

	Annex A: System performance verification
	Project name :M702
	Report number: TCT131212017F2-SAR

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

Type: Validation measurement (Complete)

Date of measurement: 22/2/2014

Measurement duration: 18 minutes 5 seconds

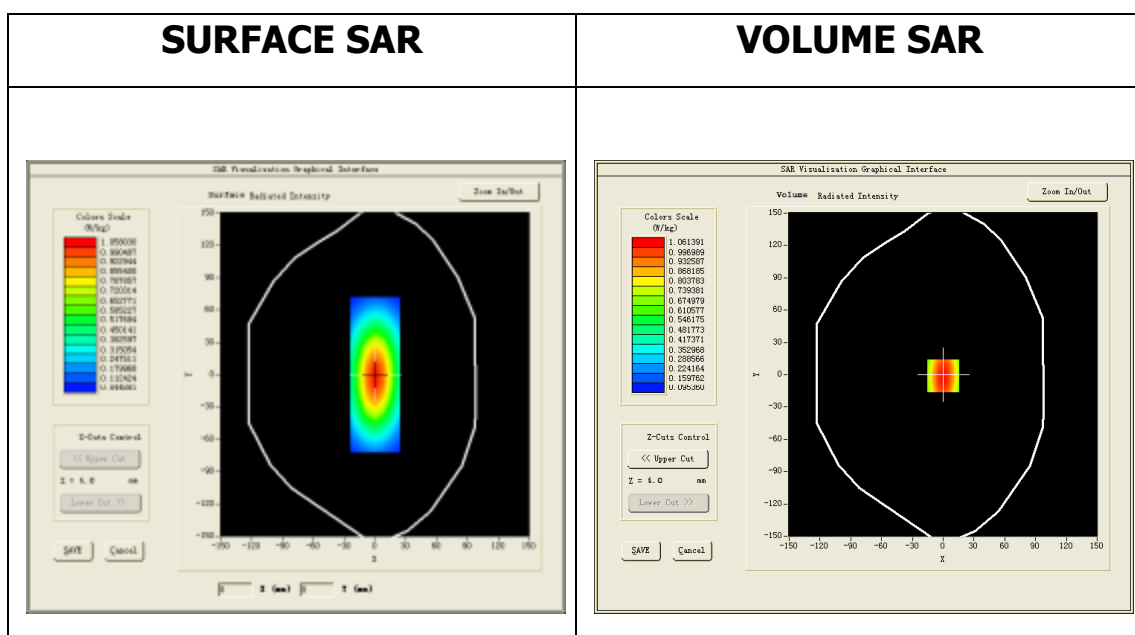
A. Experimental conditions.

<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>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>

B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	835.000000
Relative permittivity (real part)	53.429001
Relative permittivity (imaginary part)	20.728900
Conductivity (S/m)	0.962413
Variation (%)	0.130000
ConvF	6.17

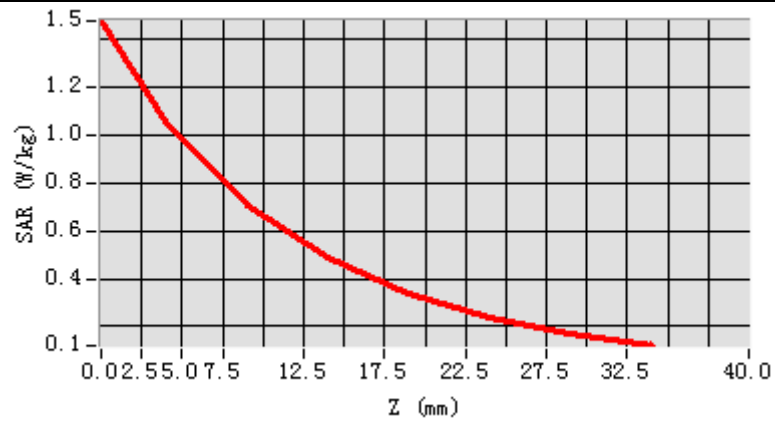


Maximum location: X=0.00, Y=-1.00

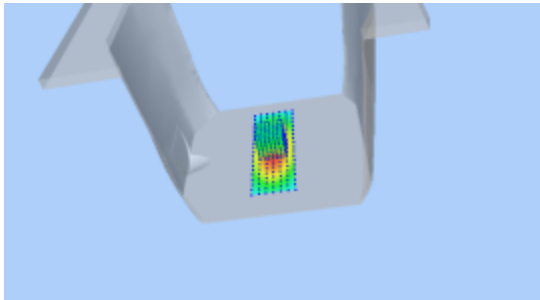
SAR Peak: 1.59 W/kg

SAR 10g (W/Kg)	0.711854
SAR 1g (W/Kg)	1.093737

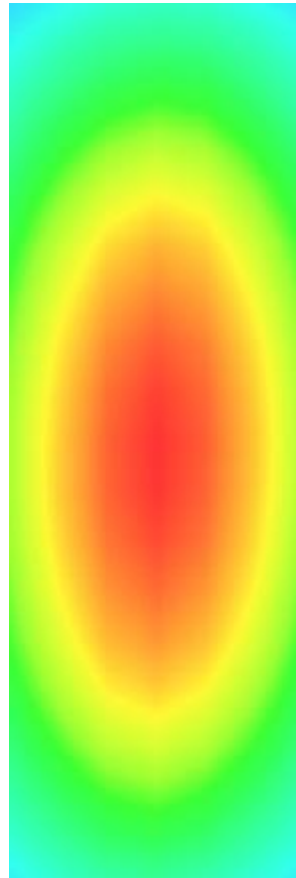
Z axis scan



3D screen shot



Hot spot position



MEASUREMENT 2

Type: Validation measurement (Complete)

Date of measurement: 22/2/2014

Measurement duration: 18 minutes 6 seconds

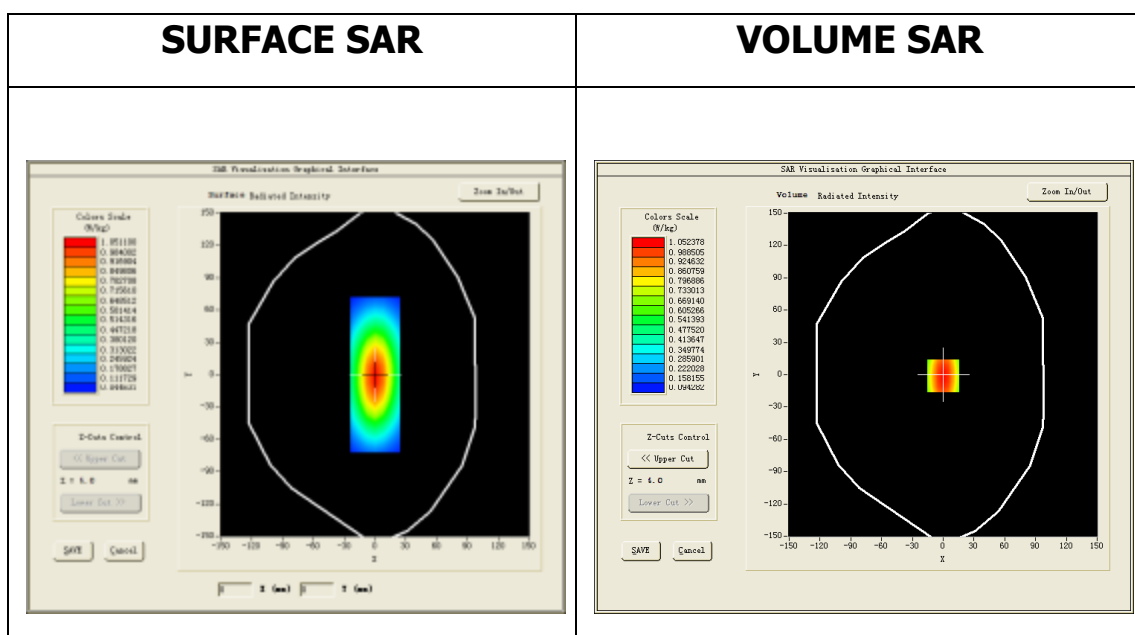
A. Experimental conditions.

<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>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>

B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	835.000000
Relative permittivity (real part)	39.801498
Relative permittivity (imaginary part)	19.343201
Conductivity (S/m)	0.897310
Variation (%)	0.110000
ConvF	5.94

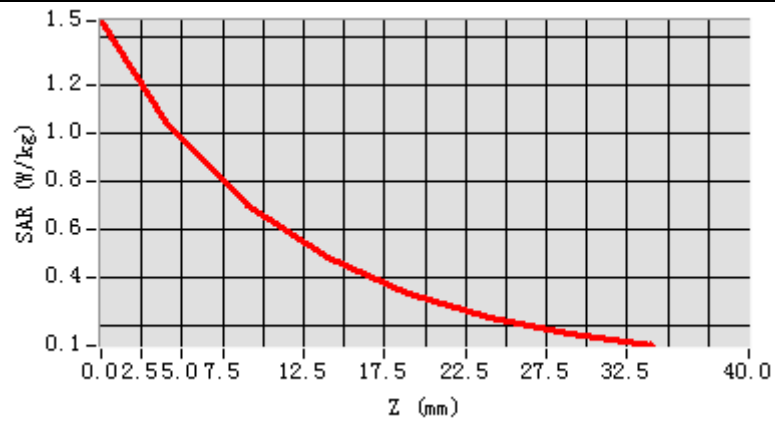


Maximum location: X=0.00, Y=-1.00

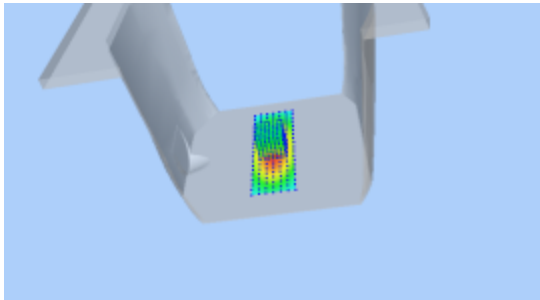
SAR Peak: 1.46 W/kg

SAR 10g (W/Kg)	0.655982
SAR 1g (W/Kg)	1.010526

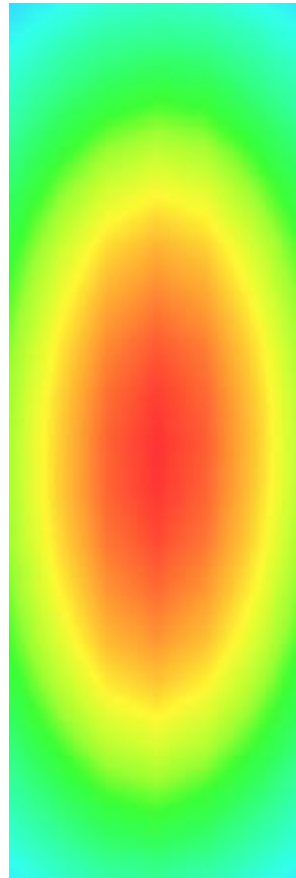
Z axis scan



3D screen shot



Hot spot position



MEASUREMENT 3

Type: Validation measurement (Complete)

Date of measurement: 22/2/2014

Measurement duration: 17 minutes 1 seconds

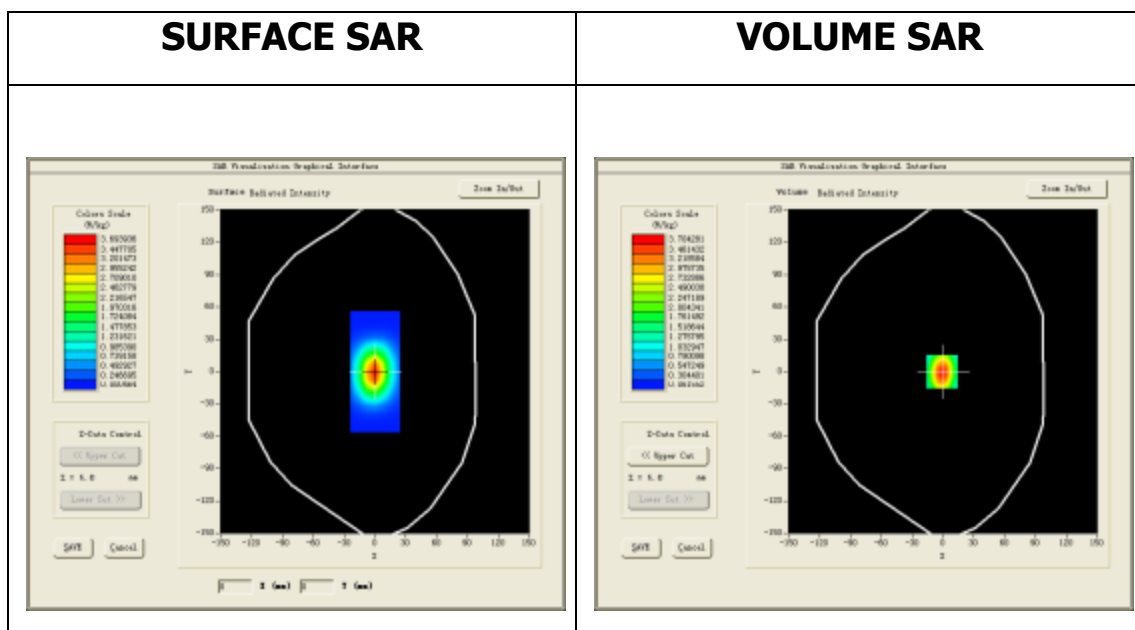
A. Experimental conditions.

<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>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>

B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	1900.000000
Relative permittivity (real part)	51.931301
Relative permittivity (imaginary part)	14.679400
Conductivity (S/m)	1.549492
Variation (%)	-0.340000
ConvF	6.25

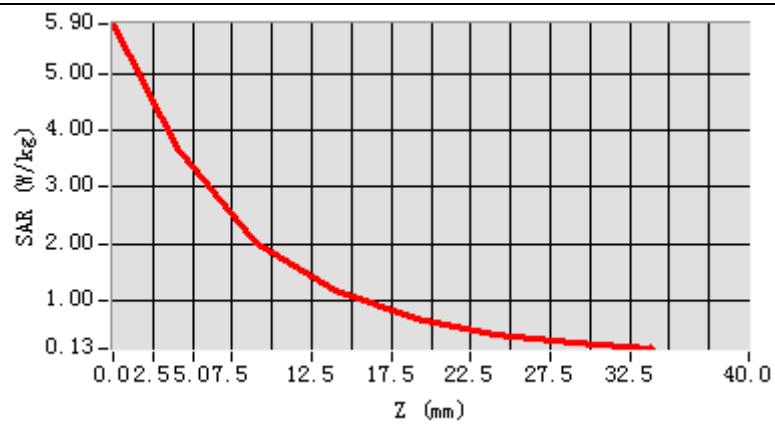


Maximum location: X=-1.00, Y=0.00

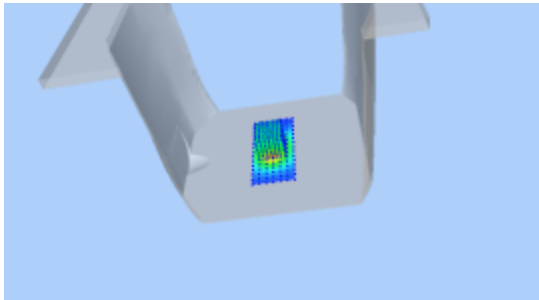
SAR Peak: 6.33 W/kg

SAR 10g (W/Kg)	1.971074
SAR 1g (W/Kg)	3.788782

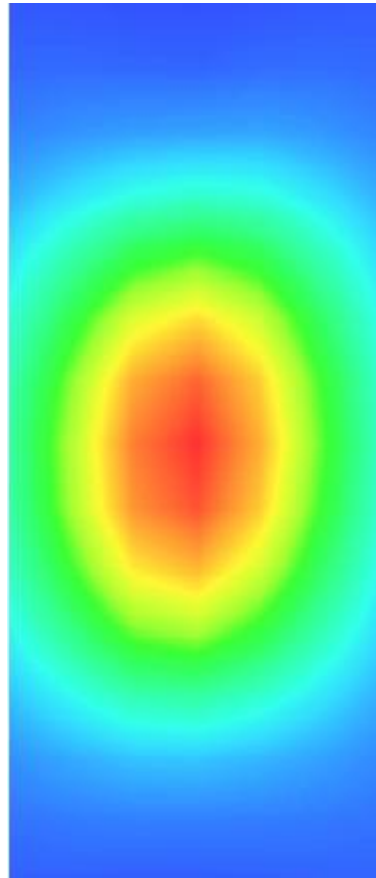
Z axis scan



3D screen shot



Hot spot position



MEASUREMENT 4

Type: Validation measurement (Complete)

Date of measurement: 22/2/2014

Measurement duration: 16 minutes 33 seconds

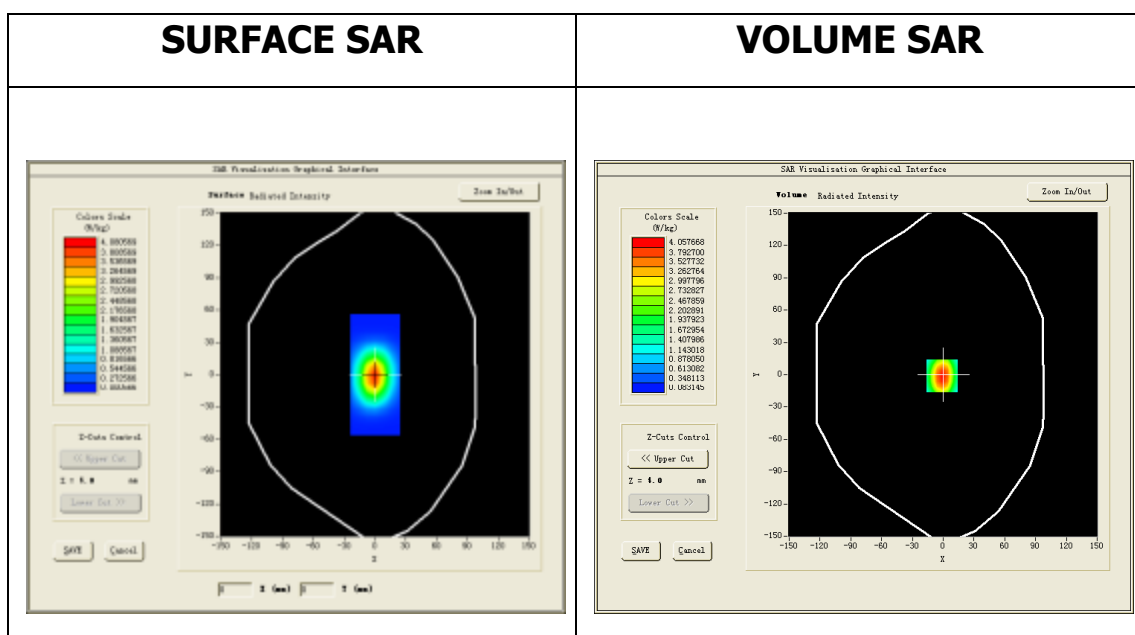
A. Experimental conditions.

<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>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>

B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	1900.000000
Relative permittivity (real part)	39.297199
Relative permittivity (imaginary part)	13.548100
Conductivity (S/m)	1.430077
Variation (%)	-0.250000
ConvF	6.08

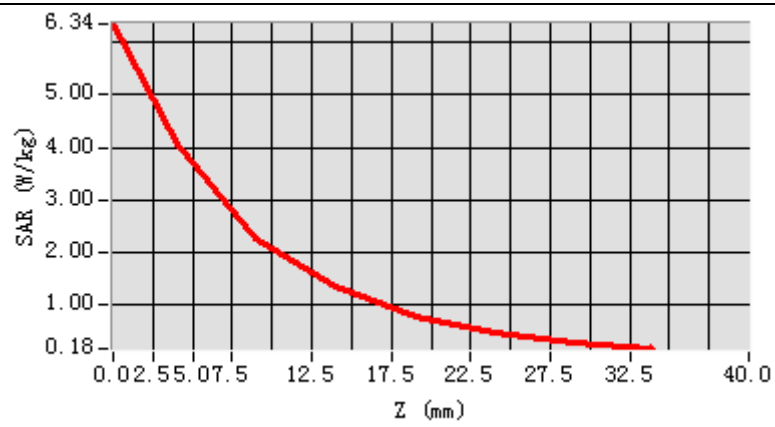


Maximum location: X=-1.00, Y=0.00

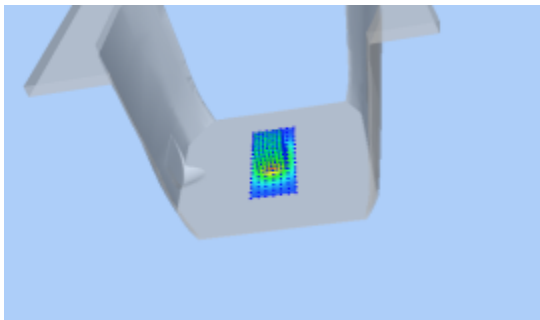
SAR Peak: 6.28 W/kg

SAR 10g (W/Kg)	2.058908
SAR 1g (W/Kg)	3.916976

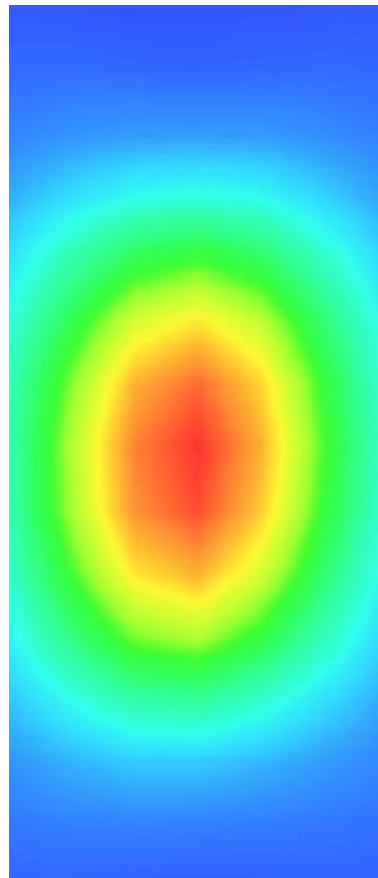
Z axis scan



3D screen shot



Hot spot position



MEASUREMENT 5

Type: Validation measurement (Complete)

Date of measurement: 24/2/2014

Measurement duration: 16 minutes 35 seconds

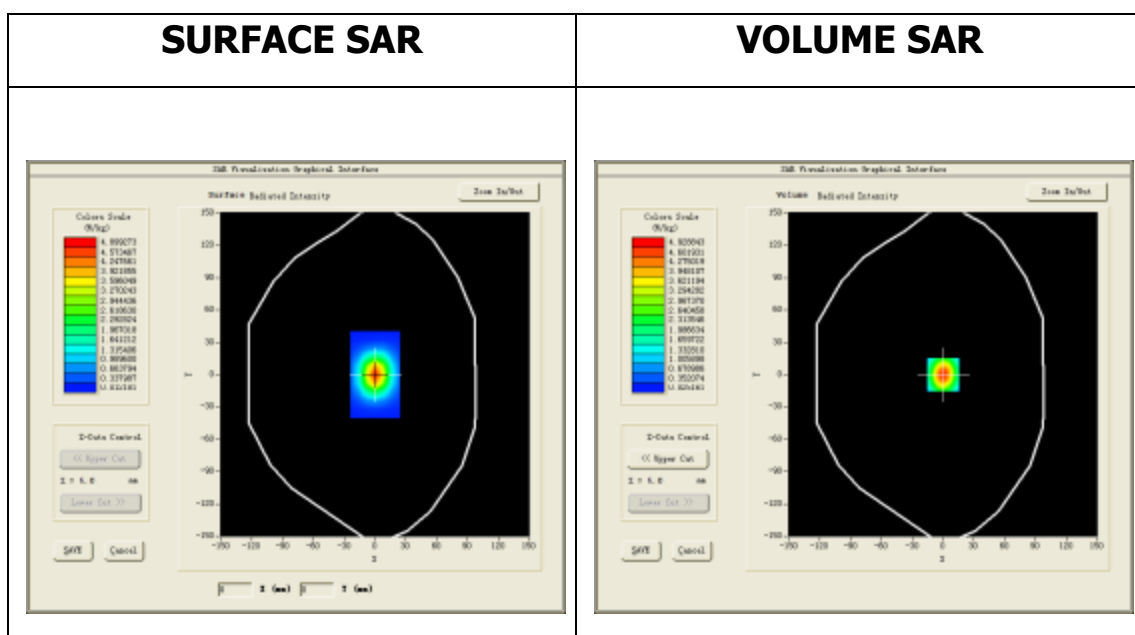
A. Experimental conditions.

<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>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>

B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	2450.000000
Relative permittivity (real part)	52.821999
Relative permittivity (imaginary part)	14.527700
Conductivity (S/m)	1.977381
Variation (%)	0.680000
ConvF	5.50

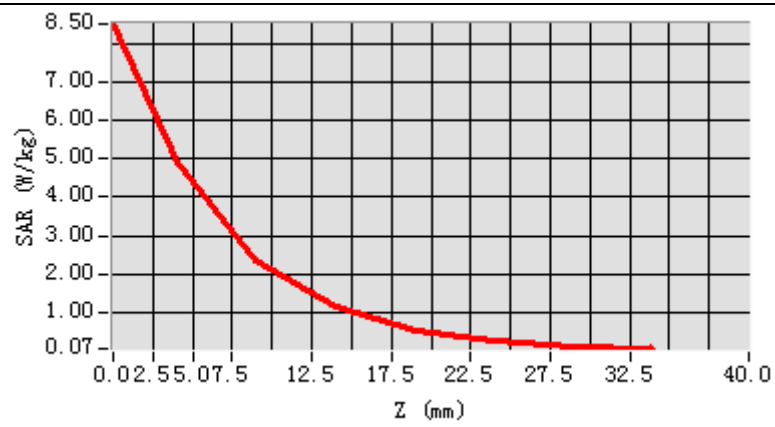


Maximum location: X=0.00, Y=0.00

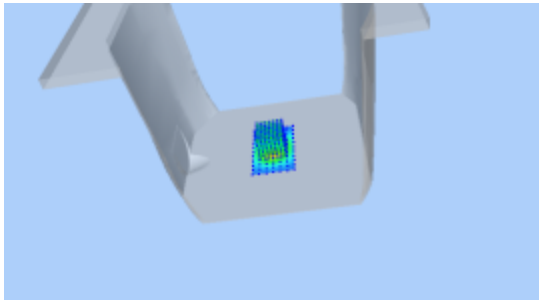
SAR Peak: 9.12 W/kg

SAR 10g (W/Kg)	2.278838
SAR 1g (W/Kg)	4.948306

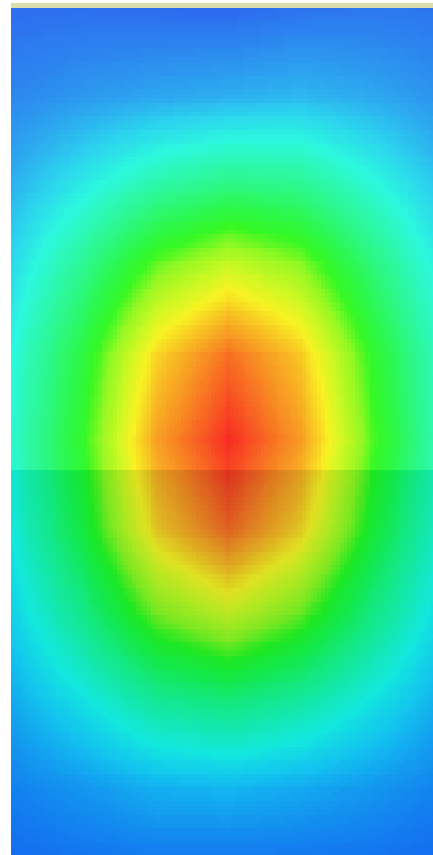
Z axis scan



3D screen shot



Hot spot position



MEASUREMENT 6

Type: Validation measurement (Complete)

Date of measurement: 24/2/2014

Measurement duration: 16 minutes 34 seconds

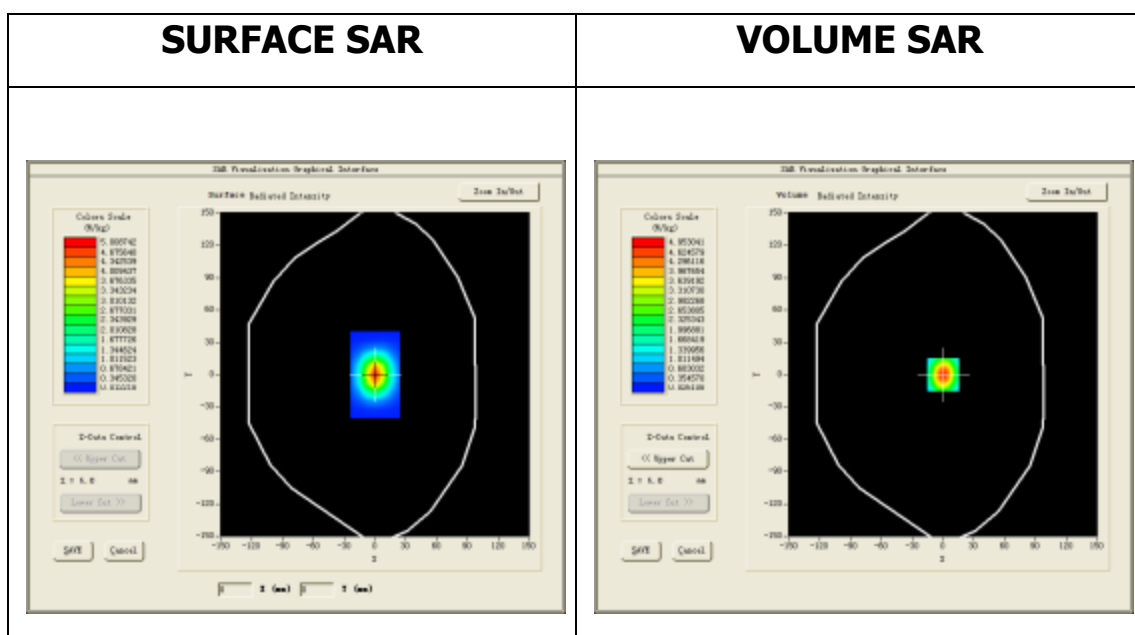
A. Experimental conditions.

<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>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>

B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	2450.000000
Relative permittivity (real part)	38.874202
Relative permittivity (imaginary part)	13.327300
Conductivity (S/m)	1.814555
Variation (%)	0.760000
ConvF	5.32

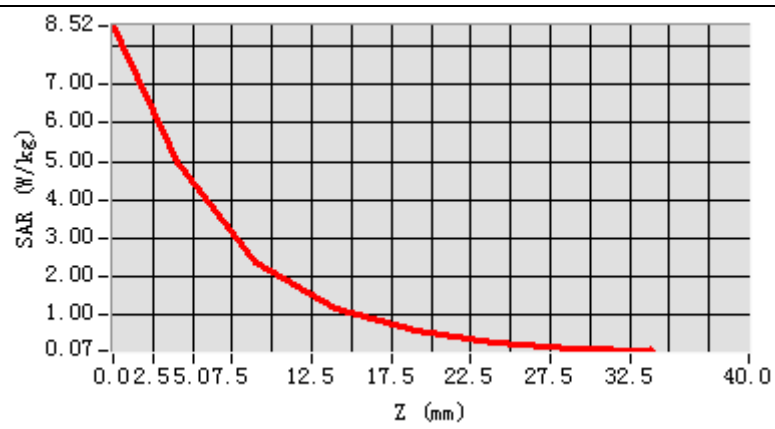


Maximum location: X=0.00, Y=0.00

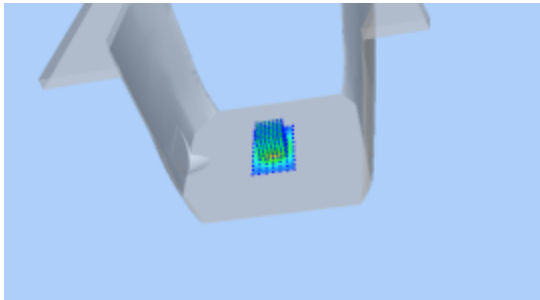
SAR Peak: 8.41 W/kg

SAR 10g (W/Kg)	2.207965
SAR 1g (W/Kg)	4.869360

Z axis scan



3D screen shot



Hot spot position

