

Appendix B: SAR Measurement results Plots

Plot	Frequency/Mode	Testing Position and Channel	Test Date
1	GSM1900	Right Cheek Middle	2019/08/10
2	GSM1900/GPRS4Tx	Body Back, Middle ,10mm	2019/08/10
3	WCDMA1900	Right Cheek Middle	2019/08/10
4	WCDMA1900	Body Back, Middle ,10mm	2019/08/10
5	WCDMA1700	Right Cheek Middle	2019/08/08
6	WCDMA1700	Body Back, Middle ,10mm	2019/08/08
7	LTE Band2	Right Cheek Middle	2019/08/10
8	LTE Band2	Body Back, Middle ,10mm	2019/08/10
9	LTE Band41	Left Cheek Middle	2019/08/13
10	LTE Band41	Body Back, Middle ,10mm	2019/08/13
11	WIFI 2.4G 802.11b	Right Cheek Middle	2019/08/12
12	WIFI 2.4G 802.11b	Body Back, Middle ,10mm	2019/08/12

Plot1: GSM1900, Right Cheek, Middle

Type: Phone measurement

Date of measurement: 08/10/2019

Measurement duration: 22 minutes 04 seconds

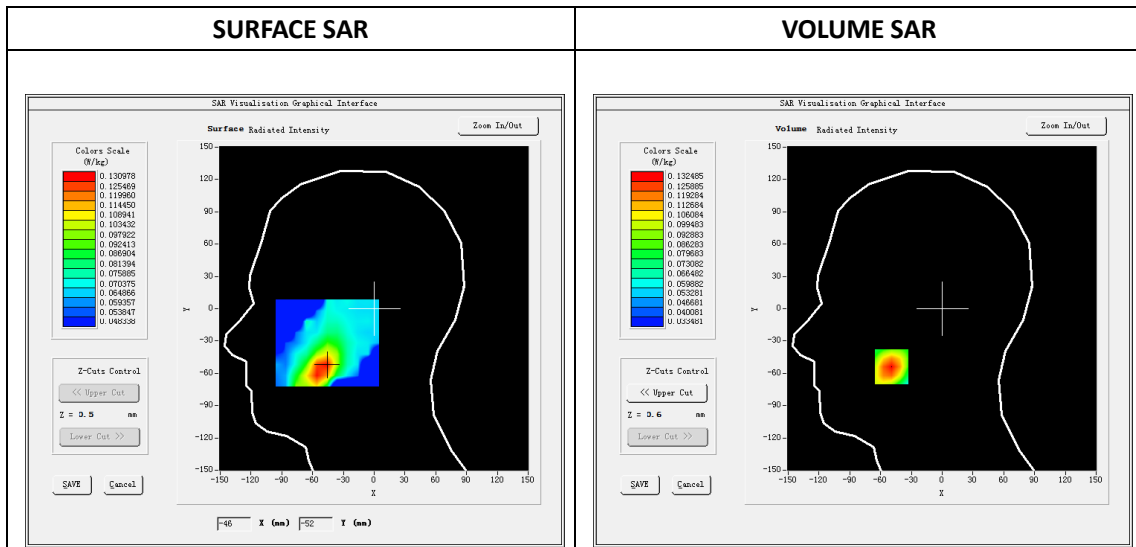
Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

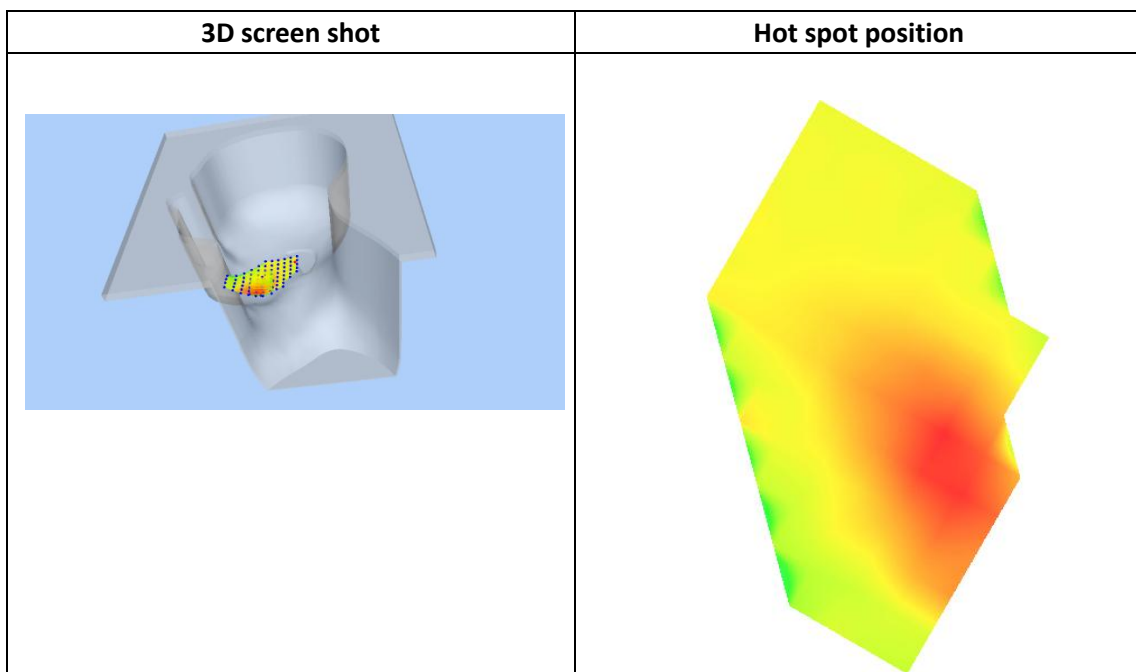
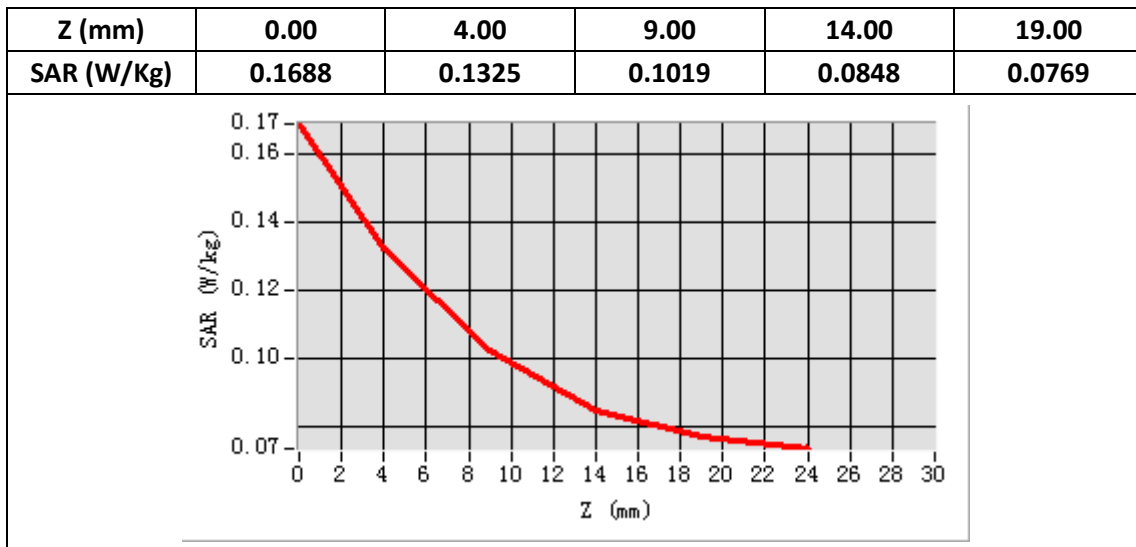
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1880
Relative permittivity (real part)	40.58
Relative permittivity (imaginary part)	13.26
Conductivity (S/m)	1.40
Variation (%)	-4.79
ConvF:	2.34



Maximum location: X=-49.00, Y=-54.00

SAR Peak: 0.17 W/kg

SAR 10g (W/Kg)	0.095721
SAR 1g (W/Kg)	0.127054



Plot2: GPRS1900, Back, Middle ,10mm

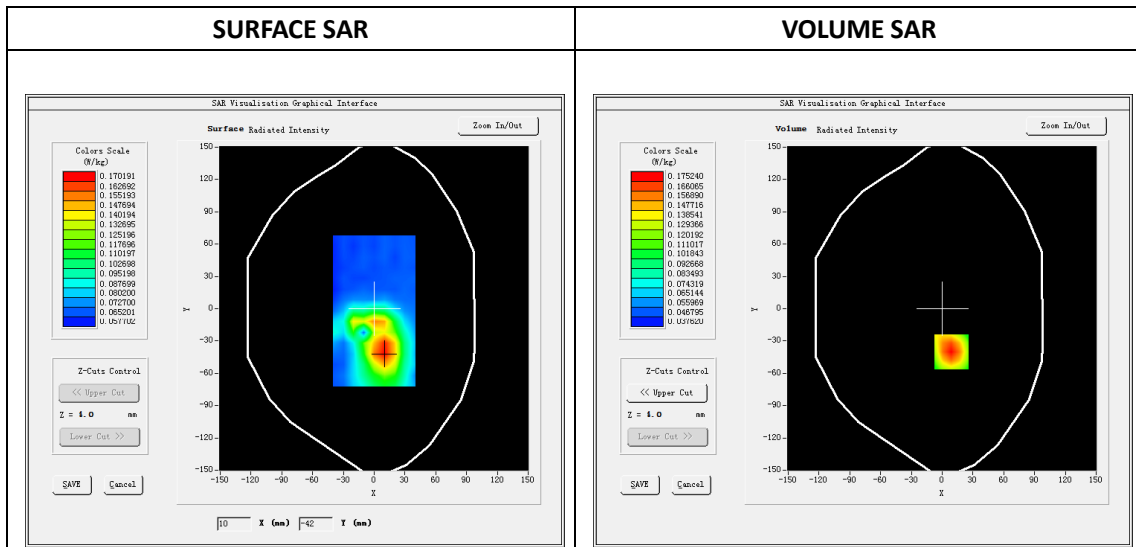
Type: Phone measurement
 Date of measurement: 08/10/2019
 Measurement duration: 22 minutes 03 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

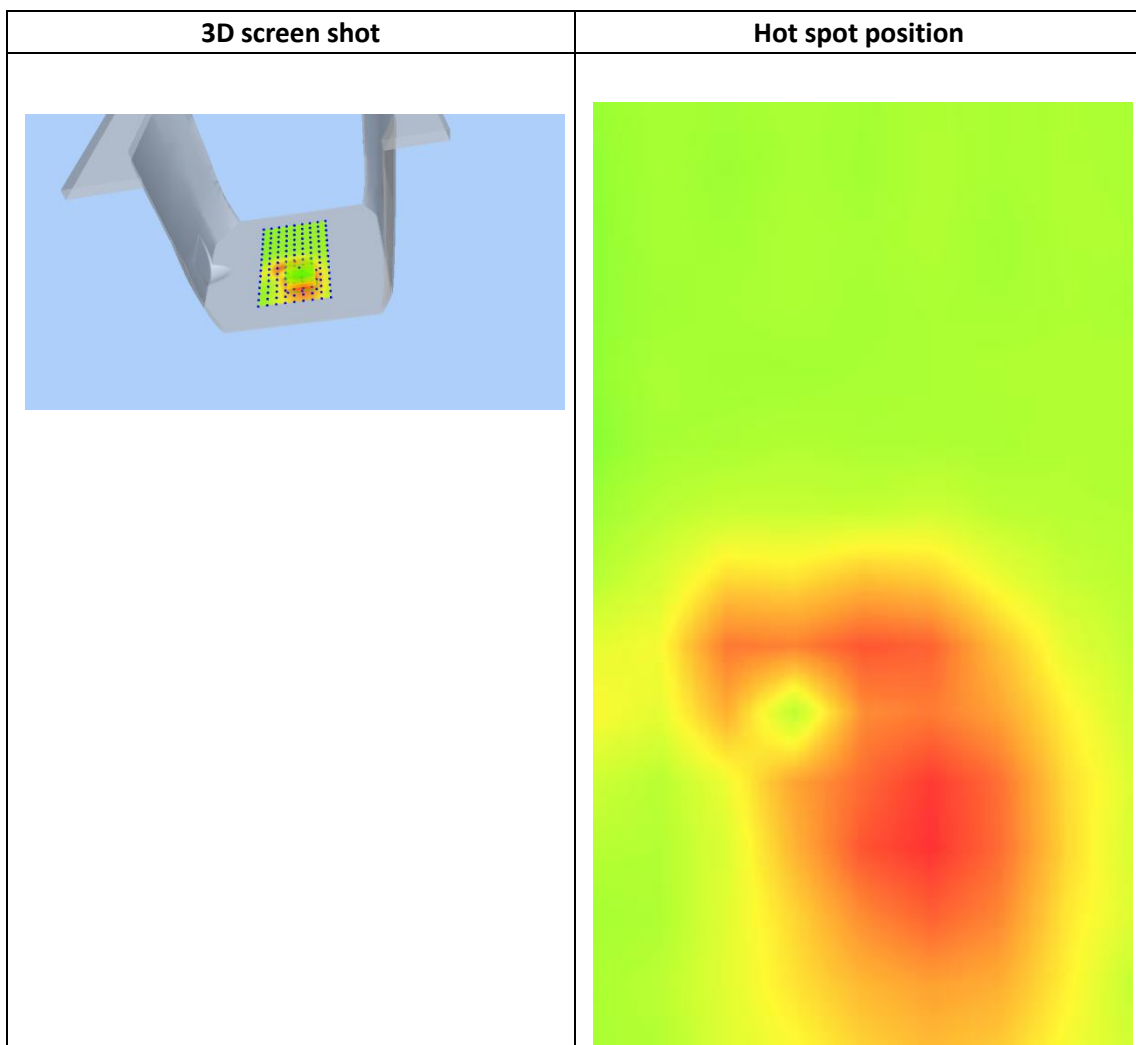
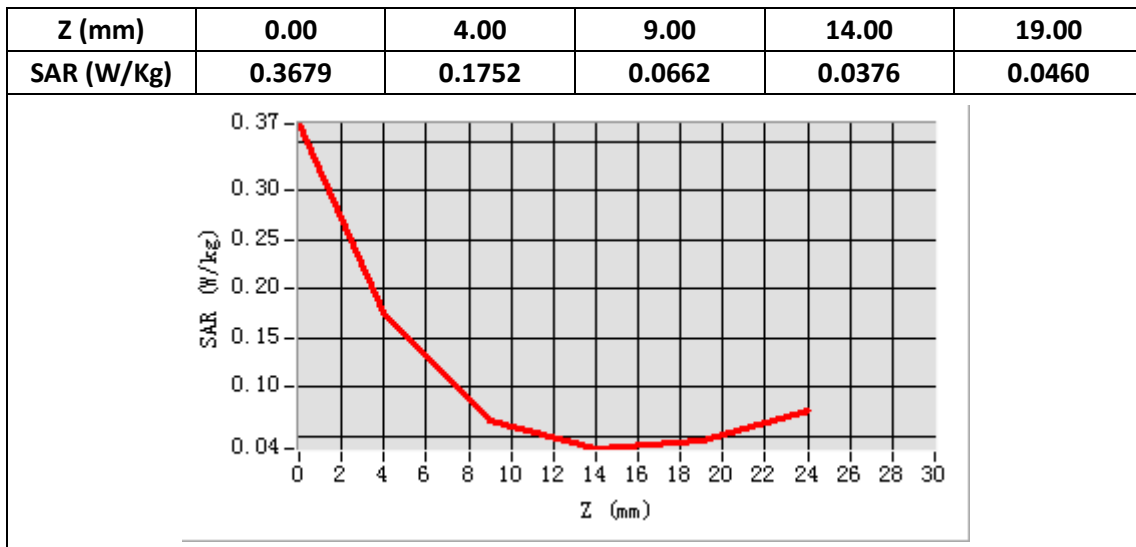
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1880
Relative permittivity (real part)	53.37
Relative permittivity (imaginary part)	14.21
Conductivity (S/m)	1.50
Variation (%)	-1.66
ConvF:	2.39



Maximum location: X=9.00, Y=-40.00

SAR Peak: 0.37W/kg

SAR 10g (W/Kg)	0.109664
SAR 1g (W/Kg)	0.181597



Plot 3: WCDMA1900, Right Cheek, Middle,10mm

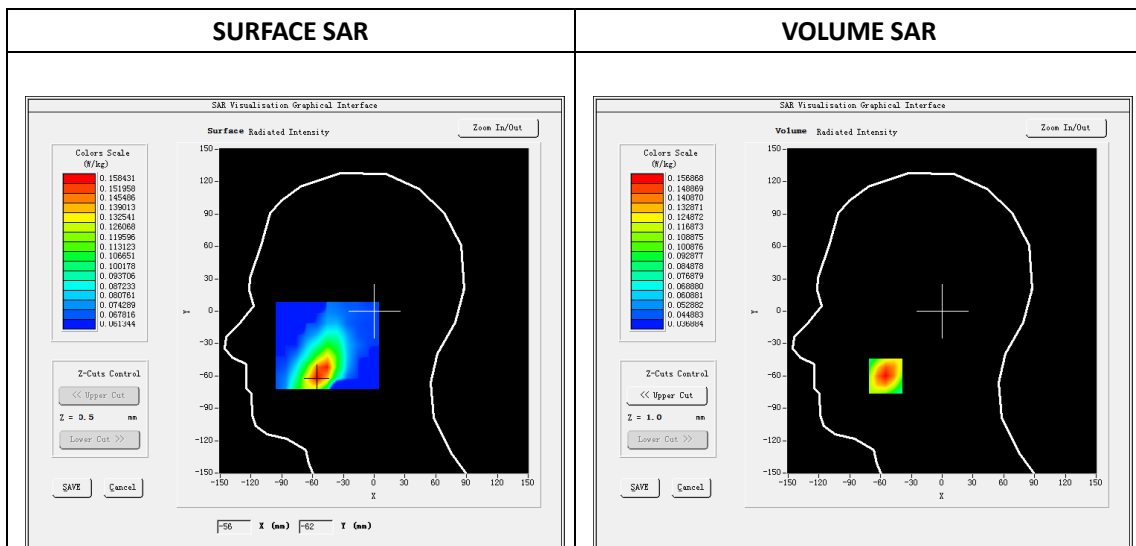
Type: Phone measurement
 Date of measurement: 08/10/2019
 Measurement duration: 22 minutes 28 seconds
 Mobile Phone IMEI number: --

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

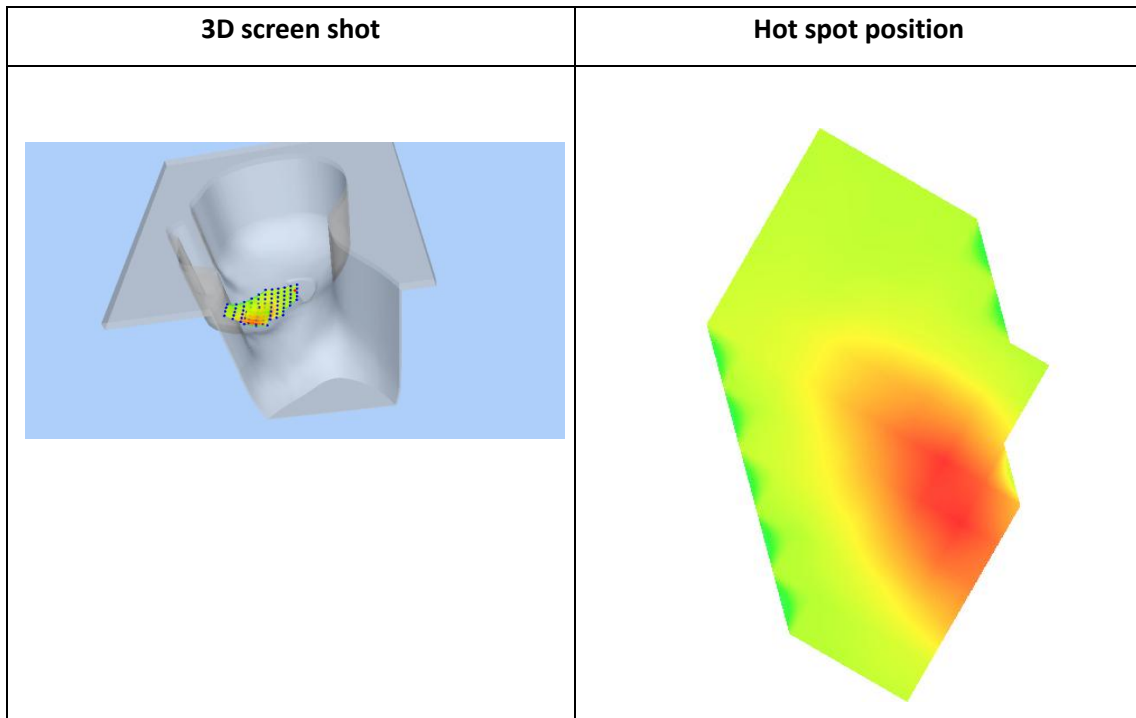
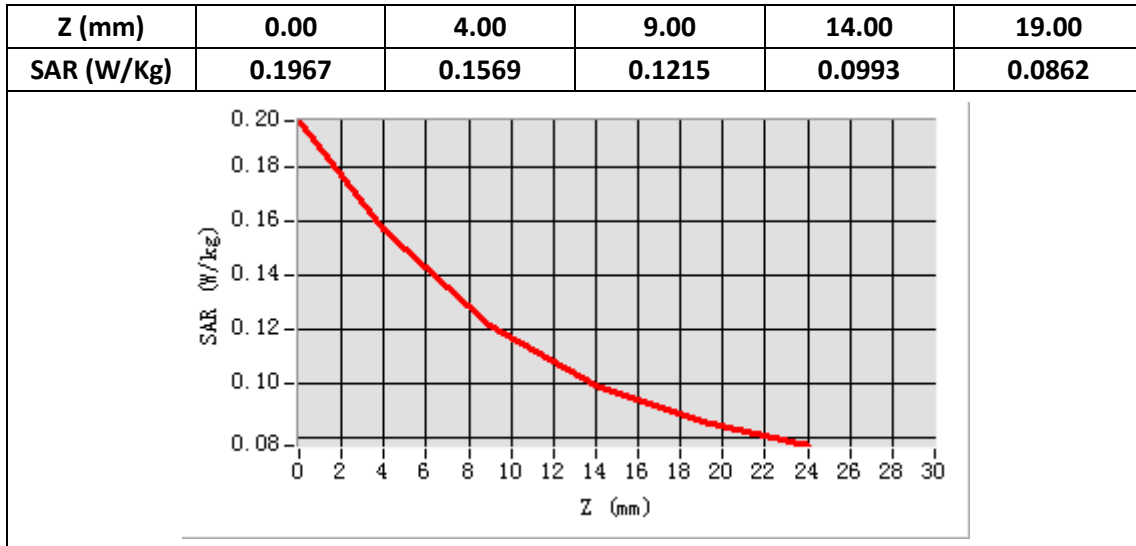
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1880
Relative permittivity (real part)	40.58
Relative permittivity (imaginary part)	13.26
Conductivity (S/m)	1.40
Variation (%)	-4.82
ConvF:	2.34



Maximum location: X=-55.00, Y=-60.00

SAR Peak: 0.20W/kg

SAR 10g (W/Kg)	0.111240
SAR 1g (W/Kg)	0.150135



Plot 4: WCDMA1900, Back, Middle,10mm

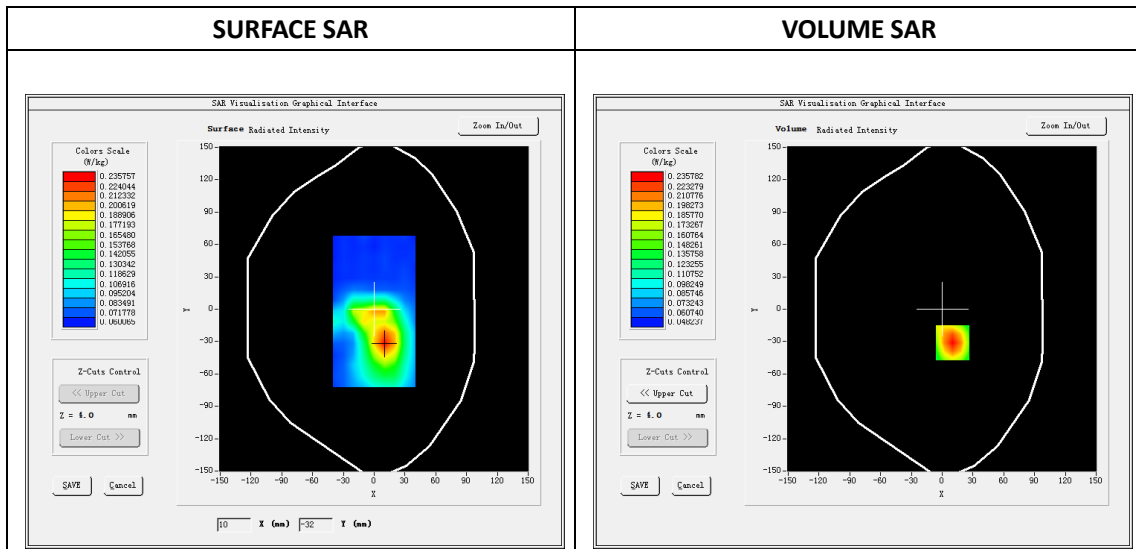
Type: Phone measurement
 Date of measurement: 08/10/2019
 Measurement duration: 22 minutes 21 seconds
 Mobile Phone IMEI number: --

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

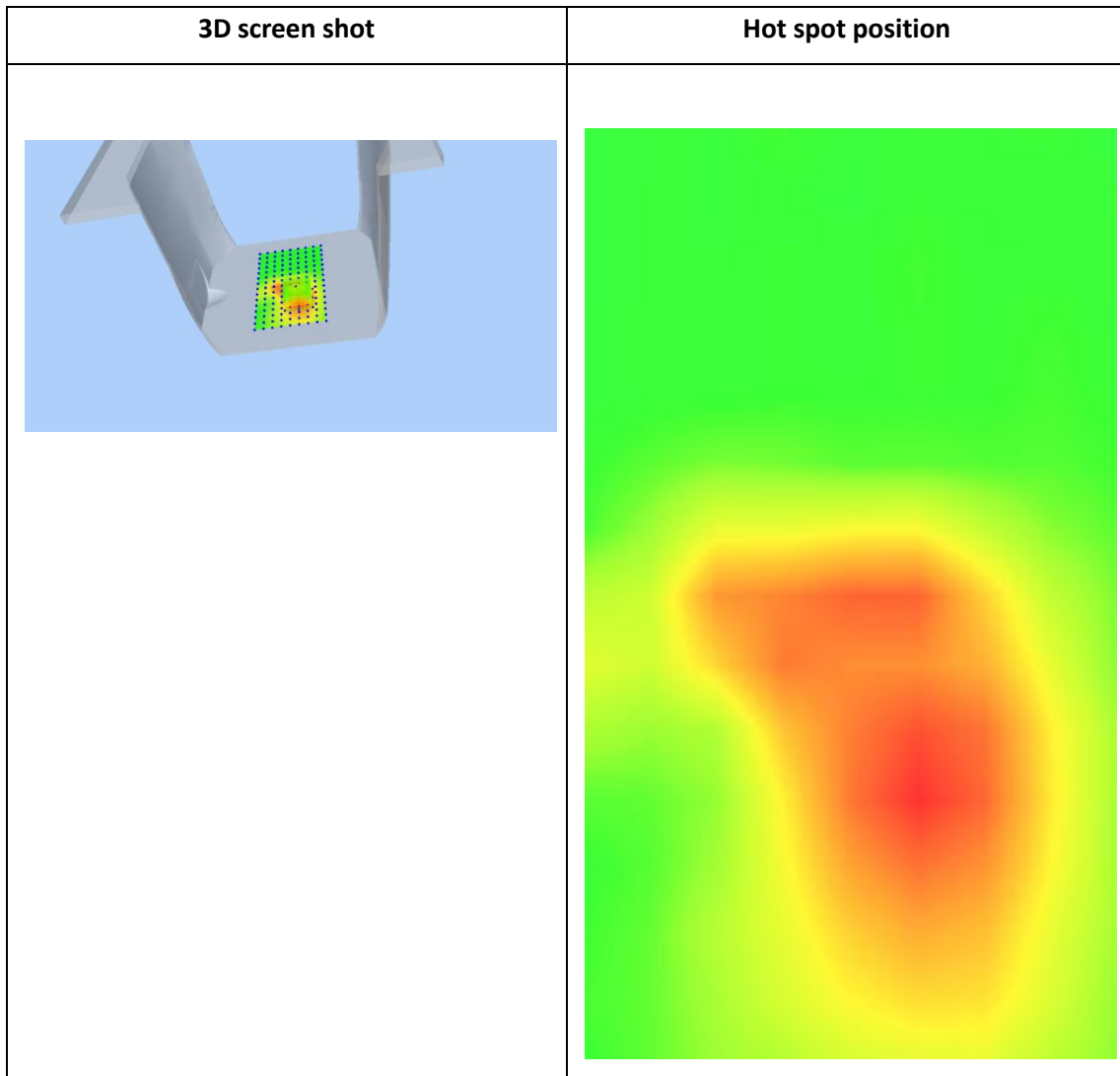
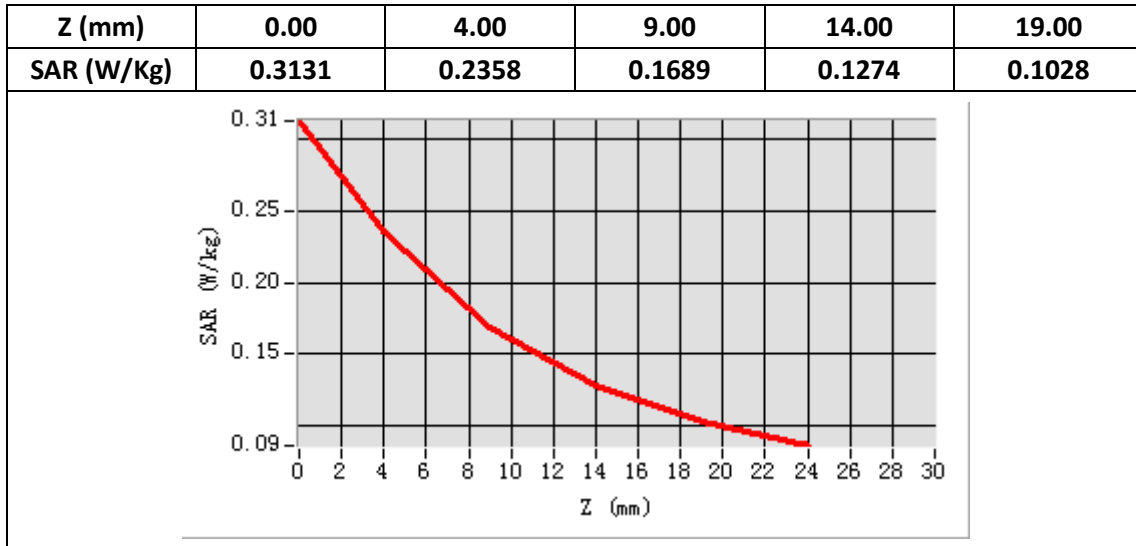
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1880
Relative permittivity (real part)	53.37
Relative permittivity (imaginary part)	14.21
Conductivity (S/m)	1.50
Variation (%)	-2.35
ConvF:	2.39



Maximum location: X=10.00, Y=-31.00

SAR Peak: 0.31W/kg

SAR 10g (W/Kg)	0.154650
SAR 1g (W/Kg)	0.224326



Plot 5: WCDMA1700, Right Cheek, Middle

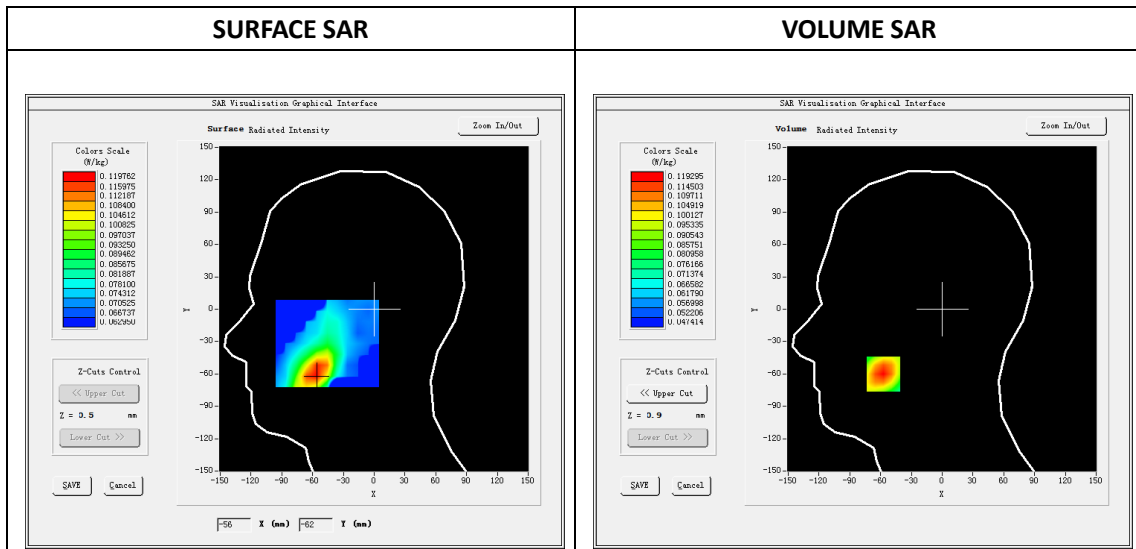
Type: Phone measurement
 Date of measurement: 08/08/2019
 Measurement duration: 22 minutes 06 seconds
 Mobile Phone IMEI number: --

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	Band2_WCDMA1700
Channels	1413
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1732.6
Relative permittivity (real part)	40.85
Relative permittivity (imaginary part)	14.20
Conductivity (S/m)	1.42
Variation (%)	-3.50
ConvF:	2.14

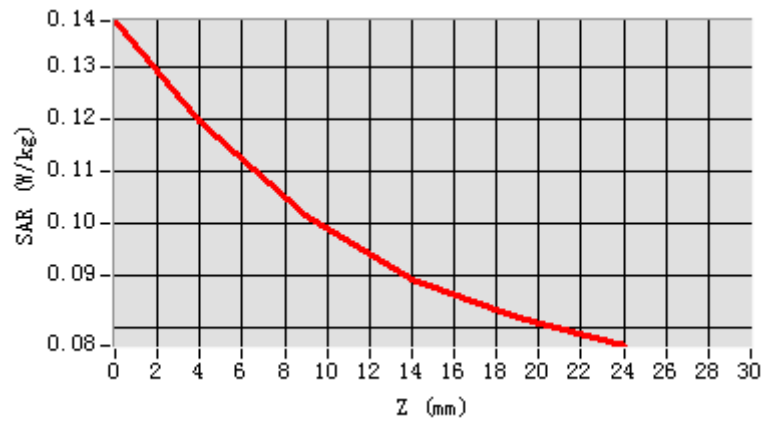


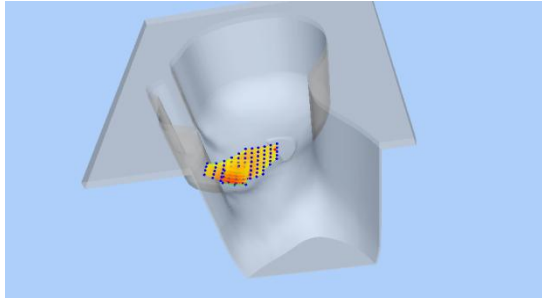
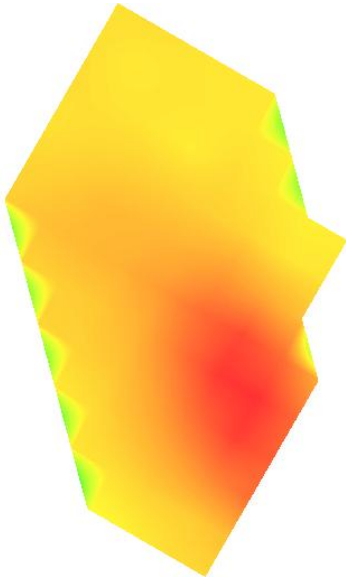
Maximum location: X=-57.00, Y=-60.00

SAR Peak: 0.14W/kg

SAR 10g (W/Kg)	0.096168
SAR 1g (W/Kg)	0.117961

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1387	0.1193	0.1012	0.0892	0.0817



3D screen shot	Hot spot position
	

Plot 6: WCDMA1700,Back, Middle,10mm

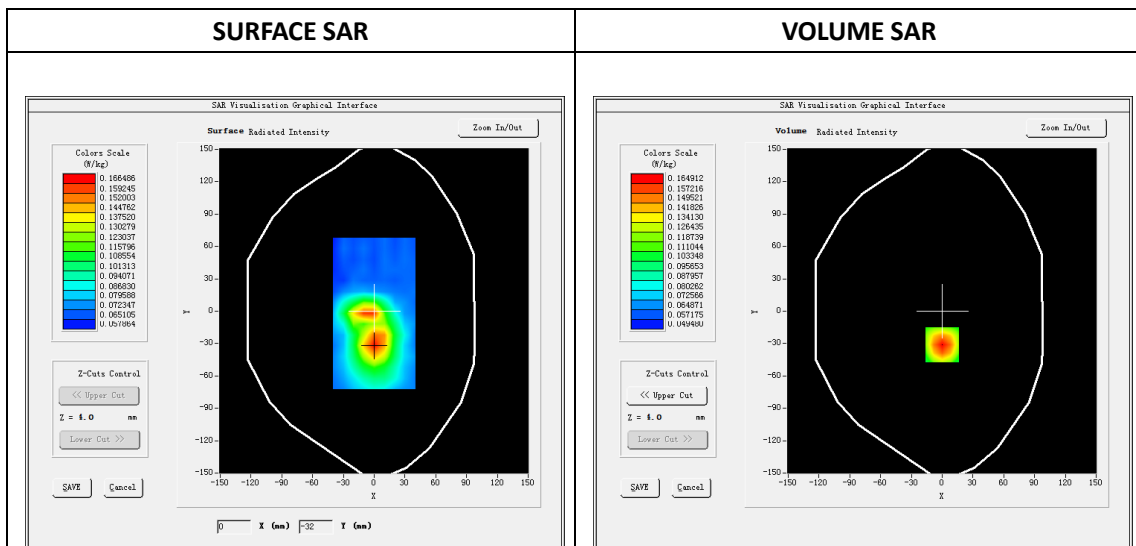
Type: Phone measurement
 Date of measurement: 08/08/2019
 Measurement duration: 22 minutes 09 seconds
 Mobile Phone IMEI number: --

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

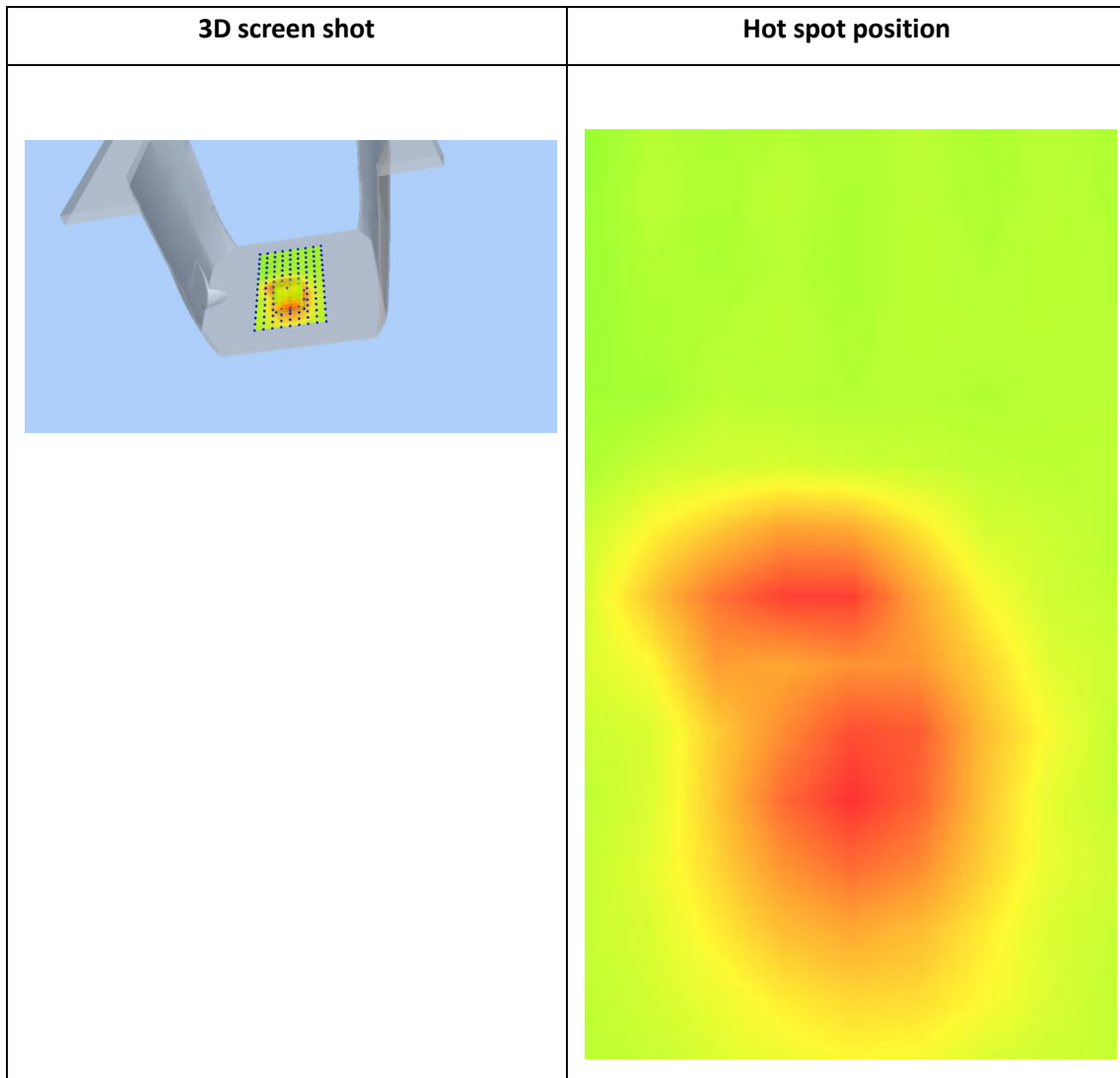
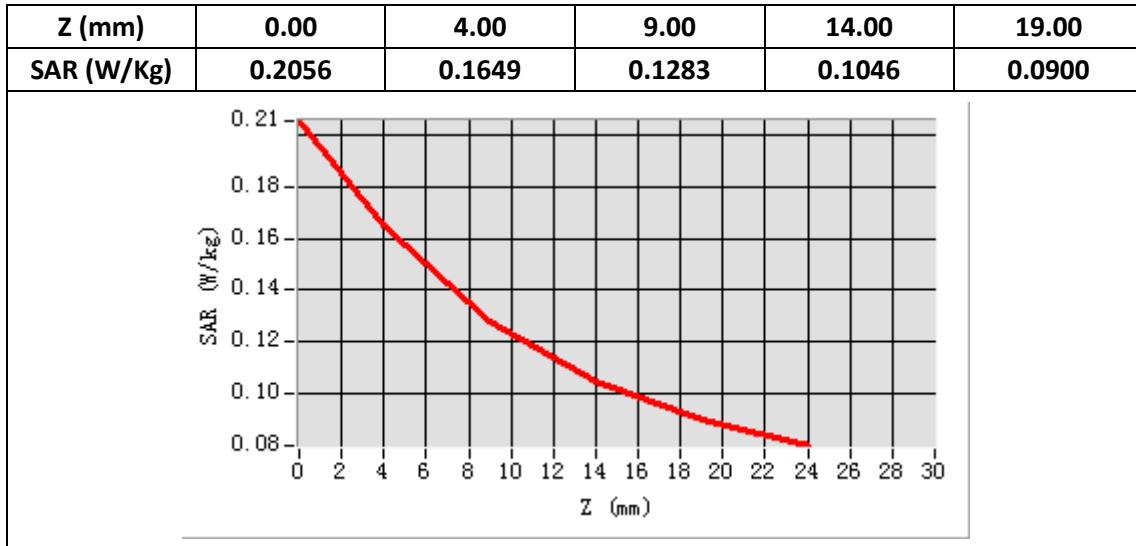
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1732.6
Relative permittivity (real part)	53.66
Relative permittivity (imaginary part)	15.20
Conductivity (S/m)	1.52
Variation (%)	0.29
ConvF:	2.22



Maximum location: X=0.00, Y=-31.00

SAR Peak: 0.21W/kg

SAR 10g (W/Kg)	0.117606
SAR 1g (W/Kg)	0.158087



Plot 7: LTE Band2, 20MHz,Right Cheek, Middle

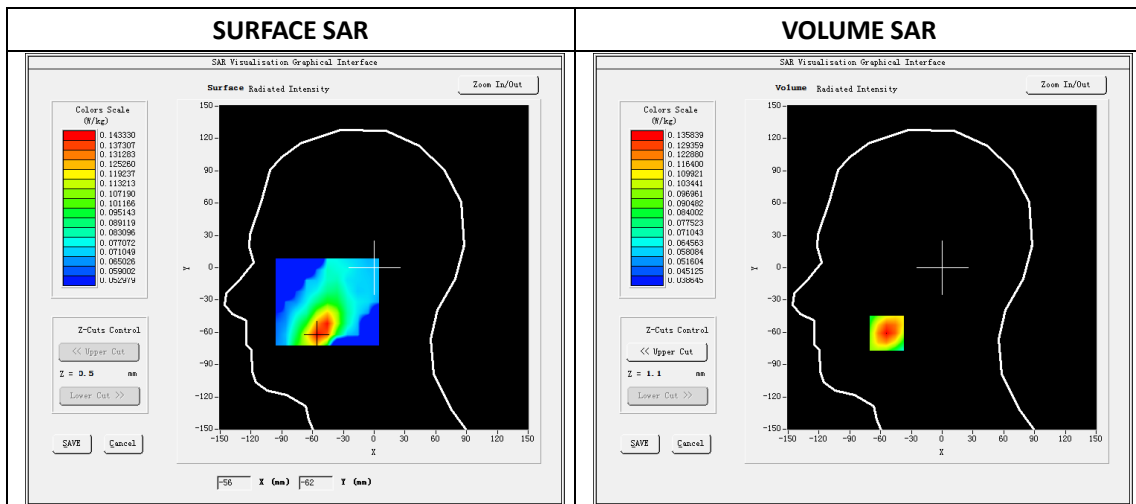
Type: Phone measurement
 Date of measurement: 08/10/2019
 Measurement duration: 22 minutes 12 econds
 Mobile Phone IMEI number: --

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	LTE Band 2
Channels	18900
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1880
Relative permittivity (real part)	40.58
Relative permittivity (imaginary part)	13.26
Conductivity (S/m)	1.40
Variation (%)	-4.33
ConvF:	2.34

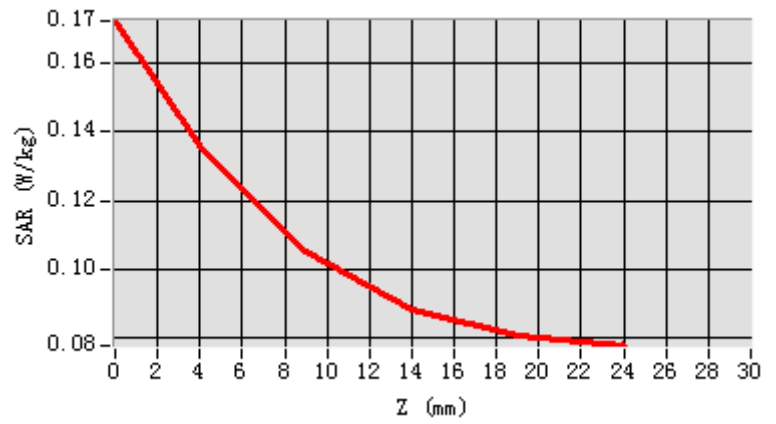


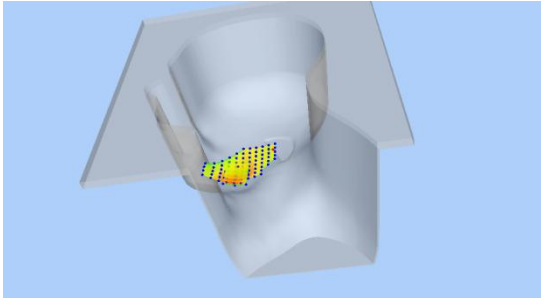
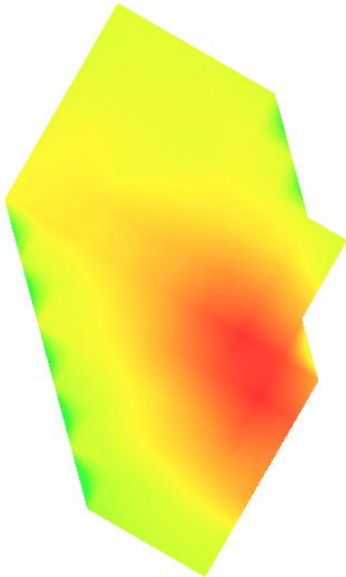
Maximum location: X=-54.00, Y=-61.00

SAR Peak: 0.17 W/kg

SAR 10g (W/Kg)	0.100669
SAR 1g (W/Kg)	0.130764

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1721	0.1358	0.1053	0.0884	0.0810



3D screen shot	Hot spot position
	

Plot 8: LTE Band2, 20MHz, Back, Middle,10mm

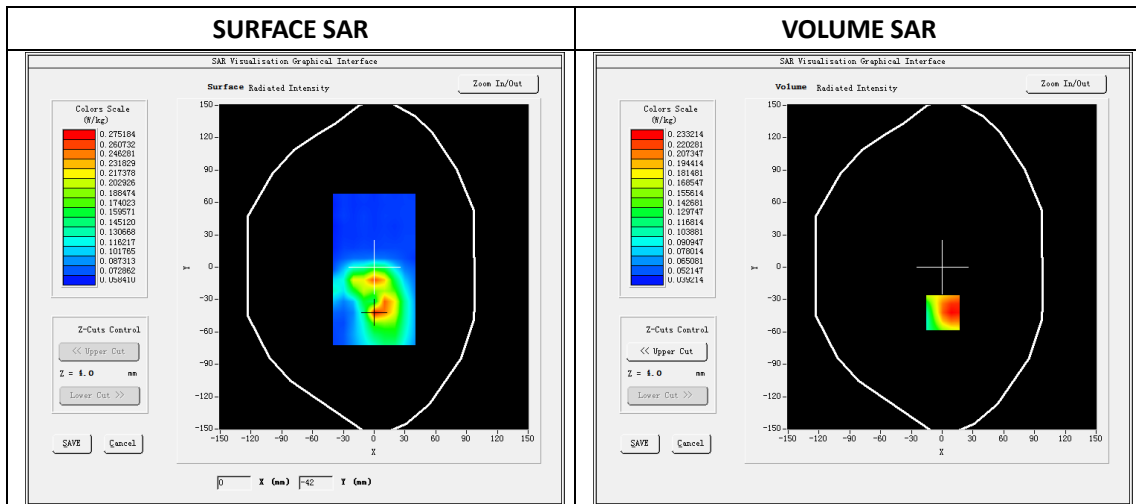
Type: Phone measurement
 Date of measurement: 08/10/2019
 Measurement duration: 22 minutes 13 seconds
 Mobile Phone IMEI number: --

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 2
Channels	18900
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

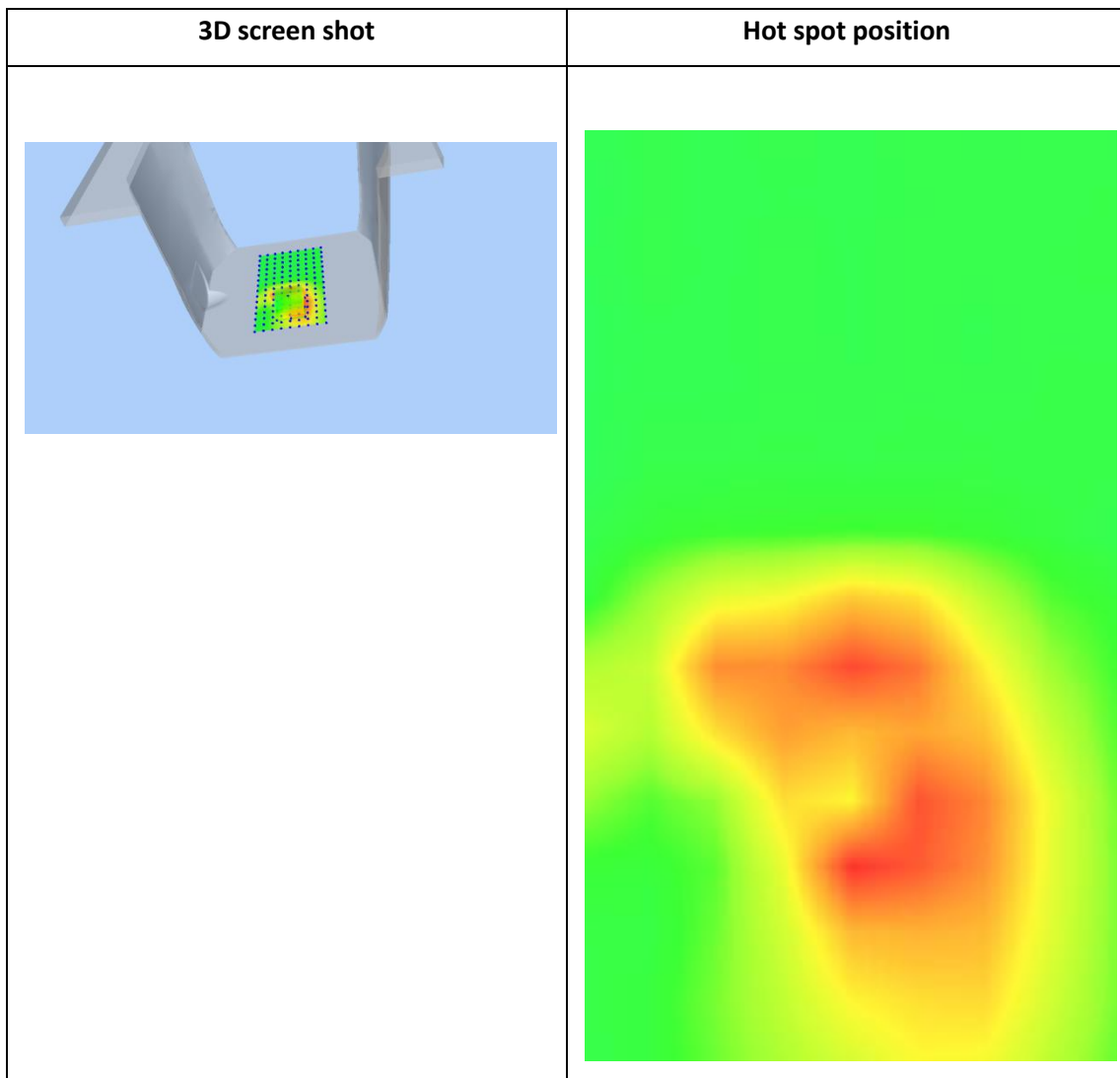
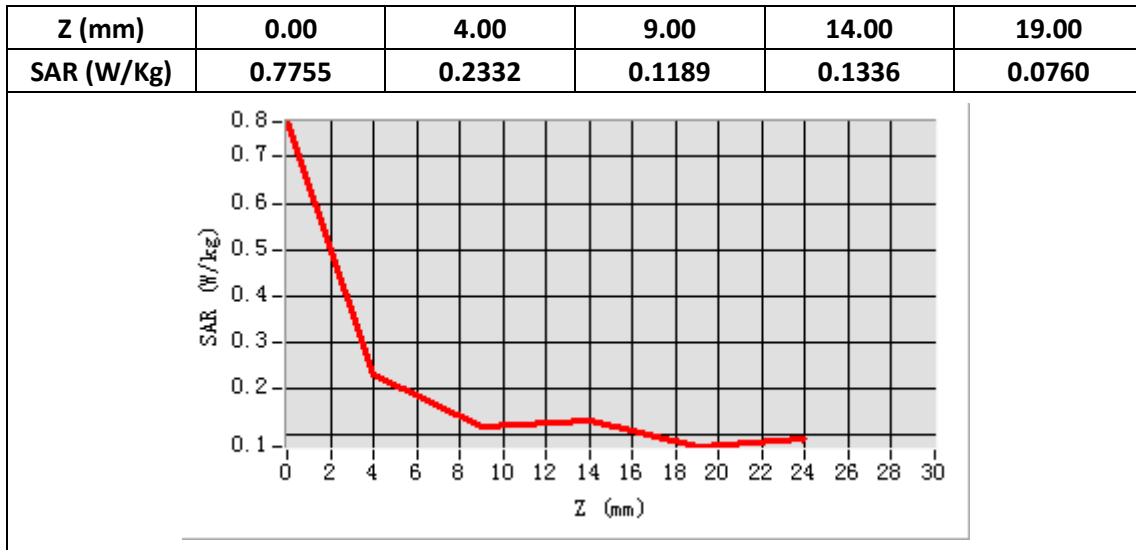
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1880
Relative permittivity (real part)	53.37
Relative permittivity (imaginary part)	14.21
Conductivity (S/m)	1.50
Variation (%)	-3.22
ConvF:	2.39



Maximum location: X=1.00, Y=-42.00

SAR Peak: 0.31W/kg

SAR 10g (W/Kg)	0.161618
SAR 1g (W/Kg)	0.226591



Plot 9: LTE Band41, 20MHz, Left Cheek, Middle

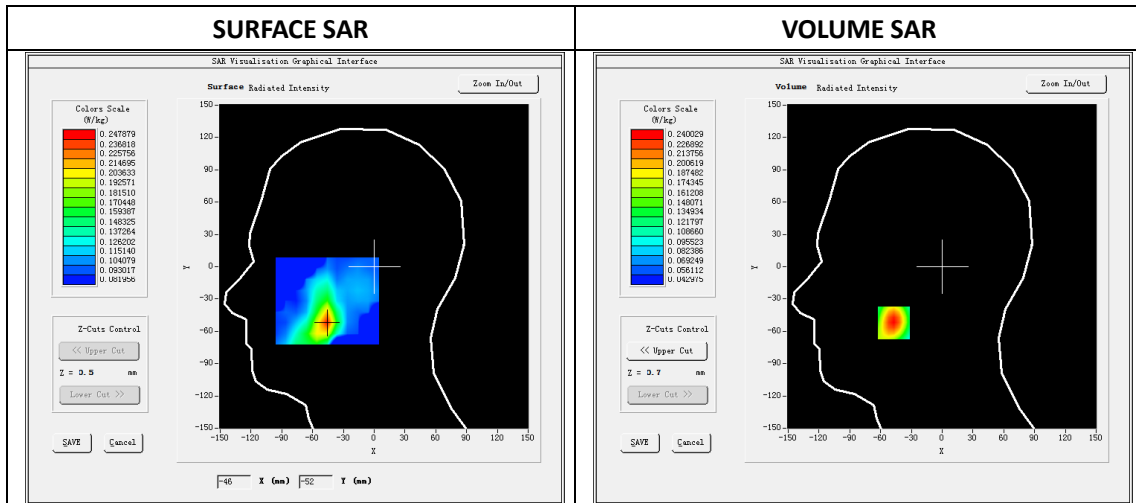
Type: Phone measurement
 Date of measurement: 08/13/2019
 Measurement duration: 22 minutes 35 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7, dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Left Cheek
Band	LTE Band 41
Channels	40390
Signal	LTE (Duty cycle: 63%)

B. SAR Measurement Results

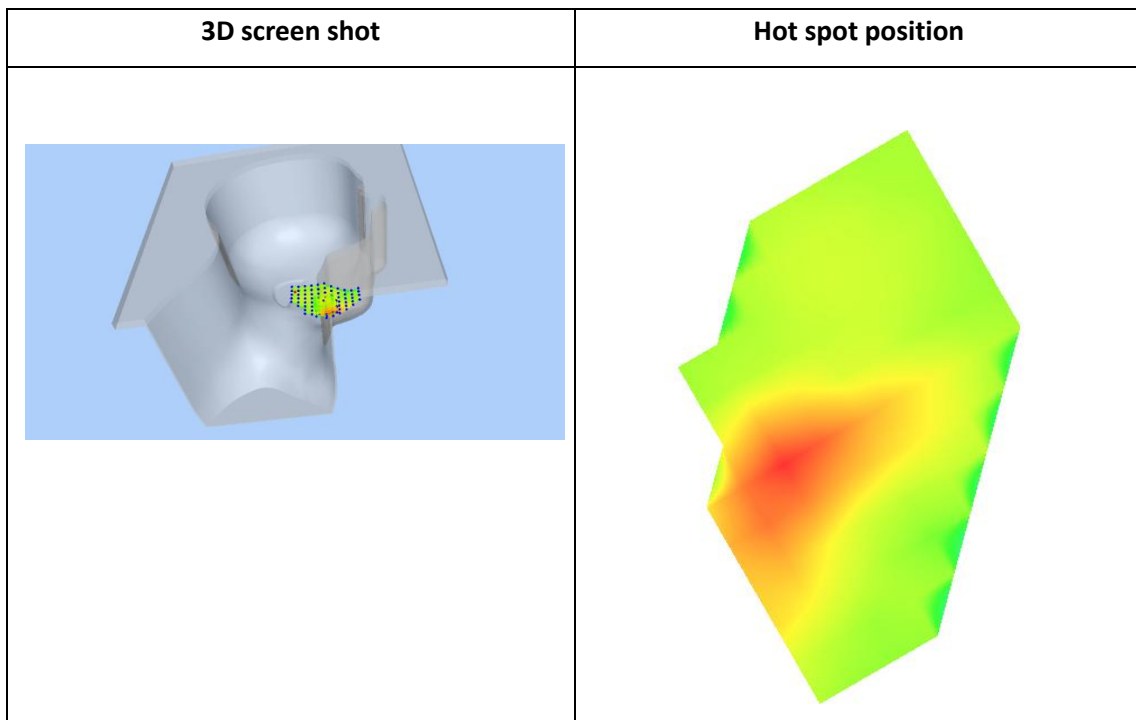
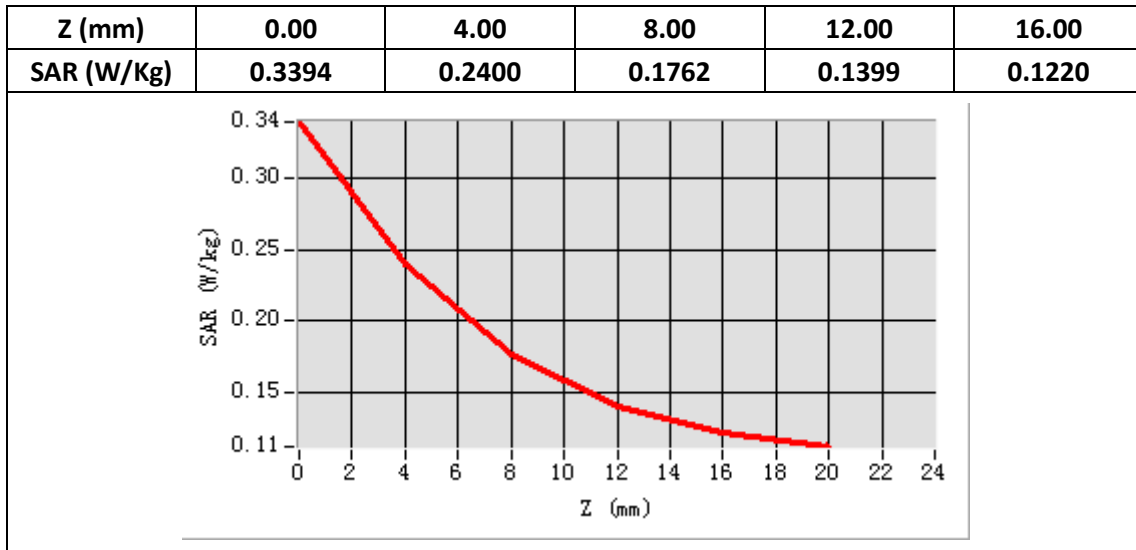
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2570
Relative permittivity (real part)	40.03
Relative permittivity (imaginary part)	13.50
Conductivity (S/m)	1.95
Variation (%)	-3.82
ConvF:	2.35



Maximum location: X=-47.00, Y=-52.00

SAR Peak: 0.34W/kg

SAR 10g (W/Kg)	0.155903
SAR 1g (W/Kg)	0.228774



Plot 10: LTE Band41, 20MHz, Back, Middle,10mm

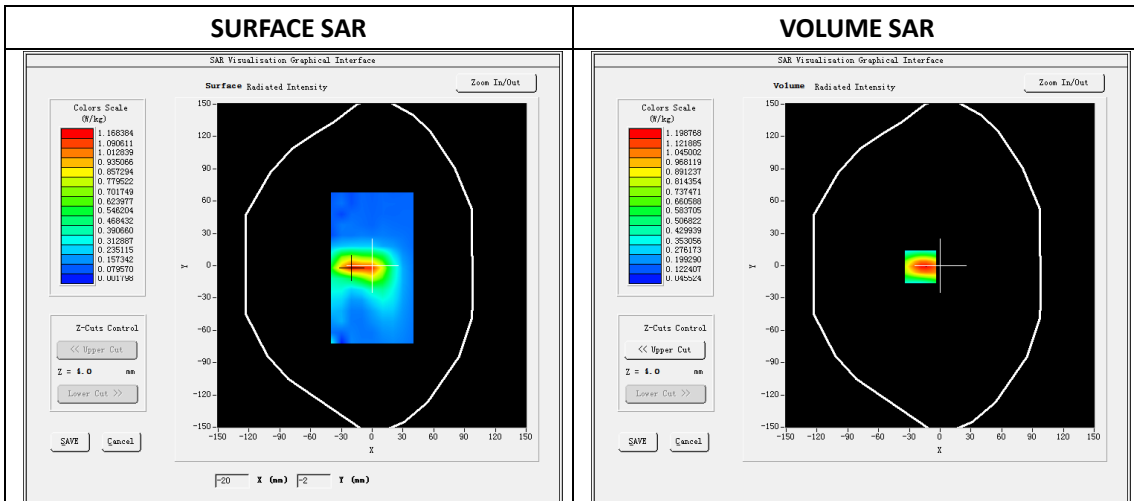
Type: Phone measurement
 Date of measurement: 08/13/2019
 Measurement duration: 22 minutes 08 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 41
Channels	40390
Signal	LTE (Duty cycle: 63%)

B. SAR Measurement Results

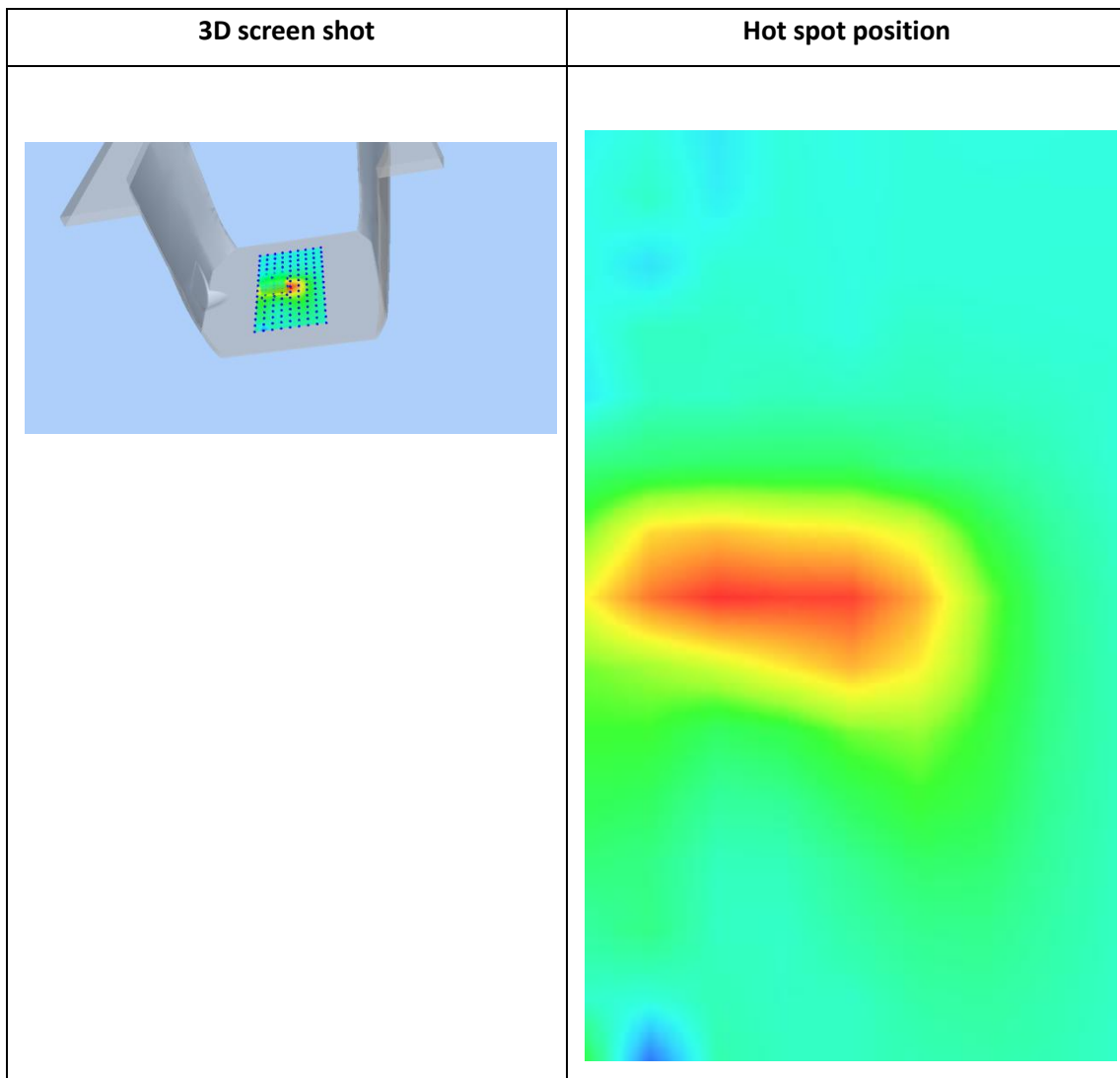
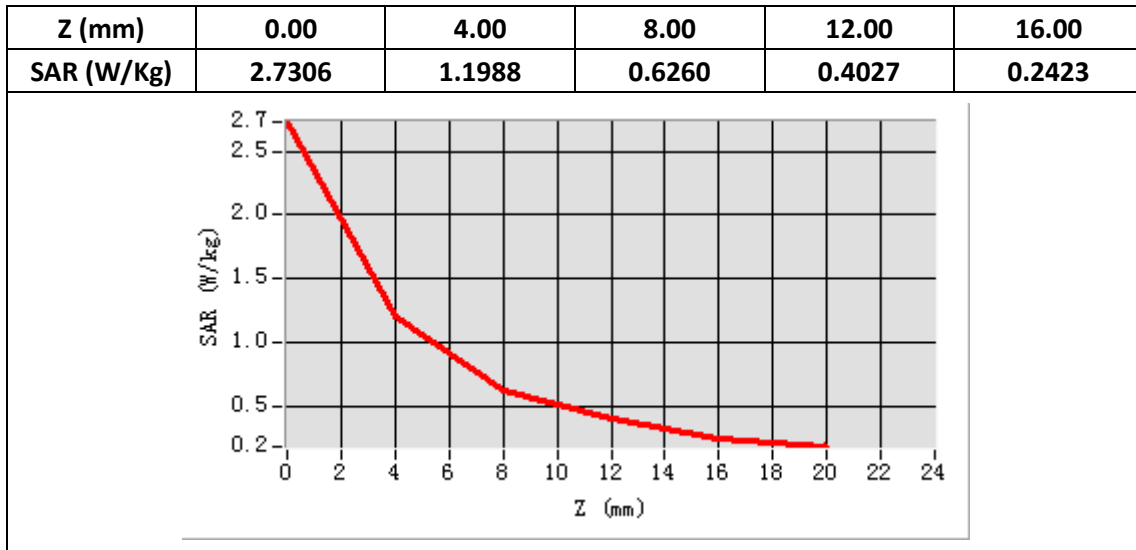
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2570
Relative permittivity (real part)	52.98
Relative permittivity (imaginary part)	14.95
Conductivity (S/m)	2.16
Variation (%)	-1.33
ConvF:	2.43



Maximum location: X=-19.00, Y=-1.00

SAR Peak: 2.11W/kg

SAR 10g (W/Kg)	0.565059
SAR 1g (W/Kg)	1.111696



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

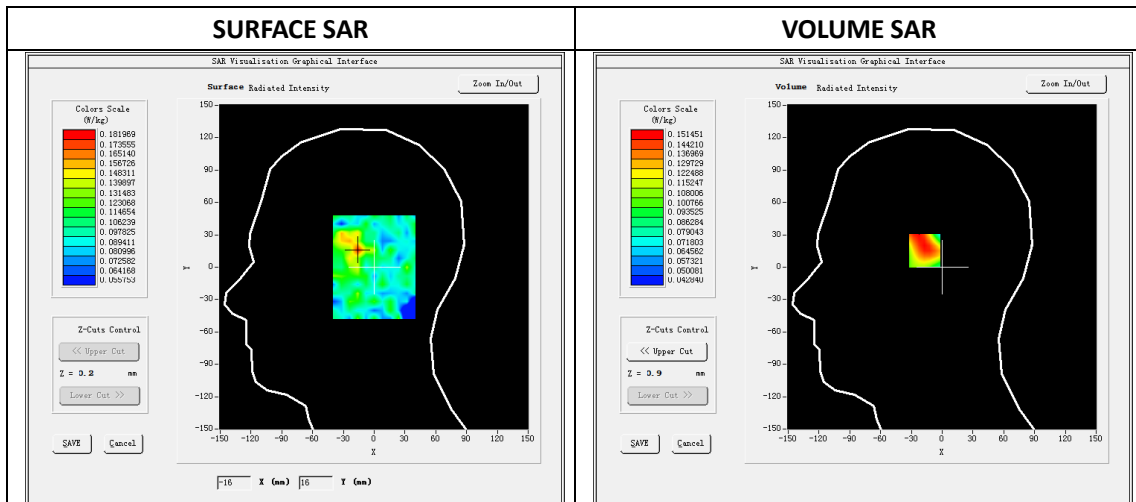
Type: Phone measurement
 Date of measurement: 08/12/2019
 Measurement duration: 22 minutes 31 seconds
 Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. SAR Measurement Results

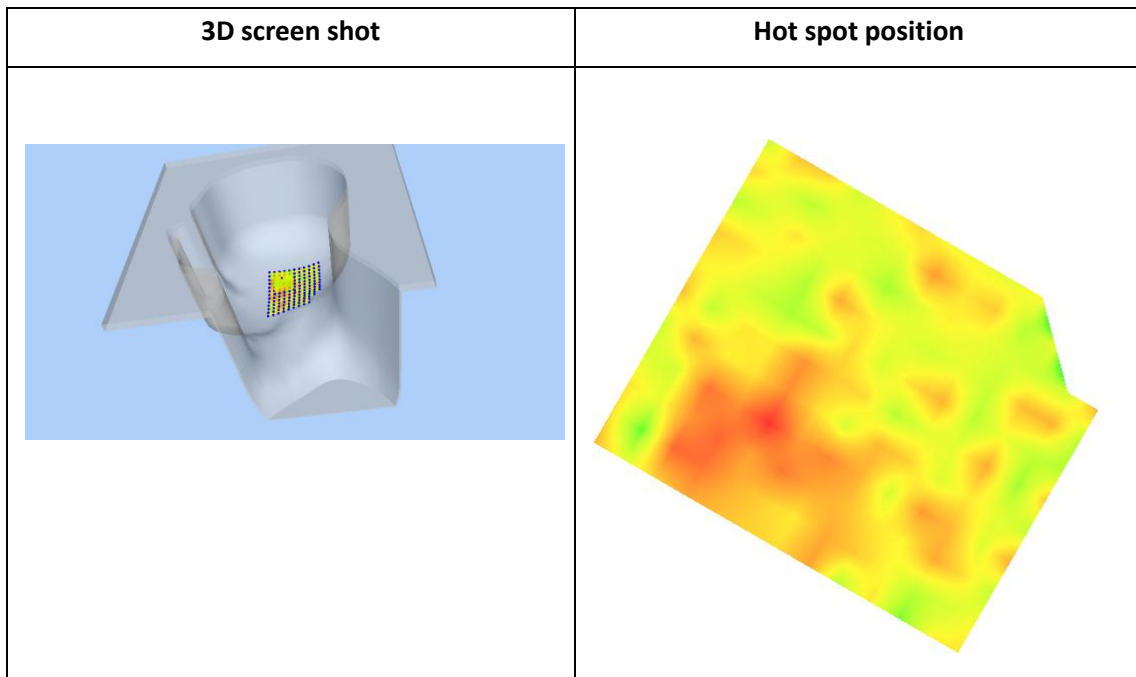
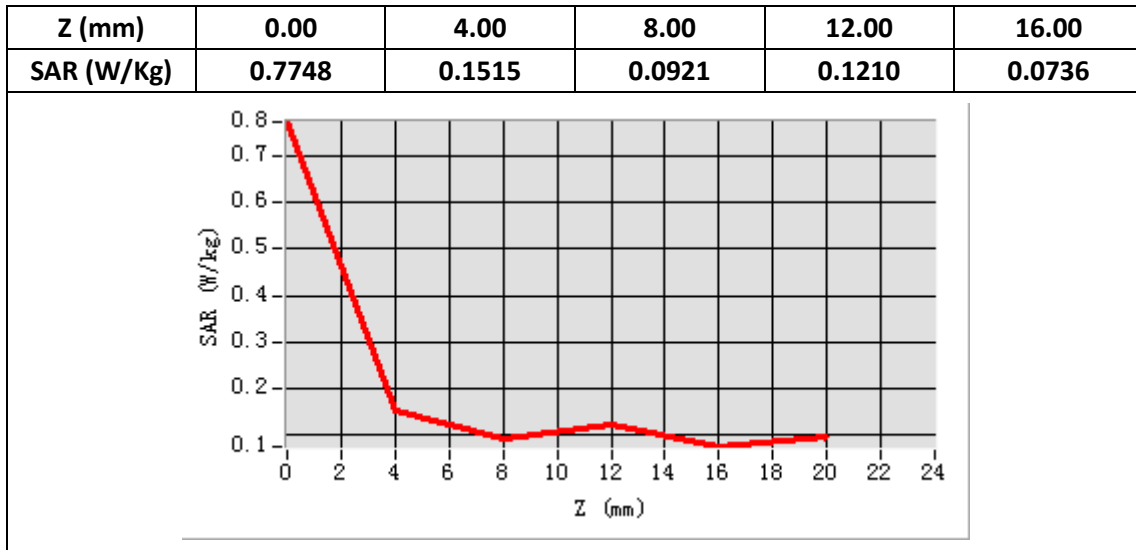
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2437
Relative permittivity (real part)	40.28
Relative permittivity (imaginary part)	13.30
Conductivity (S/m)	1.81
Variation (%)	0.58
ConvF:	2.37



Maximum location: X=-16.00 Y=16.00

SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.114050
SAR 1g (W/Kg)	0.152553



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

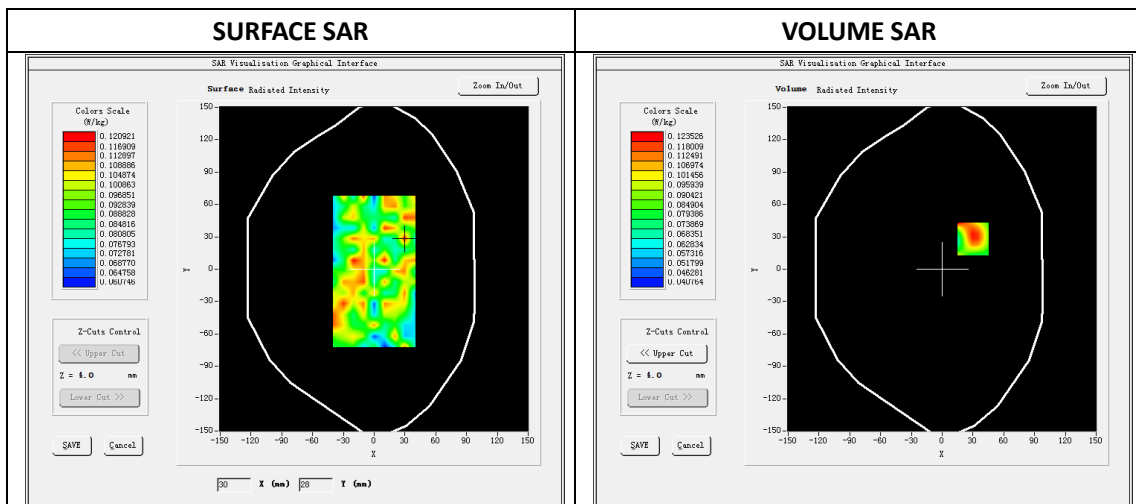
Type: Phone measurement
 Date of measurement: 08/12/2019
 Measurement duration: 22 minutes 32 seconds
 Mobile Phone IMEI number: --

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_27/15_EPG0261
Frequency (MHz)	2437
Relative permittivity (real part)	53.16
Relative permittivity (imaginary part)	14.40
Conductivity (S/m)	1.96
Variation (%)	4.67
ConvF:	2.46



Maximum location: X=30.00 Y=28.00

SAR Peak: 0.14W/kg

SAR 10g (W/Kg)	0.091921
SAR 1g (W/Kg)	0.114212

