

## Appendix B: SAR Measurement results Plots

Plot	Frequency/Mode	Testing Position and Channel	Test Date
1	GSM850	Right Cheek Middle	2019/05/15
2	GSM850/GPRS4Tx	Body Back, Middle ,10mm	2019/05/15
3	GSM1900	Left Cheek Middle	2019/05/27
4	GSM1900/GPRS4Tx	Body Face Middle ,10mm	2019/05/27
5	WCDMA1900	Left Cheek Middle	2019/05/27
6	WCDMA1900	Body Face, Middle ,10mm	2019/05/27
7	WCDMA850	Right Cheek Middle	2019/05/15
8	WCDMA850	Body Back, Middle ,10mm	2019/05/15
9	LTE Band2	Left Cheek Middle	2019/05/27
10	LTE Band2	Body Face, Middle ,10mm	2019/05/27
11	LTE Band4	Left Cheek Middle	2019/05/22
12	LTE Band4	Body Back, Middle ,10mm	2019/05/22
13	LTE Band5	Left Cheek Middle	2019/05/15
14	LTE Band5	Body Back, Middle,10mm	2019/05/15
15	LTE Band7	Left Cheek Middle	2019/05/31
16	LTE Band7	Body Back, Middle ,10mm	2019/05/31
17	WIFI 2.4G 802.11b	Right Tilt Middle	2019/05/29
18	WIFI 2.4G 802.11b	Edge D, Middle ,10mm	2019/05/29
19	WIFI 5G 802.11a-20MHz	Right Cheek 5240	2019/06/03
20	WIFI 5G 802.11ac-40MHz	Body Back, 5755 ,10mm	2019/06/05
21	BT 3.0 8-DPSK	Left Cheek Low	2019/07/08
22	BT 3.0 8-DPSK	Body Back, Low ,10mm	2019/07/08

**Plot 1: GSM850, Right Cheek, Middle**

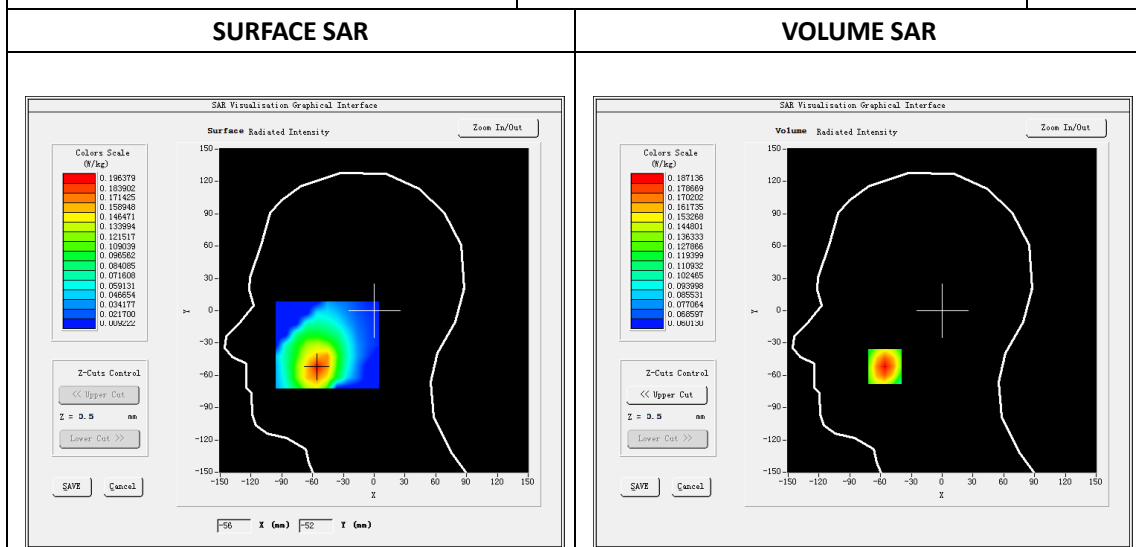
Type: Phone measurement  
 Date of measurement: 05/15/2019  
 Measurement duration: 22 minutes 11 seconds  
 Mobile Phone IMEI number: --

**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	GSM850
Channels	190
Signal	GSM (Duty cycle: 1:8.3)

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	836.6
Relative permittivity (real part)	41.43
Relative permittivity (imaginary part)	19.27
Conductivity (S/m)	0.91
Variation (%)	-3.88
ConvF:	1.92

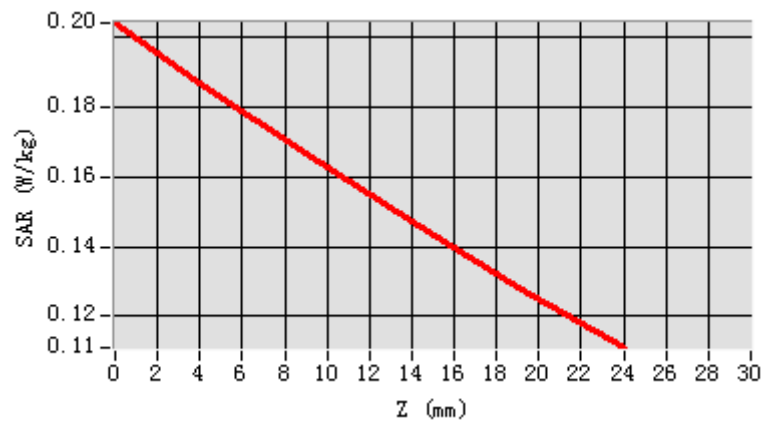


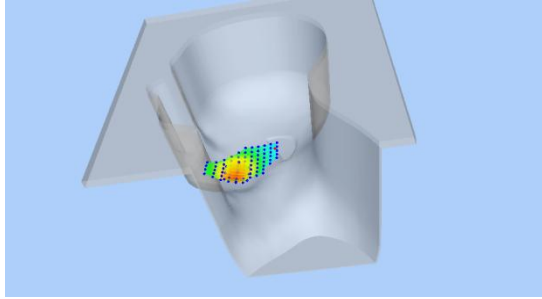
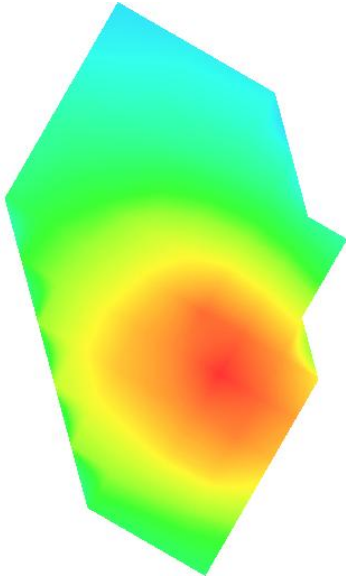
**Maximum location: X=-56.00, Y=-52.00**

**SAR Peak: 0.20W/kg**

SAR 10g (W/Kg)	0.148730
SAR 1g (W/Kg)	0.183810

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.2041	0.1871	0.1667	0.1471	0.1285



3D screen shot	Hot spot position
	

**Plot 2: GPRS850, Back, Middle,10mm**

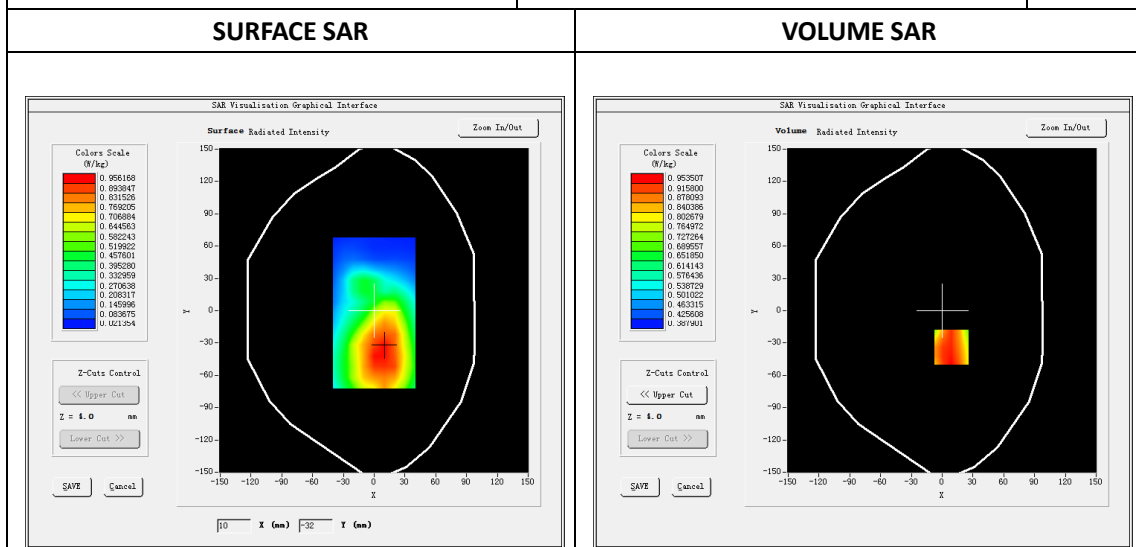
Type: Phone measurement  
 Date of measurement: 05/15/2019  
 Measurement duration: 22 minutes 31 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	GSPRS850_2Tx
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)	55.31
Relative permittivity (imaginary part)	20.48
Conductivity (S/m)	0.95
Variation (%)	-0.86
ConvF:	1.99

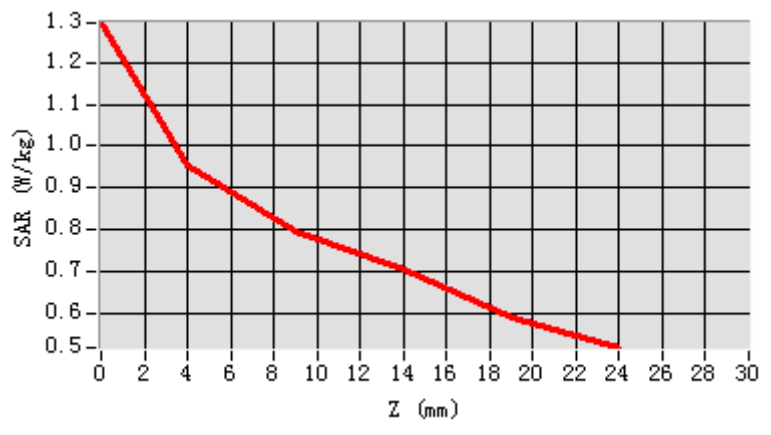


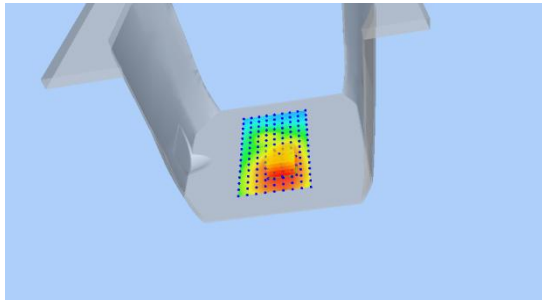
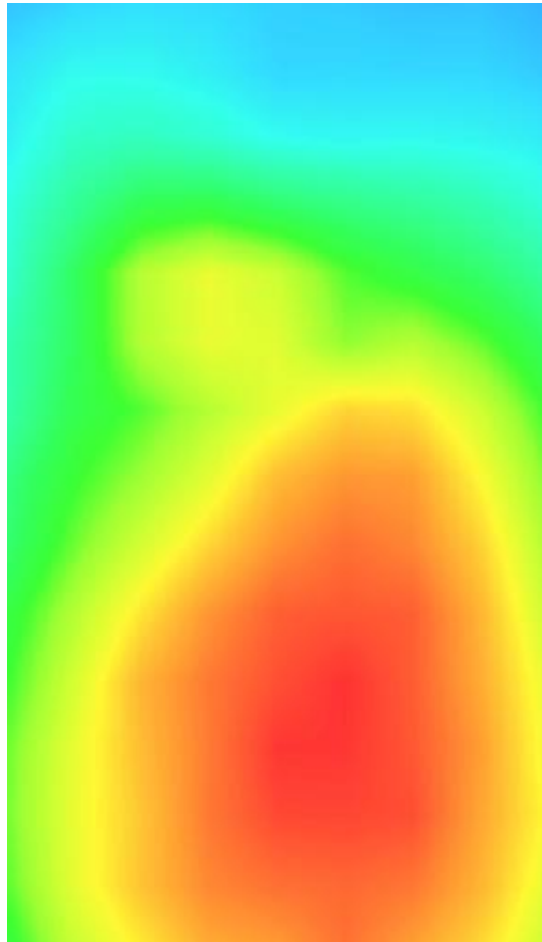
Maximum location: X=9.00, Y=-34.00

SAR Peak: 1.08 W/kg

SAR 10g (W/Kg)	0.776021
SAR 1g (W/Kg)	0.942317

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.2943	0.9535	0.7949	0.7036	0.5877



3D screen shot	Hot spot position
	

**Plot3: GSM1900, Left Cheek, Middle**

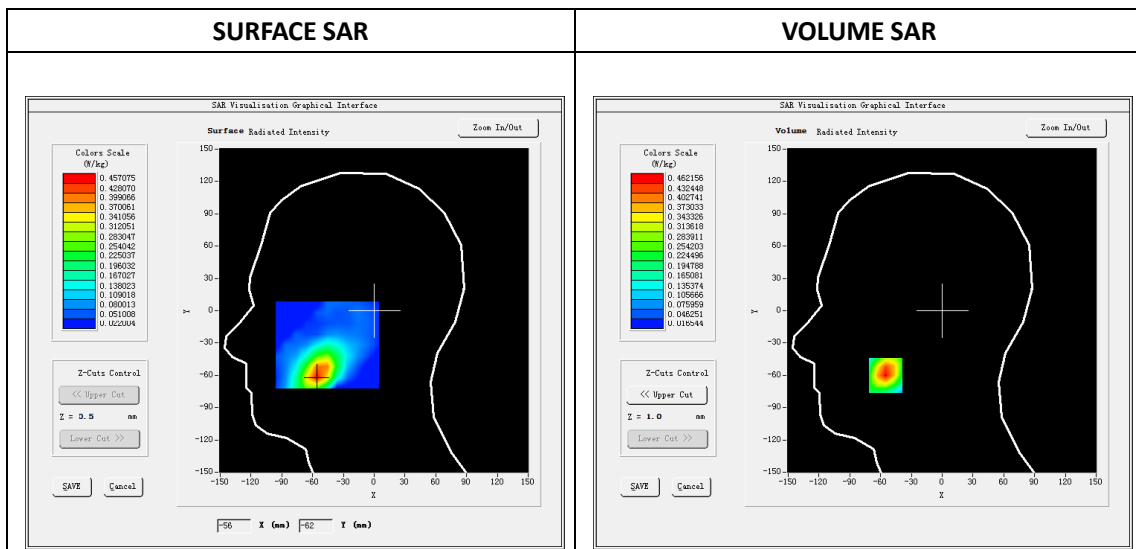
Type: Phone measurement  
 Date of measurement: 05/27/2019  
 Measurement duration: 22 minutes 24 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

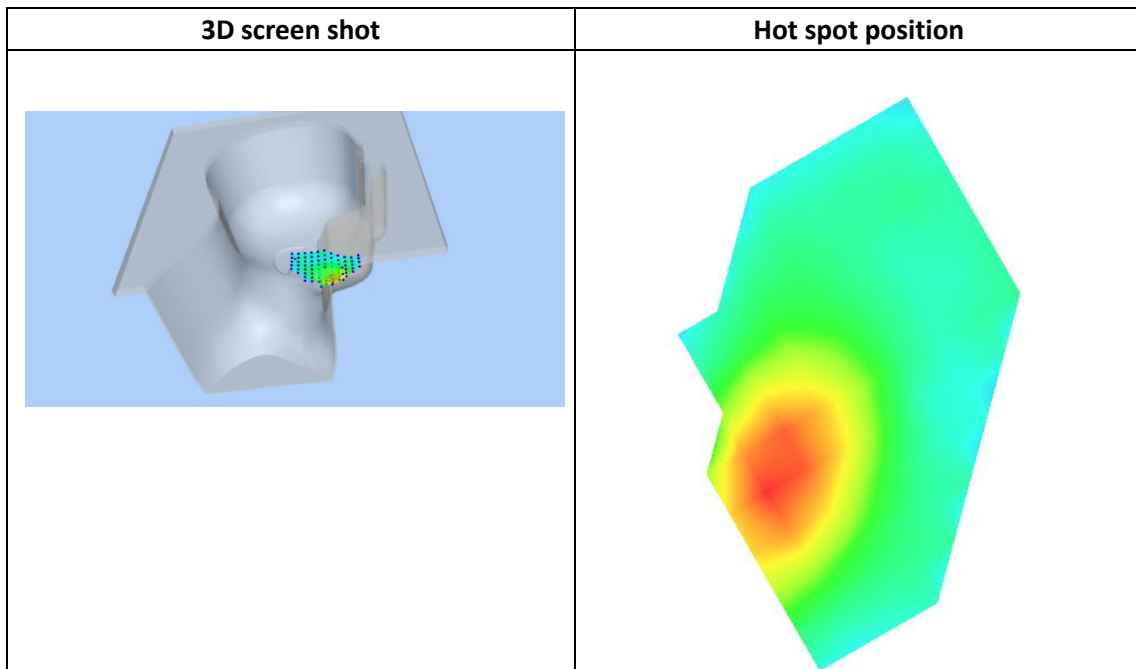
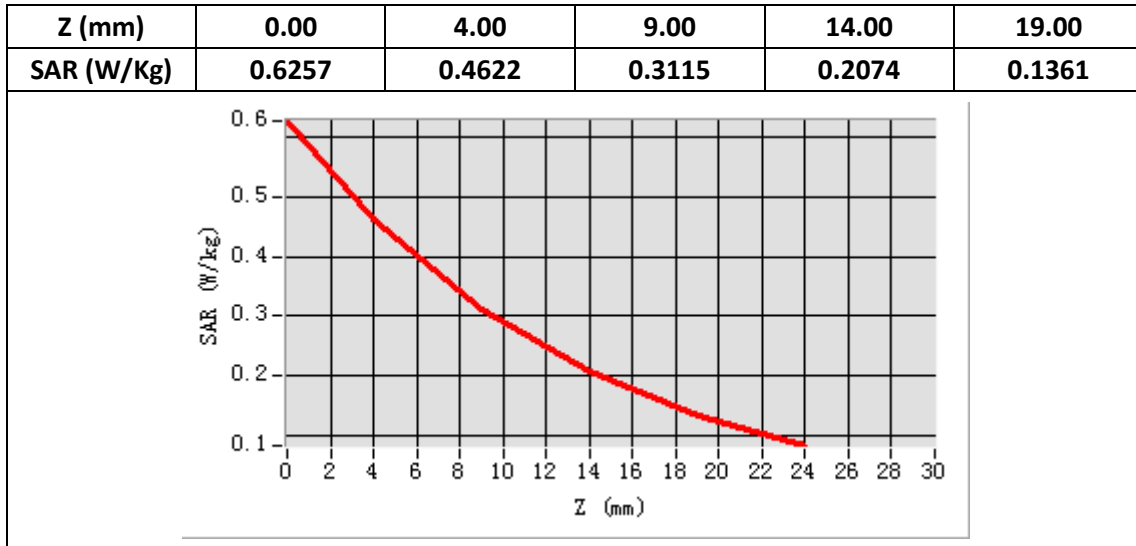
<b>E-Field Probe</b>	SATIMO SN_27/15_EPG0261
<b>Frequency (MHz)</b>	1880
<b>Relative permittivity (real part)</b>	40.11
<b>Relative permittivity (imaginary part)</b>	13.17
<b>Conductivity (S/m)</b>	1.39
<b>Variation (%)</b>	-4.32
<b>ConvF:</b>	2.34



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

**SAR Peak: 0.64 W/kg**

<b>SAR 10g (W/Kg)</b>	0.253458
<b>SAR 1g (W/Kg)</b>	0.433478



**Plot4: GPRS1900, Face, Middle ,10mm**

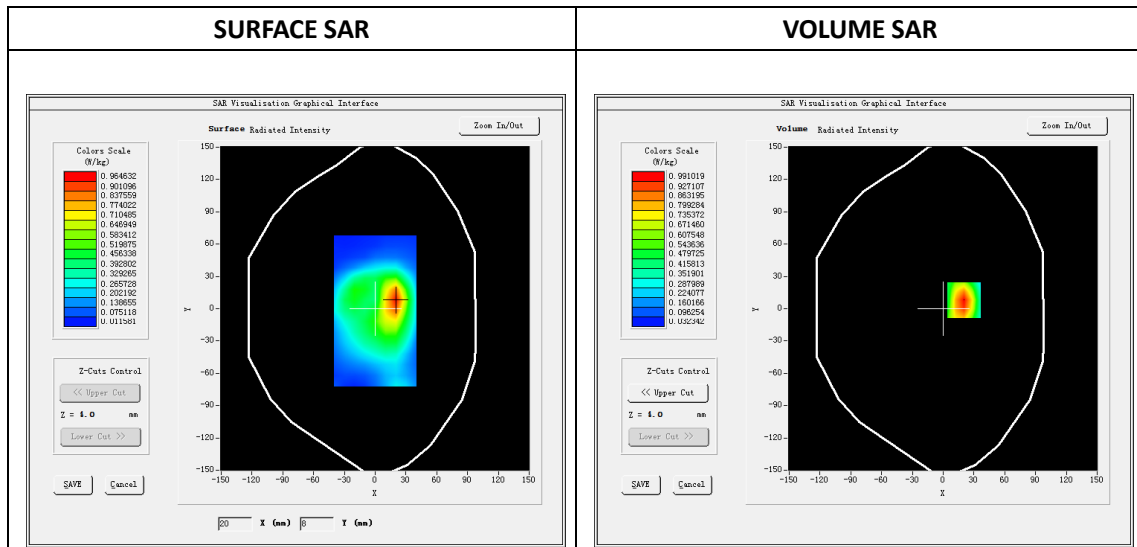
Type: Phone measurement  
 Date of measurement: 05/27/2019  
 Measurement duration: 22 minutes 23 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

<b>Area Scan</b>	dx=8mm dy=8mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Face
<b>Band</b>	GPRS1900_2Tx
<b>Channels</b>	661
<b>Signal</b>	GPRS(Duty cycle: 1:2)

**B. SAR Measurement Results**

<b>E-Field Probe</b>	SATIMO SN_27/15_EPG0261
<b>Frequency (MHz)</b>	1880
<b>Relative permittivity (real part)</b>	53.06
<b>Relative permittivity (imaginary part)</b>	14.12
<b>Conductivity (S/m)</b>	1.49
<b>Variation (%)</b>	0.53
<b>ConvF:</b>	2.39



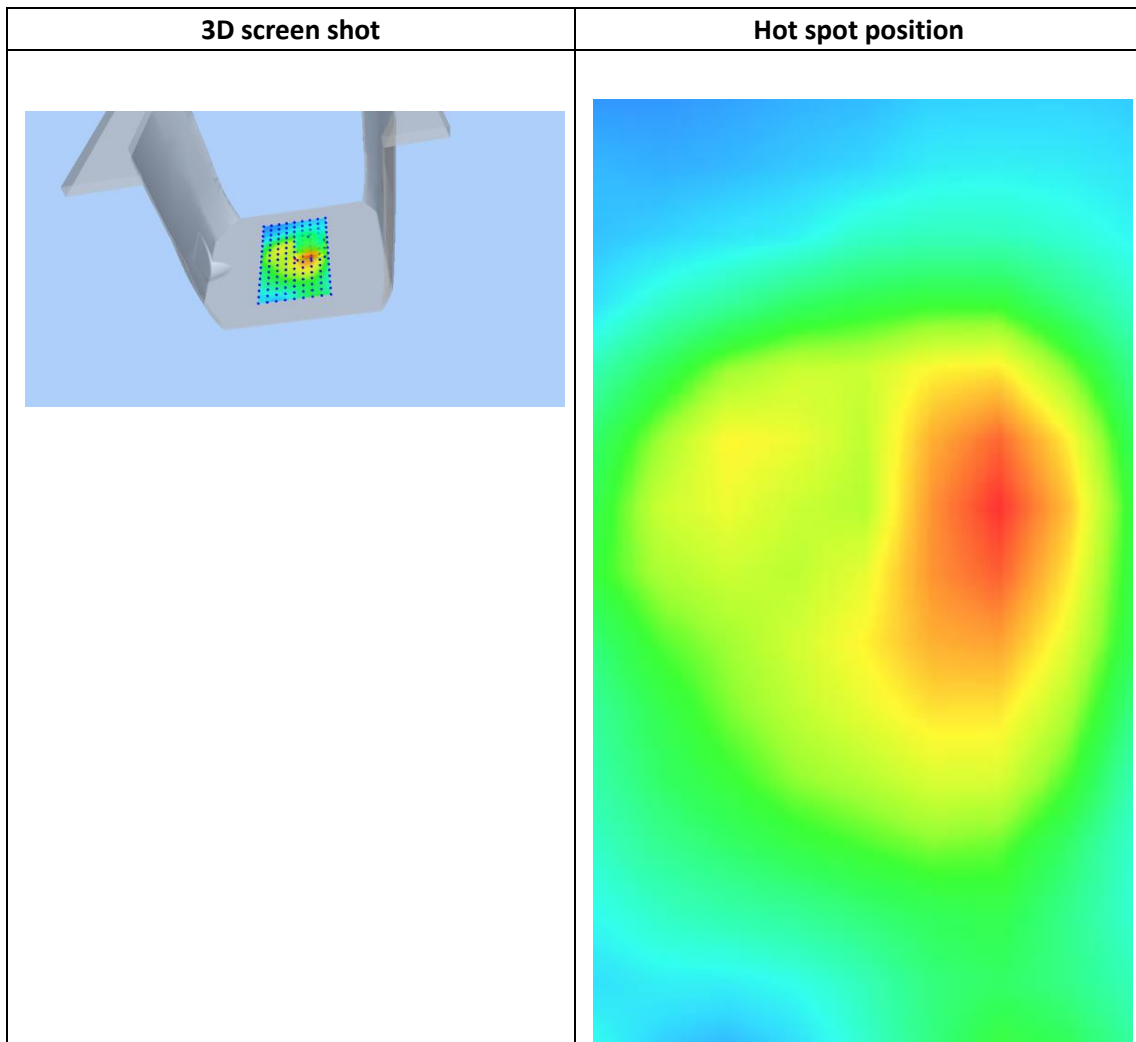
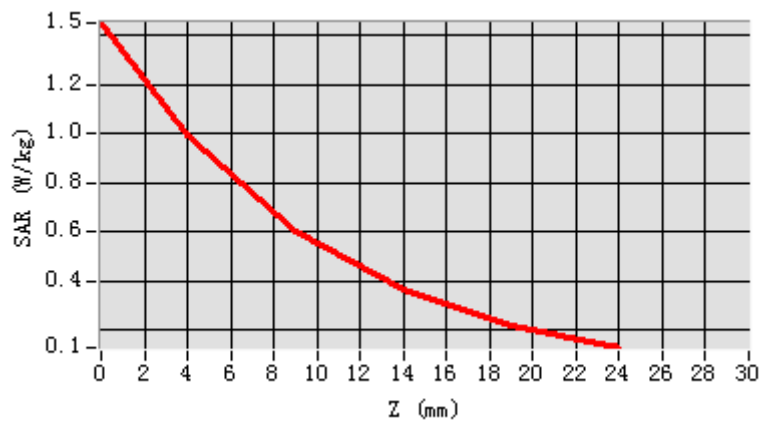
**Maximum location: X=20.00, Y=8.00**

**SAR Peak: 1.46W/kg**

<b>SAR 10g (W/Kg)</b>	0.516815
<b>SAR 1g (W/Kg)</b>	0.927099



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.4523	0.9910	0.6025	0.3645	0.2223



## Plot 5: WCDMA1900, Left Cheek, Middle,10mm

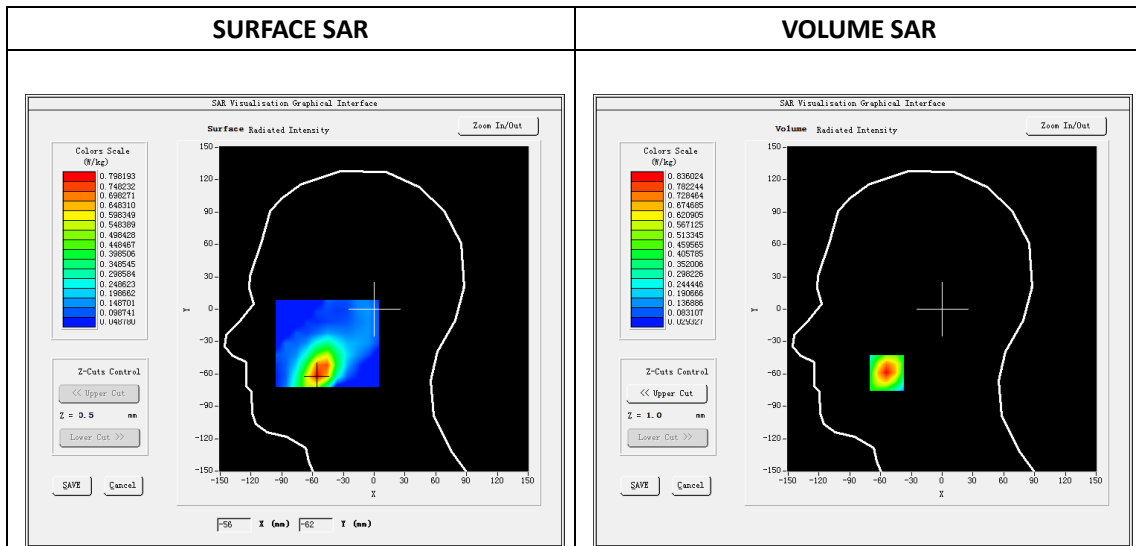
Type: Phone measurement  
 Date of measurement: 05/27/2019  
 Measurement duration: 22 minutes 18 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

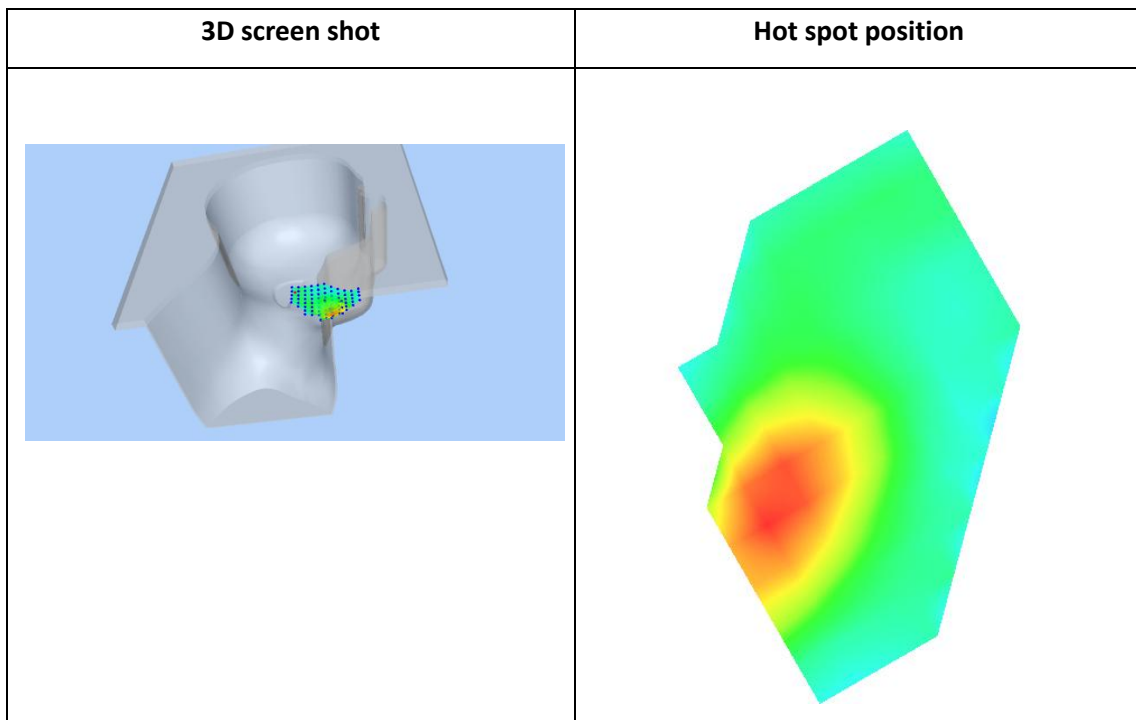
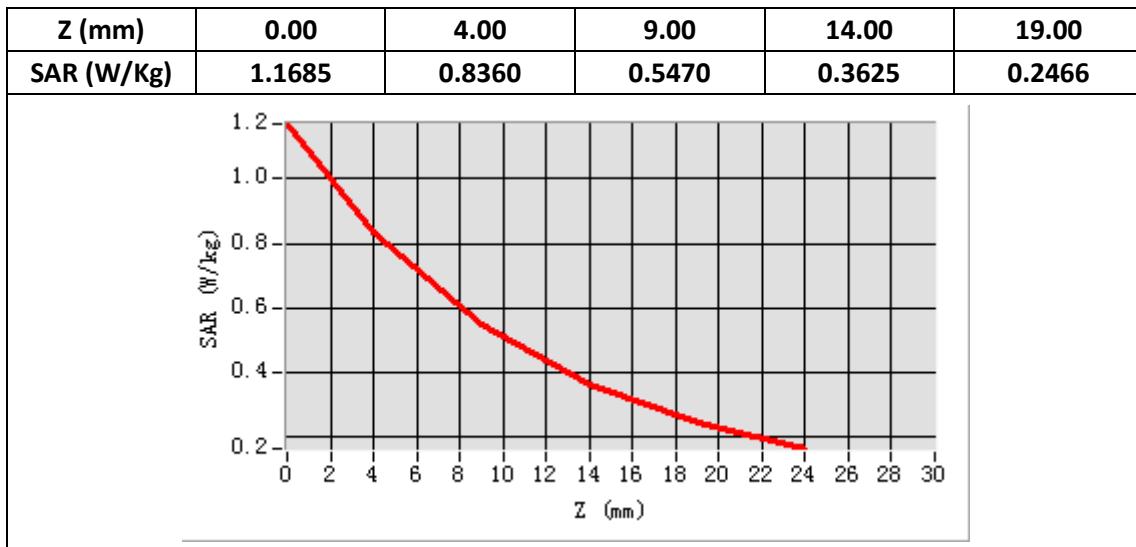
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1880
Relative permittivity (real part)	40.11
Relative permittivity (imaginary part)	13.17
Conductivity (S/m)	1.39
Variation (%)	-2.50
ConvF:	2.34



**Maximum location: X=-54.00, Y=-59.00**

**SAR Peak: 1.17W/kg**

<b>SAR 10g (W/Kg)</b>	0.453756
<b>SAR 1g (W/Kg)</b>	0.778450



**Plot 6: WCDMA1900, Face, Middle,10mm**

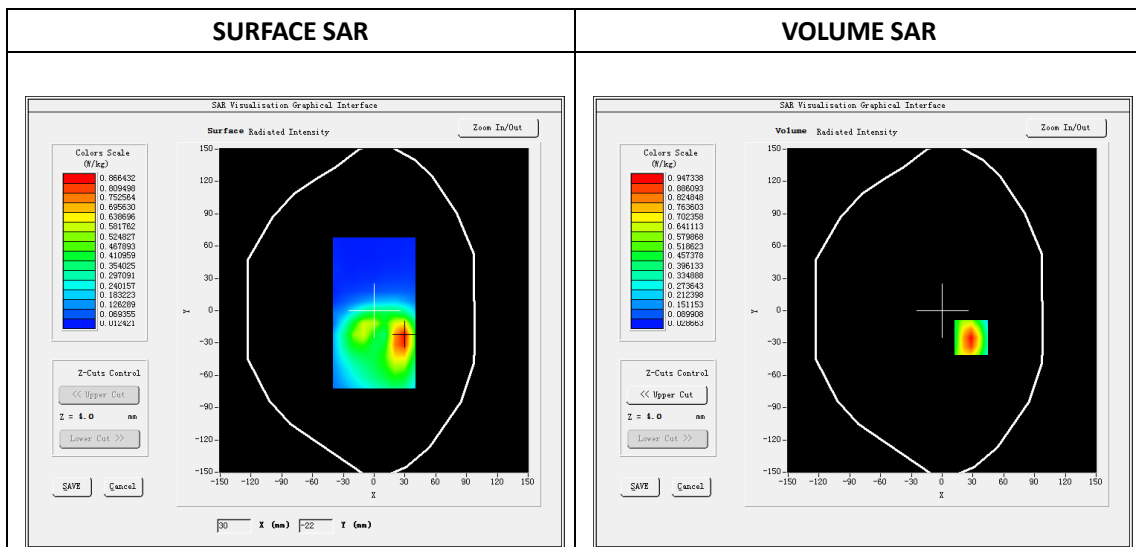
Type: Phone measurement  
 Date of measurement: 05/27/2019  
 Measurement duration: 22 minutes 51 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

<b>E-Field Probe</b>	SATIMO SN_27/15_EPG0261
<b>Frequency (MHz)</b>	1880
<b>Relative permittivity (real part)</b>	53.06
<b>Relative permittivity (imaginary part)</b>	14.12
<b>Conductivity (S/m)</b>	1.49
<b>Variation (%)</b>	1.10
<b>ConvF:</b>	2.39

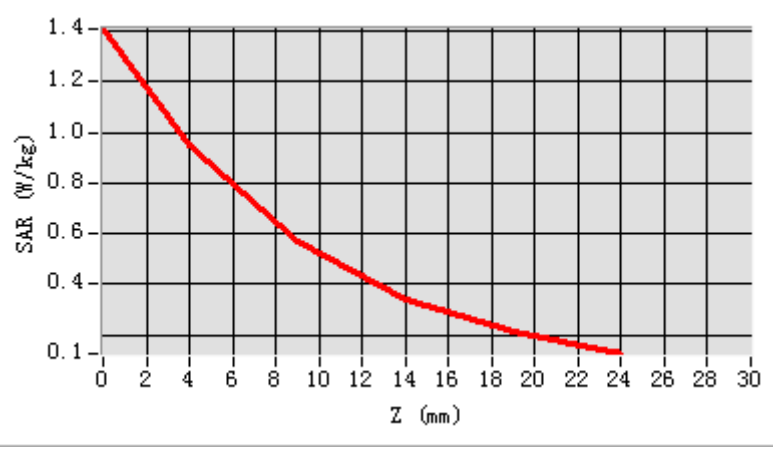


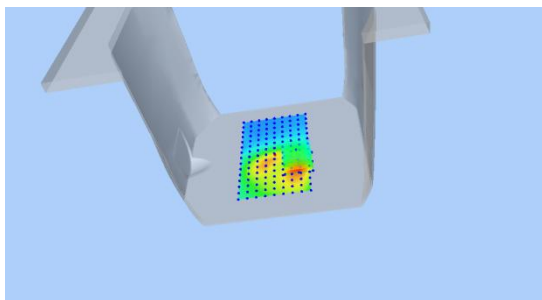
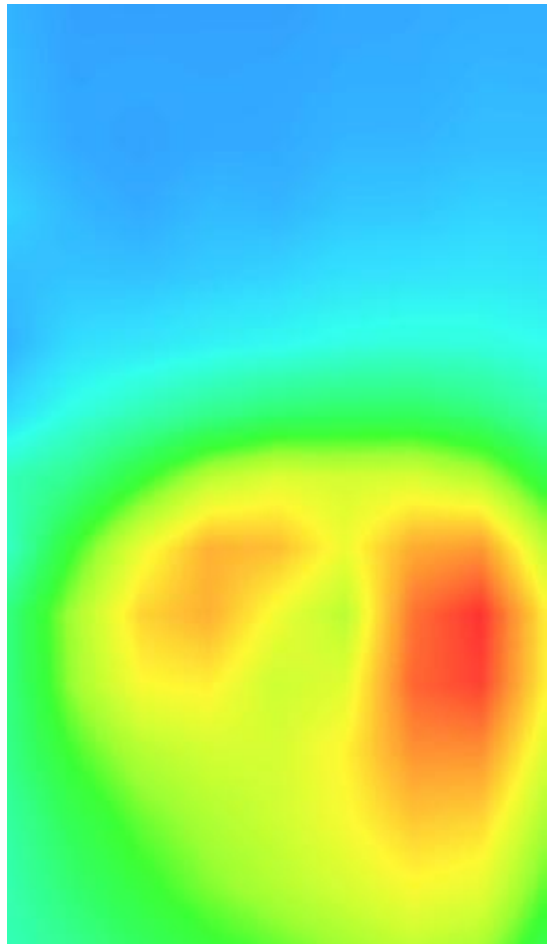
**Maximum location: X=28.00, Y=-25.00**

**SAR Peak: 1.42W/kg**

<b>SAR 10g (W/Kg)</b>	0.488280
<b>SAR 1g (W/Kg)</b>	0.884602

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.4080	0.9473	0.5669	0.3405	0.2095



3D screen shot	Hot spot position
	

## Plot 7: WCDMA850, Right Cheek, Middle

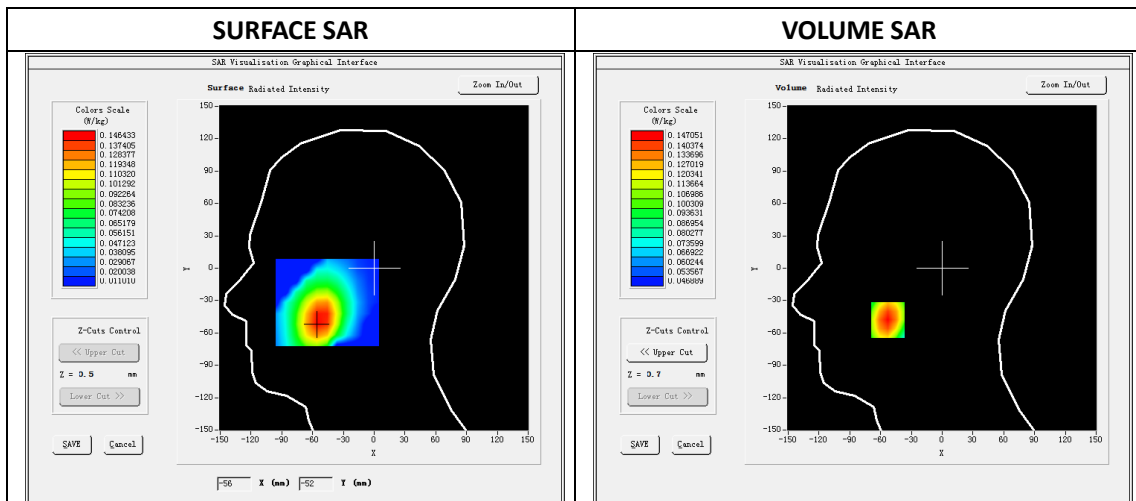
Type: Phone measurement  
 Date of measurement: 05/15/2019  
 Measurement duration: 22 minutes 25 seconds  
 Mobile Phone IMEI number: --

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

**B. SAR Measurement Results**

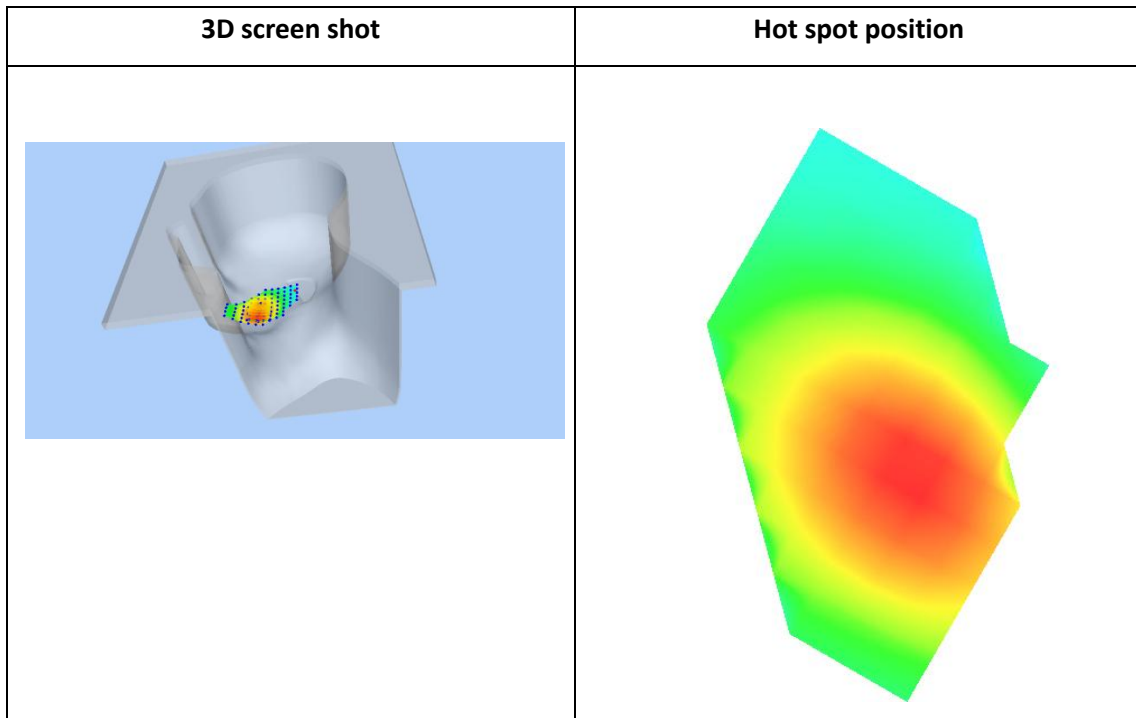
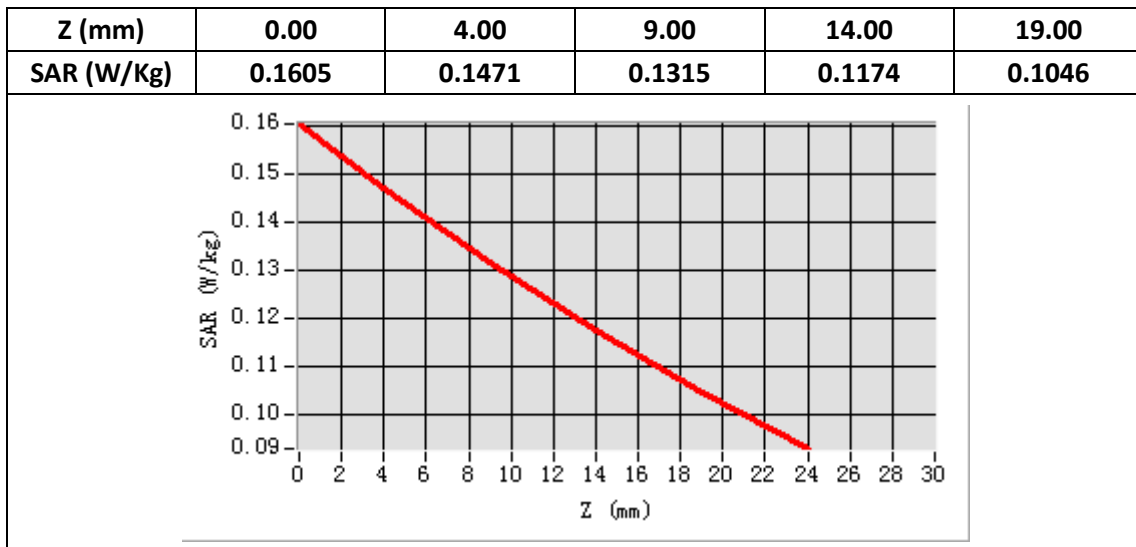
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	836.6
Relative permittivity (real part)	41.43
Relative permittivity (imaginary part)	19.27
Conductivity (S/m)	0.91
Variation (%)	-4.28
ConvF:	1.92



**Maximum location: X=-53.00, Y=-48.00**

**SAR Peak: 0.16W/kg**

SAR 10g (W/Kg)	0.119550
SAR 1g (W/Kg)	0.144916



## Plot 8: WCDMA850, Back, Middle,10mm

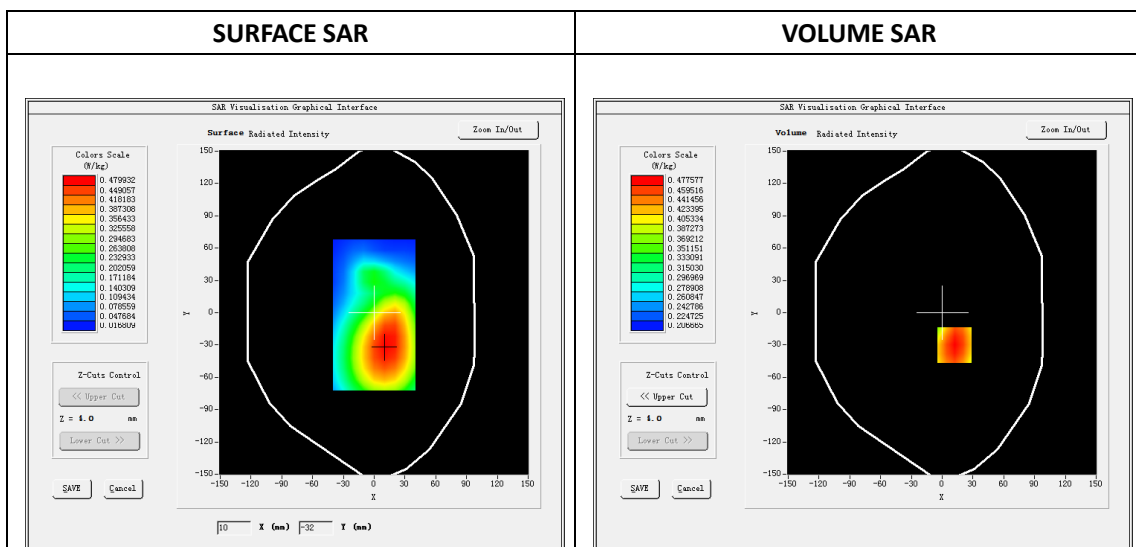
Type: Phone measurement  
 Date of measurement: 05/15/2019  
 Measurement duration: 22 minutes 48 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

<b>E-Field Probe</b>	SATIMO SN_27/15_EPG0261
<b>Frequency (MHz)</b>	836.6
<b>Relative permittivity (real part)</b>	53.12
<b>Relative permittivity (imaginary part)</b>	15.10
<b>Conductivity (S/m)</b>	1.51
<b>Variation (%)</b>	-1.01
<b>ConvF:</b>	1.99



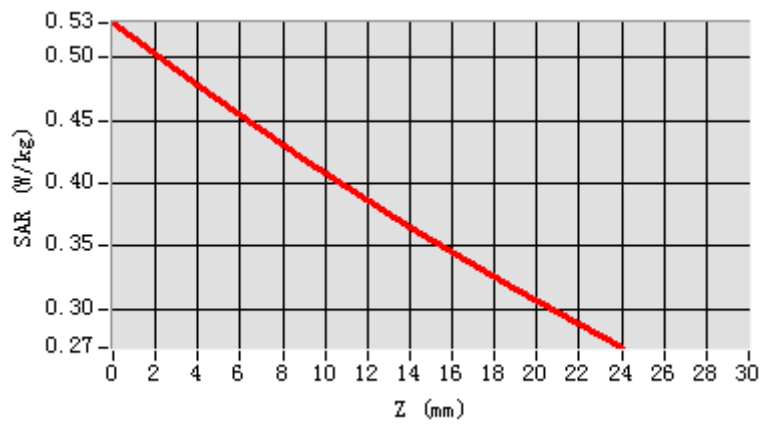
**Maximum location: X=12.00, Y=-30.00**

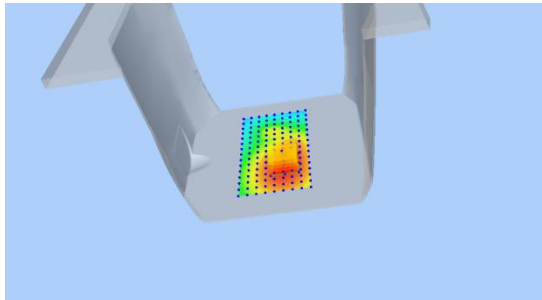
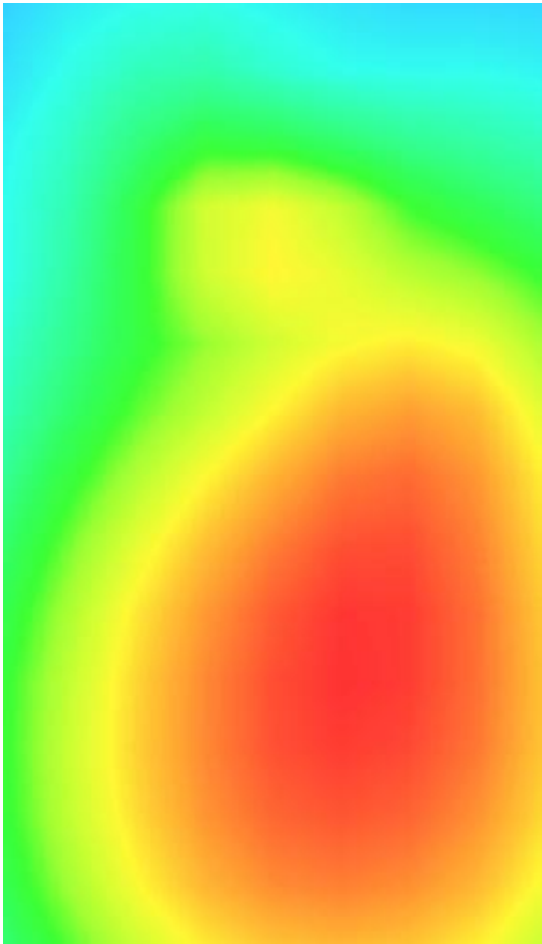
**SAR Peak: 0.53W/kg**

<b>SAR 10g (W/Kg)</b>	0.394921
<b>SAR 1g (W/Kg)</b>	0.474990



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5276	0.4776	0.4191	0.3651	0.3152



3D screen shot	Hot spot position
	

### Plot 9: LTE Band2, 10MHz, Left Cheek, Middle

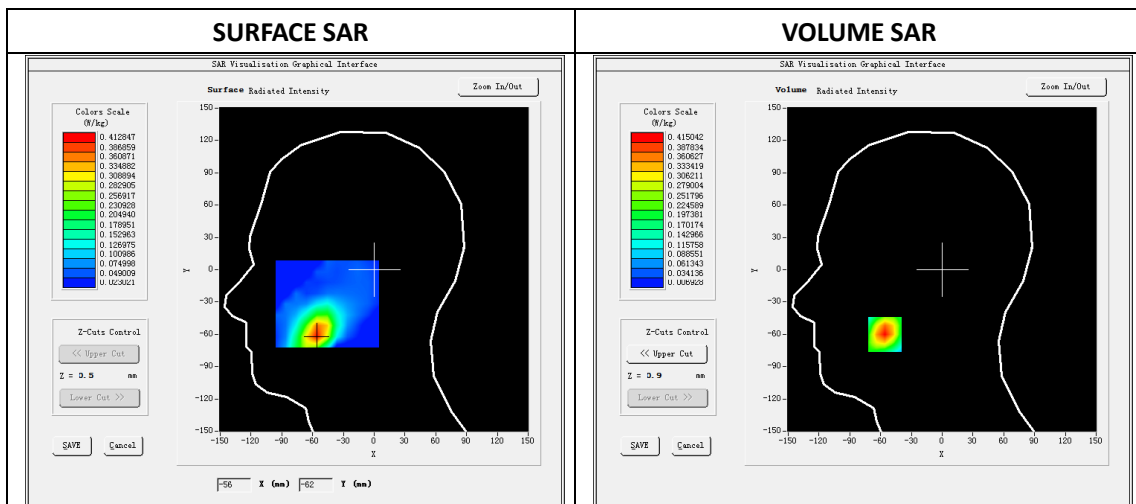
Type: Phone measurement  
 Date of measurement: 05/27/2019  
 Measurement duration: 22 minutes 06 econds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Left Cheek
Band	LTE Band 2
Channels	20525
Signal	LTE (Duty cycle: 1:1)

**B. SAR Measurement Results**

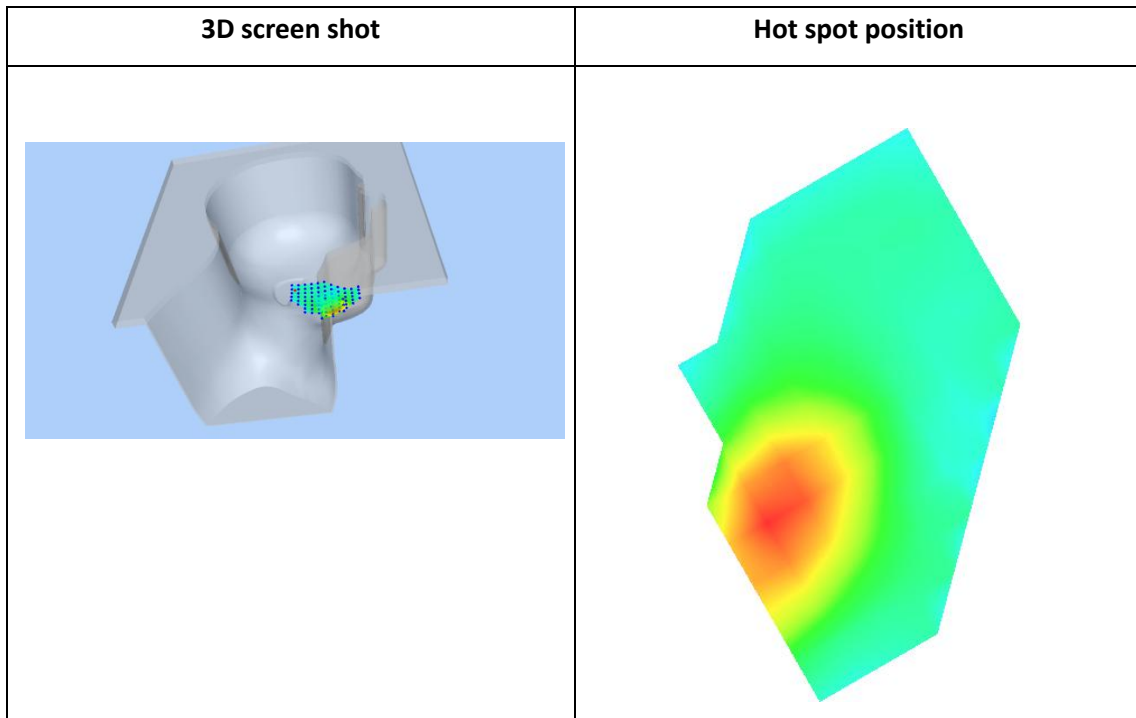
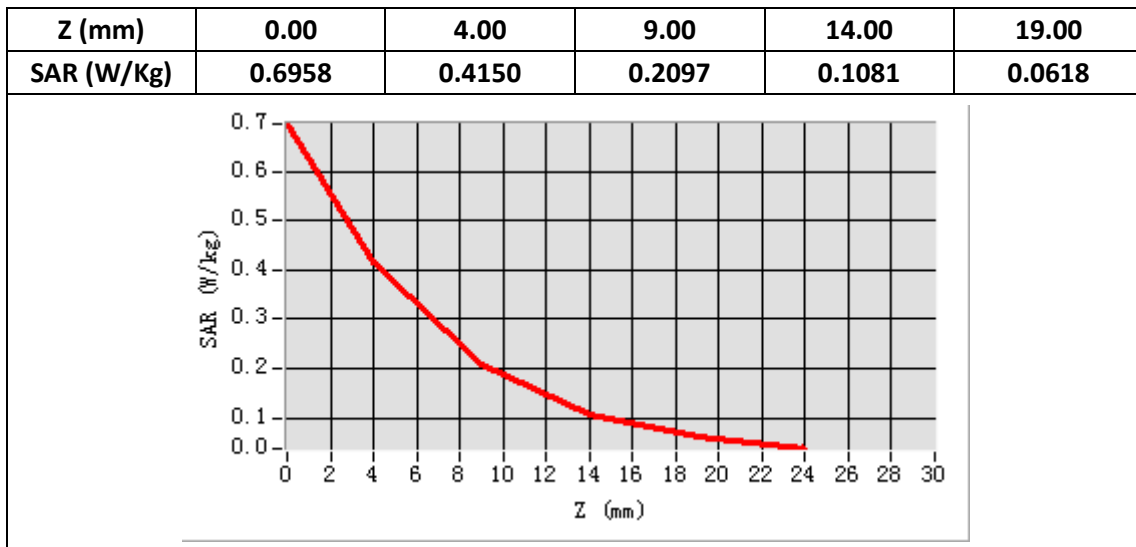
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	836.5
Relative permittivity (real part)	40.11
Relative permittivity (imaginary part)	13.17
Conductivity (S/m)	1.39
Variation (%)	-2.57
ConvF:	2.34



Maximum location: X=-56.00, Y=-60.00

SAR Peak: 0.70 W/kg

SAR 10g (W/Kg)	0.196944
SAR 1g (W/Kg)	0.387719



**Plot 10: LTE Band2, 10MHz, Face, Middle,10mm**

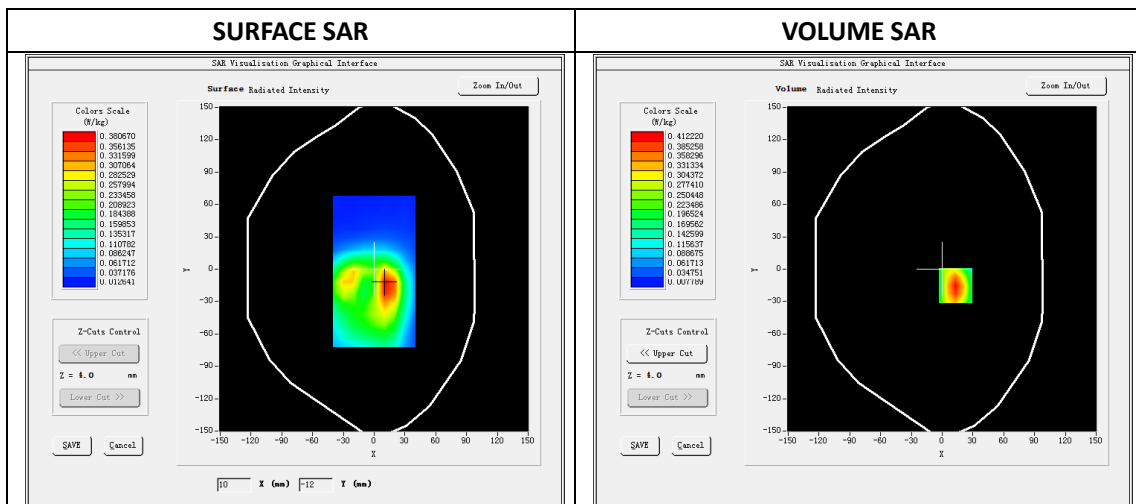
Type: Phone measurement  
 Date of measurement: 05/27/2019  
 Measurement duration: 22 minutes 37 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Face
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)	53.06
Relative permittivity (imaginary part)	14.12
Conductivity (S/m)	1.49
Variation (%)	-2.37
ConvF:	2.39

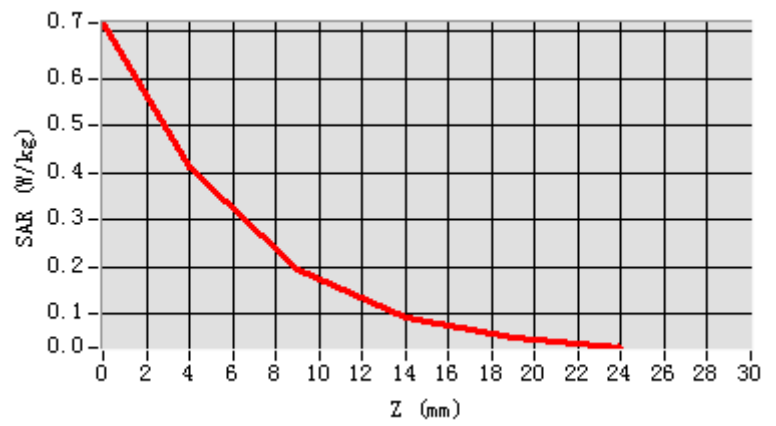


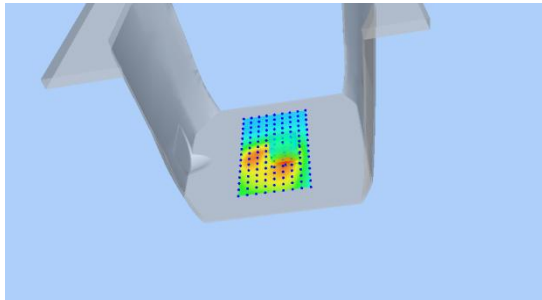
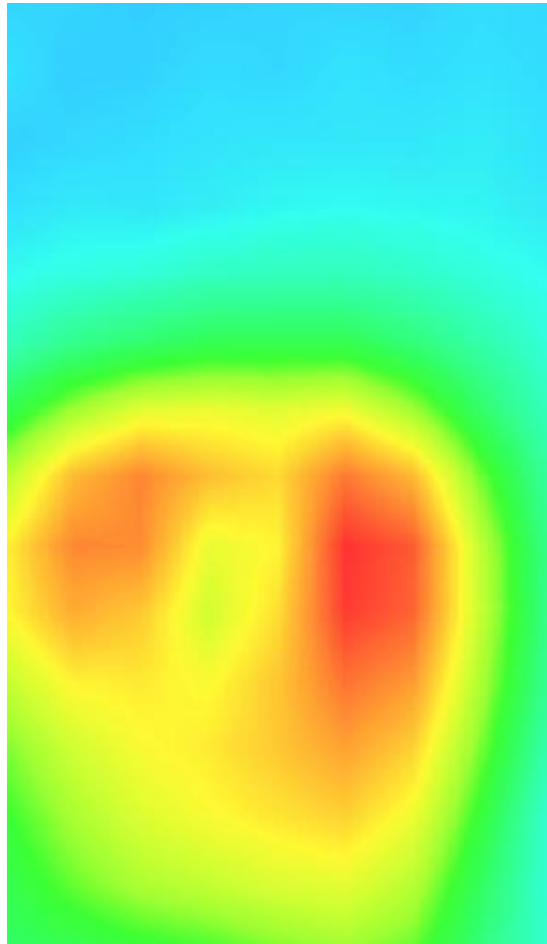
**Maximum location: X=13.00, Y=-15.00**

**SAR Peak: 0.72W/kg**

<b>SAR 10g (W/Kg)</b>	0.194312
<b>SAR 1g (W/Kg)</b>	0.387621

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7183	0.4122	0.1956	0.0937	0.0504



3D screen shot	Hot spot position
	

**Plot 11: LTE Band4, 20MHz,Left Cheek, Middle**

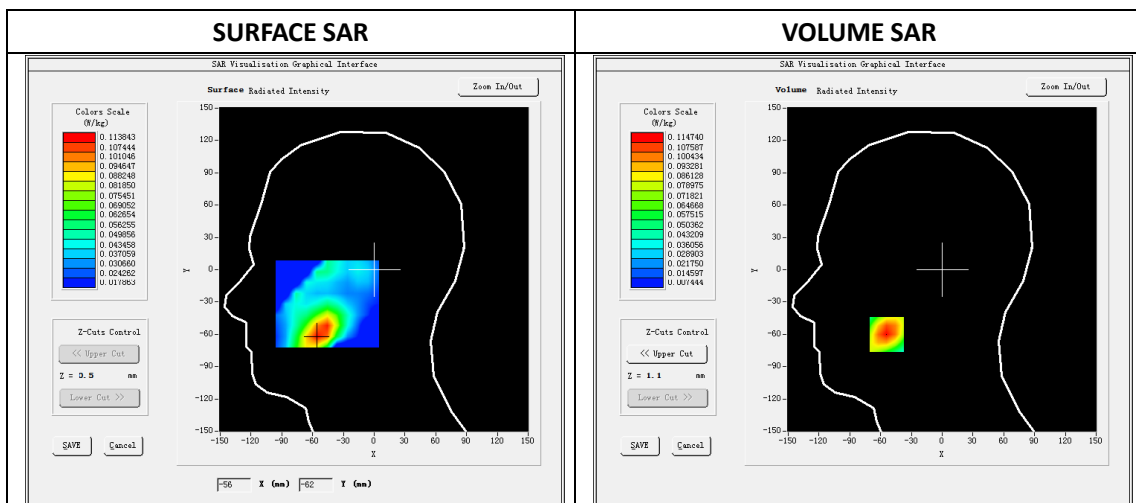
Type: Phone measurement  
 Date of measurement: 05/22/2019  
 Measurement duration: 22 minutes 59 econds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1732.5
Relative permittivity (real part)	40.14
Relative permittivity (imaginary part)	14.00
Conductivity (S/m)	1.40
Variation (%)	-3.86
ConvF:	2.14

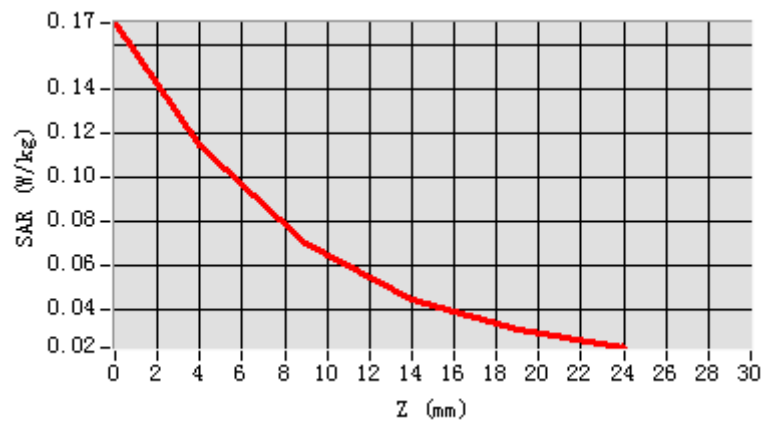


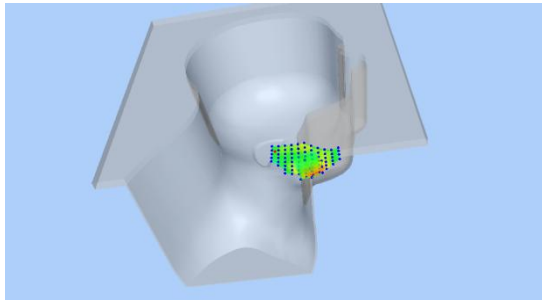
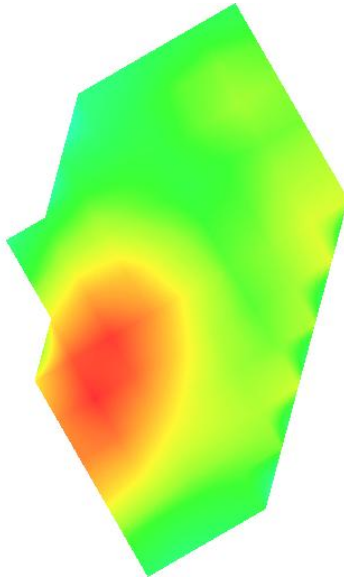
**Maximum location: X=-54.00, Y=-60.00**

**SAR Peak: 0.17 W/kg**

SAR 10g (W/Kg)	0.064933
SAR 1g (W/Kg)	0.108509

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1705	0.1147	0.0700	0.0446	0.0310



3D screen shot	Hot spot position
	

**Plot 12: LTE Band4, 20MHz, Back, Middle,10mm**

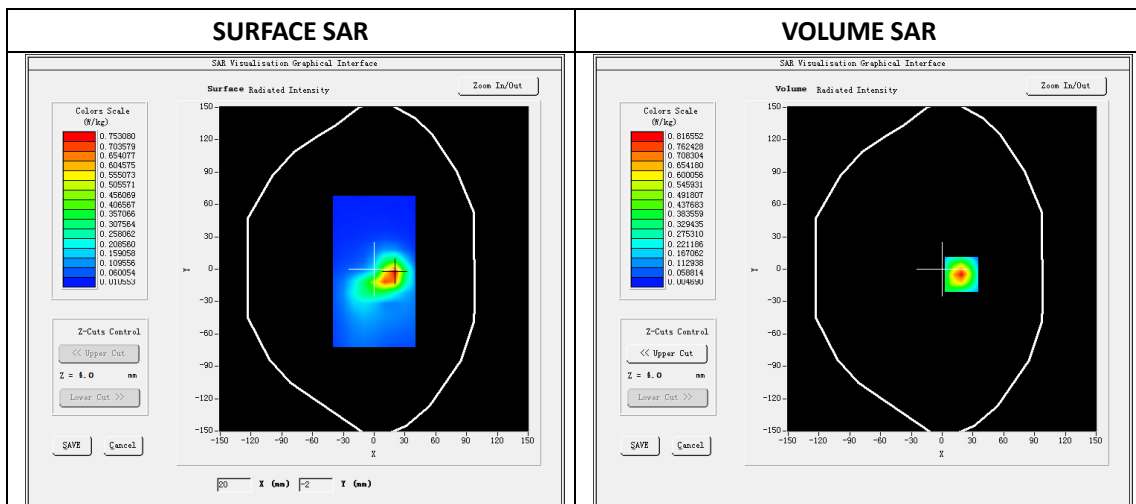
Type: Phone measurement  
 Date of measurement: 05/22/2019  
 Measurement duration: 22 minutes 16 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1732.5
Relative permittivity (real part)	53.09
Relative permittivity (imaginary part)	15.10
Conductivity (S/m)	1.51
Variation (%)	-3.20
ConvF:	2.22



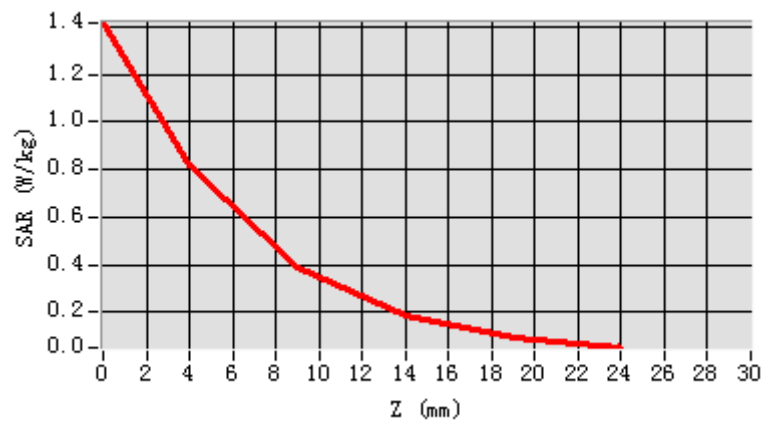
**Maximum location: X=19.00, Y=-5.00**

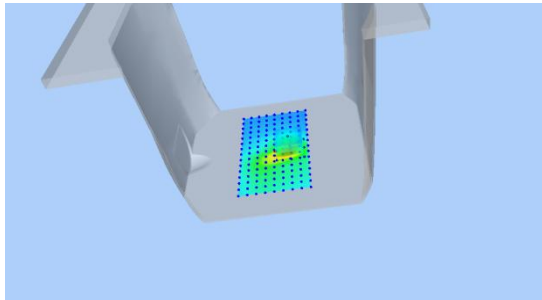
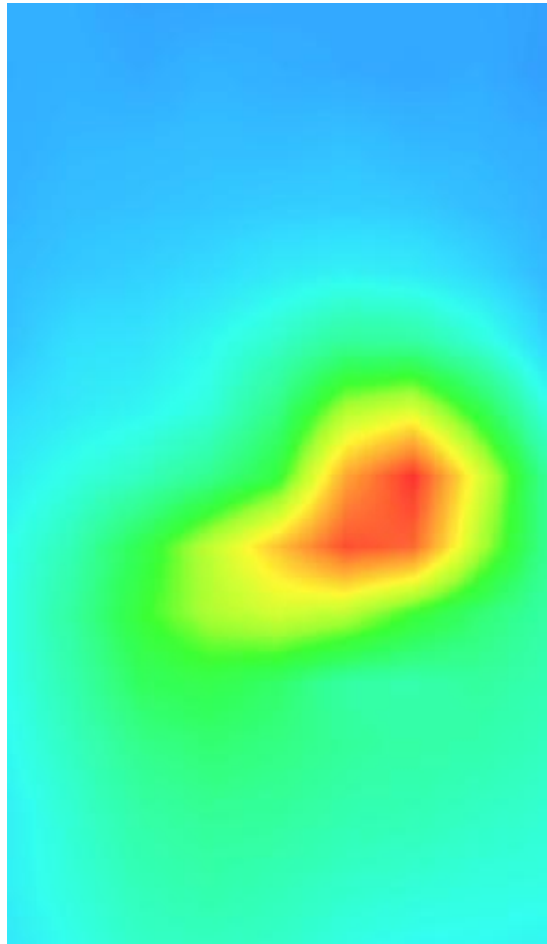
**SAR Peak: 1.42W/kg**

SAR 10g (W/Kg)	0.333513
SAR 1g (W/Kg)	0.743387



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.4176	0.8166	0.3877	0.1830	0.0941



3D screen shot	Hot spot position
	

**Plot 13: LTE Band5, 10MHz,Left Cheek, Middle**

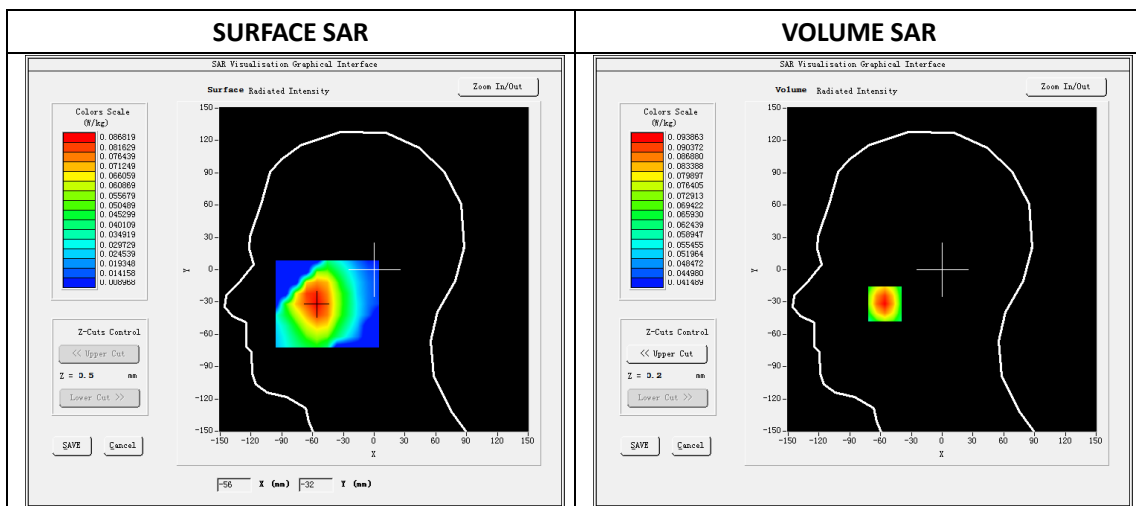
Type: Phone measurement  
 Date of measurement: 05/15/2019  
 Measurement duration: 22 minutes 07 econds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

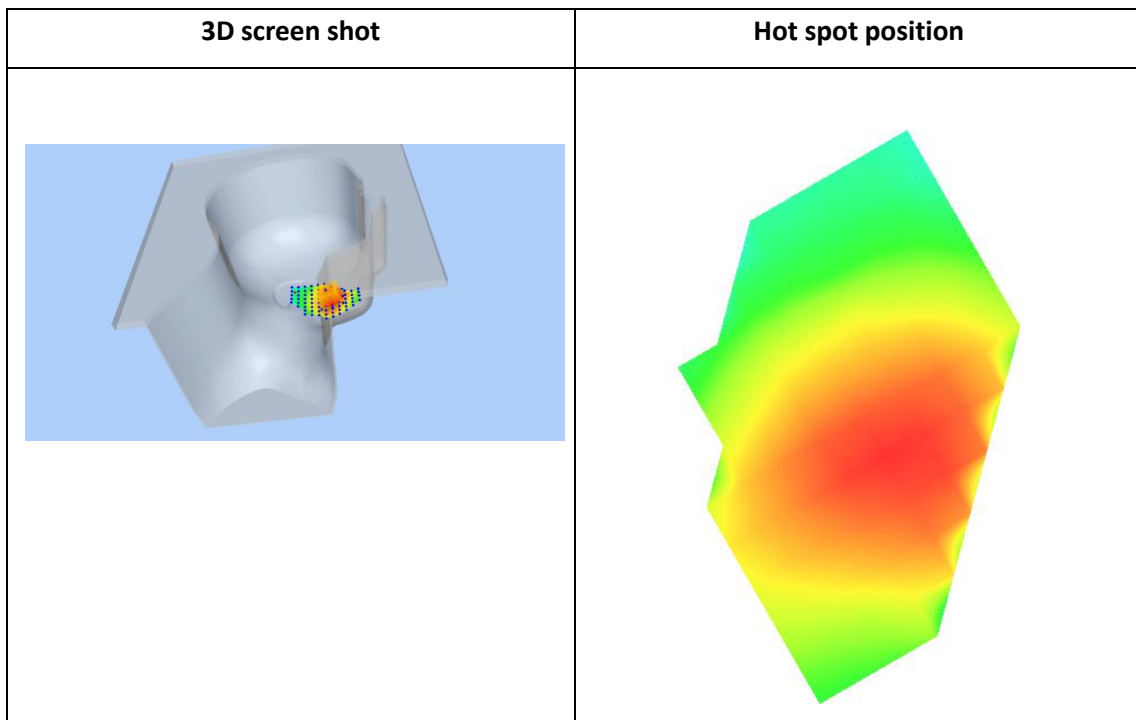
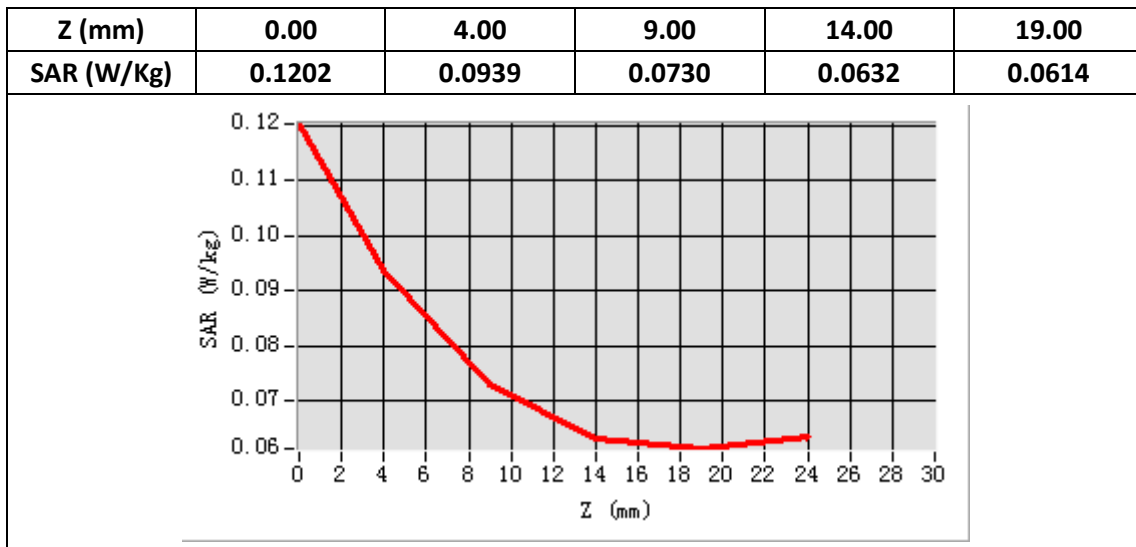
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	836.5
Relative permittivity (real part)	41.43
Relative permittivity (imaginary part)	19.27
Conductivity (S/m)	0.91
Variation (%)	-2.25
ConvF:	1.92



**Maximum location: X=-56.00, Y=-32.00**

**SAR Peak: 0.12 W/kg**

<b>SAR 10g (W/Kg)</b>	0.074486
<b>SAR 1g (W/Kg)</b>	0.092563



**Plot 14: LTE Band5, 10MHz, Back, Middle,10mm**

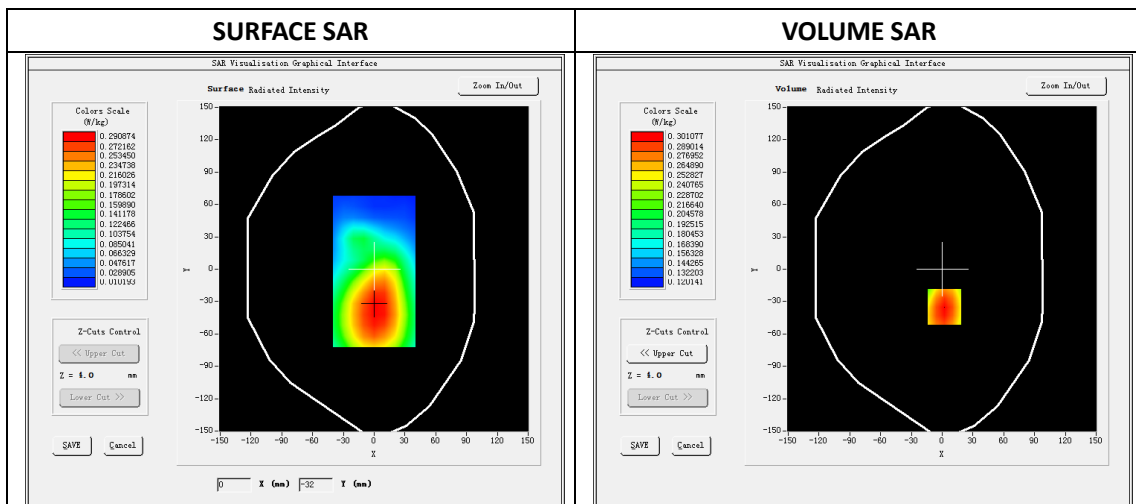
Type: Phone measurement  
 Date of measurement: 05/15/2019  
 Measurement duration: 22 minutes 49 seconds  
 Mobile Phone IMEI number: --

**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)	55.31
Relative permittivity (imaginary part)	20.48
Conductivity (S/m)	0.95
Variation (%)	-1.35
ConvF:	1.99

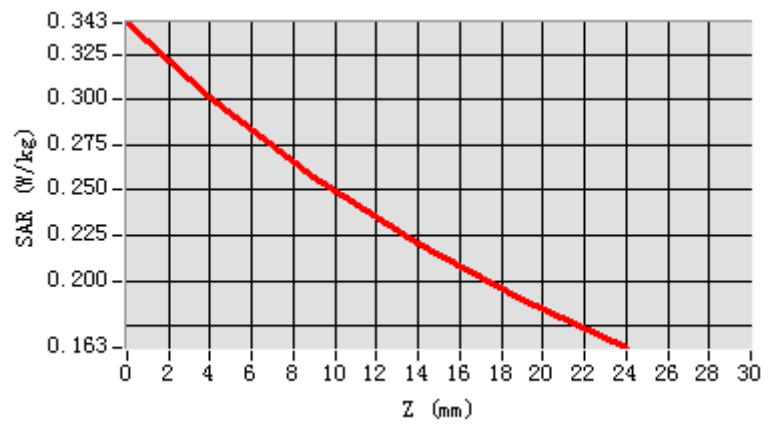


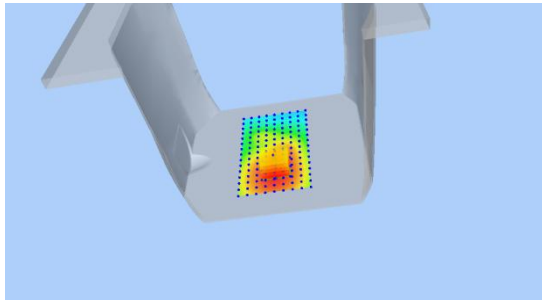
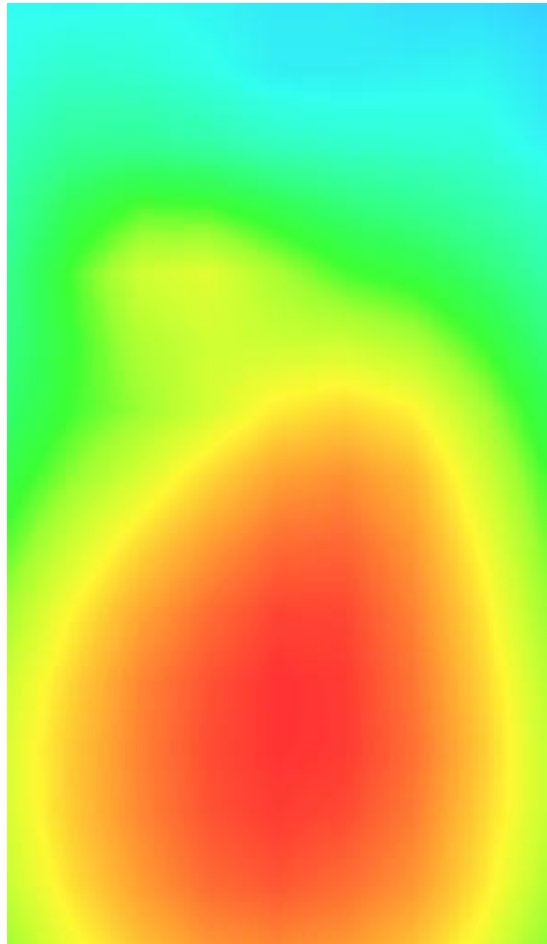
**Maximum location: X=2.00, Y=-35.00**

**SAR Peak: 0.34W/kg**

SAR 10g (W/Kg)	0.242903
SAR 1g (W/Kg)	0.298635

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.3426	0.3011	0.2568	0.2202	0.1896



3D screen shot	Hot spot position
	

### Plot 15: LTE Band7, 20MHz, Left Cheek, Middle

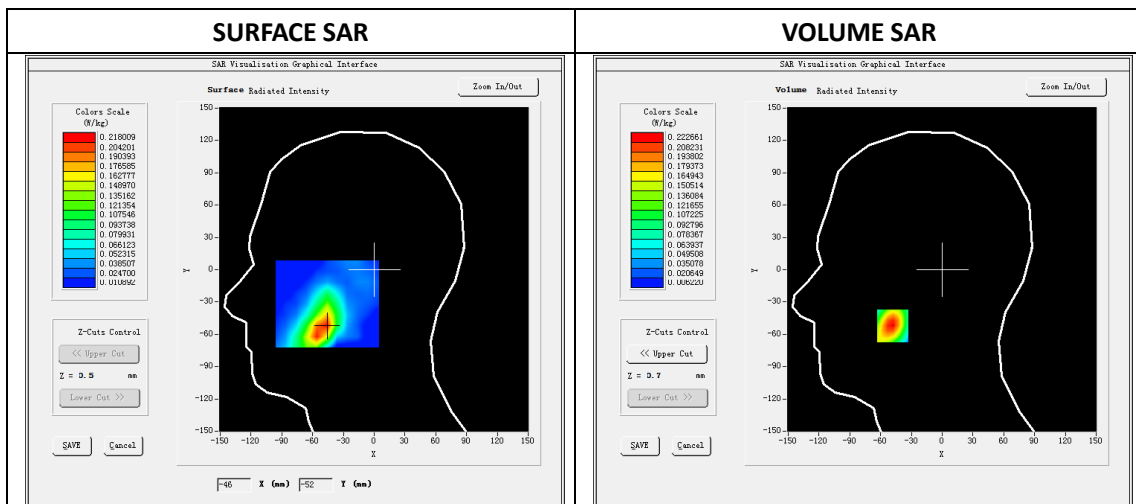
Type: Phone measurement  
 Date of measurement: 05/31/2019  
 Measurement duration: 22 minutes 55 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=5mm,dy=5mm
ZoomScan	7x7x8,dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Left Cheek
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)	39.16
Relative permittivity (imaginary part)	13.57
Conductivity (S/m)	1.96
Variation (%)	-3.26
ConvF:	2.35

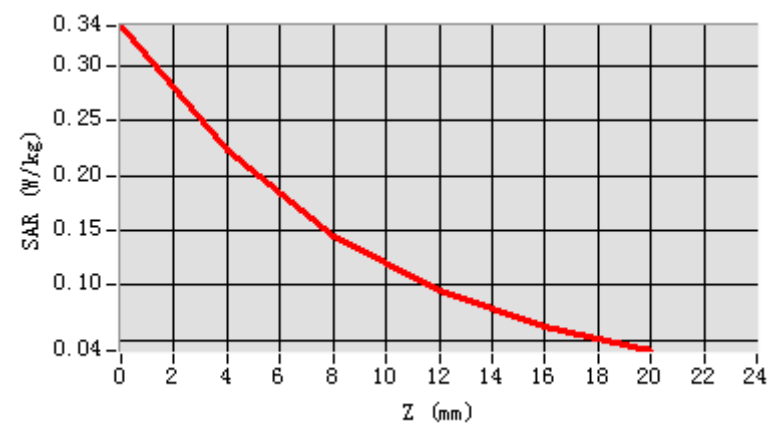


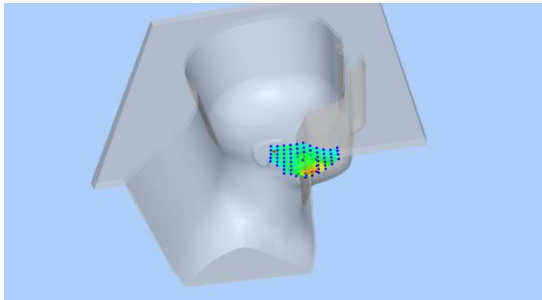
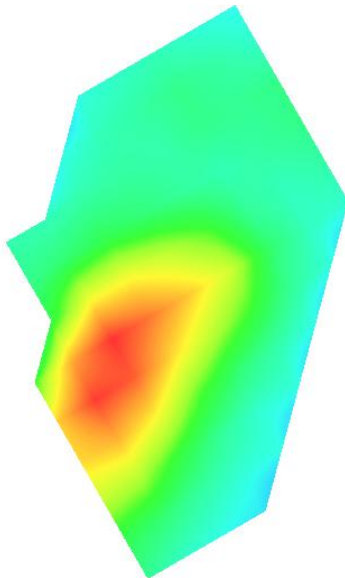
Maximum location: X=-48.00 Y=-52.00

SAR Peak: 0.34W/kg

SAR 10g (W/Kg)	0.111806
SAR 1g (W/Kg)	0.205476

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>8.00</b>	<b>12.00</b>	<b>16.00</b>
<b>SAR (W/Kg)</b>	<b>0.3366</b>	<b>0.2227</b>	<b>0.1455</b>	<b>0.0953</b>	<b>0.0631</b>



3D screen shot	Hot spot position
	

**Plot 16: LTE Band7, 20MHz, Back, Middle,10mm**

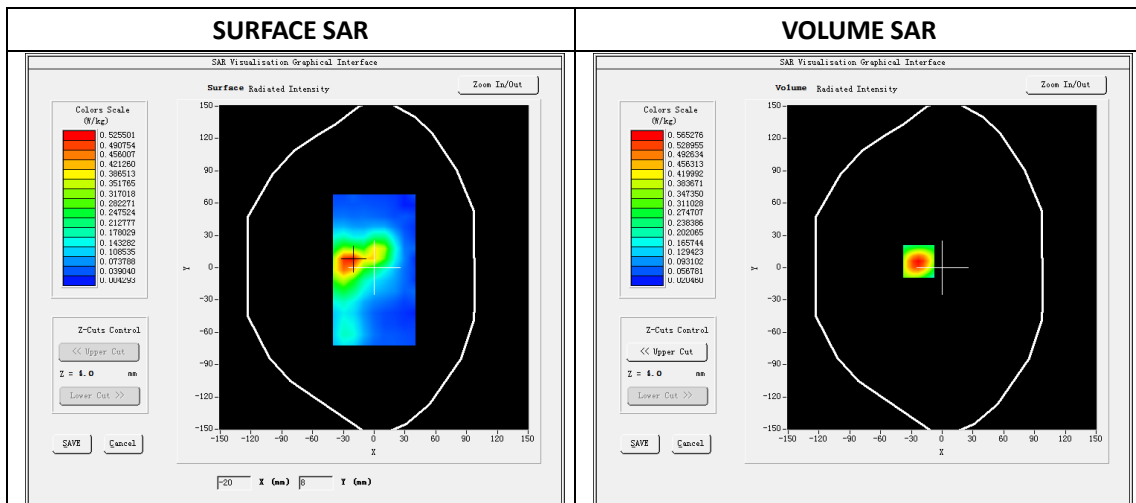
Type: Phone measurement  
 Date of measurement: 05/31/2019  
 Measurement duration: 22 minutes 22 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=5mm,dy=5mm
ZoomScan	7x7x8,dx=5mm dy=5mm dz=4mm
Phantom	Validation plane
Device Position	Back
Band	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)	52.34
Relative permittivity (imaginary part)	14.95
Conductivity (S/m)	2.16
Variation (%)	1.53
ConvF:	2.43



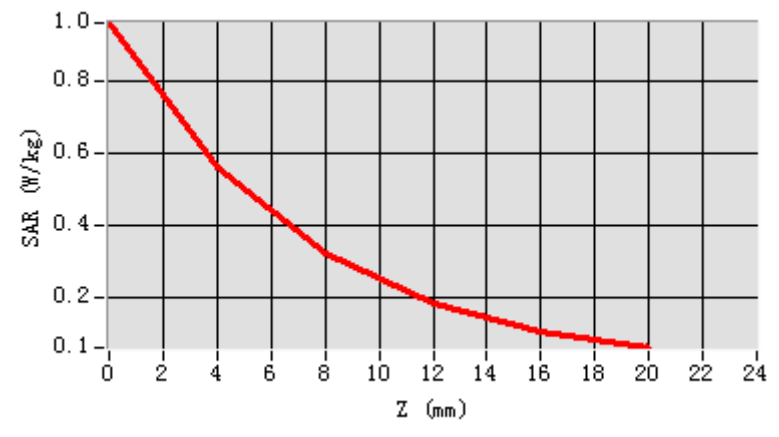
**Maximum location: X=-23.00 Y=6.00**

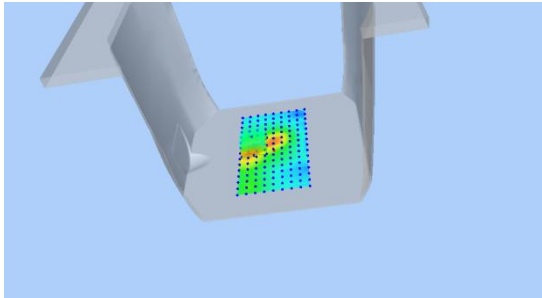
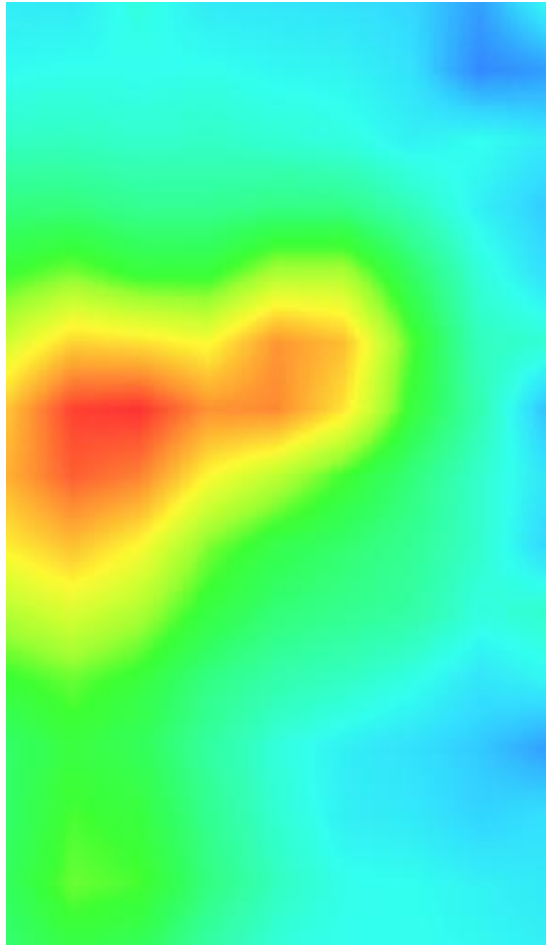
**SAR Peak: 0.97 W/kg**

<b>SAR 10g (W/Kg)</b>	0.265391
<b>SAR 1g (W/Kg)</b>	0.522292



<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>8.00</b>	<b>12.00</b>	<b>16.00</b>
<b>SAR (W/Kg)</b>	<b>0.9638</b>	<b>0.5653</b>	<b>0.3226</b>	<b>0.1847</b>	<b>0.1094</b>



3D screen shot	Hot spot position
	

## Plot 17: Wi-Fi 802.11b Right Tilt, Middle

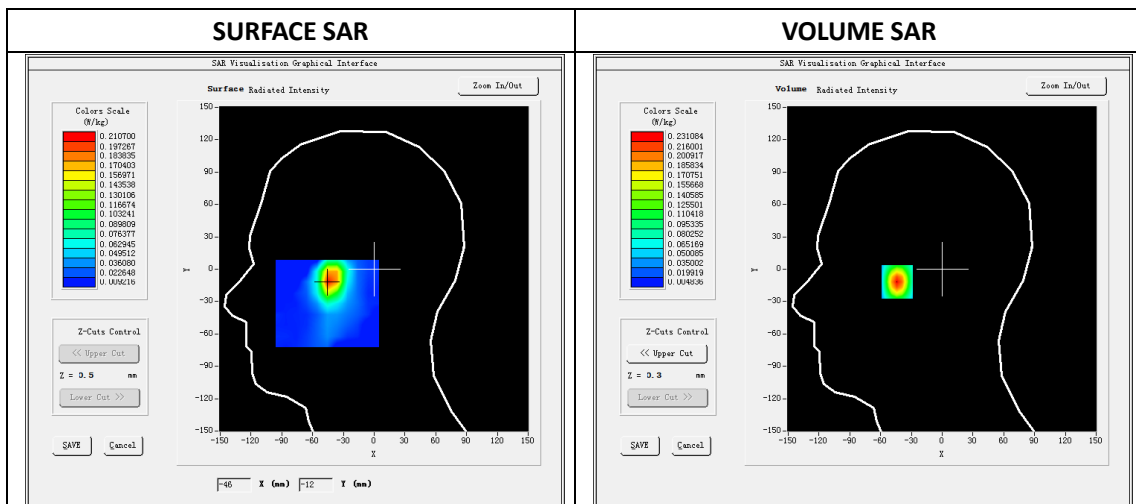
Type: Phone measurement  
 Date of measurement: 05/29/2019  
 Measurement duration: 22 minutes 53 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

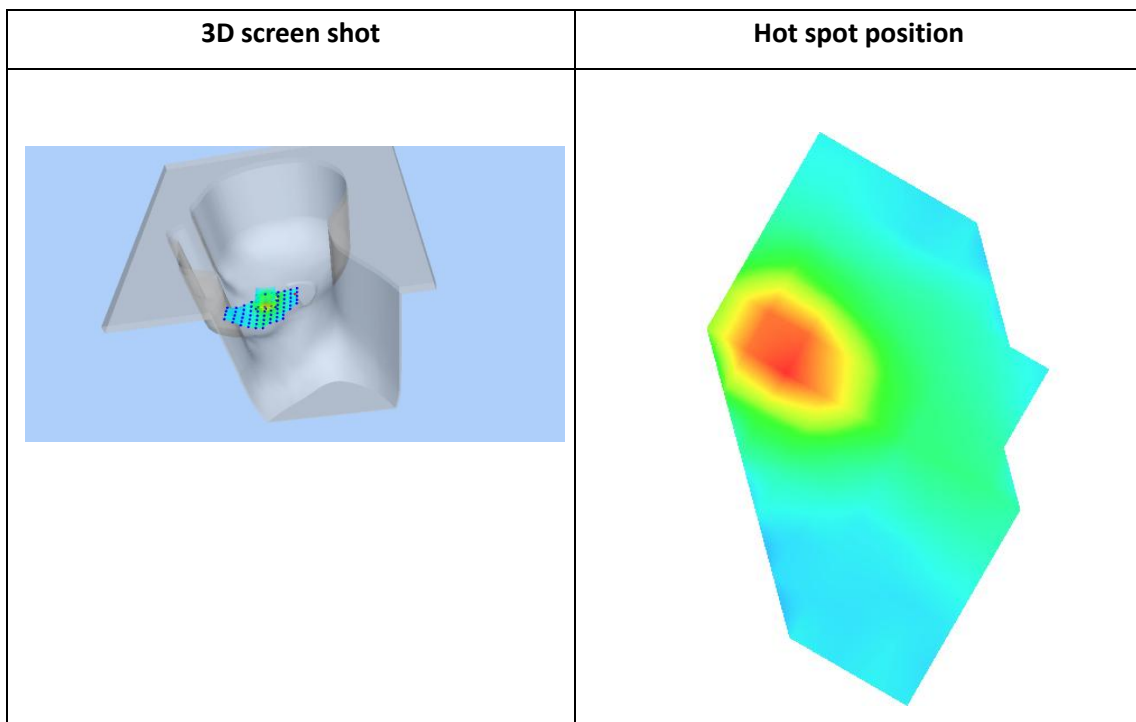
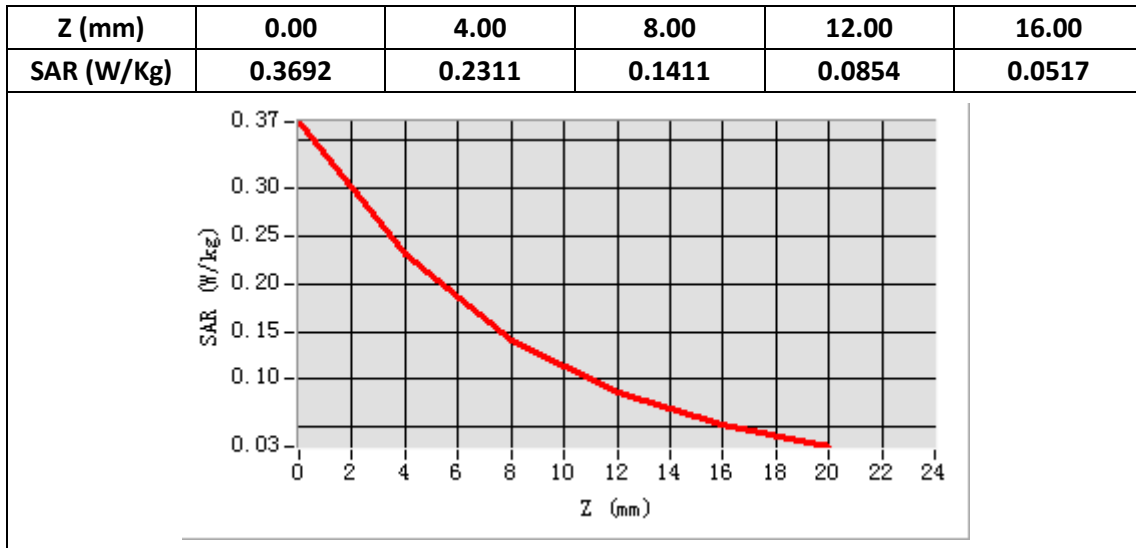
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2437
Relative permittivity (real part)	39.44
Relative permittivity (imaginary part)	13.30
Conductivity (S/m)	1.81
Variation (%)	-1.74
ConvF:	2.37



Maximum location: X=-44.00 Y=-11.00

SAR Peak: 0.37 W/kg

SAR 10g (W/Kg)	0.098890
SAR 1g (W/Kg)	0.206022



## Plot 18: Wi-Fi 802.11b, Edge D ,Middle, 10mm

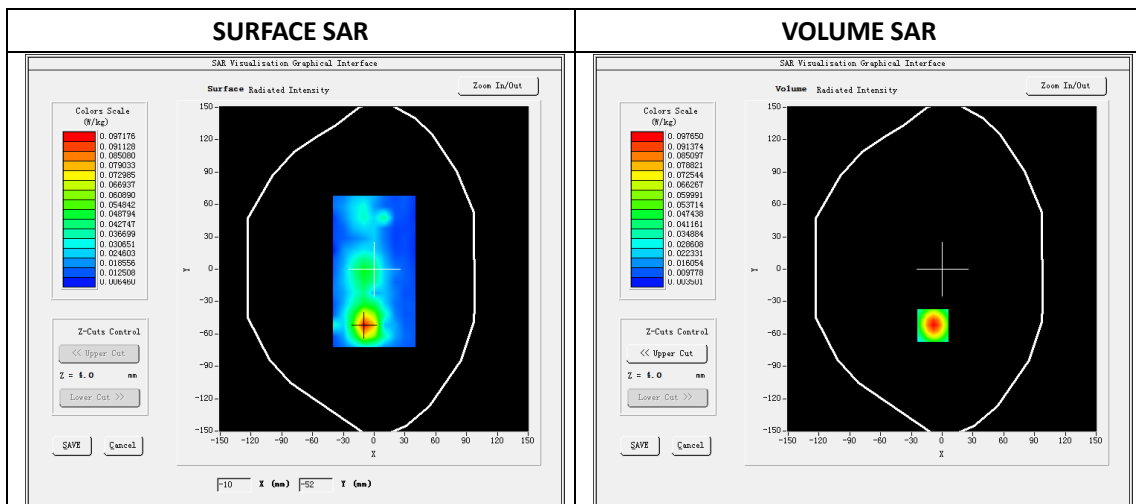
Type: Phone measurement  
 Date of measurement: 05/29/2019  
 Measurement duration: 22 minutes 28 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

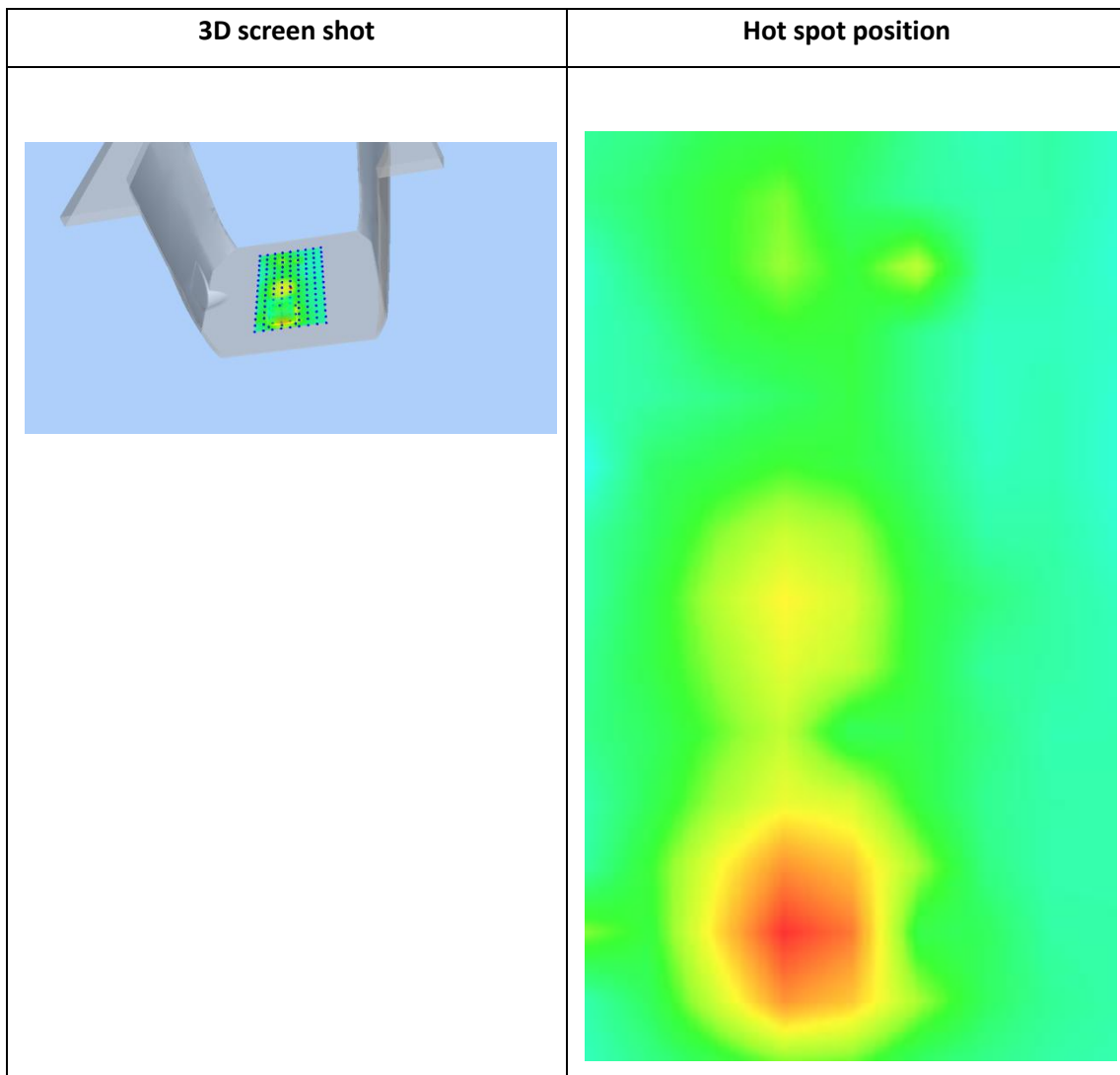
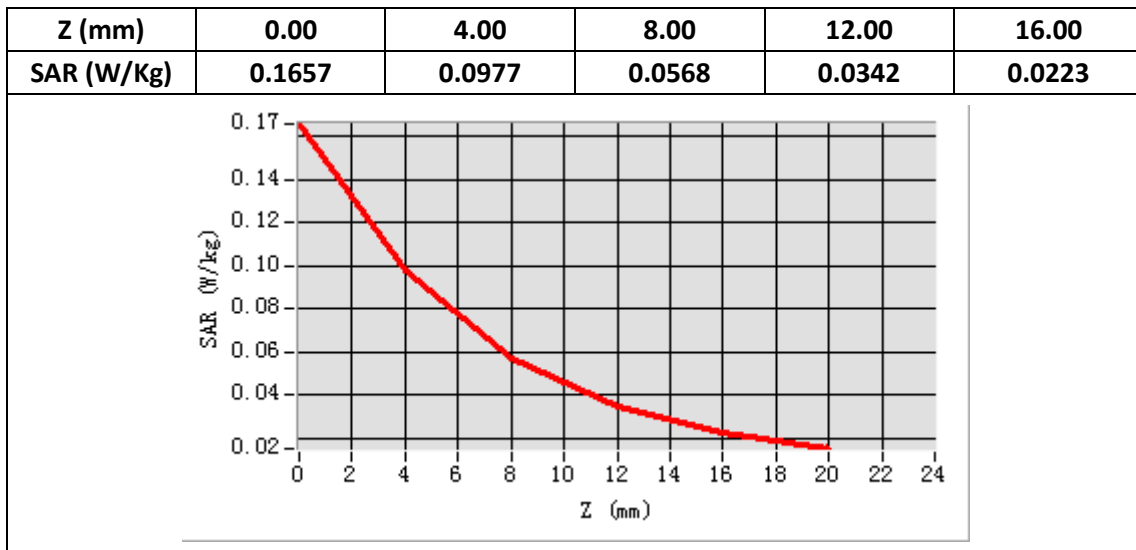
<b>E-Field Probe</b>	SATIMO SN_27/15_EPG0261
<b>Frequency (MHz)</b>	2437
<b>Relative permittivity (real part)</b>	52.66
<b>Relative permittivity (imaginary part)</b>	14.55
<b>Conductivity (S/m)</b>	1.98
<b>Variation (%)</b>	-2.07
<b>ConvF:</b>	2.46



**Maximum location: X=-9.00 Y=-52.00**

**SAR Peak: 0.17 W/kg**

<b>SAR 10g (W/Kg)</b>	0.046209
<b>SAR 1g (W/Kg)</b>	0.090740



**Plot 19: WIFI 5G 802.11a(20MHz), Right Cheek**

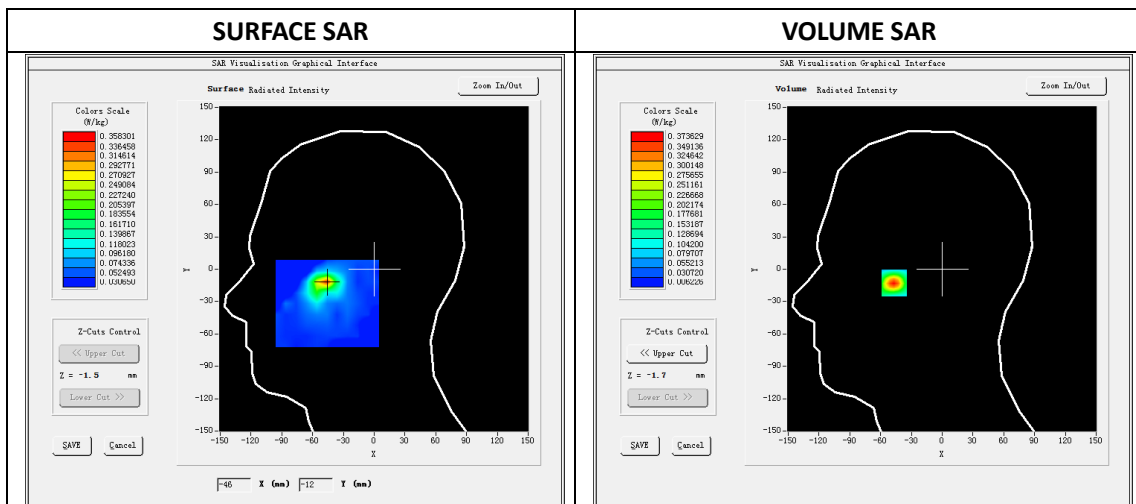
Type: Phone measurement  
 Date of measurement: 06/03/2019  
 Measurement duration: 22 minutes 19 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=4mm,dy=4mm
ZoomScan	7x7x12,dx=4m, dy=4mm, dz=2mm
Phantom	Validation plane
Device Position	Right Cheek
Band	WIFI 5G
Channels	48
Signal	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5240
Relative permittivity (real part)	36.45
Relative permittivity (imaginary part)	15.96
Conductivity (S/m)	4.61
Variation (%)	-3.63
ConvF:	2.19

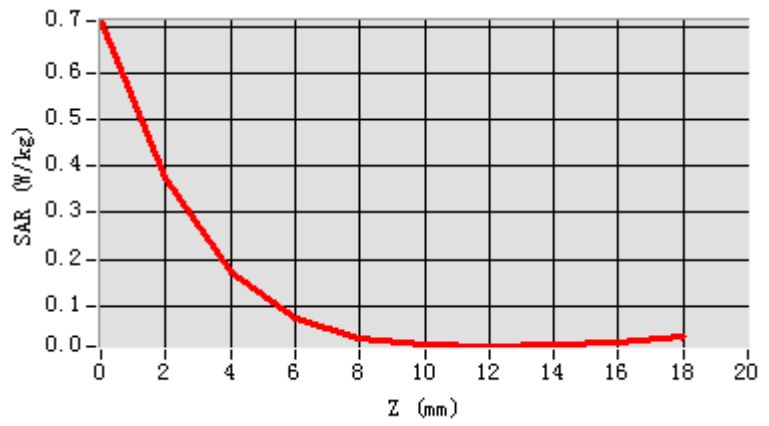


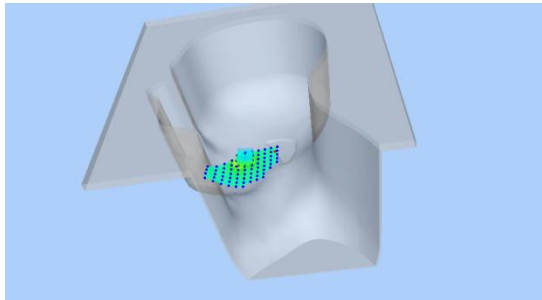
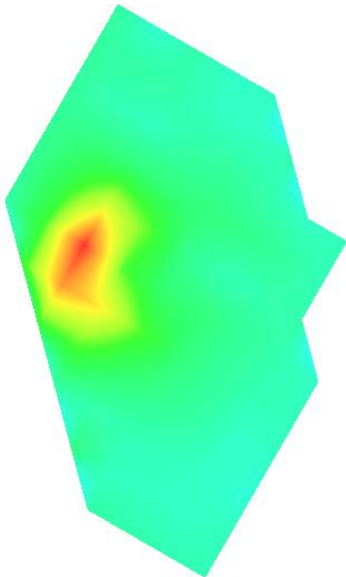
Maximum location: X=-47.00 Y=-12.00

SAR Peak: 1.23 W/kg

SAR 10g (W/Kg)	0.126604
SAR 1g (W/Kg)	0.370444

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00
SAR (W/Kg)	0.7124	0.3736	0.1732	0.0731	0.0312	0.0160	0.0124	0.0149	0.0225



3D screen shot	Hot spot position
	

## Plot 20: WIFI 5G 802.11ac(40MHz), Back , 10mm

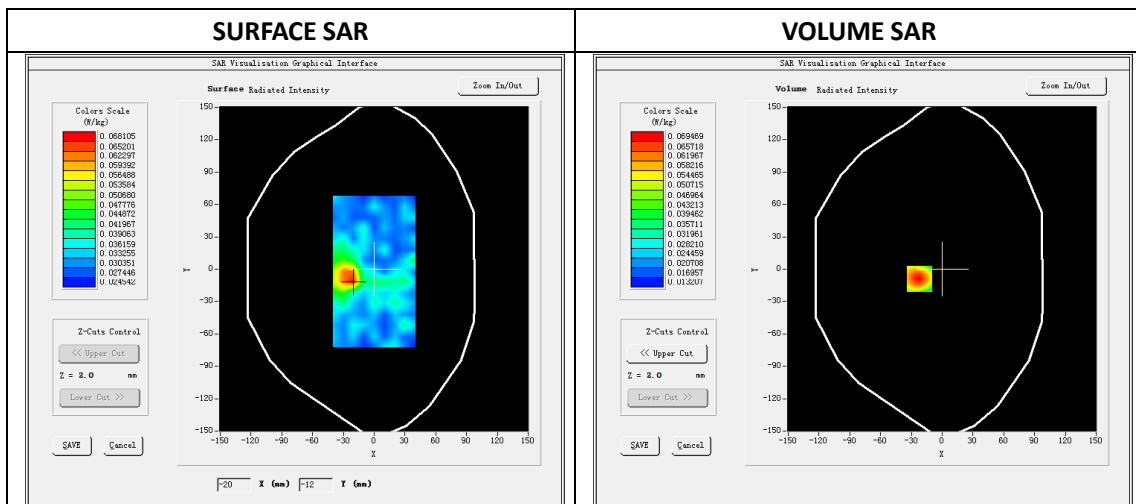
Type: Phone measurement  
 Date of measurement: 06/05/2019  
 Measurement duration: 22 minutes 47 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

<b>Area Scan</b>	dx=4mm,dy=4mm
<b>ZoomScan</b>	7x7x12,dx=4m, dy=4mm, dz=2mm
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Back
<b>Band</b>	WIFI 5G
<b>Channels</b>	151
<b>Signal</b>	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

<b>E-Field Probe</b>	SATIMO SN_27/15_EPG0261
<b>Frequency (MHz)</b>	5755
<b>Relative permittivity (real part)</b>	48.11
<b>Relative permittivity (imaginary part)</b>	18.22
<b>Conductivity (S/m)</b>	5.87
<b>Variation (%)</b>	-4.63
<b>ConvF:</b>	2.26



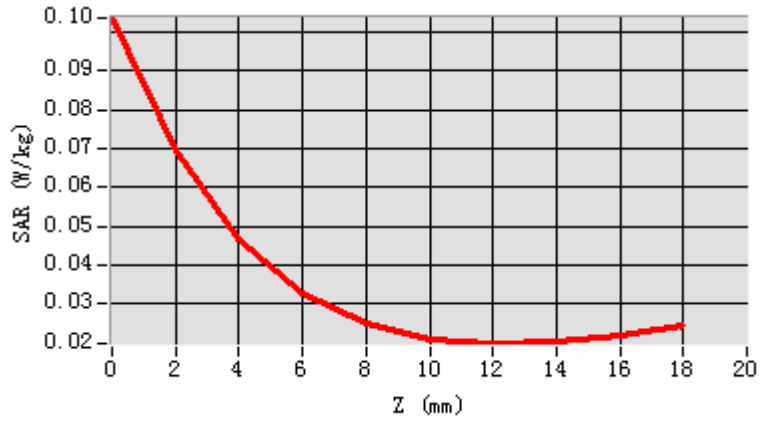
**Maximum location: X=-22.00 Y=-9.00**

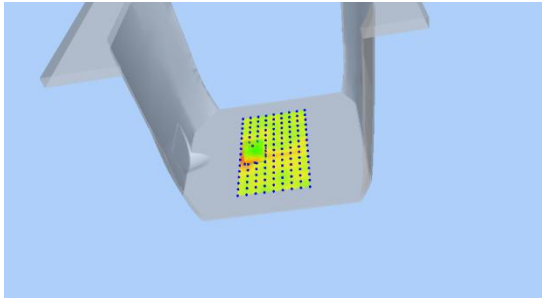
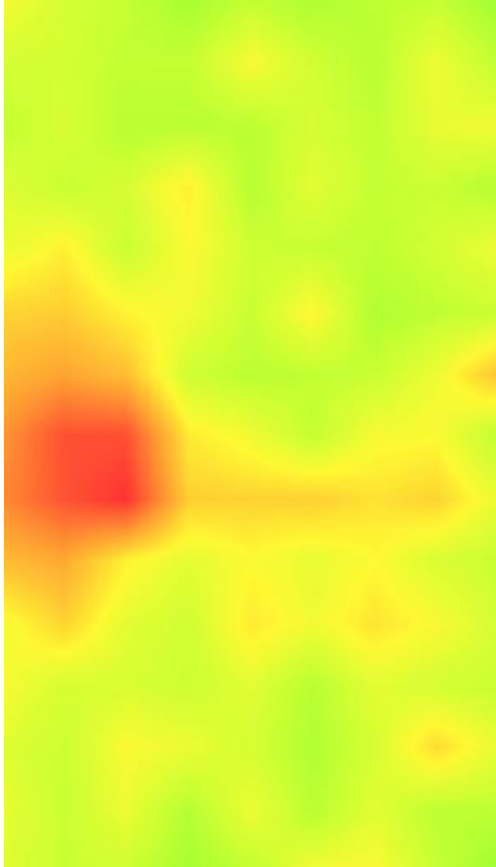
**SAR Peak: 0.11 W/kg**

<b>SAR 10g (W/Kg)</b>	0.036412
<b>SAR 1g (W/Kg)</b>	0.055051



Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00
SAR (W/Kg)	0.1036	0.0695	0.0468	0.0327	0.0249	0.0211	0.0199	0.0204	0.0222



3D screen shot	Hot spot position
	

## Plot 21: BT 3.0 8-DPSK Left Check, Low

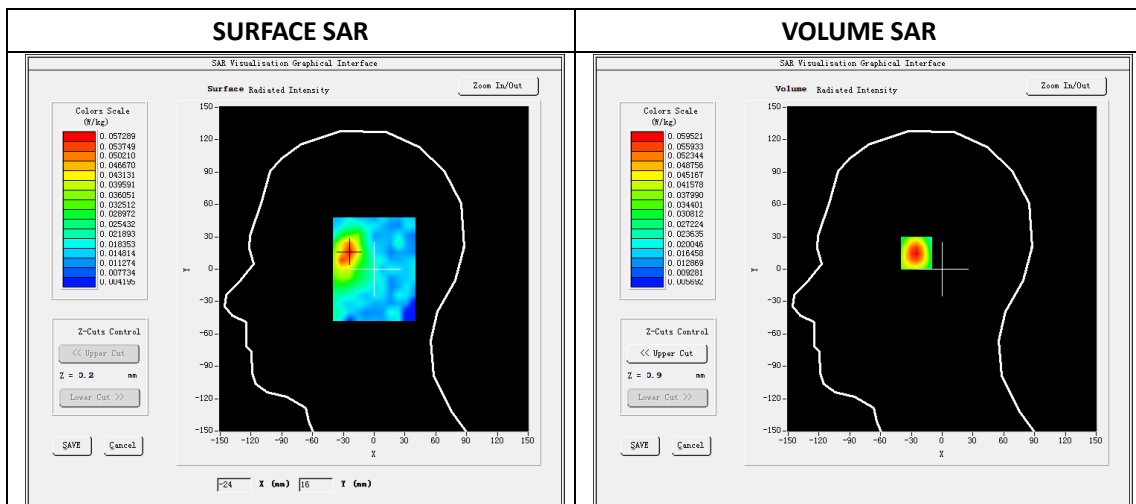
Type: Phone measurement  
 Date of measurement: 07/08/2019  
 Measurement duration: 22 minutes 23 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

<b>Area Scan</b>	dx=5mm,dy=5mm
<b>ZoomScan</b>	7x7x8,dx=5mm dy=5mm dz=4mm
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Left Check
<b>Band</b>	BT
<b>Channels</b>	0
<b>Signal</b>	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

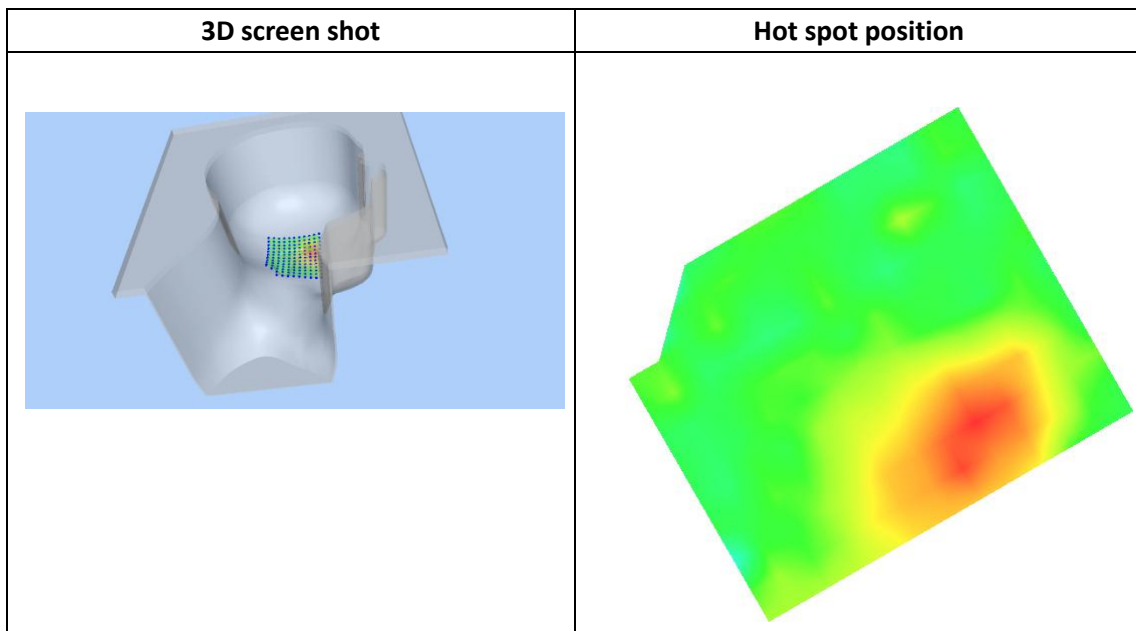
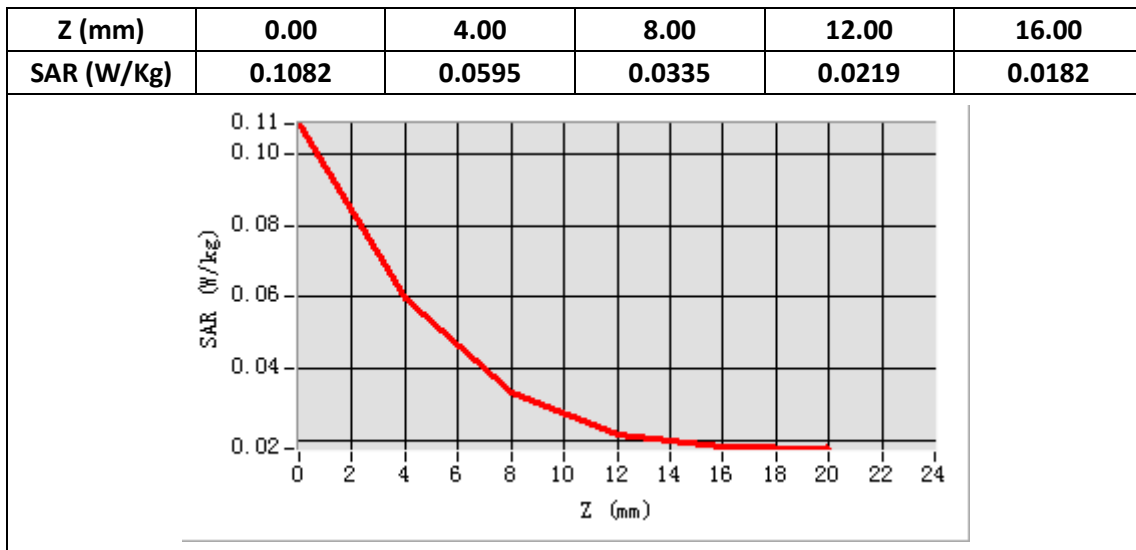
<b>E-Field Probe</b>	SATIMO SN_27/15_EPG0261
<b>Frequency (MHz)</b>	2402
<b>Relative permittivity (real part)</b>	39.38
<b>Relative permittivity (imaginary part)</b>	13.44
<b>Conductivity (S/m)</b>	1.83
<b>Variation (%)</b>	-1.74
<b>ConvF:</b>	-4.37



**Maximum location: X=-24.00, Y=16.00**

**SAR Peak: 0.11 W/kg**

<b>SAR 10g (W/Kg)</b>	0.032435
<b>SAR 1g (W/Kg)</b>	0.056286



**Plot 22: BT 3.0 8-DPSK, Back ,Low, 10mm**

Type: Phone measurement

Date of measurement: 07/08/2019

Measurement duration: 22 minutes 28 seconds

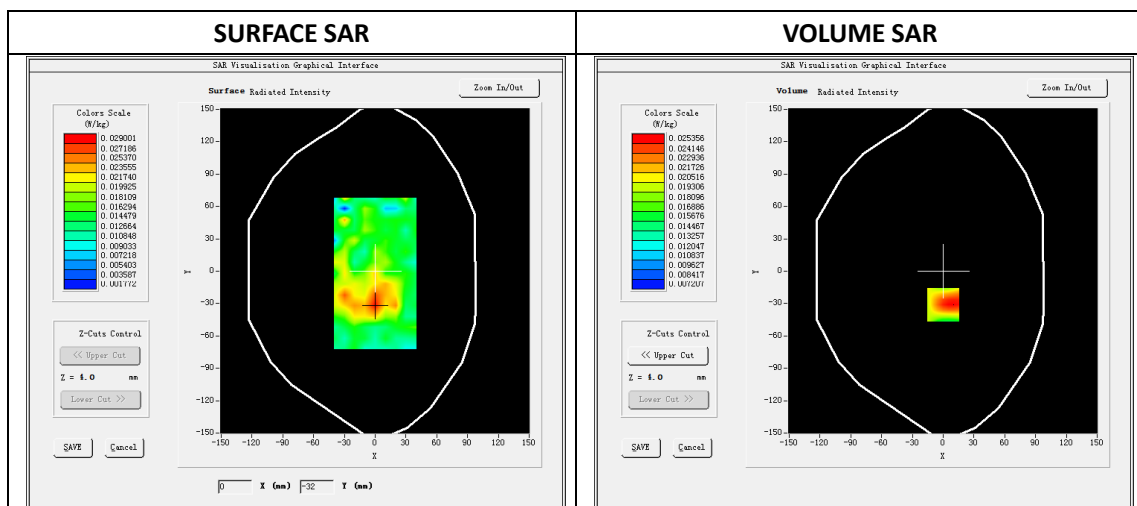
Mobile Phone IMEI number: --

**A. Experimental conditions.**

<b>Area Scan</b>	dx=5mm,dy=5mm
<b>ZoomScan</b>	7x7x8,dx=5mm dy=5mm dz=4mm
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	BT
<b>Channels</b>	0
<b>Signal</b>	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

<b>E-Field Probe</b>	SATIMO SN_27/15_EPG0261
<b>Frequency (MHz)</b>	2402
<b>Relative permittivity (real part)</b>	52.78
<b>Relative permittivity (imaginary part)</b>	14.40
<b>Conductivity (S/m)</b>	1.96
<b>Variation (%)</b>	-2.07
<b>ConvF:</b>	4.30



**Maximum location: X=0.00, Y=-31.00**

**SAR Peak: 0.04 W/kg**

<b>SAR 10g (W/Kg)</b>	0.017093
<b>SAR 1g (W/Kg)</b>	0.025120

