

MEASUREMENT 5

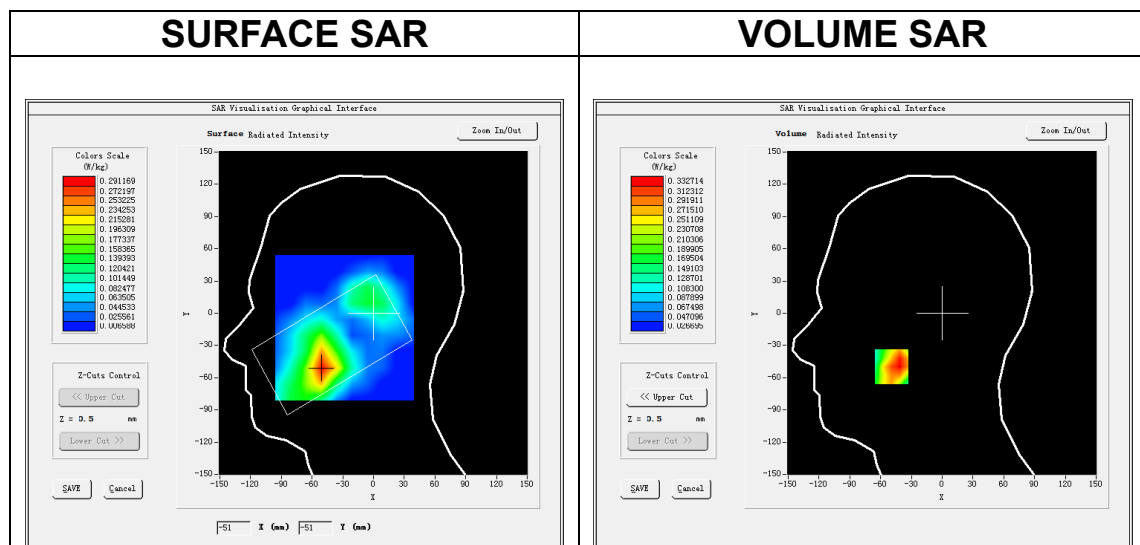
Date of measurement: 15/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>Band2 WCDMA1900</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>
ConvF	<u>2.05</u>

B. SAR Measurement Results

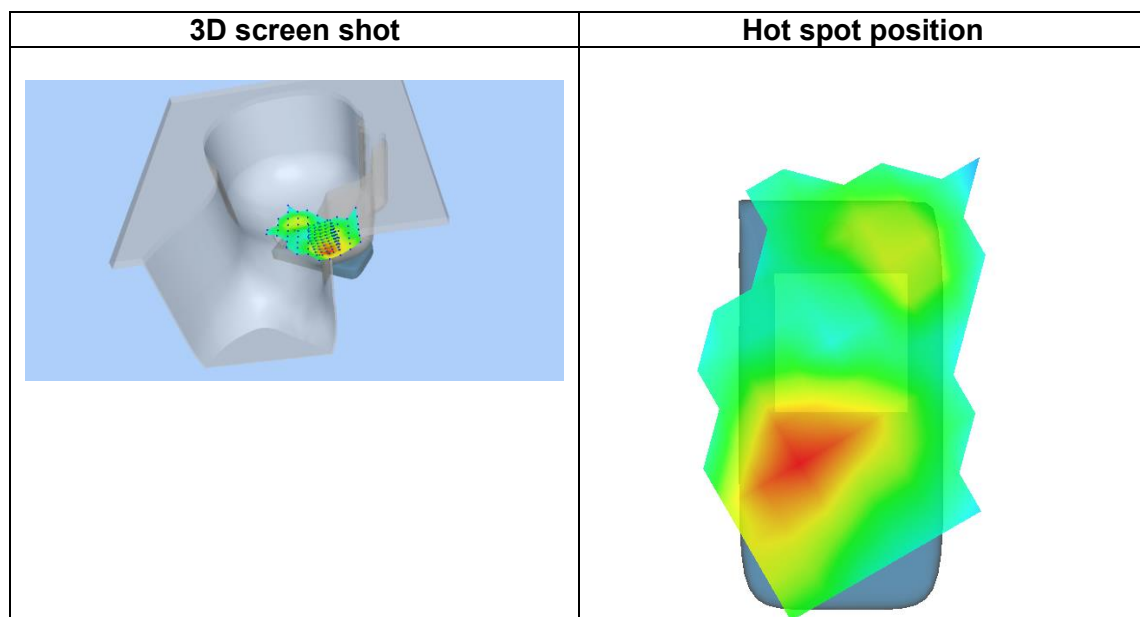
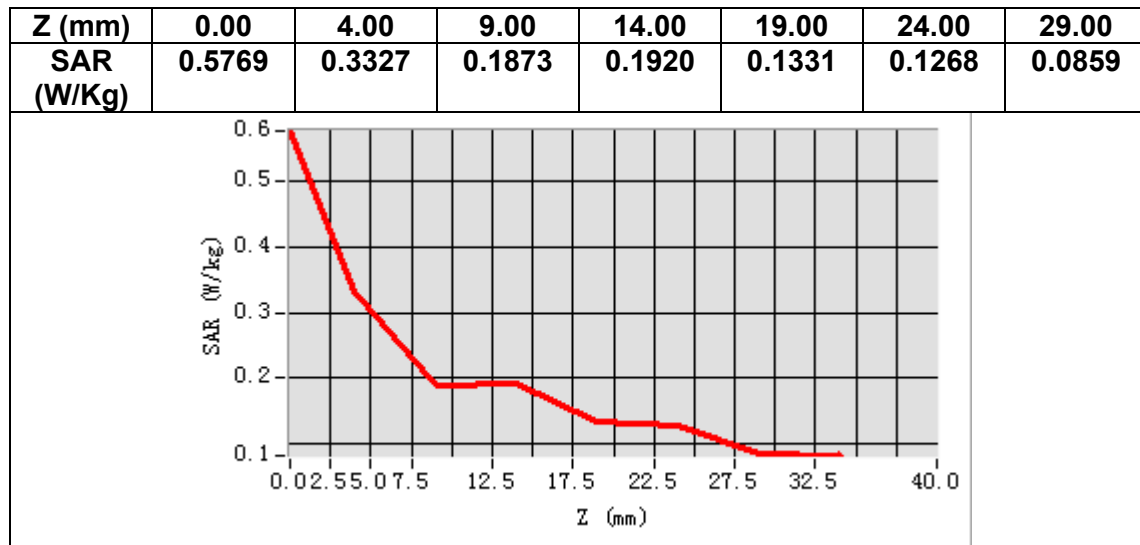
Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.408000
Conductivity (S/m)	1.400391
Variation (%)	2.450000



Maximum location: X=-49.00, Y=-50.00

SAR Peak: 0.49 W/kg

SAR 10g (W/Kg)	0.219710
SAR 1g (W/Kg)	0.329051



MEASUREMENT 6

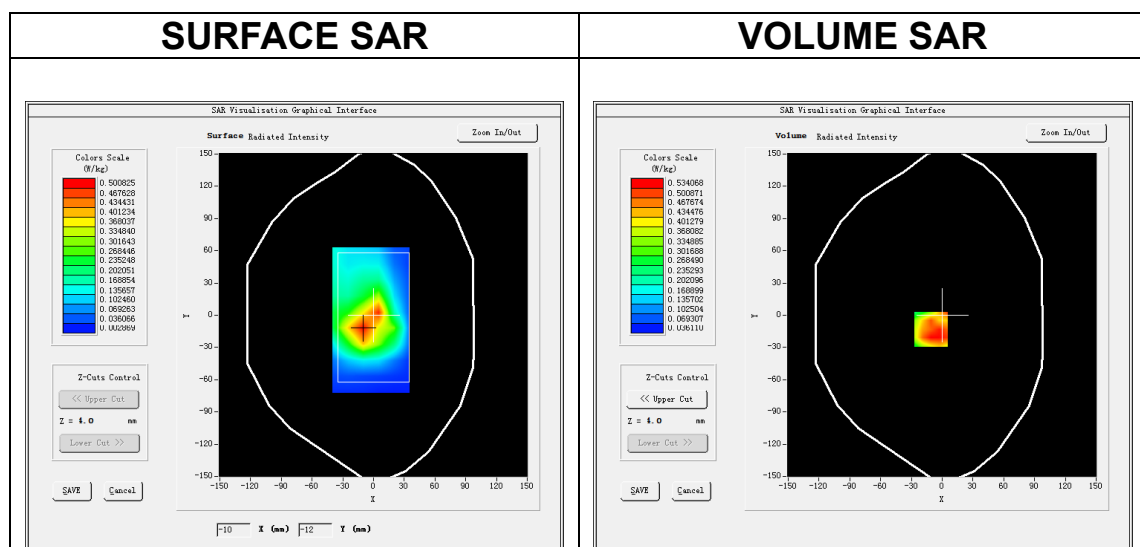
Date of measurement: 15/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>Band2 WCDMA1900</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>
ConvF	<u>2.05</u>

B. SAR Measurement Results

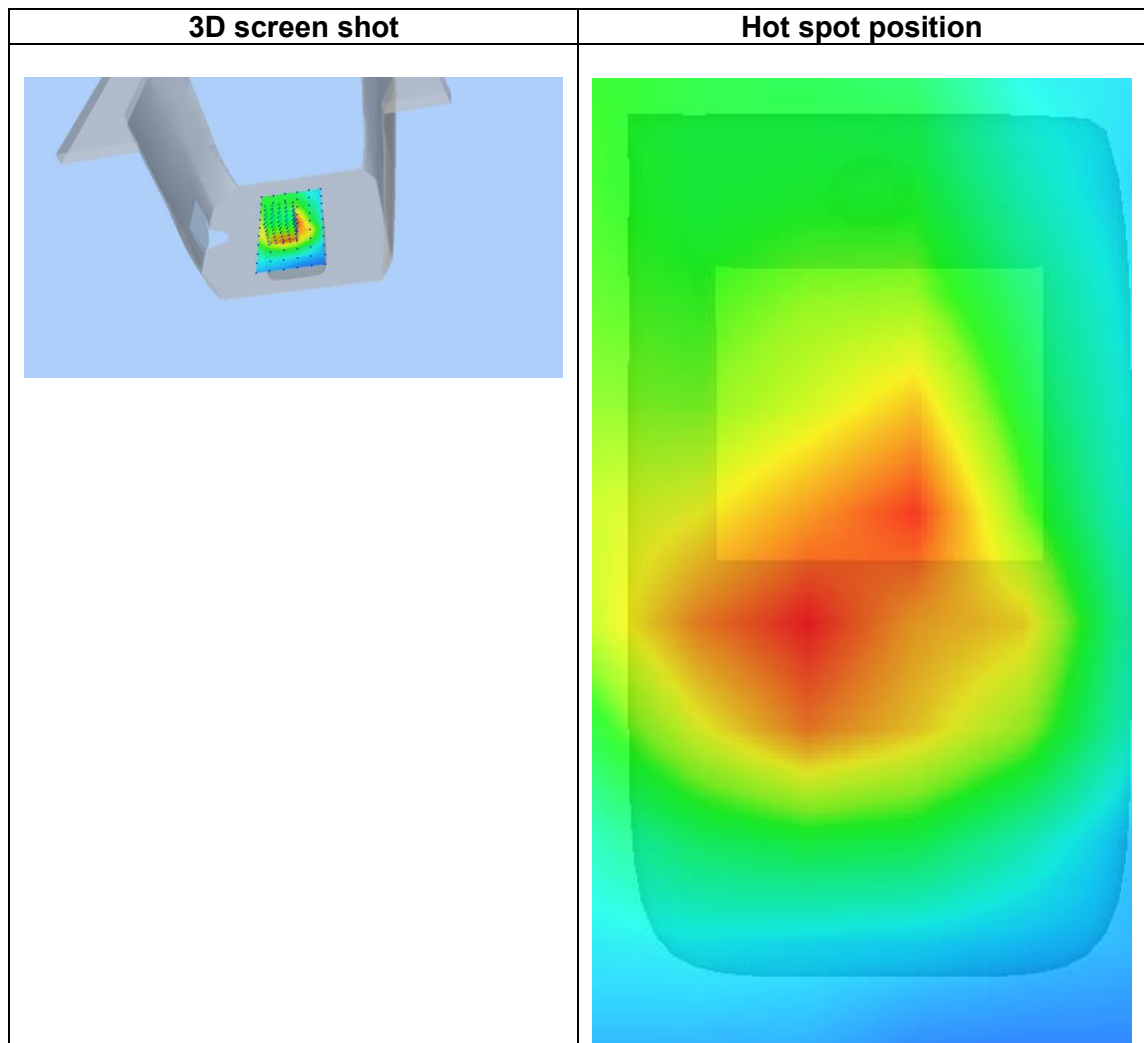
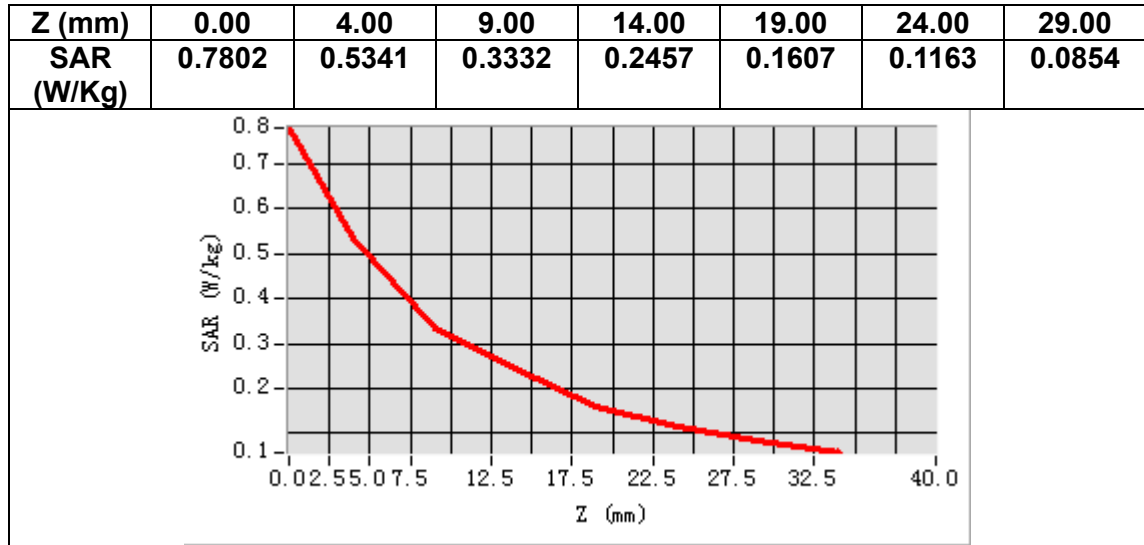
Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.408000
Conductivity (S/m)	1.400391
Variation (%)	-0.660000



Maximum location: X=-11.00, Y=-13.00

SAR Peak: 0.95 W/kg

SAR 10g (W/Kg)	0.313045
SAR 1g (W/Kg)	0.530365



MEASUREMENT 7

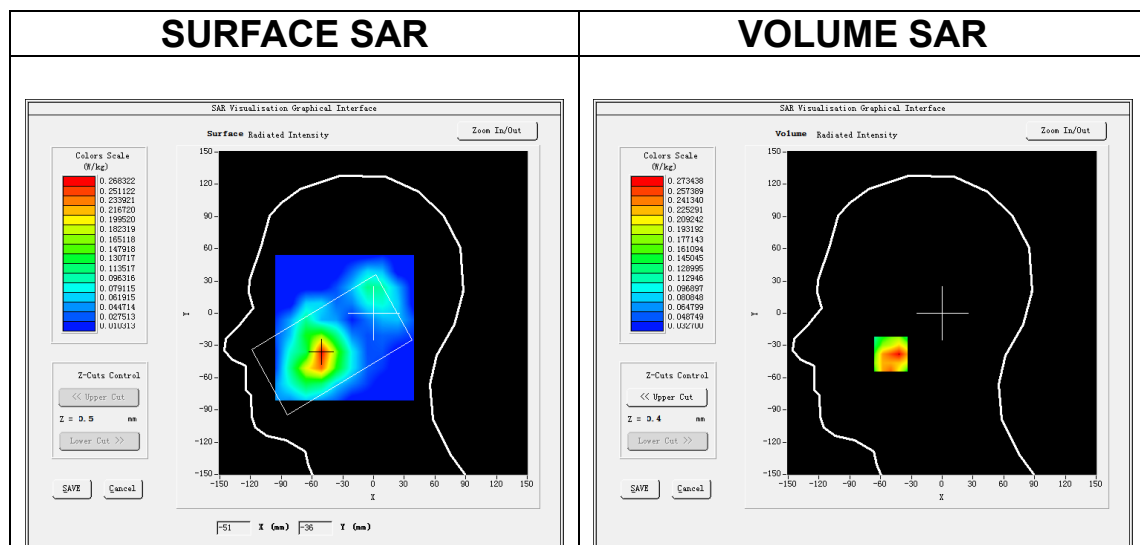
Date of measurement: 14/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>Band4 WCDMA1700</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>
ConvF	<u>2.05</u>

B. SAR Measurement Results

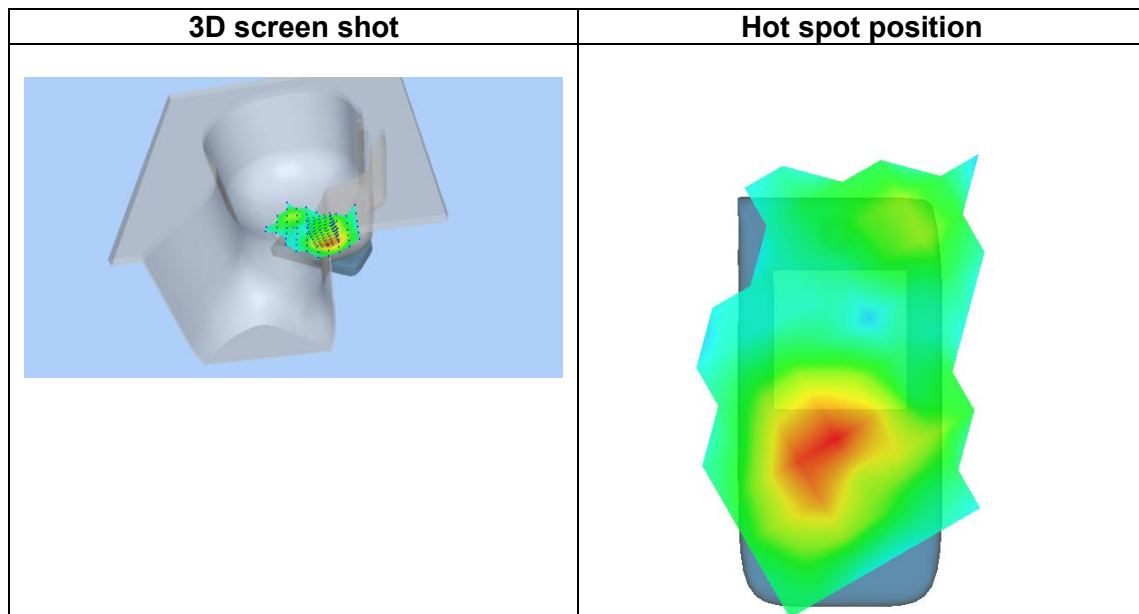
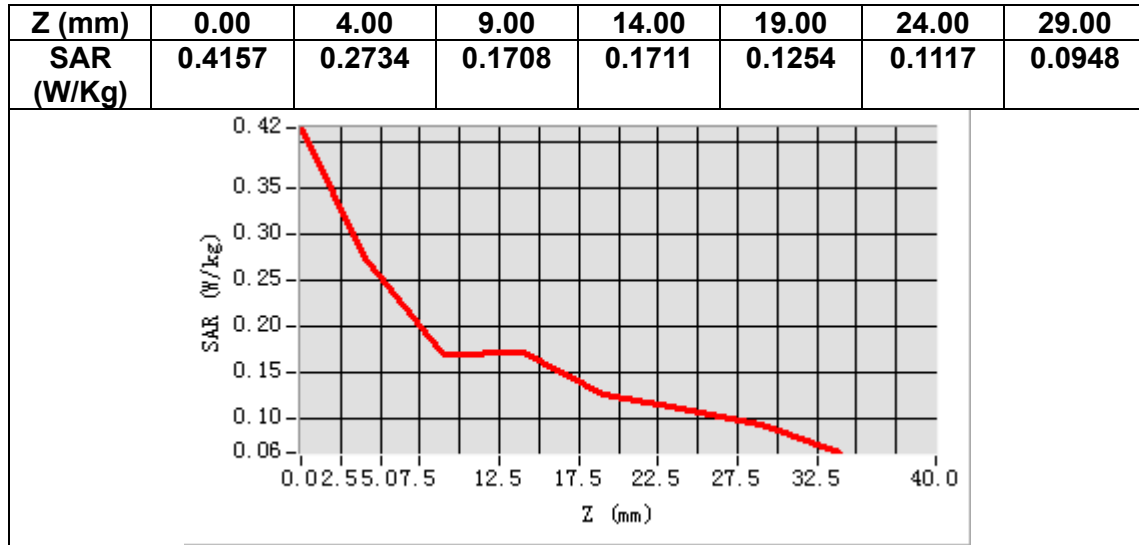
Frequency (MHz)	1732.600000
Relative permittivity (real part)	40.116364
Relative permittivity (imaginary part)	14.137455
Conductivity (S/m)	1.360809
Variation (%)	1.590000



Maximum location: X=-50.00, Y=-38.00

SAR Peak: 0.44 W/kg

SAR 10g (W/Kg)	0.180722
SAR 1g (W/Kg)	0.247362



MEASUREMENT 8

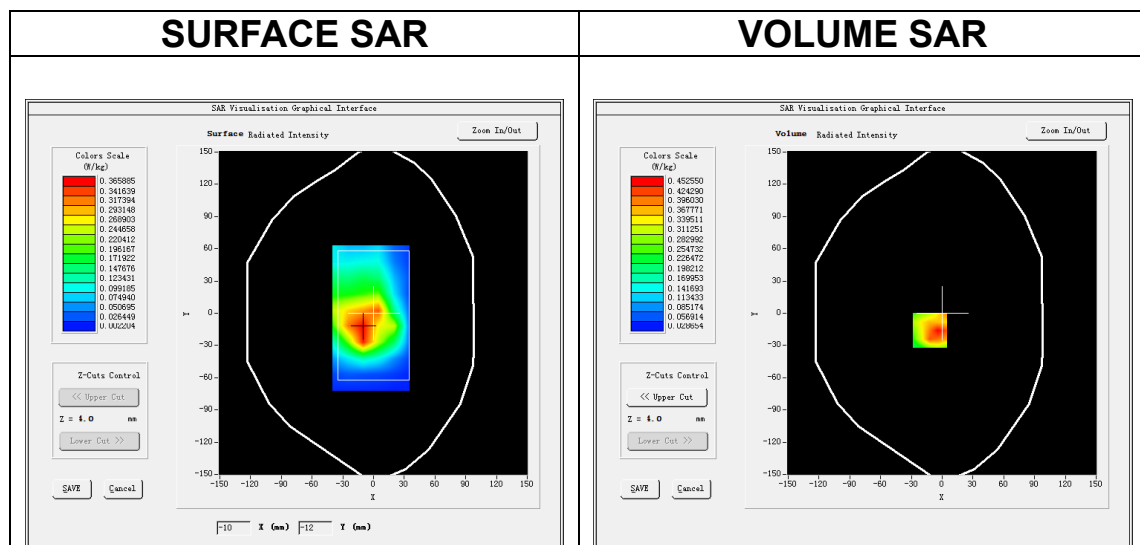
Date of measurement: 14/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>Band4 WCDMA1700</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>
ConvF	<u>2.05</u>

B. SAR Measurement Results

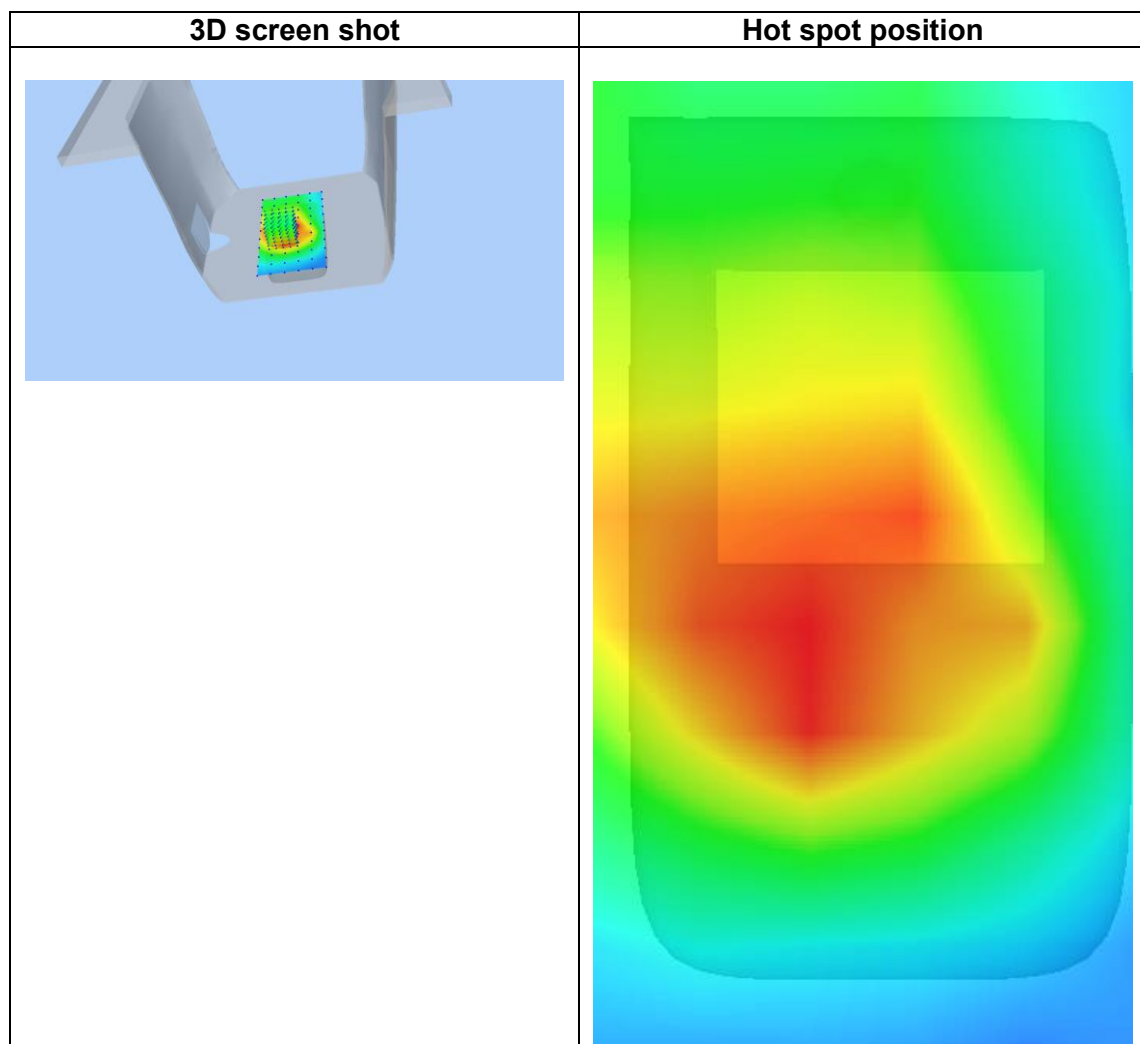
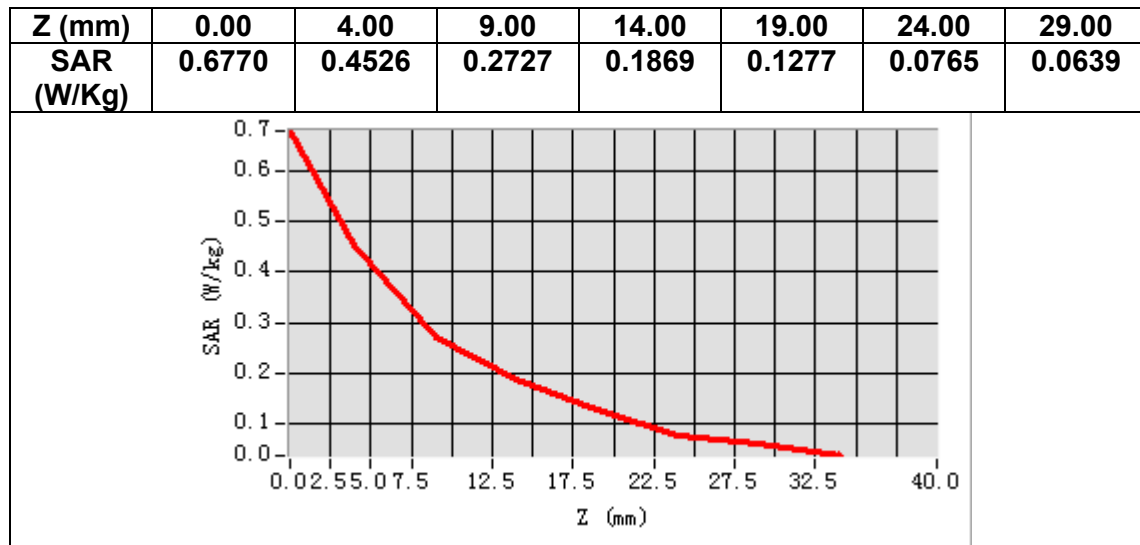
Frequency (MHz)	1732.600000
Relative permittivity (real part)	40.116364
Relative permittivity (imaginary part)	14.137455
Conductivity (S/m)	1.360809
Variation (%)	-2.740000



Maximum location: X=-12.00, Y=-16.00

SAR Peak: 0.70 W/kg

SAR 10g (W/Kg)	0.263960
SAR 1g (W/Kg)	0.423692



MEASUREMENT 9

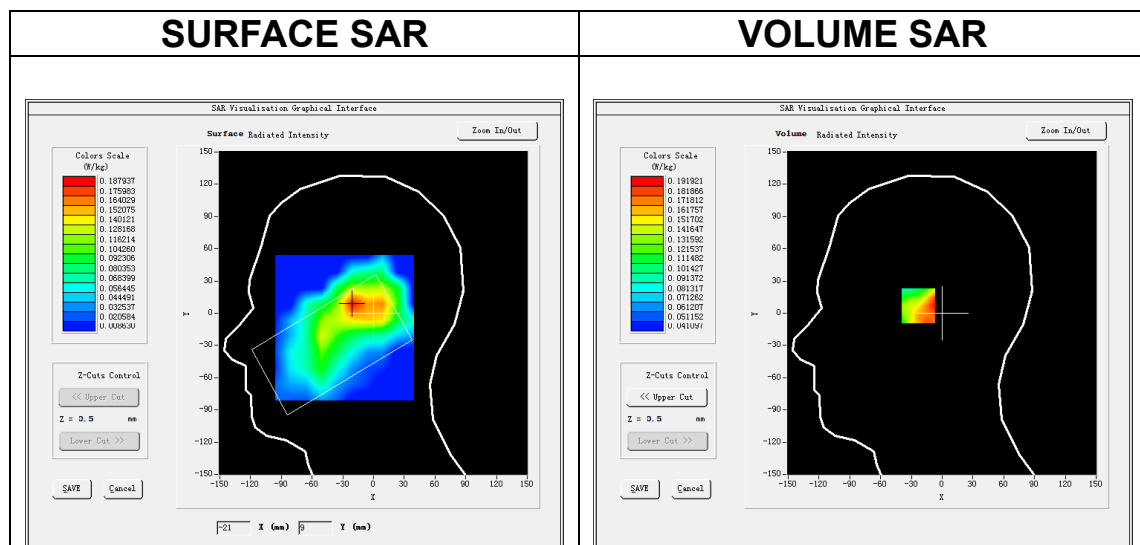
Date of measurement: 13/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>Band5 WCDMA850</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>
ConvF	<u>1.66</u>

B. SAR Measurement Results

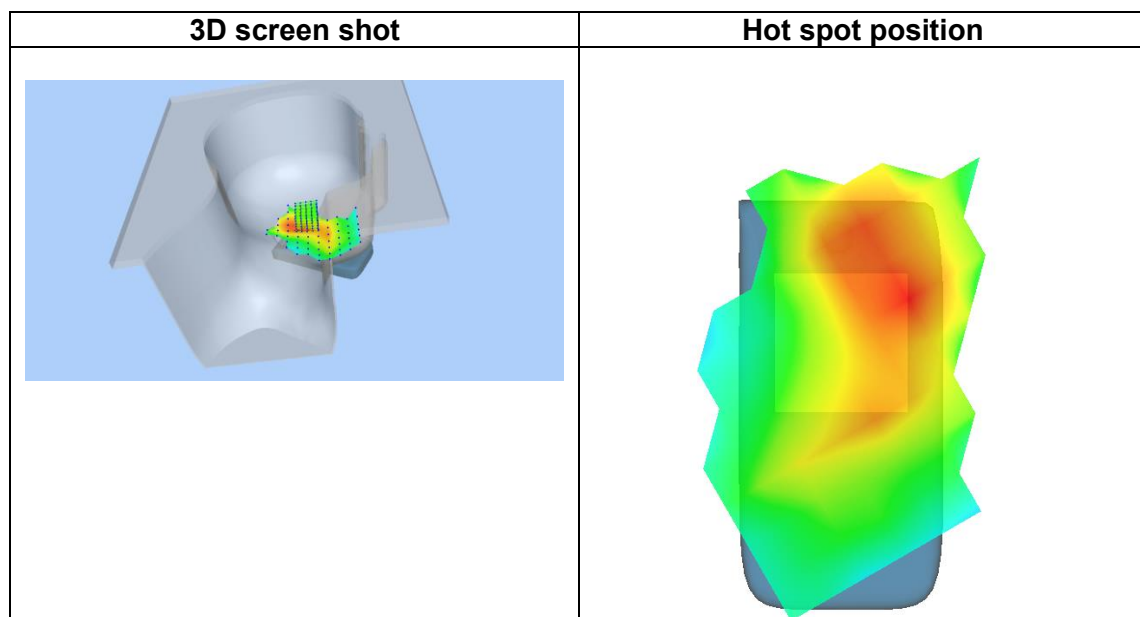
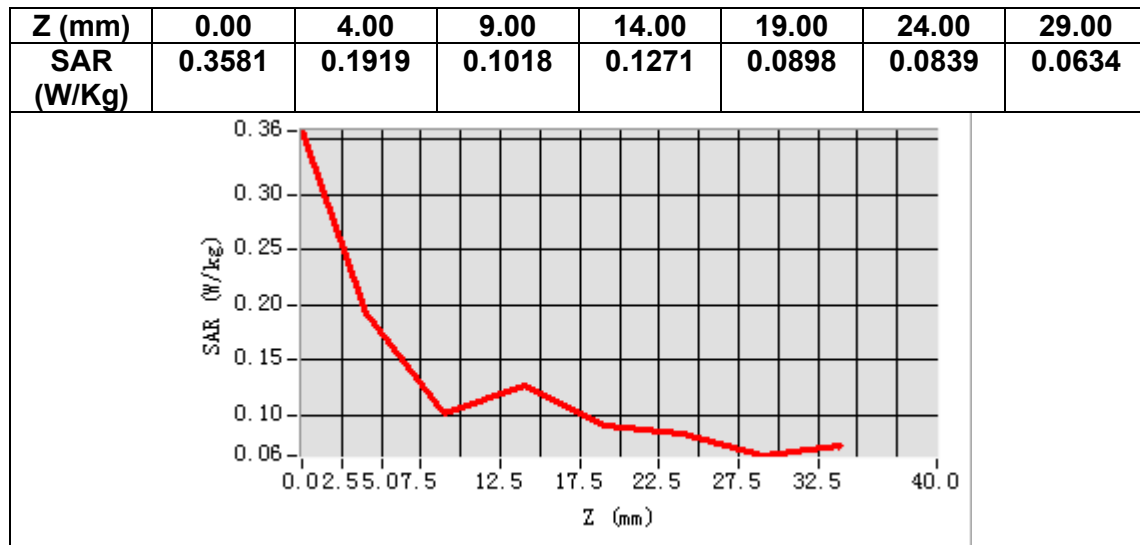
Frequency (MHz)	836.400024
Relative permittivity (real part)	41.500000
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901453
Variation (%)	-1.580000



Maximum location: X=-20.00, Y=8.00

SAR Peak: 0.27 W/kg

SAR 10g (W/Kg)	0.131679
SAR 1g (W/Kg)	0.178455



MEASUREMENT 10

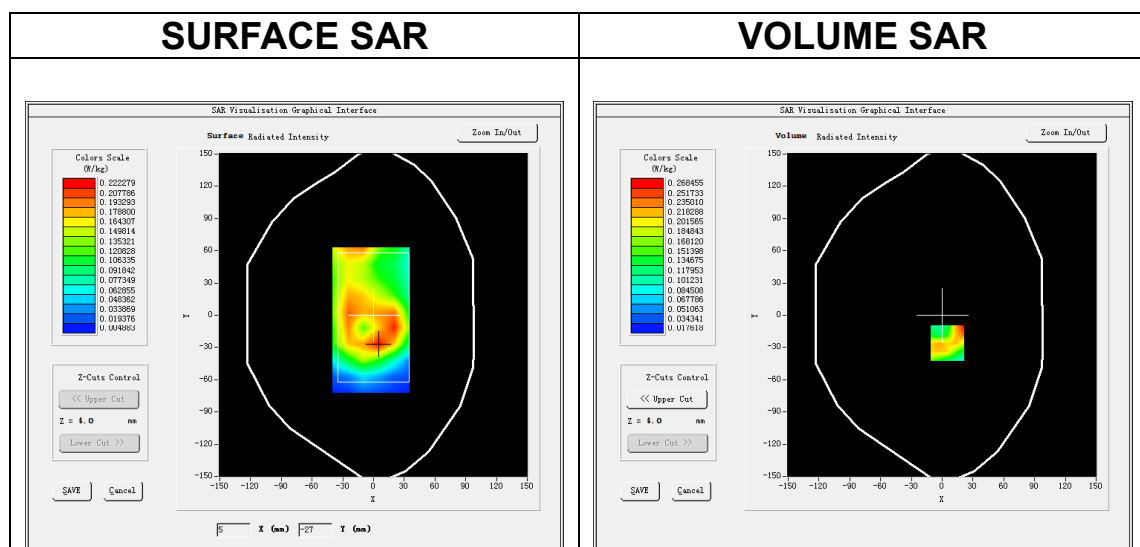
Date of measurement: 13/5/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>Band5 WCDMA850</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.66</u>

B. SAR Measurement Results

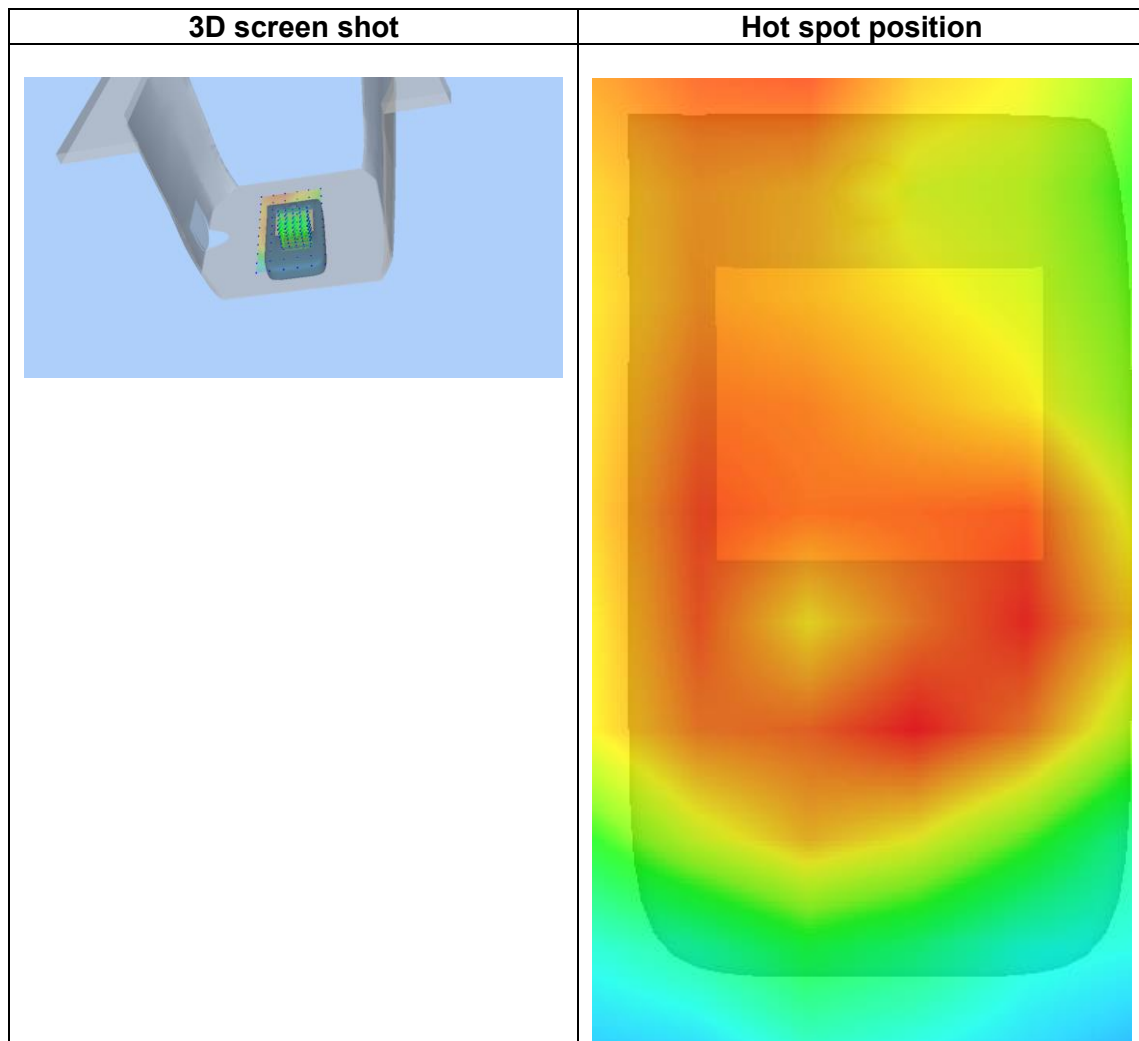
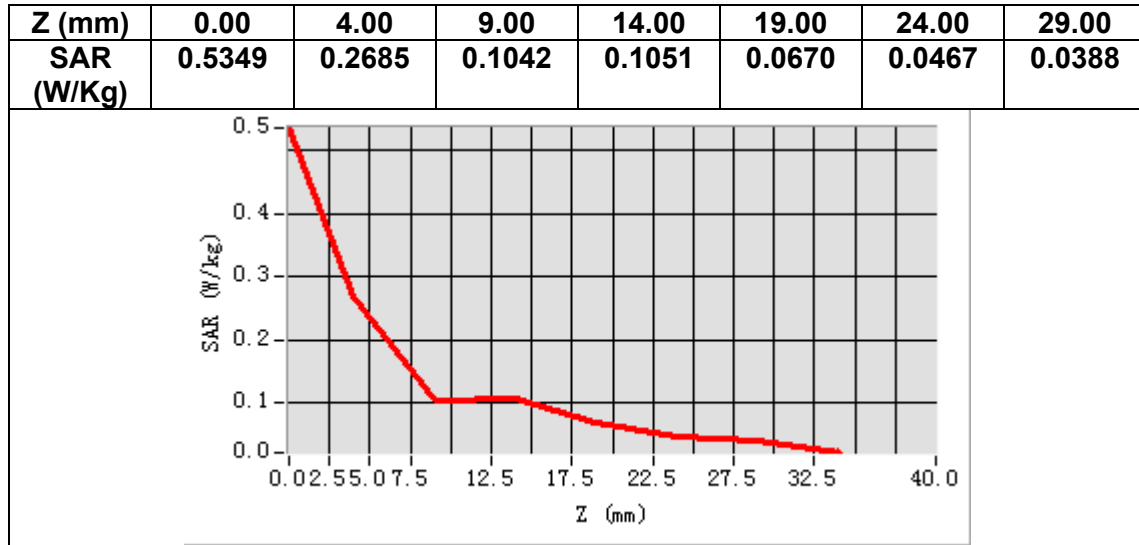
Frequency (MHz)	836.400024
Relative permittivity (real part)	41.500000
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901453
Variation (%)	-3.270000



Maximum location: X=5.00, Y=-26.00

SAR Peak: 0.36 W/kg

SAR 10g (W/Kg)	0.134410
SAR 1g (W/Kg)	0.229362



MEASUREMENT 11

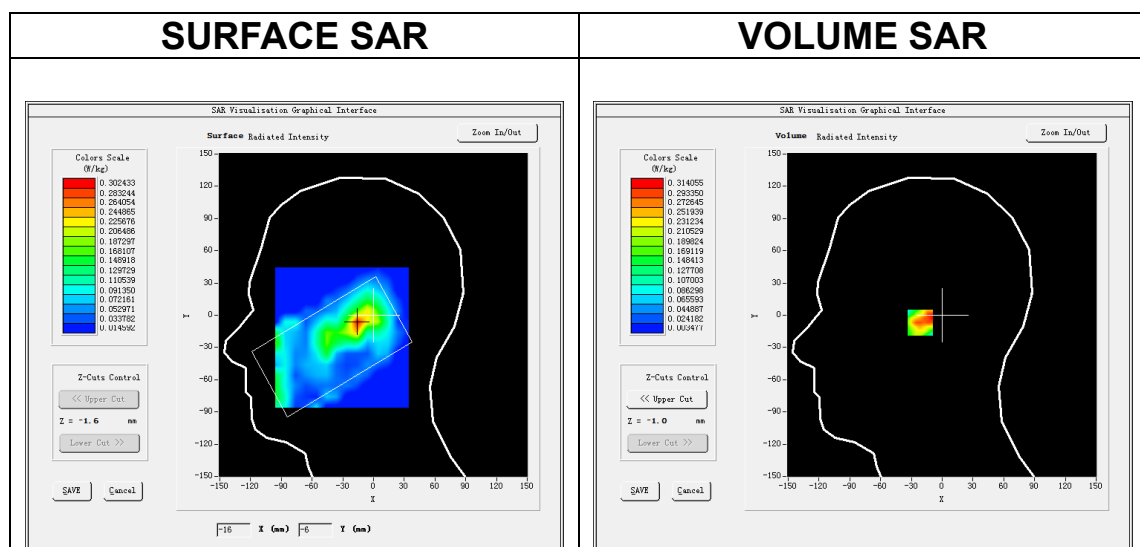
Date of measurement: 20/5/2025

A. Experimental conditions.

Area Scan	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
ZoomScan	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>IEEE 802.11a U-NII</u>
Channels	<u>Middle</u>
Signal	<u>IEEE802.a (Crest factor: 1.0)</u>
ConvF	<u>2.30</u>

B. SAR Measurement Results

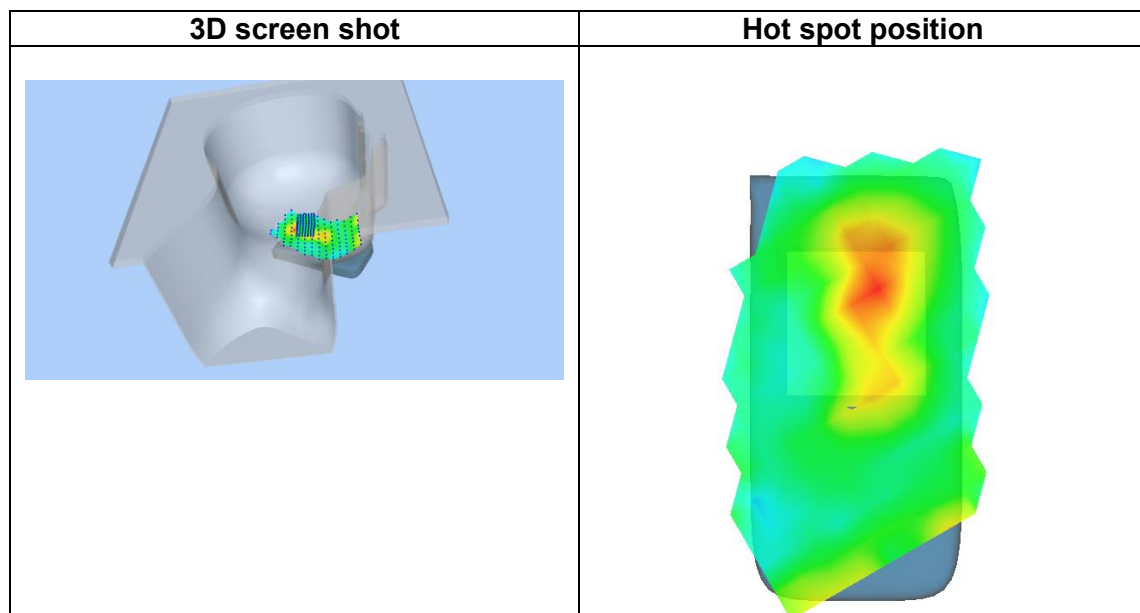
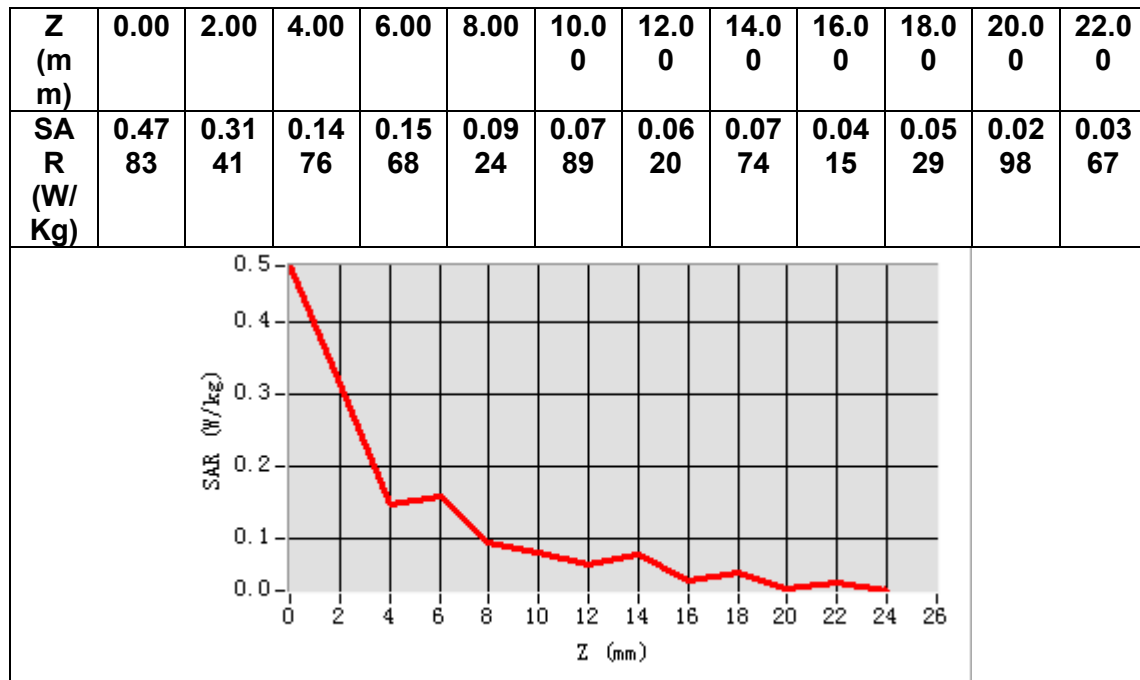
Frequency (MHz)	5200.000000
Relative permittivity (real part)	37.400000
Relative permittivity (imaginary part)	16.129999
Conductivity (S/m)	4.510778
Variation (%)	-1.480000



Maximum location: X=-16.00, Y=-7.00

SAR Peak: 0.66 W/kg

SAR 10g (W/Kg)	0.147411
SAR 1g (W/Kg)	0.295548



MEASUREMENT 12

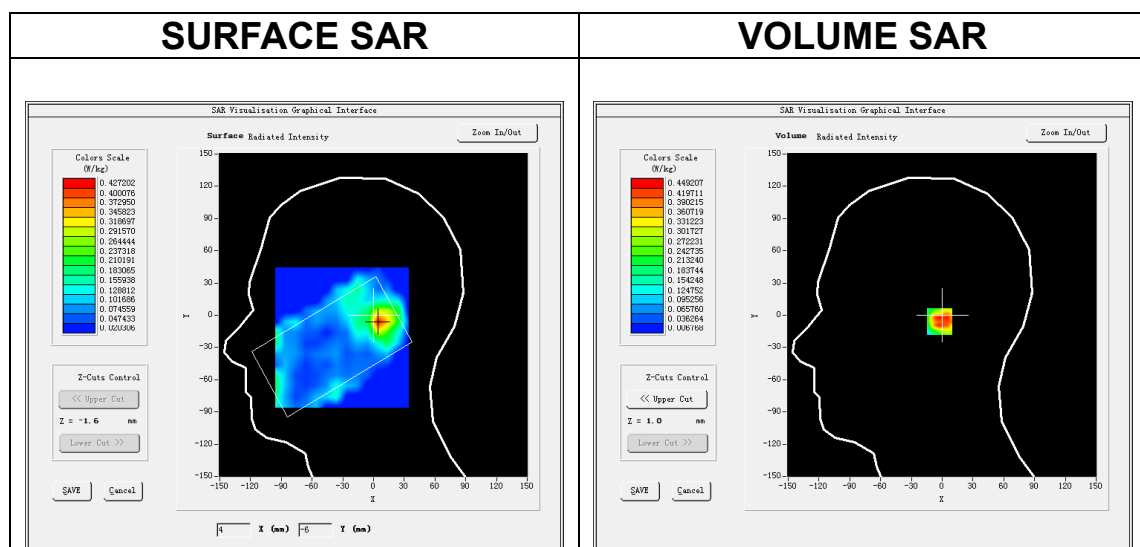
Date of measurement: 12/6/2025

A. Experimental conditions.

Area Scan	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
ZoomScan	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>IEEE 802.11a U-NII</u>
Channels	<u>Low</u>
Signal	<u>IEEE802.a (Crest factor: 1.0)</u>
ConvF	<u>2.27</u>

B. SAR Measurement Results

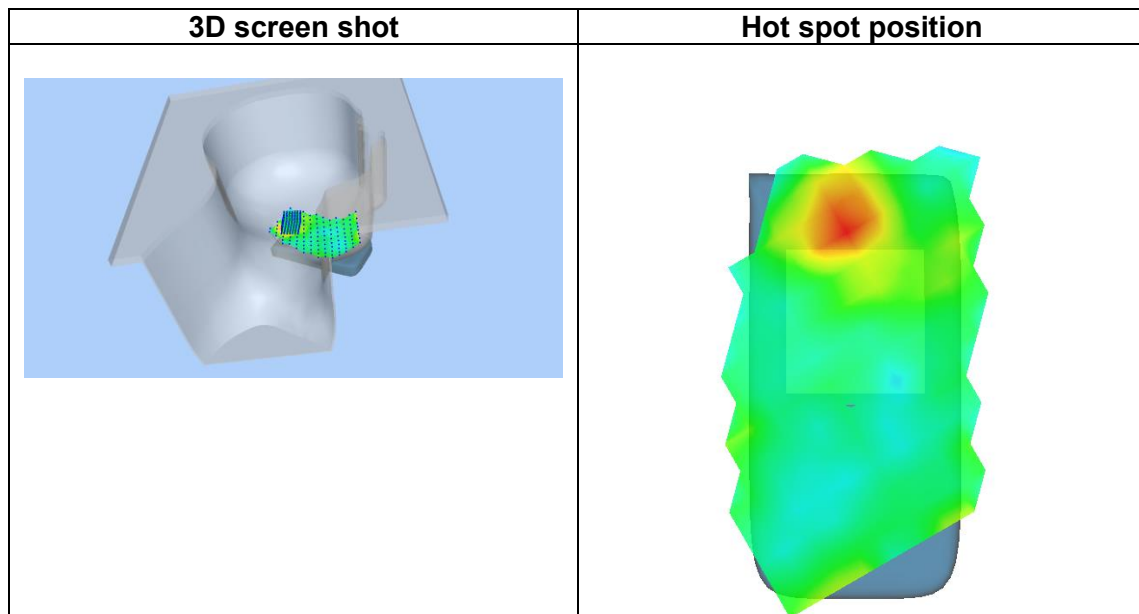
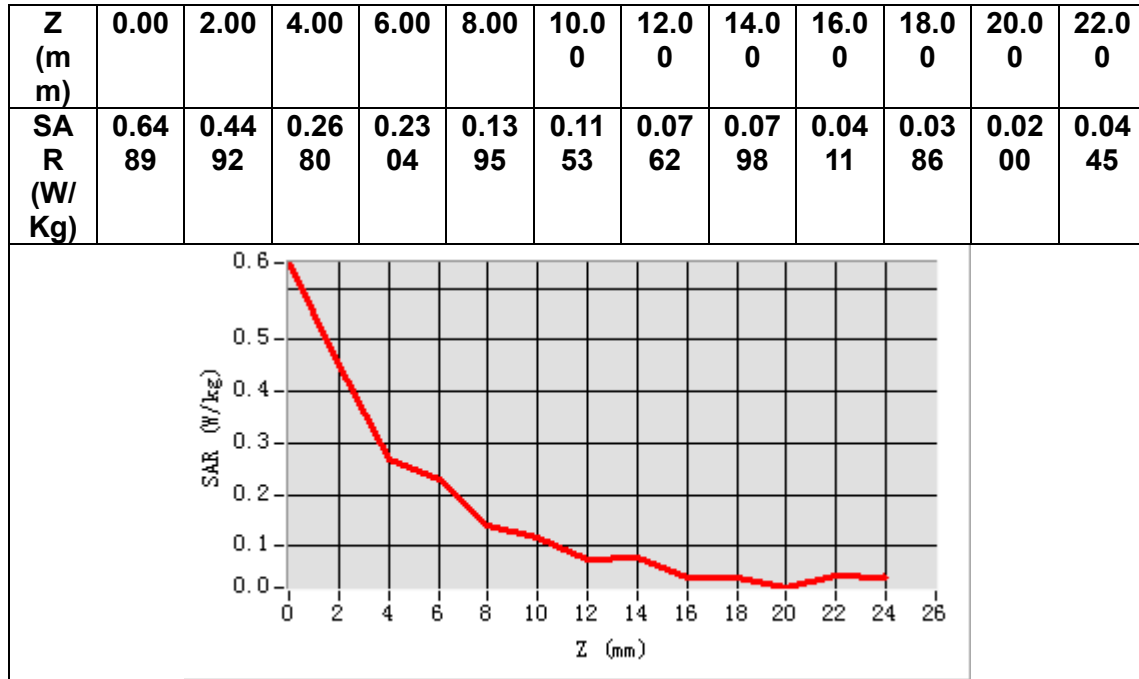
Frequency (MHz)	5745.000000
Relative permittivity (real part)	35.314999
Relative permittivity (imaginary part)	16.344377
Conductivity (S/m)	5.216581
Variation (%)	4.420000



Maximum location: X=5.00, Y=-6.00

SAR Peak: 0.94 W/kg

SAR 10g (W/Kg)	0.191017
SAR 1g (W/Kg)	0.391645



MEASUREMENT 13

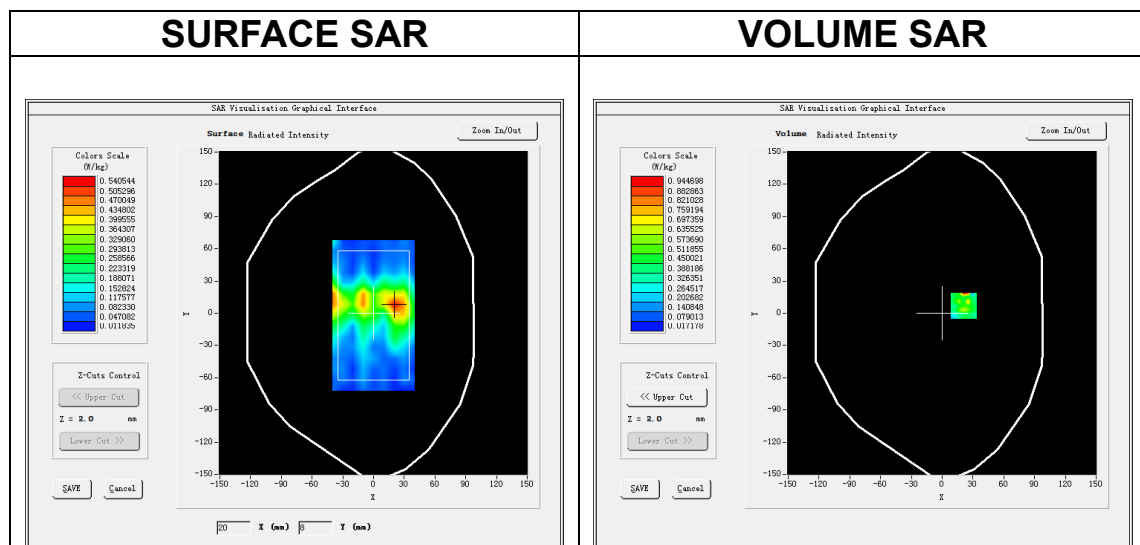
Date of measurement: 20/5/2025

A. Experimental conditions.

Area Scan	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
ZoomScan	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>IEEE 802.11a U-NII</u>
Channels	<u>Middle</u>
Signal	<u>IEEE802.a (Crest factor: 1.0)</u>
ConvF	<u>2.30</u>

B. SAR Measurement Results

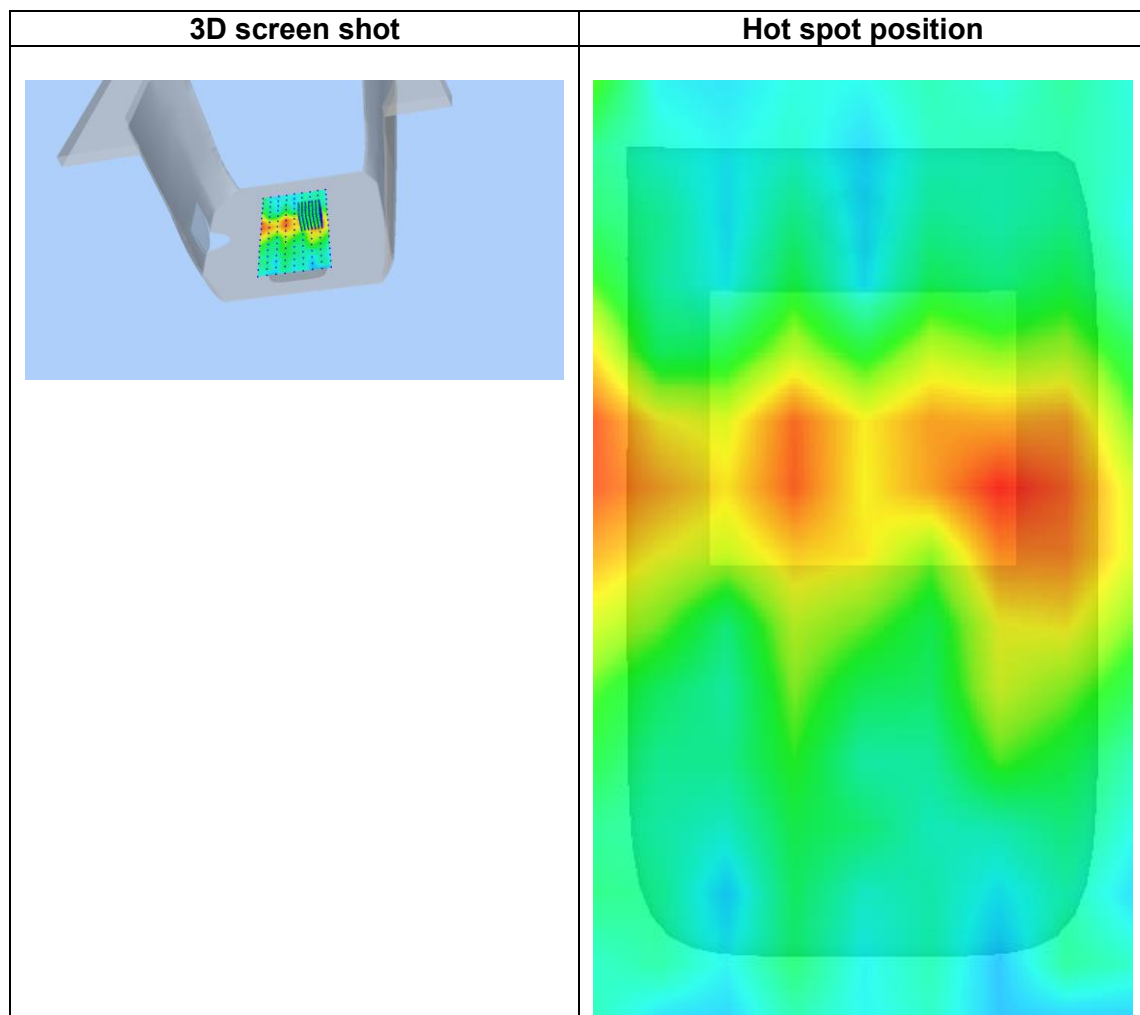
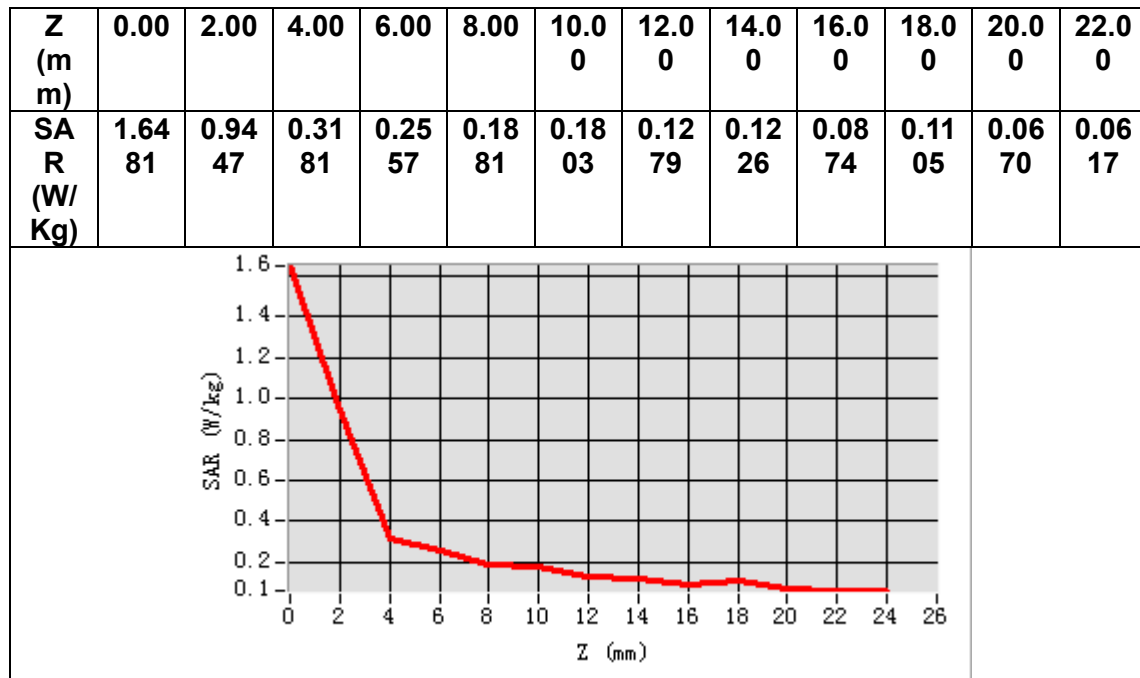
Frequency (MHz)	5200.000000
Relative permittivity (real part)	37.400000
Relative permittivity (imaginary part)	16.129999
Conductivity (S/m)	4.510778
Variation (%)	-0.850000



Maximum location: X=21.00, Y=7.00

SAR Peak: 2.23 W/kg

SAR 10g (W/Kg)	0.218832
SAR 1g (W/Kg)	0.429334



MEASUREMENT 14

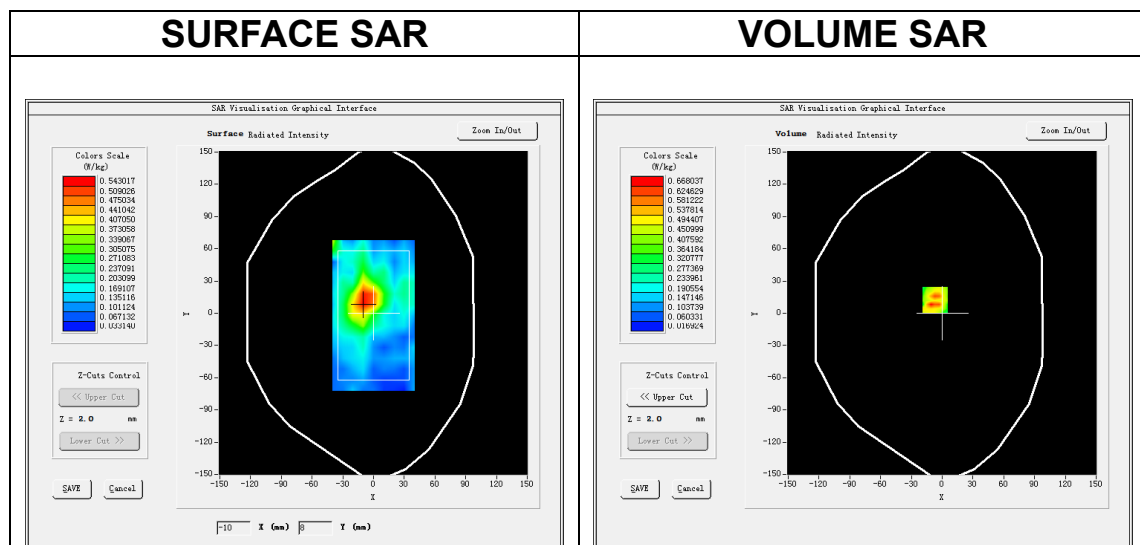
Date of measurement: 12/6/2025

A. Experimental conditions.

Area Scan	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
ZoomScan	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>IEEE 802.11a U-NII</u>
Channels	<u>Low</u>
Signal	<u>IEEE802.a (Crest factor: 1.0)</u>
ConvF	<u>2.27</u>

B. SAR Measurement Results

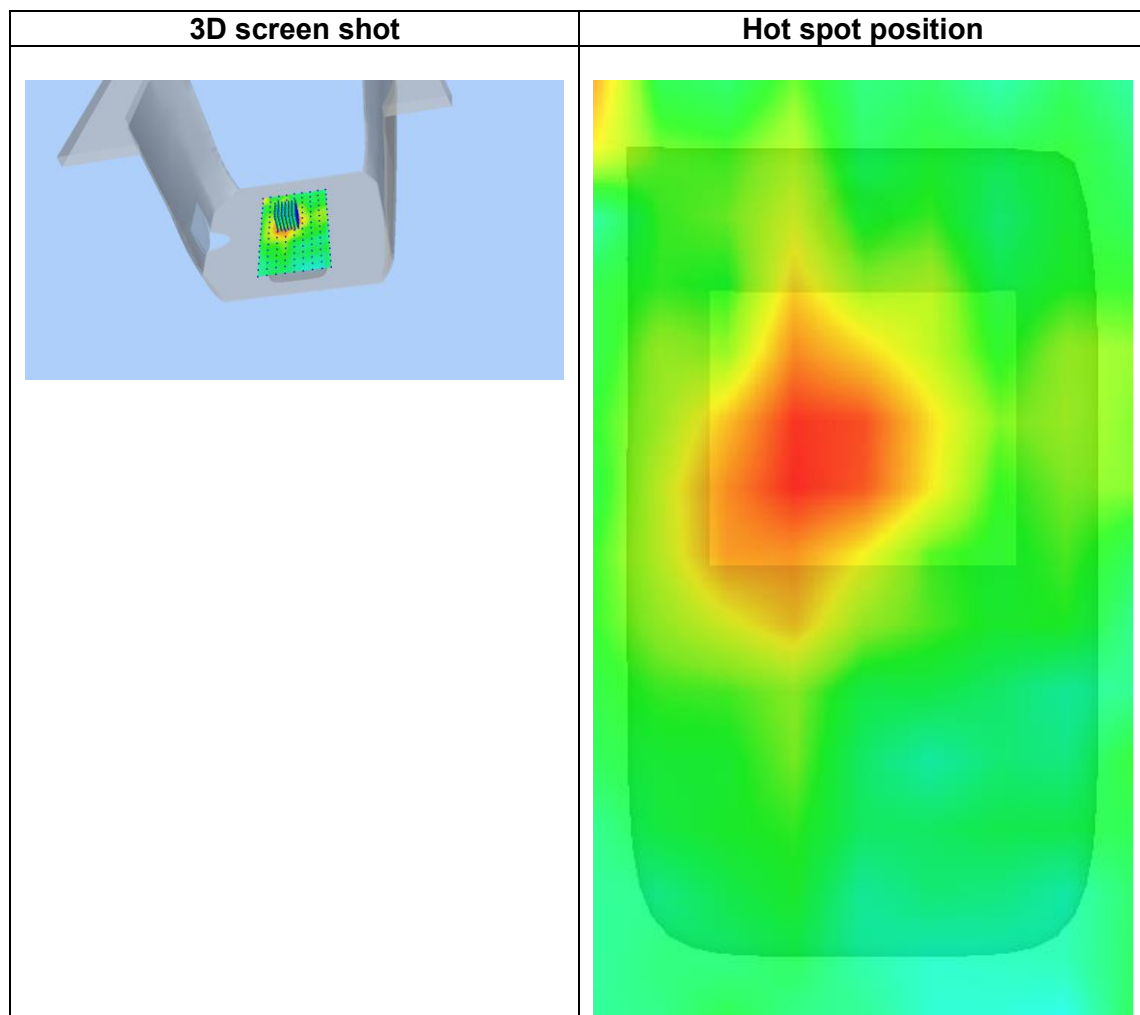
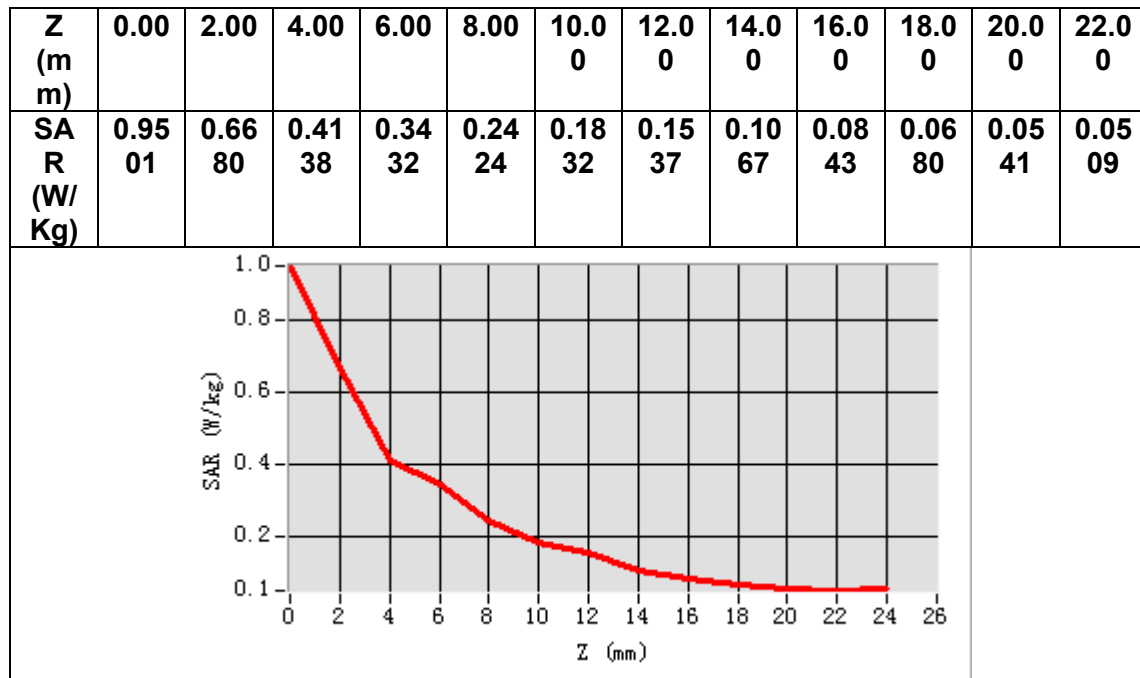
Frequency (MHz)	5745.000000
Relative permittivity (real part)	35.314999
Relative permittivity (imaginary part)	16.344377
Conductivity (S/m)	5.216581
Variation (%)	-2.120000



Maximum location: X=-7.00, Y=12.00

SAR Peak: 0.96 W/kg

SAR 10g (W/Kg)	0.214694
SAR 1g (W/Kg)	0.396089



MEASUREMENT 15

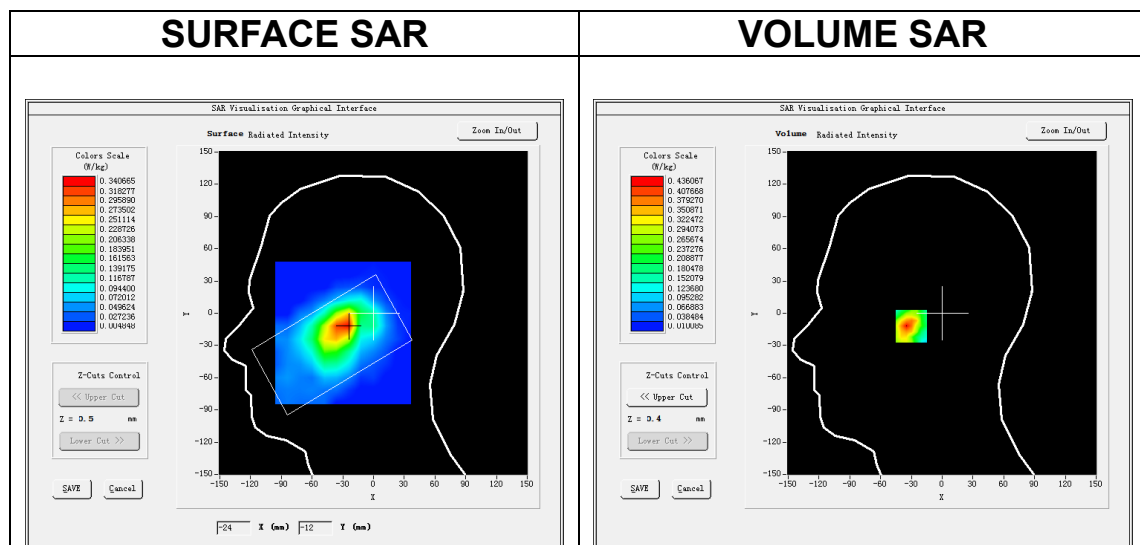
Date of measurement: 16/5/2025

A. Experimental conditions.

Area Scan	<u>dx=12mm dy=12mm, h= 5.00 mm</u>
ZoomScan	<u>7x7x7,dx=5mm dy=5mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>IEEE 802.11b ISM</u>
Channels	<u>Low</u>
Signal	<u>IEEE802.b (Crest factor: 1.0)</u>
ConvF	<u>2.38</u>

B. SAR Measurement Results

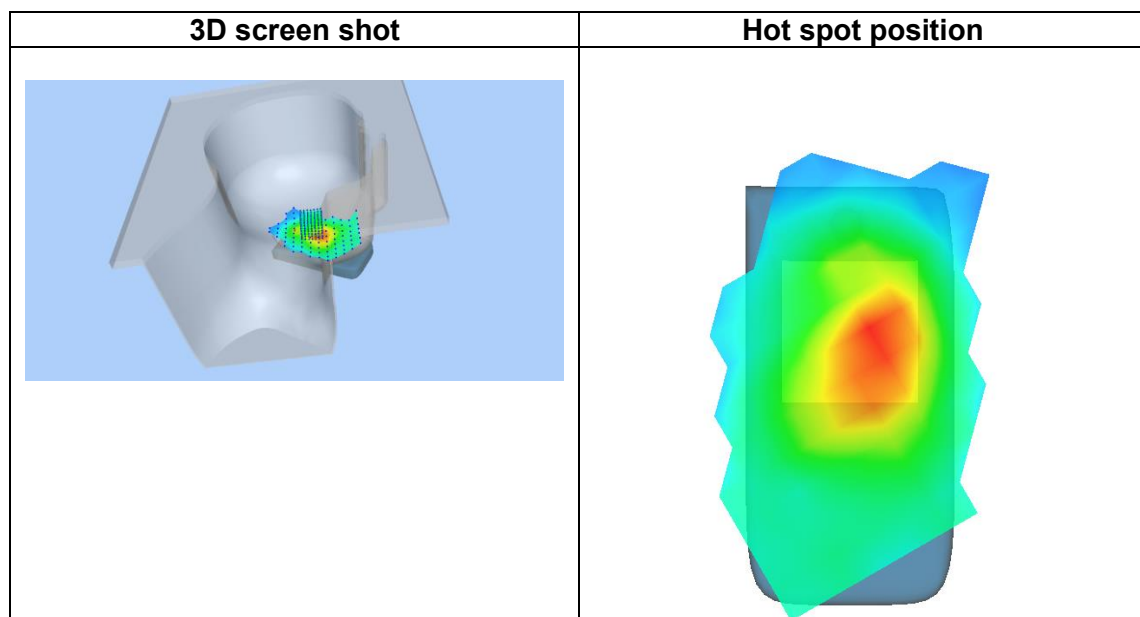
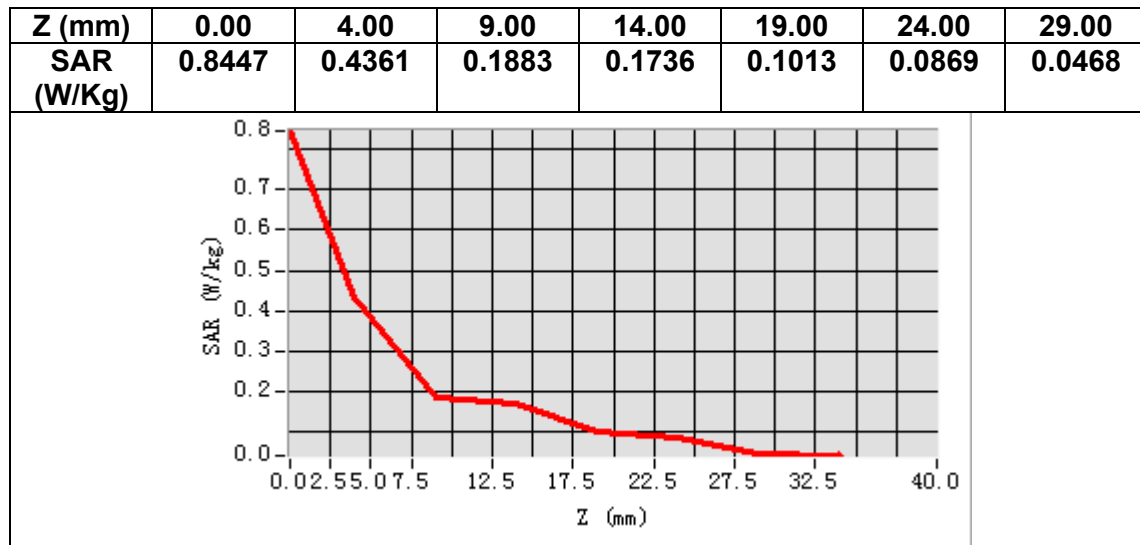
Frequency (MHz)	2412.000000
Relative permittivity (real part)	39.224000
Relative permittivity (imaginary part)	13.205000
Conductivity (S/m)	1.769470
Variation (%)	-1.230000



Maximum location: X=-27.00, Y=-12.00

SAR Peak: 0.72 W/kg

SAR 10g (W/Kg)	0.234181
SAR 1g (W/Kg)	0.403955



MEASUREMENT 16

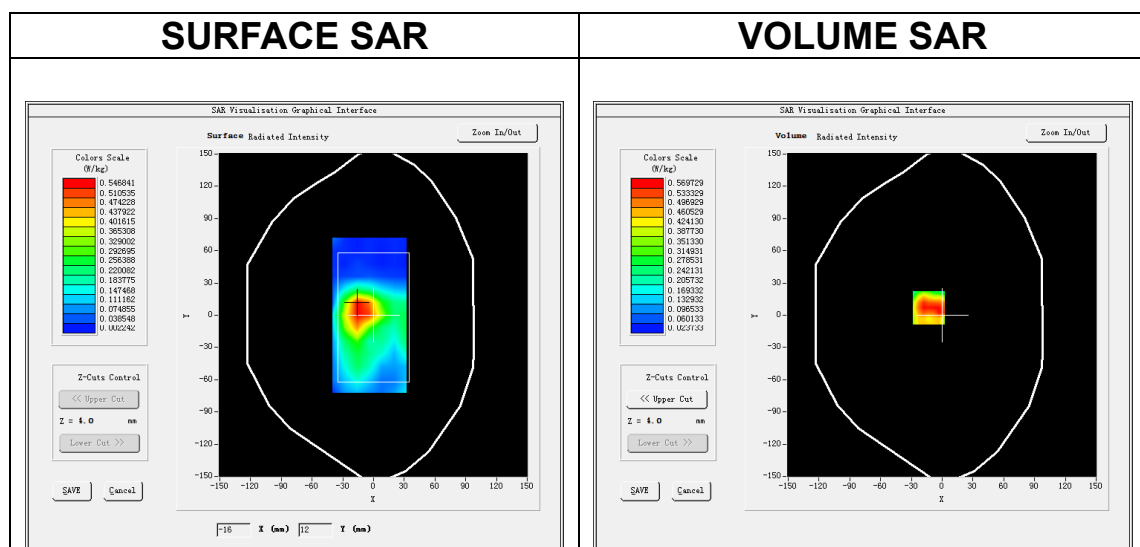
Date of measurement: 16/5/2025

A. Experimental conditions.

Area Scan	<u>dx=12mm dy=12mm, h= 5.00 mm</u>
ZoomScan	<u>7x7x7,dx=5mm dy=5mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>IEEE 802.11b ISM</u>
Channels	<u>Low</u>
Signal	<u>IEEE802.b (Crest factor: 1.0)</u>
ConvF	<u>2.38</u>

B. SAR Measurement Results

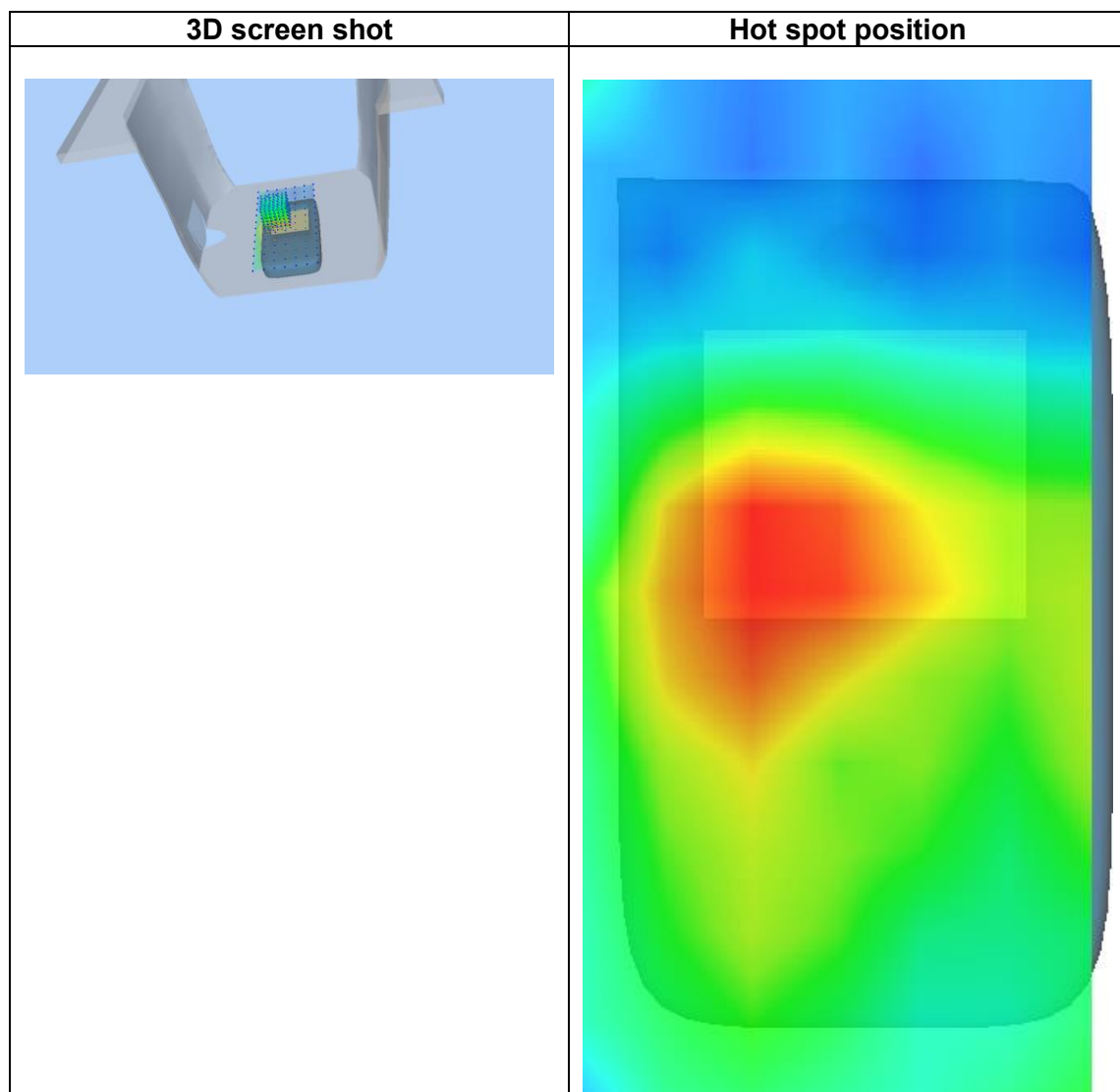
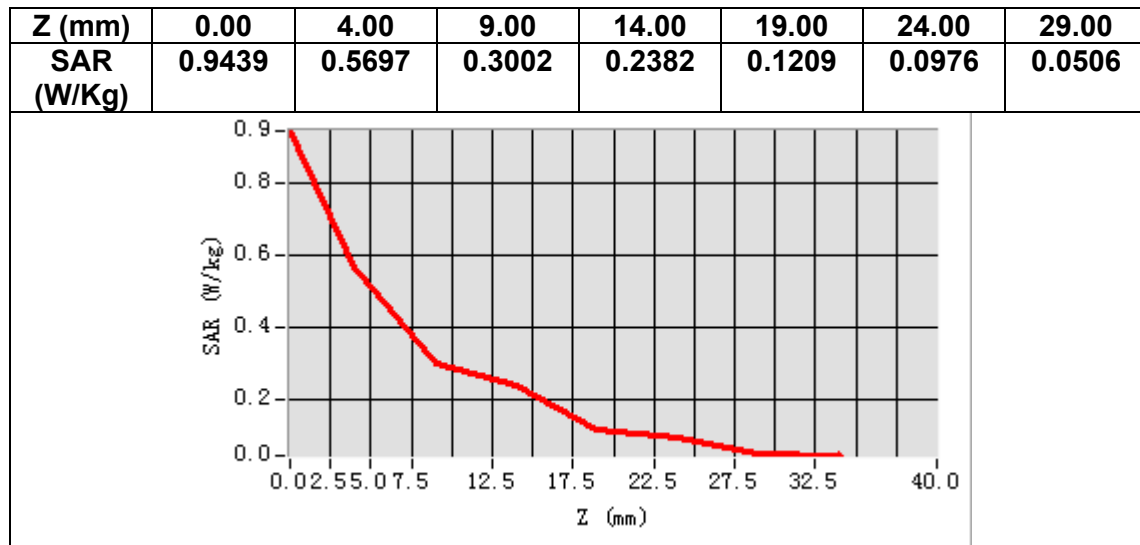
Frequency (MHz)	2412.000000
Relative permittivity (real part)	39.224000
Relative permittivity (imaginary part)	13.205000
Conductivity (S/m)	1.769470
Variation (%)	2.380000



Maximum location: X=-13.00, Y=7.00

SAR Peak: 0.90 W/kg

SAR 10g (W/Kg)	0.328320
SAR 1g (W/Kg)	0.548831



MEASUREMENT 17

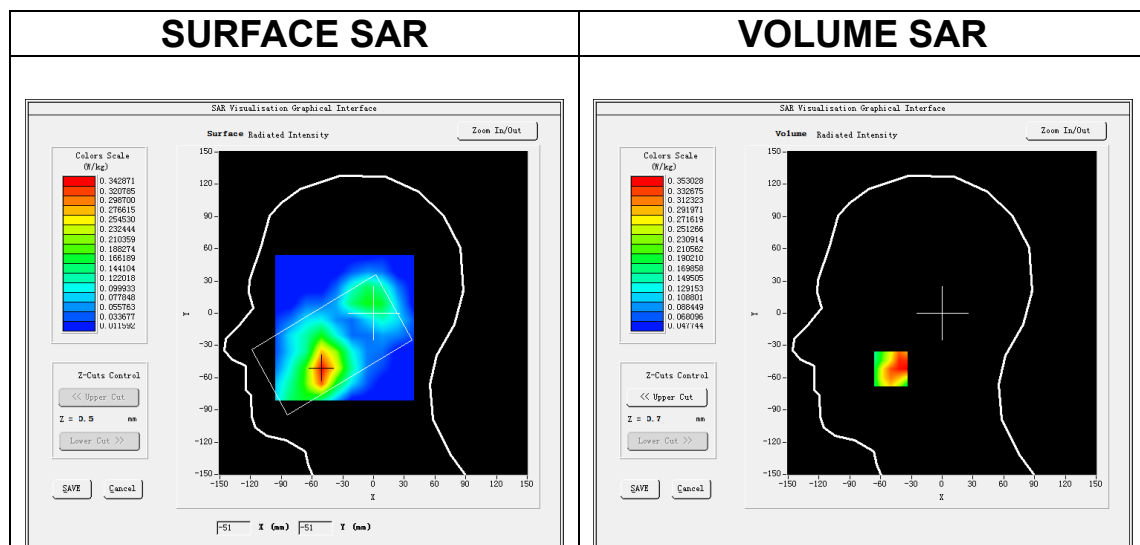
Date of measurement: 15/5/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
<u>Phantom</u>	<u>Left head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>LTE band 2</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.05</u>

B. SAR Measurement Results

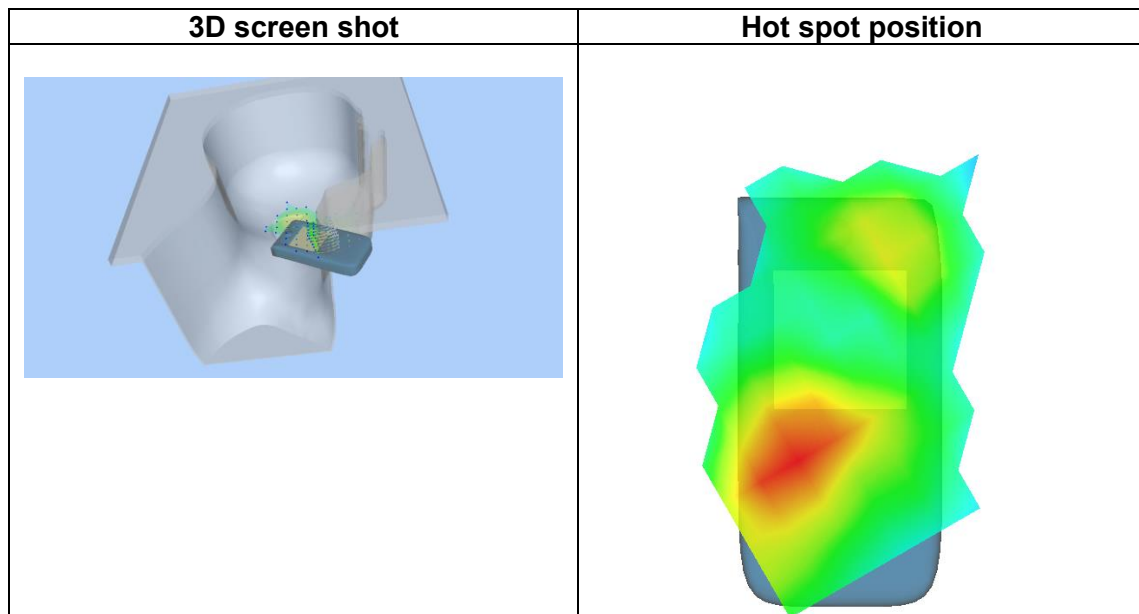
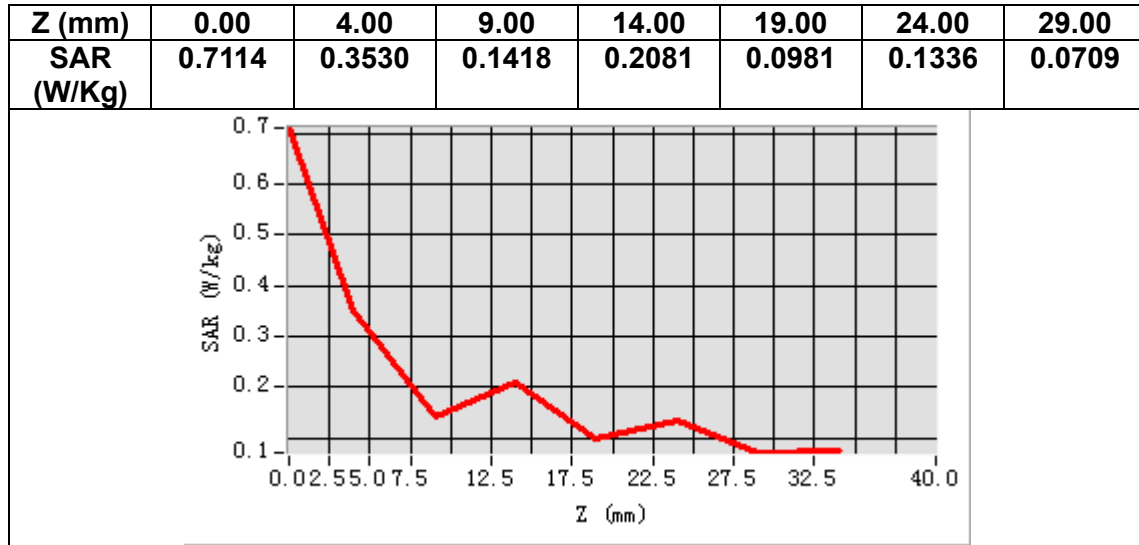
Frequency (MHz)	1879.500000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.411700
Conductivity (S/m)	1.400405
Variation (%)	-2.740000



Maximum location: X=-50.00, Y=-52.00

SAR Peak: 0.56 W/kg

SAR 10g (W/Kg)	0.258241
SAR 1g (W/Kg)	0.364430



MEASUREMENT 18

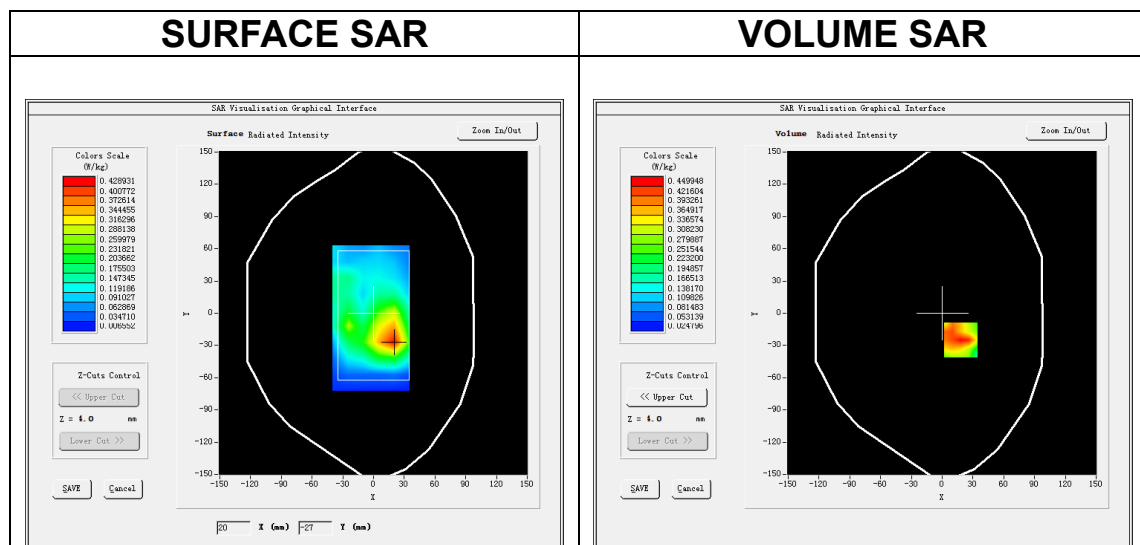
Date of measurement: 15/5/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>LTE band 2</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.05</u>

B. SAR Measurement Results

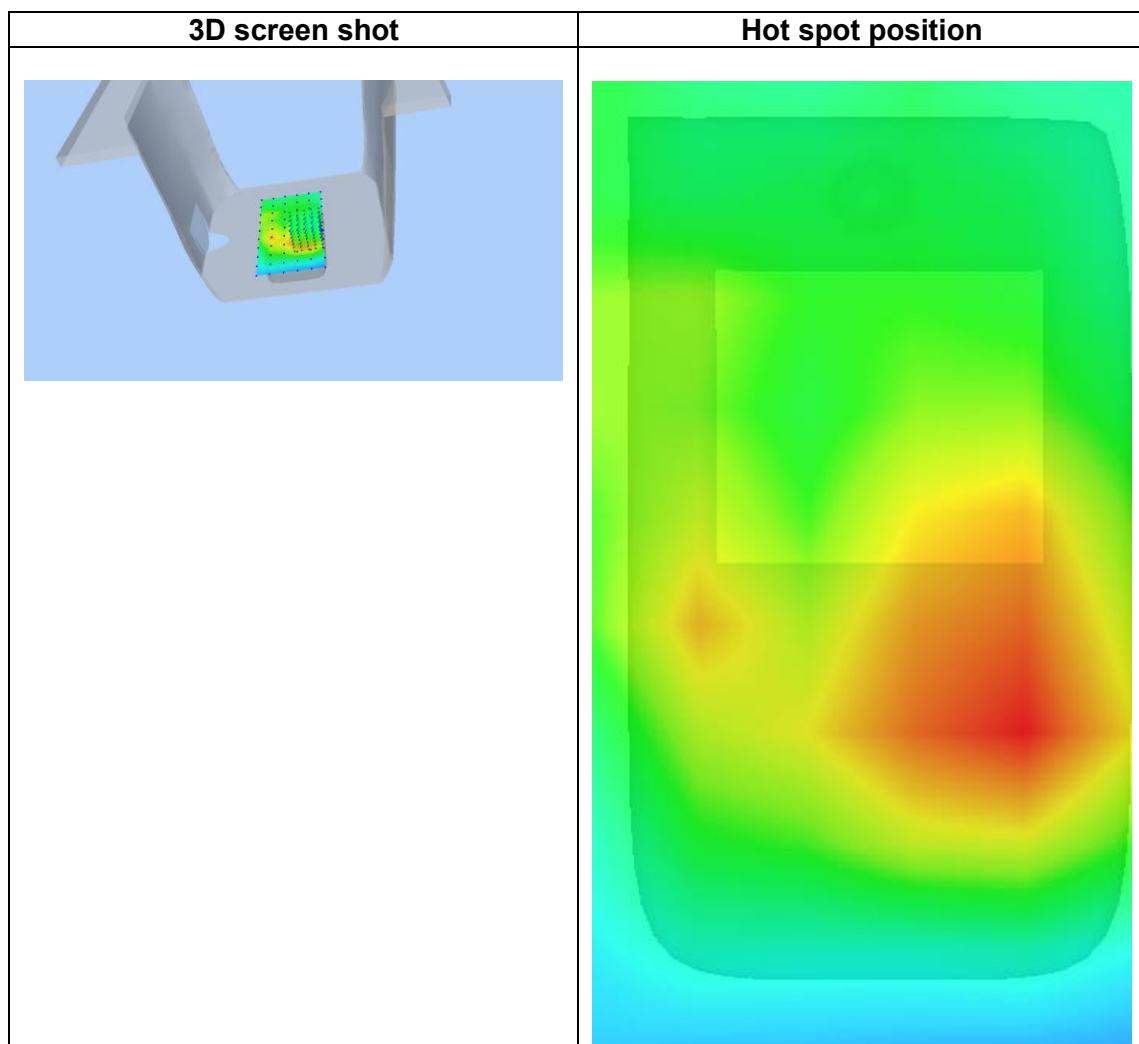
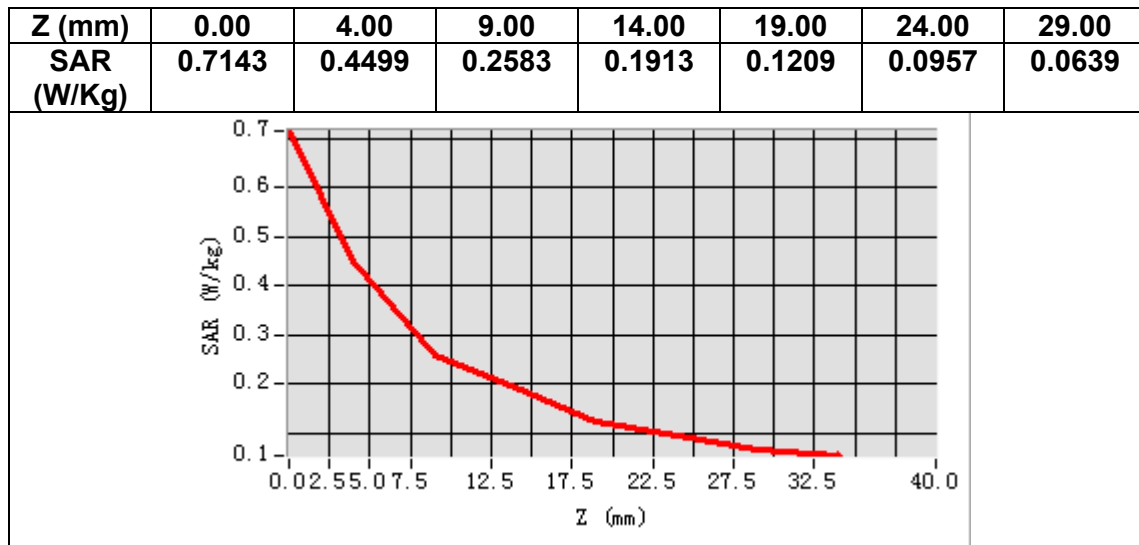
Frequency (MHz)	1879.500000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.411700
Conductivity (S/m)	1.400405
Variation (%)	-3.200001



Maximum location: X=18.00, Y=-25.00

SAR Peak: 0.76 W/kg

SAR 10g (W/Kg)	0.268348
SAR 1g (W/Kg)	0.435884



MEASUREMENT 19

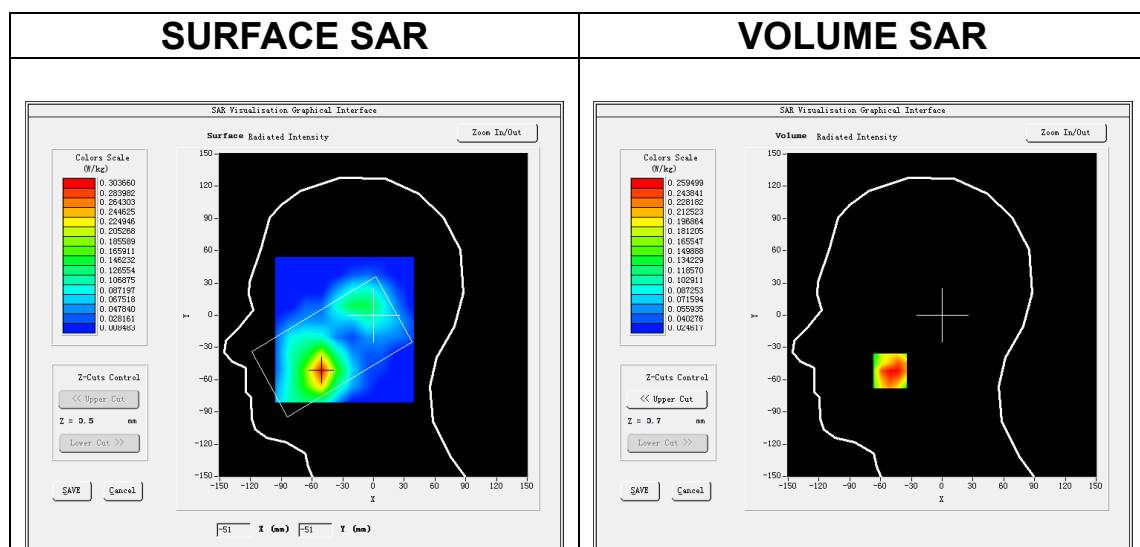
Date of measurement: 14/5/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
<u>Phantom</u>	<u>Left head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>LTE band 4</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.05</u>

B. SAR Measurement Results

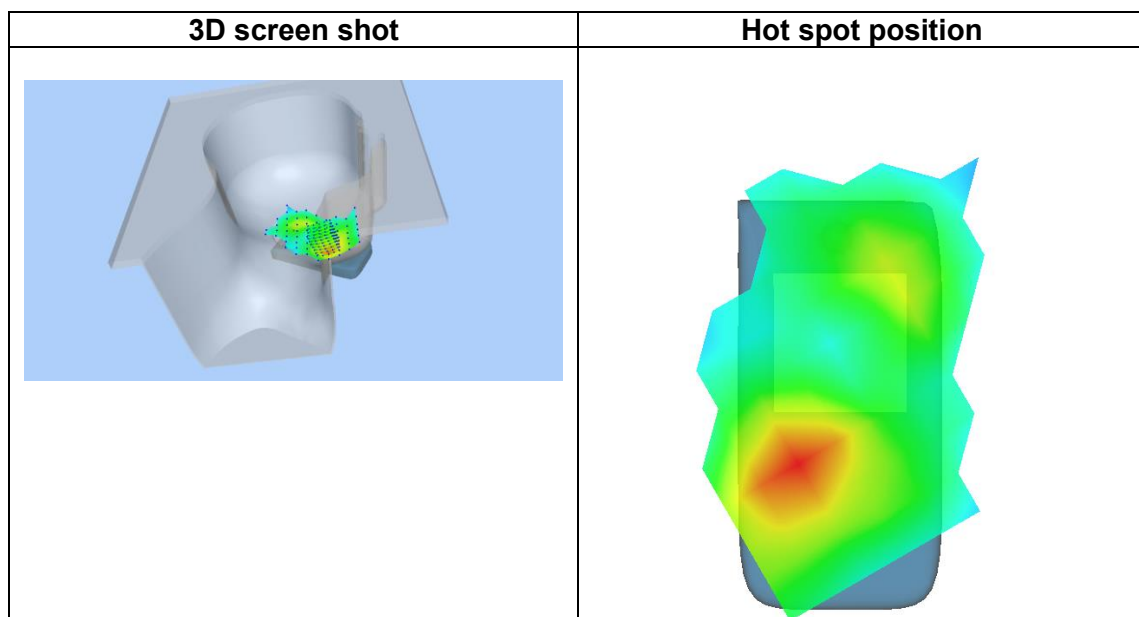
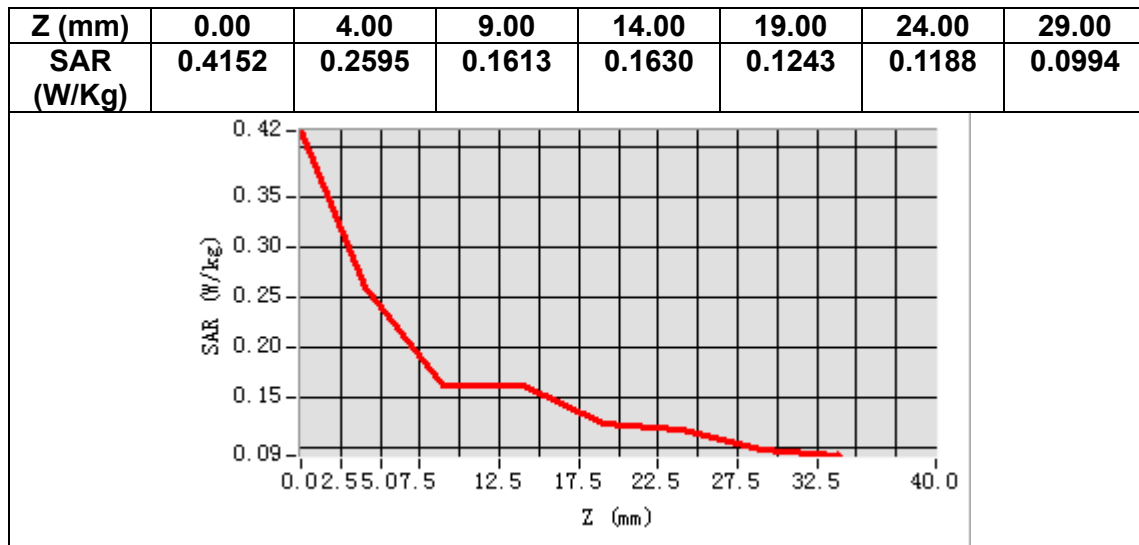
Frequency (MHz)	1732.500000
Relative permittivity (real part)	40.115910
Relative permittivity (imaginary part)	14.136136
Conductivity (S/m)	1.360603
Variation (%)	0.200000



Maximum location: X=-51.00, Y=-52.00

SAR Peak: 0.41 W/kg

SAR 10g (W/Kg)	0.175866
SAR 1g (W/Kg)	0.260696



MEASUREMENT 20

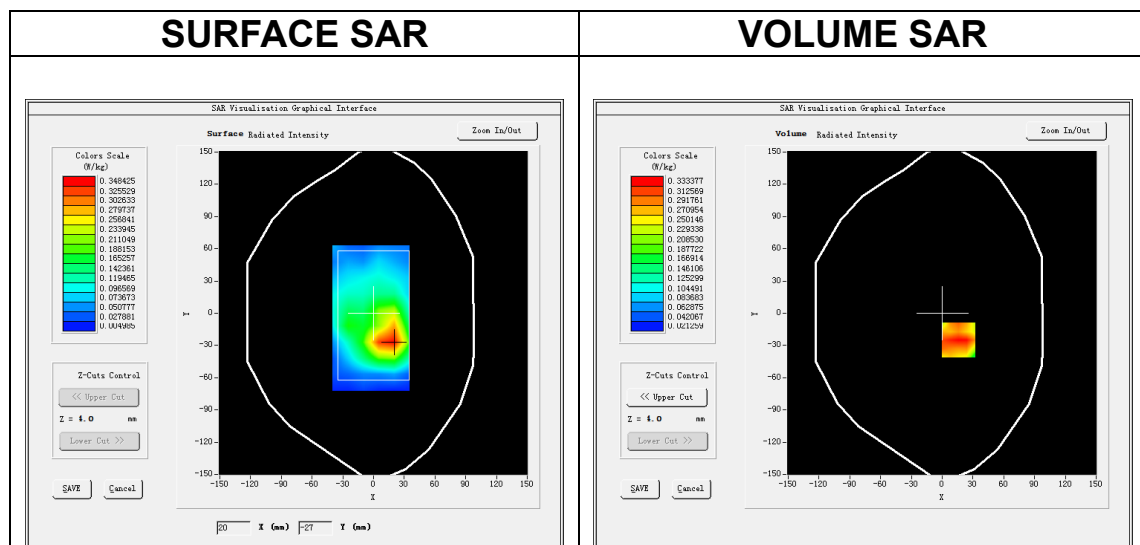
Date of measurement: 14/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>LTE band 4</u>
Channels	<u>Middle</u>
Signal	<u>LTE (Crest factor: 1.0)</u>
ConvF	<u>2.05</u>

B. SAR Measurement Results

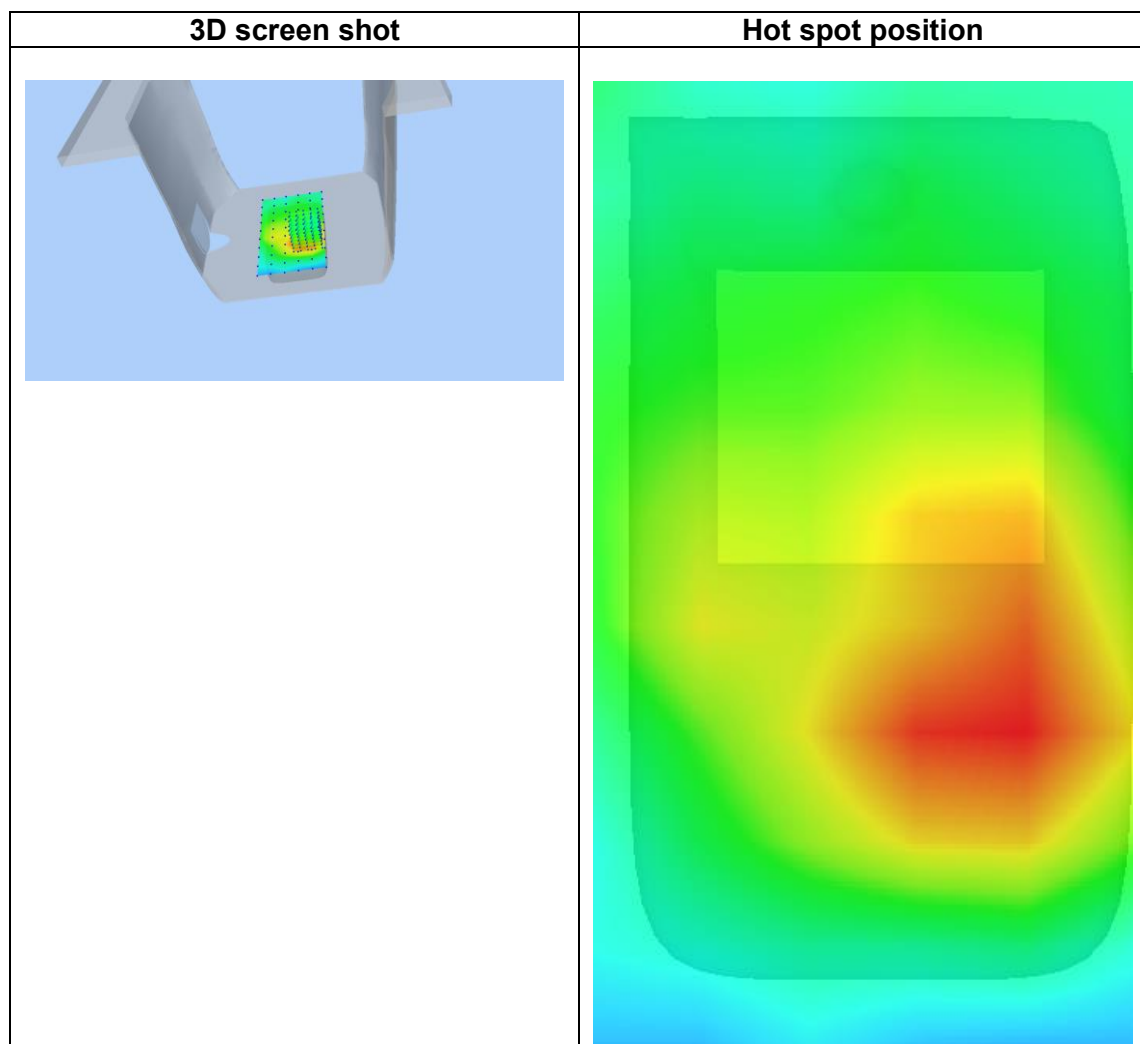
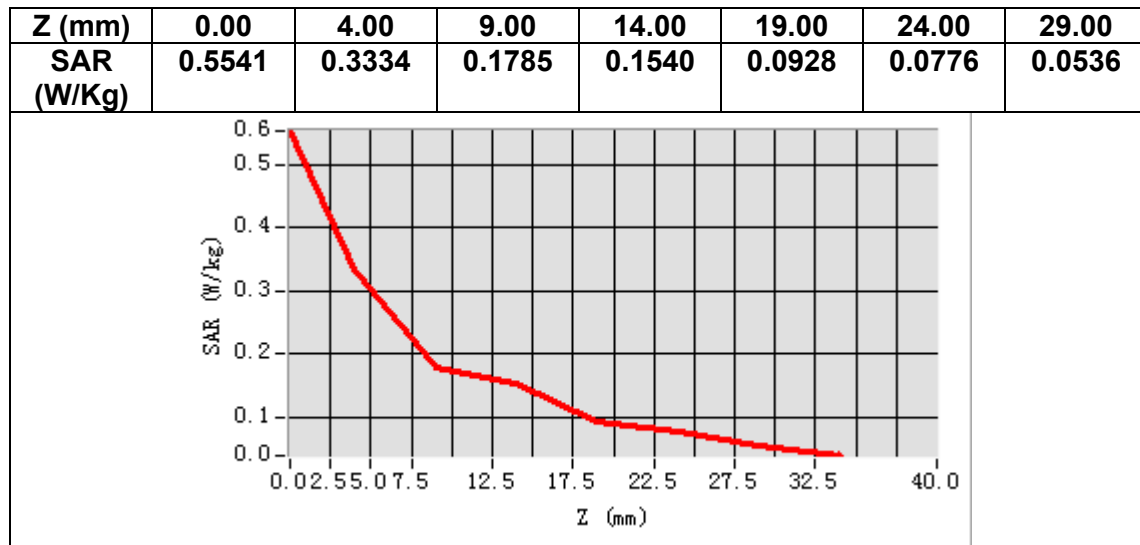
Frequency (MHz)	1732.500000
Relative permittivity (real part)	40.115910
Relative permittivity (imaginary part)	14.136136
Conductivity (S/m)	1.360603
Variation (%)	-4.720000



Maximum location: X=16.00, Y=-25.00

SAR Peak: 0.60 W/kg

SAR 10g (W/Kg)	0.210899
SAR 1g (W/Kg)	0.337066



MEASUREMENT 21

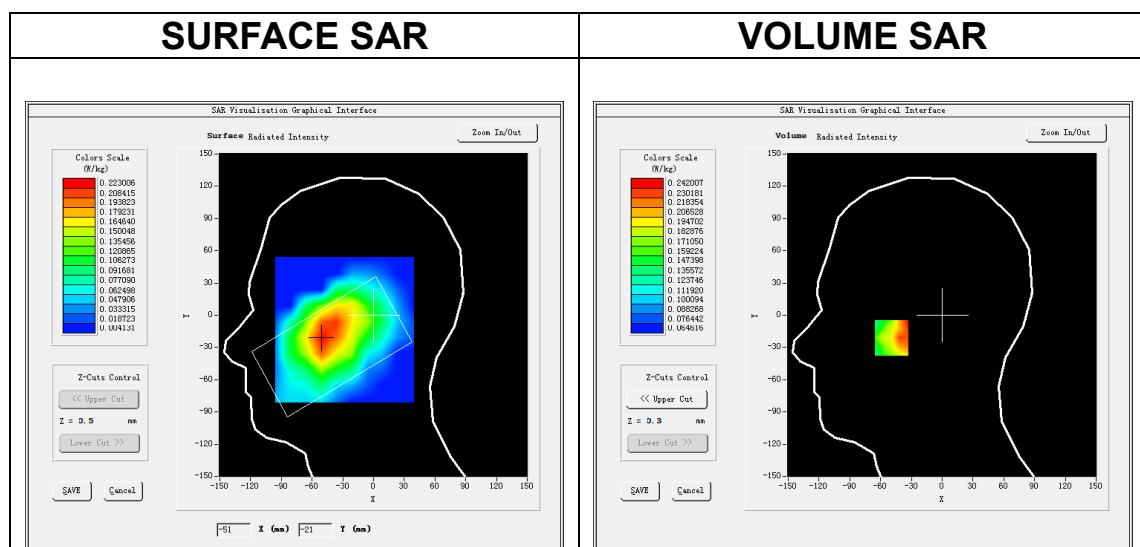
Date of measurement: 13/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>LTE band 5</u>
Channels	<u>Middle</u>
Signal	<u>LTE (Crest factor: 1.0)</u>
ConvF	<u>1.66</u>

B. SAR Measurement Results

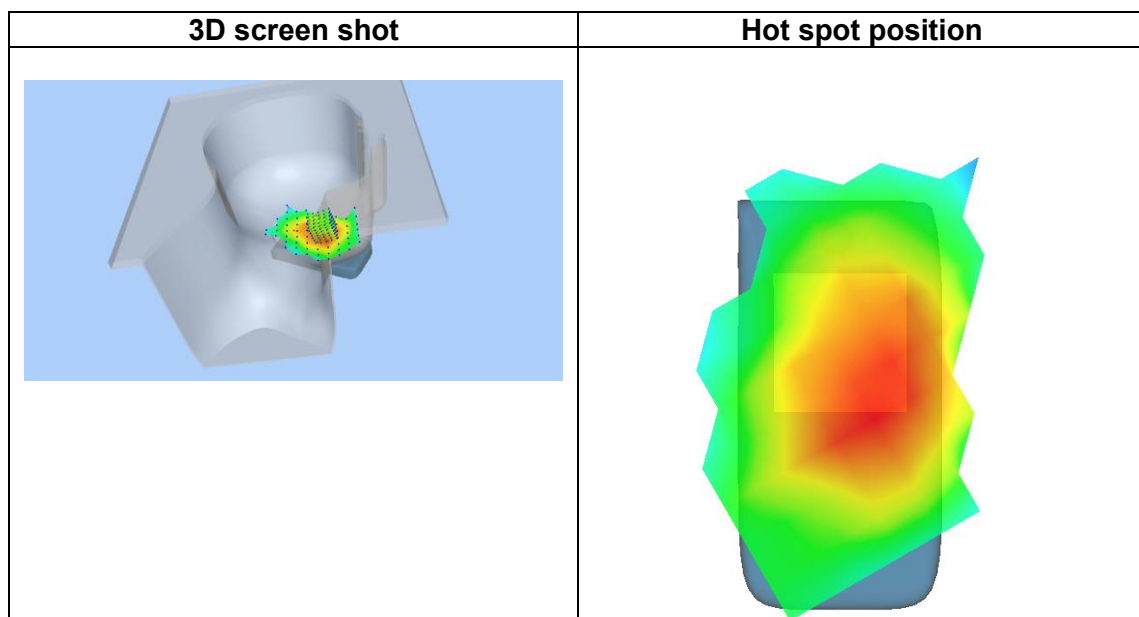
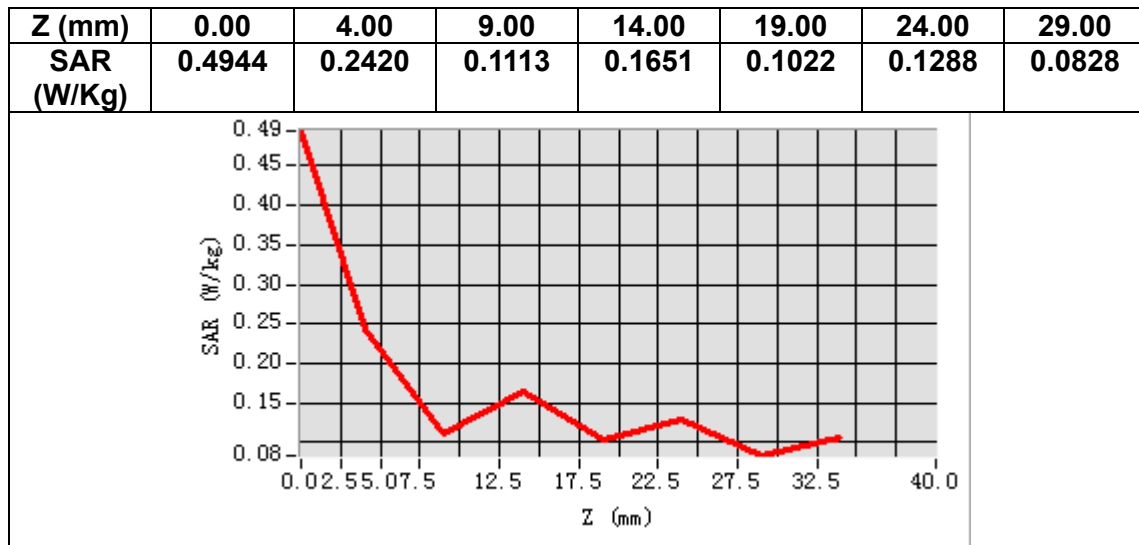
Frequency (MHz)	836.500000
Relative permittivity (real part)	41.500000
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901561
Variation (%)	2.020000



Maximum location: X=-49.00, Y=-21.00

SAR Peak: 0.30 W/kg

SAR 10g (W/Kg)	0.175652
SAR 1g (W/Kg)	0.220813



MEASUREMENT 22

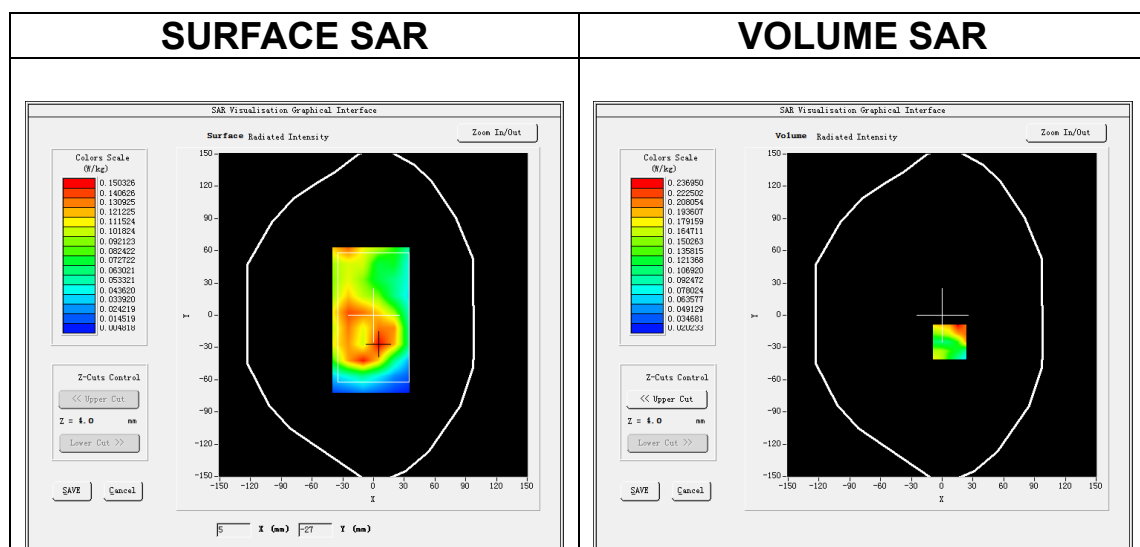
Date of measurement: 13/5/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>LTE band 5</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.66</u>

B. SAR Measurement Results

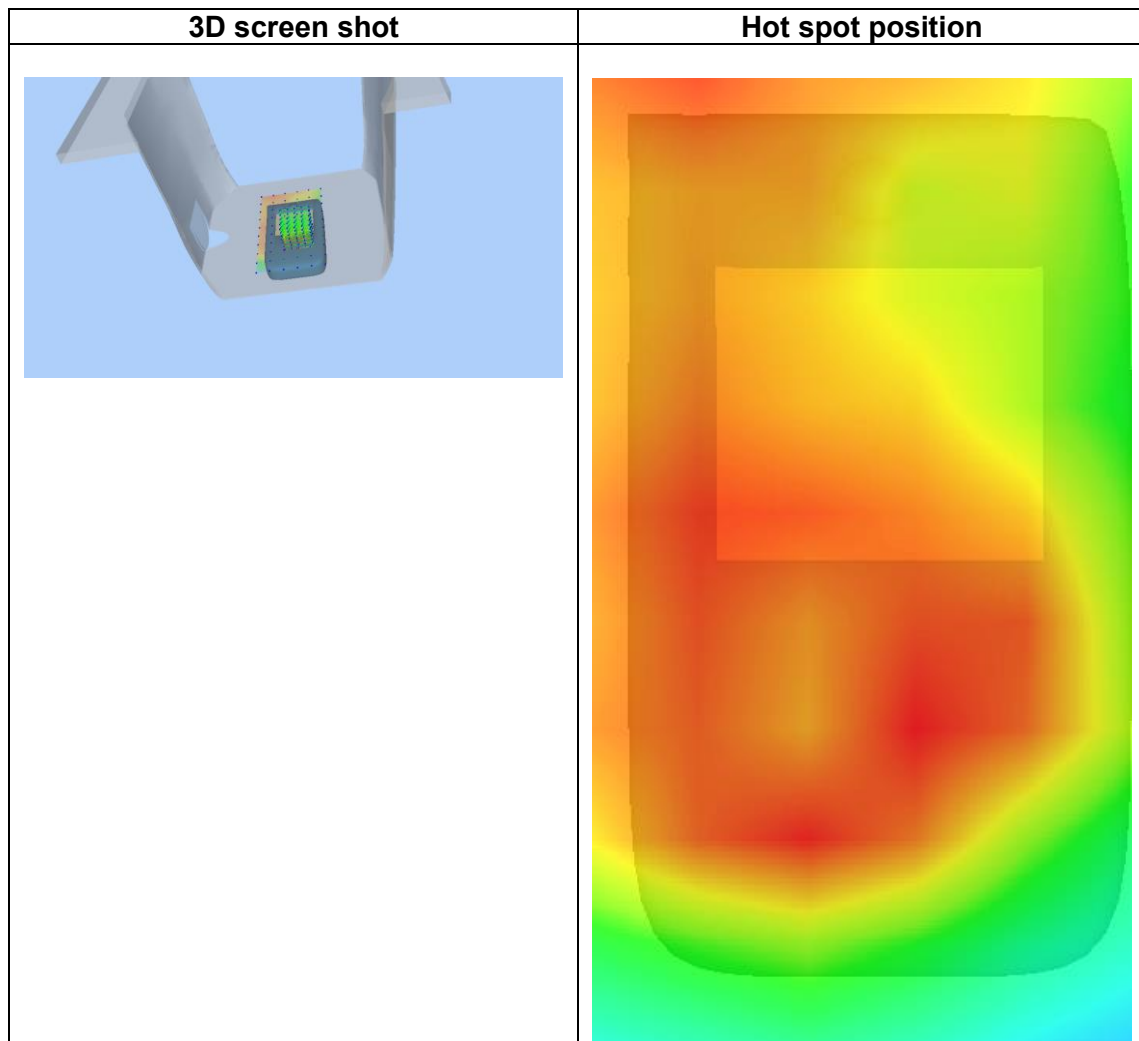
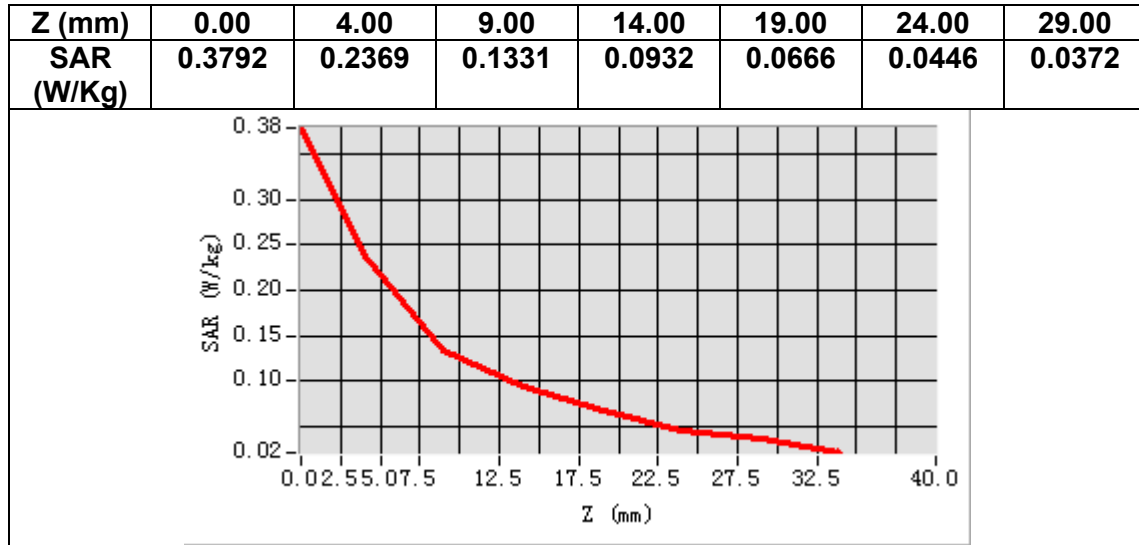
Frequency (MHz)	836.500000
Relative permittivity (real part)	41.500000
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901561
Variation (%)	0.910000



Maximum location: X=7.00, Y=-25.00

SAR Peak: 0.34 W/kg

SAR 10g (W/Kg)	0.121291
SAR 1g (W/Kg)	0.197484



MEASUREMENT 23

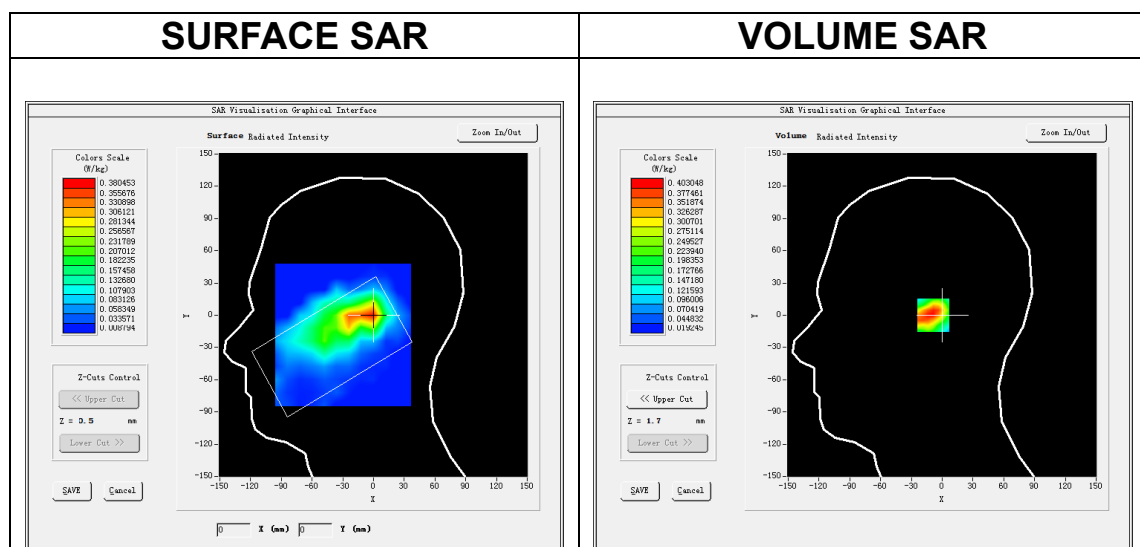
Date of measurement: 19/5/2025

A. Experimental conditions.

Area Scan	<u>dx=12mm dy=12mm, h= 5.00 mm</u>
ZoomScan	<u>7x7x7,dx=5mm dy=5mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>LTE band 7</u>
Channels	<u>Middle</u>
Signal	<u>LTE (Crest factor: 1.0)</u>
ConvF	<u>2.35</u>

B. SAR Measurement Results

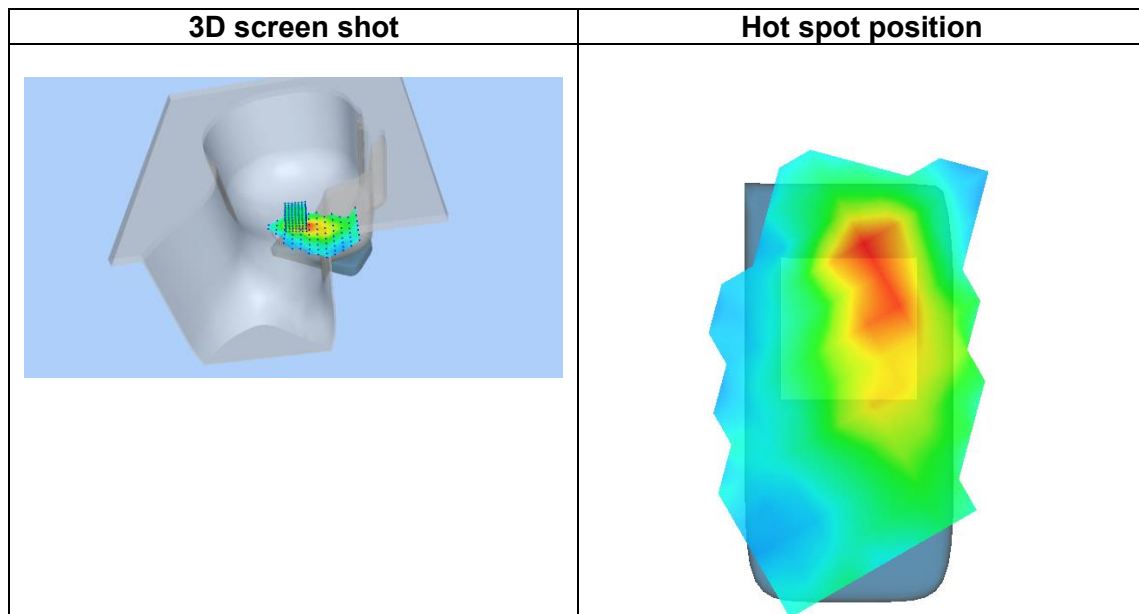
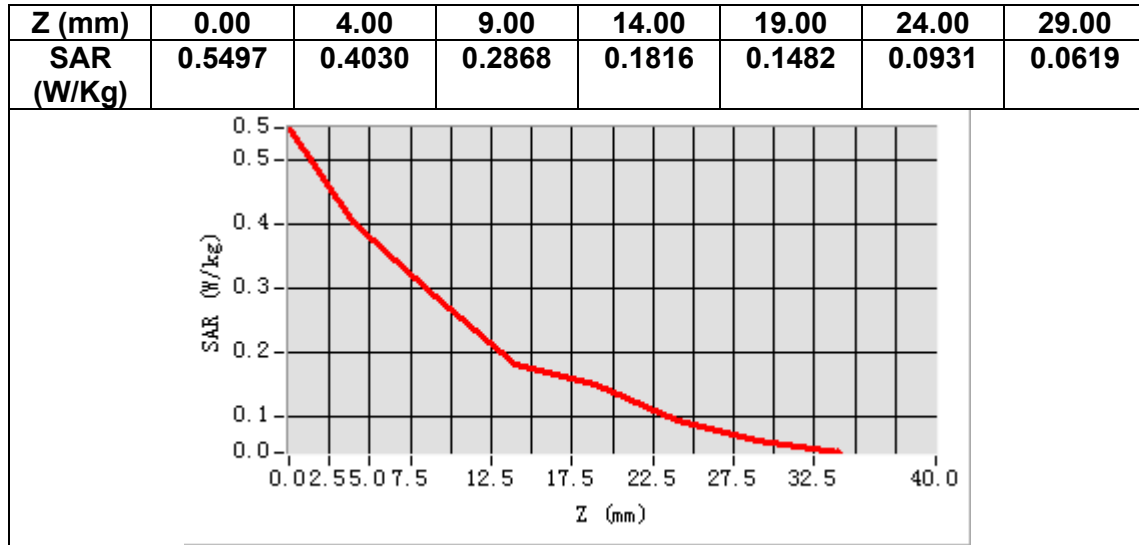
Frequency (MHz)	2535.000000
Relative permittivity (real part)	39.086666
Relative permittivity (imaginary part)	13.418333
Conductivity (S/m)	1.889749
Variation (%)	-1.580000



Maximum location: X=-5.00, Y=0.00

SAR Peak: 0.59 W/kg

SAR 10g (W/Kg)	0.228734
SAR 1g (W/Kg)	0.374582



MEASUREMENT 24

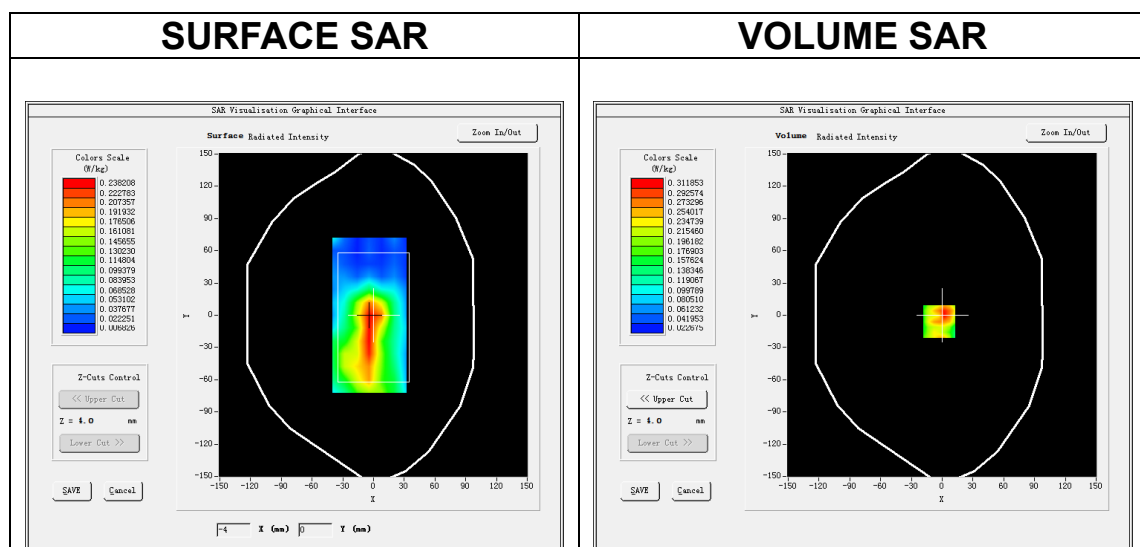
Date of measurement: 19/5/2025

A. Experimental conditions.

Area Scan	<u>dx=12mm dy=12mm, h= 5.00 mm</u>
ZoomScan	<u>7x7x7,dx=5mm dy=5mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>LTE band 7</u>
Channels	<u>Middle</u>
Signal	<u>LTE (Crest factor: 1.0)</u>
ConvF	<u>2.35</u>

B. SAR Measurement Results

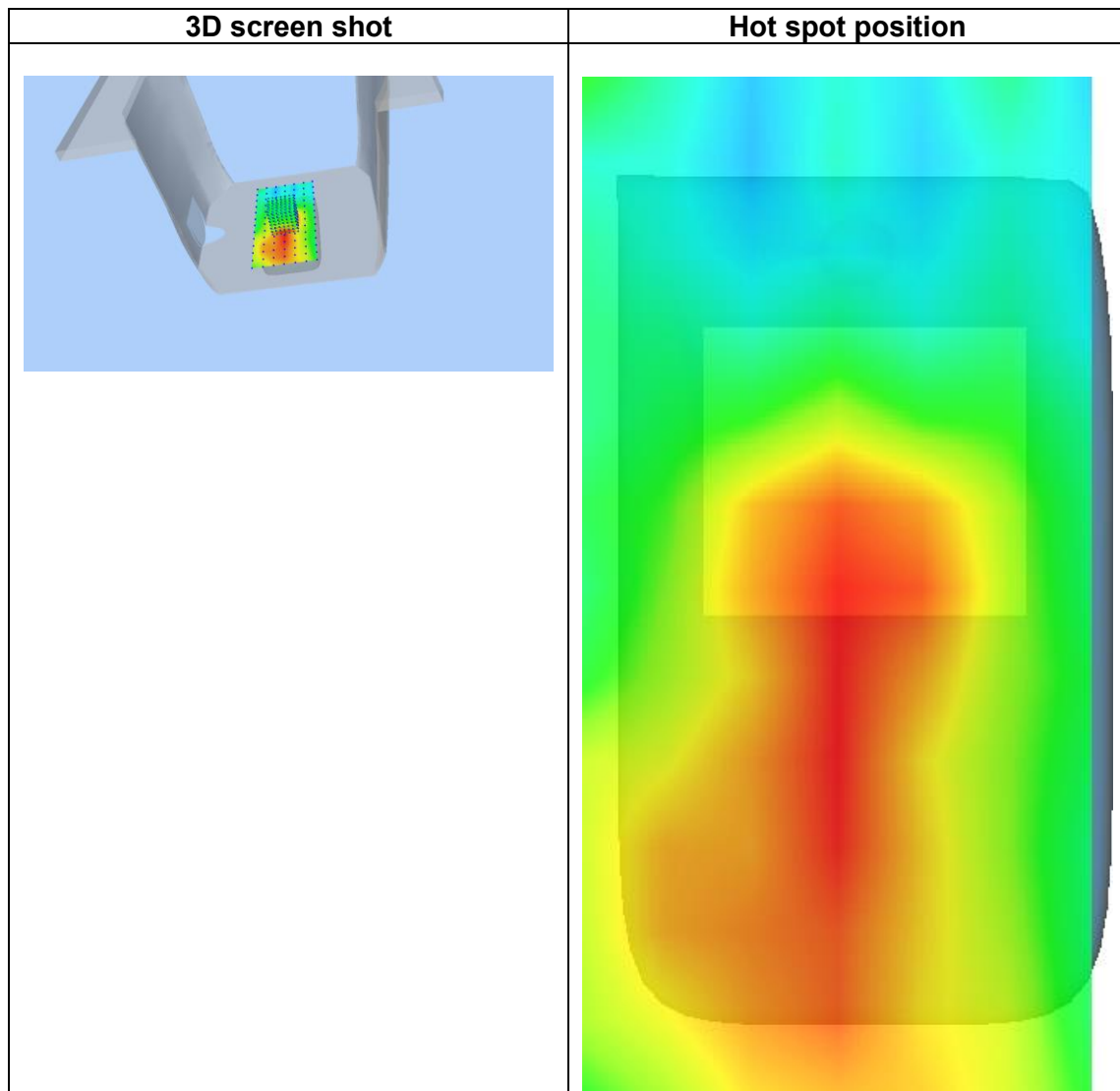
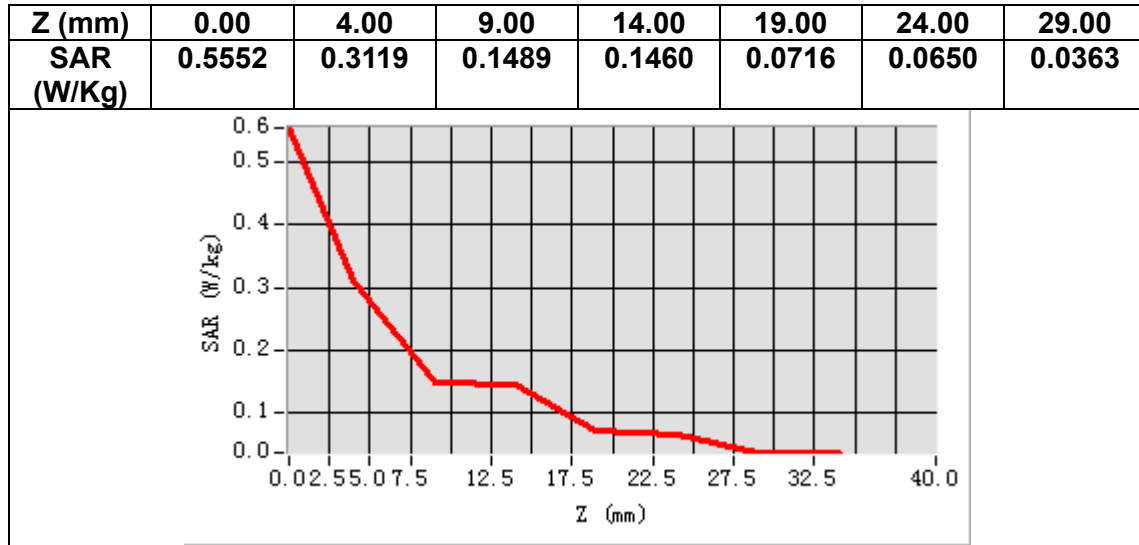
Frequency (MHz)	2535.000000
Relative permittivity (real part)	39.086666
Relative permittivity (imaginary part)	13.418333
Conductivity (S/m)	1.889749
Variation (%)	1.490000



Maximum location: X=-3.00, Y=-6.00

SAR Peak: 0.50 W/kg

SAR 10g (W/Kg)	0.175312
SAR 1g (W/Kg)	0.293544



MEASUREMENT 25

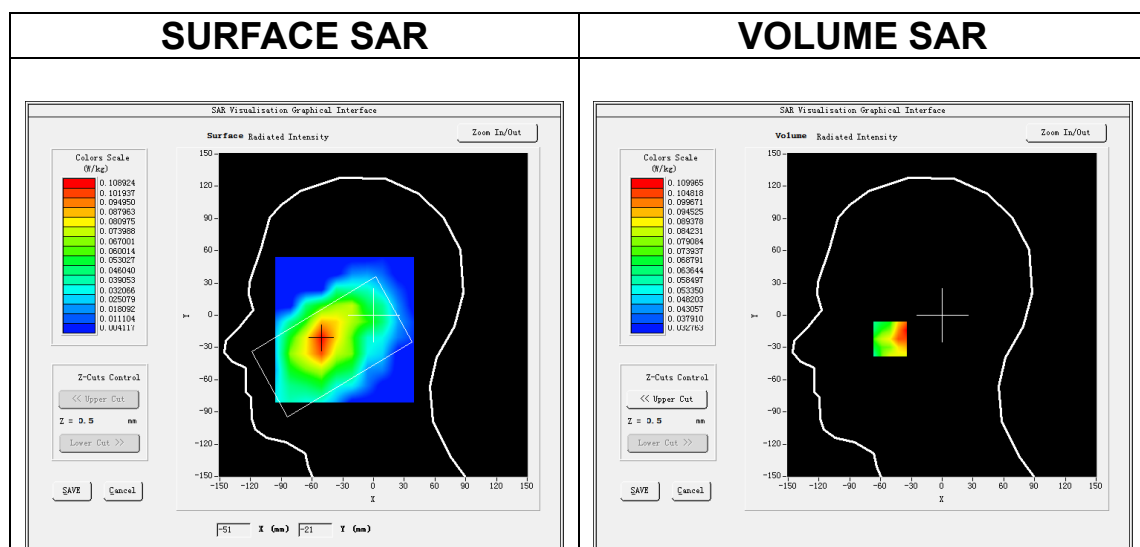
Date of measurement: 12/5/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
<u>Phantom</u>	<u>Left head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>LTE band 12</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.65</u>

B. SAR Measurement Results

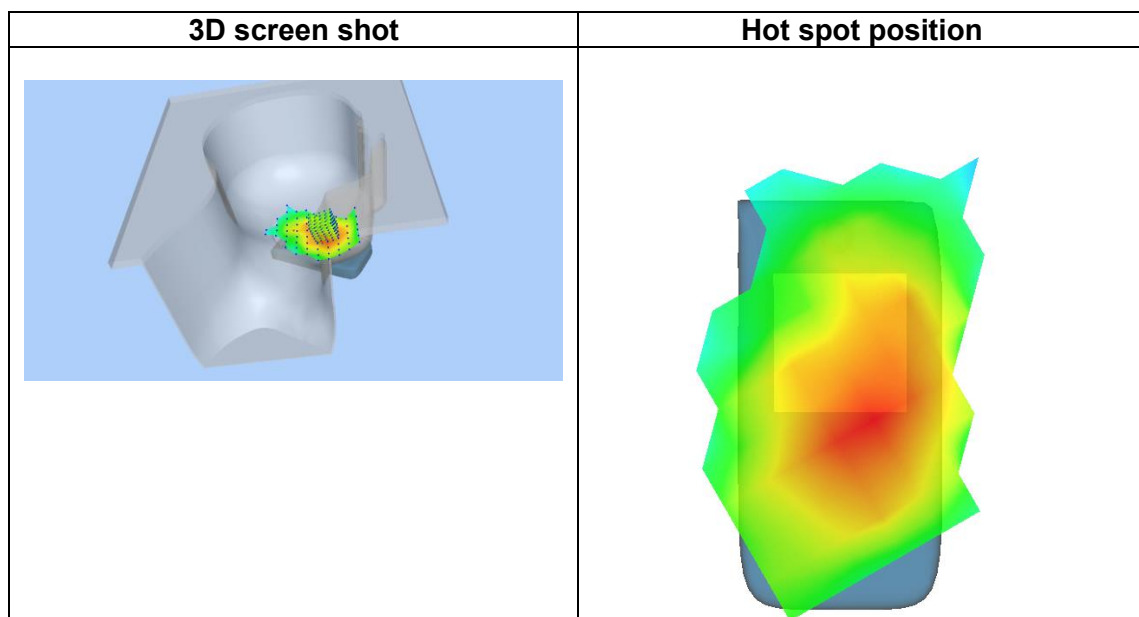
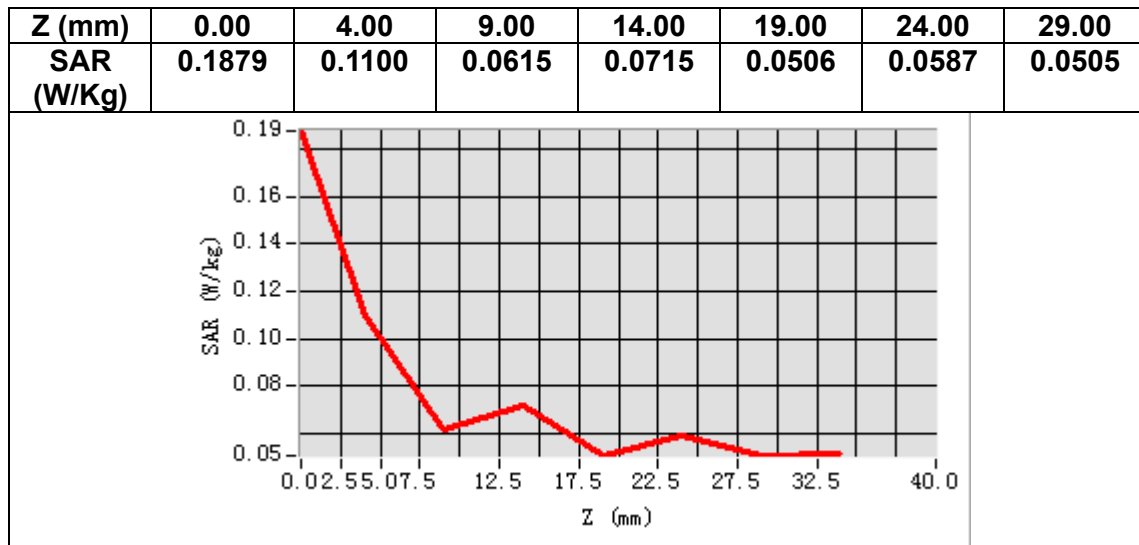
Frequency (MHz)	707.500000
Relative permittivity (real part)	42.126667
Relative permittivity (imaginary part)	23.264000
Conductivity (S/m)	0.914404
Variation (%)	2.170000



Maximum location: X=-51.00, Y=-22.00

SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)	0.081195
SAR 1g (W/Kg)	0.108019



MEASUREMENT 26

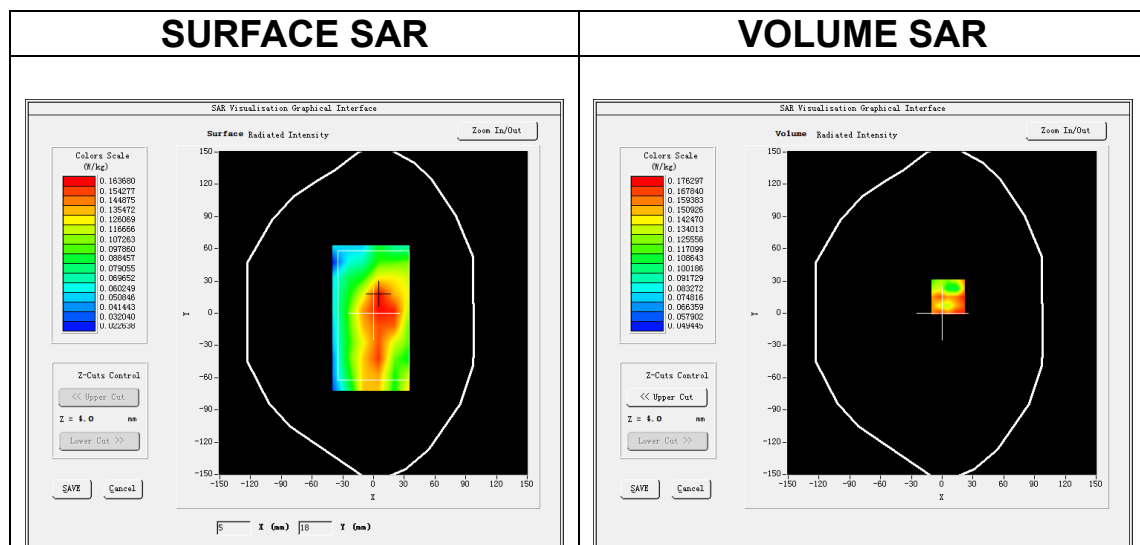
Date of measurement: 12/5/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>LTE band 12</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.65</u>

B. SAR Measurement Results

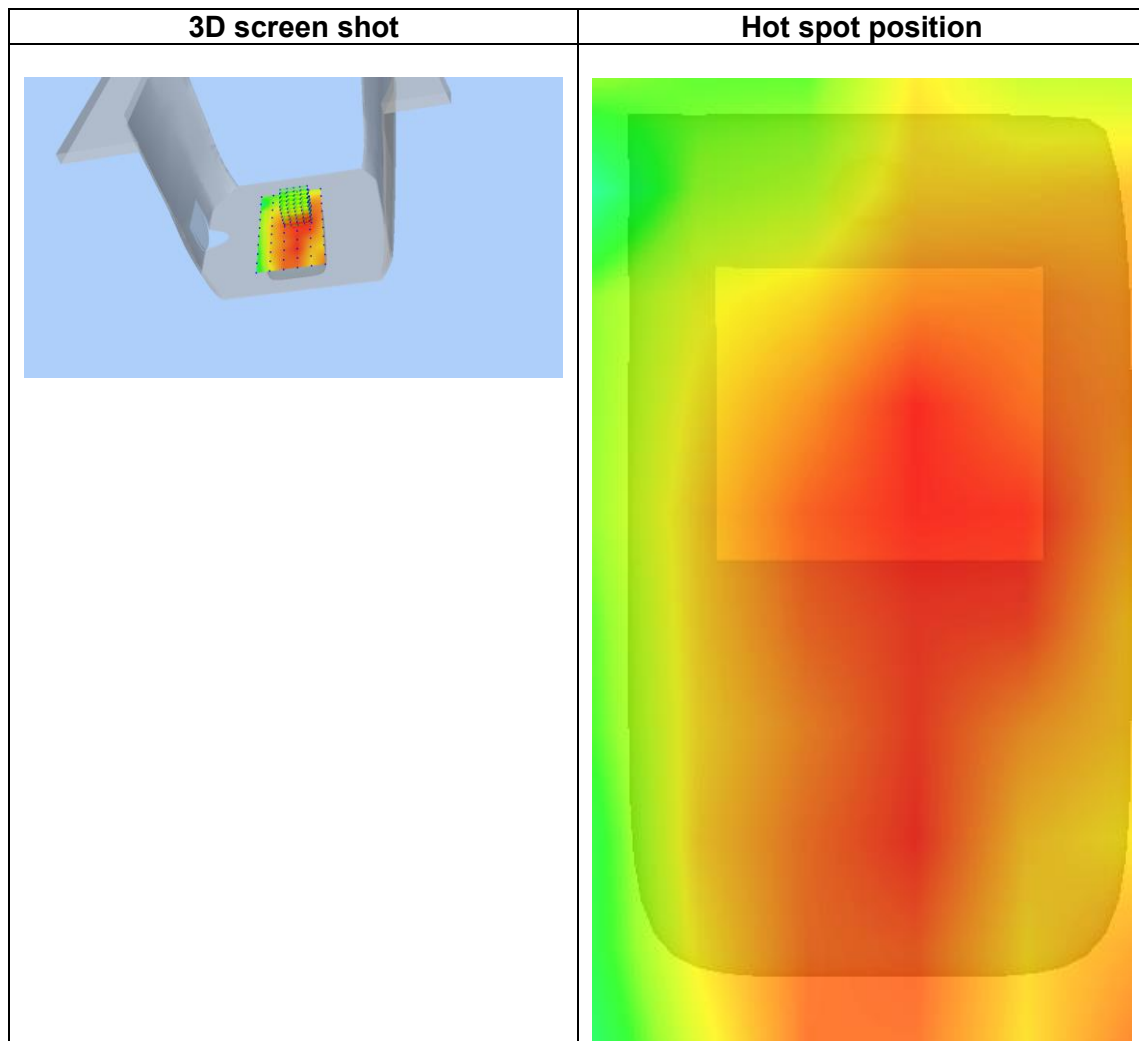
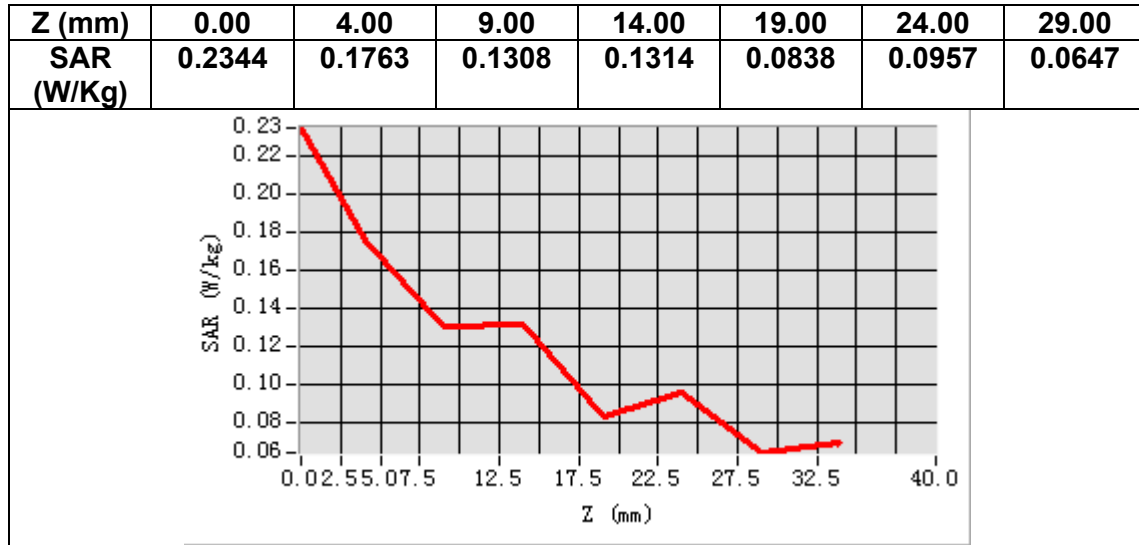
Frequency (MHz)	707.500000
Relative permittivity (real part)	42.126667
Relative permittivity (imaginary part)	23.264000
Conductivity (S/m)	0.914404
Variation (%)	-0.500000



Maximum location: X=6.00, Y=15.00

SAR Peak: 0.24 W/kg

SAR 10g (W/Kg)	0.131624
SAR 1g (W/Kg)	0.161665



MEASUREMENT 27

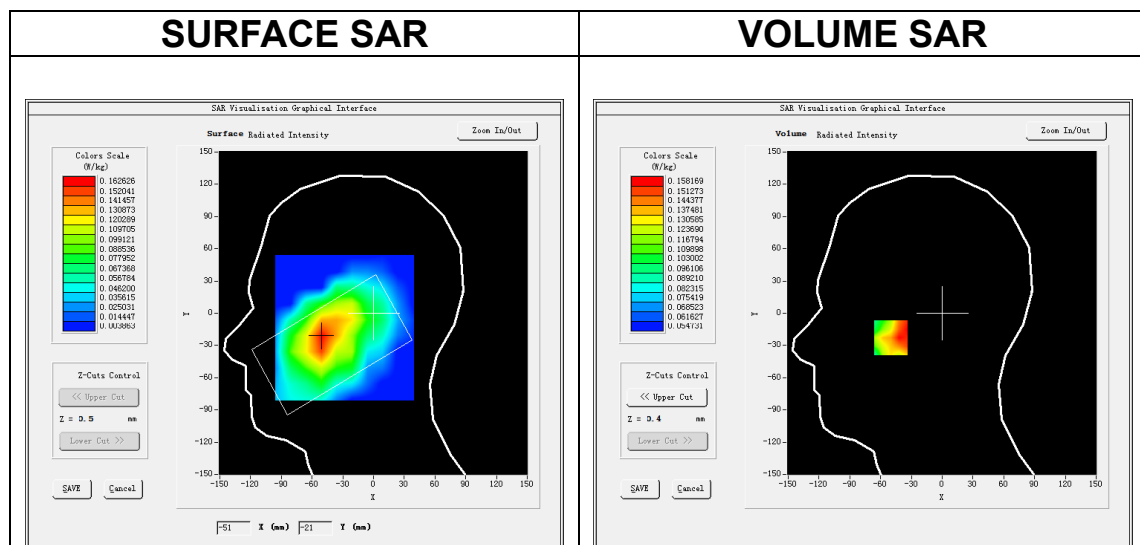
Date of measurement: 12/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>LTE band 17</u>
Channels	<u>Middle</u>
Signal	<u>LTE (Crest factor: 1.0)</u>
ConvF	<u>1.65</u>

B. SAR Measurement Results

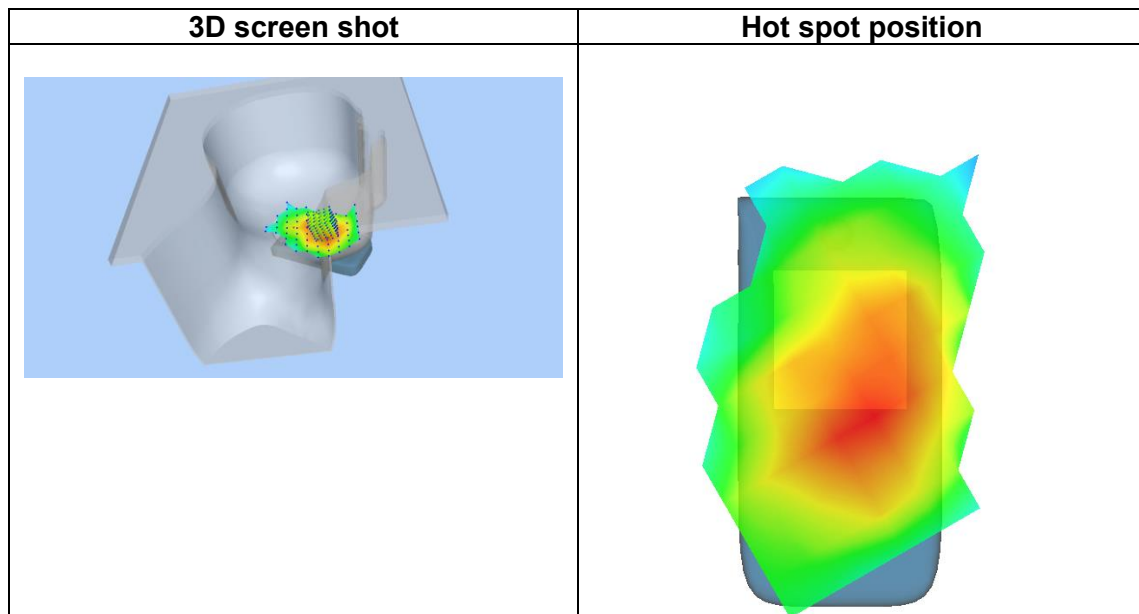
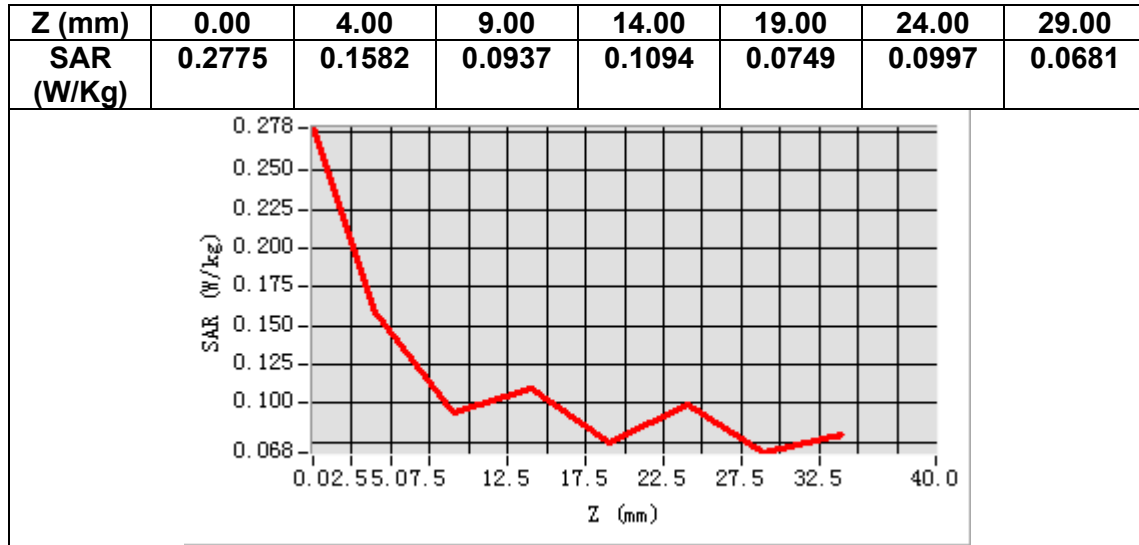
Frequency (MHz)	710.000000
Relative permittivity (real part)	42.113335
Relative permittivity (imaginary part)	23.152000
Conductivity (S/m)	0.913218
Variation (%)	4.240000



Maximum location: X=-50.00, Y=-23.00

SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.126821
SAR 1g (W/Kg)	0.162090



MEASUREMENT 28

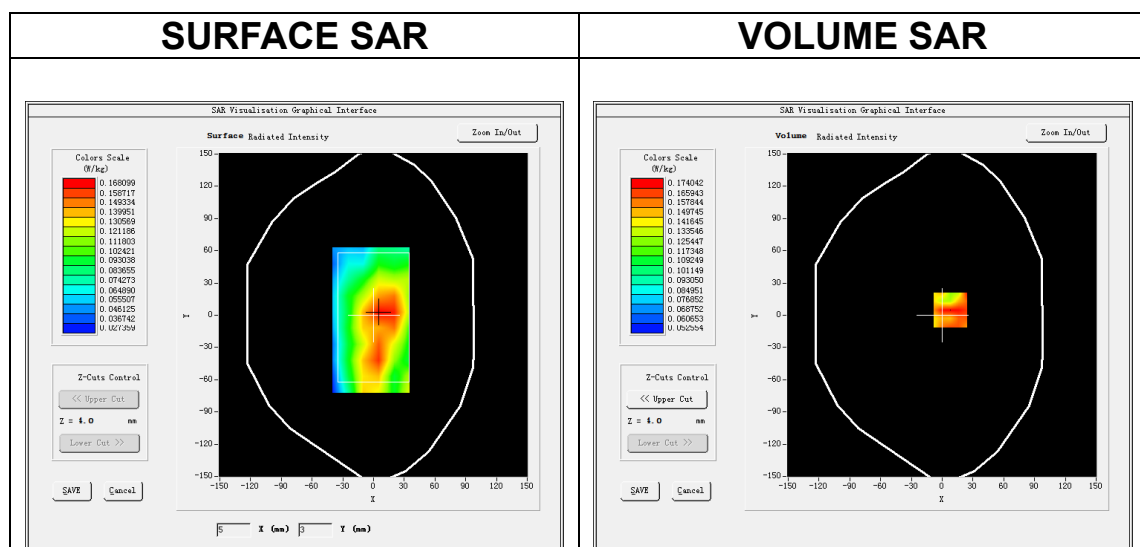
Date of measurement: 12/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>LTE band 17</u>
Channels	<u>Middle</u>
Signal	<u>LTE (Crest factor: 1.0)</u>
ConvF	<u>1.65</u>

B. SAR Measurement Results

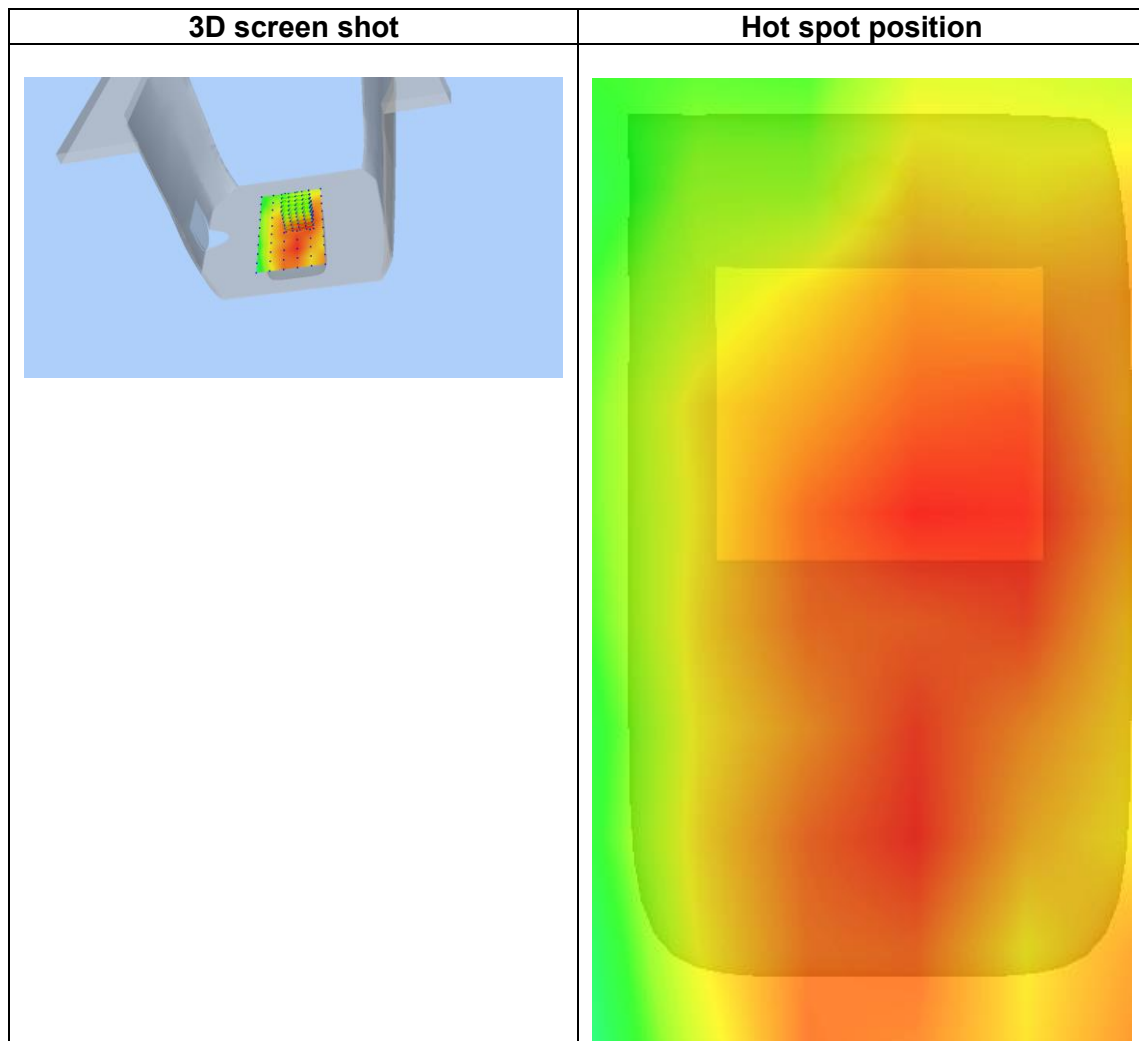
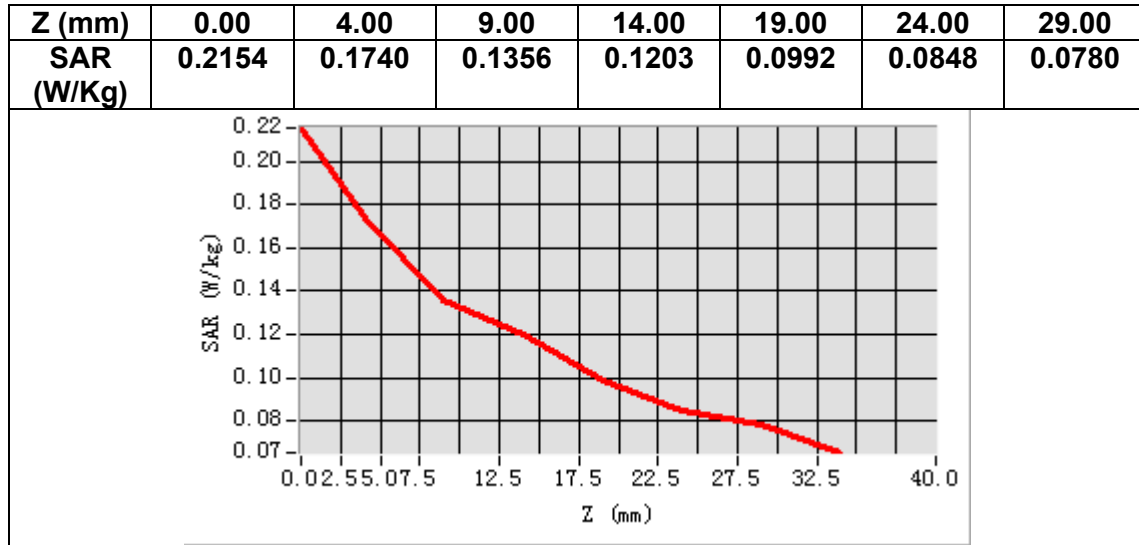
Frequency (MHz)	710.000000
Relative permittivity (real part)	42.113335
Relative permittivity (imaginary part)	23.152000
Conductivity (S/m)	0.913218
Variation (%)	-0.020000



Maximum location: X=8.00, Y=5.00

SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.131117
SAR 1g (W/Kg)	0.160381



MEASUREMENT 29

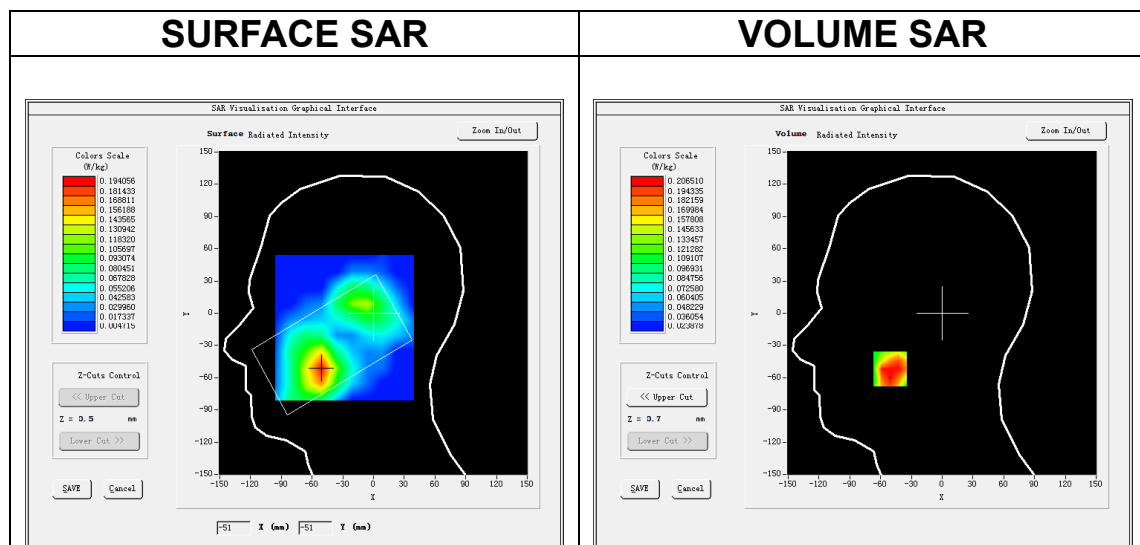
Date of measurement: 14/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>CUSTOM (LTEBand66)</u>
Channels	<u>Middle</u>
Signal	<u>(Crest factor: 1.0)</u>
ConvF	<u>2.09</u>

B. SAR Measurement Results

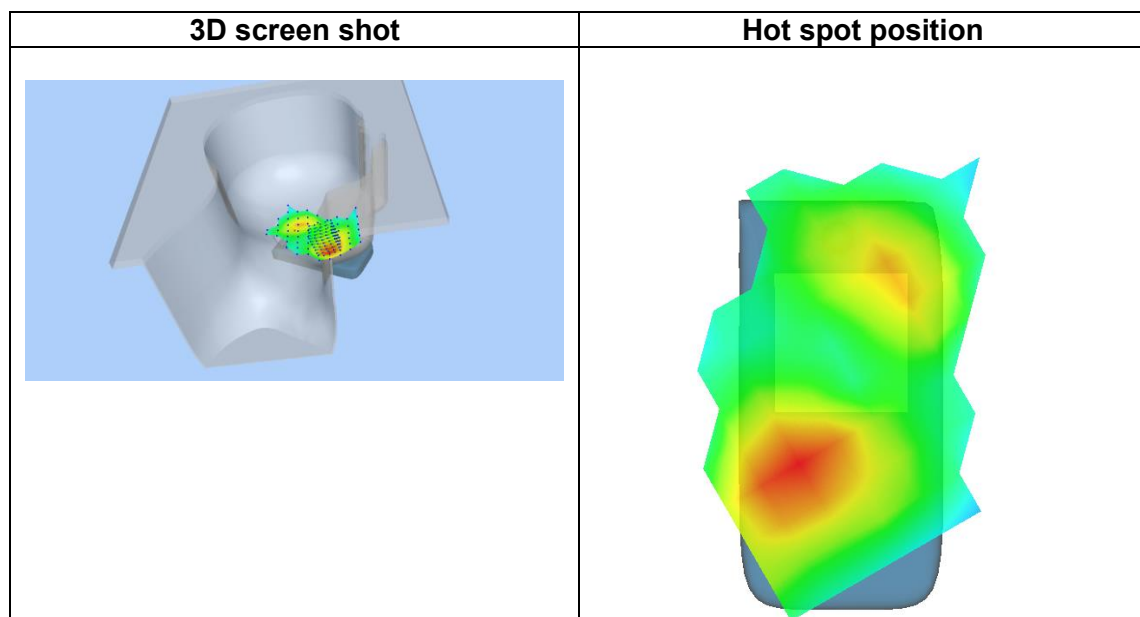
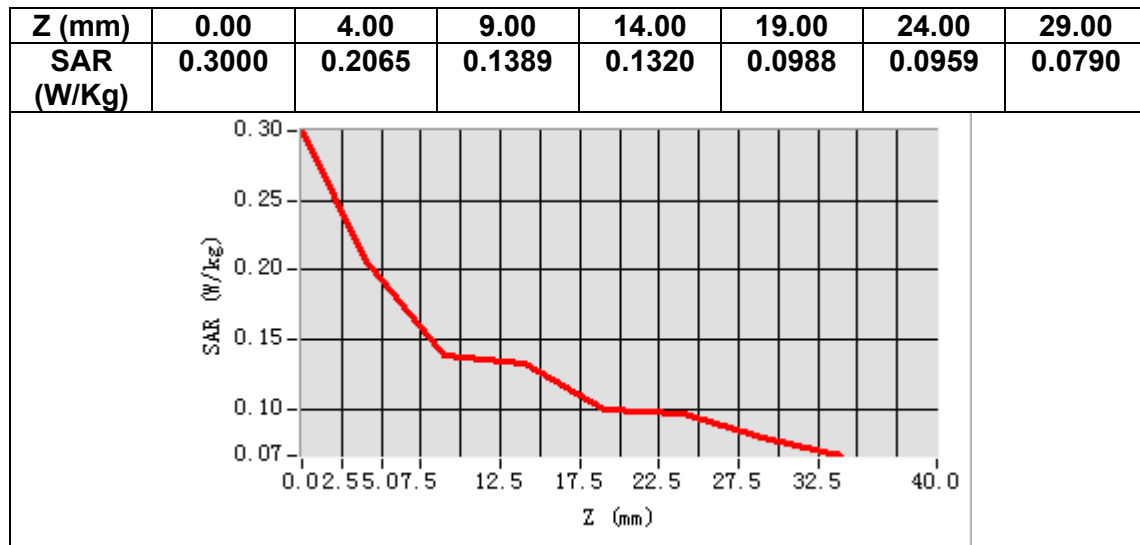
Frequency (MHz)	1745.000000
Relative permittivity (real part)	40.104546
Relative permittivity (imaginary part)	14.103182
Conductivity (S/m)	1.367225
Variation (%)	3.690000



Maximum location: X=-51.00, Y=-52.00

SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)	0.145288
SAR 1g (W/Kg)	0.206033



MEASUREMENT 30

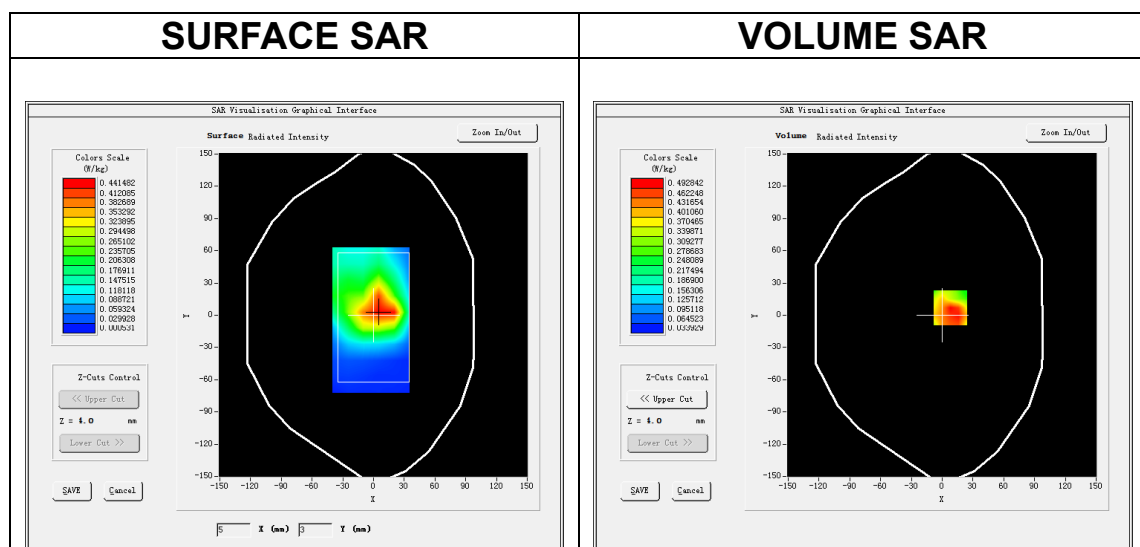
Date of measurement: 14/5/2025

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>CUSTOM (LTEBand66)</u>
Channels	<u>Middle</u>
Signal	<u>(Crest factor: 1.0)</u>
ConvF	<u>2.09</u>

B. SAR Measurement Results

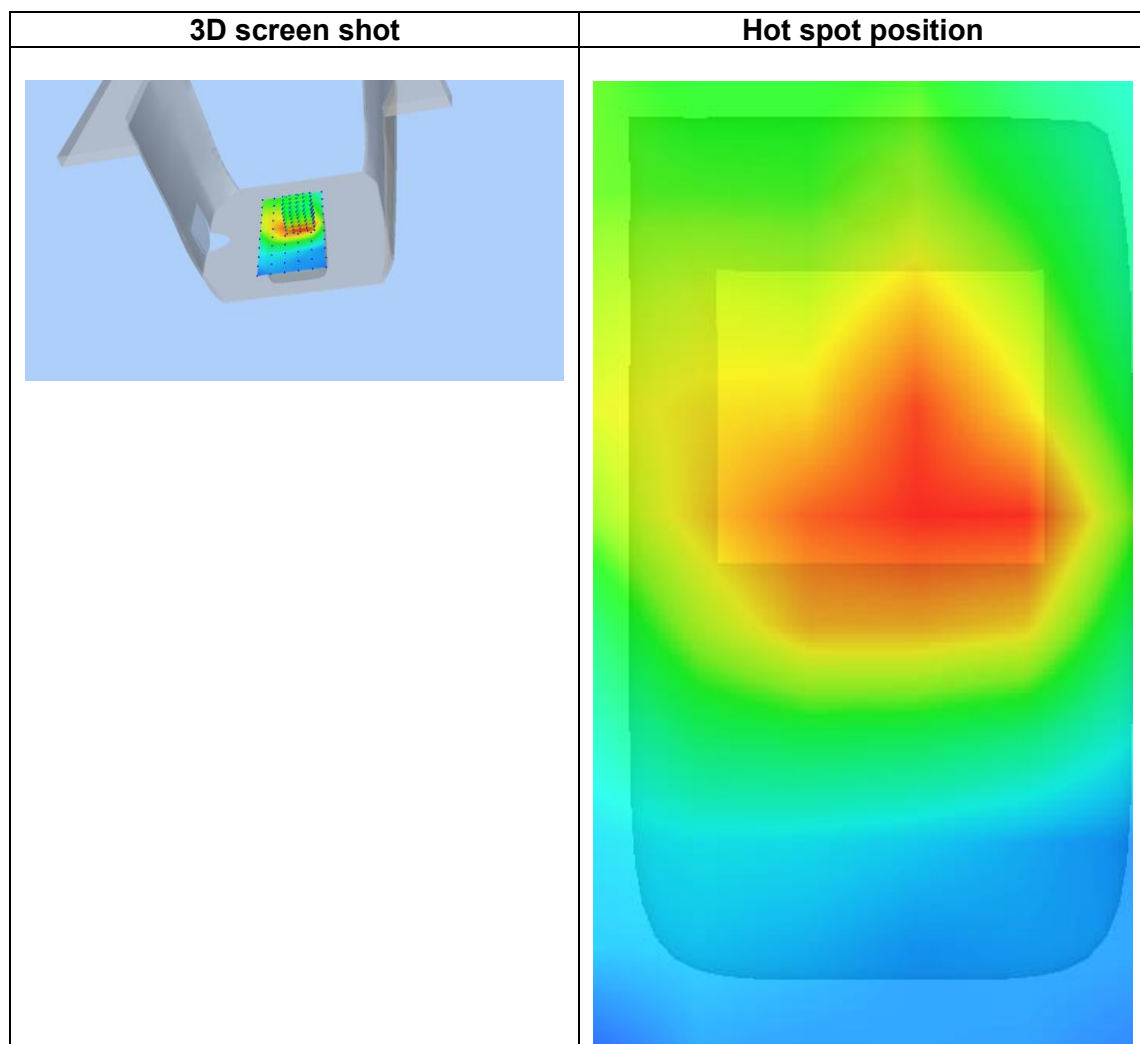
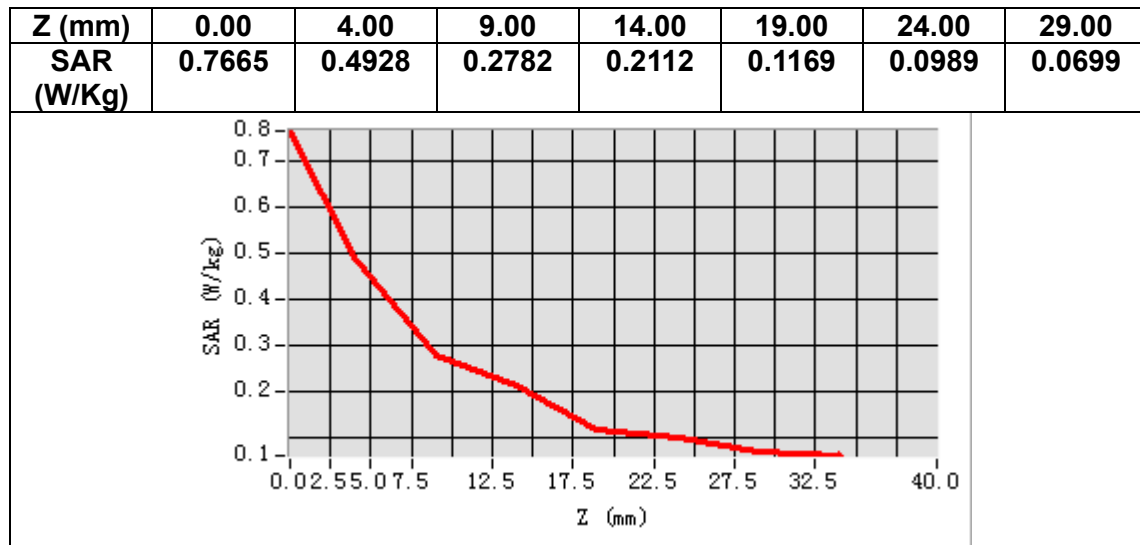
Frequency (MHz)	1745.000000
Relative permittivity (real part)	40.104546
Relative permittivity (imaginary part)	14.103182
Conductivity (S/m)	1.367225
Variation (%)	-3.090000



Maximum location: X=8.00, Y=7.00

SAR Peak: 0.83 W/kg

SAR 10g (W/Kg)	0.301477
SAR 1g (W/Kg)	0.484080



Appendix D. Calibration Certificate

Table of contents
E Field Probe - EPGO0523-403
750 MHz Dipole - SN 03/15 DIP 0G750-355
835 MHz Dipole - SN 03/15 DIP 0G835-347
1800 MHz Dipole - SN 03/15 DIP 1G800-349
1900 MHz Dipole - SN 03/15 DIP 1G900-350
2450 MHz Dipole - SN 03/15 DIP 2G450-352
2600 MHz Dipole - SN 03/15 DIP 2G600-356
5000-6000 MHz Dipole - SN 03/14 WGA33



COMOSAR E-Field Probe Calibration Report

Ref : ACR.307.3.24.BES.A

**GUANGDONG ASIA HONGKE TEST
TECHNOLOGY CO., LTD**
NO.1/F,BUILDING B1, JUNFENG INDUSTRIAL PARK,
CHONGQING ROAD, HEPING COMMUNITY,
FUHAIHAI STREET, BAO'AN DISTRICT,SHENZHEN,
GUANGDONG 518055, P.R.CHINA
MVG COMOSAR DOSIMETRIC E-FIELD PROBE
SERIAL NO.: SN 39/21 EPGO0523-403

Calibrated at MVG

Z.I. de la pointe du diable

**Technopôle Brest Iroise – 295 avenue Alexis de Rochon
29280 PLOUZANE - FRANCE**

Calibration date: 09/11/2024



Accreditations #2-6789
Scope available on www.cofrac.fr

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Summary:

This document presents the method and results from an accredited COMOSAR E-Field Probe calibration performed at MVG, using the CALIPROBE test bench, for use with a MVG COMOSAR system only. The test results covered by accreditation are traceable to the International System of Units (SI).



COMOSAR E-FIELD PROBE CALIBRATION REPORT

Ref: ACR.307.3.24.BES.A

	<i>Name</i>	<i>Function</i>	<i>Date</i>	<i>Signature</i>
<i>Prepared by :</i>	Jérôme Le Gall	Measurement Responsible	09/10/2024	
<i>Checked by :</i>	Jérôme Luc	Technical Manager	09/10/2024	
<i>Approved by :</i>	Yann Toutain	Laboratory Director	09/11/2024	

	<i>Customer Name</i>
<i>Distribution :</i>	Shenzhen Asia Hongke

<i>Issue</i>	<i>Name</i>	<i>Date</i>	<i>Modifications</i>
A	Jérôme Luc	9/11/2024	Initial release



COMOSAR E-FIELD PROBE CALIBRATION REPORT

Ref: ACR.307.3.24.BES.A

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COMOSAR E-FIELD PROBE CALIBRATION REPORT

Ref: ACR.307.3.24.BES.A

1 DEVICE UNDER TEST

Device Under Test	
Device Type	COMOSAR DOSIMETRIC E FIELD PROBE
Manufacturer	MVG
Model	SSE2
Serial Number	SN 39/21 EPG00523-403
Product Condition (new / used)	New
Frequency Range of Probe	0.15 GHz-6GHz
Resistance of Three Dipoles at Connector	Dipole 1: R1=0.199 M Ω Dipole 2: R2=0.218 M Ω Dipole 3: R3=0.210 M Ω

2 PRODUCT DESCRIPTION

2.1 GENERAL INFORMATION

MVG's COMOSAR E field Probes are built in accordance to the IEC/IEEE 62209-1528 and FCC KDB865664 D01 standards.



Figure 1 – MVG COMOSAR Dosimetric E field Probe

Probe Length	330 mm
Length of Individual Dipoles	2 mm
Maximum external diameter	8 mm
Probe Tip External Diameter	2.5 mm
Distance between dipoles / probe extremity	1 mm

3 MEASUREMENT METHOD

The IEC/IEEE 62209-1528 and FCC KDB865664 D01 standards provide recommended practices for the probe calibrations, including the performance characteristics of interest and methods by which to assess their affect. All calibrations / measurements performed meet the fore mentioned standards.

3.1 LINEARITY

The evaluation of the linearity was done in free space using the waveguide, performing a power sweep to cover the SAR range 0.01W/kg to 100W/kg.

3.2 SENSITIVITY

The sensitivity factors of the three dipoles were determined using a two step calibration method (air and tissue simulating liquid) using waveguides as outlined in the standards.

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COMOSAR E-FIELD PROBE CALIBRATION REPORT

Ref: ACR.307.3.24.BES.A

3.3 LOWER DETECTION LIMIT

The lower detection limit was assessed using the same measurement set up as used for the linearity measurement. The required lower detection limit is 10 mW/kg.

3.4 ISOTROPY

The axial isotropy was evaluated by exposing the probe to a reference wave from a standard dipole with the dipole mounted under the flat phantom in the test configuration suggested for system validations and checks. The probe was rotated along its main axis from 0 to 360 degrees in 15-degree steps. The hemispherical isotropy is determined by inserting the probe in a thin plastic box filled with tissue-equivalent liquid, with the plastic box illuminated with the fields from a half wave dipole. The dipole is rotated about its axis (0°–180°) in 15° increments. At each step the probe is rotated about its axis (0°–360°).

3.1 BOUNDARY EFFECT

The boundary effect is defined as the deviation between the SAR measured data and the expected exponential decay in the liquid when the probe is oriented normal to the interface. To evaluate this effect, the liquid filled flat phantom is exposed to fields from either a reference dipole or waveguide. With the probe normal to the phantom surface, the peak spatial average SAR is measured and compared to the analytical value at the surface.

The boundary effect uncertainty can be estimated according to the following uncertainty approximation formula based on linear and exponential extrapolations between the surface and $d_{be} + d_{step}$ along lines that are approximately normal to the surface:

$$SAR_{uncertainty} [\%] = \Delta SAR_{be} \frac{(d_{be} + d_{step})^2 (e^{-\Delta SAR_{be}(\delta/2)})}{2d_{step} \delta/2} \text{ for } (d_{be} + d_{step}) < 10 \text{ mm}$$

where

$SAR_{uncertainty}$	is the uncertainty in percent of the probe boundary effect
d_{be}	is the distance between the surface and the closest <i>zoom-scan</i> measurement point, in millimetre
Δ_{step}	is the separation distance between the first and second measurement points that are closest to the phantom surface, in millimetre, assuming the boundary effect at the second location is negligible
δ	is the minimum penetration depth in millimetres of the head tissue-equivalent liquids defined in this standard, i.e., $\delta \approx 14$ mm at 3 GHz;
ΔSAR_{be}	in percent of SAR is the deviation between the measured SAR value, at the distance d_{be} from the boundary, and the analytical SAR value.

The measured worst case boundary effect SARuncertainty[%] for scanning distances larger than 4mm is 1.0% Limit ,2%).



COMOSAR E-FIELD PROBE CALIBRATION REPORT

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4 MEASUREMENT UNCERTAINTY

The guidelines outlined in the IEC/IEEE 62209-1528 and FCC KDB865664 D01 standards were followed to generate the measurement uncertainty associated with an E-field probe calibration using the waveguide technique. All uncertainties listed below represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2, traceable to the Internationally Accepted Guides to Measurement Uncertainty.

Uncertainty analysis of the probe calibration in waveguide					
ERROR SOURCES	Uncertainty value (%)	Probability Distribution	Divisor	ci	Standard Uncertainty (%)
Expanded uncertainty 95 % confidence level k = 2					14 %

5 CALIBRATION MEASUREMENT RESULTS

Calibration Parameters	
Liquid Temperature	20 +/- 1 °C
Lab Temperature	20 +/- 1 °C
Lab Humidity	30-70 %

5.1 SENSITIVITY IN AIR

Normx dipole 1 ($\mu\text{V}/(\text{V}/\text{m})^2$)	Normy dipole 2 ($\mu\text{V}/(\text{V}/\text{m})^2$)	Normz dipole 3 ($\mu\text{V}/(\text{V}/\text{m})^2$)
1.26	0.87	0.77

DCP dipole 1 (mV)	DCP dipole 2 (mV)	DCP dipole 3 (mV)
113	108	113

Calibration curves $e_i=f(V)$ ($i=1,2,3$) allow to obtain E-field value using the formula:

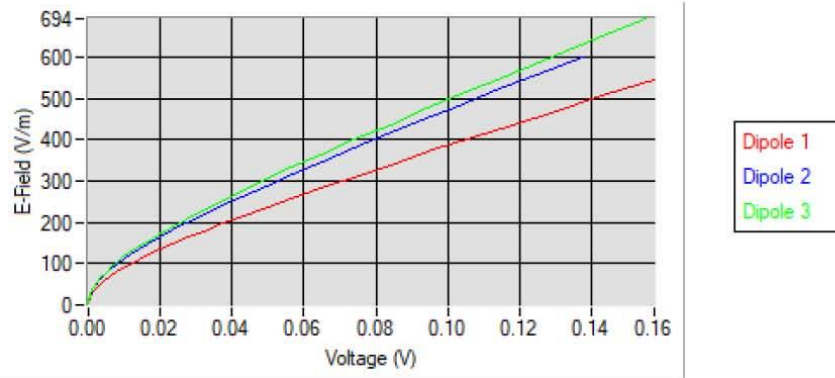
$$E = \sqrt{E_1^2 + E_2^2 + E_3^2}$$



COMOSAR E-FIELD PROBE CALIBRATION REPORT

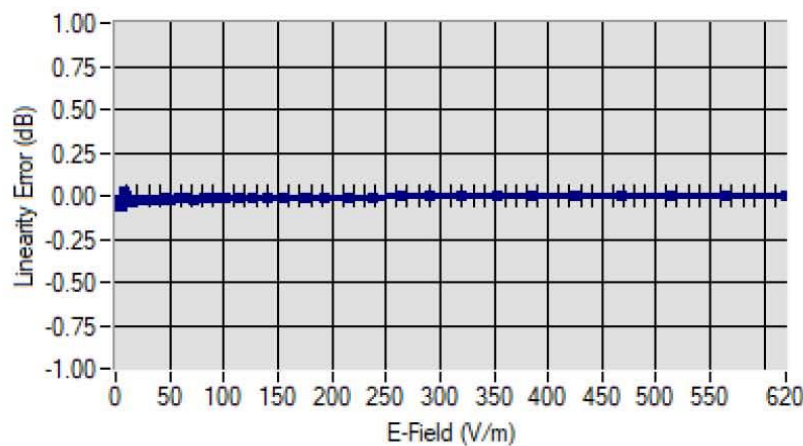
Ref: ACR.307.3.24.BES.A

Calibration curves



5.2 LINEARITY

Linearity



Linearity: $\pm 1.42\%$ ($\pm 0.06\text{dB}$)



COMOSAR E-FIELD PROBE CALIBRATION REPORT

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5.3 SENSITIVITY IN LIQUID

Liquid	Frequency (MHz +/- 100MHz)	ConvF
HL600	600	1.62
HL750	750	1.65
HL850	835	1.66
HL900	900	1.77
HL1500	1500	2.09
HL1750	1750	2.09
HL1800	1800	2.05
HL1900	1900	2.05
HL2000	2000	2.41
HL2100	2100	2.36
HL2300	2300	2.55
HL2450	2450	2.38
HL2600	2600	2.35
HL3300	3300	2.04
HL3500	3500	1.98
HL3700	3700	2.11
HL3900	3900	2.54
HL4200	4200	2.22
HL4600	4600	2.40
HL4900	4900	2.33
HL5200	5200	2.30
HL5400	5400	2.30
HL5600	5600	2.29
HL5800	5800	2.27

LOWER DETECTION LIMIT: 8mW/kg

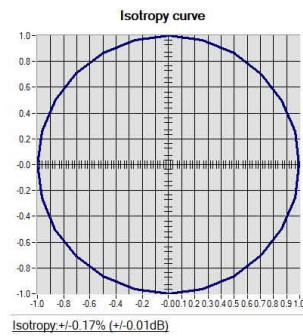


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5.4 ISOTROPY

HL1800 MHz





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6 LIST OF EQUIPMENT

Equipment Summary Sheet				
Equipment Description	Manufacturer / Model	Identification No.	Current Calibration Date	Next Calibration Date
CALIPROBE Test Bench	Version 2	NA	Validated. No cal required.	Validated. No cal required.
Network Analyzer	Rohde & Schwarz ZVM	100203	08/2024	08/2027
Network Analyzer	Agilent 8753ES	MY40003210	10/2021	10/2024
Network Analyzer – Calibration kit	Rohde & Schwarz ZV-Z235	101223	05/2024	05/2027
Network Analyzer – Calibration kit	HP 85033D	3423A08186	06/2021	06/2027
Multimeter	Keithley 2000	1160271	02/2024	02/2027
Signal Generator	Rohde & Schwarz SMB	106589	04/2024	04/2027
Amplifier	MVG	MODU-023-C-0002	Characterized prior to test. No cal required.	Characterized prior to test. No cal required.
Power Meter	NI-USB 5680	170100013	06/2024	06/2027
Power Meter	Rohde & Schwarz NRVD	832839-056	11/2021	11/2024
Directional Coupler	Krytar 158020	131467	Characterized prior to test. No cal required.	Characterized prior to test. No cal required.
Waveguide	MVG	SN 32/16 WG4_1	Validated. No cal required.	Validated. No cal required.
Liquid transition	MVG	SN 32/16 WGLIQ_0G900_1	Validated. No cal required.	Validated. No cal required.
Waveguide	MVG	SN 32/16 WG6_1	Validated. No cal required.	Validated. No cal required.
Liquid transition	MVG	SN 32/16 WGLIQ_1G500_1	Validated. No cal required.	Validated. No cal required.
Waveguide	MVG	SN 32/16 WG8_1	Validated. No cal required.	Validated. No cal required.
Liquid transition	MVG	SN 32/16 WGLIQ_1G800B_1	Validated. No cal required.	Validated. No cal required.
Liquid transition	MVG	SN 32/16 WGLIQ_1G800H_1	Validated. No cal required.	Validated. No cal required.
Waveguide	MVG	SN 32/16 WG10_1	Validated. No cal required.	Validated. No cal required.
Liquid transition	MVG	SN 32/16 WGLIQ_3G500_1	Validated. No cal required.	Validated. No cal required.

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Waveguide	MVG	SN 32/16 WG12_1	Validated. No cal required.	Validated. No cal required.
Liquid transition	MVG	SN 32/16 WGLIQ_5G000_1	Validated. No cal required.	Validated. No cal required.
Temperature / Humidity Sensor	Testo 184 H1	44225320	06/2024	06/2027



SAR Reference Dipole Calibration Report

Ref : ACR.53.23.24.BES.A

**GUANGDONG ASIA HONGKE TEST
TECHNOLOGY CO., LTD**
NO.1/F,BUILDING B1, JUNFENG INDUSTRIAL PARK,
CHONGQING ROAD, HEPING COMMUNITY ,
FUHAIHAI STREET, BAO'AN DISTRICT, SHENZHEN,
GUANGDONG 518055, P.R.CHINA
MVG COMOSAR REFERENCE DIPOLE
FREQUENCY: 750MHZ
SERIAL NO.: SN 03/15 DIP0G750-355

Calibrated at MVG
Z.I. de la pointe du diable
Technopôle Brest Iroise – 295 avenue Alexis de Rochon
29280 PLOUZANE - FRANCE

Calibration date: 02/21/2024



Accreditations #2-6789 and #2-6814
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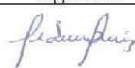
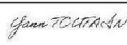
Summary:

This document presents the method and results from an accredited SAR reference dipole calibration performed in MVG using the COMOSAR test bench. All calibration results are traceable to national metrology institutions.



SAR REFERENCE DIPOLE CALIBRATION REPORT

REF : ACR.53.23.24.BES.A

	Name	Function	Date	Signature
Prepared by :	Pedro Ruiz	Measurement Responsible	2/22/2024	
Checked & approved by:	Jérôme Luc	Technical Manager	2/22/2024	
Authorized by:	Yann Toutain	Laboratory Director	2/27/2024	

Yann
Toutain ID

Signature numérique de
Yann Toutain ID
Date : 2024.02.27
08:54:37 +01'00'

	Customer Name
Distribution :	Shenzhen Asia Hongke

Issue	Name	Date	Modifications
A	Pedro Ruiz	2/22/2024	Initial release



SAR REFERENCE DIPOLE CALIBRATION REPORT

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