

Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Touch- Left<SIM 1>

DUT: mobile phone; Type: AM521

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3;
Conv.F=6.42;Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.94$;
 $\rho = 1000$ kg/m³ ;

Phantom section: Left Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

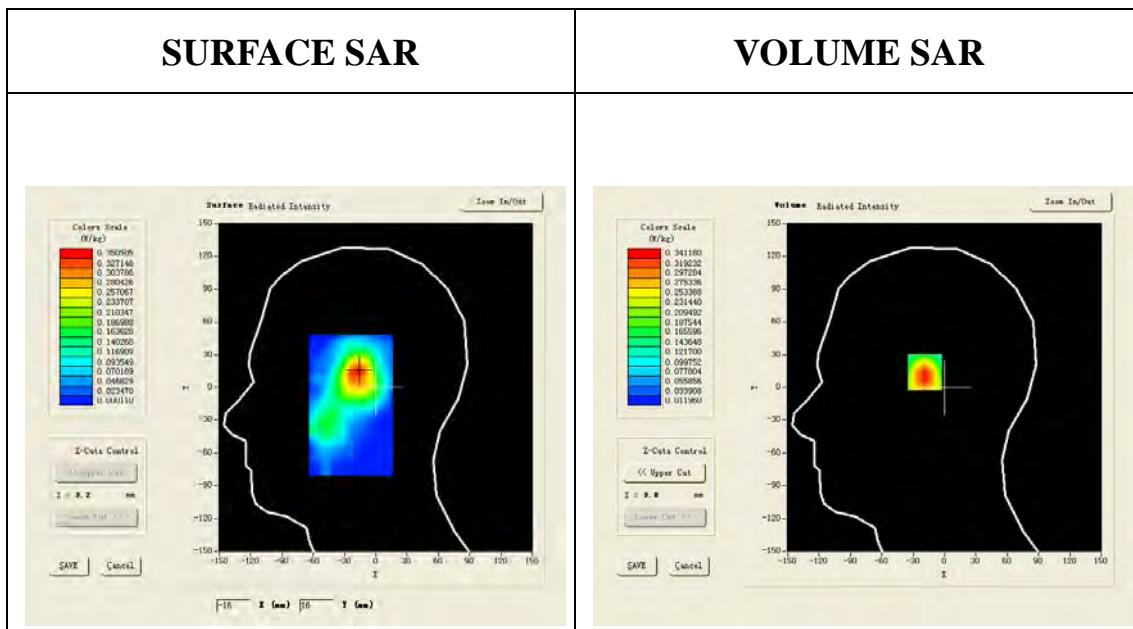
- Probe:SSE5; Calibrated: 12/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid Touch-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm

Configuration/PCS1900 Mid Touch-Left/Zoom Scan: Measurement grid: dx=8mm,

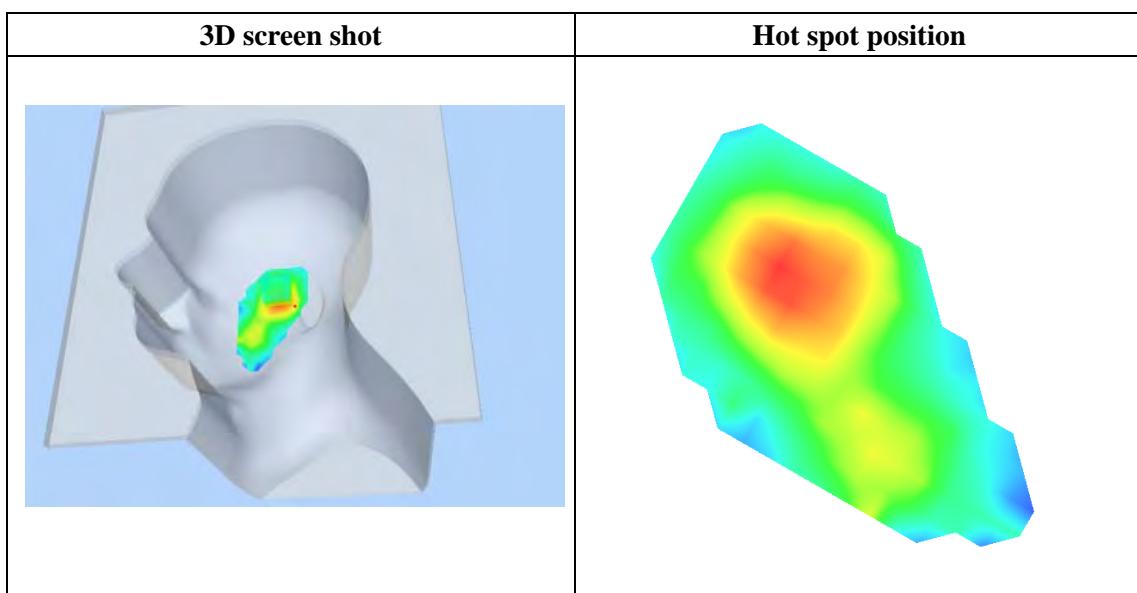
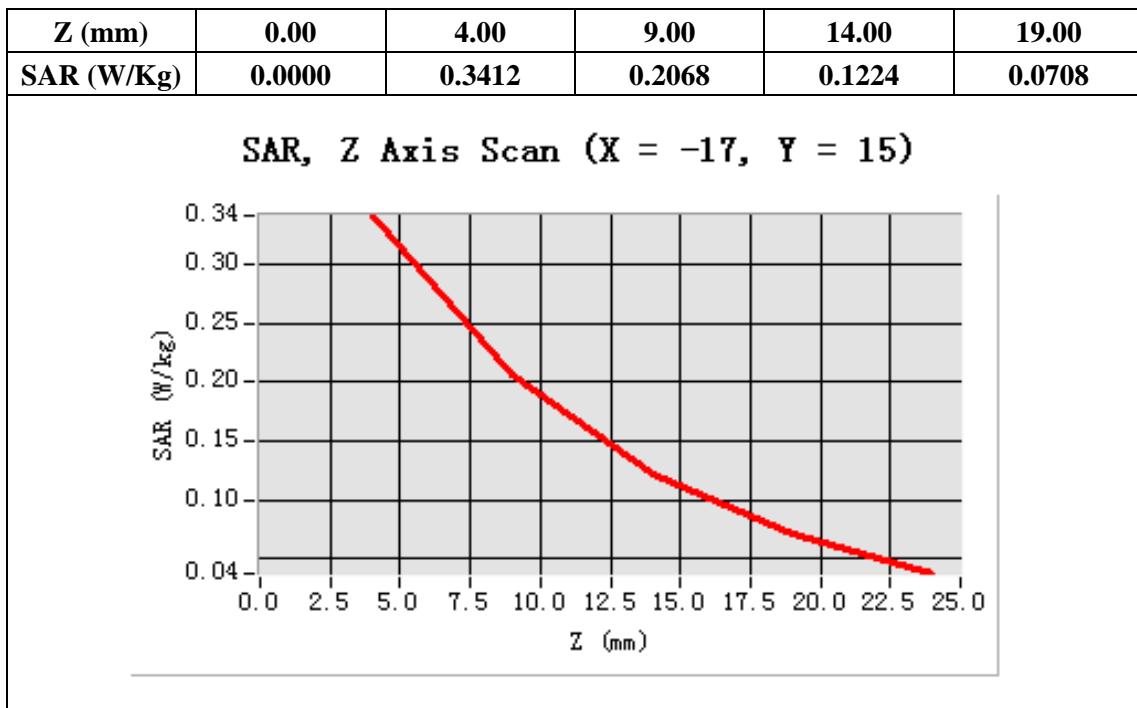
dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-17.00, Y=15.00

SAR 10g (W/Kg)	0.181197
SAR 1g (W/Kg)	0.323300



Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Tilt-Left<SIM 1>

DUT: mobile phone; Type: AM521

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3;
Conv.F=6.42;Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.94$;
 $\rho = 1000$ kg/m³ ;

Phantom section: Left Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

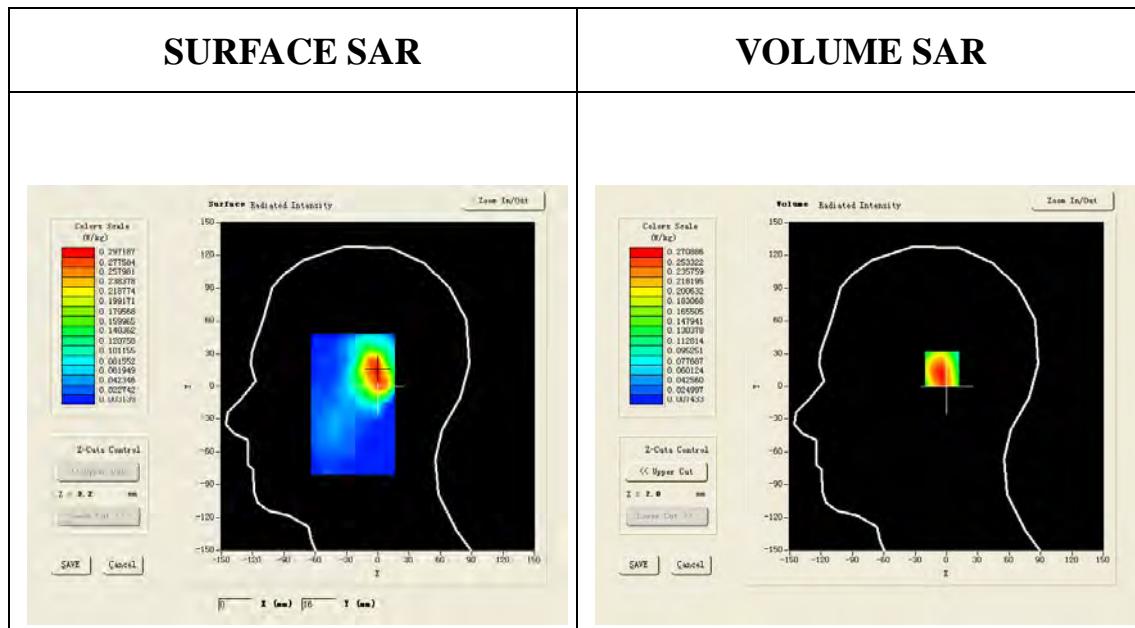
Satimo Configuration:

- Probe:SSE5; Calibrated: 12/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid Tilt-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm

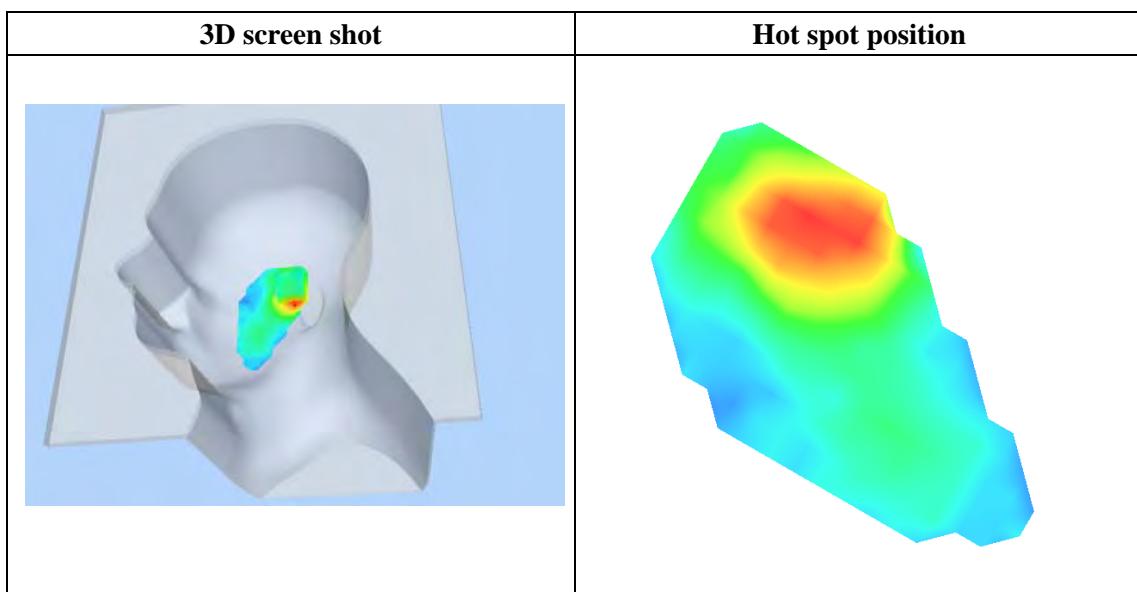
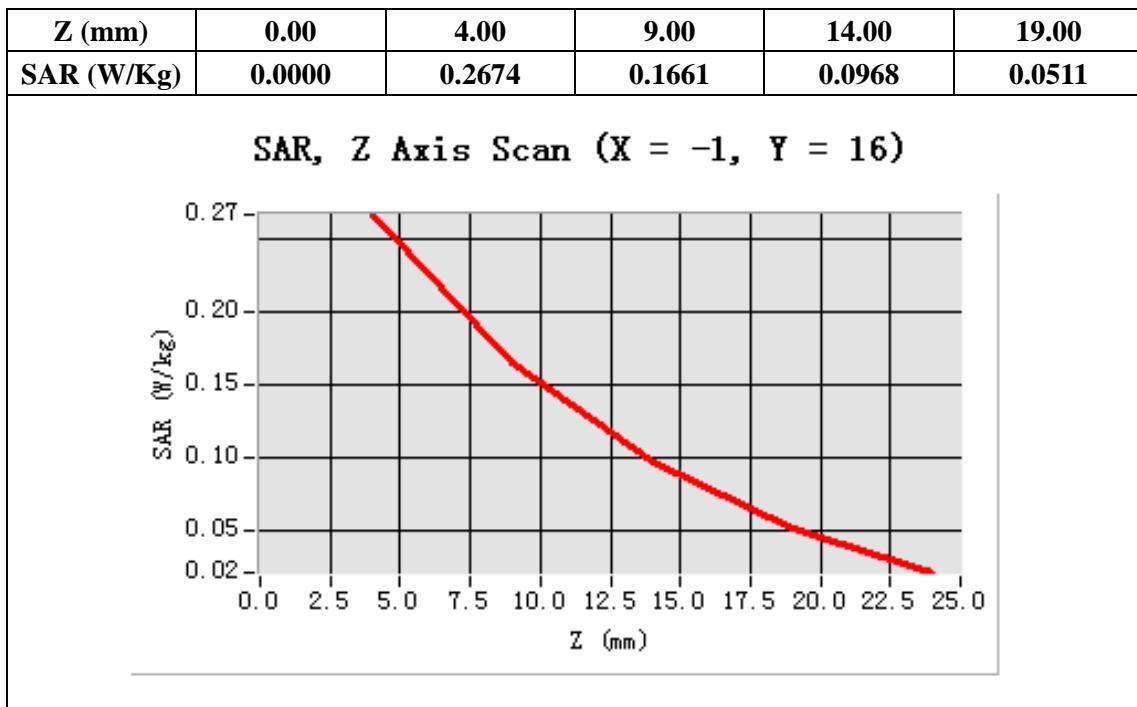
Configuration/PCS1900 Mid Tilt-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-1.00, Y=16.00

SAR 10g (W/Kg)	0.145567
SAR 1g (W/Kg)	0.258160



Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Touch- Right<SIM 1>

DUT: mobile phone; Type: AM521

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3;
Conv.F=6.42;Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.94$;
 $\rho = 1000$ kg/m³ ;

Phantom section: Right Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

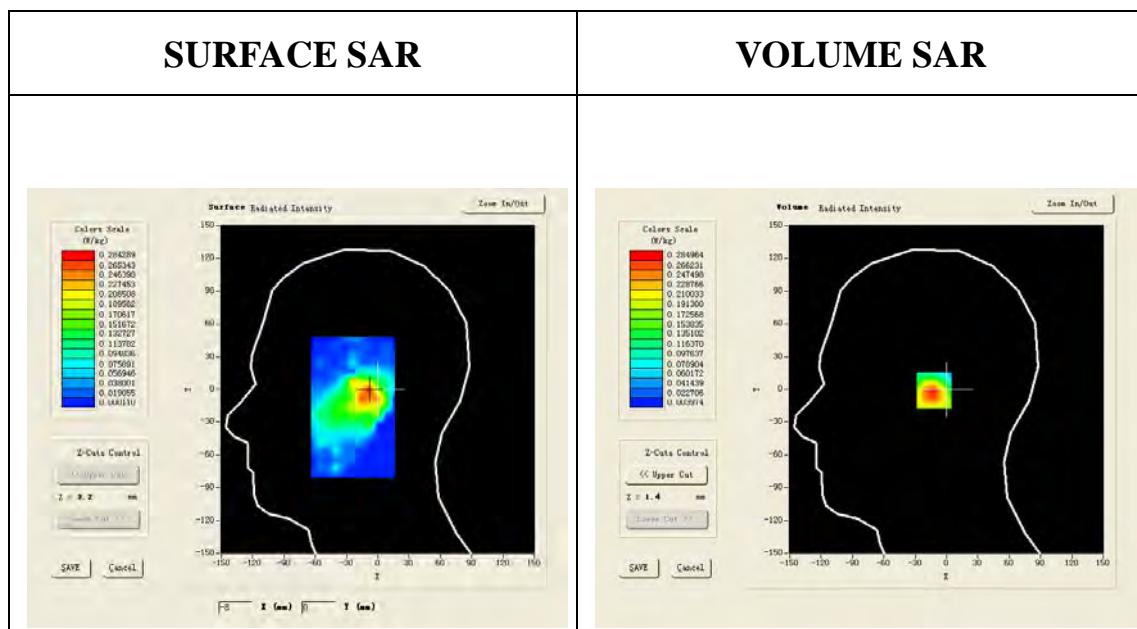
- Probe:SSE5; Calibrated: 12/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm

Configuration/PCS1900 Mid Touch-Right/Zoom Scan: Measurement grid: dx=8mm,

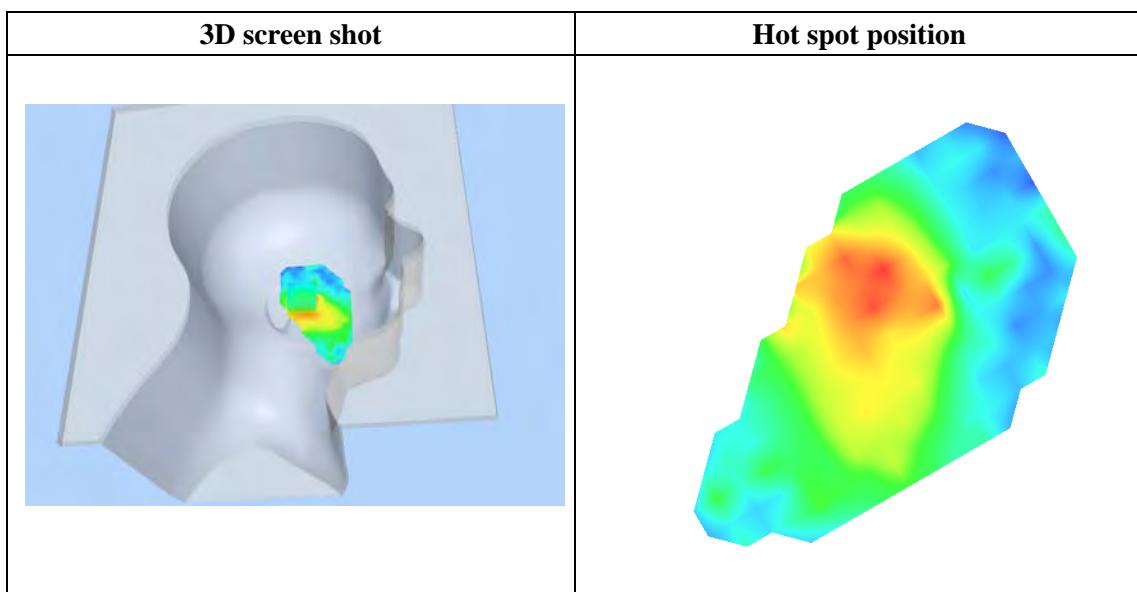
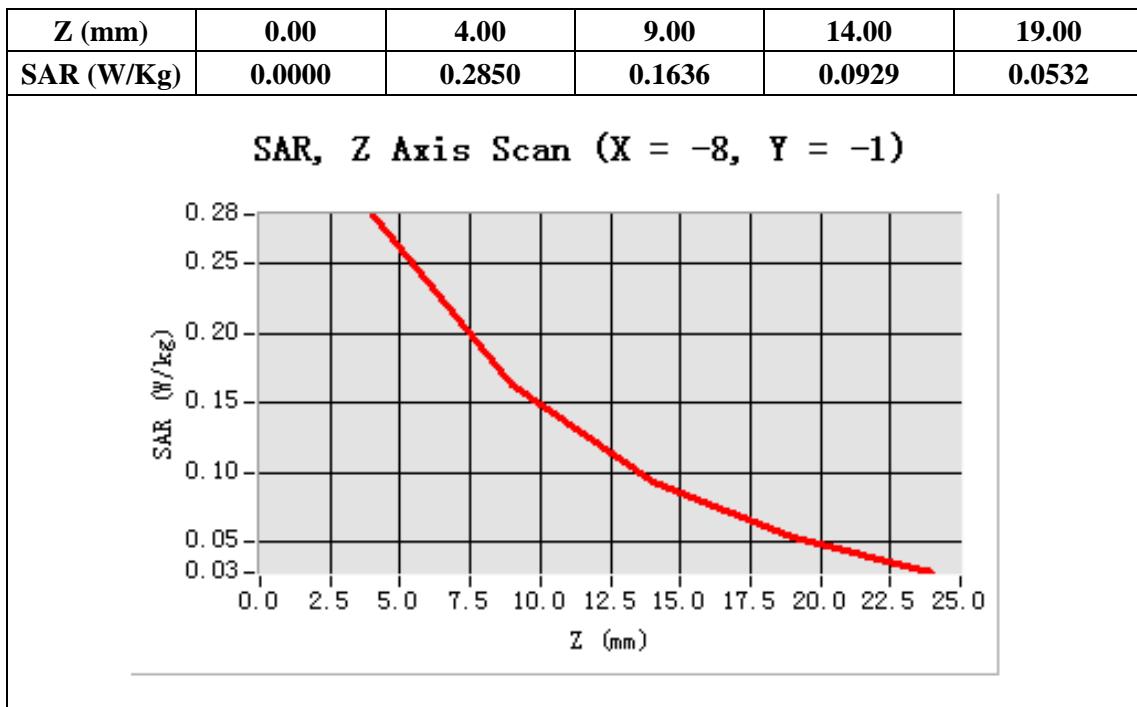
dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-8.00, Y=-1.00

SAR 10g (W/Kg)	0.143328
SAR 1g (W/Kg)	0.269246



Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Tilt- Right<SIM 1>

DUT: mobile phone; Type: AM521

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3;
Conv.F=6.42; Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.94$;
 $\rho = 1000$ kg/m³ ;

Phantom section: Right Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

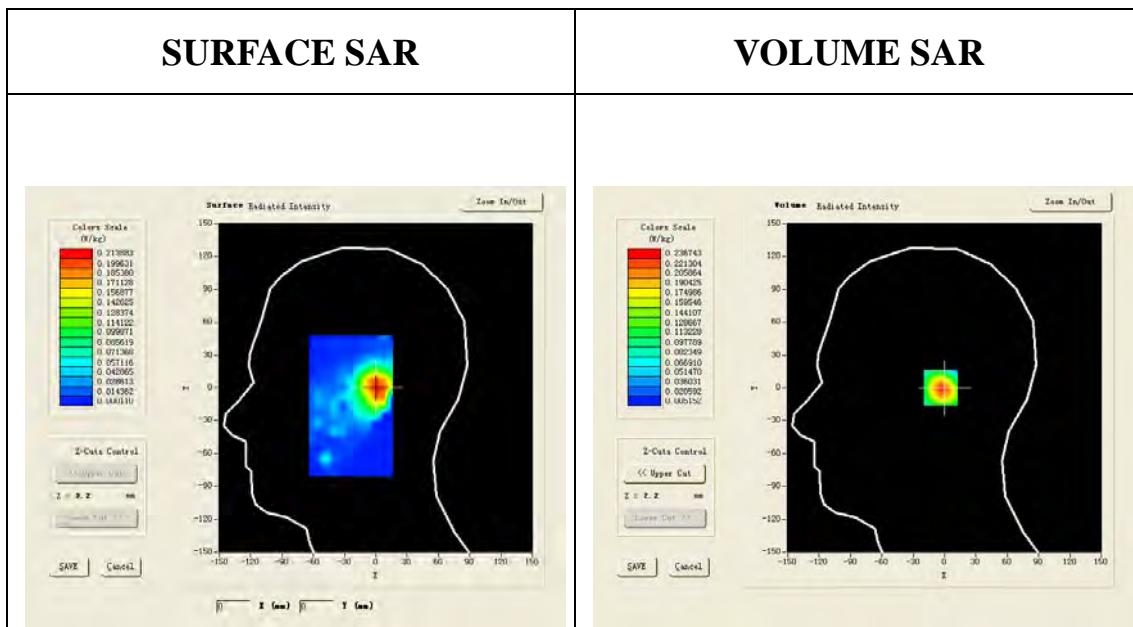
Satimo Configuration:

- Probe:SSE5; Calibrated: 12/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid Tilt-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm

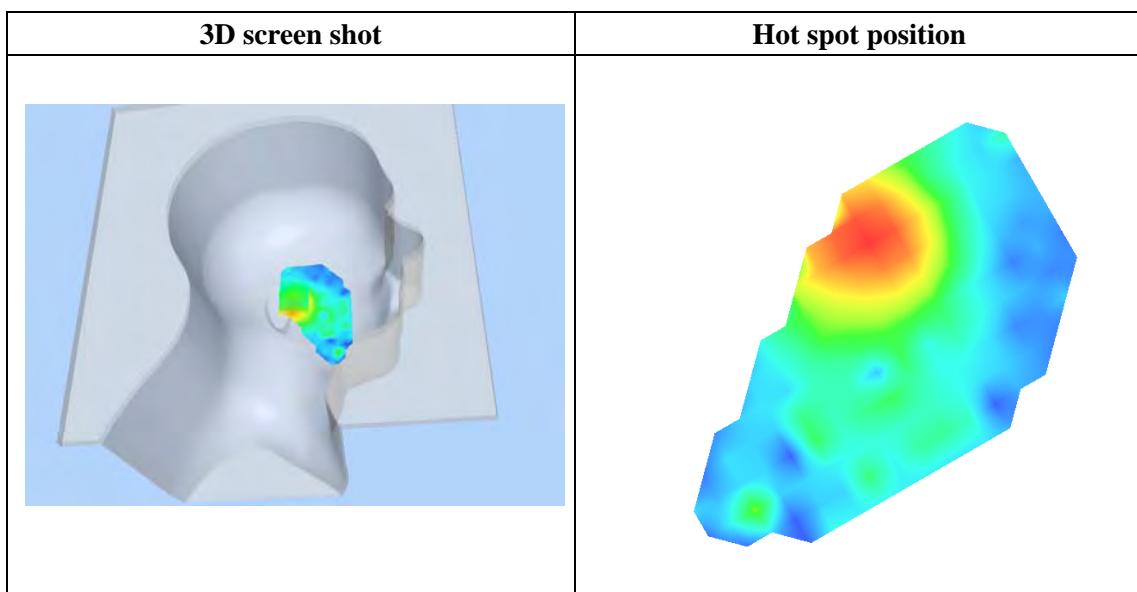
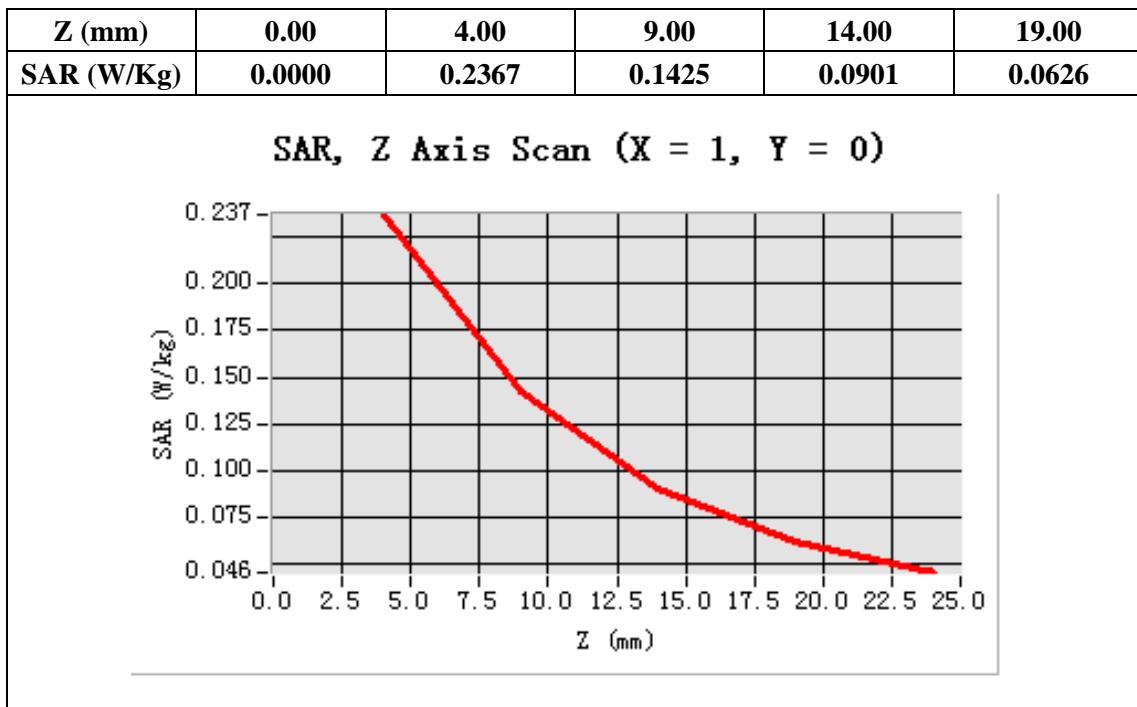
**Configuration/PCS1900 Mid Tilt-Right/Zoom Scan: Measurement grid: dx=8mm,
dy=8mm, dz=5mm;**

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	0.123142
SAR 1g (W/Kg)	0.220384



Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Touch-Left<SIM 2>

DUT: mobile phone; Type: AM521

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3;
Conv.F=6.42; Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.94$;
 $\rho = 1000$ kg/m³ ;

Phantom section: Left Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

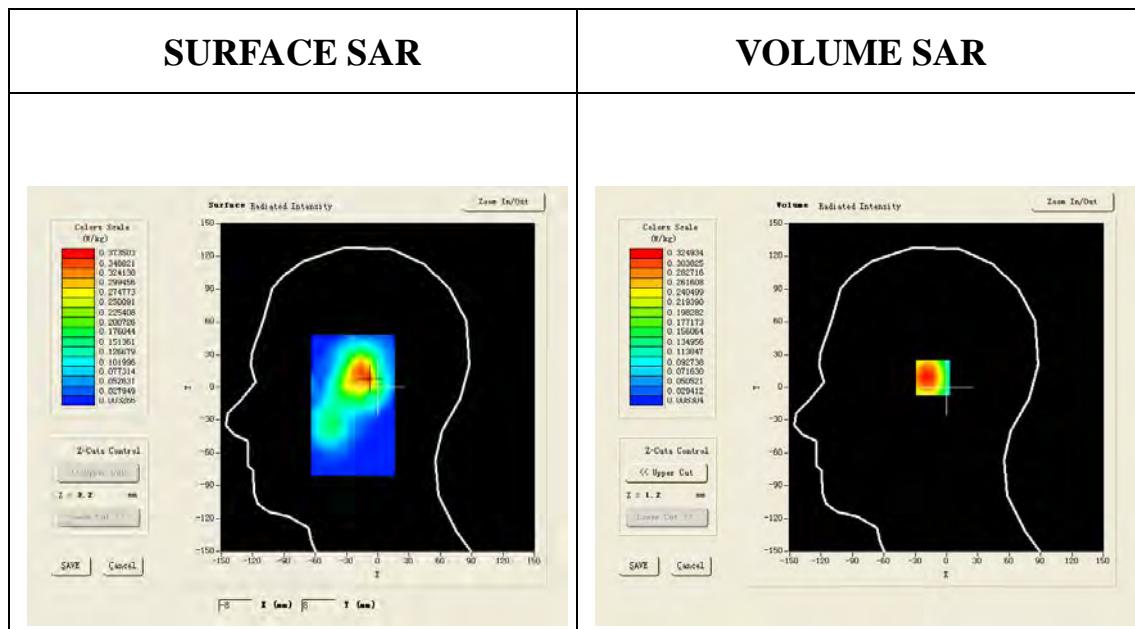
Satimo Configuration:

- Probe:SSE5; Calibrated: 12/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid Touch-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm

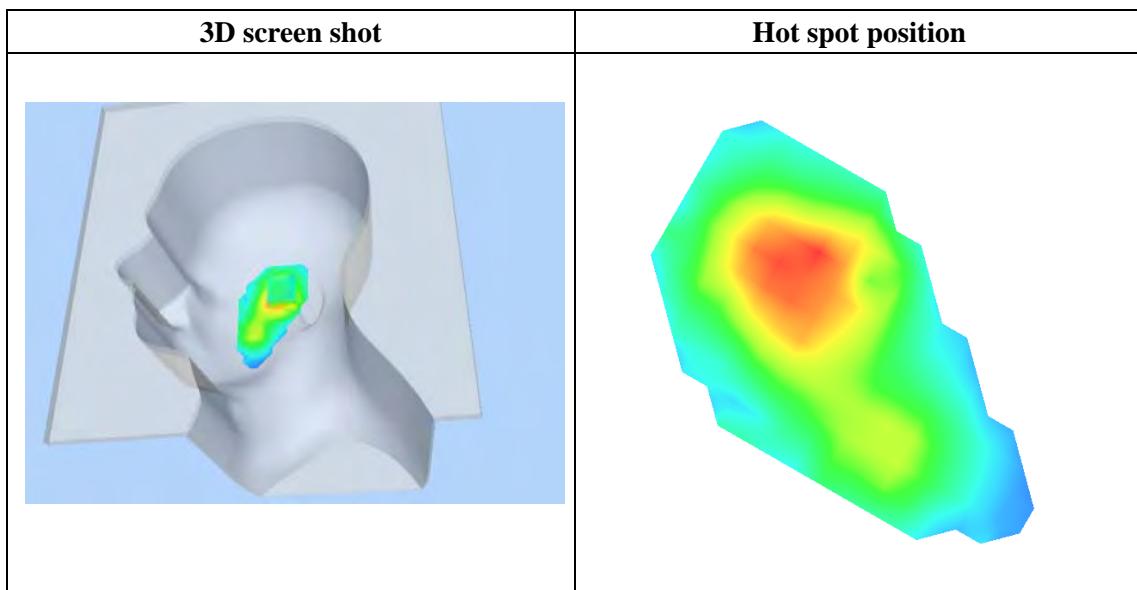
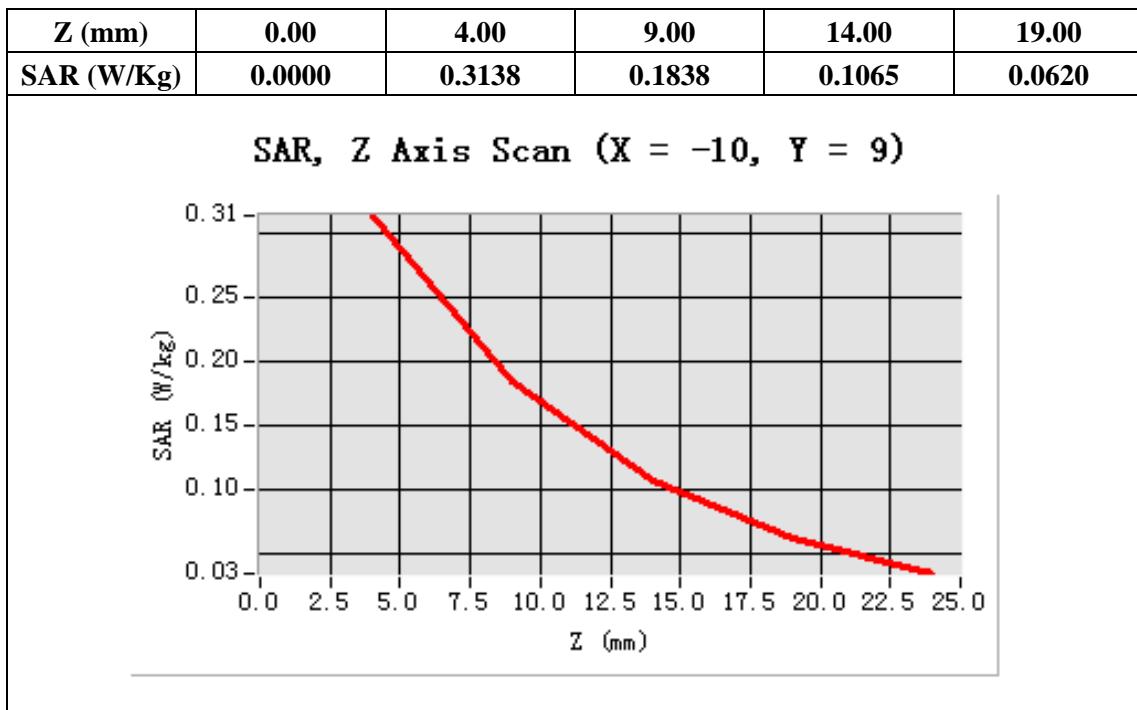
Configuration/PCS1900 Mid Touch-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Touch
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-10.00, Y=9.00

SAR 10g (W/Kg)	0.176662
SAR 1g (W/Kg)	0.310013



Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Body- Back(MS) <SIM 1>

DUT: mobile phone; Type: AM521

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3;
Conv.F=6.42;Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 52.77$;
 $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

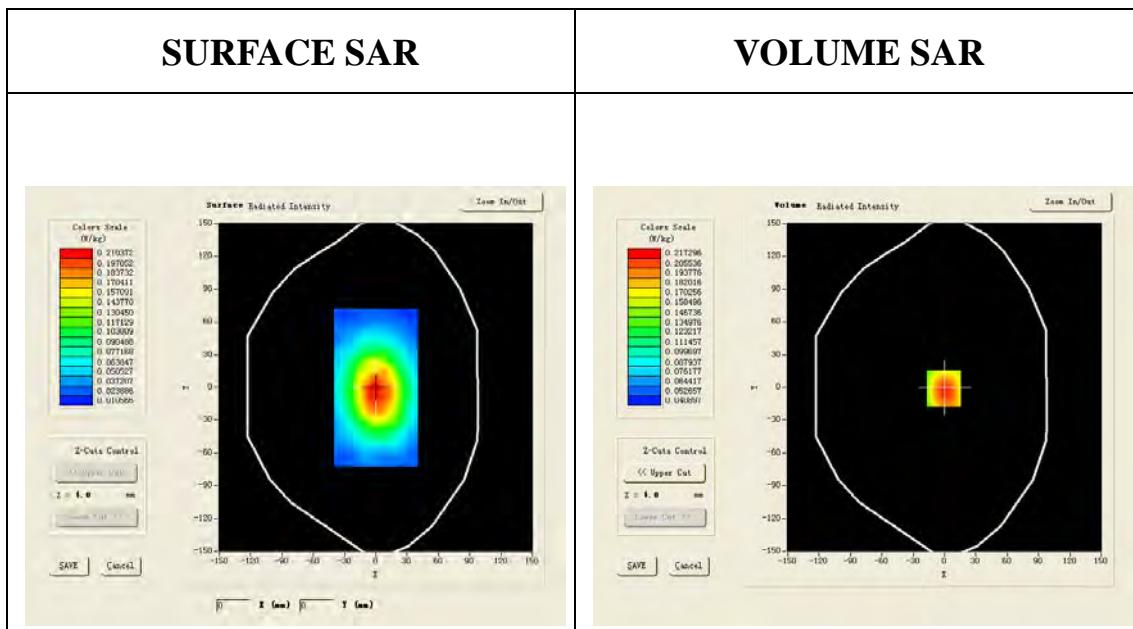
- Probe:SSE5; Calibrated: 12/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid Body-Back/Area Scan: Measurement grid: dx=20mm, dy=20mm

Configuration/PCS1900 Mid Body-Back/Zoom Scan: Measurement grid: dx=8mm,

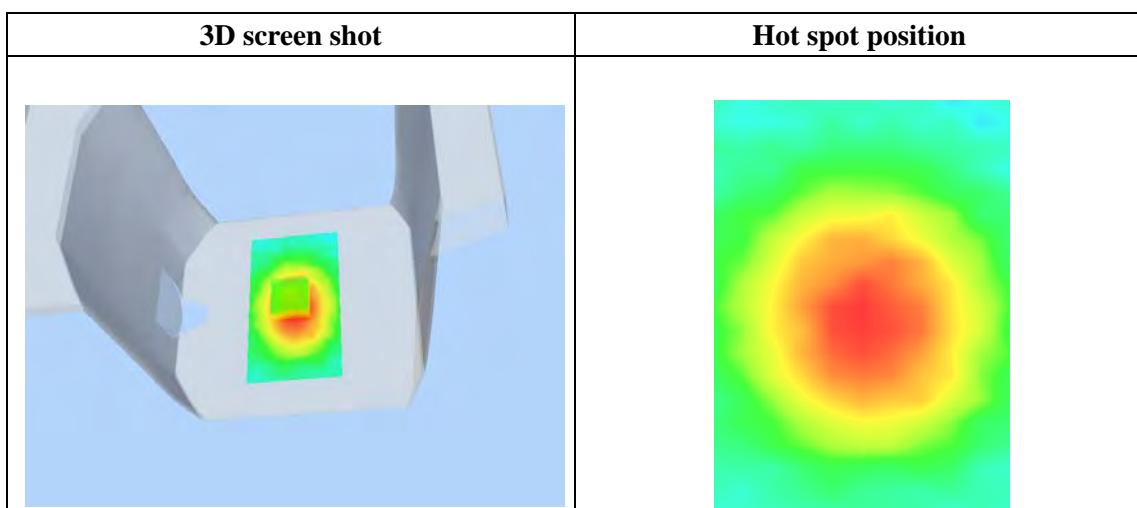
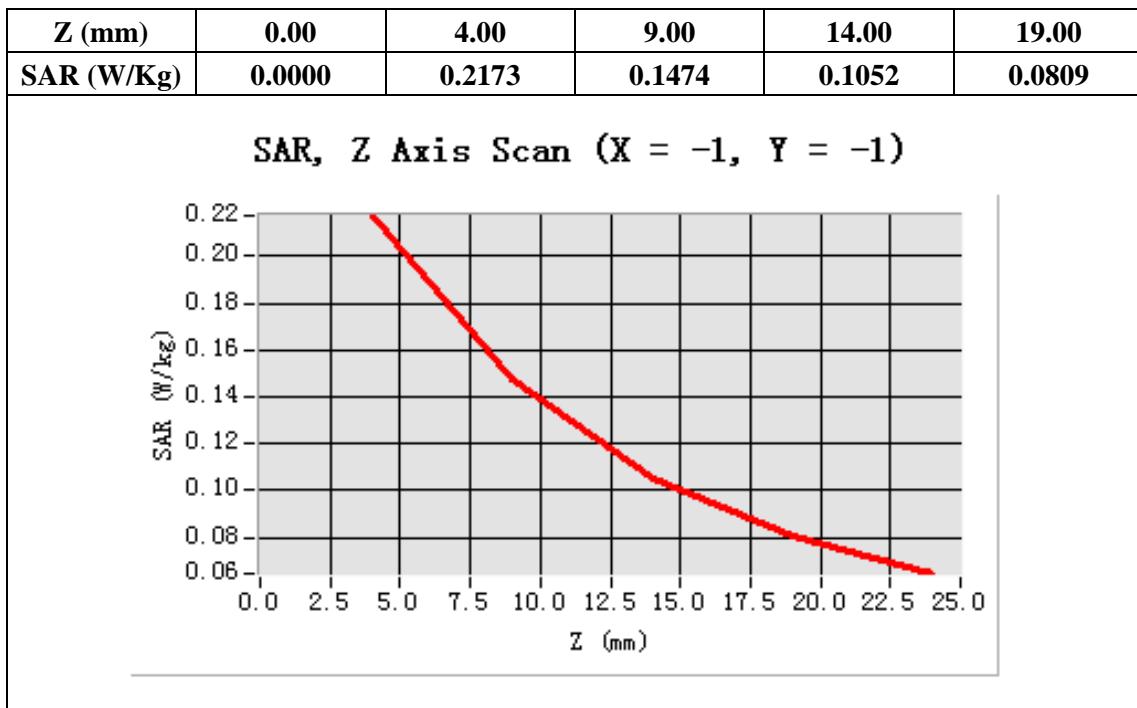
dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



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

SAR 10g (W/Kg)	0.152752
SAR 1g (W/Kg)	0.226321



Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Body- Back (2up) <SIM 1>

DUT: mobile phone; Type: AM521

Communication System: GPRS-2 Slot; Communication System Band: PCS1900; Duty Cycle: 1:4.2 ; Conv.F=6.42; Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 52.77$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

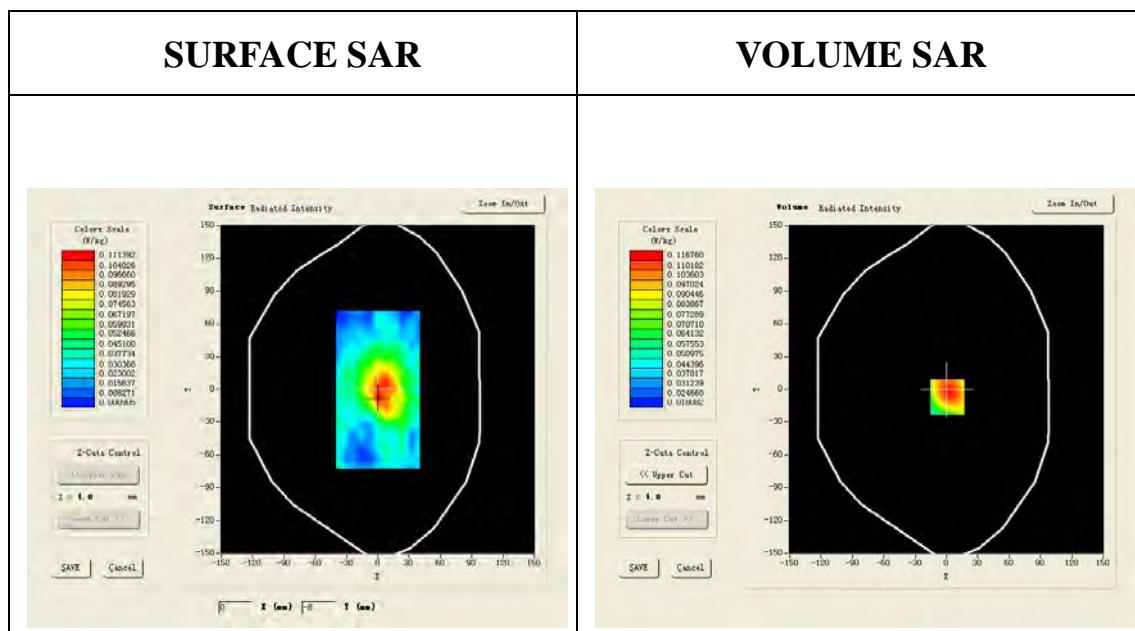
- Probe:SSE5; Calibrated: 12/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid Body-Back/Area Scan: Measurement grid: dx=20mm, dy=20mm

Configuration/GPRS1900 Mid Body-Back/Zoom Scan: Measurement grid: dx=8mm,

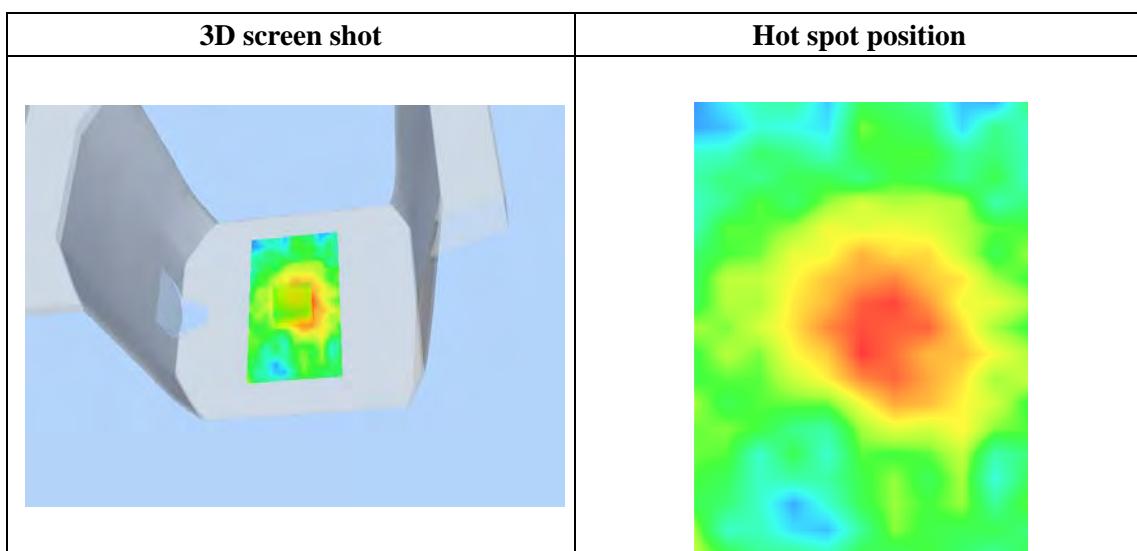
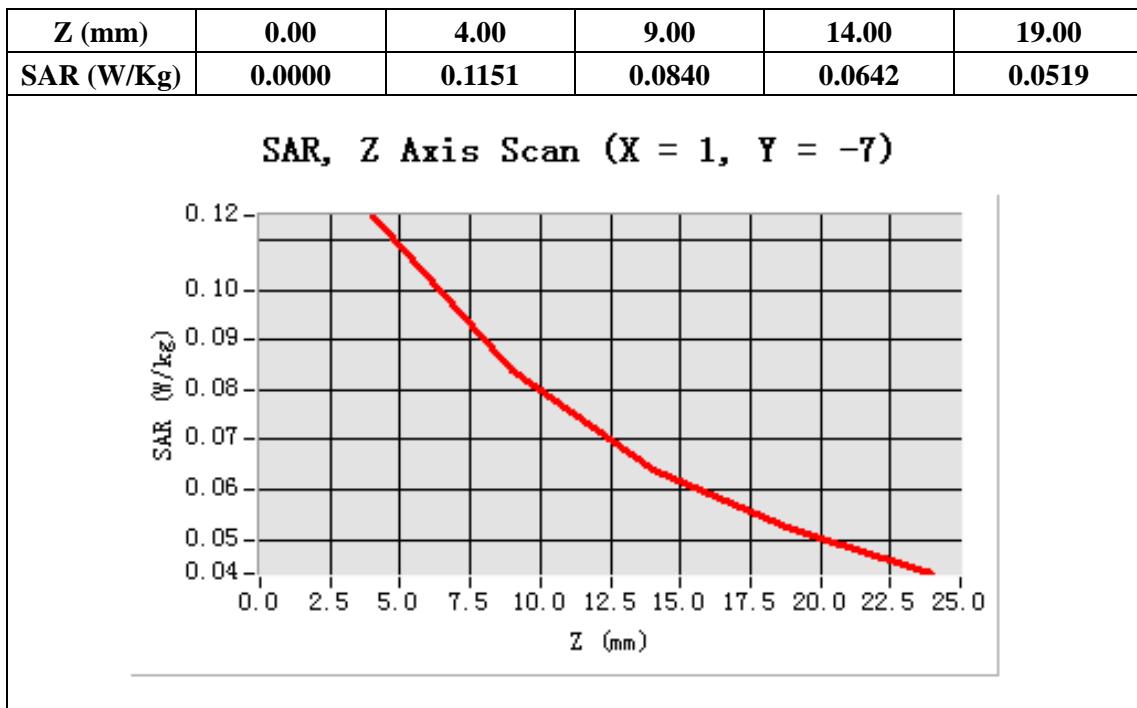
dy=8mm, dz=5m;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 4.0)



Maximum location: X=1.00, Y=-7.00

SAR 10g (W/Kg)	0.080270
SAR 1g (W/Kg)	0.113216



Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Body- Back (3up) <SIM 1>

DUT: mobile phone; Type: AM521

Communication System: GPRS-3 Slot; Communication System Band: PCS1900; Duty Cycle: 1:2.7;

Conv.F=6.42

Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 52.77$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section

Ambient temperature (°C):21, Liquid temperature (°C):21

Satimo Configuration:

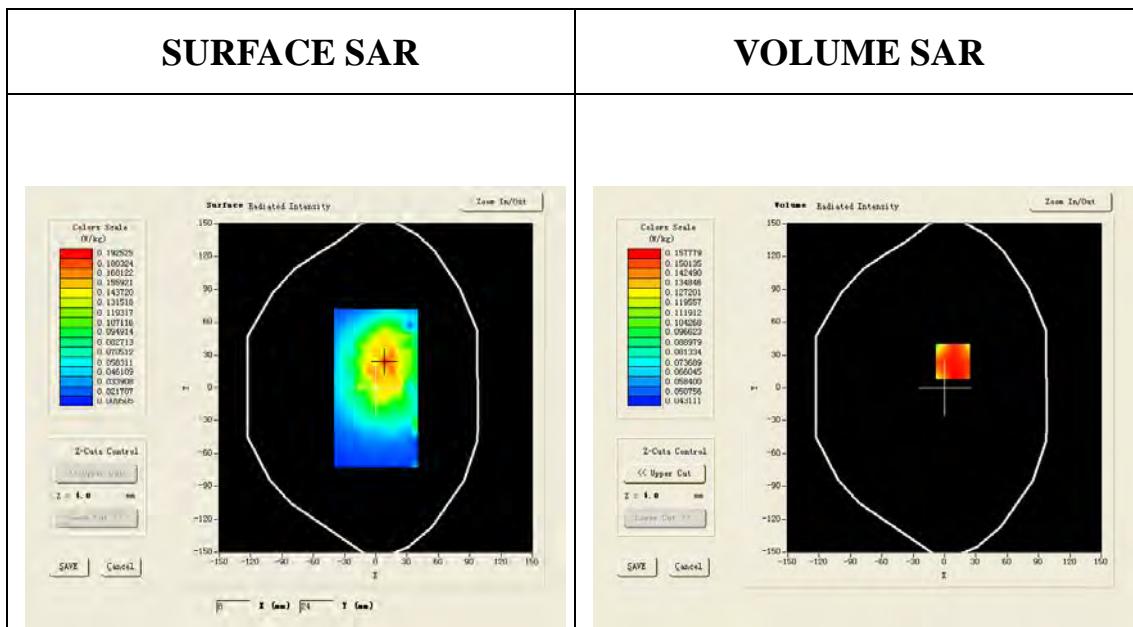
Probe:SSE5; Calibrated: 12/09/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid Body- Back /Area Scan: Measurement grid: dx=20mm, dy=20mm

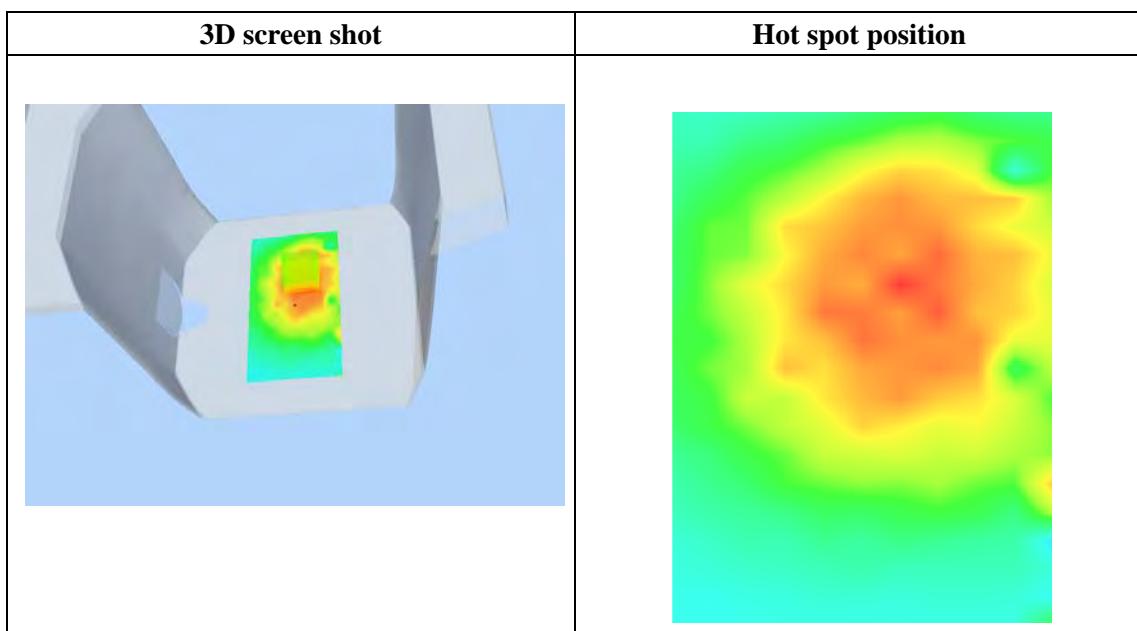
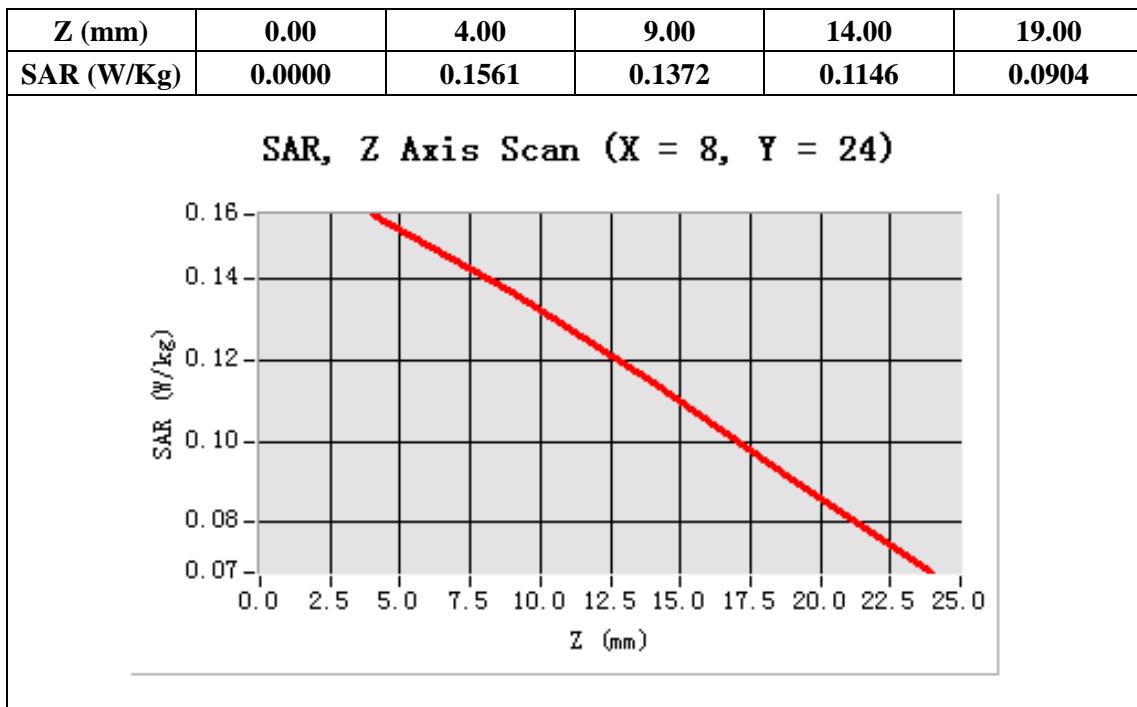
Configuration/GPRS1900 Mid Body- Back /Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5m;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 2.7)



Maximum location: X=8.00, Y=24.00

SAR 10g (W/Kg)	0.134024
SAR 1g (W/Kg)	0.167340



Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Body- Back (4up) <SIM 1>

DUT: mobile phone; Type: AM521

Communication System: GPRS-4 Slot; Communication System Band: PCS1900; Duty Cycle: 1:2.0;

Conv.F=6.42

Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 52.77$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section

Ambient temperature (°C):21, Liquid temperature (°C):21

Satimo Configuration:

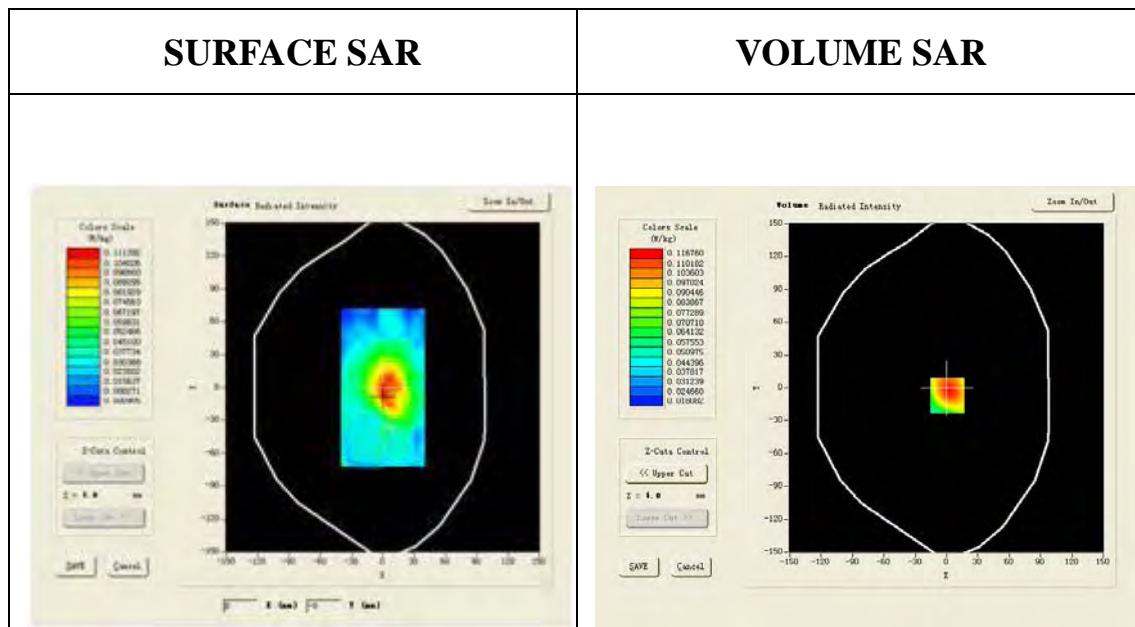
Probe:SSE5; Calibrated: 12/09/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid Body- Back /Area Scan: Measurement grid: dx=20mm, dy=20mm

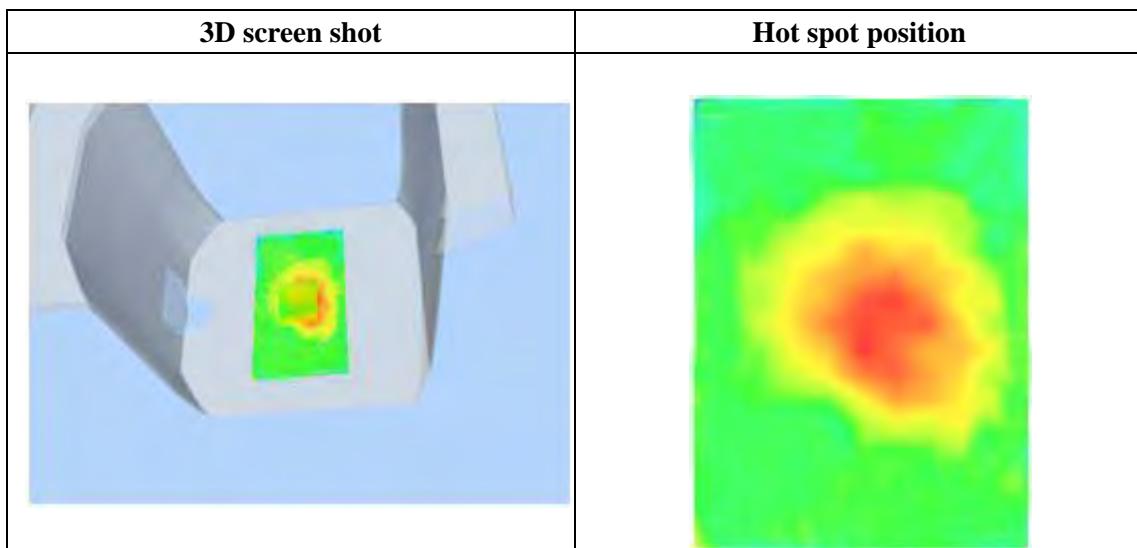
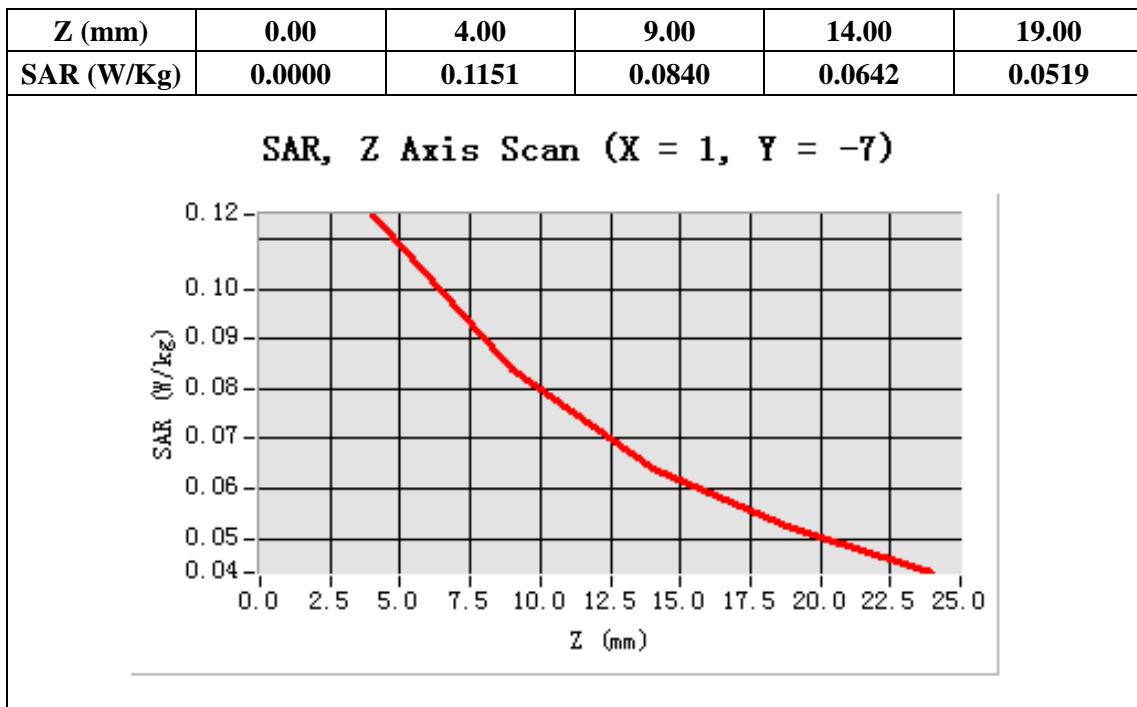
Configuration/GPRS1900 Mid Body- Back /Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5m;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 2.0)



Maximum location: X=1.00, Y=-7.00

SAR 10g (W/Kg)	0.081367
SAR 1g (W/Kg)	0.114325



Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Body -Front (MS) <SIM 1>

DUT: mobile phone; Type: AM521

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3;
Conv.F=6.42;Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 52.77$;
 $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

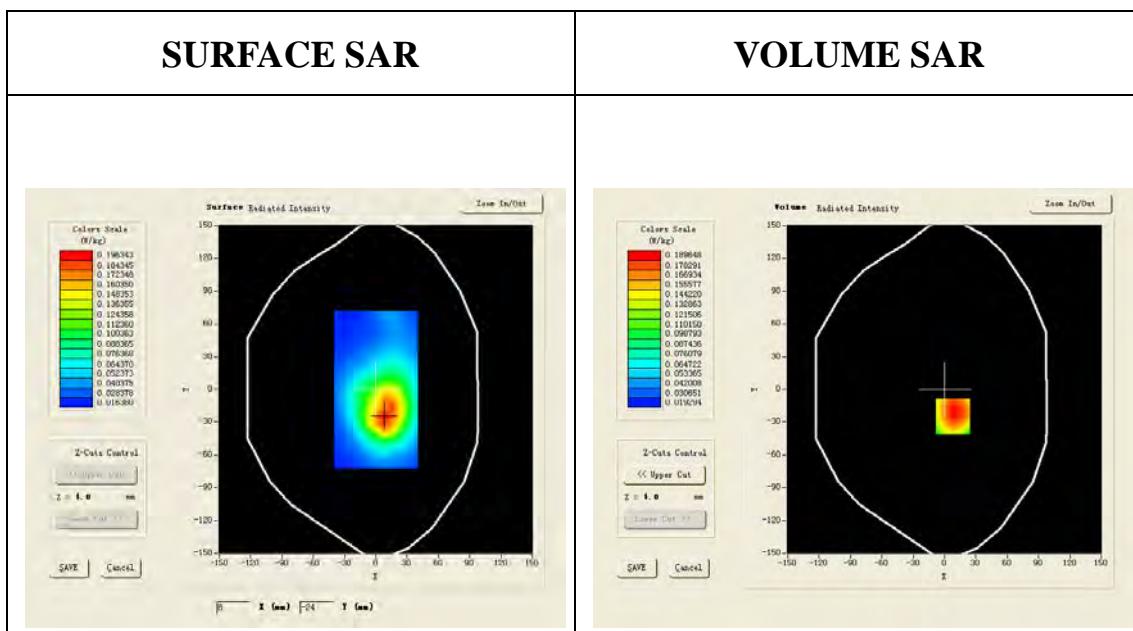
- Probe:SSE5; Calibrated: 12/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid Body-Back/Area Scan: Measurement grid: dx=20mm, dy=20mm

Configuration/PCS1900 Mid Body-Back/Zoom Scan: Measurement grid: dx=8mm,

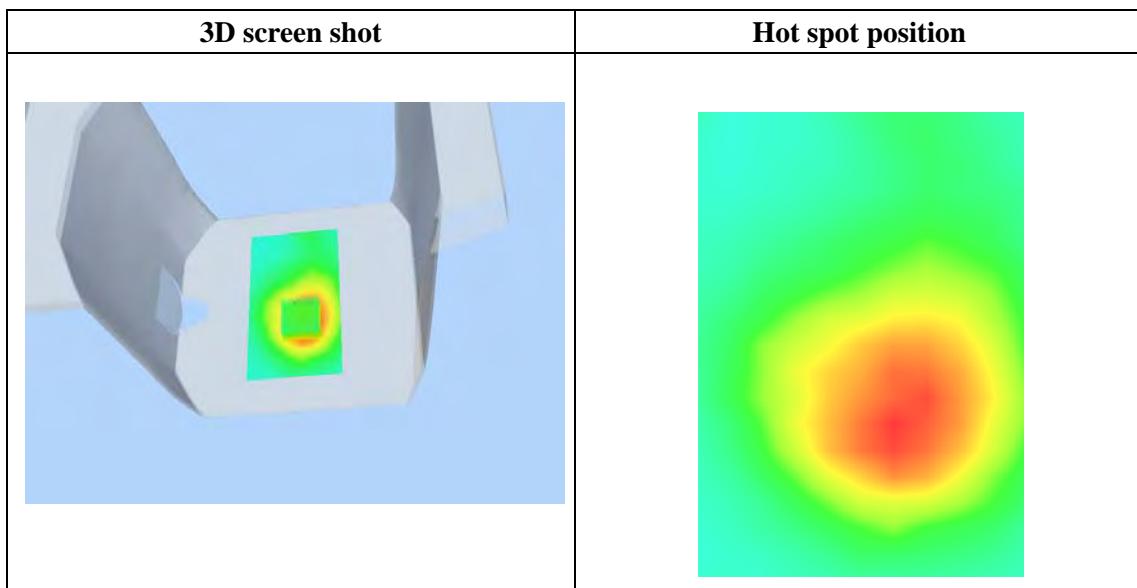
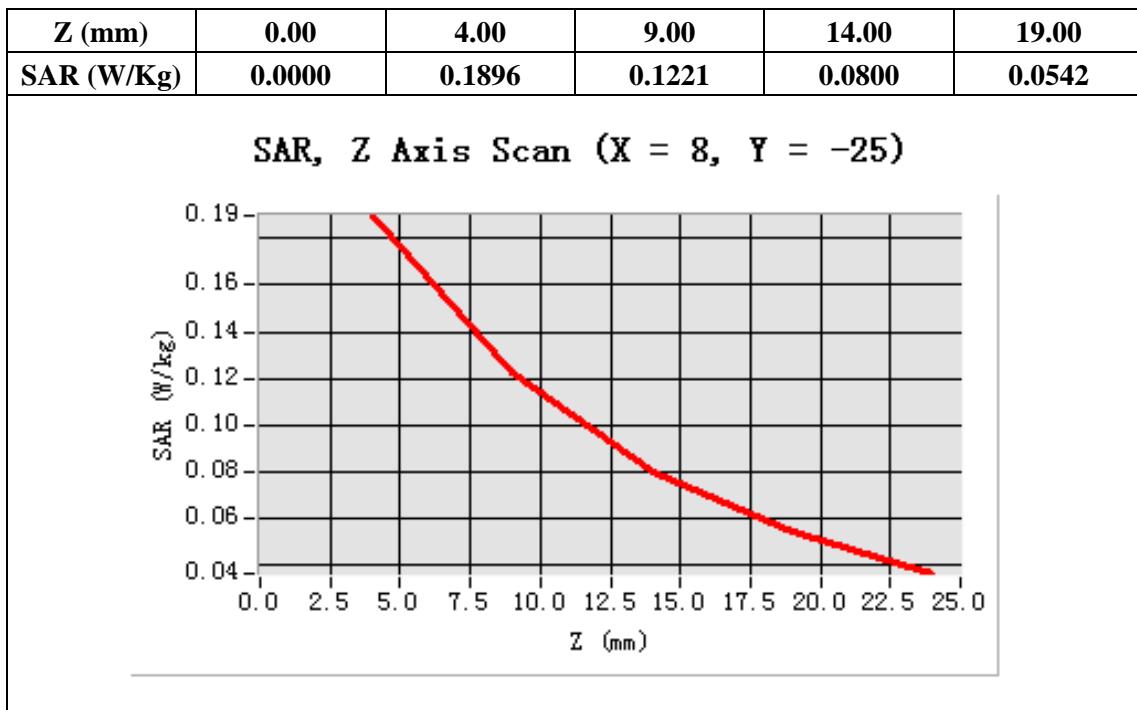
dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=8.00, Y=-25.00

SAR 10g (W/Kg)	0.116753
SAR 1g (W/Kg)	0.183364



Test Laboratory: AGC Lab

Date: Aug. 14,2012

PCS 1900 Mid-Body- Back (MS with earphone) <SIM 1>

DUT: mobile phone; Type: AM521

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3;

Conv.F=6.42;Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 52.77$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

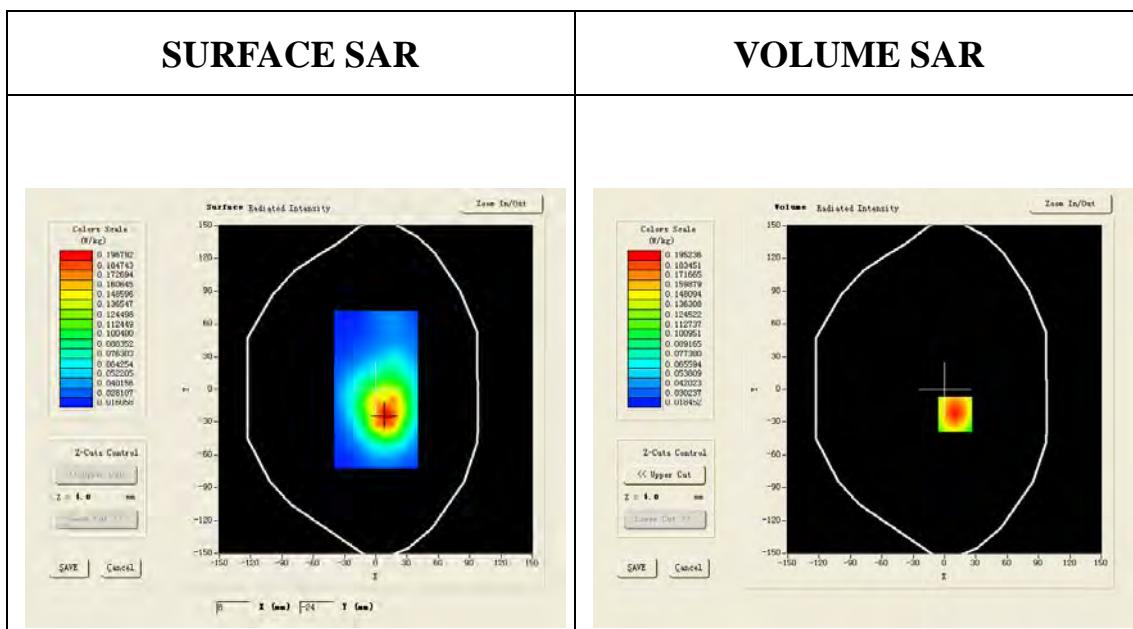
- Probe:SSE5; Calibrated: 12/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid Body-Back/Area Scan: Measurement grid: dx=20mm, dy=20mm

Configuration/PCS1900 Mid Body-Back/Zoom Scan: Measurement grid: dx=8mm,

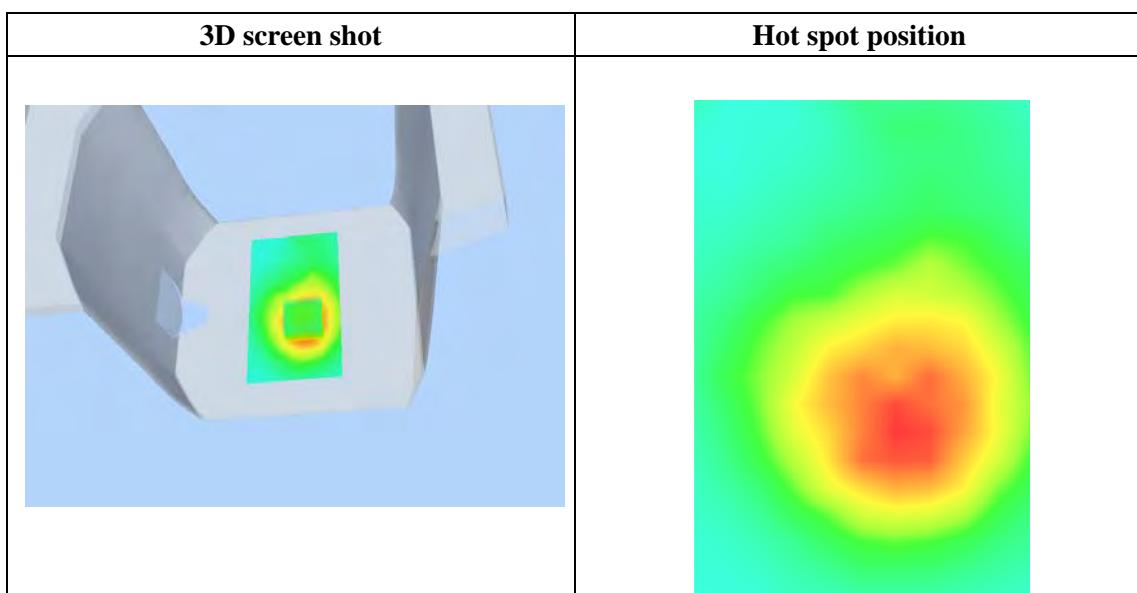
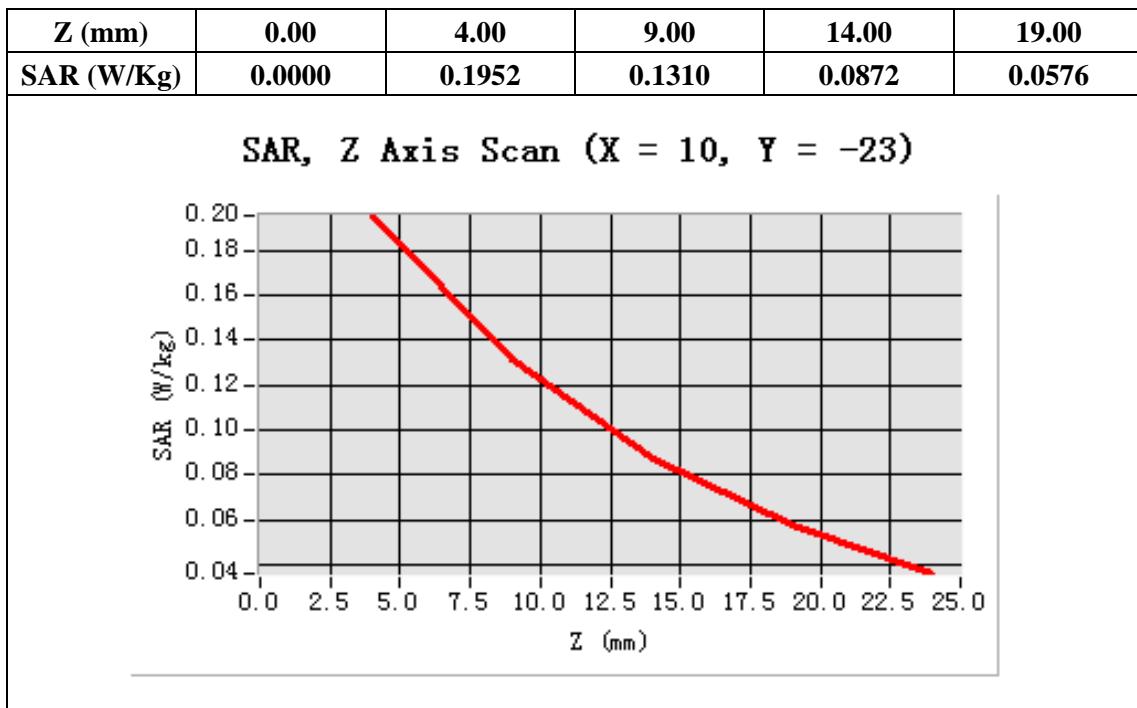
dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)

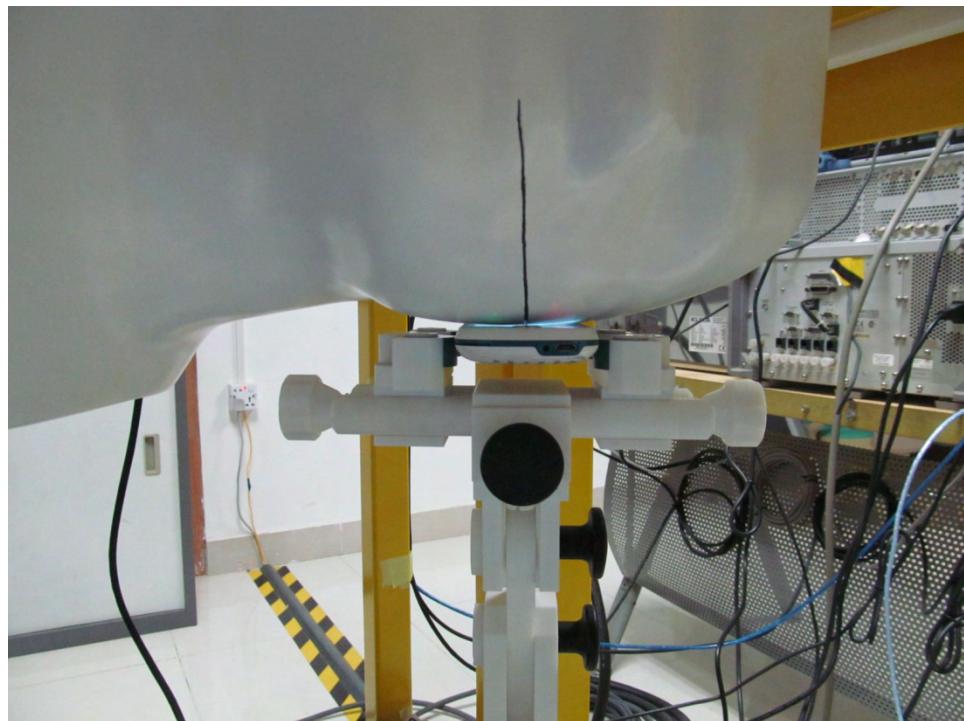


Maximum location: X=10.00, Y=-23.00

SAR 10g (W/Kg)	0.116032
SAR 1g (W/Kg)	0.184974



Appendix C. TEST SETUP PHOTOGRAPHS & EUT PHOTOGRAPS
Test Setup Photographs
LEFT-CHECK TOUCH



LEFT-TILT 15⁰



RIGHT-CHECK TOUCH



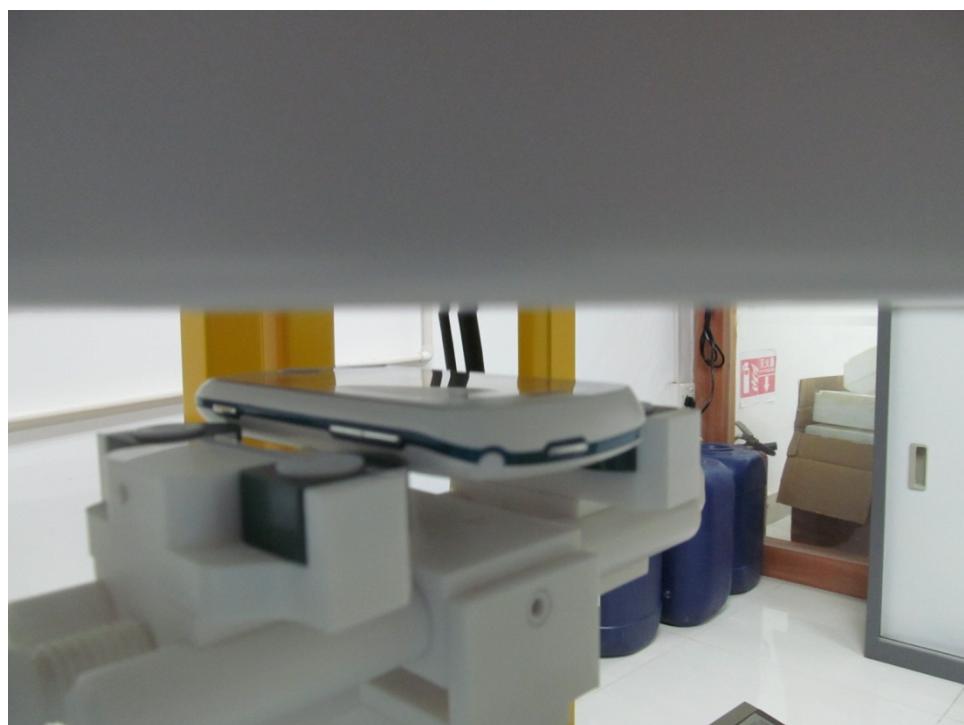
RIGHT-TILT 15°



Body Back15mm



Body Front 15mm



Body back with Headset



DEPTH OF THE LIQUID IN THE PHANTOM—ZOOM IN

Note : The position used in the measurement were according to IEEE 1528-2003



EUT PHOTOGRAPS
TOP VIEW OF SAMPLE



BOTTOM VIEW OF SAMPLE



LEFT VIEW OF SAMPLE



RIGHT VIEW OF SAMPLE



FRONT VIEW OF SAMPLE



BACK VEW OF SAMPLE



ALL VIEW OF SAMPLE

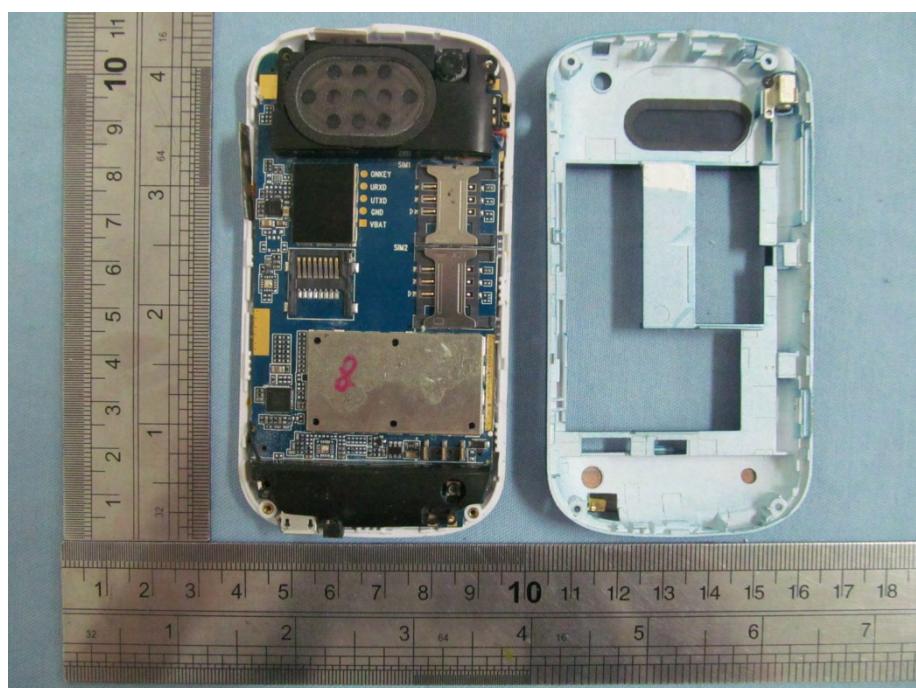


GSM
Antenna

OPEN VIEW OF SAMPLE-1



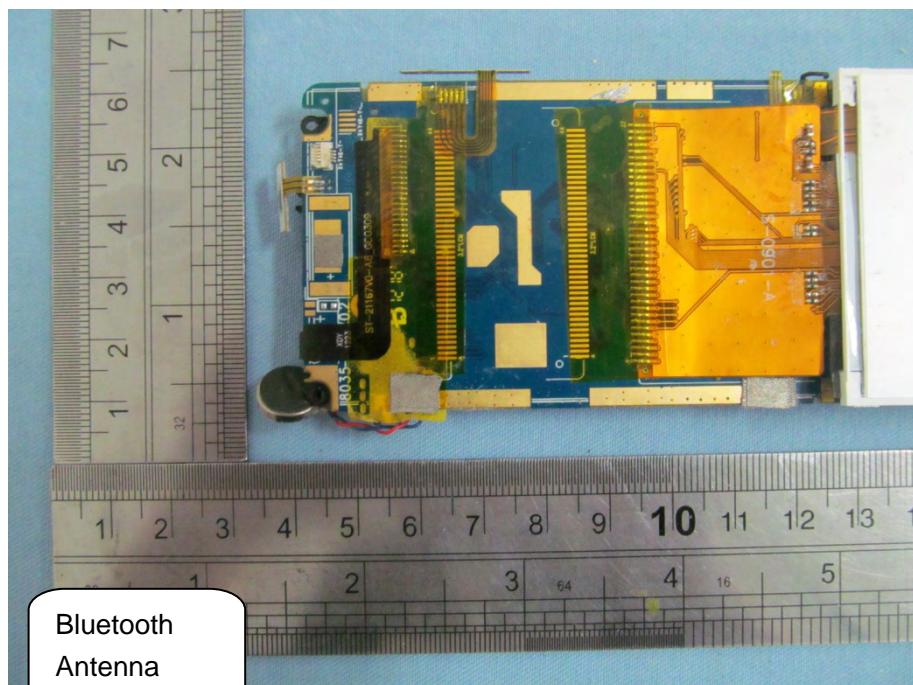
OPEN VIEW OF SAMPLE-2



OPEN VIEW OF SAMPLE-3



INTERNAL VIEW OF SAMPLE-1



INTERNAL VIEW OF SAMPLE-2

