

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

**Date: Aug. 08,2019**

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;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 53.08$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section; Input Power=18dBm  
Ambient temperature (°C):21.1, Liquid temperature (°C): 20.7

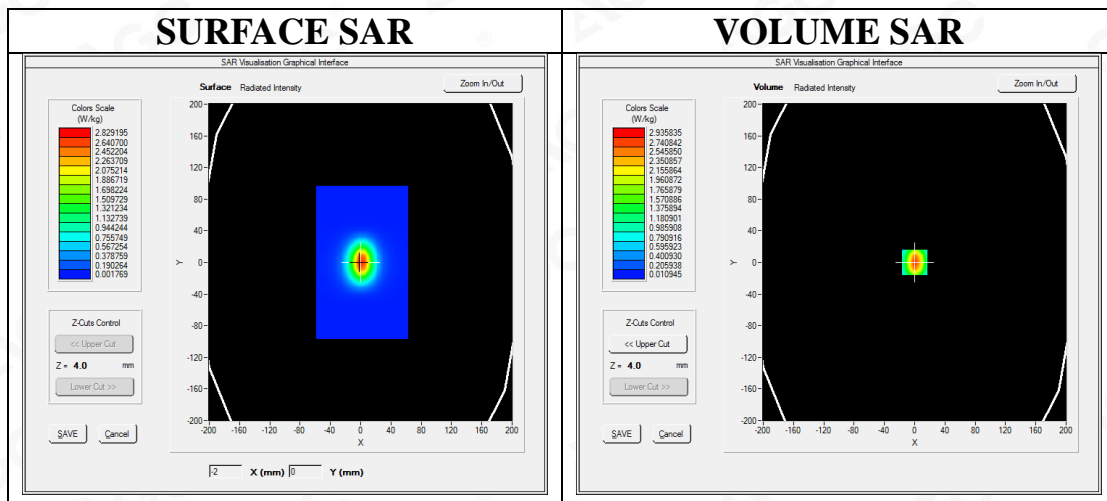
SATIMO Configuration:

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**

<b>SAR 10g (W/Kg)</b>	1.252349
<b>SAR 1g (W/Kg)</b>	2.806244



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

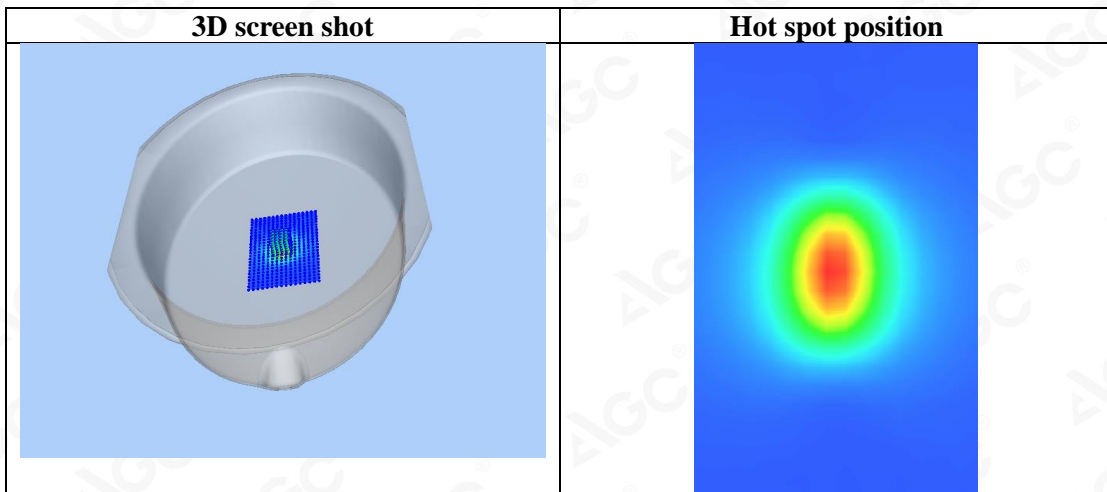
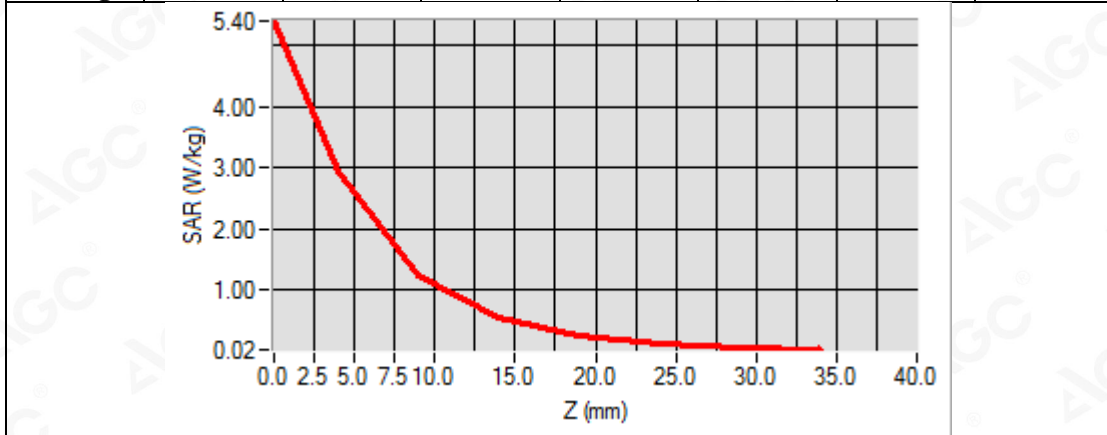
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

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)	5.3947	2.9328	1.2335	0.5485	0.2345	0.1068	0.0447



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 Head 1900MHz**

**Date: Aug. 04,2019**

**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/m<sup>3</sup> ;  
Phantom section: Flat Section; Input Power=18dBm  
Ambient temperature (°C):21.2, Liquid temperature (°C): 20.9

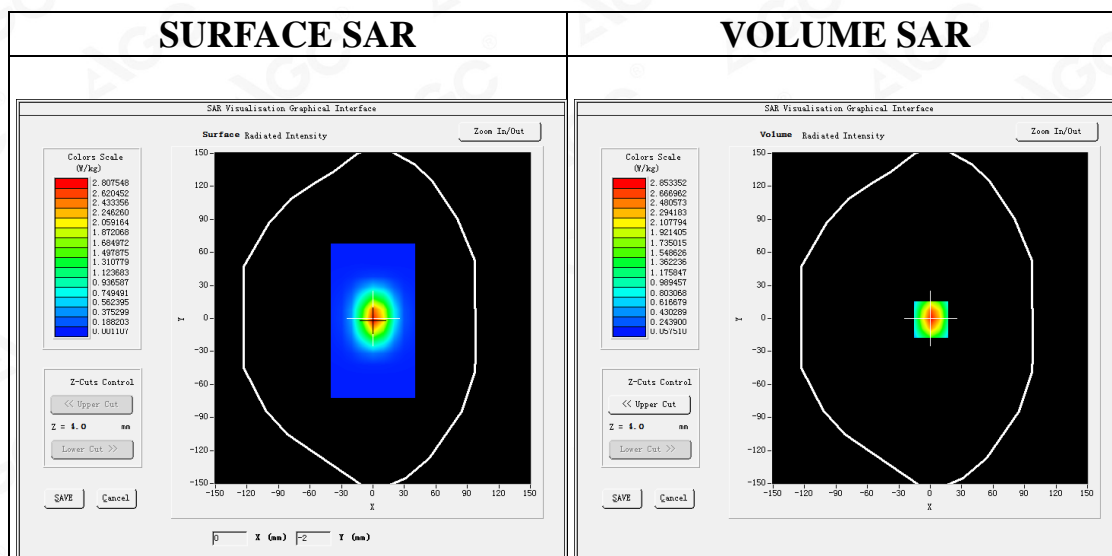
SATIMO Configuration:

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**

<b>SAR 10g (W/Kg)</b>	<b>1.381355</b>
<b>SAR 1g (W/Kg)</b>	<b>2.671684</b>



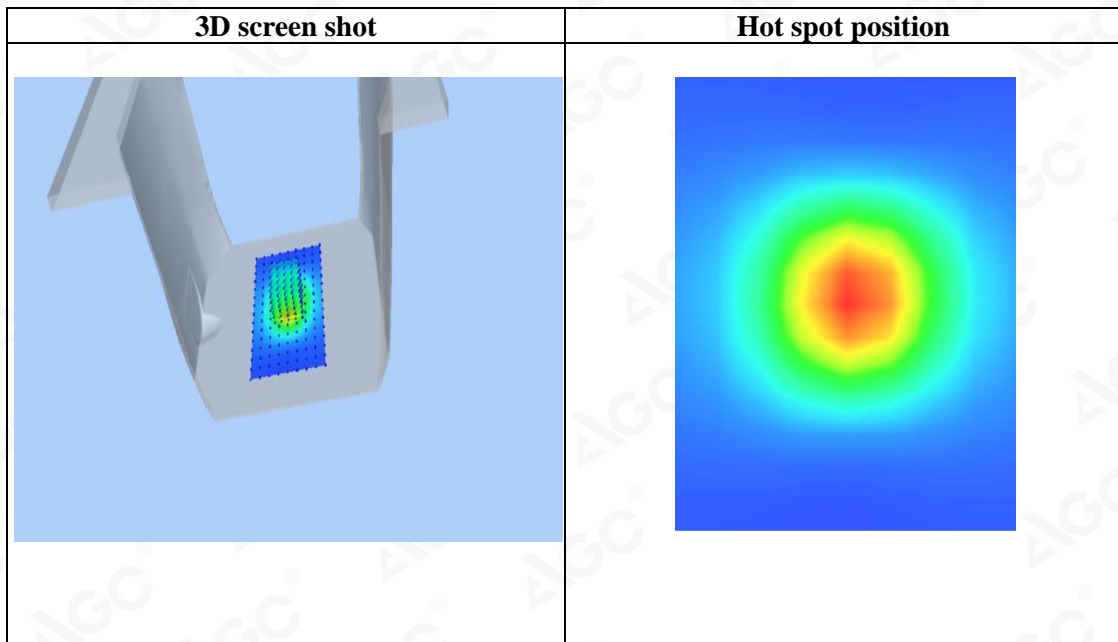
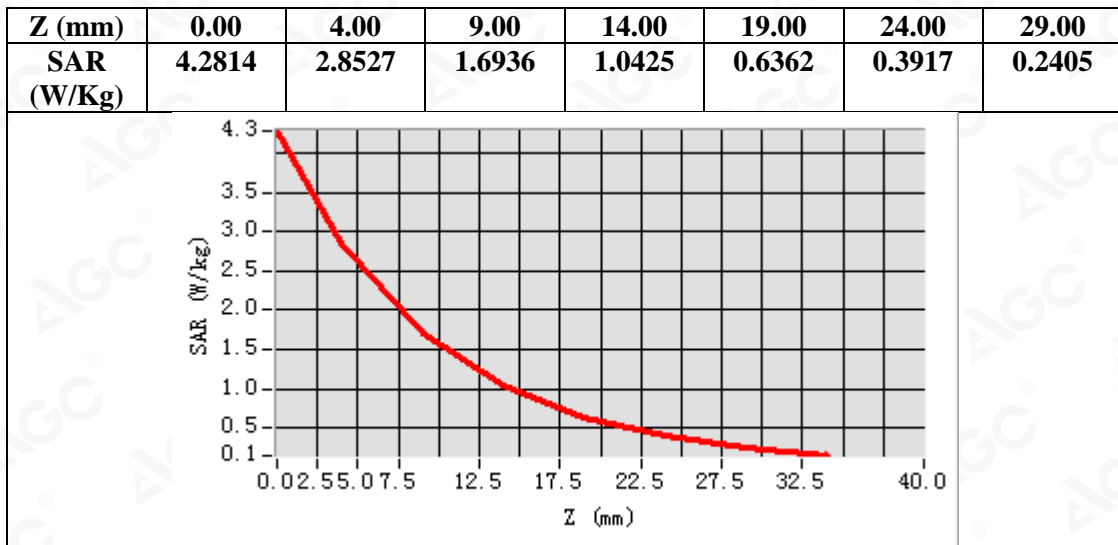
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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**  
**System Check Body 1900MHz**

**Date: Aug. 04,2019**

**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;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 51.26$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section; Input Power=18dBm  
Ambient temperature (°C):21.2, Liquid temperature (°C): 20.8

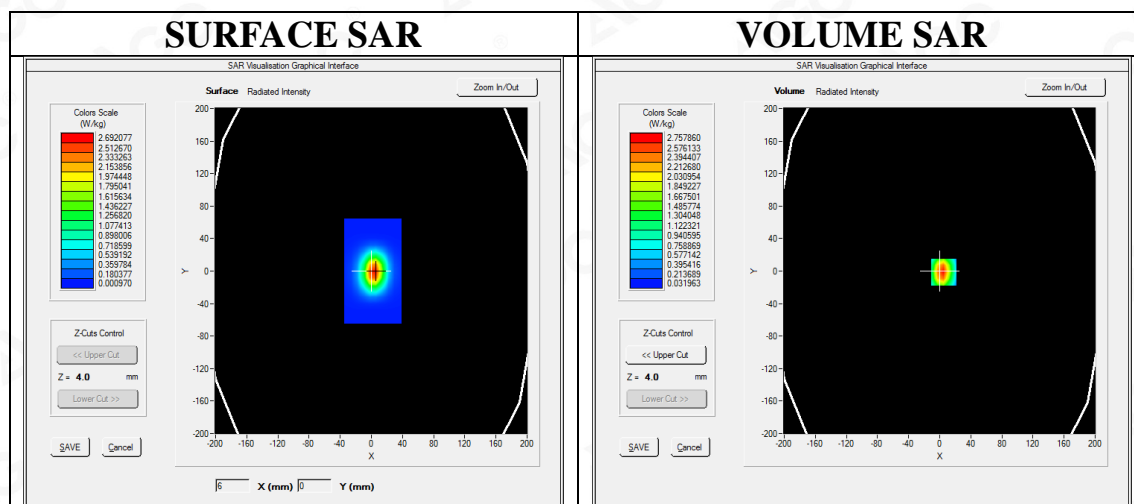
SATIMO Configuration:

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**

<b>SAR 10g (W/Kg)</b>	1.302494
<b>SAR 1g (W/Kg)</b>	2.623251



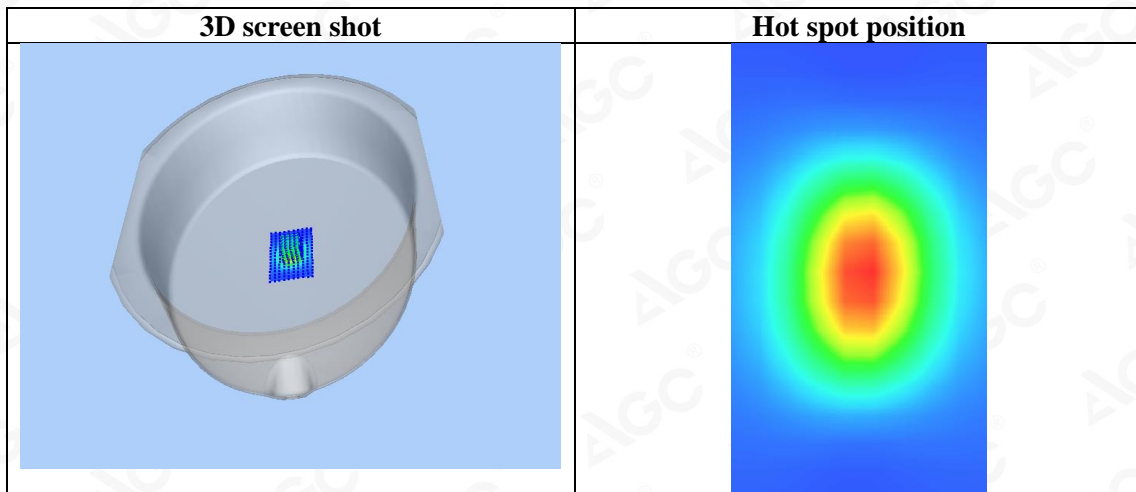
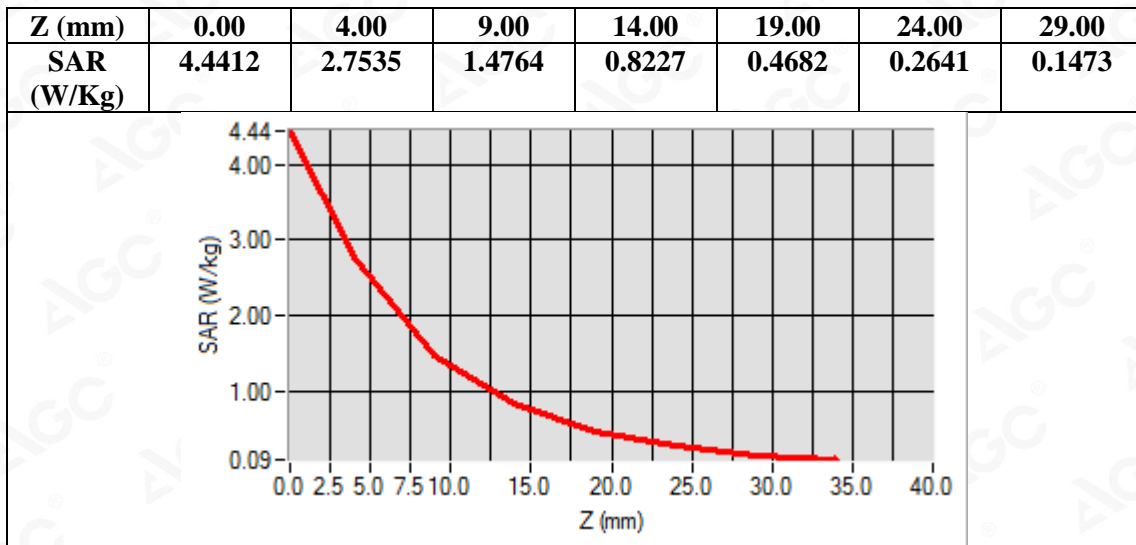
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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**  
**System Check Head 2450 MHz**

**Date: Aug. 08,2019**

**DUT: Dipole 2450 MHz Type: SID 2450**

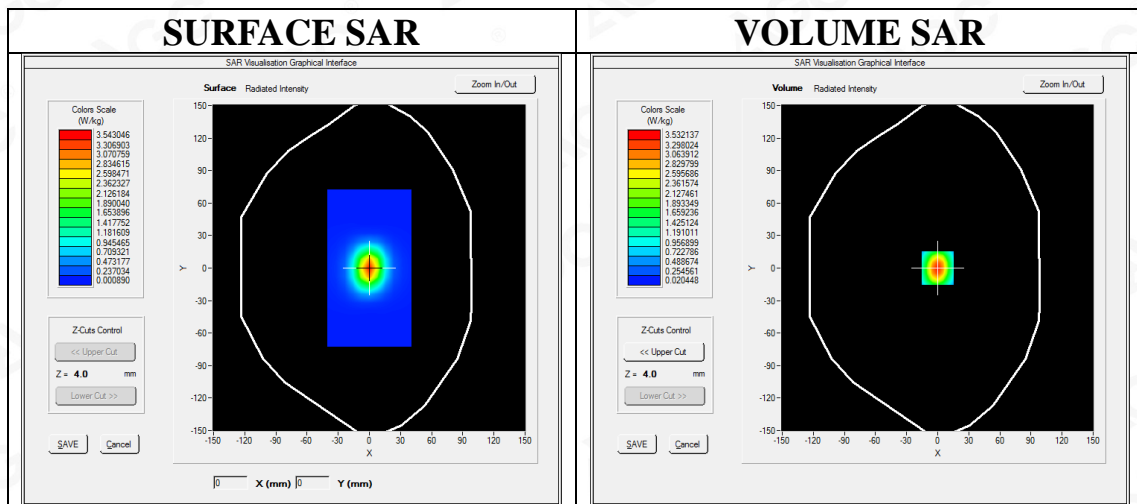
Communication System CW; Communication System Band: D2450 (2450.0 MHz); Duty Cycle: 1:1; Conv.F=4.90  
Frequency: 2450 MHz; Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.80$  mho/m;  $\epsilon_r = 39.60$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section; Input Power=18dBm  
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**

<b>SAR 10g (W/Kg)</b>	1.492437
<b>SAR 1g (W/Kg)</b>	3.223873



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

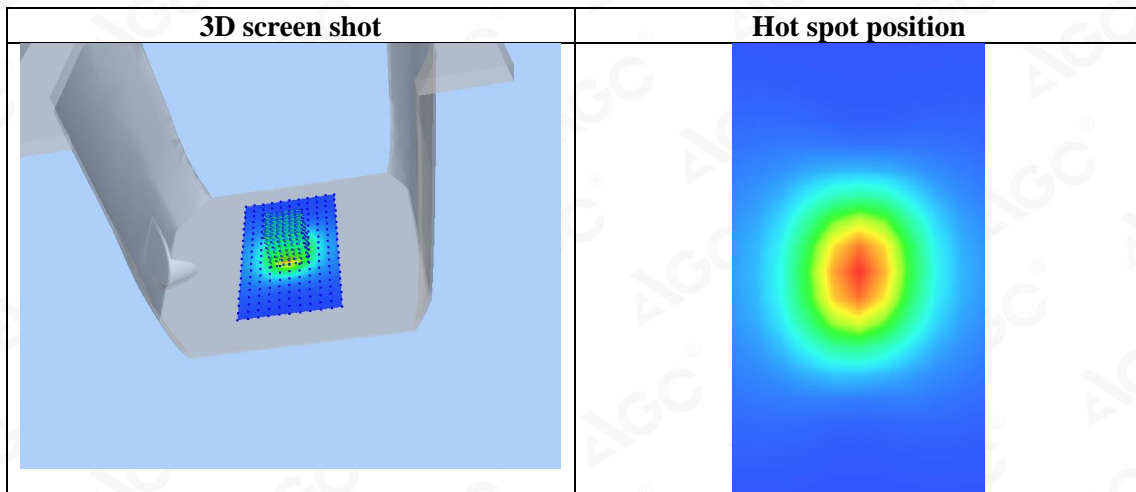
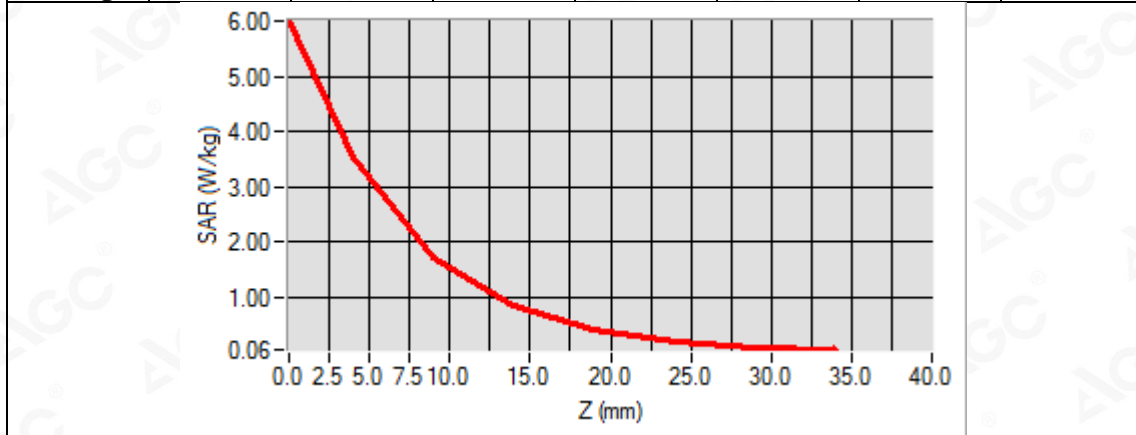
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

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)	5.9980	3.5317	1.7158	0.8537	0.4262	0.258	0.1074



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 2450 MHz**

**Date: Aug. 08,2019**

**DUT: Dipole 2450 MHz Type: SID 2450**

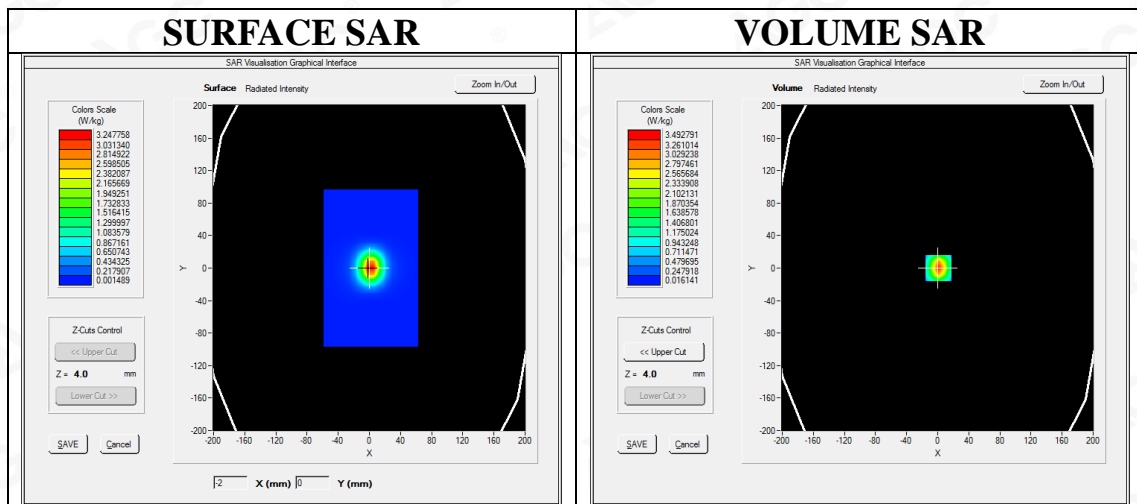
Communication System CW; Communication System Band: D2450 (2450.0 MHz); Duty Cycle: 1:1; Conv.F=5.04  
Frequency: 2450 MHz; Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.92$  mho/m;  $\epsilon_r = 52.10$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section; Input Power=18dBm  
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**

<b>SAR 10g (W/Kg)</b>	1.468423
<b>SAR 1g (W/Kg)</b>	3.257245



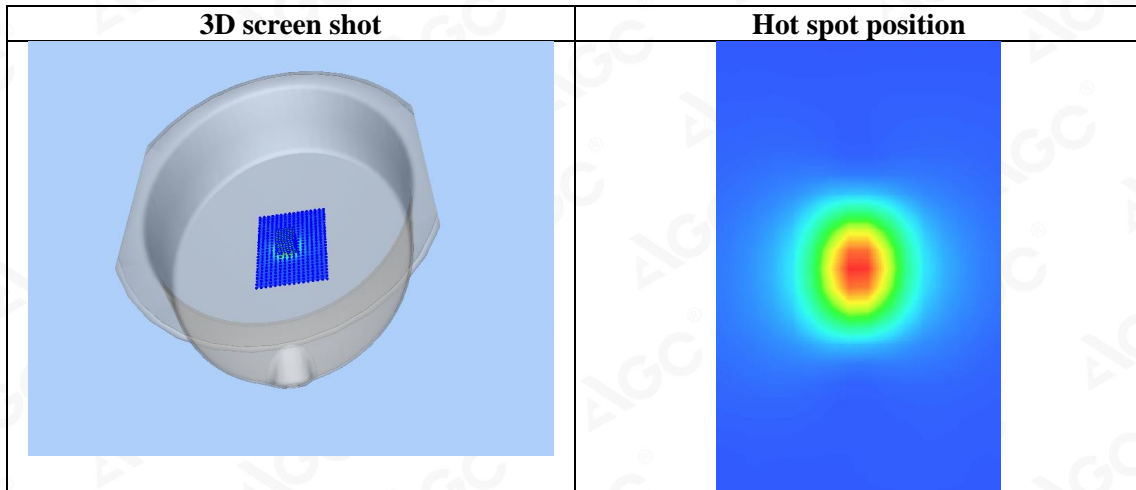
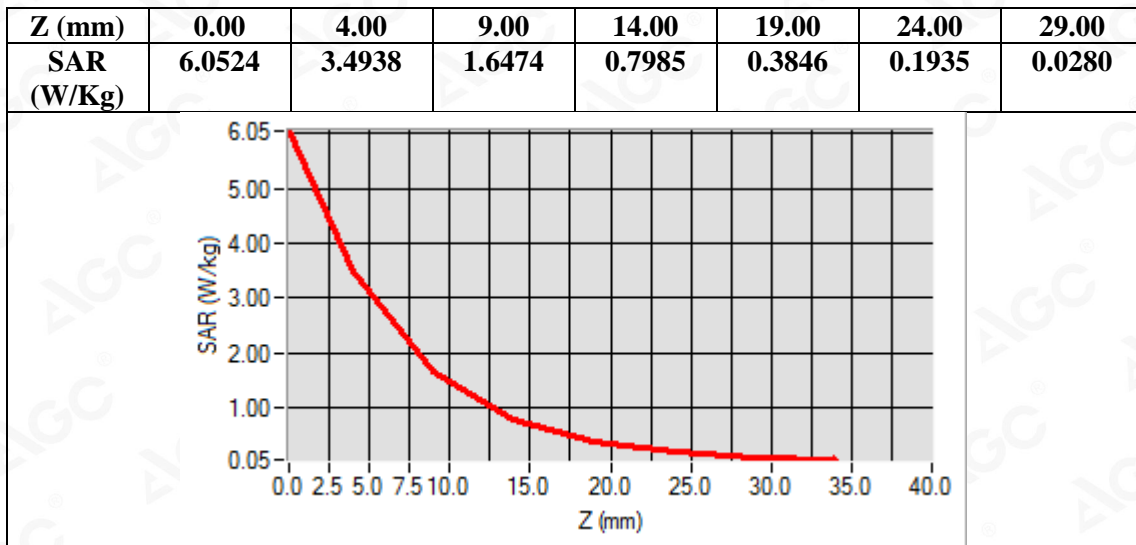
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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**  
**System Check Head 2600MHz**  
**DUT: Dipole 2600 MHz; Type: SID 2600**

**Date: Aug. 01,2019**

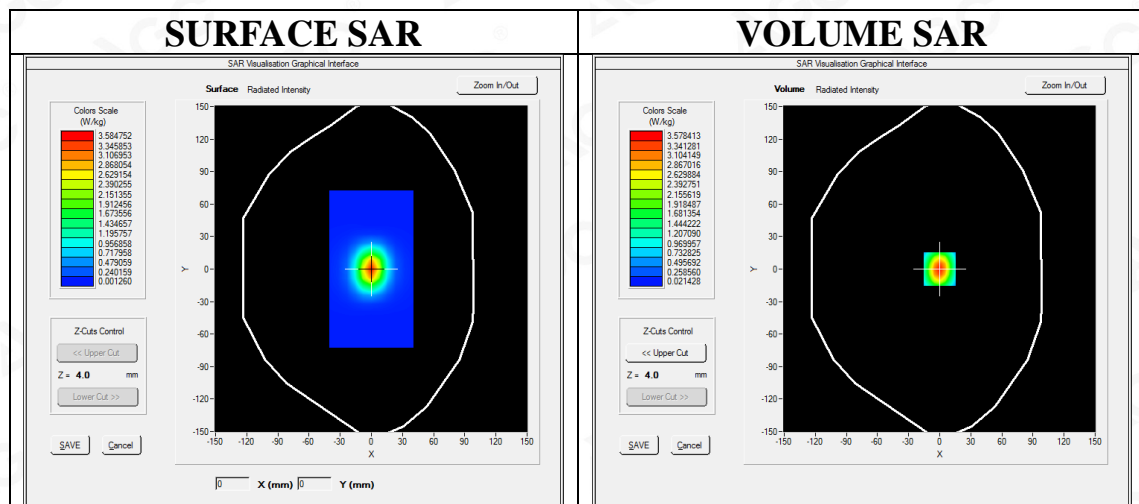
Communication System: CW; Communication System Band: D2600 (2600.0 MHz); Duty Cycle: 1:1; Conv.F=4.57  
Frequency:2600 MHz; Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 38.62$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section; Input Power=18dBm  
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**

<b>SAR 10g (W/Kg)</b>	1.516524
<b>SAR 1g (W/Kg)</b>	3.261257



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

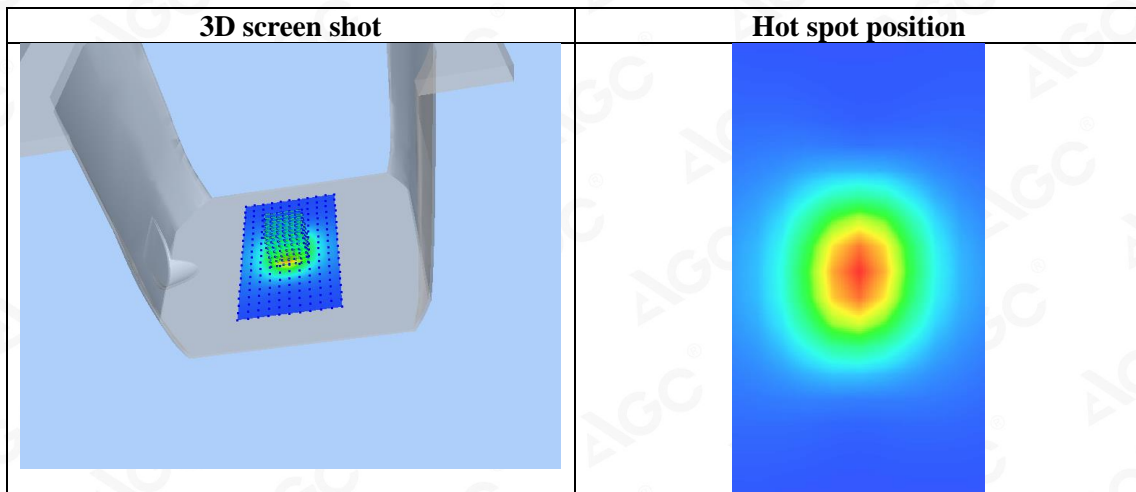
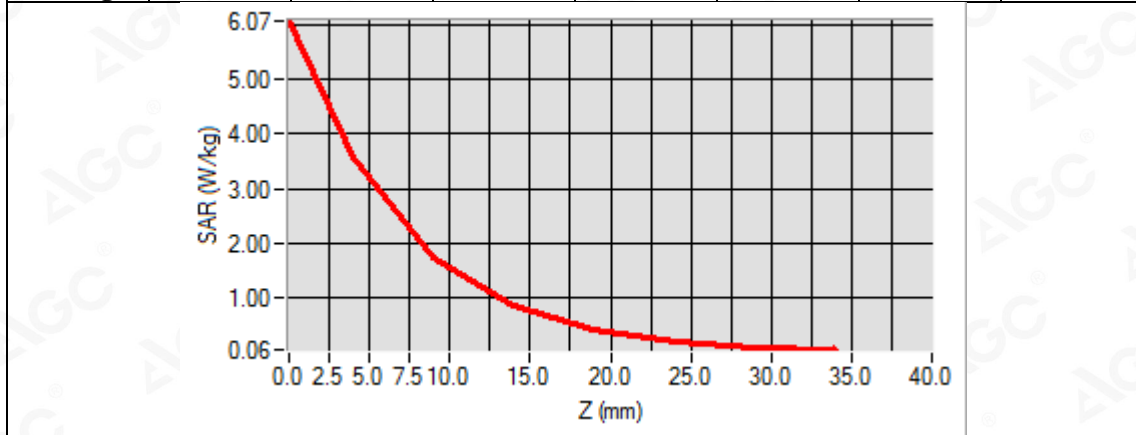
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

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)	6.0612	3.5756	1.7434	0.8628	0.4317	0.2268	0.1124



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 2600MHz**  
**DUT: Dipole 2600 MHz; Type: SID 2600**

**Date: Aug. 01,2019**

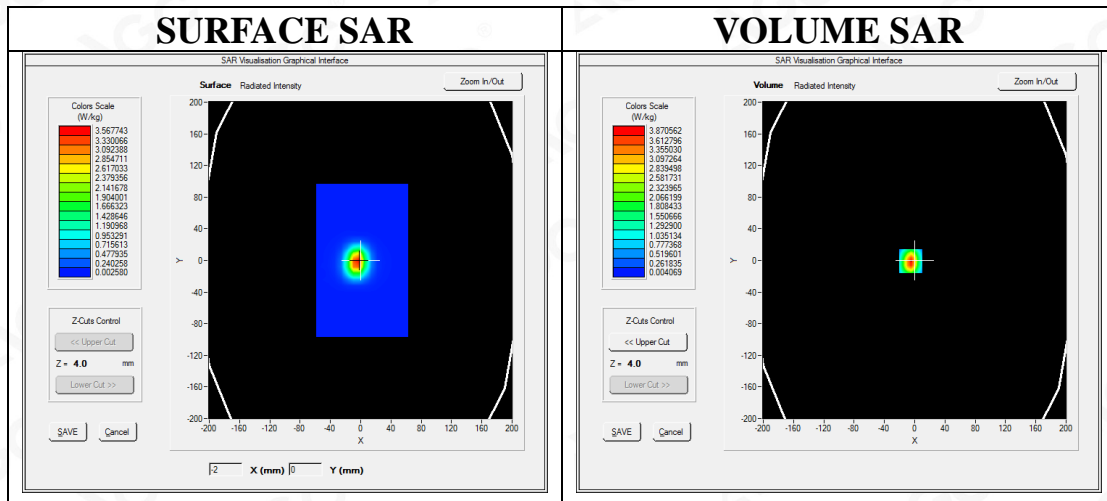
Communication System: CW; Communication System Band: D2600 (2600.0 MHz); Duty Cycle: 1:1; Conv.F=4.68  
Frequency:2600 MHz; Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.14$  mho/m;  $\epsilon_r = 52.47$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section; Input Power=18dBm  
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**

<b>SAR 10g (W/Kg)</b>	1.503144
<b>SAR 1g (W/Kg)</b>	3.423194



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

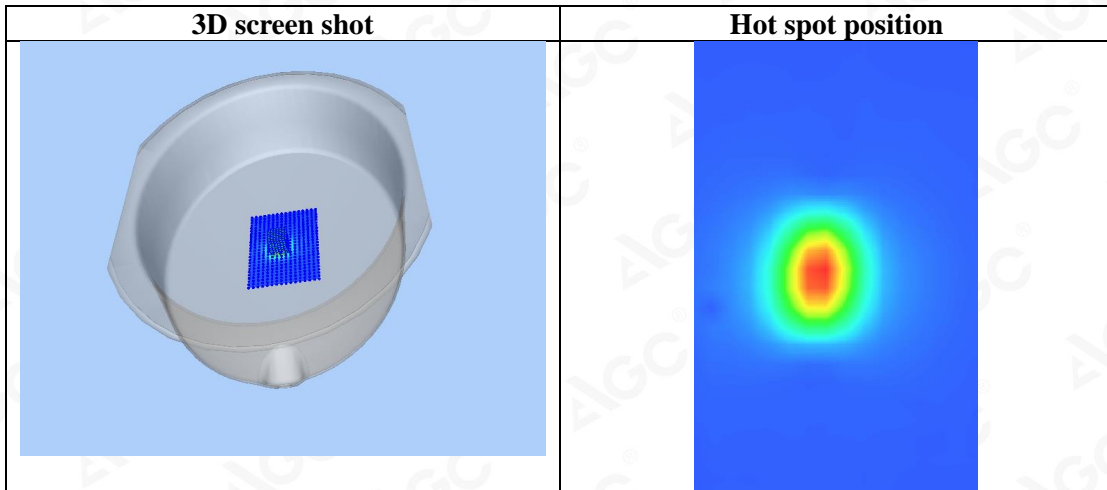
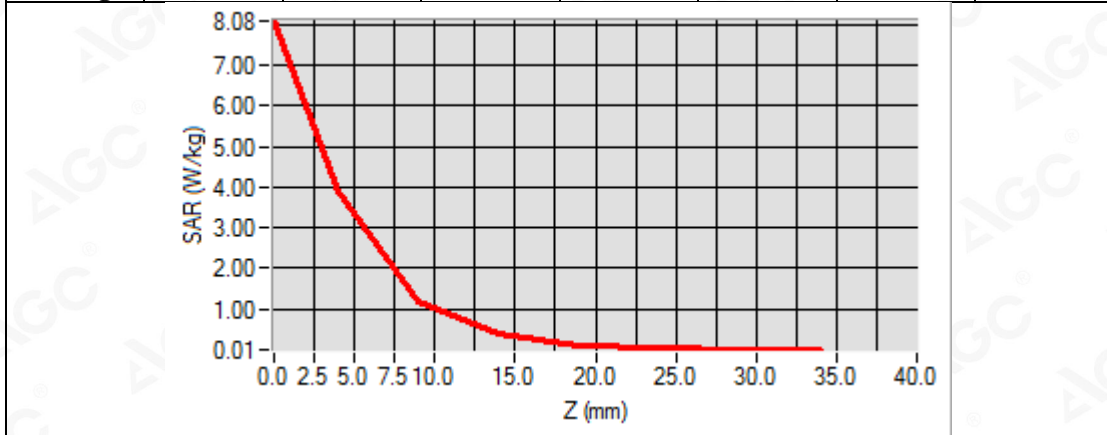
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

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)	8.0767	3.8706	1.2044	0.3868	0.1287	0.0443	0.0167



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 Head 5200 MHz**  
**DUT: Dipole 5000MHz Type: SWG5500**

**Date: Aug. 28,2019**

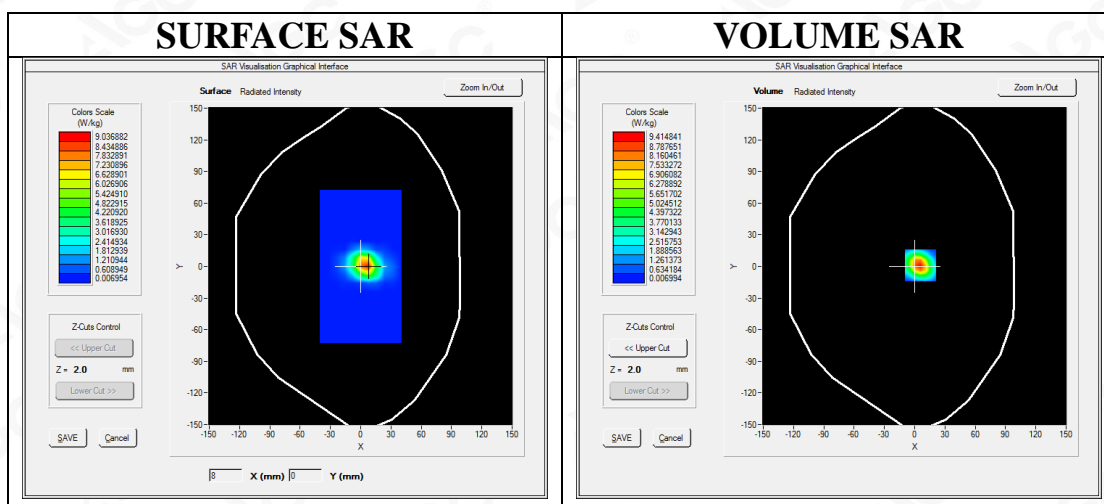
Communication System: CW; Communication System Band: D5000 (5000.0 MHz); Duty Cycle: 1:1; Conv.F=2.46  
Frequency: 5200 MHz; Medium parameters used:  $f = 5200$  MHz;  $\sigma = 4.61$  mho/m;  $\epsilon_r = 35.64$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section; Input Power=15dBm  
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**

<b>SAR 10g (W/Kg)</b>	1.742684
<b>SAR 1g (W/Kg)</b>	5.052657



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

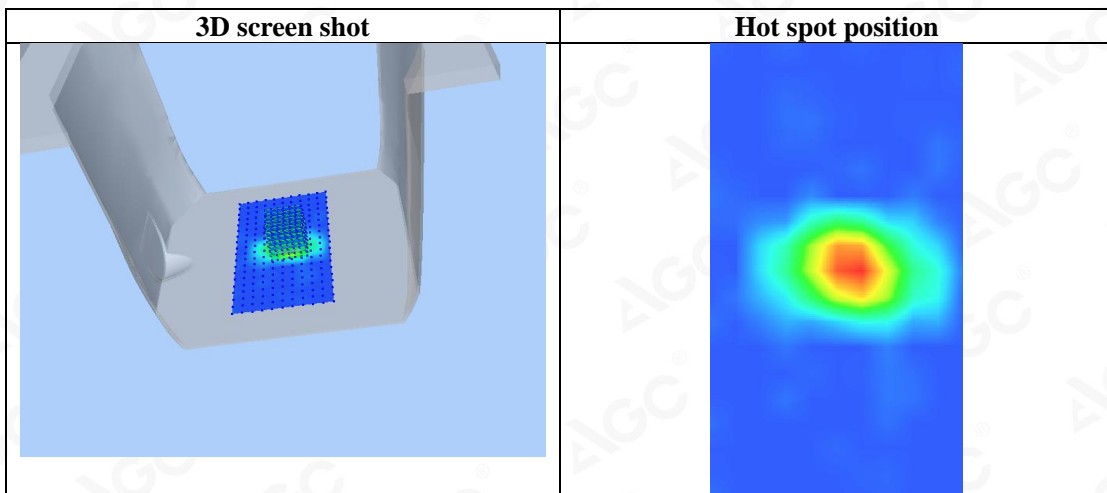
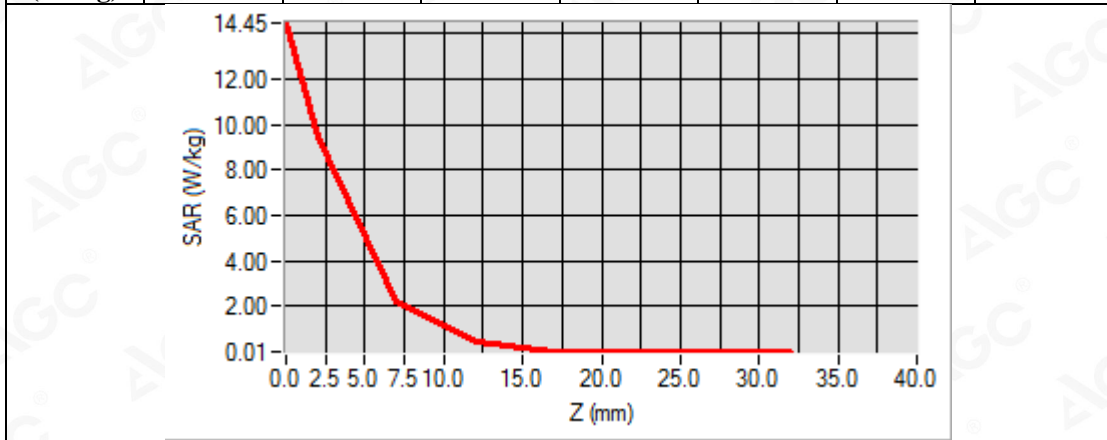
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	14.4365	9.4015	2.2038	0.378	0.0085	0.0226	0.0072



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 5200 MHz**  
**DUT: Dipole 5000MHz Type: SWG5500**

**Date: Aug. 28,2019**

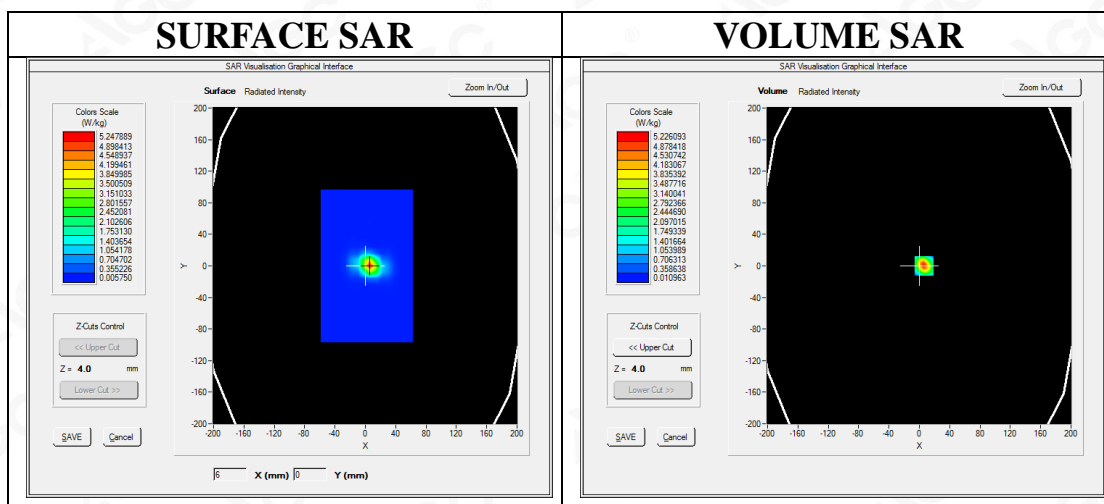
Communication System: CW; Communication System Band: D5000 (5000.0 MHz); Duty Cycle: 1:1; Conv.F=2.52  
Frequency: 5200 MHz; Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.32$  mho/m;  $\epsilon_r = 48.90$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section; Input Power=15dBm  
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**

<b>SAR 10g (W/Kg)</b>	1.648521
<b>SAR 1g (W/Kg)</b>	4.884215



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

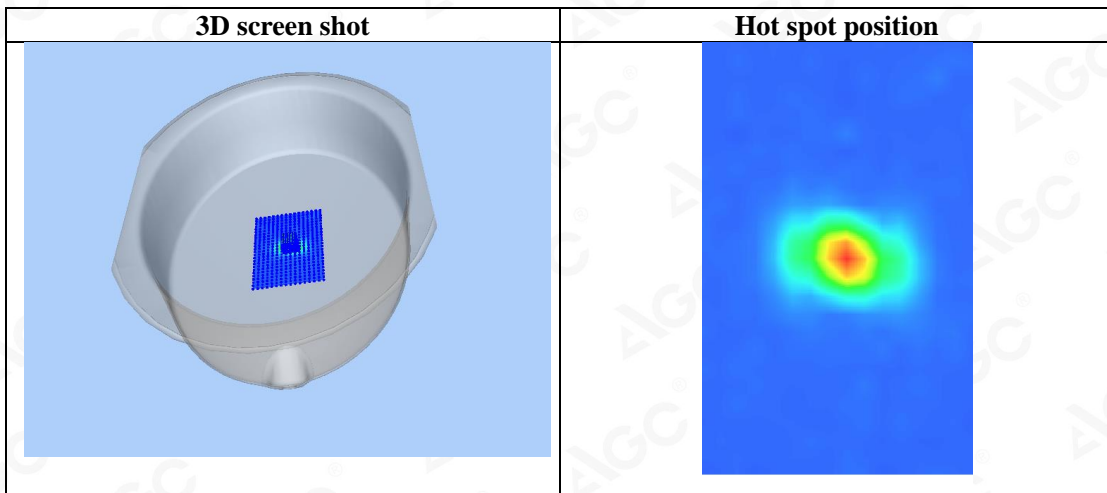
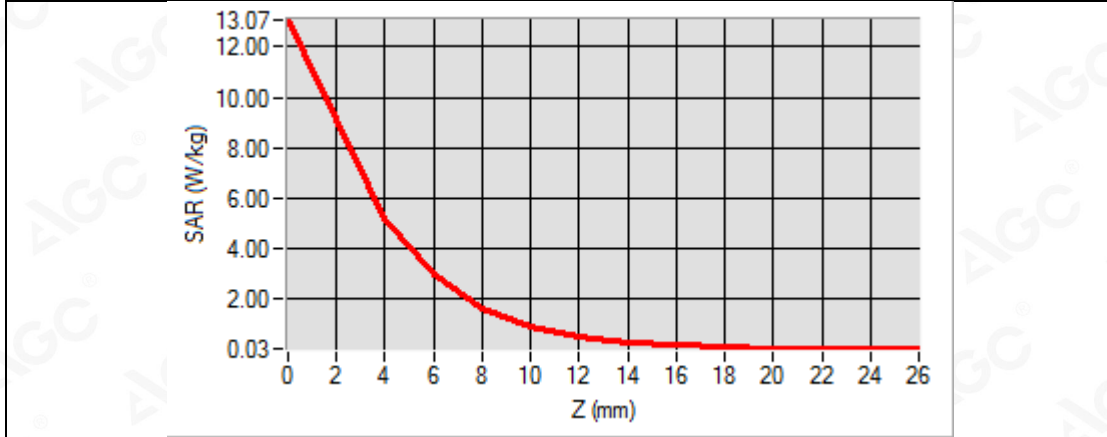
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118

Z (mm)	0.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00	24.00
SAR (W/Kg)	13.06	5.2243	2.9475	1.6452	0.9147	0.5119	0.2936	0.1608	0.0942	0.0674	0.0339	0.0217



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/m<sup>3</sup>;  
Phantom section: Left Section  
Ambient temperature (°C): 21.2, Liquid temperature (°C): 20.8

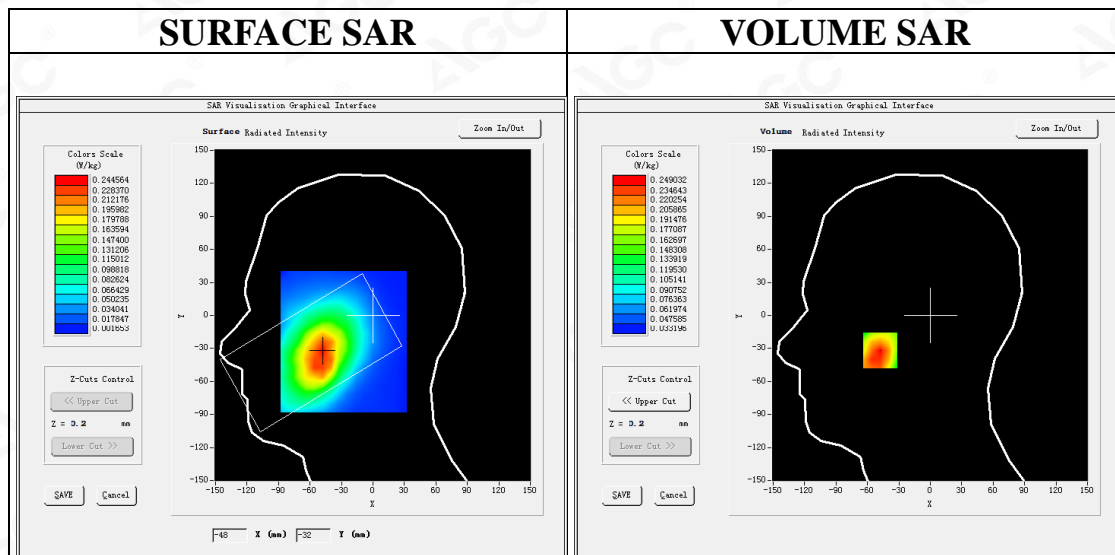
### SATIMO Configuration

- 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.

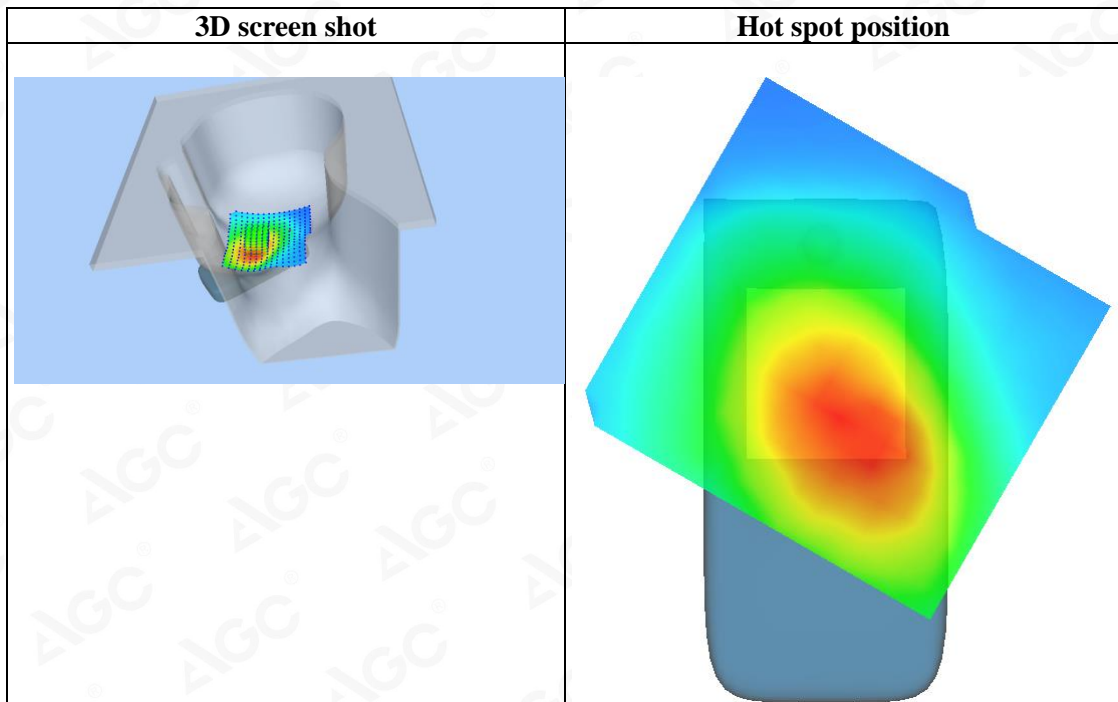
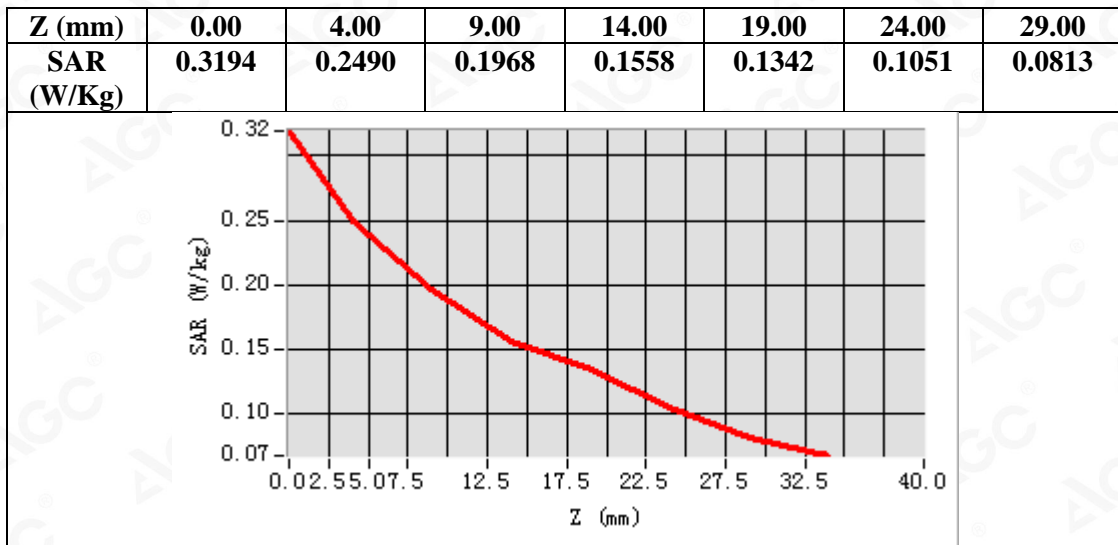
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118





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/m<sup>3</sup> ; Phantom section: Flat Section  
Ambient temperature (°C): 21.2, Liquid temperature (°C): 20.9

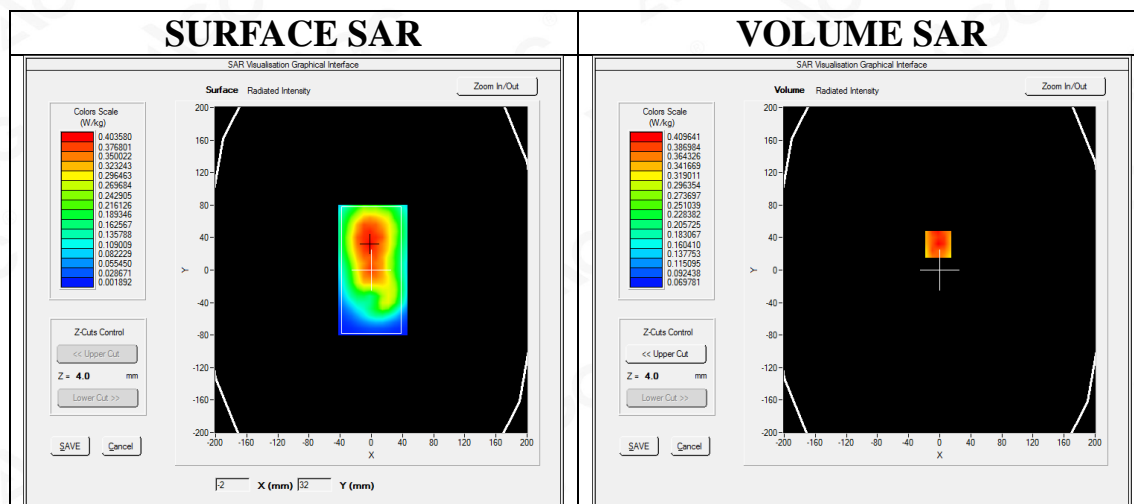
SATIMO Configuration:

- 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;

<b>Area Scan</b>	dx=8mm dy=8mm, h= 5.00 mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
<b>Phantom</b>	ELLI
<b>Device Position</b>	Body Back
<b>Band</b>	GSM 850
<b>Channels</b>	Middle
<b>Signal</b>	TDMA (Crest factor: 4.0)



**Maximum location: X=-2.00, Y=32.00**

**SAR Peak: 0.53 W/kg**

<b>SAR 10g (W/Kg)</b>	0.294576
<b>SAR 1g (W/Kg)</b>	0.397423



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

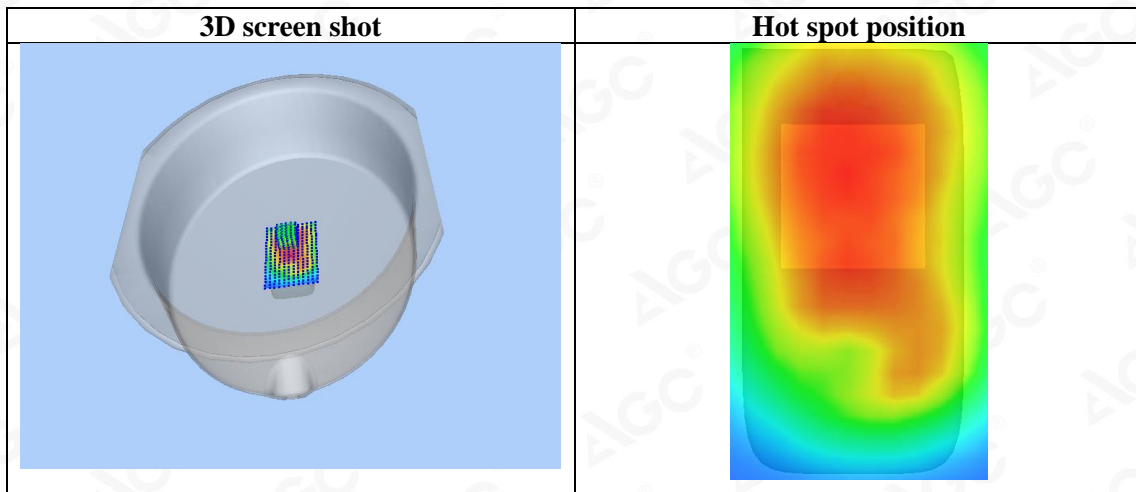
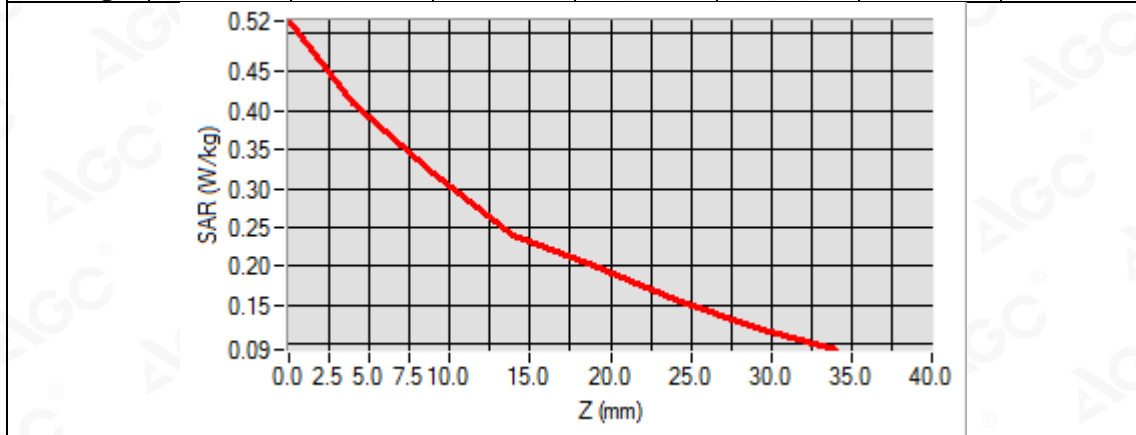
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.5154	0.4096	0.3198	0.2388	0.2013	0.1573	0.1207



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/m<sup>3</sup> ;  
Phantom section: Right Section  
Ambient temperature (°C): 21.1, Liquid temperature (°C): 20.8

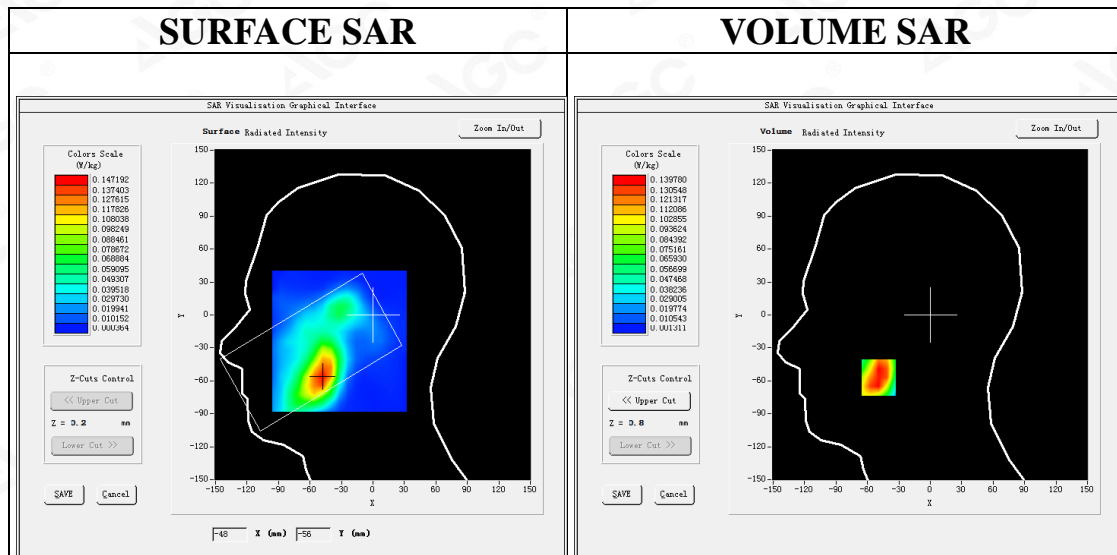
SATIMO Configuration:

- 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;**

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



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

**SAR Peak: 0.21 W/kg**

<b>SAR 10g (W/Kg)</b>	0.080286
<b>SAR 1g (W/Kg)</b>	0.134726



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

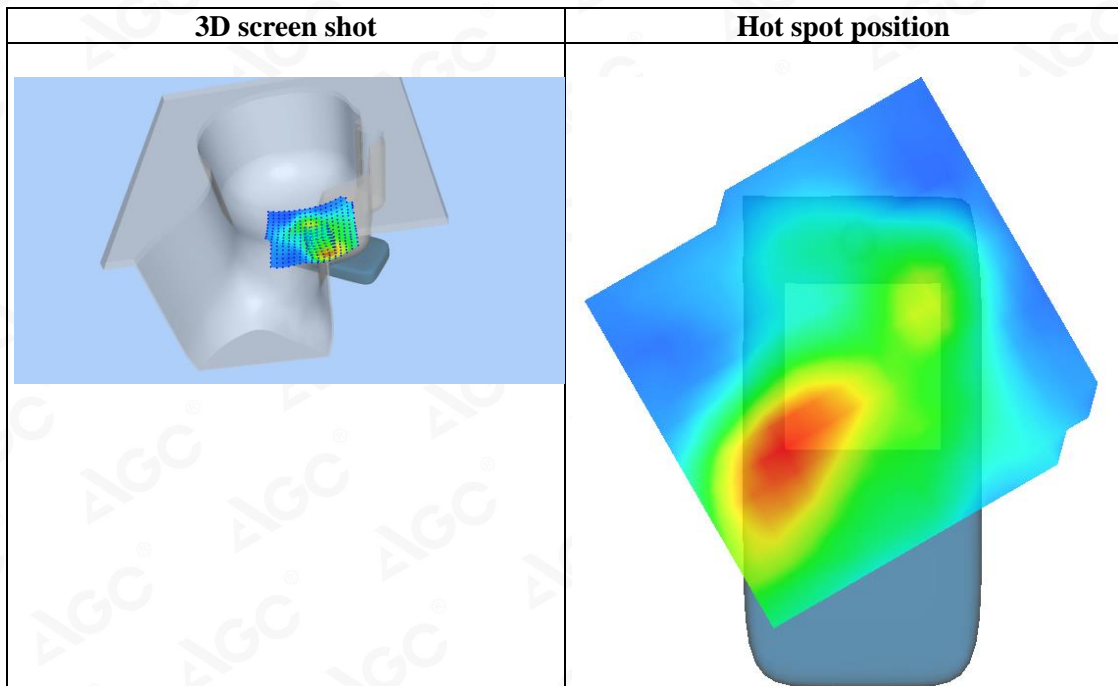
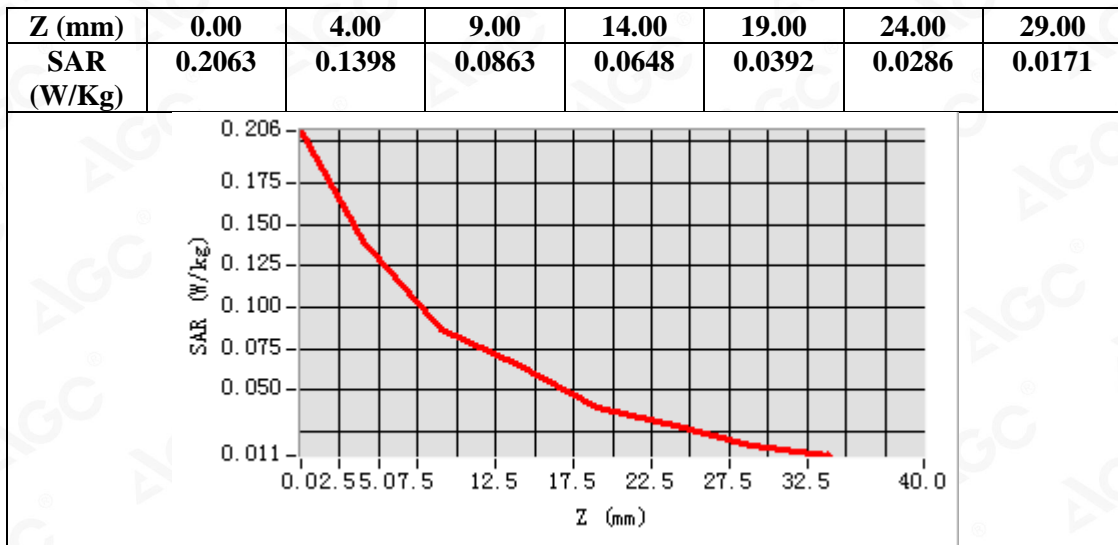
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118





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/m<sup>3</sup> ; Phantom section: Flat Section  
Ambient temperature (°C): 21.1, Liquid temperature (°C): 20.7

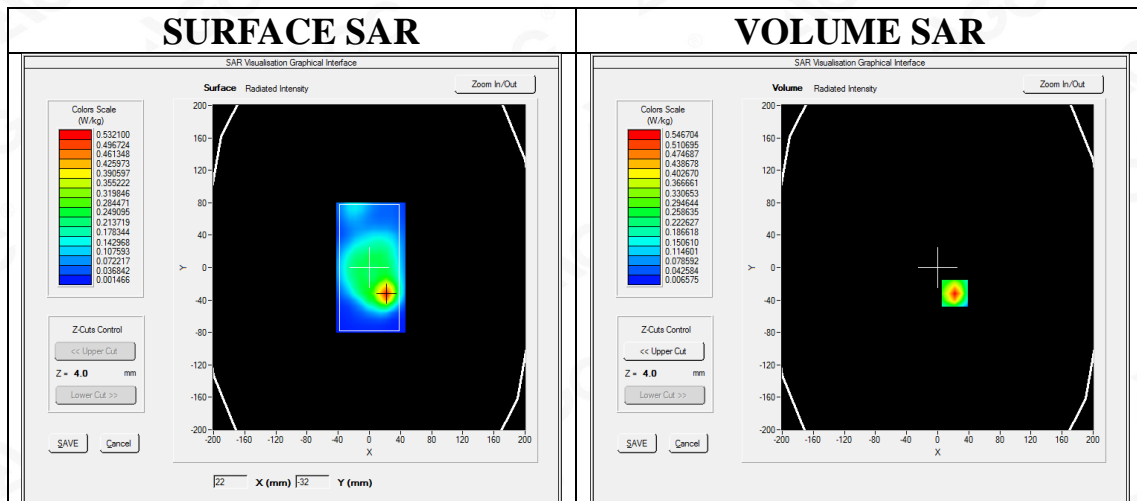
SATIMO Configuration:

- 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;

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



**Maximum location: X=22.00, Y=-32.00**

**SAR Peak: 0.88 W/kg**

<b>SAR 10g (W/Kg)</b>	0.251130
<b>SAR 1g (W/Kg)</b>	0.503105



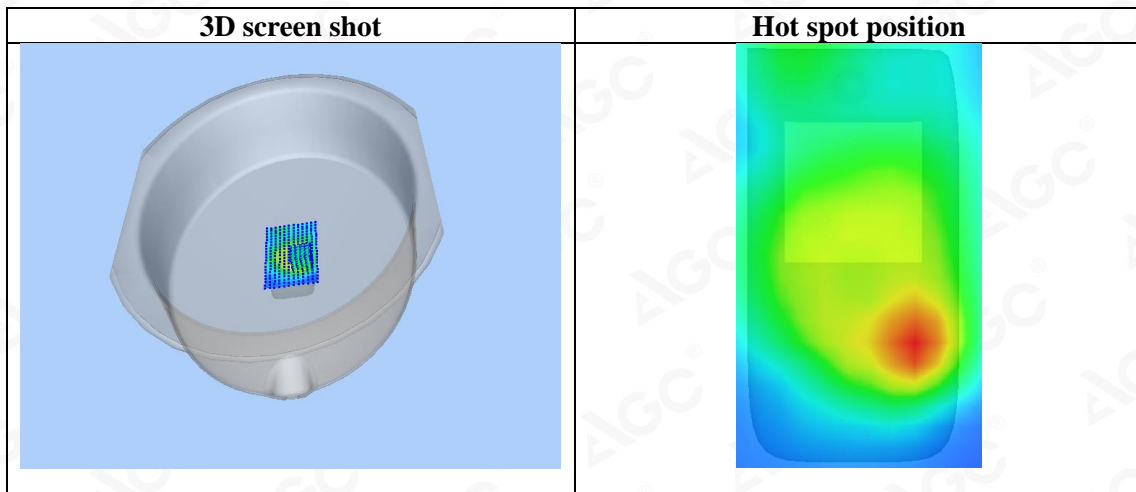
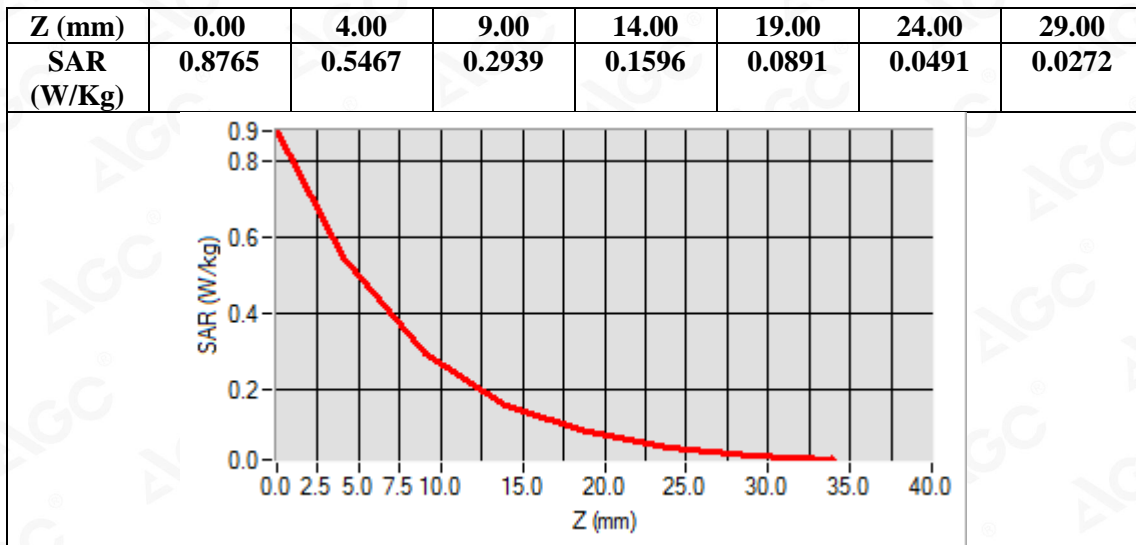
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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-Touch-Right (RMC)**  
**DUT: Smart Phone; Type: X19**

**Date: Aug. 08,2019**

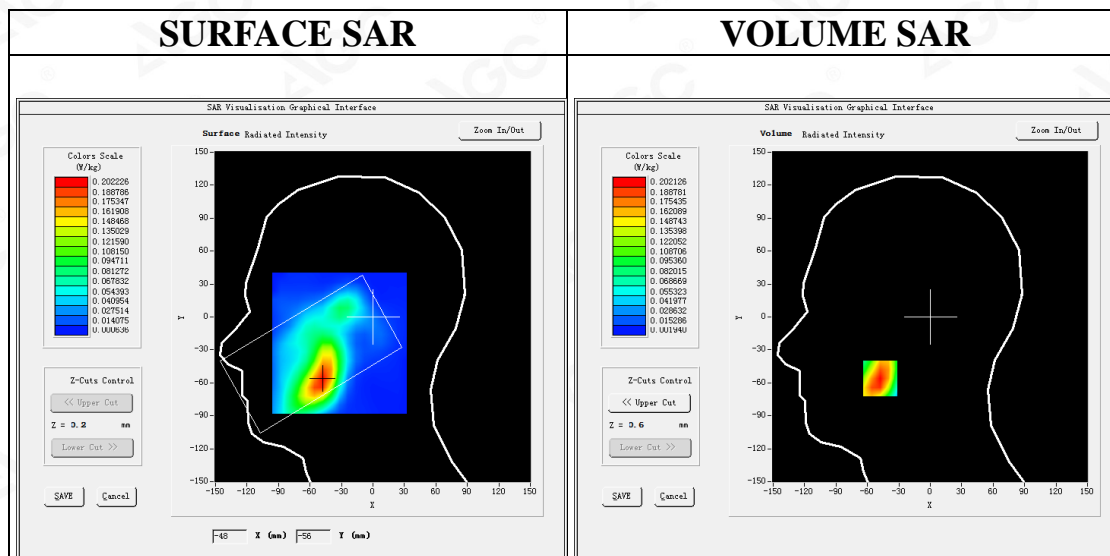
Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=5.24;  
Frequency: 1880 MHz; Medium parameters used:  $f = 1850$  MHz;  $\sigma = 1.40$  mho/m;  $\epsilon_r = 40.45$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Right Section  
Ambient temperature (°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;

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



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

**SAR Peak: 0.29 W/kg**

<b>SAR 10g (W/Kg)</b>	0.114386
<b>SAR 1g (W/Kg)</b>	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





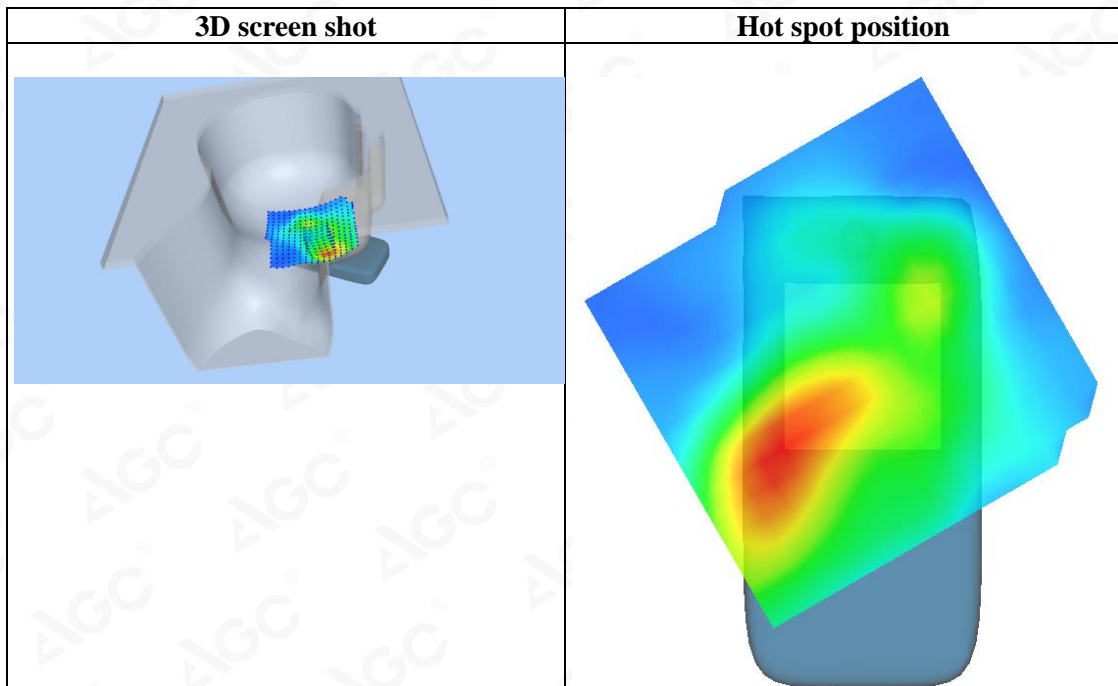
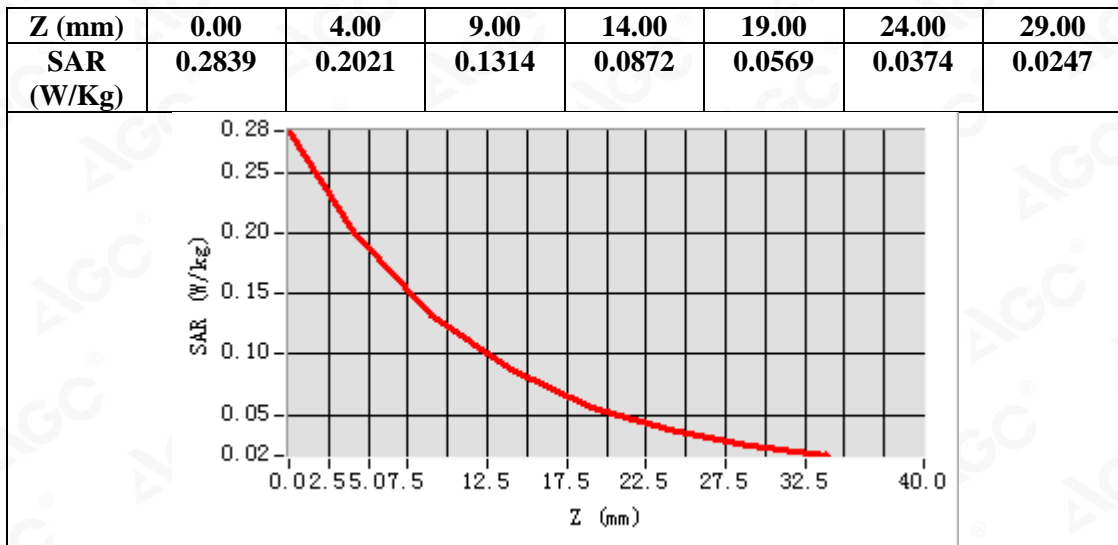
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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



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**

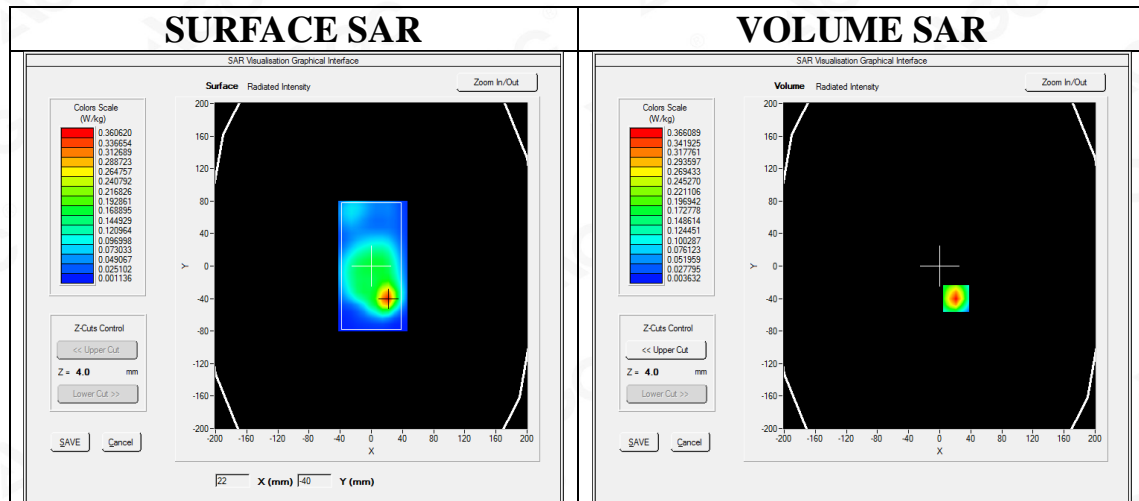
Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=5.39;  
Frequency: 1880 MHz; Medium parameters used:  $f = 1850$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon r = 53.26$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section  
Ambient temperature (°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;

<b>Area Scan</b>	dx=8mm dy=8mm, h= 5.00 mm
<b>ZoomScan</b>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
<b>Phantom</b>	ELLI
<b>Device Position</b>	Body Back
<b>Band</b>	WCDMA band II
<b>Channels</b>	Middle
<b>Signal</b>	CDMA (Crest factor: 1.0)



**Maximum location: X=21.00, Y=-40.00**  
**SAR Peak: 0.59 W/kg**

<b>SAR 10g (W/Kg)</b>	0.169767
<b>SAR 1g (W/Kg)</b>	0.340809



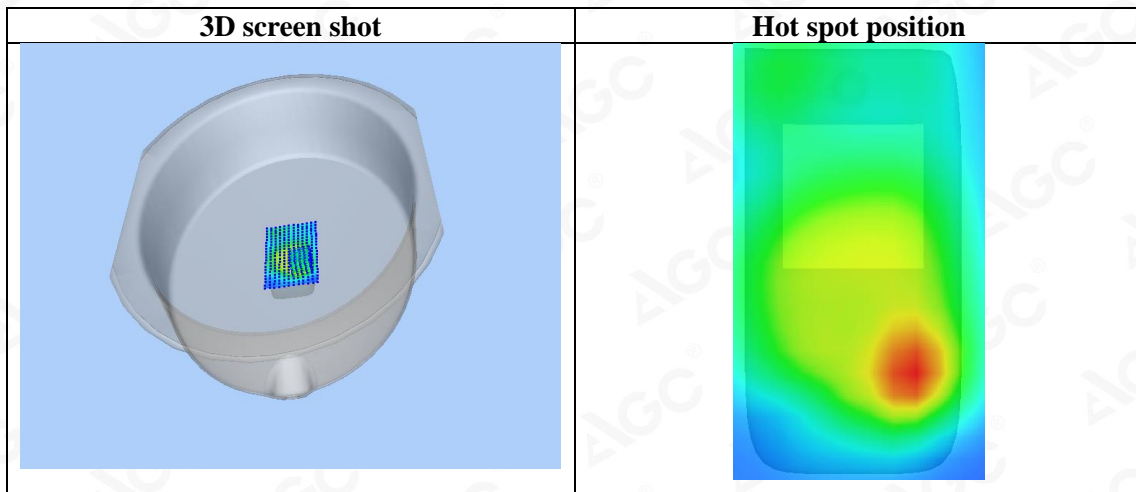
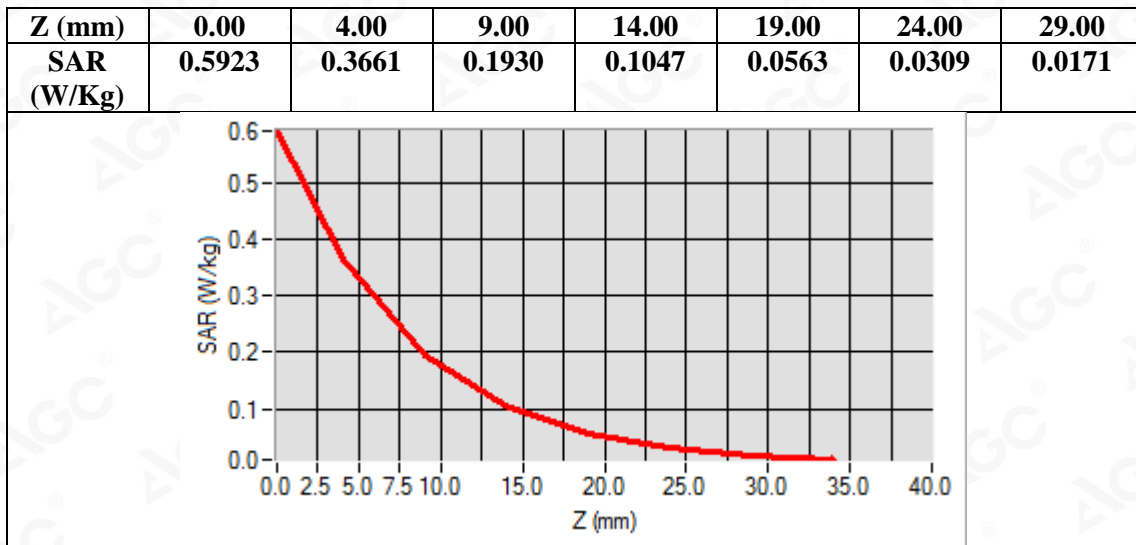
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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



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 V Mid-Touch-Left (RMC)**  
**DUT: Smart Phone; Type: X19**

**Date: Aug. 04,2019**

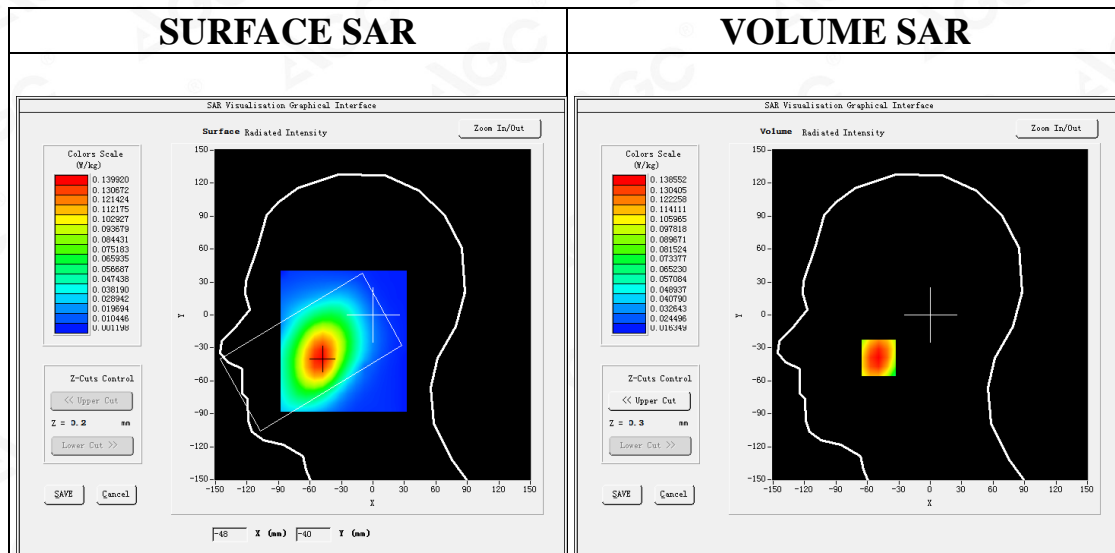
Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.29;  
Frequency: 836.6 MHz; Medium parameters used:  $f = 835\text{MHz}$ ;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 40.74$ ;  $\rho = 1000 \text{ kg/m}^3$  ;  
Phantom section: Left Section  
Ambient 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:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

<b>Area Scan</b>	$dx=8\text{mm}$ $dy=8\text{mm}$ , $h= 5.00 \text{ mm}$
<b>ZoomScan</b>	$5x5x7$ , $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$ ,Complete
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	WCDMA Band V
<b>Channels</b>	Middle
<b>Signal</b>	CDMA (Crest factor: 1.0)



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

**SAR Peak: 0.17 W/kg**

<b>SAR 10g (W/Kg)</b>	0.101769
<b>SAR 1g (W/Kg)</b>	0.134705



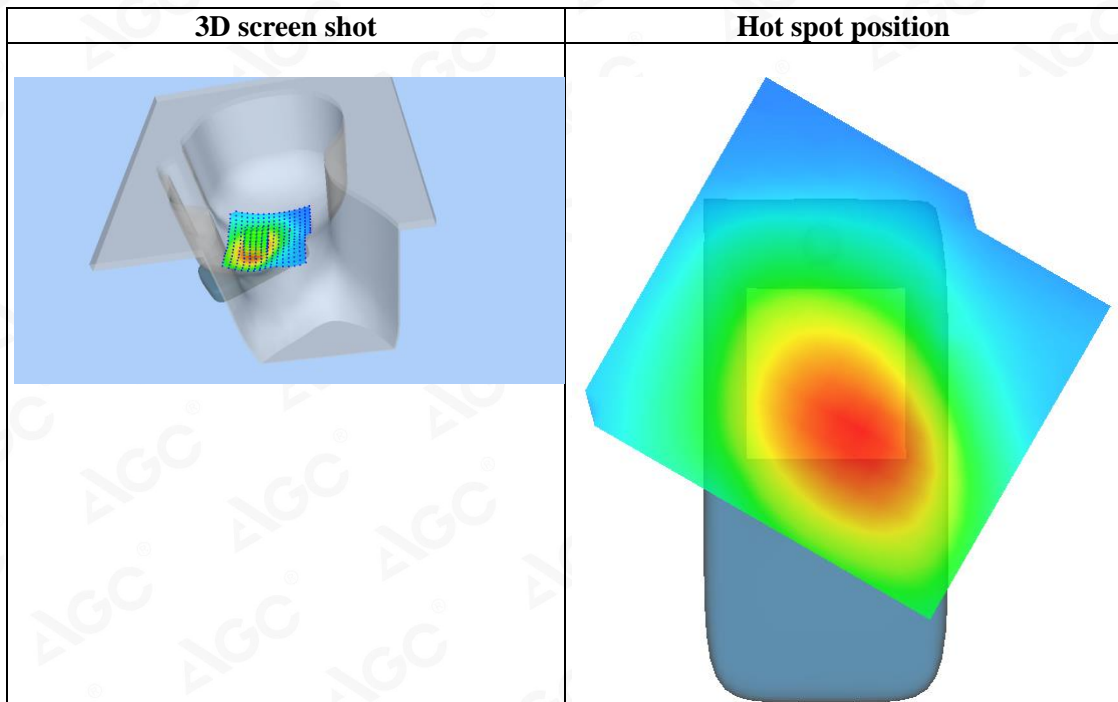
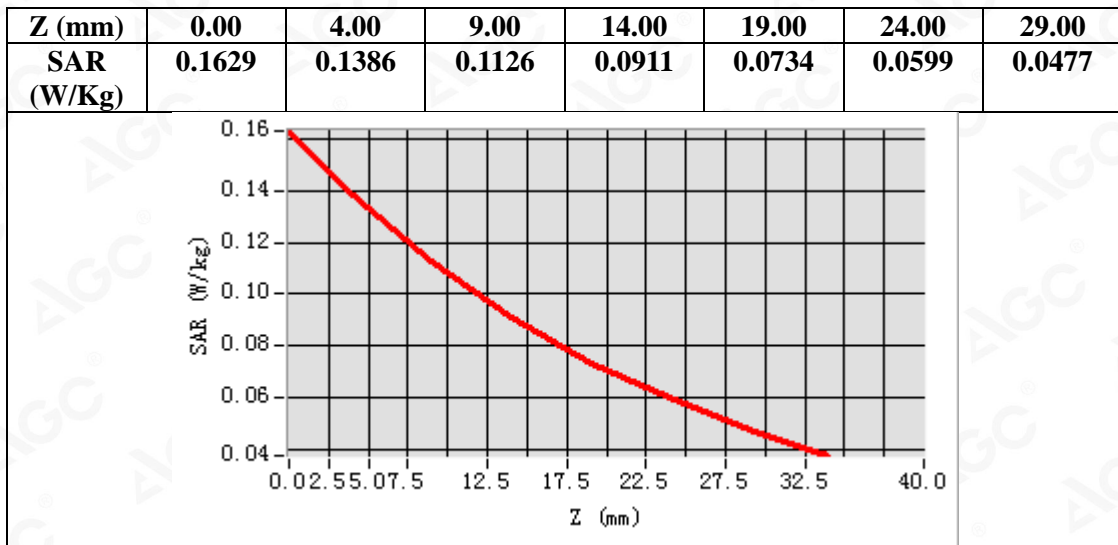
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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



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

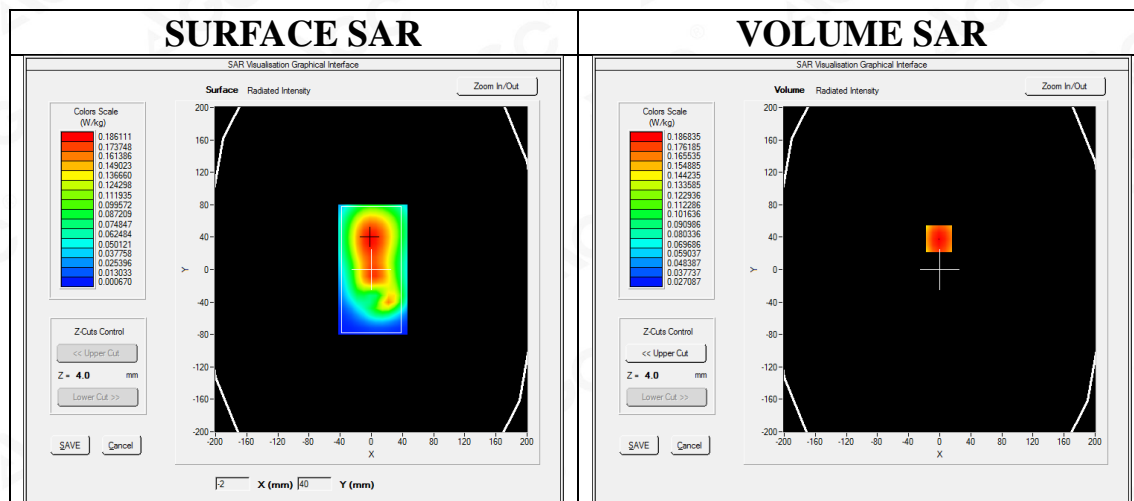
SATIMO Configuration:

- 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	$5x5x7$ , $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$ , 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



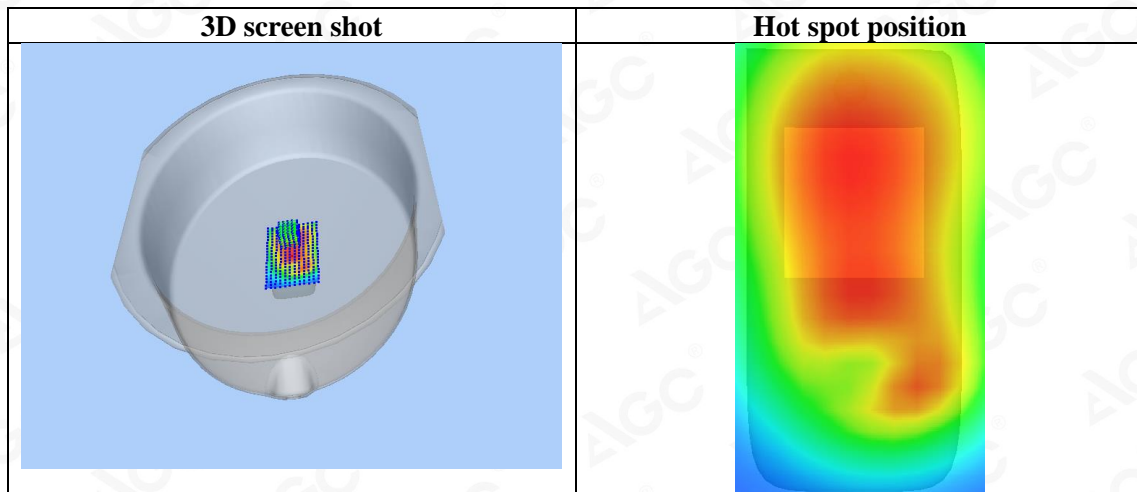
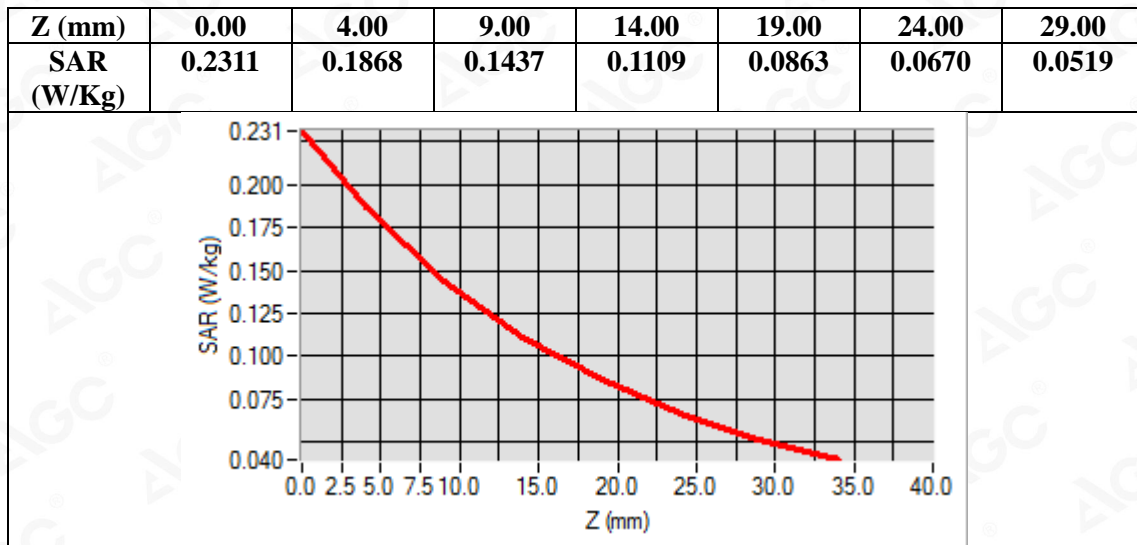
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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



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**

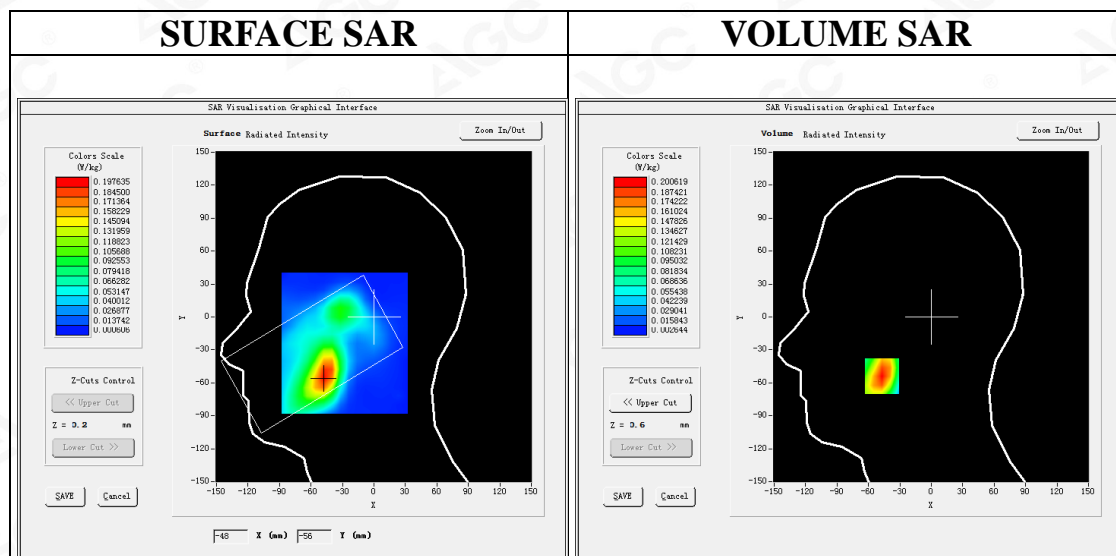
Communication System: LTE; Communication System Band: LTE Band 2; Duty Cycle:1:1; Conv.F=5.24;  
Frequency:1880MHz; Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 39.41$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Right Section  
Ambient temperature (°C): 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: 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;

<b>Area Scan</b>	dx=8mm dy=8mm, h= 5.00 mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	LTE Band 2
<b>Channels</b>	Middle
<b>Signal</b>	OFDM (Crest factor: 1.0)



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

**SAR Peak: 0.28 W/kg**

<b>SAR 10g (W/Kg)</b>	0.110247
<b>SAR 1g (W/Kg)</b>	0.188670



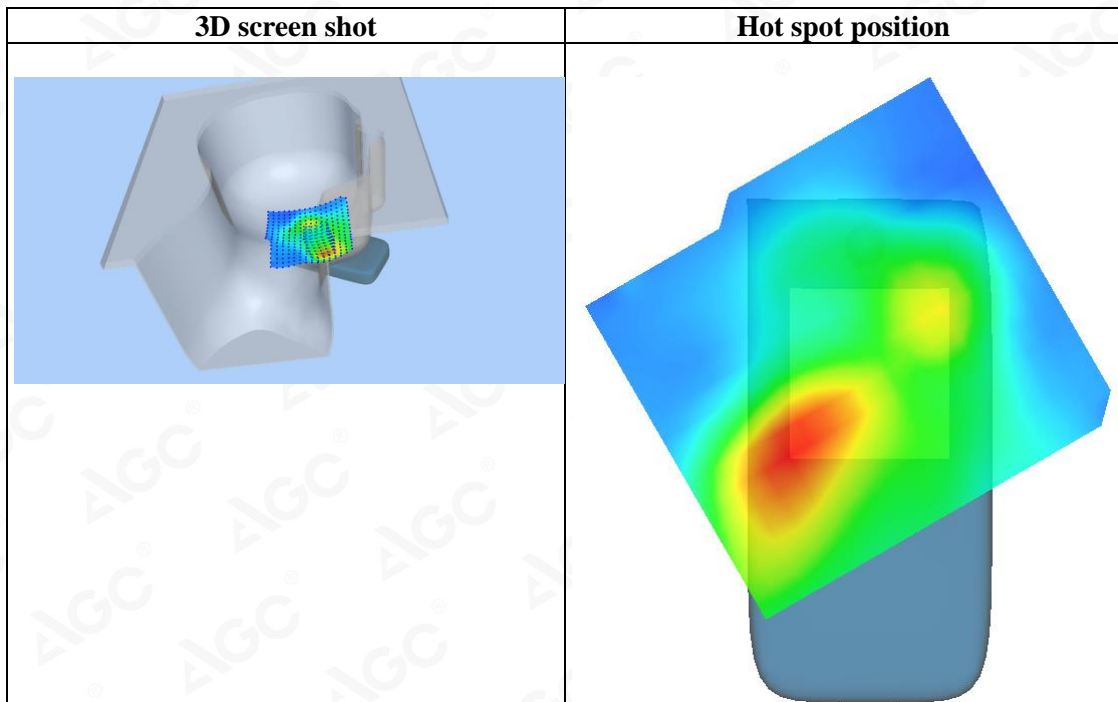
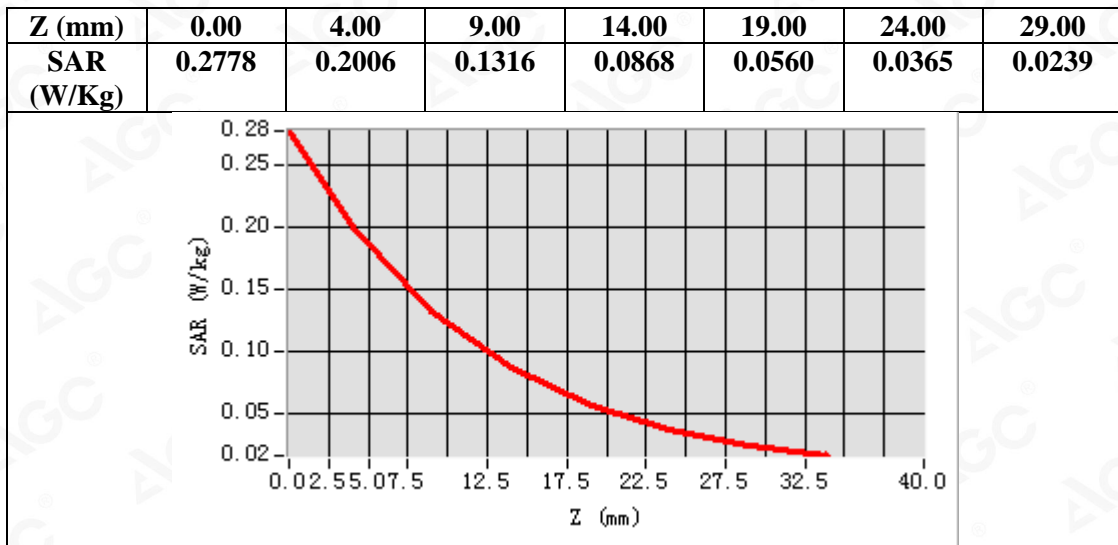
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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**

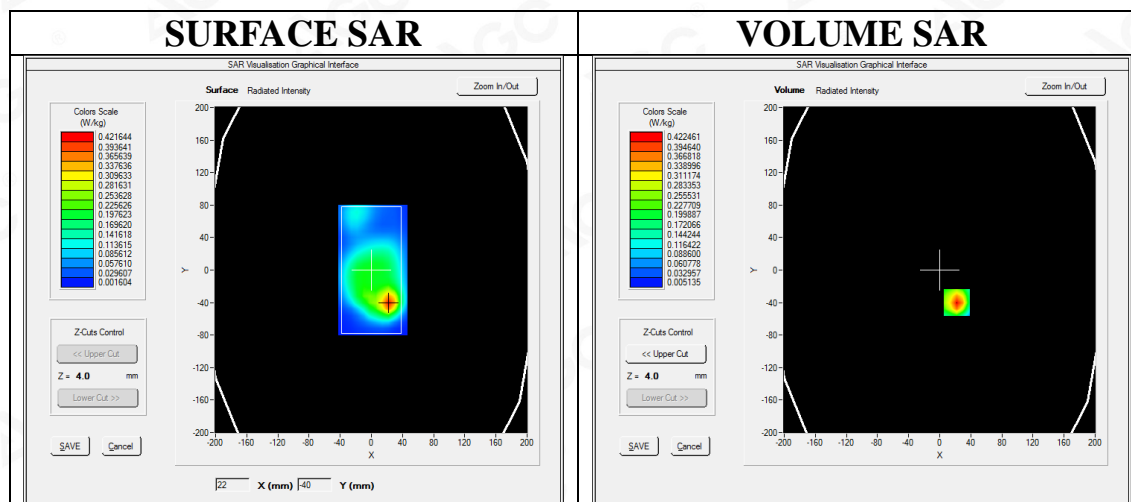
Communication System: LTE; Communication System Band: LTE Band 2; Duty Cycle:1:1; Conv.F=5.39;  
Frequency:1880MHz; Medium parameters used:  $f = 1850 \text{ MHz}$ ;  $\sigma = 1.46 \text{ mho/m}$ ;  $\epsilon_r = 51.69$ ;  $\rho = 1000 \text{ kg/m}^3$  ;  
Phantom section: Flat Section  
Ambient temperature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

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



**Maximum location: X=22.00, Y=-40.00**

**SAR Peak: 0.68 W/kg**

<b>SAR 10g (W/Kg)</b>	0.202292
<b>SAR 1g (W/Kg)</b>	0.398568



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

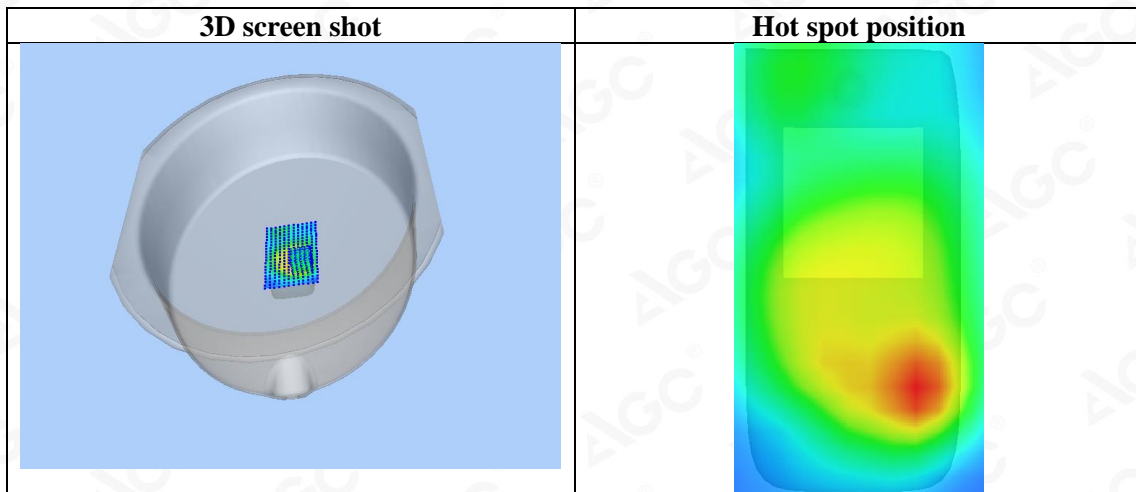
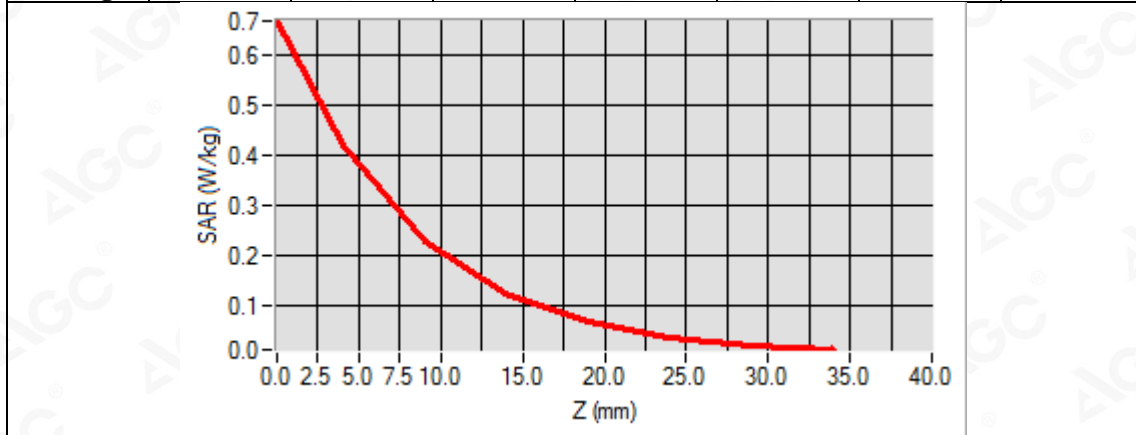
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

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)	0.6697	0.4225	0.2295	0.1261	0.0695	0.0387	0.0221



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-Touch-Left (1 RB#0)**  
**DUT: Smart Phone; Type: X19**

**Date: Aug. 03,2019**

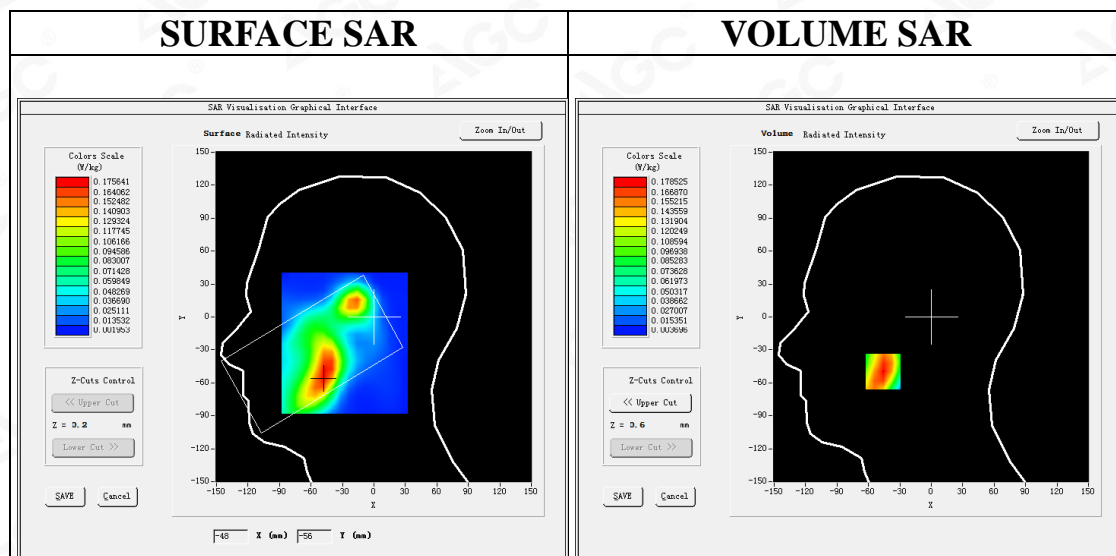
Communication System: LTE; Communication System Band: LTE Band 4; Duty Cycle:1:1; Conv.F=4.71;  
Frequency:1732.5 MHz; Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.36$  mho/m;  $\epsilon_r = 40.45$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Right Section  
Ambient temperature (°C): 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;

<b>Area Scan</b>	dx=8mm dy=8mm, h= 5.00 mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	LTE Band 4
<b>Channels</b>	Middle
<b>Signal</b>	OFDM (Crest factor: 1.0)



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

**SAR Peak: 0.24 W/kg**

<b>SAR 10g (W/Kg)</b>	0.105584
<b>SAR 1g (W/Kg)</b>	0.169025



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

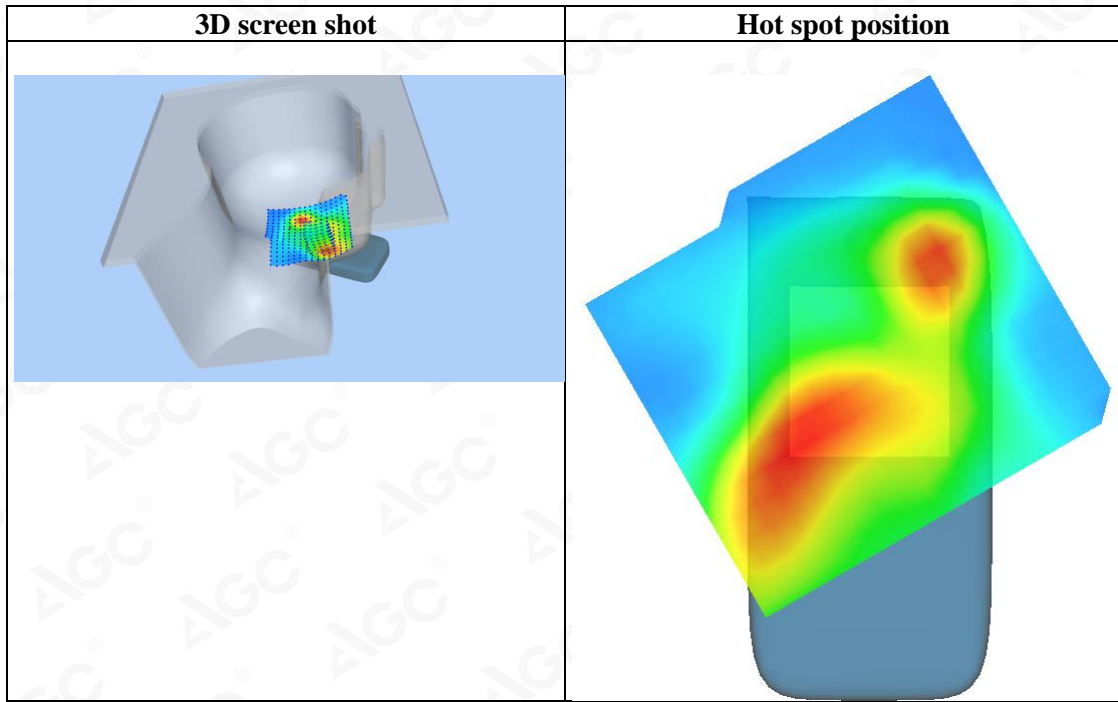
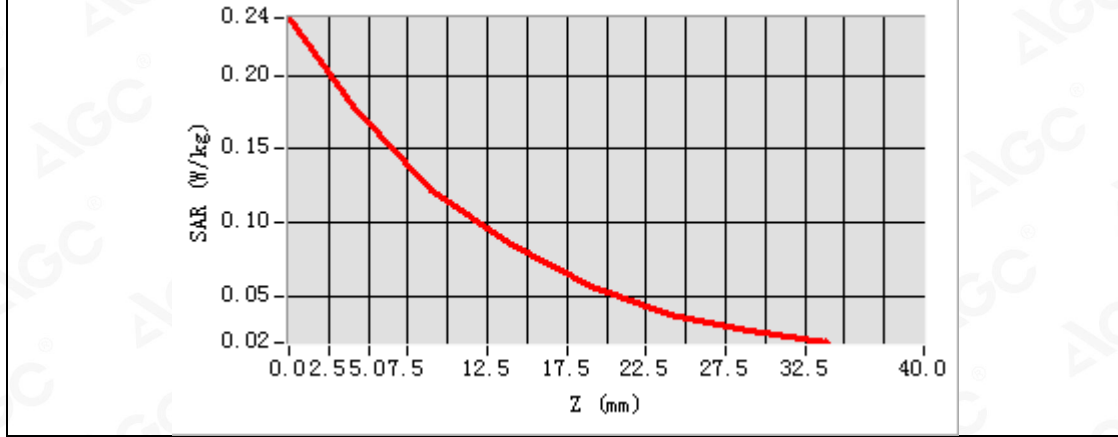
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.2389	0.1785	0.1221	0.0846	0.0565	0.0378	0.0262



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**

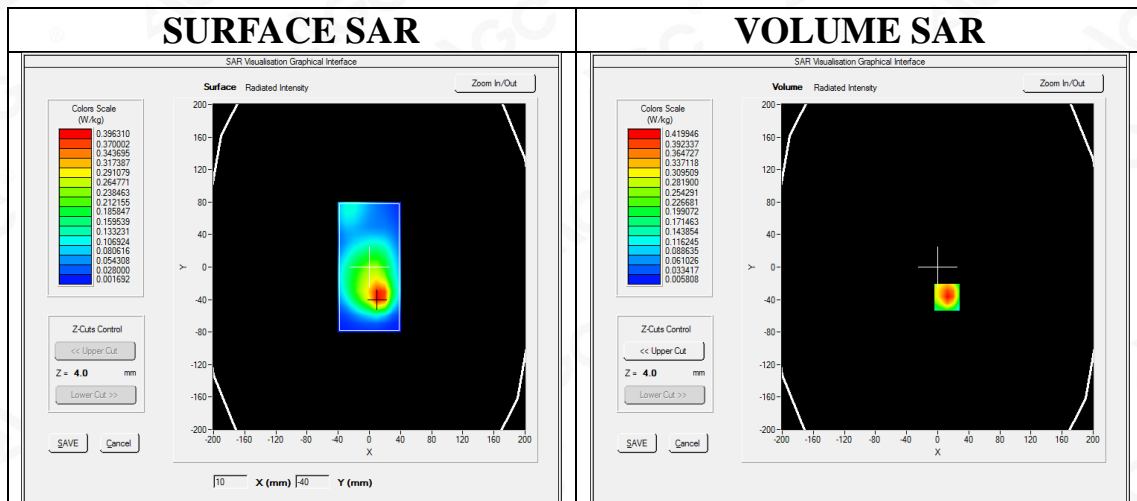
Communication System: LTE; Communication System Band: LTE Band 4; Duty Cycle:1:1; Conv.F=4.81;  
Frequency:1732.5 MHz; Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.54$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section  
Ambient temperature (°C): 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;**

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



**Maximum location: X=12.00, Y=-37.00**

**SAR Peak: 0.67 W/kg**

<b>SAR 10g (W/Kg)</b>	0.222177
<b>SAR 1g (W/Kg)</b>	0.404080



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

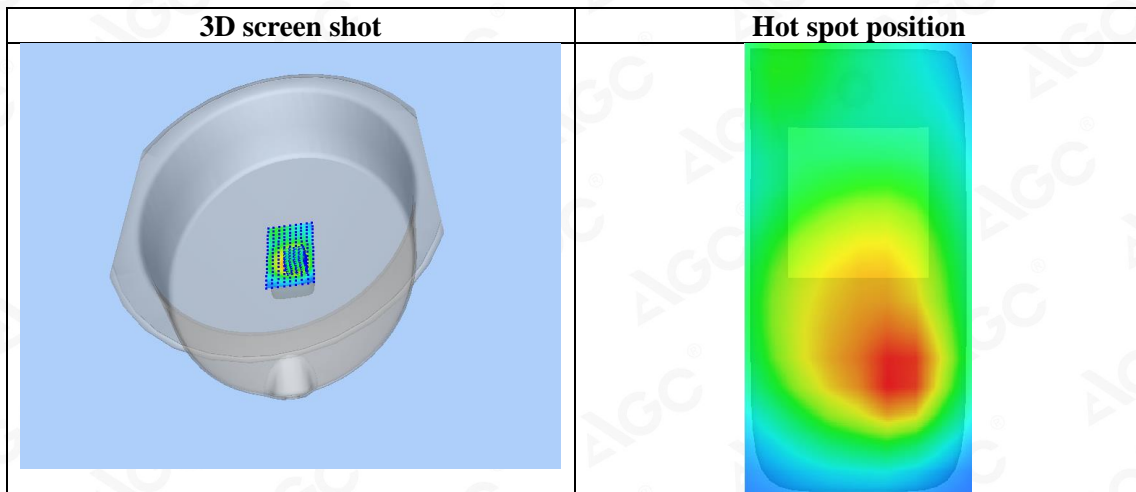
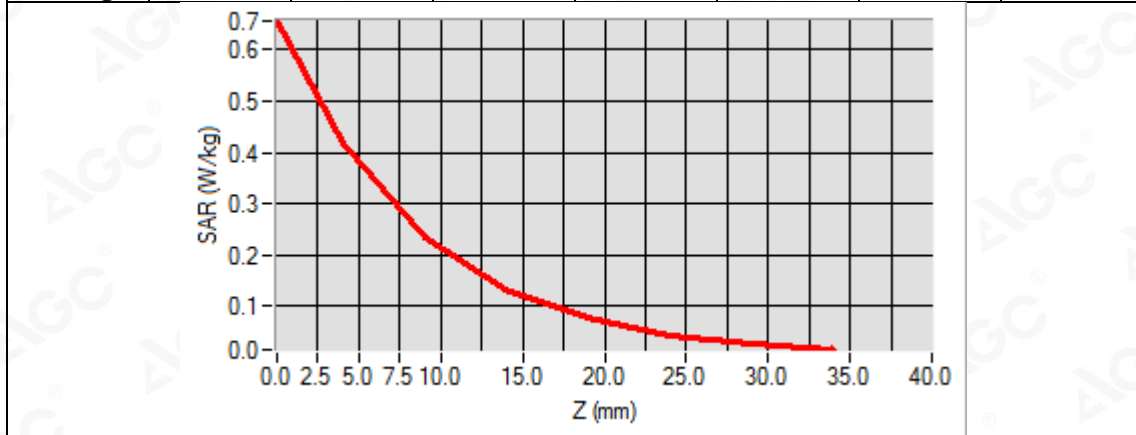
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

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)	0.6565	0.4199	0.2341	0.1346	0.0769	0.0447	0.0265



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 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/m<sup>3</sup> ;  
Phantom section: Left Section  
Ambient temperature (°C): 20.6, Liquid temperature (°C): 20.3

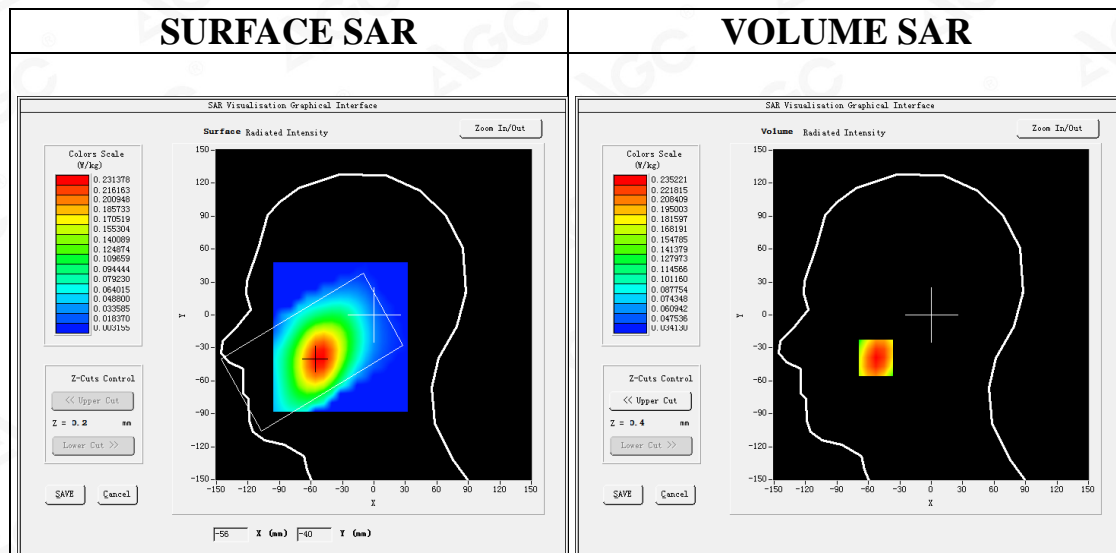
**SATIMO Configuration:**

- 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;**

<b>Area Scan</b>	dx=8mm dy=8mm, h= 5.00 mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	LTE Band 5
<b>Channels</b>	Middle
<b>Signal</b>	OFDM (Crest factor: 1.0)



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

**SAR Peak: 0.28 W/kg**

<b>SAR 10g (W/Kg)</b>	0.174187
<b>SAR 1g (W/Kg)</b>	0.228316



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

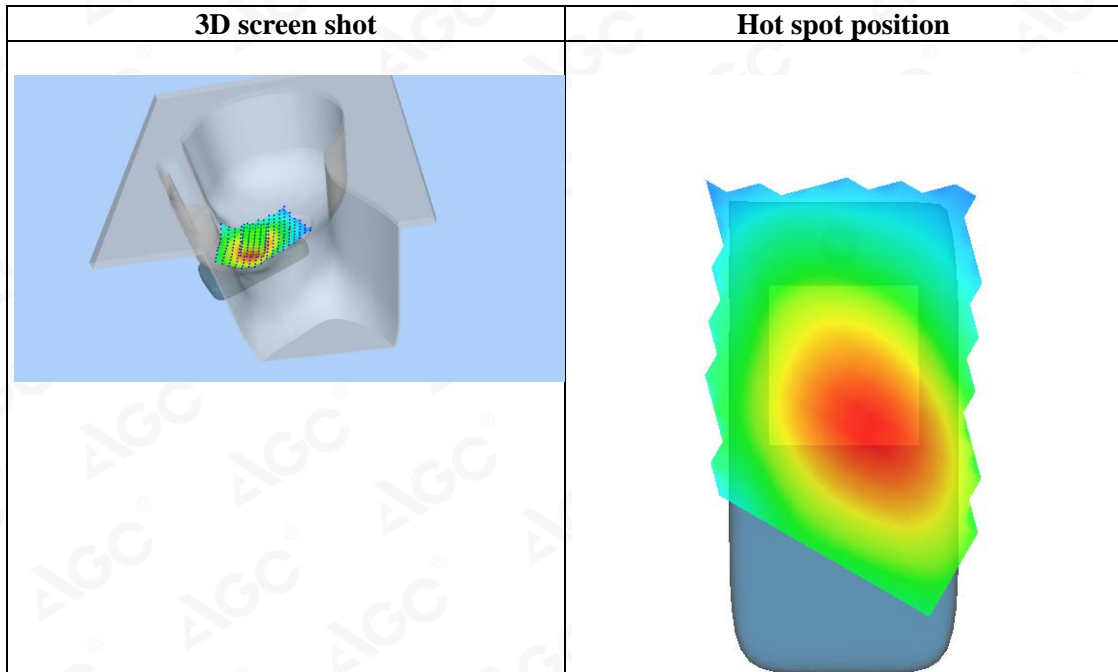
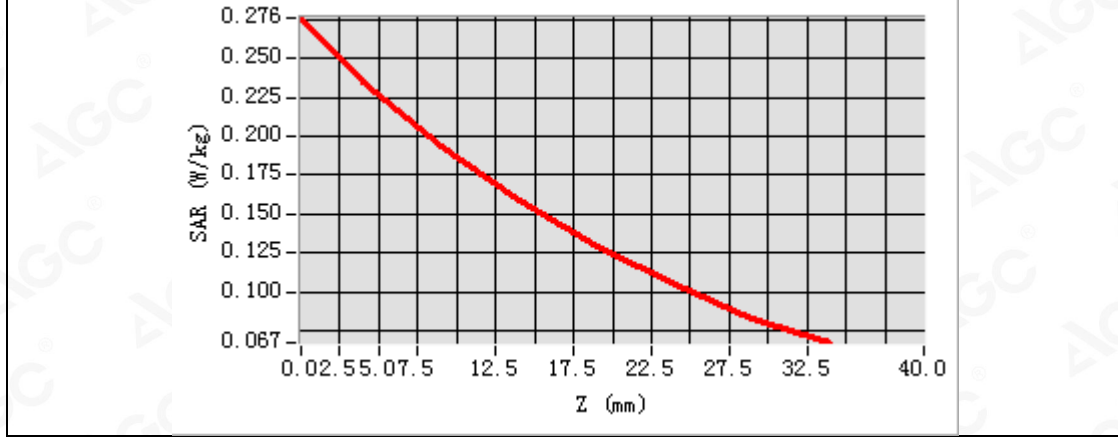
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

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



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 5 Mid-Body-Back (1 RB#0)**  
**DUT: Smart Phone; Type: X19**

**Date: Aug. 07,2019**

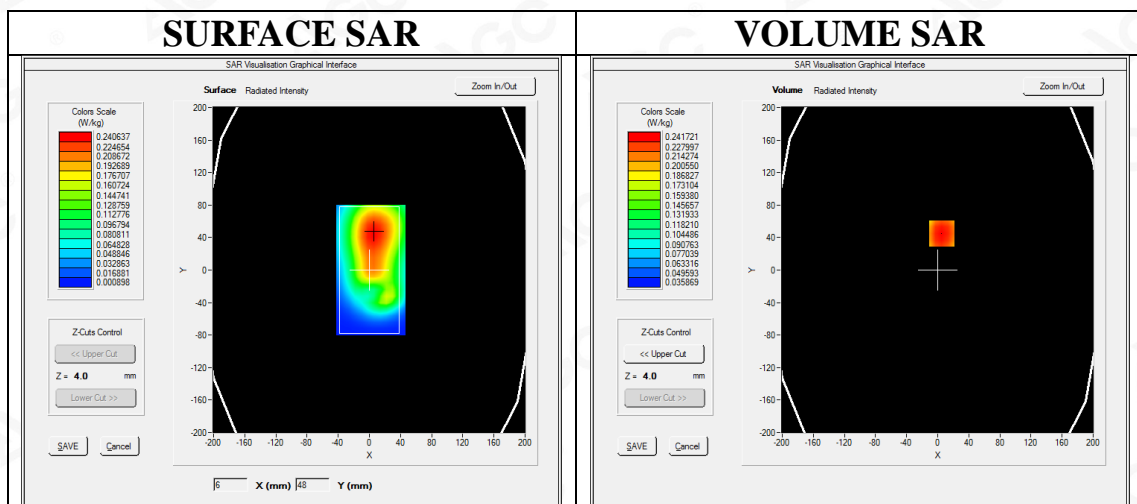
Communication System: LTE; Communication System Band: LTE Band 5; Duty Cycle:1:1; Conv.F=5.49  
Frequency:836.5 MHz; Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 55.01$ ;  $\rho = 1000 \text{ kg/m}^3$  ;  
Phantom section: Flat Section  
Ambient temperature ( $^{\circ}\text{C}$ ): 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=8mm, dy=8mm**  
**Configuration/ LTE Band 5 Mid-Body-back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;**

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



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

<b>SAR 10g (W/Kg)</b>	0.176092
<b>SAR 1g (W/Kg)</b>	0.234612



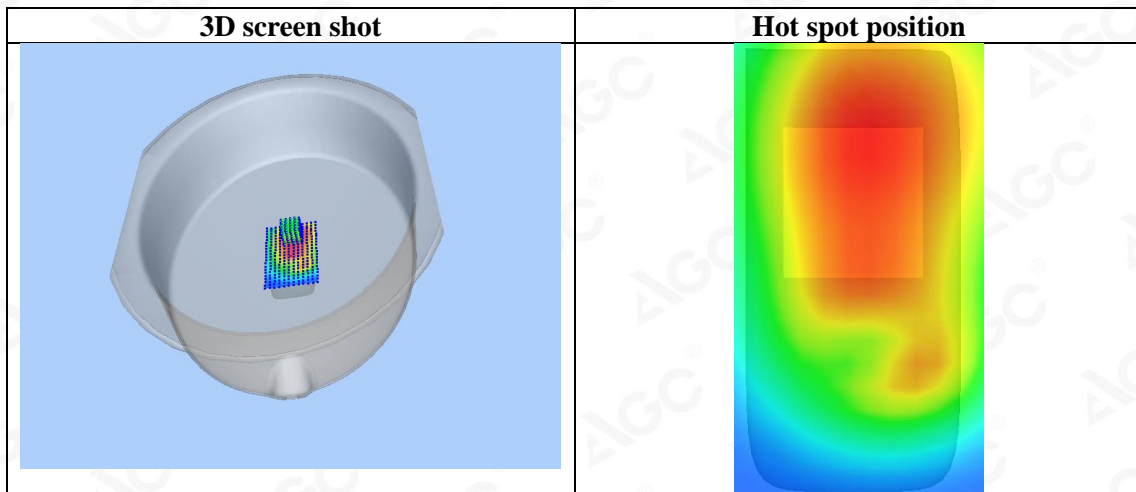
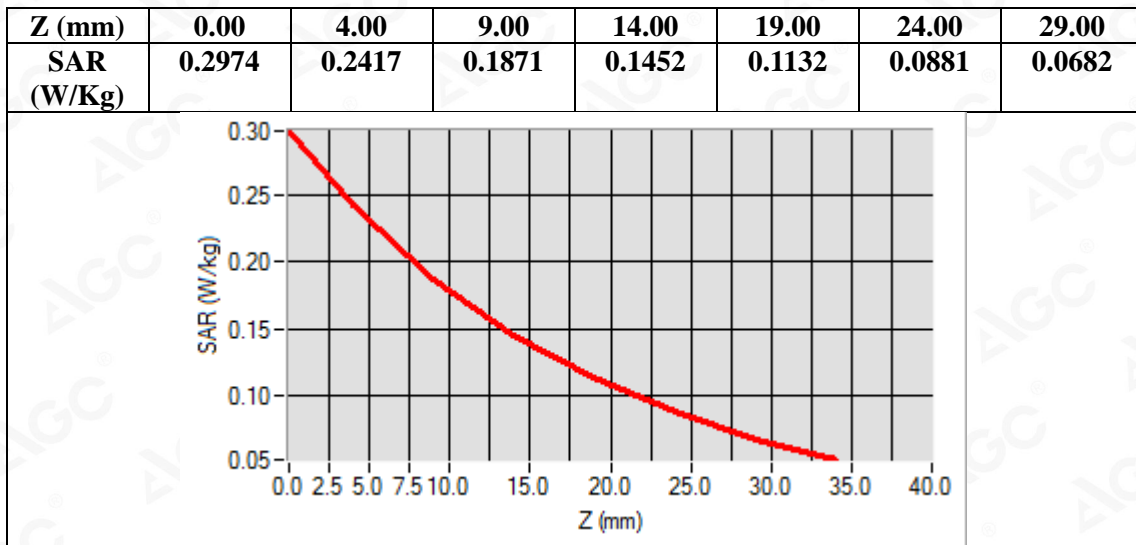
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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



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**

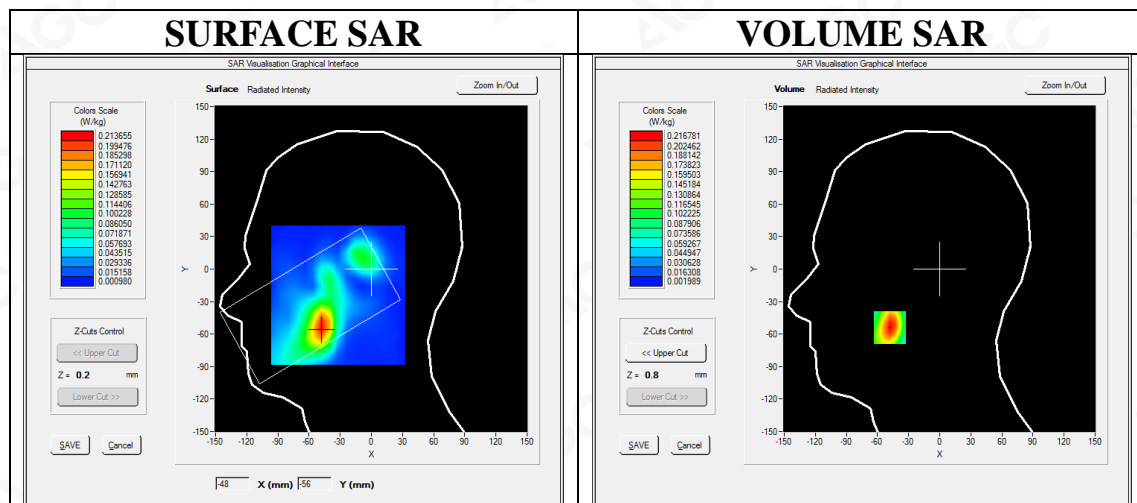
Communication System: LTE; Communication System Band: LTE Band 7; Duty Cycle:1:1; Conv.F=4.57  
Frequency: 2535MHz; Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.93$  mho/m;  $\epsilon_r = 39.14$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Left Section  
Ambient temperature (°C): 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

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



**Maximum location: X=-48.00, Y=-54.00**  
**SAR Peak: 0.33 W/kg**

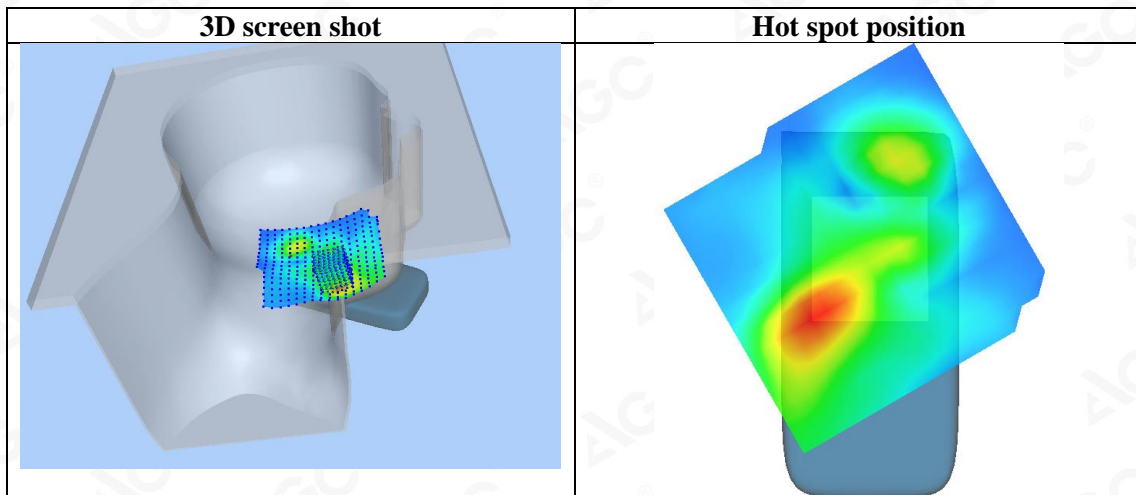
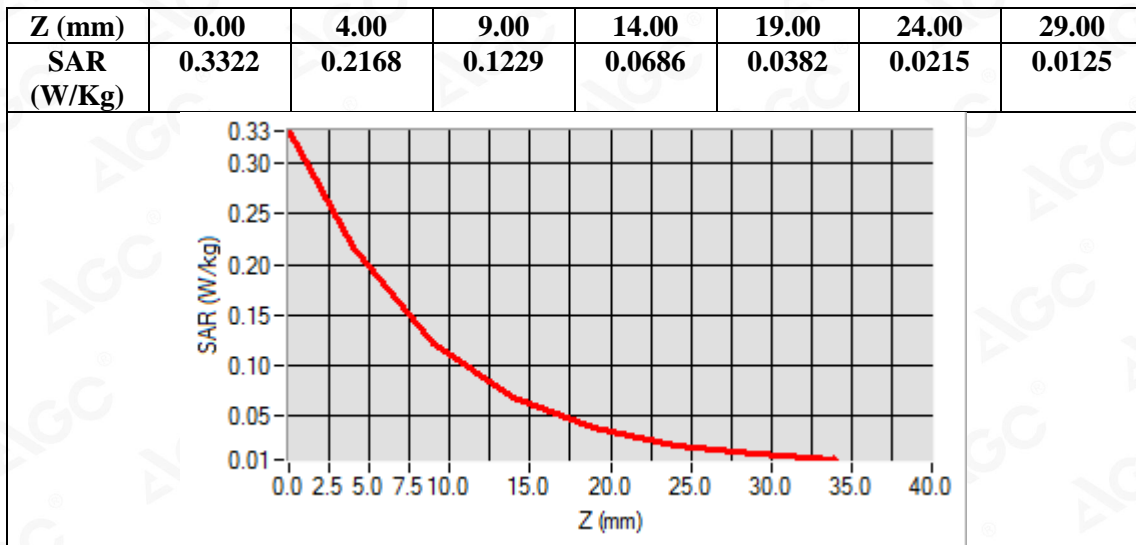
<b>SAR 10g (W/Kg)</b>	0.105079
<b>SAR 1g (W/Kg)</b>	0.200944



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 7 Low-Edge 3 (1RB#0)**  
**DUT: Smart Phone; Type: X19**

**Date: Aug. 01,2019**

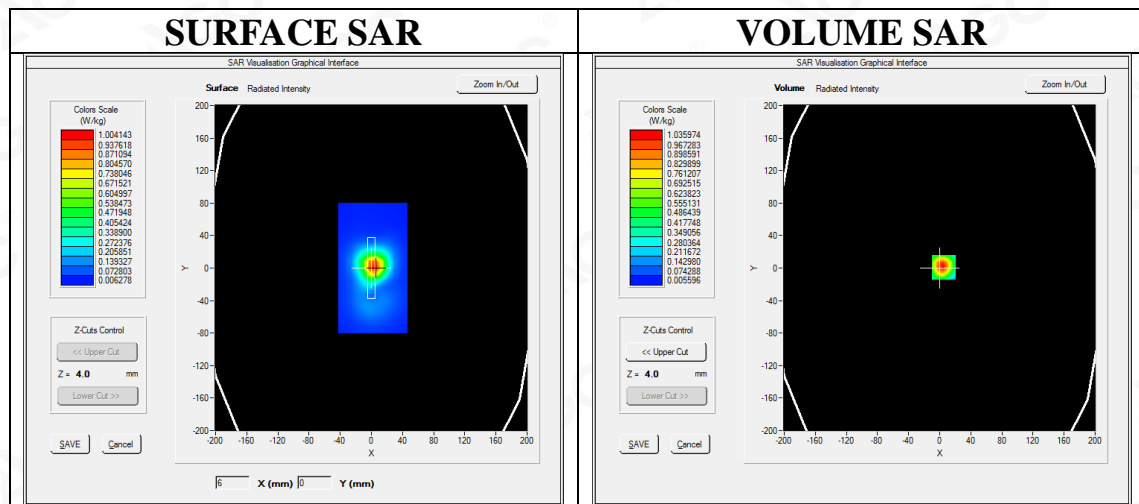
Communication System: LTE; Communication System Band: LTE Band 7; Duty Cycle:1:1; Conv.F=4.68  
Frequency: 2510MHz; Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.11$  mho/m;  $\epsilon_r = 53.64$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section  
Ambient temperature (°C): 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

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



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

<b>SAR 10g (W/Kg)</b>	0.482784
<b>SAR 1g (W/Kg)</b>	0.967455



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

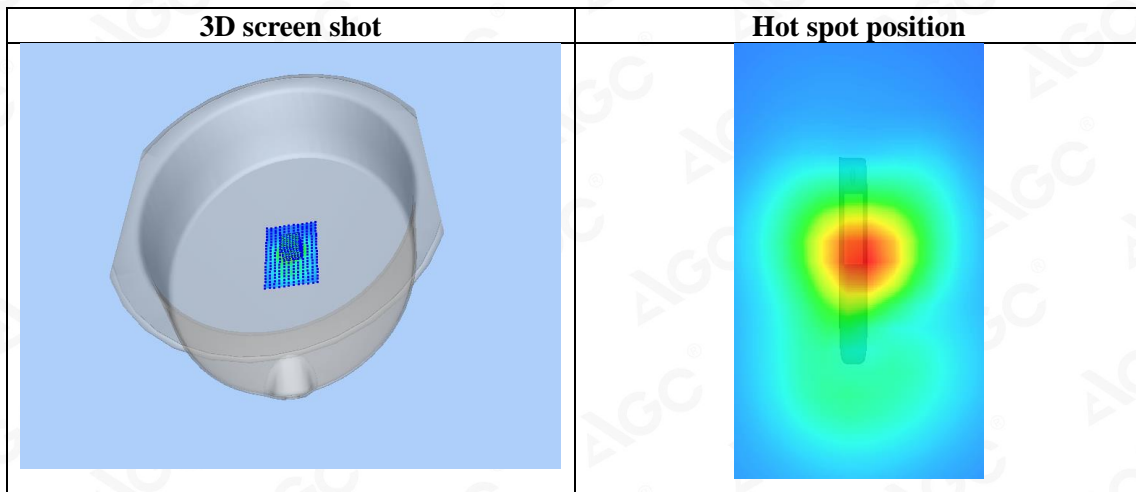
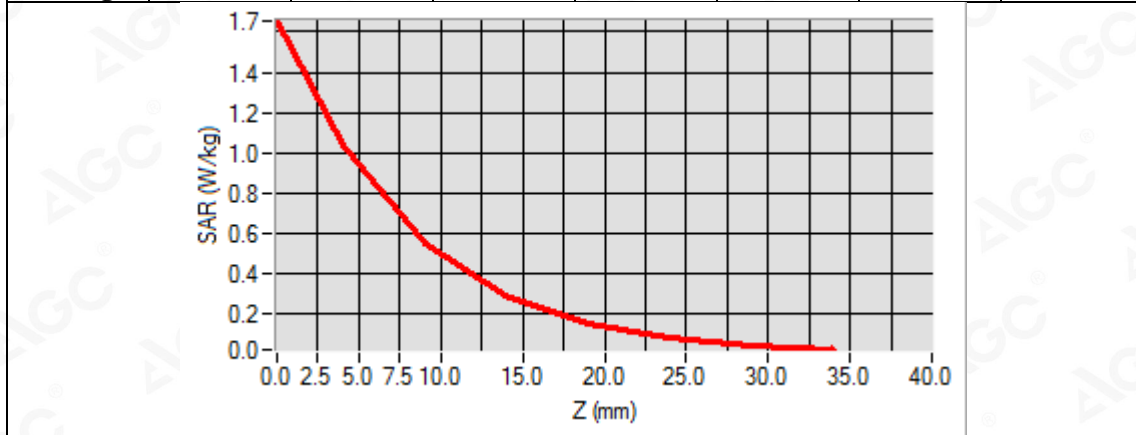
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

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)	1.6543	1.0360	0.5549	0.2917	0.1568	0.0838	0.0450



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-Edge 3 (1RB#0)**  
**DUT: Smart Phone; Type: X19**

**Date: Aug. 01,2019**

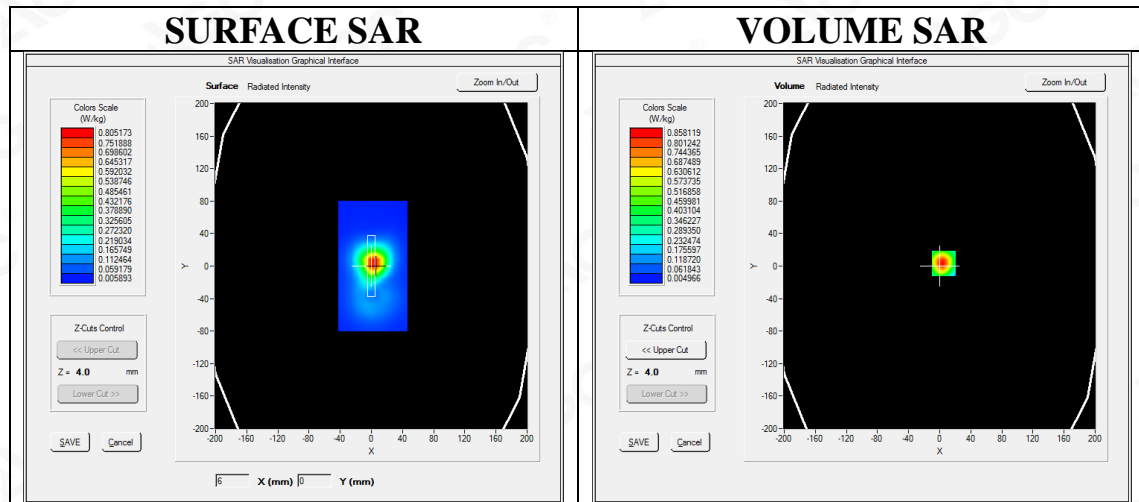
Communication System: LTE; Communication System Band: LTE Band 7; Duty Cycle:1:1; Conv.F=4.68  
Frequency: 2535MHz; Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 53.28$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section  
Ambient temperature (°C): 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**

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



**Maximum location: X=5.00, Y=3.00**  
**SAR Peak: 1.37 W/kg**

<b>SAR 10g (W/Kg)</b>	0.403719
<b>SAR 1g (W/Kg)</b>	0.801221



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

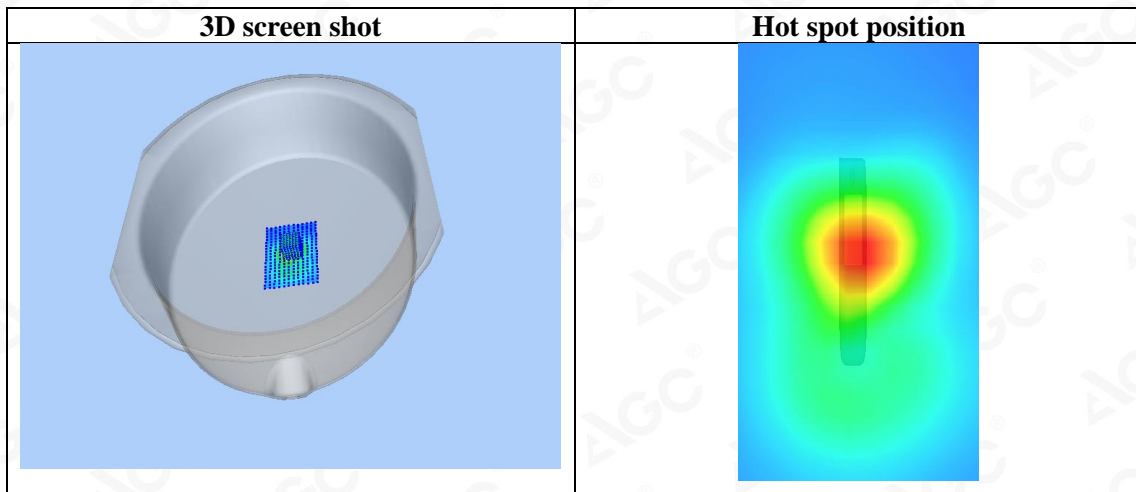
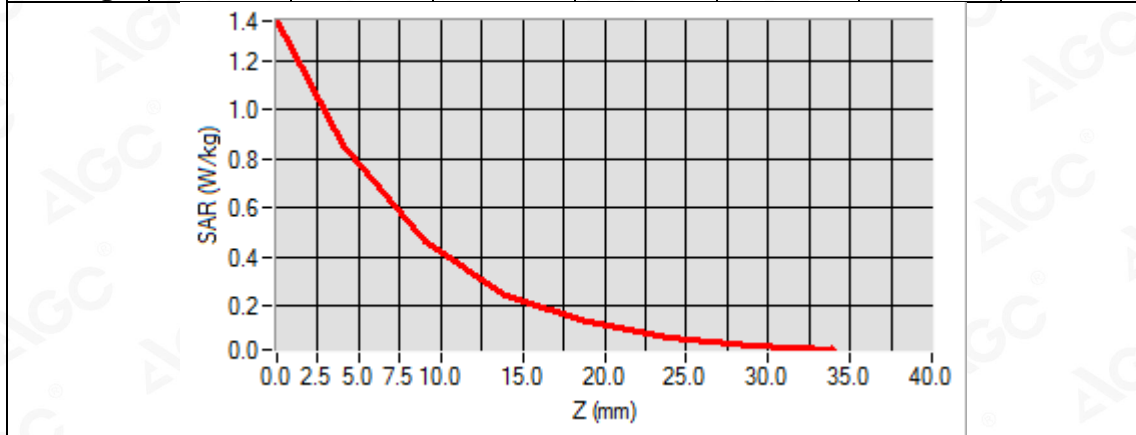
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

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)	1.3625	0.8581	0.4632	0.2435	0.1310	0.0705	0.0375



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-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:  $f = 750$  MHz;  $\sigma = 0.87$  mho/m;  $\epsilon_r = 41.14$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Left Section  
Ambient temperature (°C): 21.1, Liquid temperature (°C): 20.8

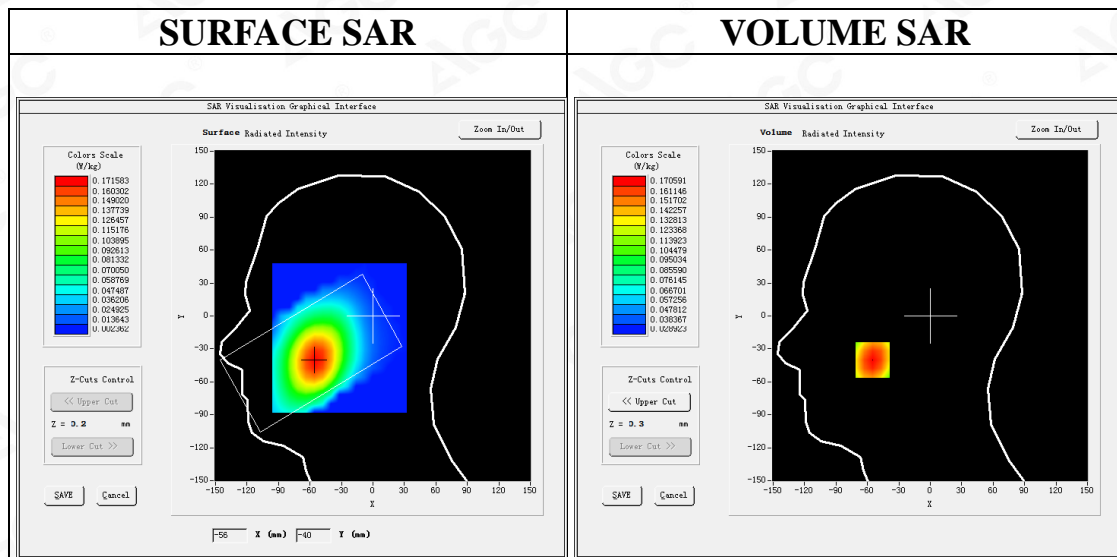
**SATIMO Configuration:**

- 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/ 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;

<b>Area Scan</b>	dx=8mm dy=8mm, h= 5.00 mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	LTE Band 12
<b>Channels</b>	Middle
<b>Signal</b>	OFDM (Crest factor: 1.0)



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

**SAR Peak: 0.20 W/kg**

<b>SAR 10g (W/Kg)</b>	0.131017
<b>SAR 1g (W/Kg)</b>	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.

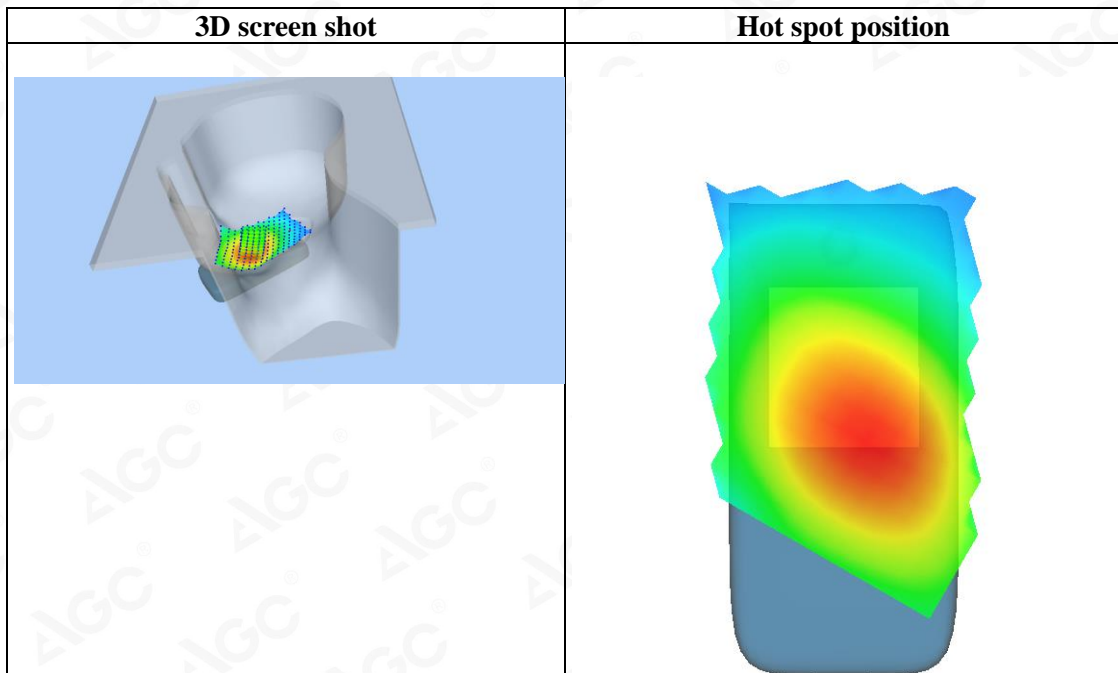
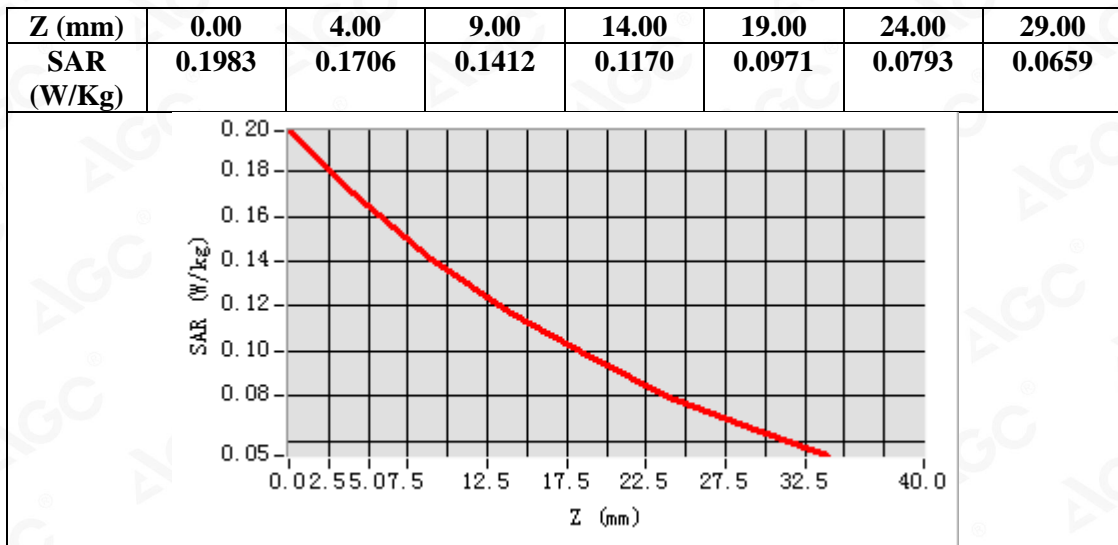
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118





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:  $f = 750$  MHz;  $\sigma = 0.93$  mho/m;  $\epsilon_r = 56.39$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section  
Ambient temperature (°C): 21.1, Liquid temperature (°C): 20.9

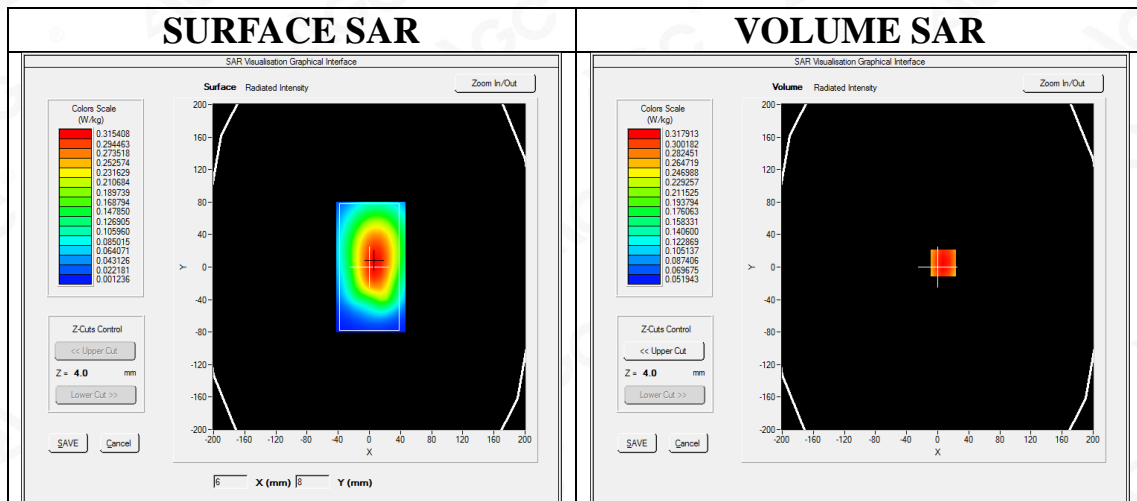
SATIMO Configuration:

- 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/ LTE Band 12 Mid-Body-back/Area Scan: Measurement grid: dx=8mm, dy=8mm**

**Configuration/ LTE Band 12 Mid-Body-back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5m;**

<b>Area Scan</b>	dx=8mm dy=8mm, h= 5.00 mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	ELLI
<b>Device Position</b>	Body Back
<b>Band</b>	LTE Band 12
<b>Channels</b>	Middle
<b>Signal</b>	OFDM (Crest factor: 1.0)



**Maximum location: X=7.00, Y=5.00**

**SAR Peak: 0.37 W/kg**

<b>SAR 10g (W/Kg)</b>	0.252361
<b>SAR 1g (W/Kg)</b>	0.327303



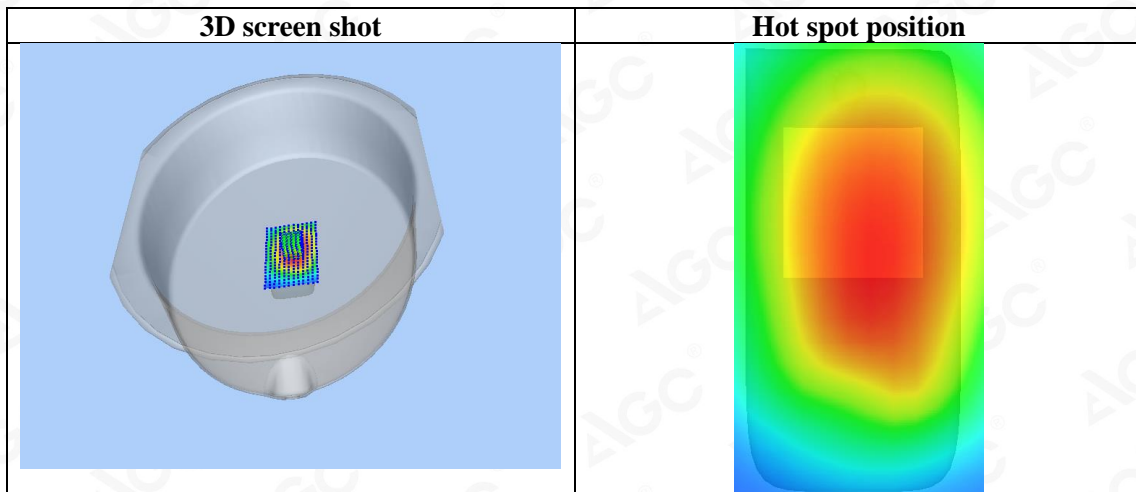
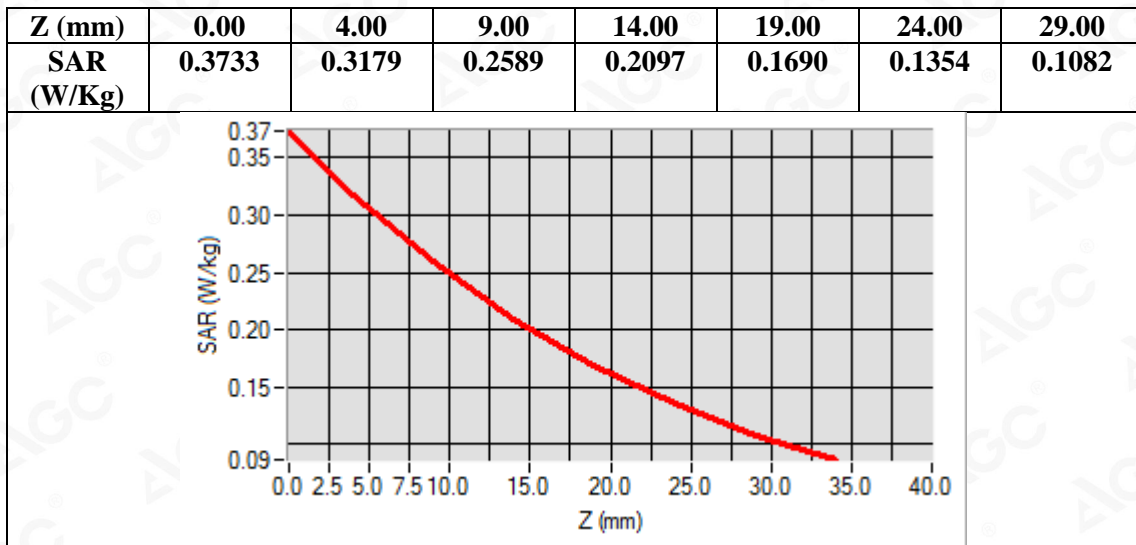
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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



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

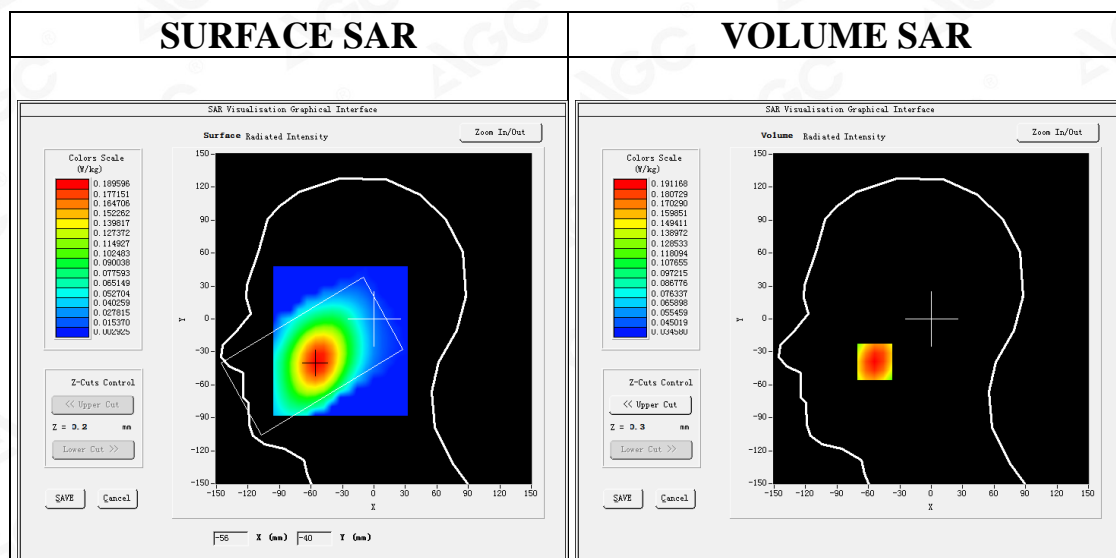
SATIMO Configuration:

- 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=8mm, dy=8mm

**Configuration/ LTE Band 17 Mid- Touch-Left /Zoom Scan:** Measurement grid: dx=8mm,dy=8mm, dz=5mm;

<b>Area Scan</b>	dx=8mm dy=8mm, h= 5.00 mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	LTE Band 17
<b>Channels</b>	Middle
<b>Signal</b>	OFDM (Crest factor: 1.0)



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

**SAR Peak: 0.22 W/kg**

<b>SAR 10g (W/Kg)</b>	0.152967
<b>SAR 1g (W/Kg)</b>	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

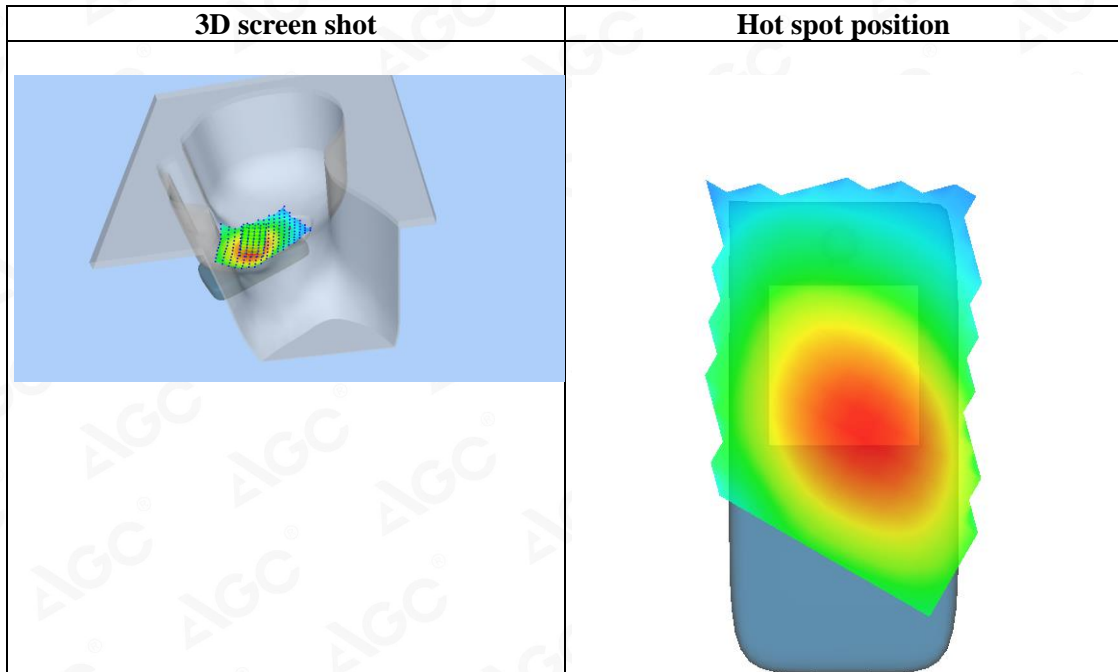
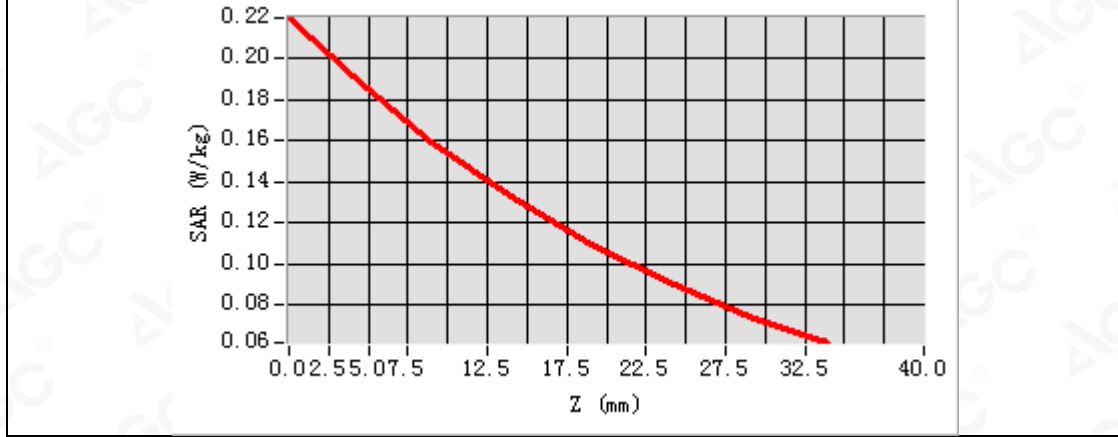
Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.2198	0.1912	0.1596	0.1332	0.1096	0.0910	0.0746



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

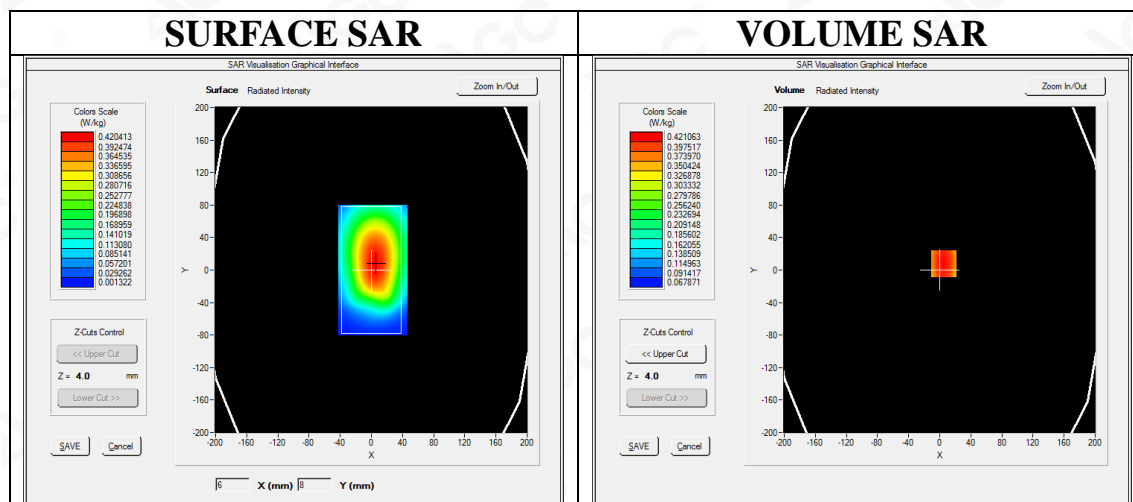
SATIMO Configuration:

- 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=8mm, dy=8mm**

**Configuration/ LTE Band 17 Mid-Body-back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;**

<b>Area Scan</b>	dx=8mm dy=8mm, h= 5.00 mm
<b>Zoom Scan</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Phantom</b>	ELLI
<b>Device Position</b>	Body Back
<b>Band</b>	LTE Band 17
<b>Channels</b>	Middle
<b>Signal</b>	OFDM (Crest factor: 1.0)



**Maximum location: X=5.00, Y=8.00**

**SAR Peak: 0.50 W/kg**

<b>SAR 10g (W/Kg)</b>	0.333509
<b>SAR 1g (W/Kg)</b>	0.433010



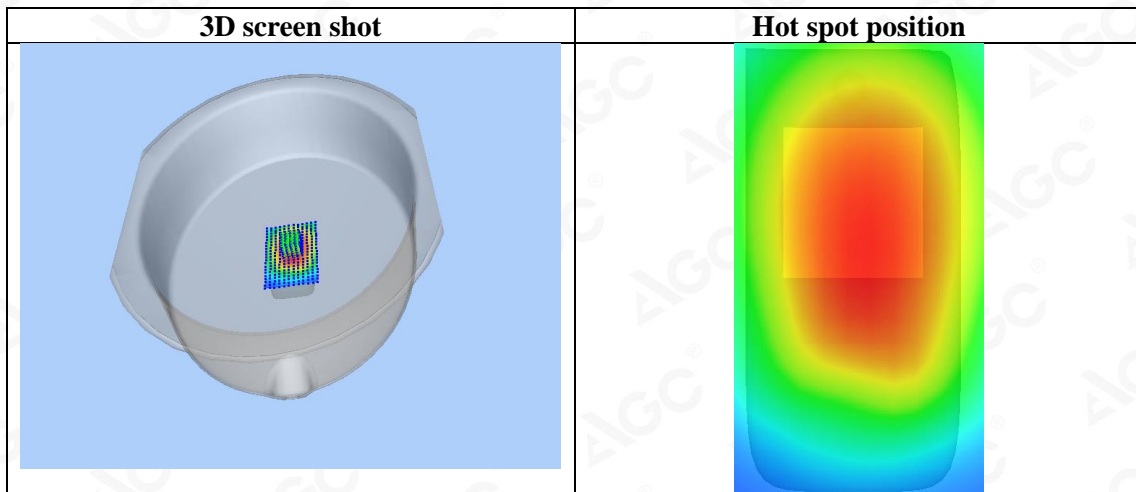
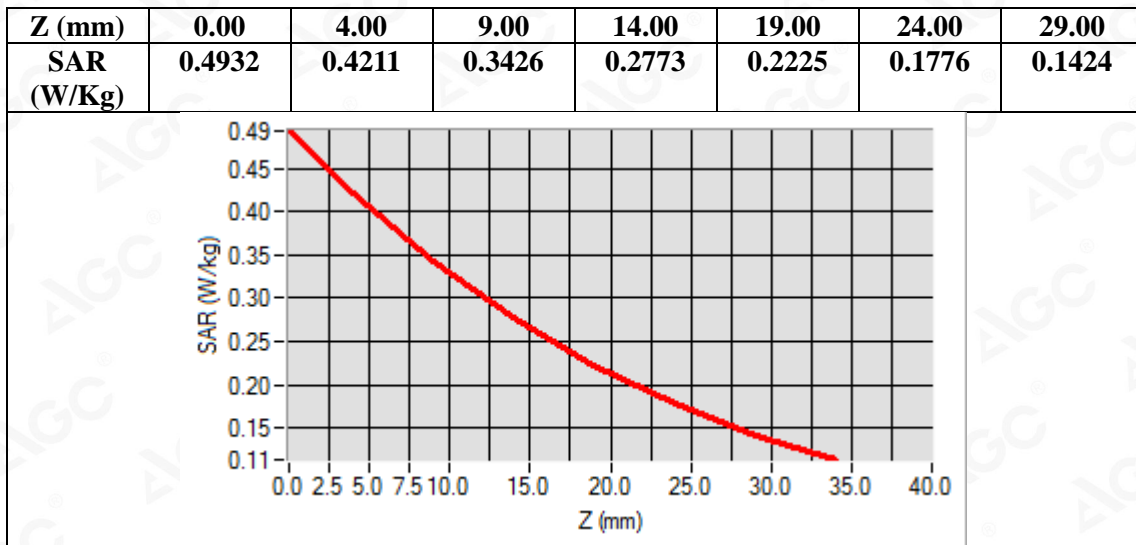
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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

## 2.4G WIFI MODE

Test Laboratory: AGC Lab  
802.11b Mid-Touch-Left  
DUT: Smart Phone; Type: X19

Date: Aug. 08,2019

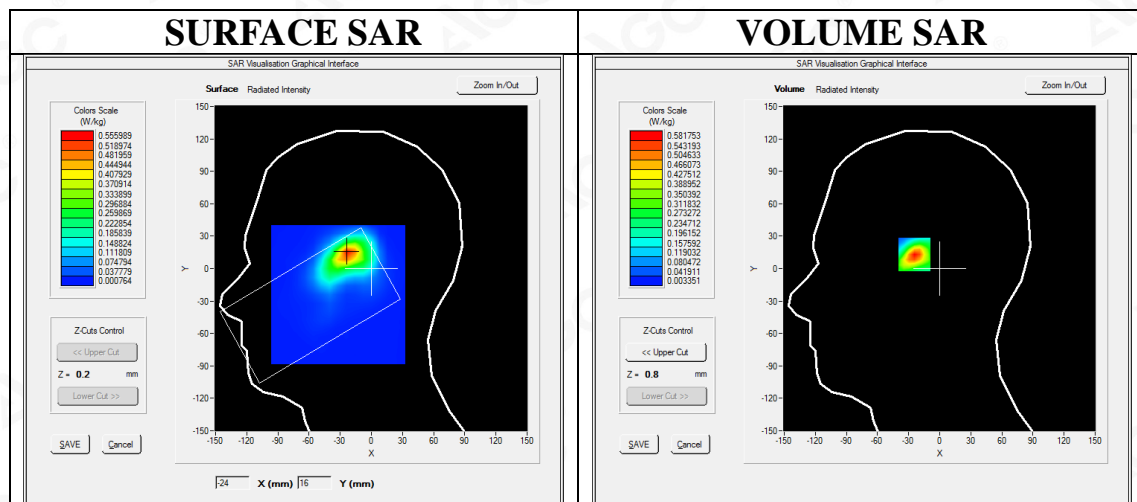
Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.90;  
Frequency: 2437 MHz; Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.79$  mho/m;  $\epsilon_r = 39.81$   $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Left Section  
Ambient temperature (°C):21.1, 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

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



**Maximum location: X=-23.00, Y=15.00**

**SAR Peak: 0.89 W/kg**

<b>SAR 10g (W/Kg)</b>	0.251744
<b>SAR 1g (W/Kg)</b>	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

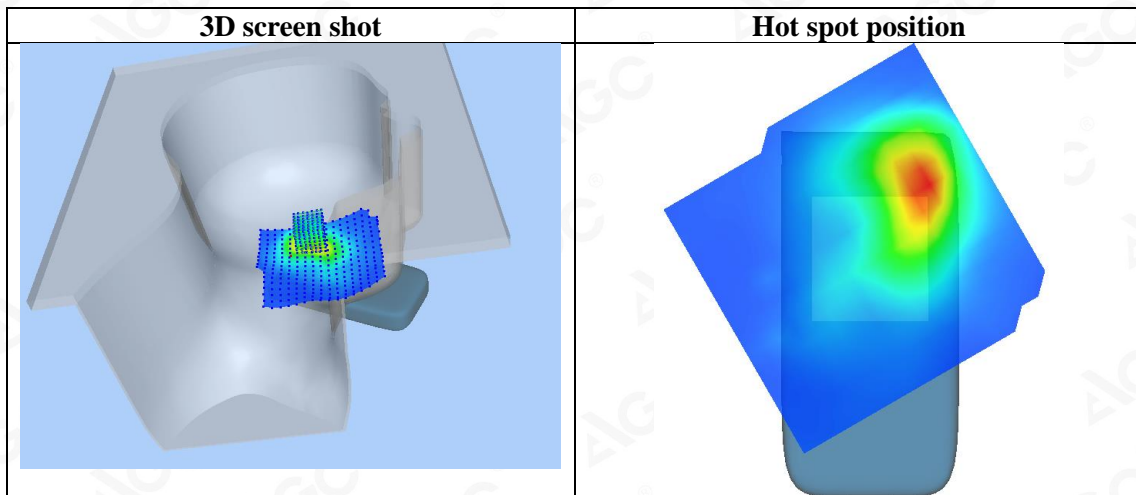
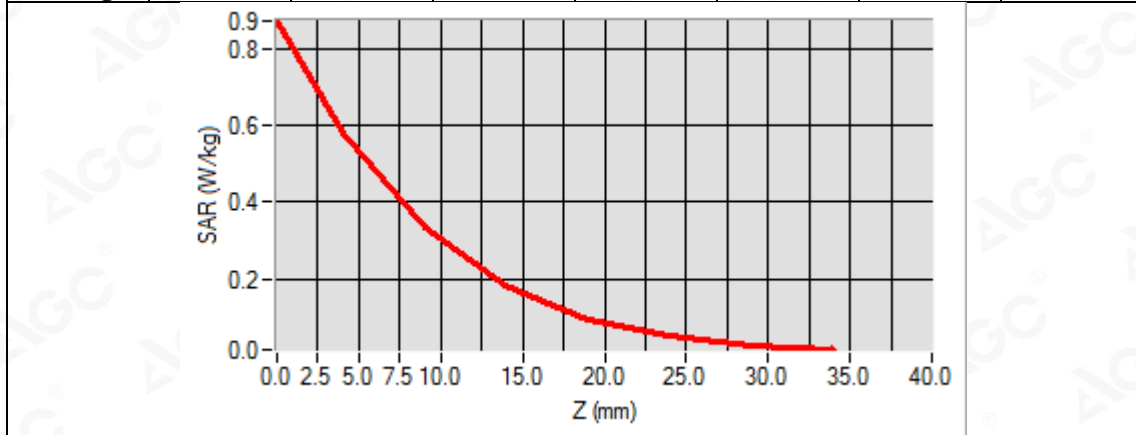
Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.8732	0.5818	0.3345	0.1795	0.0948	0.0519	0.0275



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**

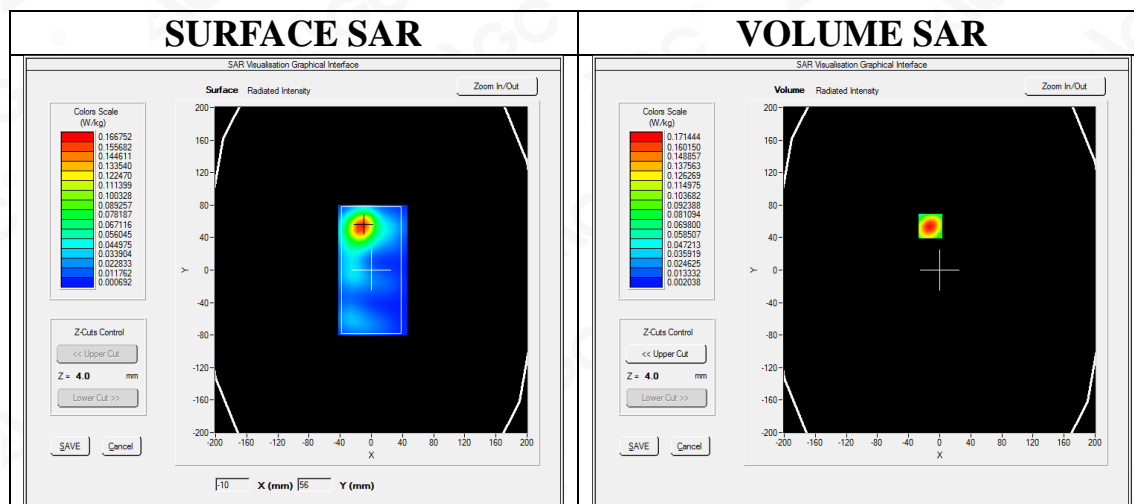
Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=5.04;  
Frequency: 2437 MHz; Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.91$  mho/m;  $\epsilon_r = 52.34$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section  
Ambient temperature (°C):21.1, 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;

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



**Maximum location: X=-12.00, Y=54.00**

**SAR Peak: 0.27 W/kg**

<b>SAR 10g (W/Kg)</b>	0.086120
<b>SAR 1g (W/Kg)</b>	0.160241



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

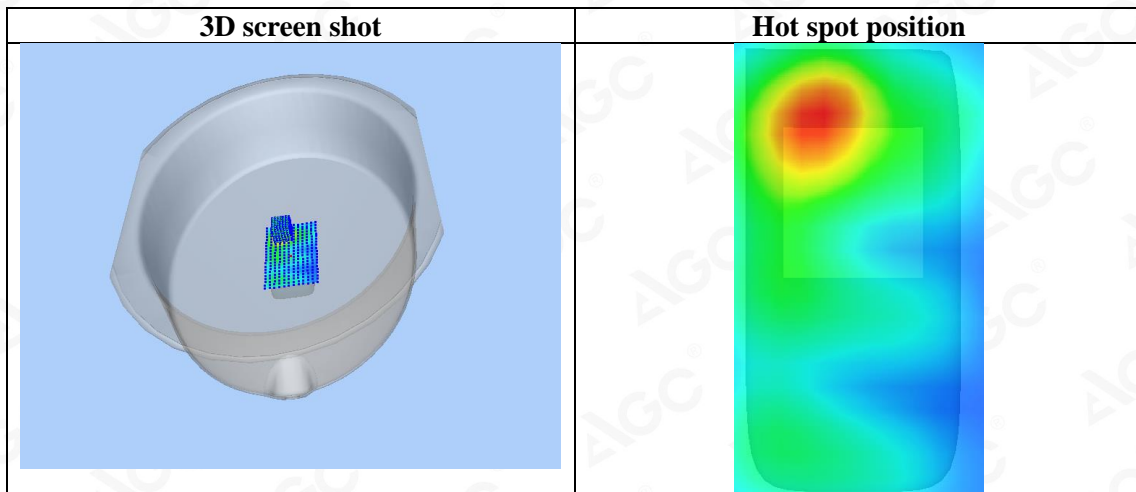
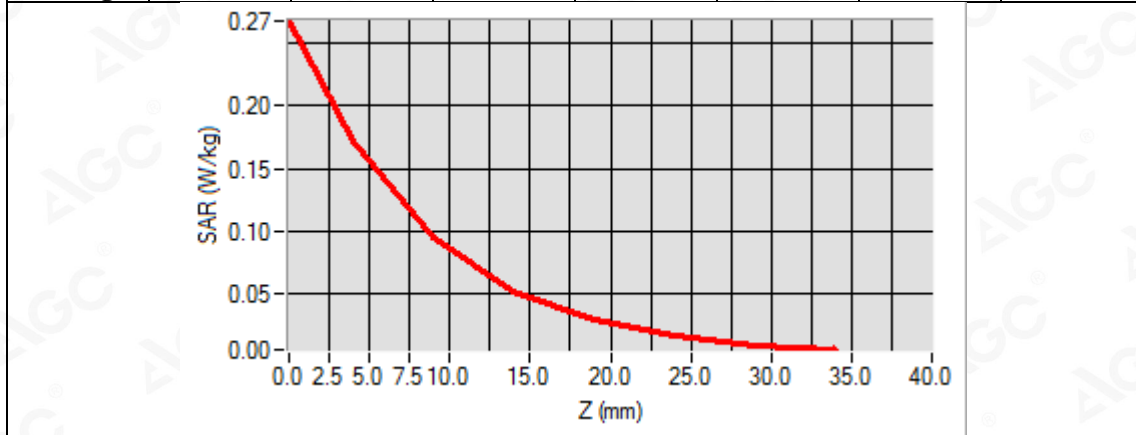
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.2679	0.1714	0.0948	0.0514	0.0284	0.0155	0.0087



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

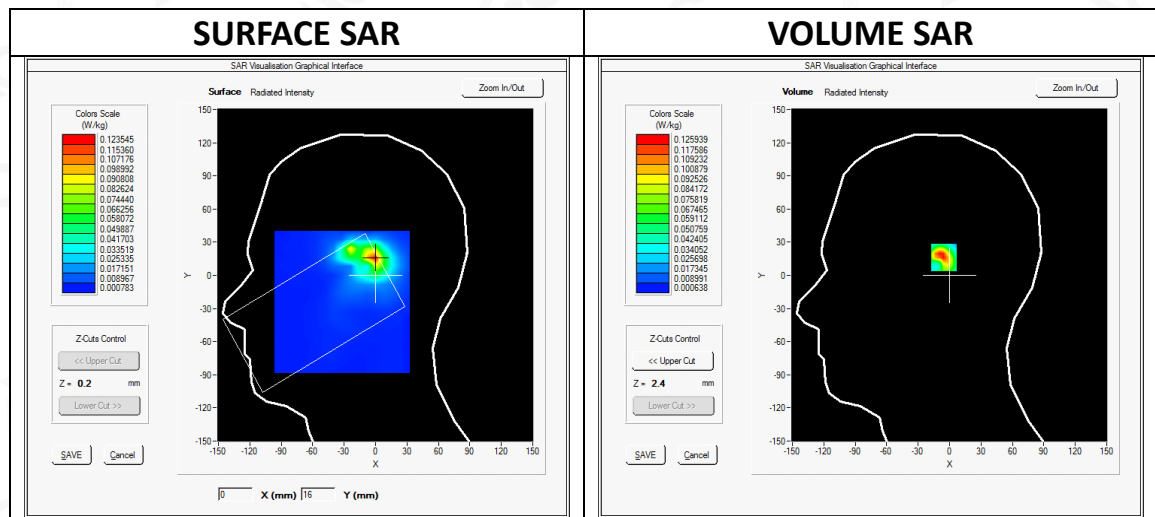
**SATIMO Configuration:**

- 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

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



**Maximum location: X=-1.00, Y=16.00**

**SAR Peak: 0.33 W/kg**

<b>SAR 10g (W/Kg)</b>	0.038757
<b>SAR 1g (W/Kg)</b>	0.117848



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

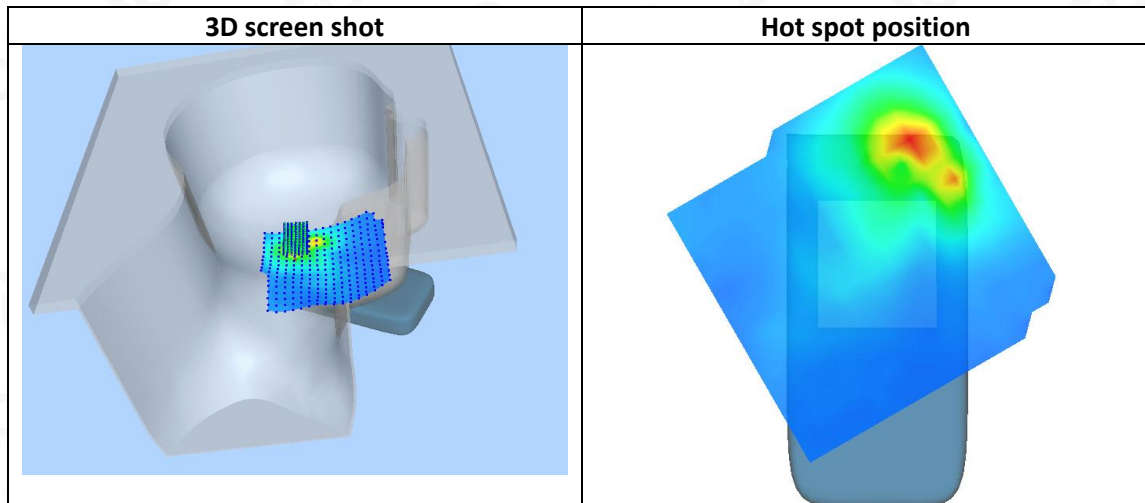
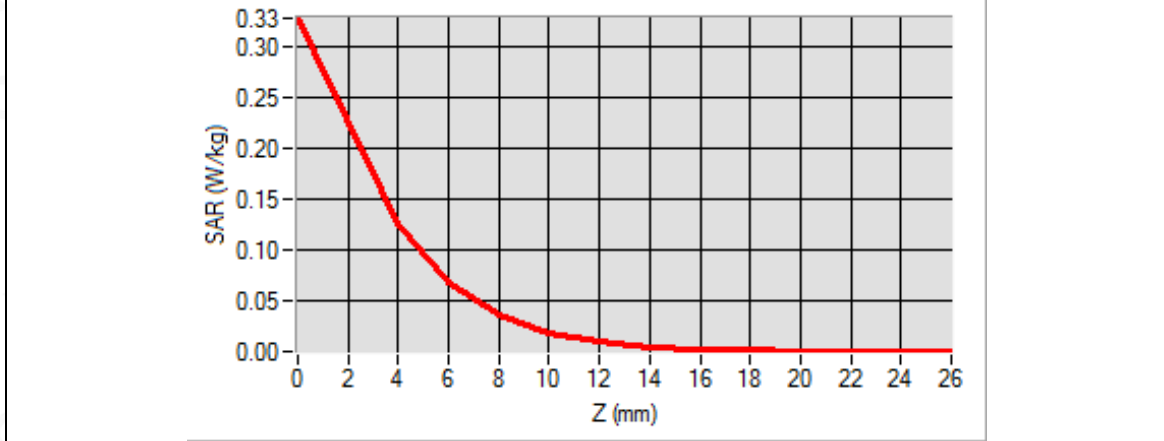
Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118



Z (mm)	0.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00	24.00
SAR (W/Kg)	0.3280	0.1259	0.0684	0.0361	0.0184	0.0098	0.0051	0.0031	0.0020	0.0011	0.0010	0.0008



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**

**802.11ac20 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

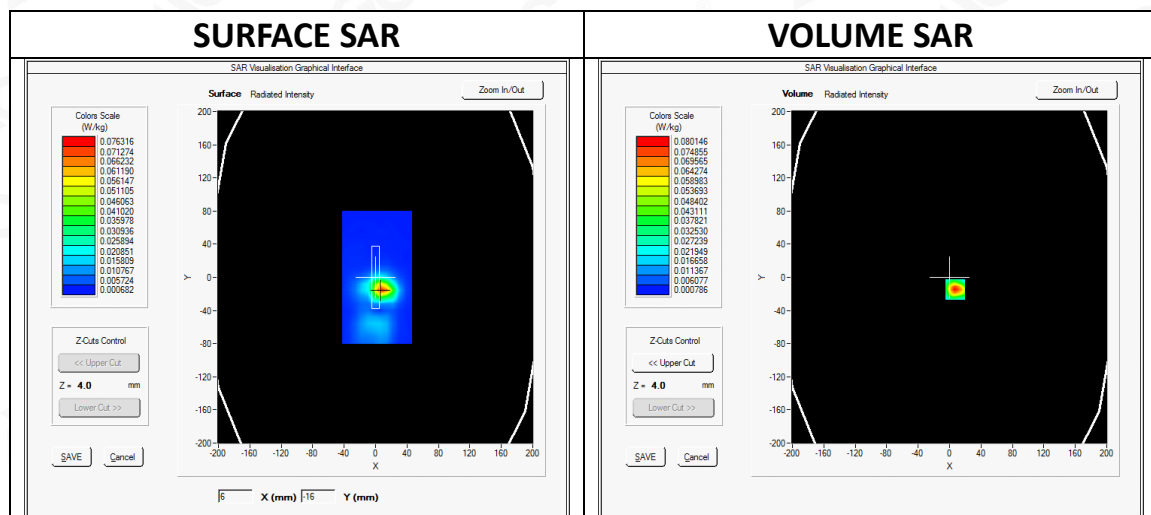
**SATIMO Configuration:**

- 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;**

<b>Area Scan</b>	dx=8mm dy=8mm, h= 5.00 mm
<b>ZoomScan</b>	7x7x7,dx=5mm dy=5mm dz=5mm
<b>Phantom</b>	ELLI
<b>Device Position</b>	Edge1
<b>Band</b>	5200MHz
<b>Channels</b>	CH44
<b>Signal</b>	Crest factor: 1.0



**Maximum location: X=7.00, Y=-15.00**

**SAR Peak: 0.20 W/kg**

<b>SAR 10g (W/Kg)</b>	0.027092
<b>SAR 1g (W/Kg)</b>	0.075989



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

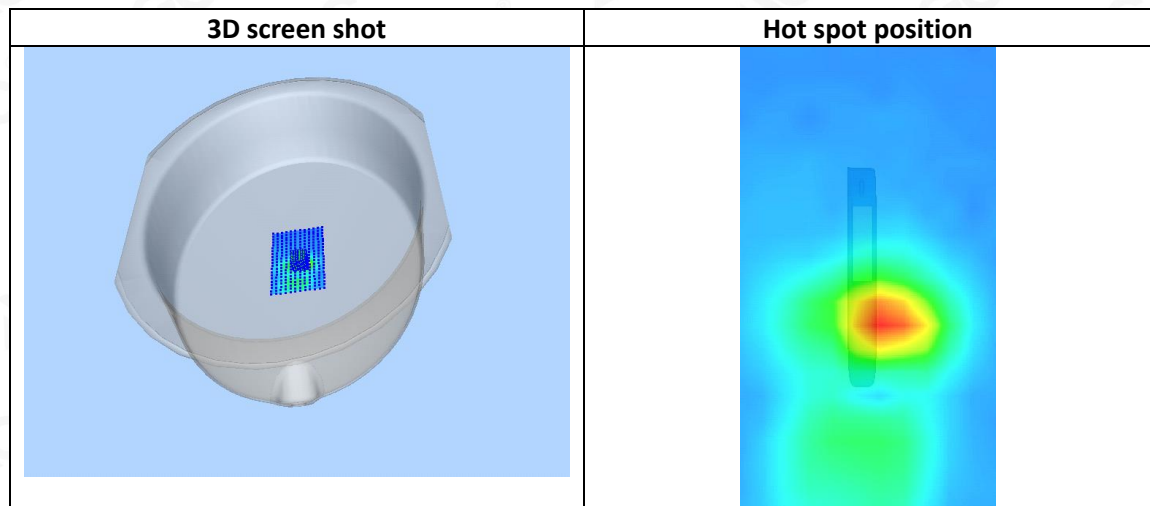
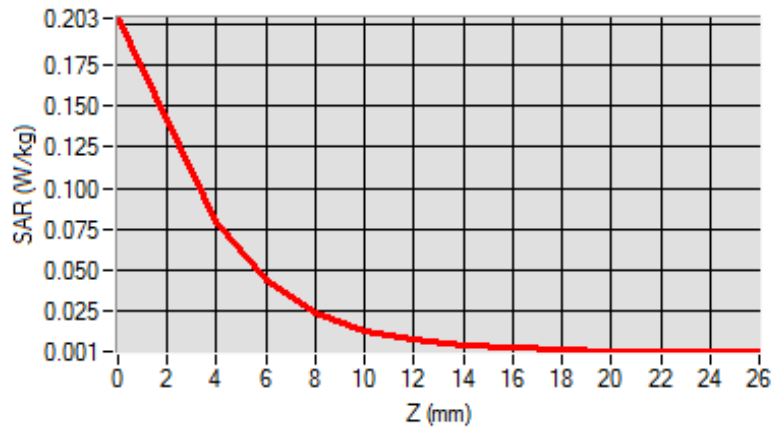
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118

Z (mm)	0.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00	24.00
SAR (W/Kg)	0.2033	0.0801	0.0443	0.0244	0.0137	0.0079	0.0043	0.0027	0.0020	0.0014	0.0011	0.0010



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**

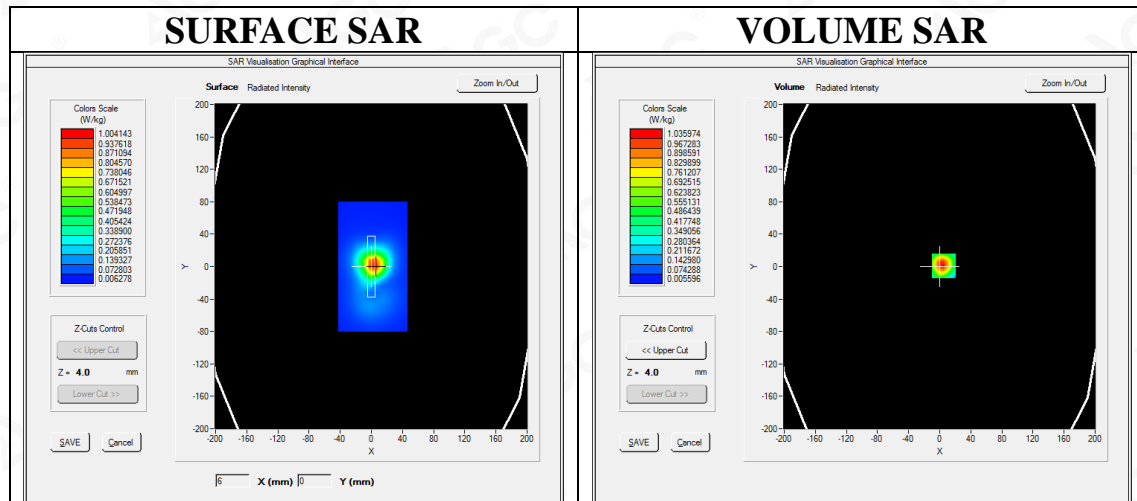
Communication System: LTE; Communication System Band: LTE Band 7; Duty Cycle:1:1; Conv.F=4.68  
Frequency: 2510MHz; Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.11$  mho/m;  $\epsilon_r = 53.64$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Phantom section: Flat Section  
Ambient temperature (°C): 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

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



**Maximum location: X=5.00, Y=1.00**  
**SAR Peak: 1.66 W/kg**

<b>SAR 10g (W/Kg)</b>	0.481379
<b>SAR 1g (W/Kg)</b>	0.966981



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

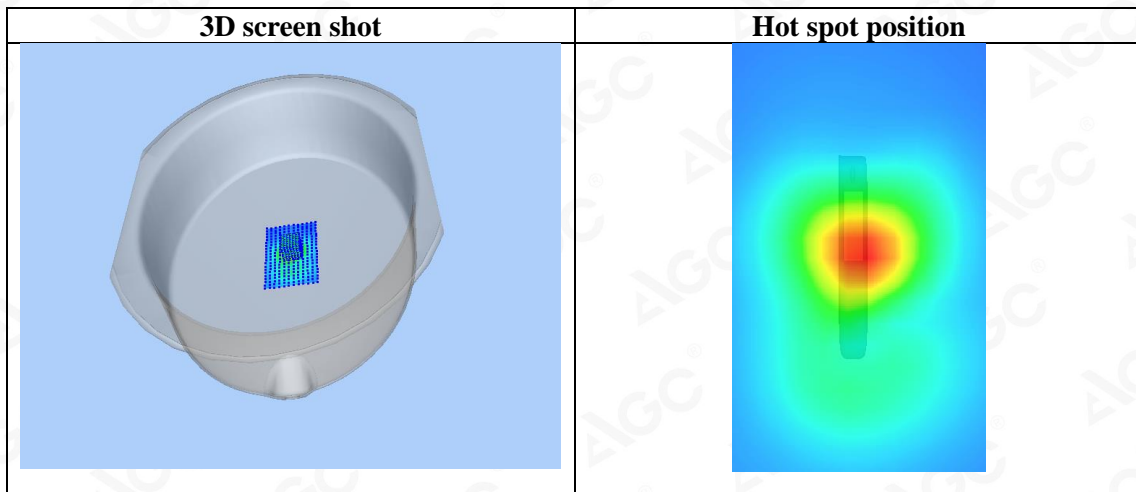
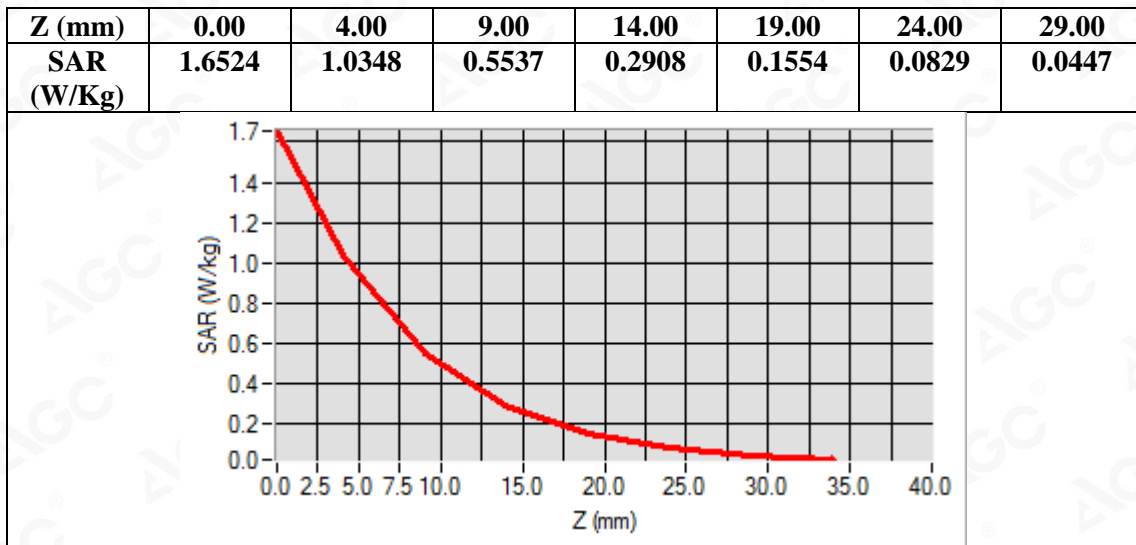
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118





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

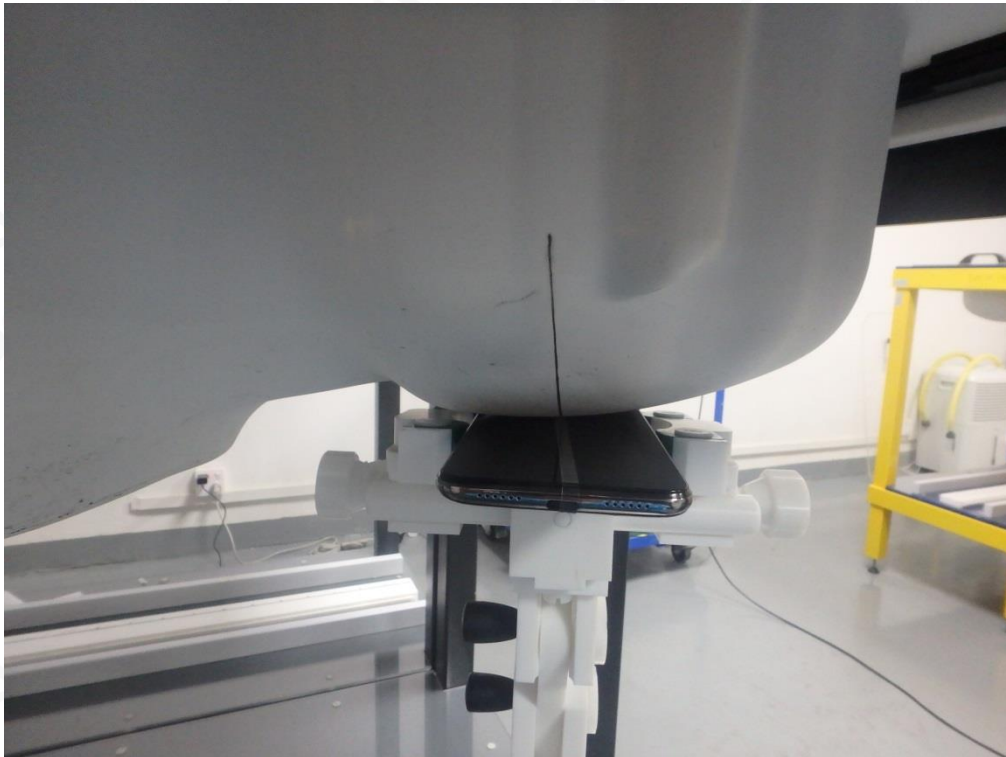
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu,  
Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

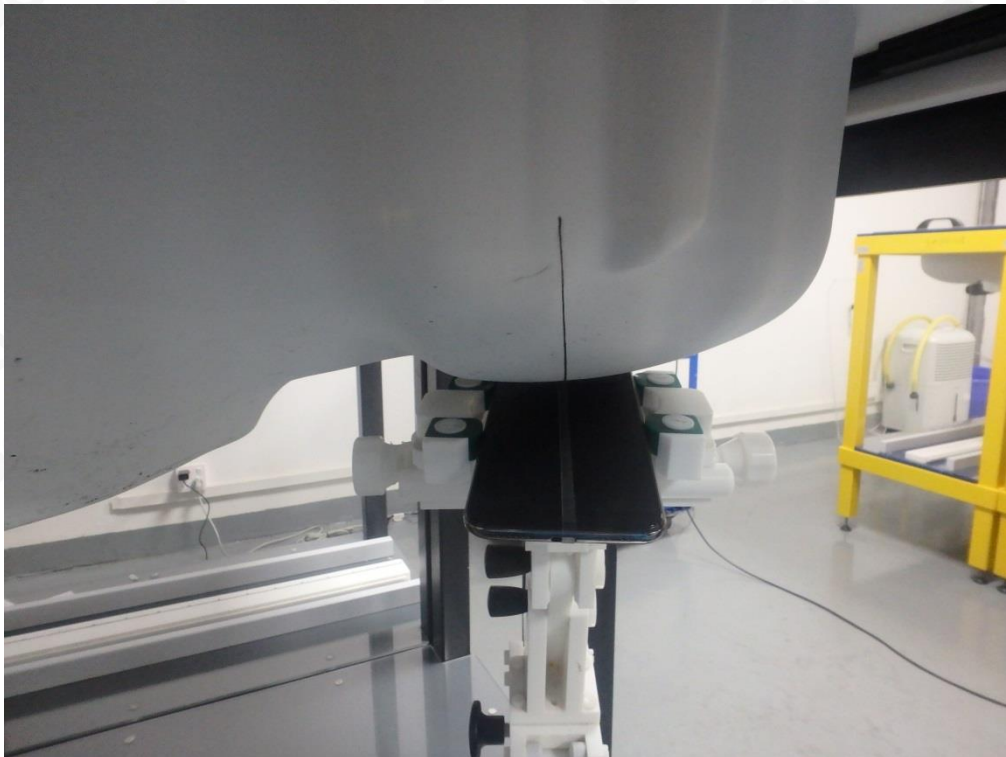
E-mail: agc@agc-cert.com

Service Hotline:400 089 2118

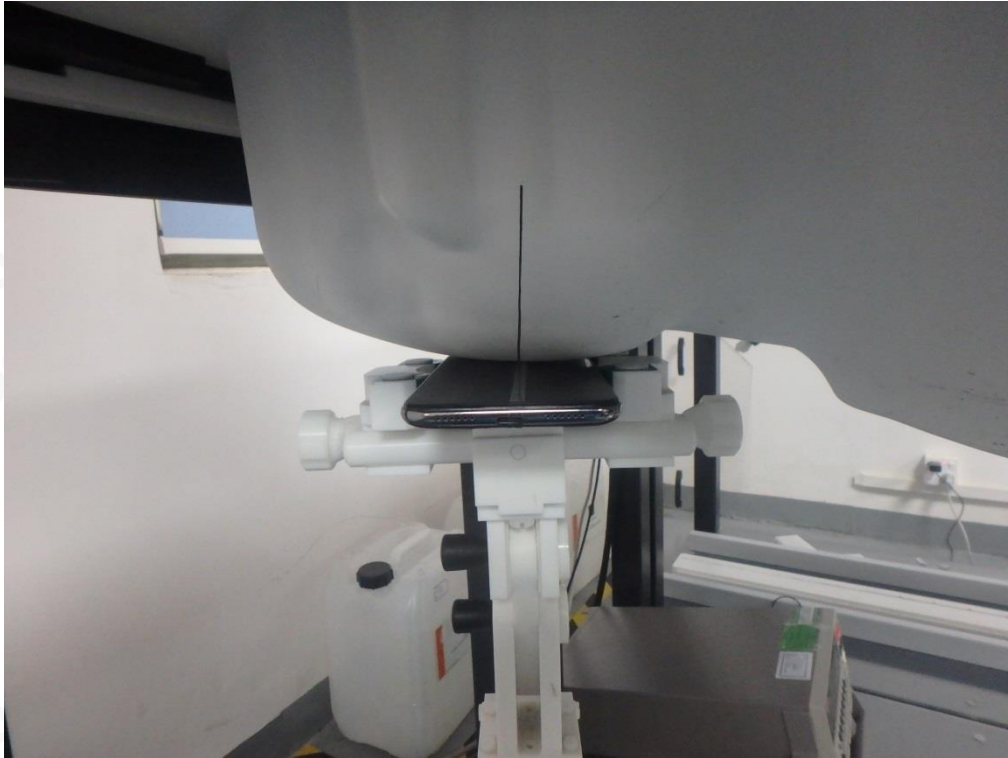
**APPENDIX C. TEST SETUP PHOTOGRAPHS**  
LEFT-CHEEK TOUCH



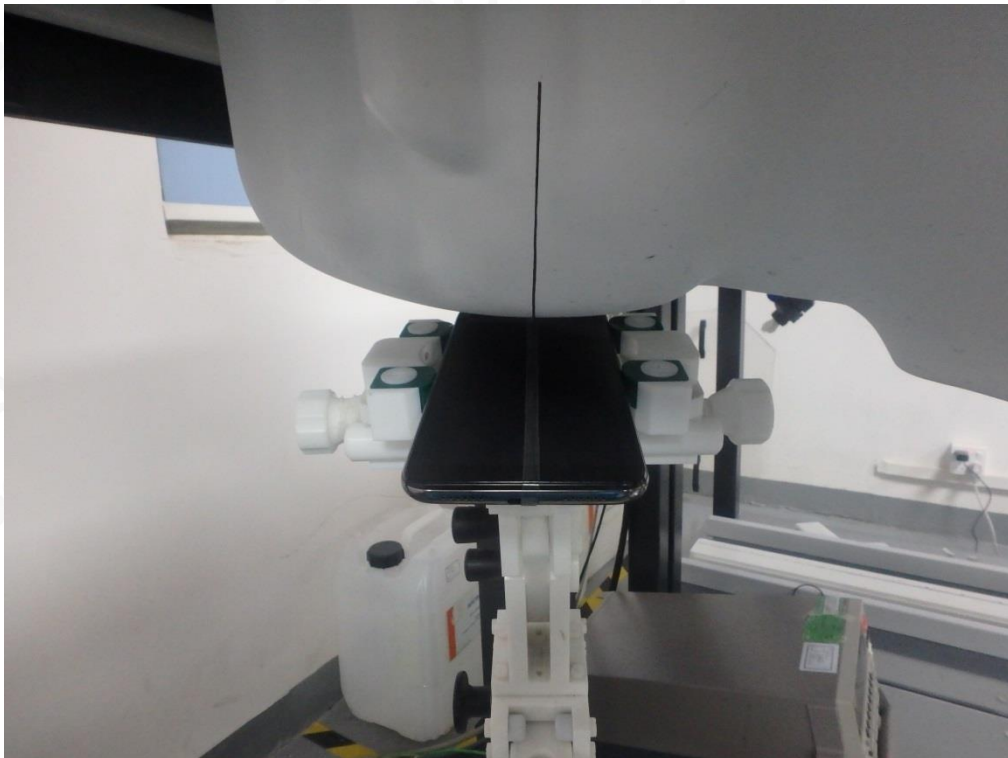
LEFT-TILT 15°



RIGHT- CHEEK TOUCH

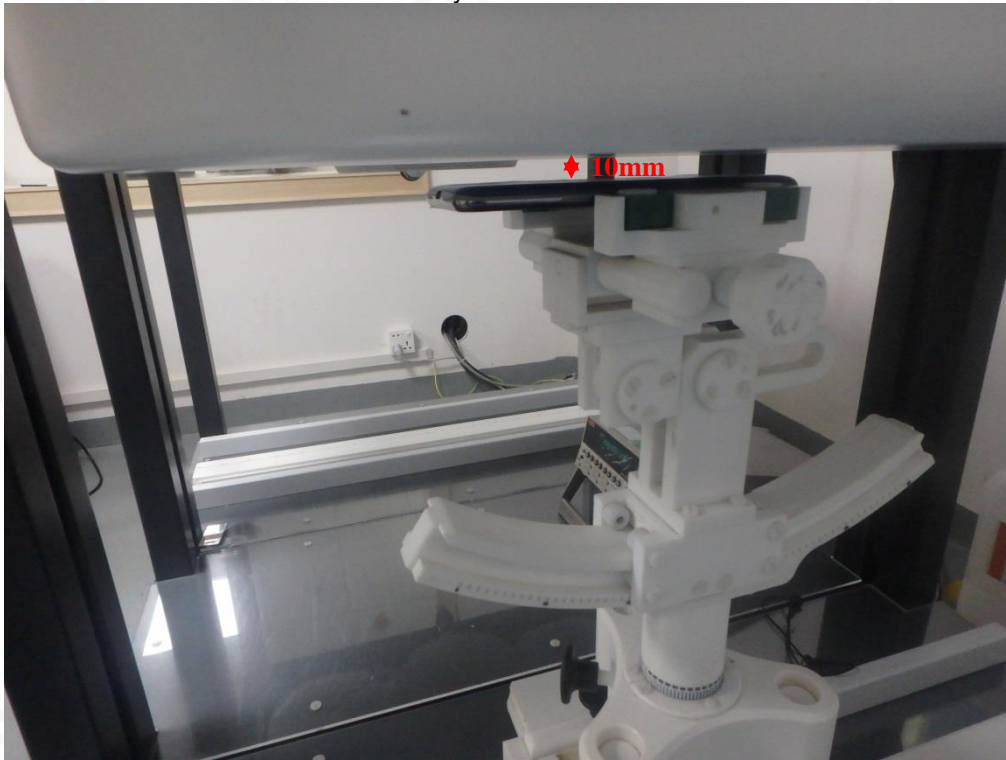


RIGHT-TILT 15°

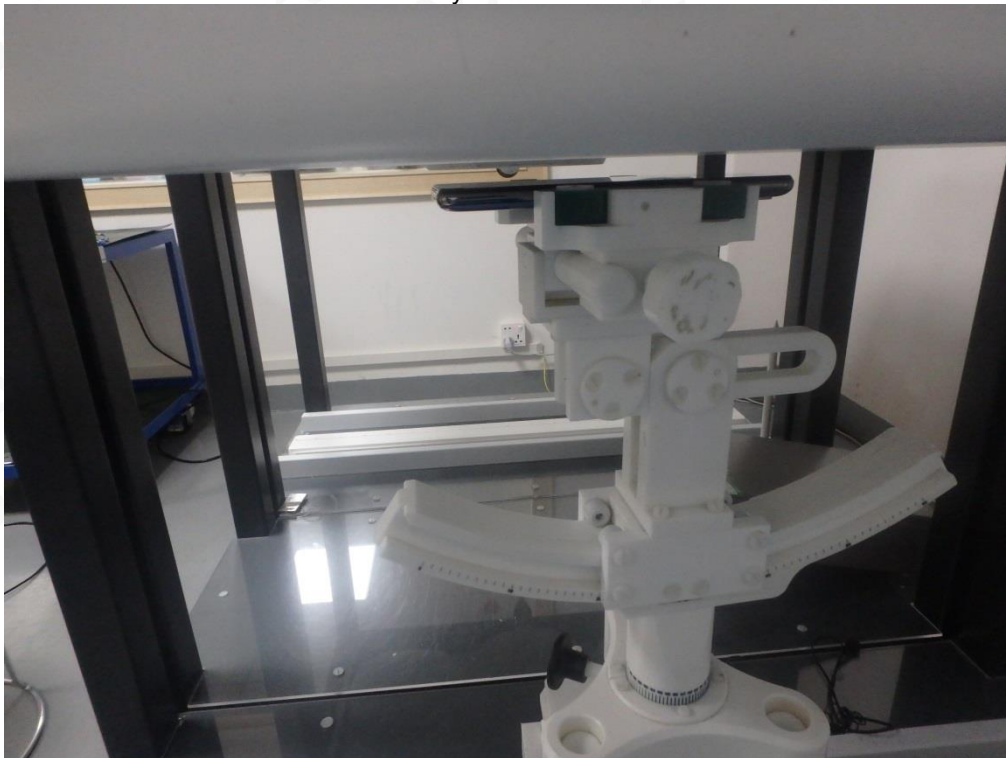




Body Back 10mm

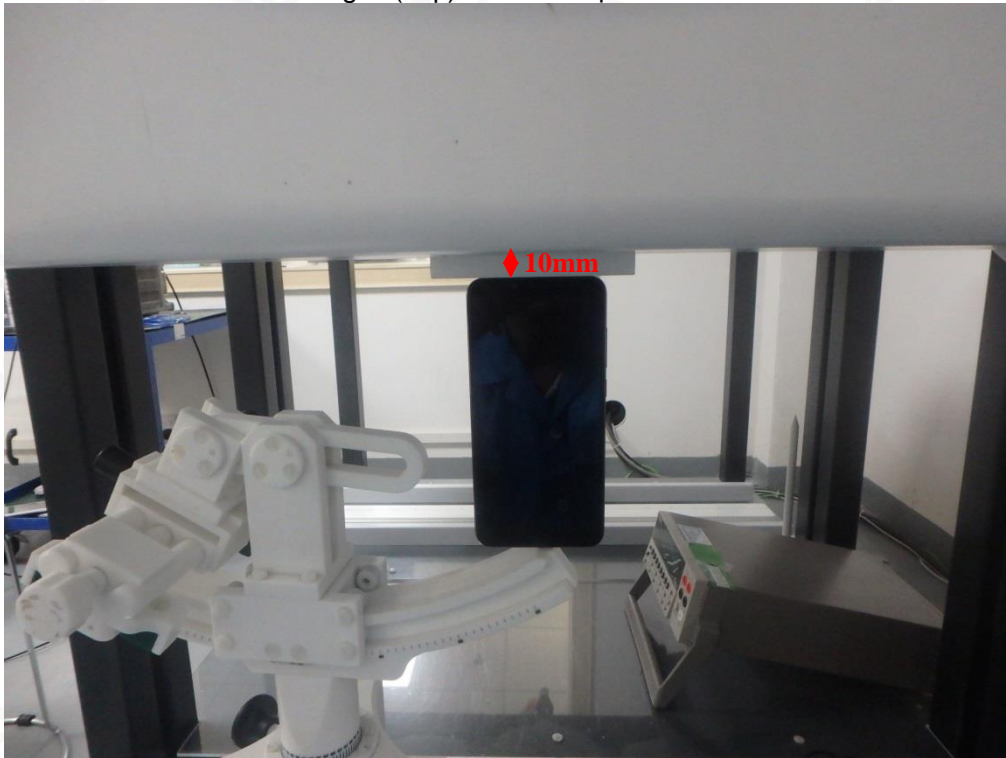


Body Front 10mm

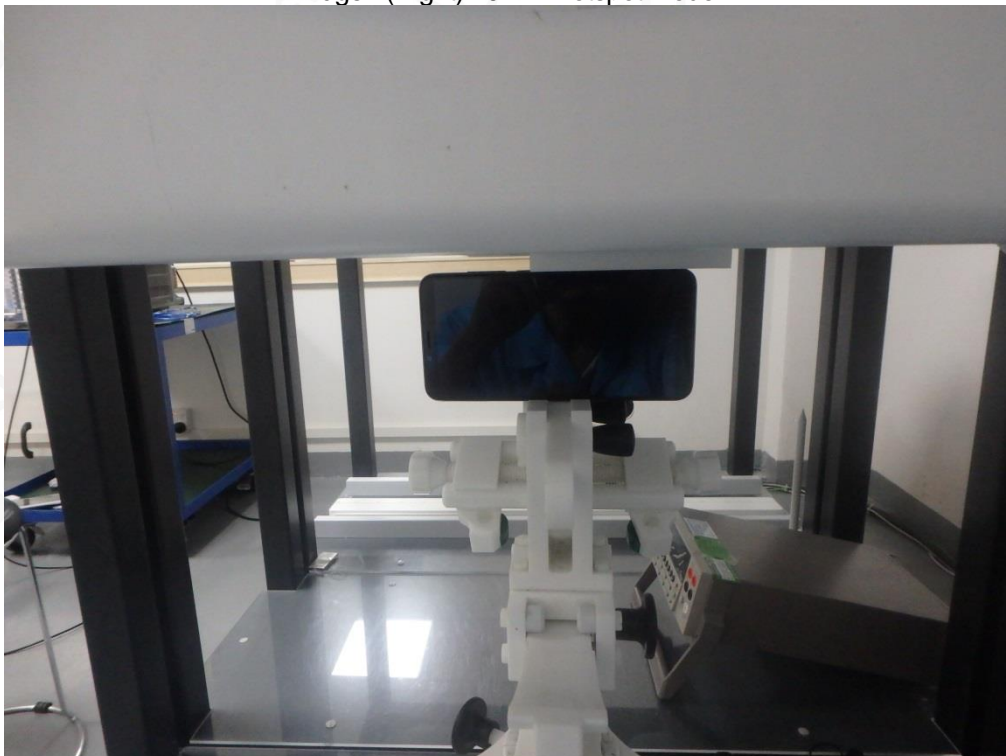




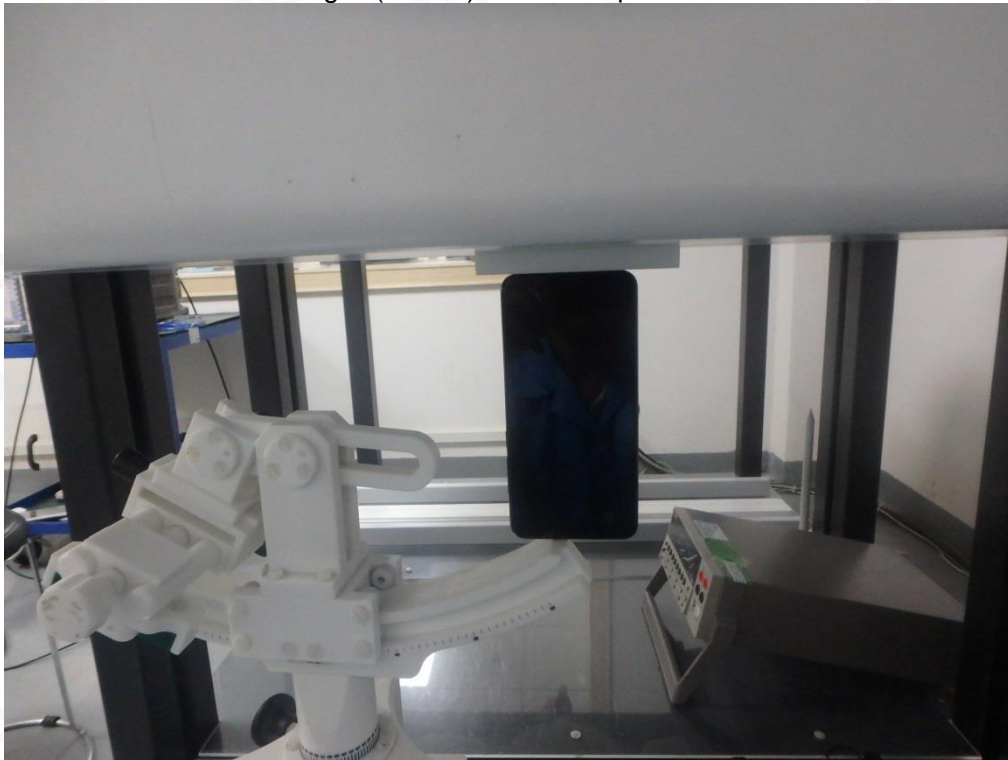
Edge 1(Top) 10mm-Hotspot Mode



Edge 2(Right) 10mm-Hotspot Mode



Edge 3(Bottom) 10mm-Hotspot Mode

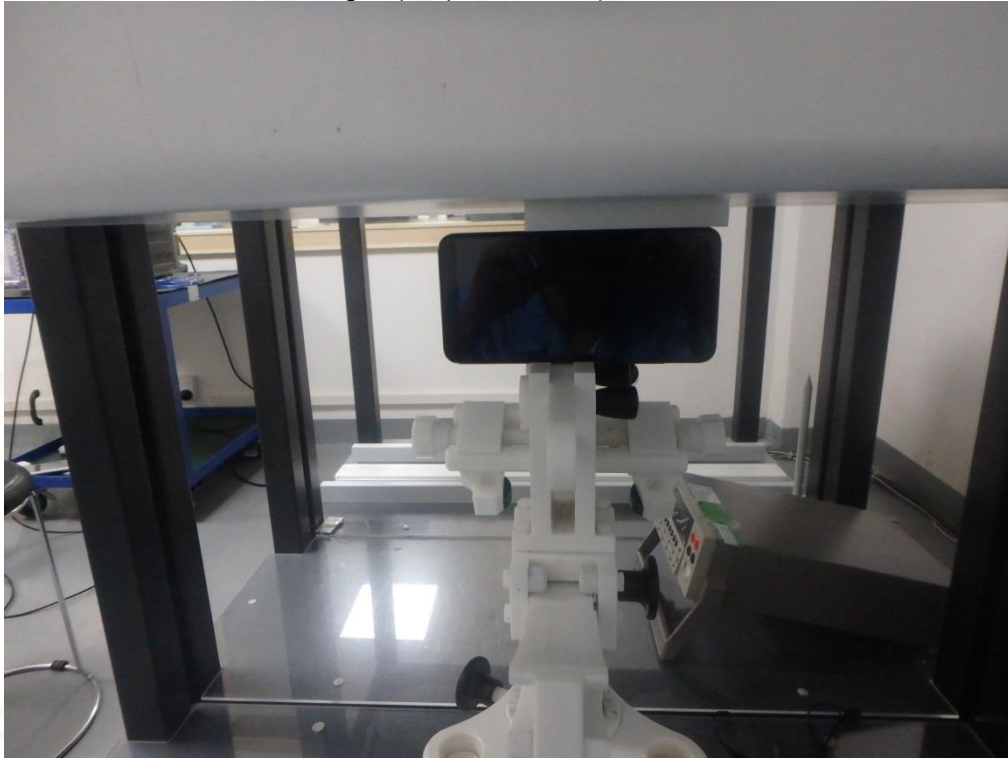


Edge 3(Bottom) with headset 10mm-Hotspot Mode





Edge 4(Left) 10mm-Hotspot Mode



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

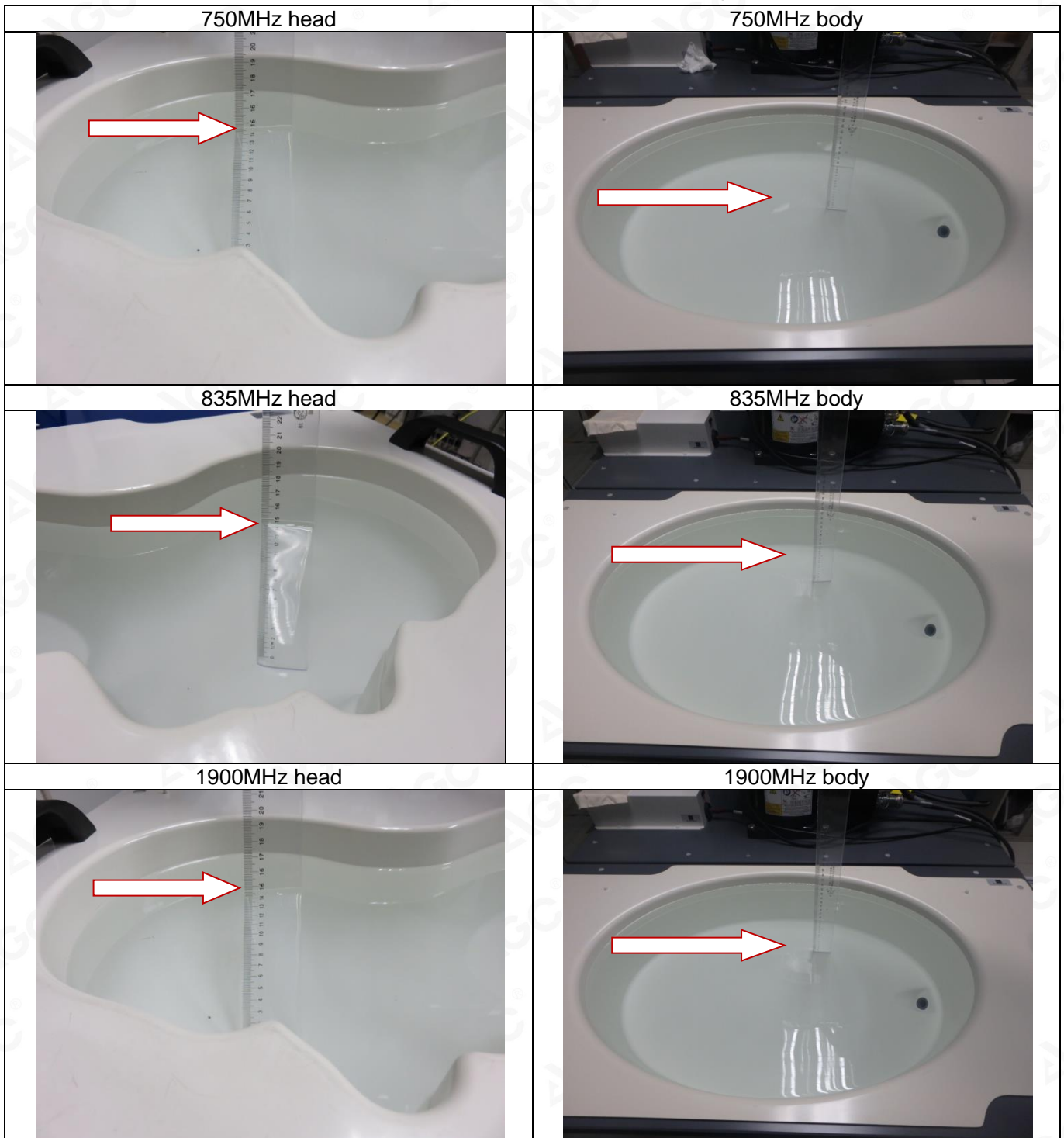
Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118

### DEPTH OF THE LIQUID IN THE PHANTOM—ZOOM IN

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



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

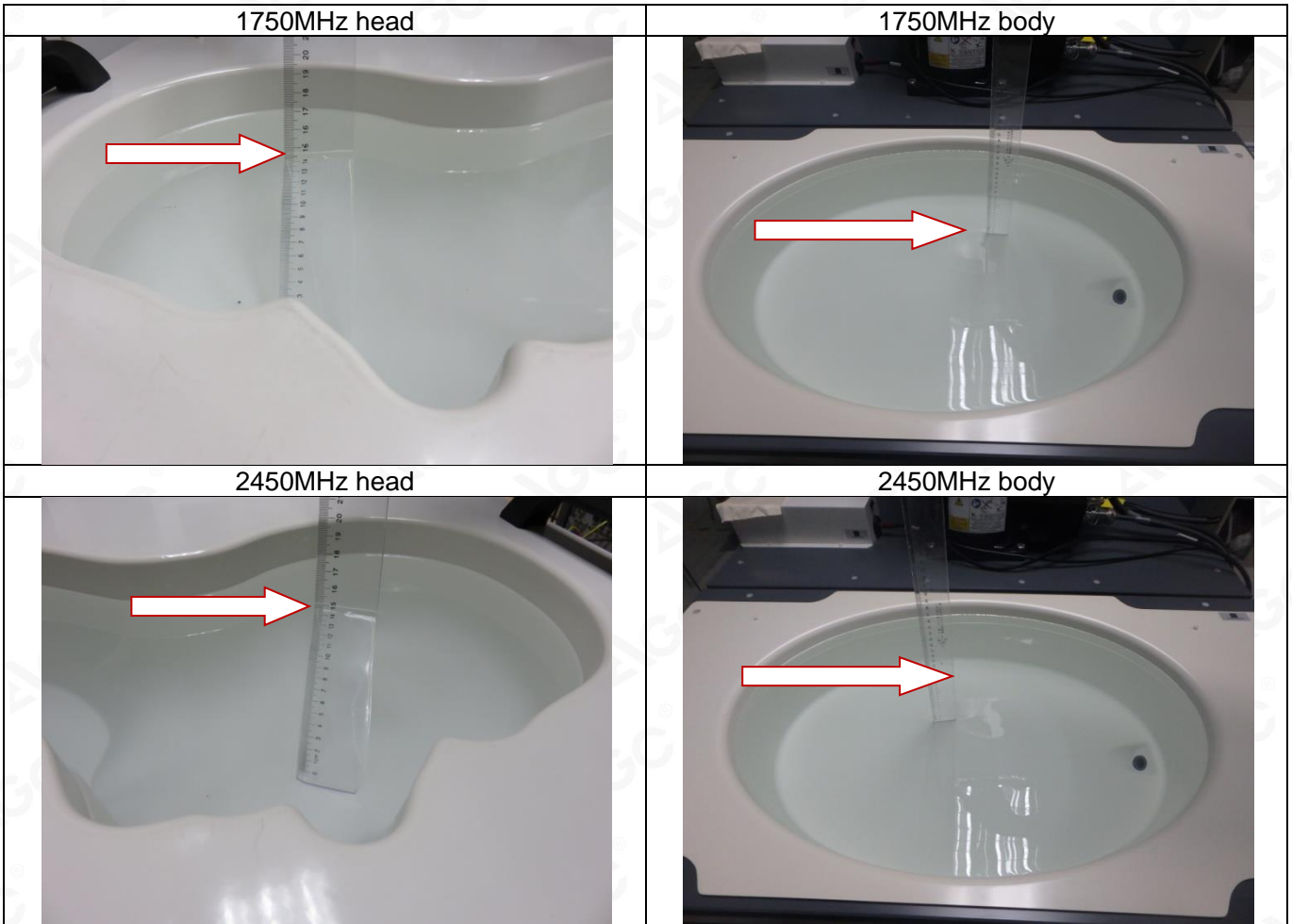
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technial Industrial Park, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline:400 089 2118





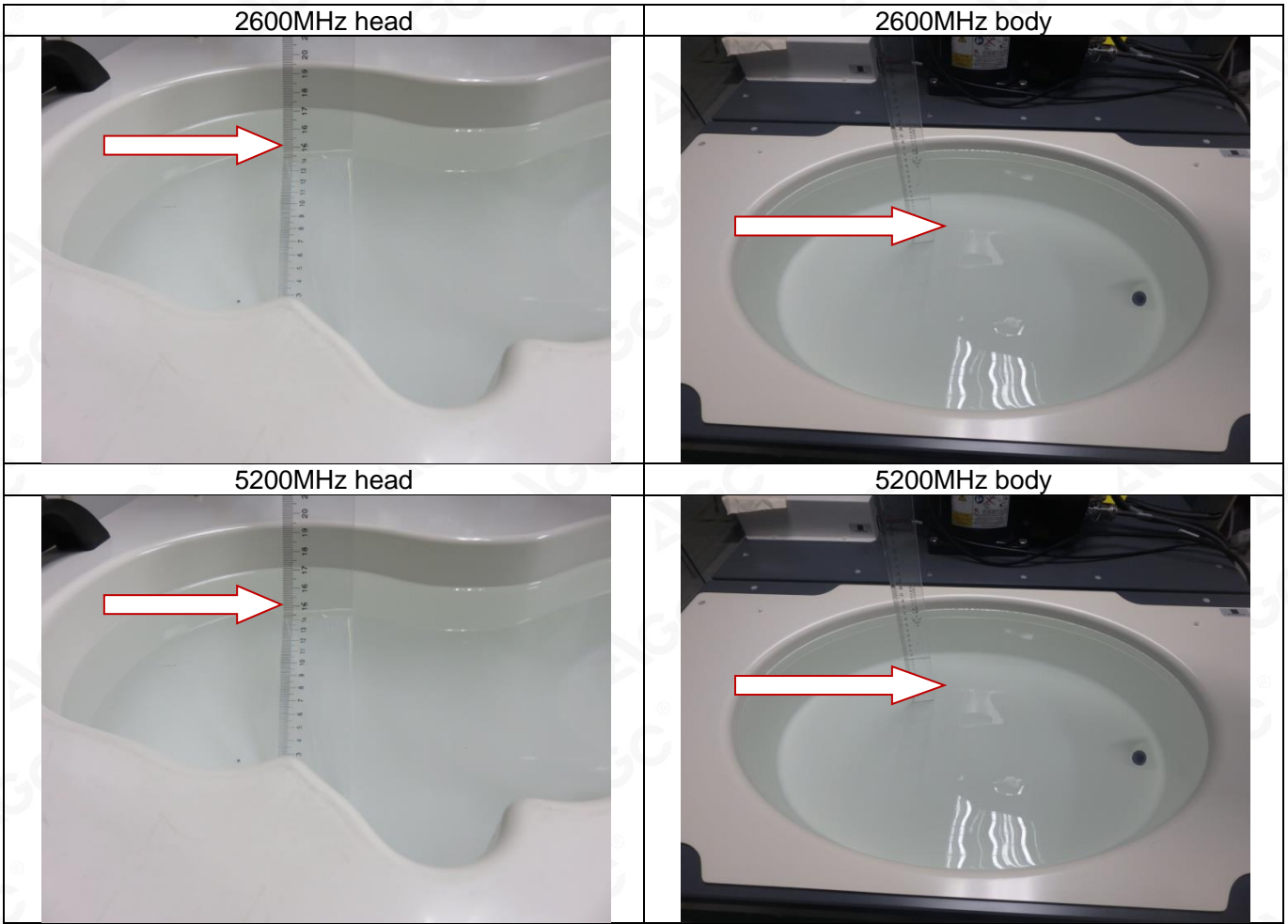
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

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



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 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