



Annex B: Measurement Results

Project Name : W3

Report Number:

FCC16093987A-6

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 6/10/2016

Measurement duration: 9 minutes 18 seconds

A. Experimental conditions.

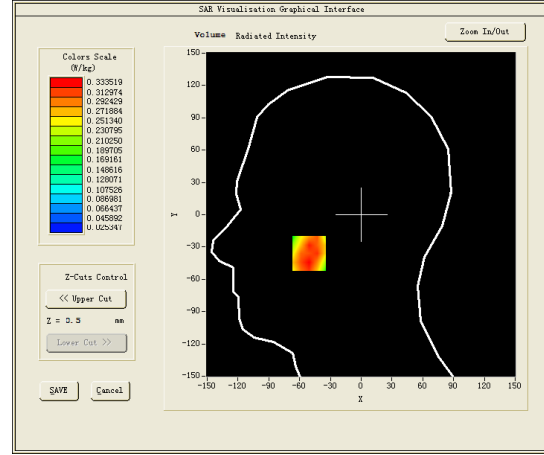
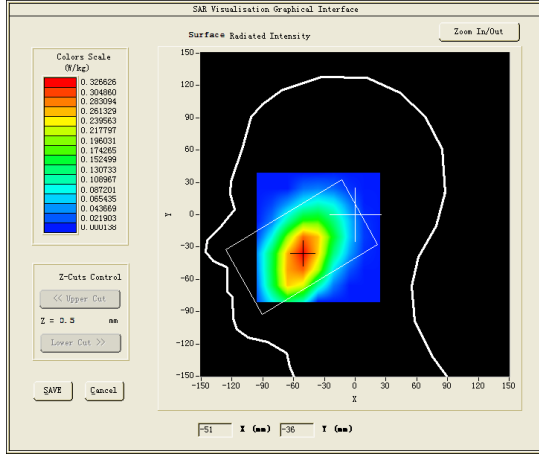
<u>Area Scan</u>	<u>dx=15mm dy=15mm</u>
<u>ZoomScan</u>	<u>5x5x7, dx=8mm dy=8mm dz=5mm, Complete</u>
<u>Phantom</u>	<u>Right head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>CUSTOM (GPRS850 4Tx)</u>
<u>Channels</u>	<u>Low</u>
<u>Signal</u>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)</u>
<u>Conversion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

C. SAR Measurement Results

Frequency (MHz)	824.200012
Relative permittivity (real part)	40.336941
Relative permittivity (imaginary part)	19.790300
Conductivity (S/m)	0.906176
Variation (%)	-1.560000

SURFACE SAR

VOLUME SAR

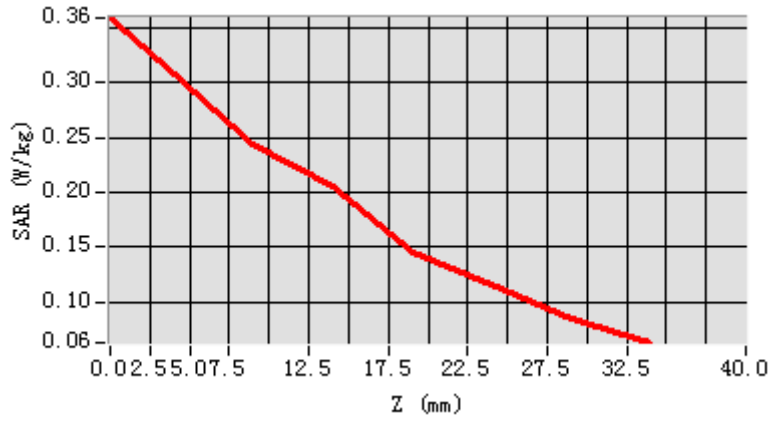


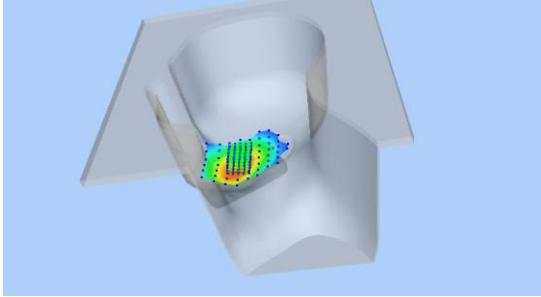
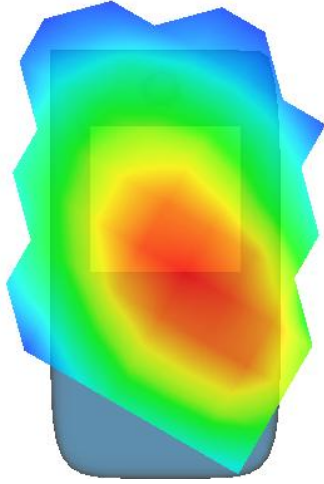
Maximum location: X=-51.00, Y=-36.00

SAR Peak: 0.45 W/kg

SAR 10g (W/Kg)	0.230416
SAR 1g (W/Kg)	0.323298

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.3587	0.3075	0.2435	0.2044	0.1456	0.1161	0.0854



3D screen shot	Hot spot position
	

MEASUREMENT 2

Rear-side-low

Type: Phone measurement (Complete)

Date of measurement: 6/10/2016

Measurement duration: 11 minutes 21 seconds

A. Experimental conditions.

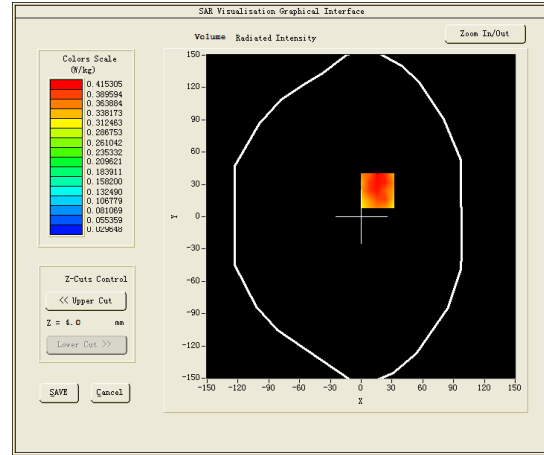
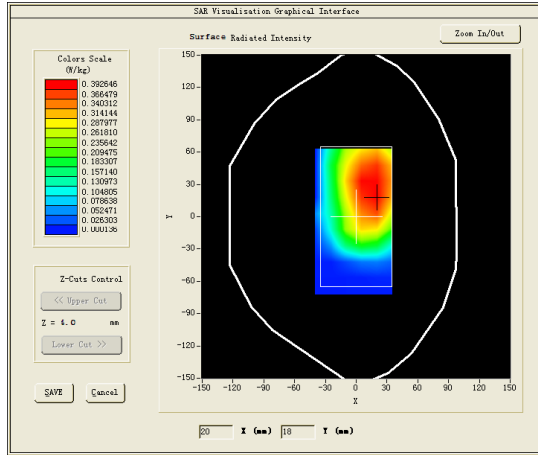
<u>Area Scan</u>	<u>dx=15mm dy=15mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm</u> <u>dz=5mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>CUSTOM (GPRS850 4Tx)</u>
<u>Channels</u>	<u>Low</u>
<u>Signal</u>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)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

C. SAR Measurement Results

Frequency (MHz)	824.200012
Relative permittivity (real part)	40.676079
Relative permittivity (imaginary part)	19.941540
Conductivity (S/m)	0.913101
Variation (%)	1.210000

SURFACE SAR

VOLUME SAR

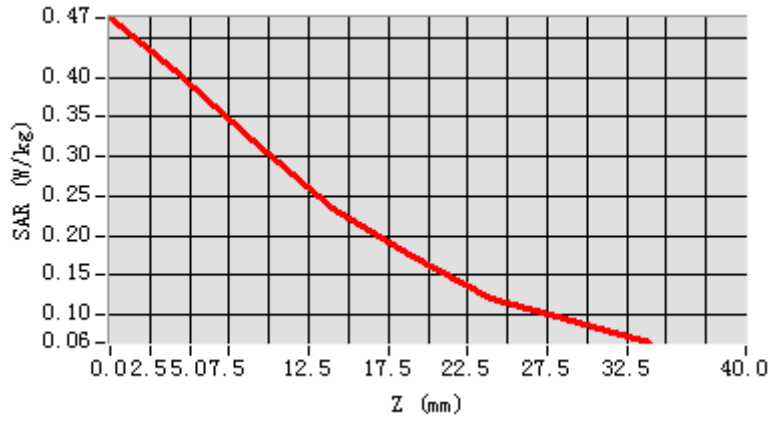


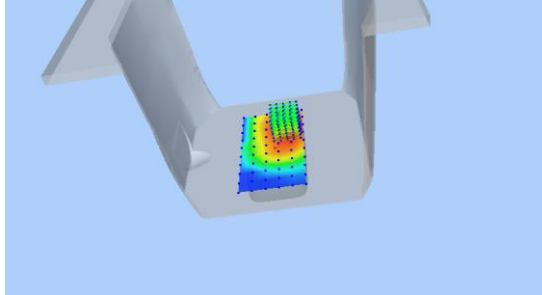
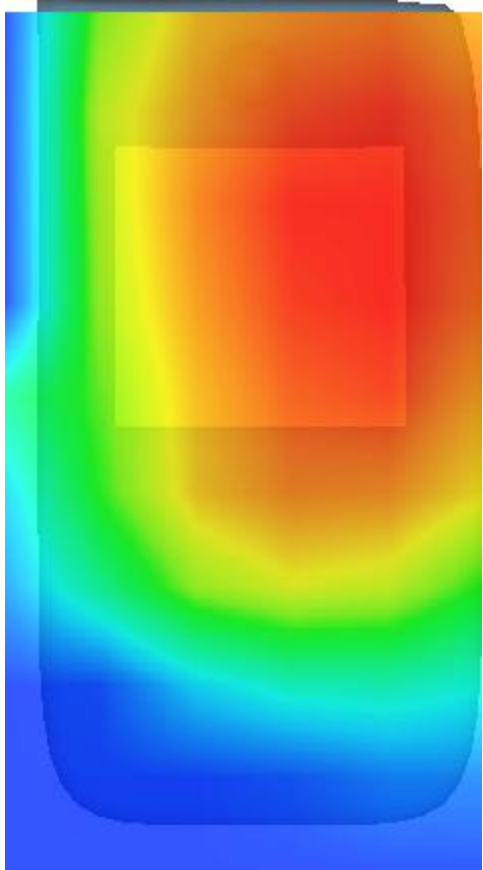
Maximum location: X=16.00, Y=24.00

SAR Peak: 0.56 W/kg

SAR 10g (W/Kg)	0.293887
SAR 1g (W/Kg)	0.418719

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.4749	0.4089	0.3200	0.2350	0.1736	0.1214	0.0933



3D screen shot	Hot spot position
	

MEASUREMENT 3

Towards-ground-low

Type: Phone measurement (Complete)

Date of measurement: 6/10/2016

Measurement duration: 11 minutes 24 seconds

A. Experimental conditions.

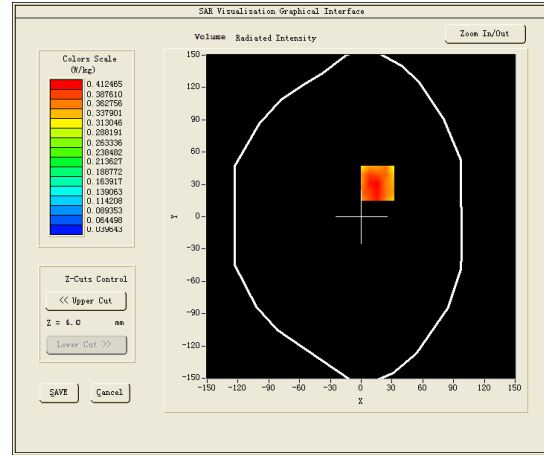
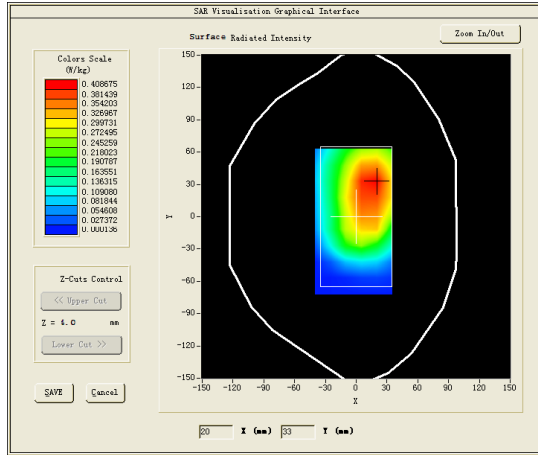
<u>Area Scan</u>	<u>dx=15mm dy=15mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm</u> <u>dz=5mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>CUSTOM (GPRS850 4Tx)</u>
<u>Channels</u>	<u>Low</u>
<u>Signal</u>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)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

C. SAR Measurement Results

Frequency (MHz)	824.200012
Relative permittivity (real part)	40.676079
Relative permittivity (imaginary part)	19.941540
Conductivity (S/m)	0.913101
Variation (%)	1.600000

SURFACE SAR

VOLUME SAR

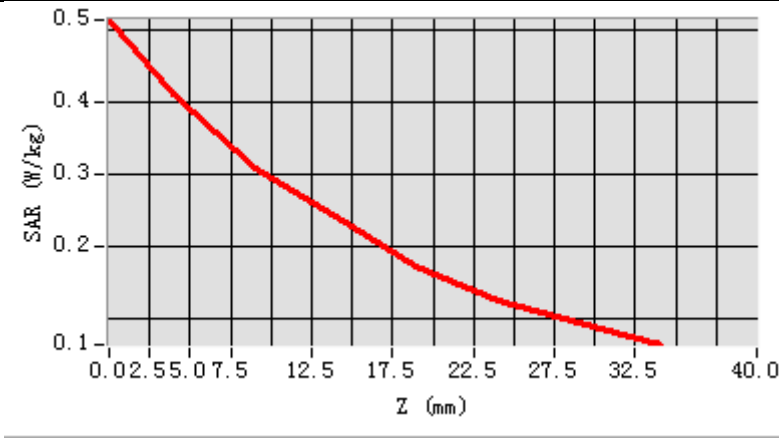


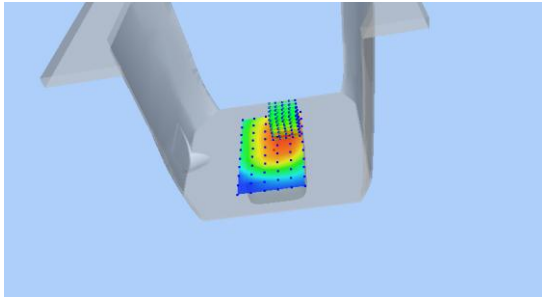
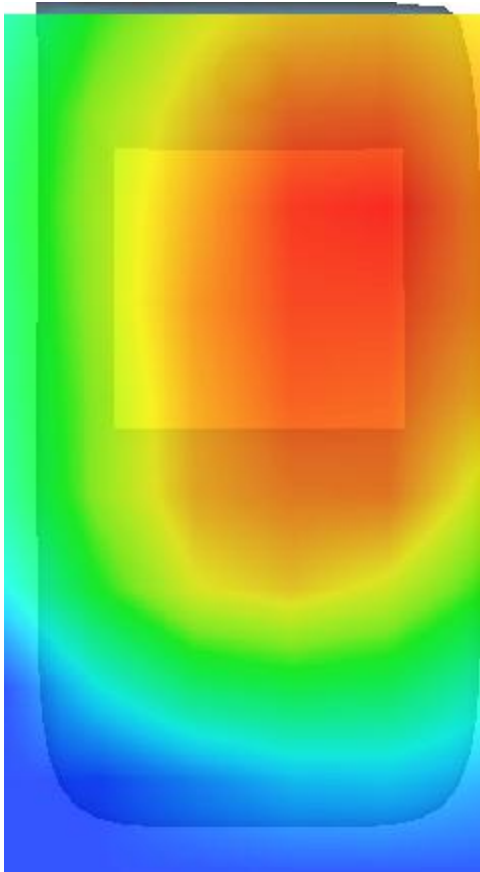
Maximum location: X=16.00, Y=31.00

SAR Peak: 0.54 W/kg

SAR 10g (W/Kg)	0.287104
SAR 1g (W/Kg)	0.413242

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.5141	0.4125	0.3070	0.2428	0.1718	0.1254	0.0926



3D screen shot	Hot spot position
	

MEASUREMENT 4

Type: Phone measurement (Complete)

Date of measurement: 11/10/2016

Measurement duration: 10 minutes 19 seconds

A. Experimental conditions.

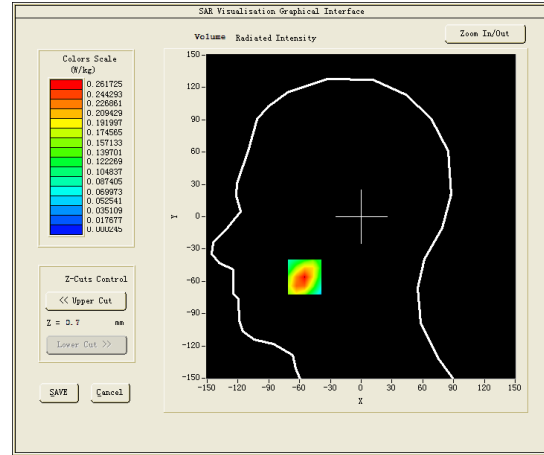
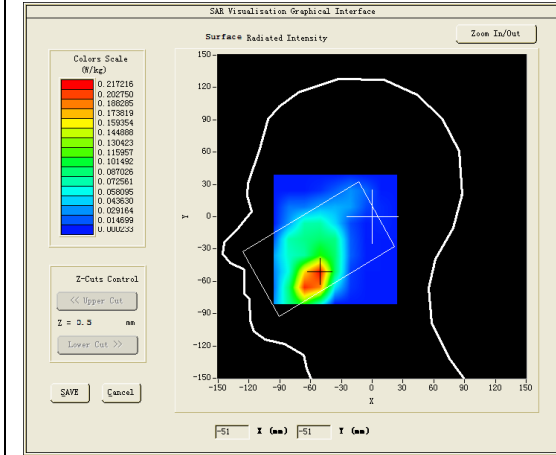
<u>Area Scan</u>	<u>dx=15mm dy=15mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<u>Phantom</u>	<u>Right head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>CUSTOM (GPRS1900 4Tx)</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)</u>
<u>Conversion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

C. SAR Measurement Results

Frequency (MHz)	1880.000000
Relative permittivity (real part)	39.914200
Relative permittivity (imaginary part)	13.434300
Conductivity (S/m)	1.403138
Variation (%)	-2.020000

SURFACE SAR

VOLUME SAR

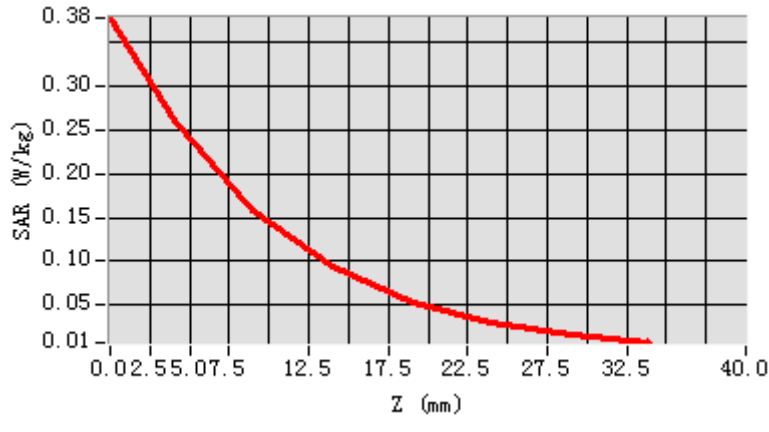


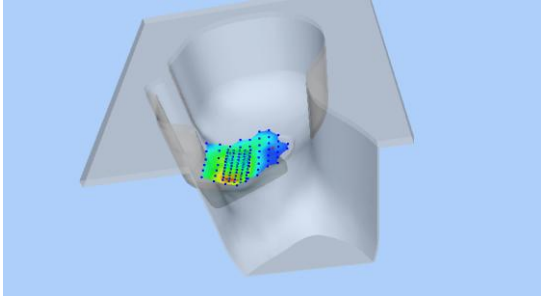
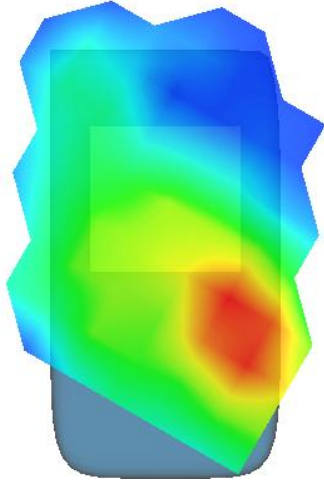
Maximum location: X=-55.00, Y=-56.00

SAR Peak: 0.39 W/kg

SAR 10g (W/Kg)	0.134466
SAR 1g (W/Kg)	0.246090

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.3785	0.2617	0.1585	0.0933	0.0517	0.0297	0.0159



3D screen shot	Hot spot position
	

MEASUREMENT 5

Bottom-Side-middle

Type: Phone measurement (Complete)

Date of measurement: 11/10/2016

Measurement duration: 10 minutes 57 seconds

A. Experimental conditions.

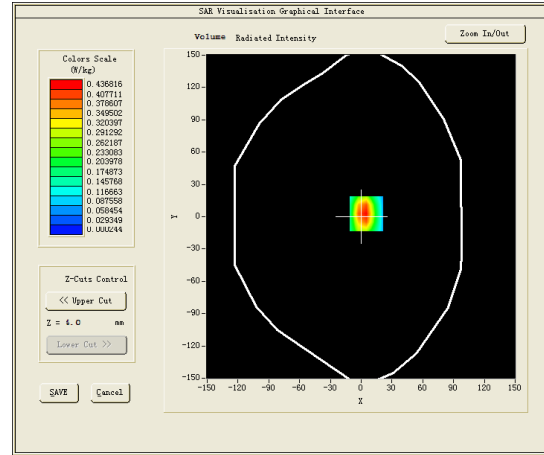
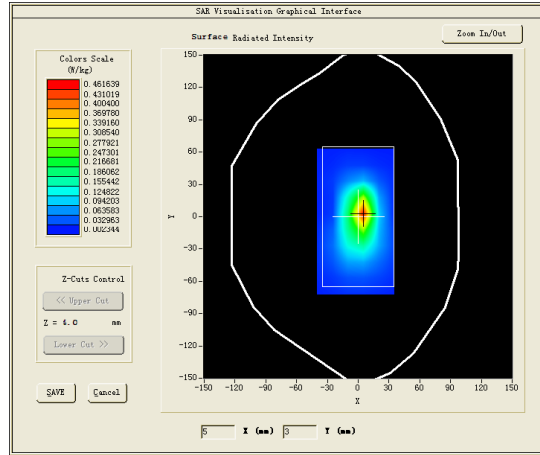
<u>Area Scan</u>	<u>dx=15mm dy=15mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm</u> <u>dz=5mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>CUSTOM (GPRS1900 4Tx)</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)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

C. SAR Measurement Results

Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.356098
Relative permittivity (imaginary part)	14.668600
Conductivity (S/m)	1.532054
Variation (%)	-1.250000

SURFACE SAR

VOLUME SAR

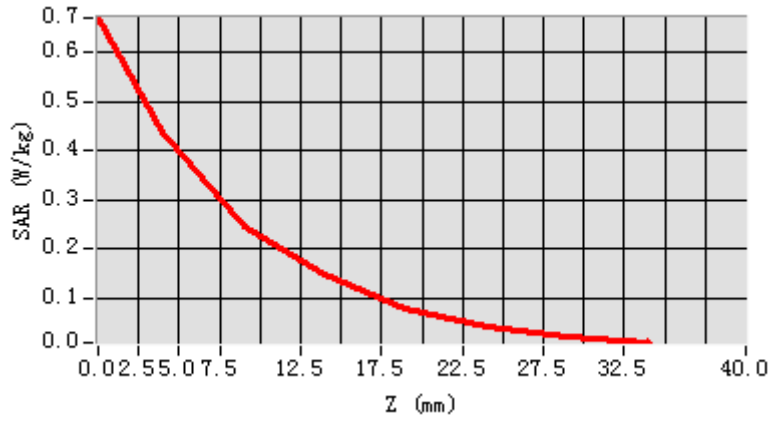


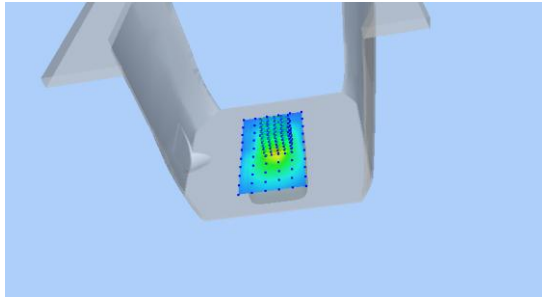
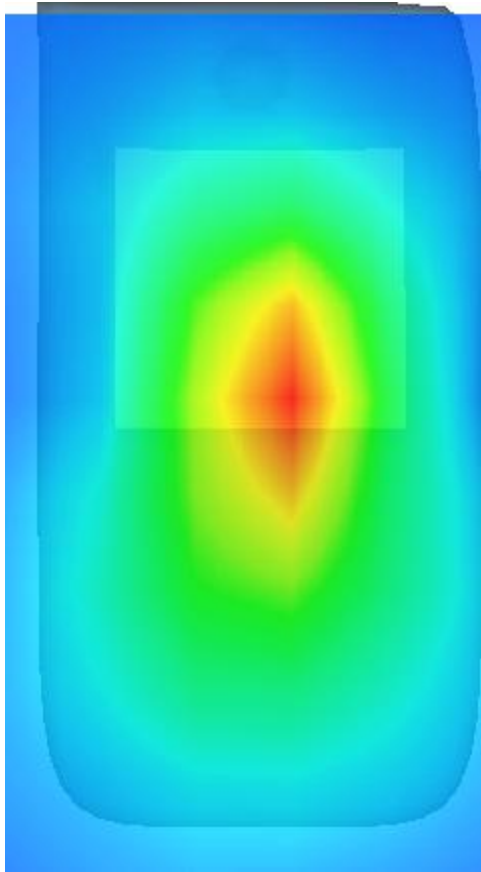
Maximum location: X=5.00, Y=3.00

SAR Peak: 0.71 W/kg

SAR 10g (W/Kg)	0.215008
SAR 1g (W/Kg)	0.435121

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.6703	0.4368	0.2468	0.1474	0.0778	0.0430	0.0213



3D screen shot	Hot spot position
	

MEASUREMENT 6

Towards-phantom-middle

Type: Phone measurement (Complete)

Date of measurement: 11/10/2016

Measurement duration: 11 minutes 3 seconds

A. Experimental conditions.

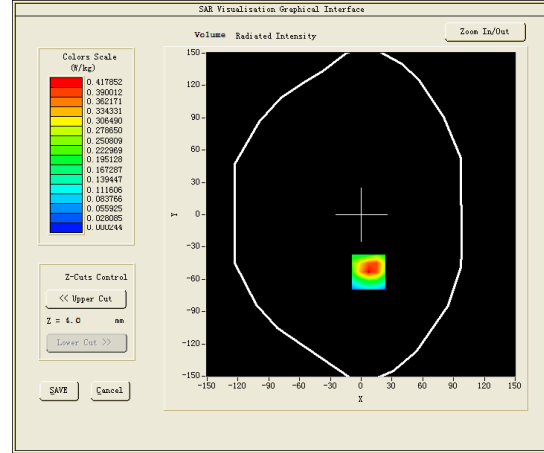
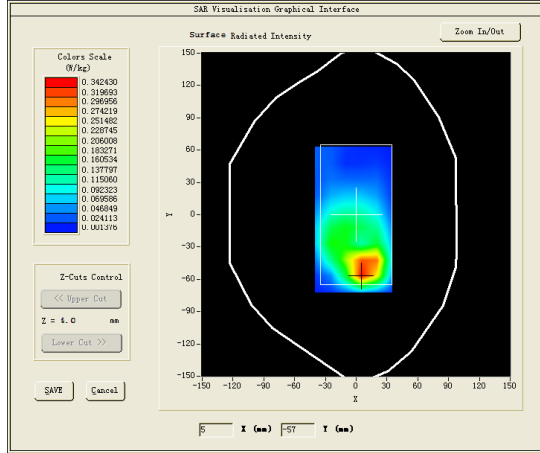
<u>Area Scan</u>	<u>dx=15mm dy=15mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm</u> <u>dz=5mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>CUSTOM (GPRS1900 4Tx)</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>Duty Cycle: 2.00 (Crest factor: 2.0)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

C. SAR Measurement Results

Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.356098
Relative permittivity (imaginary part)	14.668600
Conductivity (S/m)	1.532054
Variation (%)	1.510000

SURFACE SAR

VOLUME SAR

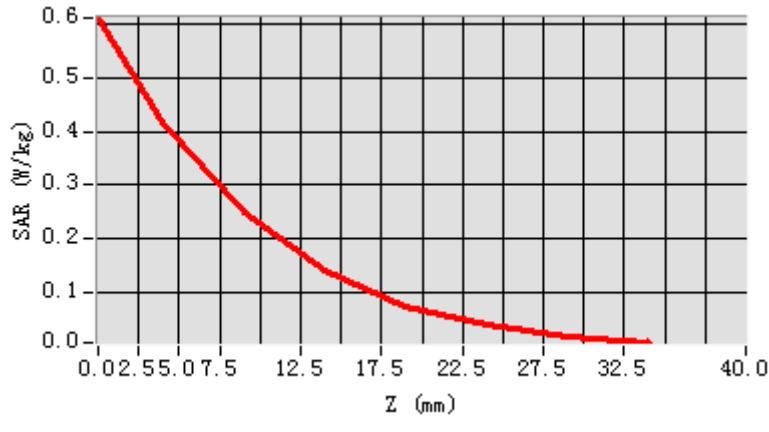


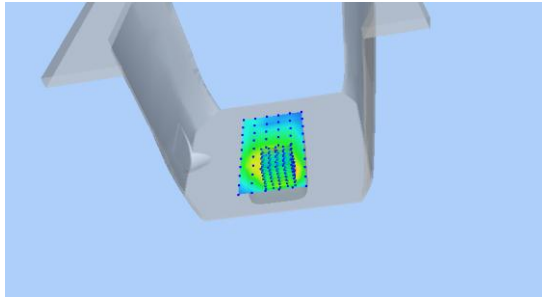
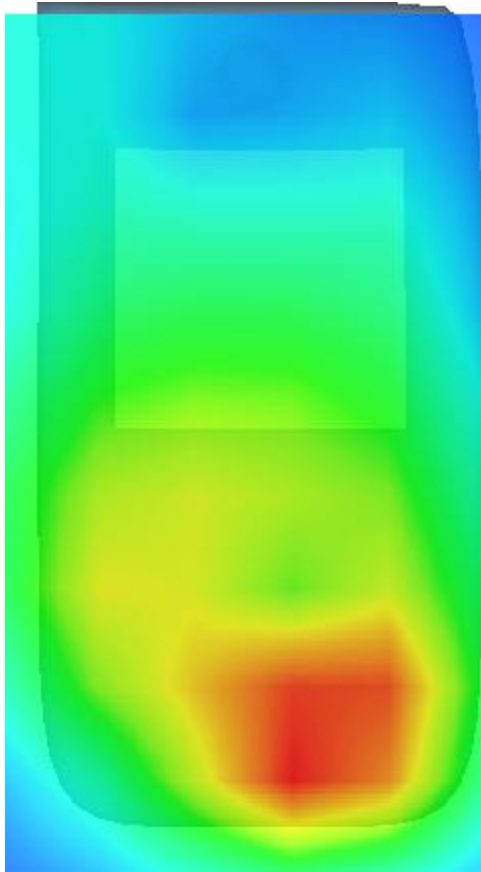
Maximum location: X=7.00, Y=-53.00

SAR Peak: 0.68 W/kg

SAR 10g (W/Kg)	0.208406
SAR 1g (W/Kg)	0.413752

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.6101	0.4179	0.2497	0.1424	0.0764	0.0425	0.0201



3D screen shot	Hot spot position
	

MEASUREMENT 7

Type: Phone measurement (Complete)

Date of measurement: 7/10/2016

Measurement duration: 13 minutes 16 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm</u>
<u>ZoomScan</u>	<u>7x7x7,dx=5mm dy=5mm</u> <u>dz=5mm,Complete</u>
<u>Phantom</u>	<u>Right head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>IEEE 802.11b ISM</u>
<u>Channels</u>	<u>Low</u>
<u>Signal</u>	<u>IEEE802.b (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.00</u>

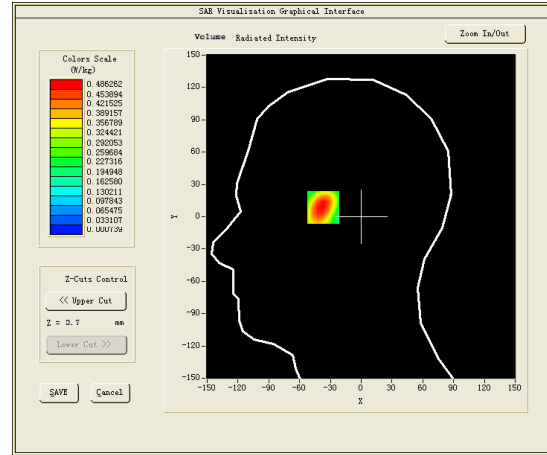
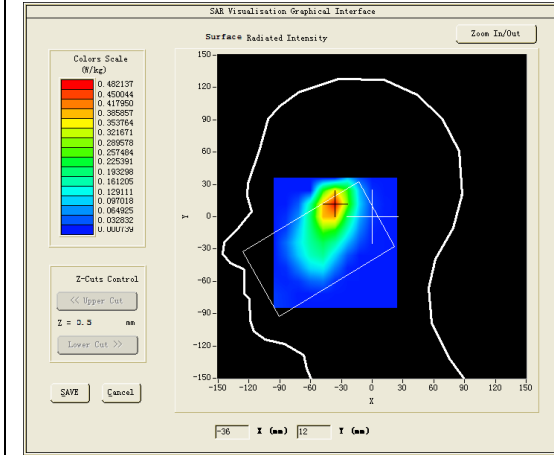
C. SAR Measurement Results

Lower Band SAR (Channel 1):

Frequency (MHz)	2412.000000
Relative permittivity (real part)	39.006599
Relative permittivity (imaginary part)	13.260500
Conductivity (S/m)	1.776907
Variation (%)	-1.290000

SURFACE SAR

VOLUME SAR

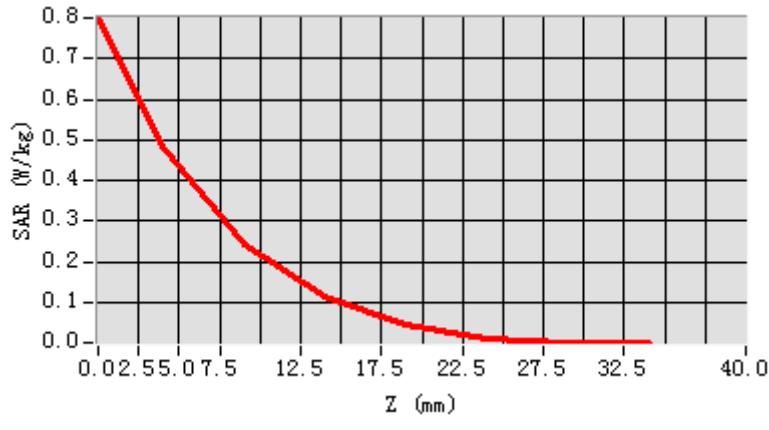


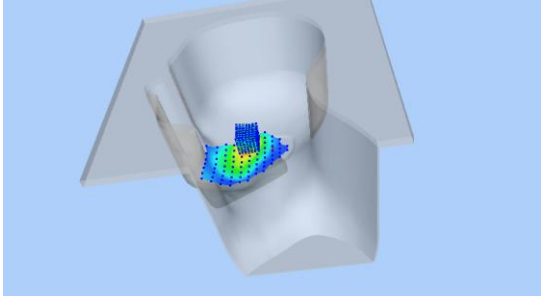
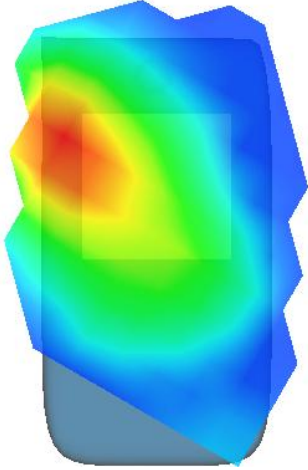
Maximum location: X=-37.00, Y=11.00

SAR Peak: 0.81 W/kg

SAR 10g (W/Kg)	0.232017
SAR 1g (W/Kg)	0.464182

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.8004	0.4863	0.2414	0.1147	0.0472	0.0116	0.0025



3D screen shot	Hot spot position
	

MEASUREMENT 8

Front-side-low

Type: Phone measurement (Complete)

Date of measurement: 7/10/2016

Measurement duration: 11 minutes 39 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm</u>
<u>ZoomScan</u>	<u>7x7x7,dx=5mm dy=5mm 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>Low</u>
<u>Signal</u>	<u>IEEE802.b (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.11</u>

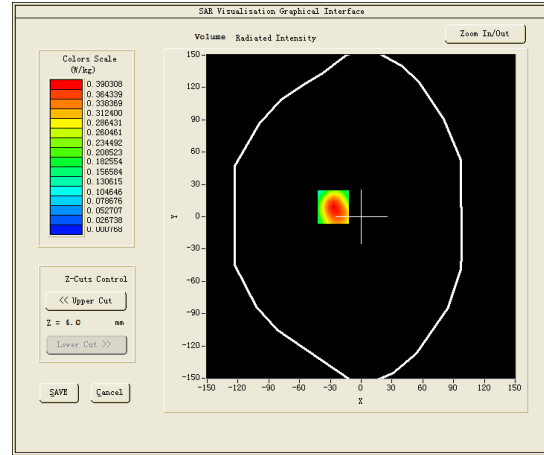
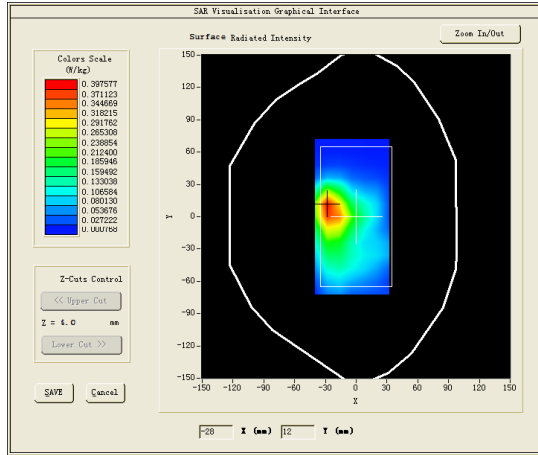
C. SAR Measurement Results

Lower Band SAR (Channel 1):

Frequency (MHz)	2412.000000
Relative permittivity (real part)	52.417801
Relative permittivity (imaginary part)	14.706300
Conductivity (S/m)	1.970644
Variation (%)	-4.050000

SURFACE SAR

VOLUME SAR

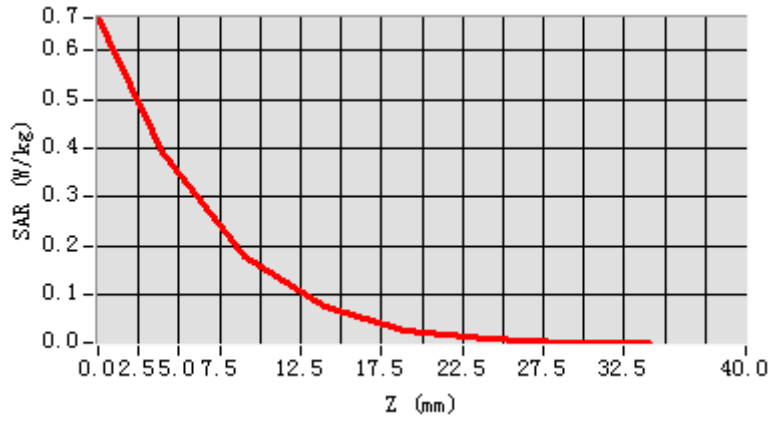


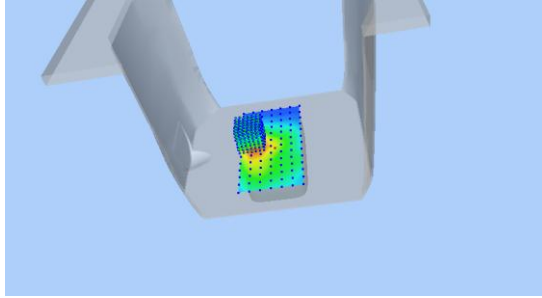
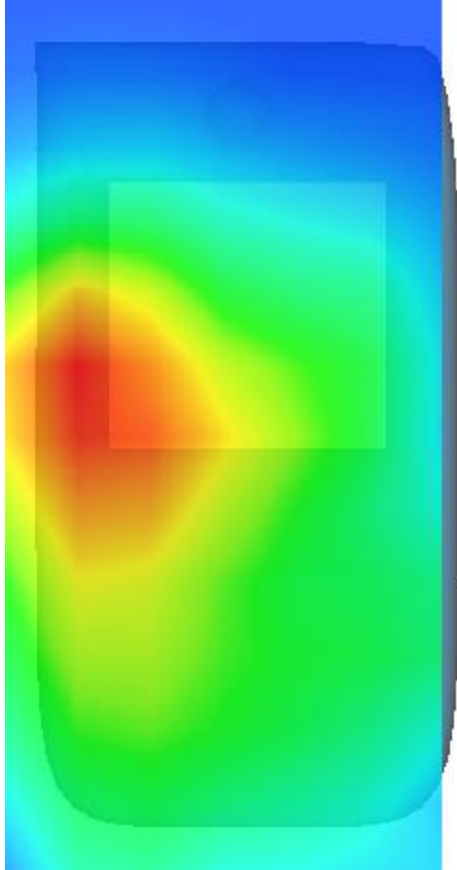
Maximum location: X=-27.00, Y=9.00

SAR Peak: 0.73 W/kg

SAR 10g (W/Kg)	0.204110
SAR 1g (W/Kg)	0.415869

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.6668	0.3903	0.1789	0.0757	0.0236	0.0076	0.0022



3D screen shot	Hot spot position
	

MEASUREMENT 9

Towards-phantom-low

Type: Phone measurement (Complete)

Date of measurement: 7/10/2016

Measurement duration: 11 minutes 41 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm</u>
<u>ZoomScan</u>	<u>7x7x7,dx=5mm dy=5mm 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>Low</u>
<u>Signal</u>	<u>IEEE802.b (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.11</u>

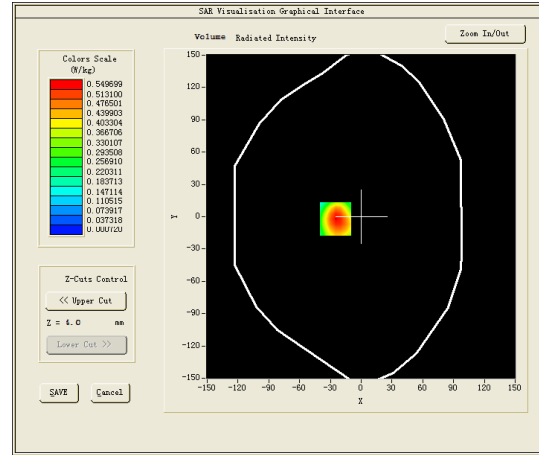
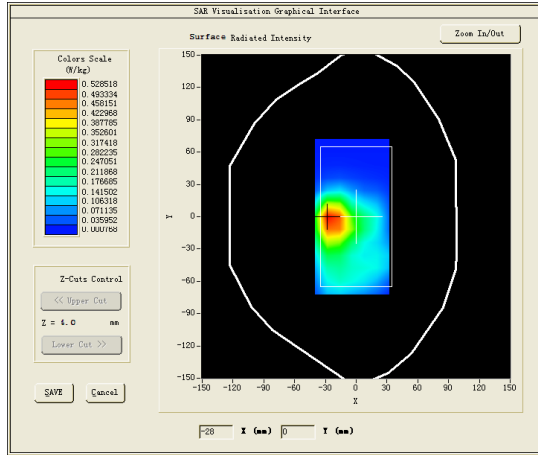
C. SAR Measurement Results

Lower Band SAR (Channel 1):

Frequency (MHz)	2412.000000
Relative permittivity (real part)	52.417801
Relative permittivity (imaginary part)	14.706300
Conductivity (S/m)	1.970644
Variation (%)	-0.110000

SURFACE SAR

VOLUME SAR

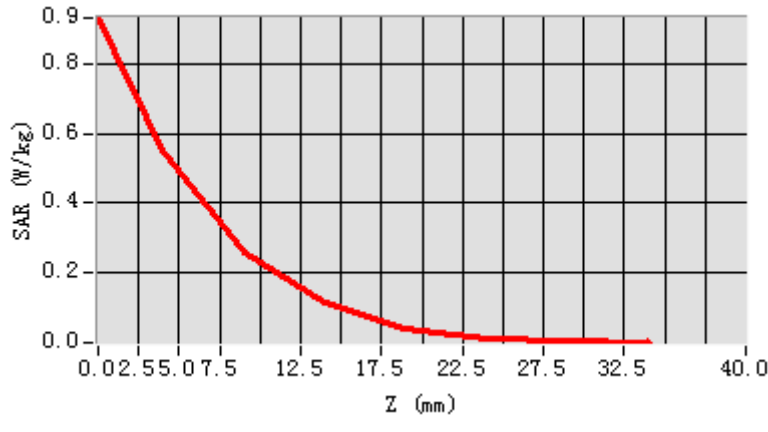


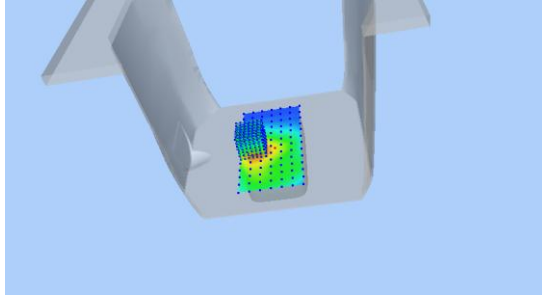
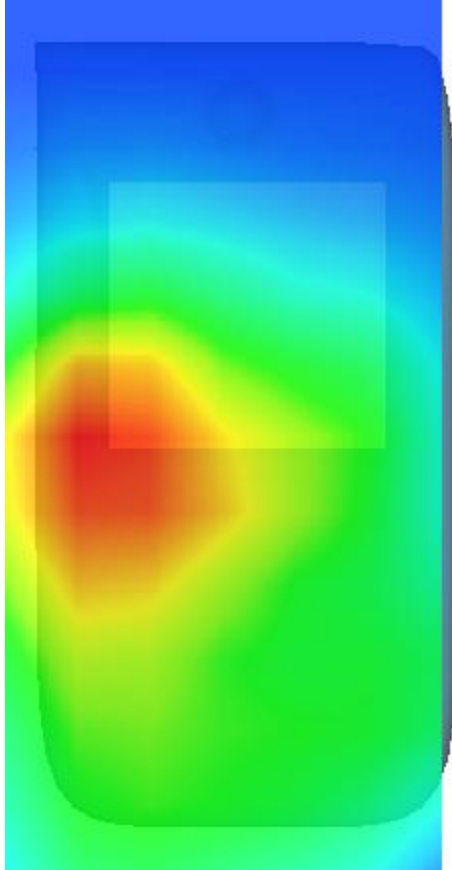
Maximum location: X=-25.00, Y=-2.00

SAR Peak: 1.03 W/kg

SAR 10g (W/Kg)	0.291750
SAR 1g (W/Kg)	0.588356

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.9311	0.5497	0.2586	0.1165	0.0437	0.0117	0.0040



3D screen shot	Hot spot position
	

MEASUREMENT 10

Type: Phone measurement (Complete)

Date of measurement: 11/10/2016

Measurement duration: 10 minutes 19 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<u>Phantom</u>	<u>Right head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>Band2 WCDMA1900</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.63</u>

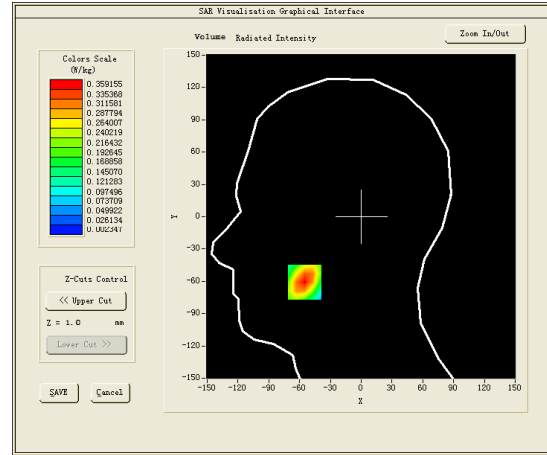
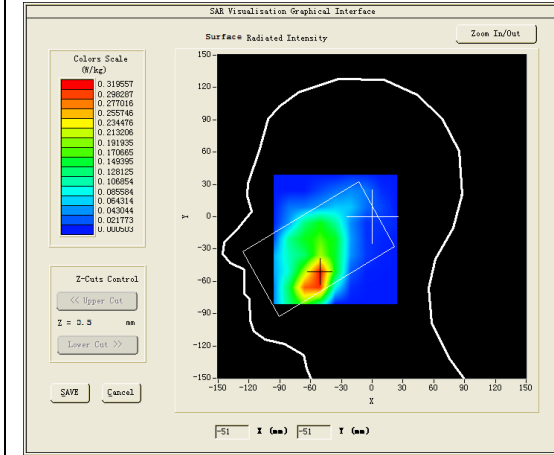
C. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	39.914200
Relative permittivity (imaginary part)	13.434300
Conductivity (S/m)	1.403138
Variation (%)	4.280000

SURFACE SAR

VOLUME SAR

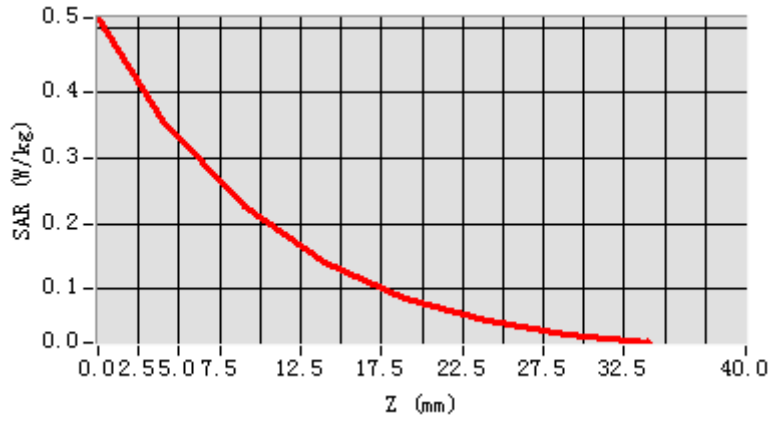


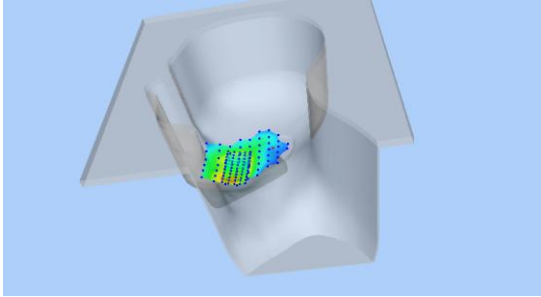
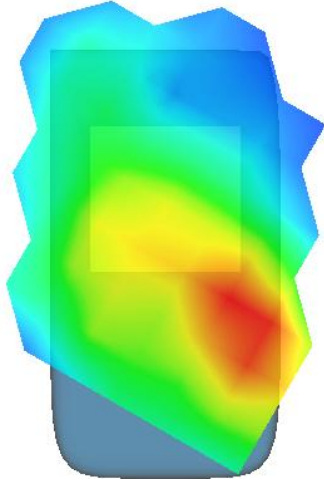
Maximum location: X=-55.00, Y=-61.00

SAR Peak: 0.52 W/kg

SAR 10g (W/Kg)	0.194603
SAR 1g (W/Kg)	0.340278

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.5148	0.3592	0.2246	0.1400	0.0857	0.0522	0.0310



3D screen shot	Hot spot position
	

MEASUREMENT 11

Towards-phantom-middle

Type: Phone measurement (Complete)

Date of measurement: 11/10/2016

Measurement duration: 11 minutes 32 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm</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>Band2 WCDMA1900</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.78</u>

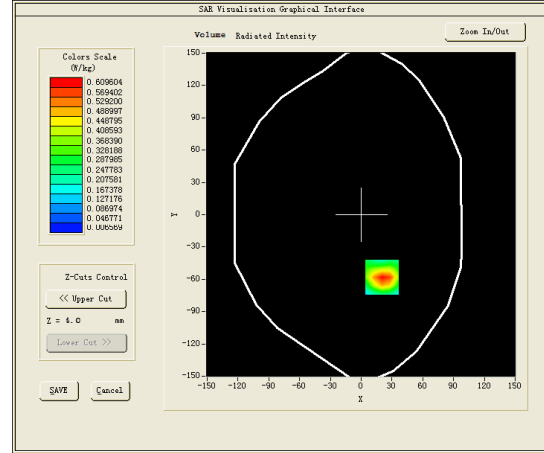
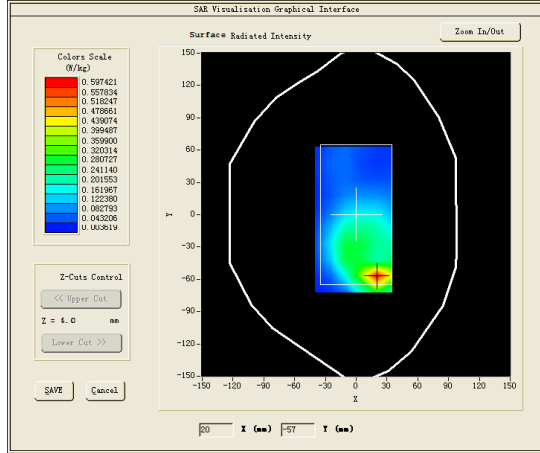
C. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.356098
Relative permittivity (imaginary part)	14.668600
Conductivity (S/m)	1.532054
Variation (%)	-0.380000

SURFACE SAR

VOLUME SAR

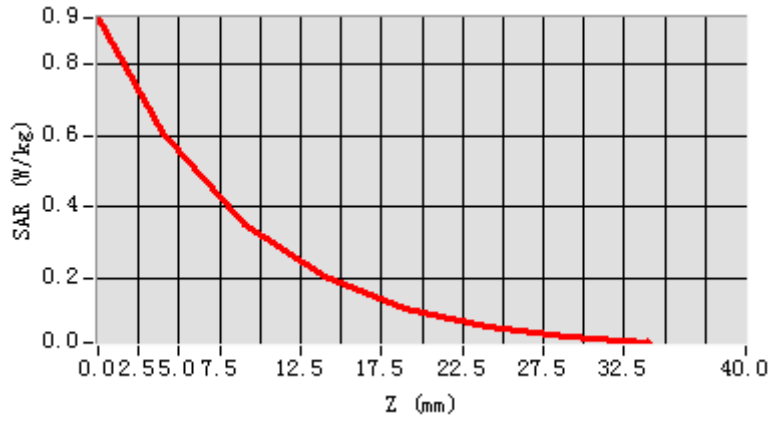


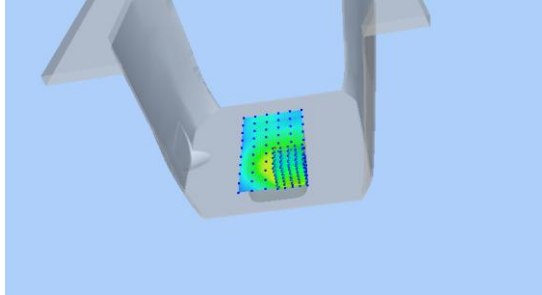
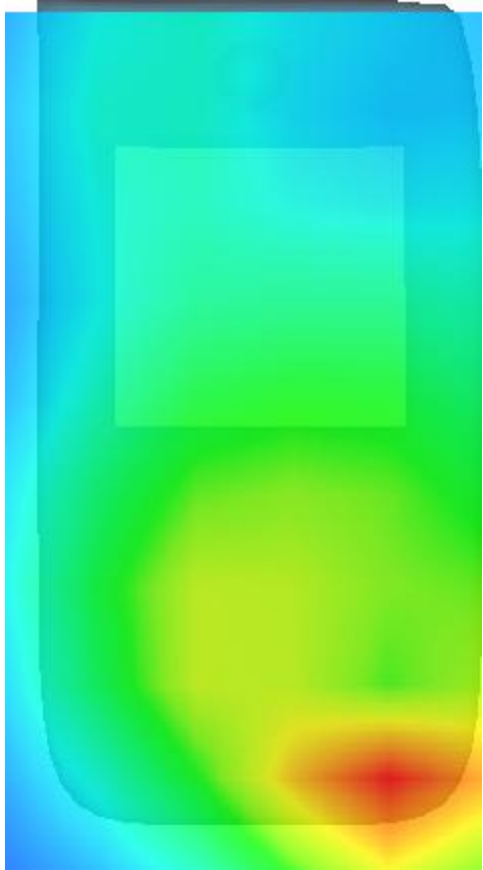
Maximum location: X=20.00, Y=-58.00

SAR Peak: 1.03 W/kg

SAR 10g (W/Kg)	0.320306
SAR 1g (W/Kg)	0.623564

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.9302	0.6096	0.3508	0.2048	0.1171	0.0663	0.0365



3D screen shot	Hot spot position
	

MEASUREMENT 12

Front-side-middle

Type: Phone measurement (Complete)

Date of measurement: 11/10/2016

Measurement duration: 11 minutes 2 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm</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>Band2 WCDMA1900</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.78</u>

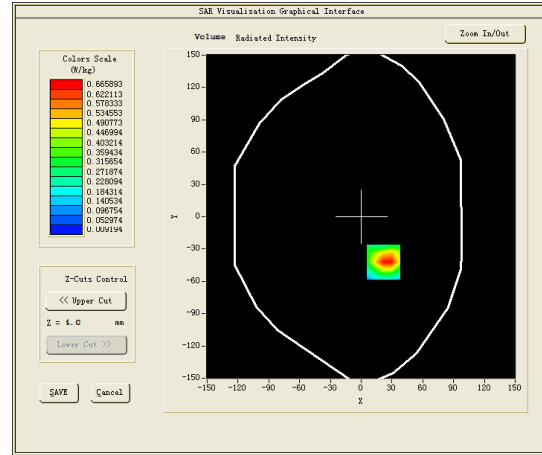
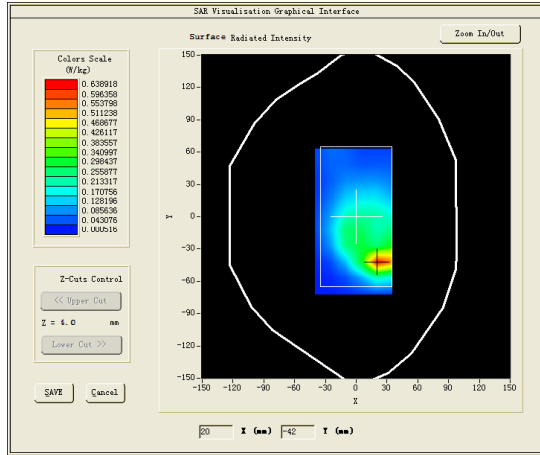
C. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.356098
Relative permittivity (imaginary part)	14.668600
Conductivity (S/m)	1.532054
Variation (%)	-0.670000

SURFACE SAR

VOLUME SAR

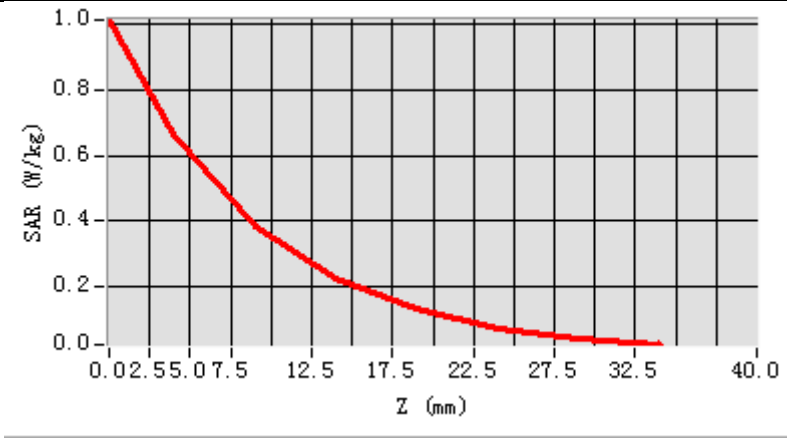


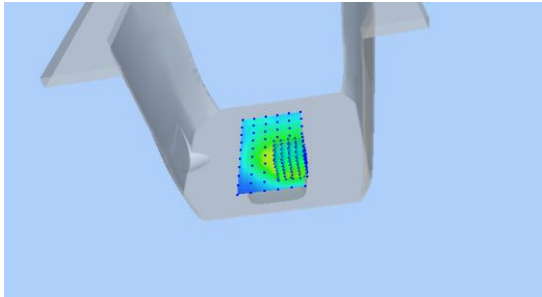
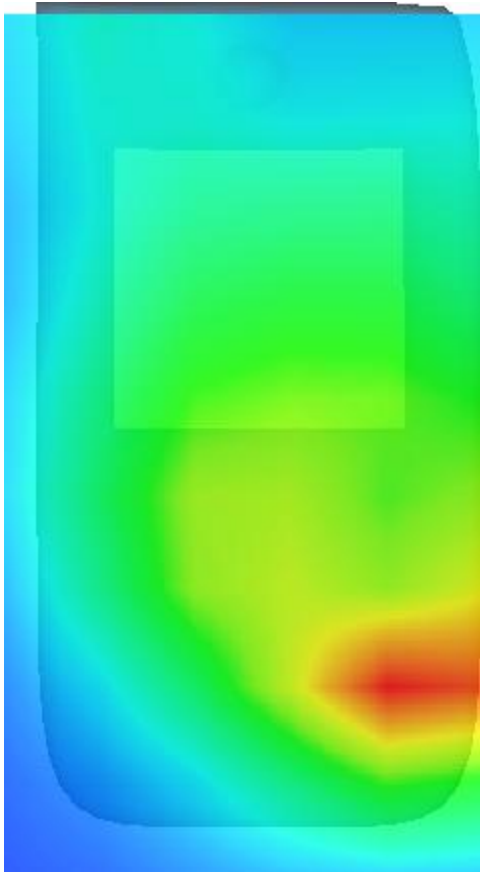
Maximum location: X=22.00, Y=-42.00

SAR Peak: 1.17 W/kg

SAR 10g (W/Kg)	0.353118
SAR 1g (W/Kg)	0.694736

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.0138	0.6659	0.3846	0.2259	0.1299	0.0734	0.0410



3D screen shot	Hot spot position
	

MEASUREMENT 13

Type: Phone measurement (Complete)

Date of measurement: 6/10/2016

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm</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>Cheek</u>
<u>Band</u>	<u>Band5 WCDMA850</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.93</u>

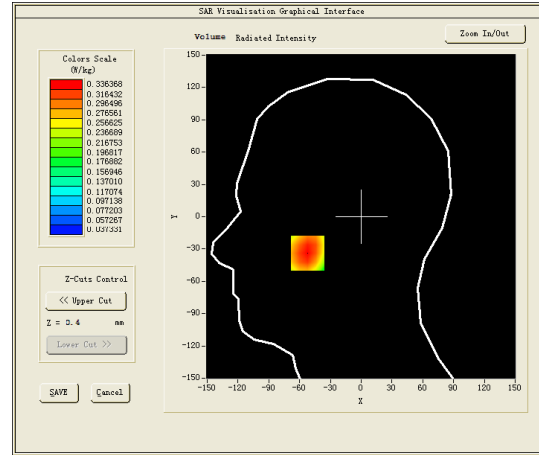
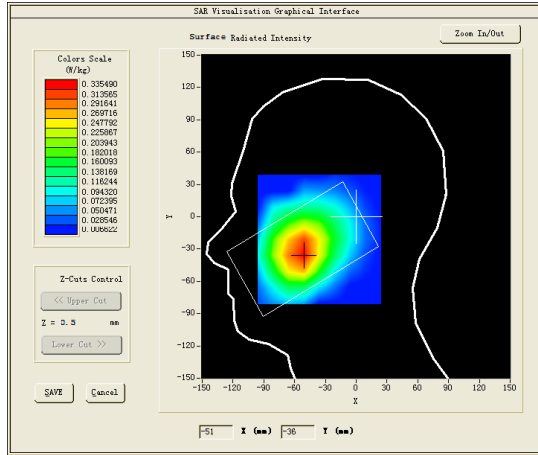
C. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.400024
Relative permittivity (real part)	40.234680
Relative permittivity (imaginary part)	19.852501
Conductivity (S/m)	0.922480
Variation (%)	0.470000

SURFACE SAR

VOLUME SAR

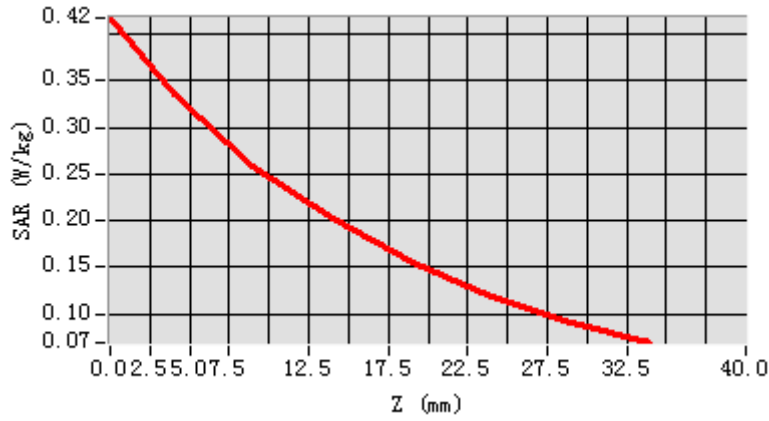


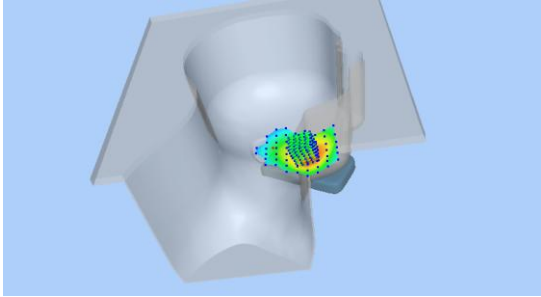
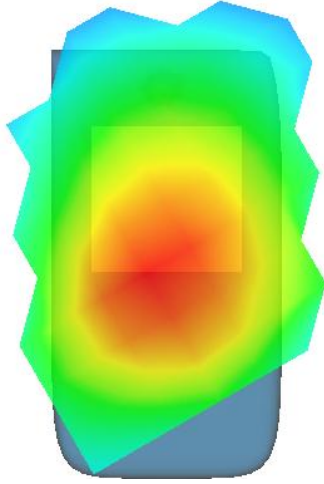
Maximum location: X=-52.00, Y=-34.00

SAR Peak: 0.42 W/kg

SAR 10g (W/Kg)	0.239985
SAR 1g (W/Kg)	0.332173

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.4169	0.3364	0.2588	0.2025	0.1560	0.1191	0.0910



3D screen shot	Hot spot position
	

MEASUREMENT 9

Towards-ground-middle

Type: Phone measurement (Complete)

Date of measurement: 6/10/2016

Measurement duration: 11 minutes 26 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm</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>Band5 WCDMA850</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>5.07</u>

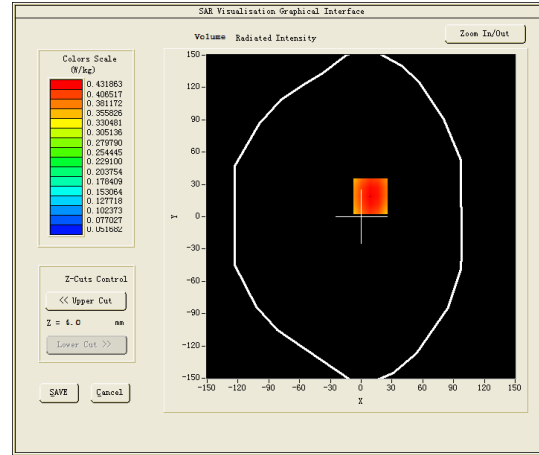
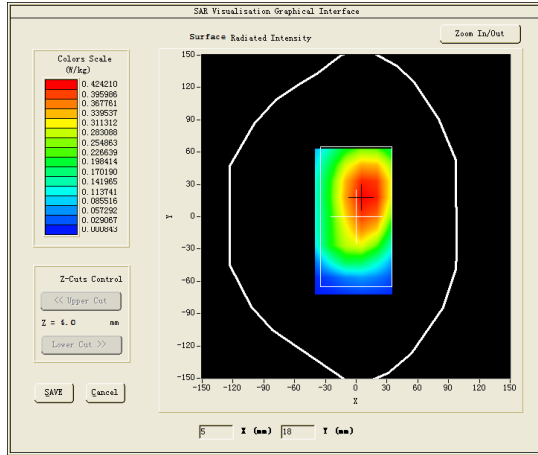
C. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.400024
Relative permittivity (real part)	53.916260
Relative permittivity (imaginary part)	21.316219
Conductivity (S/m)	0.990494
Variation (%)	-0.200000

SURFACE SAR

VOLUME SAR

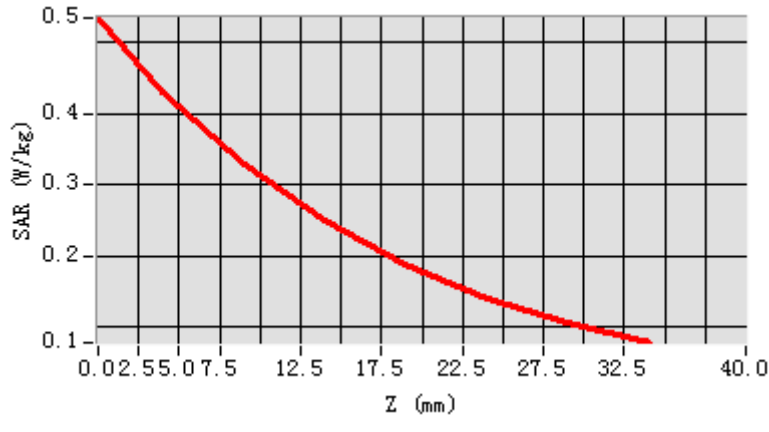


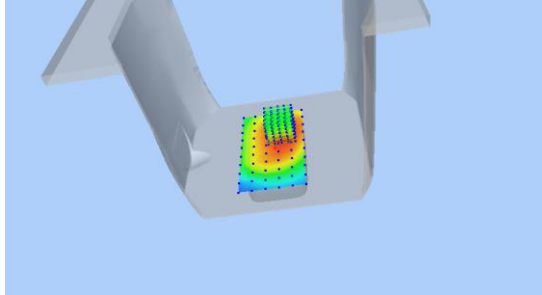
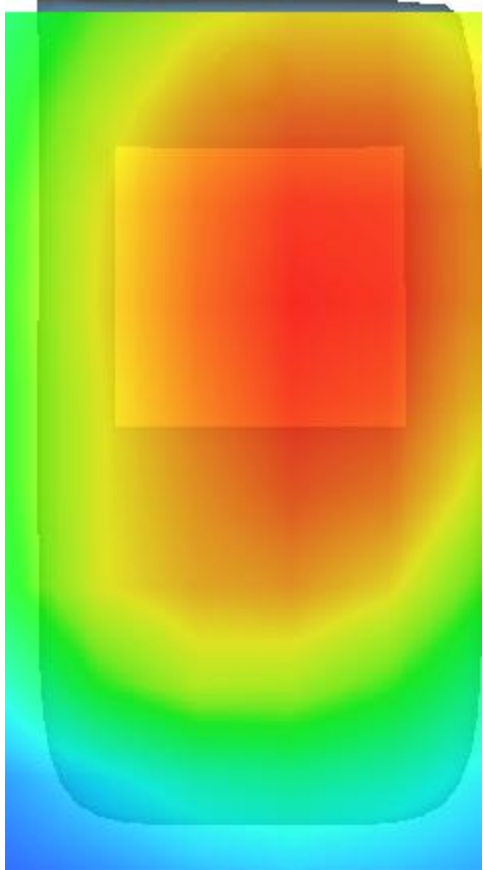
Maximum location: X=9.00, Y=19.00

SAR Peak: 0.58 W/kg

SAR 10g (W/Kg)	0.332175
SAR 1g (W/Kg)	0.455791

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.5351	0.4319	0.3292	0.2501	0.1888	0.1417	0.1056



3D screen shot	Hot spot position
	

MEASUREMENT 15

Rear-side-middle

Type: Phone measurement (Complete)

Date of measurement: 6/10/2016

Measurement duration: 11 minutes 10 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm</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>Band5 WCDMA850</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>5.07</u>

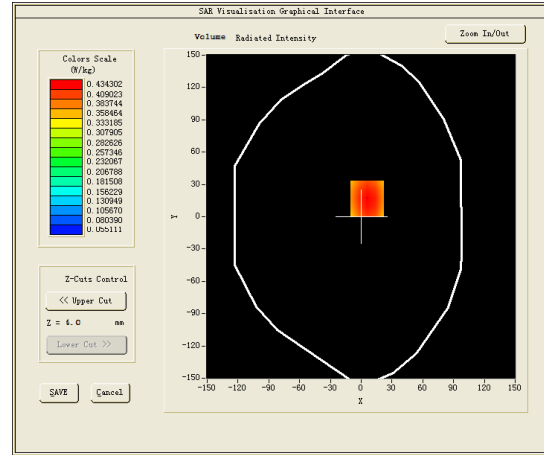
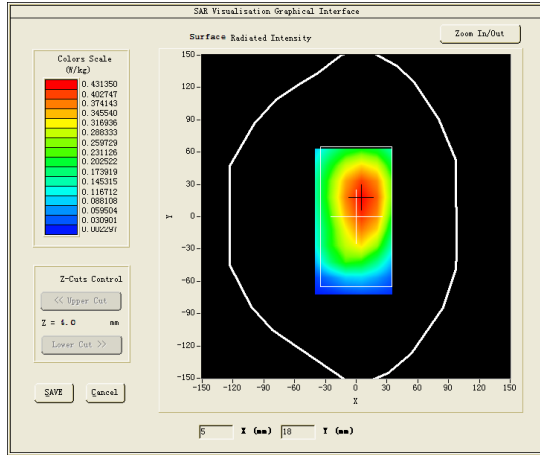
C. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.400024
Relative permittivity (real part)	53.916260
Relative permittivity (imaginary part)	21.316219
Conductivity (S/m)	0.990494
Variation (%)	-0.080000

SURFACE SAR

VOLUME SAR

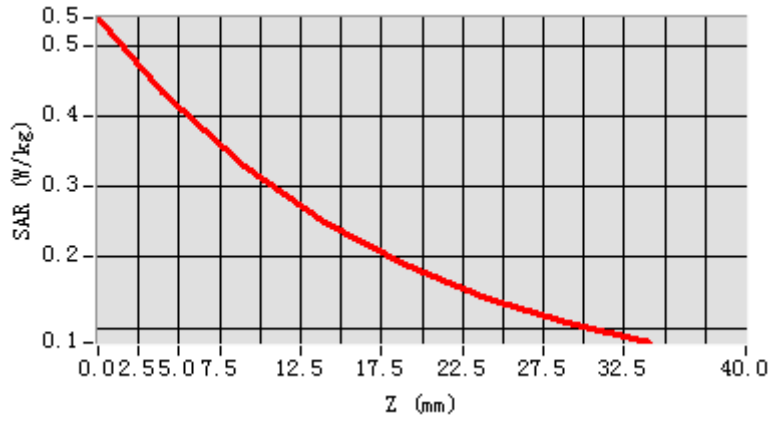


Maximum location: X=6.00, Y=17.00

SAR Peak: 0.58 W/kg

SAR 10g (W/Kg)	0.332622
SAR 1g (W/Kg)	0.457335

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.5395	0.4343	0.3299	0.2499	0.1888	0.1419	0.1064



3D screen shot	Hot spot position
