



Annex A: System Check

Tested Model : N5001L

**Report Number:
FCC17040291A**

I. RESULTS

<u>TYPE</u>	<u>BAND</u>	<u>PARAMETERS</u>
Validation	CW750	<u>Measurement 1</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW750	<u>Measurement 2</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW835	<u>Measurement 3</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW835	<u>Measurement 4</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW1800	<u>Measurement 5</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW1800	<u>Measurement 6</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW1900	<u>Measurement 7</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW1900	<u>Measurement 8</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW2450	<u>Measurement 9</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW2450	<u>Measurement 10</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW2600	<u>Measurement 11</u> : Validation Plane with Dipole device position on Middle Channel in CW mode
Validation	CW2600	<u>Measurement 12</u> : Validation Plane with Dipole device position on Middle Channel in CW mode

MEASUREMENT 1

BODY

Type: Validation measurement (Complete)

Date of measurement: 19/9/2017

Measurement duration: 11 minutes 41 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>CW750</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

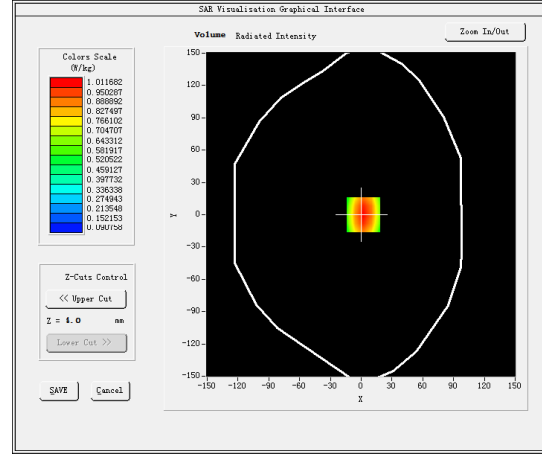
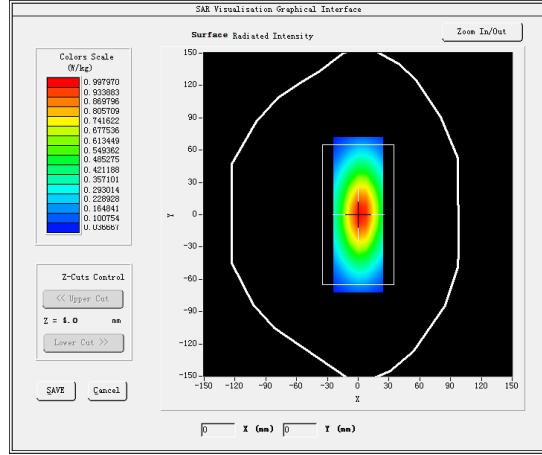
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	750.000000
Relative permittivity (real part)	53.517799
Relative permittivity (imaginary part)	24.024599
Conductivity (S/m)	1.001025
Variation (%)	0.320000

SURFACE SAR

VOLUME SAR

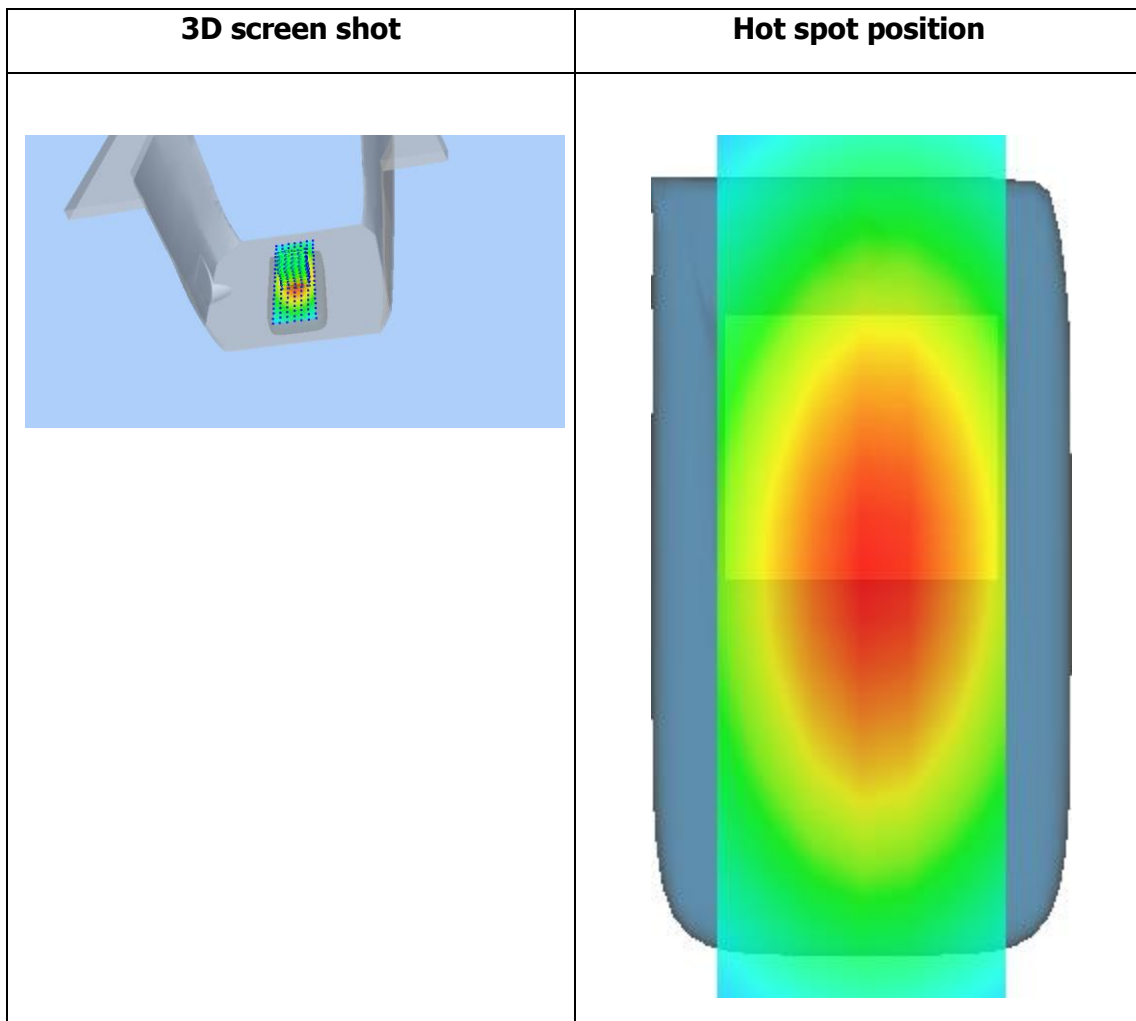
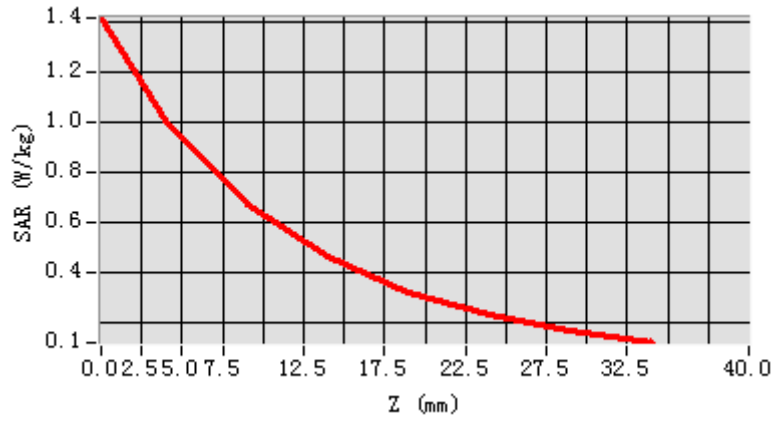


Maximum location: X=2.00, Y=0.00

SAR Peak: 1.41 W/kg

SAR 10g (W/Kg)	0.609663
SAR 1g (W/Kg)	0.905411

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.4197	1.0117	0.6692	0.4600	0.3210	0.2279	0.1624



MEASUREMENT 2

HEAD

Type: Validation measurement (Complete)

Date of measurement: 19/9/2017

Measurement duration: 11 minutes 40 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>CW750</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

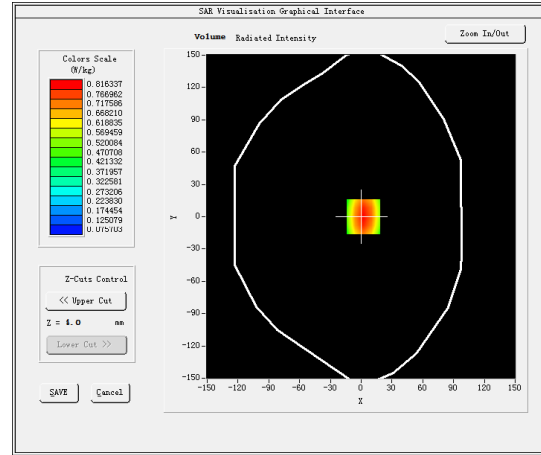
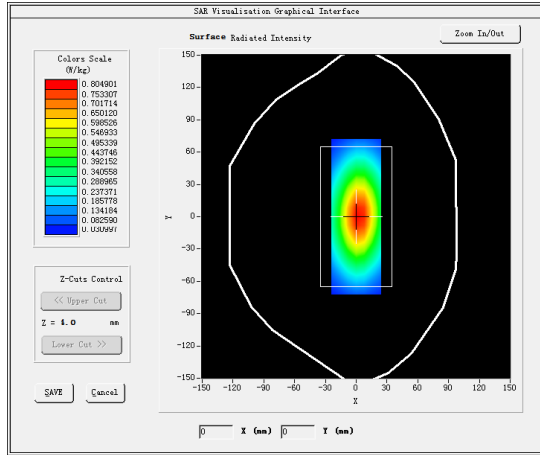
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	750.000000
Relative permittivity (real part)	41.350601
Relative permittivity (imaginary part)	21.254601
Conductivity (S/m)	0.885608
Variation (%)	1.030000

SURFACE SAR

VOLUME SAR

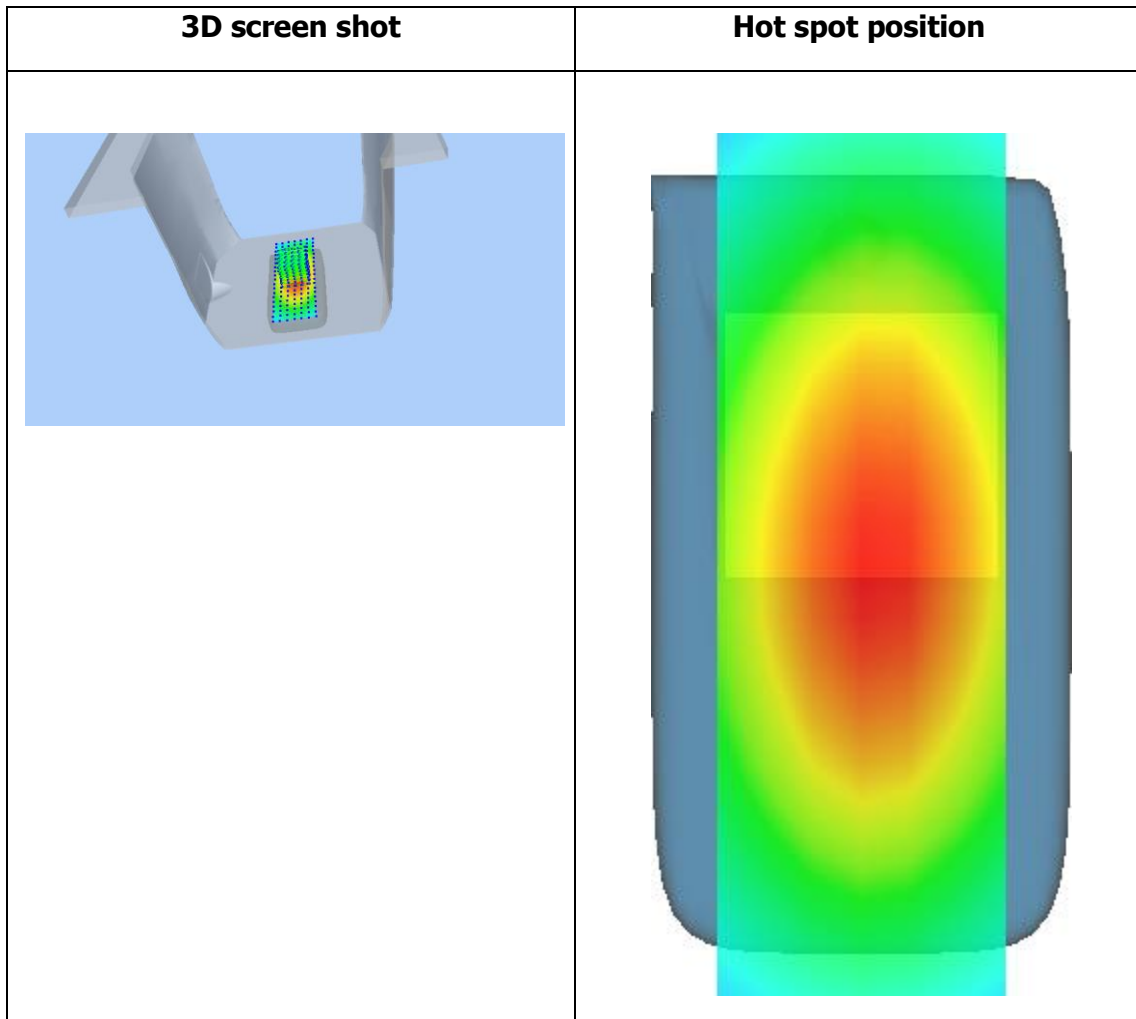
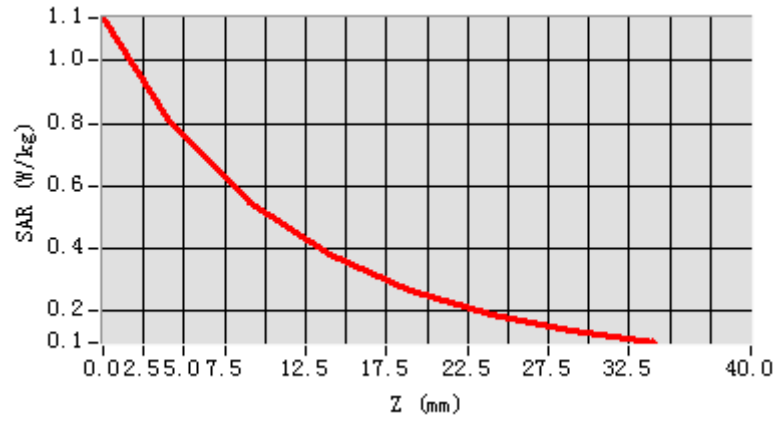


Maximum location: X=2.00, Y=0.00

SAR Peak: 1.13 W/kg

SAR 10g (W/Kg)	0.537155
SAR 1g (W/Kg)	0.783648

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.1379	0.8163	0.5446	0.3776	0.2647	0.1886	0.1348



MEASUREMENT 3

BODY

Type: Validation measurement (Complete)

Date of measurement: 10/6/2017

Measurement duration: 11 minutes 54 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>

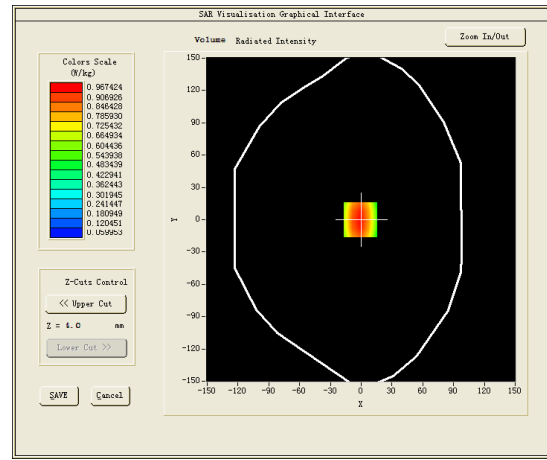
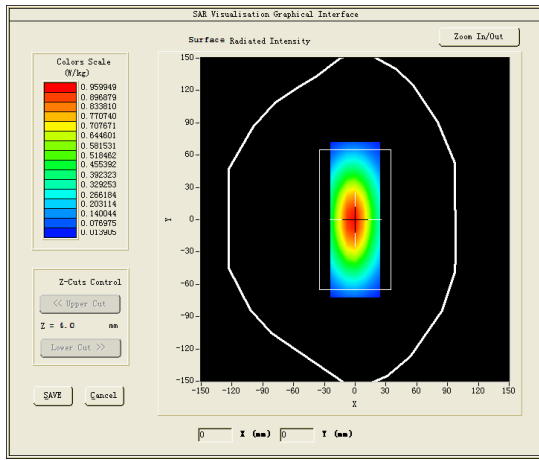
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	835.000000
Relative permittivity (real part)	53.927799
Relative permittivity (imaginary part)	21.281300
Conductivity (S/m)	0.987216
Variation (%)	0.120000

SURFACE SAR

VOLUME SAR

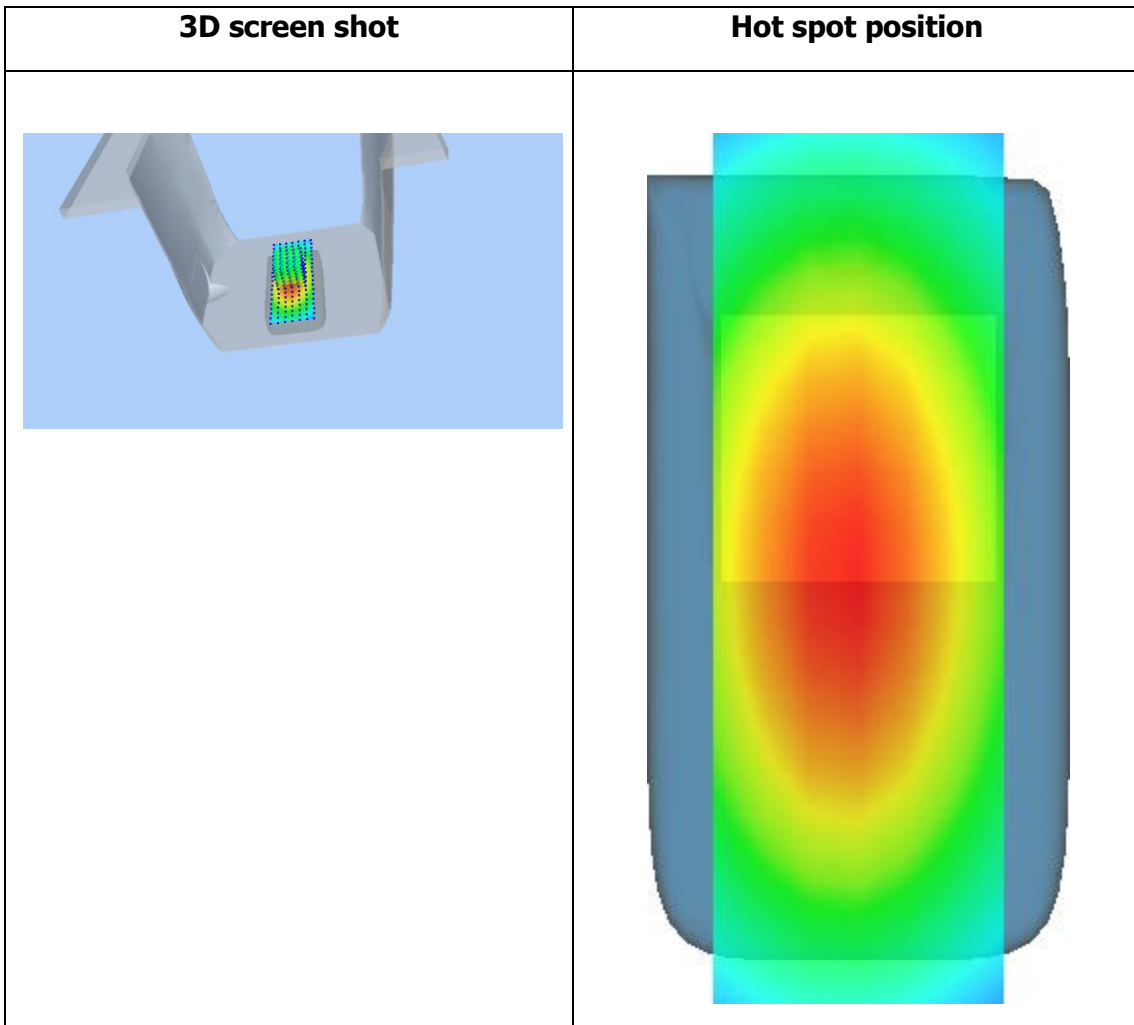
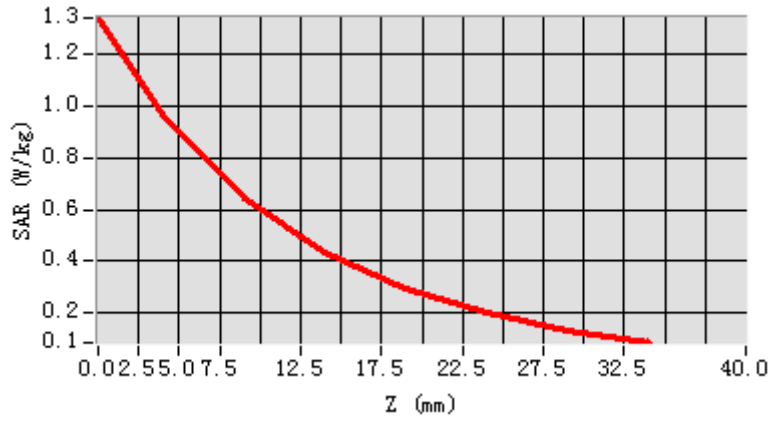


Maximum location: X=-1.00, Y=0.00

SAR Peak: 1.44 W/kg

SAR 10g (W/Kg)	0.644746
SAR 1g (W/Kg)	1.014583

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.3418	0.9674	0.6426	0.4358	0.2947	0.1989	0.1326



MEASUREMENT 4

HEAD

Type: Validation measurement (Complete)

Date of measurement: 10/6/2017

Measurement duration: 11 minutes 54 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>

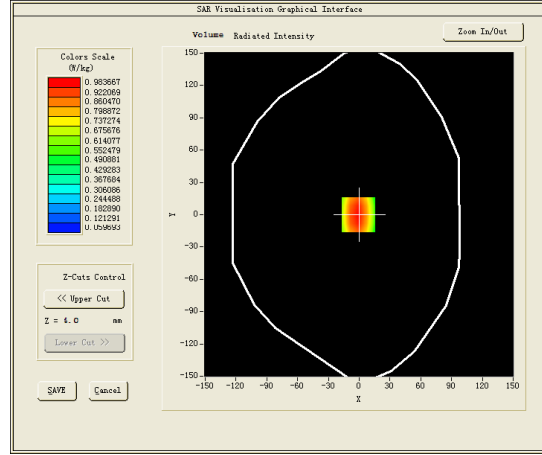
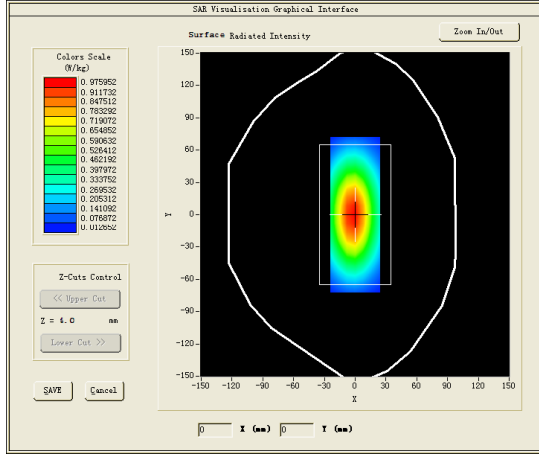
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	835.000000
Relative permittivity (real part)	40.328999
Relative permittivity (imaginary part)	19.880501
Conductivity (S/m)	0.922234
Variation (%)	-0.070000

SURFACE SAR

VOLUME SAR

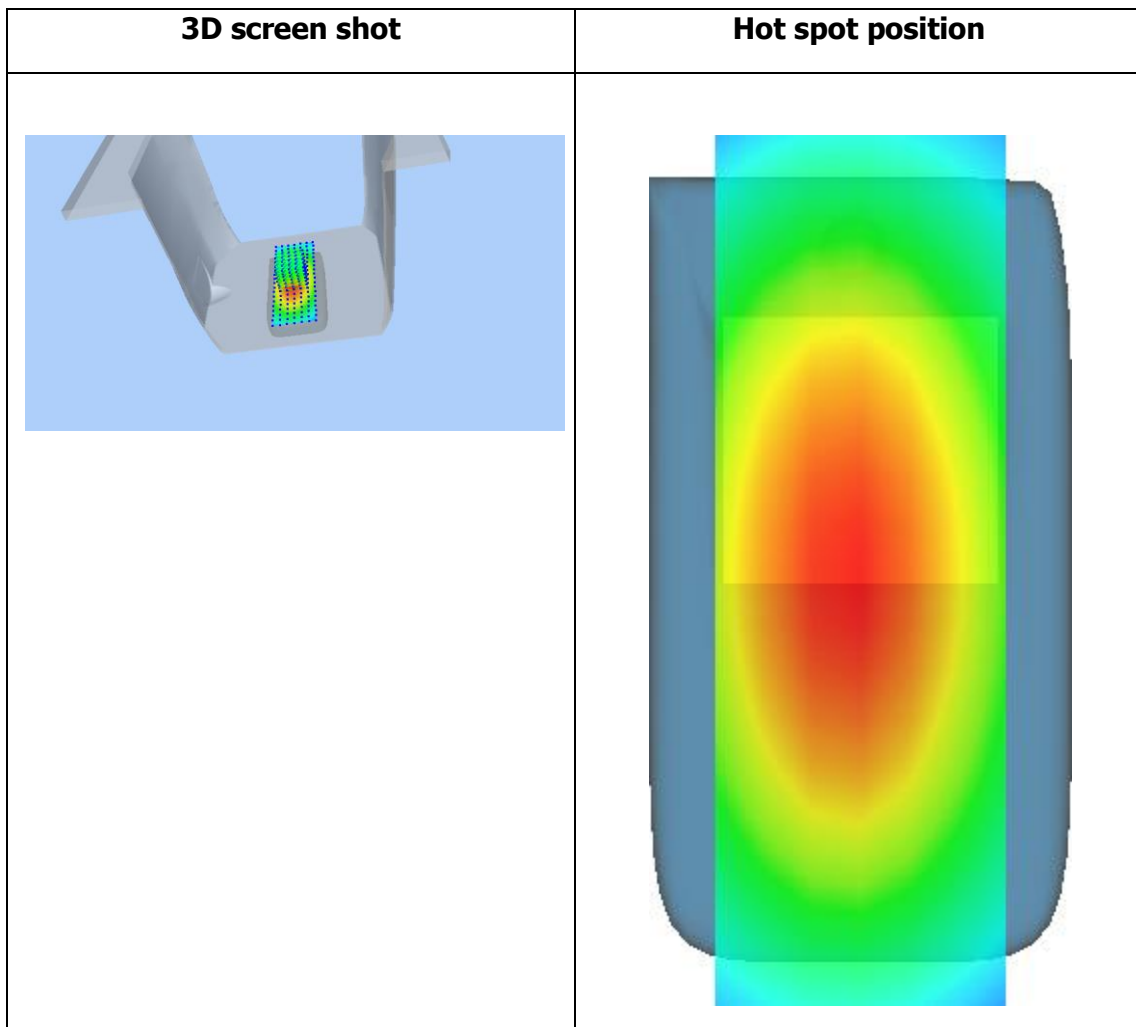
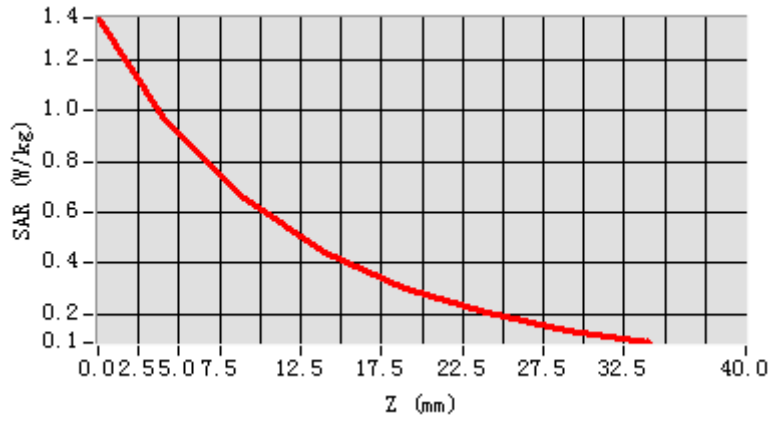


Maximum location: X=-1.00, Y=0.00

SAR Peak: 1.37 W/kg

SAR 10g (W/Kg)	0.615004
SAR 1g (W/Kg)	0.970049

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.3669	0.9837	0.6529	0.4412	0.2993	0.2017	0.1343



MEASUREMENT 5

BODY

Type: Validation measurement (Complete)

Date of measurement: 15/6/2017

Measurement duration: 11 minutes 43 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>CW1800</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

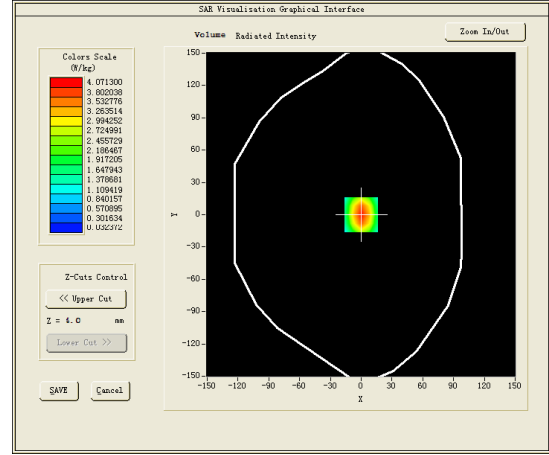
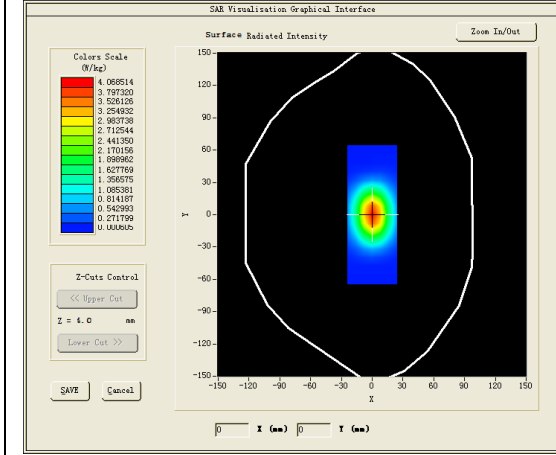
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	1800.000000
Relative permittivity (real part)	52.970200
Relative permittivity (imaginary part)	15.414900
Conductivity (S/m)	1.541490
Variation (%)	-0.080000

SURFACE SAR

VOLUME SAR

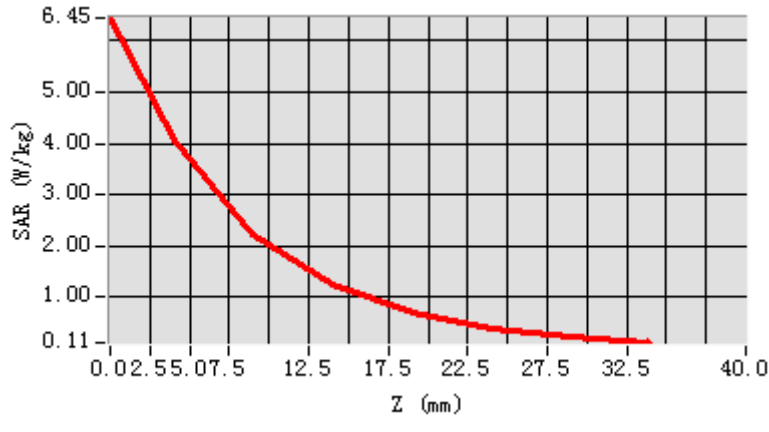


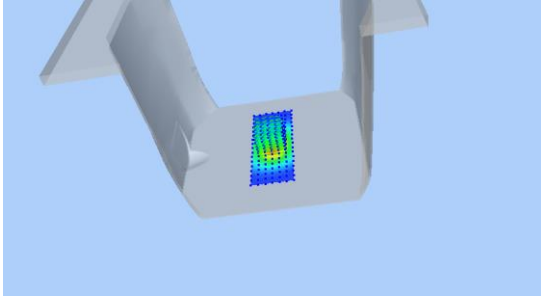
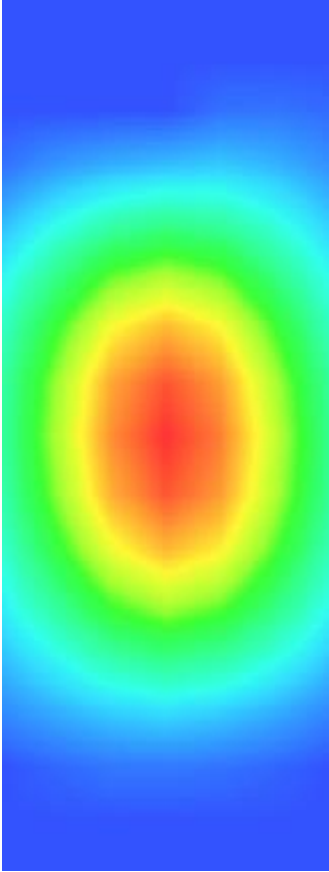
Maximum location: X=0.00, Y=0.00

SAR Peak: 6.86 W/kg

SAR 10g (W/Kg)	2.171523
SAR 1g (W/Kg)	4.155761

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.4478	4.0713	2.2310	1.2495	0.7043	0.3895	0.2089



3D screen shot	Hot spot position
	

MEASUREMENT 6

HEAD

Type: Validation measurement (Complete)

Date of measurement: 15/6/2017

Measurement duration: 11 minutes 41 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>CW1800</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

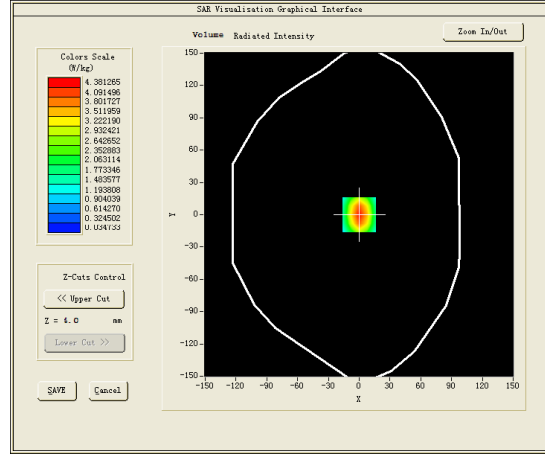
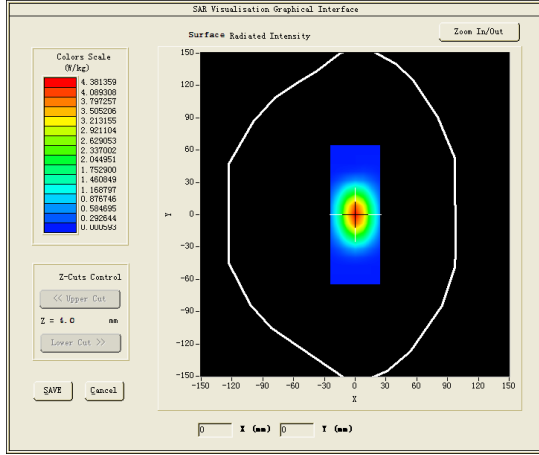
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	1800.000000
Relative permittivity (real part)	39.484501
Relative permittivity (imaginary part)	14.358300
Conductivity (S/m)	1.435830
Variation (%)	0.610000

SURFACE SAR

VOLUME SAR

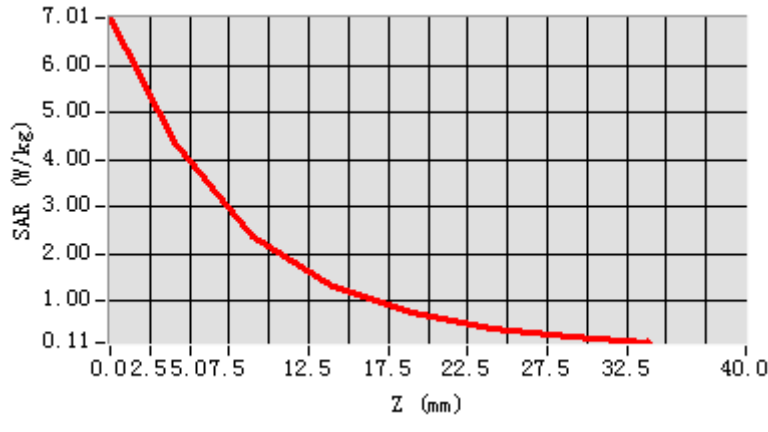


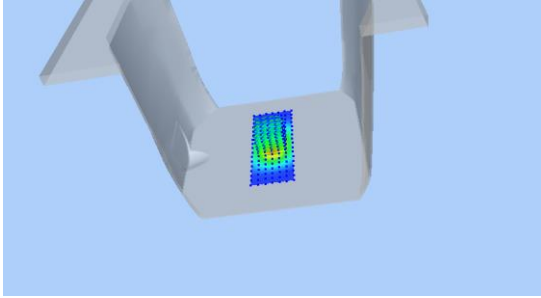
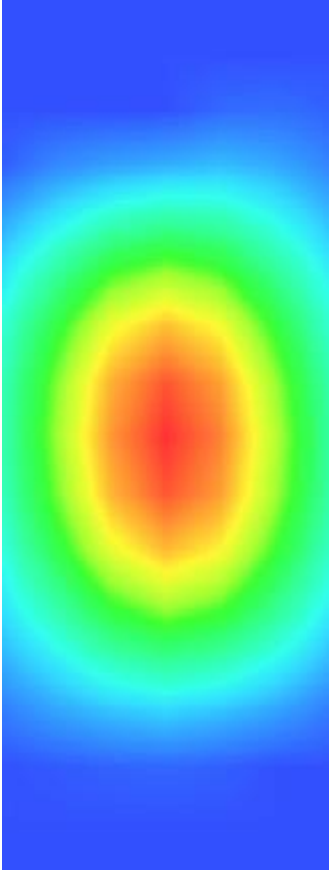
Maximum location: X=0.00, Y=0.00

SAR Peak: 6.95 W/kg

SAR 10g (W/Kg)	2.160484
SAR 1g (W/Kg)	4.198096

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	7.0118	4.3813	2.3674	1.3177	0.7415	0.4093	0.2206



3D screen shot	Hot spot position
	

MEASUREMENT 7

BODY

Type: Validation measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 10 minutes 57 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>

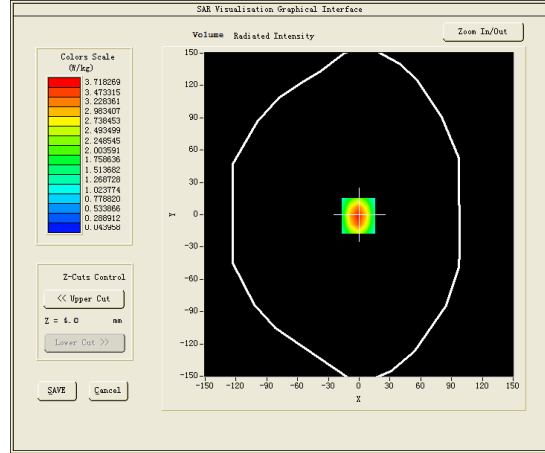
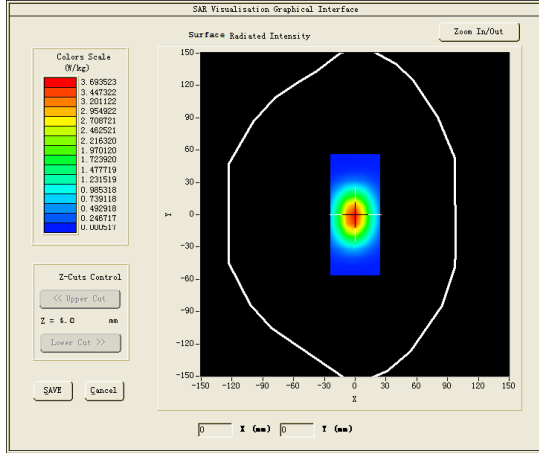
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	1900.000000
Relative permittivity (real part)	53.365299
Relative permittivity (imaginary part)	14.757600
Conductivity (S/m)	1.557747
Variation (%)	-0.450000

SURFACE SAR

VOLUME SAR

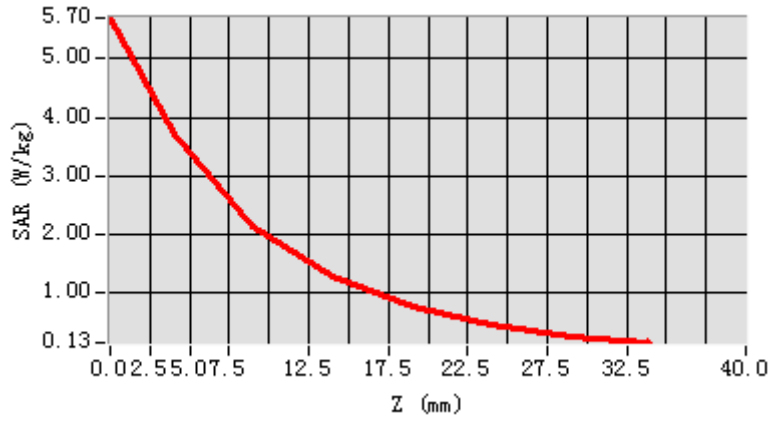


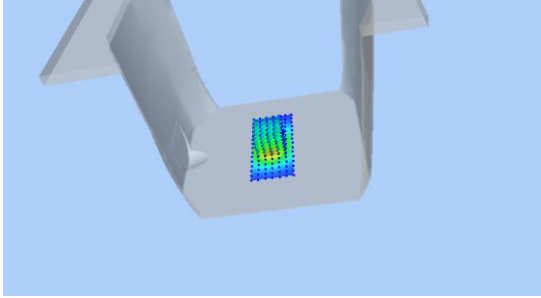
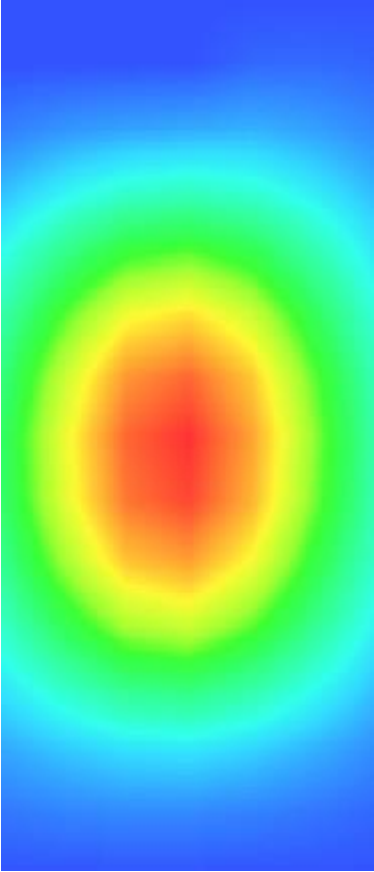
Maximum location: X=-1.00, Y=-1.00

SAR Peak: 6.26 W/kg

SAR 10g (W/Kg)	2.093533
SAR 1g (W/Kg)	3.932904

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	5.7034	3.7183	2.1347	1.2560	0.7338	0.4260	0.2429



3D screen shot	Hot spot position
	

MEASUREMENT 8

HEAD

Type: Validation measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 11 minutes 6 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>

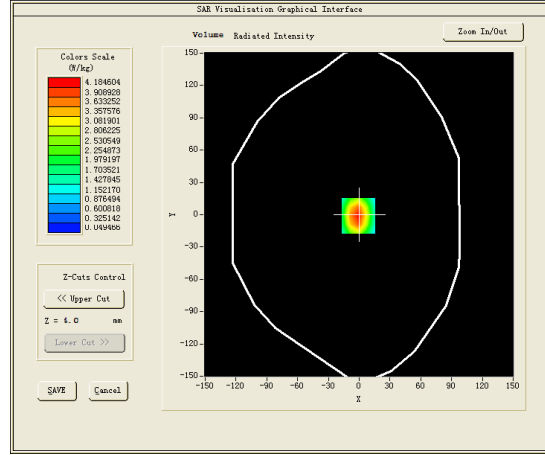
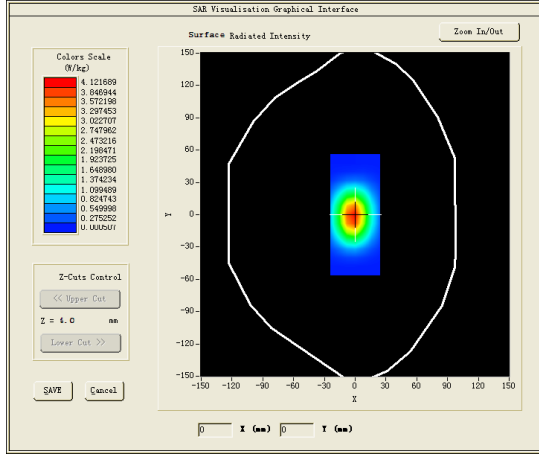
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	1900.000000
Relative permittivity (real part)	39.976398
Relative permittivity (imaginary part)	13.386300
Conductivity (S/m)	1.412998
Variation (%)	-0.040000

SURFACE SAR

VOLUME SAR

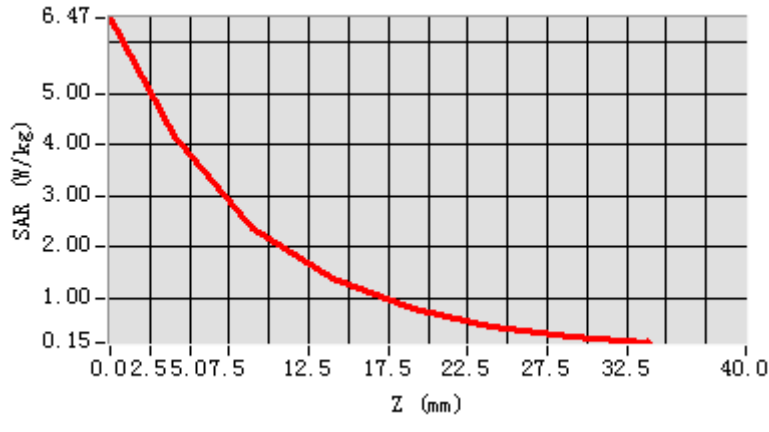


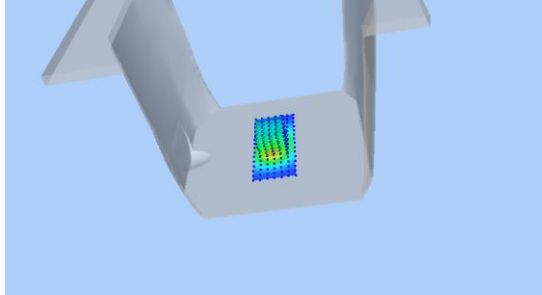
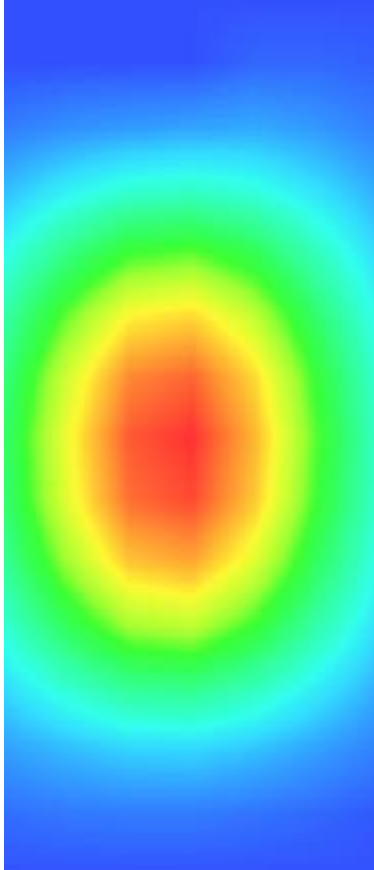
Maximum location: X=-1.00, Y=-1.00

SAR Peak: 6.48 W/kg

SAR 10g (W/Kg)	2.107104
SAR 1g (W/Kg)	3.997625

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.4693	4.1846	2.3780	1.3892	0.8084	0.4680	0.2662



3D screen shot	Hot spot position
	

MEASUREMENT 9

BODY

Type: Validation measurement (Complete)

Date of measurement: 17/6/2017

Measurement duration: 9 minutes 46 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>

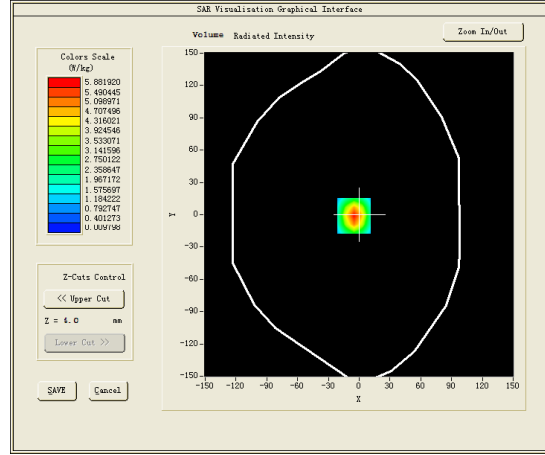
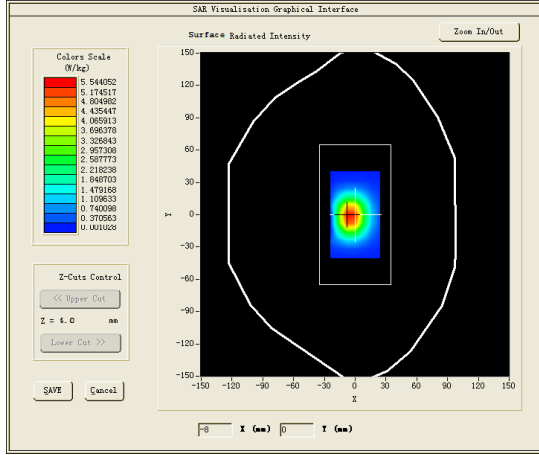
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	2450.000000
Relative permittivity (real part)	52.735699
Relative permittivity (imaginary part)	14.017300
Conductivity (S/m)	1.907910
Variation (%)	0.390000

SURFACE SAR

VOLUME SAR

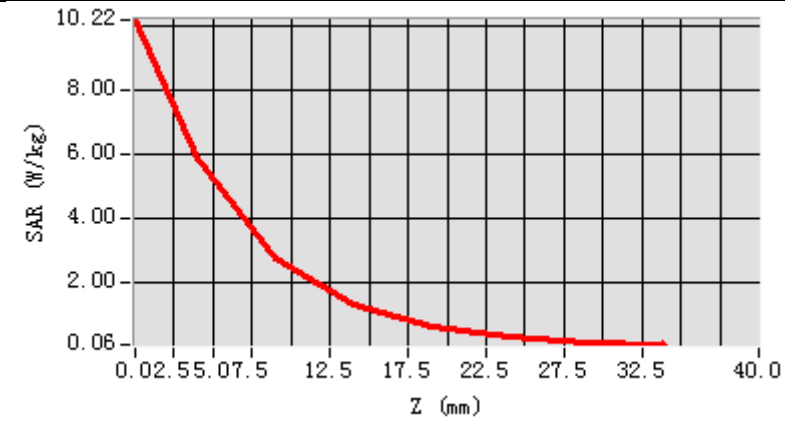


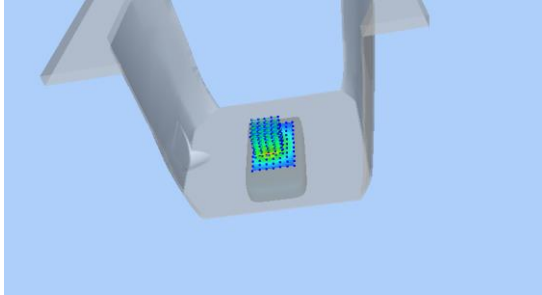
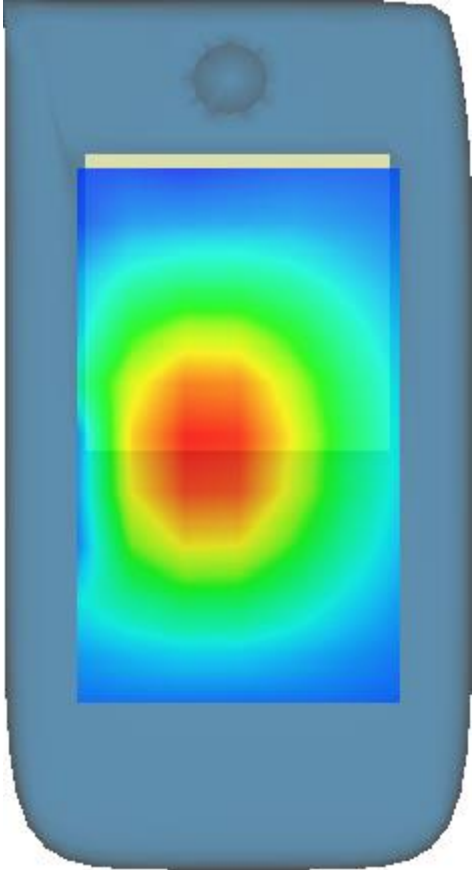
Maximum location: X=-5.00, Y=-1.00

SAR Peak: 10.96 W/kg

SAR 10g (W/Kg)	2.633453
SAR 1g (W/Kg)	5.988343

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	10.2188	5.8819	2.7478	1.3151	0.6266	0.2969	0.1341



3D screen shot	Hot spot position
	

MEASUREMENT 10

HEAD

Type: Validation measurement (Complete)

Date of measurement: 17/6/2017

Measurement duration: 9 minutes 46 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>

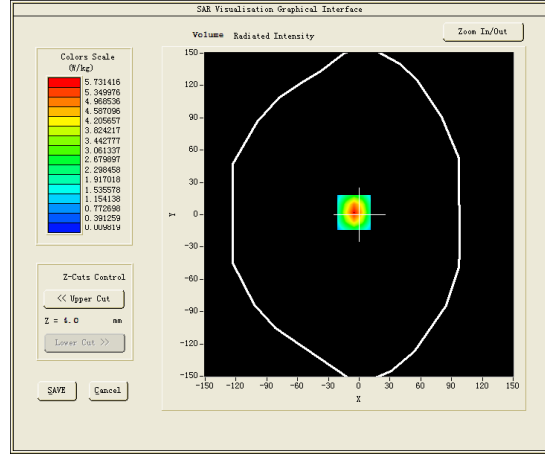
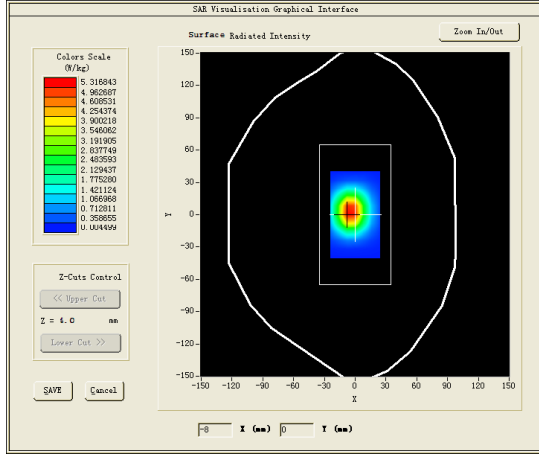
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	2450.000000
Relative permittivity (real part)	39.235699
Relative permittivity (imaginary part)	12.917300
Conductivity (S/m)	1.758188
Variation (%)	2.820000

SURFACE SAR

VOLUME SAR

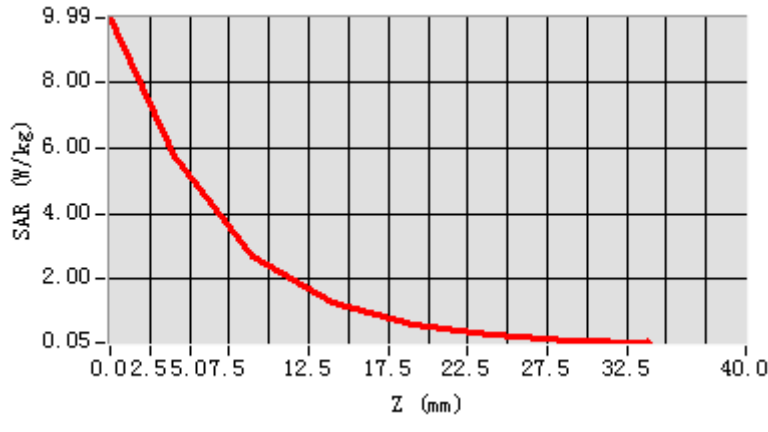


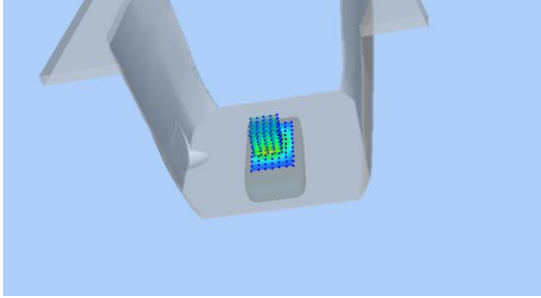
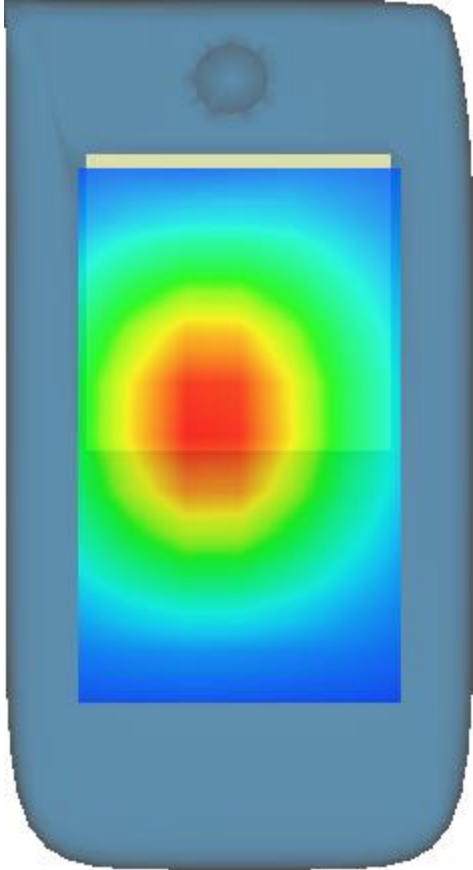
Maximum location: X=-5.00, Y=2.00

SAR Peak: 9.92 W/kg

SAR 10g (W/Kg)	2.452895
SAR 1g (W/Kg)	5.393069

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	9.9915	5.7314	2.6626	1.2722	0.6047	0.2852	0.1274



3D screen shot	Hot spot position
	

MEASUREMENT 11

BODY

Type: Validation measurement (Complete)

Date of measurement: 8/6/2017

Measurement duration: 10 minutes 13 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>CW2600</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

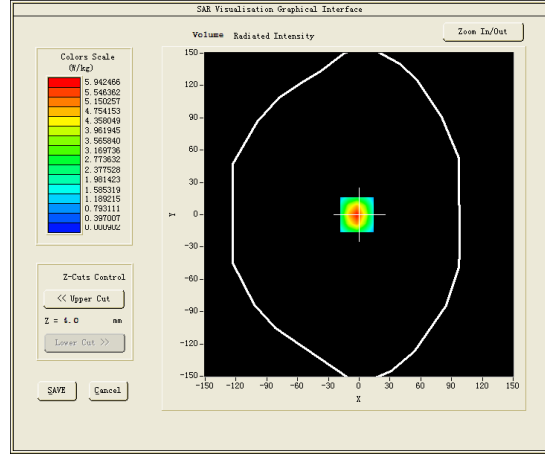
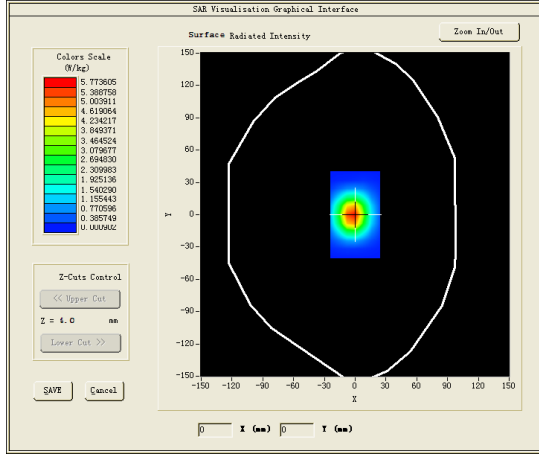
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	2600.000000
Relative permittivity (real part)	52.007900
Relative permittivity (imaginary part)	14.458500
Conductivity (S/m)	2.088450
Variation (%)	-0.220000

SURFACE SAR

VOLUME SAR

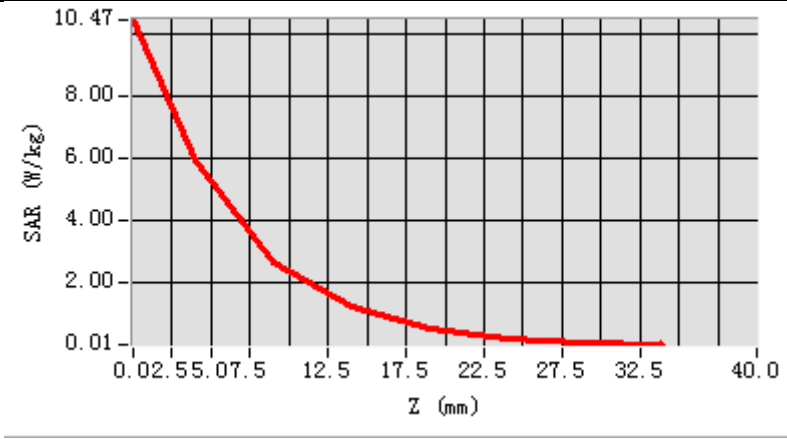


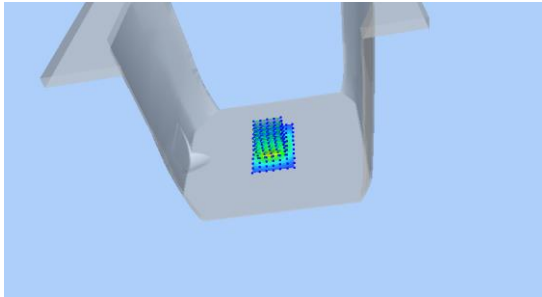
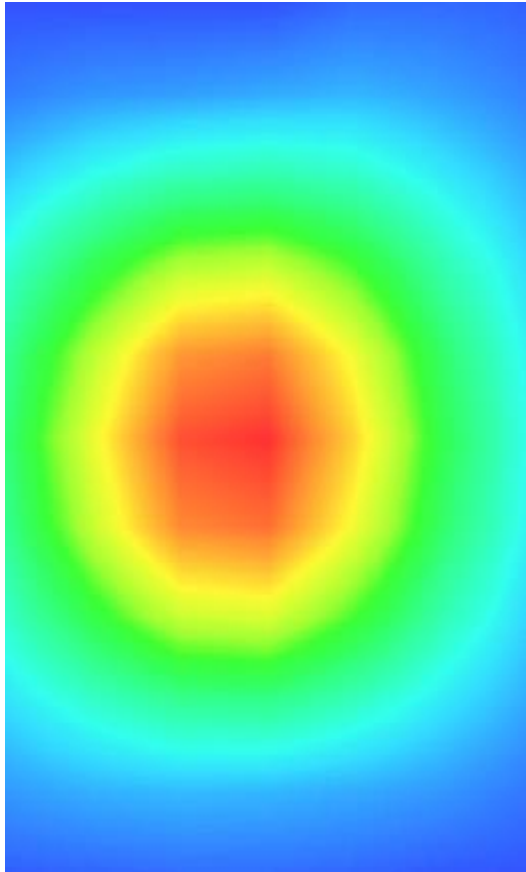
Maximum location: X=-2.00, Y=0.00

SAR Peak: 10.74 W/kg

SAR 10g (W/Kg)	2.559674
SAR 1g (W/Kg)	5.786435

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	10.474 5	5.9425	2.6827	1.2126	0.5266	0.2069	0.0714



3D screen shot	Hot spot position
	

MEASUREMENT 12

HEAD

Type: Validation measurement (Complete)

Date of measurement: 8/6/2017

Measurement duration: 10 minutes 12 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>CW2600</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>

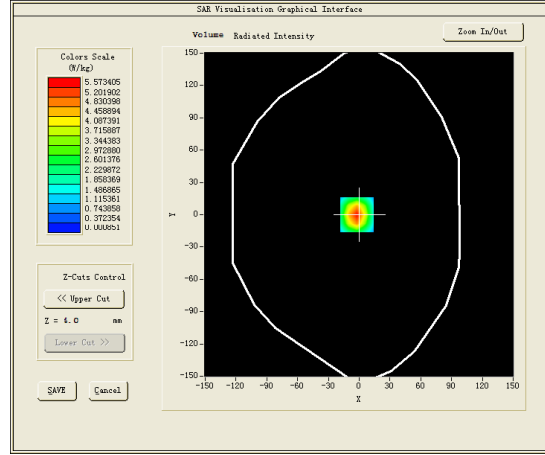
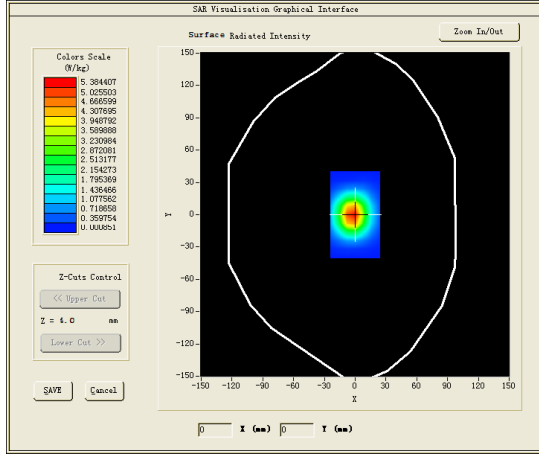
B. SAR Measurement Results

Middle Band SAR (Channel -1):

Frequency (MHz)	2600.000000
Relative permittivity (real part)	38.979599
Relative permittivity (imaginary part)	13.989700
Conductivity (S/m)	2.020734
Variation (%)	0.250000

SURFACE SAR

VOLUME SAR

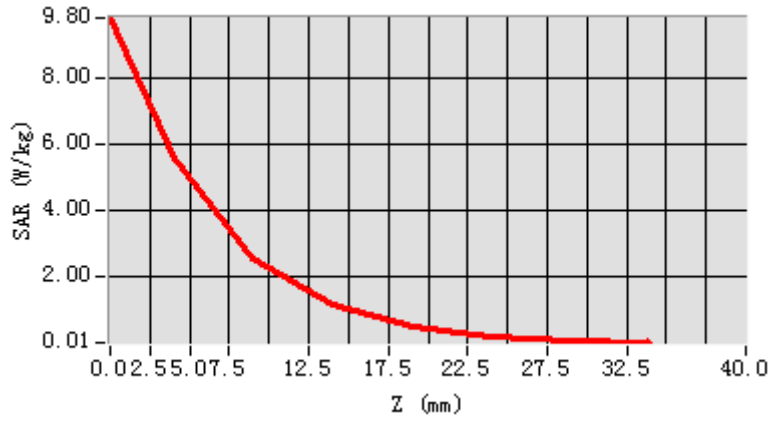


Maximum location: X=-2.00, Y=0.00

SAR Peak: 9.73 W/kg

SAR 10g (W/Kg)	2.342963
SAR 1g (W/Kg)	5.318259

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	9.8044	5.5734	2.5229	1.1430	0.4950	0.1964	0.0689



3D screen shot	Hot spot position
