

Appendix A: SAR System performance Check Plots

Measurement	Liquid	Frequency	Test Date
System Check	Head	835	2020-06-16
System Check	Body	835	2020-06-16
System Check	Head	1900	2020-06-18
System Check	Body	1900	2020-06-18
System Check	Head	2450	2020-06-20
System Check	Body	2450	2020-06-20

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: 06/16/2020

Measurement duration: 22 minutes 08 seconds

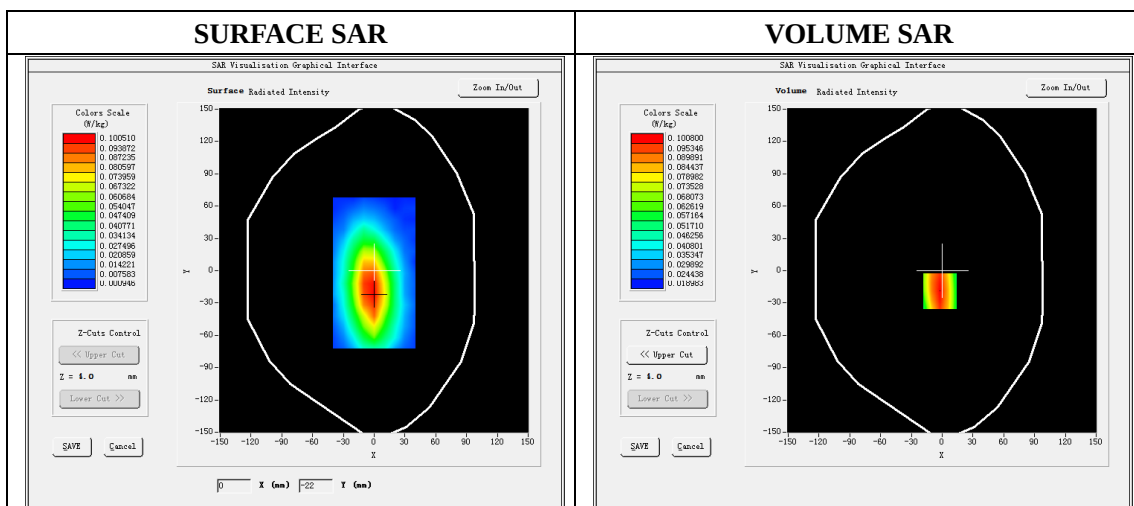
A. Experimental conditions.

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

B. SAR Measurement Results

Band SAR

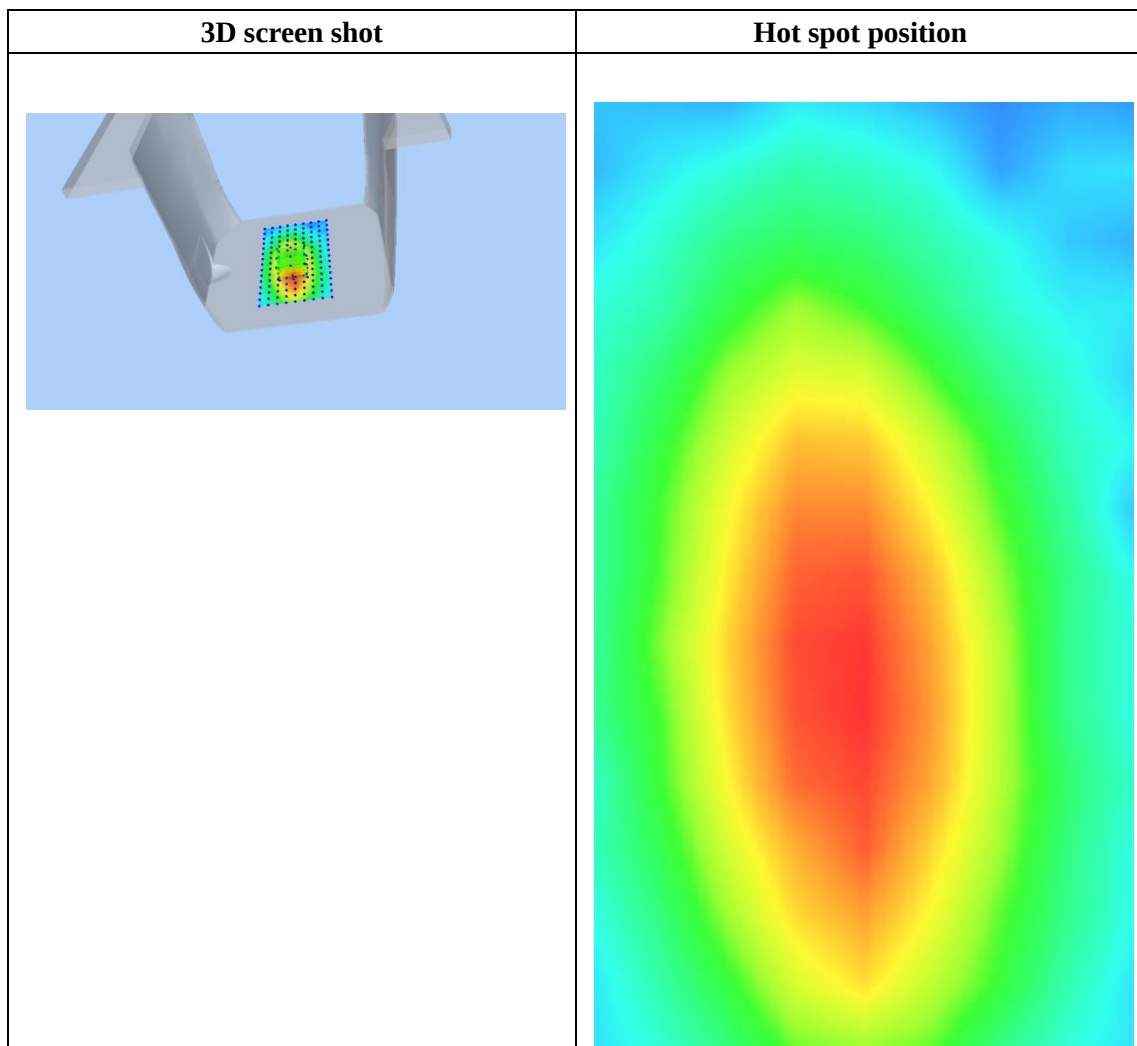
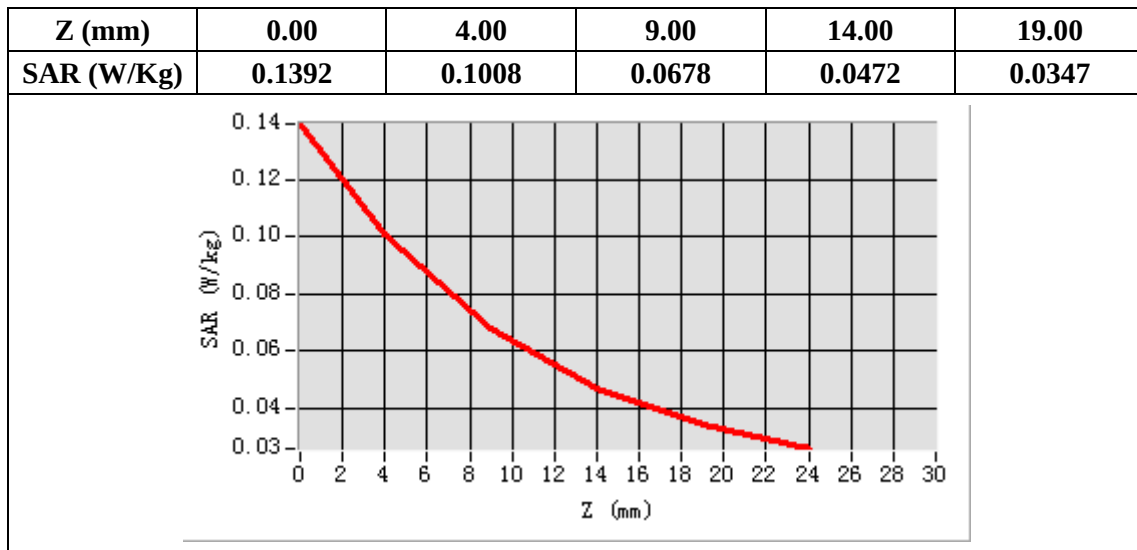
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	835
Relative permittivity (real part)	41.52
Relative permittivity	19.27
Conductivity (S/m)	0.91
Power drift (%)	-3.85
Ambient Temperature:	22.2 °C
Liquid Temperature:	22.6 °C
ConvF:	1.60
Crest factor:	1:1



Maximum location: X=-2.00, Y=-19.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.063465
SAR 1g (W/Kg)	0.096357



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: 06/16/2020

Measurement duration: 22 minutes 05 seconds

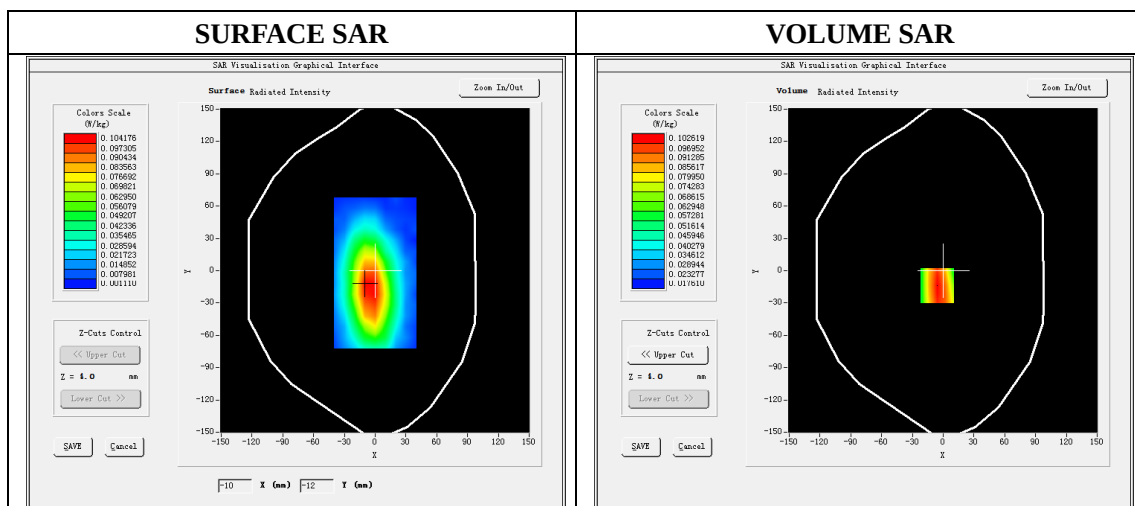
A. Experimental conditions.

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

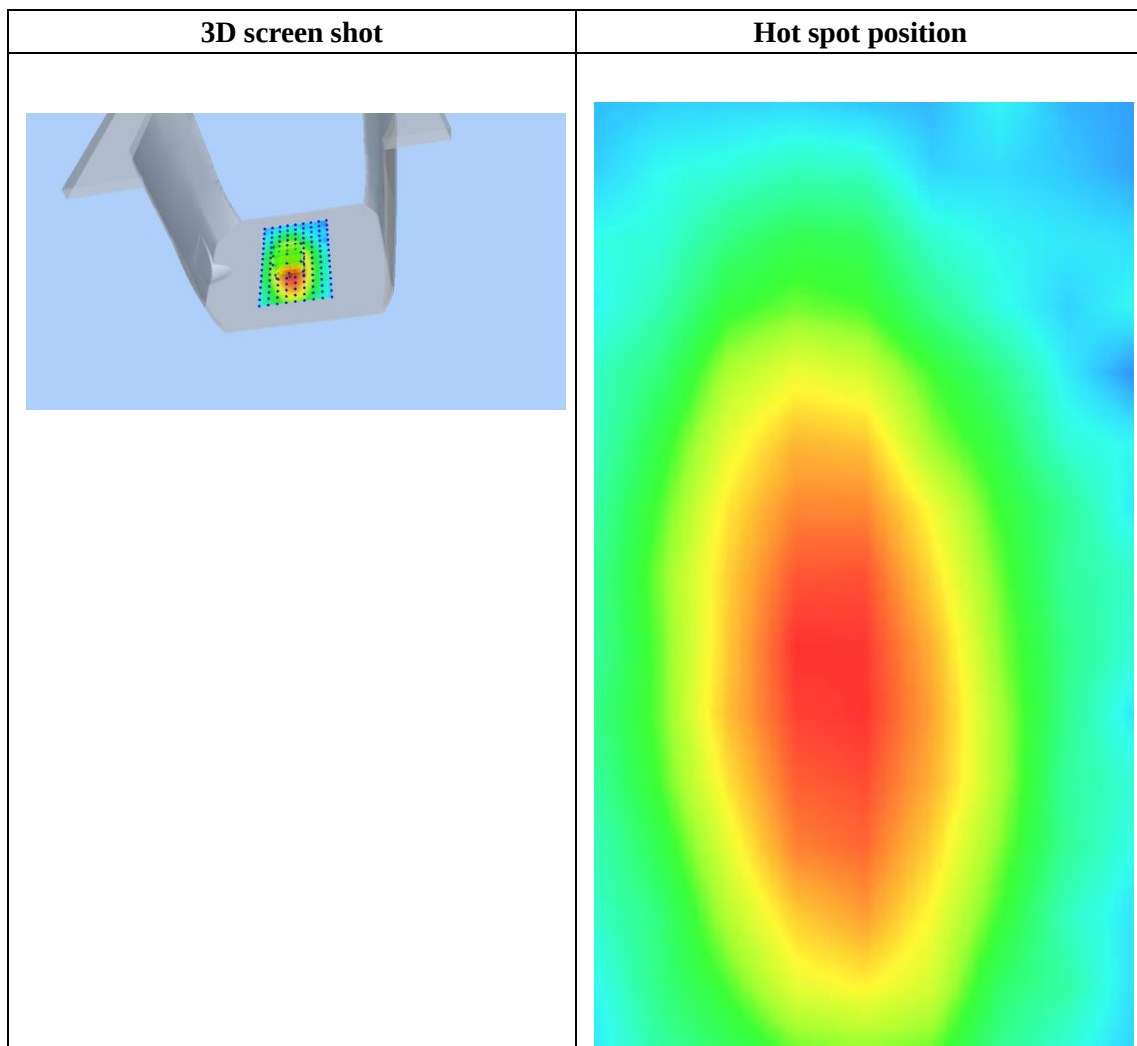
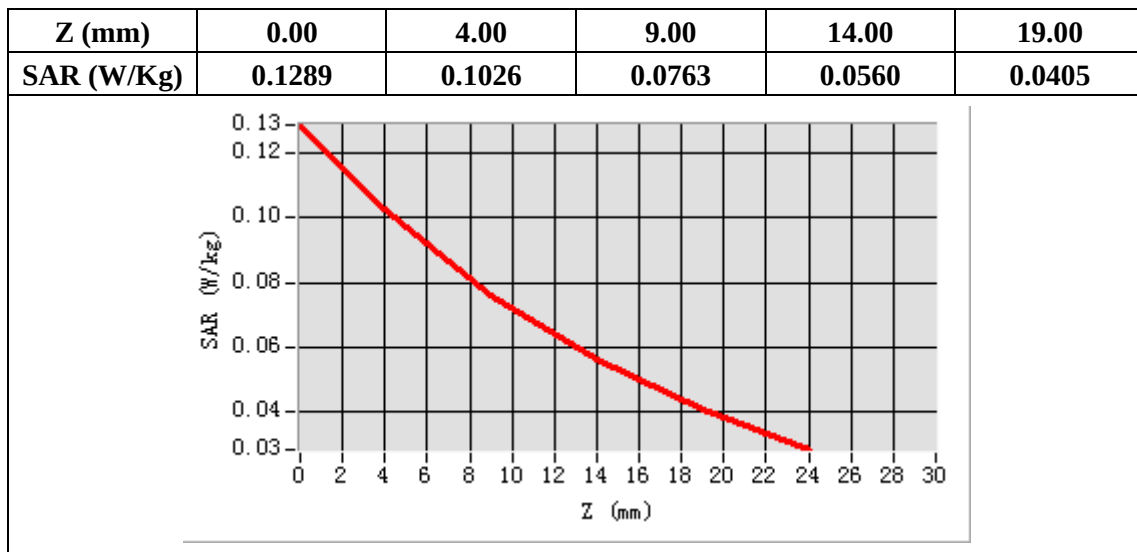
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	835
Relative permittivity (real part)	55.23
Relative permittivity	21.34
Conductivity (S/m)	0.99
Power drift (%)	-1.15
Ambient Temperature:	22.2 °C
Liquid Temperature:	22.6 °C
ConvF:	1.64
Crest factor:	1:1



Maximum location: X=-6.00, Y=-14.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.068654
SAR 1g (W/Kg)	0.100384



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: 06/18/2020

Measurement duration: 22 minutes 07 seconds

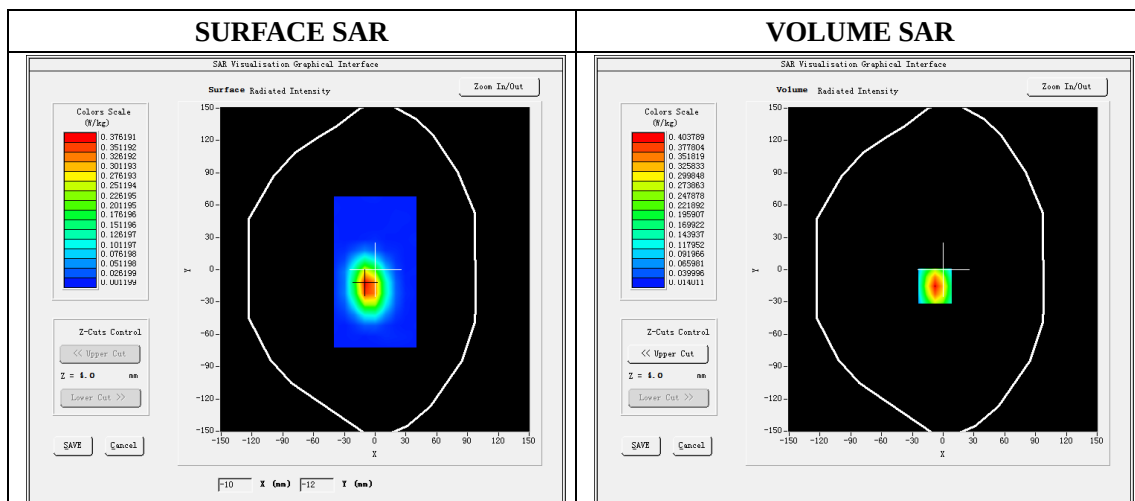
A. Experimental conditions.

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

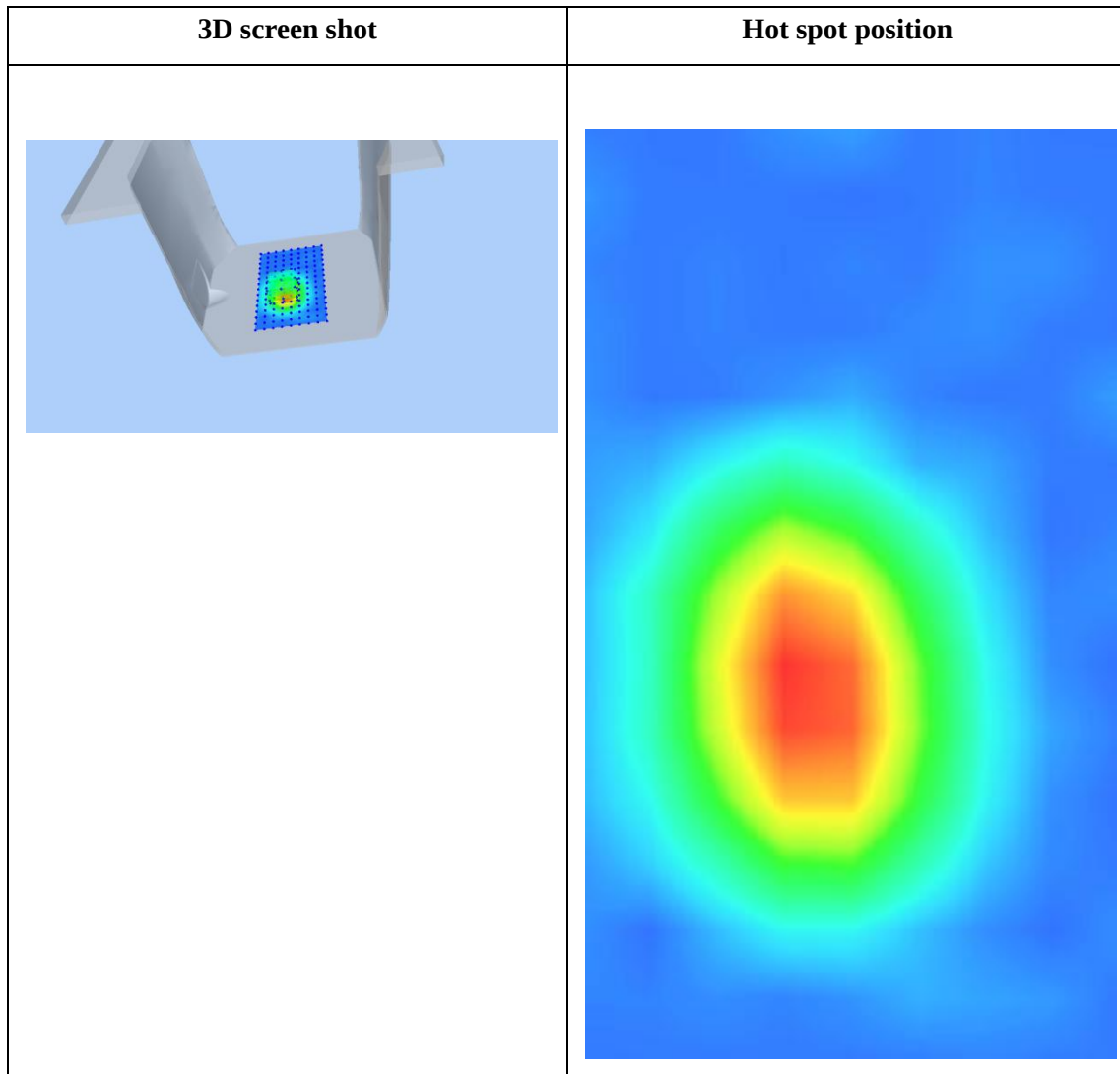
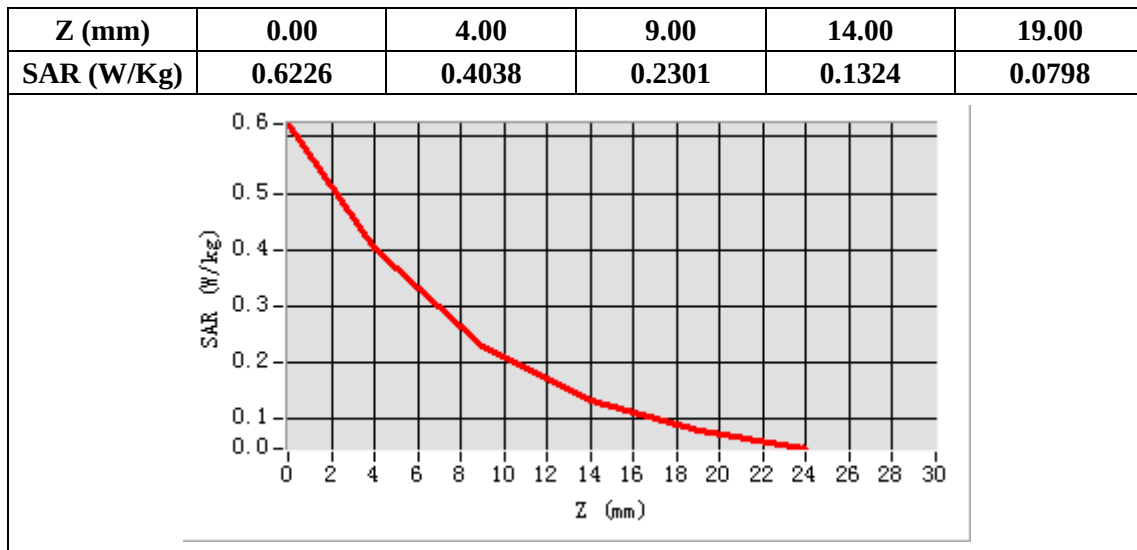
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1900
Relative permittivity (real part)	40.47
Relative permittivity	13.00
Conductivity (S/m)	1.37
Power Drift (%)	-1.88
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	2.03
Duty factor:	1:1



Maximum location: X=-8.00, Y=-15.00

SAR Peak: 0.62 W/kg

SAR 10g (W/Kg)	0.196936
SAR 1g (W/Kg)	0.373041



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: 06/18/2020

Measurement duration: 22 minutes 04 seconds

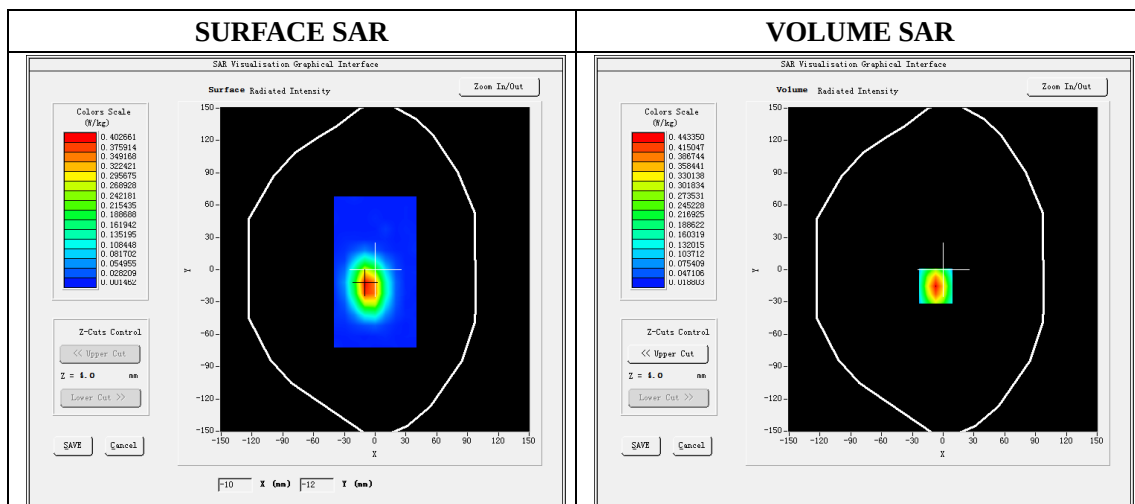
A. Experimental conditions.

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

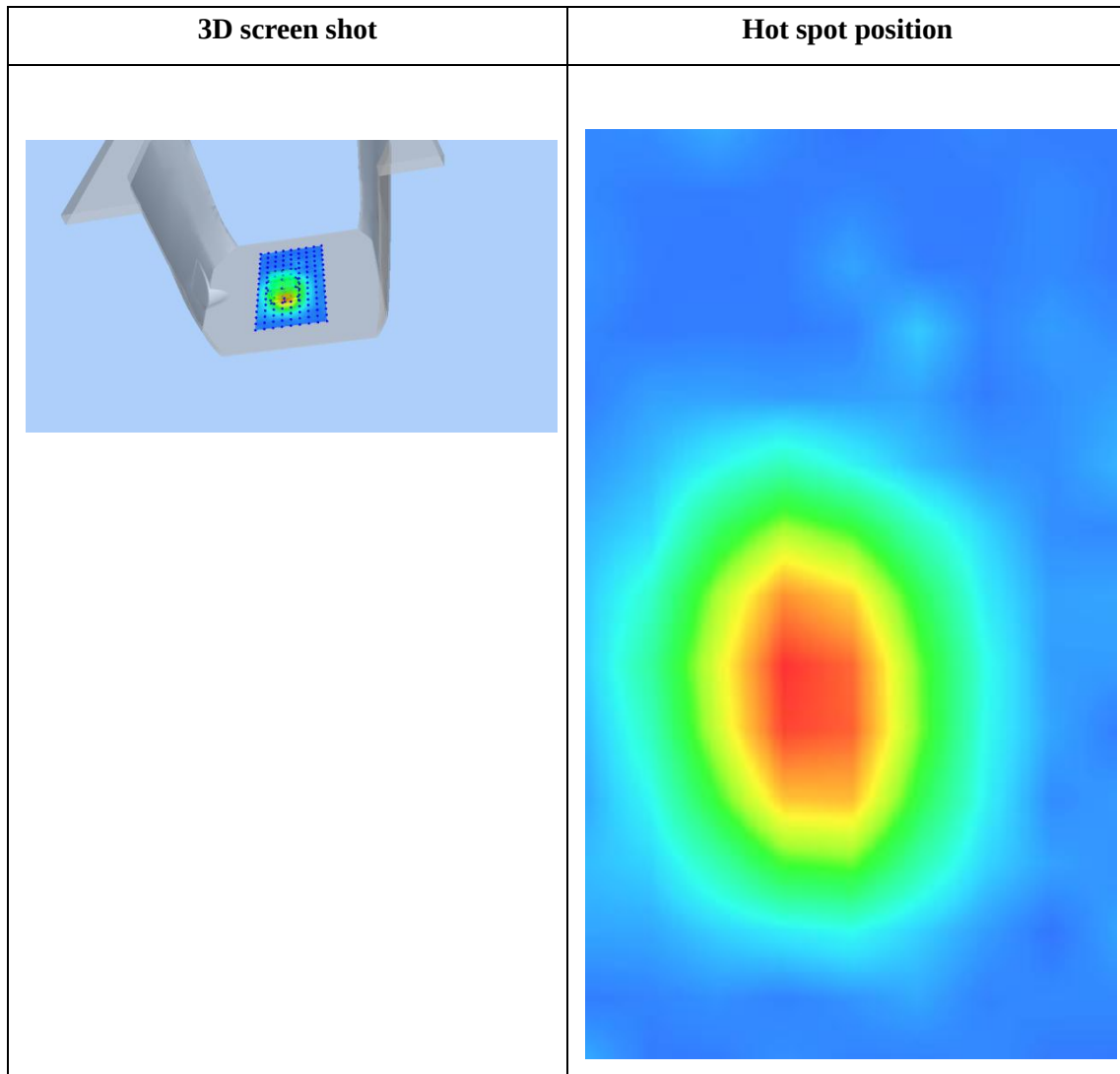
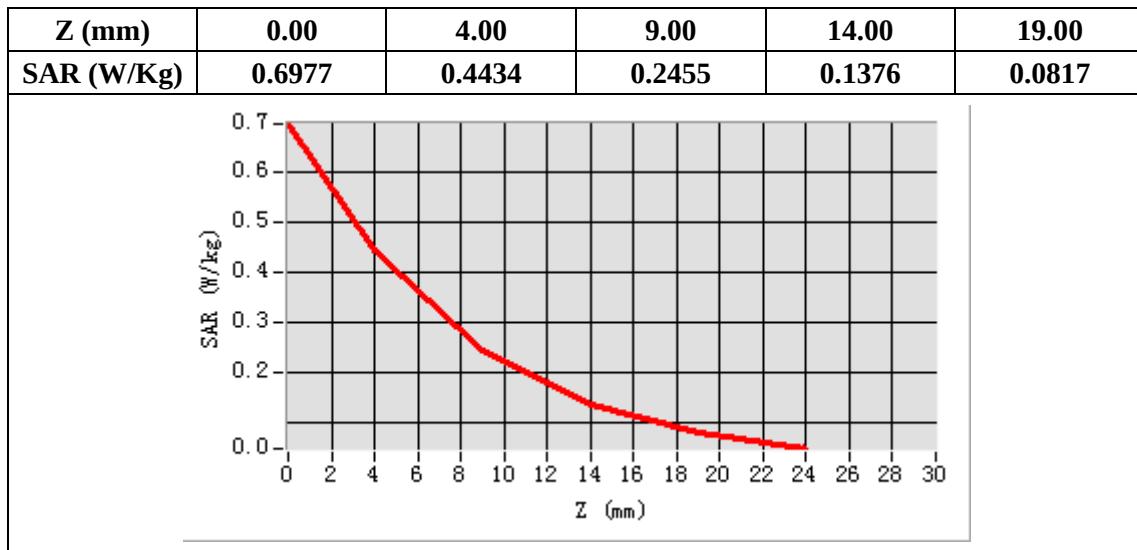
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	1900
Relative permittivity (real part)	53.26
Relative permittivity	14.02
Conductivity (S/m)	1.48
Power Drift (%)	-0.86
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	2.08
Duty factor:	1:1



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

SAR Peak: 0.70 W/kg

SAR 10g (W/Kg)	0.213310
SAR 1g (W/Kg)	0.409282



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: 06/20/2020

Measurement duration: 22 minutes 06 seconds

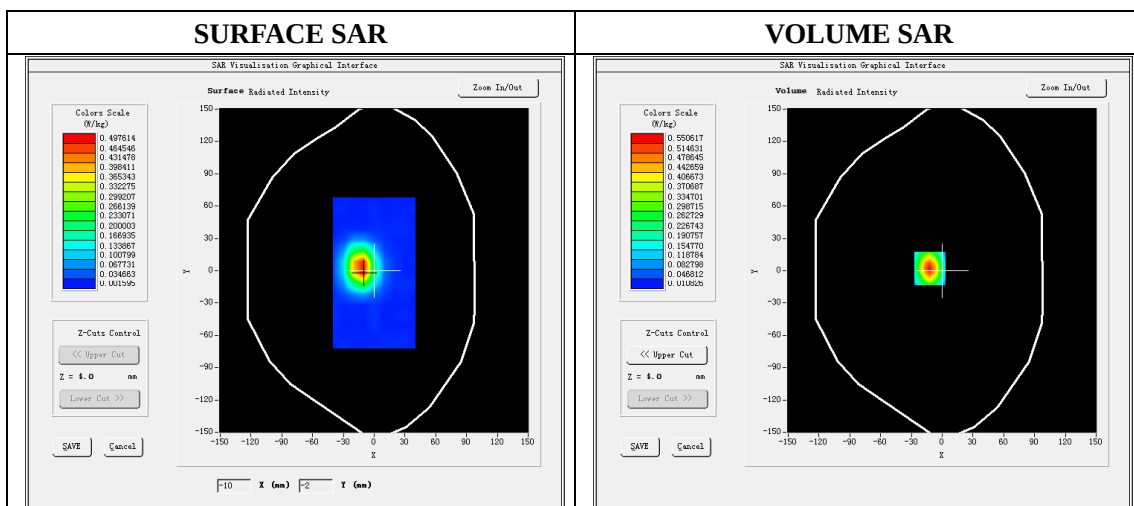
A. Experimental conditions.

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

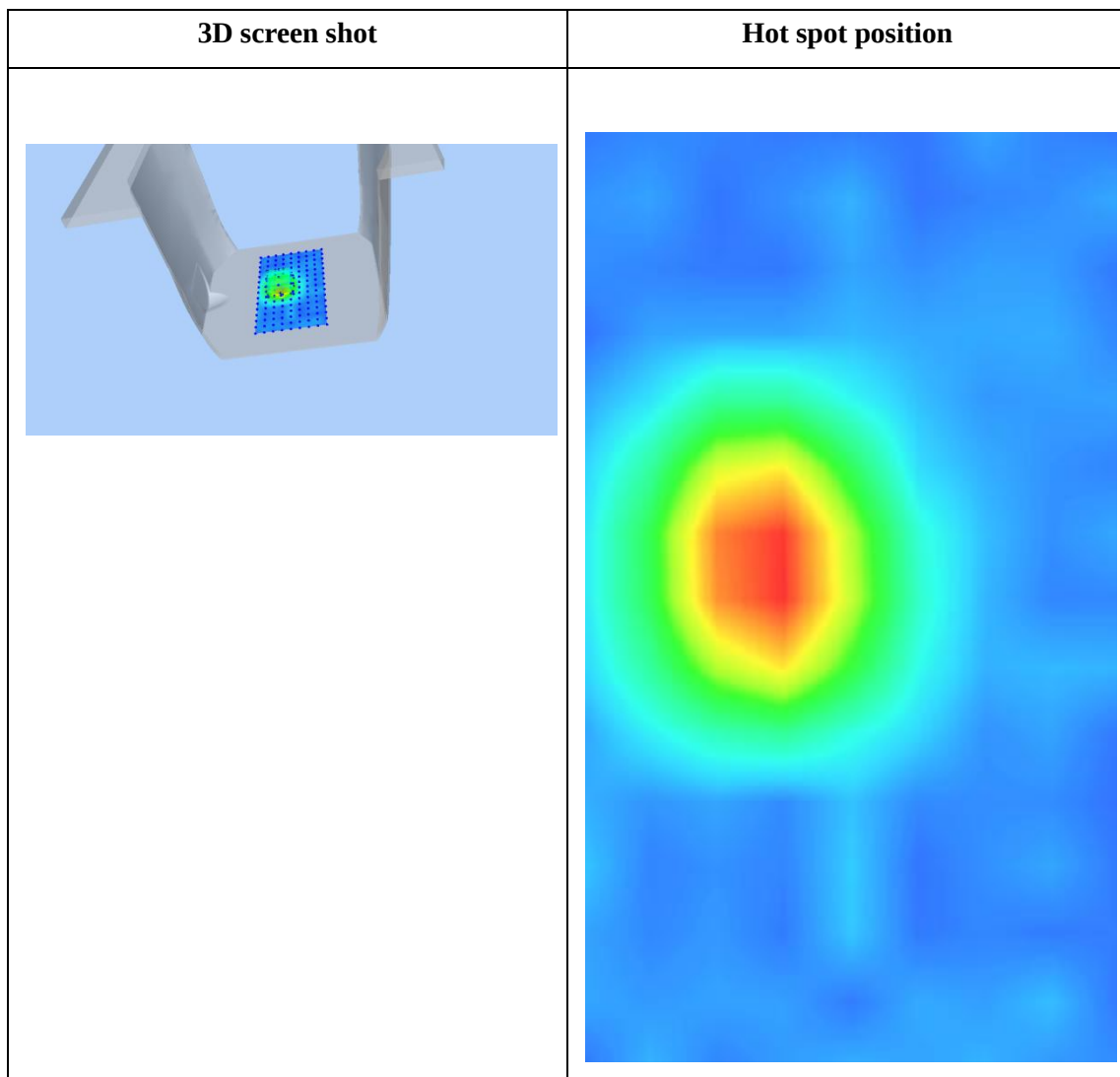
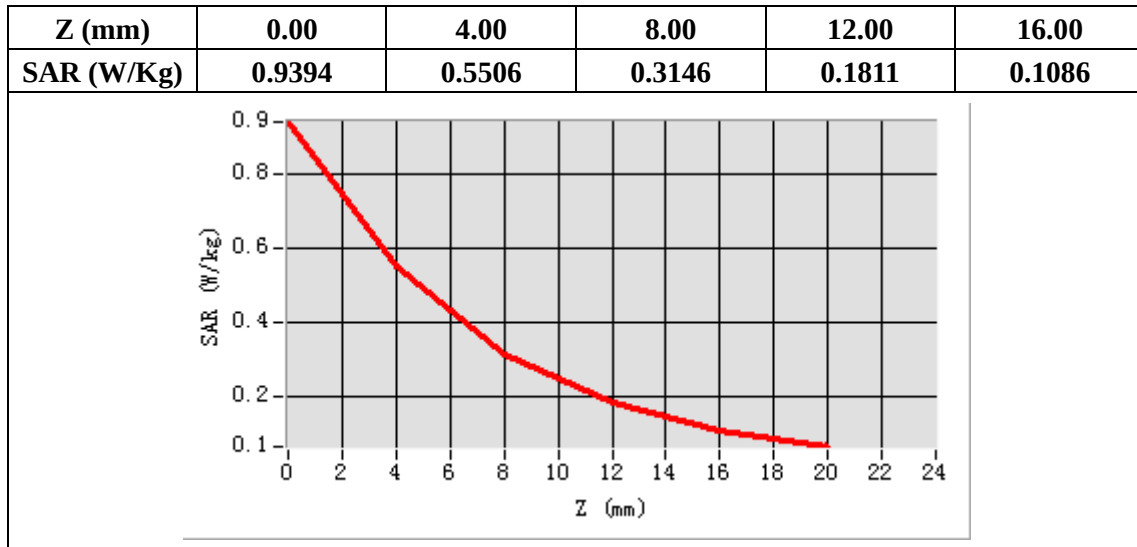
E-Field Probe	SATIMO SN_41/18_EPG0330
Frequency (MHz)	2450
Relative permittivity (real part)	39.22
Relative permittivity	13.30
Conductivity (S/m)	1.81
Power Drift (%)	0.96
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	2.05
Duty factor:	1:1



Maximum location: X=-12.00, Y=2.00

SAR Peak: 0.94 W/kg

SAR 10g (W/Kg)	0.235583
SAR 1g (W/Kg)	0.496115



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: 06/20/2020

Measurement duration: 22 minutes 09 seconds

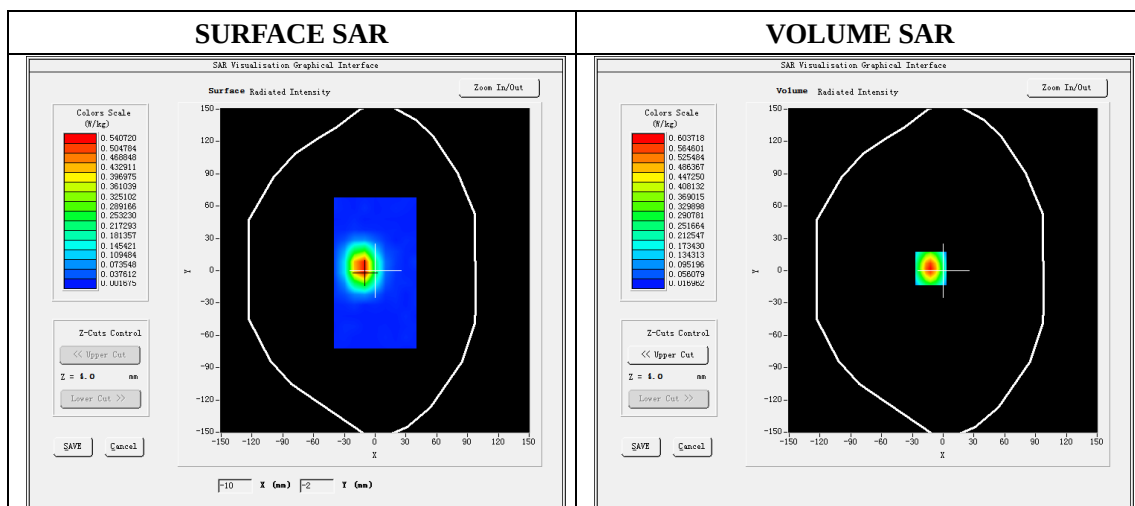
A. Experimental conditions.

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)	52.69
Relative permittivity	14.25
Conductivity (S/m)	1.94
Power Drift (%)	-0.75
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	2.12
Duty factor:	1:1



Maximum location: X=-12.00, Y=2.00

SAR Peak: 1.05 W/kg

SAR 10g (W/Kg)	0.256683
SAR 1g (W/Kg)	0.547958

