



Appendix A: SAR System performance Check Plots

Measurement	Frequency	Test Date
System Check	750	2021-11-20
System Check	835	2021-11-21
System Check	1800	2021-11-22
System Check	1900	2021-11-23
System Check	2450	2021-11-24
System Check	2600	2021-11-24

System Performance Check (750MHz)

Type: Phone measurement

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

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

Date of measurement: 11/20/2021

Measurement duration: 22 minutes 07 seconds

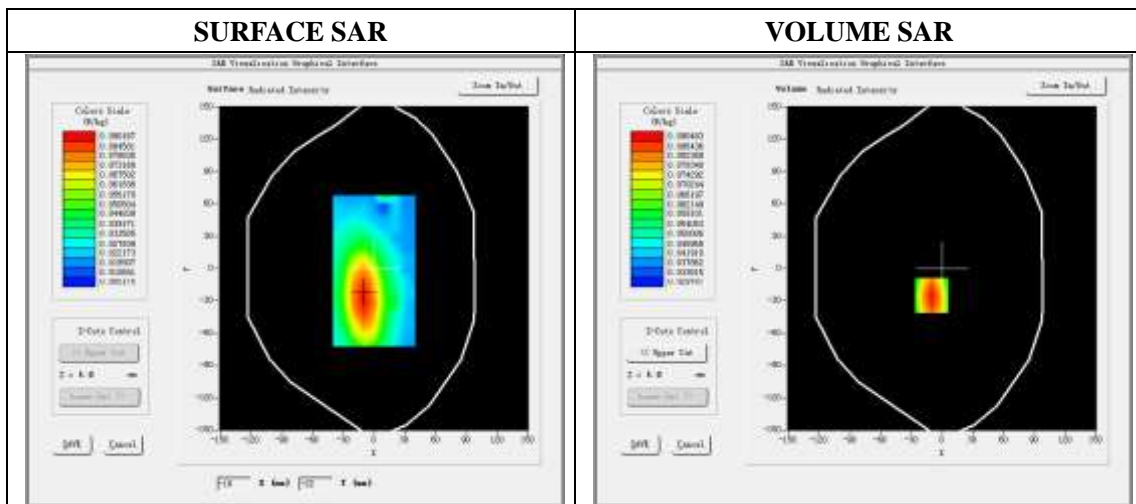
A. Experimental conditions.

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

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	750
Relative permittivity (real part)	43.37
Relative permittivity	20.85
Conductivity (S/m)	0.87
Power drift (%)	-1.67
Ambient Temperature:	22.6 °C
Liquid Temperature:	22.9 °C
ConvF:	1.85
Crest factor:	1:1

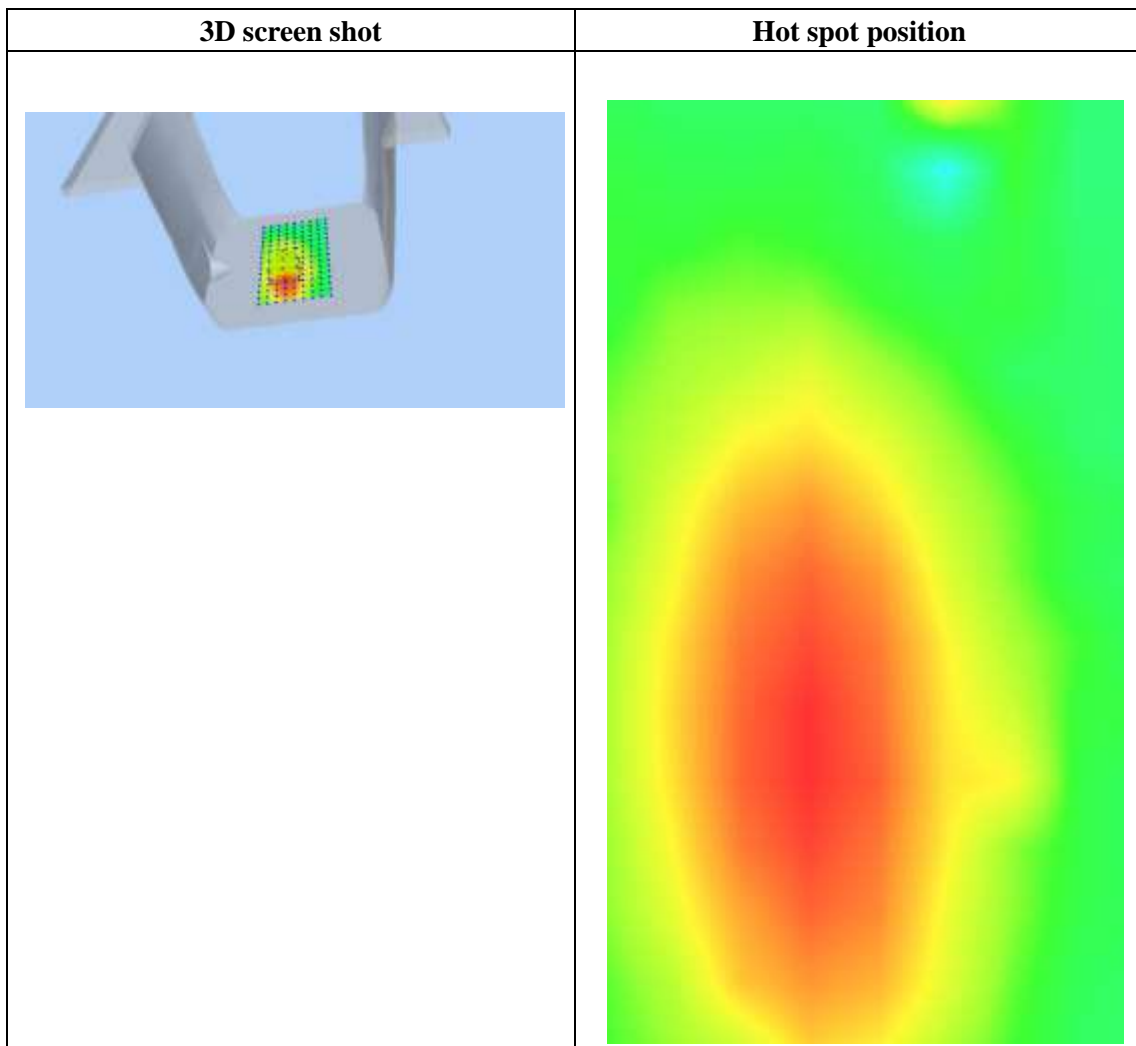
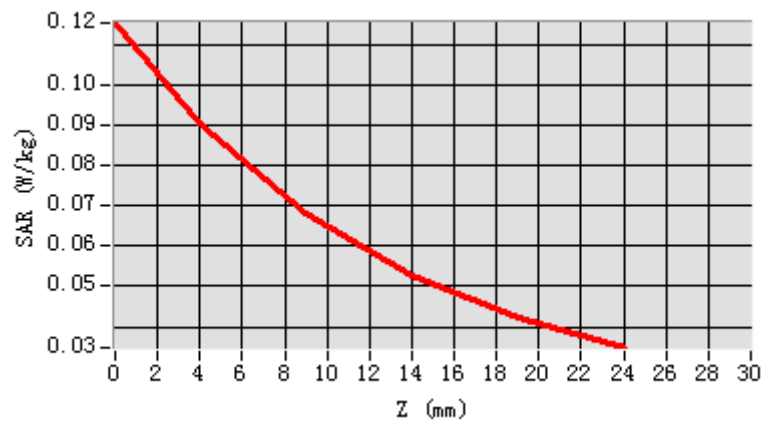


Maximum location: X=-9.00, Y=-24.00

SAR Peak: 0.15 W/kg

SAR 10g (W/Kg)	0.056905
SAR 1g (W/Kg)	0.086138

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1152	0.0905	0.0678	0.0526	0.0424



System Performance Check (835MHz)

Type: Phone measurement

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

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

Date of measurement: 11/21/2021

Measurement duration: 22 minutes 10 seconds

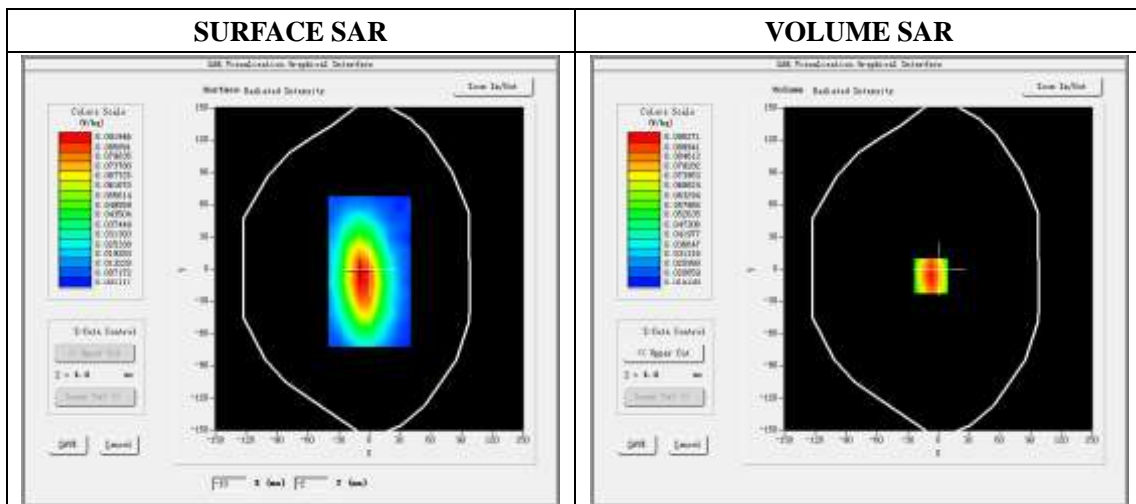
A. Experimental conditions.

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

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	835
Relative permittivity (real part)	42.04
Relative permittivity	19.80
Conductivity (S/m)	0.92
Power drift (%)	-1.05
Ambient Temperature:	22.9 °C
Liquid Temperature:	23.1 °C
ConvF:	1.93
Crest factor:	1:1

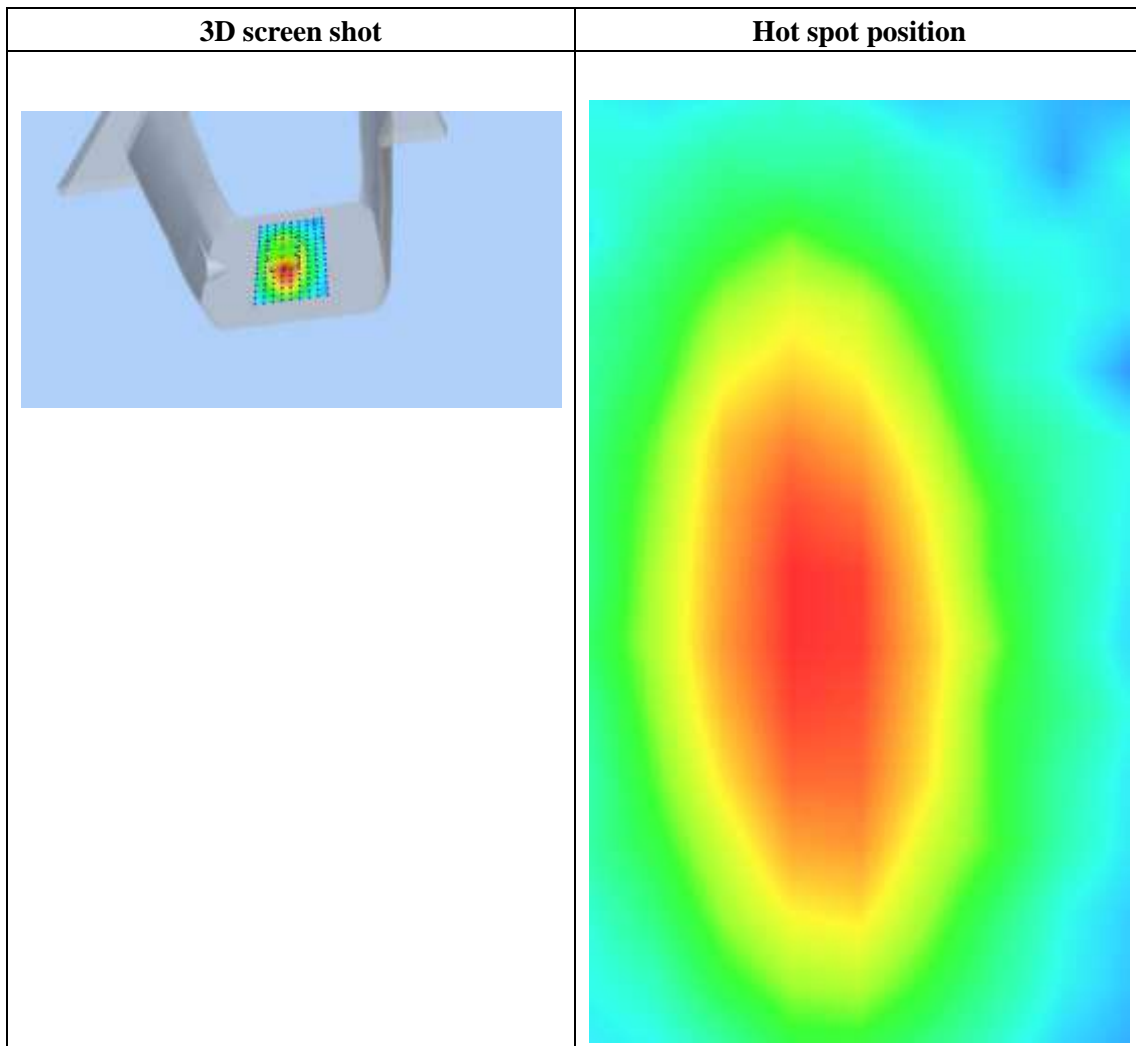
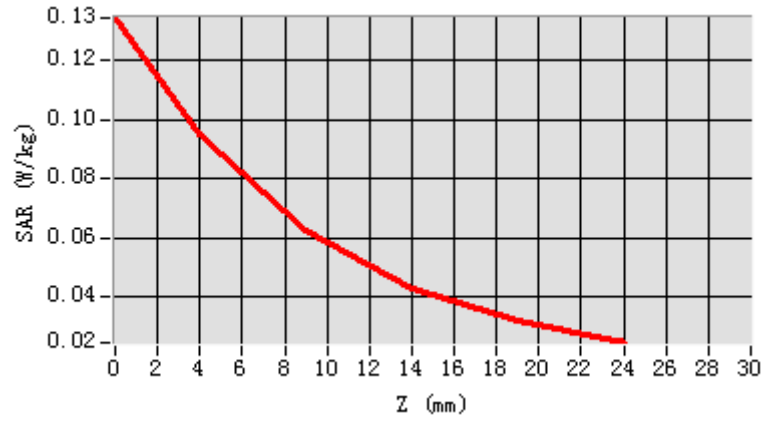


Maximum location: X=-7.00, Y=-6.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.060232
SAR 1g (W/Kg)	0.098541

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1345	0.0953	0.0625	0.0429	0.0317



System Performance Check (1800MHz)

Type: Validation measurement

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

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

Date of measurement: 11/22/2021

Measurement duration: 22 minutes 07 seconds

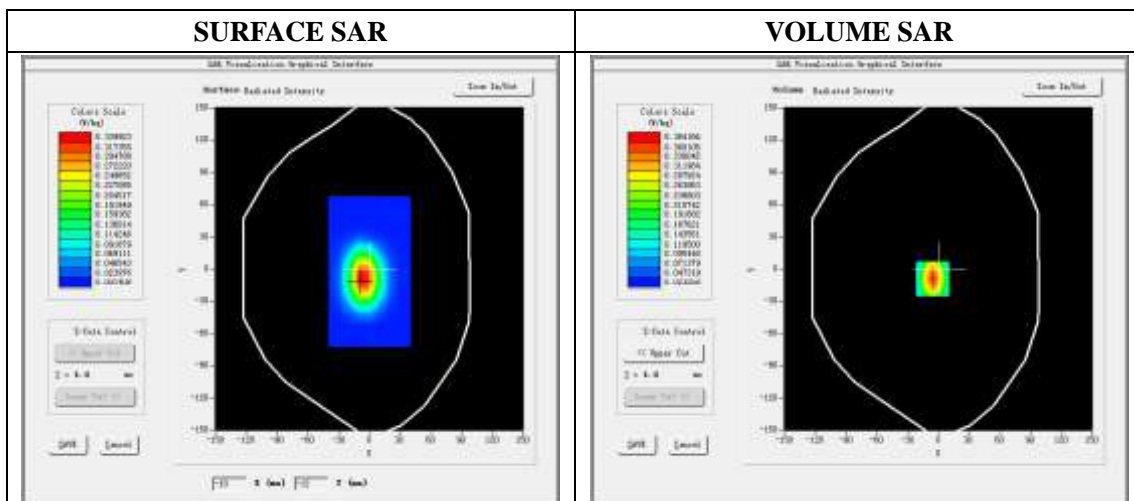
A. Experimental conditions.

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_36/20_EPGO348
Frequency (MHz)	1800
Relative permittivity (real part)	39.62
Relative permittivity	13.98
Conductivity (S/m)	1.40
Power Drift (%)	0.85
Ambient Temperature:	22.4 °C
Liquid Temperature:	22.7 °C
ConvF:	2.17
Duty factor:	1:1

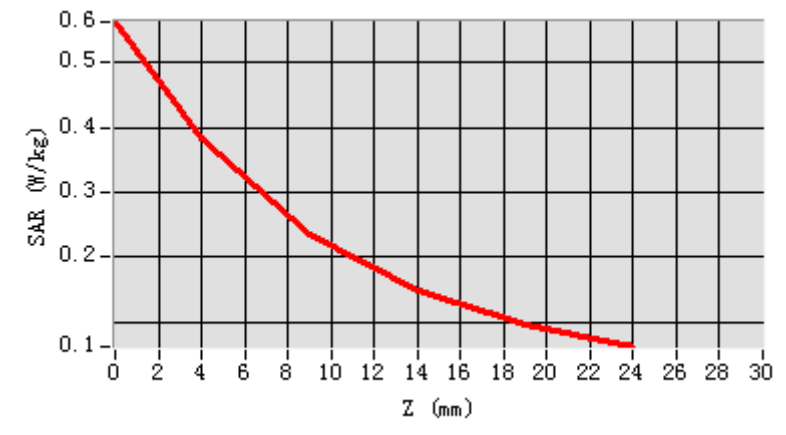


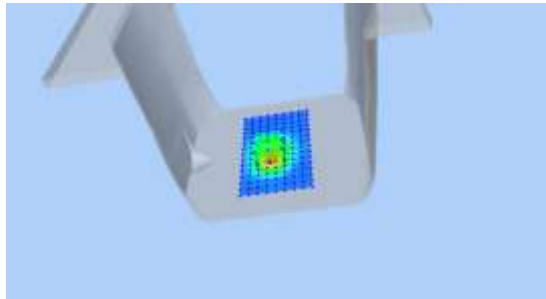
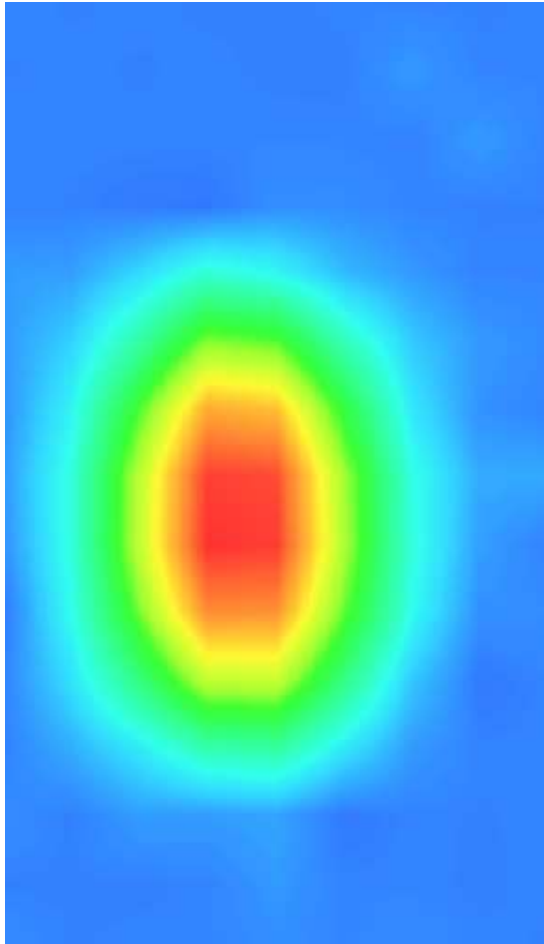
Maximum location: X=-6.00, Y=-9.00

SAR Peak: 0.56 W/kg

SAR 10g (W/Kg)	0.195216
SAR 1g (W/Kg)	0.379504

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5618	0.3842	0.2366	0.1483	0.0968



3D screen shot	Hot spot position
	

System Performance Check (1900MHz)

Type: Validation measurement

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

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

Date of measurement: 11/23/2021

Measurement duration: 22 minutes 05 seconds

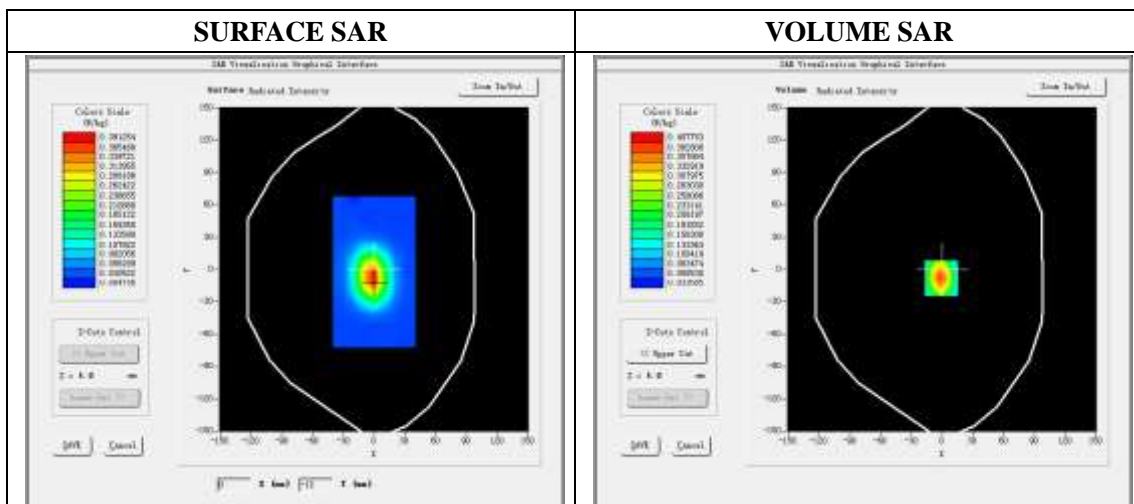
A. Experimental conditions.

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

B. SAR Measurement Results

Band SAR

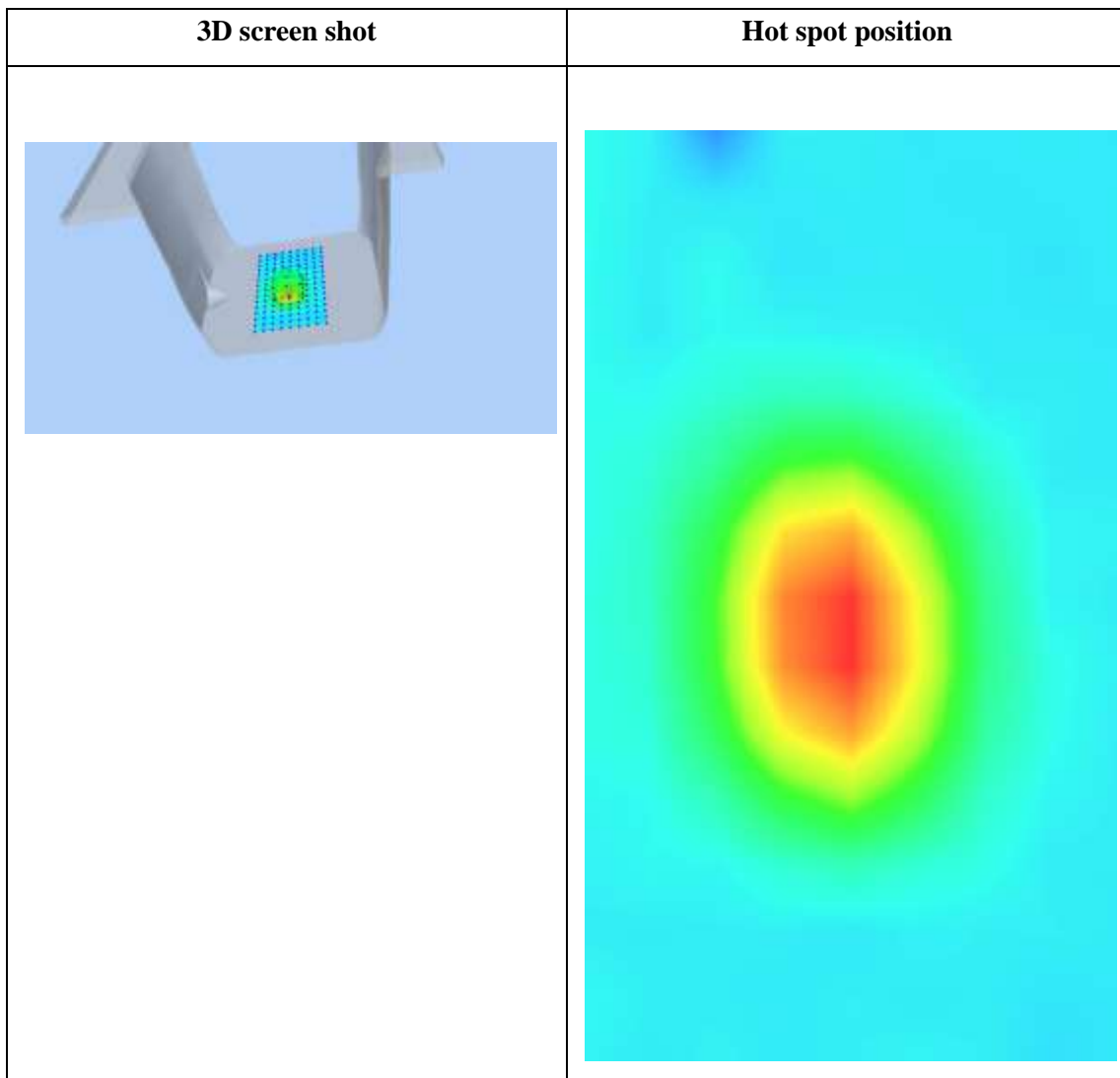
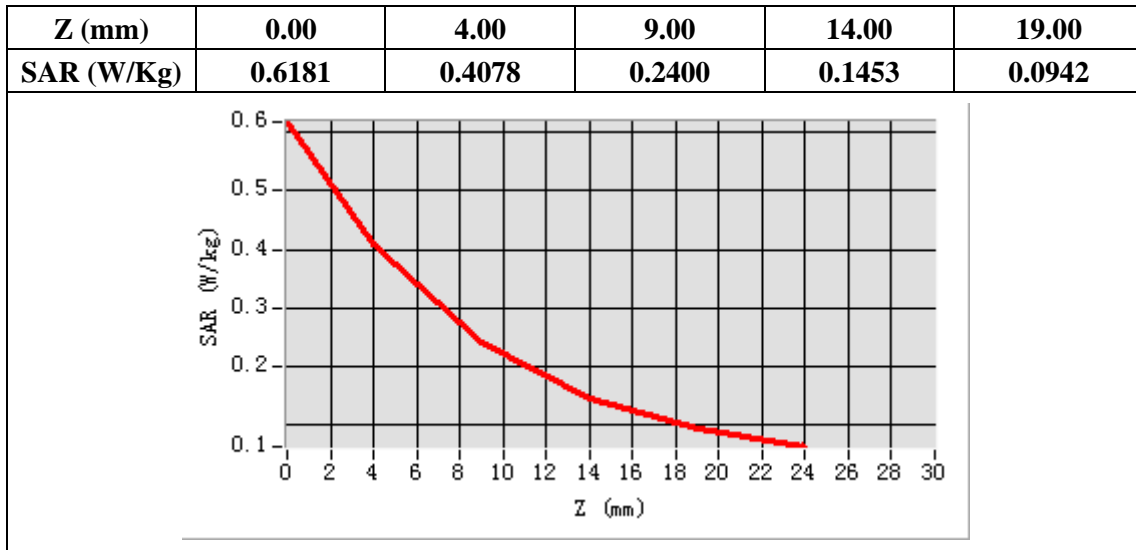
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	1900
Relative permittivity (real part)	39.04
Relative permittivity	13.53
Conductivity (S/m)	1.43
Power Drift (%)	-1.28
Ambient Temperature:	22.7 °C
Liquid Temperature:	22.9 °C
ConvF:	2.40
Duty factor:	1:1



Maximum location: X=-2.00, Y=-9.00

SAR Peak: 0.60 W/kg

SAR 10g (W/Kg)	0.208427
SAR 1g (W/Kg)	0.406132



System Performance Check (2450MHz)

Type: Phone measurement

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

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

Date of measurement: 11/24/2021

Measurement duration: 22 minutes 53 seconds

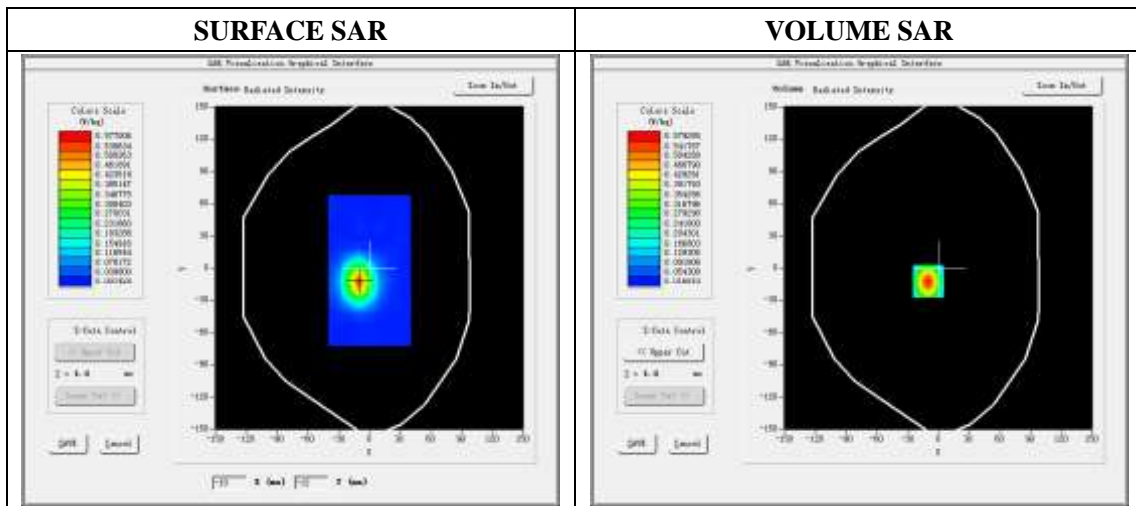
A. Experimental conditions.

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_36/20_EPGO348
Frequency (MHz)	2450
Relative permittivity (real part)	38.73
Relative permittivity	13.28
Conductivity (S/m)	1.81
Power Drift (%)	-2.14
Ambient Temperature:	22.3 °C
Liquid Temperature:	22.6 °C
ConvF:	2.40
Duty factor:	1:1

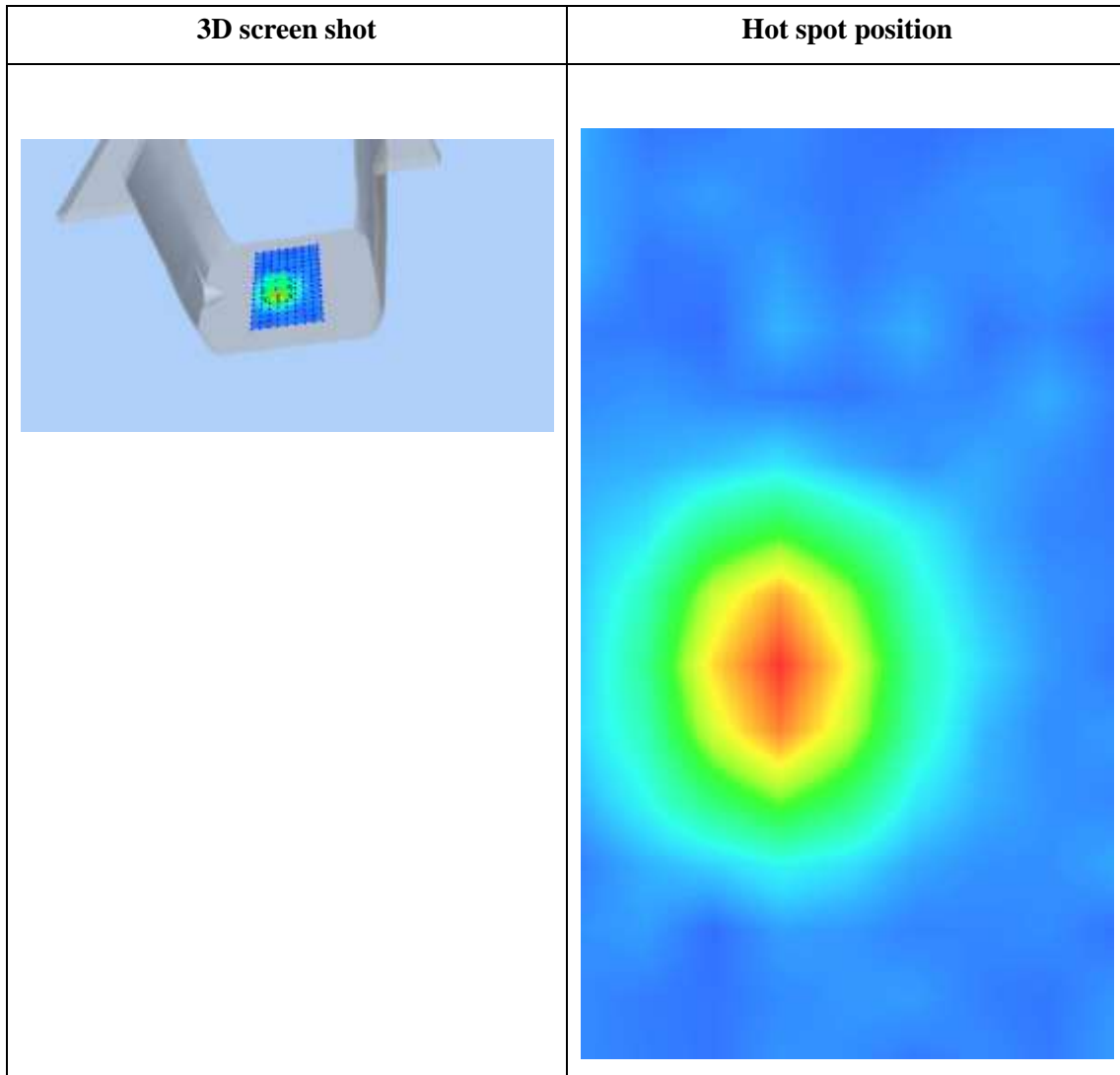
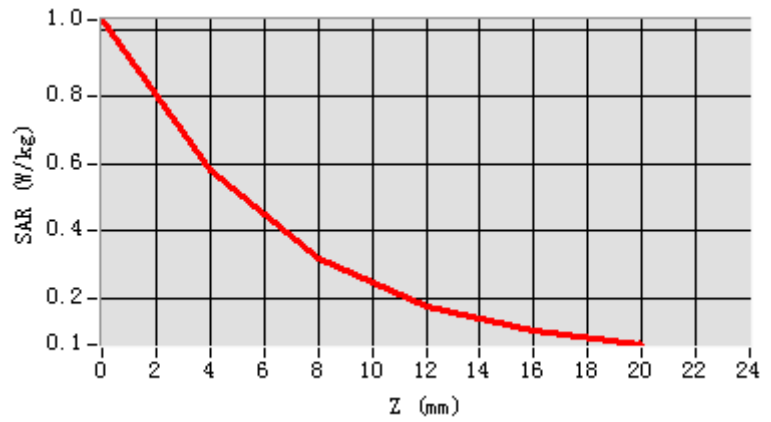


Maximum location: X=-10.00, Y=-12.00

SAR Peak: 1.03 W/kg

SAR 10g (W/Kg)	0.242841
SAR 1g (W/Kg)	0.539206

Z (mm)	0.00	4.00	8.00	12.00	16.00
SAR (W/Kg)	1.0277	0.5793	0.3165	0.1748	0.1023



System Performance Check (2600MHz)

Type: Phone measurement

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

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

Date of measurement: 11/24/2021

Measurement duration: 22 minutes 54 seconds

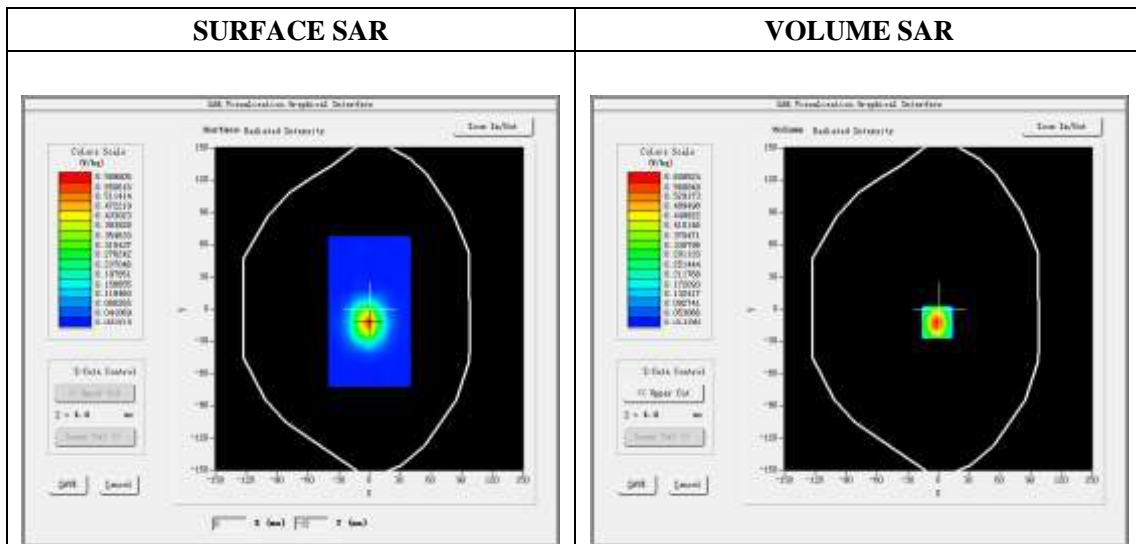
A. Experimental conditions.

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_36/20_EPGO348
Frequency (MHz)	2600
Relative permittivity (real part)	38.02
Relative permittivity	13.41
Conductivity (S/m)	1.94
Power drift (%)	-1.85
Ambient Temperature:	22.3 °C
Liquid Temperature:	22.6 °C
ConvF:	2.29
Crest factor:	1:1



Maximum location: X=-1.00, Y=-12.00

SAR Peak: 1.11 W/kg

SAR 10g (W/Kg)	0.240817
SAR 1g (W/Kg)	0.571633

Z (mm)	0.00	4.00	8.00	12.00	16.00
SAR (W/Kg)	1.1045	0.6085	0.3224	0.1712	0.0960

