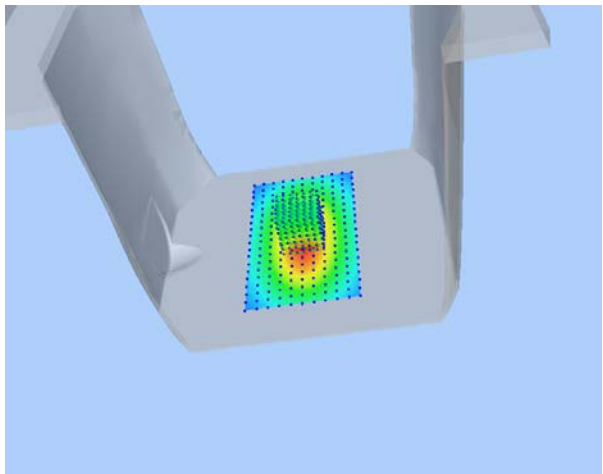
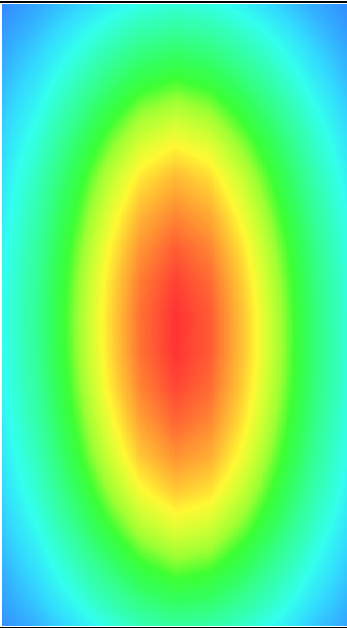
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.342744
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

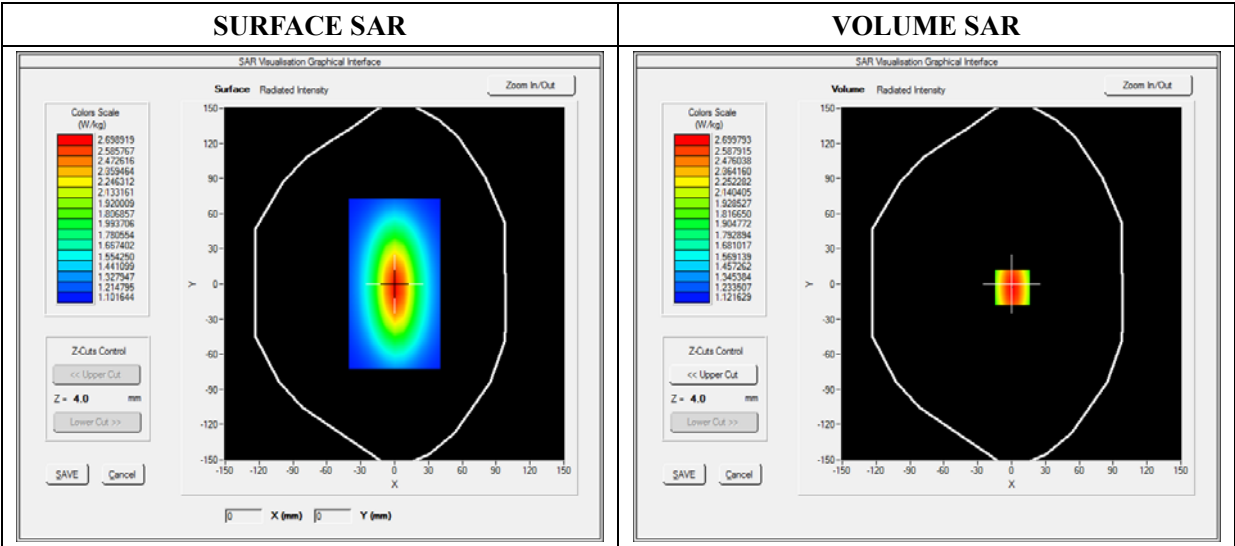
Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 7 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 1.71; Calibrated: 2021-07-16

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
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	21.2
Liquid Temperature	21.2

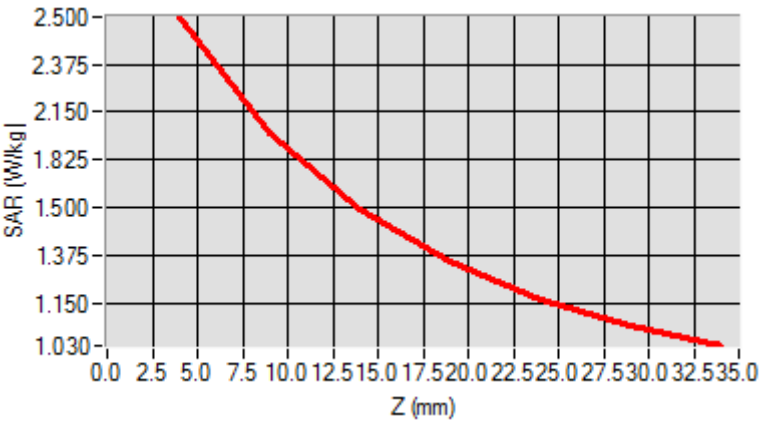


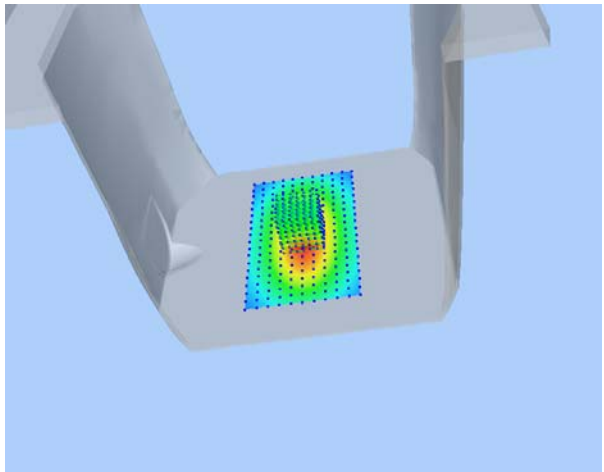
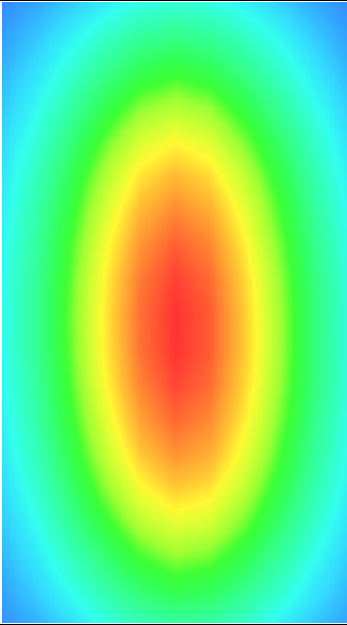
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.449489
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

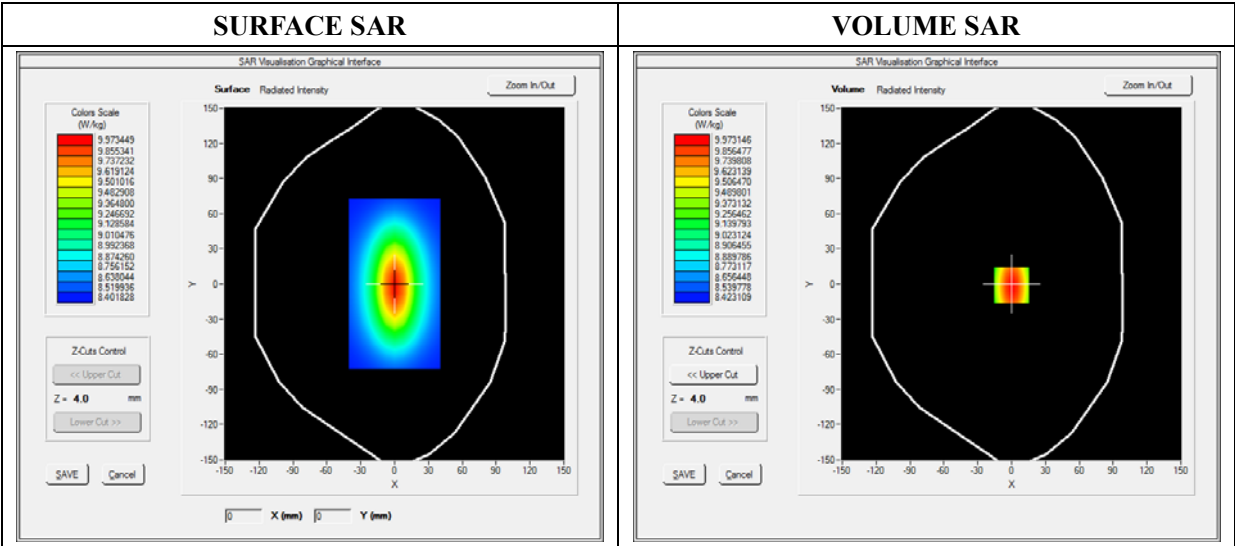
Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.11; Calibrated: 2021-07-16

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
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	21.3
Liquid Temperature	21.3

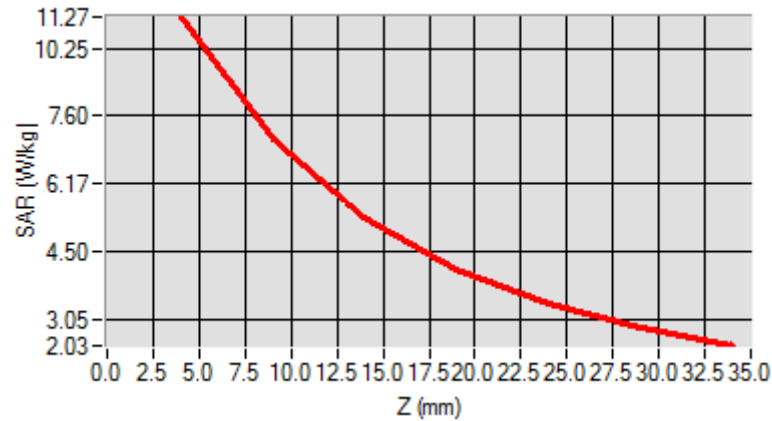


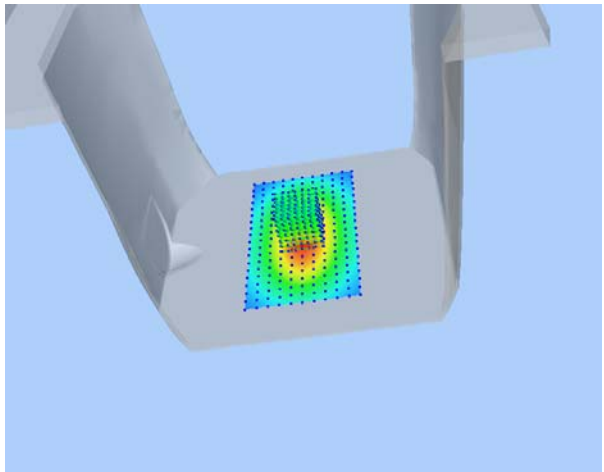
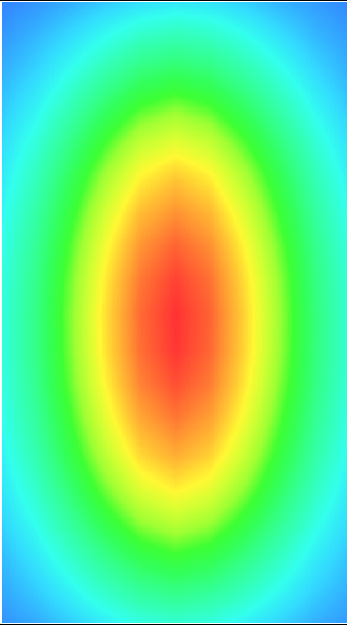
Maximum location: X=0.00, Y=0.00

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 5

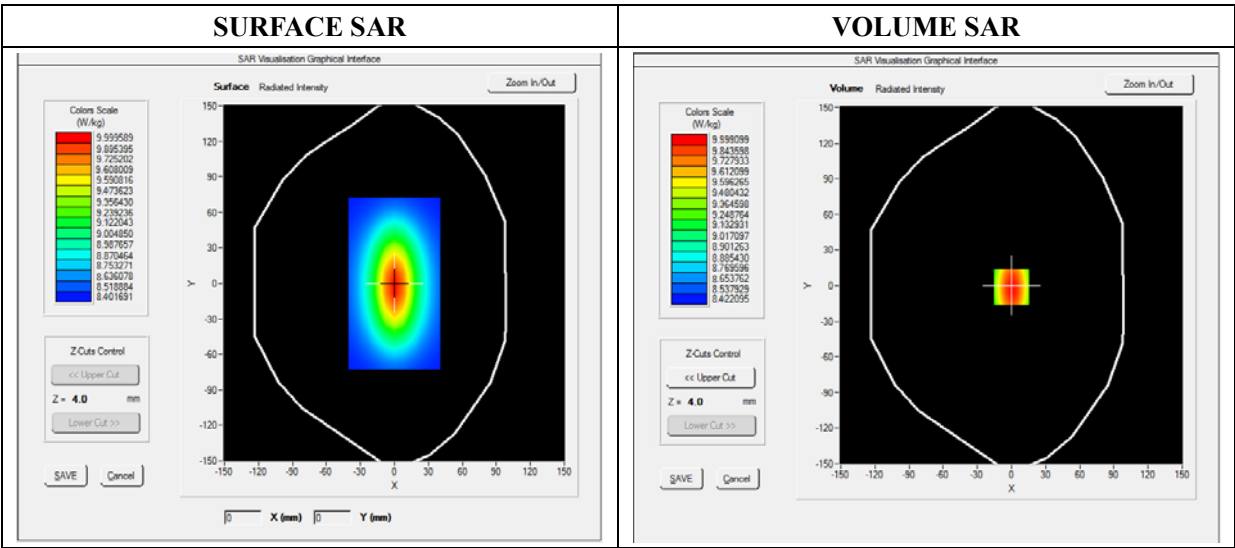
Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.21; Calibrated: 2021-07-16

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
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	21.3
Liquid Temperature	21.3

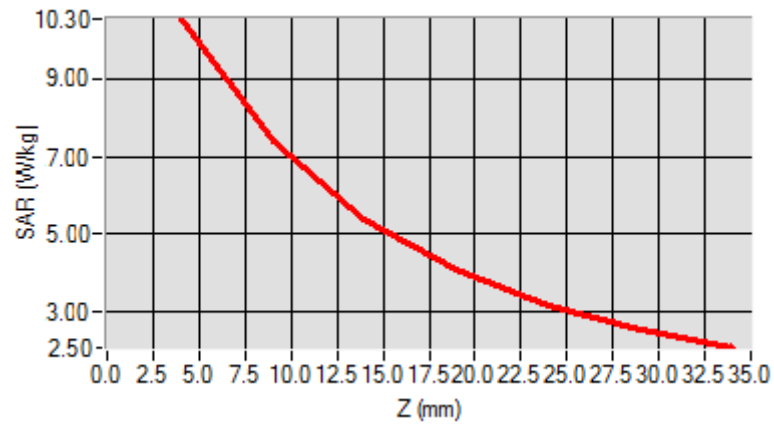


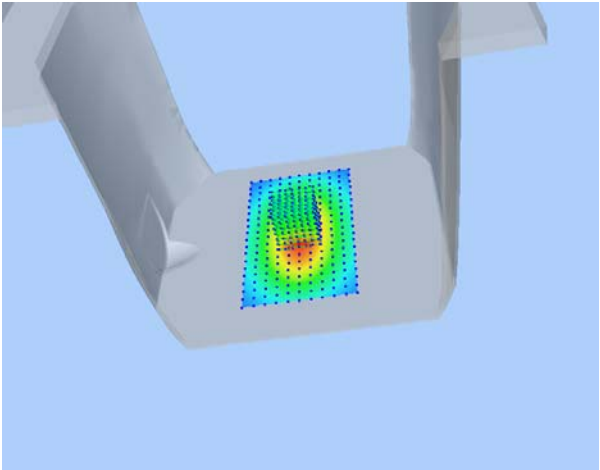
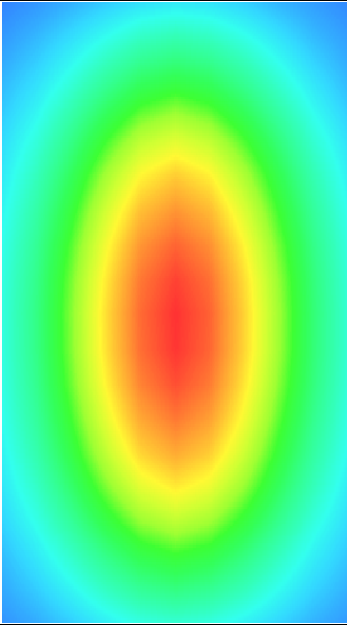
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	5.071250
SAR 1g (W/Kg)	9.501250

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	12.1250	10.3114	8.4212	6.4041	5.3425	3.3642



3D screen shot	Hot spot position
	

MEASUREMENT 7

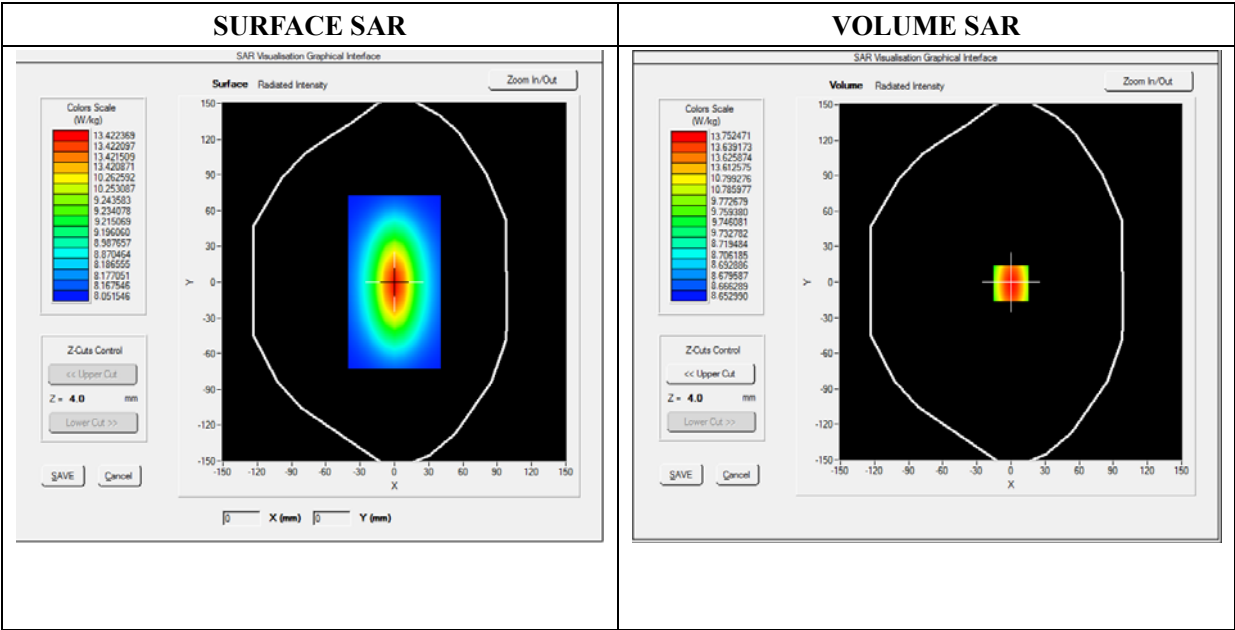
Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.29; Calibrated: 2021-07-16

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
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	21.3
Liquid Temperature	21.3

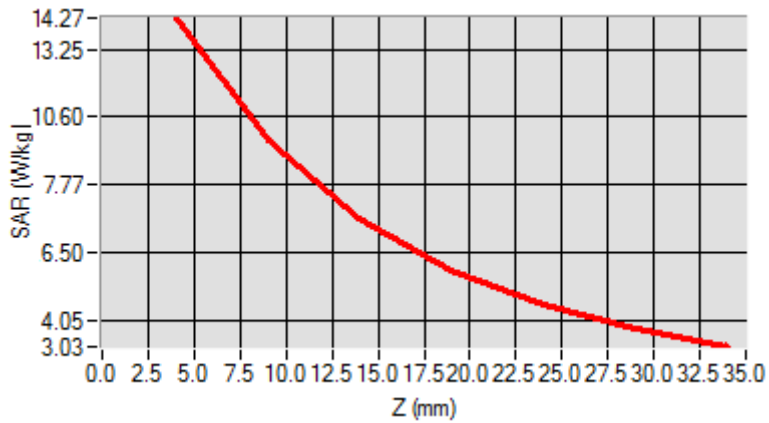


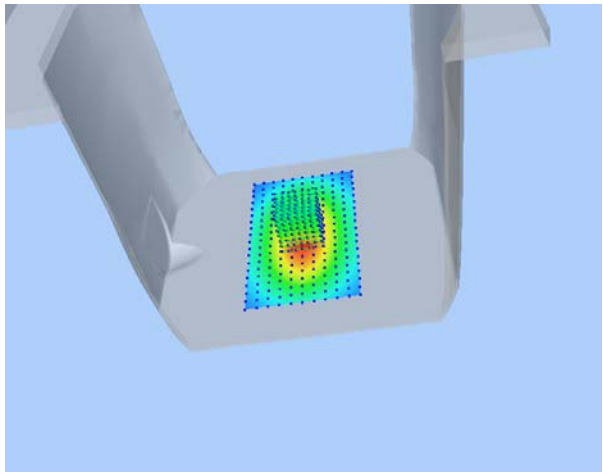
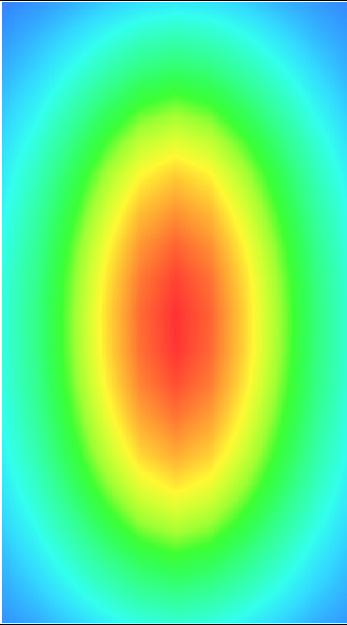
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	6.020427
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 8

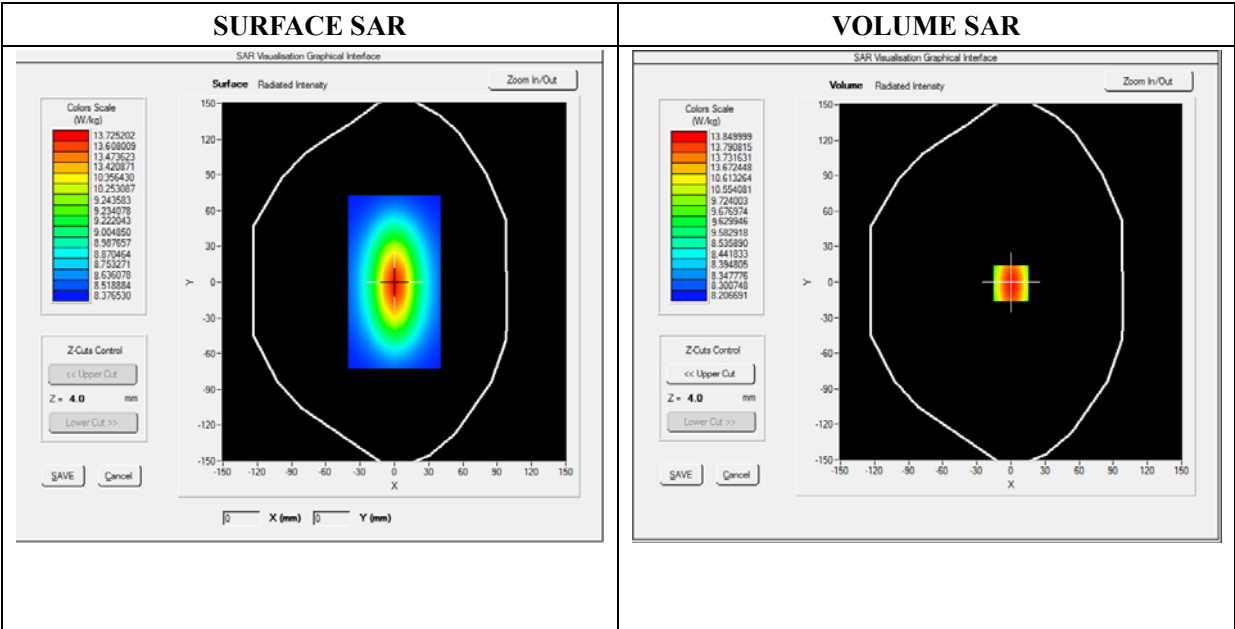
Type: Validation measurement (Fast, 75.00 %)
Measurement duration: 12 minutes 21 seconds
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.22; Calibrated: 2021-07-16

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

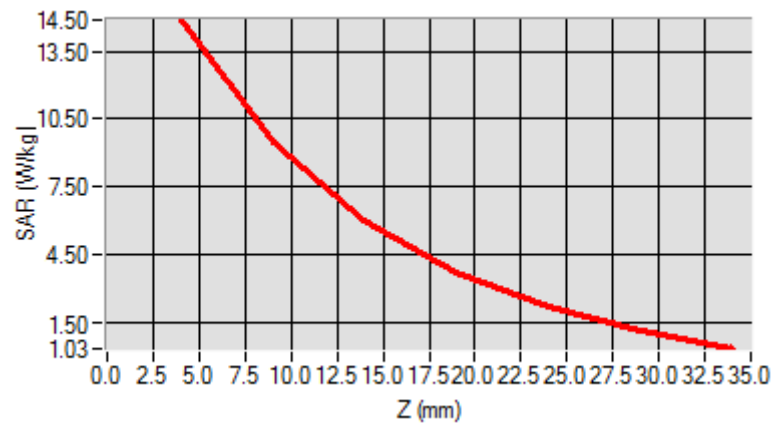
Frequency (MHz)	2600.000000
Relative Permittivity (real part)	39.221092
Conductivity (S/m)	1.990182
Power Variation (%)	1.028221
Ambient Temperature	21.3
Liquid Temperature	21.3

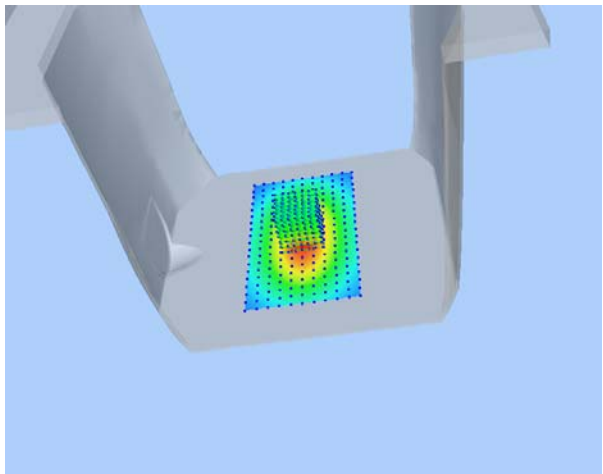
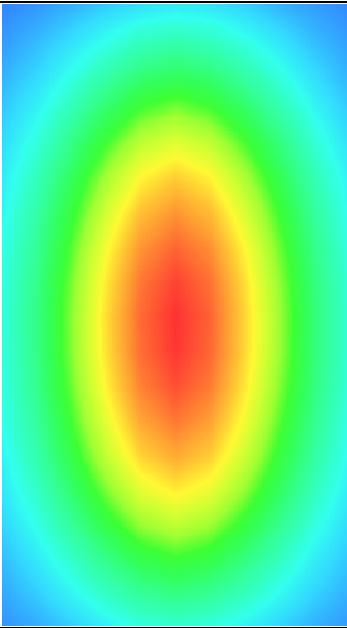


SAR 10g (W/Kg)	6.173156
SAR 1g (W/Kg)	13.670282

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	12.24321	10.4214	8.4698	6.4953	5.9665	4.7987



3D screen shot	Hot spot position
	

Annex B. Plots of SAR Measurement

MEASUREMENT 1

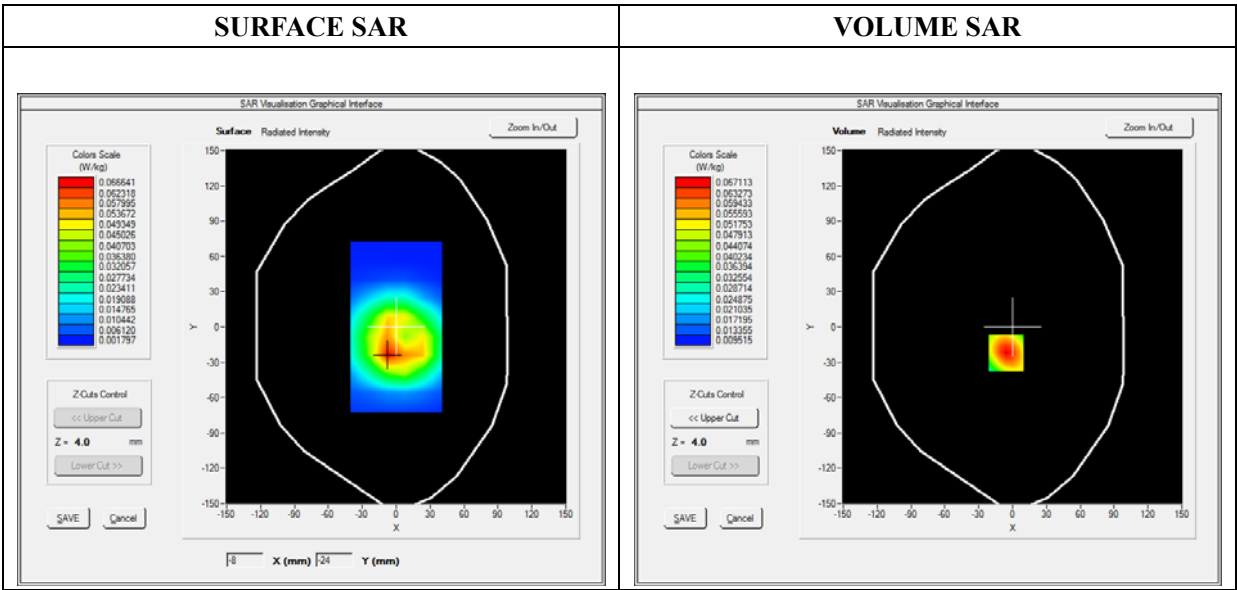
Type: Phone measurement (Complete)
Date of measurement: 2022-05-16
Measurement duration: 11 minutes 48 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
Band	GSM850
Channels	High
Signal	TDMA (Crest factor: 8.0)

B. SAR Measurement Results

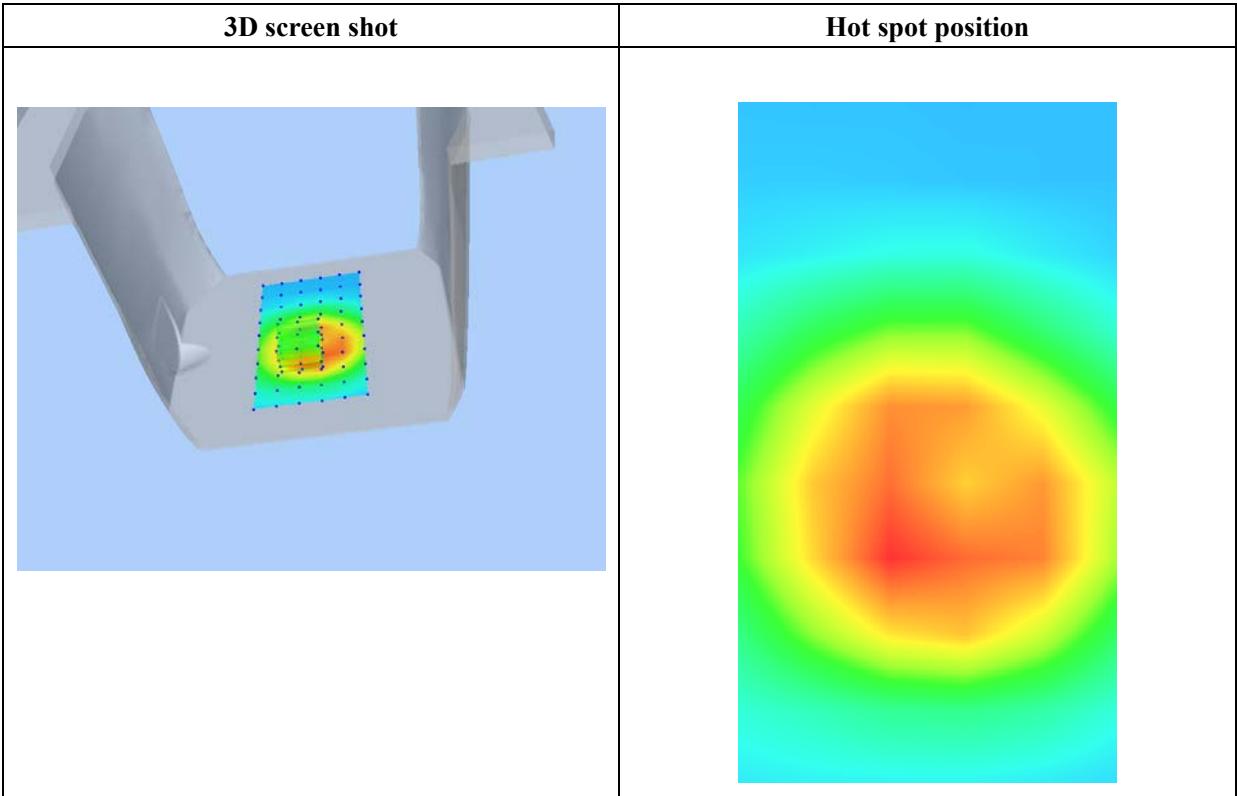
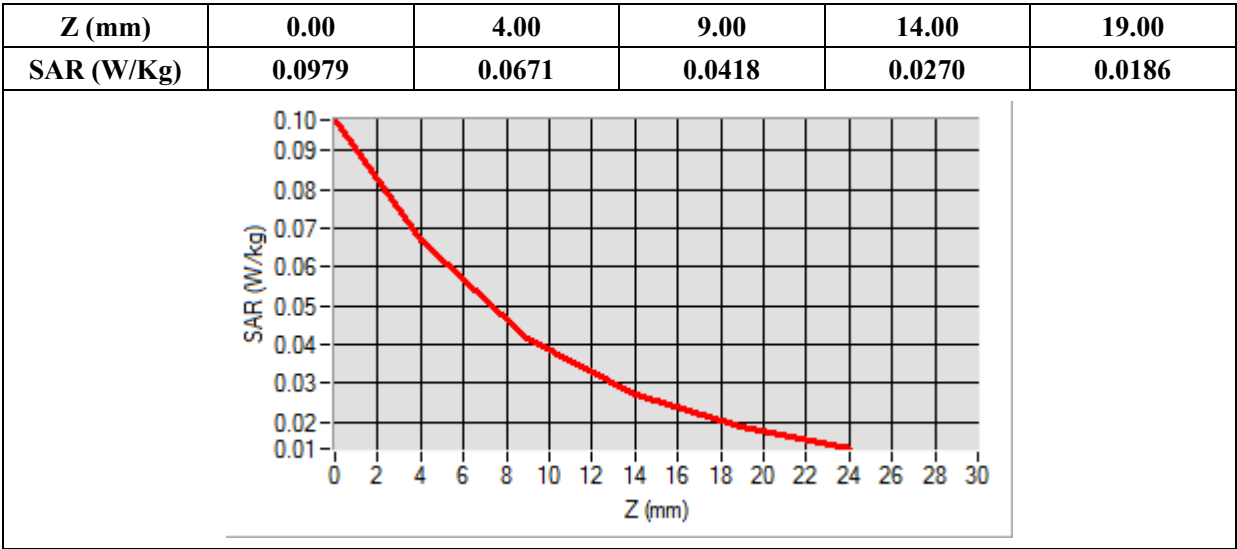
Frequency (MHz)	848.800000
Relative Permittivity (real part)	41.110245
Conductivity (S/m)	0.871245
Power Variation (%)	1.144536
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-6.00, Y=-22.00

SAR Peak: 0.10 W/kg

SAR 10g (W/Kg)	0.039975
SAR 1g (W/Kg)	0.063242



MEASUREMENT 2

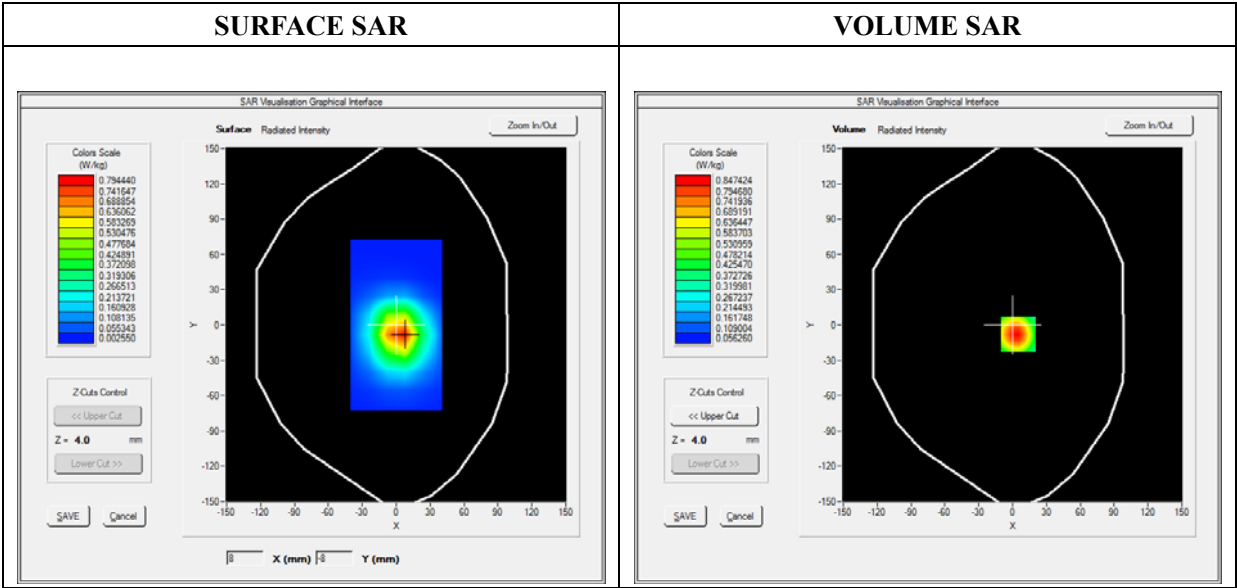
Type: Phone measurement (Complete)
Date of measurement: 2022-05-18
Measurement duration: 11 minutes 48 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
Band	GSM1900
Channels	High
Signal	TDMA (Crest factor: 8.0)

B. SAR Measurement Results

Frequency (MHz)	1909.800000
Relative Permittivity (real part)	38.560124
Conductivity (S/m)	1.380369
Power Variation (%)	1.442440
Ambient Temperature	21.1
Liquid Temperature	21.3



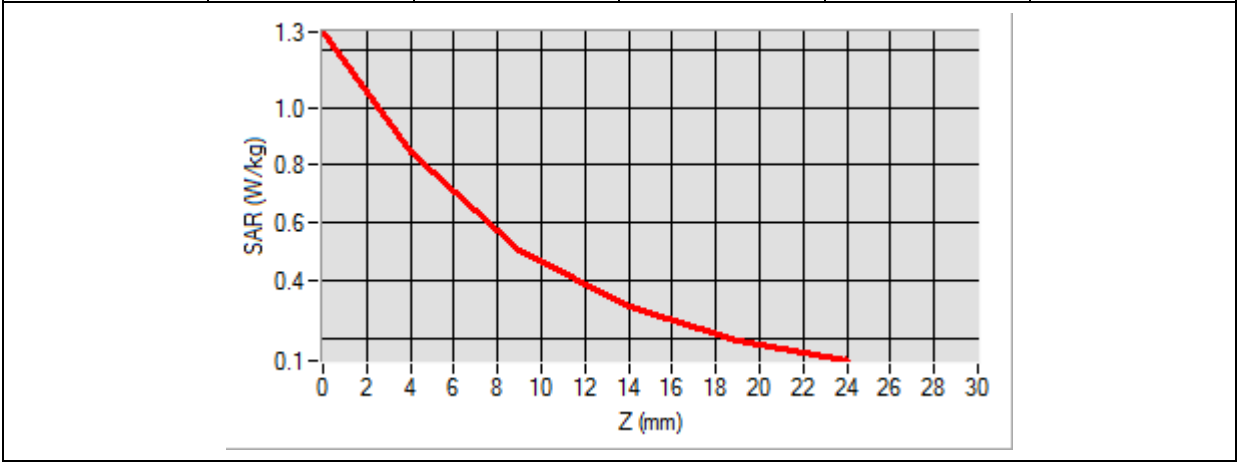
Maximum location: X=5.00, Y=-8.00

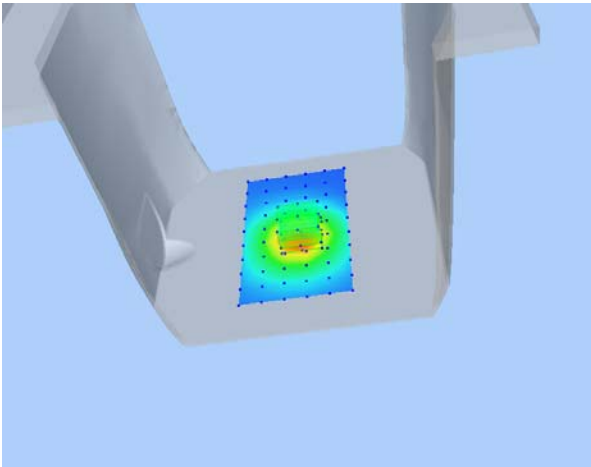
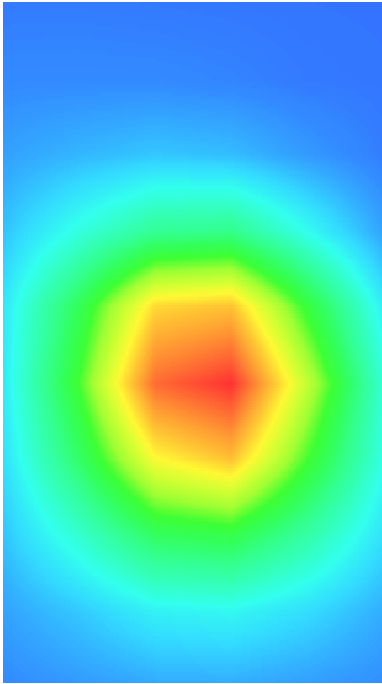
SAR Peak: 1.27 W/kg

SAR 10g (W/Kg)	0.458167
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SAR 1g (W/Kg)	0.791620
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Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.2630	0.8474	0.5073	0.3076	0.1940



3D screen shot	Hot spot position
	

MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 2022-05-18

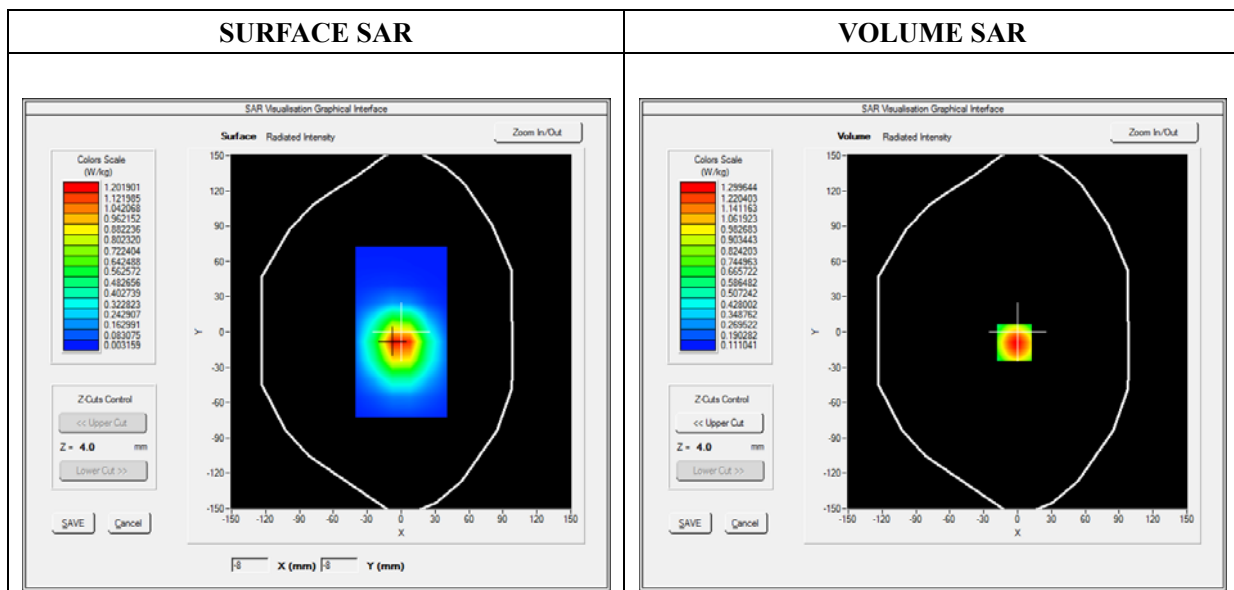
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
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

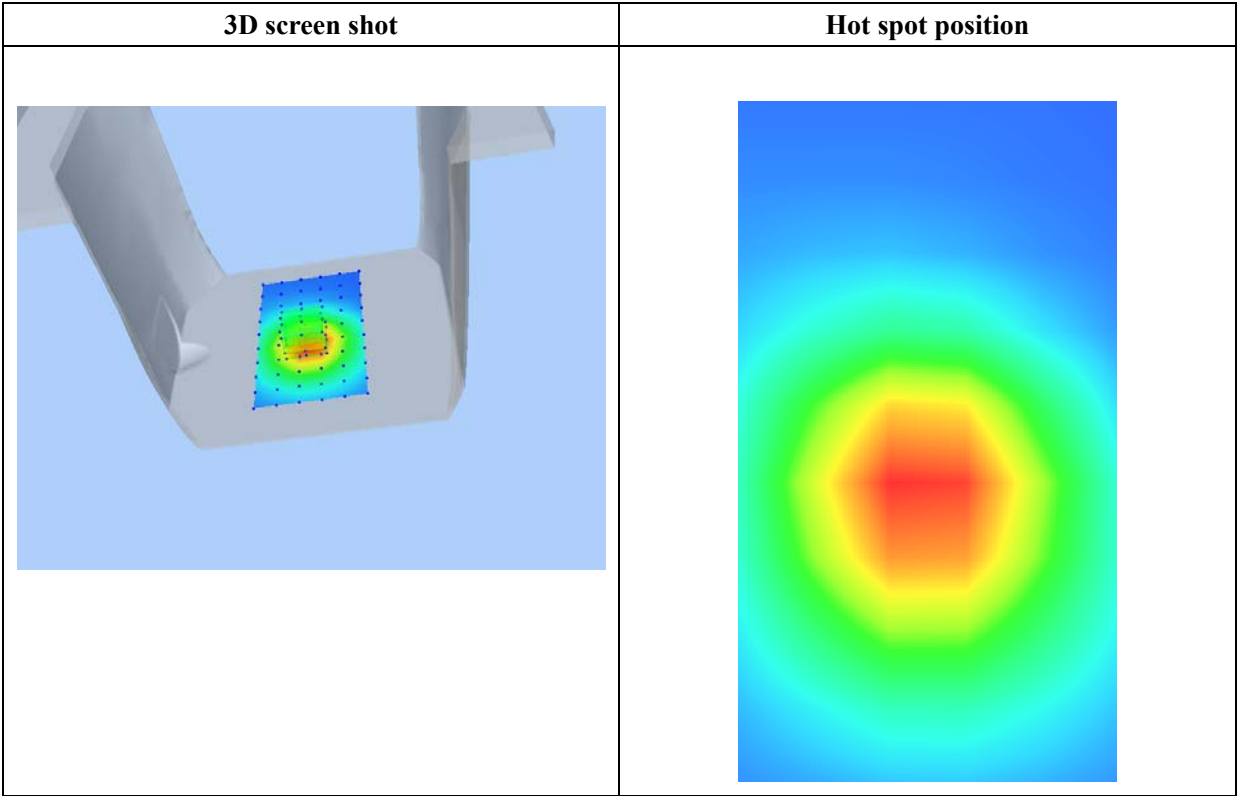
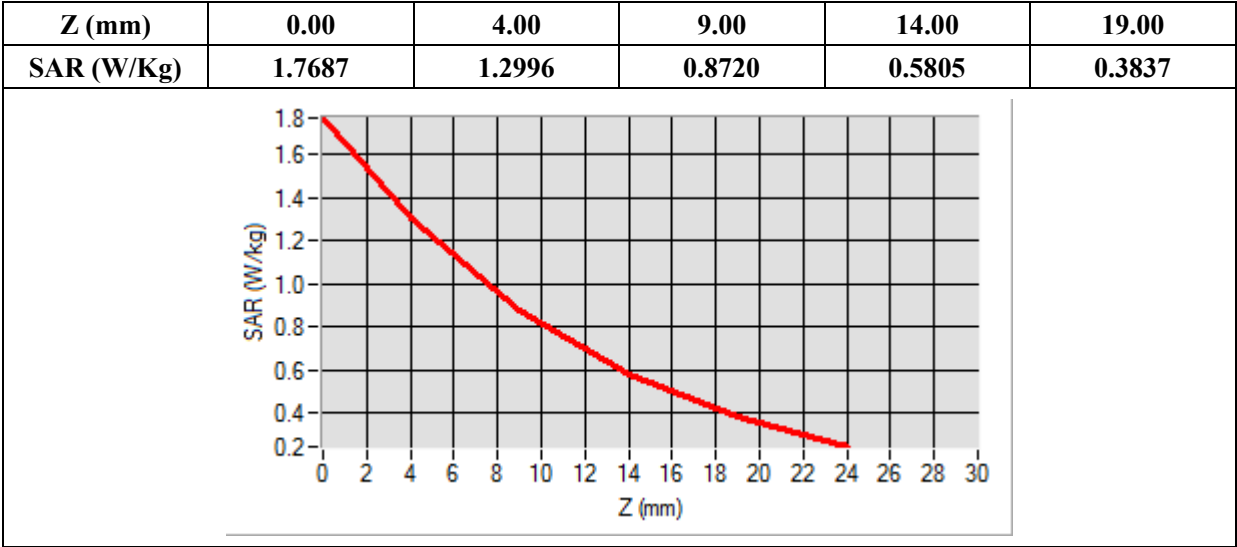


Maximum location: X=-3.00, Y=-9.00

SAR Peak: 1.78 W/kg

SAR 10g (W/Kg)	0.356604
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SAR 1g (W/Kg)	0.618546
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MEASUREMENT 4

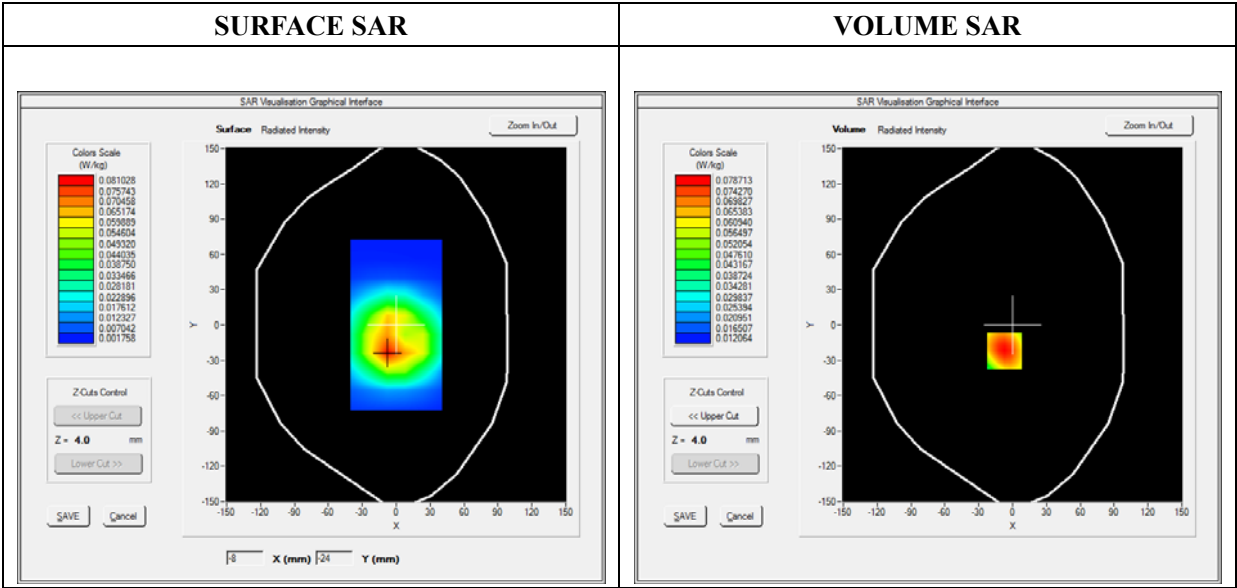
Type: Phone measurement (Complete)
Date of measurement: 2022-05-16
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
Band	WCDMA850_RMC
Channels	Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

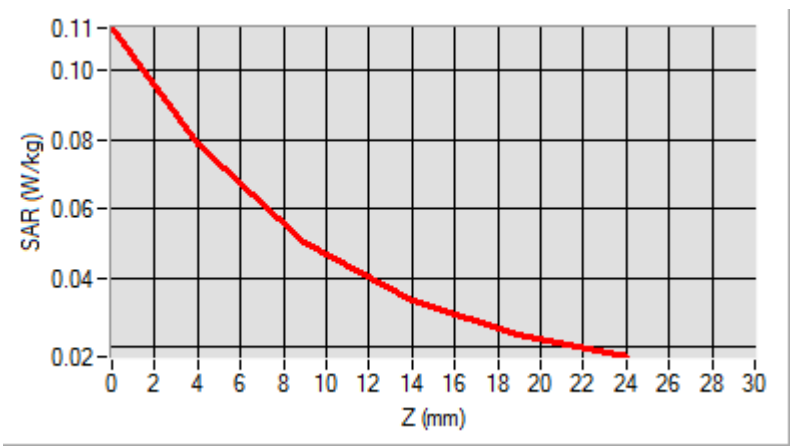
Frequency (MHz)	836.400000
Relative Permittivity (real part)	41.112695
Conductivity (S/m)	0.871145
Power Variation (%)	1.342427
Ambient Temperature	21.1
Liquid Temperature	21.3

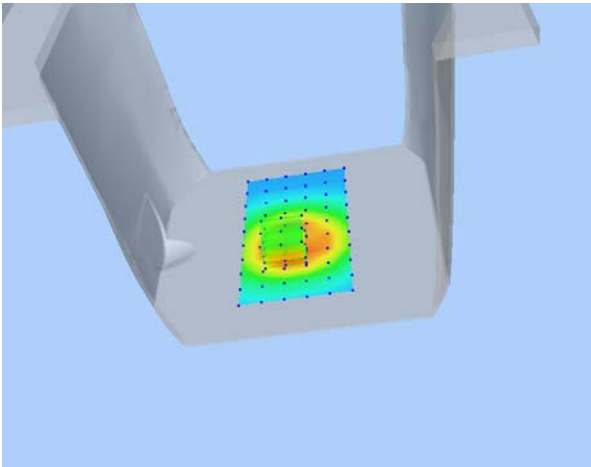
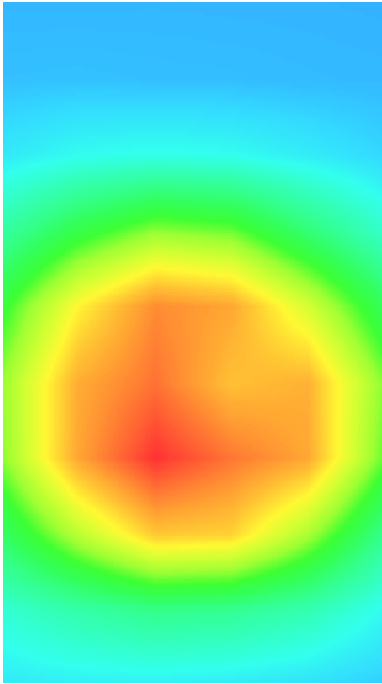


Maximum location: X=-7.00, Y=-22.00
SAR Peak: 0.11 W/kg

SAR 10g (W/Kg)	0.048730
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SAR 1g (W/Kg)	0.074690
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Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1124	0.0787	0.0505	0.0336	0.0238
					

3D screen shot	Hot spot position
	

MEASUREMENT 5

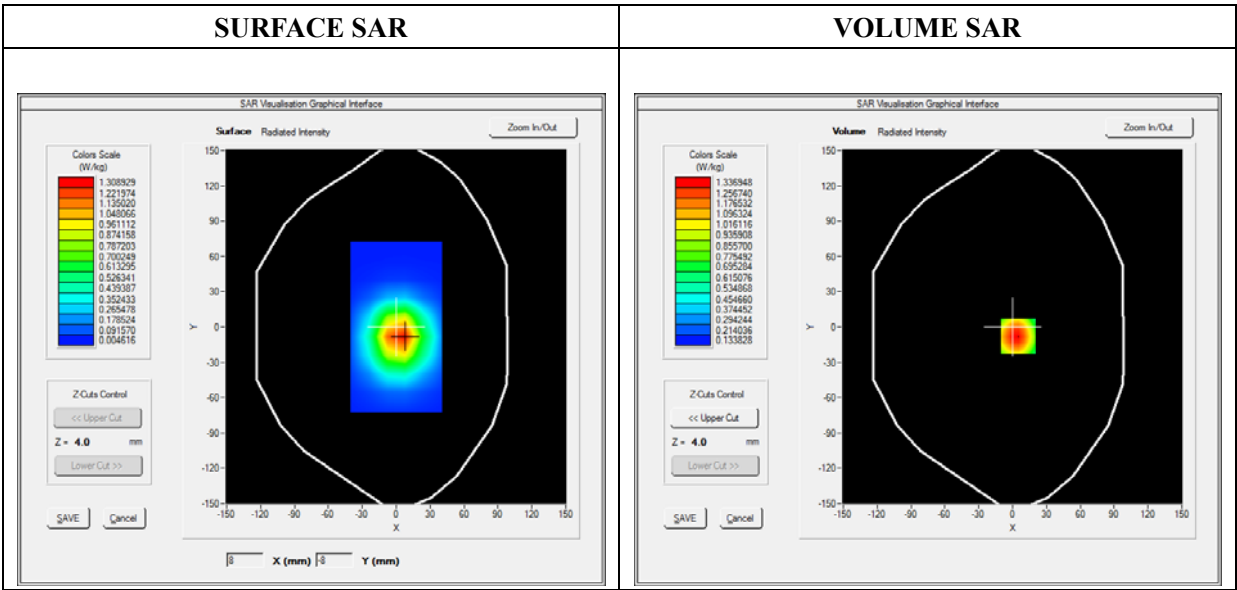
Type: Phone measurement (Complete)
Date of measurement: 2022-05-18
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
Band	LTE Band 2
Channels	QPSK, 20MHz, 1RB, Low
Signal	Duty Cycle: 1:1

B. SAR Measurement Results

Frequency (MHz)	1860.00000
Relative Permittivity (real part)	39.020124
Conductivity (S/m)	1.373697
Power Variation (%)	1.536272
Ambient Temperature	21.1
Liquid Temperature	21.3



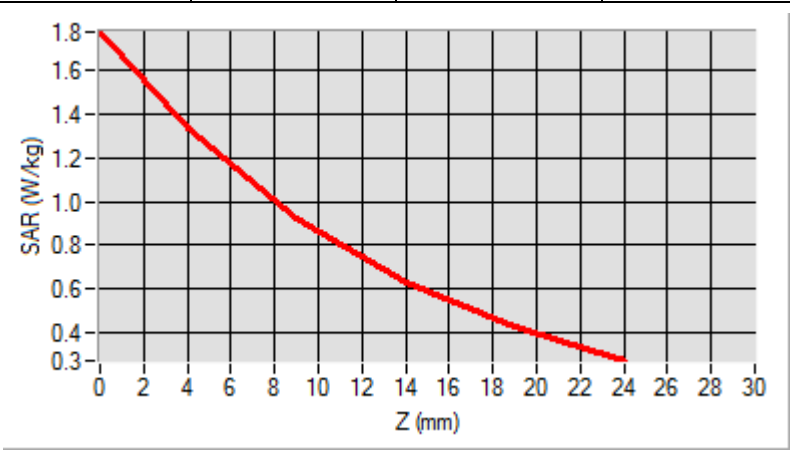
Maximum location: X=5.00, Y=-8.00

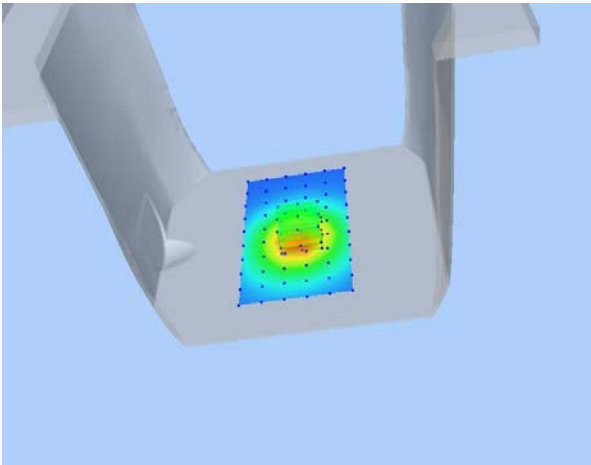
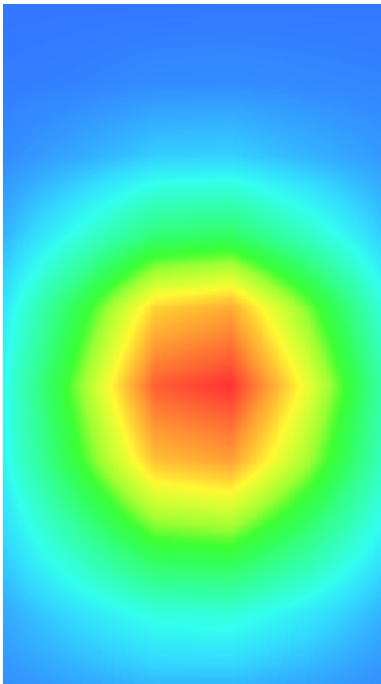
SAR Peak: 1.79 W/kg

SAR 10g (W/Kg)	0.806084
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SAR 1g (W/Kg)	1.260256
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Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.7758	1.3369	0.9242	0.6312	0.4247



3D screen shot	Hot spot position
	

MEASUREMENT 6

Type: Phone measurement (Complete)

Date of measurement: 2022-05-18

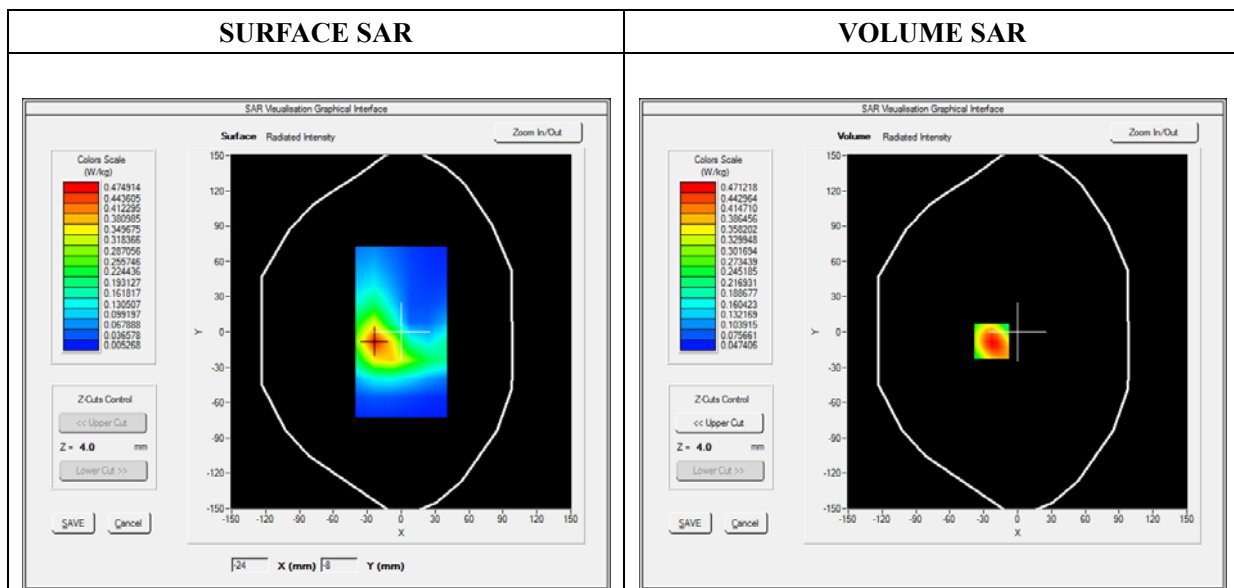
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
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)	39.021247
Conductivity (S/m)	1.370369
Power Variation (%)	1.536272
Ambient Temperature	21.1
Liquid Temperature	21.3



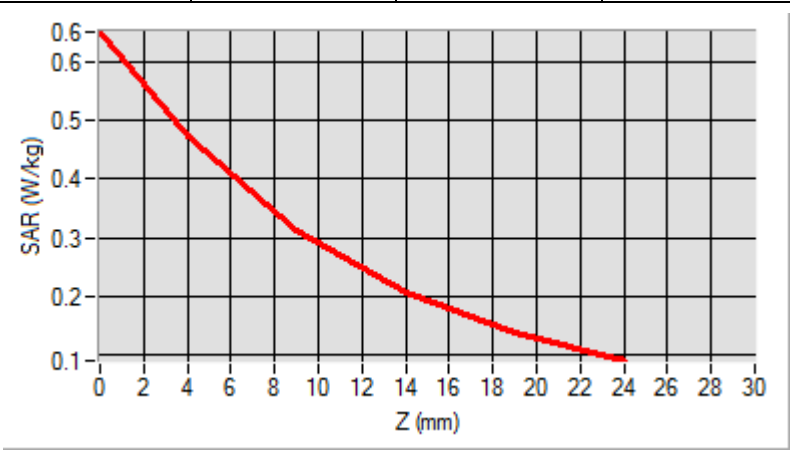
Maximum location: X=-23.00, Y=-8.00

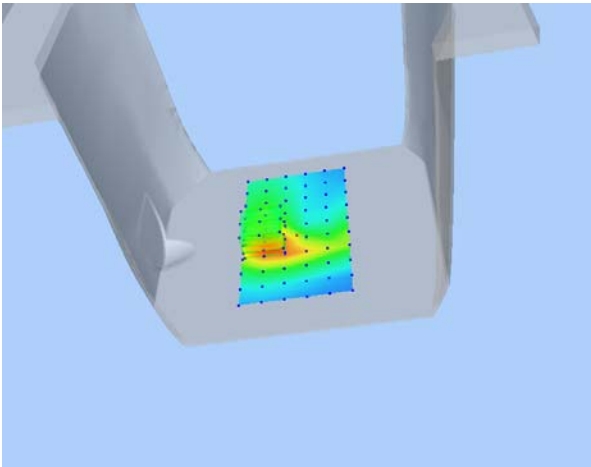
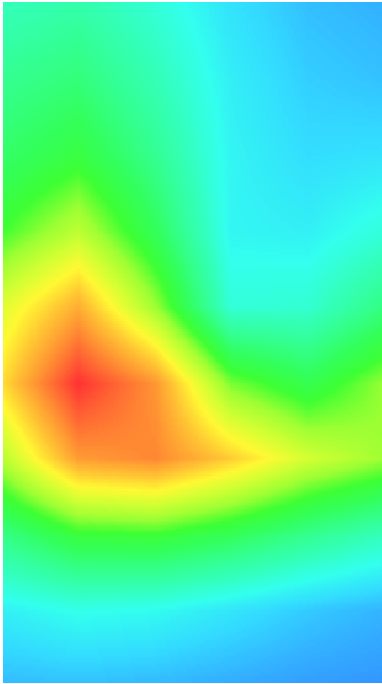
SAR Peak: 0.65 W/kg

SAR 10g (W/Kg)	0.277899
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SAR 1g (W/Kg)	0.442572
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.6496	0.4712	0.3124	0.2076	0.1393



3D screen shot	Hot spot position
	

MEASUREMENT 7

Type: Phone measurement (Complete)

Date of measurement: 2022-05-16

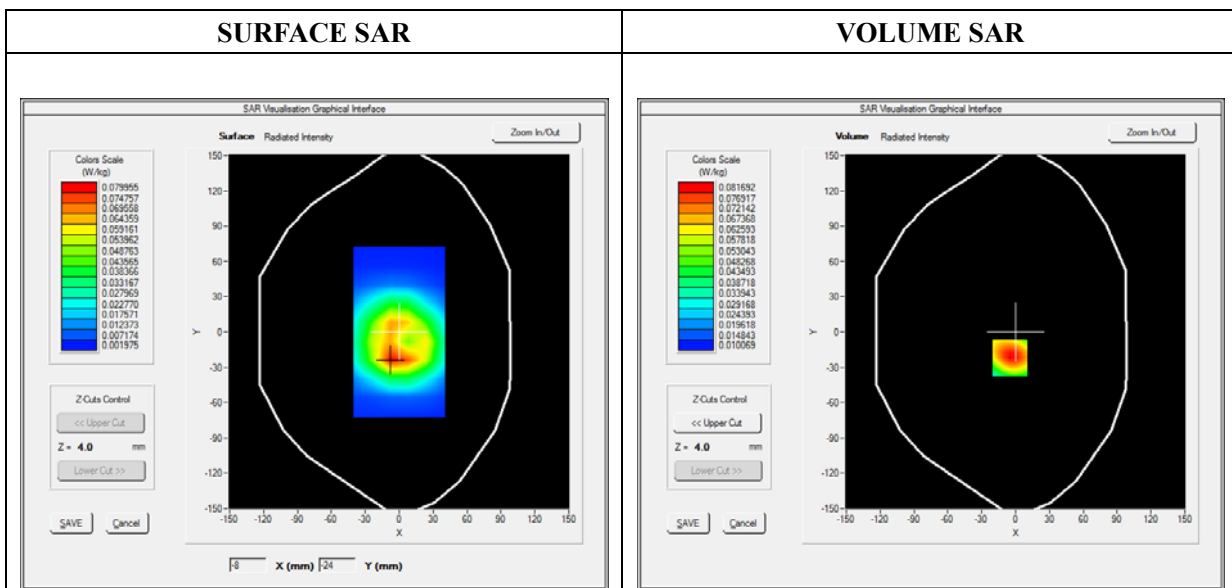
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
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)	41.114390
Conductivity (S/m)	0.872507
Power Variation (%)	1.074628
Ambient Temperature	21.1
Liquid Temperature	21.2

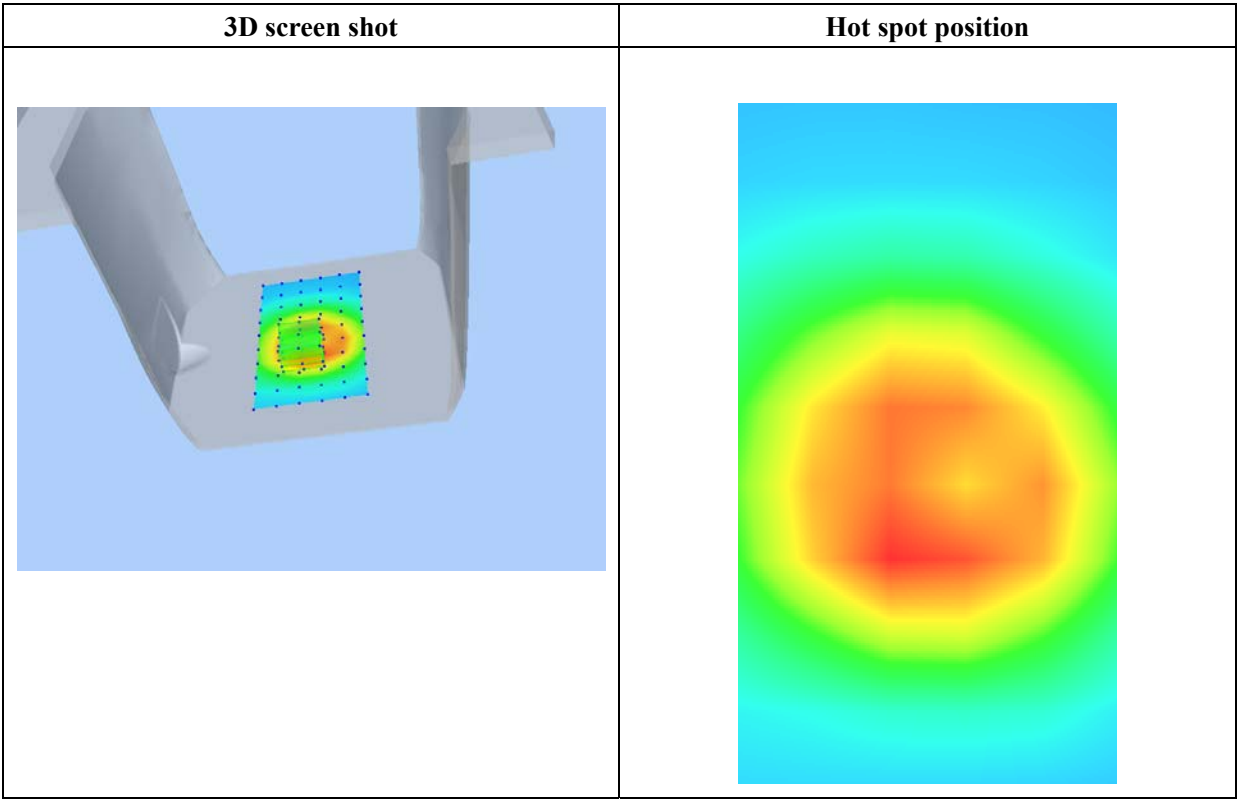
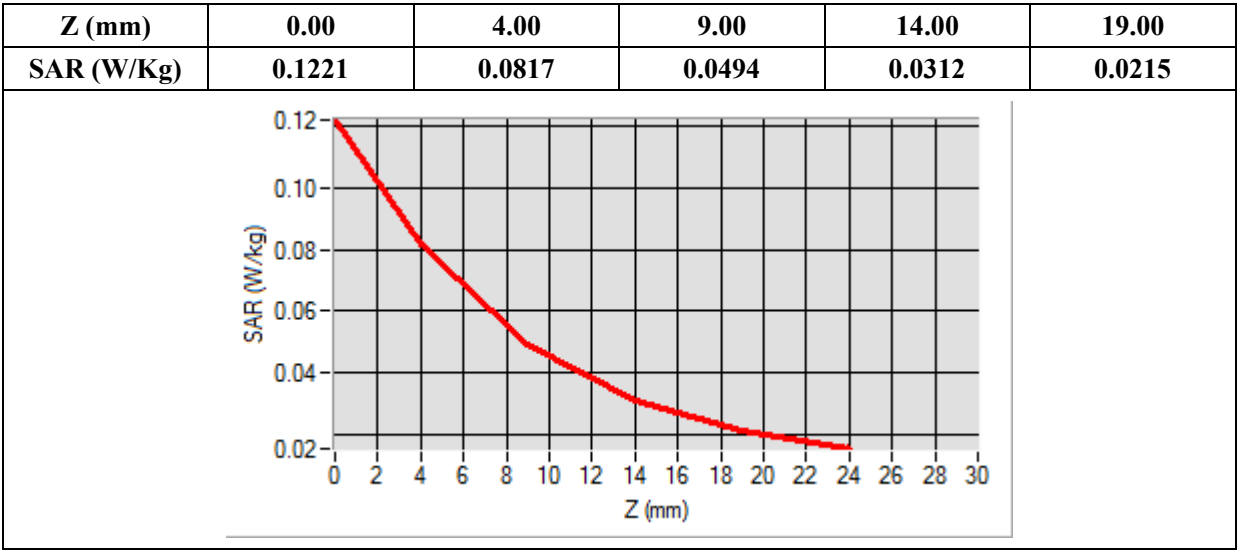


Maximum location: X=-5.00, Y=-22.00

SAR Peak: 0.12 W/kg

SAR 10g (W/Kg)	0.047657
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SAR 1g (W/Kg)	0.077451
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MEASUREMENT 8

Type: Phone measurement (Complete)

Date of measurement: 2022-05-18

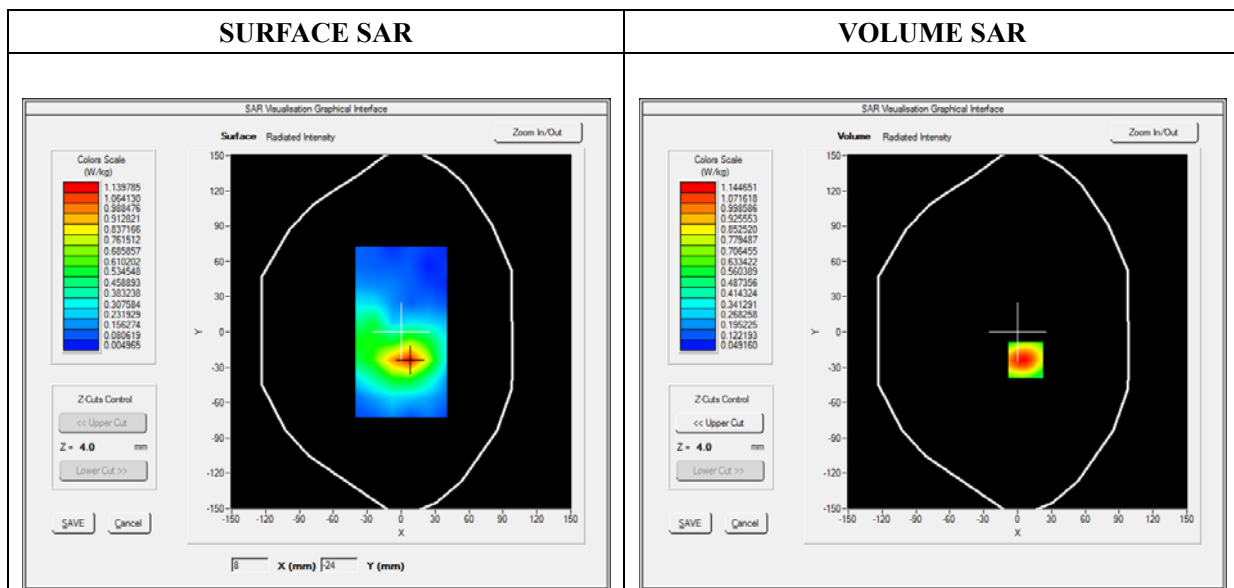
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
Band	LTE Band 7
Channels	QPSK, 20MHz, 1RB, High
Signal	Duty Cycle 1:1

B. SAR Measurement Results

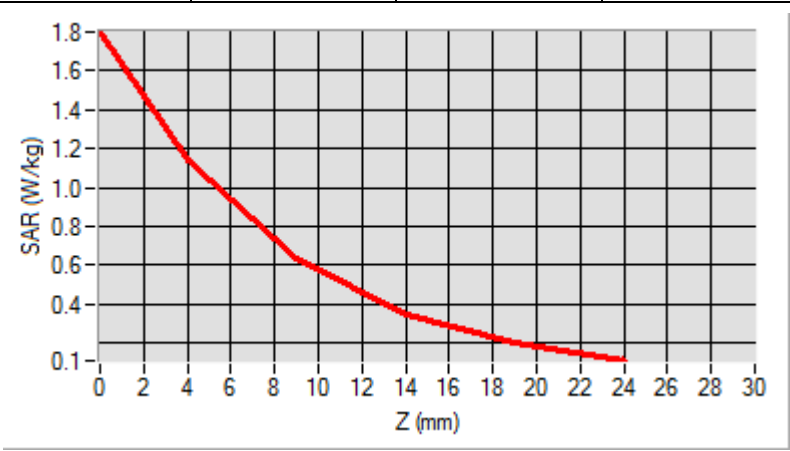
Frequency (MHz)	2560.000000
Relative Permittivity (real part)	39.221092
Conductivity (S/m)	1.990182
Power Variation (%)	0.924535
Ambient Temperature	21.1
Liquid Temperature	21.2

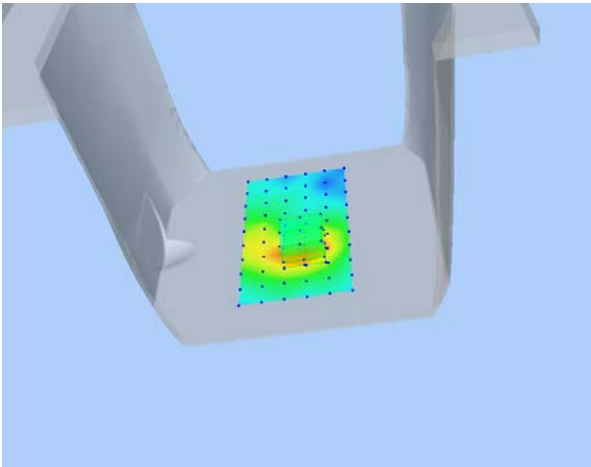
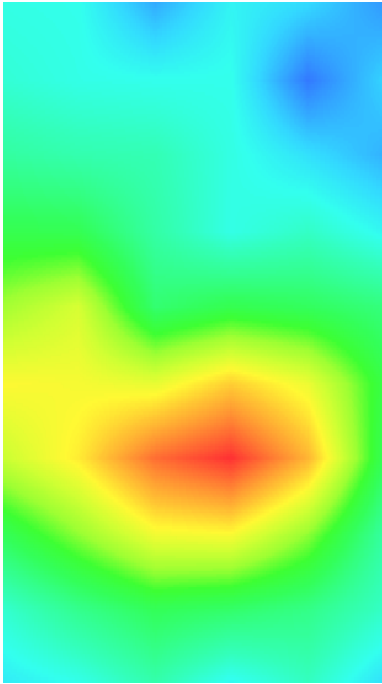


SAR 10g (W/Kg)	0.595908
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SAR 1g (W/Kg)	0.973431
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.8006	1.1447	0.6305	0.3467	0.1972



3D screen shot	Hot spot position
	

MEASUREMENT 9

Type: Phone measurement (Complete)

Date of measurement: 2022-05-16

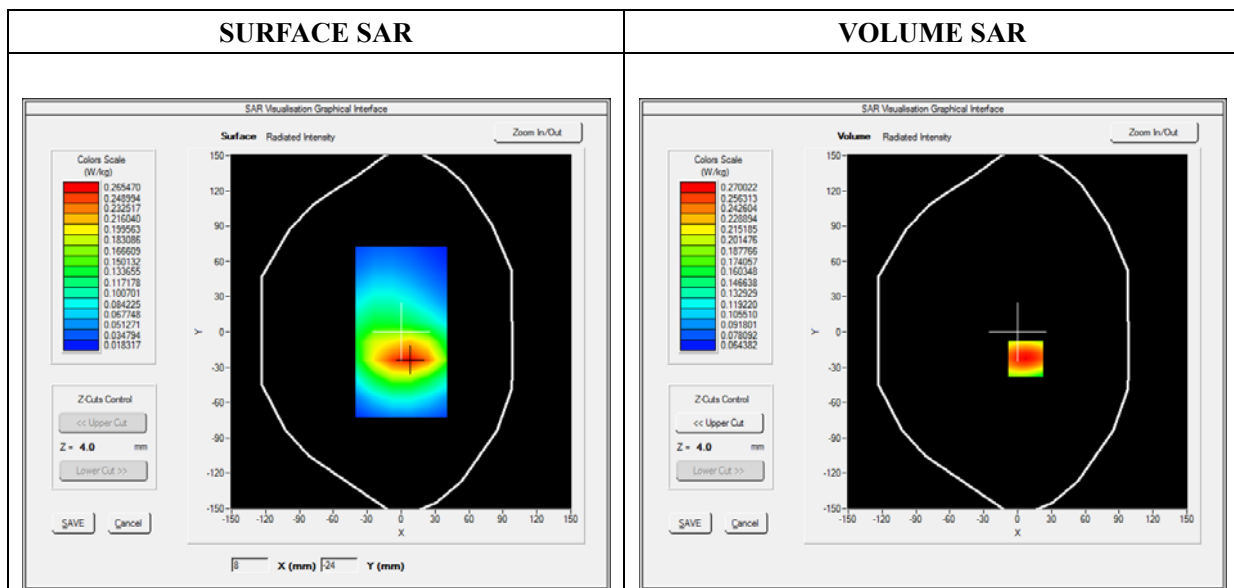
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
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)	41.322457
Conductivity (S/m)	0.862457
Power Variation (%)	0.924535
Ambient Temperature	21.1
Liquid Temperature	21.2

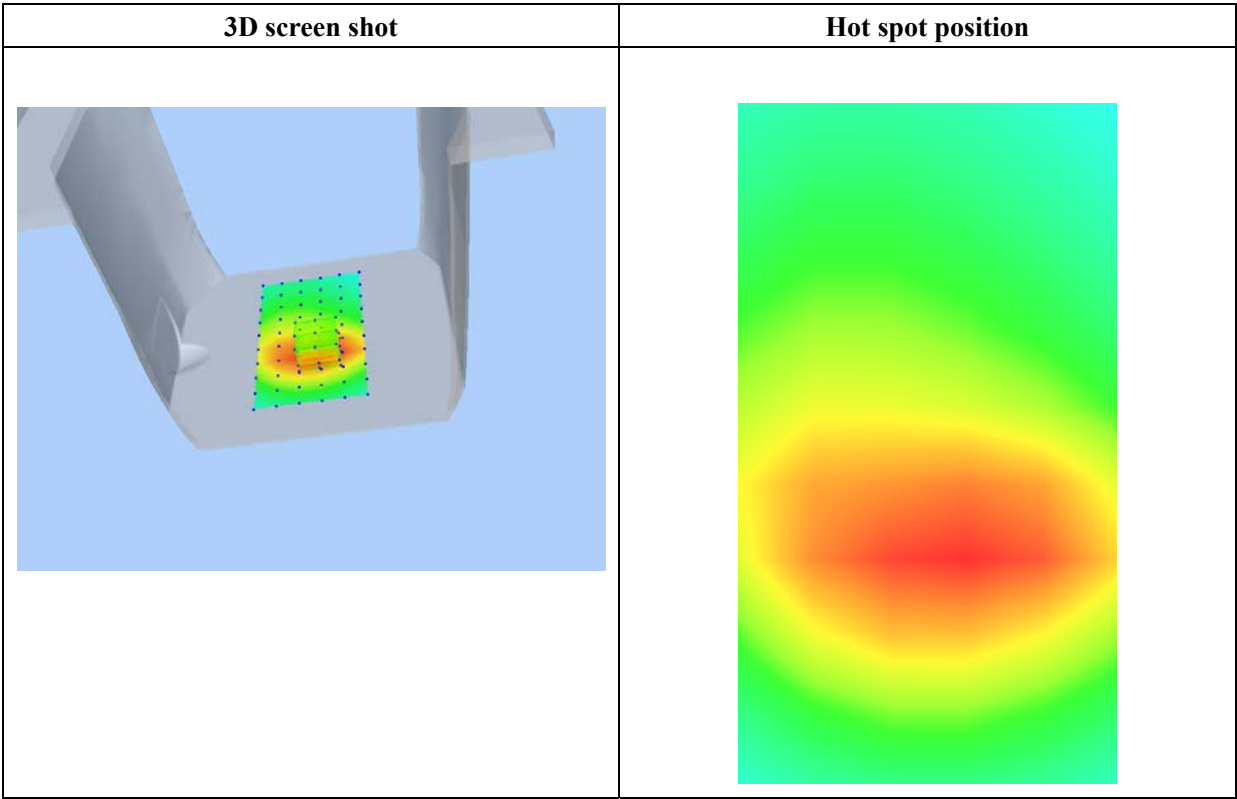
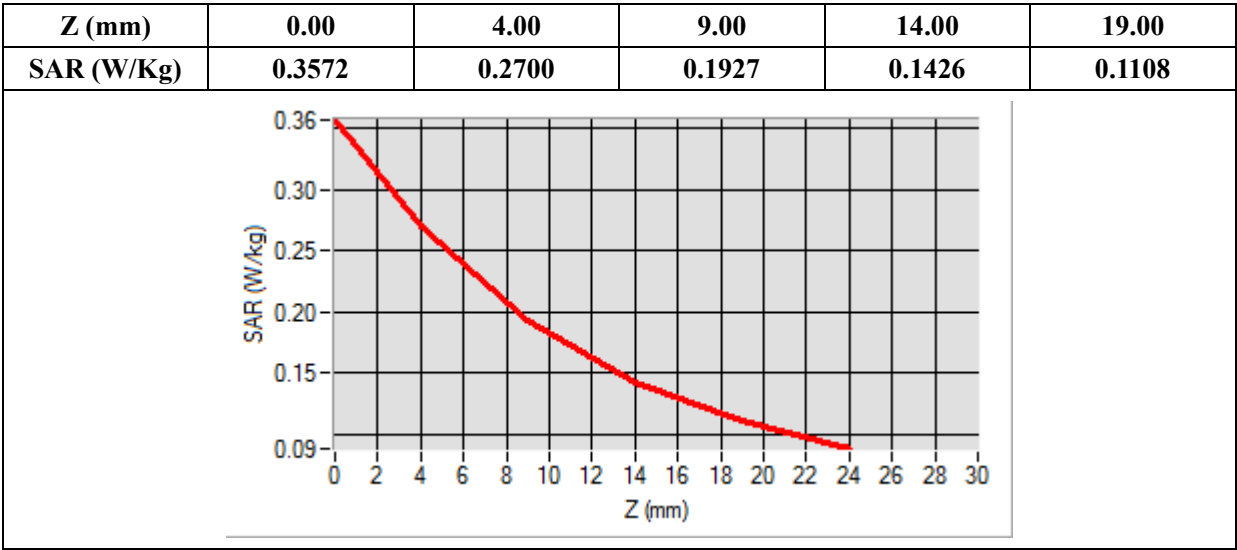


Maximum location: X=7.00, Y=-23.00

SAR Peak: 0.36 W/kg

SAR 10g (W/Kg)	0.185424
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SAR 1g (W/Kg)	0.263145
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MEASUREMENT 10

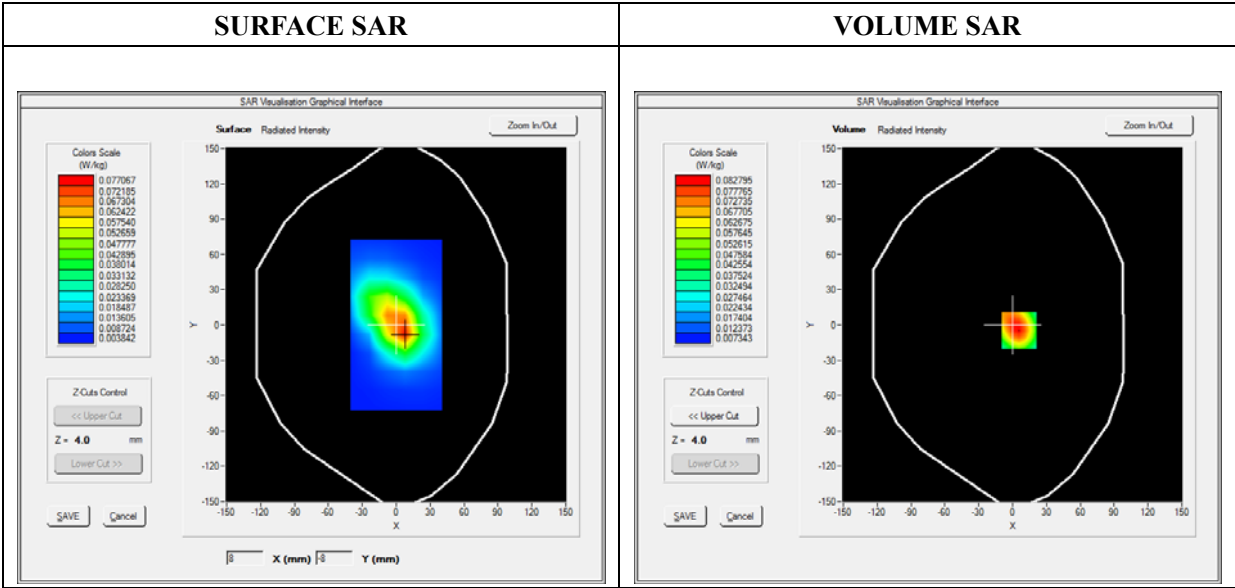
Type: Phone measurement (Complete)
Date of measurement: 2022-05-13
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
Band	WiFi(2.4GHz)_802.11b
Channels	Middle
Signal	Duty Cycle: 1:1

B. SAR Measurement Results

Frequency (MHz)	2437.000000
Relative Permittivity (real part)	38.150839
Conductivity (S/m)	1.741254
Power Variation (%)	5.210512
Ambient Temperature	21.3
Liquid Temperature	21.3



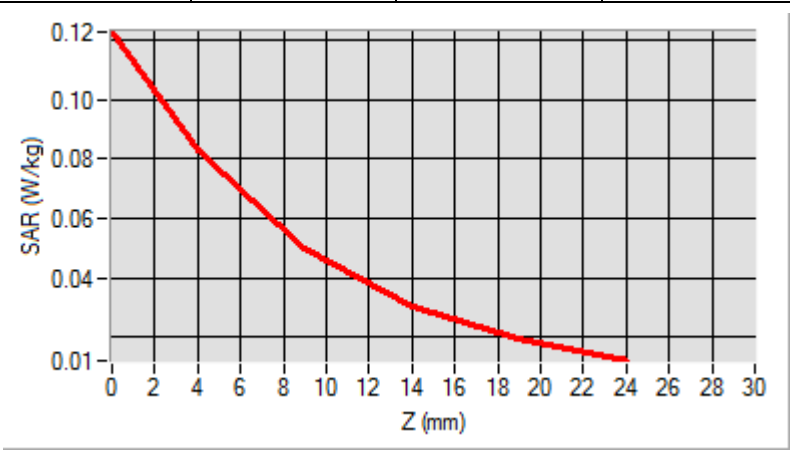
Maximum location: X=6.00, Y=-5.00

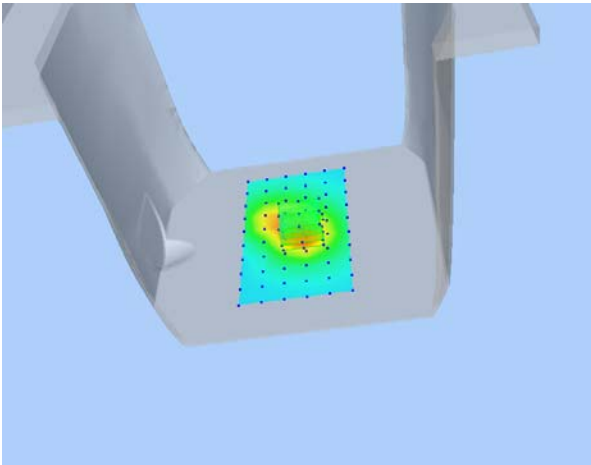
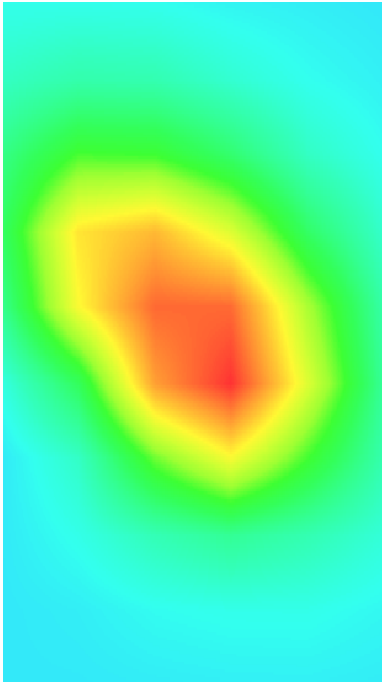
SAR Peak: 0.12 W/kg

SAR 10g (W/Kg)	0.045591
----------------	----------

SAR 1g (W/Kg)	0.078072
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1228	0.0828	0.0499	0.0305	0.0193



3D screen shot	Hot spot position
	

MEASUREMENT 11

Type: Phone measurement (Complete)

Date of measurement: 2022-05-13

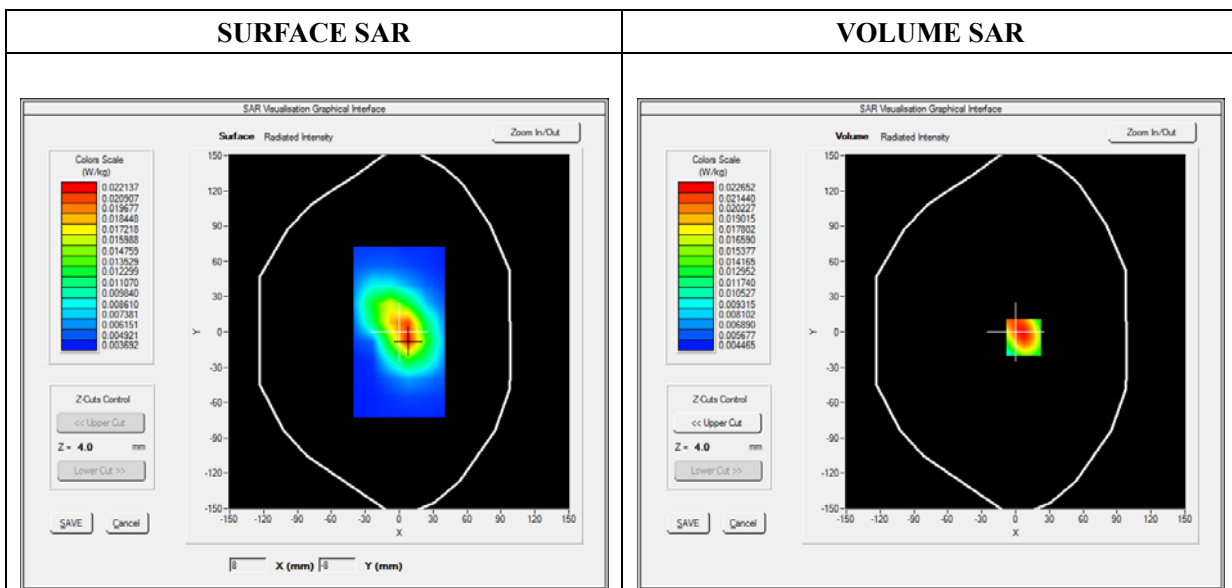
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Front(Near to Mouth)
Band	Bluetooth
Channels	Middle
Signal	Duty Cycle: 1:1

B. SAR Measurement Results

Frequency (MHz)	2480.000000
Relative Permittivity (real part)	38.152839
Conductivity (S/m)	1.742547
Power Variation (%)	0.051200
Ambient Temperature	21.3
Liquid Temperature	21.3



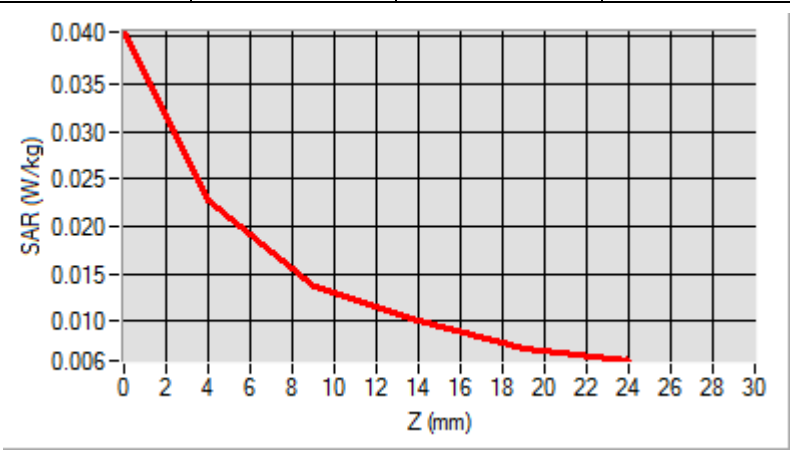
Maximum location: X=7.00, Y=-5.00

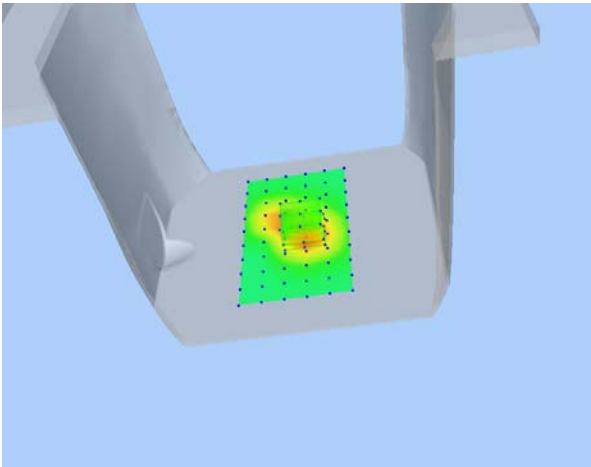
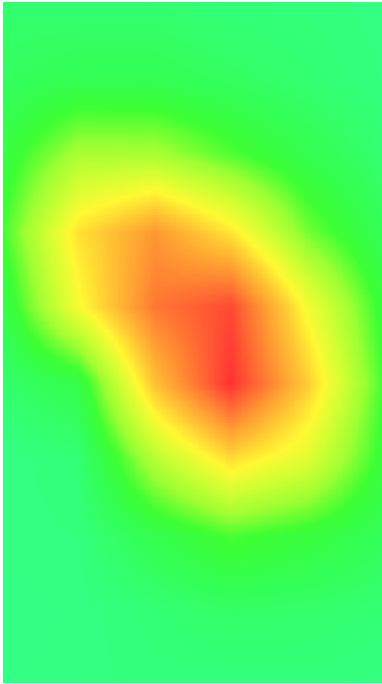
SAR Peak: 0.03 W/kg

SAR 10g (W/Kg)	0.013874
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SAR 1g (W/Kg)	0.021475
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0404	0.0227	0.0136	0.0100	0.0072



3D screen shot	Hot spot position
	

MEASUREMENT 12

Type: Phone measurement (Complete)

Date of measurement: 2022-05-16

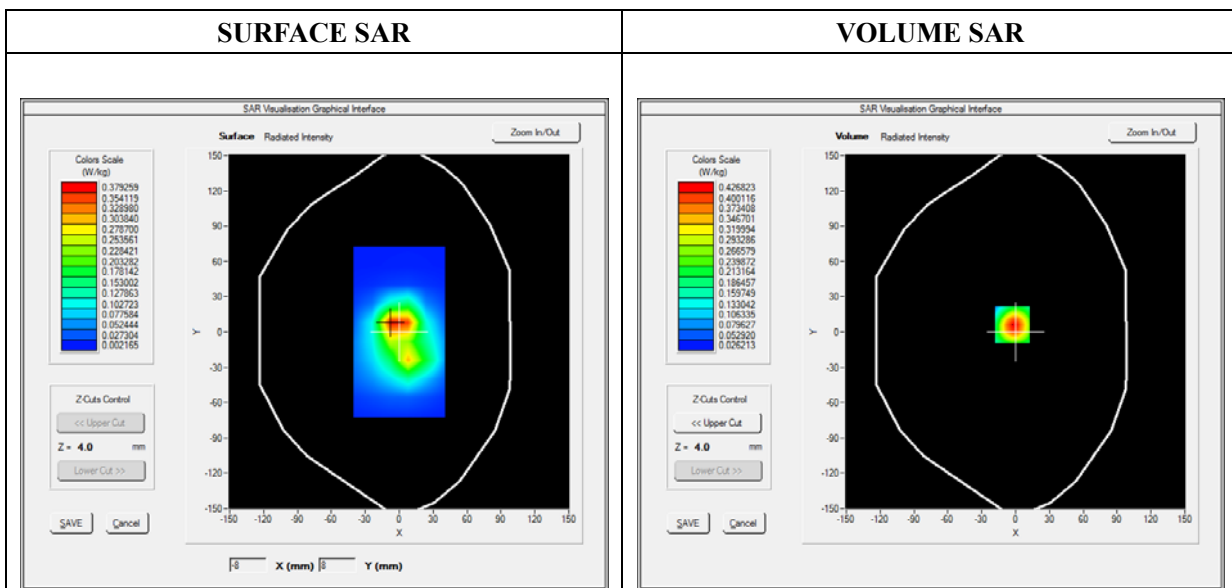
Measurement duration: 11 minutes 48 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
Band	GPRS850_2TX
Channels	High
Signal	Duty Cycle: 1:4

B. SAR Measurement Results

Frequency (MHz)	848.800000
Relative Permittivity (real part)	41.110245
Conductivity (S/m)	0.871245
Power Variation (%)	-3.720000
Ambient Temperature	21.1
Liquid Temperature	21.3



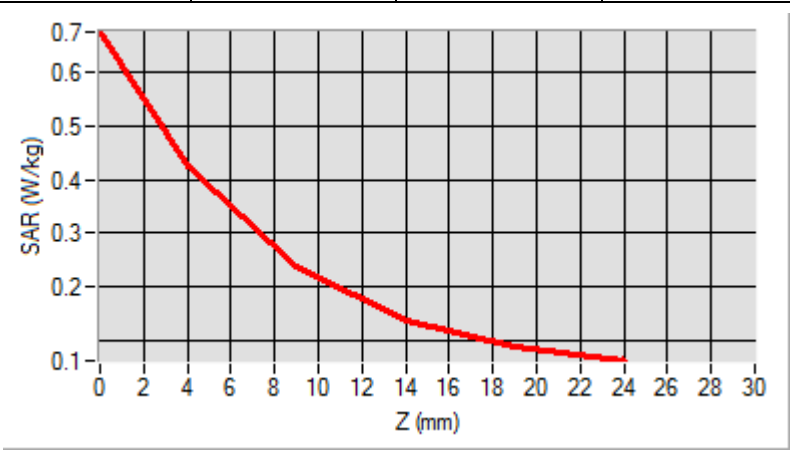
Maximum location: X=-3.00, Y=6.00

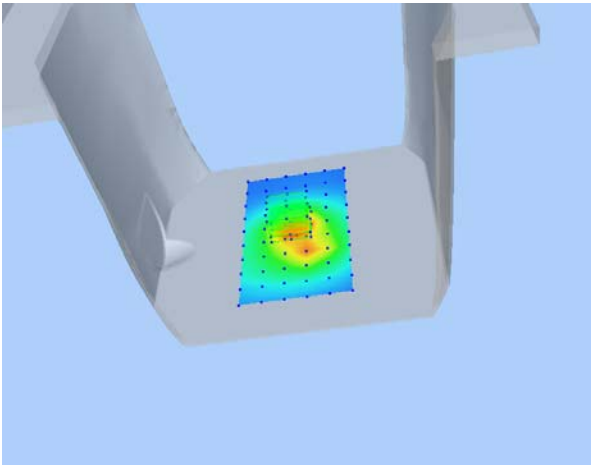
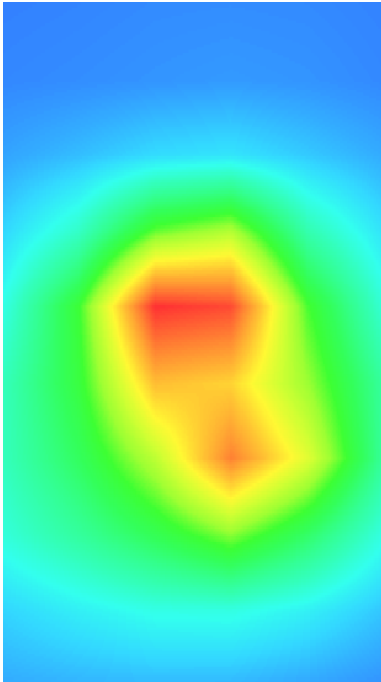
SAR Peak: 0.68 W/kg

SAR 10g (W/Kg)	0.219201
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SAR 1g (W/Kg)	0.393789
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.6769	0.4268	0.2367	0.1371	0.0884



3D screen shot	Hot spot position
	

MEASUREMENT 13

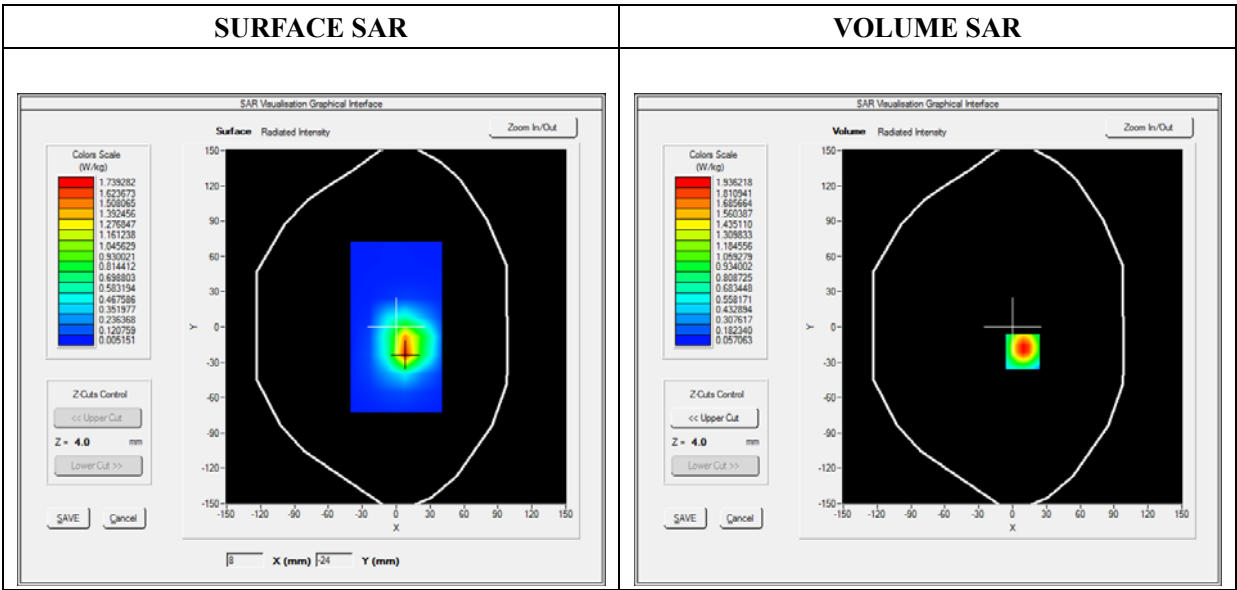
Type: Phone measurement (Complete)
Date of measurement: 2022-05-18
Measurement duration: 11 minutes 48 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
Band	GPRS1900_3TX
Channels	High
Signal	Duty Cycle: 1:2.66

B. SAR Measurement Results

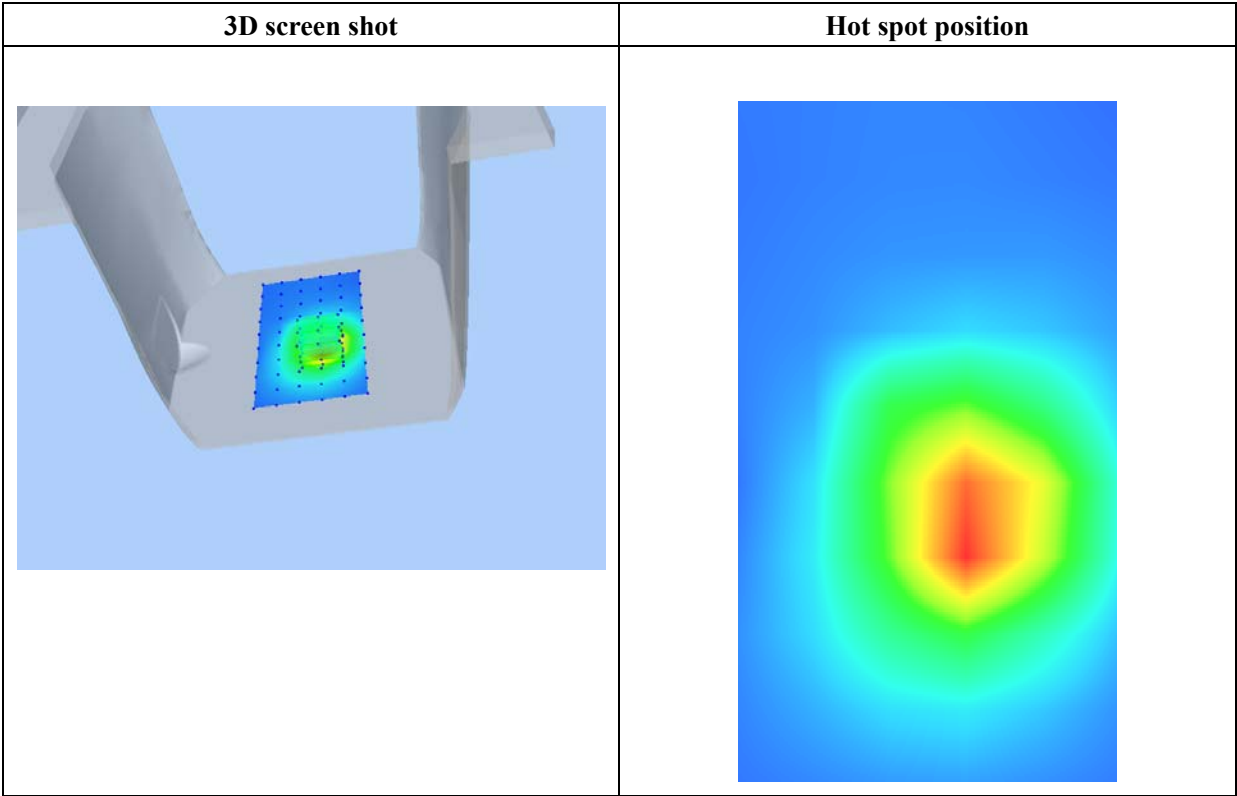
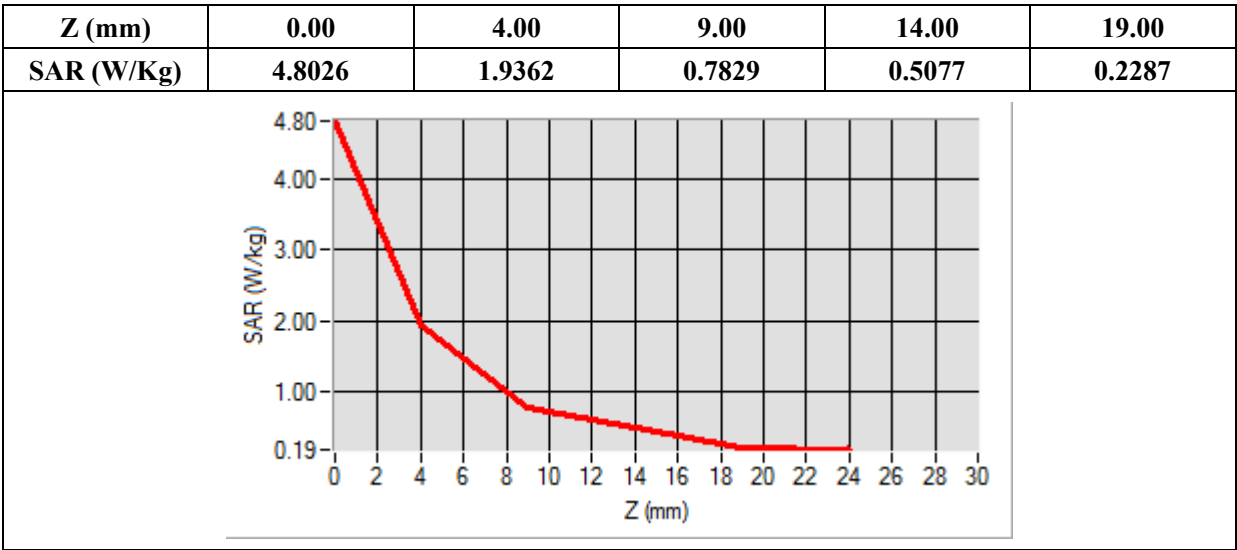
Frequency (MHz)	1909.800000
Relative Permittivity (real part)	38.560124
Conductivity (S/m)	1.380369
Power Variation (%)	-1.080000
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=9.00, Y=-21.00

SAR Peak: 3.34 W/kg

SAR 10g (W/Kg)	0.907866
SAR 1g (W/Kg)	1.801961



MEASUREMENT 14

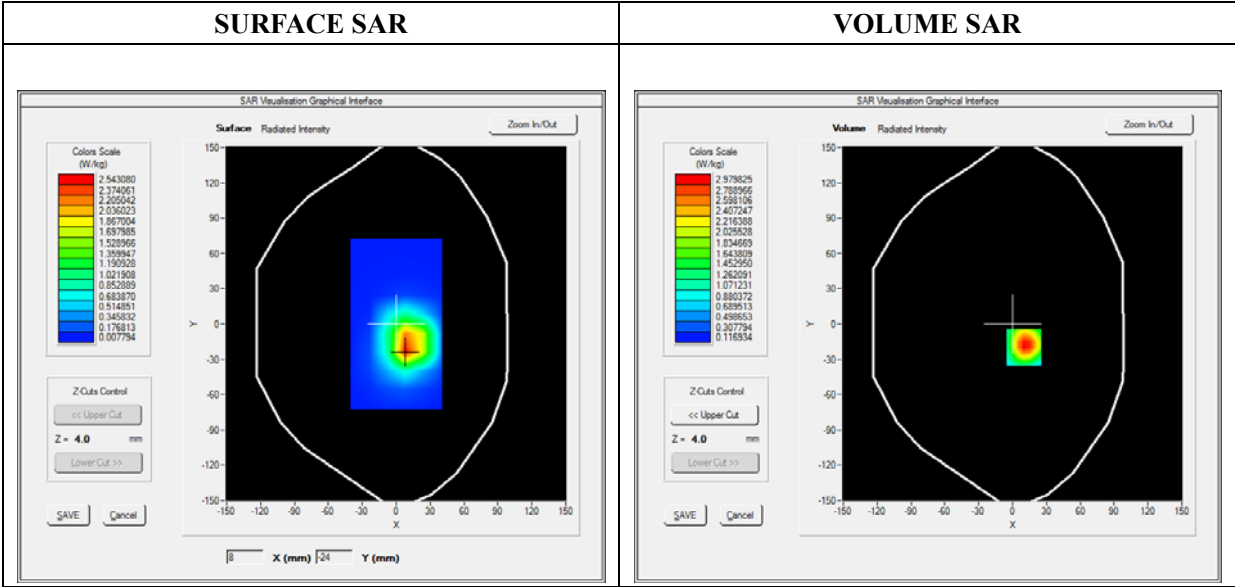
Type: Phone measurement (Complete)
Date of measurement: 2022-05-18
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
Band	WCDMA1900_RMC
Channels	Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

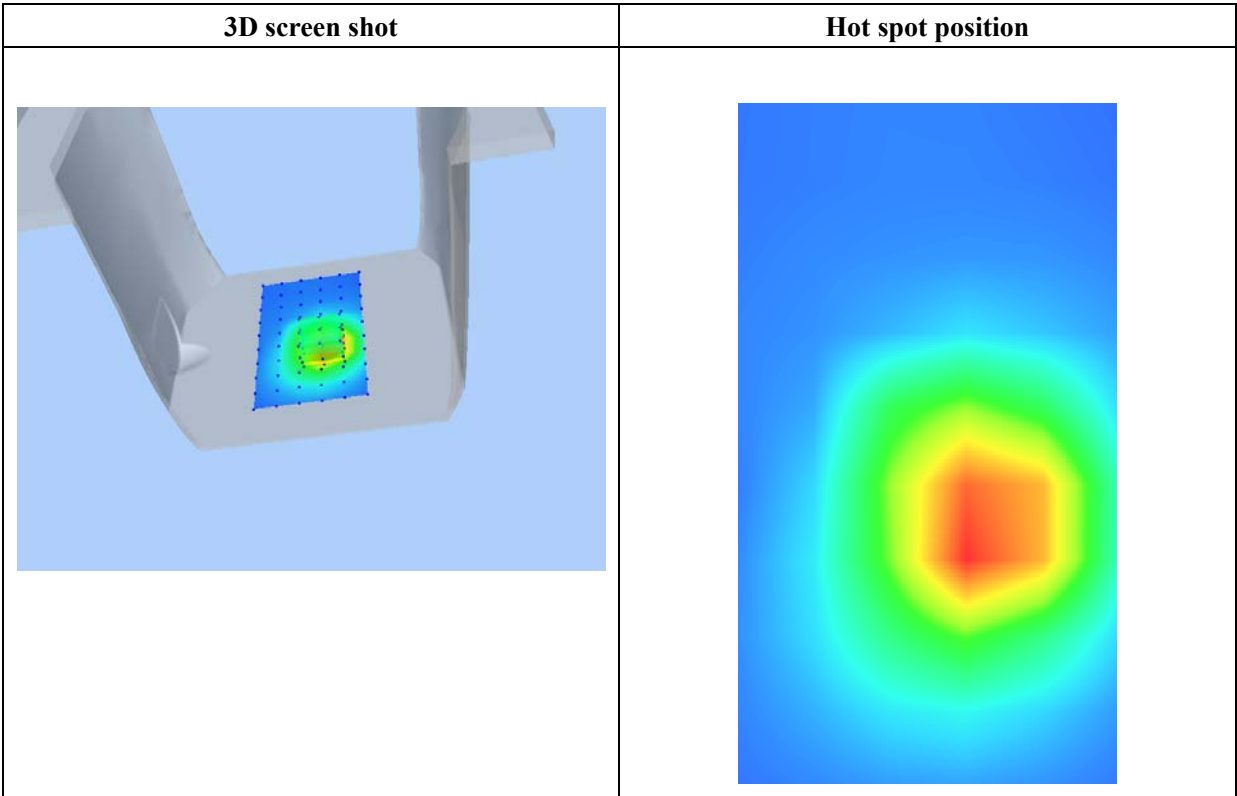
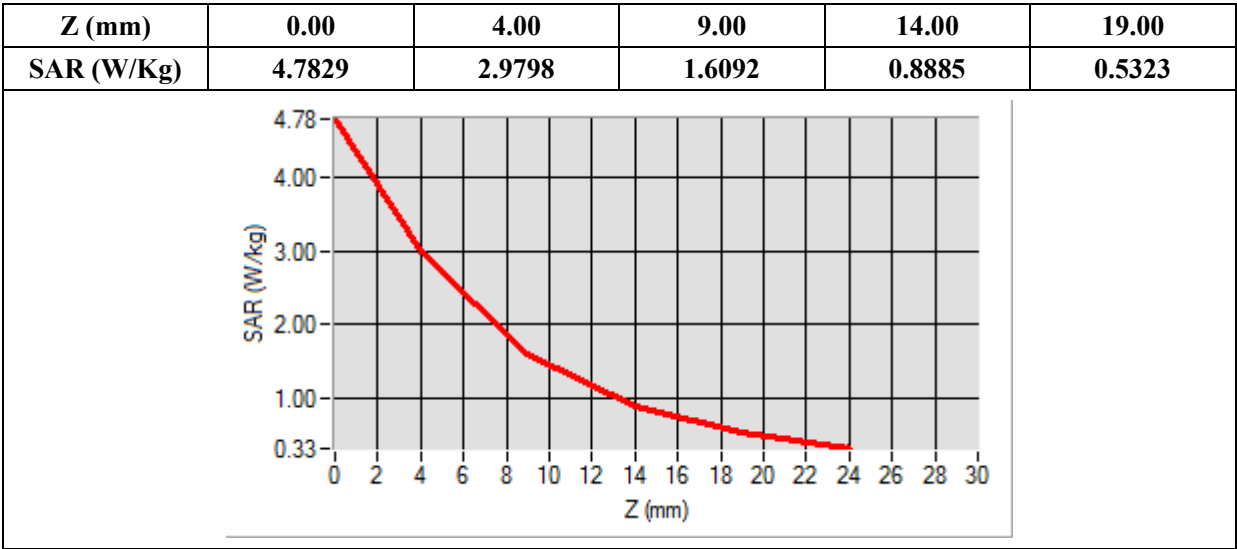
Frequency (MHz)	1880.000000
Relative Permittivity (real part)	38.5654521
Conductivity (S/m)	1.382584
Power Variation (%)	1.524540
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=10.00, Y=-20.00

SAR Peak: 4.86 W/kg

SAR 10g (W/Kg)	1.185962
SAR 1g (W/Kg)	2.793933



MEASUREMENT 15

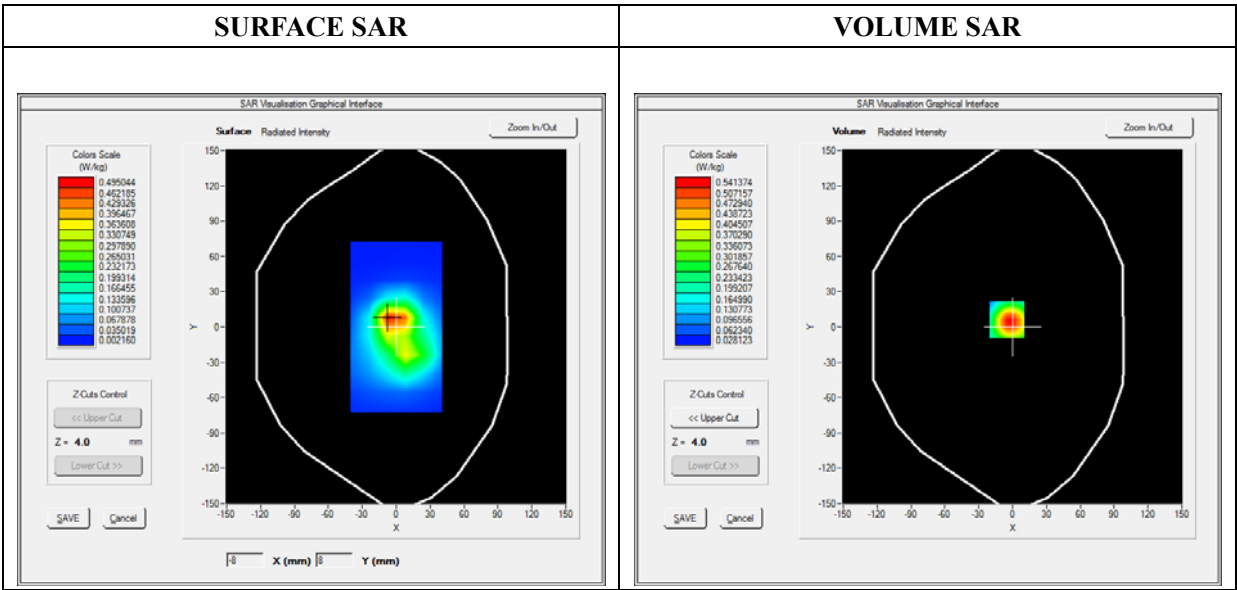
Type: Phone measurement (Complete)
Date of measurement: 2022-05-16
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
Band	WCDMA850_RMC
Channels	Middle
Signal	Duty Cycle 1:1

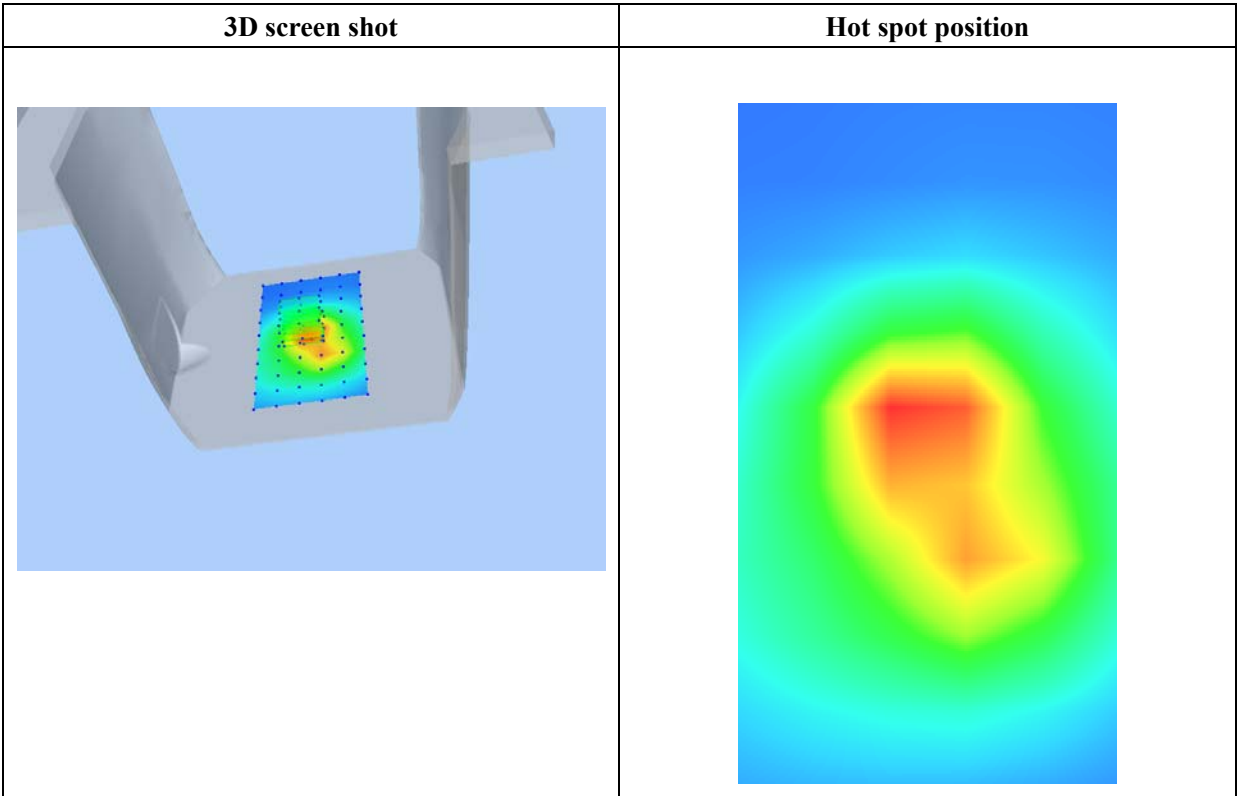
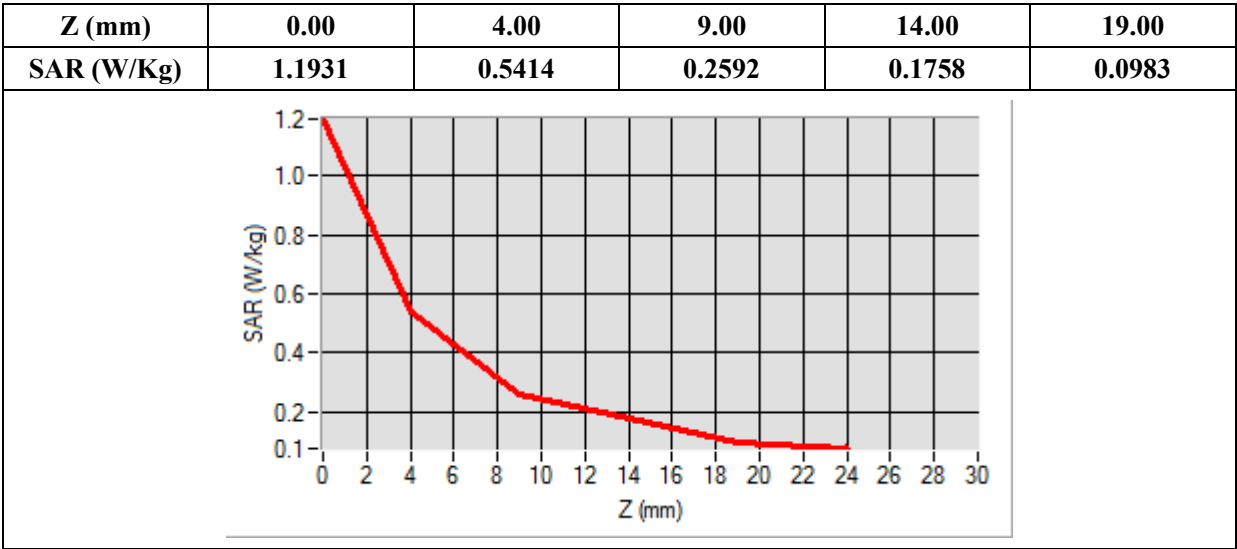
B. SAR Measurement Results

Frequency (MHz)	836.400000
Relative Permittivity (real part)	41.112695
Conductivity (S/m)	0.871145
Power Variation (%)	1.342427
Ambient Temperature	21.1
Liquid Temperature	21.3



Maximum location: X=-5.00, Y=6.00
SAR Peak: 0.87 W/kg

SAR 10g (W/Kg)	0.280216
SAR 1g (W/Kg)	0.508742



MEASUREMENT 16

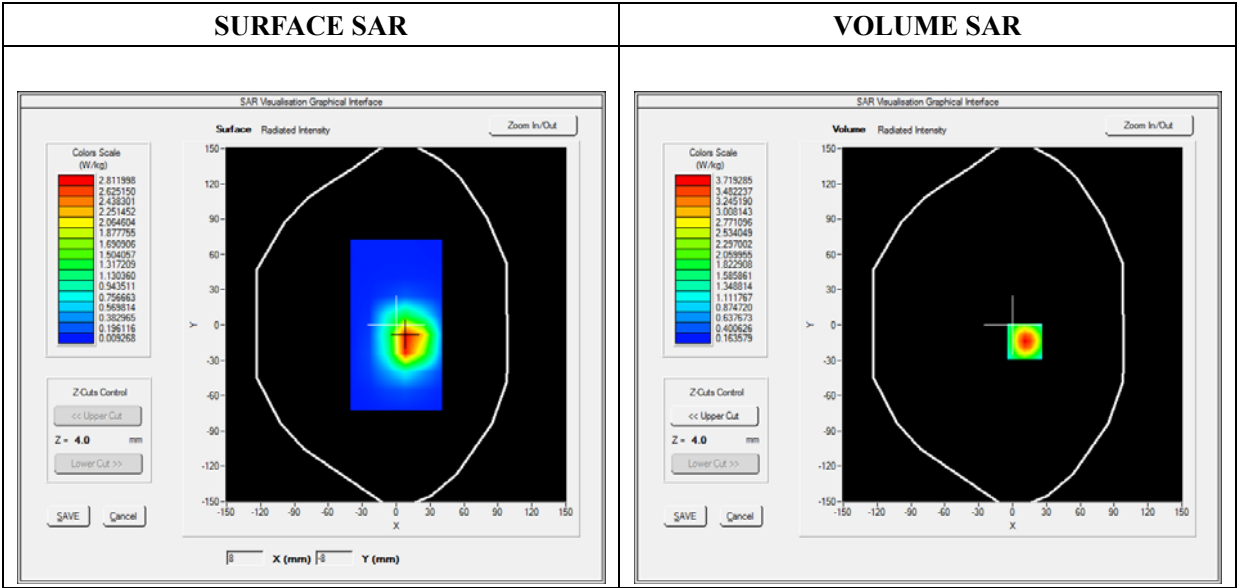
Type: Phone measurement (Complete)
Date of measurement: 2022-05-18
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
Band	LTE Band 2
Channels	QPSK, 1.4MHz, 1RB, High
Signal	Duty Cycle: 1:1

B. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative Permittivity (real part)	38.564521
Conductivity (S/m)	1.381412
Power Variation (%)	1.536272
Ambient Temperature	21.1
Liquid Temperature	21.3



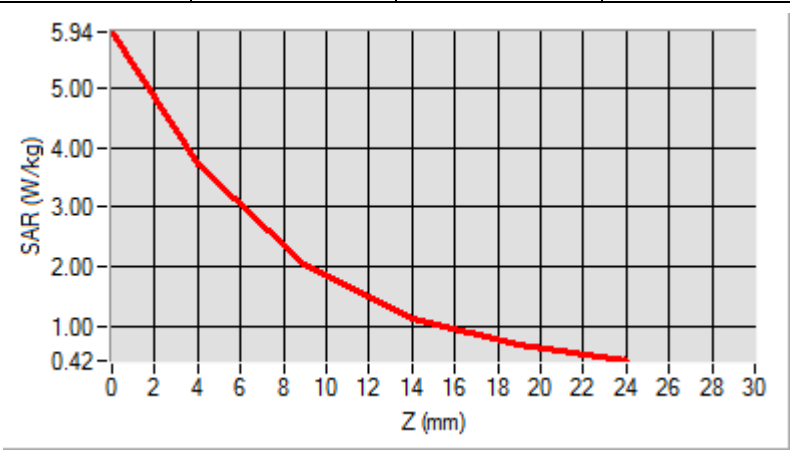
Maximum location: X=11.00, Y=-14.00

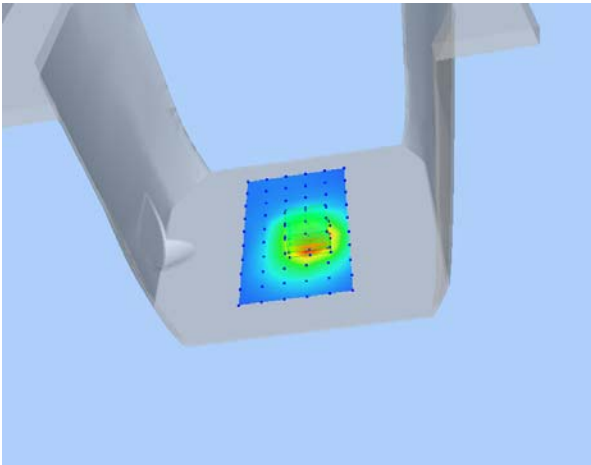
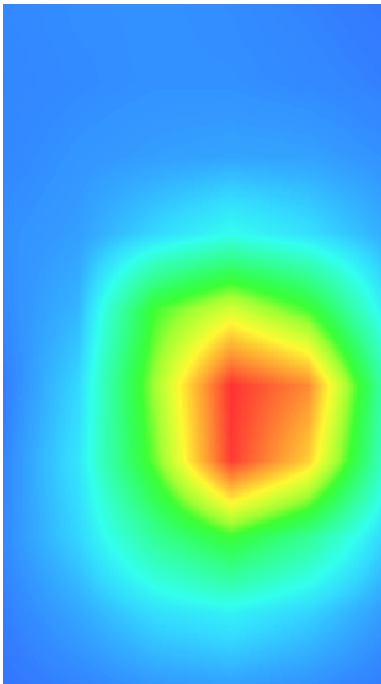
SAR Peak: 5.97 W/kg

SAR 10g (W/Kg)	1.193199
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SAR 1g (W/Kg)	2.402544
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.9367	3.7193	2.0255	1.1285	0.6810



3D screen shot	Hot spot position
	

MEASUREMENT 17

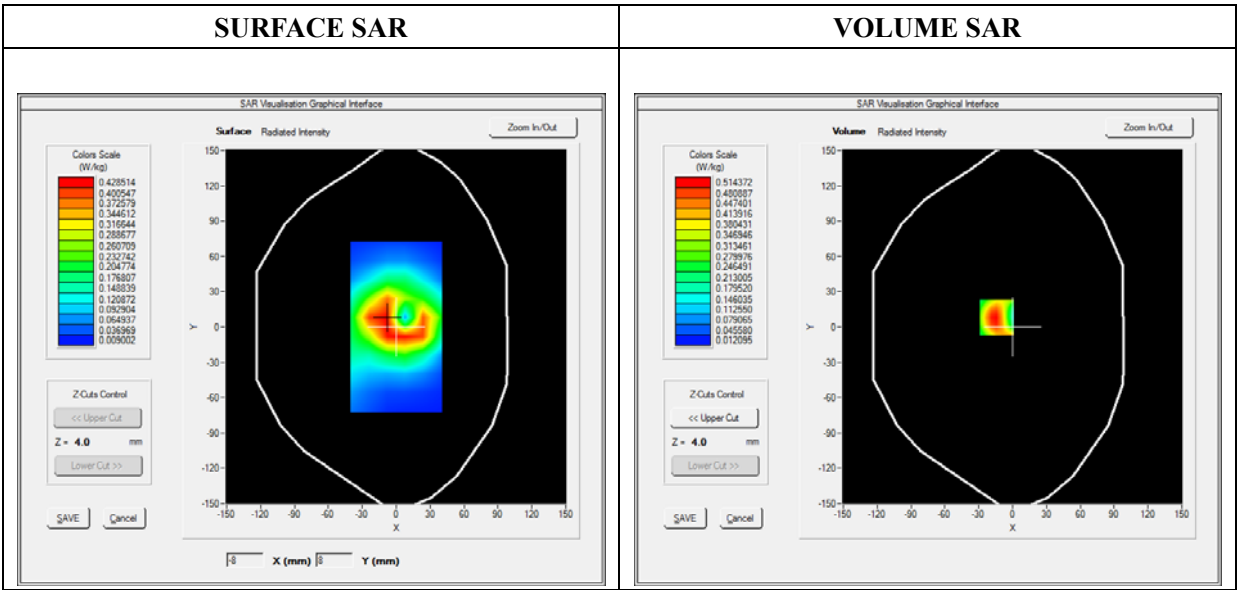
Type: Phone measurement (Complete)
Date of measurement: 2022-05-18
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
Band	LTE Band 4
Channels	QPSK, 20MHz, 1RB, Low
Signal	Duty Cycle: 1:1

B. SAR Measurement Results

Frequency (MHz)	1720.00000
Relative Permittivity (real part)	39.021247
Conductivity (S/m)	1.370369
Power Variation (%)	1.536272
Ambient Temperature	21.1
Liquid Temperature	21.3



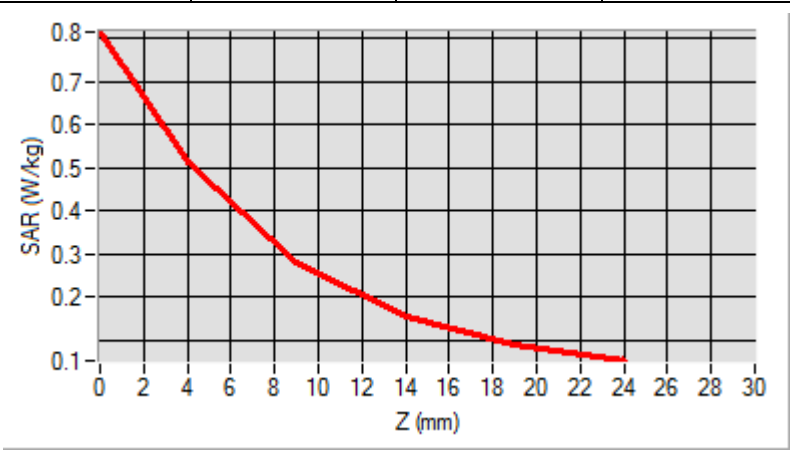
Maximum location: X=-14.00, Y=8.00

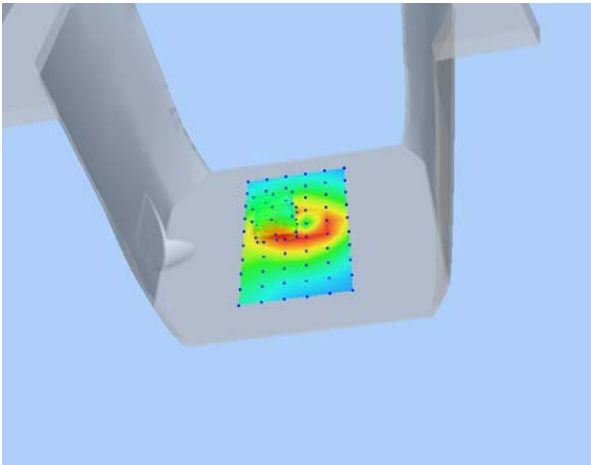
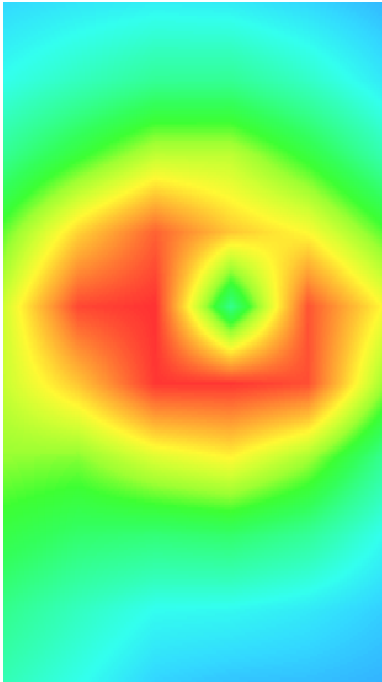
SAR Peak: 0.82 W/kg

SAR 10g (W/Kg)	0.262896
----------------	----------

SAR 1g (W/Kg)	0.479100
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8153	0.5144	0.2813	0.1550	0.0899



3D screen shot	Hot spot position
	

MEASUREMENT 18

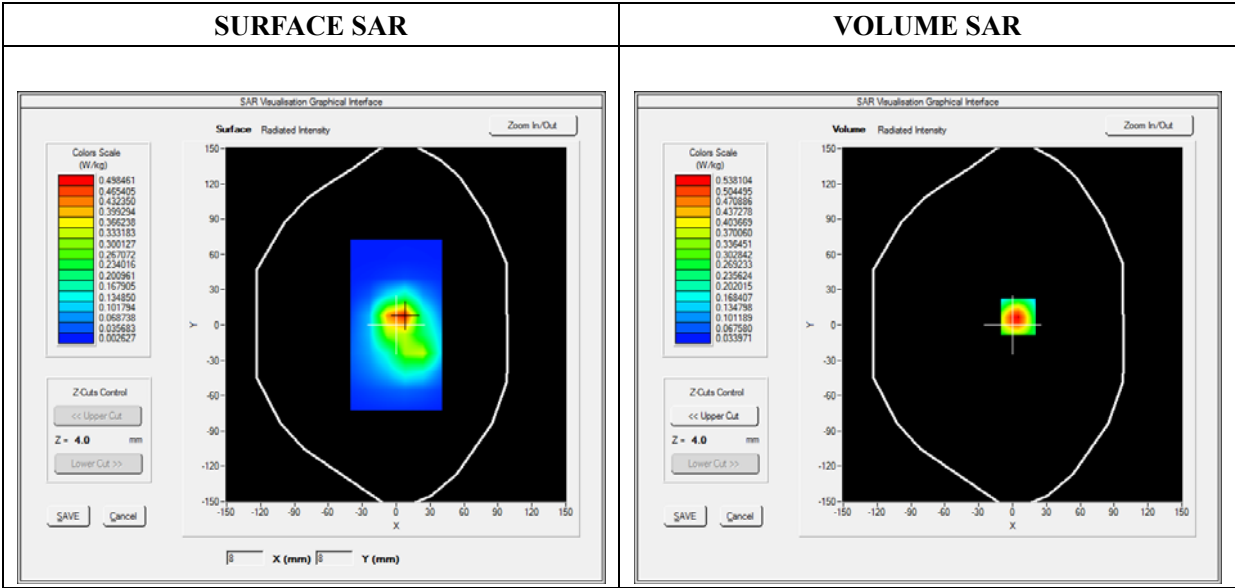
Type: Phone measurement (Complete)
Date of measurement: 2022-05-16
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
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)	41.114390
Conductivity (S/m)	0.872507
Power Variation (%)	1.374628
Ambient Temperature	21.3
Liquid Temperature	21.3

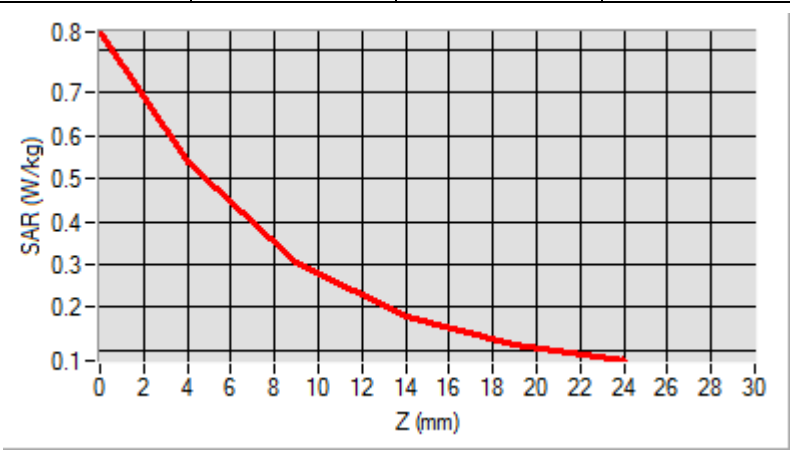


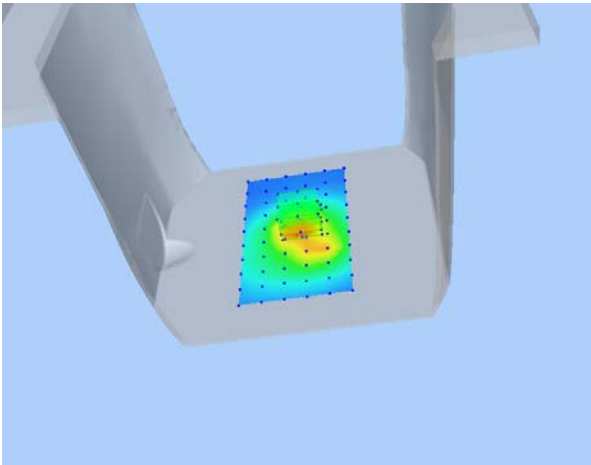
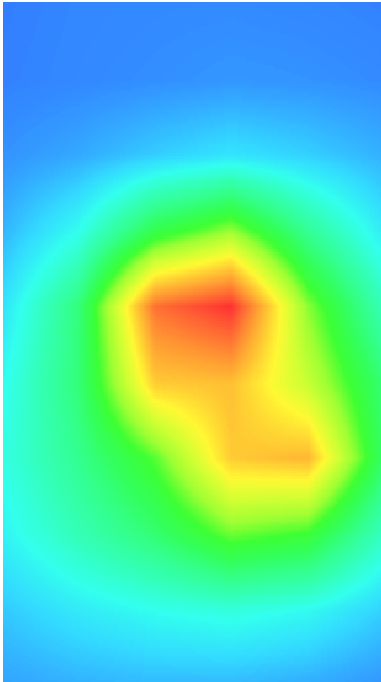
Maximum location: X=5.00, Y=7.00
SAR Peak: 0.85 W/kg

SAR 10g (W/Kg)	0.277698
----------------	----------

SAR 1g (W/Kg)	0.499518
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8424	0.5381	0.3031	0.1770	0.1132



3D screen shot	Hot spot position
	

MEASUREMENT 19

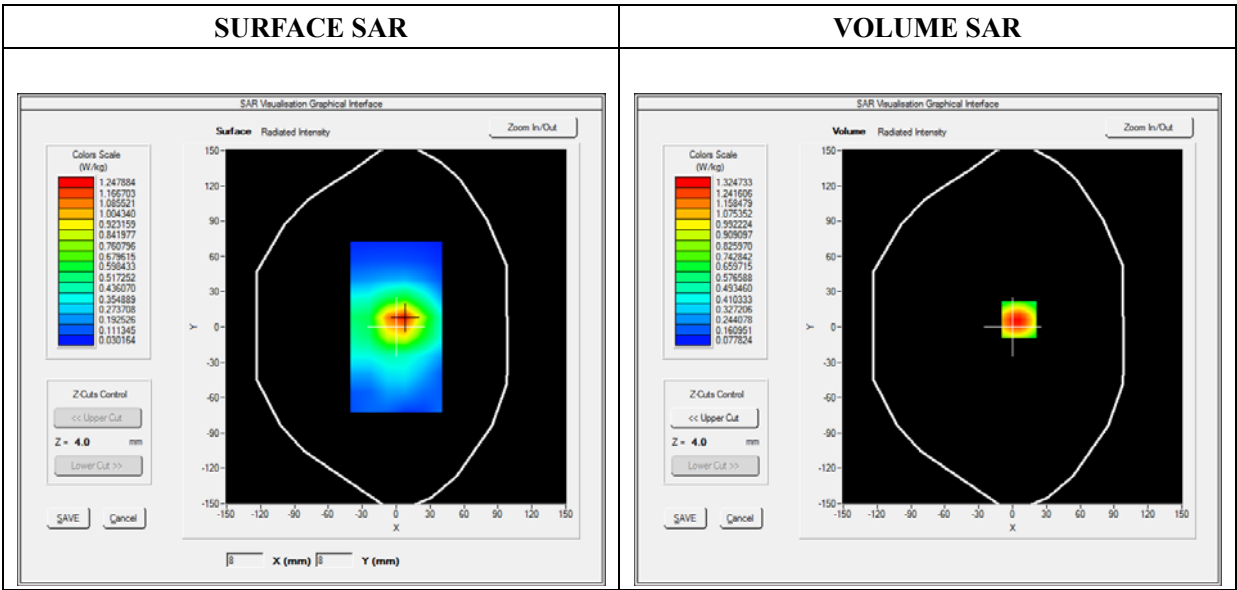
Type: Phone measurement (Complete)
Date of measurement: 2022-05-18
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
Band	LTE Band 7
Channels	QPSK, 20MHz, 1RB,Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2535.000000
Relative Permittivity (real part)	39.224534
Conductivity (S/m)	1.992458
Power Variation (%)	0.924535
Ambient Temperature	21.3
Liquid Temperature	21.3

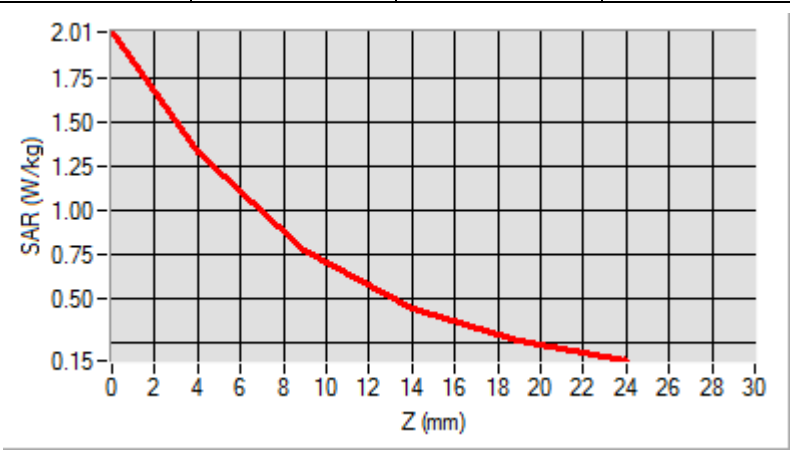


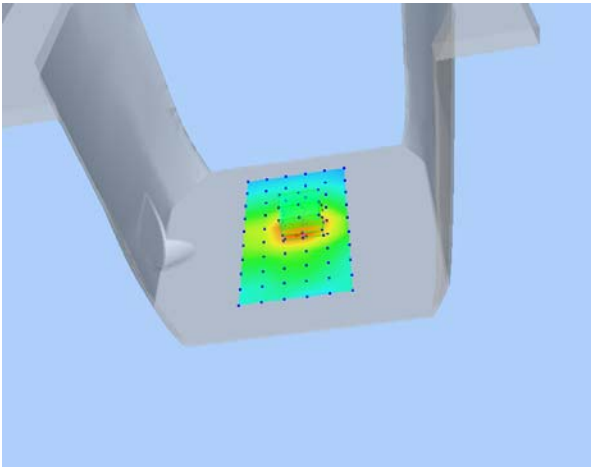
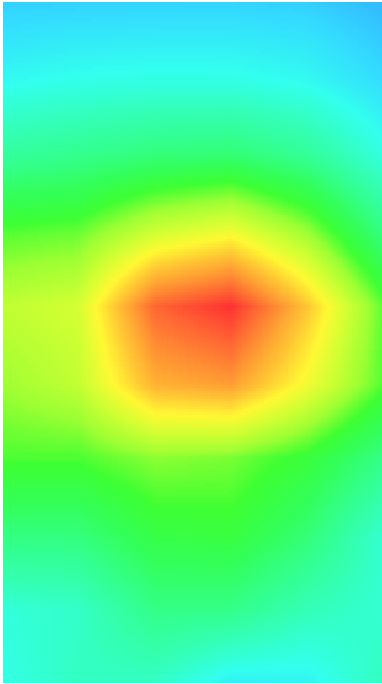
Maximum location: X=6.00, Y=6.00
SAR Peak: 2.02 W/kg

SAR 10g (W/Kg)	0.708150
----------------	----------

SAR 1g (W/Kg)	1.239917
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	2.0052	1.3247	0.7714	0.4490	0.2675



3D screen shot	Hot spot position
	

MEASUREMENT 20

Type: Phone measurement (Complete)

Date of measurement: 2022-05-16

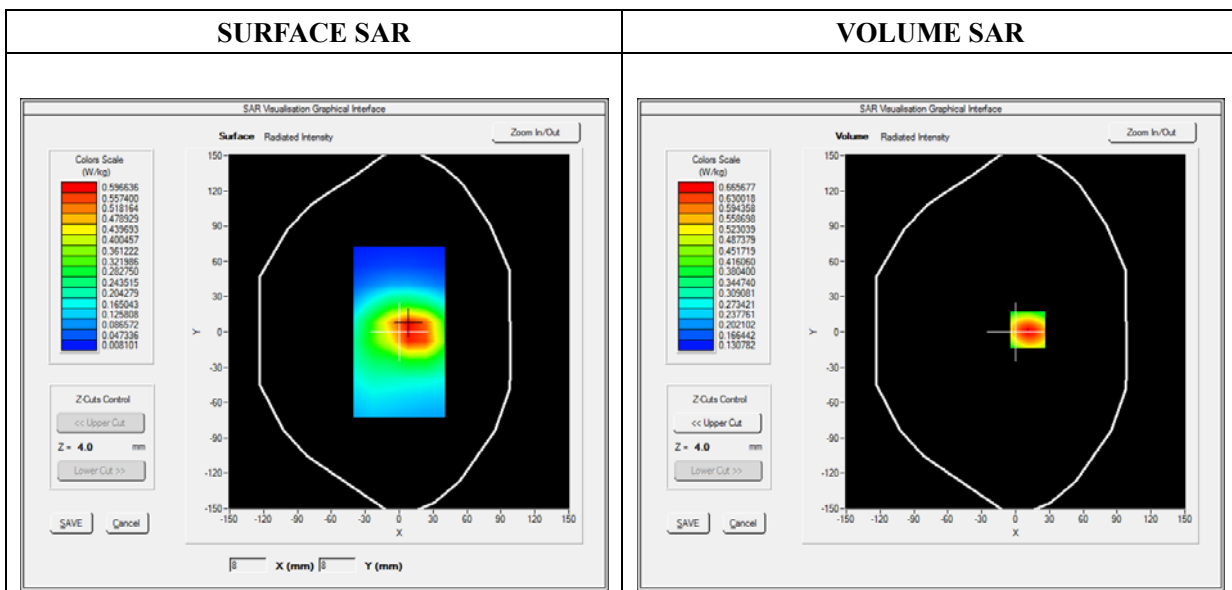
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
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)	41.322457
Conductivity (S/m)	0.862457
Power Variation (%)	0.924535
Ambient Temperature	21.3
Liquid Temperature	21.3



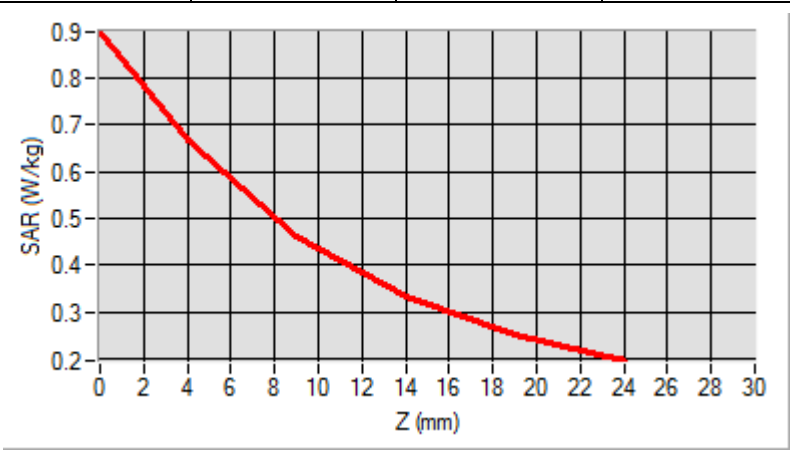
Maximum location: X=11.00, Y=2.00

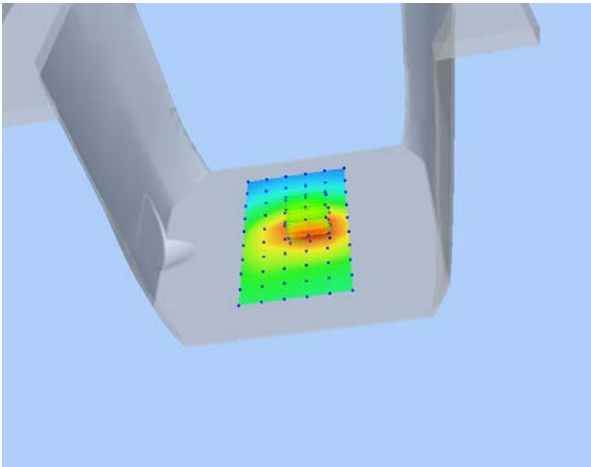
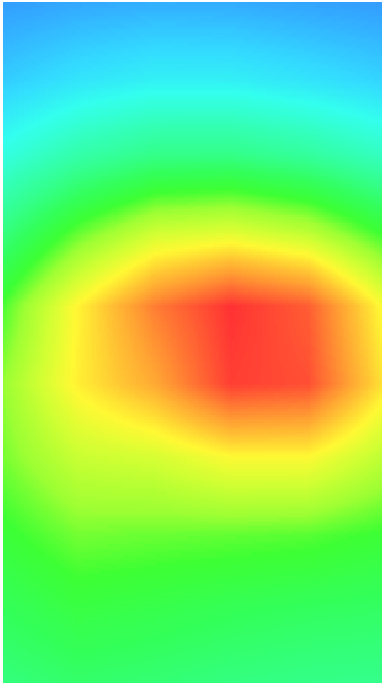
SAR Peak: 0.90 W/kg

SAR 10g (W/Kg)	0.434077
----------------	----------

SAR 1g (W/Kg)	0.642505
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8995	0.6657	0.4616	0.3321	0.2517



3D screen shot	Hot spot position
	

MEASUREMENT 21

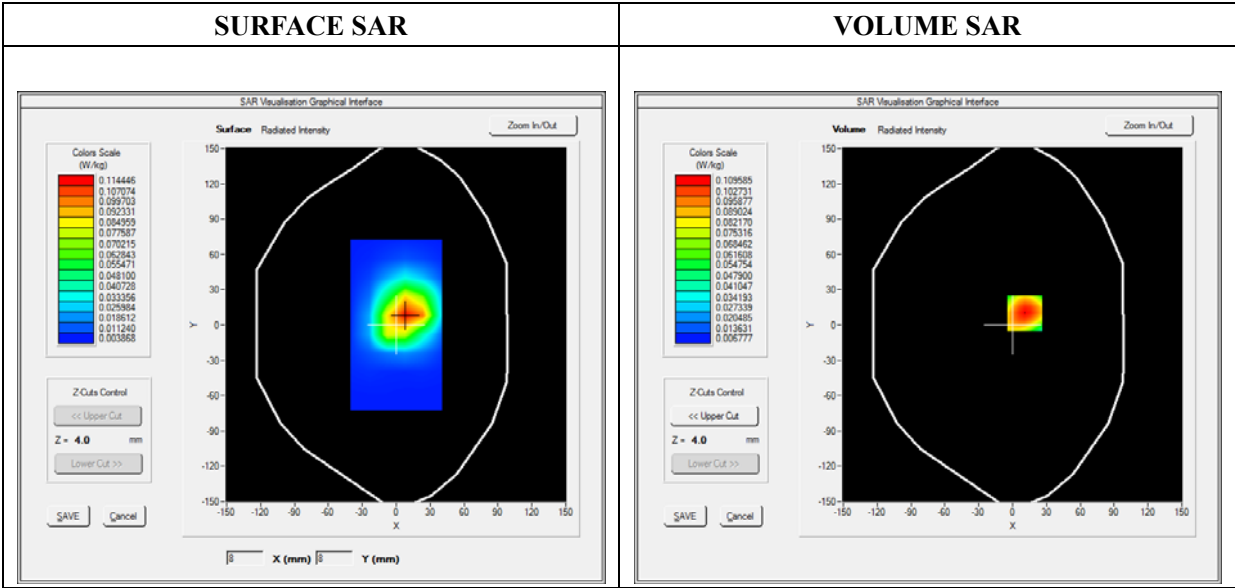
Type: Phone measurement (Complete)
Date of measurement: 2022-05-13
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
Band	WiFi(2.4GHz)_802.11b
Channels	Midlle
Signal	Duty Cycle: 1:1

B. SAR Measurement Results

Frequency (MHz)	2437.000000
Relative Permittivity (real part)	38.150839
Conductivity (S/m)	1.741254
Power Variation (%)	5.512000
Ambient Temperature	21.3
Liquid Temperature	21.3



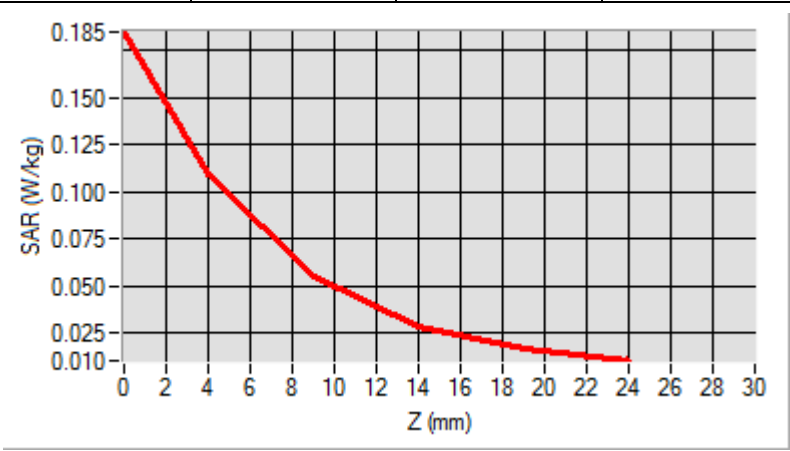
Maximum location: X=11.00, Y=10.00

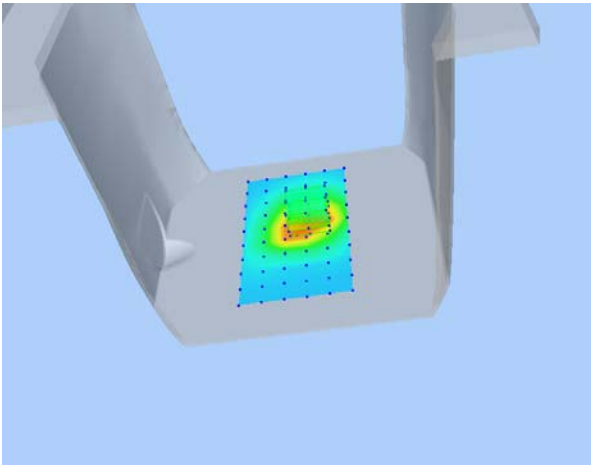
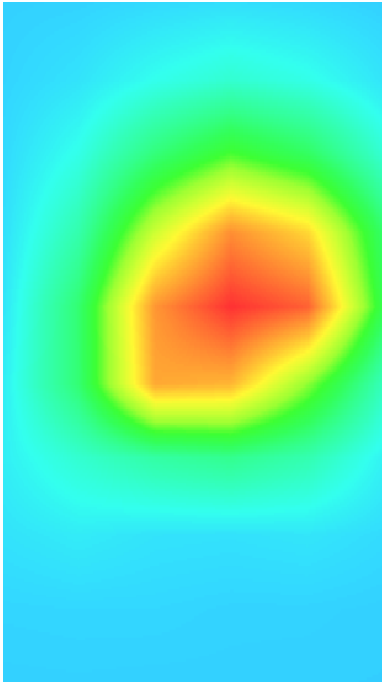
SAR Peak: 0.18 W/kg

SAR 10g (W/Kg)	0.057555
----------------	----------

SAR 1g (W/Kg)	0.103329
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1848	0.1096	0.0551	0.0285	0.0167



3D screen shot	Hot spot position
	

MEASUREMENT 22

Type: Phone measurement (Complete)

Date of measurement: 2022-05-13

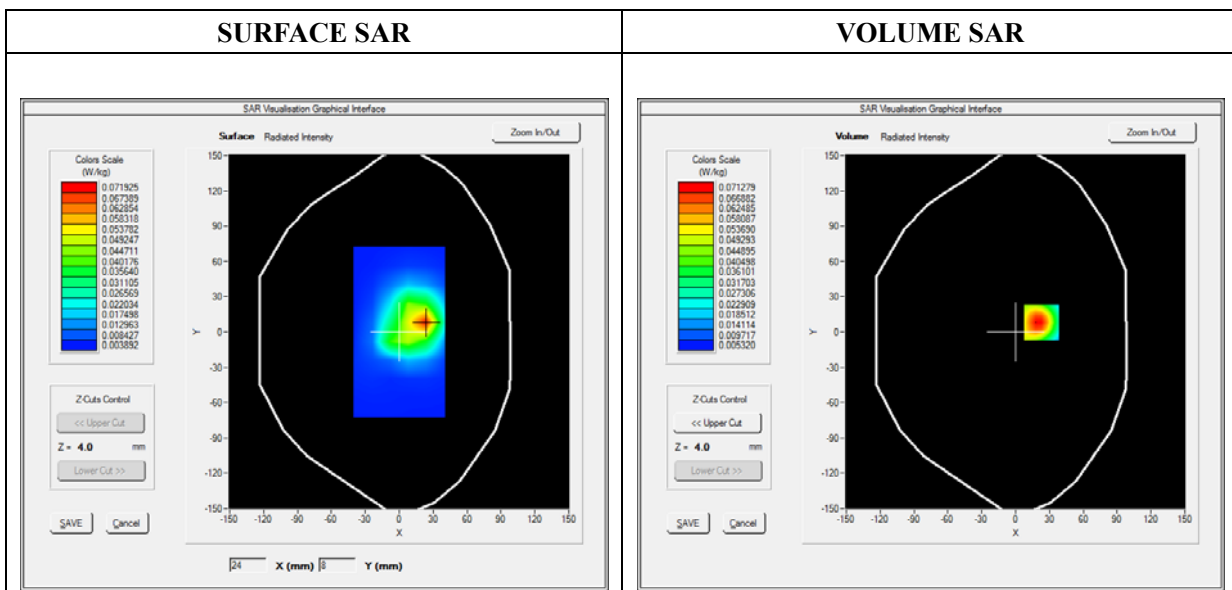
Measurement duration: 12 minutes 3 seconds

A. Experimental conditions

Area Scan	sam_direct_droit2_surf8mm.txt
Phantom	Flat Plane
Device Position	Back
Band	Bluetooth
Channels	High
Signal	Duty Cycle: 1:1

B. SAR Measurement Results

Frequency (MHz)	2480.000000
Relative Permittivity (real part)	38.152839
Conductivity (S/m)	1.742547
Power Variation (%)	2.512110
Ambient Temperature	21.3
Liquid Temperature	21.3



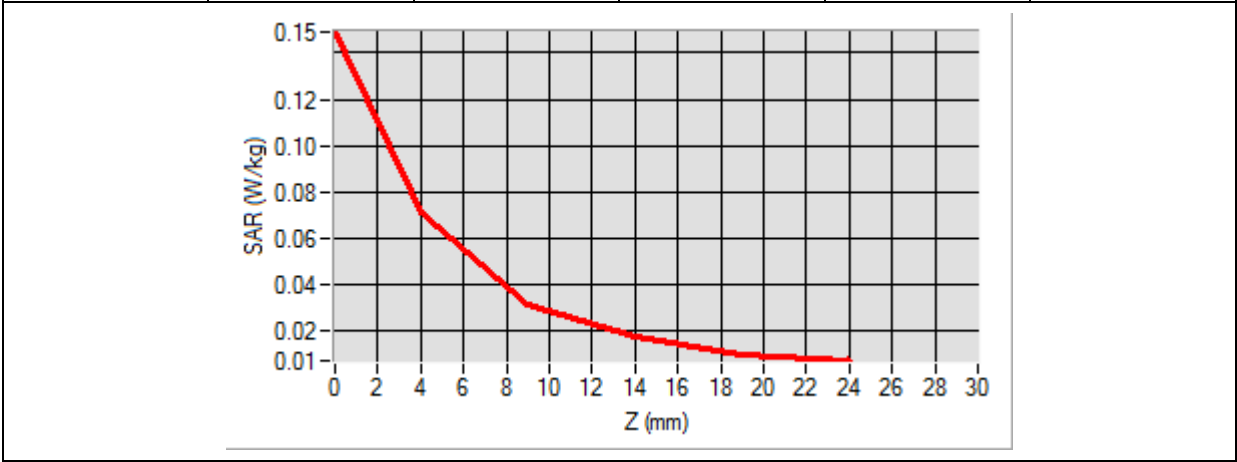
Maximum location: X=23.00, Y=8.00

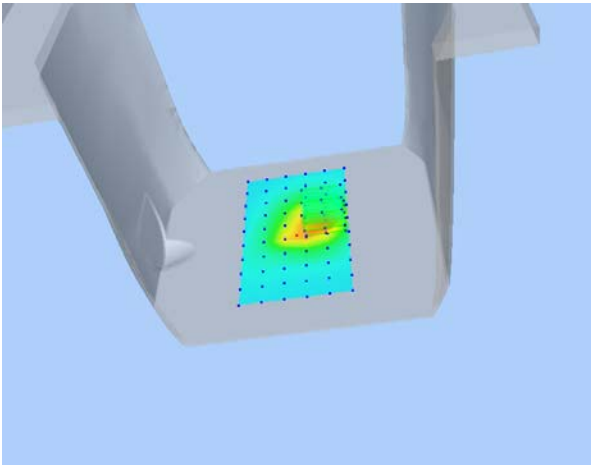
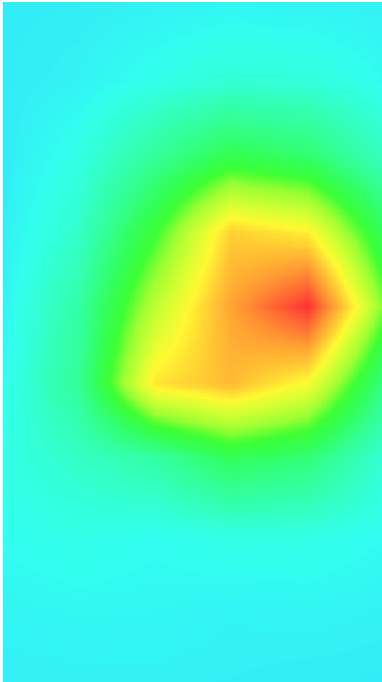
SAR Peak: 0.12 W/kg

SAR 10g (W/Kg)	0.035221
----------------	----------

SAR 1g (W/Kg)	0.066965
---------------	----------

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1490	0.0713	0.0316	0.0182	0.0104



3D screen shot	Hot spot position
	

Annex C. EUT Photos

EUT View 1



EUT View 2



EUT View 3



EUT View 4



Antenna View

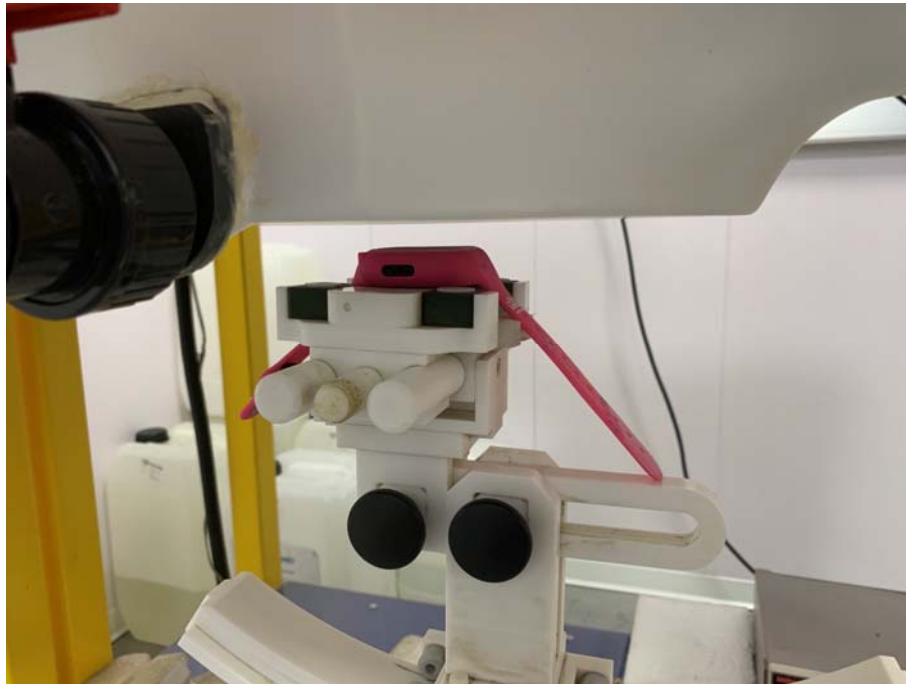


Annex D. Test Setup Photos

Near to Mouth Exposure Conditions

Test distance: 10mm

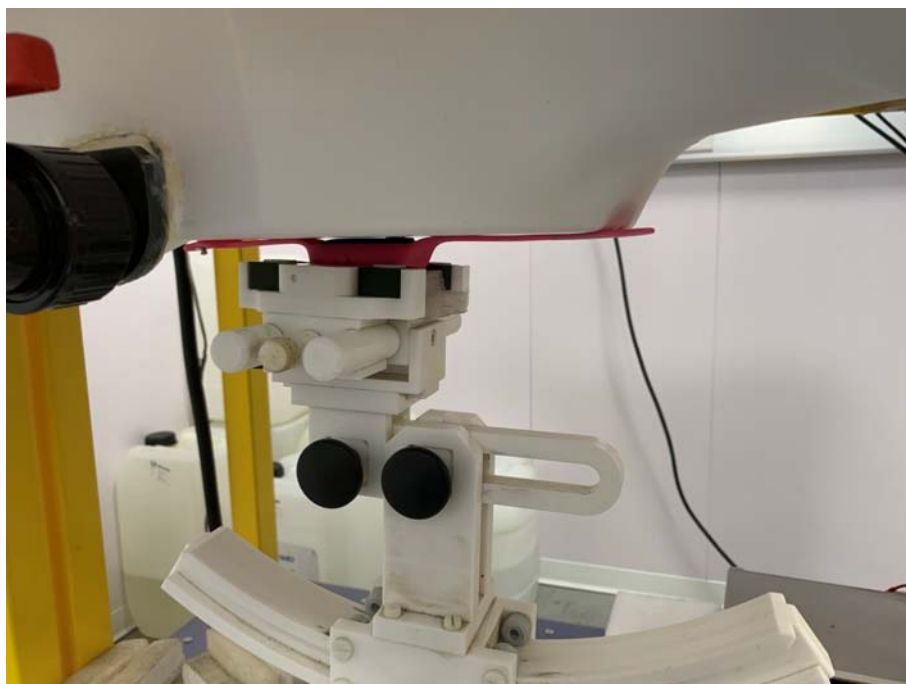
Body Front



Wrist-worn mode Exposure Conditions

Test distance: 0mm

Body Back



Annex E. Calibration Certificate

Please refer to the exhibit for the calibration certificate

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