

Appendix A: SAR System performance Check Plots

Measurement	Liquid	Frequency	Test Date
System Check	Head	750	2019-03-15
System Check	Body	750	2019-03-15
System Check	Head	850	2019-03-16
System Check	Body	850	2019-03-16
System Check	Head	1800	2019-03-17
System Check	Body	1800	2019-03-17
System Check	Head	1900	2019-03-18
System Check	Body	1900	2019-03-18
System Check	Head	2450	2019-03-19
System Check	Body	2450	2019-03-19

System Performance Check (Head, 750MHz)

Type: Phone measurement

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

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

Date of measurement: 03/15/2019

Measurement duration: 22 minutes 15 seconds

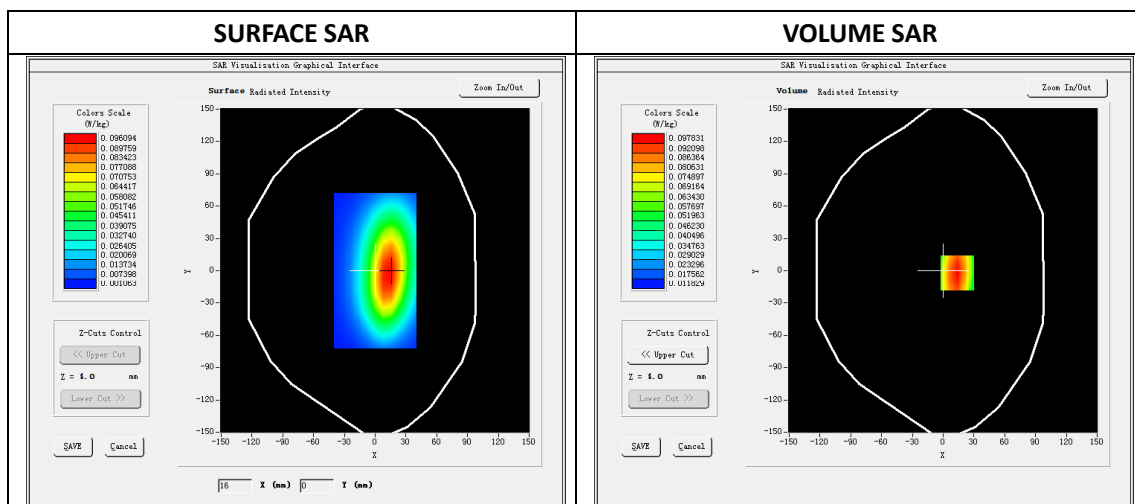
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	750MHz
Channels	
Signal	CW

B. SAR Measurement Results

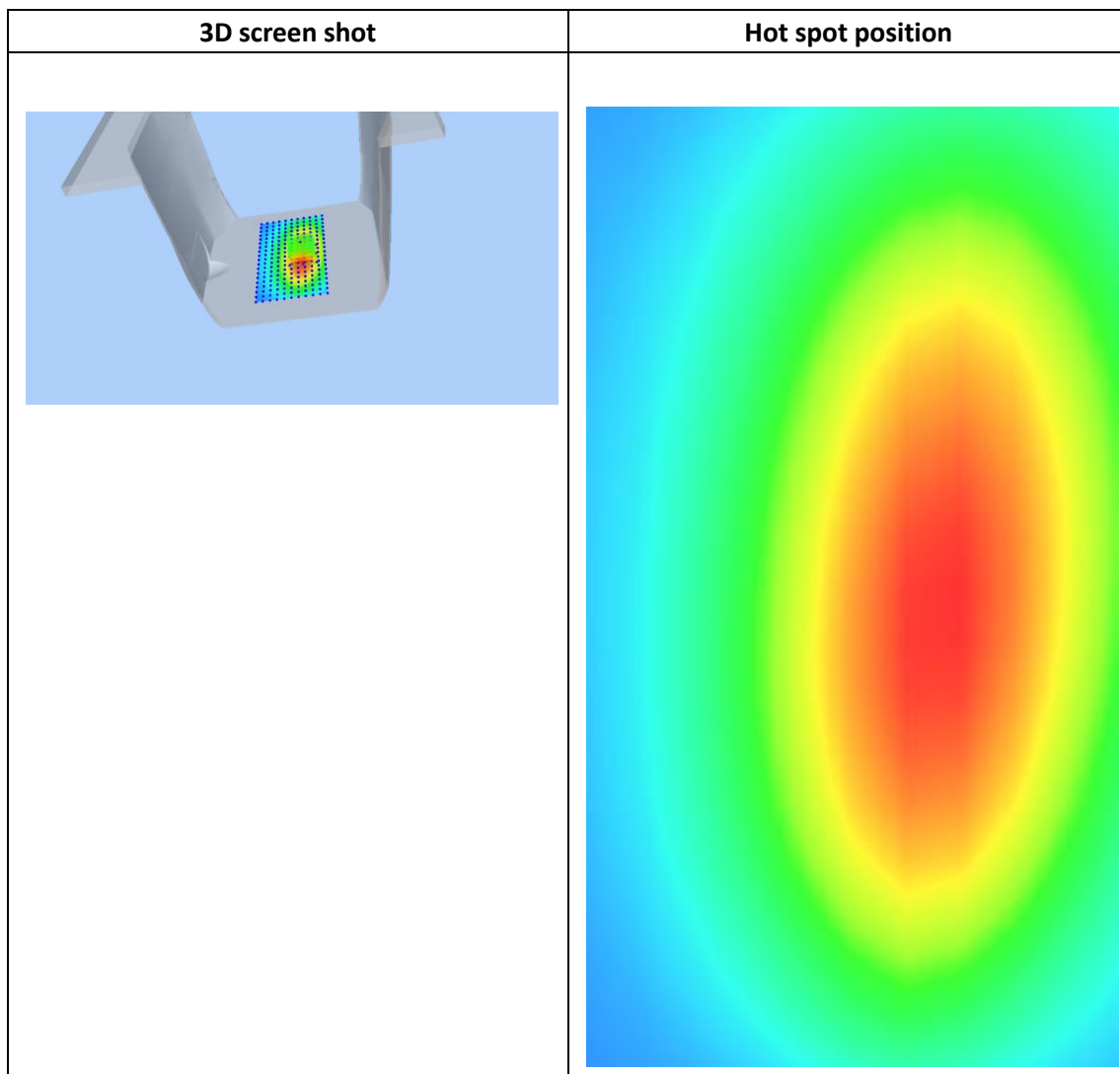
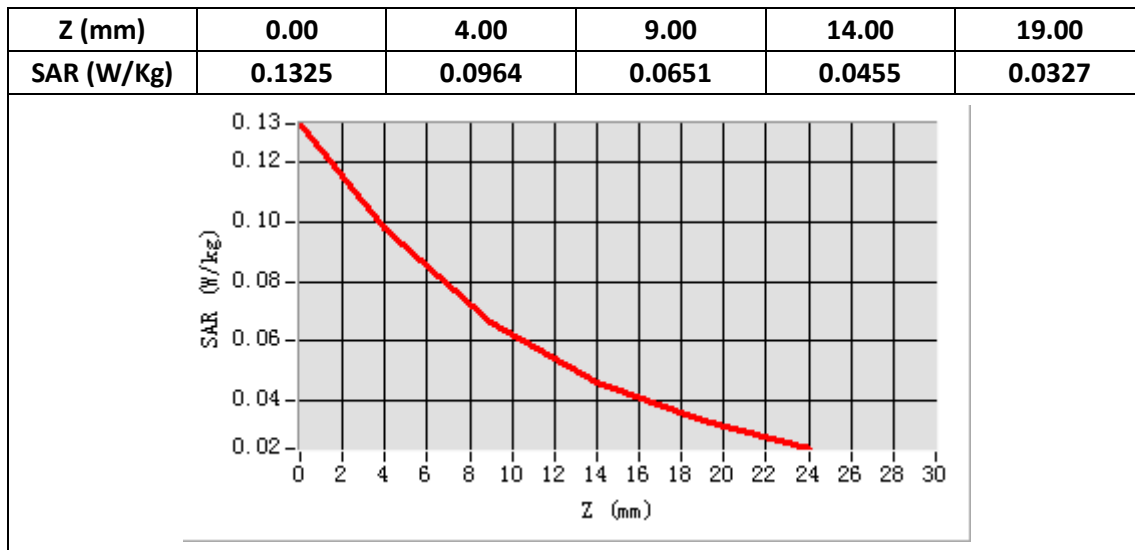
Band SAR

E-Field Probe	SATIMO SN27/15 EPGO261
Frequency (MHz)	750
Relative permittivity (real part)	41.88
Relative permittivity	21.36
Conductivity (S/m)	0.99
Power drift (%)	0.15
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	1.87
Crest factor:	1:1



Maximum location: X=14.00, Y=-2.00

SAR 10g (W/Kg)	0.011277
SAR 1g (W/Kg)	0.083766



System Performance Check (Body, 750MHz)

Type: Phone measurement

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

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

Date of measurement: 03/15/2019

Measurement duration: 22 minutes 35 seconds

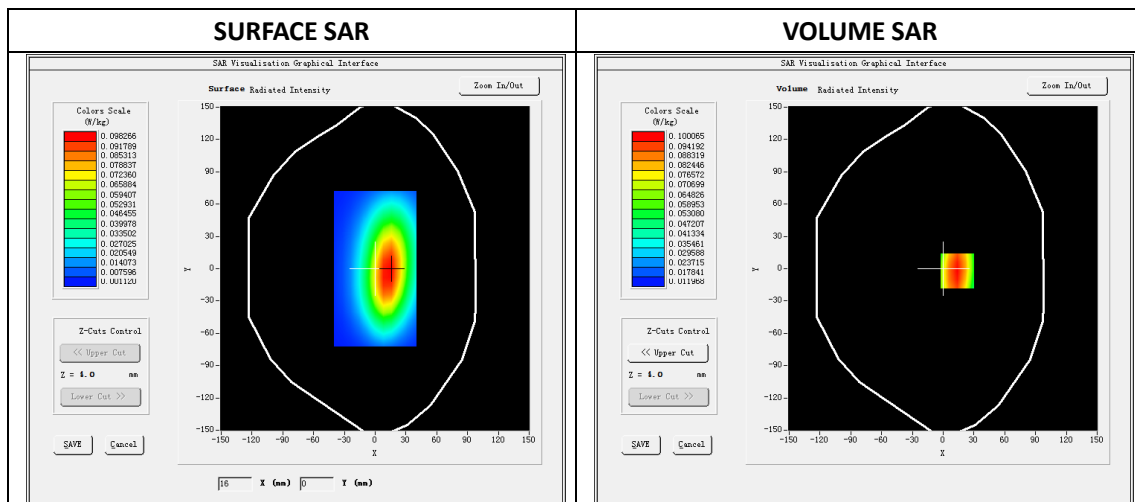
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	750MHz
Channels	
Signal	CW

B. SAR Measurement Results

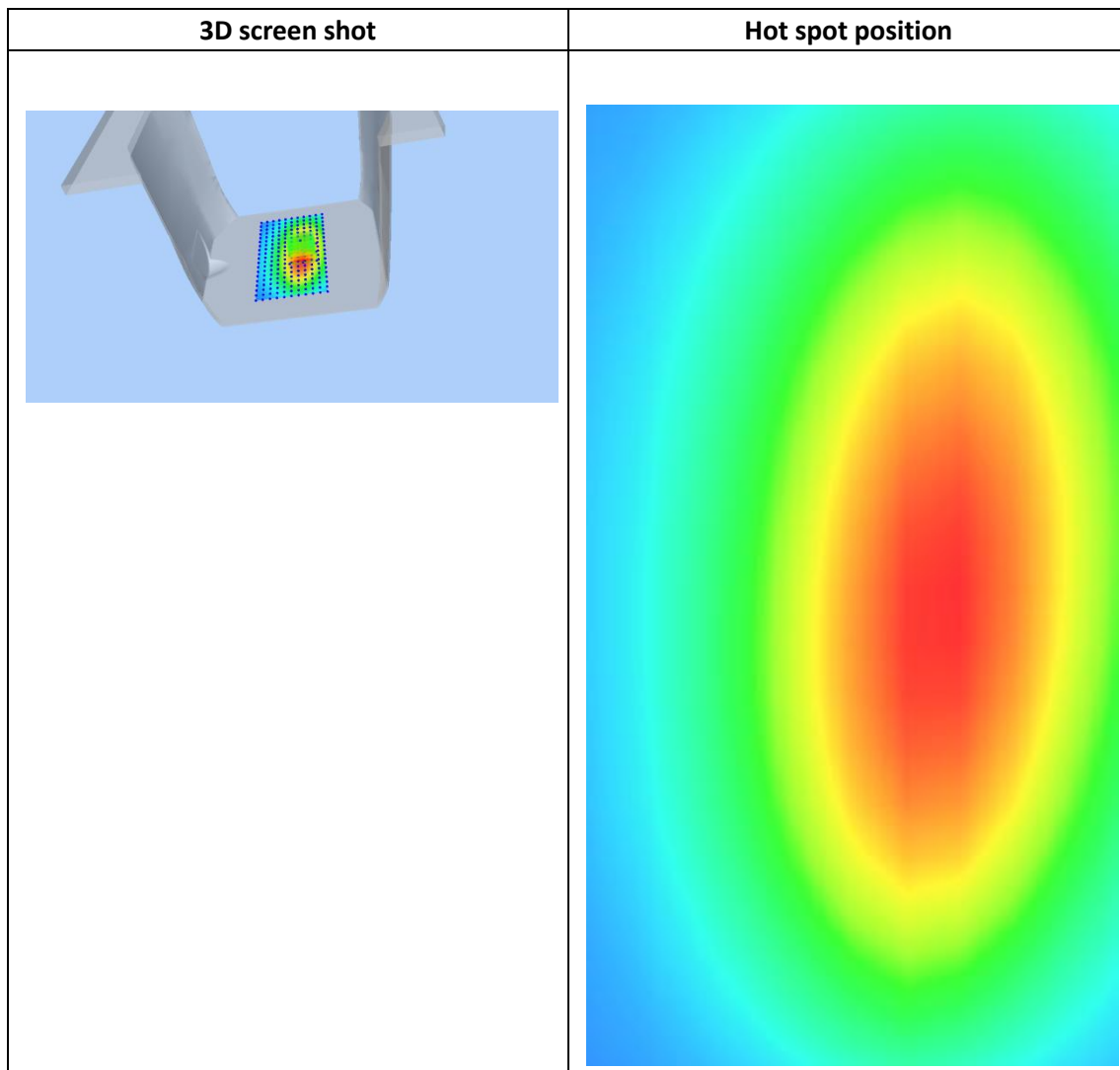
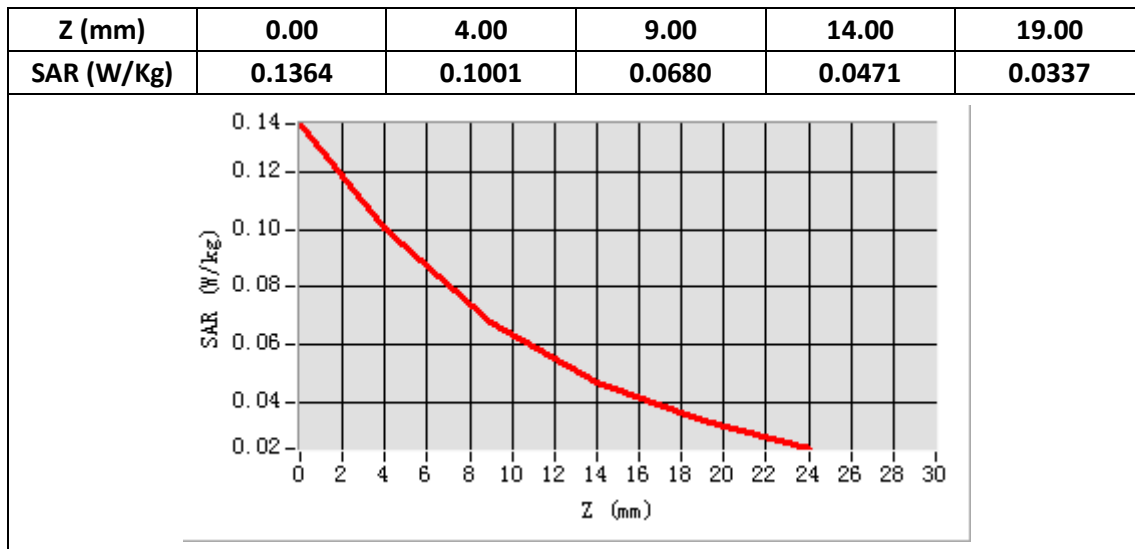
Band SAR

E-Field Probe	SATIMO SN27/15 EPGO261
Frequency (MHz)	750
Relative permittivity (real part)	55.36
Relative permittivity	23.04
Conductivity (S/m)	0.96
Power drift (%)	0.29
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	1.93
Crest factor:	1:1



Maximum location: X=14.00, Y=-2.00

SAR 10g (W/Kg)	0.060365
SAR 1g (W/Kg)	0.091011



System Performance Check (Head, 850MHz)

Type: Phone measurement

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

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

Date of measurement: 03/16/2019

Measurement duration: 22 minutes 20 seconds

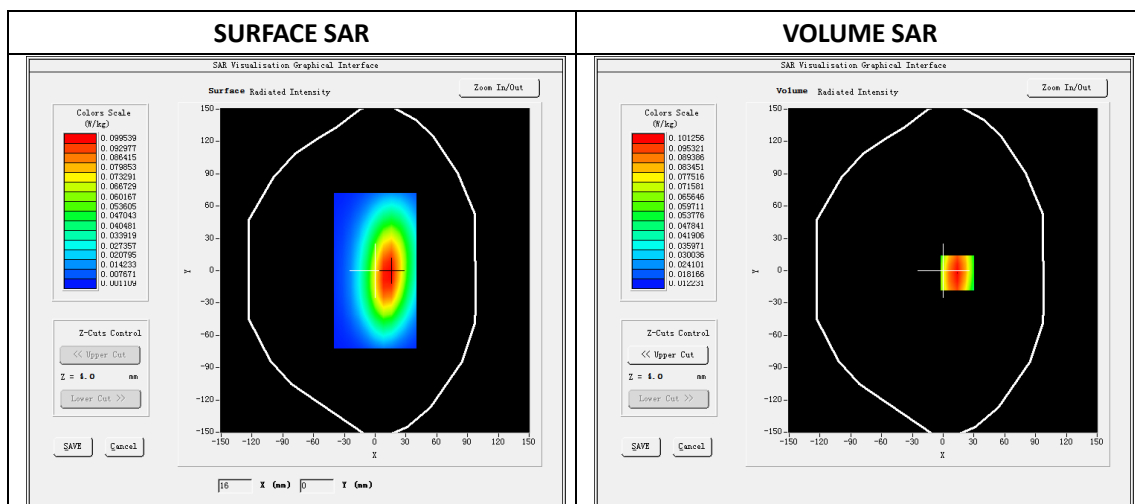
A. Experimental conditions.

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

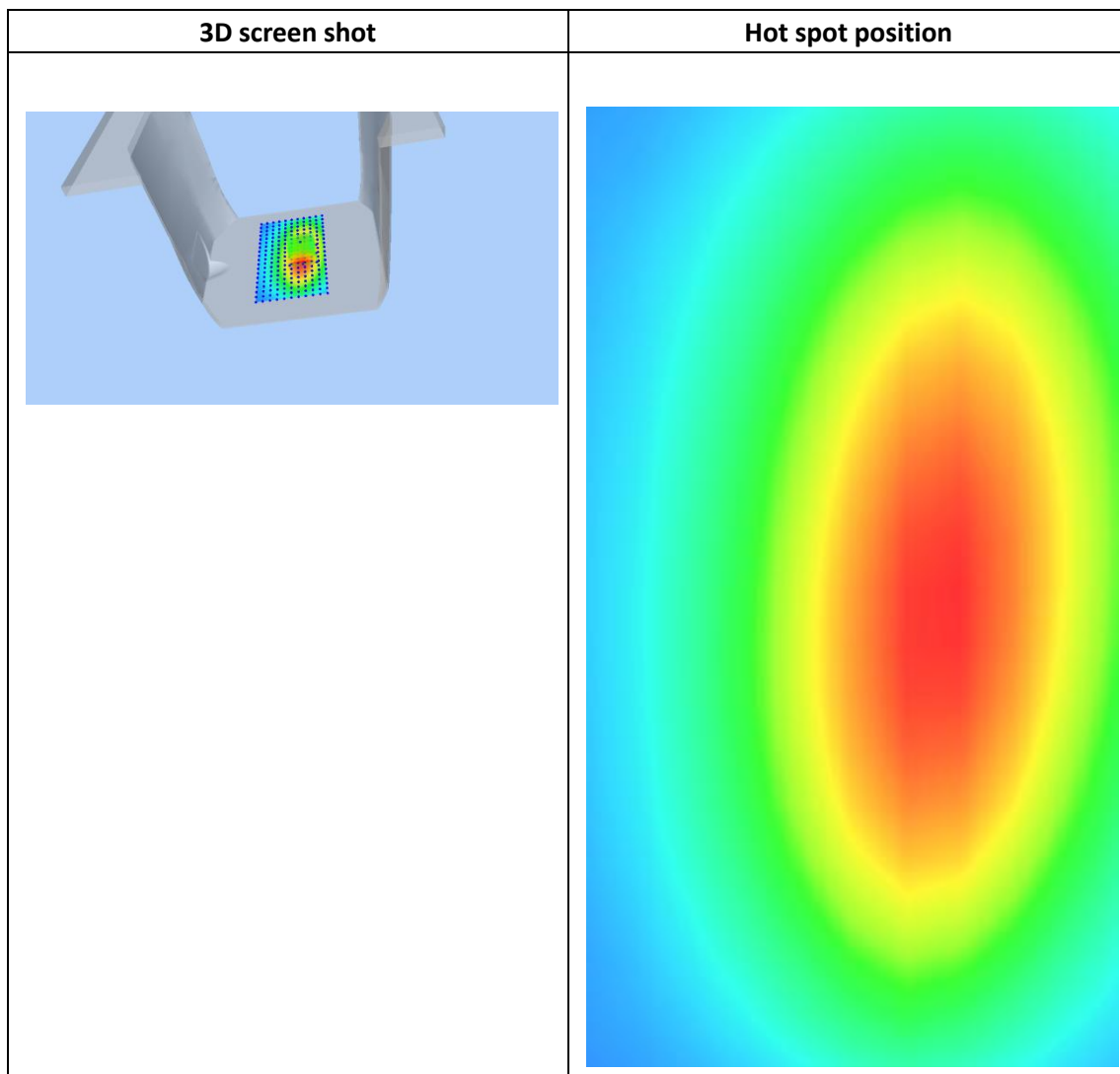
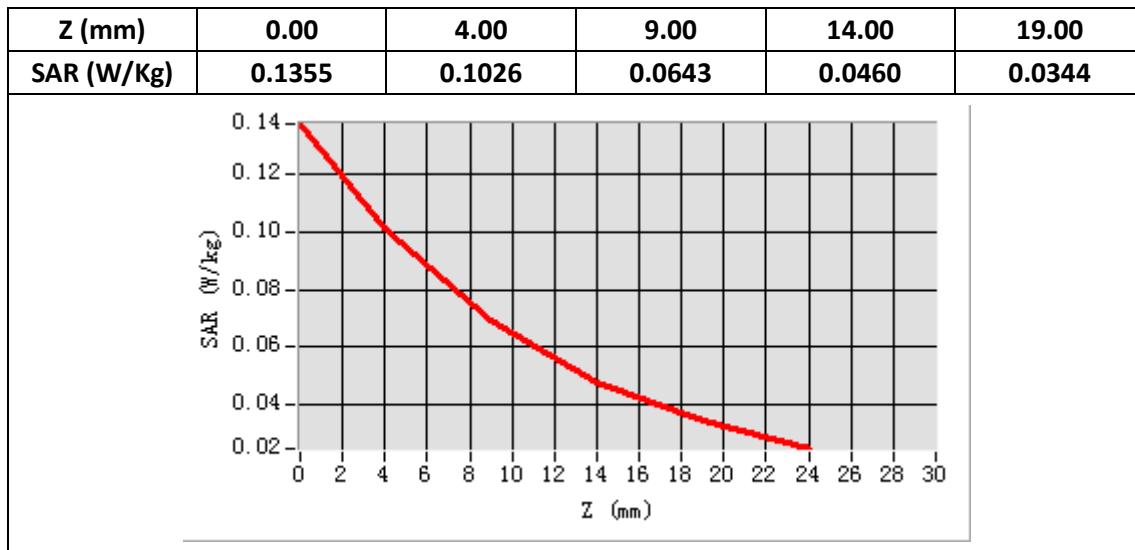
Band SAR

E-Field Probe	SATIMO SN27/15 EPGO261
Frequency (MHz)	850
Relative permittivity (real part)	41.52
Relative permittivity	19.05
Conductivity (S/m)	0.90
Power drift (%)	-0.22
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	1.92
Crest factor:	1:1



Maximum location: X=14.00, Y=-2.00

SAR 10g (W/Kg)	0.061213
SAR 1g (W/Kg)	0.095142



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: 03/16/2019

Measurement duration: 22 minutes 19 seconds

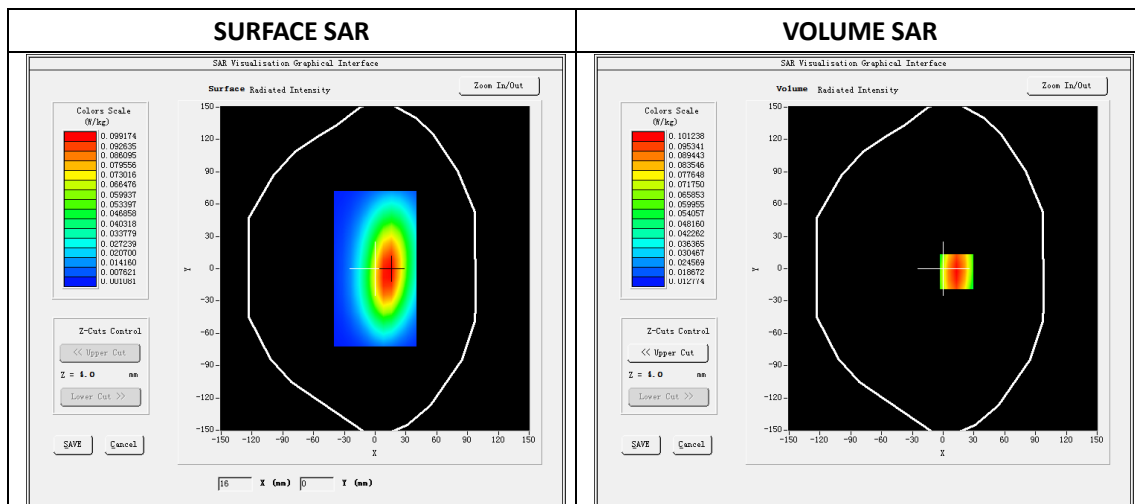
A. Experimental conditions.

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

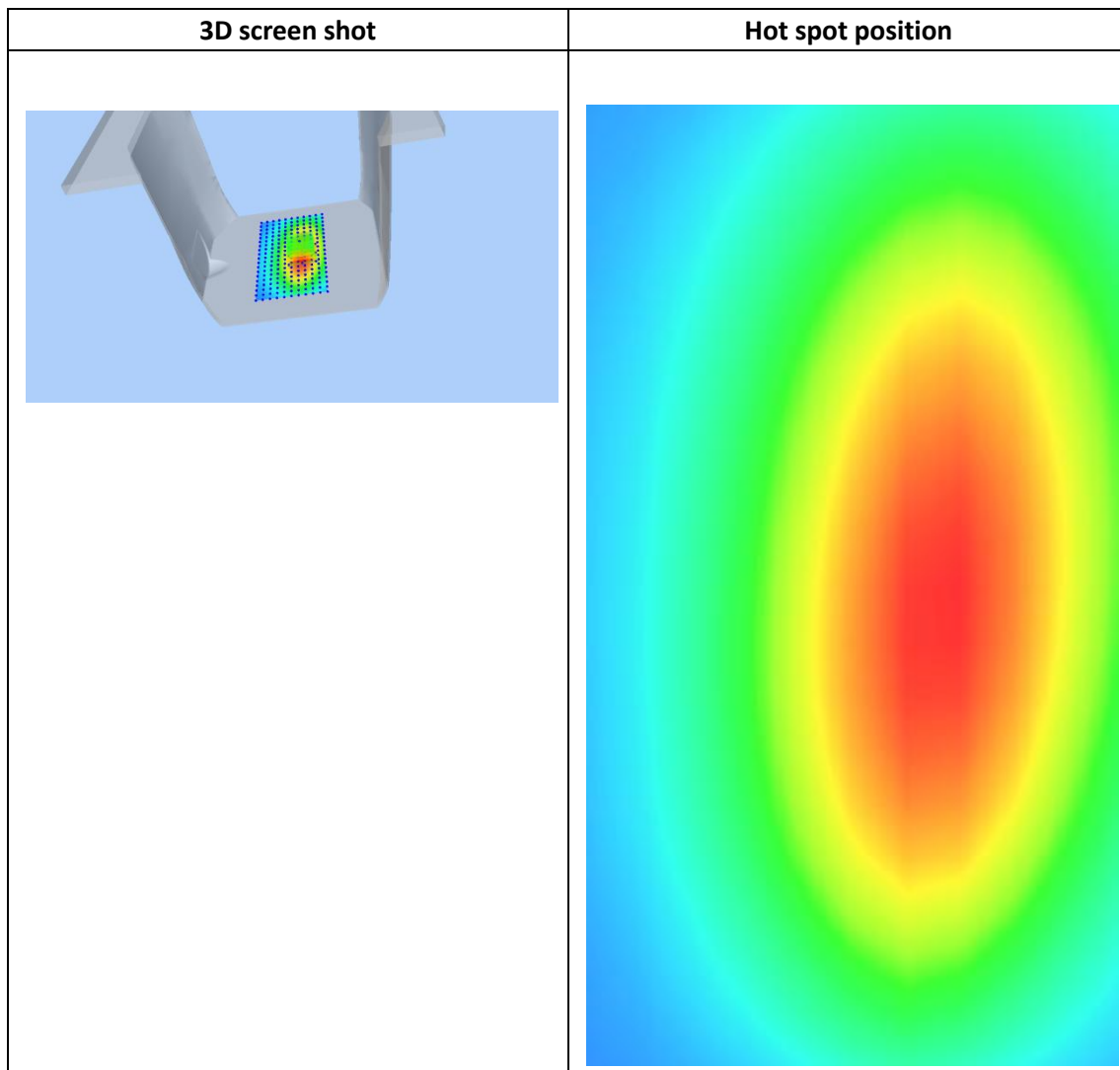
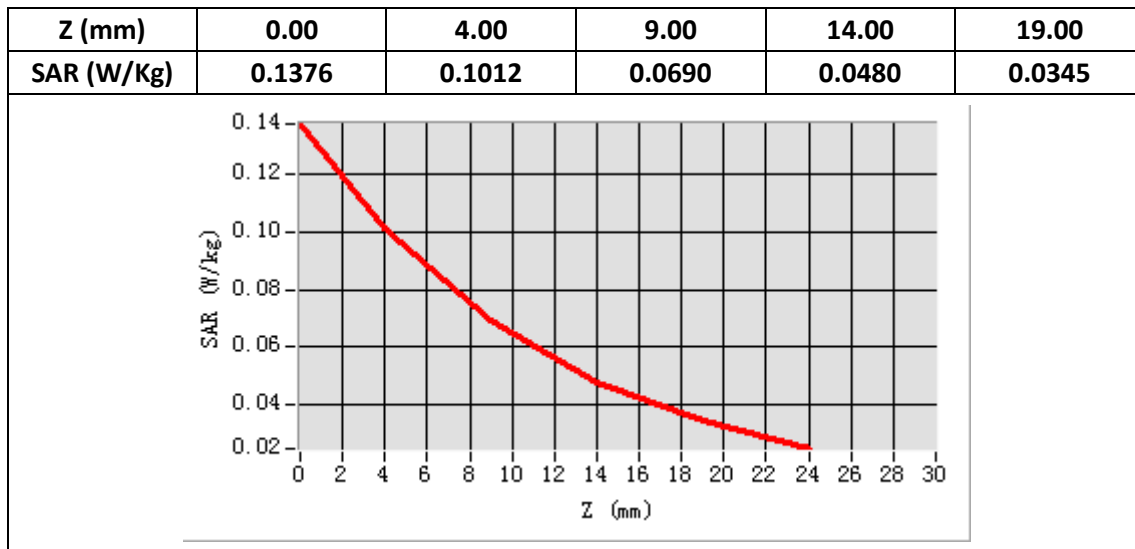
Band SAR

E-Field Probe	SATIMO SN27/15 EPGO261
Frequency (MHz)	850
Relative permittivity (real part)	55.21
Relative permittivity	20.69
Conductivity (S/m)	0.96
Power drift (%)	-0.11
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	1.99
Crest factor:	1:1



Maximum location: X=13.00, Y=-3.00

SAR 10g (W/Kg)	0.063312
SAR 1g (W/Kg)	0.096811



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: 03/17/2019

Measurement duration: 22 minutes 33 seconds

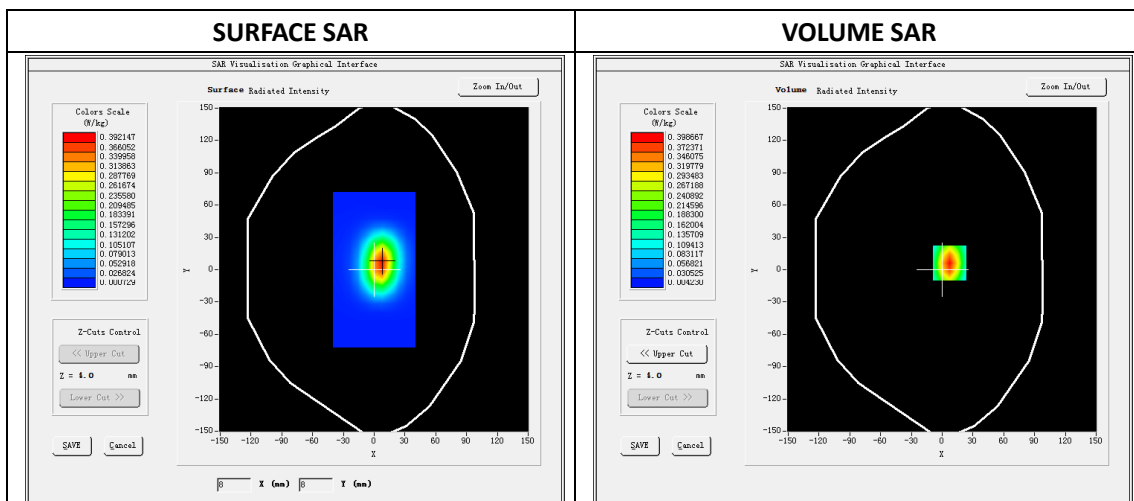
A. Experimental conditions.

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

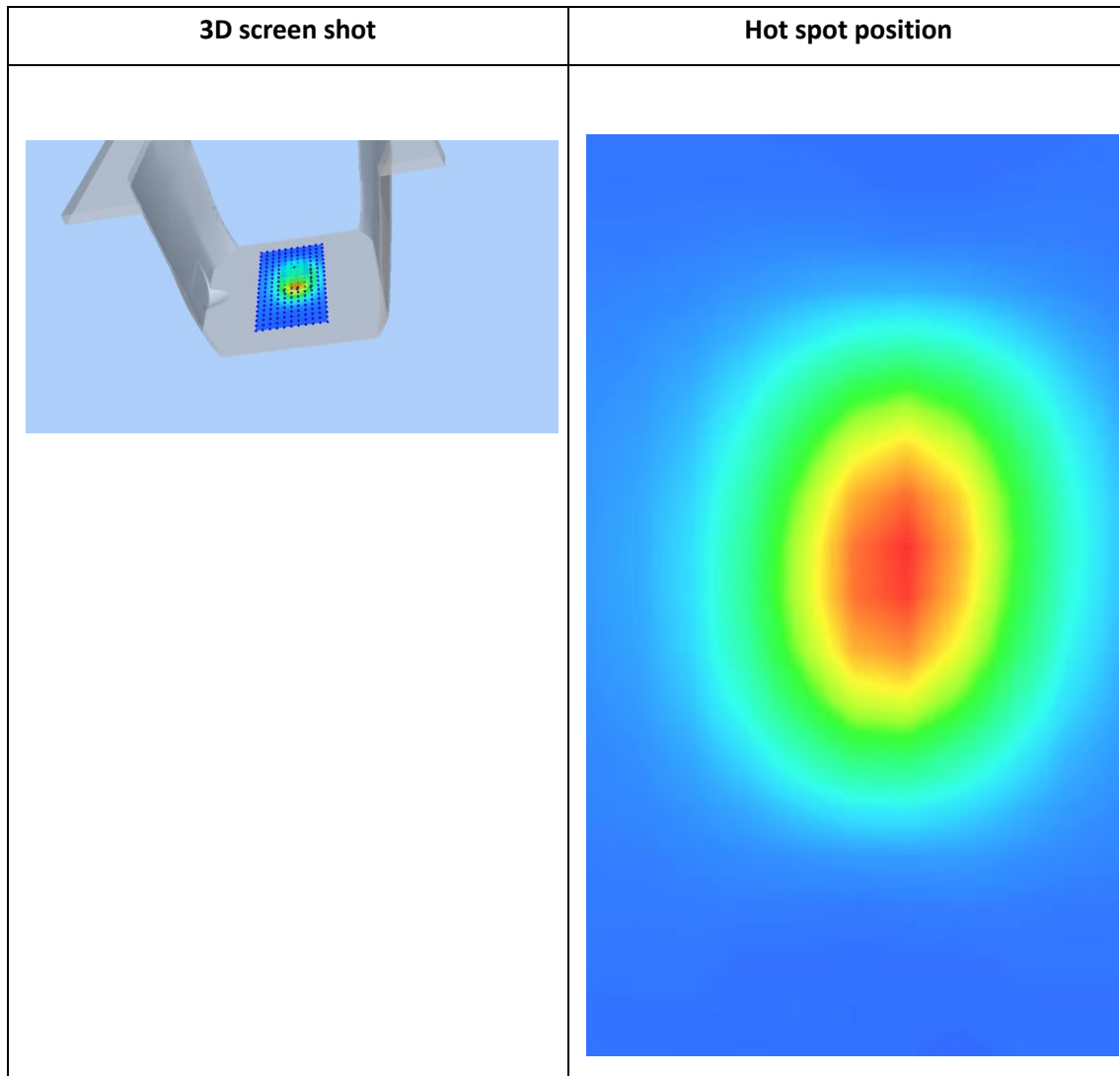
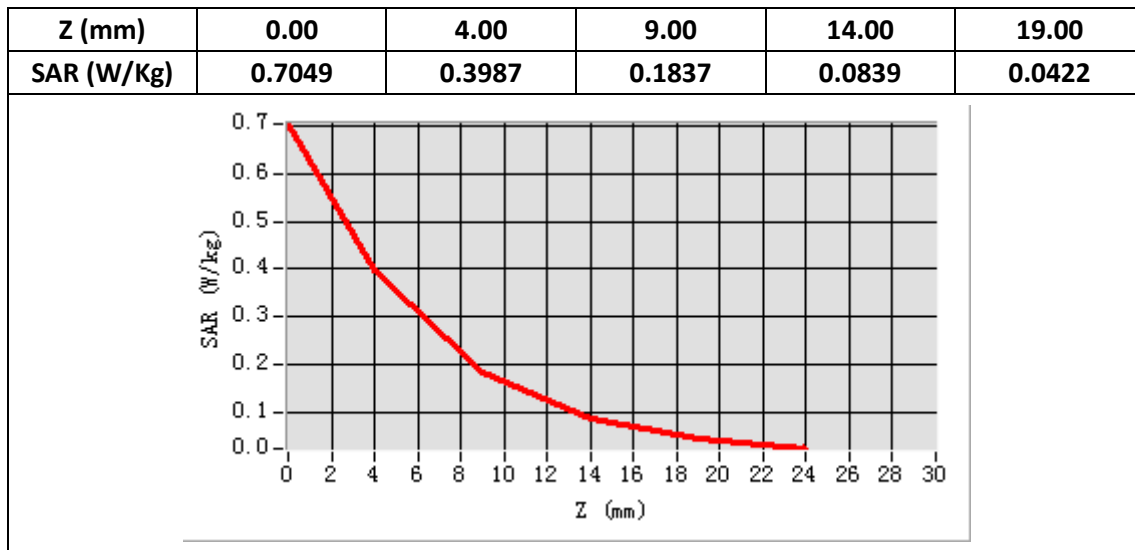
Band SAR

E-Field Probe	SATIMO SN27/15 EPGO261
Frequency (MHz)	1800
Relative permittivity (real part)	40.49
Relative permittivity	14.1
Conductivity (S/m)	1.41
Power Drift (%)	-0.21
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.14
Duty factor:	1:1



Maximum location: X=7.00, Y=6.00

SAR 10g (W/Kg)	0.176029
SAR 1g (W/Kg)	0.370253



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: 03/17/2019

Measurement duration: 22 minutes 46 seconds

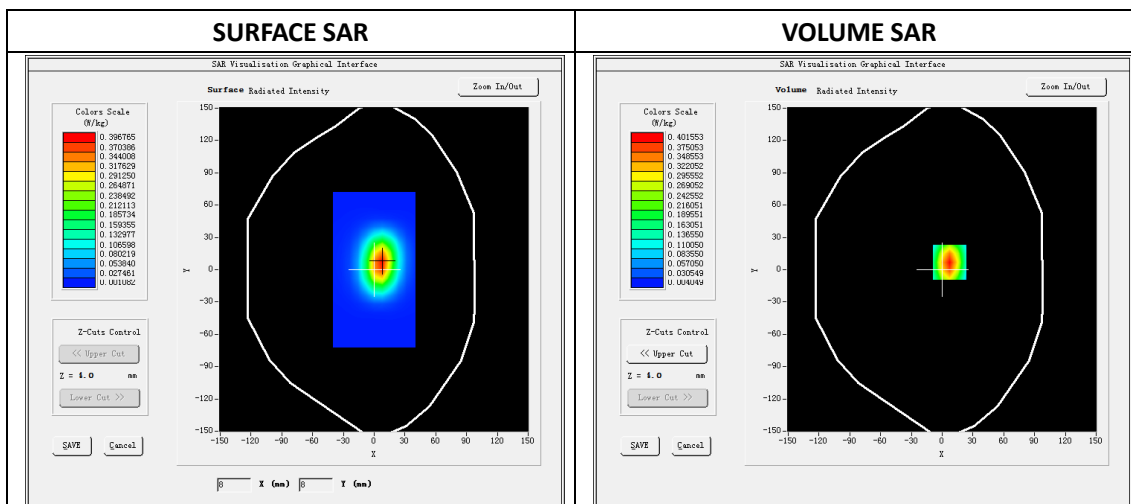
A. Experimental conditions.

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

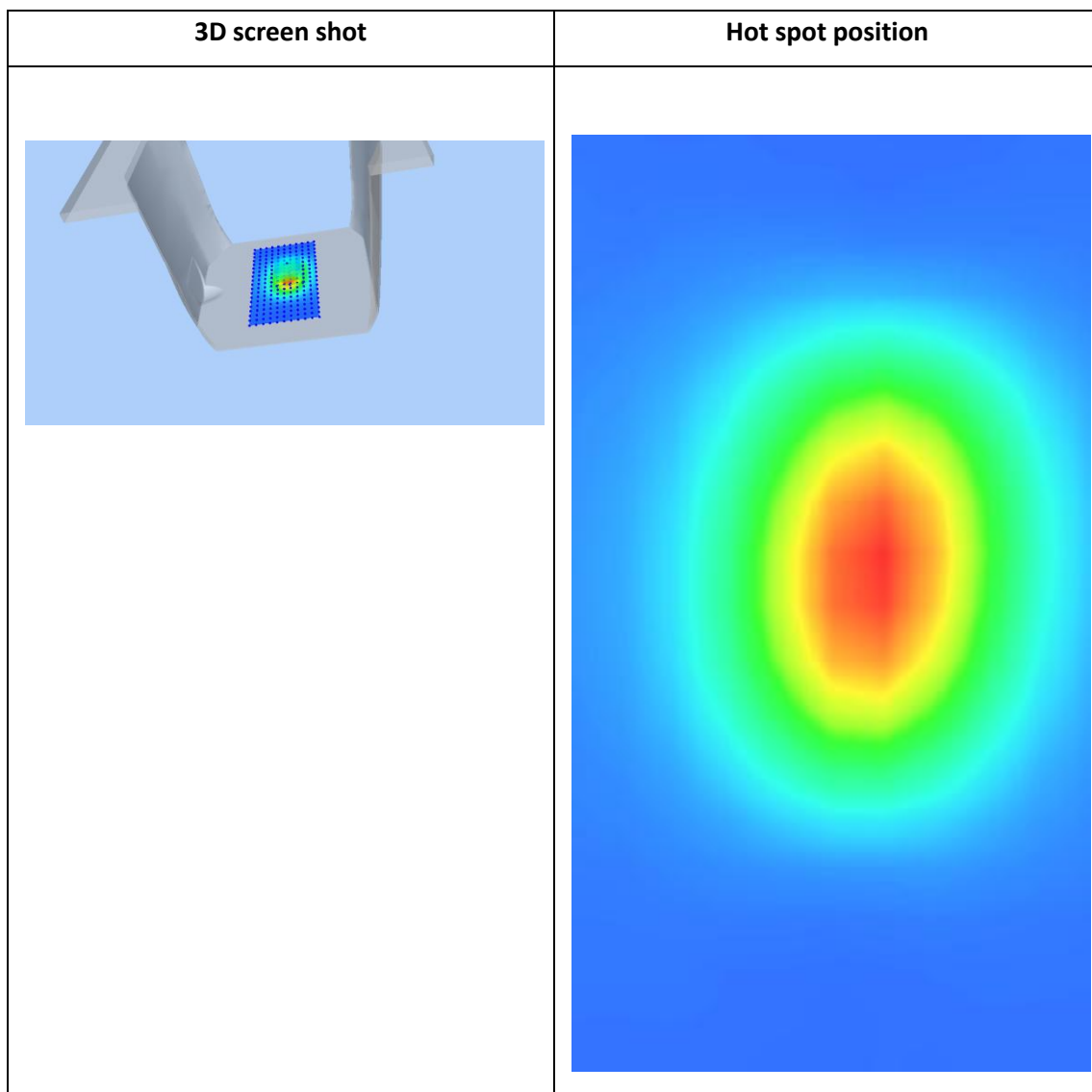
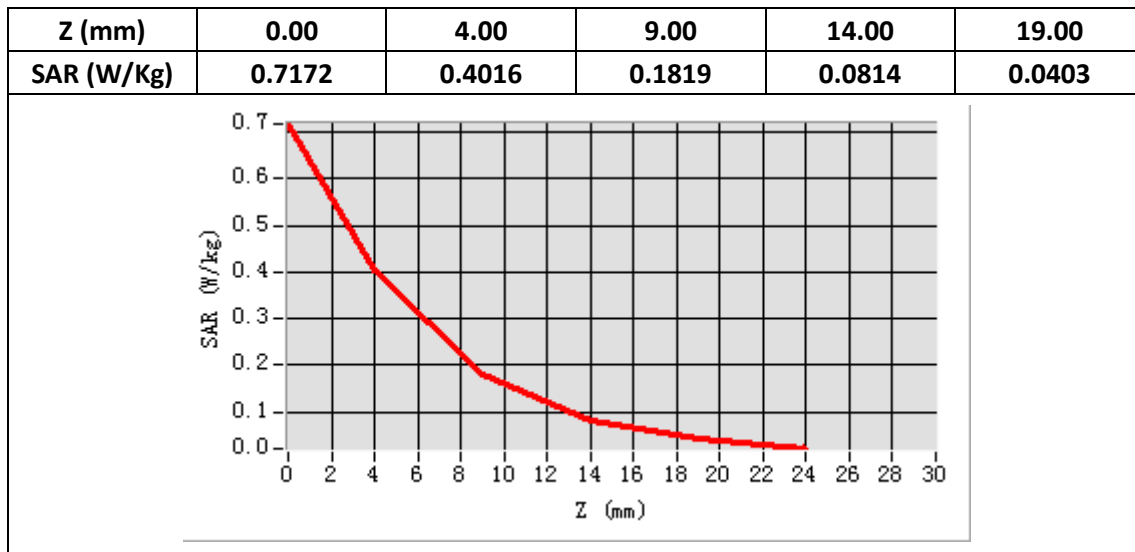
Band SAR

E-Field Probe	SATIMO SN27/15 EPGO261
Frequency (MHz)	1800
Relative permittivity (real part)	53.31
Relative permittivity	15.10
Conductivity (S/m)	1.51
Power Drift (%)	-0.28
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.22
Duty factor:	1:1



Maximum location: X=7.00, Y=7.00

SAR 10g (W/Kg)	0.176701
SAR 1g (W/Kg)	0.373736



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: 03/18/2019

Measurement duration: 22 minutes 33 seconds

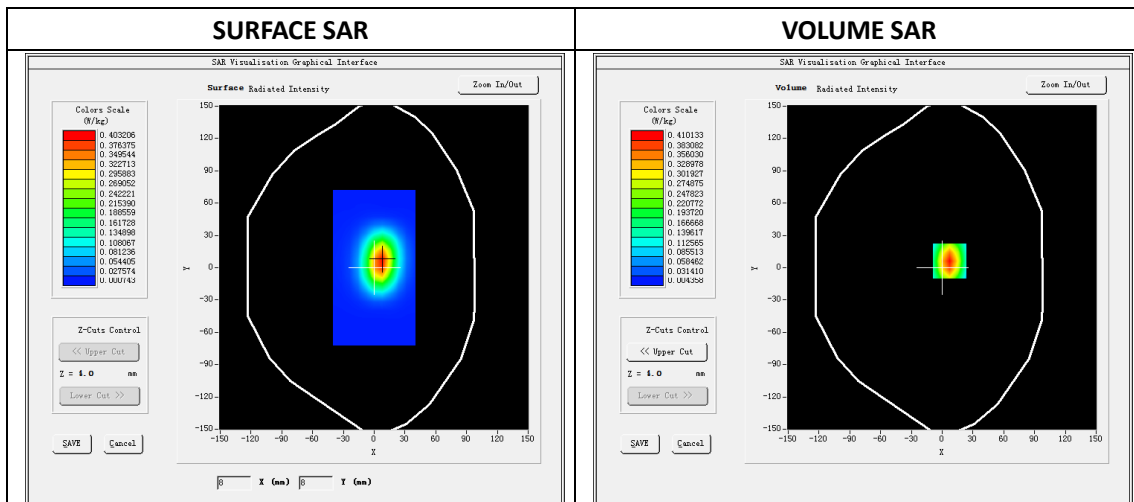
A. Experimental conditions.

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

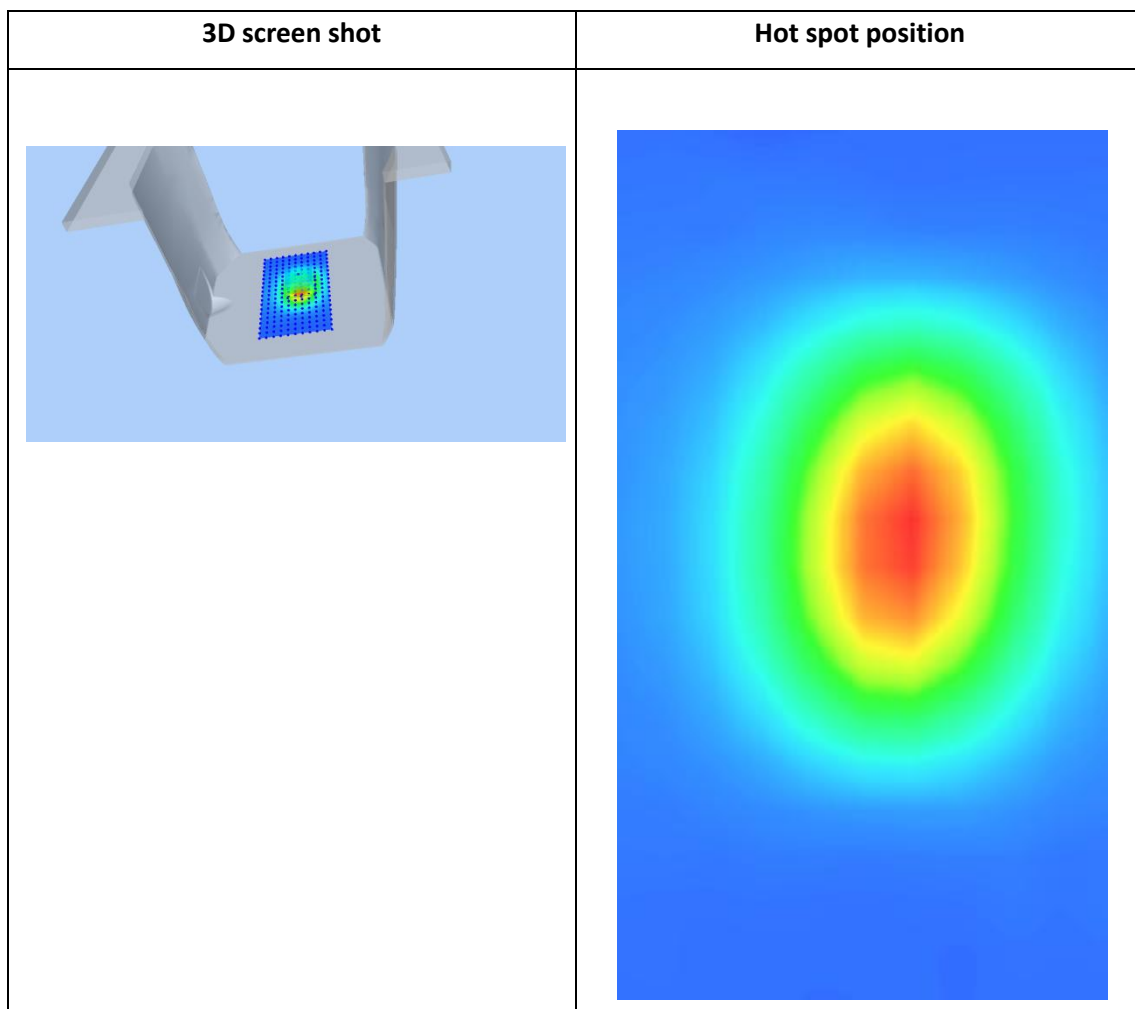
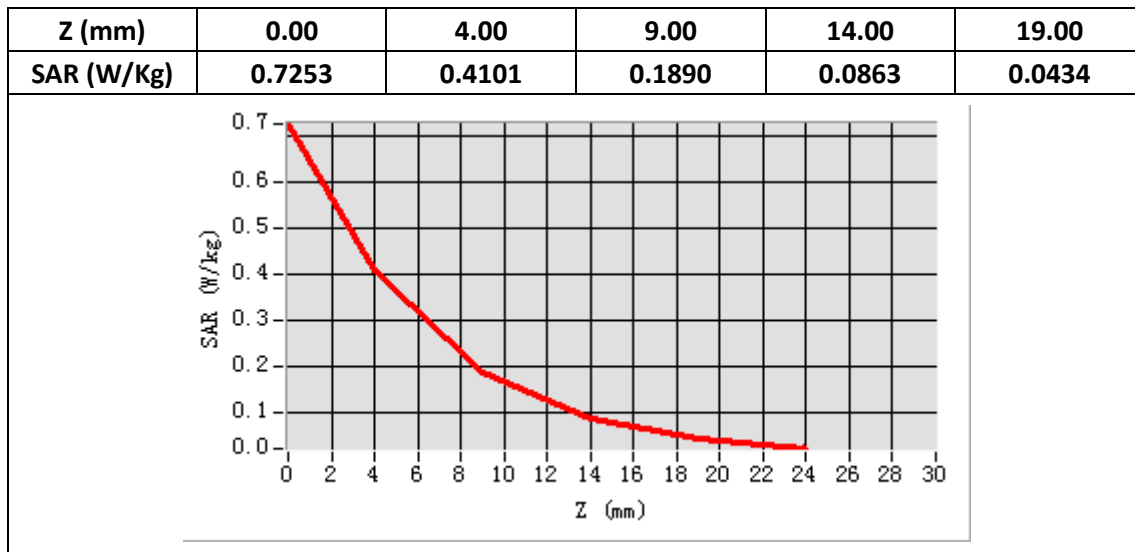
Band SAR

E-Field Probe	SATIMO SN27/15 EPGO261
Frequency (MHz)	1900
Relative permittivity (real part)	40.52
Relative permittivity	13.35
Conductivity (S/m)	1.41
Power Drift (%)	0.11
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.34
Duty factor:	1:1



Maximum location: X=7.00, Y=6.00

SAR 10g (W/Kg)	0.181123
SAR 1g (W/Kg)	0.380926



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: 03/18/2019

Measurement duration: 22 minutes 42 seconds

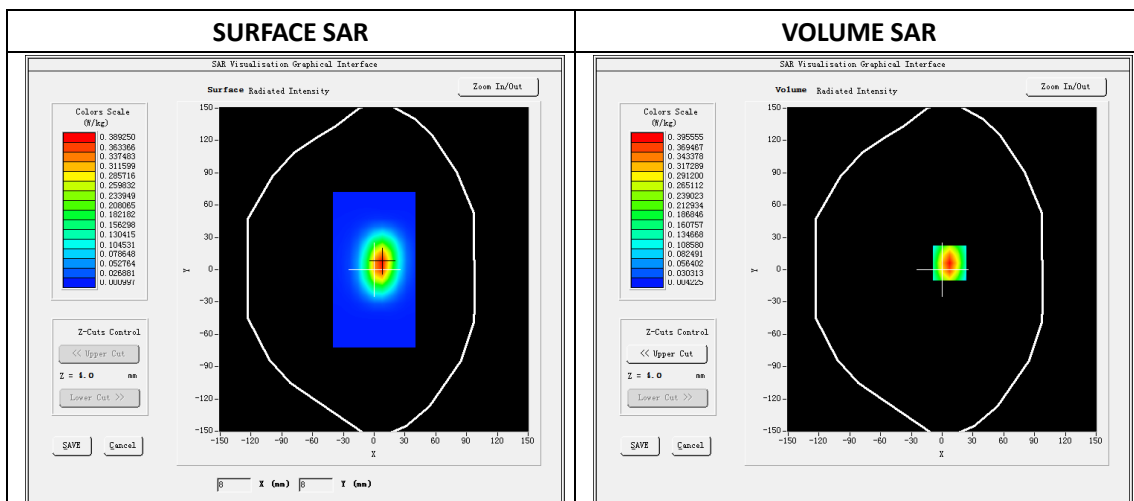
A. Experimental conditions.

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

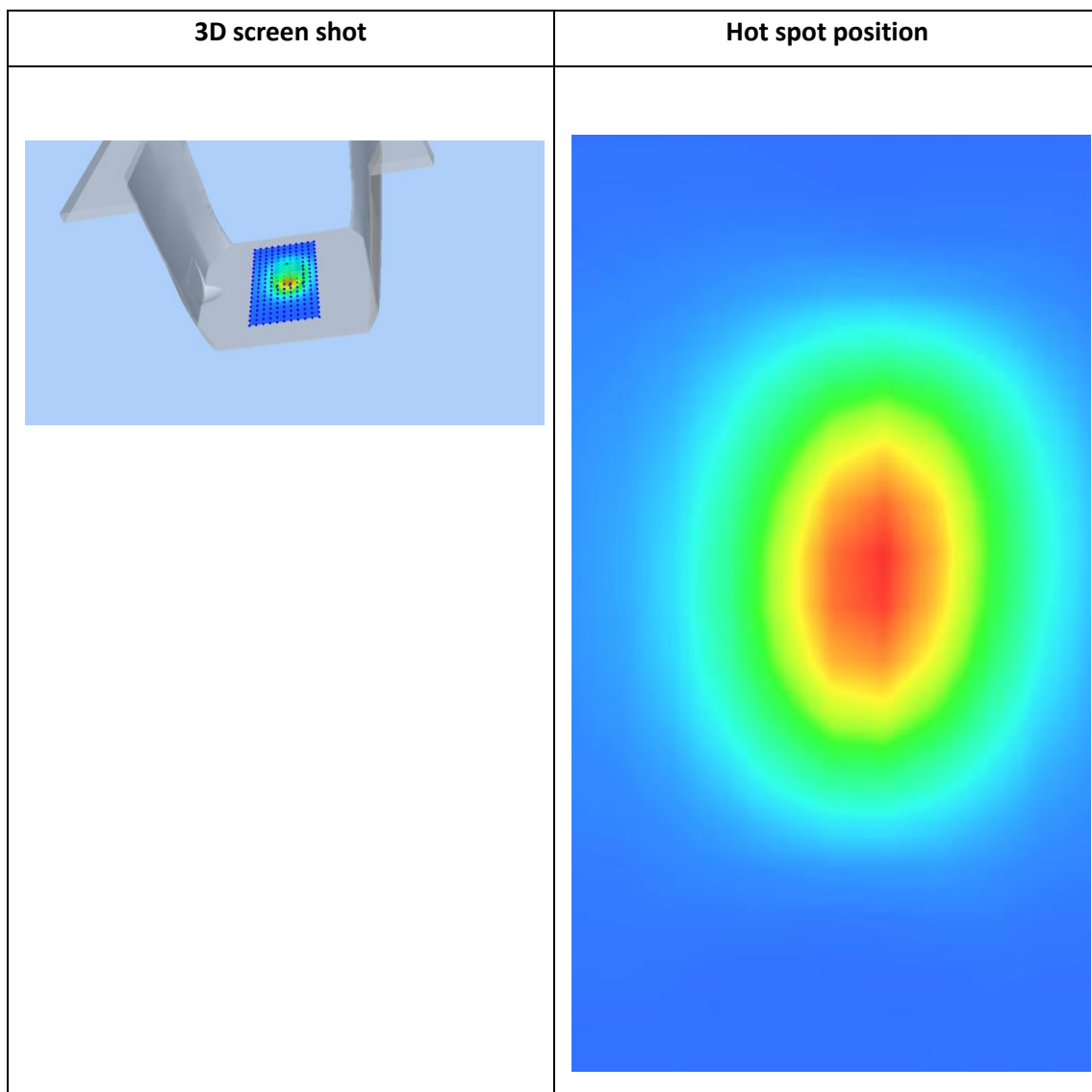
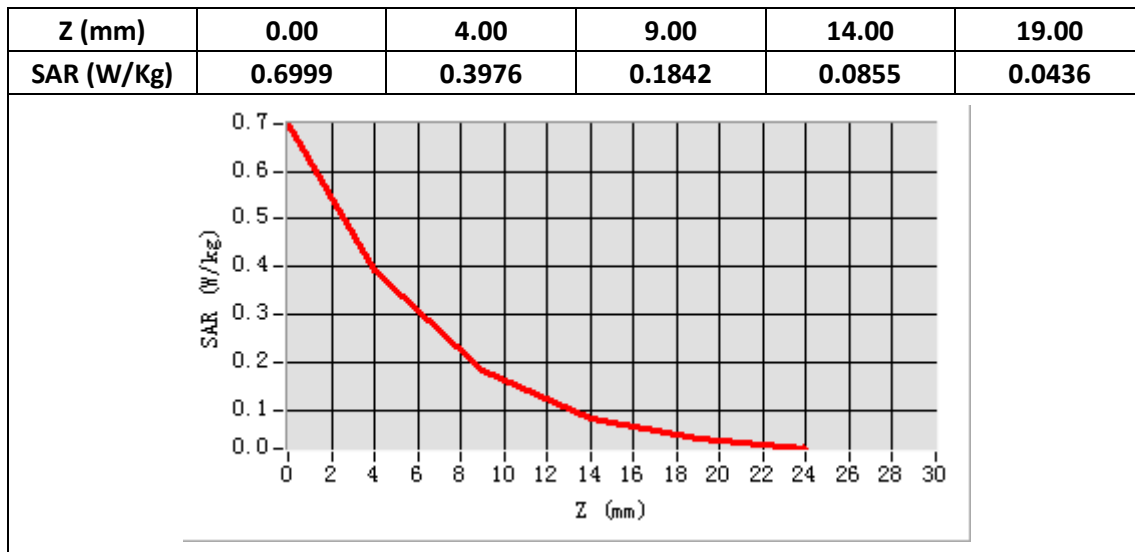
Band SAR

E-Field Probe	SATIMO SN27/15 EPGO261
Frequency (MHz)	1900
Relative permittivity (real part)	53.35
Relative permittivity	14.40
Conductivity (S/m)	1.52
Power Drift (%)	-0.13
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.39
Duty factor:	1:1



Maximum location: X=7.00, Y=6.00

SAR 10g (W/Kg)	0.181243
SAR 1g (W/Kg)	0.385321



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: 03/19/2019

Measurement duration: 22 minutes 43 seconds

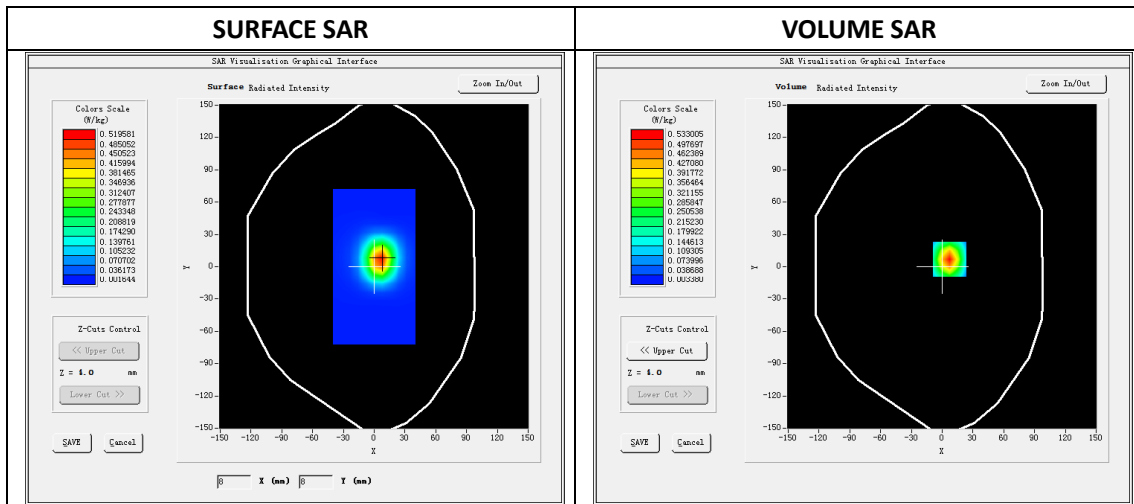
A. Experimental conditions.

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

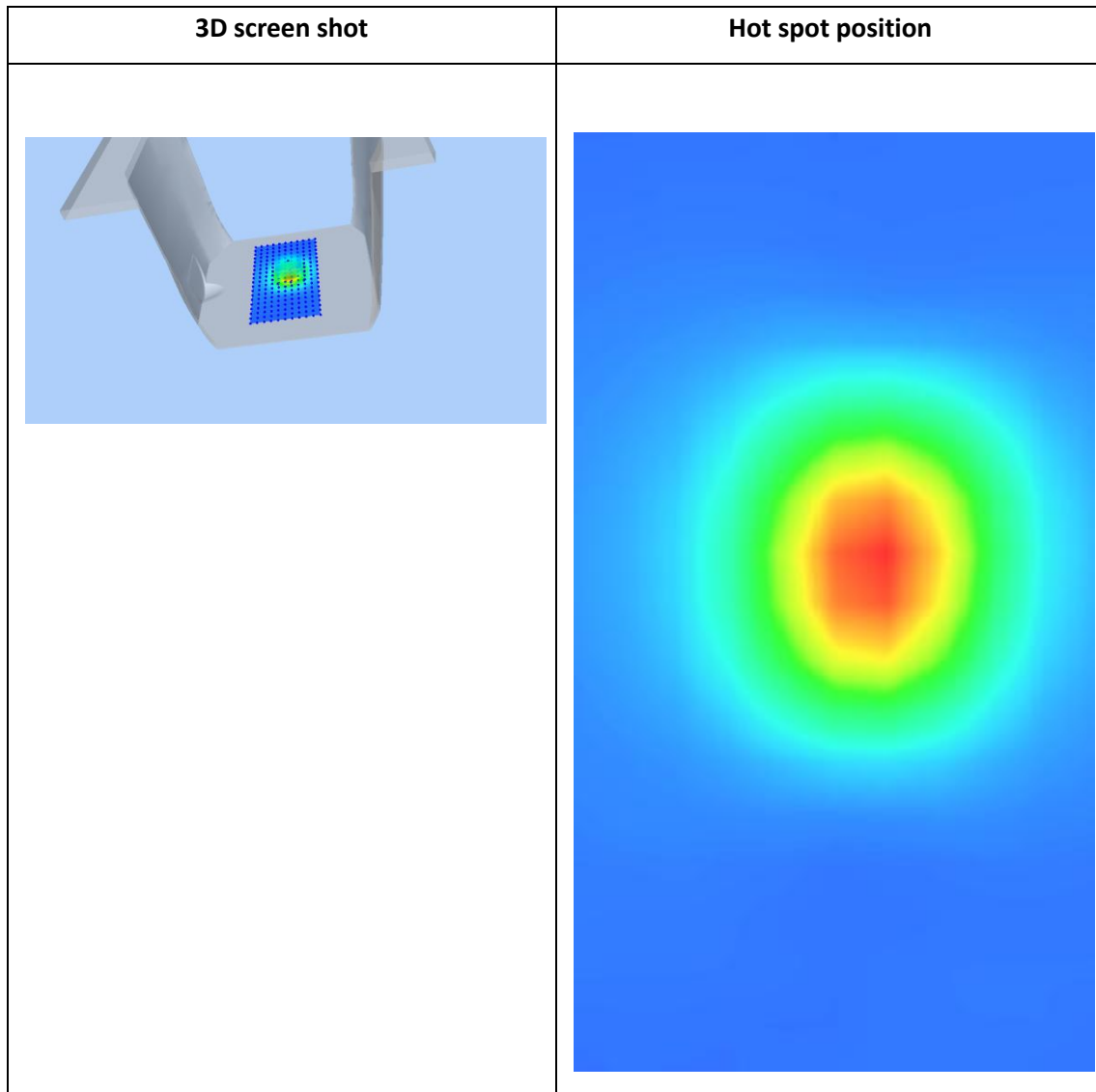
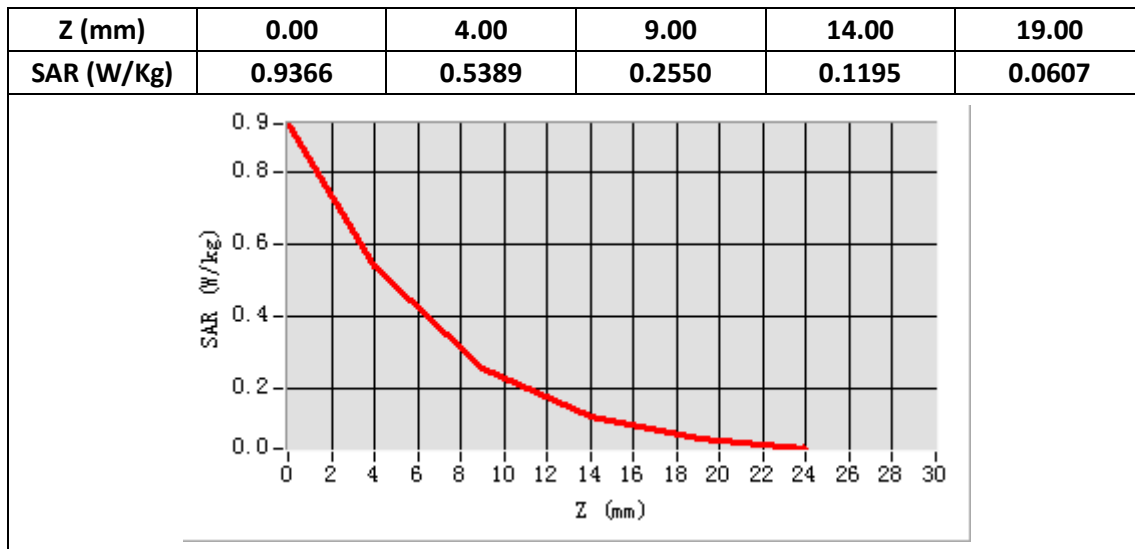
Band SAR

E-Field Probe	SATIMO SN27/15 EPGO261
Frequency (MHz)	2450
Relative permittivity (real part)	39.24
Relative permittivity	13.44
Conductivity (S/m)	1.83
Power Drift (%)	0.22
Duty factor:	1:1
ConvF:	2.37



Maximum location: X=7.00, Y=7.00

SAR 10g (W/Kg)	0.231938
SAR 1g (W/Kg)	0.524811



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: 03/19/2019

Measurement duration: 22 minutes 35 seconds

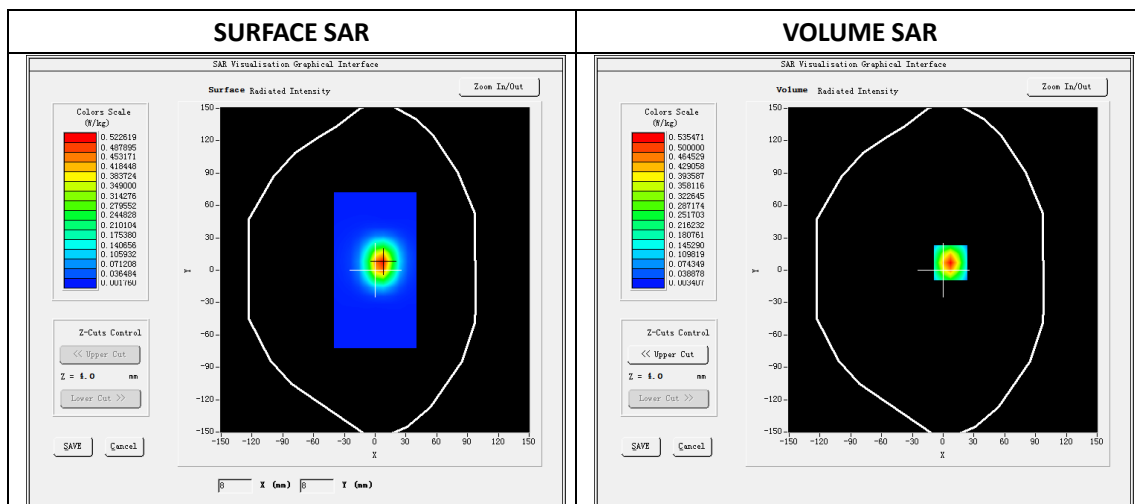
A. Experimental conditions.

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 SN27/15 EPGO261
Frequency (MHz)	2450
Relative permittivity (real part)	52.73
Relative permittivity	14.40
Conductivity (S/m)	1.96
Power Drift (%)	0.09
Duty factor:	1:1
ConvF:	2.46



Maximum location: X=7.00, Y=7.00

SAR 10g (W/Kg)	0.229603
SAR 1g (W/Kg)	0.522180

