

## Appendix B: SAR Measurement results Plots

Plot	Frequency/Mode	Testing Position& Channel	Test Date
1	GSM 850	Left Cheek, Middle	2018-07-23
2	GPRS 850	Body Back, Middle	2018-07-23
3	GSM 1900	Right Cheek, Middle	2018-07-24
4	GPRS 1900	Body Back, Middle	2018-07-24
5	WCDMA 1900	Left Cheek, Middle	2018-07-24
6	WCDMA 1900	Body Back, Middle	2018-07-24
7	WCDMA 850	Left Cheek, Middle	2018-07-23
8	WCDMA 850	Body Back, Middle	2018-07-23
9	LTE Band 2	Left Cheek, Middle	2018-07-24
10	LTE Band 2	Body Back, Middle	2018-07-24
11	LTE Band 4	Left Cheek, Middle	2018-07-24
12	LTE Band 4	Body Back, Middle	2018-07-24
13	LTE Band 5	Right Cheek, Middle	2018-07-23
14	LTE Band 5	Body Back, Middle	2018-07-23
15	LTE Band 7	Left Cheek, Middle	2018-07-26
16	LTE Band 7	Body Back, Middle	2018-07-26
17	WIFI 802.11b	Right Tilt, Middle	2018-07-25
18	WIFI 802.11b	Body Back, Middle	2018-07-25
19	WIFI 802.11a/20	Right Tilt, Middle	2018-07-27
20	WIFI 802.11a/20	Edge D, Middle	2018-07-27
21	WIFI 802.11n/40	Right Tilt, Middle	2018-07-27
22	WIFI 802.11n/40	Edge D, Middle	2018-07-27
23	WIFI 802.11a/20	Right Tilt, Middle	2018-07-30
24	WIFI 802.11a/20	Edge D, Middle	2018-07-30
25	WIFI 802.11n/40	Right Tilt, Middle	2018-07-30
26	WIFI 802.11n/40	Edge D, Middle	2018-07-30

## Plot 1: GSM 850 Left Cheek, Middle

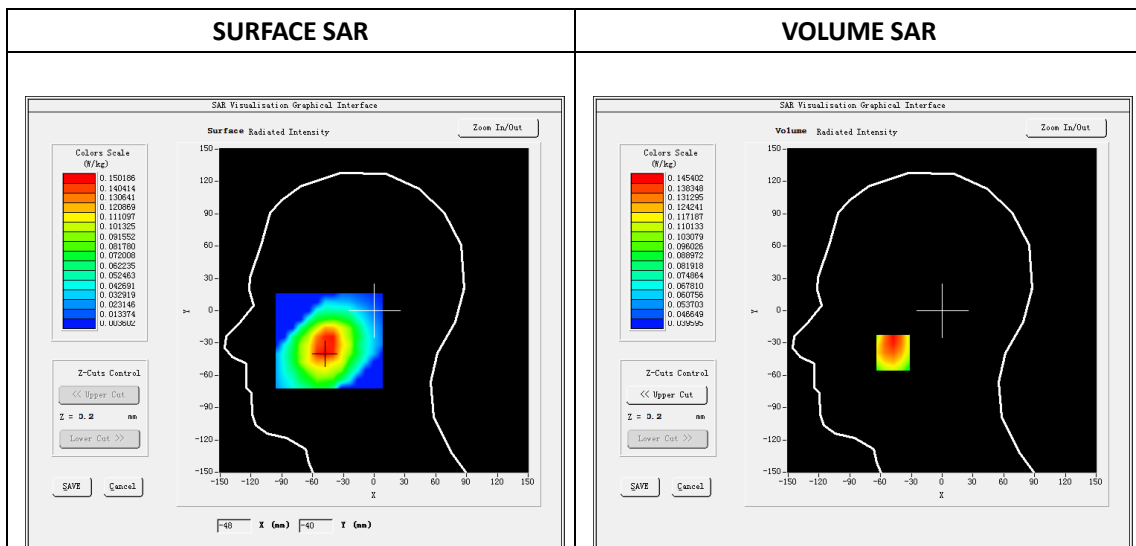
Type: Phone measurement  
 Date of measurement: 07/23/2018  
 Measurement duration: 22 minutes 15 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Left Cheek
Band	GSM850
Channels	Middle
Signal	GSM (Duty cycle: 1:8.3)

**B. SAR Measurement Results**

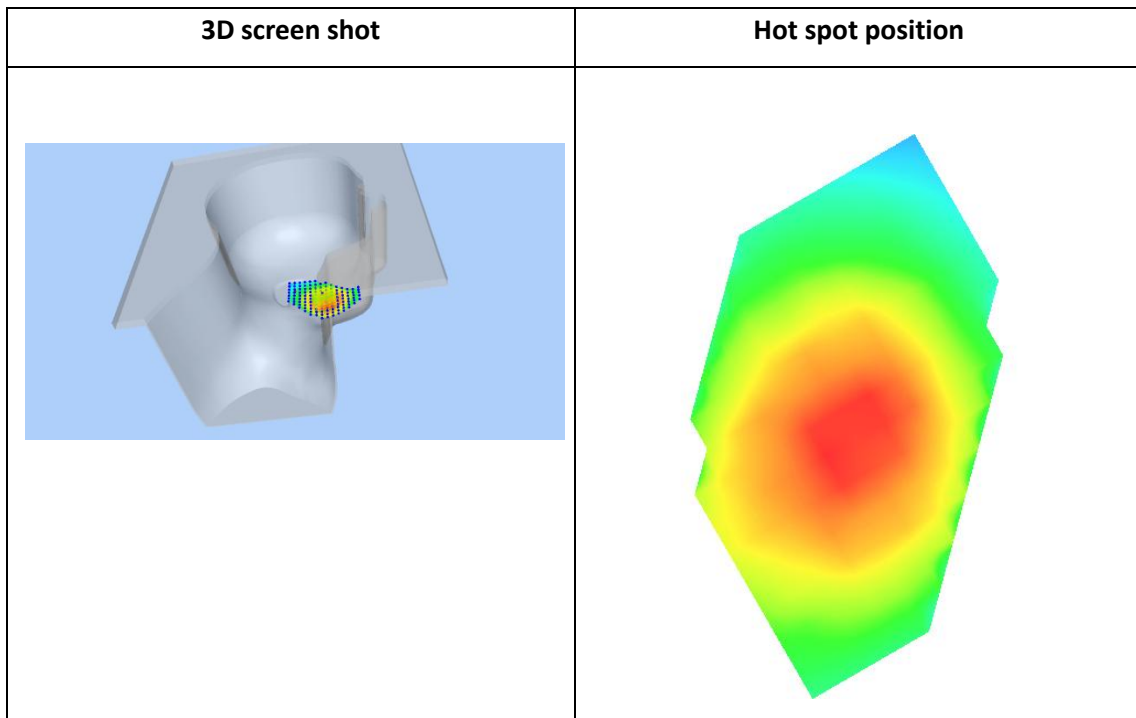
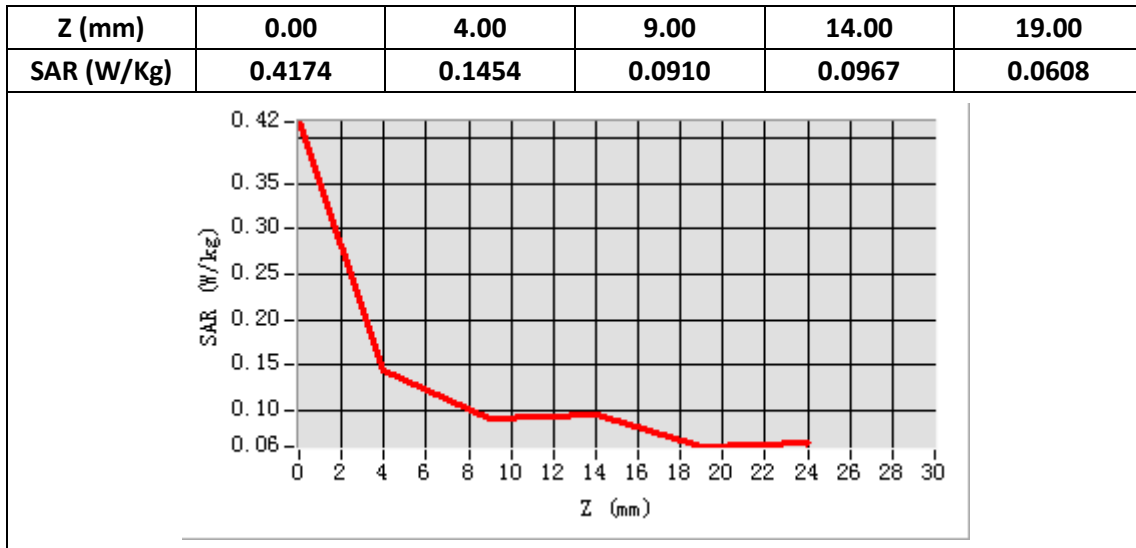
E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	836.6
Relative permittivity (real part)	41.61
Relative permittivity (imaginary part)	19.35
Conductivity (S/m)	0.89
Variation (%)	4.65
ConvF:	4.99



**Maximum location: X=-48.00, Y=-39.00**

**SAR Peak: 0.17 W/kg**

<b>SAR 10g (W/Kg)</b>	0.111090
<b>SAR 1g (W/Kg)</b>	0.142859



## Plot 2:GPRS 850 , Back, Middle,10mm

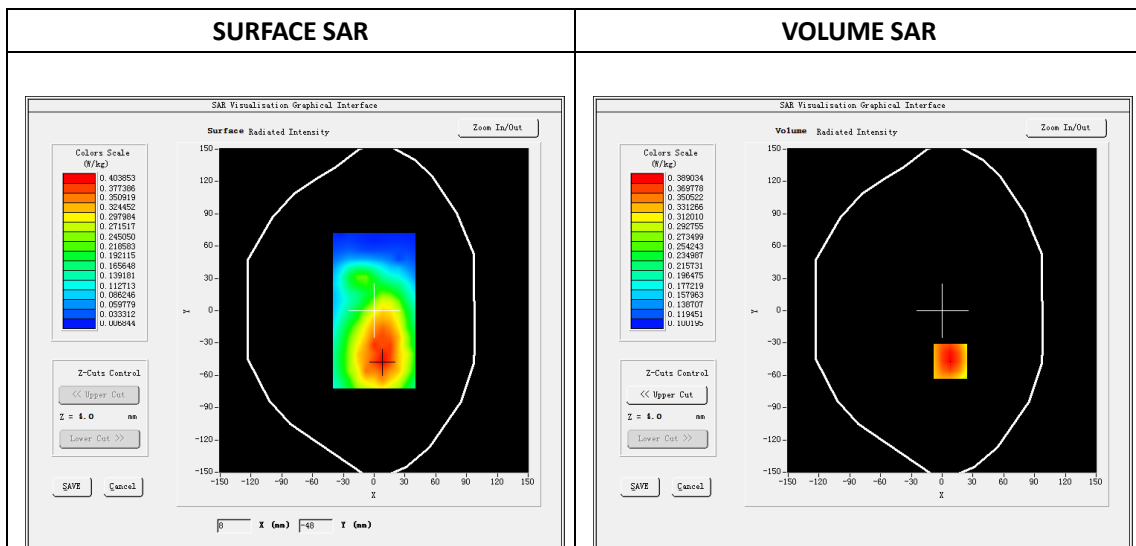
Type: Phone measurement  
 Date of measurement: 07/23/2018  
 Measurement duration: 22 minutes 25 seconds  
 Mobile Phone IMEI number: --

**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>	GPRS 850_4Tx
<b>Channels</b>	Middle
<b>Signal</b>	GPRS (Duty cycle: 1:2.08)

**B. SAR Measurement Results**

<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	836.6
<b>Relative permittivity (real part)</b>	55.35
<b>Relative permittivity (imaginary part)</b>	20.35
<b>Conductivity (S/m)</b>	0.91
<b>Variation (%)</b>	-1.63
<b>ConvF:</b>	5.18

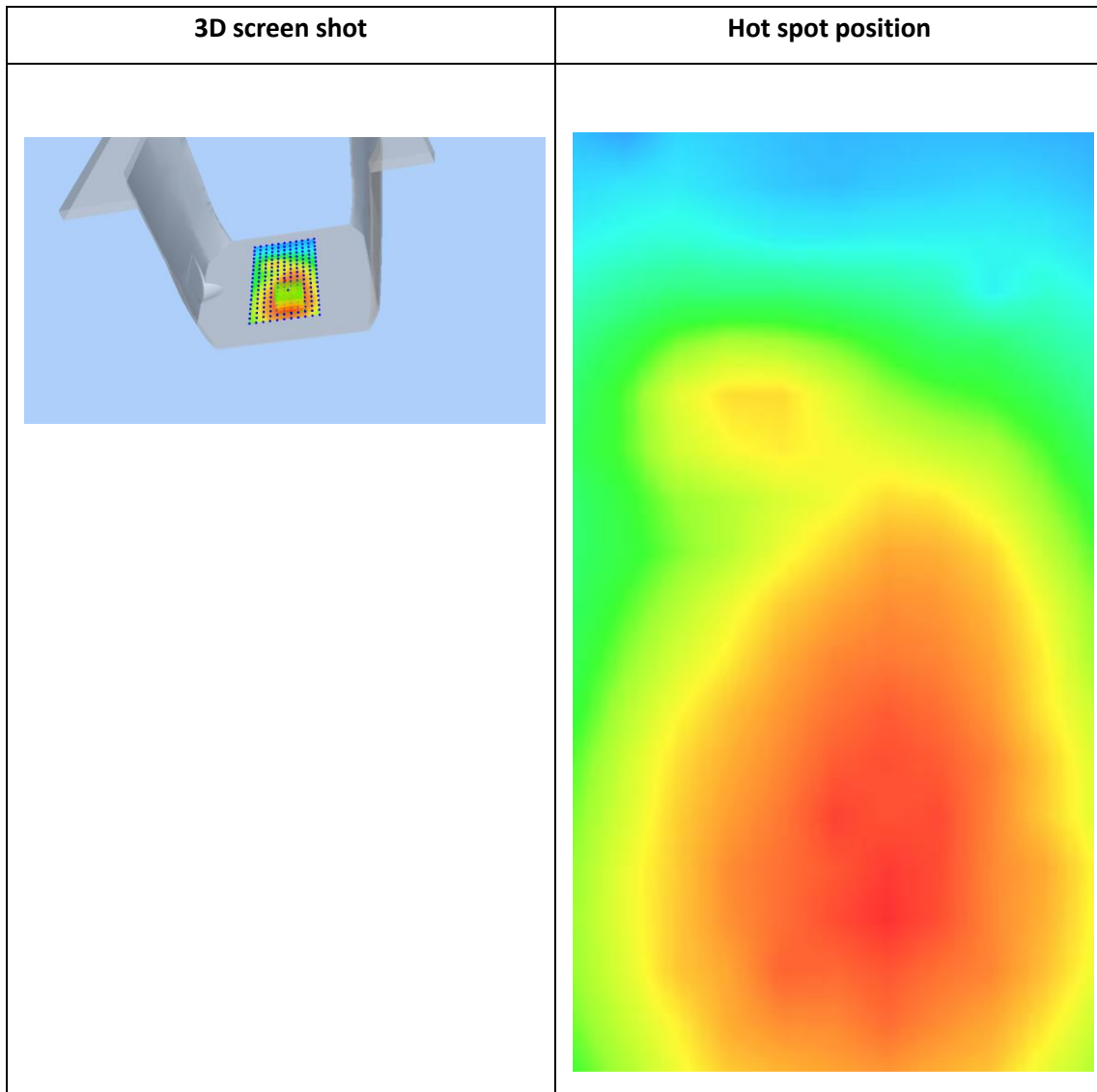
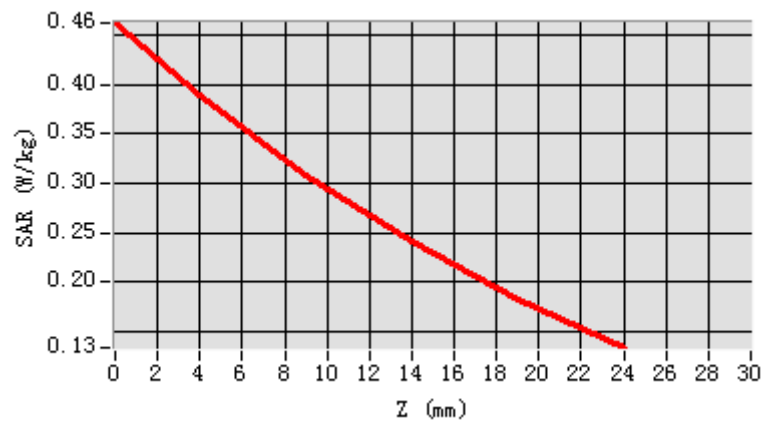


**Maximum location: X=8.00, Y=-47.00**

**SAR Peak: 0.47 W/kg**

<b>SAR 10g (W/Kg)</b>	0.281979
<b>SAR 1g (W/Kg)</b>	0.381675

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.4625	0.3890	0.3087	0.2403	0.1823



### Plot 3:GSM1900 Right Cheek, Middle

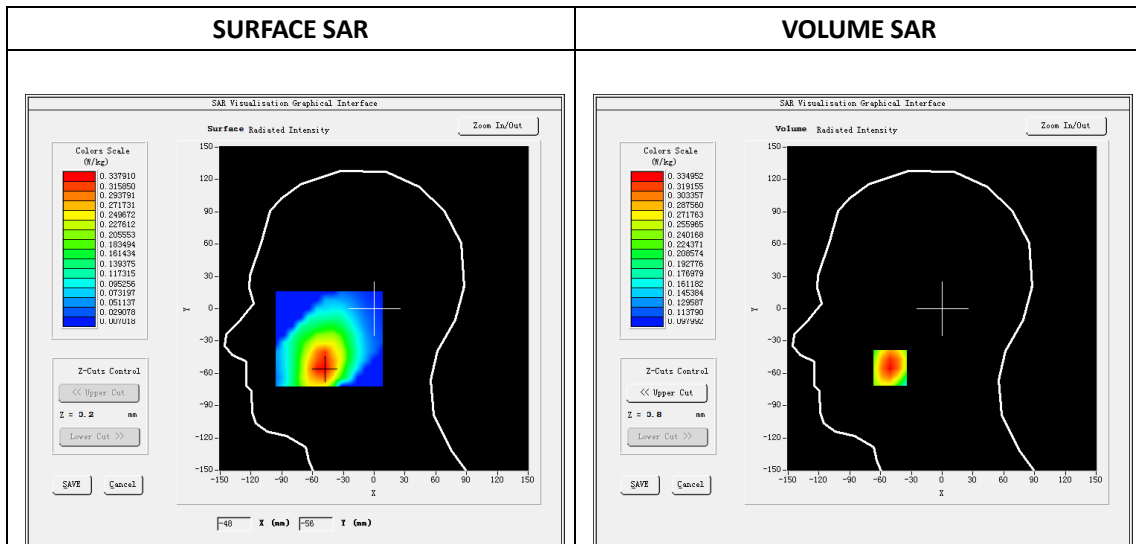
Type: Phone measurement  
 Date of measurement: 07/24/2018  
 Measurement duration: 22 minutes 13 seconds  
 Mobile Phone IMEI number: --

**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>	Right Cheek
<b>Band</b>	GSM
<b>Channels</b>	1900
<b>Signal</b>	GSM(Duty cycle: 1:8.3)

**B. SAR Measurement Results**

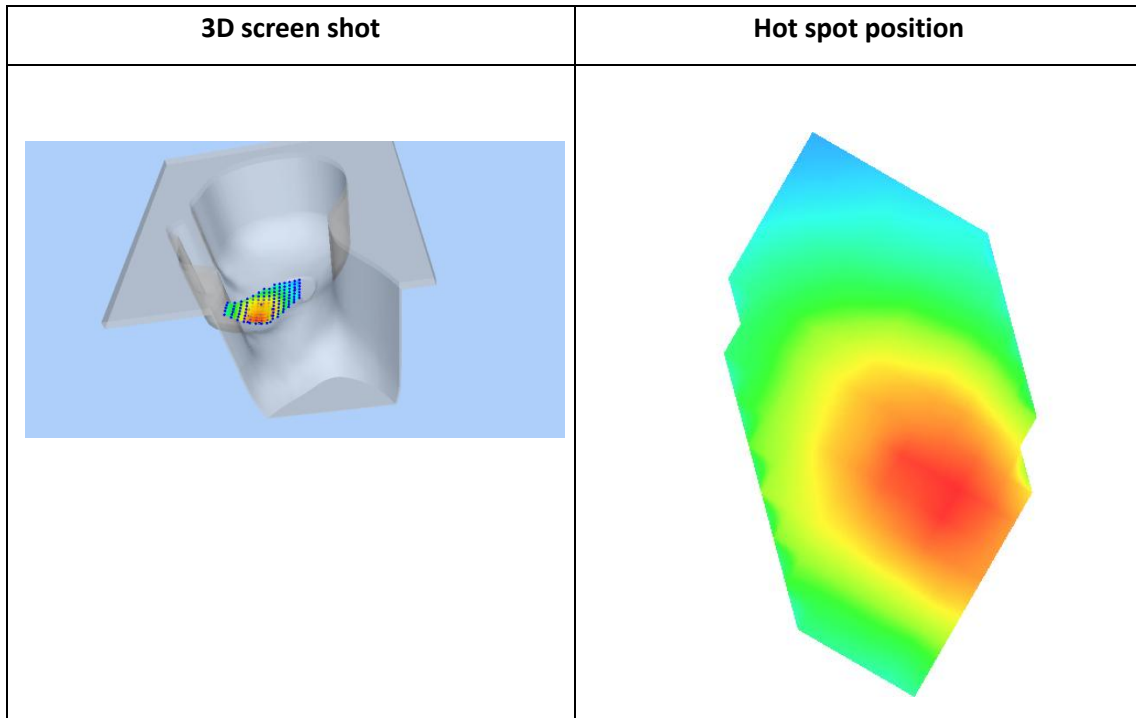
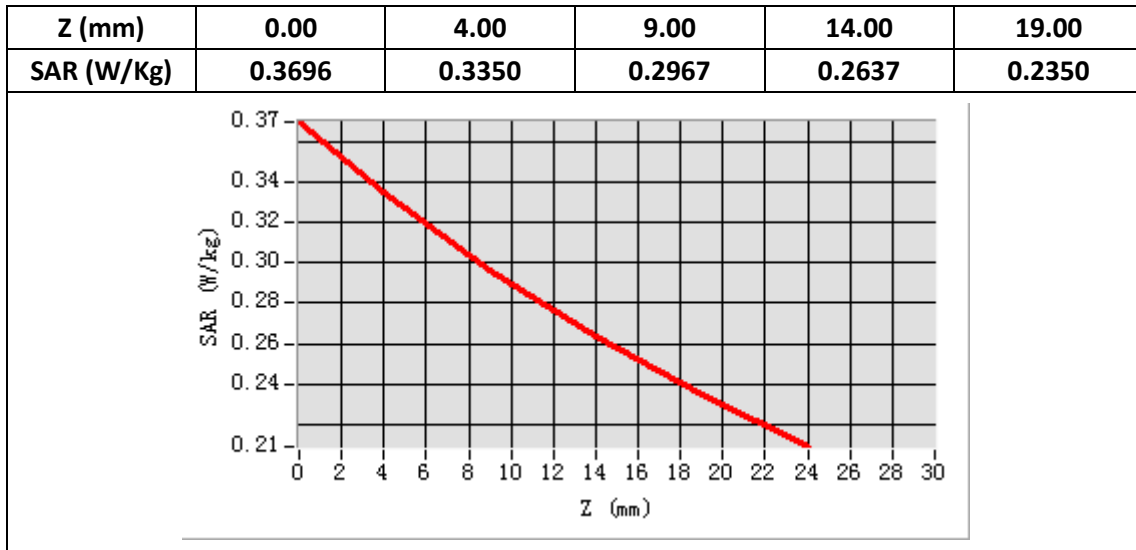
<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	1880
<b>Relative permittivity (real part)</b>	41.15
<b>Relative permittivity (imaginary part)</b>	12.68
<b>Conductivity (S/m)</b>	1.38
<b>Variation (%)</b>	3.02
<b>ConvF:</b>	4.73



**Maximum location: X=-51.00, Y=-55.00**

**SAR Peak: 0.37 W/kg**

<b>SAR 10g (W/Kg)</b>	0.268278
<b>SAR 1g (W/Kg)</b>	0.325606



### Plot 4:GPRS 1900 , Back Middle,10mm

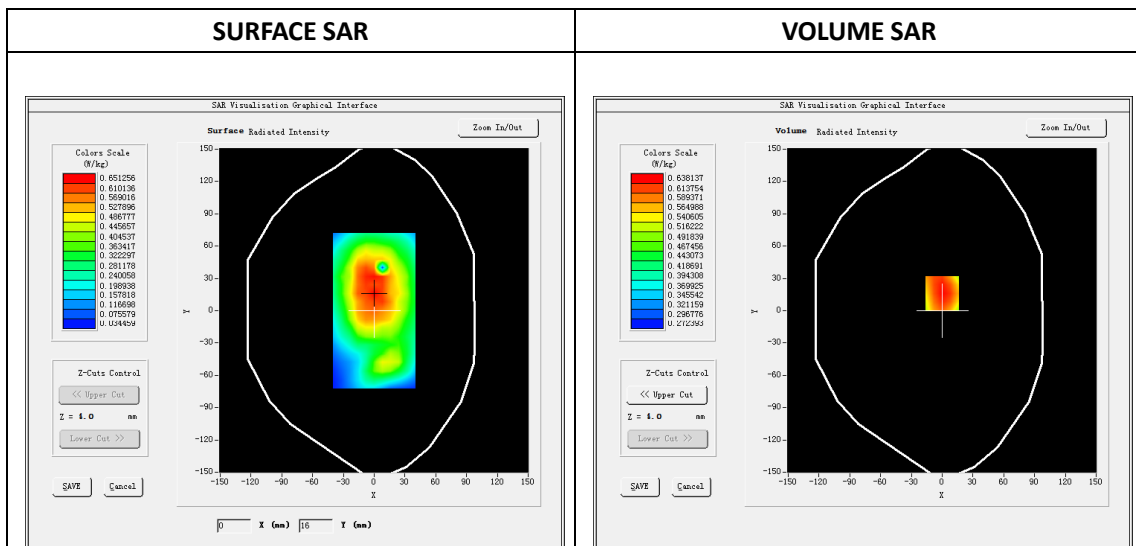
Type: Phone measurement  
 Date of measurement: 07/24/2018  
 Measurement duration: 22 minutes 24 seconds  
 Mobile Phone IMEI number: --

**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>	Edge C
<b>Band</b>	GPRS_4Tx
<b>Channels</b>	Middle
<b>Signal</b>	GPRS (Duty cycle: 1:2.08)

**B. SAR Measurement Results**

<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	1880
<b>Relative permittivity (real part)</b>	53.94
<b>Relative permittivity (imaginary part)</b>	14.15
<b>Conductivity (S/m)</b>	1.53
<b>Variation (%)</b>	4.69
<b>ConvF:</b>	4.83



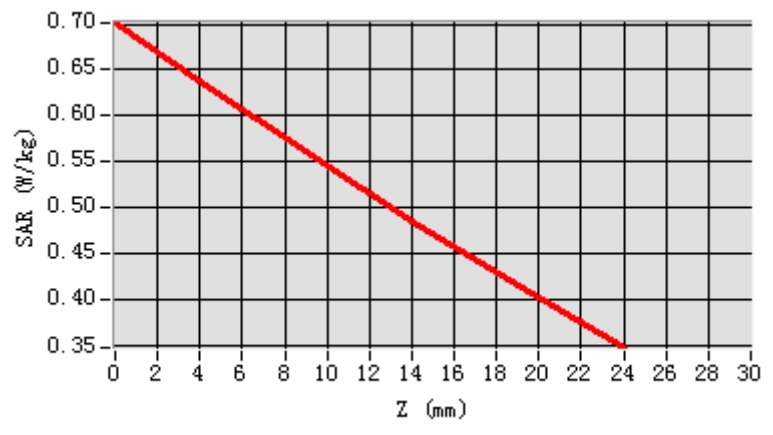
**Maximum location: X=0.00, Y=16.00**

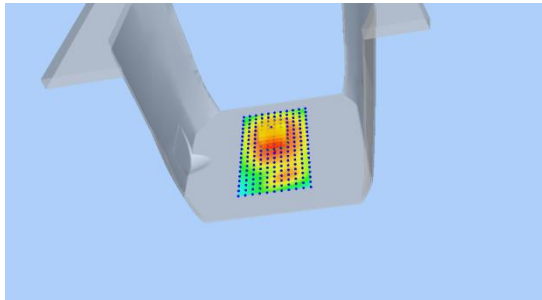
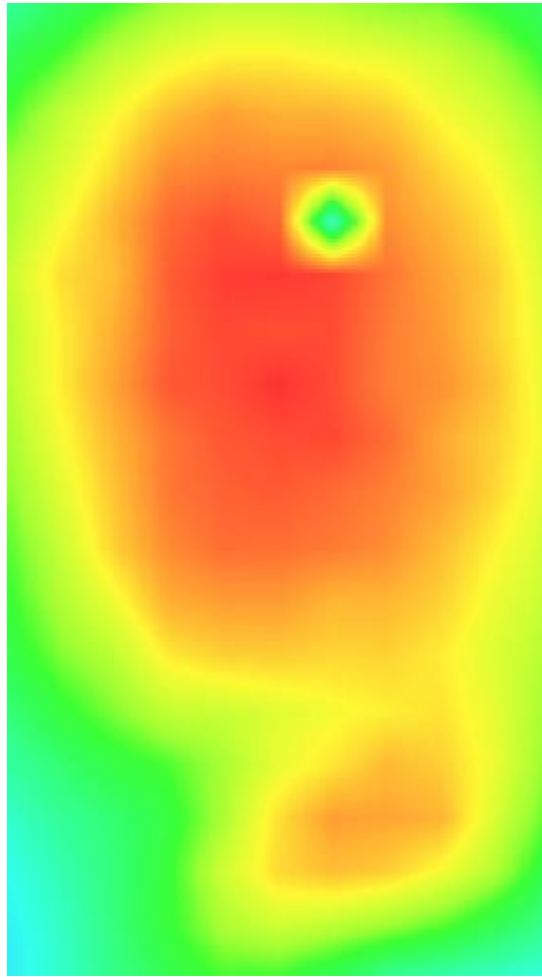
**SAR Peak: 0.70 W/kg**

<b>SAR 10g (W/Kg)</b>	0.517660
<b>SAR 1g (W/Kg)</b>	0.623331



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7011	0.6381	0.5611	0.4863	0.4147



3D screen shot	Hot spot position
	

**Plot 5: WCDMA 1900 Left Cheek, Middle**

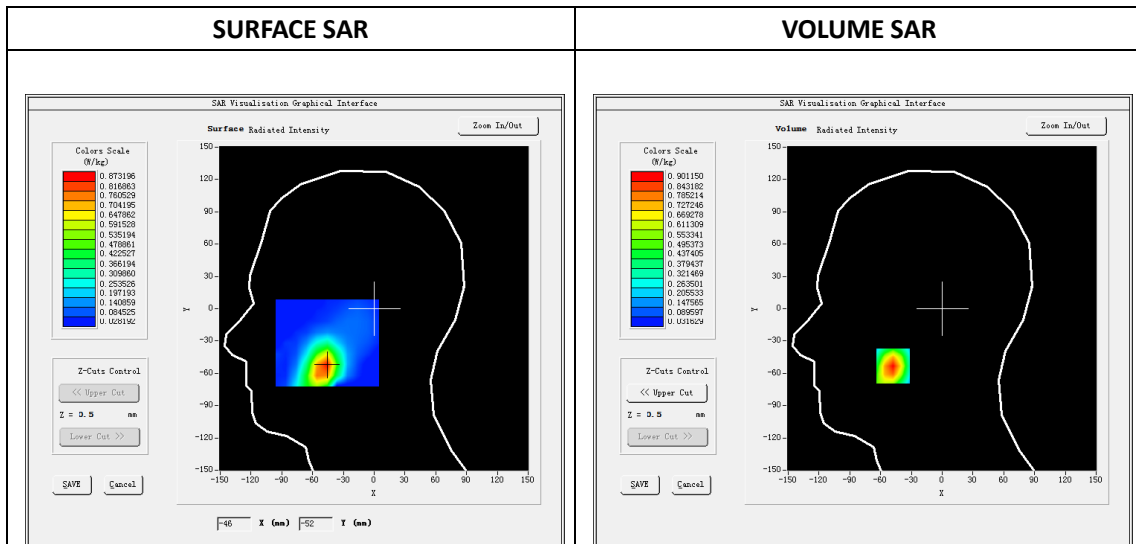
Type: Phone measurement  
 Date of measurement: 07/24/2018  
 Measurement duration: 22 minutes 11 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Left Cheek
Band	WCDMA 1900
Channels	9400
Signal	WCDMA (Duty cycle: 1:1)

**B. SAR Measurement Results**

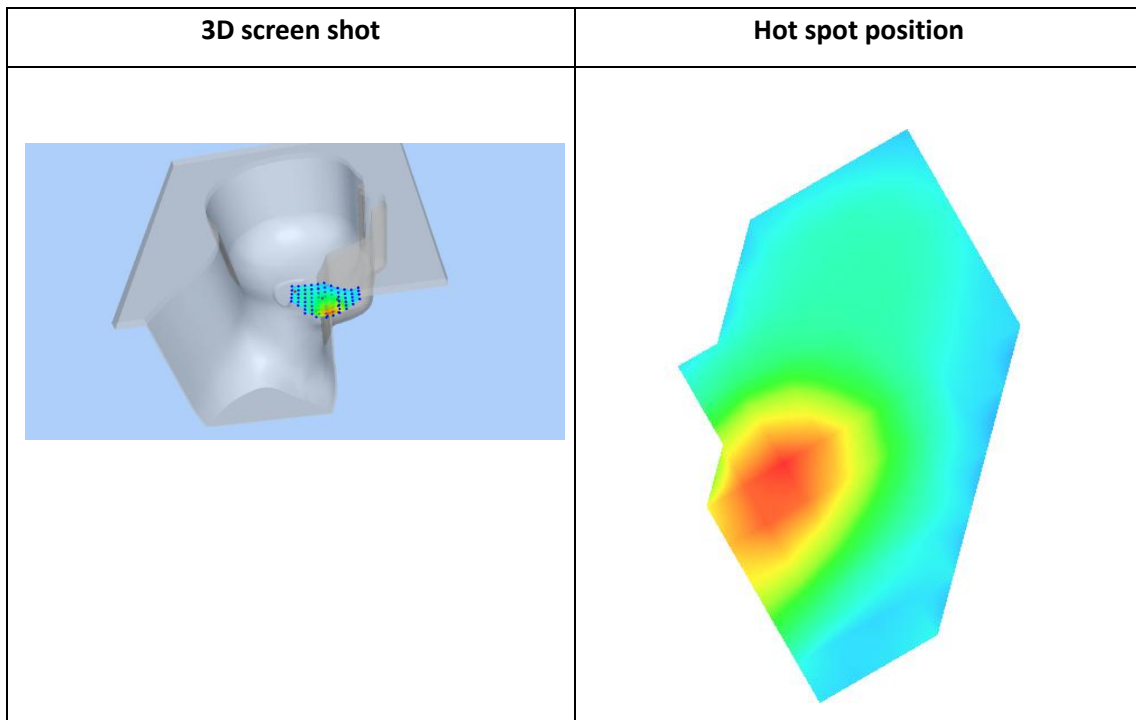
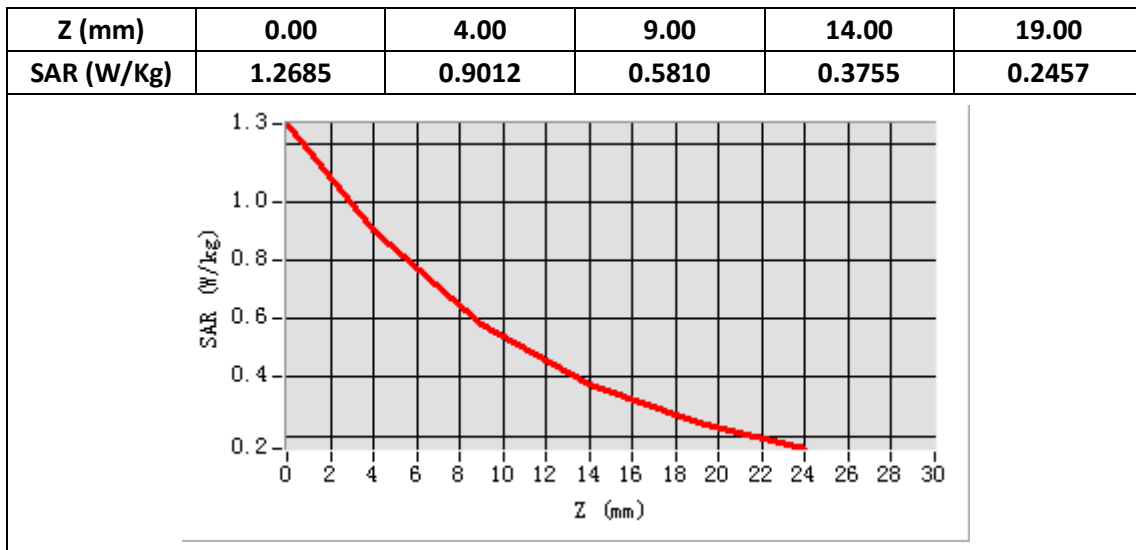
E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	1880
Relative permittivity (real part)	41.15
Relative permittivity (imaginary part)	12.68
Conductivity (S/m)	1.38
Variation (%)	-0.33
ConvF:	4.73



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

**SAR Peak: 1.28 W/kg**

SAR 10g (W/Kg)	0.477539
SAR 1g (W/Kg)	0.713185



## Plot 6:WCDMA 1900 , Back, Middle,10mm

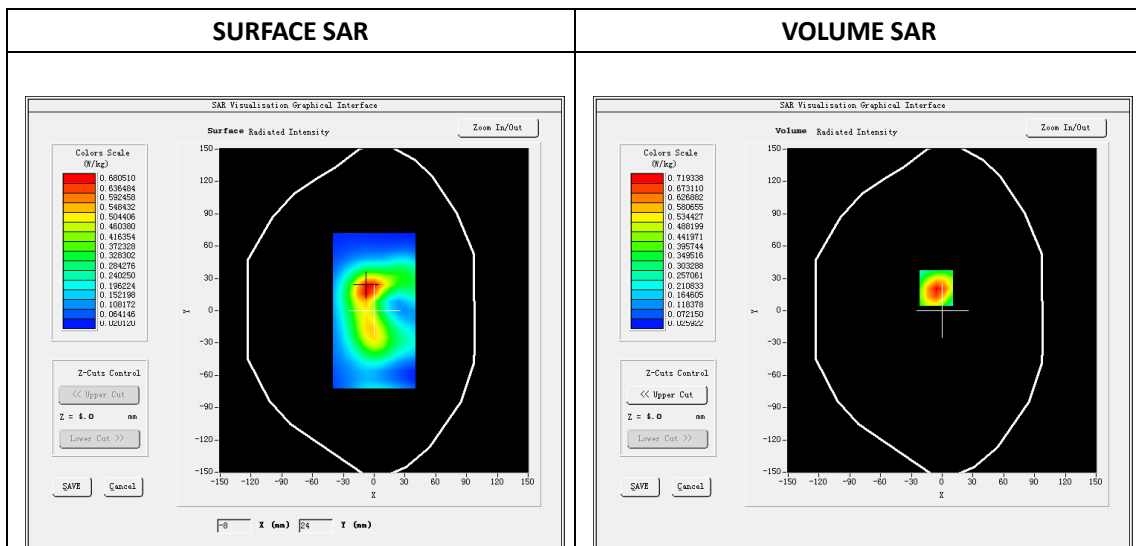
Type: Phone measurement  
 Date of measurement: 07/24/2018  
 Measurement duration: 22 minutes 15 seconds  
 Mobile Phone IMEI number: --

**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>	WCDMA 1900
<b>Channels</b>	9400
<b>Signal</b>	WCDMA (Duty cycle: 1:1)

**B. SAR Measurement Results**

<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	1880
<b>Relative permittivity (real part)</b>	53.94
<b>Relative permittivity (imaginary part)</b>	14.15
<b>Conductivity (S/m)</b>	1.53
<b>Variation (%)</b>	-0.09
<b>ConvF:</b>	4.83

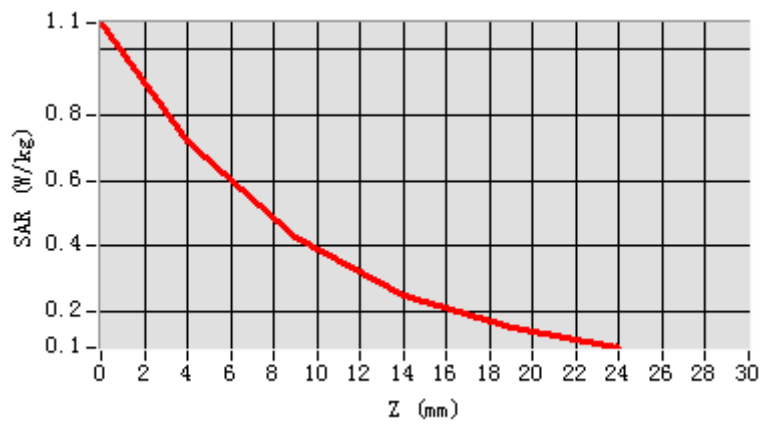


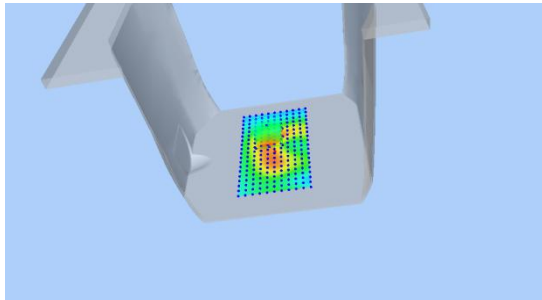
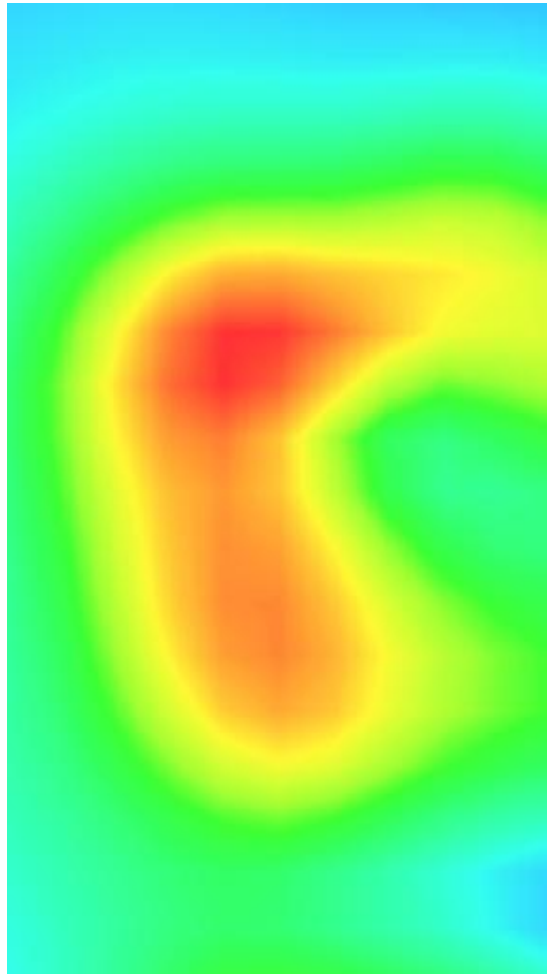
**Maximum location: X=-6.00, Y=21.00**

**SAR Peak: 1.09 W/kg**

<b>SAR 10g (W/Kg)</b>	0.378665
<b>SAR 1g (W/Kg)</b>	0.679007

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>
<b>SAR (W/Kg)</b>	<b>1.0804</b>	<b>0.7193</b>	<b>0.4243</b>	<b>0.2512</b>	<b>0.1530</b>



3D screen shot	Hot spot position
	

**Plot 7: WCDMA 850 Left Cheek, Middle**

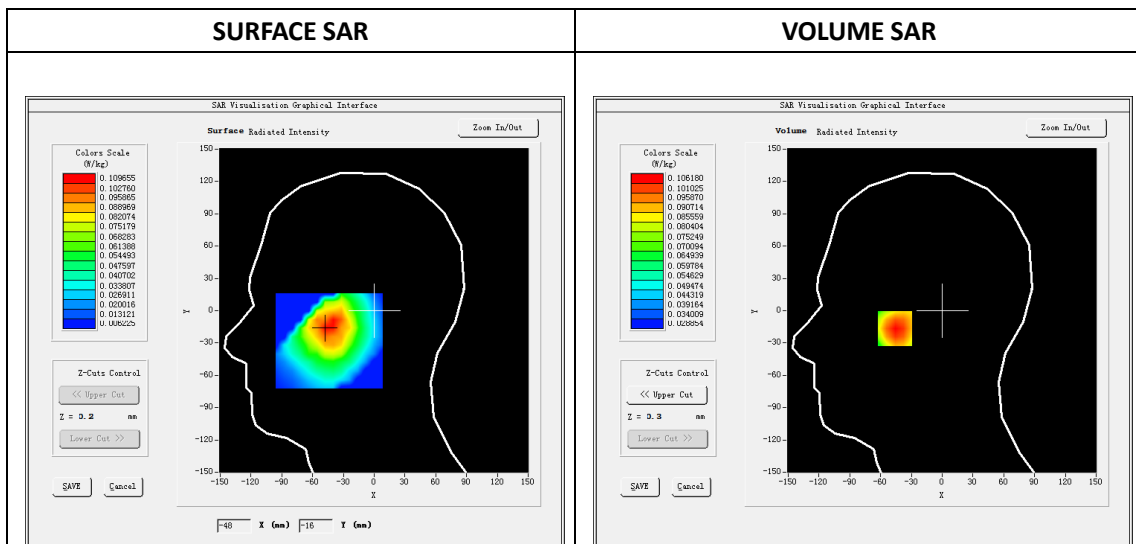
Type: Phone measurement  
 Date of measurement: 07/23/2018  
 Measurement duration: 22 minutes 15 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Right Cheek
Band	WCDMA 850
Channels	Middle
Signal	WCDMA (Duty cycle: 1:1)

**B. SAR Measurement Results**

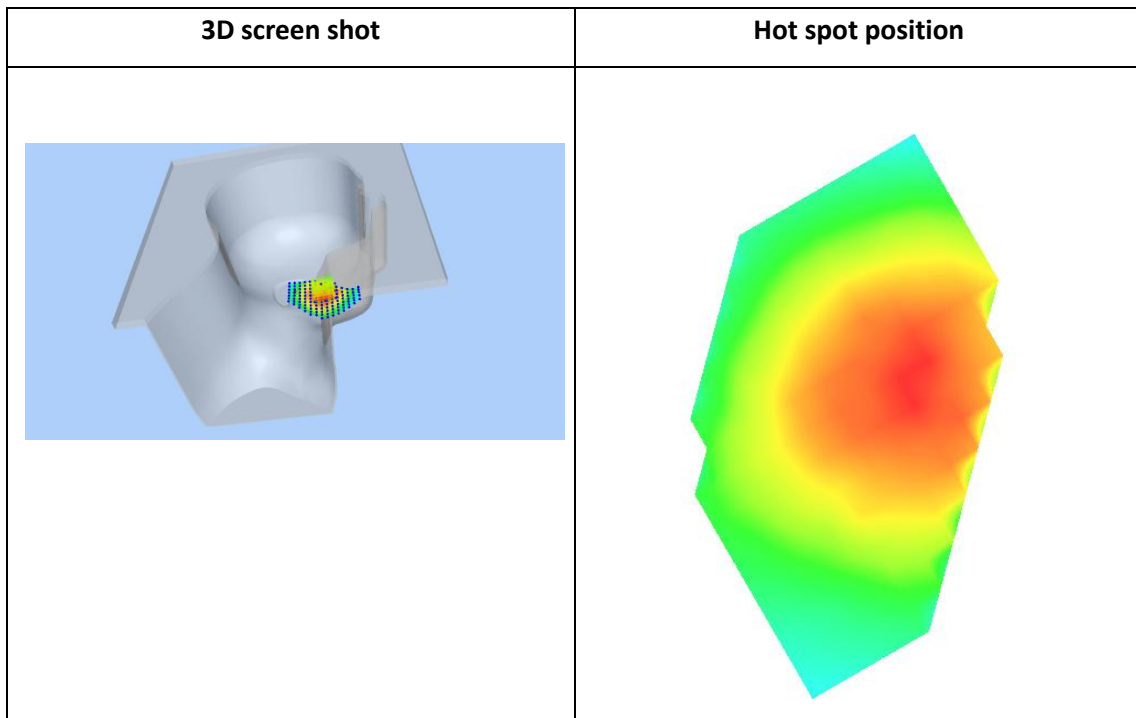
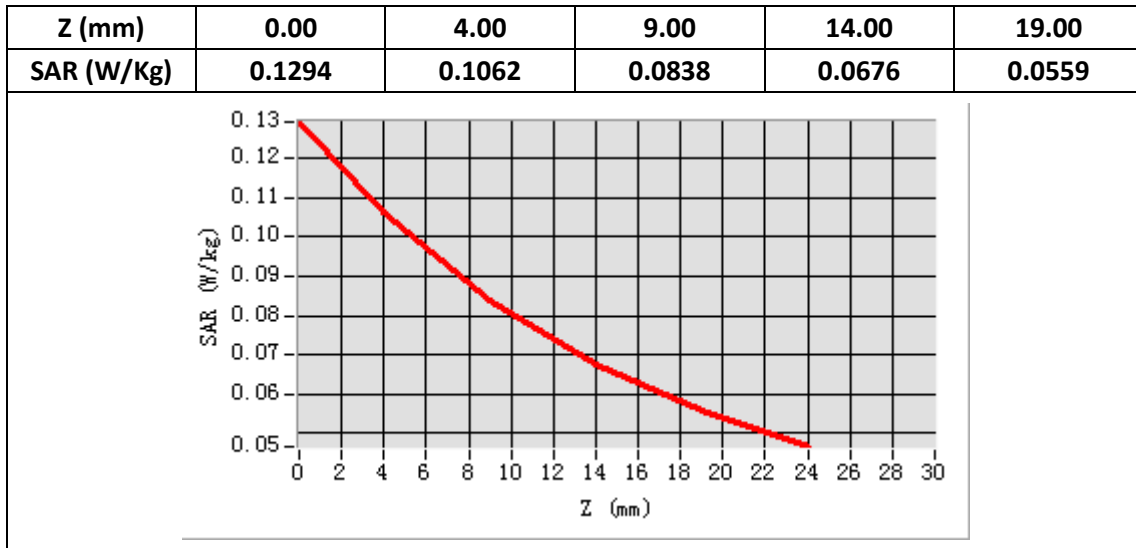
E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	836.6
Relative permittivity (real part)	41.61
Relative permittivity (imaginary part)	19.35
Conductivity (S/m)	0.89
Variation (%)	0.84
ConvF:	4.99



Maximum location: X=-46.00, Y=-16.00

SAR Peak: 0.13 W/kg

SAR 10g (W/Kg)	0.078421
SAR 1g (W/Kg)	0.104024



**Plot 8:WCDMA 850 , Back, Middle,10mm**

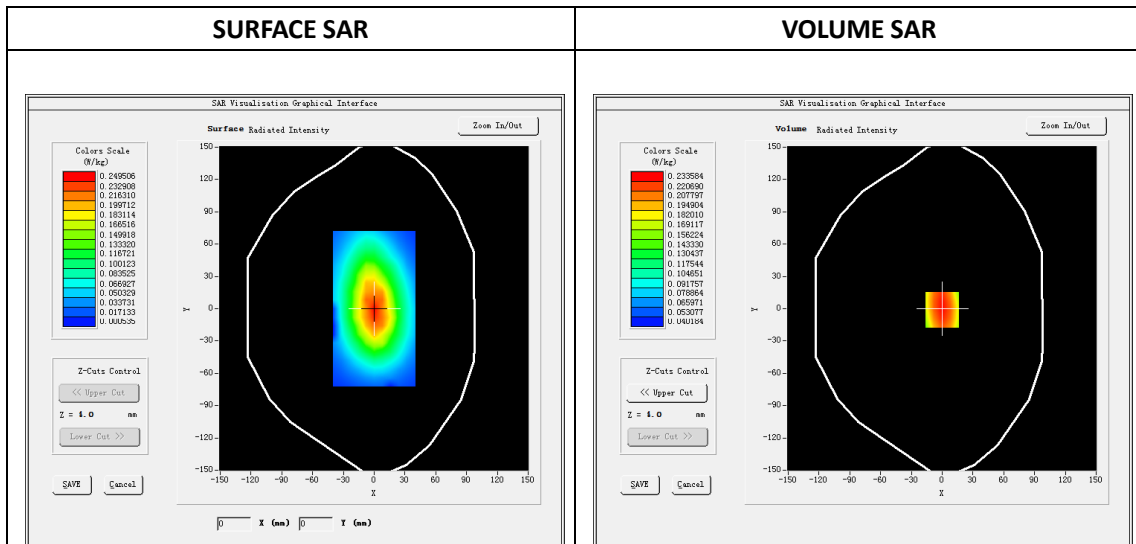
Type: Phone measurement  
 Date of measurement: 07/23/2018  
 Measurement duration: 22 minutes 11 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	WCDMA 850
Channels	Middle
Signal	WCDMA (Duty cycle: 1:1)

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	836.6
Relative permittivity (real part)	55.35
Relative permittivity (imaginary part)	20.35
Conductivity (S/m)	0.91
Variation (%)	1.47
ConvF:	5.18



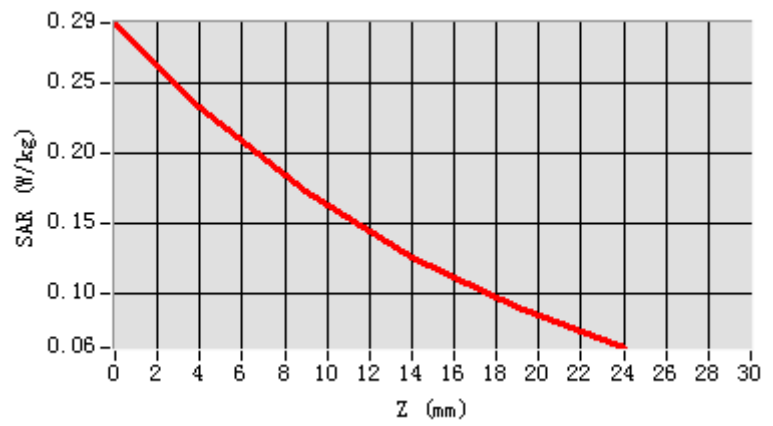
Maximum location: X=0.00, Y=-1.00

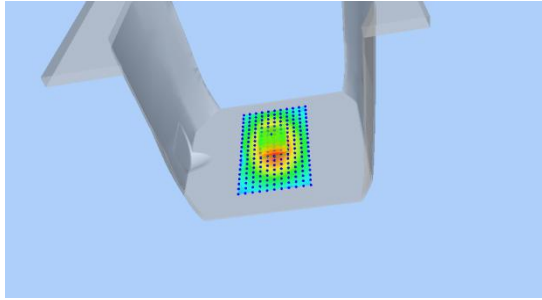
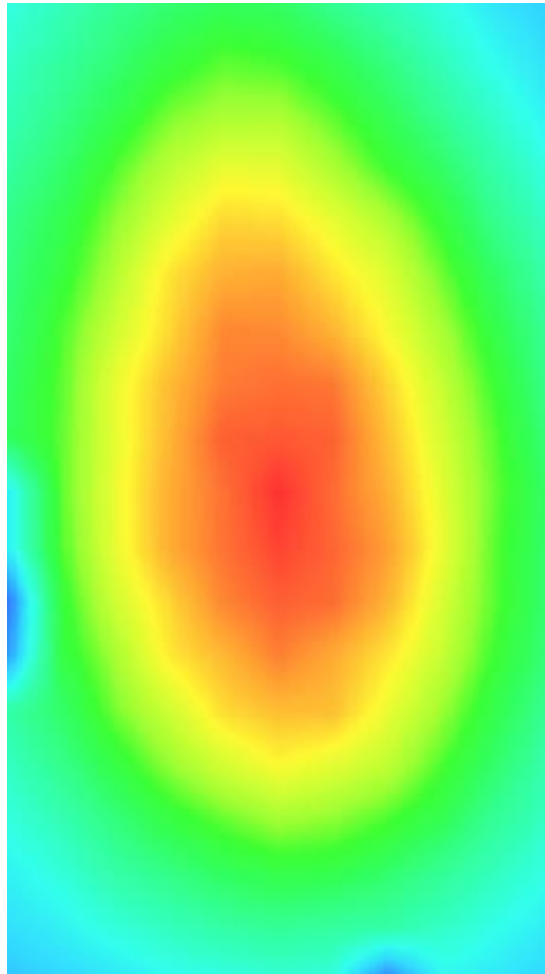
SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)	0.157572
SAR 1g (W/Kg)	0.227297



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.2932	0.2336	0.1733	0.1265	0.0903



3D screen shot	Hot spot position
	

### Plot 9: LTE Band2, 20MHz, Left Cheek, Middle

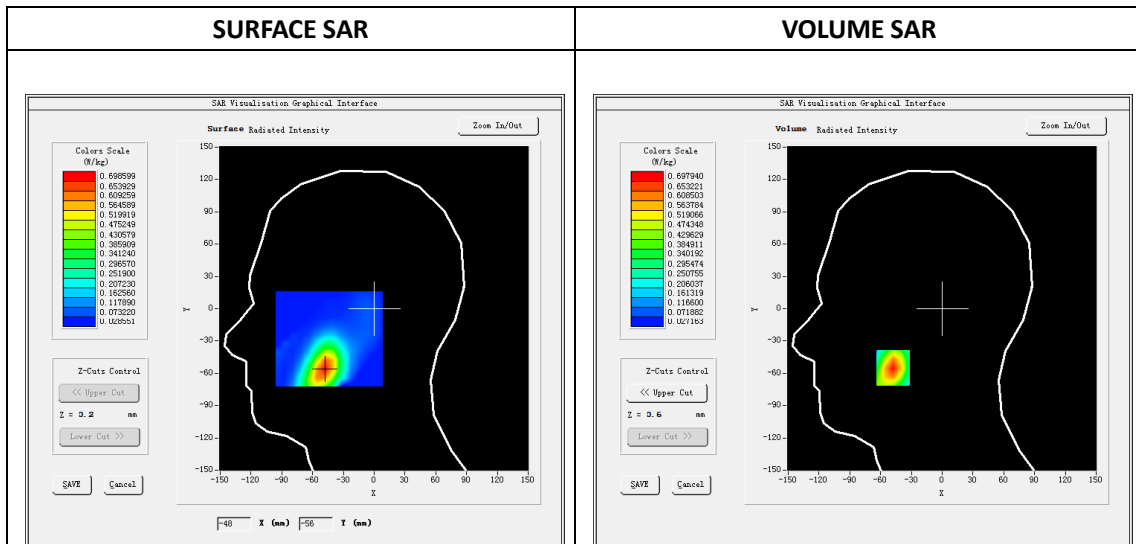
Type: Phone measurement  
 Date of measurement: 07/24/2018  
 Measurement duration: 22 minutes 11 seconds  
 Mobile Phone IMEI number: --

**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>	Left Cheek
<b>Band</b>	LTE Band 2
<b>Channels</b>	Middle
<b>Signal</b>	LTE (Duty cycle: 1:1)

**B. SAR Measurement Results**

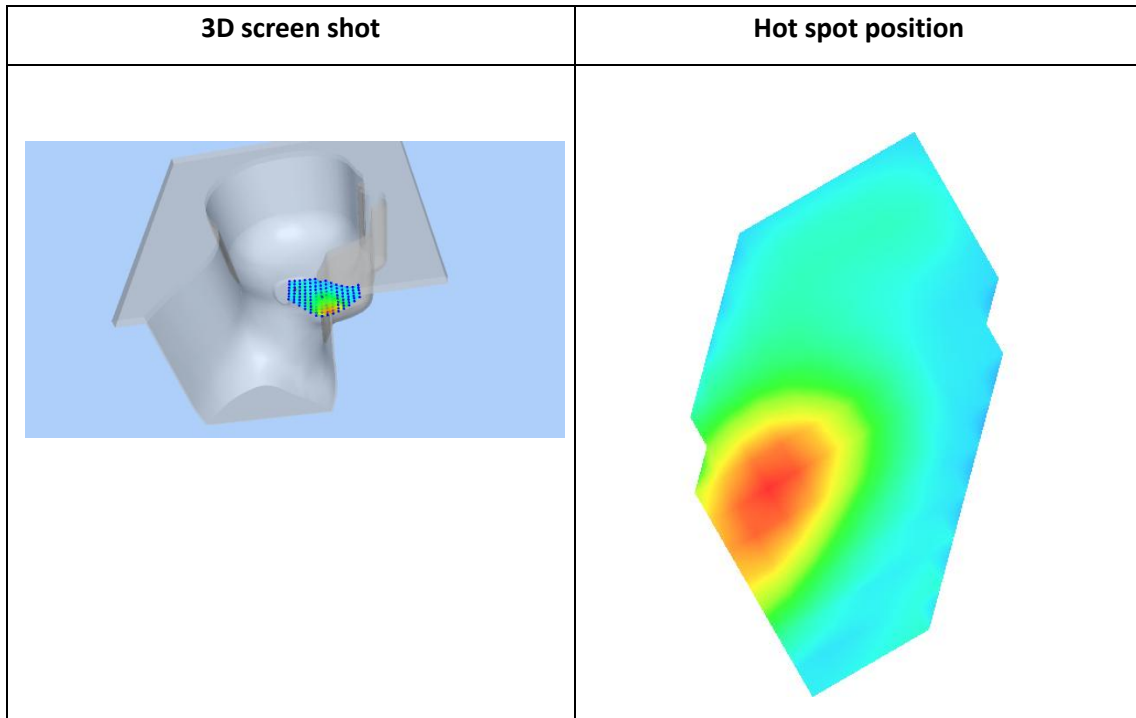
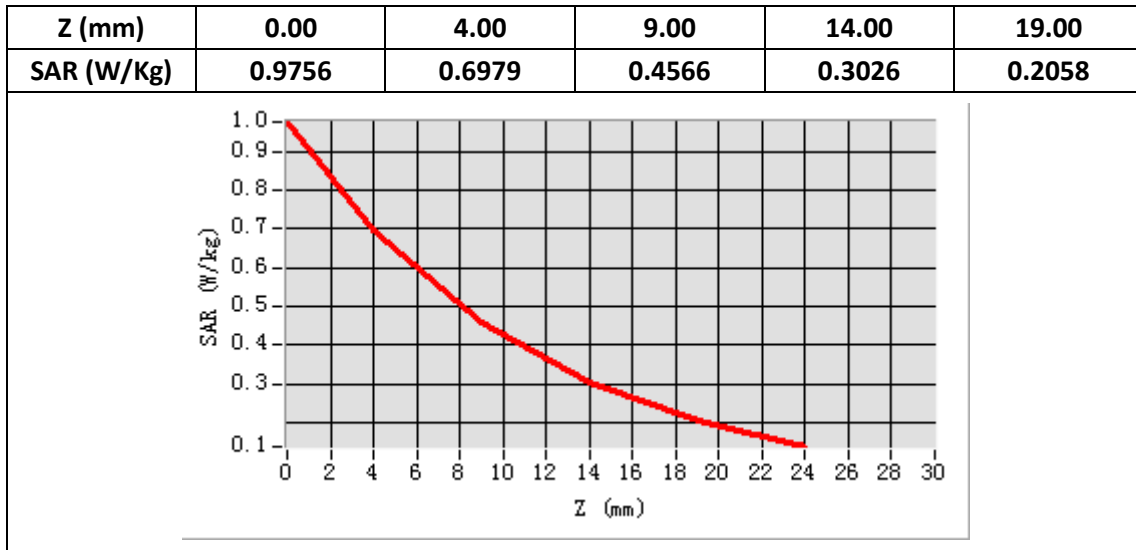
<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	1880
<b>Relative permittivity (real part)</b>	41.15
<b>Relative permittivity (imaginary part)</b>	12.68
<b>Conductivity (S/m)</b>	1.38
<b>Variation (%)</b>	0.18
<b>ConvF:</b>	4.73



**Maximum location: X=-48.00, Y=-55.00**

**SAR Peak: 0.98 W/kg**

<b>SAR 10g (W/Kg)</b>	0.379985
<b>SAR 1g (W/Kg)</b>	0.648801



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

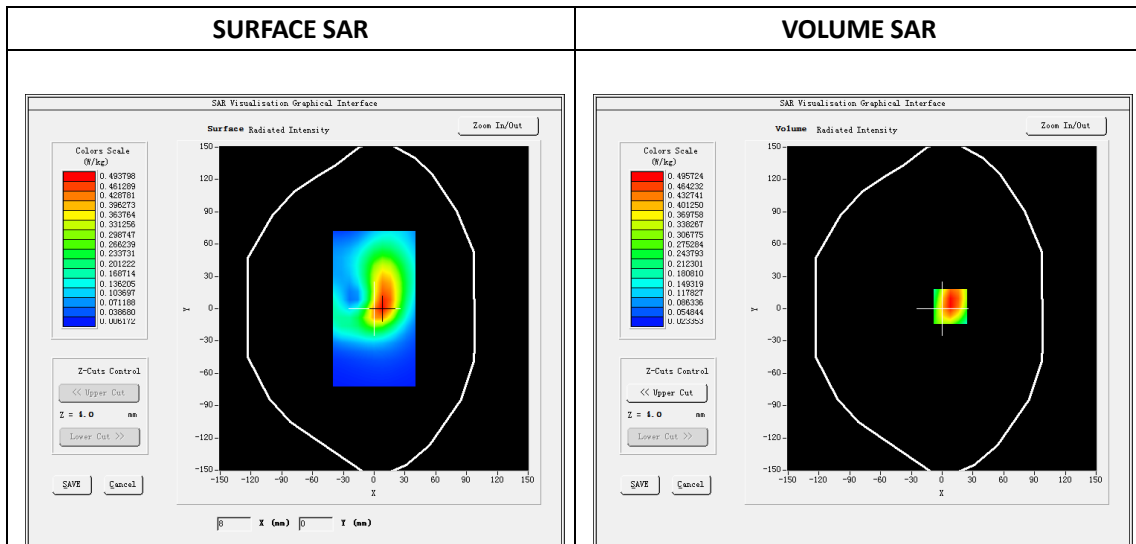
Type: Phone measurement  
 Date of measurement: 07/24/2018  
 Measurement duration: 22 minutes 11 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

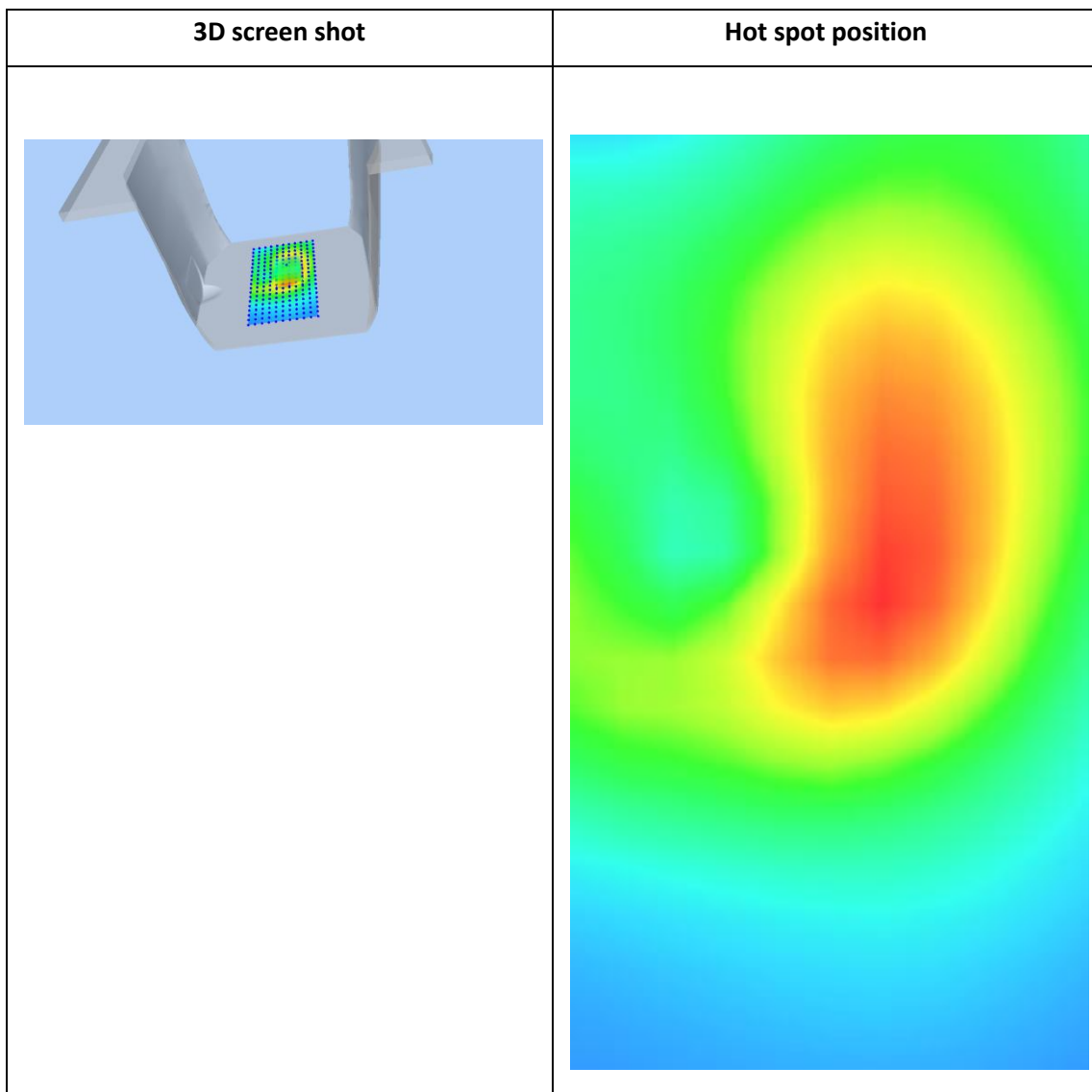
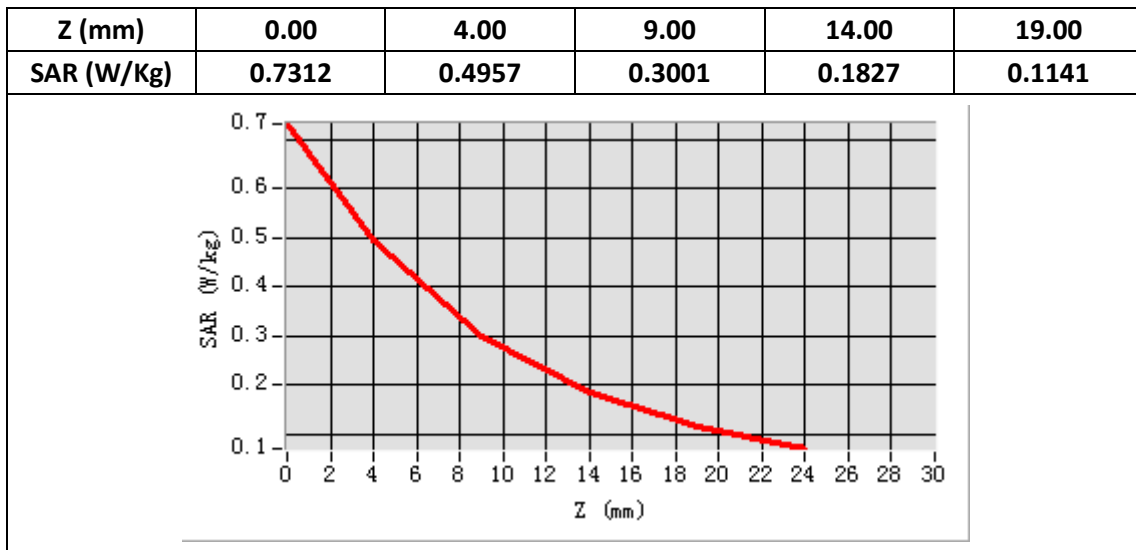
E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	1880
Relative permittivity (real part)	53.94
Relative permittivity (imaginary part)	14.15
Conductivity (S/m)	1.53
Variation (%)	0.42
ConvF:	4.83



**Maximum location: X=8.00, Y=2.00**

**SAR Peak: 0.75 W/kg**

<b>SAR 10g (W/Kg)</b>	0.274172
<b>SAR 1g (W/Kg)</b>	0.473761



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

Type: Phone measurement

Date of measurement: 07/24/2018

Measurement duration: 22 minutes 15 seconds

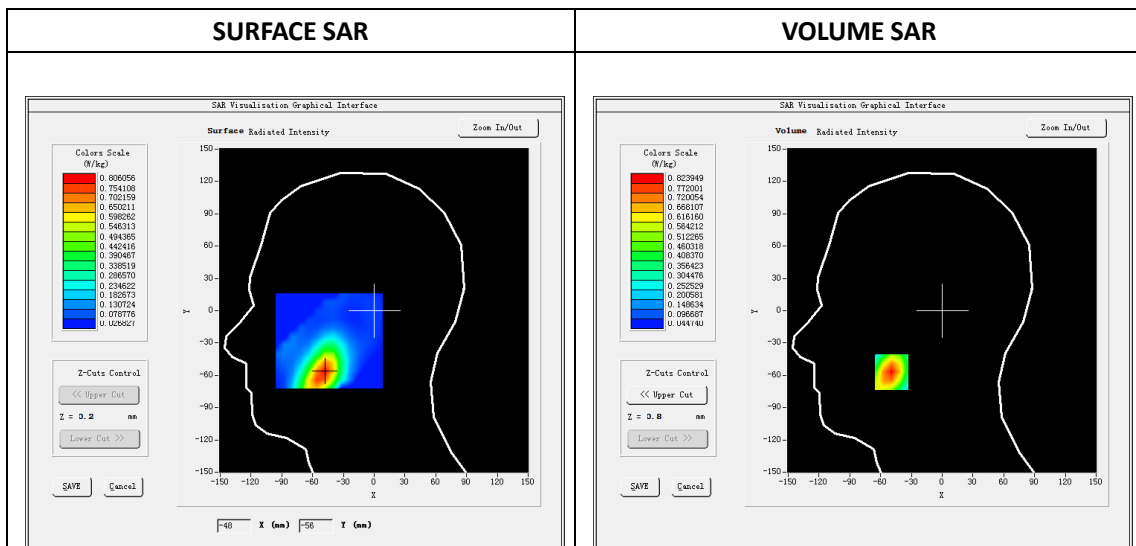
Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

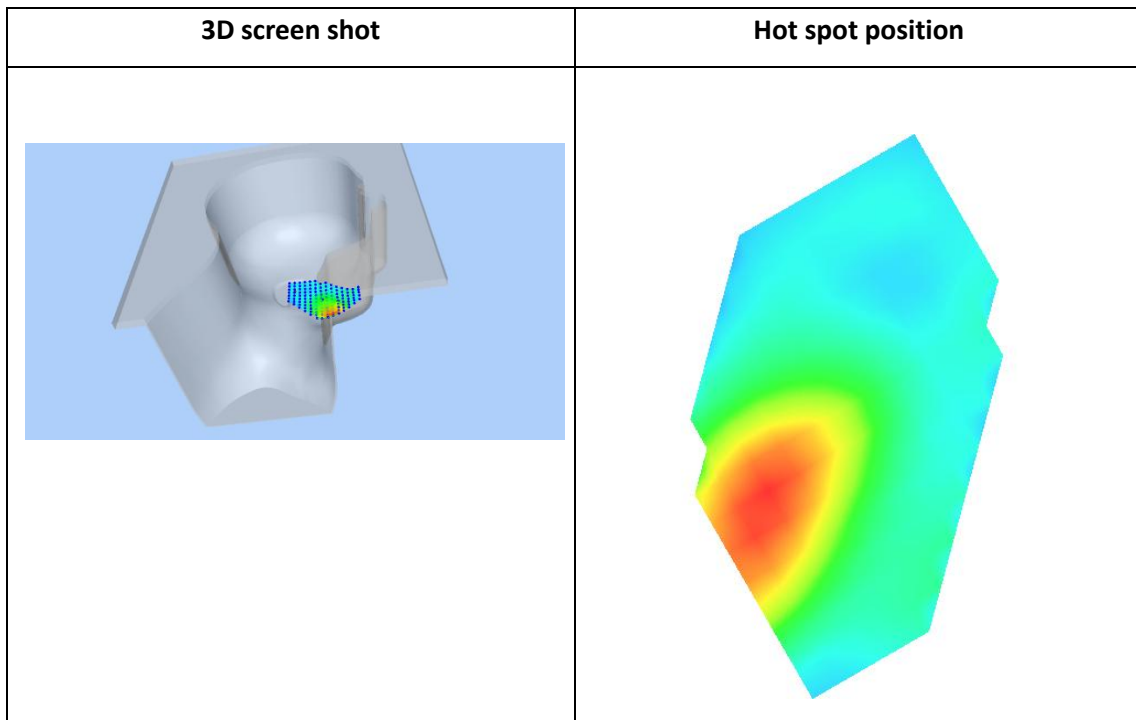
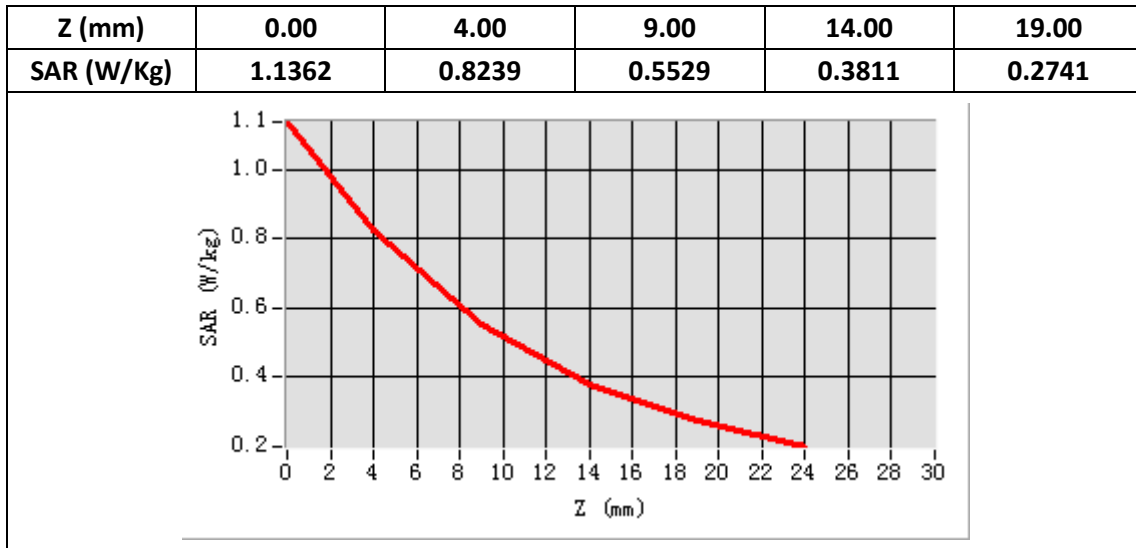
E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	1732.5
Relative permittivity (real part)	41.15
Relative permittivity (imaginary part)	12.68
Conductivity (S/m)	1.38
Variation (%)	-0.40
ConvF:	4.29



Maximum location: X=-49.00, Y=-57.00

SAR Peak: 1.14 W/kg

SAR 10g (W/Kg)	0.477398
SAR 1g (W/Kg)	0.685465



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

Type: Phone measurement

Date of measurement: 07/24/2018

Measurement duration: 22 minutes 25 seconds

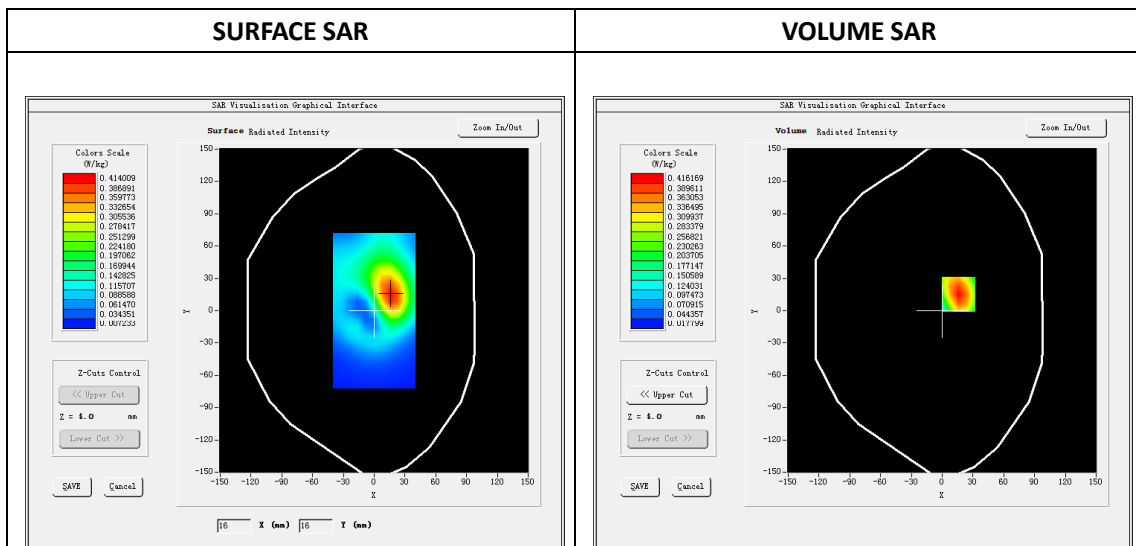
Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	1732.5
Relative permittivity (real part)	53.94
Relative permittivity (imaginary part)	14.15
Conductivity (S/m)	1.53
Variation (%)	-0.28
ConvF:	4.43



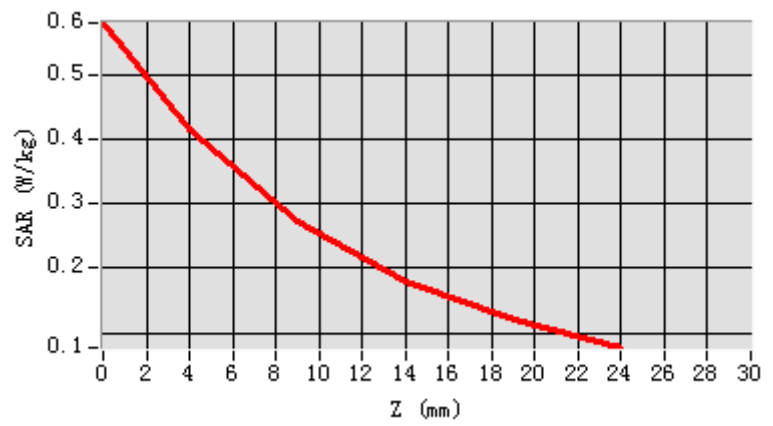
**Maximum location: X=16.00, Y=15.00**

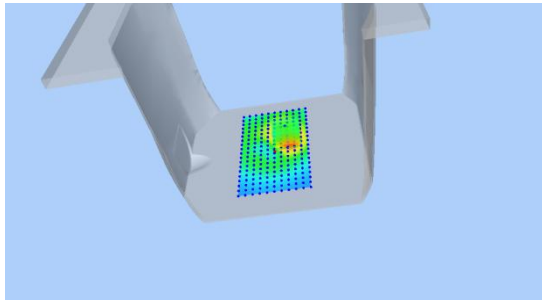
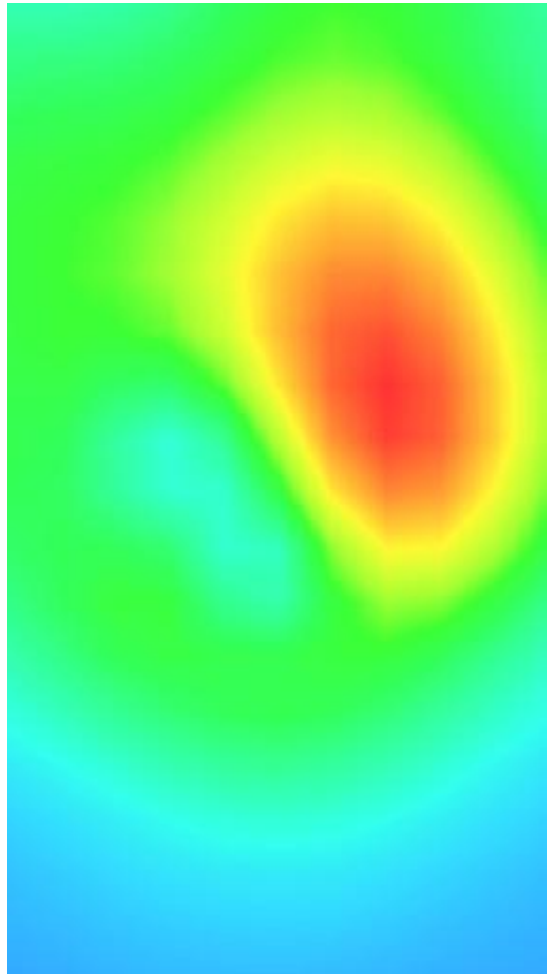
**SAR Peak: 0.58 W/kg**

<b>SAR 10g (W/Kg)</b>	0.242721
<b>SAR 1g (W/Kg)</b>	0.464123



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5791	0.4162	0.2726	0.1793	0.1193



3D screen shot	Hot spot position
	

### Plot 13: LTE Band5, 10MHz, Right Cheek, Middle

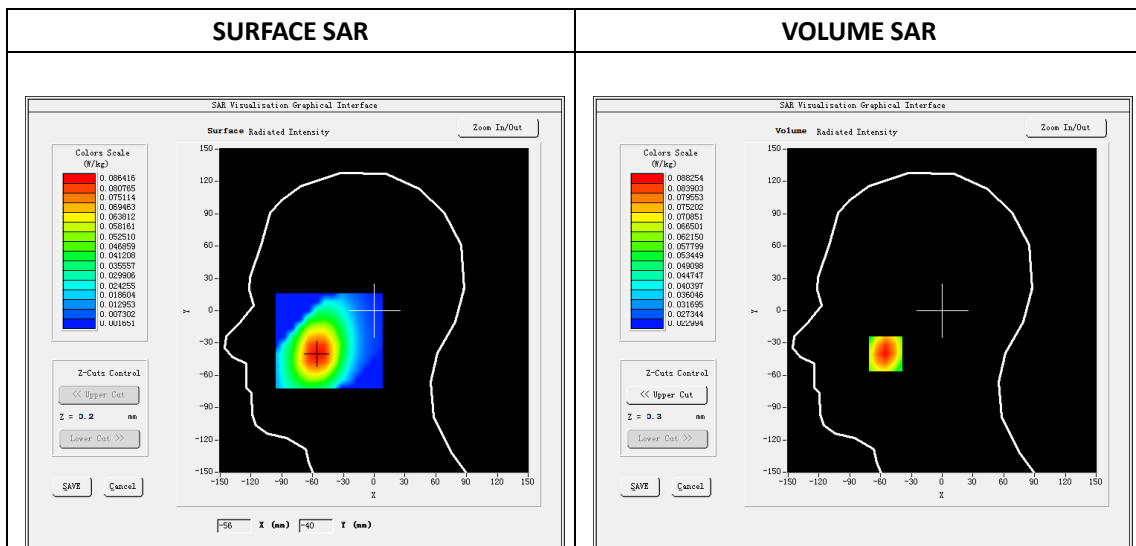
Type: Phone measurement  
 Date of measurement: 07/23/2018  
 Measurement duration: 22 minutes 22 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

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

**B. SAR Measurement Results**

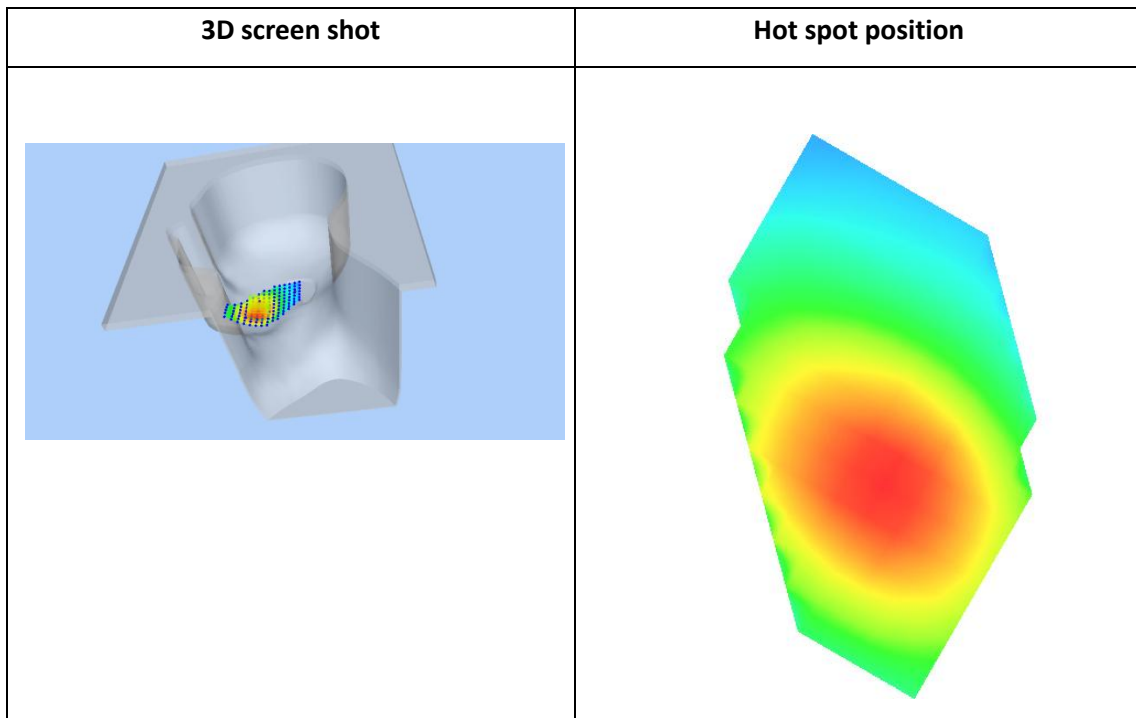
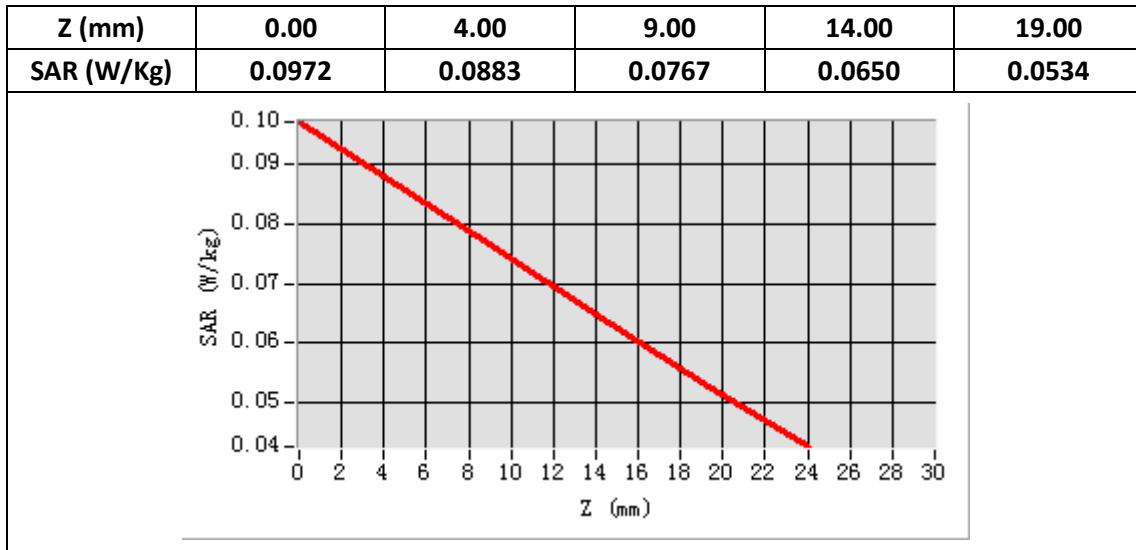
E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	836.5
Relative permittivity (real part)	41.61
Relative permittivity (imaginary part)	19.35
Conductivity (S/m)	0.89
Variation (%)	0.34
ConvF:	4.99



**Maximum location: X=-55.00, Y=-40.00**

**SAR Peak: 0.10 W/kg**

<b>SAR 10g (W/Kg)</b>	0.067385
<b>SAR 1g (W/Kg)</b>	0.086545



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

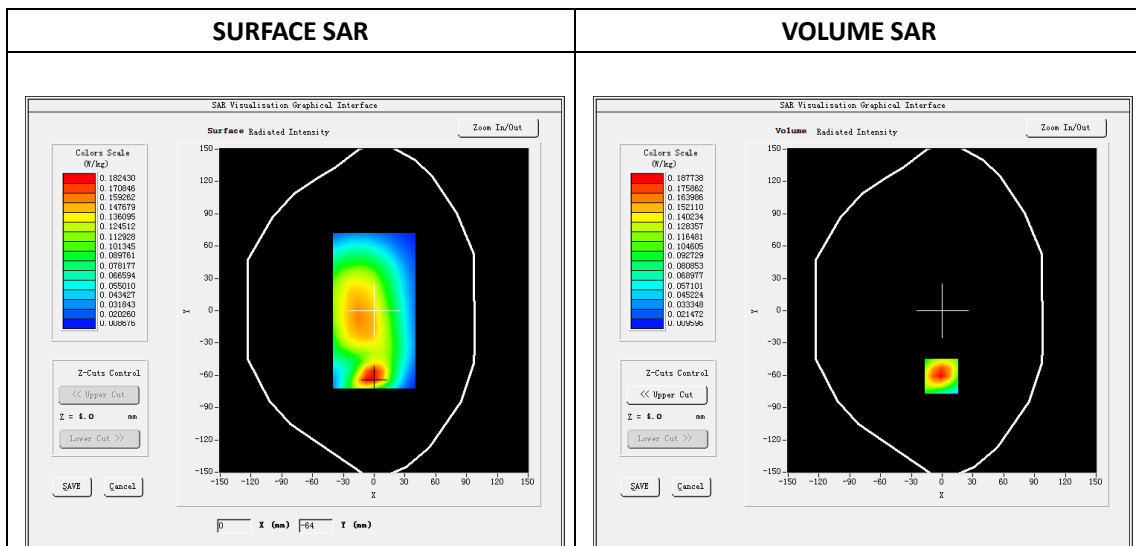
Type: Phone measurement  
 Date of measurement: 07/23/2018  
 Measurement duration: 22 minutes 26 seconds  
 Mobile Phone IMEI number: --

**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>	LTE Band 5
<b>Channels</b>	Middle
<b>Signal</b>	LTE (Duty cycle: 1:1)

**B. SAR Measurement Results**

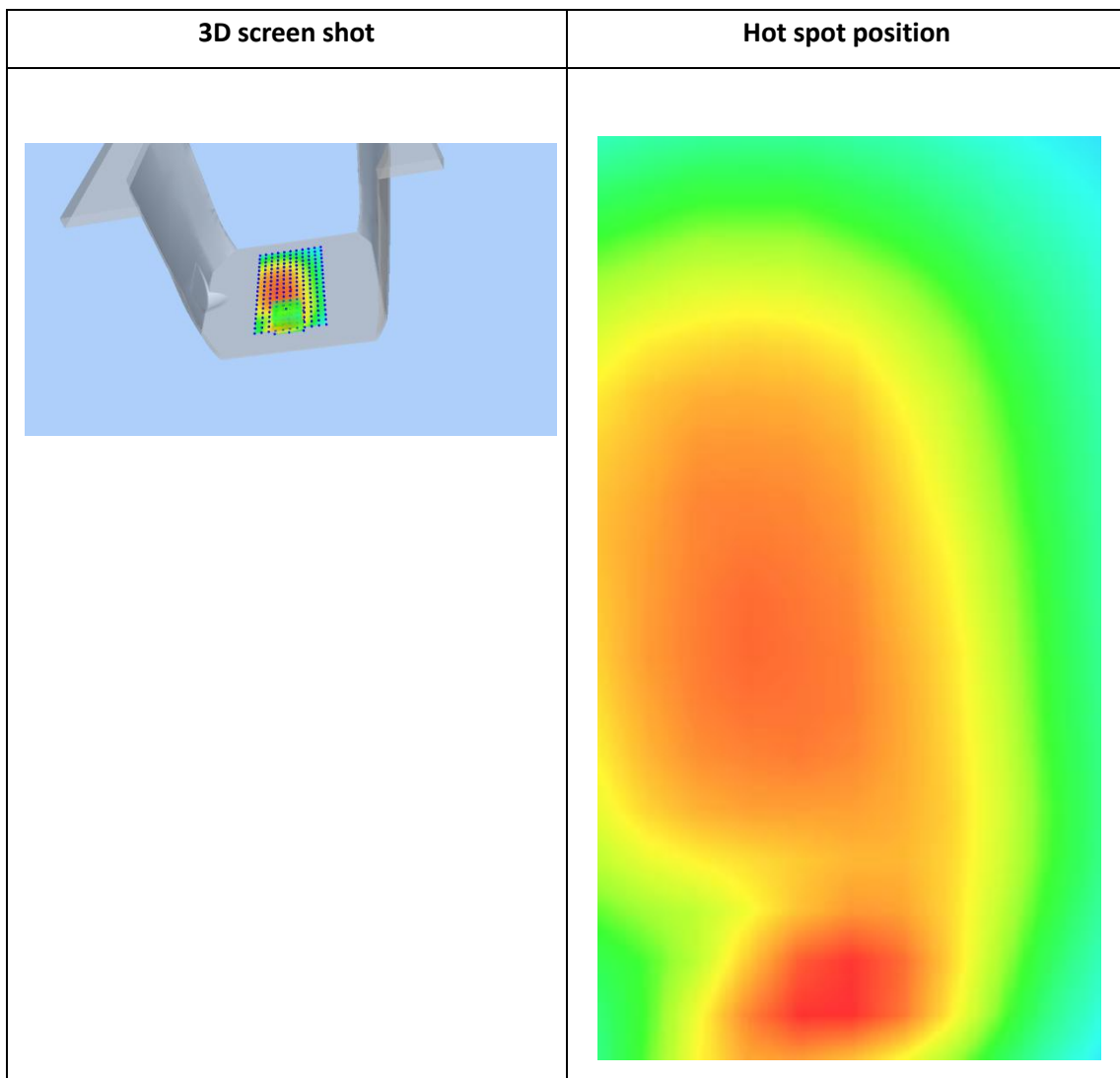
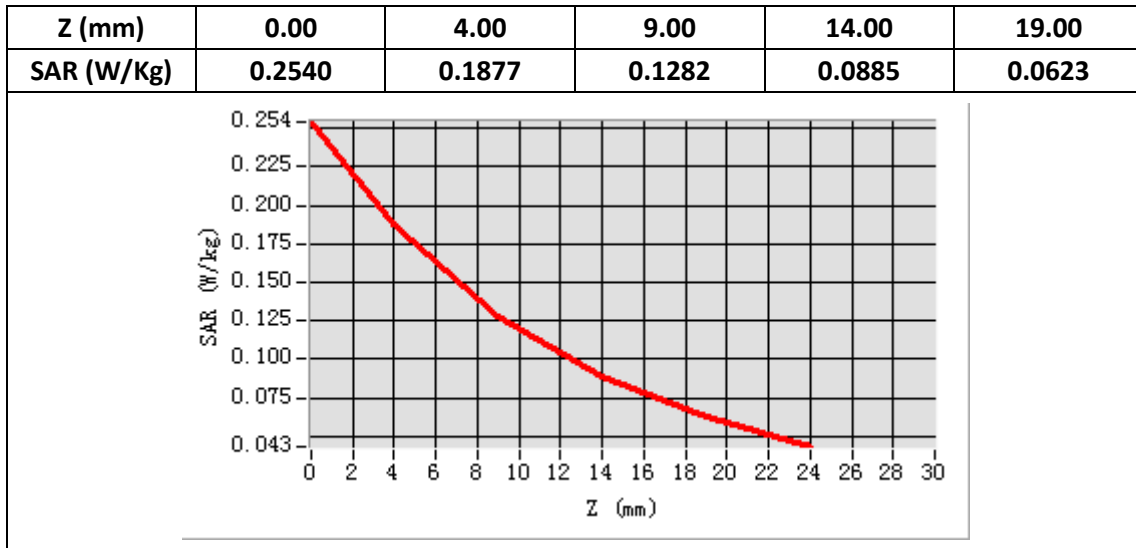
<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	836.5
<b>Relative permittivity (real part)</b>	55.35
<b>Relative permittivity (imaginary part)</b>	20.35
<b>Conductivity (S/m)</b>	0.91
<b>Variation (%)</b>	-1.33
<b>ConvF:</b>	5.18



**Maximum location: X=-1.00, Y=-610**

**SAR Peak: 0.26W/kg**

<b>SAR 10g (W/Kg)</b>	0.110706
<b>SAR 1g (W/Kg)</b>	0.180971



**Plot 15: LTE Band7, 20MHz, Right Cheek, Middle**

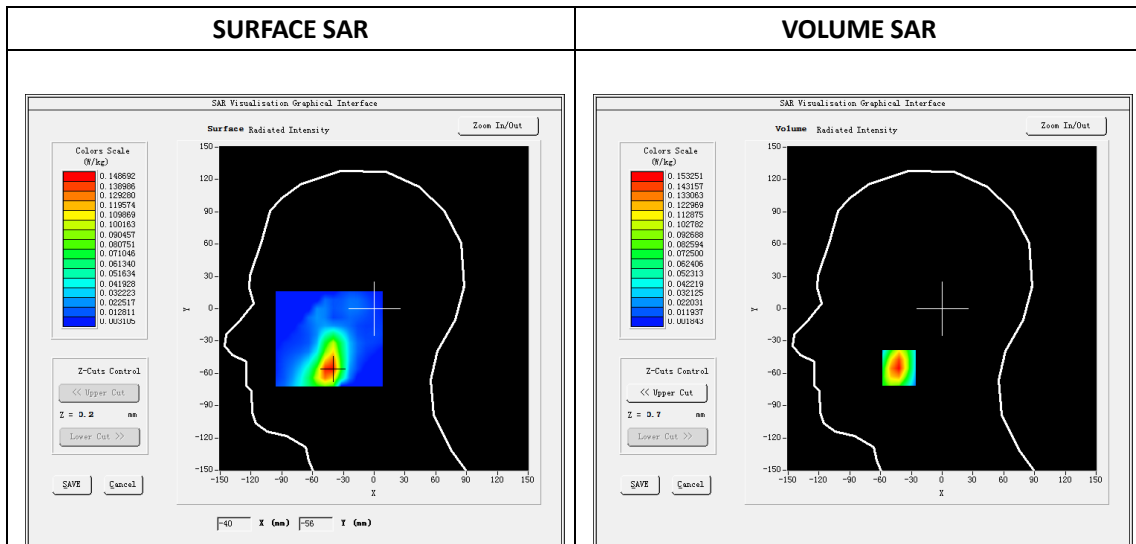
Type: Phone measurement  
 Date of measurement: 07/26/2018  
 Measurement duration: 22 minutes 46 seconds  
 Mobile Phone IMEI number: --

**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>	Right Cheek
<b>Band</b>	LTE Band 7
<b>Channels</b>	Middle
<b>Signal</b>	LTE (Duty cycle: 1:1)

**B. SAR Measurement Results**

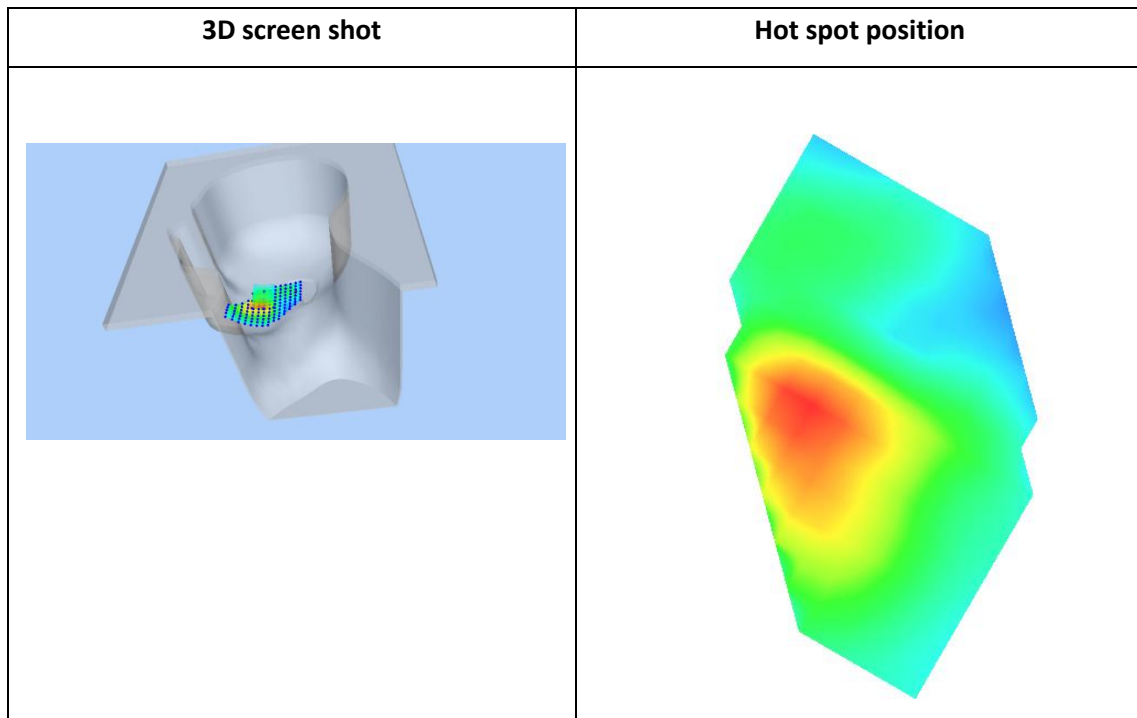
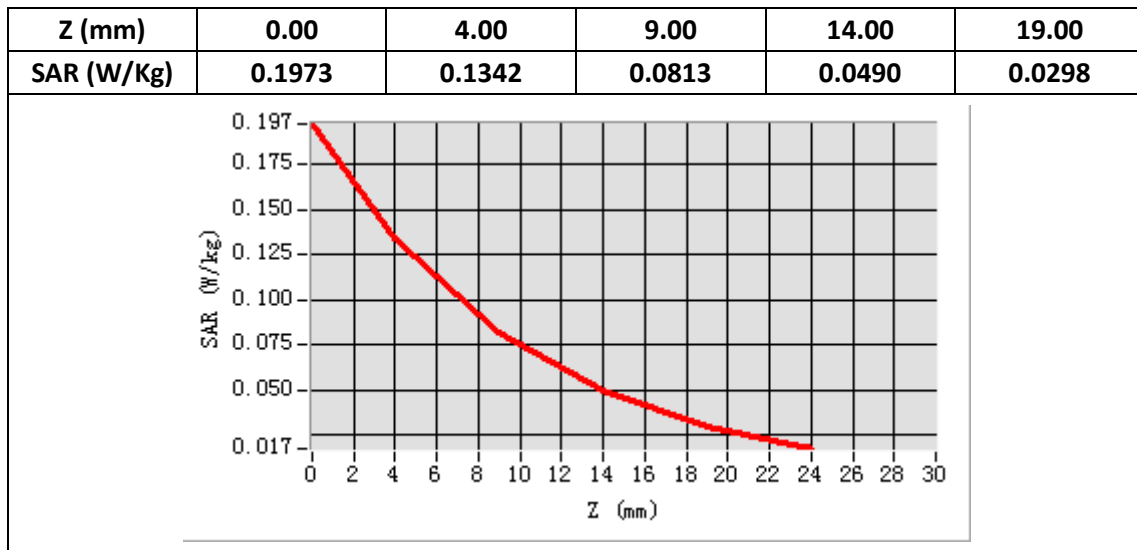
<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	2535
<b>Relative permittivity (real part)</b>	38.45
<b>Relative permittivity (imaginary part)</b>	13.41
<b>Conductivity (S/m)</b>	1.94
<b>Variation (%)</b>	-1.63
<b>ConvF:</b>	4.16



**Maximum location: X=-42.00, Y=-55.00**

**SAR Peak: 0.24 W/kg**

<b>SAR 10g (W/Kg)</b>	0.074157
<b>SAR 1g (W/Kg)</b>	0.142778



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

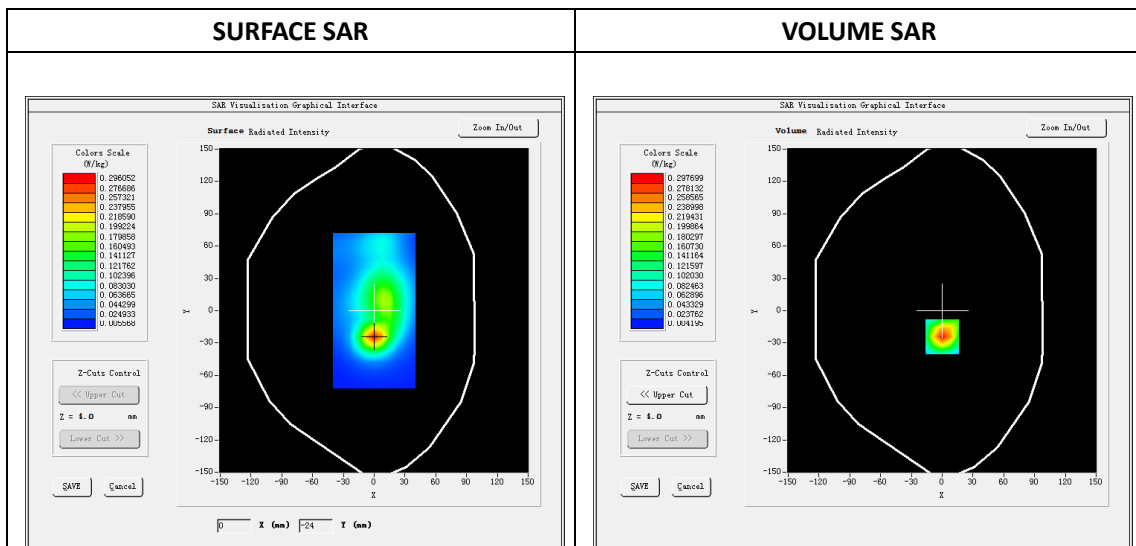
Type: Phone measurement  
 Date of measurement: 07/26/2018  
 Measurement duration: 22 minutes 19 seconds  
 Mobile Phone IMEI number: --

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

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	2535
Relative permittivity (real part)	52.42
Relative permittivity (imaginary part)	14.23
Conductivity (S/m)	2.02
Variation (%)	-0.41
ConvF:	4.28

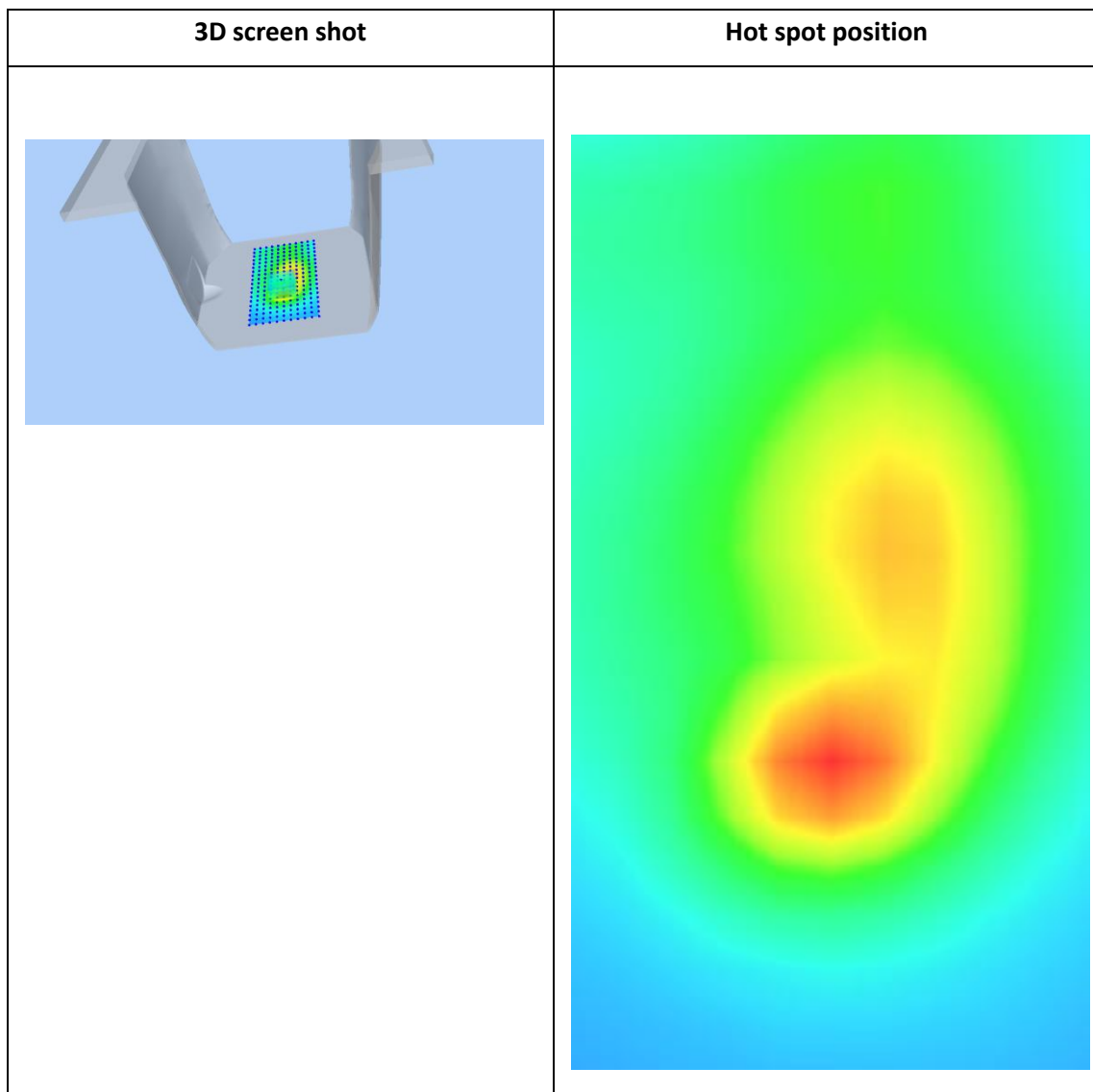
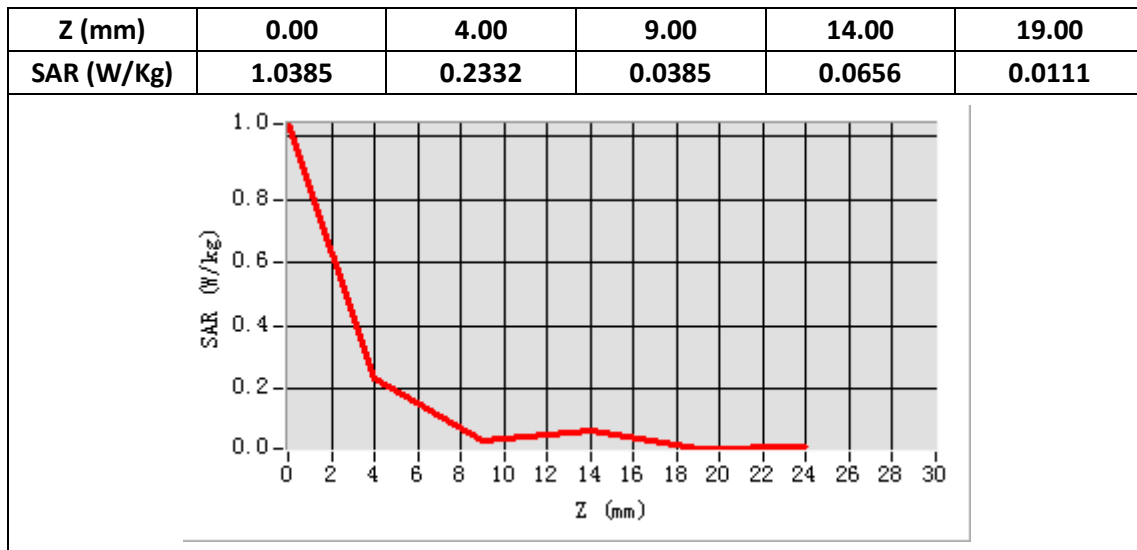


Maximum location: X=0.00, Y=-24.00

SAR Peak: 0.48 W/kg

SAR 10g (W/Kg)	0.110415
SAR 1g (W/Kg)	0.216262





### Plot 17: WIFI 802.11b, Right Tilt Middle

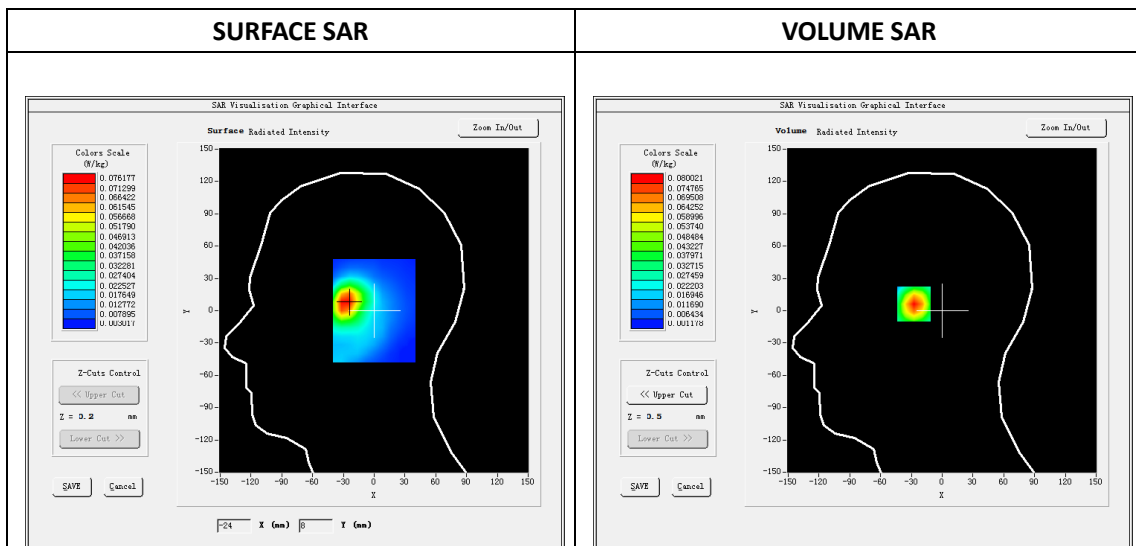
Type: Phone measurement  
 Date of measurement: 07/25/2018  
 Measurement duration: 22 minutes 11 seconds  
 Mobile Phone IMEI number: --

**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>	Right Tilt
<b>Band</b>	WIFI 802.11b
<b>Channels</b>	2437
<b>Signal</b>	DSSS (Duty cycle: 1:1)

**B. SAR Measurement Results**

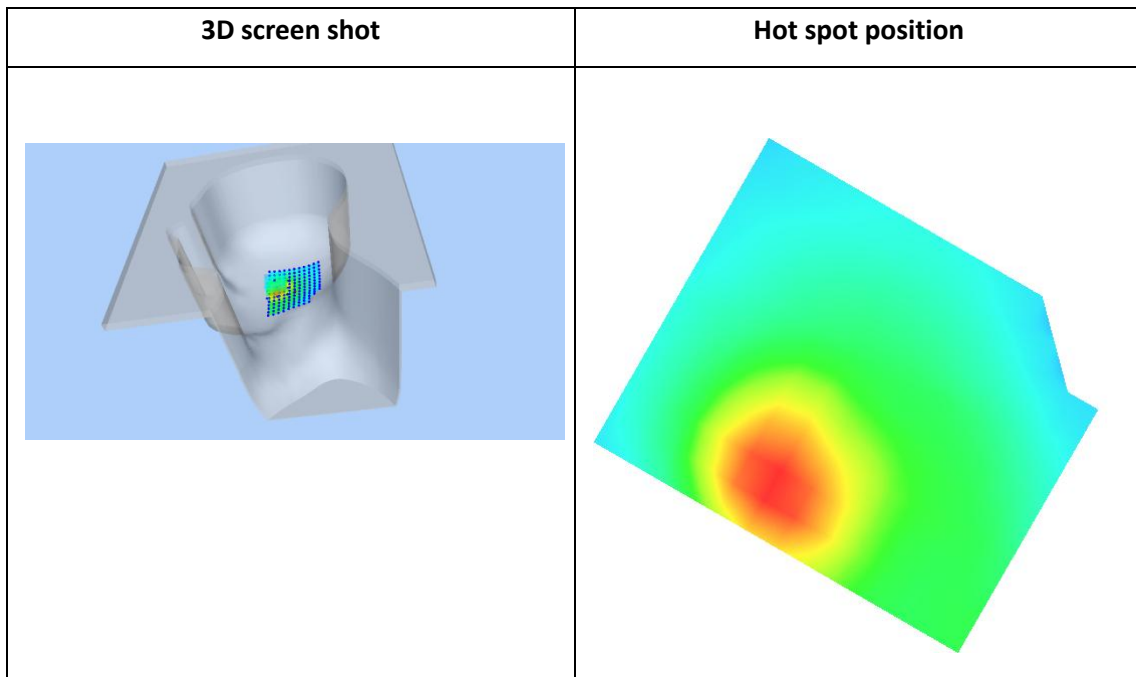
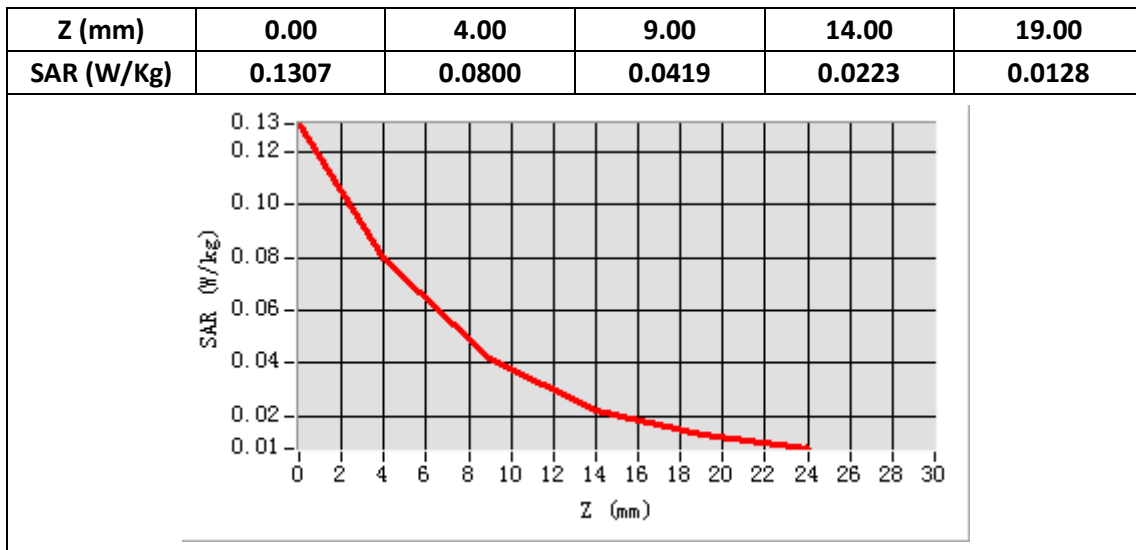
<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	6
<b>Relative permittivity (real part)</b>	38.99
<b>Relative permittivity (imaginary part)</b>	12.85
<b>Conductivity (S/m)</b>	1.78
<b>Variation (%)</b>	-0.84
<b>ConvF:</b>	4.46



**Maximum location: X=-27.00, Y=8.00**

**SAR Peak: 0.13 W/kg**

<b>SAR 10g (W/Kg)</b>	0.039046
<b>SAR 1g (W/Kg)</b>	0.079463



**Plot 18: WIFI 802.11b, Back, Middle ,10mm**

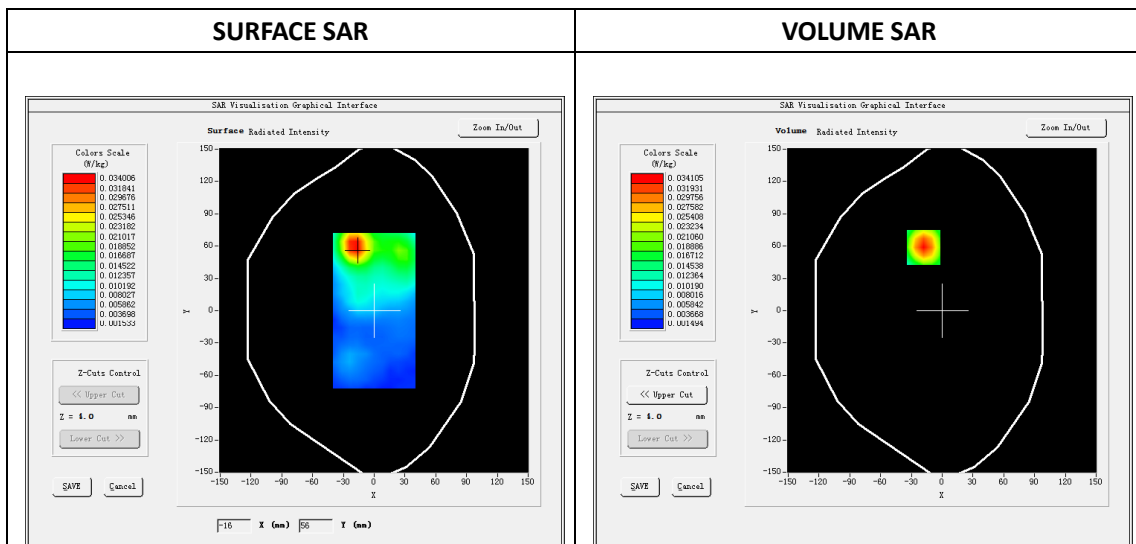
Type: Phone measurement  
 Date of measurement: 07/25/2018  
 Measurement duration: 22 minutes 21 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	WIFI 802.11b
Channels	2437
Signal	DSSS (Duty cycle: 1:1)

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	6
Relative permittivity (real part)	52.35
Relative permittivity (imaginary part)	15.11
Conductivity (S/m)	1.91
Variation (%)	4.34
ConvF:	4.61

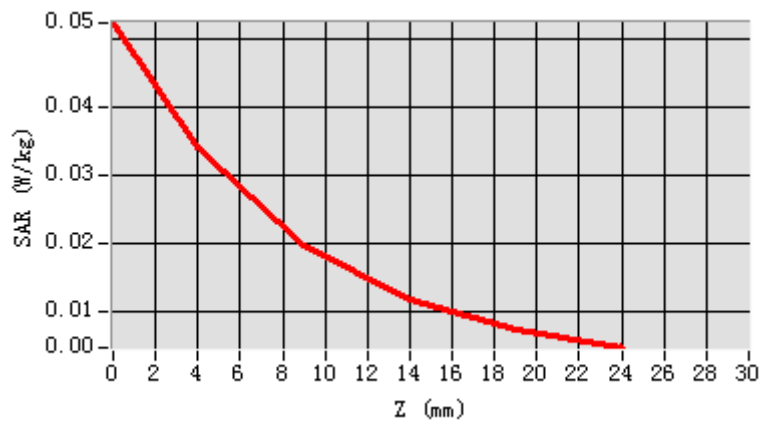


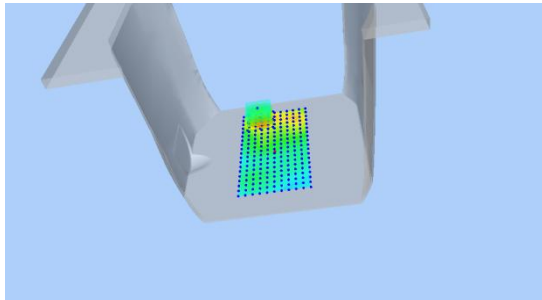
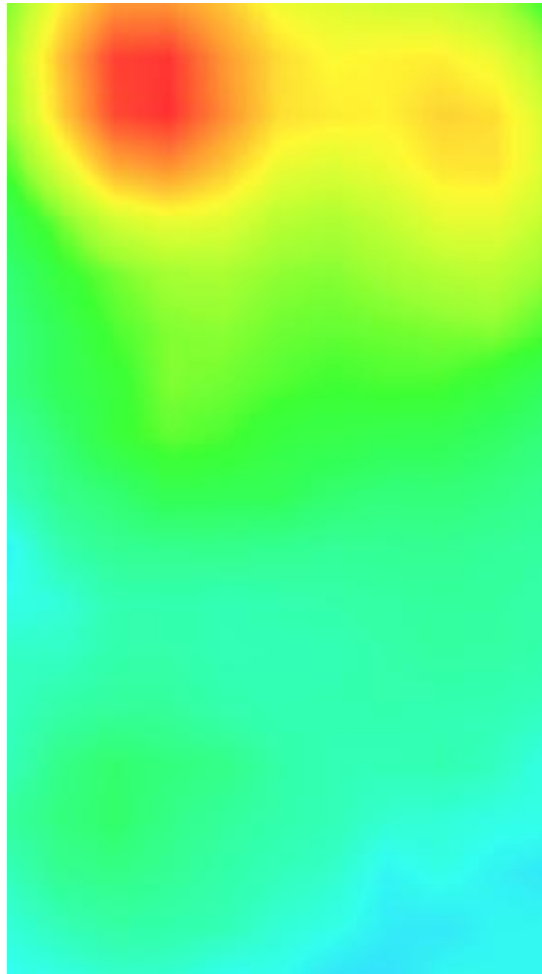
Maximum location: X=-18.00, Y=59.00

SAR Peak: 0.05 W/kg

SAR 10g (W/Kg)	0.018544
SAR 1g (W/Kg)	0.034236

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>
<b>SAR (W/Kg)</b>	<b>0.0525</b>	<b>0.0341</b>	<b>0.0196</b>	<b>0.0115</b>	<b>0.0072</b>



3D screen shot	Hot spot position
	

### Plot 19: WIFI 802.11n/20, Right Tilt

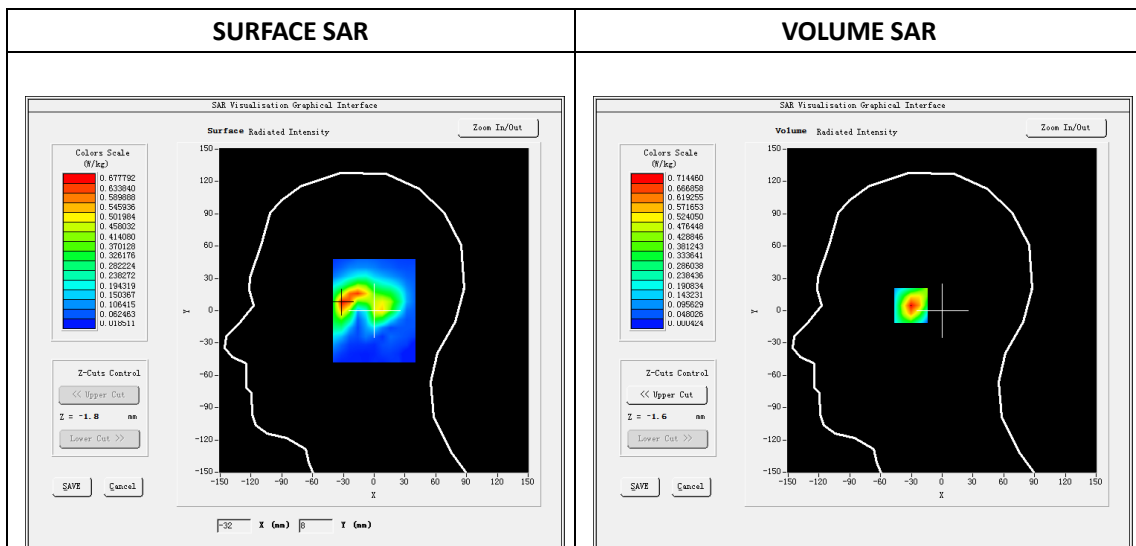
Type: Phone measurement  
 Date of measurement: 07/27/2018  
 Measurement duration: 22 minutes 11 seconds  
 Mobile Phone IMEI number: --

**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>	Right Cheek
<b>Band</b>	WIFI 802.11n/20
<b>Channels</b>	36
<b>Signal</b>	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

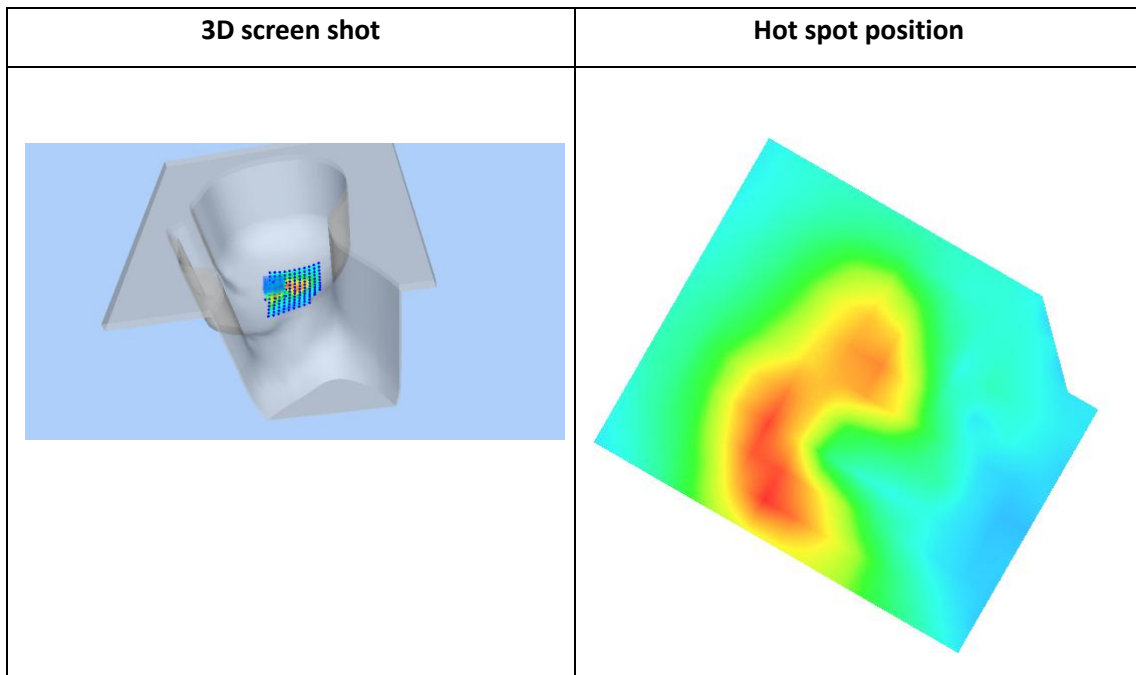
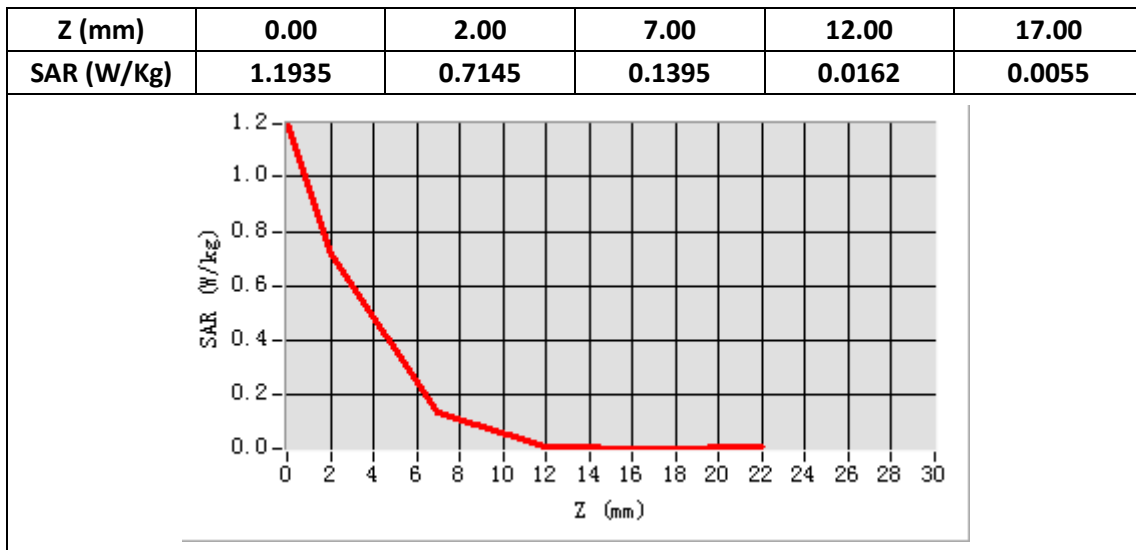
<b>E-Field Probe</b>	SATIMO SN_27/15_EP261
<b>Frequency (MHz)</b>	5180
<b>Relative permittivity (real part)</b>	35.55
<b>Relative permittivity (imaginary part)</b>	14.53
<b>Conductivity (S/m)</b>	4.81
<b>Variation (%)</b>	-1.86
<b>ConvF:</b>	2.20



**Maximum location: X=-30.00, Y=7.00**

**SAR Peak: 1.88 W/kg**

<b>SAR 10g (W/Kg)</b>	0.273930
<b>SAR 1g (W/Kg)</b>	0.757624



**Plot 18: WIFI 802.11n/20, 20MHz, Edge D, 10mm**

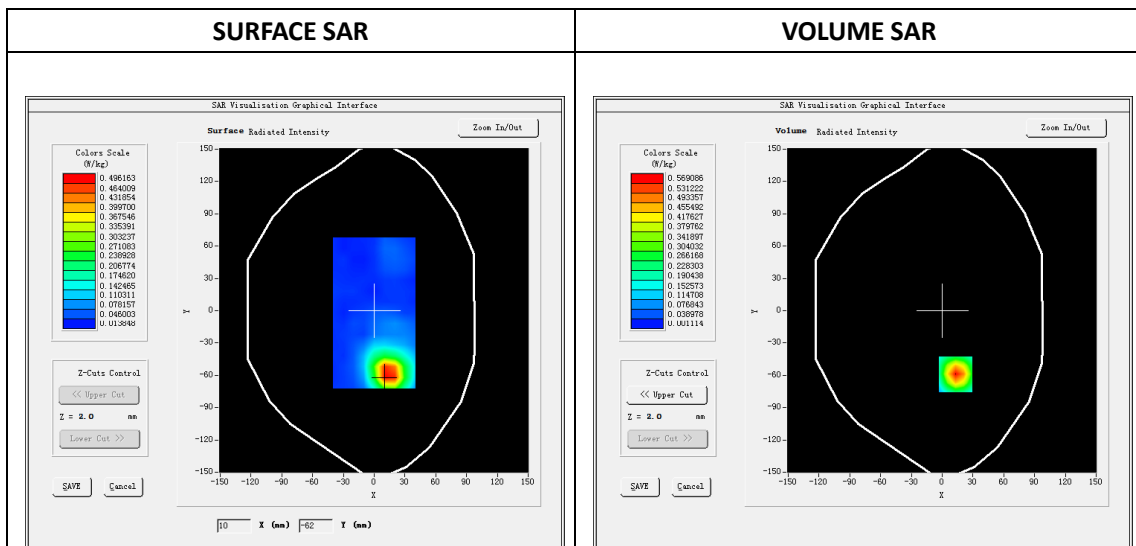
Type: Phone measurement  
 Date of measurement: 07/27/2018  
 Measurement duration: 22 minutes 38 seconds  
 Mobile Phone IMEI number: --

**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	WIFI 802.11n/20
Channels	36
Signal	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_27/15_EP261
Frequency (MHz)	5180
Relative permittivity (real part)	49.53
Relative permittivity (imaginary part)	18.38
Conductivity (S/m)	5.24
Variation (%)	1.16
ConvF:	2.27

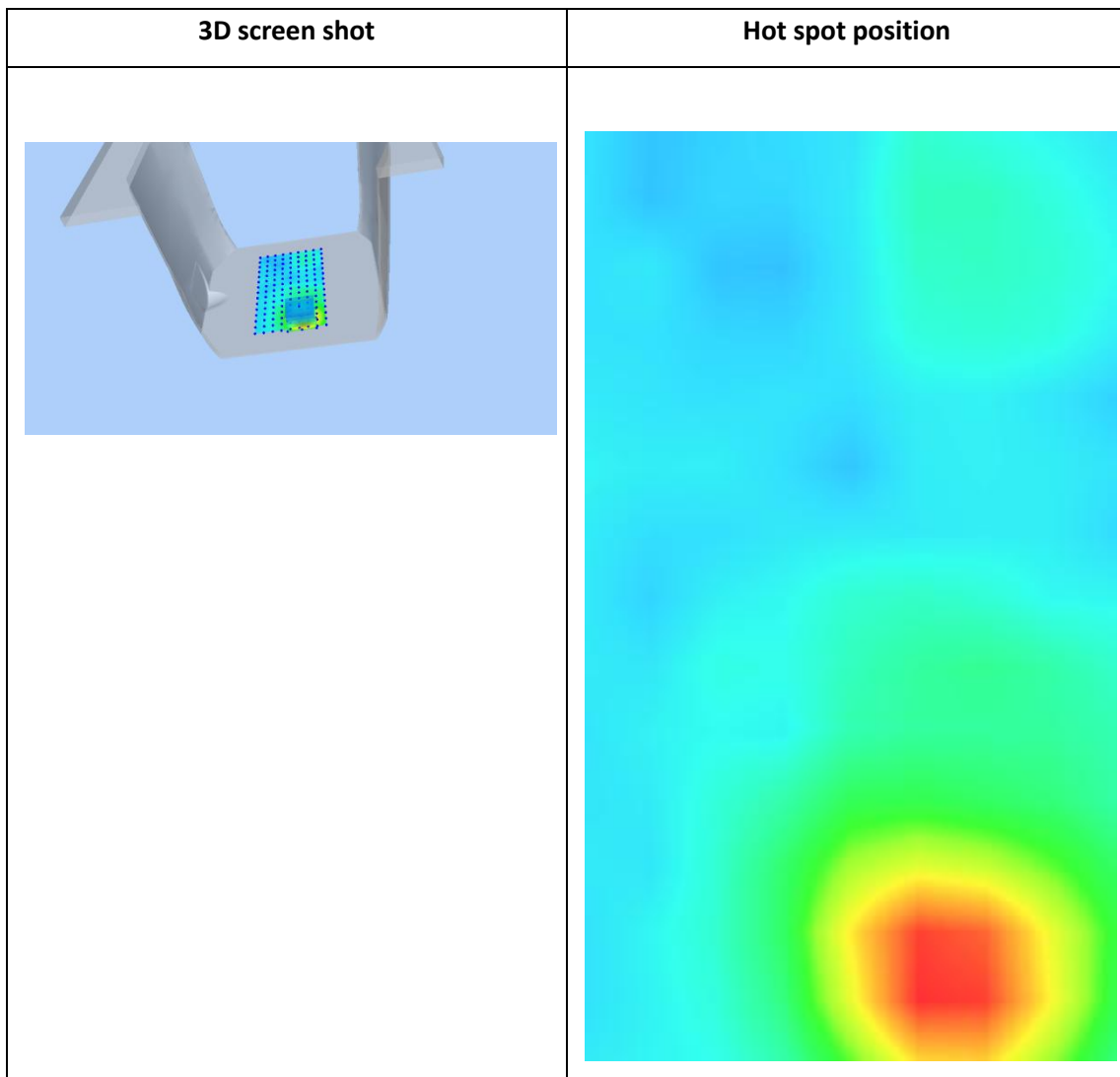
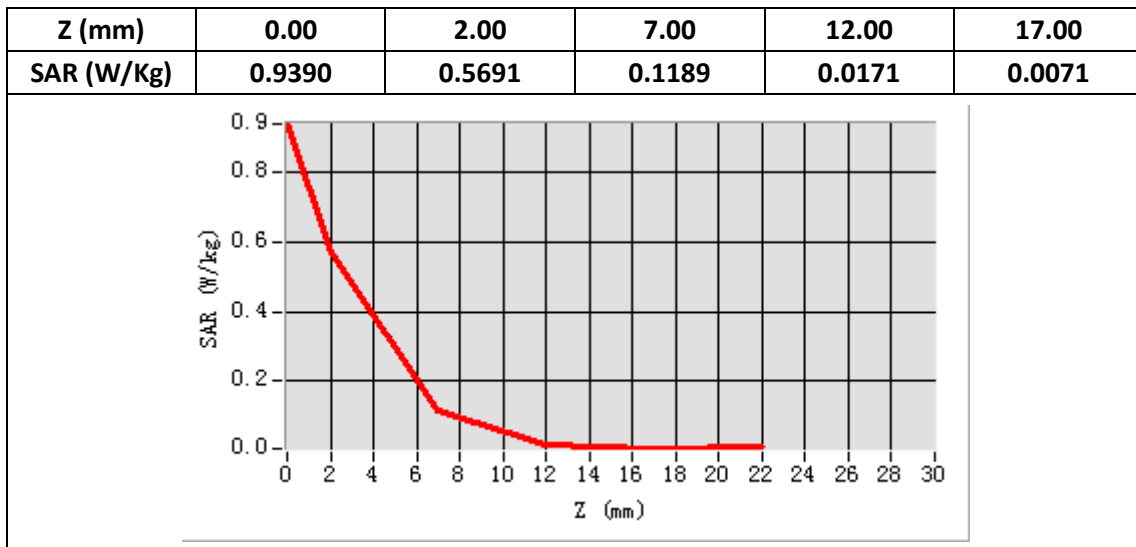


**Maximum location: X=13.00, Y=-59.00**

**SAR Peak: 0.97 W/kg**

<b>SAR 10g (W/Kg)</b>	0.137788
<b>SAR 1g (W/Kg)</b>	0.336513





## Plot 21: WIFI 802.11n/20, Right Tilt

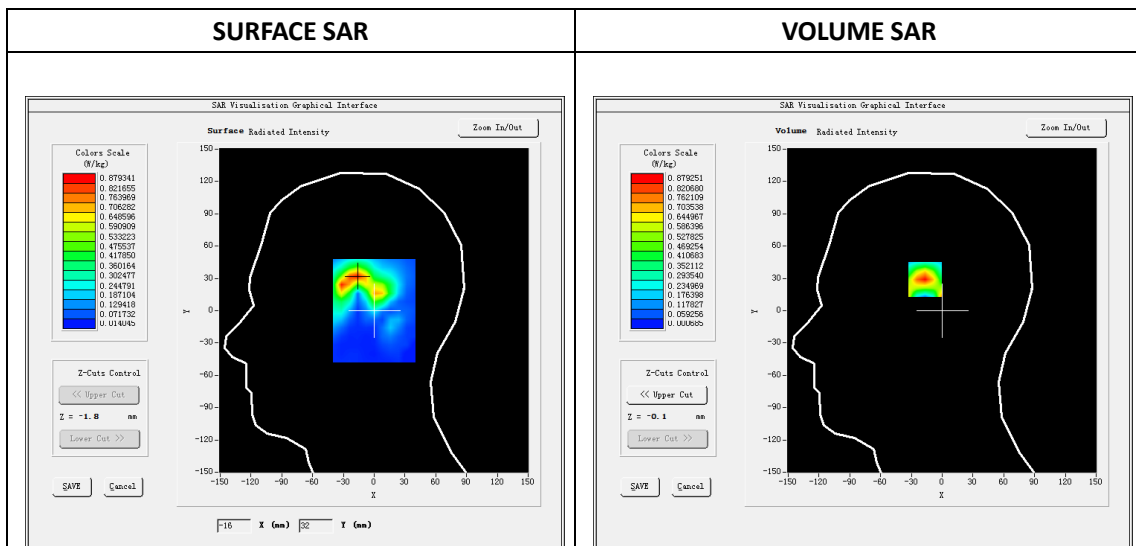
Type: Phone measurement  
 Date of measurement: 07/27/2018  
 Measurement duration: 22 minutes 31 seconds  
 Mobile Phone IMEI number: --

**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>	Right Tilt
<b>Band</b>	WIFI 802.11n/20
<b>Channels</b>	54
<b>Signal</b>	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

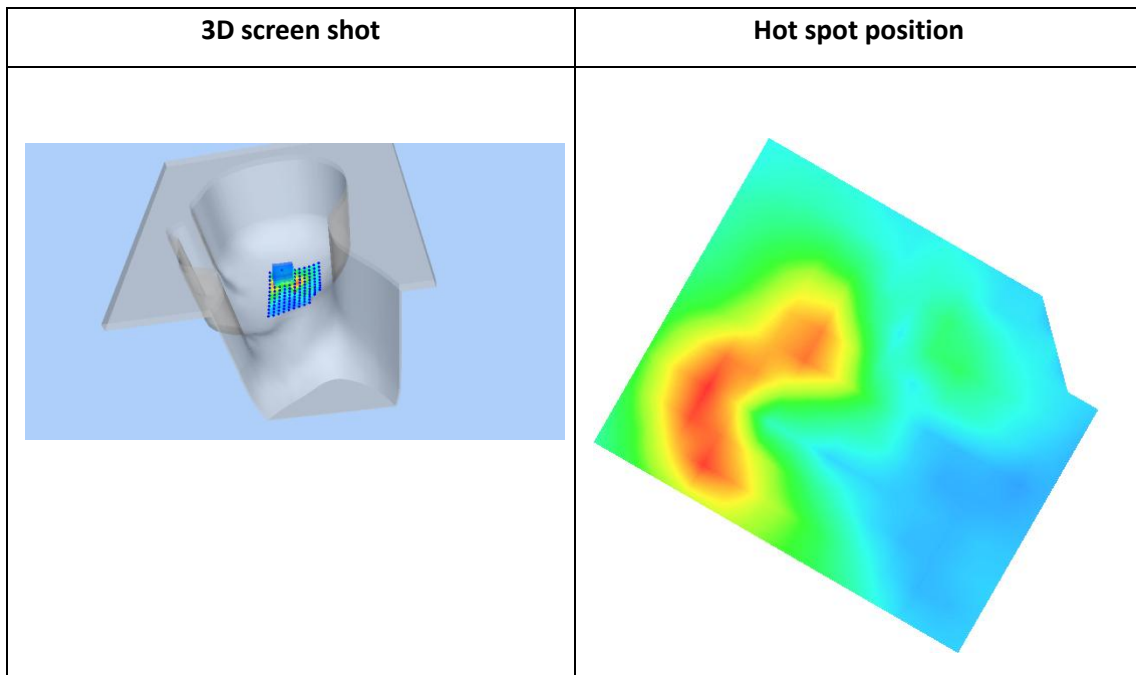
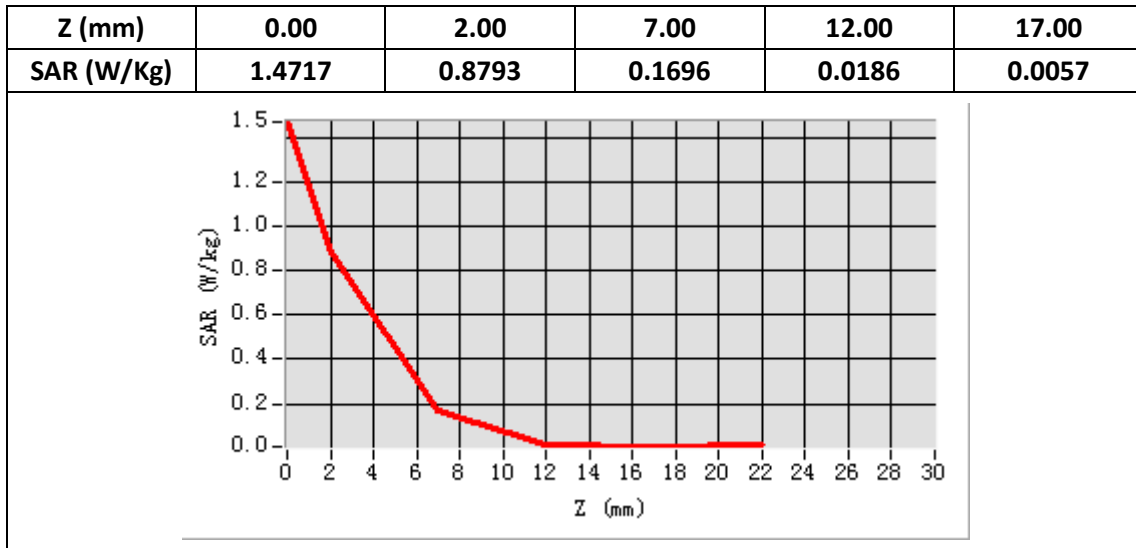
<b>E-Field Probe</b>	SATIMO SN_27/15_EP261
<b>Frequency (MHz)</b>	5320
<b>Relative permittivity (real part)</b>	37.81
<b>Relative permittivity (imaginary part)</b>	16.66
<b>Conductivity (S/m)</b>	5.03
<b>Variation (%)</b>	-2.59
<b>ConvF:</b>	2.07



**Maximum location: X=-16.00, Y=32.00**

**SAR Peak: 2.32 W/kg**

<b>SAR 10g (W/Kg)</b>	0.329420
<b>SAR 1g (W/Kg)</b>	0.713918



**Plot 22: WIFI 802.11n/20, Edge D, 10mm**

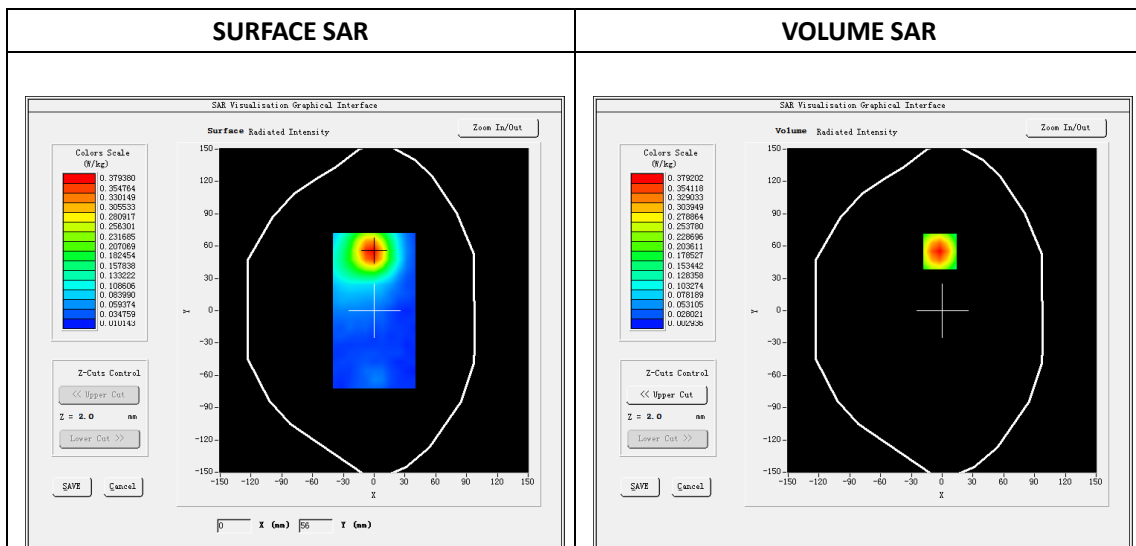
Type: Phone measurement  
 Date of measurement: 07/27/2018  
 Measurement duration: 22 minutes 31 seconds  
 Mobile Phone IMEI number: --

**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>	Edge D
<b>Band</b>	WIFI 802.11n/20
<b>Channels</b>	54
<b>Signal</b>	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

<b>E-Field Probe</b>	SATIMO SN_27/15_EP261
<b>Frequency (MHz)</b>	5260
<b>Relative permittivity (real part)</b>	48.31
<b>Relative permittivity (imaginary part)</b>	18.25
<b>Conductivity (S/m)</b>	5.43
<b>Variation (%)</b>	-1.04
<b>ConvF:</b>	2.14

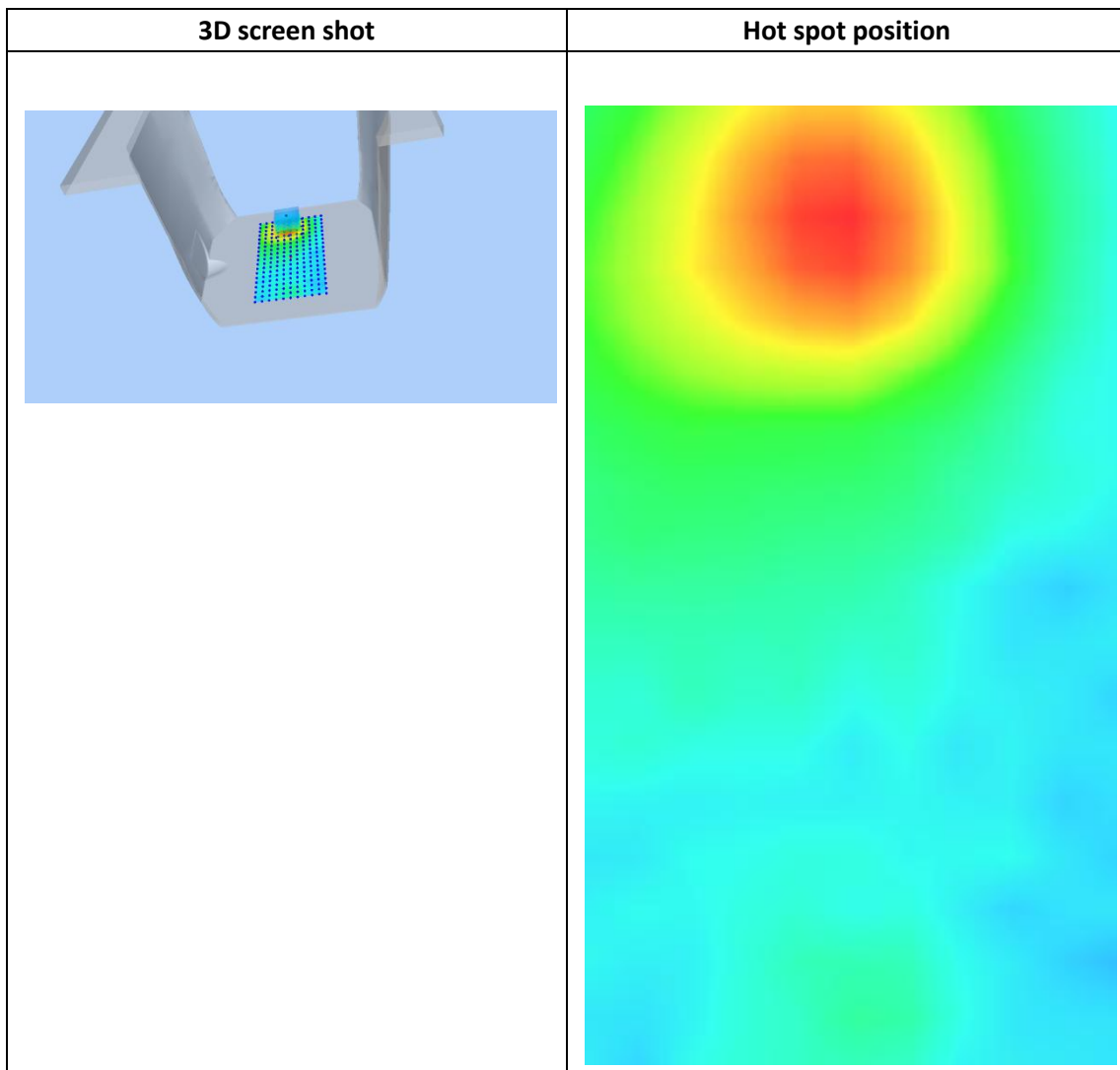
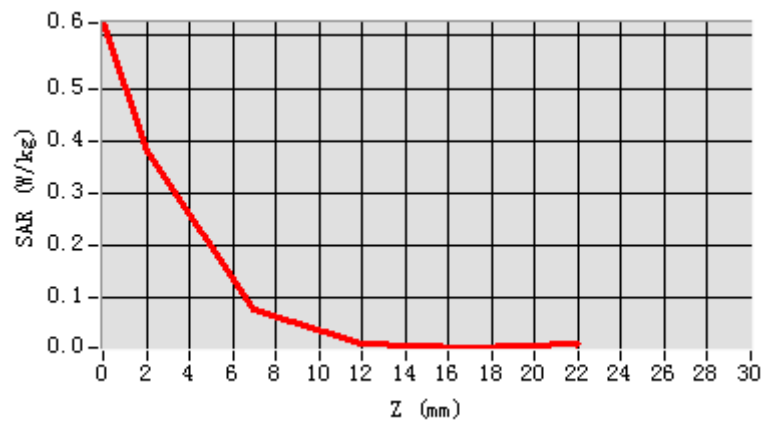


**Maximum location: X=-2.00, Y=55.00**

**SAR Peak: 0.65 W/kg**

<b>SAR 10g (W/Kg)</b>	0.105180
<b>SAR 1g (W/Kg)</b>	0.281012

Z (mm)	0.00	2.00	7.00	12.00	17.00
SAR (W/Kg)	0.6244	0.3792	0.0806	0.0128	0.0066



### Plot 23: WIFI 802.11a/20, Right Tilt

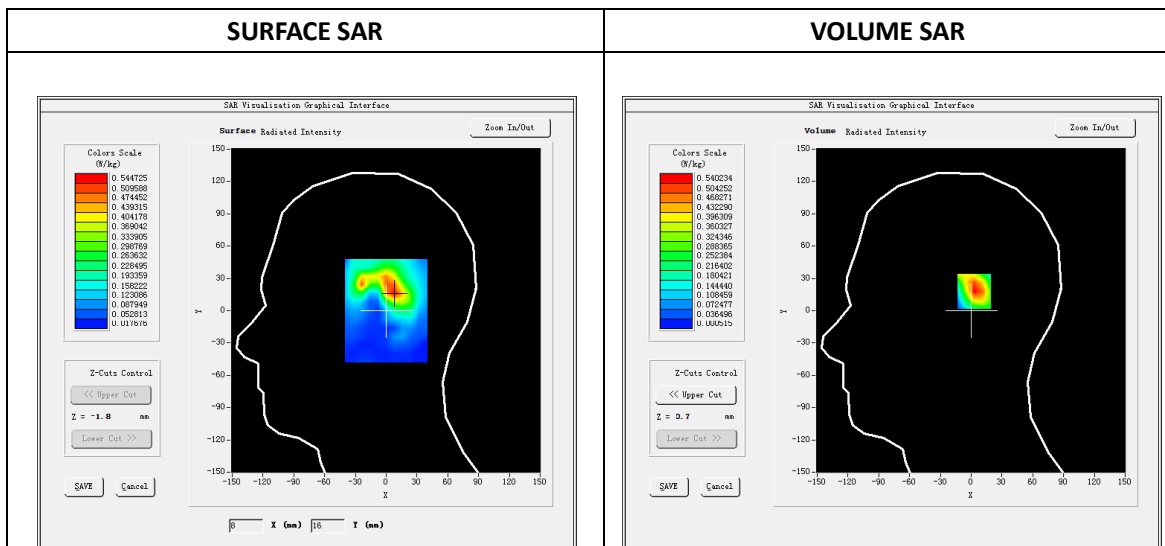
Type: Phone measurement  
 Date of measurement: 07/30/2018  
 Measurement duration: 22 minutes 22 seconds  
 Mobile Phone IMEI number: --

**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>	Right Tilt
<b>Band</b>	WIFI 802.11a/20
<b>Channels</b>	120
<b>Signal</b>	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

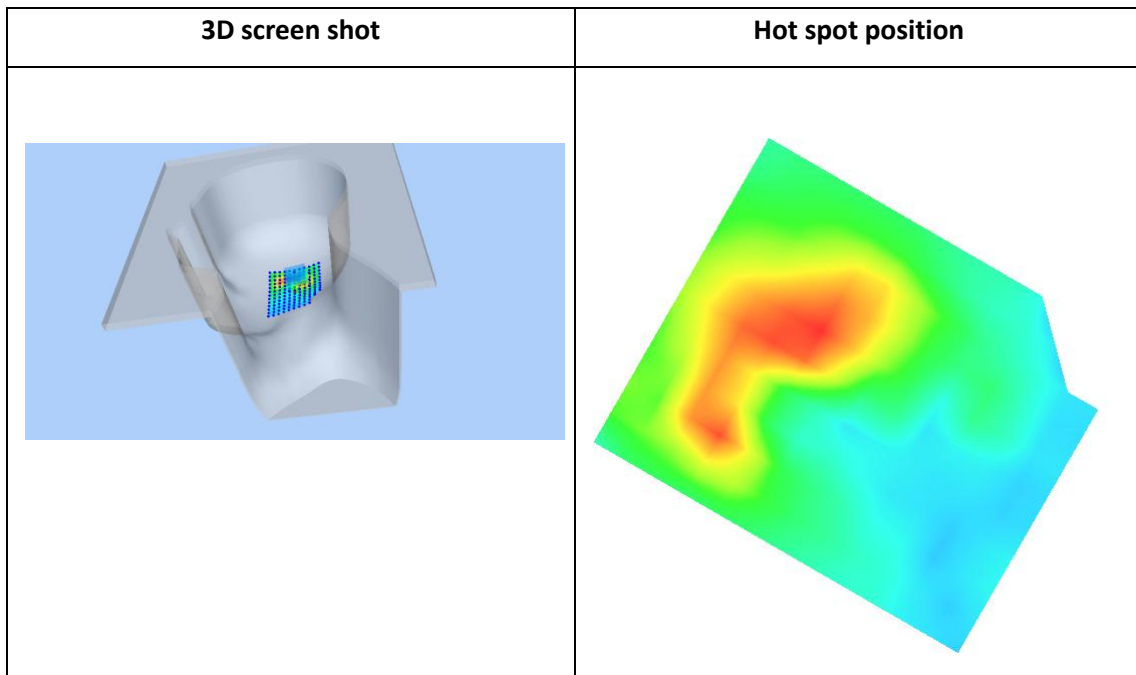
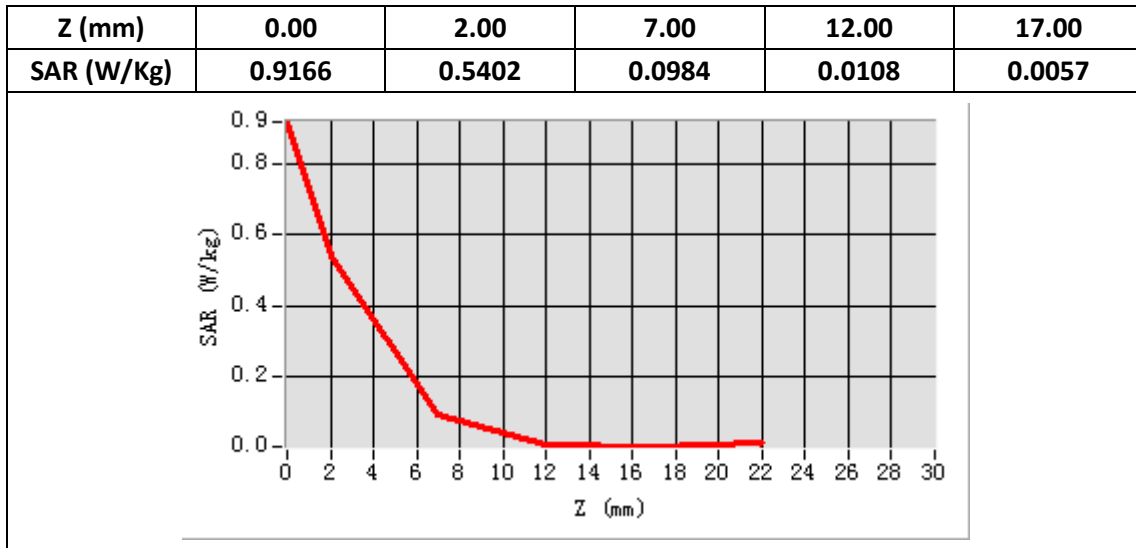
<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	5600
<b>Relative permittivity (real part)</b>	36.33
<b>Relative permittivity (imaginary part)</b>	15.68
<b>Conductivity (S/m)</b>	4.92
<b>Variation (%)</b>	-2.67
<b>ConvF:</b>	2.18



**Maximum location: X=7.00, Y=18.00**

**SAR Peak: 1.48 W/kg**

<b>SAR 10g (W/Kg)</b>	0.224252
<b>SAR 1g (W/Kg)</b>	0.562025



**Plot 24: WIFI 802.11a/20, Edge D, 10mm**

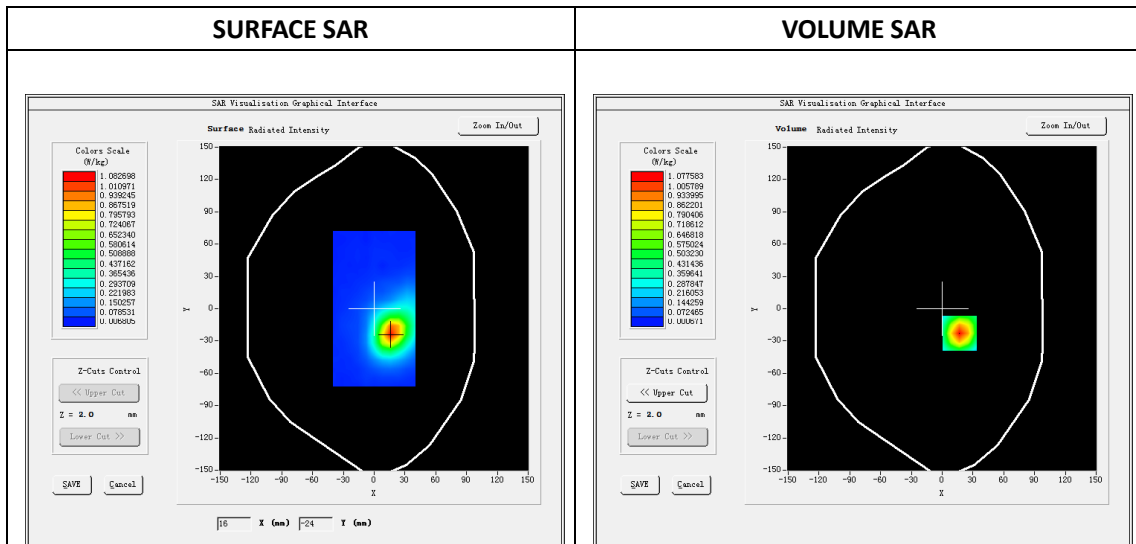
Type: Phone measurement  
 Date of measurement: 07/30/2018  
 Measurement duration: 22 minutes 13 seconds  
 Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Edge D
Band	WIFI 802.11a/20
Channels	120
Signal	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_27/15_EP261
Frequency (MHz)	5600
Relative permittivity (real part)	48.13
Relative permittivity (imaginary part)	17.02
Conductivity (S/m)	5.35
Variation (%)	-1.88
ConvF:	2.24



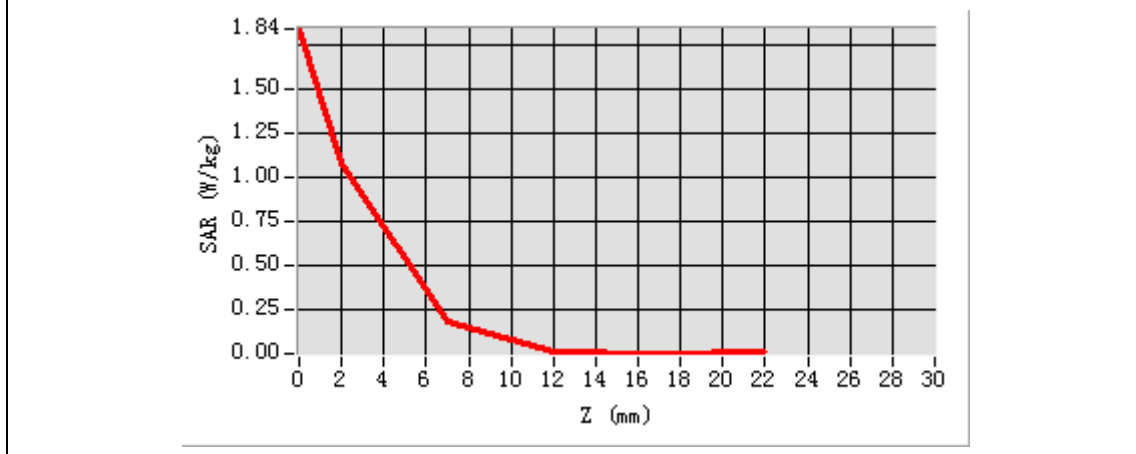
**Maximum location: X=17.00, Y=-23.00**

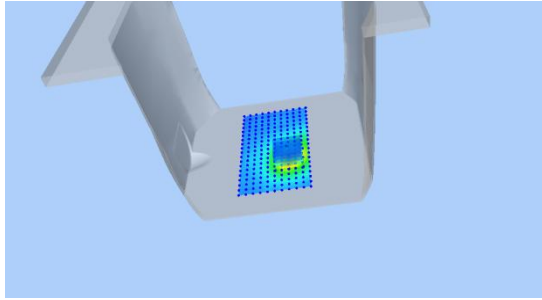
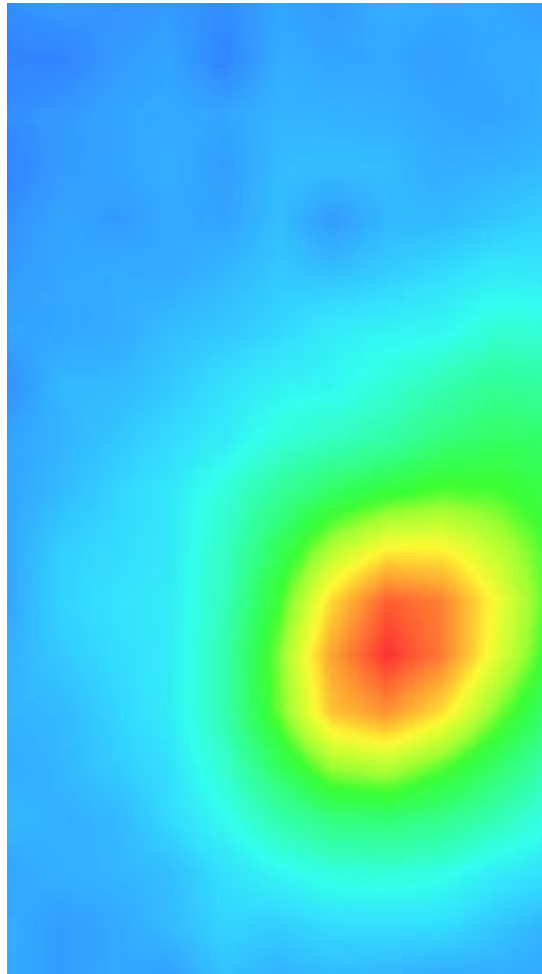
**SAR Peak: 1.91 W/kg**

SAR 10g (W/Kg)	0.247471
SAR 1g (W/Kg)	0.617106



Z (mm)	0.00	2.00	7.00	12.00	17.00
SAR (W/Kg)	1.8360	1.0776	0.1877	0.0137	0.0023



3D screen shot	Hot spot position
	

## Plot 25: WIFI 802.11n/20, Right Tilt

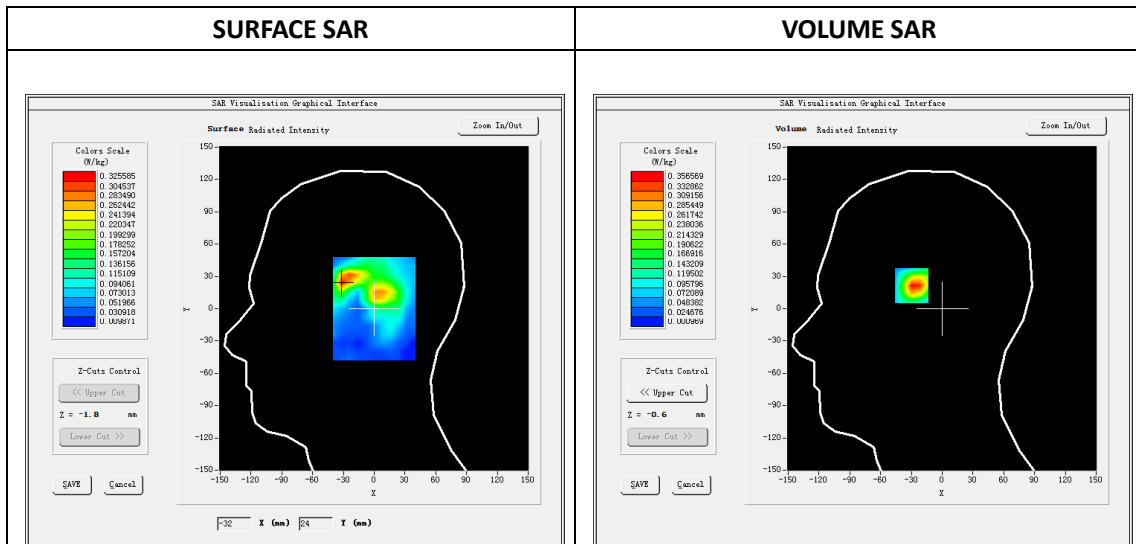
Type: Phone measurement  
 Date of measurement: 07/30/2018  
 Measurement duration: 22 minutes 33 seconds  
 Mobile Phone IMEI number: --

**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>	Right Tilt
<b>Band</b>	WIFI 802.11n/20
<b>Channels</b>	165
<b>Signal</b>	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

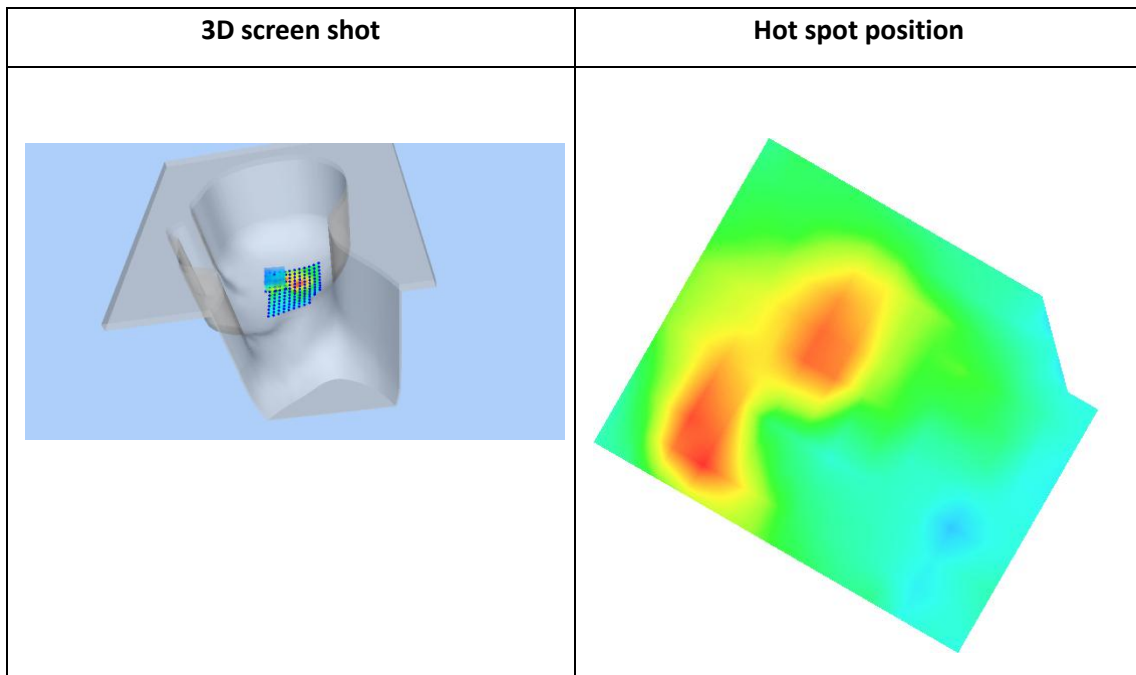
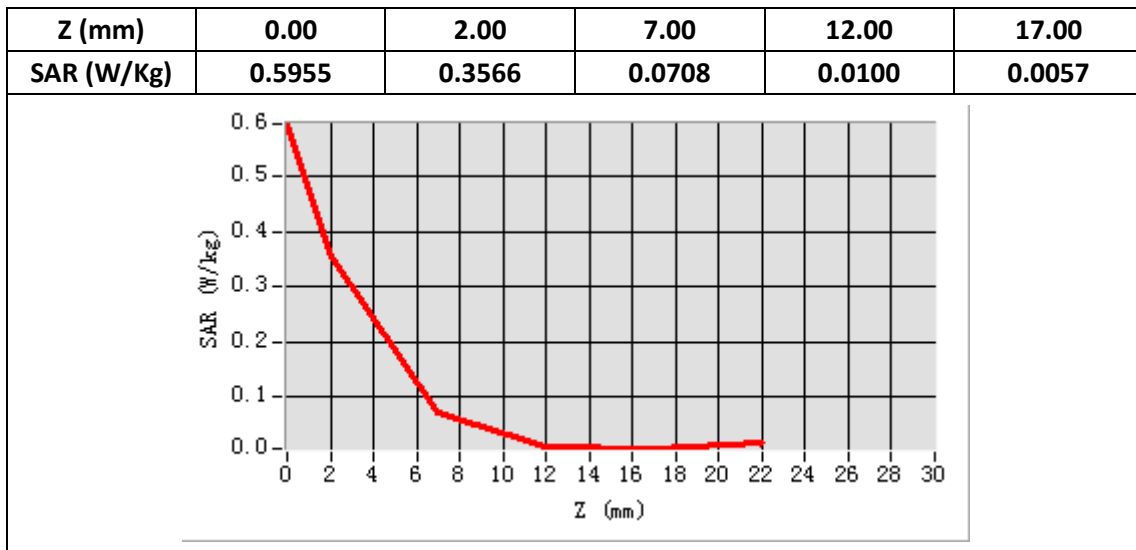
<b>E-Field Probe</b>	SATIMO SN_27/15_EP261
<b>Frequency (MHz)</b>	5755
<b>Relative permittivity (real part)</b>	37.72
<b>Relative permittivity (imaginary part)</b>	16.21
<b>Conductivity (S/m)</b>	5.31
<b>Variation (%)</b>	-3.93
<b>ConvF:</b>	2.26



**Maximum location: X=-30.00, Y=25.00**

**SAR Peak: 0.96 W/kg**

<b>SAR 10g (W/Kg)</b>	0.140761
<b>SAR 1g (W/Kg)</b>	0.365285



**Plot 26: WIFI 802.11n/20 , Edge D, 10mm**

Type: Phone measurement

Date of measurement: 07/30/2018

Measurement duration: 22 minutes 11 seconds

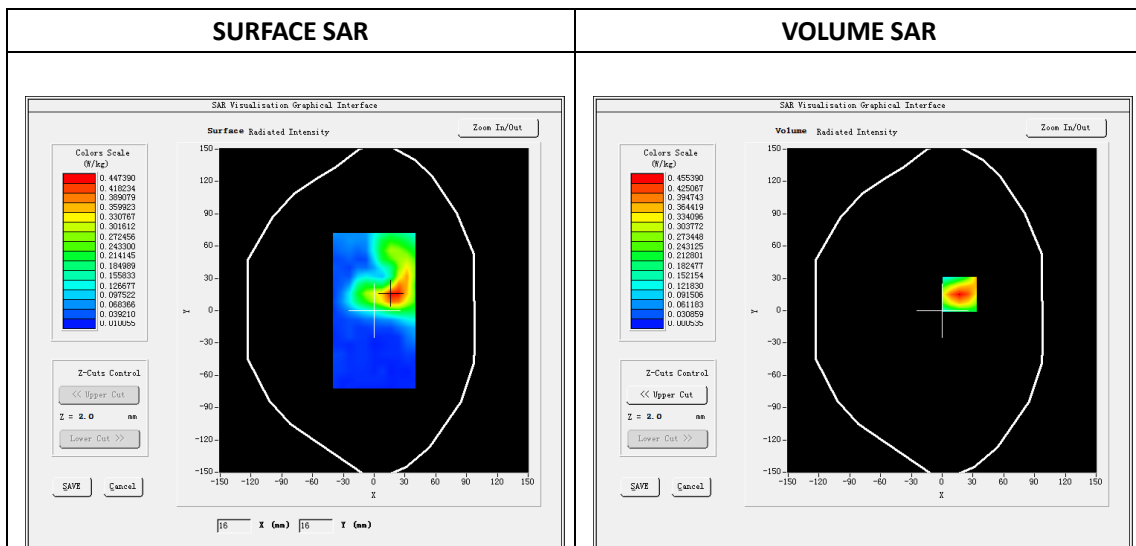
Mobile Phone IMEI number: --

**A. Experimental conditions.**

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Edge D
Band	WIFI 802.11n/20
Channels	165
Signal	OFDM (Duty cycle: 1:1)

**B. SAR Measurement Results**

E-Field Probe	SATIMO SN_27/15_EP261
Frequency (MHz)	5755
Relative permittivity (real part)	48.25
Relative permittivity (imaginary part)	18.13
Conductivity (S/m)	5.87
Variation (%)	-3.54
ConvF:	2.32

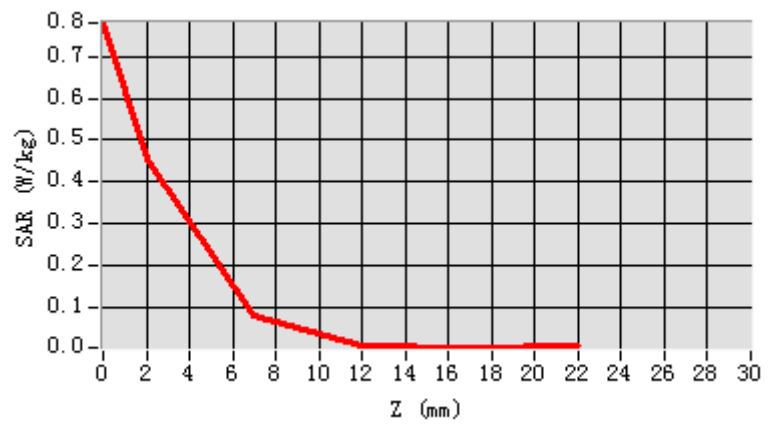


Maximum location: X=17.00, Y=15.00

SAR Peak: 0.81 W/kg

SAR 10g (W/Kg)	0.113076
SAR 1g (W/Kg)	0.270937

Z (mm)	0.00	2.00	7.00	12.00	17.00
SAR (W/Kg)	0.7818	0.4554	0.0766	0.0054	0.0014



3D screen shot	Hot spot position
