

Appendix B: SAR Measurement results Plots

Plot	Frequency/Mode	Testing Position and Channel	Test Date
1	GSM850	Right Cheek Middle	2020/05/11
2	GSM850/GPRS4Tx	Body Back, Middle ,10mm	2020/05/11
3	GSM1900	Right Cheek Middle	2020/05/14
4	GSM1900/GPRS4Tx	Body Back, Middle ,10mm	2020/05/14
5	WCDMA1900	Right Cheek Middle	2020/05/14
6	WCDMA1900	Body Back, Middle ,10mm	2020/05/14
7	WCDMA1700	Right Cheek Middle	2020/05/13
8	WCDMA1700	Body Back, Middle ,10mm	2020/05/13
9	WCDMA850	Right Cheek Middle	2020/05/11
10	WCDMA850	Body Back, Middle ,10mm	2020/05/11
11	WIFI 2.4G 802.11b	Left Cheek Middle	2020/05/16
12	WIFI 2.4G 802.11b	Body Back, Middle ,10mm	2020/05/16

Plot 1: GSM850, Right Cheek, Middle

Type: Phone measurement

Date of measurement: 05/11/2020

Measurement duration: 22 minutes 08 seconds

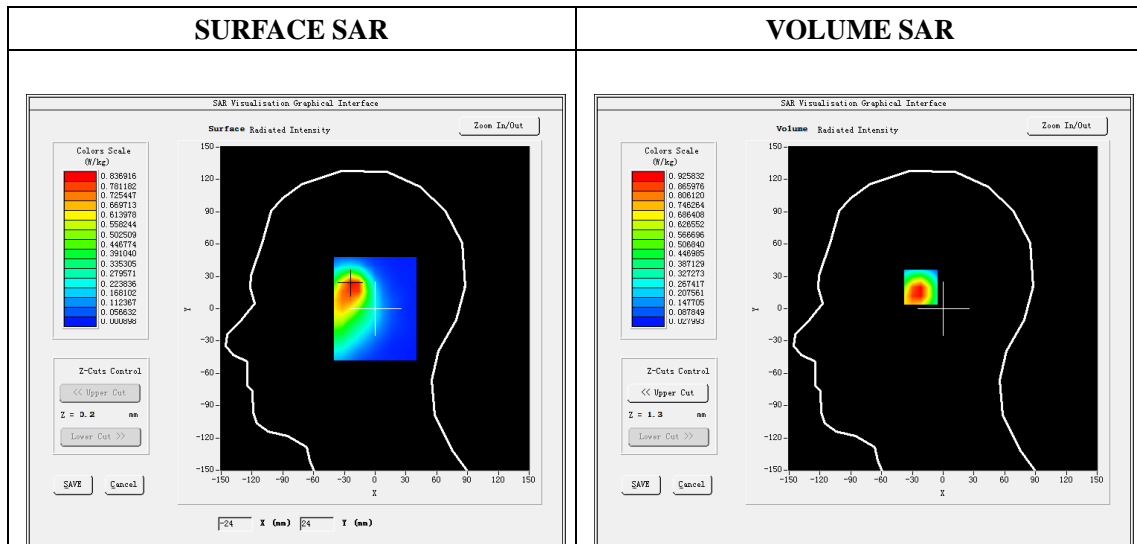
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Right Cheek
Band	GSM850
Channels	190
Signal	GSM (Duty cycle: 1:8.3)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	836.6
Relative permittivity (real part)	41.55
Relative permittivity (imaginary part)	20.26
Conductivity (S/m)	0.94
Variation (%)	-1.28
ConvF:	1.60

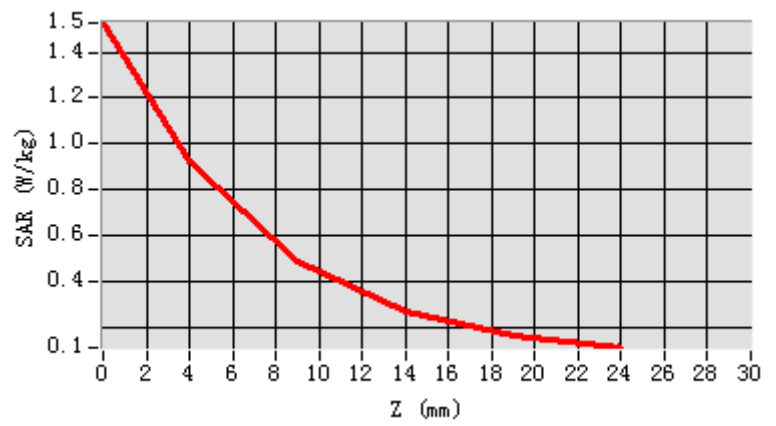


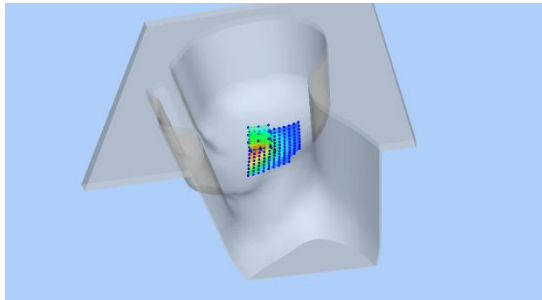
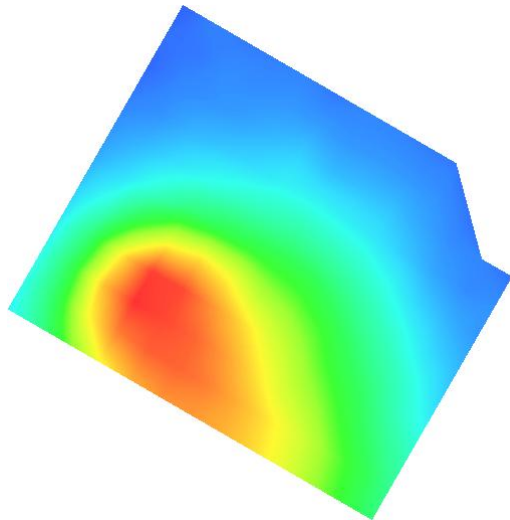
Maximum location: X=-21.00, Y=22.00

SAR Peak: 1.59W/kg

SAR 10g (W/Kg)	0.503574
SAR 1g (W/Kg)	0.911741

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.5274	0.9258	0.4835	0.2634	0.1630



3D screen shot	Hot spot position
	

Plot 2: GPRS850, Back, Middle,10mm

Type: Phone measurement

Date of measurement: 05/11/2020

Measurement duration: 22 minutes 05 seconds

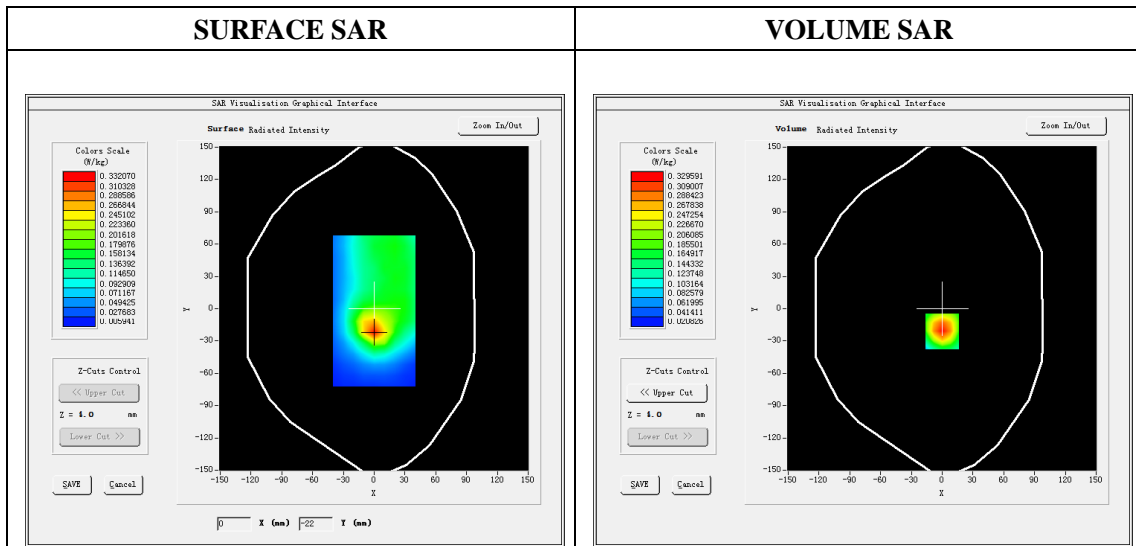
Mobile Phone IMEI number: --

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_41/18_EPG0330
Frequency (MHz)	836.6
Relative permittivity (real part)	55.22
Relative permittivity (imaginary part)	20.69
Conductivity (S/m)	0.96
Variation (%)	-1.39
ConvF:	1.64

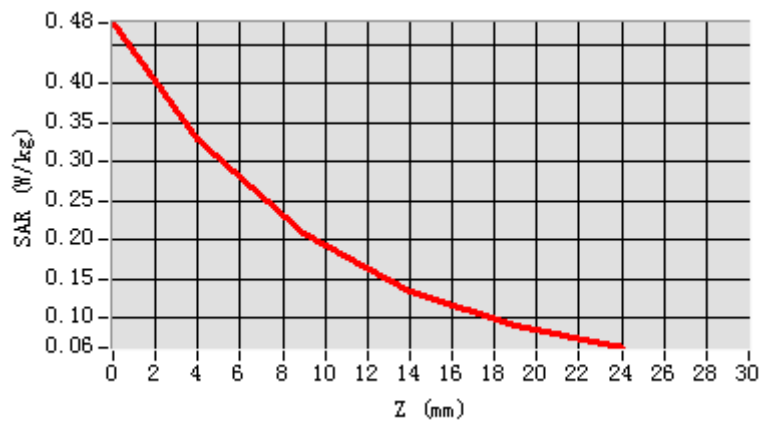


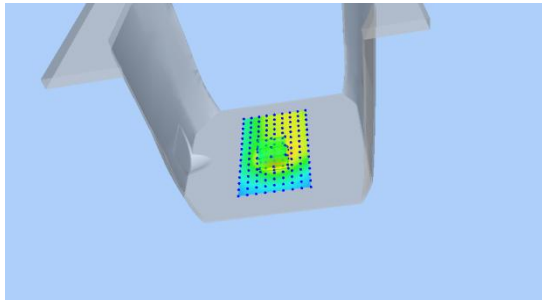
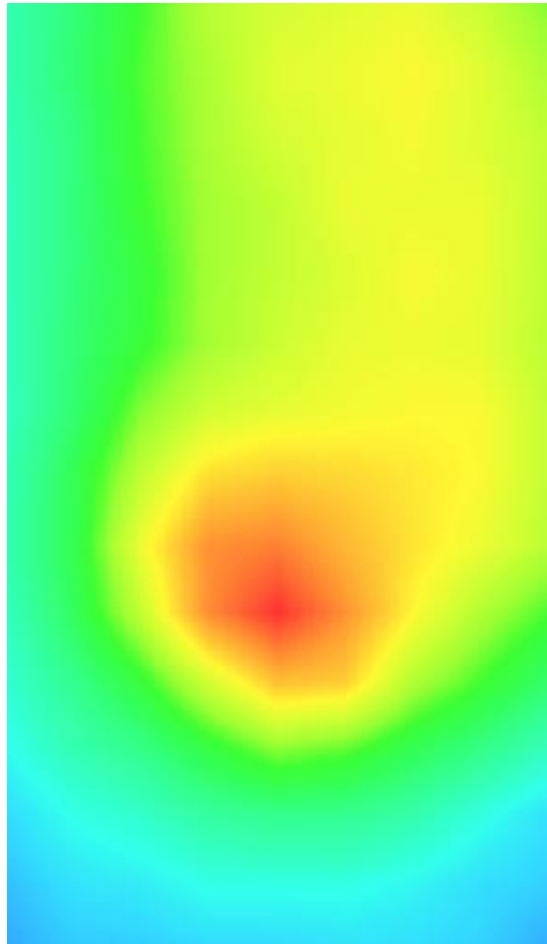
Maximum location: X=0.00, Y=-21.00

SAR Peak: 0.48 W/kg

SAR 10g (W/Kg)	0.188259
SAR 1g (W/Kg)	0.315399

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.4771	0.3296	0.2068	0.1332	0.0904



3D screen shot	Hot spot position
	

Plot 3: GSM1900, Right Cheek, Middle

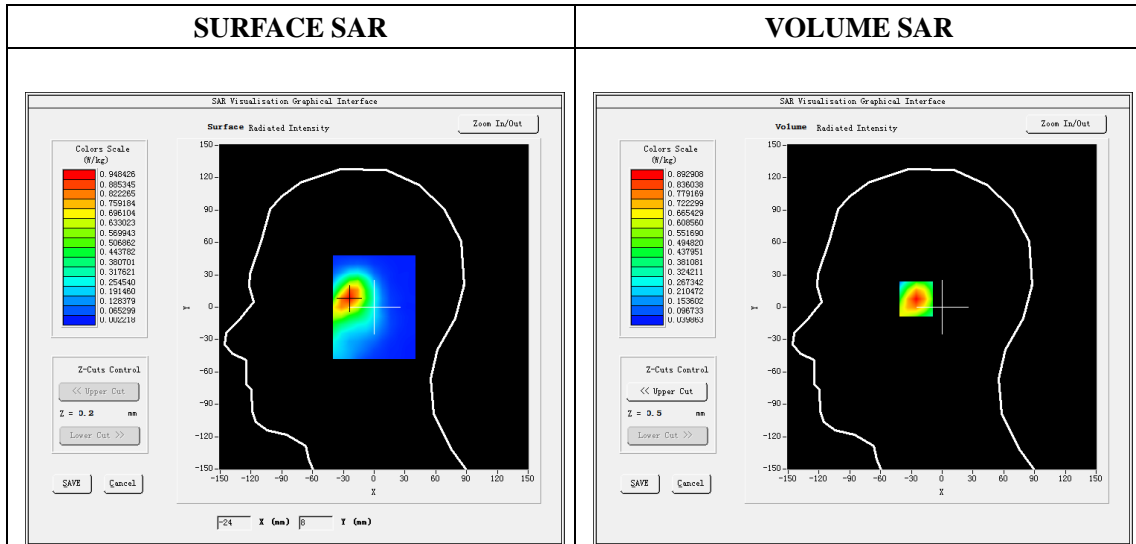
Type: Phone measurement
 Date of measurement: 05/14/2020
 Measurement duration: 22 minutes 02 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Right Cheek
Band	GSM1900
Channels	661
Signal	GSM (Duty cycle: 1:8.3)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1880
Relative permittivity (real part)	40.50
Relative permittivity (imaginary part)	13.26
Conductivity (S/m)	1.40
Variation (%)	4.84
ConvF:	2.03

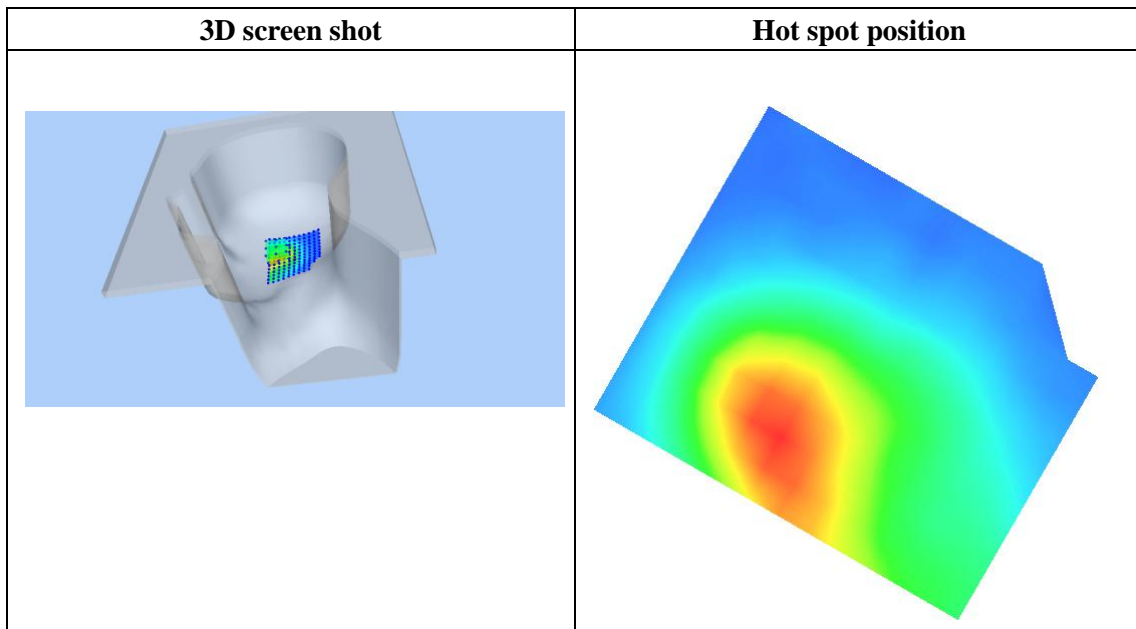
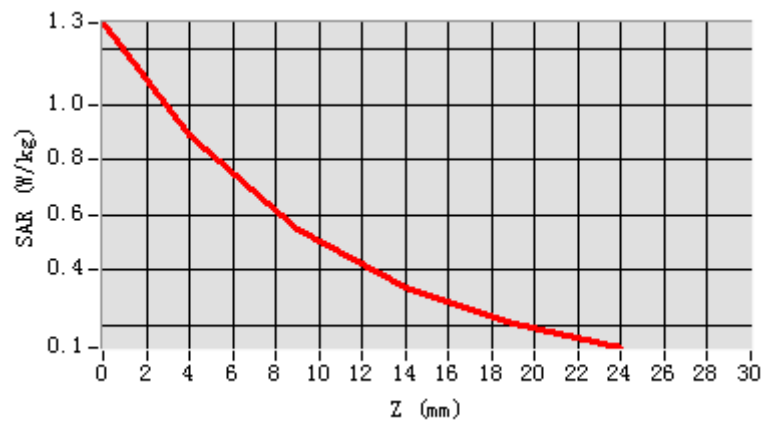


Maximum location: X=-24.00, Y=9.00

SAR Peak: 1.30 W/kg

SAR 10g (W/Kg)	0.472035
SAR 1g (W/Kg)	0.830672

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.2976	0.8929	0.5488	0.3354	0.2058



Plot 4: GPRS1900, Back, Middle ,10mm

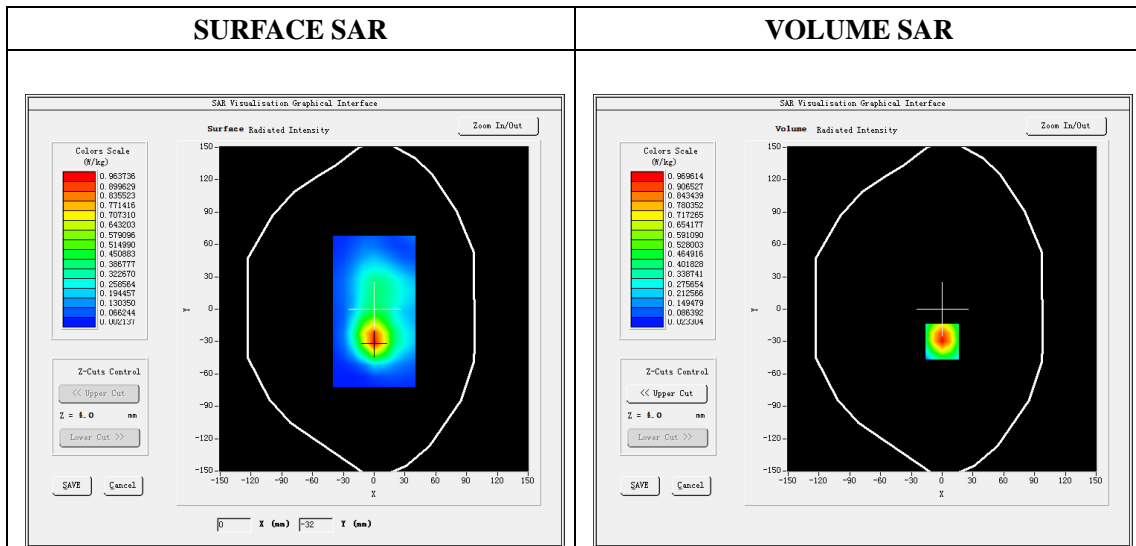
Type: Phone measurement
 Date of measurement: 05/14/2020
 Measurement duration: 22 minutes 04 seconds
 Mobile Phone IMEI number: --

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_41/18_EPG0330
Frequency (MHz)	1880
Relative permittivity (real part)	53.29
Relative permittivity (imaginary part)	14.40
Conductivity (S/m)	1.52
Variation (%)	-1.09
ConvF:	2.08

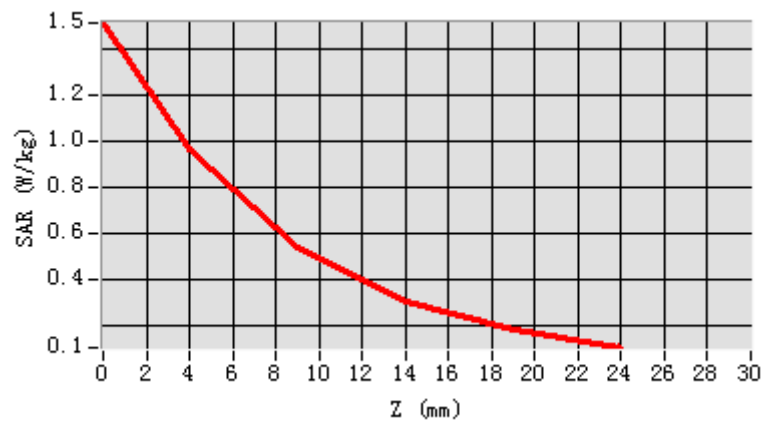


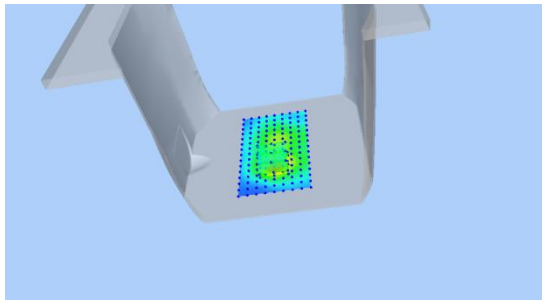
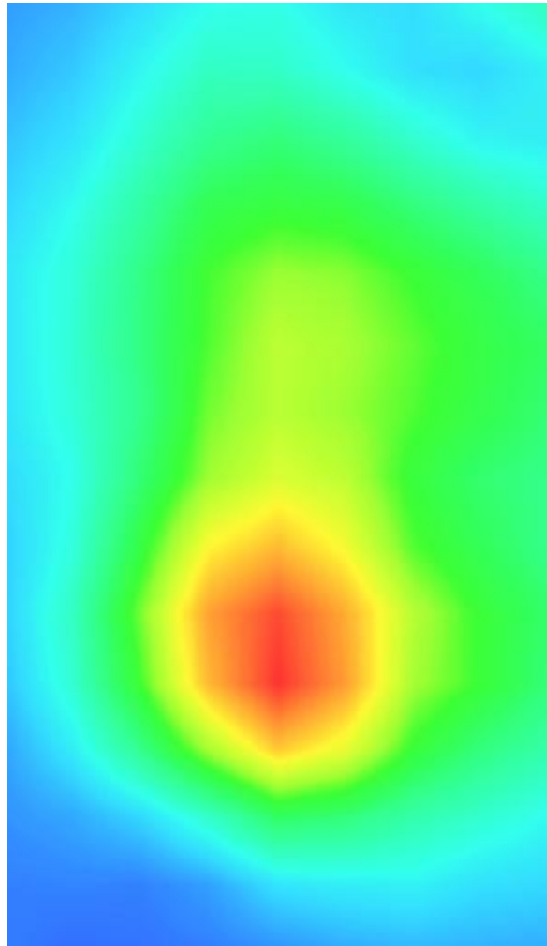
Maximum location: X=0.00, Y=-30.00

SAR Peak: 1.53 W/kg

SAR 10g (W/Kg)	0.491846
SAR 1g (W/Kg)	0.915339

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.5158	0.9696	0.5412	0.3047	0.1800



3D screen shot	Hot spot position
	

Plot 5: WCDMA1900, Right Cheek, Middle

Type: Phone measurement

Date of measurement: 05/14/2020

Measurement duration: 22 minutes 01 seconds

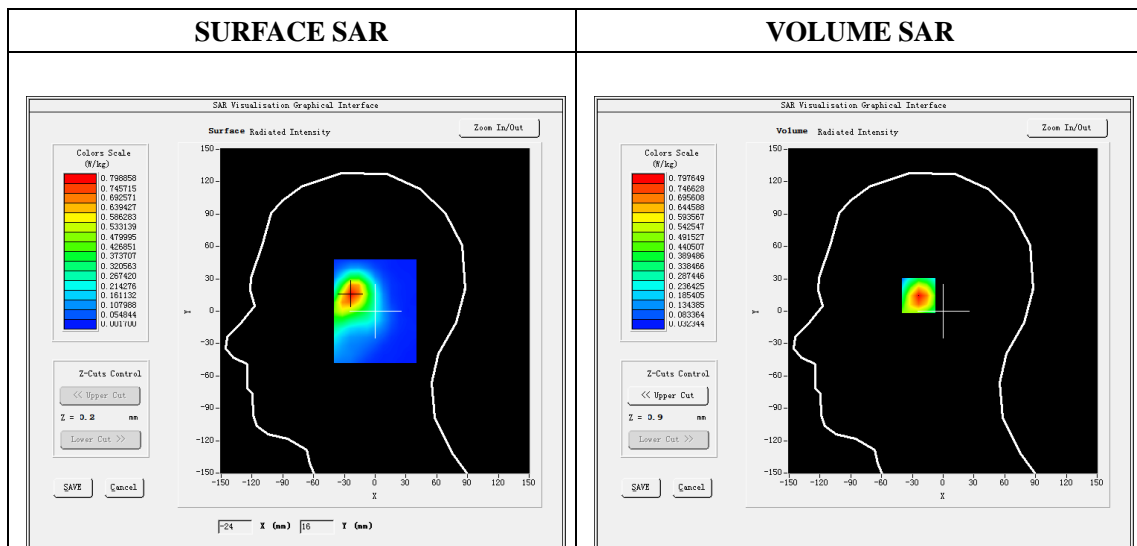
Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1880
Relative permittivity (real part)	40.50
Relative permittivity (imaginary)	13.26
Conductivity (S/m)	1.40
Variation (%)	-2.58
ConvF:	2.03

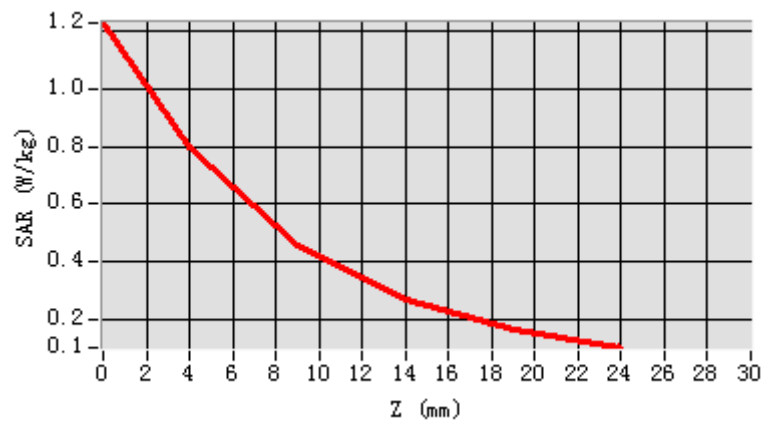


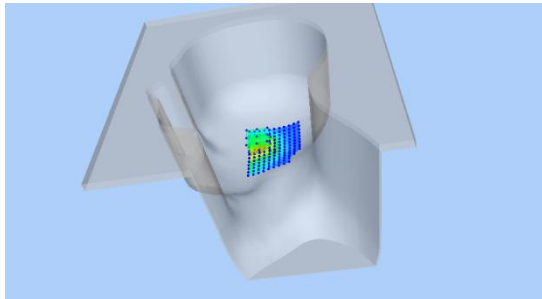
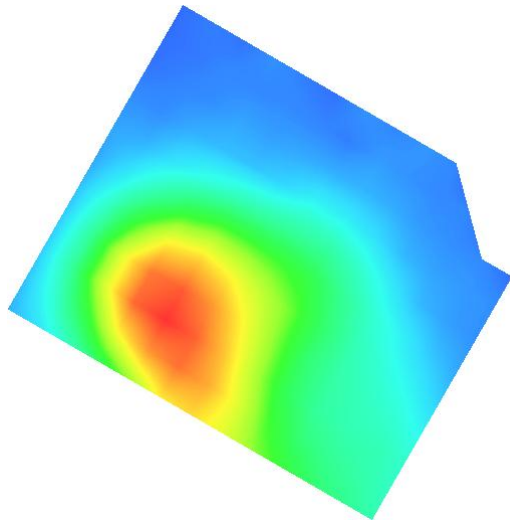
Maximum location: X=-23.00, Y=16.00

SAR Peak: 1.25W/kg

SAR 10g (W/Kg)	0.407101
SAR 1g (W/Kg)	0.744720

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.2297	0.7976	0.4555	0.2642	0.1616



3D screen shot	Hot spot position
	

Plot 6: WCDMA1900, Back, Middle,10mm

Type: Phone measurement

Date of measurement: 05/14/2020

Measurement duration: 22 minutes 07 seconds

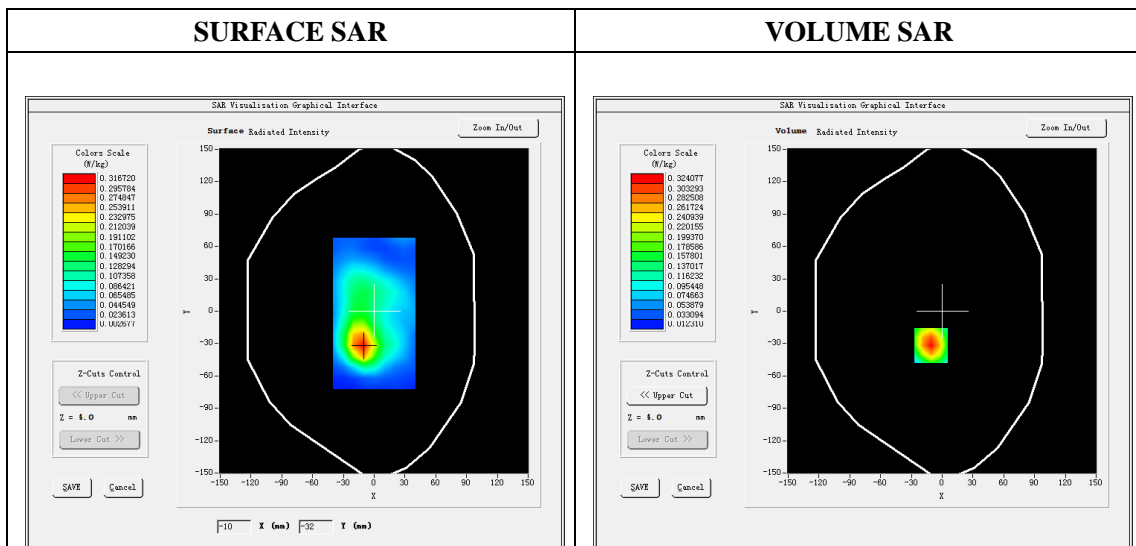
Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1880
Relative permittivity (real part)	53.29
Relative permittivity (imaginary)	14.40
Conductivity (S/m)	1.52
Variation (%)	-1.65
ConvF:	2.08

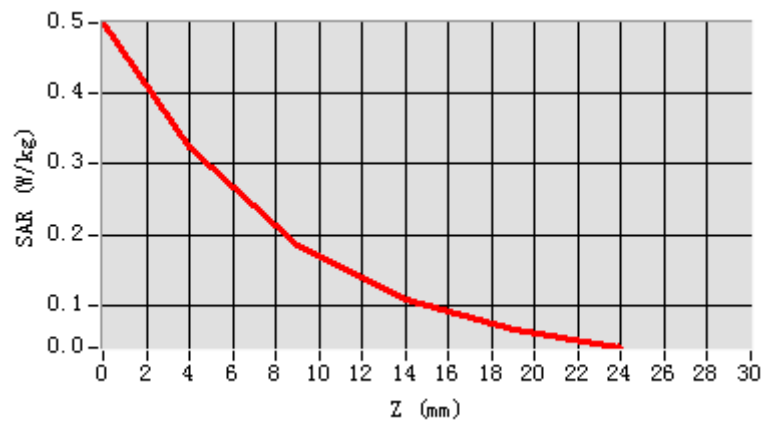


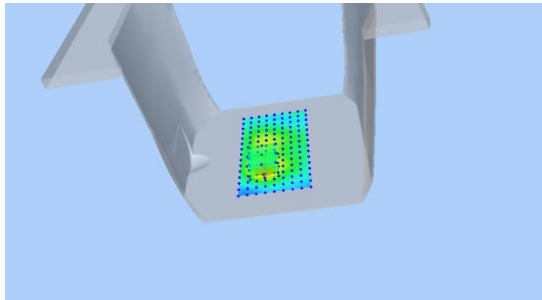
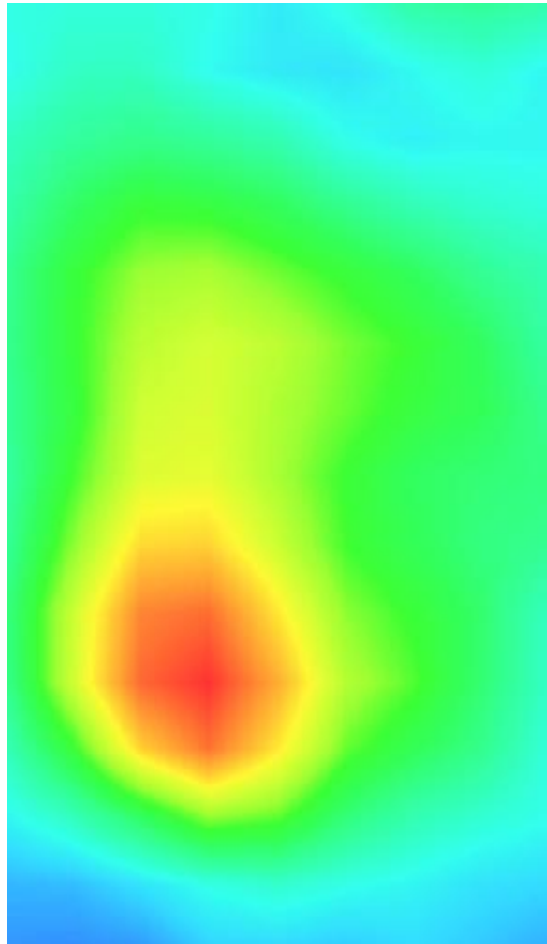
Maximum location: X=-11.00, Y=-32.00

SAR Peak: 0.50W/kg

SAR 10g (W/Kg)	0.169117
SAR 1g (W/Kg)	0.303580

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.4974	0.3241	0.1863	0.1089	0.0671



3D screen shot	Hot spot position
	

Plot 7: WCDMA1700, Right Cheek, Middle

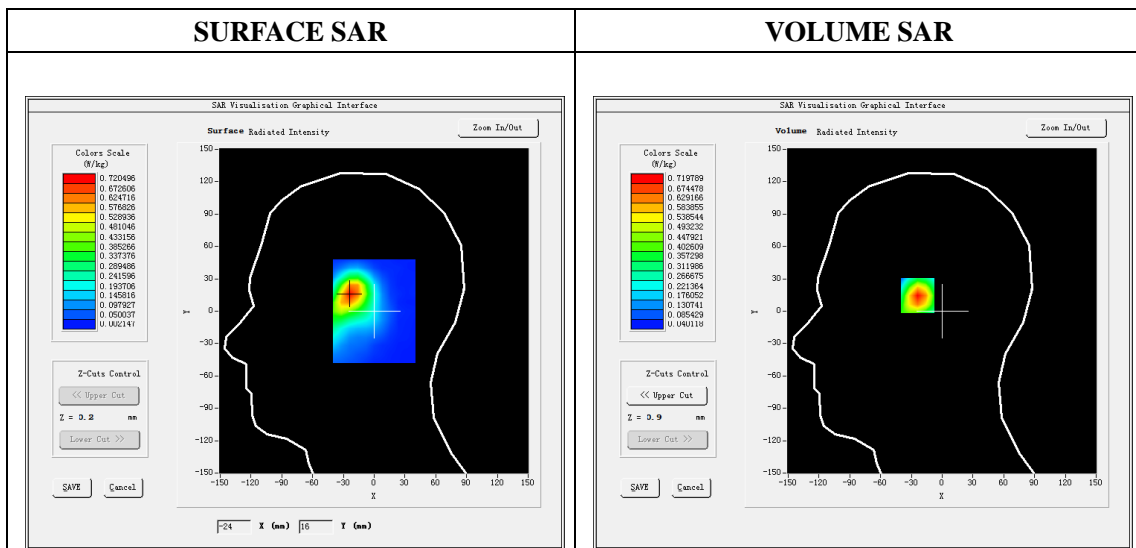
Type: Phone measurement
 Date of measurement: 05/13/2020
 Measurement duration: 22 minutes 03 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Right Cheek
Band	Band2_WCDMA1700
Channels	1413
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1732.6
Relative permittivity (real part)	40.56
Relative permittivity (imaginary)	14.10
Conductivity (S/m)	1.41
Variation (%)	-2.72
ConvF:	2.14

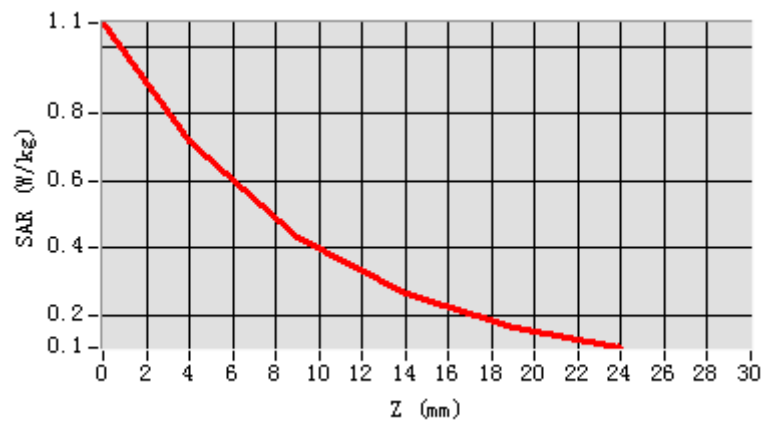


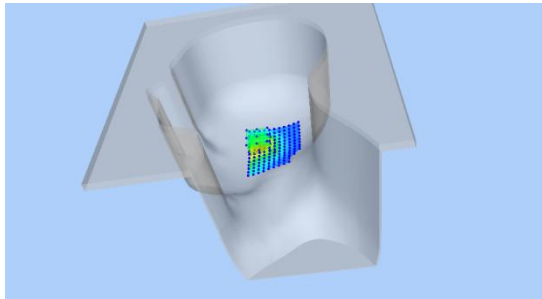
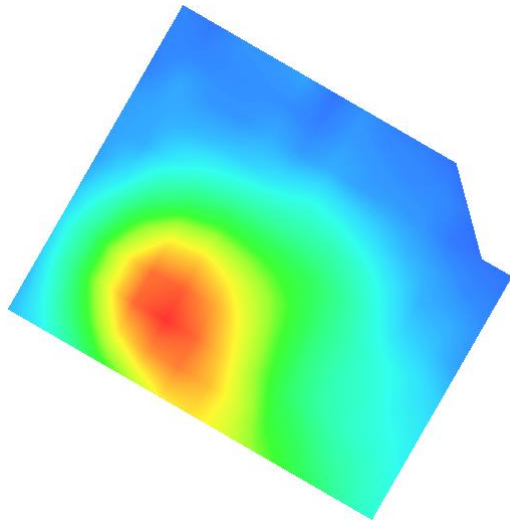
Maximum location: X=-23.00, Y=16.00

SAR Peak: 1.08W/kg

SAR 10g (W/Kg)	0.378839
SAR 1g (W/Kg)	0.682411

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.0712	0.7198	0.4318	0.2624	0.1659



3D screen shot	Hot spot position
	

Plot 8: WCDMA1700, Back, Middle,10mm

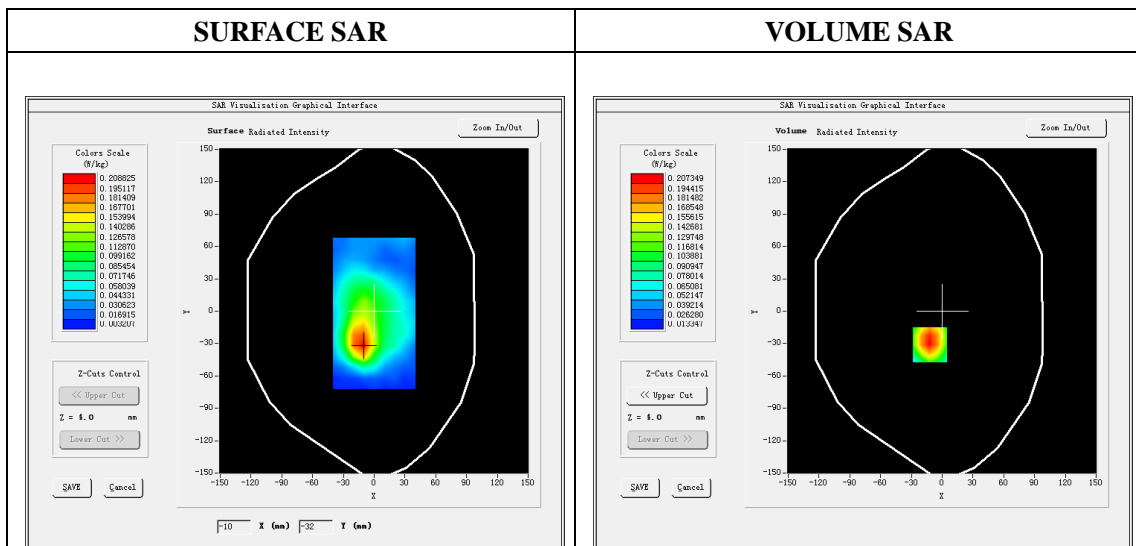
Type: Phone measurement
 Date of measurement: 05/13/2020
 Measurement duration: 22 minutes 09 seconds
 Mobile Phone IMEI number: --

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_WCDMA1700
Channels	1413
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1732.6
Relative permittivity (real part)	53.35
Relative permittivity (imaginary)	15.40
Conductivity (S/m)	1.54
Variation (%)	-1.29
ConvF:	2.22

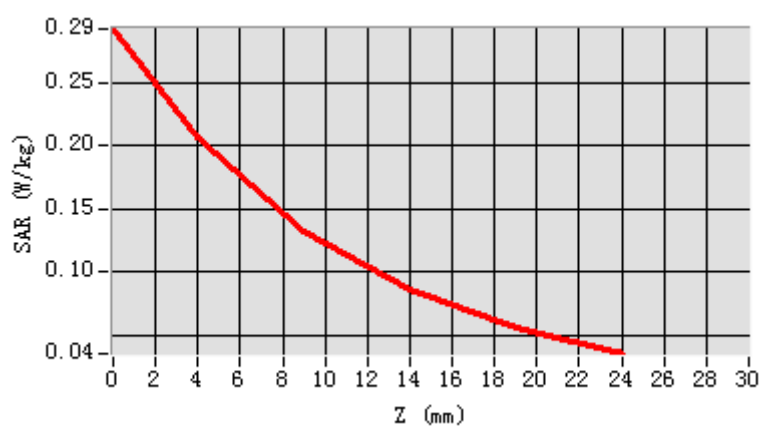


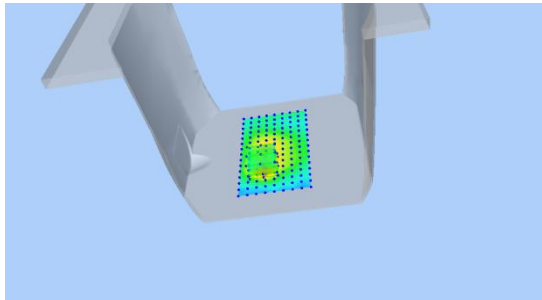
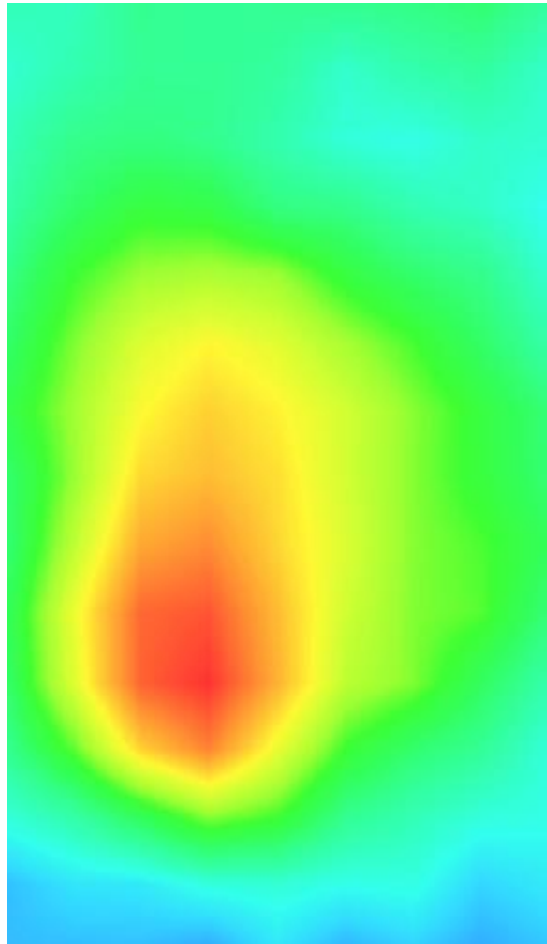
Maximum location: X=-12.00, Y=-31.00

SAR Peak: 0.29W/kg

SAR 10g (W/Kg)	0.120169
SAR 1g (W/Kg)	0.197101

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.2932	0.2073	0.1329	0.0854	0.0556



3D screen shot	Hot spot position
	

Plot 9: WCDMA850, Right Cheek, Middle

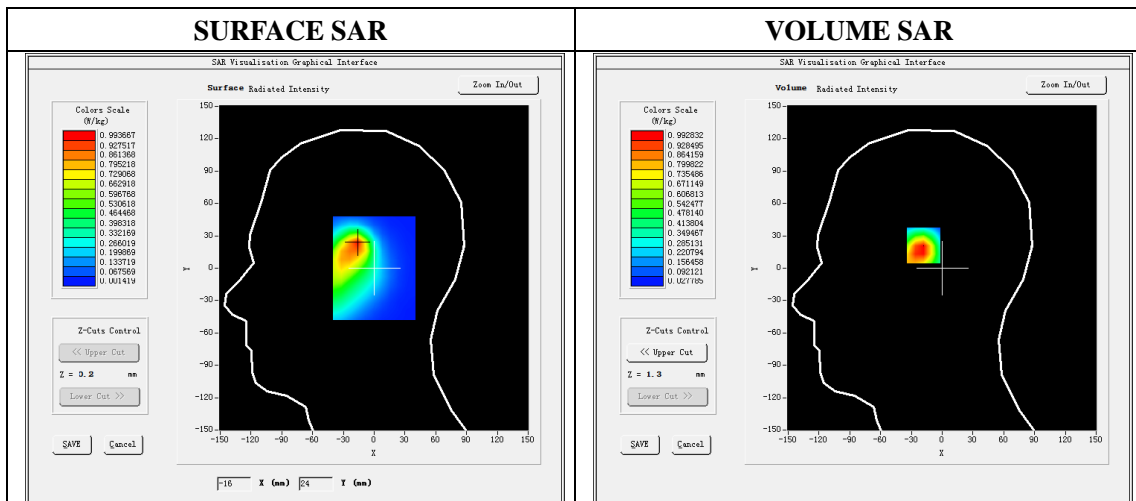
Type: Phone measurement
 Date of measurement: 05/11/2020
 Measurement duration: 22 minutes 06 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

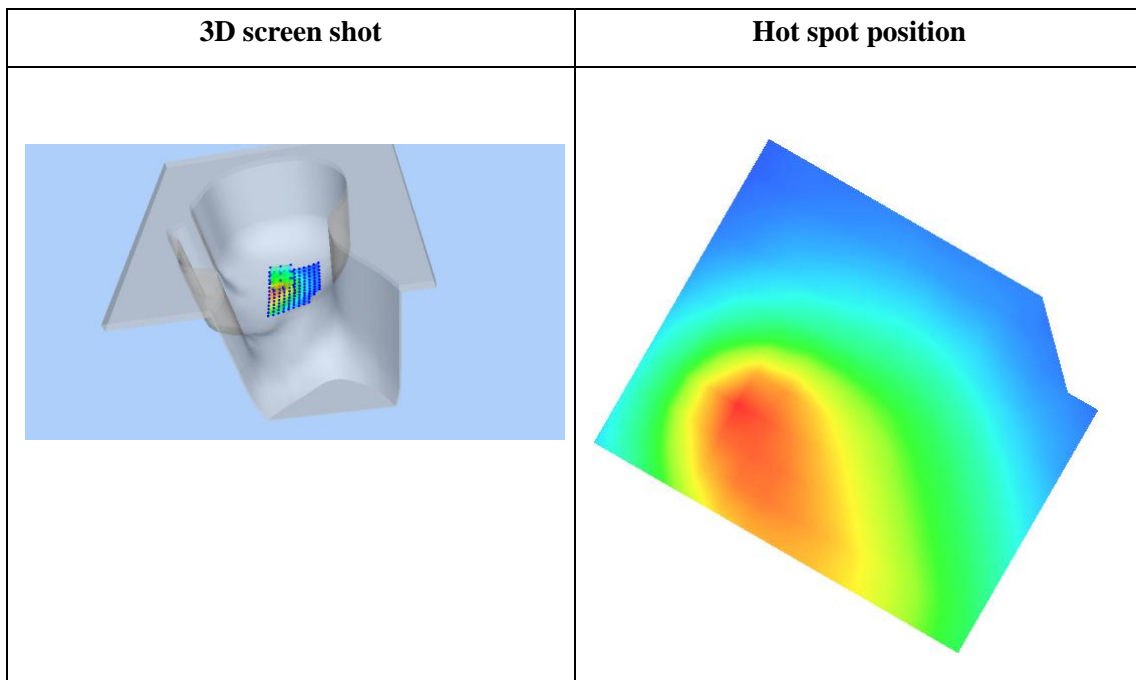
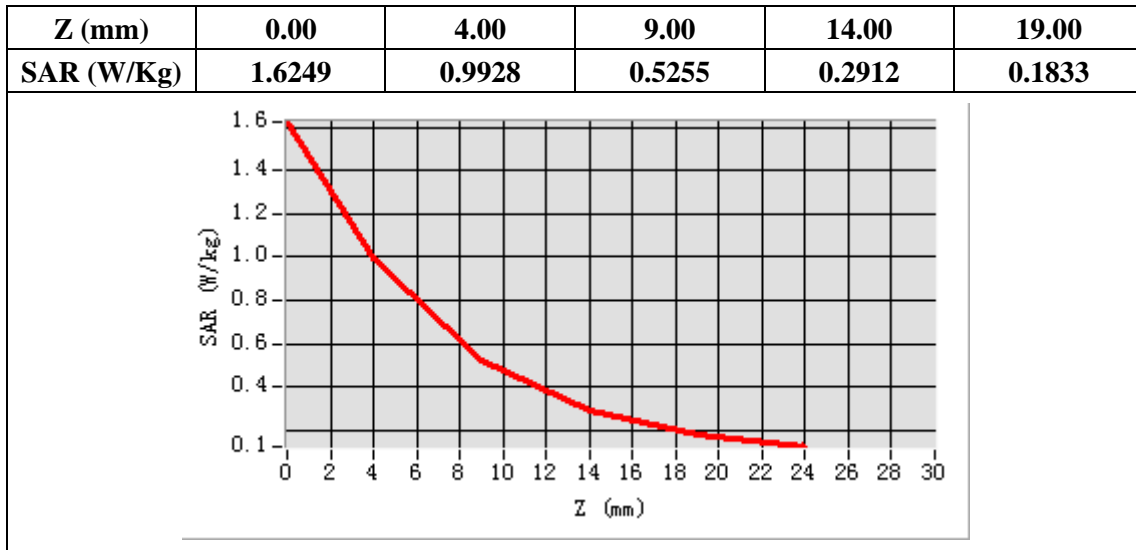
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	836.6
Relative permittivity (real part)	41.55
Relative permittivity (imaginary)	20.26
Conductivity (S/m)	0.94
Variation (%)	-1.30
ConvF:	1.60



Maximum location: X=-17.00, Y=23.00

SAR Peak: 1.69W/kg

SAR 10g (W/Kg)	0.551769
SAR 1g (W/Kg)	0.979585



Plot 10: WCDMA850, Back, Middle,10mm

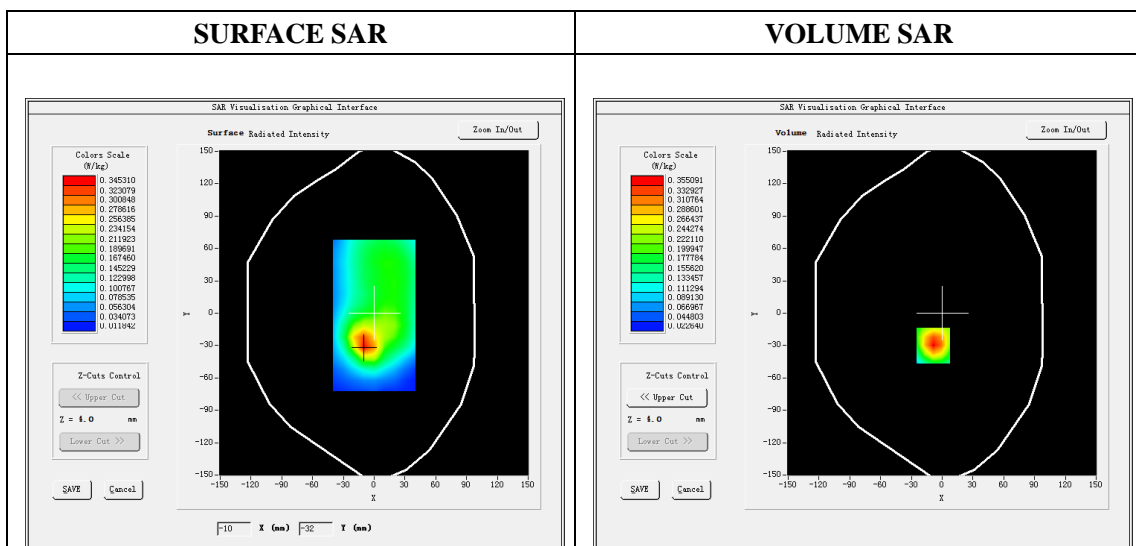
Type: Phone measurement
 Date of measurement: 05/11/2020
 Measurement duration: 22 minutes 10 seconds
 Mobile Phone IMEI number: --

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_41/18_EPG0330
Frequency (MHz)	836.6
Relative permittivity (real part)	55.22
Relative permittivity (imaginary)	20.69
Conductivity (S/m)	0.96
Variation (%)	-4.06
ConvF:	1.64

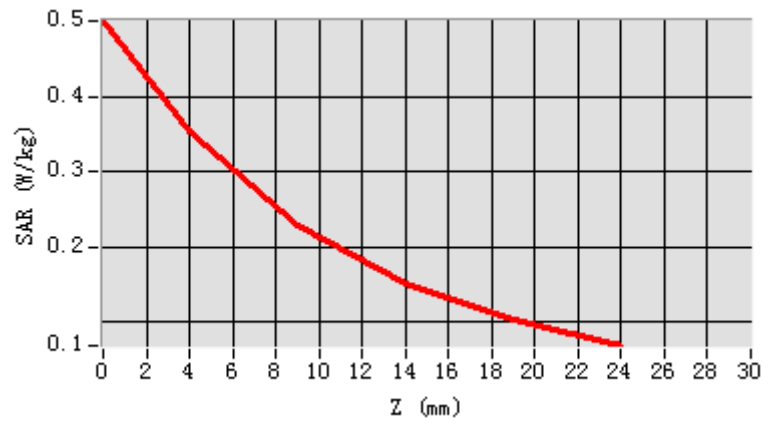


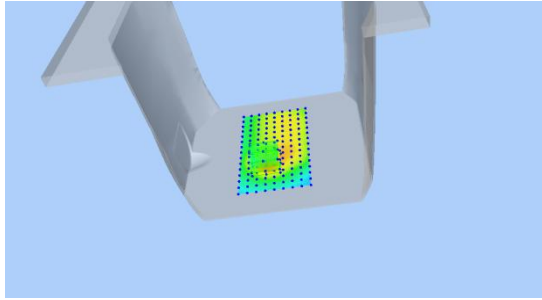
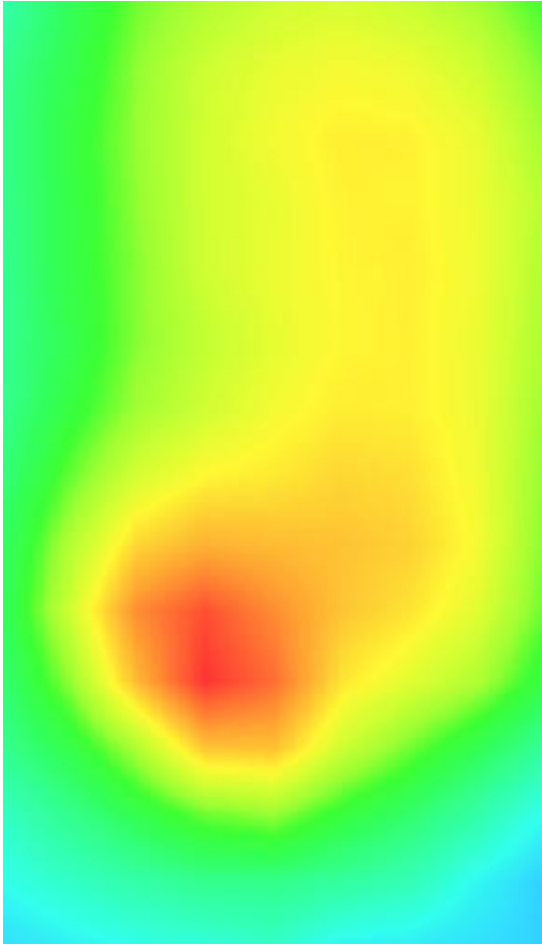
Maximum location: X=-9.00, Y=-30.00

SAR Peak: 0.50W/kg

SAR 10g (W/Kg)	0.206634
SAR 1g (W/Kg)	0.340482

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5008	0.3551	0.2298	0.1510	0.1024



3D screen shot	Hot spot position
	

Plot 11: Wi-Fi 802.11b, Left Cheek, Middle

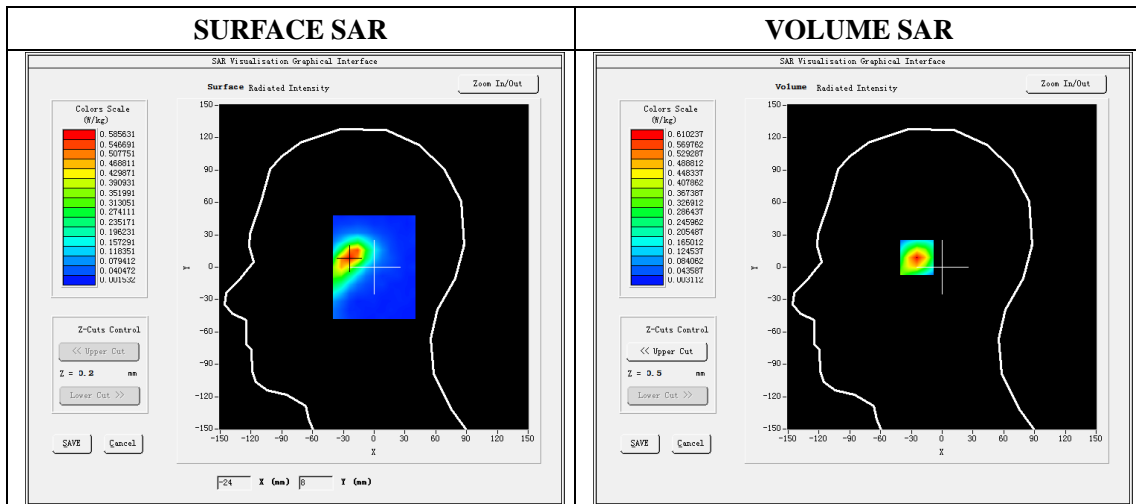
Type: Phone measurement
 Date of measurement: 05/16/2020
 Measurement duration: 22 minutes 14 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	2437
Relative permittivity (real part)	39.23
Relative permittivity (imaginary)	13.44
Conductivity (S/m)	1.83
Variation (%)	1.38
ConvF:	2.05

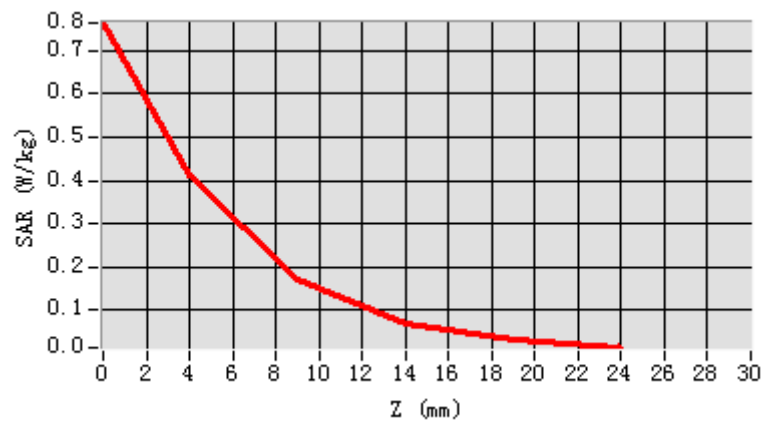


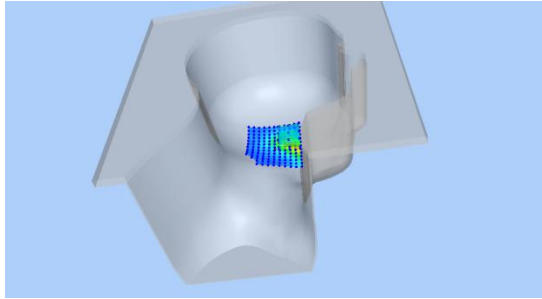
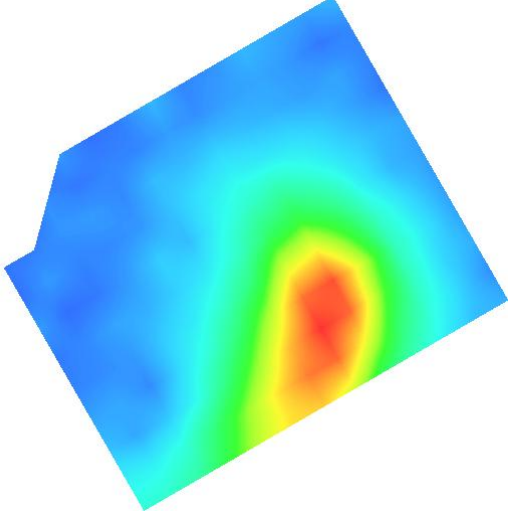
Maximum location: X=-8.00 Y=-22.00

SAR Peak: 0.78 W/kg

SAR 10g (W/Kg)	0.179369
SAR 1g (W/Kg)	0.391782

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7642	0.4117	0.1738	0.0705	0.0312



3D screen shot	Hot spot position
	

Plot 12: Wi-Fi 802.11b, Back ,Middle, 10mm

Type: Phone measurement

Date of measurement: 05/16/2020

Measurement duration: 22 minutes 11 seconds

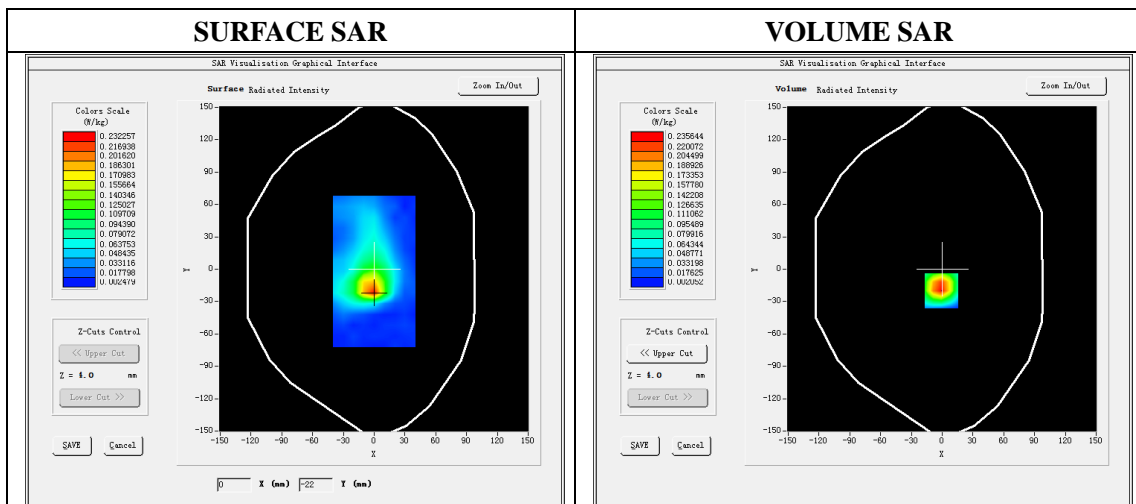
Mobile Phone IMEI number: --

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_41/18_EPG0330
Frequency (MHz)	2437
Relative permittivity (real part)	52.74
Relative permittivity (imaginary)	14.47
Conductivity (S/m)	1.97
Variation (%)	-2.35
ConvF:	2.12



Maximum location: X=-1.00 Y=-20.00

SAR Peak: 0.48 W/kg

SAR 10g (W/Kg)	0.100586
SAR 1g (W/Kg)	0.231119

