



Appendix A: SAR System performance Check Plots

Measurement	Liquid	Frequency	Test Date
System Check	Head	835	2020-05-11
System Check	Body	835	2020-05-11
System Check	Head	1800	2020-05-13
System Check	Body	1800	2020-05-13
System Check	Head	1900	2020-05-14
System Check	Body	1900	2020-05-14
System Check	Head	2450	2020-05-16
System Check	Body	2450	2020-05-16

System Performance Check (Head, 835MHz)

Type: Phone measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 05/11/2020

Measurement duration: 22 minutes 09 seconds

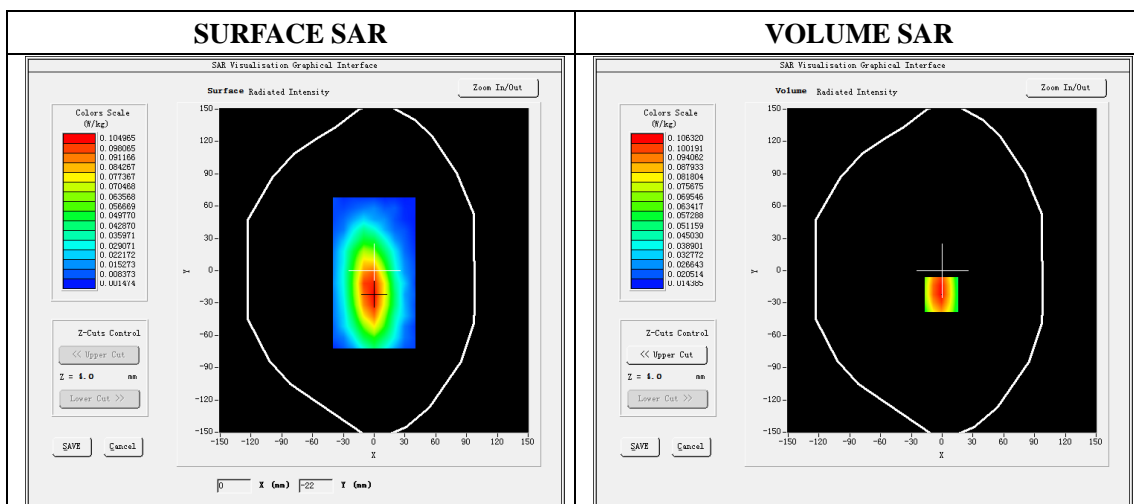
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	835MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

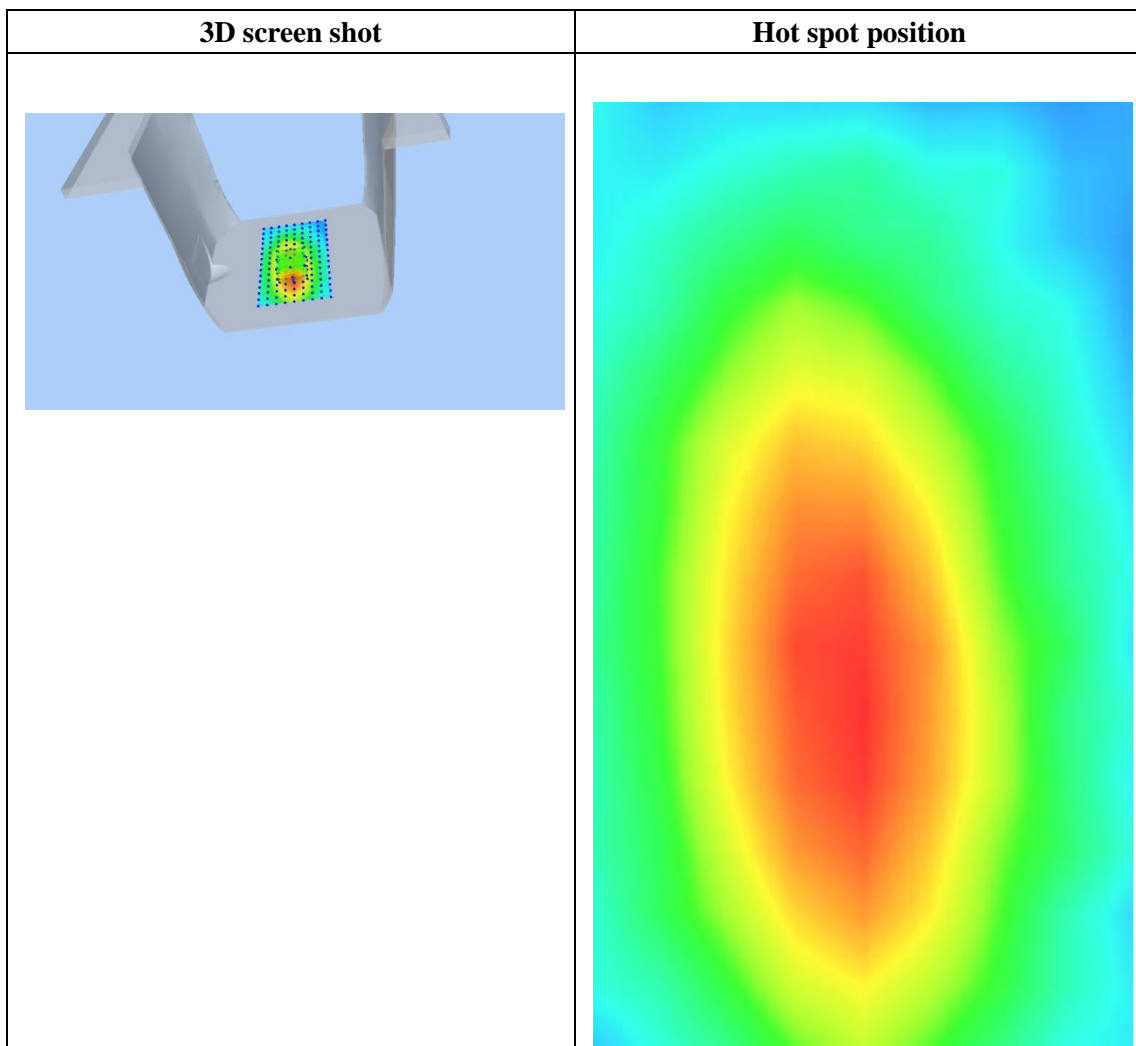
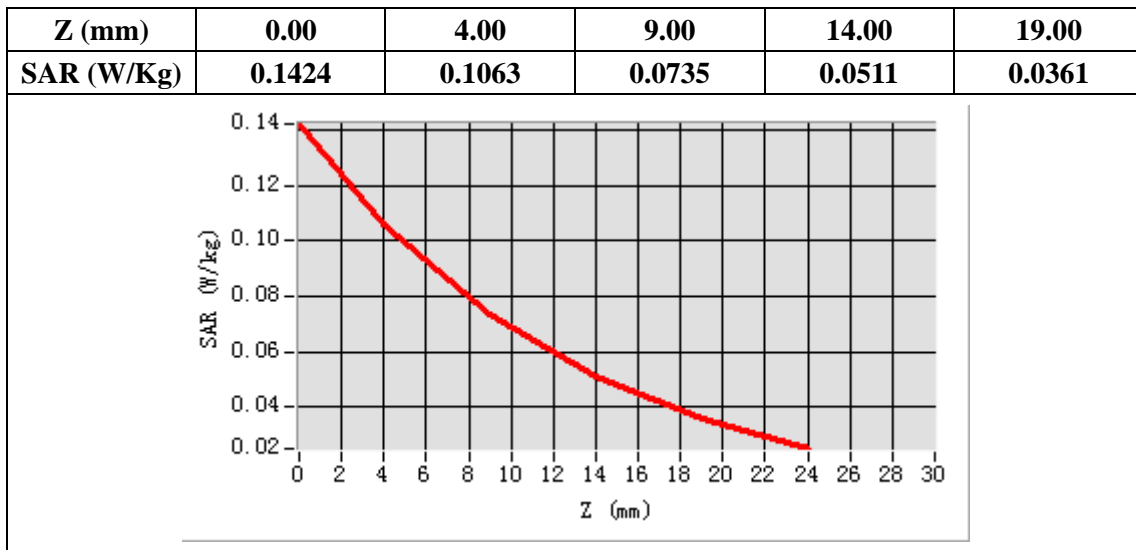
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	835
Relative permittivity (real part)	41.55
Relative permittivity	20.26
Conductivity (S/m)	0.94
Power drift (%)	-1.16
Ambient Temperature:	22.2 °C
Liquid Temperature:	22.6 °C
ConvF:	1.60
Crest factor:	1:1



Maximum location: X=-1.00, Y=-22.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.067816
SAR 1g (W/Kg)	0.102181



System Performance Check (Body, 835MHz)

Type: Phone measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 05/11/2020

Measurement duration: 22 minutes 03 seconds

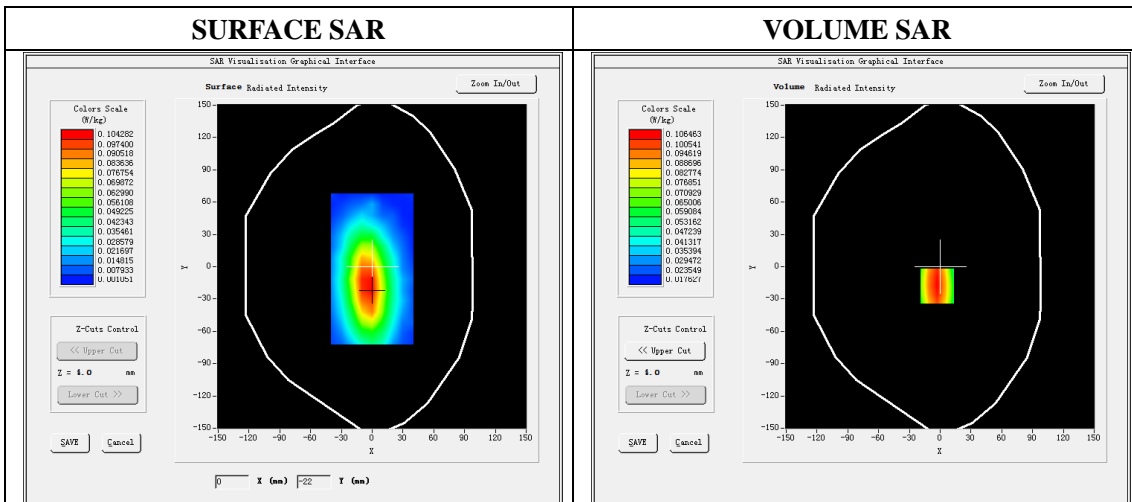
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	835MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

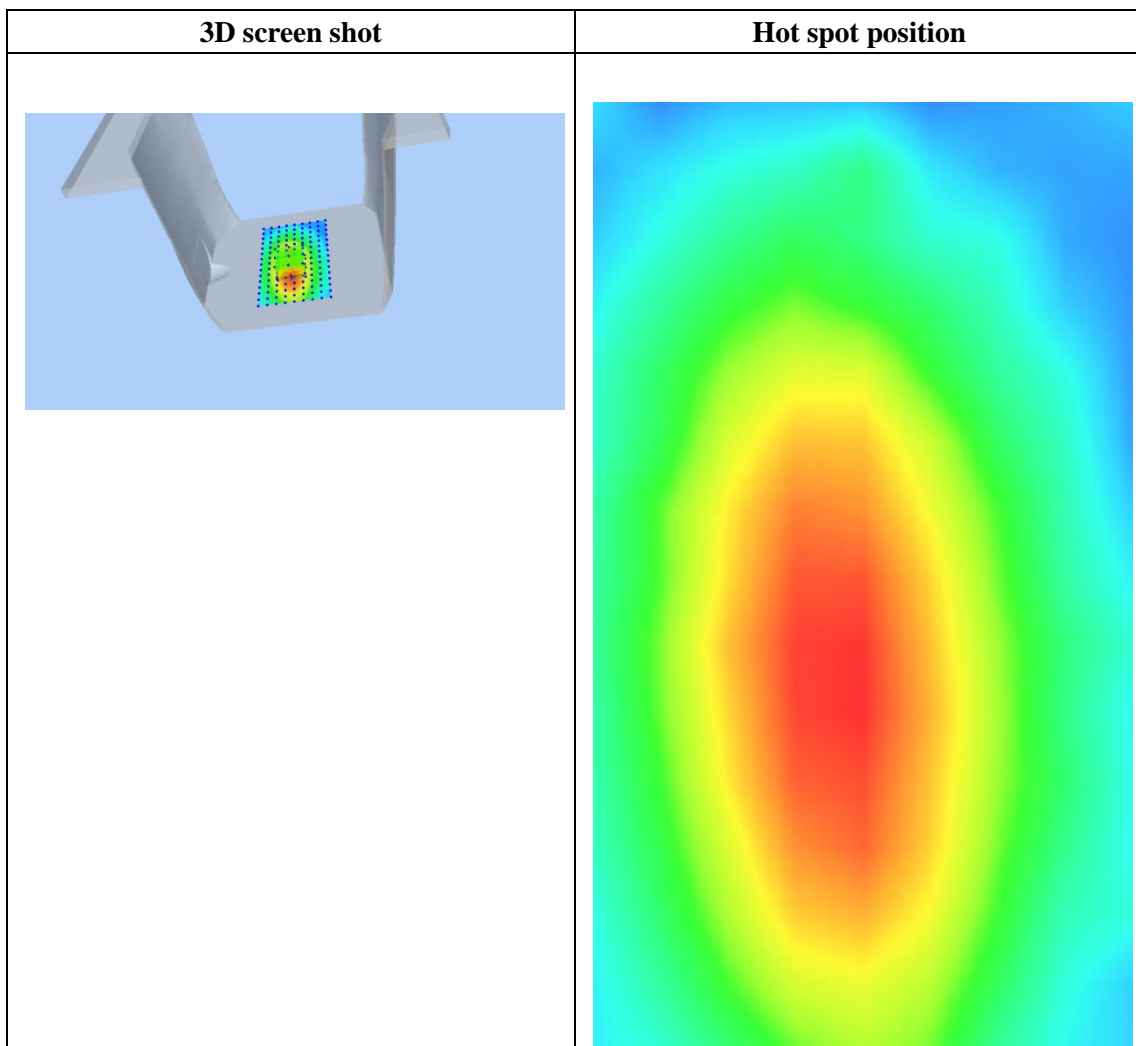
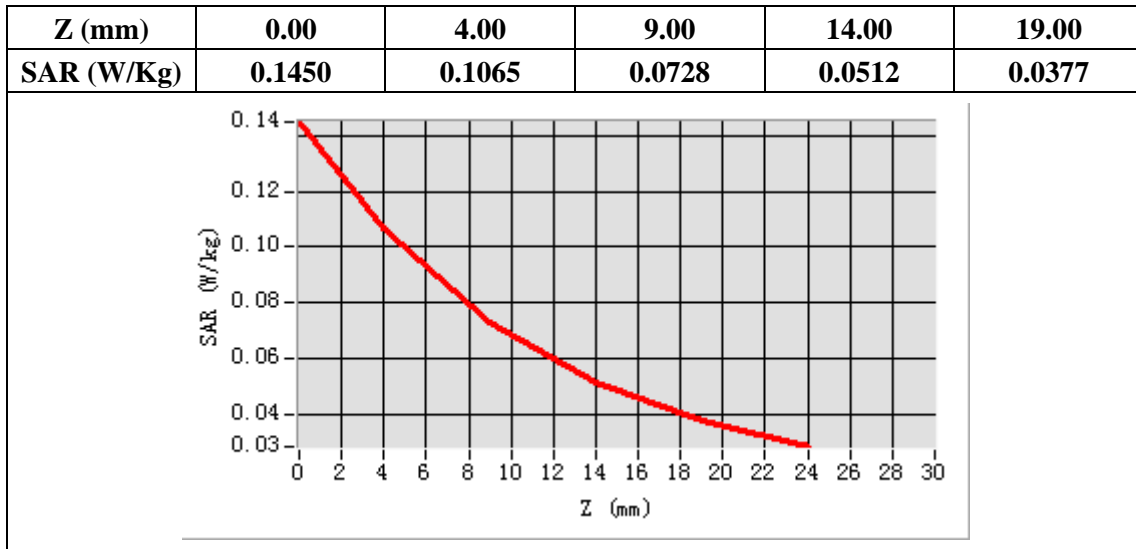
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	835
Relative permittivity (real part)	55.22
Relative permittivity	20.69
Conductivity (S/m)	0.96
Power drift (%)	0.04
Ambient Temperature:	22.2 °C
Liquid Temperature:	22.6 °C
ConvF:	1.64
Crest factor:	1:1



Maximum location: X=-3.00, Y=-18.00

SAR Peak: 0.15 W/kg

SAR 10g (W/Kg)	0.068343
SAR 1g (W/Kg)	0.103444



System Performance Check (Head, 1800MHz)

Type: Validation measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 05/13/2020

Measurement duration: 22 minutes 06 seconds

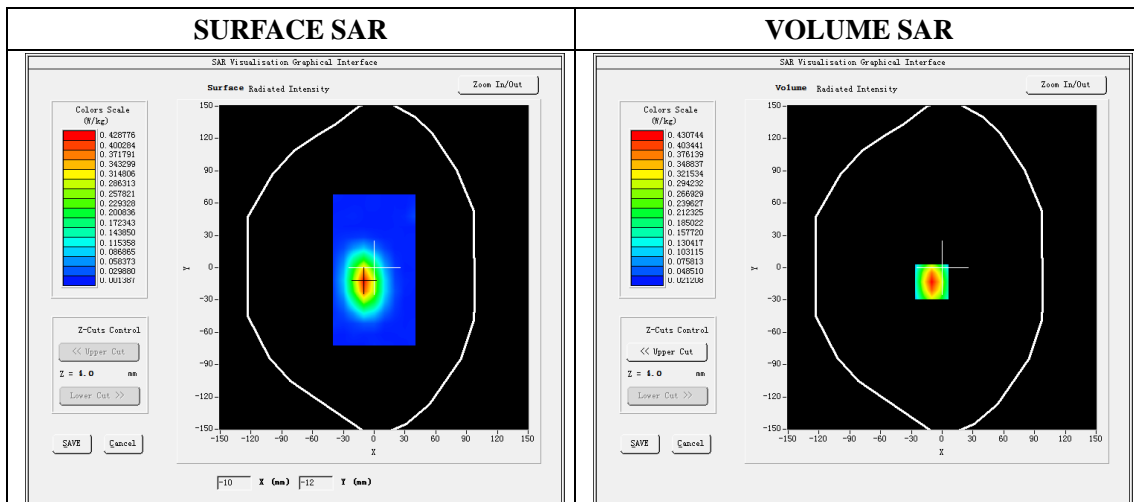
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	1800MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

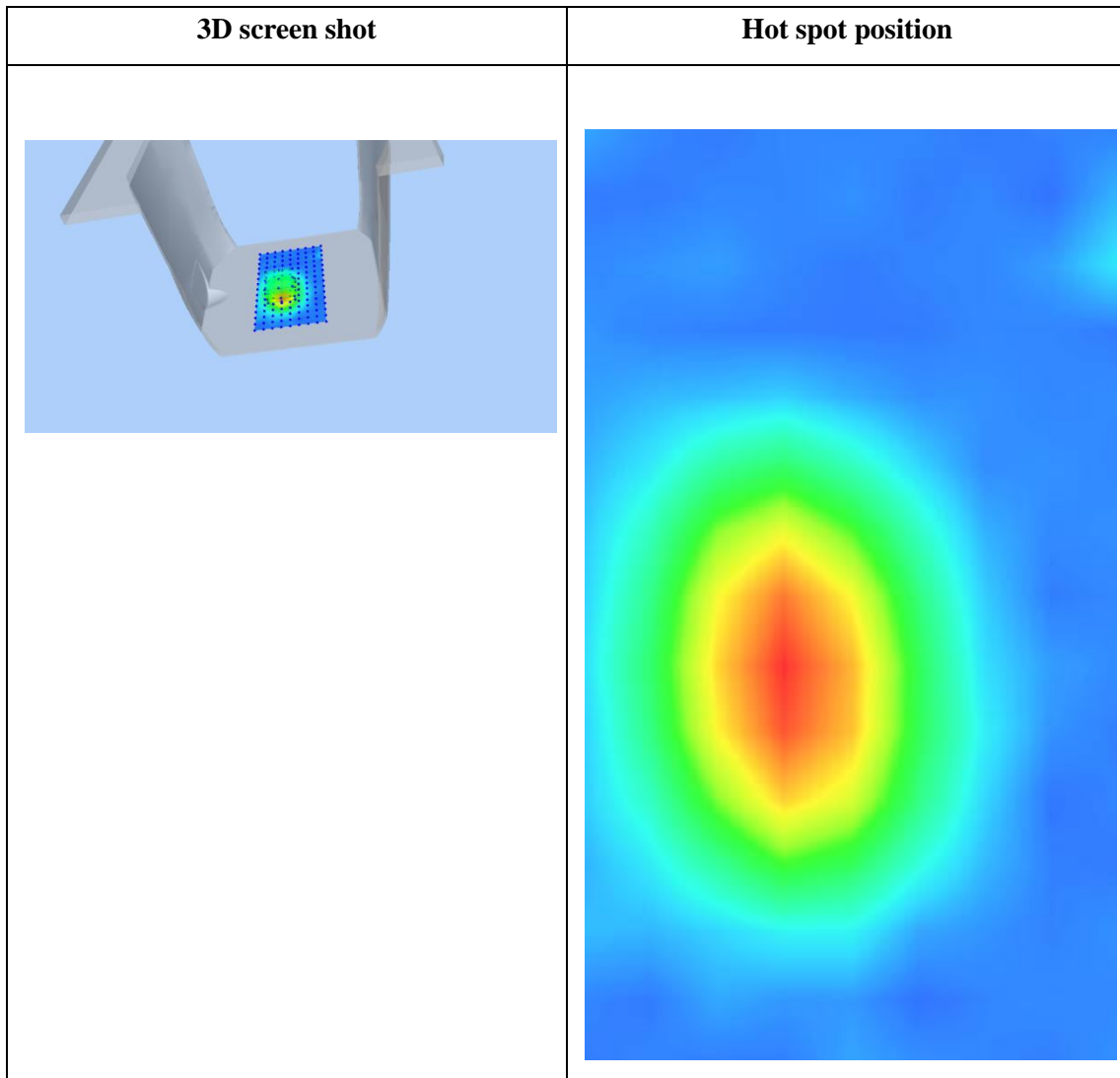
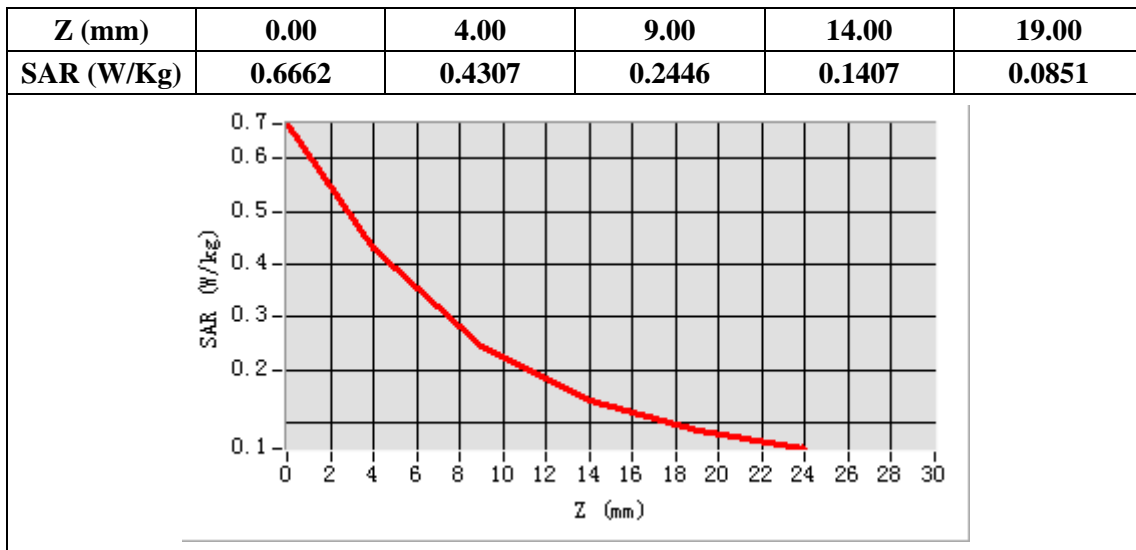
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1800
Relative permittivity (real part)	40.56
Relative permittivity	14.10
Conductivity (S/m)	1.41
Power Drift (%)	-0.60
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	1.74
Duty factor:	1:1



Maximum location: X=-10.00, Y=-13.00

SAR Peak: 0.67 W/kg

SAR 10g (W/Kg)	0.214960
SAR 1g (W/Kg)	0.403206



System Performance Check (Body, 1800MHz)

Type: Validation measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 05/13/2020

Measurement duration: 22 minutes 08 seconds

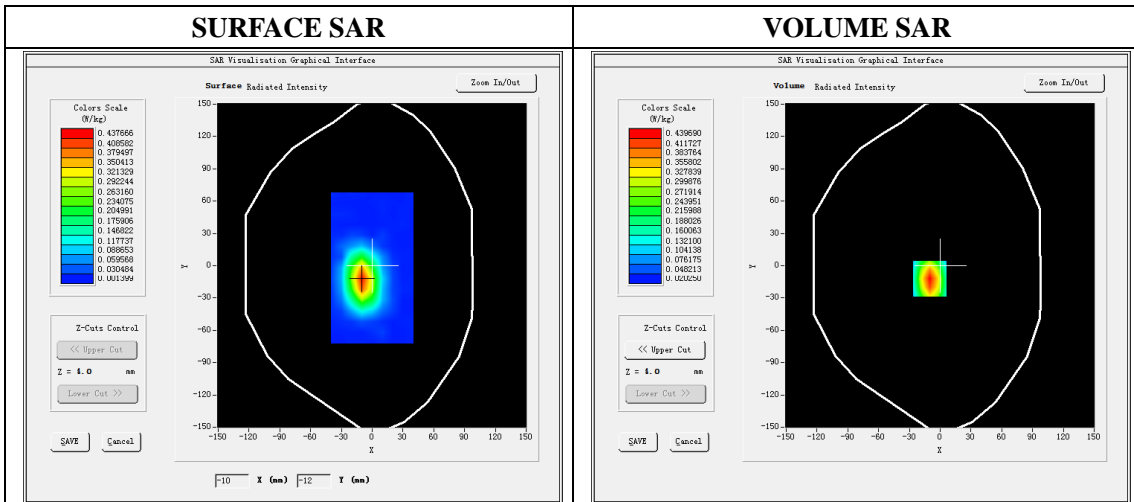
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	1800MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

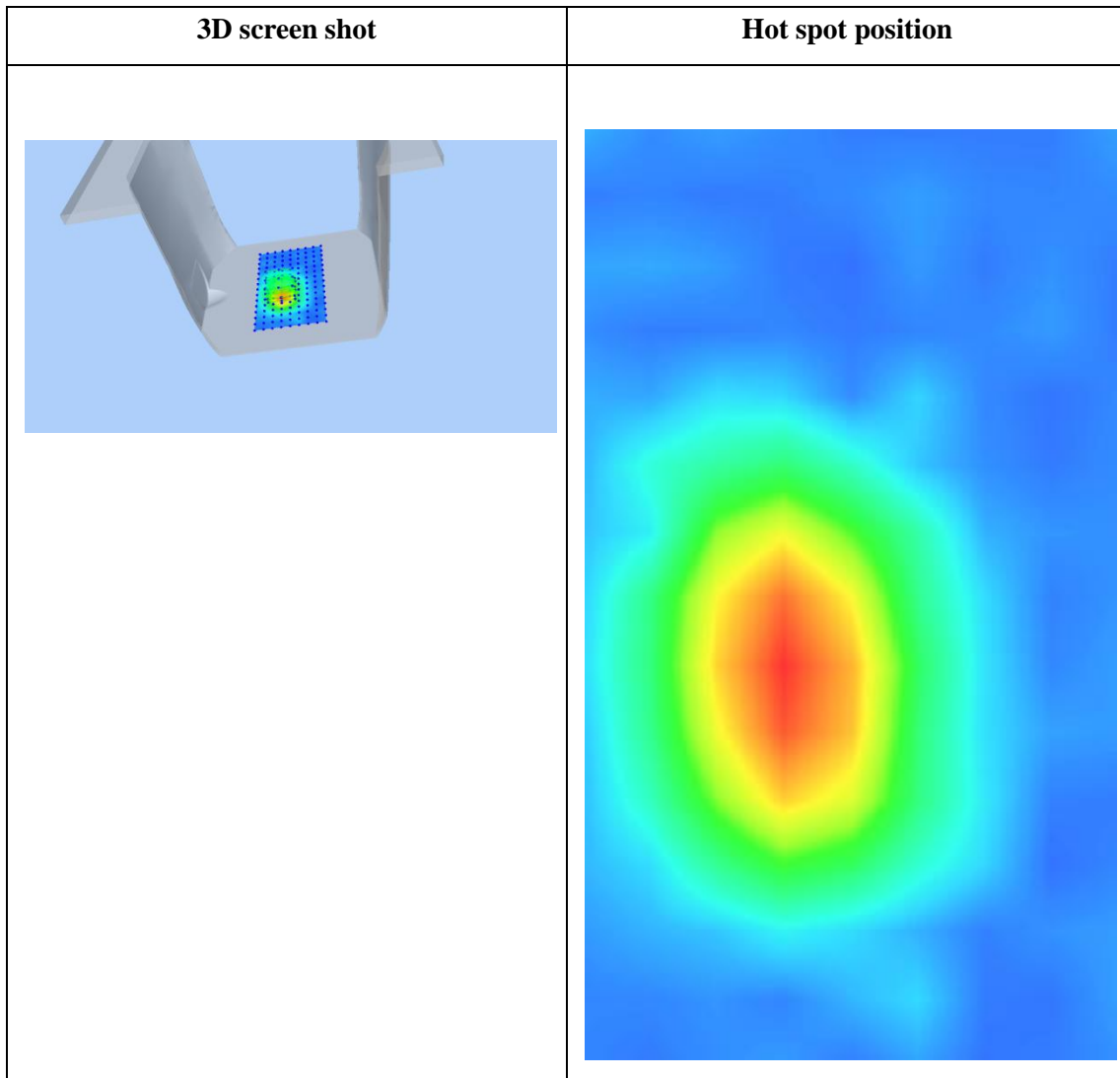
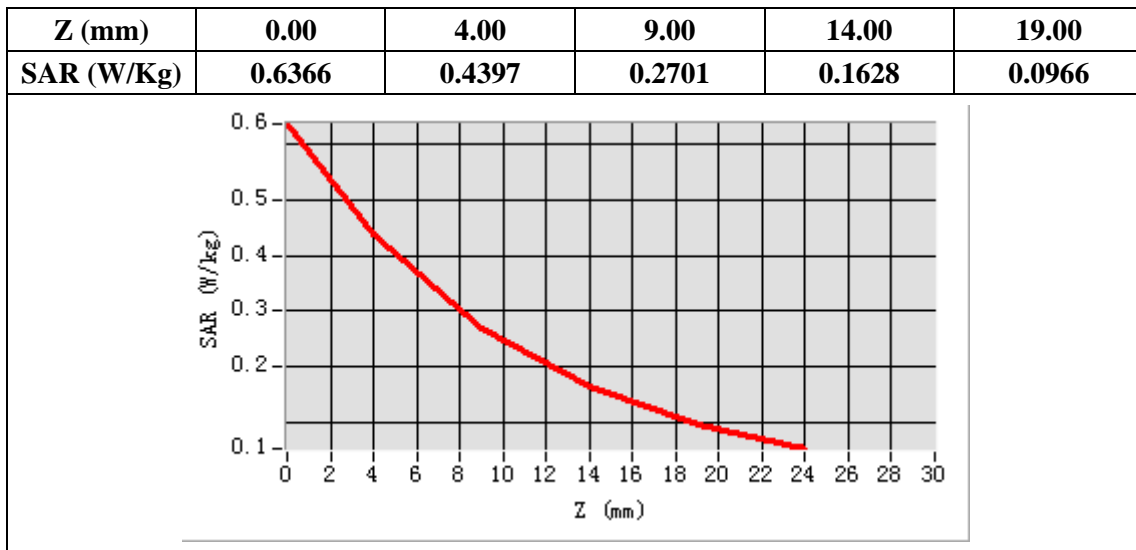
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1800
Relative permittivity (real part)	53.35
Relative permittivity	15.40
Conductivity (S/m)	1.54
Power Drift (%)	-2.43
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	1.81
Duty factor:	1:1



Maximum location: X=-10.00, Y=-12.00

SAR Peak: 0.64 W/kg

SAR 10g (W/Kg)	0.225103
SAR 1g (W/Kg)	0.406665



System Performance Check (Head, 1900MHz)

Type: Validation measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 05/14/2020

Measurement duration: 22 minutes 02 seconds

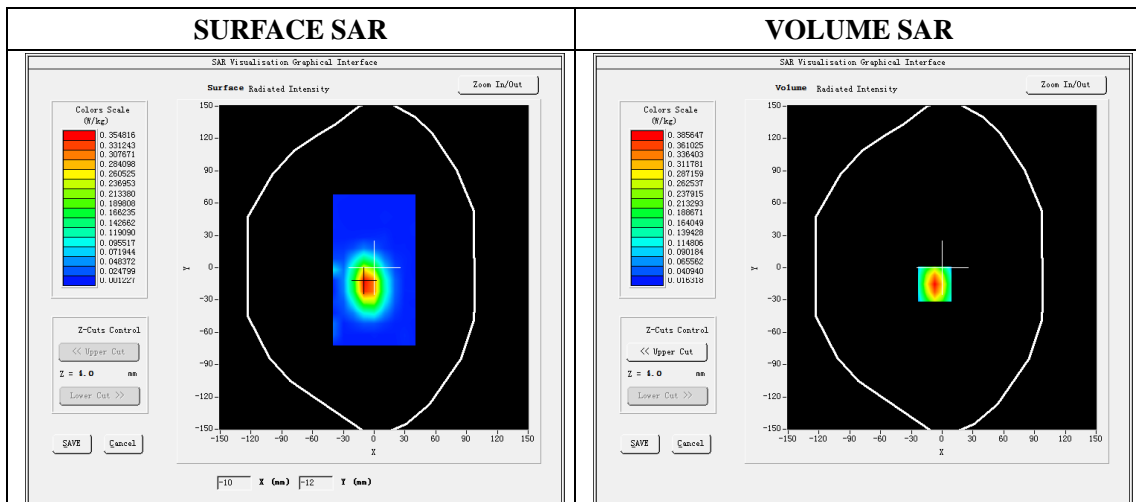
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	1900MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

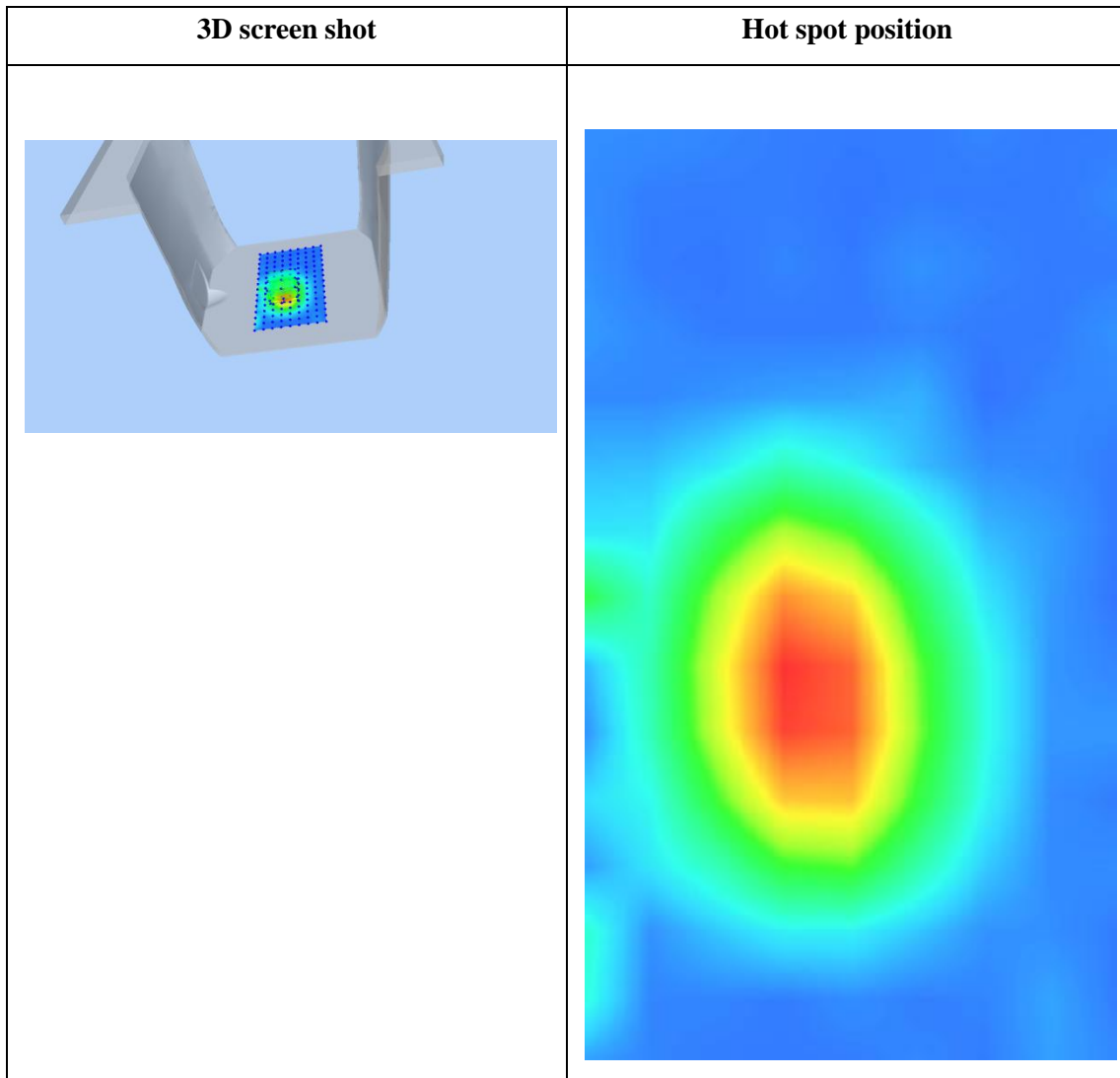
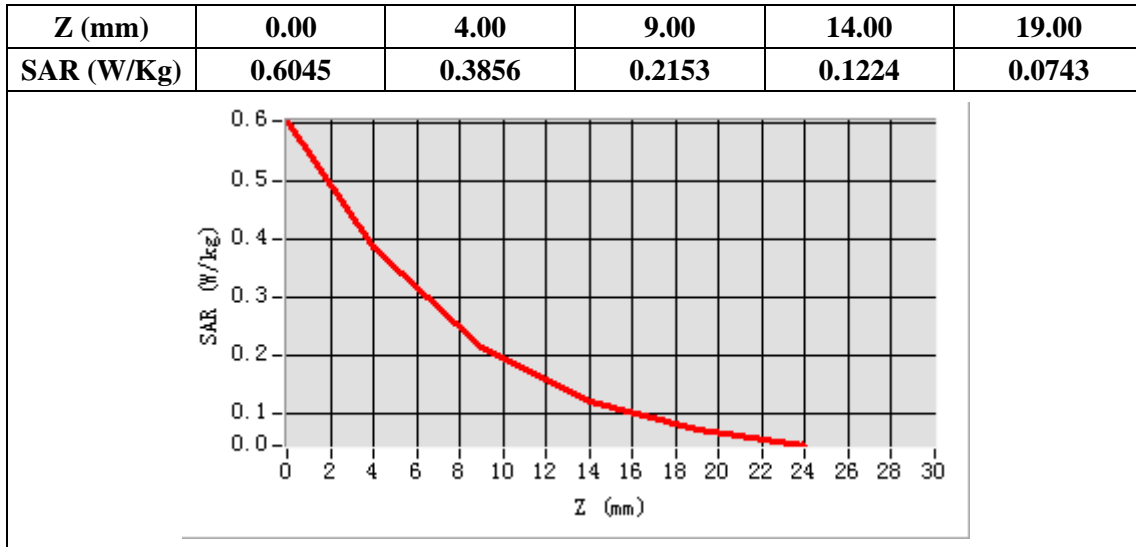
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1900
Relative permittivity (real part)	40.50
Relative permittivity	13.26
Conductivity (S/m)	1.40
Power Drift (%)	-4.33
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	2.03
Duty factor:	1:1



Maximum location: X=-7.00, Y=-15.00

SAR Peak: 0.61 W/kg

SAR 10g (W/Kg)	0.187209
SAR 1g (W/Kg)	0.356377



System Performance Check (Body, 1900MHz)

Type: Validation measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 05/14/2020

Measurement duration: 22 minutes 01 seconds

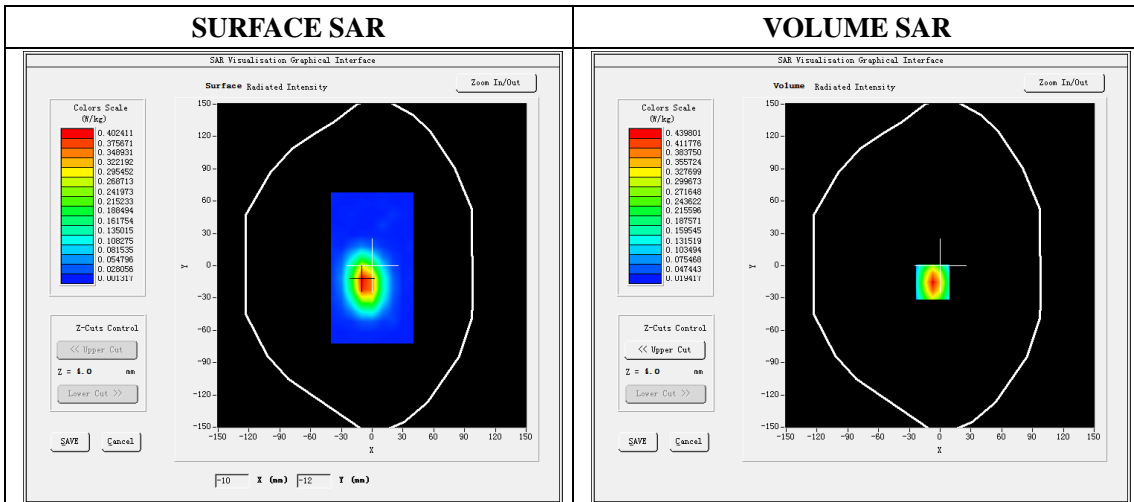
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	1900MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

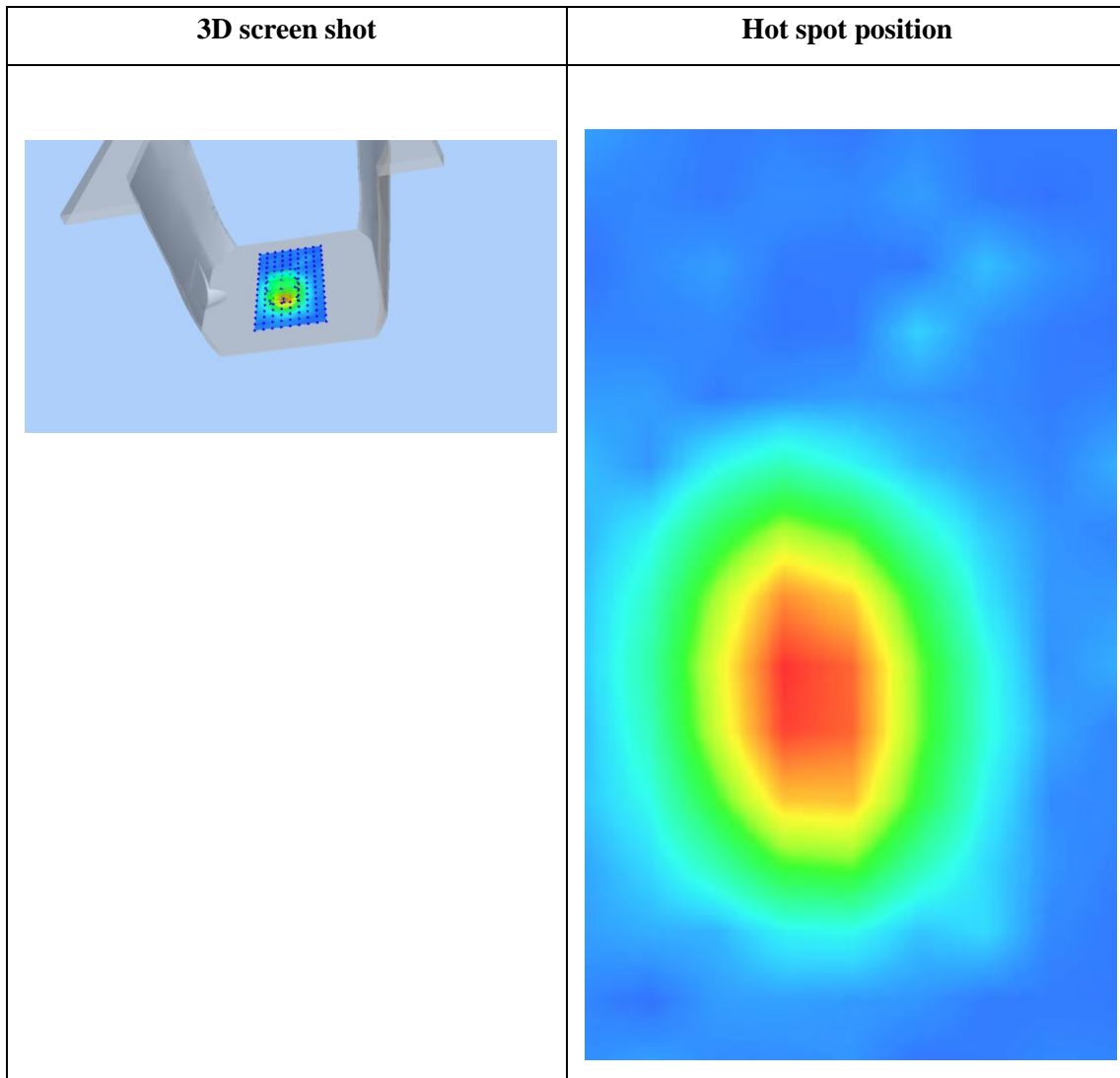
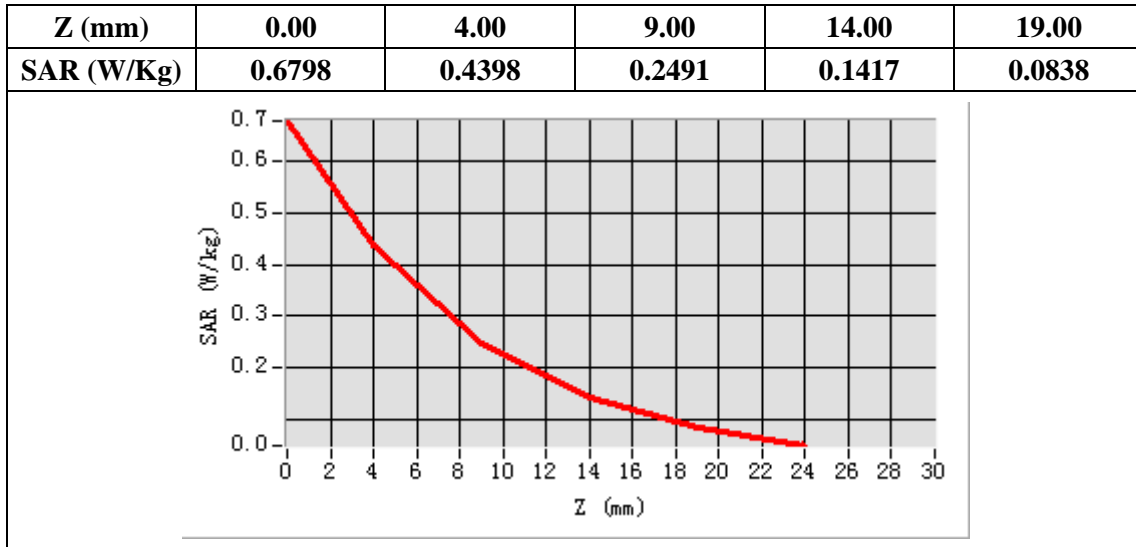
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1900
Relative permittivity (real part)	53.29
Relative permittivity	14.40
Conductivity (S/m)	1.52
Power Drift (%)	-0.78
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	2.08
Duty factor:	1:1



Maximum location: X=-7.00, Y=-15.00

SAR Peak: 0.68 W/kg

SAR 10g (W/Kg)	0.212895
SAR 1g (W/Kg)	0.405392



System Performance Check (Head, 2450MHz)

Type: Phone measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=5mm, dy=5mm, dz=4mm

Date of measurement: 05/16/2020

Measurement duration: 22 minutes 05 seconds

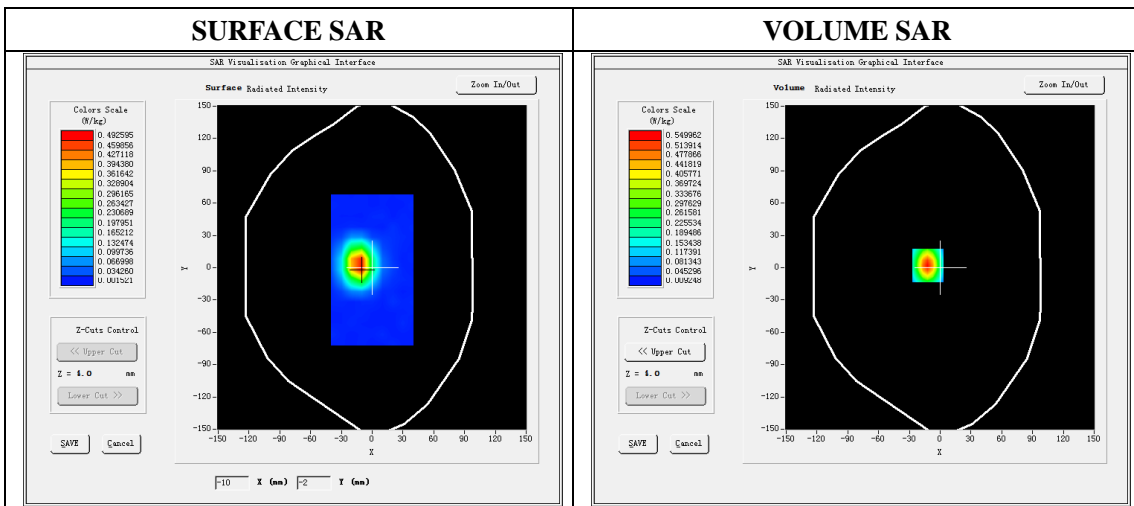
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=5mm dy=5mm dz=4mm
Device Position	Dipole
Band	2450MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

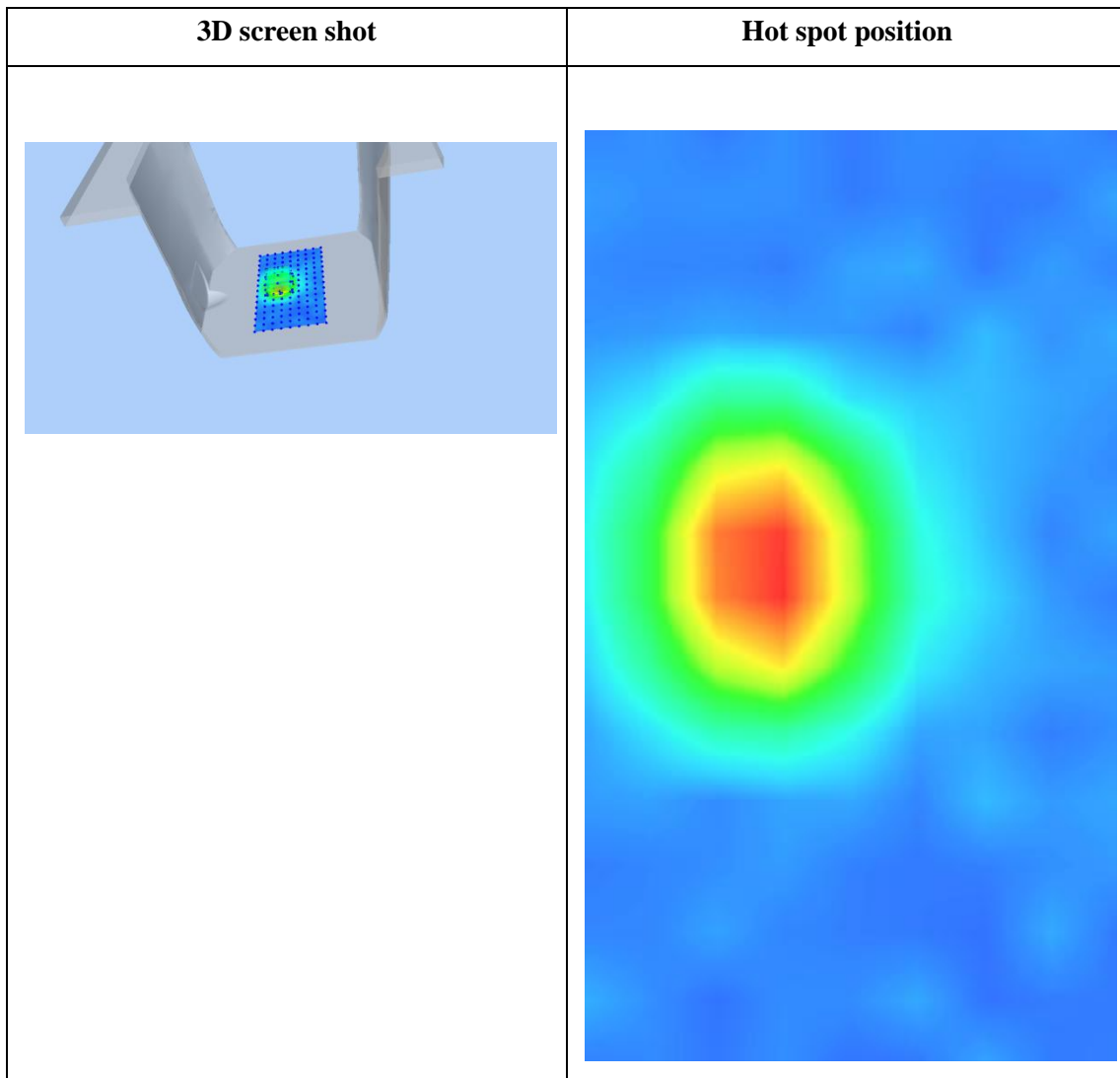
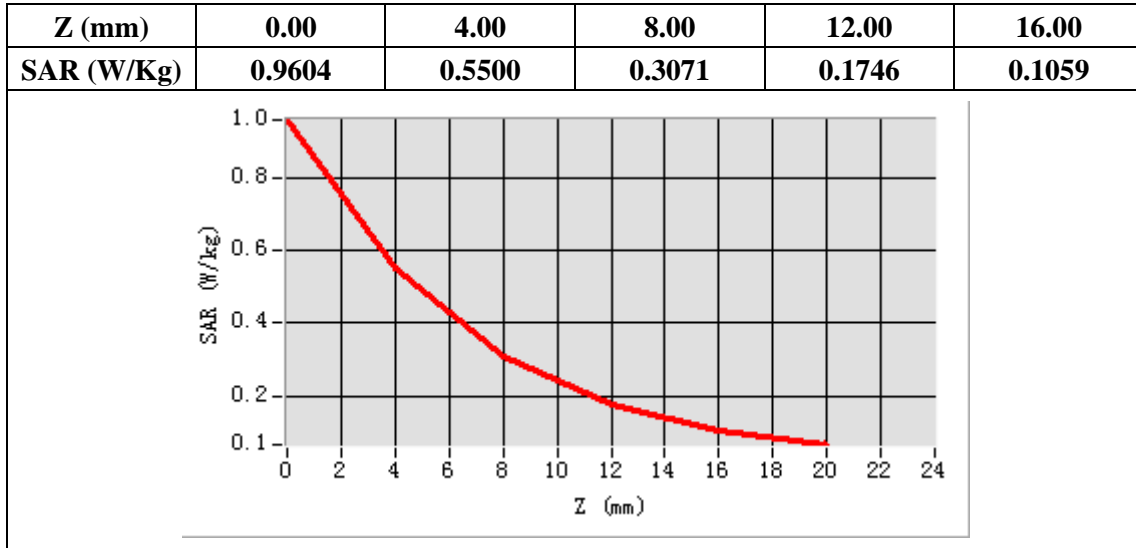
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	2450
Relative permittivity (real part)	39.23
Relative permittivity	13.44
Conductivity (S/m)	1.83
Power Drift (%)	-2.51
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	2.05
Duty factor:	1:1



Maximum location: X=-12.00, Y=2.00

SAR Peak: 0.96 W/kg

SAR 10g (W/Kg)	0.233221
SAR 1g (W/Kg)	0.495458



System Performance Check (Body, 2450MHz)

Type: Phone measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=5mm, dy=5mm, dz=4mm

Date of measurement: 05/16/2020

Measurement duration: 22 minutes 04 seconds

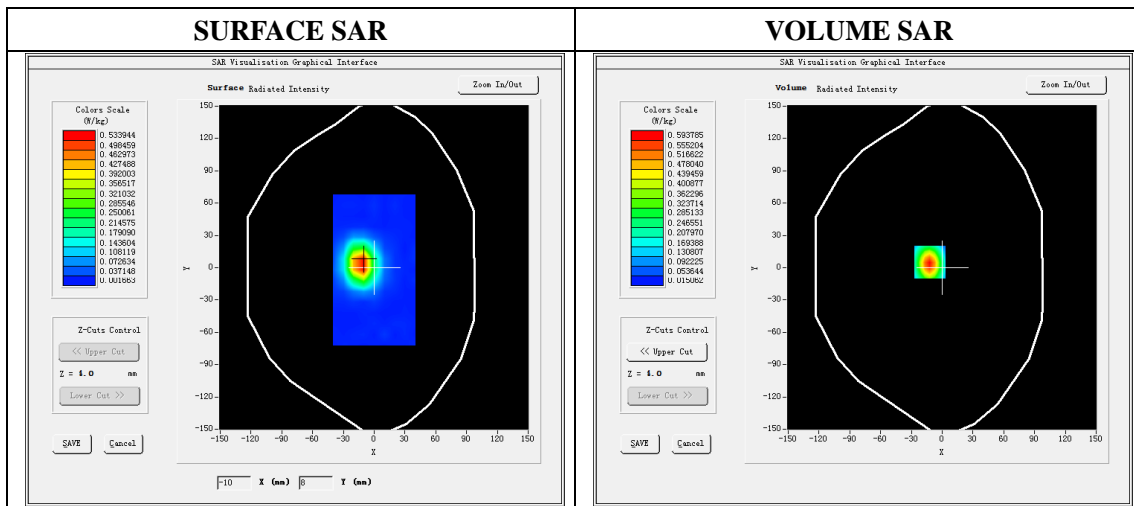
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=5mm dy=5mm dz=4mm
Device Position	Dipole
Band	2450MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	2450
Relative permittivity (real part)	52.74
Relative permittivity	14.47
Conductivity (S/m)	1.97
Power Drift (%)	-0.29
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	2.12
Duty factor:	1:1

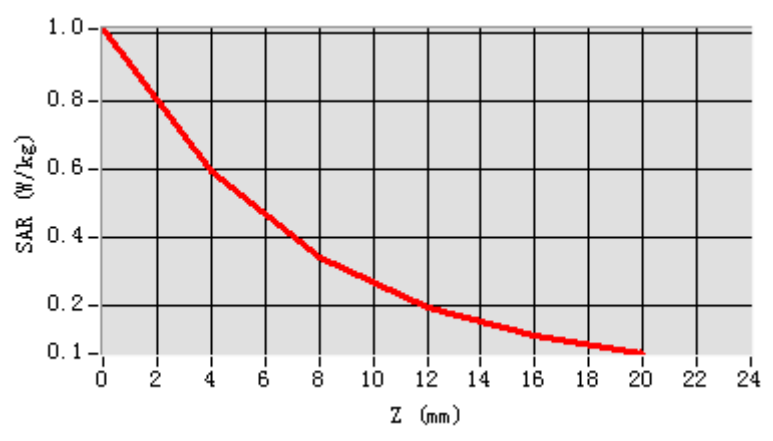


Maximum location: X=-12.00, Y=5.00

SAR Peak: 1.01 W/kg

SAR 10g (W/Kg)	0.251469
SAR 1g (W/Kg)	0.537445

Z (mm)	0.00	4.00	8.00	12.00	16.00
SAR (W/Kg)	1.0095	0.5938	0.3379	0.1902	0.1082



3D screen shot	Hot spot position
