

Appendix A. SAR System Validation Data

Test Laboratory: AGC Lab

Date: Mar.28, 2013

System Check Head 850 MHz

DUT: Dipole 900 MHz Type: SID 900

Communication System CW; Communication System Band: D850 (850.0 MHz); Duty Cycle: 1:1; Conv.F=6.05

Frequency: 850 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 41.33$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section; Input Power=10dBm

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

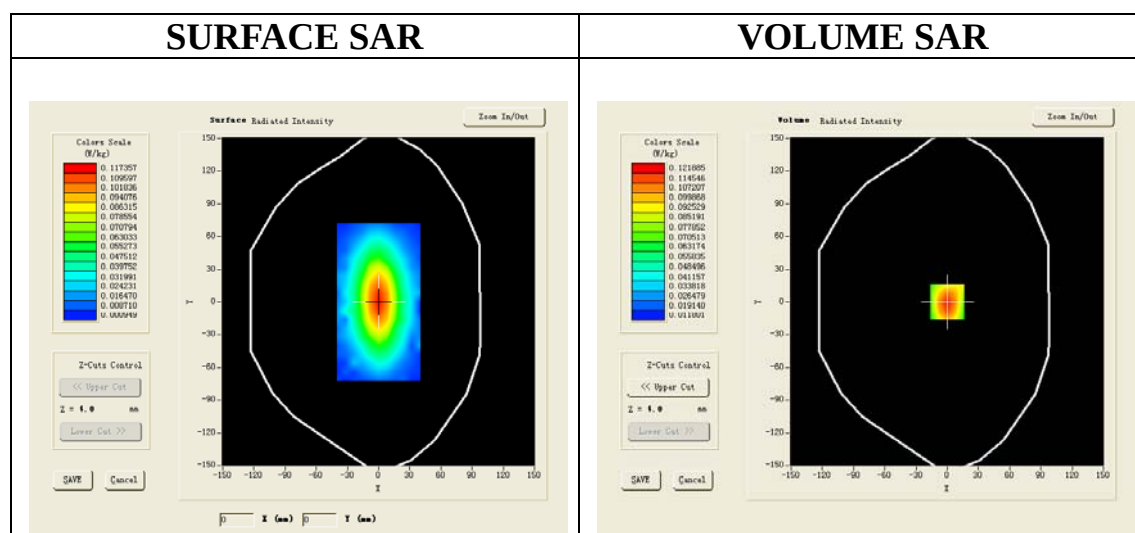
Satimo Configuration:

Probe: EP159; Calibrated: 12/11/2012

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

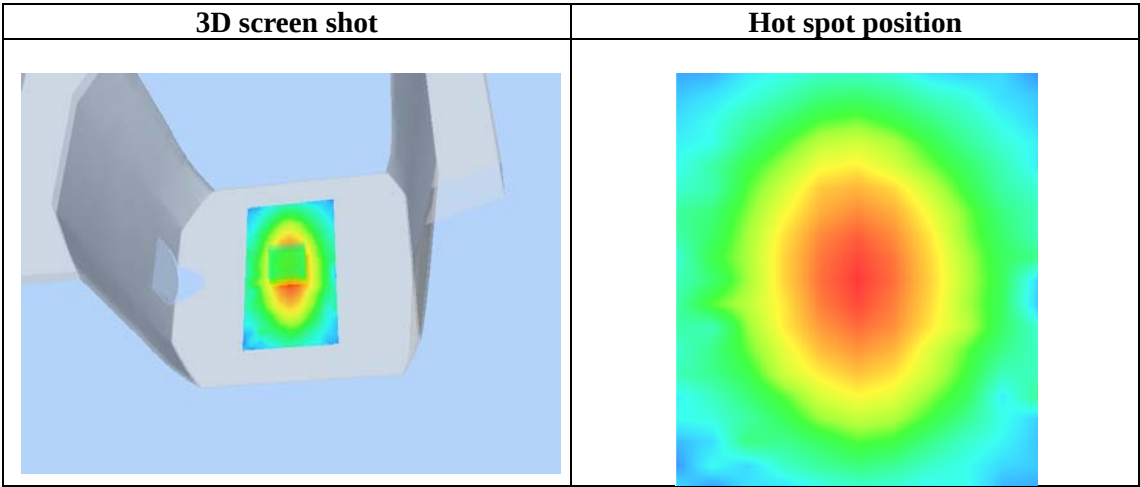
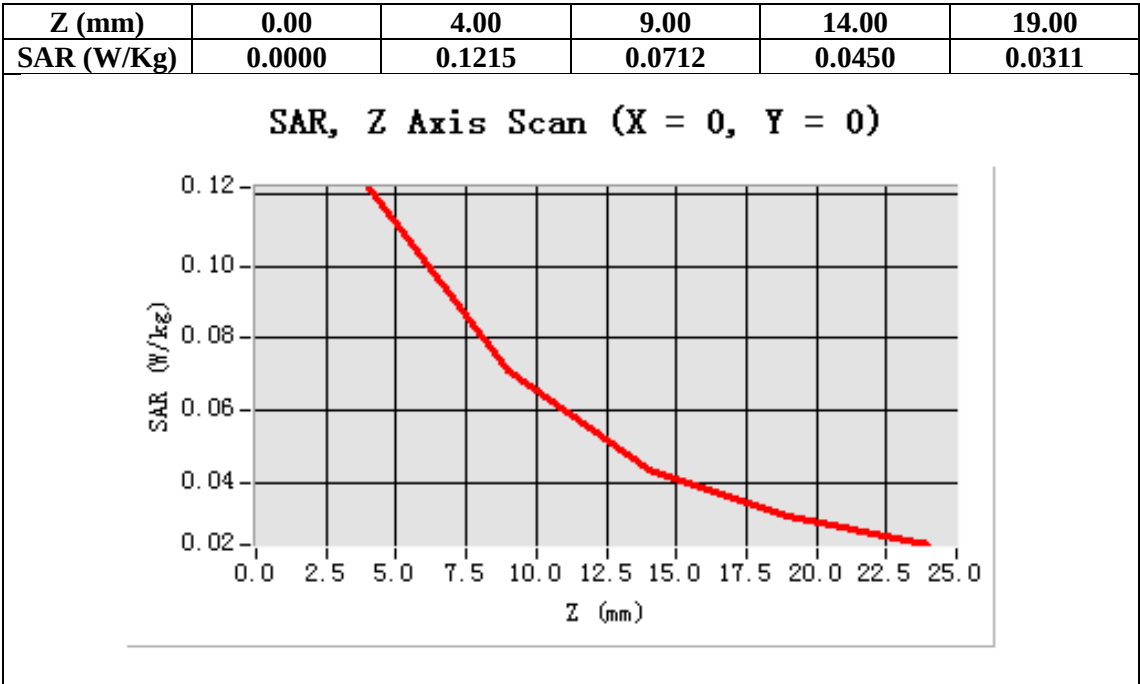
Configuration/System Check GSM 850 Head/Area Scan: Measurement grid: dx=8mm,dy=8mm

Configuration/System Check GSM 850 Head/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm



Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	0.069213
SAR 1g (W/Kg)	0.112845



Test Laboratory: AGC Lab
System Check Head 1900MHz

Date: Mar.28, 2013

DUT: Dipole 1900 MHz; Type: SID 1900

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Duty Cycle:1:1; Conv.F=5.73
Frequency: 1900 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.12$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section; Input Power=10dBm

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

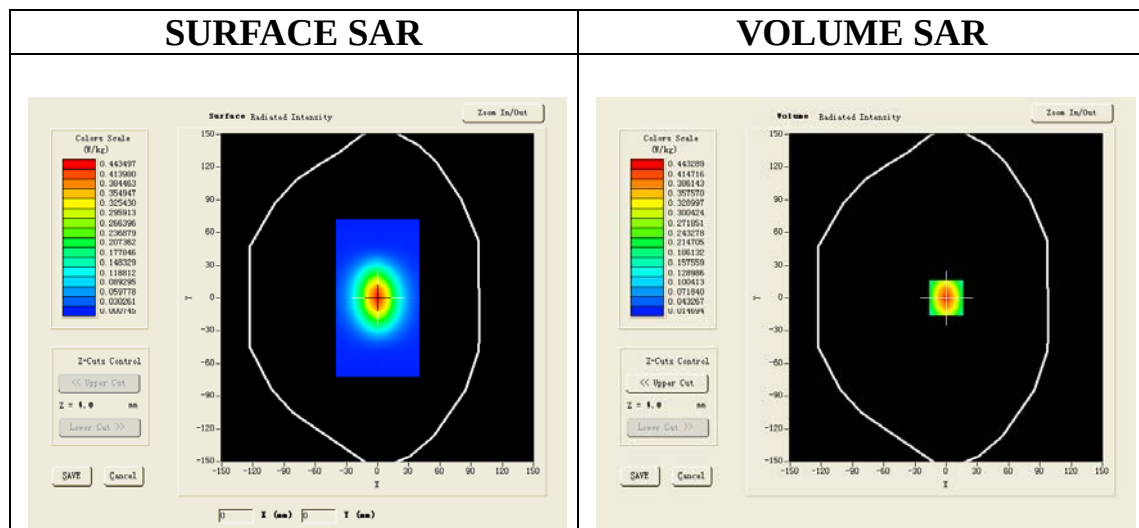
Satimo Configuration:

Probe: EP159; Calibrated: 12/11/2012

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

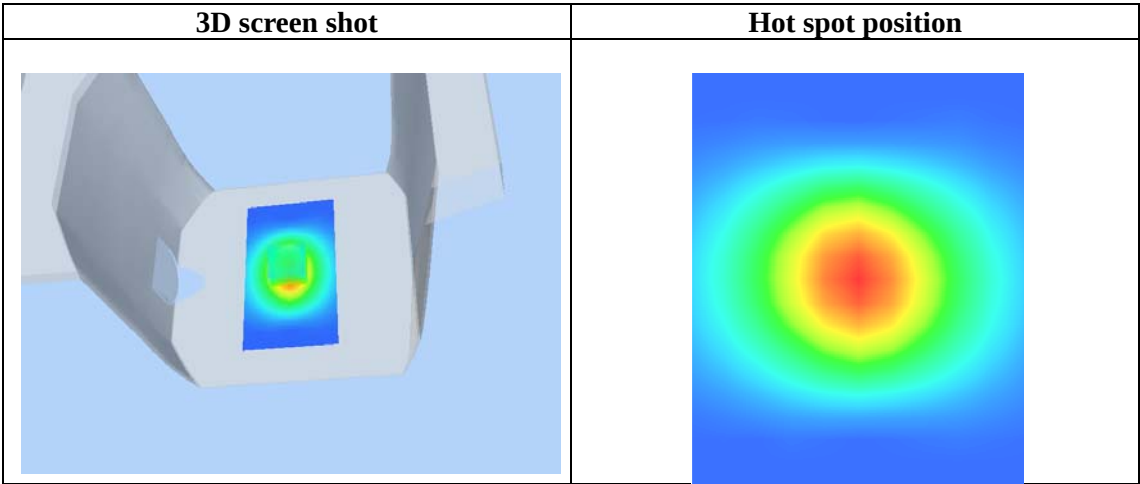
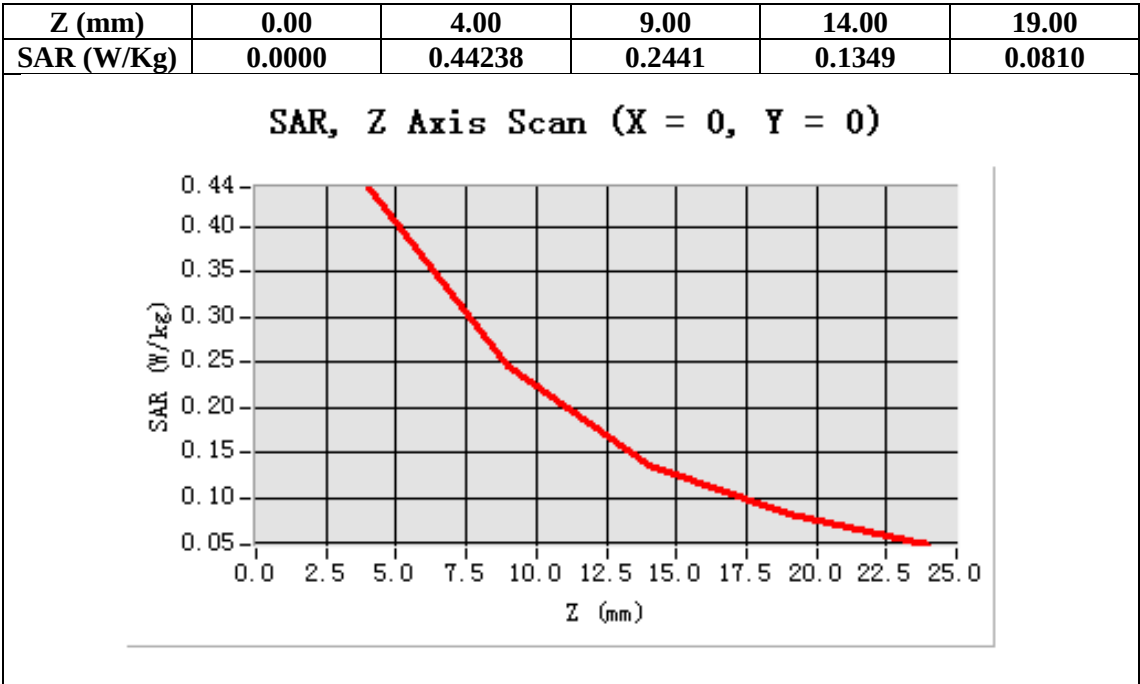
Configuration/System Check PCS1900 Head/Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/System Check PCS1900 Head/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm



Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	0.213237
SAR 1g (W/Kg)	0.415111



Appendix B. SAR measurement Data

Test Laboratory: AGC Lab

GSM 850 Mid-Touch-Left <SIM 1>

DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=6.05
Frequency: 836.6 MHz; Medium parameters used: $f = 850$ MHz; $\sigma=0.91$ mho/m; $\epsilon_r=41.33$; $\rho=1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

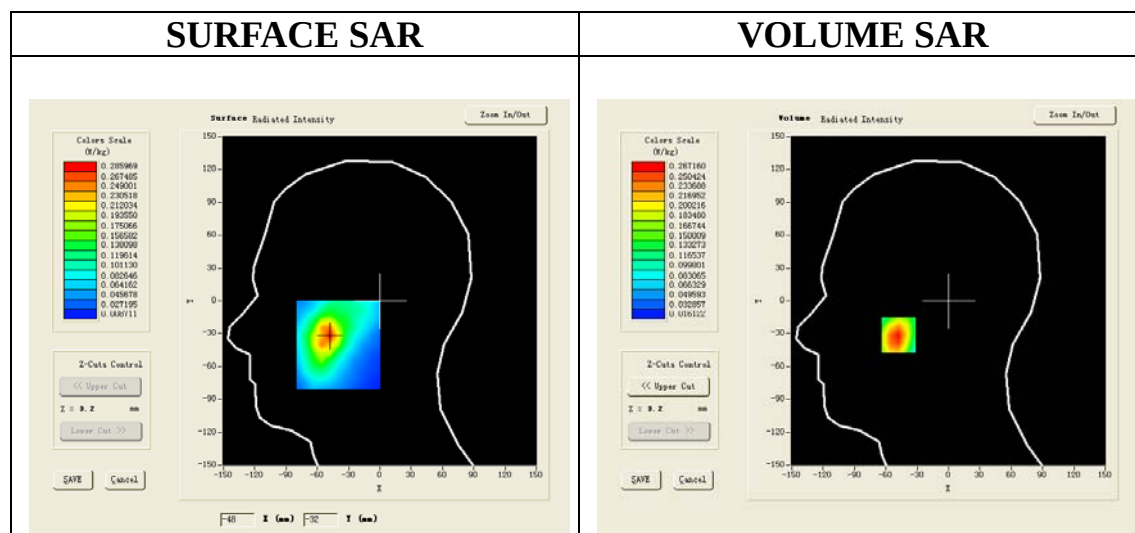
Satimo Configuration:

Probe: EP159; Calibrated: 12/11/2012

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

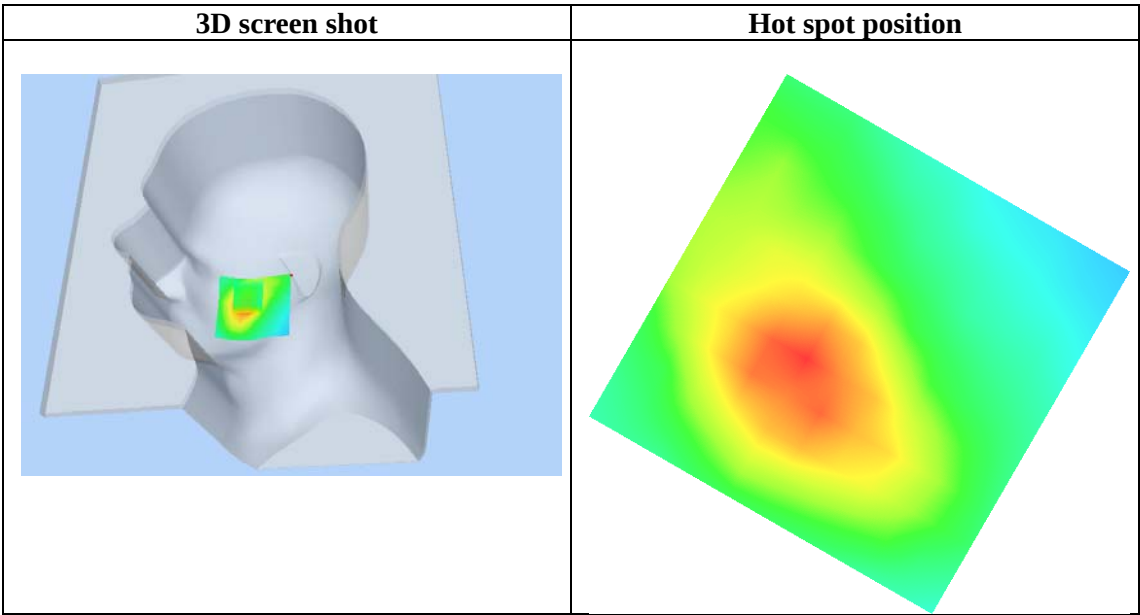
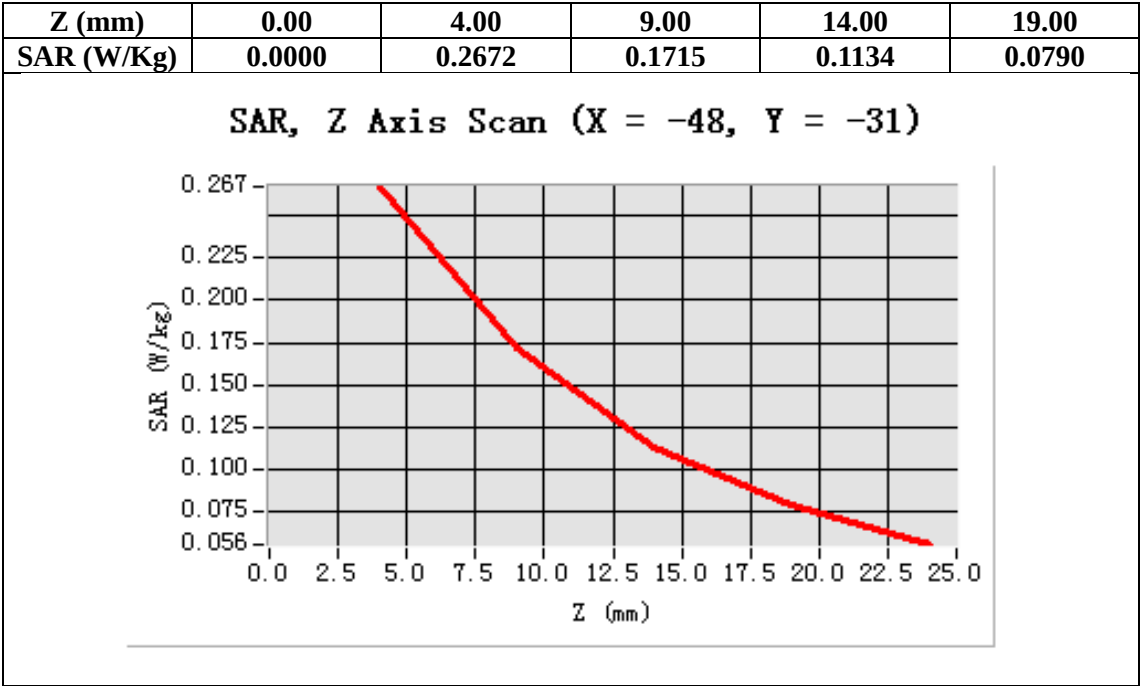
Configuration/GSM 850 Mid-Touch-Left/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm
Configuration/GSM 850 Mid-Touch-Left/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Cheek
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-48.00, Y=-31.00

SAR 10g (W/Kg)	0.153487
SAR 1g (W/Kg)	0.254228



Test Laboratory: AGC Lab
GSM 850 Mid-Tilt-Left <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=6.05;
Frequency: 836.6 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 41.33$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature(°C): 21.0

Satimo Configuration:

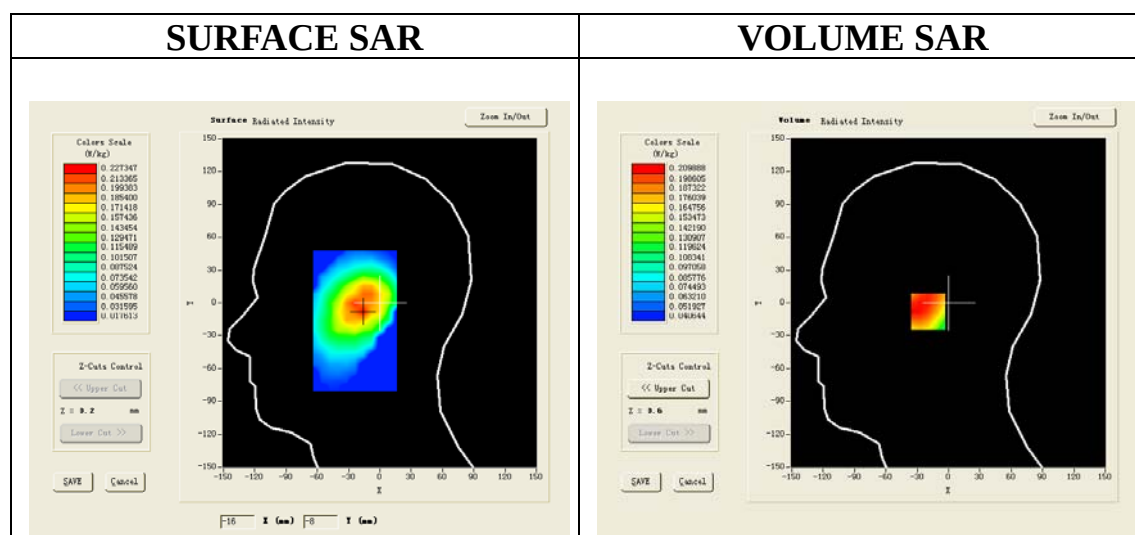
Probe: EP159; Calibrated: 12/11/2012

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

Configuration/GSM 850 Mid-Tilt-Left/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm

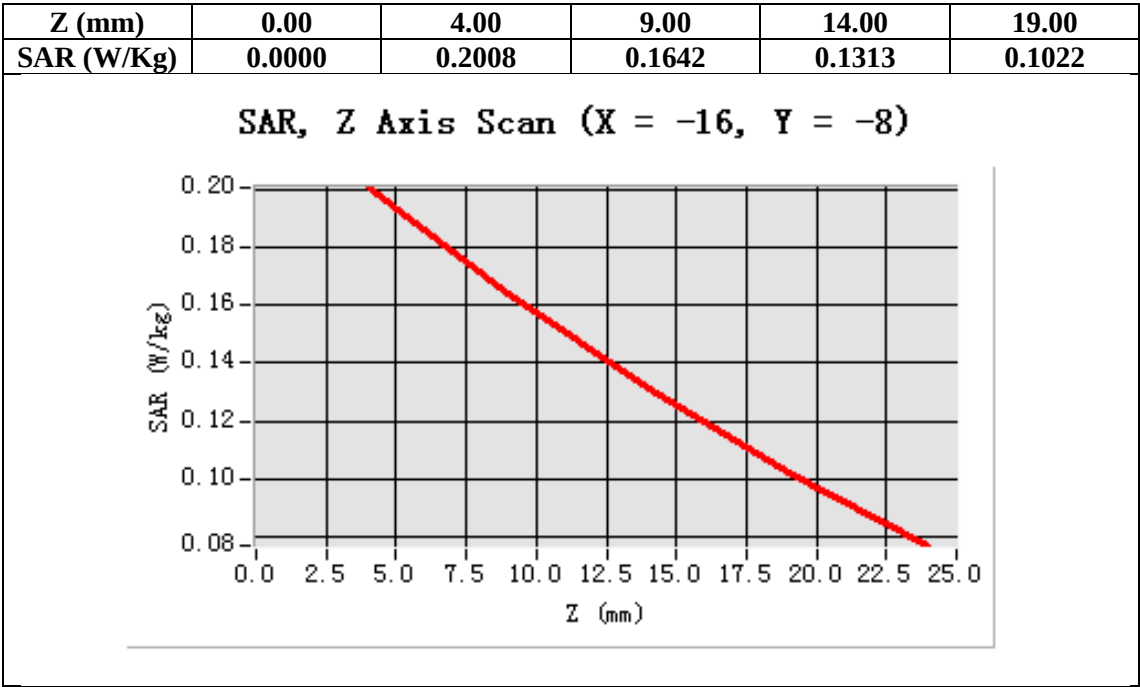
Configuration/GSM 850 Mid-Tilt-Left/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm,dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Tilt
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-16.00, Y=-8.00

SAR 10g (W/Kg)	0.155610
SAR 1g (W/Kg)	0.204244



Test Laboratory: AGC Lab
GSM 850 Mid- Touch-Right <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=6.05;
Frequency: 836.6 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 41.33$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

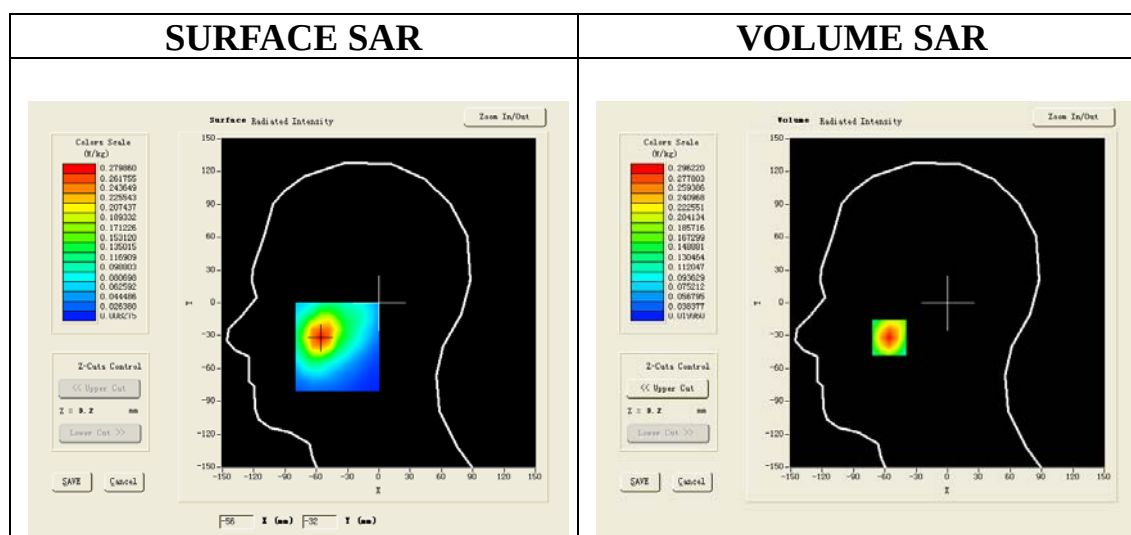
Probe: EP159; Calibrated: 12/11/2012

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

Configuration/GSM 850 Mid-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm

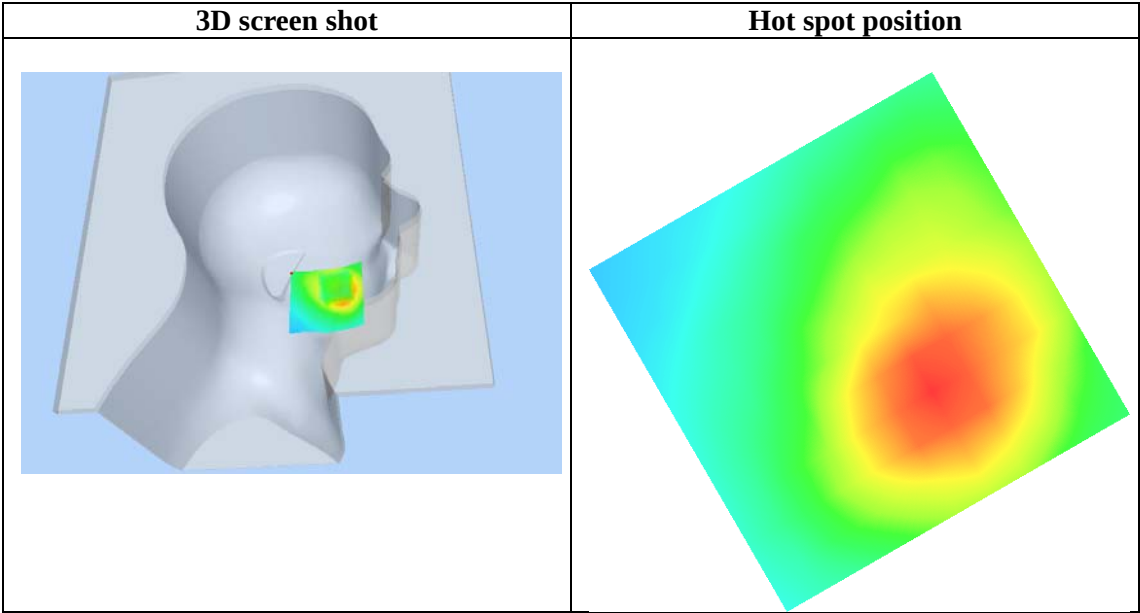
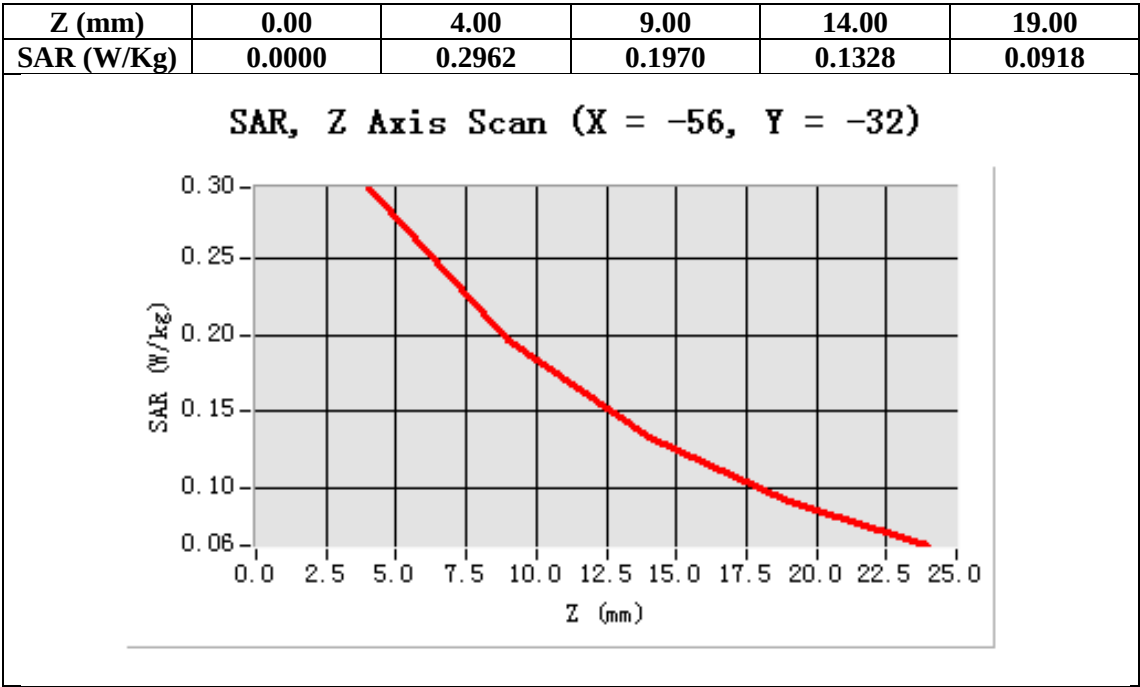
Configuration/GSM 850 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-56.00, Y=-32.00

SAR 10g (W/Kg)	0.169030
SAR 1g (W/Kg)	0.277241



Test Laboratory: AGC Lab
GSM 850 Mid-Tilt-Right <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=6.05;
Frequency: 836.6 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 41.33$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

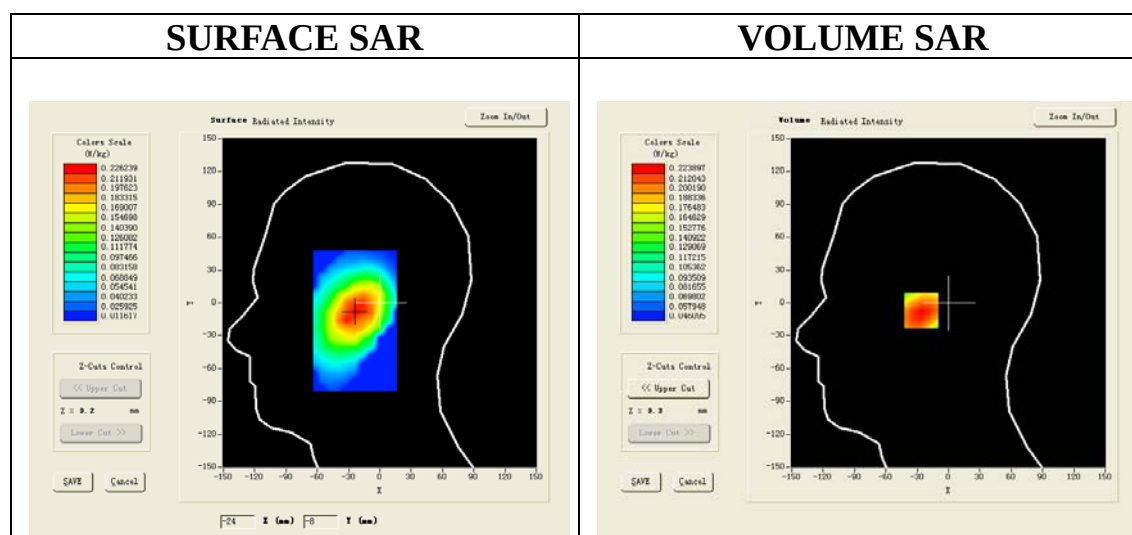
Probe: EP159; Calibrated: 12/11/2012

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

Configuration/GSM 850 Mid-Tilt-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm

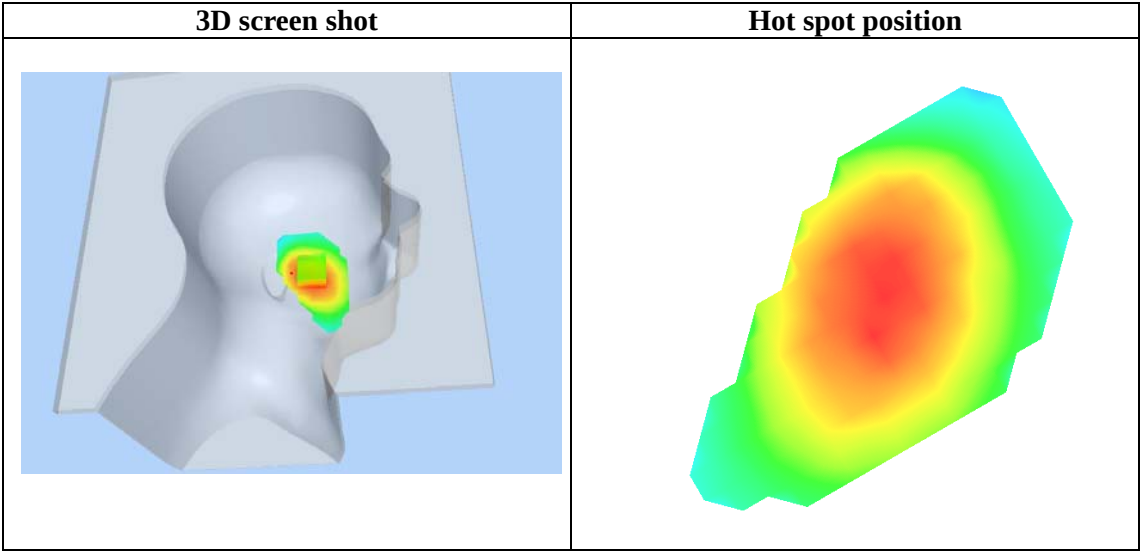
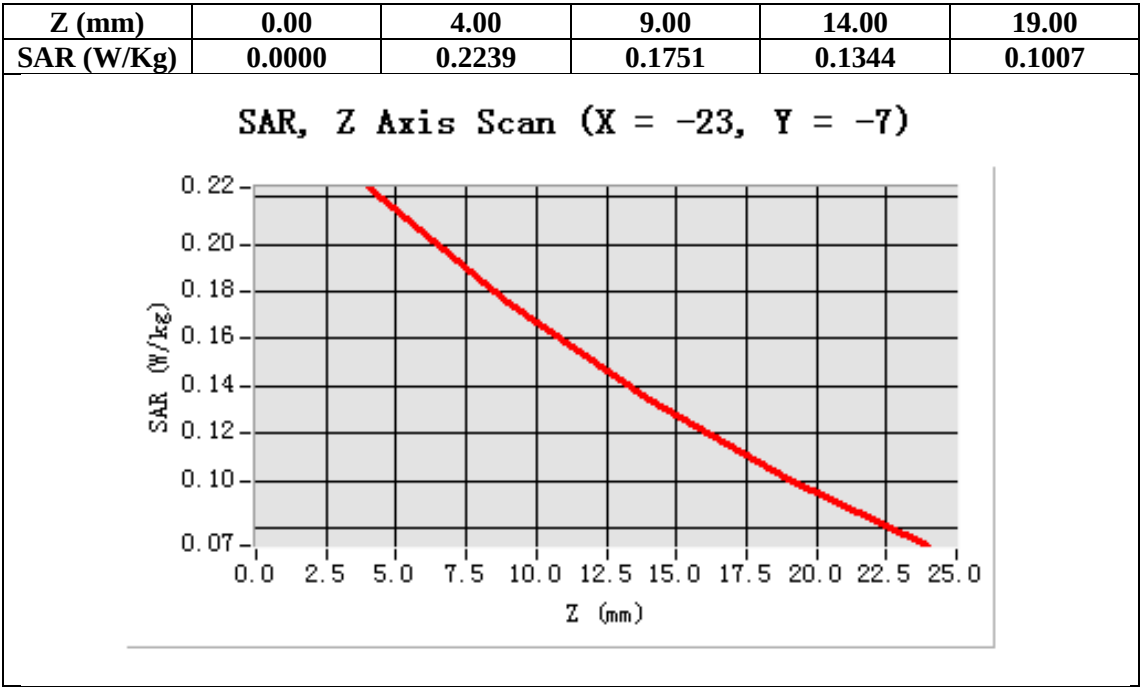
Configuration/GSM 850 Mid-Tilt-Right/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Tilt
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-23.00, Y=-7.00

SAR 10g (W/Kg)	0.158099
SAR 1g (W/Kg)	0.216490



Test Laboratory: AGC Lab
GSM 850 Mid-Touch-Right <SIM 2>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=6.05
Frequency: 836.6 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 41.33$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

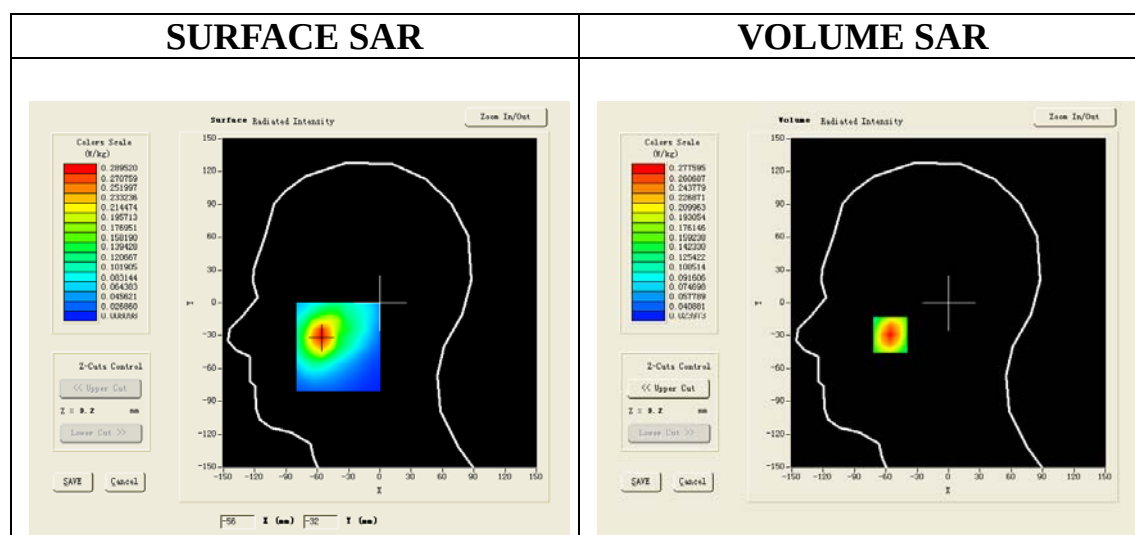
Satimo Configuration:

Probe: EP159; Calibrated: 12/11/2012

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

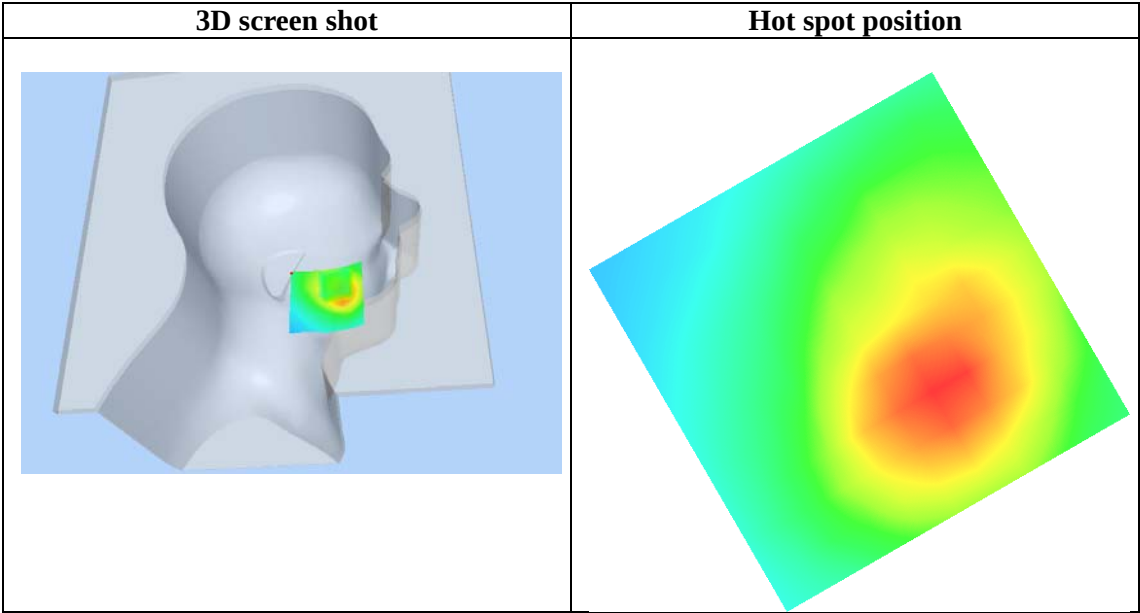
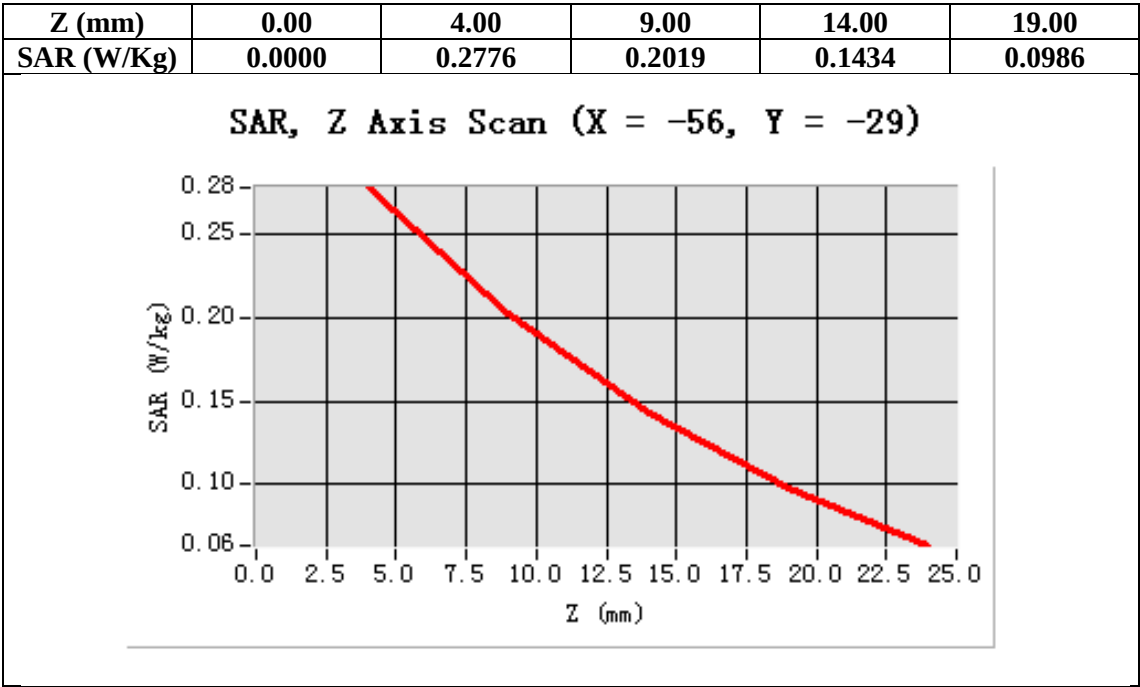
Configuration/GSM 850 Mid-Touch-Right/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm
Configuration/GSM 850 Mid-Touch-Right/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-56.00, Y=-29.00

SAR 10g (W/Kg)	0.166654
SAR 1g (W/Kg)	0.260645



Test Laboratory: AGC Lab
GSM 850 Low- Body- Back <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

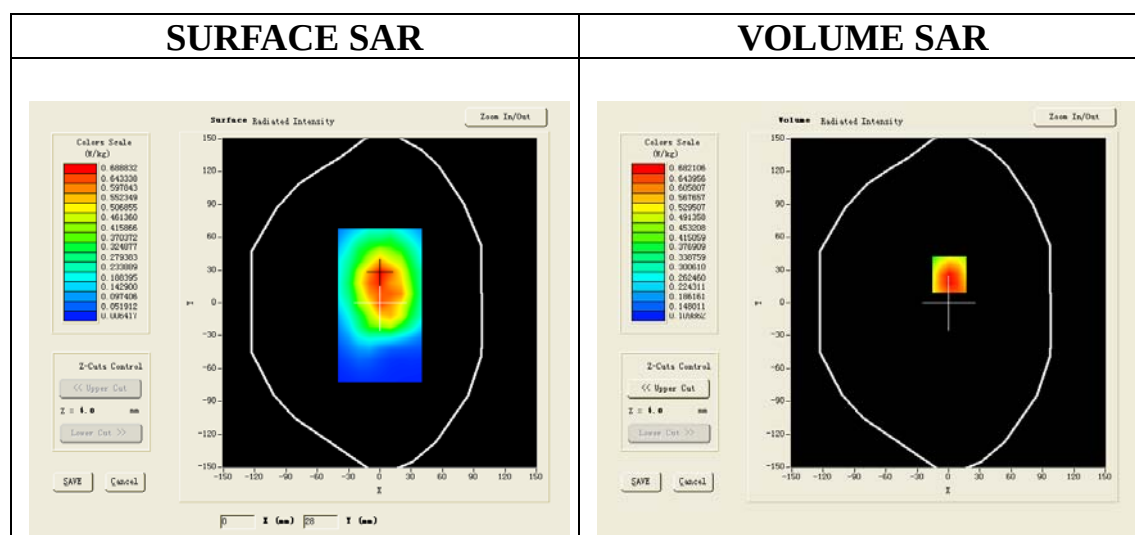
Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=6.05;
Frequency: 824.2 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 53.72$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

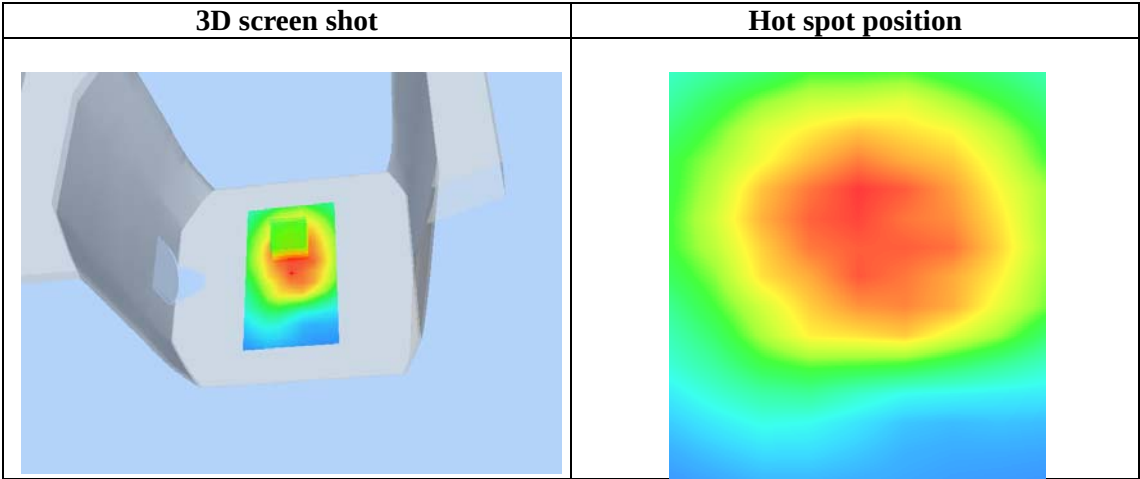
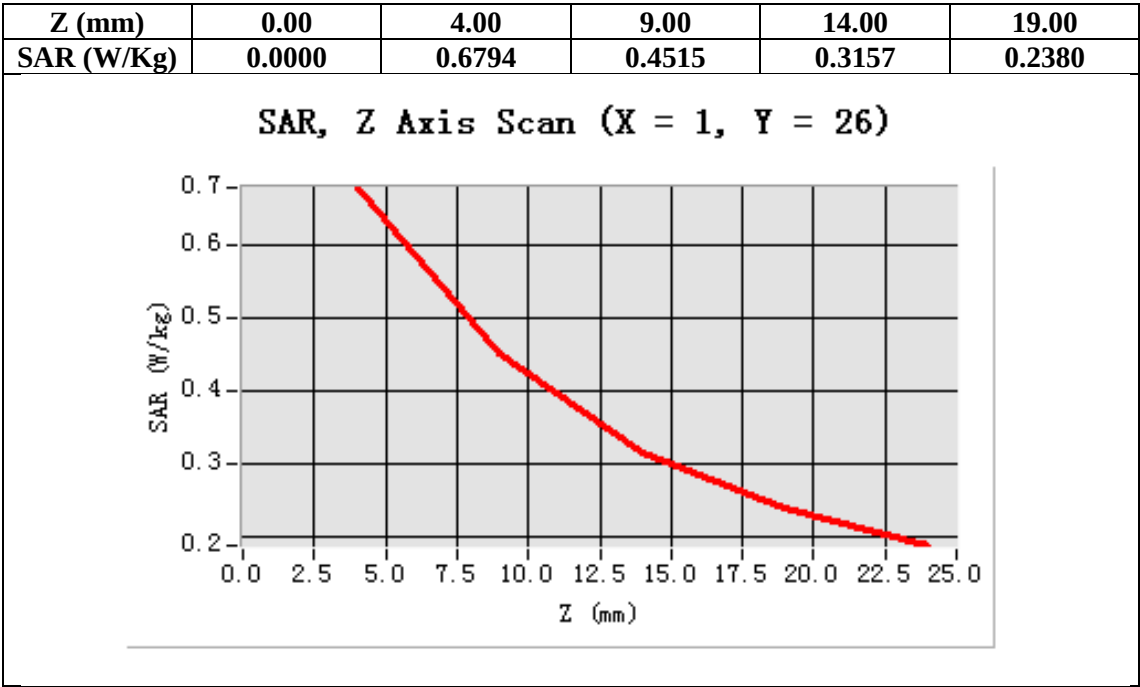
Configuration/GSM 850 Low-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm
Configuration/GSM 850 Low-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	Low
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=1.00, Y=26.00

SAR 10g (W/Kg)	0.479450
SAR 1g (W/Kg)	0.711618



Test Laboratory: AGC Lab
GSM 850 Mid- Body- Back <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=6.05;
Frequency: 836.6 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 53.72$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

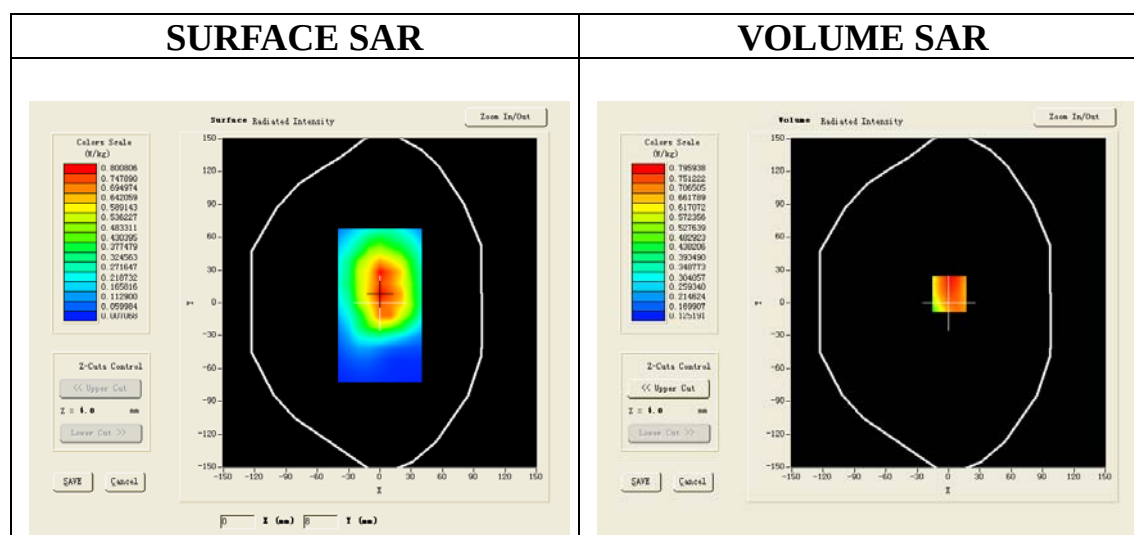
Satimo Configuration:

Probe: EP159; Calibrated: 12/11/2012

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

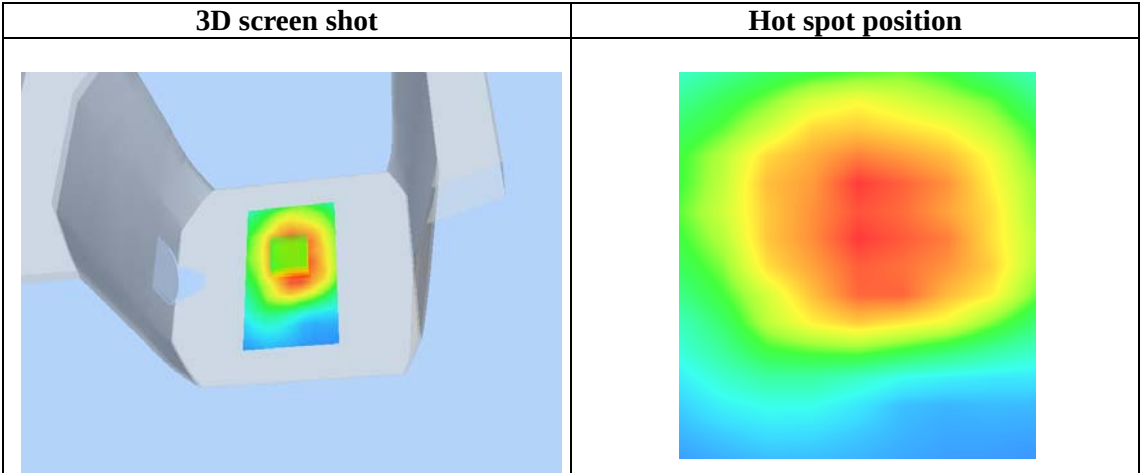
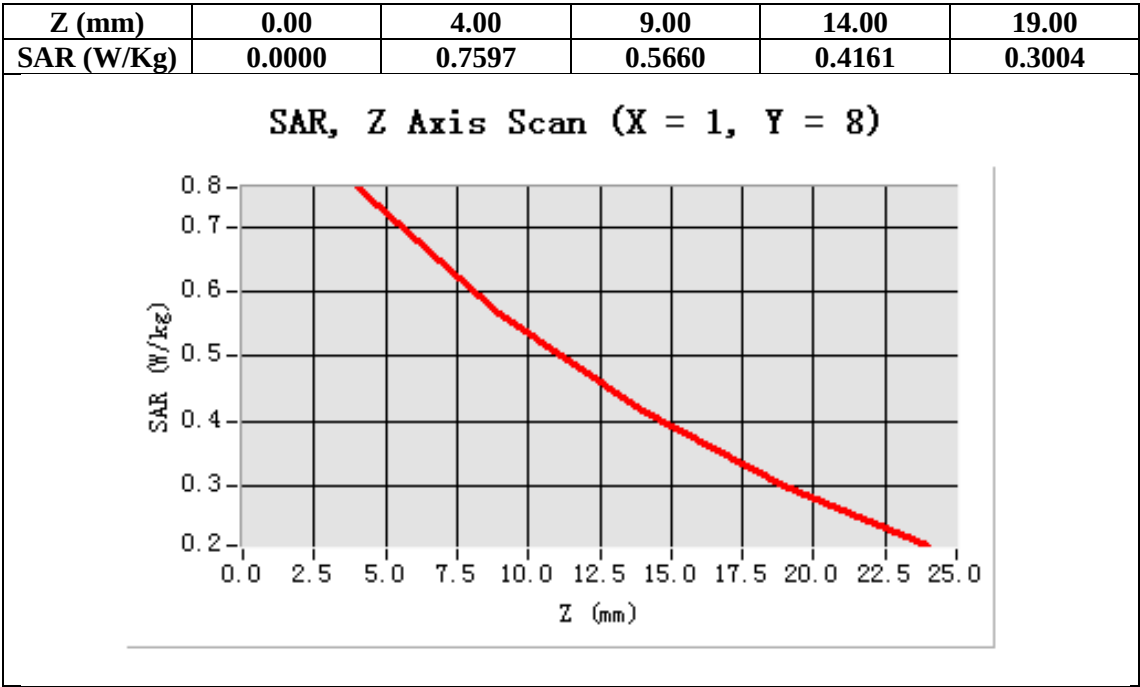
Configuration/GSM 850 Mid-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm
Configuration/GSM 850 Mid-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=1.00, Y=8.00

SAR 10g (W/Kg)	0.572836
SAR 1g (W/Kg)	0.819048



Test Laboratory: AGC Lab
GSM 850 High- Body- Back <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

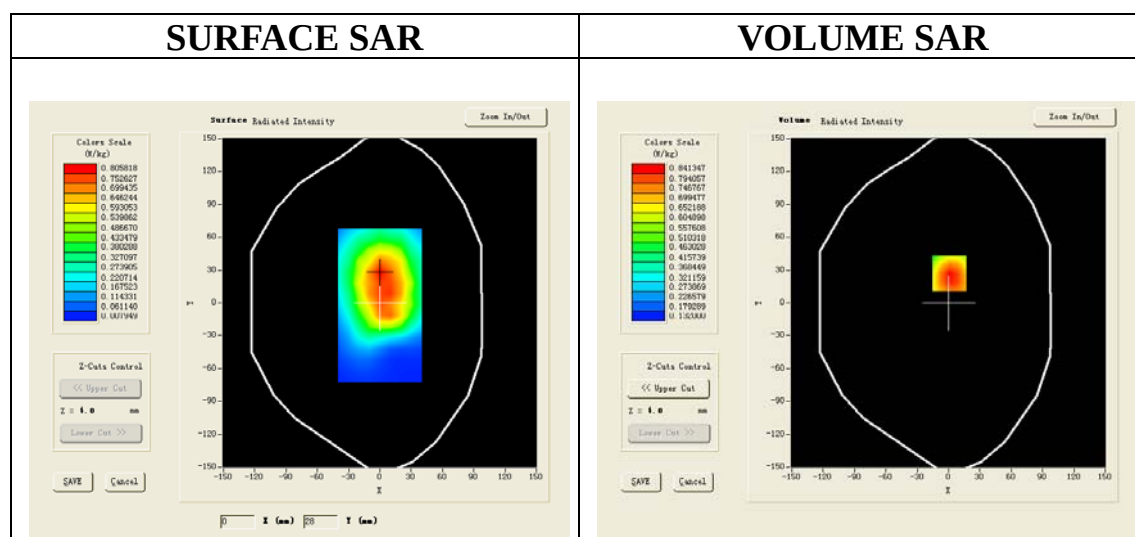
Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=6.05;
Frequency: 848.8 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 53.72$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

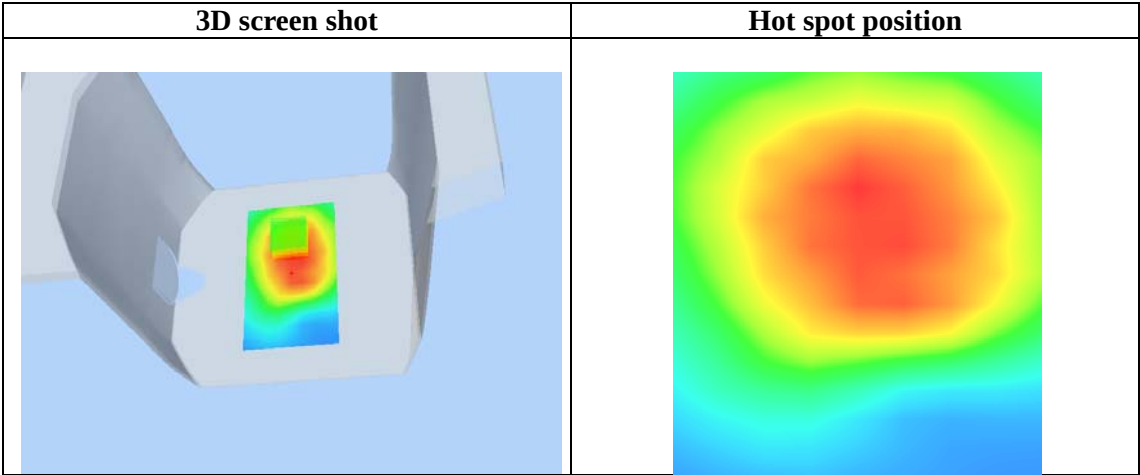
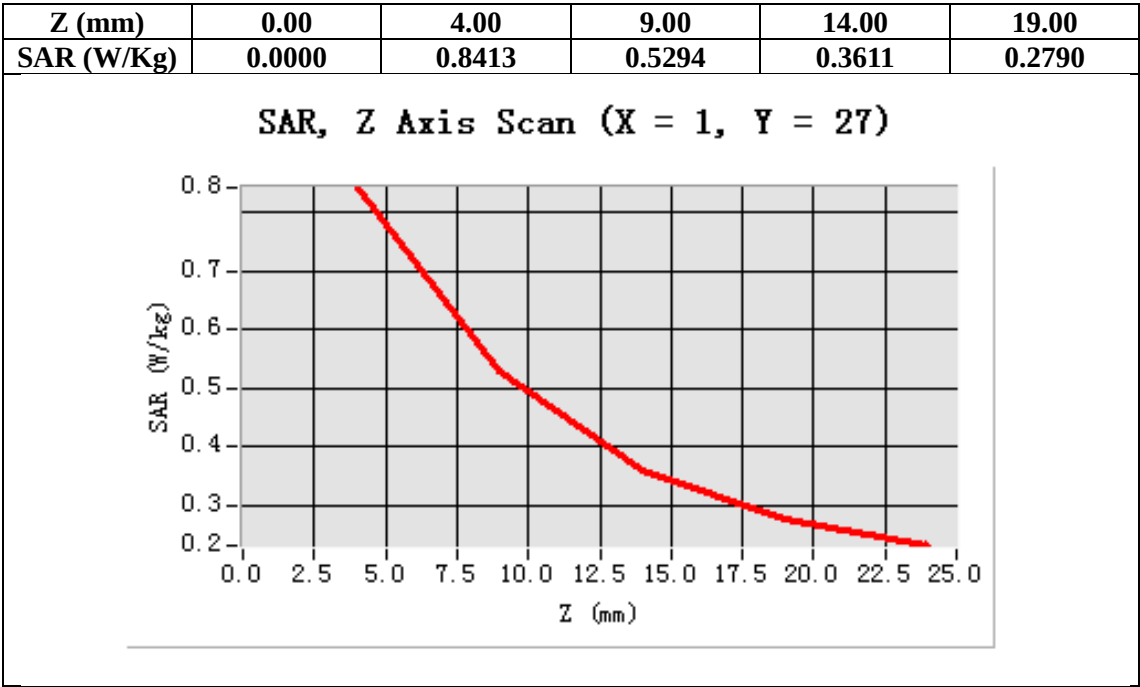
Configuration/GSM 850 High-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm
Configuration/GSM 850 High-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	High
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=1.00, Y=27.00

SAR 10g (W/Kg)	0.580973
SAR 1g (W/Kg)	0.878239



Test Laboratory: AGC Lab
GPRS 850 Mid- Body - Back (2up) <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: GPRS -2 Slot; Communication System Band: GSM850; Duty Cycle: 1:4.2; Conv.F=6.05;
Frequency: 836.6 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 53.72$; $\rho = 1000\text{kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 21.0, Liquid temperature ($^{\circ}\text{C}$): 21.0

Satimo Configuration:

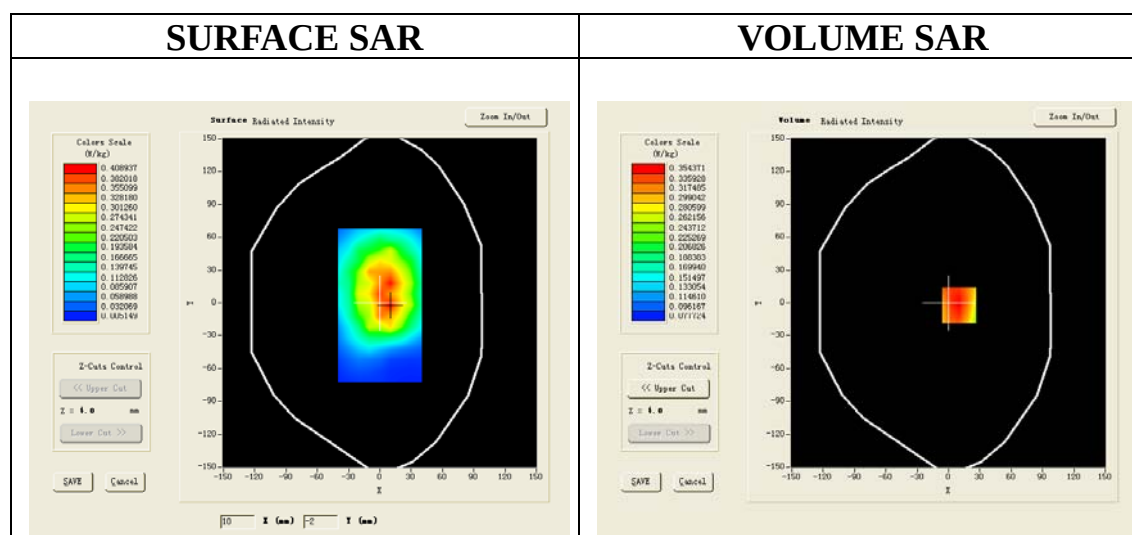
Probe: EP159; Calibrated: 12/11/2012

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

Configuration/GPRS 850 Mid-Body-Back/Area Scan (6x8x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

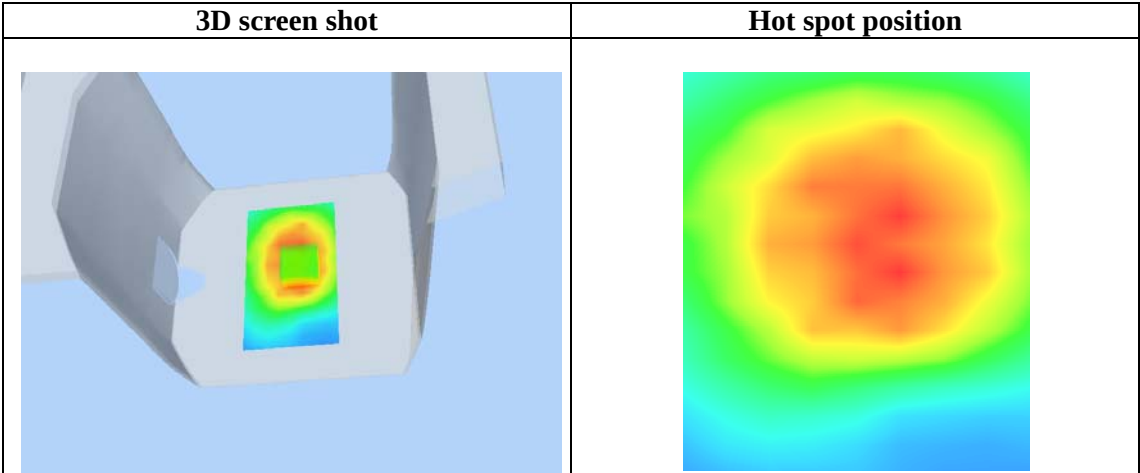
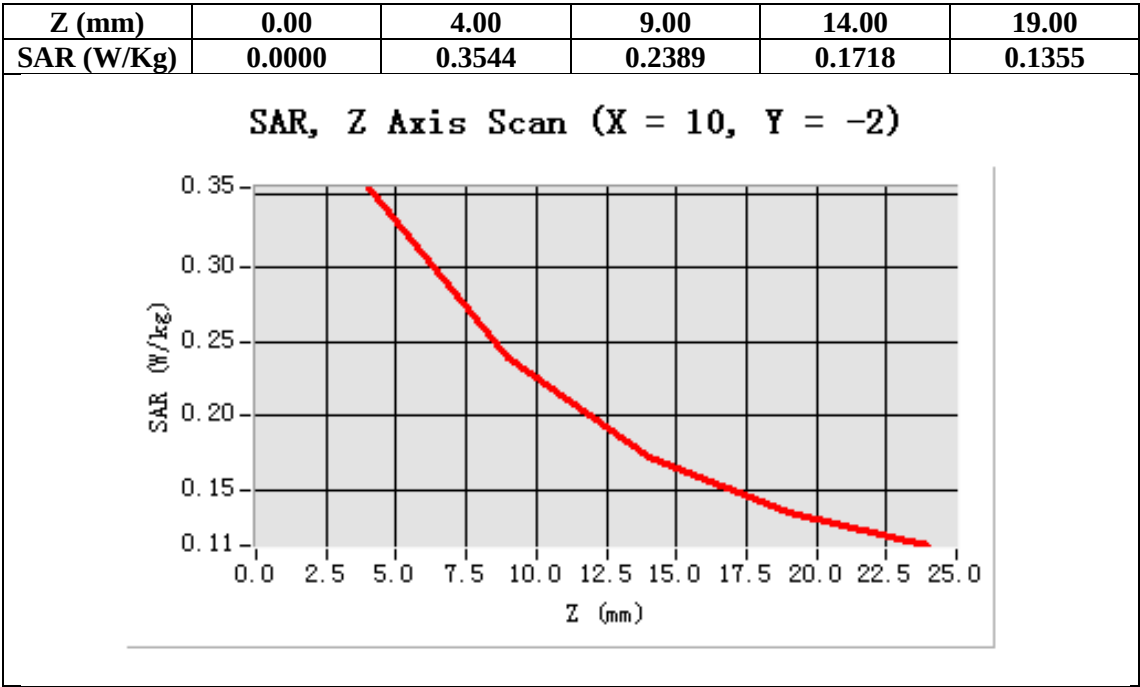
Configuration/GPRS 850 Mid-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 4.0)



Maximum location: X=10.00, Y=-2.00

SAR 10g (W/Kg)	0.260471
SAR 1g (W/Kg)	0.371895



Test Laboratory: AGC Lab
GPRS 850 Mid-Body-back (3up) <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: GPRS -3 Slot; Communication System Band: GSM 850; Duty Cycle: 1:2.8; Conv.F=6.05;
Frequency: 836.6 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 53.72$; $\rho = 1000\text{kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 21.0, Liquid temperature ($^{\circ}\text{C}$): 21.0

Satimo Configuration:

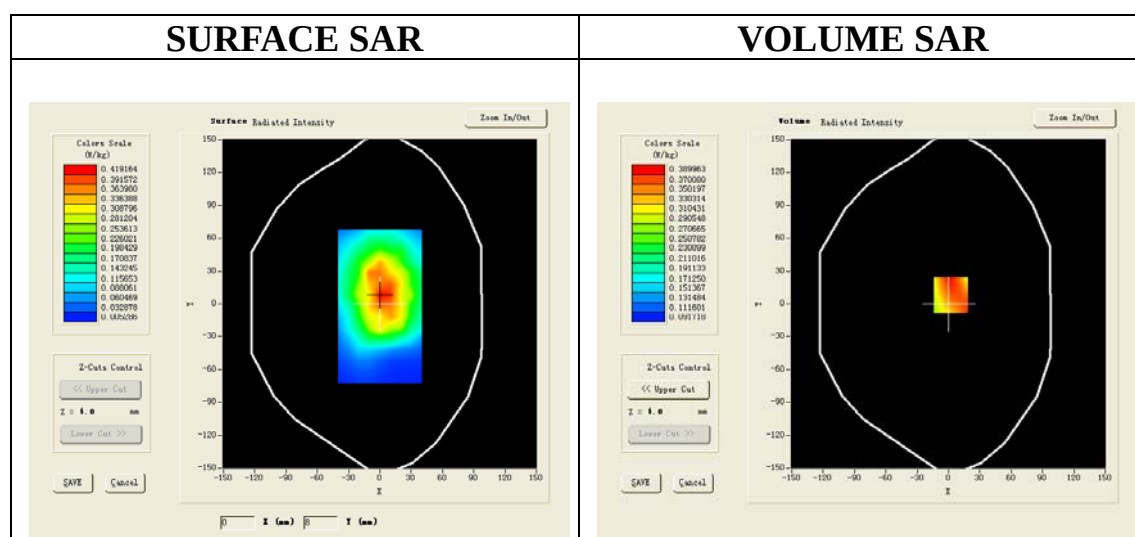
Probe: EP159; Calibrated: 12/11/2012

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

Configuration/GPRS 850 Mid-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm

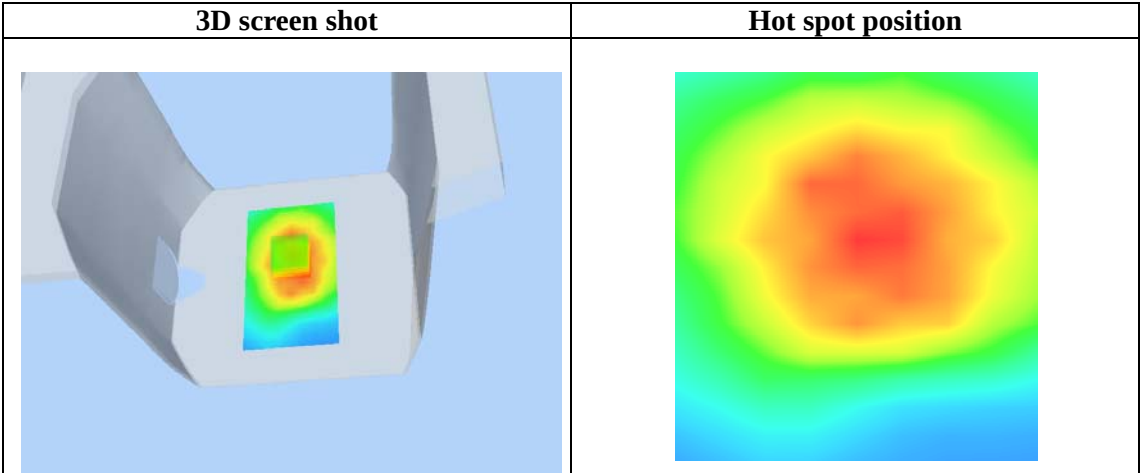
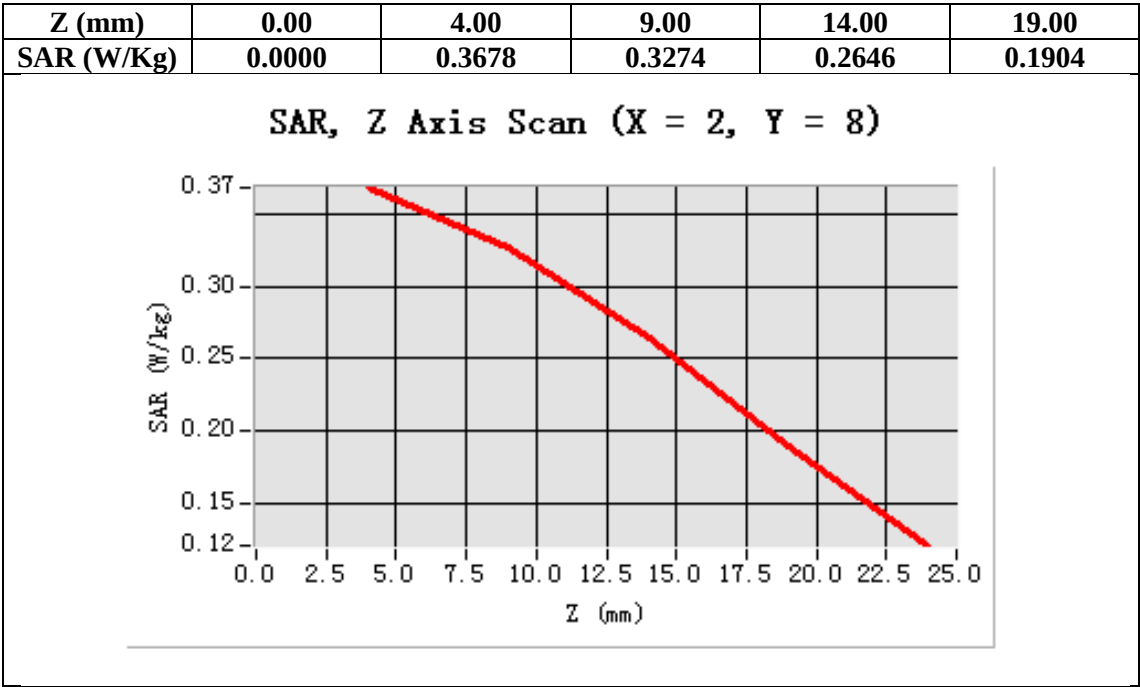
Configuration/GPRS 850 Mid-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor:2.7)



Maximum location: X=2.00, Y=8.00

SAR 10g (W/Kg)	0.303669
SAR 1g (W/Kg)	0.407265



Test Laboratory: AGC Lab
GPRS 850 Mid- Body-Back (4up) <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: GPRS -4 Slot; Communication System Band: GSM 850; Duty Cycle: 1:2.1; Conv.F=6.05
;Frequency: 836.6 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 53.72$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

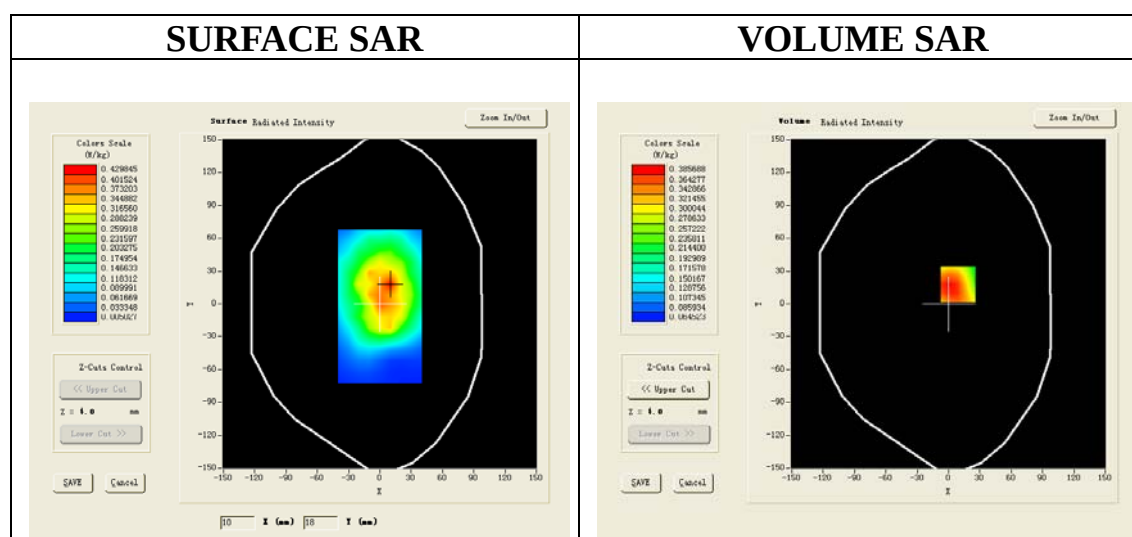
Probe: EP159; Calibrated: 12/11/2012

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

Configuration/GPRS 850 Mid-Body-Back/Area Scan: Measurement grid: dx=20mm, dy=20mm

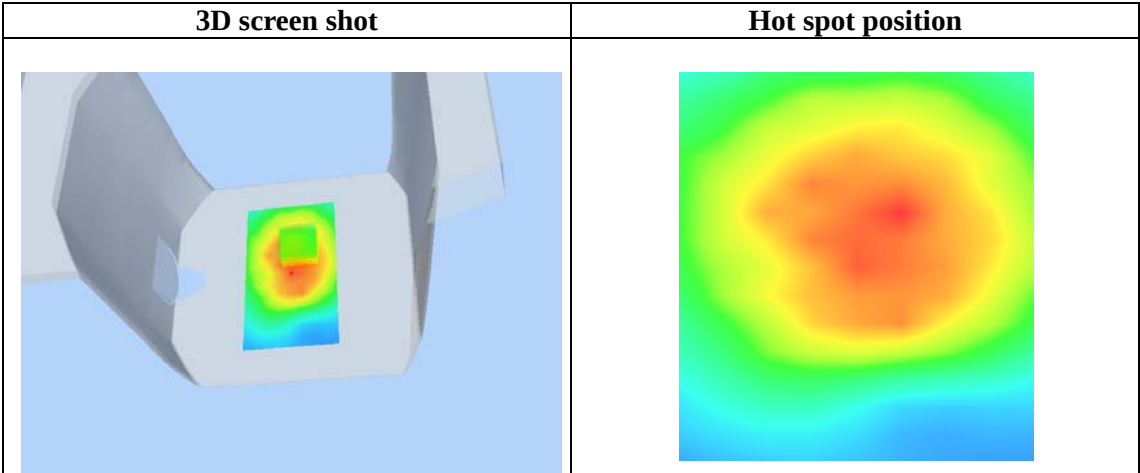
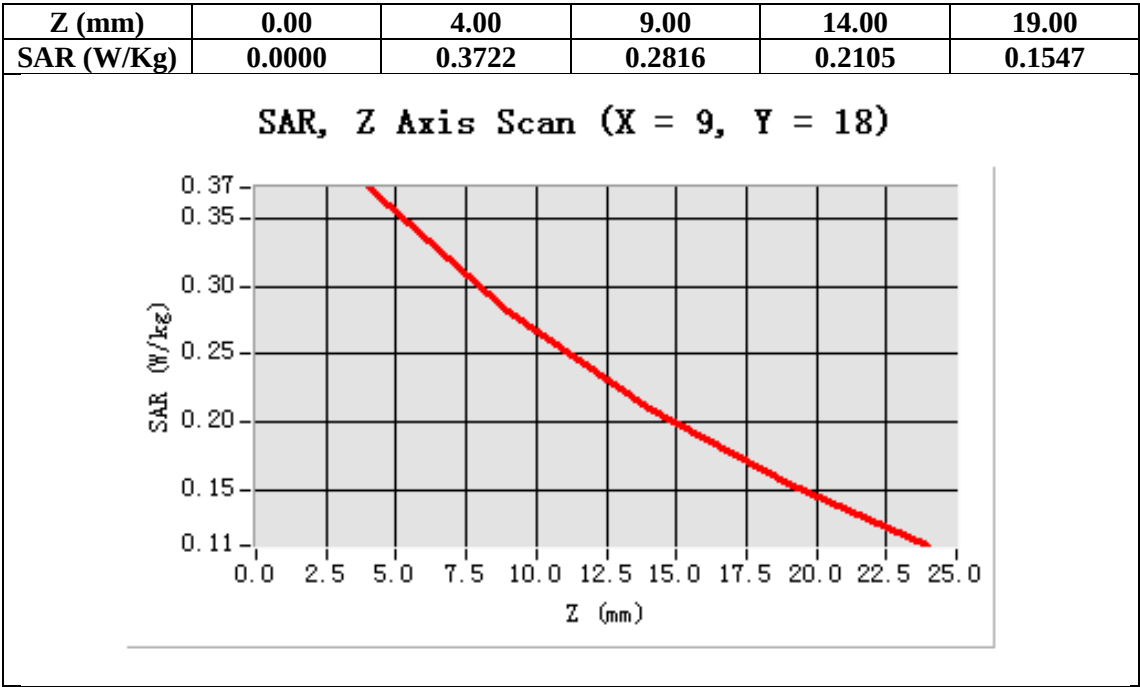
Configuration/GPRS 850 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 2.0)



Maximum location: X=9.00, Y=18.00

SAR 10g (W/Kg)	0.285166
SAR 1g (W/Kg)	0.400874



Test Laboratory: AGC Lab
GSM 850 Mid- Body- Front (MS) <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=6.05;
Frequency: 836.6 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 53.72$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

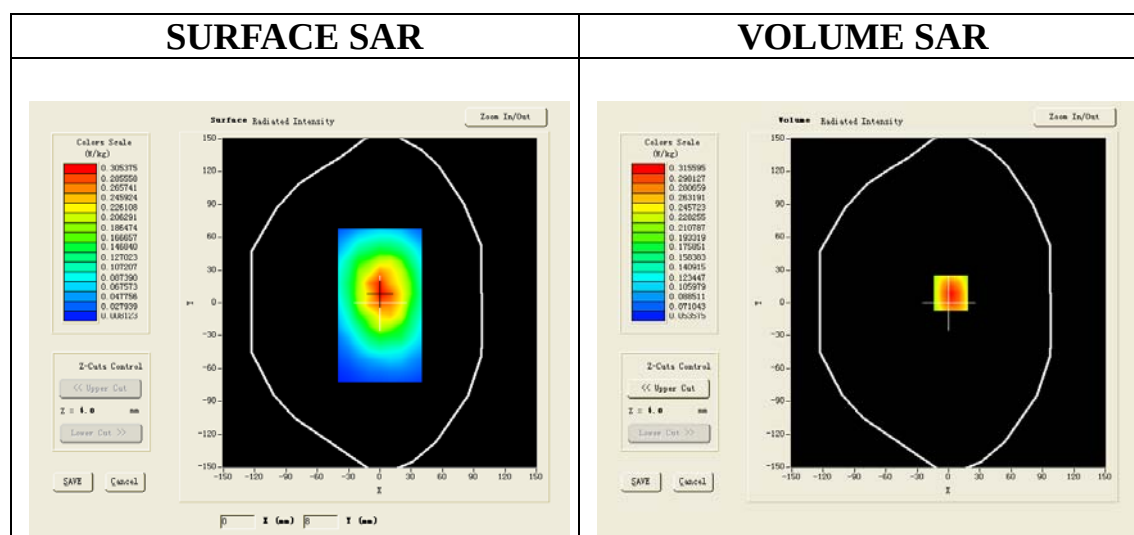
Satimo Configuration:

Probe: EP159; Calibrated: 12/11/2012

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

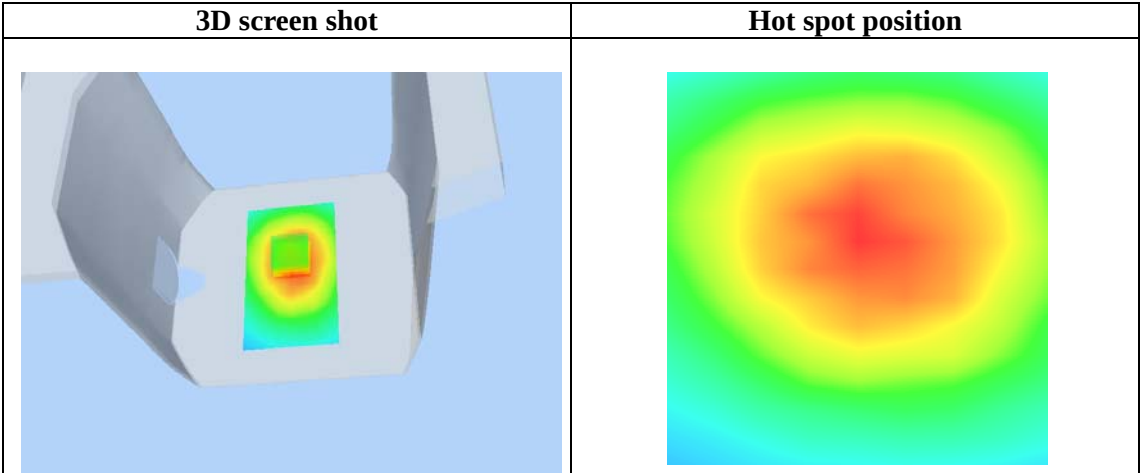
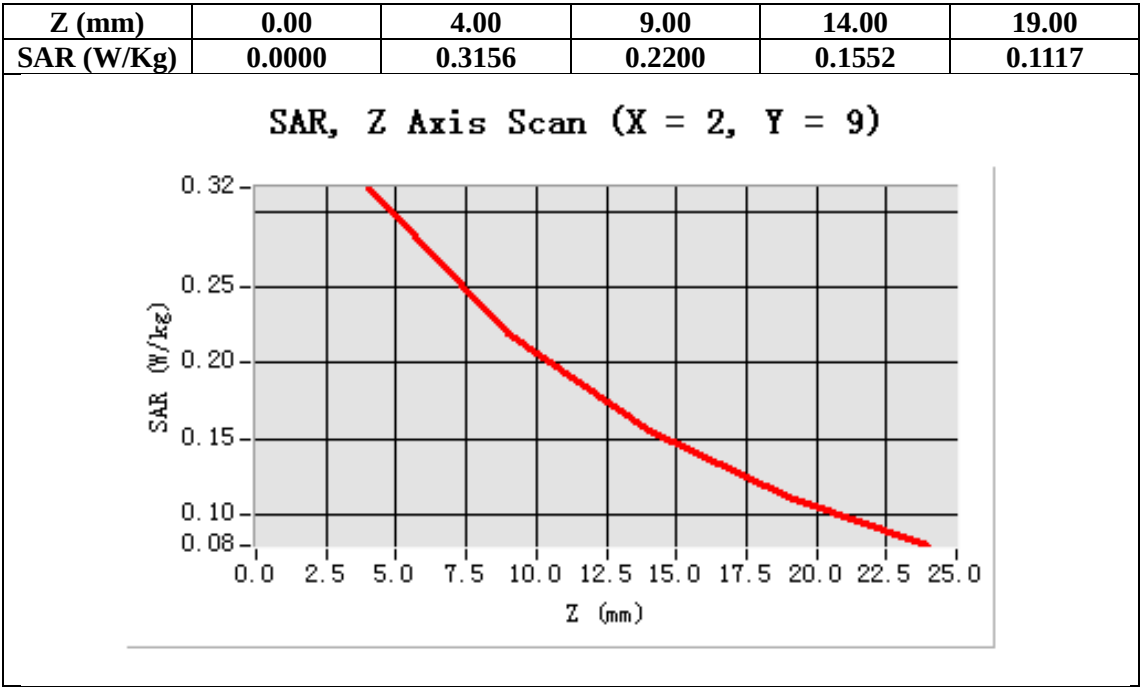
Configuration/GSM 850 Mid-Body- Front /Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm
Configuration/GSM 850 Mid-Body- Front Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Front
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=2.00, Y=9.00

SAR 10g (W/Kg)	0.216322
SAR 1g (W/Kg)	0.324538



Test Laboratory: AGC Lab
GSM 850 High- Body- Back (MS) –with earphone <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=6.05;
Frequency: 848.8 MHz; Medium parameters used: $f = 850$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 53.72$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

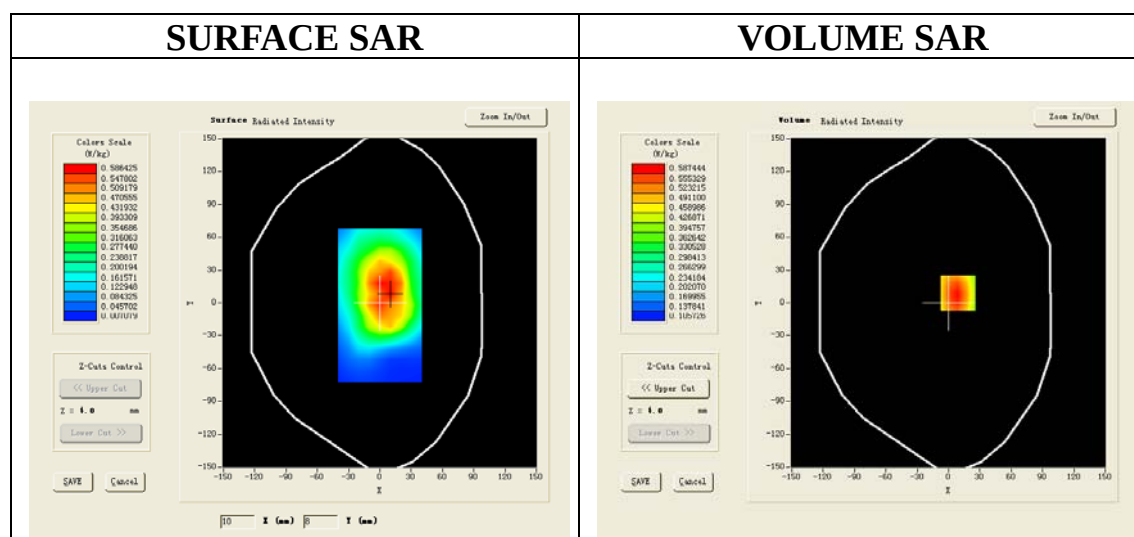
Satimo Configuration:

Probe: EP159; Calibrated: 12/11/2012

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

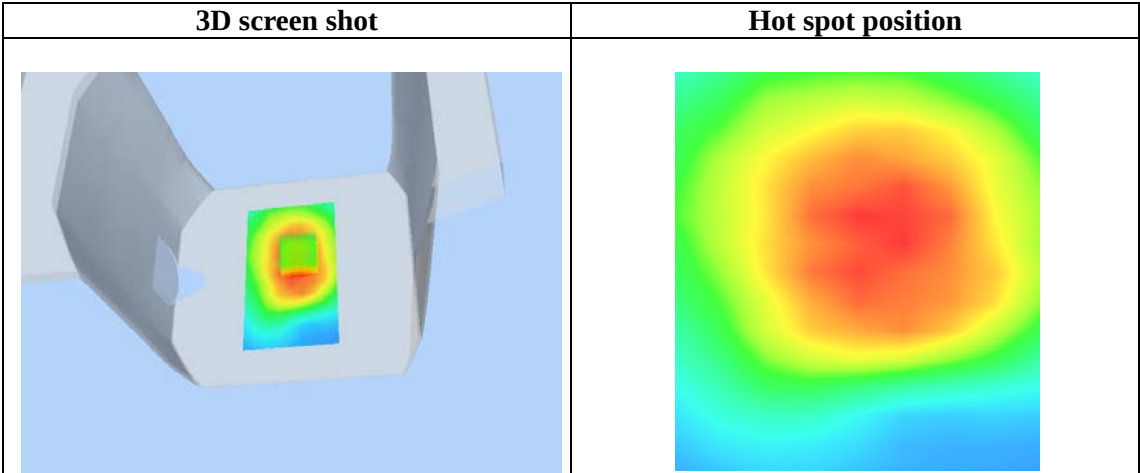
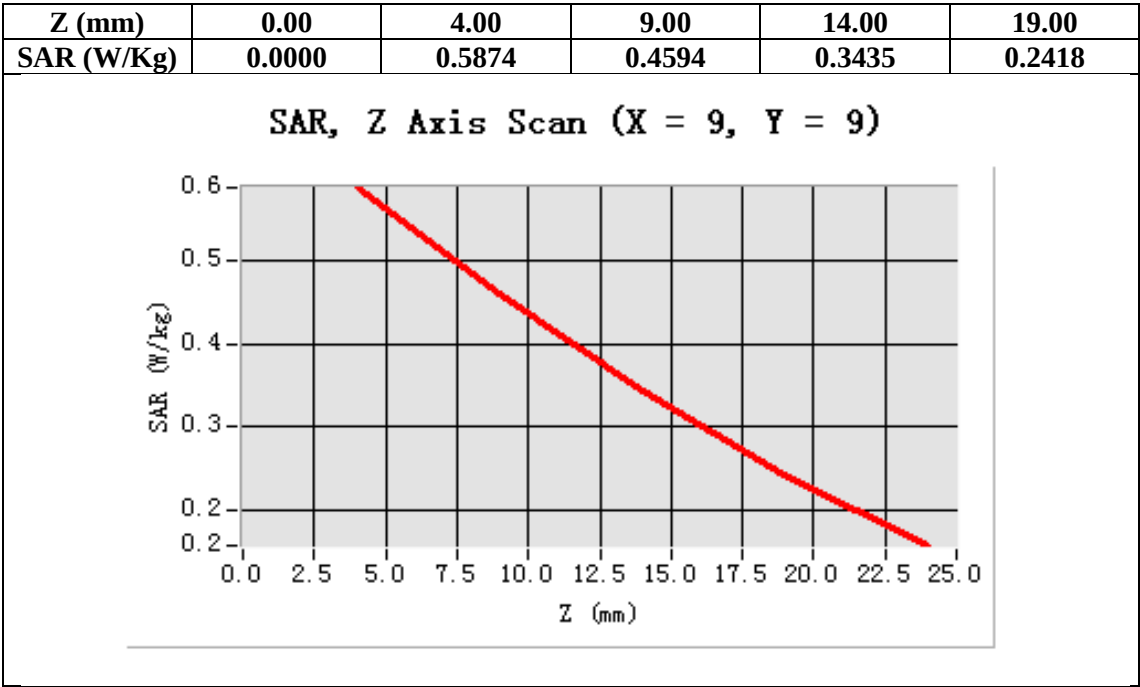
Configuration/GSM 850 High-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm
Configuration/GSM 850 High-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	High
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=9.00, Y=9.00

SAR 10g (W/Kg)	0.428321
SAR 1g (W/Kg)	0.608539



Test Laboratory: AGC Lab
PCS 1900 Mid-Touch- Left <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.12$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

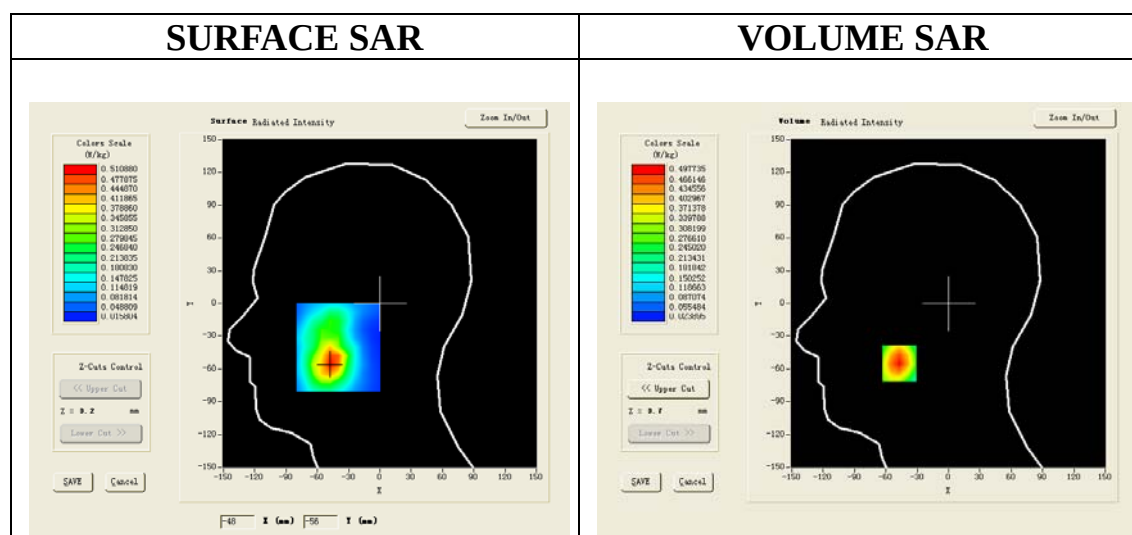
Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- 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

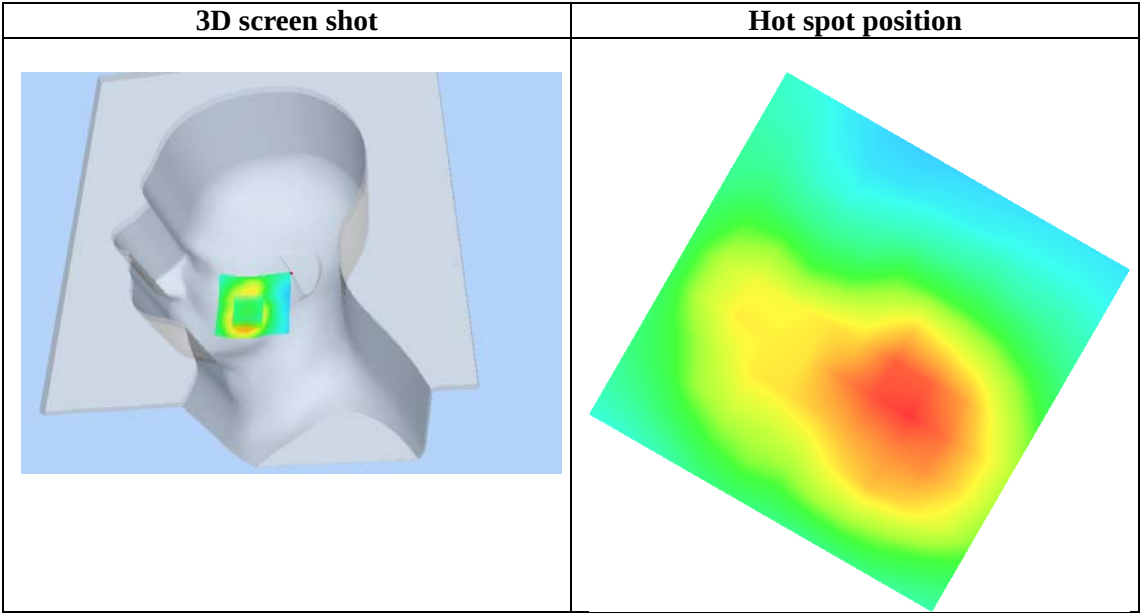
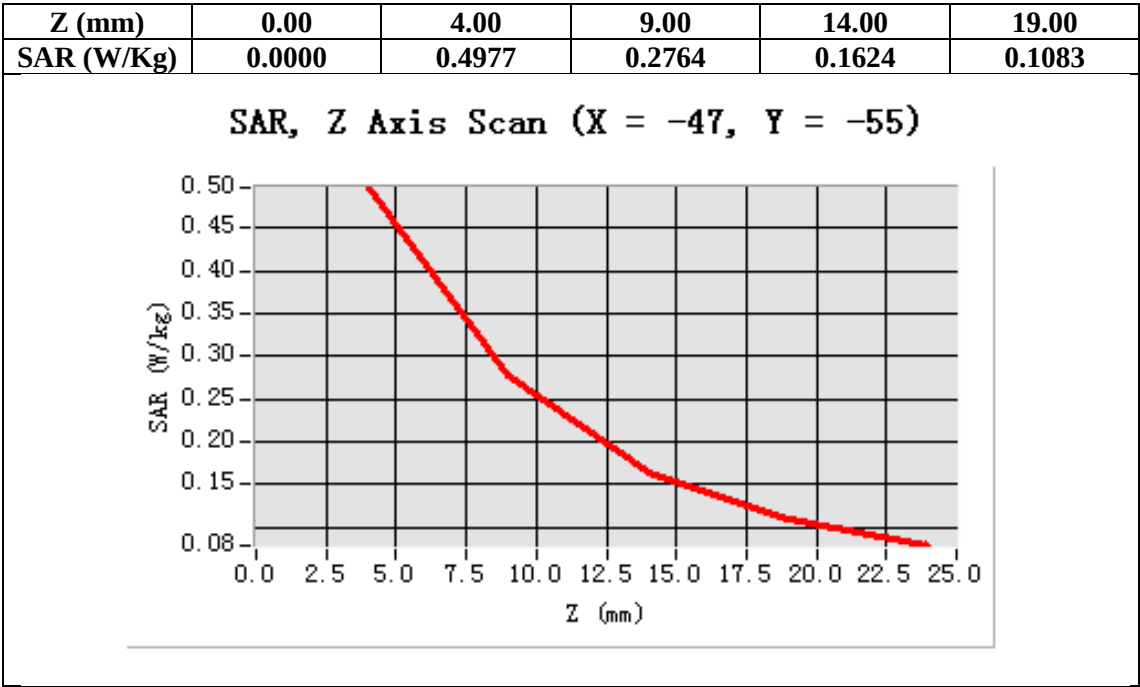
Configuration/PCS1900 Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Cheek
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-47.00, Y=-55.00

SAR 10g (W/Kg)	0.267835
SAR 1g (W/Kg)	0.470756



Test Laboratory: AGC Lab
PCS 1900 Mid-Tilt-Left <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.12$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

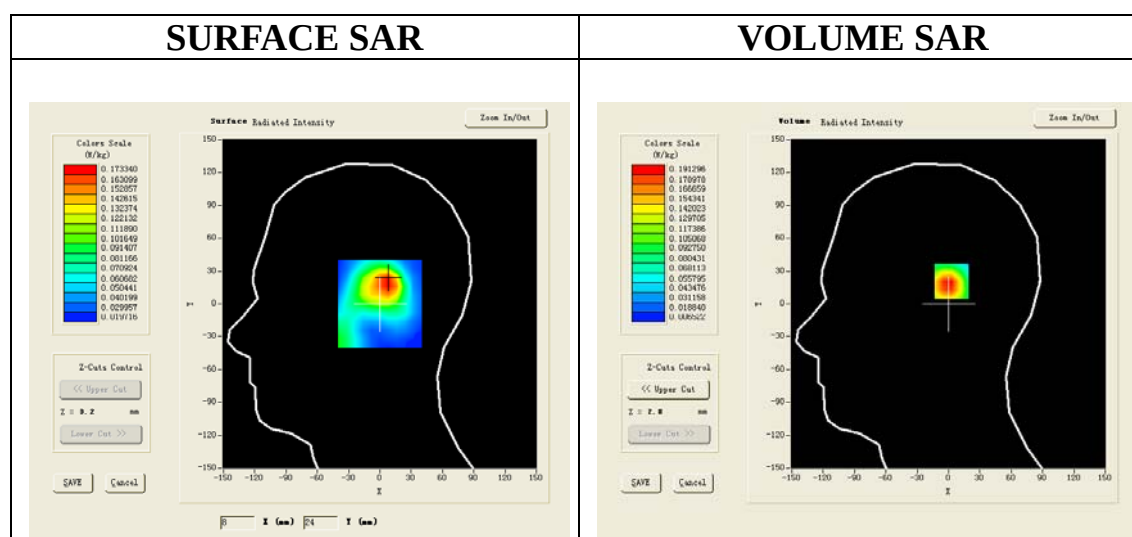
Satimo Configuration:

- Probe:EP159; Calibrated: 12/11/2012
- 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

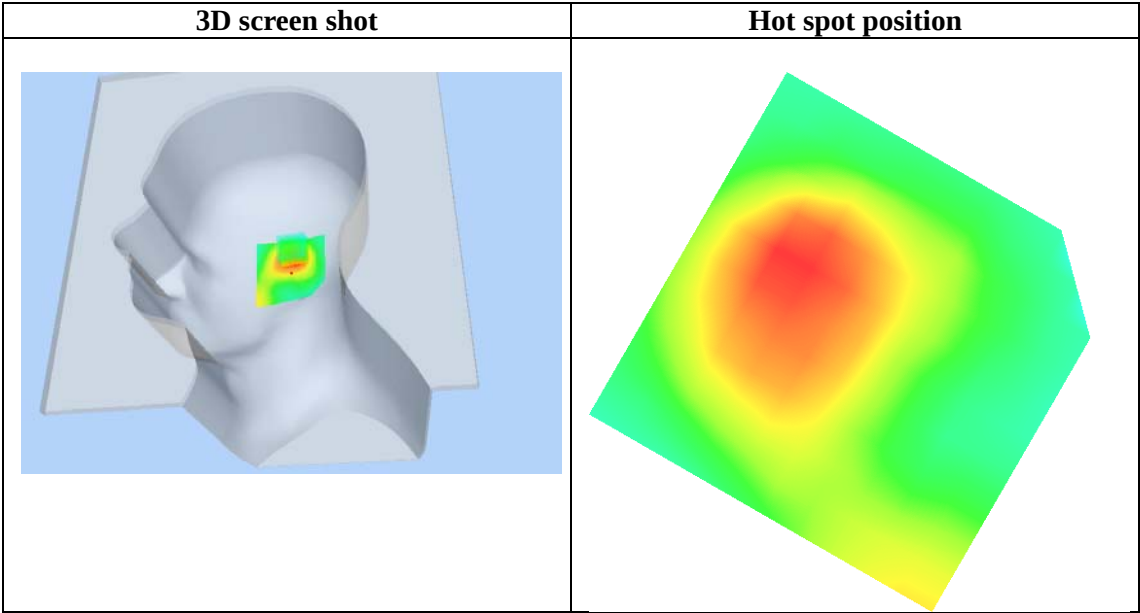
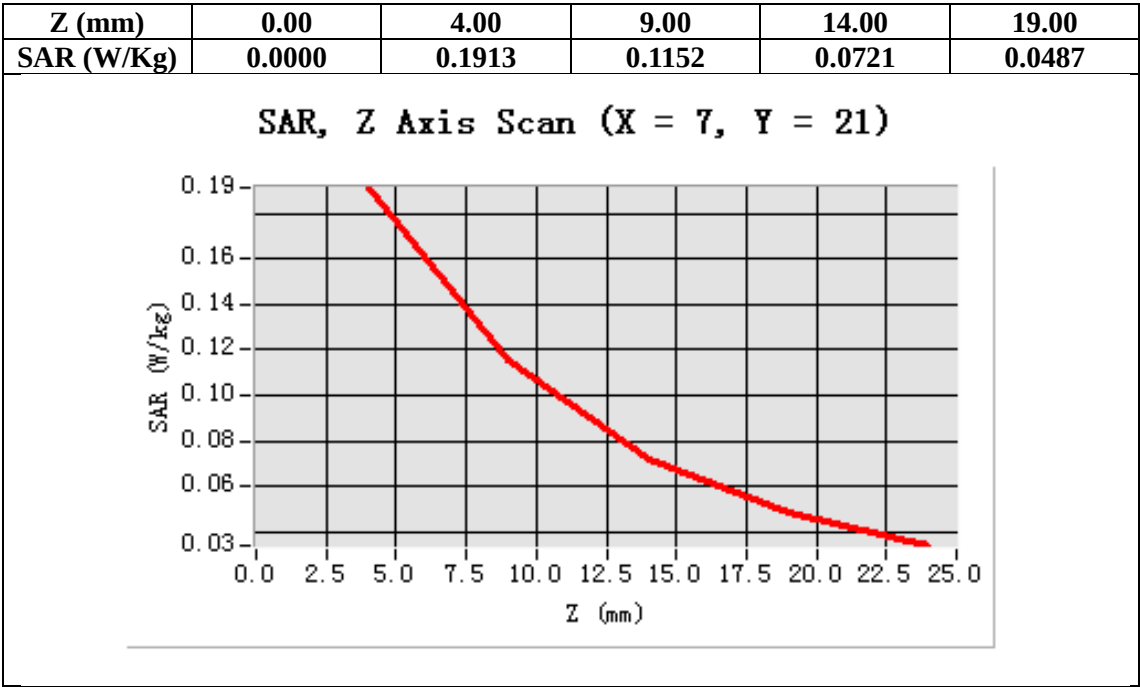
Configuration/PCS1900 Mid-Tilt-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm,dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Tilt
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=7.00, Y=21.00

SAR 10g (W/Kg)	0.107014
SAR 1g (W/Kg)	0.185689



Test Laboratory: AGC Lab
PCS 1900 Mid-Touch-Right <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.12$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

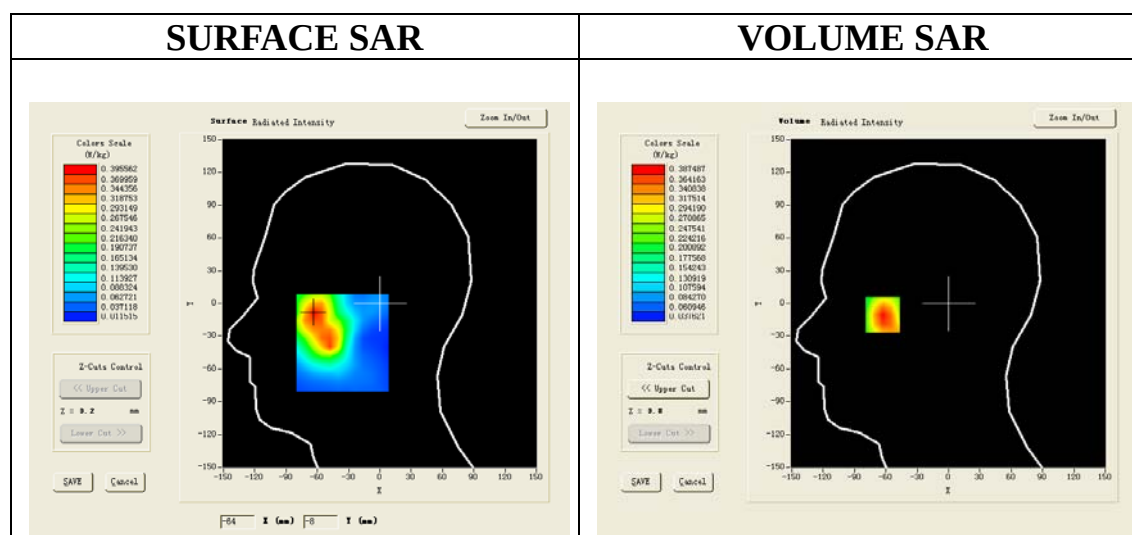
Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- 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

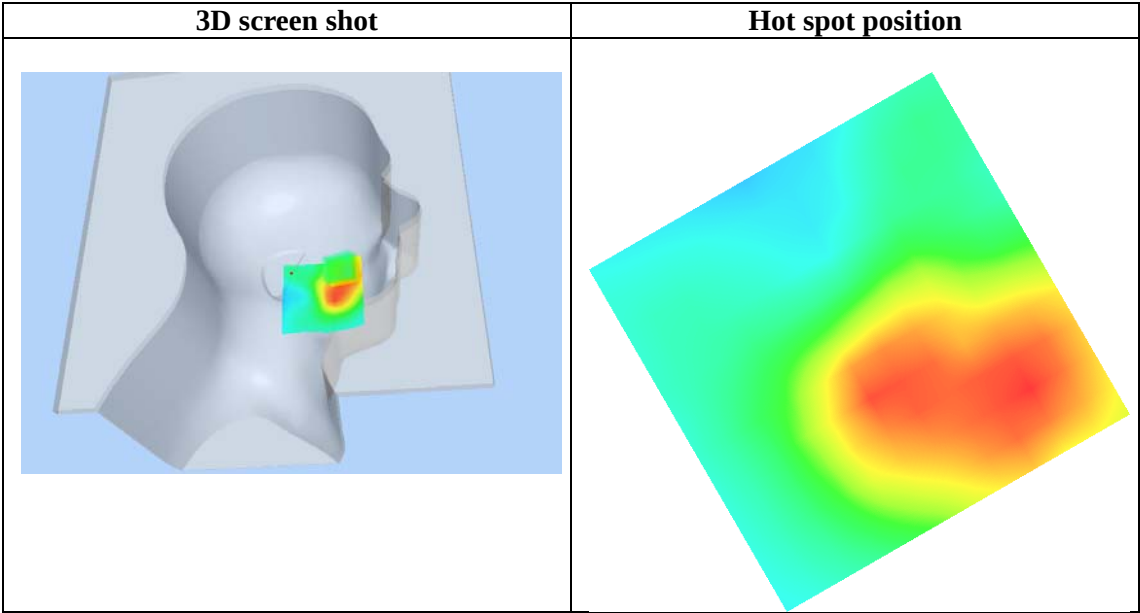
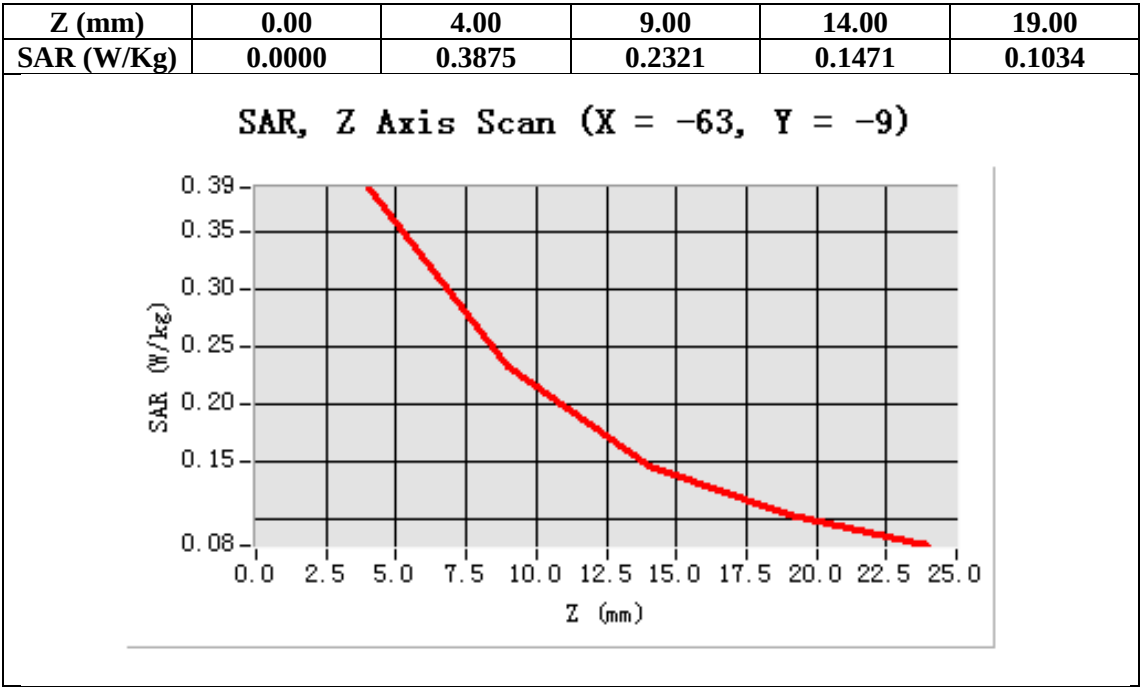
Configuration/PCS1900 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-63.00, Y=-9.00

SAR 10g (W/Kg)	0.225097
SAR 1g (W/Kg)	0.368928



Test Laboratory: AGC Lab
PCS 1900 Mid-Tilt-Right <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.12$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

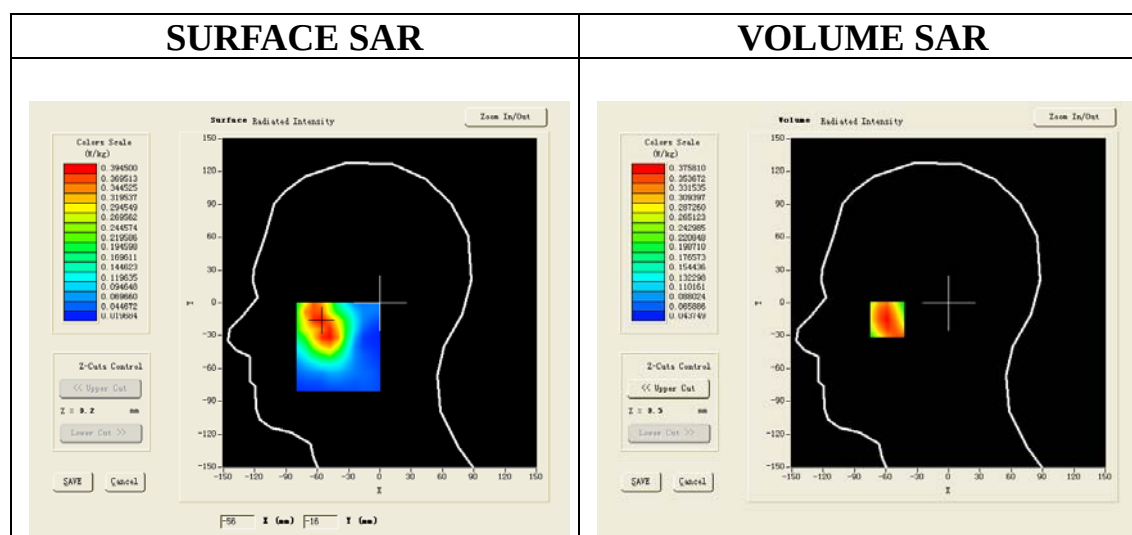
Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- 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

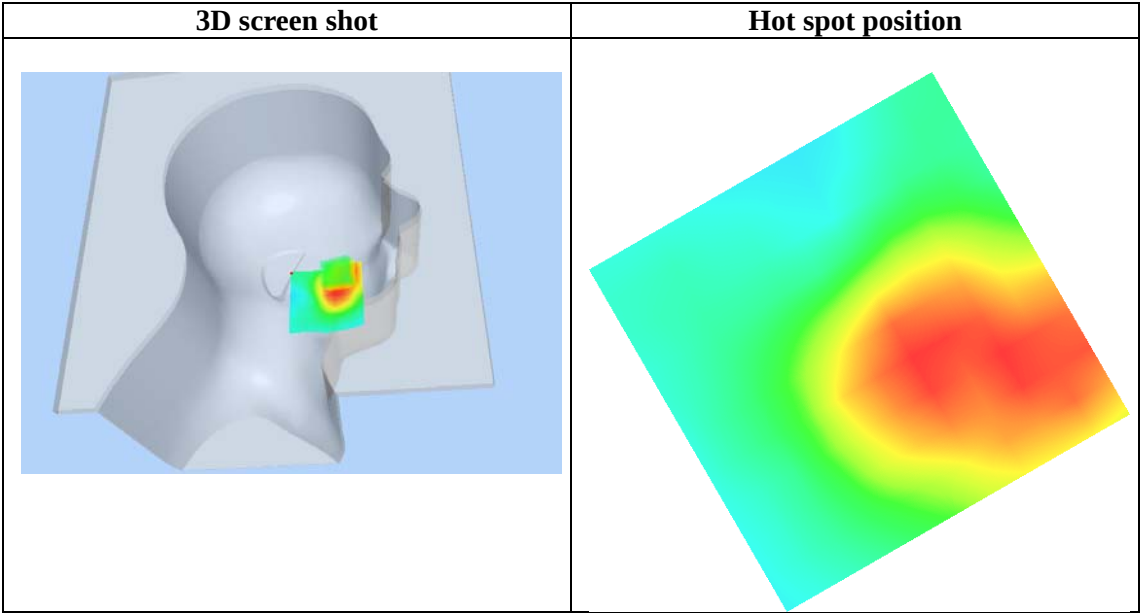
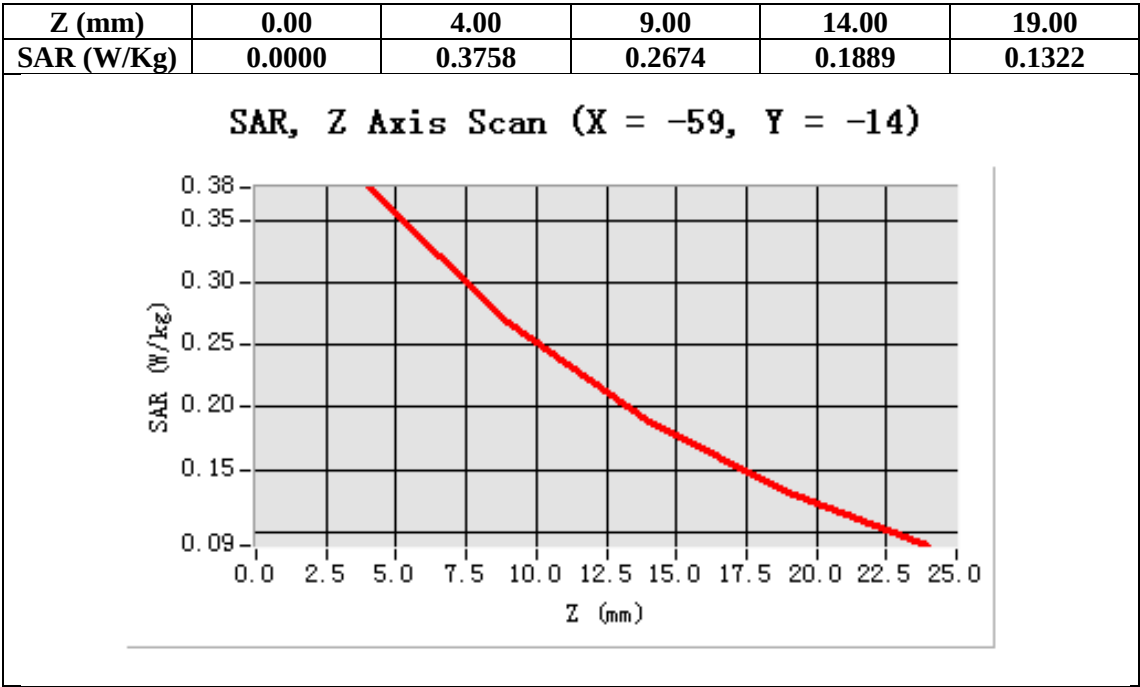
Configuration/PCS1900 Mid-Tilt-Right/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Tilt
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-59.00, Y=-14.00

SAR 10g (W/Kg)	0.240570
SAR 1g (W/Kg)	0.358634



Test Laboratory: AGC Lab
PCS 1900 Mid-Touch-Left <SIM 2>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.12$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

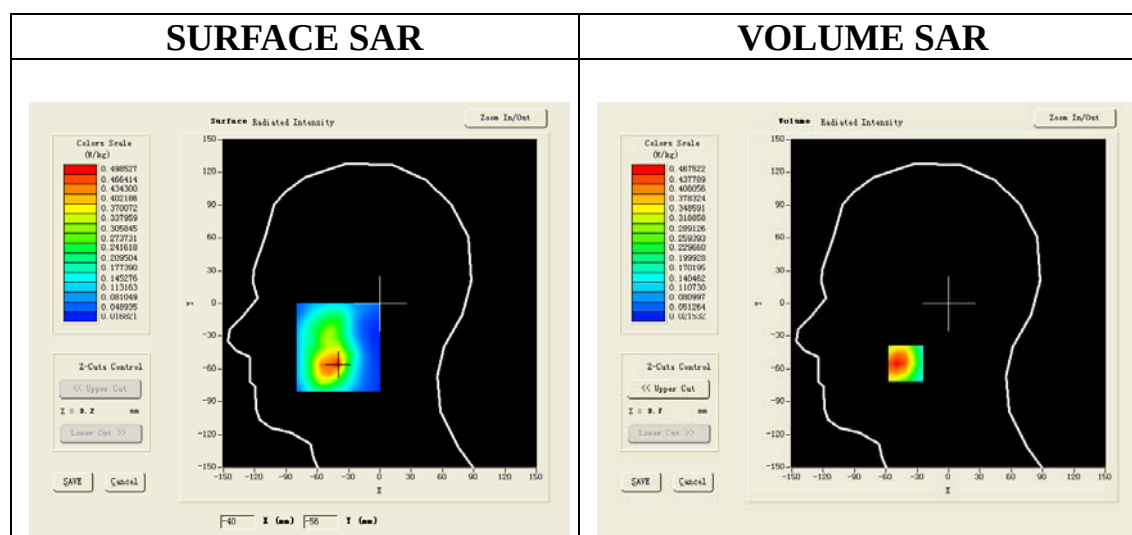
Satimo Configuration:

- Probe:EP159; Calibrated: 12/11/2012
- 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

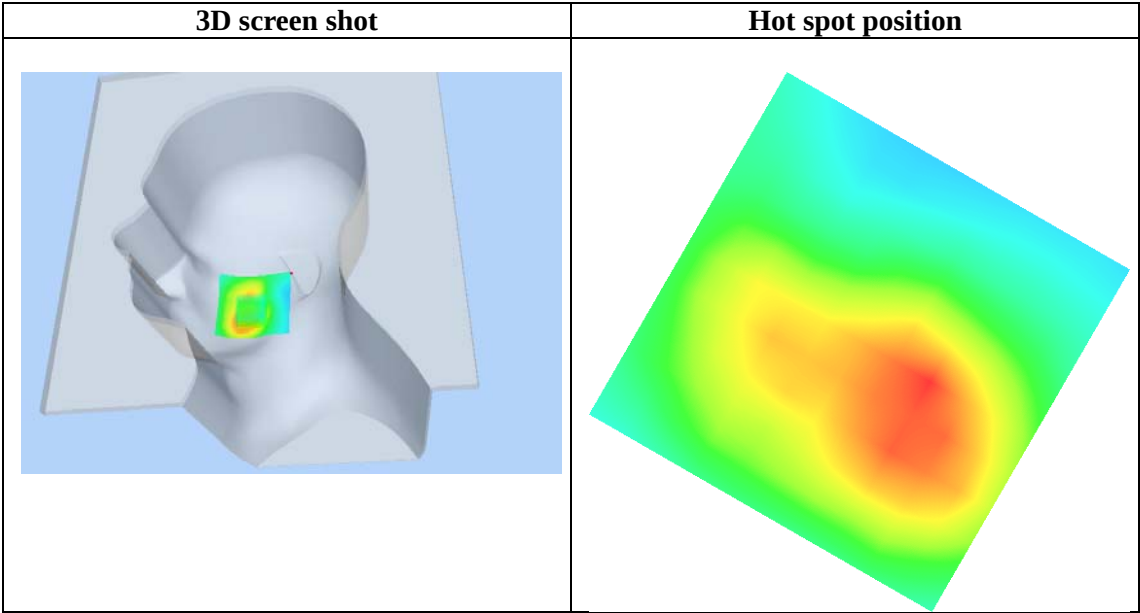
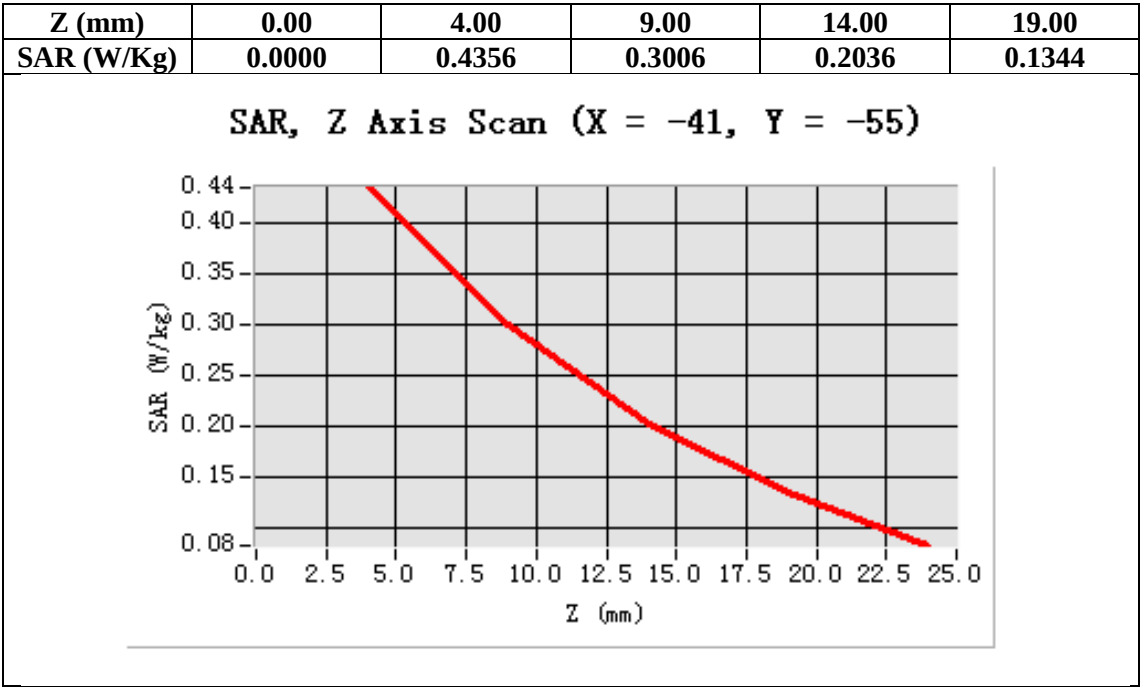
Configuration/PCS1900 Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Cheek
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-41.00, Y=-55.00

SAR 10g (W/Kg)	0.276579
SAR 1g (W/Kg)	0.441403



Test Laboratory: AGC Lab
PCS 1900 Mid-Body-Back <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 52.45$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

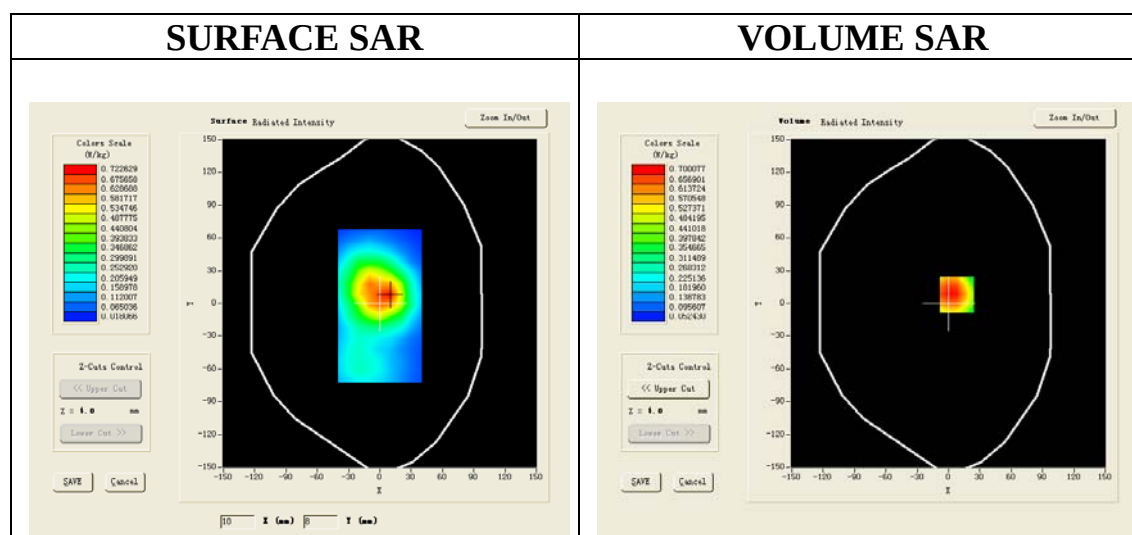
Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- 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

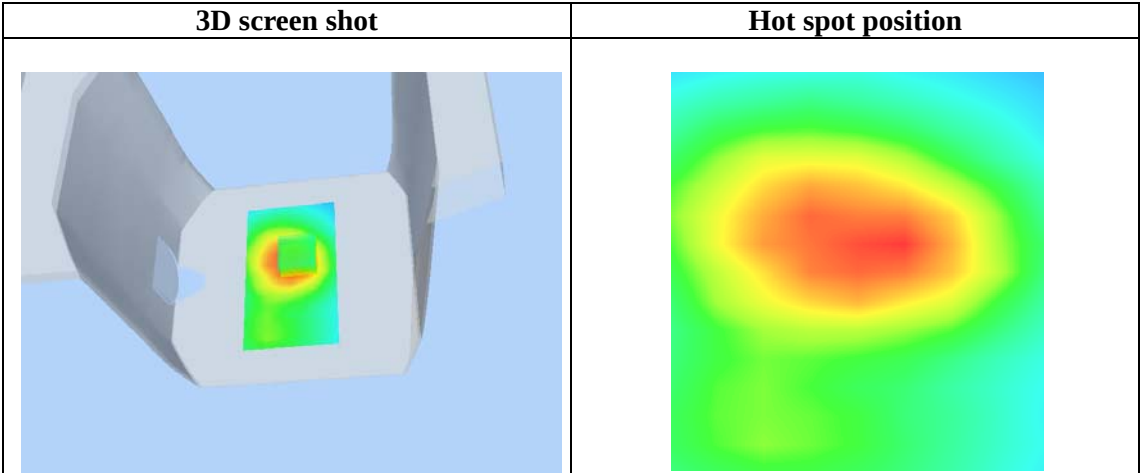
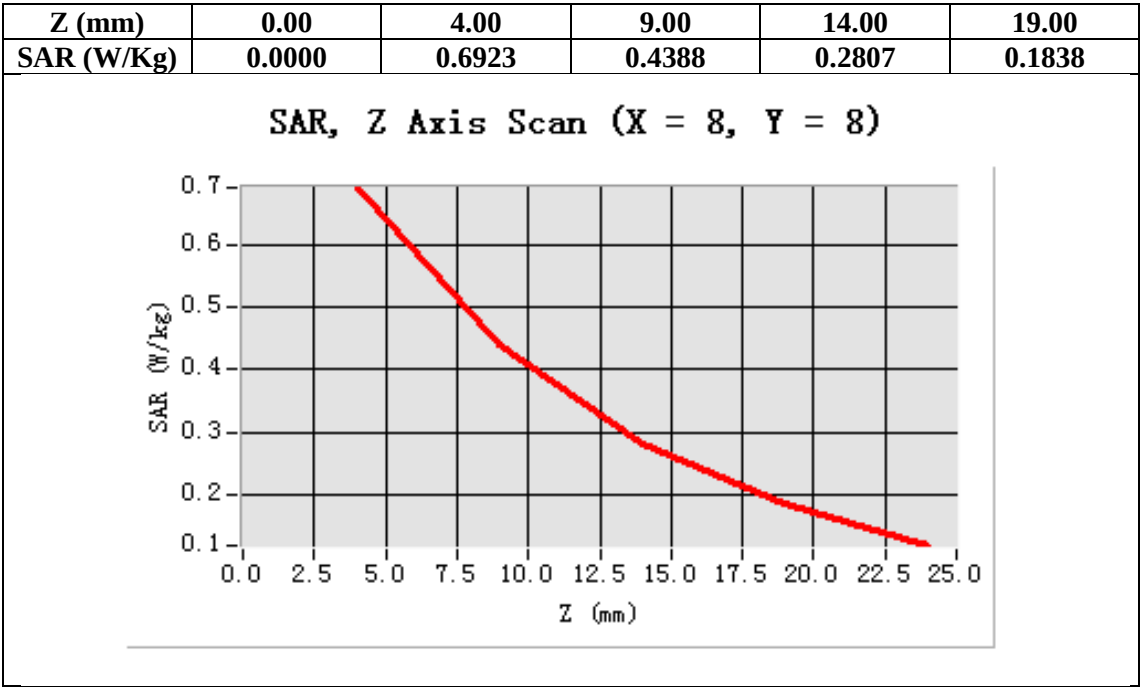
Configuration/PCS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=8.00, Y=8.00

SAR 10g (W/Kg)	0.456679
SAR 1g (W/Kg)	0.730631



Test Laboratory: AGC Lab
GPRS 1900 Mid-Body-Back (2up) <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: GPRS-2 Slot; Communication System Band: PCS1900; Duty Cycle: 1:4.2 ; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 52.45$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

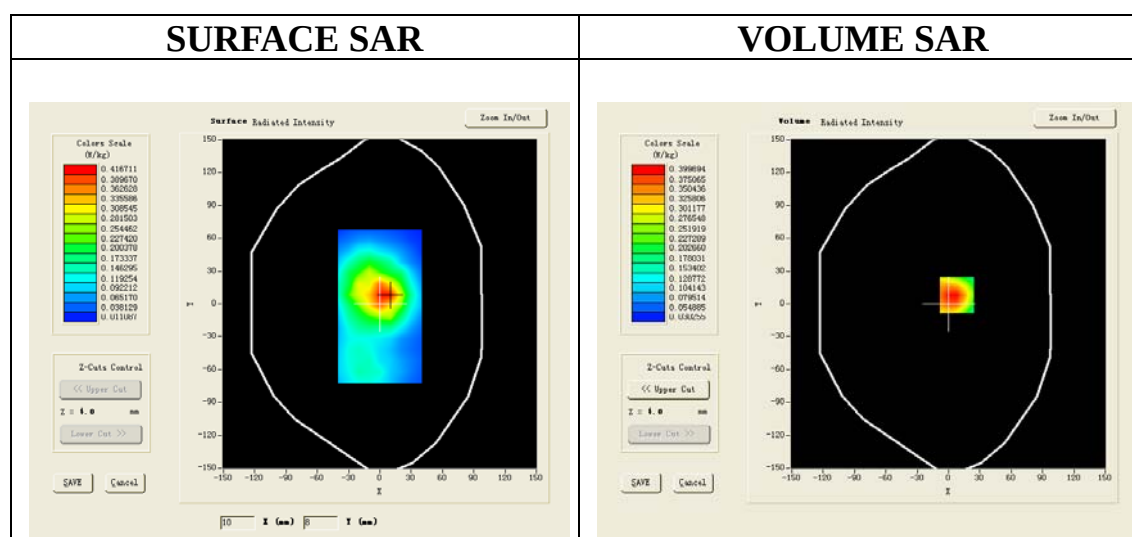
Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- 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

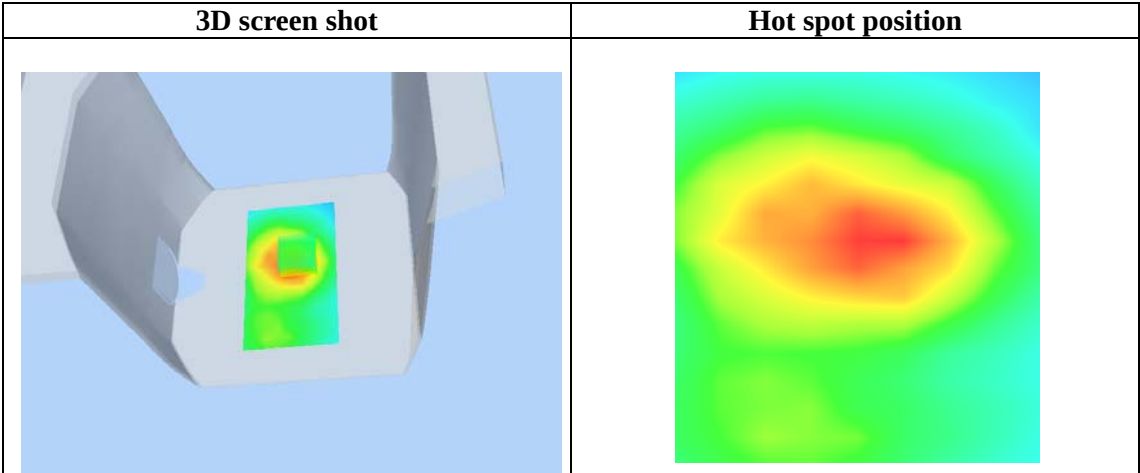
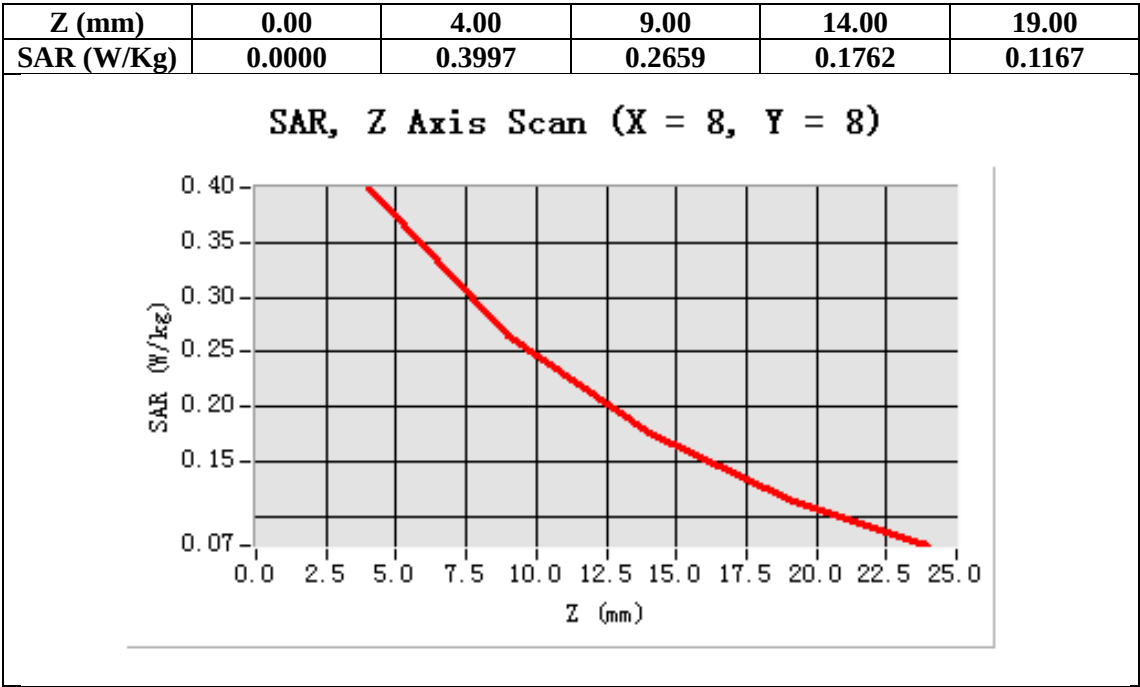
Configuration/GPRS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5m;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 4.0)



Maximum location: X=8.00, Y=8.00

SAR 10g (W/Kg)	0.261908
SAR 1g (W/Kg)	0.418622



Test Laboratory: AGC Lab
GPRS 1900 Mid-Body-Back (3up) <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: GPRS-3 Slot; Communication System Band: PCS 1900; Duty Cycle:1:2.8 ; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 52.45$ $\rho = 1000\text{kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 21.0, Liquid temperature ($^{\circ}\text{C}$): 21.0

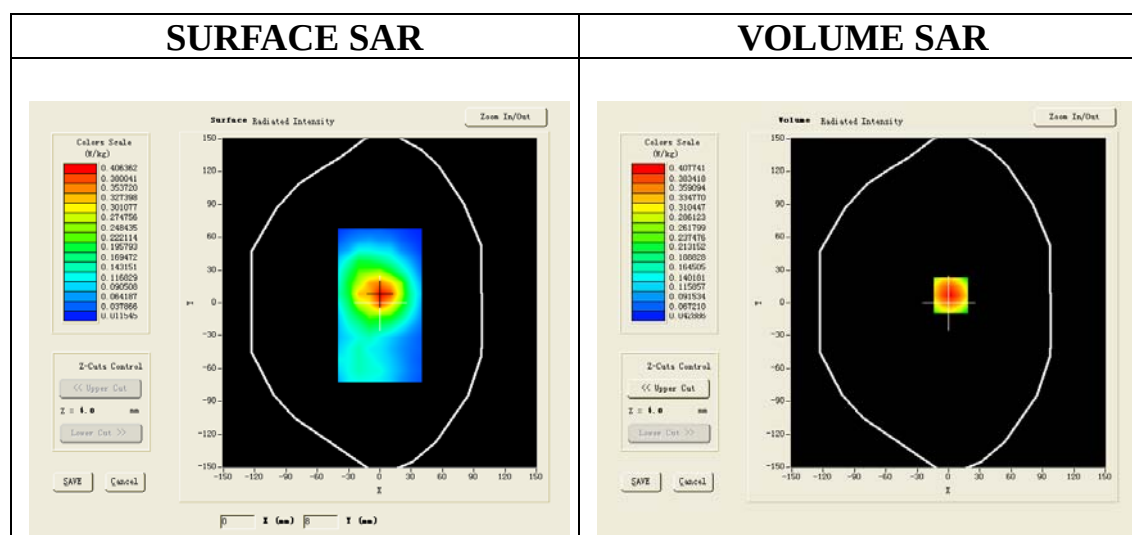
Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- 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

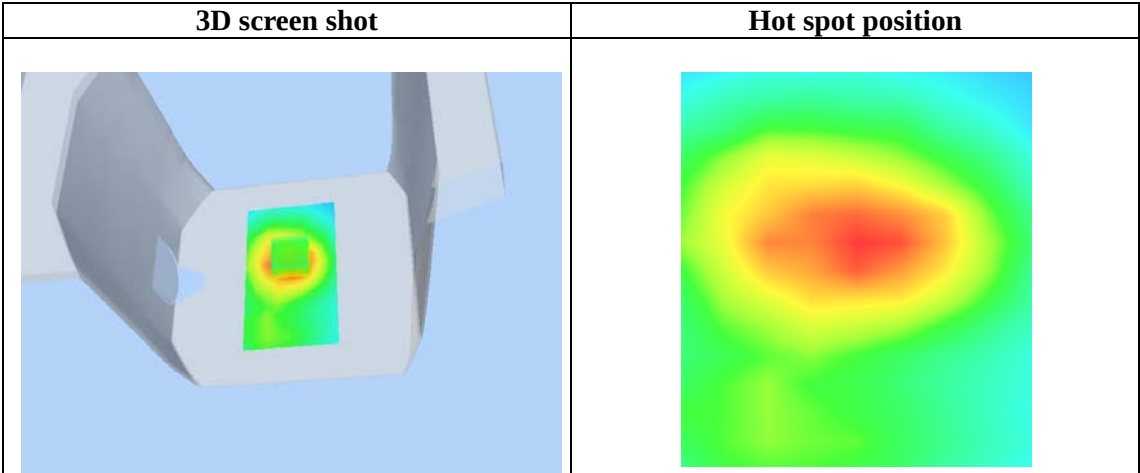
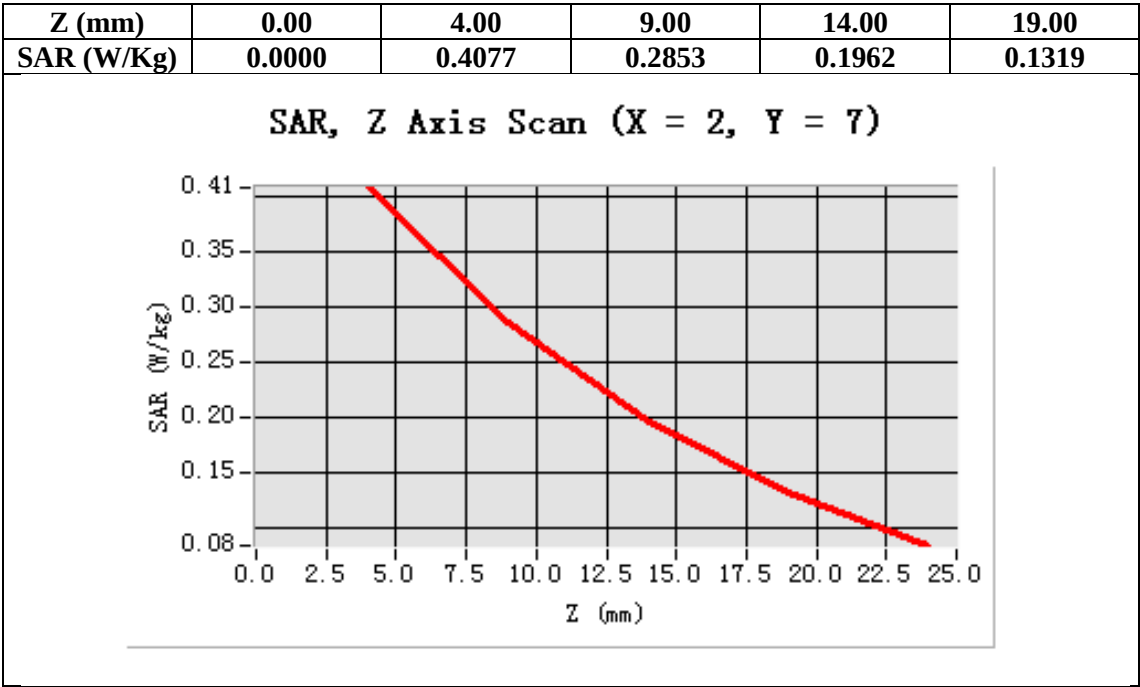
Configuration/GPRS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 2.7)



Maximum location: X=2.00, Y=7.00

SAR 10g (W/Kg)	0.273609
SAR 1g (W/Kg)	0.421145



Test Laboratory: AGC Lab
GPRS 1900 Mid-Body- Back (4up) <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: GPRS-4 Slot; Communication System Band: PCS 1900; Duty Cycle: 1:2.1; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 52.45$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

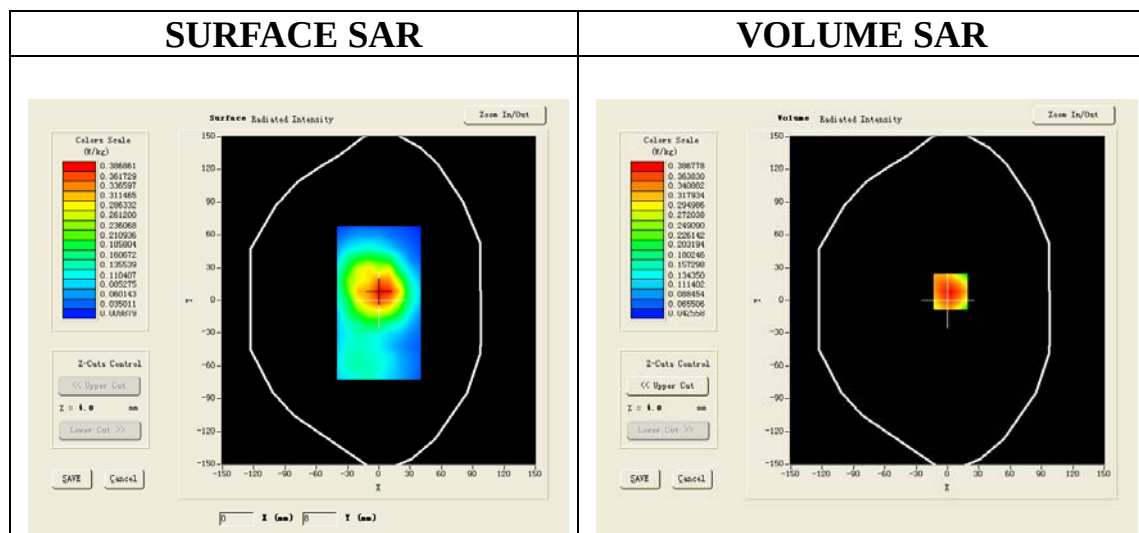
Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- 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

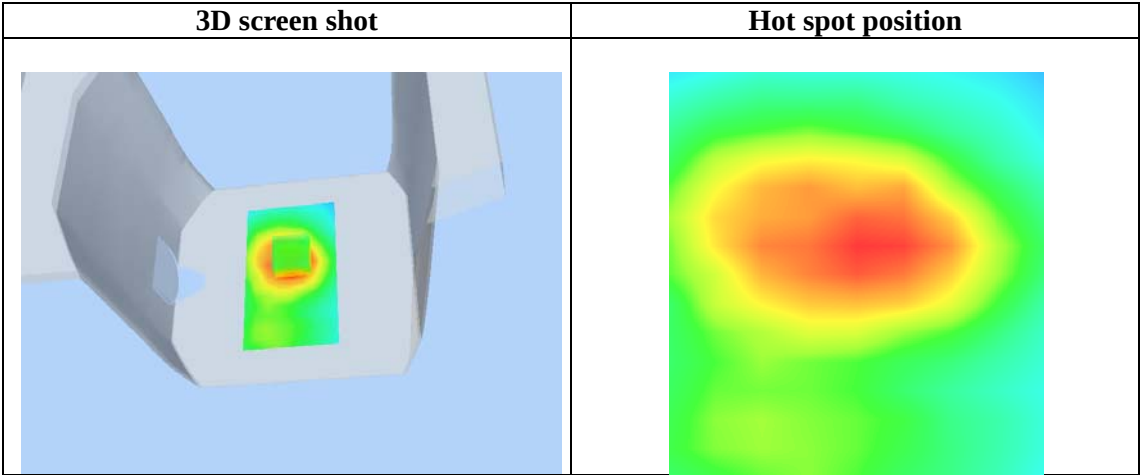
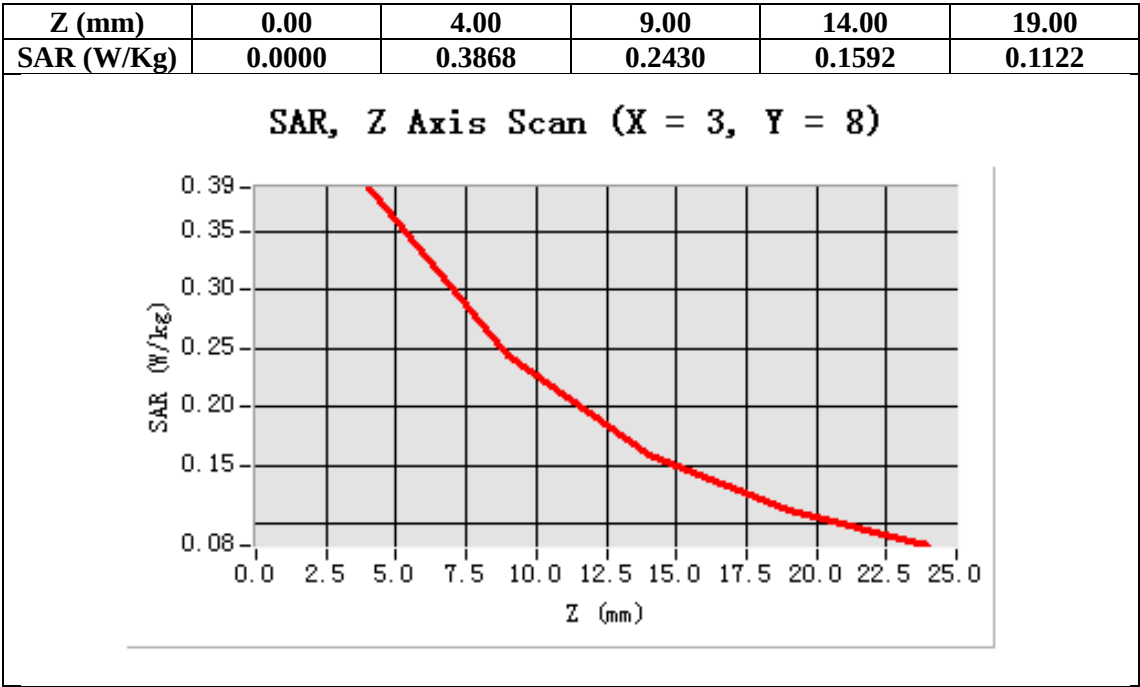
Configuration/GPRS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 2.0)



Maximum location: X=3.00, Y=8.00

SAR 10g (W/Kg)	0.256852
SAR 1g (W/Kg)	0.401765



Test Laboratory: AGC Lab
PCS 1900 Mid-Body -Front (MS) <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 52.45$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

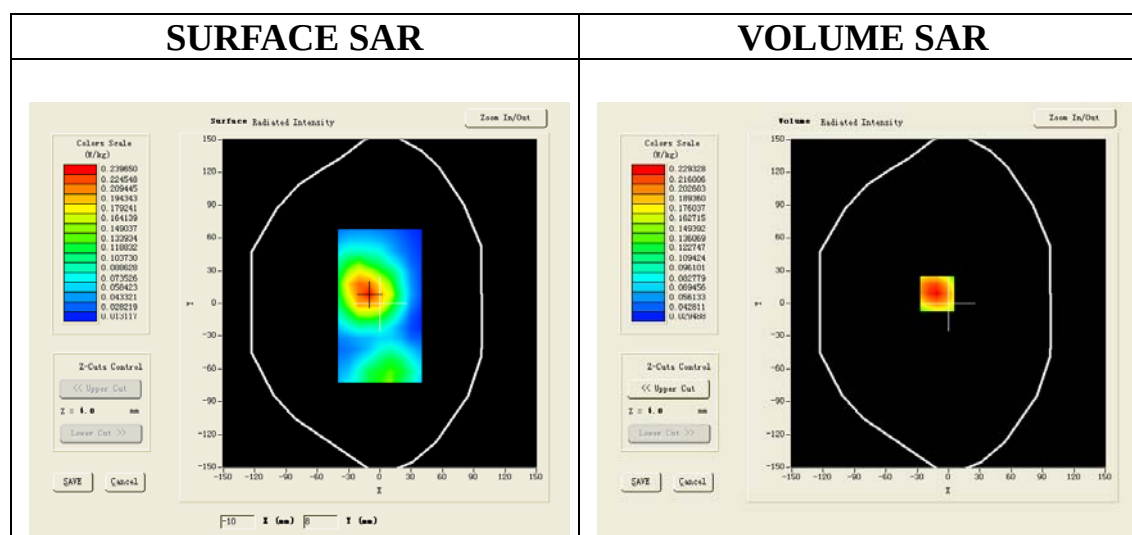
Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM1; Type: SAM
- Measurement SW: OpenSAR V4_02_01

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

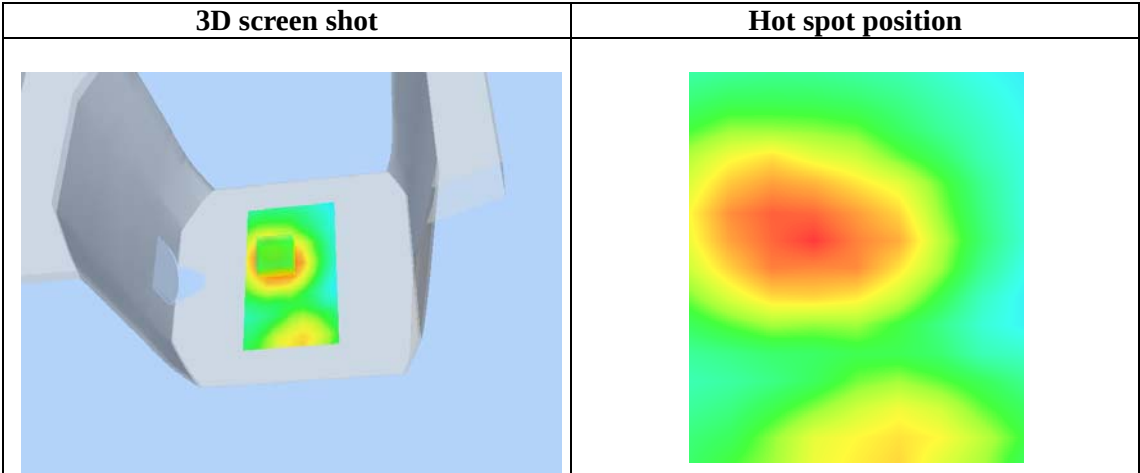
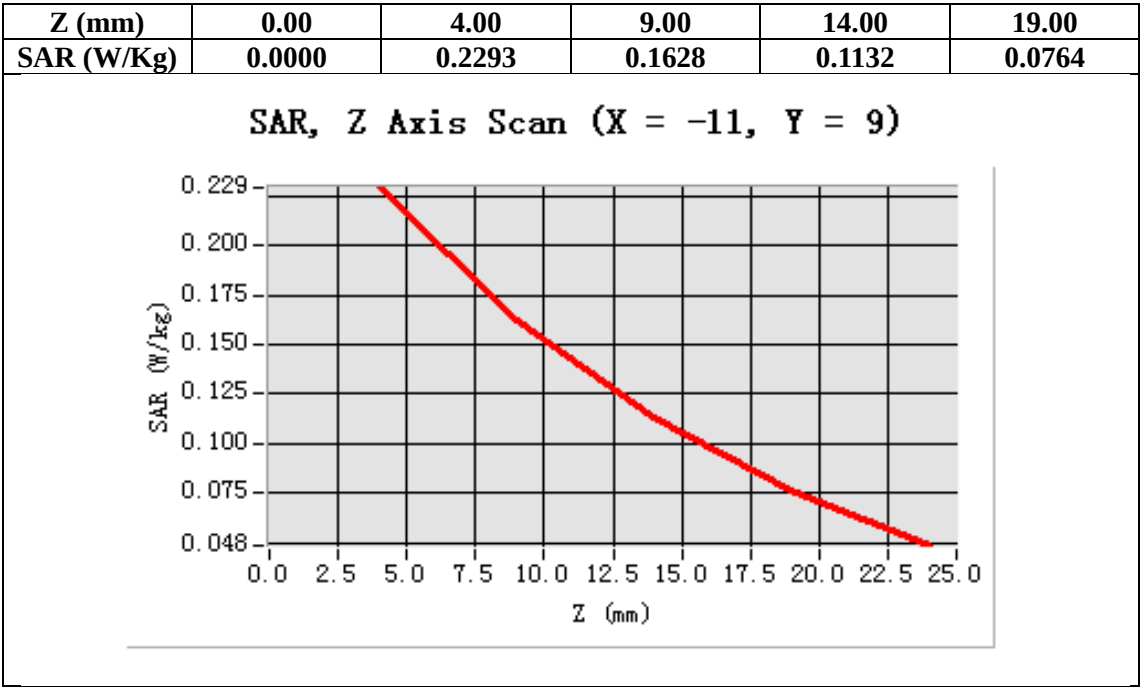
Configuration/PCS1900 Mid-Body- Front /Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Front
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-11.00, Y=9.00

SAR 10g (W/Kg)	0.156925
SAR 1g (W/Kg)	0.237877



Test Laboratory: AGC Lab
PCS 1900 Mid-Body- Back (MS) –with earphone <SIM 1>
DUT: GSM Mobile Phone; Type: QM-G2GRQ1BK

Date: Mar.28, 2013

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=5.73;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 52.45$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

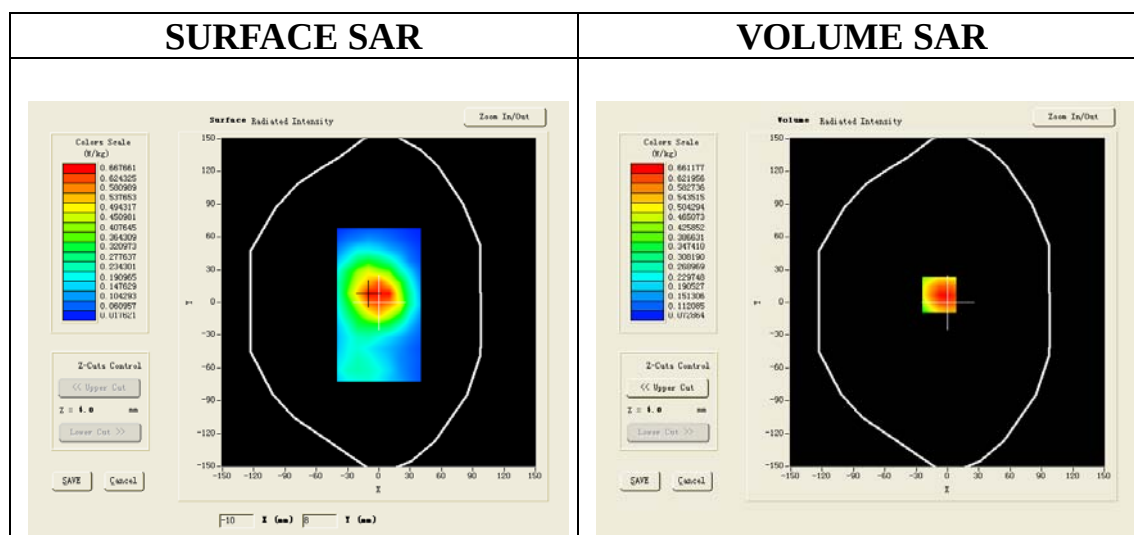
Satimo Configuration:

- Probe: EP159; Calibrated: 12/11/2012
- 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

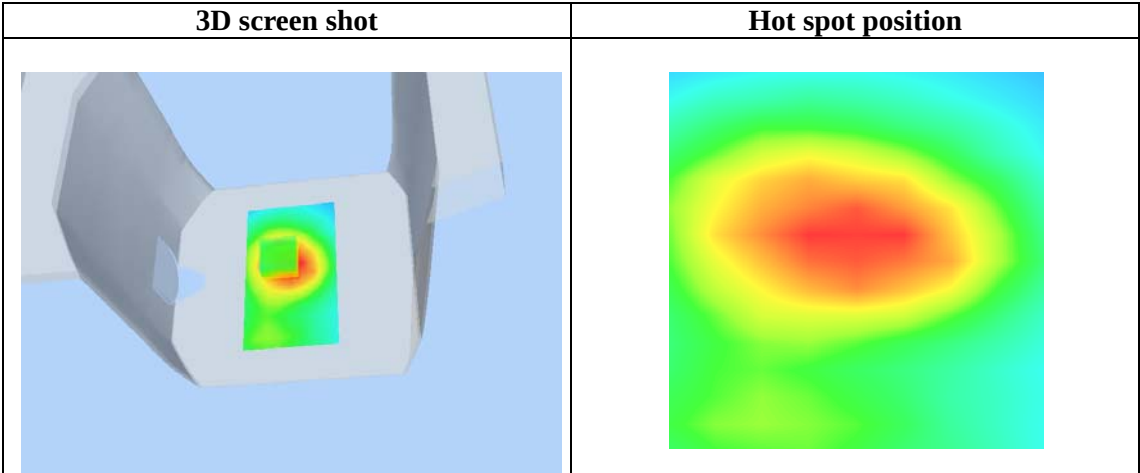
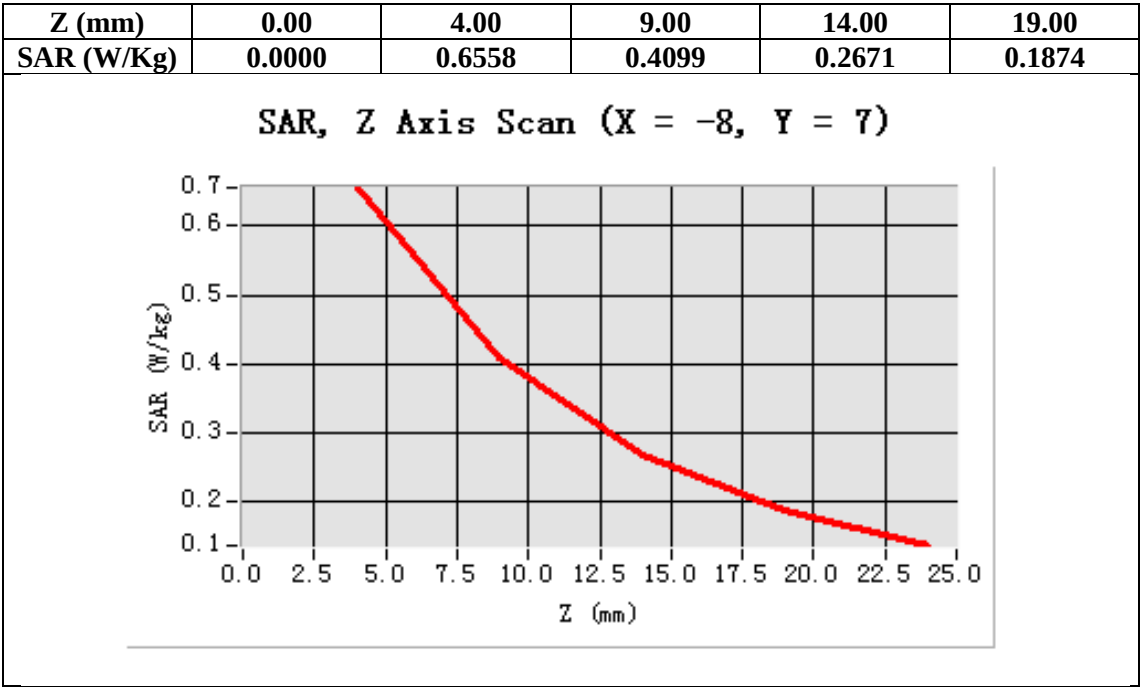
Configuration/PCS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-8.00, Y=7.00

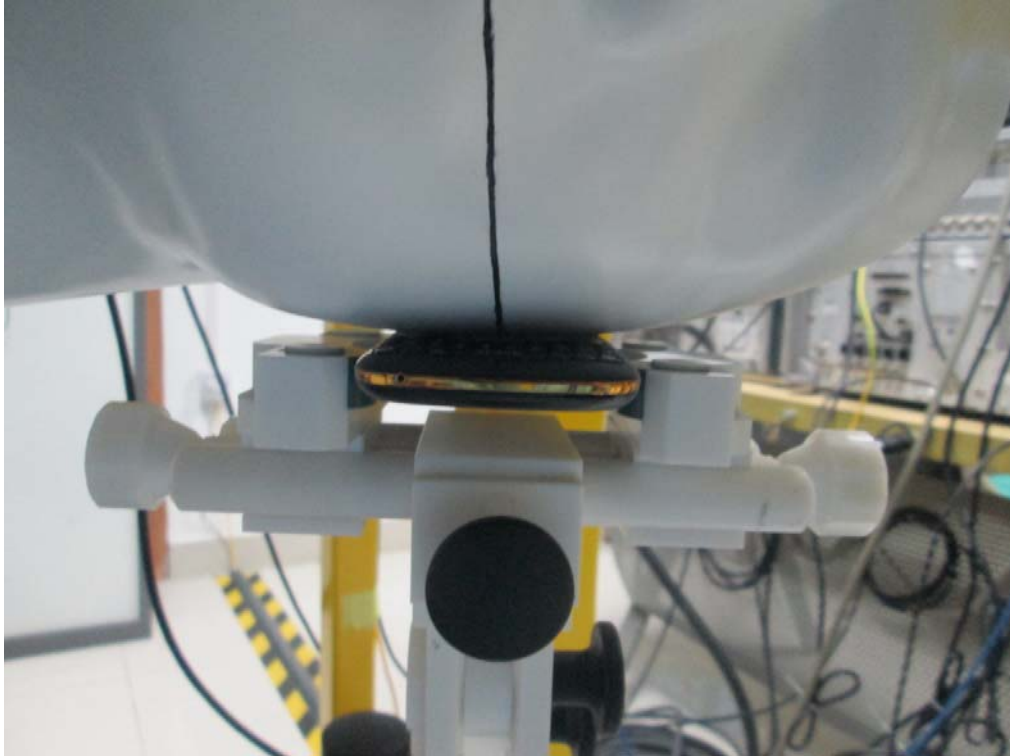
SAR 10g (W/Kg)	0.443510
SAR 1g (W/Kg)	0.691872



Appendix C. TEST SETUP PHOTOGRAPHS & EUT PHOTOGRAPHS

Test Setup Photographs

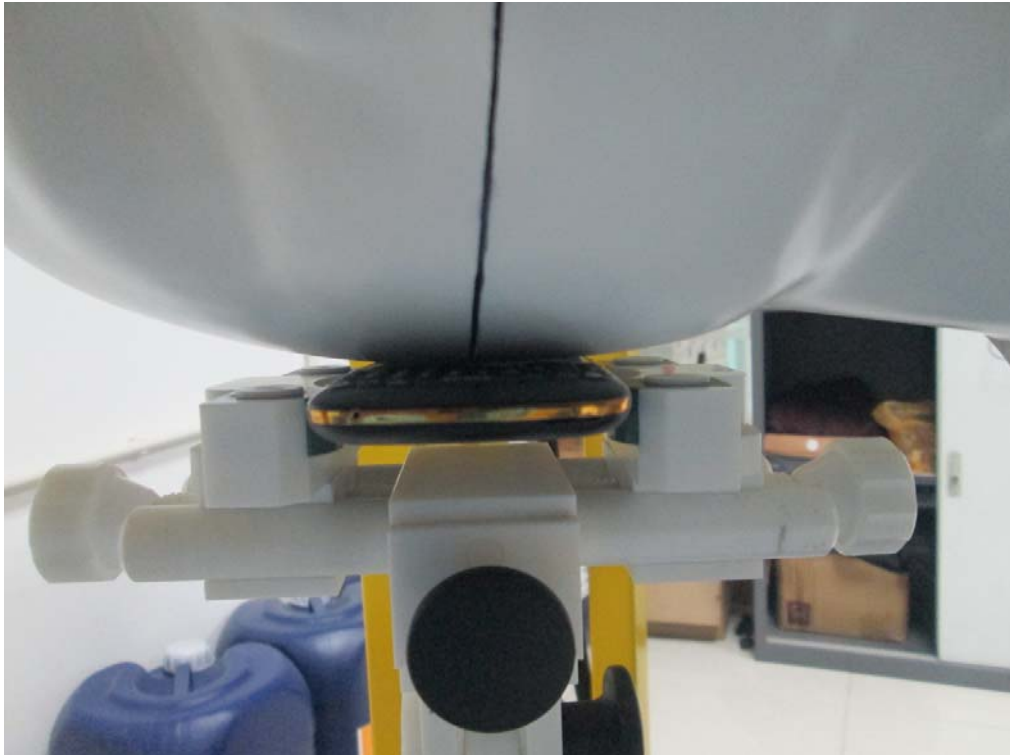
LEFT-CHECK TOUCH



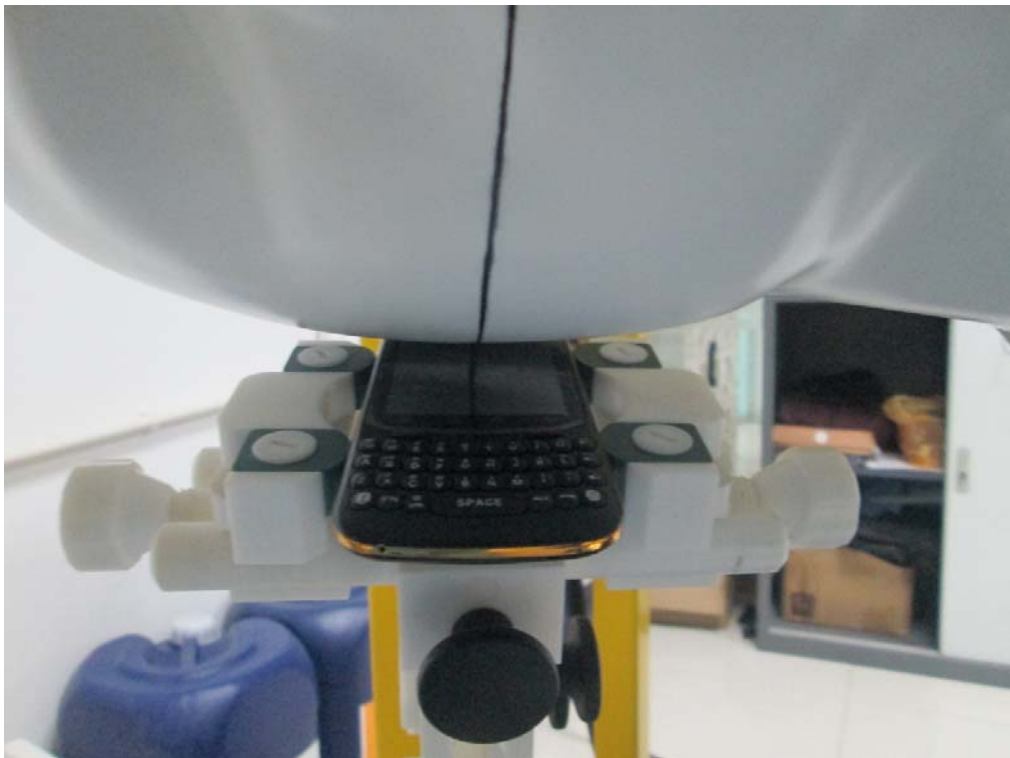
LEFT-TILT 15°



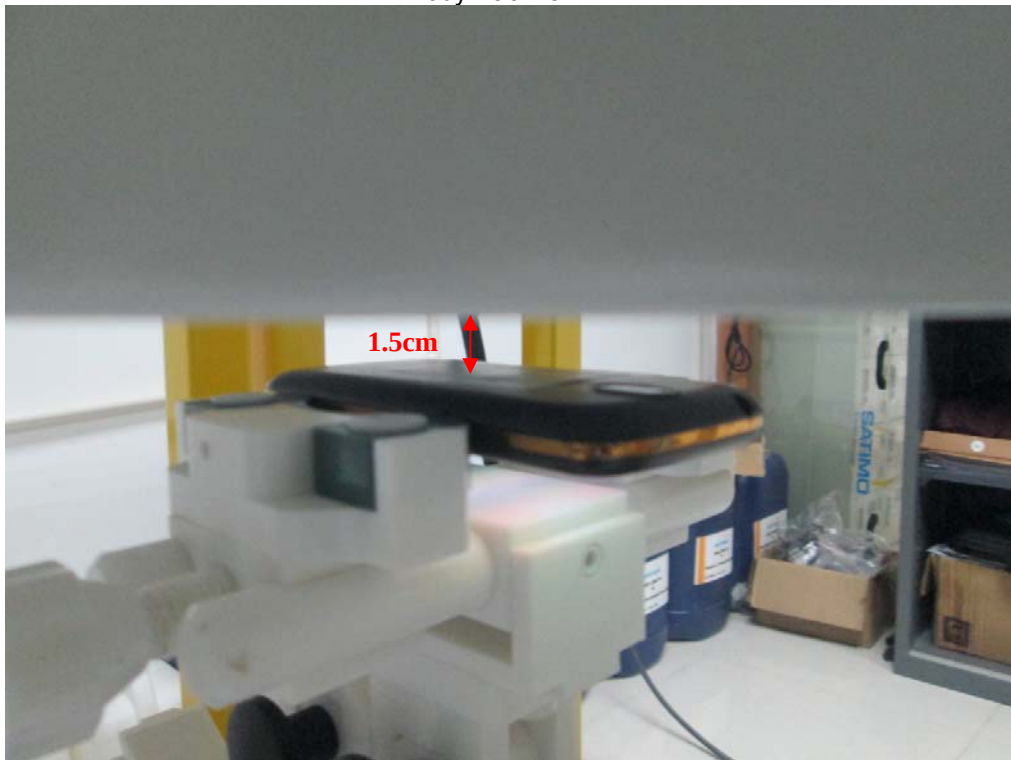
RIGHT-CHECK TOUCH



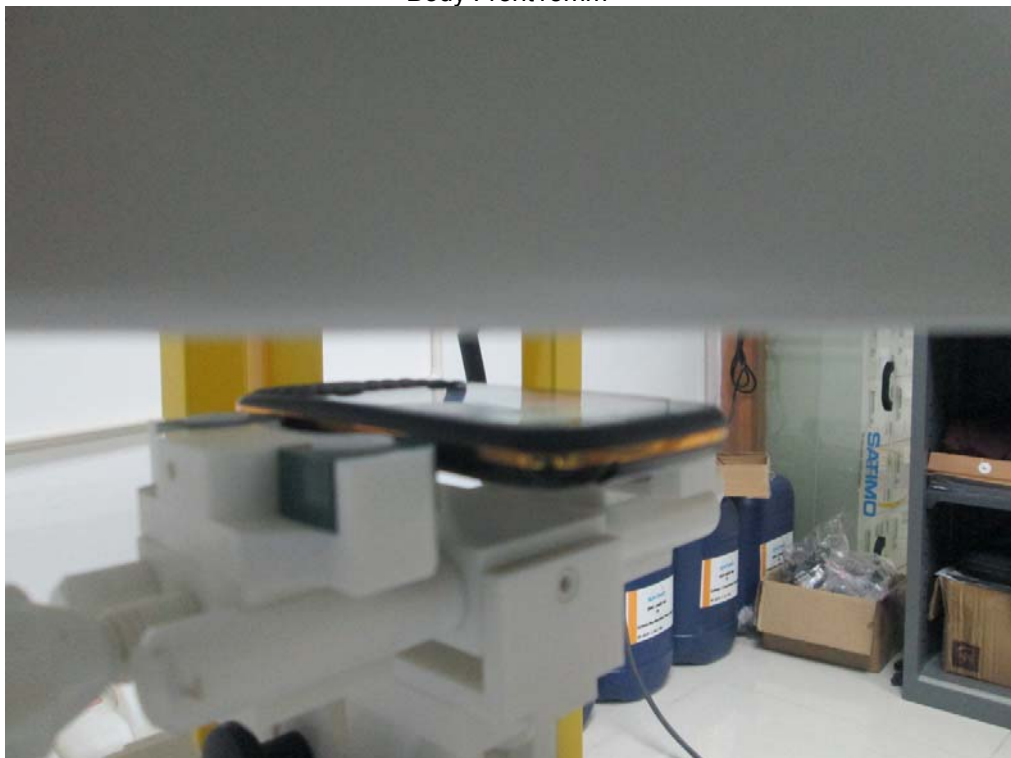
RIGHT-TILT 15°



Body Back15mm



Body Front15mm



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 PHOTOGRAPHS

TOTAL VIEW OF EUT



TOP VIEW OF EUT



BOTTOM VIEW OF EUT



FRONT VIEW OF EUT



BACK VIEW OF EUT



LEFT VIEW OF EUT



RIGHT VIEW OF EUT



OPEN VIEW OF EUT-1



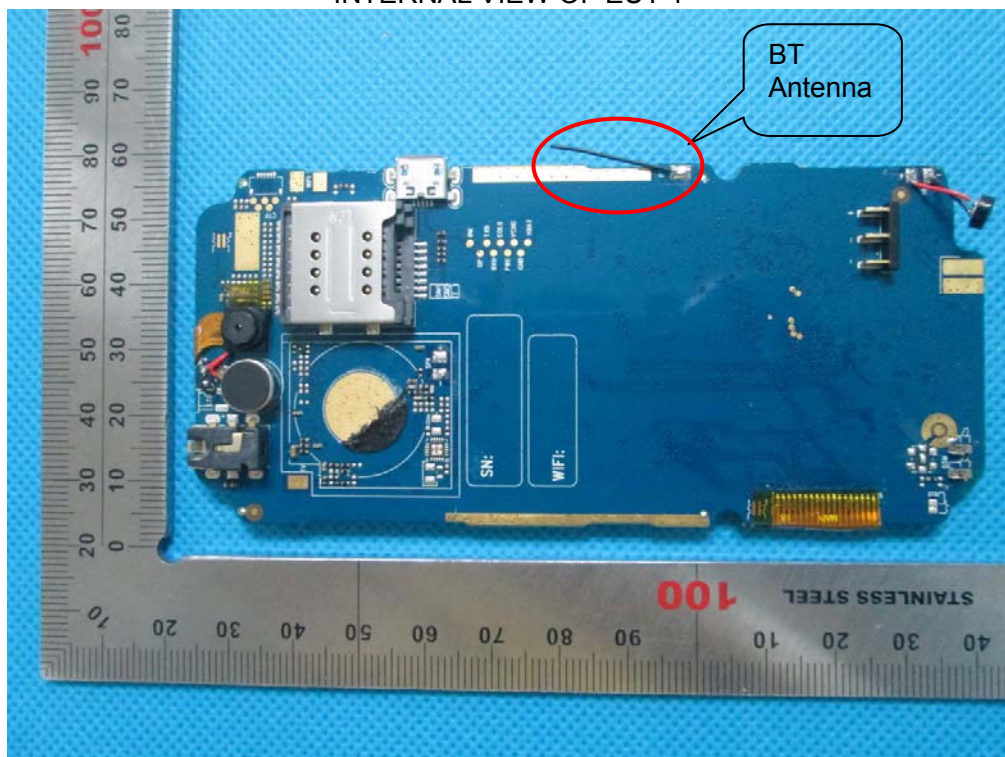
OPEN VIEW OF EUT-2



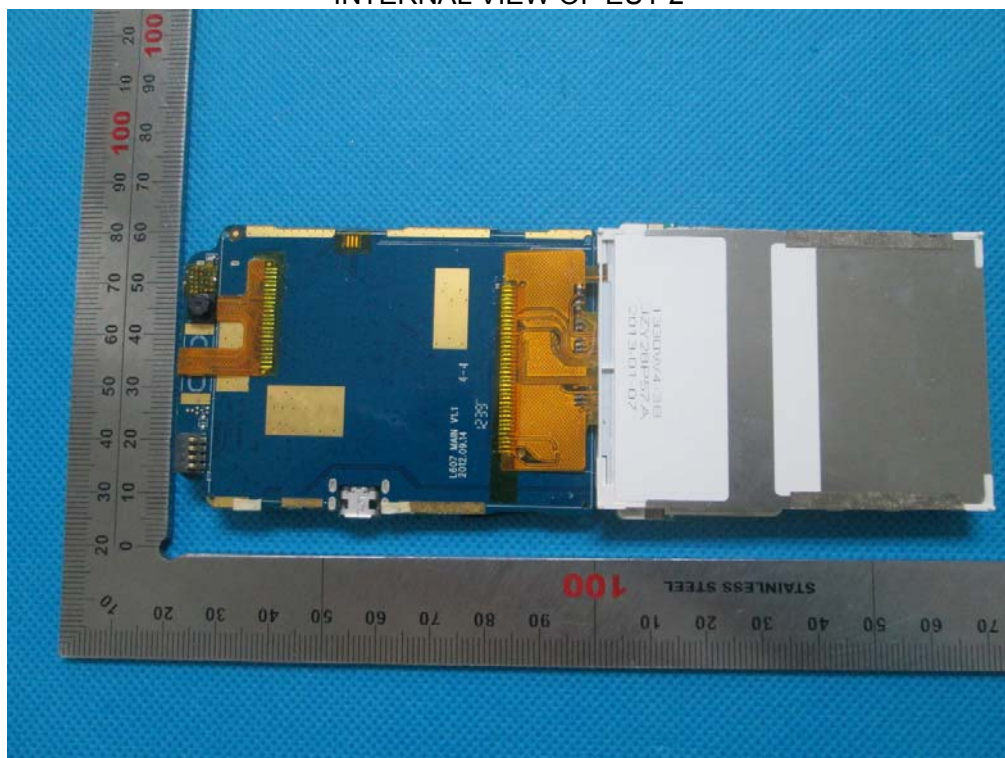
OPEN VIEW OF EUT-3



INTERNAL VIEW OF EUT-1



INTERNAL VIEW OF EUT-2



INTERNAL VIEW OF EUT-3

