

Test Laboratory: AGC Lab

Date: Apr. 13,2020

System Check Head 2300 MHz

DUT: Dipole 2300 MHz Type: SID 2300

Communication System CW; Communication System Band: D2300 (2300.0 MHz); Duty Cycle: 1:1; Conv.F=4.58

Frequency: 2300 MHz; Medium parameters used: $f = 2300$ MHz; $\sigma = 1.63$ mho/m; $\epsilon_r = 39.58$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section; Input Power=18dBm

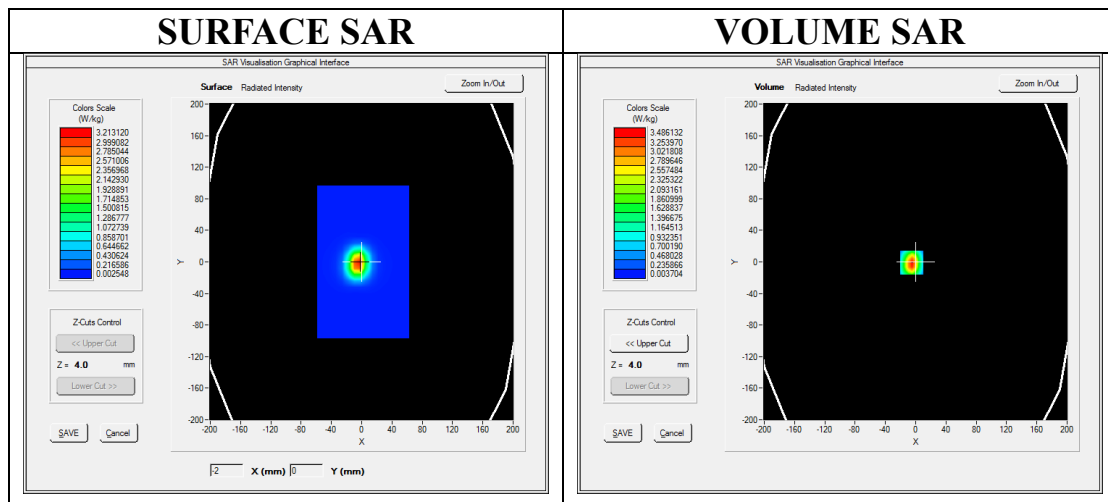
Ambient temperature (°C):21.4, Liquid temperature (°C): 21.2

SATIMO Configuration

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/System Check 2300MHz Head/Area Scan: Measurement grid: dx=8mm, dy=8mm

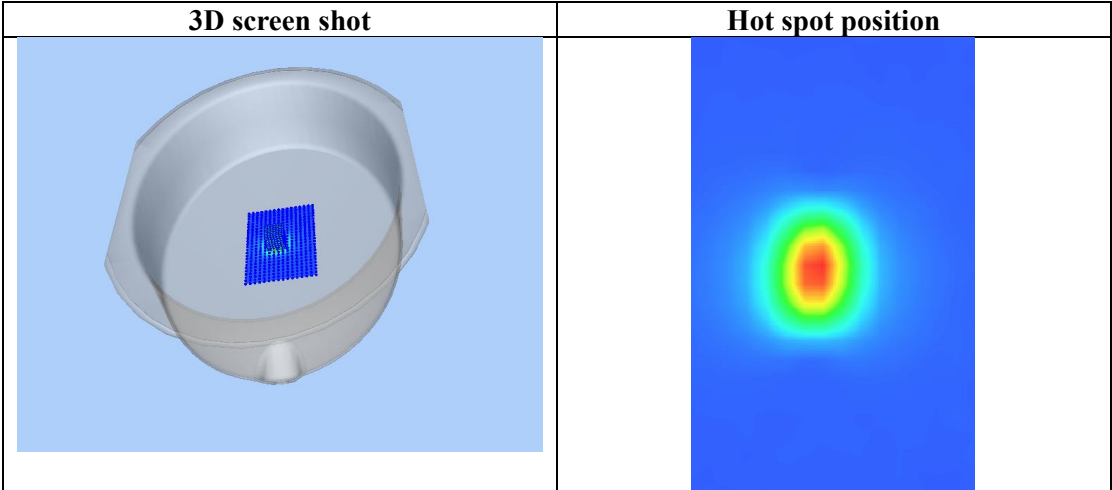
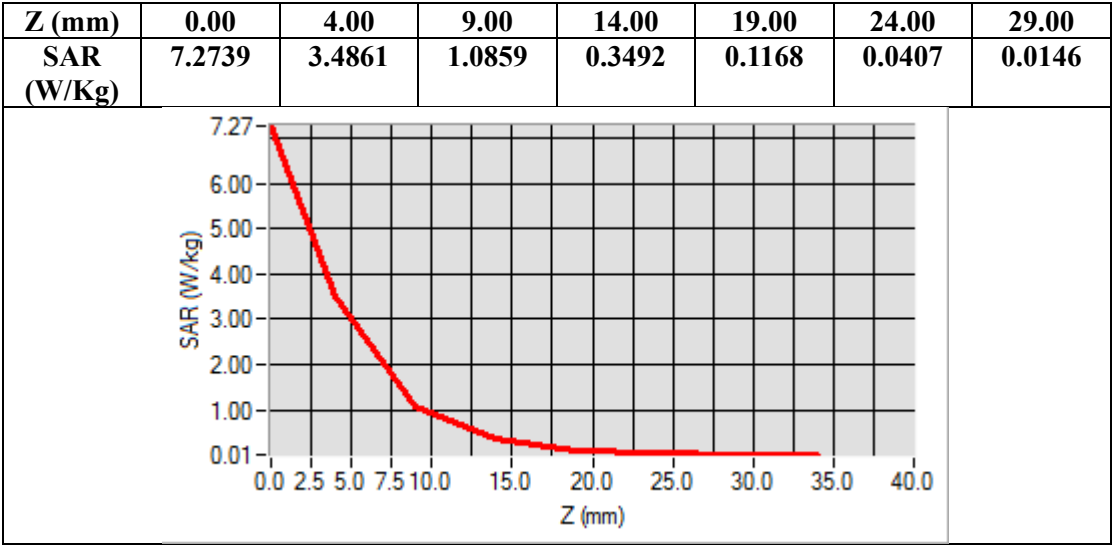
Configuration/System Check 2300MHz Head/Zoom Scan: Measurement grid: dx=5mm,dy=5mm, dz=5mm



Maximum location: X=-5.00, Y=-1.00

SAR Peak: 7.12 W/kg

SAR 10g (W/Kg)	1.338412
SAR 1g (W/Kg)	3.262807



Test Laboratory: AGC Lab
System Check Head 2450 MHz

Date: Apr. 26,2020

DUT: Dipole 2450 MHz Type: SID 2450

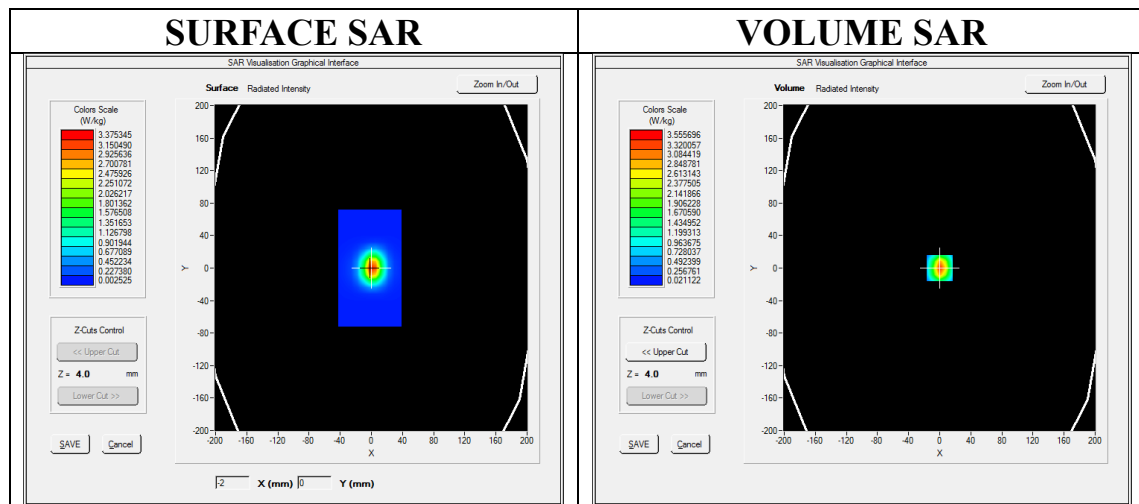
Communication System CW; Communication System Band: D2450 (2450.0 MHz); Duty Cycle: 1:1; Conv.F=4.12
Frequency: 2450 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.82$ mho/m; $\epsilon_r = 41.61$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (°C):21.5, Liquid temperature (°C): 21.3

SATIMO Configuration

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/System Check 2450MHz Head/Area Scan: Measurement grid: dx=8mm, dy=8mm

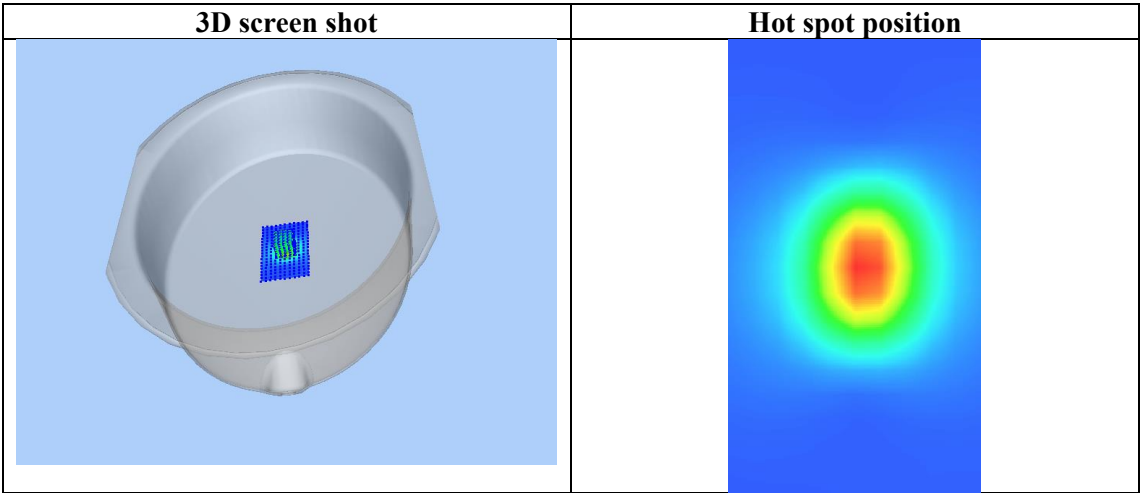
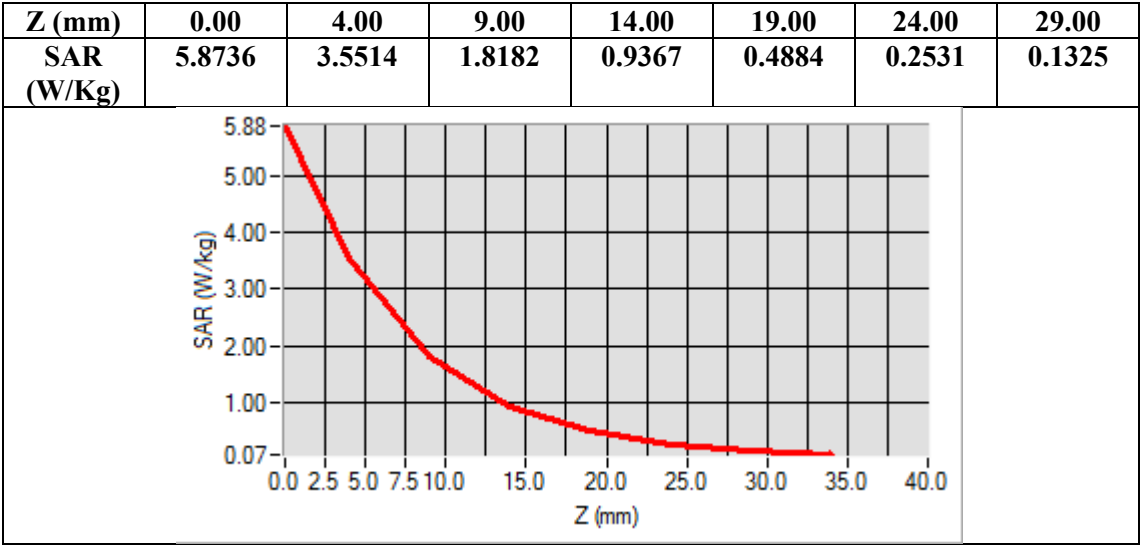
Configuration/System Check 2450MHz Head/Zoom Scan: Measurement grid: dx=5mm,dy=5mm, dz=5mm



Maximum location: X=0.00, Y=0.00

SAR Peak: 5.89 W/kg

SAR 10g (W/Kg)	1.516423
SAR 1g (W/Kg)	3.294398



Test Laboratory: AGC Lab
System Check Head 2600MHz
DUT: Dipole 2600 MHz; Type: SID 2600

Date: Apr. 17,2020

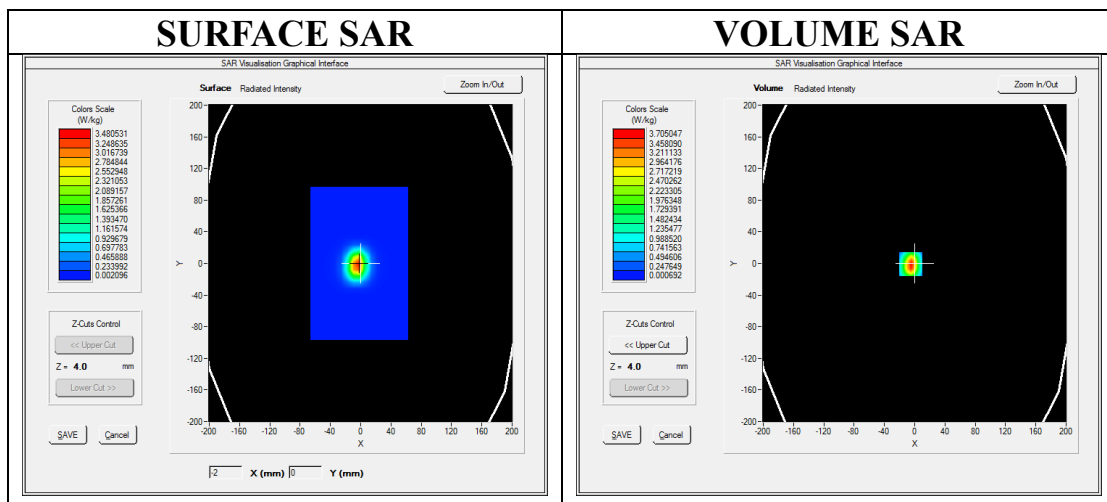
Communication System: CW; Communication System Band: D2600 (2600.0 MHz); Duty Cycle: 1:1; Conv.F=3.77
Frequency:2600 MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 38.15$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (°C): 21.4, Liquid temperature (°C): 21.2

SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/System Check 2600 Head/Area Scan: Measurement grid: dx=8mm,dy=8mm

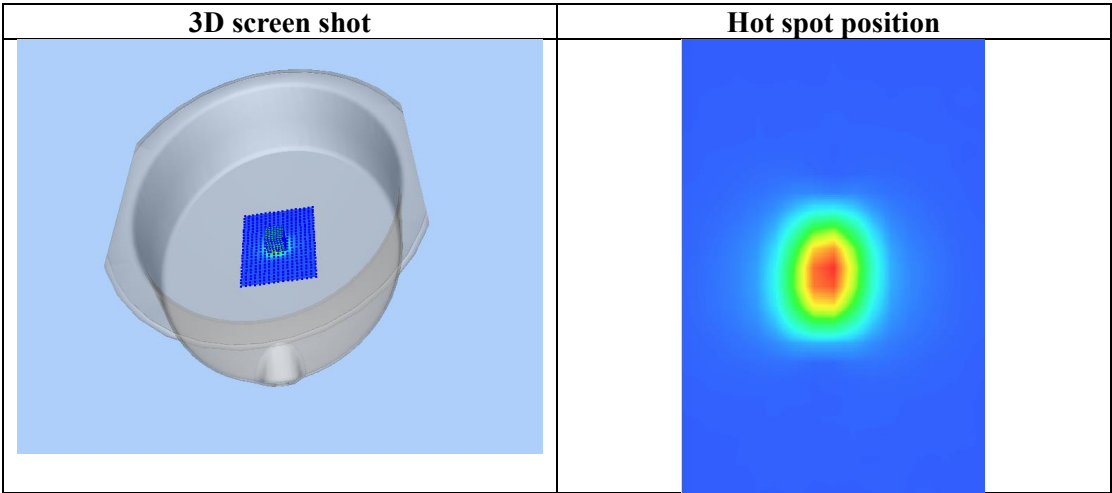
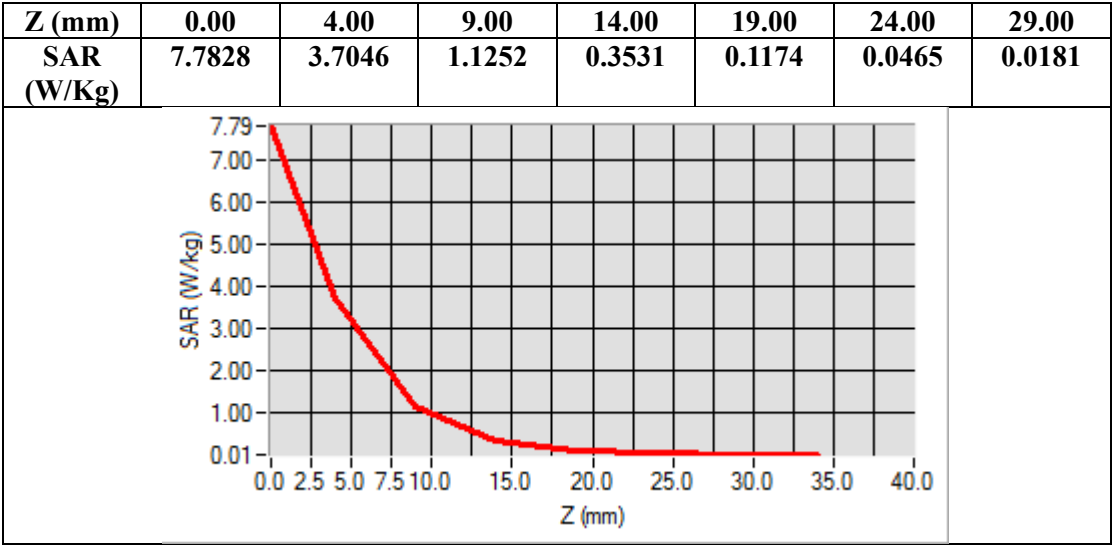
Configuration/System Check 2600 Head/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=-5.00, Y=-1.00

SAR Peak: 7.61 W/kg

SAR 10g (W/Kg)	1.439415
SAR 1g (W/Kg)	3.470628



APPENDIX B. SAR MEASUREMENT DATA

Test Laboratory: AGC Lab

Date: Apr. 23,2020

GSM 850 Mid- Touch-Right <SIM 1>

DUT: Smart Phone; Type: Mara Phones Z1

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.05;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 40.79$ C; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.6, Liquid temperature (°C): 21.3

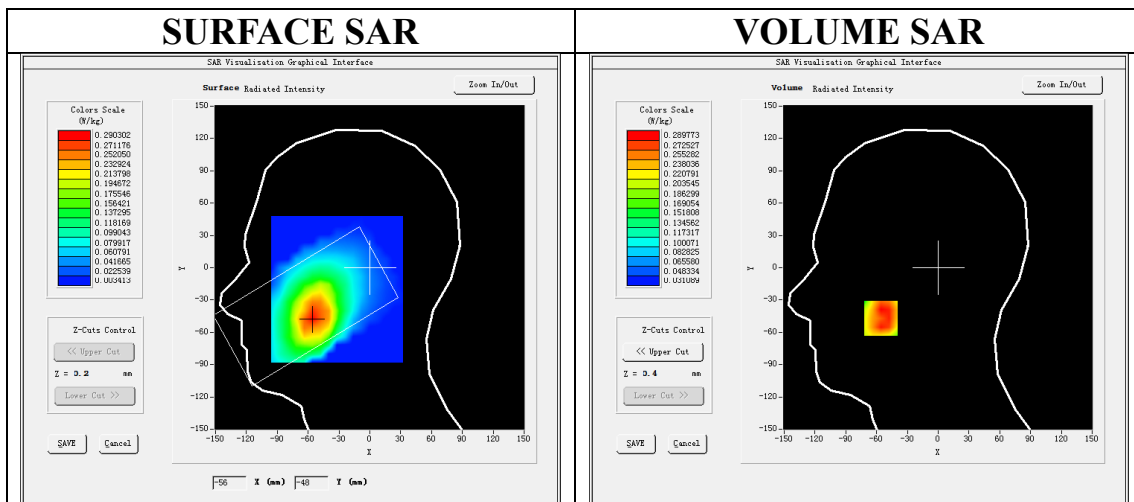
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/GSM 850 Mid-Touch-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

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

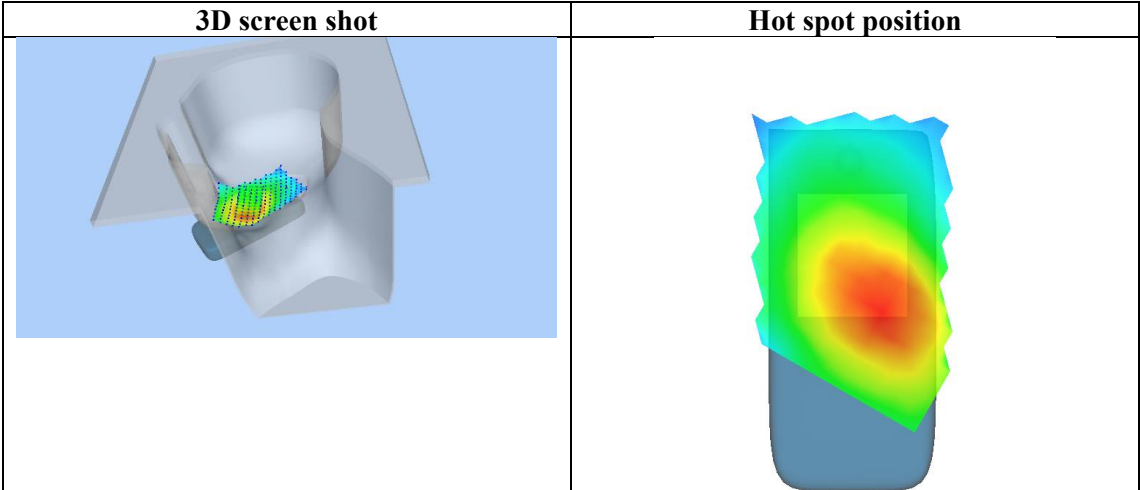
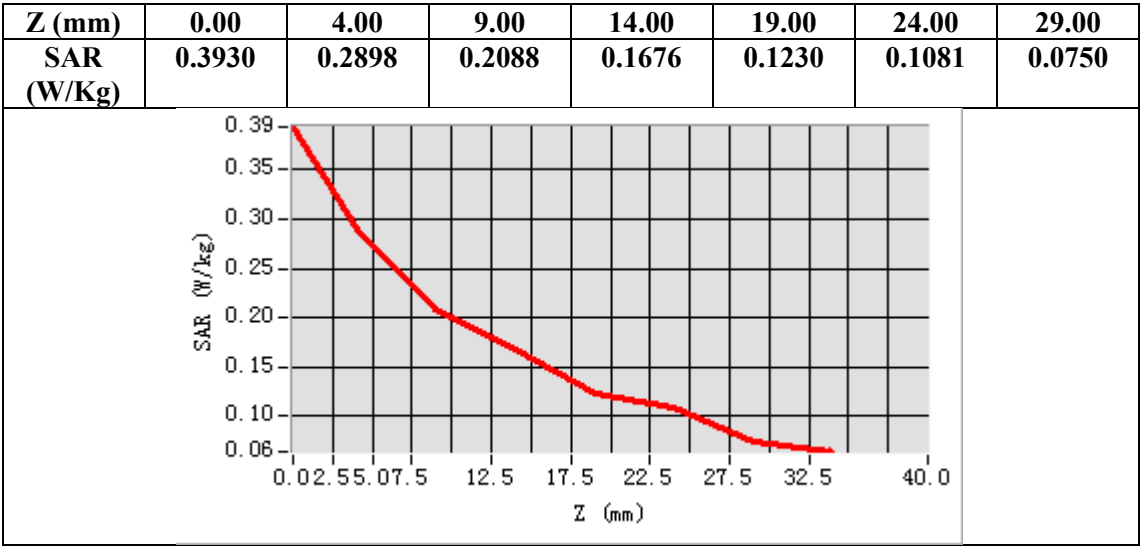
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Right head
Device Position	Cheek
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-56.00, Y=-47.00

SAR Peak: 0.40 W/kg

SAR 10g (W/Kg)	0.199580
SAR 1g (W/Kg)	0.280435



Test Laboratory: AGC Lab
GSM 850 Mid- Body- Back (MS)<SIM 1>
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 23,2020

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.05;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 40.79$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.6, Liquid temperature (°C): 21.3

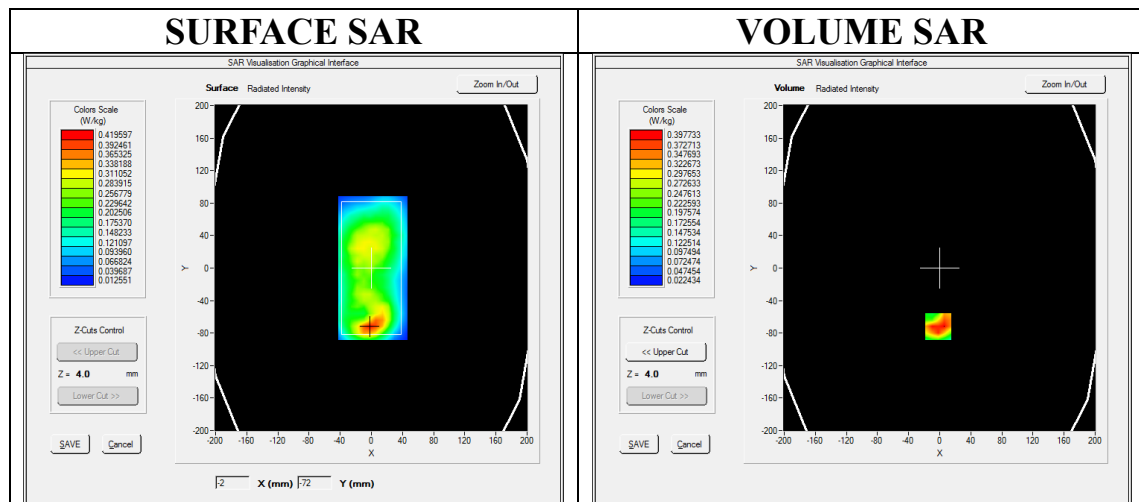
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/GSM 850 Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm

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

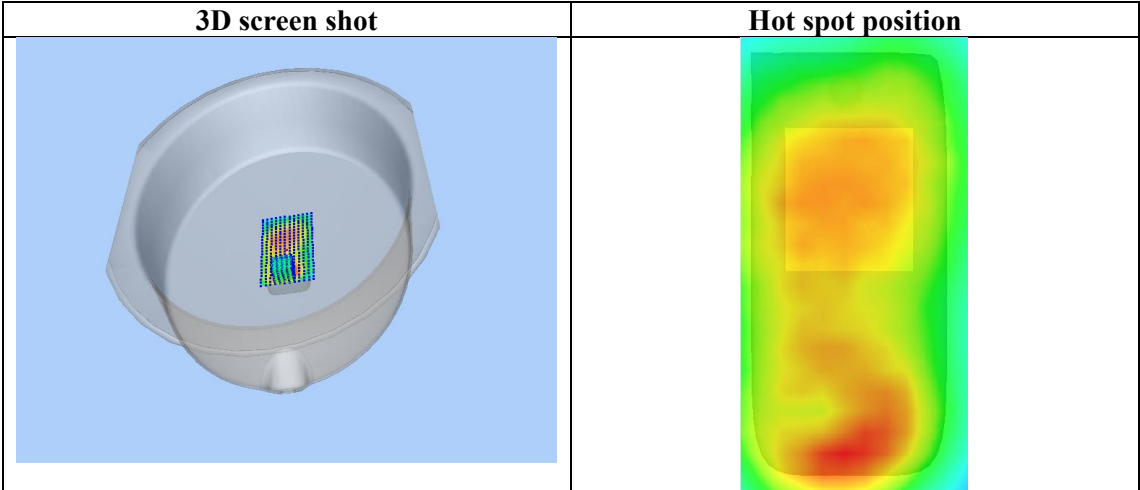
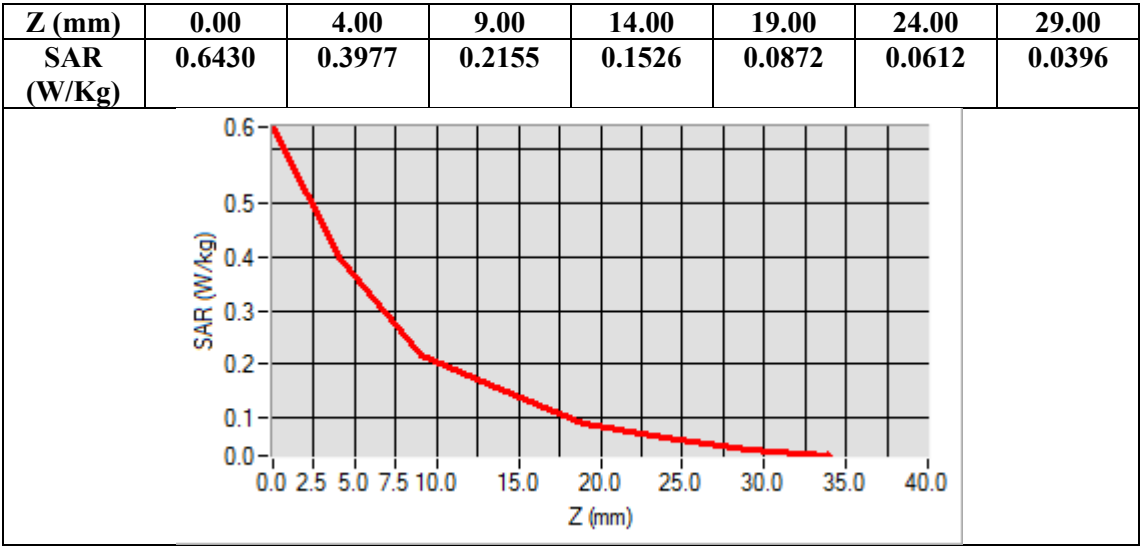
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	ELLI
Device Position	Body Back
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-2.00, Y=-72.00

SAR Peak: 0.63 W/kg

SAR 10g (W/Kg)	0.221265
SAR 1g (W/Kg)	0.383917



Test Laboratory: AGC Lab
GPRS 850 Mid- Body- Back (1up)
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 23,2020

Communication System: GPRS-1 Slot; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.05;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 40.79$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.6, Liquid temperature (°C): 21.3

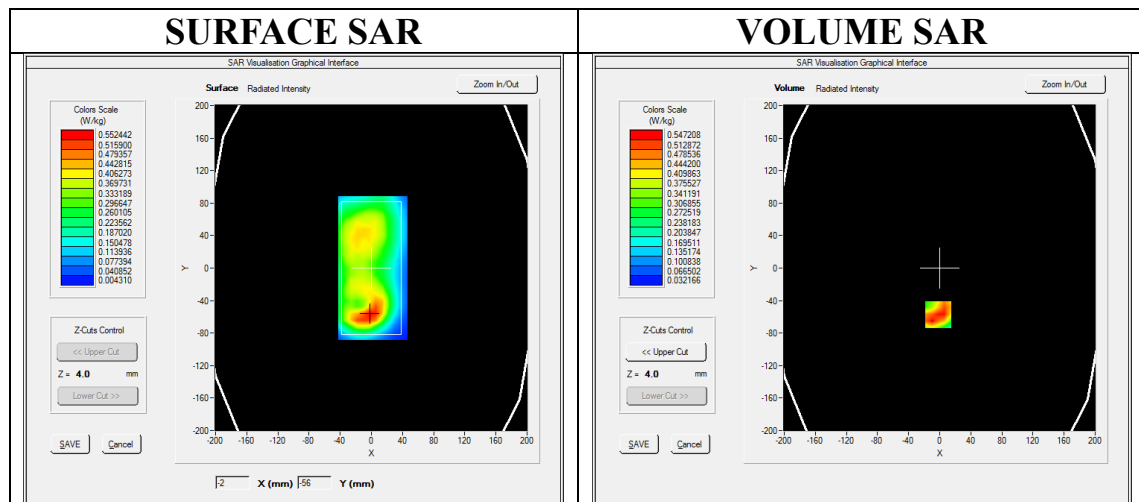
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/GPRS 850 Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm

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

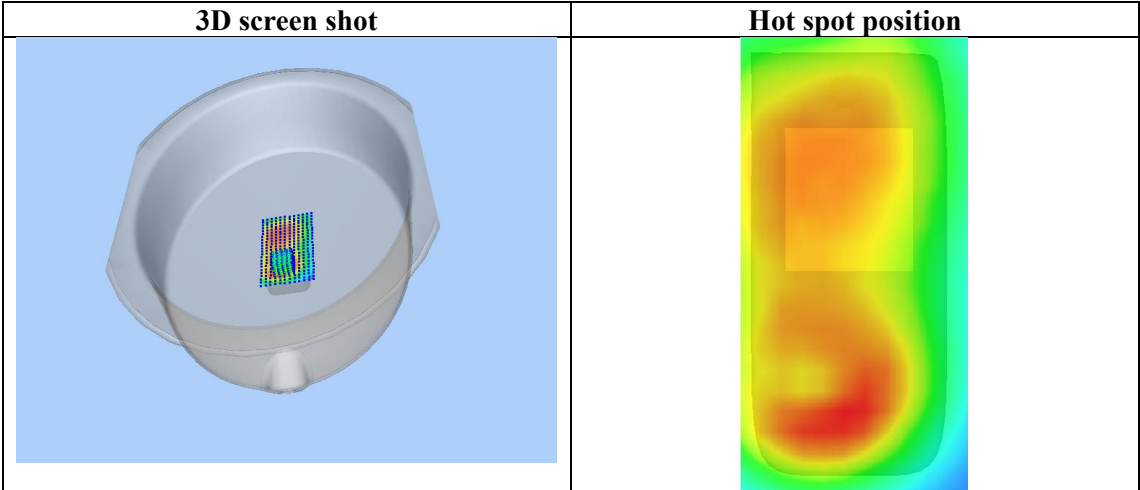
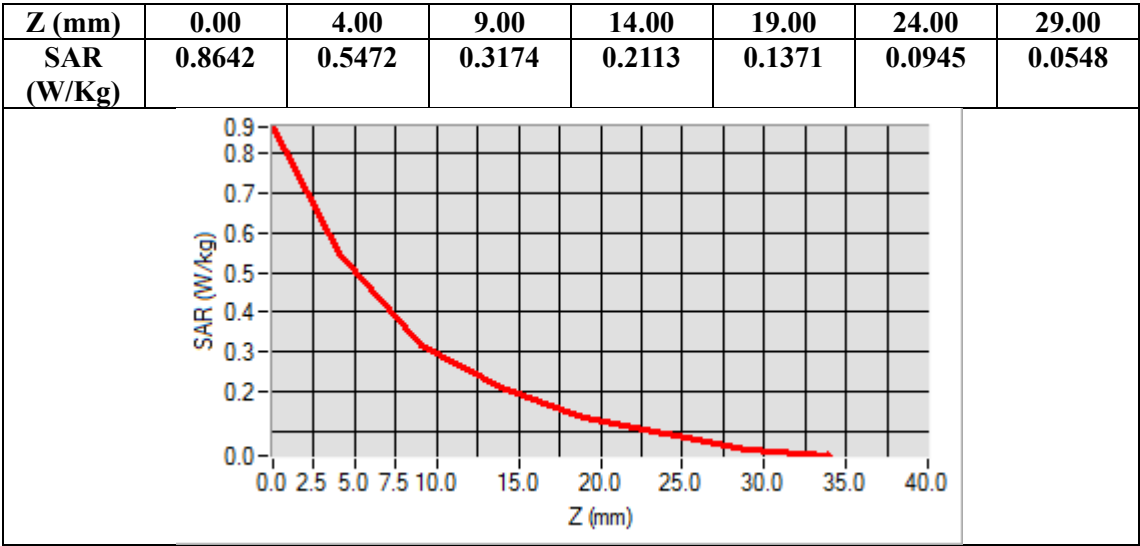
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	ELLI
Device Position	Body Back
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-2.00, Y=-57.00

SAR Peak: 0.86 W/kg

SAR 10g (W/Kg)	0.311168
SAR 1g (W/Kg)	0.528487



Test Laboratory: AGC Lab
PCS 1900 Mid-Touch- Left <SIM 1>
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 15,2020

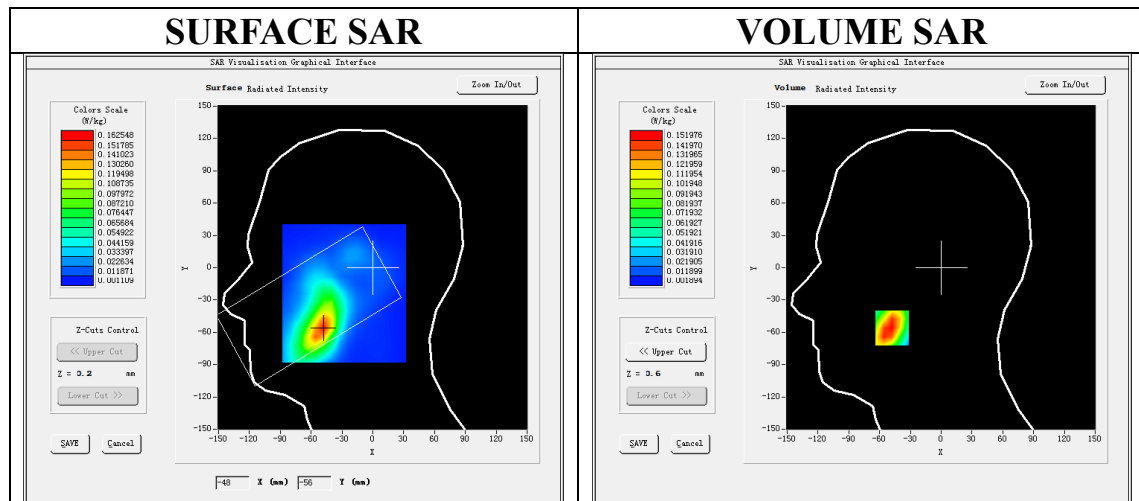
Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.48;
Frequency: 1880 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 38.82$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.3, Liquid temperature (°C): 21.0

SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

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

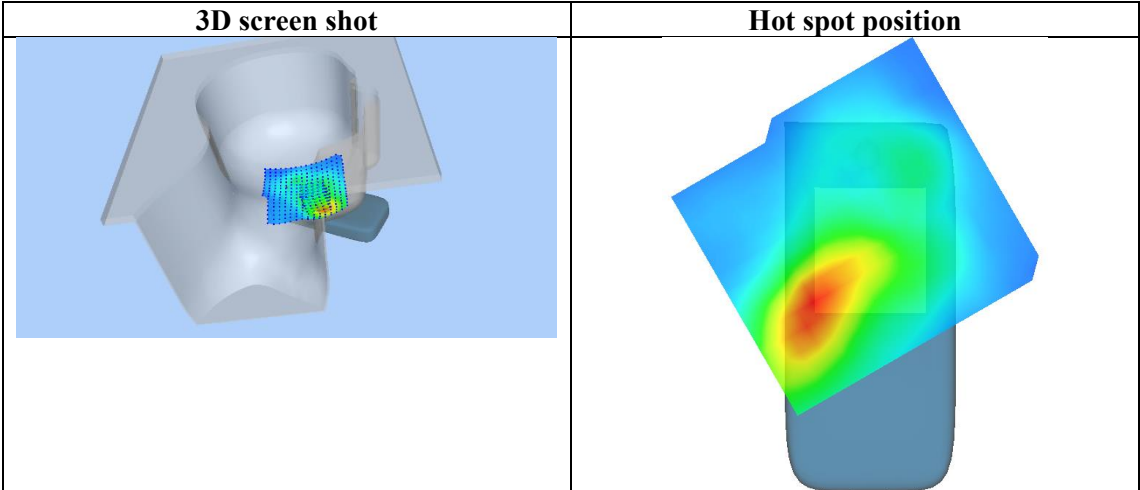
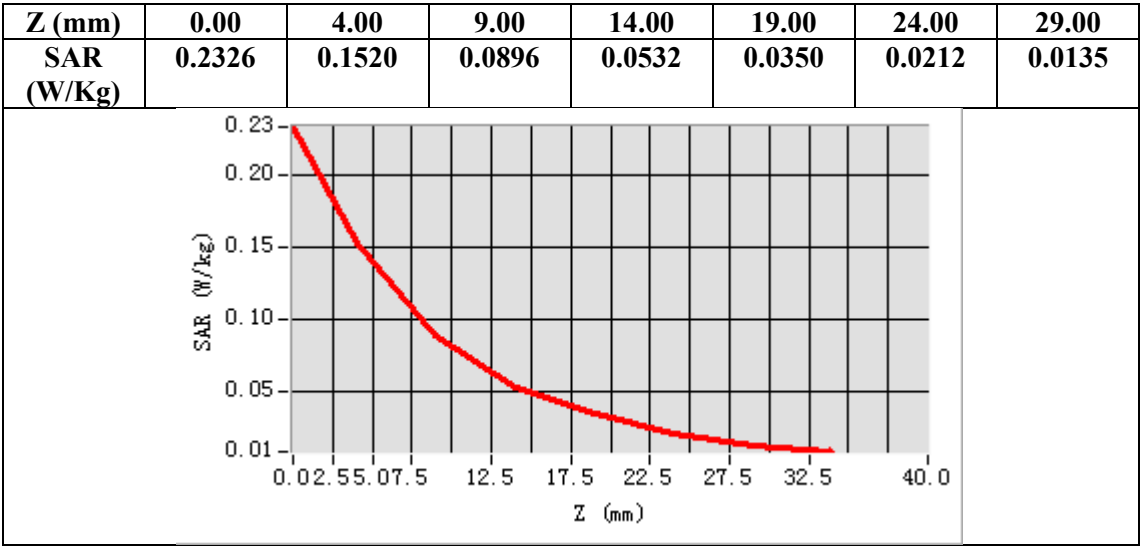
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Left head
Device Position	Cheek
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-48.00, Y=-56.00

SAR Peak: 0.24 W/kg

SAR 10g (W/Kg)	0.081185
SAR 1g (W/Kg)	0.148840



Test Laboratory: AGC Lab
PCS 1900 Mid-Body-Back (MS)<SIM 1>
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 15,2020

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.48;
Frequency: 1880 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 38.82$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.3, Liquid temperature (°C): 21.0

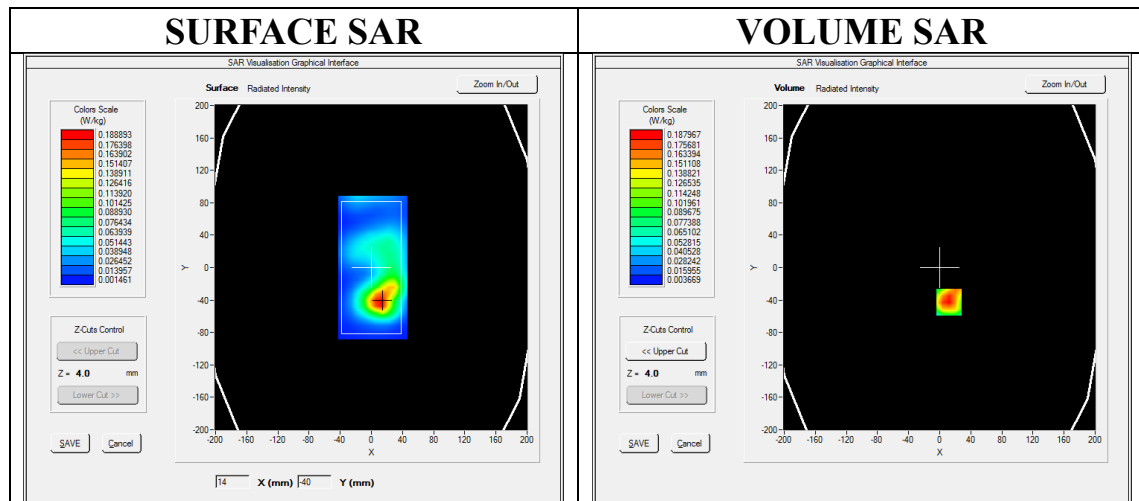
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

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

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

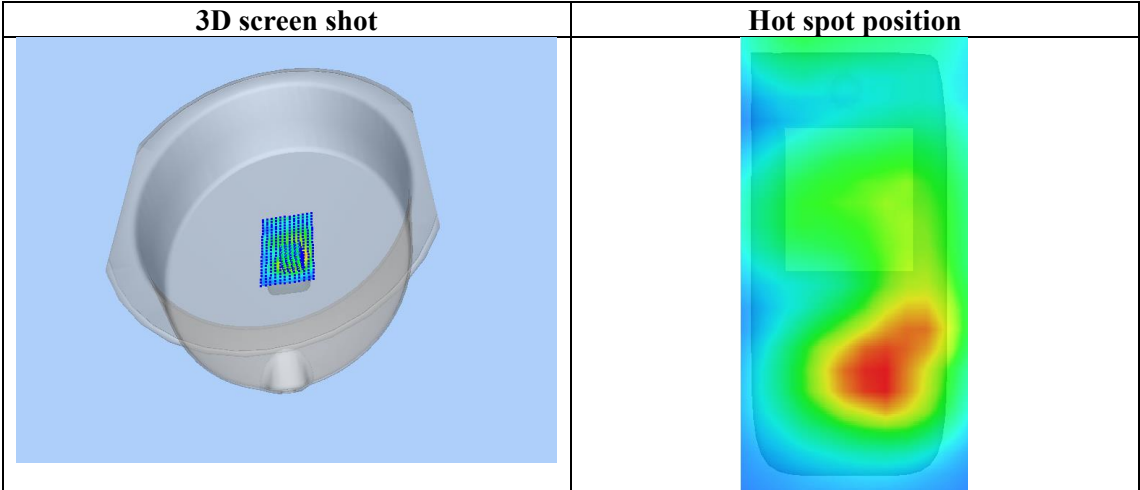
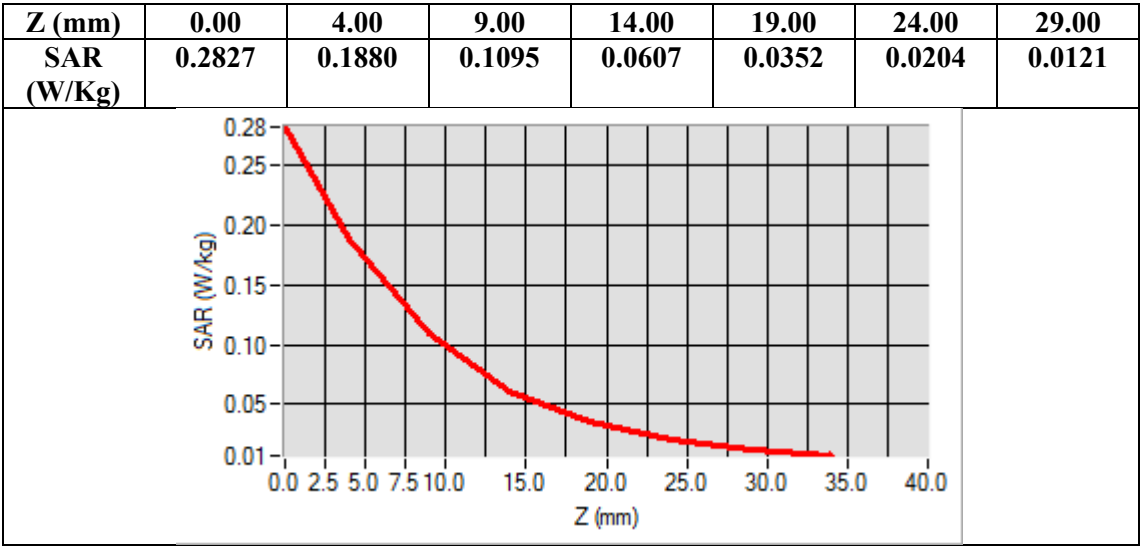
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	ELLI
Device Position	Body Back
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=12.00, Y=-43.00

SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)	0.101528
SAR 1g (W/Kg)	0.180854



Test Laboratory: AGC Lab
GPRS 1900 Mid-Edge 3(2up)
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 15,2020

Communication System: GPRS-2Slot; Communication System Band: PCS 1900; Duty Cycle: 1:4.2; Conv.F=4.48;
Frequency: 1880 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 38.82$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.3, Liquid temperature (°C): 21.0

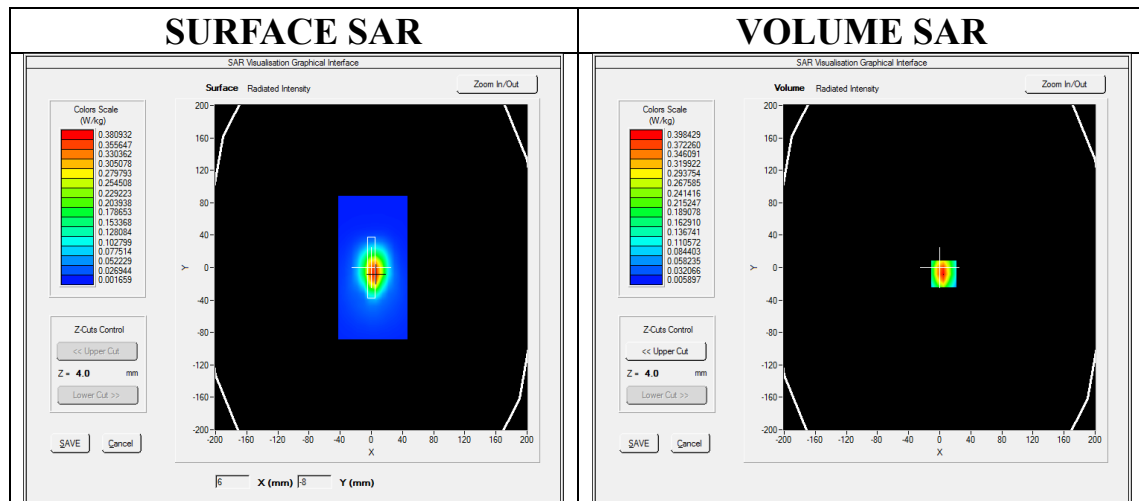
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/GPRS1900 Mid-Edge 3/Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/GPRS1900 Mid-Edge 3/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

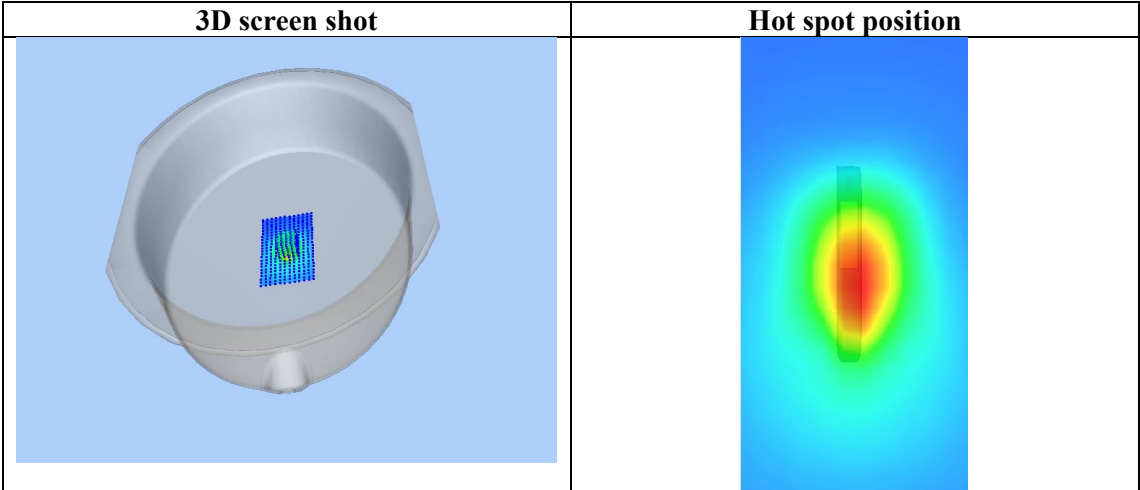
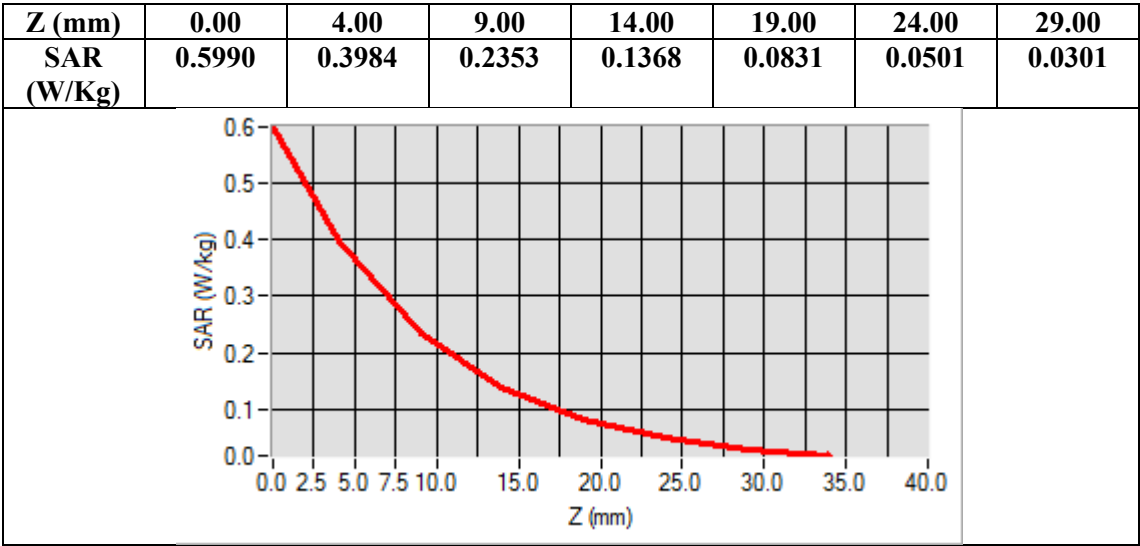
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	ELLI
Device Position	Edge 3
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 4.0)



Maximum location: X=5.00, Y=-8.00

SAR Peak: 0.61 W/kg

SAR 10g (W/Kg)	0.199982
SAR 1g (W/Kg)	0.376447



Test Laboratory: AGC Lab
WCDMA Band II Mid-Touch-Left (RMC)
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 15,2020

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.48;
Frequency: 1880 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 38.82$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.3, Liquid temperature (°C): 21.0

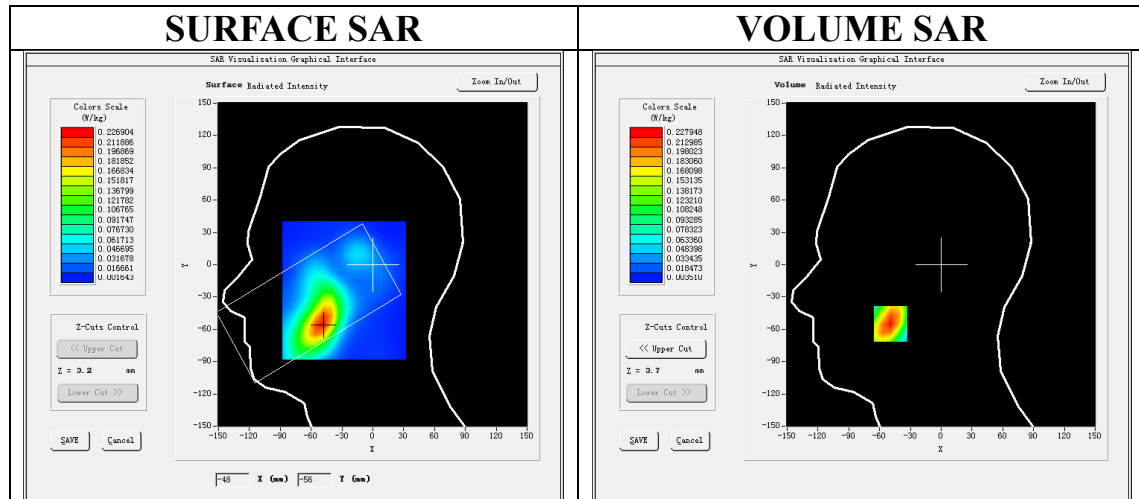
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ WCDMA Band II Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

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

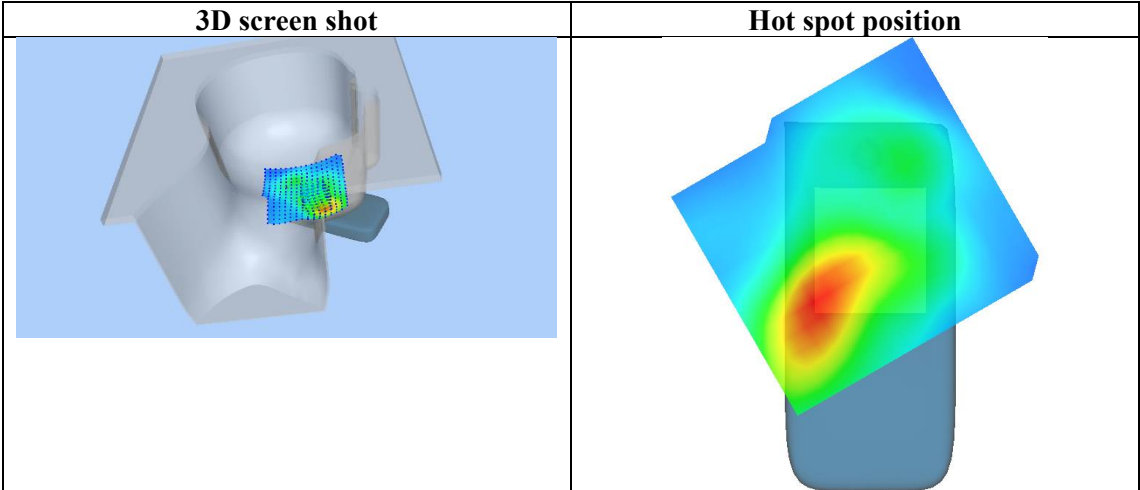
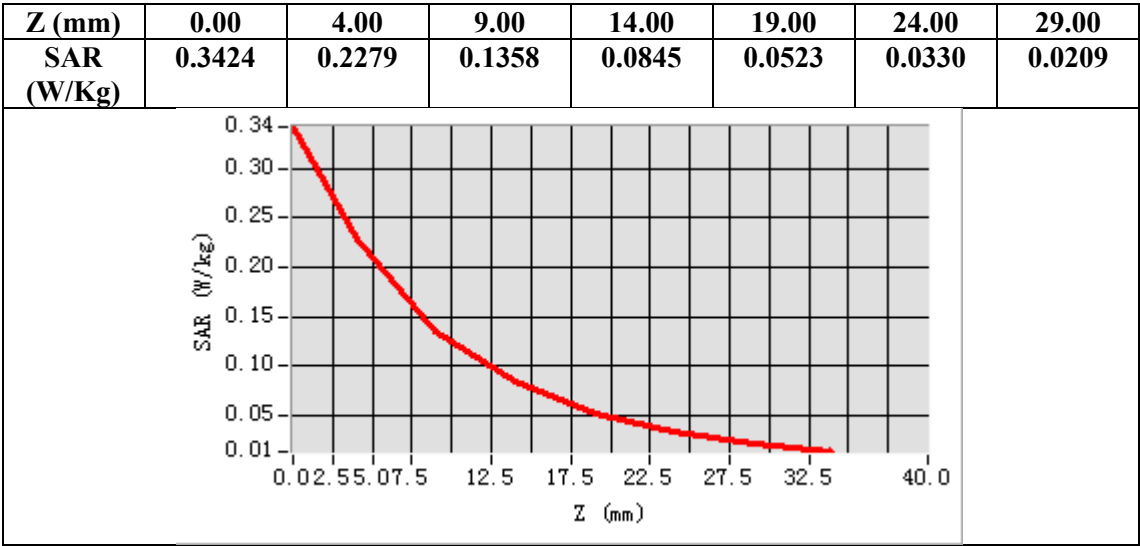
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Left head
Device Position	Cheek
Band	WCDMA Band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-49.00, Y=-55.00

SAR Peak: 0.34 W/kg

SAR 10g (W/Kg)	0.122908
SAR 1g (W/Kg)	0.216575



Test Laboratory: AGC Lab
WCDMA Band II Mid-Edge 3(RMC)
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 15,2020

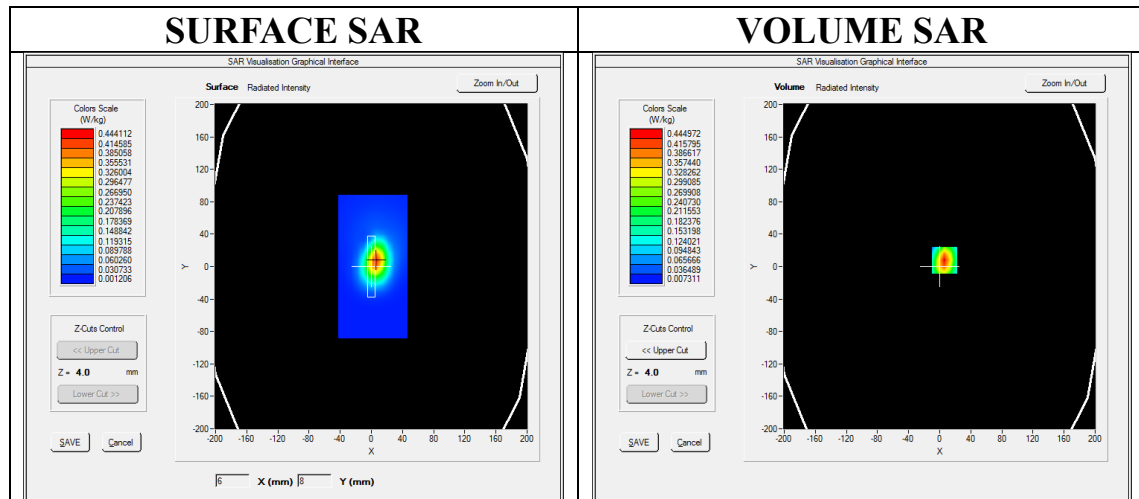
Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.60
Frequency: 1880 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 38.82$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.3, Liquid temperature (°C): 21.0

SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ WCDMA band II Mid-Edge 3/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ WCDMA band II Mid-Edge 3/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

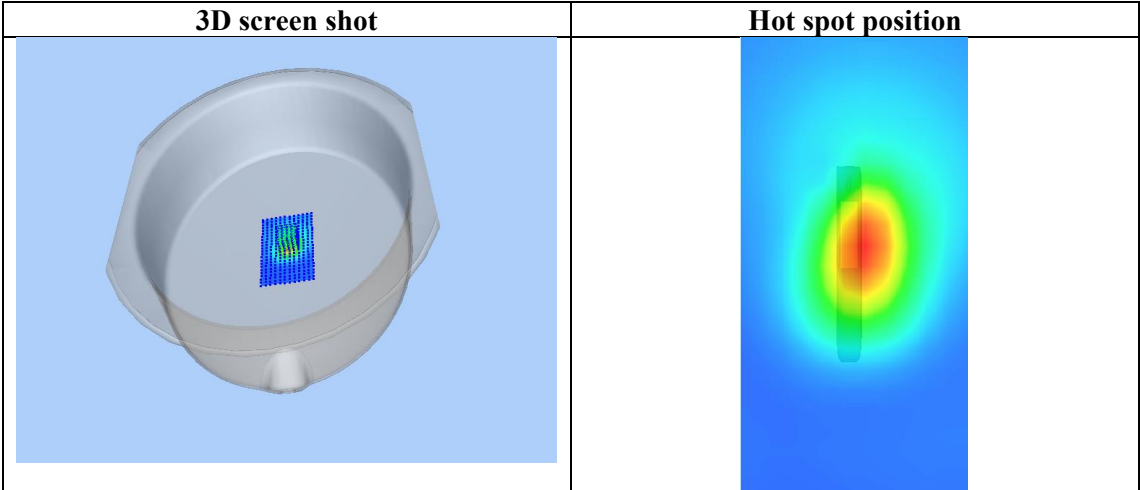
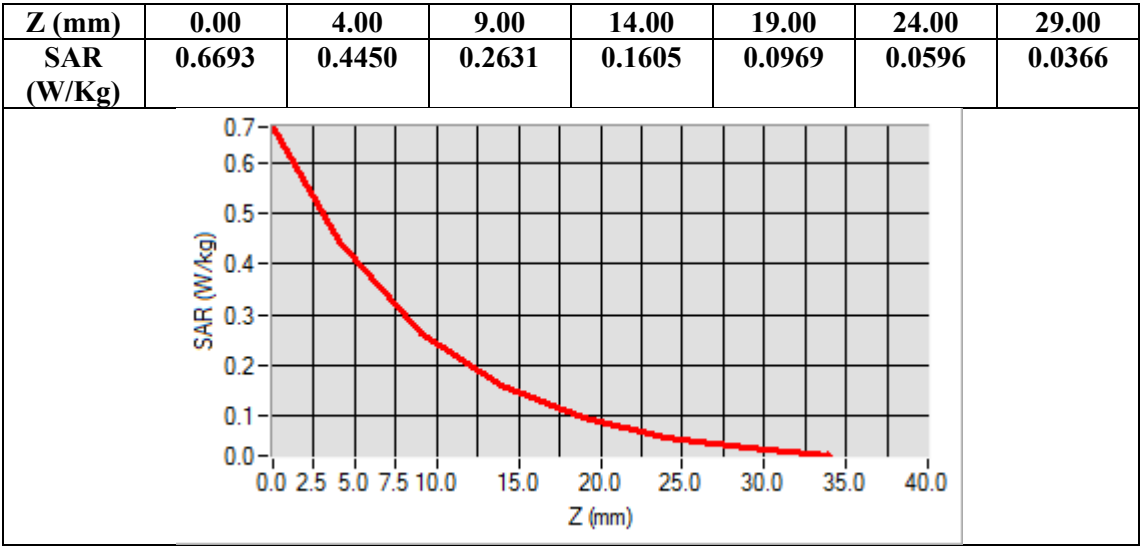
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	ELLI
Device Position	Edge 3
Band	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=6.00, Y=8.00

SAR Peak: 0.66 W/kg

SAR 10g (W/Kg)	0.222106
SAR 1g (W/Kg)	0.413987



Test Laboratory: AGC Lab

Date: Apr. 23,2020

WCDMA Band V Mid-Touch-Right (RMC)

DUT: Smart Phone; Type: Mara Phones Z1

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.05; Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.90\text{ mho/m}$; $\epsilon_r = 40.79$; $\rho = 1000\text{ kg/m}^3$; Phantom section: Right Section
Ambient temperature ($^{\circ}\text{C}$): 21.6, Liquid temperature ($^{\circ}\text{C}$): 21.3

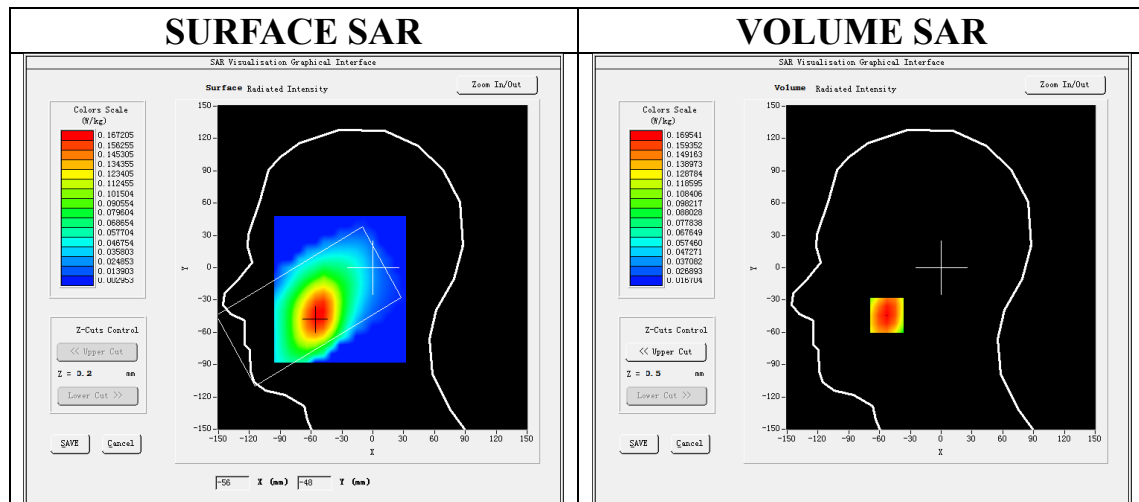
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ WCDMA Band V Mid-Touch-Right/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

Configuration/ WCDMA Band V Mid-Touch-Right/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

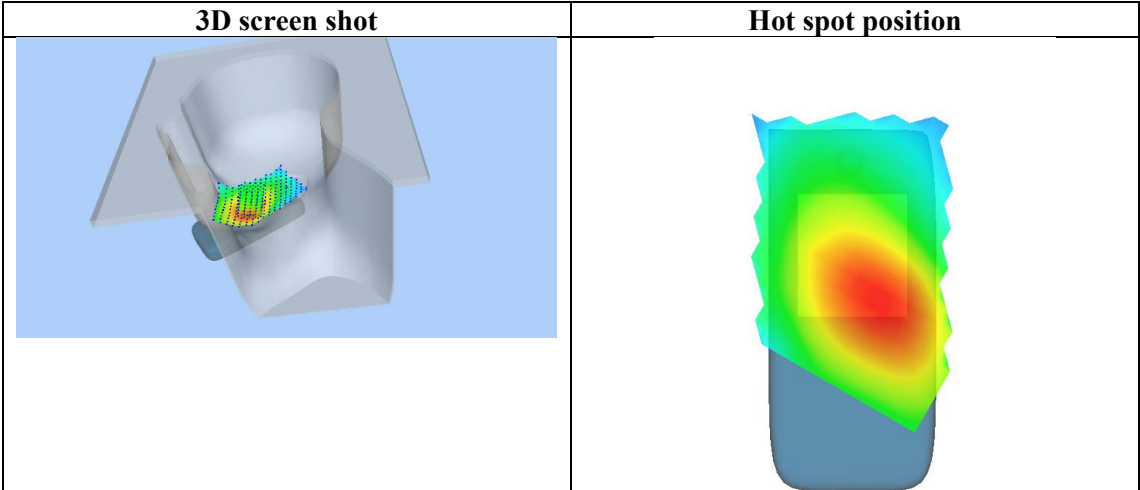
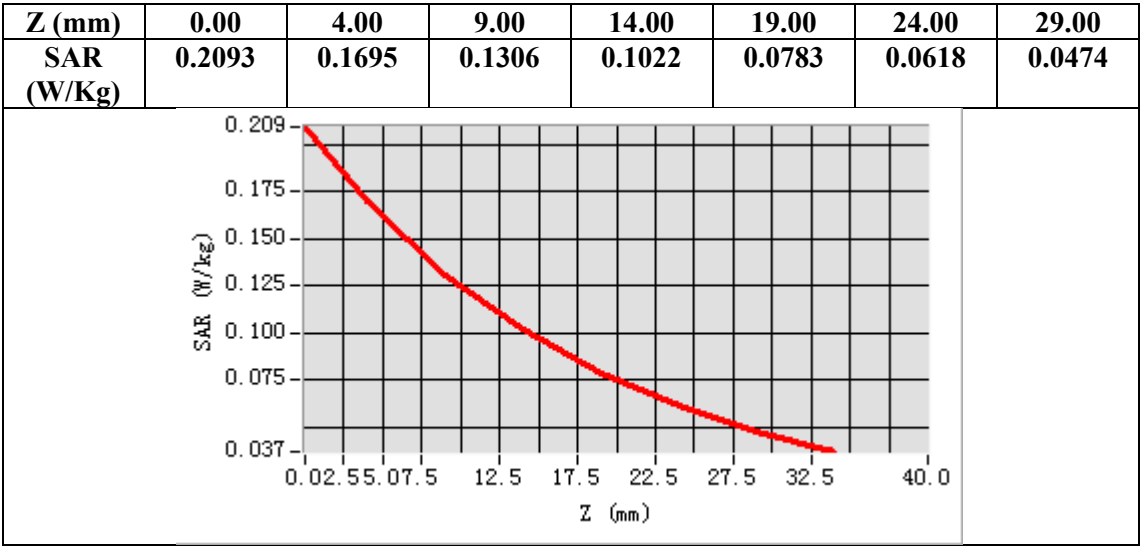
Area Scan	$dx=8\text{mm}$ $dy=8\text{mm}$, $h= 5.00\text{ mm}$
ZoomScan	$5 \times 5 \times 7$, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$, Complete
Phantom	Right head
Device Position	Cheek
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: $X=-53.00$, $Y=-44.00$

SAR Peak: 0.21 W/kg

SAR 10g (W/Kg)	0.119417
SAR 1g (W/Kg)	0.164125



Test Laboratory: AGC Lab

Date: Apr. 23,2020

WCDMA Band V Mid-Body-Towards Grounds (RMC)

DUT: Smart Phone; Type: Mara Phones Z1

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD; Duty Cycle:1: 1; Conv.F=5.05; Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.90\text{ mho/m}$; $\epsilon_r = 40.79$; $\rho = 1000\text{ kg/m}^3$; Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 21.6, Liquid temperature ($^{\circ}\text{C}$): 21.3

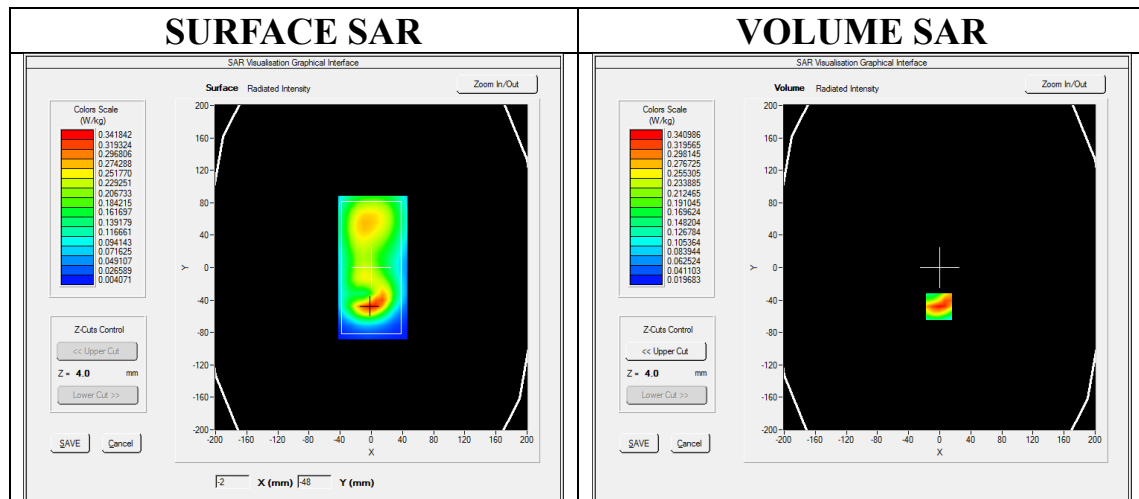
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ WCDMA Band V Mid-Body-Back/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

Configuration/ WCDMA Band V Mid-Body-Back/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

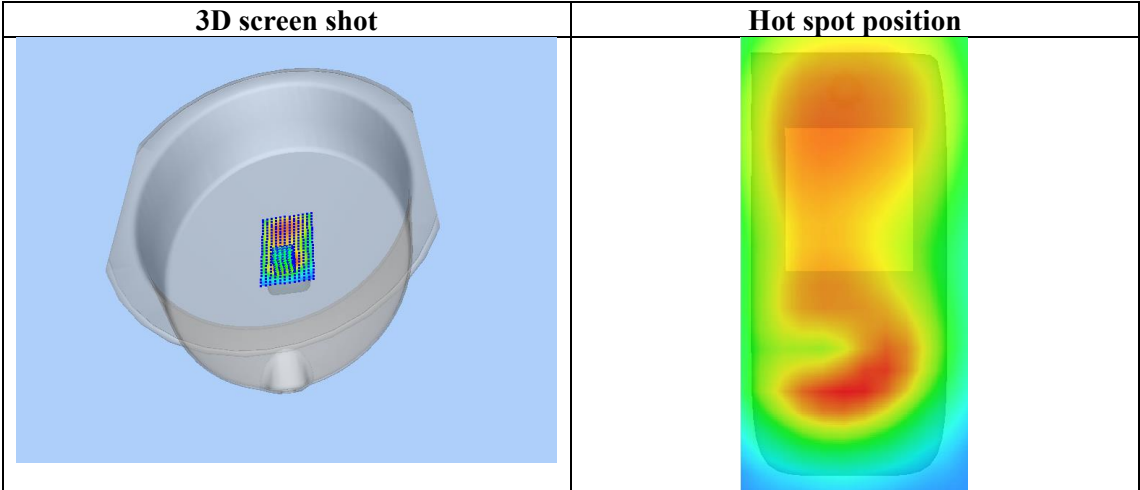
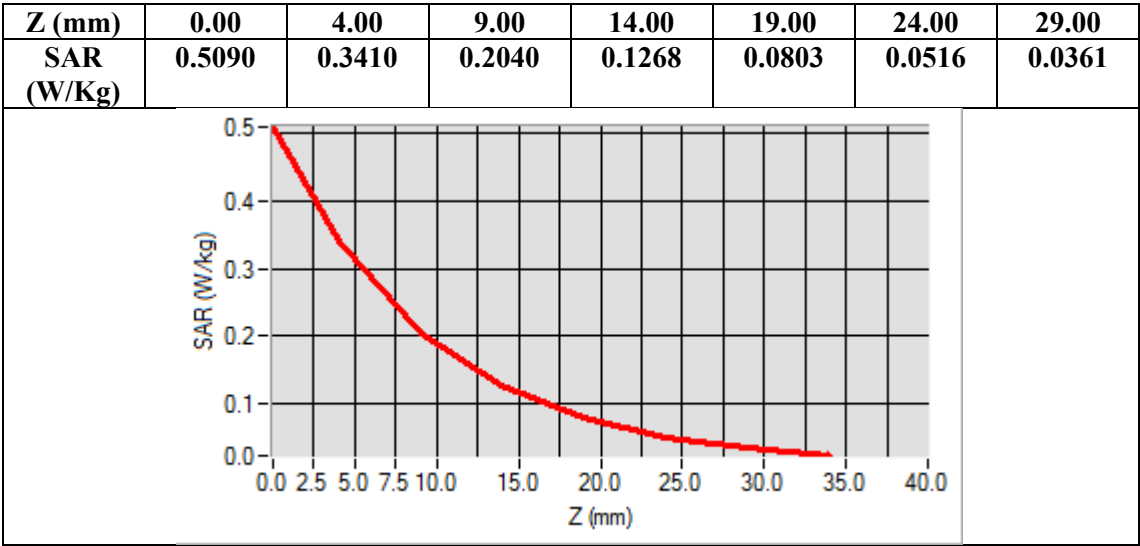
Area Scan	$dx=8\text{mm}$ $dy=8\text{mm}$, $h= 5.00\text{ mm}$
ZoomScan	$5\times 5\times 7$, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$, Complete
Phantom	ELLI
Device Position	Body Back
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: $X=-1.00$, $Y=-48.00$

SAR Peak: 0.51 W/kg

SAR 10g (W/Kg)	0.186222
SAR 1g (W/Kg)	0.321892



Test Laboratory: AGC Lab
LTE Band 7 Mid-Right Tilt (1RB#0)
DUT: Smart Phone; **Type:** Mara Phones Z1

Date: Apr. 17,2020

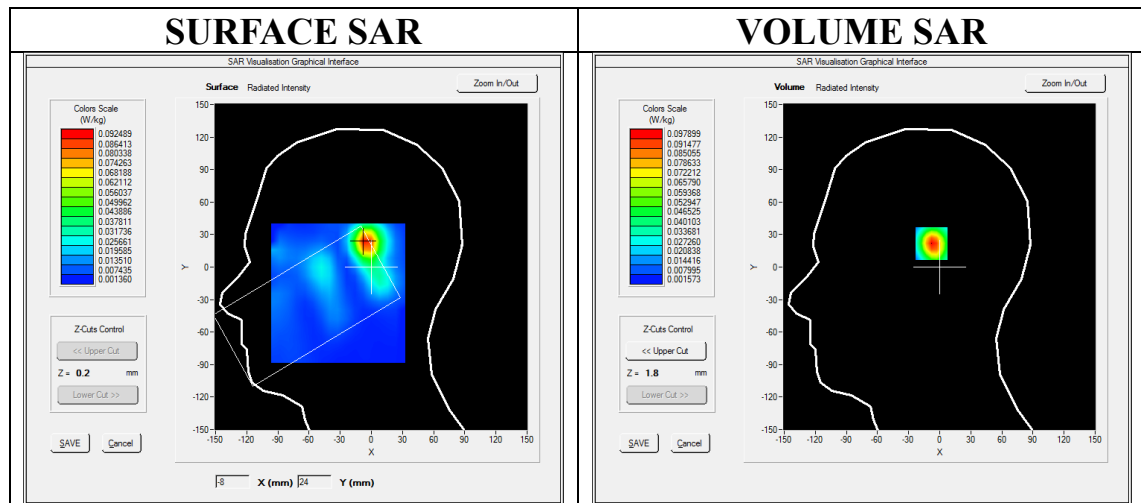
Communication System: LTE; Communication System Band: LTE Band 7; Duty Cycle:1:1; Conv.F=3.77
Frequency: 2535MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 1.87$ mho/m; $\epsilon_r = 38.45$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.4, Liquid temperature (°C): 21.2

SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE BAND 7 Mid-Right Tilt/Area Scan: Measurement grid: dx=8mm, y=8mm
Configuration/ LTE BAND 7 Mid-Right Tilt/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

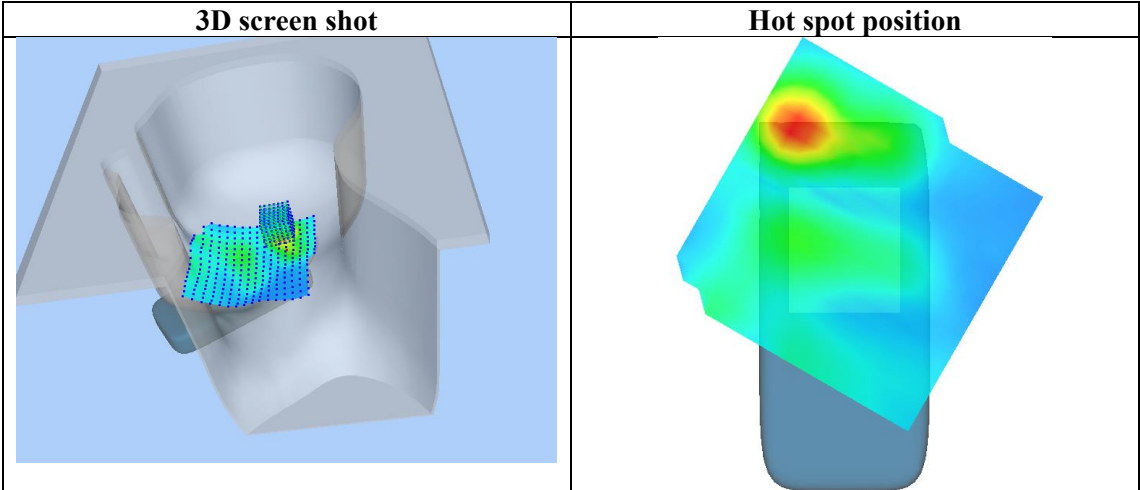
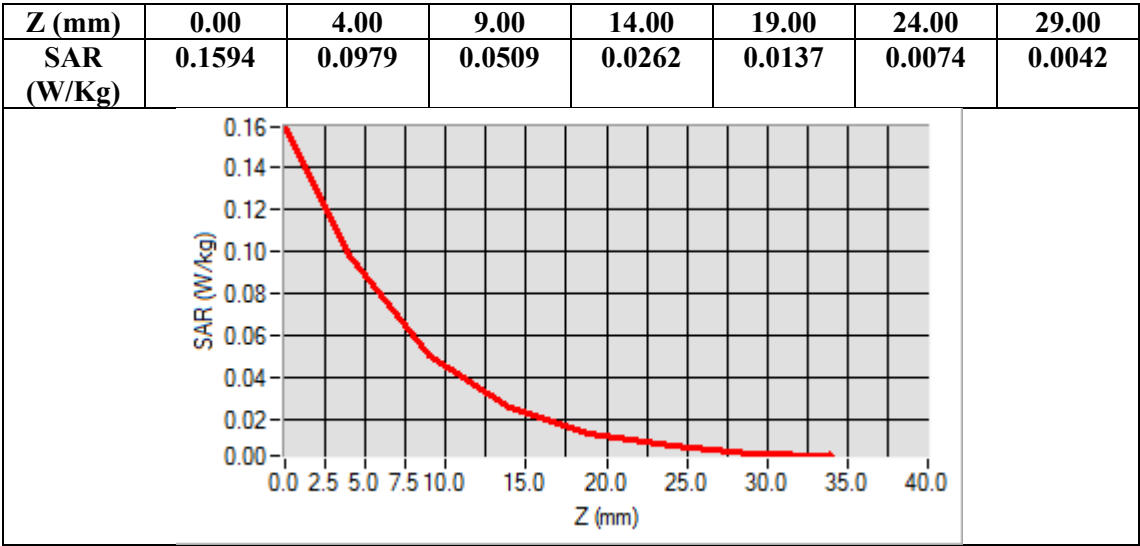
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Right Tilt
Device Position	Cheek
Band	LTE BAND 7
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=-6.00, Y=23.00

SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)	0.042401
SAR 1g (W/Kg)	0.089577



Test Laboratory: AGC Lab
LTE Band 7 Mid-Edge 3 (1RB#0)
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 17,2020

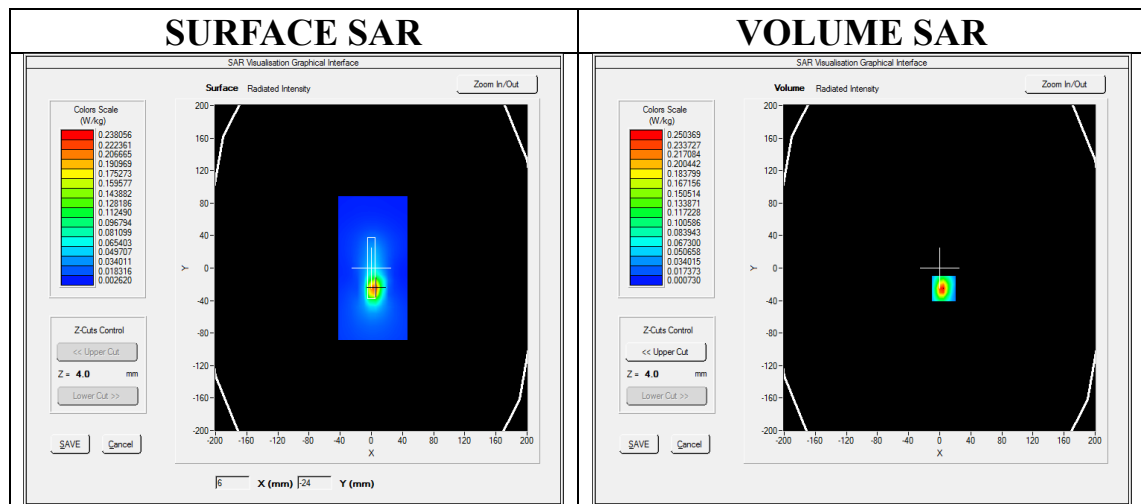
Communication System: LTE; Communication System Band: LTE Band 7; Duty Cycle:1:1; Conv.F=3.77
Frequency: 2535MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 1.87$ mho/m; $\epsilon_r = 38.45$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.4, Liquid temperature (°C): 21.2

SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE BAND 7 Mid-Edge 3 /Area Scan: Measurement grid: dx=10mm, y=10mm
Configuration/ LTE BAND 7 Mid-Edge 3 /Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

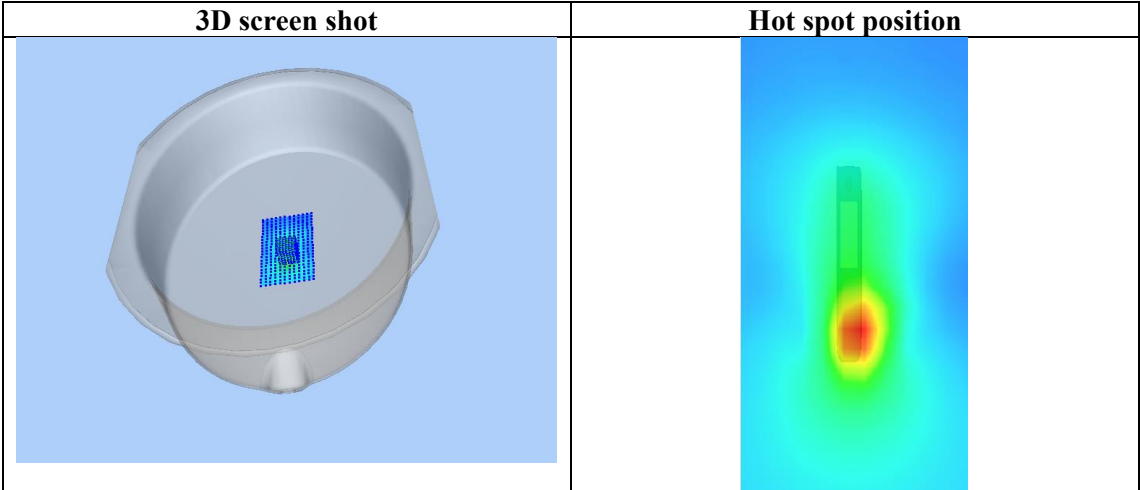
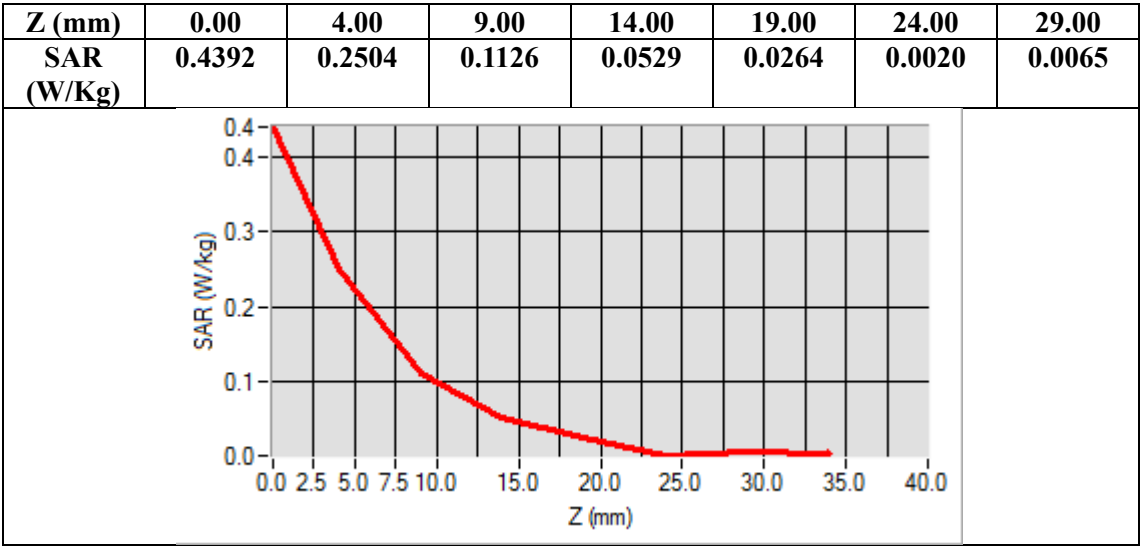
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	ELLI
Device Position	Edge 3
Band	LTE BAND 7
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=5.00, Y=-25.00

SAR Peak: 0.47 W/kg

SAR 10g (W/Kg)	0.089129
SAR 1g (W/Kg)	0.228835



Test Laboratory: AGC Lab
LTE Band 38 Mid-Right-Tilt (1 RB#0)
DUT: Smart Phone; **Type:** Mara Phones Z1

Date: Apr. 17,2020

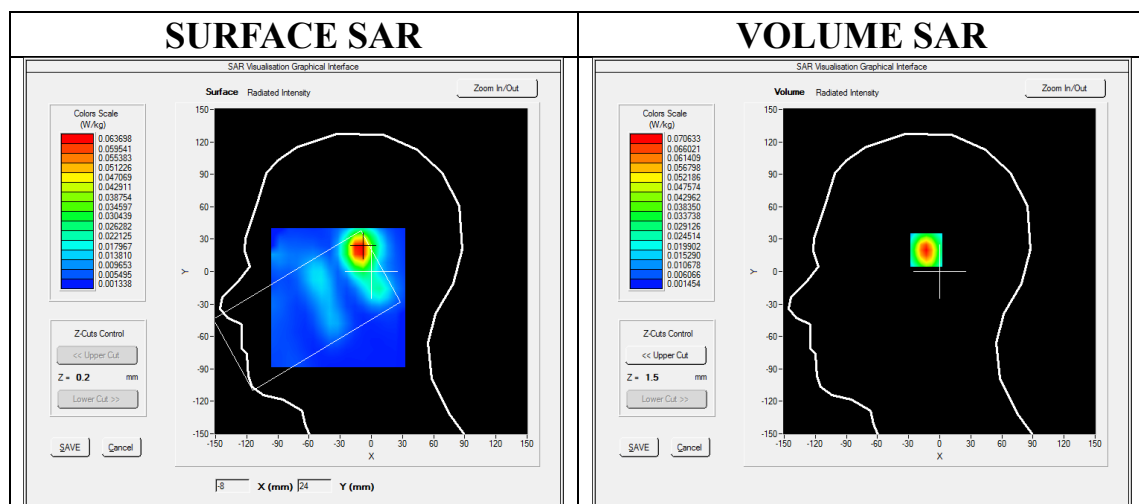
Communication System: LTE; Communication System Band: LTE Band 38; Duty Cycle:1:1.58; Conv.F=3.77
Frequency: 2595 MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 38.15$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.4, Liquid temperature (°C): 21.2

SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 38 Mid- Right-Tilt/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ LTE Band 38 Mid- Right-Tilt/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

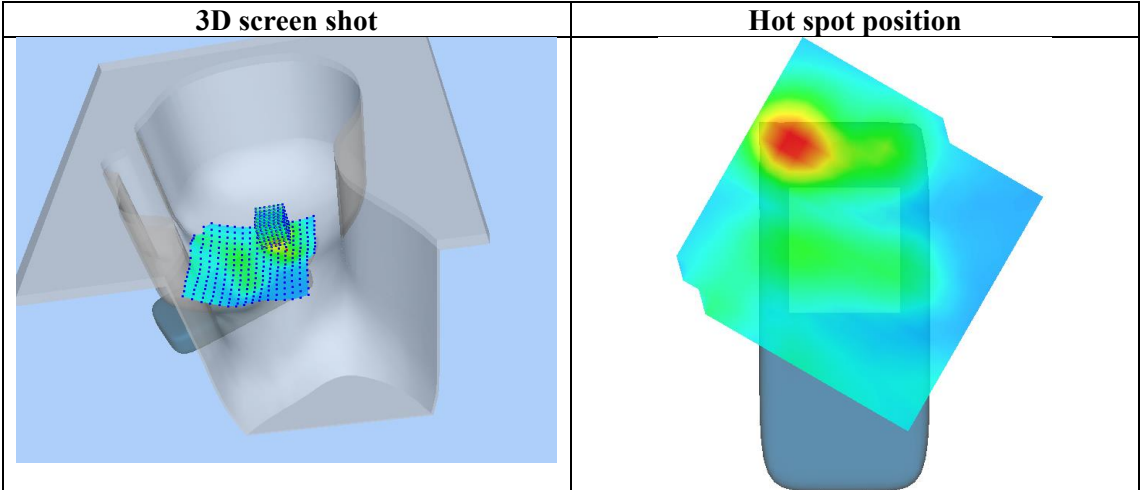
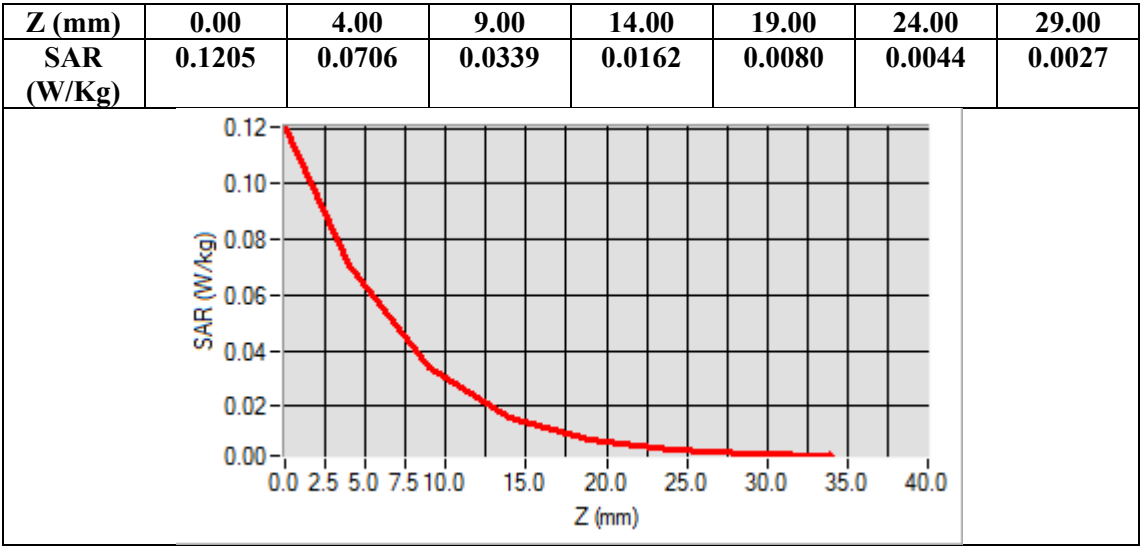
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Right Tilt
Device Position	Cheek
Band	LTE Band 38
Channels	Middle
Signal	Crest factor: 1.58



Maximum location: X=-11.00, Y=21.00

SAR Peak: 0.12 W/kg

SAR 10g (W/Kg)	0.029946
SAR 1g (W/Kg)	0.064435



Test Laboratory: AGC Lab
LTE Band 38 Mid-Edge 4 (1 RB#0)
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 17,2020

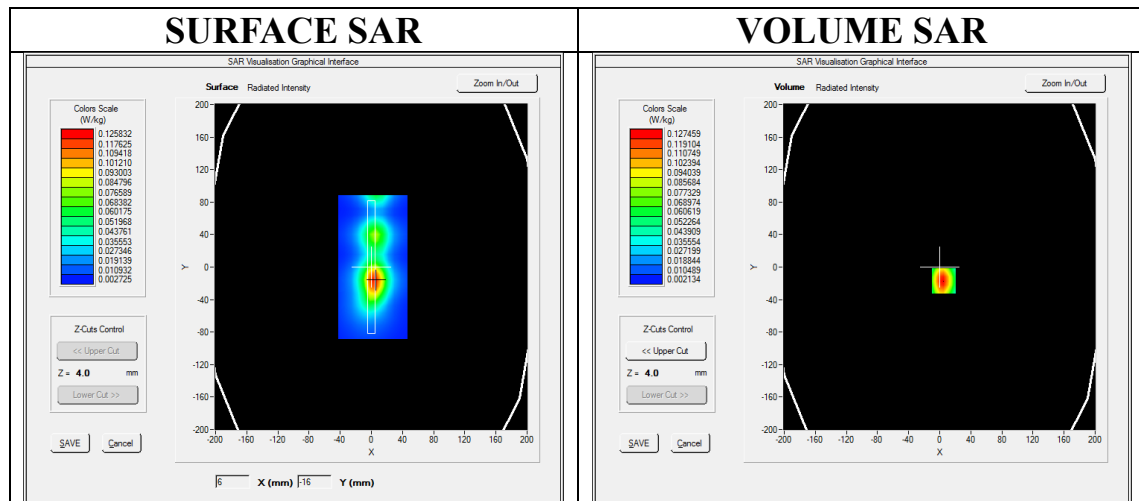
Communication System: LTE; Communication System Band: LTE Band 38; Duty Cycle:1:1.58; Conv.F=3.77;
Frequency: 2595 MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 38.15$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.4, Liquid temperature (°C): 21.2

SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 38 Mid-Edge 4/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ LTE Band 38 Mid-Edge 4/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5m;

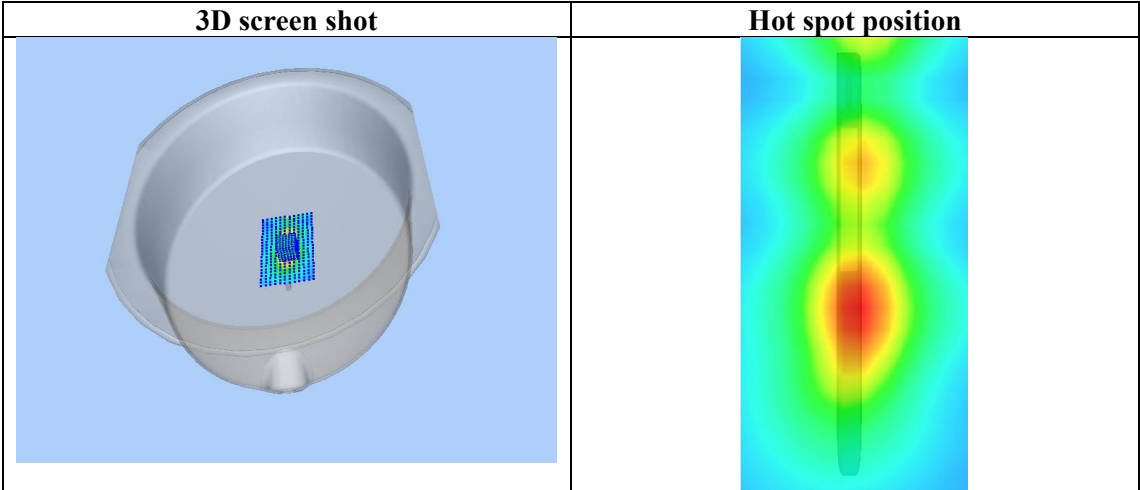
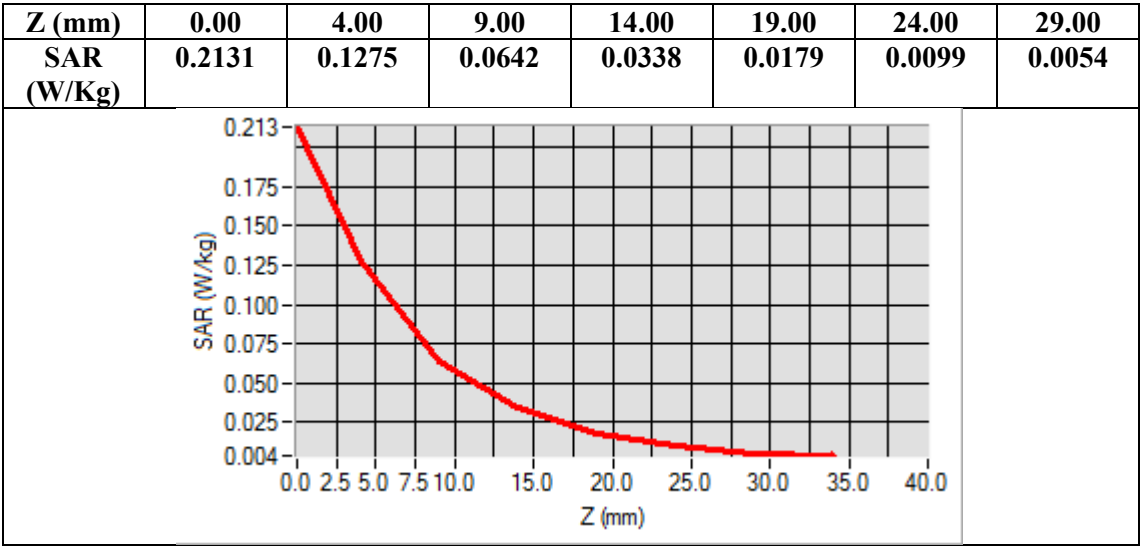
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	ELLI
Device Position	Edge 4
Band	LTE Band 38
Channels	Middle
Signal	Crest factor: 1.58



Maximum location: X=5.00, Y=-17.00

SAR Peak: 0.21 W/kg

SAR 10g (W/Kg)	0.061792
SAR 1g (W/Kg)	0.121466



Test Laboratory: AGC Lab
LTE Band 40 Mid-Touch-Left (1RB#0)
DUT: Smart Phone; **Type:** Mara Phones Z1

Date: Apr. 13,2020

Communication System: LTE; Communication System Band: LTE Band 40; Duty Cycle:63.33%; Conv.F=4.58
Frequency: 2350MHz; Medium parameters used: $f = 2300$ MHz; $\sigma = 1.64$ mho/m; $\epsilon_r = 39.34$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.4, Liquid temperature (°C): 21.2

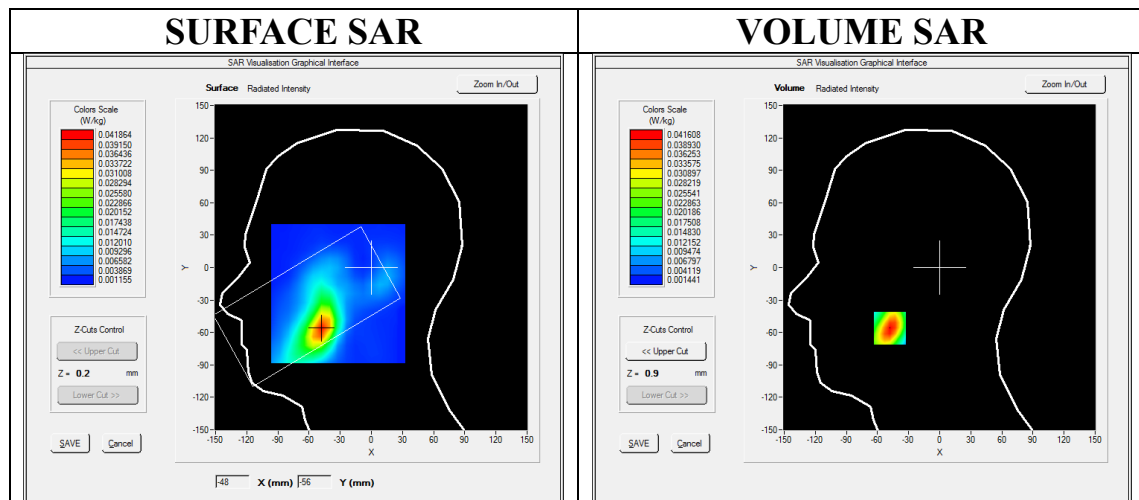
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 40 Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, y=8mm

Configuration/ LTE Band 40 Mid-Touch-Left/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

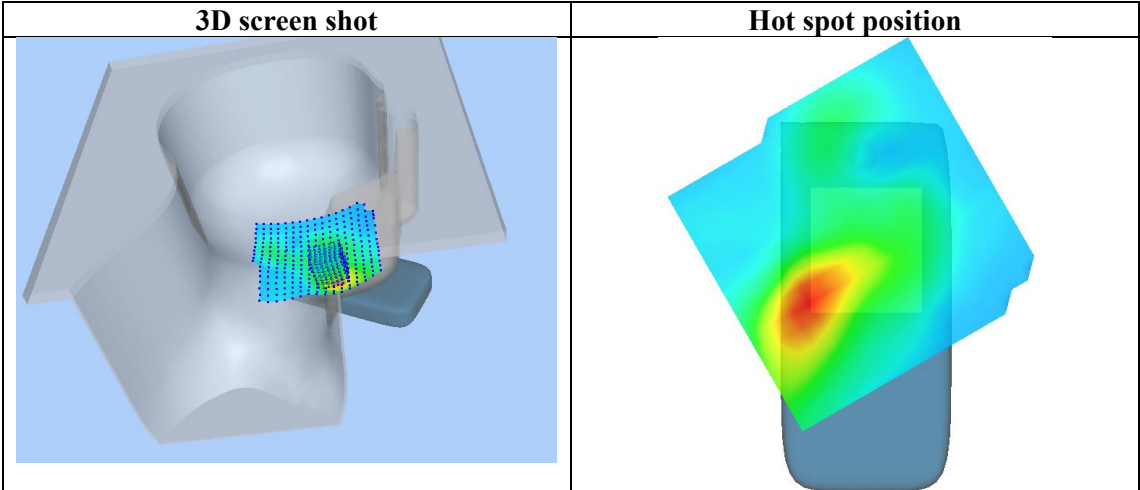
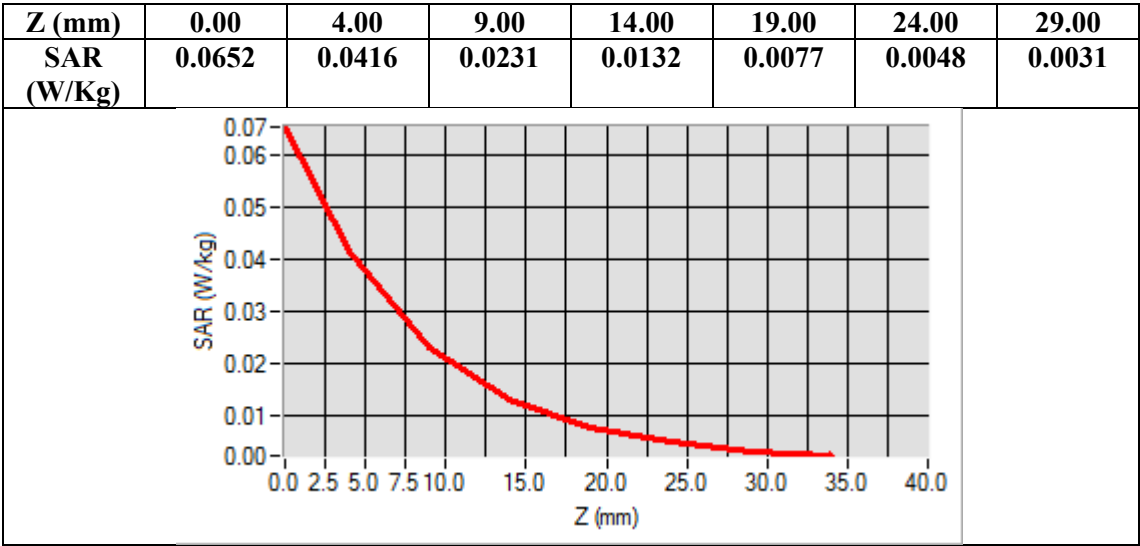
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Left head
Device Position	Cheek
Band	LTE Band 40
Channels	Middle
Signal	OFDM (Crest factor: 1.58)



Maximum location: X=-48.00, Y=-56.00

SAR Peak: 0.07 W/kg

SAR 10g (W/Kg)	0.020409
SAR 1g (W/Kg)	0.038809



Test Laboratory: AGC Lab
LTE Band 40 Mid-Edge 4 (1RB#0)
DUT: Smart Phone; **Type:** Mara Phones Z1

Date: Apr. 13,2020

Communication System: LTE; Communication System Band: LTE Band 41; Duty Cycle:63.33%; Conv.F=4.58
Frequency: 2350MHz; Medium parameters used: $f = 2300$ MHz; $\sigma = 1.64$ mho/m; $\epsilon_r = 39.34$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.4, Liquid temperature (°C): 21.2

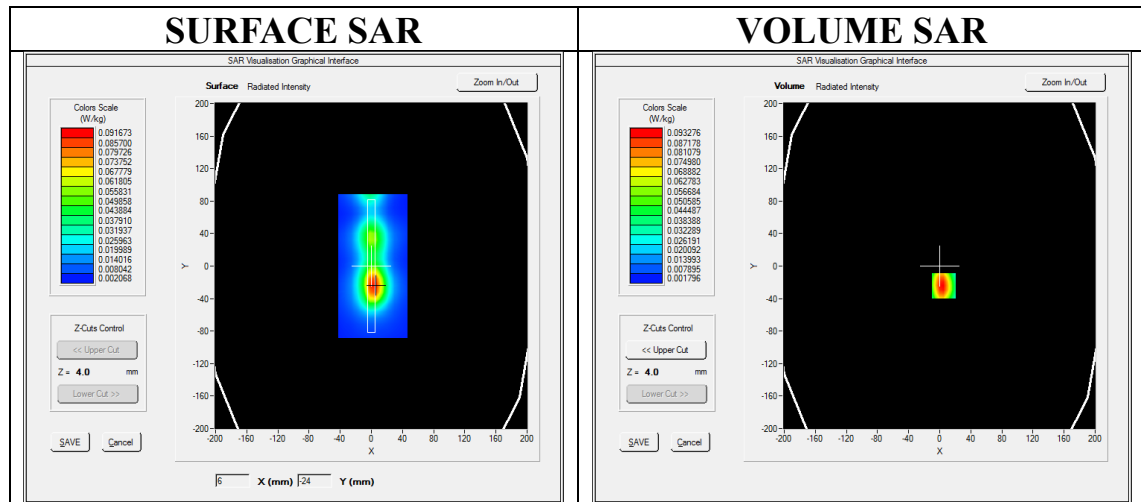
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 40 Mid-Edge 4 /Area Scan: Measurement grid: dx=10mm, y=10mm

Configuration/ LTE Band 40 Mid-Edge 4 /Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

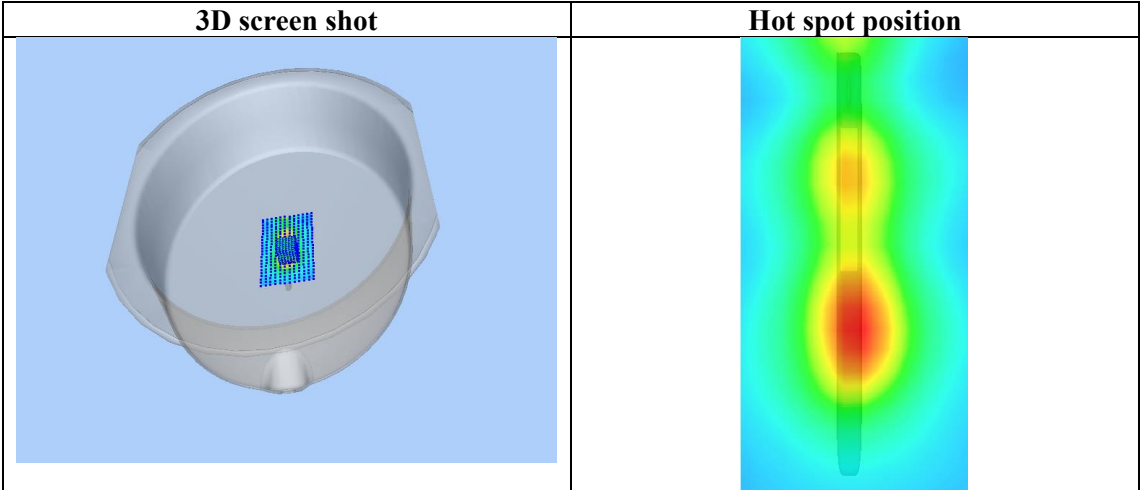
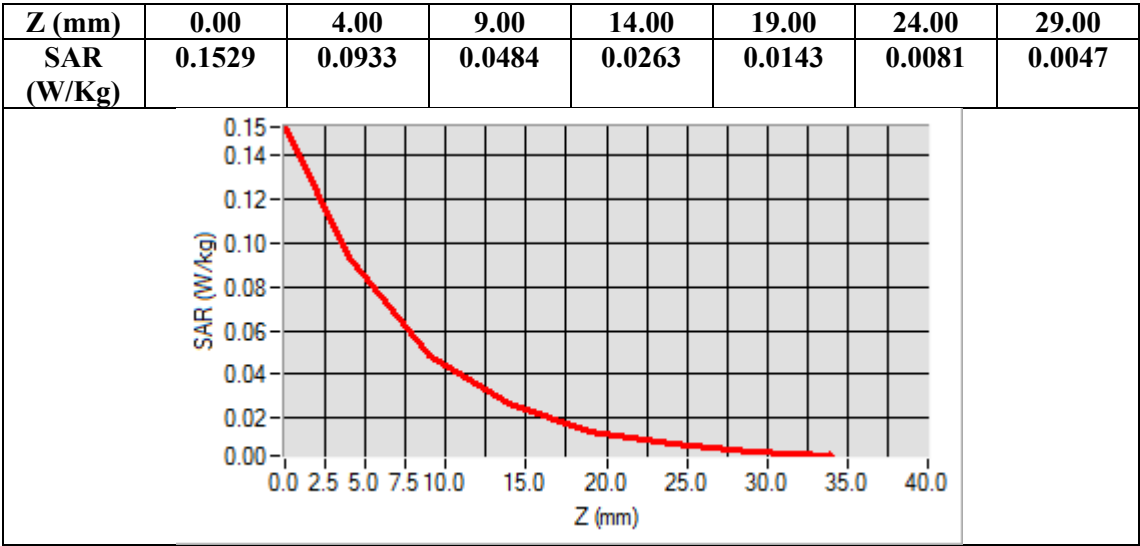
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	ELLI
Device Position	Edge 4
Band	LTE Band 40
Channels	Middle
Signal	OFDM (Crest factor: 1.58)



Maximum location: X=5.00, Y=-24.00

SAR Peak: 0.15 W/kg

SAR 10g (W/Kg)	0.046296
SAR 1g (W/Kg)	0.089400



Test Laboratory: AGC Lab
LTE Band 41 Mid-Right Tilt (1RB#0)
DUT: Smart Phone; **Type:** Mara Phones Z1

Date: Apr. 17,2020

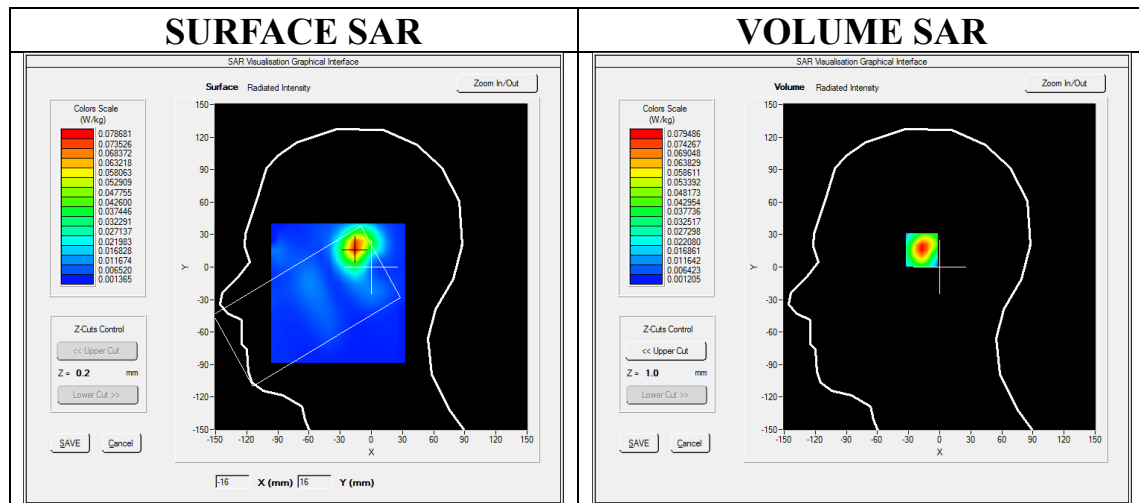
Communication System: LTE; Communication System Band: LTE Band 41; Duty Cycle:1:1.58; Conv.F=3.77
Frequency: 2605 MHz; Medium parameters used: $f=2600$ MHz; $\sigma=1.89$ mho/m; $\epsilon_r=38.01$; $\rho=1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.4 Liquid temperature (°C): 21.2

SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE BAND 41 Mid-Right Tilt/Area Scan: Measurement grid: dx=8mm, y=8mm
Configuration/ LTE BAND 41 Mid-Right Tilt/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

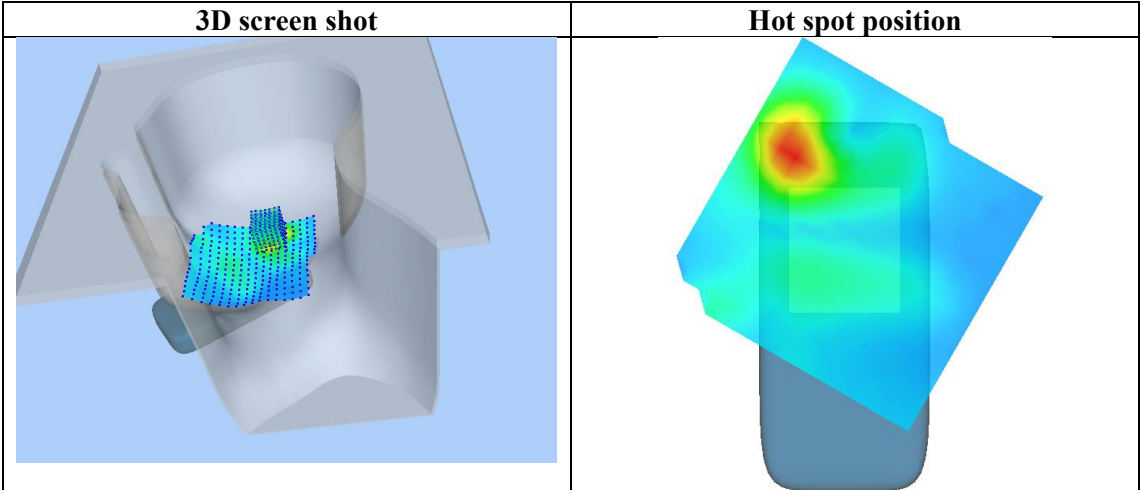
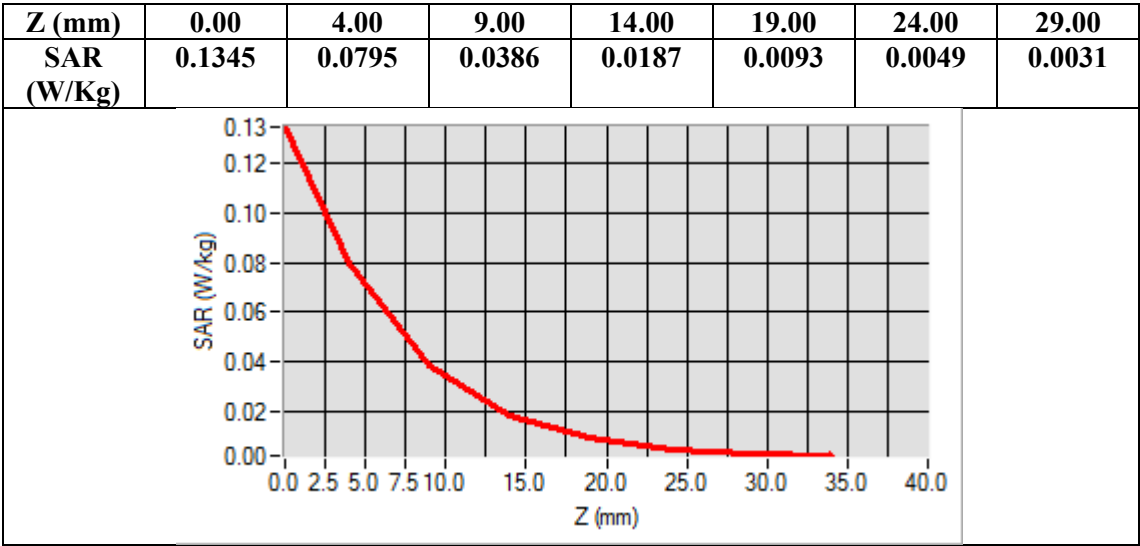
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Right Tilt
Device Position	Cheek
Band	LTE BAND 41
Channels	Middle
Signal	OFDM (Crest factor: 1.58)



Maximum location: X=-16.00, Y=17.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.033681
SAR 1g (W/Kg)	0.073583



Test Laboratory: AGC Lab
LTE Band 41 Mid-Edge 3 (1RB#0)
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 17,2020

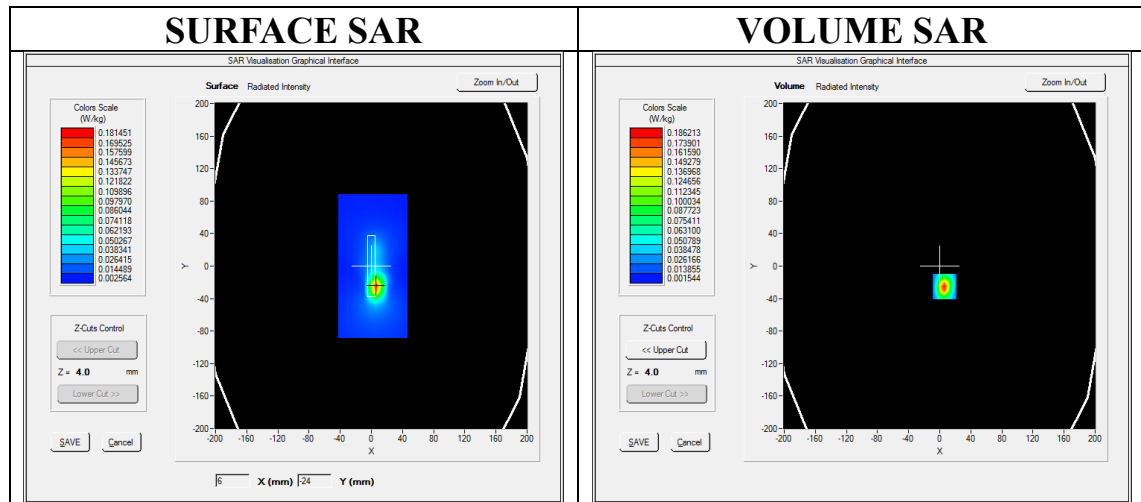
Communication System: LTE; Communication System Band: LTE Band 41; Duty Cycle:1:1.58; Conv.F=3.77
Frequency: 2605 MHz; Medium parameters used: $f=2600$ MHz; $\sigma=1.89$ mho/m; $\epsilon_r=38.01$; $\rho=1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.4, Liquid temperature (°C): 21.2

SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE BAND 41 Mid-Edge 3 /Area Scan: Measurement grid: dx=10mm, y=10mm
Configuration/ LTE BAND 41 Mid-Edge 3 /Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

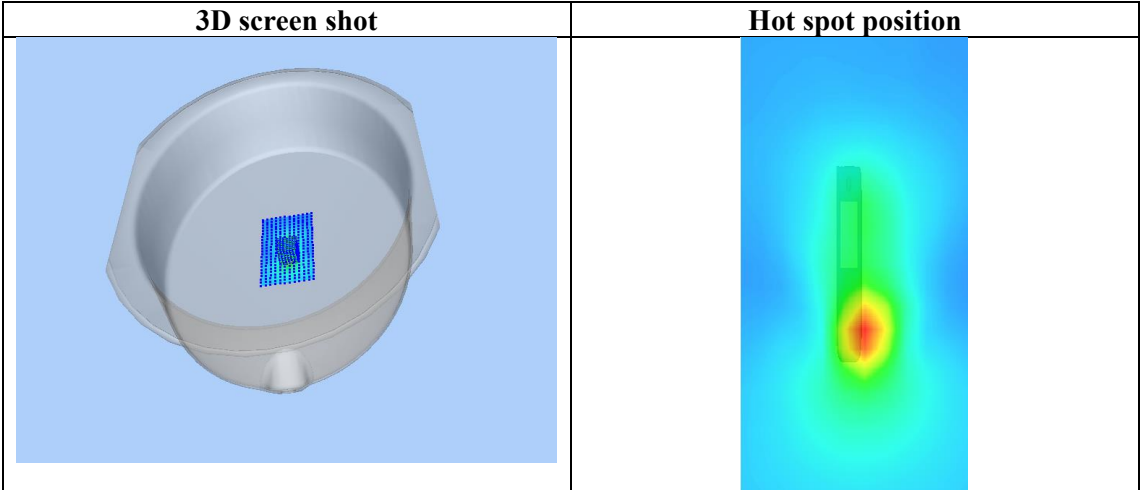
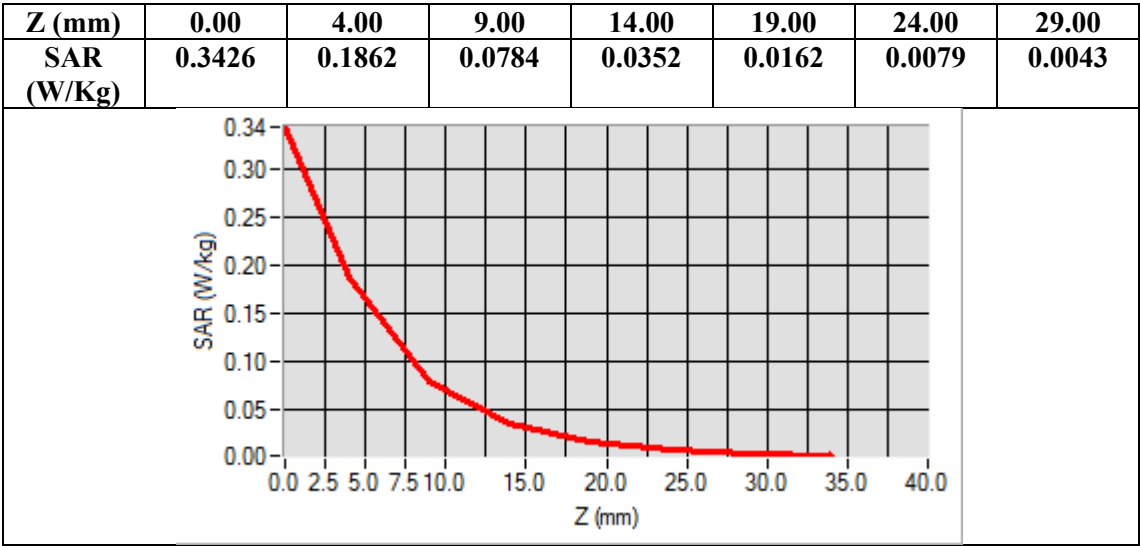
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	ELLI
Device Position	Edge 3
Band	LTE BAND 41
Channels	Middle
Signal	OFDM (Crest factor: 1.58)



Maximum location: X=6.00, Y=-25.00

SAR Peak: 0.34 W/kg

SAR 10g (W/Kg)	0.061751
SAR 1g (W/Kg)	0.162101



WIFI MODE

Test Laboratory: AGC Lab

802.11b Mid-Touch-Left

DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 26,2020

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.12;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.81$ mho/m; $\epsilon_r = 41.82$ $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C):21.5, Liquid temperature (°C): 21.3

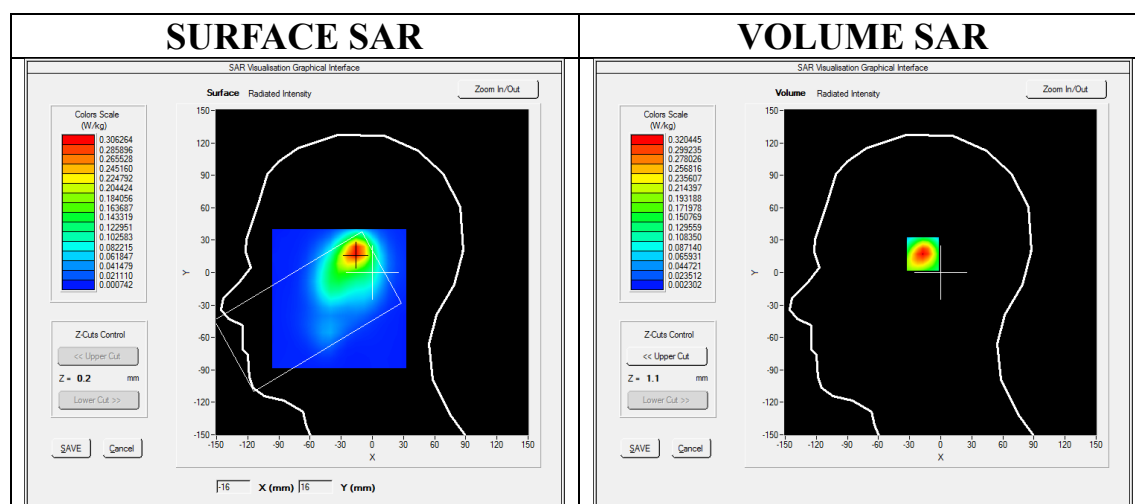
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/802.11b Mid- Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/802.11b Mid- Touch-Left/Zoom Scan: Measurement grid: dx=5mm,dy=5mm, dz=5mm

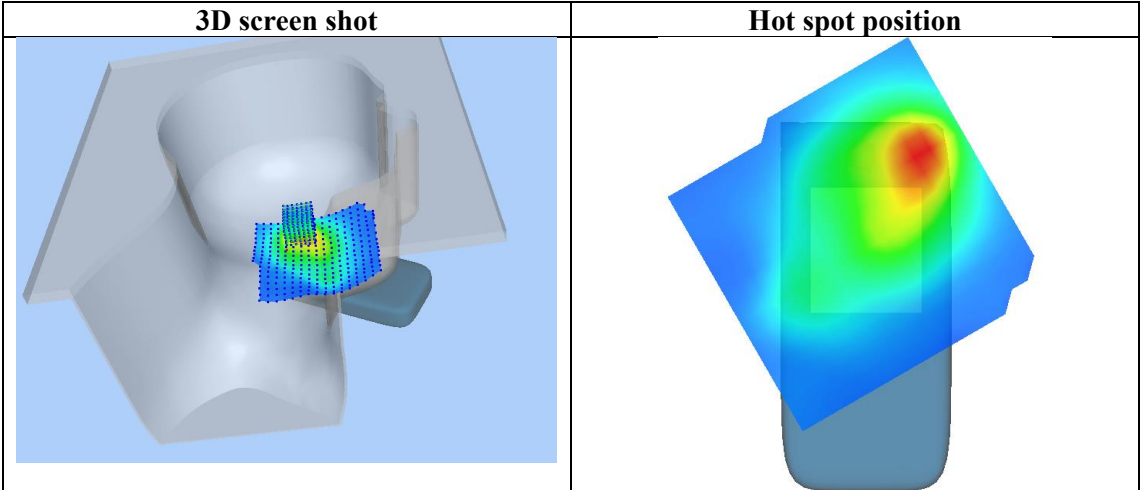
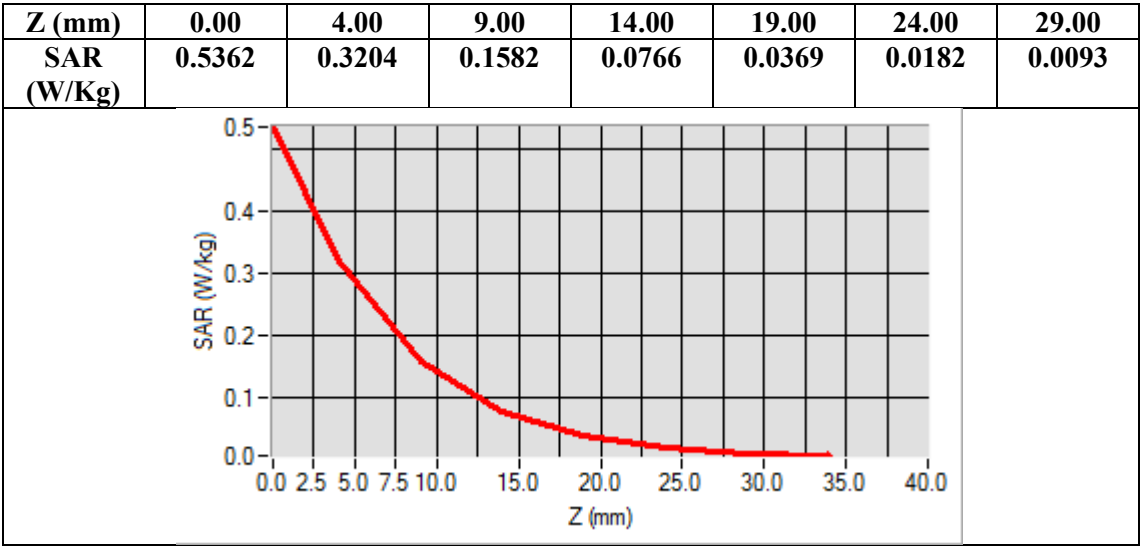
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Left head
Device Position	Cheek
Band	2450MHz
Channels	Middle
Signal	Crest factor: 1.0



Maximum location: X=-16.00, Y=19.00

SAR Peak: 0.54 W/kg

SAR 10g (W/Kg)	0.142986
SAR 1g (W/Kg)	0.297432



Test Laboratory: AGC Lab
802.11b Mid-Body-Worn- Back
DUT: Smart Phone; Type: Mara Phones Z1

Date: Apr. 26,2020

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.12;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.81$ mho/m; $\epsilon_r = 41.82$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21.5, Liquid temperature (°C): 21.3

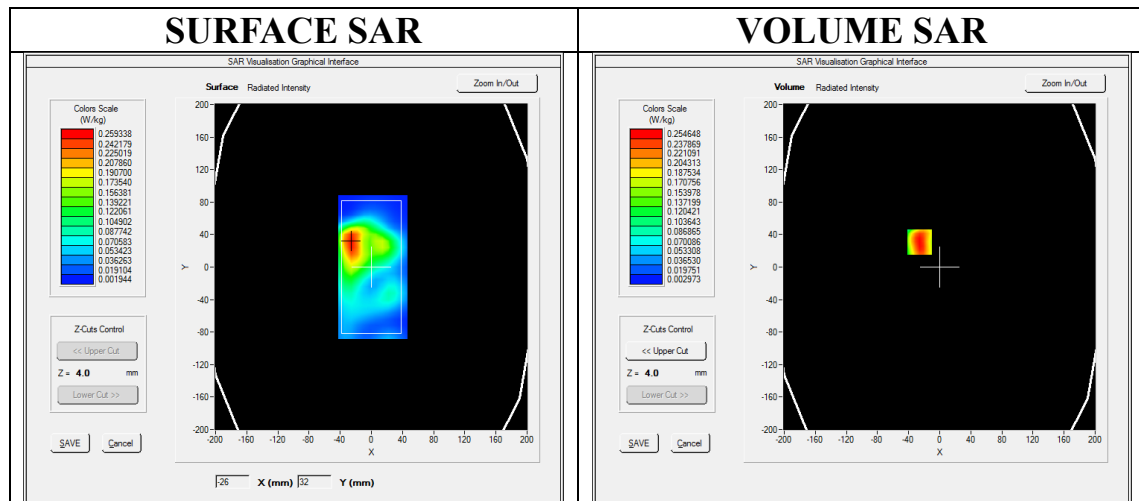
SATIMO Configuration:

- Probe: SSE5; Calibrated: Jun. 04,2019; Serial No.: SN 22/16 EP315
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/802.11b Mid- Body- Back /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/802.11b Mid- Body- Back /Zoom Scan: Measurement grid: dx=5mm,dy=5mm, dz=5mm;

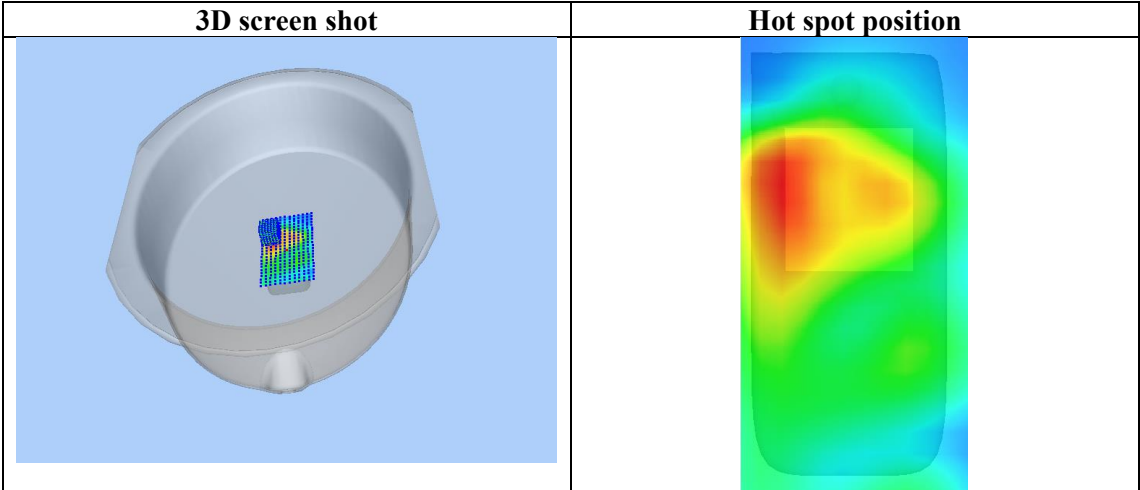
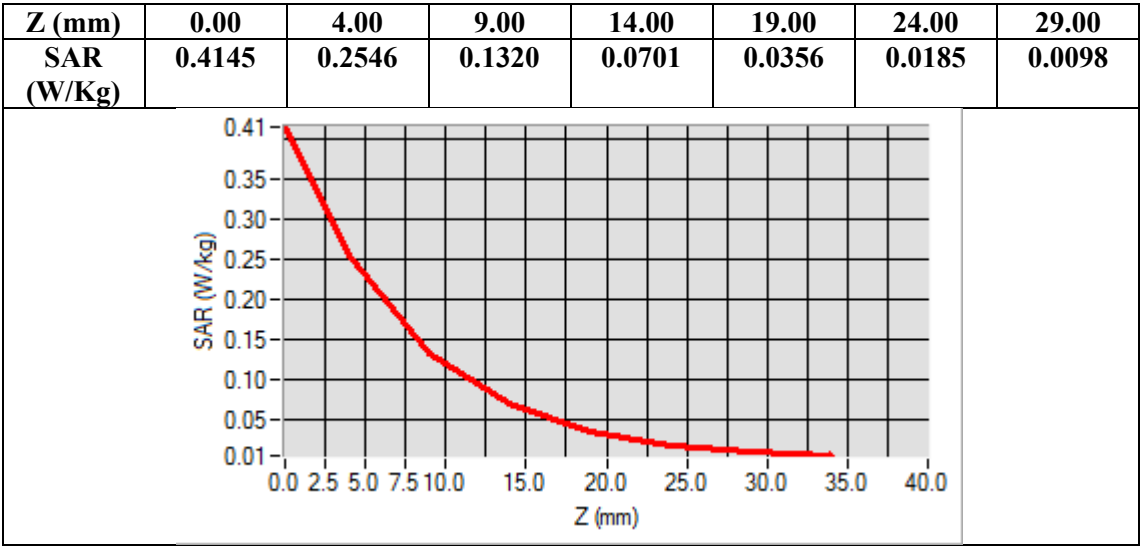
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	ELLI
Device Position	Body Back
Band	2450MHz
Channels	Middle
Signal	Crest factor: 1.0



Maximum location: X=-26.00, Y=31.00

SAR Peak: 0.42 W/kg

SAR 10g (W/Kg)	0.130989
SAR 1g (W/Kg)	0.243048

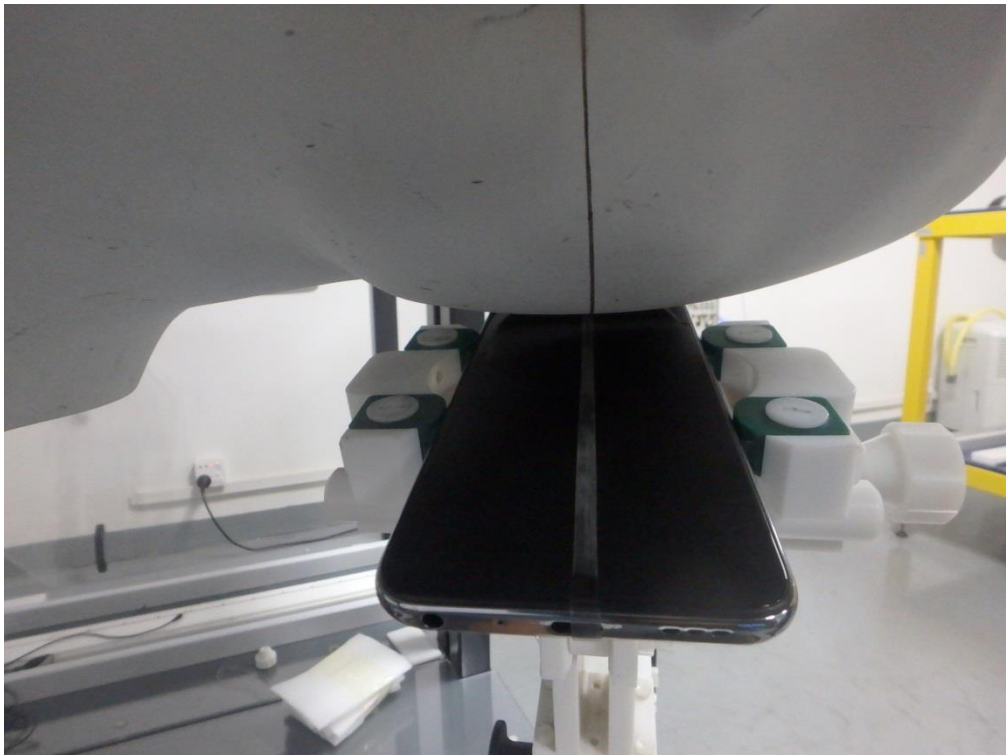


APPENDIX C. TEST SETUP PHOTOGRAPHS

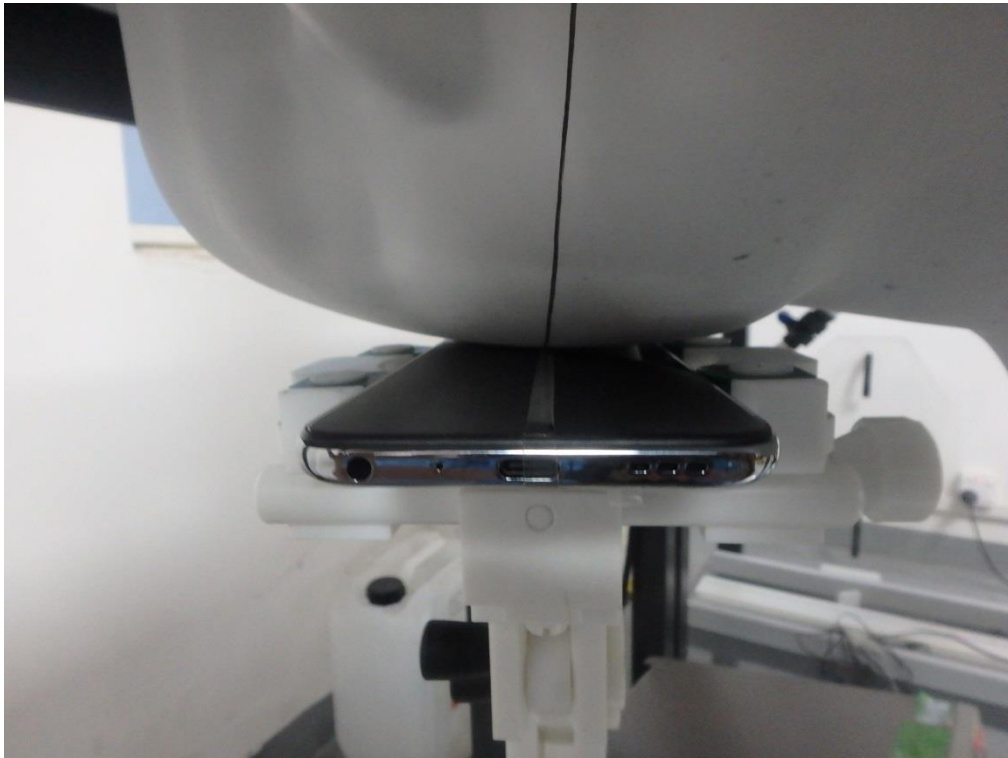
LEFT-CHEEK TOUCH



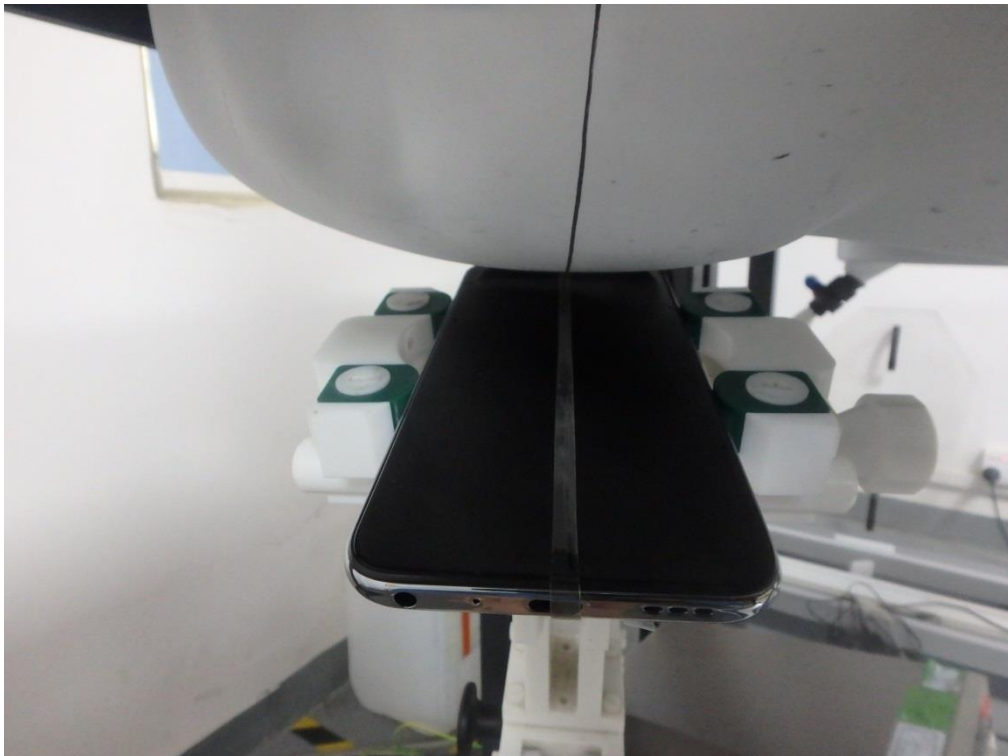
LEFT-TILT 15°



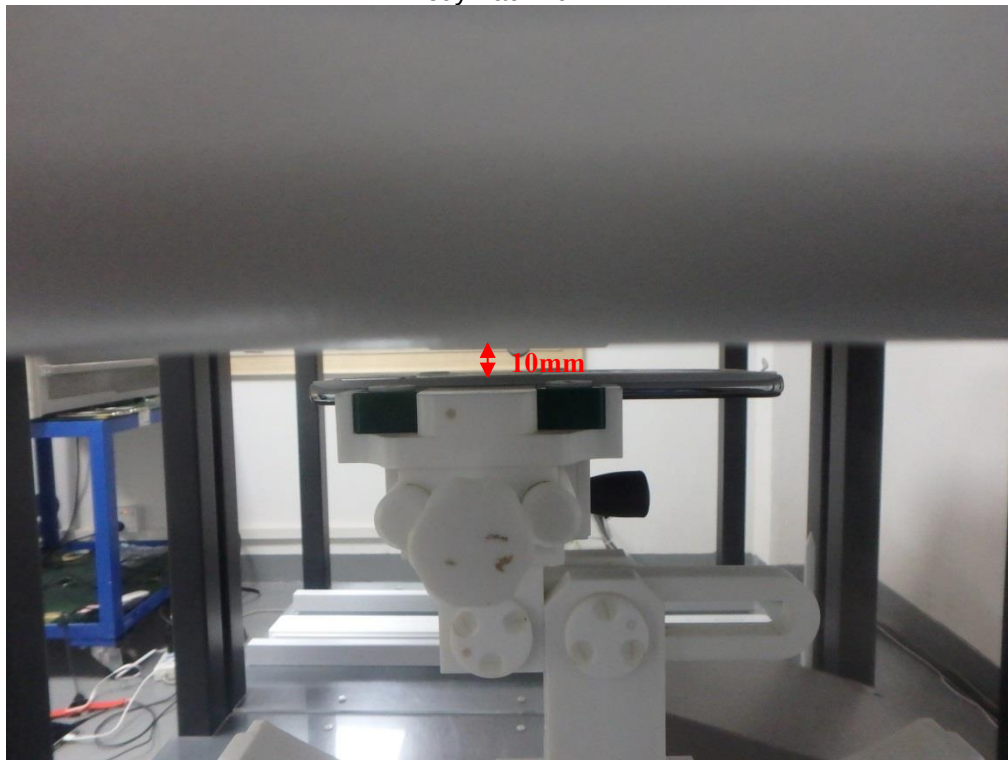
RIGHT- CHEEK TOUCH



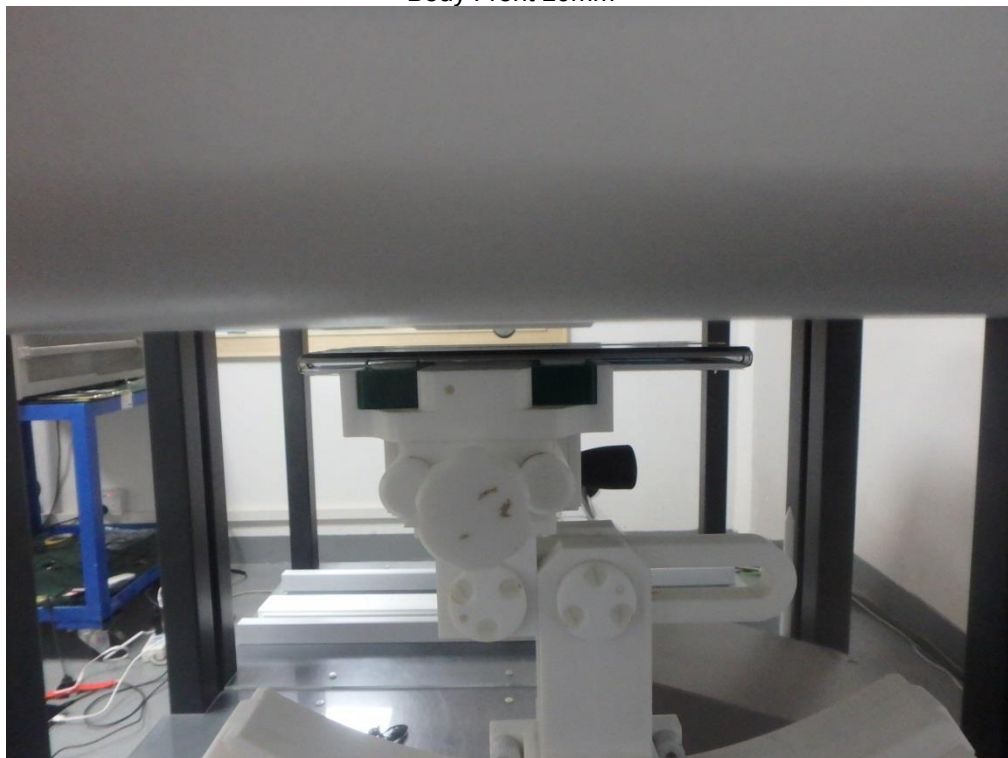
RIGHT-TILT 15°



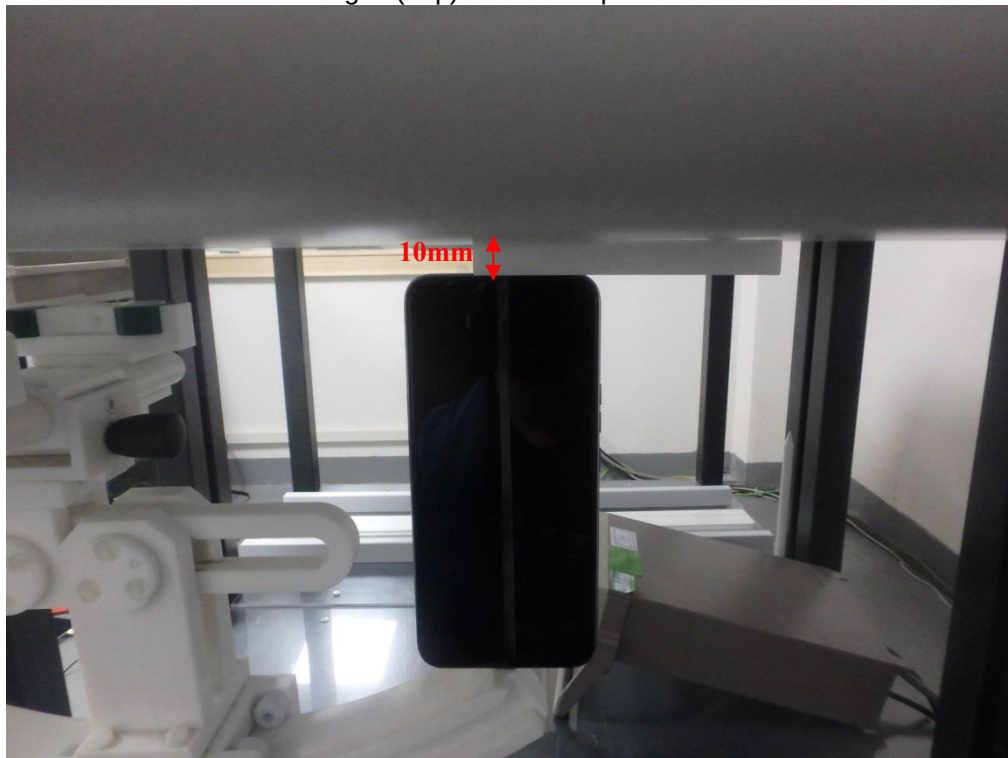
Body Back 10mm



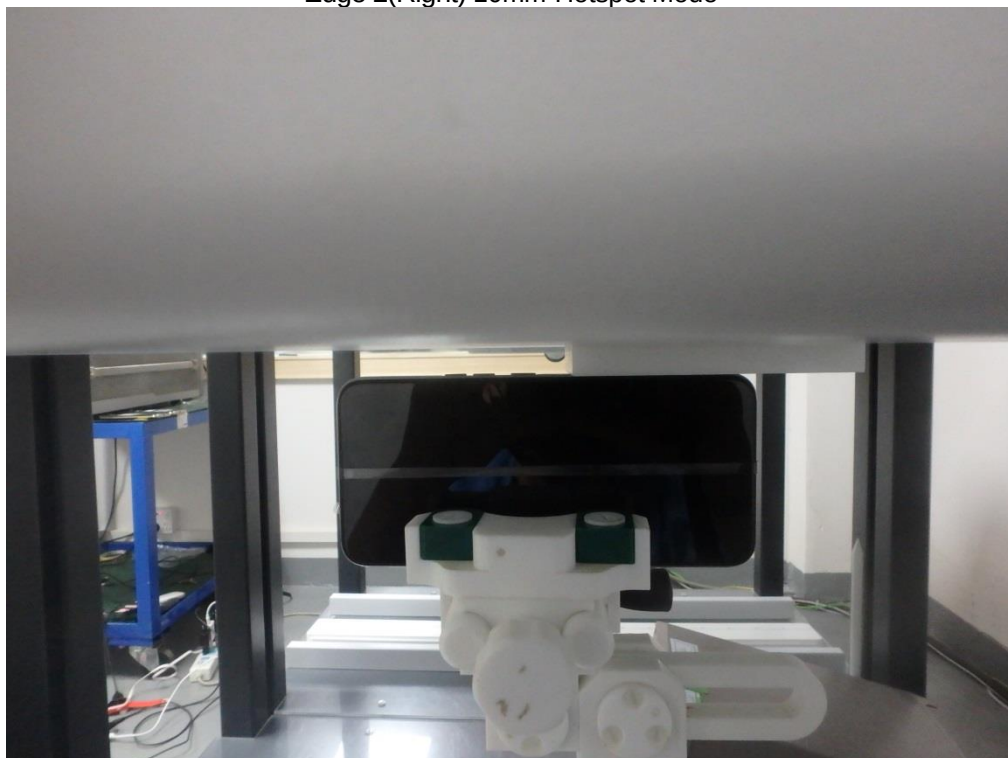
Body Front 10mm



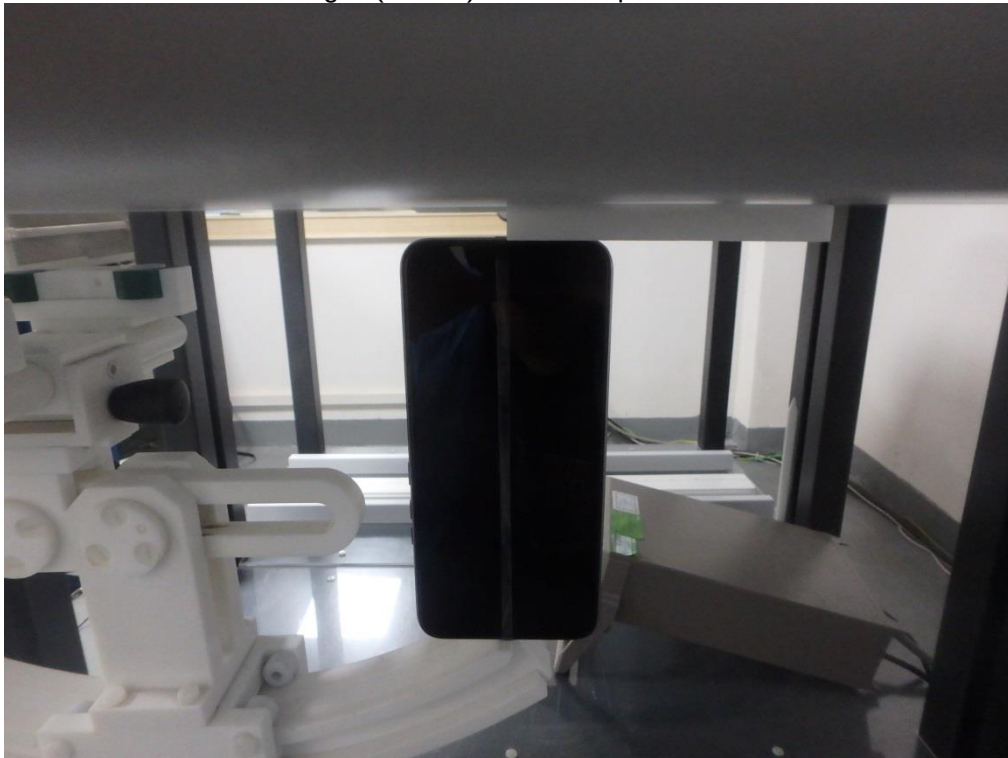
Edge 1(Top) 10mm-Hotspot Mode



Edge 2(Right) 10mm-Hotspot Mode



Edge 3(Bottom) 10mm-Hotspot Mode

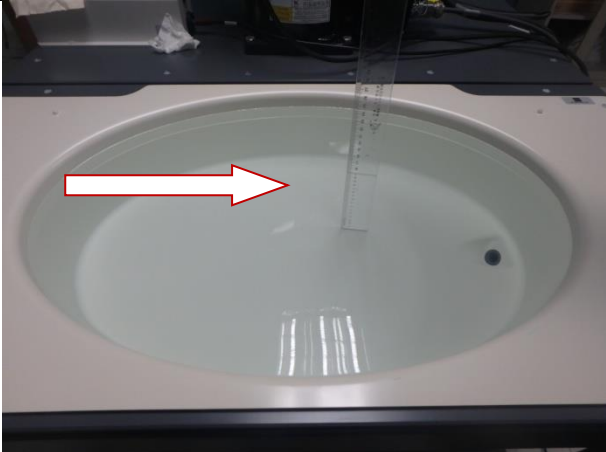
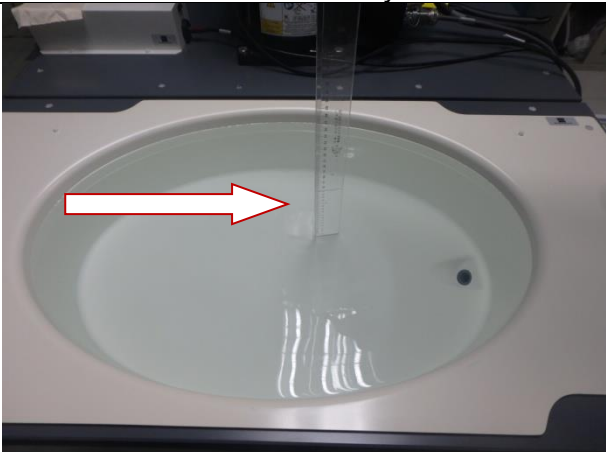
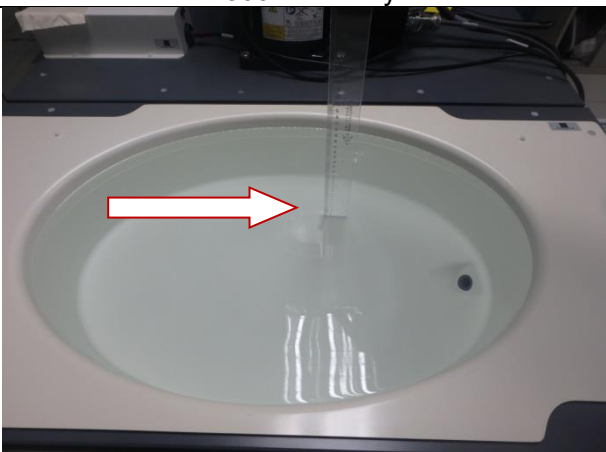


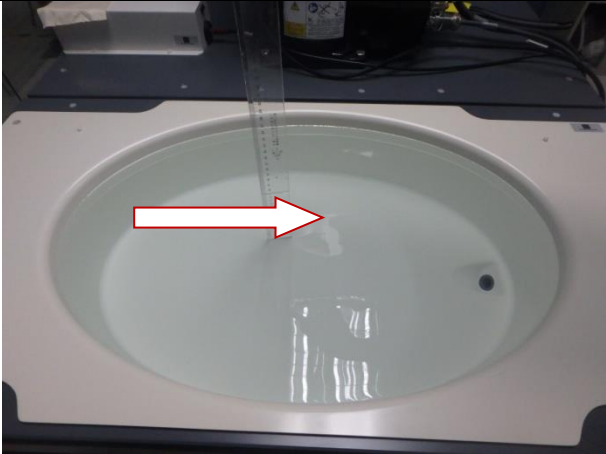
Edge 4(Left) 10mm-Hotspot Mode



DEPTH OF THE LIQUID IN THE PHANTOM—ZOOM IN

Note : The position used in the measurement were according to IEEE 1528-2013

835MHz head  A photograph of a white, irregularly shaped phantom head filled with liquid. A vertical ruler is placed inside the liquid. A red arrow points to the liquid surface, which is at approximately the 15 cm mark on the ruler.	835MHz body  A photograph of a white, oval-shaped phantom body filled with liquid. A vertical ruler is placed inside the liquid. A red arrow points to the liquid surface, which is at approximately the 15 cm mark on the ruler.
1900MHz head  A photograph of a white, irregularly shaped phantom head filled with liquid. A vertical ruler is placed inside the liquid. A red arrow points to the liquid surface, which is at approximately the 15 cm mark on the ruler.	1900MHz body  A photograph of a white, oval-shaped phantom body filled with liquid. A vertical ruler is placed inside the liquid. A red arrow points to the liquid surface, which is at approximately the 15 cm mark on the ruler.
2300MHz head  A photograph of a white, irregularly shaped phantom head filled with liquid. A vertical ruler is placed inside the liquid. A red arrow points to the liquid surface, which is at approximately the 15 cm mark on the ruler.	2300MHz body  A photograph of a white, oval-shaped phantom body filled with liquid. A vertical ruler is placed inside the liquid. A red arrow points to the liquid surface, which is at approximately the 15 cm mark on the ruler.

2450MHz head  A photograph of a white, irregularly shaped object (head) submerged in a tank of water. A vertical ruler is placed next to the object, and a red arrow points to the water level.	2450MHz body  A photograph of a white, oval-shaped object (body) submerged in a tank of water. A vertical ruler is placed next to the object, and a red arrow points to the water level.
2600MHz head  A photograph of a white, irregularly shaped object (head) submerged in a tank of water. A vertical ruler is placed next to the object, and a red arrow points to the water level.	2600MHz body  A photograph of a white, oval-shaped object (body) submerged in a tank of water. A vertical ruler is placed next to the object, and a red arrow points to the water level.

APPENDIX D. CALIBRATION DATA

Refer to Attached files.