

Appendix B: SAR Measurement results Plots

Plot	Frequency/Mode	Testing Position and Channel	Test Date
1	WCDMA1900	Edge D, Middle ,10mm	2020/05/14
2	WCDMA850	Edge C, Middle ,10mm	2020/05/11
3	LTE Band2	Edge D, Middle ,10mm	2020/05/14
4	LTE Band4	Top Side, Middle ,10mm	2020/05/13
5	LTE Band5	Edge C, Middle ,10mm	2020/05/11
6	LTE Band12	Edge C, Middle ,10mm	2020/05/10
7	LTE Band14	Edge C, Middle ,10mm	2020/06/08
8	WIFI 2.4G 802.11b	Top Side, Middle ,10mm	2020/05/16

Plot 1: WCDMA1900, Edge D, Middle,10mm

Type: Phone measurement

Date of measurement: 05/14/2020

Measurement duration: 22 minutes 06 seconds

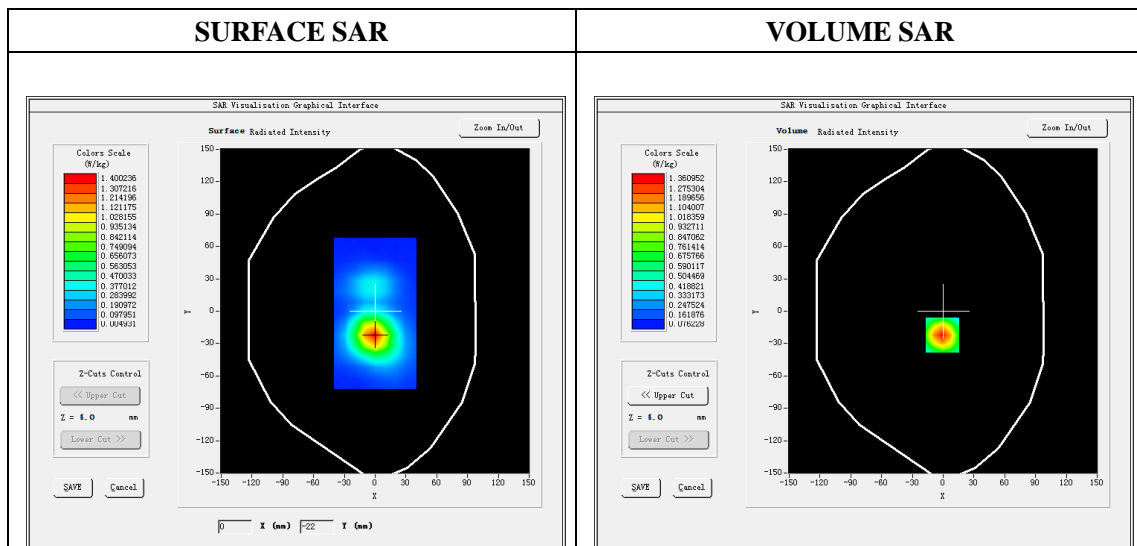
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Edge D
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)	53.30
Relative permittivity (imaginary)	14.31
Conductivity (S/m)	1.51
Variation (%)	0.20
ConvF:	2.39

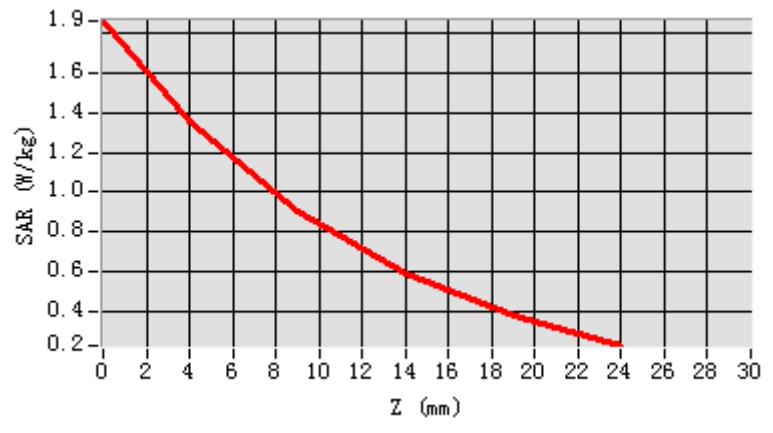


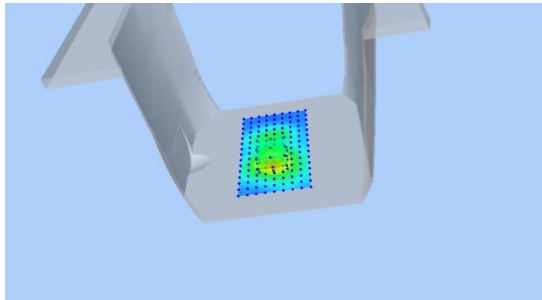
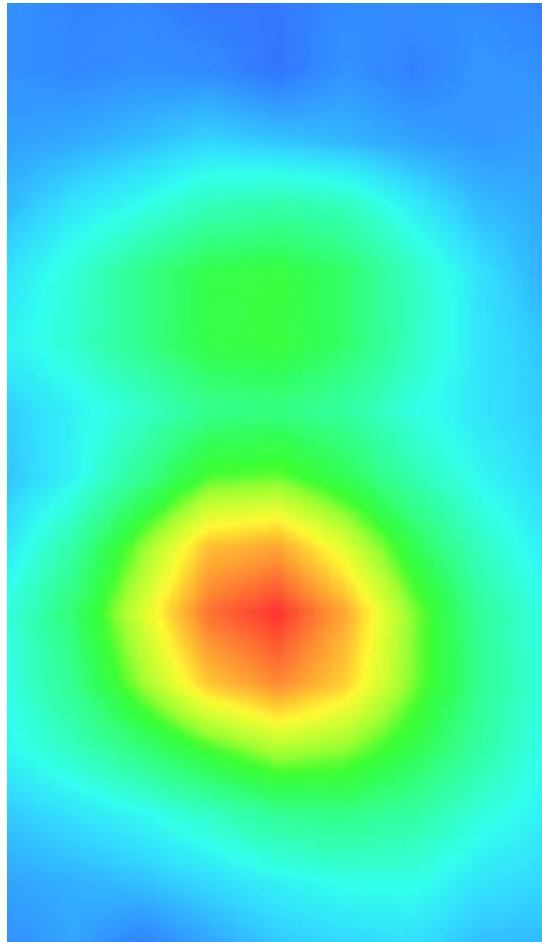
Maximum location: X=-1.00, Y=-22.00

SAR Peak: 1.87W/kg

SAR 10g (W/Kg)	0.731363
SAR 1g (W/Kg)	1.260527

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.8649	1.3610	0.9012	0.5875	0.3760



3D screen shot	Hot spot position
	

Plot 2: WCDMA850, Edge C, Middle,10mm

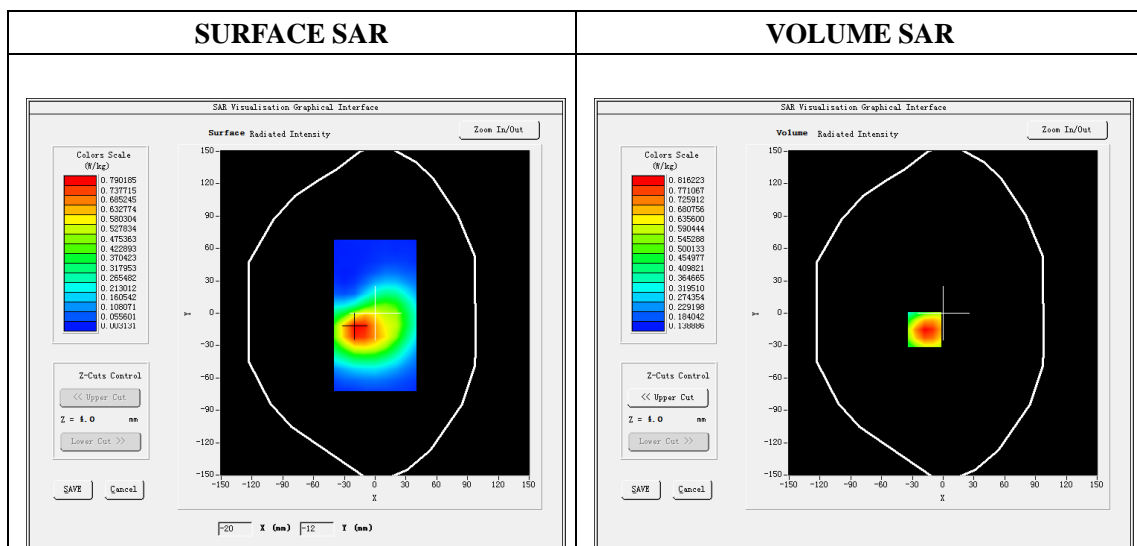
Type: Phone measurement
 Date of measurement: 05/11/2020
 Measurement duration: 22 minutes 09 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

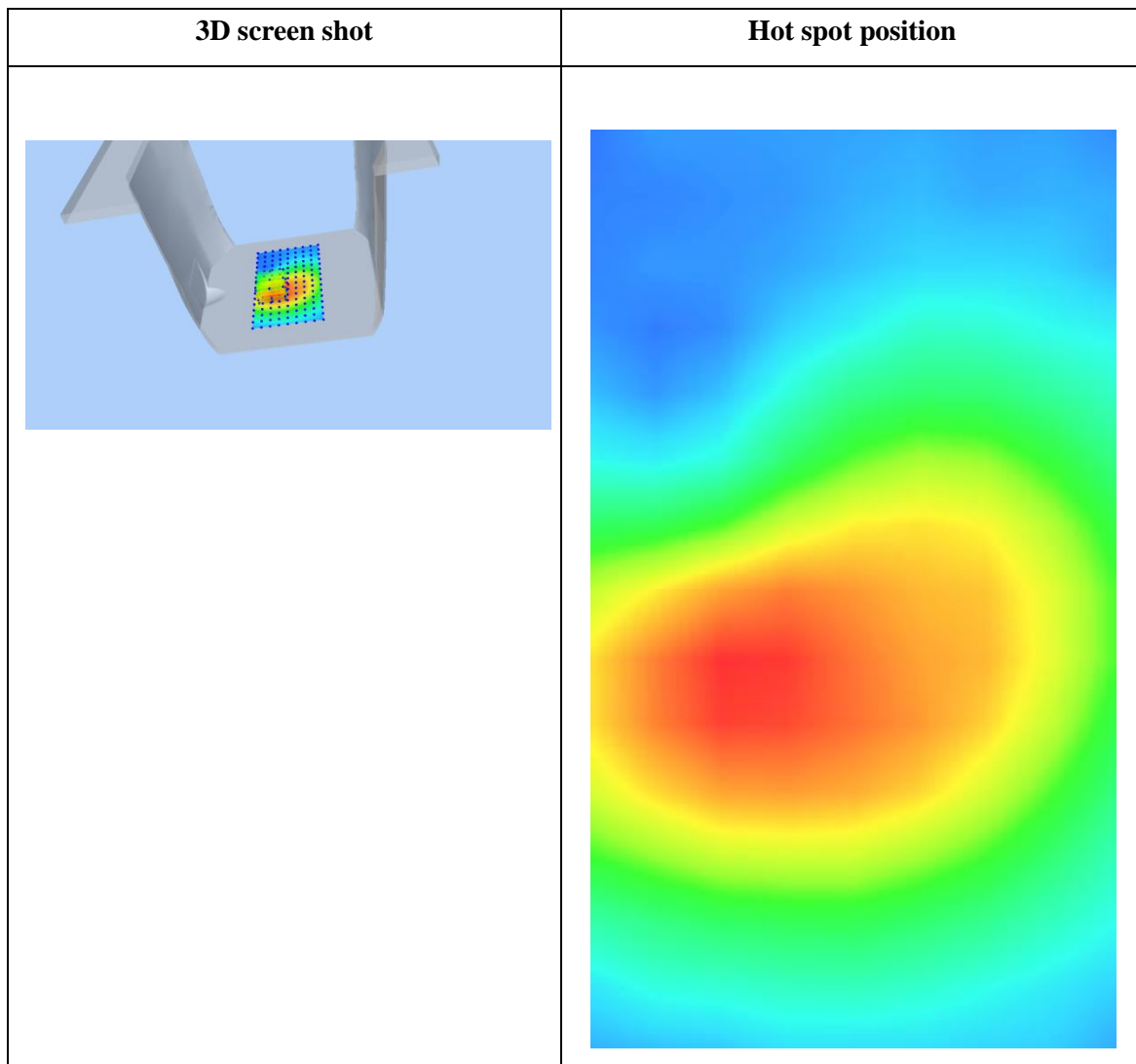
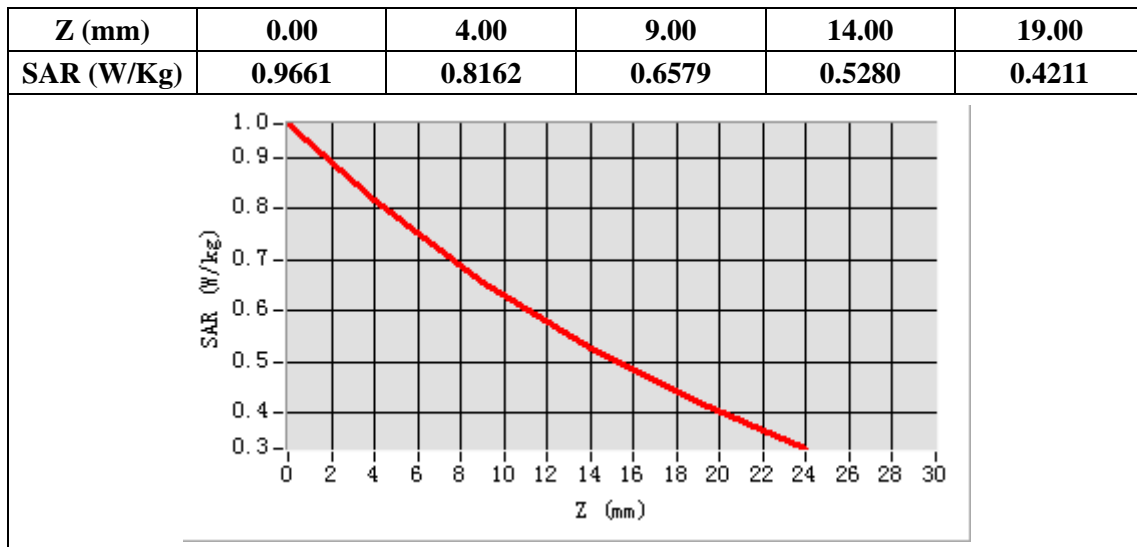
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	836.6
Relative permittivity (real part)	55.24
Relative permittivity (imaginary)	21.13
Conductivity (S/m)	0.98
Variation (%)	-1.14
ConvF:	1.99



Maximum location: X=-18.00, Y=-15.00

SAR Peak: 0.97W/kg

SAR 10g (W/Kg)	0.590295
SAR 1g (W/Kg)	0.800153



Plot 3: LTE Band2, 20MHz, Edge D, Middle,10mm

Type: Phone measurement

Date of measurement: 05/14/2020

Measurement duration: 22 minutes 08 seconds

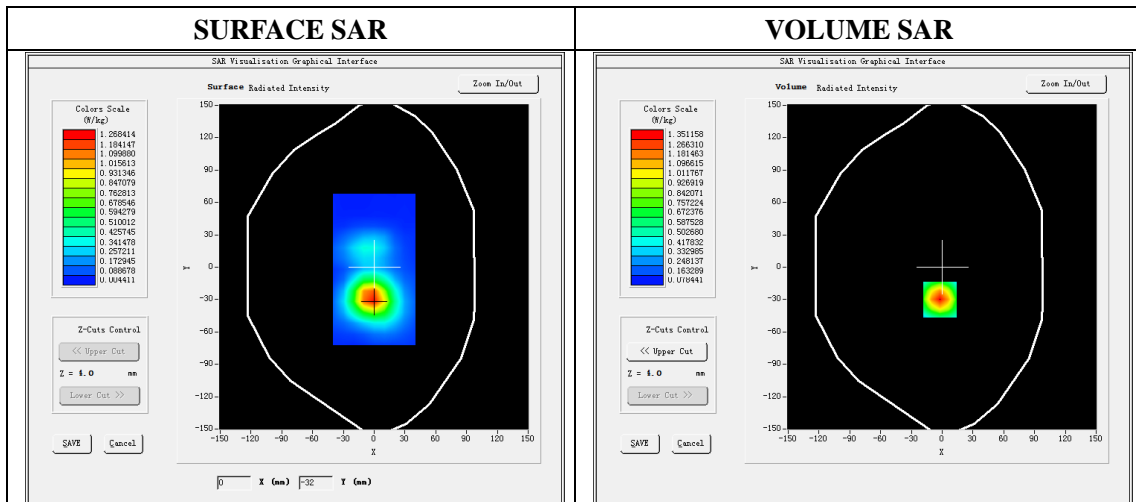
Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

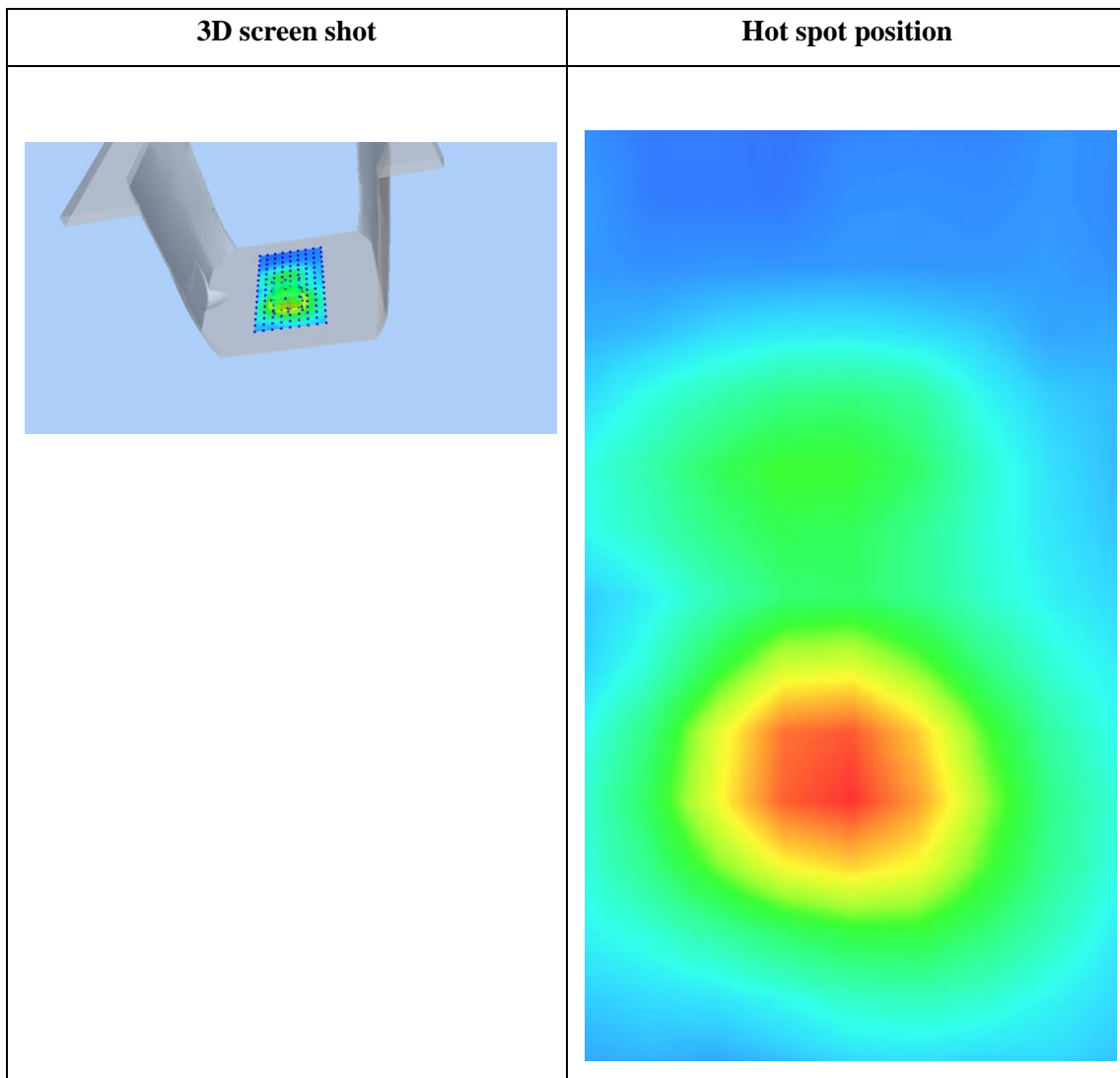
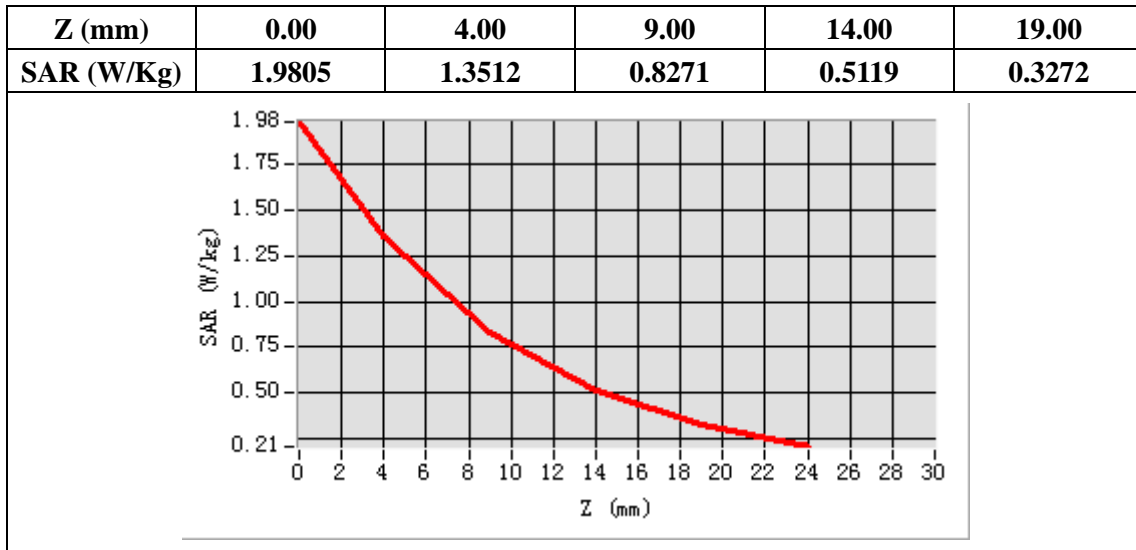
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1880
Relative permittivity (real part)	53.30
Relative permittivity (imaginary)	14.31
Conductivity (S/m)	1.51
Variation (%)	1.96
ConvF:	2.39



Maximum location: X=-2.00, Y=-30.00

SAR Peak: 1.98W/kg

SAR 10g (W/Kg)	0.701025
SAR 1g (W/Kg)	1.253636



Plot 4: LTE Band4, 20MHz, Top Side, Middle,10mm

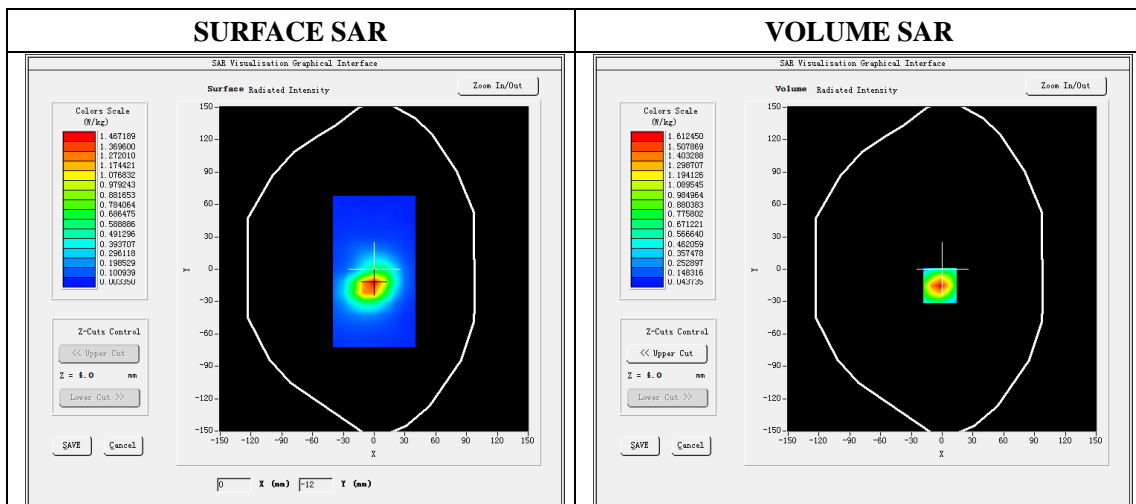
Type: Phone measurement
 Date of measurement: 05/13/2020
 Measurement duration: 22 minutes 05 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

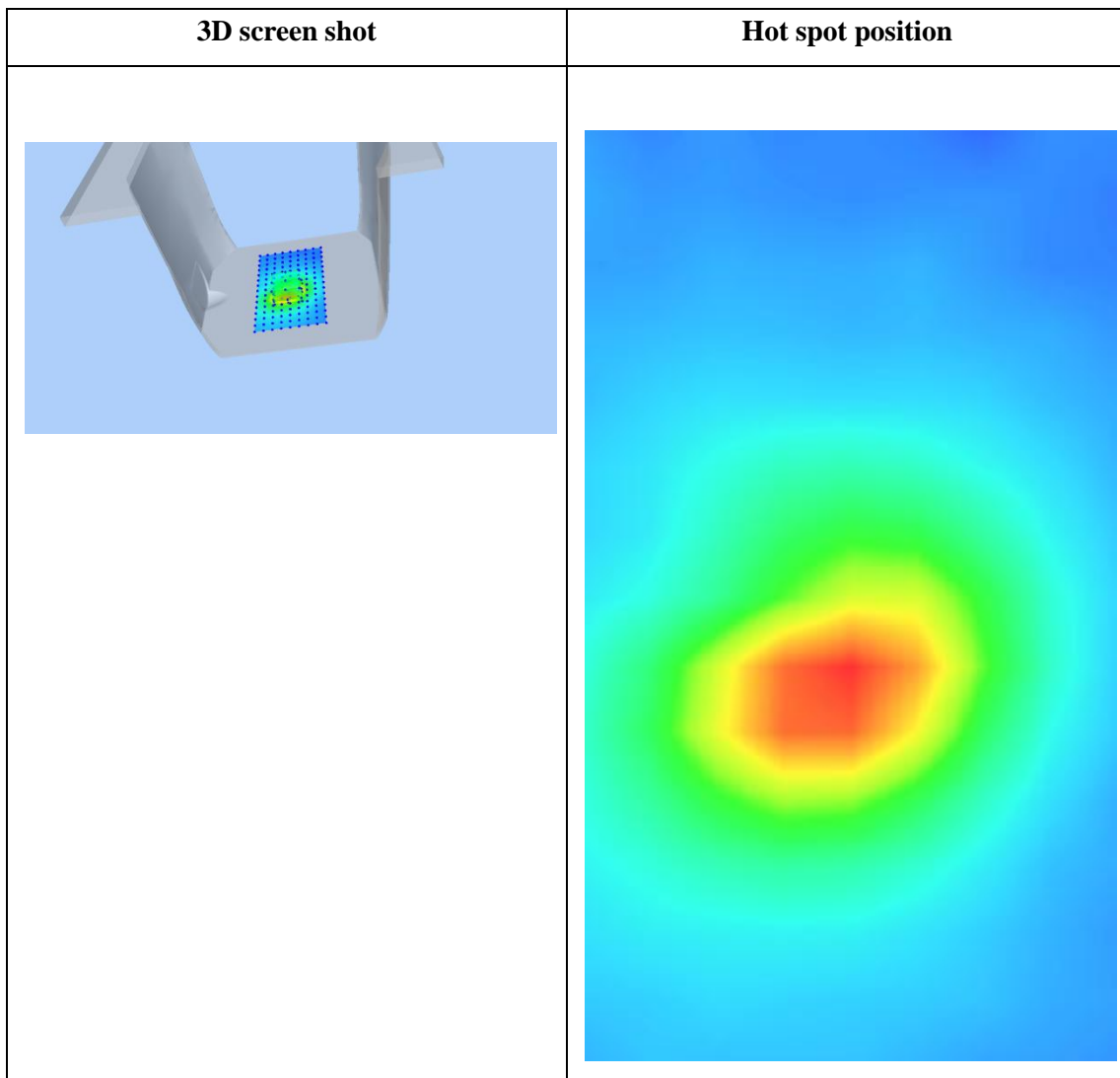
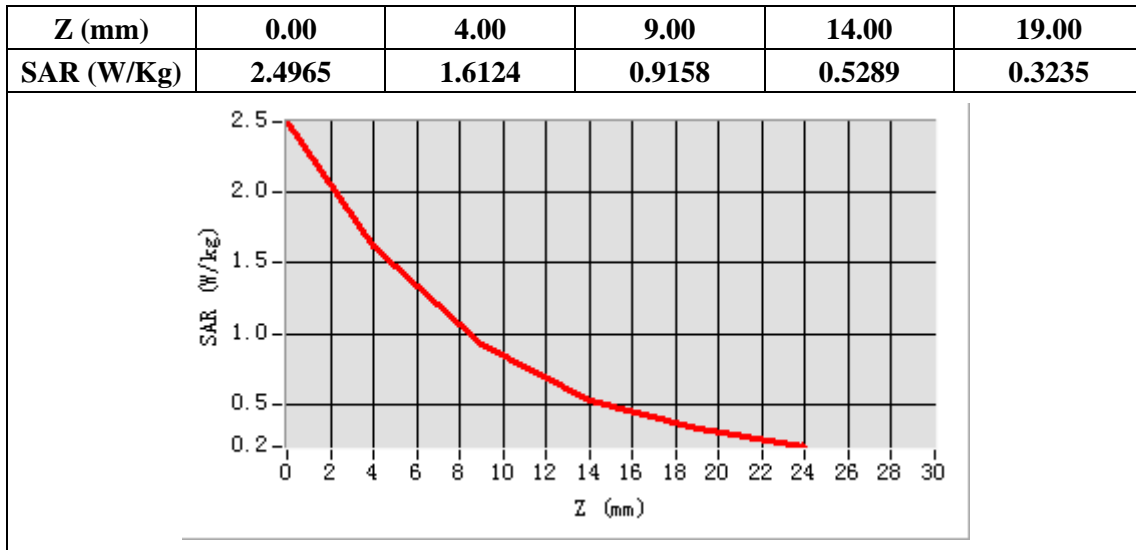
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1732.5
Relative permittivity (real part)	53.33
Relative permittivity (imaginary)	15.20
Conductivity (S/m)	1.52
Variation (%)	-0.90
ConvF:	2.22



Maximum location: X=-2.00, Y=-15.00

SAR Peak: 2.50W/kg

SAR 10g (W/Kg)	0.773751
SAR 1g (W/Kg)	1.420421



Plot 5: LTE Band5, 10MHz, Edge C, Middle,10mm

Type: Phone measurement

Date of measurement: 05/11/2020

Measurement duration: 22 minutes 04 seconds

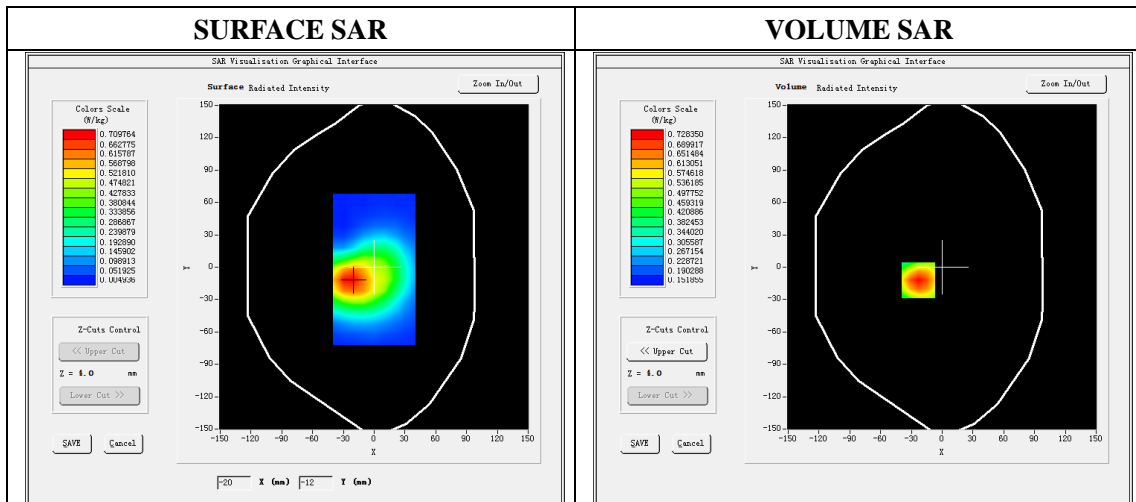
Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	836.5
Relative permittivity (real part)	55.24
Relative permittivity (imaginary)	21.13
Conductivity (S/m)	0.98
Variation (%)	-1.19
ConvF:	1.99

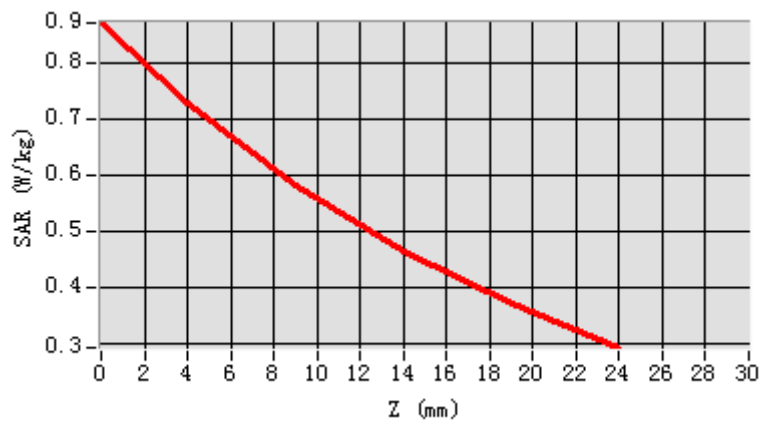


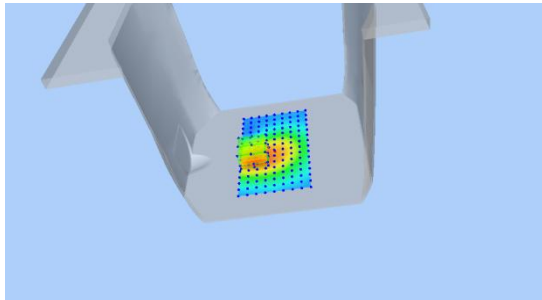
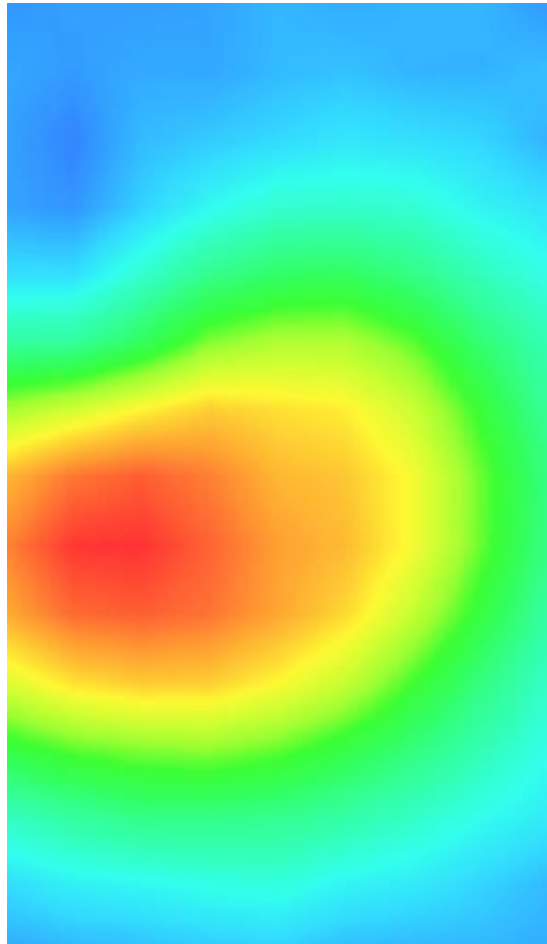
Maximum location: X=-23.00, Y=-12.00

SAR Peak: 0.87W/kg

SAR 10g (W/Kg)	0.521923
SAR 1g (W/Kg)	0.710545

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8712	0.7284	0.5814	0.4648	0.3718



3D screen shot	Hot spot position
	

Plot 6: LTE Band12, 10MHz, Edge C, Middle,10mm

Type: Phone measurement

Date of measurement: 05/10/2020

Measurement duration: 22 minutes 07 seconds

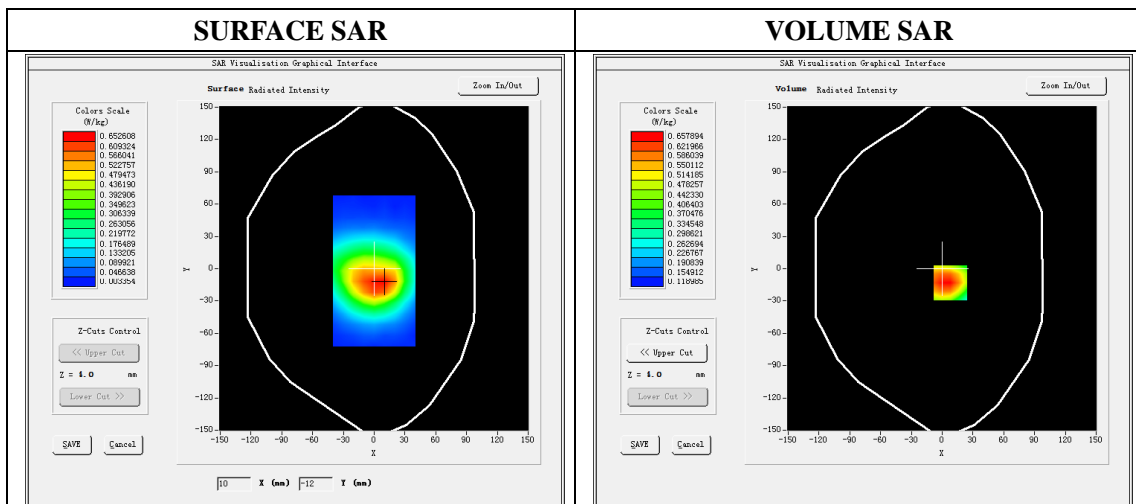
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Edge C
Band	LTE Band 12
Channels	23095
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	707.5
Relative permittivity (real part)	55.54
Relative permittivity (imaginary)	23.04
Conductivity (S/m)	0.96
Variation (%)	-0.48
ConvF:	1.93

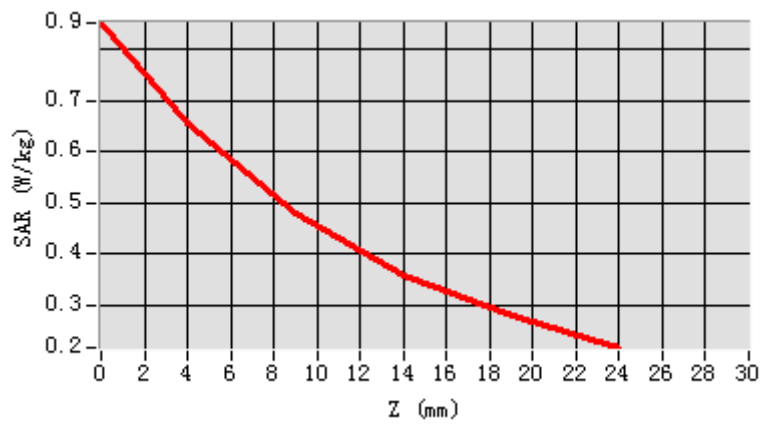


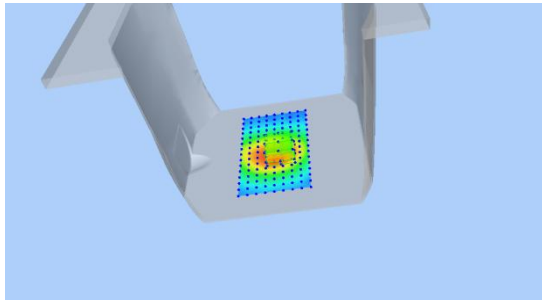
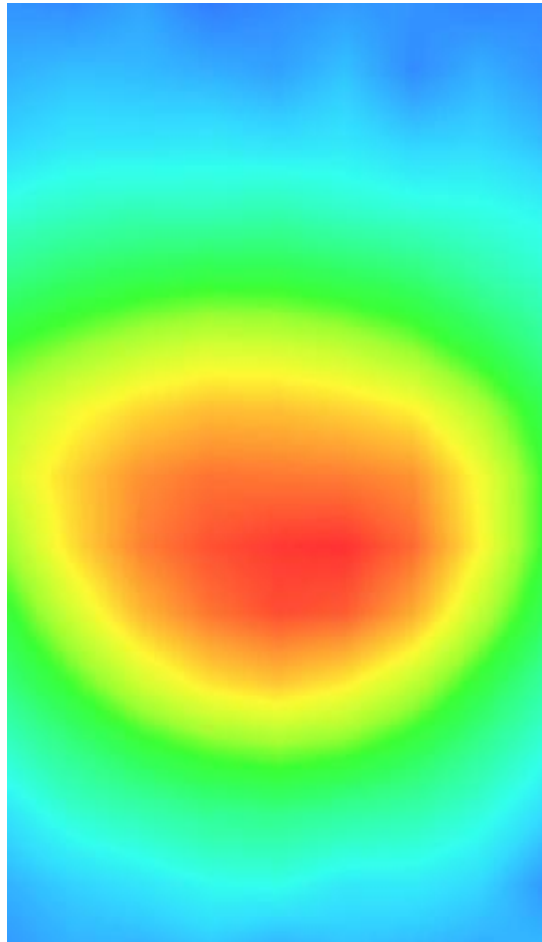
Maximum location: X=8.00, Y=-13.00

SAR Peak: 0.86W/kg

SAR 10g (W/Kg)	0.460848
SAR 1g (W/Kg)	0.649257

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8526	0.6579	0.4799	0.3592	0.2782



3D screen shot	Hot spot position
	

Plot 7: LTE Band14, 10MHz, Edge C, Middle,10mm

Type: Phone measurement

Date of measurement: 06/08/2020

Measurement duration: 22 minutes 16 seconds

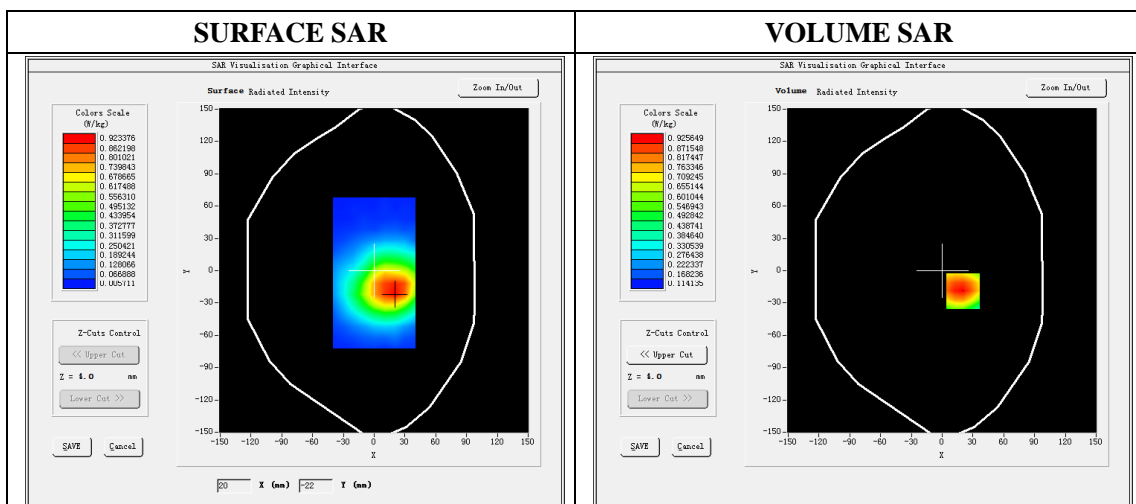
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Edge C
Band	LTE Band 14
Channels	23330
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_41/18_EPG0334
Frequency (MHz)	793
Relative permittivity (real part)	55.51
Relative permittivity (imaginary)	22.80
Conductivity (S/m)	0.95
Variation (%)	-0.97
ConvF:	1.49

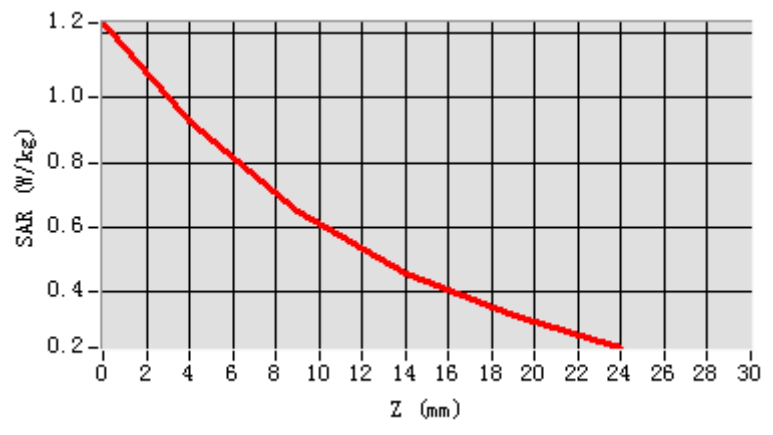


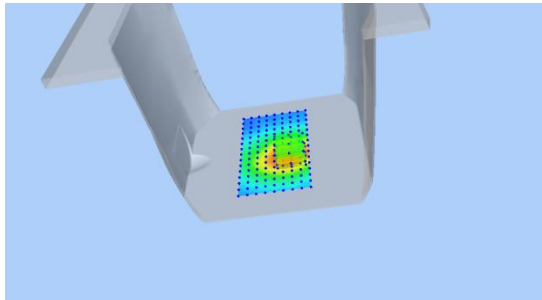
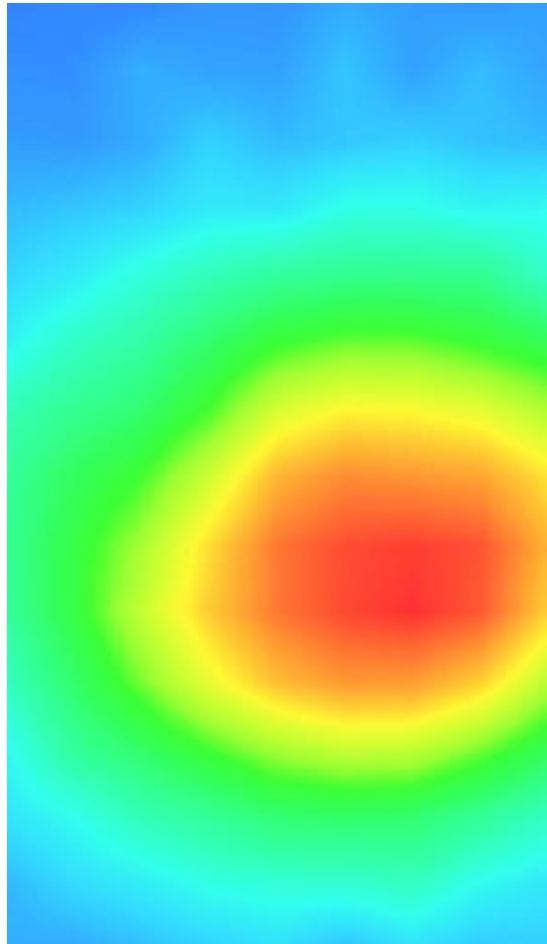
Maximum location: X=20.00, Y=-19.00

SAR Peak: 1.23W/kg

SAR 10g (W/Kg)	0.620166
SAR 1g (W/Kg)	0.922408

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.2293	0.9256	0.6472	0.4564	0.3263



3D screen shot	Hot spot position
	

Plot 8: Wi-Fi 802.11b, TOP Side ,Middle, 10mm

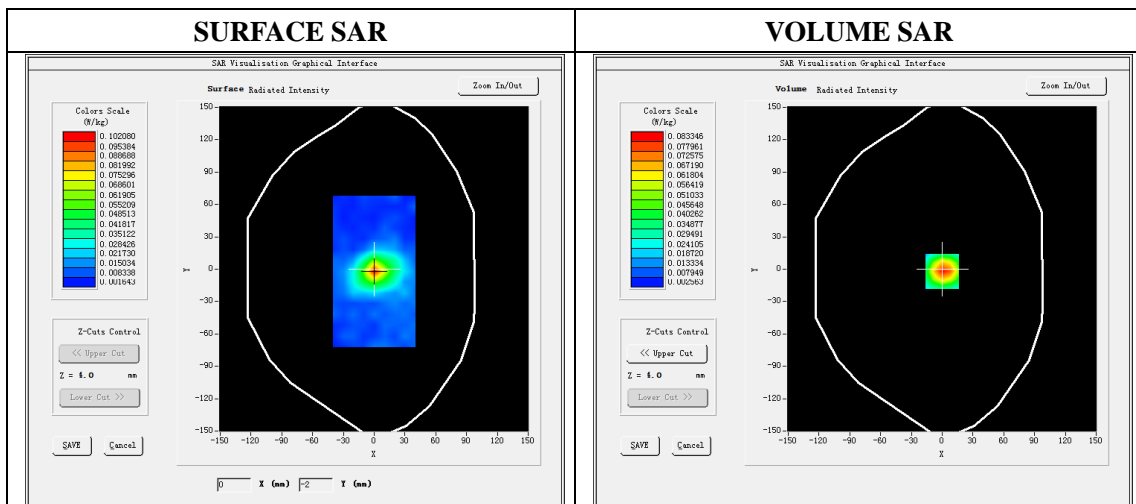
Type: Phone measurement
 Date of measurement: 05/16/2020
 Measurement duration: 22 minutes 12 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=5mm,dy=5mm
ZoomScan	7x7x8,dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	TOP Side
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)	52.68
Relative permittivity (imaginary)	14.40
Conductivity (S/m)	1.96
Variation (%)	-2.82
ConvF:	2.46



Maximum location: X=0.00 Y=-2.00

SAR Peak: 0.10 W/kg

SAR 10g (W/Kg)	0.044597
SAR 1g (W/Kg)	0.077885

