

Appendix A: SAR System performance Check Plots

Measurement	Liquid	Frequency	Test Date
System Check	Head	835	2019-05-15
System Check	Body	835	2019-05-15
System Check	Head	1800	2019-05-22
System Check	Body	1800	2019-05-22
System Check	Head	1900	2019-05-27
System Check	Body	1900	2019-05-27
System Check	Head	2450	2019-05-29
System Check	Body	2450	2019-05-29
System Check	Head	2600	2019-05-31
System Check	Body	2600	2019-05-31
System Check	Head	5200	2019-06-03
System Check	Body	5200	2019-06-03
System Check	Head	5400	2019-06-03
System Check	Body	5400	2019-06-03
System Check	Head	5600	2019-06-04
System Check	Body	5600	2019-06-04
System Check	Head	5800	2019-06-05
System Check	Body	5800	2019-06-05
System Check	Head	2450	2019-07-08
System Check	Body	2450	2019-07-08



System Performance Check (Head, 835MHz)

Type: Phone measurement

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

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

Date of measurement: 05/15/2019

Measurement duration: 22 minutes 48 seconds

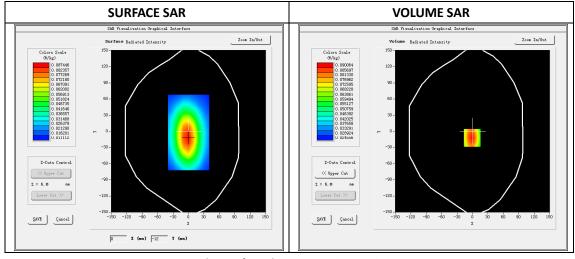
A. Experimental conditions.

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_27/15_EPG0261
Frequency (MHz)	835
Relative permittivity (real part)	41.43
Relative permittivity	19.27
Conductivity (S/m)	0.91
Power drift (%)	-2.84
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	1.92
Crest factor:	1:1

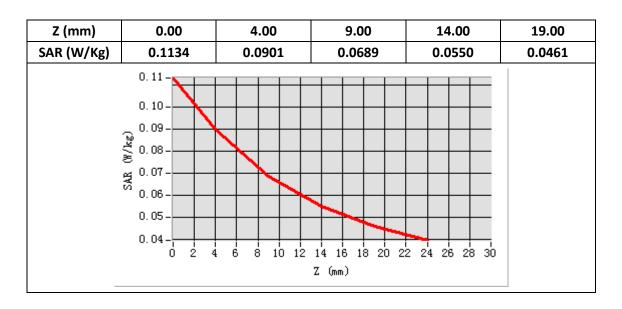


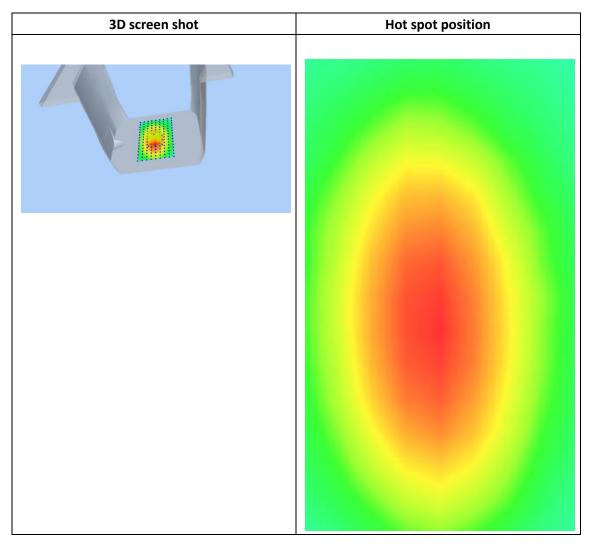
Maximum location: X=-1.00, Y=-12.00

SAR Peak: 0.11 W/kg

SAR 10g (W/Kg)	0.065161
SAR 1g (W/Kg)	0.087975









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: 05/15/2019

Measurement duration: 22 minutes 19 seconds

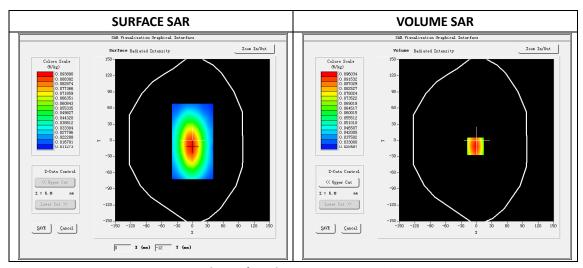
A. Experimental conditions.

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

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	835
Relative permittivity (real part)	55.31
Relative permittivity	20.48
Conductivity (S/m)	0.95
Power drift (%)	-3.21
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	1.99
Crest factor:	1:1

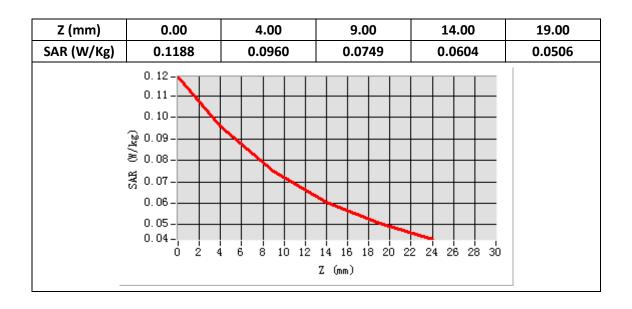


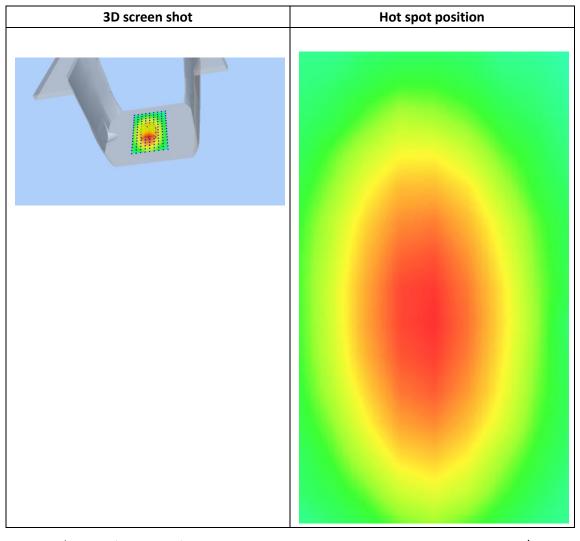
Maximum location: X=-2.00, Y=-11.00

SAR Peak: 0.12 W/kg

SAR 10g (W/Kg)	0.070609
SAR 1g (W/Kg)	0.093951









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: 05/22/2019

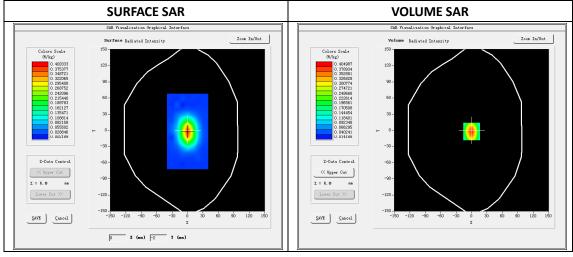
Measurement duration: 22 minutes 34 seconds

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

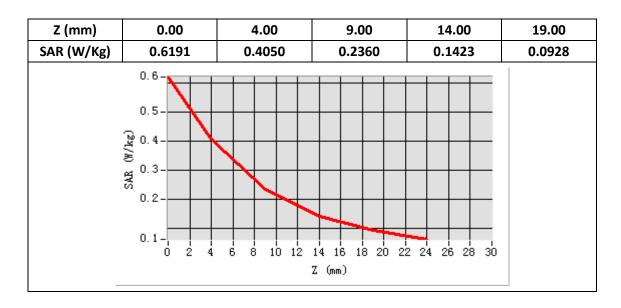
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1800
Relative permittivity (real part)	40.16
Relative permittivity	14.00
Conductivity (S/m)	1.40
Power Drift (%)	-1.01
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.14
Duty factor:	1:1

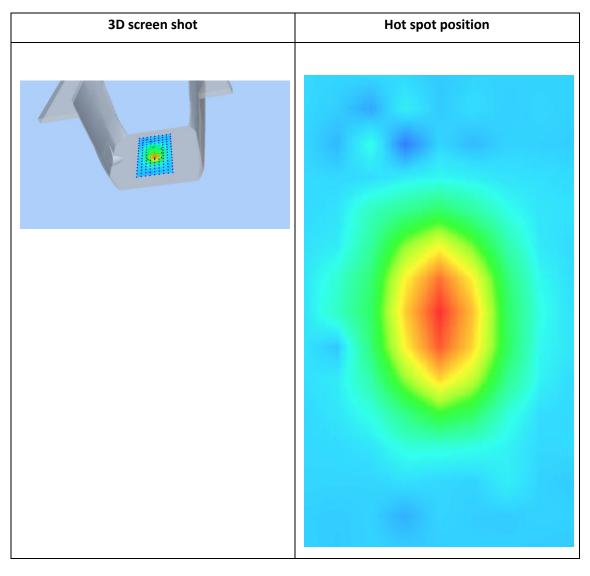


Maximum location: X=0.00, Y=-2.00 SAR Peak: 0.62 W/kg

SAR 10g (W/Kg)	0.207587
SAR 1g (W/Kg)	0.381556









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: 05/22/2019

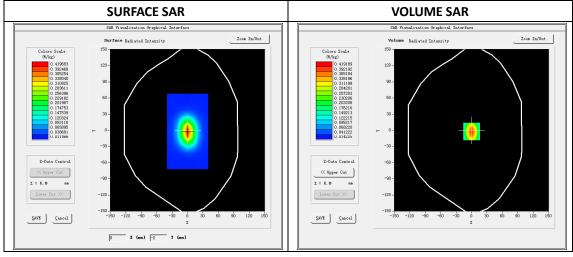
Measurement duration: 22 minutes 51 seconds

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

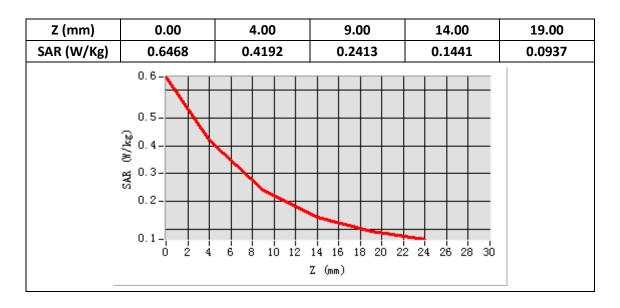
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1800
Relative permittivity (real part)	53.12
Relative permittivity	15.10
Conductivity (S/m)	1.51
Power Drift (%)	-0.69
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.22
Duty factor:	1:1

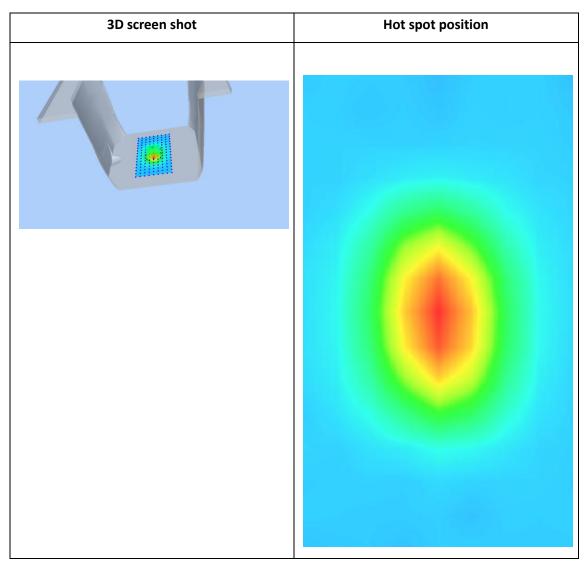


Maximum location: X=0.00, Y=-2.00 SAR Peak: 0.65 W/kg

SAR 10g (W/Kg)	0.209393
SAR 1g (W/Kg)	0.388646









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: 05/27/2019

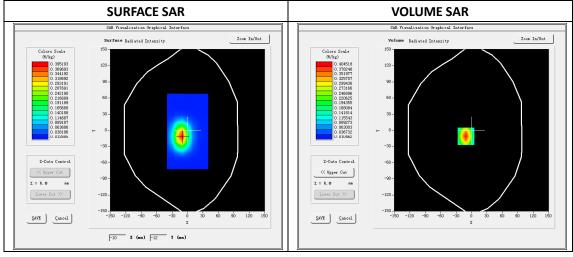
Measurement duration: 22 minutes 27 seconds

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

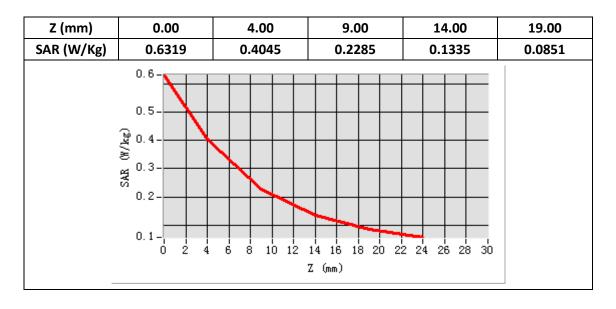
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1900
Relative permittivity (real part)	40.11
Relative permittivity	13.17
Conductivity (S/m)	1.39
Power Drift (%)	-0.74
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.34
Duty factor:	1:1

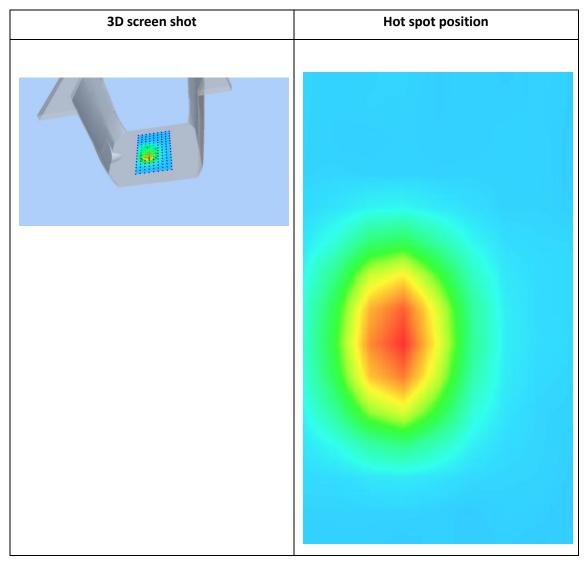


Maximum location: X=-11.00, Y=-11.00 SAR Peak: 0.63 W/kg

SAR 10g (W/Kg)	0.197420
SAR 1g (W/Kg)	0.374521









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: 05/27/2019

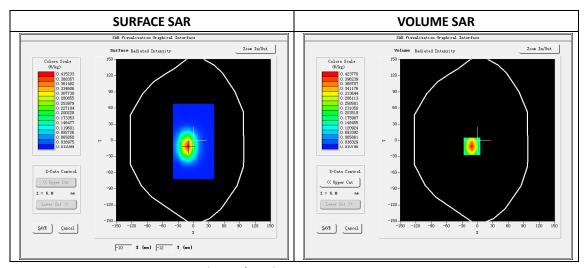
Measurement duration: 22 minutes 30 seconds

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

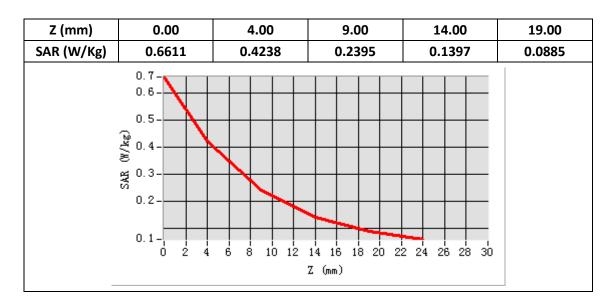
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	1900
Relative permittivity (real part)	53.06
Relative permittivity	14.12
Conductivity (S/m)	1.49
Power Drift (%)	-0.81
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.39
Duty factor:	1:1

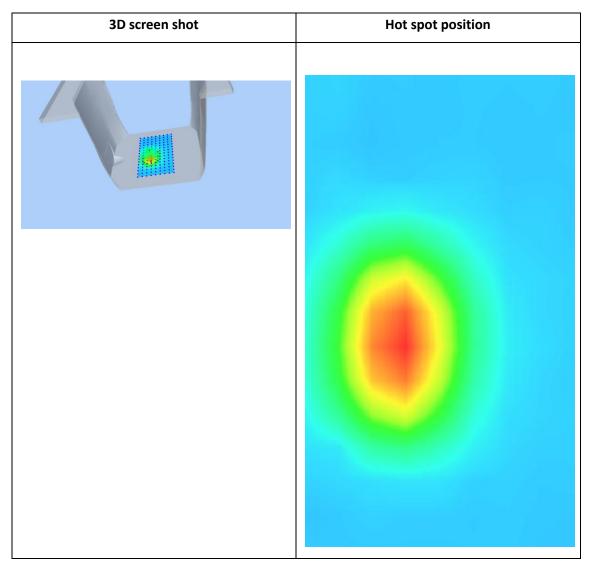


Maximum location: X=-11.00, Y=-11.00 SAR Peak: 0.66 W/kg

SAR 10g (W/Kg)	0.206725
SAR 1g (W/Kg)	0.392376









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: 05/29/2019

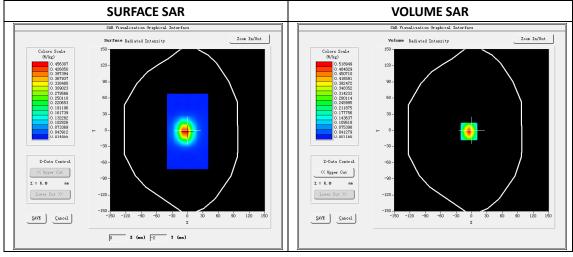
Measurement duration: 22 minutes 08 seconds

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

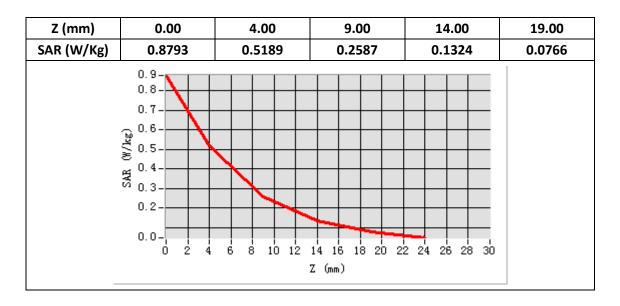
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2450
Relative permittivity (real part)	39.44
Relative permittivity	13.30
Conductivity (S/m)	1.81
Power Drift (%)	-0.96
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.37
Duty factor:	1:1

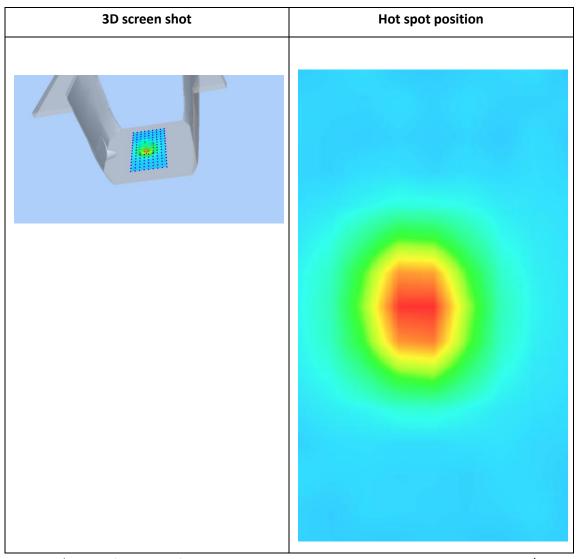


Maximum location: X=-5.00, Y=-2.00 SAR Peak: 0.88 W/kg

SAR 10g (W/Kg)	0.232692
SAR 1g (W/Kg)	0.503383









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: 05/29/2019

Measurement duration: 22 minutes 10 seconds

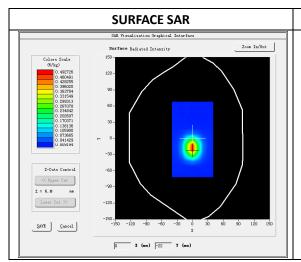
A. Experimental conditions.

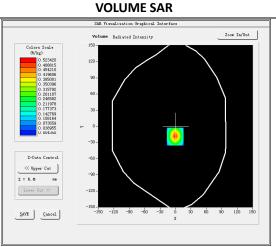
Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=5mm dy=5mm dz=4mm
Device Position	Dipole
Band	2450MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2450
Relative permittivity (real part)	52.66
Relative permittivity	14.55
Conductivity (S/m)	1.98
Power Drift (%)	-1.47
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.46
Duty factor:	1:1



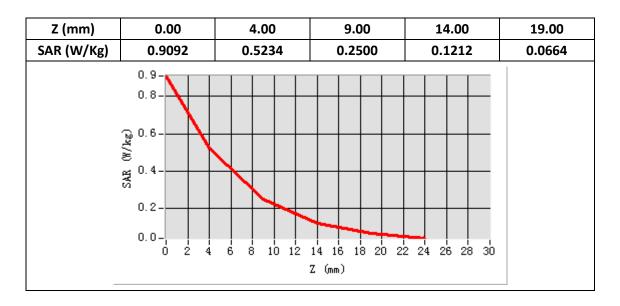


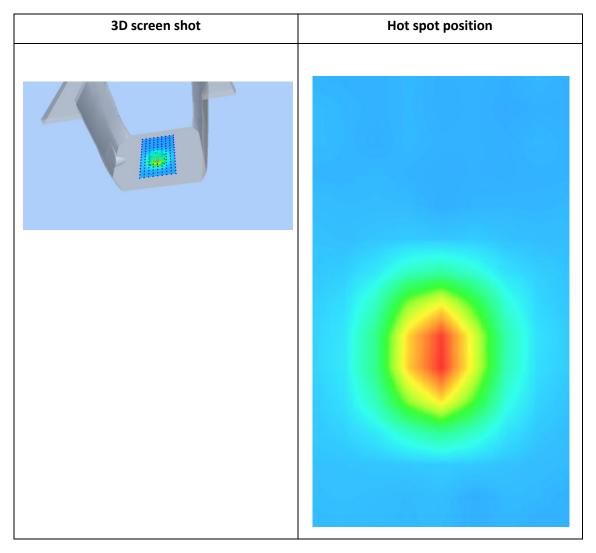
Maximum location: X=-1.00, Y=-19.00

SAR Peak: 0.91 W/kg

SAR 10g (W/Kg)	0.218930
SAR 1g (W/Kg)	0.478505









System Performance Check (Head, 2600MHz)

Type: Phone measurement

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

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

Date of measurement: 05/31/2019

Measurement duration: 22 minutes 49 seconds

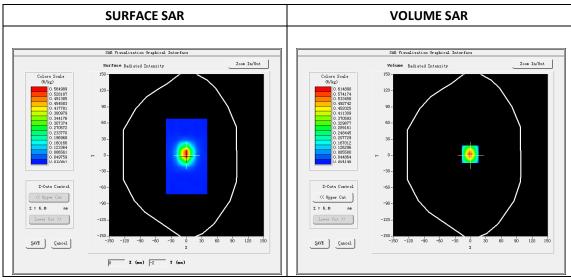
A. Experimental conditions.

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

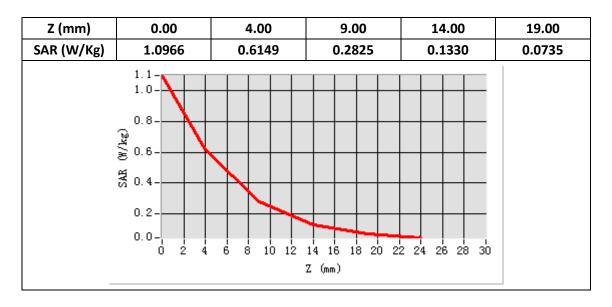
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2600
Relative permittivity (real part)	39.17
Relative permittivity	13.57
Conductivity (S/m)	1.96
Power drift (%)	-1.08
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.35

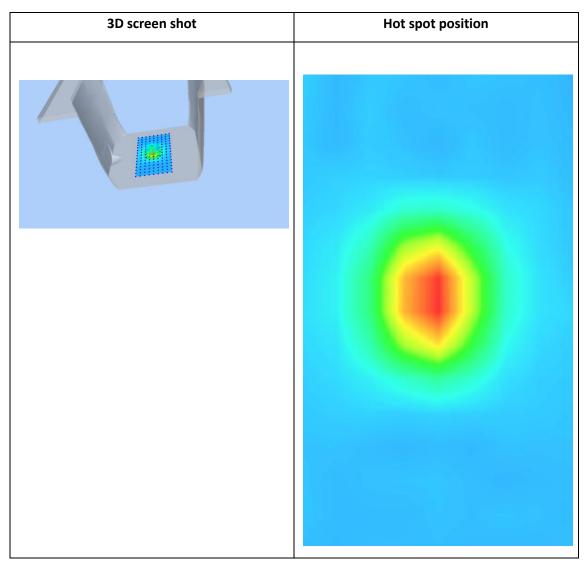


Maximum location: X=-1.00, Y=2.00 SAR Peak: 1.09 W/kg

SAR 10g (W/Kg)	0.249671
SAR 1g (W/Kg)	0.559530









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: 05/31/2019

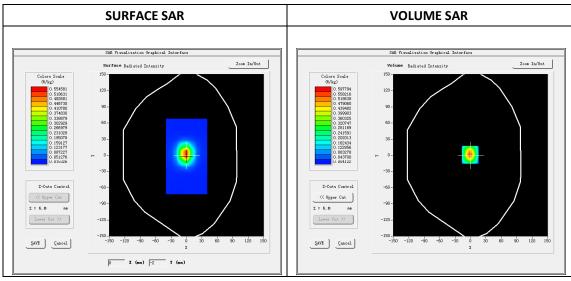
Measurement duration: 22 minutes 01 seconds

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

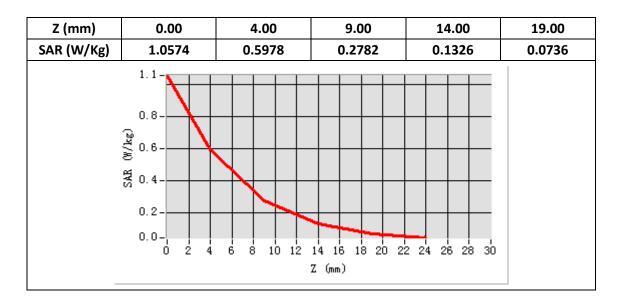
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2600
Relative permittivity (real part)	52.43
Relative permittivity	15.09
Conductivity (S/m)	2.18
Power drift (%)	-0.44
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.43

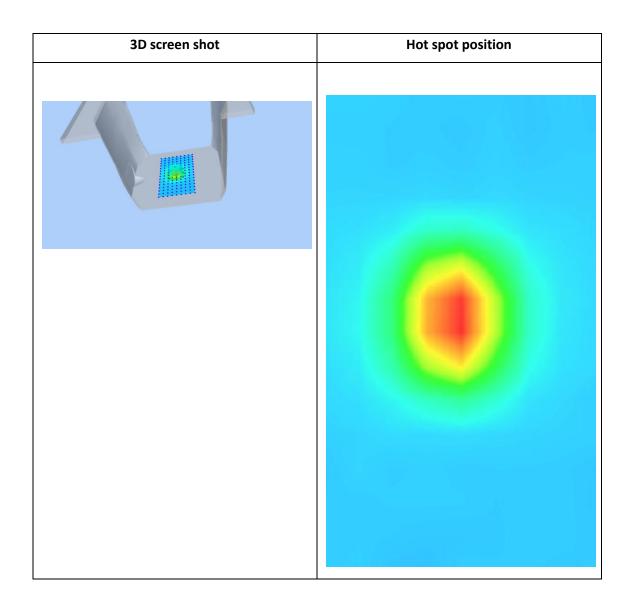


Maximum location: X=-1.00, Y=1.00 SAR Peak: 1.06 W/kg

SAR 10g (W/Kg)	0.245659
SAR 1g (W/Kg)	0.547083









System Performance Check (Head, 5200MHz)

Type: Phone measurement

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

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

Date of measurement: 06/03/2019

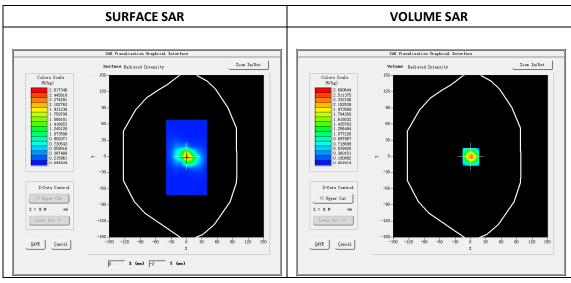
Measurement duration: 22 minutes 05 seconds

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

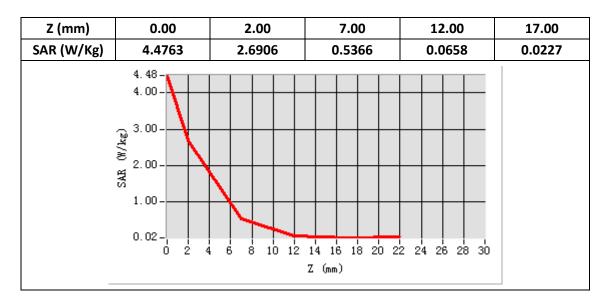
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5200
Relative permittivity (real part)	36.45
Relative permittivity	15.96
Conductivity (S/m)	4.61
Power drift (%)	-1.00
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.15

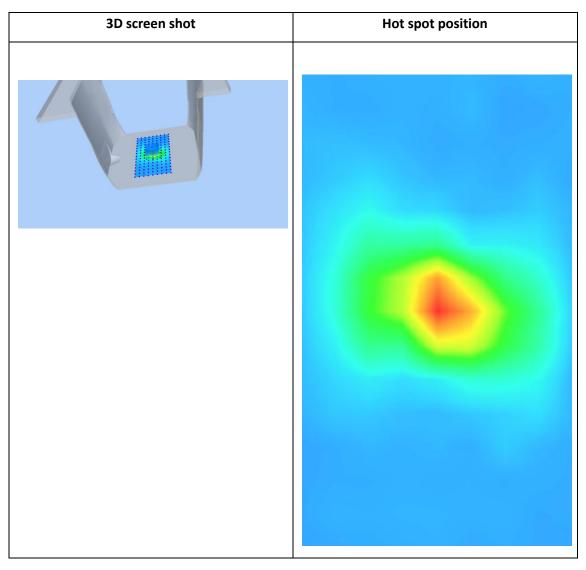


Maximum location: X=1.00, Y=-1.00 SAR Peak: 4.63W/kg

SAR 10g (W/Kg)	0.580935
SAR 1g (W/Kg)	1.547584









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: 06/03/2019

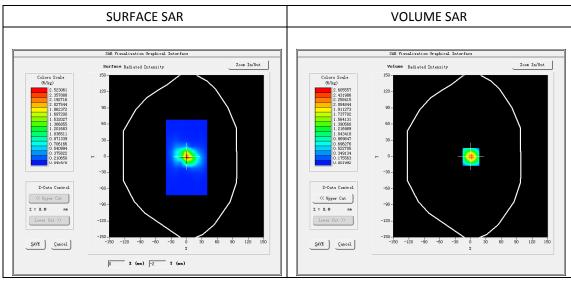
Measurement duration: 22 minutes 56 seconds

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

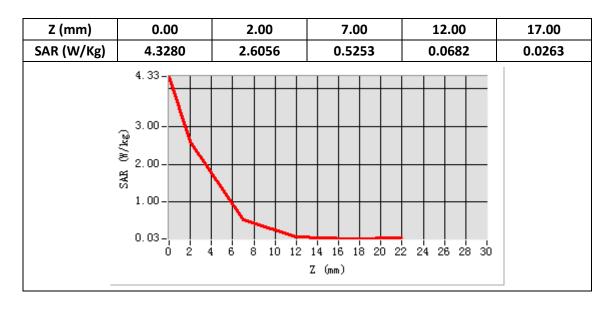
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5200
Relative permittivity (real part)	49.41
Relative permittivity	17.90
Conductivity (S/m)	5.17
Power drift (%)	-1.53
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.21

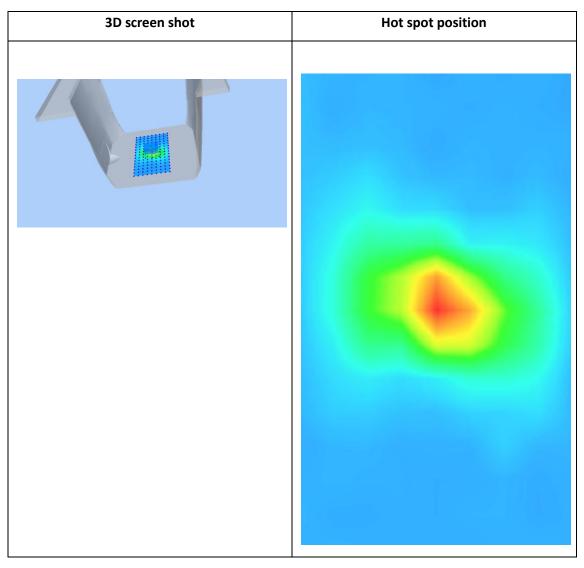


Maximum location: X=1.00, Y=-1.00 SAR Peak: 4.48 W/kg

SAR 10g (W/Kg)	0.559052
SAR 1g (W/Kg)	1.481033









System Performance Check (Head, 5400MHz)

Type: Phone measurement

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

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

Date of measurement: 06/03/2019

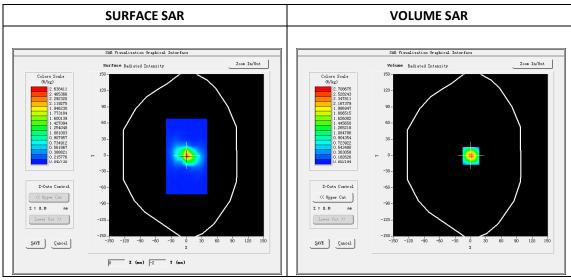
Measurement duration: 22 minutes 19 seconds

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

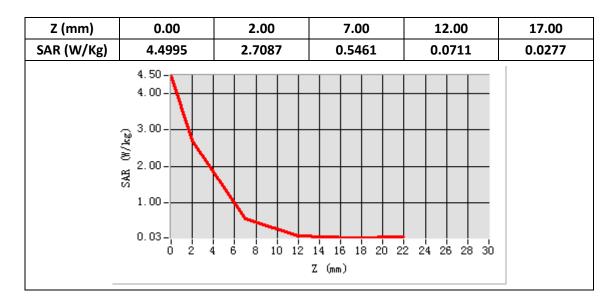
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5400
Relative permittivity (real part)	36.12
Relative permittivity	16.10
Conductivity (S/m)	4.83
Power drift (%)	-1.40
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.10

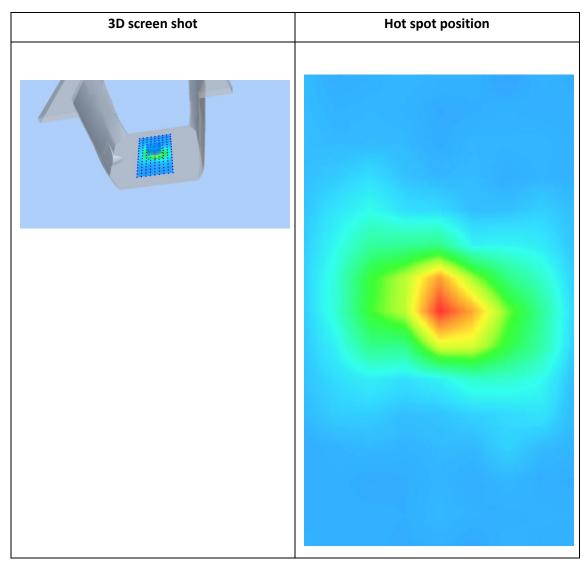


Maximum location: X=1.00, Y=-1.00 SAR Peak: 4.66W/kg

SAR 10g (W/Kg)	0.585091
SAR 1g (W/Kg)	1.541764









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: 06/03/2019

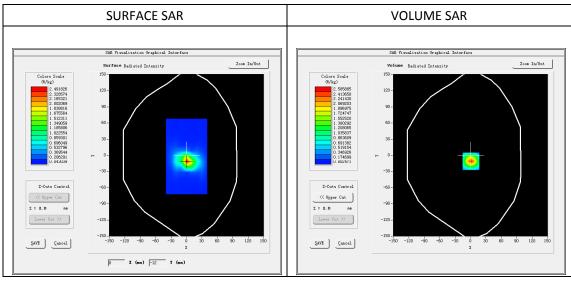
Measurement duration: 22 minutes 14 seconds

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

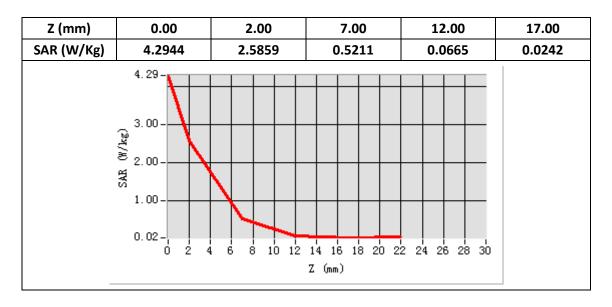
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5400
Relative permittivity (real part)	47.16
Relative permittivity	18.47
Conductivity (S/m)	5.54
Power drift (%)	-0.95
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.16

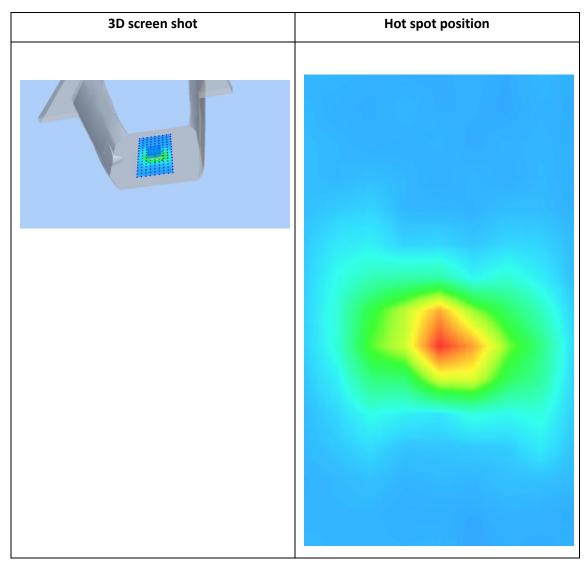


Maximum location: X=1.00, Y=-11.00 SAR Peak: 4.44 W/kg

SAR 10g (W/Kg)	0.554204
SAR 1g (W/Kg)	1.470546









System Performance Check (Head, 5600MHz)

Type: Phone measurement

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

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

Date of measurement: 06/04/2019

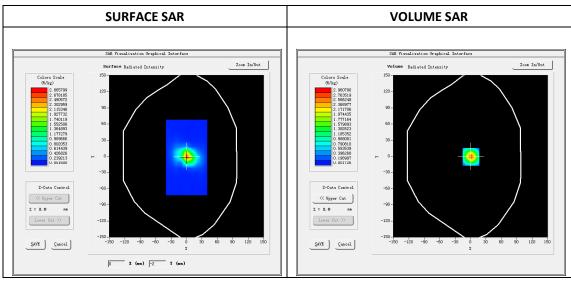
Measurement duration: 22 minutes 41 seconds

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

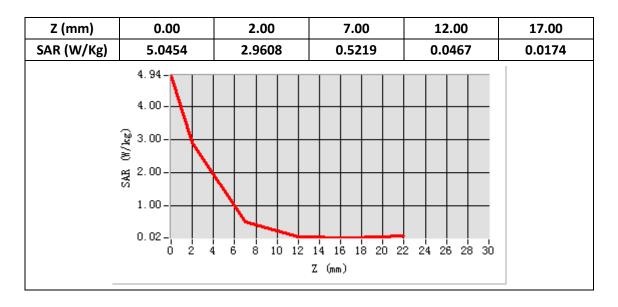
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5600
Relative permittivity (real part)	35.82
Relative permittivity	16.17
Conductivity (S/m)	5.03
Power drift (%)	-1.67
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.17

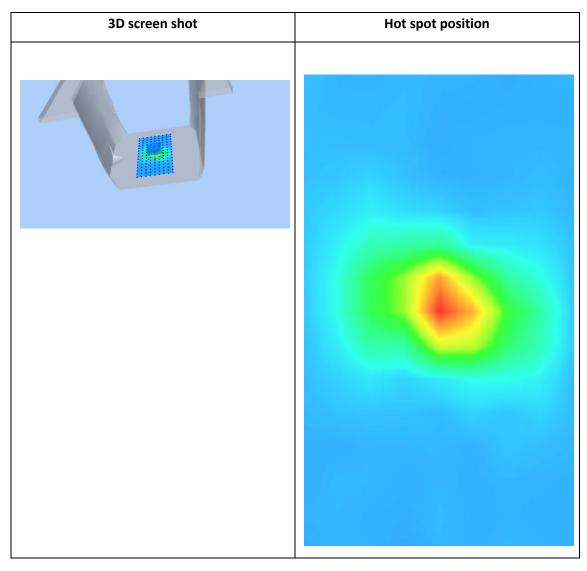


Maximum location: X=1.00, Y=-1.00 SAR Peak: 5.25W/kg

SAR 10g (W/Kg)	0.609291
SAR 1g (W/Kg)	1.652614









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: 06/04/2019

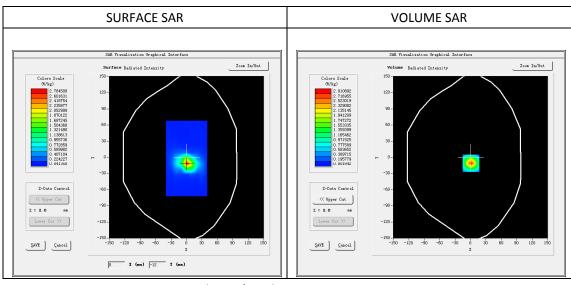
Measurement duration: 22 minutes 12 seconds

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

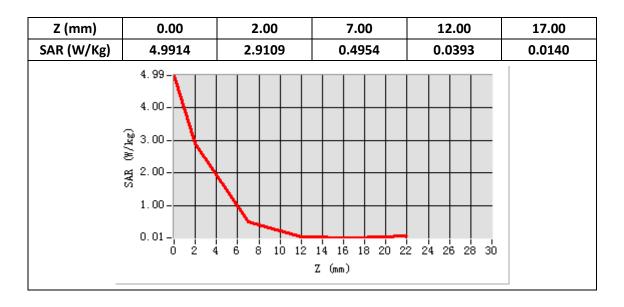
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5600
Relative permittivity (real part)	48.24
Relative permittivity	18.23
Conductivity (S/m)	5.67
Power drift (%)	-0.77
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.24

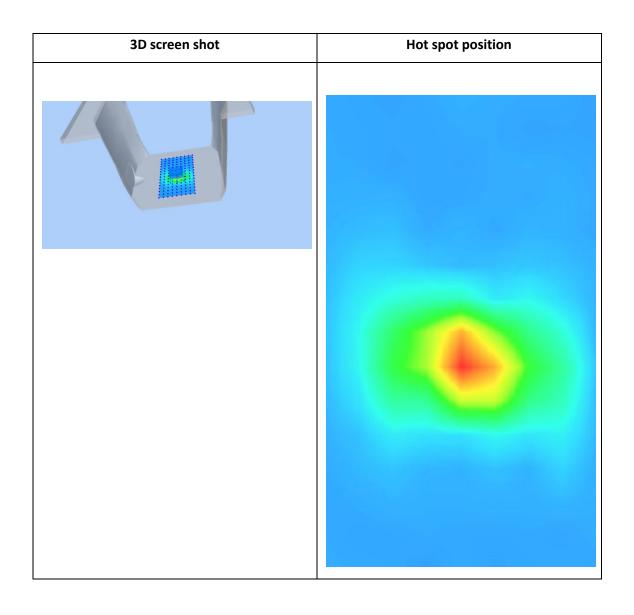


Maximum location: X=1.00, Y=-11.00 SAR Peak: 5.20 W/kg

SAR 10g (W/Kg)	0.590434
SAR 1g (W/Kg)	1.619668









System Performance Check (Head, 5800MHz)

Type: Phone measurement

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

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

Date of measurement: 06/05/2019

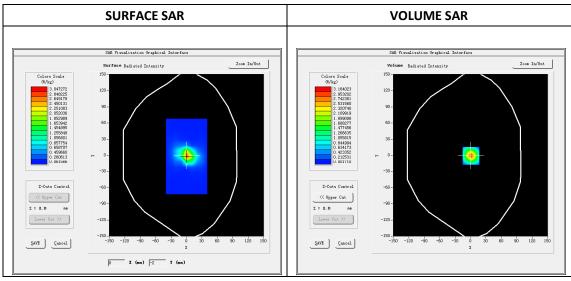
Measurement duration: 22 minutes 06 seconds

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

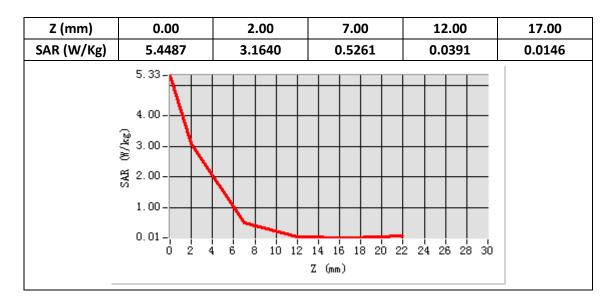
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5800
Relative permittivity (real part)	35.36
Relative permittivity	16.26
Conductivity (S/m)	5.24
Power drift (%)	-1.38
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.19

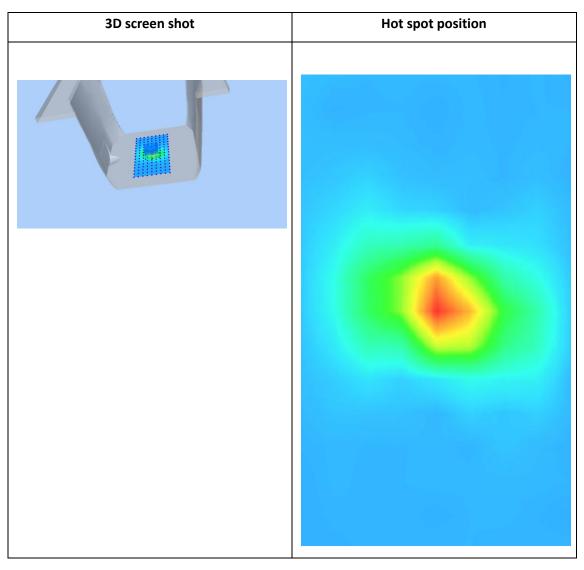


Maximum location: X=1.00, Y=-1.00 SAR Peak: 5.68 W/kg

SAR 10g (W/Kg)	0.640946
SAR 1g (W/Kg)	1.754701









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: 06/05/2019

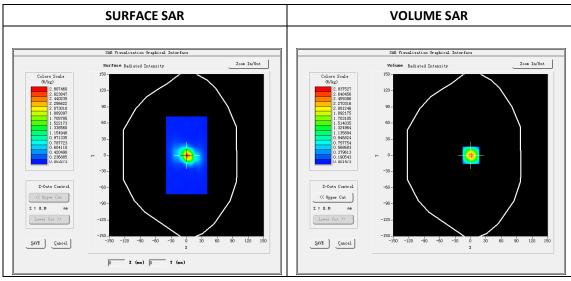
Measurement duration: 22 minutes 18 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

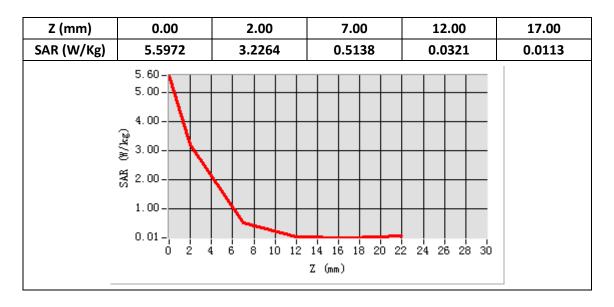
E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	5800
Relative permittivity (real part)	48.11
Relative permittivity	18.22
Conductivity (S/m)	5.87
Power drift (%)	-0.66
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	2.26

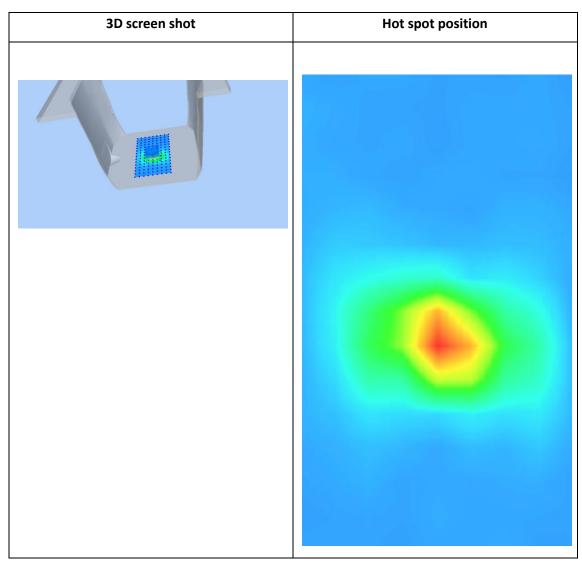


Maximum location: X=1.00, Y=-11.00 SAR Peak: 5.84 W/kg

SAR 10g (W/Kg)	0.641153
SAR 1g (W/Kg)	1.781743









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: 07/08/2019

Measurement duration: 22 minutes 33 seconds

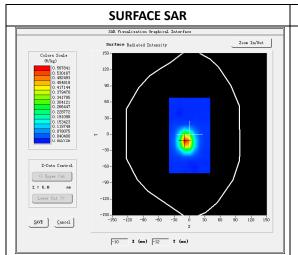
A. Experimental conditions.

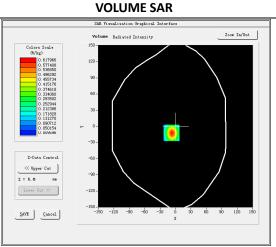
Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=5mm dy=5mm dz=4mm
Device Position	Dipole
Band	2450MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_27/15_EPG0261
Frequency (MHz)	2450
Relative permittivity (real part)	39.35
Relative permittivity	13.37
Conductivity (S/m)	1.82
Power Drift (%)	-0.03
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	2.37
Duty factor:	1:1



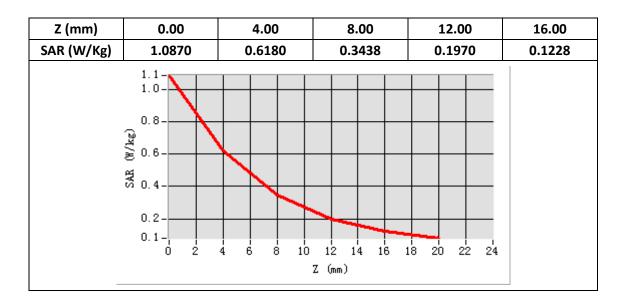


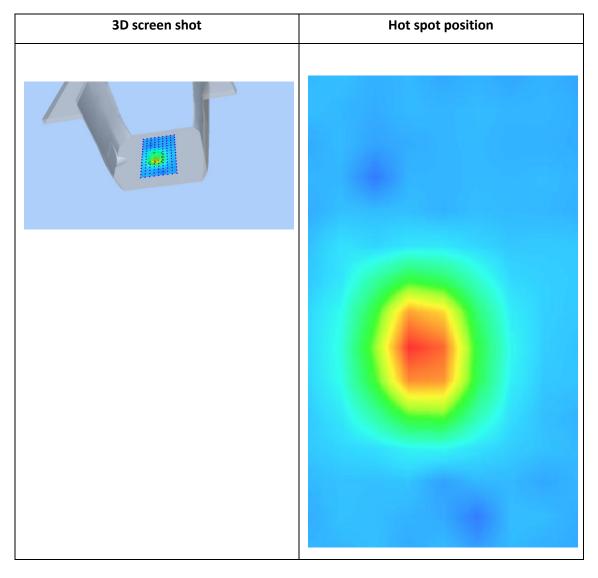
Maximum location: X=-8.00, Y=-12.00

SAR Peak: 1.09 W/kg

SAR 10g (W/Kg)	0.260051
SAR 1g (W/Kg)	0.557463









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: 07/08/2019

Measurement duration: 22 minutes 26 seconds

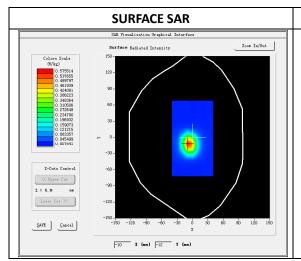
A. Experimental conditions.

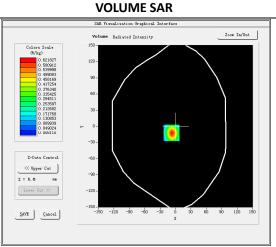
Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=5mm dy=5mm dz=4mm
Device Position	Dipole
Band	2450MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_27/15_EPG0261	
Frequency (MHz)	2450	
Relative permittivity (real part)	52.70	
Relative permittivity	14.33	
Conductivity (S/m)	1.95	
Power Drift (%)	-1.25	
Ambient Temperature:	22.1°C	
Liquid Temperature:	22.6°C	
ConvF:	2.46	
Duty factor:	1:1	





Maximum location: X=-8.00, Y=-12.00

SAR Peak: 1.09 W/kg

SAR 10g (W/Kg)	0.258919
SAR 1g (W/Kg)	0.565325



