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Annex A: System Check

Project Name : X601

**Report Number:
FCC16083893A-6**

MEASUREMENT 1

HEAD

Type: Validation measurement (Complete)

Date of measurement: 19/8/2016

Measurement duration: 11 minutes 48 seconds

A. Experimental conditions.

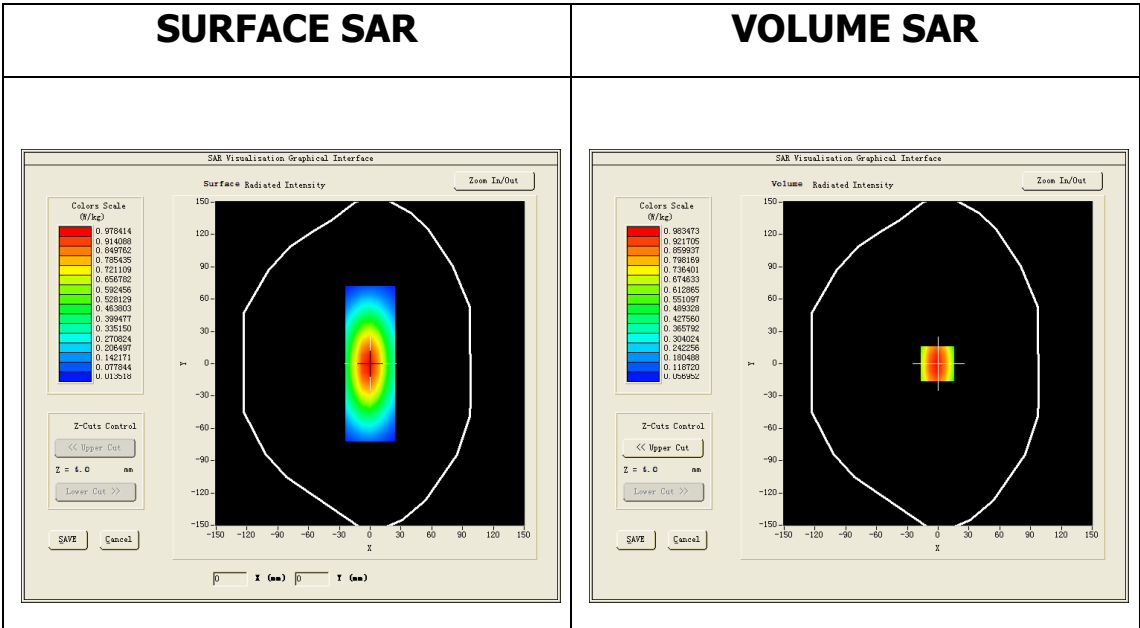
<u>Area Scan</u>	<u>dx=8mm dy=8mm</u>
<u>ZoomScan</u>	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW835</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>5.07</u>

B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	835.000000
Relative permittivity (real part)	40.526699
Relative permittivity (imaginary part)	19.965200
Conductivity (S/m)	0.926163

Variation (%)	0.920000
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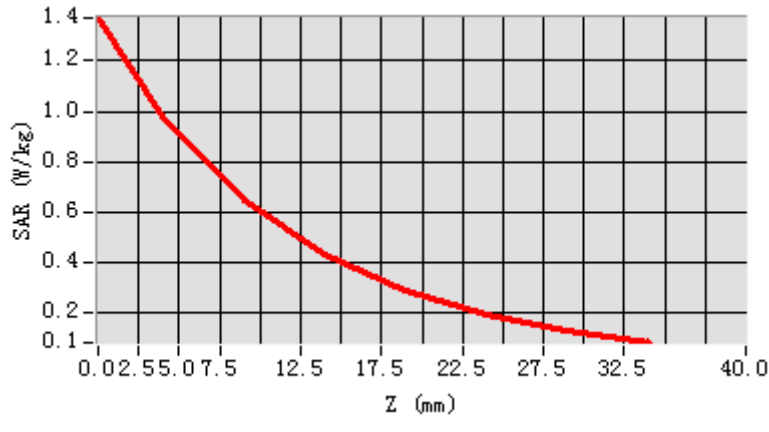


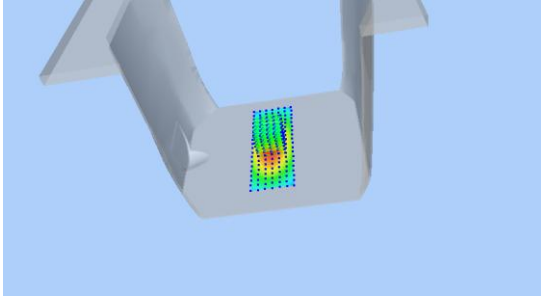

Maximum location: X=-1.00, Y=0.00

SAR Peak: 1.37 W/kg

SAR 10g (W/Kg)	6.10478
SAR 1g (W/Kg)	9.69519

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.3713	0.9835	0.6484	0.4339	0.2906	0.1933	0.1261



3D screen shot	Hot spot position
	

MEASUREMENT 2

BODY

Type: Validation measurement (Complete)

Date of measurement: 19/8/2016

Measurement duration: 11 minutes 47 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=8mm dy=8mm</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>Dipole</u>
<u>Band</u>	<u>CW835</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>5.07</u>

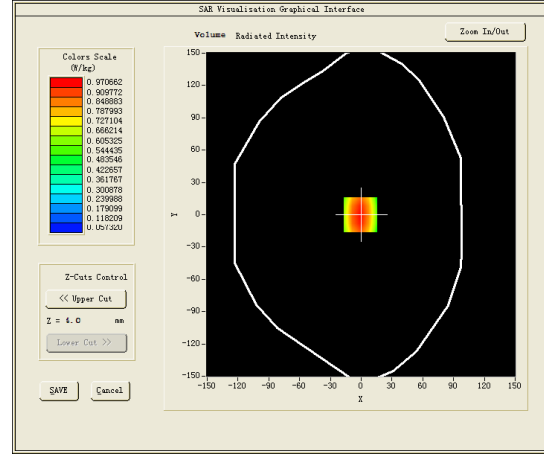
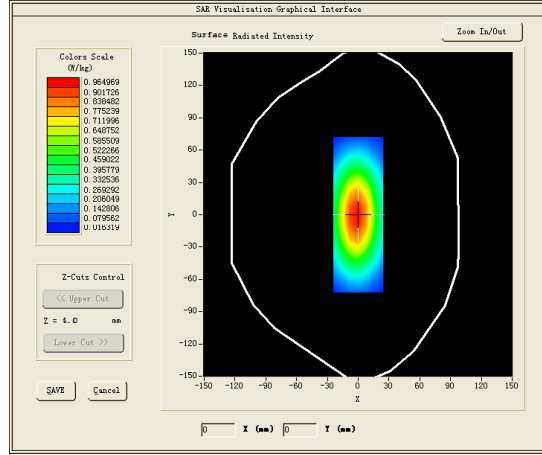
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	835.000000
Relative permittivity (real part)	53.439098
Relative permittivity (imaginary part)	21.715401
Conductivity (S/m)	1.007353
Variation (%)	0.760000

SURFACE SAR

VOLUME SAR

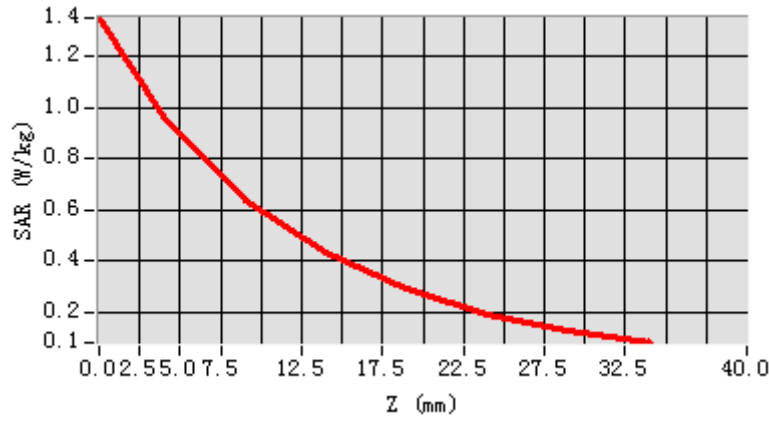


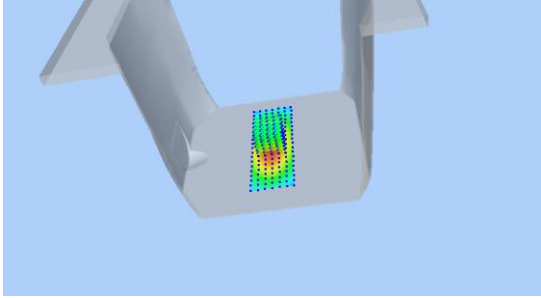

Maximum location: X=-1.00, Y=0.00

SAR Peak: 1.47 W/kg

SAR 10g (W/Kg)	6.61623
SAR 1g (W/Kg)	10.49474

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.3515	0.9707	0.6410	0.4295	0.2884	0.1920	0.1262



3D screen shot	Hot spot position
	

MEASUREMENT 3

BODY

Type: Validation measurement (Complete)

Date of measurement: 18/8/2016

Measurement duration: 11 minutes 20 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=8mm dy=8mm</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>Dipole</u>
<u>Band</u>	<u>CW1900</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.78</u>

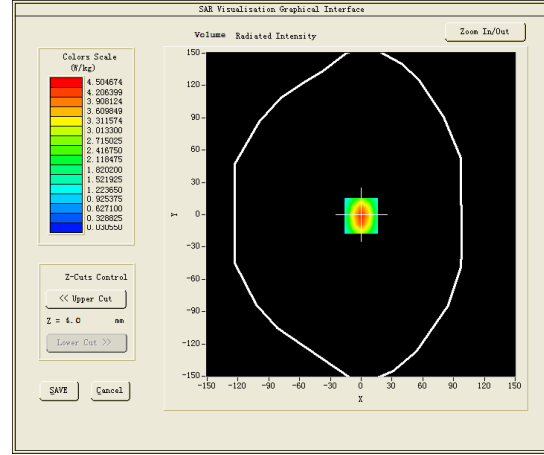
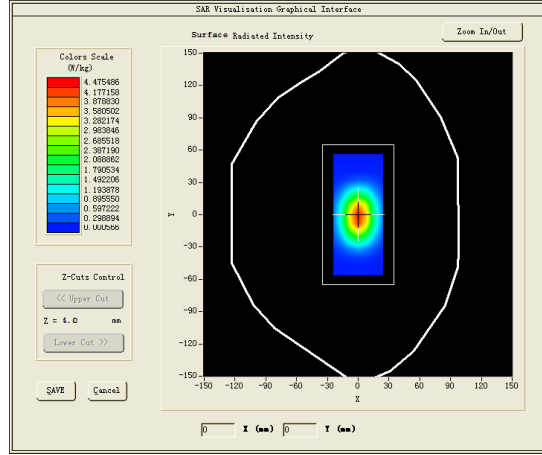
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	1900.000000
Relative permittivity (real part)	52.238701
Relative permittivity (imaginary part)	14.662300
Conductivity (S/m)	1.547687
Variation (%)	-0.120000

SURFACE SAR

VOLUME SAR

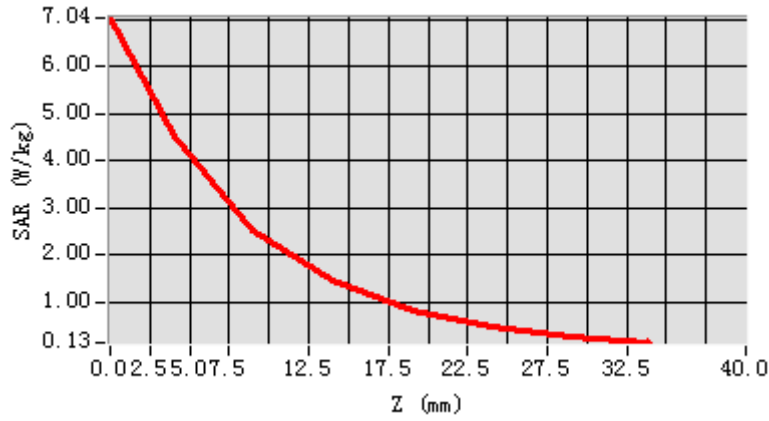


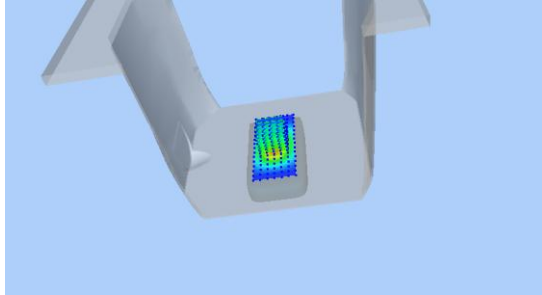
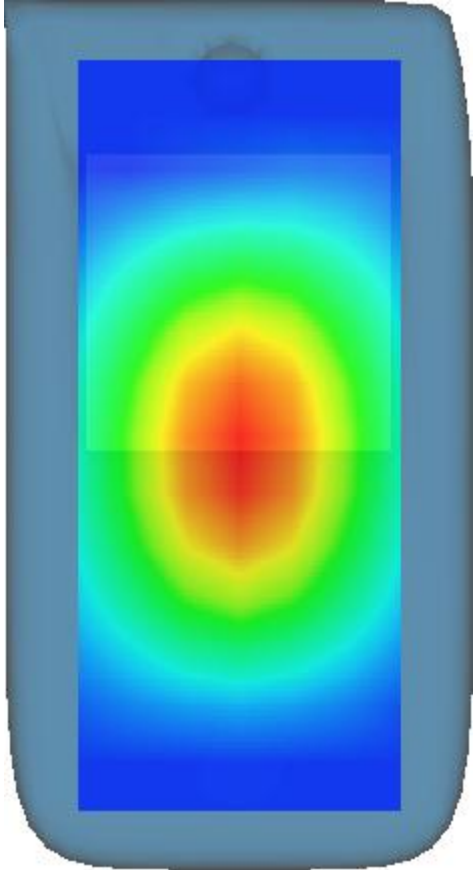
Maximum location: X=0.00, Y=-1.00

SAR Peak: 7.00 W/kg

SAR 10g (W/Kg)	22.16406
SAR 1g (W/Kg)	42.98718

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	7.0414	4.5047	2.5140	1.4403	0.8196	0.4627	0.2535



3D screen shot	Hot spot position
	

MEASUREMENT 4

HEAD

Type: Validation measurement (Complete)

Date of measurement: 18/8/2016

Measurement duration: 11 minutes 21 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=8mm dy=8mm</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>Dipole</u>
<u>Band</u>	<u>CW1900</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.78</u>

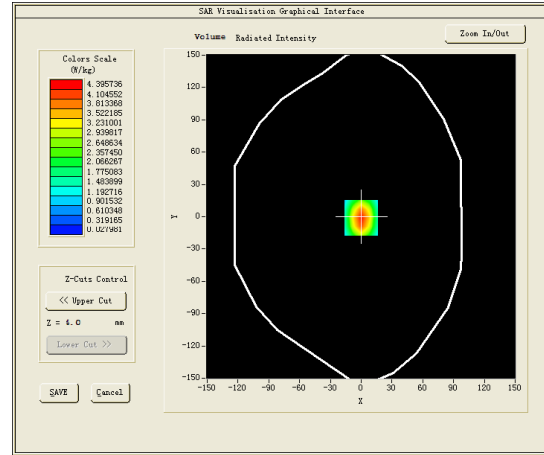
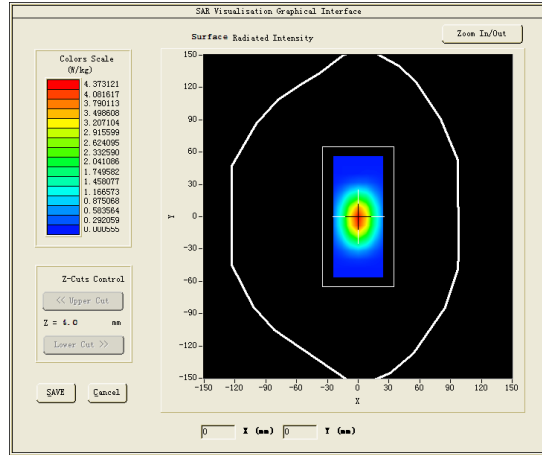
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	1900.000000
Relative permittivity (real part)	52.238701
Relative permittivity (imaginary part)	14.662300
Conductivity (S/m)	1.547687
Variation (%)	-0.060000

SURFACE SAR

VOLUME SAR

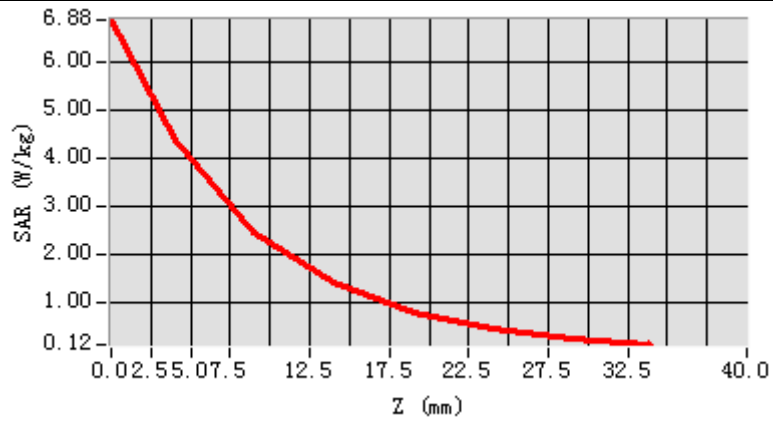


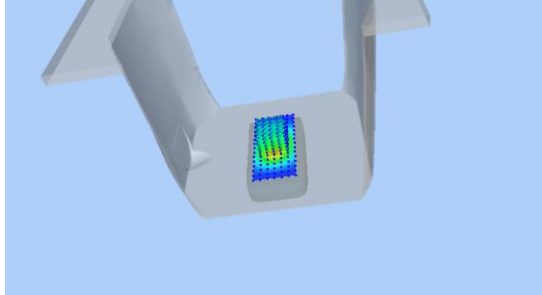
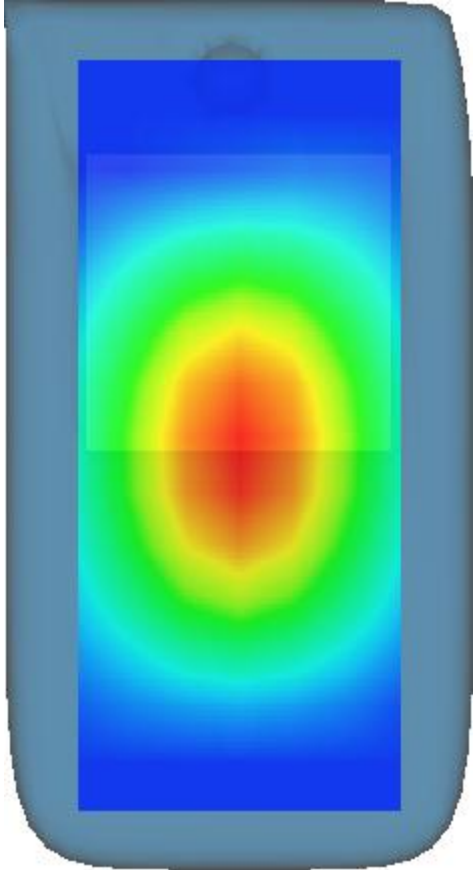
Maximum location: X=0.00, Y=-1.00

SAR Peak: 6.84 W/kg

SAR 10g (W/Kg)	21.46633
SAR 1g (W/Kg)	41.50148

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.8761	4.3957	2.4510	1.4045	0.7983	0.4499	0.2451



3D screen shot	Hot spot position
	

MEASUREMENT 5

BODY

Type: Validation measurement (Complete)

Date of measurement: 20/8/2016

Measurement duration: 10 minutes 15 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=8mm dy=8mm</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>Dipole</u>
<u>Band</u>	<u>CW2450</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.11</u>

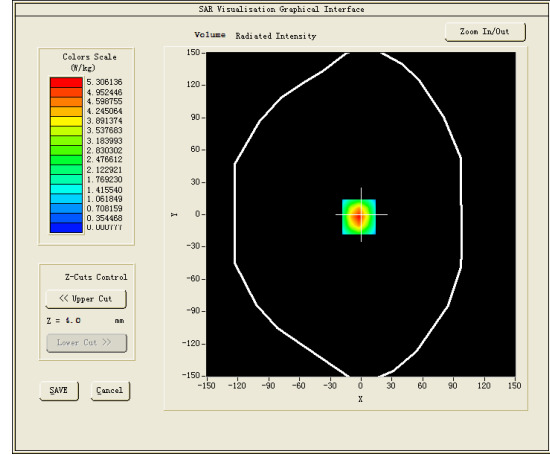
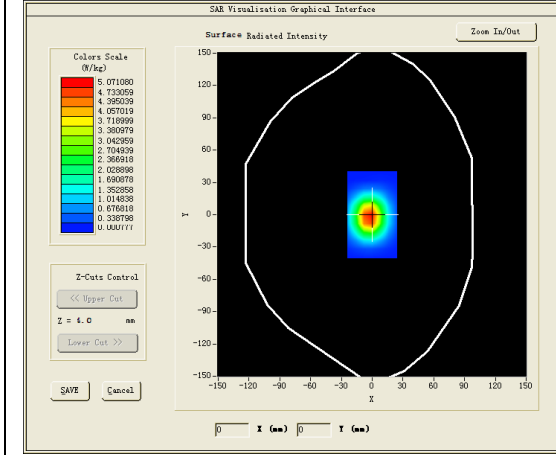
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	2450.000000
Relative permittivity (real part)	54.220600
Relative permittivity (imaginary part)	14.968800
Conductivity (S/m)	2.037420
Variation (%)	0.050000

SURFACE SAR

VOLUME SAR

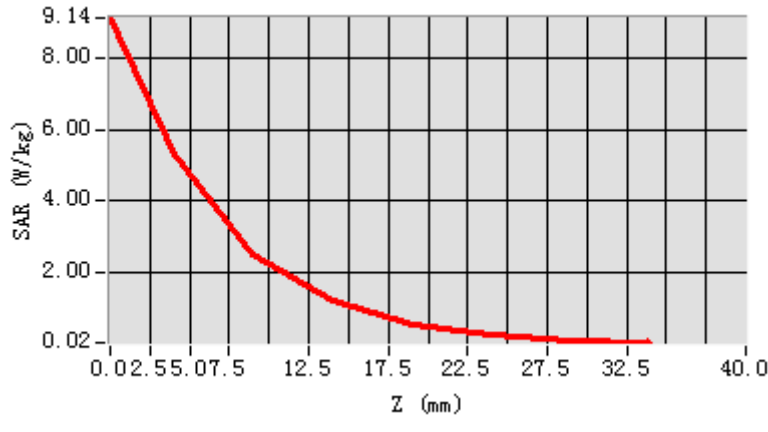


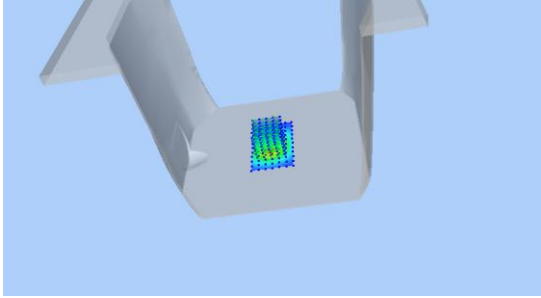
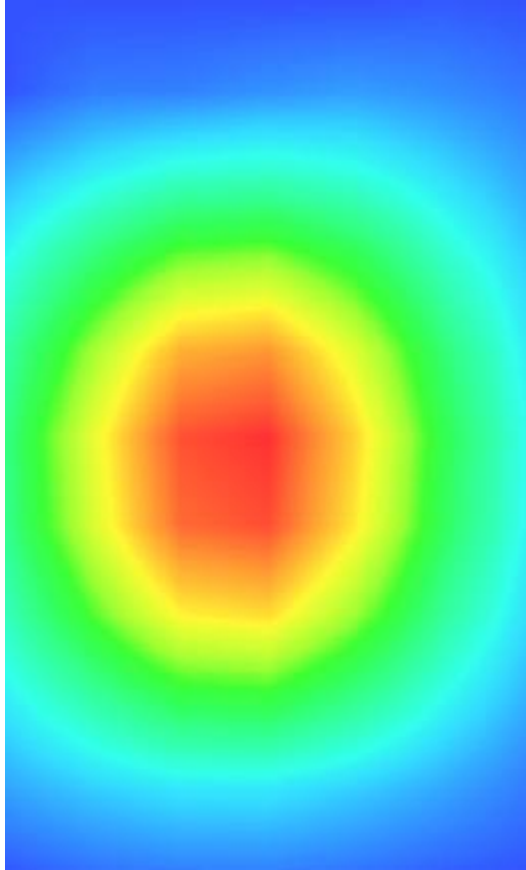
Maximum location: X=-2.00, Y=-2.00

SAR Peak: 10.27 W/kg

SAR 10g (W/Kg)	25.83320
SAR 1g (W/Kg)	57.34640

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	9.1411	5.3061	2.4999	1.1841	0.5409	0.2294	0.0858



3D screen shot	Hot spot position
	

MEASUREMENT 6

HEAD

Type: Validation measurement (Complete)

Date of measurement: 20/8/2016

Measurement duration: 10 minutes 16 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=8mm dy=8mm</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>Dipole</u>
<u>Band</u>	<u>CW2450</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.11</u>

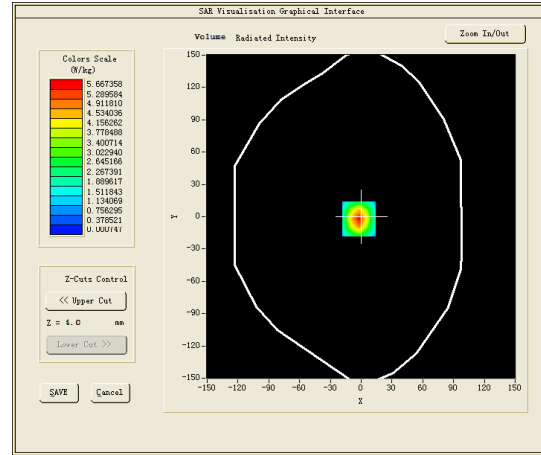
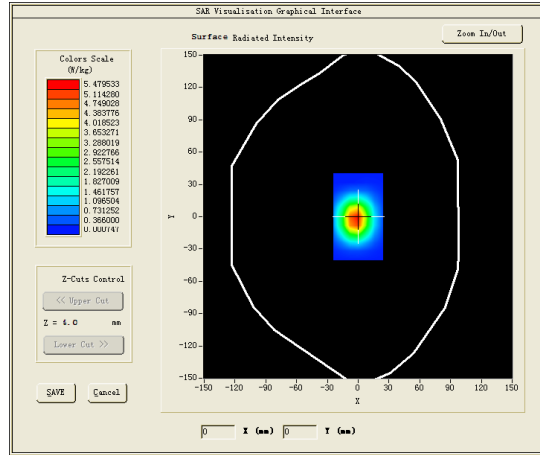
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	2450.000000
Relative permittivity (real part)	39.274300
Relative permittivity (imaginary part)	13.209200
Conductivity (S/m)	1.797919
Variation (%)	-0.070000

SURFACE SAR

VOLUME SAR

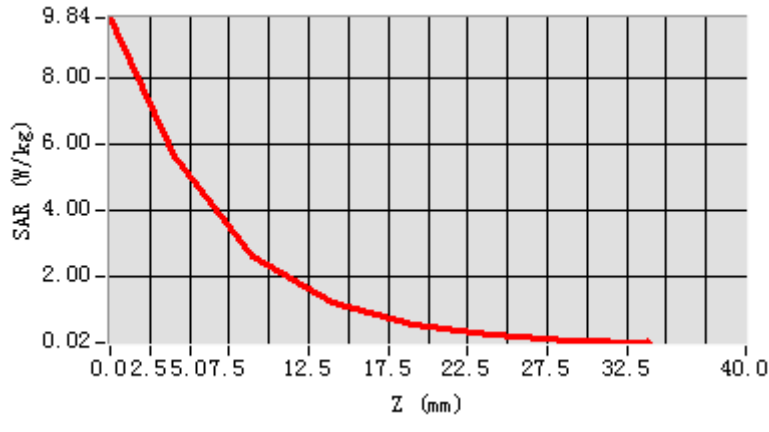


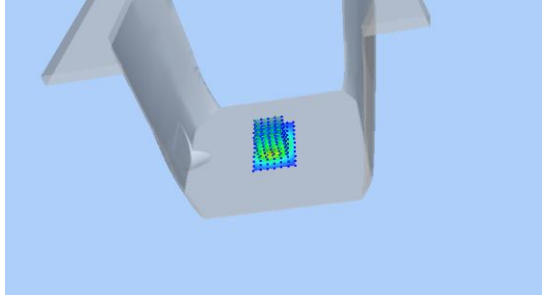
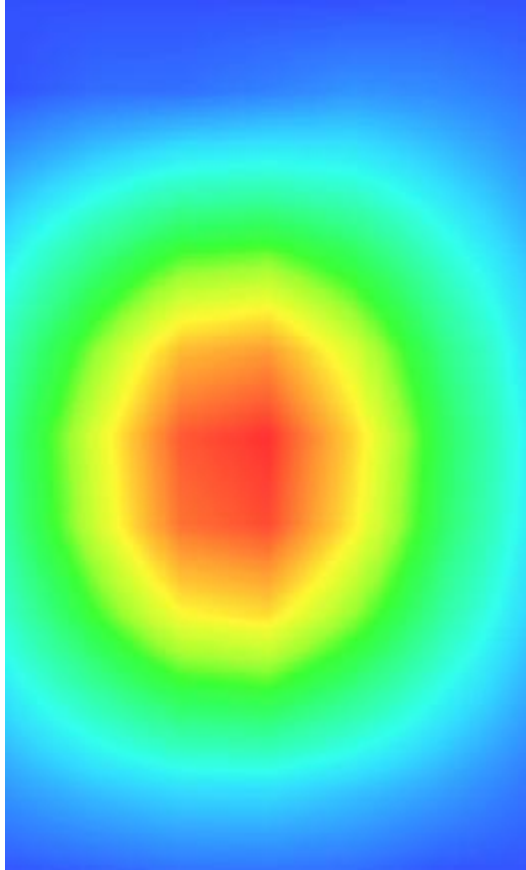
Maximum location: X=-2.00, Y=-2.00

SAR Peak: 9.73 W/kg

SAR 10g (W/Kg)	23.89643
SAR 1g (W/Kg)	52.19294

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	9.8410	5.6674	2.6392	1.2582	0.5748	0.2432	0.0901



3D screen shot	Hot spot position
	

MEASUREMENT 7

HEAD

Type: Validation measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 13 minutes 45 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>Dipole</u>
<u>Band</u>	<u>CW5200</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

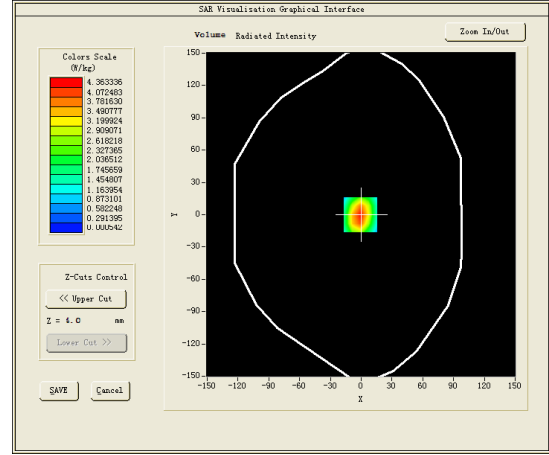
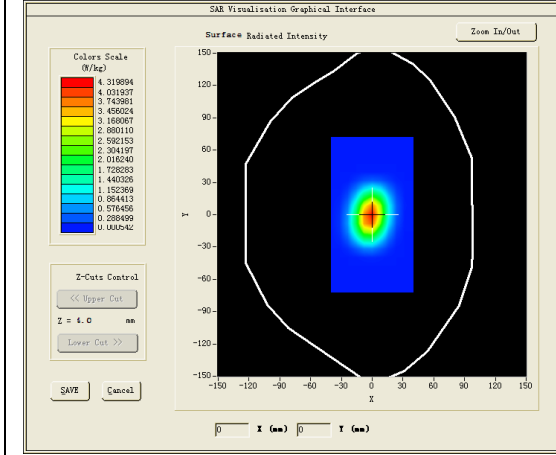
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	5200.000000
Relative permittivity (real part)	35.553182
Relative permittivity (imaginary part)	16.497414
Conductivity (S/m)	4.773841
Variation (%)	0.330000

SURFACE SAR

VOLUME SAR

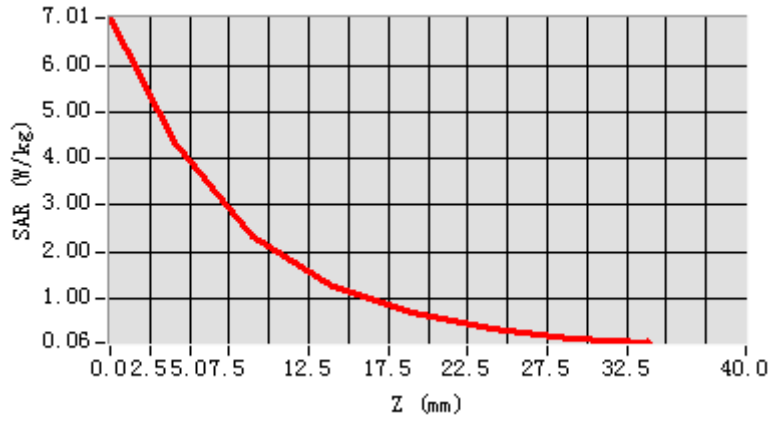


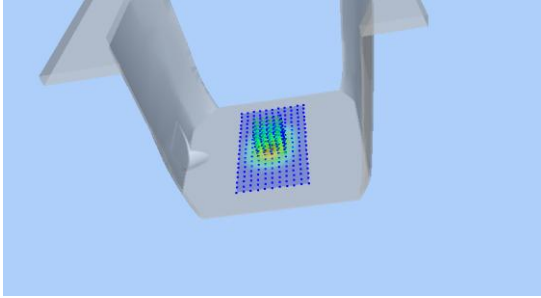
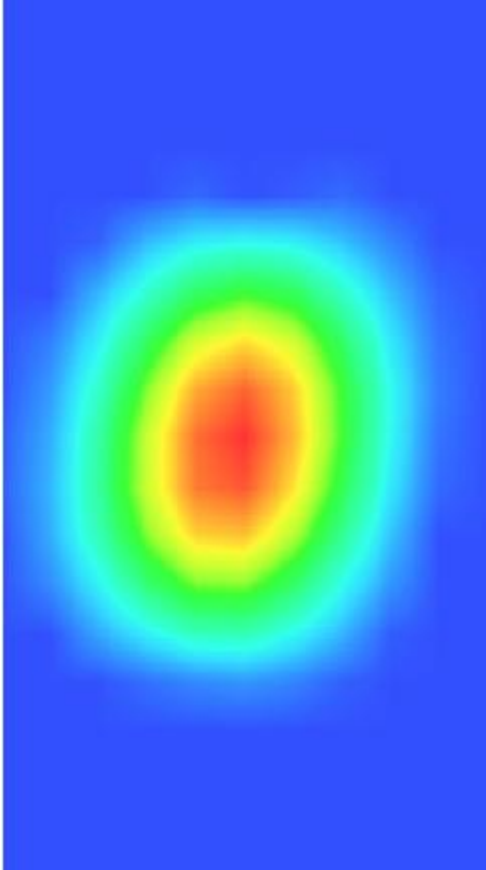
Maximum location: X=-1.00, Y=0.00

SAR Peak: 15 W/kg

SAR 10g (W/Kg)	23.57172
SAR 1g (W/Kg)	83.92412

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	7.0084	4.3633	2.3305	1.2711	0.6827	0.3505	0.1629



3D screen shot	Hot spot position
	

MEASUREMENT 8

BODY

Type: Validation measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 11 minutes 20 seconds

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm</u>
<u>ZoomScan</u>	<u>8x8x7,dx=4mm dy=4mm</u> <u>dz=2mm,Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW5200</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

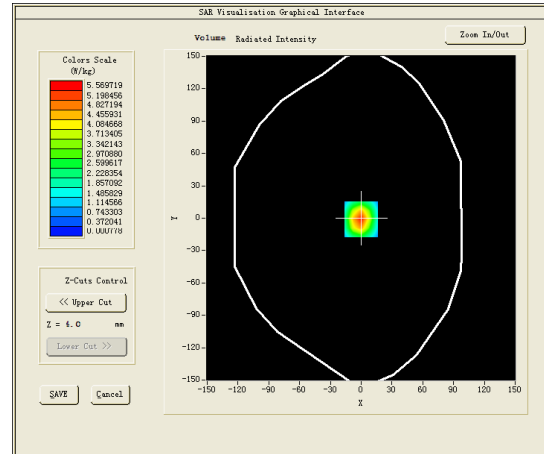
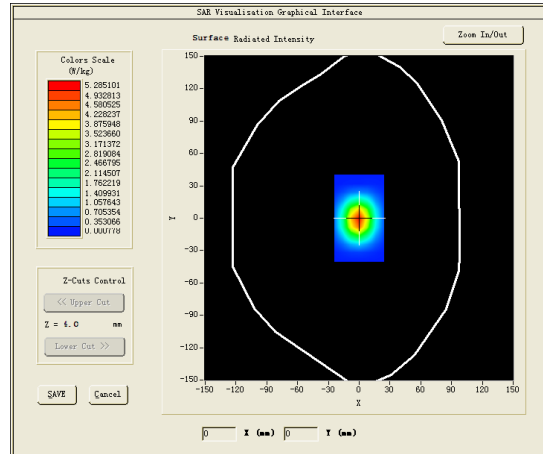
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	5200.000000
Relative permittivity (real part)	50.422599
Relative permittivity (imaginary part)	18.202492
Conductivity (S/m)	5.26371
Variation (%)	2.020000

SURFACE SAR

VOLUME SAR

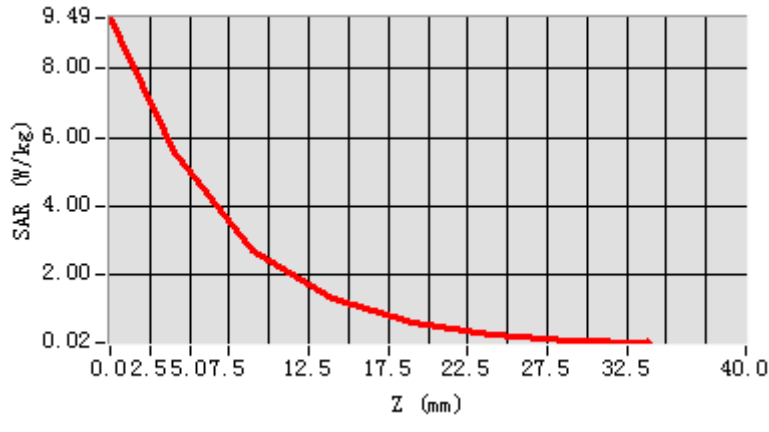


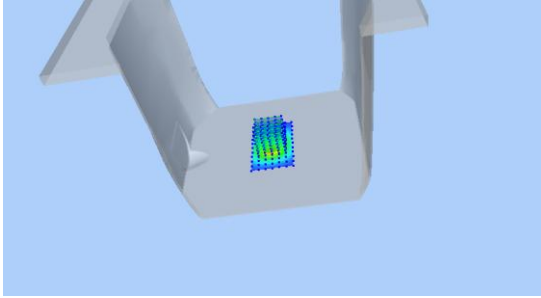
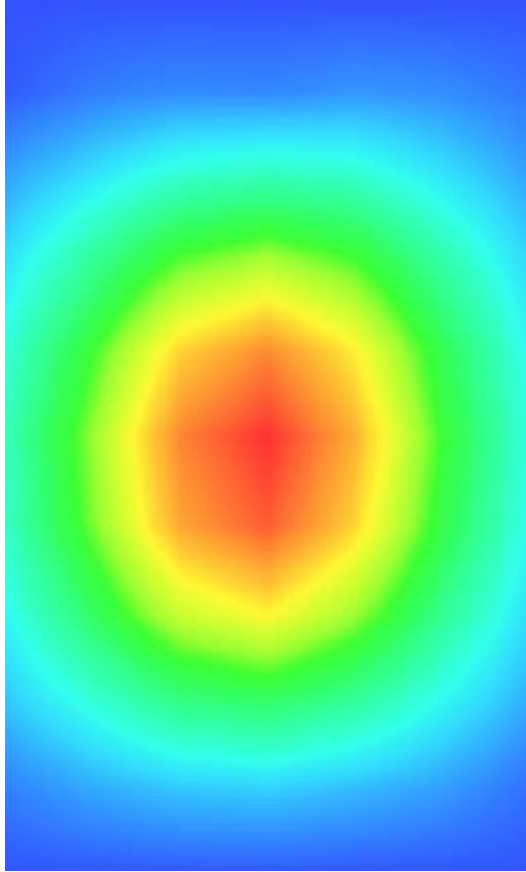
Maximum location: X=0.00, Y=-1.00

SAR Peak: 10.20 W/kg

SAR 10g (W/Kg)	22.37202
SAR 1g (W/Kg)	77.83191

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	9.4884	5.5697	2.6880	1.3102	0.6207	0.2724	0.0955



3D screen shot	Hot spot position
	

MEASUREMENT 9

HEAD

Type: Validation measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 10 minutes 39 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>Dipole</u>
<u>Band</u>	<u>CW5800</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

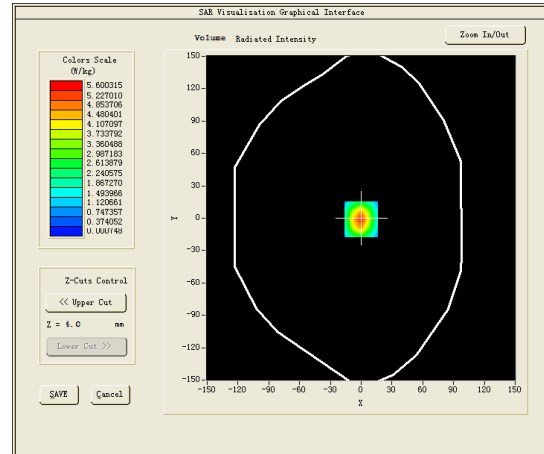
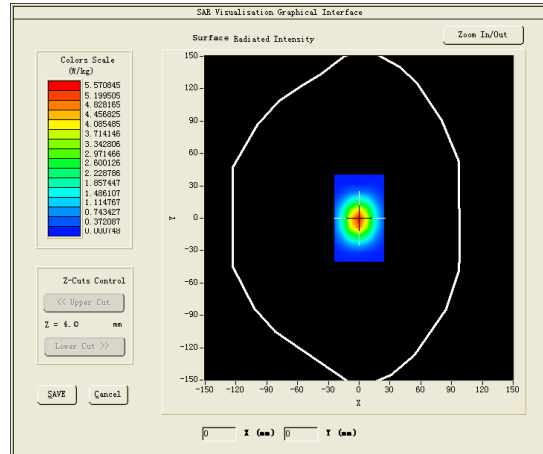
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	5800.000000
Relative permittivity (real part)	34.225599
Relative permittivity (imaginary part)	16.160852
Conductivity (S/m)	5.211844
Variation (%)	0.310000

SURFACE SAR

VOLUME SAR

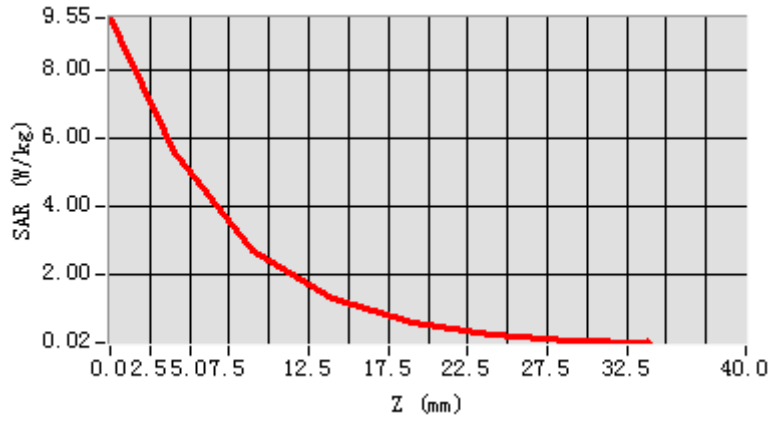


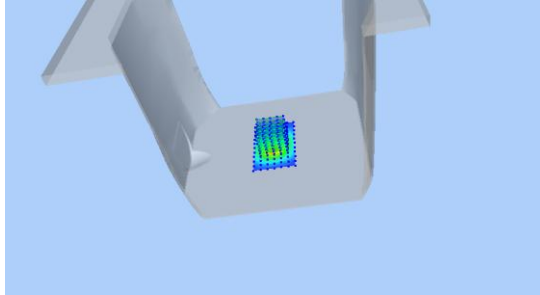
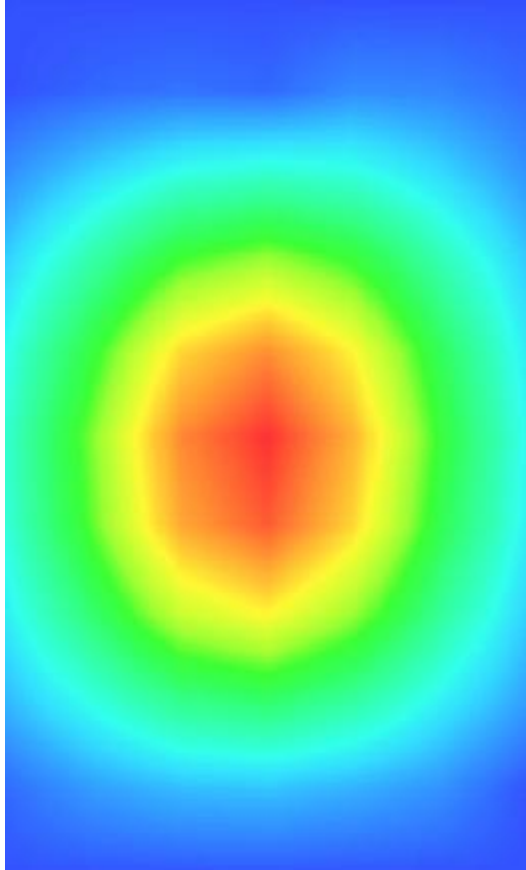
Maximum location: X=0.00, Y=-1.00

SAR Peak: 9.48 W/kg

SAR 10g (W/Kg)	23.57353
SAR 1g (W/Kg)	83.92489

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	9.5519	5.6003	2.6971	1.3148	0.6202	0.2707	0.0931



3D screen shot	Hot spot position
	

MEASUREMENT 10

BODY

Type: Validation measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 11 minutes 52 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>Dipole</u>
<u>Band</u>	<u>CW5800</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

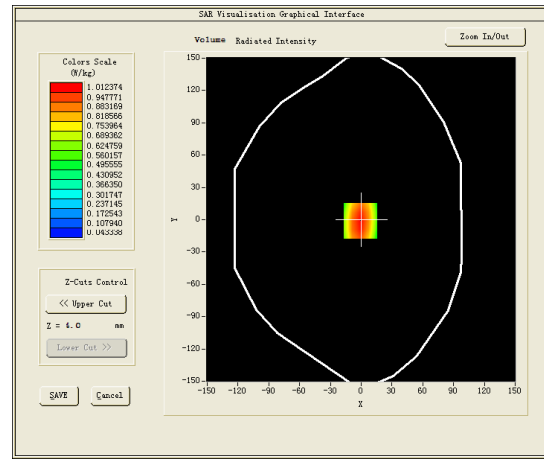
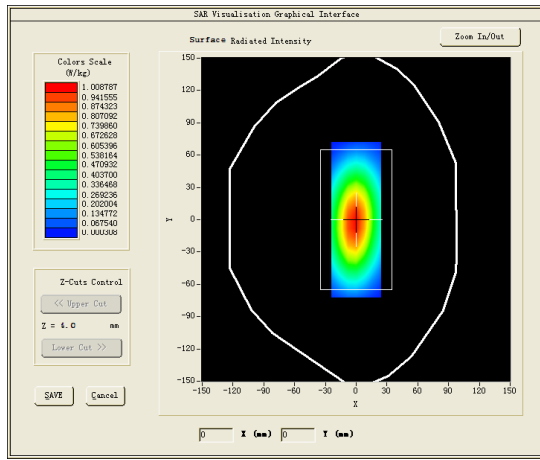
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	5800.000000
Relative permittivity (real part)	48.090699
Relative permittivity (imaginary part)	19.043921
Conductivity (S/m)	6.14163
Variation (%)	-0.080000

SURFACE SAR

VOLUME SAR

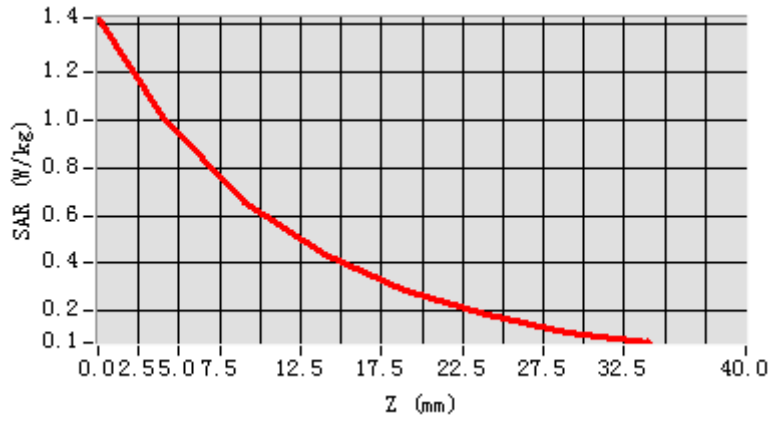


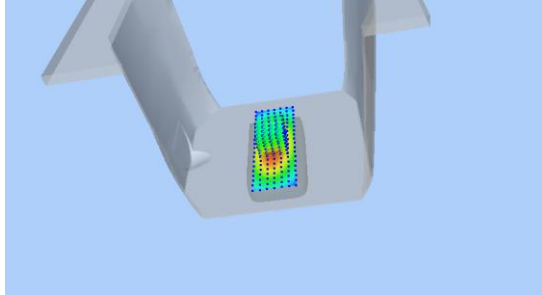
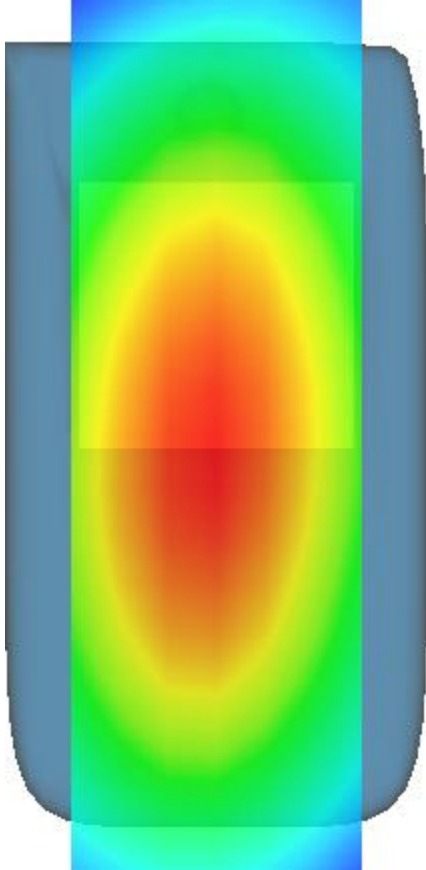
Maximum location: X=-1.00, Y=-1.00

SAR Peak: 1.42 W/kg

SAR 10g (W/Kg)	22.02128
SAR 1g (W/Kg)	77.66225

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.4287	1.0124	0.6572	0.4322	0.2826	0.1807	0.1105



3D screen shot	Hot spot position
	

MEASUREMENT 11

HEAD

Type: Validation measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 10 minutes 35 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>Dipole</u>
<u>Band</u>	<u>CW5300</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

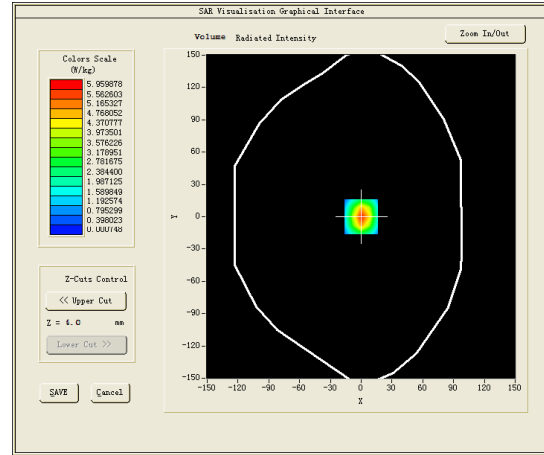
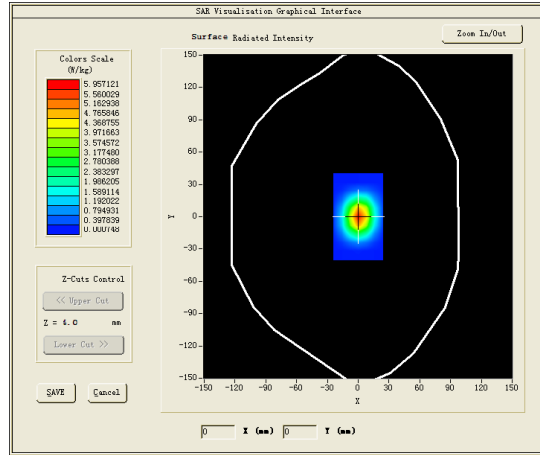
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	5300.000000
Relative permittivity (real part)	35.343199
Relative permittivity (imaginary part)	16.591080
Conductivity (S/m)	4.881334
Variation (%)	-0.220000

SURFACE SAR

VOLUME SAR

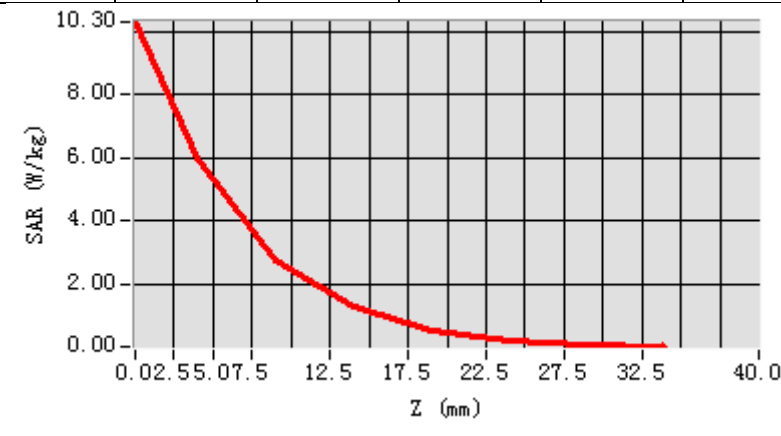


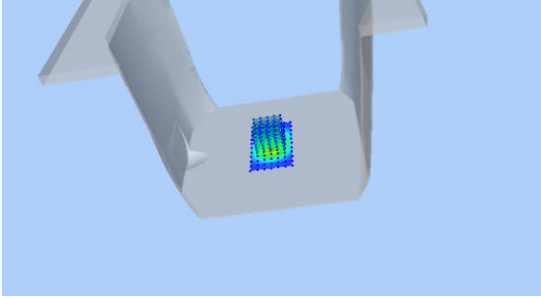
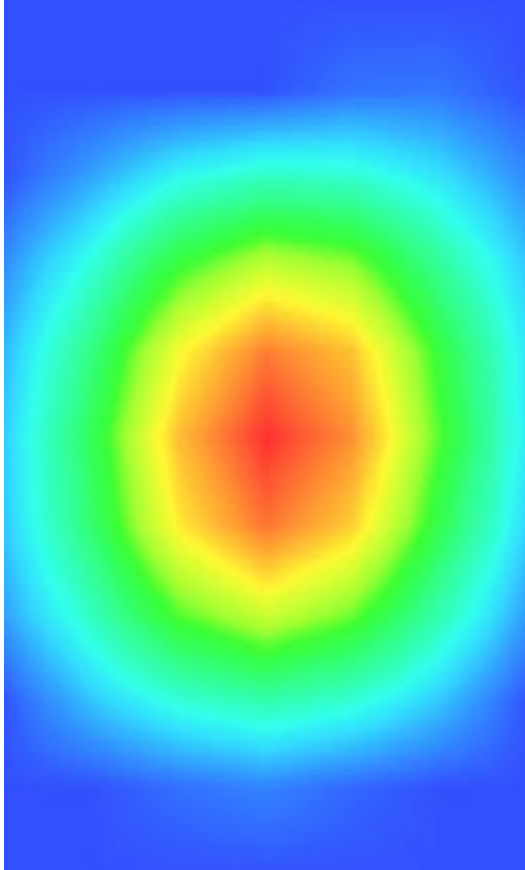
Maximum location: X=0.00, Y=0.00

SAR Peak: 41.12 W/kg

SAR 10g (W/Kg)	25.70497
SAR 1g (W/Kg)	89.512652

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	10.301	5.9599	2.7639	1.2615	0.5204	0.1728	0.0386
	2						



3D screen shot	Hot spot position
	

MEASUREMENT 12

BODY

Type: Validation measurement (Complete)

Date of measurement: 30/8/2016

Measurement duration: 10 minutes 20 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>Dipole</u>
<u>Band</u>	<u>CW5300</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

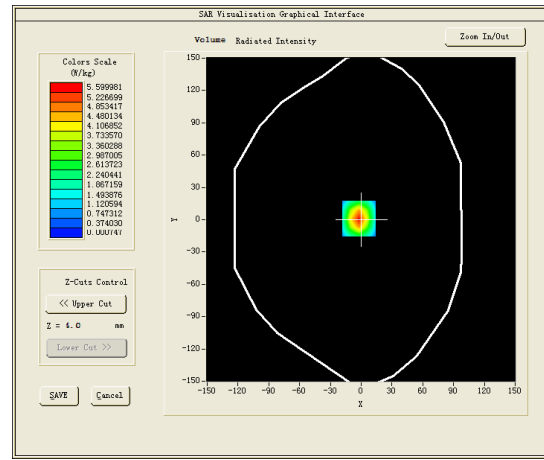
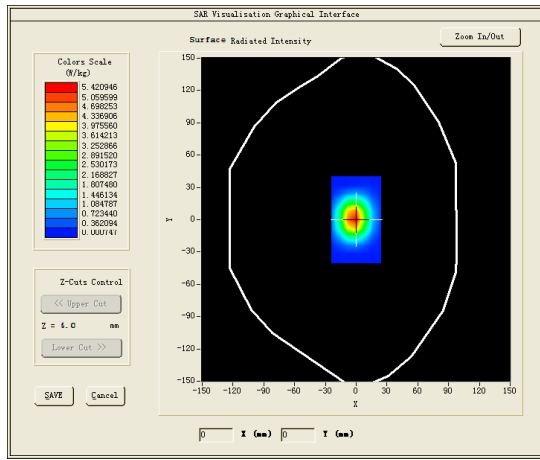
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	5300.000000
Relative permittivity (real part)	47.944300
Relative permittivity (imaginary part)	18.167566
Conductivity (S/m)	5.353919
Variation (%)	0.280000

SURFACE SAR

VOLUME SAR

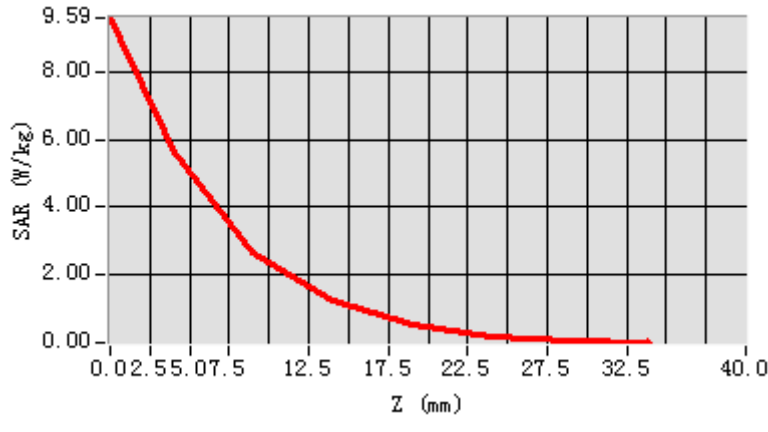


Maximum location: X=-2.00, Y=1.00

SAR Peak: 40.47 W/kg

SAR 10g (W/Kg)	22.521496
SAR 1g (W/Kg)	81.240974

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	9.5918	5.6000	2.6526	1.2395	0.5276	0.1905	0.0324



3D screen shot	Hot spot position
