



Appendix A: SAR System performance Check Plots

Measurement	Liquid	Frequency	Test Date
System Check	Body	850	2019-04-16
System Check	Body	1800	2019-04-17
System Check	Body	1900	2019-04-18
System Check	Body	2450	2019-04-19
System Check	Body	2600	2019-04-20



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: 04/16/2019

Measurement duration: 22 minutes 24 seconds

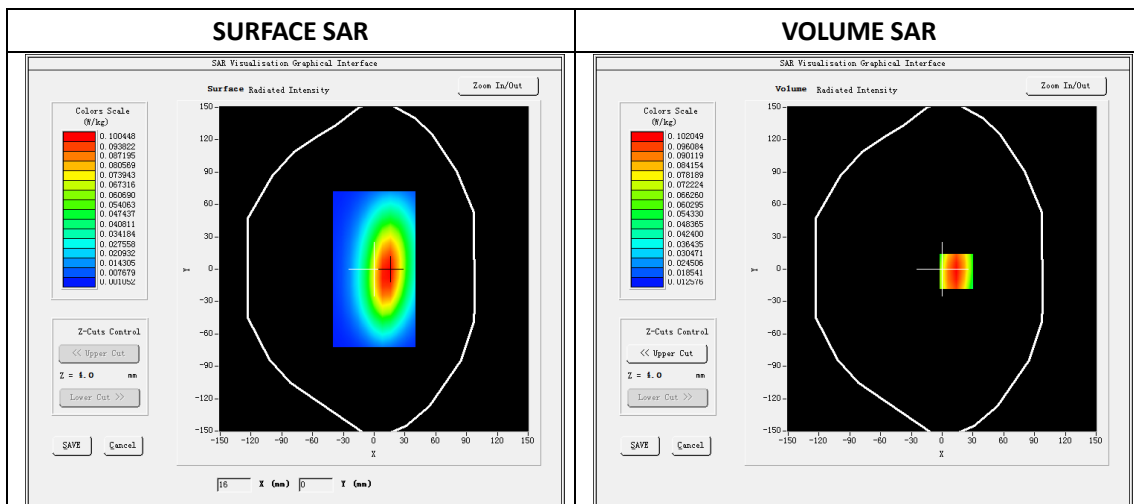
A. Experimental conditions.

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_27/15_EPG0261
Frequency (MHz)	850
Relative permittivity (real part)	55.24
Relative permittivity	20.96
Conductivity (S/m)	0.99
Power drift (%)	0.05
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	1.99
Crest factor:	1:1

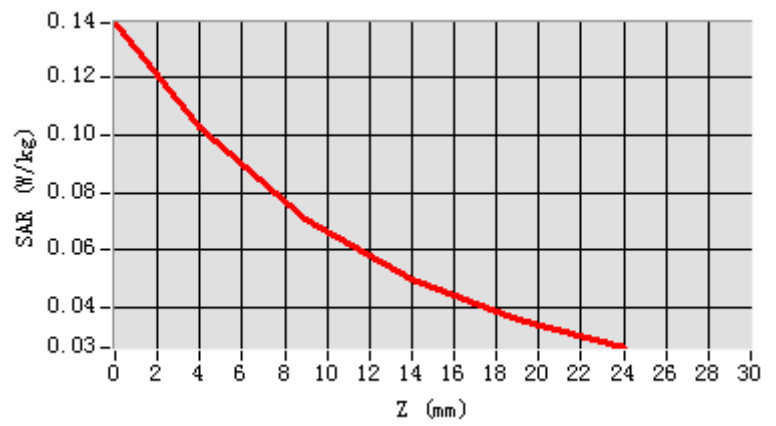


Maximum location: X=14.00, Y=-2.00

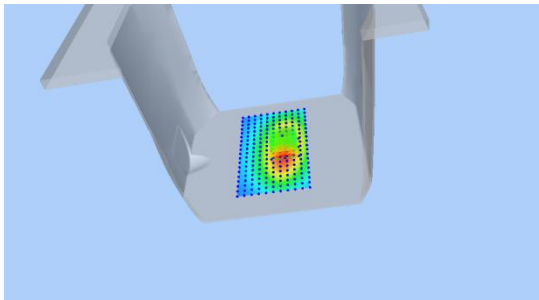
SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.064131
SAR 1g (W/Kg)	0.097816

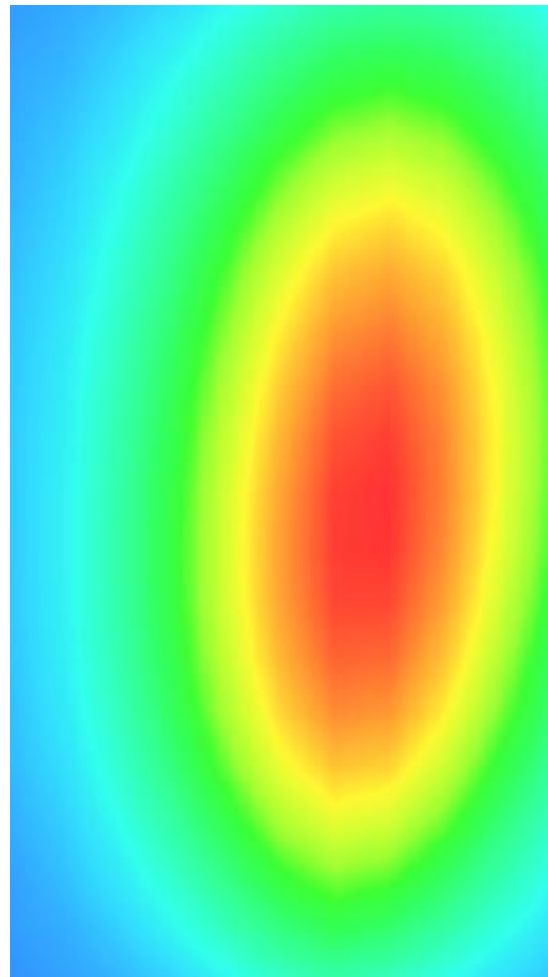
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1342	0.1026	0.0726	0.0455	0.0324



3D screen shot



Hot spot position





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: 04/17/2019

Measurement duration: 22 minutes 43 seconds

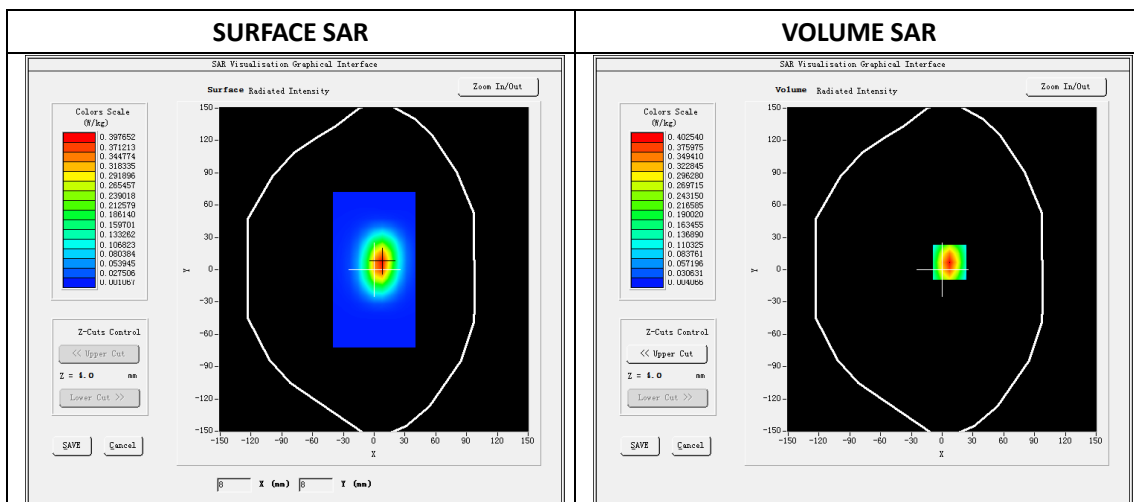
A. Experimental conditions.

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)	53.39
Relative permittivity	15.20
Conductivity (S/m)	1.52
Power Drift (%)	-0.07
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.22
Duty factor:	1:1

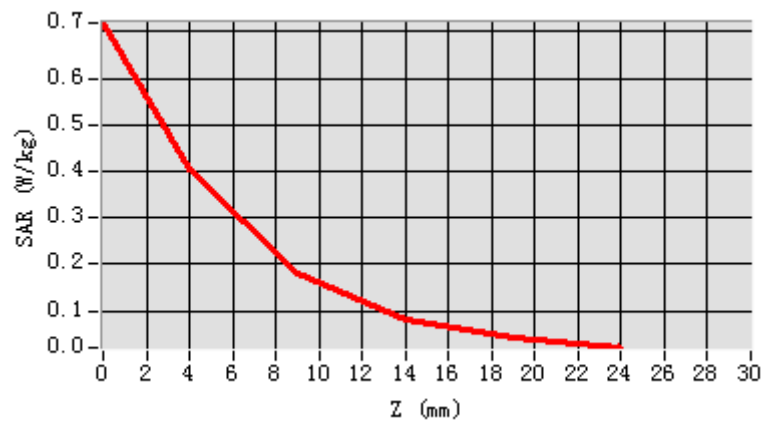


Maximum location: X=7.00, Y=7.00

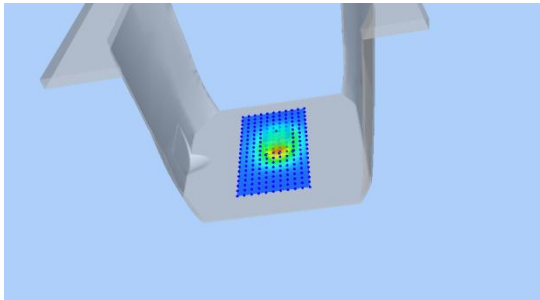
SAR Peak: 0.72 W/kg

SAR 10g (W/Kg)	0.177150
SAR 1g (W/Kg)	0.374639

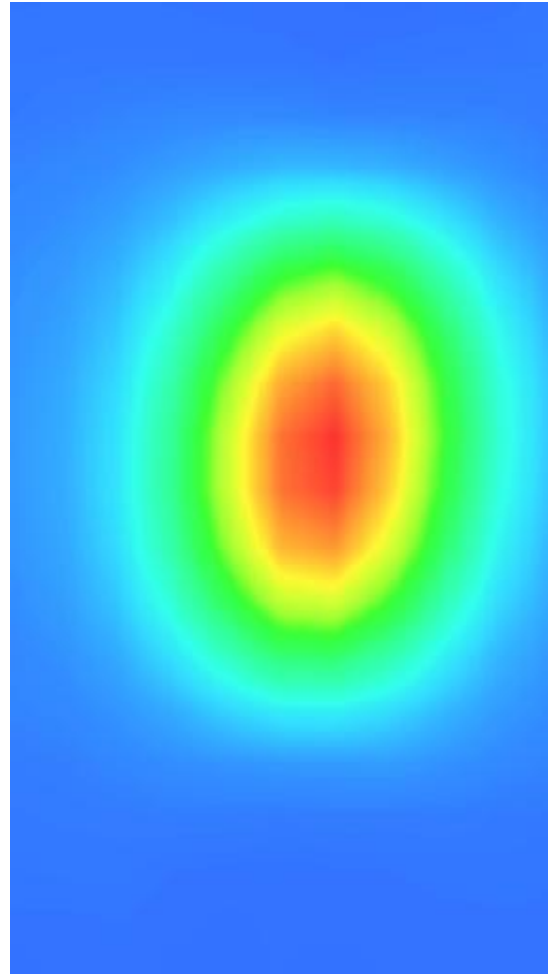
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/kg)	0.7189	0.4025	0.1824	0.0817	0.0405



3D screen shot



Hot spot position



**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: 04/18/2019

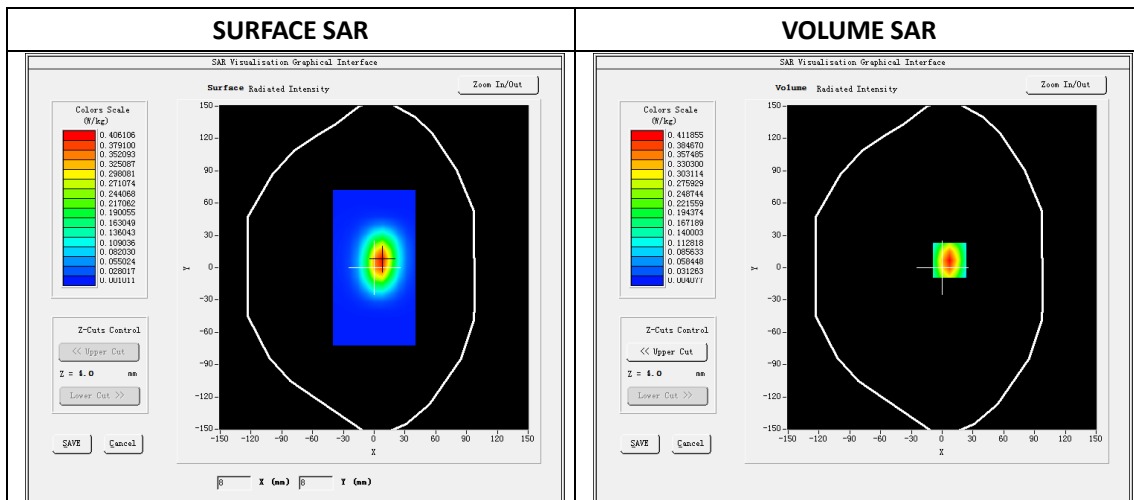
Measurement duration: 22 minutes 23 seconds

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)	53.40
Relative permittivity	14.49
Conductivity (S/m)	1.53
Power Drift (%)	0.02
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.39
Duty factor:	1:1

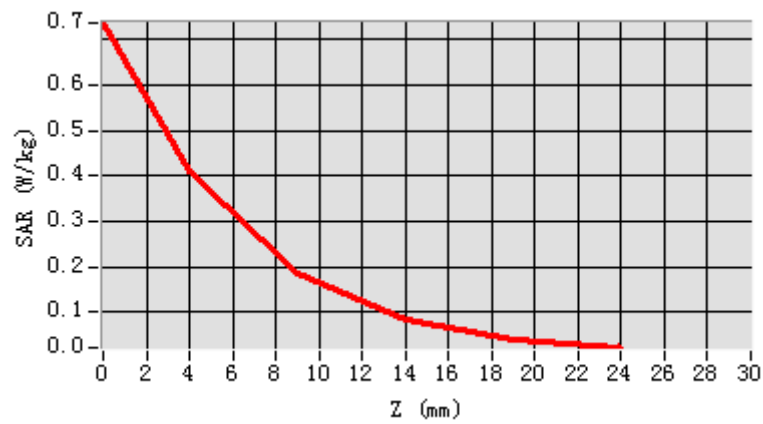


Maximum location: X=7.00, Y=7.00

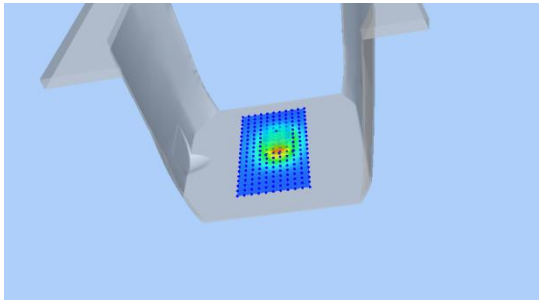
SAR Peak: 0.74 W/kg

SAR 10g (W/Kg)	0.180967
SAR 1g (W/Kg)	0.383856

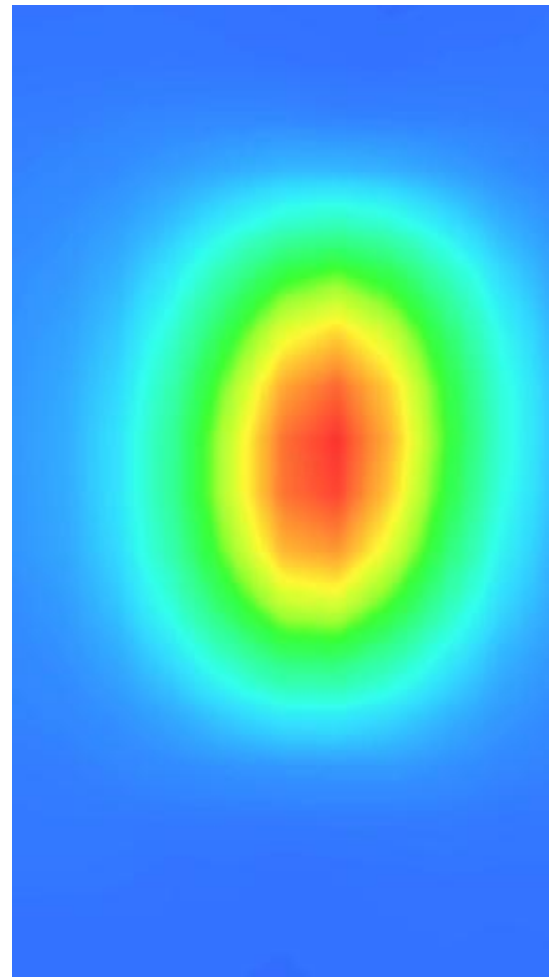
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/kg)	0.7376	0.4119	0.1858	0.0828	0.0408



3D screen shot



Hot spot position





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: 04/19/2019
 Measurement duration: 22 minutes 37 seconds

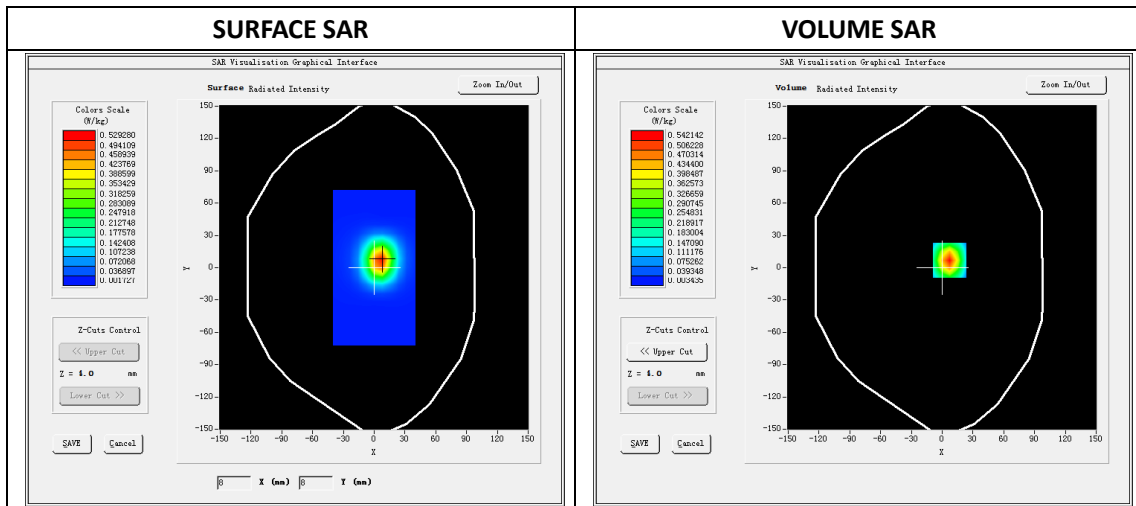
A. Experimental conditions.

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)	52.65
Relative permittivity	14.18
Conductivity (S/m)	1.93
Power Drift (%)	0.21
Duty factor:	1:1
ConvF:	2.46

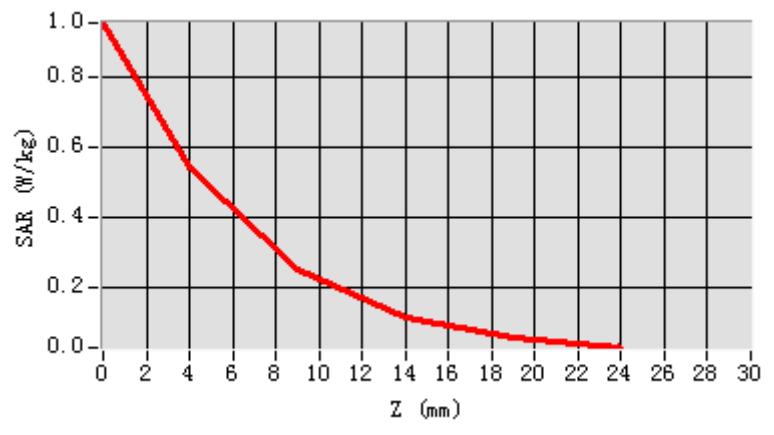


Maximum location: X=-7.00, Y=7.00

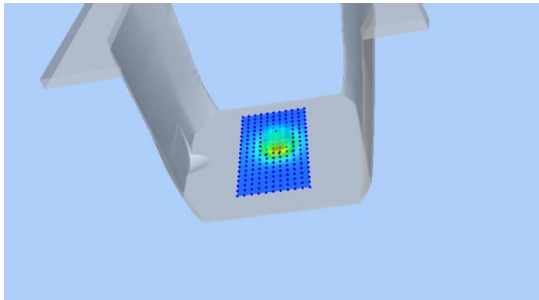
SAR Peak: 0.95 W/kg

SAR 10g (W/Kg)	0.232358
SAR 1g (W/Kg)	0.528859

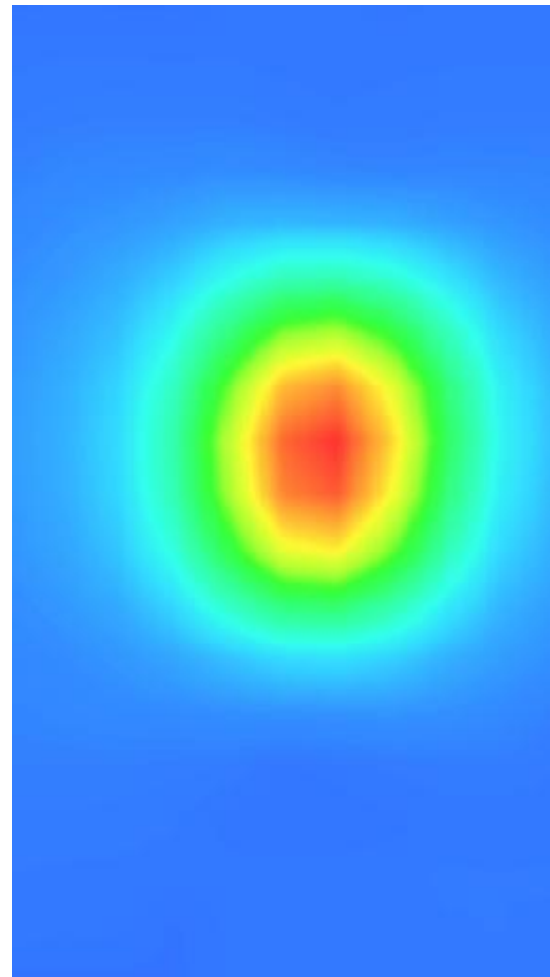
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/kg)	0.9535	0.5421	0.2516	0.1152	0.0574



3D screen shot



Hot spot position





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: 04/20/2019

Measurement duration: 22 minutes 53 seconds

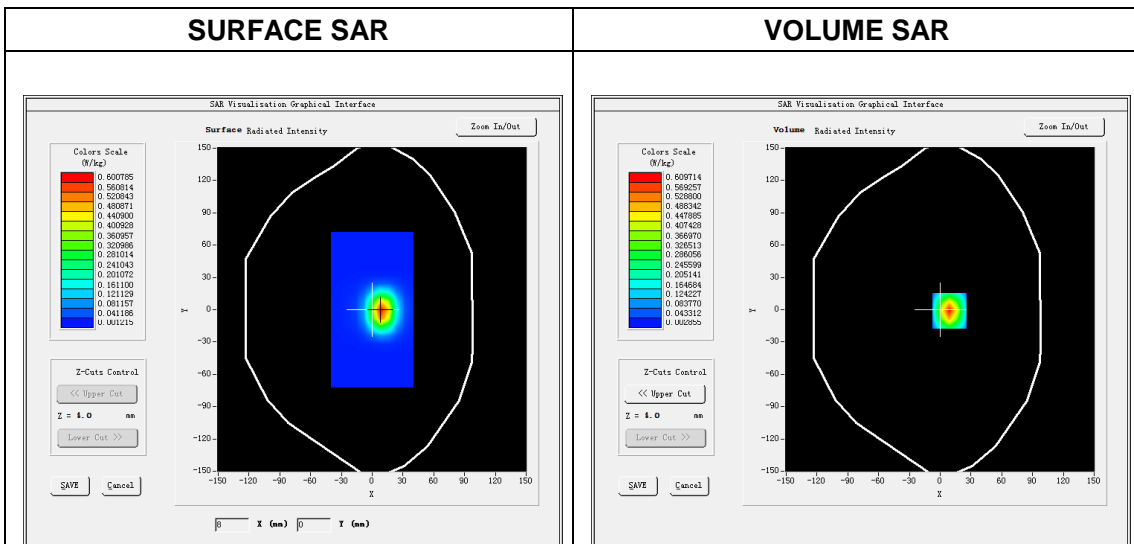
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=5mm dy=5mm dz=4mm
Device Position	Dipole
Band	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)	52.35
Relative permittivity	14.68
Conductivity (S/m)	2.12
Power drift (%)	-0.21
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.43

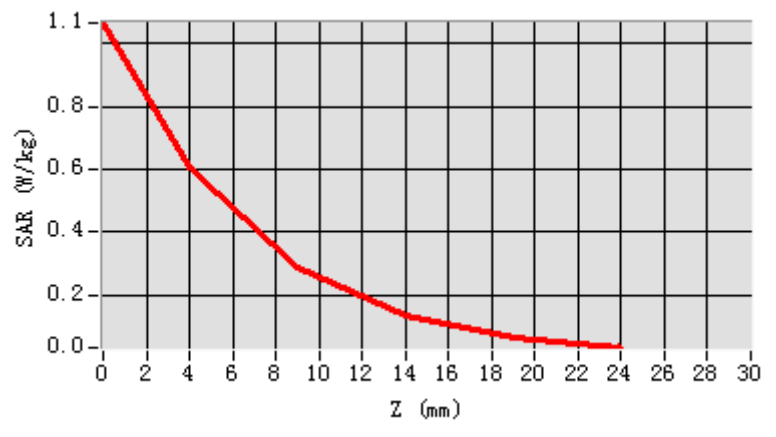


Maximum location: X=-9.00, Y=1.00

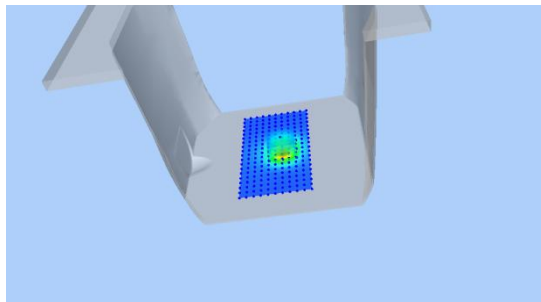
SAR Peak: 1.06 W/kg

SAR 10g (W/Kg)	0.241353
SAR 1g (W/Kg)	0.550893

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/kg)	1.0654	0.6097	0.2859	0.1323	0.0662



3D screen shot



Hot spot position

