



# **Annex A: System Check**

**Tested Model: X5** 

Report Number: FCC17030156A-6

#### I. RESULTS

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



### **BODY**

Type: Validation measurement (Complete)

Date of measurement: 30/3/2017

Measurement duration: 11 minutes 54 seconds

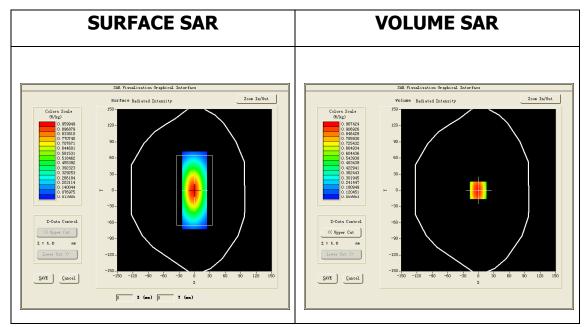
### A. Experimental conditions.

<u>Area Scan</u>	dx=8mm dy=8mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<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>	CW (Crest factor: 1.0)	

### **B. SAR Measurement Results**

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



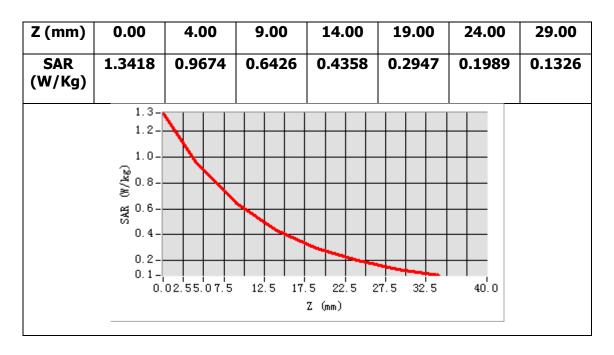


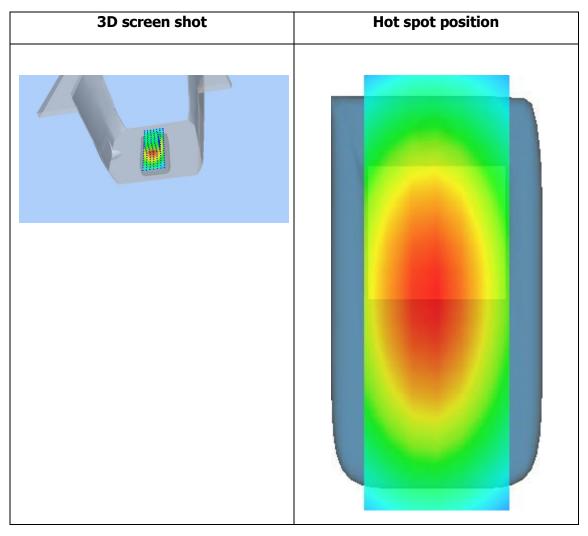
Maximum location: X=-1.00, Y=0.00

SAR Peak: 1.44 W/kg

SAR 10g (W/Kg)	6.44746
SAR 1g (W/Kg)	10.14583









### **HEAD**

Type: Validation measurement (Complete)

Date of measurement: 30/3/2017

Measurement duration: 11 minutes 54 seconds

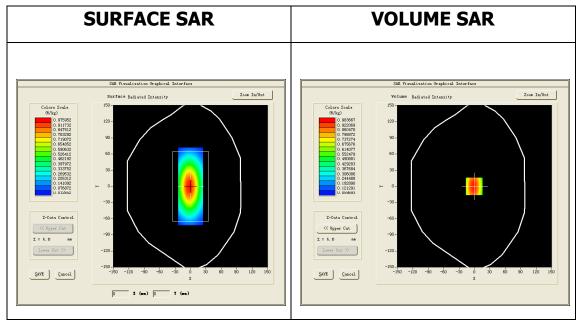
### A. Experimental conditions.

<u>Area Scan</u>	dx=8mm dy=8mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<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>	CW (Crest factor: 1.0)	

### **B. SAR Measurement Results**

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





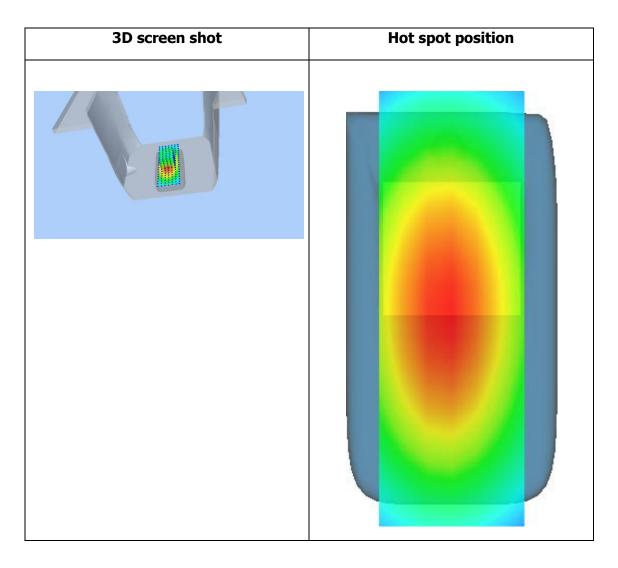
Maximum location: X=-1.00, Y=0.00

SAR Peak: 1.37 W/kg

SAR 10g (W/Kg)	6.15004
SAR 1g (W/Kg)	9.70049



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
	1.4- 1.2 1.0 2AK (%//kg) 0.8 0.6 0.4 0.1 0.	02.55.07.5	12.5 17	.5 22.5 2 Z (mm)	27.5 32.5	40.0	





### **BODY**

Type: Validation measurement (Complete)

Date of measurement: 5/4/2017

Measurement duration: 11 minutes 43 seconds

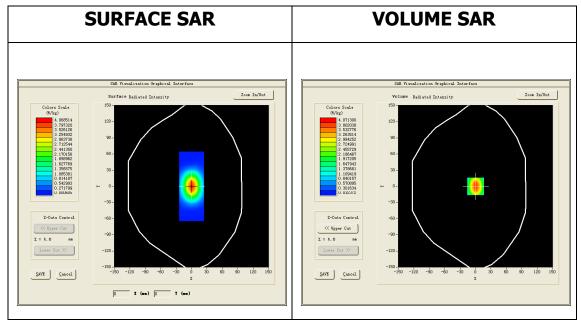
### A. Experimental conditions.

<u>Area Scan</u>	dx=8mm dy=8mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<b>Device Position</b>	<u>Dipole</u>	
<u>Band</u>	<u>CW1800</u>	
<u>Channels</u>	<u>Middle</u>	
<u>Signal</u>	CW (Crest factor: 1.0)	

### **B. SAR Measurement Results**

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



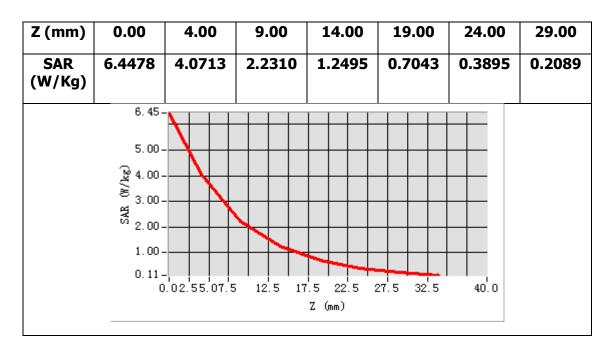


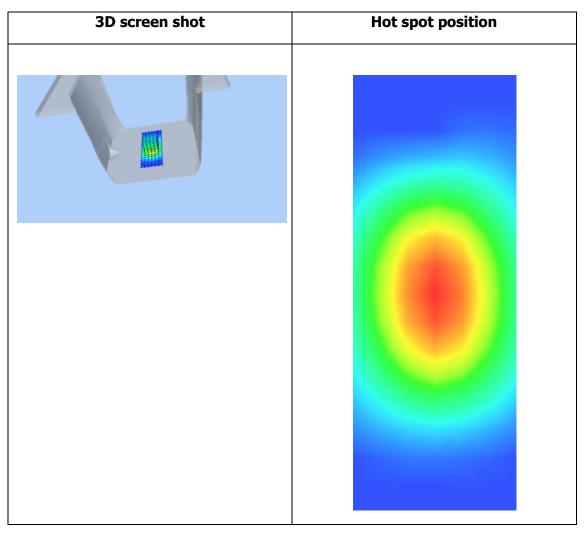
Maximum location: X=0.00, Y=0.00

SAR Peak: 6.86 W/kg

SAR 10g (W/Kg)	21.71523
SAR 1g (W/Kg)	41.55761









### **HEAD**

Type: Validation measurement (Complete)

Date of measurement: 5/4/2017

Measurement duration: 11 minutes 41 seconds

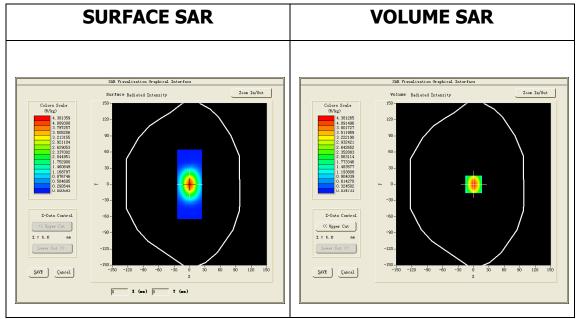
### A. Experimental conditions.

<u>Area Scan</u>	dx=8mm dy=8mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<b>Device Position</b>	<u>Dipole</u>	
<u>Band</u>	<u>CW1800</u>	
<u>Channels</u>	<u>Middle</u>	
<u>Signal</u>	CW (Crest factor: 1.0)	

### **B. SAR Measurement Results**

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



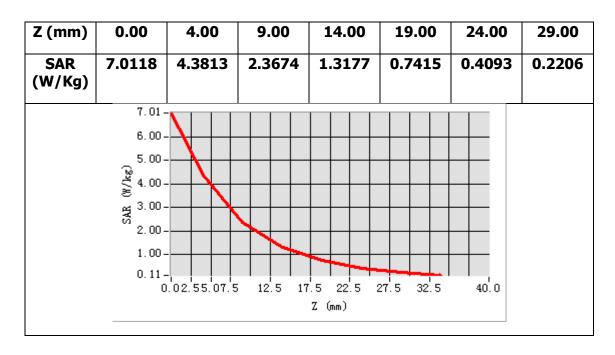


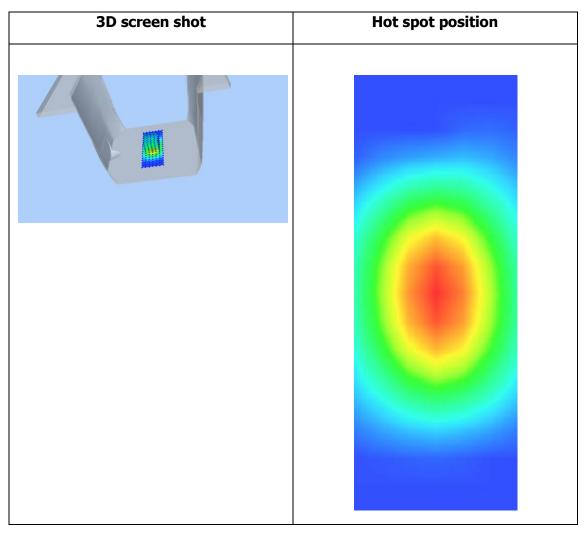
Maximum location: X=0.00, Y=0.00

SAR Peak: 6.95 W/kg

SAR 10g (W/Kg)	21.60484
SAR 1g (W/Kg)	41.98096









### **BODY**

Type: Validation measurement (Complete)

Date of measurement: 29/3/2017

Measurement duration: 10 minutes 57 seconds

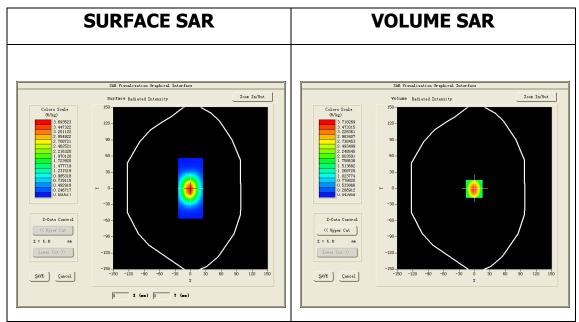
### A. Experimental conditions.

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

### **B. SAR Measurement Results**

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



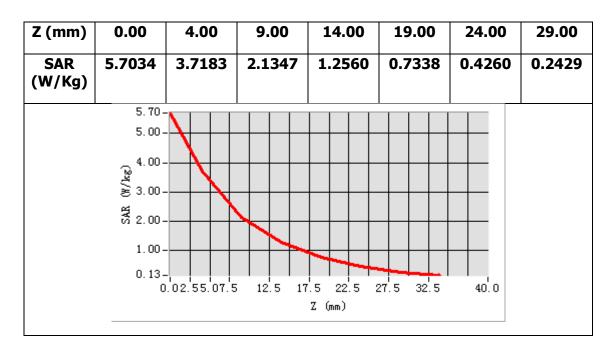


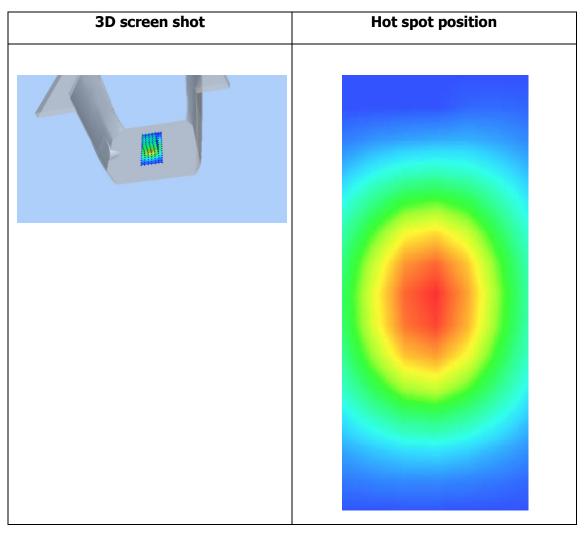
Maximum location: X=-1.00, Y=-1.00

SAR Peak: 6.26 W/kg

SAR 10g (W/Kg)	20.93533
SAR 1g (W/Kg)	39.32904









### **HEAD**

Type: Validation measurement (Complete)

Date of measurement: 29/3/2017

Measurement duration: 11 minutes 6 seconds

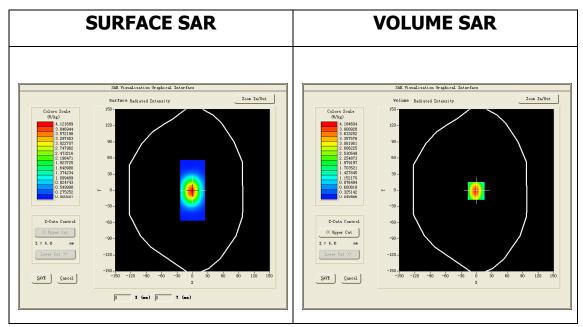
### A. Experimental conditions.

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

### **B. SAR Measurement Results**

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



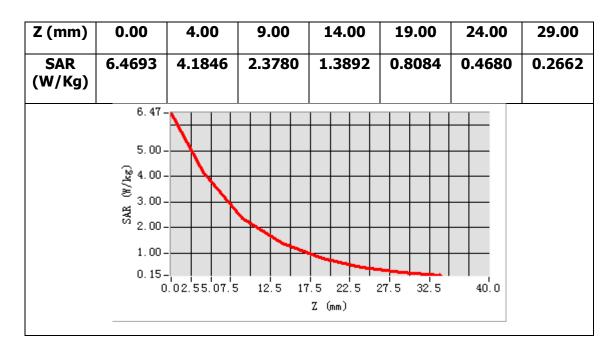


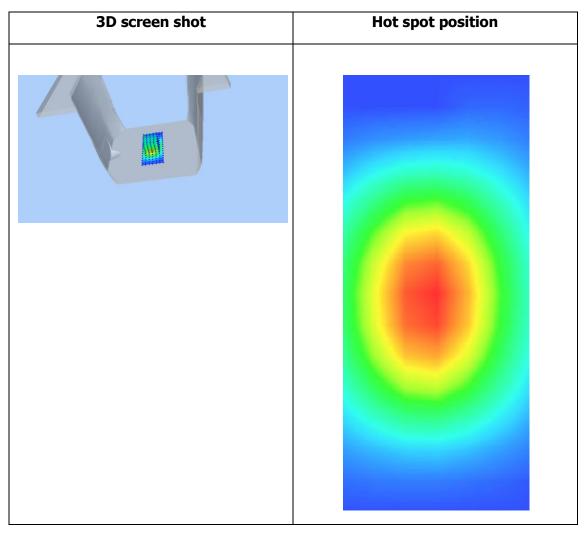
Maximum location: X=-1.00, Y=-1.00

SAR Peak: 6.48 W/kg

SAR 10g (W/Kg)	21.07104
SAR 1g (W/Kg)	39.97625









### **BODY**

Type: Validation measurement (Complete)

Date of measurement: 28/3/2017

Measurement duration: 9 minutes 46 seconds

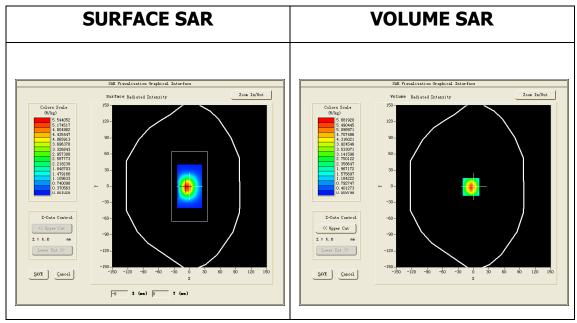
### A. Experimental conditions.

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

### **B. SAR Measurement Results**

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



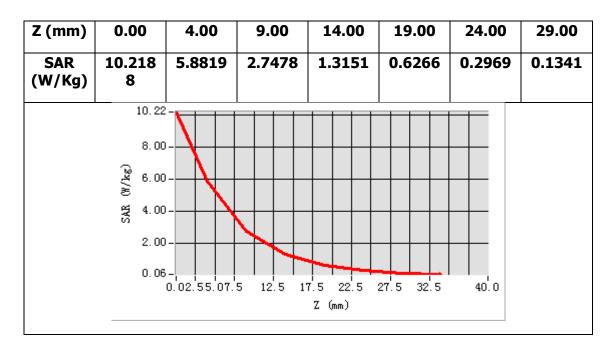


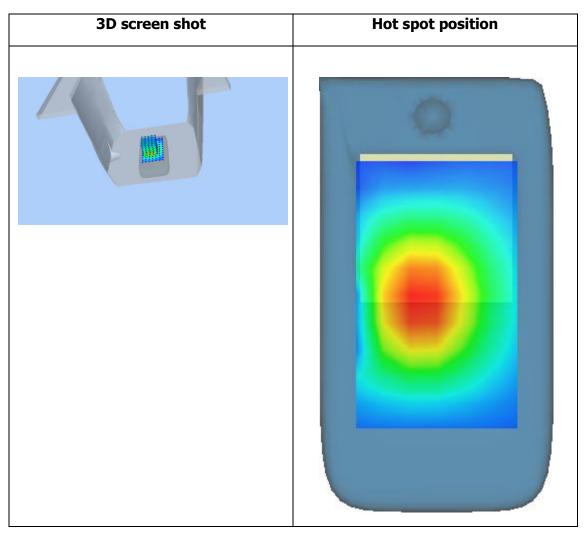
Maximum location: X=-5.00, Y=-1.00

SAR Peak: 10.96 W/kg

SAR 10g (W/Kg)	23.33453
SAR 1g (W/Kg)	56.33343









### **HEAD**

Type: Validation measurement (Complete)

Date of measurement: 28/3/2017

Measurement duration: 9 minutes 46 seconds

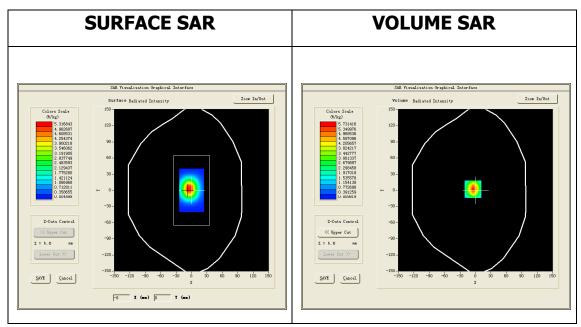
### A. Experimental conditions.

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

### **B. SAR Measurement Results**

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





Maximum location: X=-5.00, Y=2.00

SAR Peak: 9.92 W/kg

SAR 10g (W/Kg)	24.52895
SAR 1g (W/Kg)	53.93069



