



**Annex B: Measurement Results**

**Tested Model: X522**

**Report Number:  
FCC17010001A-6**

# MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 5/1/2017

Measurement duration: 10 minutes 6 seconds

## **A. Experimental conditions.**

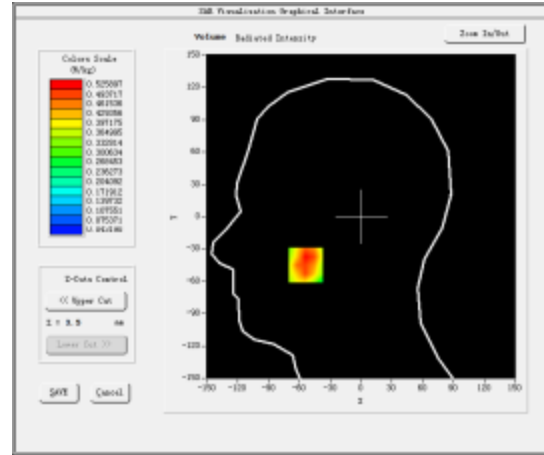
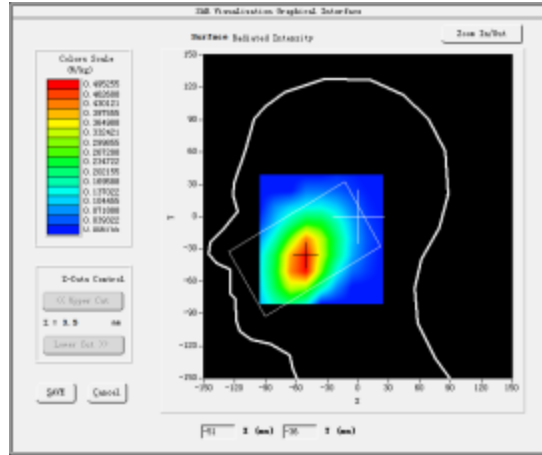
<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Left head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>CUSTOM (GPRS850 4Tx)</u>
<b><u>Channels</u></b>	<u>High</u>
<b><u>Signal</u></b>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)</u>
<b><u>Conversion factor</u></b>	<u>4.93</u>

## **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	848.799988
<b>Relative permittivity (real part)</b>	40.053120
<b>Relative permittivity (imaginary part)</b>	19.917360
<b>Conductivity (S/m)</b>	0.939214
<b>Variation (%)</b>	-0.560000

## SURFACE SAR

## VOLUME SAR

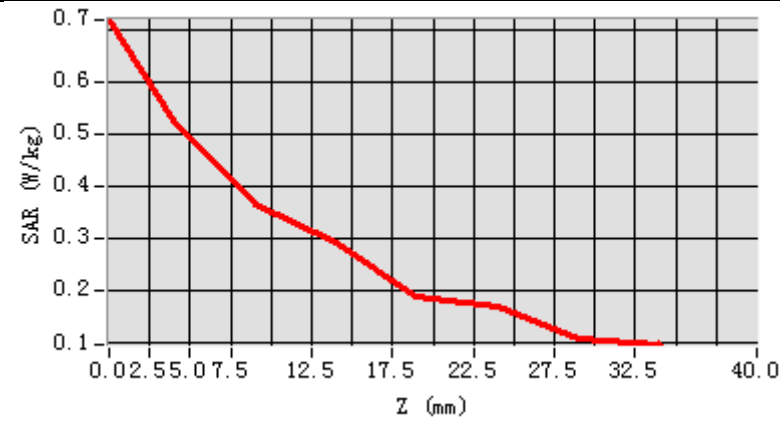


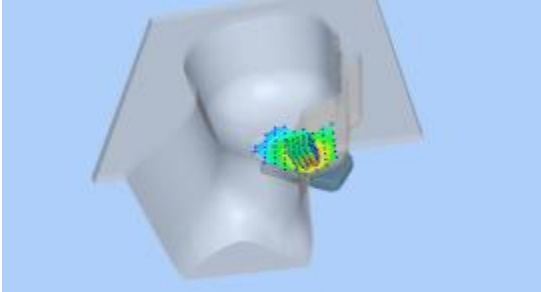
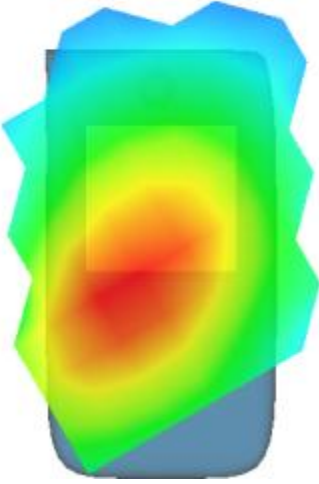
**Maximum location: X=-54.00, Y=-45.00**

**SAR Peak: 0.68 W/kg**

<b>SAR 10g (W/Kg)</b>	0.355316
<b>SAR 1g (W/Kg)</b>	0.509971

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.7176</b>	<b>0.5259</b>	<b>0.3655</b>	<b>0.2934</b>	<b>0.1900</b>	<b>0.1712</b>	<b>0.1083</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
	

## MEASUREMENT 2

Towards-ground-high

Type: Phone measurement (Complete)

Date of measurement: 5/1/2017

Measurement duration: 10 minutes 32 seconds

### **A. Experimental conditions.**

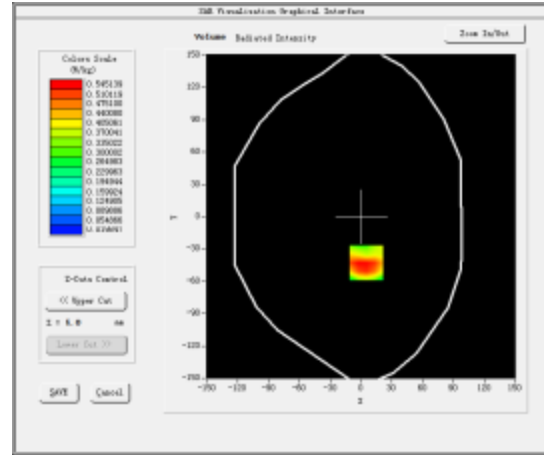
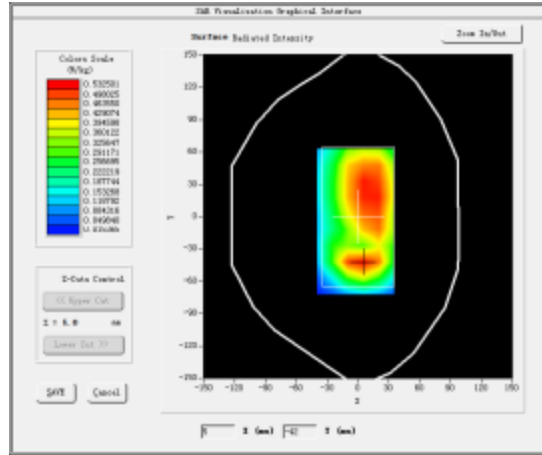
<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>CUSTOM (GPRS850 4Tx)</u>
<b><u>Channels</u></b>	<u>High</u>
<b><u>Signal</u></b>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)</u>
<b><u>Conversion factor</u></b>	<u>5.07</u>

### **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	848.799988
<b>Relative permittivity (real part)</b>	53.755020
<b>Relative permittivity (imaginary part)</b>	21.411160
<b>Conductivity (S/m)</b>	1.009655
<b>Variation (%)</b>	2.610000

## SURFACE SAR

## VOLUME SAR

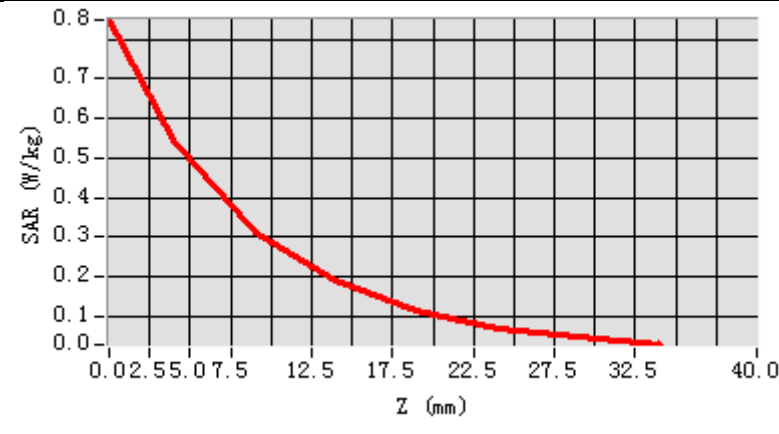


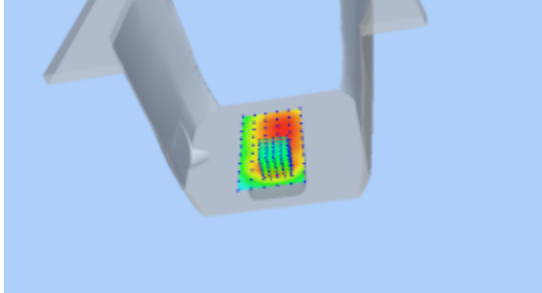
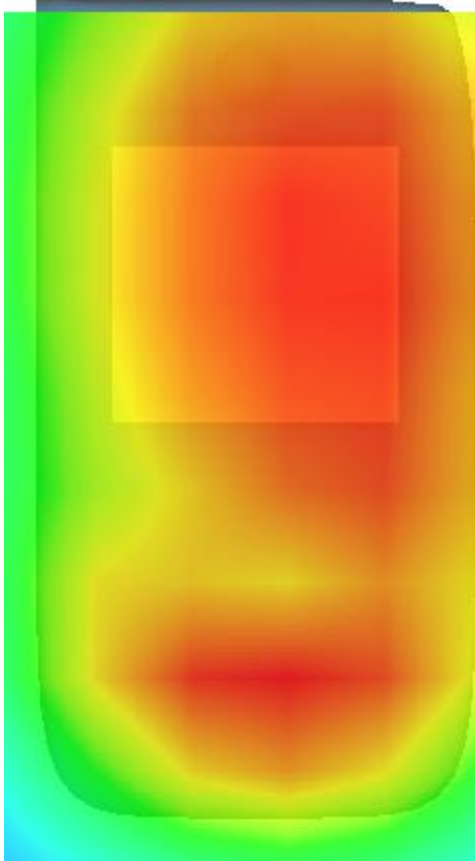
**Maximum location: X=5.00, Y=-43.00**

**SAR Peak: 0.89 W/kg**

<b>SAR 10g (W/Kg)</b>	0.304739
<b>SAR 1g (W/Kg)</b>	0.553700

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.8482</b>	<b>0.5451</b>	<b>0.3097</b>	<b>0.1886</b>	<b>0.1166</b>	<b>0.0692</b>	<b>0.0465</b>



3D screen shot	Hot spot position
	

## MEASUREMENT 3

Rear-side-high

Type: Phone measurement (Complete)

Date of measurement: 5/1/2017

Measurement duration: 11 minutes 33 seconds

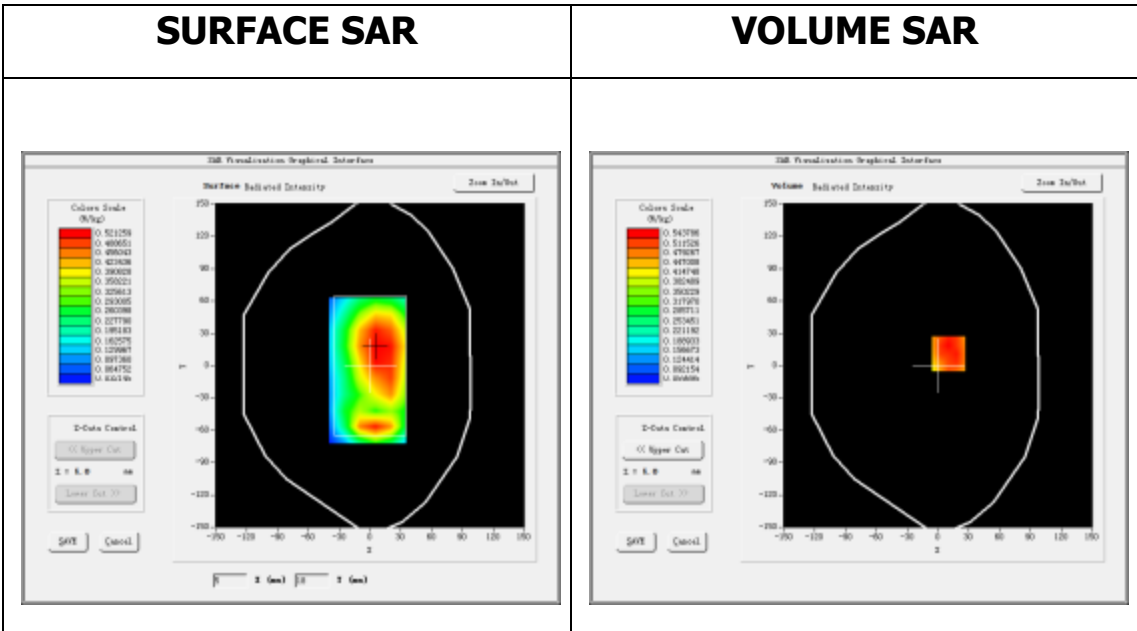
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>CUSTOM (GPRS850 4Tx)</u>
<b><u>Channels</u></b>	<u>High</u>
<b><u>Signal</u></b>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)</u>
<b><u>Conversion factor</u></b>	<u>5.07</u>

### **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	848.799988
<b>Relative permittivity (real part)</b>	53.755020
<b>Relative permittivity (imaginary part)</b>	21.411160
<b>Conductivity (S/m)</b>	1.009655
<b>Variation (%)</b>	-2.440000



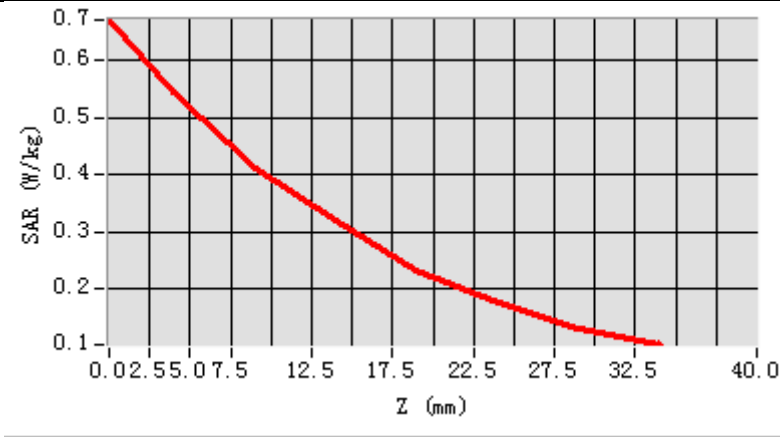


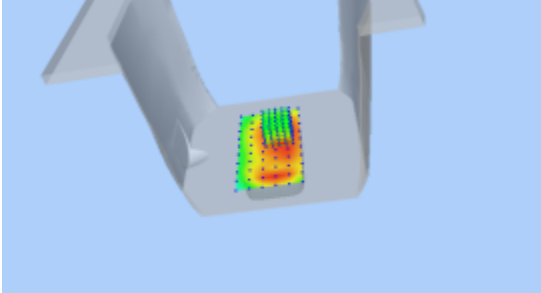
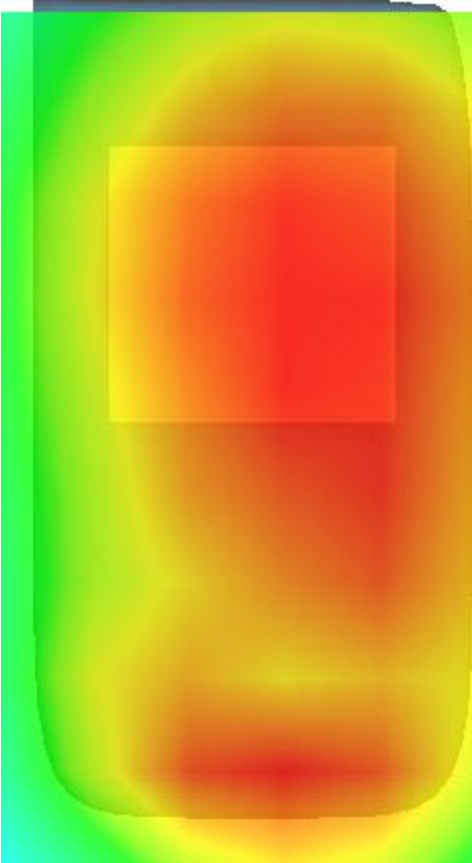
**Maximum location: X=10.00, Y=11.00**

**SAR Peak: 0.70 W/kg**

<b>SAR 10g (W/Kg)</b>	0.385695
<b>SAR 1g (W/Kg)</b>	0.537511

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.6708</b>	<b>0.5438</b>	<b>0.4122</b>	<b>0.3193</b>	<b>0.2312</b>	<b>0.1753</b>	<b>0.1301</b>



3D screen shot	Hot spot position
 <p>A 3D perspective view of a grey, handheld device. A color-coded SAR distribution is overlaid on the device's surface, showing a hot spot (red) in the center of the palm rest area, with values decreasing towards the edges (green and blue).</p>	 <p>A 2D heatmap of the device's surface. The color scale ranges from green (low SAR) to red (high SAR). A prominent red rectangular area is visible in the center of the device, indicating the location of the highest SAR values (the hot spot).</p>

## MEASUREMENT 4

Type: Phone measurement (Complete)

Date of measurement: 7/1/2017

Measurement duration: 9 minutes 33 seconds

### **A. Experimental conditions.**

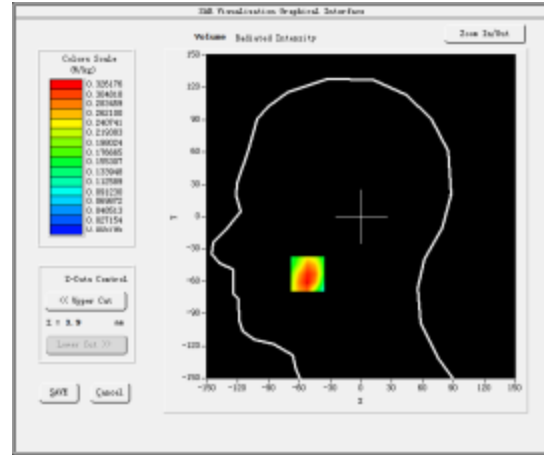
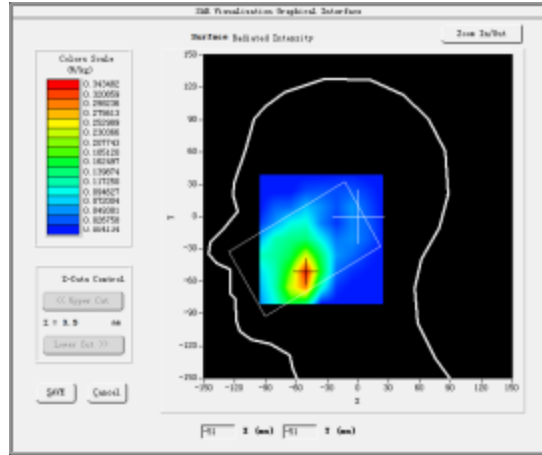
<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Left head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>CUSTOM (GPRS1900 4Tx)</u>
<b><u>Channels</u></b>	<u>Low</u>
<b><u>Signal</u></b>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)</u>
<b><u>Conversion factor</u></b>	<u>4.63</u>

### **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	1850.199951
<b>Relative permittivity (real part)</b>	39.923779
<b>Relative permittivity (imaginary part)</b>	13.336920
<b>Conductivity (S/m)</b>	1.370887
<b>Variation (%)</b>	-0.830000

## SURFACE SAR

## VOLUME SAR

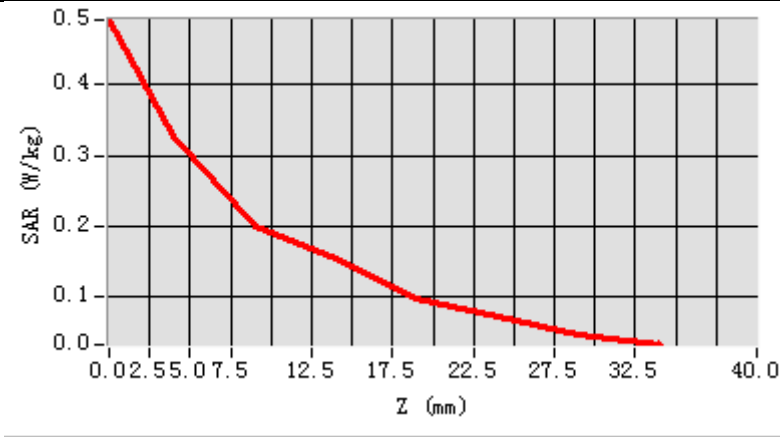


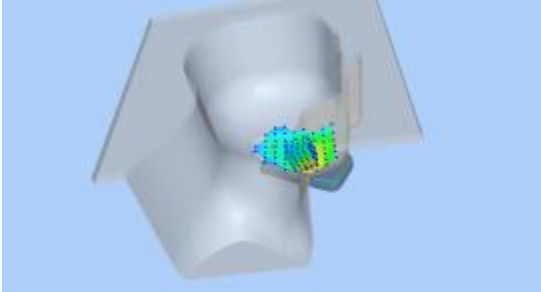
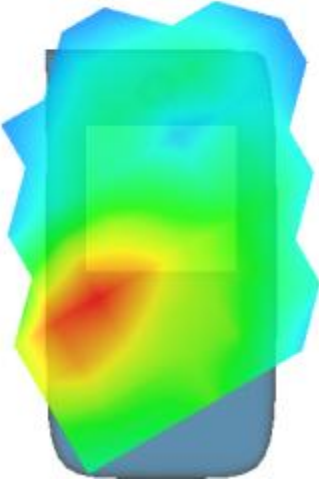
**Maximum location: X=-52.00, Y=-53.00**

**SAR Peak: 0.45 W/kg**

<b>SAR 10g (W/Kg)</b>	0.190645
<b>SAR 1g (W/Kg)</b>	0.307978

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.4916</b>	<b>0.3262</b>	<b>0.1990</b>	<b>0.1539</b>	<b>0.0982</b>	<b>0.0722</b>	<b>0.0483</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
	

## MEASUREMENT 5

Towards-ground-low

Type: Phone measurement (Complete)

Date of measurement: 7/1/2017

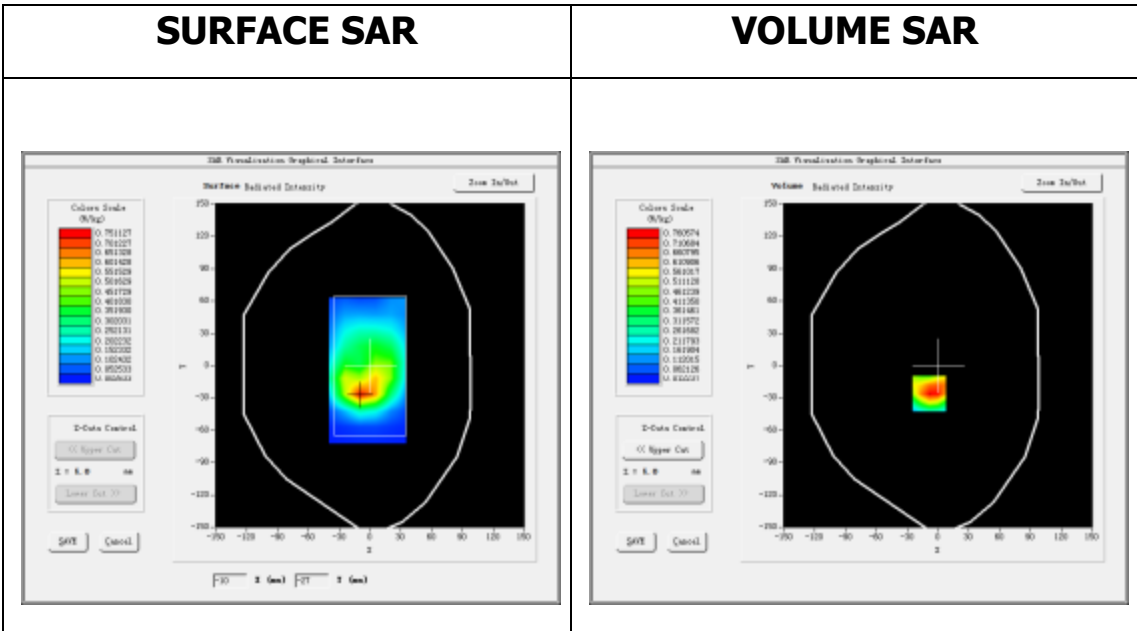
Measurement duration: 8 minutes 7 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>CUSTOM (GPRS1900 4Tx)</u>
<b><u>Channels</u></b>	<u>Low</u>
<b><u>Signal</u></b>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)</u>
<b><u>Conversion factor</u></b>	<u>4.78</u>

### **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	1850.199951
<b>Relative permittivity (real part)</b>	53.232899
<b>Relative permittivity (imaginary part)</b>	14.493960
<b>Conductivity (S/m)</b>	1.489818
<b>Variation (%)</b>	-1.720000

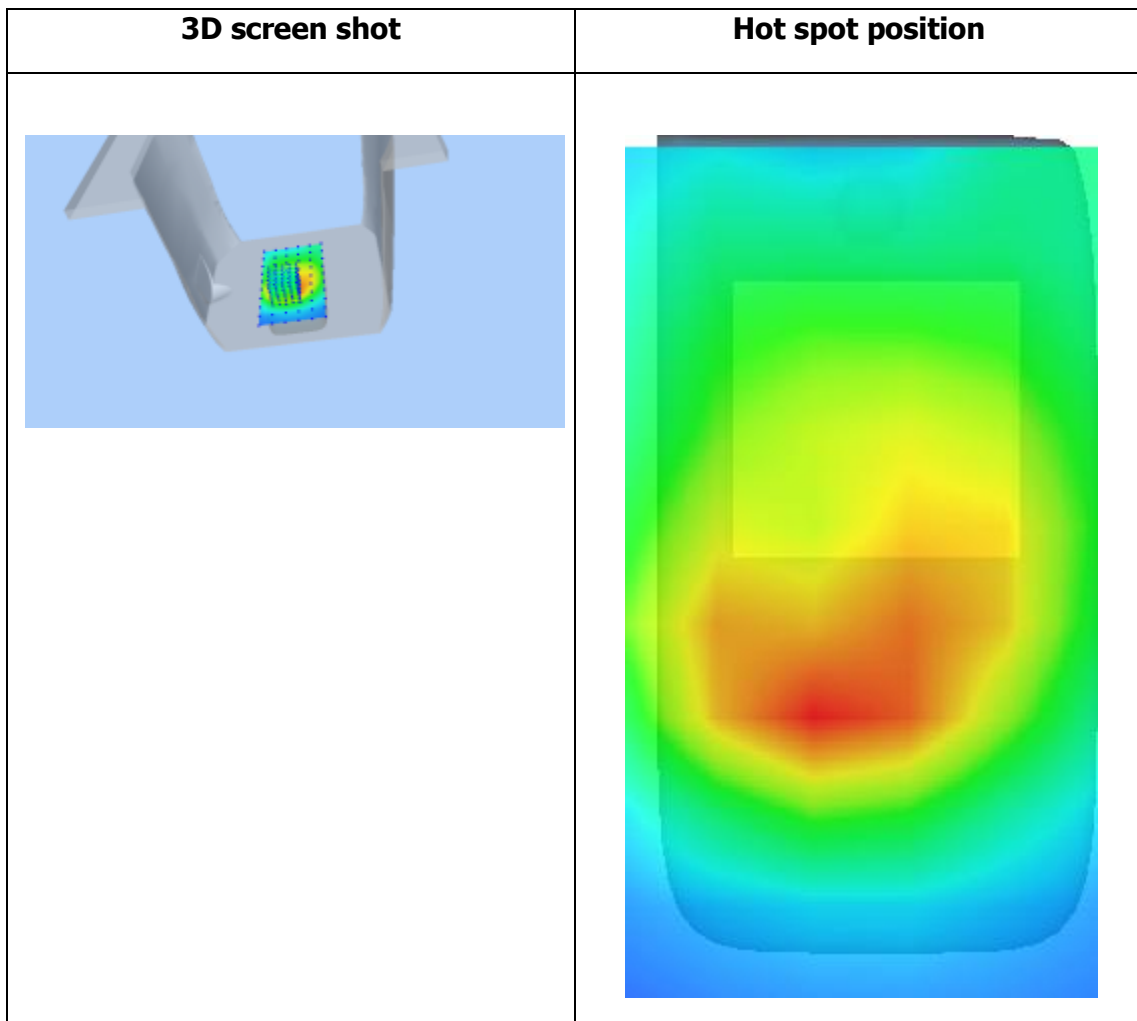
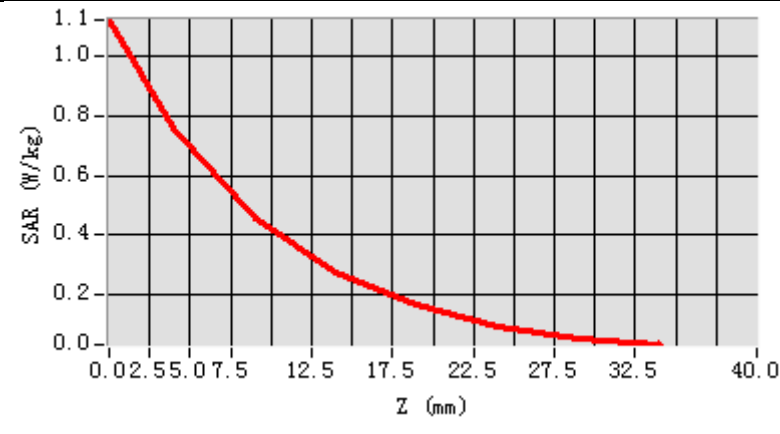


**Maximum location: X=-9.00, Y=-26.00**

**SAR Peak: 1.14 W/kg**

<b>SAR 10g (W/Kg)</b>	0.415064
<b>SAR 1g (W/Kg)</b>	0.732317

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.1188</b>	<b>0.7606</b>	<b>0.4600</b>	<b>0.2755</b>	<b>0.1659</b>	<b>0.0972</b>	<b>0.0587</b>





## MEASUREMENT 6

Rear-side-low

Type: Phone measurement (Complete)

Date of measurement: 7/1/2017

Measurement duration: 8 minutes 0 seconds

### **A. Experimental conditions.**

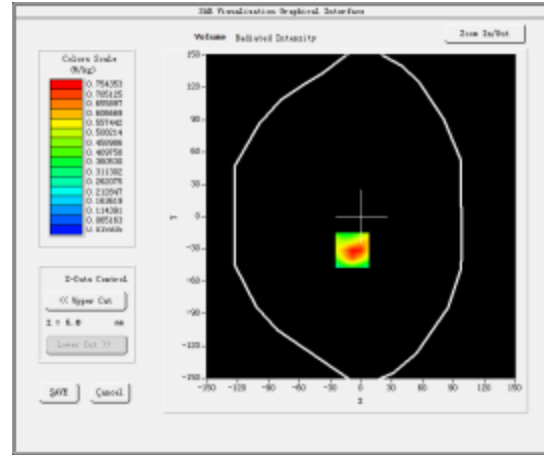
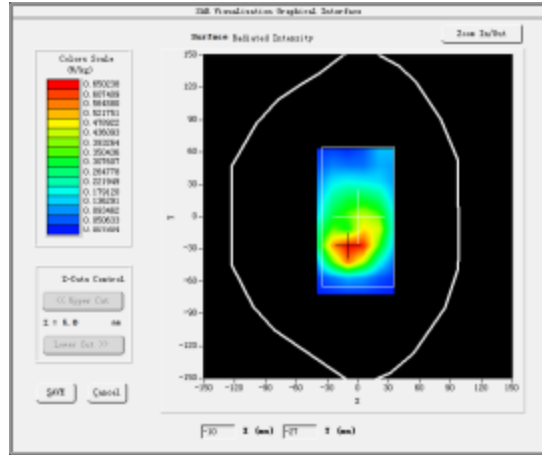
<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>CUSTOM (GPRS1900 4Tx)</u>
<b><u>Channels</u></b>	<u>Low</u>
<b><u>Signal</u></b>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)</u>
<b><u>Conversion factor</u></b>	<u>4.78</u>

### **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	1850.199951
<b>Relative permittivity (real part)</b>	53.232899
<b>Relative permittivity (imaginary part)</b>	14.493960
<b>Conductivity (S/m)</b>	1.489818
<b>Variation (%)</b>	-2.020000

## SURFACE SAR

## VOLUME SAR

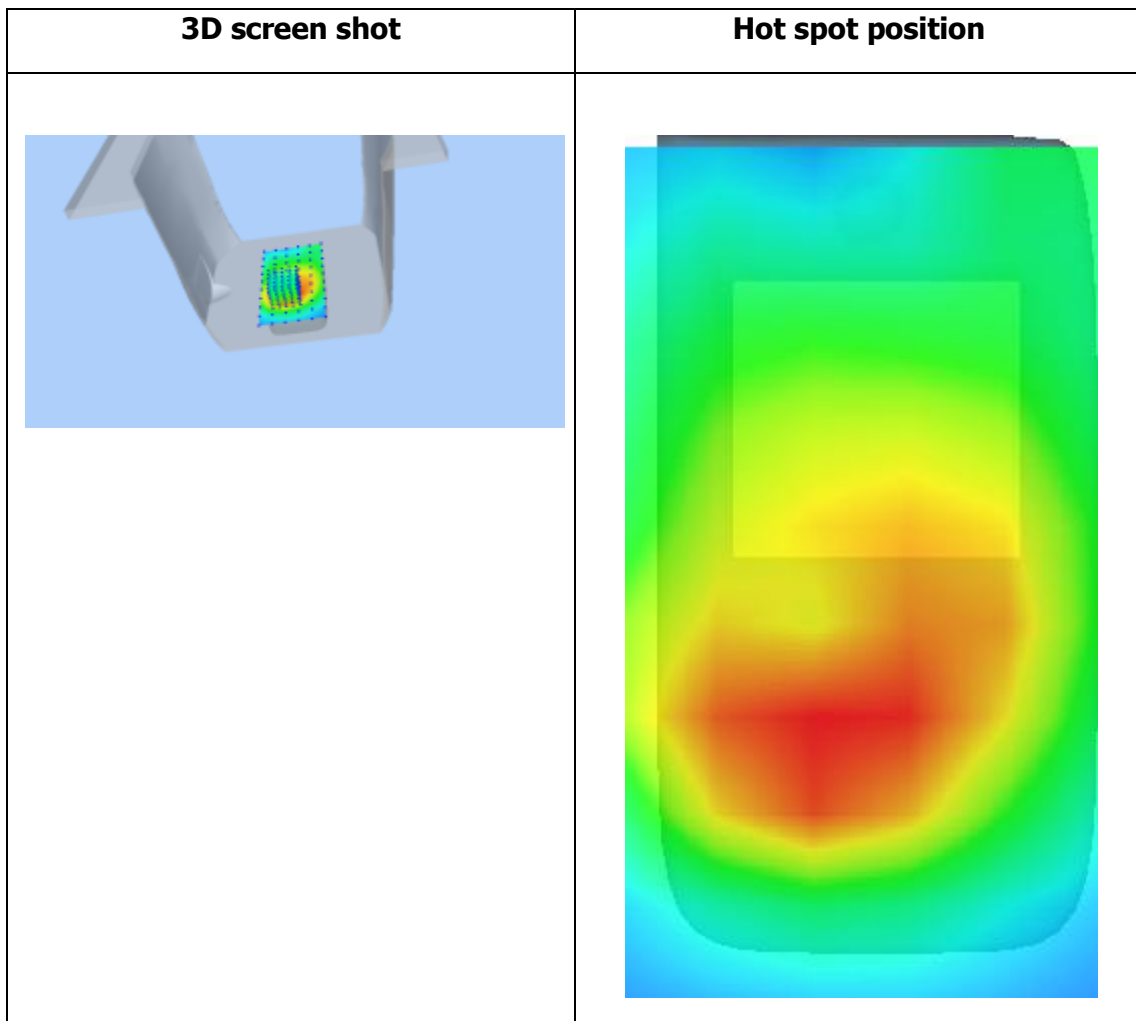
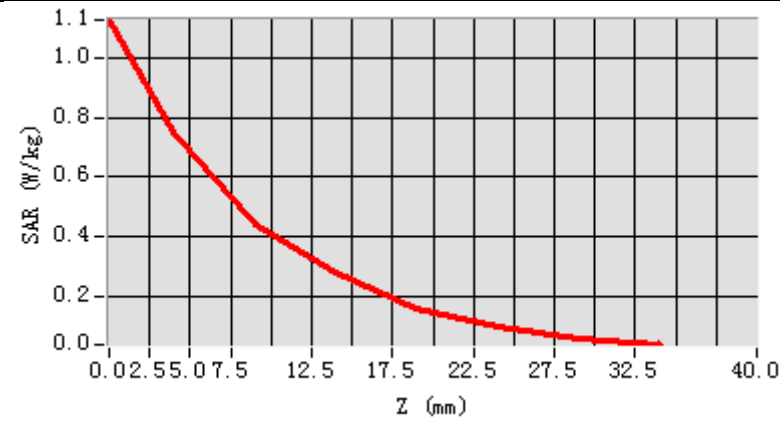


**Maximum location: X=-9.00, Y=-31.00**

**SAR Peak: 1.19 W/kg**

<b>SAR 10g (W/Kg)</b>	0.397497
<b>SAR 1g (W/Kg)</b>	0.731262

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.1285</b>	<b>0.7544</b>	<b>0.4432</b>	<b>0.2791</b>	<b>0.1571</b>	<b>0.0983</b>	<b>0.0595</b>



# MEASUREMENT 7

Type: Phone measurement (Complete)

Date of measurement: 7/1/2017

Measurement duration: 10 minutes 6 seconds

## **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm</u> <u>dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Left head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>Band2 WCDMA1900</u>
<b><u>Channels</u></b>	<u>Low</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.63</u>

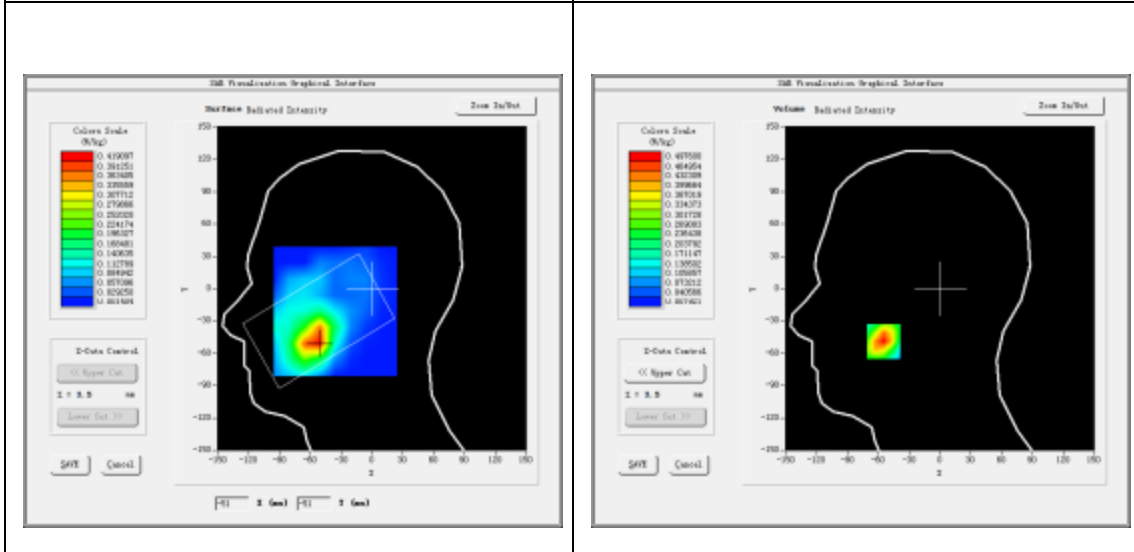
## **B. SAR Measurement Results**

Lower Band SAR (Channel 9262):

<b>Frequency (MHz)</b>	1852.400024
<b>Relative permittivity (real part)</b>	39.843739
<b>Relative permittivity (imaginary part)</b>	13.323660
<b>Conductivity (S/m)</b>	1.371153
<b>Variation (%)</b>	1.900000

## SURFACE SAR

## VOLUME SAR

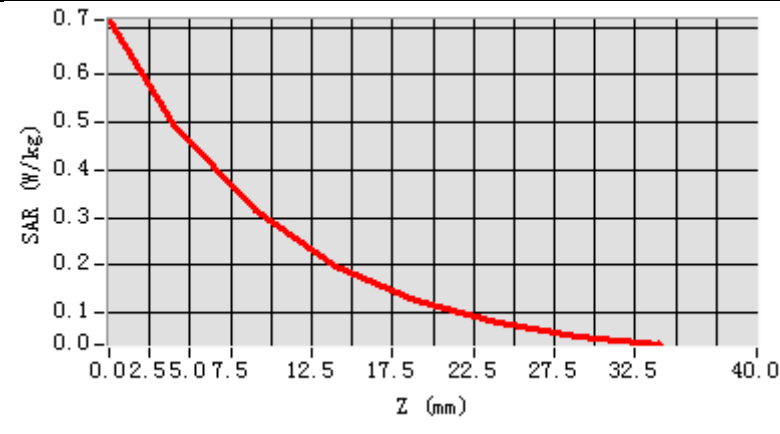


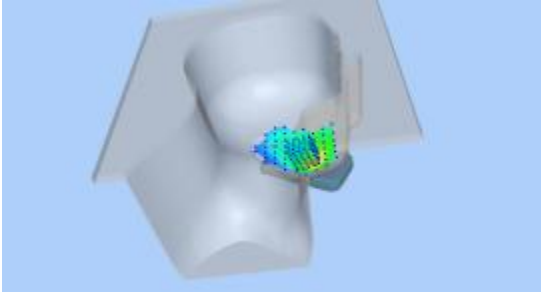
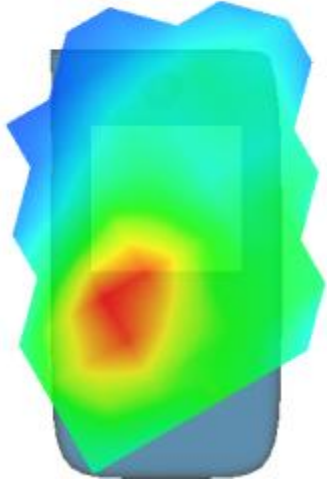
**Maximum location: X=-55.00, Y=-49.00**

**SAR Peak: 0.73 W/kg**

<b>SAR 10g (W/Kg)</b>	0.261511
<b>SAR 1g (W/Kg)</b>	0.465252

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.7150</b>	<b>0.4976</b>	<b>0.3139</b>	<b>0.1950</b>	<b>0.1242</b>	<b>0.0800</b>	<b>0.0491</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
 <p>A 3D rendering of a human head and neck model. A localized area on the side of the head is highlighted with a multi-colored grid (blue, green, yellow, red), indicating the region of interest for SAR analysis.</p>	 <p>A 3D visualization of the SAR distribution on the head model. The color scale ranges from blue (low SAR) to red (high SAR). A prominent red and yellow 'hot spot' is visible on the side of the head, corresponding to the localized area shown in the 3D screen shot.</p>

## MEASUREMENT 8

Towards-ground-low

Type: Phone measurement (Complete)

Date of measurement: 7/1/2017

Measurement duration: 7 minutes 51 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>Band2 WCDMA1900</u>
<b><u>Channels</u></b>	<u>Low</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.78</u>

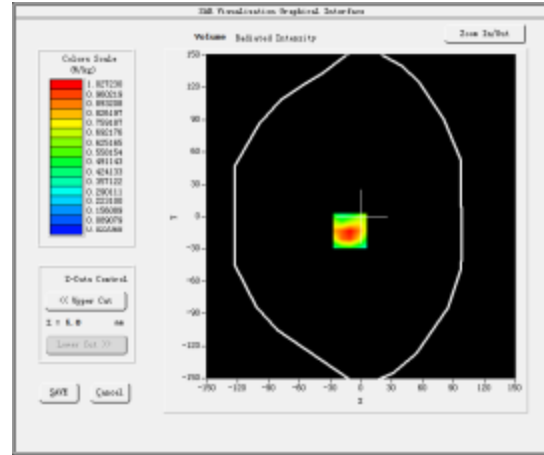
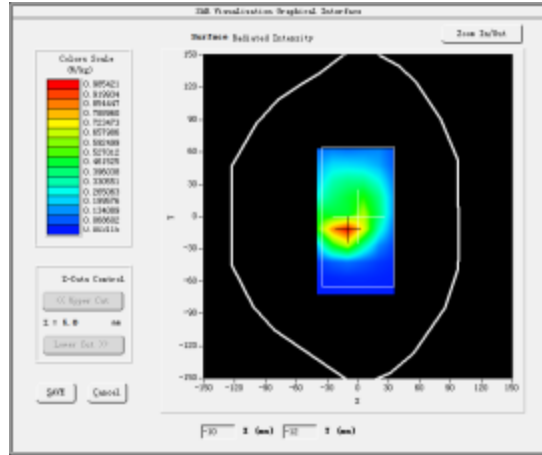
### **B. SAR Measurement Results**

Lower Band SAR (Channel 9262):

<b>Frequency (MHz)</b>	1852.400024
<b>Relative permittivity (real part)</b>	53.356966
<b>Relative permittivity (imaginary part)</b>	14.526890
<b>Conductivity (S/m)</b>	1.4935893
<b>Variation (%)</b>	-1.870000

## SURFACE SAR

## VOLUME SAR



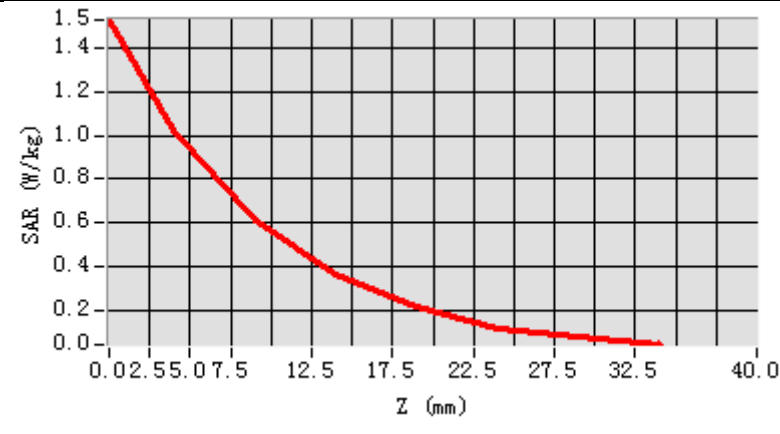
**Maximum location: X=-11.00, Y=-13.00**

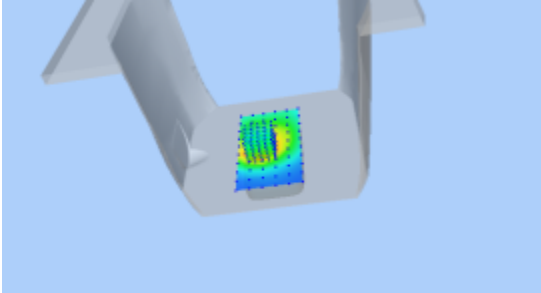
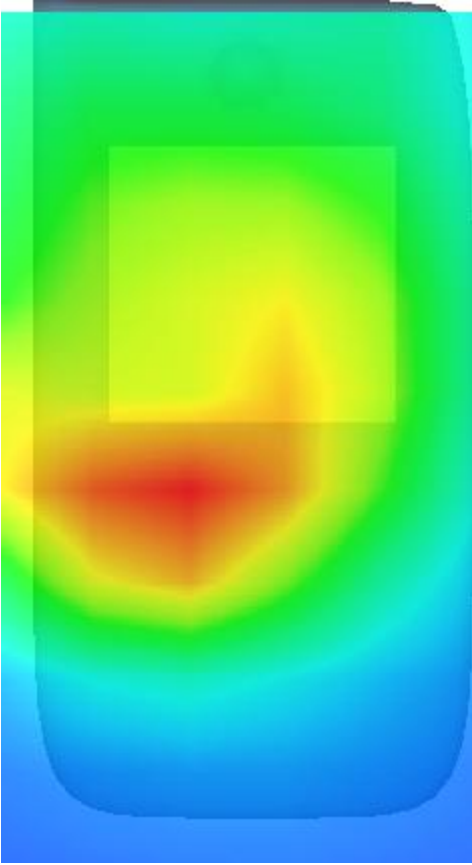
**SAR Peak: 1.60 W/kg**

<b>SAR 10g (W/Kg)</b>	0.434853
<b>SAR 1g (W/Kg)</b>	0.787721



<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.5270</b>	<b>1.0272</b>	<b>0.6080</b>	<b>0.3671</b>	<b>0.2169</b>	<b>0.1208</b>	<b>0.0797</b>



3D screen shot	Hot spot position
 <p>A 3D perspective view of a grey, L-shaped device. A small, rectangular area on the inner surface of the L-shape is highlighted with a color-coded heatmap, showing a gradient from blue (low SAR) to red (high SAR).</p>	 <p>A 2D heatmap representing the SAR distribution. The color scale ranges from blue (low SAR) to red (high SAR). The highest SAR values (red) are concentrated in a central, roughly rectangular region, with values decreasing as they move towards the edges (green and blue).</p>

## MEASUREMENT 9

Rear-side-low

Type: Phone measurement (Complete)

Date of measurement: 7/1/2017

Measurement duration: 10 minutes 1 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>Band2 WCDMA1900</u>
<b><u>Channels</u></b>	<u>Low</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.78</u>

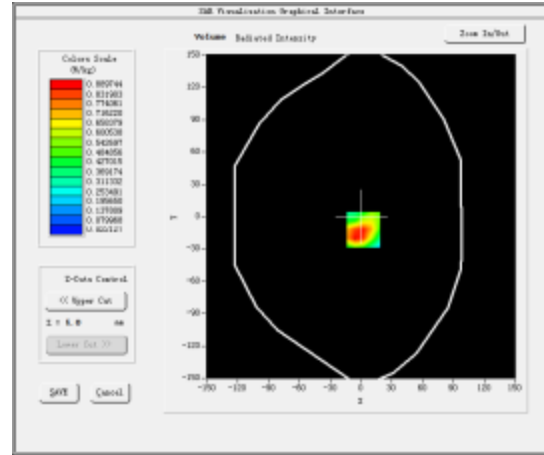
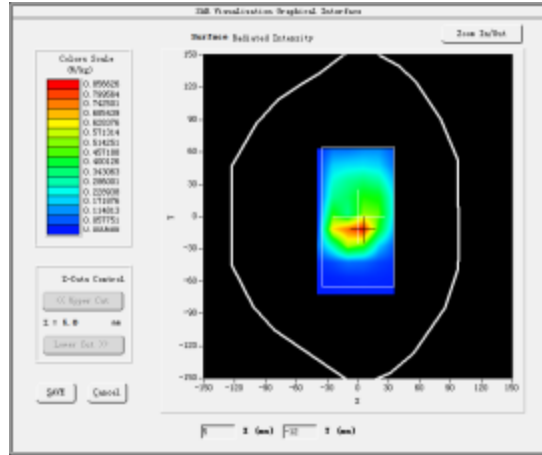
### **B. SAR Measurement Results**

Lower Band SAR (Channel 9262):

<b>Frequency (MHz)</b>	1852.400024
<b>Relative permittivity (real part)</b>	53.356966
<b>Relative permittivity (imaginary part)</b>	14.526890
<b>Conductivity (S/m)</b>	1.4935893
<b>Variation (%)</b>	2.110000

## SURFACE SAR

## VOLUME SAR

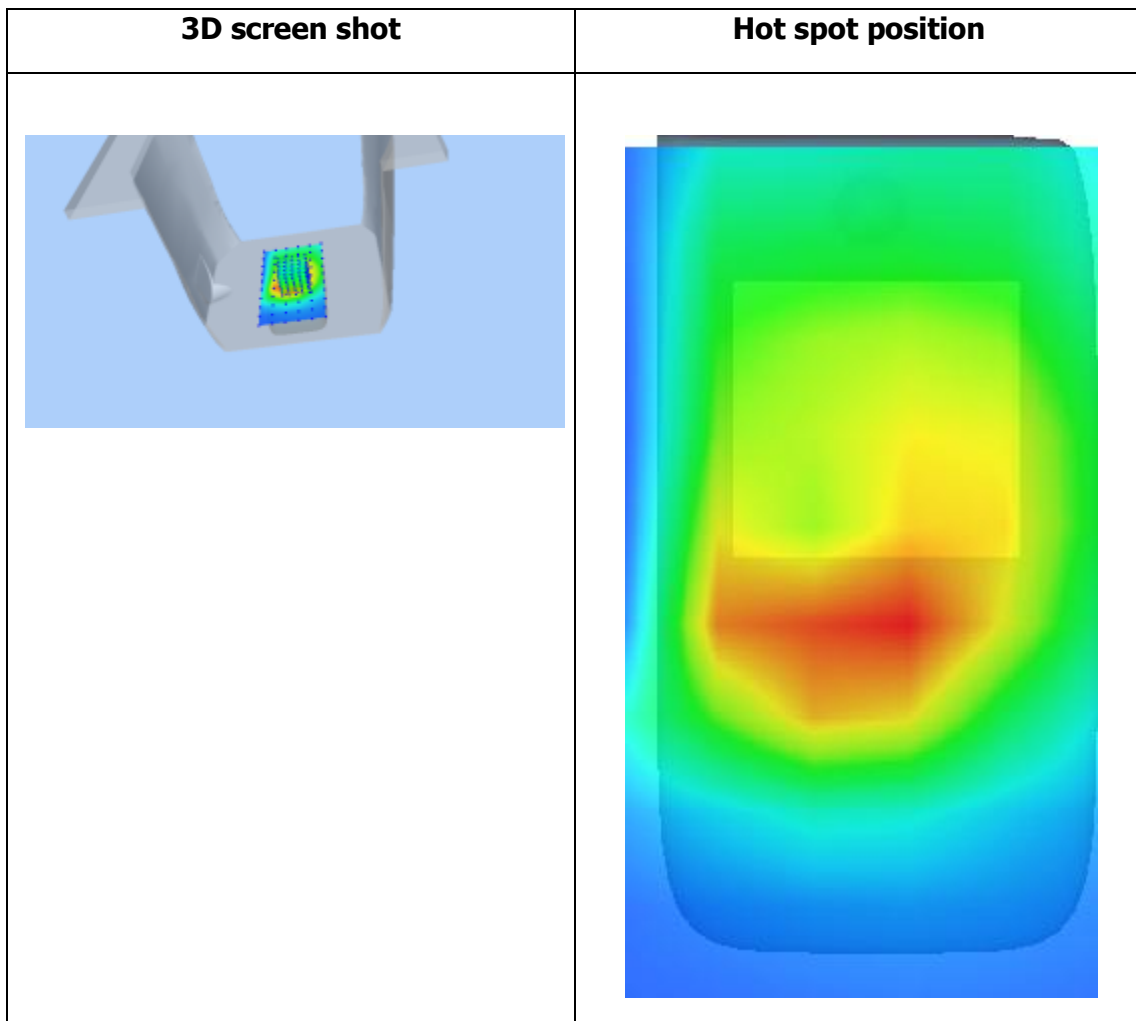
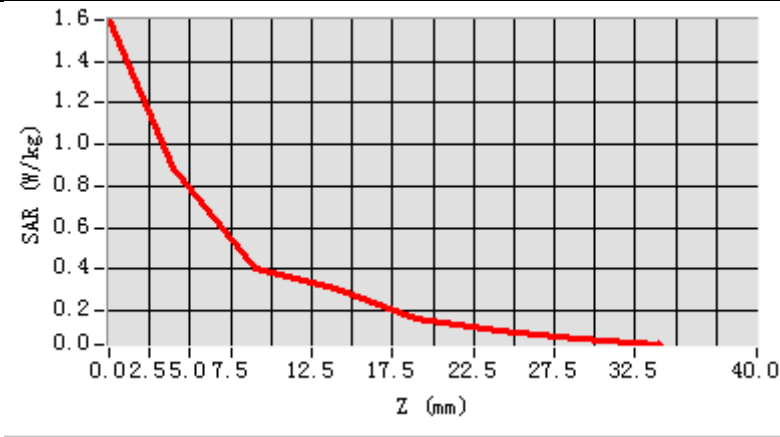


**Maximum location: X=2.00, Y=-12.00**

**SAR Peak: 1.45 W/kg**

<b>SAR 10g (W/Kg)</b>	0.471910
<b>SAR 1g (W/Kg)</b>	0.794162

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.5984</b>	<b>0.8897</b>	<b>0.4062</b>	<b>0.3086</b>	<b>0.1638</b>	<b>0.1055</b>	<b>0.0660</b>



# MEASUREMENT 10

Type: Phone measurement (Complete)

Date of measurement: 6/1/2017

Measurement duration: 10 minutes 16 seconds

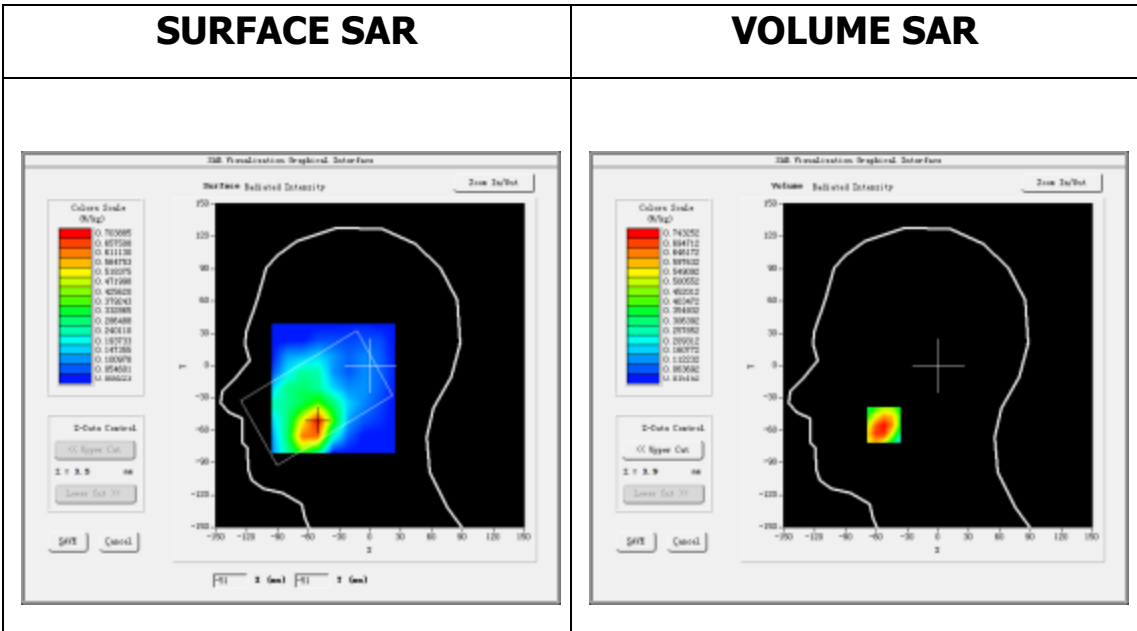
## **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Left head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>Band4 WCDMA1700</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.01</u>

## **B. SAR Measurement Results**

Middle Band SAR (Channel 1412):

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	39.768299
<b>Relative permittivity (imaginary part)</b>	14.198700
<b>Conductivity (S/m)</b>	1.366230
<b>Variation (%)</b>	-1.010000

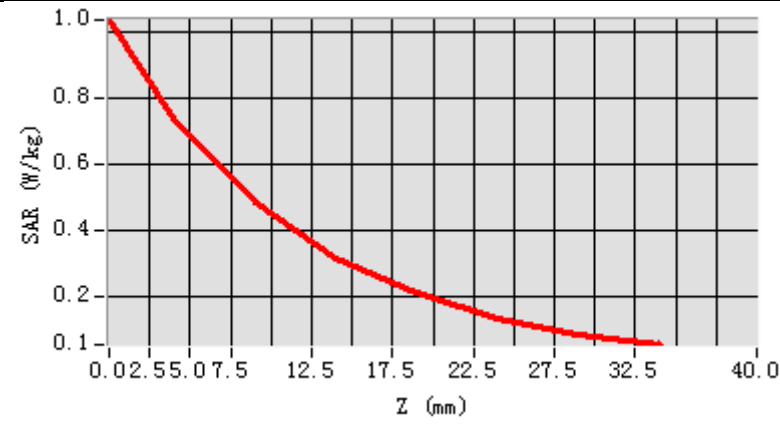


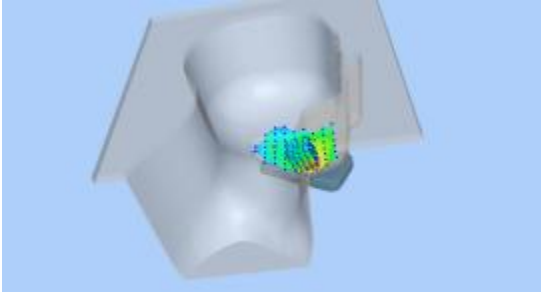
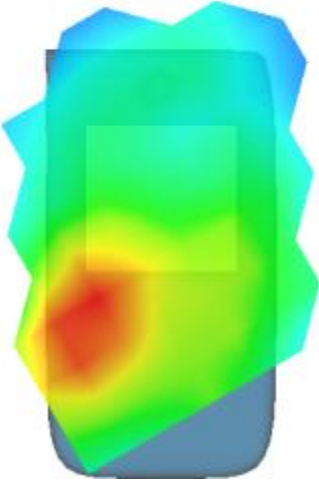
**Maximum location: X=-53.00, Y=-55.00**

**SAR Peak: 1.08 W/kg**

<b>SAR 10g (W/Kg)</b>	0.230540
<b>SAR 1g (W/Kg)</b>	0.523169

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.0372</b>	<b>0.7433</b>	<b>0.4883</b>	<b>0.3200</b>	<b>0.2143</b>	<b>0.1381</b>	<b>0.0906</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
 <p>A 3D rendering of a human head model. A localized area on the side of the head is highlighted with a multi-colored grid (red, yellow, green, blue), indicating the region of interest for SAR analysis.</p>	 <p>A 3D visualization of the SAR distribution on the head model. The color gradient represents the SAR intensity, with red indicating the highest values (hot spot) and blue indicating the lowest values. The hot spot is located on the side of the head, corresponding to the area shown in the 3D screen shot.</p>

# MEASUREMENT 11

Towards-ground-middle

Type: Phone measurement (Complete)

Date of measurement: 6/1/2017

Measurement duration: 10 minutes 3 seconds

## **A. Experimental conditions.**

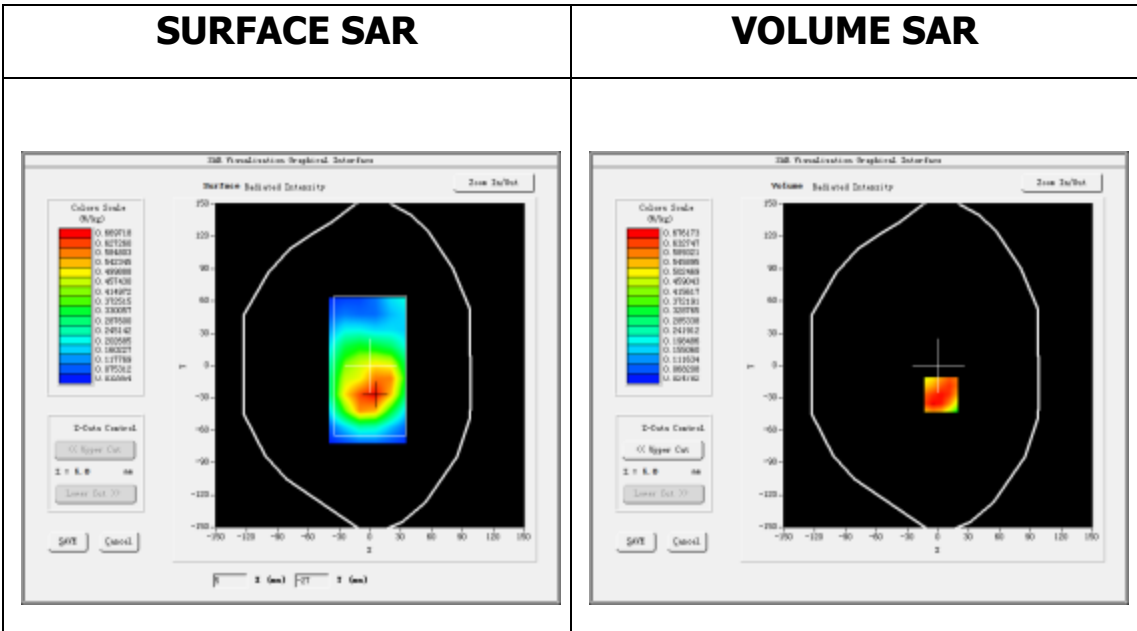
<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>Band4 WCDMA1700</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.16</u>

## **B. SAR Measurement Results**

Middle Band SAR (Channel 1412):

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	53.306900
<b>Relative permittivity (imaginary part)</b>	15.297200
<b>Conductivity (S/m)</b>	1.471931
<b>Variation (%)</b>	-0.280000



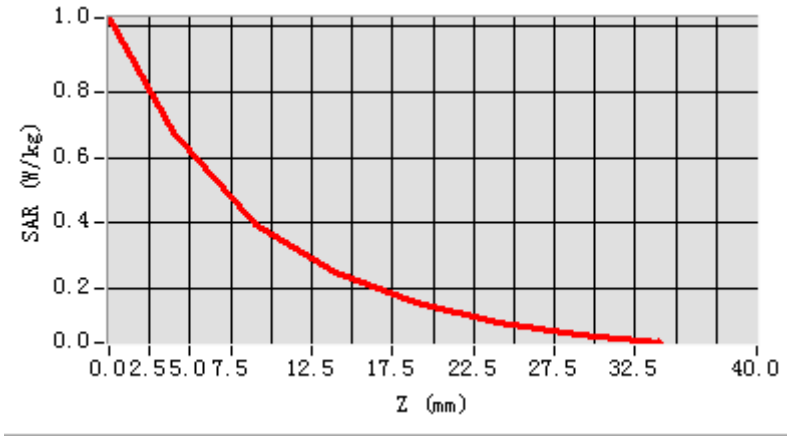


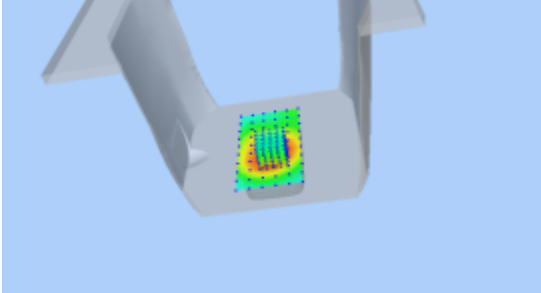
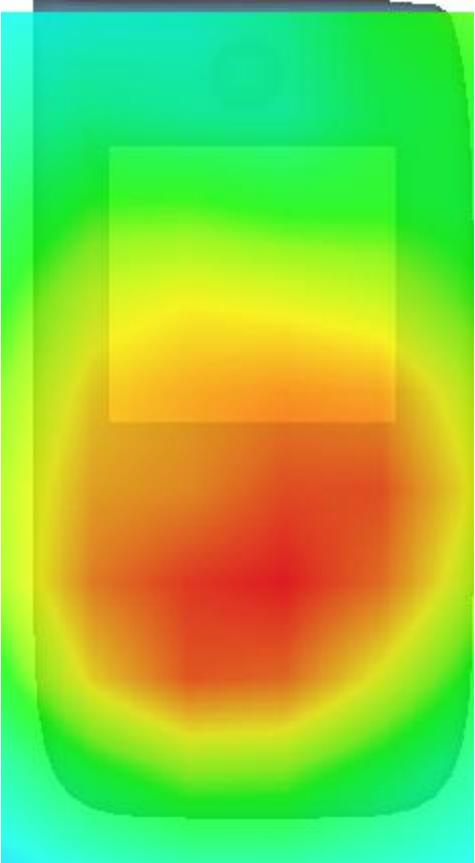
**Maximum location: X=3.00, Y=-27.00**

**SAR Peak: 1.02 W/kg**

<b>SAR 10g (W/Kg)</b>	0.394277
<b>SAR 1g (W/Kg)</b>	0.658081

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.0266</b>	<b>0.6762</b>	<b>0.3974</b>	<b>0.2516</b>	<b>0.1558</b>	<b>0.0934</b>	<b>0.0605</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
 <p>A 3D perspective view of a grey, L-shaped device. A small rectangular area on the inner surface of the L-shape is highlighted with a multi-colored heatmap, indicating the location of the hot spot.</p>	 <p>A 2D heatmap showing the spatial distribution of SAR. The color scale ranges from cyan (low SAR) to red (high SAR). The highest SAR values (red) are concentrated in a rectangular region in the center of the device's inner surface, corresponding to the hot spot position.</p>

## MEASUREMENT 12

Rear-side-middle

Type: Phone measurement (Complete)

Date of measurement: 6/1/2017

Measurement duration: 10 minutes 50 seconds

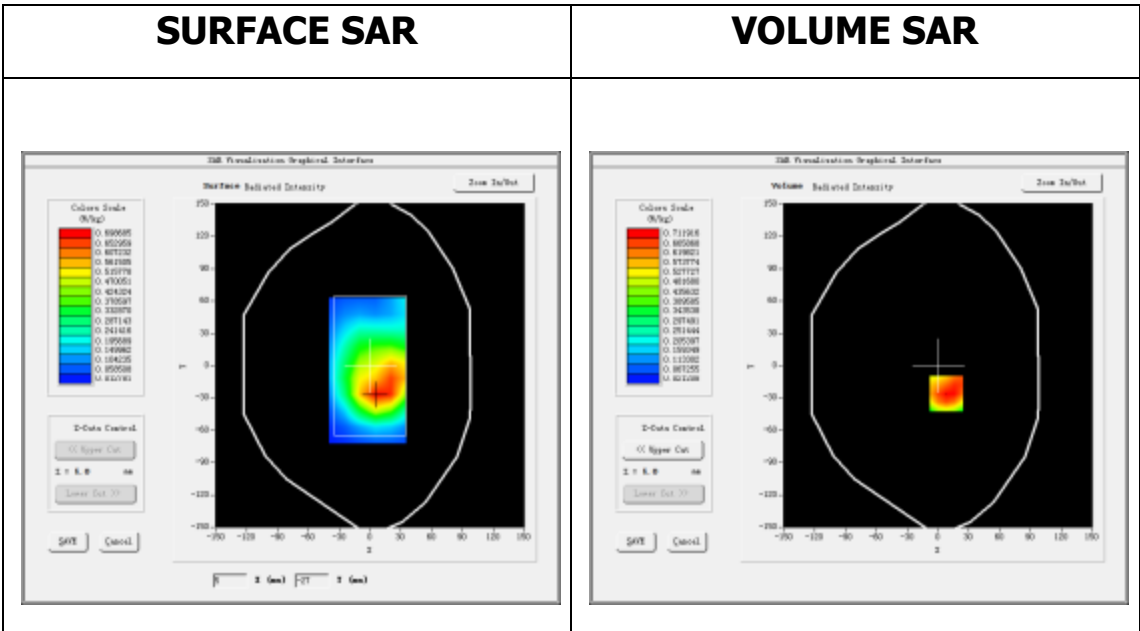
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>Band4 WCDMA1700</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.16</u>

### **B. SAR Measurement Results**

Middle Band SAR (Channel 1412):

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	53.306900
<b>Relative permittivity (imaginary part)</b>	15.297200
<b>Conductivity (S/m)</b>	1.471931
<b>Variation (%)</b>	-0.320000

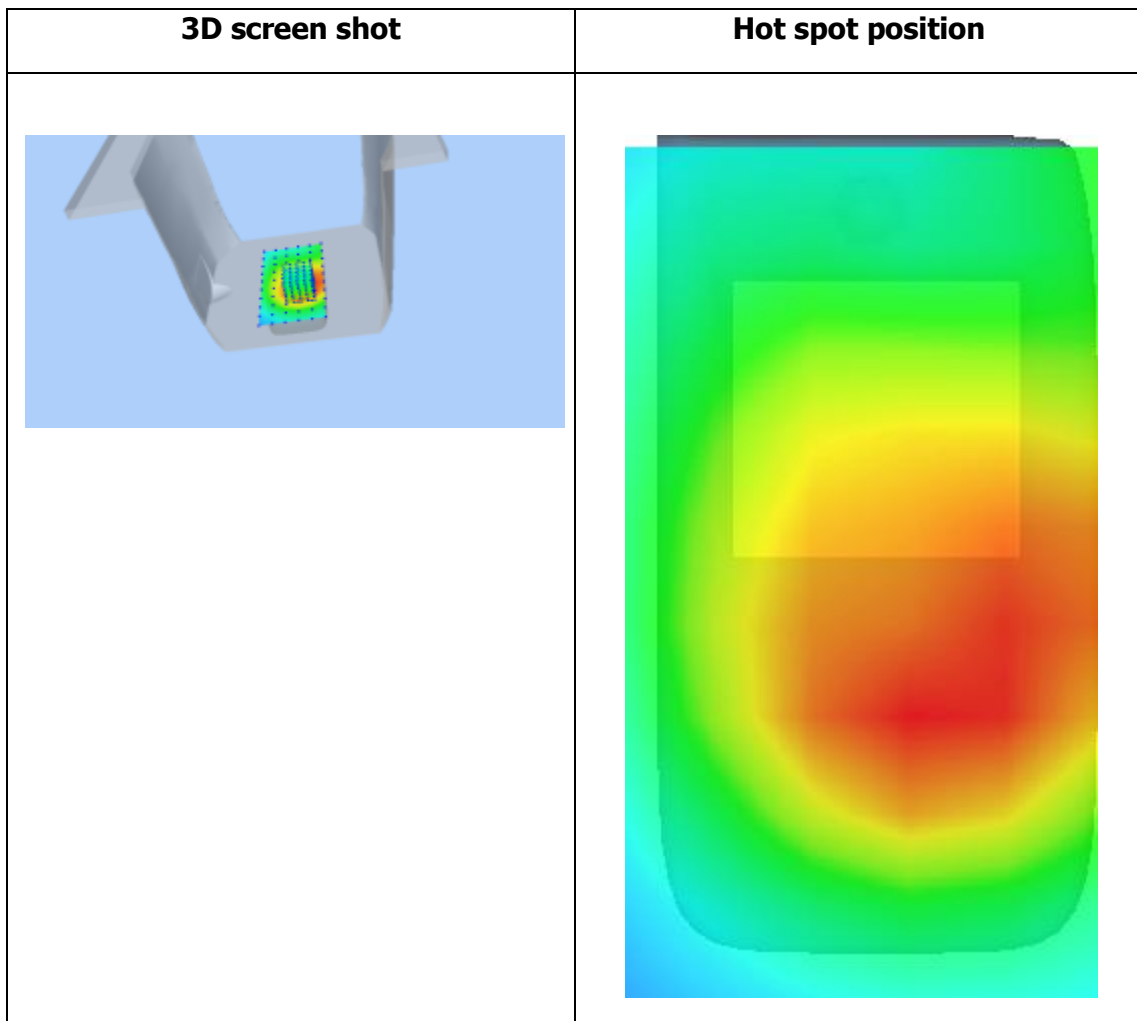
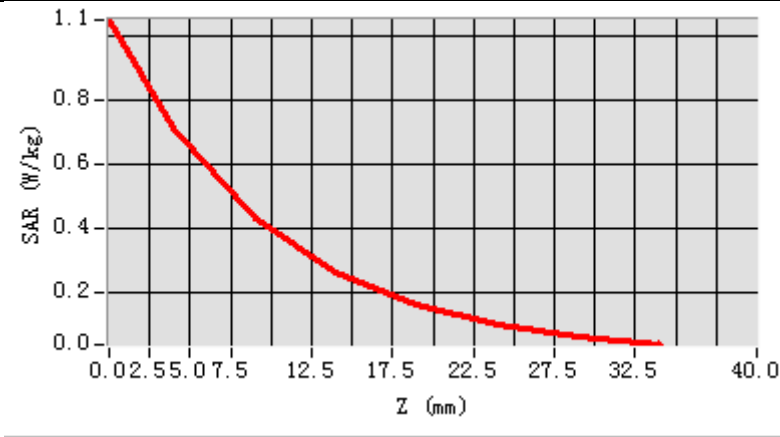


**Maximum location: X=8.00, Y=-26.00**

**SAR Peak: 1.06 W/kg**

<b>SAR 10g (W/Kg)</b>	0.411976
<b>SAR 1g (W/Kg)</b>	0.689295

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.0523</b>	<b>0.7119</b>	<b>0.4307</b>	<b>0.2643</b>	<b>0.1614</b>	<b>0.0986</b>	<b>0.0599</b>



# MEASUREMENT 13

Type: Phone measurement (Complete)

Date of measurement: 5/1/2017

Measurement duration: 9 minutes 13 seconds

## **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Left head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>Band5 WCDMA850</u>
<b><u>Channels</u></b>	<u>Low</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.93</u>

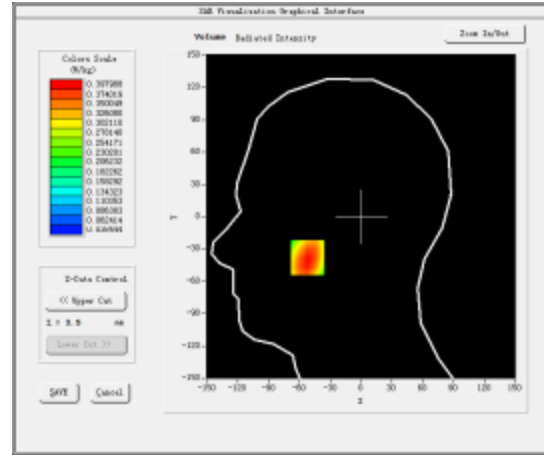
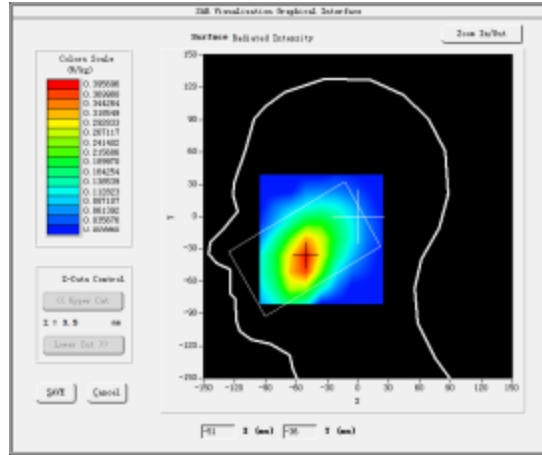
## **B. SAR Measurement Results**

Lower Band SAR (Channel 4132):

<b>Frequency (MHz)</b>	826.400024
<b>Relative permittivity (real part)</b>	40.366501
<b>Relative permittivity (imaginary part)</b>	19.842400
<b>Conductivity (S/m)</b>	0.910987
<b>Variation (%)</b>	-0.150000

## SURFACE SAR

## VOLUME SAR

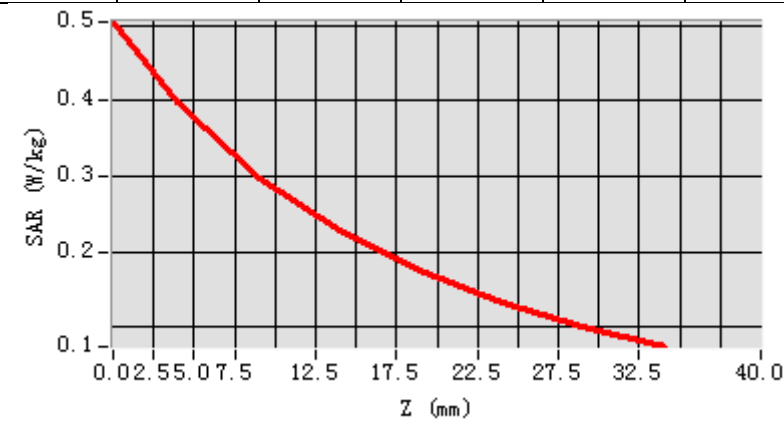


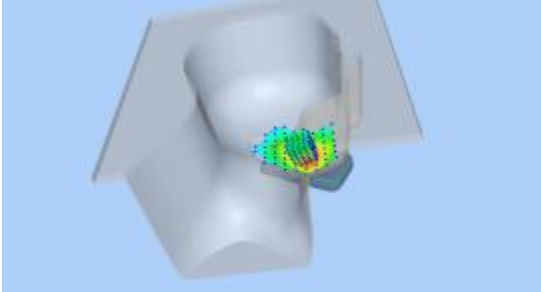
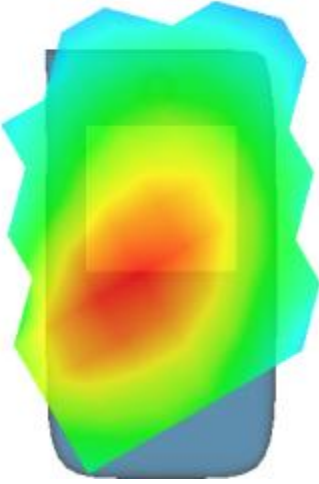
**Maximum location: X=-52.00, Y=-38.00**

**SAR Peak: 0.51 W/kg**

<b>SAR 10g (W/Kg)</b>	0.274448
<b>SAR 1g (W/Kg)</b>	0.391698

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.5048</b>	<b>0.3980</b>	<b>0.2984</b>	<b>0.2295</b>	<b>0.1740</b>	<b>0.1320</b>	<b>0.0995</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
 <p>A 3D rendering of a human head and neck model. A localized area on the side of the head is highlighted with a multi-colored grid (red, yellow, green, blue), indicating the region of interest for SAR analysis.</p>	 <p>A 3D visualization of the SAR distribution on the head model. The color gradient represents the SAR intensity, with red indicating the highest values (hot spot) and blue indicating the lowest values. The hot spot is located on the side of the head, corresponding to the area shown in the 3D screen shot.</p>



# MEASUREMENT 14

Towards-ground-low

Type: Phone measurement (Complete)

Date of measurement: 5/1/2017

Measurement duration: 10 minutes 6 seconds

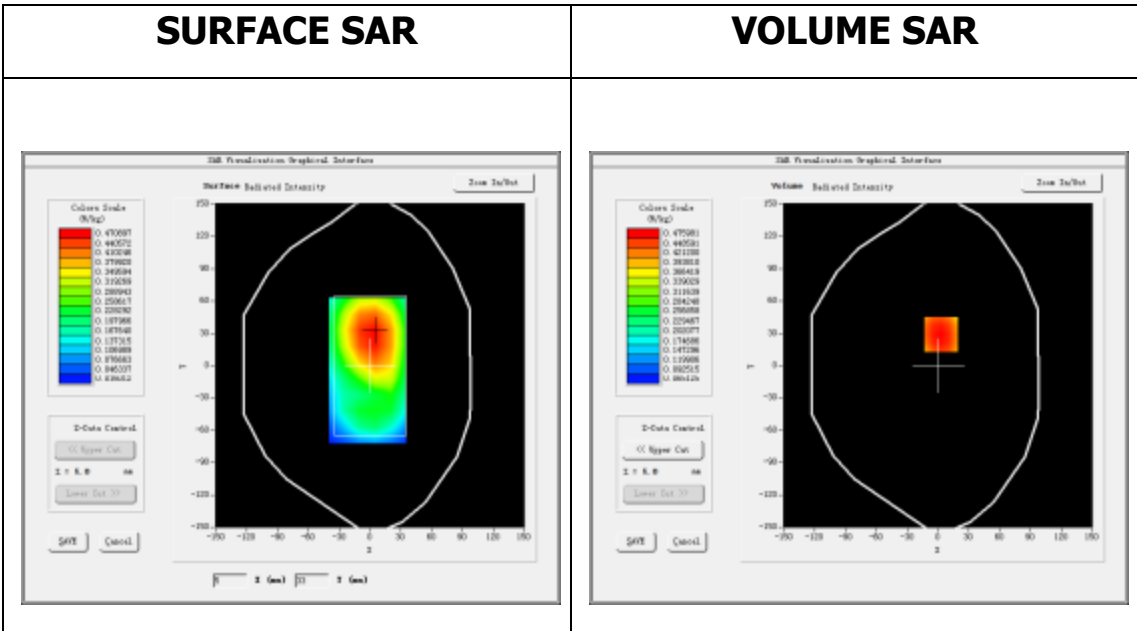
## **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>Band5 WCDMA850</u>
<b><u>Channels</u></b>	<u>Low</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>5.07</u>

## **B. SAR Measurement Results**

Lower Band SAR (Channel 4132):

<b>Frequency (MHz)</b>	826.400024
<b>Relative permittivity (real part)</b>	54.039879
<b>Relative permittivity (imaginary part)</b>	21.302919
<b>Conductivity (S/m)</b>	0.978041
<b>Variation (%)</b>	-0.220000

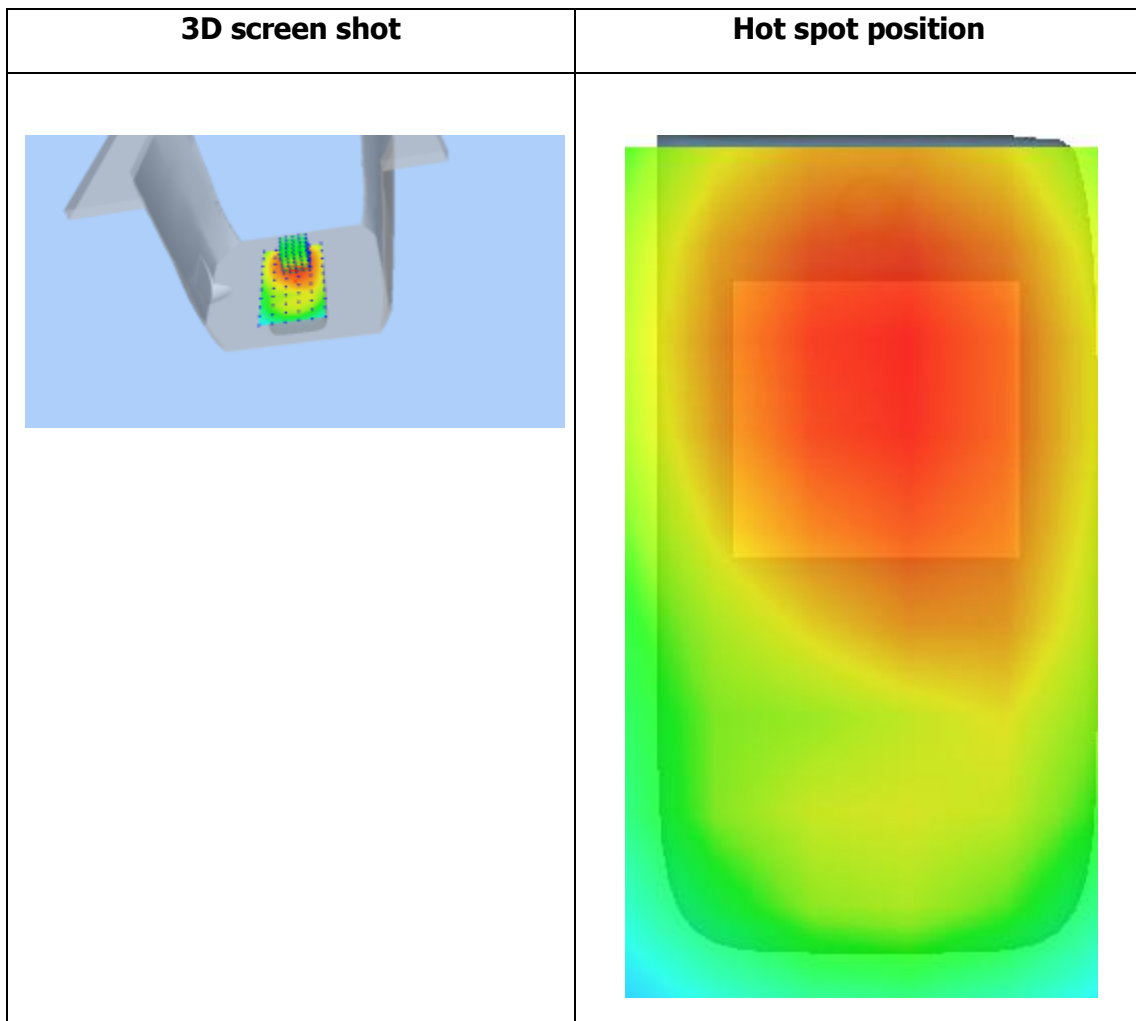
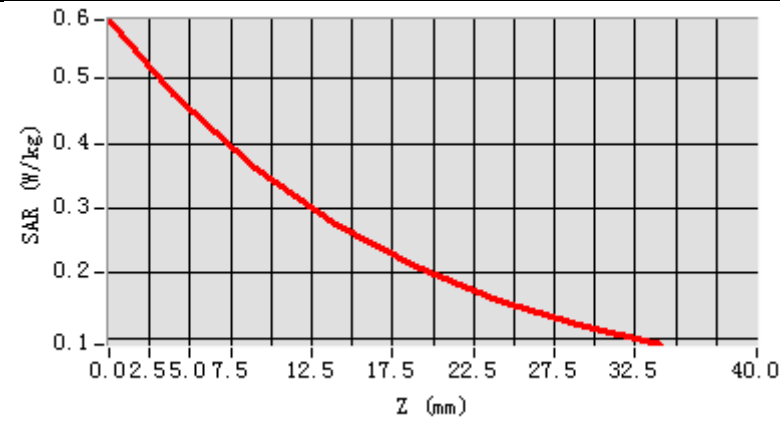


**Maximum location: X=3.00, Y=29.00**

**SAR Peak: 0.59 W/kg**

<b>SAR 10g (W/Kg)</b>	0.341996
<b>SAR 1g (W/Kg)</b>	0.466947

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.5902</b>	<b>0.4760</b>	<b>0.3627</b>	<b>0.2752</b>	<b>0.2089</b>	<b>0.1579</b>	<b>0.1191</b>



## MEASUREMENT 15

Rear-side-low

Type: Phone measurement (Complete)

Date of measurement: 5/1/2017

Measurement duration: 9 minutes 49 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>Band5 WCDMA850</u>
<b><u>Channels</u></b>	<u>Low</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>5.07</u>

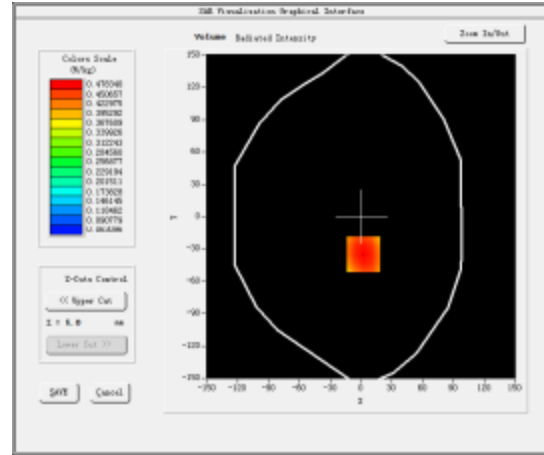
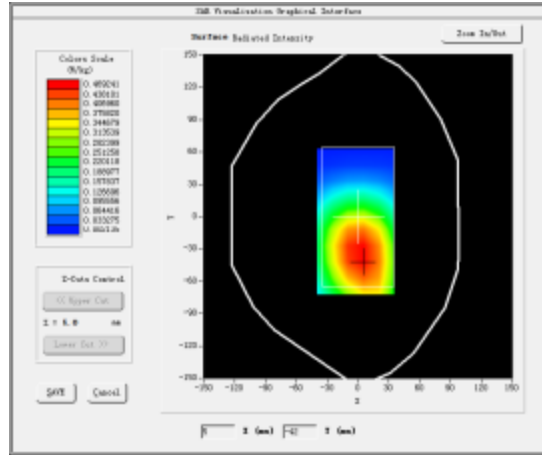
### **B. SAR Measurement Results**

Lower Band SAR (Channel 4132):

<b>Frequency (MHz)</b>	826.400024
<b>Relative permittivity (real part)</b>	54.039879
<b>Relative permittivity (imaginary part)</b>	21.302919
<b>Conductivity (S/m)</b>	0.978041
<b>Variation (%)</b>	-0.330000

## SURFACE SAR

## VOLUME SAR

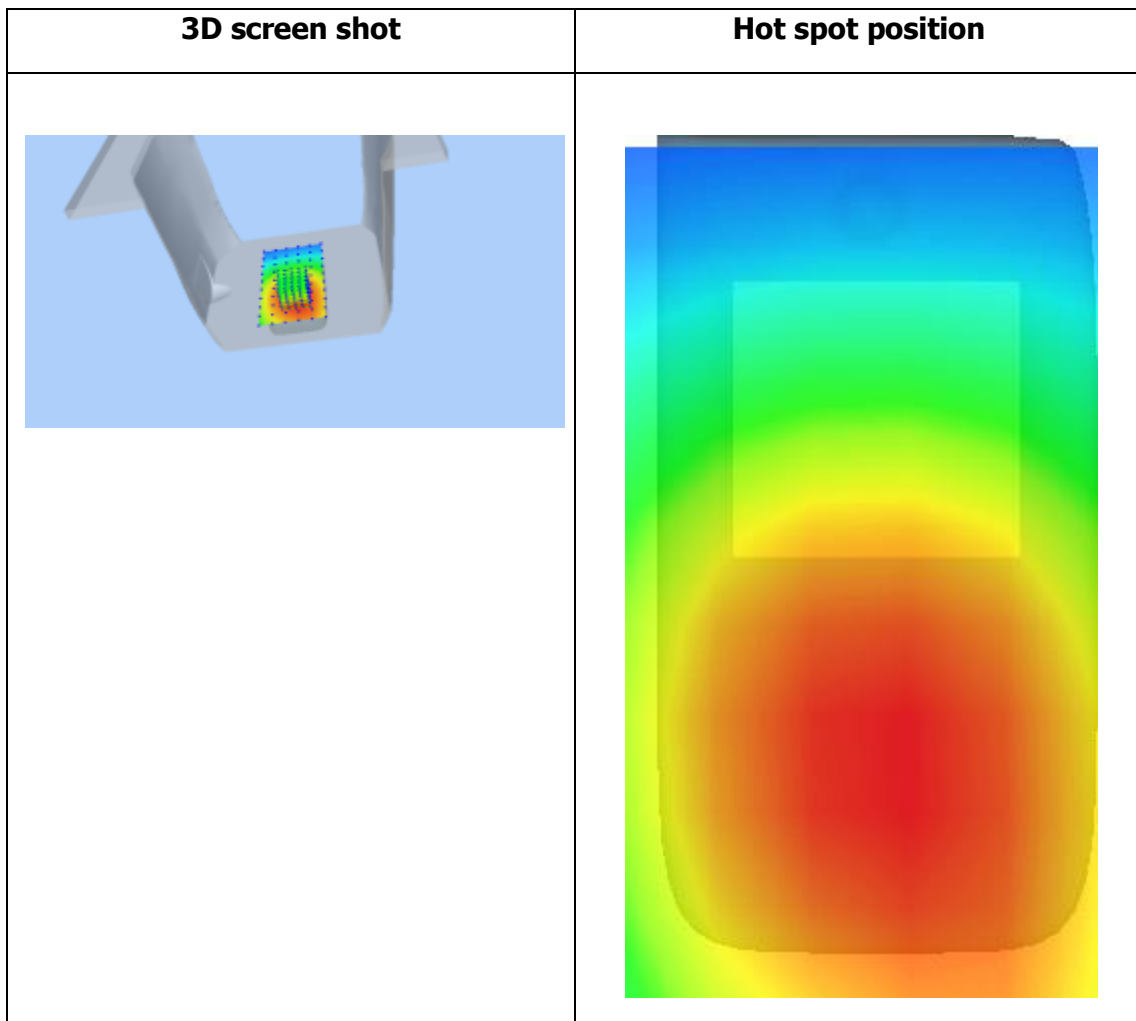
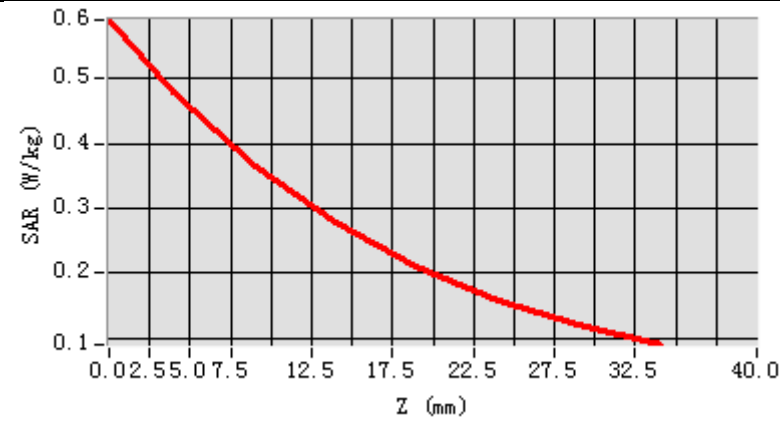


**Maximum location: X=2.00, Y=-35.00**

**SAR Peak: 0.59 W/kg**

<b>SAR 10g (W/Kg)</b>	0.343703
<b>SAR 1g (W/Kg)</b>	0.468268

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.5904</b>	<b>0.4783</b>	<b>0.3653</b>	<b>0.2786</b>	<b>0.2105</b>	<b>0.1590</b>	<b>0.1199</b>



# MEASUREMENT 16

20M-1RB#0

Type: Phone measurement (Complete)

Date of measurement: 7/1/2017

Measurement duration: 9 minutes 37 seconds

## **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Left head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>LTE band 2</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.63</u>

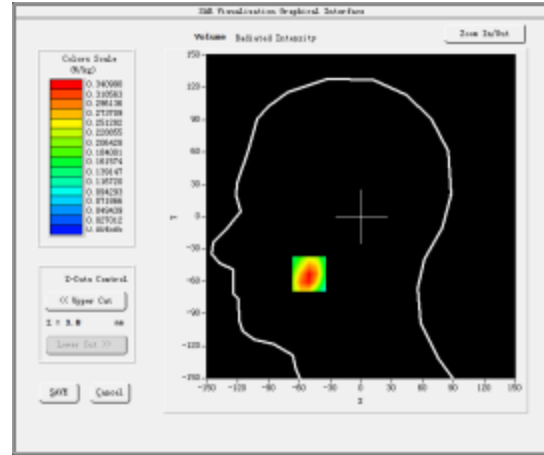
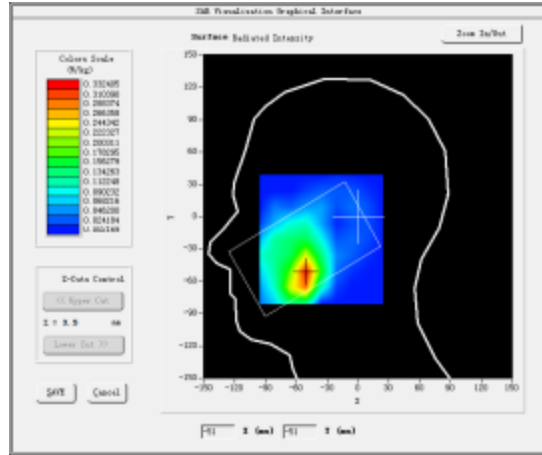
## **B. SAR Measurement Results**

Middle Band SAR (Channel 18900):

<b>Frequency (MHz)</b>	1879.500000
<b>Relative permittivity (real part)</b>	39.917001
<b>Relative permittivity (imaginary part)</b>	14.022994
<b>Conductivity (S/m)</b>	1.403500
<b>Variation (%)</b>	0.050000

## SURFACE SAR

## VOLUME SAR



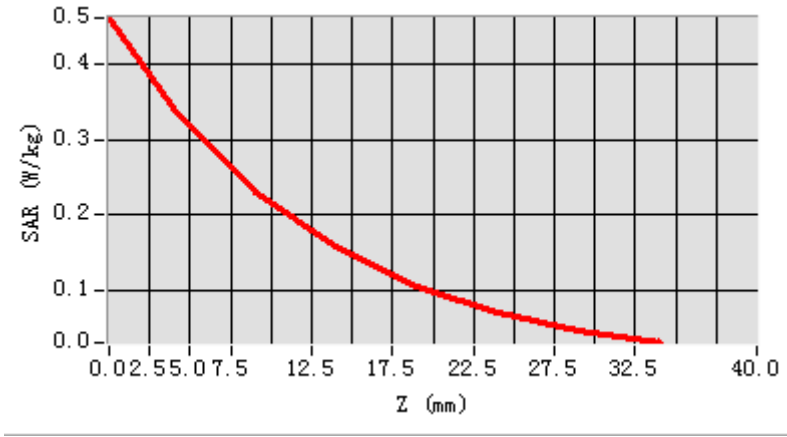
**Maximum location: X=-51.00, Y=-53.00**

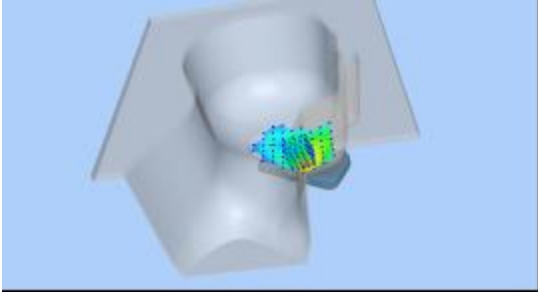
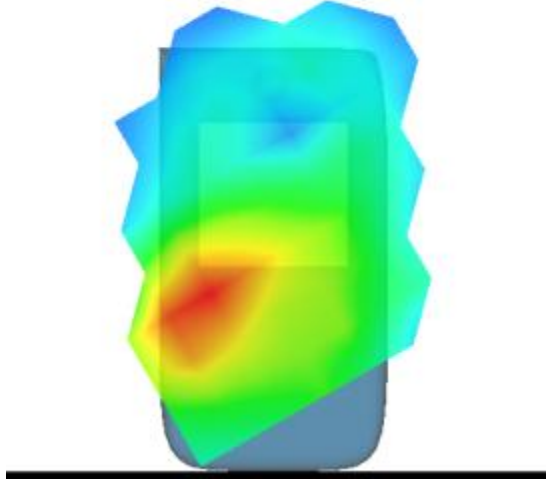
**SAR Peak: 0.49 W/kg**

<b>SAR 10g (W/Kg)</b>	0.195884
<b>SAR 1g (W/Kg)</b>	0.331135



<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.4621</b>	<b>0.3410</b>	<b>0.2298</b>	<b>0.1582</b>	<b>0.1041</b>	<b>0.0703</b>	<b>0.0470</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
 <p>A 3D rendering of a human head model. A small, localized area on the side of the head is highlighted with a multi-colored grid (red, yellow, green, blue), indicating the position of the SAR hot spot.</p>	 <p>A 3D visualization of the hot spot position. It shows a color gradient from red (highest SAR) to blue (lowest SAR) over a 3D volume, with the highest intensity (red) concentrated in the same area as shown in the 3D screen shot.</p>

# MEASUREMENT 17

Towards-ground-20M-50RB#0-middle

Type: Phone measurement (Complete)

Date of measurement: 7/1/2017

Measurement duration: 8 minutes 11 seconds

## **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>LTE band 2</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.78</u>

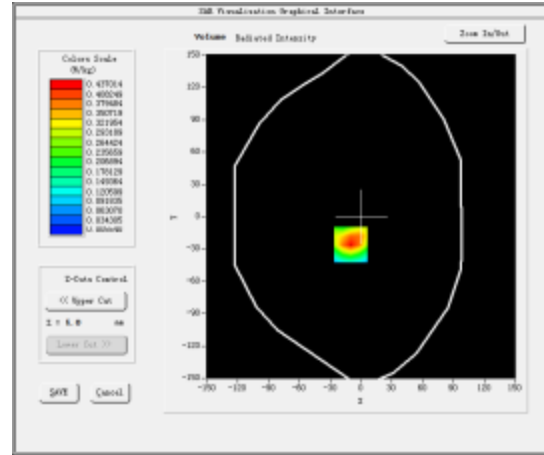
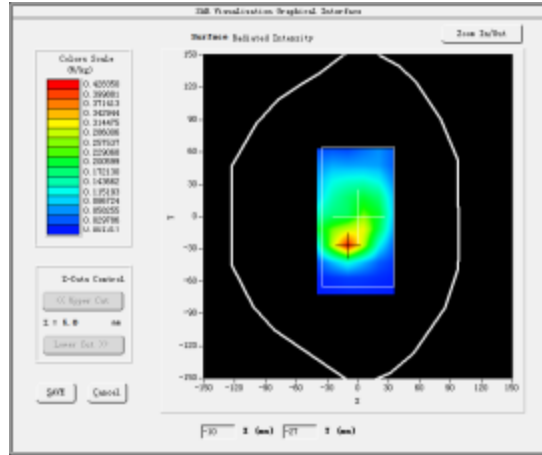
## **B. SAR Measurement Results**

Middle Band SAR (Channel 18900):

<b>Frequency (MHz)</b>	1879.500000
<b>Relative permittivity (real part)</b>	53.367001
<b>Relative permittivity (imaginary part)</b>	14.686350
<b>Conductivity (S/m)</b>	1.533500
<b>Variation (%)</b>	1.130000

## SURFACE SAR

## VOLUME SAR

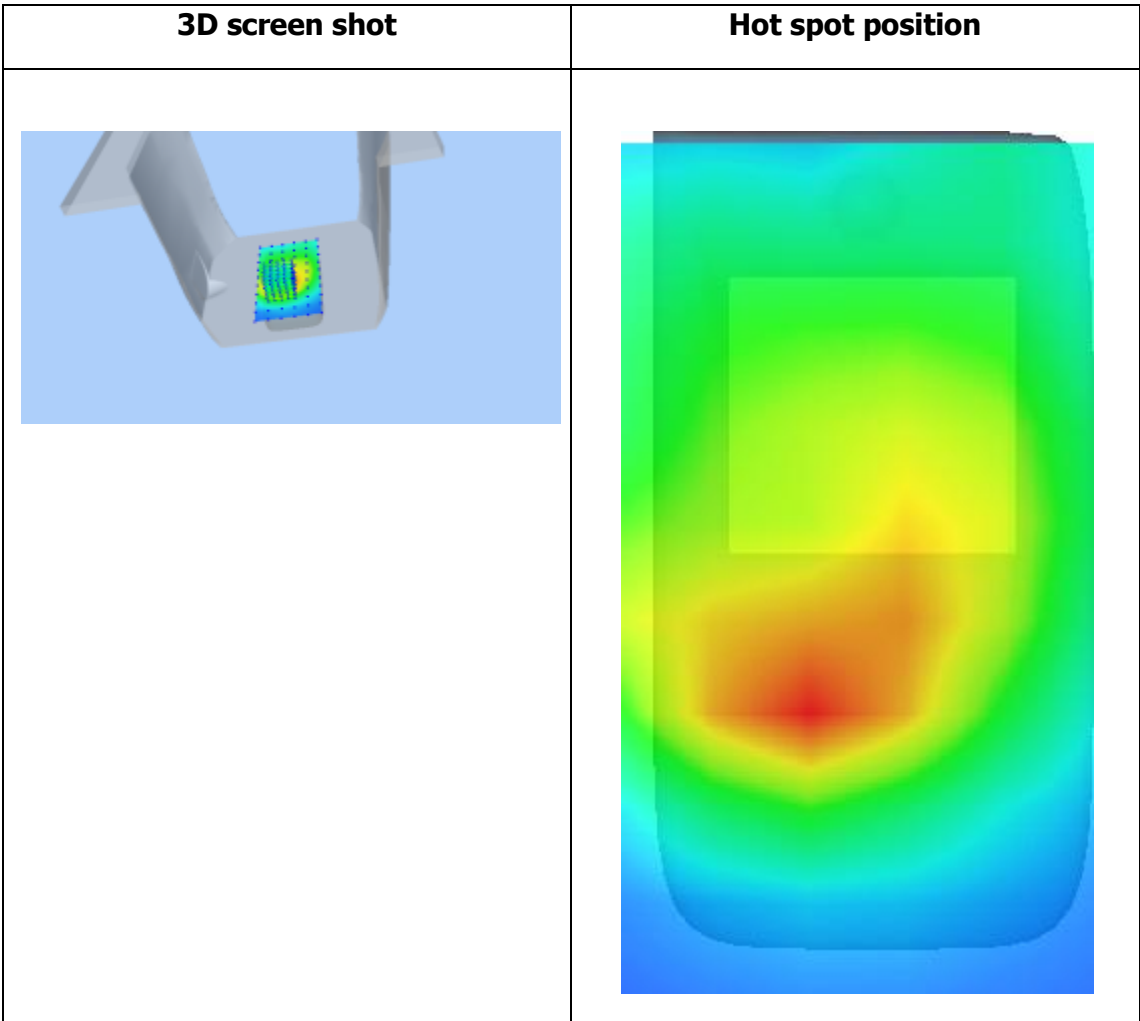
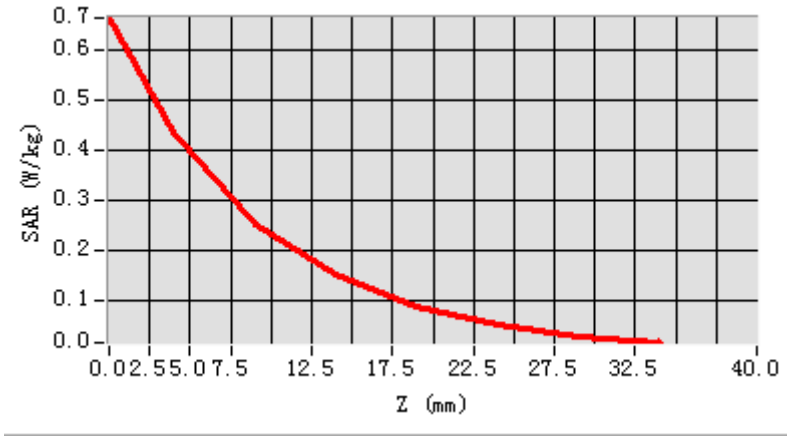


**Maximum location: X=-10.00, Y=-26.00**

**SAR Peak: 0.67 W/kg**

<b>SAR 10g (W/Kg)</b>	0.226026
<b>SAR 1g (W/Kg)</b>	0.417526

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.6624</b>	<b>0.4370</b>	<b>0.2543</b>	<b>0.1509</b>	<b>0.0882</b>	<b>0.0515</b>	<b>0.0302</b>



## MEASUREMENT 18

Bottom-side-20M-1RB#0-middle

Type: Phone measurement (Complete)

Date of measurement: 7/1/2017

Measurement duration: 10 minutes 21 seconds

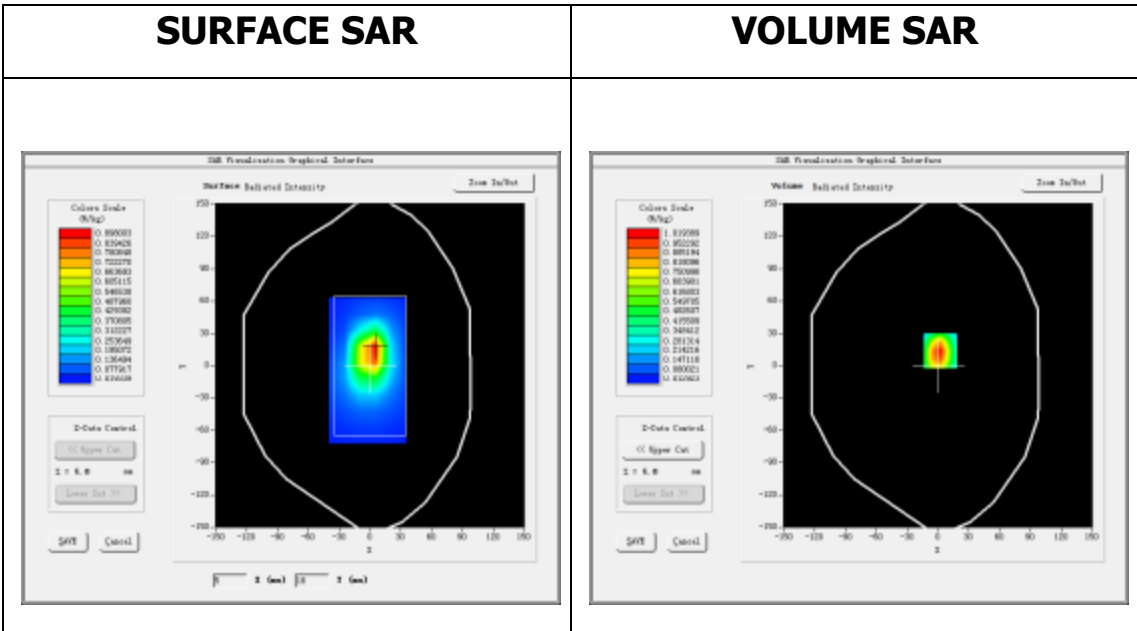
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>LTE band 2</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.78</u>

### **B. SAR Measurement Results**

Middle Band SAR (Channel 18900):

<b>Frequency (MHz)</b>	1879.500000
<b>Relative permittivity (real part)</b>	53.367001
<b>Relative permittivity (imaginary part)</b>	14.686350
<b>Conductivity (S/m)</b>	1.533500
<b>Variation (%)</b>	-2.740000

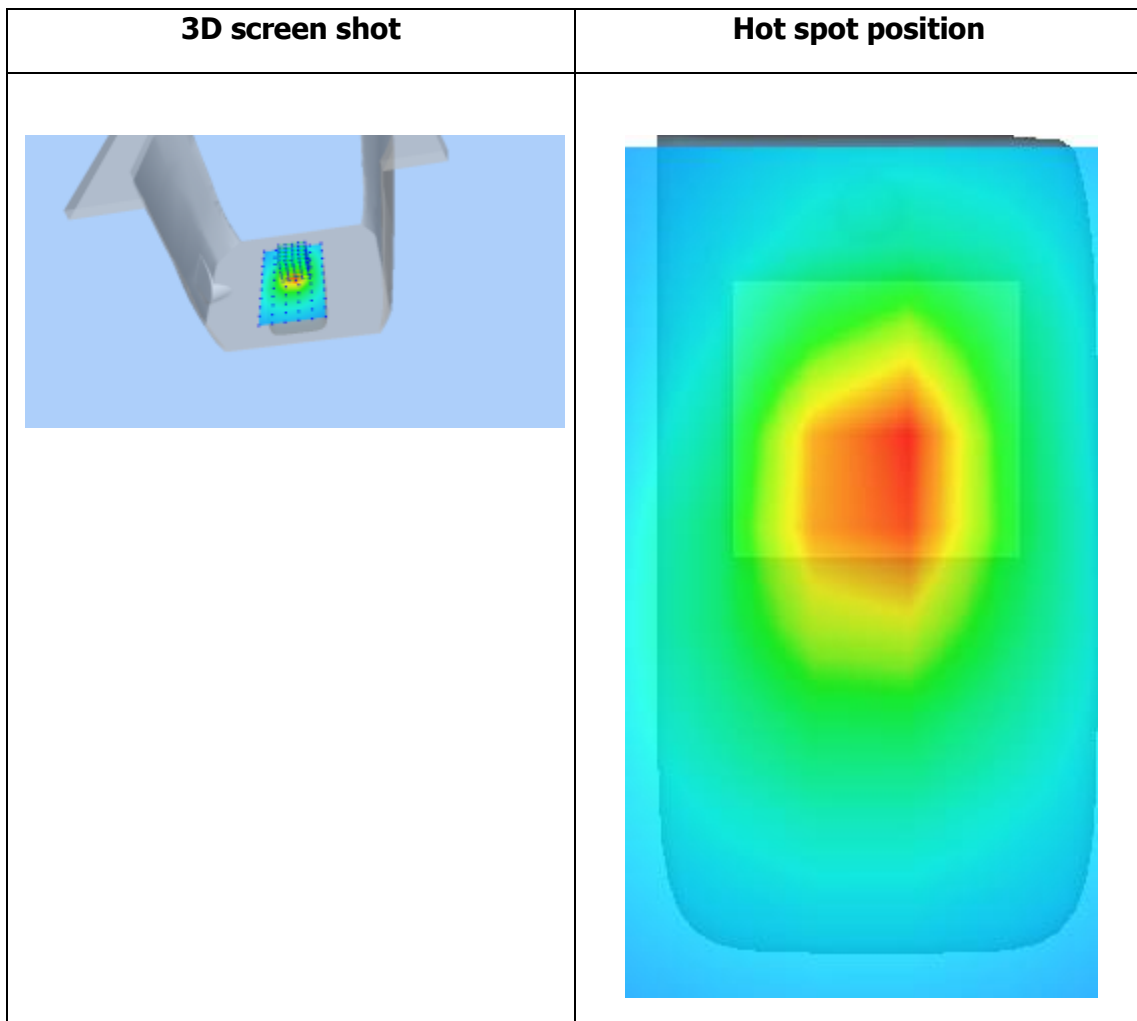
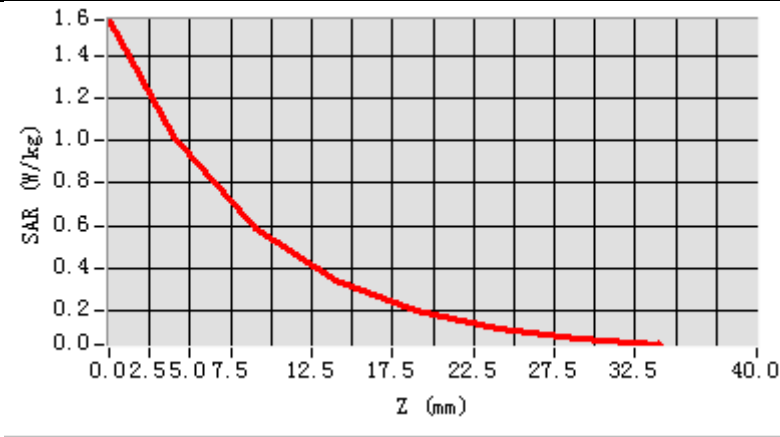


**Maximum location: X=2.00, Y=14.00**

**SAR Peak: 1.58 W/kg**

<b>SAR 10g (W/Kg)</b>	0.511017
<b>SAR 1g (W/Kg)</b>	0.772529

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.5674</b>	<b>1.0194</b>	<b>0.5827</b>	<b>0.3421</b>	<b>0.1989</b>	<b>0.1160</b>	<b>0.0678</b>



## MEASUREMENT 19

20M-1RB#99

Type: Phone measurement (Complete)

Date of measurement: 6/1/2017

Measurement duration: 10 minutes 12 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Left head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>LTE band 4</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.01</u>

### **B. SAR Measurement Results**

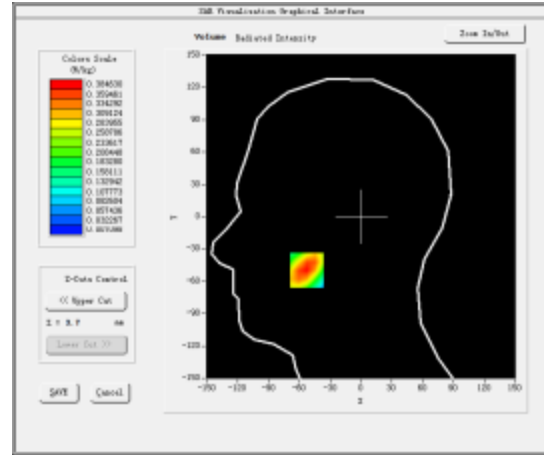
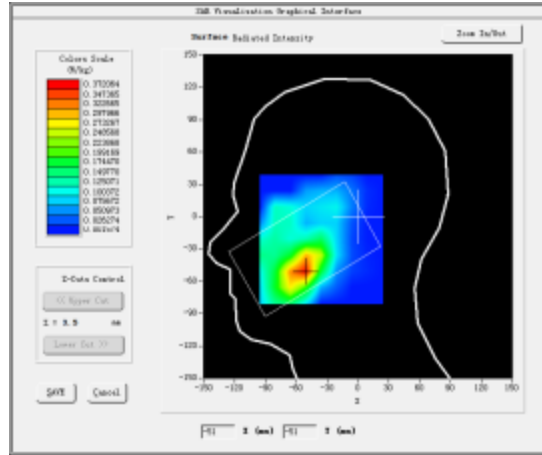
Middle Band SAR (Channel 20175):

<b>Frequency (MHz)</b>	1732.500000
<b>Relative permittivity (real part)</b>	39.826401
<b>Relative permittivity (imaginary part)</b>	14.189300
<b>Conductivity (S/m)</b>	1.365720
<b>Variation (%)</b>	0.070000



## SURFACE SAR

## VOLUME SAR

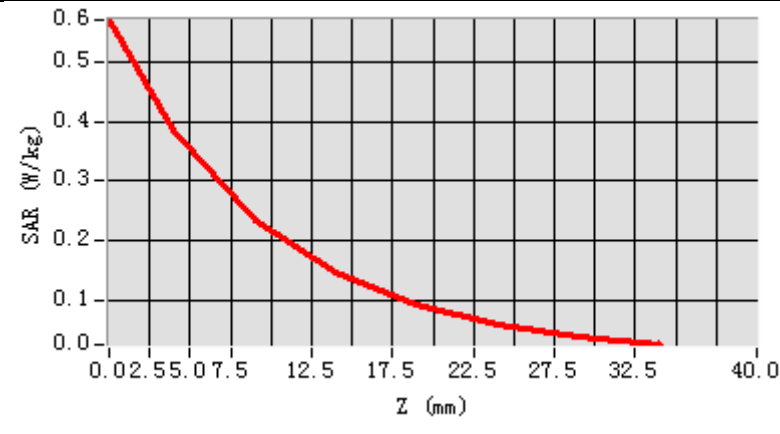


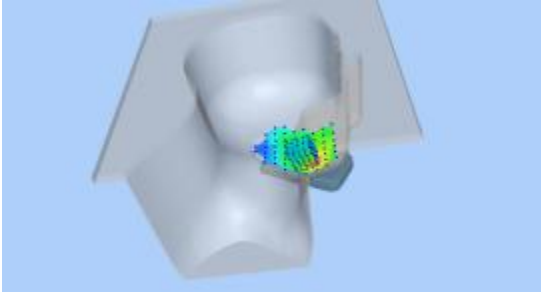
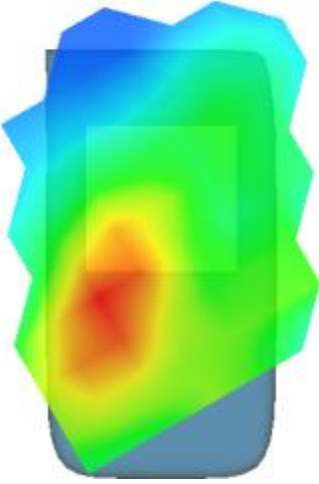
**Maximum location: X=-53.00, Y=-50.00**

**SAR Peak: 0.57 W/kg**

<b>SAR 10g (W/Kg)</b>	0.213529
<b>SAR 1g (W/Kg)</b>	0.368450

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.5709</b>	<b>0.3846</b>	<b>0.2341</b>	<b>0.1453</b>	<b>0.0939</b>	<b>0.0588</b>	<b>0.0383</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
 <p>A 3D rendering of a human head and neck model. A small, localized area on the side of the head is highlighted with a multi-colored grid (blue, green, yellow, red), indicating the position of the SAR hot spot.</p>	 <p>A 3D visualization of the SAR hot spot position. It shows a color gradient from blue (low SAR) to red (high SAR), with the highest intensity (red) concentrated in a specific region on the side of the head, matching the location shown in the 3D screen shot.</p>

## MEASUREMENT 20

Towards Ground-20M-1RB#99-middle

Type: Phone measurement (Complete)

Date of measurement: 6/1/2017

Measurement duration: 7 minutes 40 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>LTE band 4</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.16</u>

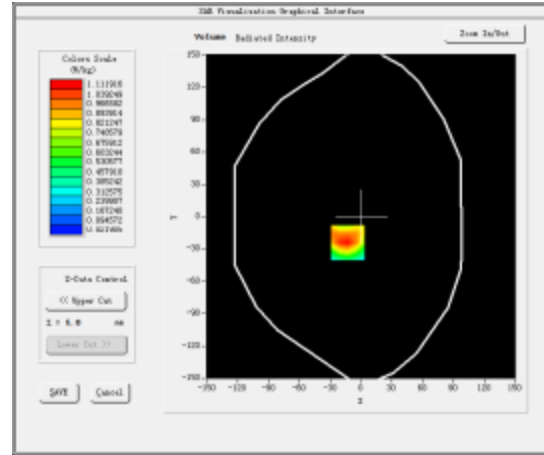
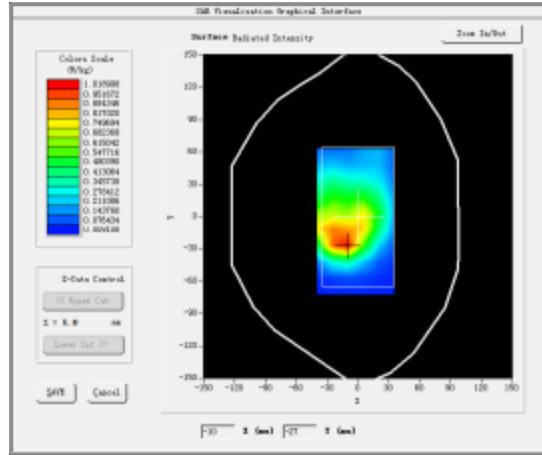
### **B. SAR Measurement Results**

Middle Band SAR (Channel 20175):

<b>Frequency (MHz)</b>	1732.500000
<b>Relative permittivity (real part)</b>	53.302151
<b>Relative permittivity (imaginary part)</b>	15.274800
<b>Conductivity (S/m)</b>	1.470200
<b>Variation (%)</b>	0.530000

## SURFACE SAR

## VOLUME SAR

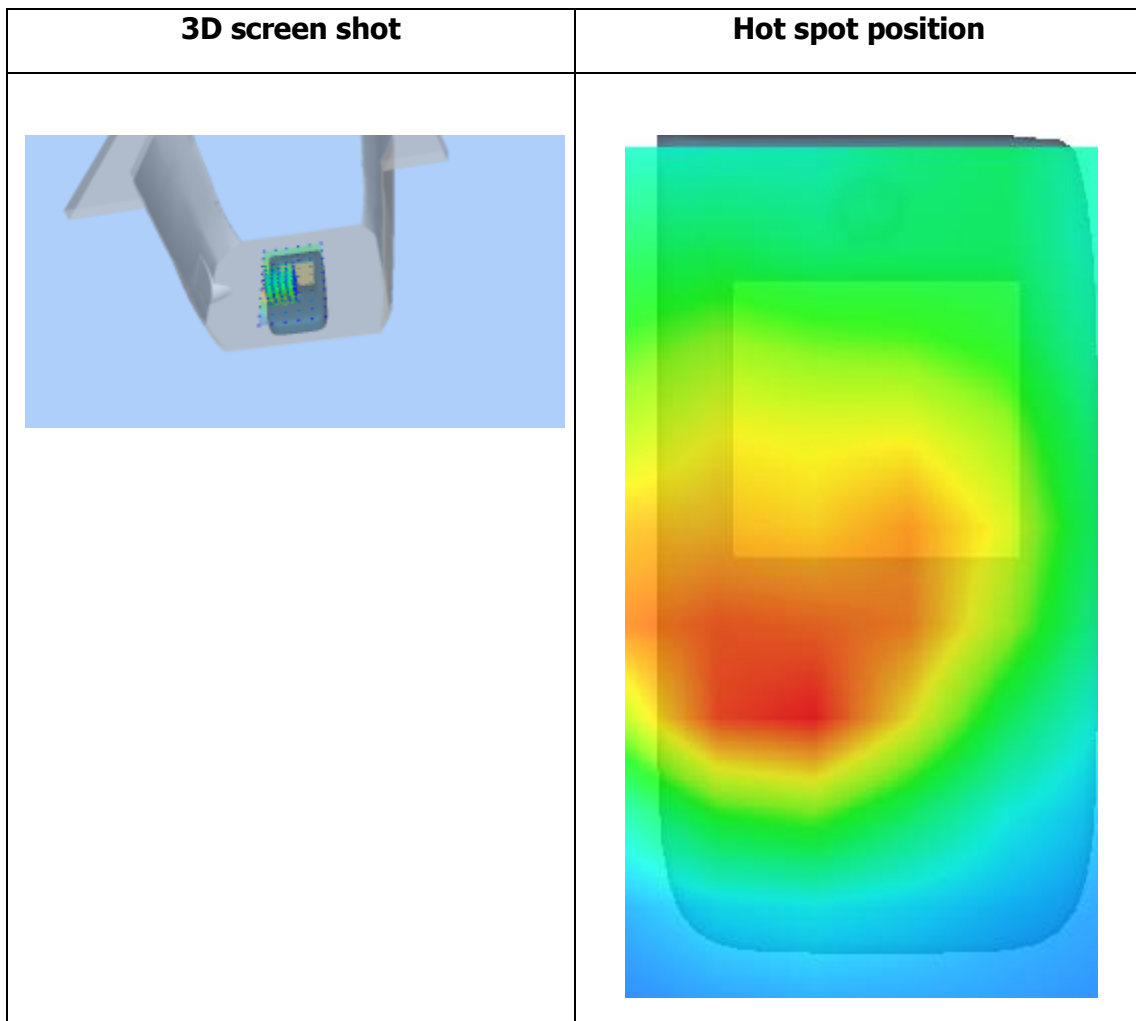
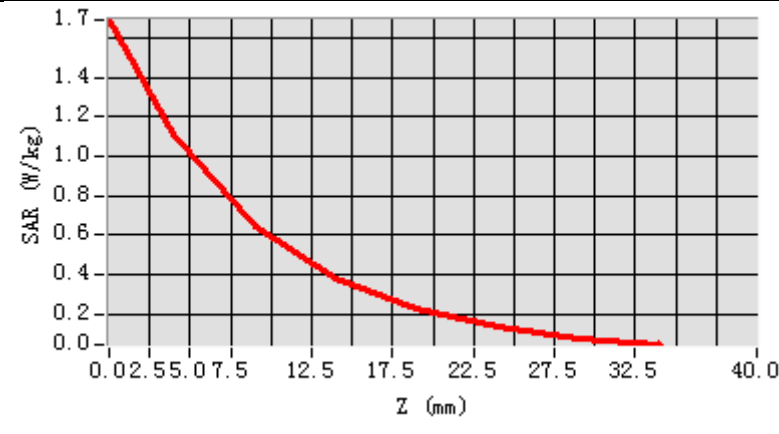


**Maximum location: X=-13.00, Y=-24.00**

**SAR Peak: 1.70 W/kg**

<b>SAR 10g (W/Kg)</b>	0.435899
<b>SAR 1g (W/Kg)</b>	0.721127

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.6914</b>	<b>1.1119</b>	<b>0.6462</b>	<b>0.3812</b>	<b>0.2264</b>	<b>0.1331</b>	<b>0.0788</b>



## MEASUREMENT 21

Rear-side-20M-50RB#50-middle

Type: Phone measurement (Complete)

Date of measurement: 6/1/2017

Measurement duration: 7 minutes 54 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=15mm dy=15mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>LTE band 4</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.16</u>

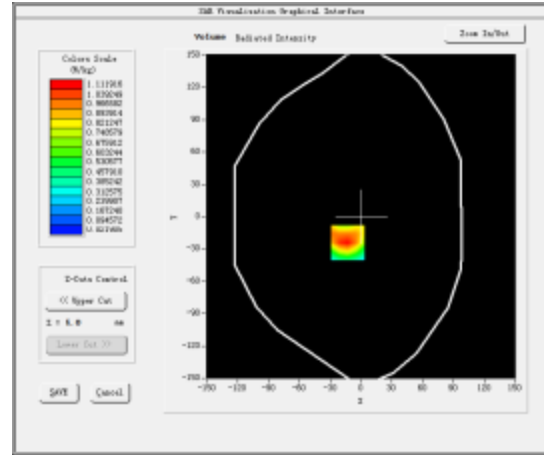
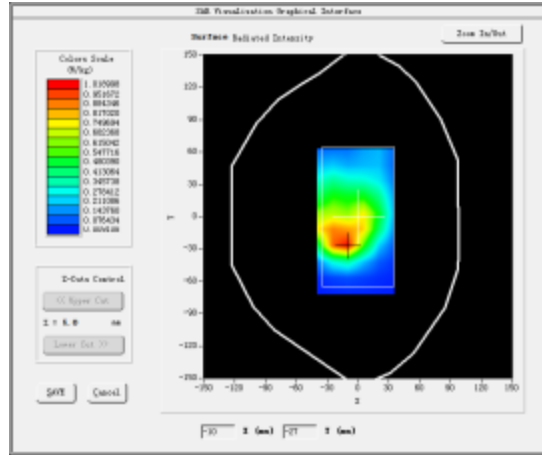
### **B. SAR Measurement Results**

Middle Band SAR (Channel 20175):

<b>Frequency (MHz)</b>	1732.500000
<b>Relative permittivity (real part)</b>	53.302151
<b>Relative permittivity (imaginary part)</b>	15.274800
<b>Conductivity (S/m)</b>	1.470200
<b>Variation (%)</b>	-0.640000

## SURFACE SAR

## VOLUME SAR

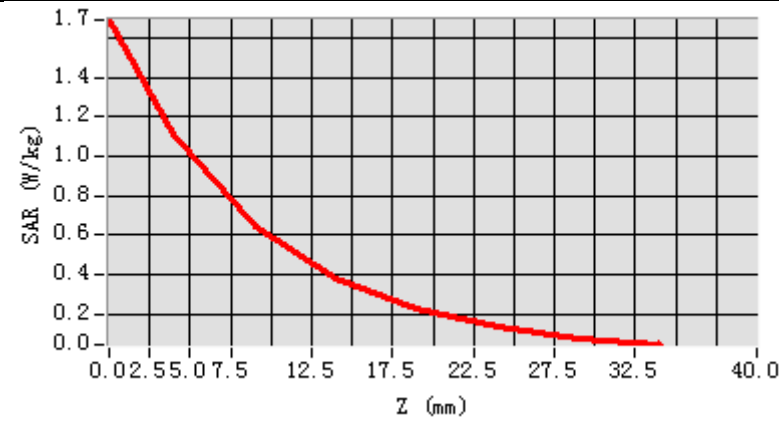


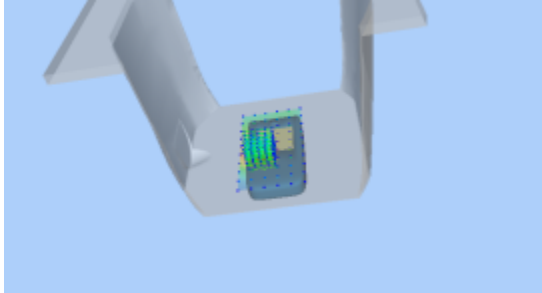
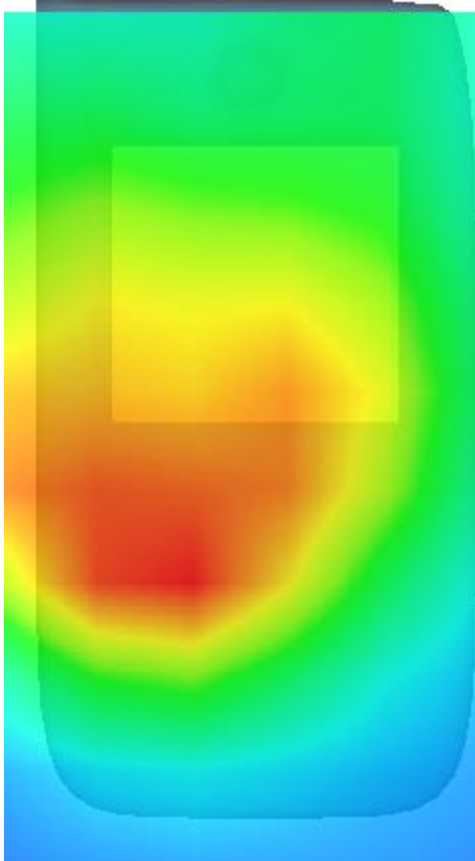
**Maximum location: X=-13.00, Y=-24.00**

**SAR Peak: 1.70 W/kg**

<b>SAR 10g (W/Kg)</b>	0.403248
<b>SAR 1g (W/Kg)</b>	0.782015

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.6914</b>	<b>1.1119</b>	<b>0.6462</b>	<b>0.3812</b>	<b>0.2264</b>	<b>0.1331</b>	<b>0.0788</b>



3D screen shot	Hot spot position
	



## MEASUREMENT 22

20M-1RB#0

Type: Phone measurement (Complete)

Date of measurement: 10/1/2017

Measurement duration: 9 minutes 41 seconds

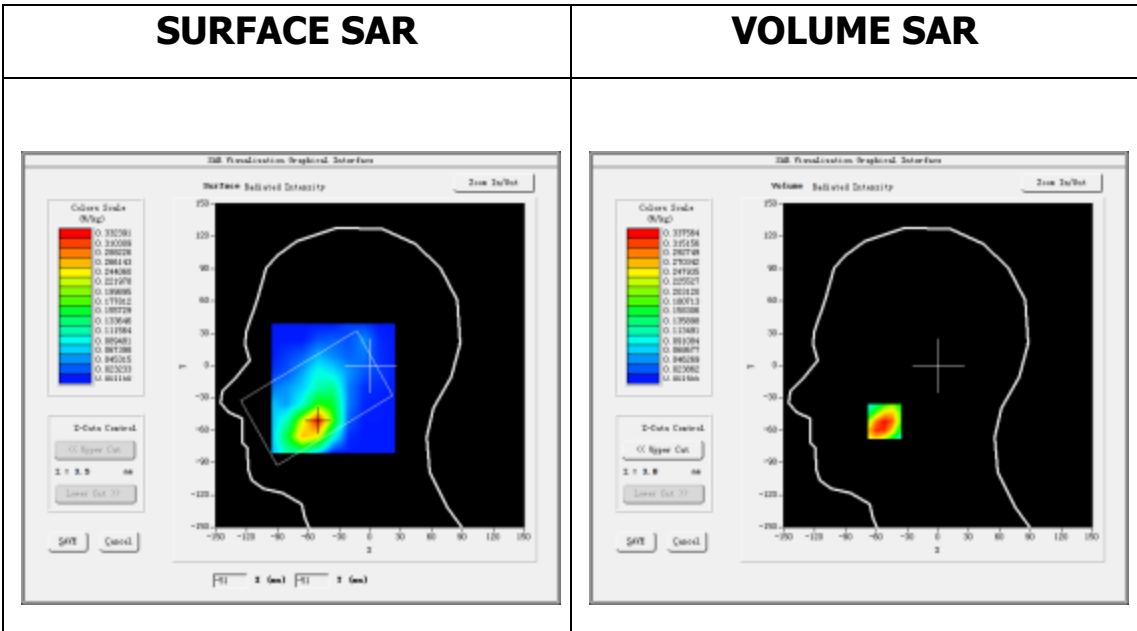
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=12mm dy=12mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Right head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>LTE band 7</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>3.92</u>

### **B. SAR Measurement Results**

Middle Band SAR (Channel 21100):

<b>Frequency (MHz)</b>	2535.000000
<b>Relative permittivity (real part)</b>	38.580998
<b>Relative permittivity (imaginary part)</b>	13.688100
<b>Conductivity (S/m)</b>	1.927741
<b>Variation (%)</b>	-2.720000

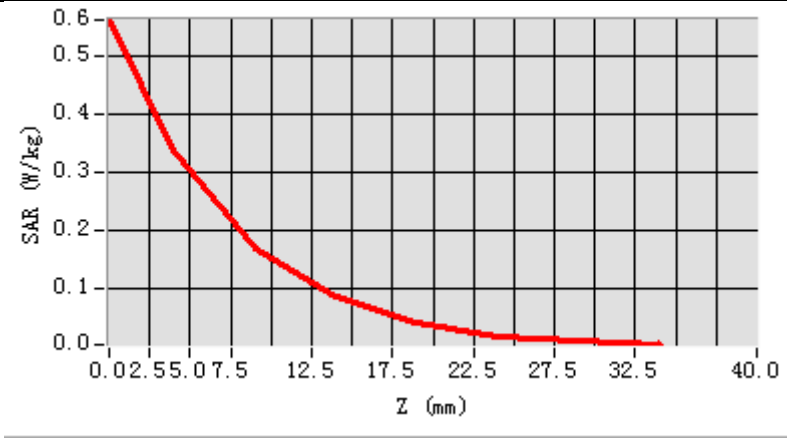


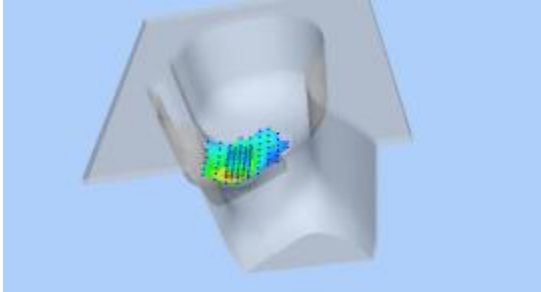
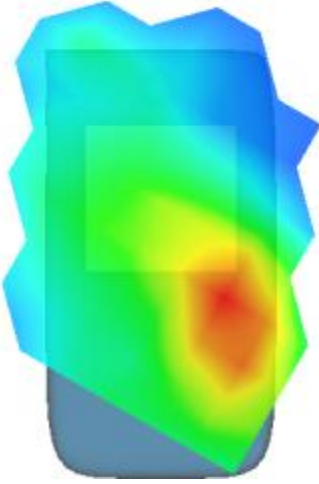
**Maximum location: X=-52.00, Y=-52.00**

**SAR Peak: 0.58 W/kg**

<b>SAR 10g (W/Kg)</b>	0.166058
<b>SAR 1g (W/Kg)</b>	0.333545

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.5601</b>	<b>0.3376</b>	<b>0.1691</b>	<b>0.0872</b>	<b>0.0429</b>	<b>0.0200</b>	<b>0.0106</b>



3D screen shot	Hot spot position
 <p>A 3D rendering of a human head model. A localized area of high SAR is shown in the center of the head, represented by a cluster of small colored spheres (red, yellow, green, blue) indicating the spatial distribution of the field.</p>	 <p>A 3D visualization of the hot spot position. The head model is shown with a color-coded surface representing SAR intensity. The highest intensity (red) is concentrated in the center of the head, with intensity decreasing as it moves away from the center (yellow, green, blue).</p>

## MEASUREMENT 23

Towards-phantom-20M-1RB#0-middle

Type: Phone measurement (Complete)

Date of measurement: 10/1/2017

Measurement duration: 10 minutes 55 seconds

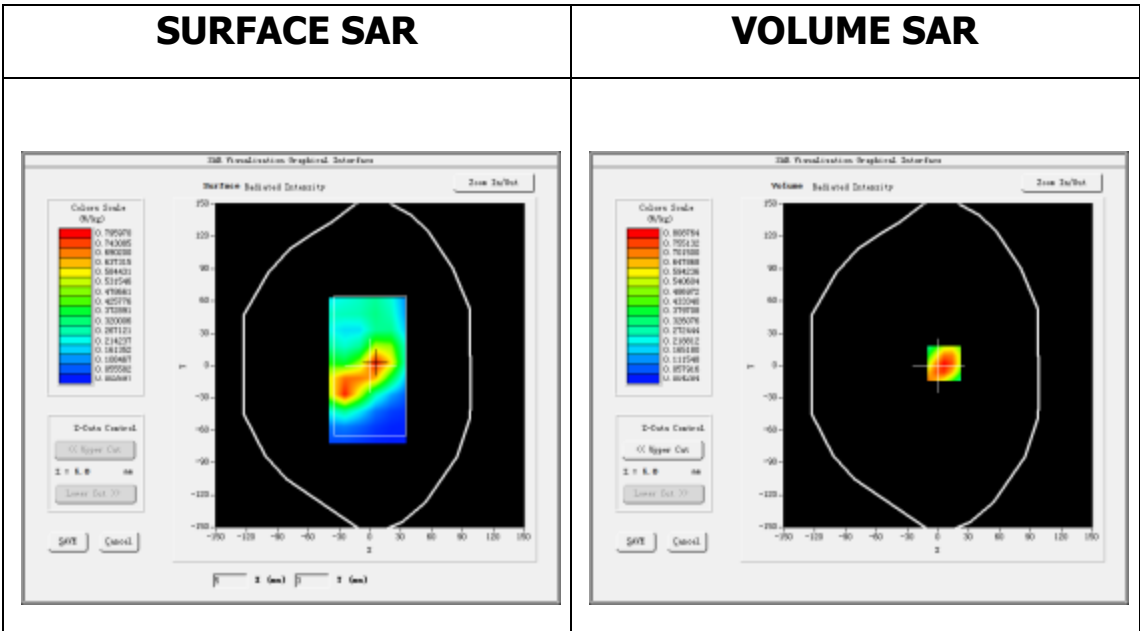
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=12mm dy=12mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>LTE band 7</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.07</u>

### **B. SAR Measurement Results**

Middle Band SAR (Channel 21100):

<b>Frequency (MHz)</b>	2535.000000
<b>Relative permittivity (real part)</b>	51.951601
<b>Relative permittivity (imaginary part)</b>	14.458500
<b>Conductivity (S/m)</b>	2.056239
<b>Variation (%)</b>	-0.530000

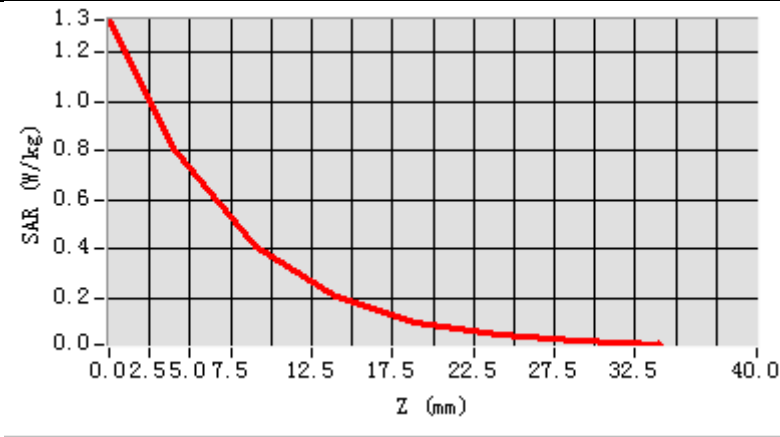


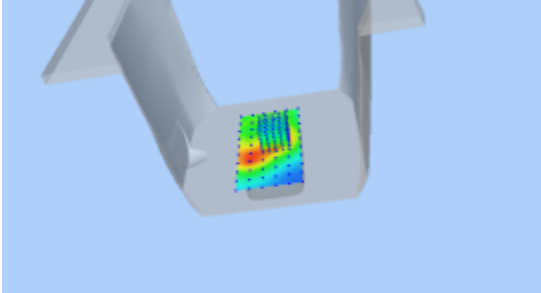
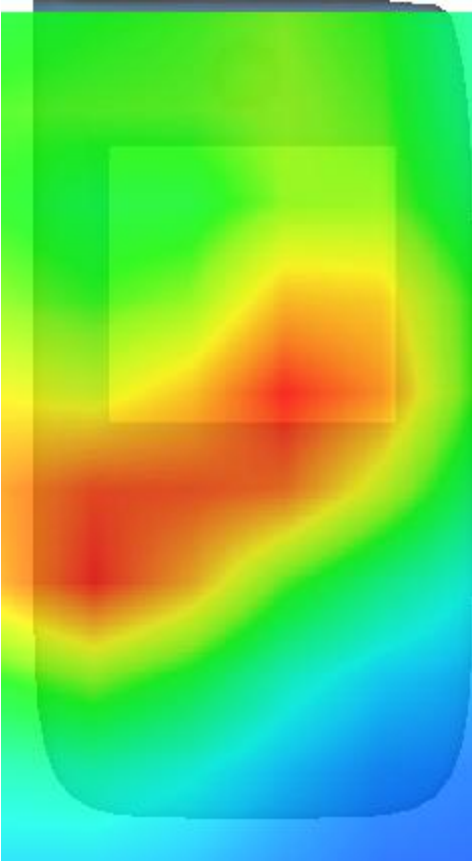
**Maximum location: X=6.00, Y=2.00**

**SAR Peak: 1.34 W/kg**

<b>SAR 10g (W/Kg)</b>	0.400744
<b>SAR 1g (W/Kg)</b>	0.678759

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.3310</b>	<b>0.8088</b>	<b>0.4095</b>	<b>0.2056</b>	<b>0.0994</b>	<b>0.0483</b>	<b>0.0230</b>



3D screen shot	Hot spot position
	

## MEASUREMENT 24

Front-side-20M-50RB#0-middle

Type: Phone measurement (Complete)

Date of measurement: 10/1/2017

Measurement duration: 10 minutes 46 seconds

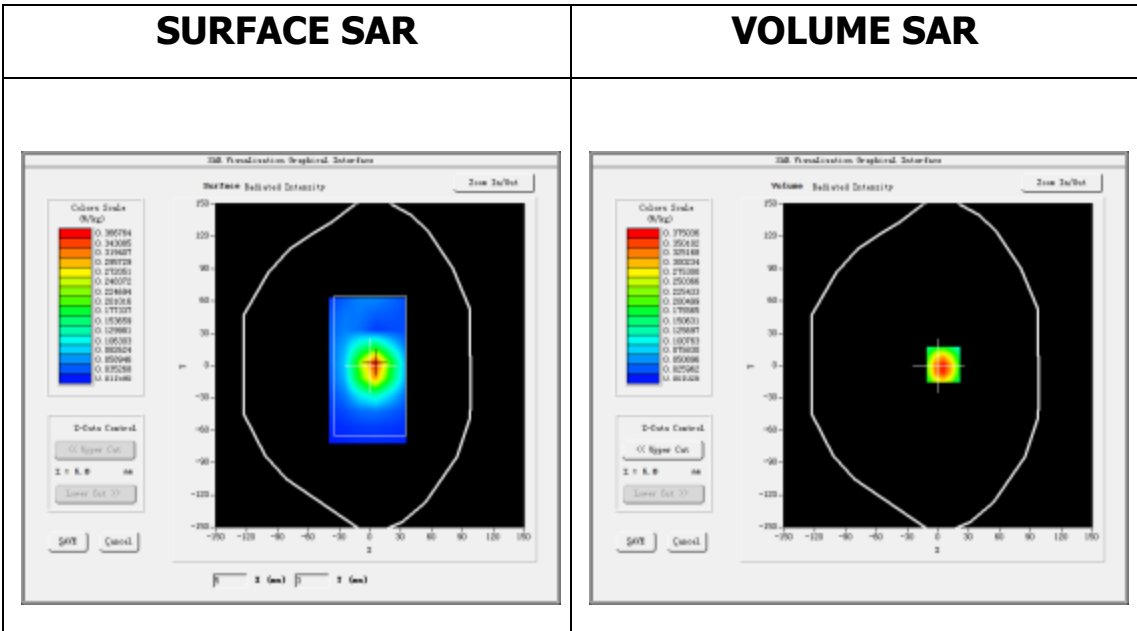
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=12mm dy=12mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>LTE band 7</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.07</u>

### **B. SAR Measurement Results**

Middle Band SAR (Channel 21100):

<b>Frequency (MHz)</b>	2535.000000
<b>Relative permittivity (real part)</b>	51.951601
<b>Relative permittivity (imaginary part)</b>	14.458500
<b>Conductivity (S/m)</b>	2.056239
<b>Variation (%)</b>	-0.700000



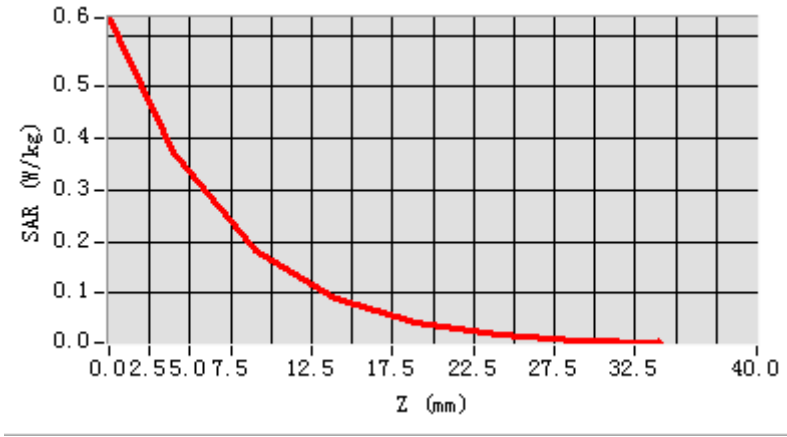
**Maximum location: X=5.00, Y=1.00**

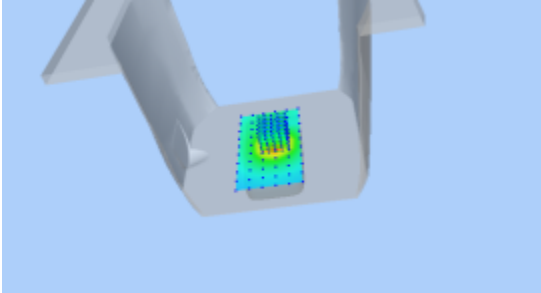
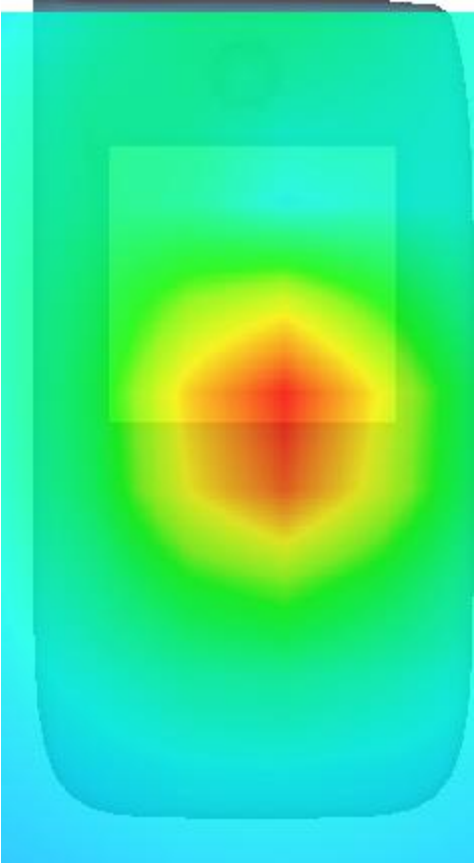
**SAR Peak: 0.64 W/kg**

<b>SAR 10g (W/Kg)</b>	0.118253
<b>SAR 1g (W/Kg)</b>	0.741188



<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.6341</b>	<b>0.3750</b>	<b>0.1831</b>	<b>0.0900</b>	<b>0.0438</b>	<b>0.0210</b>	<b>0.0097</b>



3D screen shot	Hot spot position
	

## MEASUREMENT 25

Type: Phone measurement (Complete)

Date of measurement: 9/1/2017

Measurement duration: 10 minutes 8 seconds

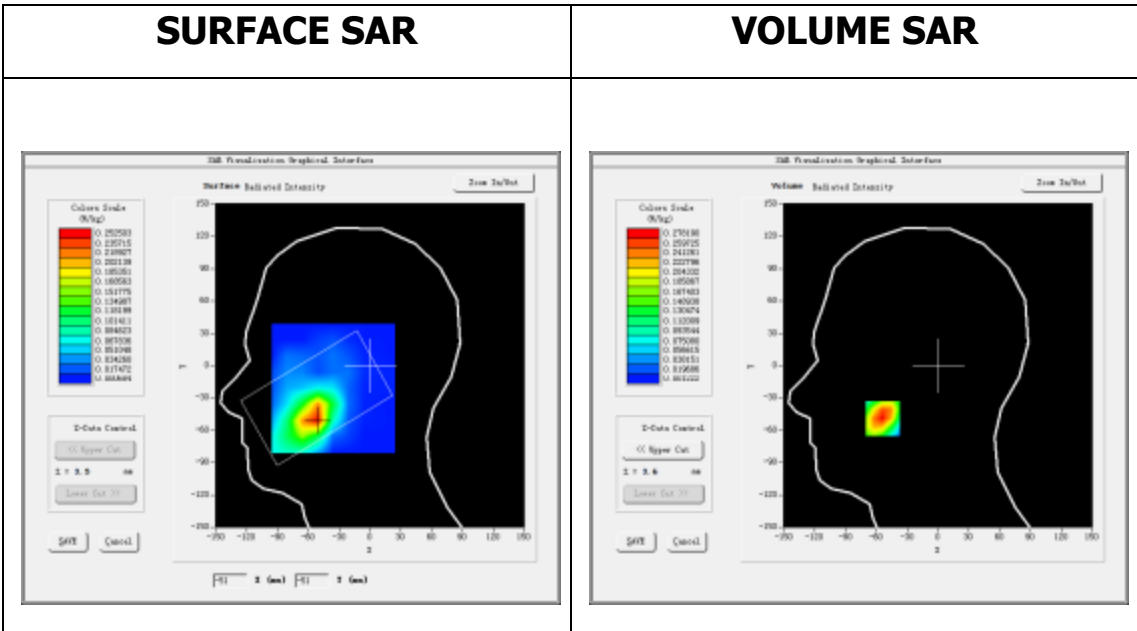
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=12mm dy=12mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Right head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>IEEE 802.11b ISM</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.00</u>

### **B. SAR Measurement Results**

Middle Band SAR (Channel 6):

<b>Frequency (MHz)</b>	2437.000000
<b>Relative permittivity (real part)</b>	39.248100
<b>Relative permittivity (imaginary part)</b>	13.379800
<b>Conductivity (S/m)</b>	1.775193
<b>Variation (%)</b>	2.080000

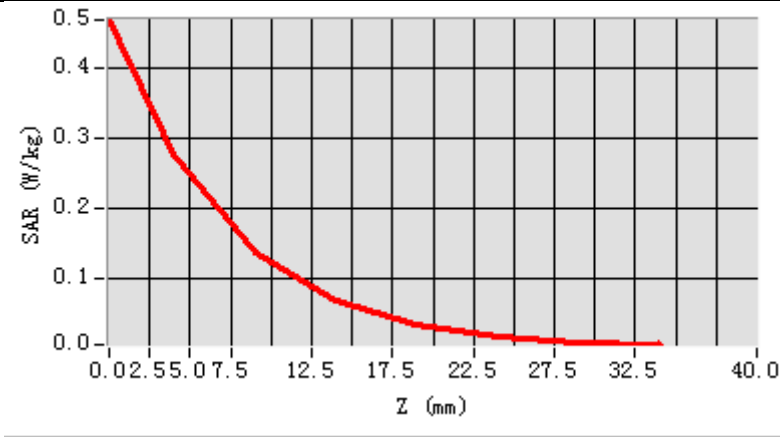


**Maximum location: X=-54.00, Y=-49.00**

**SAR Peak: 0.47 W/kg**

<b>SAR 10g (W/Kg)</b>	0.130840
<b>SAR 1g (W/Kg)</b>	0.268902

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.4697</b>	<b>0.2782</b>	<b>0.1360</b>	<b>0.0669</b>	<b>0.0327</b>	<b>0.0166</b>	<b>0.0082</b>



3D screen shot	Hot spot position
<p>A 3D rendering of a hand holding a mobile phone. The phone is shown in a cutaway view, revealing internal components. A small, multi-colored (rainbow) hot spot is visible on the phone's surface, indicating the location of maximum SAR exposure.</p>	<p>A 3D visualization of the hot spot position. It shows a color gradient from blue (low SAR) to red (high SAR). The highest SAR region (red) is concentrated in the center of the phone's surface, corresponding to the hot spot location shown in the 3D screen shot.</p>

## MEASUREMENT 26

Towards-ground-middle

Type: Phone measurement (Complete)

Date of measurement: 9/1/2017

Measurement duration: 10 minutes 38 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=12mm dy=12mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>IEEE 802.11b ISM</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.11</u>

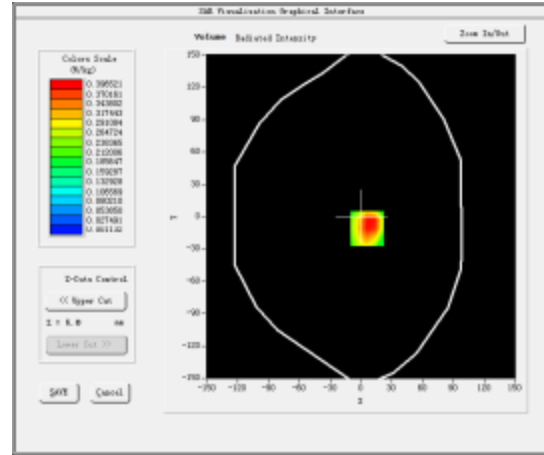
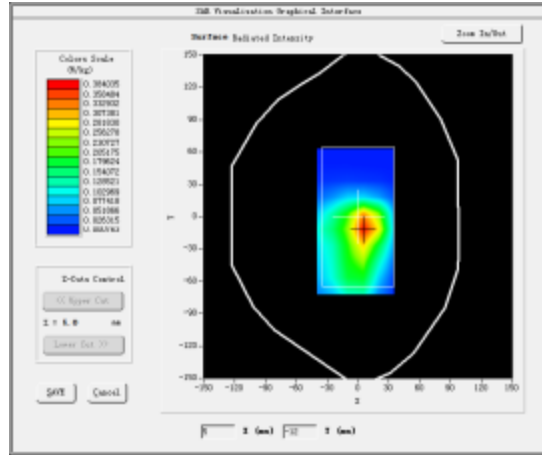
### **B. SAR Measurement Results**

Middle Band SAR (Channel 6):

<b>Frequency (MHz)</b>	2437.000000
<b>Relative permittivity (real part)</b>	52.756401
<b>Relative permittivity (imaginary part)</b>	14.076200
<b>Conductivity (S/m)</b>	1.919671
<b>Variation (%)</b>	0.210000

## SURFACE SAR

## VOLUME SAR

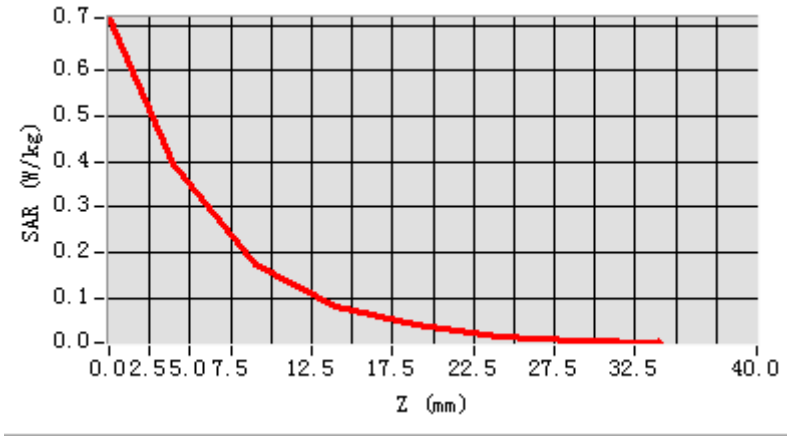


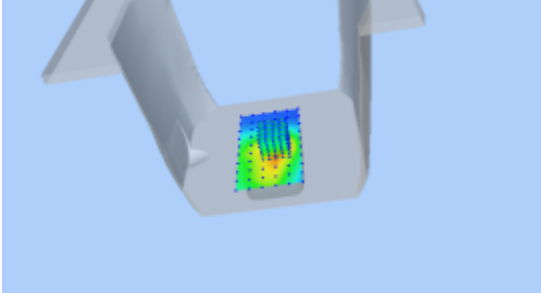
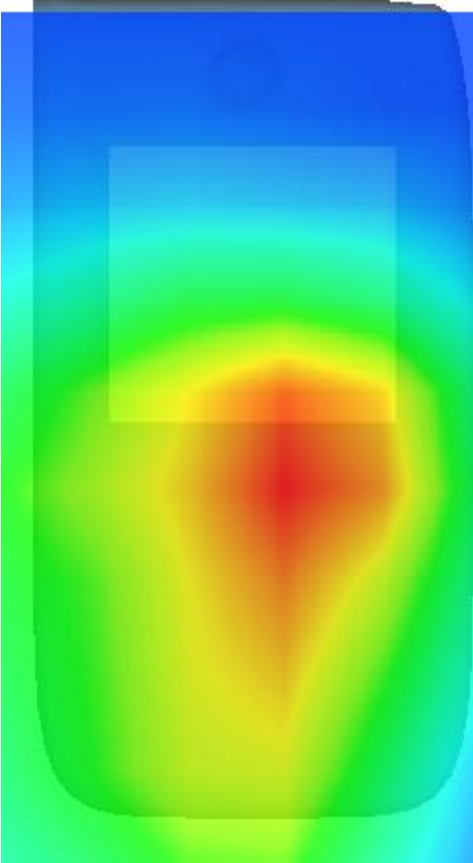
**Maximum location: X=6.00, Y=-11.00**

**SAR Peak: 0.75 W/kg**

<b>SAR 10g (W/Kg)</b>	0.191416
<b>SAR 1g (W/Kg)</b>	0.399234

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.7158</b>	<b>0.3965</b>	<b>0.1753</b>	<b>0.0810</b>	<b>0.0431</b>	<b>0.0161</b>	<b>0.0092</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
 <p>A 3D perspective view of a grey, L-shaped device. A small rectangular area on the device's surface is highlighted with a color-coded heatmap, showing a concentration of high SAR values (red and yellow) in the center of the highlighted area.</p>	 <p>A 2D heatmap showing the spatial distribution of SAR values. The color scale ranges from blue (low SAR) to red (high SAR). The highest SAR values (red) are concentrated in a central region, which corresponds to the hot spot position shown in the 3D view.</p>

## MEASUREMENT 27

Rear-side-middle

Type: Phone measurement (Complete)

Date of measurement: 9/1/2017

Measurement duration: 11 minutes 32 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=12mm dy=12mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>IEEE 802.11b ISM</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>
<b><u>Conversion factor</u></b>	<u>4.11</u>

### **B. SAR Measurement Results**

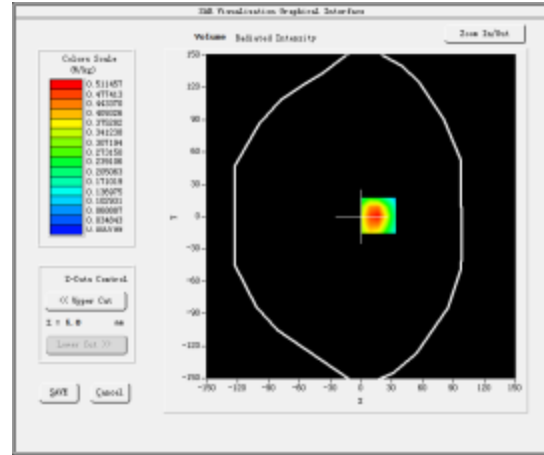
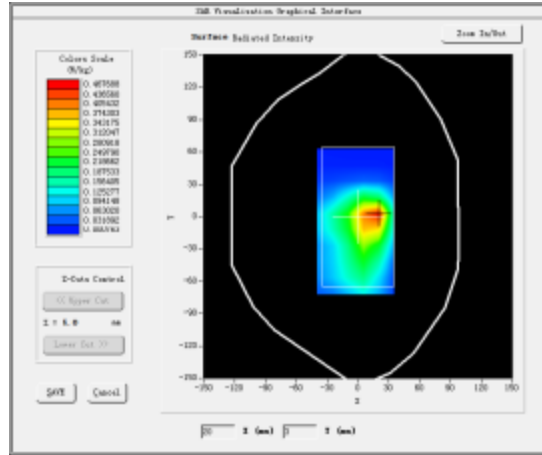
Middle Band SAR (Channel 6):

<b>Frequency (MHz)</b>	2437.000000
<b>Relative permittivity (real part)</b>	52.756401
<b>Relative permittivity (imaginary part)</b>	14.076200
<b>Conductivity (S/m)</b>	1.919671
<b>Variation (%)</b>	1.640000



## SURFACE SAR

## VOLUME SAR

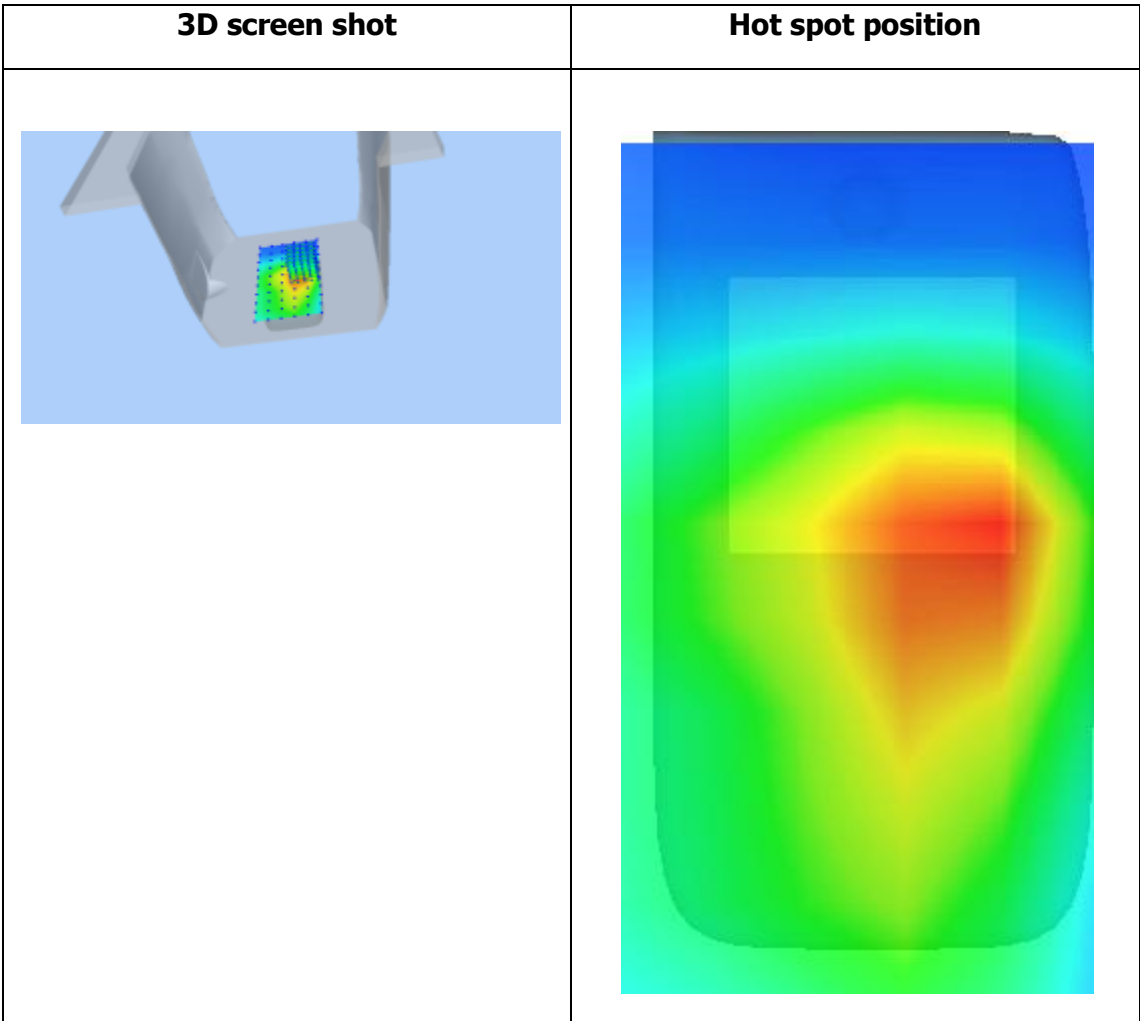
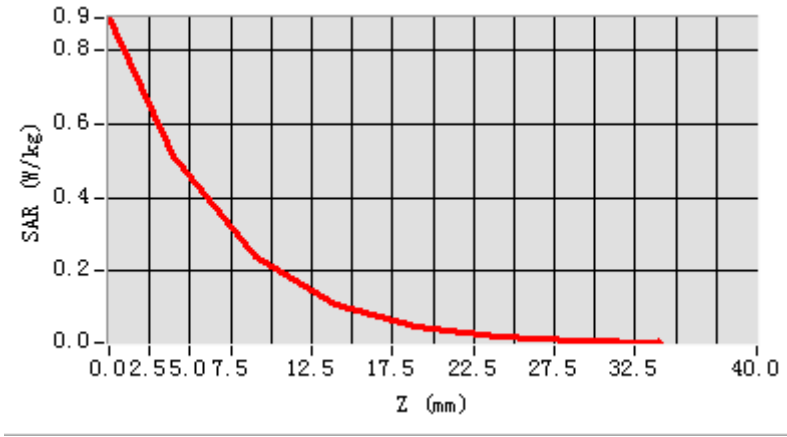


**Maximum location: X=17.00, Y=1.00**

**SAR Peak: 0.92 W/kg**

<b>SAR 10g (W/Kg)</b>	0.237431
<b>SAR 1g (W/Kg)</b>	0.496410

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.8894</b>	<b>0.5115</b>	<b>0.2367</b>	<b>0.1091</b>	<b>0.0494</b>	<b>0.0218</b>	<b>0.0094</b>



## MEASUREMENT 28

Type: Phone measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 8 minutes 48 seconds

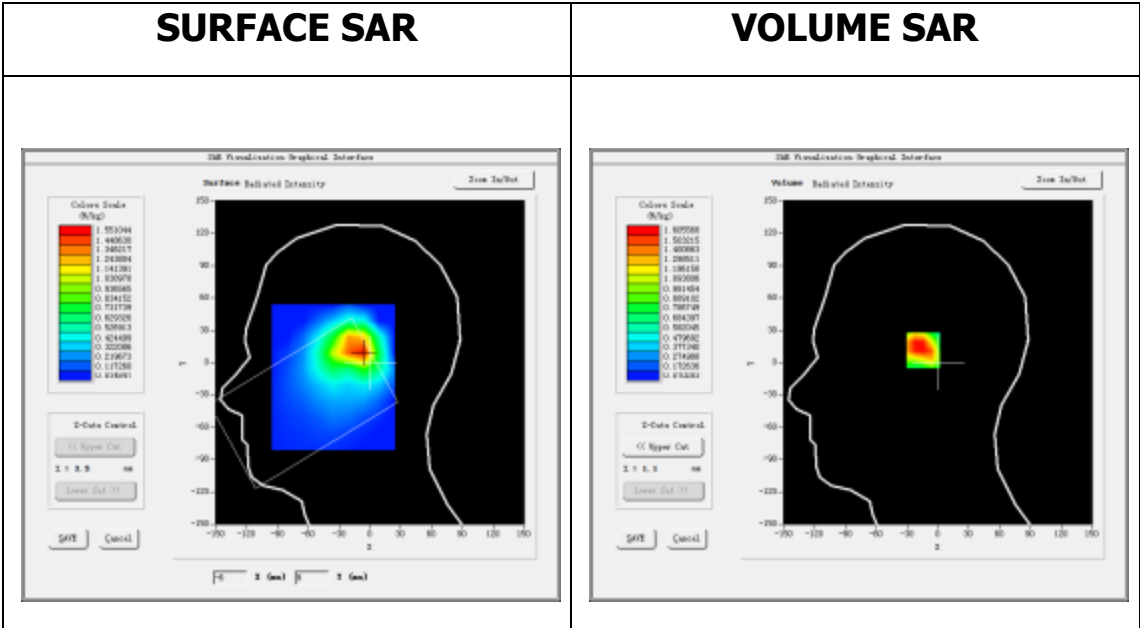
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Left head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>IEEE 802.11a U-NII-2A</u>
<b><u>Channels</u></b>	<u>High</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>

### **B. SAR Measurement Results**

High Band SAR (Channel 64):

<b>Frequency (MHz)</b>	5320.000000
<b>Relative permittivity (real part)</b>	35.539701
<b>Relative permittivity (imaginary part)</b>	16.548572
<b>Conductivity (S/m)</b>	4.835210
<b>Variation (%)</b>	0.350000

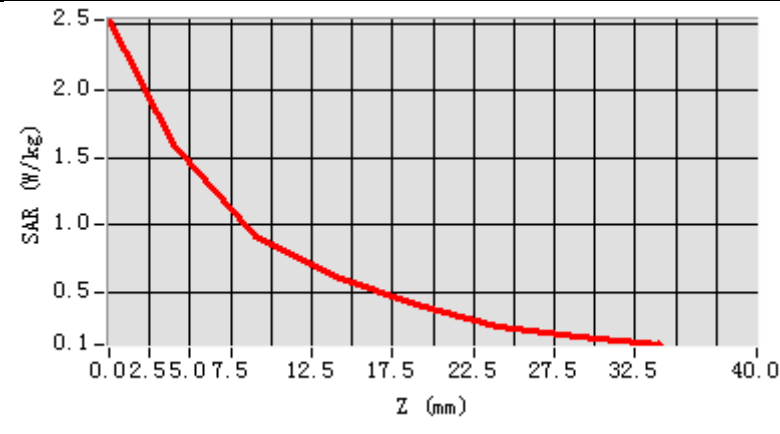


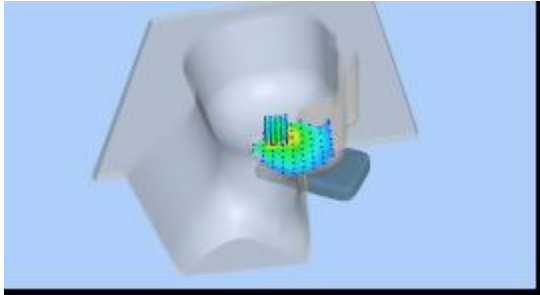
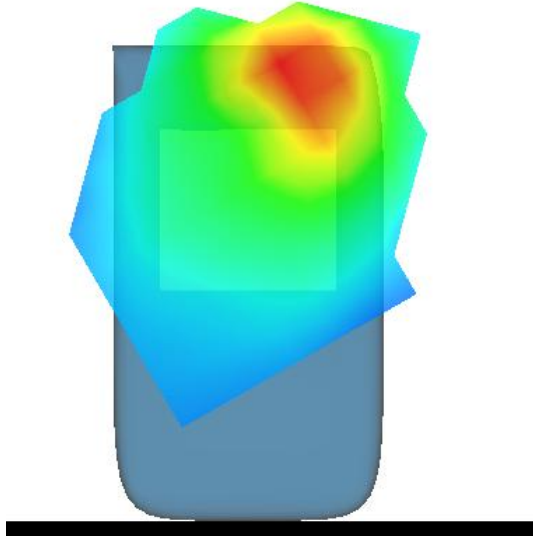
**Maximum location: X=-11.00, Y=12.00**

**SAR Peak: 2.66 W/kg**

<b>SAR 10g (W/Kg)</b>	0.0711964
<b>SAR 1g (W/Kg)</b>	0.147296

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>2.5249</b>	<b>1.6056</b>	<b>0.9199</b>	<b>0.6251</b>	<b>0.4122</b>	<b>0.2435</b>	<b>0.1769</b>



3D screen shot	Hot spot position
	

## MEASUREMENT 29

Type: Phone measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 9 minutes 35 seconds

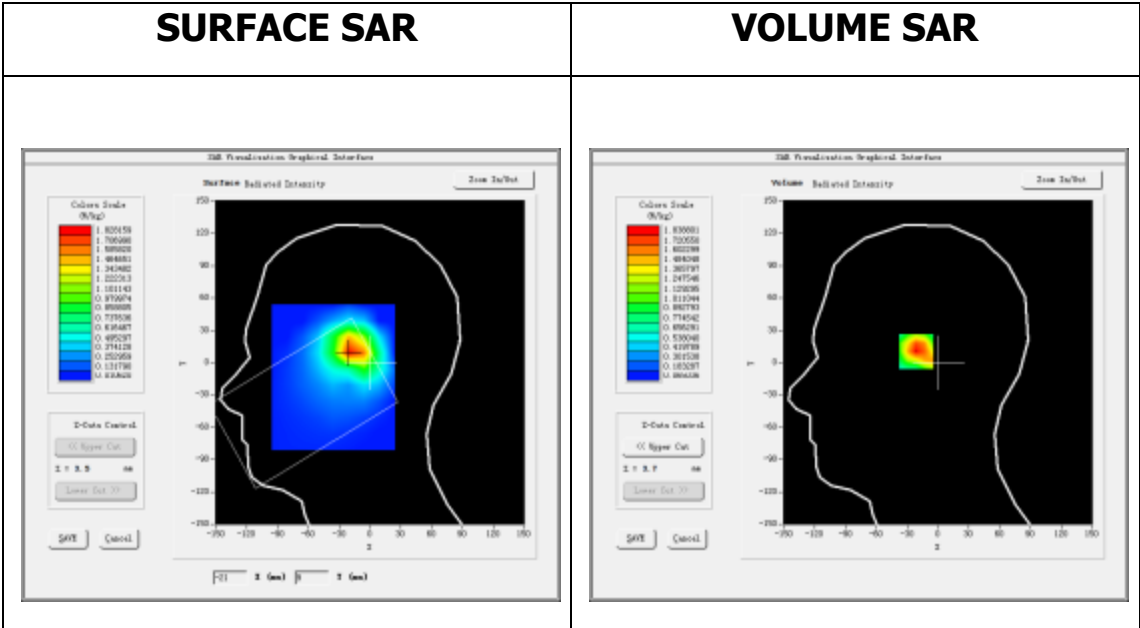
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Left head</u>
<b><u>Device Position</u></b>	<u>Cheek</u>
<b><u>Band</u></b>	<u>IEEE 802.11a U-NII-3</u>
<b><u>Channels</u></b>	<u>High</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>

### **B. SAR Measurement Results**

High Band SAR (Channel 165):

<b>Frequency (MHz)</b>	5825.000000
<b>Relative permittivity (real part)</b>	34.635521
<b>Relative permittivity (imaginary part)</b>	16.245435
<b>Conductivity (S/m)</b>	5.161300
<b>Variation (%)</b>	0.000000

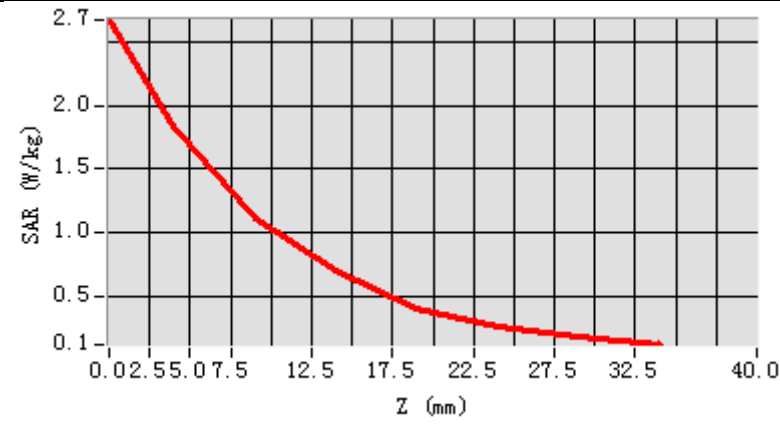


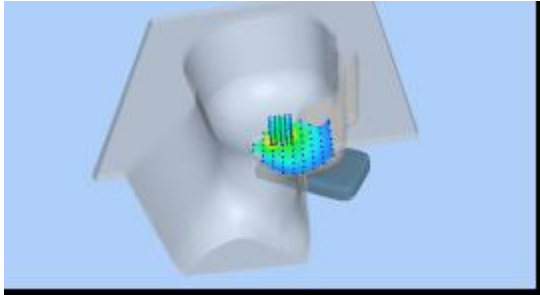
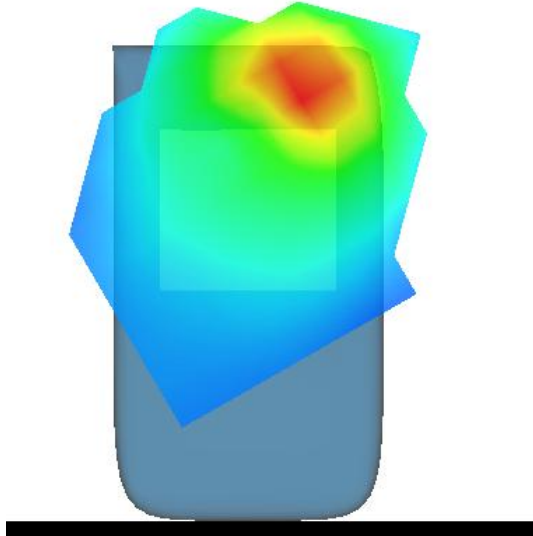
**Maximum location: X=-19.00, Y=12.00**

**SAR Peak: 2.71 W/kg**

<b>SAR 10g (W/Kg)</b>	0.081018
<b>SAR 1g (W/Kg)</b>	0.125455

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>2.6699</b>	<b>1.8388</b>	<b>1.1141</b>	<b>0.6988</b>	<b>0.4126</b>	<b>0.2673</b>	<b>0.1890</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
 <p>A 3D rendering of a human head model. A small, localized area on the top of the head is highlighted with a color gradient from blue to red, indicating the position of the maximum SAR (hot spot).</p>	 <p>A 3D rendering of the same head model, but with a much larger area on the top of the head highlighted with a color gradient from blue to red, representing the hot spot position.</p>



## MEASUREMENT 30

Towards-Ground-High

Type: Phone measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 10 minutes 13 seconds

### **A. Experimental conditions.**

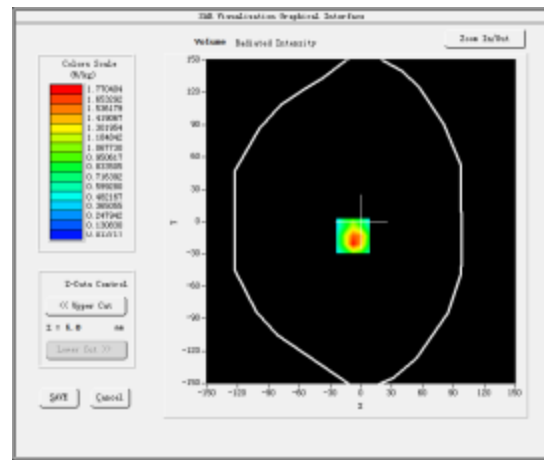
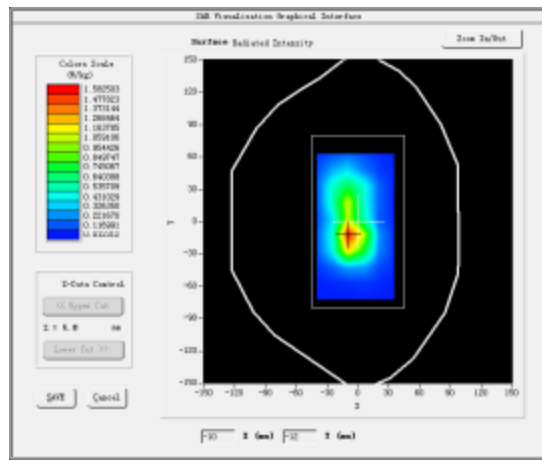
<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>8x8x7,dx=4mm dy=4mm dz=2mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>IEEE 802.11a U-NII-2A</u>
<b><u>Channels</u></b>	<u>High</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>

### **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	5320.000000
<b>Relative permittivity (real part)</b>	48.328526
<b>Relative permittivity (imaginary part)</b>	17.830894
<b>Conductivity (S/m)</b>	5.274532
<b>Variation (%)</b>	1.250000

## SURFACE SAR

## VOLUME SAR

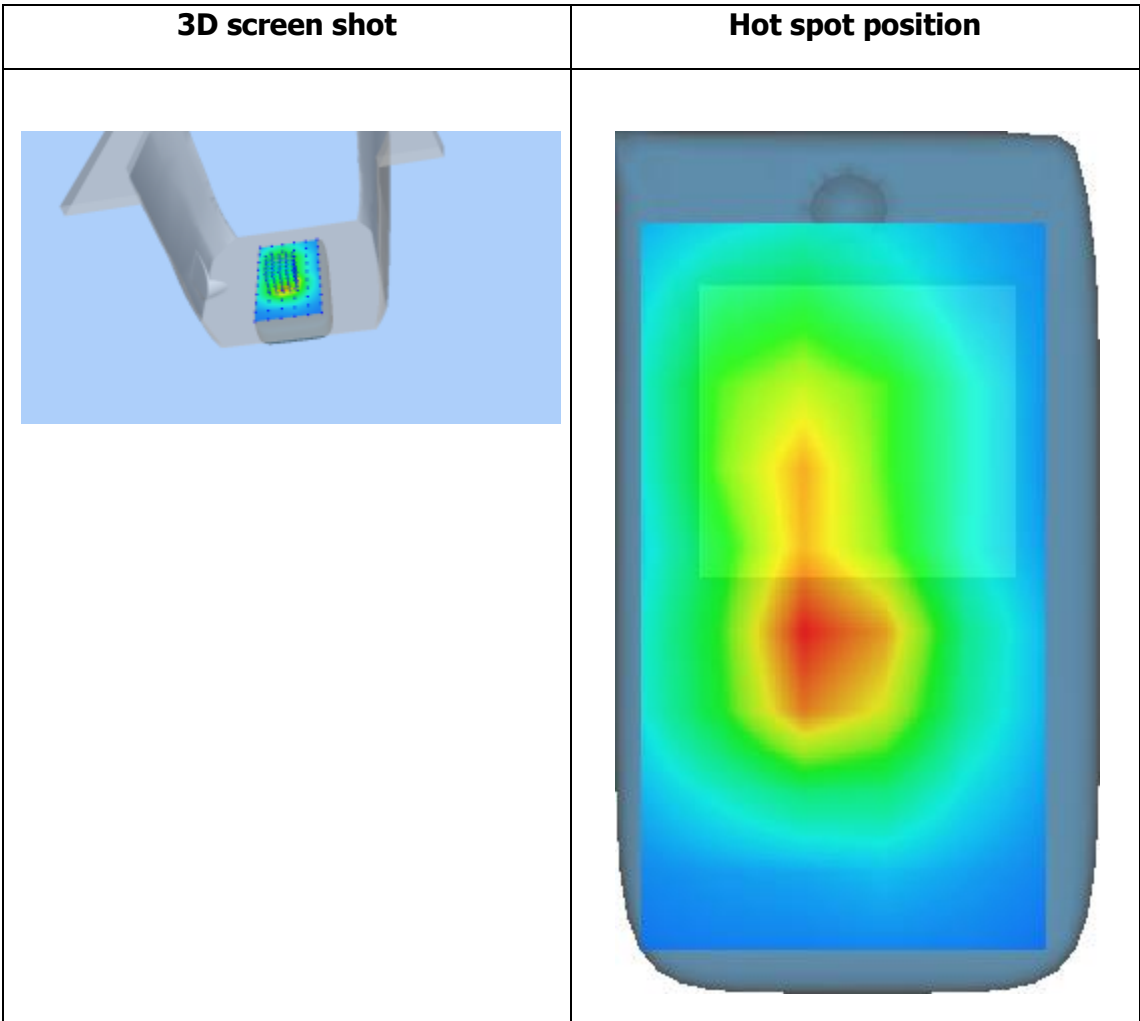
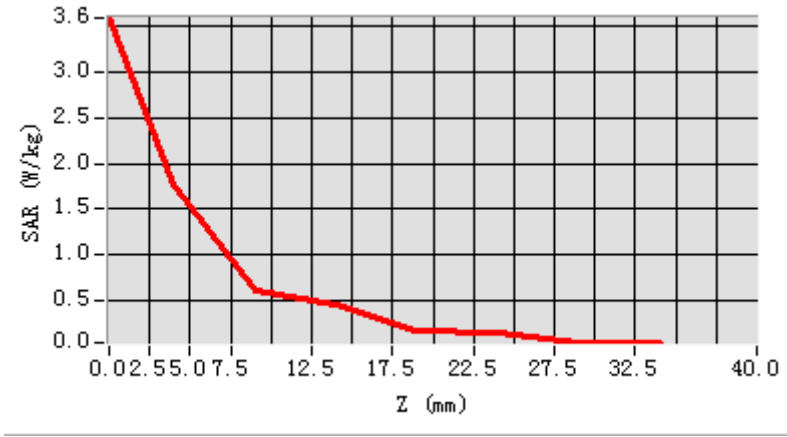


**Maximum location: X=-8.00, Y=-13.00**

**SAR Peak: 3.19 W/kg**

<b>SAR 10g (W/Kg)</b>	0.132298
<b>SAR 1g (W/Kg)</b>	0.181332

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>3.5872</b>	<b>1.7704</b>	<b>0.6223</b>	<b>0.4580</b>	<b>0.1851</b>	<b>0.1560</b>	<b>0.0566</b>



# MEASUREMENT 31

Towards-Phantom- High

Type: Phone measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 10 minutes 31 seconds

## **A. Experimental conditions.**

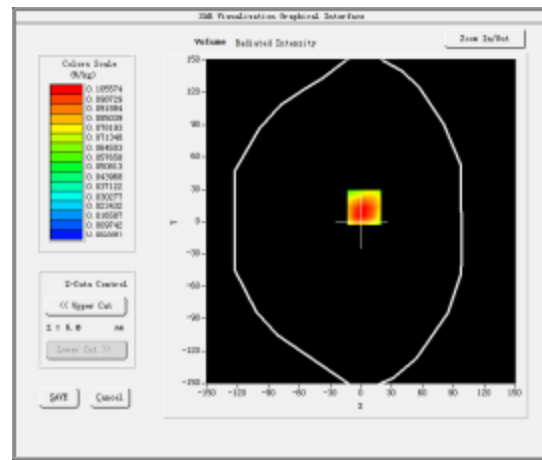
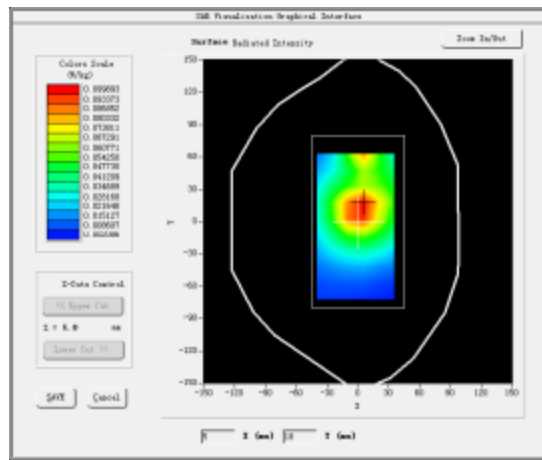
<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm</u> <u>dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>IEEE 802.11a U-NII-3</u>
<b><u>Channels</u></b>	<u>High</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>

## **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	5825.000000
<b>Relative permittivity (real part)</b>	48.235748
<b>Relative permittivity (imaginary part)</b>	19.060800
<b>Conductivity (S/m)</b>	6.173560
<b>Variation (%)</b>	0.820000

## SURFACE SAR

## VOLUME SAR

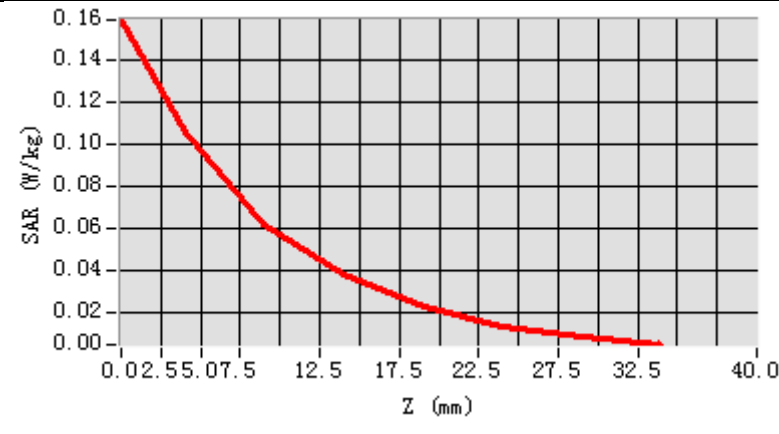


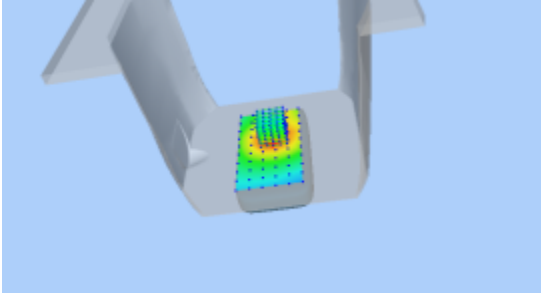
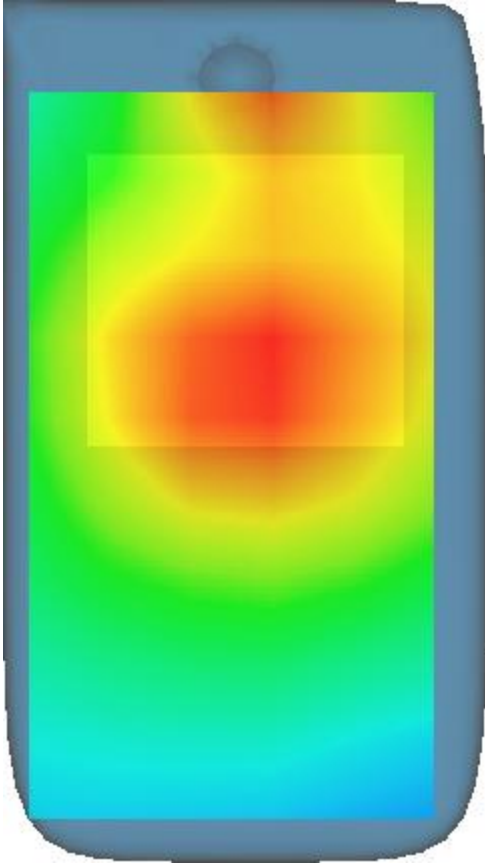
**Maximum location: X=3.00, Y=13.00**

**SAR Peak: 0.17 W/kg**

<b>SAR 10g (W/Kg)</b>	0.131298
<b>SAR 1g (W/Kg)</b>	0.135327

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>0.1592</b>	<b>0.1056</b>	<b>0.0621</b>	<b>0.0381</b>	<b>0.0226</b>	<b>0.0132</b>	<b>0.0079</b>



3D screen shot	Hot spot position
	

## MEASUREMENT 32

Front-side- Low

Type: Phone measurement (Complete)

Date of measurement: 17/1/2017

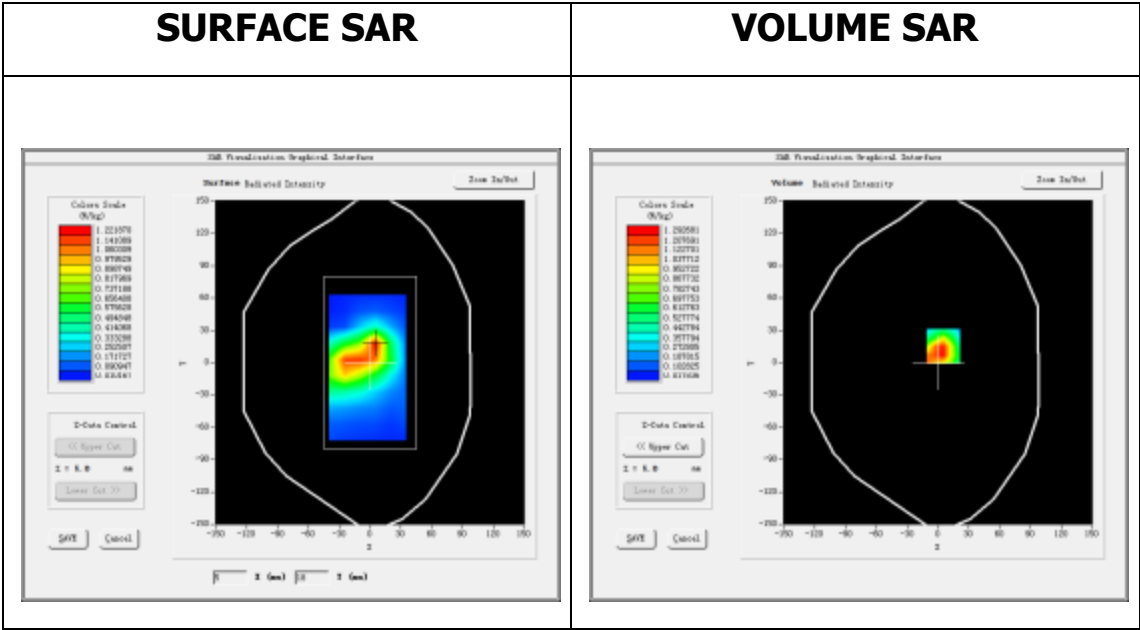
Measurement duration: 10 minutes 46 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm</u> <u>dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>IEEE 802.11a U-NII-1</u>
<b><u>Channels</u></b>	<u>Low</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>

### **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	5180.000000
<b>Relative permittivity (real part)</b>	49.961700
<b>Relative permittivity (imaginary part)</b>	18.019321
<b>Conductivity (S/m)</b>	5.195116
<b>Variation (%)</b>	0.630000



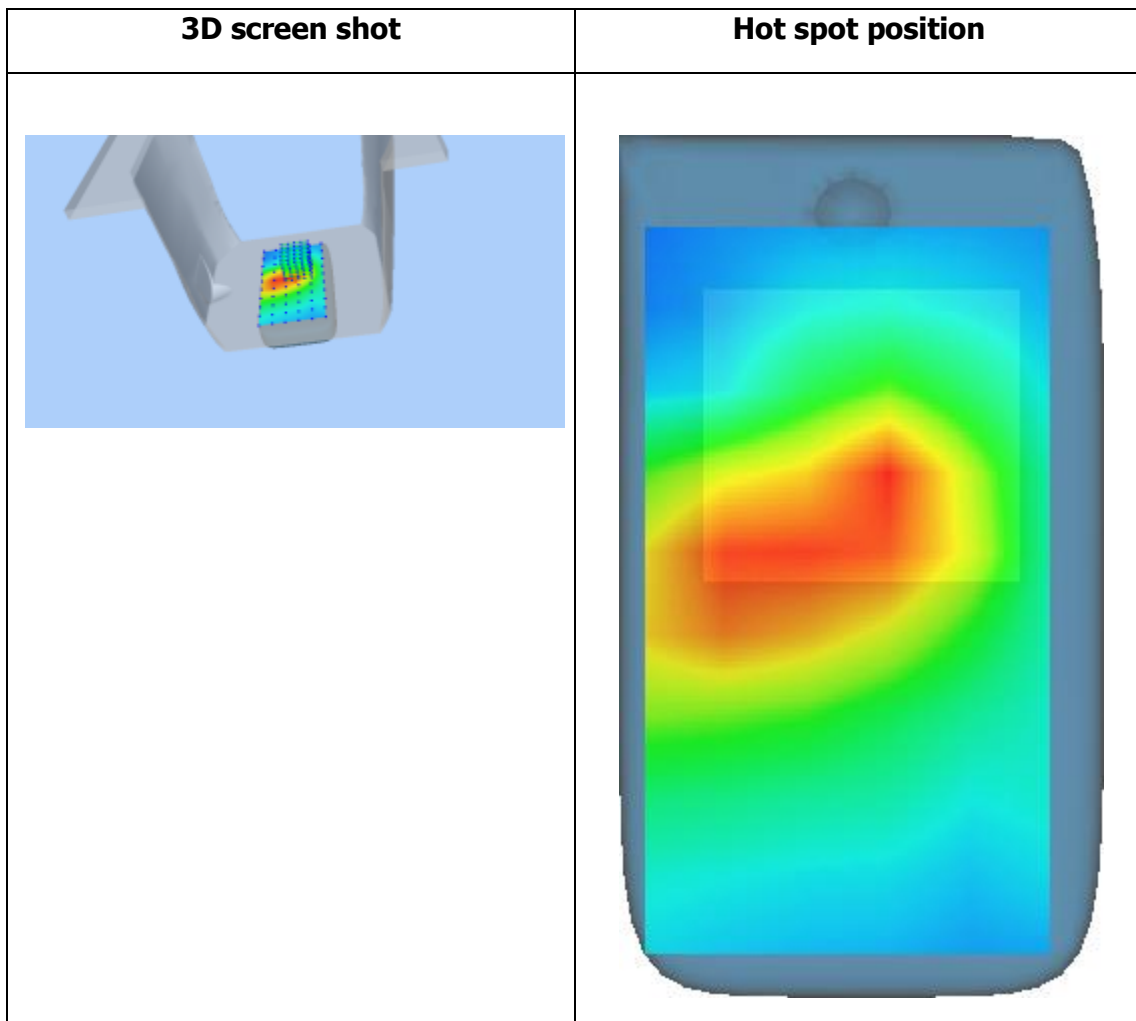
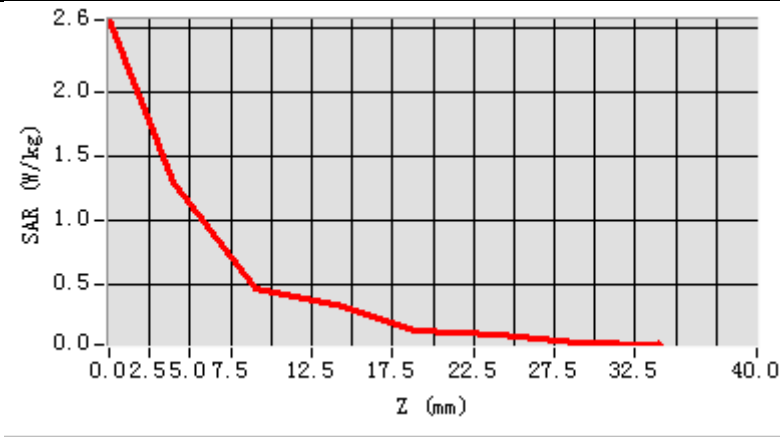
**Maximum location: X=5.00, Y=15.00**

**SAR Peak: 2.17 W/kg**

<b>SAR 10g (W/Kg)</b>	0.124335
<b>SAR 1g (W/Kg)</b>	0.171442



<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>2.5565</b>	<b>1.2927</b>	<b>0.4811</b>	<b>0.3526</b>	<b>0.1520</b>	<b>0.1133</b>	<b>0.0501</b>



## MEASUREMENT 33

### Front-side- High

Type: Phone measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 9 minutes 30 seconds

### **A. Experimental conditions.**

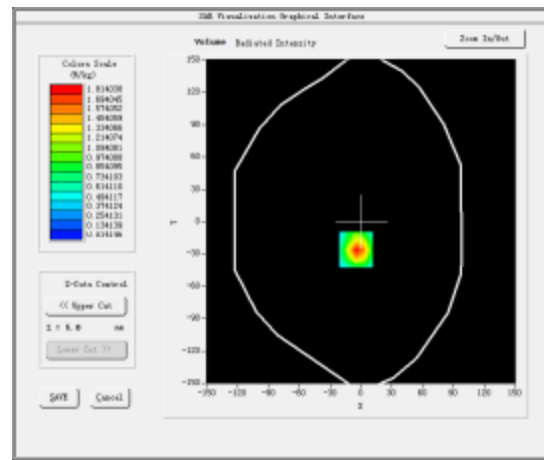
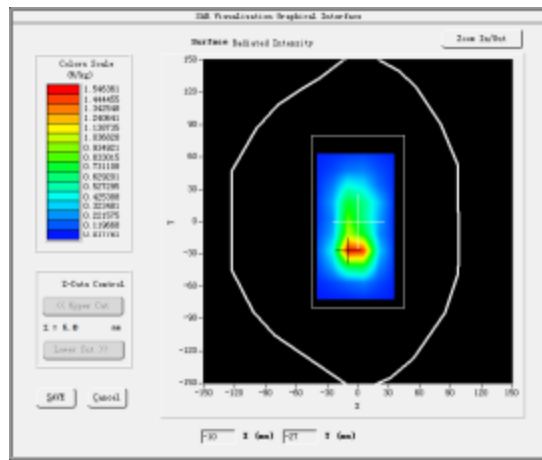
<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Body</u>
<b><u>Band</u></b>	<u>IEEE 802.11a U-NII-3</u>
<b><u>Channels</u></b>	<u>High</u>
<b><u>Signal</u></b>	<u>Duty cycle:1:1</u>

### **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	5825.000000
<b>Relative permittivity (real part)</b>	48.139400
<b>Relative permittivity (imaginary part)</b>	19.154900
<b>Conductivity (S/m)</b>	6.205808
<b>Variation (%)</b>	0.360000

## SURFACE SAR

## VOLUME SAR



**Maximum location: X=-5.00, Y=-26.00**

**SAR Peak: 2.98 W/kg**

<b>SAR 10g (W/Kg)</b>	0.152059
<b>SAR 1g (W/Kg)</b>	0.187274

<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>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>2.9759</b>	<b>1.8140</b>	<b>0.9340</b>	<b>0.5156</b>	<b>0.2681</b>	<b>0.1454</b>	<b>0.0814</b>

