



## Appendix A: SAR System performance Check Plots

<b>Measurement</b>	<b>Liquid</b>	<b>Frequency</b>	<b>Test Date</b>
System Check	Head	750	2023/05/30
System Check	Head	835	2023/06/08
System Check	Head	1800	2023/06/18
System Check	Head	1900	2023/06/17
System Check	Head	2450	2023/06/11

## System Performance Check (750MHz)

Type: Validation measurement

Date of measurement: 05/30/2023

### A. Experimental conditions.

<b>E-Field Probe</b>	SATIMO SN 32/22 EPGO383
<b>Area Scan</b>	dx=8mm dy=8mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Dipole
<b>Band</b>	750MHz
<b>Channels</b>	Middle
<b>Signal</b>	CW(Crest factor: 1.0)

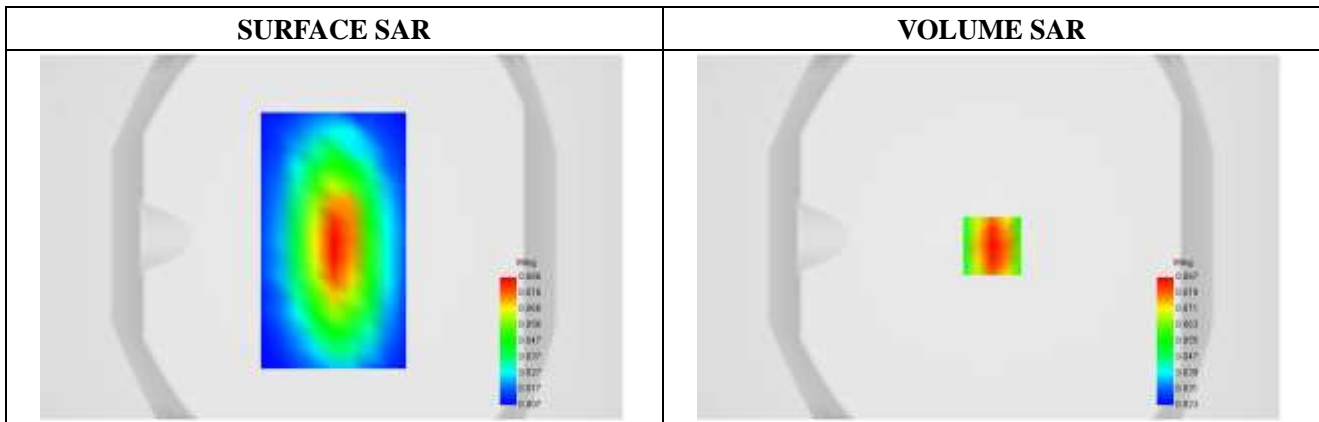
### B. SAR Measurement Results

<b>Frequency (MHz)</b>	750
<b>Relative permittivity (real part)</b>	41.76
<b>Conductivity (S/m)</b>	0.89
<b>Variation (%)</b>	-0.41

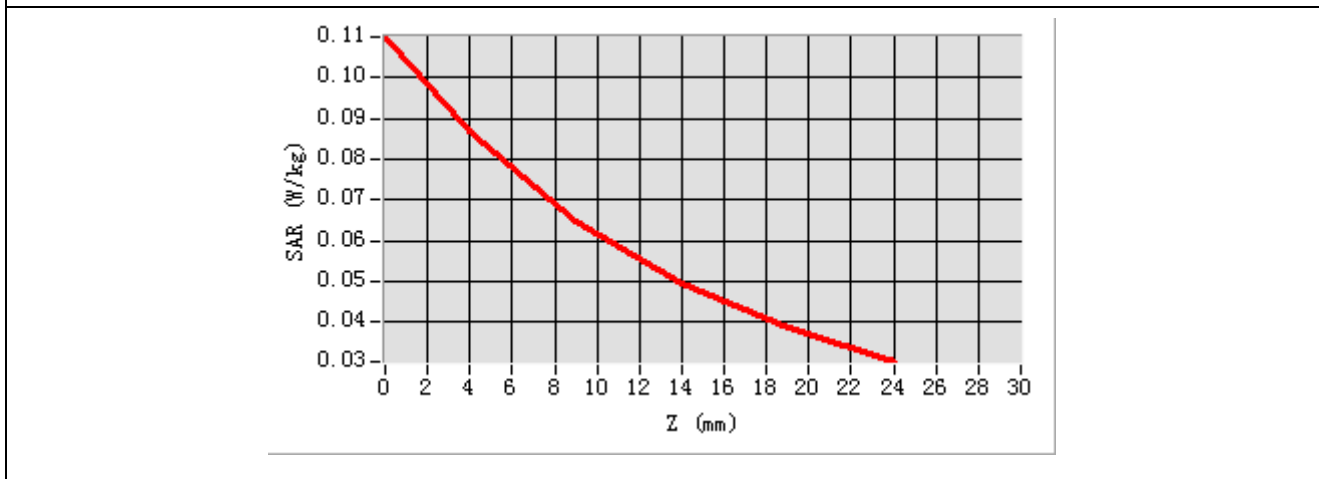
Maximum location: X=1.00, Y=-5.00

SAR Peak: 0.12 W/kg

<b>SAR 10g (W/Kg)</b>	0.059010
<b>SAR 1g (W/Kg)</b>	0.087295



**Z Axis Scan**



## System Performance Check (835MHz)

Type: Validation measurement

Date of measurement: 06/08/2023

### A. Experimental conditions.

<b>E-Field Probe</b>	SATIMO SN 32/22 EPGO383
<b>Area Scan</b>	dx=8mm dy=8mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Dipole
<b>Band</b>	835MHz
<b>Channels</b>	Middle
<b>Signal</b>	CW(Crest factor: 1.0)

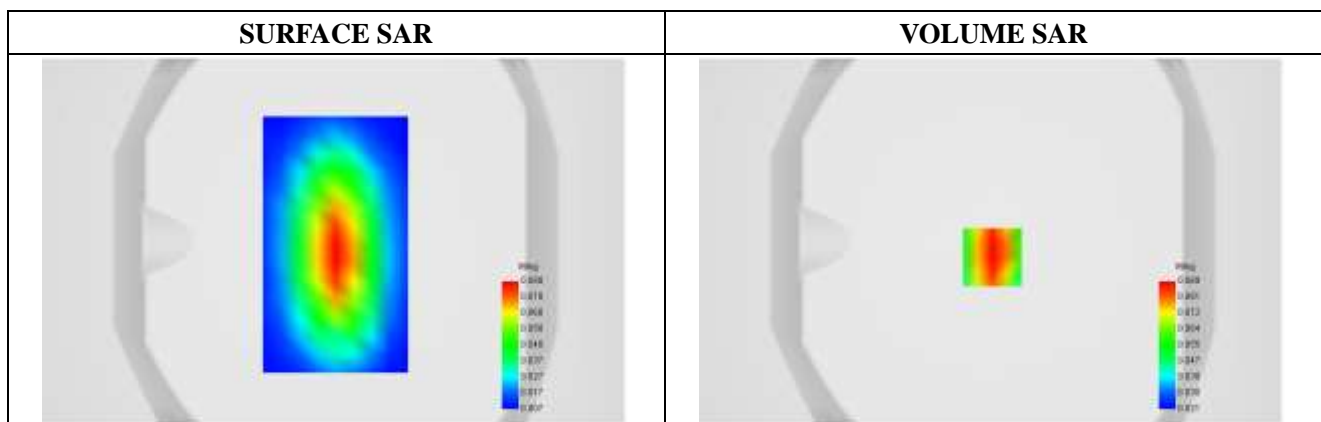
### B. SAR Measurement Results

<b>Frequency (MHz)</b>	835
<b>Relative permittivity (real part)</b>	41.36
<b>Conductivity (S/m)</b>	0.92
<b>Variation (%)</b>	-0.34

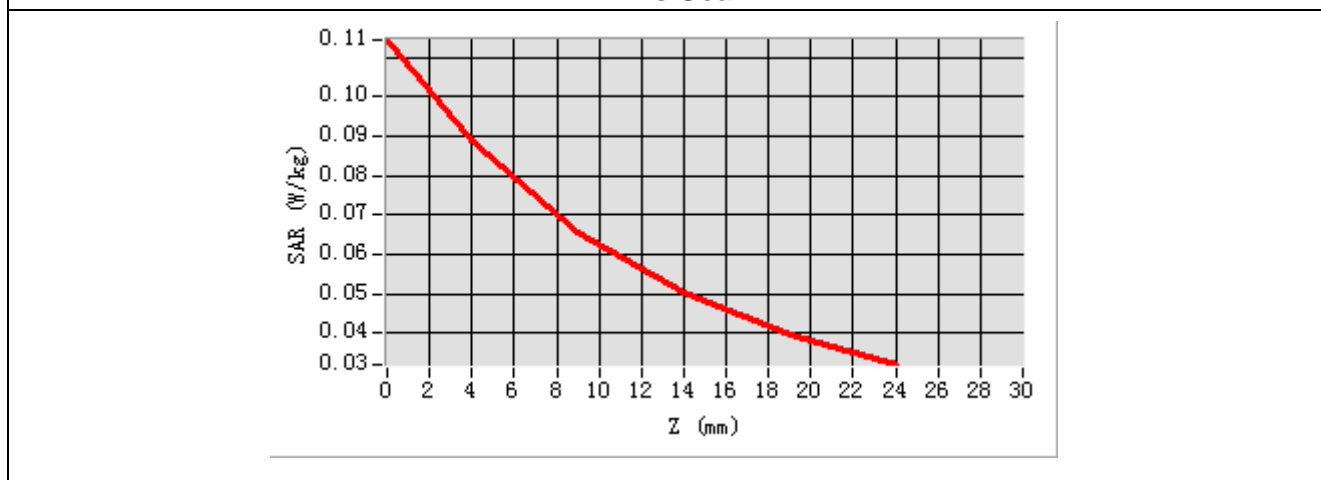
Maximum location: X=0.00, Y=-9.00

SAR Peak: 0.12 W/kg

<b>SAR 10g (W/Kg)</b>	0.059622
<b>SAR 1g (W/Kg)</b>	0.087127



**Z Axis Scan**



## System Performance Check (1800MHz)

Type: Validation measurement

Date of measurement: 06/18/2023

### A. Experimental conditions.

<b>E-Field Probe</b>	SATIMO SN 32/22 EPGO383
<b>Area Scan</b>	dx=8mm dy=8mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Dipole
<b>Band</b>	1800MHz
<b>Channels</b>	Middle
<b>Signal</b>	CW(Crest factor: 1.0)

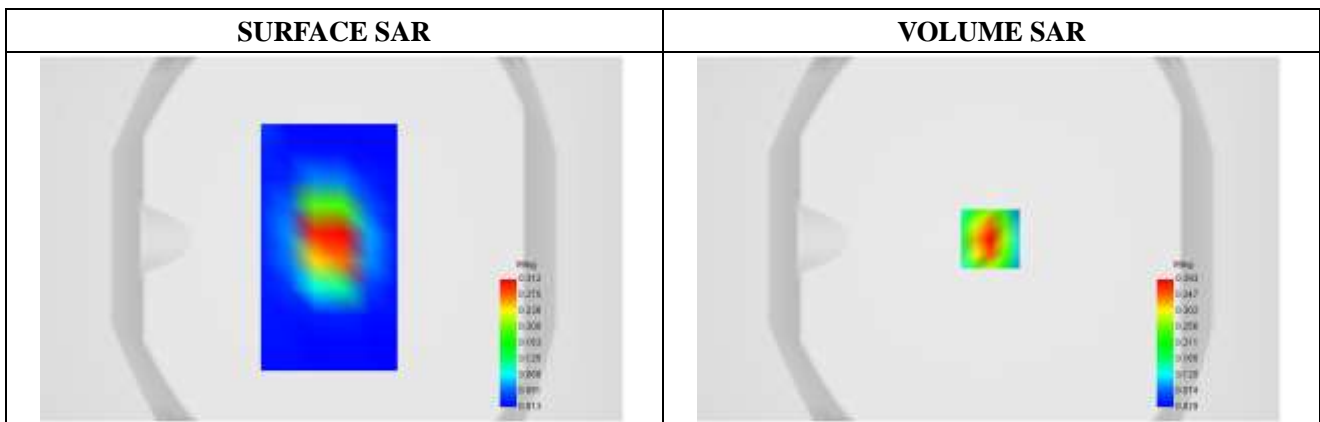
### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1800
<b>Relative permittivity (real part)</b>	39.59
<b>Conductivity (S/m)</b>	1.38
<b>Variation (%)</b>	-1.00

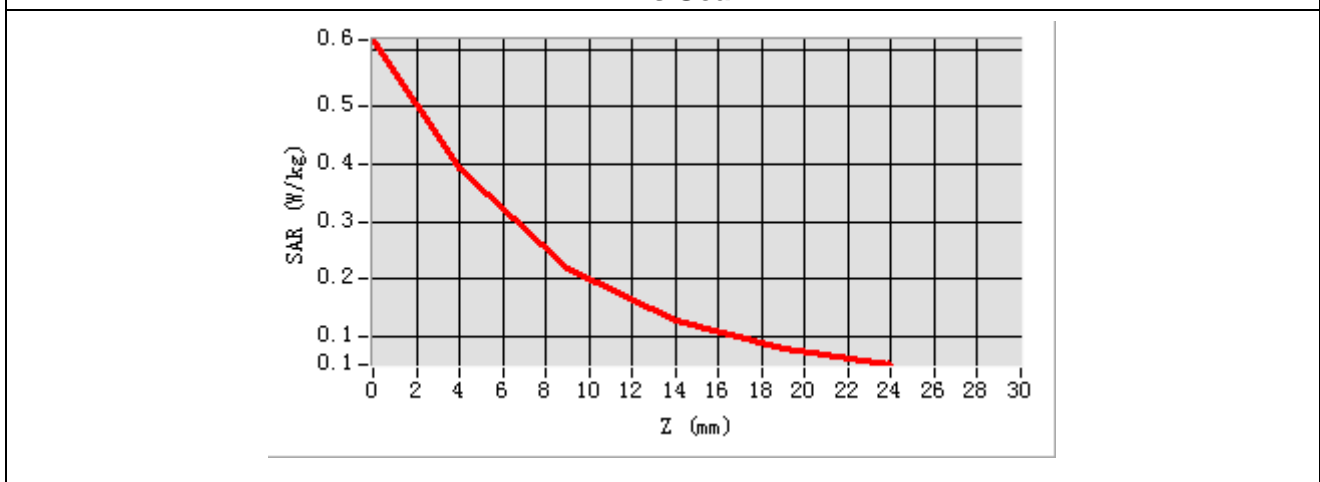
Maximum location: X=0.00, Y=0.00

SAR Peak: 0.61 W/kg

<b>SAR 10g (W/Kg)</b>	0.196874
<b>SAR 1g (W/Kg)</b>	0.365766



### Z Axis Scan



## System Performance Check (1900MHz)

Type: Validation measurement

Date of measurement: 06/17/2023

### A. Experimental conditions.

<b>E-Field Probe</b>	SATIMO SN 32/22 EPGO383
<b>Area Scan</b>	dx=8mm dy=8mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Dipole
<b>Band</b>	1900MHz
<b>Channels</b>	Middle
<b>Signal</b>	CW(Crest factor: 1.0)

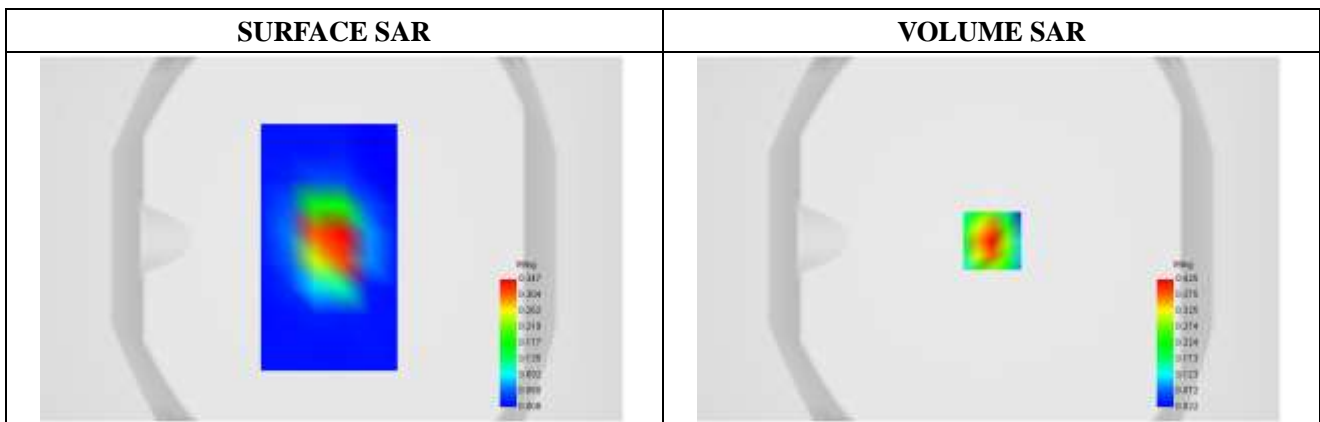
### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1900
<b>Relative permittivity (real part)</b>	38.96
<b>Conductivity (S/m)</b>	1.43
<b>Variation (%)</b>	0.61

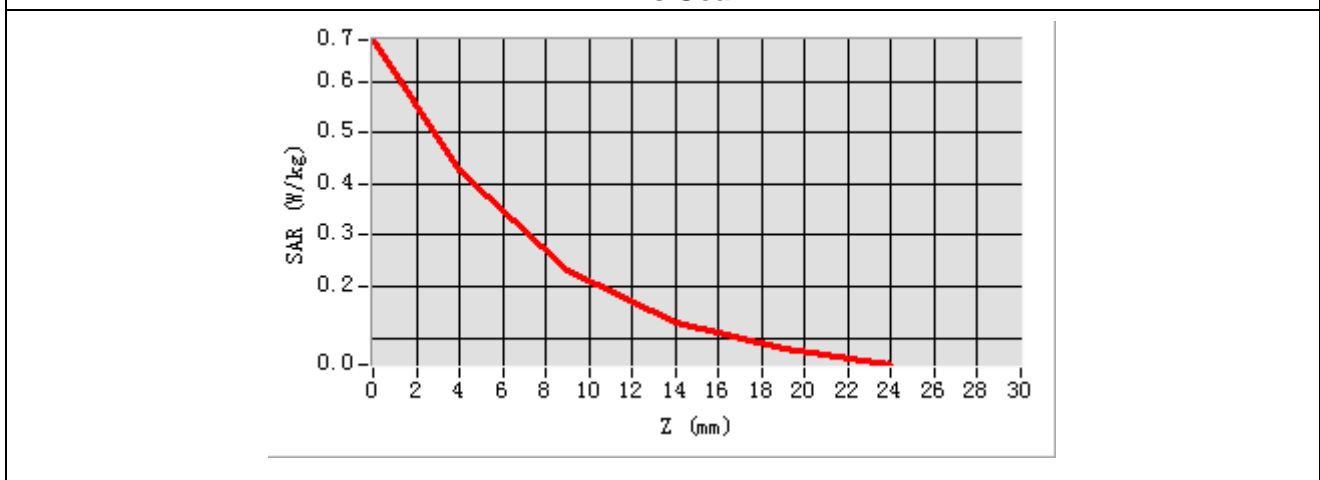
**Maximum location: X=1.00, Y=-1.00**

**SAR Peak: 0.68 W/kg**

<b>SAR 10g (W/Kg)</b>	0.207012
<b>SAR 1g (W/Kg)</b>	0.408135



**Z Axis Scan**



## System Performance Check (2450MHz)

Type: Validation measurement

Date of measurement: 06/11/2023

### A. Experimental conditions.

<b>E-Field Probe</b>	SATIMO SN 32/22 EPGO383
<b>Area Scan</b>	dx=8mm dy=8mm
<b>Zoom Scan</b>	7x7x7,dx=5mm dy=5mm dz=5mm
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Dipole
<b>Band</b>	2450MHz
<b>Channels</b>	Middle
<b>Signal</b>	CW(Crest factor: 1.0)

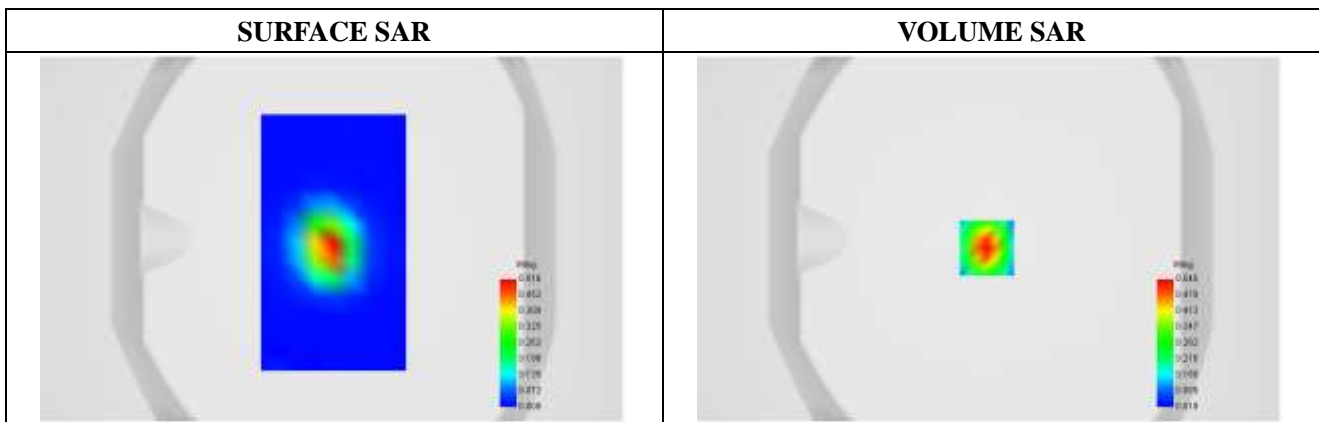
### B. SAR Measurement Results

<b>Frequency (MHz)</b>	2450
<b>Relative permittivity (real part)</b>	38.64
<b>Conductivity (S/m)</b>	1.79
<b>Variation (%)</b>	-0.23

**Maximum location: X=2.00, Y=-5.00**

**SAR Peak: 0.93 W/kg**

<b>SAR 10g (W/Kg)</b>	0.235311
<b>SAR 1g (W/Kg)</b>	0.508647



### Z Axis Scan

