

**Appendix B: SAR Measurement results Plots**

Plot	Frequency/Mode	Testing Position and Channel	Test Date
1	WCDMA850	Body Back, Middle ,15mm	2021/11/21
2	WCDMA1900	Edge D, Middle ,15mm	2021/11/23
3	WCDMA1700	Body Back, High ,15mm	2021/11/22
4	LTE Band2	Edge D, High ,15mm	2021/11/23
5	LTE Band4	Body Back, Middle ,15mm	2021/11/22
6	LTE Band5	Edge A, Middle ,15mm	2021/11/21
7	LTE Band7	Edge D, Low ,15mm	2021/11/24
8	LTE Band12	Body Back, Middle ,15mm	2021/11/20
9	LTE Band13	Body Back, Middle ,15mm	2021/11/20
10	LTE Band66	Body Back, Middle ,15mm	2021/11/22
11	WIFI 2.4G 802.11b	Edge C, Middle ,15mm	2021/11/24

Plot 1: WCDMA850, Back, Middle ,15mm

Type: Phone measurement

Date of measurement: 11/21/2021

Measurement duration: 22 minutes 09 seconds

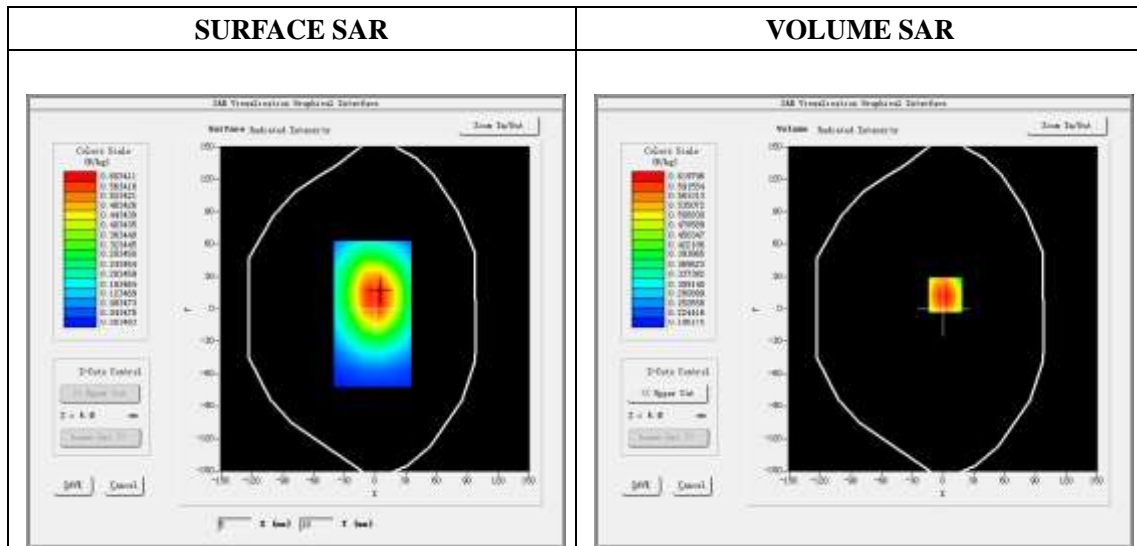
Mobile Phone IMEI number: --

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	Band5_WCDMA850
Channels	4183
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

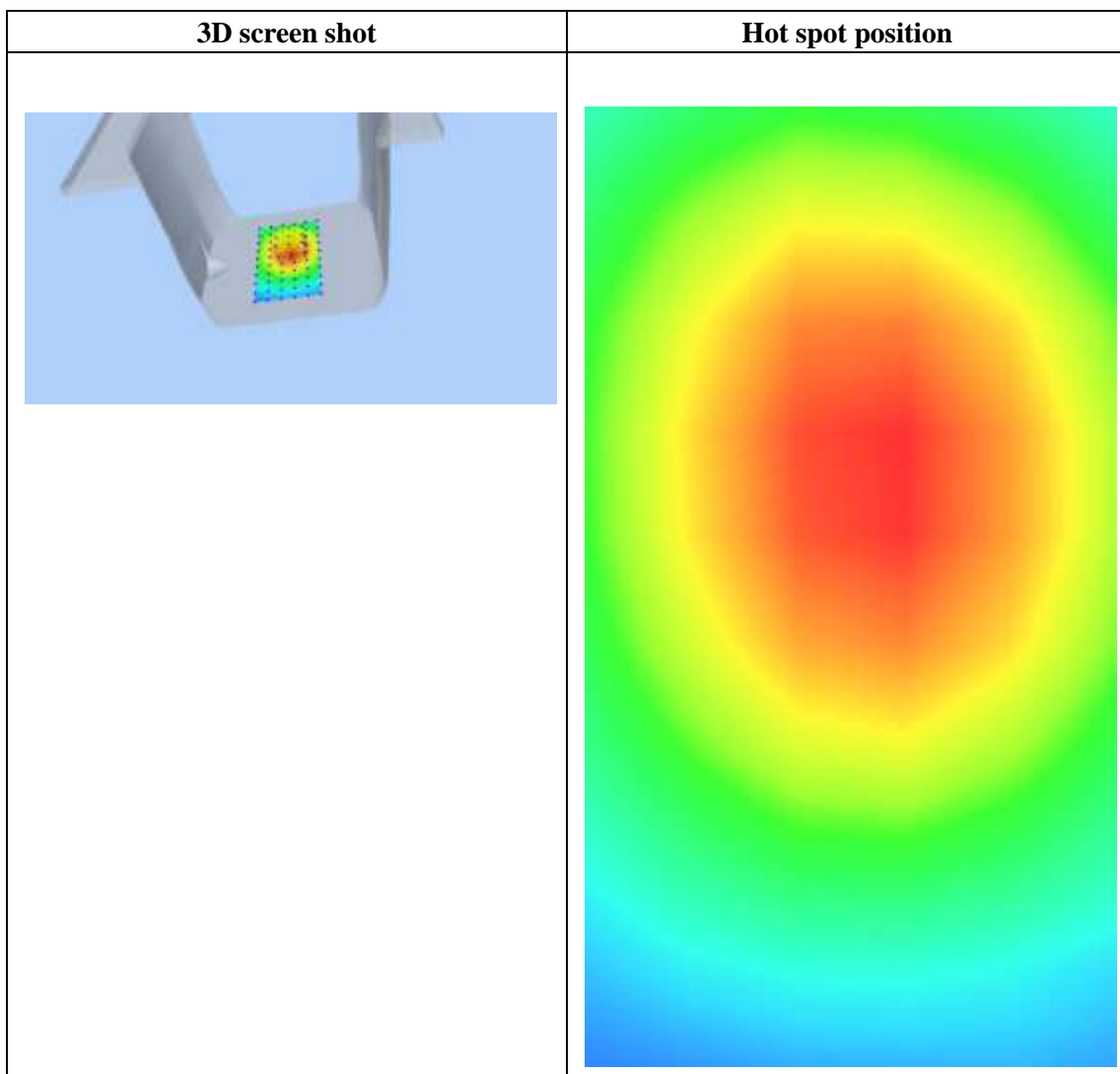
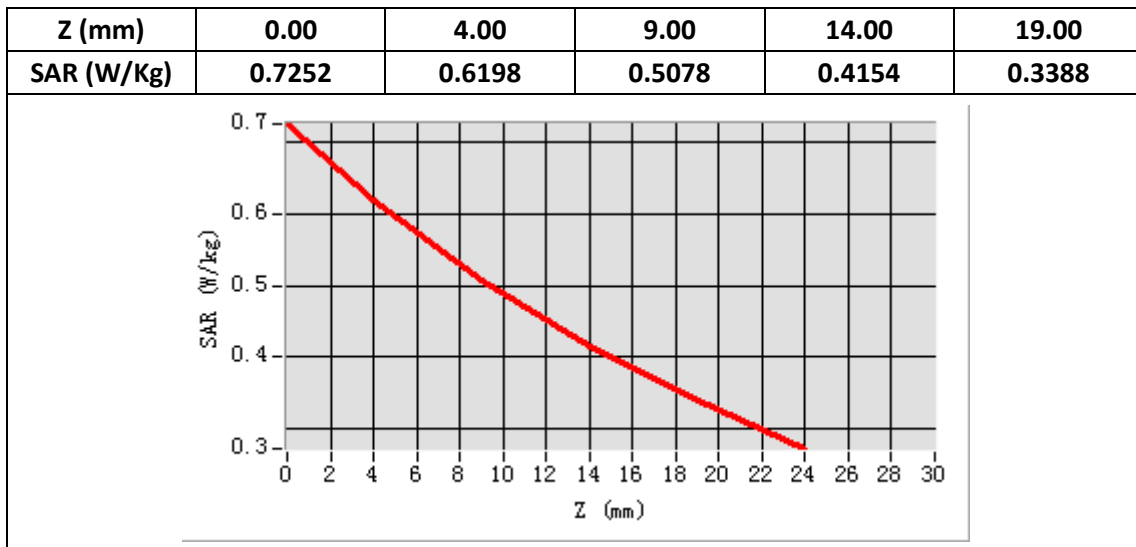
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	836.6
Relative permittivity (real part)	42.04
Relative permittivity (imaginary part)	19.80
Conductivity (S/m)	0.92
Variation (%)	-1.45
ConvF:	1.93



Maximum location: X=2.00, Y=13.00

SAR Peak: 0.73 W/kg

SAR 10g (W/Kg)	0.468527
SAR 1g (W/Kg)	0.609856



Plot 2: WCDMA1900, Edge D, Middle,15mm

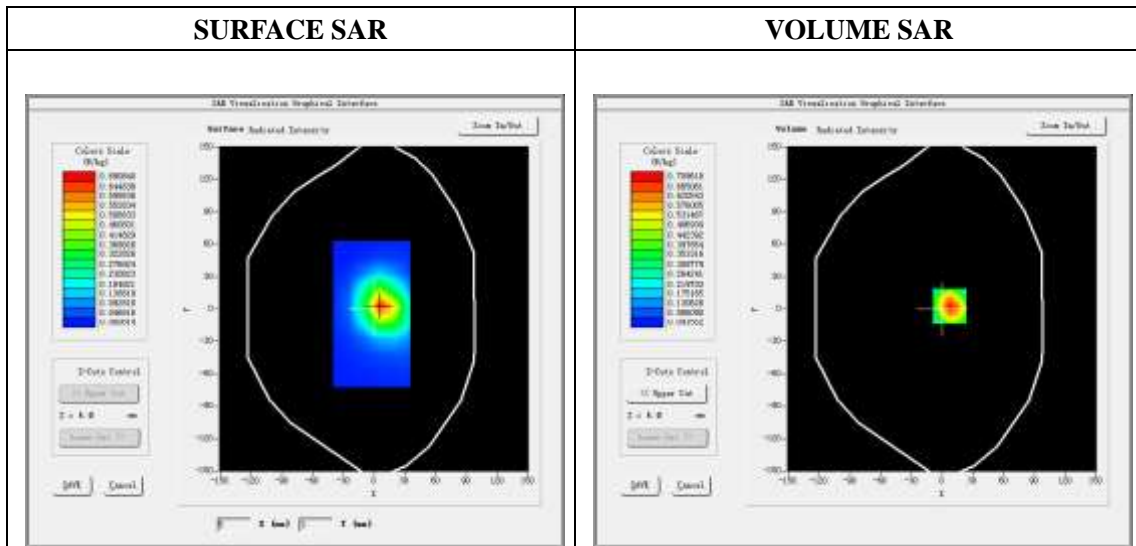
Type: Phone measurement
 Date of measurement: 11/23/2021
 Measurement duration: 22 minutes 10 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

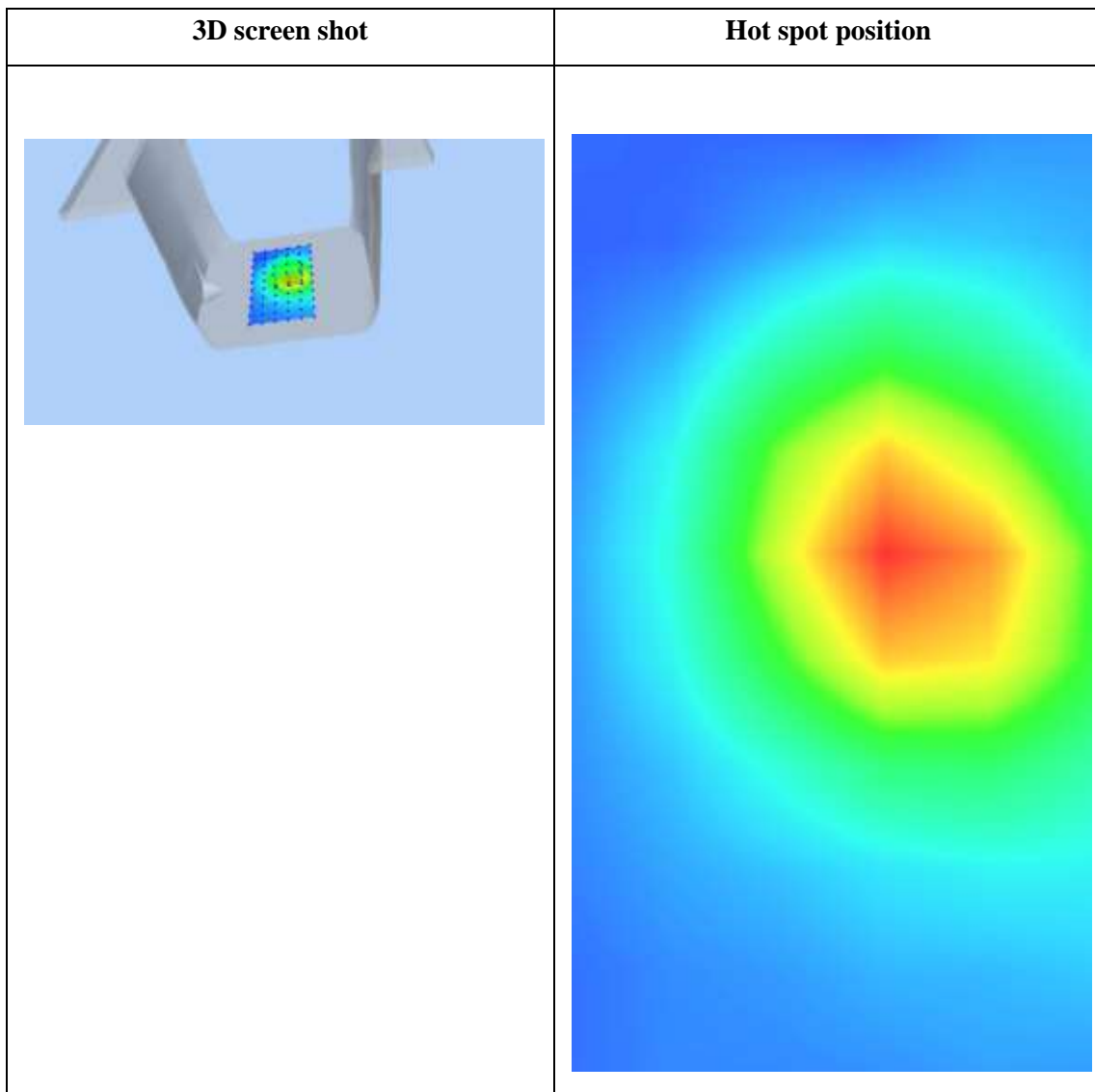
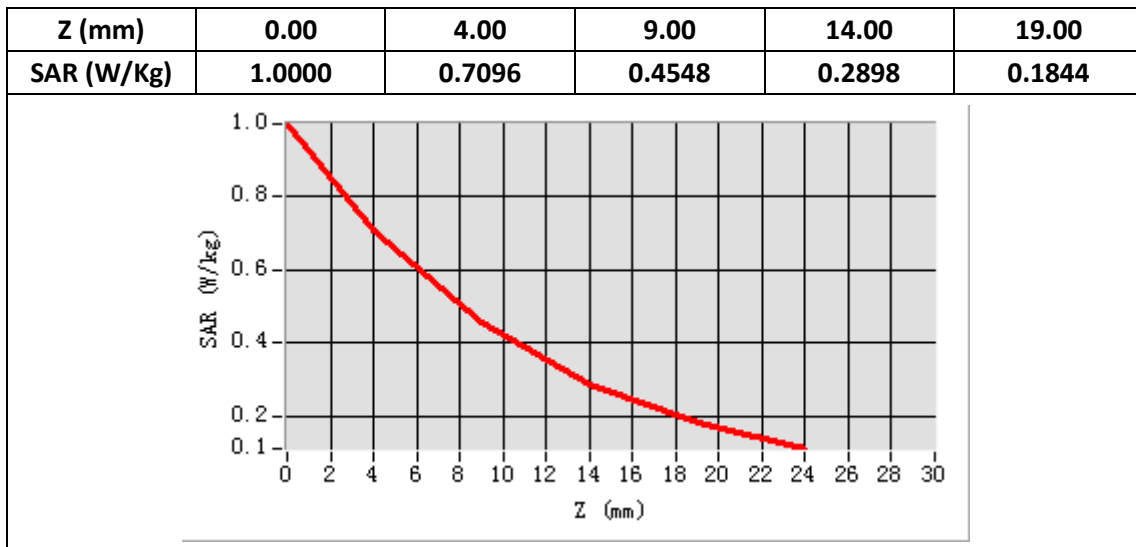
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1880
Relative permittivity (real part)	39.29
Relative permittivity (imaginary)	13.58
Conductivity (S/m)	1.42
Variation (%)	-1.83
ConvF:	2.17



Maximum location: X=7.00, Y=3.00

SAR Peak: 1.00W/kg

SAR 10g (W/Kg)	0.382938
SAR 1g (W/Kg)	0.661736



Plot 3: WCDMA1700, Back, High,15mm

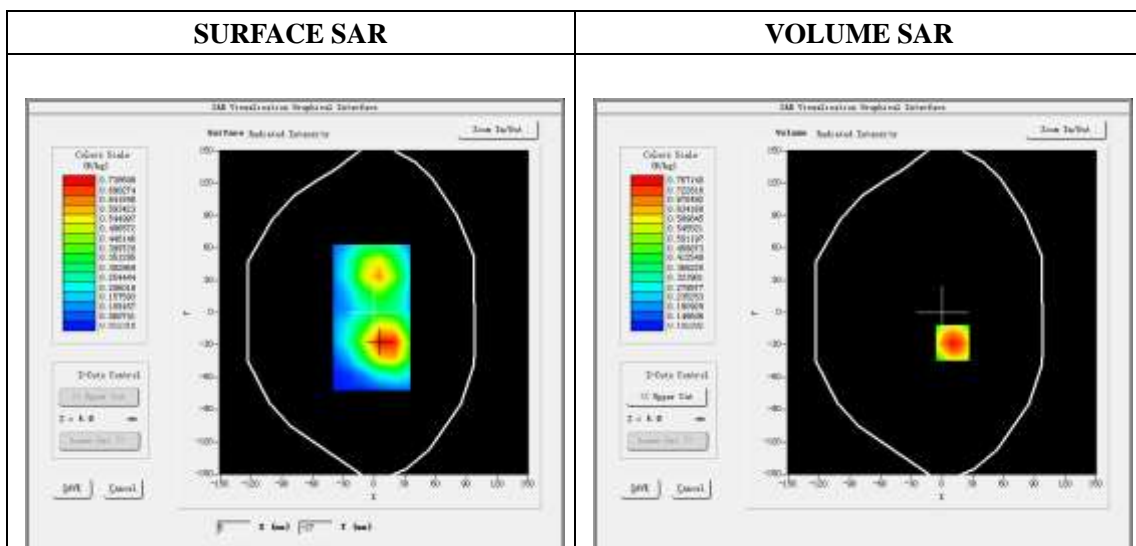
Type: Phone measurement
 Date of measurement: 11/22/2021
 Measurement duration: 22 minutes 07 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	Band4_WCDMA1700
Channels	1513
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

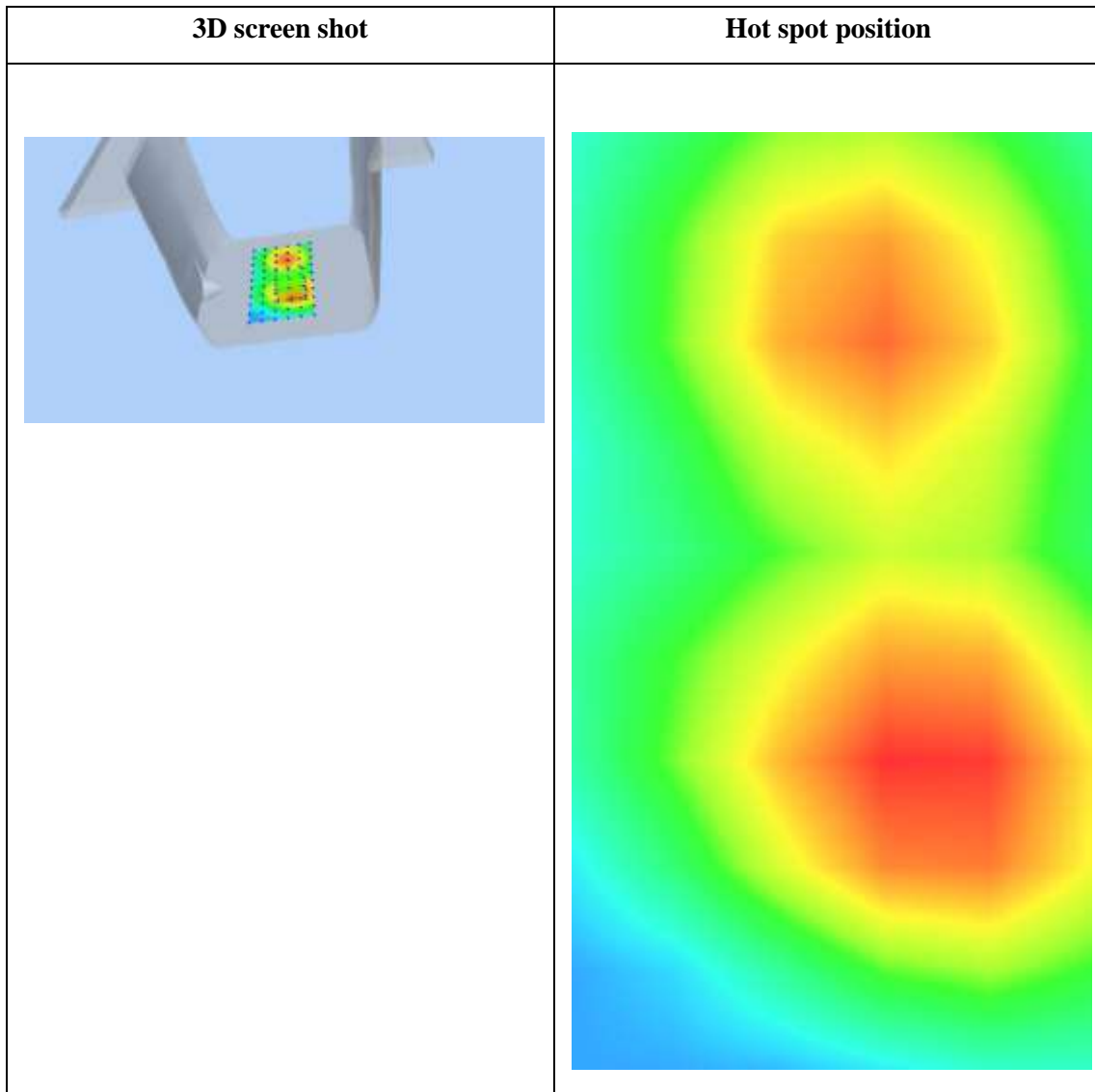
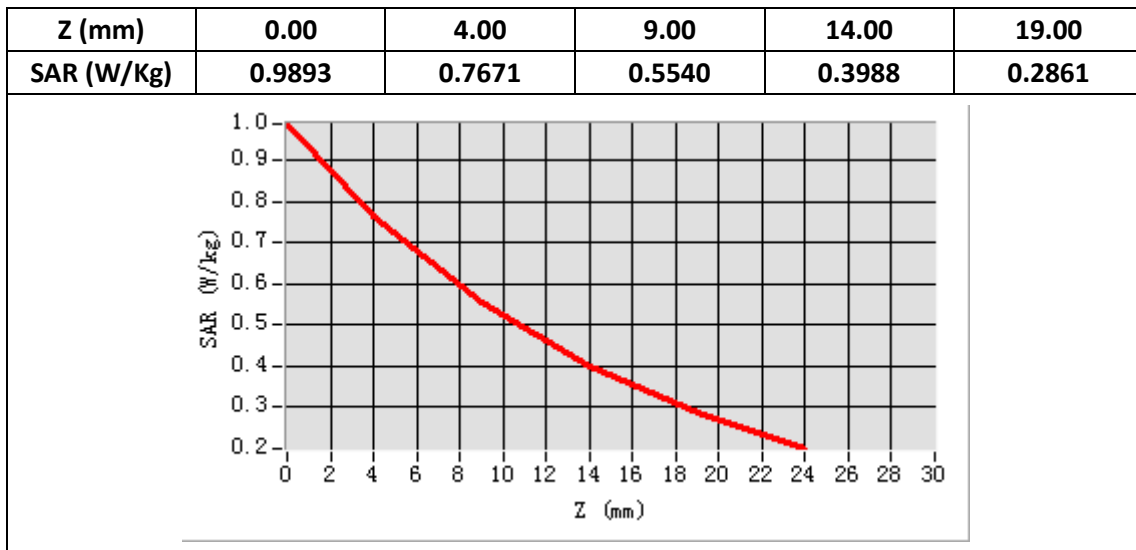
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1752.6
Relative permittivity (real part)	39.91
Relative permittivity (imaginary)	14.05
Conductivity (S/m)	1.37
Variation (%)	-0.52
ConvF:	2.22



Maximum location: X=10.00, Y=-28.00

SAR Peak: 0.99 W/kg

SAR 10g (W/Kg)	0.493935
SAR 1g (W/Kg)	0.741646



Plot 4: LTE Band2, 20MHz, Edge D, High,15mm

Type: Phone measurement

Date of measurement: 11/23/2021

Measurement duration: 22 minutes 18 seconds

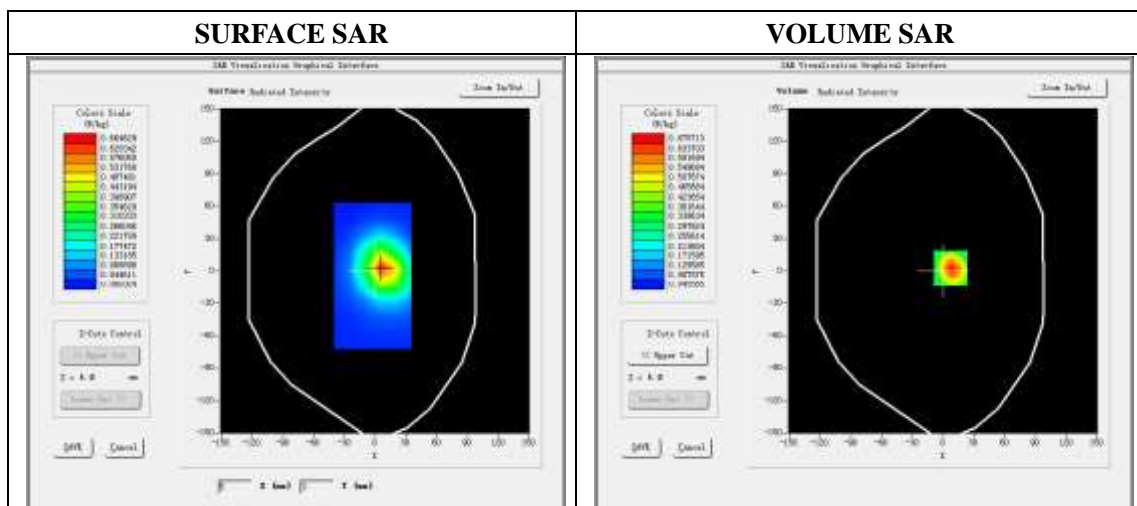
Mobile Phone IMEI number: --

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	19100
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1900
Relative permittivity (real part)	39.04
Relative permittivity (imaginary)	13.53
Conductivity (S/m)	1.43
Variation (%)	-0.23
ConvF:	2.40

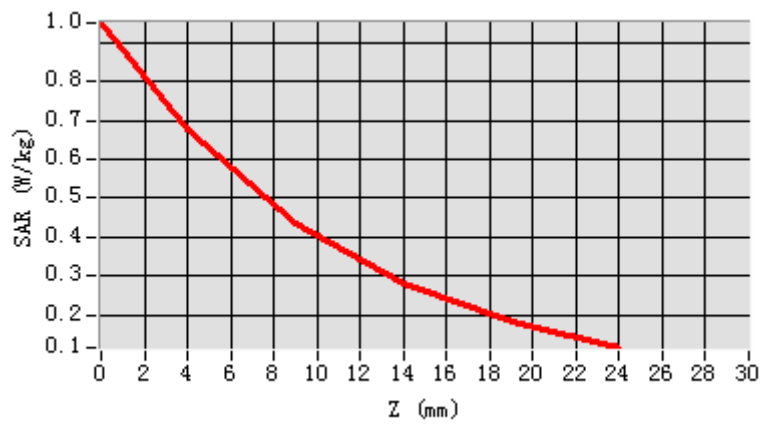


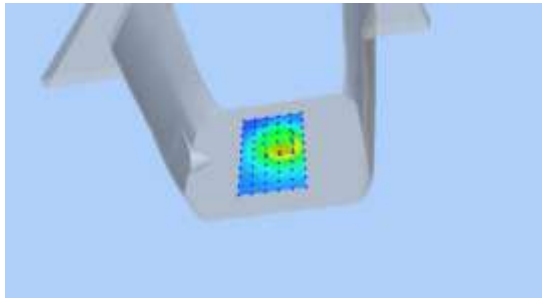
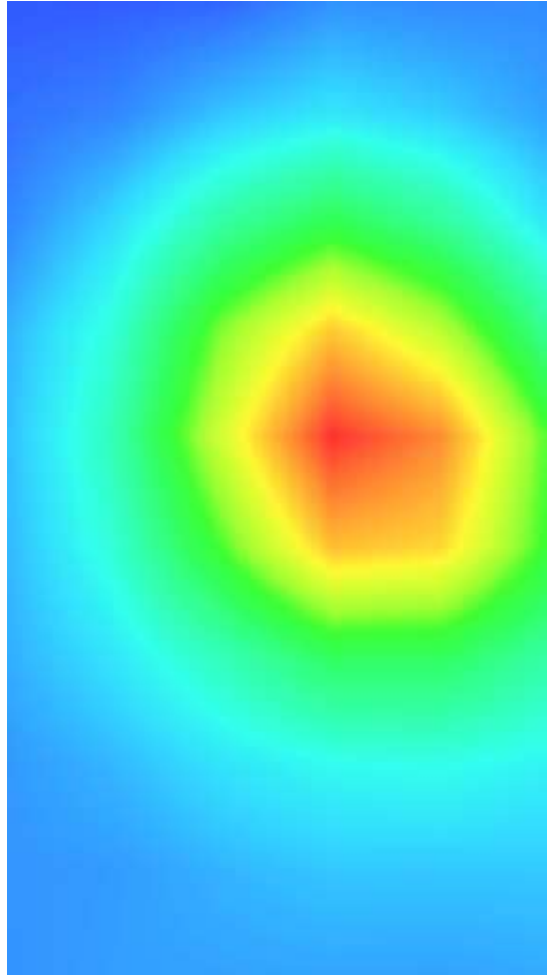
Maximum location: X=7.00, Y=3.00

SAR Peak: 0.95 W/kg

SAR 10g (W/Kg)	0.371165
SAR 1g (W/Kg)	0.632281

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.9513	0.6757	0.4352	0.2807	0.1829



3D screen shot	Hot spot position
	

Plot 5: LTE Band4, 20MHz, Back, Middle,15mm

Type: Phone measurement

Date of measurement: 11/22/2021

Measurement duration: 22 minutes 15 seconds

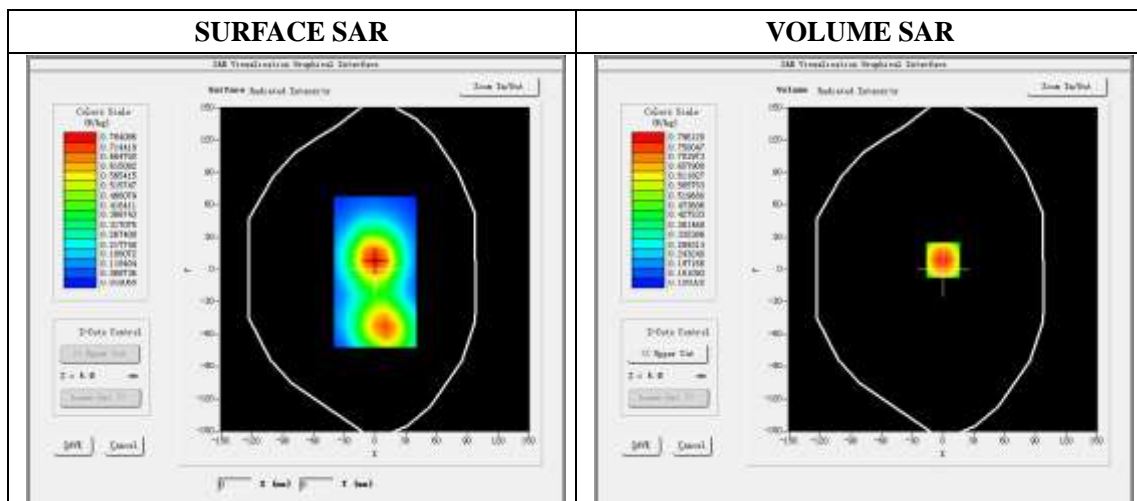
Mobile Phone IMEI number: --

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

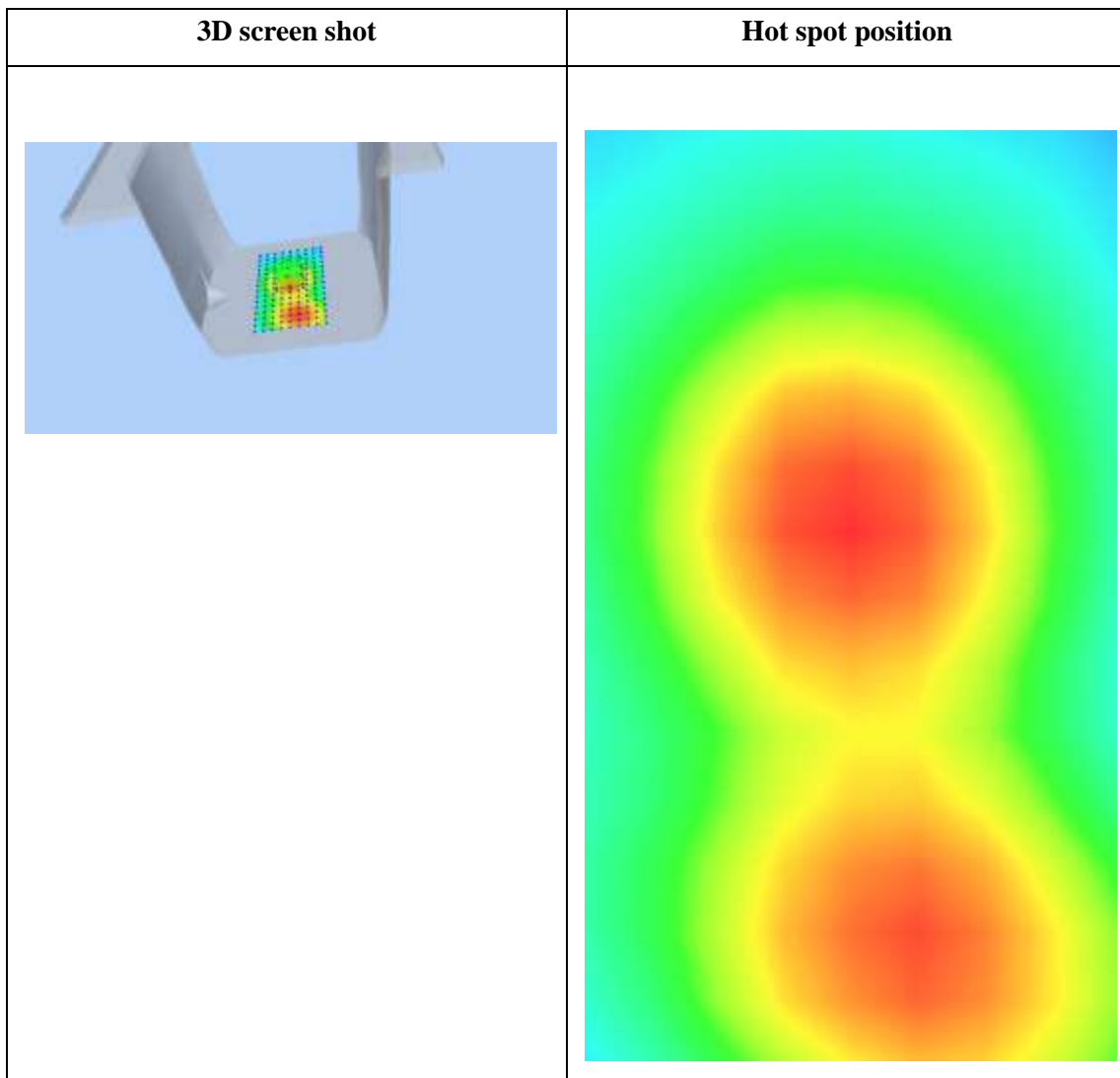
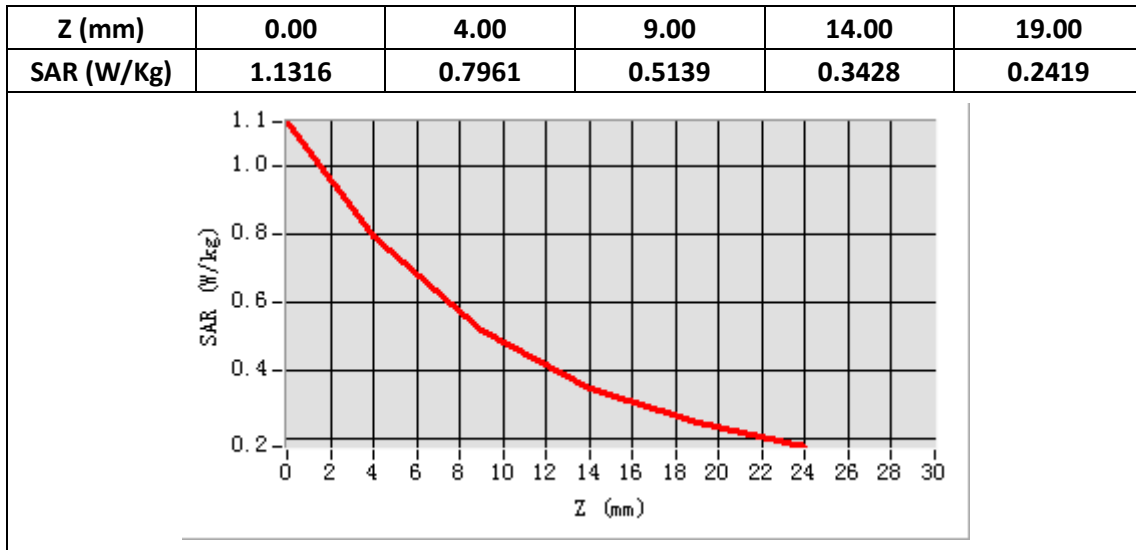
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1732.5
Relative permittivity (real part)	40.56
Relative permittivity (imaginary)	14.01
Conductivity (S/m)	1.35
Variation (%)	3.31
ConvF:	2.22



Maximum location: X=0.00, Y=9.00

SAR Peak: 1.13 W/kg

SAR 10g (W/Kg)	0.480423
SAR 1g (W/Kg)	0.769693



Plot 6: LTE Band5, 10MHz, Edge A, Middle,15mm

Type: Phone measurement

Date of measurement: 11/21/2021

Measurement duration: 22 minutes 09 seconds

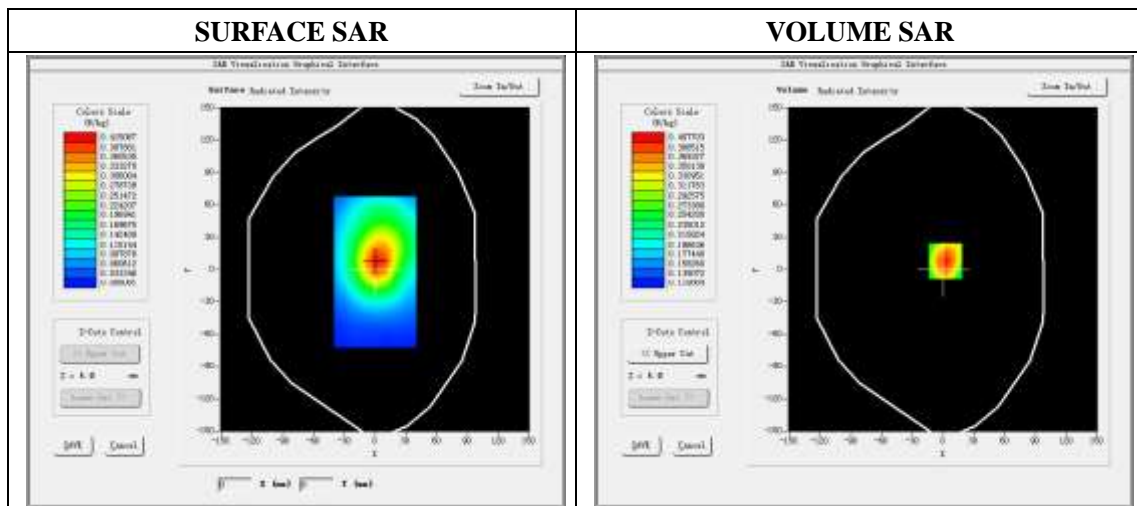
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Edge A
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)	42.04
Relative permittivity (imaginary)	19.80
Conductivity (S/m)	0.92
Variation (%)	0.06
ConvF:	1.93

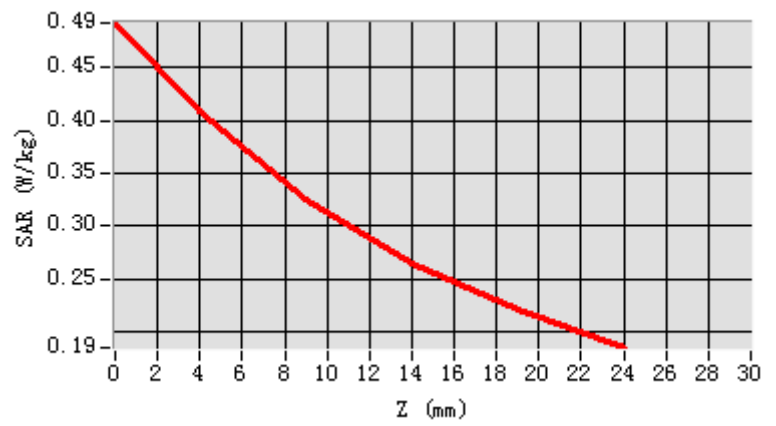


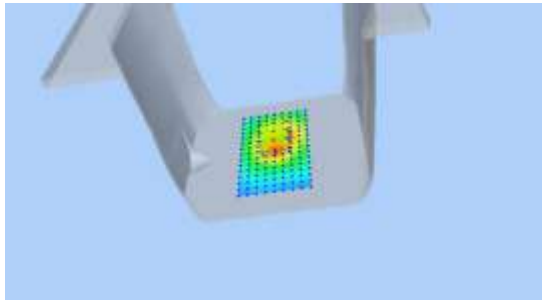
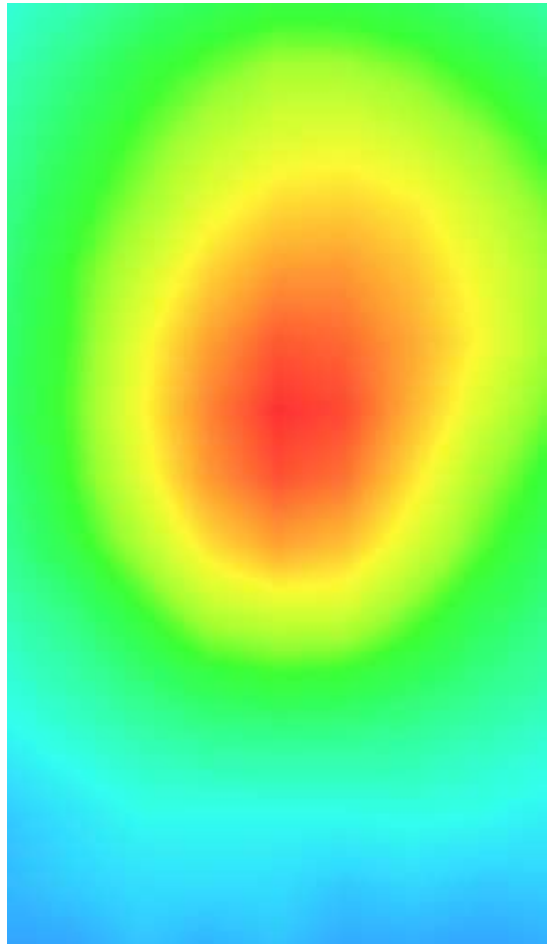
Maximum location: X=2.00, Y=8.00

SAR Peak: 0.49 W/kg

SAR 10g (W/Kg)	0.296493
SAR 1g (W/Kg)	0.391301

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.4917	0.4077	0.3258	0.2655	0.2213



3D screen shot	Hot spot position
	

Plot 7: LTE Band7, 20MHz, Edge D, Low,15mm

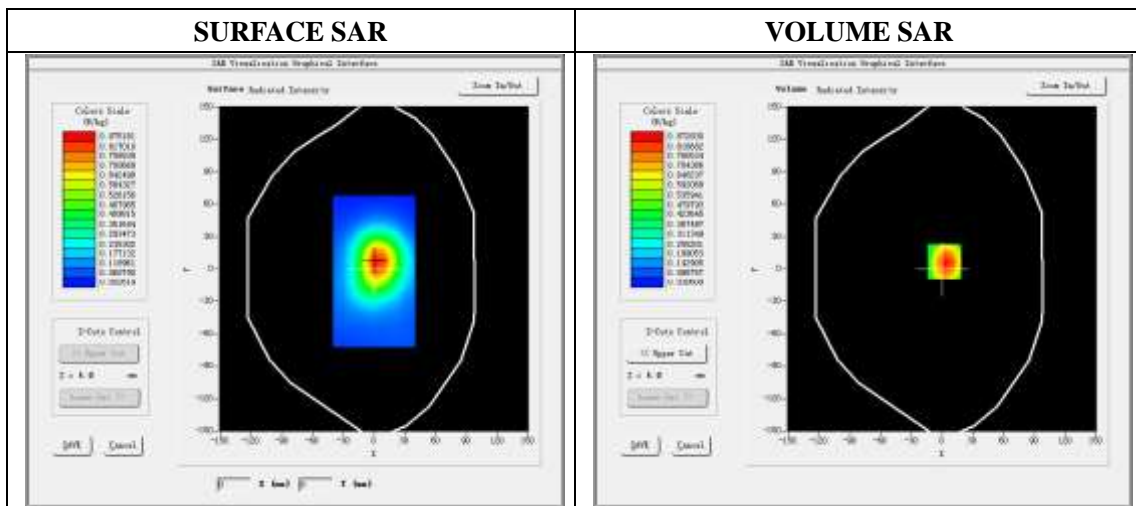
Type: Phone measurement
 Date of measurement: 11/24/2021
 Measurement duration: 22 minutes 57 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	7x7x8,dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Edge D
Band	LTE Band 7
Channels	20850
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	2510
Relative permittivity (real part)	38.41
Relative permittivity (imaginary)	13.75
Conductivity (S/m)	1.92
Variation (%)	-1.65
ConvF:	2.29

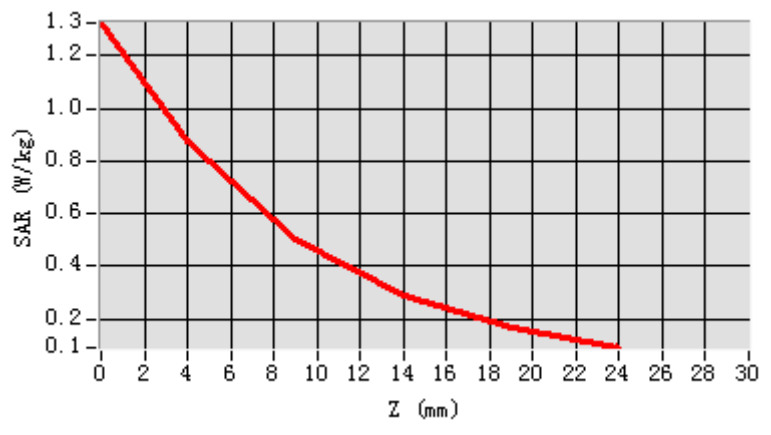


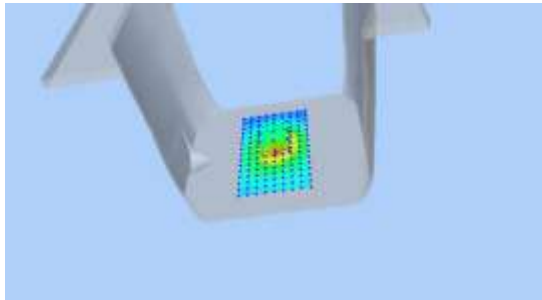
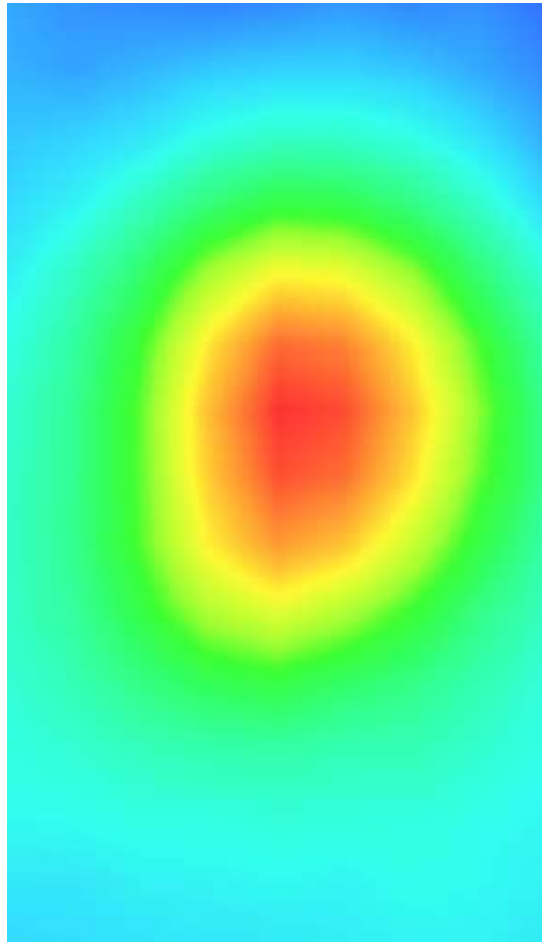
Maximum location: X=2.00, Y=7.00

SAR Peak: 1.34 W/kg

SAR 10g (W/Kg)	0.461487
SAR 1g (W/Kg)	0.827738

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.3248	0.8728	0.5041	0.2880	0.1657



3D screen shot	Hot spot position
	

Plot 8: LTE Band12, 10MHz, Back, Middle,15mm

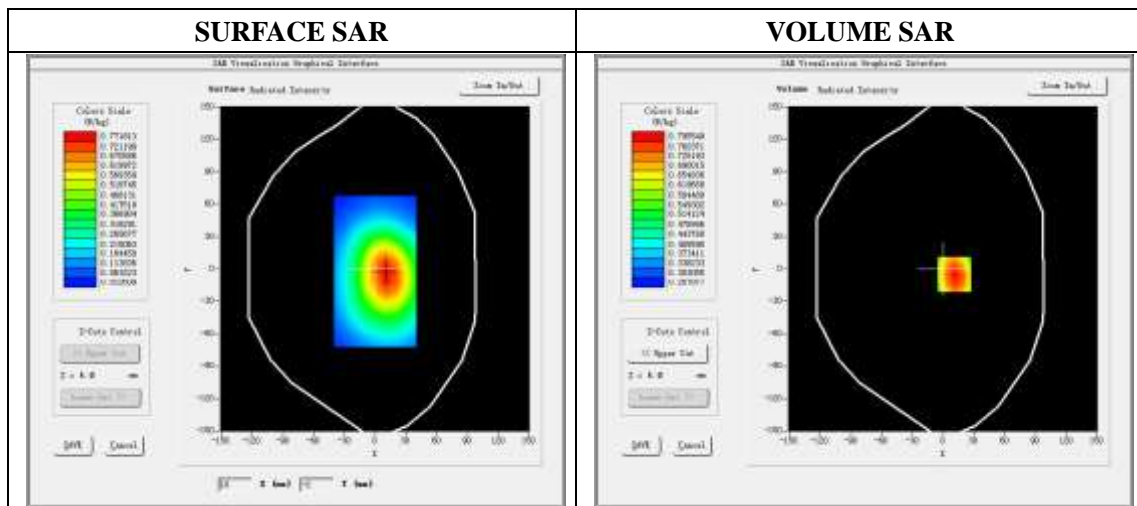
Type: Phone measurement
 Date of measurement: 11/20/2021
 Measurement duration: 22 minutes 15 seconds
 Mobile Phone IMEI number: --

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 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)	43.37
Relative permittivity (imaginary)	22.10
Conductivity (S/m)	0.87
Variation (%)	-1.67
ConvF:	1.85

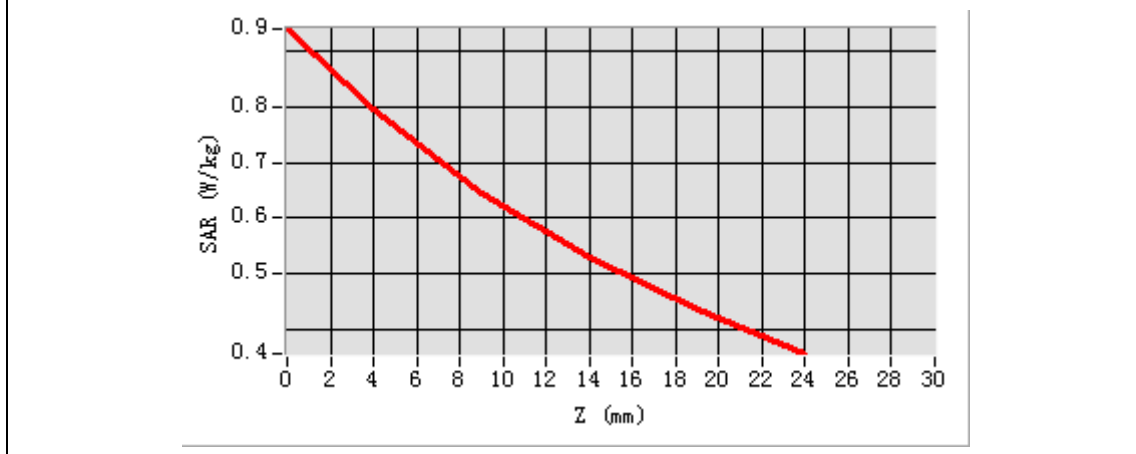


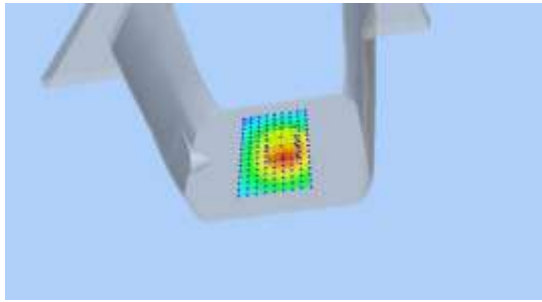
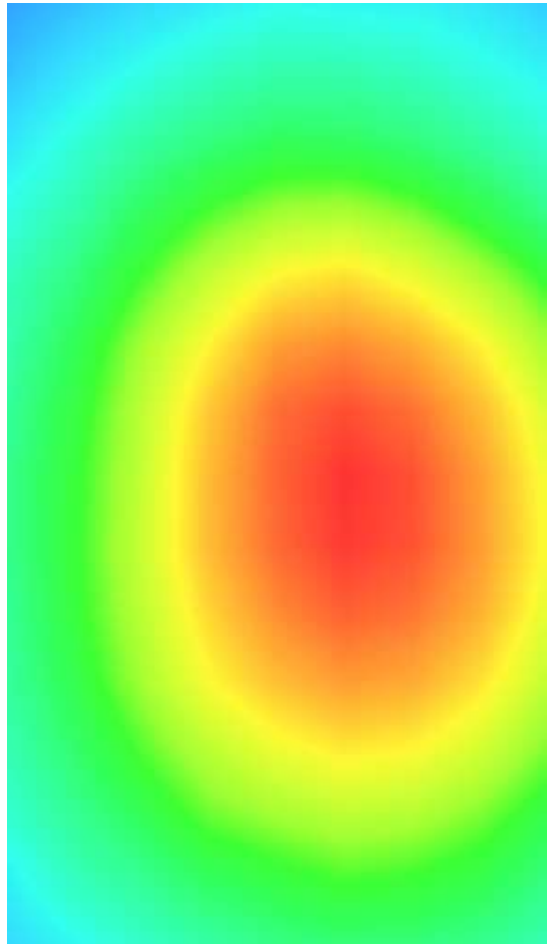
Maximum location: X=11.00, Y=-5.00

SAR Peak: 0.94 W/kg

SAR 10g (W/Kg)	0.602771
SAR 1g (W/Kg)	0.785402

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.9414	0.7955	0.6459	0.5279	0.4343



3D screen shot	Hot spot position
	

Plot 9: LTE Band13, 10MHz, Back, Middle,15mm

Type: Phone measurement

Date of measurement: 11/20/2021

Measurement duration: 22 minutes 18 seconds

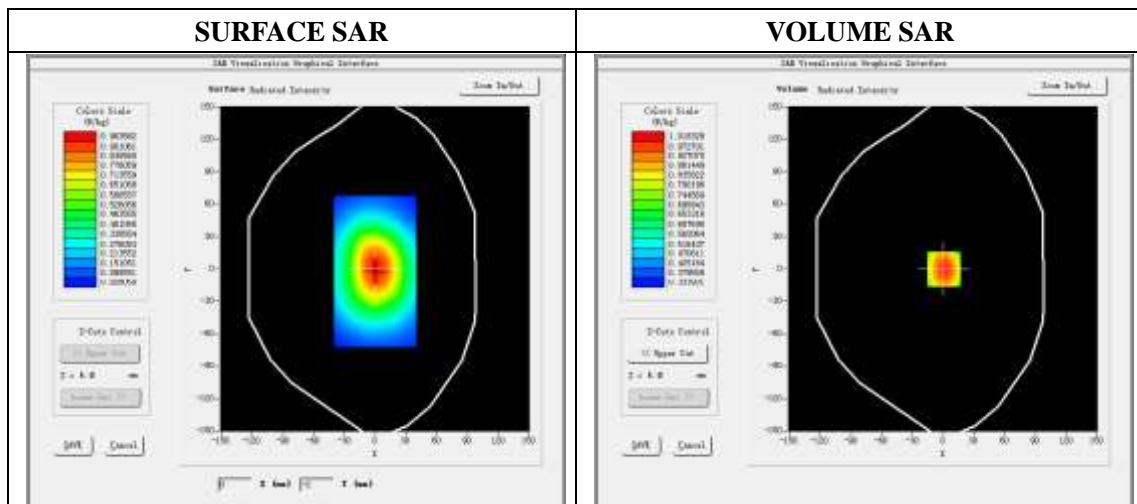
Mobile Phone IMEI number: --

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 13
Channels	23230
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	782
Relative permittivity (real part)	42.58
Relative permittivity (imaginary)	20.92
Conductivity (S/m)	0.91
Variation (%)	-3.10
ConvF:	1.85

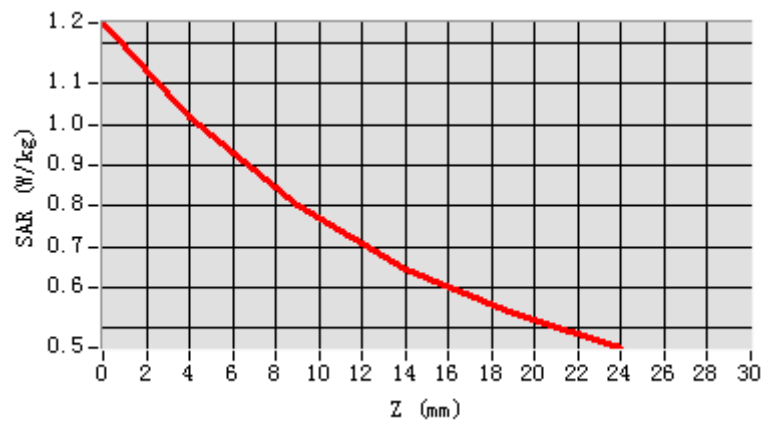


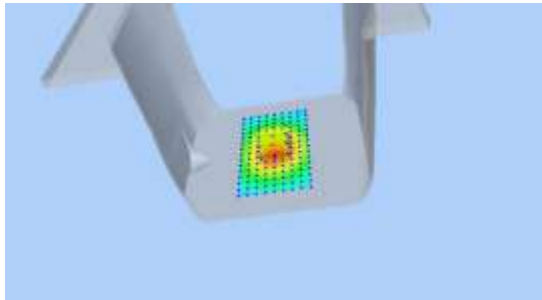
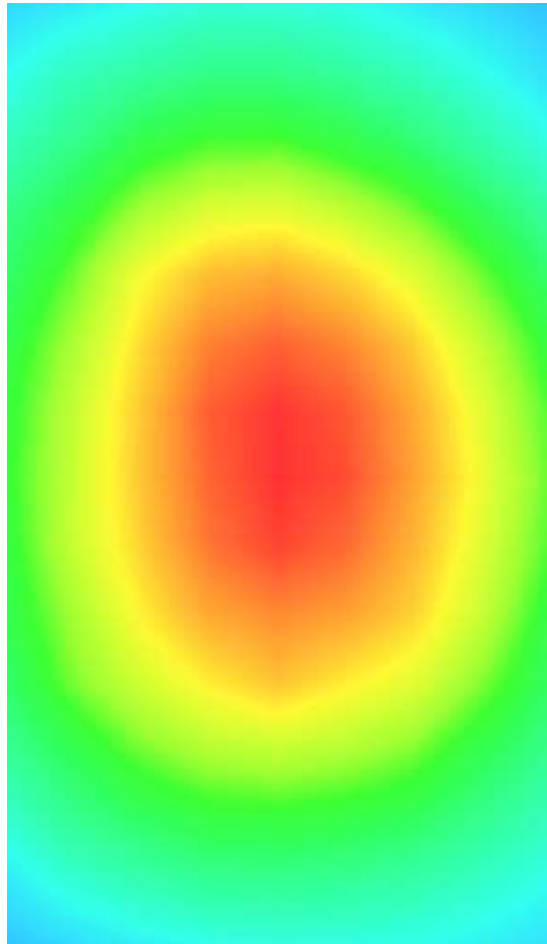
Maximum location: X=1.00 Y=0.00

SAR Peak: 1.25 W/kg

SAR 10g (W/Kg)	0.740528
SAR 1g (W/Kg)	0.973419

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.2490	1.0183	0.7996	0.6452	0.5372



3D screen shot	Hot spot position
	

Plot 10: LTE Band66, 20MHz, Back, Middle,15mm

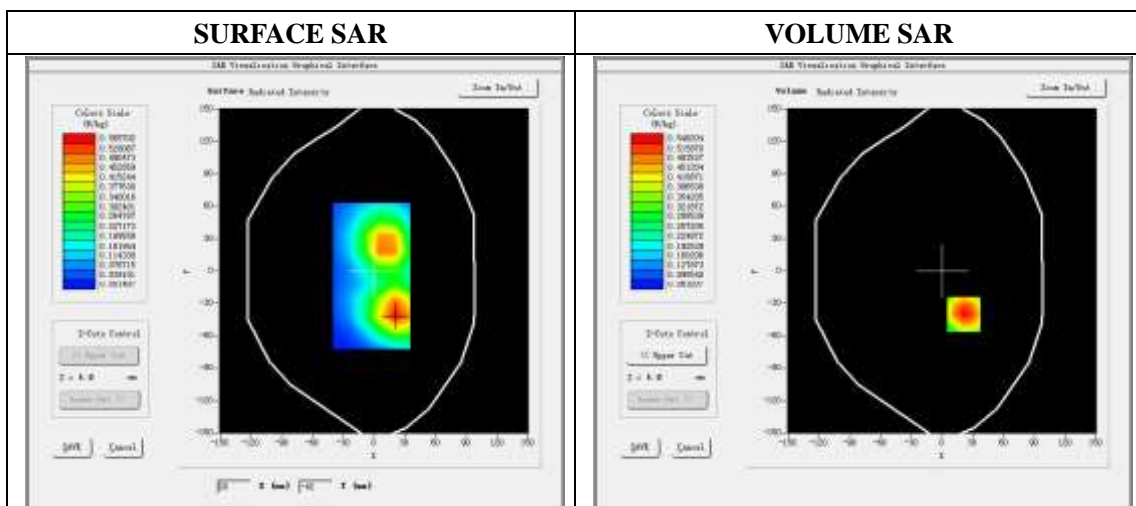
Type: Phone measurement
 Date of measurement: 11/22/2021
 Measurement duration: 22 minutes 20 seconds
 Mobile Phone IMEI number: --

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)	40.19
Relative permittivity (imaginary)	14.01
Conductivity (S/m)	1.36
Variation (%)	0.48
ConvF:	2.22

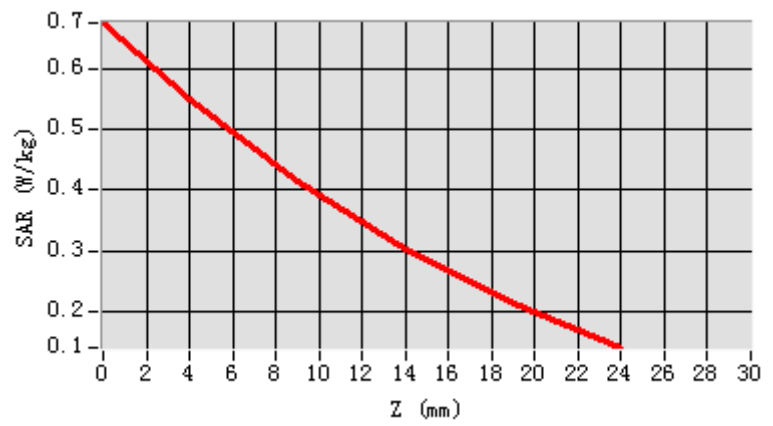


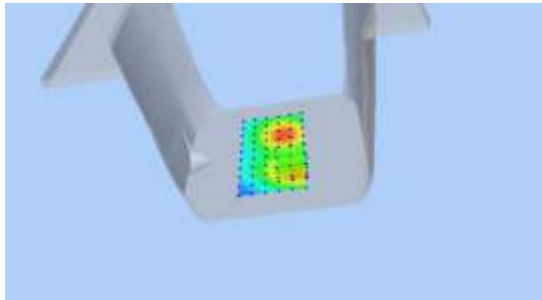
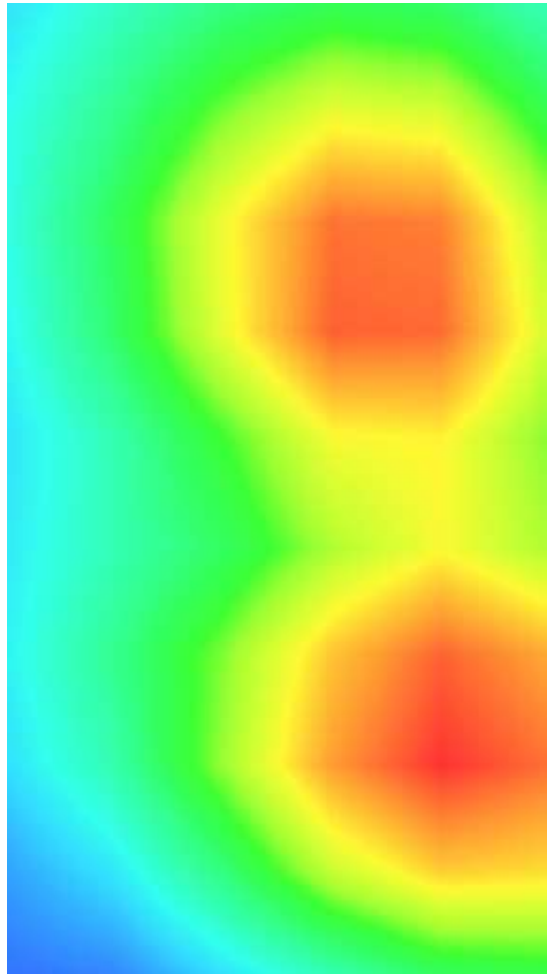
Maximum location: X=21.00 Y=-40.00

SAR Peak: 0.68 W/kg

SAR 10g (W/Kg)	0.356228
SAR 1g (W/Kg)	0.522611

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.6744	0.5482	0.4140	0.3035	0.2136



3D screen shot	Hot spot position
	

Plot 11: Wi-Fi 802.11b, Edge C ,Middle, 15mm

Type: Phone measurement

Date of measurement: 11/24/2021

Measurement duration: 22 minutes 51 seconds

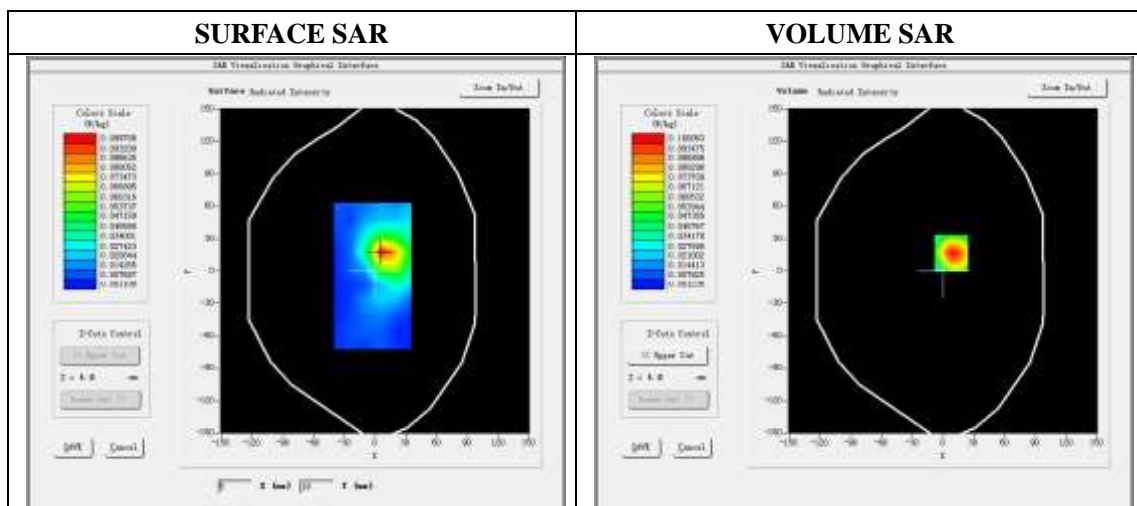
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm,dy=8mm
ZoomScan	7x7x8,dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Edge C
Band	WIFI 802.11b
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)	38.97
Relative permittivity (imaginary)	13.20
Conductivity (S/m)	1.79
Variation (%)	-2.20
ConvF:	2.40

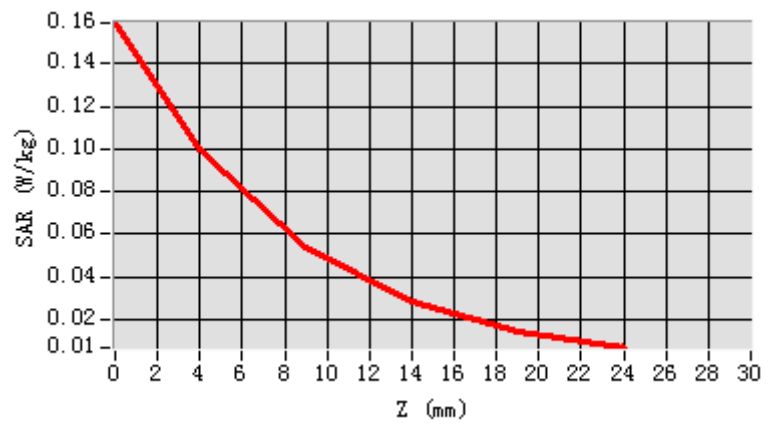


Maximum location: X=8.00 Y=17.00

SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)	0.049058
SAR 1g (W/Kg)	0.094159

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1590	0.1001	0.0538	0.0281	0.0146



3D screen shot	Hot spot position
