

Test Laboratory: AGC Lab

Date: Aug. 08,2019

System Check Body 1900MHz

DUT: Dipole 1900 MHz; Type: SID 1900

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Duty Cycle:1:1; Conv.F=5.39

Frequency: 1900 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 53.08$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section; Input Power=18dBm

Ambient temperature (°C):21.1, Liquid temperature (°C): 20.7

SATIMO Configuration:

Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159

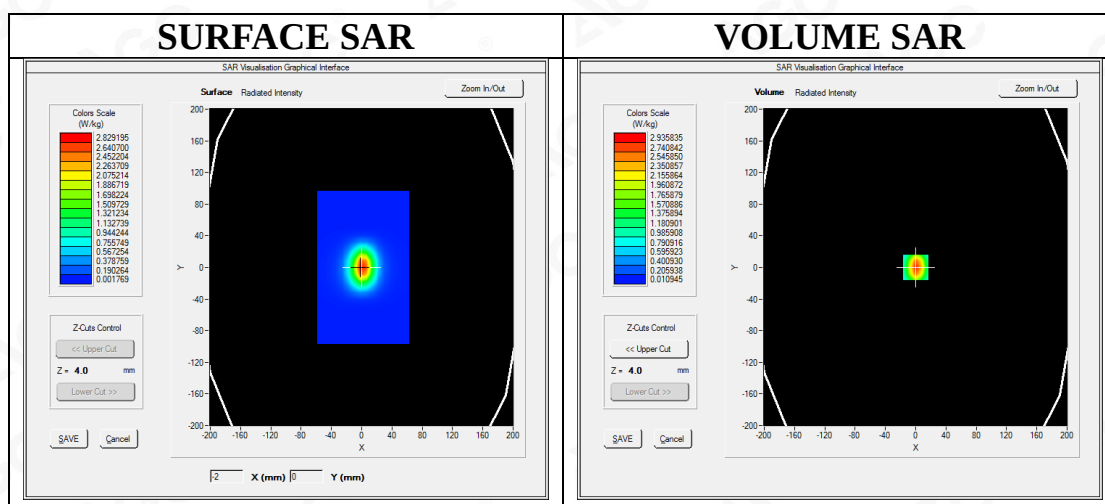
• Sensor-Surface: 4mm (Mechanical Surface Detection)

• Phantom: ELLI39 Phantom

• Measurement SW: OpenSAR V4_02_35

Configuration/System Check 1900MHz Body/Area Scan: Measurement grid: dx=8mm, dy=8mm

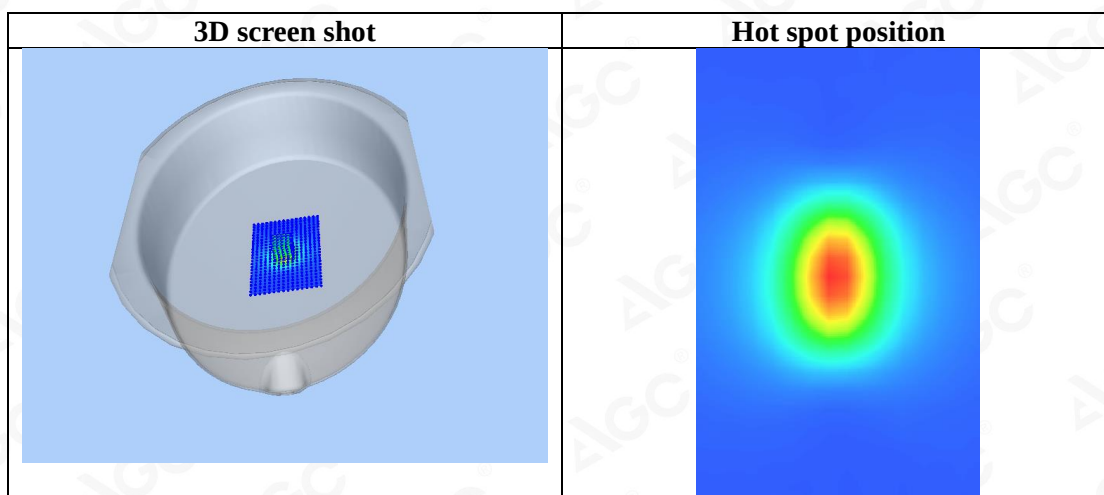
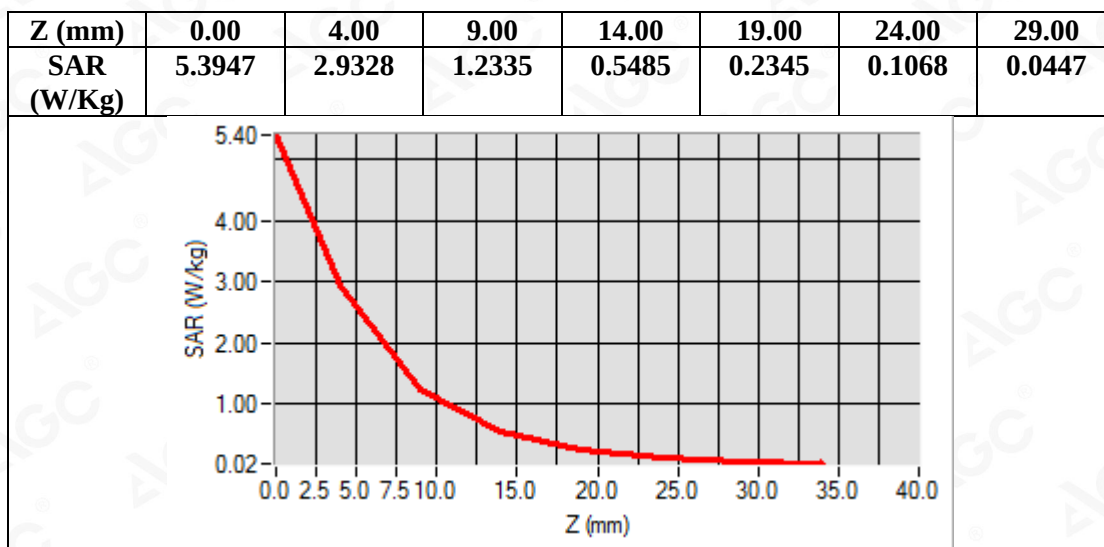
Configuration/System Check 1900MHz Body/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=0.00, Y=0.00

SAR Peak: 5.33 W/kg

SAR 10g (W/Kg)	1.252349
SAR 1g (W/Kg)	2.806244



Test Laboratory: AGC Lab

Date: Aug. 04,2019

System Check Head 1900MHz

DUT: Dipole 1900 MHz; Type: SID 1900

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Duty Cycle:1:1; Conv.F=5.24

Frequency: 1900 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.26$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section; Input Power=18dBm

Ambient temperature (°C):21.2, Liquid temperature (°C): 20.9

SATIMO Configuration:

Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159

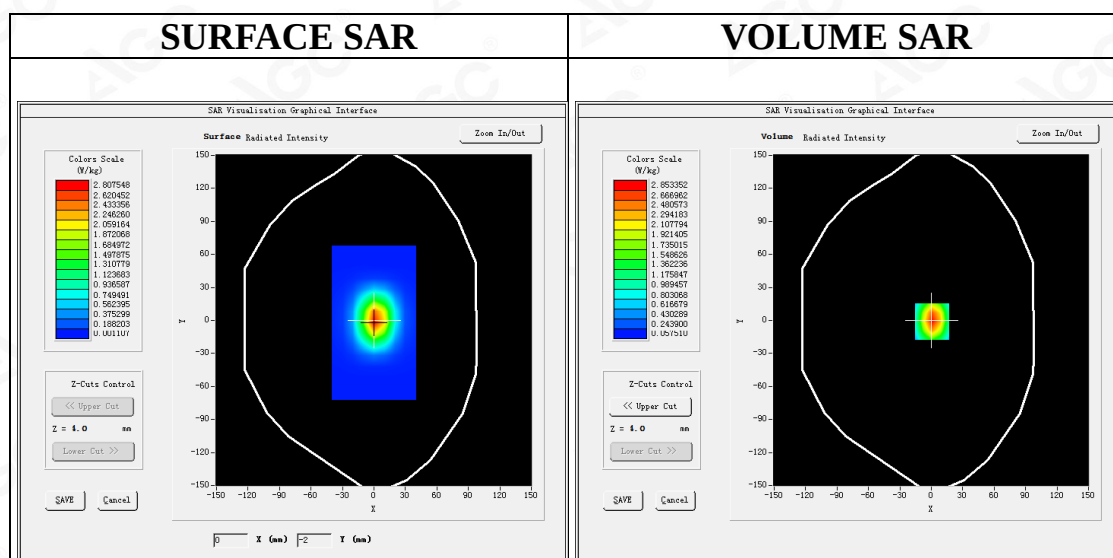
• Sensor-Surface: 4mm (Mechanical Surface Detection)

• Phantom: SAM twin phantom

• Measurement SW: OpenSAR V4_02_35

Configuration/System Check 1900MHz Head/Area Scan: Measurement grid: dx=10mm, dy=10mm

Configuration/System Check 1900MHz Head/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=1.00, Y=-1.00

SAR Peak: 4.29 W/kg

SAR 10g (W/Kg)	1.381355
SAR 1g (W/Kg)	2.671684



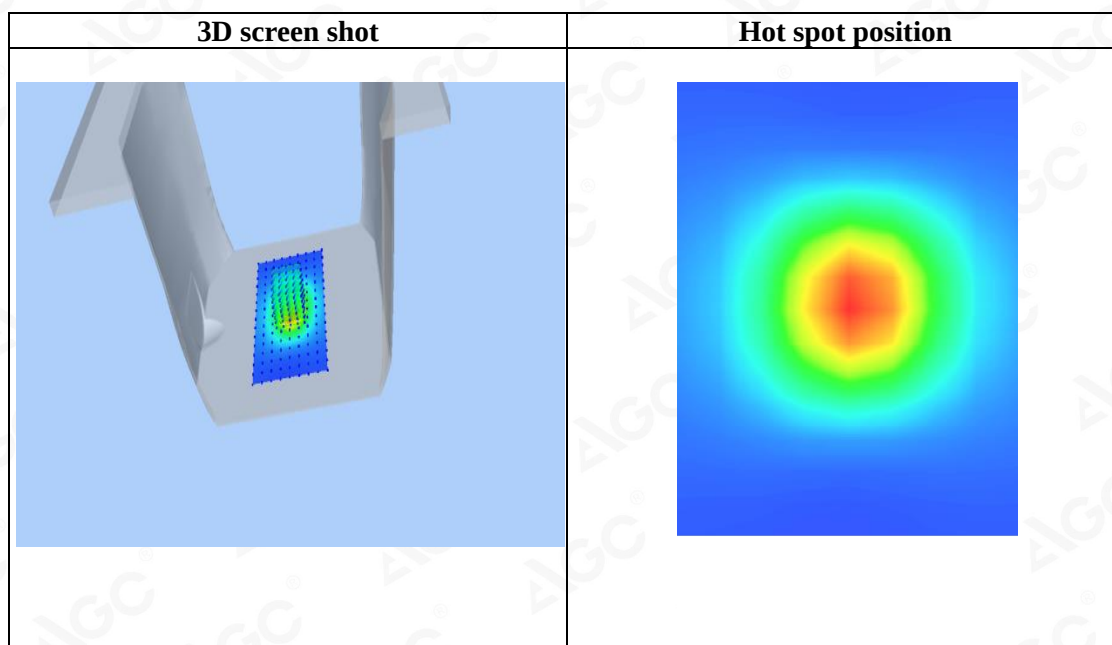
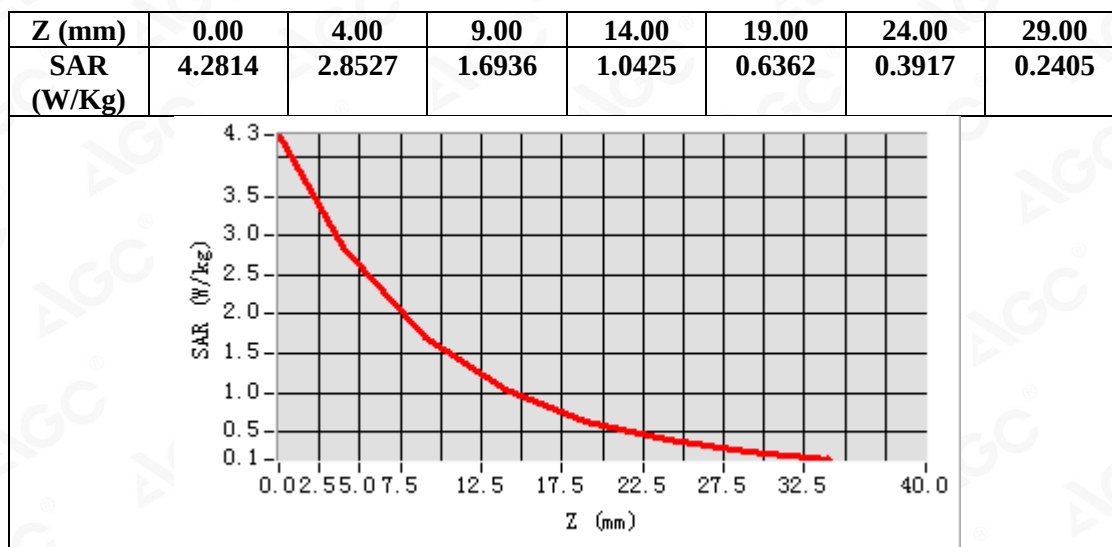
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
System Check Body 1900MHz
DUT: Dipole 1900 MHz; Type: SID 1900

Date: Aug. 04,2019

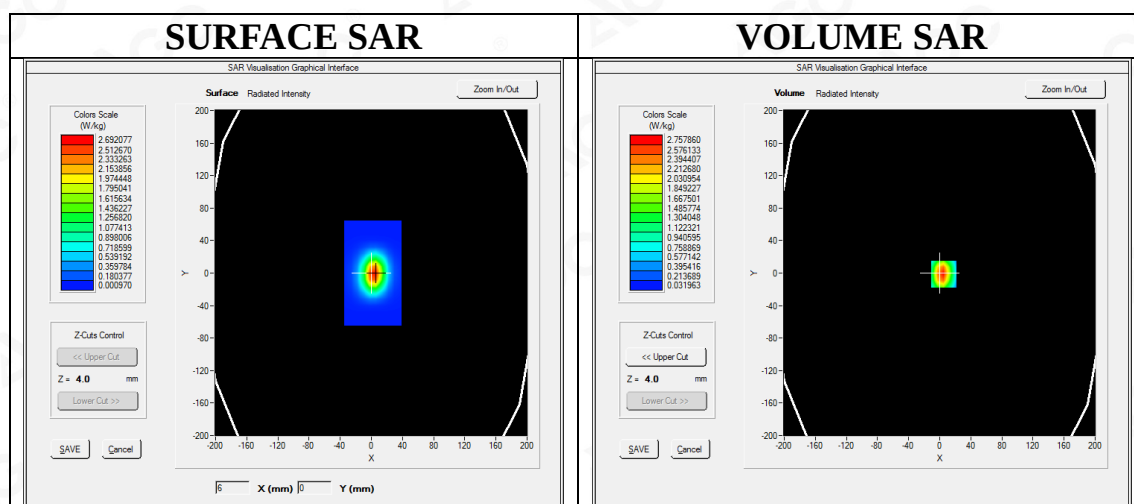
Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Duty Cycle:1:1; Conv.F=5.39
Frequency: 1900 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 51.26$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (°C):21.2, Liquid temperature (°C): 20.8

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/System Check 1900MHz Body/Area Scan: Measurement grid: dx=8mm, dy=8mm

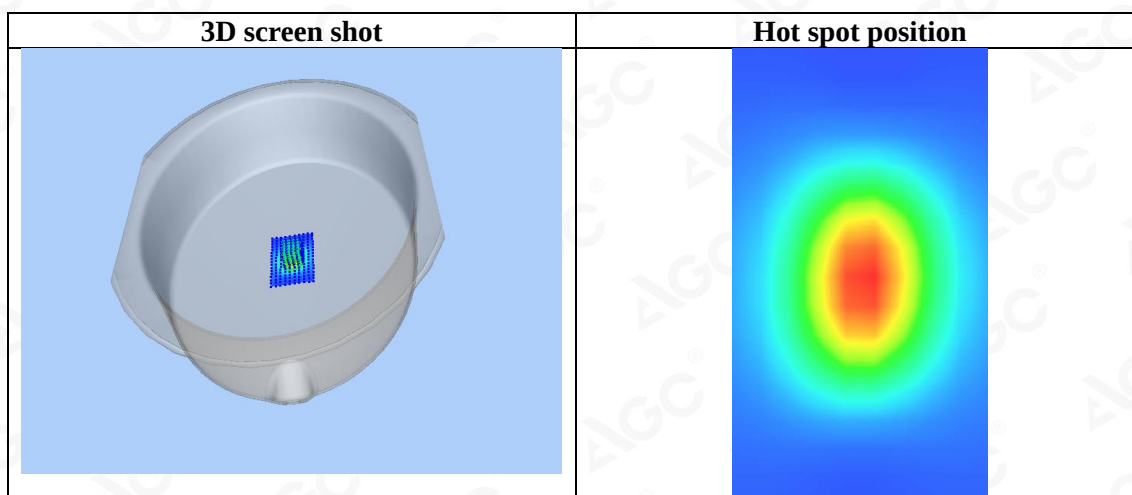
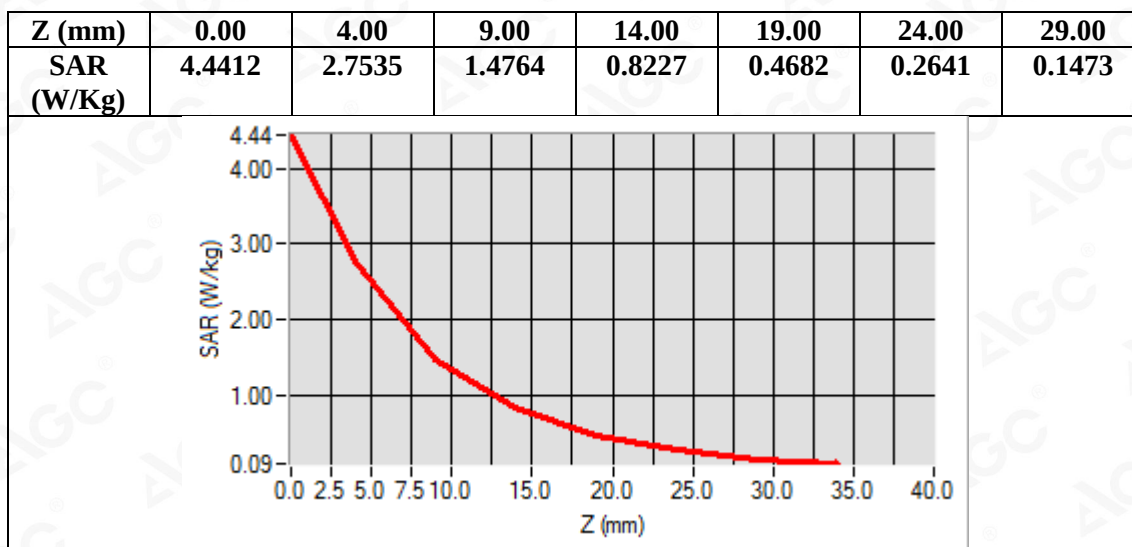
Configuration/System Check 1900MHz Body/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=5.00, Y=-1.00

SAR Peak: 4.49 W/kg

SAR 10g (W/Kg)	1.302494
SAR 1g (W/Kg)	2.623251



Test Laboratory: AGC Lab

Date: Aug. 08,2019

System Check Head 2450 MHz

DUT: Dipole 2450 MHz Type: SID 2450

Communication System CW; Communication System Band: D2450 (2450.0 MHz); Duty Cycle: 1:1; Conv.F=4.90

Frequency: 2450 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.80$ mho/m; $\epsilon_r = 39.60$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section; Input Power=18dBm

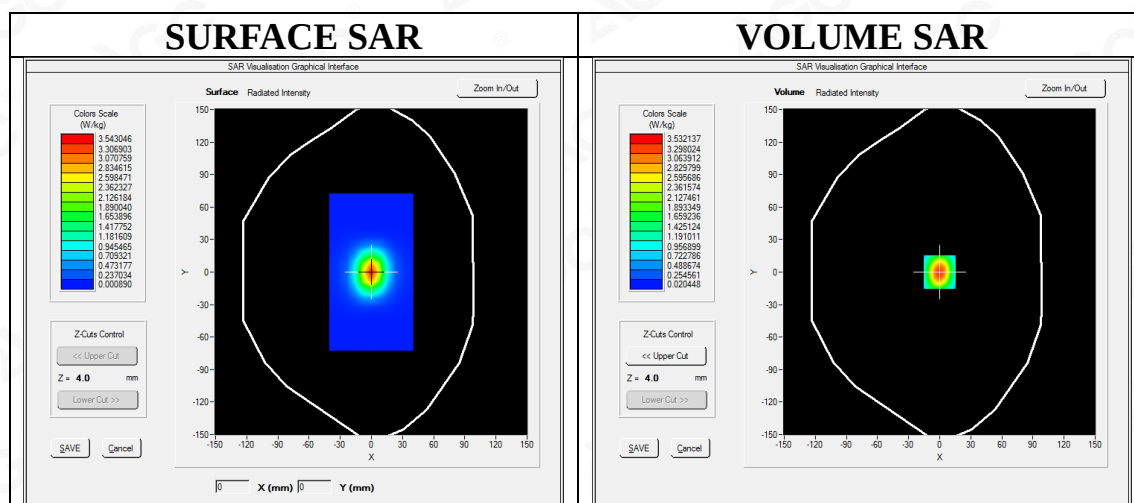
Ambient temperature (°C):21.1, Liquid temperature (°C): 20.8

SATIMO Configuration

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

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

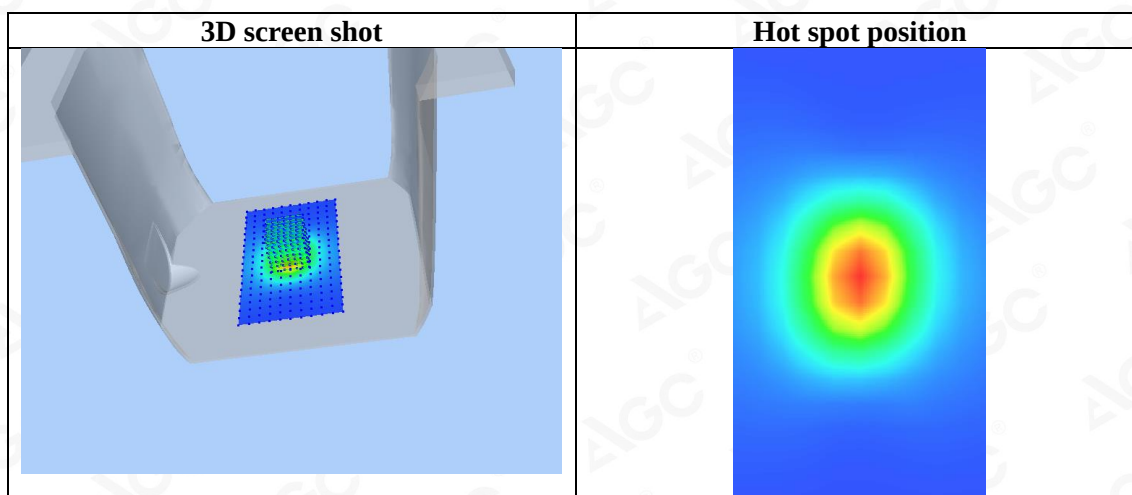
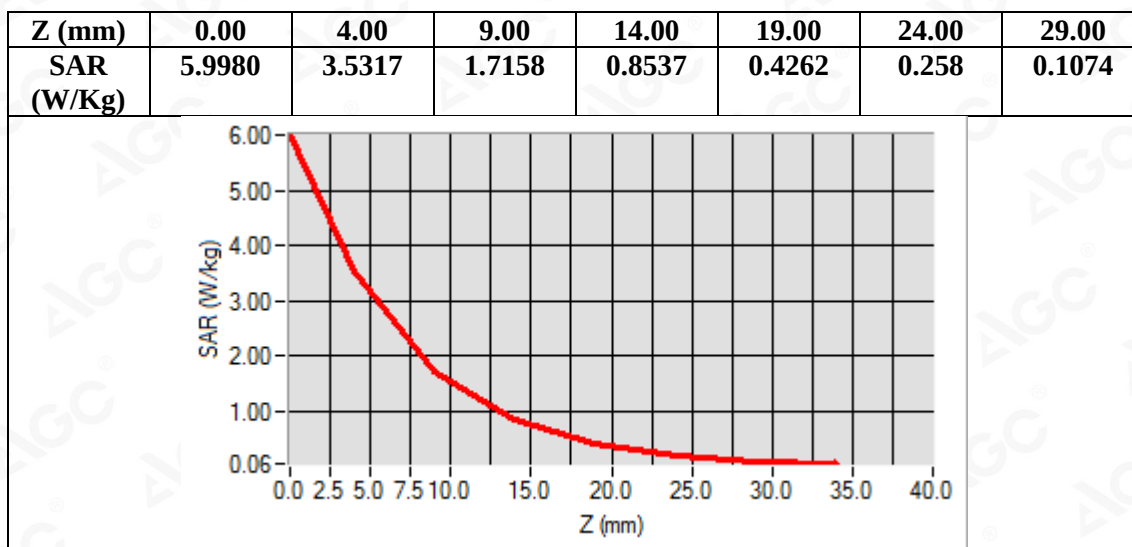
Configuration/System Check 2450MHz Head/Zoom Scan: Measurement grid: dx=5mm,dy=5mm, dz=5mm



Maximum location: X=0.00, Y=0.00

SAR Peak: 5.93 W/kg

SAR 10g (W/Kg)	1.492437
SAR 1g (W/Kg)	3.223873



Test Laboratory: AGC Lab
System Check Body 2450 MHz
DUT: Dipole 2450 MHz Type: SID 2450

Date: Aug. 08,2019

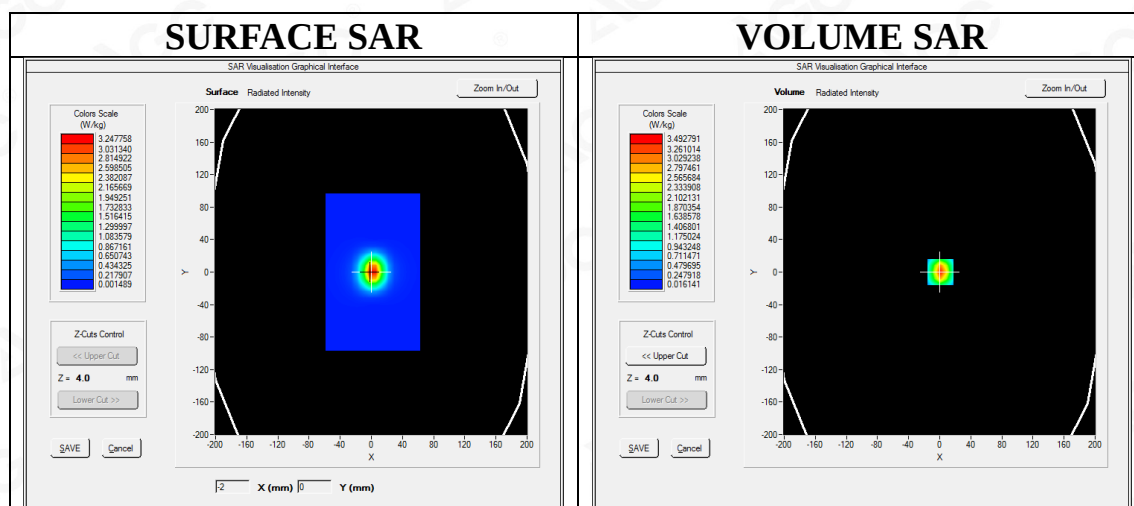
Communication System CW; Communication System Band: D2450 (2450.0 MHz); Duty Cycle: 1:1; Conv.F=5.04
Frequency: 2450 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 52.10$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (°C):21.1, Liquid temperature (°C): 20.7

SATIMO Configuration

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

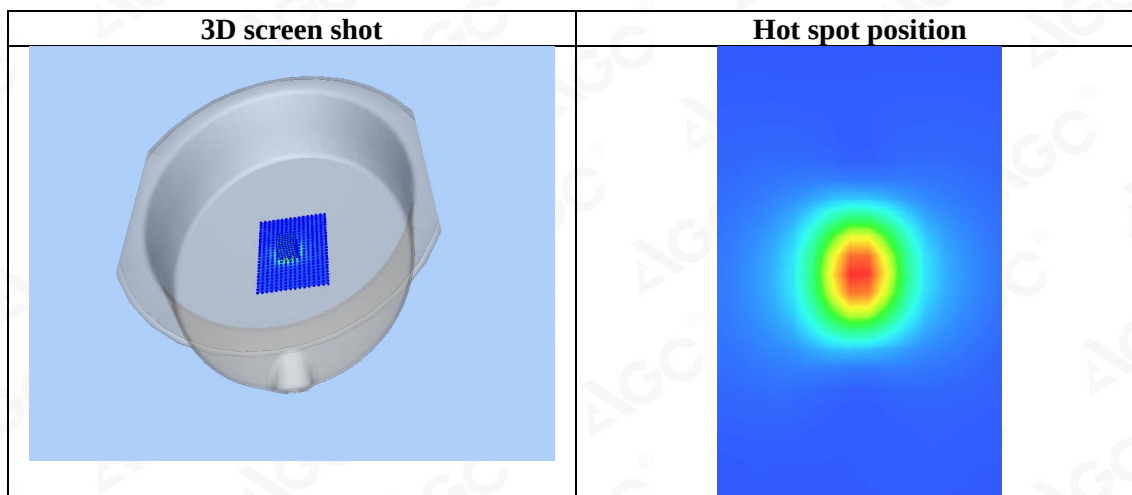
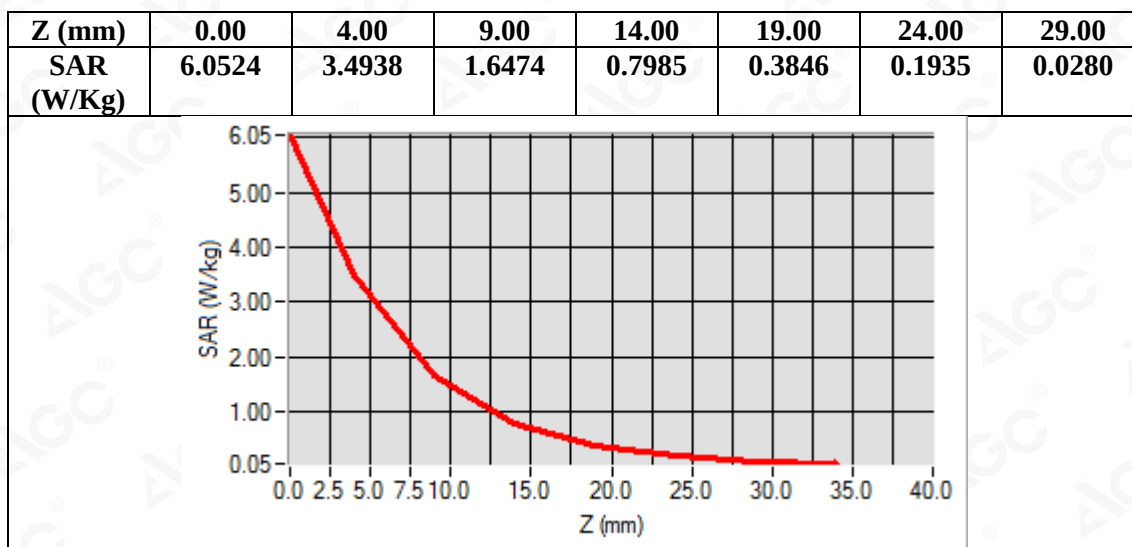
Configuration/System Check 2450MHz Body/Area Scan: Measurement grid: dx=8mm, dy=8mm

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



Maximum location: X=1.00, Y=0.00
SAR Peak: 6.01 W/kg

SAR 10g (W/Kg)	1.468423
SAR 1g (W/Kg)	3.257245



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

Date: Aug. 01,2019

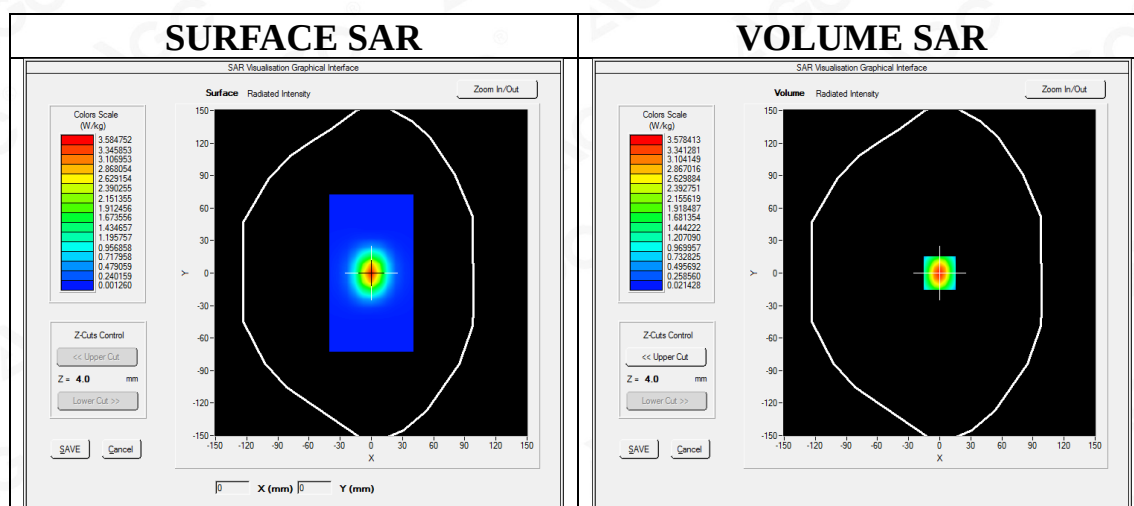
Communication System: CW; Communication System Band: D2600 (2600.0 MHz); Duty Cycle: 1:1; Conv.F=4.57
Frequency:2600 MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 38.62$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (°C): 20.7, Liquid temperature (°C): 20.5

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

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

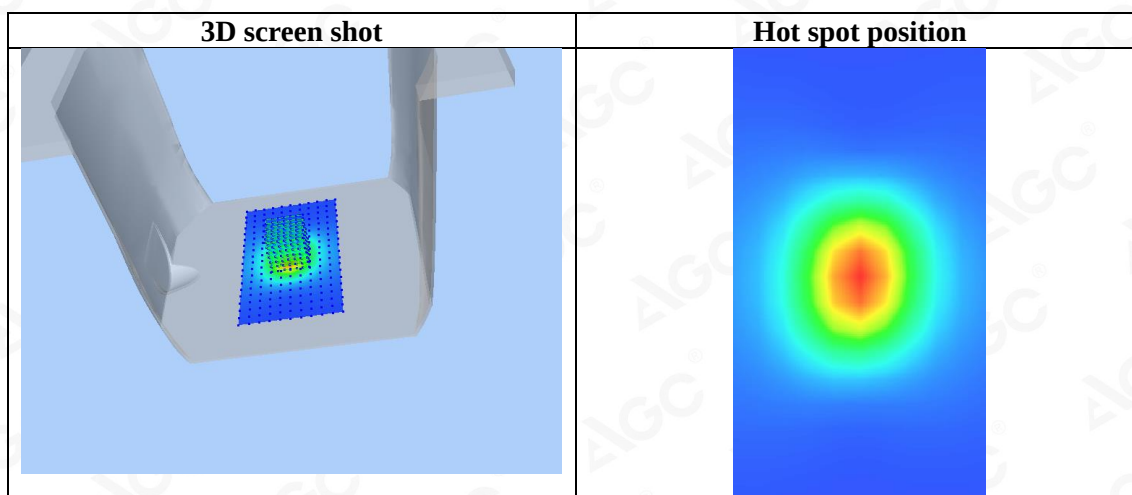
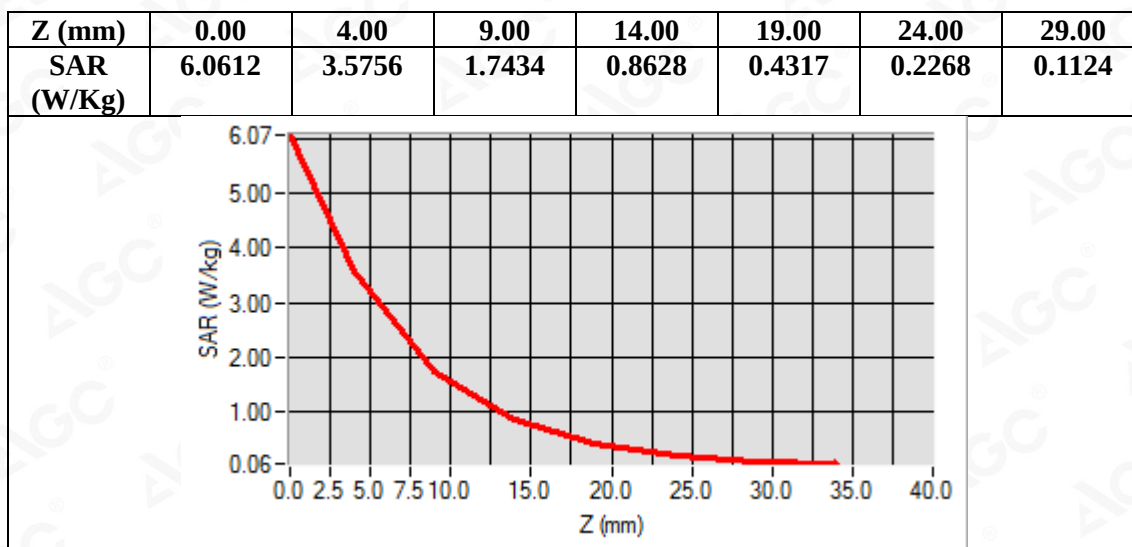
Configuration/System Check 2600 Head/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=0.00, Y=0.00

SAR Peak: 5.99 W/kg

SAR 10g (W/Kg)	1.516524
SAR 1g (W/Kg)	3.261257



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

Date: Aug. 01,2019

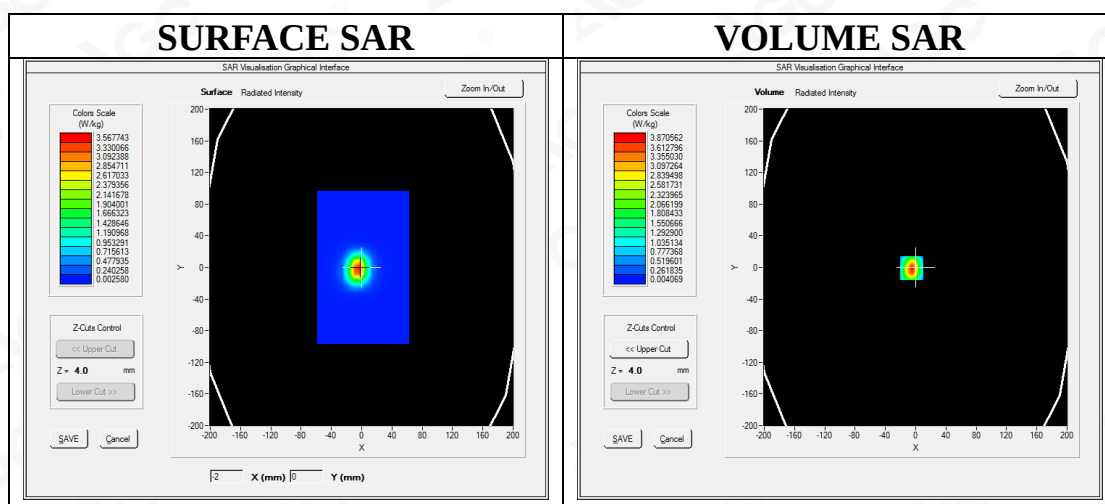
Communication System: CW; Communication System Band: D2600 (2600.0 MHz); Duty Cycle: 1:1; Conv.F=4.68
Frequency:2600 MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 2.14$ mho/m; $\epsilon_r = 52.47$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (°C): 20.7, Liquid temperature (°C): 20.4

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

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

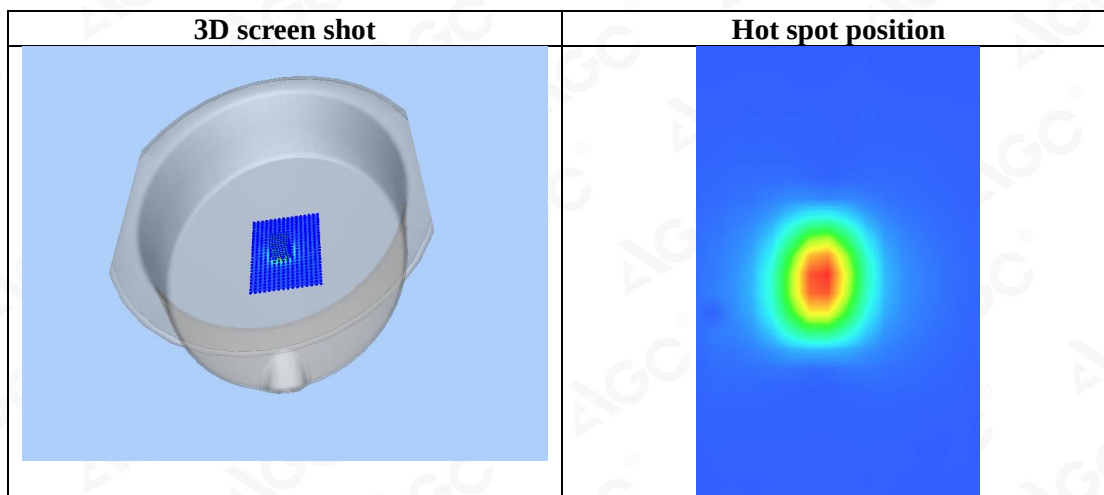
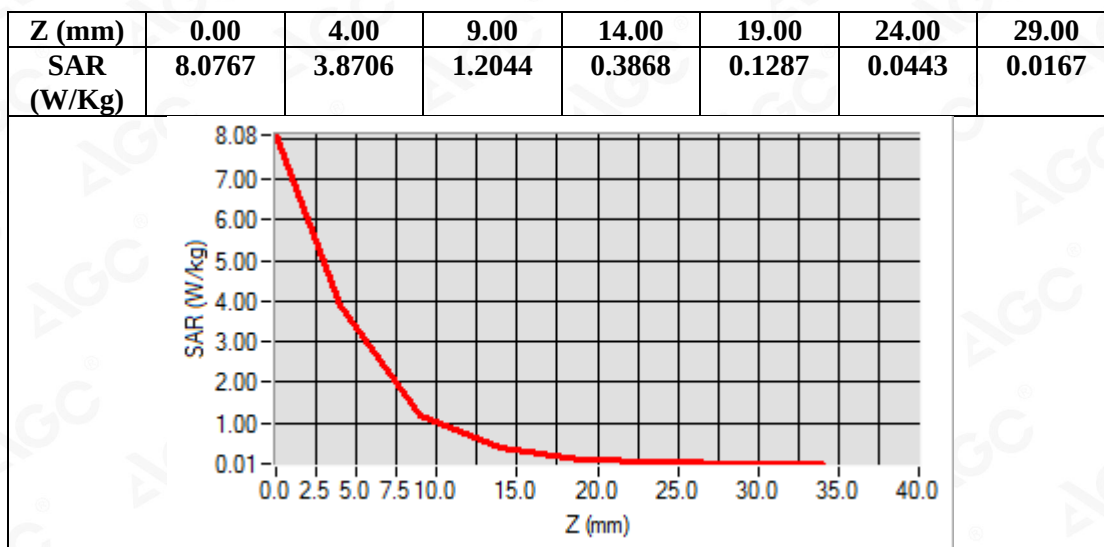
Configuration/System Check 2600 Body /Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



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

SAR Peak: 7.90 W/kg

SAR 10g (W/Kg)	1.503144
SAR 1g (W/Kg)	3.423194



Test Laboratory: AGC Lab
System Check Head 5200 MHz
DUT: Dipole 5000MHz Type: SWG5500

Date: Aug. 28,2019

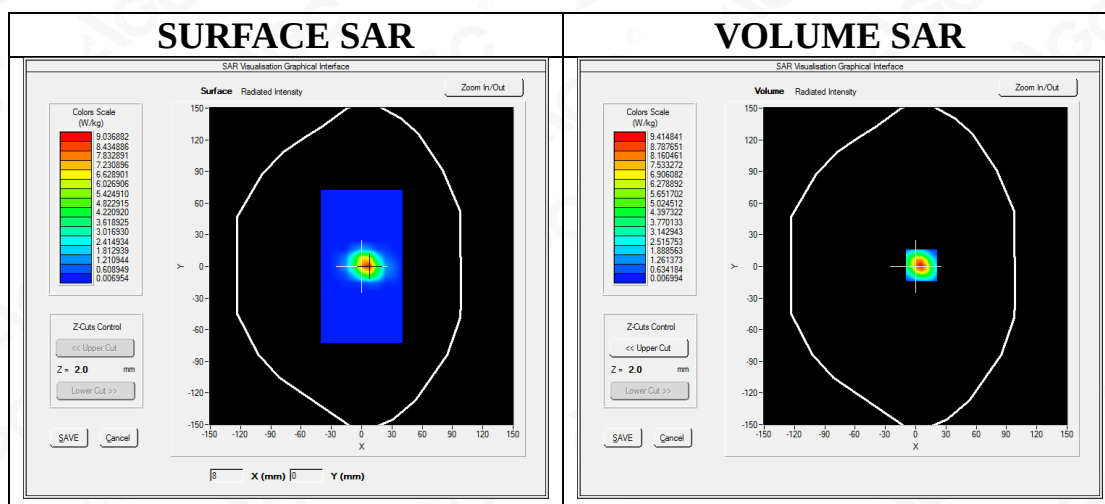
Communication System: CW; Communication System Band: D5000 (5000.0 MHz); Duty Cycle: 1:1; Conv.F=2.46
Frequency: 5200 MHz; Medium parameters used: $f = 5200$ MHz; $\sigma = 4.61$ mho/m; $\epsilon_r = 35.64$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=15dBm
Ambient temperature (°C): 20.6, Liquid temperature (°C): 20.3

SATIMO Configuration:

- Probe: SSE2; Calibrated: Mar. 25,2019; Serial No.: SN 45/15 EPGO281
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/System Check 5200 Head/Area Scan: Measurement grid: dx=8mm,dy=8mm

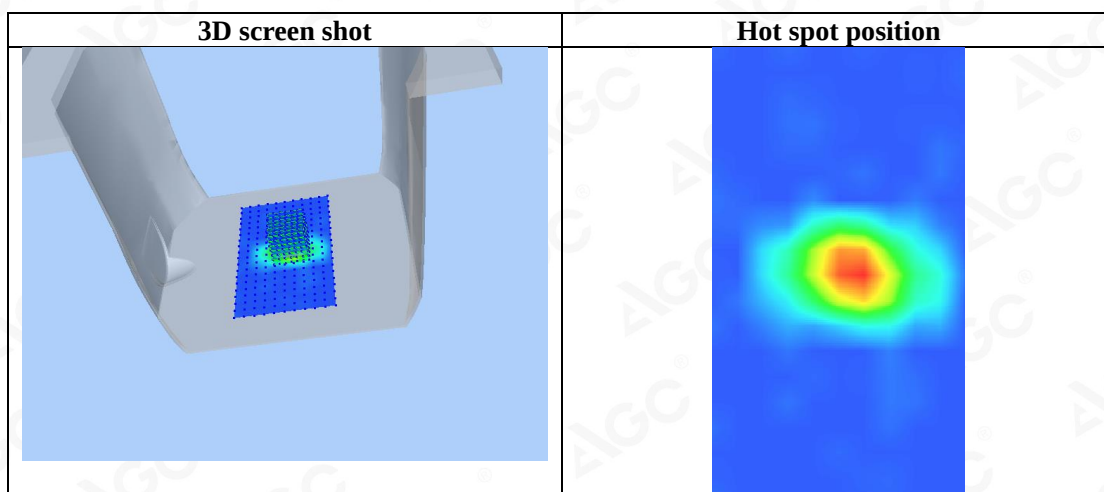
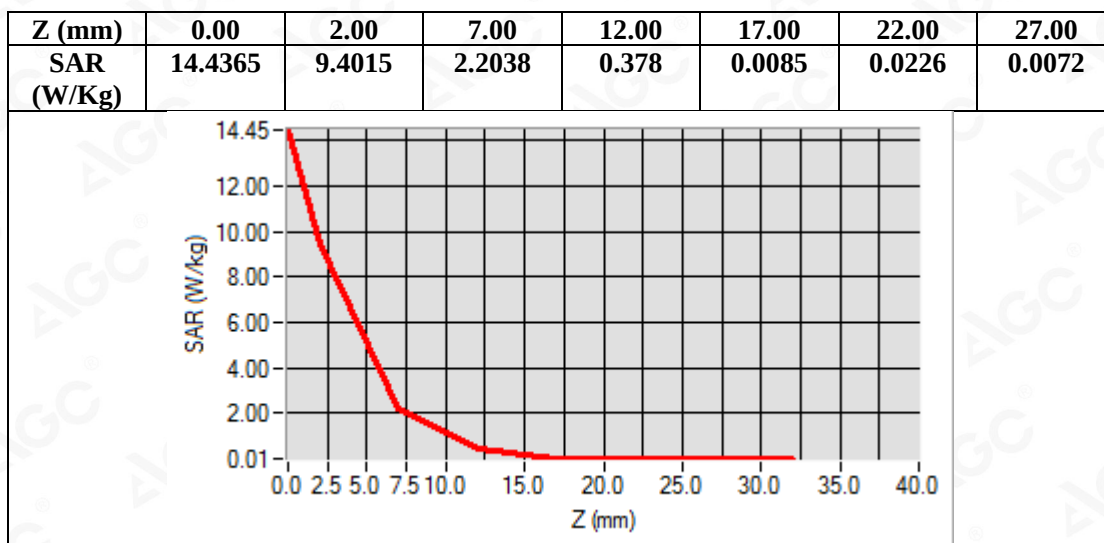
Configuration/System Check 5200 Head/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=6.00, Y=1.00

SAR Peak: 15.09 W/kg

SAR 10g (W/Kg)	1.742684
SAR 1g (W/Kg)	5.052657



Test Laboratory: AGC Lab
System Check Body 5200 MHz
DUT: Dipole 5000MHz Type: SWG5500

Date: Aug. 28,2019

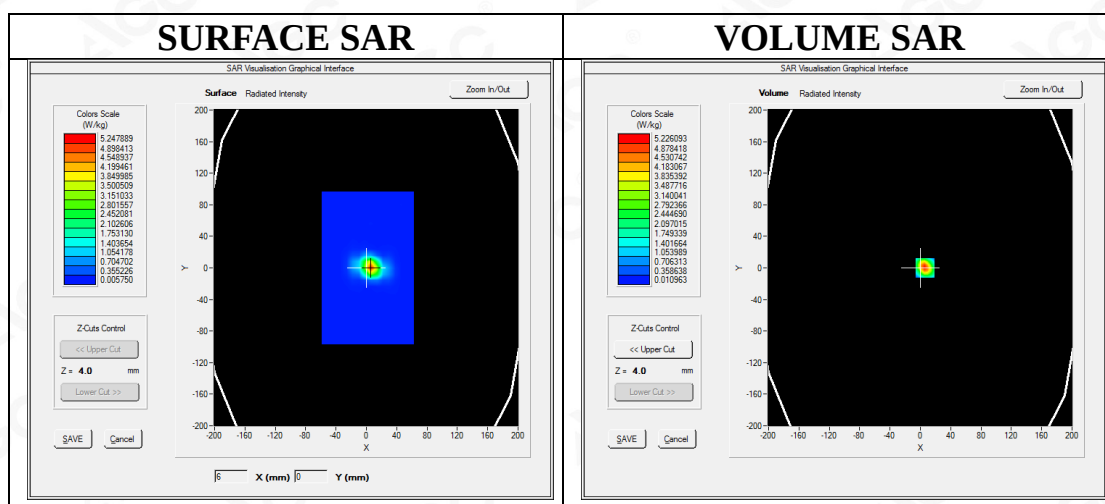
Communication System: CW; Communication System Band: D5000 (5000.0 MHz); Duty Cycle: 1:1; Conv.F=2.52
Frequency: 5200 MHz; Medium parameters used: $f = 5200$ MHz; $\sigma = 5.32$ mho/m; $\epsilon_r = 48.90$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=15dBm
Ambient temperature (°C): 20.6, Liquid temperature (°C): 20.4

SATIMO Configuration:

- Probe: SSE2; Calibrated: Mar. 25,2019; Serial No.: SN 45/15 EPGO281
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/System Check 5200 Body/Area Scan: Measurement grid: dx=8mm,dy=8mm

Configuration/System Check 5200 Body /Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=6.00, Y=0.00

SAR Peak: 12.84 W/kg

SAR 10g (W/Kg)	1.648521
SAR 1g (W/Kg)	4.884215



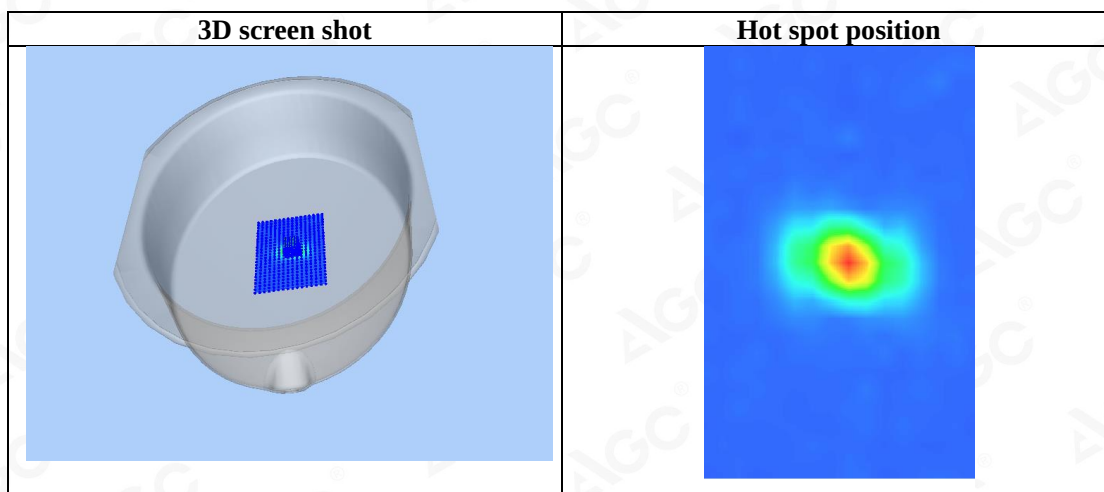
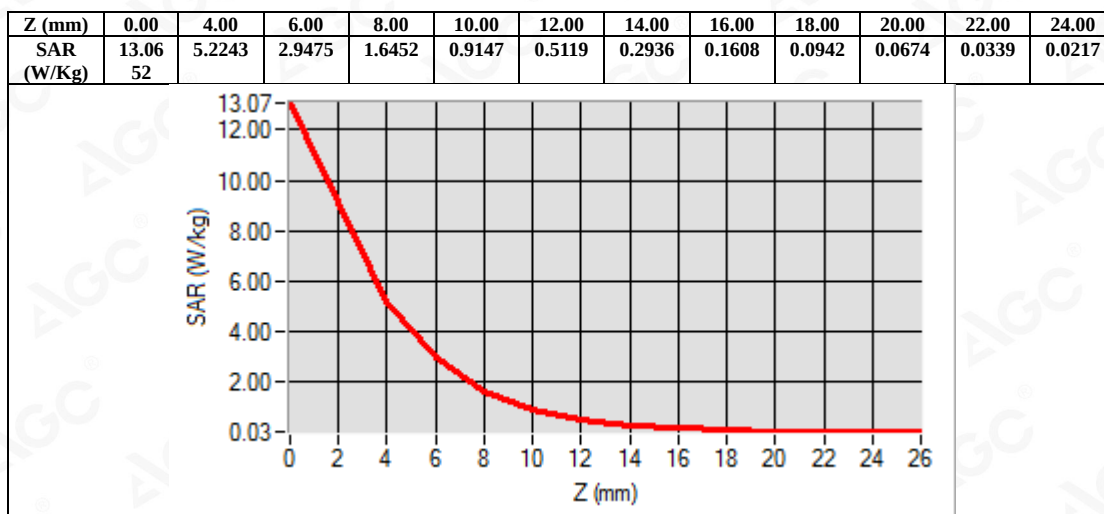
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



APPENDIX B. SAR MEASUREMENT DATA

Test Laboratory: AGC Lab

GSM 850 Mid-Touch-Left <SIM 1>

DUT: Smart Phone; Type: X19

Date: Aug. 04,2019

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.29;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.92$ mho/m; $\epsilon_r = 40.74$; $\rho = 1000$ kg/m³;
Phantom section: Left Section
Ambient temperature (°C): 21.2, Liquid temperature (°C): 20.8

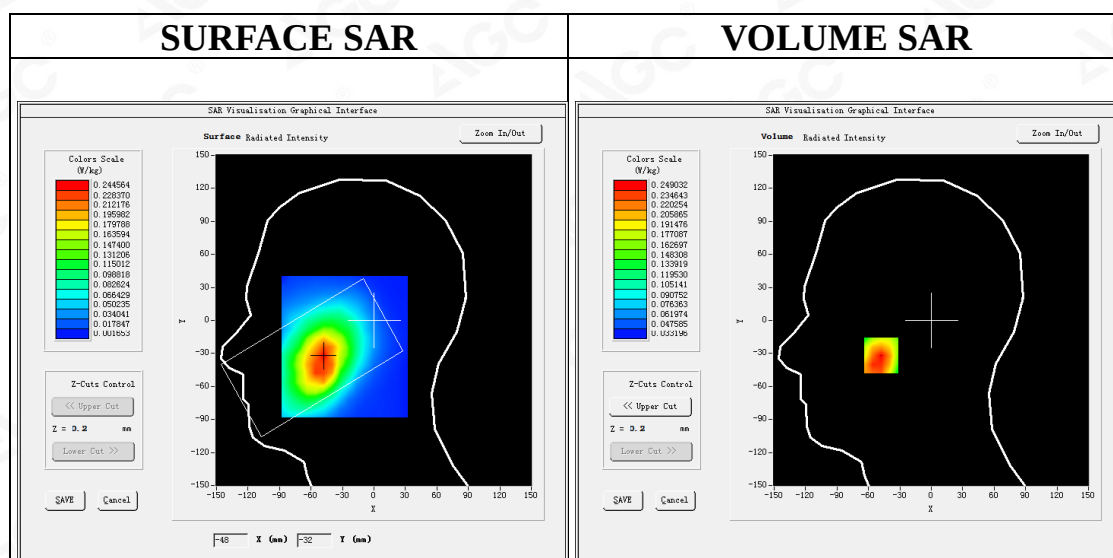
SATIMO Configuration

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

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

Configuration/GSM 850 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	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-48.00, Y=-32.00

SAR Peak: 0.32 W/kg

SAR 10g (W/Kg)	0.176407
SAR 1g (W/Kg)	0.241911



Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



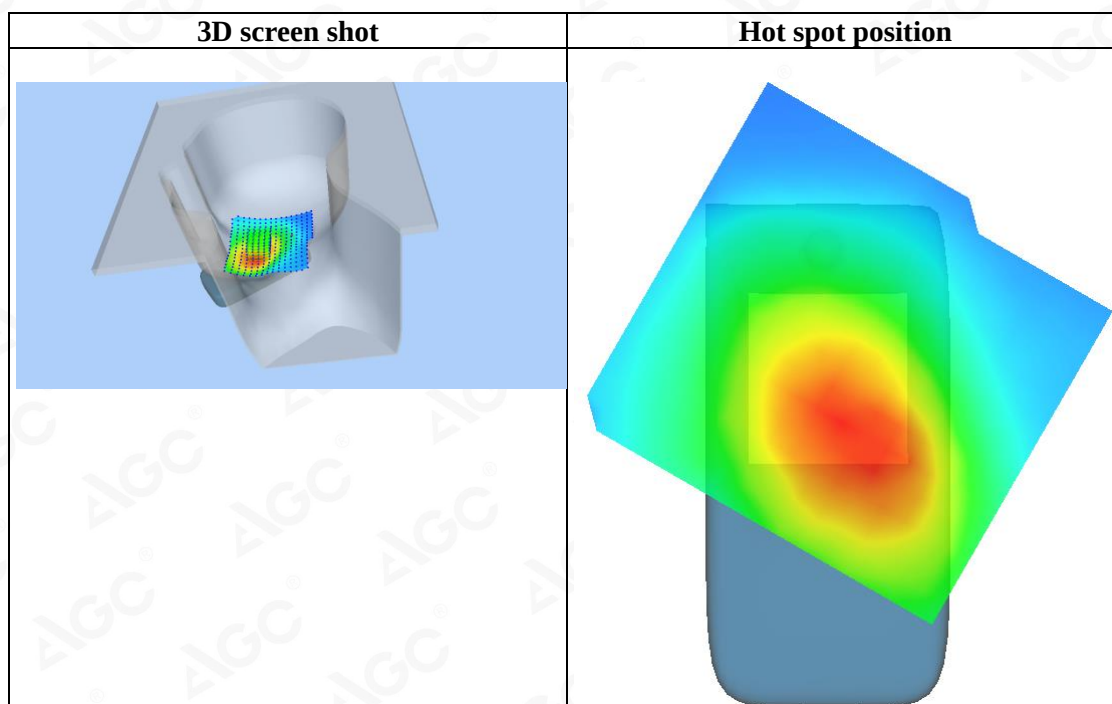
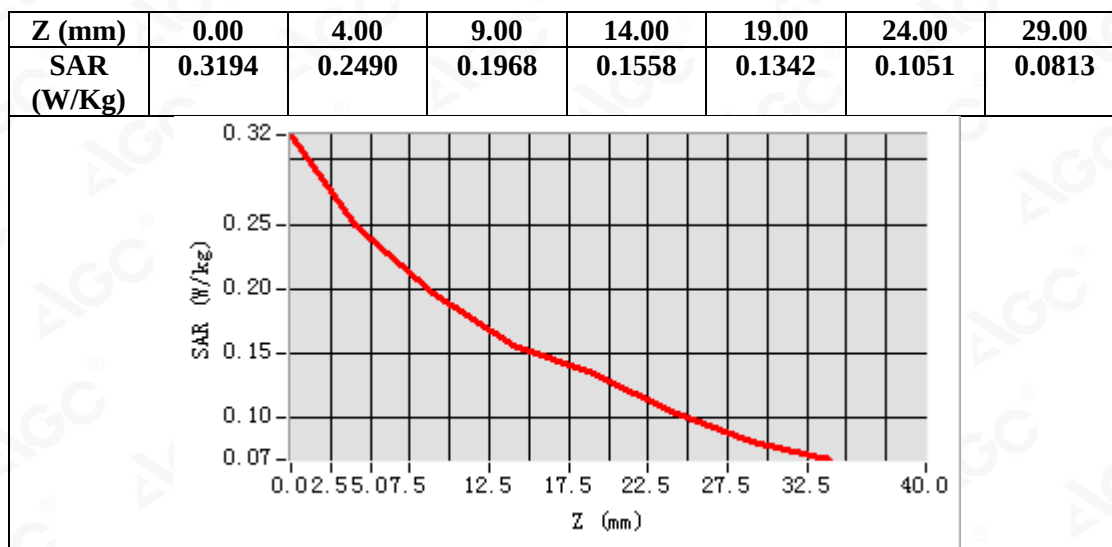
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
GPRS 850 Mid- Body- Back (2up)
DUT: Smart Phone; Type: X19

Date: Aug. 04,2019

Communication System: GPRS-2 Slot; Communication System Band: GSM 850; Duty Cycle: 1:4.2; Conv.F=5.49;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.96$ mho/m; $\epsilon_r = 54.08$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.2, Liquid temperature (°C): 20.9

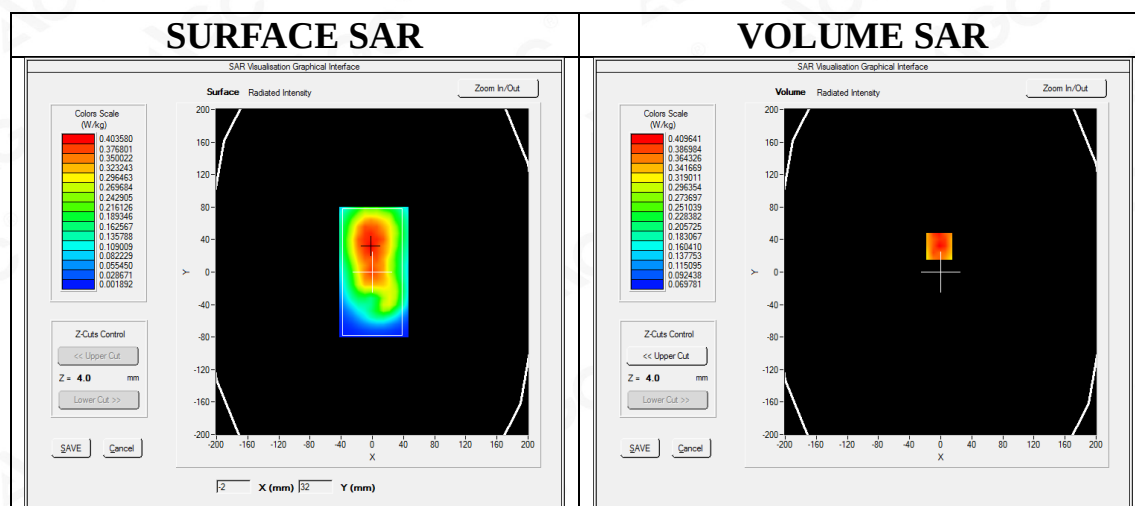
SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- 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: 4.0)



Maximum location: X=-2.00, Y=32.00

SAR Peak: 0.53 W/kg

SAR 10g (W/Kg)	0.294576
SAR 1g (W/Kg)	0.397423



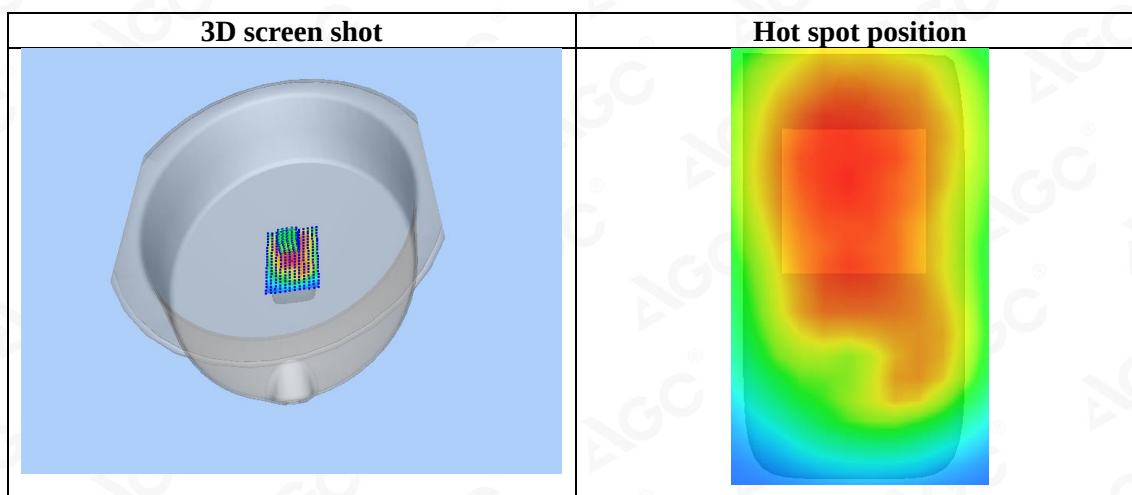
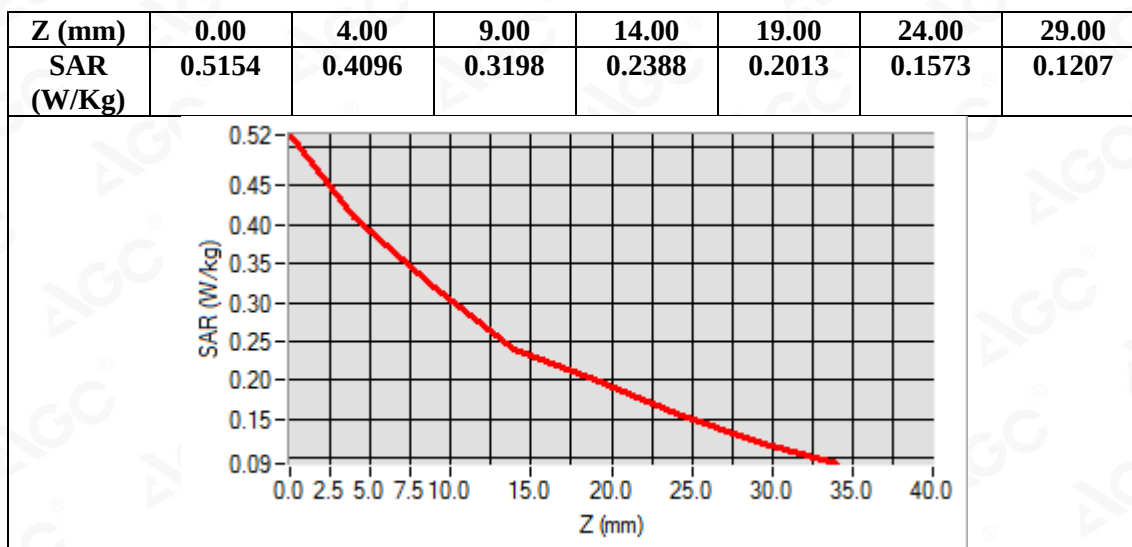
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
PCS 1900 Mid-Touch-Right <SIM 1>
DUT: Smart Phone; Type: X19

Date: Aug. 08,2019

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=5.24;
Frequency: 1880 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.40$ mho/m; $\epsilon_r = 40.45$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.1, Liquid temperature (°C): 20.8

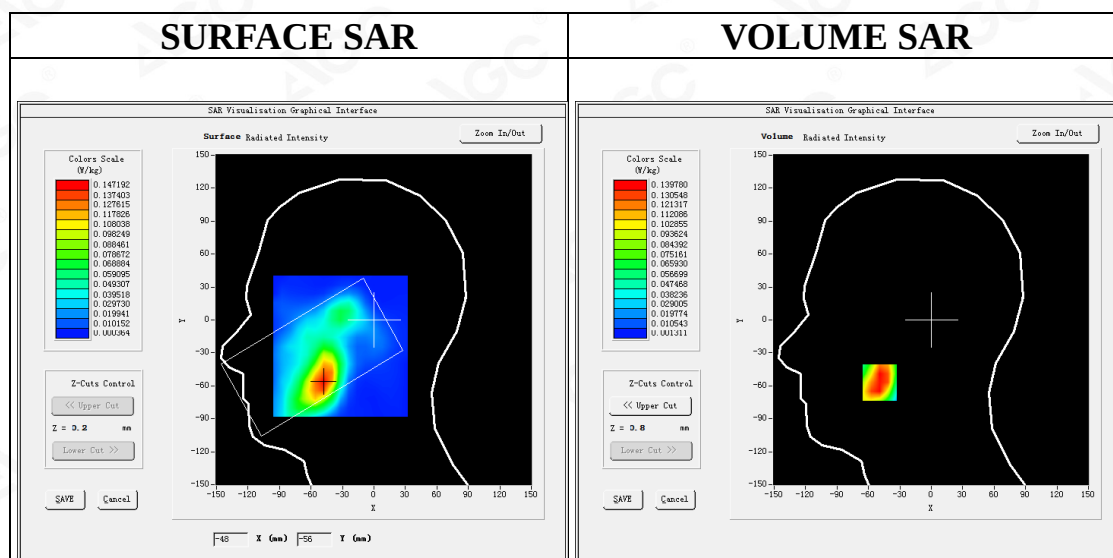
SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

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

Configuration/PCS1900 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	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-49.00, Y=-57.00

SAR Peak: 0.21 W/kg

SAR 10g (W/Kg)	0.080286
SAR 1g (W/Kg)	0.134726



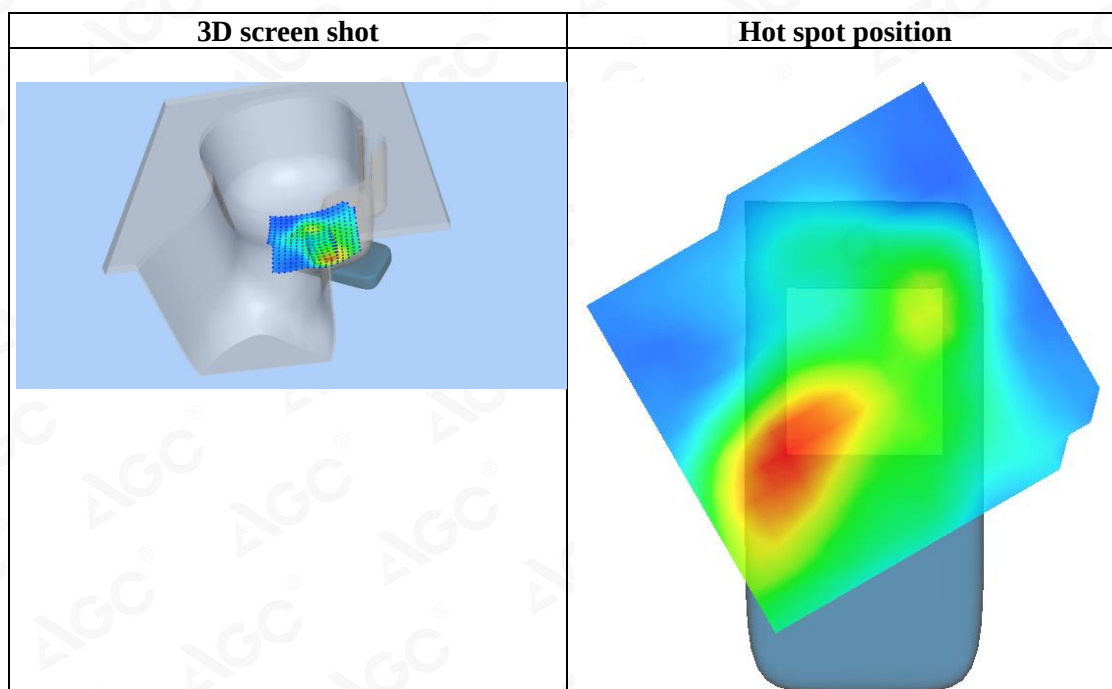
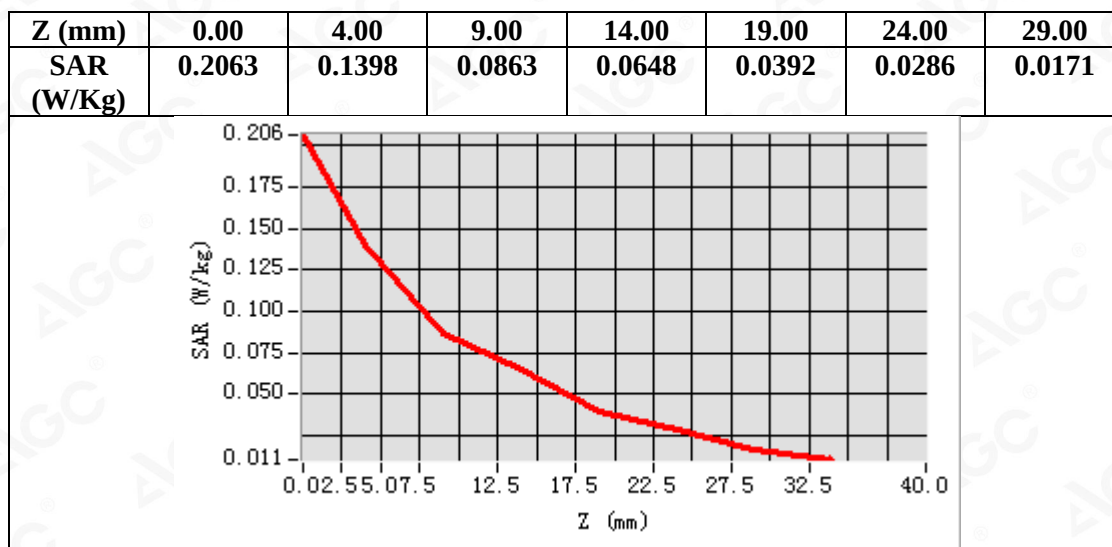
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
GPRS 1900 Mid-Body-Back (3up)
DUT: Smart Phone; Type: X19

Date: Aug. 08,2019

Communication System: GPRS-3Slot; Communication System Band: PCS 1900; Duty Cycle: 1:4.2; Conv.F=5.39;
Frequency: 1880 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 53.26$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.1, Liquid temperature (°C): 20.7

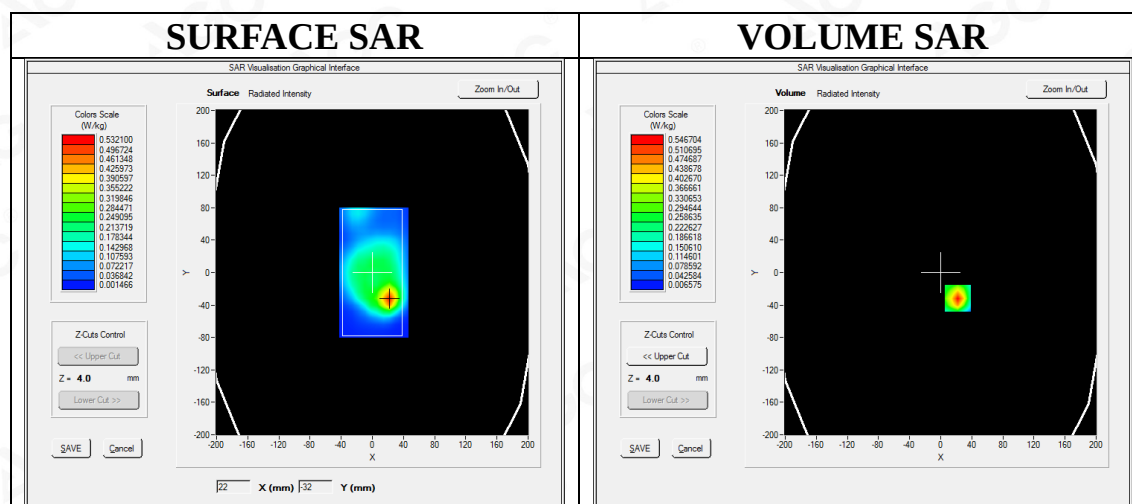
SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

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

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

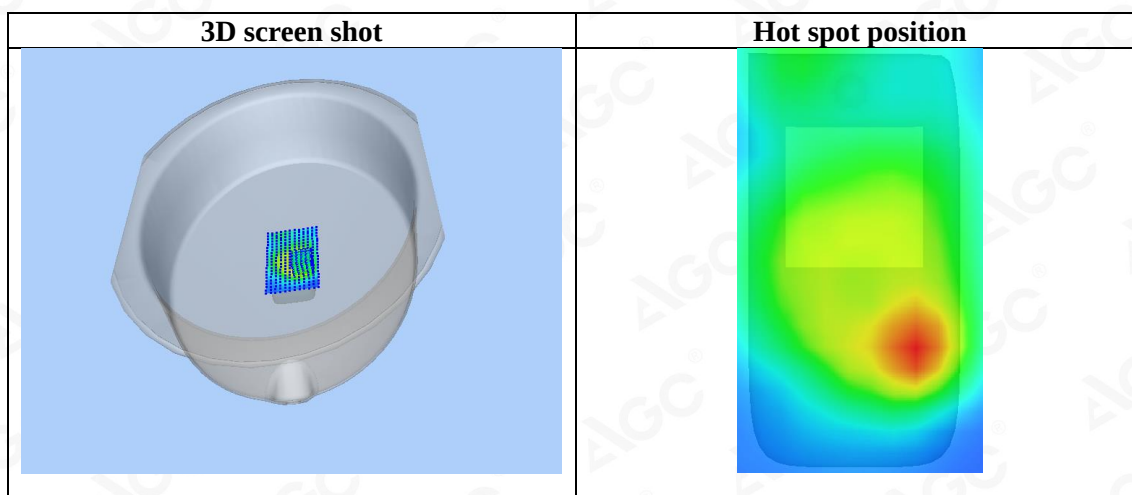
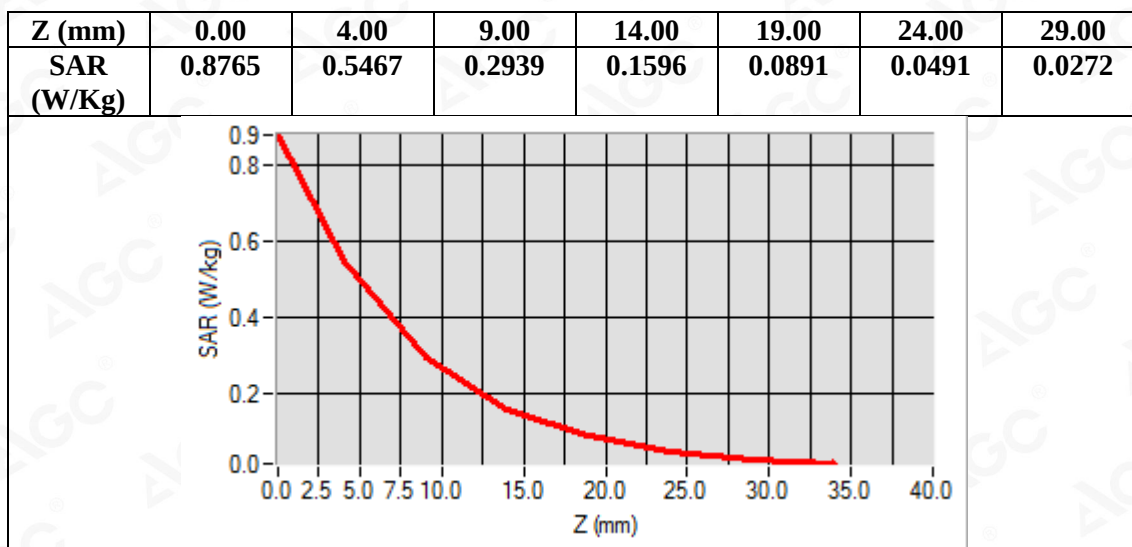
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	ELLI
Device Position	Body Back
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 4.0)



Maximum location: X=22.00, Y=-32.00

SAR Peak: 0.88 W/kg

SAR 10g (W/Kg)	0.251130
SAR 1g (W/Kg)	0.503105



Test Laboratory: AGC Lab
WCDMA Band II Mid-Touch-Right (RMC)
DUT: Smart Phone; Type: X19

Date: Aug. 08,2019

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=5.24;
Frequency: 1880 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.40$ mho/m; $\epsilon_r = 40.45$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.1, Liquid temperature (°C): 20.8

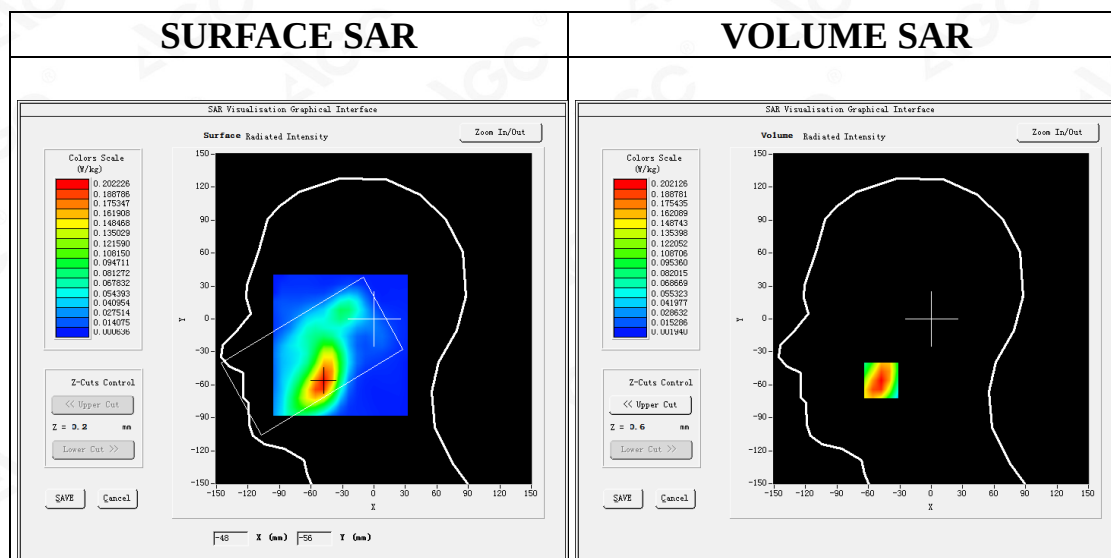
SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

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

Configuration/WCDMA band II 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	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



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

SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)	0.114386
SAR 1g (W/Kg)	0.193664



Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



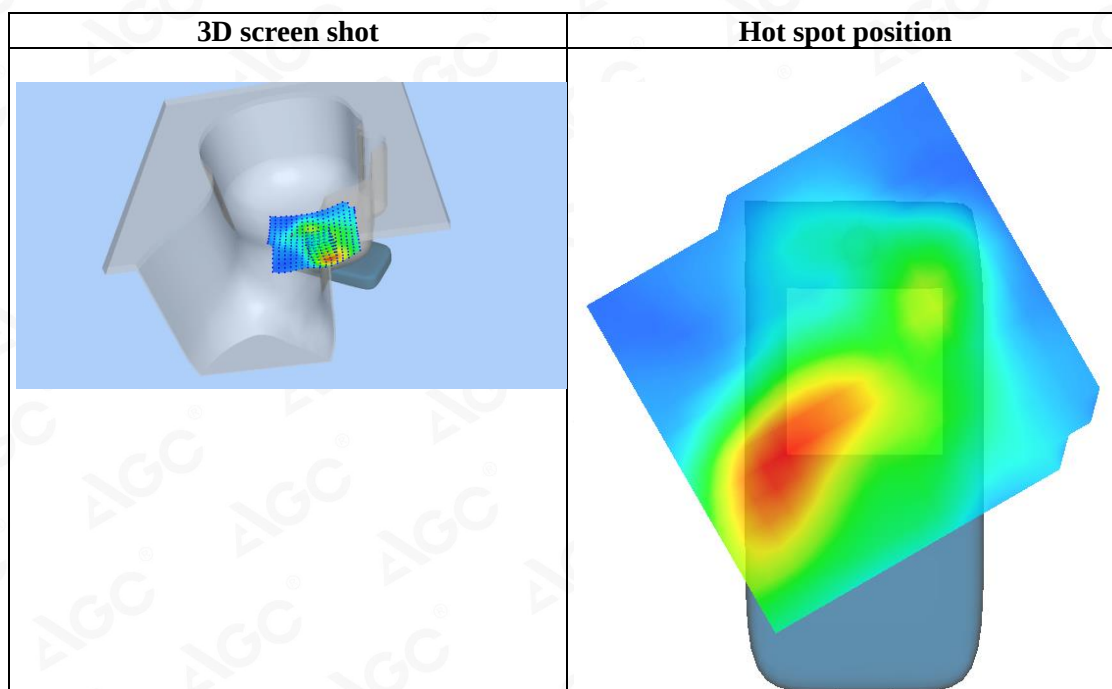
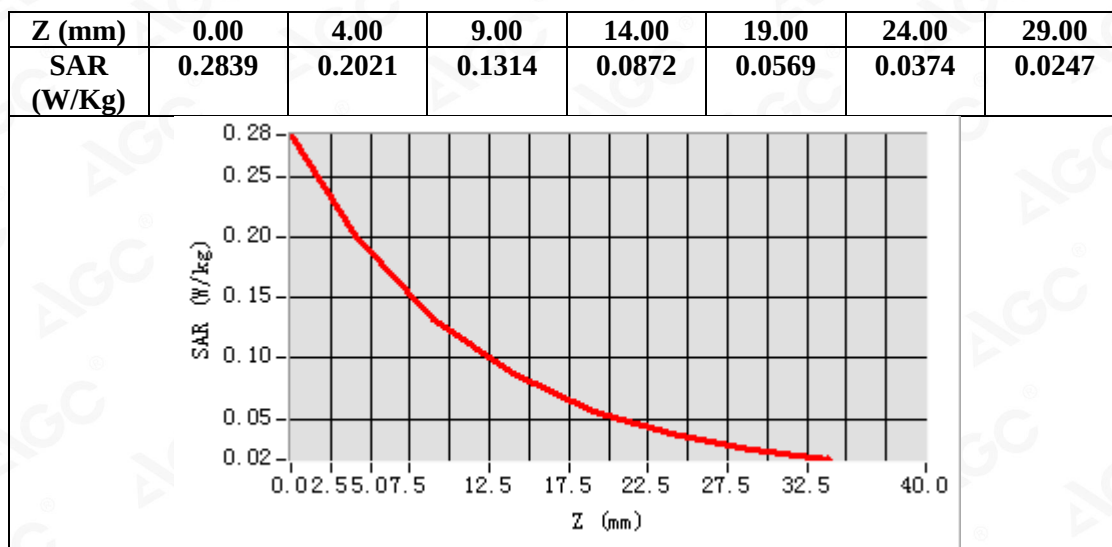
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
WCDMA Band II Mid-Body-Towards Grounds (RMC 12.2kbps)
DUT: Smart Phone; **Type:** X19

Date: Aug. 08,2019

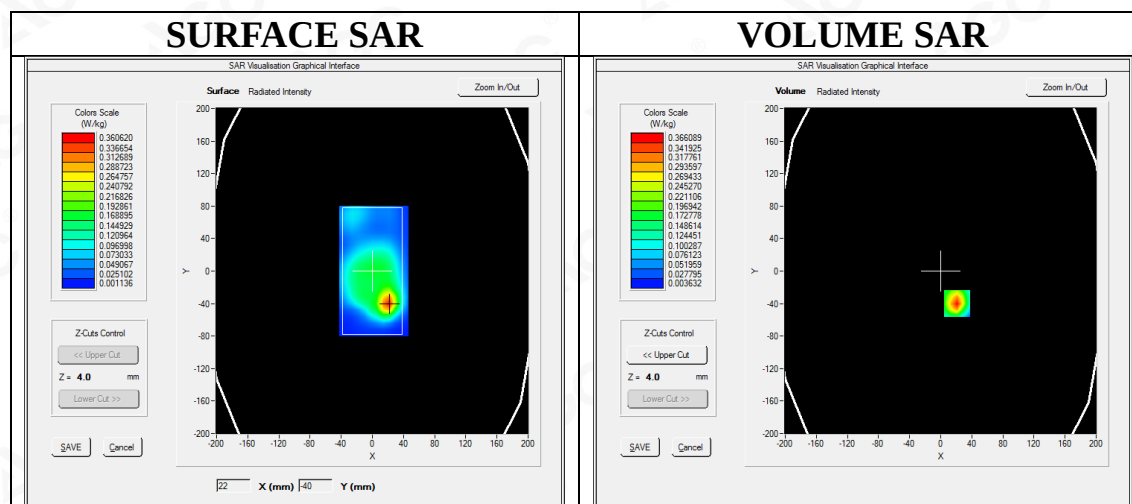
Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=5.39;
Frequency: 1880 MHz; Medium parameters used: $f = 1850$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 53.26$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.1, Liquid temperature (°C): 20.7

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ WCDMA band II Mid-Body-back/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ WCDMA band II 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	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=21.00, Y=-40.00

SAR Peak: 0.59 W/kg

SAR 10g (W/Kg)	0.169767
SAR 1g (W/Kg)	0.340809



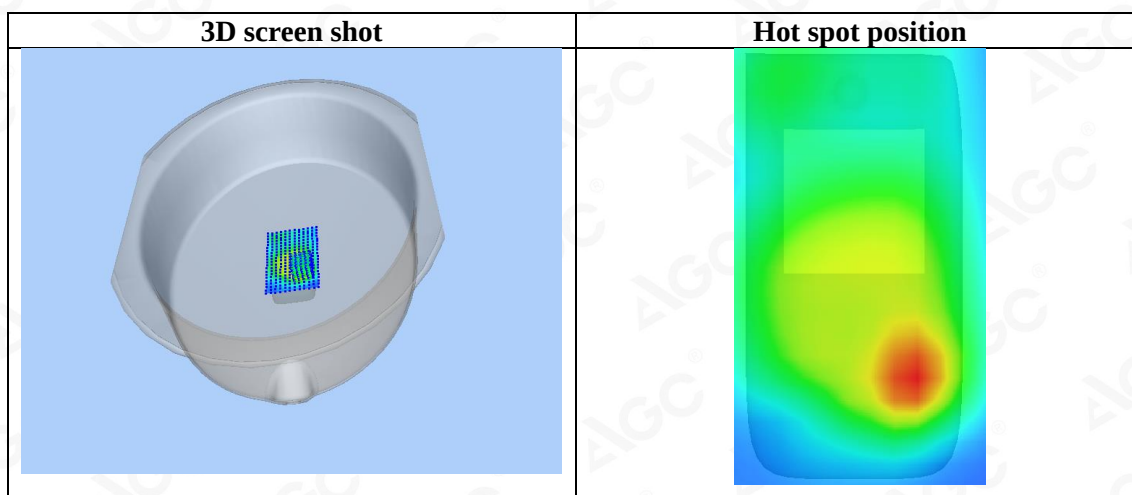
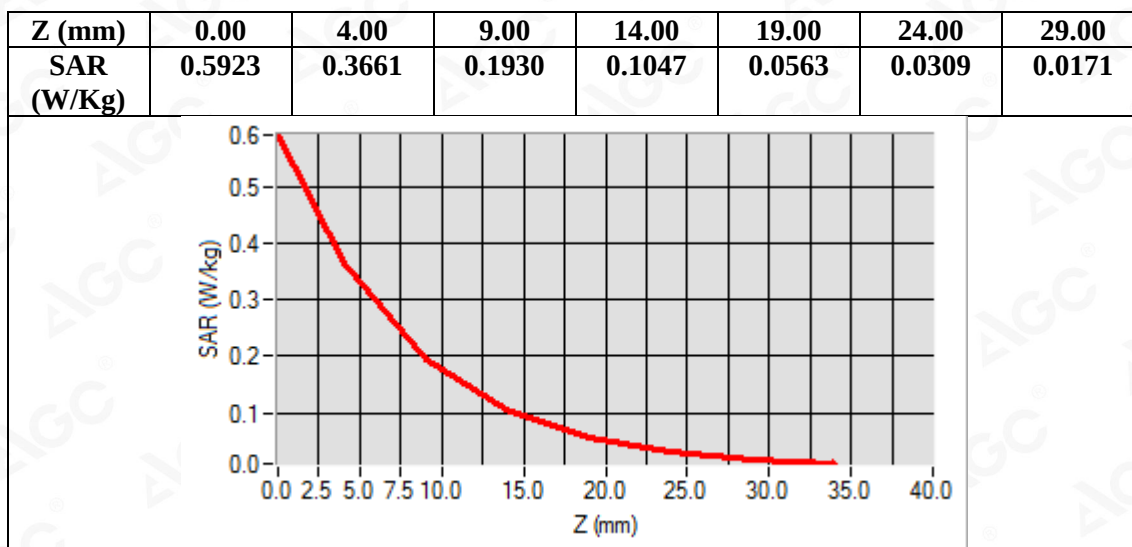
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab

Date: Aug. 04,2019

WCDMA Band V Mid-Touch-Left (RMC)

DUT: Smart Phone; Type: X19

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.29;
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.92\text{ mho/m}$; $\epsilon_r = 40.74$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Left Section
Ambient temperature ($^{\circ}\text{C}$): 21.2, Liquid temperature ($^{\circ}\text{C}$): 20.8

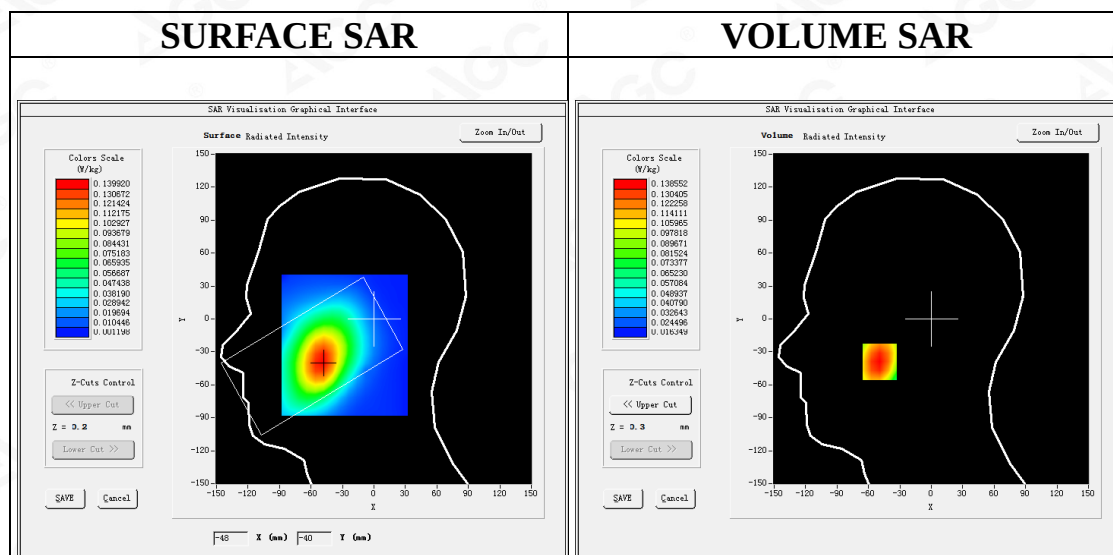
SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

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

Configuration/ WCDMA Band V Mid-Touch-Left/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	Left head
Device Position	Cheek
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-49.00, Y=-39.00

SAR Peak: 0.17 W/kg

SAR 10g (W/Kg)	0.101769
SAR 1g (W/Kg)	0.134705



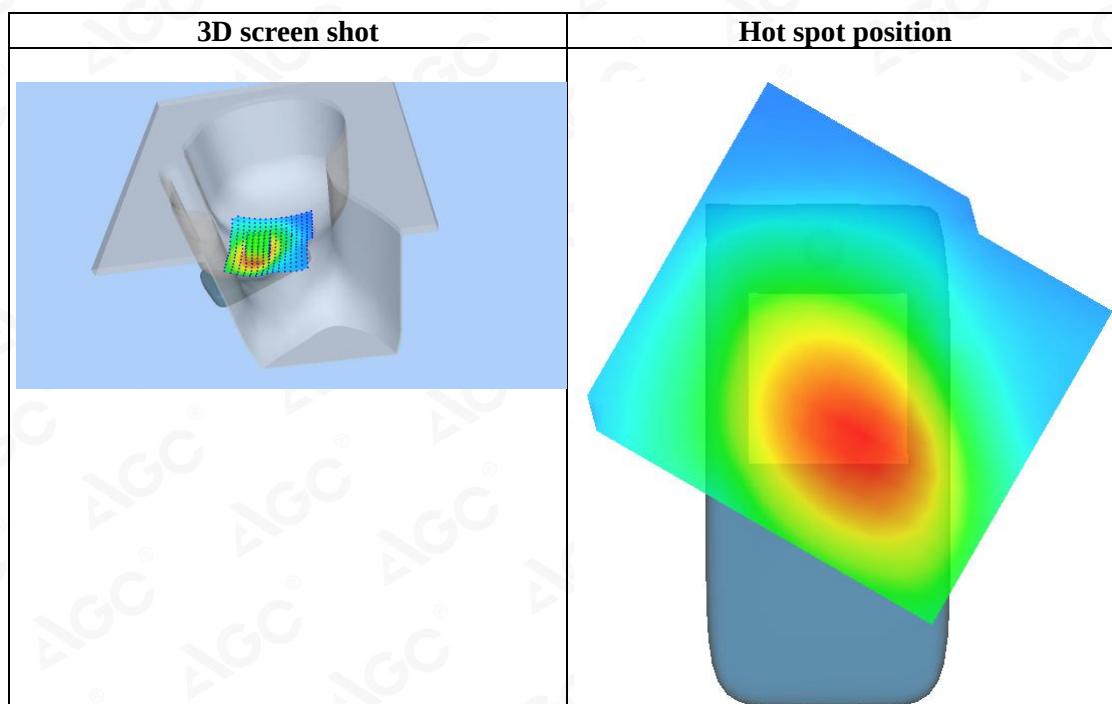
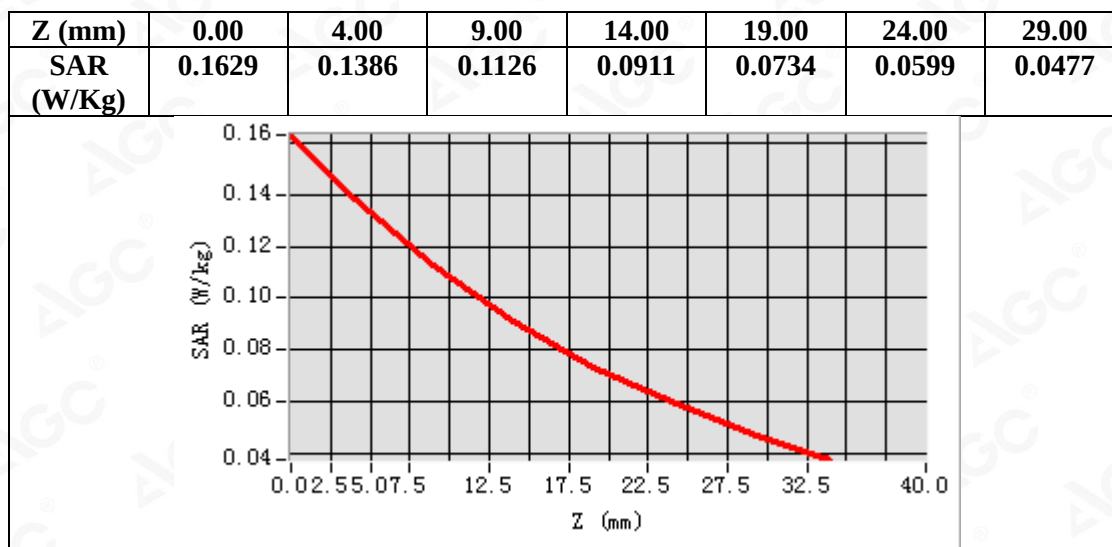
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab

Date: Aug. 04,2019

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

DUT: Smart Phone; Type: X19

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD; Duty Cycle:1: 1; Conv.F=5.49;
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.96\text{ mho/m}$; $\epsilon_r = 54.08$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 21.2, Liquid temperature ($^{\circ}\text{C}$): 20.9

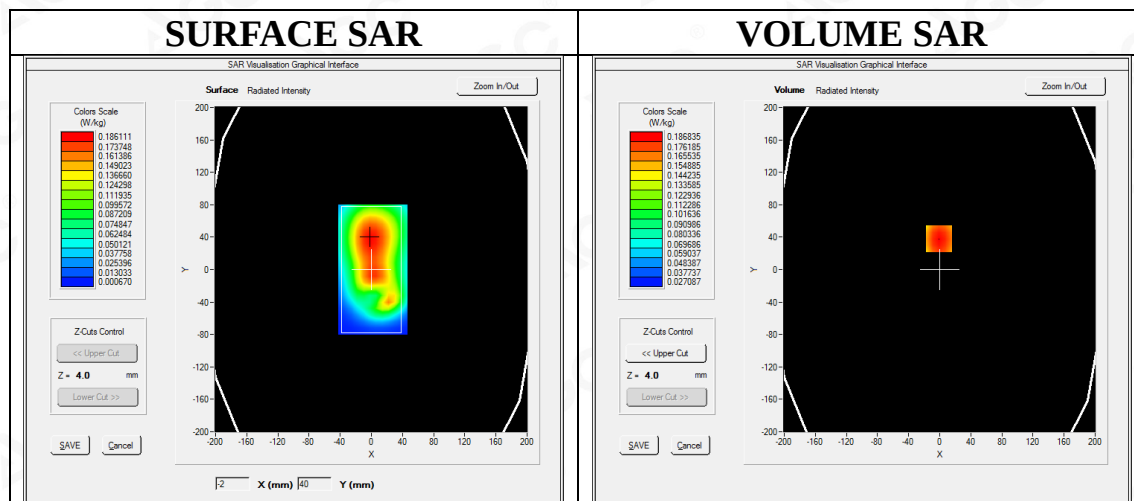
SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- 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: $X=-1.00$, $Y=38.00$

SAR Peak: 0.23 W/kg

SAR 10g (W/Kg)	0.135748
SAR 1g (W/Kg)	0.181190



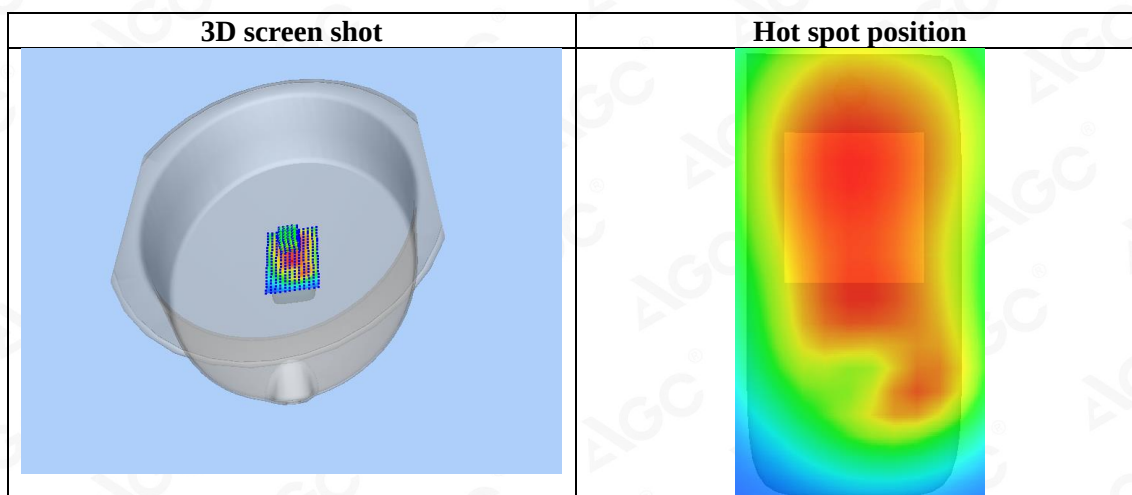
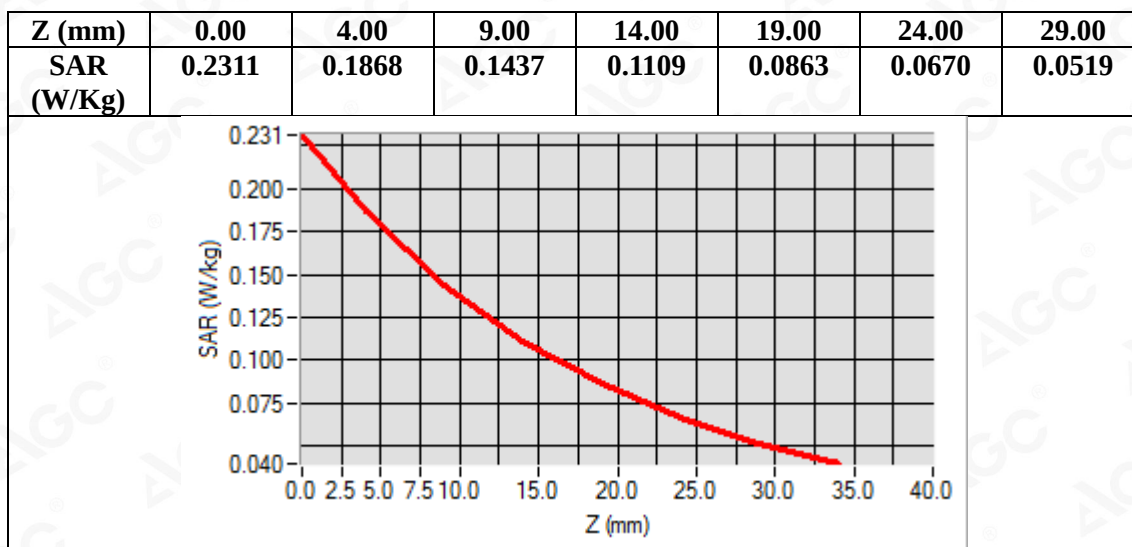
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
LTE Band 2 Mid-Touch-Right (1 RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 04,2019

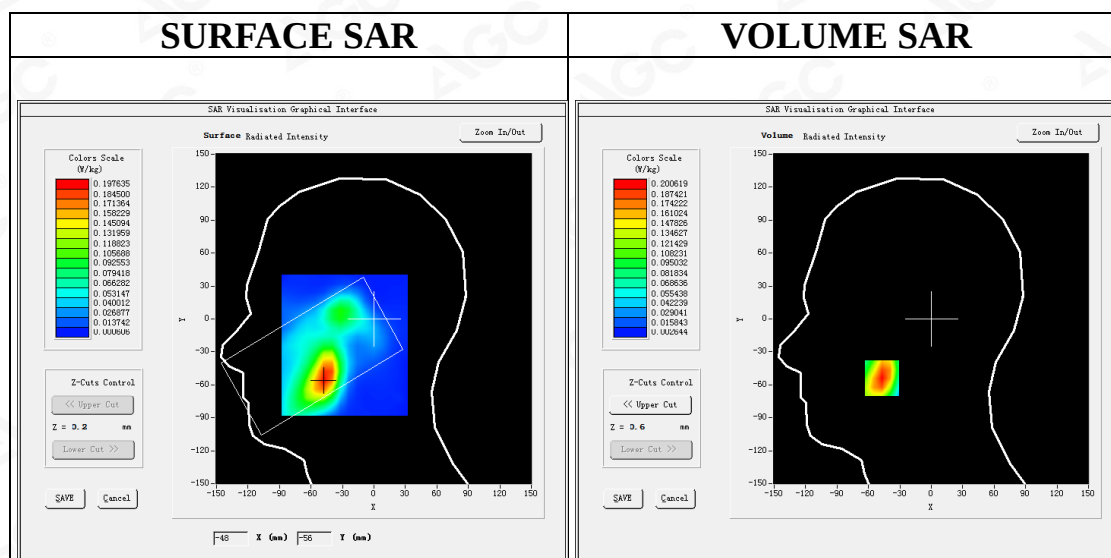
Communication System: LTE; Communication System Band: LTE Band 2; Duty Cycle:1:1; Conv.F=5.24;
Frequency:1880MHz; Medium parameters used: $f=1900\text{ MHz}$; $\sigma = 1.41\text{ mho/m}$; $\epsilon_r = 39.41$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Right Section
Ambient temperature ($^{\circ}\text{C}$): 21.2, Liquid temperature ($^{\circ}\text{C}$): 20.9

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 2 Mid- Touch-Right /Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ LTE Band 2 Mid- Touch-Right /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 head
Device Position	Cheek
Band	LTE Band 2
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=-47.00, Y=-54.00

SAR Peak: 0.28 W/kg

SAR 10g (W/Kg)	0.110247
SAR 1g (W/Kg)	0.188670



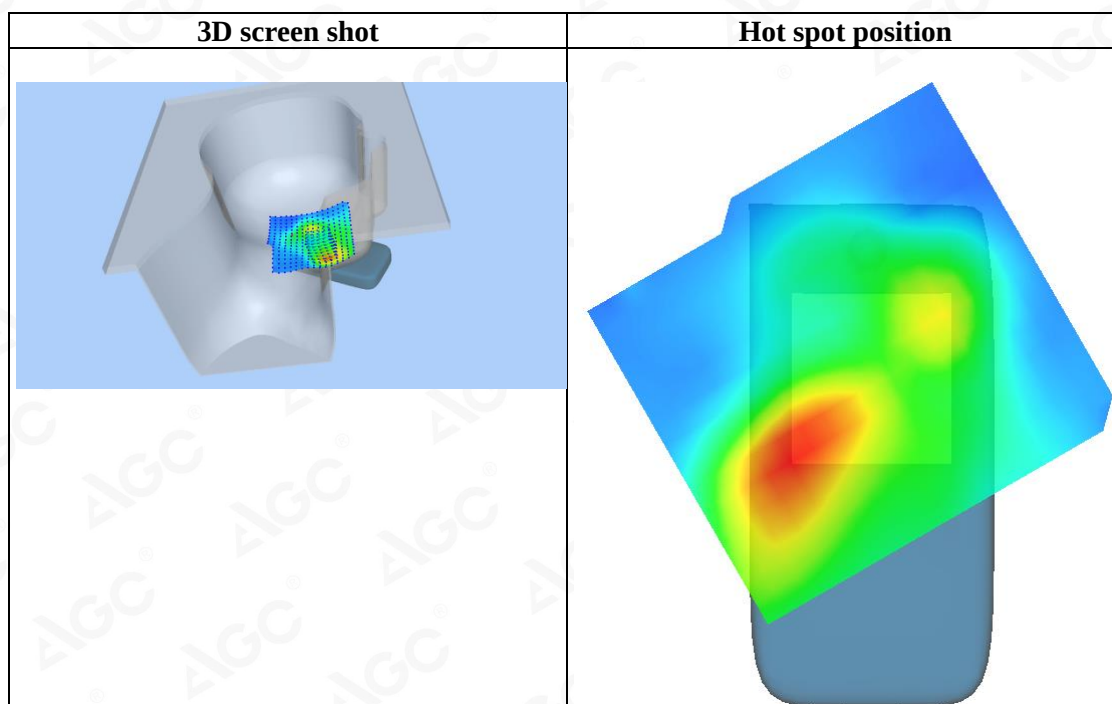
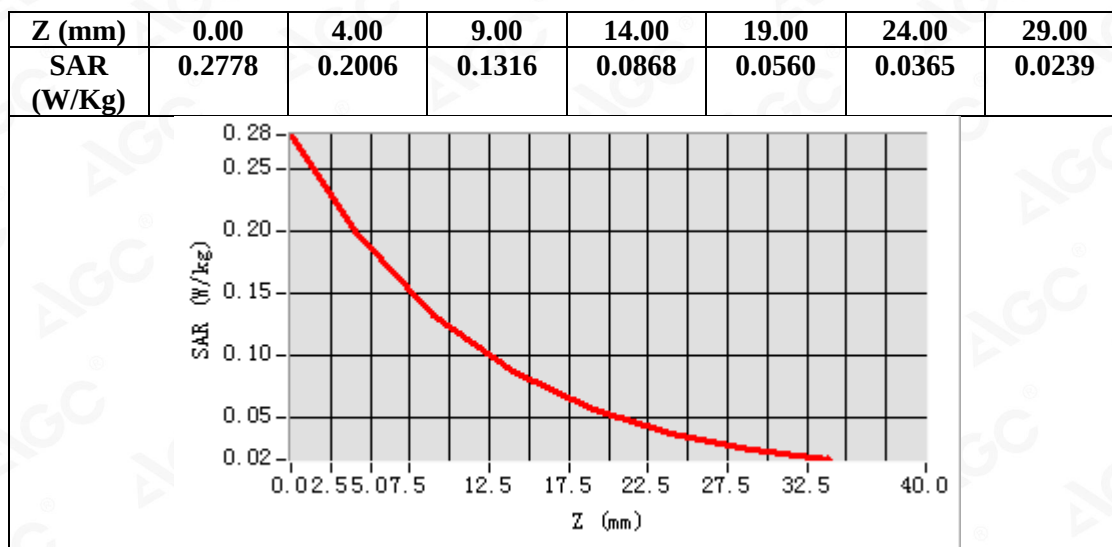
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
LTE Band 2 Mid-Body-Back (1 RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 04,2019

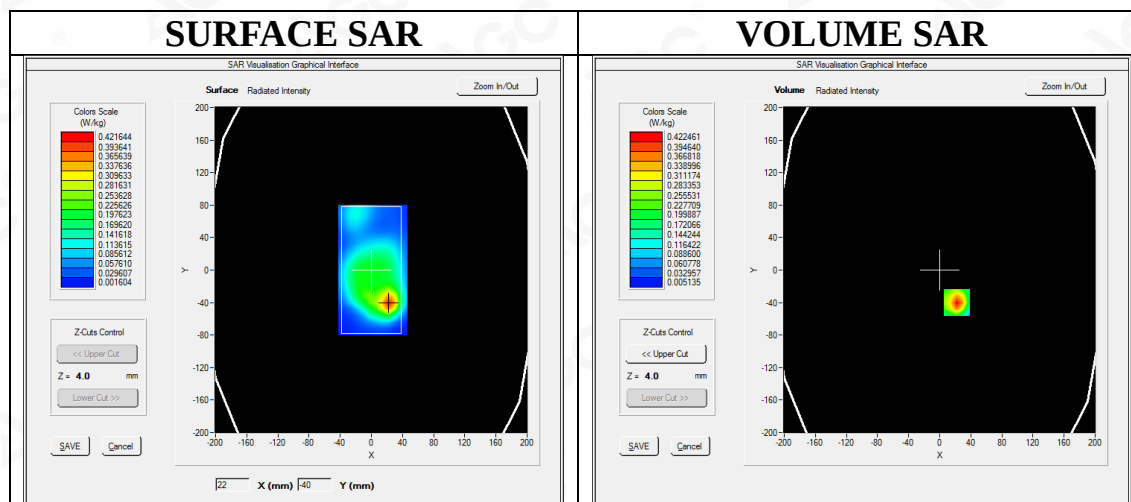
Communication System: LTE; Communication System Band: LTE Band 2; Duty Cycle:1:1; Conv.F=5.39;
Frequency:1880MHz; Medium parameters used: $f = 1850 \text{ MHz}$; $\sigma = 1.46 \text{ mho/m}$; $\epsilon_r = 51.69$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 21.2, Liquid temperature ($^{\circ}\text{C}$): 20.8

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 2 Mid-Body-back/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ LTE Band 2 Mid-Body-back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

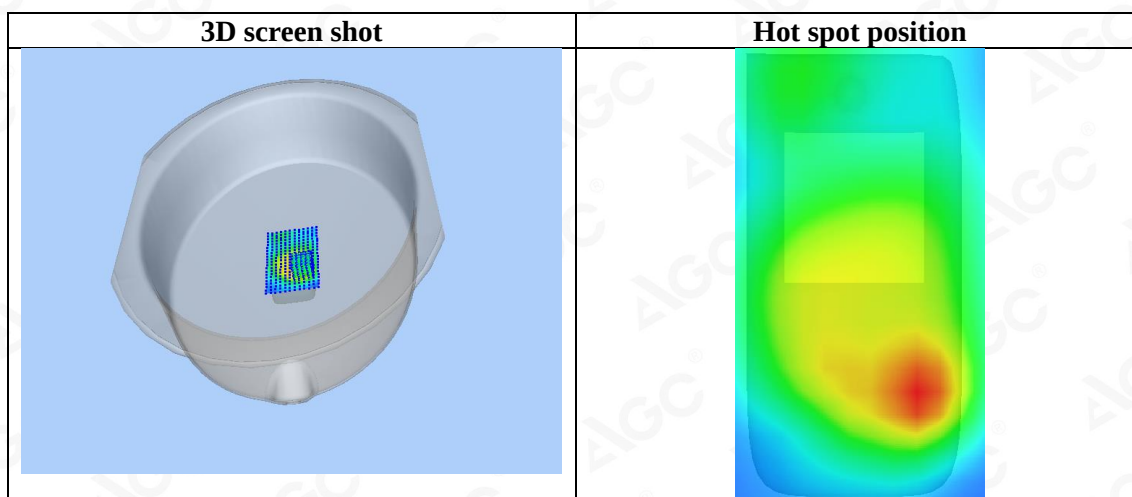
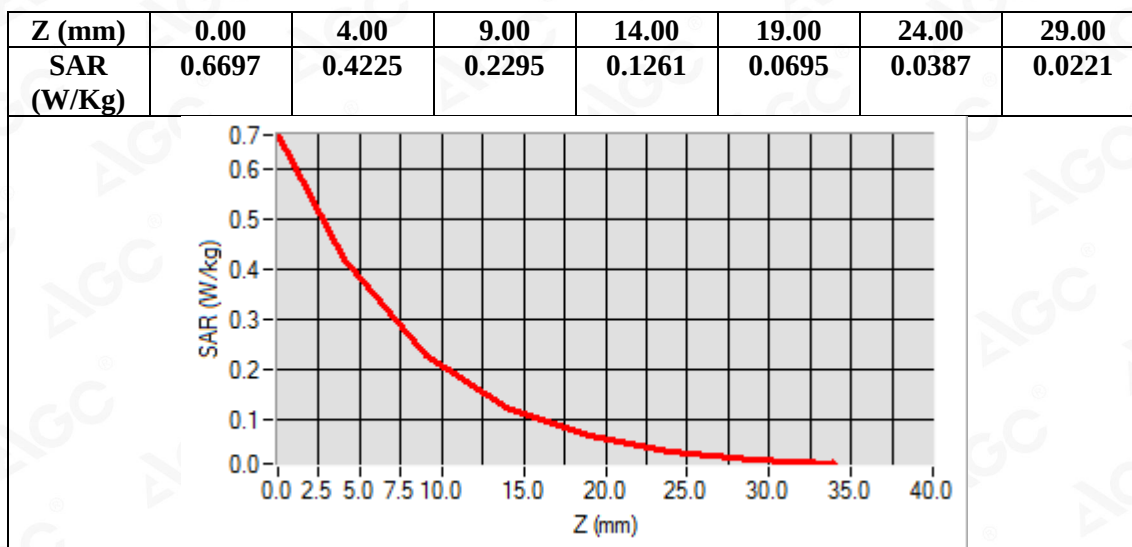
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	ELLI
Device Position	Body Back
Band	LTE Band 2
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=22.00, Y=-40.00

SAR Peak: 0.68 W/kg

SAR 10g (W/Kg)	0.202292
SAR 1g (W/Kg)	0.398568



Test Laboratory: AGC Lab
LTE Band 4 Mid-Touch-Left (1 RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 03,2019

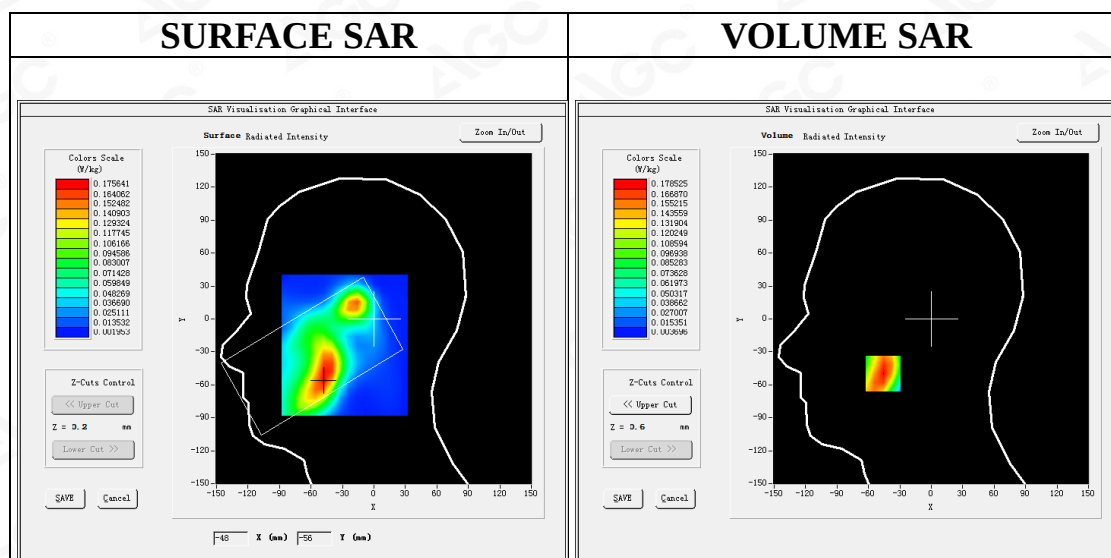
Communication System: LTE; Communication System Band: LTE Band 4; Duty Cycle:1:1; Conv.F=4.71;
Frequency:1732.5 MHz; Medium parameters used: $f=1750$ MHz; $\sigma=1.36$ mho/m; $\epsilon_r=40.45$; $\rho=1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 20.8, Liquid temperature (°C): 20.5

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 4 Mid- Touch-Right /Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ LTE Band 4 Mid- Touch-Right /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 head
Device Position	Cheek
Band	LTE Band 4
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=-46.00, Y=-50.00

SAR Peak: 0.24 W/kg

SAR 10g (W/Kg)	0.105584
SAR 1g (W/Kg)	0.169025



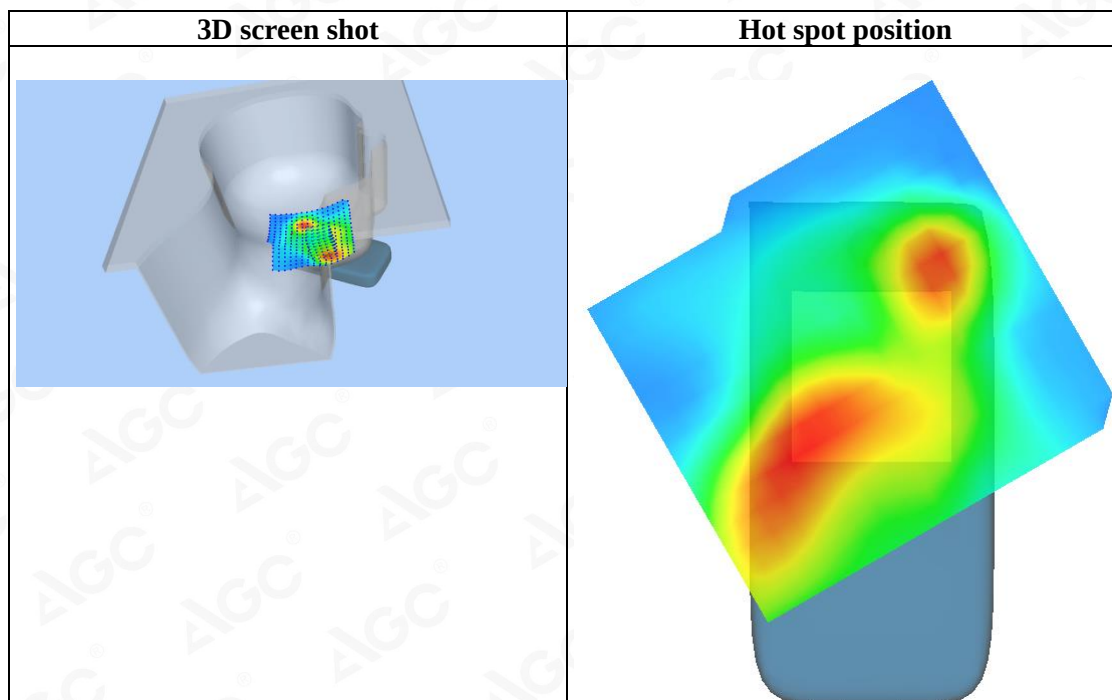
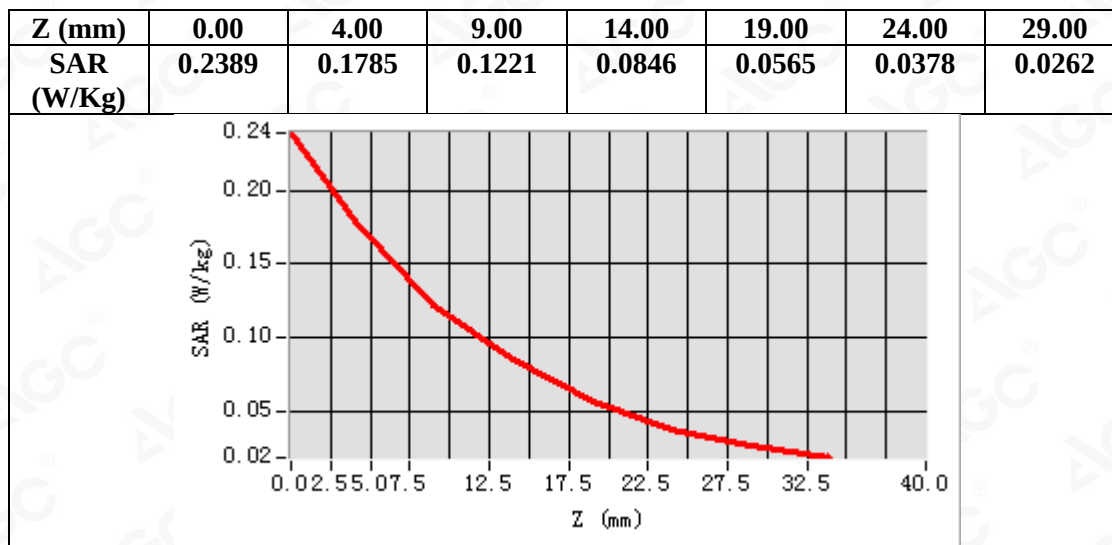
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
LTE Band 4 Mid-Body-Back (1 RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 03,2019

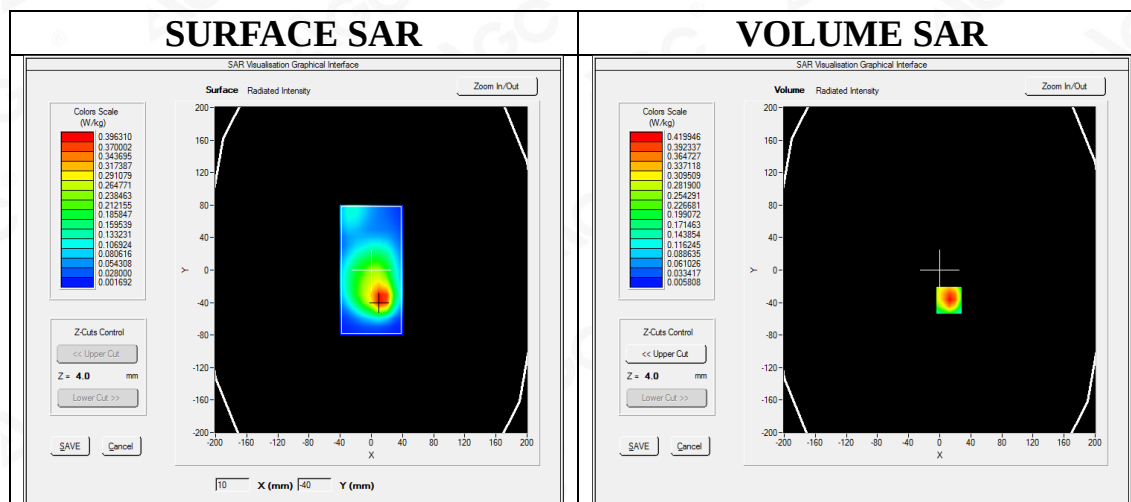
Communication System: LTE; Communication System Band: LTE Band 4; Duty Cycle:1:1; Conv.F=4.81;
Frequency:1732.5 MHz; Medium parameters used: $f = 1750$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 53.54$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 20.8, Liquid temperature (°C): 20.5

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

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

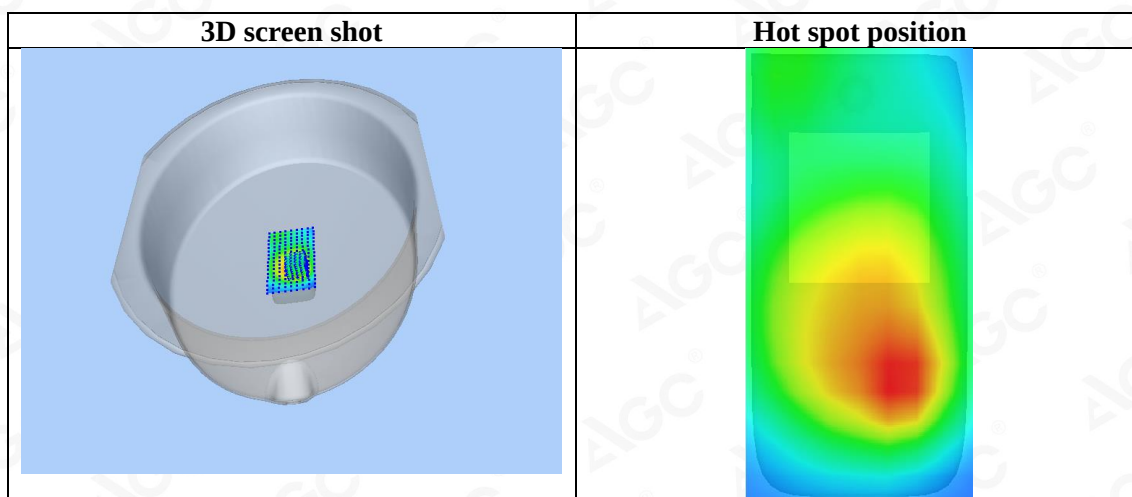
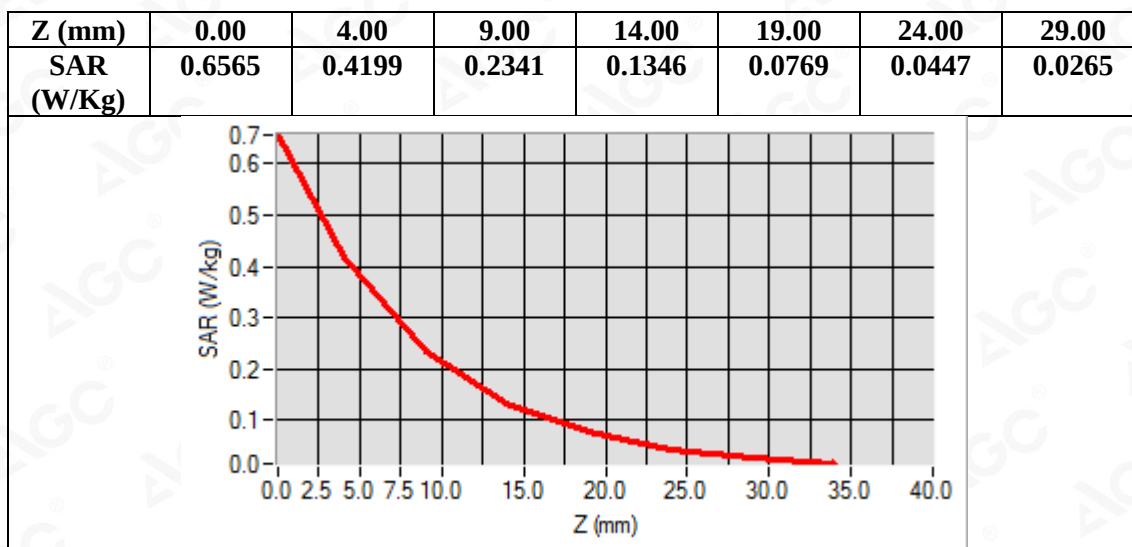
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	ELLI
Device Position	Body Back
Band	LTE Band 4
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=12.00, Y=-37.00

SAR Peak: 0.67 W/kg

SAR 10g (W/Kg)	0.222177
SAR 1g (W/Kg)	0.404080



Test Laboratory: AGC Lab
LTE Band 5 Mid-Touch-Left (1 RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 07,2019

Communication System: LTE; Communication System Band: LTE Band 5; Duty Cycle:1:1; Conv.F=5.29
Frequency: 836.5 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.02$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 20.6, Liquid temperature (°C): 20.3

SATIMO Configuration:

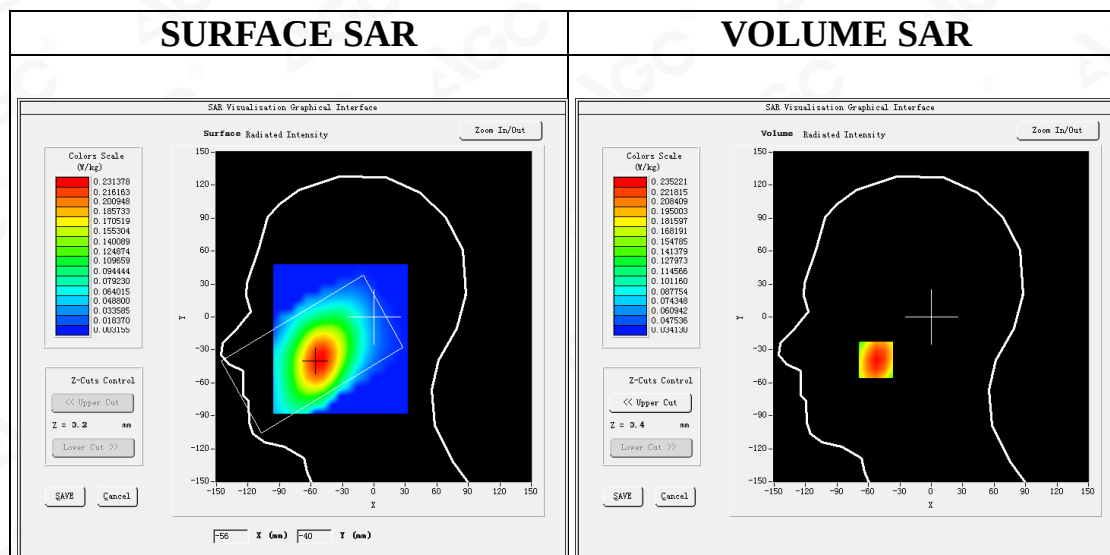
Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 5 Mid- Touch-Left /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/ LTE Band 5 Mid- Touch-Left /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	Left head
Device Position	Cheek
Band	LTE Band 5
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=-53.00, Y=-39.00

SAR Peak: 0.28 W/kg

SAR 10g (W/Kg)	0.174187
SAR 1g (W/Kg)	0.228316



Attestation of Global Compliance(Shenzhen)Co.,Ltd.

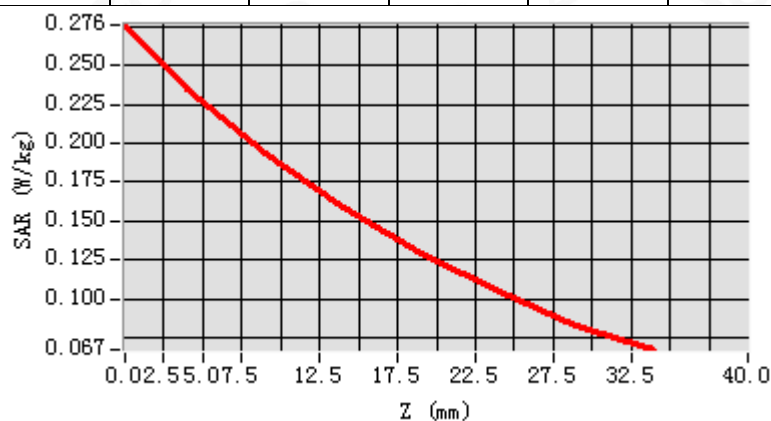
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

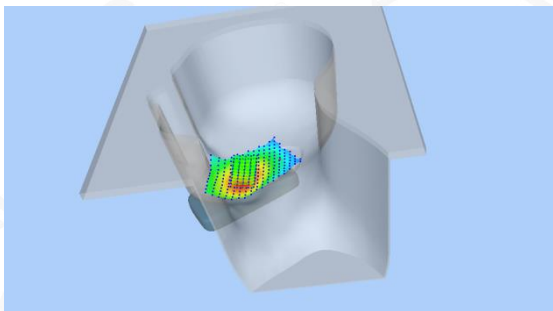
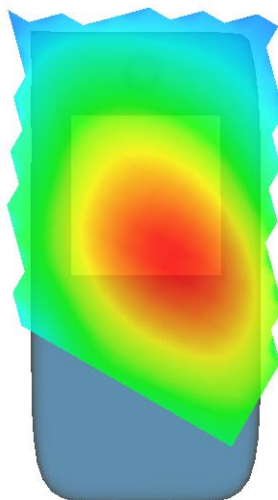
Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.2759	0.2352	0.1934	0.1594	0.1297	0.1046	0.0834



3D screen shot	Hot spot position
	

Test Laboratory: AGC Lab
LTE Band 5 Mid-Body-Back (1 RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 07,2019

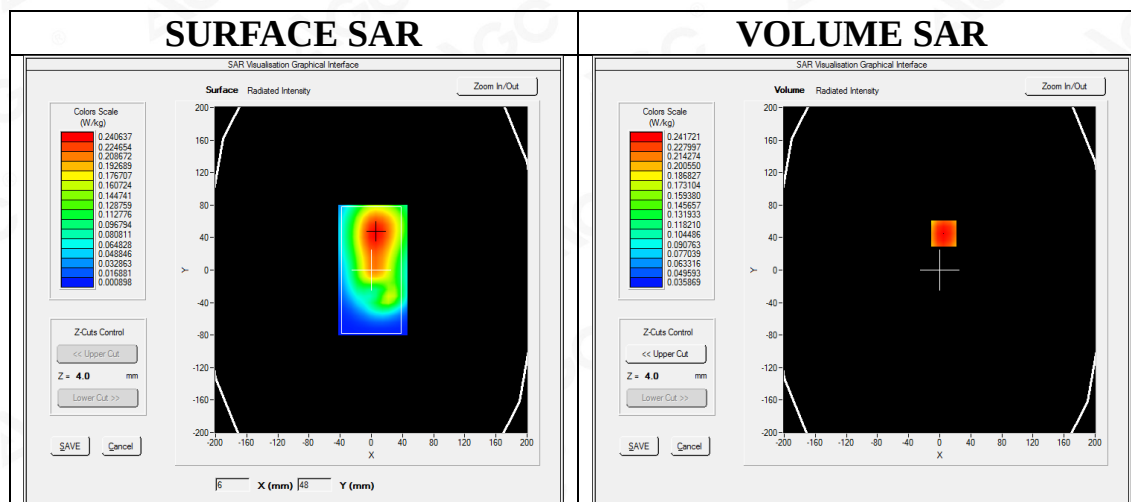
Communication System: LTE; Communication System Band: LTE Band 5; Duty Cycle:1:1; Conv.F=5.49
Frequency:836.5 MHz; Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 55.01$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 20.6, Liquid temperature ($^{\circ}\text{C}$): 20.2

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

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

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



Maximum location: X=5.00, Y=45.00
SAR Peak: 0.30 W/kg

SAR 10g (W/Kg)	0.176092
SAR 1g (W/Kg)	0.234612



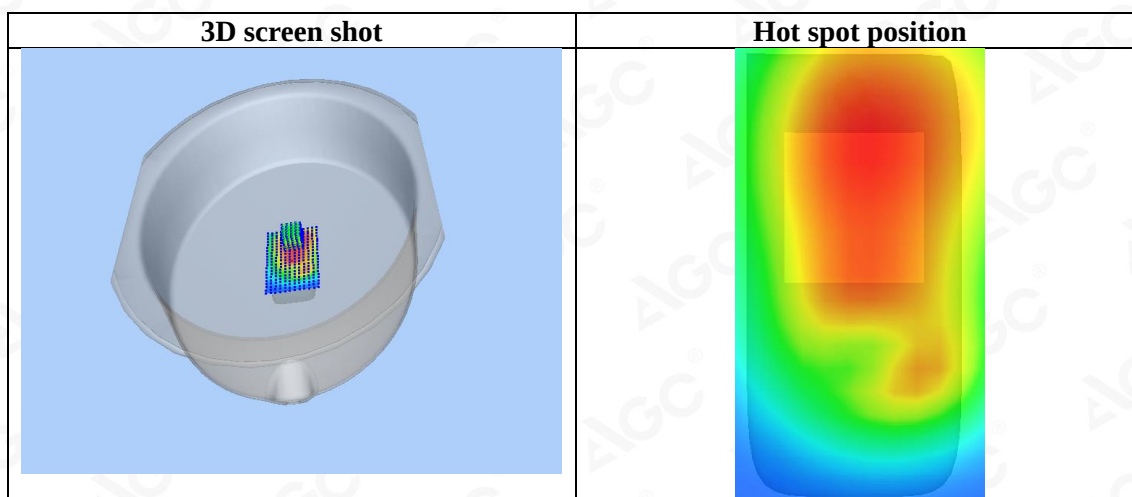
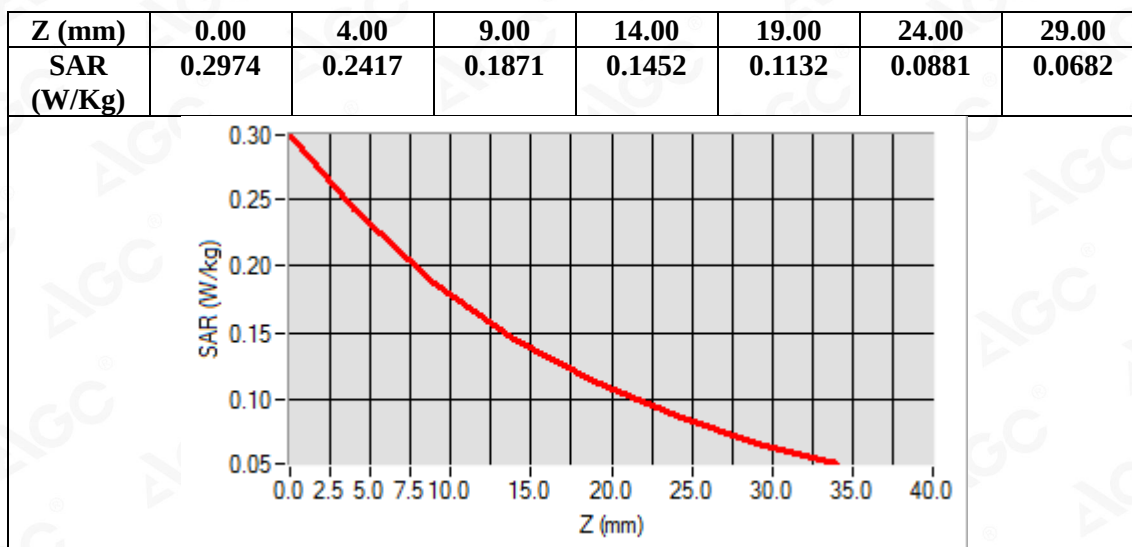
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
LTE Band 7 Mid-Touch-Left (1RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 01,2019

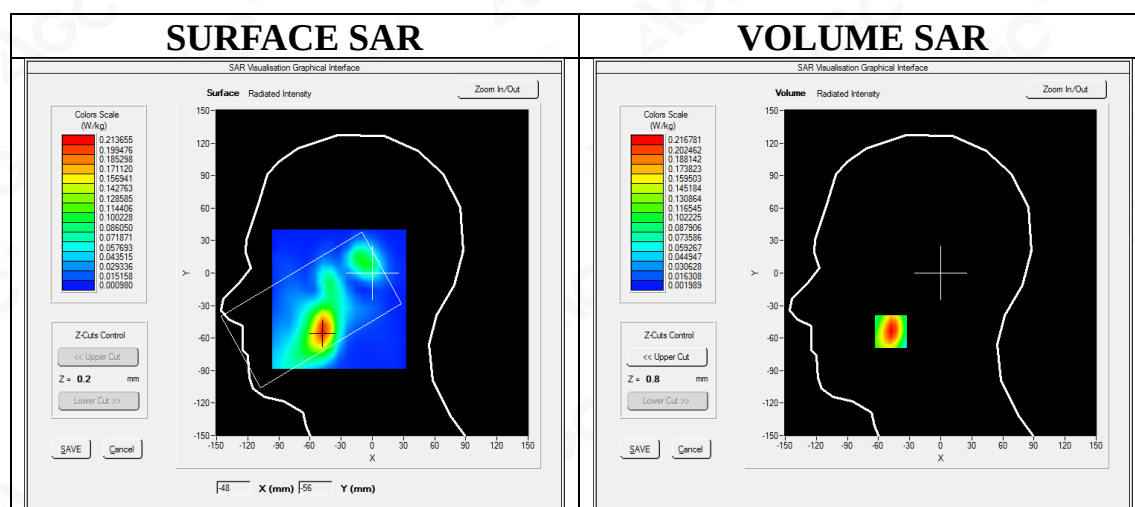
Communication System: LTE; Communication System Band: LTE Band 7; Duty Cycle:1:1; Conv.F=4.57
Frequency: 2535MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 39.14$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 20.7, Liquid temperature (°C): 20.5

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

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

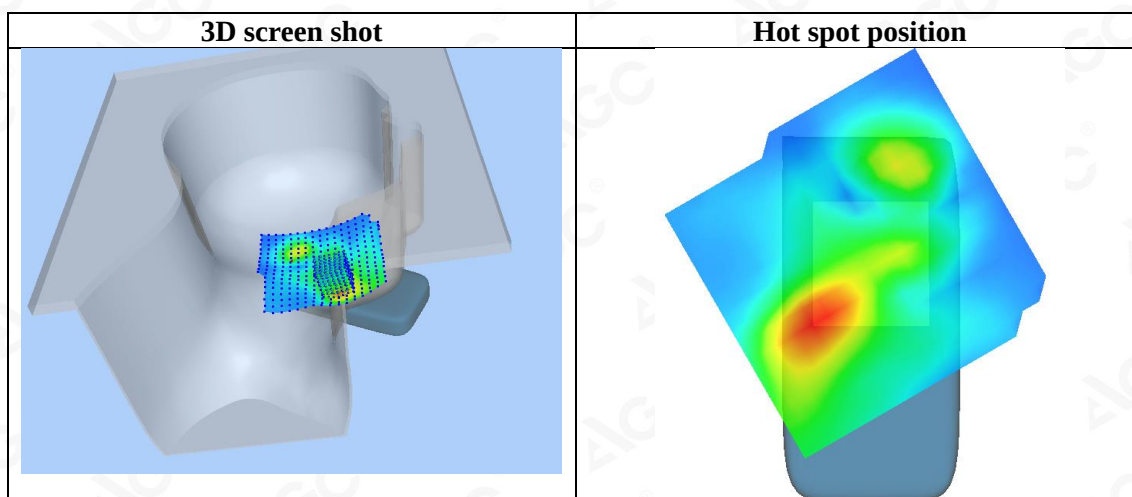
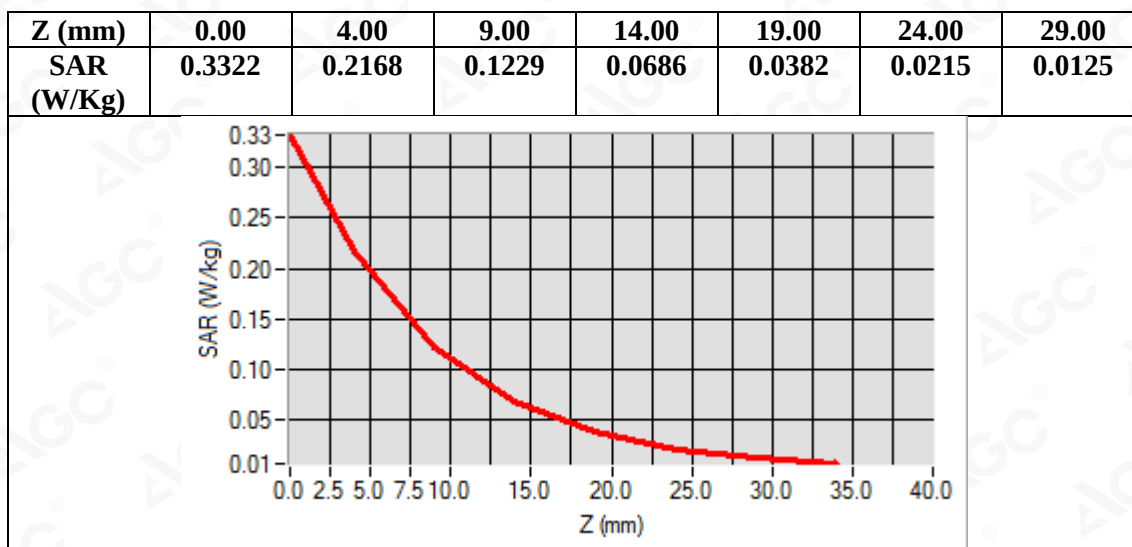
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Left head
Device Position	Cheek
Band	LTE BAND 7
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=-48.00, Y=-54.00

SAR Peak: 0.33 W/kg

SAR 10g (W/Kg)	0.105079
SAR 1g (W/Kg)	0.200944



Test Laboratory: AGC Lab
LTE Band 7 Low-Edge 3 (1RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 01,2019

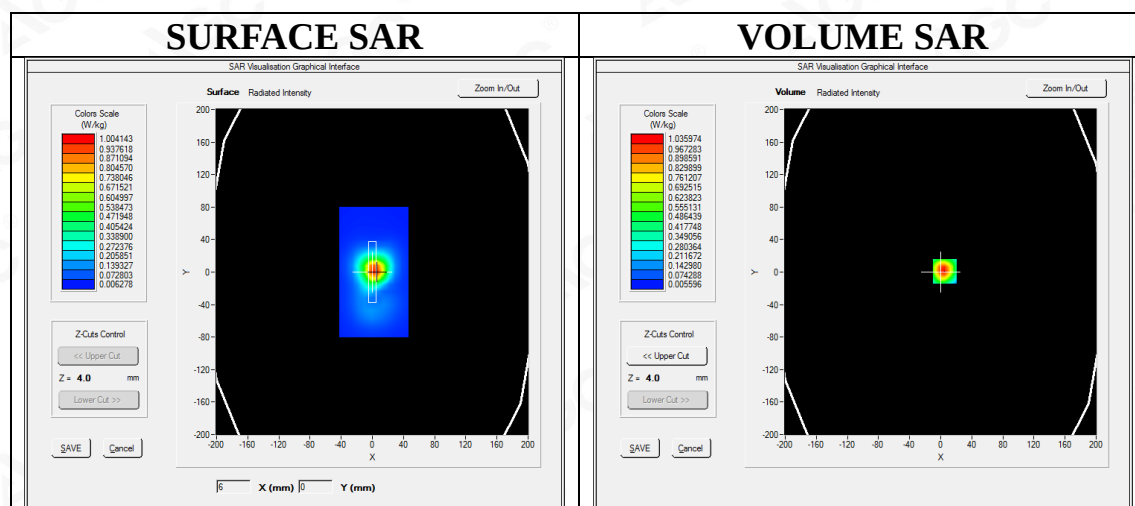
Communication System: LTE; Communication System Band: LTE Band 7; Duty Cycle:1:1; Conv.F=4.68
Frequency: 2510MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 2.11$ mho/m; $\epsilon_r = 53.64$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 20.7, Liquid temperature (°C): 20.4

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

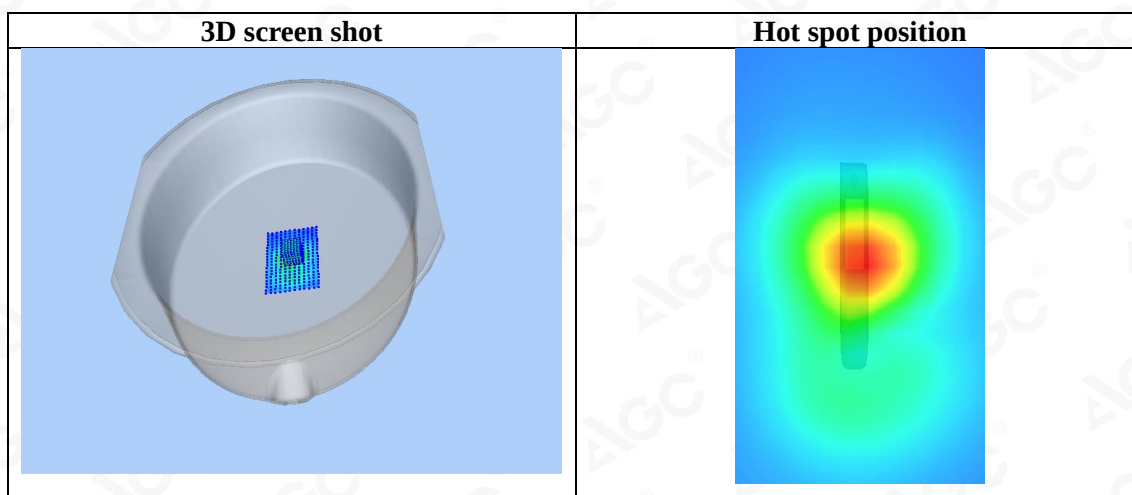
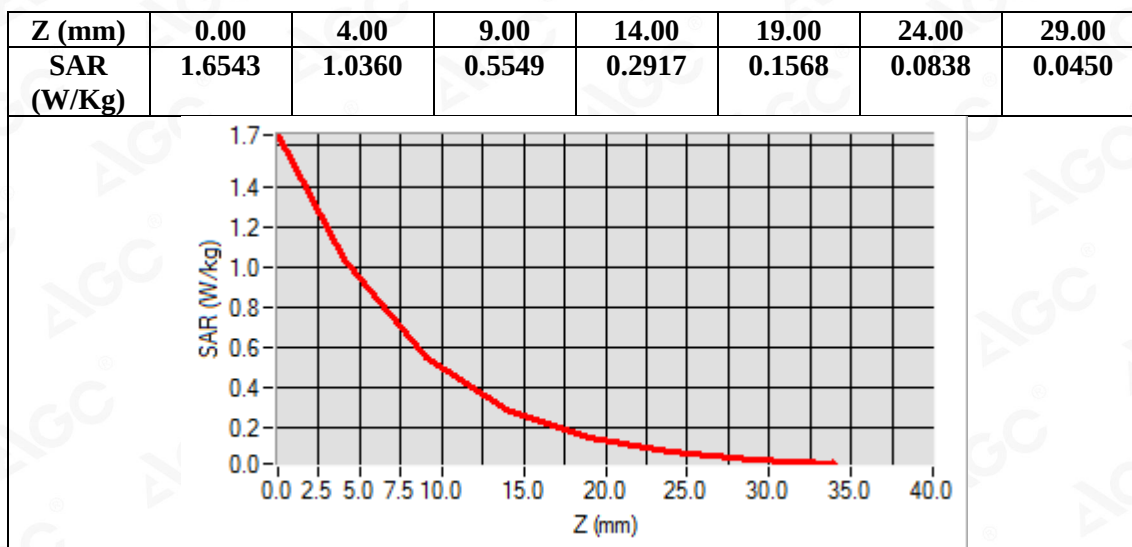
Configuration/ LTE BAND 7 Low- Edge 3 /Area Scan: Measurement grid: dx=10mm, y=10mm
Configuration/ LTE BAND 7 Low- Edge 3 /Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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	Low
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=5.00, Y=1.00
SAR Peak: 1.67 W/kg

SAR 10g (W/Kg)	0.482784
SAR 1g (W/Kg)	0.967455



Test Laboratory: AGC Lab
LTE Band 7 Mid-Edge 3 (1RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 01,2019

Communication System: LTE; Communication System Band: LTE Band 7; Duty Cycle:1:1; Conv.F=4.68
Frequency: 2535MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 2.12$ mho/m; $\epsilon_r = 53.28$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 20.7, Liquid temperature (°C): 20.4

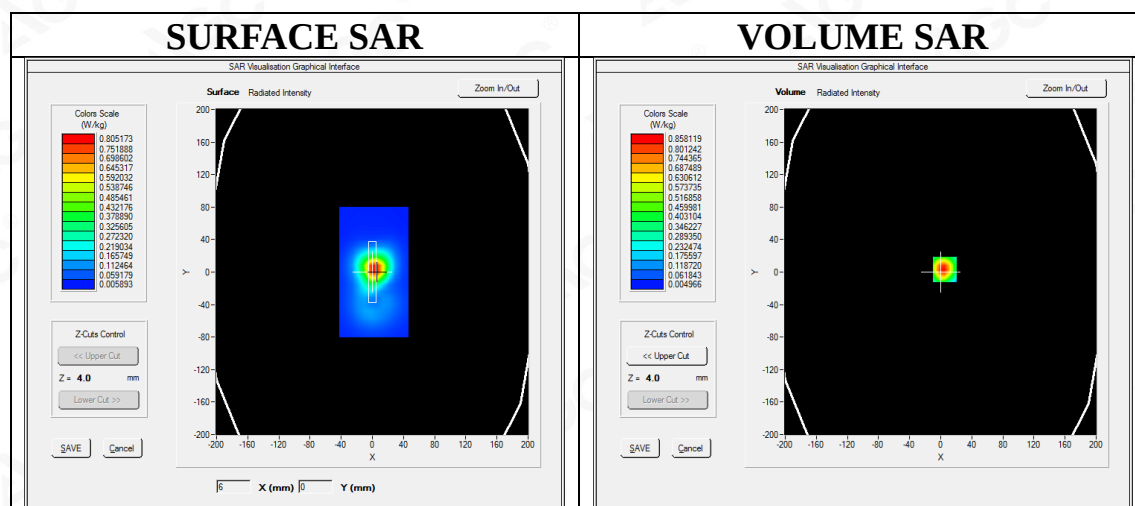
SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- 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

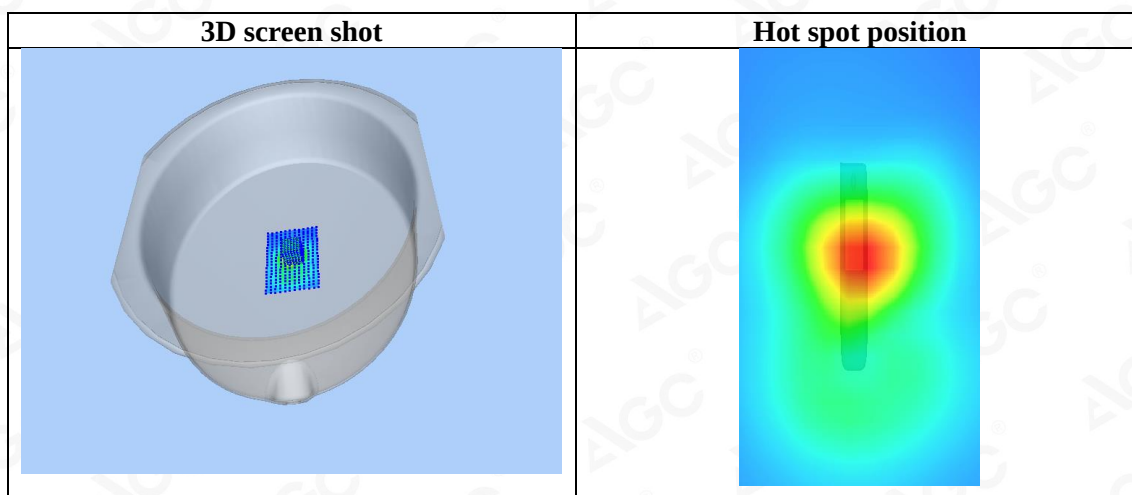
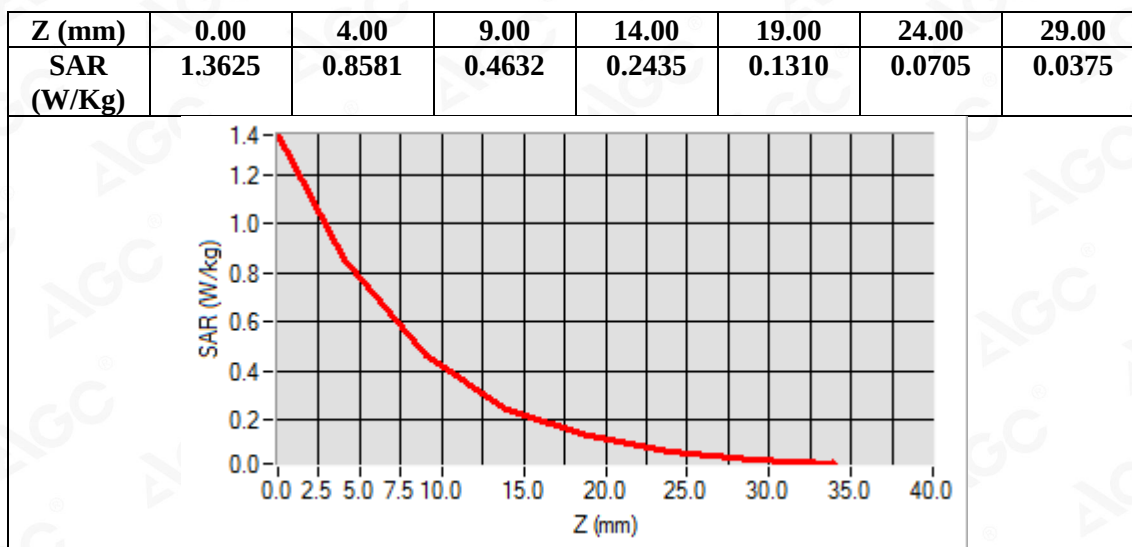
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	ELLI
Device Position	Edge 3
Band	LTE BAND 7
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=5.00, Y=3.00

SAR Peak: 1.37 W/kg

SAR 10g (W/Kg)	0.403719
SAR 1g (W/Kg)	0.801221



Test Laboratory: AGC Lab
LTE Band 12 Mid-Touch-Left (1 RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 02,2019

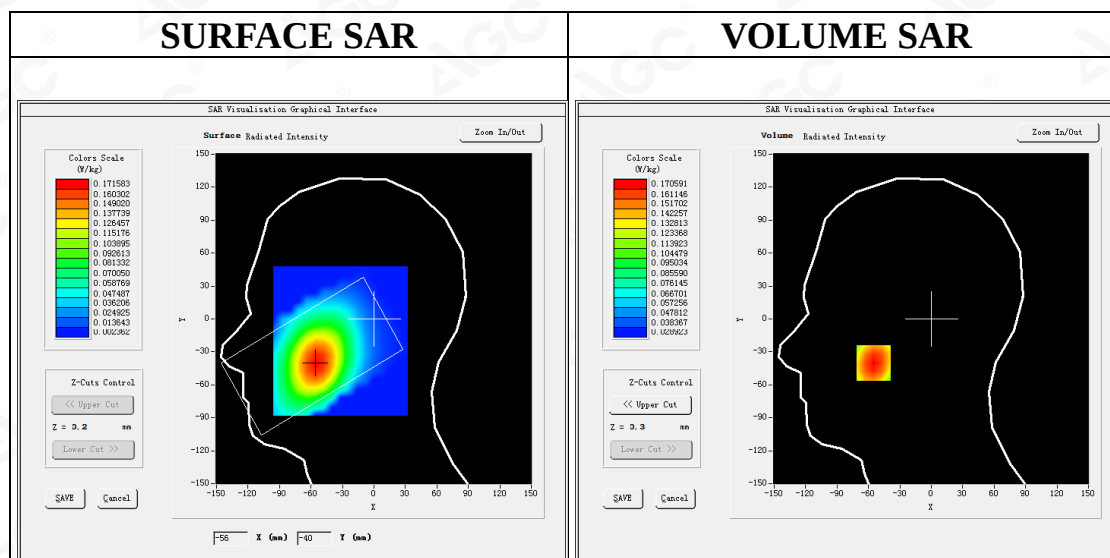
Communication System: LTE; Communication System Band: LTE Band 12; Duty Cycle:1:1; Conv.F=5.20
Frequency: 707.5 MHz; Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.87 \text{ mho/m}$; $\epsilon_r = 41.14$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Left Section
Ambient temperature ($^{\circ}\text{C}$): 21.1, Liquid temperature ($^{\circ}\text{C}$): 20.8

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 12 Mid- Touch-Left /Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/ LTE Band 12 Mid- Touch-Left /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	Left head
Device Position	Cheek
Band	LTE Band 12
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=-55.00, Y=-40.00

SAR Peak: 0.20 W/kg

SAR 10g (W/Kg)	0.131017
SAR 1g (W/Kg)	0.169088



Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



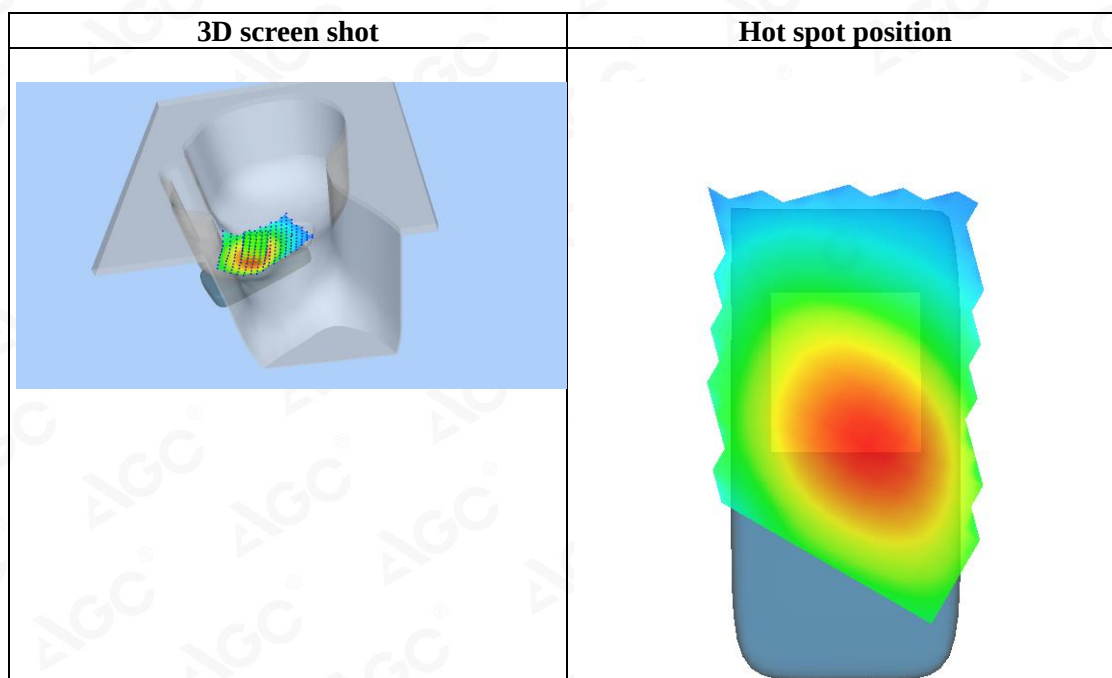
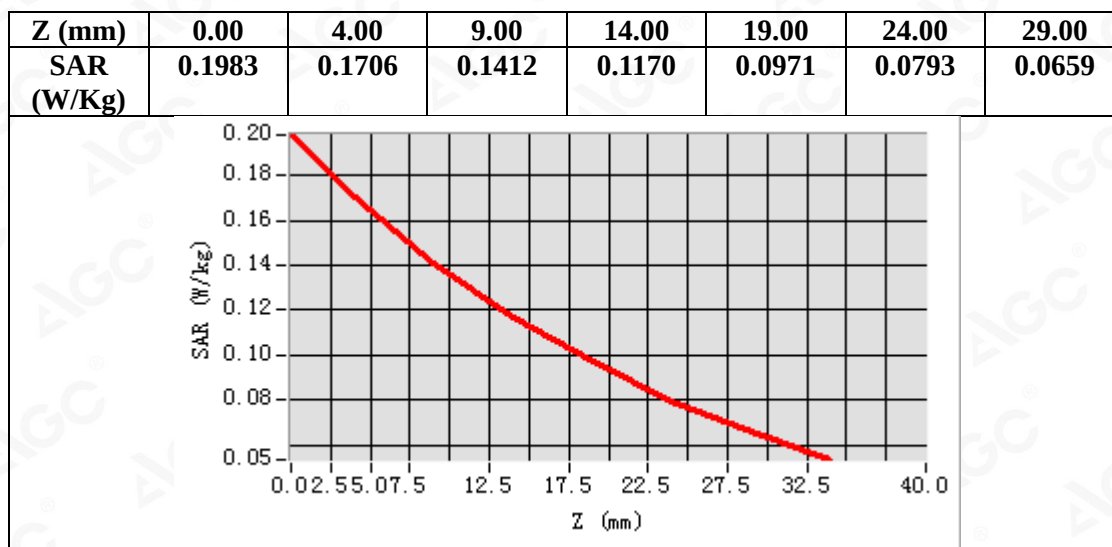
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
LTE Band 12 Mid-Body-Back (1 RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 02,2019

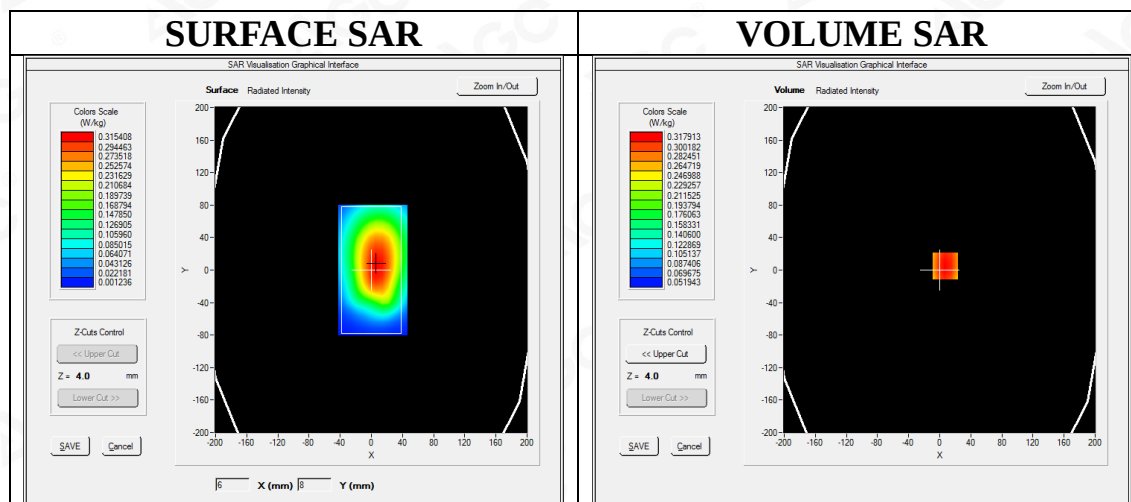
Communication System: LTE; Communication System Band: LTE Band 12; Duty Cycle:1:1; Conv.F=5.40;
Frequency: 707.5 MHz; Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 56.39$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 21.1, Liquid temperature ($^{\circ}\text{C}$): 20.9

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 12 Mid-Body-back/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$
Configuration/ LTE Band 12 Mid-Body-back/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{m}$;

Area Scan	$dx=8\text{mm}$ $dy=8\text{mm}$, $h= 5.00 \text{ mm}$
Zoom Scan	$5\times 5\times 7$, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$
Phantom	ELLI
Device Position	Body Back
Band	LTE Band 12
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=7.00, Y=5.00

SAR Peak: 0.37 W/kg

SAR 10g (W/Kg)	0.252361
SAR 1g (W/Kg)	0.327303



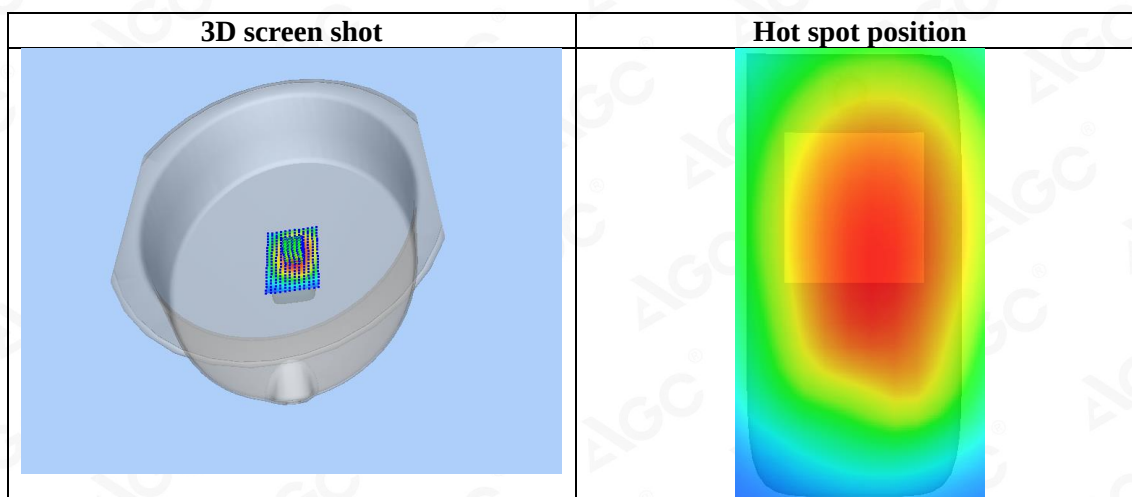
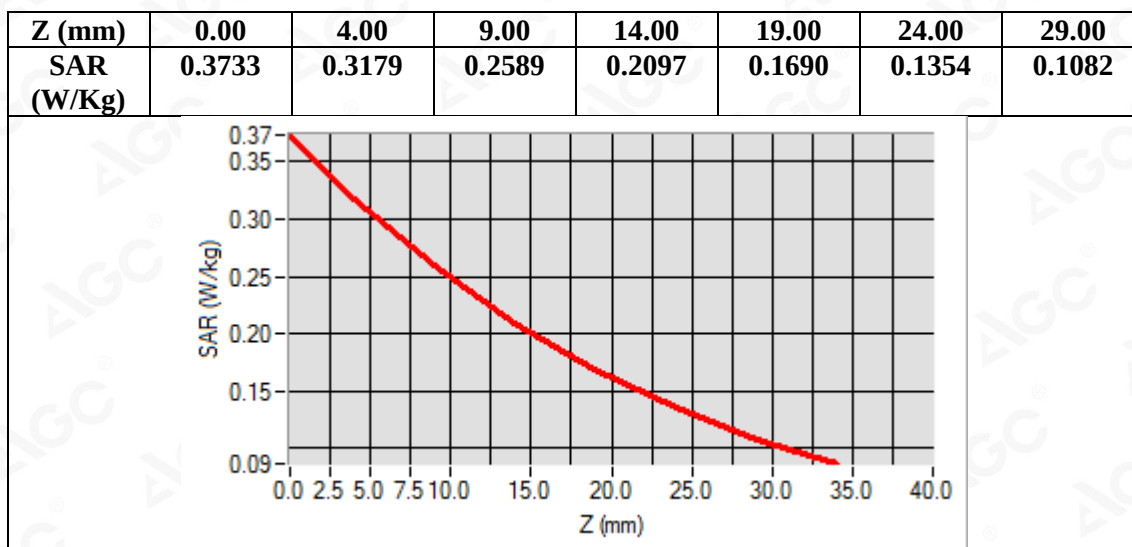
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
LTE Band 17 Mid-Touch-Left (1 RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 02,2019

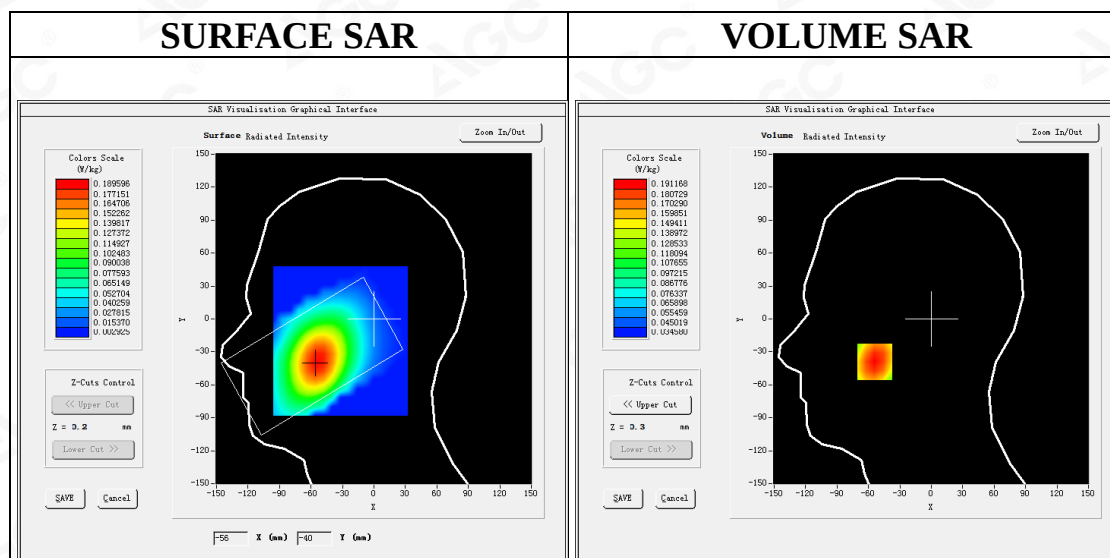
Communication System: LTE; Communication System Band: LTE Band 17; Duty Cycle:1:1; Conv.F=5.20
Frequency: 710 MHz; Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 40.69$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Left Section
Ambient temperature ($^{\circ}\text{C}$): 21.1, Liquid temperature ($^{\circ}\text{C}$): 20.8

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 17 Mid- Touch-Left /Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$
Configuration/ LTE Band 17 Mid- Touch-Left /Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	$dx=8\text{mm}$ $dy=8\text{mm}$, $h= 5.00 \text{ mm}$
Zoom Scan	$5x5x7$, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$
Phantom	Left head
Device Position	Cheek
Band	LTE Band 17
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=-54.00, Y=-39.00

SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.152967
SAR 1g (W/Kg)	0.195719



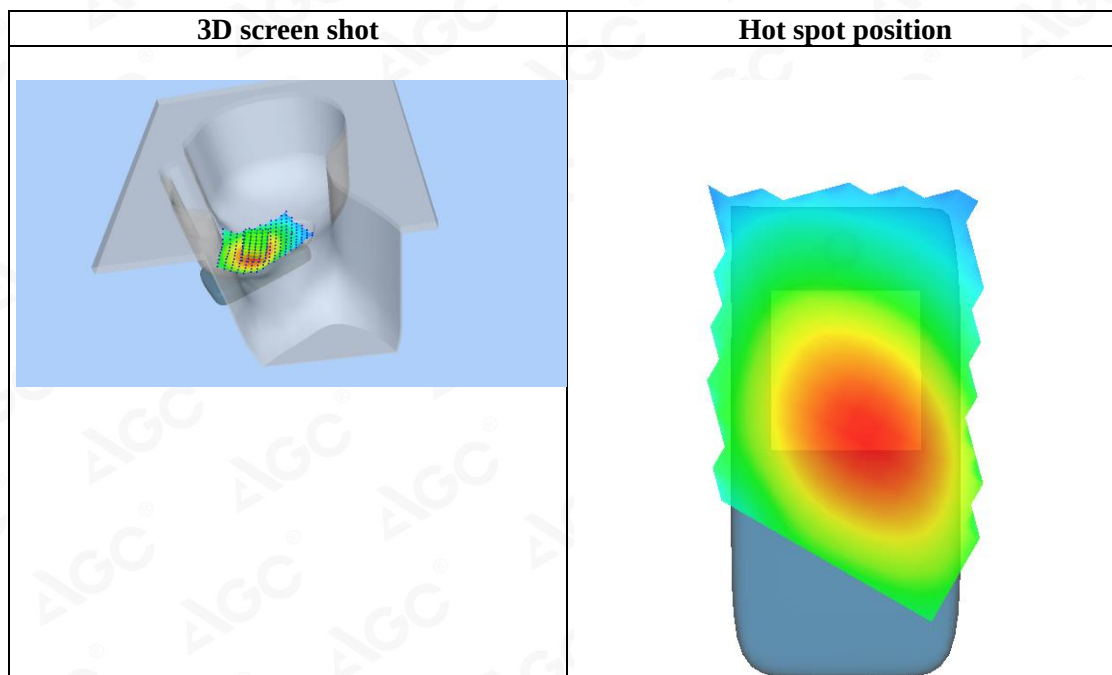
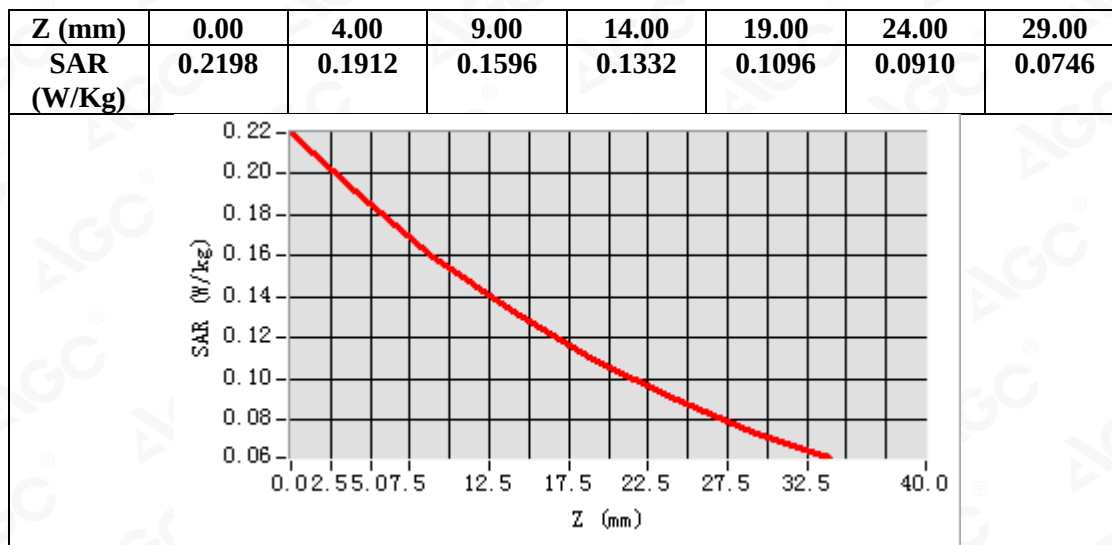
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
LTE Band 17 Mid-Body-Back (1 RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 02,2019

Communication System: LTE; Communication System Band: LTE Band 17; Duty Cycle:1:1; Conv.F=5.40;
Frequency: 710 MHz; Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.94 \text{ mho/m}$; $\epsilon_r = 55.71$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 21.1, Liquid temperature ($^{\circ}\text{C}$): 20.9

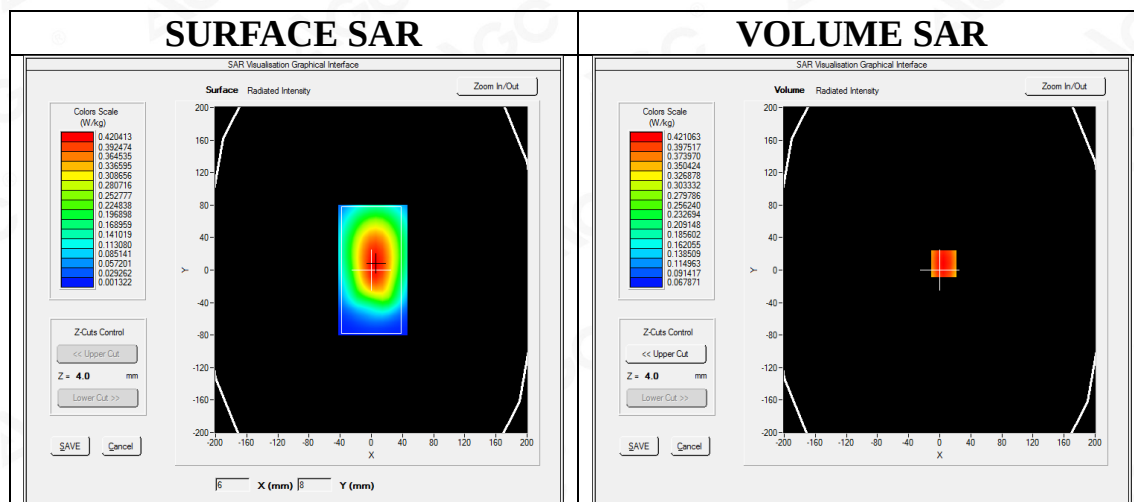
SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE Band 17 Mid-Body-back/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

Configuration/ LTE Band 17 Mid-Body-back/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

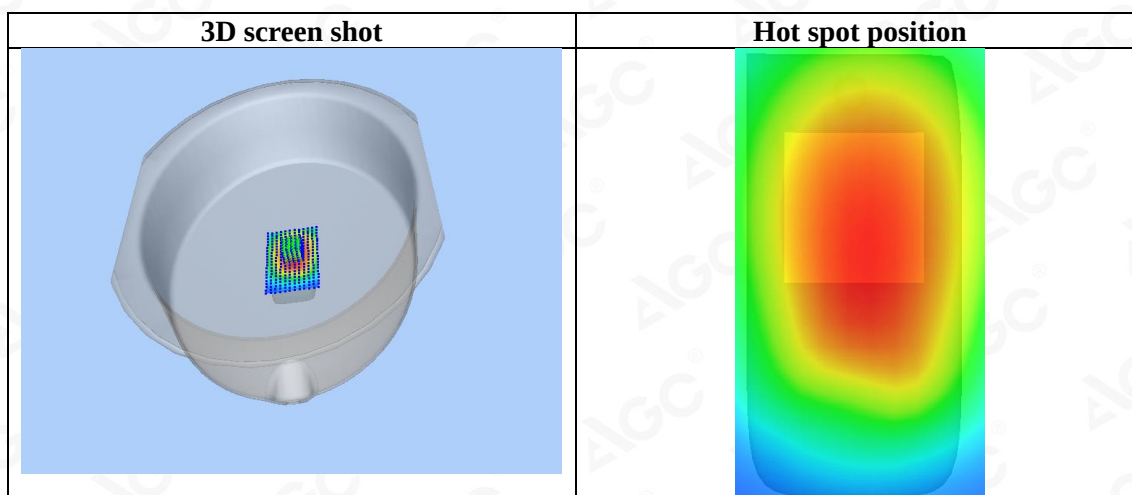
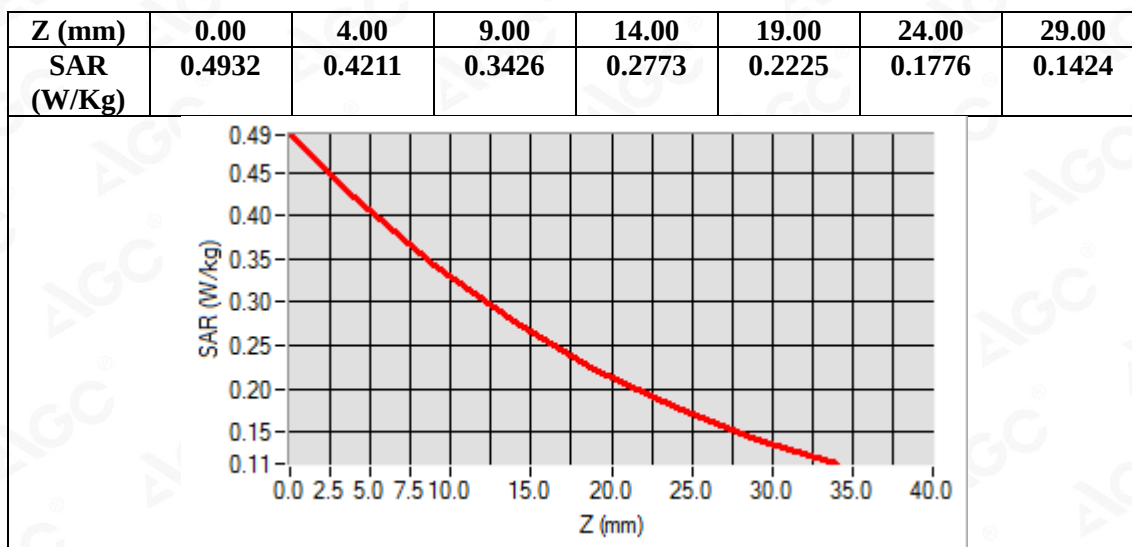
Area Scan	$dx=8\text{mm}$ $dy=8\text{mm}$, $h= 5.00 \text{ mm}$
Zoom Scan	$5\times 5\times 7$, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$
Phantom	ELLI
Device Position	Body Back
Band	LTE Band 17
Channels	Middle
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=5.00, Y=8.00

SAR Peak: 0.50 W/kg

SAR 10g (W/Kg)	0.333509
SAR 1g (W/Kg)	0.433010



2.4G WIFI MODE

Test Laboratory: AGC Lab

802.11b Mid-Touch-Left

DUT: Smart Phone; Type: X19

Date: Aug. 08,2019

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.90;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 39.81$ $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C):21.1, Liquid temperature (°C): 20.8

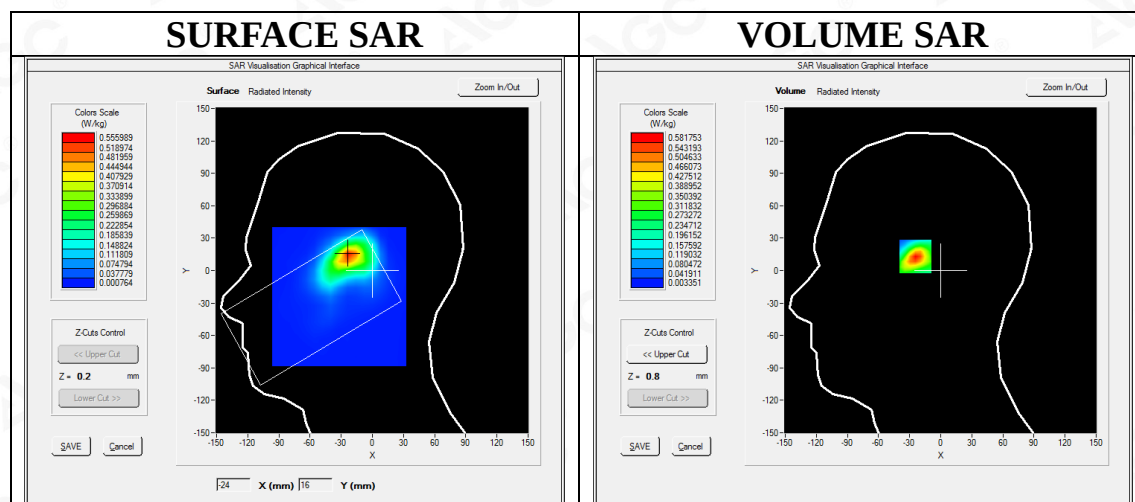
SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- 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=-23.00, Y=15.00

SAR Peak: 0.89 W/kg

SAR 10g (W/Kg)	0.251744
SAR 1g (W/Kg)	0.516273



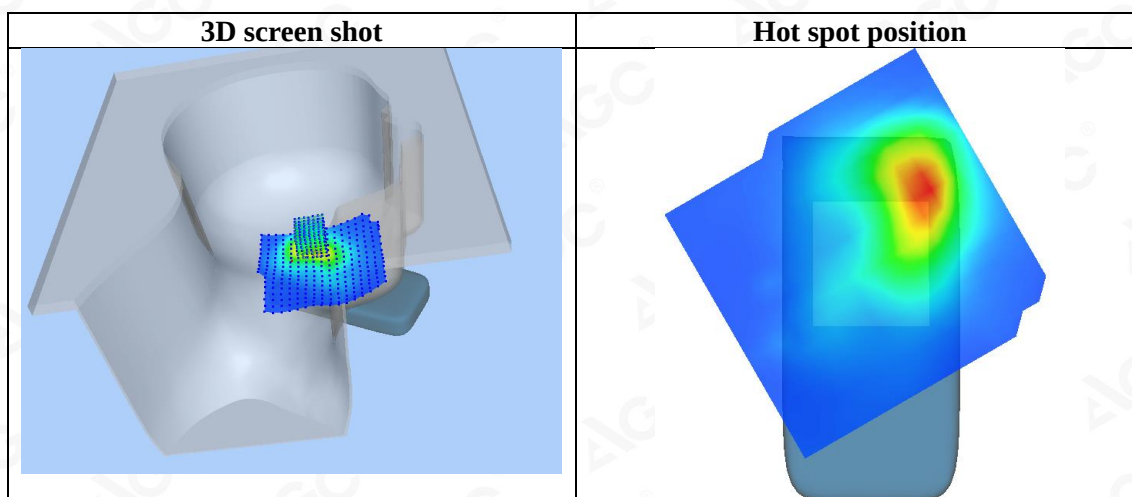
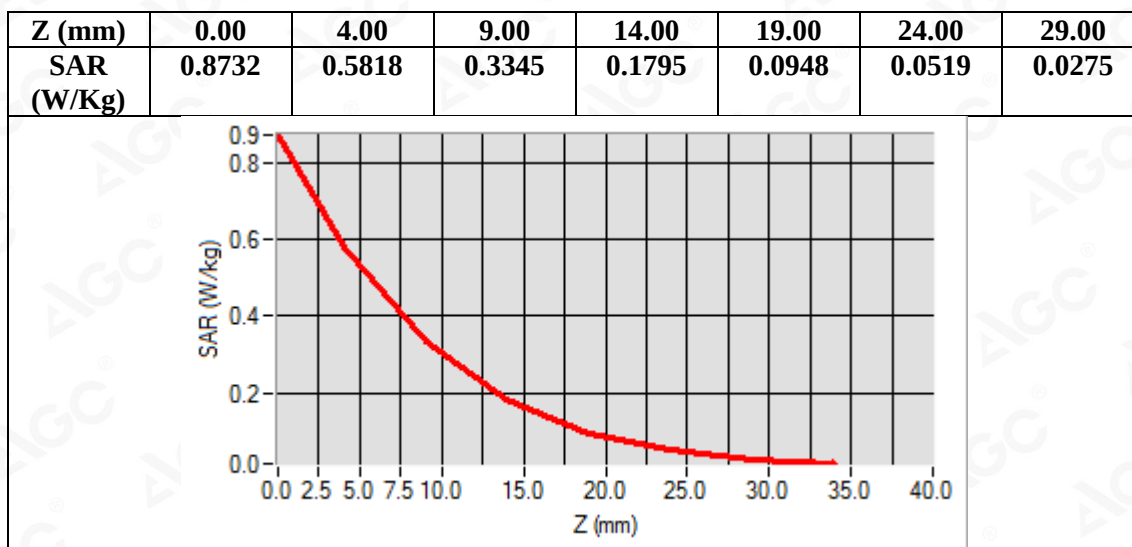
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Test Laboratory: AGC Lab
802.11b Mid-Body-Worn- Back
DUT: Smart Phone; Type: X19

Date: Aug. 08,2019

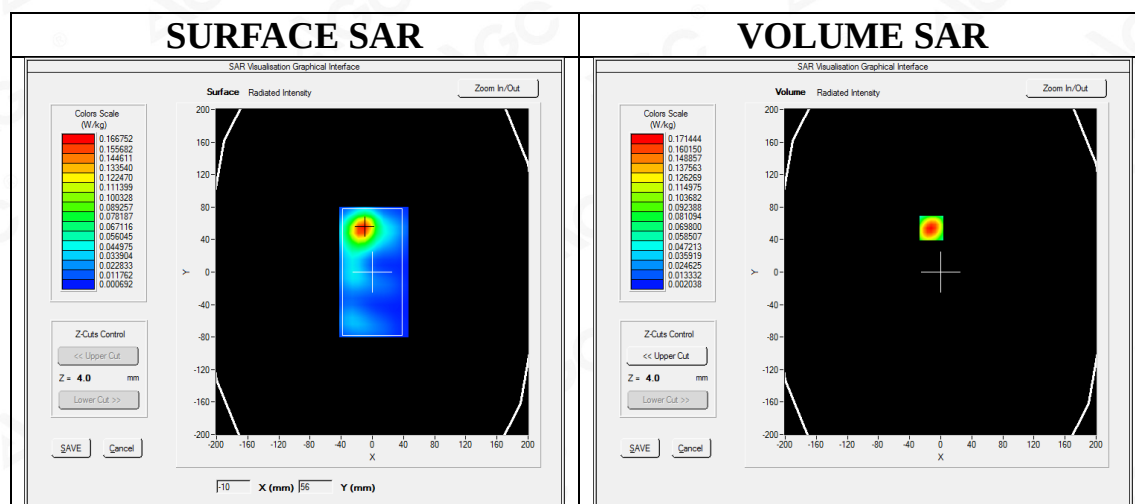
Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=5.04;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.91$ mho/m; $\epsilon_r = 52.34$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21.1, Liquid temperature (°C): 20.7

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- 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=-12.00, Y=54.00

SAR Peak: 0.27 W/kg

SAR 10g (W/Kg)	0.086120
SAR 1g (W/Kg)	0.160241



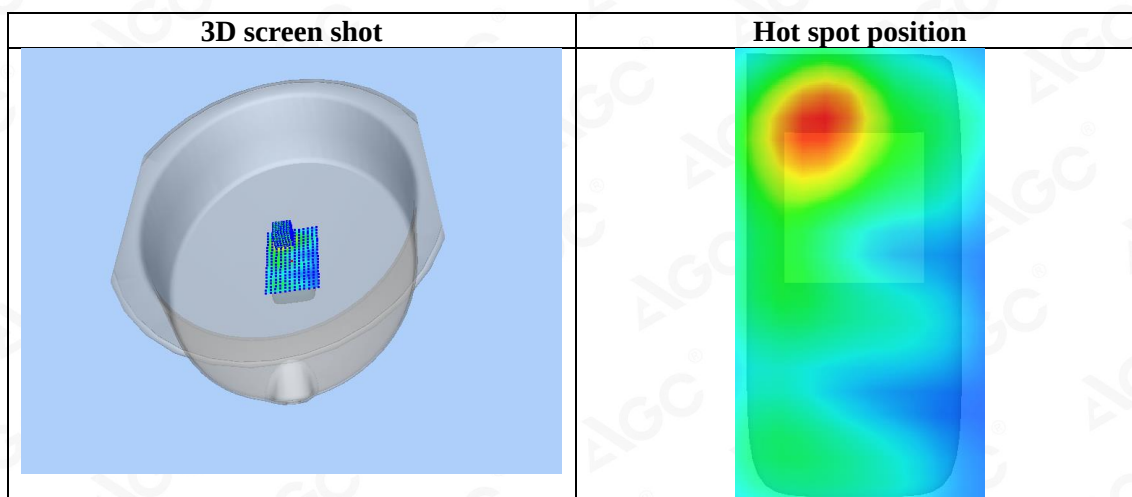
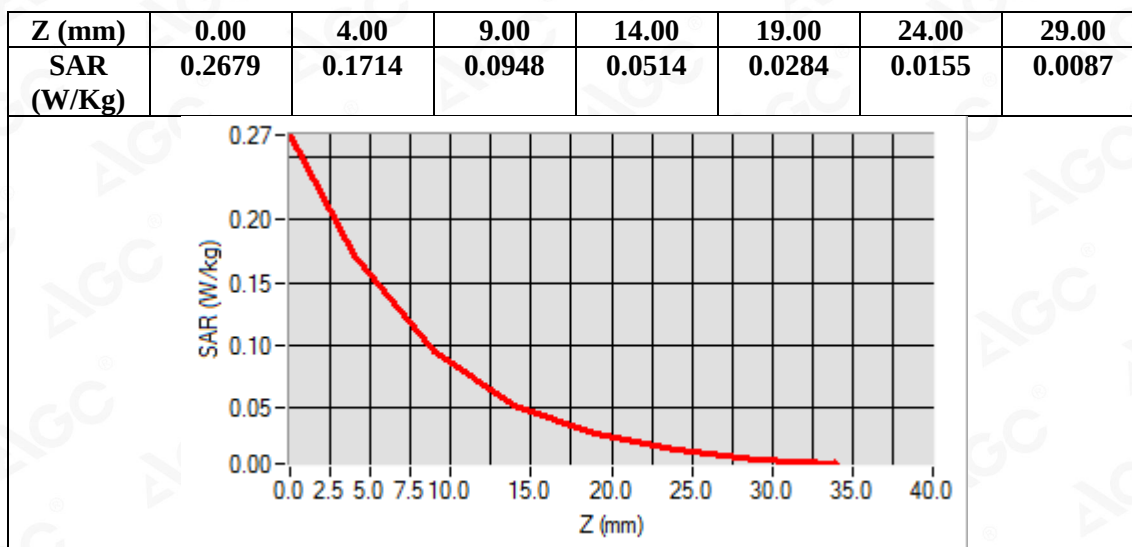
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



5.2GHz 802.11a20

Test Laboratory: AGC Lab

802.11a20 CH44 Mid-Tilt-Left

DUT: Smart Phone; Type: X19

Date: Aug. 28,2019

Communication System: Wi-Fi; Communication System Band: 802.11a20; Duty Cycle: 1:1; Conv.F=2.46;
Frequency: 5220MHz; Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 4.62 \text{ mho/m}$; $\epsilon_r = 35.21$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 20.6, Liquid temperature ($^{\circ}\text{C}$): 20.3

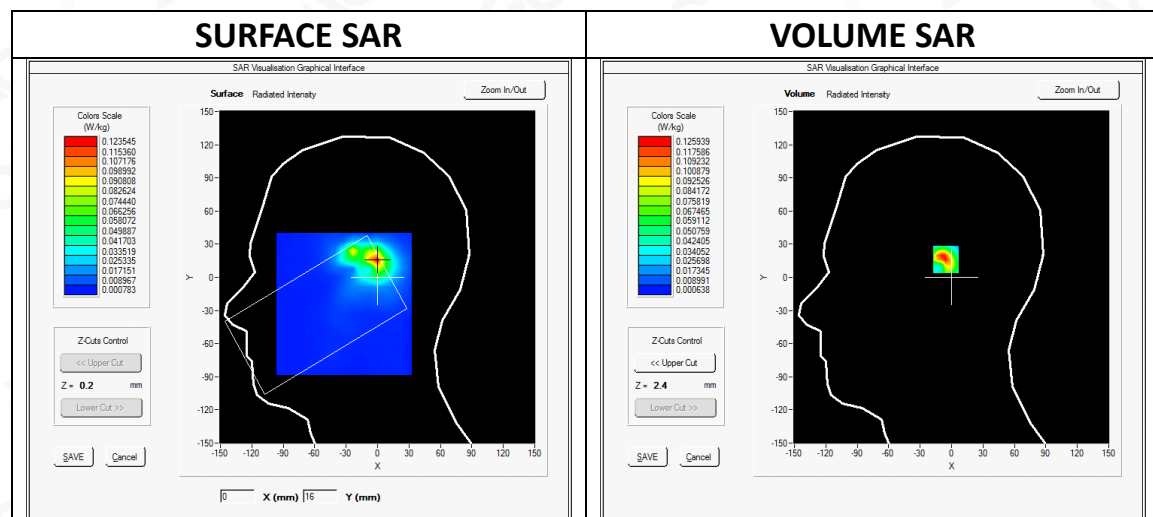
SATIMO Configuration:

- Probe: SSE2; Calibrated: Mar. 25,2019; Serial No.: SN 45/15 EPGO281
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: SAM twin phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/802.11a20 CH44 Mid- Tilt-Left /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/802.11a20 CH44 Mid- Tilt-Left /Zoom Scan: Measurement grid: dx=5mm,dy=5mm, dz=5mm

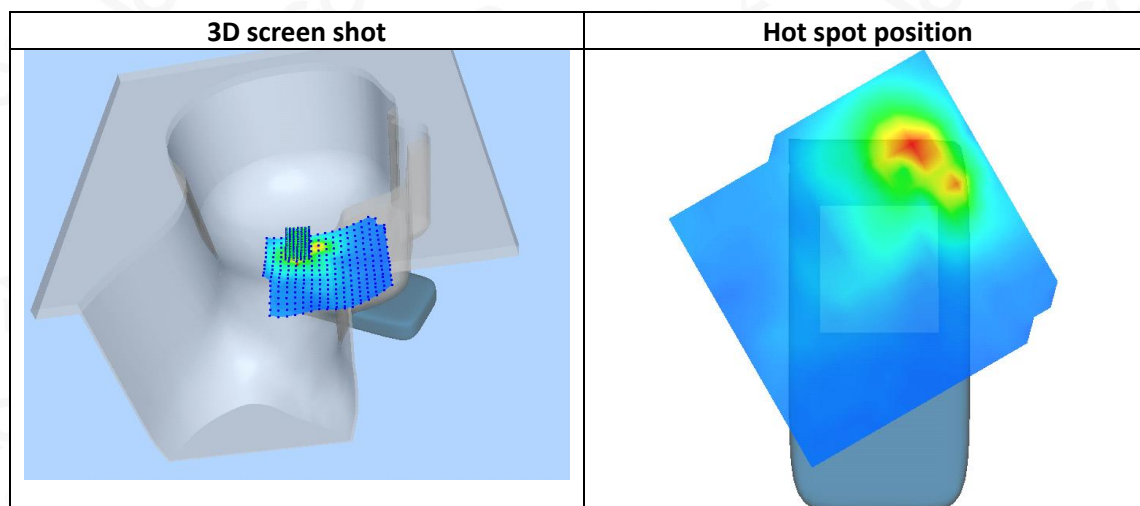
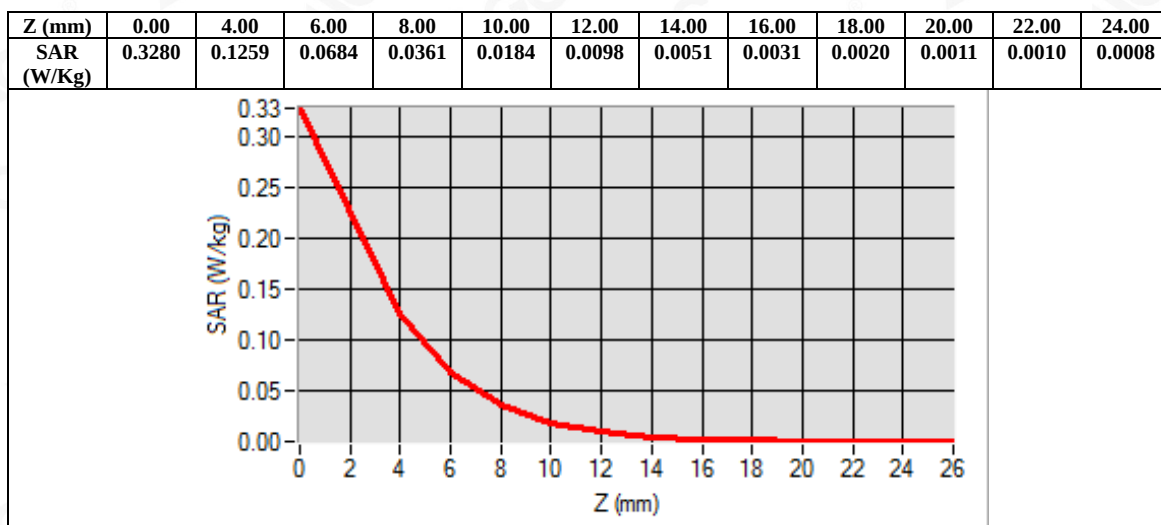
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Left head
Device Position	Tilt
Band	5200MHz
Channels	Middle
Signal	Crest factor: 1.0



Maximum location: X=-1.00, Y=16.00

SAR Peak: 0.33 W/kg

SAR 10g (W/Kg)	0.038757
SAR 1g (W/Kg)	0.117848



5.2GHz 802.11a20

Test Laboratory: AGC Lab

802.11ac20 CH44-Edge1

DUT: Smart Phone; Type: X19

Date: Aug. 28,2019

Communication System: Wi-Fi; Communication System Band: 802.11a20; Duty Cycle: 1:1; Conv.F=2.52;
Frequency: 5220MHz; Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 5.33 \text{ mho/m}$; $\epsilon_r = 48.74$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$): 20.6, Liquid temperature ($^{\circ}\text{C}$): 20.4

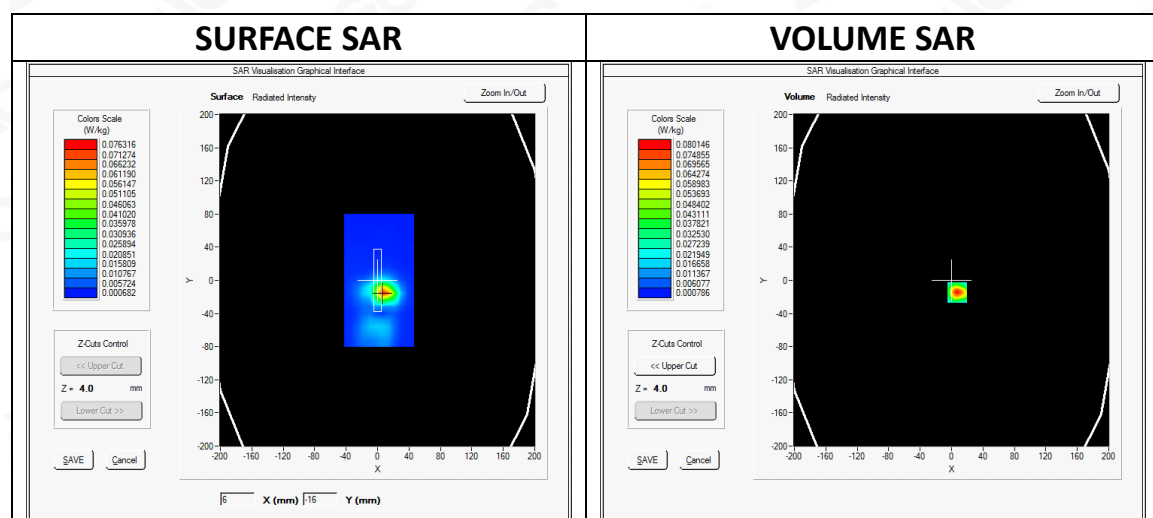
SATIMO Configuration:

- Probe: SSE2; Calibrated: Mar. 25,2019; Serial No.: SN 45/15 EPGO281
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/802.11a20 CH44- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/802.11a20 CH44- Edge1 /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	Edge1
Band	5200MHz
Channels	CH44
Signal	Crest factor: 1.0



Maximum location: X=7.00, Y=-15.00

SAR Peak: 0.20 W/kg

SAR 10g (W/Kg)	0.027092
SAR 1g (W/Kg)	0.075989



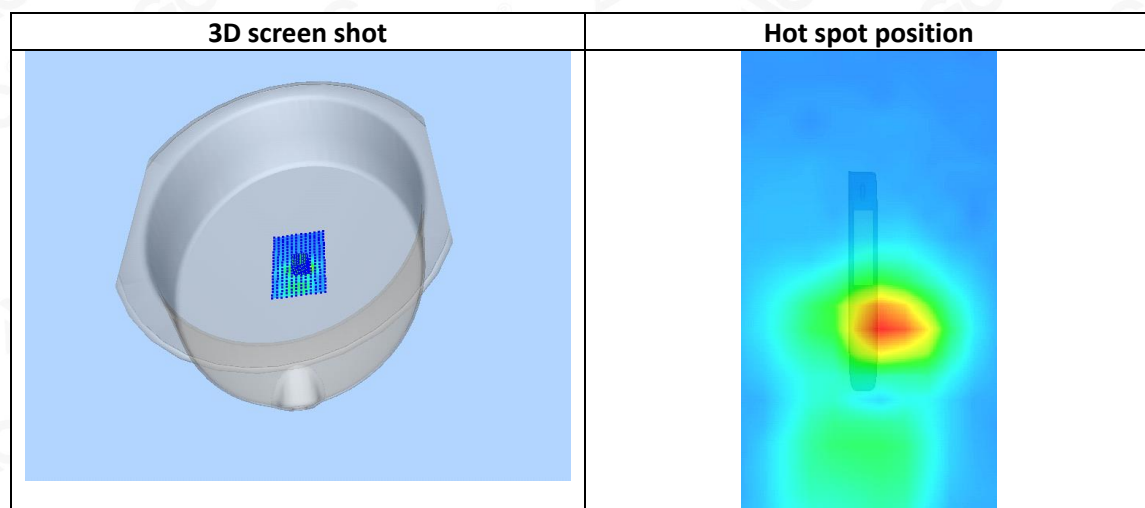
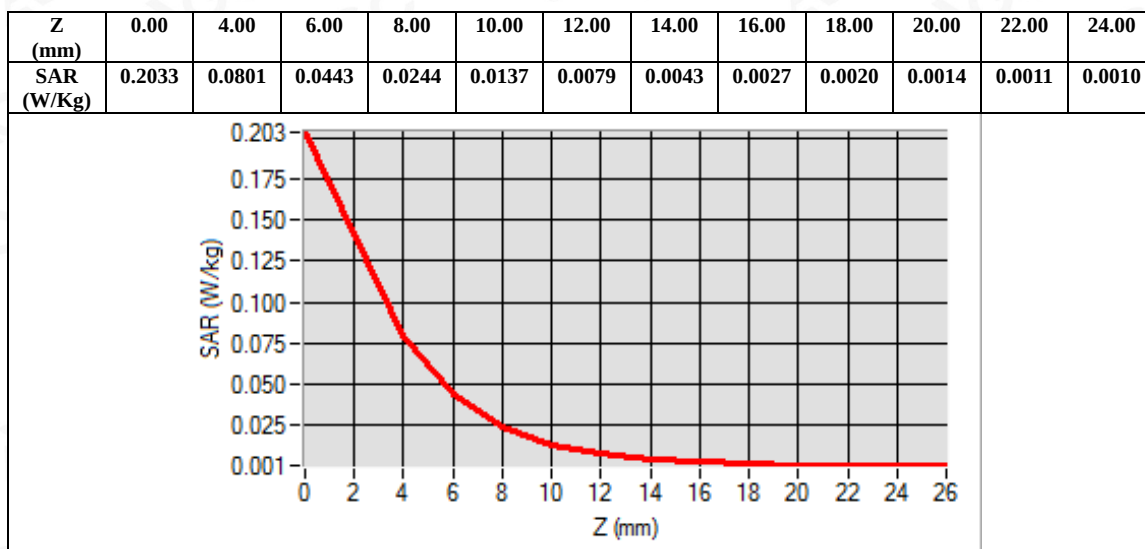
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Repeat SAR

Test Laboratory: AGC Lab
LTE Band 7 Low-Edge 3 (1RB#0)
DUT: Smart Phone; Type: X19

Date: Aug. 01,2019

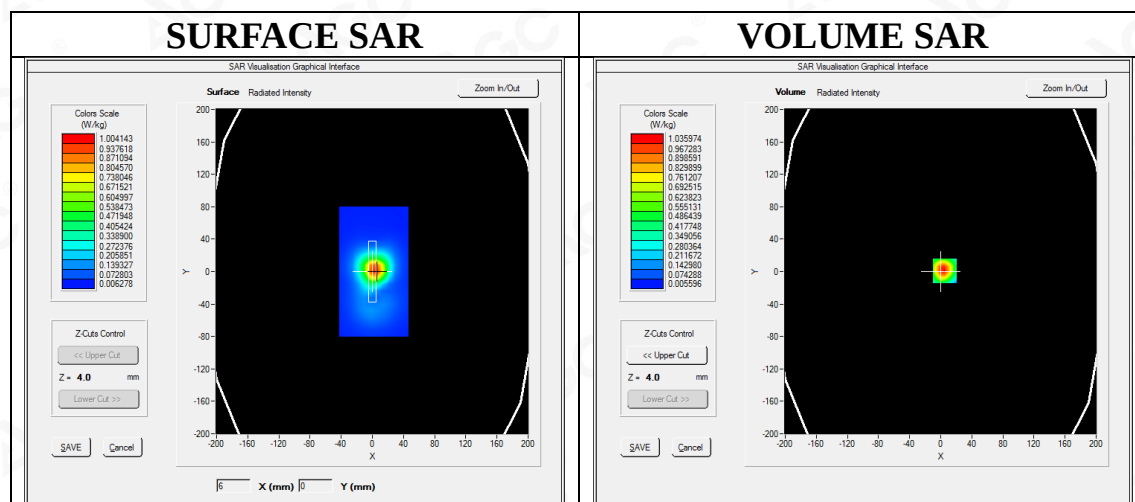
Communication System: LTE; Communication System Band: LTE Band 7; Duty Cycle:1:1; Conv.F=4.68
Frequency: 2510MHz; Medium parameters used: $f = 2600$ MHz; $\sigma = 2.11$ mho/m; $\epsilon_r = 53.64$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 20.7, Liquid temperature (°C): 20.4

SATIMO Configuration:

- Probe: SSE5; Calibrated: Aug. 08,2018; Serial No.: SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ LTE BAND 7 Low- Edge 3 /Area Scan: Measurement grid: dx=10mm, y=10mm
Configuration/ LTE BAND 7 Low- 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	Low
Signal	OFDM (Crest factor: 1.0)



Maximum location: X=5.00, Y=1.00

SAR Peak: 1.66 W/kg

SAR 10g (W/Kg)	0.481379
SAR 1g (W/Kg)	0.966981



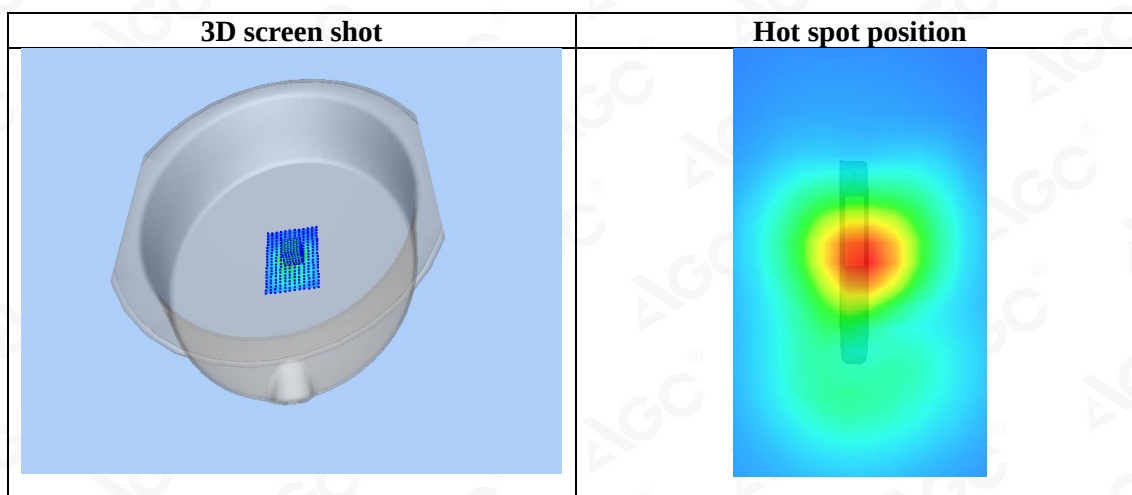
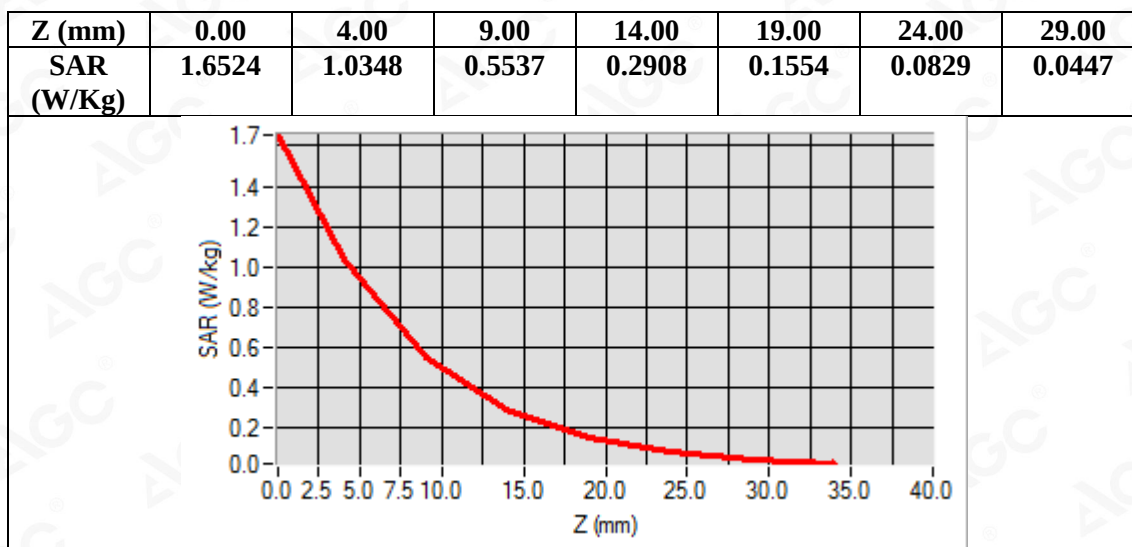
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

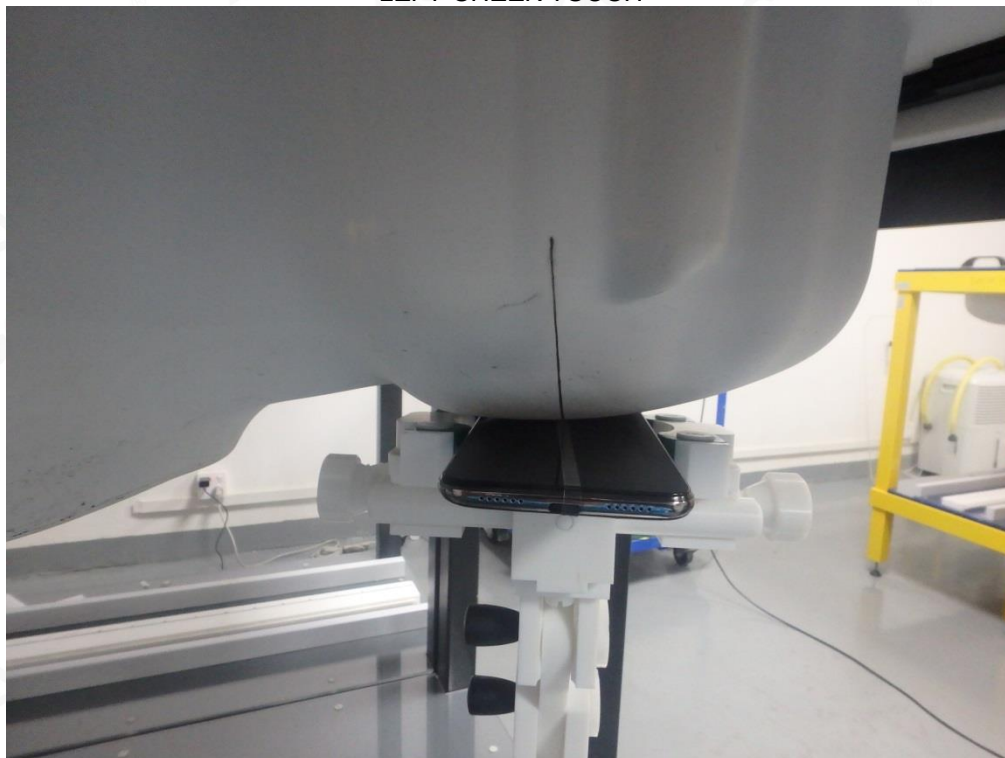
Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

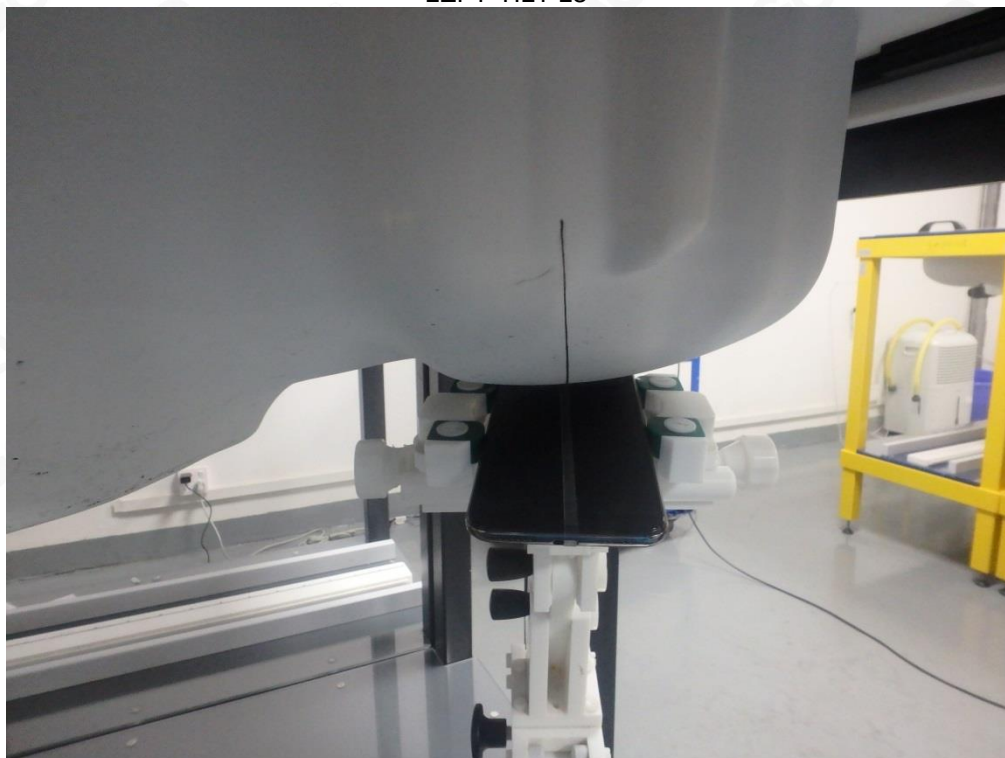
Service Hotline:400 089 2118



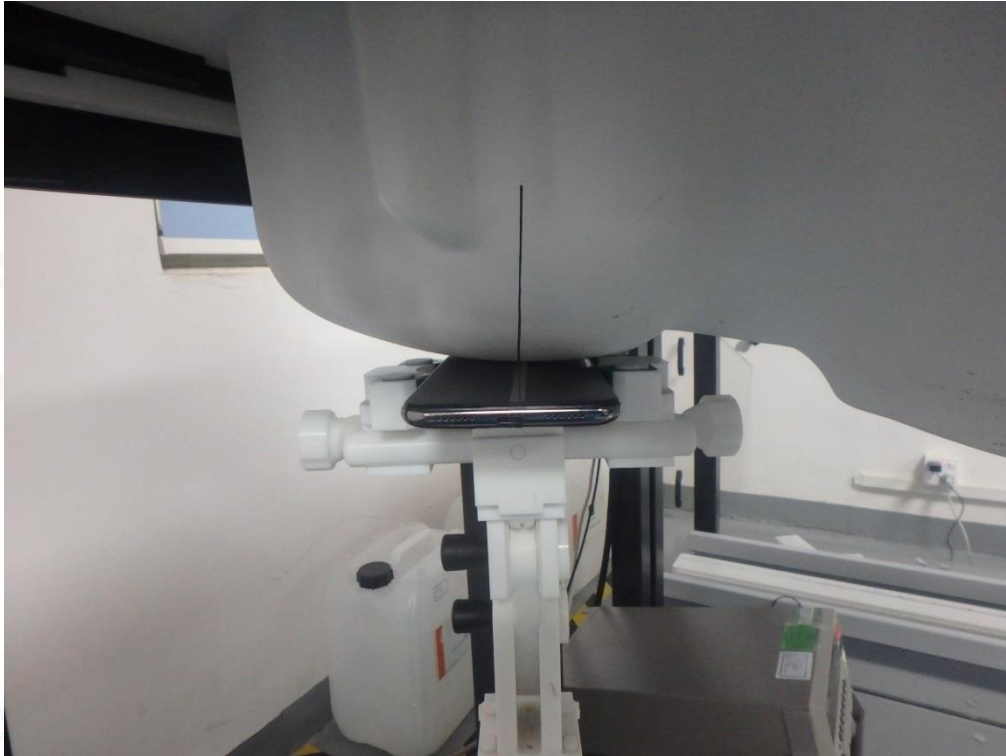
APPENDIX C. TEST SETUP PHOTOGRAPHS
LEFT-CHEEK TOUCH



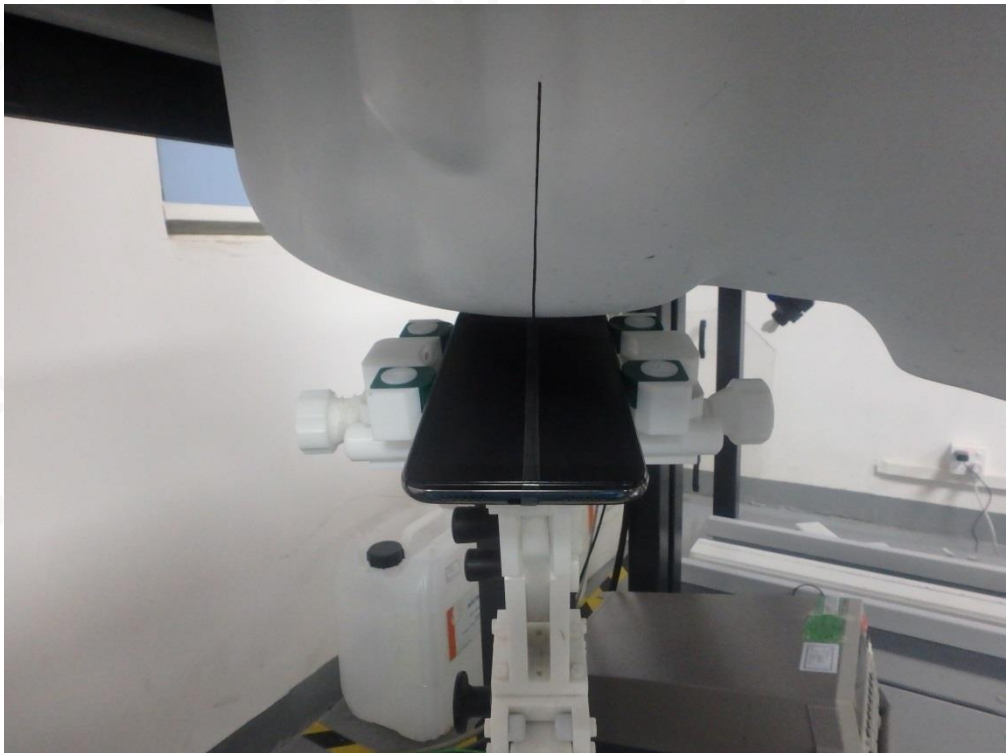
LEFT-TILT 15°



RIGHT- CHEEK TOUCH



RIGHT-TILT 15°



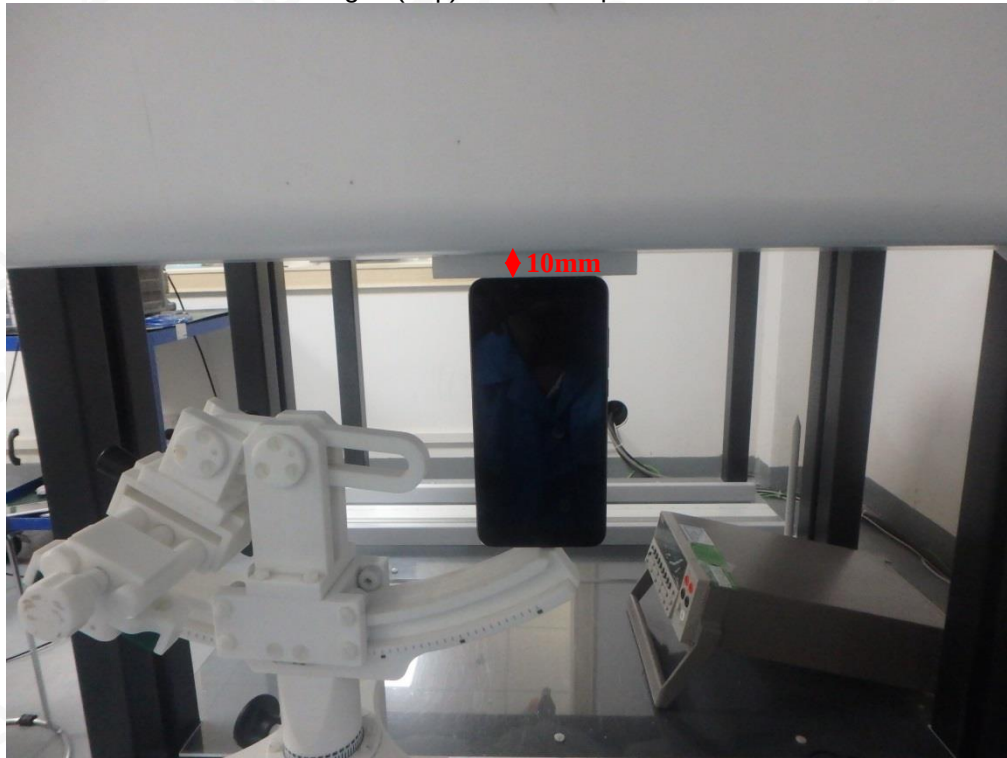
Body Back 10mm



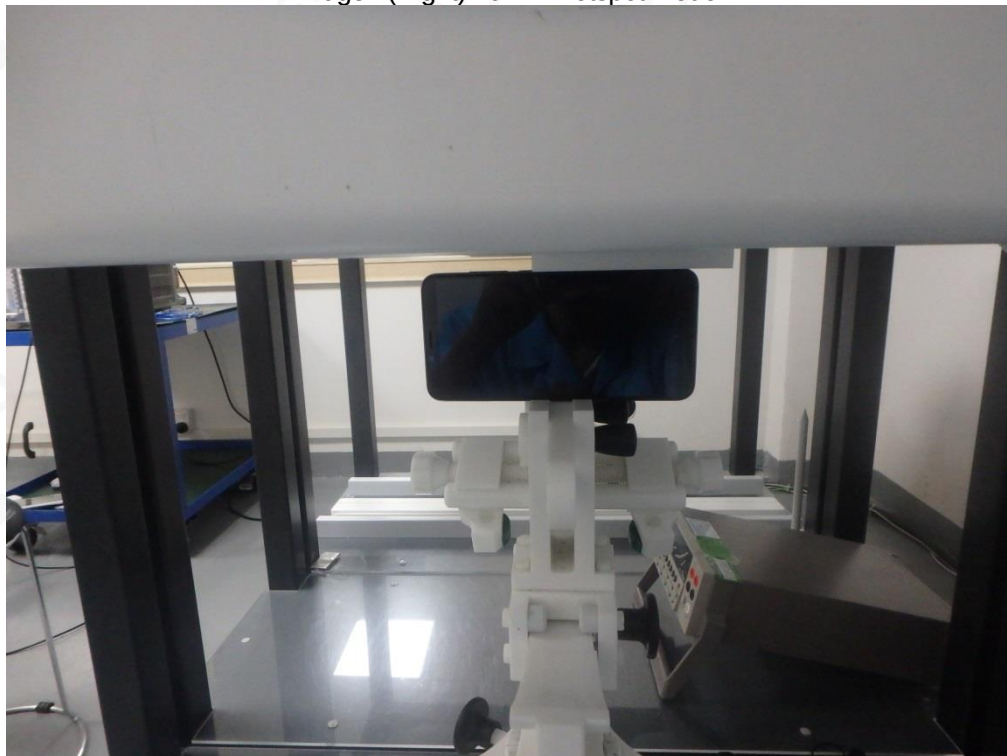
Body Front 10mm



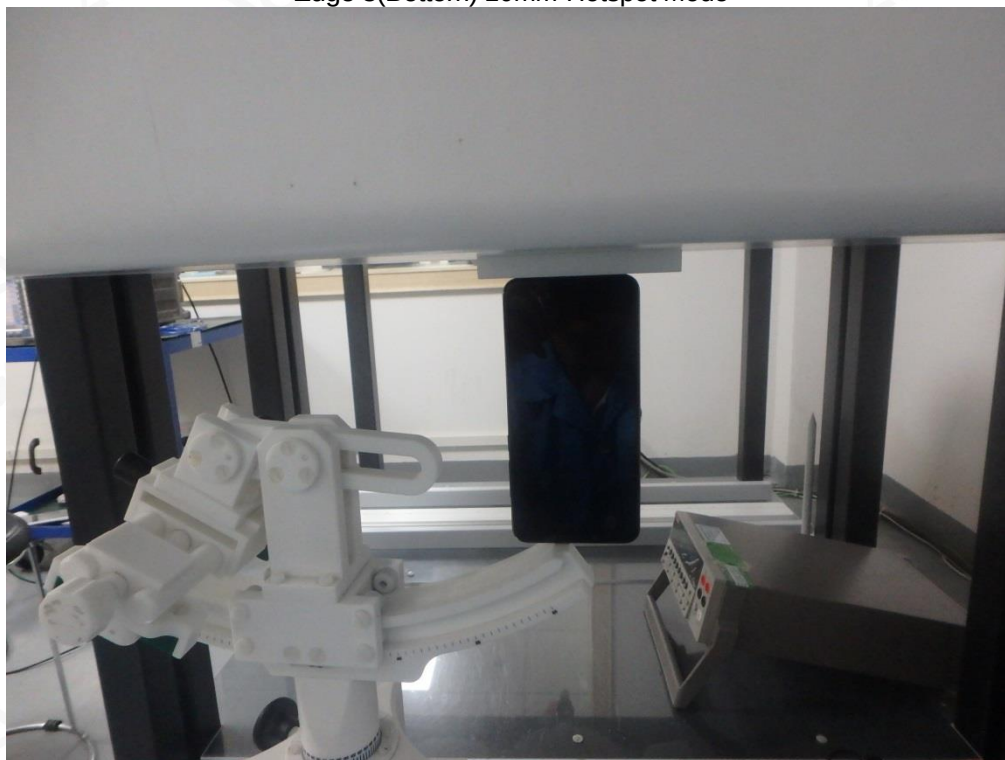
Edge 1(Top) 10mm-Hotspot Mode



Edge 2(Right) 10mm-Hotspot Mode



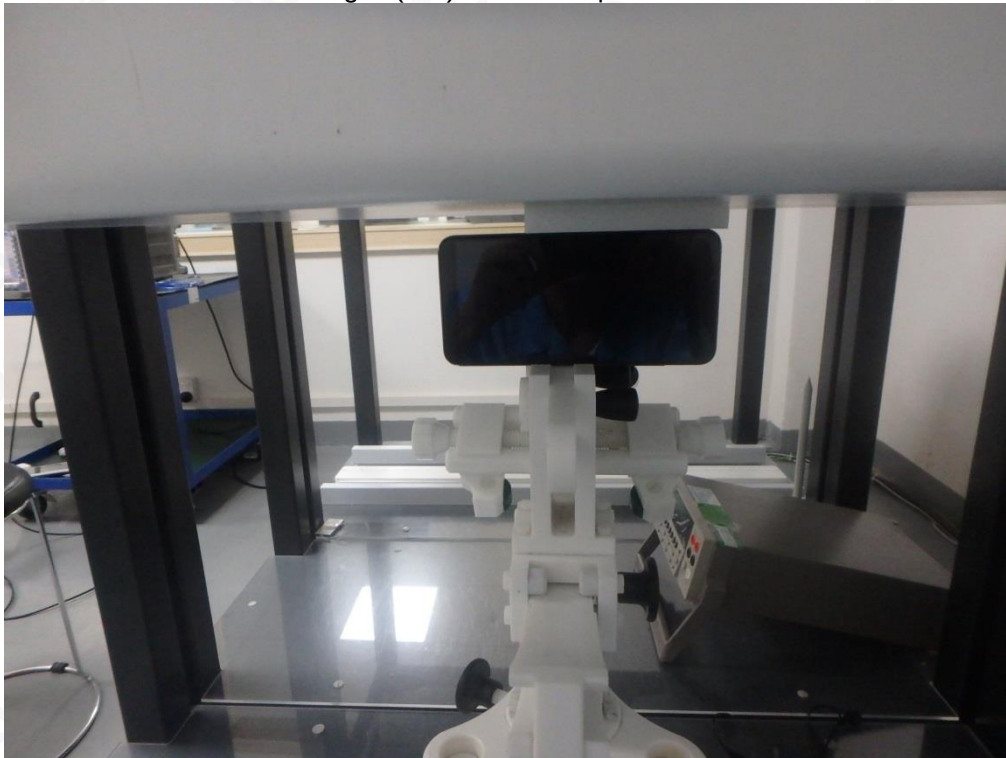
Edge 3(Bottom) 10mm-Hotspot Mode



Edge 3(Bottom) with headset 10mm-Hotspot Mode

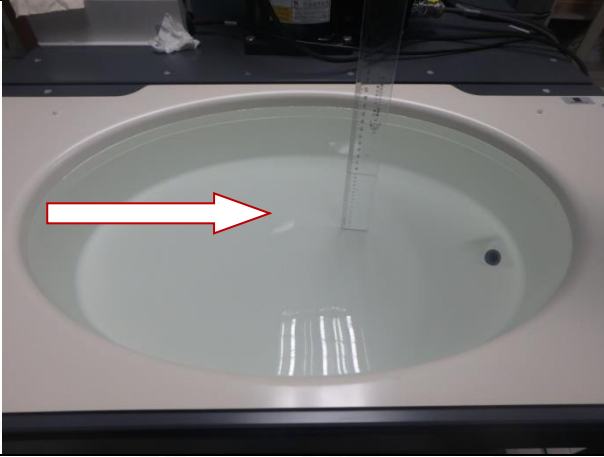
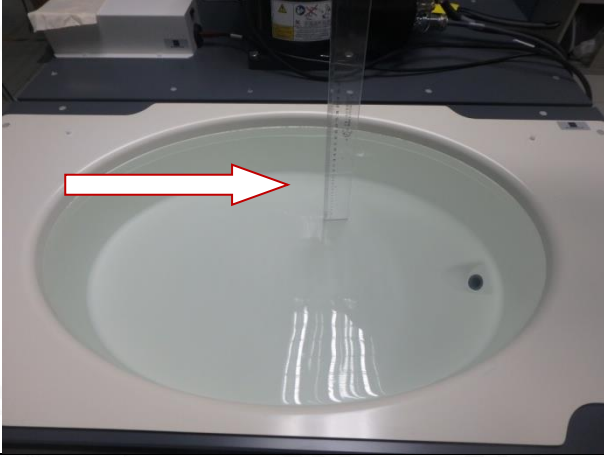
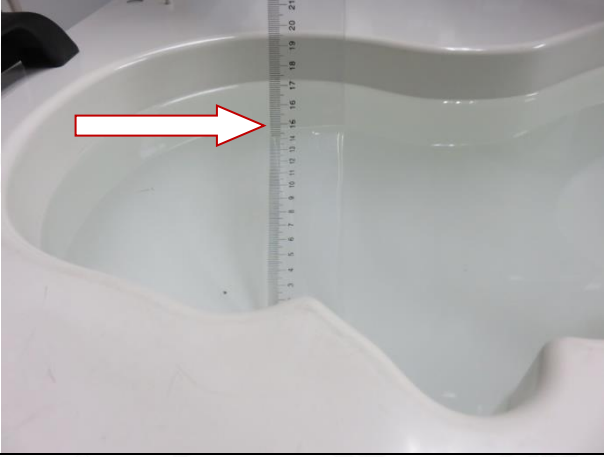
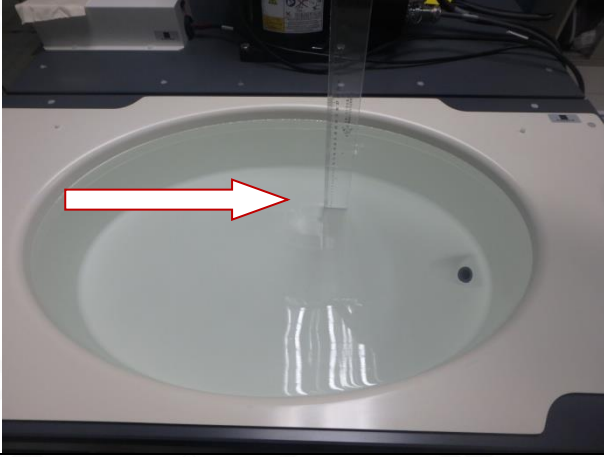


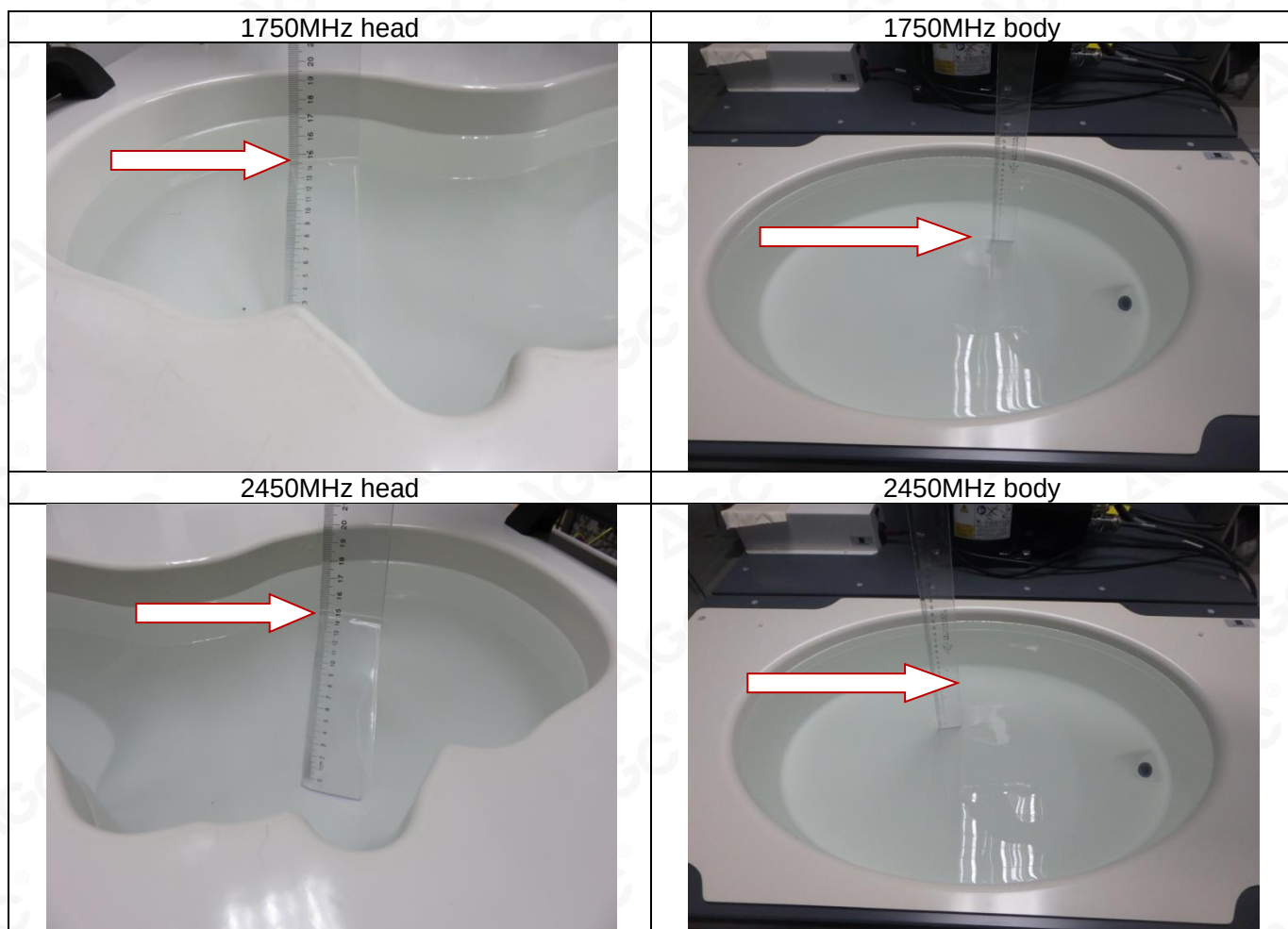
Edge 4(Left) 10mm-Hotspot Mode

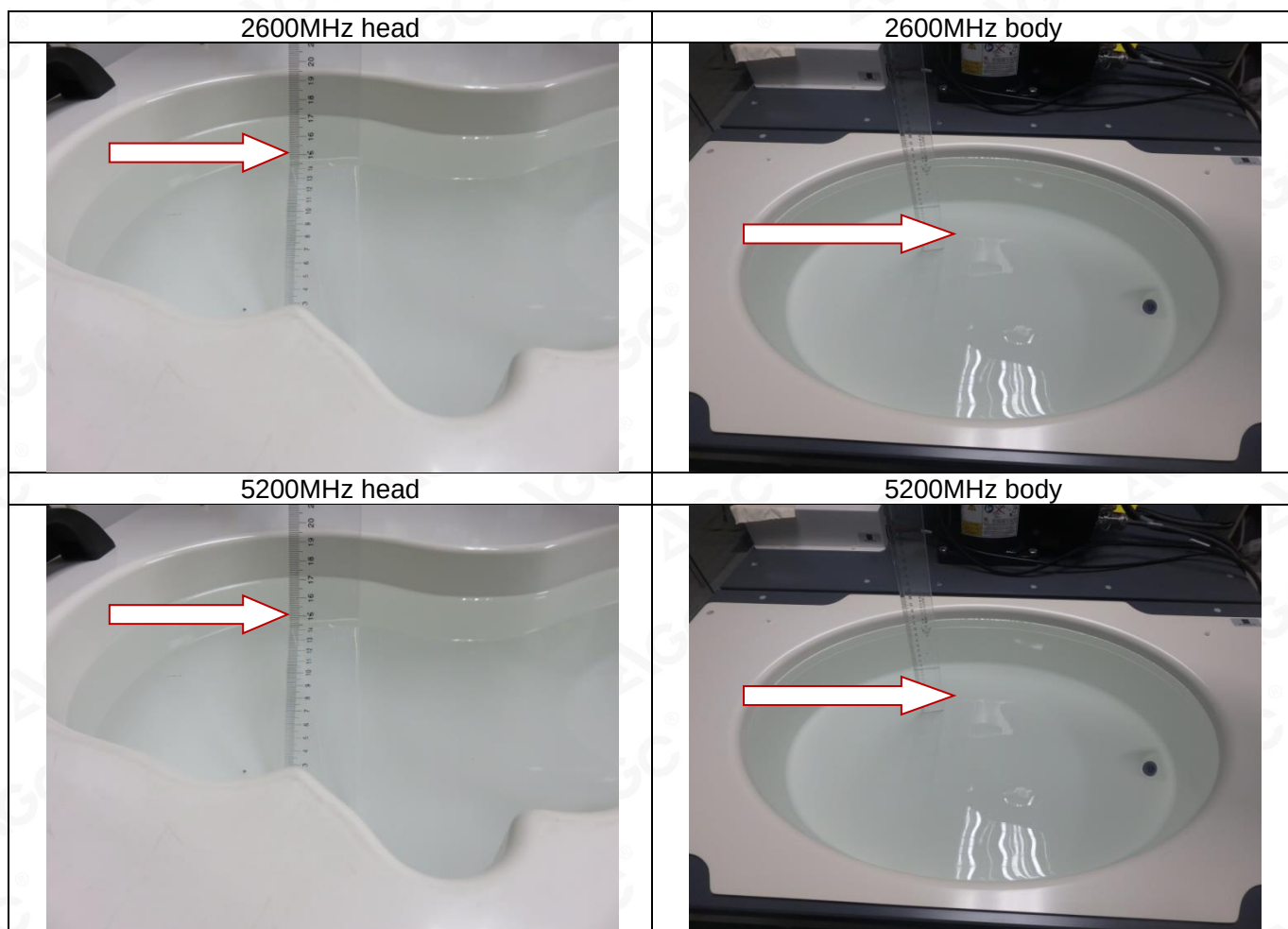


DEPTH OF THE LIQUID IN THE PHANTOM—ZOOM IN

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

750MHz head	750MHz body
	
835MHz head	835MHz body
	
1900MHz head	1900MHz body
	





APPENDIX D. CALIBRATION DATA

Refer to Attached files.



Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118