

**Appendix A: SAR System performance Check Plots**

Measurement	Liquid	Frequency	Test Date
System Check	Head	1800	2019-08-08
System Check	Body	1800	2019-08-08
System Check	Head	1900	2019-08-10
System Check	Body	1900	2019-08-10
System Check	Head	2450	2019-08-12
System Check	Body	2450	2019-08-12
System Check	Head	2600	2019-08-13
System Check	Body	2600	2019-08-13

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: 08/08/2019

Measurement duration: 22 minutes 03 seconds

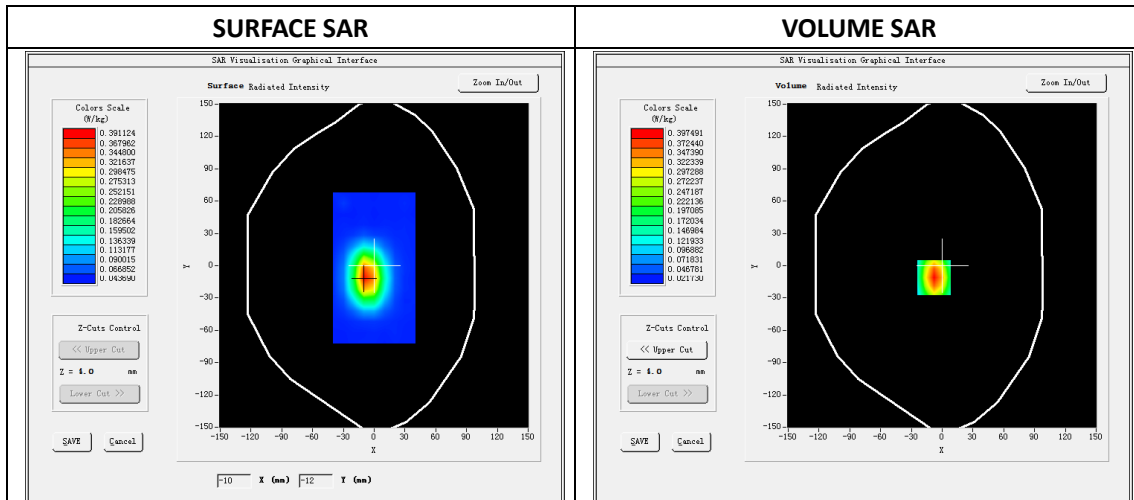
A. Experimental conditions.

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

B. SAR Measurement Results

Band SAR

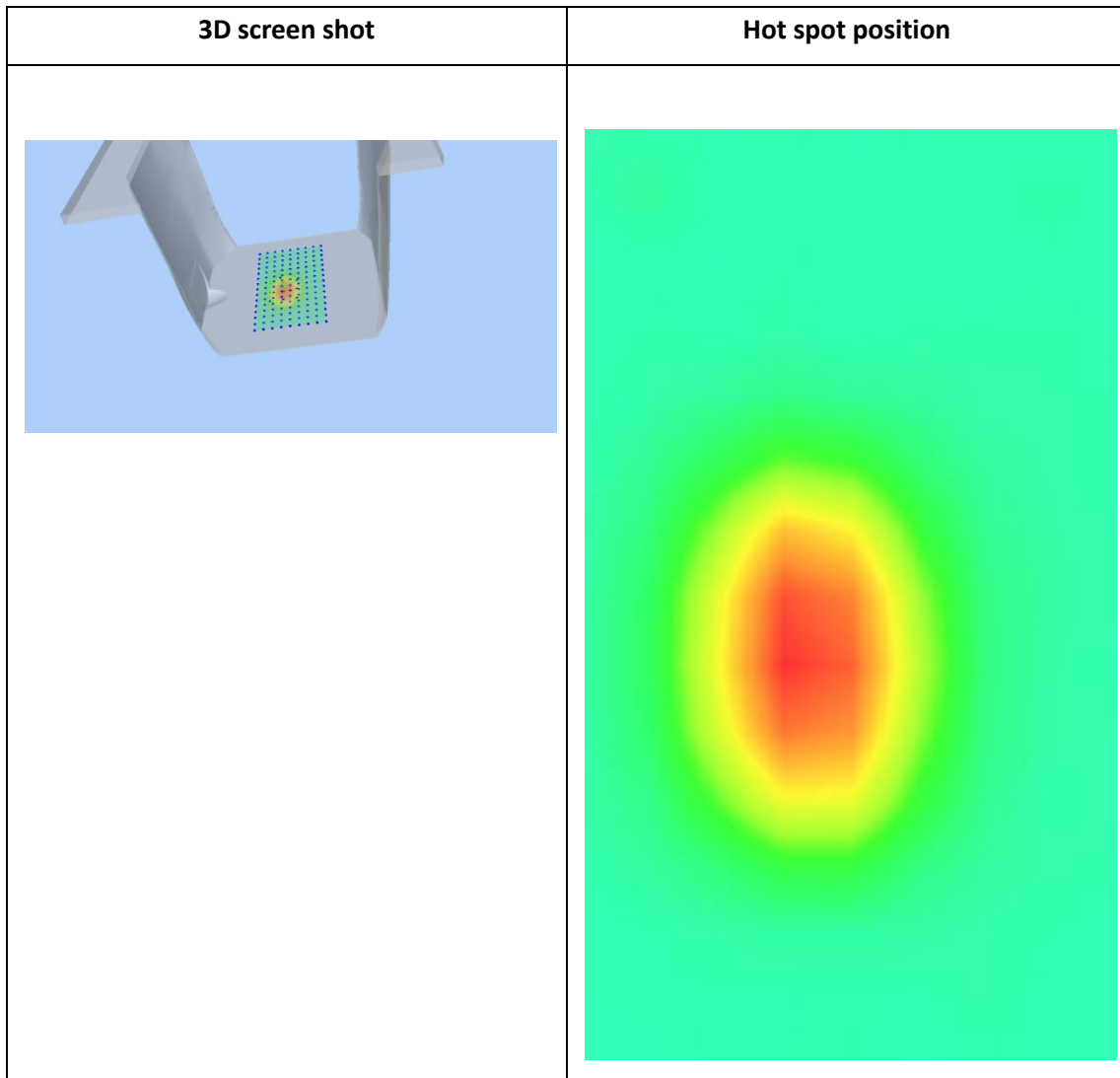
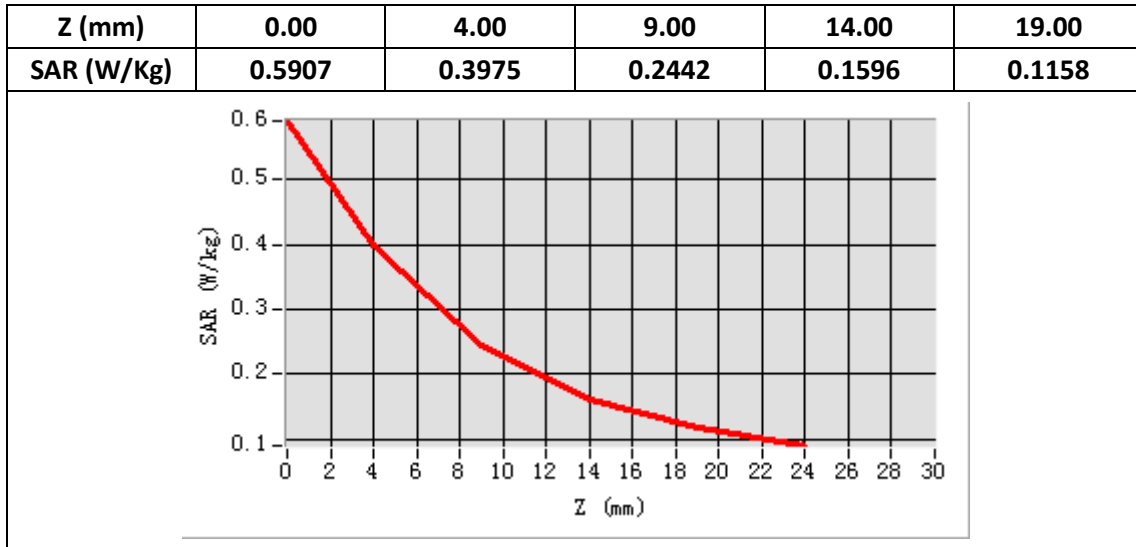
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1800
Relative permittivity (real part)	40.85
Relative permittivity	14.20
Conductivity (S/m)	1.42
Power Drift (%)	-1.70
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.14
Duty factor:	1:1



Maximum location: X=-8.00, Y=-11.00

SAR Peak: 0.59 W/kg

SAR 10g (W/Kg)	0.217824
SAR 1g (W/Kg)	0.376568



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: 08/08/2019

Measurement duration: 22 minutes 07 seconds

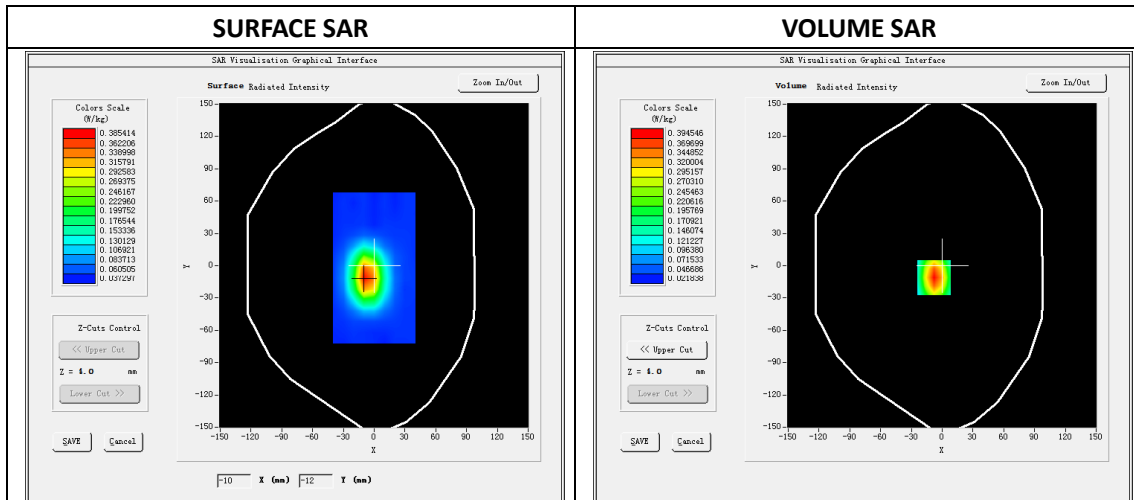
A. Experimental conditions.

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

B. SAR Measurement Results

Band SAR

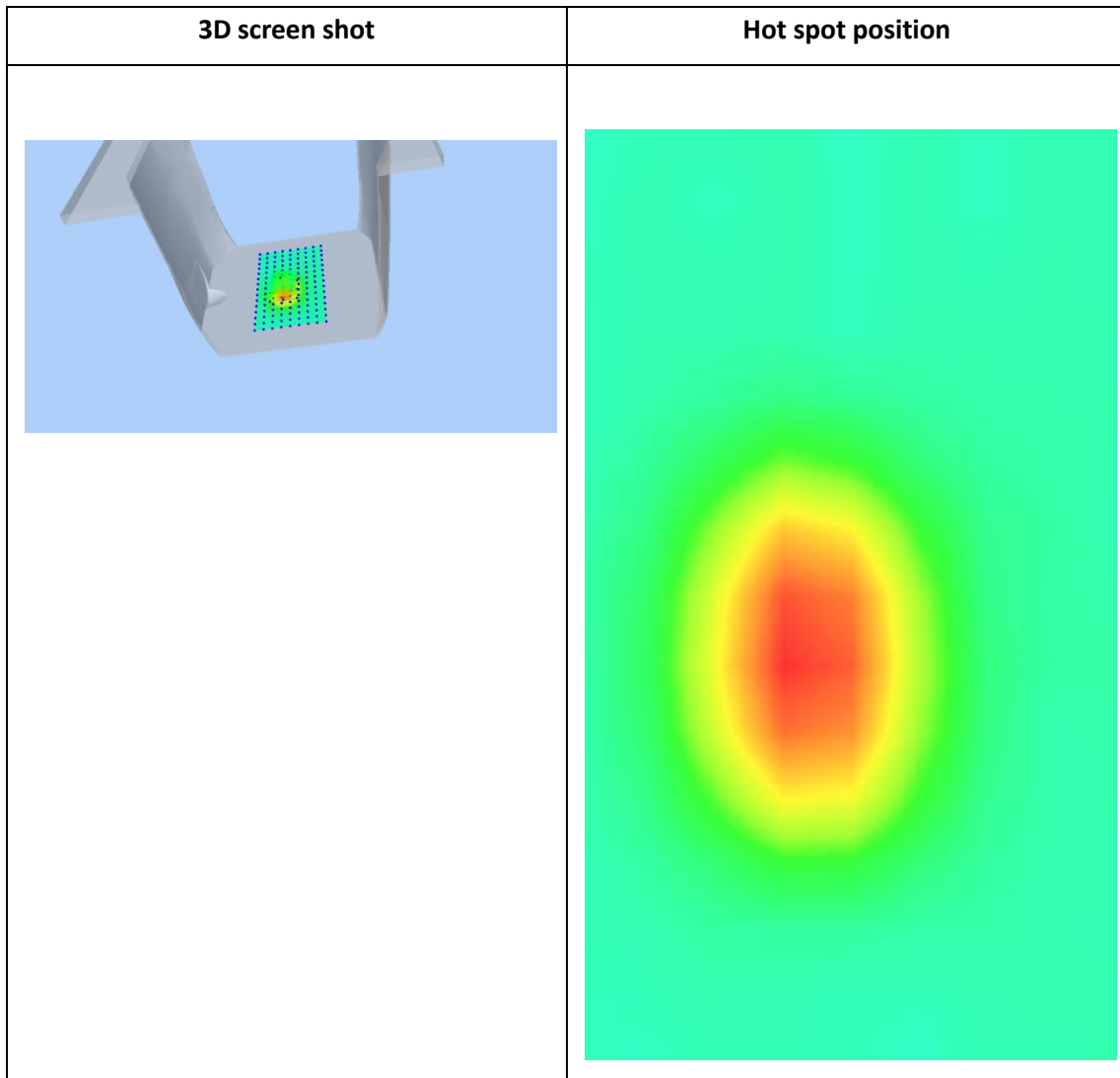
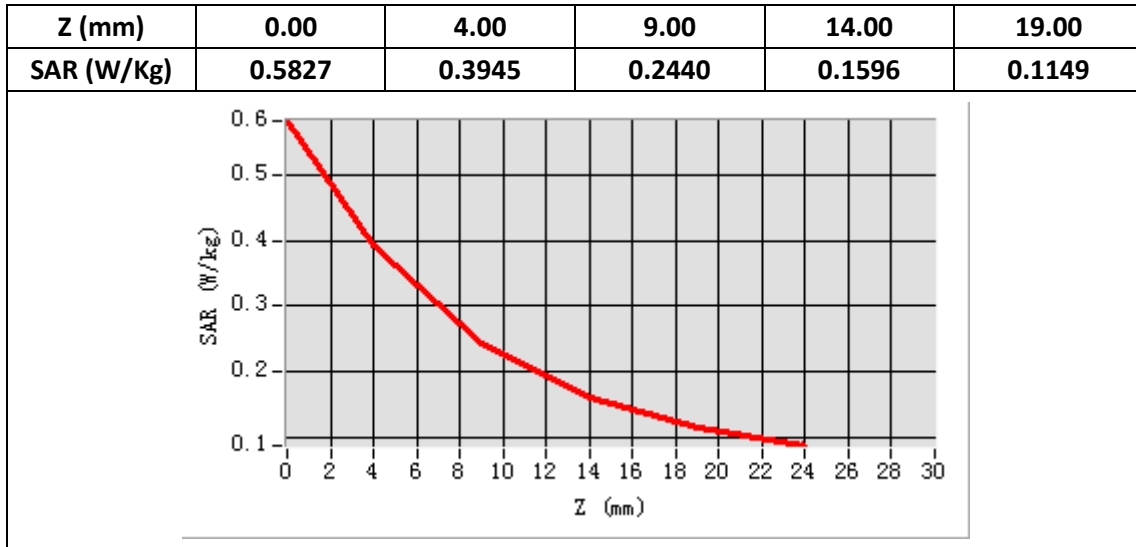
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1800
Relative permittivity (real part)	53.66
Relative permittivity	15.20
Conductivity (S/m)	1.52
Power Drift (%)	-1.85
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.22
Duty factor:	1:1



Maximum location: X=-8.00, Y=-11.00

SAR Peak: 0.58 W/kg

SAR 10g (W/Kg)	0.214244
SAR 1g (W/Kg)	0.368499



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: 08/10/2019

Measurement duration: 22 minutes 10 seconds

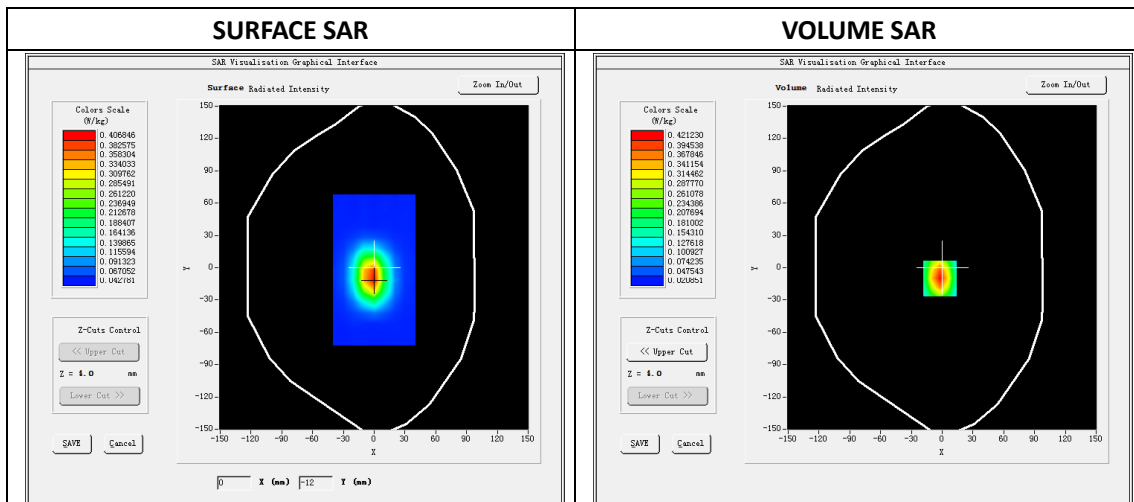
A. Experimental conditions.

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

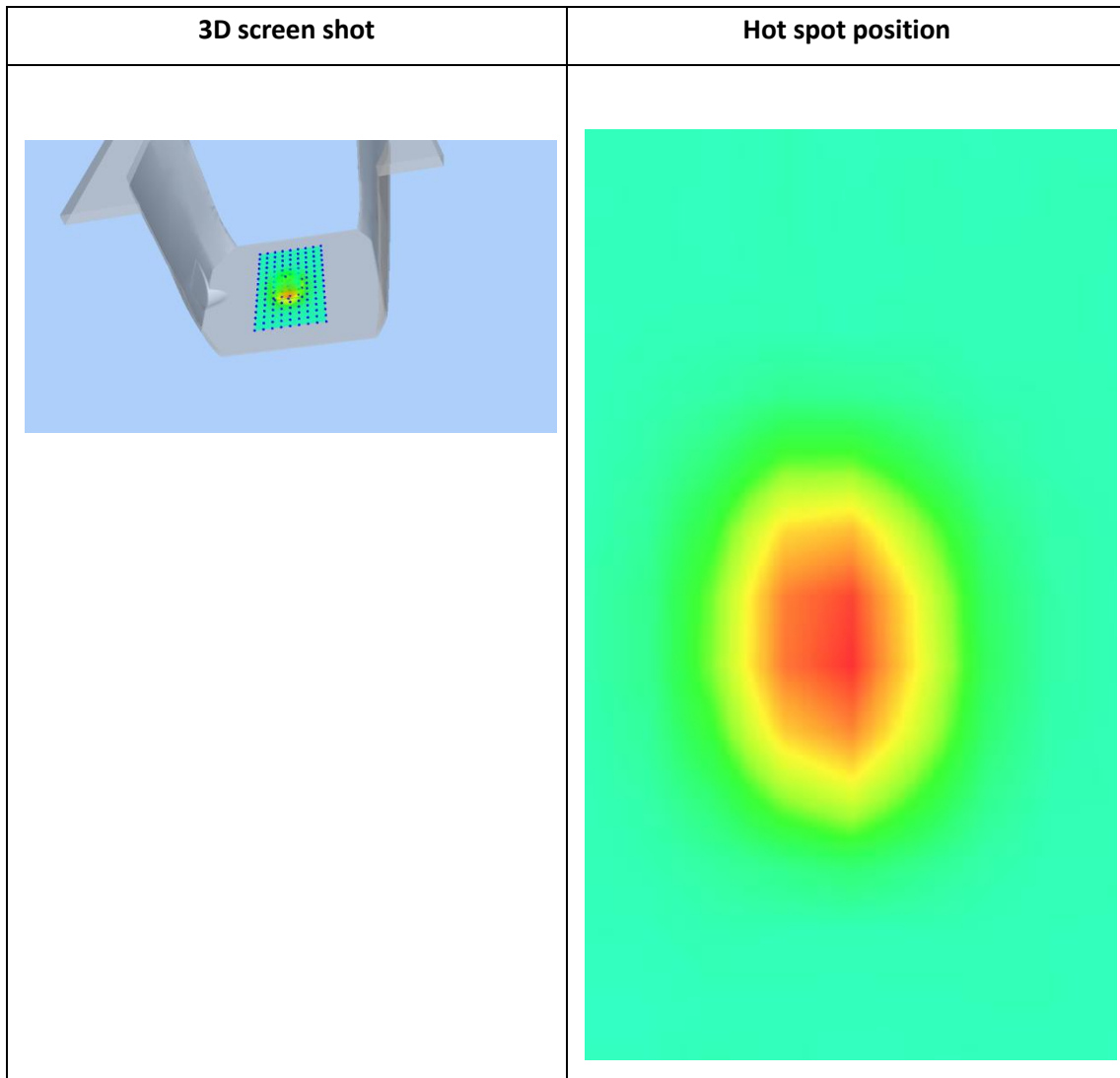
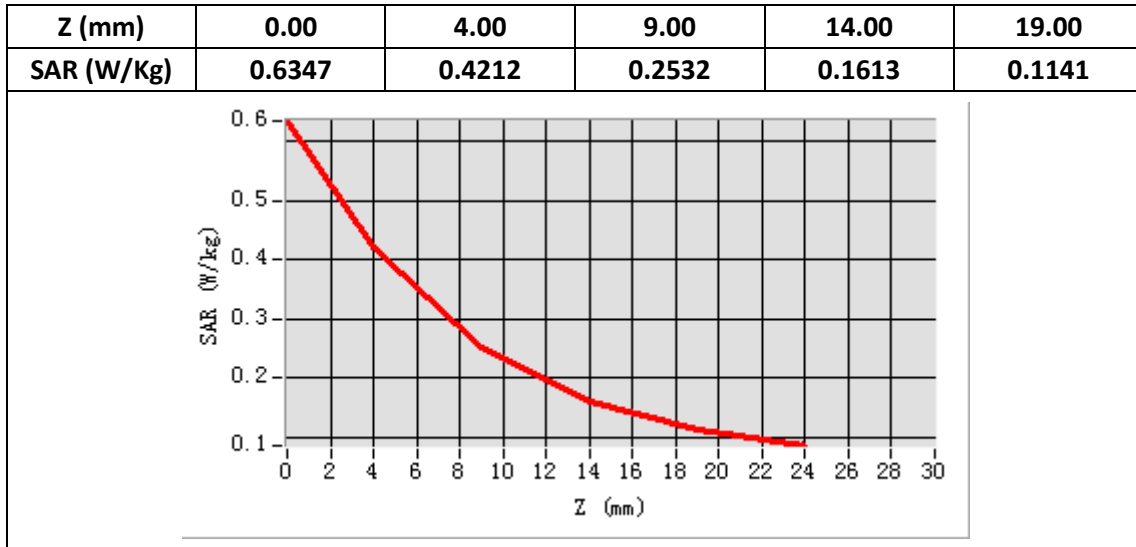
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1900
Relative permittivity (real part)	40.58
Relative permittivity	13.26
Conductivity (S/m)	1.40
Power Drift (%)	-0.58
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.34
Duty factor:	1:1



Maximum location: X=-2.00, Y=-10.00

SAR Peak: 0.64 W/kg

SAR 10g (W/Kg)	0.222271
SAR 1g (W/Kg)	0.394088



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: 08/10/2019

Measurement duration: 22 minutes 15 seconds

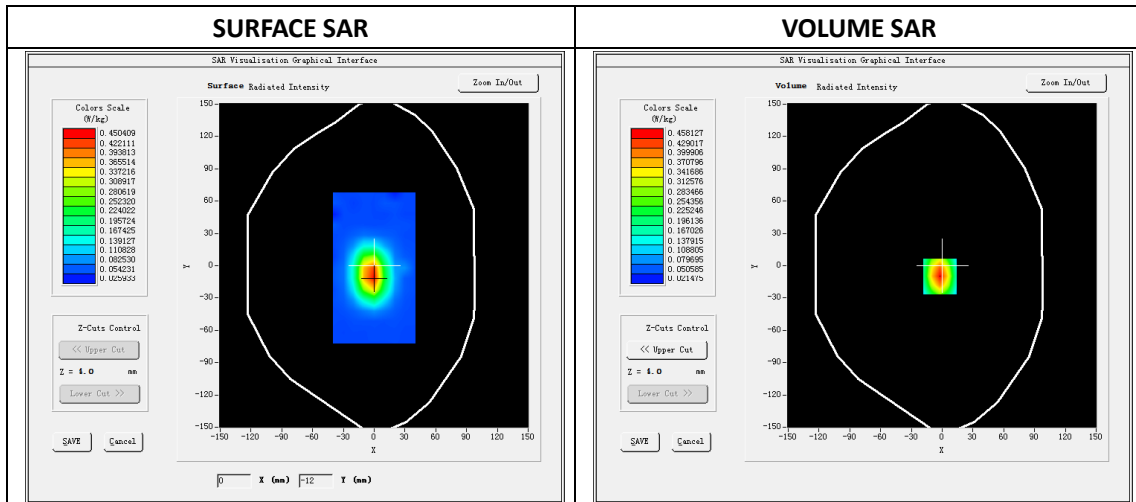
A. Experimental conditions.

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

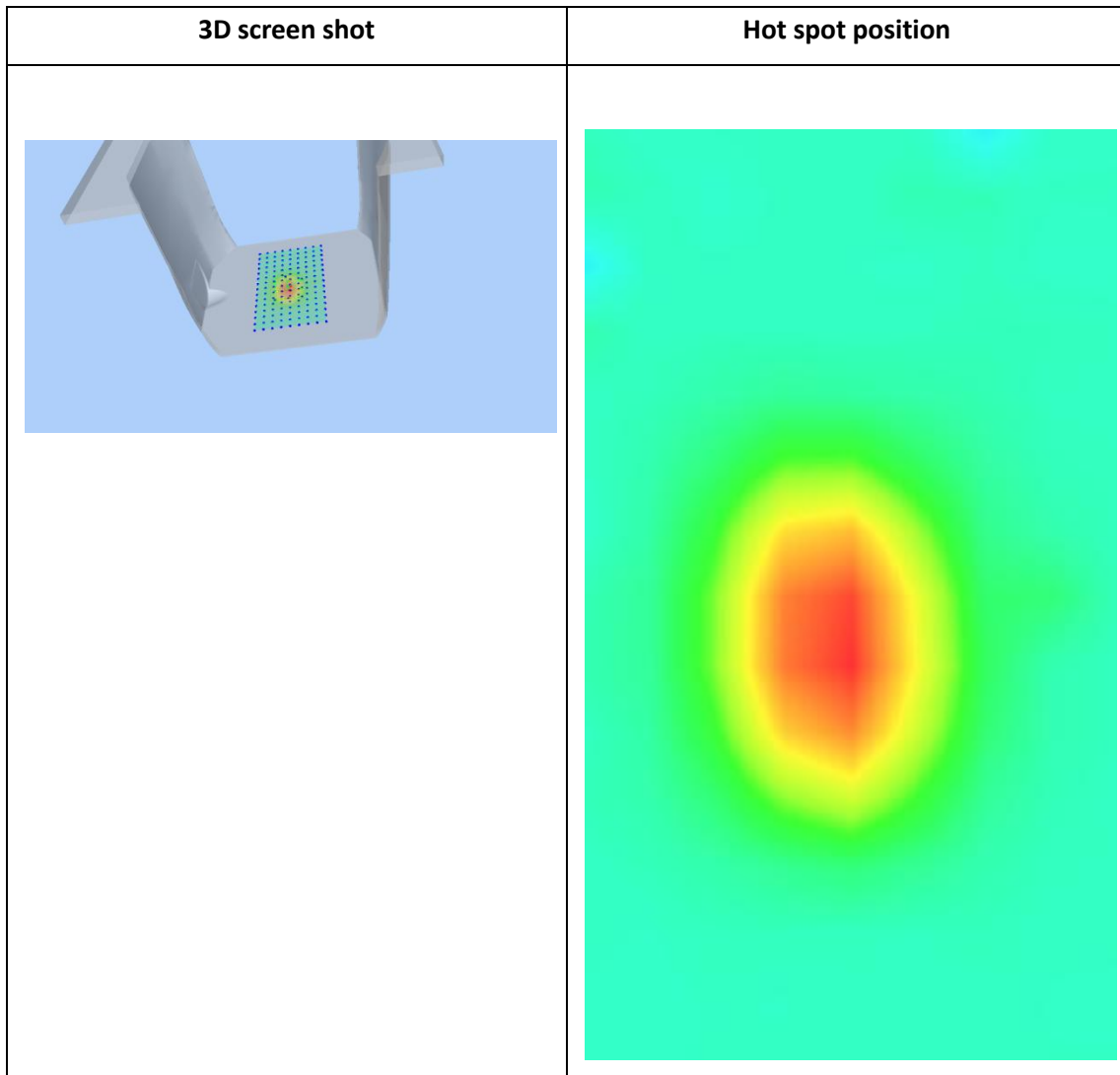
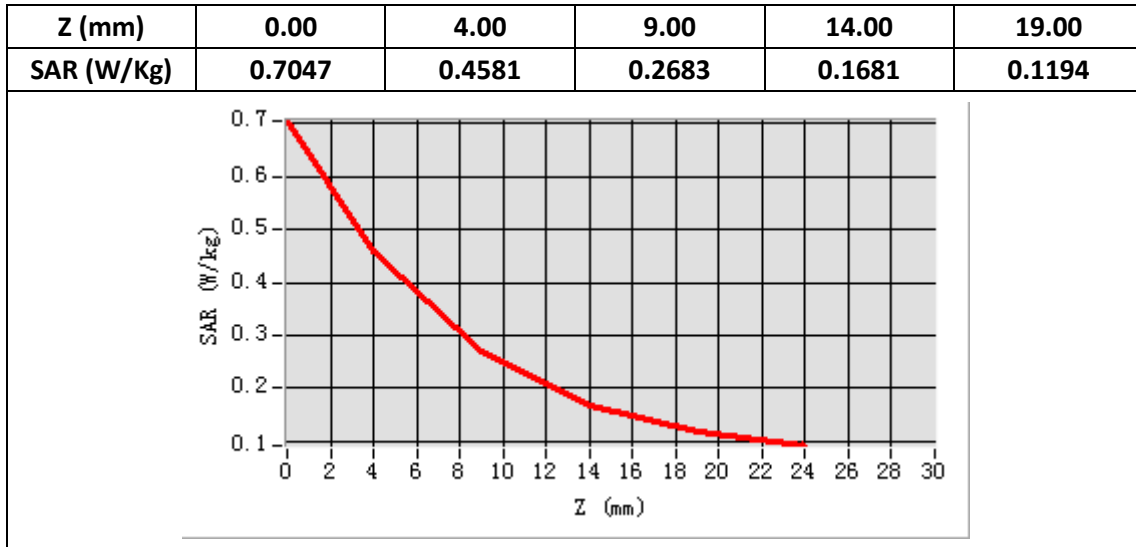
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1900
Relative permittivity (real part)	53.37
Relative permittivity	14.21
Conductivity (S/m)	1.50
Power Drift (%)	-3.85
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.39
Duty factor:	1:1



Maximum location: X=-2.00, Y=-10.00

SAR Peak: 0.71 W/kg

SAR 10g (W/Kg)	0.237621
SAR 1g (W/Kg)	0.425220



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: 08/12/2019

Measurement duration: 22 minutes 13 seconds

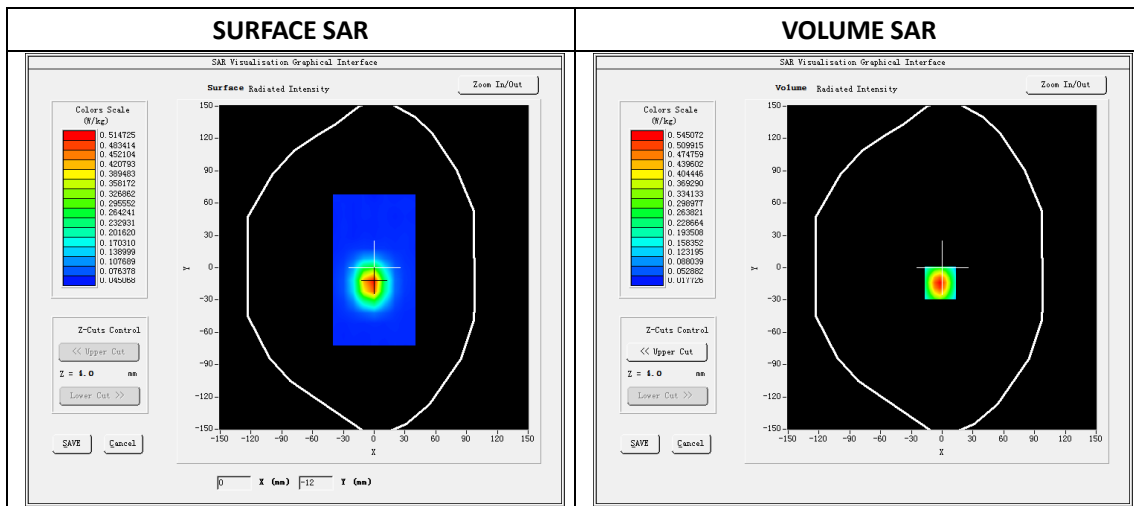
A. Experimental conditions.

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

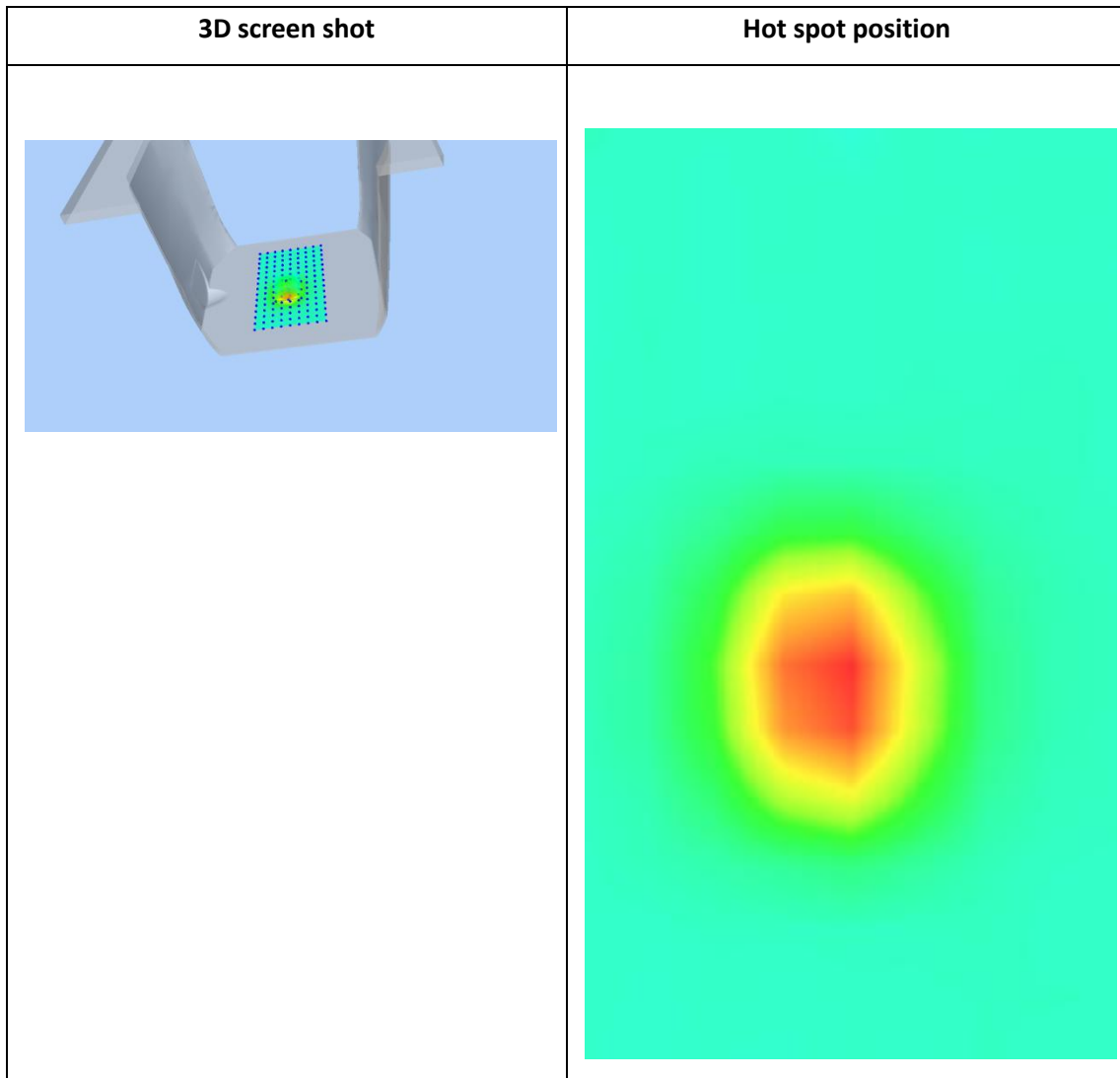
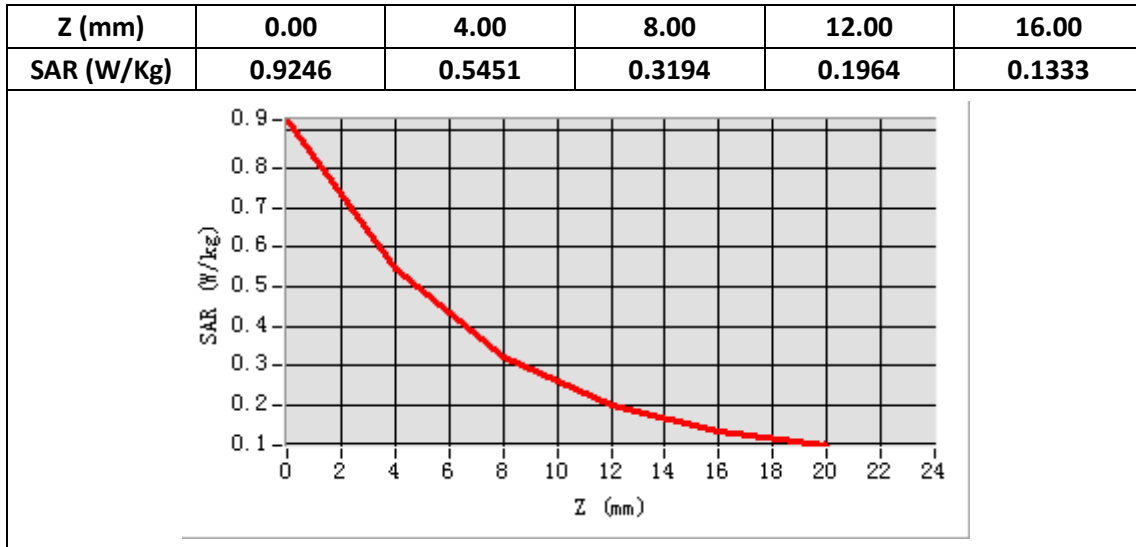
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2450
Relative permittivity (real part)	40.28
Relative permittivity	13.30
Conductivity (S/m)	1.81
Power Drift (%)	-2.29
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.37
Duty factor:	1:1



Maximum location: X=-2.00, Y=-14.00

SAR Peak: 0.92 W/kg

SAR 10g (W/Kg)	0.249555
SAR 1g (W/Kg)	0.496071



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: 08/12/2019

Measurement duration: 22 minutes 06 seconds

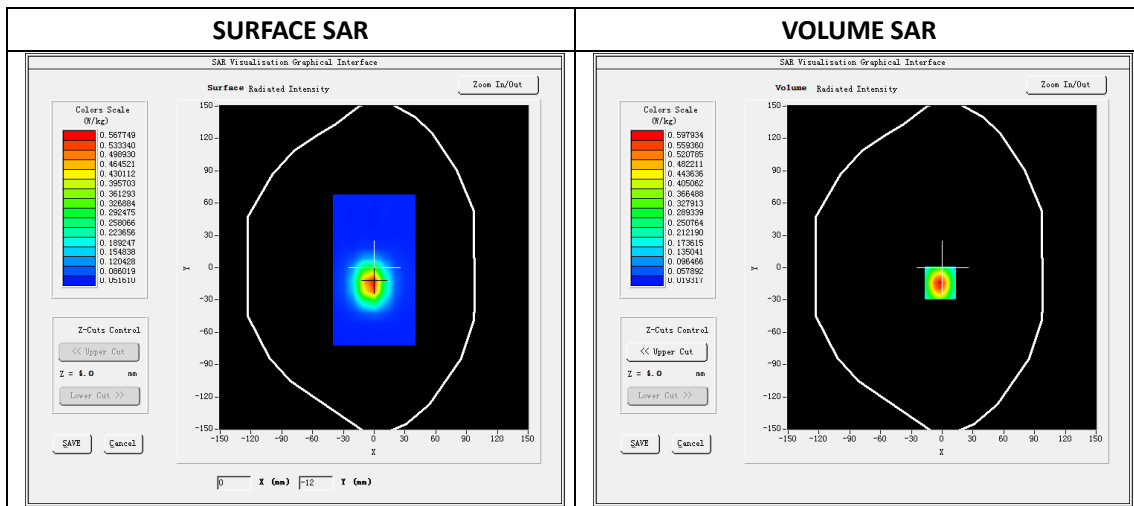
A. Experimental conditions.

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

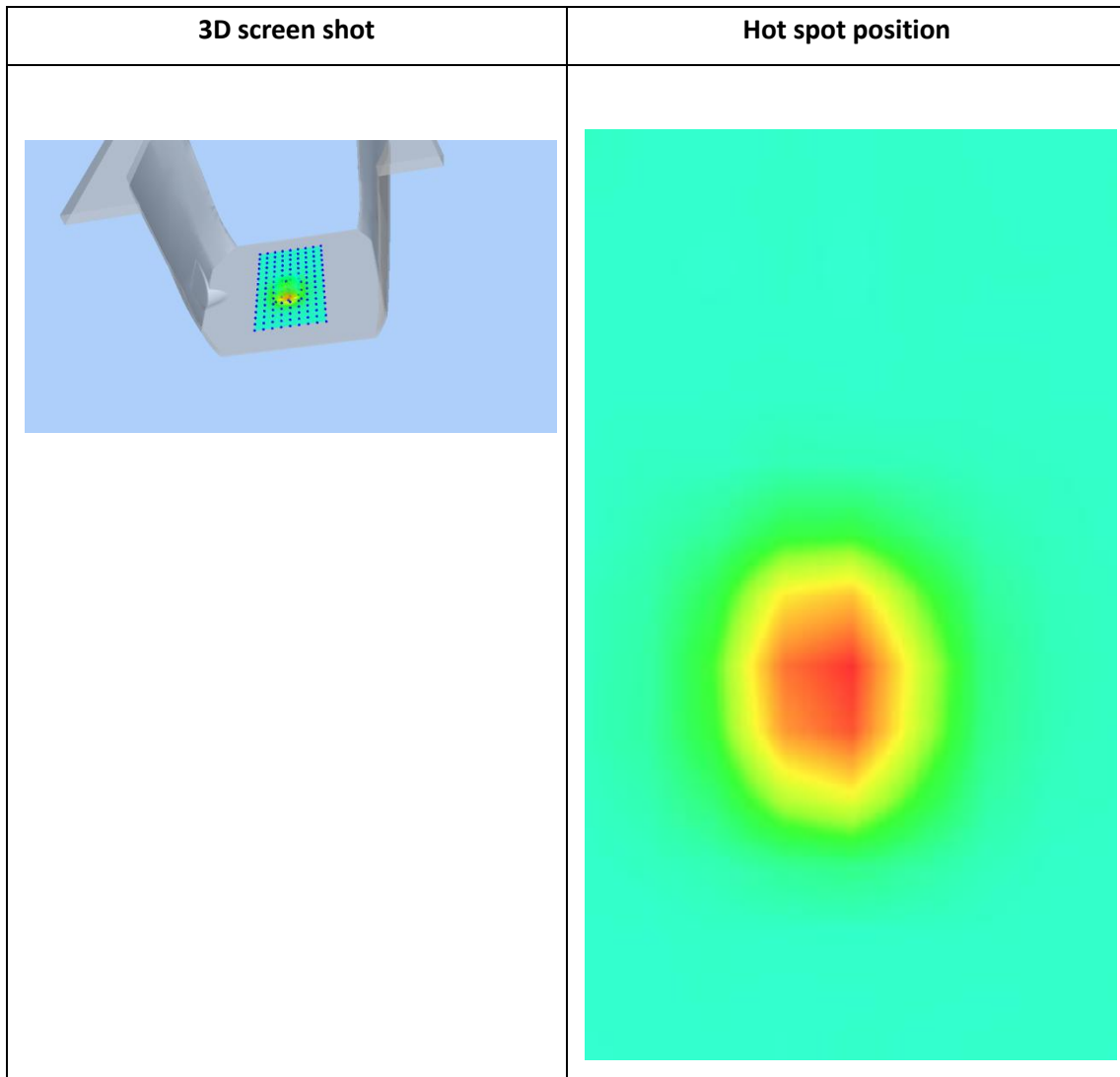
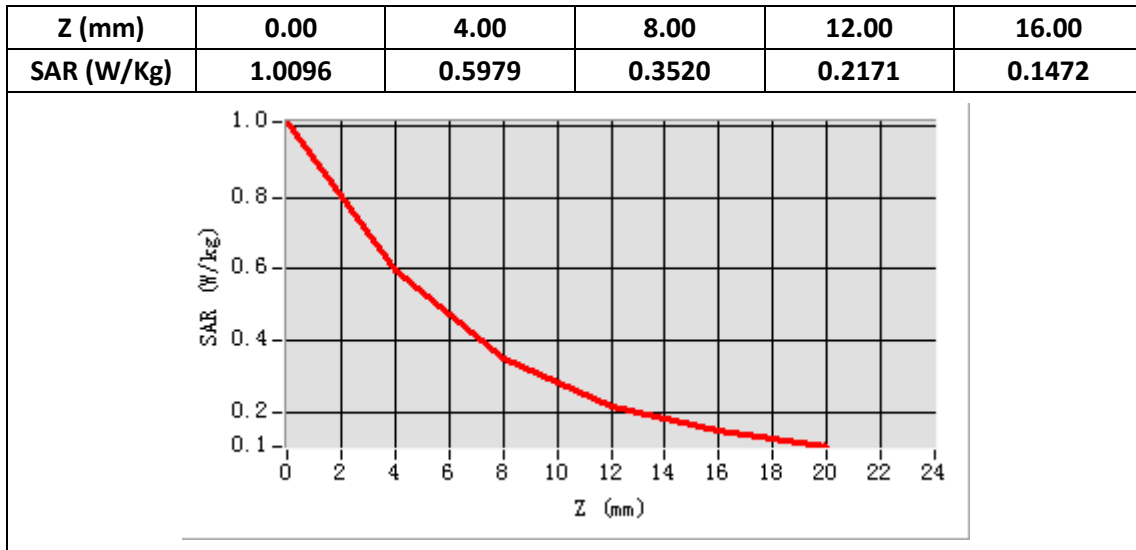
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2450
Relative permittivity (real part)	53.16
Relative permittivity	14.40
Conductivity (S/m)	1.96
Power Drift (%)	-2.25
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.46
Duty factor:	1:1



Maximum location: X=-2.00, Y=-14.00

SAR Peak: 1.01 W/kg

SAR 10g (W/Kg)	0.273949
SAR 1g (W/Kg)	0.547005



System Performance Check (Head, 2600MHz)

Type: Phone measurement

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

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

Date of measurement: 08/13/2019

Measurement duration: 22 minutes 17 seconds

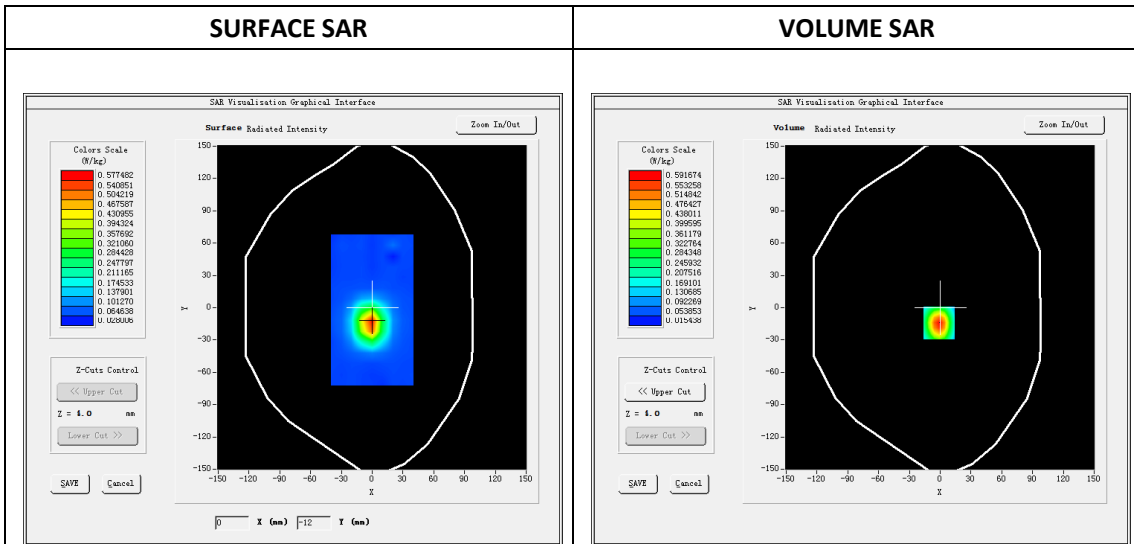
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=5mm dy=5mm dz=4mm
Device Position	Dipole
Band	2600MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

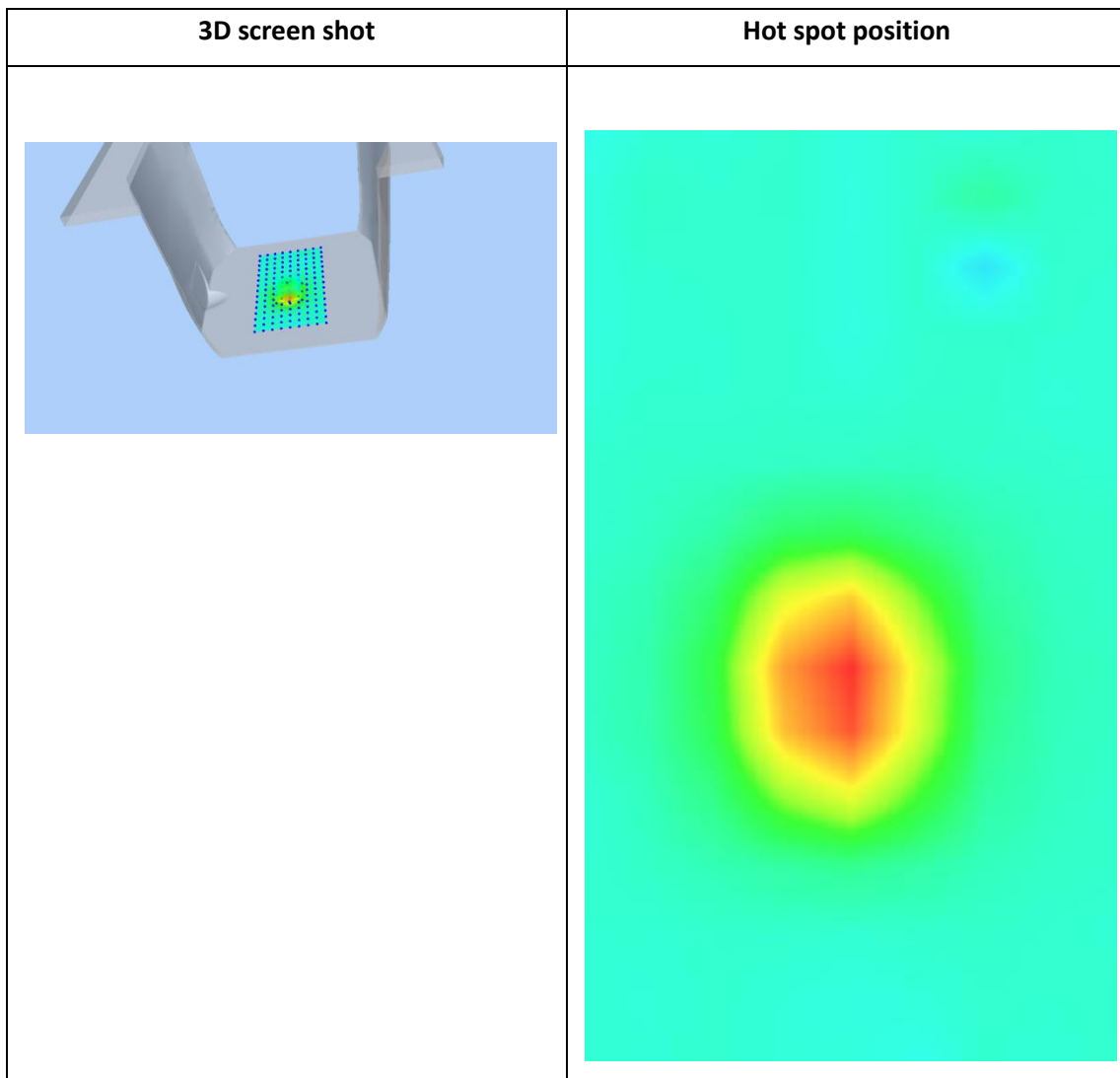
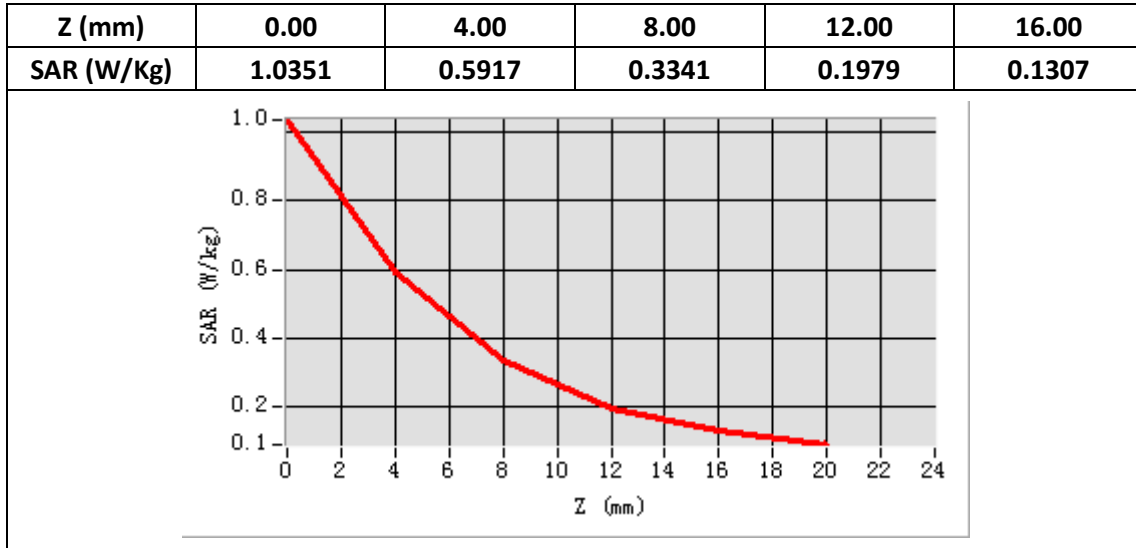
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2600
Relative permittivity (real part)	40.03
Relative permittivity	13.50
Conductivity (S/m)	1.95
Power drift (%)	-1.53
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.35



Maximum location: X=-1.00, Y=-14.00

SAR Peak: 1.04 W/kg

SAR 10g (W/Kg)	0.263405
SAR 1g (W/Kg)	0.542729



System Performance Check (Body, 2600MHz)

Type: Phone measurement

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

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

Date of measurement: 08/13/2019

Measurement duration: 22 minutes 18 seconds

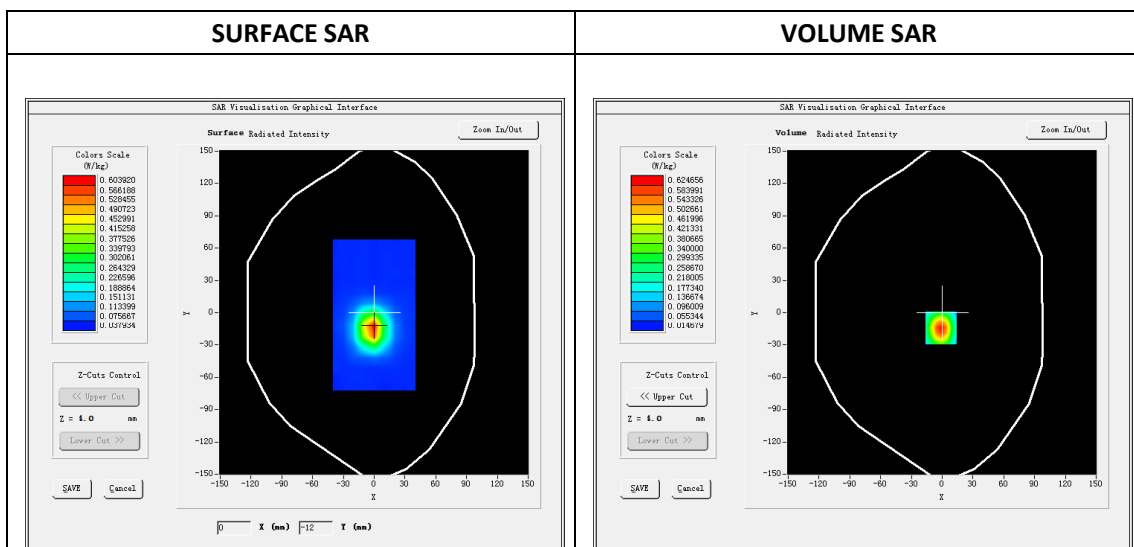
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=5mm dy=5mm dz=4mm
Device Position	Dipole
Band	2600MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2600
Relative permittivity (real part)	52.98
Relative permittivity	14.95
Conductivity (S/m)	2.16
Power drift (%)	-2.44
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.43



Maximum location: X=-1.00, Y=-14.00

SAR Peak: 1.08 W/kg

SAR 10g (W/Kg)	0.271935
SAR 1g (W/Kg)	0.564820

