

Appendix B: SAR Measurement results Plots

Plot	Frequency/Mode	Testing Position and Channel	Test Date
1	GSM850/GPRS4Tx	Body Back, Middle ,10mm	2021/11/19
2	GSM1900/GPRS4Tx	Body Back, Middle ,10mm	2021/11/06
3	CDMA BC0	Body Back, Middle ,10mm	2021/11/19
4	WCDMA850	Body Back, Middle ,10mm	2021/11/19
5	WCDMA1900	Body Back, Middle ,10mm	2021/11/06
6	WCDMA1700	Body Back, Middle ,10mm	2021/11/14
7	LTE Band2	Body Back, Middle ,10mm	2021/11/06
8	LTE Band4	Body Back, Middle ,10mm	2021/11/14
9	LTE Band5	Body Back, Middle ,10mm	2021/11/19
10	LTE Band7	Body Back, Middle ,10mm	2021/11/04
11	LTE Band12	Body Back, Middle ,10mm	2021/11/18
12	LTE Band17	Body Back, Middle ,10mm	2021/11/18
13	LTE Band25	Body Back, Middle ,10mm	2021/11/06
14	LTE Band26	Body Back, Middle ,10mm	2021/11/19
15	LTE Band41	Body Back, Middle ,10mm	2021/11/04
16	LTE Band66	Body Back, Middle ,10mm	2021/11/14
17	WIFI 2.4G 802.11b	Body Back, Middle ,10mm	2021/11/04
18	WIFI 2.4G 802.11b	Edge A, Middle ,10mm	2021/11/04

Plot 1: GPRS850, Back, Middle,10mm

Type: Phone measurement

Date of measurement: 11/19/2021

Measurement duration: 22 minutes 01 seconds

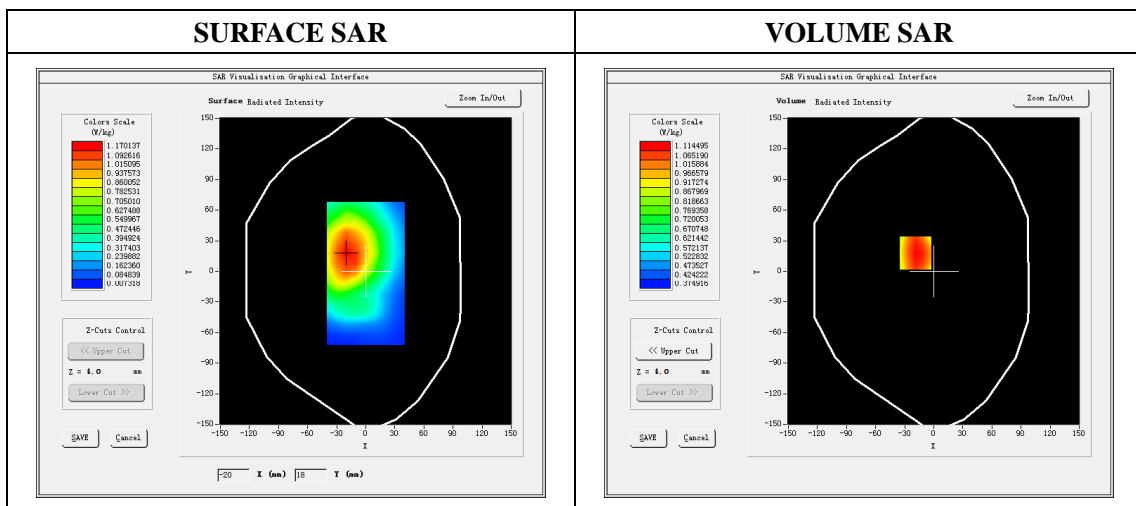
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	GSPRS850_4Tx
Channels	190
Signal	GPRS(Duty cycle: 1:2)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	836.6
Relative permittivity (real part)	41.69
Relative permittivity (imaginary part)	18.53
Conductivity (S/m)	0.98
Variation (%)	-2.00

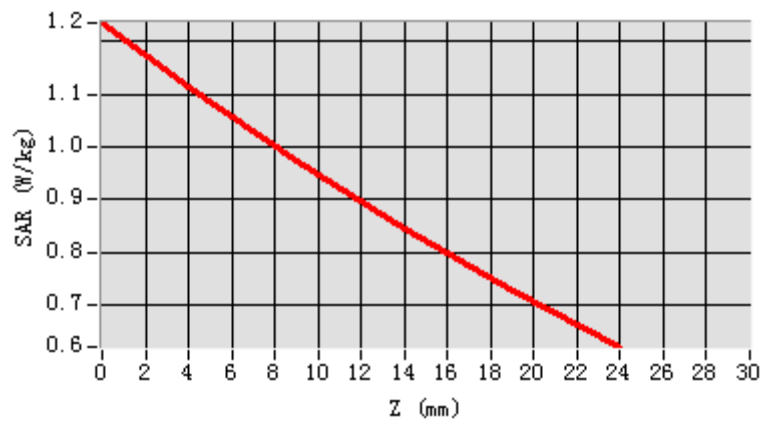


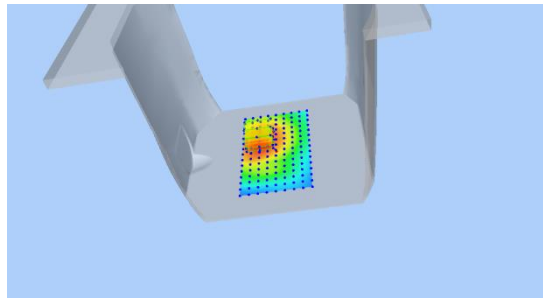
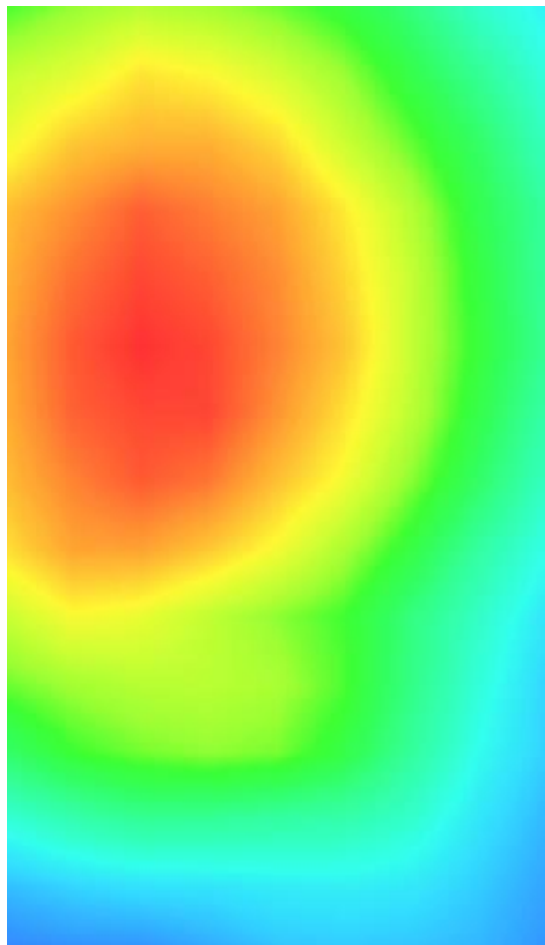
Maximum location: X=-19.00, Y=21.00

SAR Peak: 1.27 W/kg

SAR 10g (W/Kg)	0.902522
SAR 1g (W/Kg)	1.092946

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.2355	1.1145	0.9742	0.8456	0.7279



3D screen shot	Hot spot position
	

Plot 2: GPRS1900, Back, Middle ,10mm

Type: Phone measurement

Date of measurement: 11/06/2021

Measurement duration: 22 minutes 05 seconds

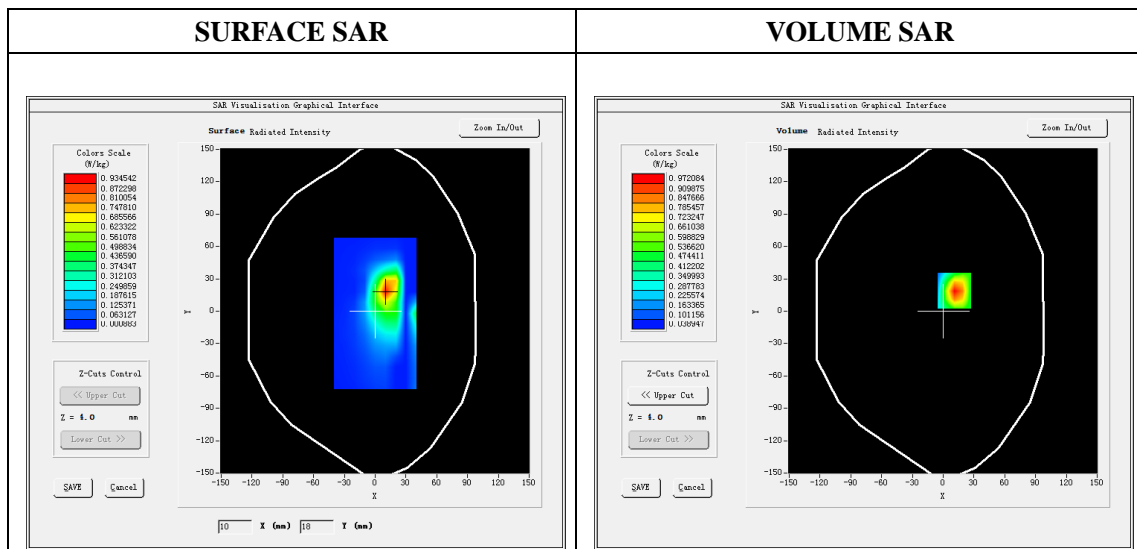
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	GPRS1900_4Tx
Channels	661
Signal	GPRS(Duty cycle: 1:2)

B. SAR Measurement Results

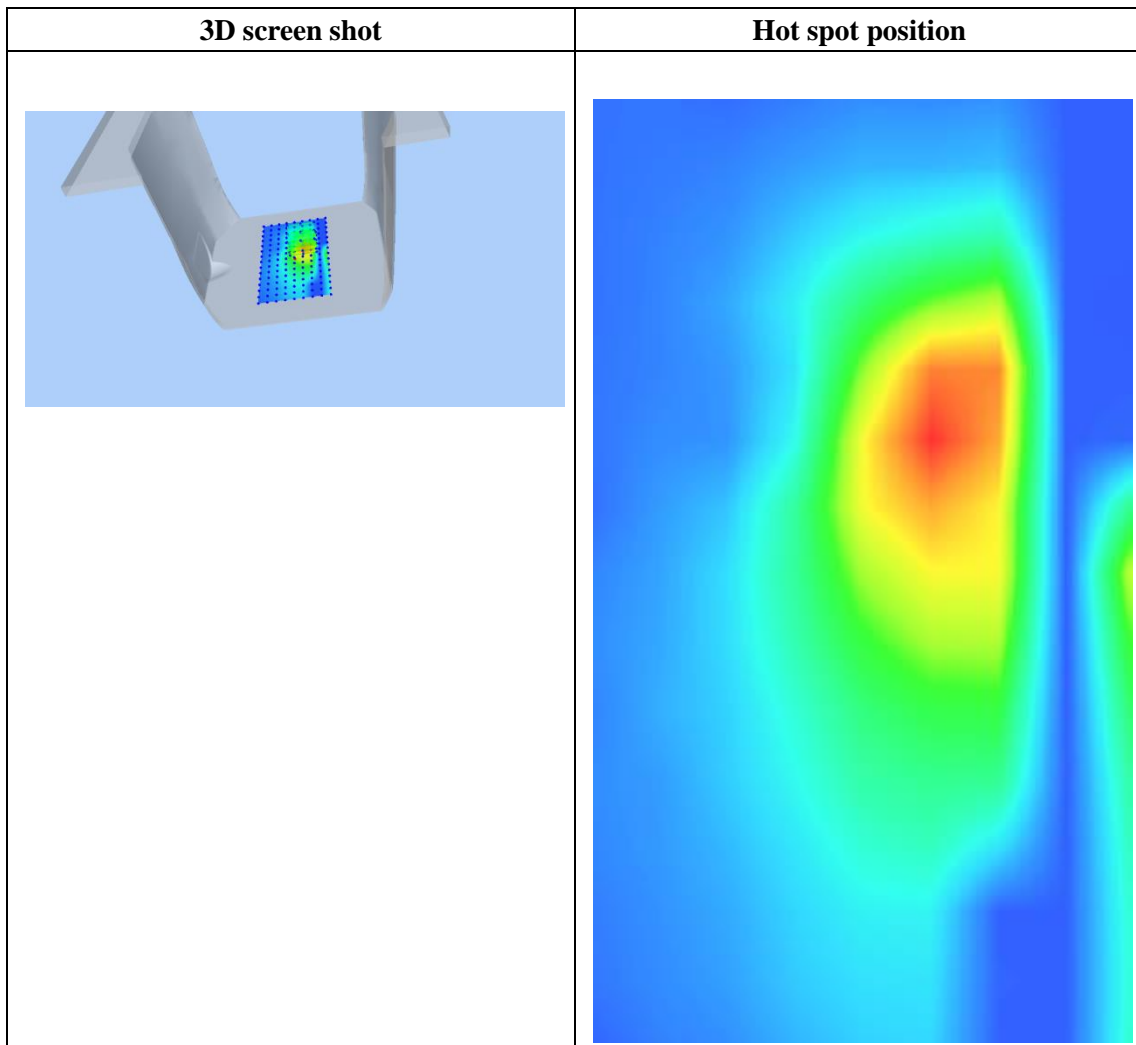
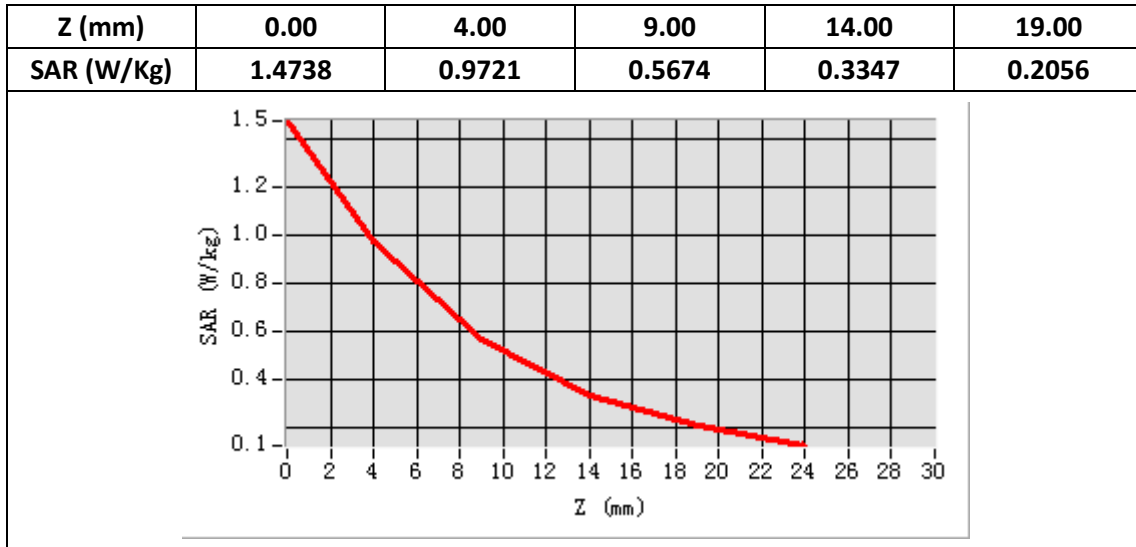
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1880
Relative permittivity (real part)	39.92
Relative permittivity (imaginary part)	13.48
Conductivity (S/m)	1.41
Variation (%)	-2.67



Maximum location: X=11.00, Y=19.00

SAR Peak: 1.50 W/kg

SAR 10g (W/Kg)	0.481367
SAR 1g (W/Kg)	0.906023



Plot 3: CDMA BC0, Back, Middle,10mm

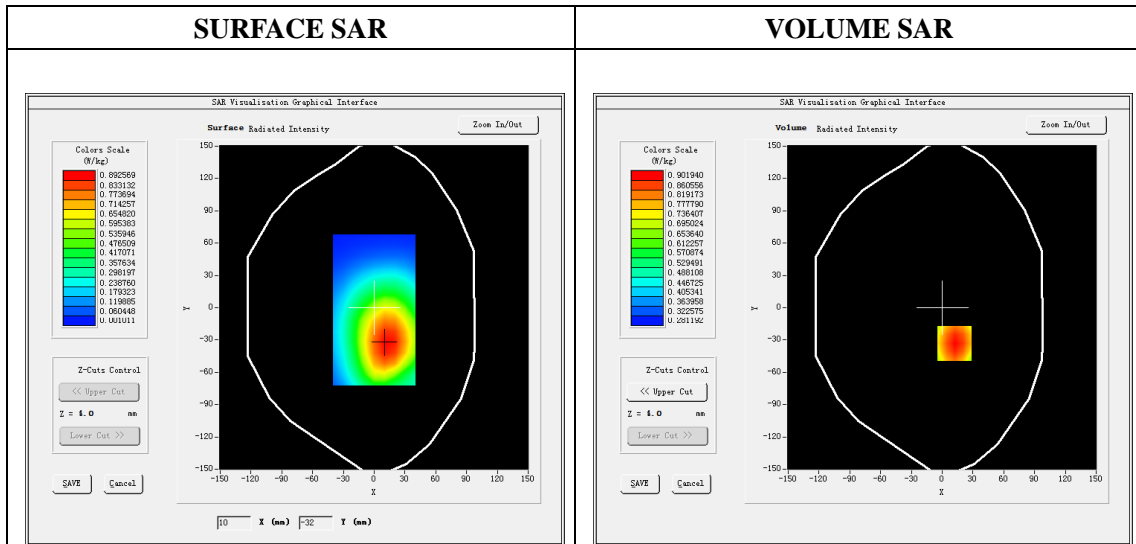
Type: Phone measurement
 Date of measurement: 11/19/2021
 Measurement duration: 22 minutes 07 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	CDMA BC0
Channels	384
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

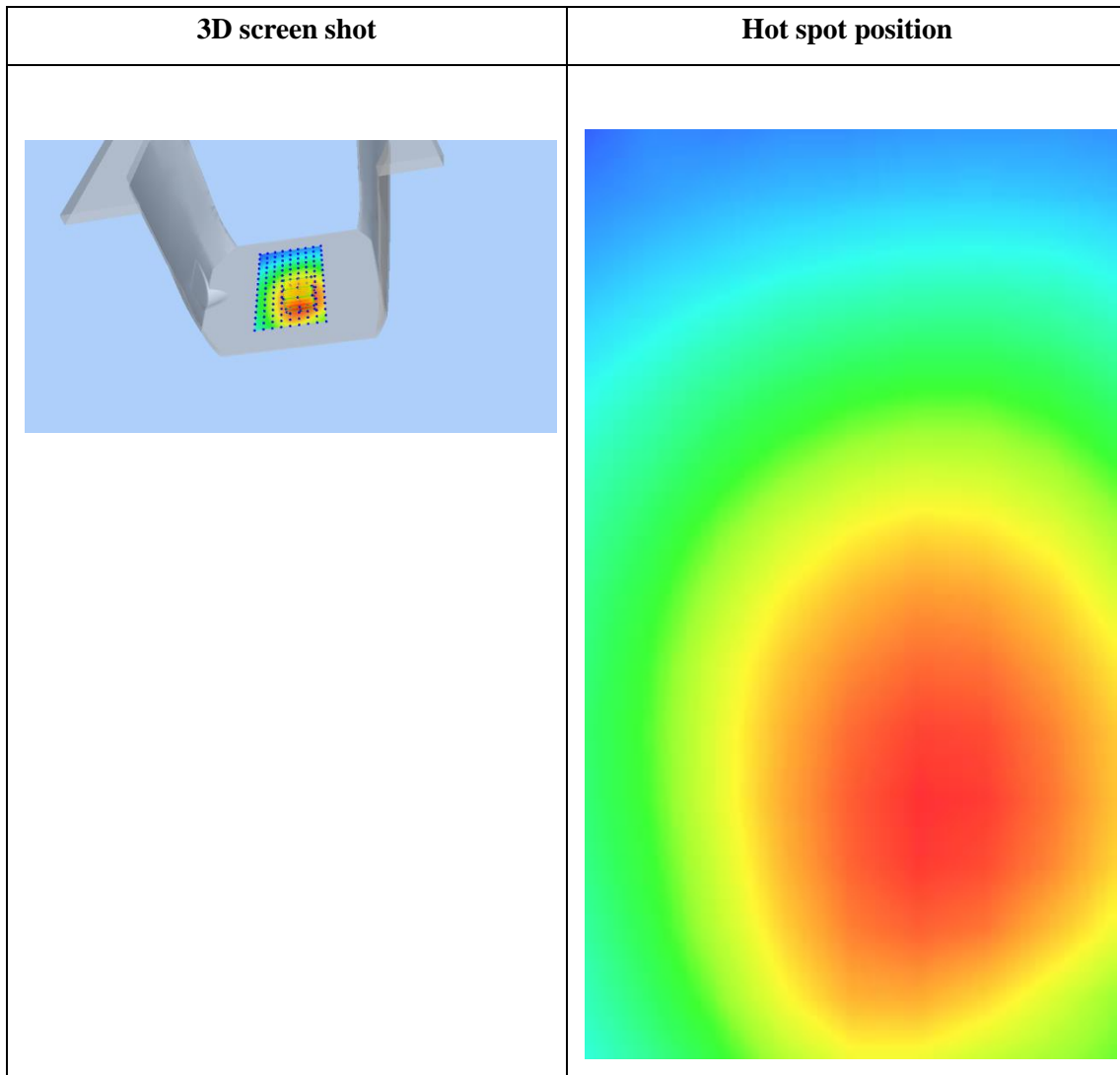
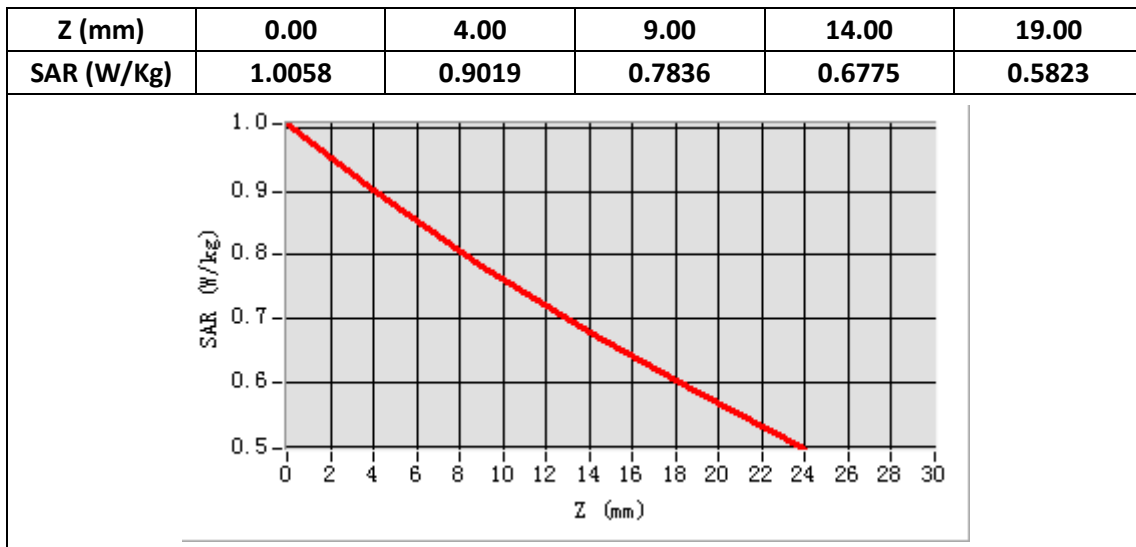
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	836.52
Relative permittivity (real part)	41.69
Relative permittivity (imaginary)	18.53
Conductivity (S/m)	0.98
Variation (%)	-1.84



Maximum location: X=12.00, Y=-33.00

SAR Peak: 1.01W/kg

SAR 10g (W/Kg)	0.720265
SAR 1g (W/Kg)	0.878146



Plot 4: WCDMA850, Back, Middle,10mm

Type: Phone measurement

Date of measurement: 11/19/2021

Measurement duration: 22 minutes 08 seconds

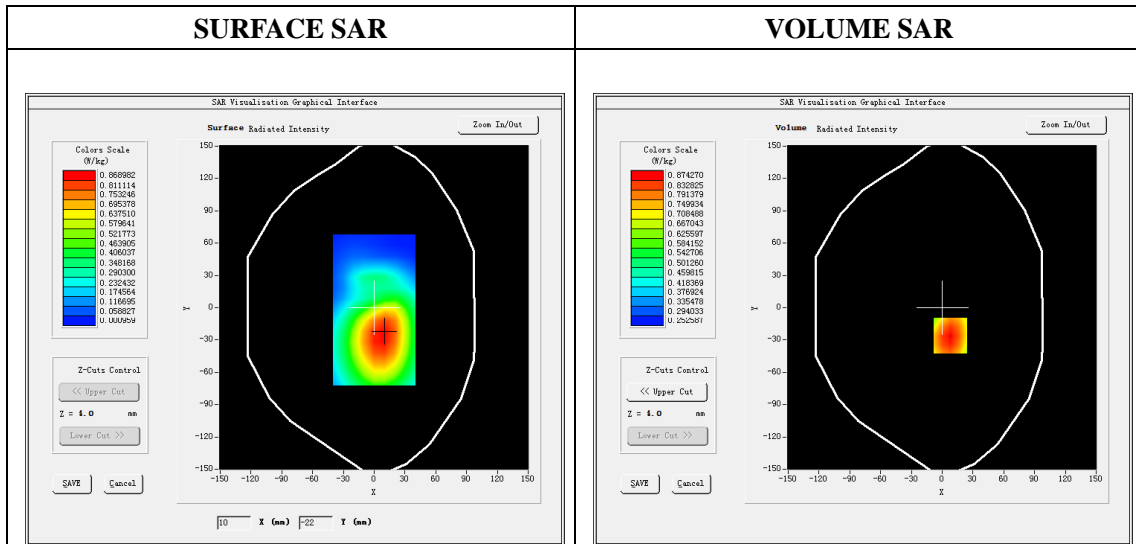
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	Band5_WCDMA850
Channels	4183
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	836.6
Relative permittivity (real part)	41.69
Relative permittivity (imaginary)	18.53
Conductivity (S/m)	0.98
Variation (%)	-1.27

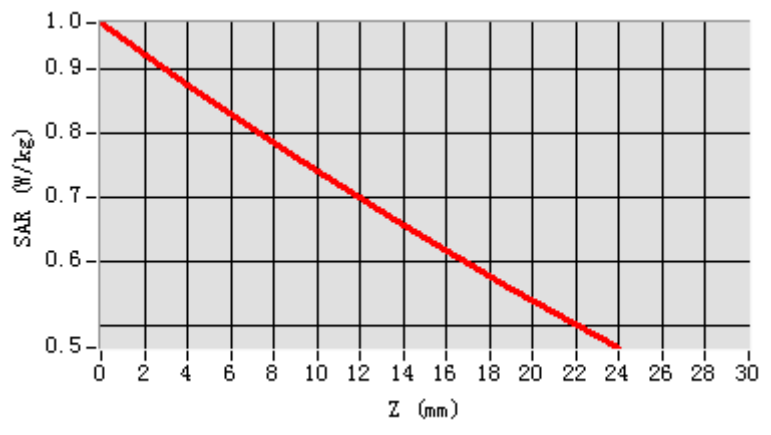


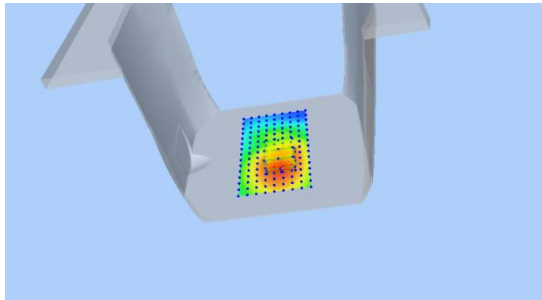
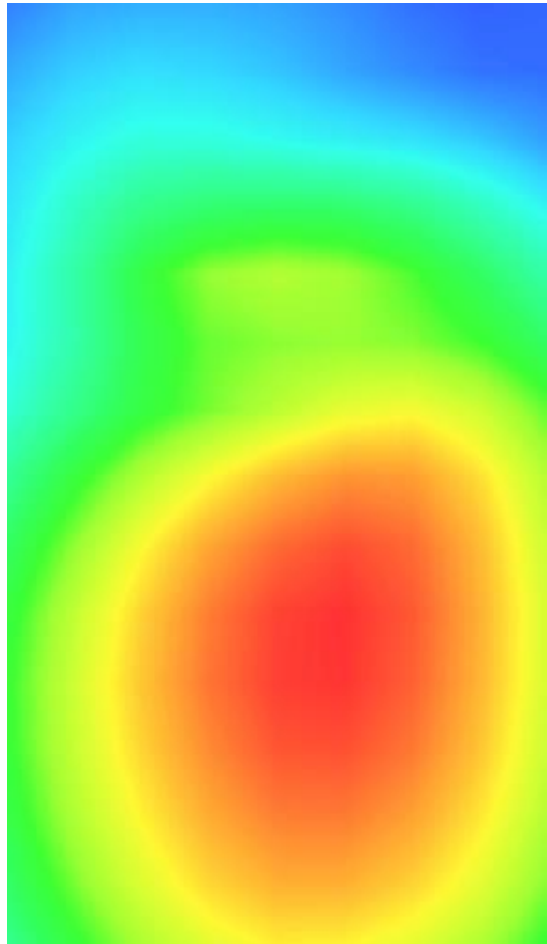
Maximum location: X=8.00, Y=-26.00

SAR Peak: 0.97W/kg

SAR 10g (W/Kg)	0.695615
SAR 1g (W/Kg)	0.851385

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.9703	0.8743	0.7607	0.6544	0.5557



3D screen shot	Hot spot position
	

Plot 5: WCDMA1900, Back, Middle,10mm

Type: Phone measurement

Date of measurement: 11/06/2021

Measurement duration: 22 minutes 09 seconds

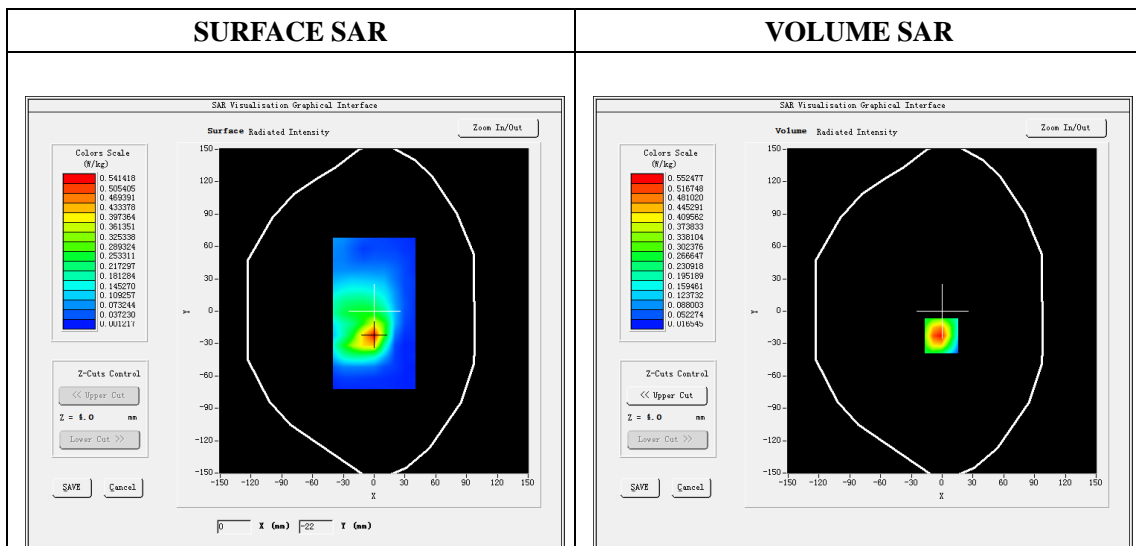
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	Band2_WCDMA1900
Channels	9400
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

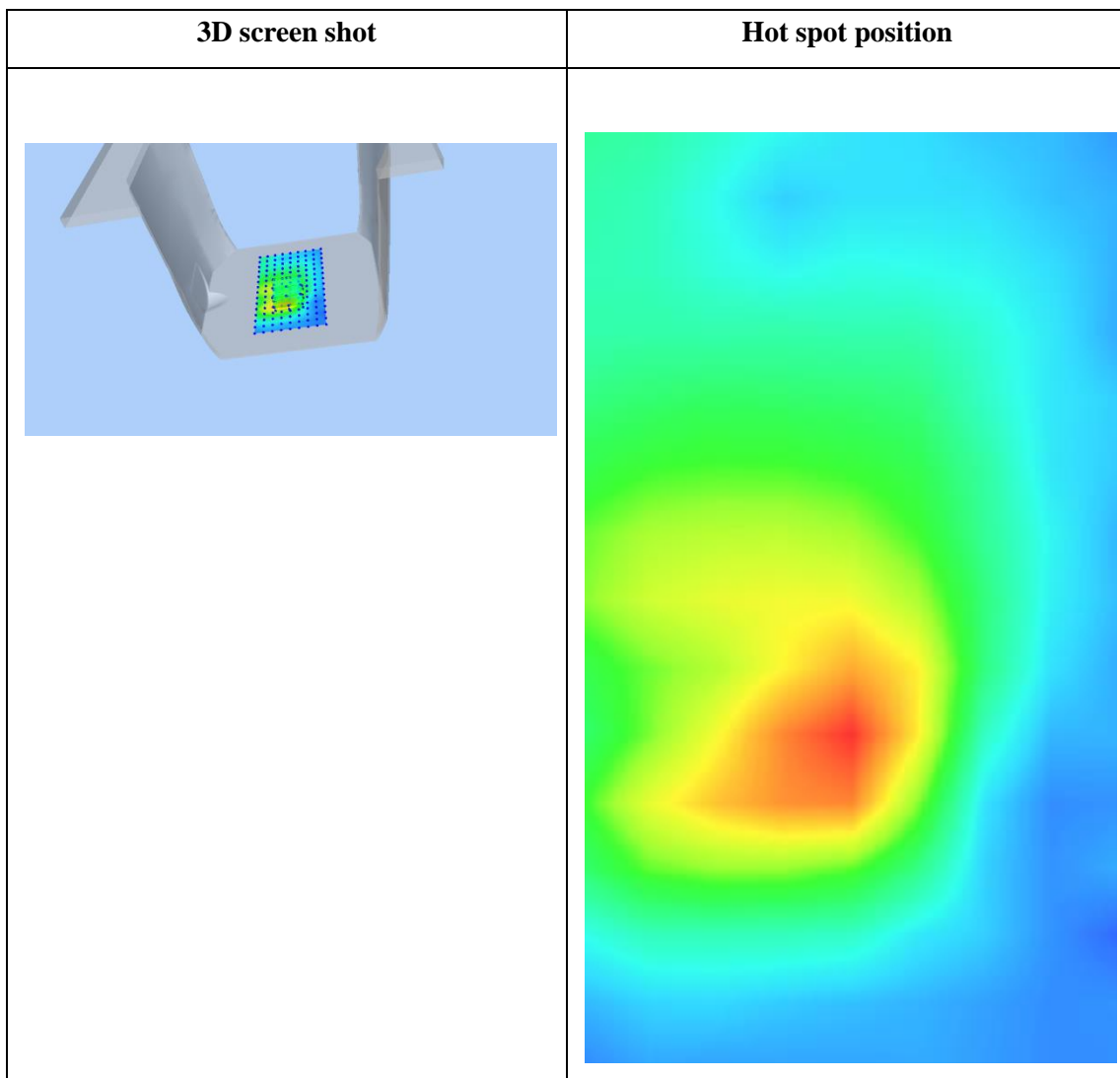
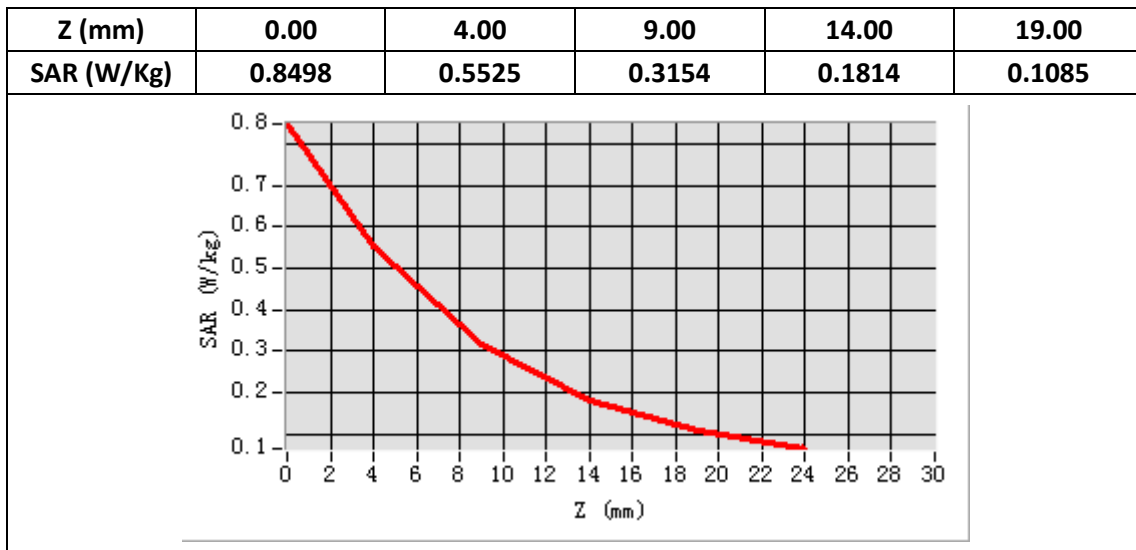
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1880
Relative permittivity (real part)	39.92
Relative permittivity (imaginary)	13.48
Conductivity (S/m)	1.41
Variation (%)	-0.85



Maximum location: X=-1.00, Y=-23.00

SAR Peak: 0.87W/kg

SAR 10g (W/Kg)	0.275401
SAR 1g (W/Kg)	0.519512



Plot 6: WCDMA1700, Back, Middle,10mm

Type: Phone measurement

Date of measurement: 11/14/2021

Measurement duration: 22 minutes 11 seconds

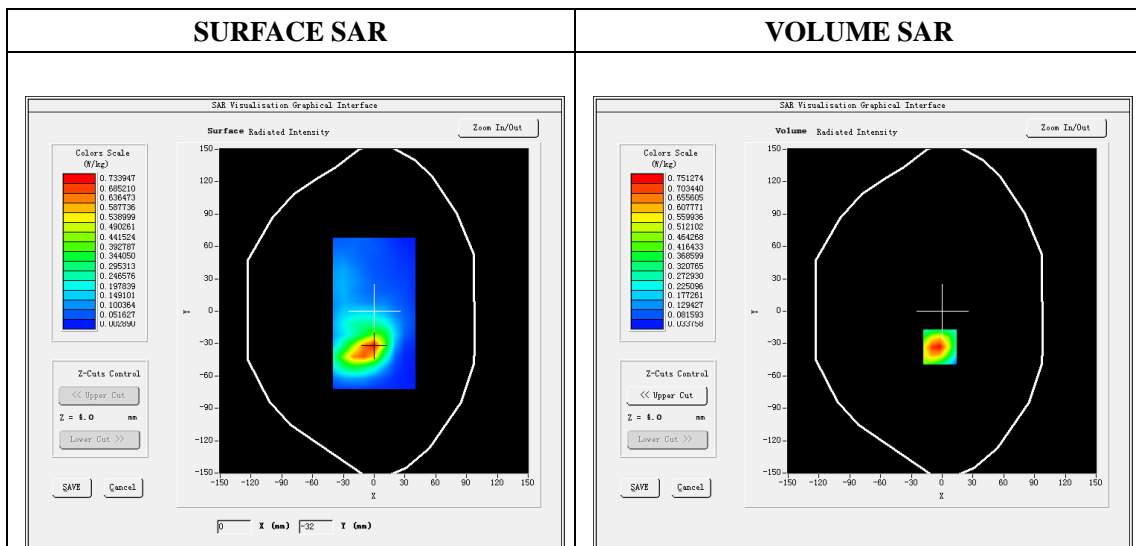
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	Band4_WCDMA1700
Channels	1413
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

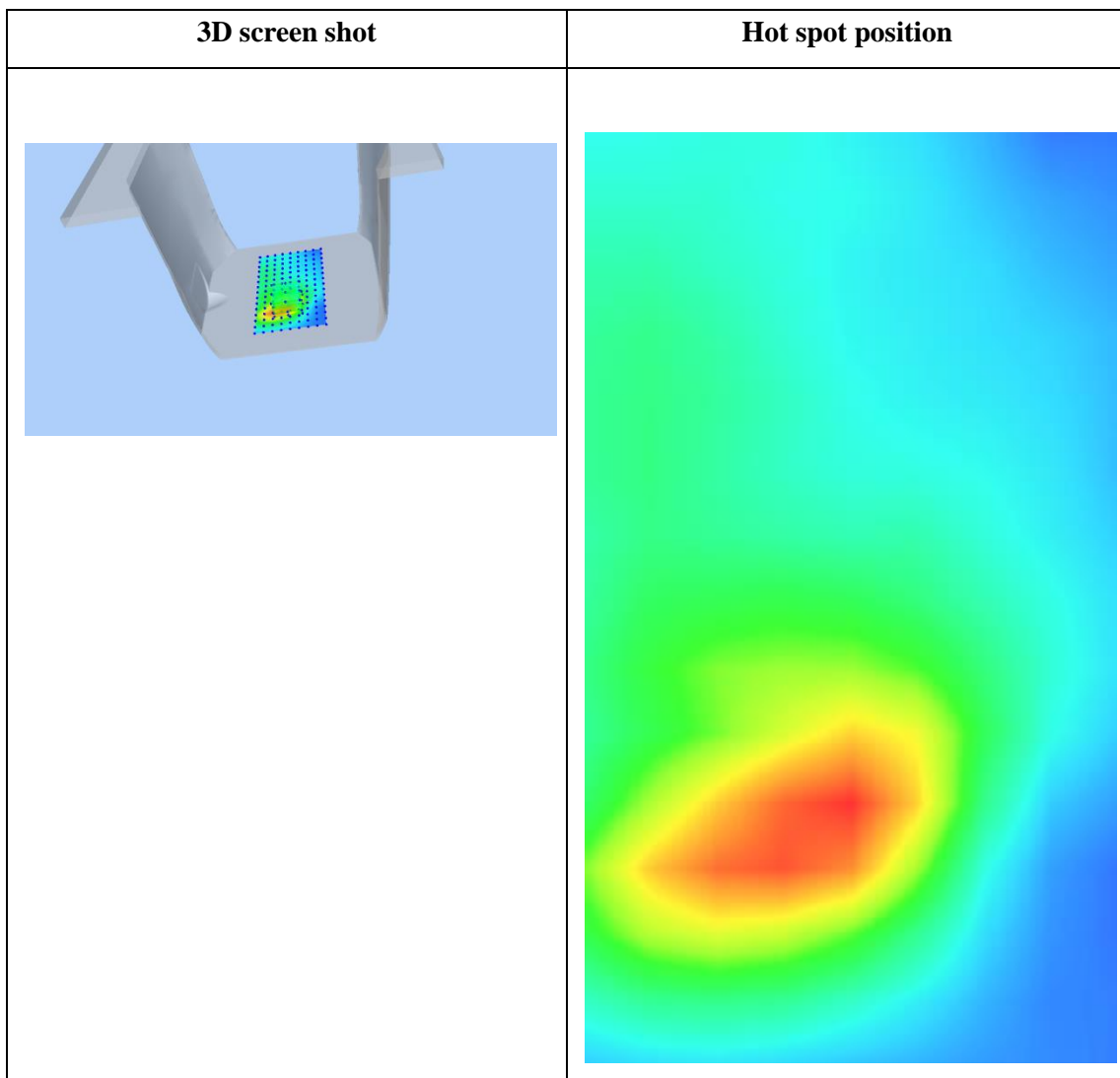
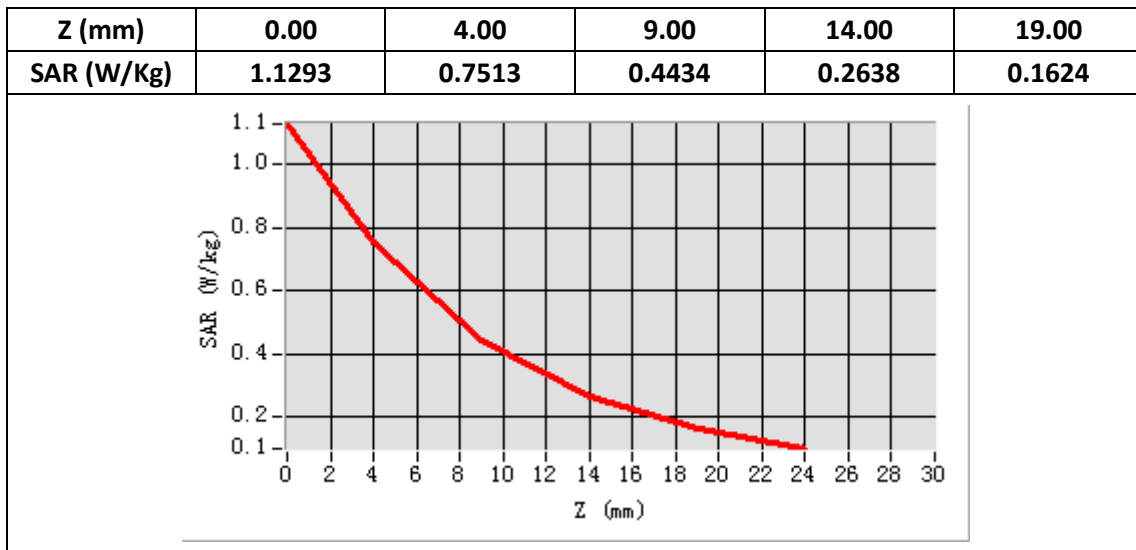
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1732.6
Relative permittivity (real part)	40.31
Relative permittivity (imaginary)	14.42
Conductivity (S/m)	1.35
Variation (%)	-1.76



Maximum location: X=-2.00, Y=-33.00

SAR Peak: 1.15W/kg

SAR 10g (W/Kg)	0.389230
SAR 1g (W/Kg)	0.715797



Plot 7: LTE Band2, 20MHz, Back, Middle,10mm

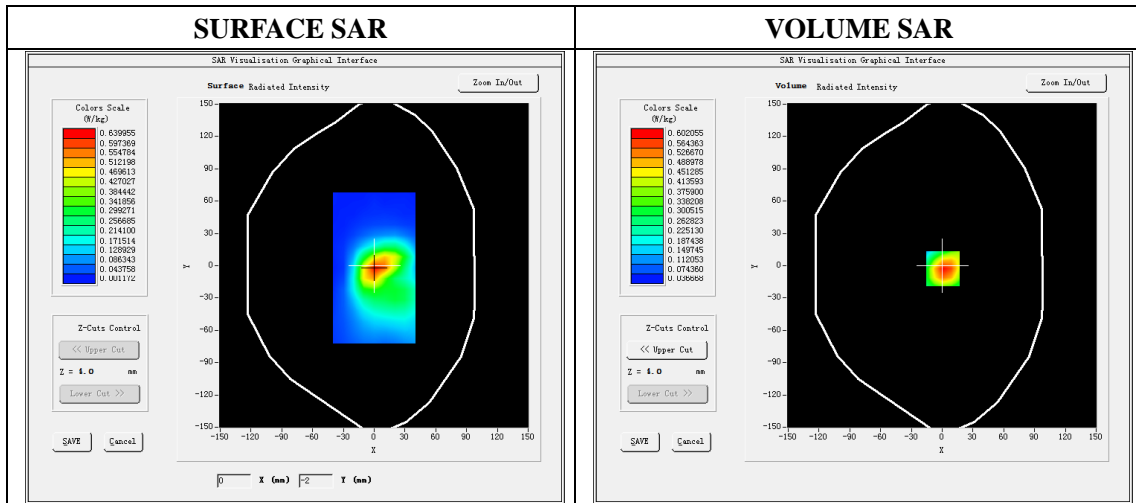
Type: Phone measurement
 Date of measurement: 11/06/2021
 Measurement duration: 22 minutes 16 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 2
Channels	18900
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1880
Relative permittivity (real part)	39.92
Relative permittivity (imaginary)	13.48
Conductivity (S/m)	1.41
Variation (%)	0.50

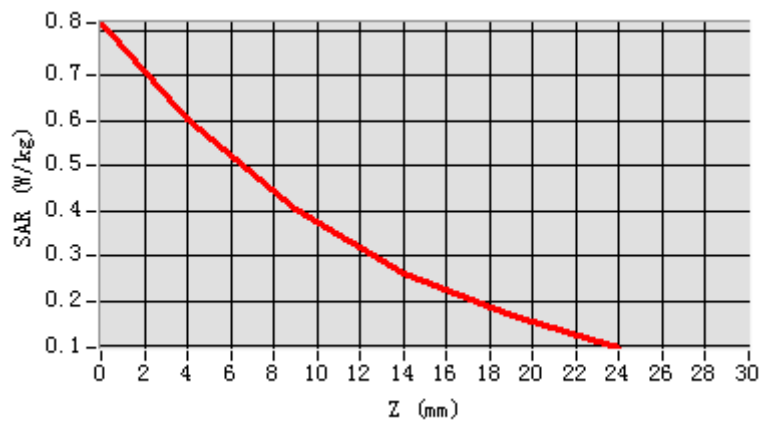


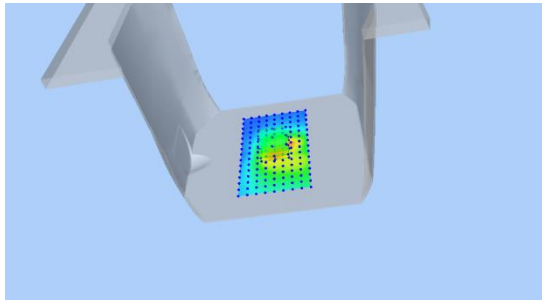
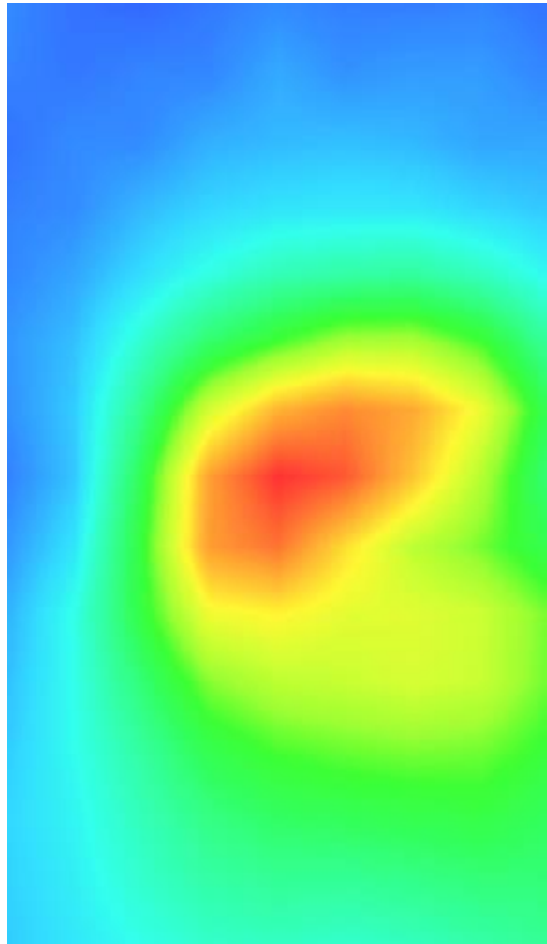
Maximum location: X=1.00, Y=-3.00

SAR Peak: 0.83W/kg

SAR 10g (W/Kg)	0.337523
SAR 1g (W/Kg)	0.566959

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8163	0.6021	0.4025	0.2627	0.1660



3D screen shot	Hot spot position
	

Plot 8: LTE Band4, 20MHz, Back, Middle,10mm

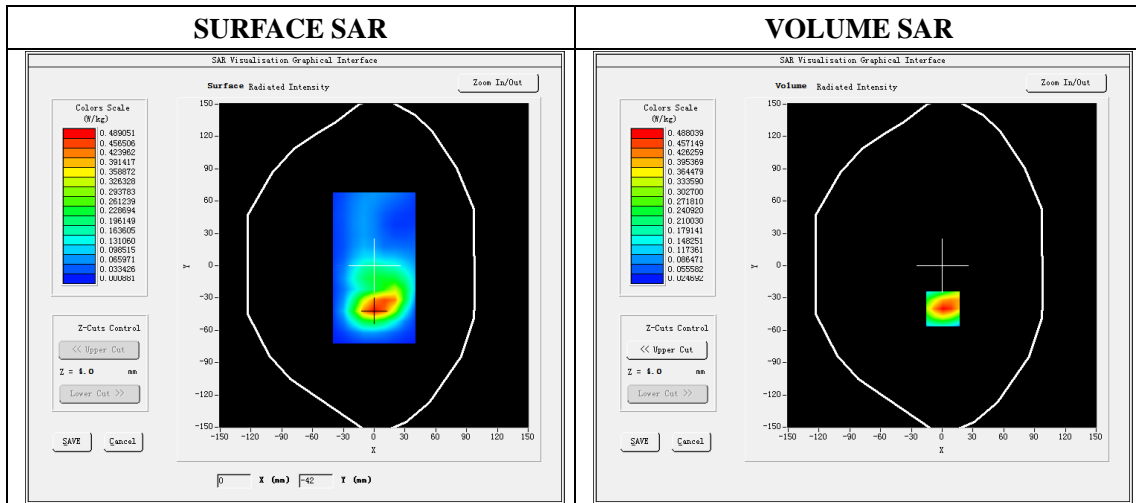
Type: Phone measurement
 Date of measurement: 11/14/2021
 Measurement duration: 22 minutes 13 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 4
Channels	20175
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1732.5
Relative permittivity (real part)	40.31
Relative permittivity (imaginary)	14.42
Conductivity (S/m)	1.35
Variation (%)	-2.73

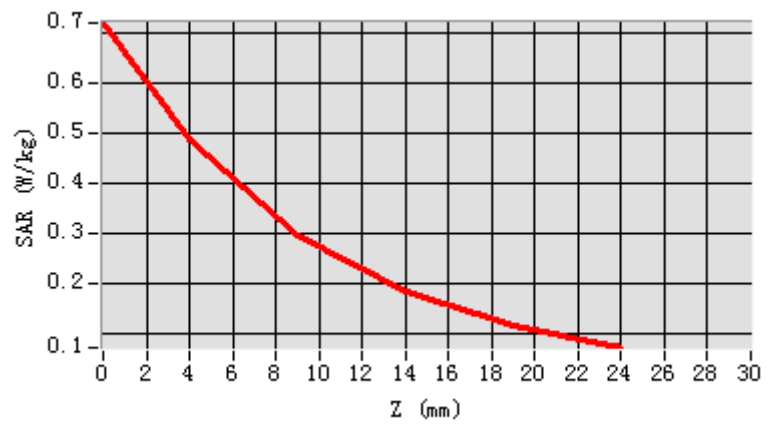


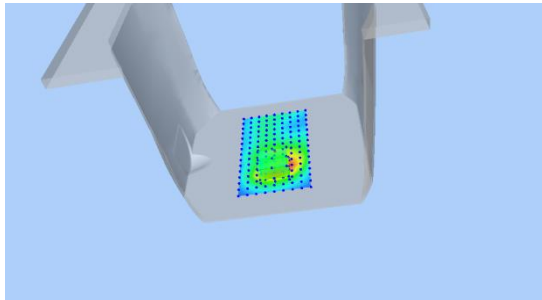
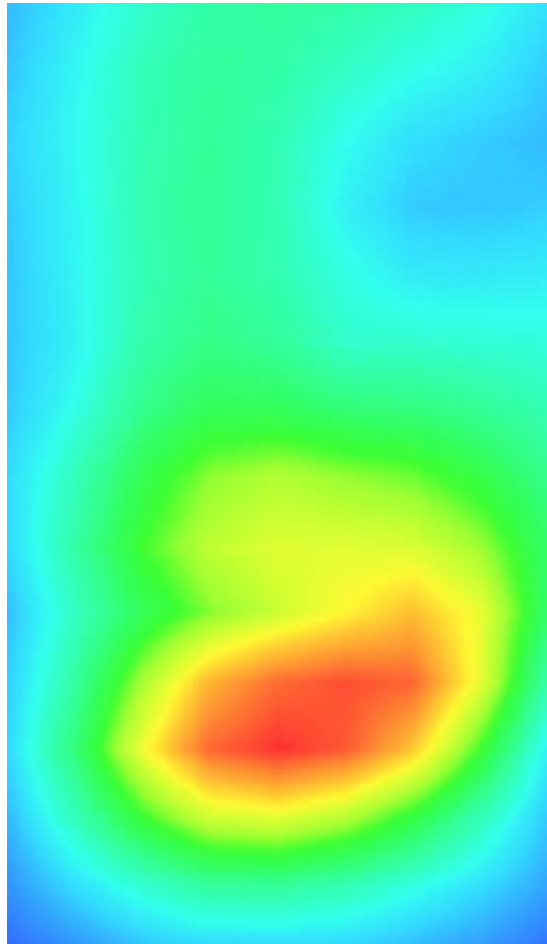
Maximum location: X=1.00, Y=-40.00

SAR Peak: 0.72W/kg

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

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7200	0.4880	0.2958	0.1809	0.1141



3D screen shot	Hot spot position
	

Plot 9: LTE Band5, 10MHz, Back, Middle,10mm

Type: Phone measurement

Date of measurement: 11/19/2021

Measurement duration: 22 minutes 22 seconds

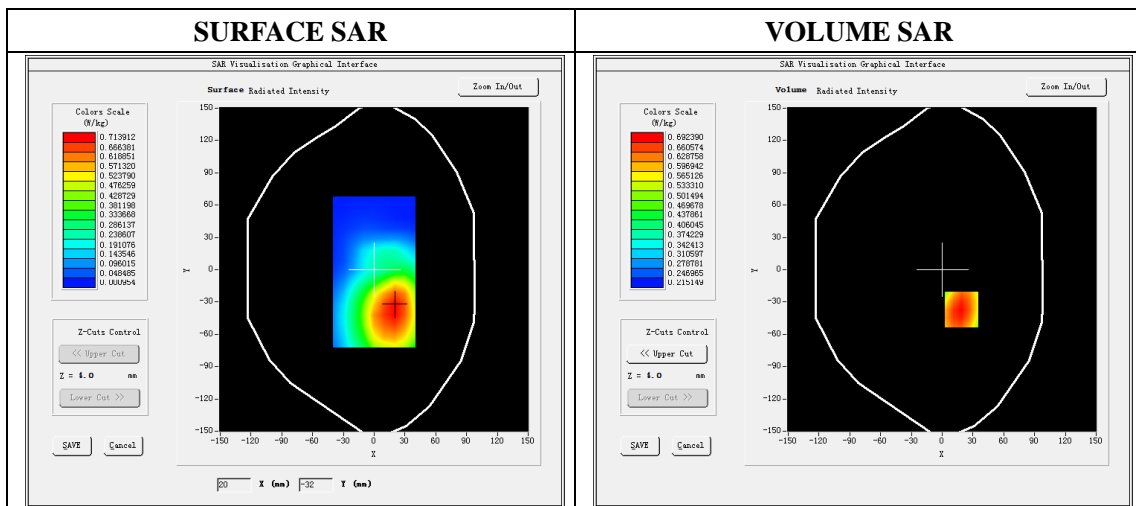
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 5
Channels	20525
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	836.5
Relative permittivity (real part)	41.69
Relative permittivity (imaginary)	18.53
Conductivity (S/m)	0.98
Variation (%)	0.73

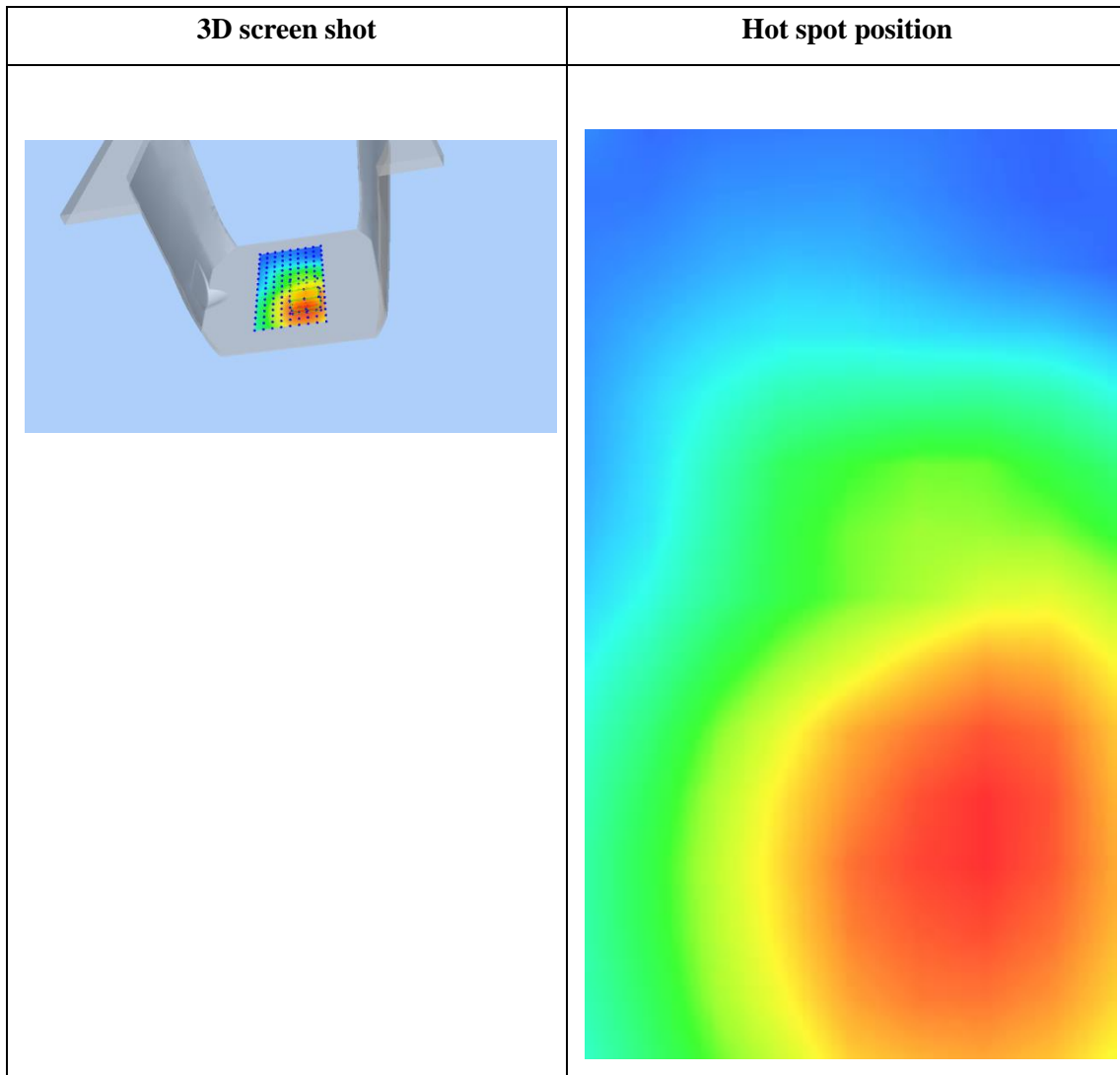
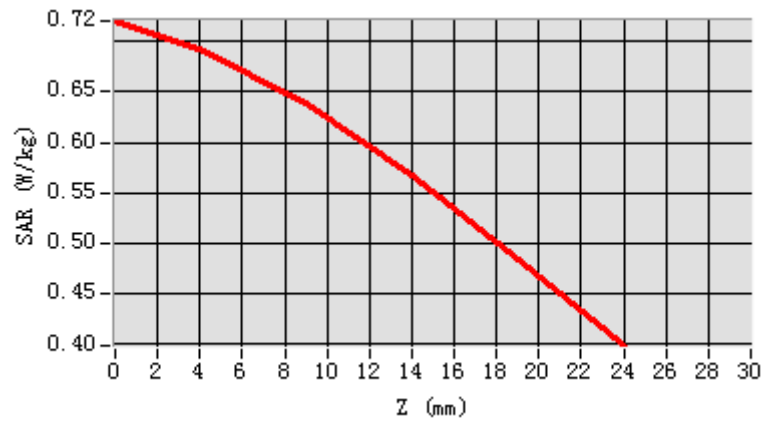


Maximum location: X=19.00, Y=-37.00

SAR Peak: 0.74W/kg

SAR 10g (W/Kg)	0.574044
SAR 1g (W/Kg)	0.678657

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7204	0.6924	0.6391	0.5671	0.4830



Plot 10: LTE Band7, 20MHz, Back, Middle,10mm

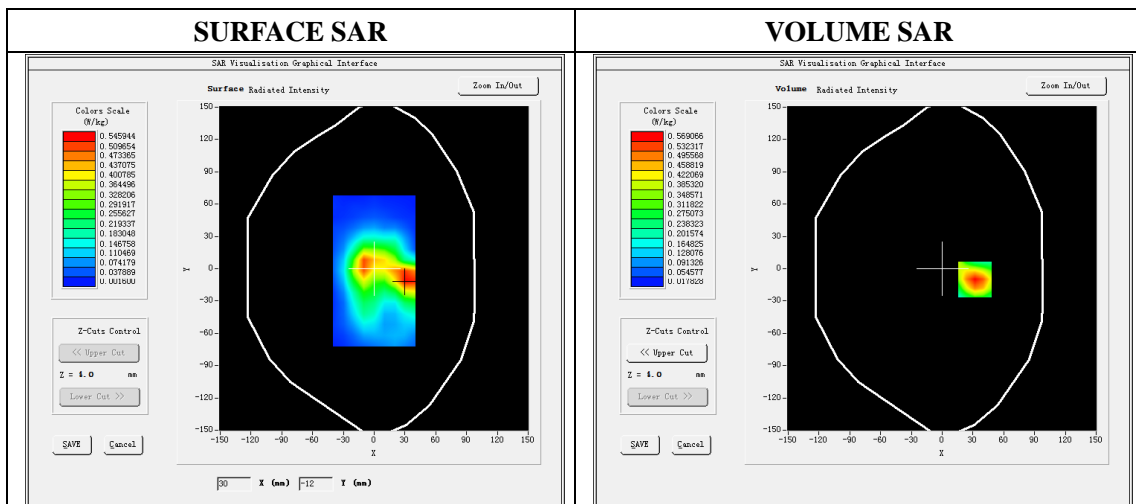
Type: Phone measurement
 Date of measurement: 11/04/2021
 Measurement duration: 22 minutes 21 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=5mm,dy=5mm
ZoomScan	7x7x8,dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 7
Channels	21100
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	2535
Relative permittivity (real part)	38.45
Relative permittivity (imaginary)	13.21
Conductivity (S/m)	1.96
Variation (%)	-3.01

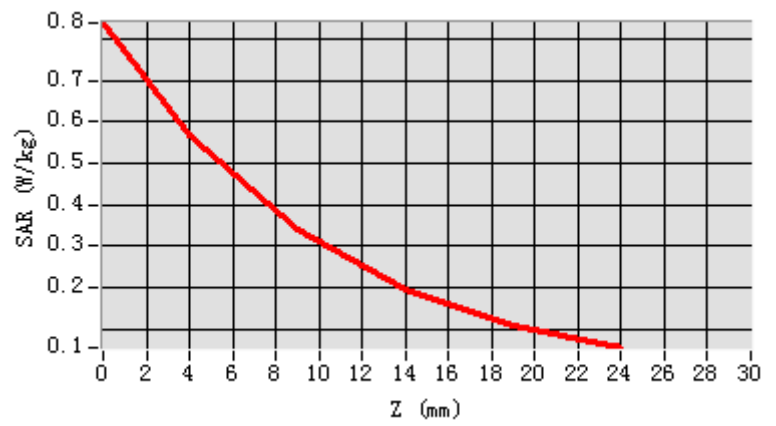


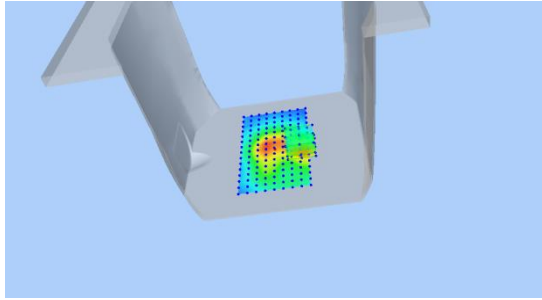
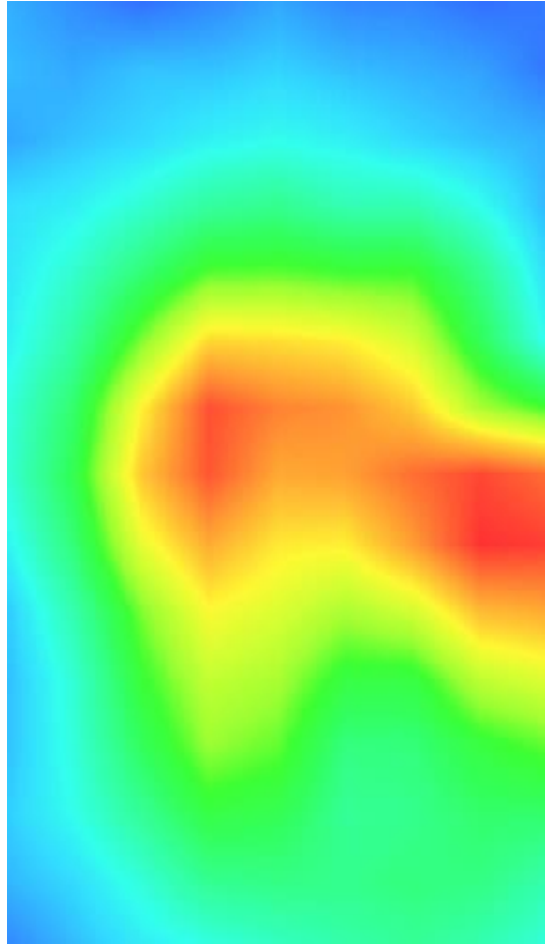
Maximum location: X=32.00 Y=-10.00

SAR Peak: 0.84 W/kg

SAR 10g (W/Kg)	0.290589
SAR 1g (W/Kg)	0.530536

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8388	0.5691	0.3396	0.1970	0.1110



3D screen shot	Hot spot position
	

Plot 11: LTE Band12, 10MHz, Back, Middle,10mm

Type: Phone measurement

Date of measurement: 11/18/2021

Measurement duration: 22 minutes 25 seconds

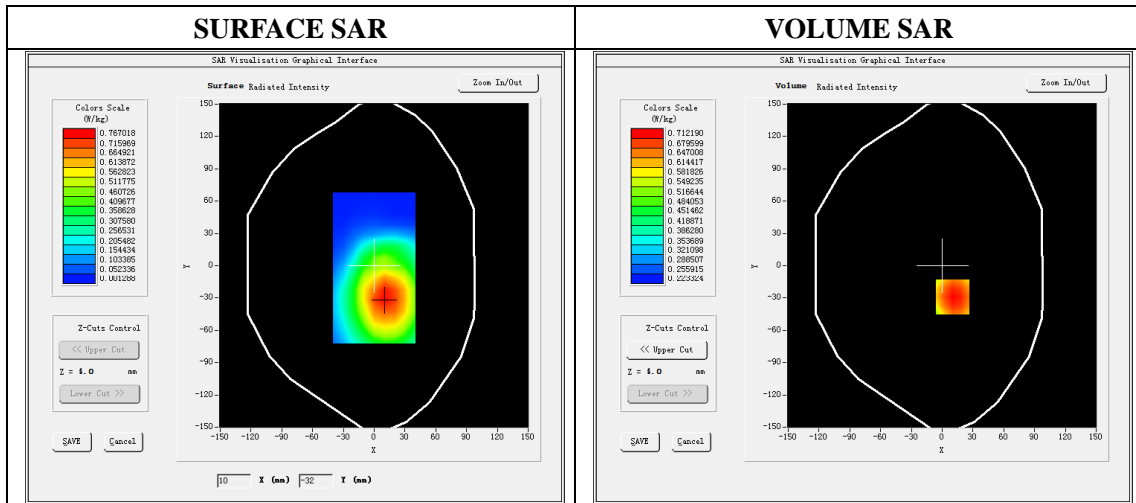
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=5mm,dy=5mm
ZoomScan	7x7x8,dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 12
Channels	23095
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	707.5
Relative permittivity (real part)	43.11
Relative permittivity (imaginary)	17.28
Conductivity (S/m)	0.86
Variation (%)	-2.17

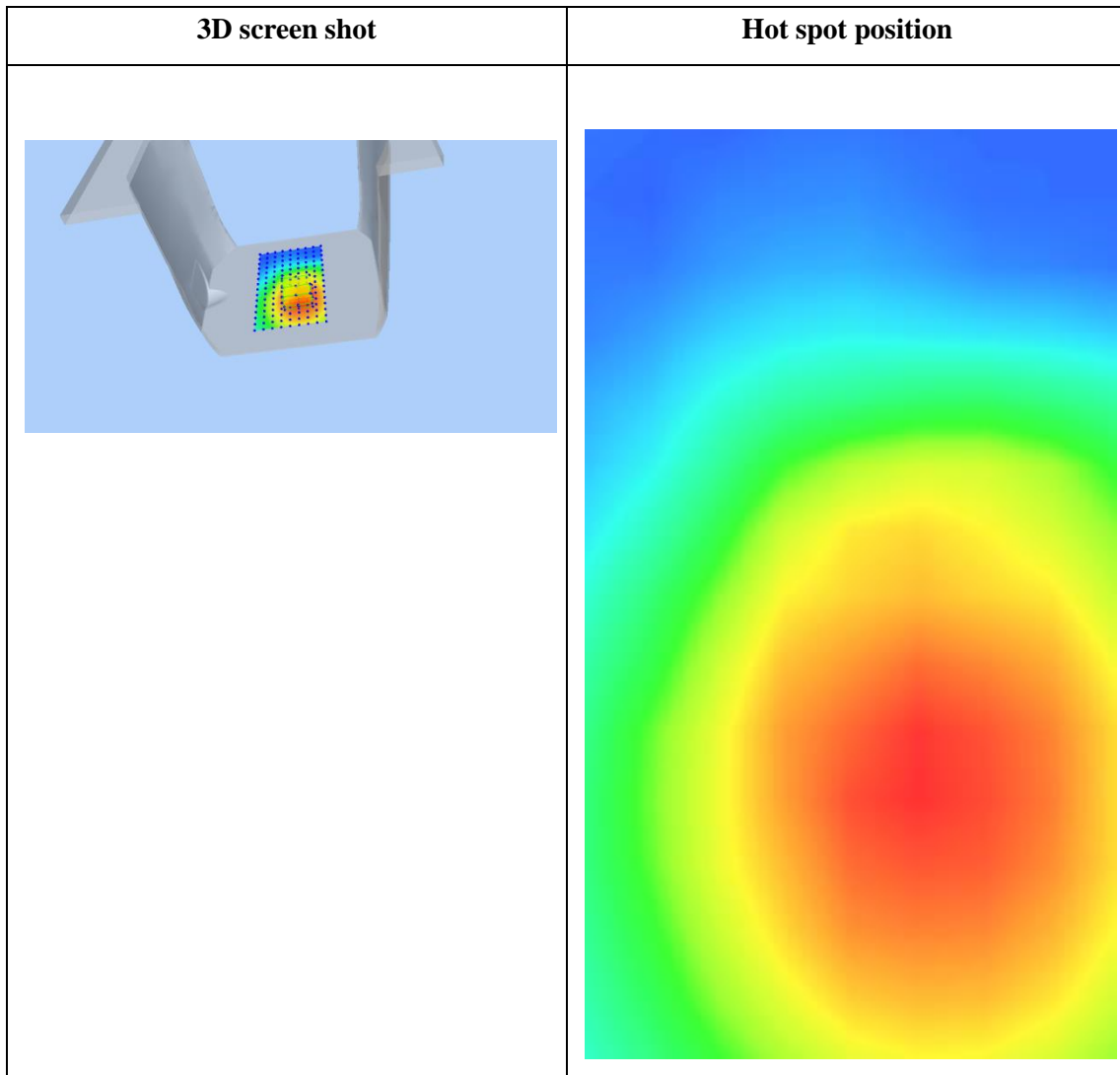
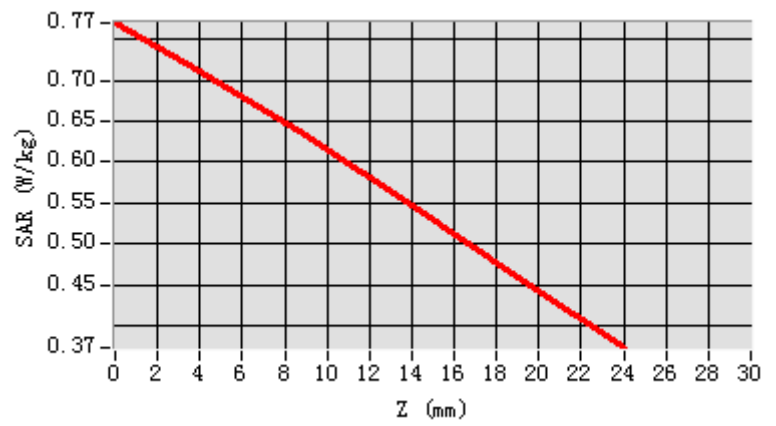


Maximum location: X=10.00 Y=-29.00

SAR Peak: 0.78 W/kg

SAR 10g (W/Kg)	0.592192
SAR 1g (W/Kg)	0.713283

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7703	0.7122	0.6323	0.5461	0.4575



Plot 12: LTE Band17, 10MHz, Back, Middle,10mm

Type: Phone measurement

Date of measurement: 11/18/2021

Measurement duration: 22 minutes 23 seconds

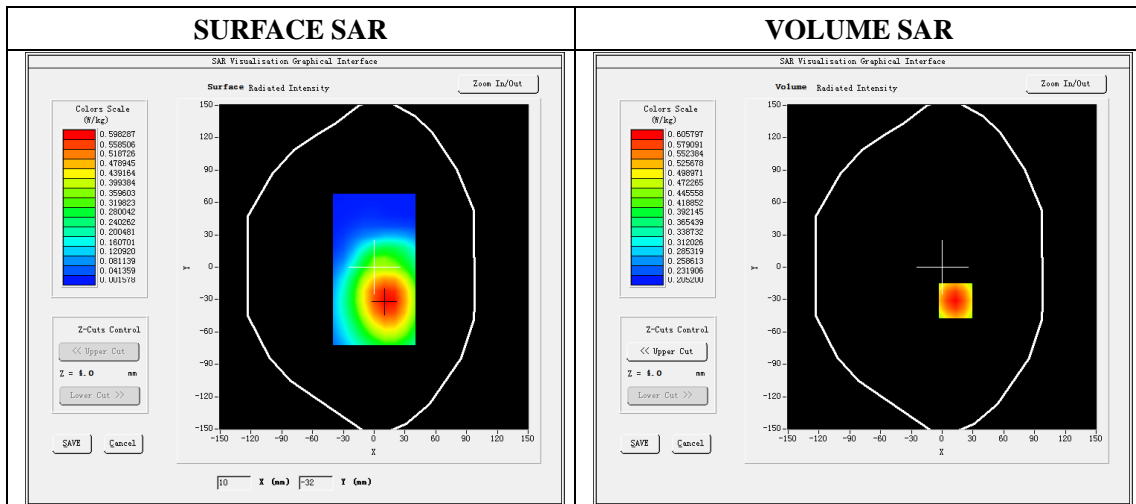
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 17
Channels	23790
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	710
Relative permittivity (real part)	42.98
Relative permittivity (imaginary)	22.19
Conductivity (S/m)	0.87
Variation (%)	-2.80

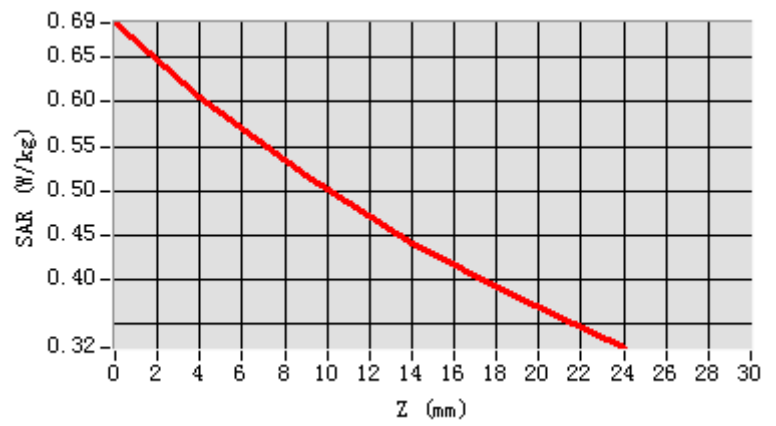


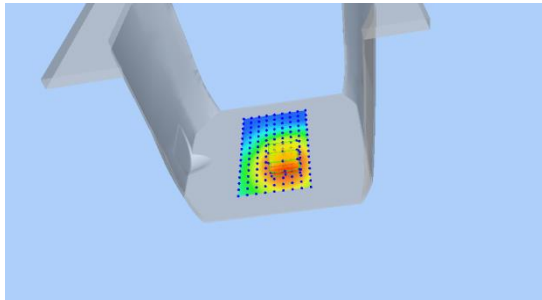
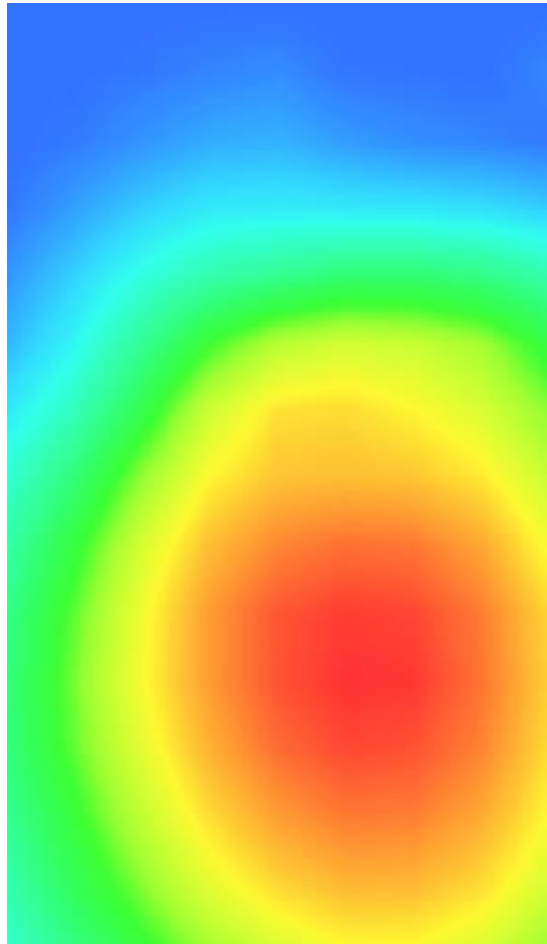
Maximum location: X=13.00, Y=-31.00

SAR Peak: 0.69W/kg

SAR 10g (W/Kg)	0.477795
SAR 1g (W/Kg)	0.588727

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.6889	0.6058	0.5164	0.4417	0.3788



3D screen shot	Hot spot position
	

Plot 13: LTE Band 25, 20MHz, Back, Middle,10mm

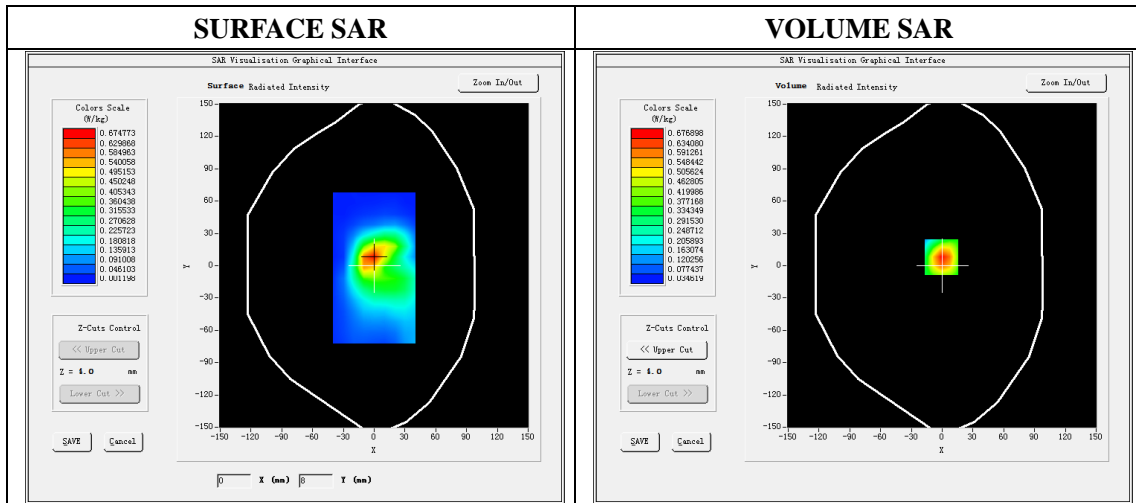
Type: Phone measurement
 Date of measurement: 11/06/2021
 Measurement duration: 22 minutes 26 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 25
Channels	26365
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

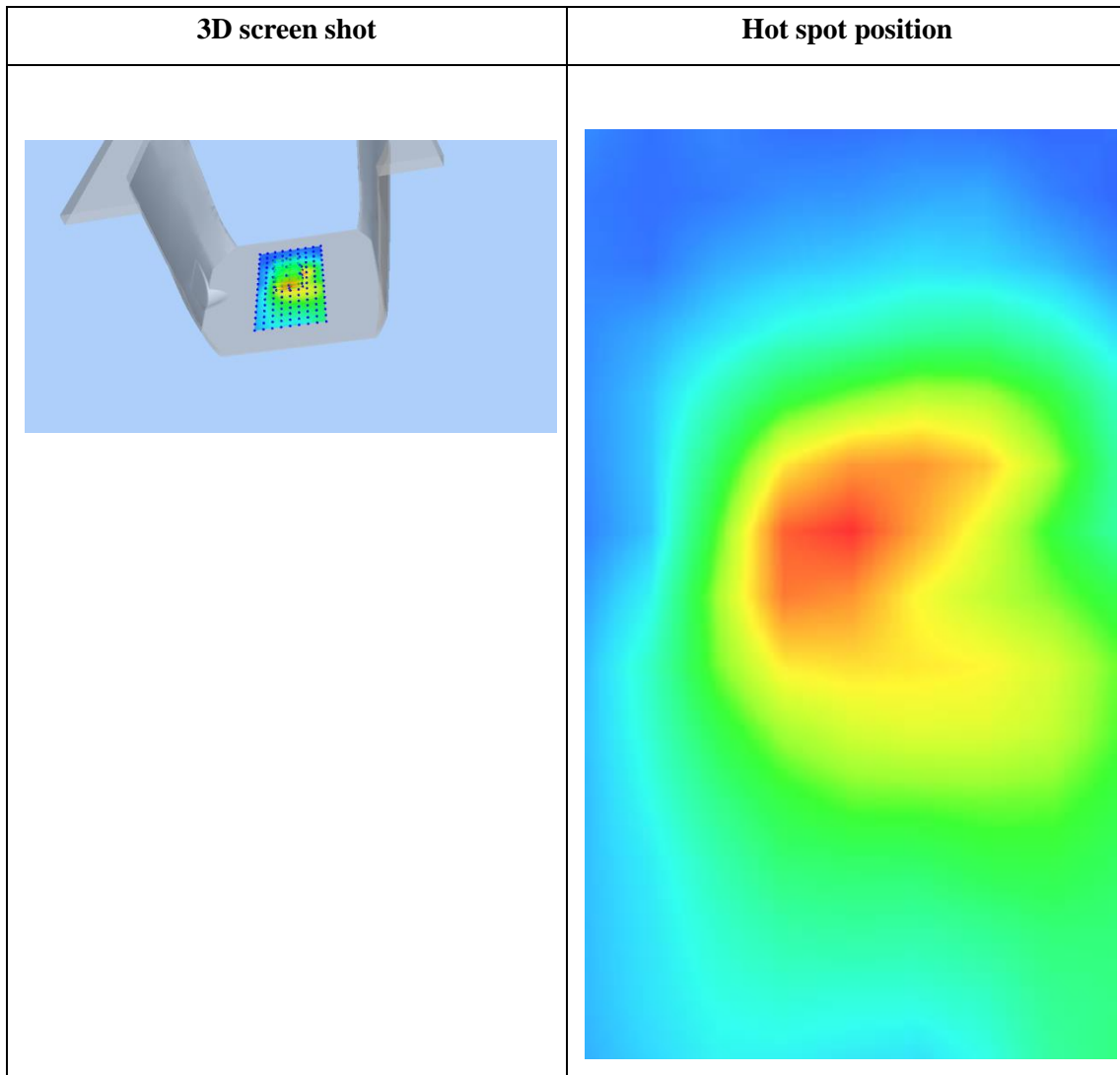
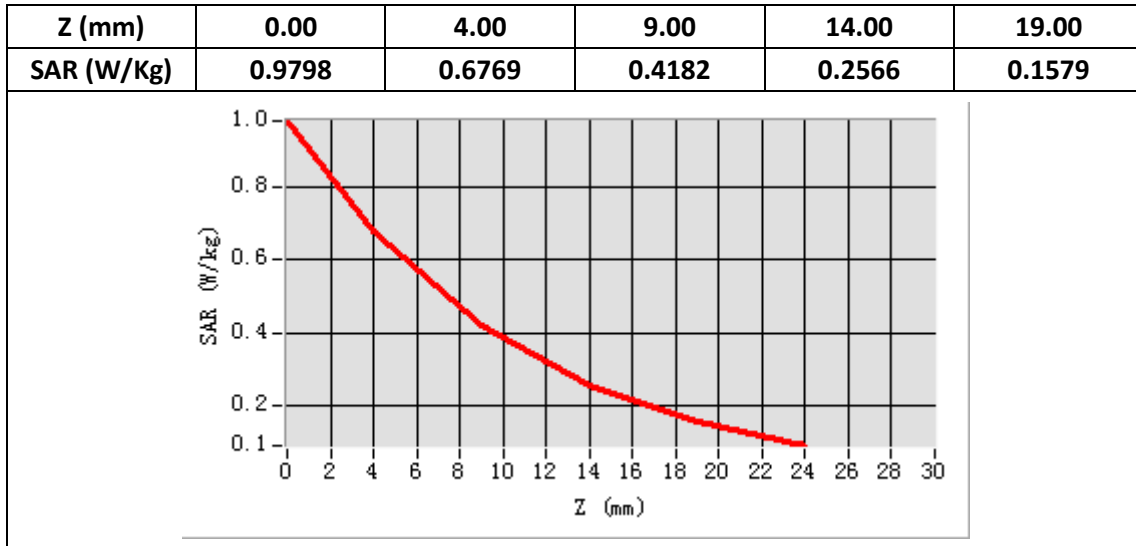
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1882.5
Relative permittivity (real part)	39.87
Relative permittivity (imaginary)	12.58
Conductivity (S/m)	1.41
Variation (%)	-0.57



Maximum location: X=-1.00, Y=8.00

SAR Peak: 0.99W/kg

SAR 10g (W/Kg)	0.359777
SAR 1g (W/Kg)	0.633831



Plot 14: LTE Band 26, 15MHz, Back, Middle,10mm

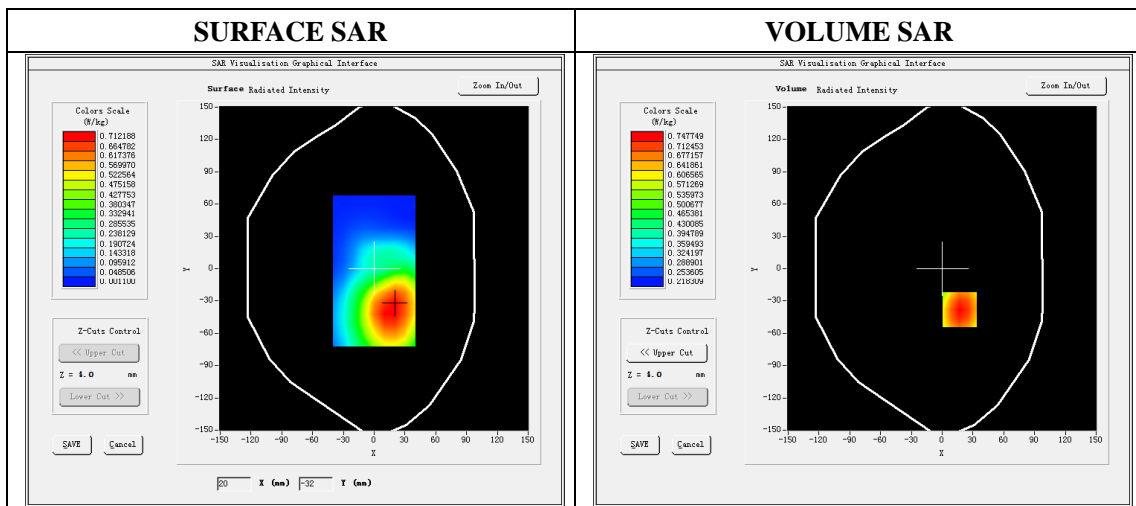
Type: Phone measurement
 Date of measurement: 11/19/2021
 Measurement duration: 22 minutes 26 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 26
Channels	26865
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	831.52
Relative permittivity (real part)	42.03
Relative permittivity (imaginary)	18.75
Conductivity (S/m)	0.97
Variation (%)	-1.71

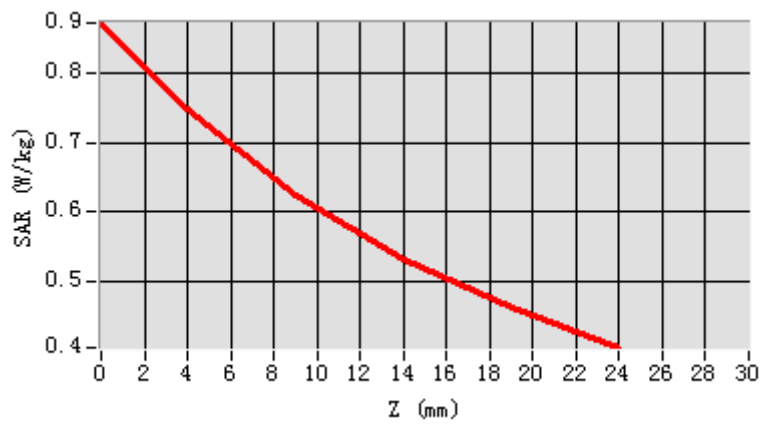


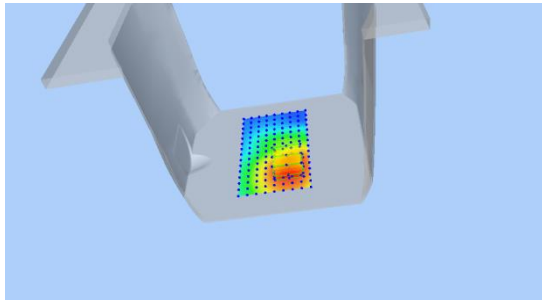
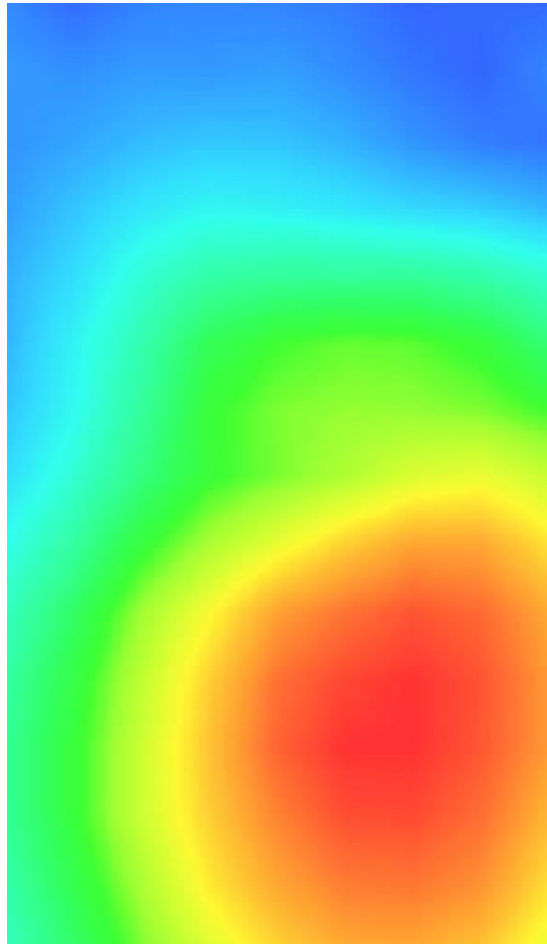
Maximum location: X=17.00, Y=-38.00

SAR Peak: 0.88W/kg

SAR 10g (W/Kg)	0.587503
SAR 1g (W/Kg)	0.727312

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8727	0.7477	0.6235	0.5303	0.4604



3D screen shot	Hot spot position
	

Plot 15: LTE Band 41, 20MHz, Back, Middle,10mm

Type: Phone measurement

Date of measurement: 11/04/2021

Measurement duration: 22 minutes 26 seconds

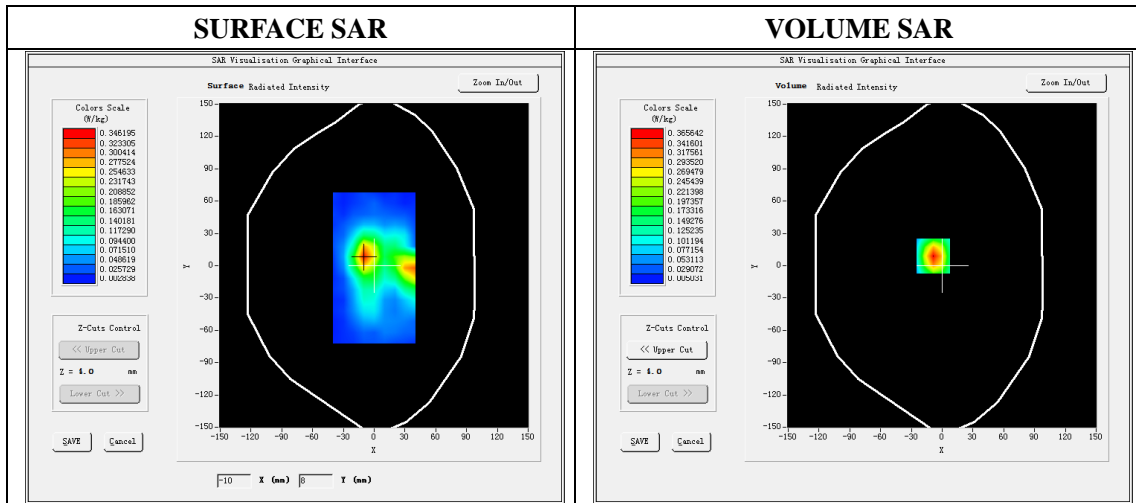
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 41
Channels	40640
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	2595
Relative permittivity (real part)	38.19
Relative permittivity (imaginary)	13.83
Conductivity (S/m)	1.97
Variation (%)	-3.60

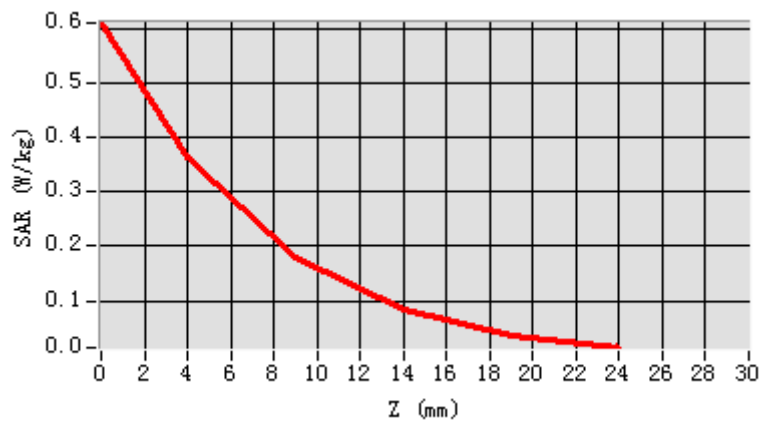


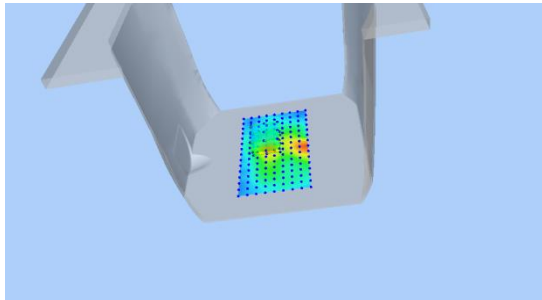
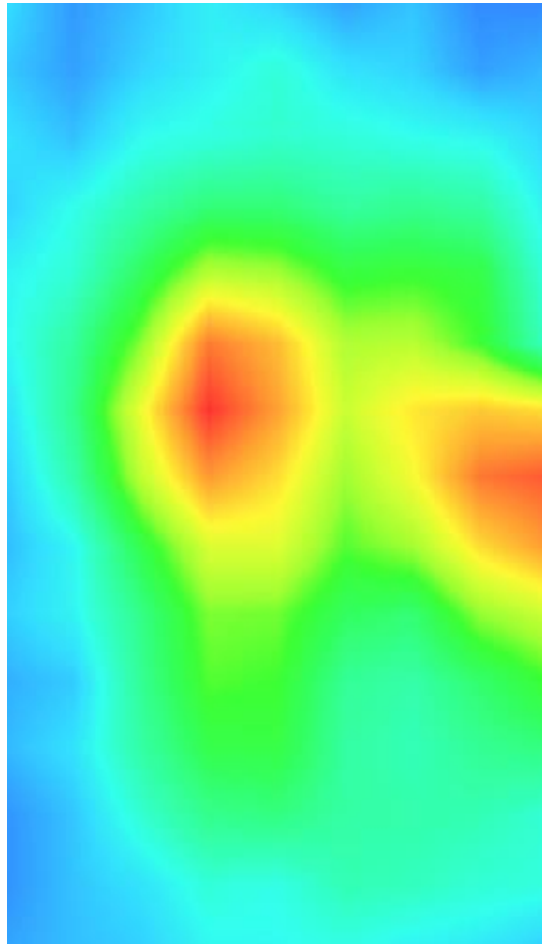
Maximum location: X=-9.00, Y=9.00

SAR Peak: 0.61W/kg

SAR 10g (W/Kg)	0.161466
SAR 1g (W/Kg)	0.341281

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.6126	0.3656	0.1798	0.0833	0.0368



3D screen shot	Hot spot position
	

Plot 16: LTE Band 66, 20MHz, Back, Middle,10mm

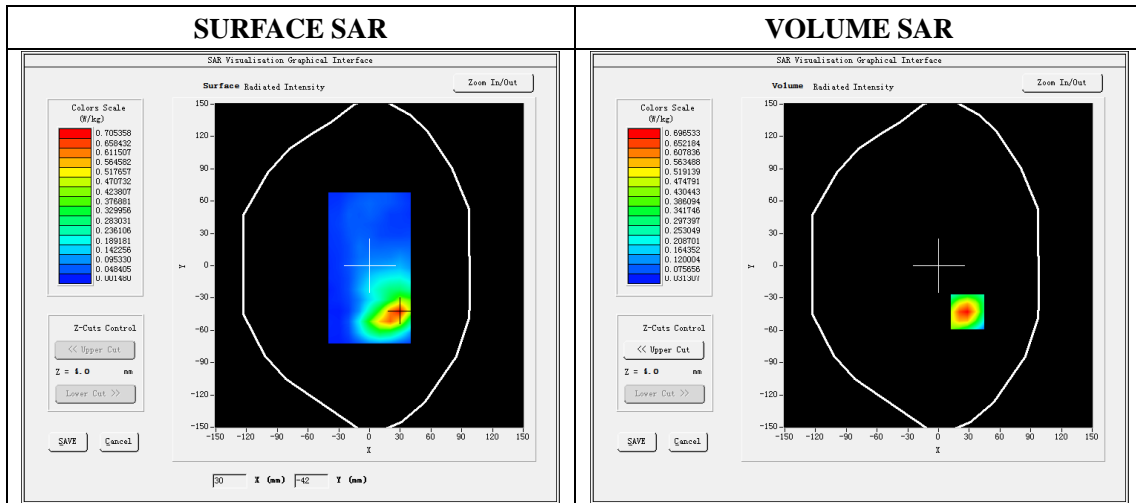
Type: Phone measurement
 Date of measurement: 11/14/2021
 Measurement duration: 22 minutes 26 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 66
Channels	132322
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1745
Relative permittivity (real part)	40.04
Relative permittivity (imaginary)	14.16
Conductivity (S/m)	1.36
Variation (%)	-1.55

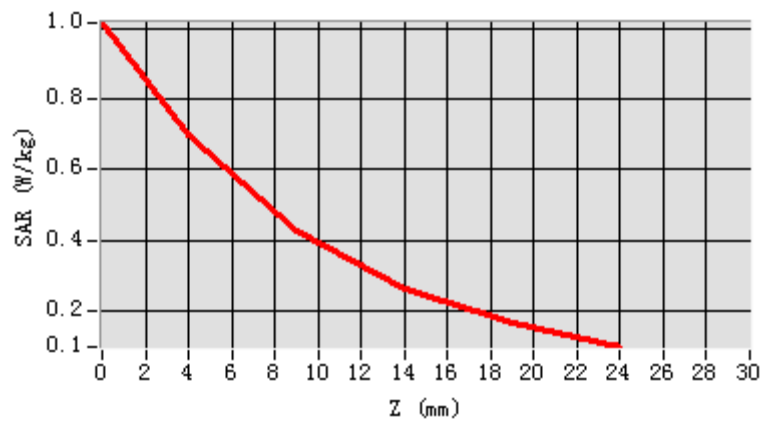


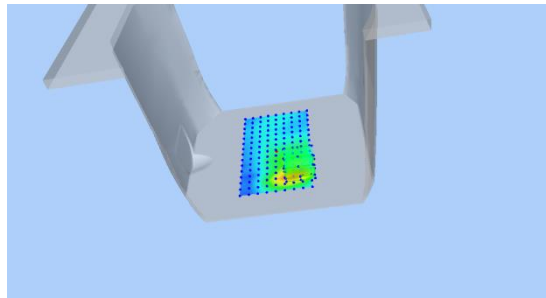
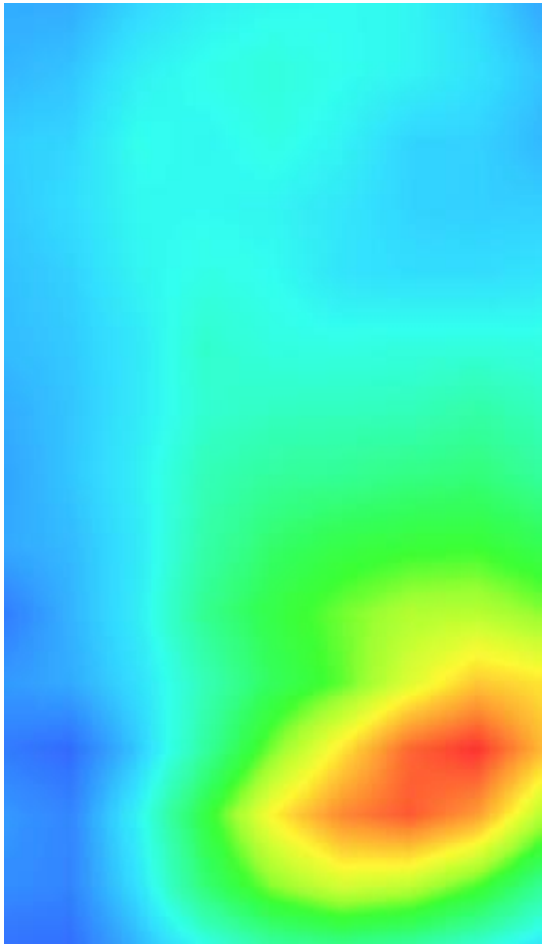
Maximum location: X=23.00, Y=-42.00

SAR Peak: 1.03W/kg

SAR 10g (W/Kg)	0.364264
SAR 1g (W/Kg)	0.615243

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.0162	0.6965	0.4267	0.2611	0.1617



3D screen shot	Hot spot position
	

Plot 17: Wi-Fi 802.11b, Back ,Middle, 10mm

Type: Phone measurement

Date of measurement: 11/04/2021

Measurement duration: 22 minutes 30 seconds

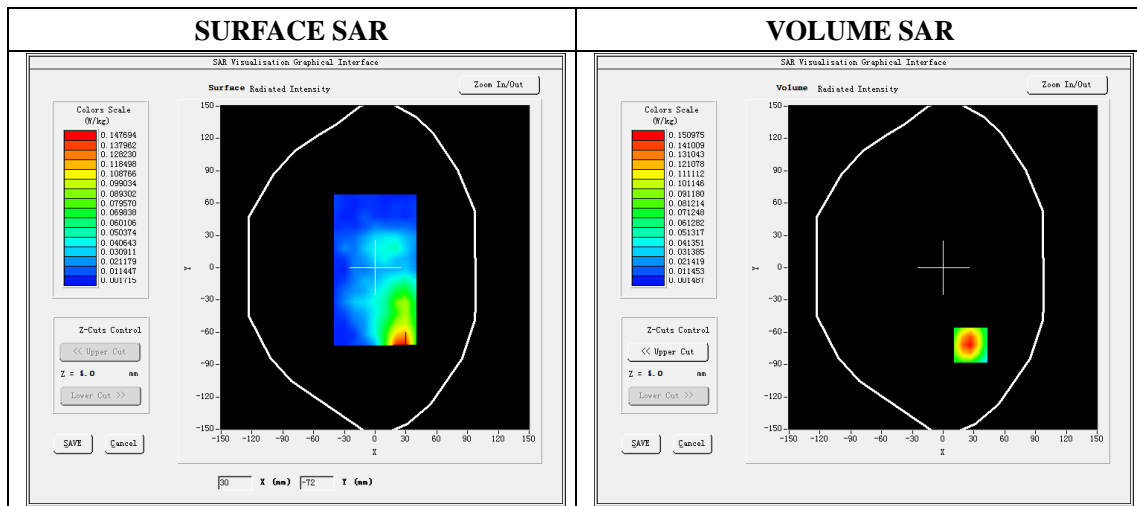
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=5mm,dy=5mm
ZoomScan	7x7x8,dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Back
Band	WIFI
Channels	6
Signal	DSSS (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	2437
Relative permittivity (real part)	38.95
Relative permittivity (imaginary)	12.74
Conductivity (S/m)	1.80
Variation (%)	-3.12

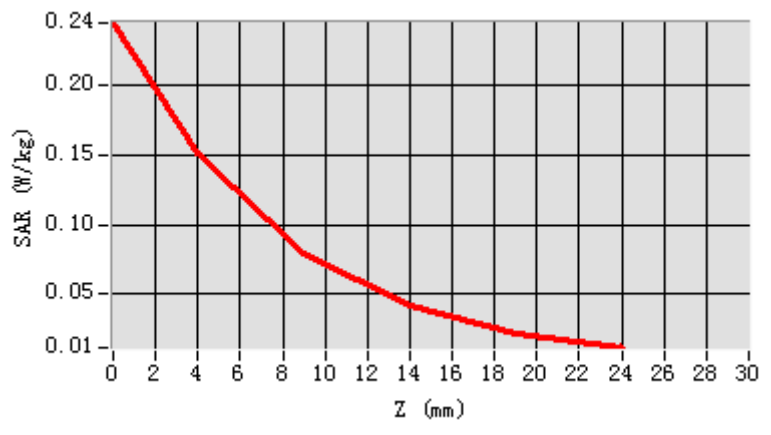


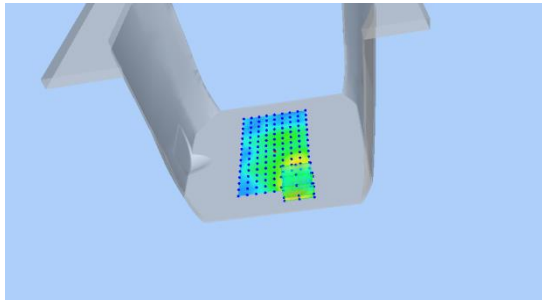
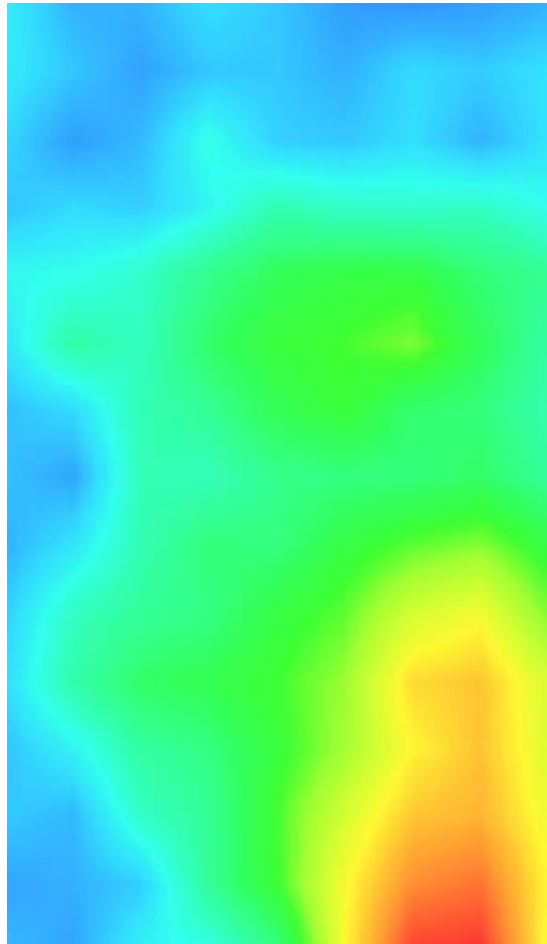
Maximum location: X=27.00 Y=-72.00

SAR Peak: 0.25 W/kg

SAR 10g (W/Kg)	0.074482
SAR 1g (W/Kg)	0.146512

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.2445	0.1510	0.0796	0.0417	0.0227



3D screen shot	Hot spot position
	

Plot 18: Wi-Fi 802.11b, Edge A ,Middle, 10mm

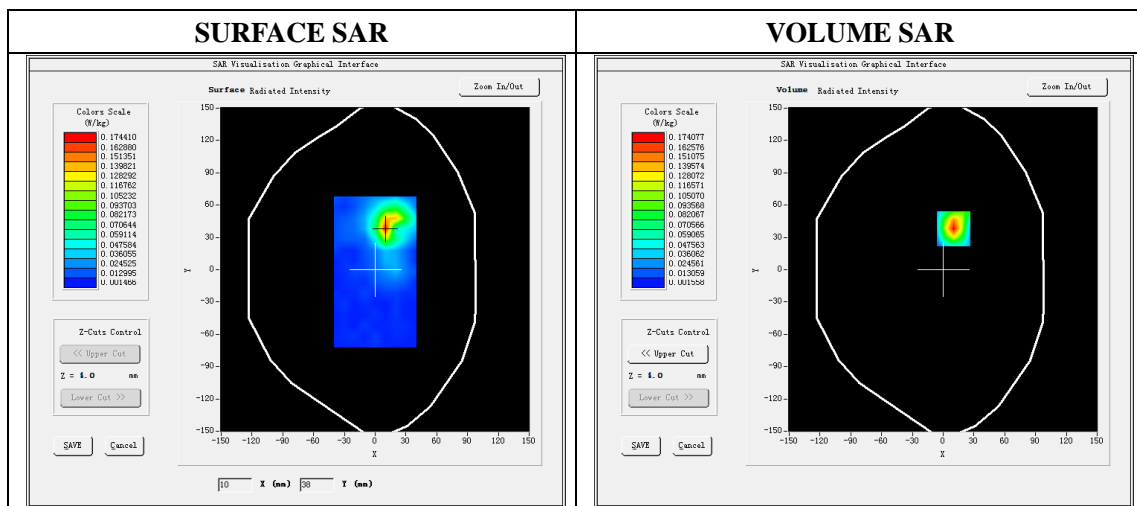
Type: Phone measurement
 Date of measurement: 11/04/2021
 Measurement duration: 22 minutes 30 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=5mm,dy=5mm
ZoomScan	7x7x8,dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Edge A
Band	WIFI
Channels	6
Signal	DSSS (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	2437
Relative permittivity (real part)	38.95
Relative permittivity (imaginary)	12.74
Conductivity (S/m)	1.80
Variation (%)	-4.53

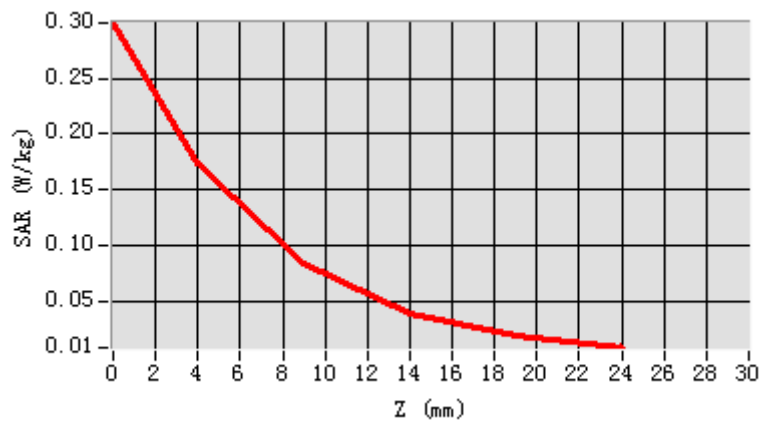


Maximum location: X=10.00 Y=-38.00

SAR Peak: 0.30 W/kg

SAR 10g (W/Kg)	0.070948
SAR 1g (W/Kg)	0.158593

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.2997	0.1741	0.0830	0.0383	0.0181



3D screen shot	Hot spot position
