



Annex A: System Check

Project Name : W4

**Report Number:
FCC16083893A-6**

I. RESULTS

<u>TYPE</u>	<u>BAND</u>	<u>PARAMETERS</u>
Validation	CW835	<u>Measurement 1:</u> Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW835	<u>Measurement 2:</u> Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW1900	<u>Measurement 3:</u> Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW1900	<u>Measurement 4:</u> Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW2450	<u>Measurement 5:</u> Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW2450	<u>Measurement 6:</u> Validation Plane with Dipole device position on Middle Channel in CW mode

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

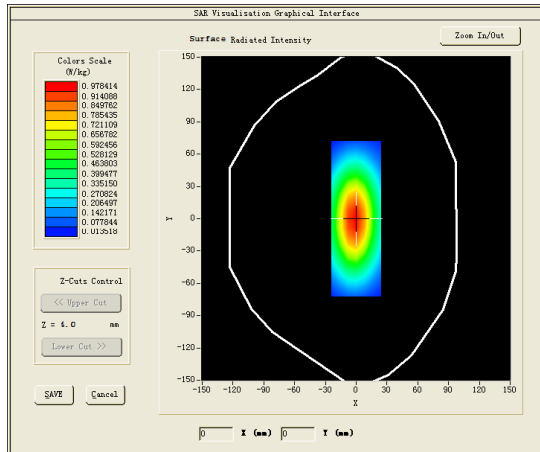
Middle Band SAR (Channel -1):

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

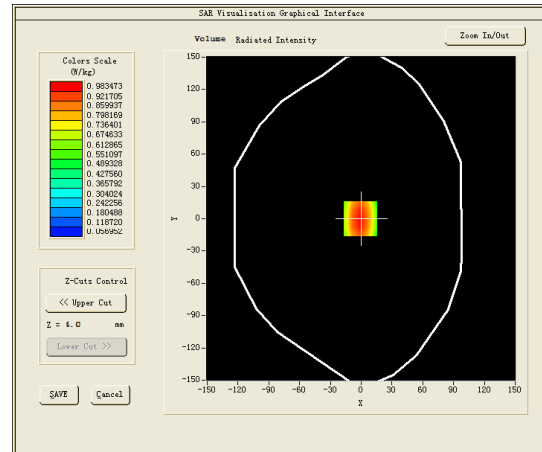
Variation (%)

0.920000

SURFACE SAR



VOLUME SAR



Maximum location: X=-1.00, Y=0.00

SAR Peak: 1.37 W/kg

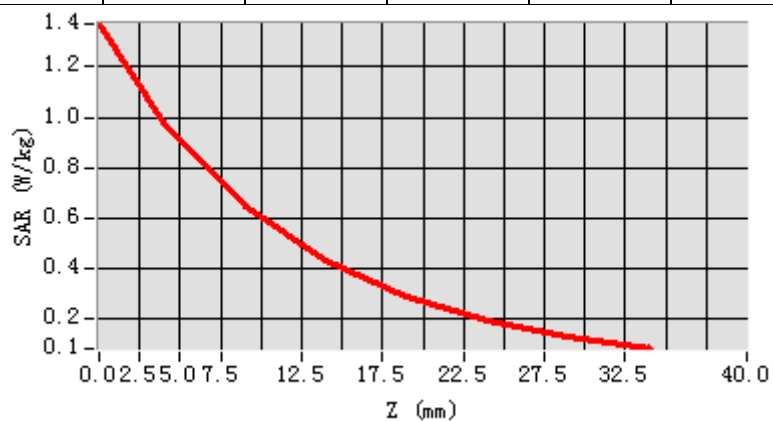
SAR 10g (W/Kg)

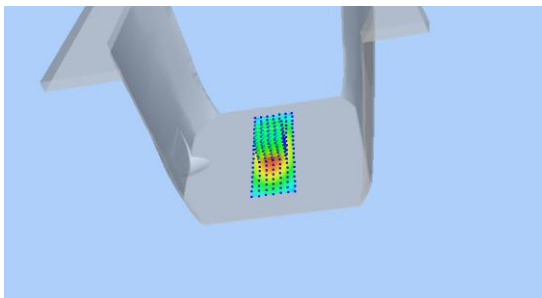
6.11478

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.

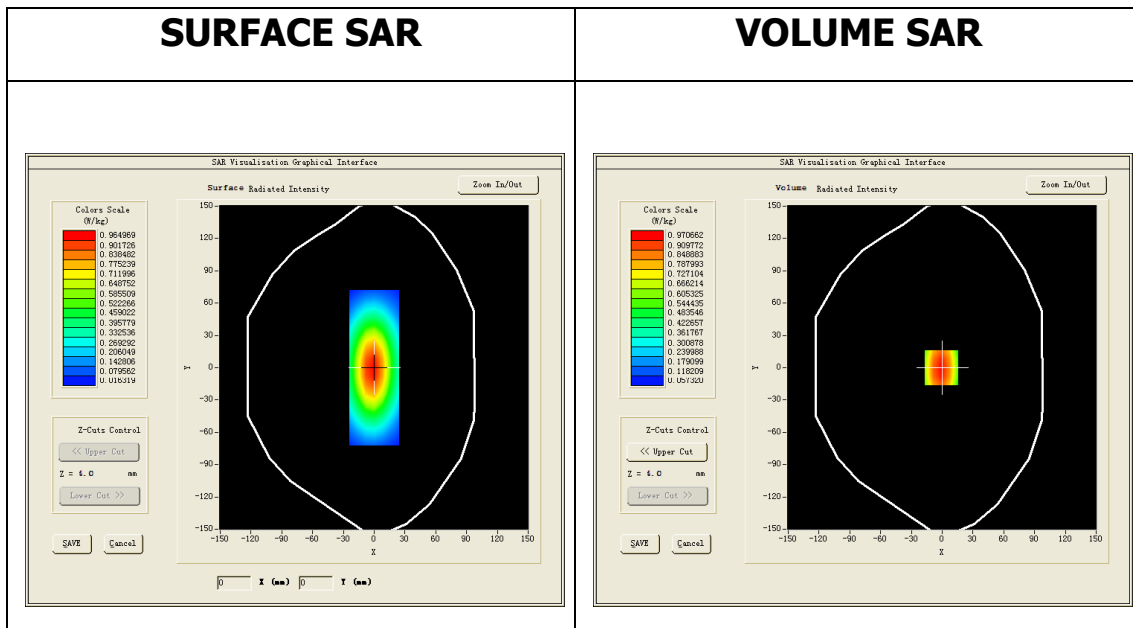
<u>Area Scan</u>	<u>dx=8mm dy=8mm</u>
<u>ZoomScan</u>	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW835</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor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

B. SAR Measurement Results

Middle Band SAR (Channel -1):

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

Variation (%)	0.760000
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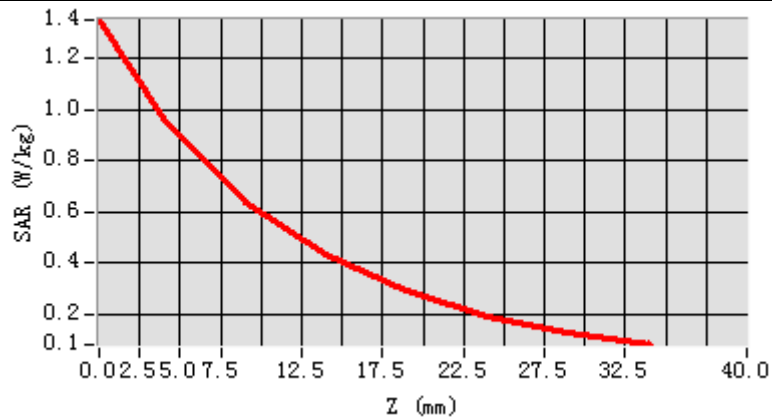


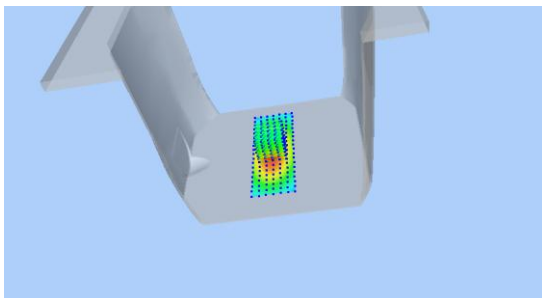
Maximum location: X=-1.00, Y=0.00

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.

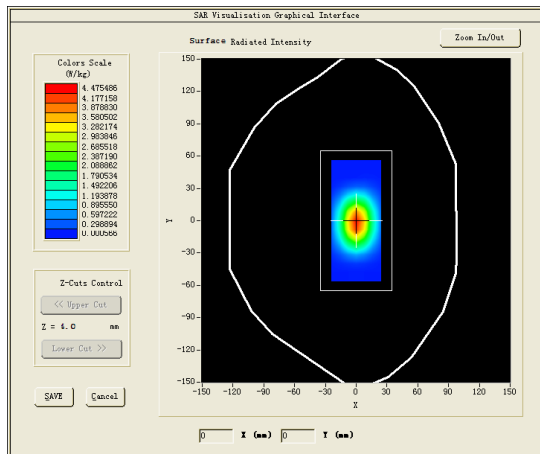
<u>Area Scan</u>	<u>dx=8mm dy=8mm</u>
<u>ZoomScan</u>	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW1900</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.78</u>

B. SAR Measurement Results

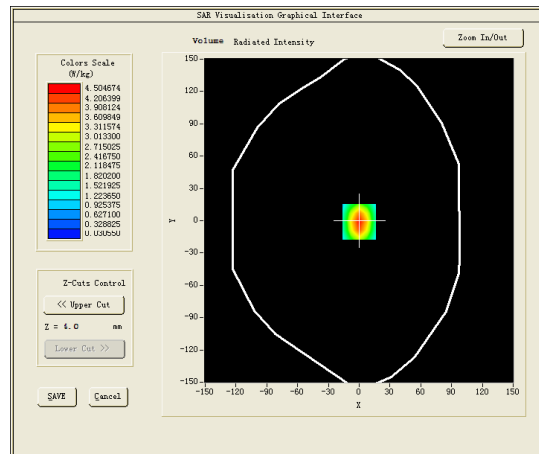
Middle Band SAR (Channel -1):

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

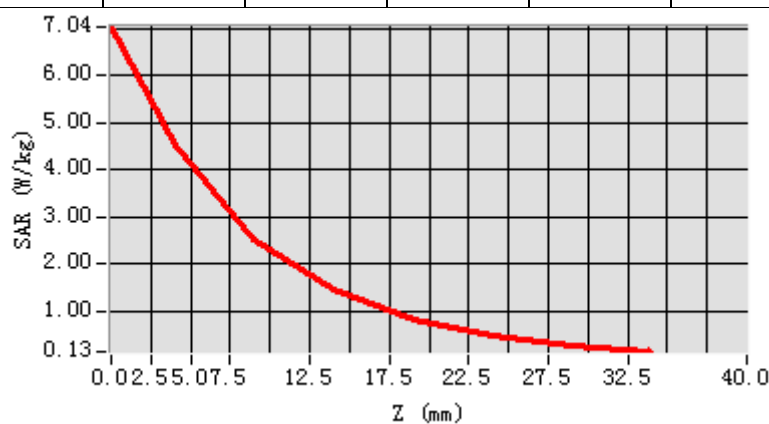


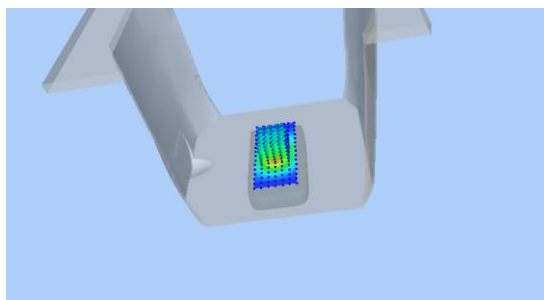
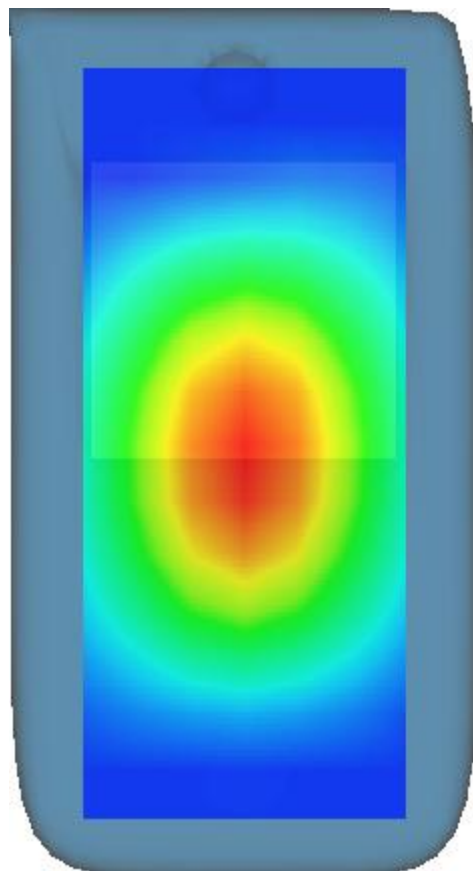
Maximum location: X=0.00, Y=-1.00

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.

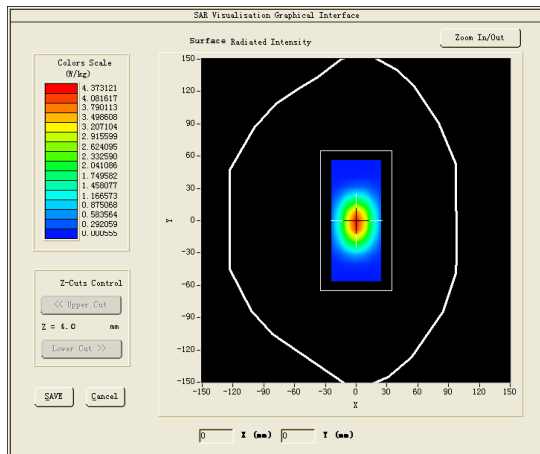
<u>Area Scan</u>	<u>dx=8mm dy=8mm</u>
<u>ZoomScan</u>	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW1900</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.78</u>

B. SAR Measurement Results

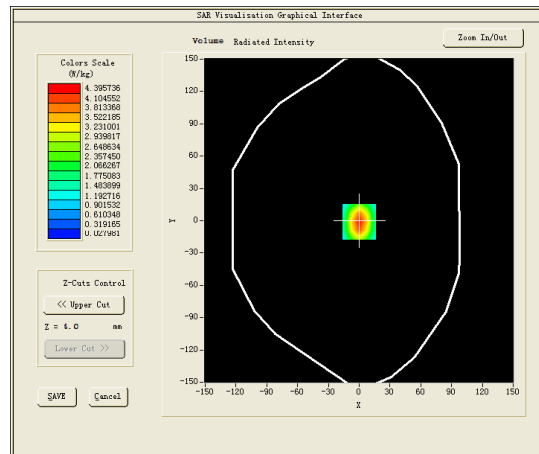
Middle Band SAR (Channel -1):

Frequency (MHz)	1900.000000
Relative permittivity (real part)	40.038703
Relative permittivity (imaginary part)	13.562312
Conductivity (S/m)	1.432770
Variation (%)	-0.060000

SURFACE SAR



VOLUME SAR

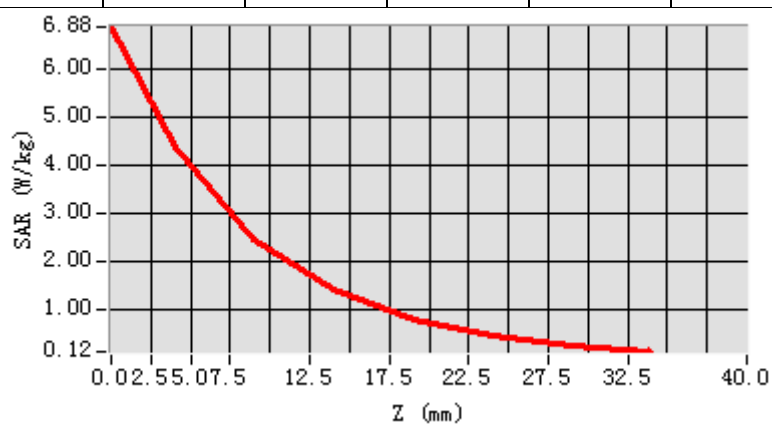


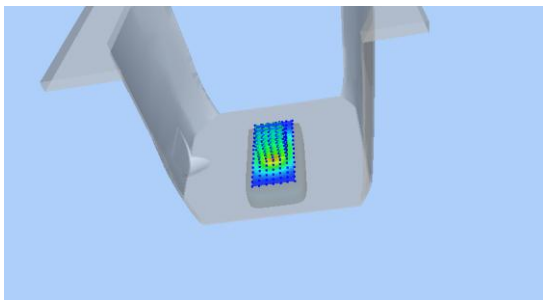
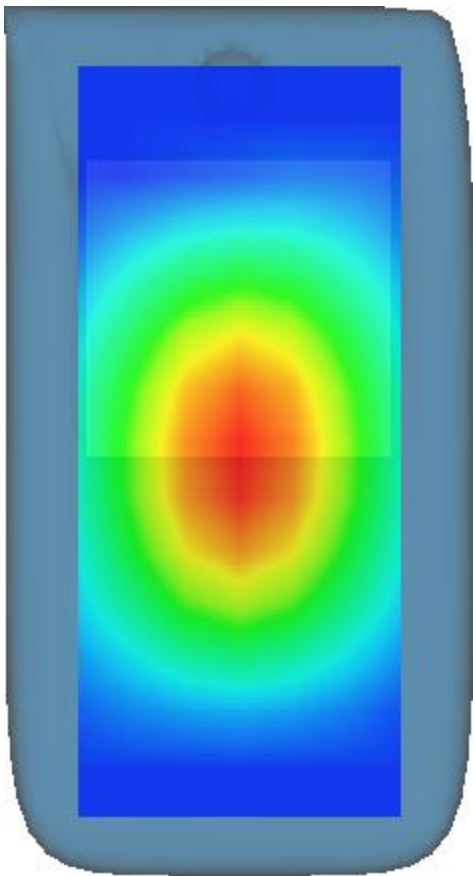
Maximum location: X=0.00, Y=-1.00

SAR Peak: 6.84 W/kg

SAR 10g (W/Kg)	2.146633
SAR 1g (W/Kg)	4.150148

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: 22/8/2016

Measurement duration: 10 minutes 15 seconds

A. Experimental conditions.

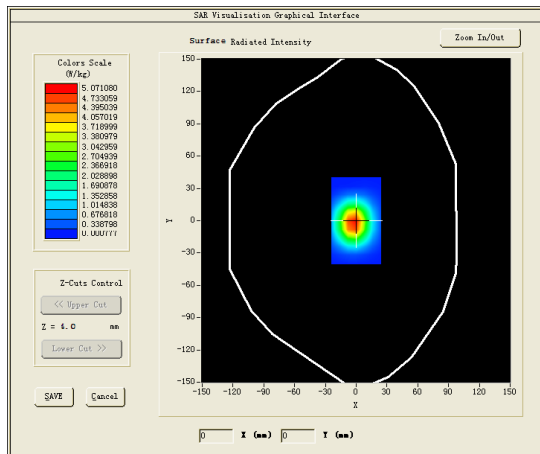
<u>Area Scan</u>	<u>dx=8mm dy=8mm</u>
<u>ZoomScan</u>	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW2450</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.11</u>

B. SAR Measurement Results

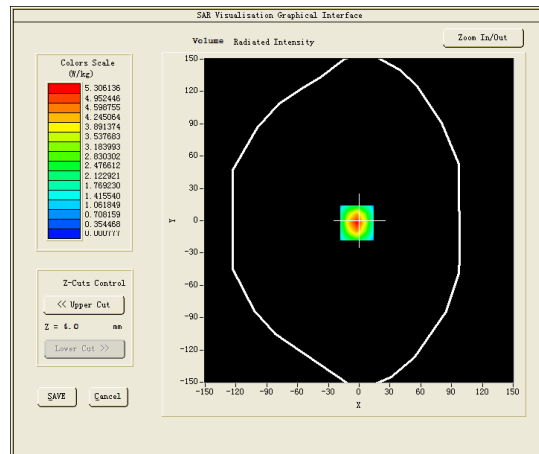
Middle Band SAR (Channel -1):

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

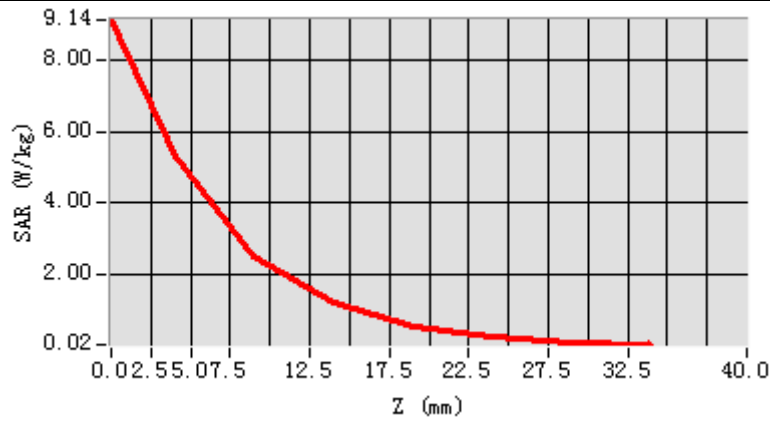


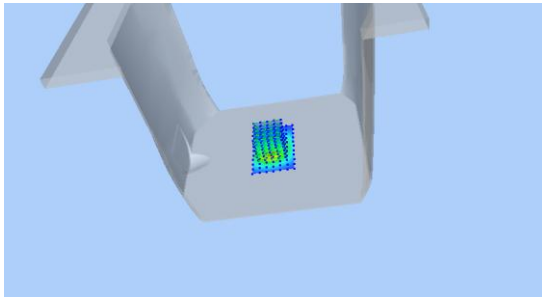
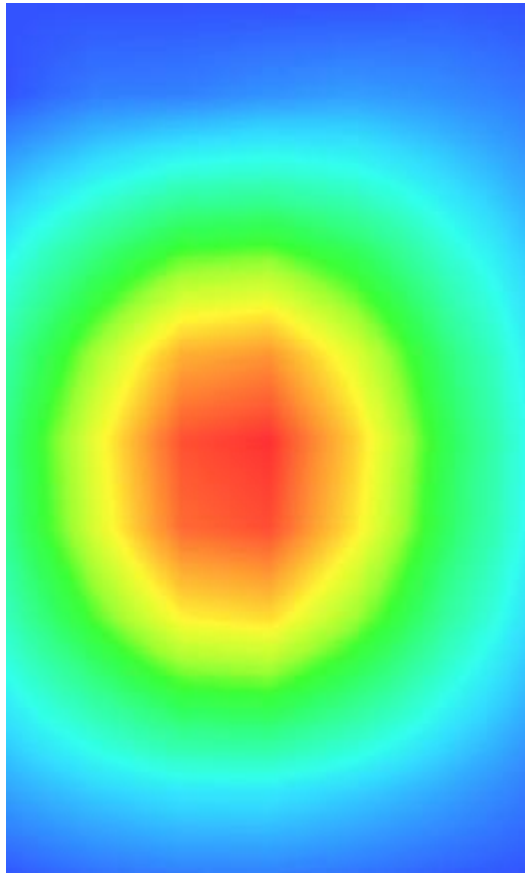
Maximum location: X=-2.00, Y=-2.00

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: 22/8/2016

Measurement duration: 10 minutes 16 seconds

A. Experimental conditions.

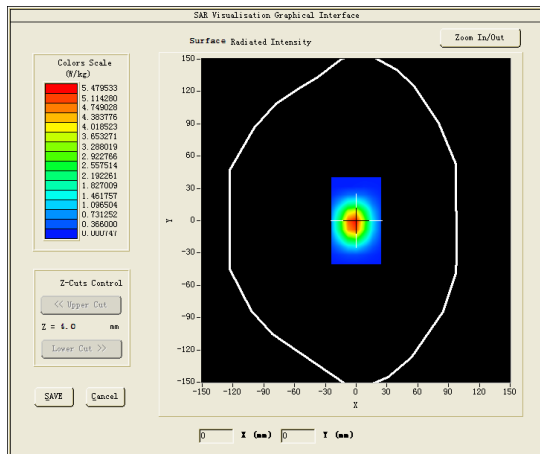
<u>Area Scan</u>	<u>dx=8mm dy=8mm</u>
<u>ZoomScan</u>	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW2450</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>Conversion factor</u>	<u>4.11</u>

B. SAR Measurement Results

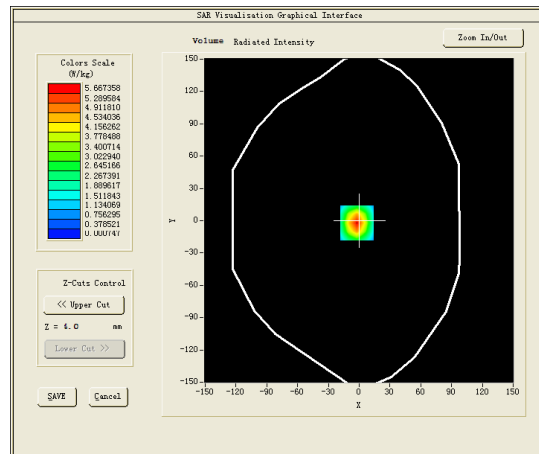
Middle Band SAR (Channel -1):

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

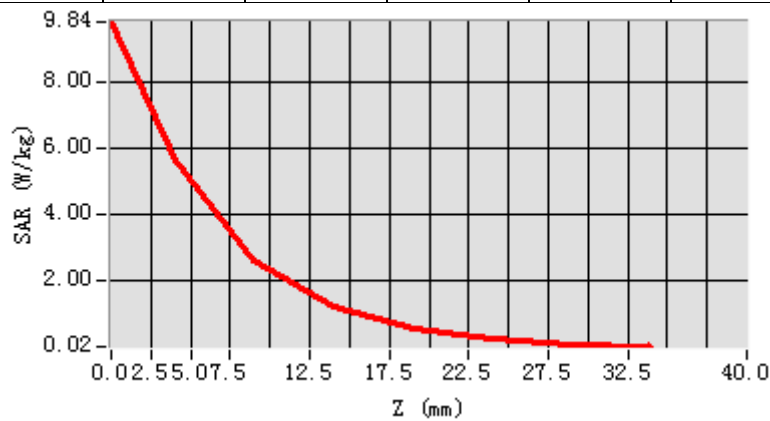


Maximum location: X=-2.00, Y=-2.00

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
