

Appendix A: SAR System performance Check Plots

Measurement	Liquid	Frequency	Test Date
System Check	Body	835	2021-08-13
System Check	Body	2450	2021-08-16
System Check	Body	2600	2021-08-16
System Check	Body	5200	2021-08-17
System Check	Body	5400	2021-08-17
System Check	Body	5600	2021-08-18
System Check	Body	5800	2021-08-18

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: 08/13/2021

Measurement duration: 22 minutes 09 seconds

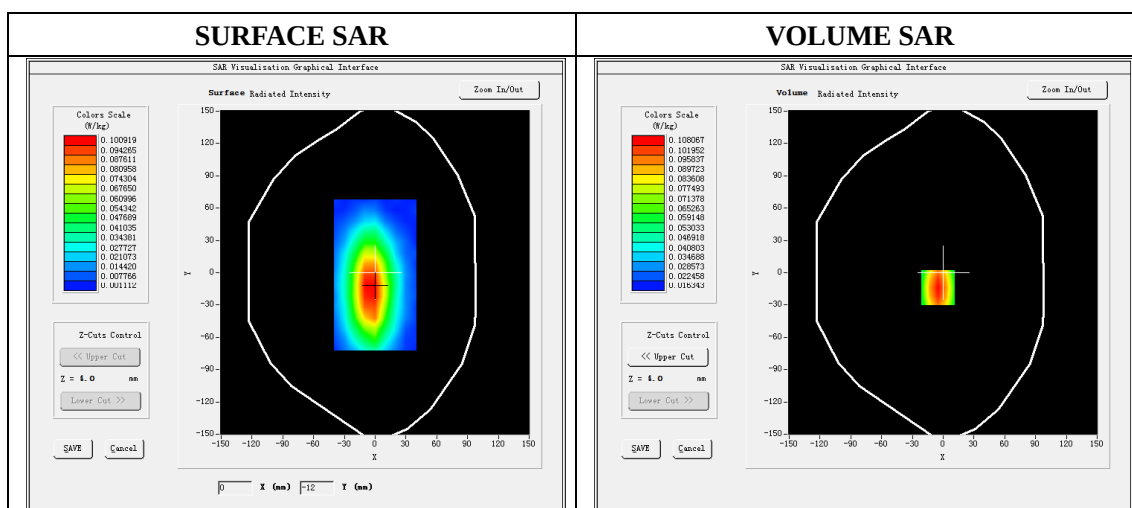
A. Experimental conditions.

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

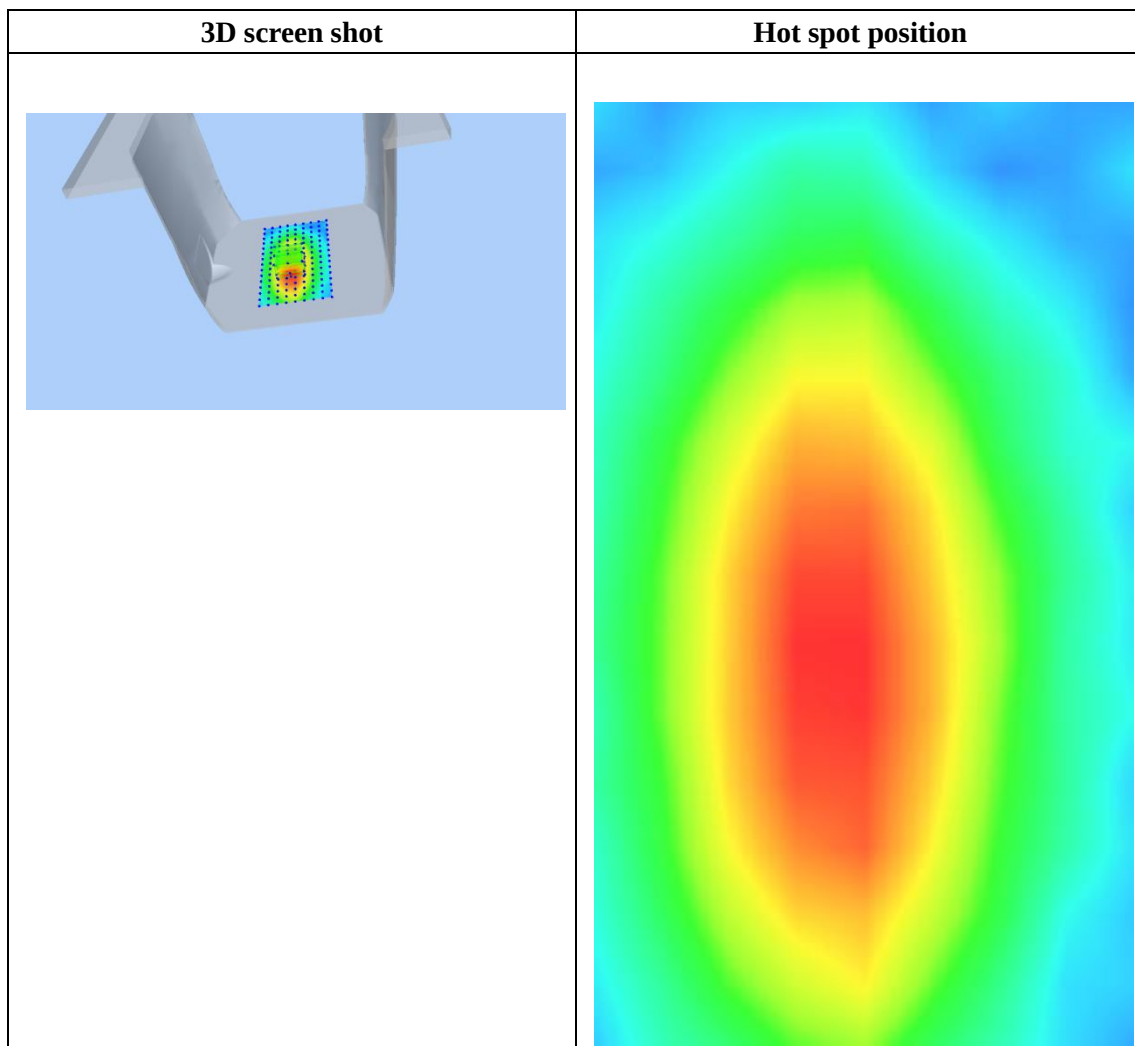
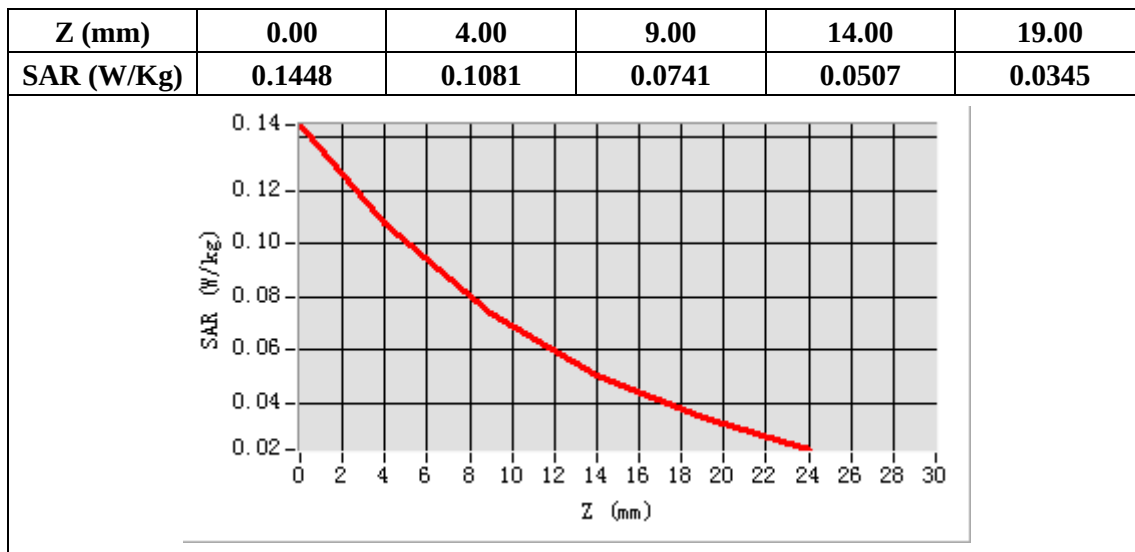
E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	835
Relative permittivity (real part)	55.28
Relative permittivity	21.34
Conductivity (S/m)	0.99
Power drift (%)	-1.37
Ambient Temperature:	22.2 °C
Liquid Temperature:	22.6 °C
ConvF:	1.90
Crest factor:	1:1



Maximum location: X=-5.00, Y=-14.00

SAR Peak: 0.15 W/kg

SAR 10g (W/Kg)	0.067844
SAR 1g (W/Kg)	0.104294



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: 08/16/2021

Measurement duration: 22 minutes 04 seconds

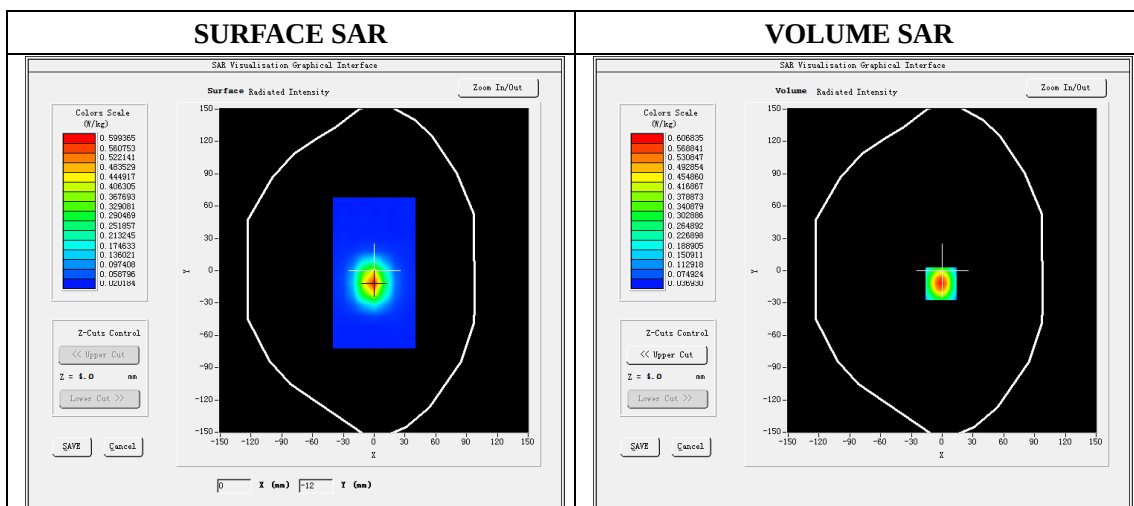
A. Experimental conditions.

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

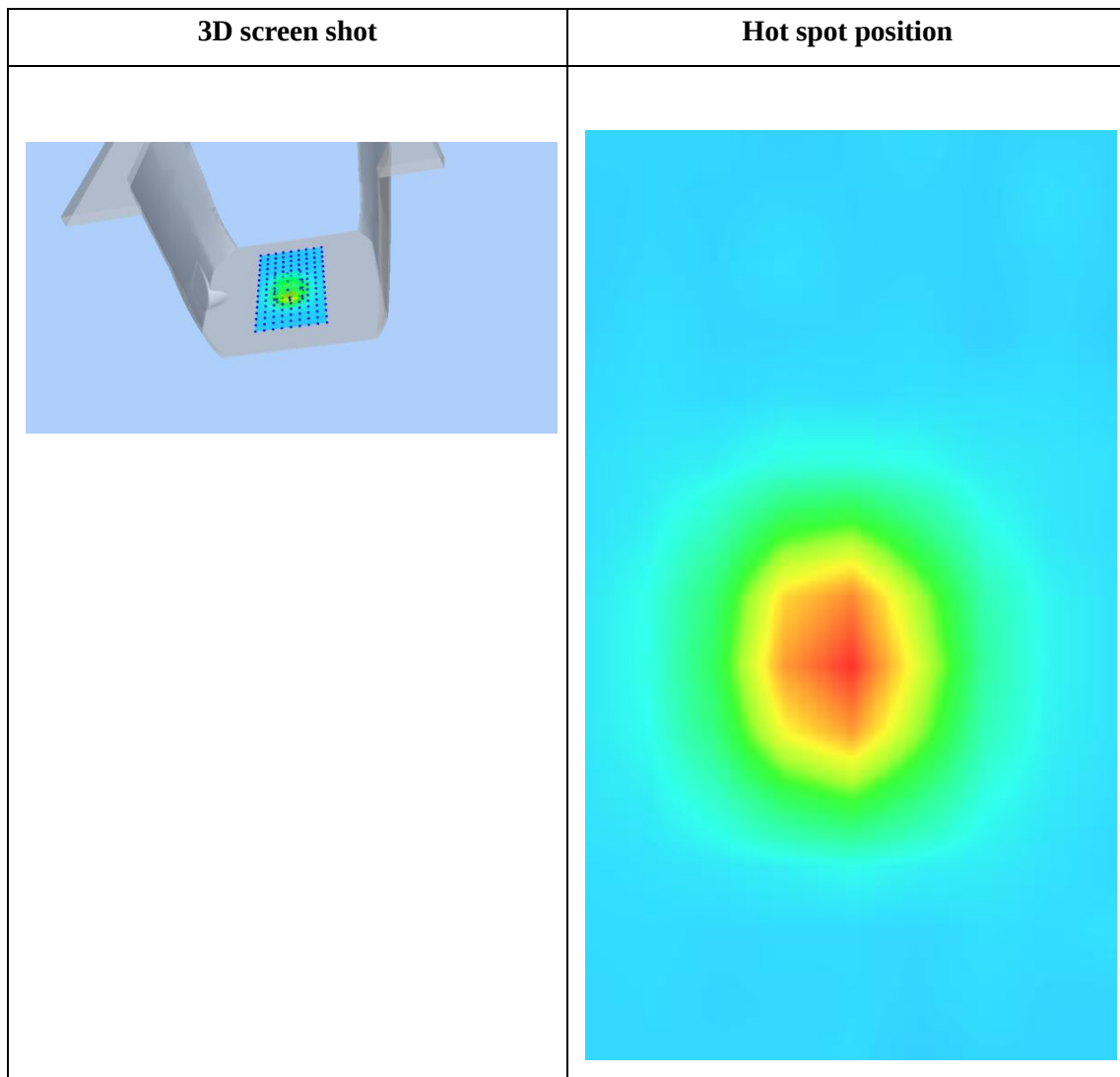
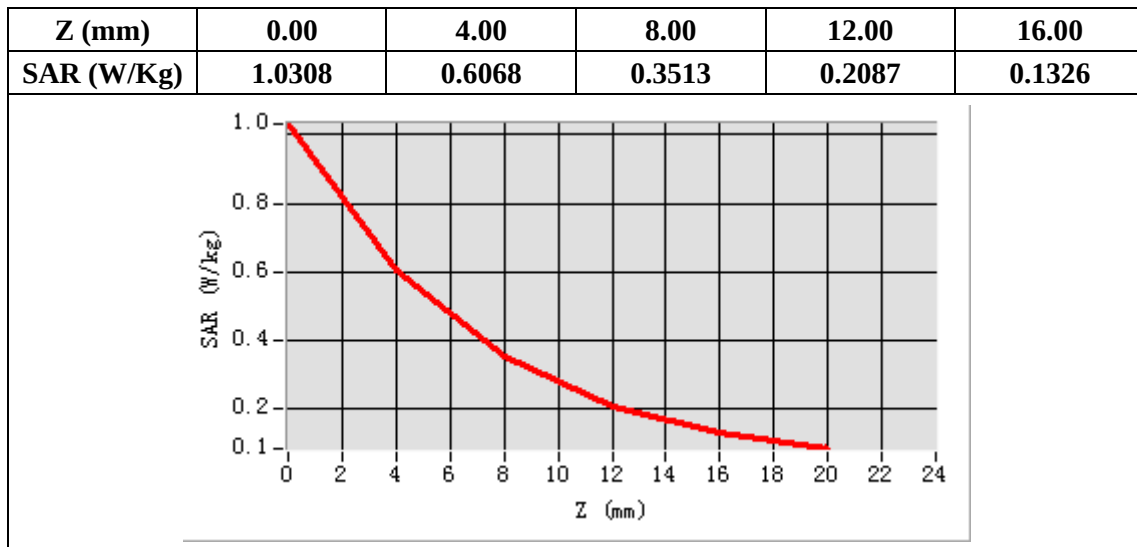
E-Field Probe	SATIMO SN_36/20_EPG0348
Frequency (MHz)	2450
Relative permittivity (real part)	52.74
Relative permittivity	14.47
Conductivity (S/m)	1.97
Power Drift (%)	-0.79
Ambient Temperature:	22.1 °C
Liquid Temperature:	22.6 °C
ConvF:	2.47
Duty factor:	1:1



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

SAR Peak: 1.03 W/kg

SAR 10g (W/Kg)	0.270394
SAR 1g (W/Kg)	0.551344



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: 08/16/2021

Measurement duration: 22 minutes 06 seconds

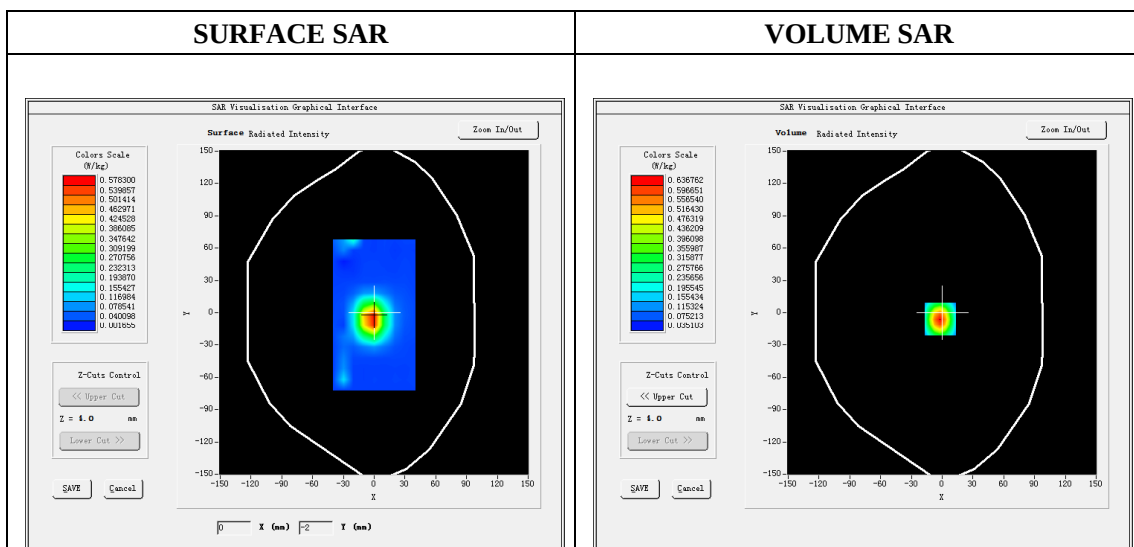
A. Experimental conditions.

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

B. SAR Measurement Results

Band SAR

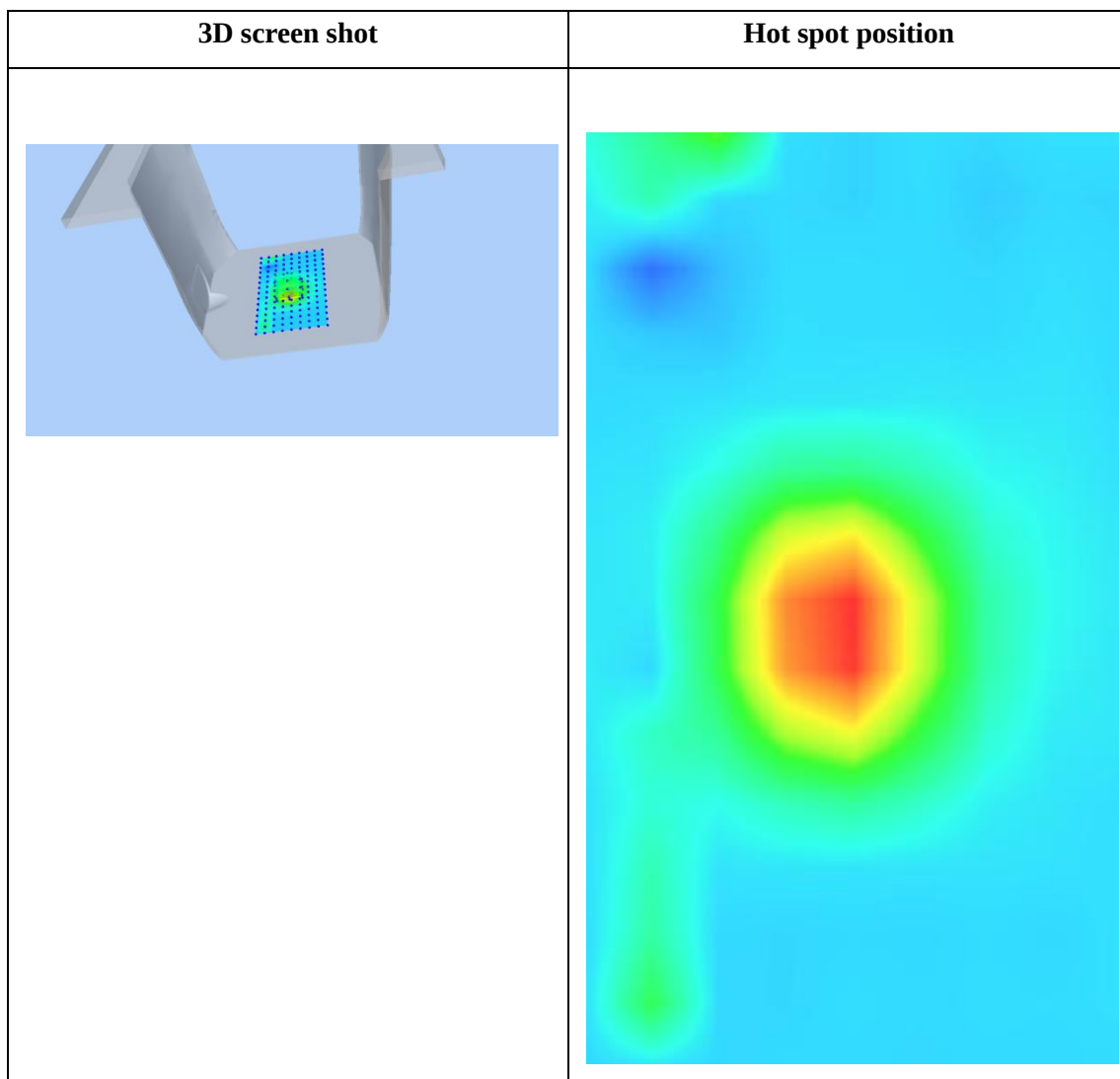
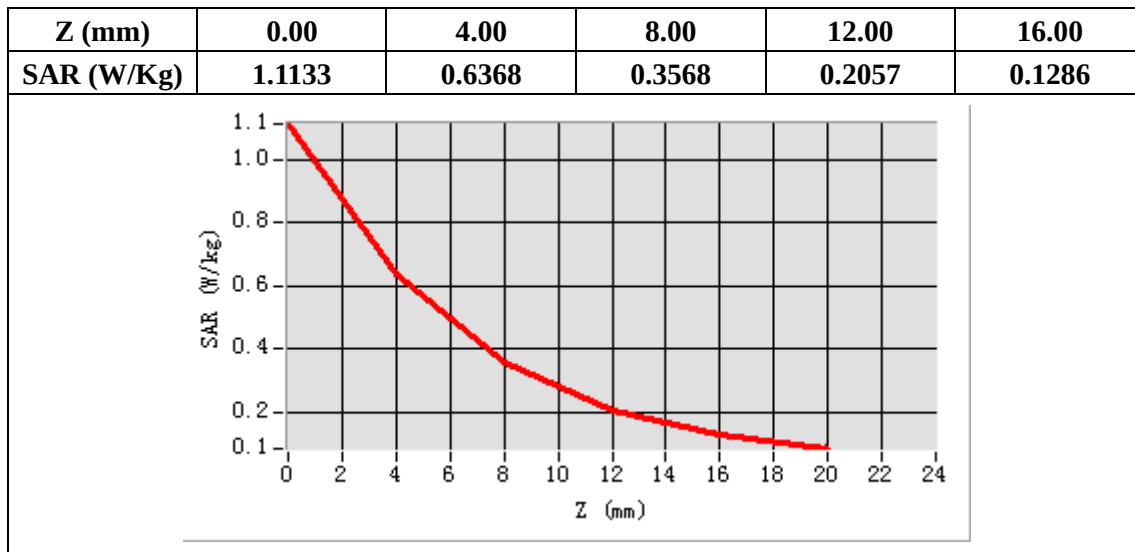
E-Field Probe	SATIMO SN_36/20_EPG0348
Frequency (MHz)	2600
Relative permittivity (real part)	52.52
Relative permittivity	14.95
Conductivity (S/m)	2.16
Power drift (%)	-1.20
Ambient Temperature:	22.2 °C
Liquid Temperature:	22.5 °C
Crest factor:	1:1
ConvF:	2.25



Maximum location: X=-2.00, Y=-6.00

SAR Peak: 1.11 W/kg

SAR 10g (W/Kg)	0.274151
SAR 1g (W/Kg)	0.572672



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: 08/17/2021

Measurement duration: 22 minutes 08 seconds

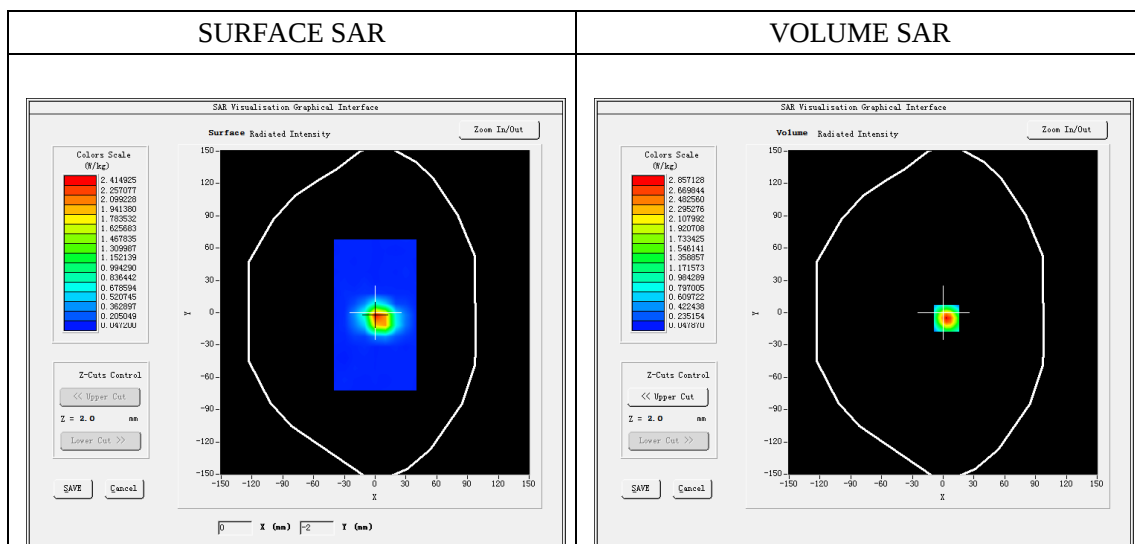
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=4mm dy=4mm dz=2mm
Device Position	Dipole
Band	5200MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	5200
Relative permittivity (real part)	49.05
Relative permittivity	18.38
Conductivity (S/m)	5.31
Power drift (%)	-0.93
Ambient Temperature:	22.2 °C
Liquid Temperature:	22.5 °C
Crest factor:	1:1
ConvF:	2.09

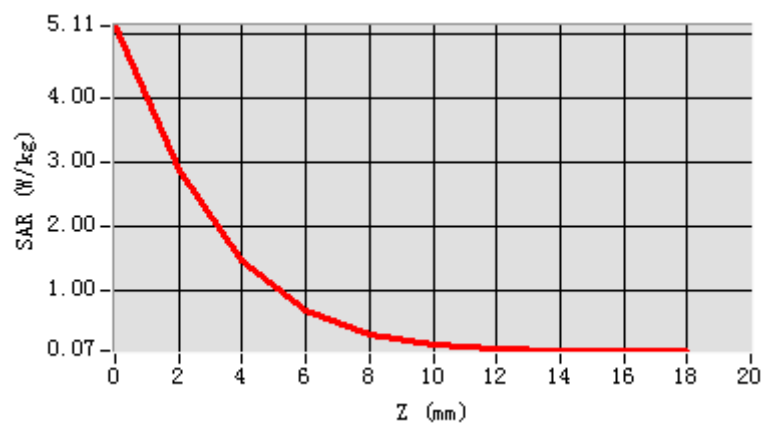


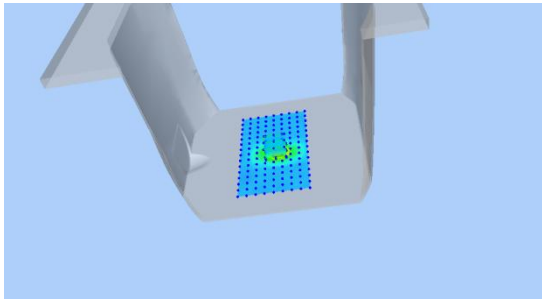
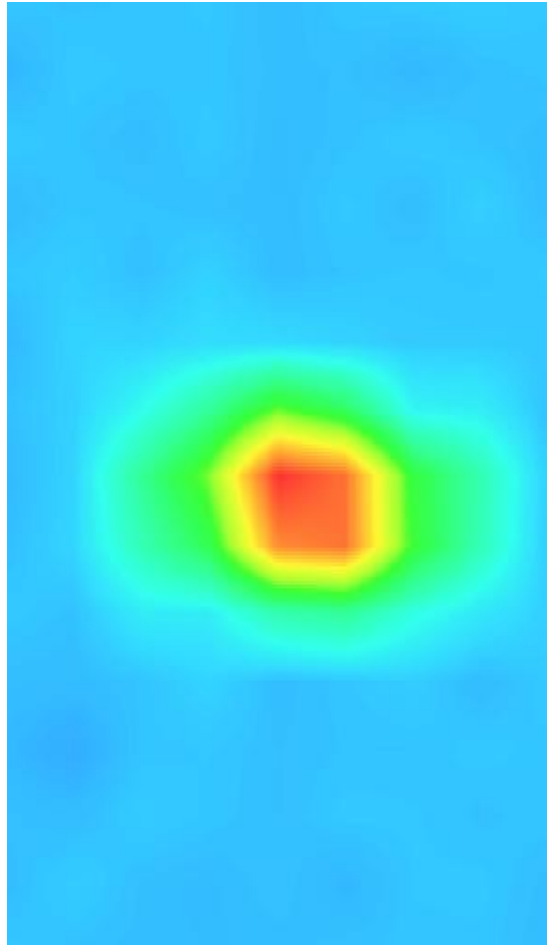
Maximum location: X=3.00, Y=-5.00

SAR Peak: 5.33 W/kg

SAR 10g (W/Kg)	0.467042
SAR 1g (W/Kg)	1.514243

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00
SAR (W/Kg)	5.1120	2.8571	1.4680	0.7020	0.3310	0.1644	0.0959	0.0726	0.0710



3D screen shot	Hot spot position
	

System Performance Check (Body, 5400MHz)

Type: Phone measurement

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

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

Date of measurement: 08/17/2021

Measurement duration: 22 minutes 19 seconds

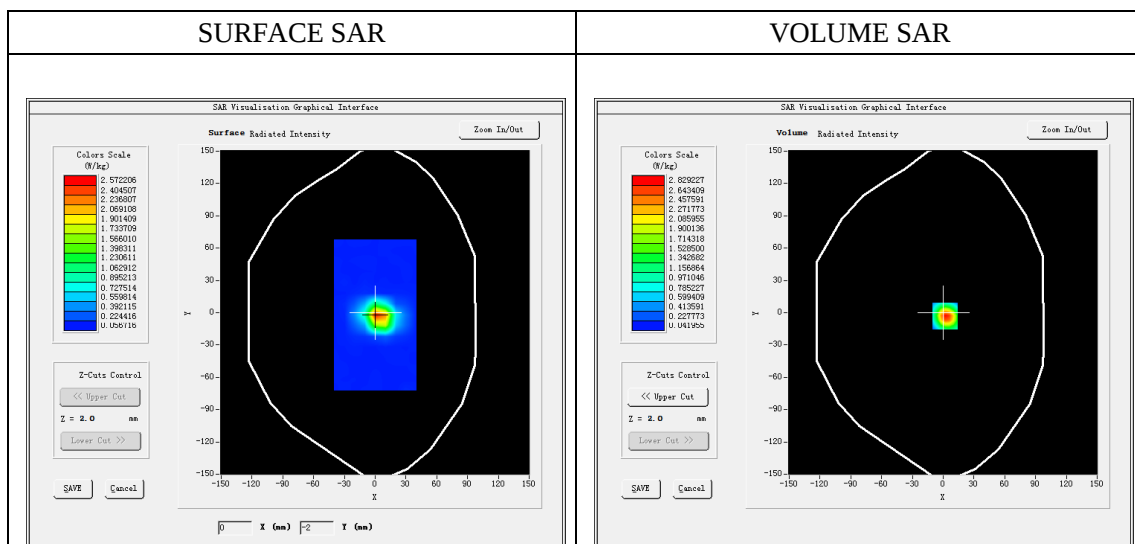
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=4mm dy=4mm dz=2mm
Device Position	Dipole
Band	5400MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	5400
Relative permittivity (real part)	48.61
Relative permittivity	18.33
Conductivity (S/m)	5.50
Power drift (%)	-0.73
Ambient Temperature:	22.2 °C
Liquid Temperature:	22.5 °C
Crest factor:	1:1
ConvF:	2.22

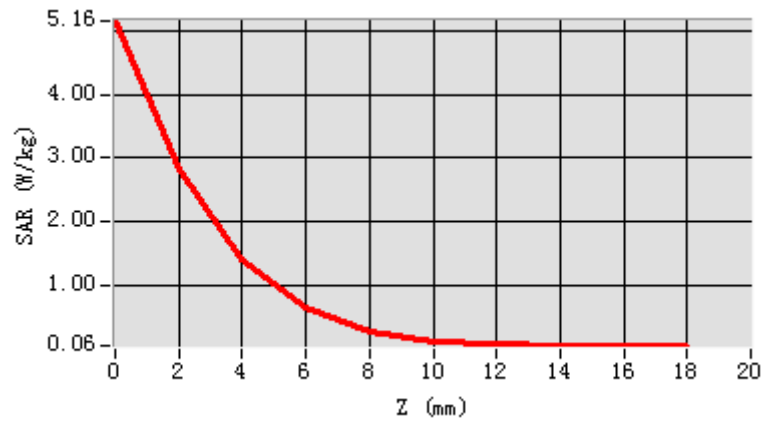


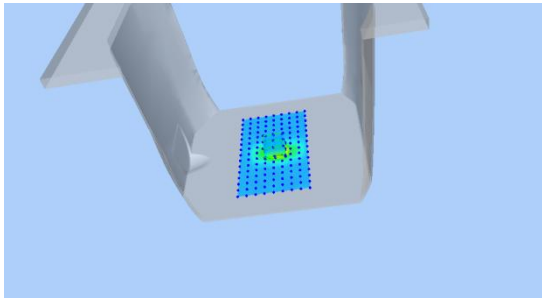
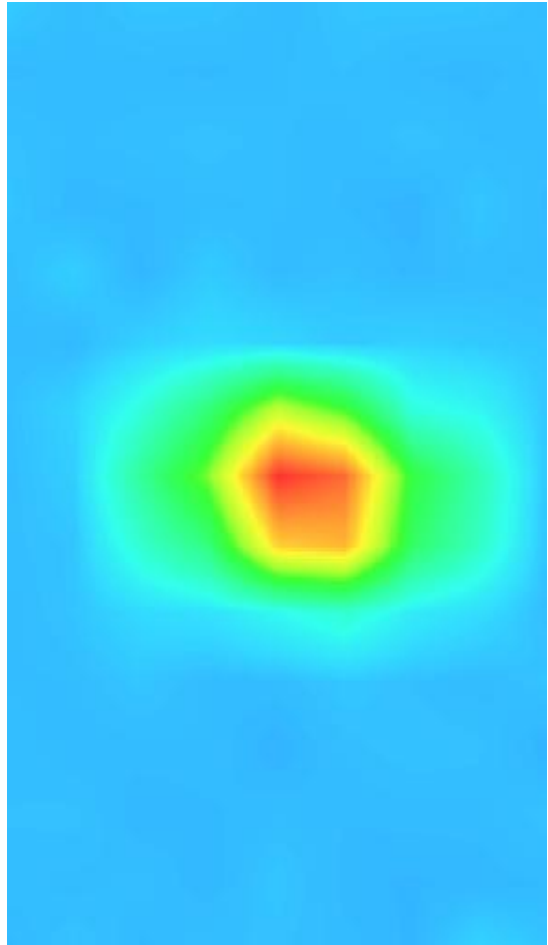
Maximum location: X=2.00, Y=-3.00

SAR Peak: 5.42 W/kg

SAR 10g (W/Kg)	0.449834
SAR 1g (W/Kg)	1.492721

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00
SAR (W/Kg)	5.1563	2.8292	1.4109	0.6459	0.2873	0.1336	0.0744	0.0568	0.0588



3D screen shot	Hot spot position
	

System Performance Check (Body, 5600MHz)

Type: Phone measurement

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

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

Date of measurement: 08/18/2021

Measurement duration: 22 minutes 18 seconds

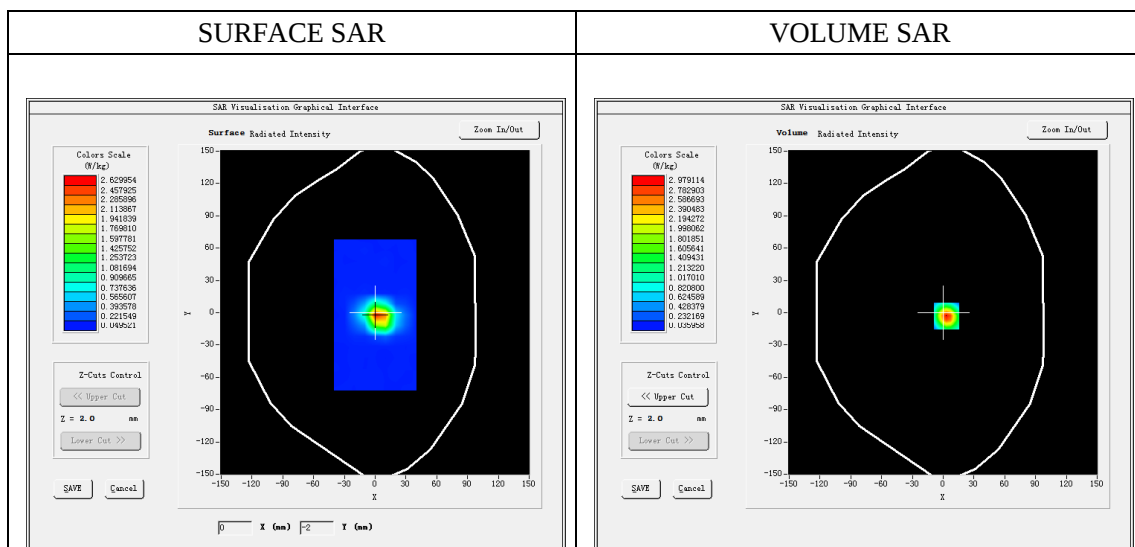
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=4mm dy=4mm dz=2mm
Device Position	Dipole
Band	5600MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_36/20_EPGO348
Frequency (MHz)	5600
Relative permittivity (real part)	48.49
Relative permittivity	18.55
Conductivity (S/m)	5.77
Power drift (%)	-0.51
Ambient Temperature:	22.2 °C
Liquid Temperature:	22.5 °C
Crest factor:	1:1
ConvF:	2.39

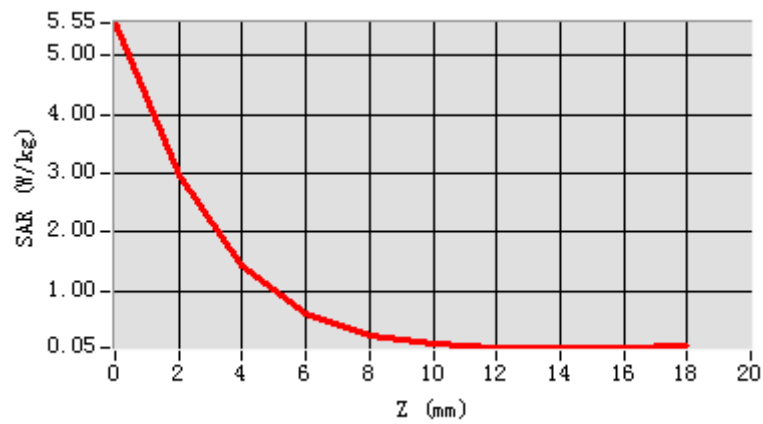


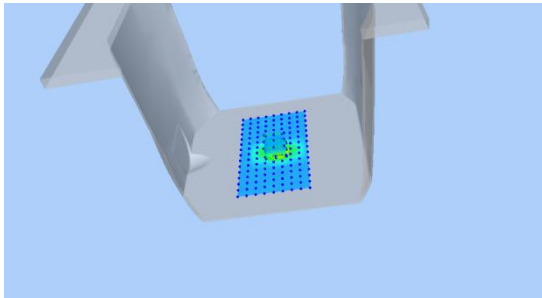
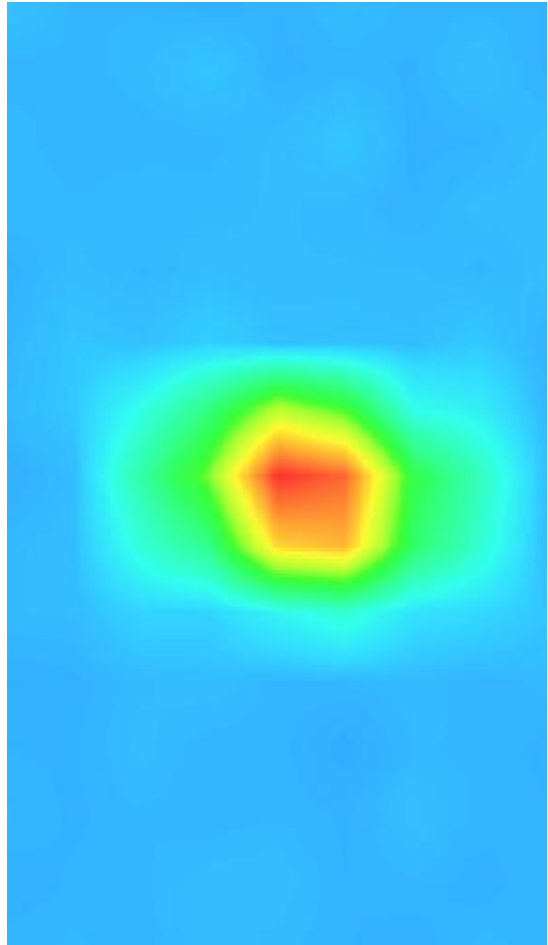
Maximum location: X=3.00, Y=-3.00

SAR Peak: 5.81 W/kg

SAR 10g (W/Kg)	0.445386
SAR 1g (W/Kg)	1.547104

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00
SAR (W/Kg)	5.5456	2.9791	1.4342	0.6229	0.2582	0.1108	0.0588	0.0465	0.0535



3D screen shot	Hot spot position
	

System Performance Check (Body, 5800MHz)

Type: Phone measurement

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

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

Date of measurement: 08/18/2021

Measurement duration: 22 minutes 01 seconds

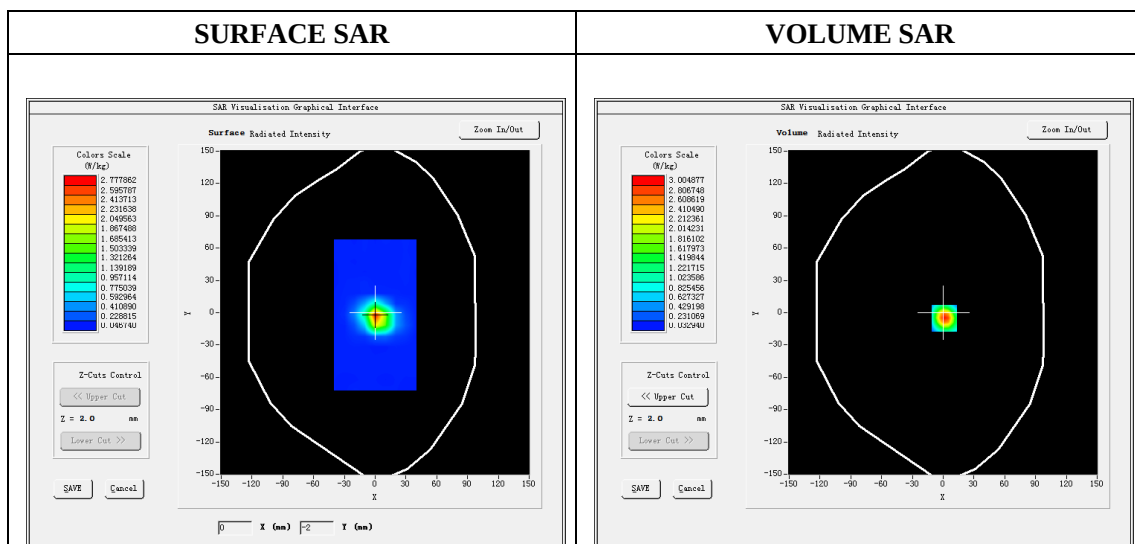
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=4mm dy=4mm dz=2mm
Device Position	Dipole
Band	5800MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_36/20_EPG0348
Frequency (MHz)	5800
Relative permittivity (real part)	48.12
Relative permittivity	18.47
Conductivity (S/m)	5.95
Power drift (%)	0.36
Ambient Temperature:	22.2 °C
Liquid Temperature:	22.5 °C
Crest factor:	1:1
ConvF:	2.34

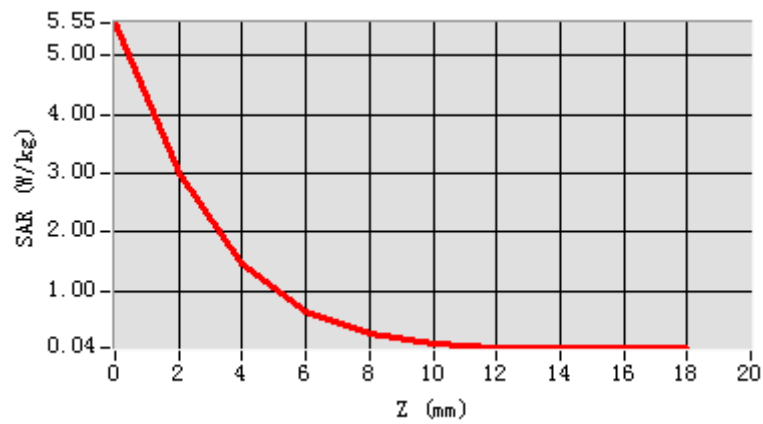


Maximum location: X=1.00, Y=-5.00

SAR Peak: 5.82 W/kg

SAR 10g (W/Kg)	0.446804
SAR 1g (W/Kg)	1.562073

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00
SAR (W/Kg)	5.5517	3.0049	1.4638	0.6446	0.2696	0.1145	0.0575	0.0411	0.0429



3D screen shot	Hot spot position
