

**Appendix B: SAR Measurement results Plots**

Plot	Frequency/Mode	Testing Position and Channel	Test Date
1	LTE Band5	Edge C, Middle ,10mm	2021/04/12
2	LTE Band7	Edge C, Middle ,10mm	2021/04/16
3	WIFI 2.4G 802.11b	Edge A, Middle ,10mm	2021/04/16
4	WIFI 5G 802.11a	Body Back, Middle ,10mm	2021/04/17
5	LTE Band41	Edge C, Middle ,10mm	2021/04/16

Plot 1: LTE Band5, 10MHz, Edge C, Middle,10mm

Type: Phone measurement

Date of measurement: 04/12/2021

Measurement duration: 22 minutes 07 seconds

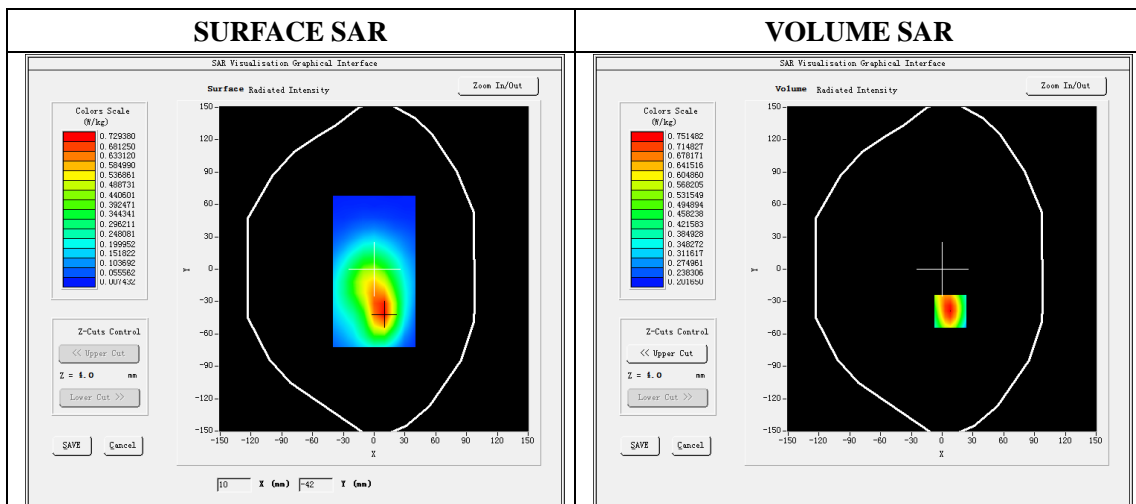
Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	836.5
Relative permittivity (real part)	55.23
Relative permittivity (imaginary)	20.91
Conductivity (S/m)	0.97
Variation (%)	0.06
ConvF:	1.90

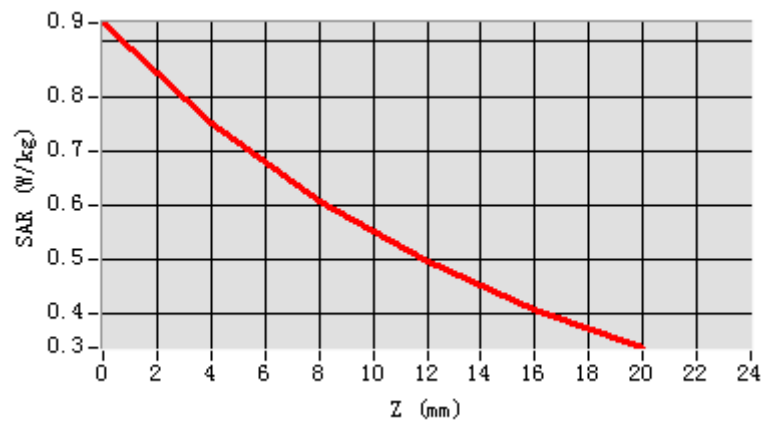


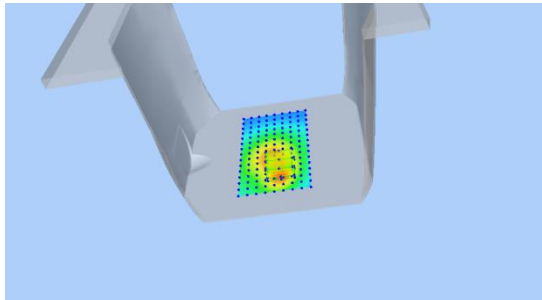
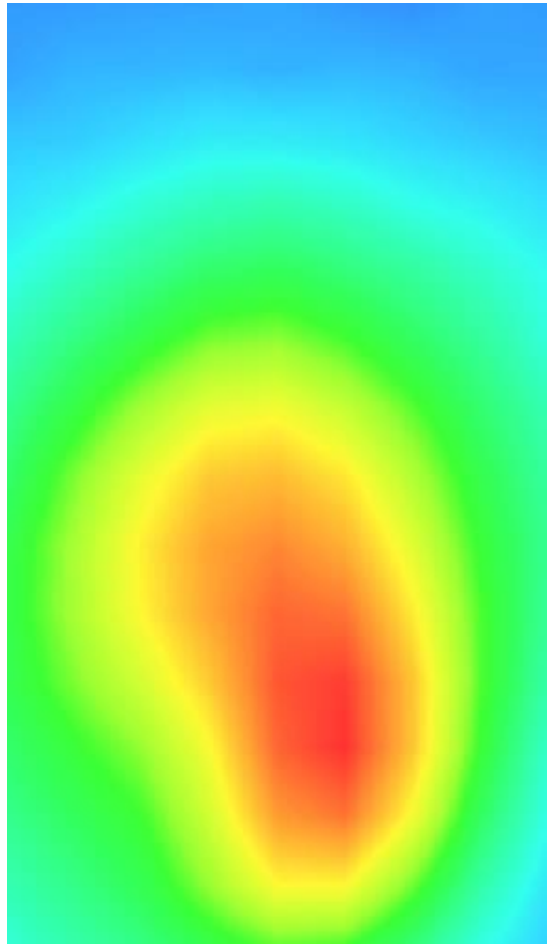
Maximum location: X=8.00, Y=-39.00

SAR Peak: 0.94W/kg

SAR 10g (W/Kg)	0.506344
SAR 1g (W/Kg)	0.709741

Z (mm)	0.00	4.00	8.00	12.00	16.00
SAR (W/Kg)	0.9343	0.7515	0.6073	0.4963	0.4104



3D screen shot	Hot spot position
	

Plot 2: LTE Band7, 20MHz, Edge C, Middle,10mm

Type: Phone measurement

Date of measurement: 04/16/2021

Measurement duration: 22 minutes 05 seconds

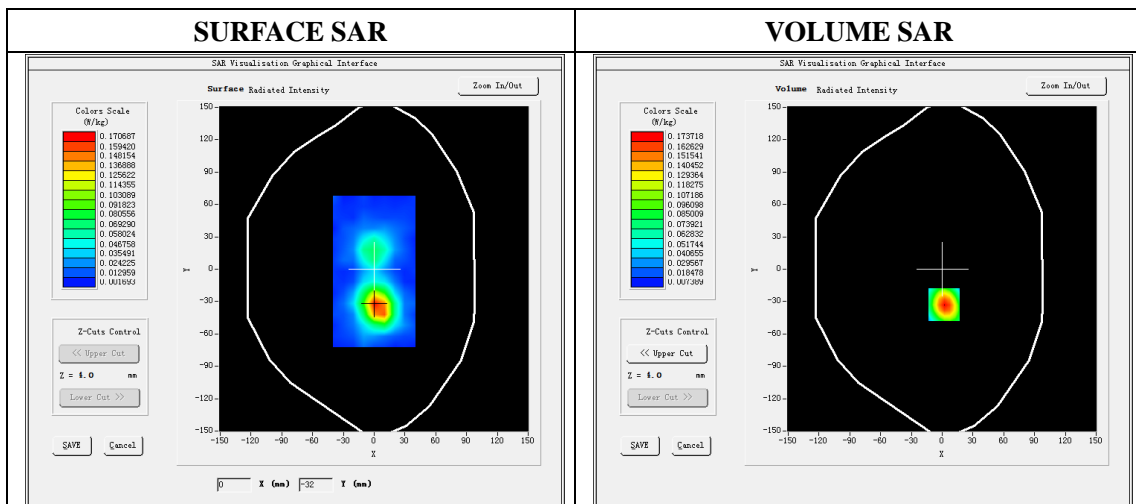
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=5mm,dy=5mm
ZoomScan	7x7x8,dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Edge C
Band	LTE Band 7
Channels	21350
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2560
Relative permittivity (real part)	52.54
Relative permittivity (imaginary)	15.09
Conductivity (S/m)	2.18
Variation (%)	-4.28
ConvF:	2.25

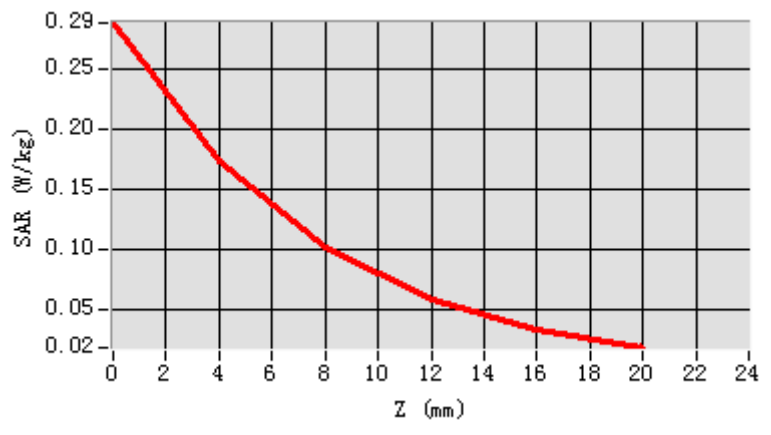


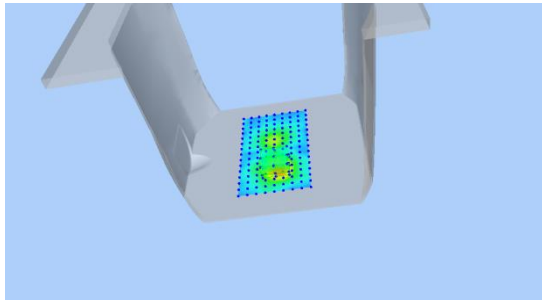
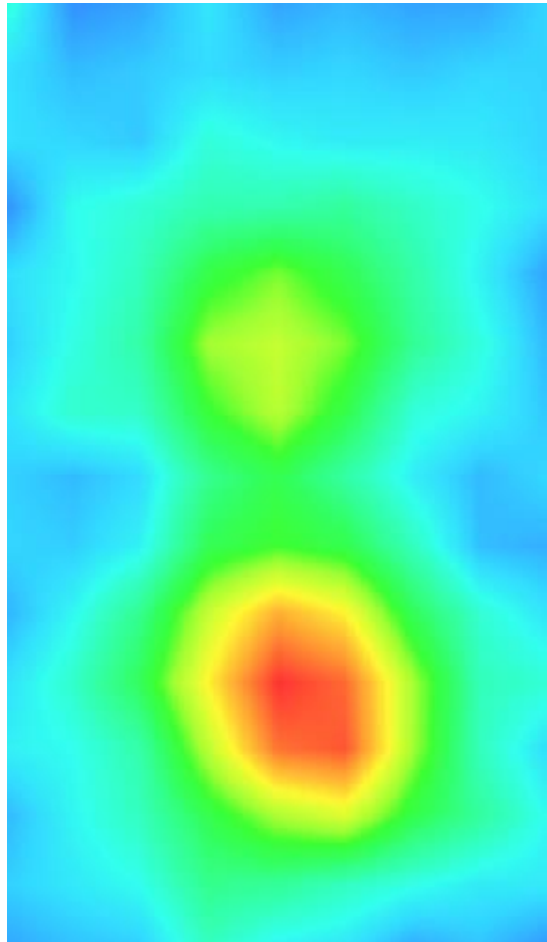
Maximum location: X=2.00 Y=-33.00

SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)	0.079234
SAR 1g (W/Kg)	0.158458

Z (mm)	0.00	4.00	8.00	12.00	16.00
SAR (W/Kg)	0.2875	0.1737	0.1020	0.0593	0.0347



3D screen shot	Hot spot position
	

Plot 3: Wi-Fi 802.11b, Edge A, Middle, 10mm

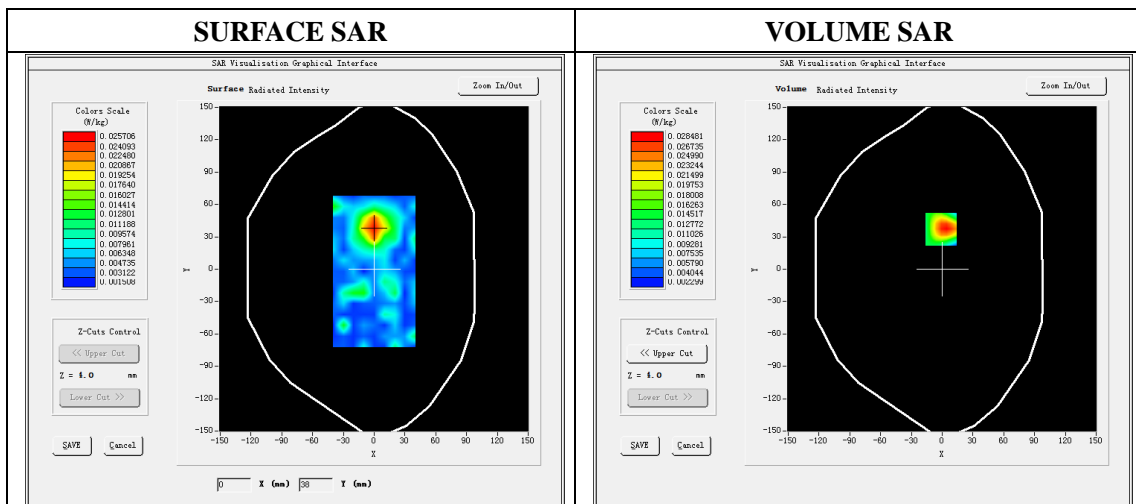
Type: Phone measurement
 Date of measurement: 04/16/2021
 Measurement duration: 22 minutes 13 seconds
 Mobile Phone IMEI number: --

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

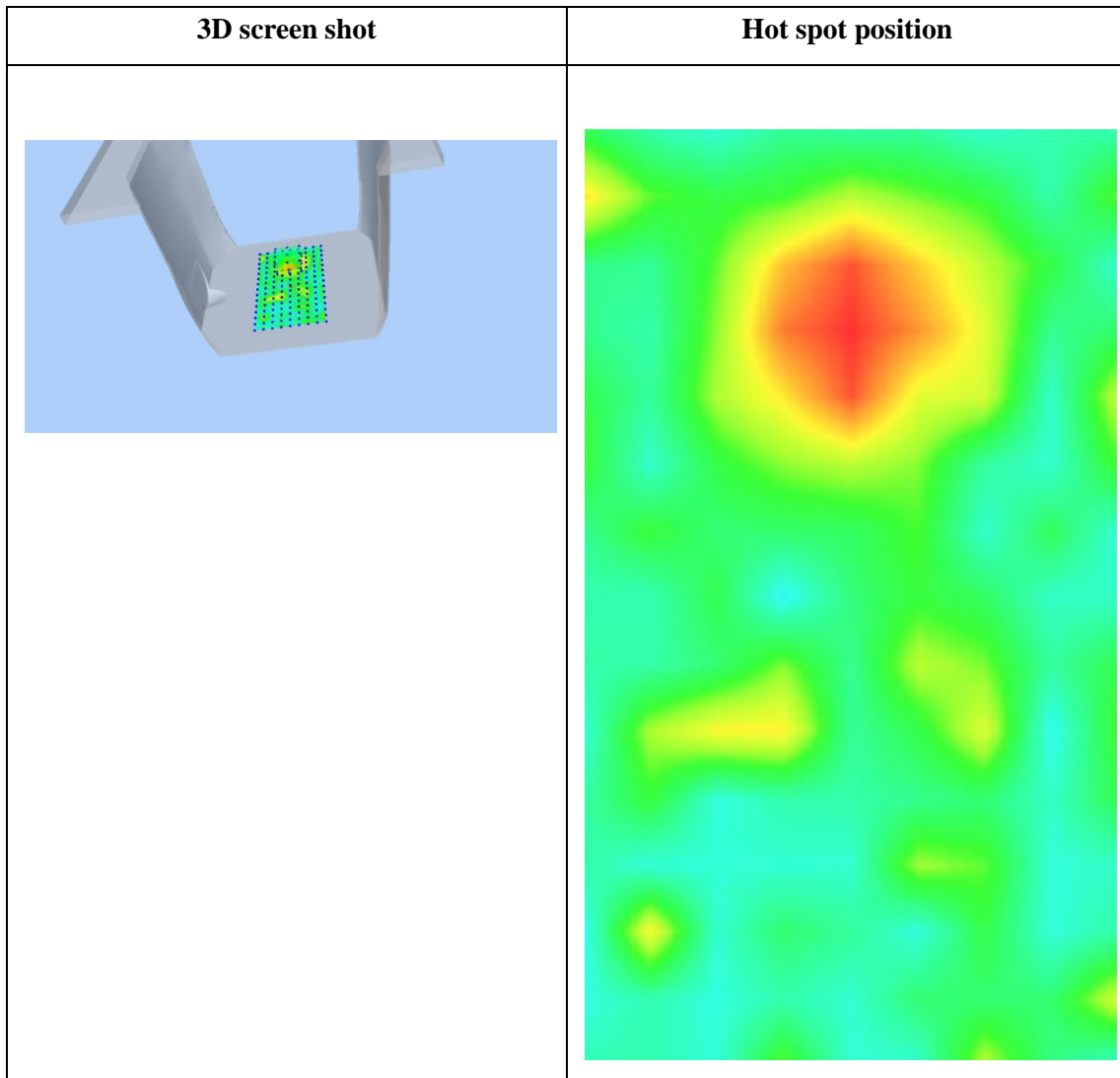
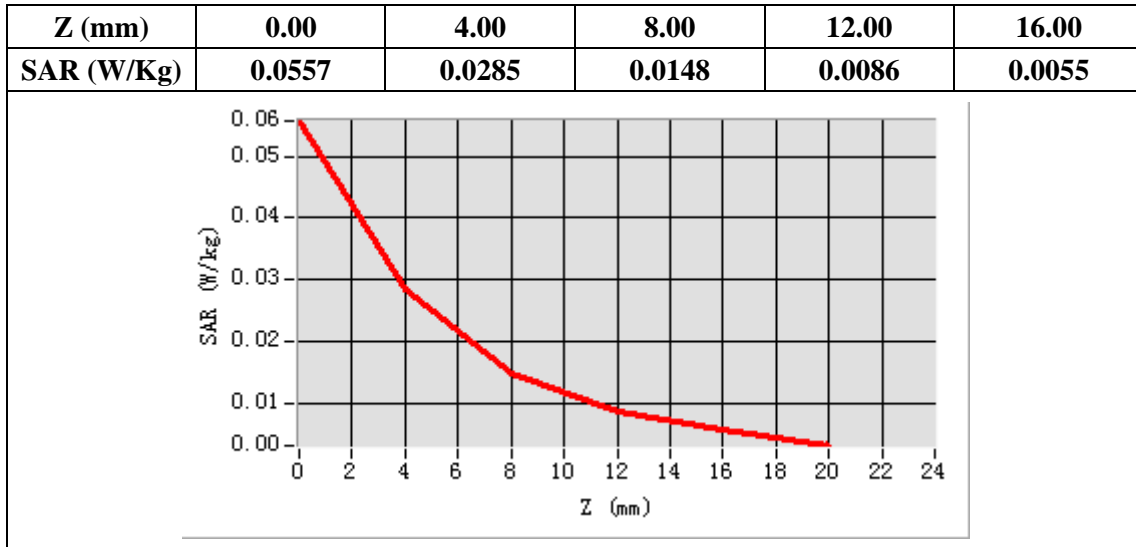
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2437
Relative permittivity (real part)	52.72
Relative permittivity (imaginary)	14.25
Conductivity (S/m)	1.94
Variation (%)	-4.17
ConvF:	2.47



Maximum location: X=-1.00 Y=37.00

SAR Peak: 0.06 W/kg

SAR 10g (W/Kg)	0.014131
SAR 1g (W/Kg)	0.027556



Plot 4: WIFI 5G 802.11a(20MHz), Back , Middle,10mm

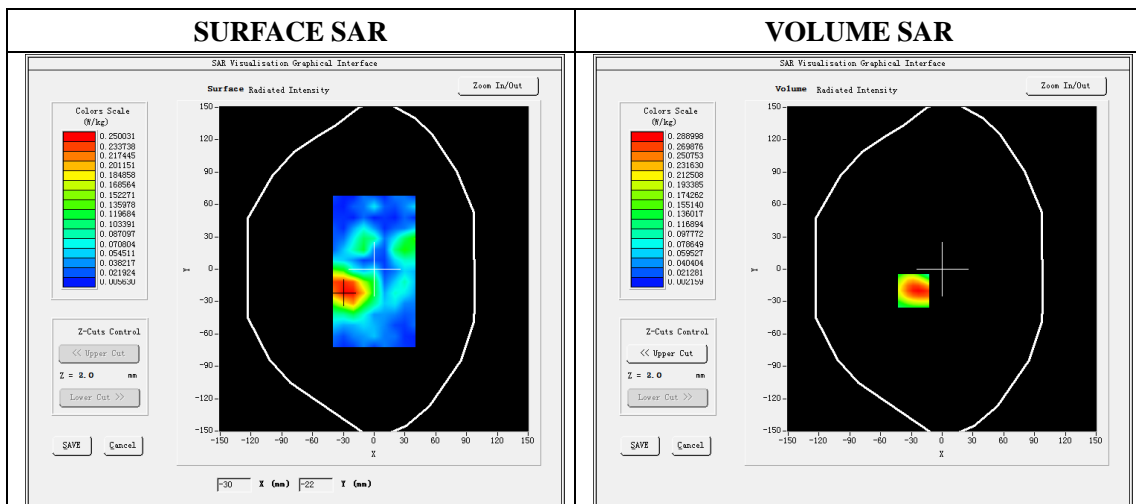
Type: Phone measurement
 Date of measurement: 04/17/2021
 Measurement duration: 22 minutes 12 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=4mm,dy=4mm
ZoomScan	7x7x12,dx=4m, dy=4mm, dz=2mm
Phantom	Validation plane
Device Position	Back
Band	WIFI 5G
Channels	149
Signal	OFDM (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5745
Relative permittivity (real part)	48.23
Relative permittivity (imaginary)	18.65
Conductivity (S/m)	6.01
Variation (%)	-3.06
ConvF:	2.34

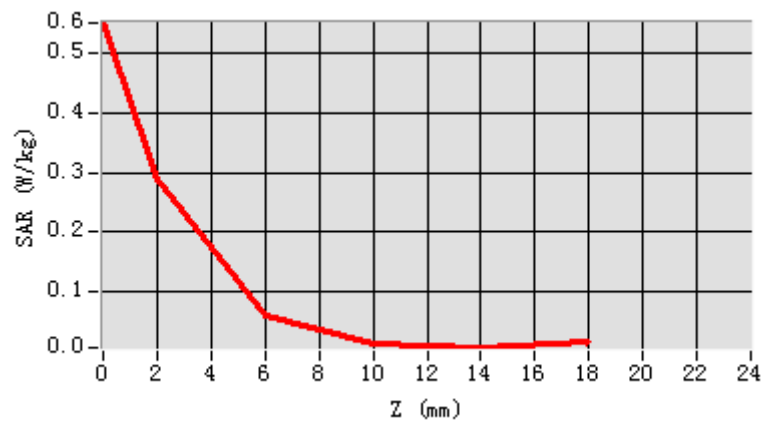


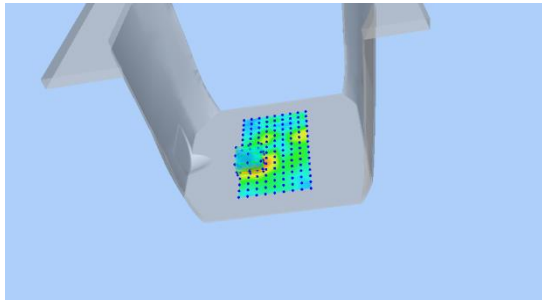
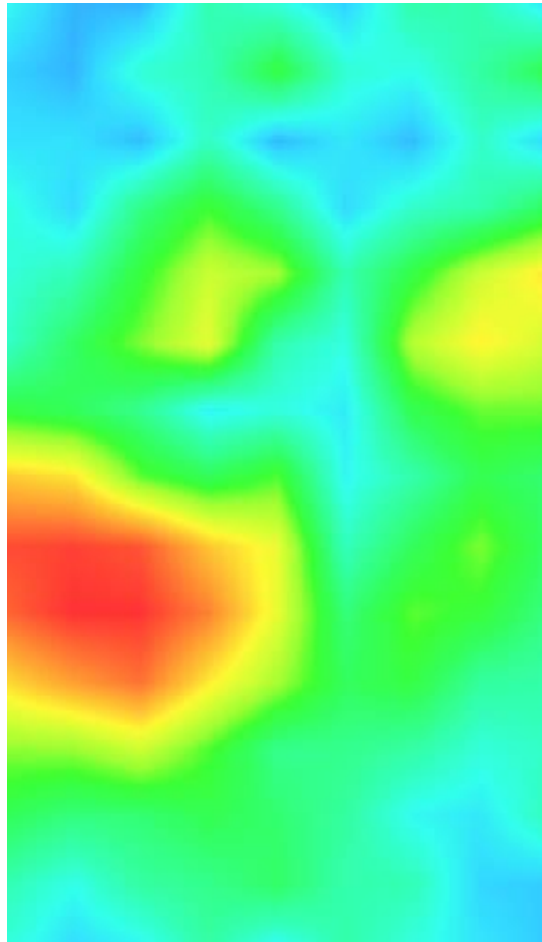
Maximum location: X=-28.00 Y=-20.00

SAR Peak: 0.55 W/kg

SAR 10g (W/Kg)	0.066118
SAR 1g (W/Kg)	0.163528

Z (mm)	0.00	2.00	6.00	10.00	14.00
SAR (W/Kg)	0.5522	0.2890	0.0582	0.0115	0.0041



3D screen shot	Hot spot position
	

Plot 5 Testing result (LTE Band 41 Bandwidth 20MHz, Edge C, Middle 10mm)

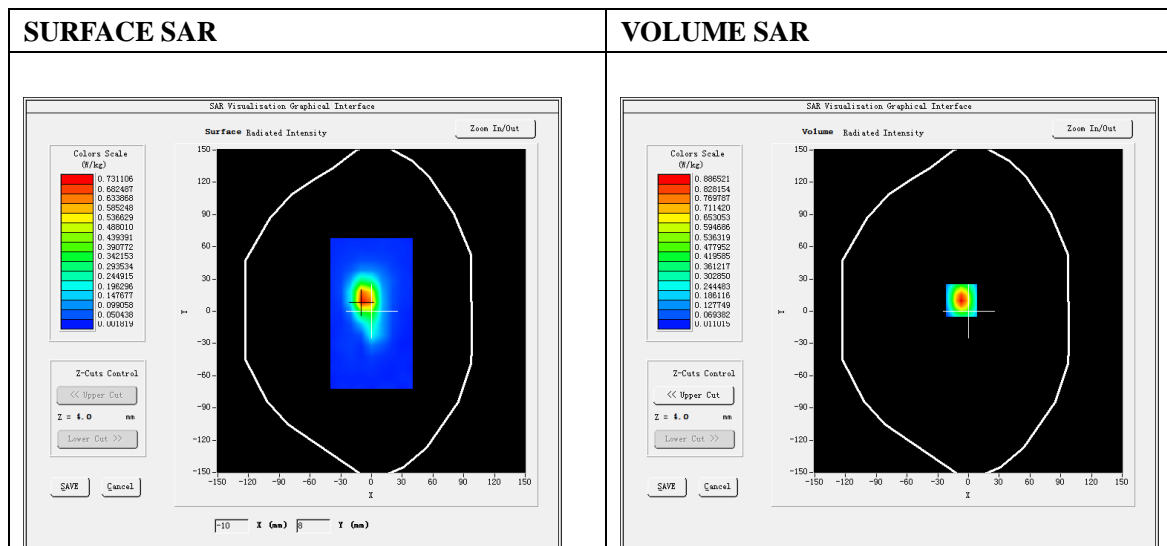
Type: Phone measurement
 Date of measurement: 04/16/2020
 Measurement duration: 22 minutes 22 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	2605
Relative permittivity (real part)	39.04
Relative permittivity (imaginary part)	13.43
Conductivity (S/m)	1.94
Variation (%)	-0.85

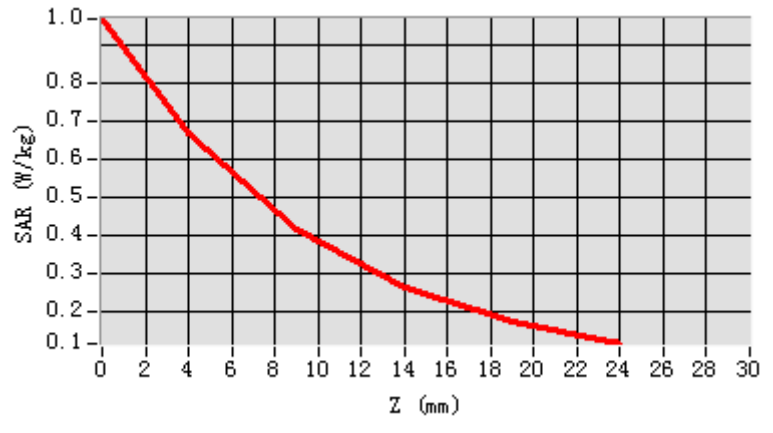


Maximum location: X=-7.00, Y=-35.00

SAR Peak: 0.97 W/kg

SAR 10g (W/Kg)	0.384778
SAR 1g (W/Kg)	0.620565

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.9658	0.6668	0.4166	0.2652	0.1759



3D screen shot	Hot spot position
