



SAR Test Report

For

Applicant Name: SHENZHEN TUGAO INTELLIGENT CO., LTD
Address: 8th Floor, Bldg A, Jinggang Science & Technology Park, Fuyong, Bao'an District, Shenzhen, China
EUT Name: Smartphone
Brand Name: HOTWAV
Model Number: A17 Pro Max
Series Model Number: Refer to section 2

Issued By

Company Name: BTF Testing Lab (Shenzhen) Co., Ltd.
Address: Plant 101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China
Report Number: BTF251215R00101
Test Standards: FCC 47 CFR §2.1093 IEEE Std. 1528-2013 IEEE C95.1-2019
FCC ID: 2AOKU-A-PROMAX

Test Conclusion: Pass
Test Date: 2025-12-15 to 2025-12-30
Date of Issue: 2025-12-31

Tested By: Kris . Li
Kris Li / Tester
Date: 2025-12-31

Prepared By: Amenda Zhong
Amenda Zhong / Project Engineer
Date: 2025-12-31

Approved By: Ryan.CJ
Ryan.CJ / EMC Manager
Date: 2025-12-31



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Revision History		
Version	Issue Date	Revisions Content
R_V0	2025-12-31	Original
Note:		Once the revision has been made, then previous versions reports are invalid.

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1. Introduction

1.1 Identification of Testing Laboratory

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	Plant 101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130

1.2 Identification of the Responsible Testing Location

Test Location:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	Plant 101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China
Description:	All measurement facilities used to collect the measurement data are located at Plant 101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China
FCC Registration Number	518915
Designation Number	CN1409

1.3 Laboratory Condition

Ambient Temperature:	21°C to 25°C
Ambient Relative Humidity:	48% to 59%
Ambient Pressure:	100 kPa to 102 kPa

1.4 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2. Product Information

2.1 Application Information

Company Name:	SHENZHEN TUGAO INTELLIGENT CO., LTD
Address:	8th Floor, Bldg A, Jinggang Science & Technology Park, Fuyong, Bao'an District, Shenzhen, China

2.2 Manufacturer Information

Company Name:	SHENZHEN TUGAO INTELLIGENT CO., LTD
Address:	8th Floor, Bldg A, Jinggang Science & Technology Park, Fuyong, Bao'an District, Shenzhen, China

2.3 Factory Information

Company Name:	SHENZHEN TUGAO INTELLIGENT CO., LTD
Address:	8th Floor, Bldg A, Jinggang Science & Technology Park, Fuyong, Bao'an District, Shenzhen, China

2.4 General Description of Equipment under Test (EUT)

EUT Name	Smartphone
Under Test Model Name	A17 Pro Max
Series Model Name	A16 Pro Max, A36, A56, A66, A76, A18 Pro Max, A19 Pro Max, A20 Pro Max, A25, A25 Ultra, Note 25 Ultra, S25, S25 Ultra, Note 26 Ultra, A26 Ultra, A27, A27 Pro, Note 17 Pro, Note 17 Max, Note 17 Pro Max
Description of Model name differentiation	A17 Pro Max is tested model, other models are derivative models. The models are identical in circuit and PCB layout, different on the model names, camera position, battery cover color, fingerprint lock color, side key color and SIM tray color. So the test data of A17 Pro Max can represent the remaining models.
Sample No.	BTFSN251215005

2.5 Equipment under Test Ancillary Equipment

Ancillary Equipment 1	Rechargeable Battery	
	Capacity	5160mAh
	Nominal Voltage	3.85V

2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EGPRS 850/1900 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/66 TDD LTE Band 41 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80) BT (EDR+BLE)
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The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	GSM, WCDMA, LTE, WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2200 MHz
	LTE Band 41	2535 ~ 2655 MHz	
	802.11b/g/n(HT20)	2412 ~ 2462 MHz	
	802.11a /802.11n(HT20/40) /802.11ac(HT20/40/80)	U-NII-1: 5180 MHz ~ 5240 MHz	
	Bluetooth	2402 ~ 2480 MHz	
Antenna Type	WWAN: FPC Antenna WLAN: FPC Antenna BT: FPC Antenna		
Hotspot Function	Support		
Power Reduction	Not Support		
Exposure Category	General Population/Uncontrolled exposure		
EUT Stage	Portable Device		
Product	Type		
	☐ Production unit	☒ Identical prototype	

3. Summary of Test Results

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
3	IEEE C95.1-2019	IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz
4	KDB447498 D04	Interim General RF Exposure Guidance v01
5	KDB865664 D01	SAR measurement 100MHz to 6GHz v01r04
6	KDB865664 D02	RF Exposure Reporting v01r02
7	KDB941225 D01	3G SAR Procedures v03r01
8	KDB941225 D05	SAR for LTE Devices v02r05
9	KDB248227 D01	802.11 Wi-Fi SAR v02r02
10	KDB941225 D06	Hotspot Mode v02r01
11	KDB648474 D04	Handset SAR v01r03
12	KDB690783 D01	SAR Listings on Grant v01r03

3.2 Device Category and SAR Limit

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user. Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

Body Position	SAR Value (W/Kg)	
	General Population/ Uncontrolled Exposure	Occupational/ Controlled Exposure
Whole-Body SAR (averaged over the entire body)	0.08	0.4
Partial-Body SAR (averaged over any 1 gram of tissue)	1.60	8.0
SAR for hands, wrists, feet and ankles (averaged over any 10 grams of tissue)	4.0	20.0

NOTE:

General Population/Uncontrolled Exposure: Locations where there is the exposure of individuals who have no knowledge or control of their exposure. General population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Occupational/Controlled Exposure: Locations where there is exposure that may be incurred by persons who are aware of the potential for exposure. In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

3.3 Test Result Summary

The maximum results of Specific Absorption Rate (SAR) found during test as follows:

<Highest Reported standalone SAR Summary>

Exposure Position	Frequency Band	Reported SAR (W/kg)	Equipment Class	Highest Reported SAR (W/kg)
Head 1-g SAR (0 mm Gap)	GSM 850	0.034	PCE	0.559
	GSM 1900	0.172		
	WCDMA Band II	0.559		
	WCDMA Band IV	0.386		
	WCDMA Band V	0.138		
	LTE Band 2	0.037		
	LTE Band 4	0.354		
	LTE Band 5	0.105		
	LTE Band 7	0.122		
	LTE Band 41	0.073		
	LTE Band 66	0.222		
	WLAN 2.4 GHz	0.472	DTS	
	RLAN 5.2 GHz	0.386	NII	
	Bluetooth	0.003	DSS	
Exposure Position	Frequency Band	Reported SAR (W/kg)	Equipment Class	Highest Reported SAR (W/kg)
Hotspot(Body) 1-g SAR (10 mm Gap)	GSM 850	0.676	PCE	0.799
	GSM 1900	0.768		
	WCDMA Band II	0.486		
	WCDMA Band IV	0.327		
	WCDMA Band V	0.186		
	LTE Band 2	0.799		
	LTE Band 4	0.289		
	LTE Band 5	0.175		
	LTE Band 7	0.567		
	LTE Band 41	0.261		
	LTE Band 66	0.257		
	WLAN 2.4 GHz	0.369	DTS	
	RLAN 5.2 GHz	0.121	NII	
	Bluetooth	0.002	DSS	

This device is in compliance with Specific Absorption Rate(SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC47 CFR part 2(2.1093) and ANSI/IEEE C95.1-2019, and had been tested in accordance with the measurement methods and procedures specified in IEEE Std. 1528-2013.

<Highest Reported Simultaneous SAR>

Exposure Position	Simultaneous Configuration	Highest Reported Simultaneous Transmission SAR (W/kg)	Limit (W/kg)	Verdict
Head 1-g SAR (0 mm Gap)	WCDMA Band II + 2.4G WIFI	1.031	1.6	Pass
Hotspot(Body) 1-g SAR (10 mm Gap)	LTE Band 2 + 2.4G WIFI	1.168	1.6	Pass

3.4 Test Uncertainty

3.4.1 Measurement uncertainty evaluation for SAR test (450MHz to 6GHz)

Uncertainty Component	Tol (+-%)	Prob. Dist.	Div.	Unc. $u(x_i)=a(x_i)/q_i$	Ci (1g)	Ci (10g)	1g Ui (+-%)	10 g Ui (+-%)	Vi veff
Measurement System									
Probe calibration	14	N (k = 2)	2	7.00	1	1	7.00	7.00	∞
Probe calibration drift	4	R	$\sqrt{3}$	2.31	1	1	2.31	2.31	∞
Probe linearity	4.7	R	$\sqrt{3}$	2.71	1	1	2.71	2.71	∞
detection limit	1	R	$\sqrt{3}$	0.58	1	1	0.58	0.58	∞
Probe isotropy	3.5	R	$\sqrt{3}$	2.02	0.71	0.71	1.43	1.43	∞
Hemispherical Isotropy	5.9	N	1	5.90	0.71	0.71	4.19	4.19	∞
Boundary effect	1	R	1.73	0.58	1	1	0.58	0.58	∞
Integration time	1.4	R	1.73	0.81	1	1	0.81	0.81	∞
Response time	0	R	1.73	0.00	1	1	0.00	0.00	∞
Readout electronics	0.5	N	1	0.50	1	1	0.50	0.50	∞
RF ambient and noise	3	R	$\sqrt{3}$	1.73	1	1	1.73	1.73	∞
Probe positioning errors	3.28	N	1	3.28	0.33	0.33	1.08	1.08	∞
Data processing errors	2.3	R	1	1.33	1	1	1.33	1.33	∞
Conductivity measurement	4.07	N	1	2.35	0.79	0.77	1.86	1.81	∞
Permittivity measurement	5.06	N	1	2.92	0.23	0.26	0.67	0.76	∞
Liquid Conductivity - Temperature Uncertainty	2.5	R	1	1.44	0.79	0.77	1.14	1.11	∞
Liquid Permittivity - Temperature Uncertainty	2.5	R	$\sqrt{3}$	1.44	0.23	0.26	0.33	0.38	∞
Shell permittivity	2.9	R	$\sqrt{3}$	1.67	0.25	0.25	0.42	0.42	∞
Repeatability of positioning the DUT or source against the phantom	2.7	N	1	2.70	2	2	5.40	5.40	∞
Uncertainty in accepted power	3	R	1	3.00	1	1	3.00	3.00	∞
Effect of operating mode on probe sensitivity	2.3	R	$\sqrt{3}$	1.33	1	1	1.33	1.33	∞
Variation in SAR due to drift in output of DUT	2.2	N	1	2.20	1	1	2.20	2.20	∞
Phantom deviation from target (ϵ' , σ)	1.9	N	1	1.90	1	1	1.90	1.90	∞
SAR scaling	0	R	$\sqrt{3}$	0.00	1	1	0.00	0.00	∞
Probe calibration	14	N (k = 2)	2	7.00	1	1	7.00	7.00	∞
Combined uncertainty	/						11.94	11.94	
Expanded Uncertainty (95% Confidence interval)	/						23.89	23.88	

* This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.4.2 Measurement uncertainty evaluation for system check

Uncertainty Component	Tol (+-%)	Prob. Dist.	Div.	Unc. $u(x_i)=a(x_i)/q_i$	Ci (1g)	Ci (10 g)	1g Ui (+-%)	10 g Ui (+-%)	V _i v _{eff}
Measurement System									
Probe calibration	14	N (k = 2)	2	7.00	1	1	7.00	7.00	∞
Probe calibration drift	4	R	1.73	2.31	1	1	2.31	2.31	∞
Probe linearity	4.7	R	1.73	2.72	1	1	2.72	2.72	∞
Detection limit	1	R	1.73	0.58	1	1	0.58	0.58	∞
Axial Isotropy	3.5	R	1.73	2.02	1	1	2.02	2.02	∞
Hemispherical Isotropy	5.9	R	1.73	3.41	0.71	0.71	2.42	2.42	∞
Boundary effect	1	R	1.73	0.58	0.71	0.71	0.41	0.41	∞
Integration time	1.4	R	1.73	0.81	1	1	0.81	0.81	∞
Response time	0	R	1.73	0.00	1	1	0.00	0.00	∞
Readout electronics	0.5	N	1	0.50	1	1	0.50	0.50	∞
Noise	3	R	1.73	1.73	1	1	1.73	1.73	∞
Reflections	3	R	1.73	1.73	1	1	1.73	1.73	∞
Positioner Mechanical Tolerance	3.28	R	1.73	1.90	0.33	0.33	0.63	0.63	∞
Positioning with respect to Phantom Shell	3.28	R	1.73	1.90	0.33	0.33	0.63	0.63	∞
Data processing errors	2.3	R	1.73	1.33	1	1	1.33	1.33	∞
Conductivity measurement	4.07	N	1	4.07	0.79	0.77	3.22	3.13	∞
Permittivity measurement	5.06	N	1	5.06	0.23	0.26	1.16	1.32	∞
Liquid Conductivity - Temperature Uncertainty	2.5	R	1.73	1.45	0.79	0.77	1.14	1.11	∞
Liquid Permittivity - Temperature Uncertainty	2.5	R	1.73	1.45	0.23	0.26	0.33	0.38	∞
Shell permittivity	2.9	R	1.73	1.68	0.25	0.25	0.42	0.42	∞
Distance between the radiating element of the DUT and the phantom medium	2.7	N	1	2.70	2	2	5.40	5.40	∞
Deviation of experimental antennas	4.5	N	1.73	2.60	1	1	2.60	2.60	∞
Other uncertainty contributions	2	R	1	2.00	1	1	2.00	2.00	∞
Uncertainty in accepted power	3	R	1.73	1.73	1	1	1.73	1.73	∞
Phantom deviation from target (ϵ' , σ)	1.9	N	1	1.90	1	0.87	1.90	1.65	∞
$u(\Delta SAR)$	/						11.89	11.85	
Expanded uncertainty (95% confidence interval)	/						23.79	23.70	

4. Measurement System

4.1 Specific Absorption Rate (SAR) Definition

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

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

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

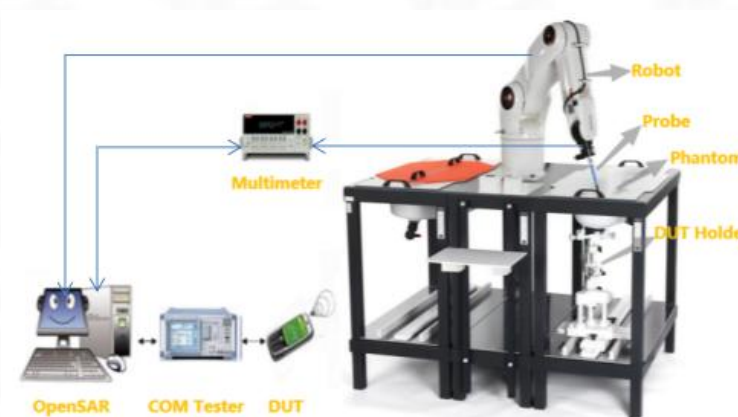
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

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

4.2 MVG SAR System

4.2.1 SAR system diagram



4.2.2 Robot



A standard high precision 6-axis robot (Denso) with teaches pendant with Scanning System

- It must be able to scan all the volume of the phantom to evaluate the tridimensional distribution of SAR.
- Must be able to set the probe orthogonal of the surface of the phantom ($\pm 30^\circ$).
- Detects stresses on the probe and stop itself if necessary to keep the integrity of the probe.

4.2.3 E-Field Probe

For the measurements, the Specific Dosimetric SSE2 E-Field Probe with following specifications is used:

- Dynamic range: 0.01-100 W/kg
- Tip diameter: 2mm for SSE2
- Distance between probe tip and sensor centre: 1mm for SSE2
- Distance between sensor centre and the inner phantom surface: 2mm for $f \geq 4\text{GHz}$.
- Probe linearity: $<0.25\text{dB}$.
- Axial Isotropy: $<0.25\text{dB}$.
- Spherical Isotropy: $<0.50\text{dB}$.
- Calibration range: 150 to 6000 MHz for head & body simulating liquid
- Angle between probe axis (evaluation axis) and surface normal line: less than 20° .



4.2.4 Phantoms

SAM Phantom

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The probe scanning of the E-Field is done in the 2 halves of the normalized head. The normalized shape of the phantom corresponds to the dimensions of 90% of an adult head size. It enables the dosimetric evaluation of left and right-hand phone usage and includes an additional flat phantom part for the simplified body performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.



SAM Phantom

The thickness of the phantom amounts to $2\text{ mm} \pm 0.2\text{ mm}$. The materials for the phantom do not affect the radiation of the device under test (DUT) : $\epsilon_r' < 5$
The head is filled with tissue simulating liquid. The hand do not have to be modeled.

TWIN SAM phantom

	Mechanical	Electrical	
Overall thickness	$2 \pm 0.2\text{ mm}$ (except ear area)	Relative permittivity	3.4
Dimensions	1000 mm(L) x 500 mm(W) x 200 mm(H)	Loss tangent	0.02
Maximum volume	27 L		
Material	Fiberglass based		

ELLIPTICAL Phantom

The phantom is for Body performance check filled with tissue-equivalent liquid to a depth of at least 150 mm, whose shell material is resistant to damage or reaction with tissue-equivalent liquid chemicals.



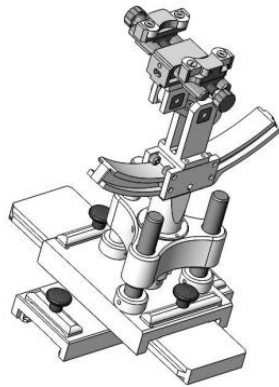
ELLI Phantom

The shape of the phantom is an ellipse with length $600\text{ mm} \pm 5\text{ mm}$ and width $400\text{ mm} \pm 5\text{ mm}$.
The phantom shell is made of low-loss and low-permittivity material, having loss tangent $\tan \delta \leq 0.05$ and relative permittivity:
 $\epsilon_r' \leq 5$ for $f \leq 3\text{ GHz}$
 $3 \leq \epsilon_r' \leq 5$ for $f > 3\text{ GHz}$
The thickness of the bottom-wall of the flat phantom is 2.0 mm with a tolerance of $\pm 0.2\text{ mm}$.

Technical & mechanical characteristics

Shell thickness	$2\text{ mm} \pm 0.2\text{ mm}$
Filling volume	25 L
Dimensions	600 mm x 400 mm x 200 mm
Permittivity	4.4
Loss tangent	0.017

4.2.5 Device Holder



System Material	Permittivity	Loss tangent
Delrin	3.7	0.005

(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
PMMA	2.9	0.028

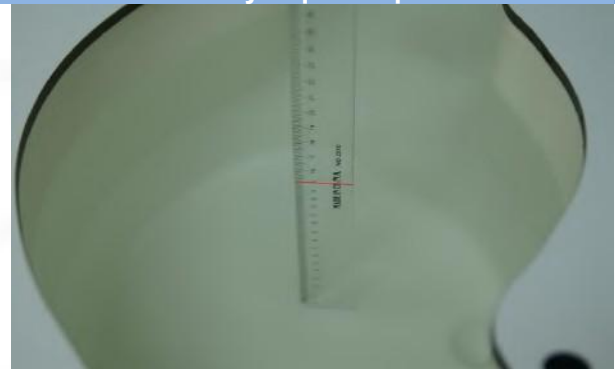
4.2.6 Simulating Liquid

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5%.

Head Liquid Depth



Body Liquid Depth



The following table gives the recipes for tissue simulating liquid and the theoretical Conductivity/Permittivity.

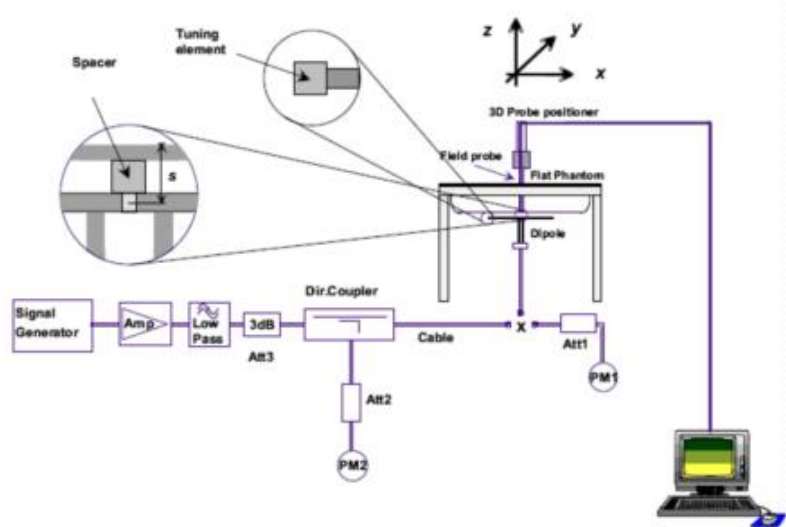
Head (Reference IEEE1528)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ε
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.4	40.0
2450	55.0	0	0	0.1	0	44.9	1.80	39.2
2600	54.9	0	0	0.1	0	45.0	1.96	39.0
Frequency (MHz)	Water (%)	Hexyl Carbitol (%)			Triton X-100 (%)		Conductivity σ (S/m)	Permittivity ε
5200	62.52	17.24			17.24		4.66	36.0
5800	62.52	17.24			17.24		5.27	35.3
Body (From instrument manufacturer)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ε
750	51.7	47.2	0	0.9	0.1	0	0.96	55.5
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
900	50.8	48.2	0	0.9	0.1	0	1.05	55.0
1800, 1900, 2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0.1	0	31.3	1.95	52.7
2600	68.2	0	0	0.1	0	31.7	2.16	52.5
Frequency(MHz)	Water	DGBE (%)			Salt (%)		Conductivity σ (S/m)	Permittivity ε
5200	78.60	21.40			/		5.30	49.00
5800	78.50	21.40			0.1		6.00	48.20

5. System Verification

5.1 Purpose of System Check

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

5.2 System Check Setup



6. TEST POSITION CONFIGURATIONS

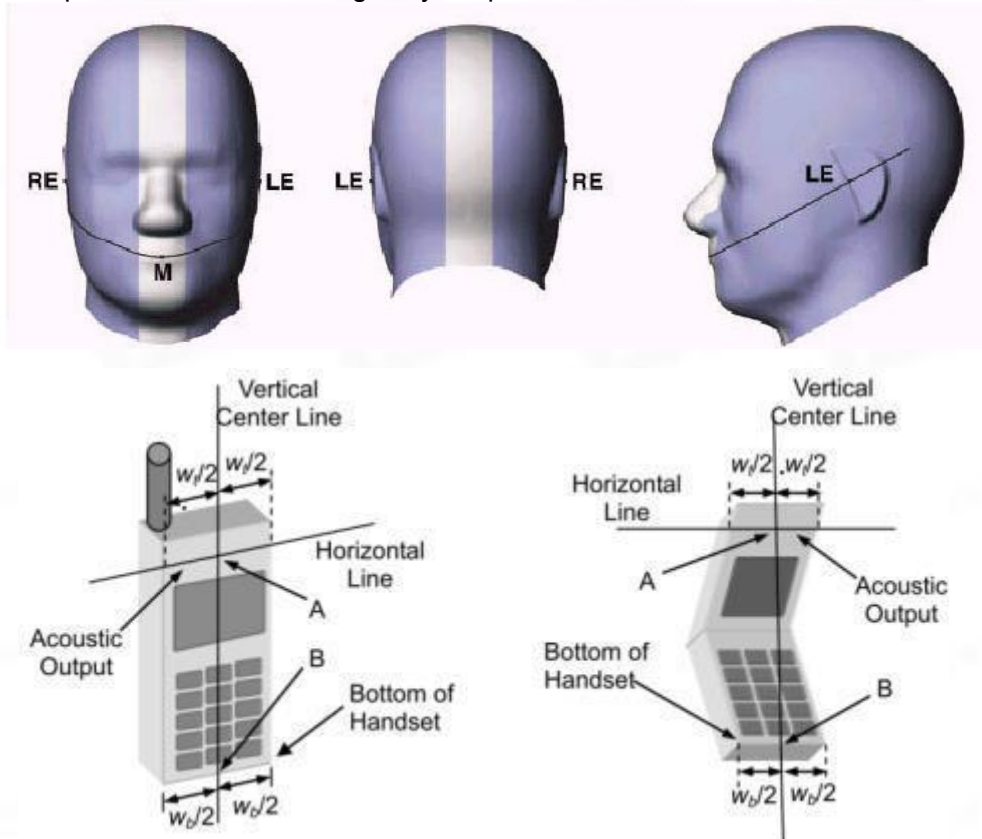
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

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

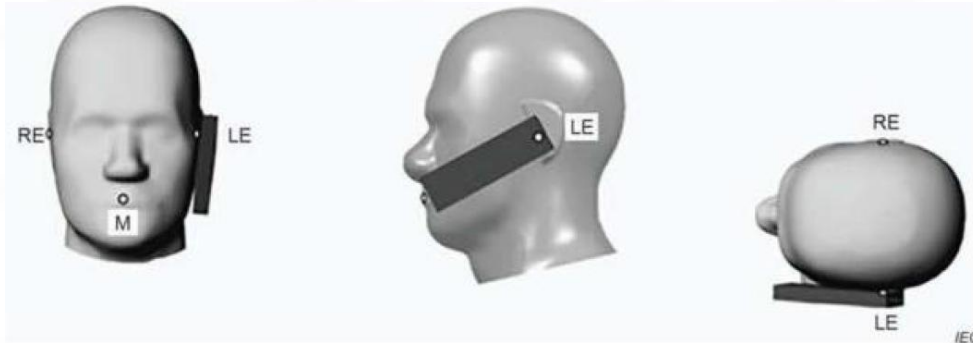
6.1.1 Two Imaginary Lines on the Handset

- The vertical center line passes through two points on the front side of the handset - the midpoint of the width w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b of the bottom of the handset.
- The horizontal line is perpendicular to the vertical center line and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



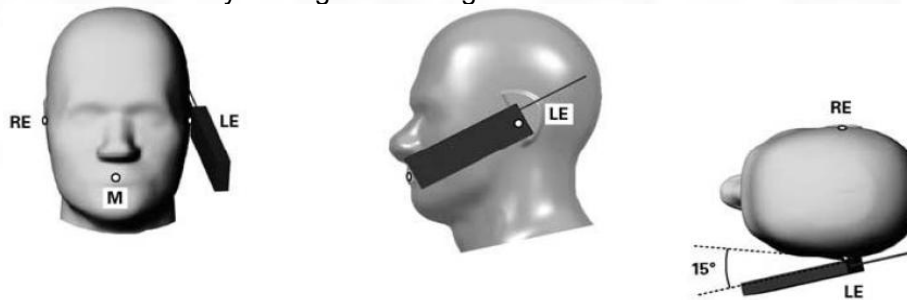
6.1.2 Two Imaginary Lines on the Handset

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



6.1.3 Titled Position

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

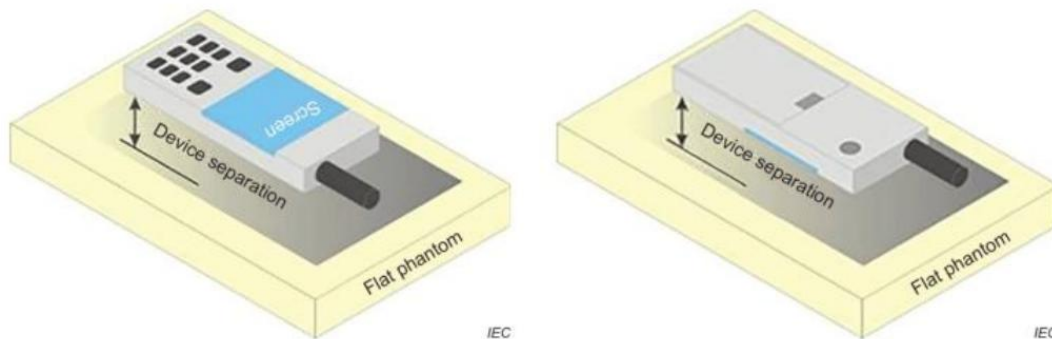


6.2 Body-worn Position Conditions

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB 447498 are used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode. When the reported SAR for a body-worn accessory.

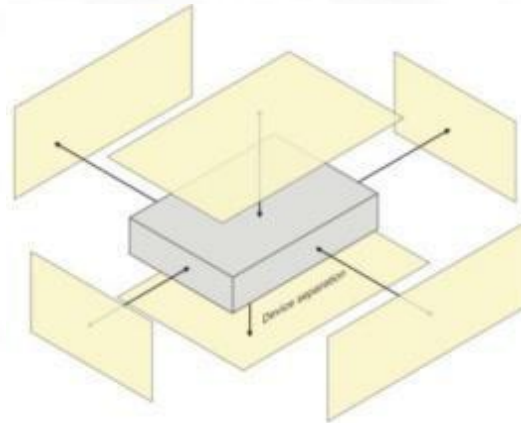
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. All body-worn accessories containing metallic components are tested in conjunction with the host device.

Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice only operations in its normal and expected use conditions, testing of data mode for body-worn compliance is not required. A conservative minimum test separation distance for supporting off-the-shelf body-worn accessories that may be acquired by users of consumer handsets is used to test for body-worn accessory SAR compliance. This distance is determined by the handset manufacturer, according to the requirements of Supplement C 01-01. Devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, will be tested using a conservative minimum test separation distance ≤ 5 mm to support compliance.



6.3 Hotspot Mode Exposure Position Conditions

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing functions, the relevant hand and body exposure conditions are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surfaces and edges with a transmitting antenna located within 25 mm from that surface or edge. When the form factor of a handset is smaller than 9 cm x 5 cm, a test separation distance of 5 mm (instead of 10 mm) is required for testing hotspot mode. When the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).



6.4 Product Specific 10g Exposure Consideration

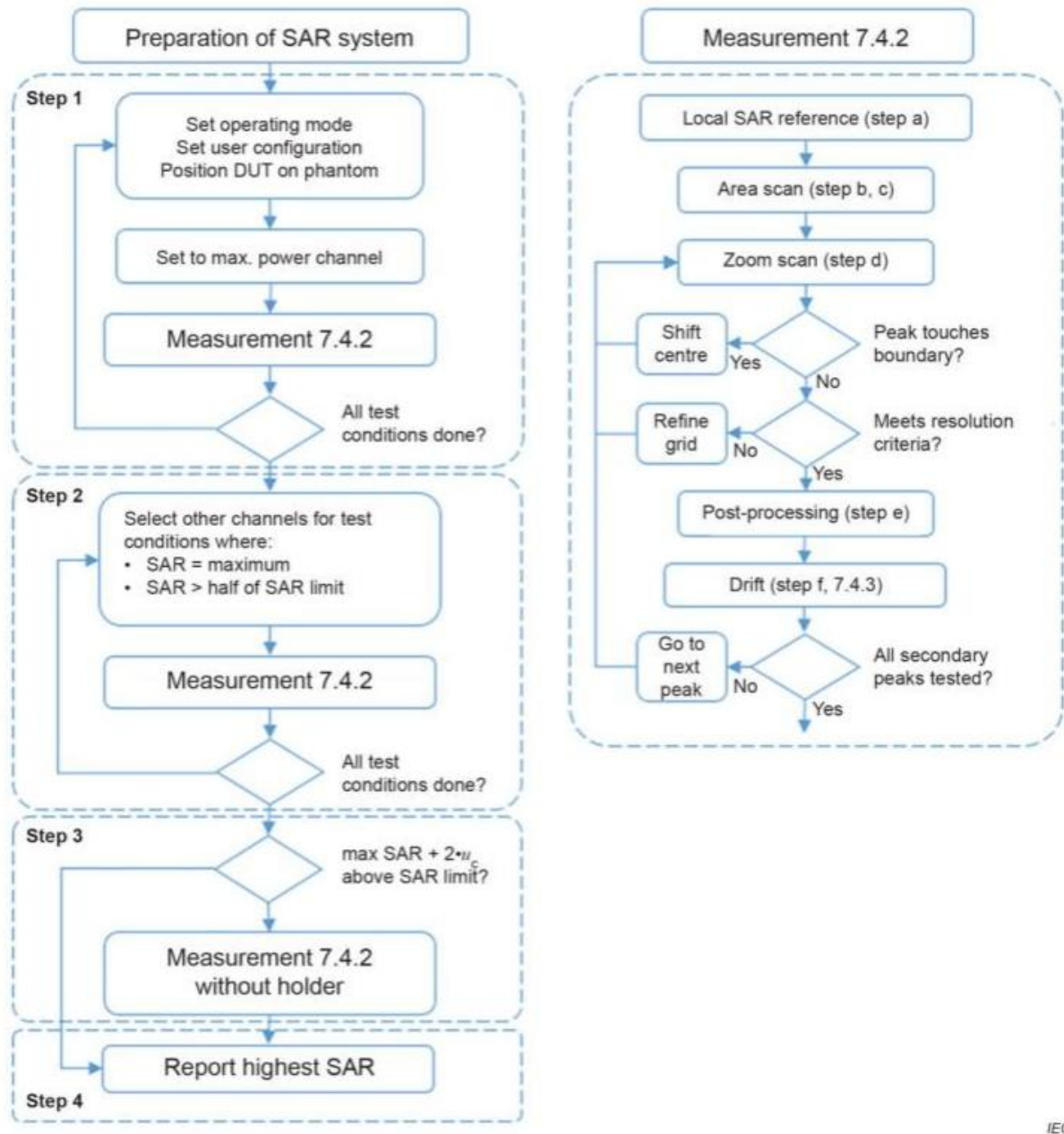
According with FCC KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance;

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

7. Measurement Procedure

7.1 Measurement Process Diagram

Body SAR



IEC

7.2 SAR Scan General Requirement

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1 g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.

			≤3GHz	>3GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5±1 mm	½ δ·ln(2)±0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30°±1°	20°±1°
Maximum area scan spatial resolution: Δx Area , Δy Area			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3–4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom			≤ 2 GHz: ≤ 8 mm 2–3 GHz: ≤ 5 mm*	3–4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: Δz Zoom (n)		≤ 5 mm	3–4 GHz: ≤ 4 mm
				4–5 GHz: ≤ 3 mm
				5–6 GHz: ≤ 2 mm
	graded grid	Δz Zoom (1): between 1st two points closest to phantom surface	≤ 4 mm	3–4 GHz: ≤ 3 mm
				4–5 GHz: ≤ 2.5 mm
				5–6 GHz: ≤ 2 mm
		≤ 1.5·Δz Zoom (n-1)		
Minimum zoom scan volume	x, y, z		≥30 mm	3–4 GHz: ≥ 28 mm
				4–5 GHz: ≥ 25 mm
				5–6 GHz: ≥ 22 mm
Note:				
1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528- 2011 for details.				
2. * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB				
447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

7.3 Measurement Procedure

The following steps are used for each test position

- a. Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- b. Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- c. Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- d. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

7.4 Area & Zoom Scan Procedure

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

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

8. Conducted RF Output Power

8.1 GSM

Mode: GSM850		Maximum Tune-up(dBm)	Burst Average Power (dBm)			Division Factors	Frame-Average Power (dBm)		
			CH128	CH190	CH251		CH128	CH190	CH251
			824.2MHz	836.6MHz	848.8MHz		824.2MHz	836.6MHz	848.8MHz
GSM		32.00	31.87	31.91	31.95	-9.03	22.84	22.88	22.92
GPRS (GMSK)	1Tx slot	32.00	31.78	31.83	31.89	-9.03	22.75	22.80	22.86
	2Tx slots	32.00	31.77	31.83	31.89	-6.02	25.75	25.81	25.87
	3Tx slots	31.00	30.69	30.71	30.67	-4.26	26.43	26.45	26.41
	4Tx slots	29.50	29.00	28.95	28.88	-3.01	25.99	25.94	25.87
EGPRS (8PSK)	1Tx slot	26.50	26.31	26.29	26.27	-9.03	17.28	17.26	17.24
	2Tx slots	25.00	24.63	24.64	24.88	-6.02	18.61	18.62	18.86
	3Tx slots	22.50	22.37	22.39	22.38	-4.26	18.11	18.13	18.12
	4Tx slots	21.00	20.94	20.98	20.95	-3.01	17.93	17.97	17.94
Mode: GSM1900		Maximum Tune-up(dBm)	Burst Average Power (dBm)			Division Factors	Frame-Average Power (dBm)		
			CH512	CH661	CH810		CH512	CH661	CH810
			1850.2MHz	1880.0MHz	1909.8MHz		1850.2MHz	1880.0MHz	1909.8MHz
GSM		29.00	28.29	28.25	28.83	-9.03	19.26	19.22	19.80
GPRS (GMSK)	1Tx slot	29.00	28.27	28.24	28.83	-9.03	19.24	19.21	19.80
	2Tx slots	29.00	28.24	28.13	28.64	-6.02	22.22	22.11	22.62
	3Tx slots	27.50	26.81	26.75	27.41	-4.26	22.55	22.49	23.15
	4Tx slots	25.50	24.66	24.58	25.36	-3.01	21.65	21.57	22.35
EGPRS (8PSK)	1Tx slot	25.50	24.95	24.77	25.38	-9.03	15.92	15.74	16.35
	2Tx slots	24.00	22.94	22.95	23.86	-6.02	16.92	16.93	17.84
	3Tx slots	22.00	20.80	20.79	21.51	-4.26	16.54	16.53	17.25
	4Tx slots	20.50	19.61	19.72	20.46	-3.01	16.60	16.71	17.45
Note: 1) Division Factors To average the power, the division factor is as follows: 1Tx-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB 2Tx-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB 3Tx-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB 4Tx-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB									

8.2 WCDMA

Mode		Maximum Tune-up(dBm)	WCDMA Band II		
			Conducted Power (dBm)		
			CH9262	CH9400	CH9538
RMC 12.2K		26.00	1852.4	1880.0	1907.6
HSDPA	Subtest-1	25.00	24.80	24.13	24.07
	Subtest-2	24.50	24.26	23.61	23.53
	Subtest-3	24.50	24.33	23.68	23.54
	Subtest-4	24.00	23.94	23.30	23.18
HSUPA	Subtest-1	24.50	24.40	23.73	23.60
	Subtest-2	24.00	23.73	23.09	22.97
	Subtest-3	24.50	24.02	23.31	23.18
	Subtest-4	24.00	23.51	22.81	22.59
	Subtest-5	24.00	23.76	23.02	22.80
Mode		Maximum Tune-up(dBm)	WCDMA Band IV		
			Conducted Power (dBm)		
			CH1312	CH1413	CH1513
RMC 12.2K		24.50	1712.4	1732.6	1752.6
HSDPA	Subtest-1	23.50	23.38	22.37	23.32
	Subtest-2	23.00	22.81	21.80	22.73
	Subtest-3	23.00	22.89	21.82	22.82
	Subtest-4	23.00	22.57	21.47	22.43
HSUPA	Subtest-1	23.00	22.98	21.99	22.84
	Subtest-2	22.50	22.33	21.30	22.23
	Subtest-3	23.00	22.61	21.50	22.53
	Subtest-4	22.50	22.02	20.99	21.96
	Subtest-5	22.50	22.31	21.29	22.24
Mode		Maximum Tune-up(dBm)	WCDMA Band V		
			Conducted Power (dBm)		
			CH4132	CH4183	CH4233
RMC 12.2K		23.00	826.4	836.6	846.6
HSDPA	Subtest-1	22.00	21.78	21.76	21.69
	Subtest-2	21.50	21.27	21.20	21.10
	Subtest-3	21.50	21.34	21.25	21.15
	Subtest-4	21.00	20.98	20.90	20.79
HSUPA	Subtest-1	21.50	21.40	21.38	21.21
	Subtest-2	21.00	20.72	20.71	20.59
	Subtest-3	21.00	20.97	20.91	20.87
	Subtest-4	20.50	20.45	20.39	20.36
	Subtest-5	21.00	20.65	20.68	20.60
Per KDB 941225 D01, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/2$ dB higher than the primary mode (RMC12.2kbps) 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.					

8.3 LTE

Band 2

LTE-FDD Band 2				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		18607	18900	19193
					1850.7MHz	1880.0MHz	1909.3MHz
1.4MHz	QPSK	1	0	22.50	21.04	21.84	22.23
			2	22.50	21.05	21.84	22.24
			5	22.50	21.04	21.82	22.27
		3	0	22.50	21.15	21.94	22.38
			2	22.50	21.15	21.93	22.37
			3	22.50	21.44	21.97	22.35
		6	0	21.50	20.50	20.87	21.39
	16QAM	1	0	22.00	20.33	21.38	21.58
			2	22.00	20.32	21.33	21.54
			5	22.00	20.31	21.38	21.56
		3	0	21.50	19.80	20.59	21.07
			2	21.50	19.80	20.55	21.05
			3	21.50	20.32	20.64	21.02
		6	0	21.50	20.55	21.11	21.37
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	18615	18900	19185
					1851.5MHz	1880.0MHz	1908.5MHz
3MHz	QPSK	1	0	22.50	21.08	21.52	22.02
			7	22.50	21.09	21.50	22.12
			14	22.50	21.06	21.51	22.10
		8	0	21.50	20.22	20.63	21.13
			4	21.50	20.24	20.65	21.13
			7	21.50	20.23	20.65	21.16
		15	0	21.50	20.22	20.63	21.14
	16QAM	1	0	21.50	20.24	20.71	21.39
			7	21.50	20.28	20.70	21.37
			14	21.50	20.27	20.71	21.34
		8	0	21.50	20.51	20.78	21.35
			4	21.50	20.51	20.80	21.28
			7	21.50	20.52	20.74	21.33
		15	0	21.50	20.33	20.48	21.18
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	18625	18900	19175
					1852.5MHz	1880.0MHz	1907.5MHz
5MHz	QPSK	1	0	22.50	21.27	21.59	22.10
			13	22.50	21.23	21.63	22.11
			24	22.50	21.21	21.60	22.07
		12	0	21.50	20.28	20.62	21.15
			6	21.50	20.16	20.64	21.17
			13	21.50	20.28	20.69	21.19
		25	0	21.50	20.24	20.69	21.20
	16QAM	1	0	21.50	20.03	20.74	21.07
			13	21.50	20.08	20.74	21.10
			24	21.50	20.03	20.75	21.12
		12	0	21.50	20.27	20.75	21.31
			6	21.50	20.29	20.78	21.26
			13	21.50	20.22	20.74	21.27
		25	0	21.50	20.35	20.61	21.29

LTE-FDD Band 2				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		18650 1855.0MHz	18900 1880.0MHz	19150 1905.0MHz
10MHz	QPSK	1	0	22.00	21.10	21.55	21.87
			25	22.00	21.09	21.55	21.93
			49	22.50	21.08	21.57	22.04
		25	0	21.50	20.29	20.66	21.17
			13	21.50	20.31	20.65	21.17
			25	21.50	20.26	20.66	21.18
		50	0	21.50	20.27	20.63	21.17
	16QAM	1	0	21.50	20.32	20.67	21.31
			25	21.50	20.37	20.77	21.41
			49	21.50	20.33	20.77	21.37
		25	0	21.50	20.26	20.89	21.23
			13	21.50	20.29	20.79	21.22
			25	21.50	20.23	20.88	21.24
		50	0	21.50	20.30	20.75	21.24
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	18675 1857.5MHz	18900 1880.0MHz	19125 1902.5MHz
15MHz	QPSK	1	0	22.00	21.21	21.58	21.81
			38	22.00	21.16	21.61	21.81
			74	22.00	21.05	21.67	21.99
		36	0	21.50	20.32	20.66	21.02
			18	21.50	20.28	20.60	21.06
			39	21.50	20.30	20.62	21.07
		75	0	21.50	20.31	20.67	21.07
	16QAM	1	0	21.50	20.40	20.85	21.18
			38	21.50	20.38	20.90	21.29
			74	21.50	20.37	20.94	21.28
		36	0	21.50	20.28	20.62	21.07
			18	21.50	20.28	20.62	21.06
			39	21.50	20.32	20.62	21.07
		75	0	21.50	20.33	20.71	21.10
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	18700 1860.0MHz	18900 1880.0MHz	19100 1900.0MHz
20MHz	QPSK	1	0	22.00	21.39	21.65	21.83
			50	22.00	21.35	21.73	21.80
			99	22.00	21.29	21.73	21.92
		50	0	21.00	20.33	20.61	20.97
			25	21.00	20.36	20.59	20.96
			50	21.50	20.33	20.63	21.03
		100	0	21.50	20.33	20.61	21.02
	16QAM	1	0	21.00	20.28	20.85	20.85
			50	21.00	20.26	20.95	20.96
			99	21.50	20.16	20.95	21.05
		50	0	21.50	20.41	20.65	21.07
			25	21.50	20.44	20.64	21.07
			50	21.50	20.38	20.71	21.17
		100	0	21.50	20.41	20.70	21.09

Band 4

LTE-FDD Band 4				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		19957	20175	20393
					1710.7MHz	1732.5MHz	1754.3MHz
1.4MHz	QPSK	1	0	23.00	14.56	22.57	22.44
			2	23.00	14.46	22.58	22.32
			5	23.00	20.52	22.57	22.28
		3	0	23.00	22.61	22.65	22.55
			2	23.00	22.60	22.65	22.54
			3	23.00	22.62	22.62	22.49
		6	0	22.00	21.58	21.63	21.52
	16QAM	1	0	22.50	13.81	22.10	21.74
			2	22.50	13.80	22.11	21.64
			5	22.50	21.68	22.07	21.79
		3	0	21.50	21.43	21.27	21.15
			2	21.50	21.44	21.16	21.14
			3	22.00	21.51	21.34	21.06
		6	0	22.00	21.64	21.84	21.43
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	19965	20175	20385
					1711.5MHz	1732.5MHz	1753.5MHz
3MHz	QPSK	1	0	23.00	22.23	22.59	22.59
			7	23.00	22.28	22.44	22.54
			14	23.00	22.30	22.54	22.54
		8	0	22.00	21.34	21.61	21.61
			4	22.00	21.44	21.62	21.60
			7	22.00	21.38	21.65	21.58
		15	0	22.00	21.47	21.67	21.55
	16QAM	1	0	22.00	21.50	21.59	21.80
			7	22.00	21.48	21.72	21.80
			14	22.00	21.42	21.70	21.79
		8	0	22.00	21.65	21.72	21.74
			4	22.00	21.68	21.75	21.76
			7	22.00	21.75	21.78	21.76
		15	0	22.00	21.57	21.51	21.60
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	19976	20175	20375
					1712.5MHz	1732.5MHz	1752.5MHz
5MHz	QPSK	1	0	23.00	22.59	22.60	22.60
			13	23.00	22.55	22.63	22.61
			24	23.00	22.58	22.61	22.60
		12	0	22.00	21.49	21.61	21.57
			6	22.00	21.49	21.60	21.59
			13	22.00	21.49	21.64	21.56
		25	0	22.00	21.49	21.64	21.62
	16QAM	1	0	22.00	21.32	21.70	21.54
			13	22.00	21.32	21.75	21.49
			24	22.00	21.36	21.74	21.59
		12	0	22.00	21.48	21.76	21.70
			6	22.00	21.56	21.74	21.73
			13	22.00	21.48	21.77	21.72
		25	0	22.00	21.59	21.55	21.64

LTE-FDD Band 4				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20000	20175	20350
					1715.0MHz	1732.5MHz	1750.0MHz
10MHz	QPSK	1	0	23.00	22.32	22.57	22.52
			25	23.00	22.39	22.53	22.51
			49	23.00	22.46	22.63	22.49
		25	0	22.00	21.48	21.58	21.56
			13	22.00	21.48	21.58	21.55
			25	22.00	21.54	21.67	21.55
		50	0	22.00	21.50	21.63	21.55
	16QAM	1	0	22.00	21.67	21.72	21.76
			25	22.00	21.63	21.79	21.75
			49	22.00	21.67	21.80	21.76
		25	0	22.00	21.48	21.72	21.70
			13	22.00	21.50	21.75	21.62
			25	22.00	21.52	21.79	21.62
		50	0	22.00	21.57	21.76	21.61
		Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20025
1717.5MHz	1732.5MHz						1747.5MHz
15MHz	QPSK	1	0	23.00	22.20	22.64	22.52
			38	23.00	22.44	22.62	22.50
			74	23.00	22.48	22.67	22.51
		36	0	22.00	21.50	21.59	21.62
			18	22.00	21.44	21.60	21.62
			39	22.00	21.43	21.57	21.61
		75	0	22.00	21.49	21.57	21.59
	16QAM	1	0	22.00	21.60	21.83	21.75
			38	22.00	21.59	21.95	21.81
			74	22.50	21.66	22.01	21.77
		36	0	22.00	21.47	21.61	21.58
			18	22.00	21.44	21.58	21.59
			39	22.00	21.51	21.61	21.65
		75	0	22.00	21.57	21.67	21.64
		Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20050
1720.0MHz	1732.5MHz						1745.0MHz
20MHz	QPSK	1	0	23.00	22.43	22.70	22.45
			50	23.00	22.60	22.68	22.48
			99	23.00	22.55	22.73	22.45
		50	0	22.00	21.44	21.52	21.54
			25	22.00	21.45	21.51	21.53
			50	22.00	21.54	21.55	21.54
		100	0	22.00	21.52	21.54	21.56
	16QAM	1	0	22.00	21.35	21.75	21.44
			50	22.00	21.44	21.79	21.54
			99	22.00	21.48	21.83	21.48
		50	0	22.00	21.53	21.54	21.65
			25	22.00	21.56	21.52	21.59
			50	22.00	21.60	21.54	21.68
		100	0	22.00	21.60	21.62	21.61

Band 5

LTE-FDD Band 5				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20407	20525	20643
					824.7MHz	836.5MHz	848.3MHz
1.4MHz	QPSK	1	0	23.50	23.42	23.27	23.18
			2	23.50	23.35	23.28	23.16
			5	23.50	23.31	23.28	23.03
		3	0	23.50	23.41	23.37	23.24
			2	23.50	23.37	23.36	23.21
			3	23.50	23.34	23.39	23.21
		6	0	22.50	22.34	22.36	22.18
	16QAM	1	0	23.00	22.50	22.67	22.32
			2	23.00	22.40	22.66	22.29
			5	23.00	22.45	22.67	22.35
		3	0	22.50	22.20	21.93	21.86
			2	22.50	22.16	21.91	21.83
			3	22.50	22.16	21.92	21.72
		6	0	23.00	22.23	22.50	22.09
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20415	20525	20635
					825.5MHz	836.5MHz	847.5MHz
3MHz	QPSK	1	0	23.50	23.11	23.13	23.22
			7	23.50	23.11	23.11	23.14
			14	23.50	23.13	23.17	23.10
		8	0	22.50	22.22	22.26	22.22
			4	22.50	22.25	22.22	22.20
			7	22.50	22.23	22.25	22.18
		15	0	22.50	22.30	22.31	22.21
	16QAM	1	0	22.50	22.18	22.22	22.38
			7	22.50	22.21	22.25	22.35
			14	22.50	22.20	22.24	22.29
		8	0	22.50	22.42	22.33	22.28
			4	22.50	22.48	22.32	22.26
			7	22.50	22.46	22.33	22.28
		15	0	22.50	22.31	22.09	22.19
LTE-FDD Band 5				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20425	20525	20625
					826.5MHz	836.5MHz	846.5MHz
5MHz	QPSK	1	0	23.50	23.27	23.19	23.21
			13	23.50	23.26	23.24	23.14
			24	23.50	23.21	23.18	23.00
		12	0	22.50	22.25	22.28	22.22
			6	22.50	22.18	22.27	22.19
			13	22.50	22.24	22.23	22.12
		25	0	22.50	22.21	22.29	22.11
	16QAM	1	0	22.50	21.97	22.23	22.10
			13	22.50	21.93	22.19	22.03
			24	22.50	21.95	22.19	21.98
		12	0	22.50	22.23	22.30	22.27
			6	22.50	22.13	22.30	22.24
			13	22.50	22.18	22.26	22.17
		25	0	22.50	22.30	22.17	22.17

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20450	20525	20600
					829.0MHz	836.5MHz	844.0MHz
10MHz	QPSK	1	0	23.50	23.09	23.06	23.20
			25	23.50	23.11	23.21	23.12
			49	23.50	23.16	23.16	23.10
		25	0	22.50	22.14	22.15	22.23
			13	22.50	22.19	22.14	22.33
			25	22.50	22.14	22.19	22.21
		50	0	22.50	22.18	22.22	22.26
			0	22.50	22.24	22.30	22.26
			25	22.50	22.19	22.27	22.23
	16QAM	1	49	22.50	22.24	22.29	22.28
			0	22.50	22.13	22.19	22.31
			13	22.50	22.13	22.34	22.32
		25	25	22.50	22.11	22.33	22.30
			0	22.50	22.17	22.21	22.27
			0	22.50			
			0	22.50			

Band 7

LTE-FDD Band 7				Maximum Tune-up(dBm)	Conducted Power(dBm)					
Bandwidth	Modulation	RB allocation	RB offset		20775	21100	21425			
					2502.5MHz	2535.0MHz	2567.5MHz			
5MHz	QPSK	1	0	23.00	22.21	22.50	22.50			
			13	23.00	22.24	22.42	22.50			
			24	23.00	22.13	22.51	22.38			
		12	0	22.00	21.21	21.44	21.50			
			6	21.50	21.19	21.40	21.42			
			13	22.00	21.17	21.64	21.46			
		25	0	22.00	21.37	21.64	21.30			
			16QAM	1	0	21.50	21.35	21.49	21.45	
					13	21.50	21.34	21.42	21.30	
	24	21.50			21.33	21.49	21.32			
	12	0		22.00	21.35	21.57	21.67			
		6		22.00	21.30	21.53	21.55			
		13		22.00	21.54	21.69	21.44			
	25	0		22.00	21.36	21.81	21.51			
		Bandwidth		Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20800	21100	21400
								2505.0MHz	2535.0MHz	2565.0MHz
10MHz	QPSK	1	0	20.50	20.24	16.20	16.50			
			25	17.00	15.59	16.33	16.77			
			49	17.00	15.71	16.28	16.71			
		25	0	16.00	15.09	15.34	15.81			
			13	16.00	14.91	15.46	15.95			
			25	16.50	14.94	15.50	16.11			
		50	0	16.00	15.04	15.43	15.83			
			16QAM	1	0	16.50	14.79	15.52	16.09	
					25	16.50	14.98	15.50	16.05	
	49	16.50			15.12	15.39	16.06			
	25	0		16.50	14.98	15.62	16.08			
		13		16.50	14.95	15.70	16.14			
		25		16.00	15.06	15.67	15.69			
	50	0		16.50	15.10	15.57	16.00			

LTE-FDD Band 7				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20825	21100	21375
					2507.5MHz	2535.0MHz	2562.5MHz
15MHz	QPSK	1	0	17.00	16.28	16.66	16.37
			38	17.00	15.86	16.60	16.59
			74	17.00	16.02	16.53	16.65
		38	0	16.00	15.50	15.47	15.64
			18	15.50	15.36	15.49	15.44
			39	16.00	15.29	15.52	15.76
		75	0	16.00	15.30	15.55	15.81
	16QAM	1	0	16.50	15.34	16.00	16.02
			38	19.50	15.22	15.83	19.36
			74	16.00	15.44	15.70	15.90
		38	0	16.00	15.42	15.49	15.66
			18	16.00	15.35	15.45	15.67
			39	16.00	15.31	15.56	15.74
		75	0	16.00	15.40	15.66	15.94
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20850	21100	21350
					2510.0MHz	2535.0MHz	2560.0MHz
20MHz	QPSK	1	0	17.00	16.30	16.57	16.12
			50	17.00	16.12	16.62	16.27
			99	16.50	16.30	16.43	16.41
		50	0	15.50	15.35	15.32	15.42
			25	21.00	20.53	15.41	15.46
			50	21.00	15.19	15.31	20.84
		100	0	16.00	15.30	15.25	15.57
	16QAM	1	0	16.00	15.14	15.76	15.34
			50	16.00	15.12	15.69	15.54
			99	16.00	15.25	15.55	15.43
		50	0	16.00	15.39	15.46	15.66
			25	16.00	15.27	15.57	15.67
			50	16.00	15.36	15.38	15.67
		100	0	15.50	15.33	15.40	15.49

Band 41

LTE-TDD Band 41				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		39675	40620	41565
					2498.5MHz	2593.0MHz	2687.5MHz
5MHz	QPSK	1	0	16.50	15.06	15.94	16.39
			13	16.50	12.37	16.10	15.77
			24	16.50	10.42	16.13	14.95
		12	0	15.50	8.51	15.33	15.03
			6	15.50	8.53	15.44	15.07
			13	15.50	9.64	15.36	14.94
		25	0	15.50	9.13	15.42	14.93
	16QAM	1	0	15.50	14.34	15.33	15.02
			13	16.00	9.72	15.50	14.94
			24	16.00	10.10	15.60	14.77
		12	0	16.00	8.29	15.63	15.11
			6	19.50	8.31	15.58	19.13
			13	16.00	9.38	15.60	15.03
		25	0	16.00	8.87	15.52	15.05

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	39700	40620	41540
					2501.0MHz	2593.0MHz	2685.0MHz
10MHz	QPSK	1	0	21.50	9.91	21.34	16.45
			25	16.50	11.95	16.34	16.22
			49	16.50	13.81	16.38	15.41
		25	0	16.00	11.38	15.64	15.37
			13	16.00	11.39	15.58	15.37
			25	16.00	13.26	15.66	15.16
	16QAM	50	0	16.00	12.36	15.62	15.24
		1	0	15.50	9.67	15.16	15.30
			25	15.50	11.79	15.24	15.12
			49	15.50	13.88	15.28	14.87
		25	0	16.00	11.07	15.73	15.51
			13	16.00	10.84	15.74	15.47
			25	16.00	13.06	15.77	15.24
		50	0	16.00	12.10	15.79	15.43

LTE-TDD Band 41				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		39725	40620	41515
15MHz	QPSK	1	0	17.00	10.41	16.27	16.70
			38	22.00	17.14	16.42	21.71
			74	21.00	15.06	16.47	20.93
		36	0	21.00	13.52	15.73	20.58
			18	16.00	13.66	15.72	15.45
			39	16.00	13.70	15.73	15.48
	16QAM	75	0	16.00	13.70	15.74	15.48
		1	0	21.00	10.05	15.39	20.63
			38	21.00	13.17	15.43	20.62
			74	20.50	15.58	15.51	20.32
		36	0	20.50	13.56	15.74	20.48
			18	16.00	13.68	15.75	15.48
			39	16.00	13.64	15.74	15.54
		75	0	16.00	13.42	15.80	15.65
20MHz	QPSK	1	0	22.50	16.01	22.16	21.95
			50	22.50	19.96	22.24	20.75
			99	22.50	20.49	22.35	16.11
		50	0	21.50	18.66	21.19	15.69
			25	21.50	18.33	21.28	15.81
			50	21.50	19.51	21.30	15.53
	16QAM	100	0	21.50	19.80	21.29	15.71
		1	0	21.00	15.68	20.78	19.91
			50	21.00	19.50	20.79	19.43
			99	21.00	19.98	20.75	17.08
		50	0	21.50	18.36	21.38	15.87
			25	21.50	17.79	21.37	15.86
			50	21.50	19.65	21.49	15.66
		100	0	21.50	19.84	21.35	15.75

Band 66

LTE-FDD Band 66				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		131979	132322	132665
					1710.7MHz	1745.0MHz	1779.3MHz
1.4MHz	QPSK	1	0	23.00	22.42	22.42	22.53
			2	22.50	22.39	22.43	22.47
			5	22.50	22.42	22.38	22.41
		3	0	23.00	22.52	22.50	18.16
			2	23.00	22.55	22.52	18.01
			3	22.50	22.47	22.48	17.84
		6	0	22.00	21.50	21.43	16.71
	16QAM	1	0	22.50	21.66	21.70	22.11
			2	22.50	21.62	21.73	22.09
			5	22.00	21.67	21.66	21.97
		3	0	21.50	21.10	21.27	16.57
			2	21.50	21.14	21.31	16.56
			3	21.50	21.09	21.30	16.48
		6	0	21.50	21.33	21.44	16.91
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	131987	132322	132657
					1711.5MHz	1745.0MHz	1778.5MHz
3MHz	QPSK	1	0	22.00	17.29	21.51	18.18
			7	18.50	17.43	17.95	18.02
			14	18.00	17.50	17.96	17.81
		8	0	17.50	16.67	17.05	16.64
			4	17.50	16.74	17.05	16.68
			7	17.50	16.81	17.07	16.65
		15	0	17.50	16.77	17.16	16.64
	16QAM	1	0	17.50	16.58	17.05	17.43
			7	17.50	16.72	17.07	17.22
			14	17.50	16.69	17.07	16.98
		8	0	17.50	16.92	17.24	16.80
			4	17.50	16.93	17.25	16.76
			7	17.50	16.95	17.24	16.81
		15	0	17.00	16.91	16.90	16.57
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	131997	132322	132647
					1712.5MHz	1745.0MHz	1777.5MHz
5MHz	QPSK	1	0	18.50	17.50	17.95	18.20
			13	18.50	17.66	18.00	18.08
			24	18.00	17.70	17.99	17.87
		12	0	17.50	16.73	17.08	16.77
			6	17.50	16.78	17.13	16.77
			13	17.50	16.80	17.09	16.68
		25	0	17.50	16.75	17.15	16.61
	16QAM	1	0	17.50	16.49	17.07	17.06
			13	17.50	16.52	17.12	16.89
			24	17.50	16.53	17.15	16.75
		12	0	17.50	16.78	17.27	16.91
			6	17.50	16.78	17.30	16.81
			13	17.50	16.82	17.21	16.75
		25	0	17.50	16.82	17.19	16.74

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	132022	132322	132622
					1715.0MHz	1745.0MHz	1775.0MHz
10MHz	QPSK	1	0	18.00	17.29	17.79	17.94
			25	18.00	17.50	17.76	17.94
			49	18.00	17.54	17.87	17.79
		25	0	17.50	16.47	17.11	16.77
			13	17.50	16.58	17.11	16.85
			25	17.50	16.66	17.16	16.87
	50	0	17.50	16.52	17.07	16.84	
	16QAM	1	0	17.50	16.60	16.94	17.37
			25	17.50	16.73	17.01	17.22
			49	17.50	16.66	17.14	17.01
		25	0	17.50	16.53	17.30	16.88
			13	17.50	16.57	17.26	16.97
			25	17.50	16.60	17.31	16.92
		50	0	17.50	16.64	17.21	16.90
LTE-FDD Band 66				Conducted Power(dBm)			
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	132047	132322	132597
					1717.5MHz	1745.0MHz	1772.5MHz
15MHz	QPSK	1	0	18.00	17.46	17.75	17.90
			38	18.00	17.68	17.78	17.91
			74	18.00	17.68	17.96	17.92
		36	0	17.50	16.40	17.07	16.88
			18	17.50	16.44	17.07	16.88
			39	17.50	16.45	17.08	16.88
	75	0	17.50	16.52	17.05	16.90	
	16QAM	1	0	17.50	16.74	17.04	17.41
			38	17.50	16.86	17.15	17.30
			74	17.50	16.66	17.31	17.11
		36	0	17.50	16.45	17.05	16.89
			18	17.50	16.50	17.06	16.91
			39	17.50	16.51	17.07	16.92
		75	0	17.50	16.53	17.16	16.98
Bandwidth		Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	132072	132322
	1720.0MHz					1745.0MHz	1770.0MHz
20MHz	QPSK	1	0	18.00	17.83	17.78	17.87
			50	18.00	17.93	17.83	17.90
			99	18.00	17.86	17.97	17.97
		50	0	17.50	16.50	17.05	17.03
			25	17.50	16.52	17.07	17.10
			50	17.50	16.74	17.06	17.11
	100	0	17.50	16.47	17.09	17.12	
	16QAM	1	0	17.50	16.74	16.90	17.09
			50	17.50	16.75	17.08	17.09
			99	17.50	16.62	17.24	16.98
		50	0	17.50	16.57	17.12	17.19
			25	17.50	16.70	17.08	17.26
			50	17.50	16.66	17.14	17.19
		100	0	17.50	16.51	17.19	17.15

8.4 Wi-Fi

2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Maximum Tune-up(dBm)	SAR Test Require.
2.4g Wifi (2.4~2.4835)	802.11b	1	2412	11.04	11.50	No
		6	2437	11.96	12.00	Yes
		11	2462	8.70	9.00	No
	802.11g	1	2412	10.12	10.50	No
		6	2437	12.23	12.50	No
		11	2462	9.94	10.00	No
	802.11n(HT20)	1	2412	10.65	11.00	No
		6	2437	12.16	12.50	No
		11	2462	10.07	10.50	No
	802.11n(HT40)	3	2422	11.73	12.00	No
		6	2437	11.81	12.00	No
		9	2452	9.96	10.00	No

Note: SAR is not required for the following 2.4 GHz OFDM conditions as the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is $\leq 1.2\text{W/kg}$.

5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Maximum Tune-up(dBm)	SAR Test Require.
U-NII-1 (5.150~5.250)	802.11a	36	5180	8.74	9.00	No
		40	5200	9.13	9.50	No
		48	5240	10.08	10.50	No
	802.11n(HT20)	36	5180	8.89	9.00	No
		40	5200	9.64	10.00	No
		48	5240	9.99	10.00	No
	802.11ac(VHT20)	36	5180	9.01	9.50	No
		40	5200	9.49	9.50	No
		48	5240	10.31	10.50	Yes
	802.11n(HT40)	38	5190	9.56	10.00	No
		46	5230	9.77	10.00	No
	802.11ac(VHT40)	38	5190	8.84	9.00	No
		46	5230	10.07	10.50	No
	802.11ac(VHT80)	42	5210	10.13	10.50	No

8.5 Bluetooth

EDR	Mode	Maximum Tune-up(dBm)	Conducted Output Power (dBm)		
			0	39	78
			2402MHz	2441MHz	2480MHz
			4.42	7.38	4.64
	GFSK	7.50	4.42	7.38	4.64
	$\pi/4$ QPSK	7.00	3.85	6.97	4.01
	8DPSK	7.50	3.78	7.00	4.94
BLE	Mode	Maximum Tune-up(dBm)	Conducted Output Power (dBm)		
			0	20	39
			2402MHz	2440MHz	2480MHz
			0.56	4.55	1.40
	1Mbps	5.00	0.56	4.55	1.40
	2Mbps	5.00	0.59	4.67	1.51

Note

- Per KDB 447498 D04 Interim General RF Exposure Guidance v01, the 1-g SAR test exclusion thresholds for 300 MHz to 6 GHz at *test separation distances* ≤ 40 cm are determined by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B. 2})$$

where

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B. 1})$$

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

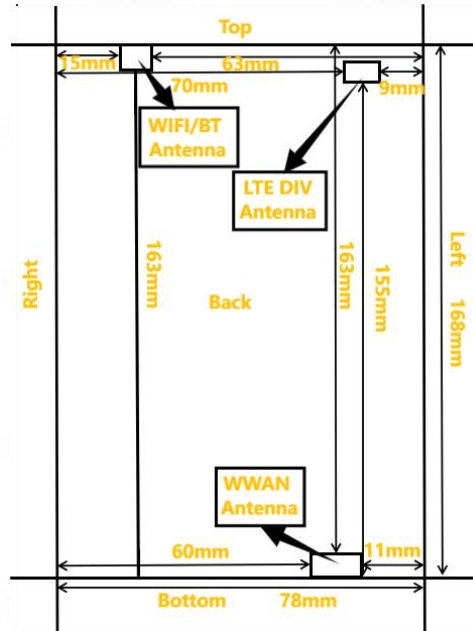
and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).

*When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine estimated SAR.

- Per KDB 248227 D01 v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
- The output power of all data rate were prescan, just the worst case (the lowest data rate) of all mode were shown in report.

9. Test Exclusion Consideration

Antenna information:



WWAN Antenna	GSM/WCDMA/LTE TX/RX
WLAN/BT Antenna	WLAN/BT TX/RX
Note: 1. KDB 447498 D04v01, particular DUT edges were not required to be evaluated for SAR if the antenna-to-edge distance is greater than 2.5cm. 2. Per KDB648474 D04, 10-g extremity SAR is not required when Body-Worn mode 1-g reported SAR<1.2W/Kg.	

Distance of The Antenna to the EUT surface and edge (mm)						
Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
WWAN	<25	<25	<25	60	163	<25
BT/Wifi	<25	<25	63	<25	<25	163
LTE DIV	<25	<25	<25	70	<25	155
Positions for SAR tests: Hotspot mode						
Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
WWAN	Yes	Yes	Yes	No	No	Yes
BT/Wifi	Yes	Yes	No	Yes	Yes	No
LTE DIV	Yes	Yes	Yes	No	Yes	No

9.1 SAR Test Exclusion Consideration Table

Per KDB 447498 requires when the standalone SAR test exclusion of section 4.3.1 is applied to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to the following format to determine simultaneous transmission SAR test exclusion:

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

W/kg for test separation distances ≤ 50 mm;

where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.

0.4 W/Kg for 1-g SAR and 1.0 W/kg for 10-g SAR, when the test separation distances is > 50 mm

10. Test Result

Head(0mm gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
GSM 850 (voice)	Left Cheek	128	824.2	-2.600	0.030	100.00	1.000	31.95	32.00	1.012	0.030	/
	Left Tilt	128	824.2	-4.050	0.013	100.00	1.000	31.95	32.00	1.012	0.013	/
	Right Cheek	128	824.2	2.370	0.034	100.00	1.000	31.95	32.00	1.012	0.034	1#
	Right Tilt	128	824.2	3.490	0.018	100.00	1.000	31.95	32.00	1.012	0.018	/
Body(10mm Gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
GSM 850 (voice)	Front	128	824.2	1.680	0.531	100.00	1.000	31.95	32.00	1.012	0.537	/
	Back	128	824.2	-1.670	0.574	100.00	1.000	31.95	32.00	1.012	0.581	/
	Left	128	824.2	4.010	0.326	100.00	1.000	31.95	32.00	1.012	0.330	/
	Bottom	128	824.2	0.200	0.458	100.00	1.000	31.95	32.00	1.012	0.463	/
Body(hotspot open, 10mm Gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
GPRS 850+2slots	Front	128	824.2	1.860	0.587	100.00	1.000	30.71	31.00	1.069	0.628	/
	Back	128	824.2	-2.090	0.632	100.00	1.000	30.71	31.00	1.069	0.676	2#
	Left	128	824.2	-4.780	0.412	100.00	1.000	30.71	31.00	1.069	0.440	/
	Bottom	128	824.2	-1.230	0.488	100.00	1.000	30.71	31.00	1.069	0.522	/

Head(0mm gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
GSM 1900 (voice)	Left Cheek	810	1909.8	4.460	0.160	100.00	1.000	28.83	29.00	1.040	0.166	/
	Left Tilt	810	1909.8	4.800	0.080	100.00	1.000	28.83	29.00	1.040	0.083	/
	Right Cheek	810	1909.8	-4.340	0.165	100.00	1.000	28.83	29.00	1.040	0.172	3#
	Right Tilt	810	1909.8	-4.100	0.085	100.00	1.000	28.83	29.00	1.040	0.088	/
Body(hotspot open, 10mm Gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
GSM 1900 (voice)	Front	810	1909.8	-3.290	0.674	100.00	1.000	28.83	29.00	1.040	0.701	/
	Back	810	1909.8	2.940	0.722	100.00	1.000	28.83	29.00	1.040	0.751	/
	Left	810	1909.8	-0.790	0.356	100.00	1.000	28.83	29.00	1.040	0.370	/
	Bottom	810	1909.8	-2.360	0.546	100.00	1.000	28.83	29.00	1.040	0.568	/
Body(hotspot open, 10mm Gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
GPRS 1900+3slots	Front	810	1909.8	3.880	0.701	100.00	1.000	27.41	27.50	1.021	0.716	/
	Back	810	1909.8	-1.200	0.752	100.00	1.000	27.41	27.50	1.021	0.768	4#
	Left	810	1909.8	-1.550	0.416	100.00	1.000	27.41	27.50	1.021	0.425	/
	Bottom	810	1909.8	-1.320	0.662	100.00	1.000	27.41	27.50	1.021	0.676	/

Head(0mm gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
WCDMA Band 2 (RMC*)	Left Cheek	9262	1852.4	0.080	0.475	100.00	1.000	25.53	26.00	1.114	0.529	/
	Left Tilt	9262	1852.4	-4.370	0.232	100.00	1.000	25.53	26.00	1.114	0.258	/
	Right Cheek	9262	1852.4	-0.200	0.502	100.00	1.000	25.53	26.00	1.114	0.559	5#
	Right Tilt	9262	1852.4	-2.660	0.245	100.00	1.000	25.53	26.00	1.114	0.273	/
Body(hotspot open, 10mm Gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
WCDMA Band 2 (RMC*)	Front	9262	1852.4	-1.700	0.384	100.00	1.000	25.53	26.00	1.114	0.428	/
	Back	9262	1852.4	2.190	0.436	100.00	1.000	25.53	26.00	1.114	0.486	6#
	Left	9262	1852.4	1.740	0.164	100.00	1.000	25.53	26.00	1.114	0.183	/
	Bottom	9262	1852.4	-3.110	0.289	100.00	1.000	25.53	26.00	1.114	0.322	/

Head(0mm gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
WCDMA Band 4 (RMC*)	Left Cheek	1312	1712.4	1.310	0.343	100.00	1.000	24.10	24.50	1.096	0.376	/
	Left Tilt	1312	1712.4	-1.650	0.171	100.00	1.000	24.10	24.50	1.096	0.187	/
	Right Cheek	1312	1712.4	0.190	0.352	100.00	1.000	24.10	24.50	1.096	0.386	7#
	Right Tilt	1312	1712.4	-3.750	0.177	100.00	1.000	24.10	24.50	1.096	0.194	/
Body(hotspot open, 10mm Gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
WCDMA Band 4 (RMC*)	Front	1312	1712.4	1.650	0.232	100.00	1.000	24.10	24.50	1.096	0.254	/
	Back	1312	1712.4	-1.140	0.298	100.00	1.000	24.10	24.50	1.096	0.327	8#
	Left	1312	1712.4	2.020	0.121	100.00	1.000	24.10	24.50	1.096	0.133	/
	Bottom	1312	1712.4	2.340	0.174	100.00	1.000	24.10	24.50	1.096	0.191	/

Head(0mm gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
WCDMA Band 5 (RMC*)	Left Cheek	4132	826.4	-2.760	0.118	100.00	1.000	22.54	23.00	1.112	0.131	/
	Left Tilt	4132	826.4	-0.610	0.061	100.00	1.000	22.54	23.00	1.112	0.068	/
	Right Cheek	4132	826.4	-1.900	0.124	100.00	1.000	22.54	23.00	1.112	0.138	9#
	Right Tilt	4132	826.4	-1.500	0.067	100.00	1.000	22.54	23.00	1.112	0.075	/
Body(hotspot open, 10mm Gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
WCDMA Band 5 (RMC*)	Front	4132	826.4	3.860	0.125	100.00	1.000	22.54	23.00	1.112	0.139	/
	Back	4132	826.4	-3.000	0.167	100.00	1.000	22.54	23.00	1.112	0.186	10#
	Left	4132	826.4	-0.880	0.065	100.00	1.000	22.54	23.00	1.112	0.072	/
	Bottom	4132	826.4	1.370	0.097	100.00	1.000	22.54	23.00	1.112	0.108	/

Head(0mm gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 2 (BW: 20MHz)	1RB	Left Cheek	19100	1900.0	-1.650	0.028	100.00	1.000	21.92	22.50	1.143	0.032	/
		Left Tilt	19100	1900.0	-3.260	0.016	100.00	1.000	21.92	22.50	1.143	0.018	/
		Right Cheek	19100	1900.0	-2.030	0.032	100.00	1.000	21.92	22.50	1.143	0.037	11#
		Right Tilt	19100	1900.0	3.000	0.019	100.00	1.000	21.92	22.50	1.143	0.022	/
	50%RB	Left Cheek	19100	1900.0	3.150	0.022	100.00	1.000	21.03	21.50	1.114	0.025	/
		Left Tilt	19100	1900.0	2.740	0.010	100.00	1.000	21.03	21.50	1.114	0.011	/
		Right Cheek	19100	1900.0	-3.240	0.027	100.00	1.000	21.03	21.50	1.114	0.030	/
		Right Tilt	19100	1900.0	-0.640	0.015	100.00	1.000	21.03	21.50	1.114	0.017	/
Body(hotspot open, 10mm Gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 2 (BW: 20MHz)	1RB	Front	19100	1900.0	0.850	0.642	100.00	1.000	21.92	22.50	1.143	0.734	/
		Back	19100	1900.0	-1.660	0.699	100.00	1.000	21.92	22.50	1.143	0.799	12#
		Left	19100	1900.0	-3.300	0.469	100.00	1.000	21.92	22.50	1.143	0.536	/
		Bottom	19100	1900.0	2.610	0.584	100.00	1.000	21.92	22.50	1.143	0.668	/
	50%RB	Front	19100	1900.0	-0.330	0.605	100.00	1.000	21.03	21.50	1.114	0.674	/
		Back	19100	1900.0	3.190	0.664	100.00	1.000	21.03	21.50	1.114	0.740	/
		Left	19100	1900.0	1.490	0.422	100.00	1.000	21.03	21.50	1.114	0.470	/
		Bottom	19100	1900.0	-4.050	0.531	100.00	1.000	21.03	21.50	1.114	0.592	/

Head(0mm gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 4 (BW: 20MHz)	1RB	Left Cheek	20175	1732.5	-1.370	0.324	100.00	1.000	22.73	23.00	1.064	0.345	/
		Left Tilt	20175	1732.5	1.870	0.164	100.00	1.000	22.73	23.00	1.064	0.174	/
		Right Cheek	20175	1732.5	0.530	0.333	100.00	1.000	22.73	23.00	1.064	0.354	13#
		Right Tilt	20175	1732.5	-4.860	0.171	100.00	1.000	22.73	23.00	1.064	0.182	/

	50%RB	Left Cheek	20175	1732.5	4.160	0.294	100.00	1.000	21.55	22.00	1.109	0.326	/
		Left Tilt	20175	1732.5	-0.430	0.158	100.00	1.000	21.55	22.00	1.109	0.175	/
		Right Cheek	20175	1732.5	1.540	0.301	100.00	1.000	21.55	22.00	1.109	0.334	/
		Right Tilt	20175	1732.5	-1.580	0.164	100.00	1.000	21.55	22.00	1.109	0.182	/
Body(hotspot open, 10mm Gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 4 (BW: 20MHz)	1RB	Front	20175	1732.5	3.080	0.232	100.00	1.000	22.73	23.00	1.064	0.247	/
		Back	20175	1732.5	-0.560	0.272	100.00	1.000	22.73	23.00	1.064	0.289	14#
		Left	20175	1732.5	4.570	0.142	100.00	1.000	22.73	23.00	1.064	0.151	/
		Bottom	20175	1732.5	1.220	0.186	100.00	1.000	22.73	23.00	1.064	0.198	/
	50%RB	Front	20175	1732.5	1.690	0.213	100.00	1.000	21.55	22.00	1.109	0.236	/
		Back	20175	1732.5	-2.520	0.256	100.00	1.000	21.55	22.00	1.109	0.284	/
		Left	20175	1732.5	-3.500	0.120	100.00	1.000	21.55	22.00	1.109	0.133	/
		Bottom	20175	1732.5	1.680	0.162	100.00	1.000	21.55	22.00	1.109	0.180	/

Head(0mm gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 5 (BW: 10MHz)	1RB	Left Cheek	20525	836.5	-4.090	0.092	100.00	1.000	23.21	23.50	1.069	0.098	/
		Left Tilt	20525	836.5	-3.370	0.051	100.00	1.000	23.21	23.50	1.069	0.055	/
		Right Cheek	20525	836.5	-2.950	0.098	100.00	1.000	23.21	23.50	1.069	0.105	15#
		Right Tilt	20525	836.5	-4.010	0.056	100.00	1.000	23.21	23.50	1.069	0.060	/
	50%RB	Left Cheek	20525	836.5	0.780	0.085	100.00	1.000	22.19	22.50	1.074	0.091	/
		Left Tilt	20525	836.5	-0.470	0.045	100.00	1.000	22.19	22.50	1.074	0.048	/
		Right Cheek	20525	836.5	-1.980	0.091	100.00	1.000	22.19	22.50	1.074	0.098	/
		Right Tilt	20525	836.5	-1.180	0.049	100.00	1.000	22.19	22.50	1.074	0.053	/
Body(hotspot open, 10mm Gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 5 (BW: 10MHz)	1RB	Front	20525	836.5	-3.710	0.129	100.00	1.000	23.21	23.50	1.069	0.138	/
		Back	20525	836.5	-1.530	0.164	100.00	1.000	23.21	23.50	1.069	0.175	16#
		Left	20525	836.5	-3.990	0.082	100.00	1.000	23.21	23.50	1.069	0.088	/
		Bottom	20525	836.5	1.330	0.101	100.00	1.000	23.21	23.50	1.069	0.108	/
	50%RB	Front	20525	836.5	3.460	0.110	100.00	1.000	22.19	22.50	1.074	0.118	/
		Back	20525	836.5	-3.810	0.146	100.00	1.000	22.19	22.50	1.074	0.157	/
		Left	20525	836.5	3.260	0.075	100.00	1.000	22.19	22.50	1.074	0.081	/
		Bottom	20525	836.5	2.200	0.093	100.00	1.000	22.19	22.50	1.074	0.100	/

Head(0mm gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 7 (BW: 20MHz)	1RB	Left Cheek	21100	2535.0	-2.320	0.104	100.00	1.000	16.62	17.00	1.091	0.113	/
		Left Tilt	21100	2535.0	-1.620	0.061	100.00	1.000	16.62	17.00	1.091	0.067	/
		Right Cheek	21100	2535.0	0.150	0.112	100.00	1.000	16.62	17.00	1.091	0.122	17#
		Right Tilt	21100	2535.0	0.190	0.066	100.00	1.000	16.62	17.00	1.091	0.072	/
	50%RB	Left Cheek	21100	2535.0	0.130	0.094	100.00	1.000	15.41	15.50	1.021	0.096	/
		Left Tilt	21100	2535.0	1.850	0.052	100.00	1.000	15.41	15.50	1.021	0.053	/
		Right Cheek	21100	2535.0	-4.780	0.101	100.00	1.000	15.41	15.50	1.021	0.103	/
		Right Tilt	21100	2535.0	-0.880	0.059	100.00	1.000	15.41	15.50	1.021	0.060	/
Body(hotspot open, 10mm Gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 7 (BW: 20MHz)	1RB	Front	21100	2535.0	0.650	0.465	100.00	1.000	16.62	17.00	1.091	0.507	/
		Back	21100	2535.0	0.680	0.520	100.00	1.000	16.62	17.00	1.091	0.567	18#
		Left	21100	2535.0	2.210	0.325	100.00	1.000	16.62	17.00	1.091	0.355	/
		Bottom	21100	2535.0	1.670	0.402	100.00	1.000	16.62	17.00	1.091	0.439	/
	50%RB	Front	21100	2535.0	-4.760	0.425	100.00	1.000	15.41	15.50	1.021	0.434	/
		Back	21100	2535.0	1.910	0.478	100.00	1.000	15.41	15.50	1.021	0.488	/

		Left	21100	2535.0	-0.620	0.284	100.00	1.000	15.41	15.50	1.021	0.290	/
		Bottom	21100	2535.0	-4.860	0.354	100.00	1.000	15.41	15.50	1.021	0.361	/

Head(0mm gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 41 (BW:20MHz)	1RB	Left Cheek	40620	2593.0	3.050	0.066	100.00	1.000	22.35	22.50	1.035	0.068	/
		Left Tilt	40620	2593.0	-1.840	0.031	100.00	1.000	22.35	22.50	1.035	0.032	/
		Right Cheek	40620	2593.0	-3.910	0.071	100.00	1.000	22.35	22.50	1.035	0.073	19#
		Right Tilt	40620	2593.0	-1.560	0.037	100.00	1.000	22.35	22.50	1.035	0.038	/
	50%RB	Left Cheek	40620	2593.0	-1.740	0.060	100.00	1.000	21.30	21.50	1.047	0.063	/
		Left Tilt	40620	2593.0	4.040	0.027	100.00	1.000	21.30	21.50	1.047	0.028	/
		Right Cheek	40620	2593.0	-2.730	0.064	100.00	1.000	21.30	21.50	1.047	0.067	/
		Right Tilt	40620	2593.0	3.060	0.031	100.00	1.000	21.30	21.50	1.047	0.032	/

Body(hotspot open, 10mm Gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 41 (BW:20MHz)	1RB	Front	40620	2593.0	1.330	0.215	100.00	1.000	22.35	22.50	1.035	0.223	/
		Back	40620	2593.0	-1.380	0.252	100.00	1.000	22.35	22.50	1.035	0.261	20#
		Left	40620	2593.0	-3.010	0.130	100.00	1.000	22.35	22.50	1.035	0.135	/
		Bottom	40620	2593.0	3.860	0.167	100.00	1.000	22.35	22.50	1.035	0.173	/
	50%RB	Front	40620	2593.0	0.190	0.194	100.00	1.000	21.30	21.50	1.047	0.203	/
		Back	40620	2593.0	-3.390	0.221	100.00	1.000	21.30	21.50	1.047	0.231	/
		Left	40620	2593.0	3.690	0.112	100.00	1.000	21.30	21.50	1.047	0.117	/
		Bottom	40620	2593.0	4.720	0.152	100.00	1.000	21.30	21.50	1.047	0.159	/

Head(0mm gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 66 (BW: 20MHz)	1RB	Left Cheek	132322	1745.0	-0.100	0.211	100.00	1.000	17.97	18.00	1.007	0.212	/
		Left Tilt	132322	1745.0	-1.790	0.110	100.00	1.000	17.97	18.00	1.007	0.111	/
		Right Cheek	132322	1745.0	0.980	0.220	100.00	1.000	17.97	18.00	1.007	0.222	21#
		Right Tilt	132322	1745.0	4.090	0.115	100.00	1.000	17.97	18.00	1.007	0.116	/
	50%RB	Left Cheek	132322	1745.0	0.750	0.187	100.00	1.000	17.07	17.50	1.104	0.206	/
		Left Tilt	132322	1745.0	1.950	0.100	100.00	1.000	17.07	17.50	1.104	0.110	/
		Right Cheek	132322	1745.0	4.720	0.195	100.00	1.000	17.07	17.50	1.104	0.215	/
		Right Tilt	132322	1745.0	1.870	0.106	100.00	1.000	17.07	17.50	1.104	0.117	/

Body(hotspot open, 10mm Gap)													
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Band 66 (BW: 20MHz)	1RB	Front	132322	1745.0	1.710	0.224	100.00	1.000	17.97	18.00	1.007	0.226	/
		Back	132322	1745.0	-0.690	0.255	100.00	1.000	17.97	18.00	1.007	0.257	22#
		Left	132322	1745.0	2.070	0.150	100.00	1.000	17.97	18.00	1.007	0.151	/
		Bottom	132322	1745.0	4.210	0.189	100.00	1.000	17.97	18.00	1.007	0.190	/
	50%RB	Front	132322	1745.0	-1.970	0.197	100.00	1.000	17.07	17.50	1.104	0.217	/
		Back	132322	1745.0	-1.330	0.220	100.00	1.000	17.07	17.50	1.104	0.243	/
		Left	132322	1745.0	1.680	0.122	100.00	1.000	17.07	17.50	1.104	0.135	/
		Bottom	132322	1745.0	0.640	0.156	100.00	1.000	17.07	17.50	1.104	0.172	/

Head(0mm gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
2.4g (2.4~2.4835) 802.11b	Left Cheek	6	2437	1.620	0.461	100.00	1.000	11.96	12.00	1.009	0.465	/
	Left Tilt	6	2437	2.610	0.230	100.00	1.000	11.96	12.00	1.009	0.232	/
	Right Cheek	6	2437	-1.600	0.468	100.00	1.000	11.96	12.00	1.009	0.472	23#
	Right Tilt	6	2437	0.550	0.235	100.00	1.000	11.96	12.00	1.009	0.237	/

Body(hotspot open, 10mm Gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
2.4g (2.4~2.4835) 802.11b	Front	6	2437	-0.570	0.321	100.00	1.000	11.96	12.00	1.009	0.324	/
	Back	6	2437	2.150	0.366	100.00	1.000	11.96	12.00	1.009	0.369	24#
	Right	6	2437	-3.750	0.215	100.00	1.000	11.96	12.00	1.009	0.217	/
	Top	6	2437	0.150	0.266	100.00	1.000	11.96	12.00	1.009	0.268	/

Head(0mm gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
U-NII-1 (5.150~5.250) 802.11ac(VHT20)	Left Cheek	48	5240	1.620	0.360	100.00	1.000	10.31	10.50	1.045	0.376	/
	Left Tilt	48	5240	2.610	0.176	100.00	1.000	10.31	10.50	1.045	0.184	/
	Right Cheek	48	5240	-2.600	0.369	100.00	1.000	10.31	10.50	1.045	0.386	25#
	Right Tilt	48	5240	0.550	0.184	100.00	1.000	10.31	10.50	1.045	0.192	/

Body(hotspot open, 10mm Gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
U-NII-1 (5.150~5.250) 802.11ac(VHT20)	Front	48	5240	-0.570	0.102	100.00	1.000	10.31	10.50	1.045	0.107	/
	Back	48	5240	2.950	0.116	100.00	1.000	10.31	10.50	1.045	0.121	26#
	Right	48	5240	-3.750	0.064	100.00	1.000	10.31	10.50	1.045	0.067	/
	Top	48	5240	0.150	0.090	100.00	1.000	10.31	10.50	1.045	0.094	/

Head(0mm gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Bluetooth	Left Cheek	39	2441	2.370	0.002	100.00	1.000	7.38	7.50	1.028	0.002	/
	Left Tilt	39	2441	3.260	0.001	100.00	1.000	7.38	7.50	1.028	0.001	/
	Right Cheek	39	2441	1.440	0.003	100.00	1.000	7.38	7.50	1.028	0.003	27#
	Right Tilt	39	2441	2.130	0.001	100.00	1.000	7.38	7.50	1.028	0.001	/

Body(hotspot open, 10mm Gap)												
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Bluetooth	Front	39	2441	3.610	0.002	100.00	1.000	7.38	7.50	1.028	0.002	/
	Back	39	2441	1.360	0.002	100.00	1.000	7.38	7.50	1.028	0.002	28#
	Right	39	2441	-0.870	0.001	100.00	1.000	7.38	7.50	1.028	0.001	/
	Top	39	2441	-0.790	0.001	100.00	1.000	7.38	7.50	1.028	0.001	/

Note:

- The maximum SAR Value of each test band is marked bold.
- SAR plot is provided only for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination.
- Per KDB 447498 D04 v01, for each exposure position, if the highest output power channel Reported SAR $\leq 0.8W/kg$, other channels SAR testing is not necessary.
- Per KDB 447498 D04 v01, head/body-worn use is evaluated with the device positioned at 0mm/10 mm from a head/flat phantom respectively filled with head tissue-equivalent medium.
- Per KDB Publication 941225 D06 where SAR test considerations for handsets (L x W ≥ 9 cm x 5 cm) are based on a composite test separation distance of 10 mm from the front, back and edges of the device with antennas 2.5 cm or closer to the edge of the device, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.
- Per KDB 447498 D04 v01, the report SAR is measured SAR value adjusted for maximum tune-up tolerance. Scaling Factor= $10^{[(\text{tune-up limit power (dBm)} - \text{Ave.power power (dBm)})/10]}$, where tune-up limit is the maximum rated power among all production units.
Reported SAR(W/kg)=Measured SAR (W/kg)*Scaling Factor.

11. SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Note: For 1g SAR, the highest measured 1g SAR is $0.752 < 0.80$ W/kg, repeated measurement is not need.

12. Simultaneous Transmission

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

12.1 Simultaneous Transmission Mode Considerations

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. The device has 2 Tx antennas, WWAN main antenna, Wifi/BT antenna supports 2.4G WIFI and BT. The 2 antennas can always transmit simultaneously. The work mode combination is showed as below table.

Application Simultaneous Transmission information:

NO.	Configuration	Head	Body-worn
1	WWAN+WIFI(2.4g)	Yes	Yes
2	WWAN+WIFI(5.2g)	Yes	Yes
3	WWAN+BT	Yes	Yes

12.2 Sum SAR of Simultaneous Transmission

Head

Band	Test Position	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5.2G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
		WWAN	WIFI 2.4G	WIFI 5.2G	Bluetooth					
WCDMA Band 2	Left Cheek	0.529	0.465	0.376	0.002	0.994	0.905	0.531	N/A	N/A
	Left Tilt	0.258	0.232	0.184	0.001	0.490	0.442	0.259	N/A	N/A
	Right Cheek	0.559	0.472	0.386	0.003	1.031	0.945	0.562	N/A	N/A
	Right Tilt	0.273	0.237	0.192	0.001	0.510	0.465	0.274	N/A	N/A

Hotspot(body-worn)

Band	Test Position	Channel Type	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5.2G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5.2G	Bluetooth					
LTE Band 2	Front	1RB	0.734	0.324	0.107	0.002	1.058	0.841	0.736	N/A	N/A
	Back		0.799	0.369	0.121	0.002	1.168	0.920	0.801	N/A	N/A
	Left		0.536	/	/	/	0.536	0.536	0.536	N/A	N/A
	Right		/	0.217	0.067	0.001	0.217	0.067	0.001	N/A	N/A
	Top		/	0.268	0.094	0.001	0.268	0.094	0.001	N/A	N/A
	Bottom		0.668	/	/	/	0.668	0.668	0.668	N/A	N/A
	Front	50%RB	0.674	0.324	0.107	0.002	0.998	0.781	0.676	N/A	N/A
	Back		0.74	0.369	0.121	0.002	1.109	0.861	0.742	N/A	N/A
	Left		0.47	/	/	/	0.470	0.470	0.470	N/A	N/A
	Right		/	0.217	0.067	0.001	0.217	0.067	0.001	N/A	N/A
	Top		/	0.268	0.094	0.001	0.268	0.094	0.001	N/A	N/A
	Bottom		0.592	/	/	/	0.592	0.592	0.592	N/A	N/A

13. Test Equipment List

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
E-Field Probe	MVG	SSE2	0125-EPGO-445	2025/02/01	2026/01/31
6 1/2 Digital Multimeter	Keithley	DMM6500	4527164	2025/10/20	2026/10/19
Wideband Radio Communication Tester	ROHDE & SCHWARZ	CMW500	161997	2025/10/17	2026/10/16
MXG Vector Signal Generator	Agilent	N5182A	MY46240163	2025/10/17	2026/10/16
E-Series Avg. Power Sensor	KEYSIGHT	E9300A	MY55050017	2025/04/02	2026/04/01
EPM Series Power Meter	KEYSIGHT	E4418B	MY41293435	2025/04/02	2026/04/01
MXA Signal Analyzer	KEYSIGHT	N9020A	MY54410409	2025/10/17	2026/10/16
Low Noise Amplifier	Tongyue	N/A	N/A	2025/07/30	2026/07/29
Coupler	MERRIMAC	CWM-10R-10.8G	LOT-83391	N/A	N/A
835MHz Validation Dipole	MVG	SID835	07/22 DIP 0G835-656	2025/05/26	2028/05/25
1800MHz Validation Dipole	MVG	SID1800	07/22 DIP 1G800-657	2025/05/26	2028/05/25
1900MHz Validation Dipole	MVG	SID1900	07/22 DIP 1G900-658	2025/05/26	2028/05/25
2450MHz Validation Dipole	MVG	SID2450	07/22 DIP 2G450-662	2025/05/26	2028/05/25
2600MHz Validation Dipole	MVG	SID2600	07/22 DIP 2G600-663	2025/05/26	2028/05/25
5200MHz-5800MHz Validation Dipole	MVG	SID5000	07/22 DIP5G000-670	2025/05/26	2028/05/25
LIMESAR Dielectric Probe	MVG	SCLMP	06/22 OCPG88	2025/02/05	2026/02/04
ENA Series Network Analyzer	Agilent	E5071B	MY42301221	2025/10/17	2026/10/16
Thermometer	Riters	DT-232	21A11	2025/04/02	2026/04/01
Antenna network emulator	MVG	ANTA 74	07/22 ANTA 74	N/A	N/A
SAM Phantom	MVG	SAM	07/22 SAM149	N/A	N/A
Mobile Phone Positioning System	MVG	MSH 118	07/22 MSH 118	N/A	N/A
Mechanical Calibration Kit	PNA	N/A	N/A	2025/10/21	2026/10/20
Open SAR test software	MVG	N/A	V5.3.5	N/A	N/A

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

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

ANNEX A Simulating Liquid Verification Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an SCLMP Dielectric Probe Kit.

Dielectric performance of tissue simulating liquid									
Frequency (MHz)	ϵ_r		σ (s/m)		Delta (ϵ_r)	Delta (σ)	Limit	Temp (°C)	Date
	Target	Measured	Target	Measured					
835	41.50	41.72	0.90	0.91	0.53%	1.11%	±5%	22.1	25/12/2025
1800	40.00	40.25	1.40	1.38	0.63%	-1.43%	±5%	22.5	26/12/2025
1900	40.00	40.21	1.40	1.39	0.53%	-0.71%	±5%	21.8	27/12/2025
2450	39.20	38.84	1.80	1.82	-0.92%	1.11%	±5%	22.2	28/12/2025
2600	39.00	38.62	1.96	1.93	-0.97%	-1.53%	±5%	22.7	29/12/2025
5200	36.00	36.24	4.66	4.58	0.67%	-1.72%	±5%	21.9	30/12/2025

NOTE: The dielectric parameters of the tissue-equivalent liquid should be measured under similar ambient conditions and within 2 °C of the conditions expected during the SAR evaluation to satisfy protocol requirements.

ANNEX B System Check Result

Comparing to the original SAR value provided by MVG, the validation data should be within its specification of 10 %(for 10 g).

Frequency (MHz)	Input Power (mW)	10g SAR (W/Kg)	1g SAR (W/Kg)	10g SAR 1W input power normalized (W/Kg)	1g SAR 1W input power normalized (W/Kg)	10g SAR Standard target (1W) (W/Kg)	1g SAR Standard target (1W) (W/Kg)	10g SAR Deviation	1g SAR Deviation
835	100	0.571	1.040	5.71	10.40	6.12	9.46	-6.70%	9.94%
1800	100	2.073	4.048	20.73	40.48	19.83	37.93	4.54%	6.72%
1900	100	1.965	3.678	19.65	36.78	20.82	40.29	-5.62%	-8.71%
2450	100	2.443	5.107	24.43	51.07	24.55	52.72	-0.49%	-3.13%
2600	100	2.589	5.400	25.89	54.00	24.43	53.76	5.98%	0.45%
5200	100	2.352	8.015	23.52	80.15	22.78	78.16	3.25%	2.55%

System Performance Check Data (835 MHz)

System check at 835 MHz

Date of measurement: 25/12/2025

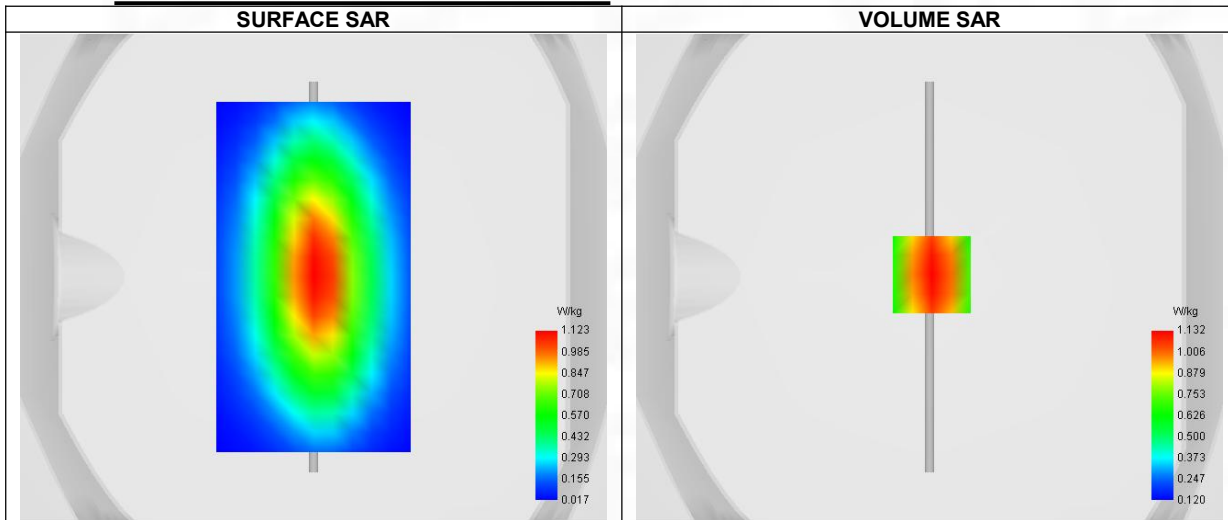
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.15
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW835
Channels/Frequency	Higher
Signal	CW

B. Permittivity

Middle TX Frequency (MHz)	835.000
Relative permittivity (real part)	41.723
Relative permittivity (imaginary part)	19.587
Conductivity (S/m)	0.912

C. SAR Surface and Volume

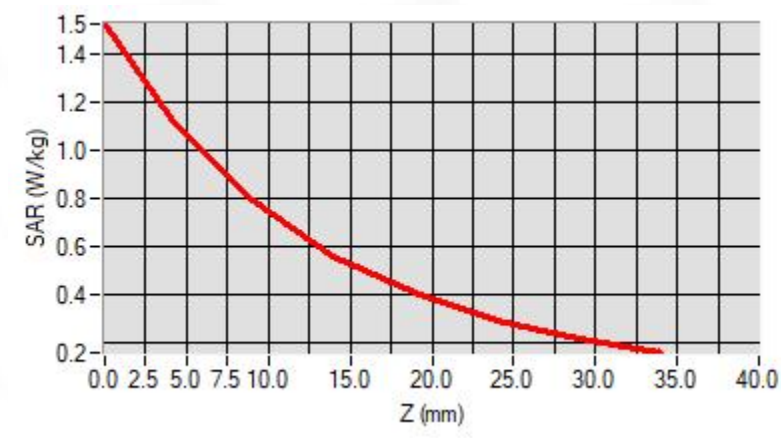


D. SAR 1g & 10g

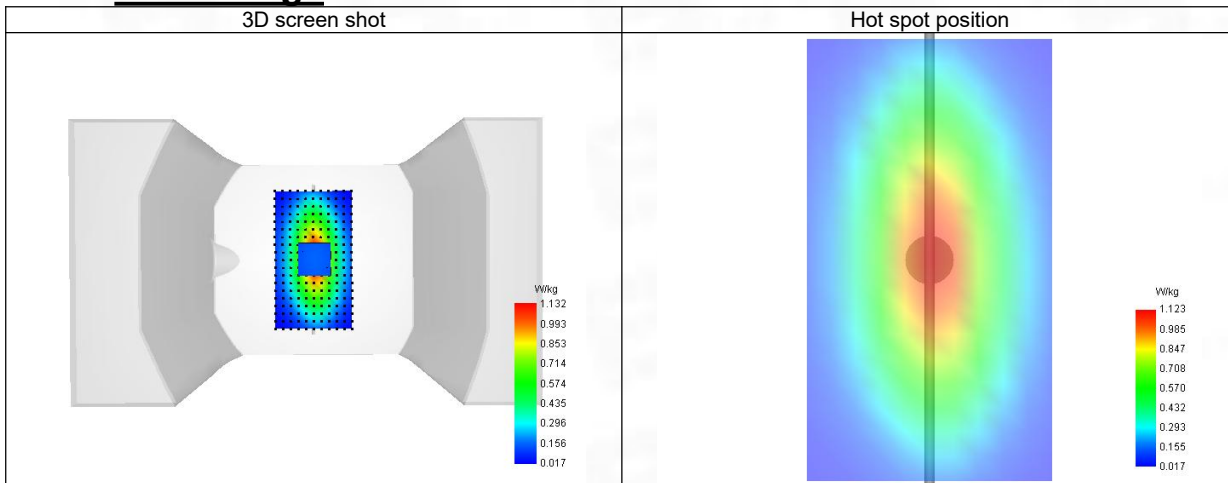
SAR 10g (W/Kg)	0.571
SAR 1g (W/Kg)	1.040
Variation (%)	-4.720
Horizontal validation criteria: minimum distance (mm)	22.627417
Vertical validation criteria: SAR ratio M2/M1 (%)	69.602452

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.522	1.132	0.788	0.559	0.404	0.291	0.214



F. 3D Image



System Performance Check Data (1800 MHz)

System check at 1800 MHz

Date of measurement: 26/12/2025

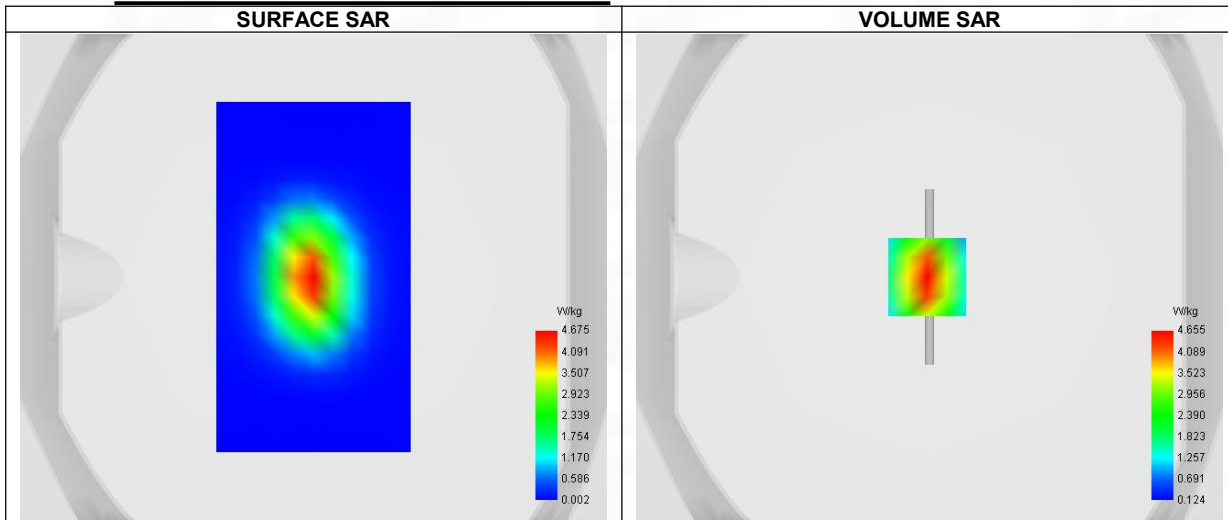
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.20
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Channels/Frequency	Middle
Signal	CW

B. Permittivity

Middle TX Frequency (MHz)	1800.000
Relative permittivity (real part)	40.251
Relative permittivity (imaginary part)	15.243
Conductivity (S/m)	1.388

C. SAR Surface and Volume



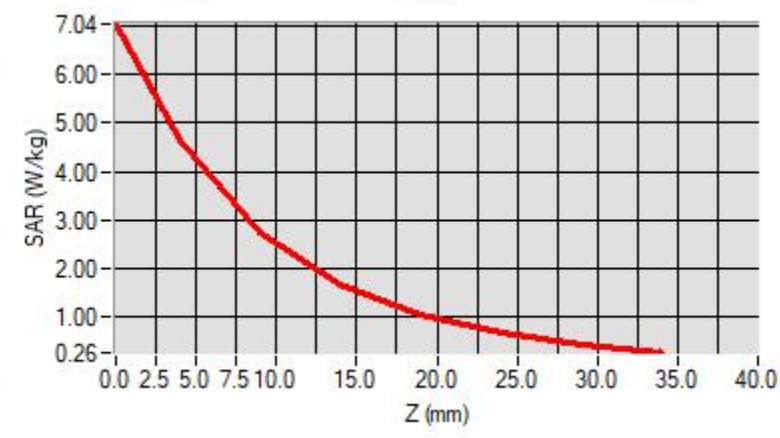
Maximum location: X=-1.00, Y=0.00 ; SAR Peak: 6.99 W/kg

D. SAR 1g & 10g

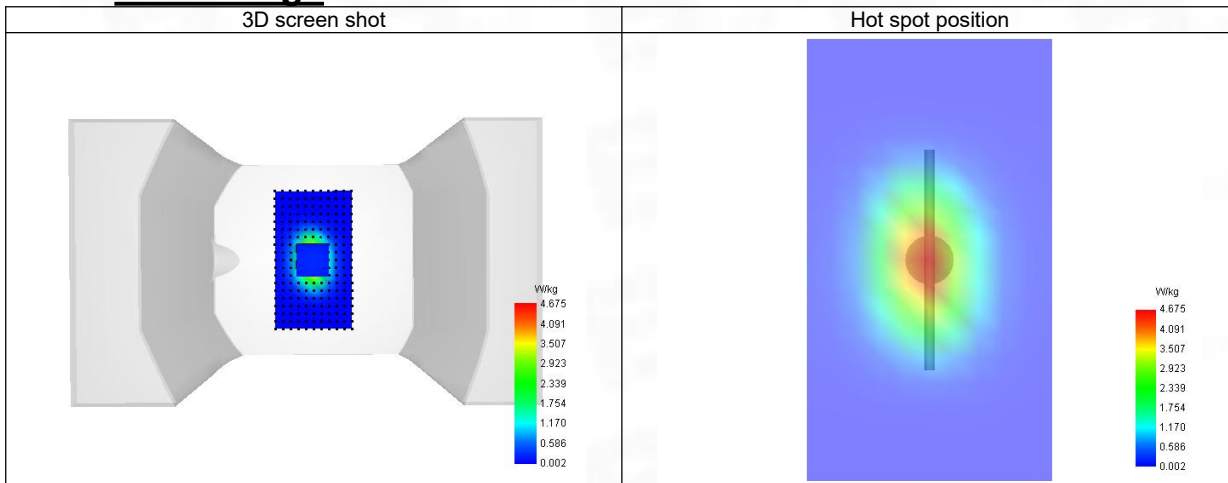
SAR 10g (W/Kg)	2.073
SAR 1g (W/Kg)	4.048
Variation (%)	-0.930
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	59.198319

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	7.039	4.655	2.756	1.681	1.053	0.659	0.418



F. 3D Image



System Performance Check Data (1900 MHz)

System check at 1900 MHz

Date of measurement: 27/12/2025

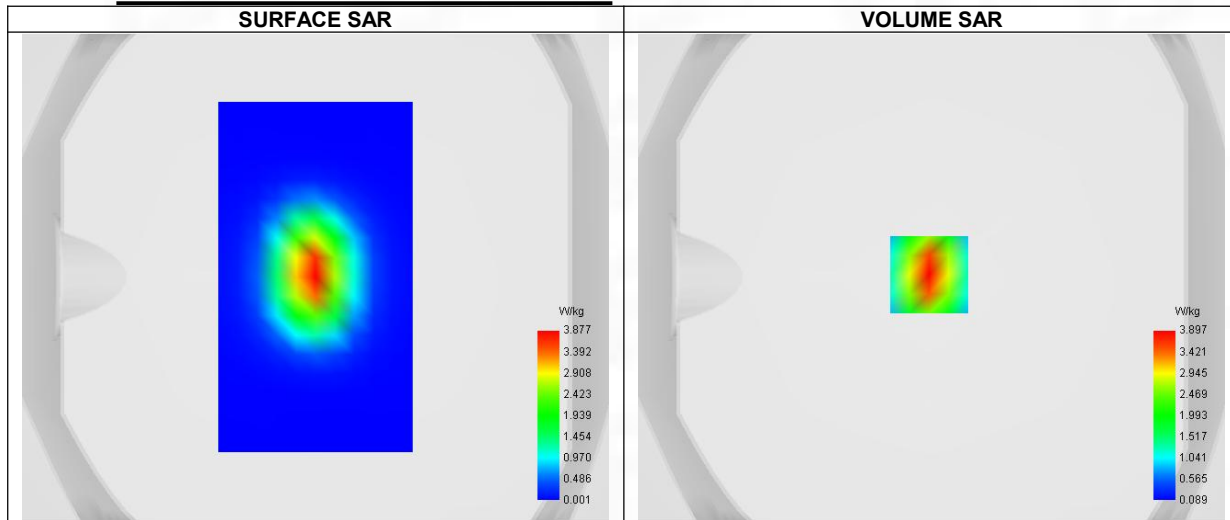
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.31
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Channels/Frequency	Middle
Signal	CW

B. Permittivity

Middle TX Frequency (MHz)	1900.000
Relative permittivity (real part)	40.213
Relative permittivity (imaginary part)	14.253
Conductivity (S/m)	1.392

C. SAR Surface and Volume



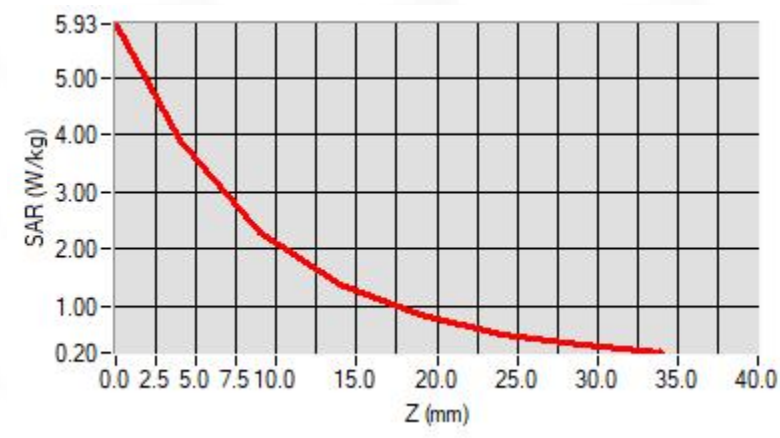
Maximum location: X=-1.00, Y=1.00 ; SAR Peak: 5.89 W/kg

D. SAR 1g & 10g

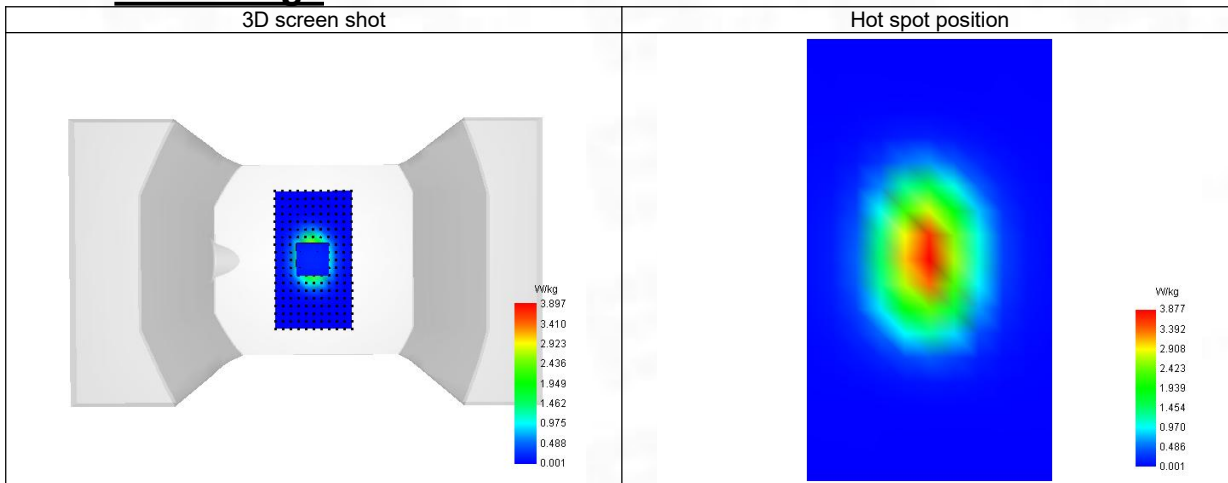
SAR 10g (W/Kg)	1.965
SAR 1g (W/Kg)	3.678
Variation (%)	-0.470
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	58.490520

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	5.927	3.897	2.280	1.386	0.847	0.521	0.326



F. 3D Image



System Performance Check Data (2450 MHz)

System check at 2450 MHz

Date of measurement: 28/12/2025

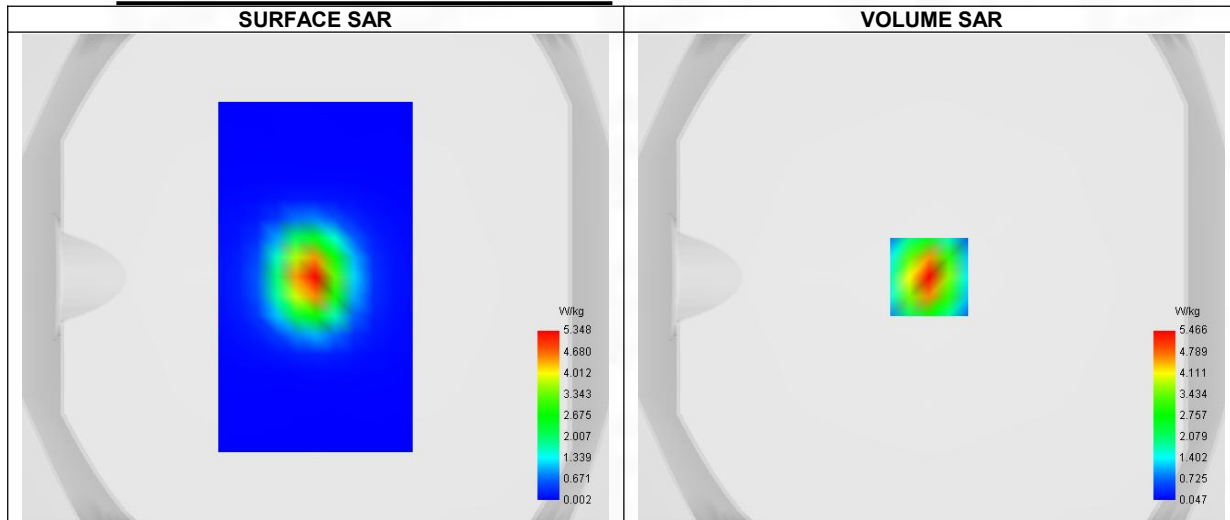
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.40
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW2450
Channels/Frequency	Middle
Signal	CW

B. Permittivity

Middle TX Frequency (MHz)	2450.000
Relative permittivity (real part)	38.841
Relative permittivity (imaginary part)	13.678
Conductivity (S/m)	1.823

C. SAR Surface and Volume



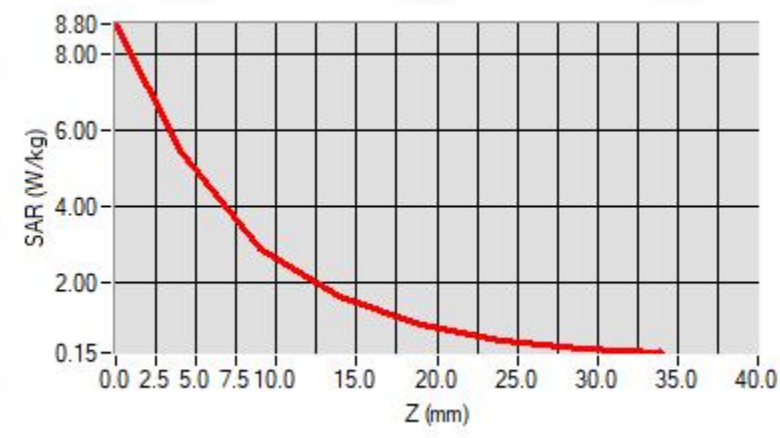
Maximum location: X=-1.00, Y=0.00 ; SAR Peak: 8.74 W/kg

D. SAR 1g & 10g

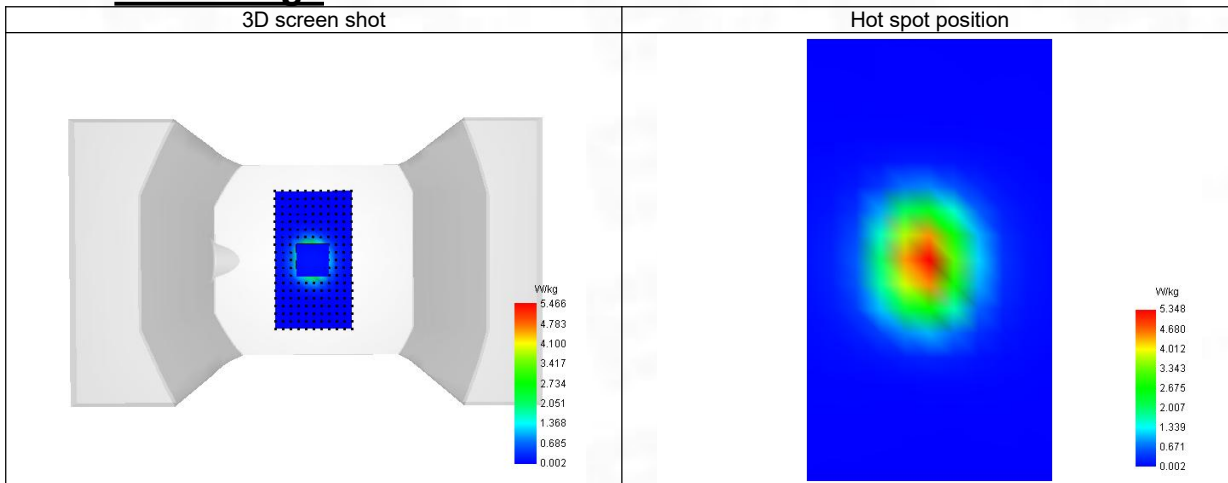
SAR 10g (W/Kg)	2.443
SAR 1g (W/Kg)	5.107
Variation (%)	1.100
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	53.325921

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	8.802	5.466	2.915	1.604	0.881	0.484	0.266



F. 3D Image



System Performance Check Data (2600 MHz)

System check at 2600 MHz

Date of measurement: 29/12/2025

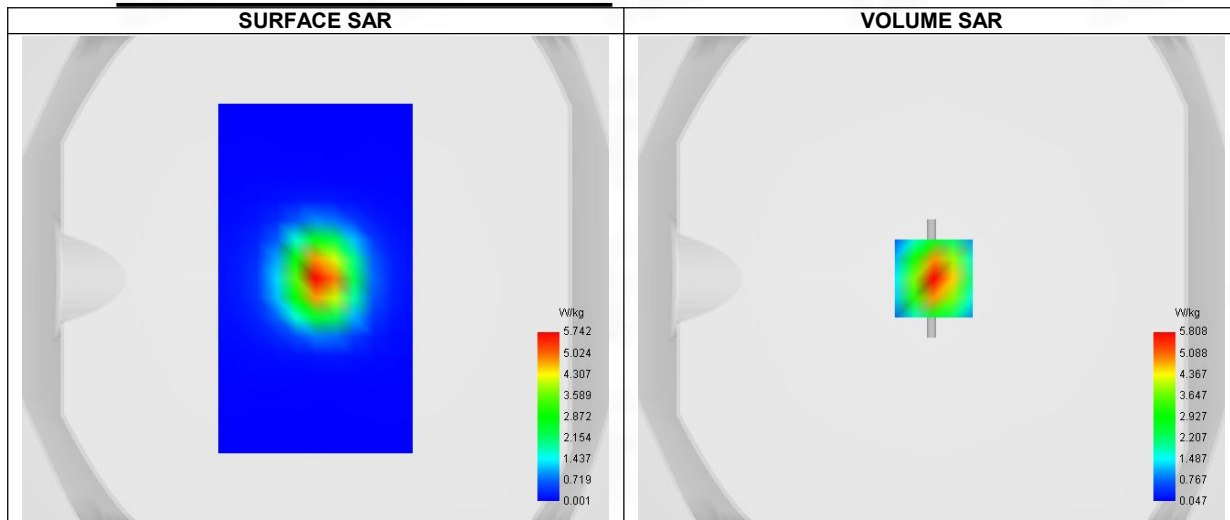
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.27
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW2600
Channels/Frequency	Middle
Signal	CW

B. Permittivity

Middle TX Frequency (MHz)	2600.000
Relative permittivity (real part)	38.622
Relative permittivity (imaginary part)	12.849
Conductivity (S/m)	1.932

C. SAR Surface and Volume



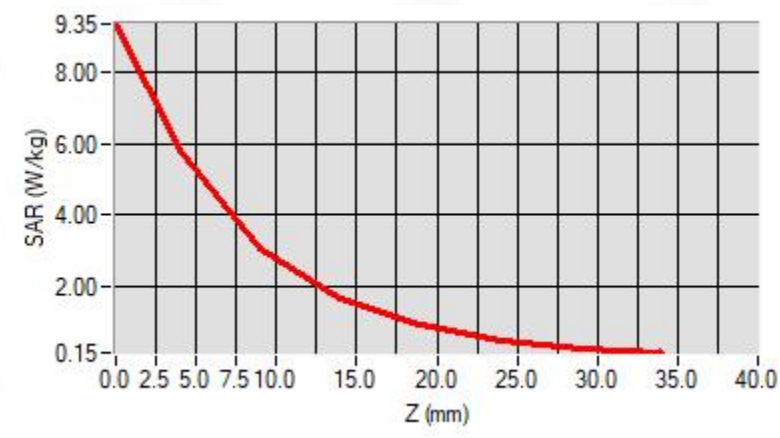
Maximum location: X=1.00, Y=0.00 ; SAR Peak: 9.32 W/kg

D. SAR 1g & 10g

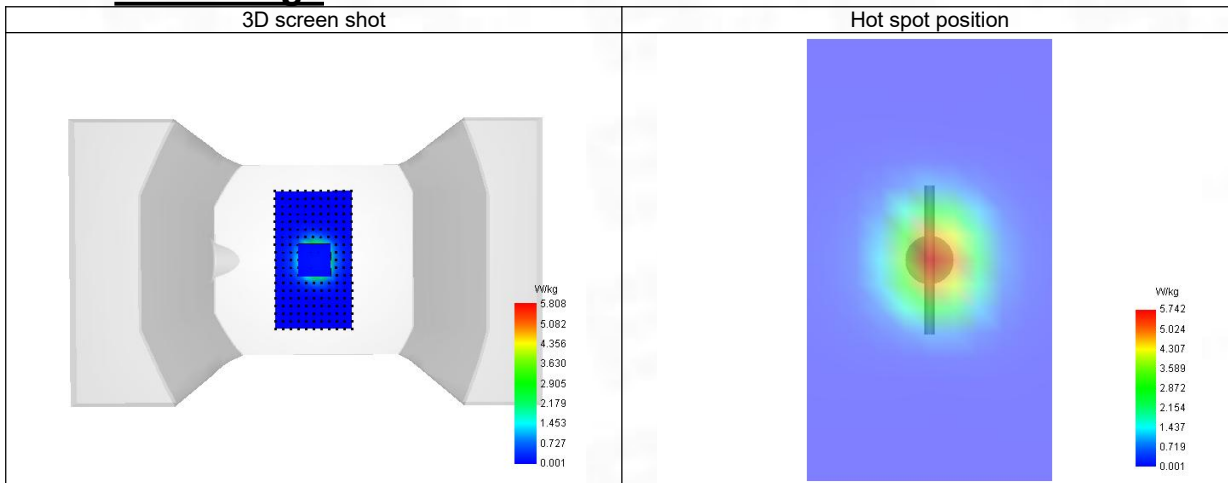
SAR 10g (W/Kg)	2.589
SAR 1g (W/Kg)	5.400
Variation (%)	3.630
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	53.043960

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	9.353	5.808	3.081	1.678	0.905	0.483	0.270



F. 3D Image



System Performance Check Data (5200 MHz)

System check at 5200 MHz

Date of measurement: 30/12/2025

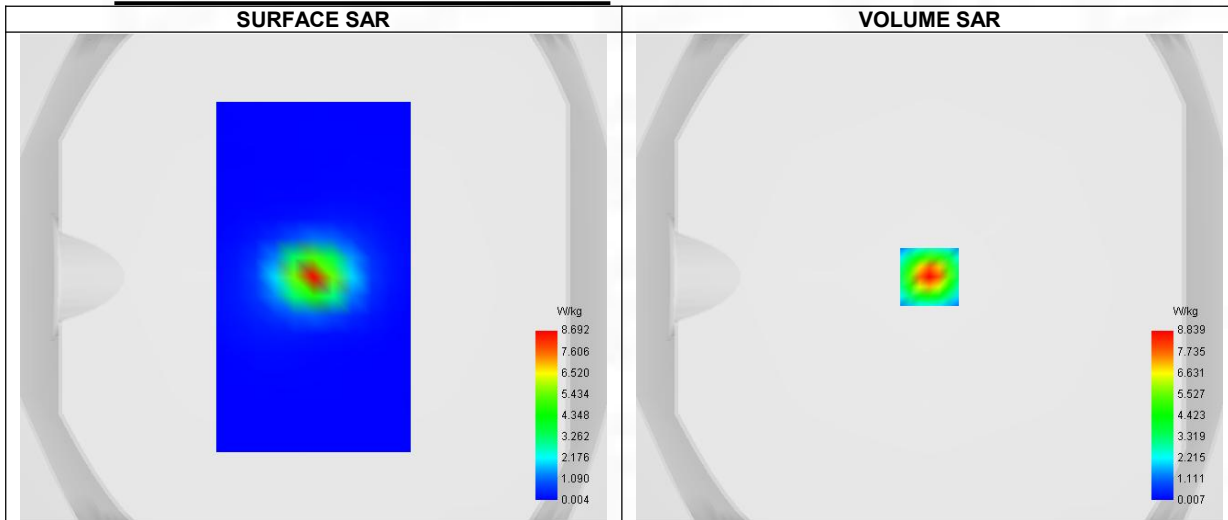
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.18
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x12, dx=4mm dy=4mm dz=2.0mm, Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW5200
Channels/Frequency	Middle
Signal	CW

B. Permittivity

Middle TX Frequency (MHz)	5200.000
Relative permittivity (real part)	36.243
Relative permittivity (imaginary part)	16.485
Conductivity (S/m)	4.584

C. SAR Surface and Volume



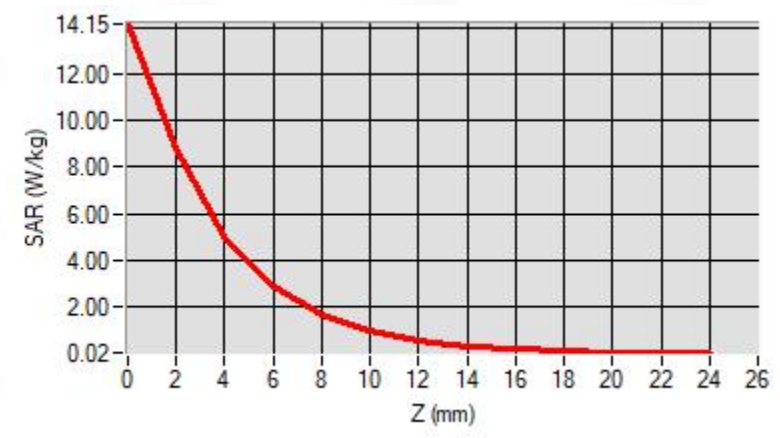
Maximum location: X=0.00, Y=0.00 ; SAR Peak: 14.72 W/kg

D. SAR 1g & 10g

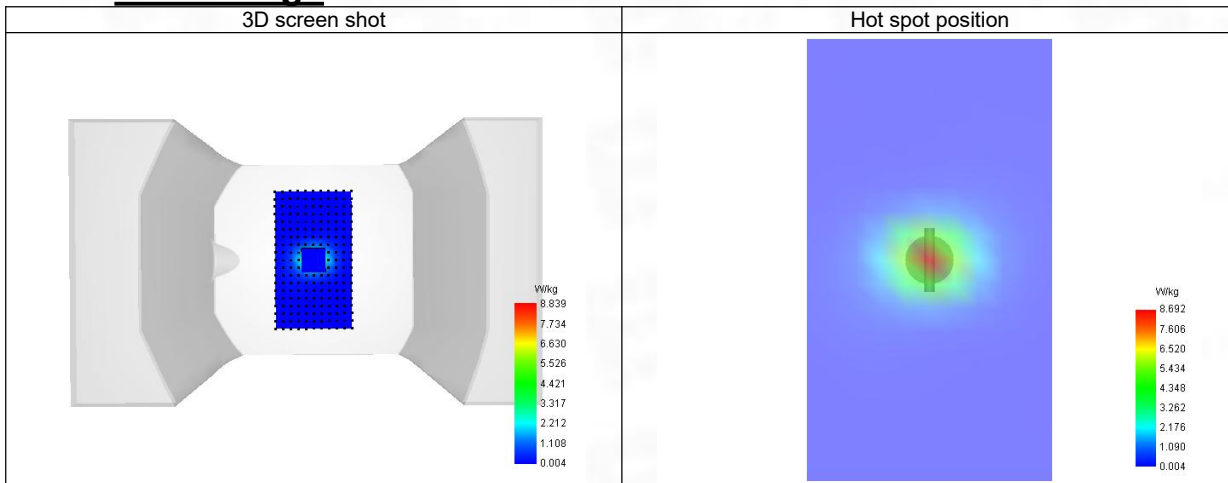
SAR 10g (W/Kg)	2.352
SAR 1g (W/Kg)	8.015
Variation (%)	-4.460
Horizontal validation criteria: minimum distance (mm)	8.944272
Vertical validation criteria: SAR ratio M2/M1 (%)	56.425273

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	14.151	8.839	4.987	2.875	1.645	0.946	0.553	0.314	0.181	0.098	0.056	0.030



F. 3D Image



ANNEX C Test Data

1-Head with front position in dist. 0mm on Channel 251 in GSM850 voice

SAR Measurement at GSM850 (Cheek, Right)

Date of measurement: 25/12/2025

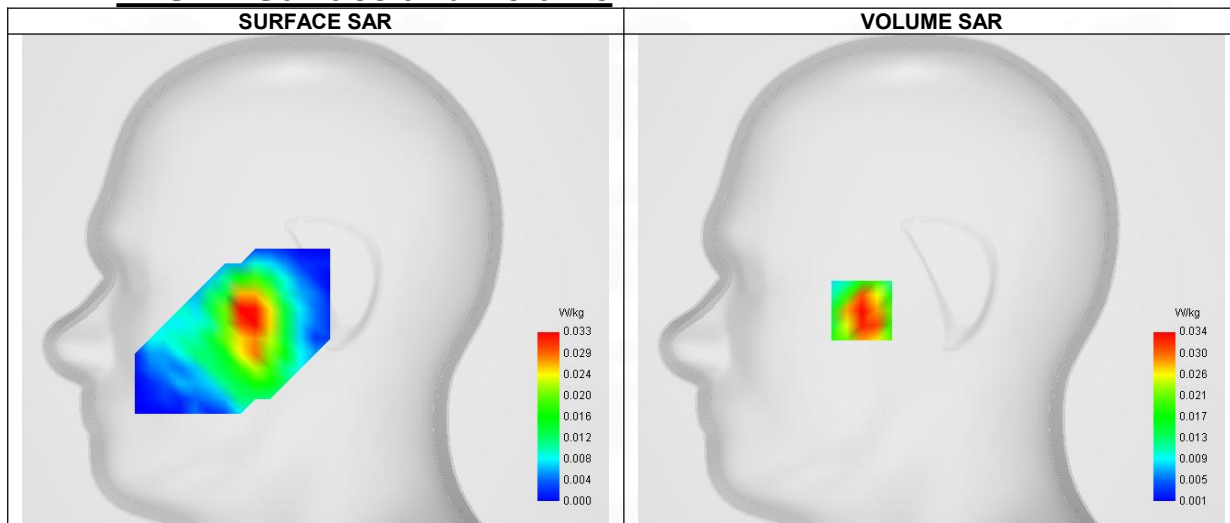
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.15
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels/Frequency	Higher (251)/ frequency 848.800 Mhz
Signal	TDMA (GSM)
Modulation	GMSK

B. Permittivity

Middle TX Frequency (MHz)	848.800
Relative permittivity (real part)	41.702
Relative permittivity (imaginary part)	19.525
Conductivity (S/m)	0.919

C. SAR Surface and Volume



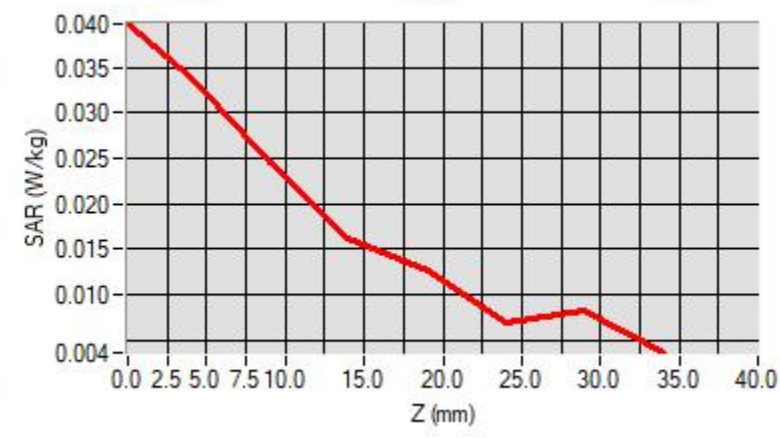
Maximum location: X=-37.00, Y=-17.00 ; SAR Peak: 0.05 W/kg

D. SAR 1g & 10g

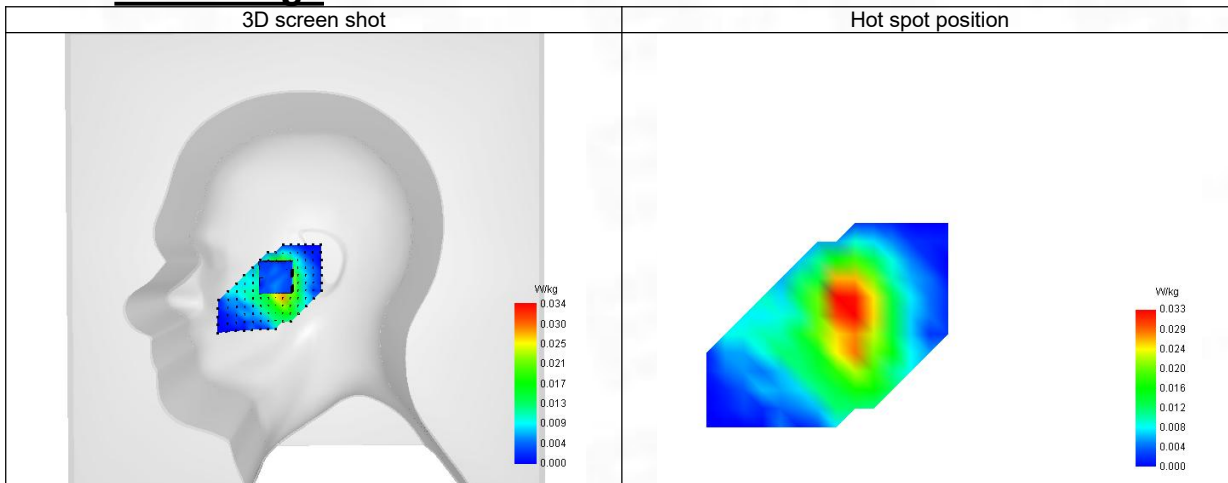
SAR 10g (W/Kg)	0.019
SAR 1g (W/Kg)	0.034
Variation (%)	2.370
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	72.581306

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.040	0.034	0.025	0.016	0.013	0.007	0.008



F. 3D Image



2-Body with back position in dist. 10mm on Channel 190 in GPRS850+3slots

SAR Measurement at GPRS850 (Body, Validation Plane)

Date of measurement: 25/12/2025

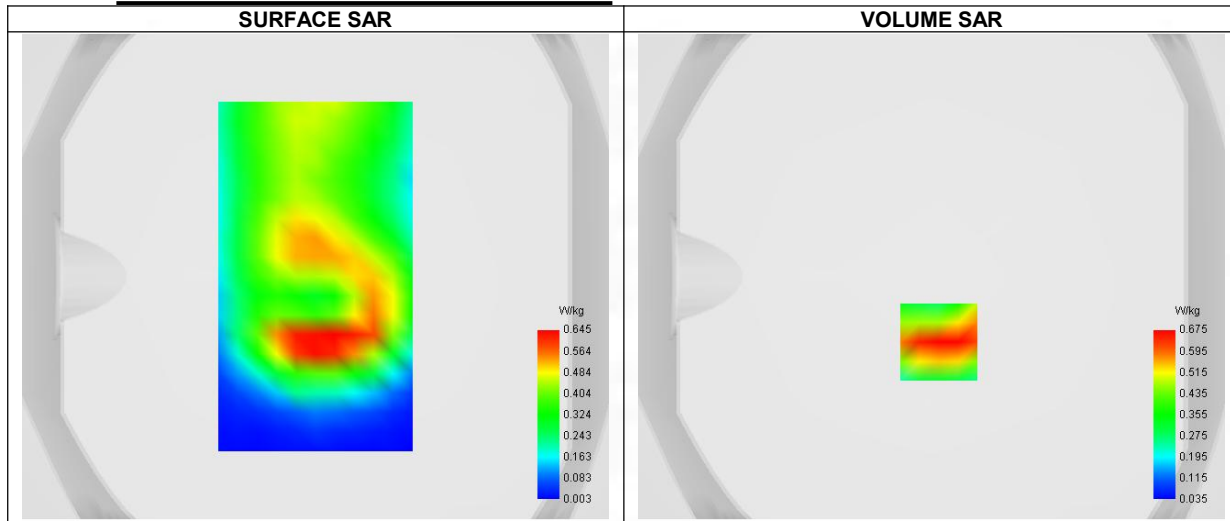
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.15
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels/Frequency	Middle (190)/ frequency 836.600 Mhz
Signal	TDMA (GPRS)
Modulation	GMSK (CS-1)
TX-slots	3

B. Permittivity

Middle TX Frequency (MHz)	836.600
Relative permittivity (real part)	41.721
Relative permittivity (imaginary part)	19.580
Conductivity (S/m)	0.913

C. SAR Surface and Volume



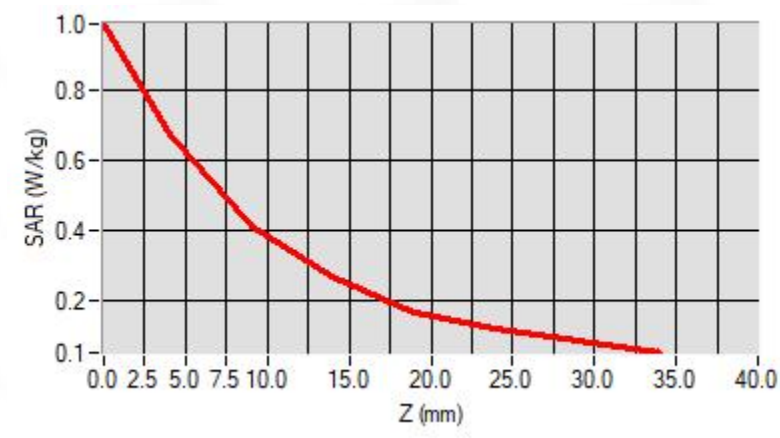
Maximum location: X=3.00, Y=-27.00 ; SAR Peak: 1.03 W/kg

D. SAR 1g & 10g

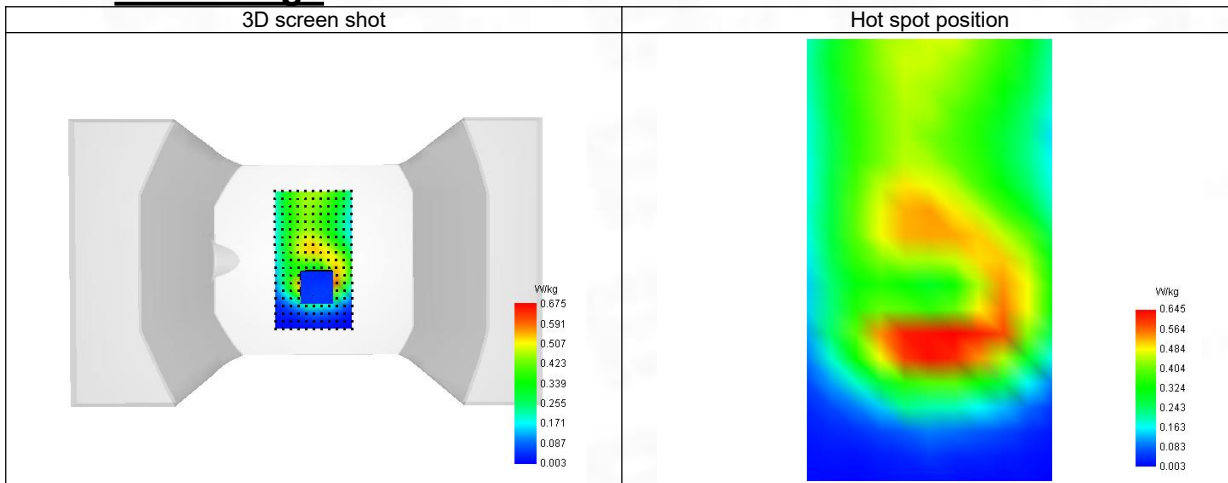
SAR 10g (W/Kg)	0.373
SAR 1g (W/Kg)	0.632
Variation (%)	-2.090
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	60.800248

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.989	0.675	0.410	0.269	0.167	0.120	0.084



F. 3D Image



3-Head with front position in dist. 0mm on Channel 810 in GSM1900 voice

SAR Measurement at GSM1900 (Cheek, Right)

Date of measurement: 27/12/2025

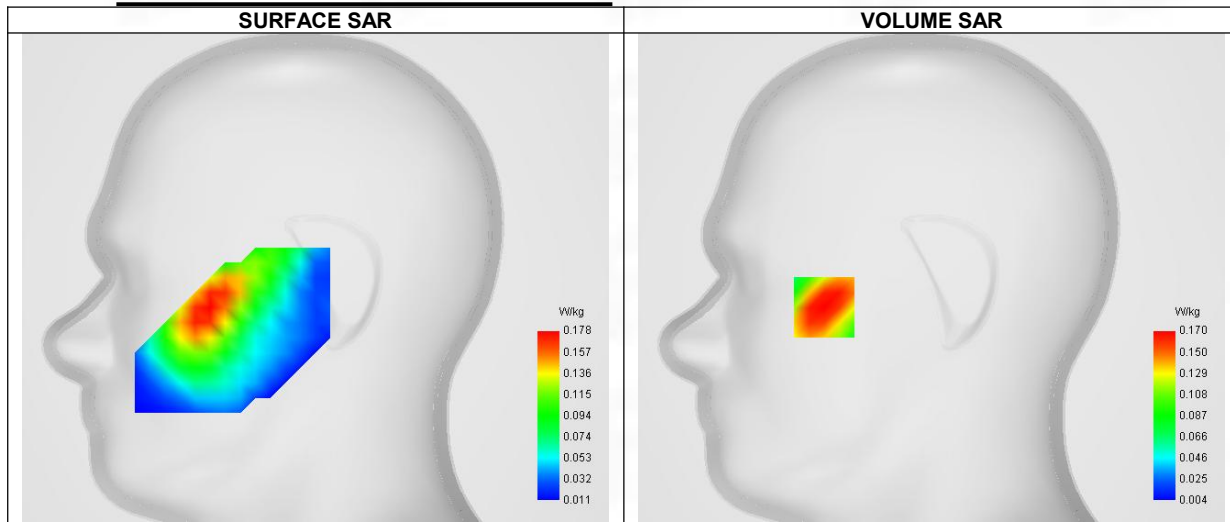
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.31
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels/Frequency	Higher (810)/ frequency 1909.800 Mhz
Signal	TDMA (GSM)
Modulation	GMSK

B. Permittivity

Middle TX Frequency (MHz)	1908.800
Relative permittivity (real part)	40.191
Relative permittivity (imaginary part)	14.244
Conductivity (S/m)	1.399

C. SAR Surface and Volume



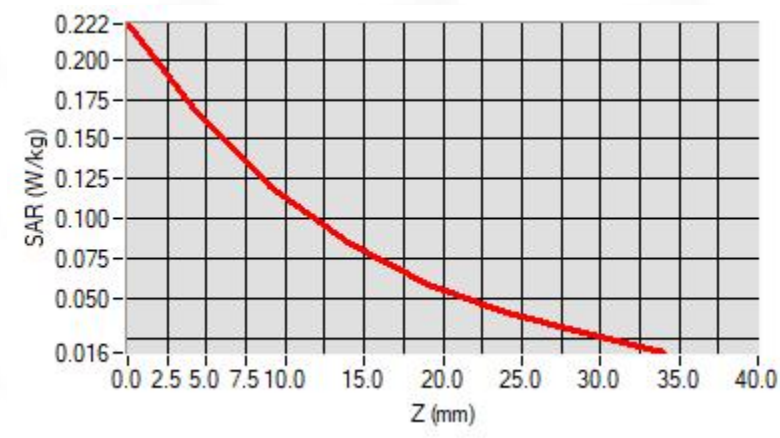
Maximum location: X=-57.00, Y=-16.00 ; SAR Peak: 0.24 W/kg

D. SAR 1g & 10g

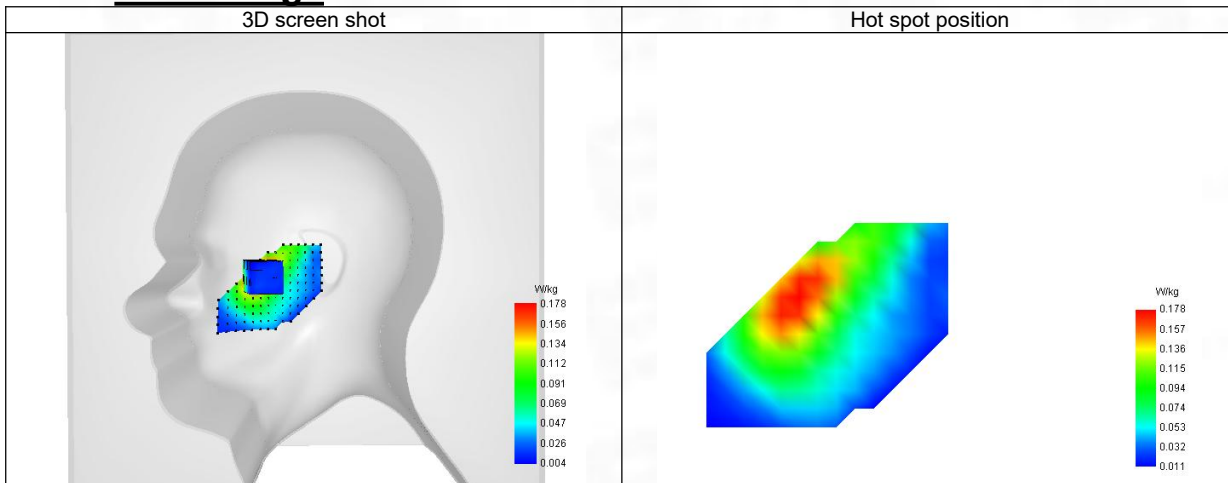
SAR 10g (W/Kg)	0.106
SAR 1g (W/Kg)	0.165
Variation (%)	-4.340
Horizontal validation criteria: minimum distance (mm)	22.627417
Vertical validation criteria: SAR ratio M2/M1 (%)	70.449818

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.222	0.170	0.120	0.085	0.059	0.040	0.028



F. 3D Image



4-Body with back position in dist. 10mm on Channel 810 in GPRS1900+3slots

SAR Measurement at GPRS1900 (Body, Validation Plane)

Date of measurement: 27/12/2025

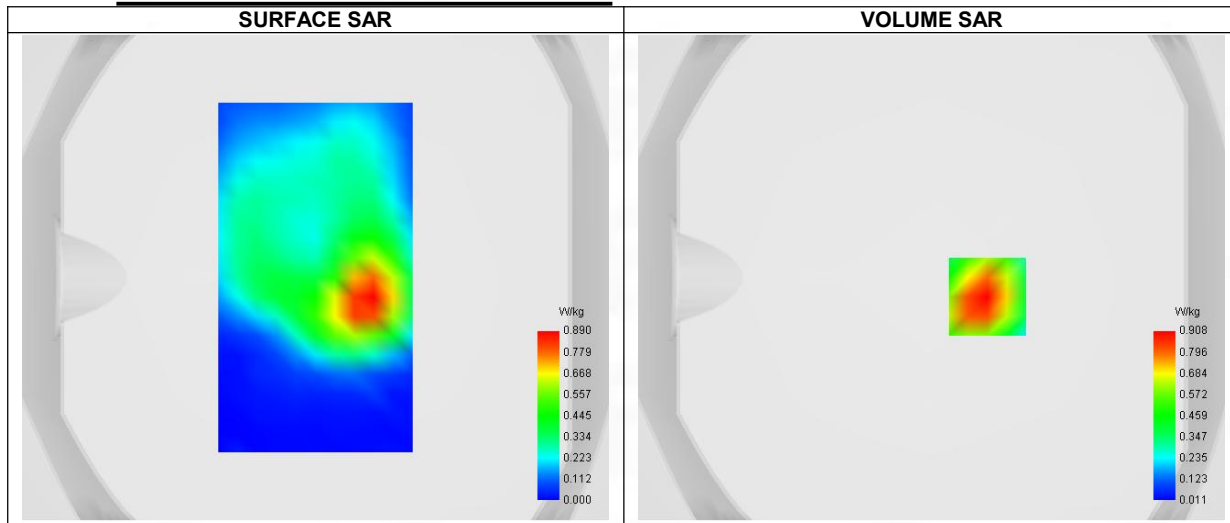
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.31
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	GPRS1900
Channels/Frequency	Higher (810)/ frequency 1909.800 Mhz
Signal	TDMA (GPRS)
Modulation	GMSK (CS-1)
TX-slots	3

B. Permittivity

Middle TX Frequency (MHz)	1909.800
Relative permittivity (real part)	40.191
Relative permittivity (imaginary part)	14.244
Conductivity (S/m)	1.399

C. SAR Surface and Volume



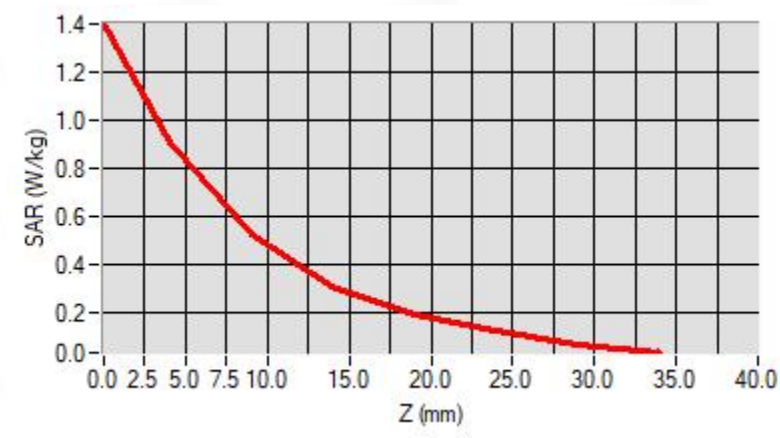
Maximum location: X=23.00, Y=-8.00 ; SAR Peak: 1.42 W/kg

D. SAR 1g & 10g

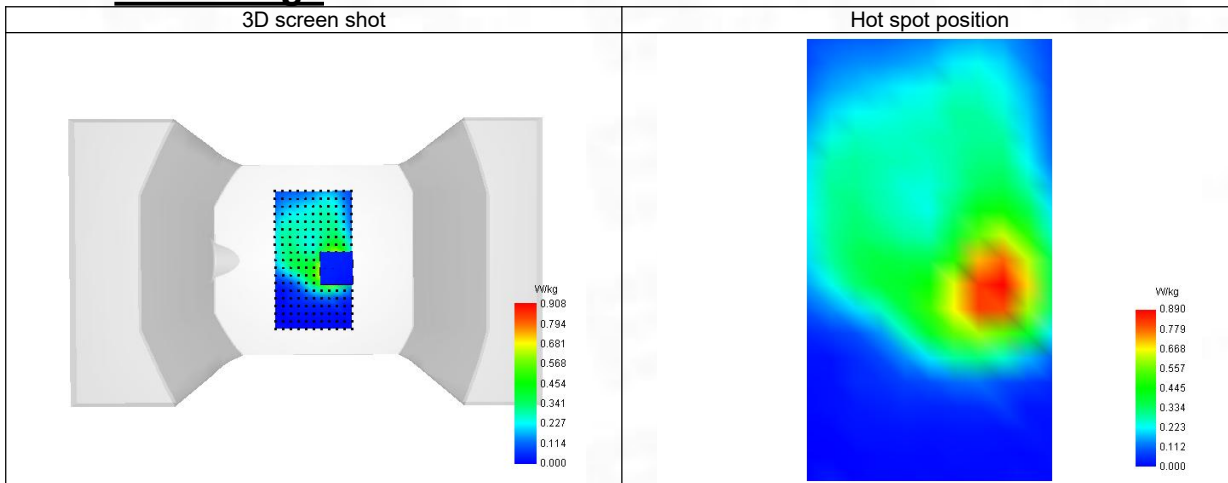
SAR 10g (W/Kg)	0.385
SAR 1g (W/Kg)	0.752
Variation (%)	-1.200
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	58.227613

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.402	0.908	0.529	0.306	0.193	0.121	0.063



F. 3D Image



5-Head with front position in dist. 0mm on Channel 9262 in WCDMA Band 2

SAR Measurement at Band 2 (1900) (Cheek, Right)

Date of measurement: 26/12/2025

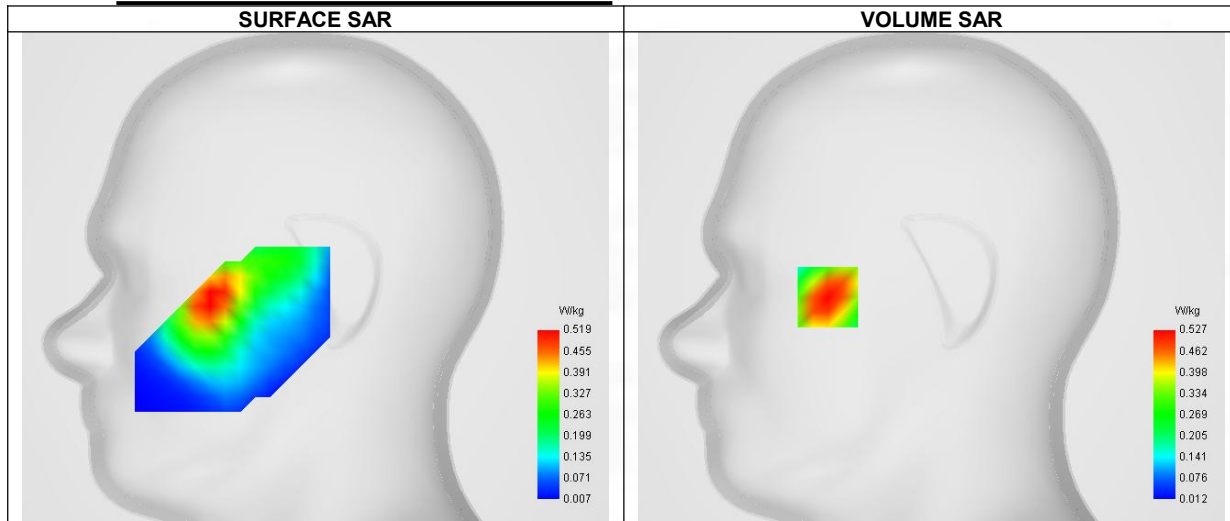
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.20
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	Band 2 (1900)
Channels/Frequency	Lower (9262)/ frequency 1852.400 Mhz
Signal	WCDMA
Mode	Release 99
Connection Type	RMC, 12.2 kbps

B. Permittivity

Middle TX Frequency (MHz)	1852.400
Relative permittivity (real part)	40.231
Relative permittivity (imaginary part)	14.724
Conductivity (S/m)	1.390

C. SAR Surface and Volume



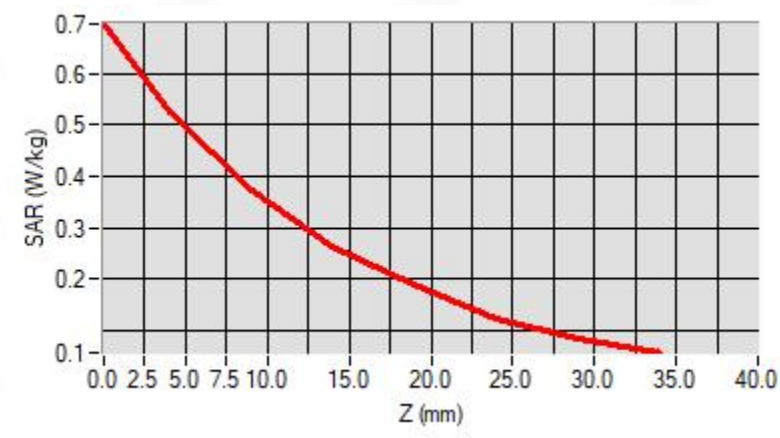
Maximum location: X=-55.00, Y=-11.00 ; SAR Peak: 0.70 W/kg

D. SAR 1g & 10g

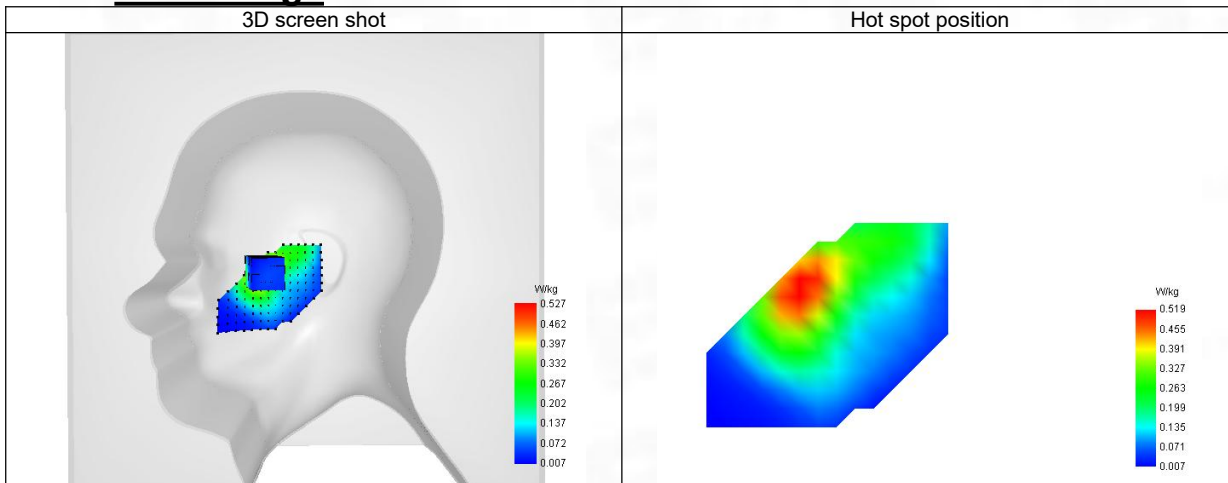
SAR 10g (W/Kg)	0.321
SAR 1g (W/Kg)	0.502
Variation (%)	-0.200
Horizontal validation criteria: minimum distance (mm)	17.888544
Vertical validation criteria: SAR ratio M2/M1 (%)	70.741554

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.697	0.527	0.373	0.262	0.187	0.121	0.083



F. 3D Image



6-Body with back position in dist. 10mm on Channel 9262 in WCDMA Band 2

SAR Measurement at Band 2 (1900) (Body, Validation Plane)

Date of measurement: 26/12/2025

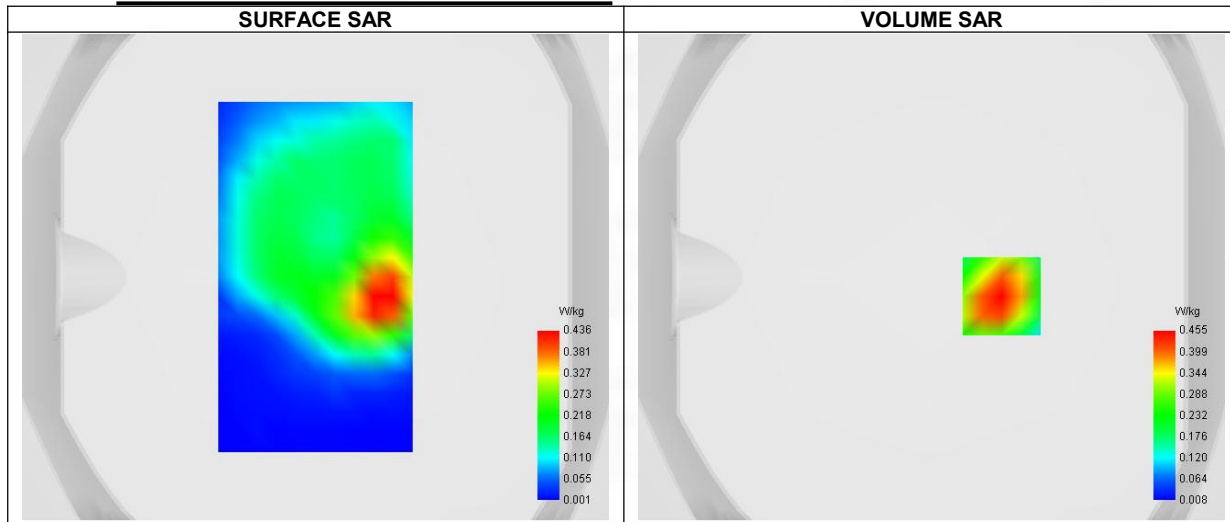
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.20
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	Band 2 (1900)
Channels/Frequency	Lower (9262)/ frequency 1852.400 Mhz
Signal	WCDMA
Mode	Release 99
Connection Type	RMC, 12.2 kbps

B. Permittivity

Middle TX Frequency (MHz)	1852.400
Relative permittivity (real part)	40.231
Relative permittivity (imaginary part)	14.724
Conductivity (S/m)	1.390

C. SAR Surface and Volume



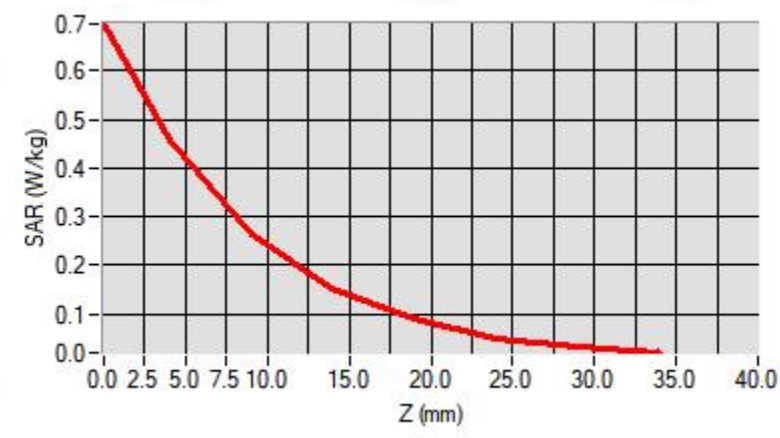
Maximum location: X=29.00, Y=-8.00 ; SAR Peak: 0.71 W/kg

D. SAR 1g & 10g

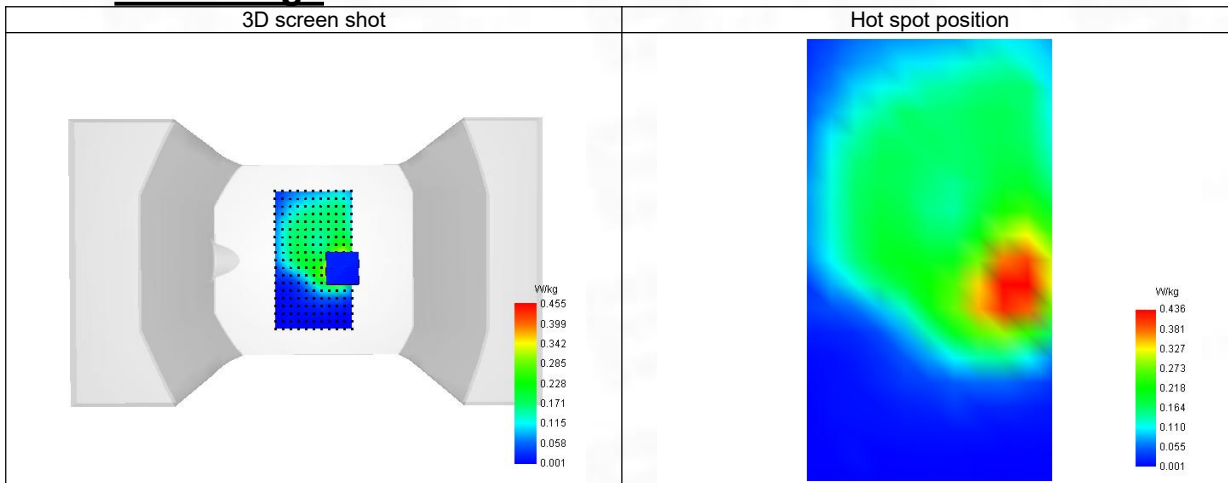
SAR 10g (W/Kg)	0.240
SAR 1g (W/Kg)	0.436
Variation (%)	2.190
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	57.568293

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.696	0.455	0.262	0.153	0.091	0.050	0.032



F. 3D Image



7-Head with front position in dist. 0mm on Channel 1312 in WCDMA Band 4

SAR Measurement at Band 4 (1700) (Cheek, Right)

Date of measurement: 26/12/2025

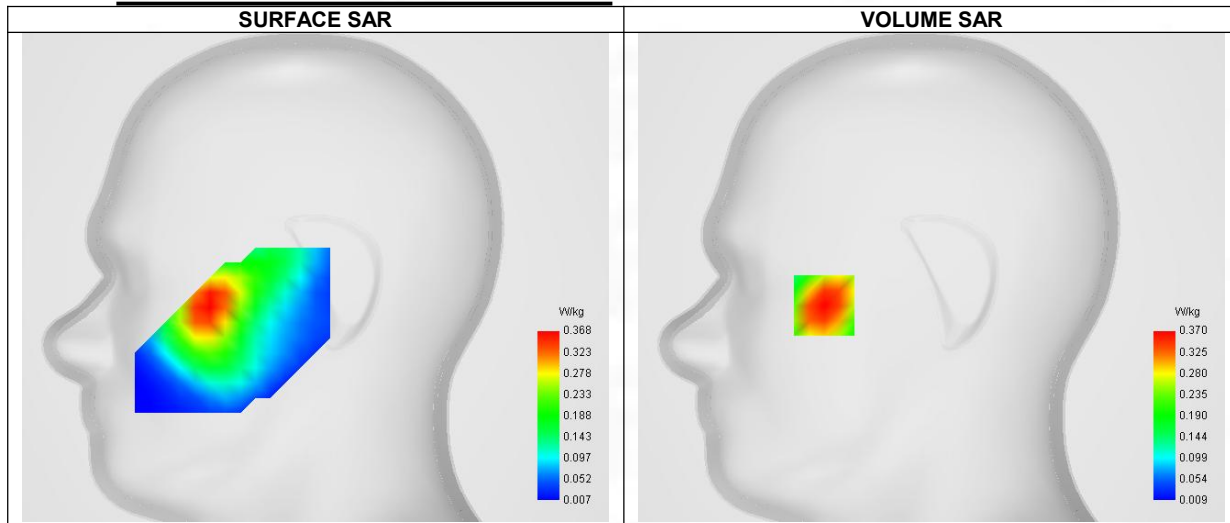
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.20
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	Band 4 (1700)
Channels/Frequency	Lower (1312)/ frequency 1712.40 Mhz
Signal	WCDMA
Mode	Release 99
Connection Type	RMC, 12.2 kbps

B. Permittivity

Middle TX Frequency (MHz)	1712.400
Relative permittivity (real part)	40.385
Relative permittivity (imaginary part)	15.637
Conductivity (S/m)	1.345

C. SAR Surface and Volume



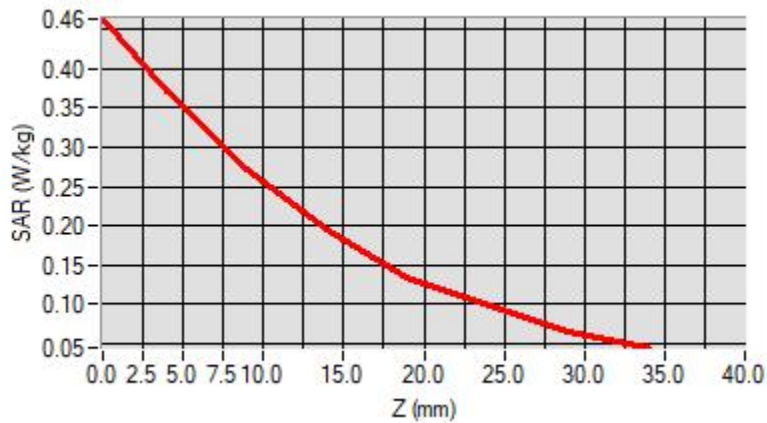
Maximum location: X=-57.00, Y=-15.00 ; SAR Peak: 0.47 W/kg

D. SAR 1g & 10g

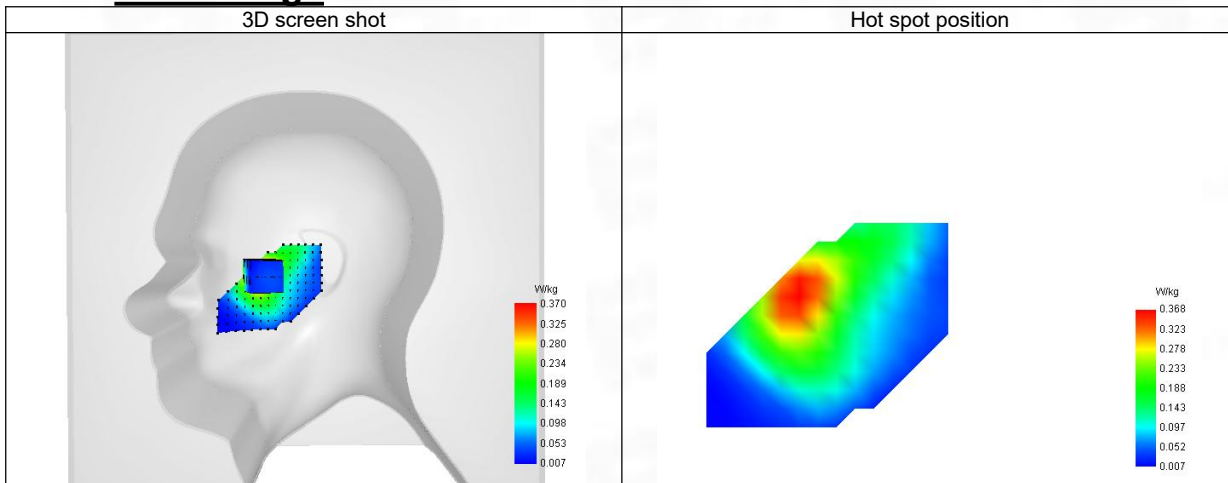
SAR 10g (W/Kg)	0.234
SAR 1g (W/Kg)	0.352
Variation (%)	0.190
Horizontal validation criteria: minimum distance (mm)	17.888544
Vertical validation criteria: SAR ratio M2/M1 (%)	73.505124

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.463	0.370	0.272	0.197	0.134	0.098	0.065



F. 3D Image



8-Body with back position in dist. 10mm on Channel 1312 in WCDMA Band 4

SAR Measurement at Band 4 (1700) (Body, Validation Plane)

Date of measurement: 26/12/2025

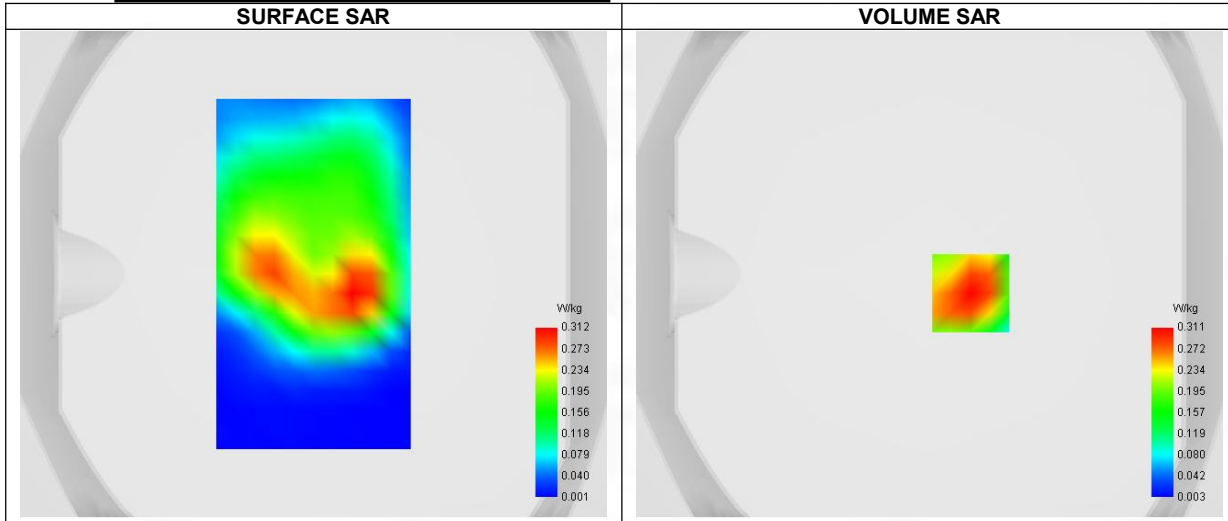
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.20
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	Band 4 (1700)
Channels/Frequency	Lower (1312)/ frequency 1712.40 Mhz
Signal	WCDMA
Mode	Release 99
Connection Type	RMC, 12.2 kbps

B. Permittivity

Middle TX Frequency (MHz)	1712.400
Relative permittivity (real part)	40.385
Relative permittivity (imaginary part)	15.637
Conductivity (S/m)	1.345

C. SAR Surface and Volume



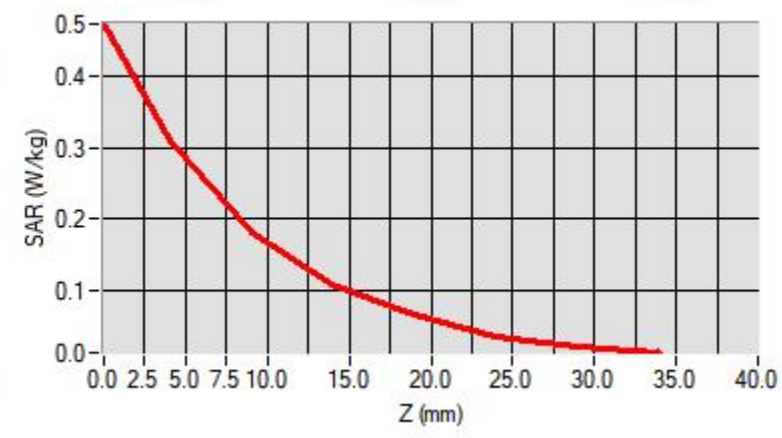
Maximum location: X=17.00, Y=-8.00 ; SAR Peak: 0.48 W/kg

D. SAR 1g & 10g

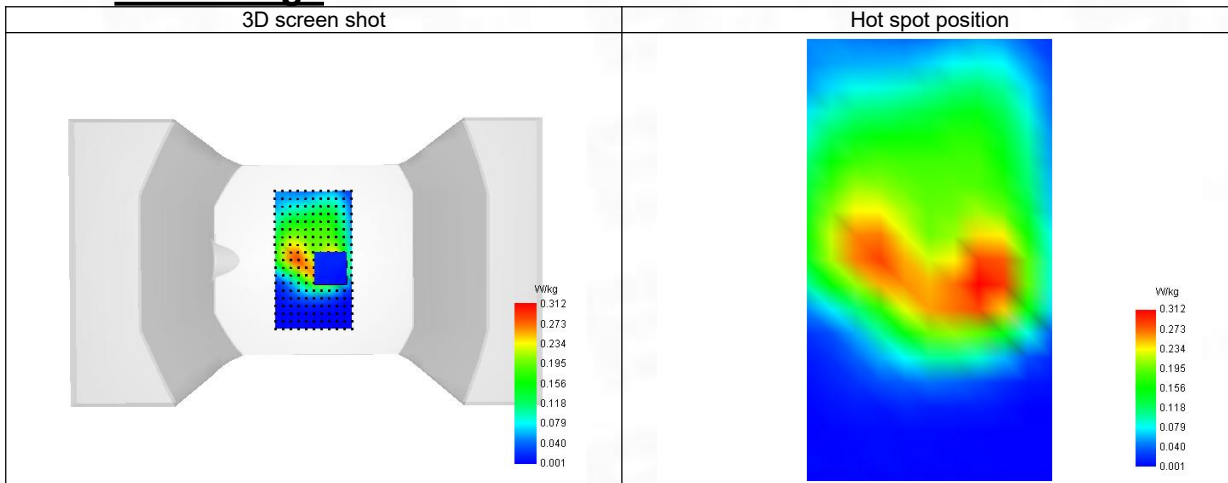
SAR 10g (W/Kg)	0.165
SAR 1g (W/Kg)	0.298
Variation (%)	-1.140
Horizontal validation criteria: minimum distance (mm)	17.888544
Vertical validation criteria: SAR ratio M2/M1 (%)	58.266590

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.474	0.311	0.181	0.109	0.066	0.036	0.022



F. 3D Image



9-Head with front position in dist. 0mm on Channel 4132 in WCDMA Band 5

SAR Measurement at Band 5 (850) (Cheek, Right)

Date of measurement: 25/12/2025

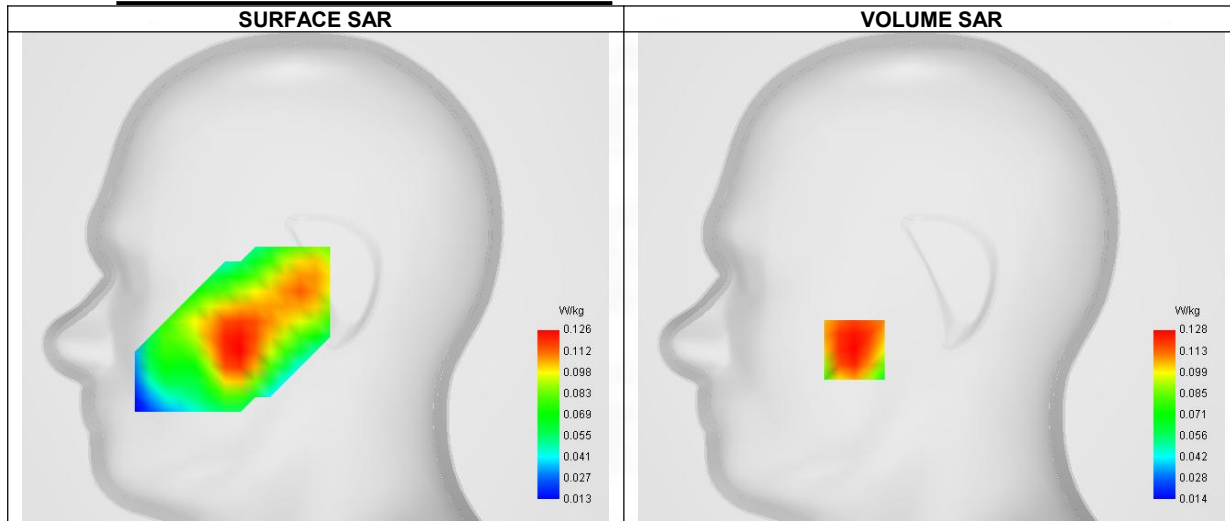
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.15
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	Band 5 (850)
Channels/Frequency	Lower (4132)/ frequency 826.400 Mhz
Signal	WCDMA
Mode	Release 99
Connection Type	RMC, 12.2 kbps

B. Permittivity

Middle TX Frequency (MHz)	826.400
Relative permittivity (real part)	41.736
Relative permittivity (imaginary part)	19.626
Conductivity (S/m)	0.908

C. SAR Surface and Volume



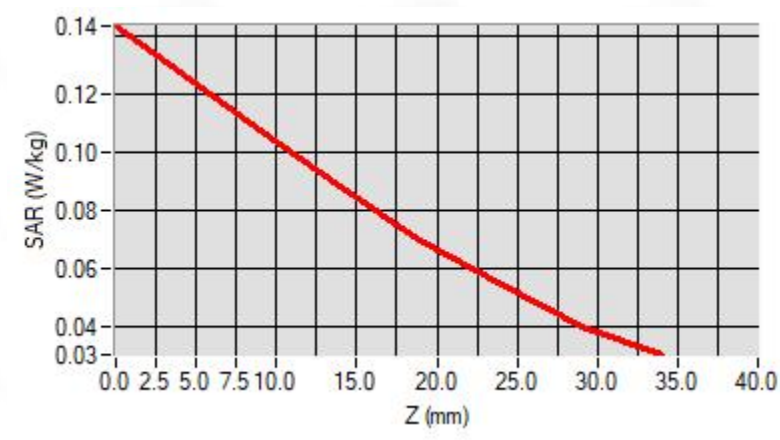
Maximum location: X=-41.00, Y=-39.00 ; SAR Peak: 0.15 W/kg

D. SAR 1g & 10g

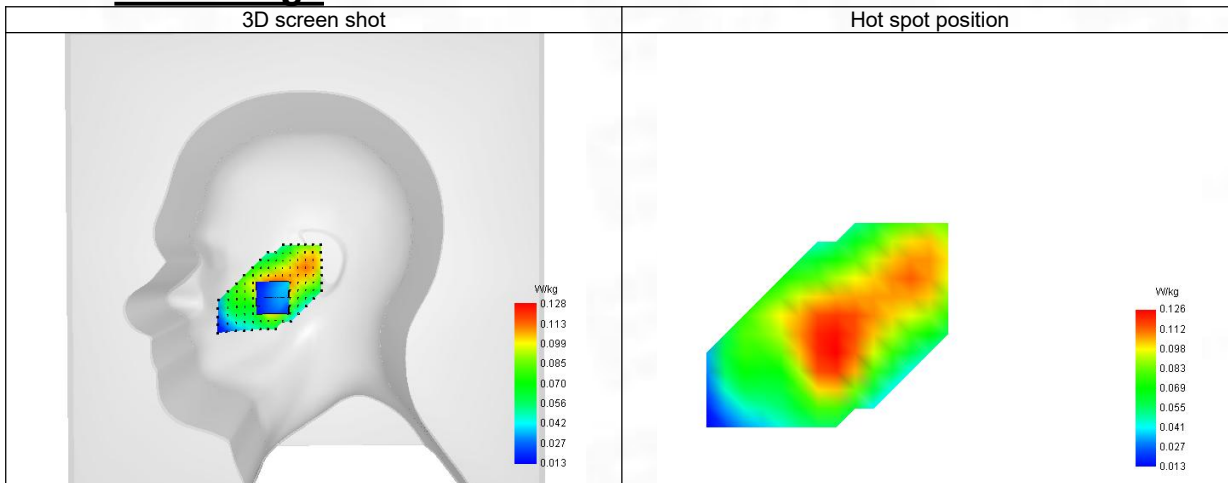
SAR 10g (W/Kg)	0.097
SAR 1g (W/Kg)	0.124
Variation (%)	-1.900
Horizontal validation criteria: minimum distance (mm)	-1.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	84.556381

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.144	0.128	0.108	0.089	0.070	0.055	0.040



F. 3D Image



10-Body with back position in dist. 10mm on Channel 4132 in WCDMA Band 5

SAR Measurement at Band 5 (850) (Body, Validation Plane)

Date of measurement: 25/12/2025

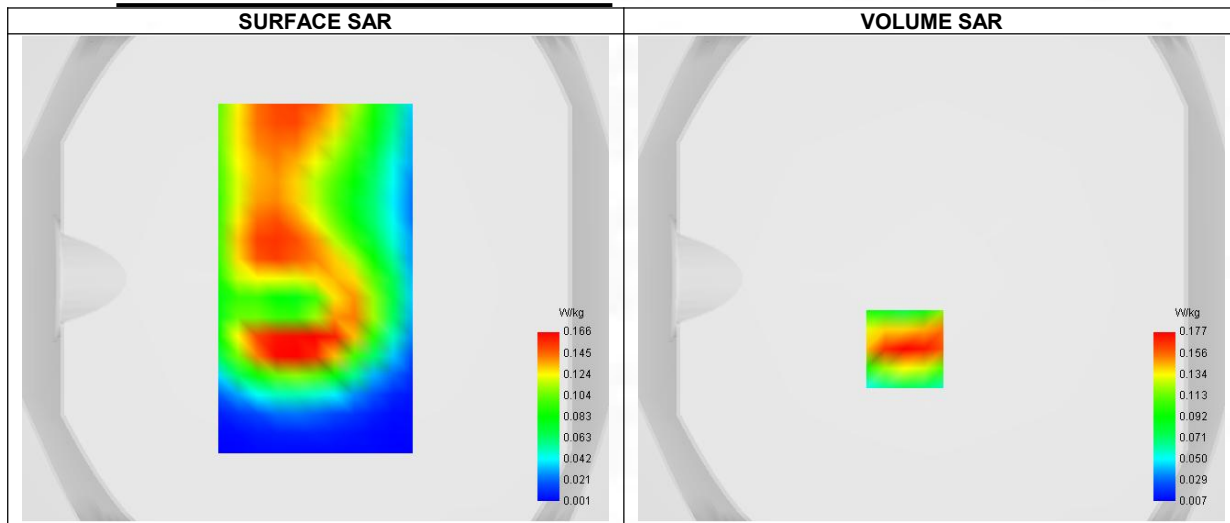
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.15
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	Band 5 (850)
Channels/Frequency	Lower (4132)/ frequency 826.400 Mhz
Signal	WCDMA
Mode	Release 99
Connection Type	RMC, 12.2 kbps

B. Permittivity

Middle TX Frequency (MHz)	826.400
Relative permittivity (real part)	41.736
Relative permittivity (imaginary part)	19.626
Conductivity (S/m)	0.908

C. SAR Surface and Volume

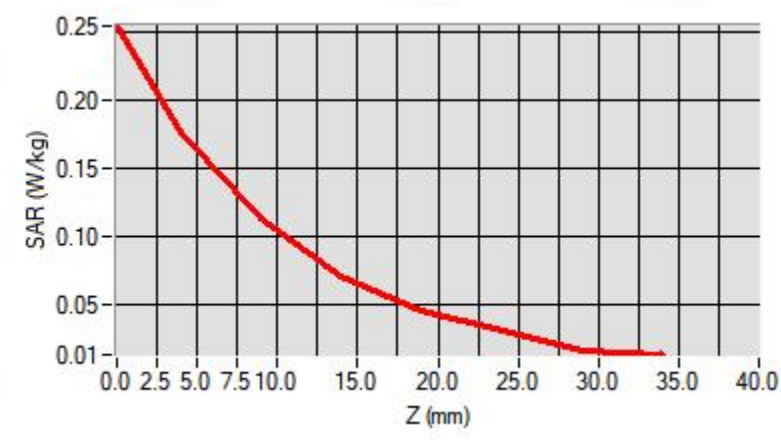


D. SAR 1g & 10g

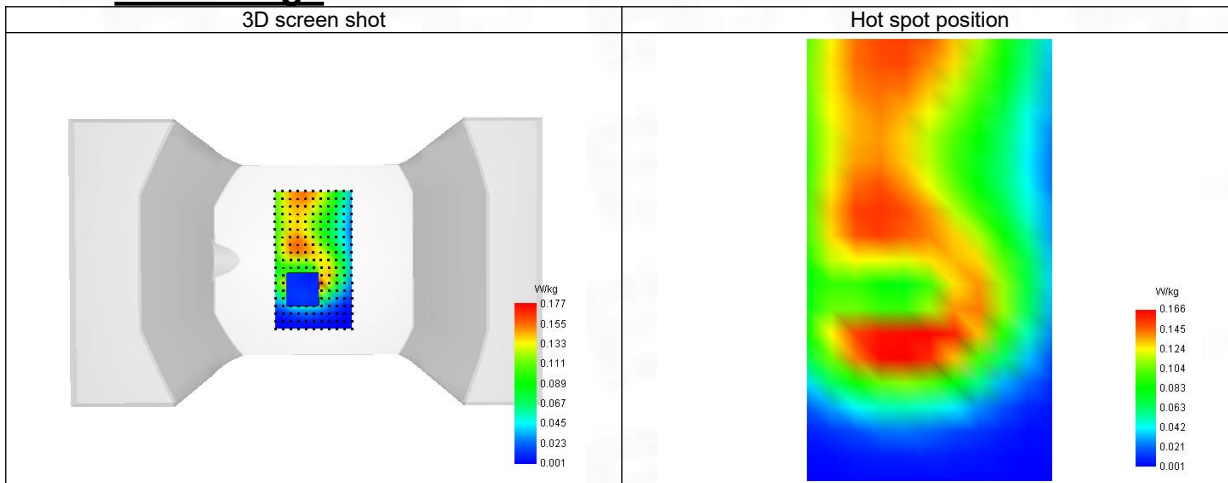
SAR 10g (W/Kg)	0.098
SAR 1g (W/Kg)	0.167
Variation (%)	-3.000
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	63.925353

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.254	0.177	0.113	0.071	0.046	0.030	0.017



F. 3D Image



11-Head with front position in dist. 0mm on Channel 19100 in LTE band 2

SAR Measurement at LTE band 2 (Cheek, Right)

Date of measurement: 27/12/2025

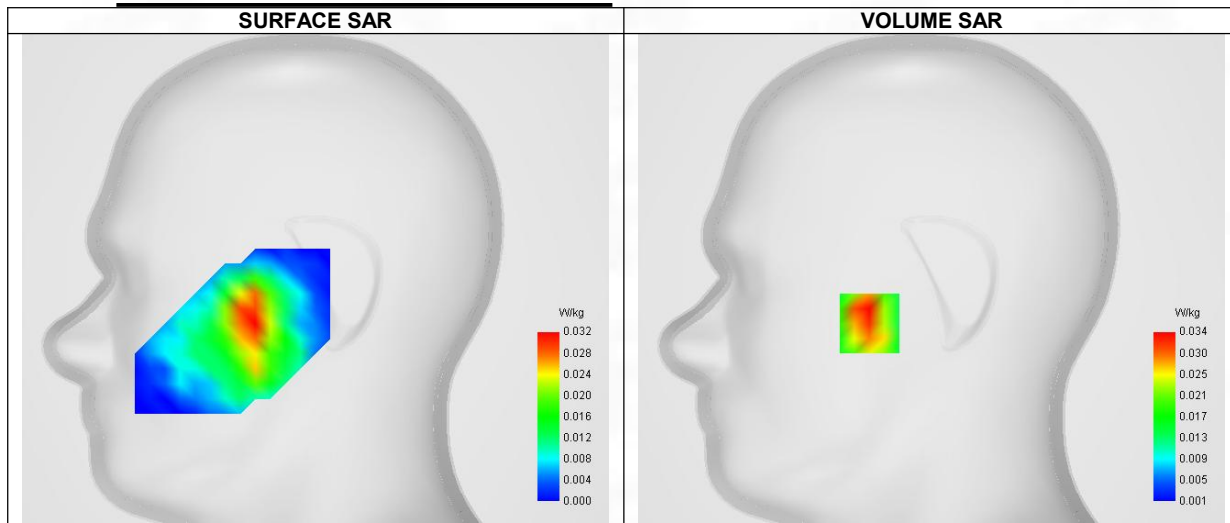
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.31
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 2
Channels/Frequency	Higher (19100)/ frequency 1900.000 Mhz
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	99
RB size	1

B. Permittivity

Middle TX Frequency (MHz)	1900.700
Relative permittivity (real part)	40.211
Relative permittivity (imaginary part)	14.252
Conductivity (S/m)	1.393

C. SAR Surface and Volume



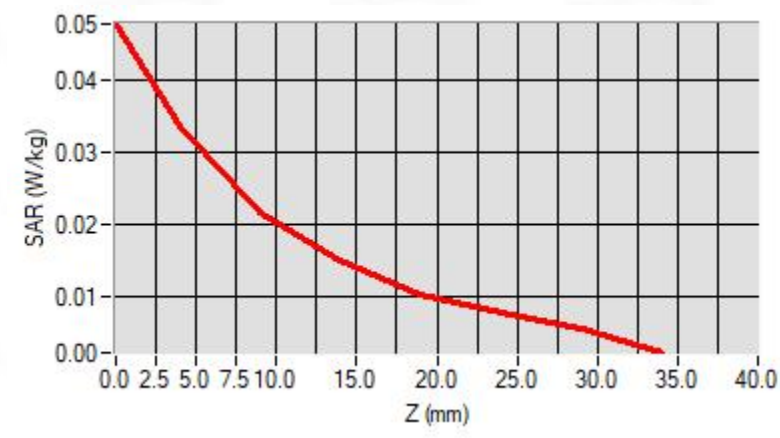
Maximum location: X=-33.00, Y=-24.00 ; SAR Peak: 0.05 W/kg

D. SAR 1g & 10g

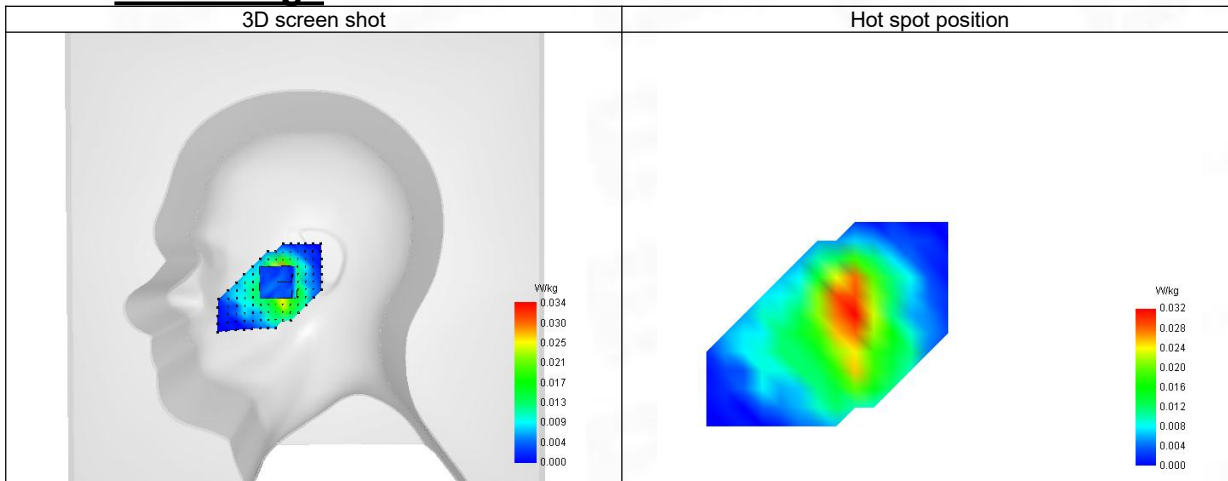
SAR 10g (W/Kg)	0.019
SAR 1g (W/Kg)	0.032
Variation (%)	-2.030
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	71.239846

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.048	0.034	0.022	0.015	0.010	0.008	0.005



F. 3D Image



12-Body with back position in dist. 10mm on Channel 19100 in LTE band 2

SAR Measurement at LTE band 2 (Body, Validation Plane)

Date of measurement: 27/12/2025

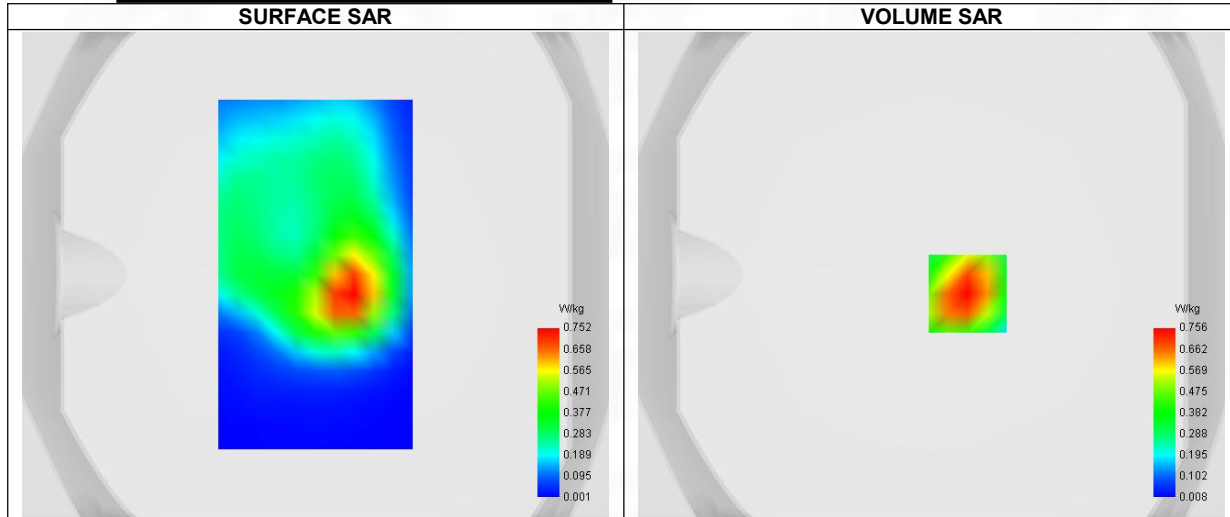
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.31
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 2
Channels/Frequency	Higher (19100)/ frequency 1900.000 Mhz
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	99
RB size	1

B. Permittivity

Middle TX Frequency (MHz)	1900.700
Relative permittivity (real part)	40.211
Relative permittivity (imaginary part)	14.252
Conductivity (S/m)	1.393

C. SAR Surface and Volume

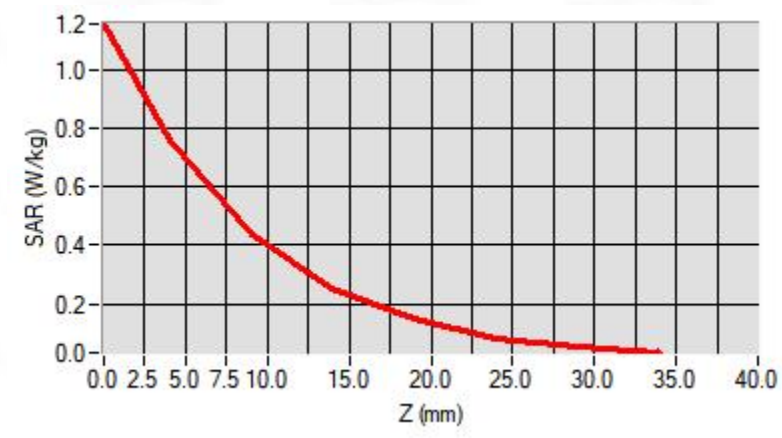


D. SAR 1g & 10g

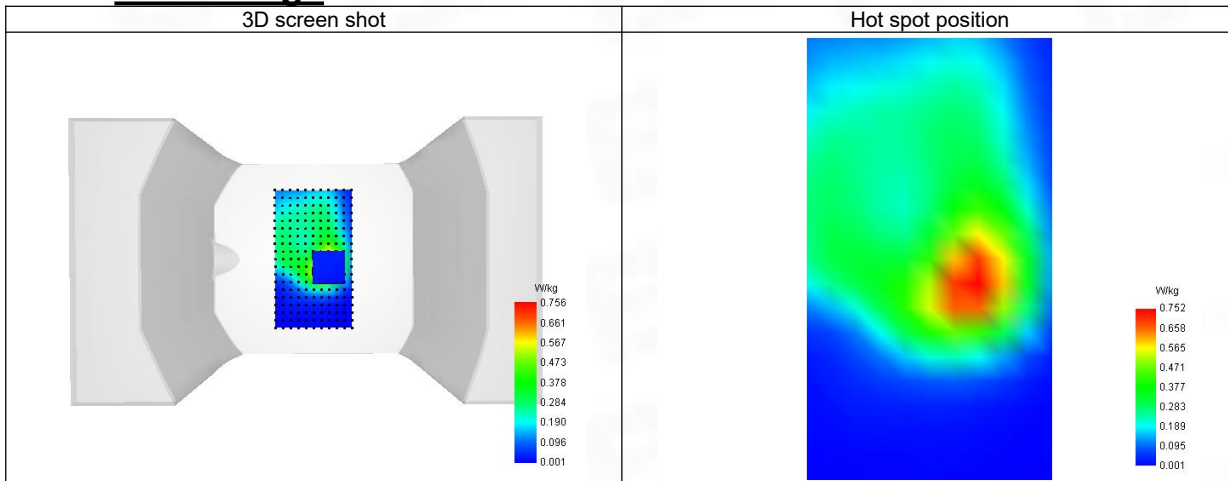
SAR 10g (W/Kg)	0.358
SAR 1g (W/Kg)	0.699
Variation (%)	-1.660
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	57.425904

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.154	0.756	0.434	0.254	0.148	0.084	0.053



F. 3D Image



13-Head with front position in dist. 0mm on Channel 20175 in LTE band 4

SAR Measurement at LTE band 4 (Cheek, Right)

Date of measurement: 26/12/2025

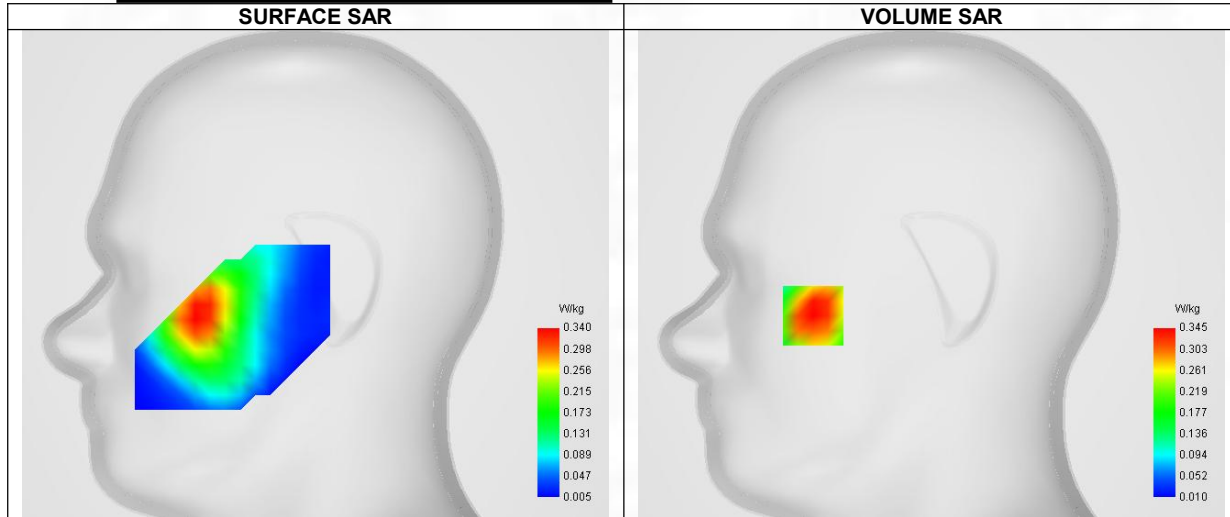
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.20
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 4
Channels/Frequency	Middle (20175)/ frequency 1732.500 Mhz
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	99
RB size	1

B. Permittivity

Middle TX Frequency (MHz)	1732.500
Relative permittivity (real part)	40.354
Relative permittivity (imaginary part)	15.547
Conductivity (S/m)	1.355

C. SAR Surface and Volume

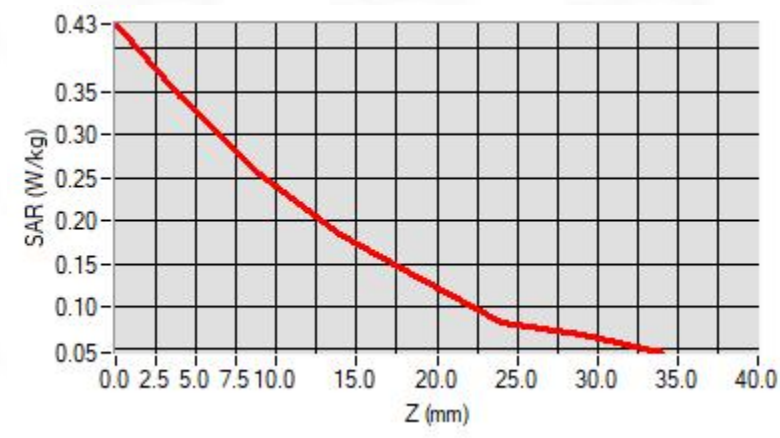


D. SAR 1g & 10g

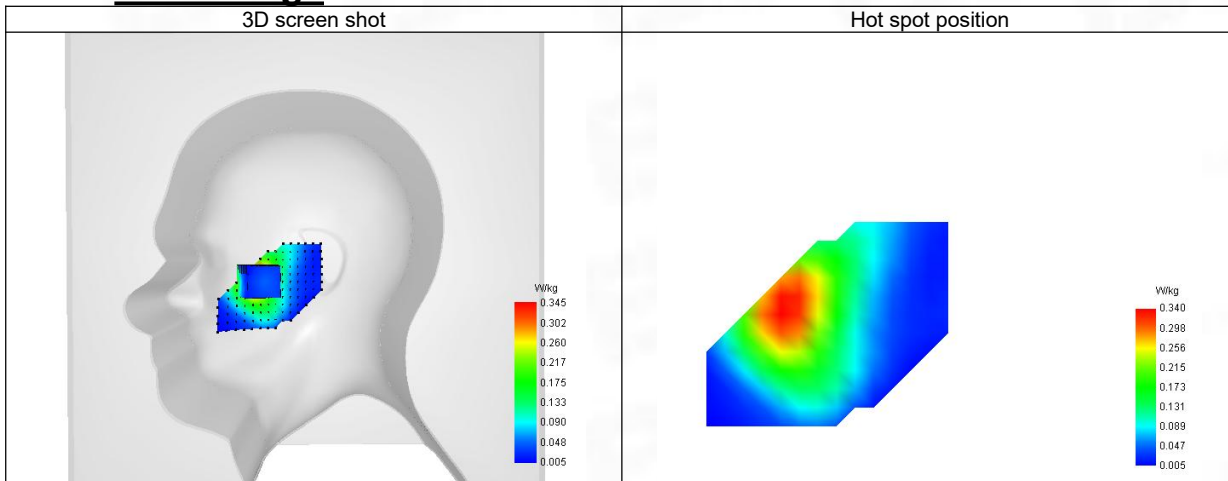
SAR 10g (W/Kg)	0.219
SAR 1g (W/Kg)	0.333
Variation (%)	0.530
Horizontal validation criteria: minimum distance (mm)	17.888544
Vertical validation criteria: SAR ratio M2/M1 (%)	73.342577

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.428	0.345	0.253	0.184	0.132	0.081	0.067



F. 3D Image



14-Body with back position in dist. 10mm on Channel 20175 in LTE band 4

SAR Measurement at LTE band 4 (Body, Validation Plane)

Date of measurement: 26/12/2025

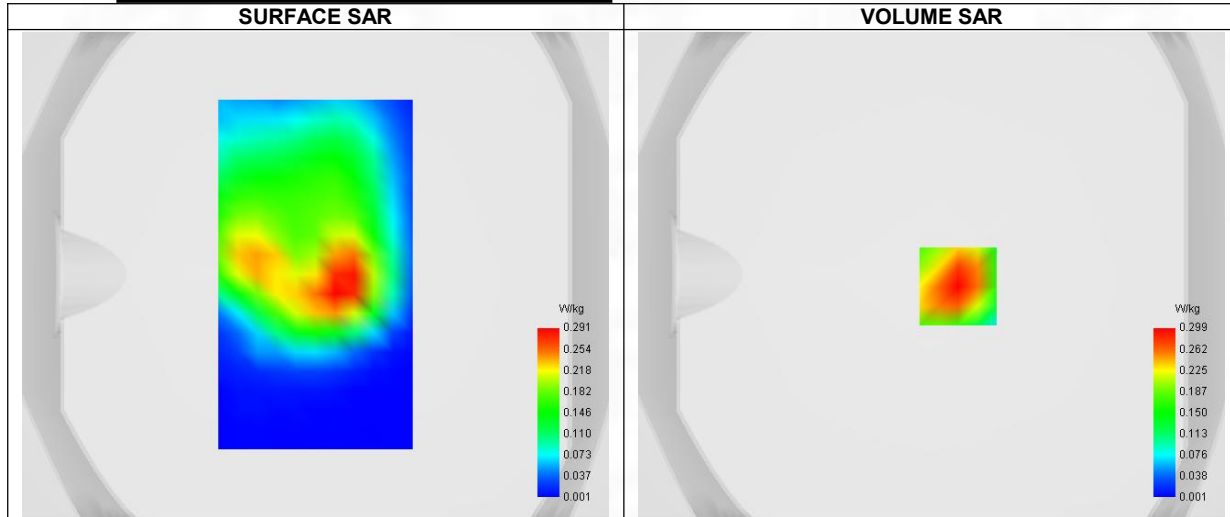
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.20
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 4
Channels/Frequency	Middle (20175)/ frequency 1732.500 Mhz
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	5
RB size	20

B. Permittivity

Middle TX Frequency (MHz)	1732.500
Relative permittivity (real part)	40.354
Relative permittivity (imaginary part)	15.547
Conductivity (S/m)	1.355

C. SAR Surface and Volume

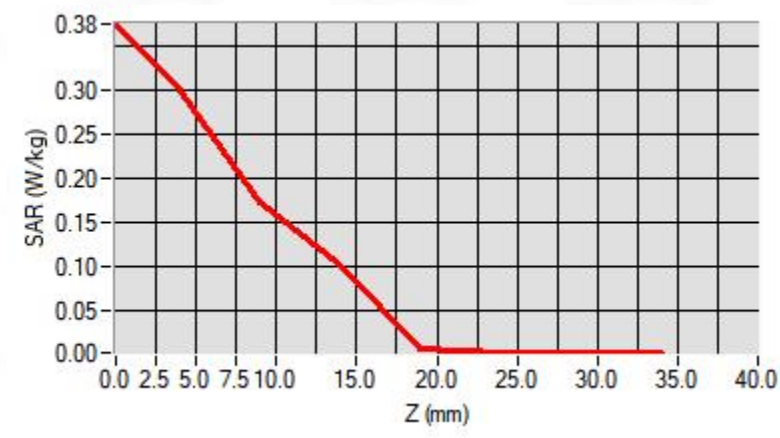


D. SAR 1g & 10g

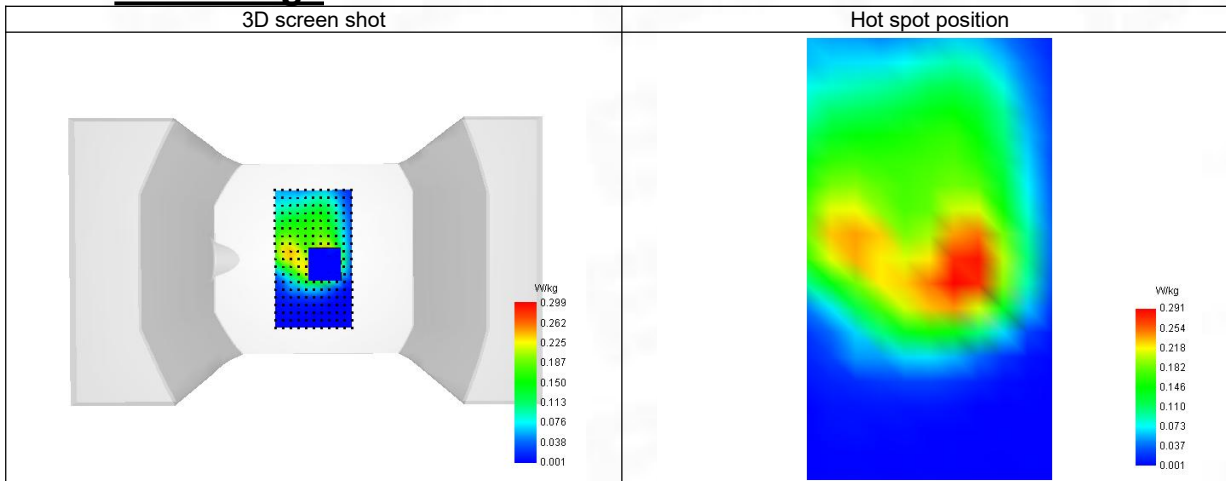
SAR 10g (W/Kg)	0.149
SAR 1g (W/Kg)	0.272
Variation (%)	-0.560
Horizontal validation criteria: minimum distance (mm)	17.888544
Vertical validation criteria: SAR ratio M2/M1 (%)	57.786410

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.375	0.299	0.173	0.102	0.005	0.002	0.001



F. 3D Image



15-Head with front position in dist. 0mm on Channel 20525 in LTE band 5

SAR Measurement at LTE band 5 (Cheek, Right)

Date of measurement: 25/12/2025

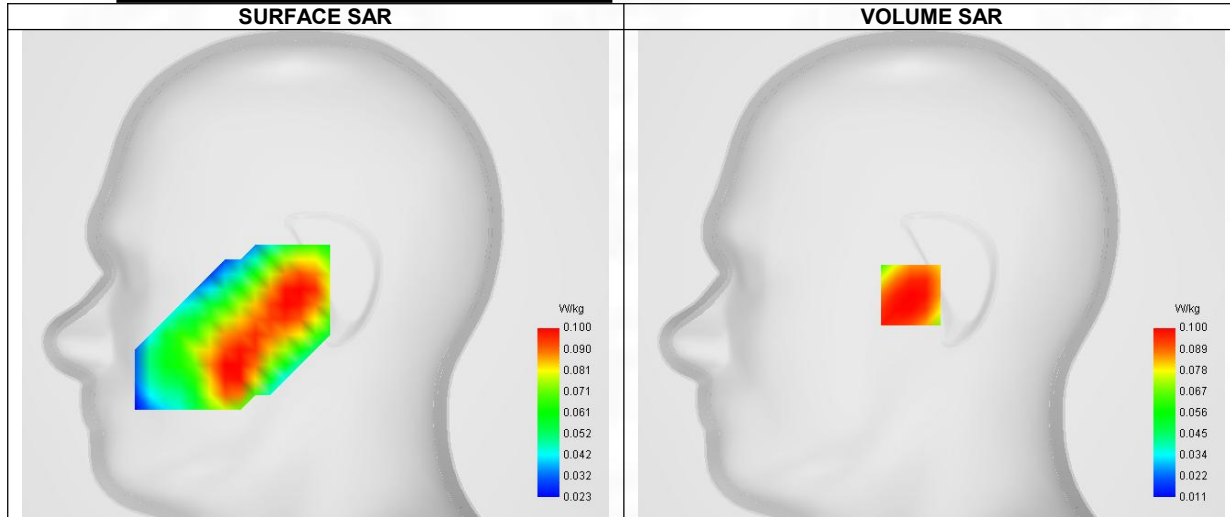
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.15
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 5
Channels/Frequency	Middle (20525)/ frequency 836.500 Mhz
Signal	LTE FDD
Cell Bandwidth	10 Mhz
Modulation	SC-OFDM - QPSK
RB offset	25
RB size	1

B. Permittivity

Middle TX Frequency (MHz)	834.700
Relative permittivity (real part)	41.723
Relative permittivity (imaginary part)	19.588
Conductivity (S/m)	0.912

C. SAR Surface and Volume



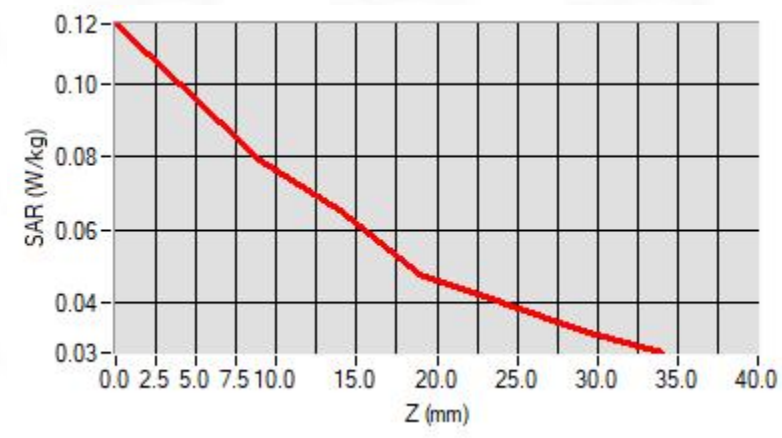
Maximum location: X=-11.00, Y=-11.00 ; SAR Peak: 0.13 W/kg

D. SAR 1g & 10g

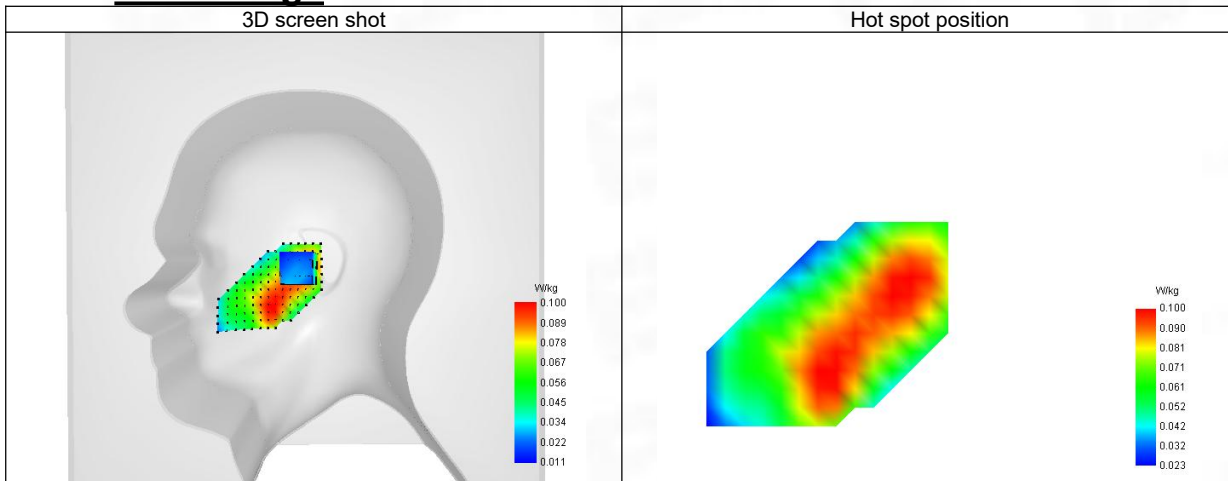
SAR 10g (W/Kg)	0.066
SAR 1g (W/Kg)	0.098
Variation (%)	-2.950
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	79.150493

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.116	0.100	0.079	0.065	0.048	0.040	0.032



F. 3D Image



16-Body with back position in dist. 10mm on Channel 20525 in LTE band 5

SAR Measurement at LTE band 5 (Body, Validation Plane)

Date of measurement: 25/12/2025

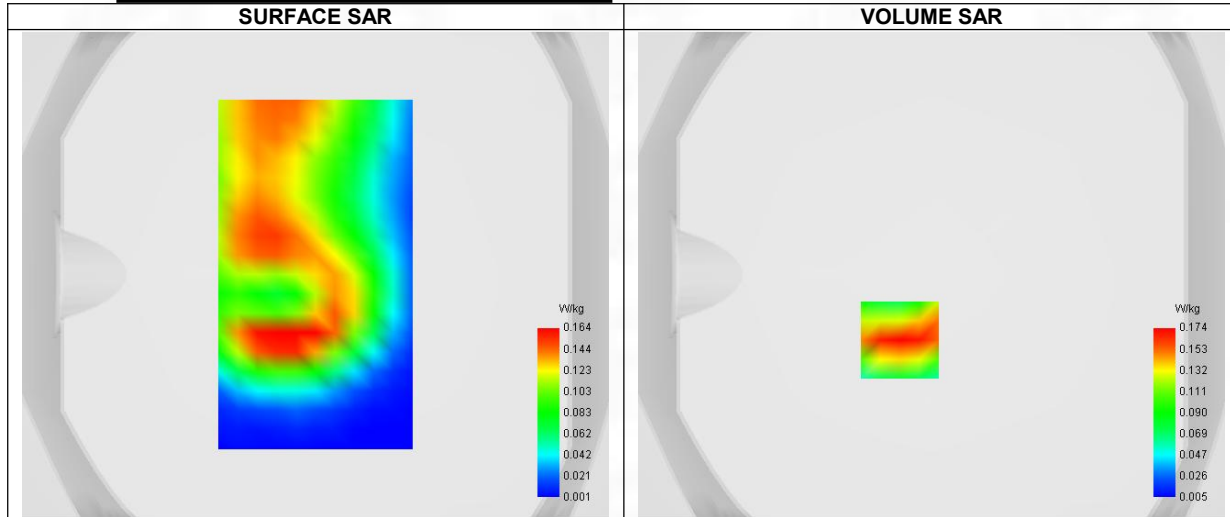
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.15
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 5
Channels/Frequency	Middle (20525)/ frequency 836.500 Mhz
Signal	LTE FDD
Cell Bandwidth	10 Mhz
Modulation	SC-OFDM - QPSK
RB offset	25
RB size	1

B. Permittivity

Middle TX Frequency (MHz)	834.700
Relative permittivity (real part)	41.723
Relative permittivity (imaginary part)	19.588
Conductivity (S/m)	0.912

C. SAR Surface and Volume

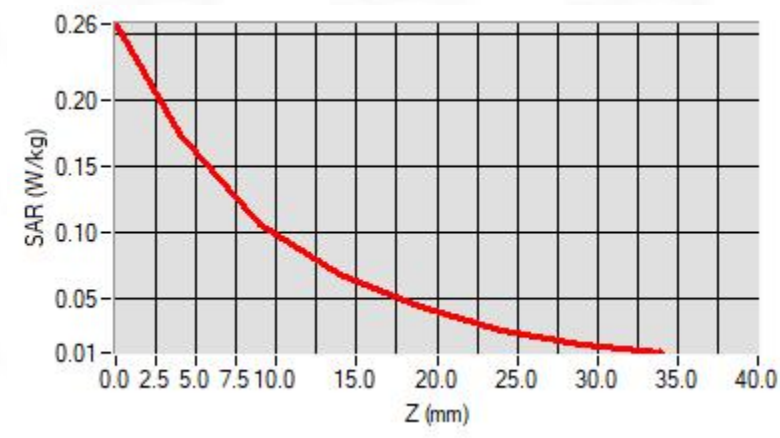


D. SAR 1g & 10g

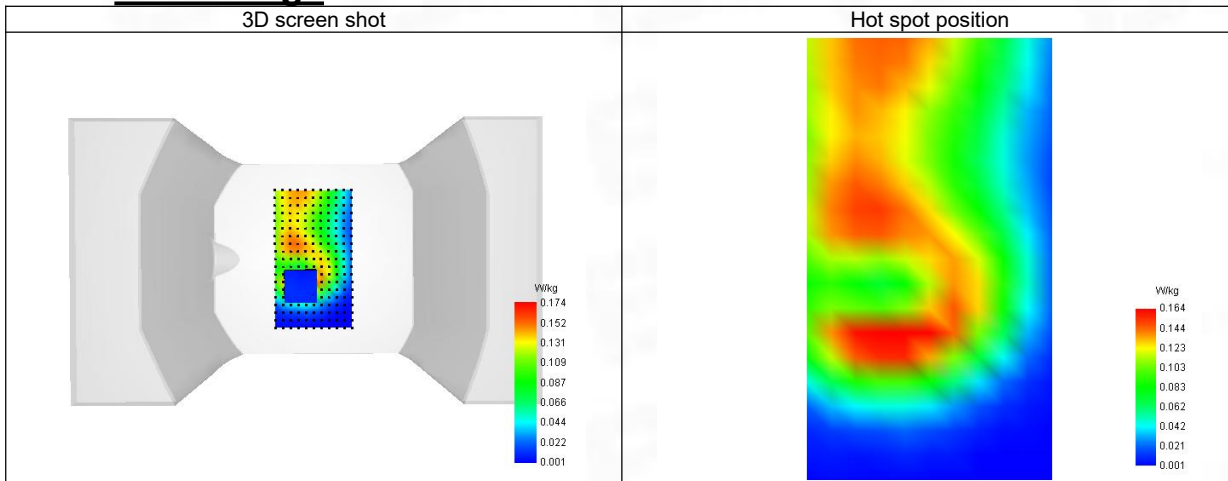
SAR 10g (W/Kg)	0.095
SAR 1g (W/Kg)	0.164
Variation (%)	-1.530
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	61.244894

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.258	0.174	0.107	0.069	0.043	0.027	0.016



F. 3D Image



17-Head with front position in dist. 0mm on Channel 21100 in LTE band 7

SAR Measurement at LTE band 7 (Cheek, Right)

Date of measurement: 29/12/2025

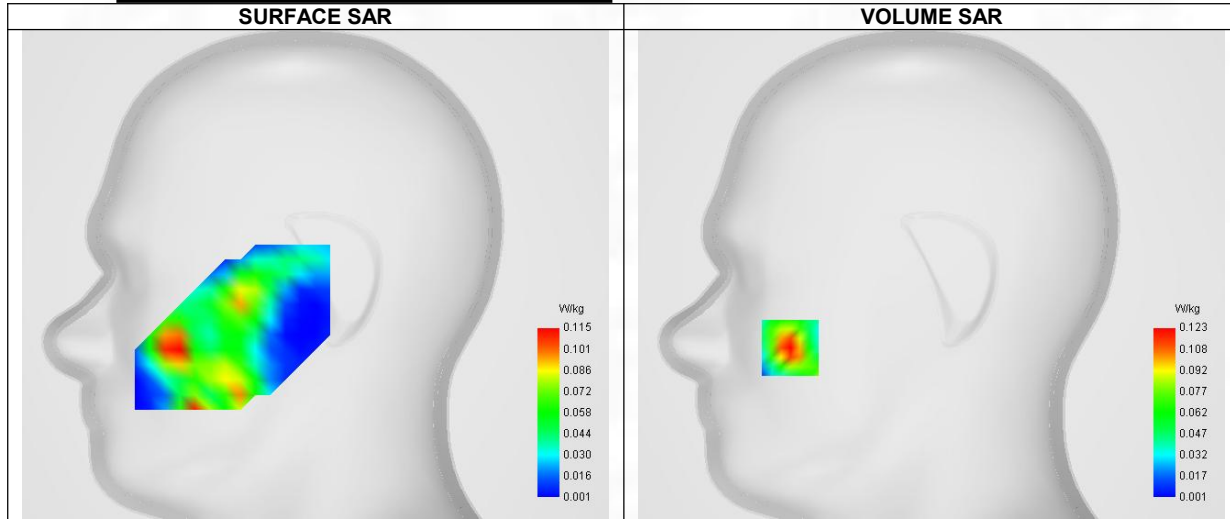
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.27
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x7, dx=5mm dy=5mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 7
Channels/Frequency	Middle (21100)/ frequency 2535.000 Mhz
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	50
RB size	1

B. Permittivity

Middle TX Frequency (MHz)	2535.700
Relative permittivity (real part)	38.716
Relative permittivity (imaginary part)	13.204
Conductivity (S/m)	1.885

C. SAR Surface and Volume



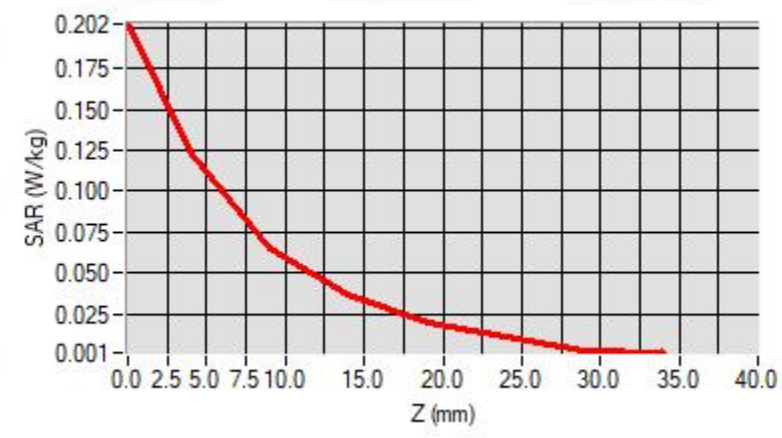
Maximum location: X=-75.00, Y=-39.00 ; SAR Peak: 0.20 W/kg

D. SAR 1g & 10g

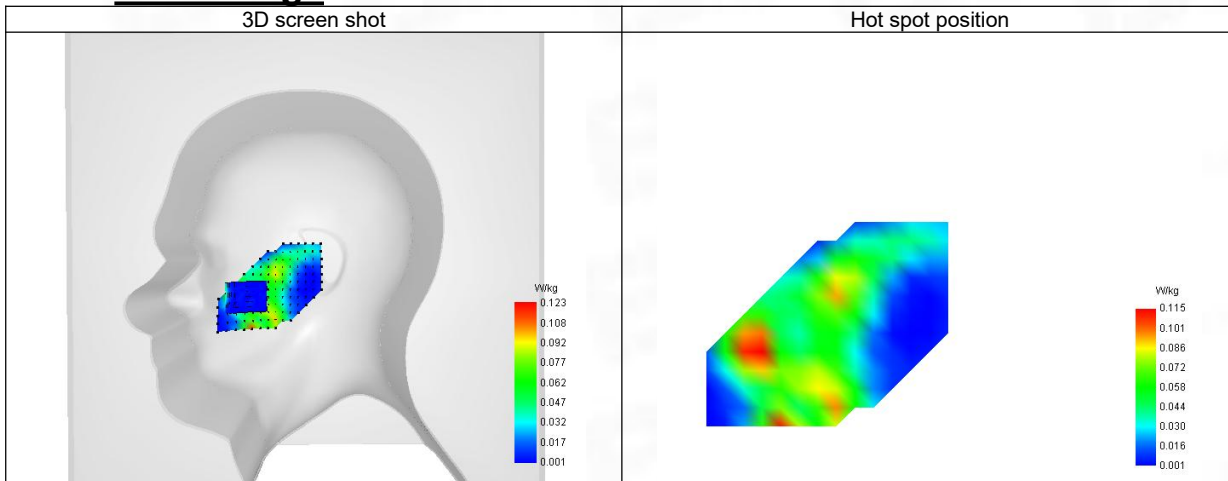
SAR 10g (W/Kg)	0.056
SAR 1g (W/Kg)	0.112
Variation (%)	0.150
Horizontal validation criteria: minimum distance (mm)	11.180340
Vertical validation criteria: SAR ratio M2/M1 (%)	52.673078

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.202	0.123	0.065	0.037	0.019	0.012	0.003



F. 3D Image



18-Body with back position in dist. 10mm on Channel 21100 in LTE band 7

SAR Measurement at LTE band 7 (Body, Validation Plane)

Date of measurement: 29/12/2025

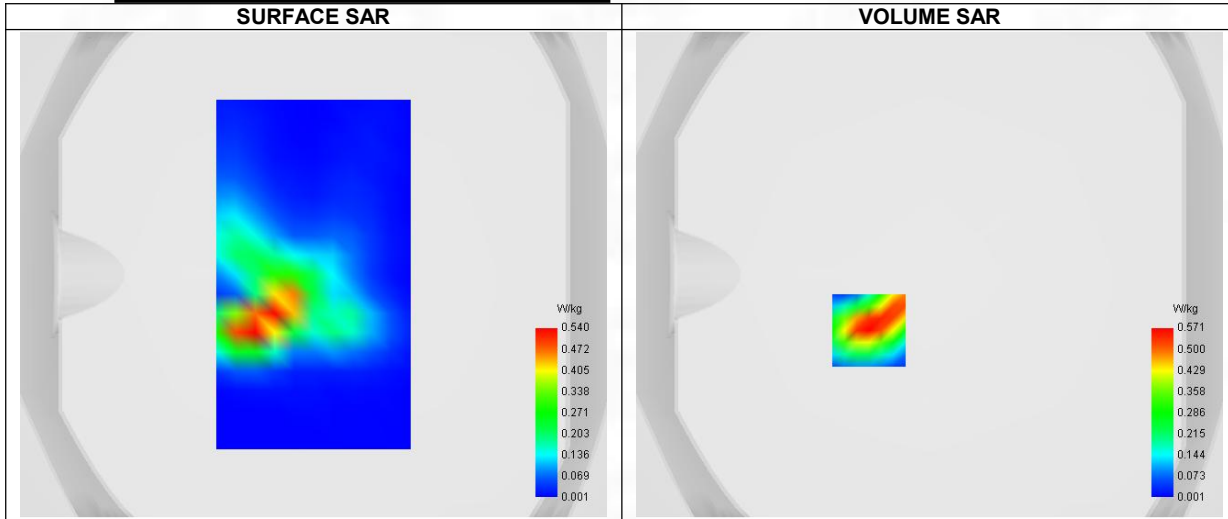
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.27
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x7, dx=5mm dy=5mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 7
Channels/Frequency	Middle (21100)/ frequency 2535.000 Mhz
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	50
RB size	1

B. Permittivity

Middle TX Frequency (MHz)	2535.700
Relative permittivity (real part)	38.716
Relative permittivity (imaginary part)	13.204
Conductivity (S/m)	1.885

C. SAR Surface and Volume

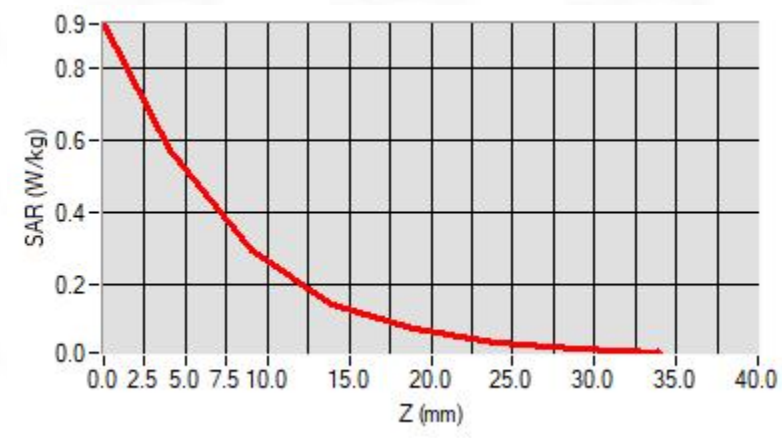


D. SAR 1g & 10g

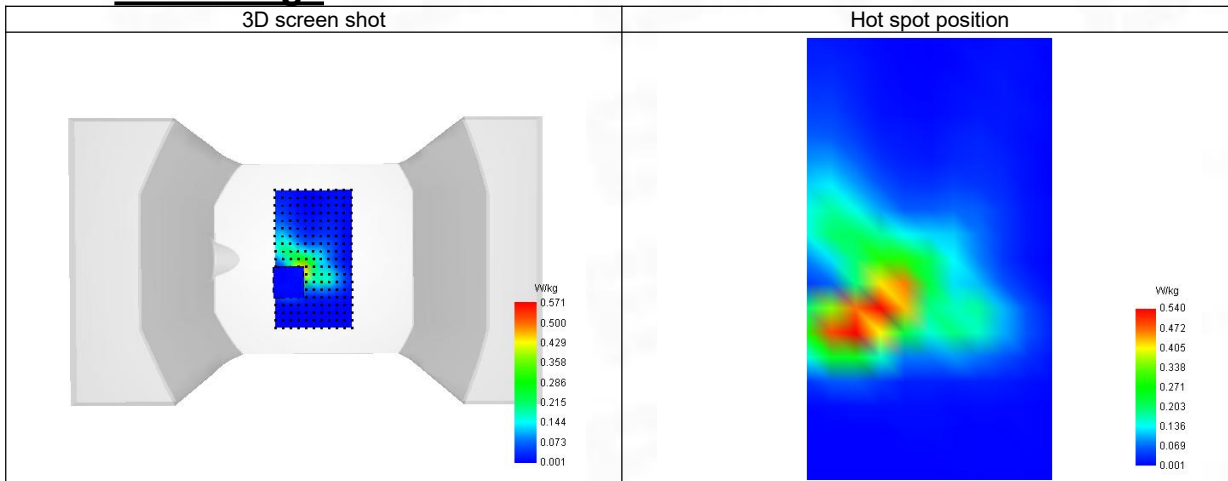
SAR 10g (W/Kg)	0.223
SAR 1g (W/Kg)	0.520
Variation (%)	0.680
Horizontal validation criteria: minimum distance (mm)	10.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	51.544140

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.926	0.571	0.295	0.145	0.074	0.035	0.022



F. 3D Image



19-Head with front position in dist. 0mm on Channel 40620 in LTE band 41

SAR Measurement at LTE band 41 (Cheek, Right)

Date of measurement: 29/12/2025

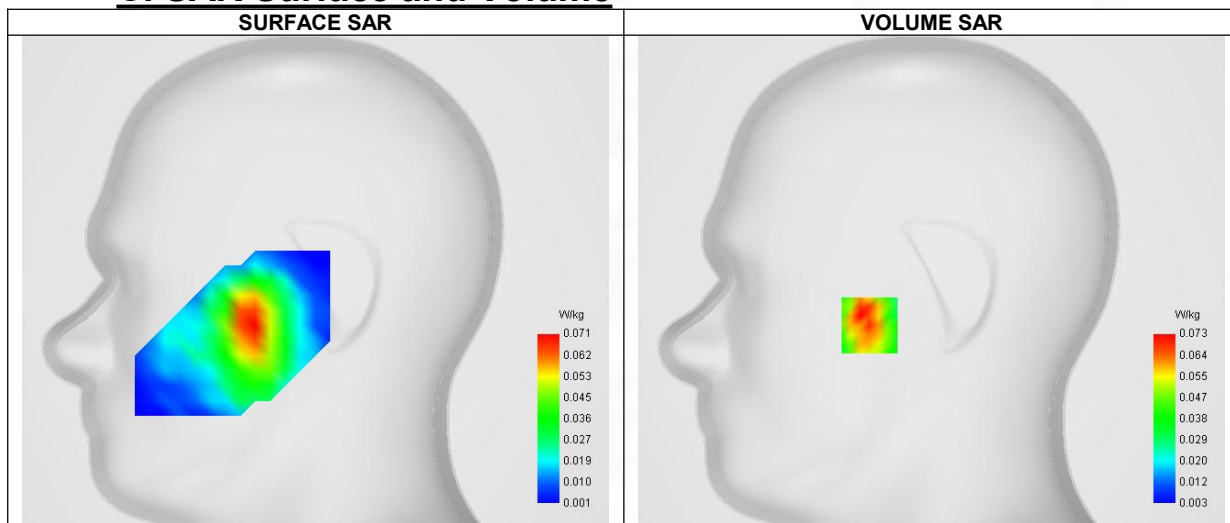
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.27
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x7, dx=5mm dy=5mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 41
Channels/Frequency	Middle (40620)/ frequency 2593.000 Mhz
Signal	LTE TDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	99
RB size	1
Subframe configuration	0
Special subframe configuration	0
Cyclic prefix	Normal
Duty Cycle (%)	0.61

B. Permittivity

Middle TX Frequency (MHz)	2593.700
Relative permittivity (real part)	38.631
Relative permittivity (imaginary part)	12.884
Conductivity (S/m)	1.927

C. SAR Surface and Volume



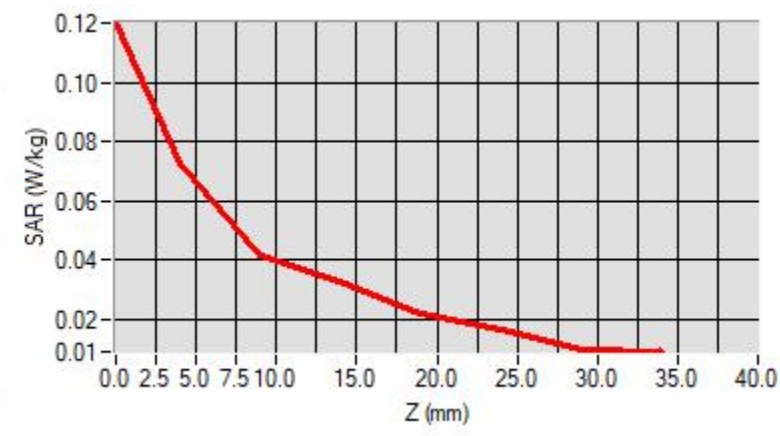
Maximum location: X=-33.00, Y=-24.00 ; SAR Peak: 0.10 W/kg

D. SAR 1g & 10g

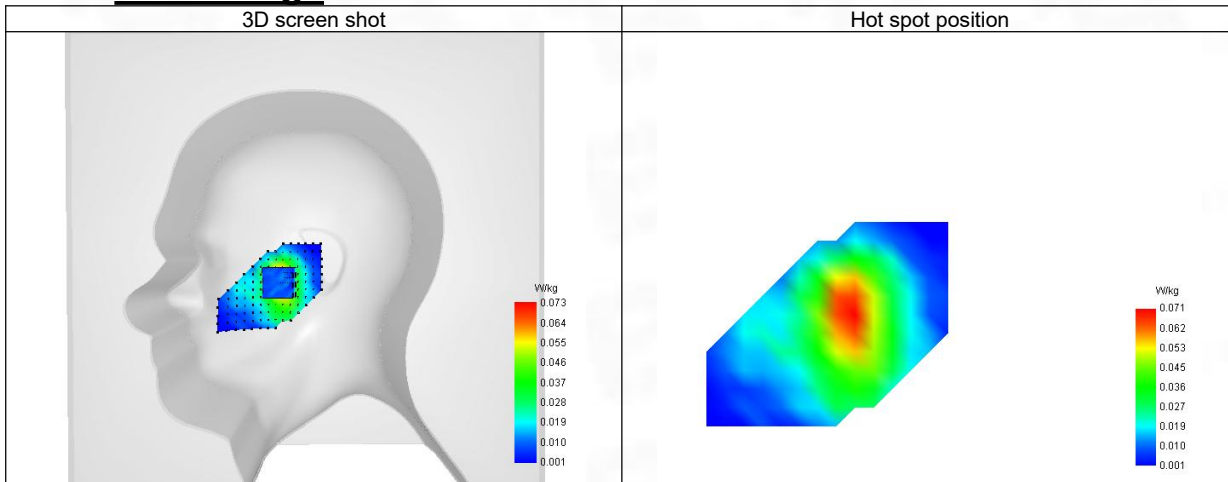
SAR 10g (W/Kg)	0.042
SAR 1g (W/Kg)	0.071
Variation (%)	-3.910
Horizontal validation criteria: minimum distance (mm)	20.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	67.241301

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.120	0.073	0.042	0.033	0.022	0.017	0.010



F. 3D Image



20-Body with back position in dist. 10mm on Channel 40620 in LTE band 41

SAR Measurement at LTE band 41 (Body, Validation Plane)

Date of measurement: 29/12/2025

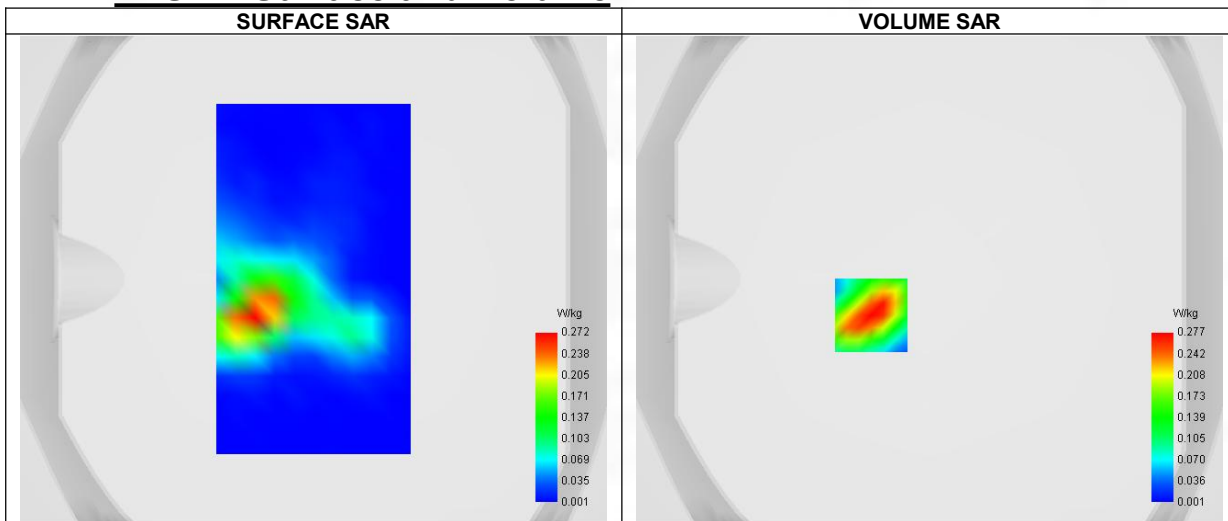
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.27
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x7, dx=5mm dy=5mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 41
Channels/Frequency	Middle (40620)/ frequency 2593.000 Mhz
Signal	LTE TDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	99
RB size	1
Subframe configuration	0
Special subframe configuration	0
Cyclic prefix	Normal
Duty Cycle (%)	0.61

B. Permittivity

Middle TX Frequency (MHz)	2593.700
Relative permittivity (real part)	38.631
Relative permittivity (imaginary part)	12.884
Conductivity (S/m)	1.927

C. SAR Surface and Volume

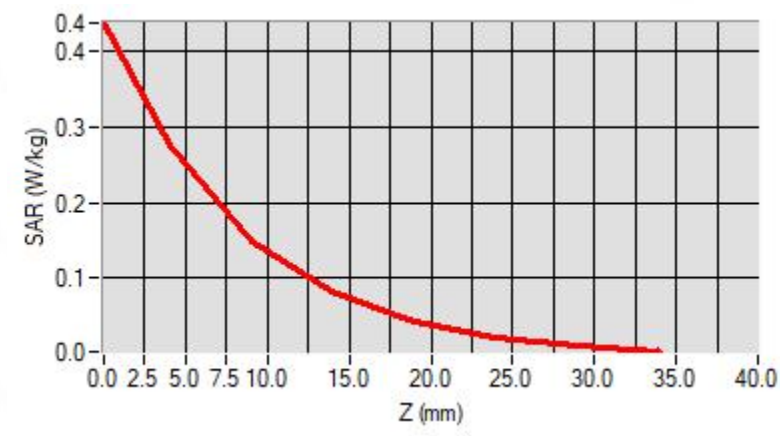


D. SAR 1g & 10g

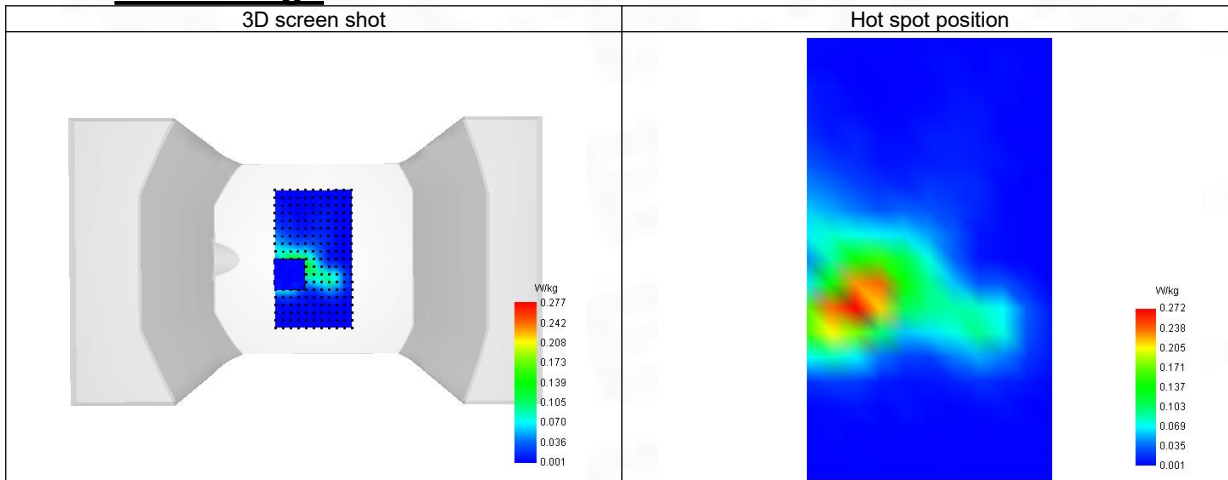
SAR 10g (W/Kg)	0.122
SAR 1g (W/Kg)	0.252
Variation (%)	-1.380
Horizontal validation criteria: minimum distance (mm)	11.180340
Vertical validation criteria: SAR ratio M2/M1 (%)	53.821716

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.439	0.277	0.149	0.081	0.043	0.020	0.010



F. 3D Image



21-Head with front position in dist. 0mm on Channel 132322 in LTE band 66

SAR Measurement at LTE band 66 (Cheek, Right)

Date of measurement: 26/12/2025

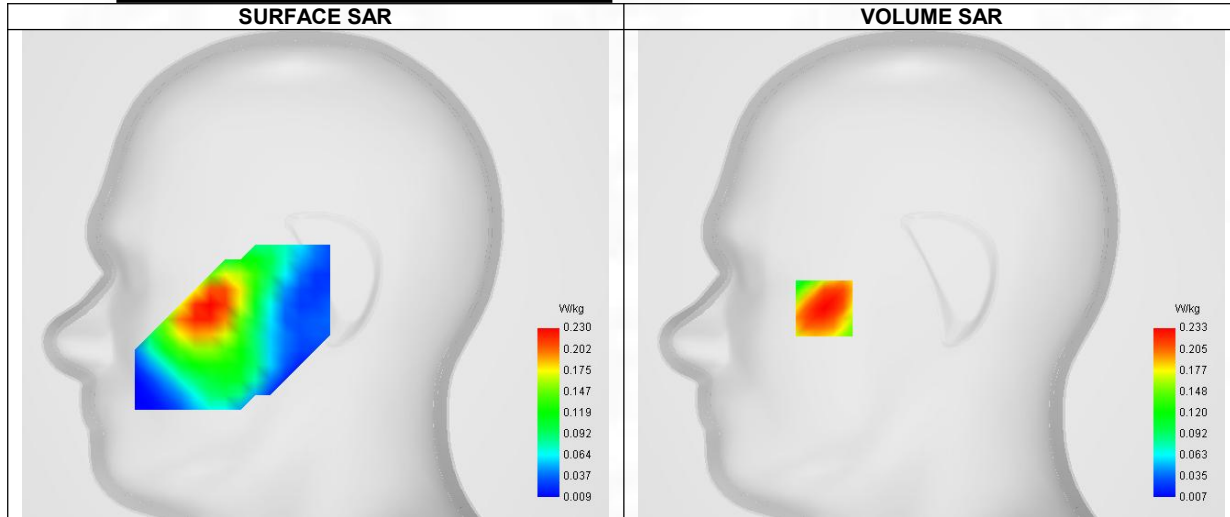
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.20
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 66
Channels/Frequency	Middle (132322)/ frequency 1745.000 Mhz
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	99
RB size	1

B. Permittivity

Middle TX Frequency (MHz)	1745.000
Relative permittivity (real part)	40.335
Relative permittivity (imaginary part)	15.491
Conductivity (S/m)	1.361

C. SAR Surface and Volume

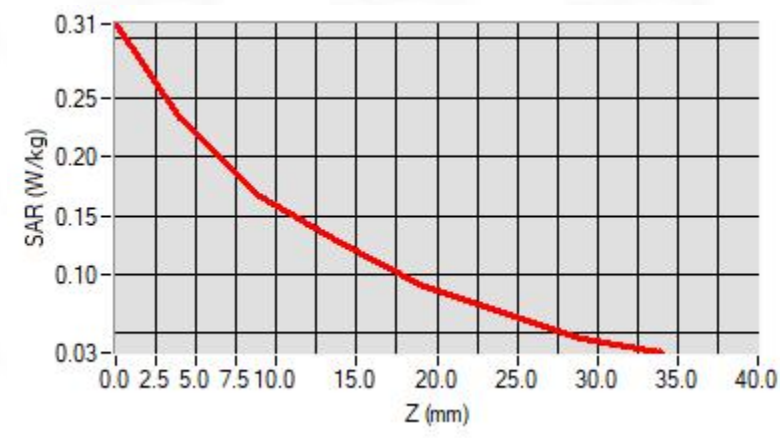


D. SAR 1g & 10g

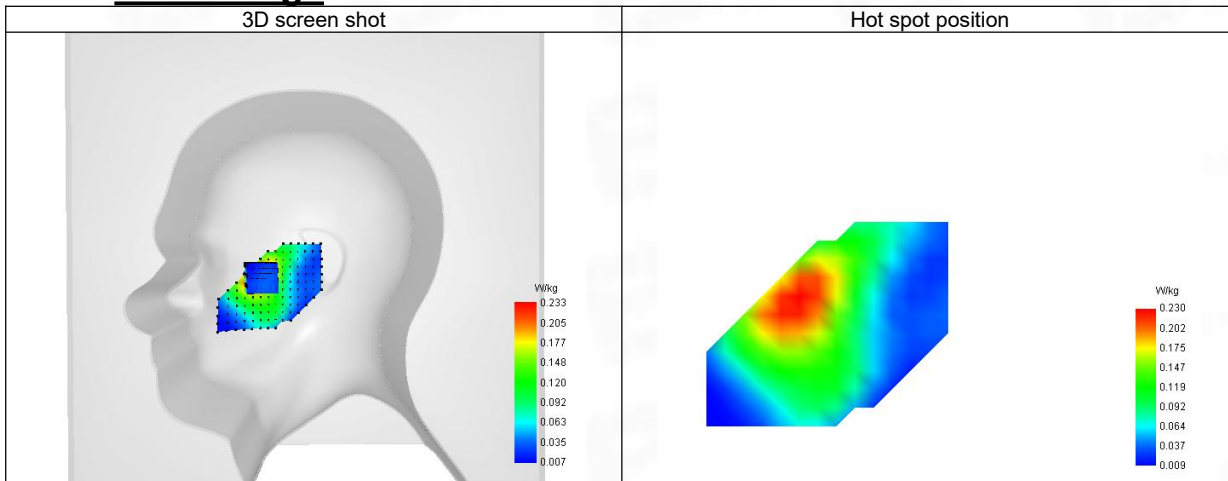
SAR 10g (W/Kg)	0.151
SAR 1g (W/Kg)	0.220
Variation (%)	0.980
Horizontal validation criteria: minimum distance (mm)	21.213203
Vertical validation criteria: SAR ratio M2/M1 (%)	71.615544

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.313	0.233	0.167	0.127	0.092	0.068	0.045



F. 3D Image



22-Body with back position in dist. 10mm on Channel 132322 in LTE band 66

SAR Measurement at LTE band 66 (Body, Validation Plane)

Date of measurement: 26/12/2025

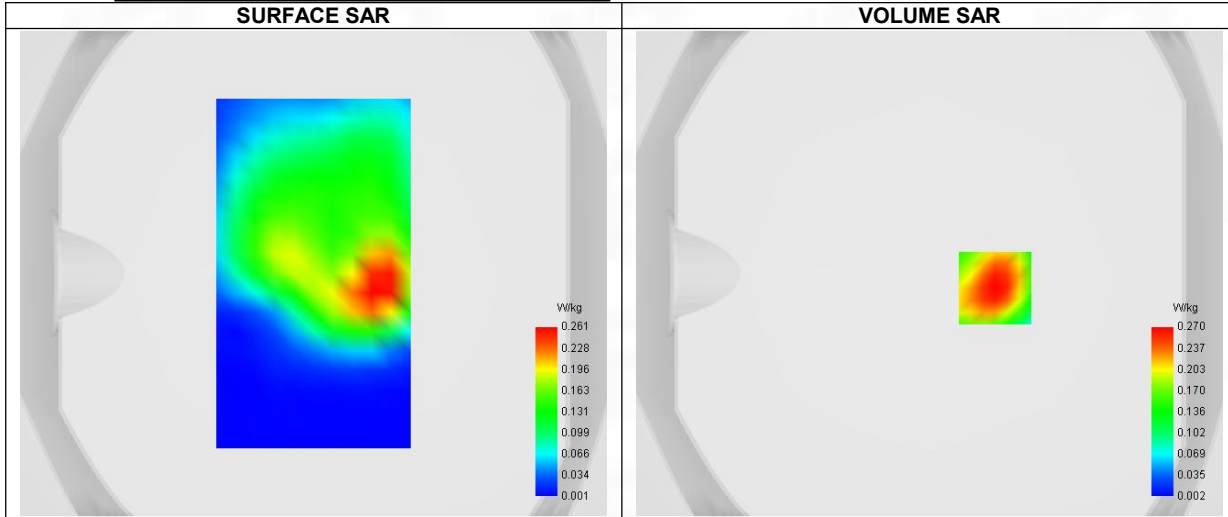
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.20
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 66
Channels/Frequency	Middle (132322)/ frequency 1745.000 Mhz
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	99
RB size	1

B. Permittivity

Middle TX Frequency (MHz)	1745.000
Relative permittivity (real part)	40.335
Relative permittivity (imaginary part)	15.491
Conductivity (S/m)	1.361

C. SAR Surface and Volume

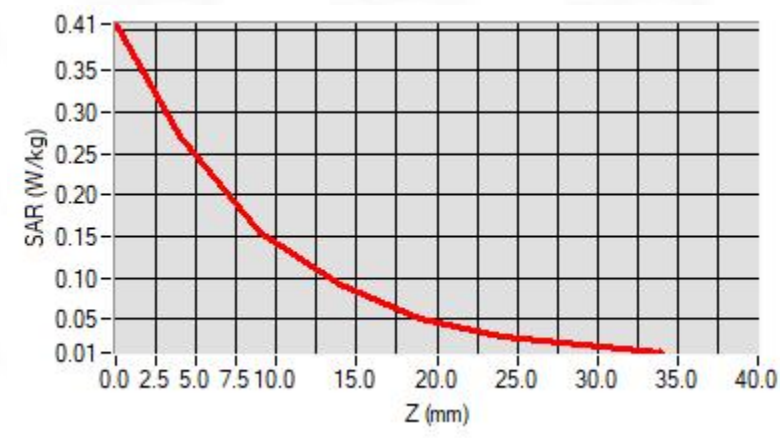


D. SAR 1g & 10g

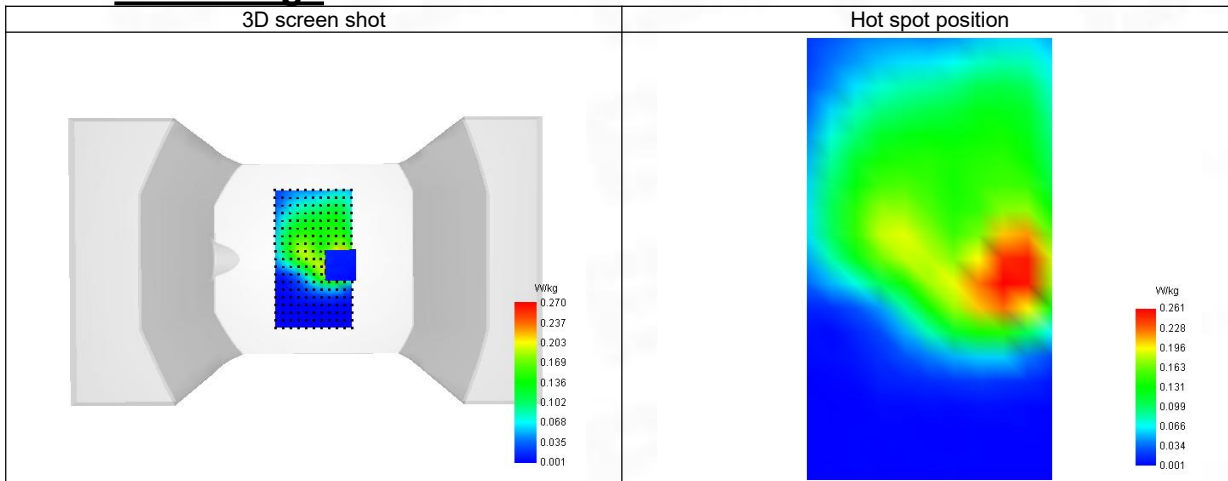
SAR 10g (W/Kg)	0.140
SAR 1g (W/Kg)	0.255
Variation (%)	-0.690
Horizontal validation criteria: minimum distance (mm)	18.027756
Vertical validation criteria: SAR ratio M2/M1 (%)	57.504758

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.406	0.270	0.155	0.092	0.050	0.030	0.019



F. 3D Image



23-Head with front position in dist. 0mm on Channel 6 in IEEE 802.11b ISM

SAR Measurement at ISM (Cheek, Right)

Date of measurement: 28/12/2025

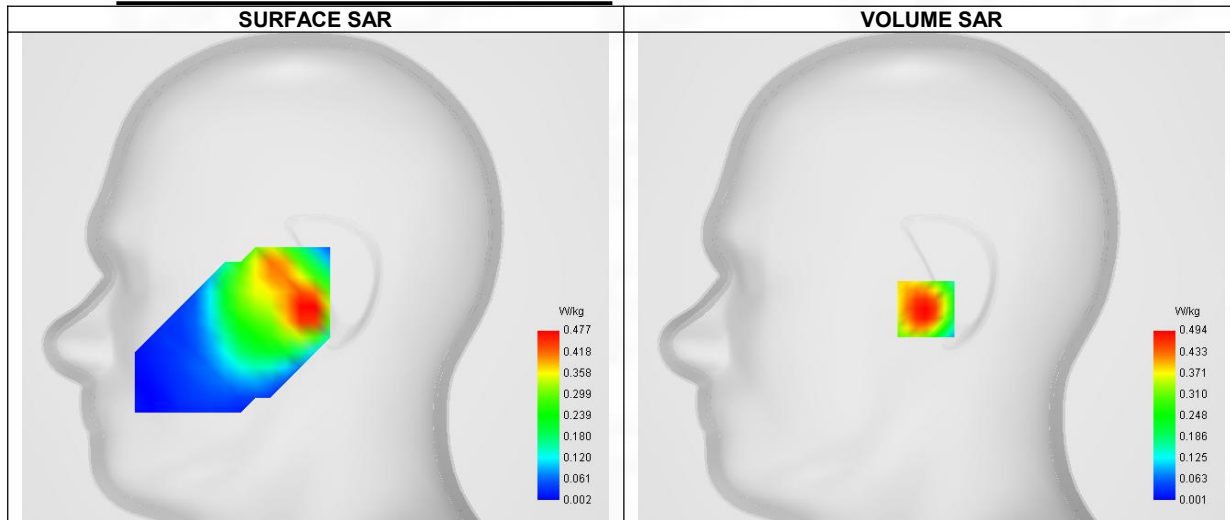
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.40
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x7, dx=5mm dy=5mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	ISM
Channels/Frequency	Middle (6)/ frequency 2437.000 Mhz
Signal	IEEE 802.11 b

B. Permittivity

Middle TX Frequency (MHz)	2437.000
Relative permittivity (real part)	38.873
Relative permittivity (imaginary part)	13.692
Conductivity (S/m)	1.813

C. SAR Surface and Volume



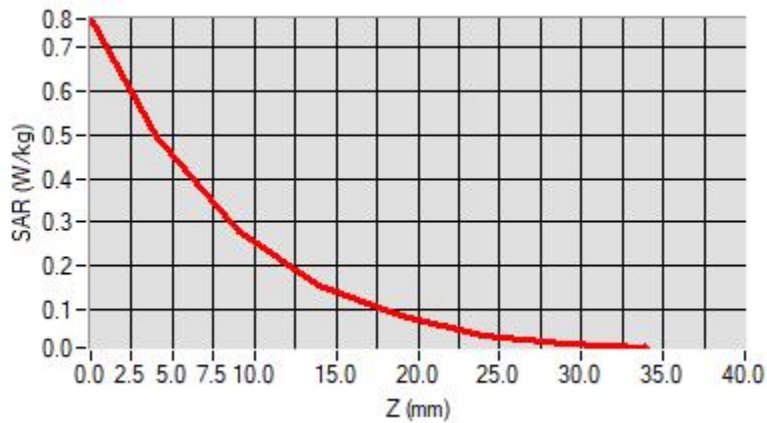
Maximum location: X=-3.00, Y=-17.00 ; SAR Peak: 0.76 W/kg

D. SAR 1g & 10g

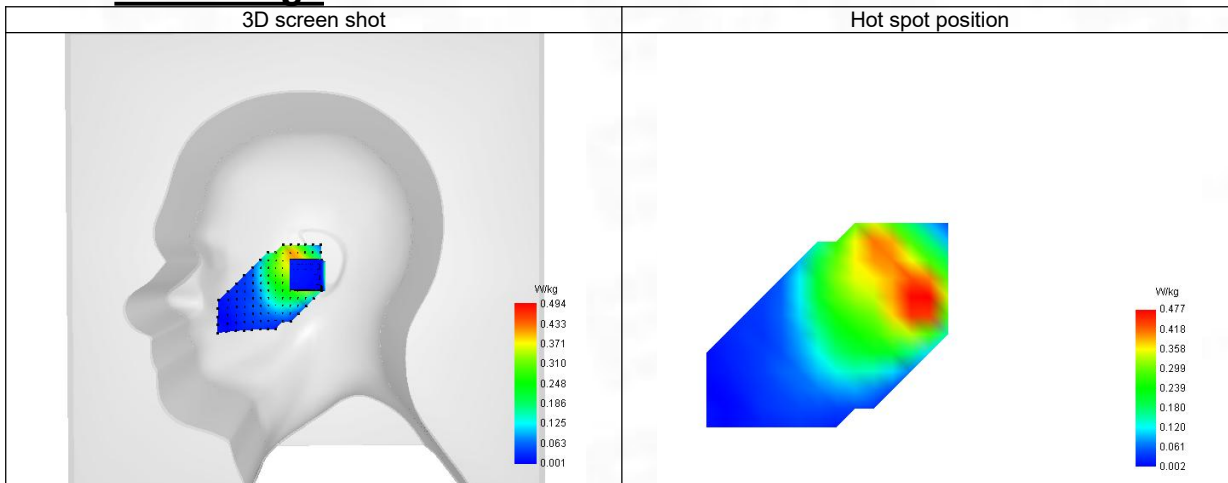
SAR 10g (W/Kg)	0.253
SAR 1g (W/Kg)	0.468
Variation (%)	-1.600
Horizontal validation criteria: minimum distance (mm)	15.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	56.610159

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.763	0.494	0.280	0.155	0.088	0.044	0.024



F. 3D Image



24-Body with back position in dist. 10mm on Channel 6 in IEEE 802.11b ISM

SAR Measurement at ISM (Body, Validation Plane)

Date of measurement: 28/12/2025

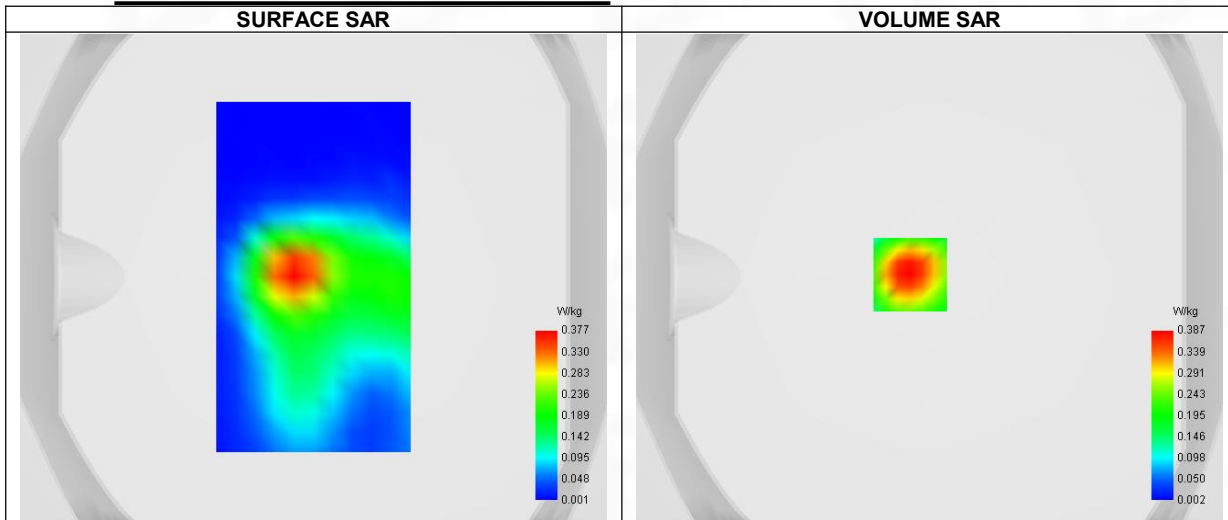
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.40
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x7, dx=5mm dy=5mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	ISM
Channels/Frequency	Middle (6)/ frequency 2437.000 Mhz
Signal	IEEE 802.11 b

B. Permittivity

Middle TX Frequency (MHz)	2437.000
Relative permittivity (real part)	38.873
Relative permittivity (imaginary part)	13.692
Conductivity (S/m)	1.813

C. SAR Surface and Volume



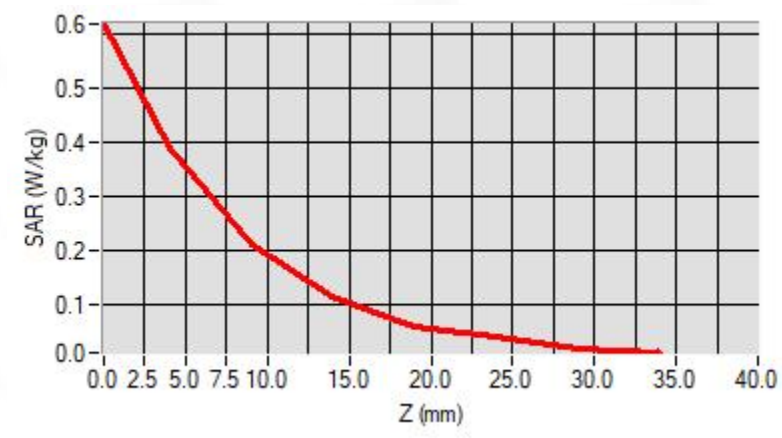
Maximum location: X=-8.00, Y=1.00 ; SAR Peak: 0.63 W/kg

D. SAR 1g & 10g

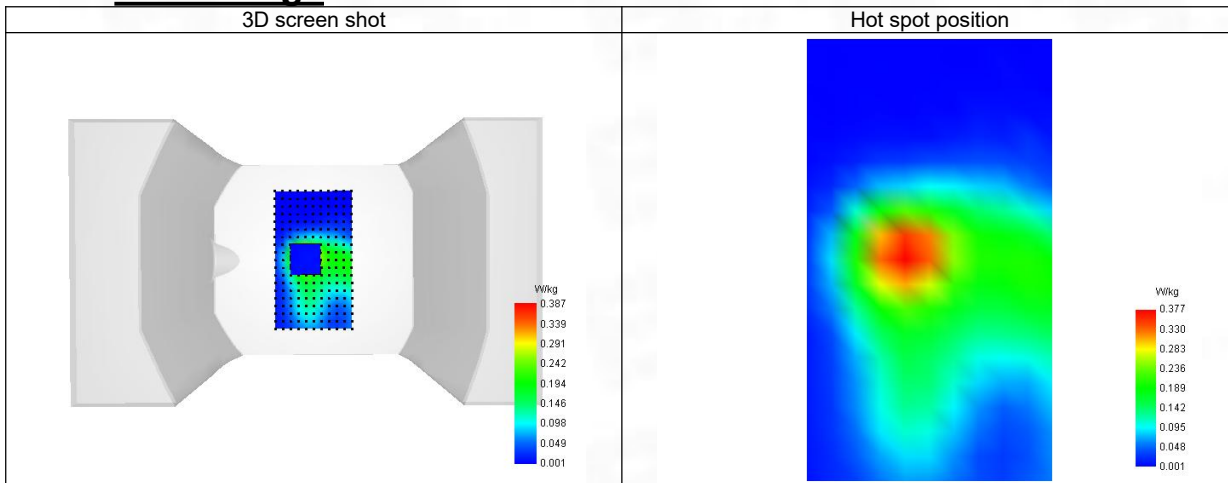
SAR 10g (W/Kg)	0.192
SAR 1g (W/Kg)	0.366
Variation (%)	2.150
Horizontal validation criteria: minimum distance (mm)	18.027756
Vertical validation criteria: SAR ratio M2/M1 (%)	53.895840

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.620	0.387	0.209	0.112	0.059	0.037	0.015



F. 3D Image



25-Head with front position in dist. 0mm on Channel 48 in IEEE 802.11ac U-NII

SAR Measurement at U-NII-1 (Cheek, Right)

Date of measurement: 30/12/2025

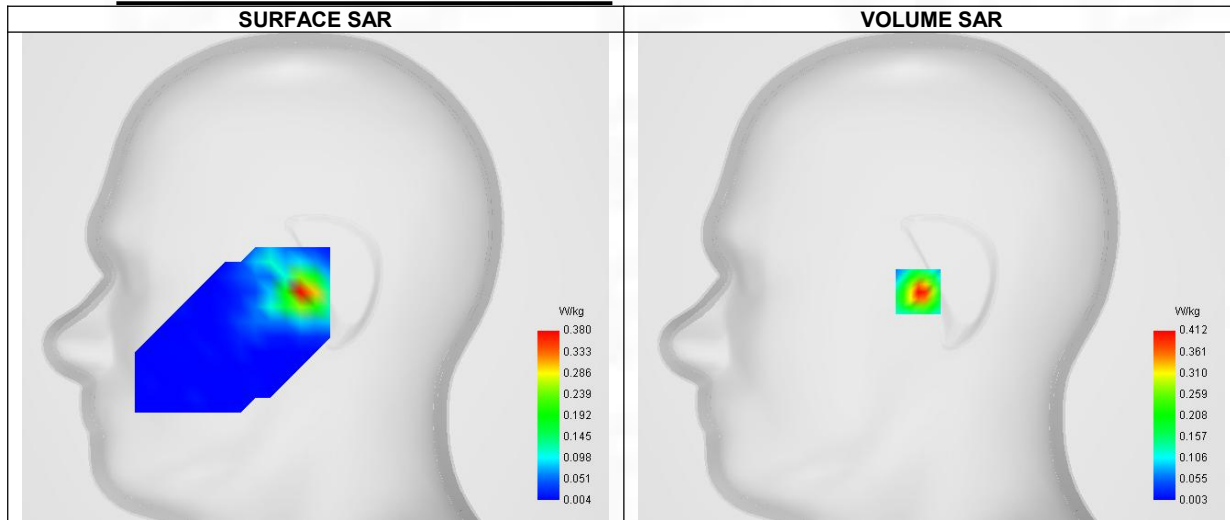
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.18
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x12, dx=4mm dy=4mm dz=2.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	U-NII-1
Channels/Frequency	Higher (48)/ frequency 5240.000 Mhz
Signal	IEEE 802.11 a

B. Permittivity

Middle TX Frequency (MHz)	5240.000
Relative permittivity (real part)	36.206
Relative permittivity (imaginary part)	16.541
Conductivity (S/m)	4.625

C. SAR Surface and Volume



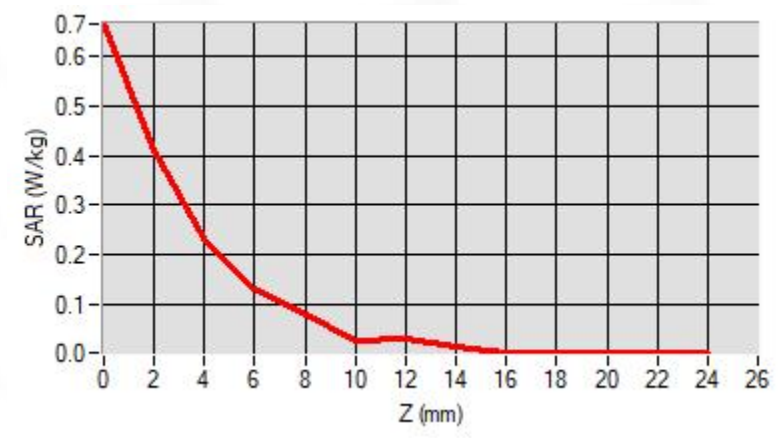
Maximum location: X=-7.00, Y=-8.00 ; SAR Peak: 1.00 W/kg

D. SAR 1g & 10g

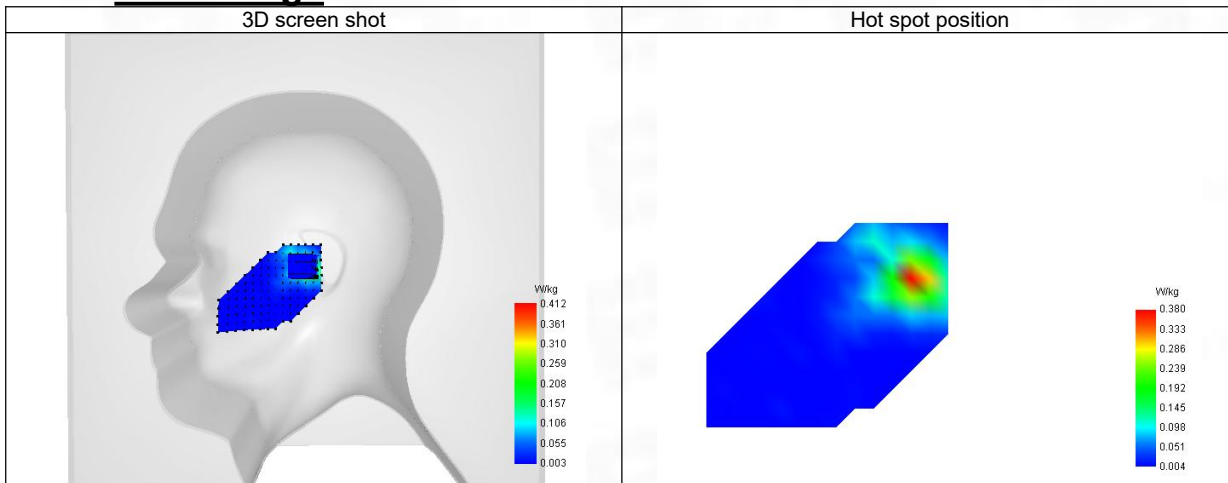
SAR 10g (W/Kg)	0.121
SAR 1g (W/Kg)	0.369
Variation (%)	-2.600
Horizontal validation criteria: minimum distance (mm)	8.944272
Vertical validation criteria: SAR ratio M2/M1 (%)	56.604987

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	0.665	0.412	0.233	0.131	0.079	0.026	0.030	0.017	0.004	0.004	0.003	0.004



F. 3D Image



26-Body with back position in dist. 10mm on Channel 48 in IEEE 802.11ac U-NII

SAR Measurement at U-NII-1 (Body, Validation Plane)

Date of measurement: 30/12/2025

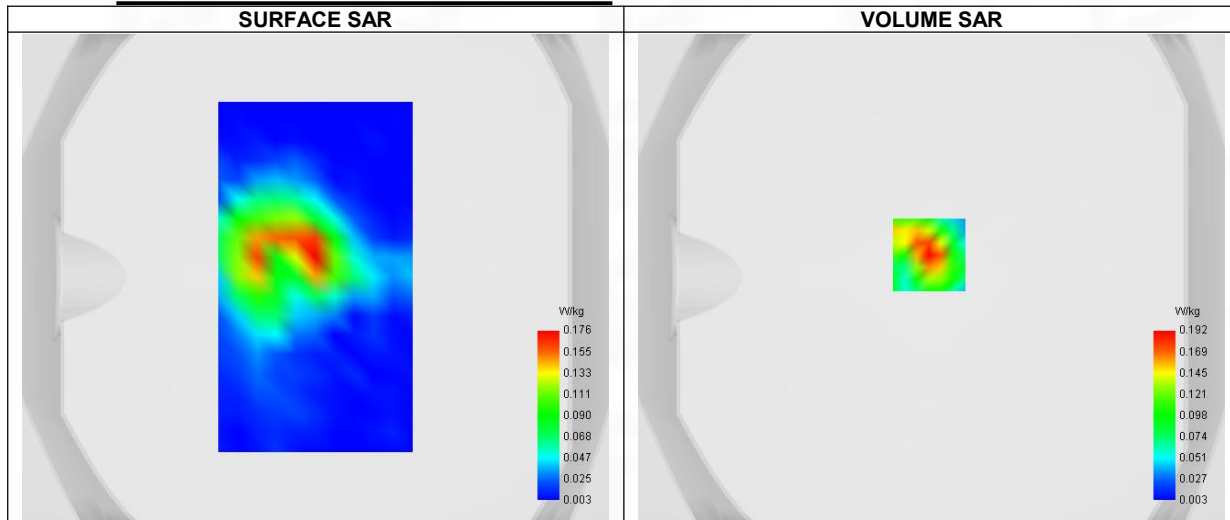
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.18
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x12, dx=4mm dy=4mm dz=2.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	U-NII-1
Channels/Frequency	Higher (48)/ frequency 5240.000 Mhz
Signal	IEEE 802.11 a

B. Permittivity

Middle TX Frequency (MHz)	5240.000
Relative permittivity (real part)	36.206
Relative permittivity (imaginary part)	16.541
Conductivity (S/m)	4.625

C. SAR Surface and Volume



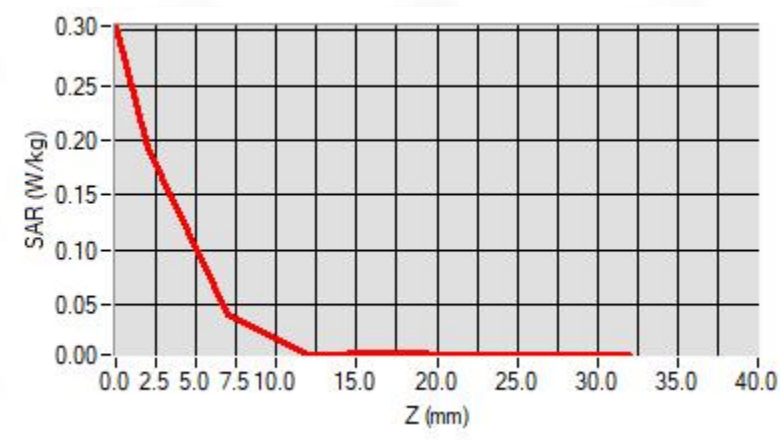
Maximum location: X=-1.00, Y=9.00 ; SAR Peak: 0.30 W/kg

D. SAR 1g & 10g

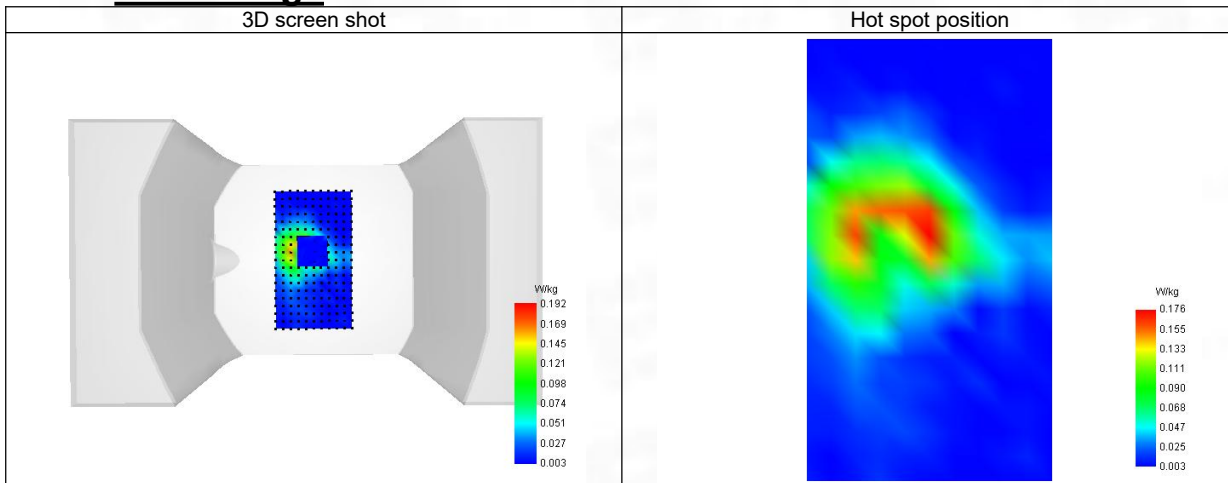
SAR 10g (W/Kg)	0.042
SAR 1g (W/Kg)	0.116
Variation (%)	2.950
Horizontal validation criteria: minimum distance (mm)	11.180340
Vertical validation criteria: SAR ratio M2/M1 (%)	67.708333

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	0.304	0.192	0.130	0.060	0.009	0.007	0.004	0.004	0.004	0.004	0.004	0.001



F. 3D Image



27-Head with front position in dist. 0mm on Channel 39 in Bluetooth

SAR Measurement at Bluetooth (Cheek, Right)

Date of measurement: 28/12/2025

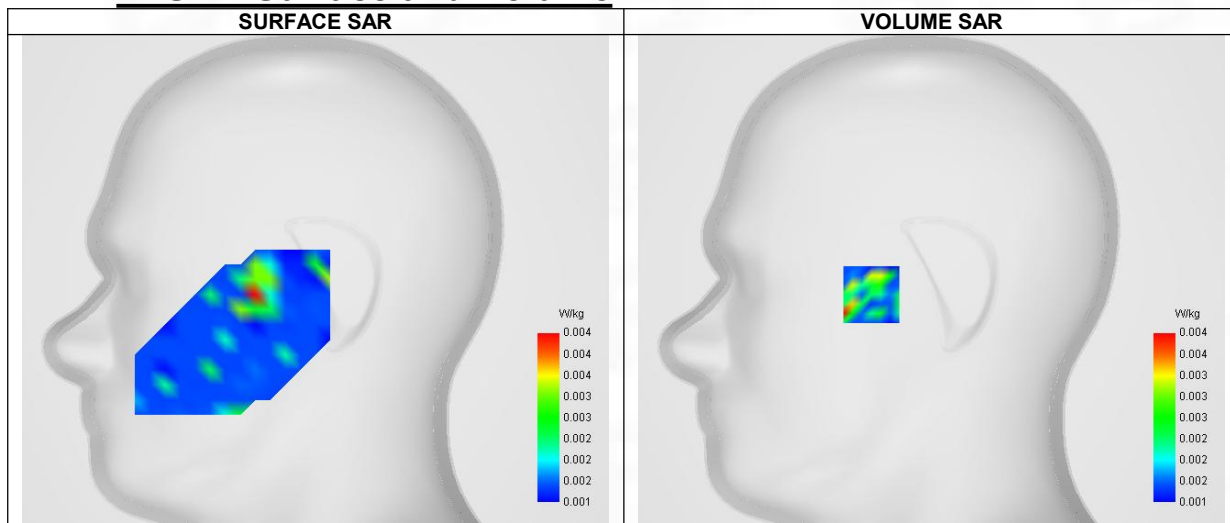
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.40
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x7, dx=5mm dy=5mm dz=5.0mm, Complete
Phantom	Right head
Device Position	Cheek
Band	Bluetooth
Channels/Frequency	Middle (39)/ frequency 2441.000 Mhz
Signal	Bluetooth

B. Permittivity

Middle TX Frequency (MHz)	2441.000
Relative permittivity (real part)	38.863
Relative permittivity (imaginary part)	13.687
Conductivity (S/m)	1.816

C. SAR Surface and Volume



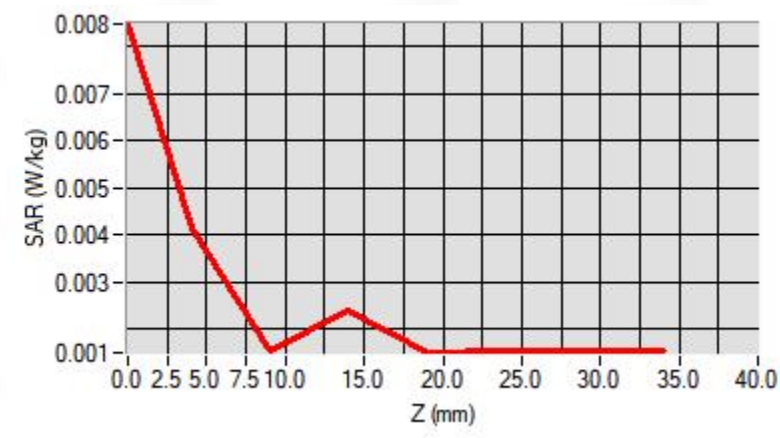
Maximum location: X=-32.00, Y=-8.00 ; SAR Peak: 0.01 W/kg

D. SAR 1g & 10g

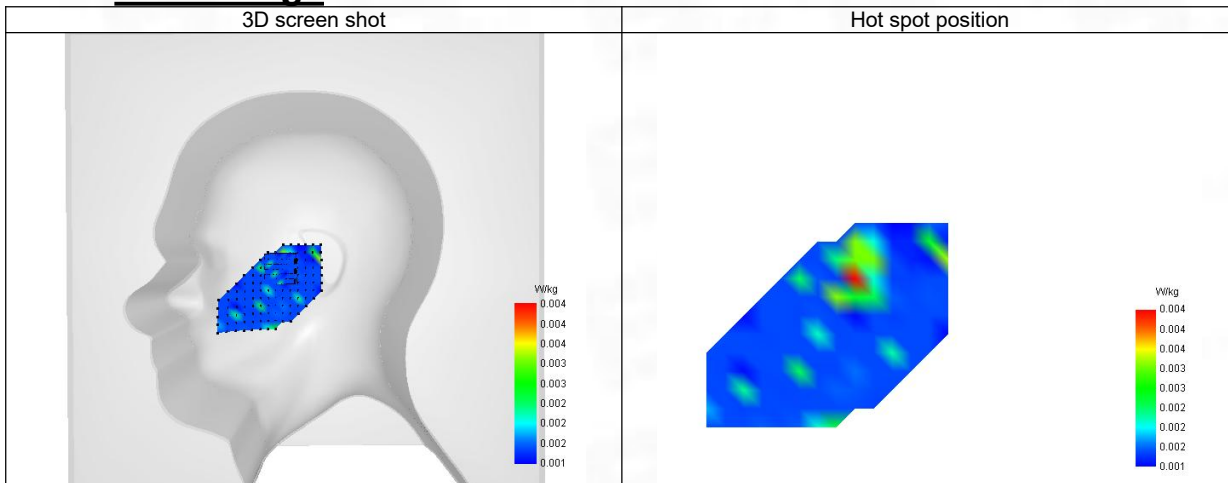
SAR 10g (W/Kg)	0.001
SAR 1g (W/Kg)	0.003
Variation (%)	1.440
Horizontal validation criteria: minimum distance (mm)	7.071068
Vertical validation criteria: SAR ratio M2/M1 (%)	39.488653

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.008	0.004	0.002	0.002	0.001	0.002	0.002



F. 3D Image



28-Body with back position in dist. 10mm on Channel 39 in Bluetooth

SAR Measurement at Bluetooth (Body, Validation Plane)

Date of measurement: 28/12/2025

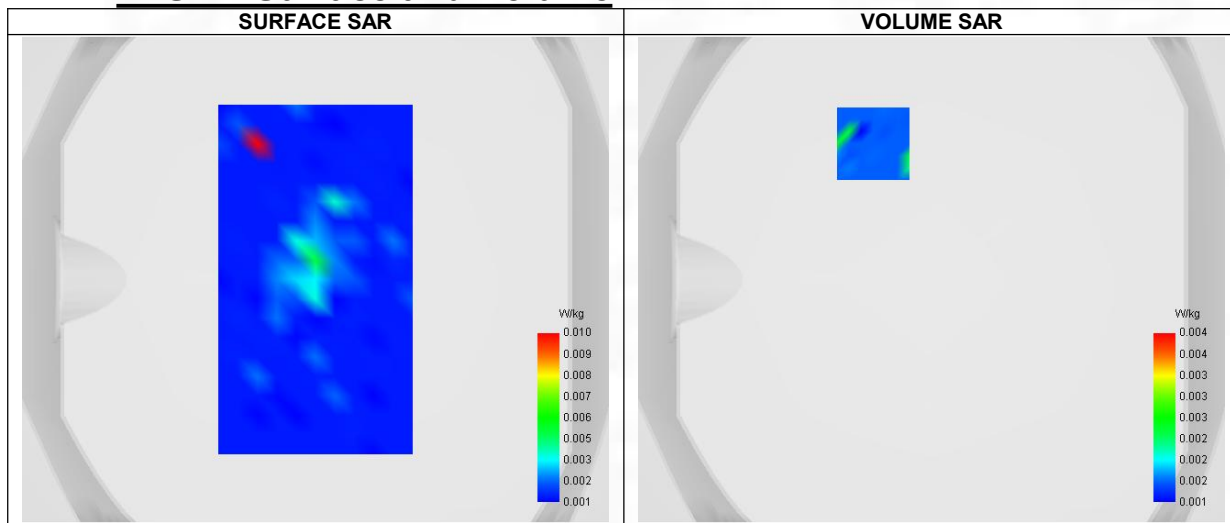
A. Experimental conditions.

Probe	0125-EPGO-445
ConvF	1.40
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x7, dx=5mm dy=5mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	Bluetooth
Channels/Frequency	Middle (39)/ frequency 2441.000 Mhz
Signal	Bluetooth

B. Permittivity

Middle TX Frequency (MHz)	2441.000
Relative permittivity (real part)	38.863
Relative permittivity (imaginary part)	13.687
Conductivity (S/m)	1.816

C. SAR Surface and Volume



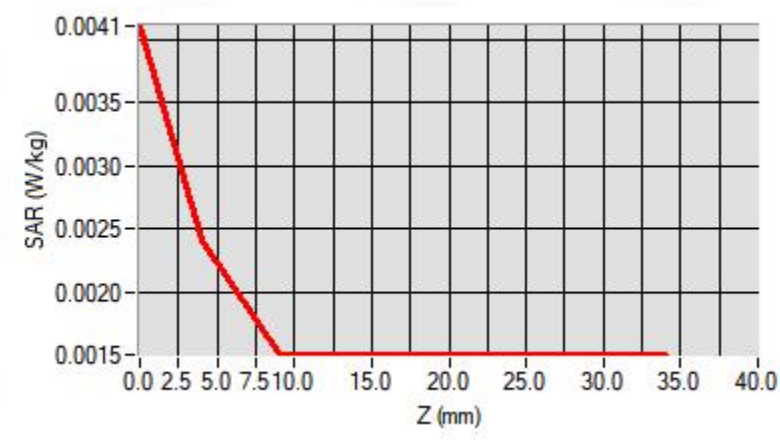
Maximum location: X=-24.00, Y=56.00 ; SAR Peak: 0.00 W/kg

D. SAR 1g & 10g

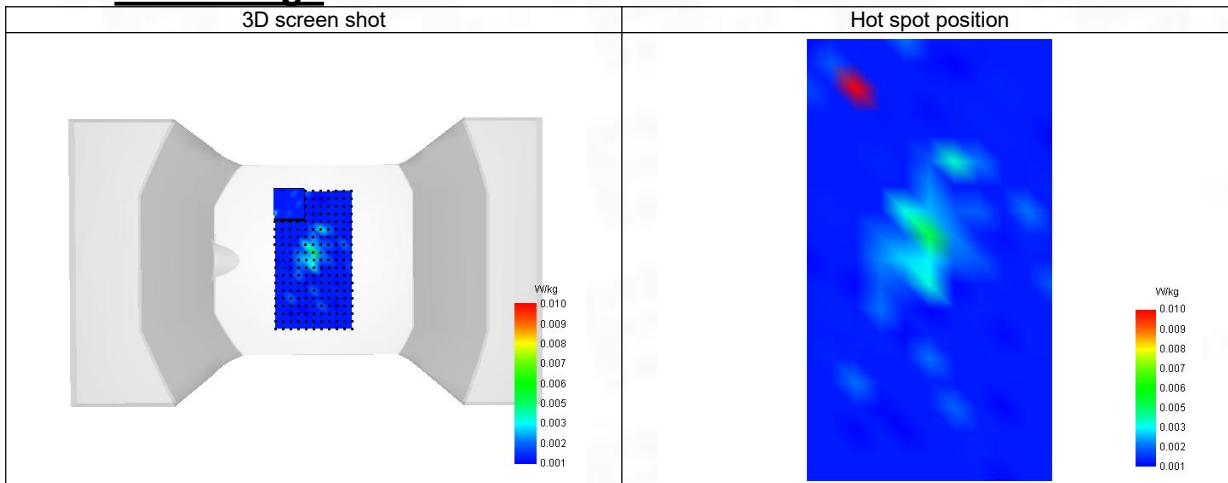
SAR 10g (W/Kg)	0.001
SAR 1g (W/Kg)	0.002
Variation (%)	1.360
Horizontal validation criteria: minimum distance (mm)	11.180340
Vertical validation criteria: SAR ratio M2/M1 (%)	62.602067

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.004	0.002	0.002	0.002	0.002	0.002	0.002

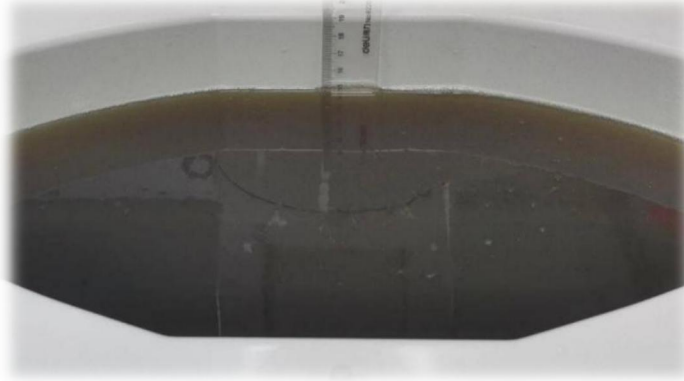


F. 3D Image



ANNEX D SAR Test Setup Photos

Reference Photo: simulation liquid depth 15cm



Please refer to the document "ANNEX D SAR Test Setup Photos.pdf".

ANNEX E EUT External and Internal Photos

Please refer to RF Report.

ANNEX F Calibration Information

Please refer to the document "Calibration.pdf".



BTF Testing Lab (Shenzhen) Co., Ltd.

Plant 101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street,
Bao'an District, Shenzhen, Guangdong, China

www.btf-lab.com

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