

Appendix B: SAR Measurement results Plots

Plot	Frequency/Mode	Testing Position and Channel	Test Date
1	GSM850/GPRS4Tx	Edge C, Middle ,5mm	2019/09/02
2	GSM1900/GPRS4Tx	Edge C, Middle ,5mm	2019/09/03
3	WCDMA1900	Edge C, Middle ,5mm	2019/09/03
4	WCDMA850	Edge C, Middle ,5mm	2019/09/02
5	LTE Band5	Edge D, Middle ,5mm	2019/09/02
6	LTE Band7	Edge C, Middle ,5mm	2019/09/05
7	LTE Band41	Edge C, Middle ,5mm	2019/09/05
8	WIFI 2.4G 802.11b	Edge D, Middle ,5mm	2019/09/04
9	WIFI 5G 802.11a	Body Face, Middle ,5mm	2019/09/10
10	CDMA BC0	Edge B, Middle ,5mm	2019/09/02
11	RFID	Edge A, Middle ,5mm	2019/09/02

Plot 1: GPRS850, Edge C, Middle,5mm

Type: Phone measurement

Date of measurement: 09/02/2019

Measurement duration: 22 minutes 07 seconds

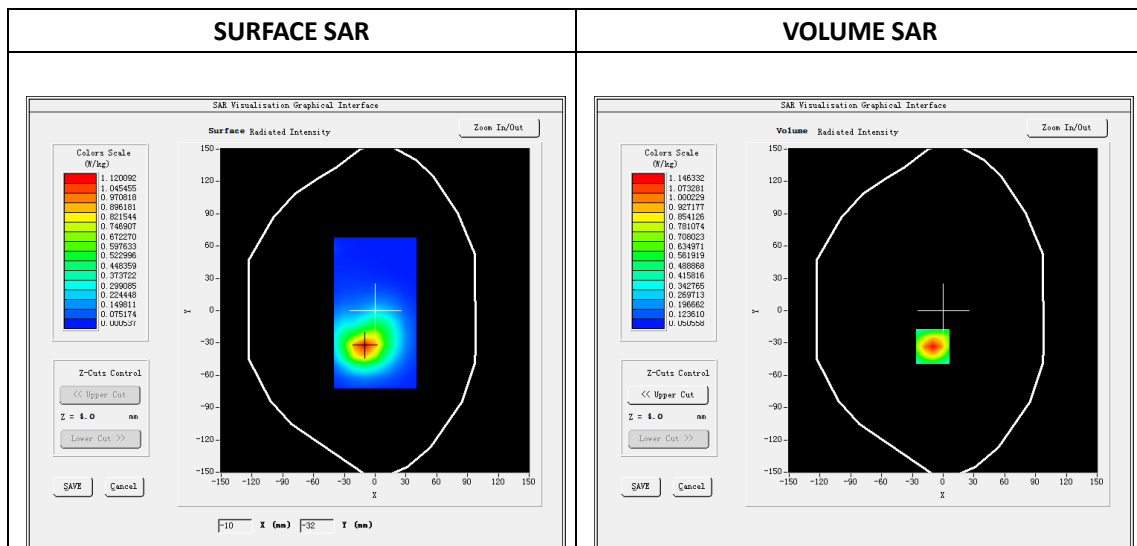
Mobile Phone IMEI number: --

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	GSPRS850_4Tx
Channels	190
Signal	GPRS(Duty cycle: 1:2)

B. SAR Measurement Results

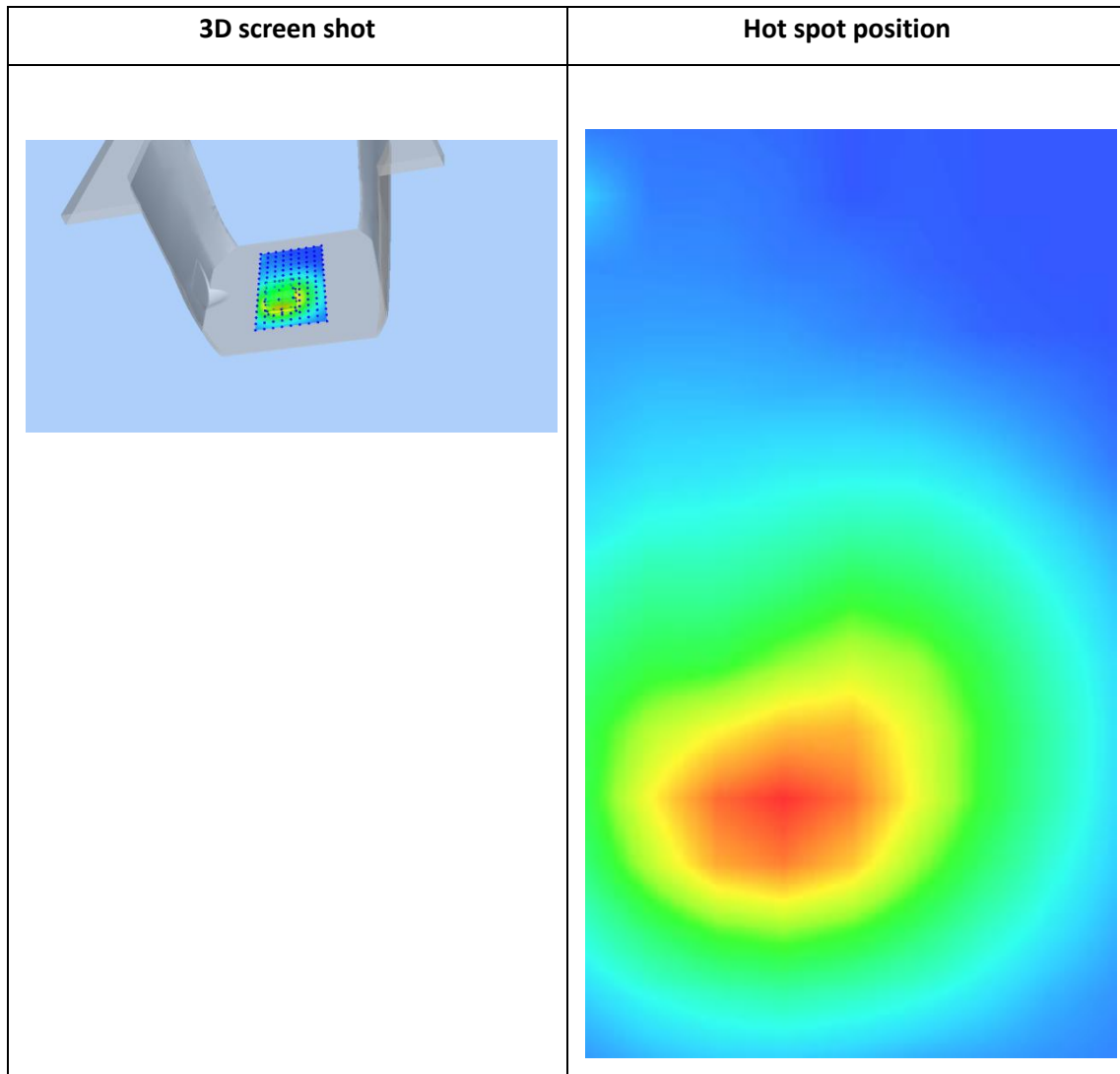
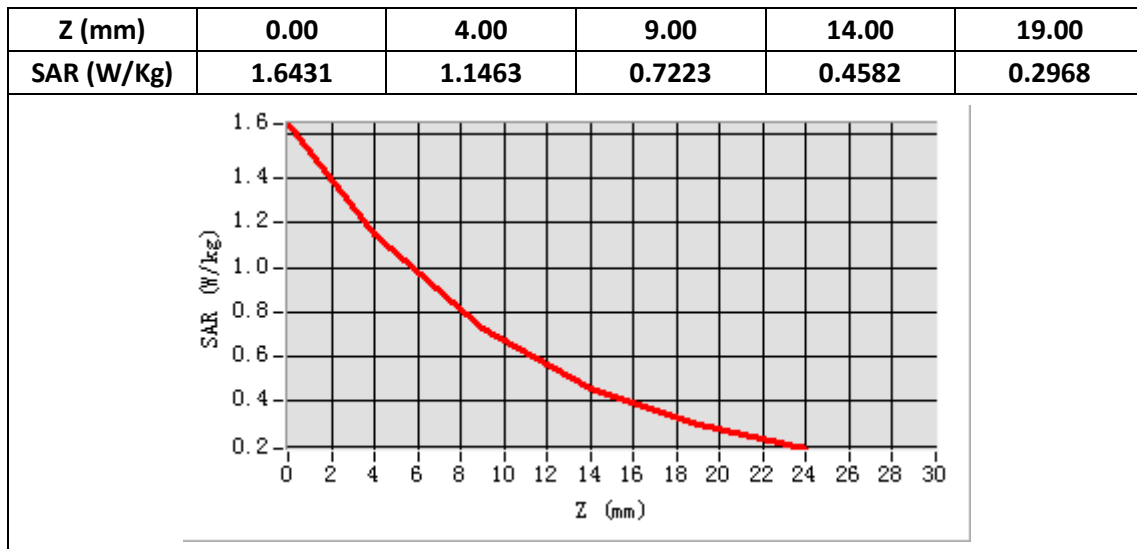
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	836.6
Relative permittivity (real part)	55.56
Relative permittivity (imaginary part)	20.91
Conductivity (S/m)	0.97
Variation (%)	-2.53
ConvF:	1.99



Maximum location: X=-10.00, Y=-33.00

SAR Peak: 1.64 W/kg

SAR 10g (W/Kg)	0.617911
SAR 1g (W/Kg)	1.081164



Plot2: GPRS1900, Edge C, Middle ,5mm

Type: Phone measurement

Date of measurement: 09/03/2019

Measurement duration: 22 minutes 03 seconds

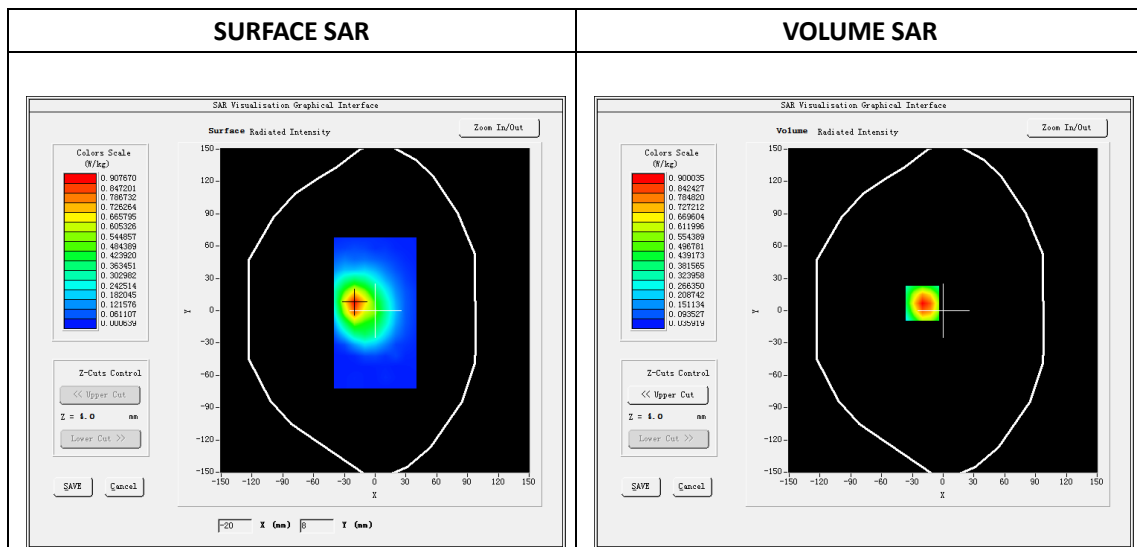
Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

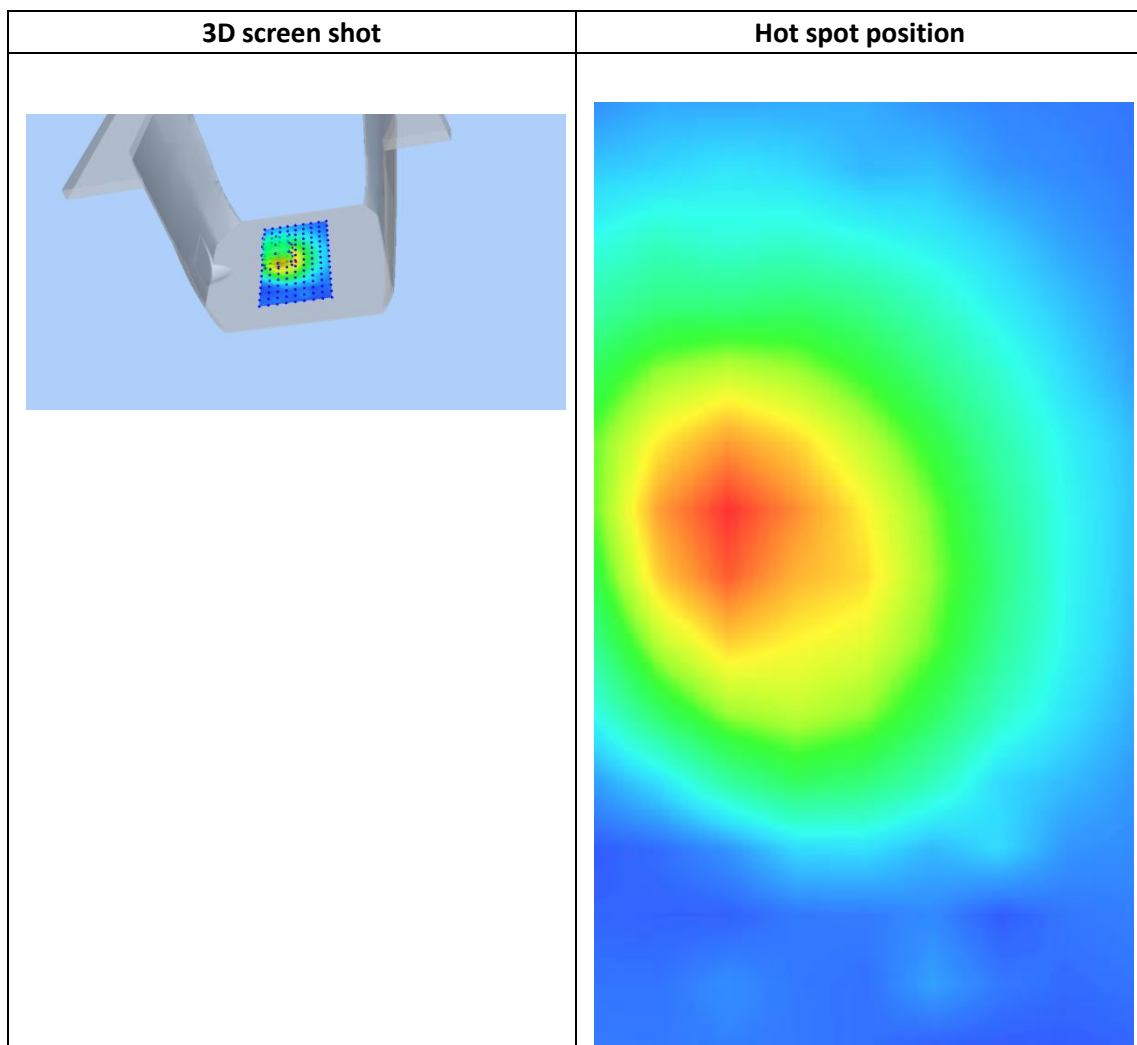
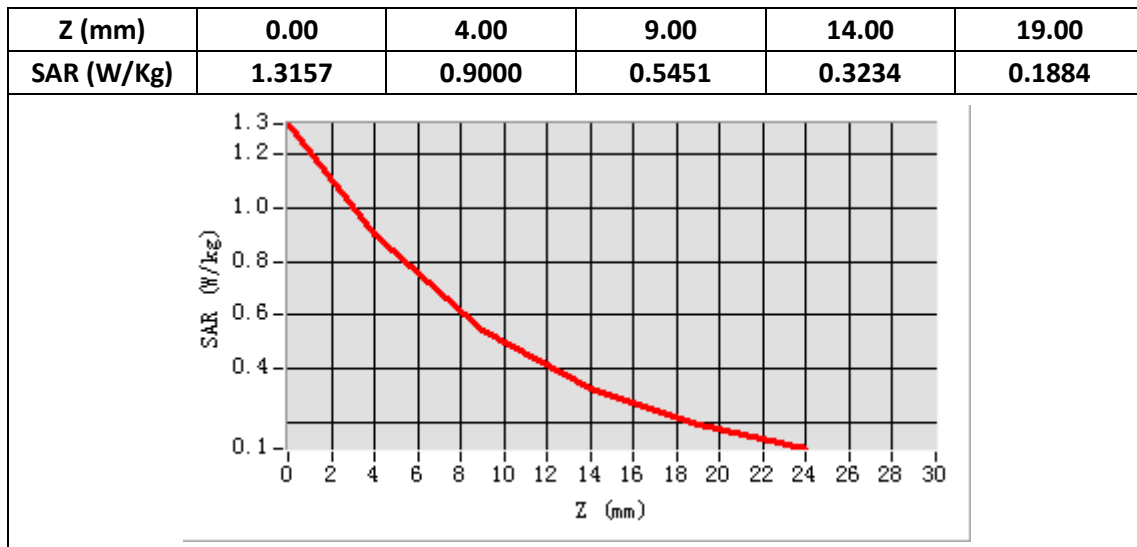
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1880
Relative permittivity (real part)	53.54
Relative permittivity (imaginary part)	14.31
Conductivity (S/m)	1.51
Variation (%)	-2.02
ConvF:	2.39



Maximum location: X=-20.00, Y=7.00

SAR Peak: 1.35W/kg

SAR 10g (W/Kg)	0.470234
SAR 1g (W/Kg)	0.844893



Plot 3: WCDMA1900 Edge C, Middle,5mm

Type: Phone measurement

Date of measurement: 09/03/2019

Measurement duration: 22 minutes 12 seconds

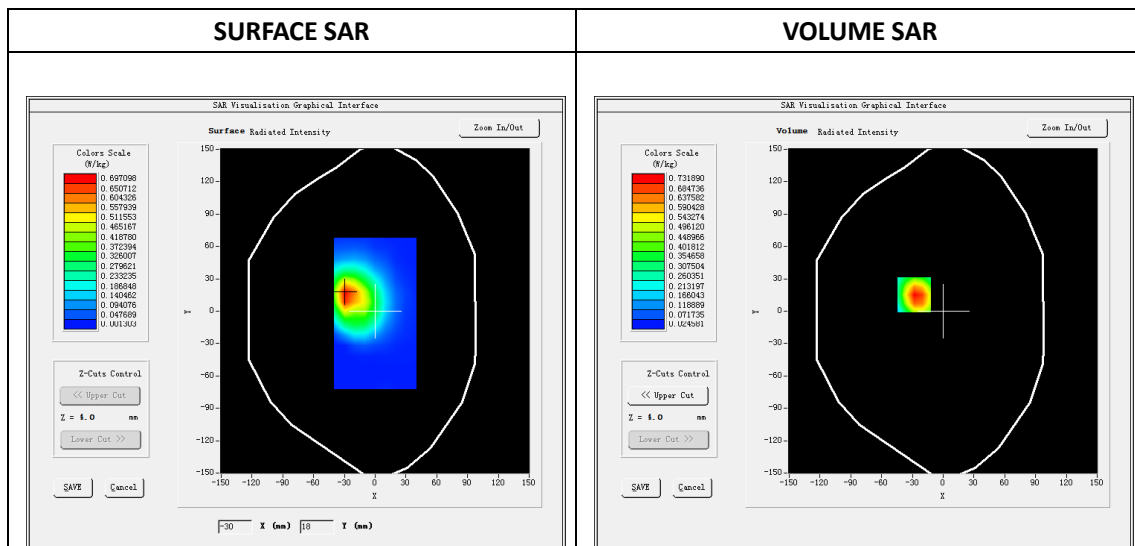
Mobile Phone IMEI number: --

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	Band2_WCDMA1900
Channels	9400
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

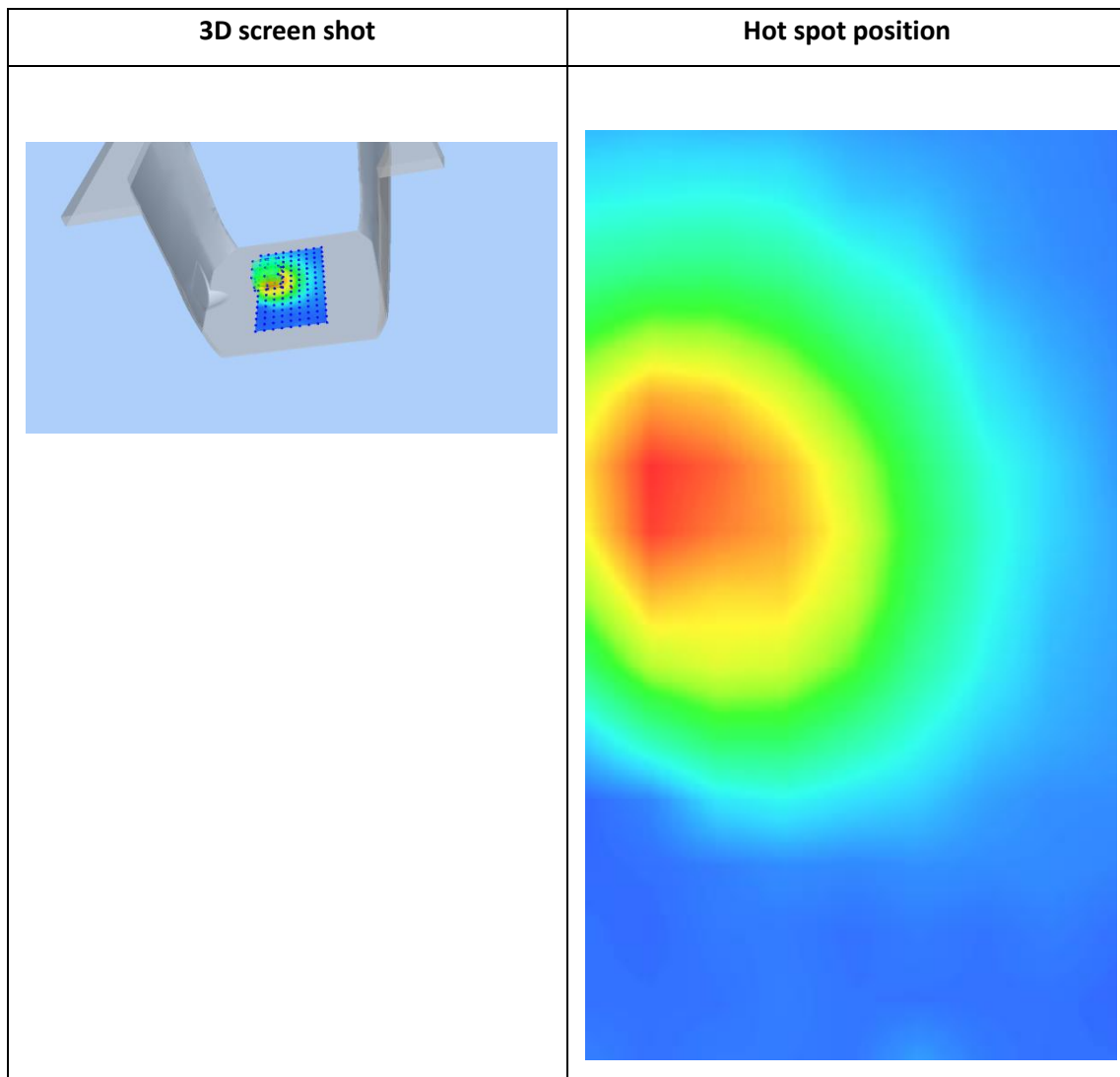
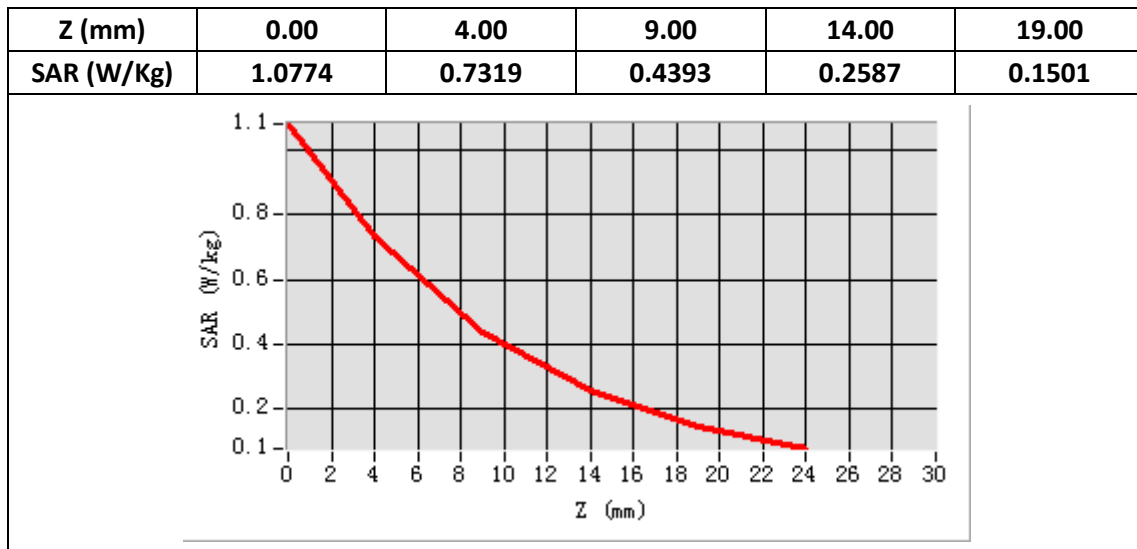
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1880
Relative permittivity (real part)	53.54
Relative permittivity (imaginary part)	14.31
Conductivity (S/m)	1.51
Variation (%)	-3.88
ConvF:	2.39



Maximum location: X=-28.00, Y=15.00

SAR Peak: 1.12W/kg

SAR 10g (W/Kg)	0.383681
SAR 1g (W/Kg)	0.693415



Plot 4: WCDMA850, Edge C, Middle,5mm

Type: Phone measurement

Date of measurement: 09/02/2019

Measurement duration: 22 minutes 14 seconds

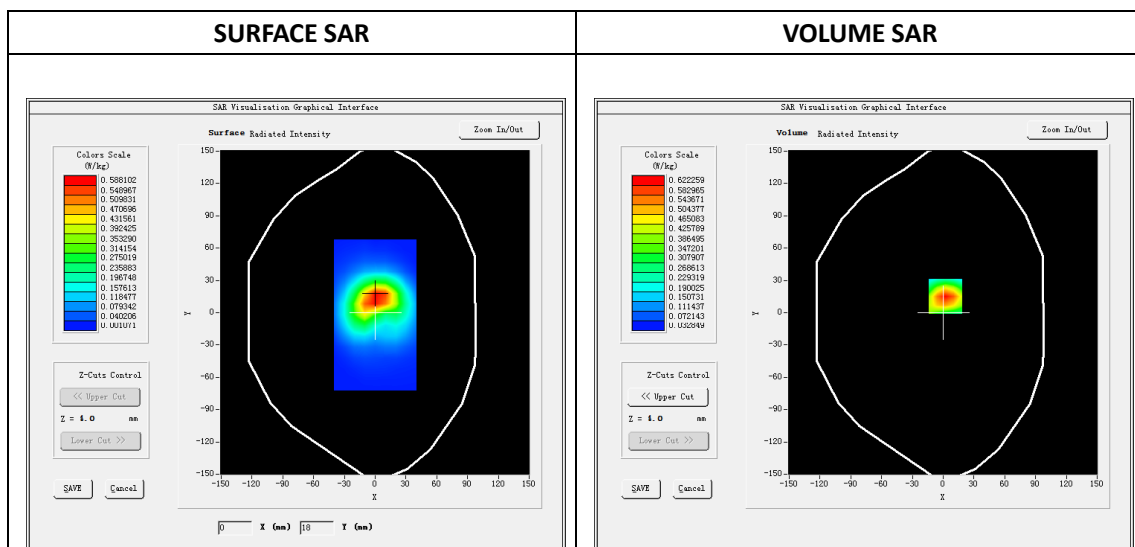
Mobile Phone IMEI number: --

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

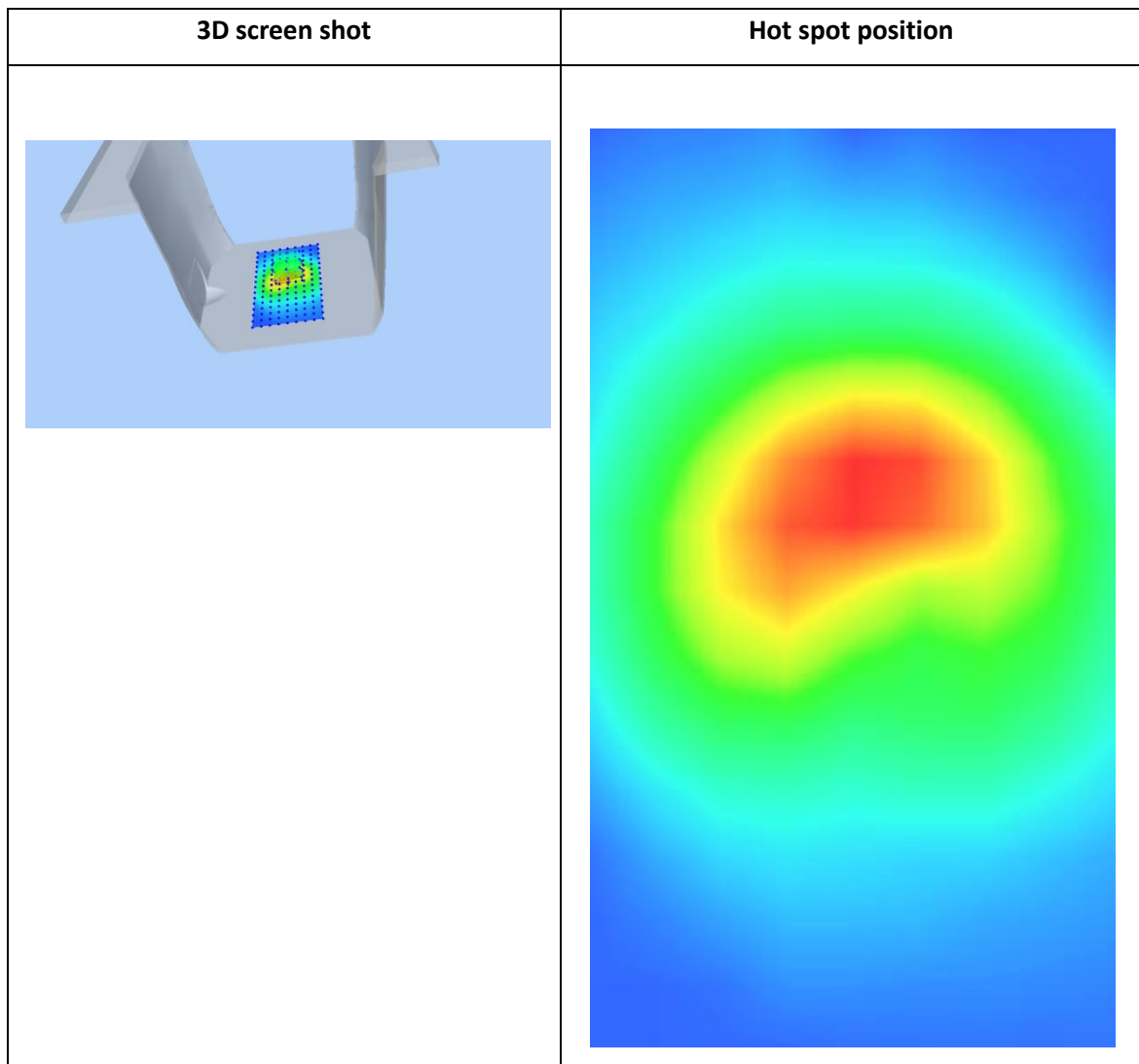
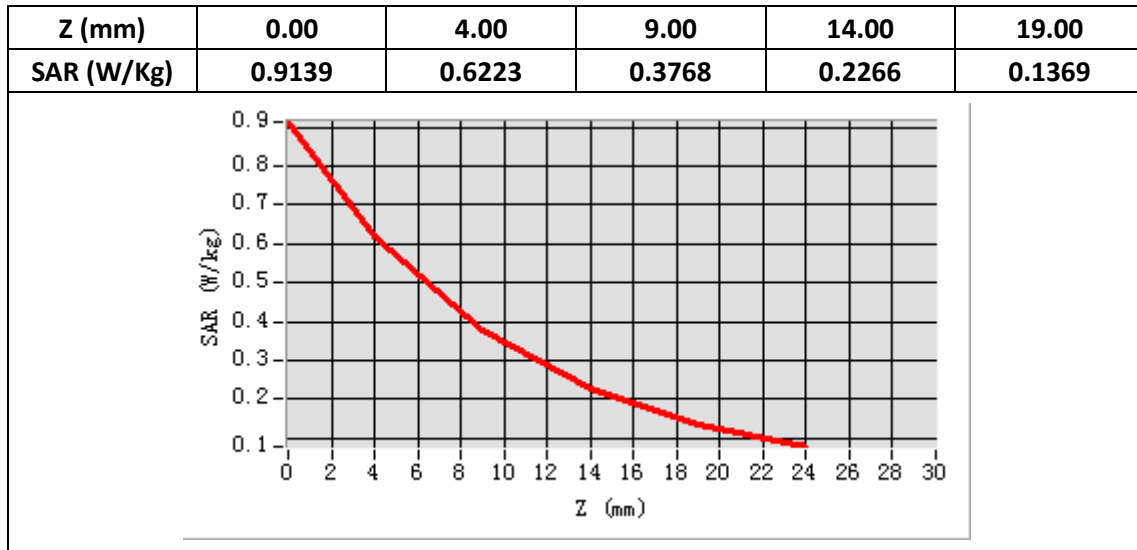
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	836.6
Relative permittivity (real part)	55.56
Relative permittivity (imaginary part)	20.91
Conductivity (S/m)	0.97
Variation (%)	-3.34
ConvF:	1.99



Maximum location: X=2.00, Y=15.00

SAR Peak: 0.92W/kg

SAR 10g (W/Kg)	0.331053
SAR 1g (W/Kg)	0.589342



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

Type: Phone measurement

Date of measurement: 09/02/2019

Measurement duration: 22 minutes 17 seconds

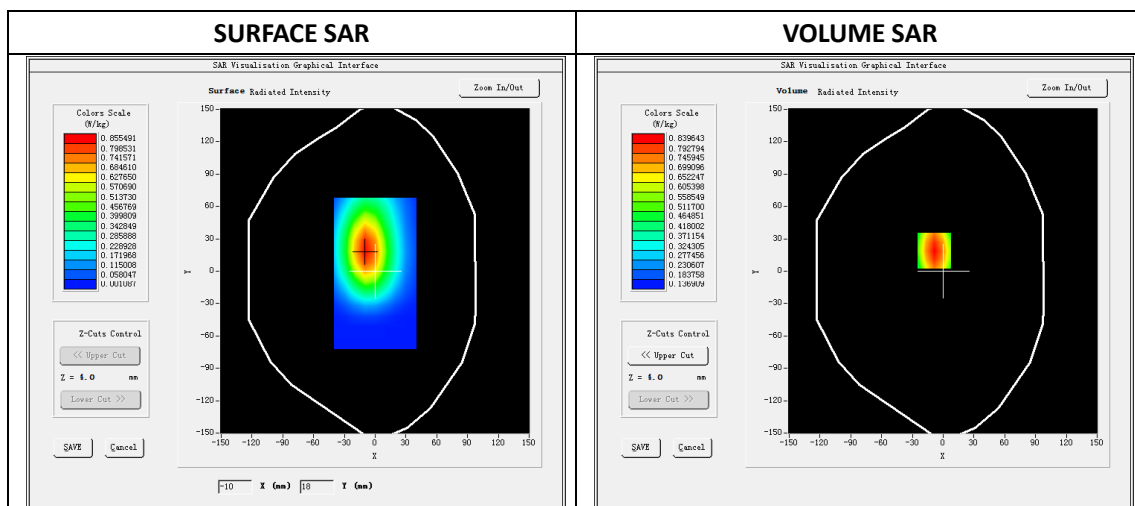
Mobile Phone IMEI number: --

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

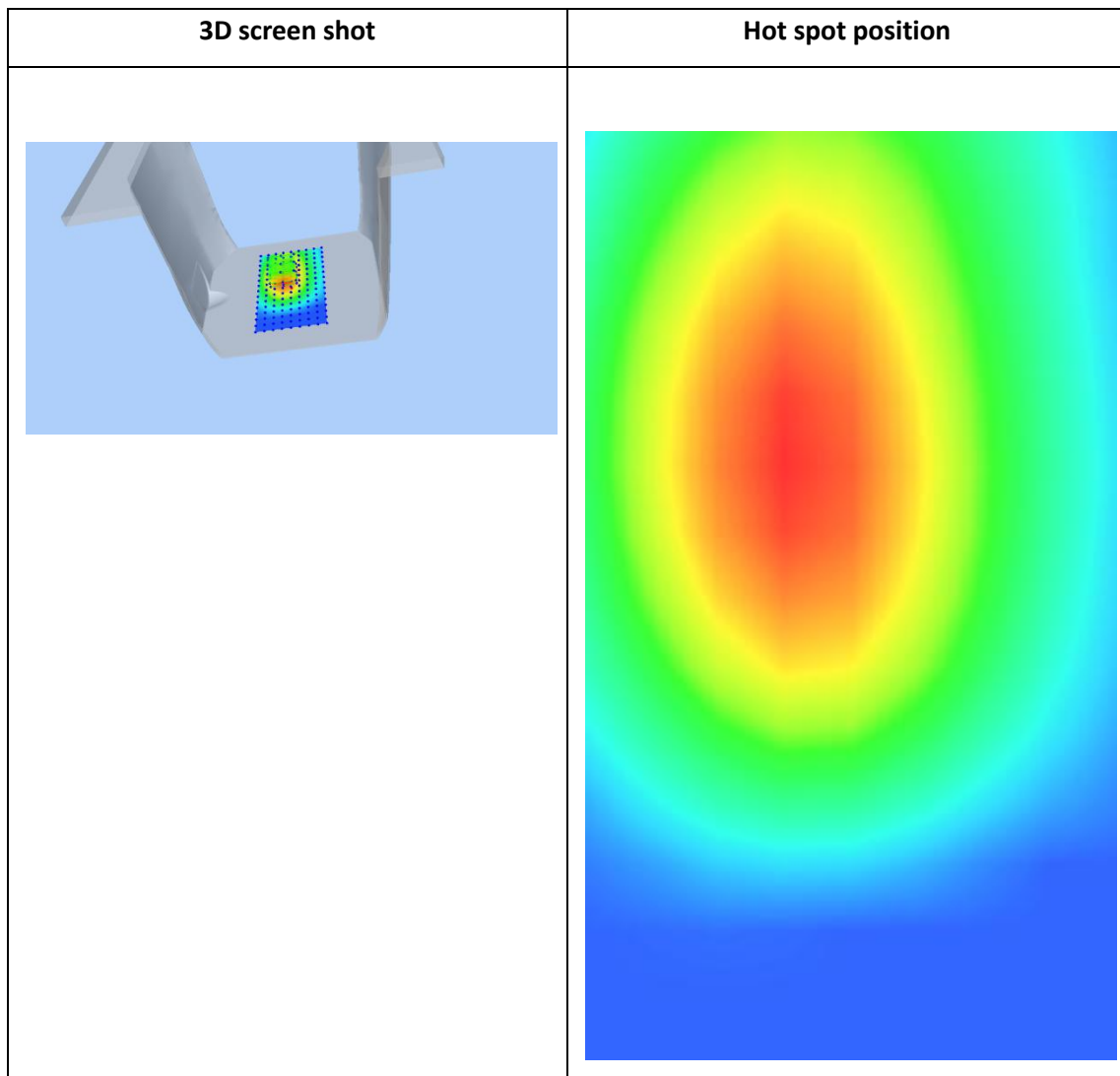
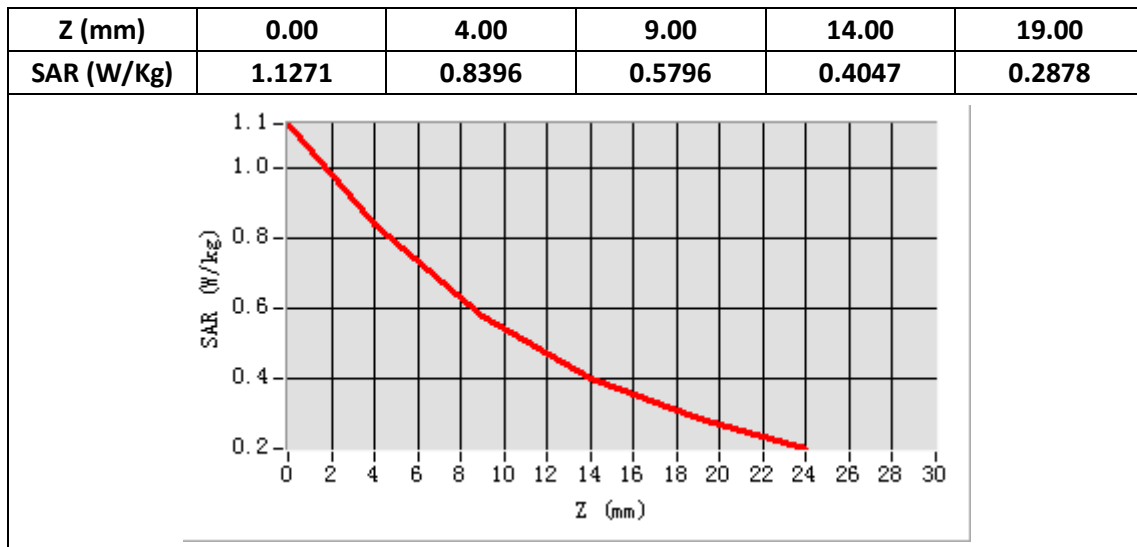
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	836.5
Relative permittivity (real part)	55.56
Relative permittivity (imaginary part)	20.91
Conductivity (S/m)	0.97
Variation (%)	0.35
ConvF:	1.99



Maximum location: X=-9.00, Y=19.00

SAR Peak: 1.13W/kg

SAR 10g (W/Kg)	0.534159
SAR 1g (W/Kg)	0.813030



Plot 6: LTE Band7, 20MHz, Edge C, Middle,5mm

Type: Phone measurement

Date of measurement: 09/05/2019

Measurement duration: 22 minutes 16 seconds

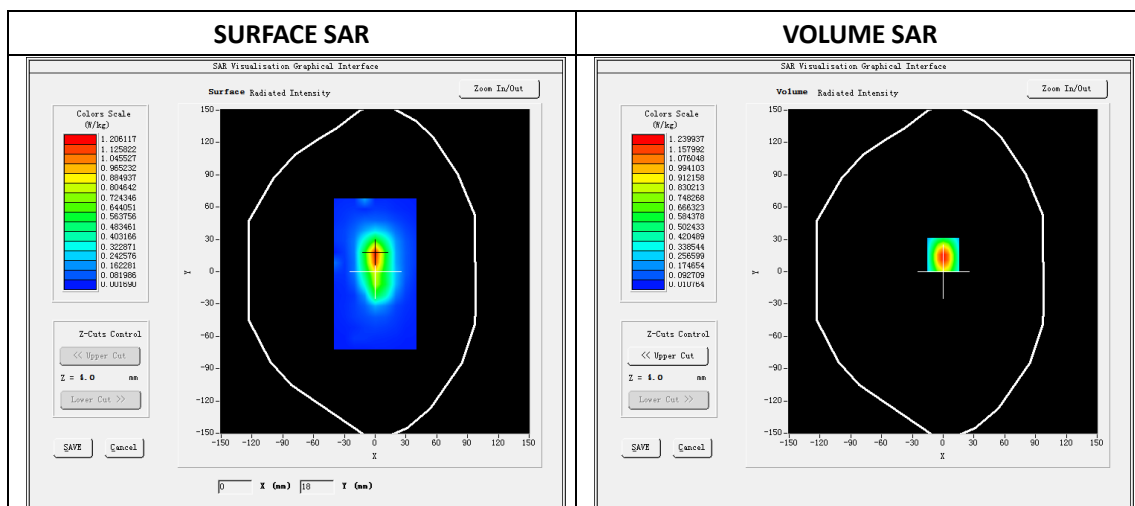
Mobile Phone IMEI number: --

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 7
Channels	21100
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

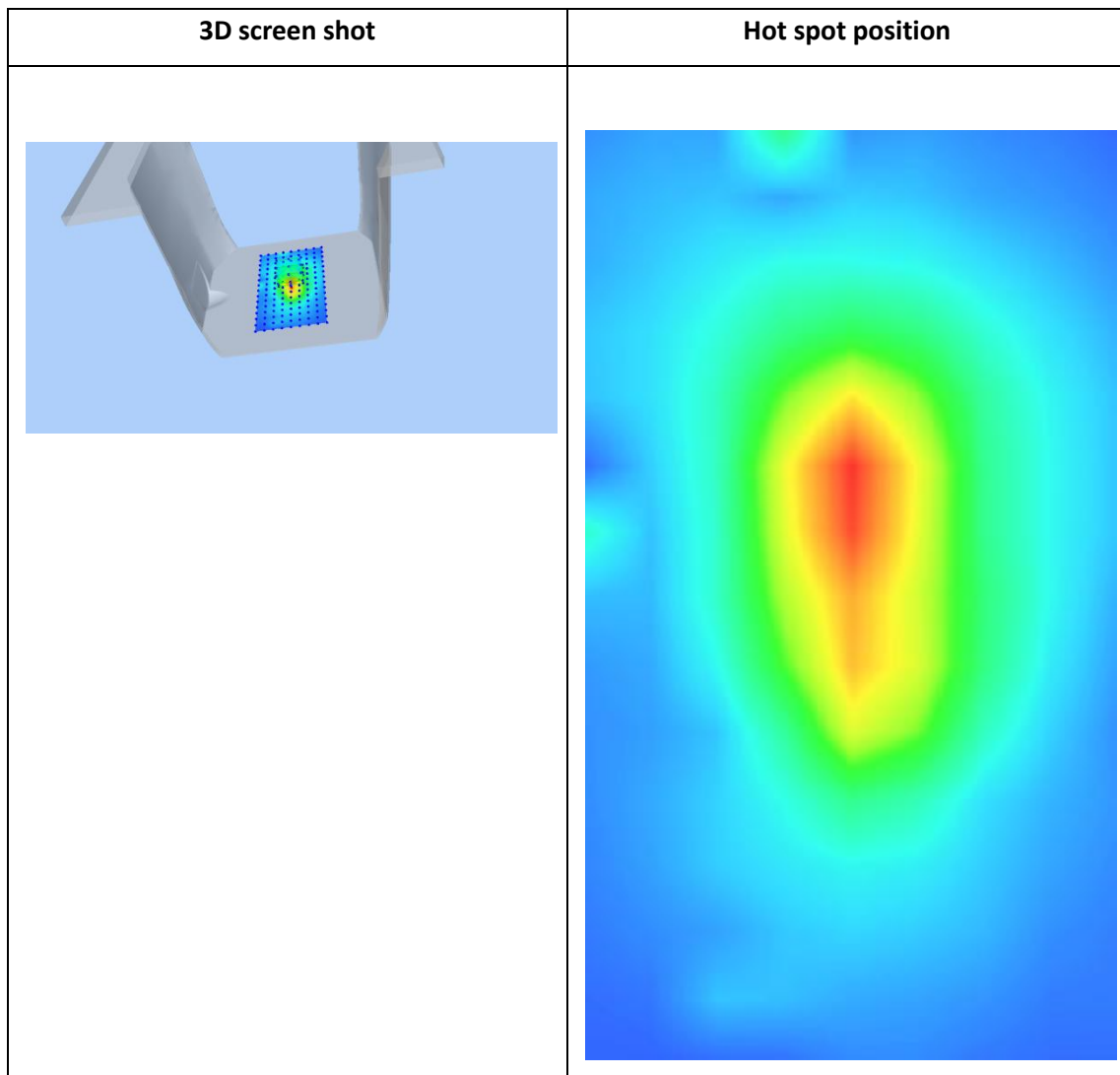
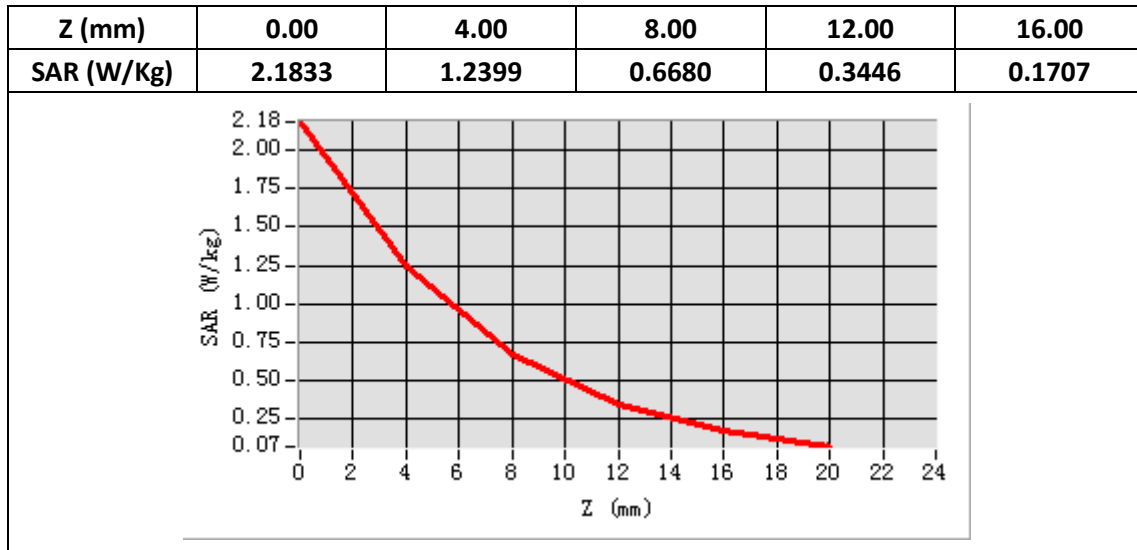
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2535
Relative permittivity (real part)	53.01
Relative permittivity (imaginary part)	15.02
Conductivity (S/m)	2.17
Variation (%)	-0.96
ConvF:	2.43



Maximum location: X=0.00 y=16.00

SAR Peak: 2.21W/kg

SAR 10g (W/Kg)	0.503598
SAR 1g (W/Kg)	1.124819



Plot 7: LTE Band41, 20MHz, Edge C, Middle,5mm

Type: Phone measurement

Date of measurement: 09/05/2019

Measurement duration: 22 minutes 18 seconds

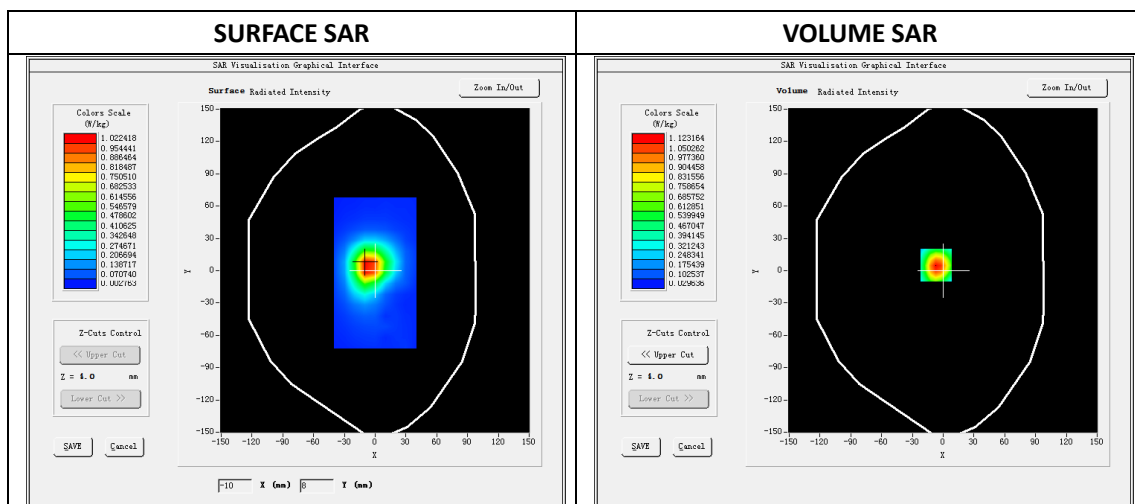
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Edge C
Band	LTE Band 41
Channels	40620
Signal	LTE (Duty cycle: 63%)

B. SAR Measurement Results

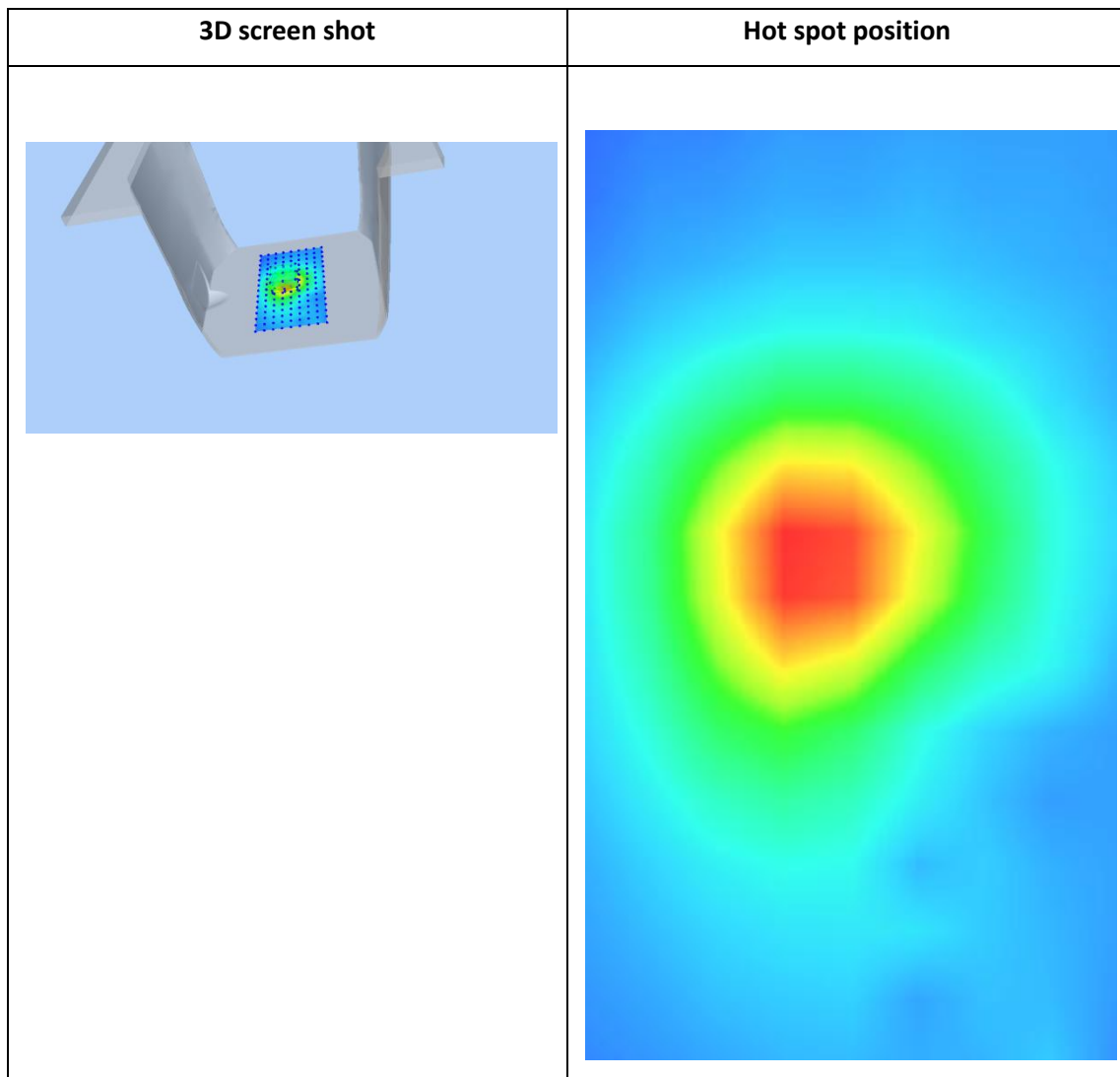
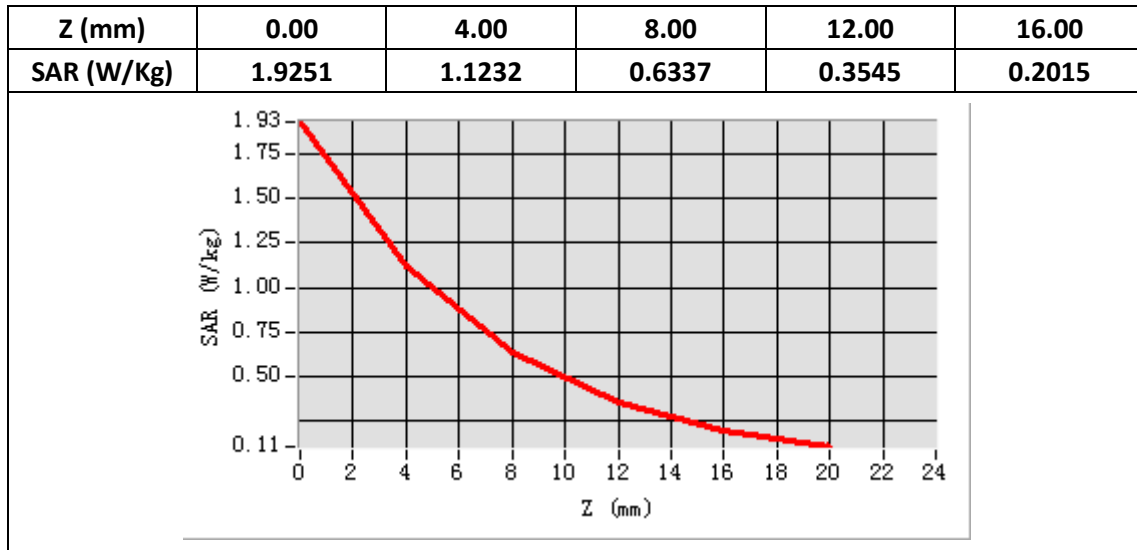
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2593
Relative permittivity (real part)	53.01
Relative permittivity (imaginary part)	15.02
Conductivity (S/m)	2.17
Variation (%)	-2.73
ConvF:	2.43



Maximum location: X=-7.00, Y=5.00

SAR Peak: 1.95W/kg

SAR 10g (W/Kg)	0.494742
SAR 1g (W/Kg)	1.031040



Plot 8: Wi-Fi 802.11b, Edge D ,Middle, 5mm

Type: Phone measurement

Date of measurement: 09/04/2019

Measurement duration: 22 minutes 11 seconds

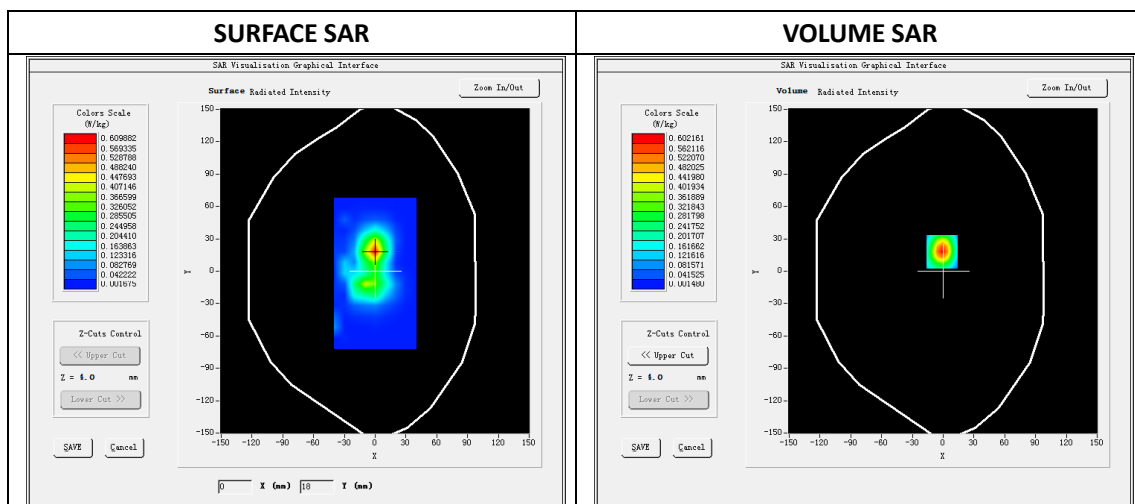
Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

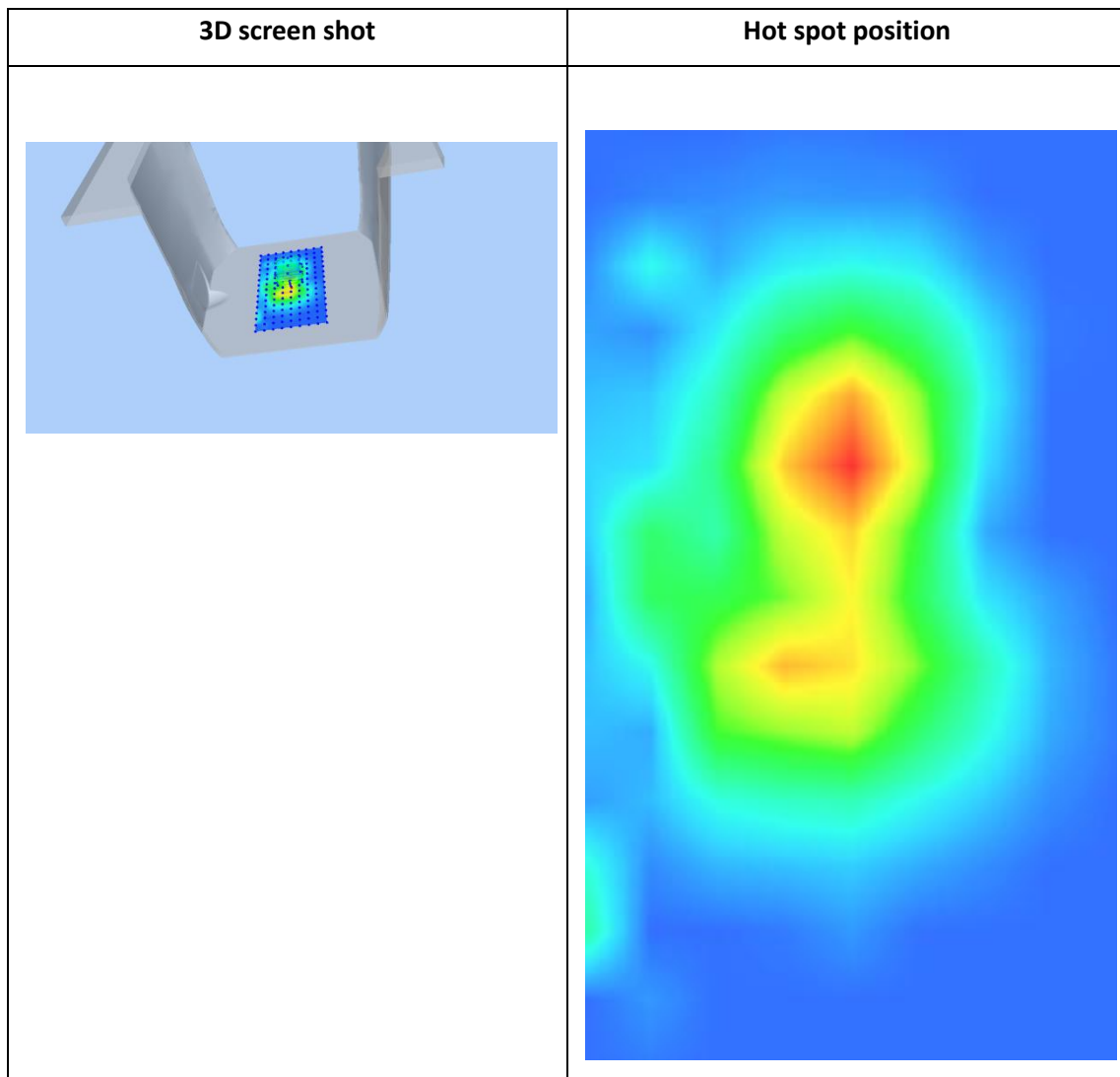
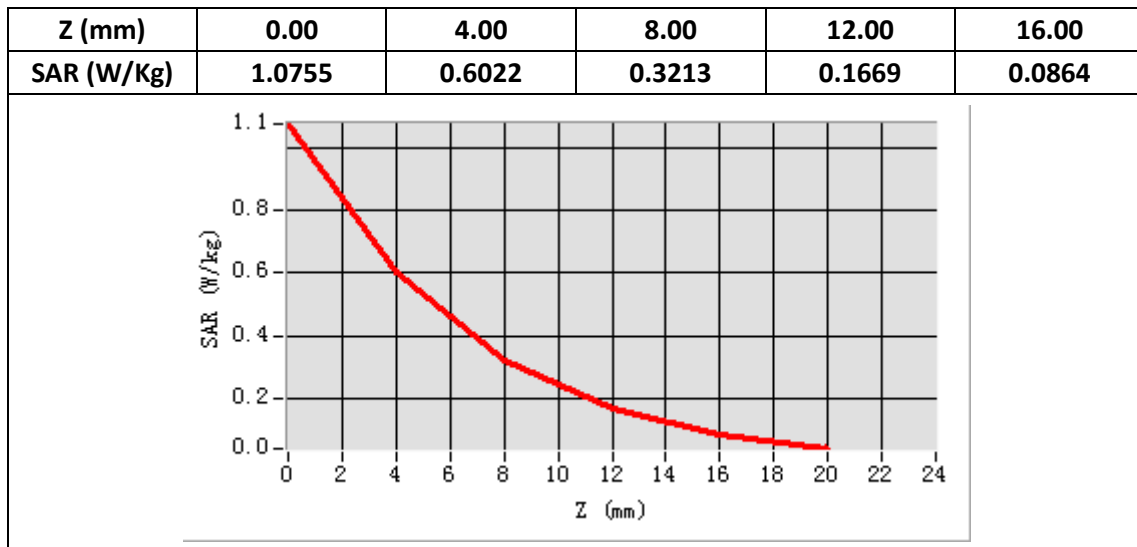
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2437
Relative permittivity (real part)	53.23
Relative permittivity (imaginary part)	14.33
Conductivity (S/m)	1.95
Variation (%)	3.12
ConvF:	2.46



Maximum location: X=-1.00 Y=18.00

SAR Peak: 1.07 W/kg

SAR 10g (W/Kg)	0.234392
SAR 1g (W/Kg)	0.542795



Plot 9: WIFI 5G 802.11a(20MHz), Face, Middle,5mm

Type: Phone measurement

Date of measurement: 09/10/2019

Measurement duration: 22 minutes 22 seconds

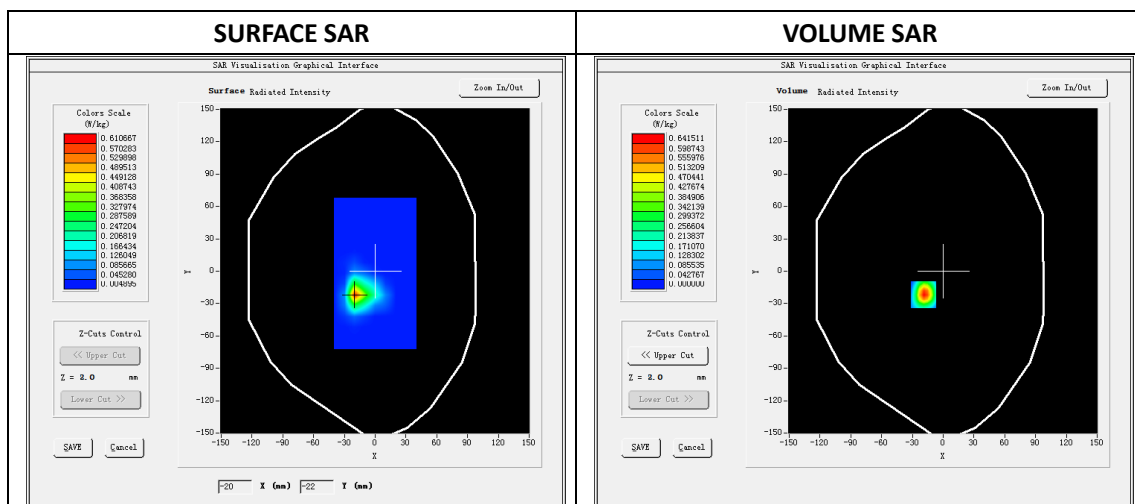
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=4mm,dy=4mm
ZoomScan	7x7x12,dx=4m, dy=4mm, dz=2mm
Phantom	Validation plane
Device Position	Face
Band	WIFI 5G
Channels	100
Signal	OFDM (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5500
Relative permittivity (real part)	49.89
Relative permittivity (imaginary part)	18.19
Conductivity (S/m)	5.66
Variation (%)	-0.81
ConvF:	2.24

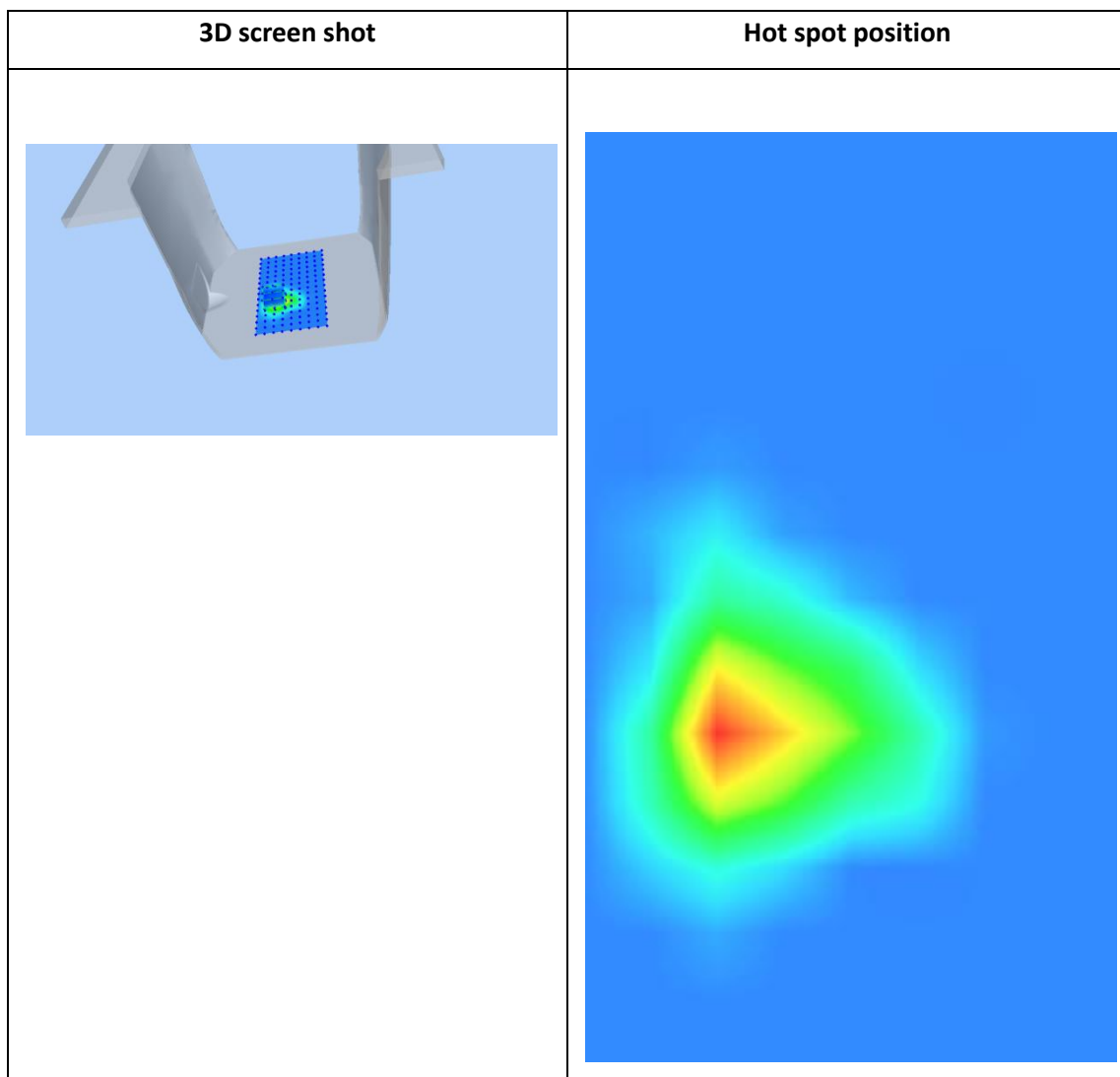
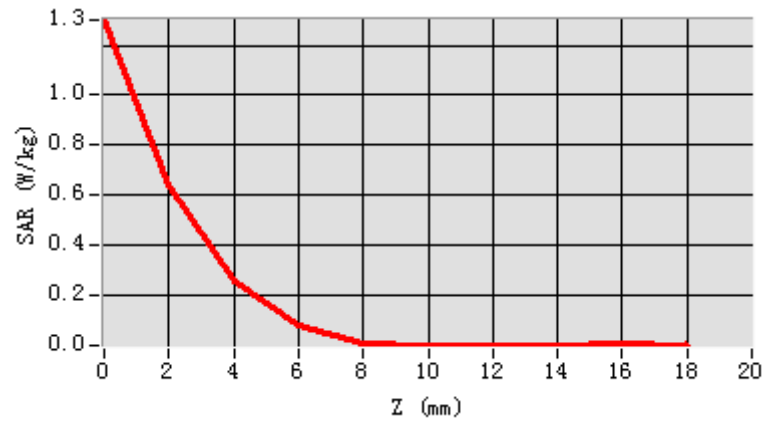


Maximum location: X=-19.00 Y=-22.00

SAR Peak: 1.41 W/kg

SAR 10g (W/Kg)	0.077878
SAR 1g (W/Kg)	0.347988

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00
SAR (W/Kg)	1.3012	0.6415	0.2603	0.0833	0.0093	0.0023	0.0001	0.0016	0.0050



Plot 10: CDMA BC0, Edge B, Middle,5mm

Type: Phone measurement

Date of measurement: 09/02/2019

Measurement duration: 22 minutes 20 seconds

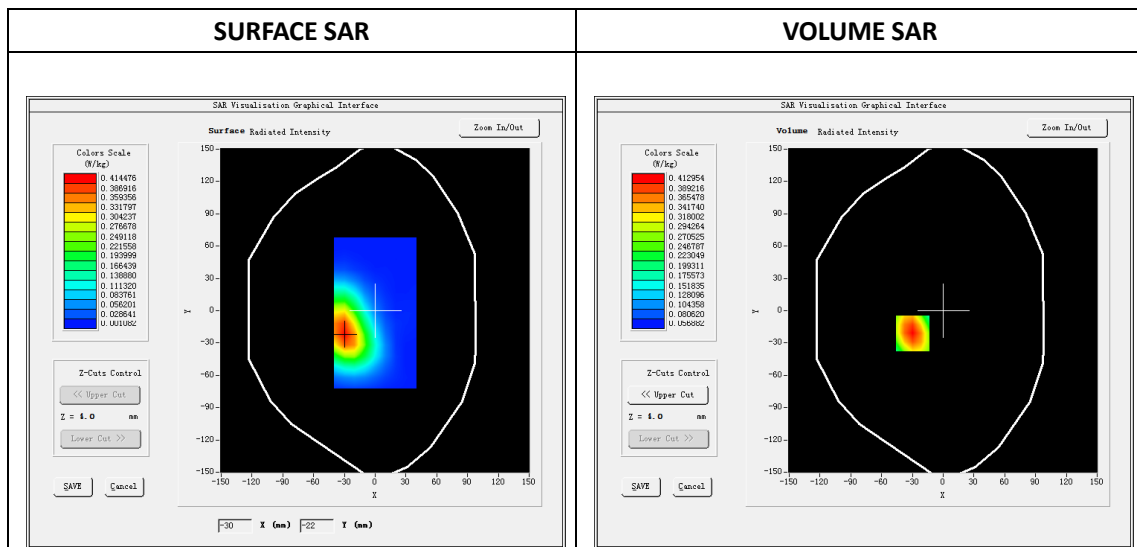
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Edge B
Band	CDMA BC0
Channels	190
Signal	QPSK(Duty cycle: 1:1)

B. SAR Measurement Results

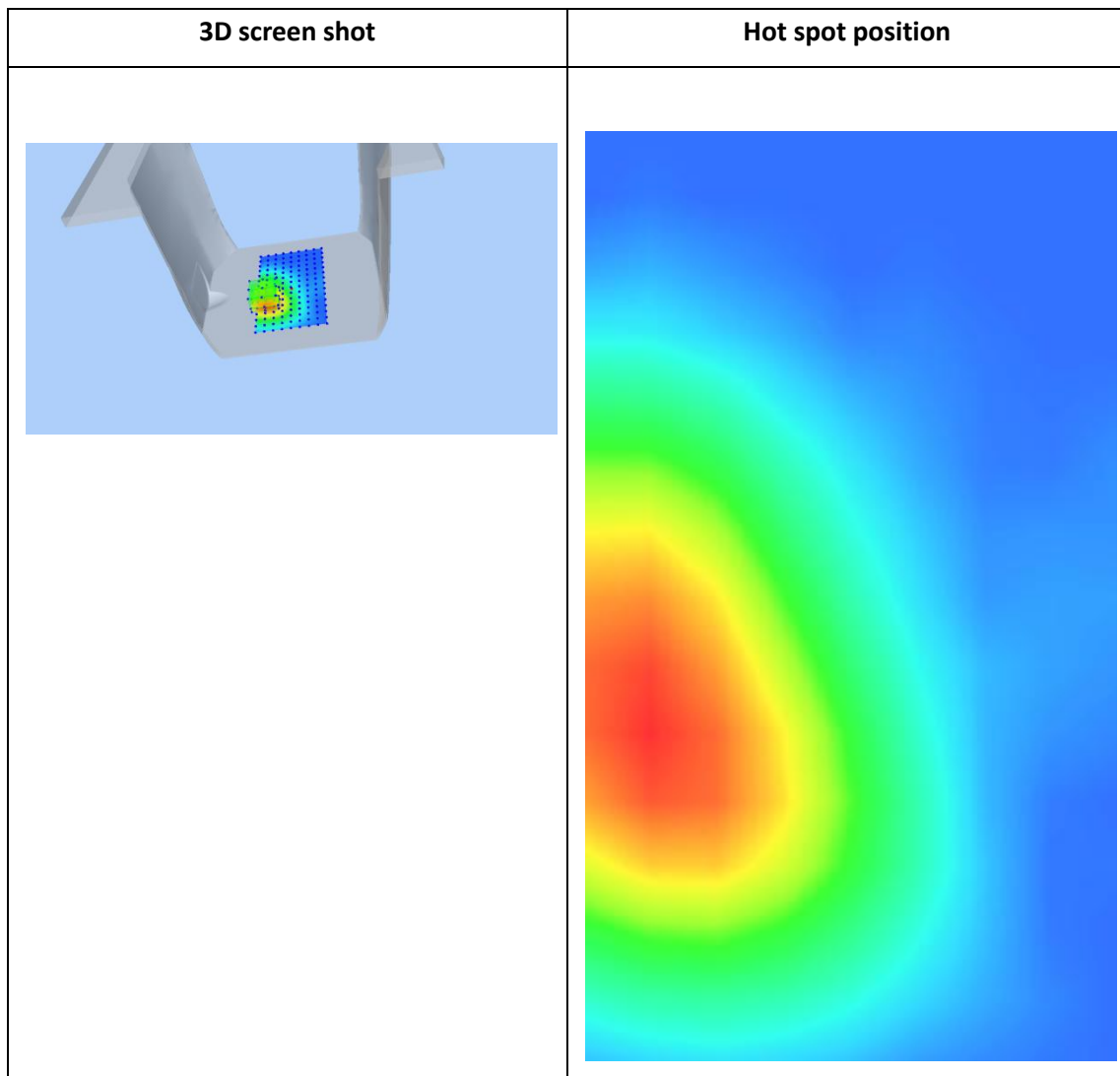
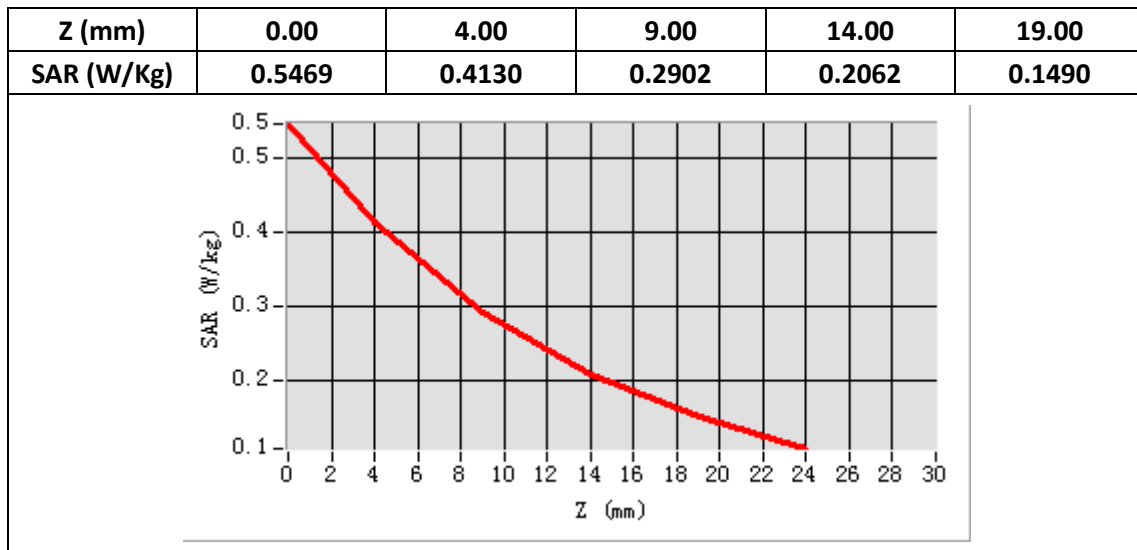
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	836.6
Relative permittivity (real part)	55.56
Relative permittivity (imaginary part)	20.91
Conductivity (S/m)	0.97
Variation (%)	-1.56
ConvF:	1.99



Maximum location: X=-30.00, Y=-21.00

SAR Peak: 0.55 W/kg

SAR 10g (W/Kg)	0.263132
SAR 1g (W/Kg)	0.399070



Plot 11: RFID, Edge A, Middle,5mm

Type: Phone measurement

Date of measurement: 09/02/2019

Measurement duration: 22 minutes 24 seconds

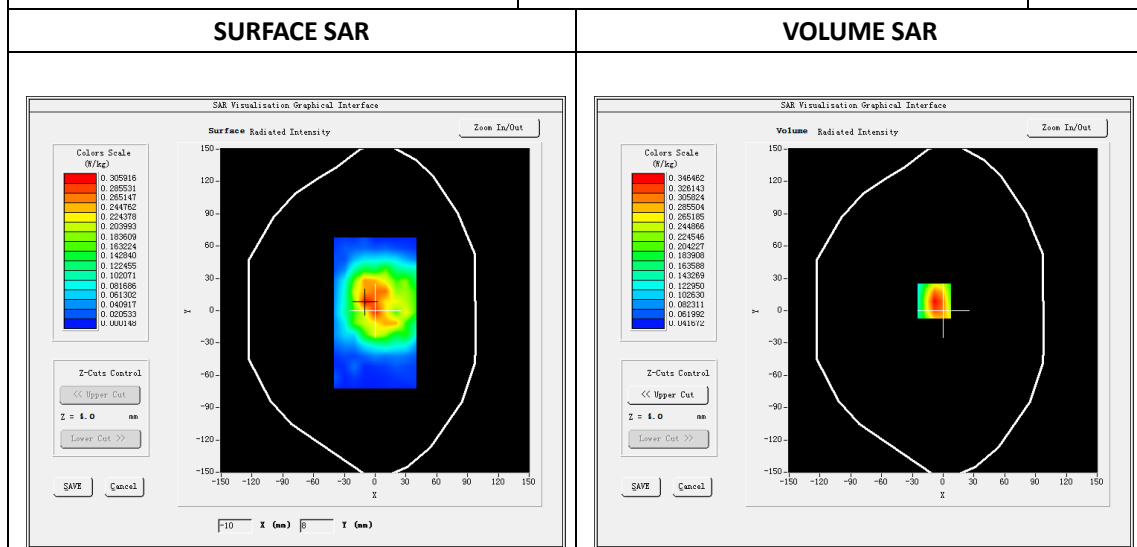
Mobile Phone IMEI number: --

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	RFID
Channels	Middle
Signal	RFID

B. SAR Measurement Results

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	866.3
Relative permittivity (real part)	55.56
Relative permittivity (imaginary part)	20.91
Conductivity (S/m)	0.97
Variation (%)	-4.32
ConvF:	1.99



Maximum location: X=-9.00, Y=9.00

SAR Peak: 0.51 W/kg

SAR 10g (W/Kg)	0.228245
SAR 1g (W/Kg)	0.342583

