



Annex B: Measurement Results

Project Name : X601-LTE

**Report Number:
FCC16083894A-6**

MEASUREMENT 23

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

Type: Phone measurement (Complete)

Date of measurement: 29/8/2016

Measurement duration: 10 minutes 14 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=12mm dy=12mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>LTE band 7</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.07</u>

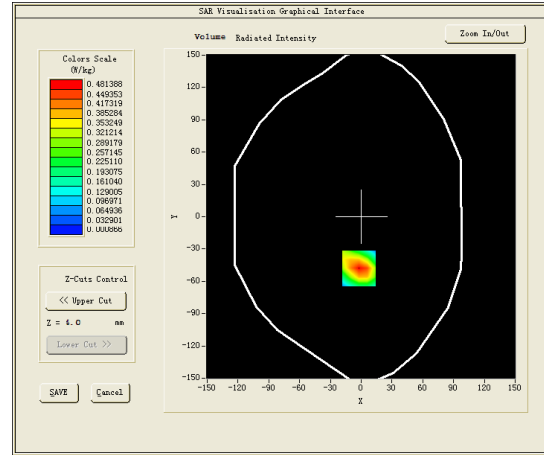
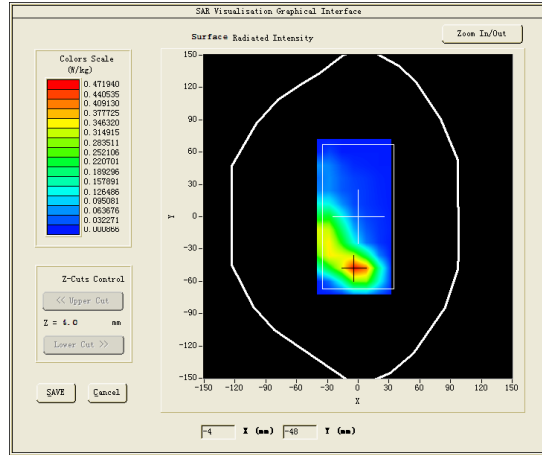
B. SAR Measurement Results

Middle Band SAR (Channel 21100):

Frequency (MHz)	2535.000000
Relative permittivity (real part)	52.643902
Relative permittivity (imaginary part)	14.644800
Conductivity (S/m)	2.062476
Variation (%)	-1.680000

SURFACE SAR

VOLUME SAR

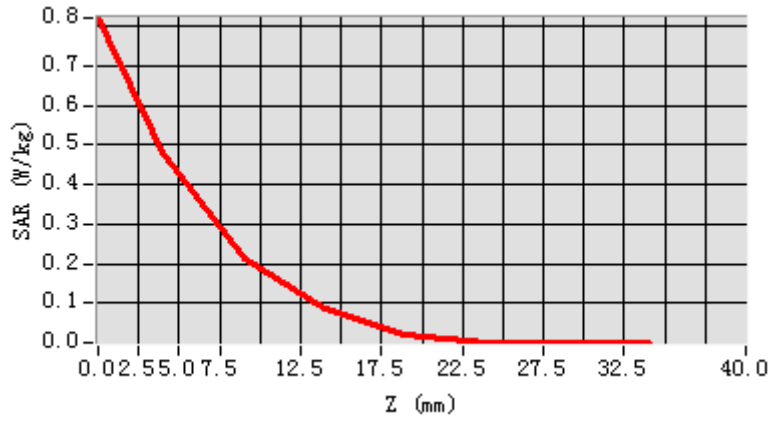


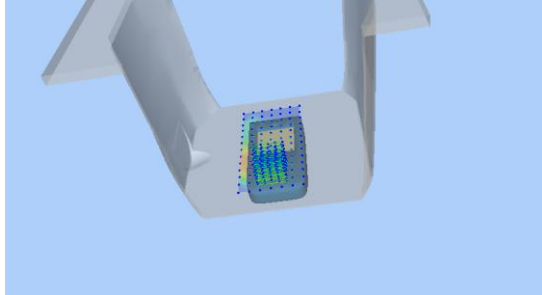
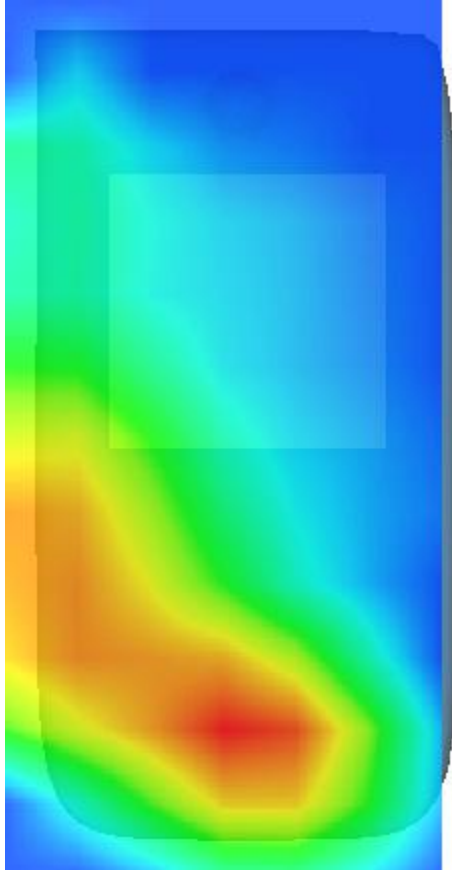
Maximum location: X=-2.00, Y=-48.00

SAR Peak: 0.88 W/kg

SAR 10g (W/Kg)	0.212433
SAR 1g (W/Kg)	0.478358

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.8212	0.4814	0.2160	0.0858	0.0200	0.0009	0.0009



3D screen shot	Hot spot position
	

MEASUREMENT 24

Front-side-20M-1%RB#0-middle

Type: Phone measurement (Complete)

Date of measurement: 29/8/2016

Measurement duration: 10 minutes 43 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=12mm dy=12mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>LTE band 7</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.07</u>

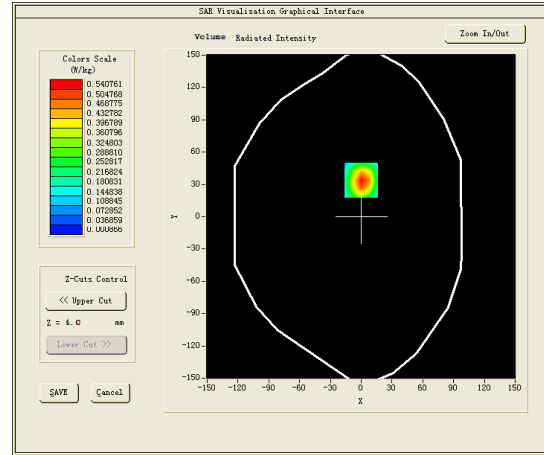
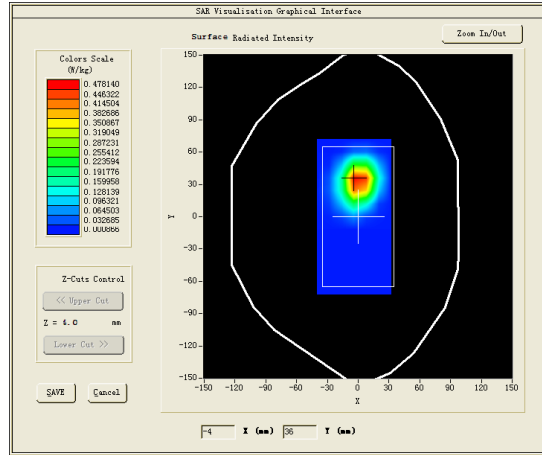
B. SAR Measurement Results

Middle Band SAR (Channel 21100):

Frequency (MHz)	2535.000000
Relative permittivity (real part)	52.643902
Relative permittivity (imaginary part)	14.644800
Conductivity (S/m)	2.062476
Variation (%)	1.910000

SURFACE SAR

VOLUME SAR

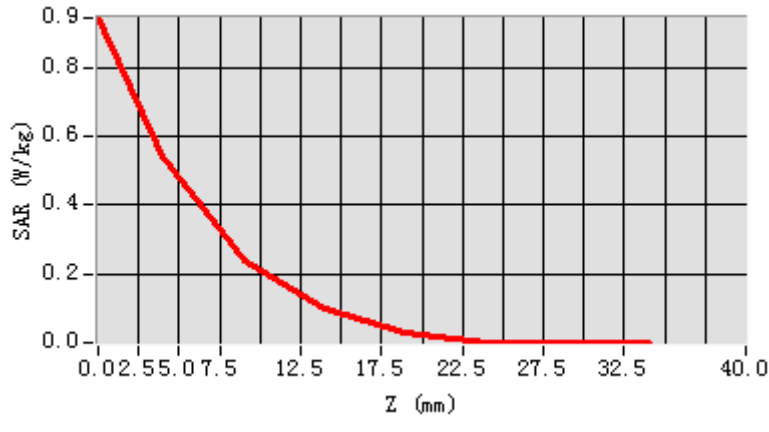


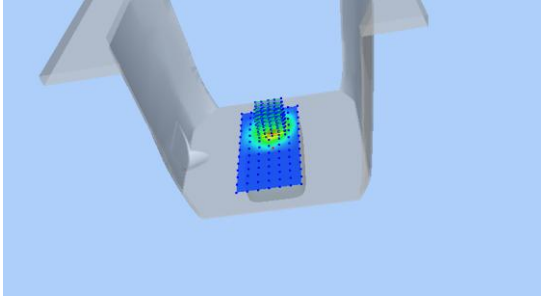
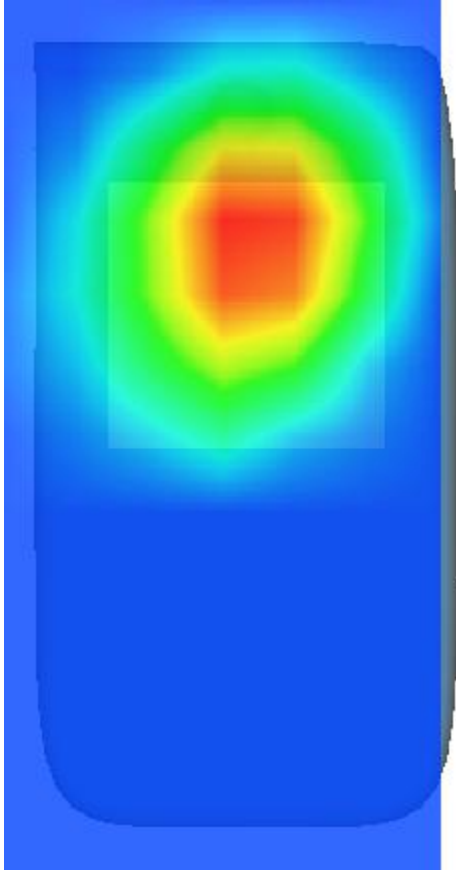
Maximum location: X=0.00, Y=34.00

SAR Peak: 1.01 W/kg

SAR 10g (W/Kg)	0.382157
SAR 1g (W/Kg)	0.434888

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.9425	0.5408	0.2384	0.0975	0.0292	0.0009	0.0009



3D screen shot	Hot spot position
	

MEASUREMENT 25

Type: Phone measurement (Complete)

Date of measurement: 20/8/2016

Measurement duration: 8 minutes 51 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=12mm dy=12mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<u>Phantom</u>	<u>Left head</u>
<u>Device Position</u>	<u>Tilt</u>
<u>Band</u>	<u>IEEE 802.11b ISM</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.b (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.00</u>

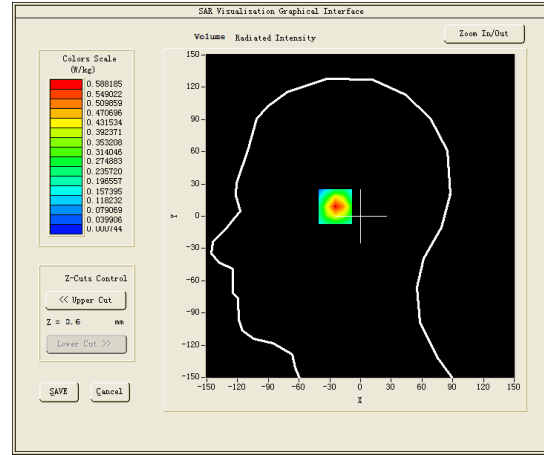
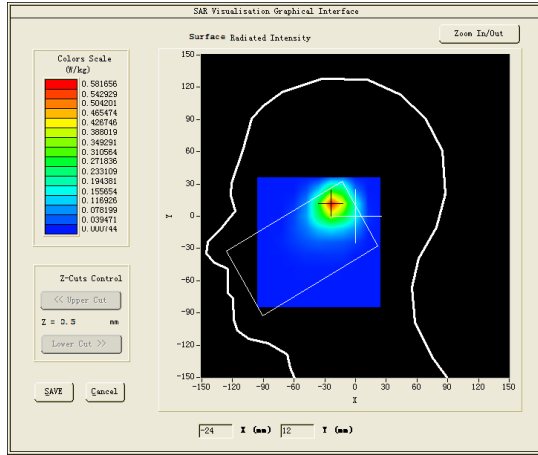
B. SAR Measurement Results

Middle Band SAR (Channel 6):

Frequency (MHz)	2437.000000
Relative permittivity (real part)	39.279701
Relative permittivity (imaginary part)	13.189900
Conductivity (S/m)	1.789430
Variation (%)	1.190000

SURFACE SAR

VOLUME SAR

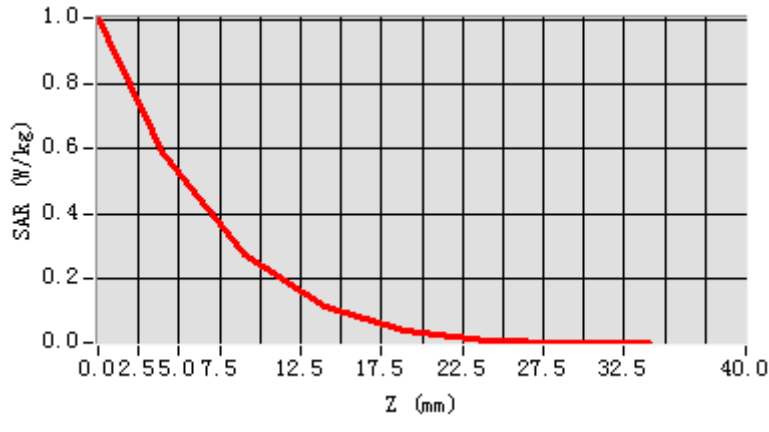


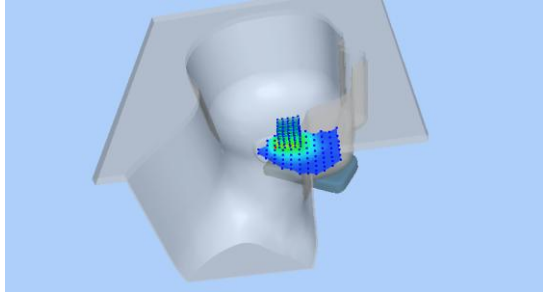
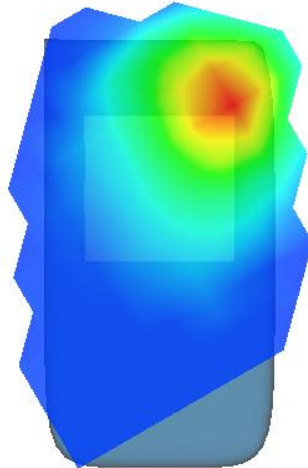
Maximum location: X=-23.00, Y=11.00

SAR Peak: 1.02 W/kg

SAR 10g (W/Kg)	0.236797
SAR 1g (W/Kg)	0.544650

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.0057	0.5882	0.2719	0.1101	0.0380	0.0081	0.0007



3D screen shot	Hot spot position
	

MEASUREMENT 26

Rear-side-middle

Type: Phone measurement (Complete)

Date of measurement: 20/8/2016

Measurement duration: 8 minutes 11 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=12mm dy=12mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11b ISM</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.b (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.11</u>

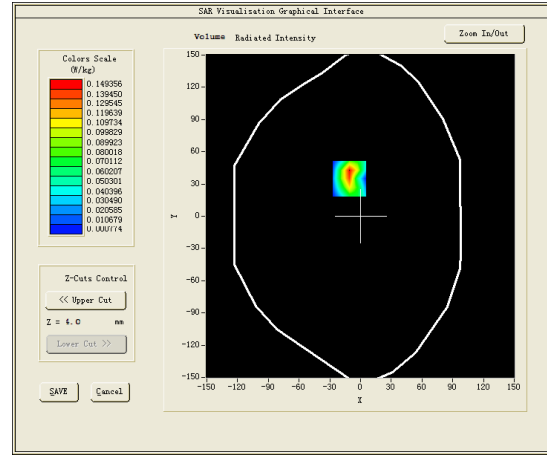
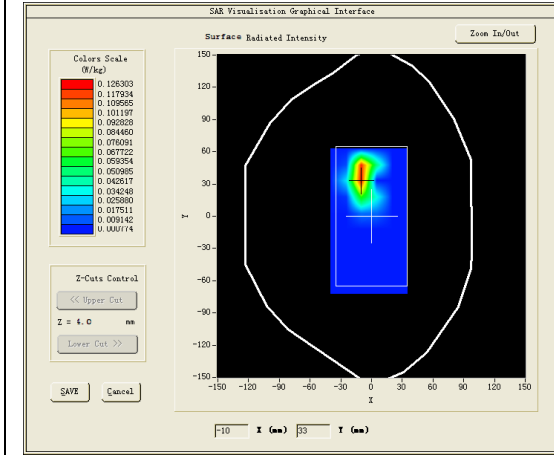
B. SAR Measurement Results

Middle Band SAR (Channel 6):

Frequency (MHz)	2437.000000
Relative permittivity (real part)	52.915798
Relative permittivity (imaginary part)	14.315100
Conductivity (S/m)	1.942082
Variation (%)	2.320000

SURFACE SAR

VOLUME SAR

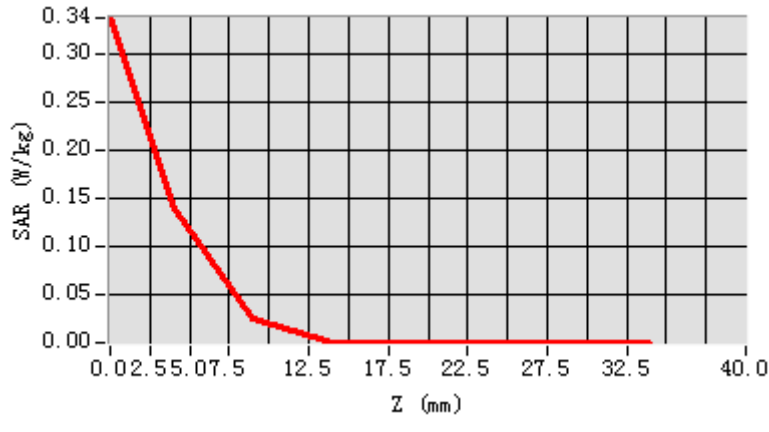


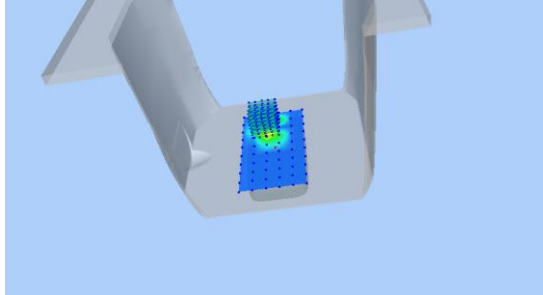
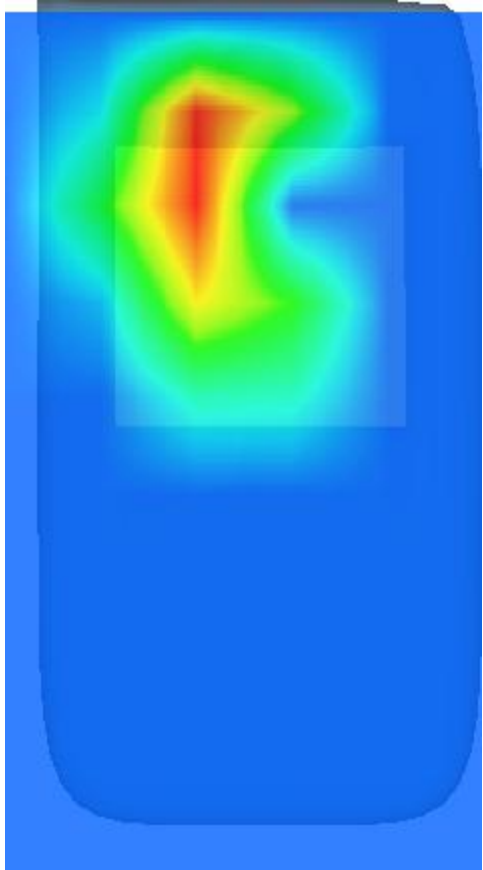
Maximum location: X=-11.00, Y=35.00

SAR Peak: 0.39 W/kg

SAR 10g (W/Kg)	0.069484
SAR 1g (W/Kg)	0.172280

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.3368	0.1401	0.0264	0.0008	0.0008	0.0008	0.0008



3D screen shot	Hot spot position
	

MEASUREMENT 27

Towards-ground-middle

Type: Phone measurement (Complete)

Date of measurement: 20/8/2016

Measurement duration: 7 minutes 46 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=12mm dy=12mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11b ISM</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.b (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.11</u>

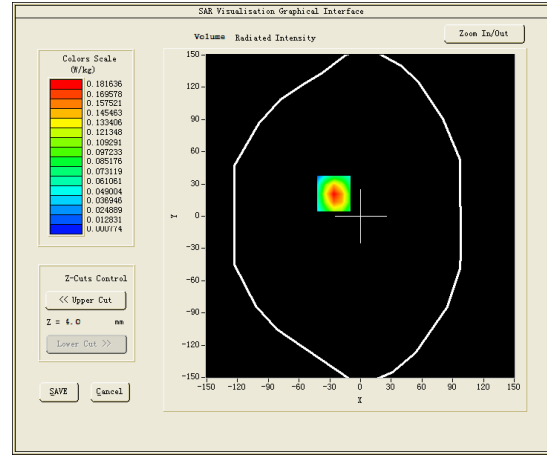
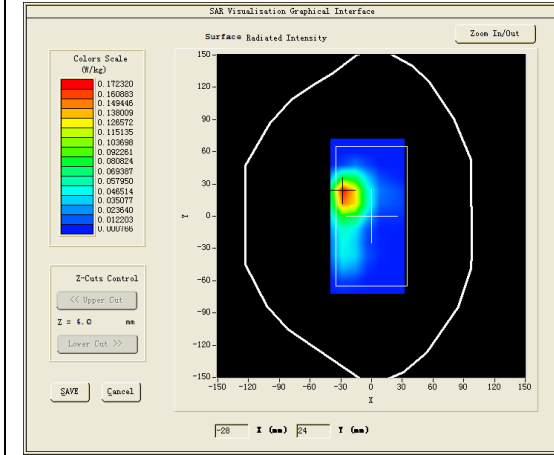
B. SAR Measurement Results

Middle Band SAR (Channel 6):

Frequency (MHz)	2437.000000
Relative permittivity (real part)	52.915798
Relative permittivity (imaginary part)	14.315100
Conductivity (S/m)	1.942082
Variation (%)	2.390000

SURFACE SAR

VOLUME SAR

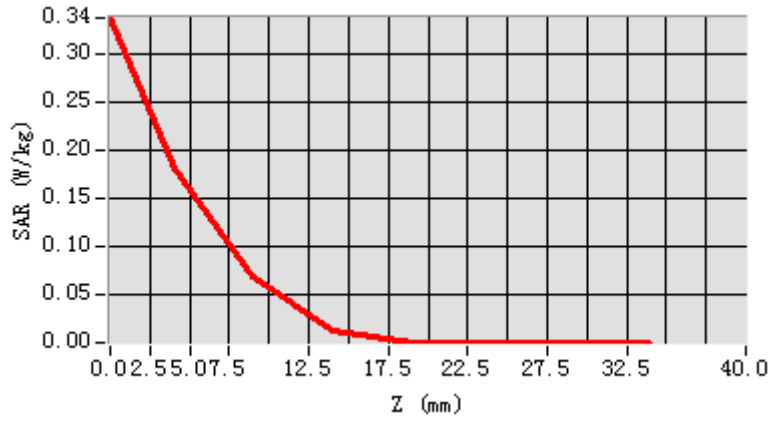


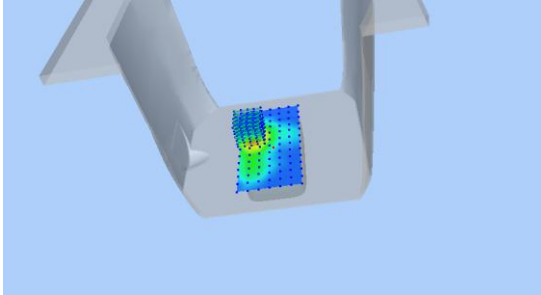
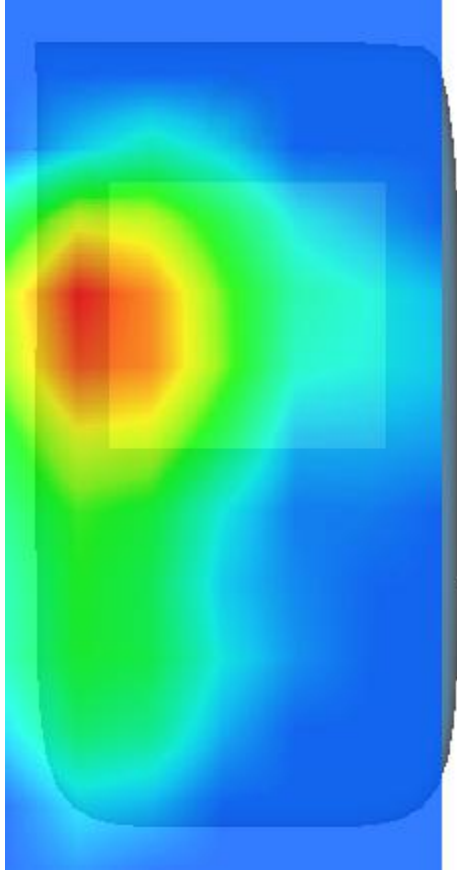
Maximum location: X=-26.00, Y=21.00

SAR Peak: 0.37 W/kg

SAR 10g (W/Kg)	0.076514
SAR 1g (W/Kg)	0.185682

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.3382	0.1816	0.0705	0.0134	0.0008	0.0008	0.0008



3D screen shot	Hot spot position
	

MEASUREMENT 28

Type: Phone measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 9 minutes 31 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm</u>
<u>ZoomScan</u>	<u>8x8x7,dx=5mm dy=5mm dz=2mm,Complete</u>
<u>Phantom</u>	<u>Left head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>IEEE 802.11a U-NII-2A</u>
<u>Channels</u>	<u>Low</u>
<u>Signal</u>	<u>Duty Cycle: 1.0</u>

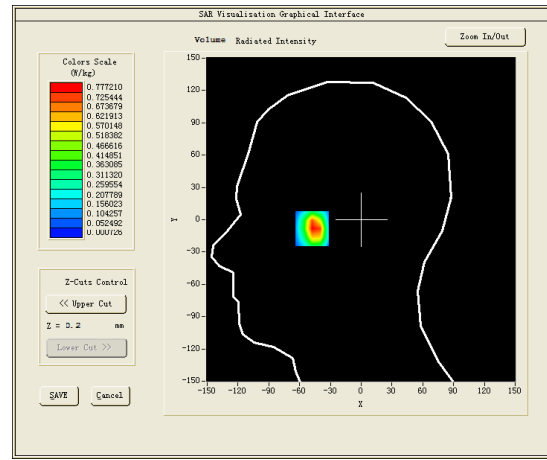
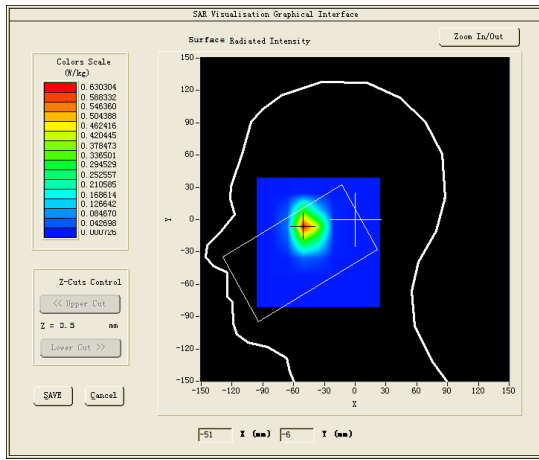
B. SAR Measurement Results

Low Band SAR (Channel 60):

Frequency (MHz)	5300.000000
Relative permittivity (real part)	35.344994
Relative permittivity (imaginary part)	16.5847077
Conductivity (S/m)	4.887213
Variation (%)	-1.670000

SURFACE SAR

VOLUME SAR

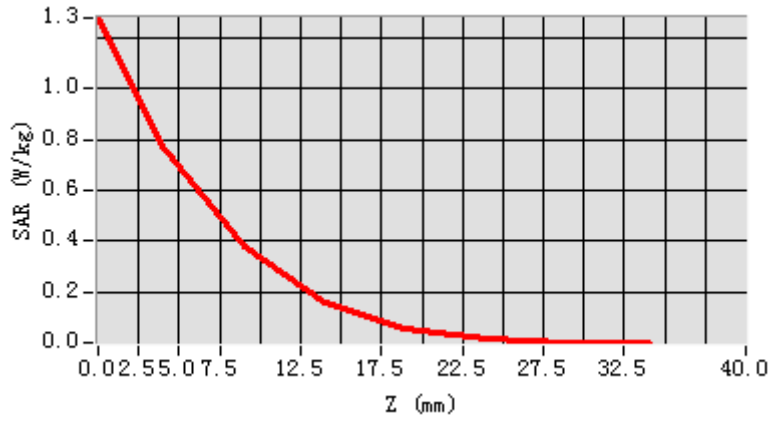


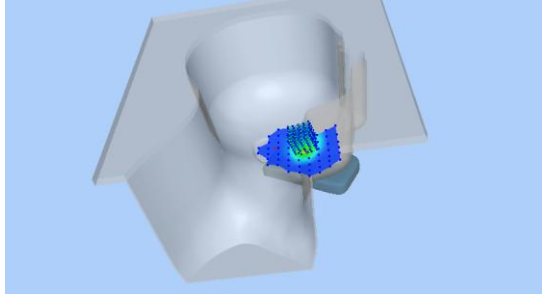
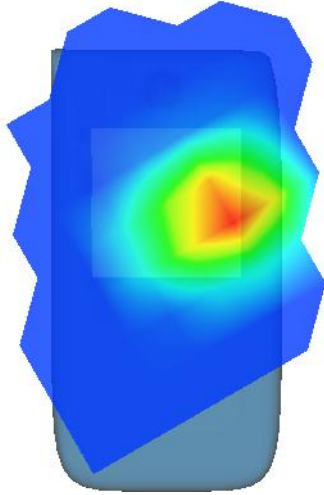
Maximum location: X=-48.00, Y=-6.00

SAR Peak: 31.59 W/kg

SAR 10g (W/Kg)	0.106553
SAR 1g (W/Kg)	0.328024

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.2802	0.7772	0.3834	0.1558	0.0586	0.0176	0.0007



3D screen shot	Hot spot position
	

MEASUREMENT 29

Type: Phone measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 8 minutes 25 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm</u>
<u>ZoomScan</u>	<u>8x8x7,dx=5mm dy=5mm</u> <u>dz=2mm,Complete</u>
<u>Phantom</u>	<u>Left head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>IEEE 802.11a U-NII-3</u>
<u>Channels</u>	<u>High</u>
<u>Signal</u>	<u>Duty Cycle: 1.0</u>

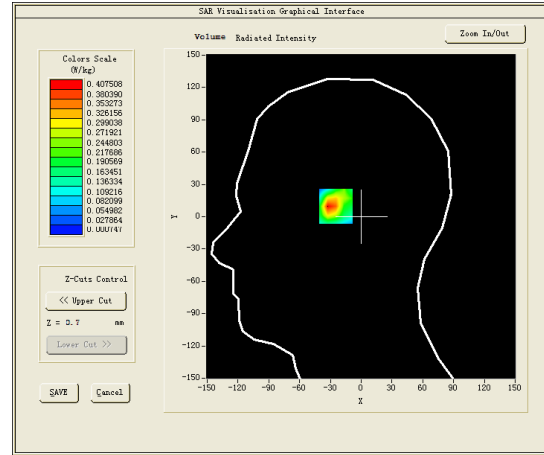
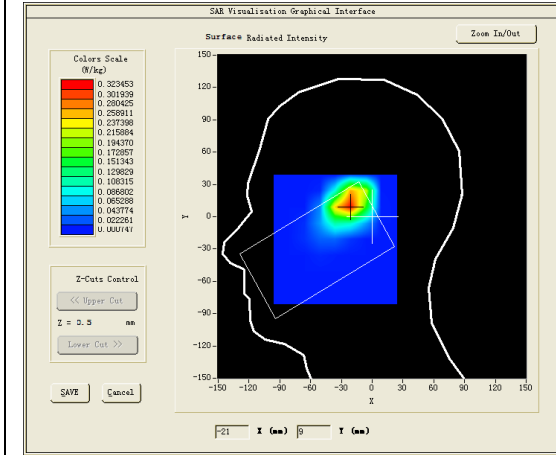
B. SAR Measurement Results

Higher Band SAR (Channel 165):

Frequency (MHz)	5825.000000
Relative permittivity (real part)	35.375124
Relative permittivity (imaginary part)	16.244335
Conductivity (S/m)	5.261348
Variation (%)	0.000000

SURFACE SAR

VOLUME SAR

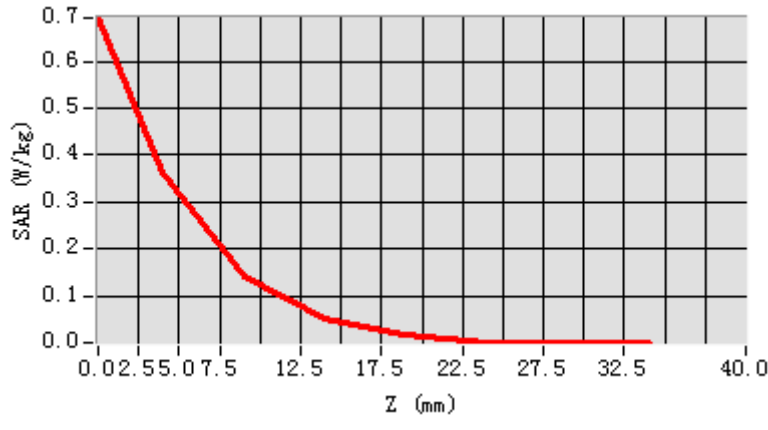


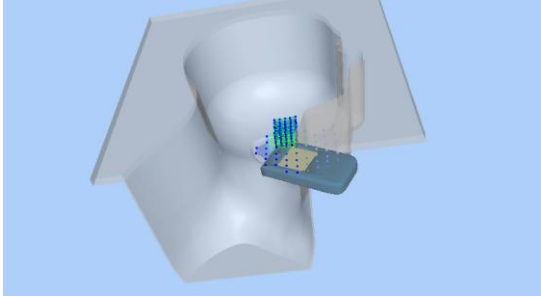
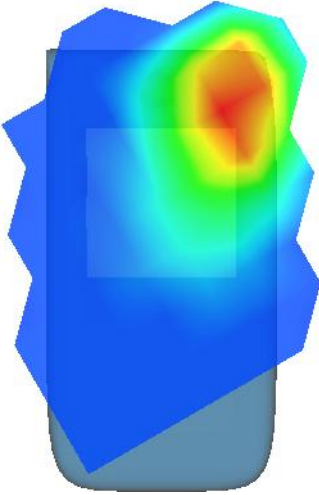
Maximum location: X=-22.00, Y=12.00

SAR Peak: 0.75 W/kg

SAR 10g (W/Kg)	0.061138
SAR 1g (W/Kg)	0.212406

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.6925	0.3658	0.1415	0.0538	0.0186	0.0010	0.0007



3D screen shot	Hot spot position
	

MEASUREMENT 30

Towards- ground-low

Type: Phone measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 11 minutes 5 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm</u>
<u>ZoomScan</u>	<u>8x8x7,dx=4mm dy=4mm dz=2mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII-1</u>
<u>Channels</u>	<u>low</u>
<u>Signal</u>	<u>Duty Cycle: 1.0</u>

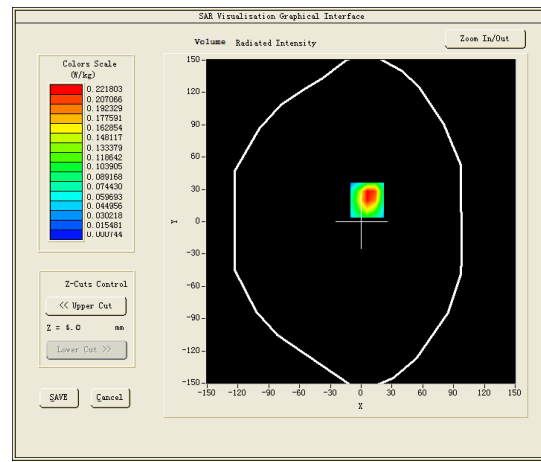
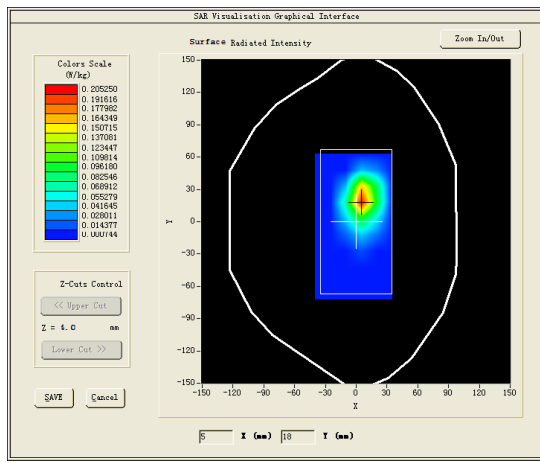
B. SAR Measurement Results

low Band SAR (Channel 36):

Frequency (MHz)	5180.000000
Relative permittivity (real part)	49.379701
Relative permittivity (imaginary part)	17.911493
Conductivity (S/m)	5.158943
Variation (%)	0.930000

SURFACE SAR

VOLUME SAR

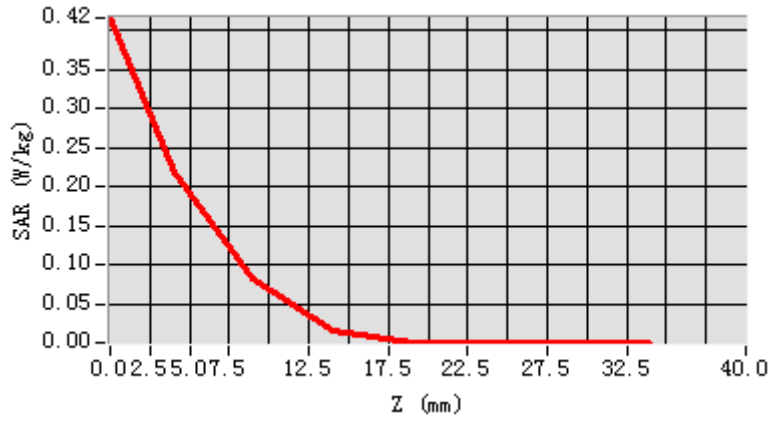


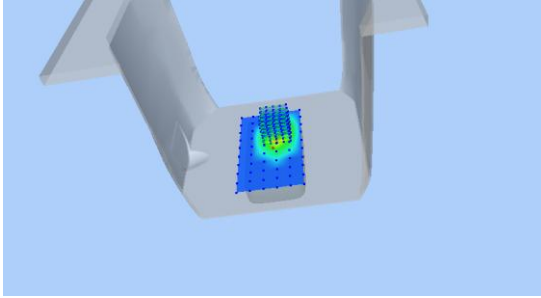
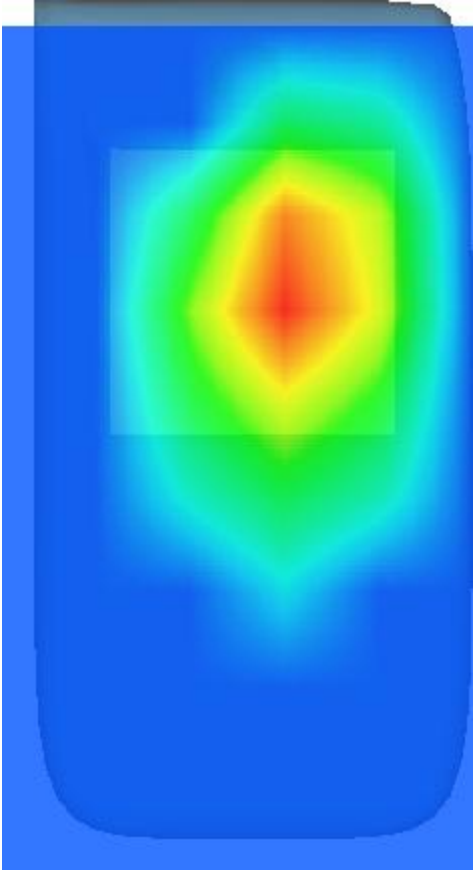
Maximum location: X=6.00, Y=20.00

SAR Peak: 0.51 W/kg

SAR 10g (W/Kg)	0.115455
SAR 1g (W/Kg)	0.299472

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.4163	0.2194	0.0820	0.0162	0.0007	0.0007	0.0007



3D screen shot	Hot spot position
	

MEASUREMENT 31

Towards-ground-high

Type: Phone measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 10 minutes 59 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm</u>
<u>ZoomScan</u>	<u>8x8x7,dx=4mm dy=4mm dz=2mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII-3</u>
<u>Channels</u>	<u>High</u>
<u>Signal</u>	<u>Duty Cycle: 1.0</u>

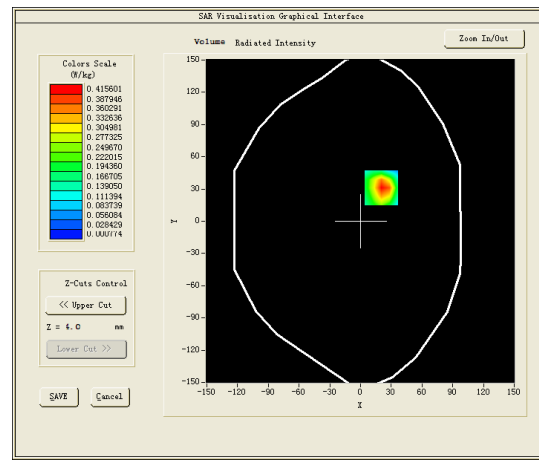
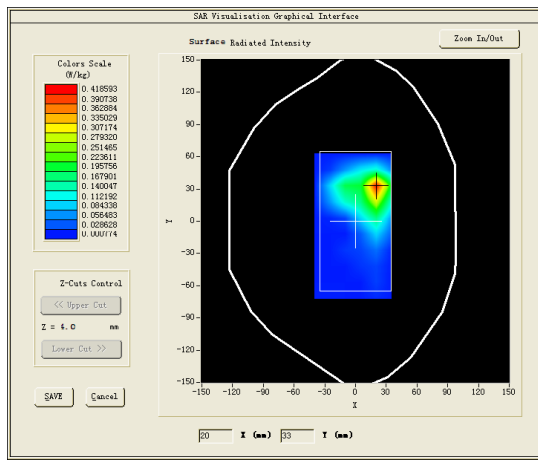
B. SAR Measurement Results

High Band SAR (Channel 165):

Frequency (MHz)	5825.000000
Relative permittivity (real part)	48.235798
Relative permittivity (imaginary part)	19.060893
Conductivity (S/m)	6.1735981
Variation (%)	-1.630000

SURFACE SAR

VOLUME SAR

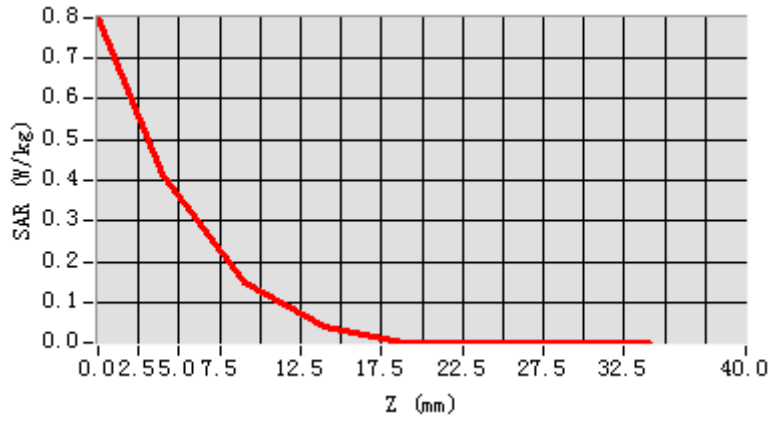


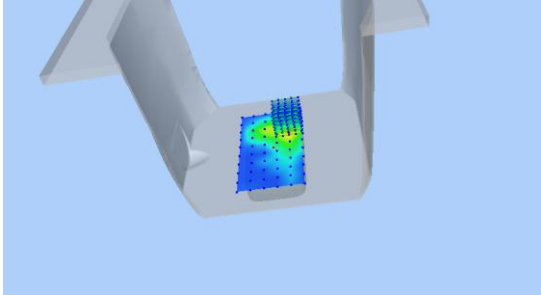
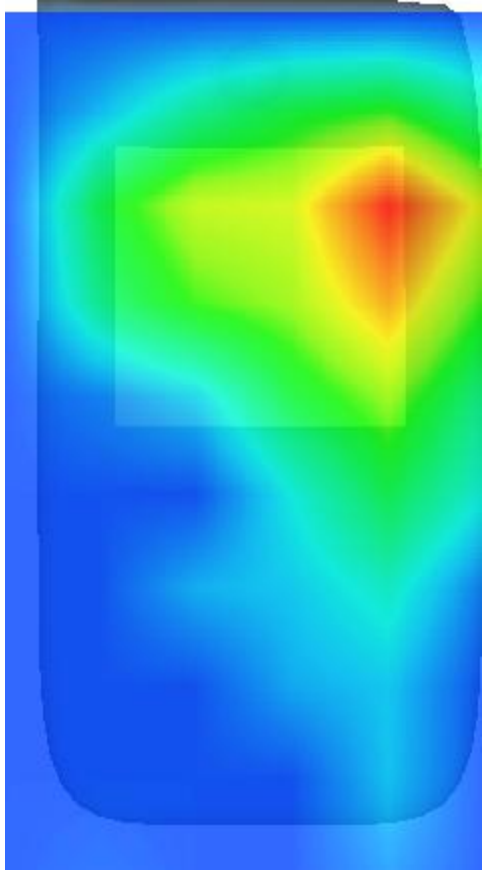
Maximum location: X=20.00, Y=31.00

SAR Peak: 0.92 W/kg

SAR 10g (W/Kg)	0.081118
SAR 1g (W/Kg)	0.226217

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.7979	0.4156	0.1502	0.0379	0.0019	0.0008	0.0008



3D screen shot	Hot spot position
	

MEASUREMENT 32

Rear Side-low

Type: Phone measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 8 minutes 25 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm</u>
<u>ZoomScan</u>	<u>8x8x7,dx=4mm dy=4mm dz=2mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII-1</u>
<u>Channels</u>	<u>low</u>
<u>Signal</u>	<u>Duty Cycle: 1.0</u>
<u>Conversion factor</u>	<u>4.11</u>

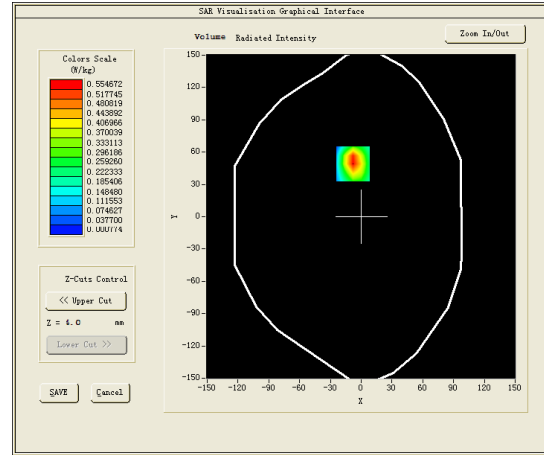
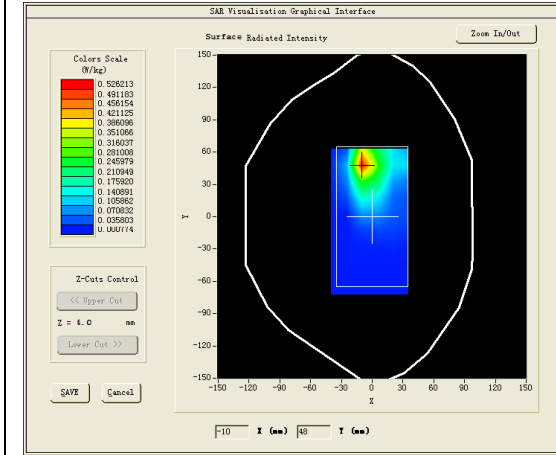
B. SAR Measurement Results

low Band SAR (Channel 36):

Frequency (MHz)	5180.000000
Relative permittivity (real part)	50.215798
Relative permittivity (imaginary part)	16.03233
Conductivity (S/m)	5.192684
Variation (%)	-0.870000

SURFACE SAR

VOLUME SAR

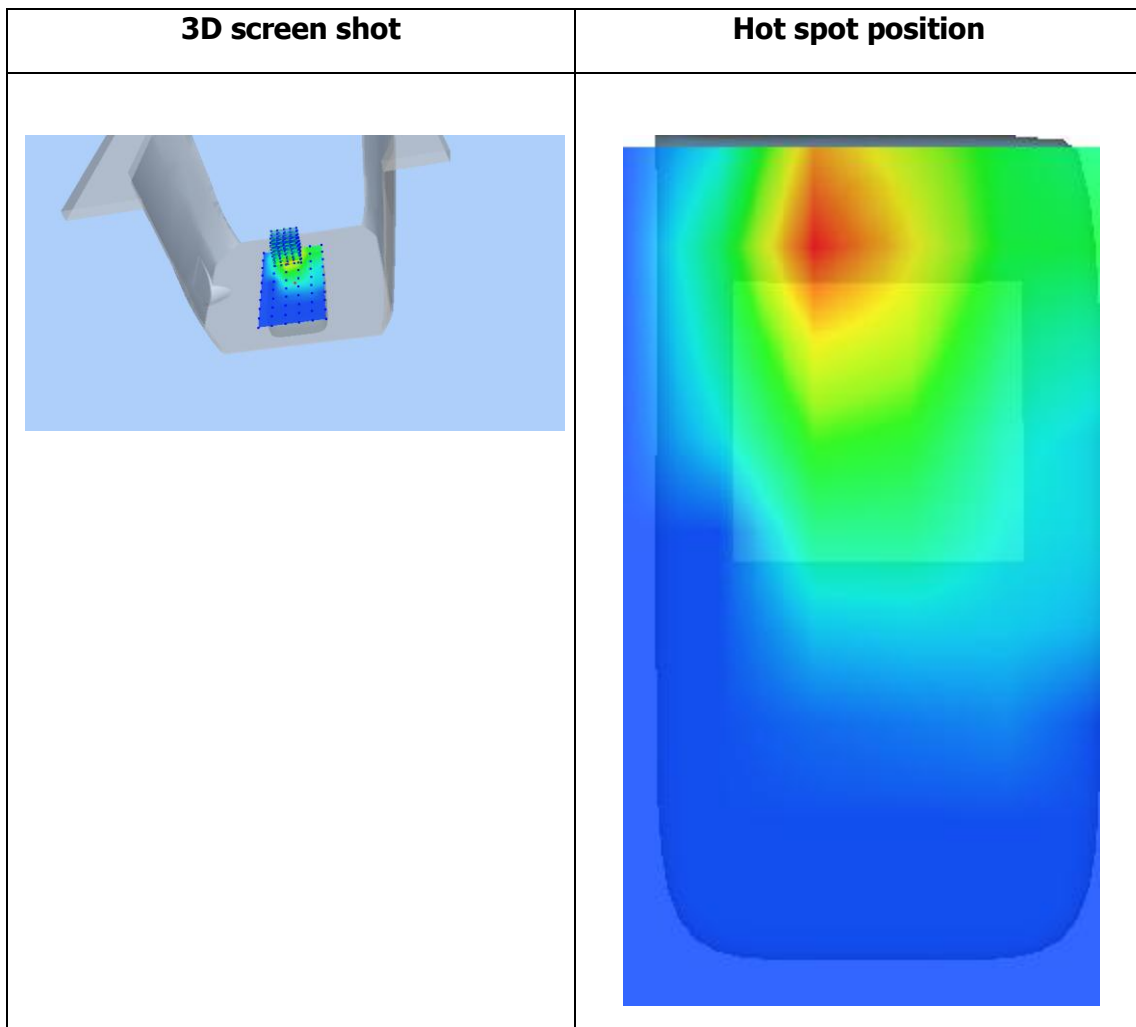
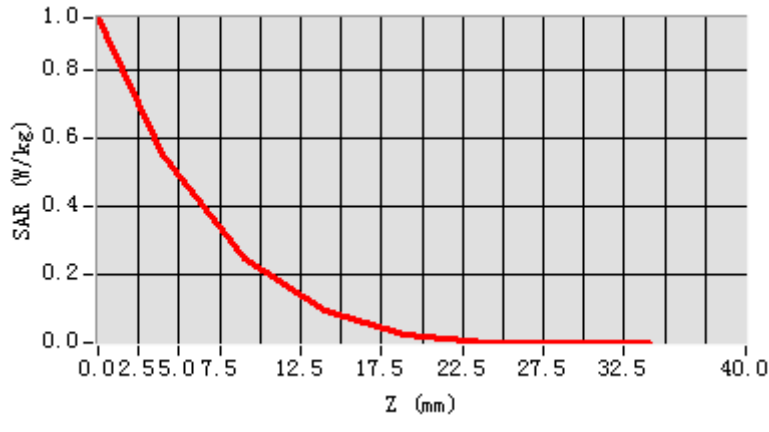


Maximum location: X=-8.00, Y=49.00

SAR Peak: 1.10 W/kg

SAR 10g (W/Kg)	0.102486
SAR 1g (W/Kg)	0.254398

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.9558	0.5547	0.2456	0.0958	0.0228	0.0008	0.0008



MEASUREMENT 33

Front Side-high

Type: Phone measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 8 minutes 18 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm</u>
<u>ZoomScan</u>	<u>8x8x7,dx=4mm dy=4mm dz=2mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII-3</u>
<u>Channels</u>	<u>High</u>
<u>Signal</u>	<u>Duty Cycle: 1.0</u>

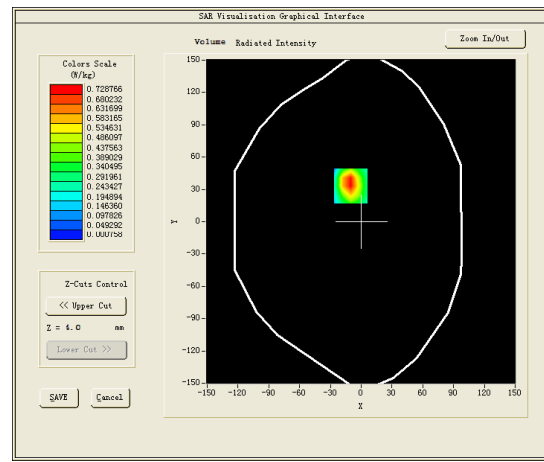
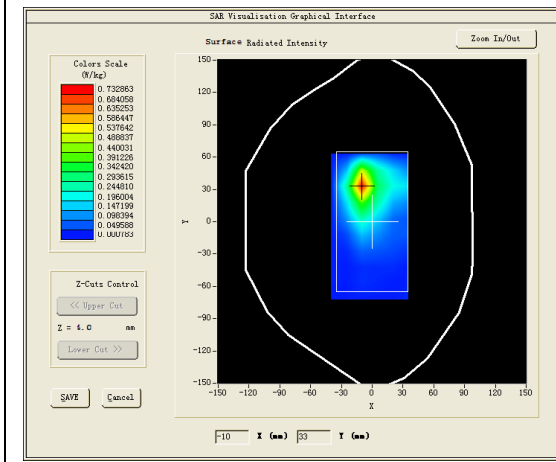
B. SAR Measurement Results

High Band SAR (Channel 165):

Frequency (MHz)	5825.000000
Relative permittivity (real part)	48.139769
Relative permittivity (imaginary part)	19.159949
Conductivity (S/m)	6.205681
Variation (%)	0.540000

SURFACE SAR

VOLUME SAR

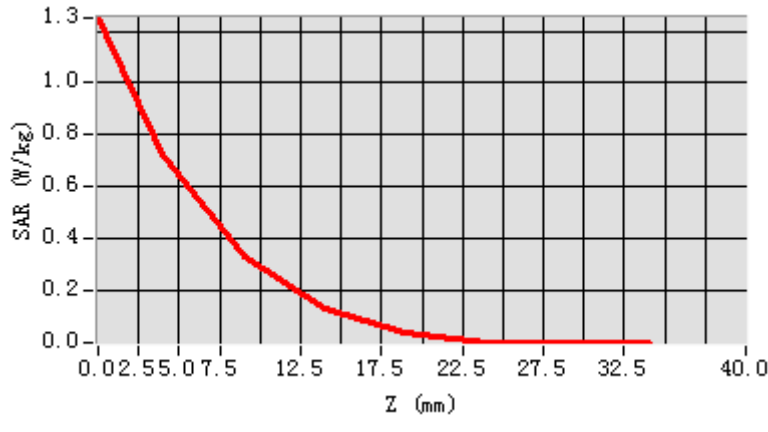


Maximum location: X=-10.00, Y=33.00

SAR Peak: 1.26 W/kg

SAR 10g (W/Kg)	0.074254
SAR 1g (W/Kg)	0.187098

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.2505	0.7288	0.3296	0.1352	0.0411	0.0018	0.0008



3D screen shot	Hot spot position
