



Appendix A: SAR System performance Check Plots

Measurement	Liquid	Frequency	Test Date
System Check	Body	850	2018-10-27
System Check	Body	1900	2018-10-28
System Check	Body	2450	2018-10-29
System Check	Body	2600	2018-10-30
System Check	Body	5200	2018-10-31

System Performance Check (Body, 850MHz)

Type: Phone measurement

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

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

Date of measurement: 10/27/2018

Measurement duration: 22 minutes 11 seconds

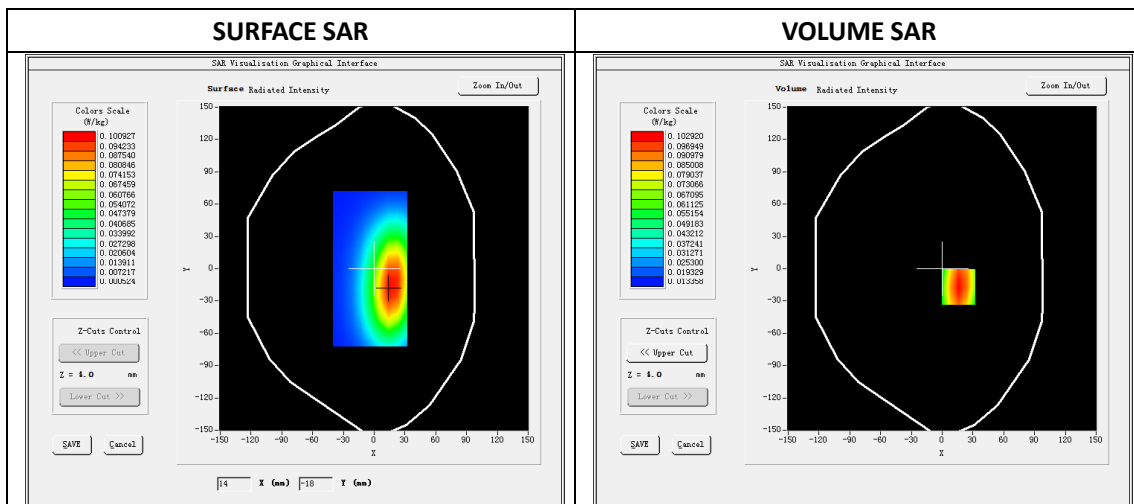
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	850MHz
Channels	
Signal	CW

B. SAR Measurement Results

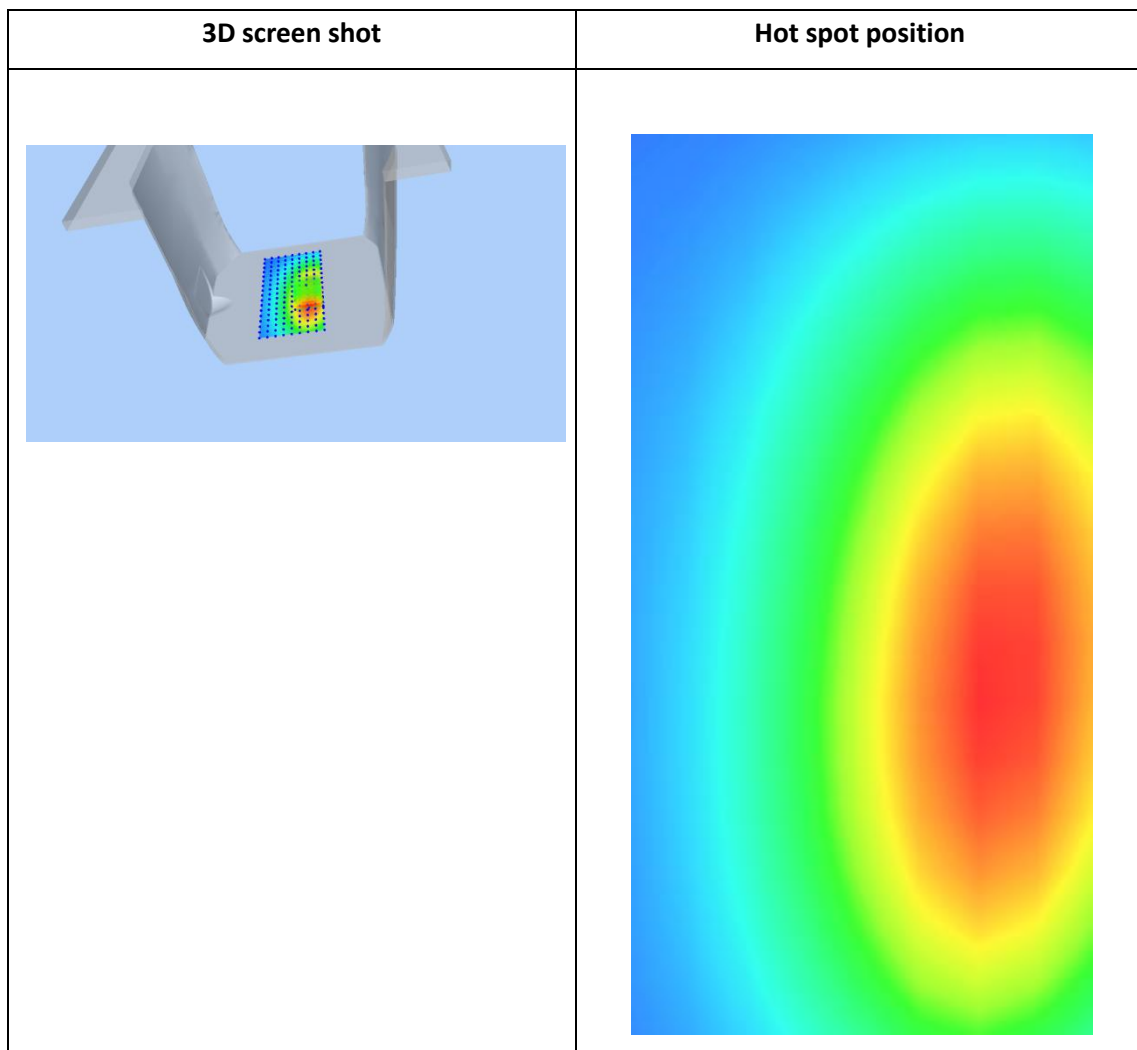
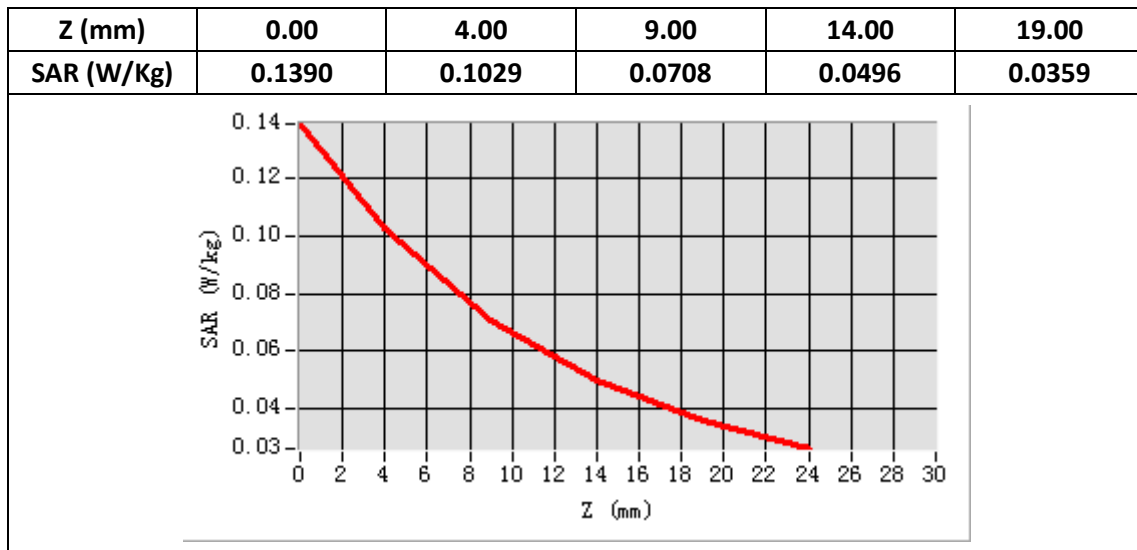
Band SAR

E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	850
Relative permittivity (real part)	55.02
Relative permittivity	20.91
Conductivity (S/m)	0.97
Power drift (%)	-0.49
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	4.43
Crest factor:	1:1



Maximum location: X=16.00, Y=-17.00

SAR 10g (W/Kg)	0.064488
SAR 1g (W/Kg)	0.102131



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: 10/28/2018

Measurement duration: 22 minutes 15 seconds

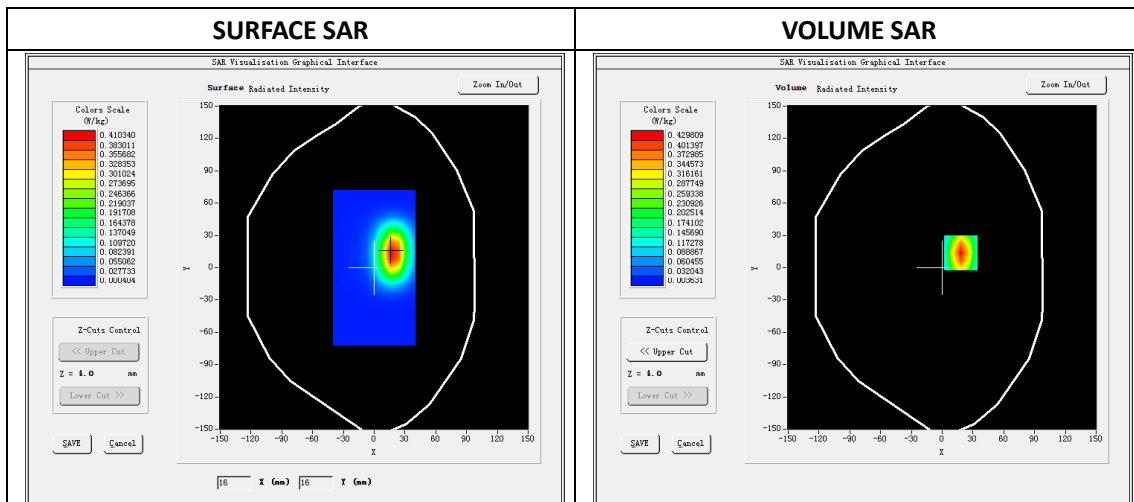
A. Experimental conditions.

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

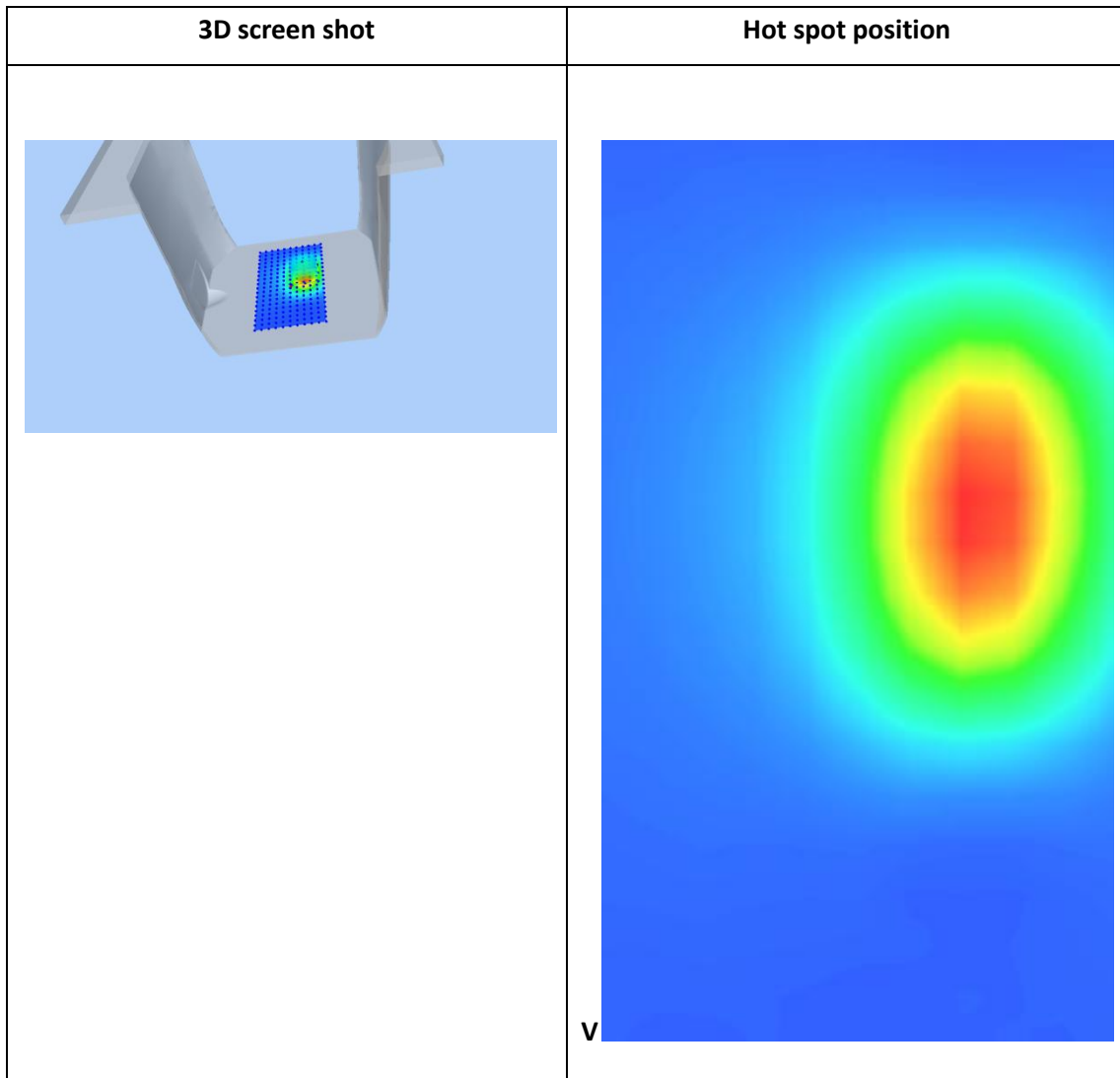
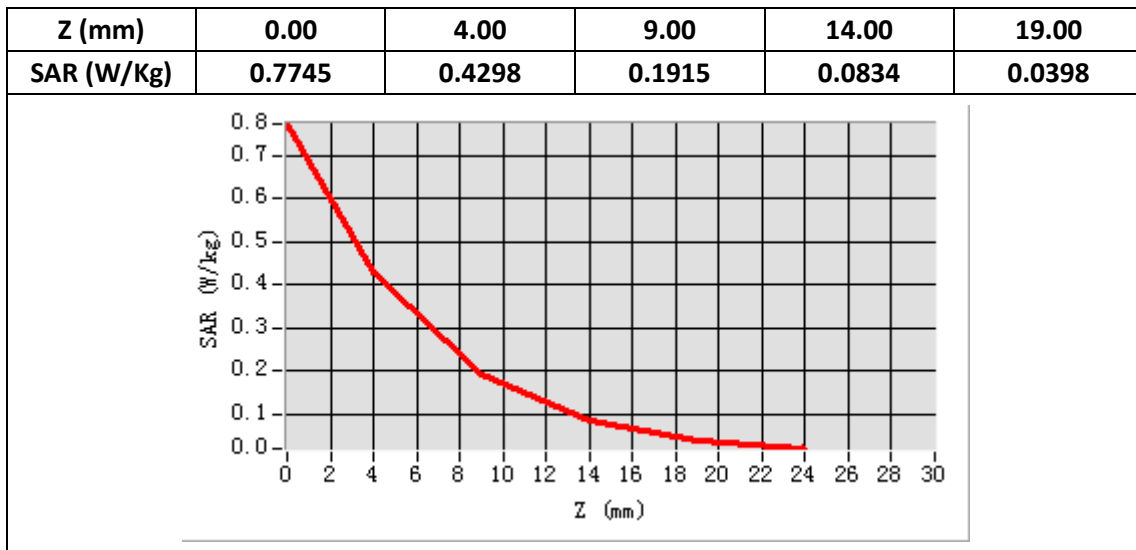
Band SAR

E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	1900
Relative permittivity (real part)	53.23
Relative permittivity	14.25
Conductivity (S/m)	1.51
Power Drift (%)	-0.04
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	4.83
Duty factor:	1:1



Maximum location: X=18.00, Y=14.00

SAR 10g (W/Kg)	0.185898
SAR 1g (W/Kg)	0.407150



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: 10/29/2018

Measurement duration: 22 minutes 31 seconds

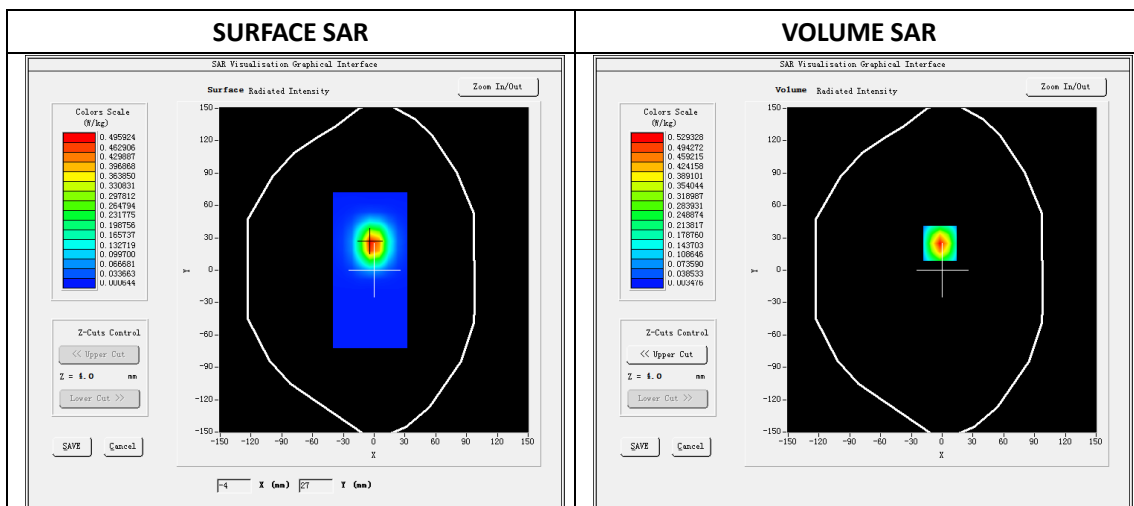
A. Experimental conditions.

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

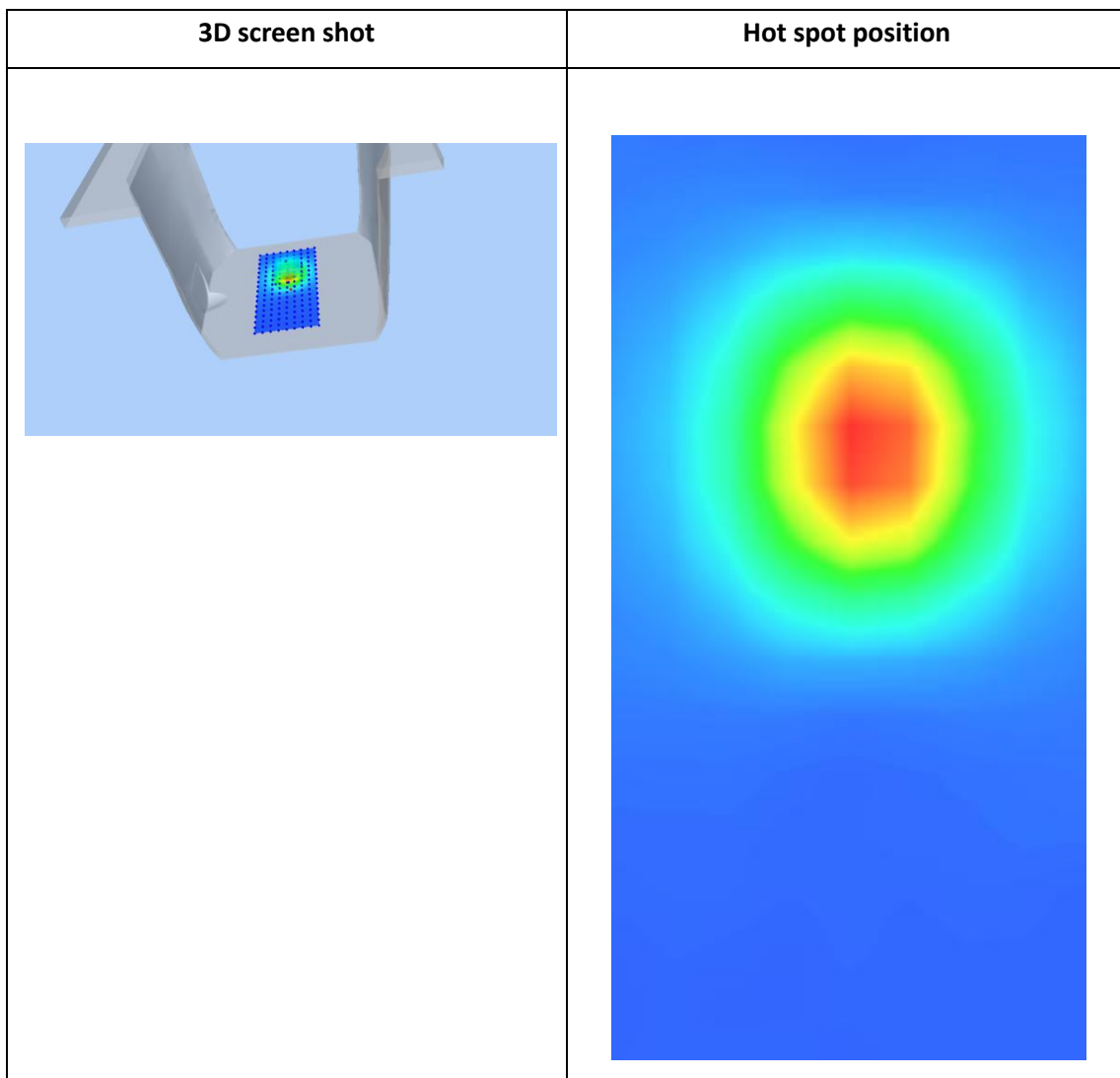
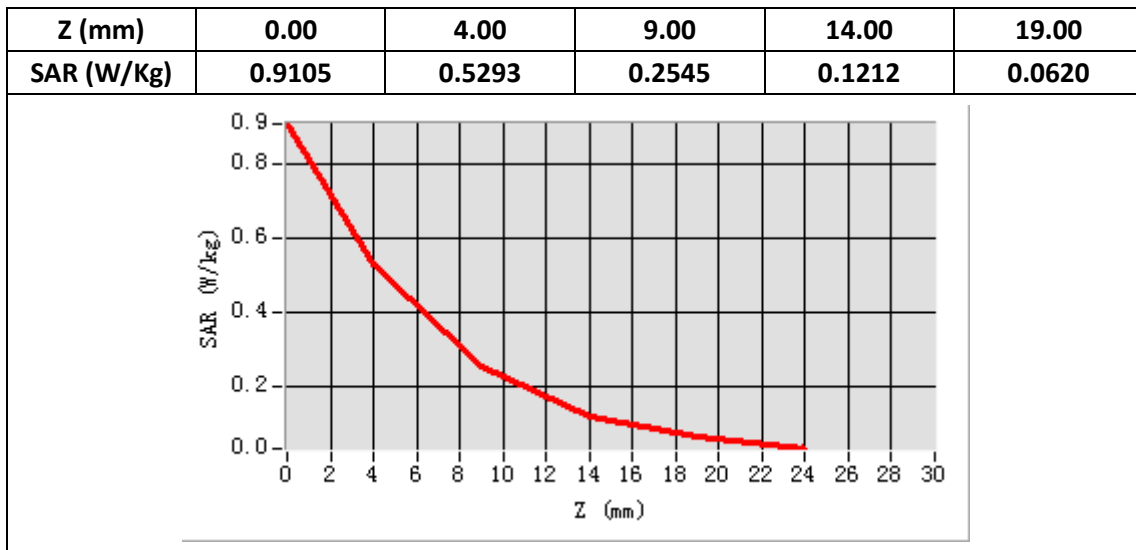
Band SAR

E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	2450
Relative permittivity (real part)	52.88
Relative permittivity	14.03
Conductivity (S/m)	1.93
Power Drift (%)	-0.42
Duty factor:	1:1
ConvF:	4.61



Maximum location: X=-2.00, Y=25.00

SAR 10g (W/Kg)	0.226678
SAR 1g (W/Kg)	0.516136



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: 10/30/2018

Measurement duration: 22 minutes 11 seconds

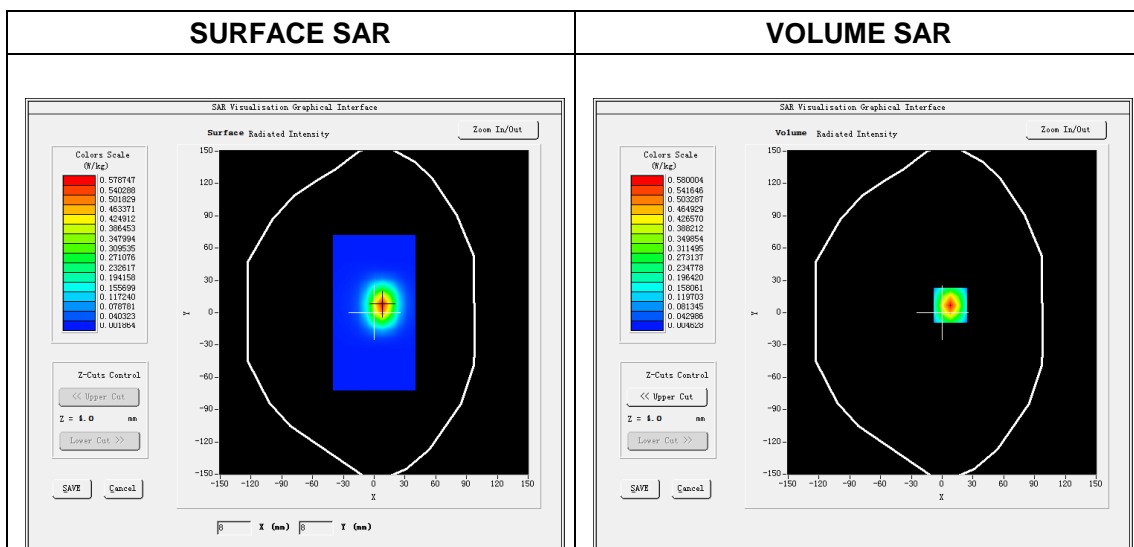
A. Experimental conditions.

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

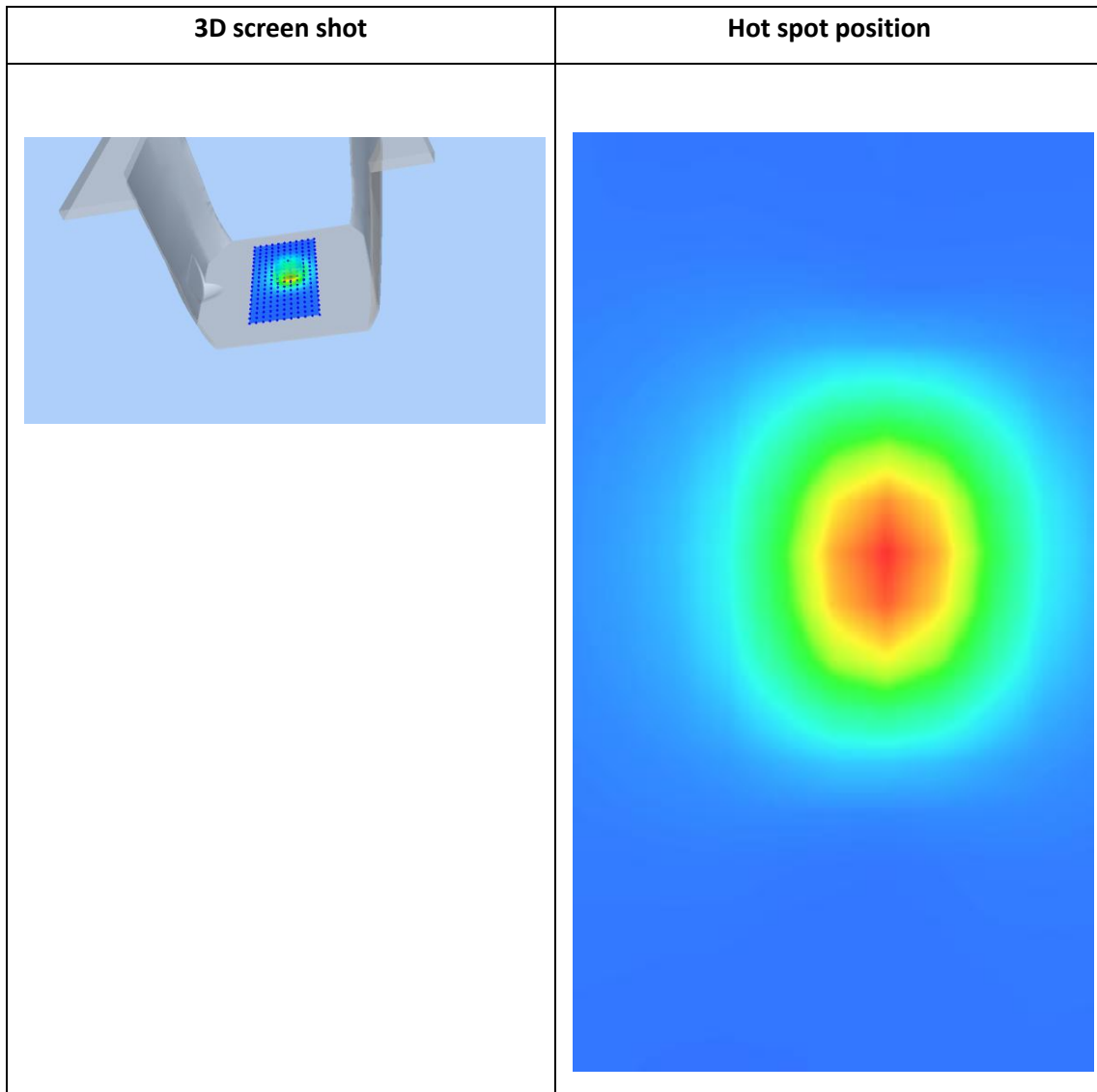
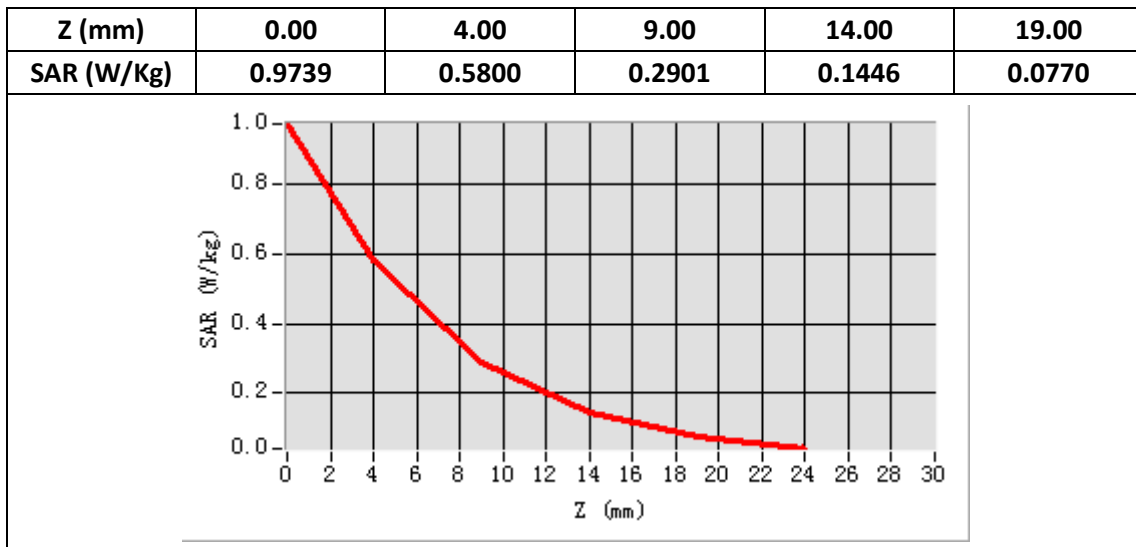
Band SAR

E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	2600
Relative permittivity (real part)	52.45
Relative permittivity	14.23
Conductivity (S/m)	2.11
Power drift (%)	-0.34
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	4.28



Maximum location: X=8.00, Y=7.00

SAR 10g (W/Kg)	0.245146
SAR 1g (W/Kg)	0.564123



System Performance Check (Body, 5200MHz)

Type: Phone measurement

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

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

Date of measurement: 10/31/2018

Measurement duration: 22 minutes 23 seconds

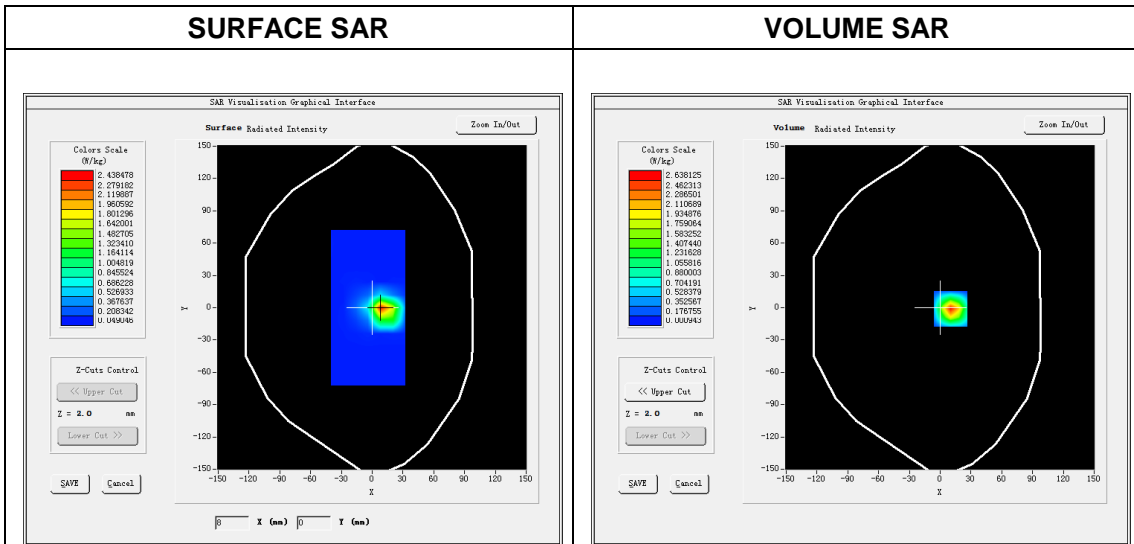
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=5mm dy=5mm dz=4mm
Device Position	Dipole
Band	5200MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

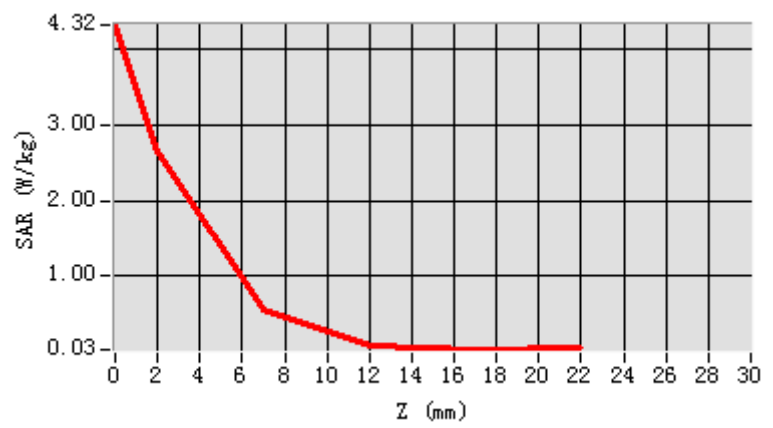
E-Field Probe	SATIMO SN_27/15_EP261
Frequency (MHz)	5200
Relative permittivity (real part)	49.45
Relative permittivity	18.03
Conductivity (S/m)	5.21
Power drift (%)	-0.22
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	4.28



Maximum location: X=10.00, Y=-1.00

SAR 10g (W/Kg)	0.550786
SAR 1g (W/Kg)	1.555135

Z (mm)	0.00	2.00	7.00	12.00	17.00
SAR (W/Kg)	4.3178	2.6381	0.5710	0.0860	0.0320



3D screen shot	Hot spot position
