

**SAR Measurement at IEEE 802.11ac U-NII (Cheek, Right)**

Date of measurement: 9/3/2023

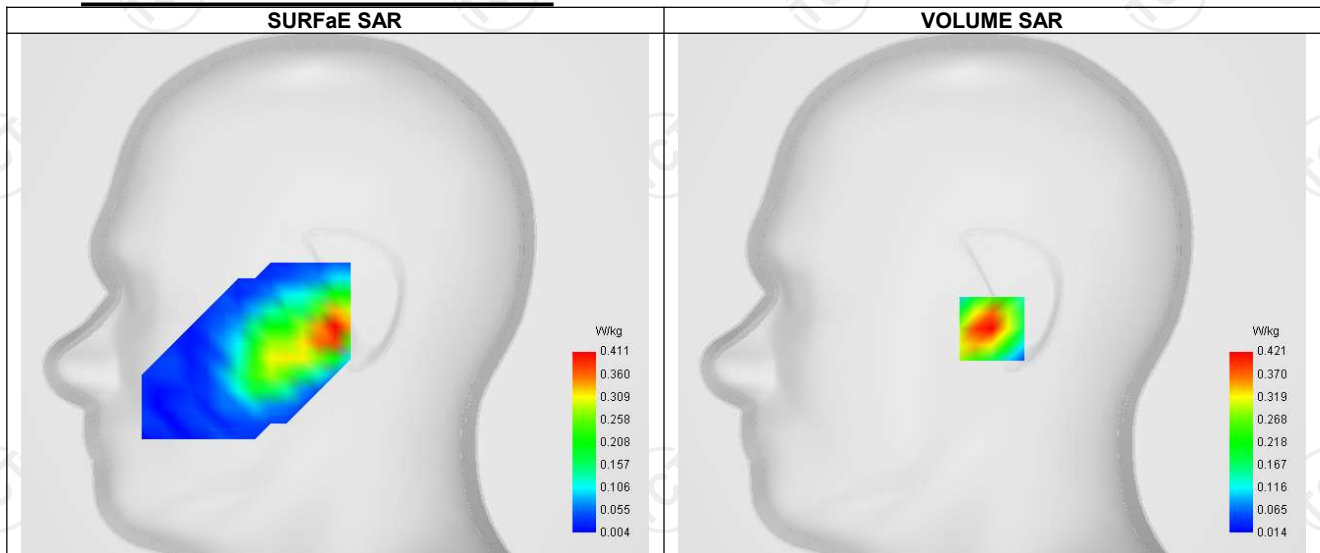
**A. Experimental conditions.**

Probe	SN 36/20 EPG0346
ConvF	2.13
Area Scan	sam_direct_droit2_surf8mm.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Right head
Device Position	Cheek
Band	IEEE 802.11ac U-NII
Channels	Lower (151)
Signal	IEEE 802.11

**B. Permittivity**

Frequency (MHz)	5755.000
Relative permittivity (real part)	47.595
Relative permittivity (imaginary part)	14.926
Conductivity (S/m)	5.951

**C. SAR Surface and Volume**



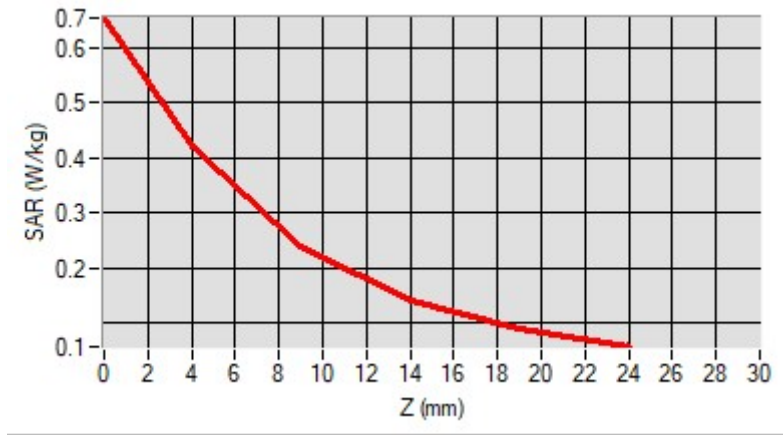
Maximum location: X=0.00, Y=-17.00 ; SAR Peak: 0.66 W/kg

**D. SAR 1g & 10g**

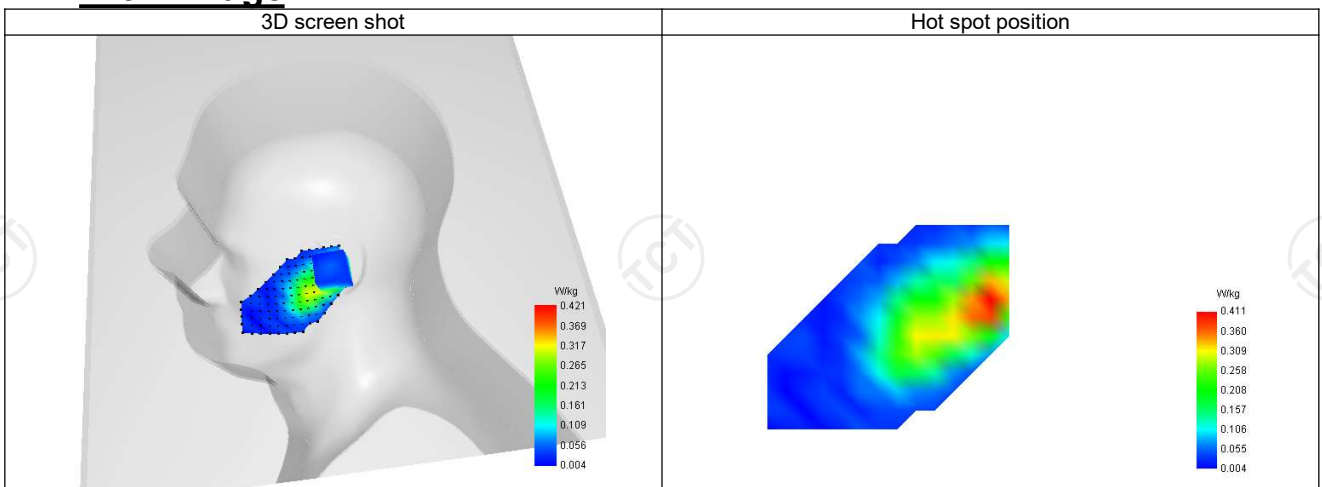
SAR 10g (W/Kg)	0.192
SAR 1g (W/Kg)	0.218
Variation (%)	-1.228
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

**E. Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.655	0.421	0.239	0.139	0.087



**F. 3D Image**



**SAR Measurement at IEEE 802.11ac U-NII (Body, Validation Plane)**

Date of measurement: 9/3/2023

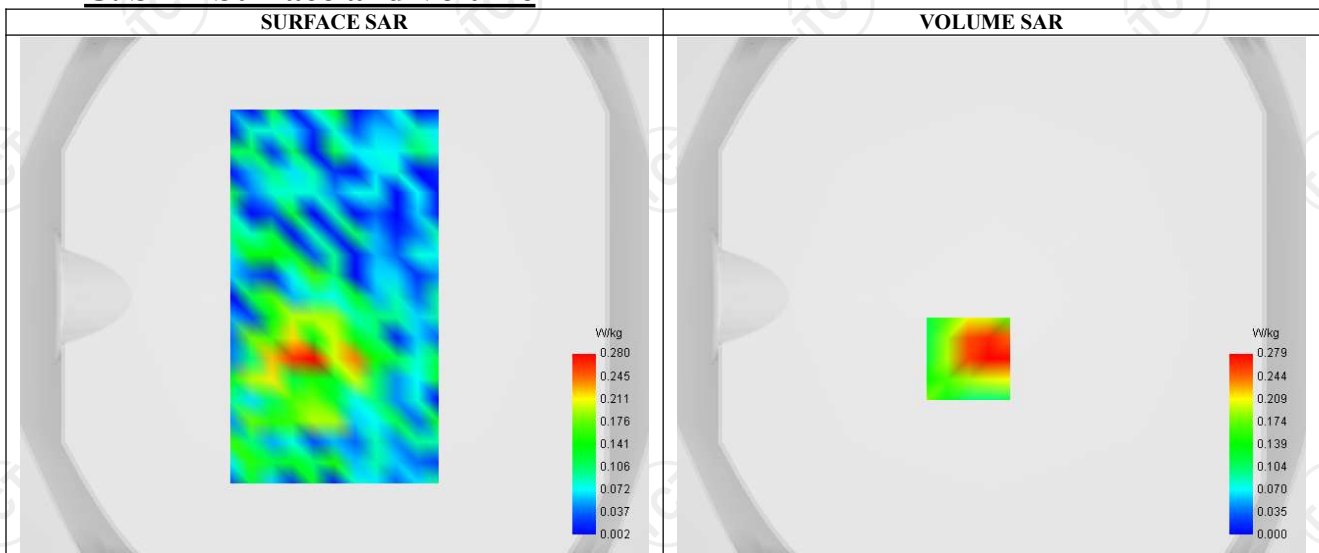
**A. Experimental conditions.**

Probe	SN 36/20 EPG0346
ConvF	2.13
Area Scan	surf_sam_plan.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body
Band	IEEE 802.11ac U-NII
Channels	Lower (151)
Signal	IEEE 802.11

**B. Permittivity**

Frequency (MHz)	5755.000
Relative permittivity (real part)	47.595
Relative permittivity (imaginary part)	14.926
Conductivity (S/m)	5.951

**C. SAR Surface and Volume**



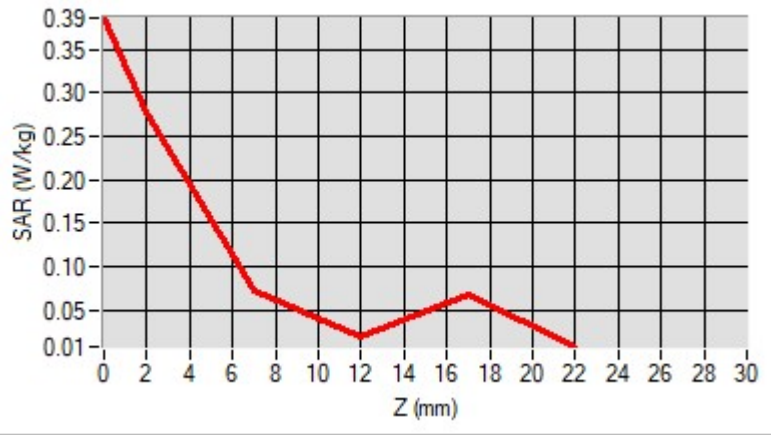
Maximum location: X=-9.00, Y=-24.00 ; SAR Peak: 0.49 W/kg

**D. SAR 1g & 10g**

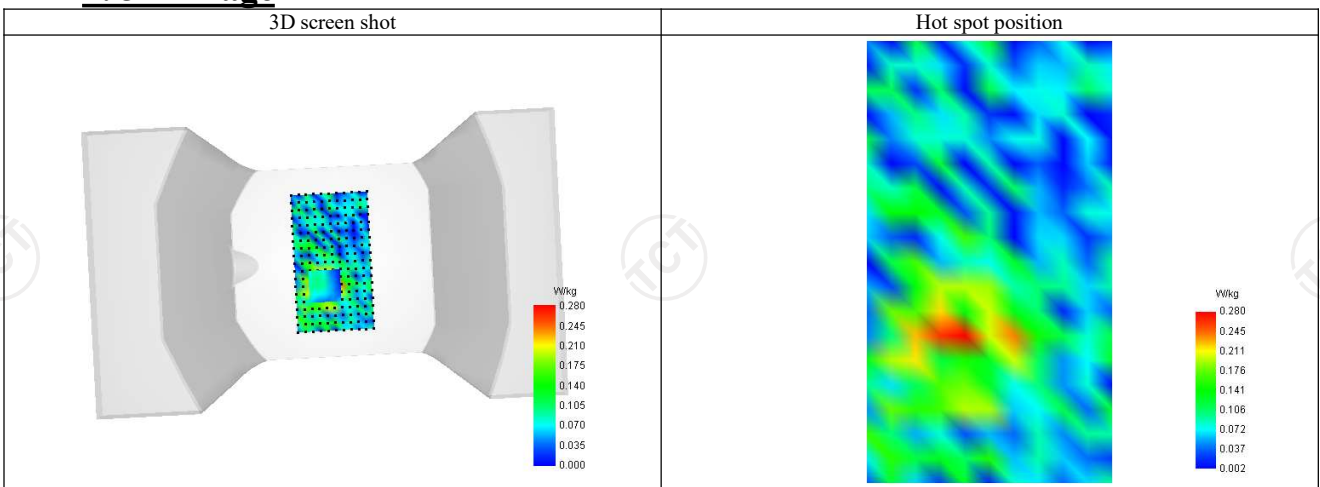
SAR 10g (W/Kg)	0.105
SAR 1g (W/Kg)	0.186
Variation (%)	1.540
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

**E. Z Axis Scan**

Z (mm)	0.00	2.00	7.00	12.00	17.00
SAR (W/Kg)	0.387	0.279	0.071	0.019	0.068



**F. 3D Image**



**SAR Measurement at LTE band 2 (Cheek, Right)**

Date of measurement: 7/3/2023

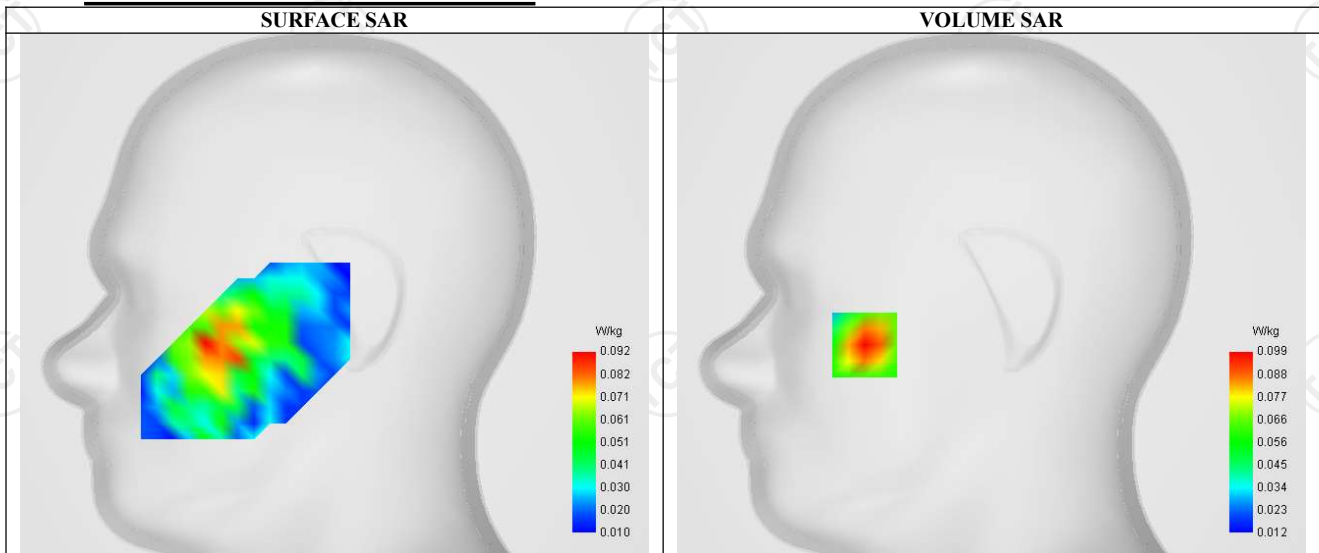
**A. Experimental conditions.**

Probe	SN 36/20 EPGO346
ConvF	2.32
Area Scan	sam direct droit2 surf8mm.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 2
Channels	Higher (19100)
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	0
RB size	1

**B. Permittivity**

Frequency (MHz)	1891.090
Relative permittivity (real part)	52.232
Relative permittivity (imaginary part)	14.325
Conductivity (S/m)	1.580

**C. SAR Surface and Volume**



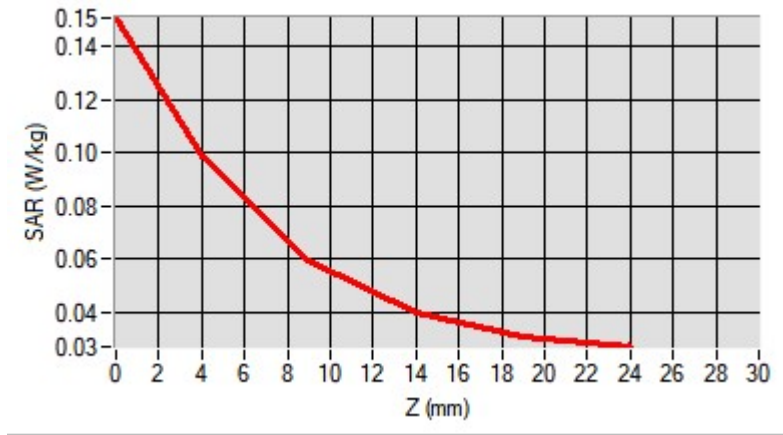
Maximum location: X=-63.00, Y=-25.00 ; SAR Peak: 0.15 W/kg

**D. SAR 1g & 10g**

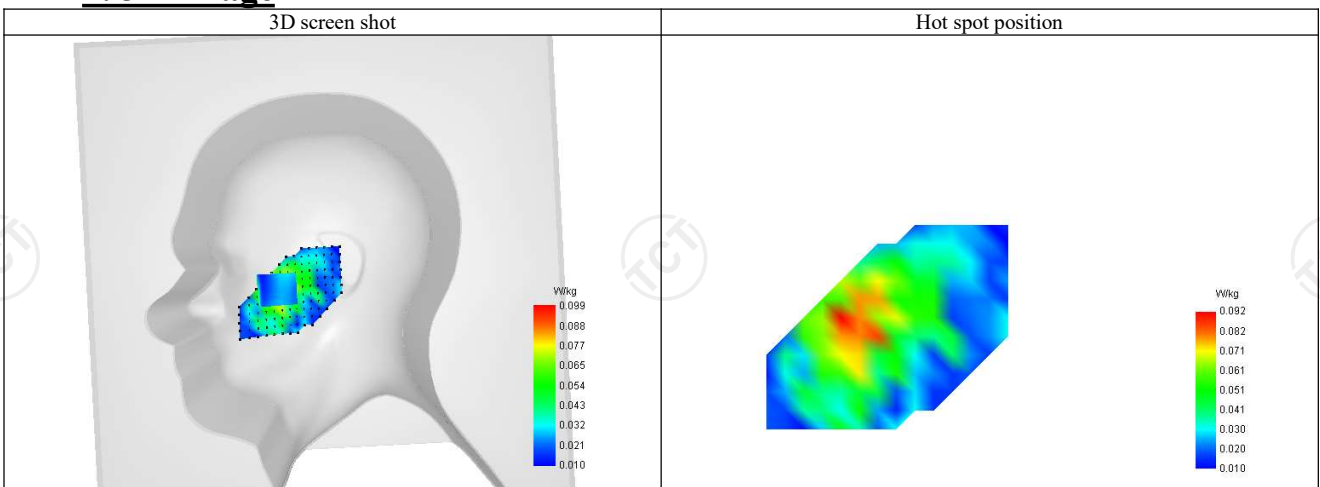
SAR 10g (W/Kg)	0.059
SAR 1g (W/Kg)	0.094
Variation (%)	-3.230
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

**E. Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.151	0.099	0.059	0.039	0.031



**F. 3D Image**



**SAR Measurement at LTE band 2 (Body, Validation Plane)**

Date of measurement: 7/3/2023

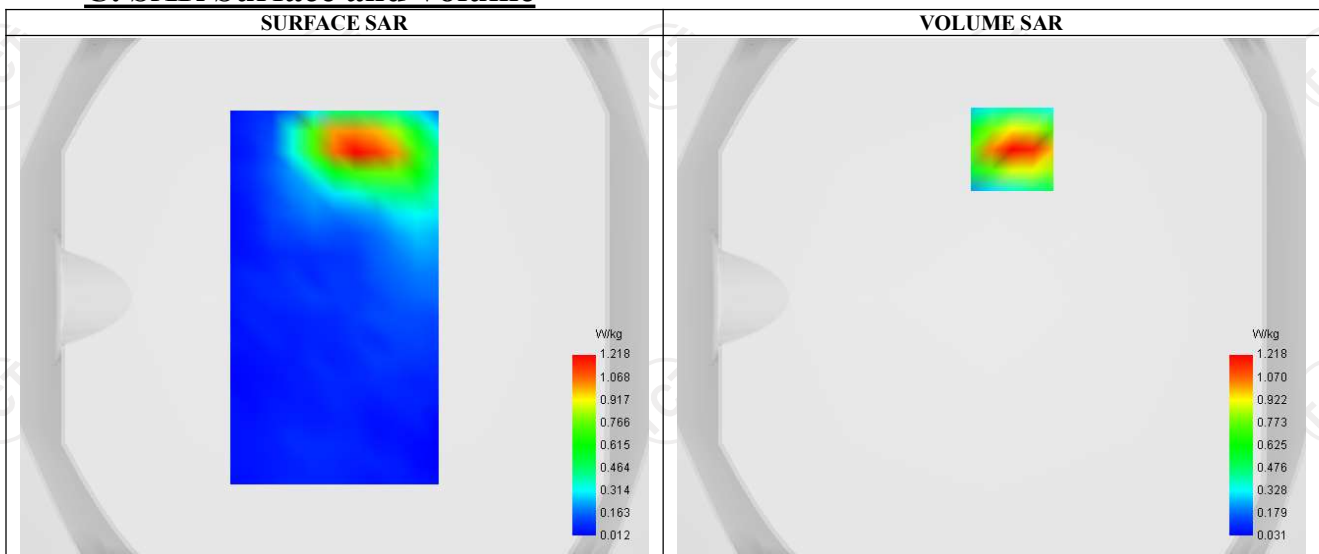
**A. Experimental conditions.**

Probe	SN 36/20 EPG0346
ConvF	2.32
Area Scan	surf sam plan.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 2
Channels	Higher (19100)
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	0
RB size	1

**B. Permittivity**

Frequency (MHz)	1891.090
Relative permittivity (real part)	52.232
Relative permittivity (imaginary part)	14.325
Conductivity (S/m)	1.580

**C. SAR Surface and Volume**



Maximum location: X=8.00, Y=57.00 ; SAR Peak: 1.92 W/kg

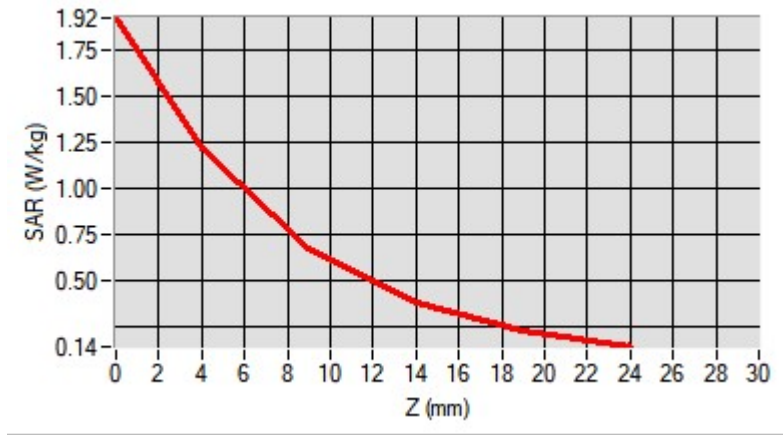
**D. SAR 1g & 10g**

SAR 10g (W/Kg)	0.609
SAR 1g (W/Kg)	1.135
Variation (%)	0.080
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

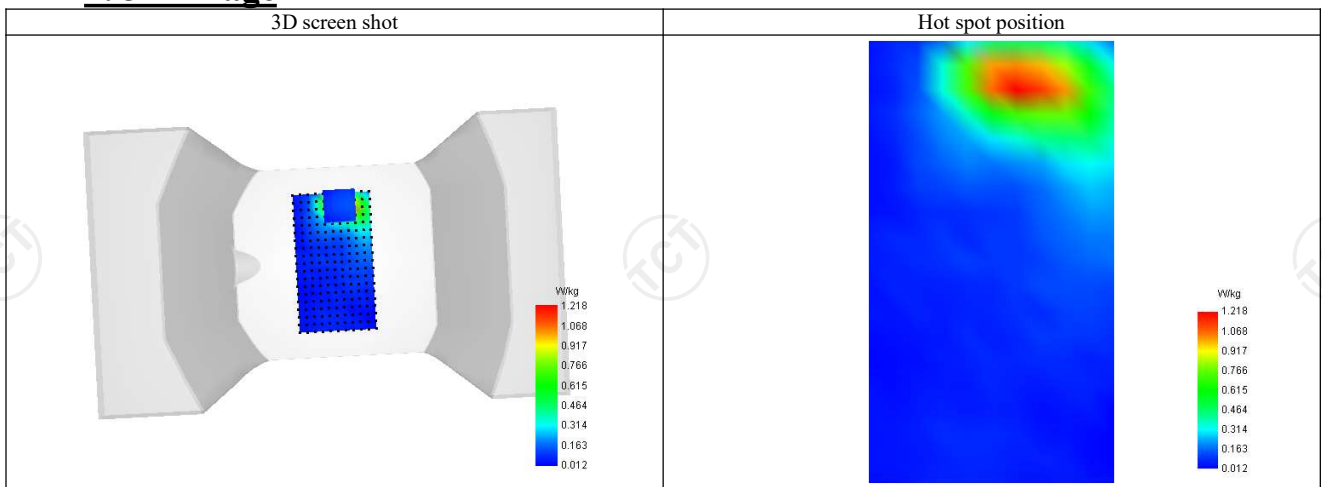
**E. Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.923	1.218	0.673	0.377	0.226





**F. 3D Image**





## SAR Measurement at LTE band 4 (Cheek, Right)

Date of measurement: 7/3/2023

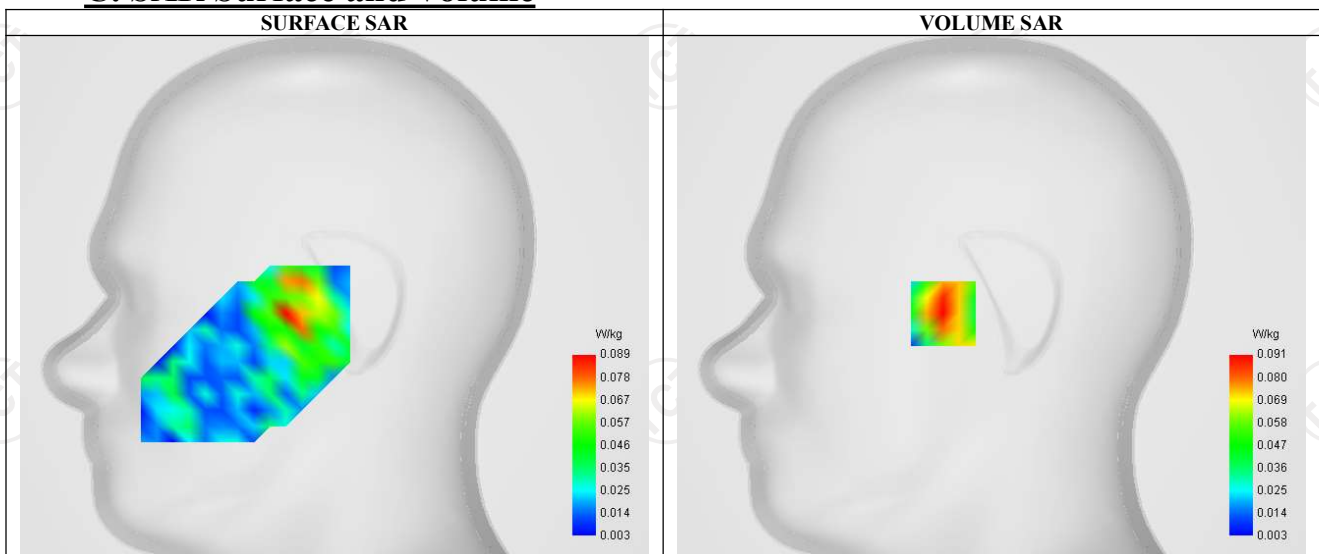
### A. Experimental conditions.

Probe	SN 36/20 EPG0346
ConvF	2.16
Area Scan	sam_direct droit2 surf8mm.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 4
Channels	Middle (20175)
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	49
RB size	1

### B. Permittivity

Frequency (MHz)	1732.410
Relative permittivity (real part)	53.317
Relative permittivity (imaginary part)	15.211
Conductivity (S/m)	1.512

### C. SAR Surface and Volume



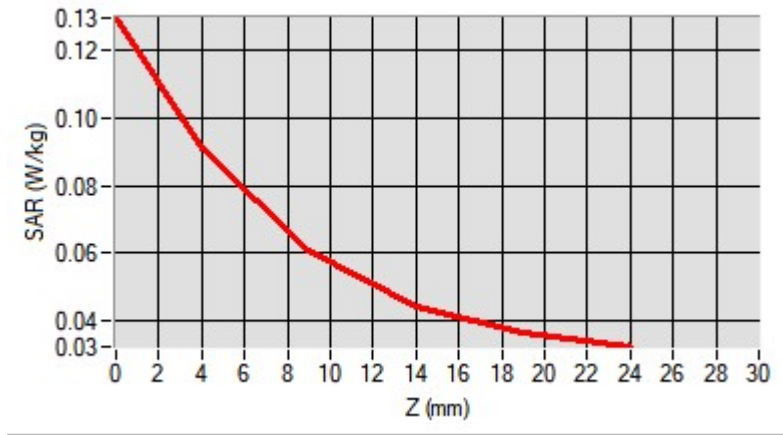
Maximum location: X=-24.00, Y=-8.00 ; SAR Peak: 0.16 W/kg

### D. SAR 1g & 10g

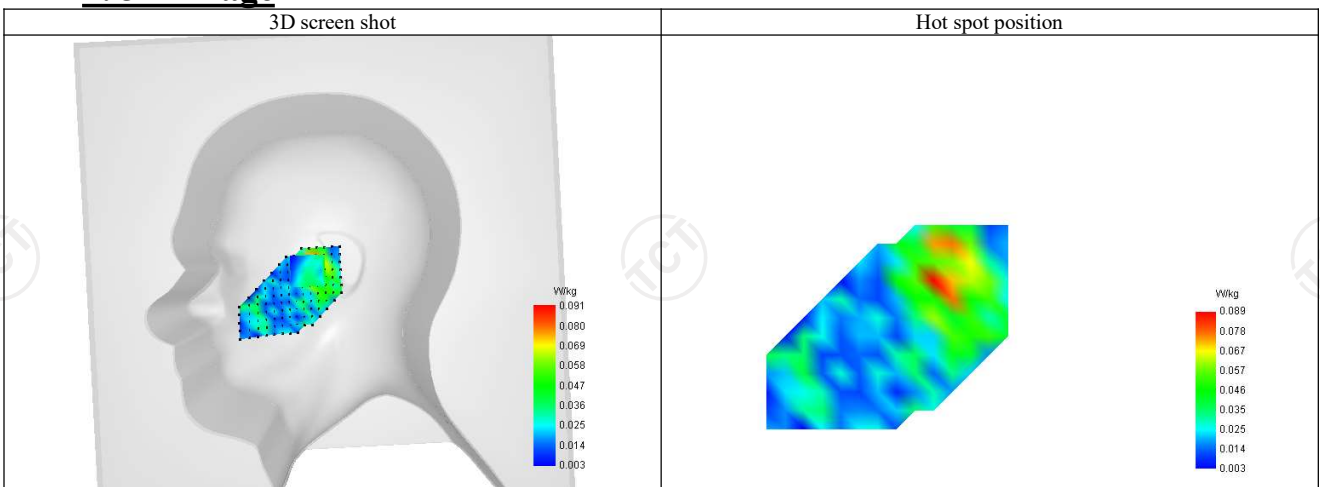
SAR 10g (W/Kg)	0.056
SAR 1g (W/Kg)	0.089
Variation (%)	-1.330
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

### E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.130	0.091	0.061	0.044	0.036



**F. 3D Image**



**SAR Measurement at LTE band 4 (Body, Validation Plane)**

Date of measurement: 7/3/2023

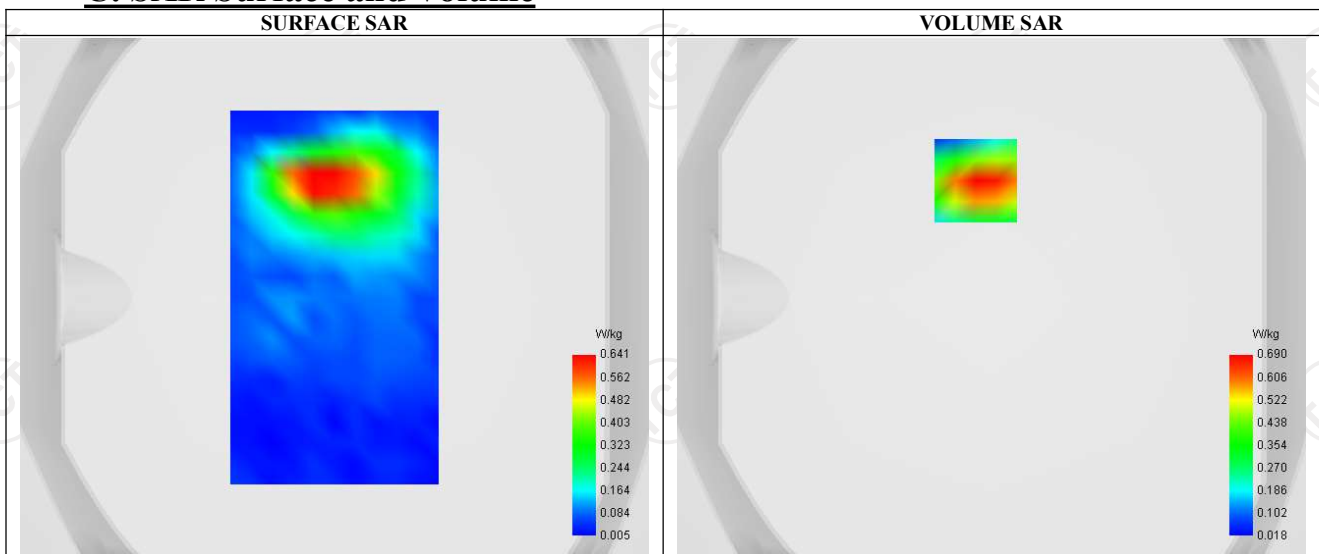
**A. Experimental conditions.**

Probe	SN 36/20 EPG0346
ConvF	2.16
Area Scan	surf sam plan.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 4
Channels	Middle (20175)
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	49
RB size	1

**B. Permittivity**

Frequency (MHz)	1732.410
Relative permittivity (real part)	53.317
Relative permittivity (imaginary part)	15.211
Conductivity (S/m)	1.512

**C. SAR Surface and Volume**

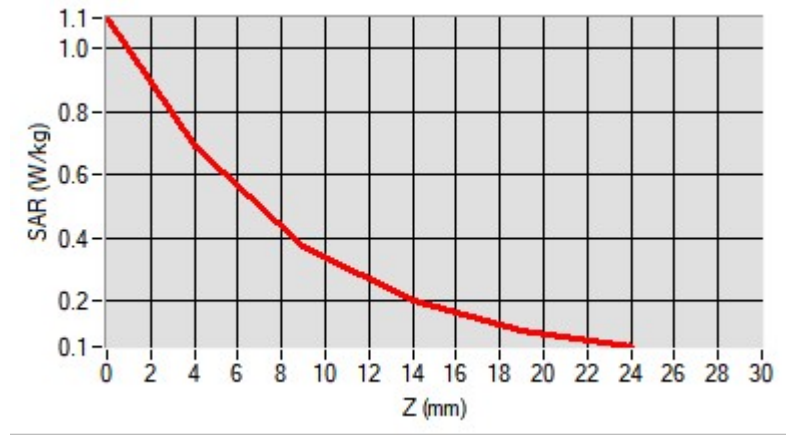


**D. SAR 1g & 10g**

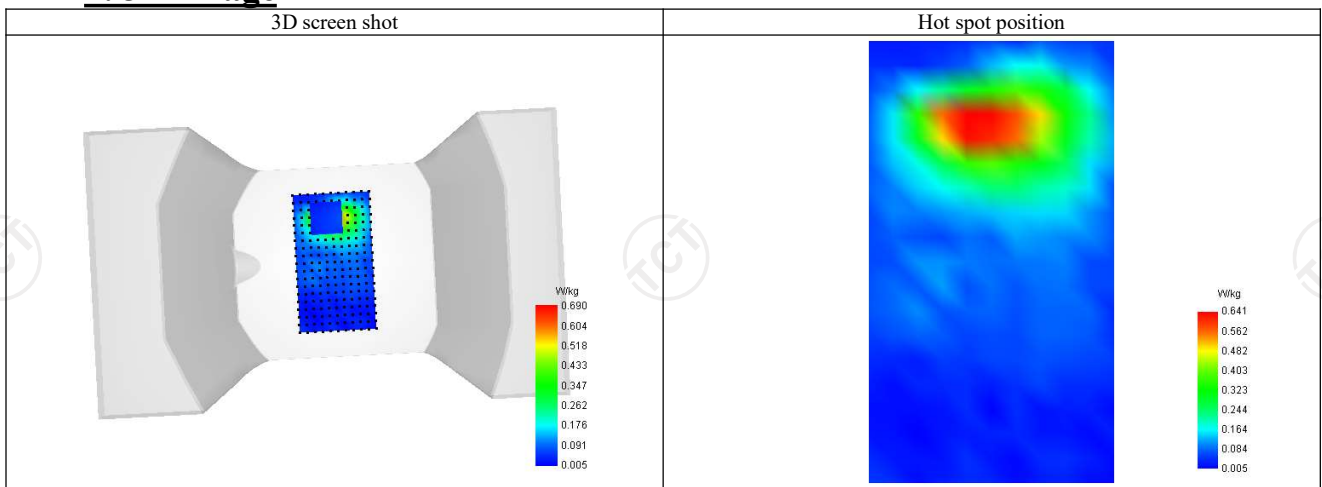
SAR 10g (W/Kg)	0.342
SAR 1g (W/Kg)	0.650
Variation (%)	-2.950
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

**E. Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.095	0.690	0.373	0.198	0.107



**F. 3D Image**



**SAR Measurement at LTE band 5 (Cheek, Right)**

Date of measurement: 6/3/2023

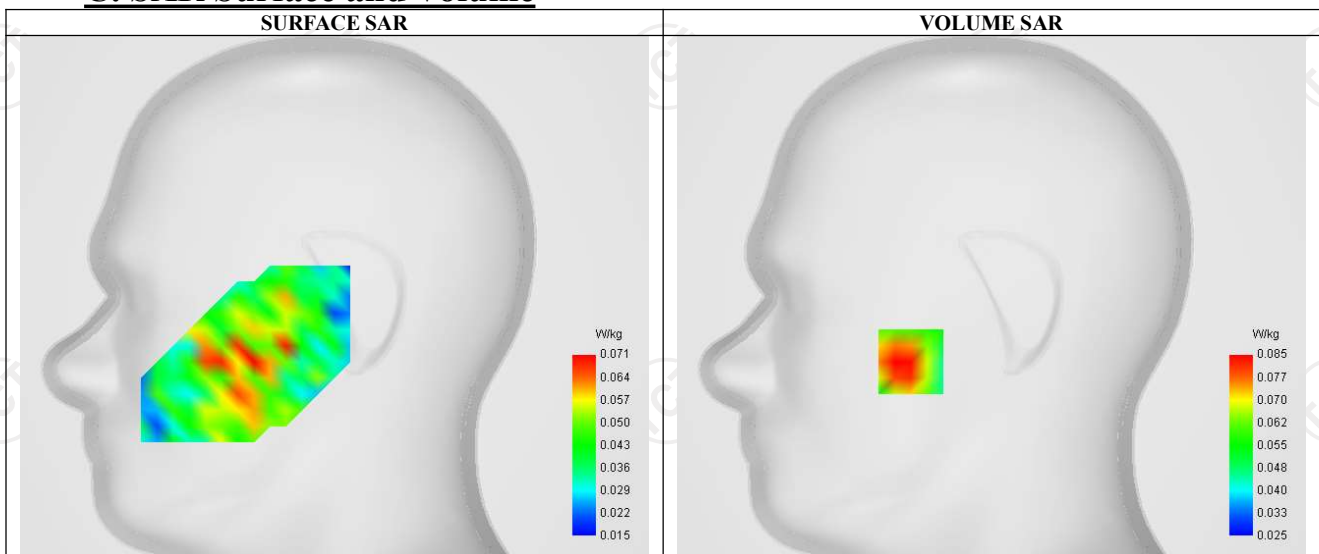
**A. Experimental conditions.**

Probe	SN 36/20 EPG0346
ConvF	1.86
Area Scan	sam_direct droit2 surf8mm.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 5
Channels	Lower (20450)
Signal	LTE FDD
Cell Bandwidth	10 Mhz
Modulation	SC-OFDM - QPSK
RB offset	0
RB size	1

**B. Permittivity**

Frequency (MHz)	824.590
Relative permittivity (real part)	55.262
Relative permittivity (imaginary part)	21.372
Conductivity (S/m)	0.931

**C. SAR Surface and Volume**



Maximum location: X=-40.00, Y=-32.00 ; SAR Peak: 0.12 W/kg

**D. SAR 1g & 10g**

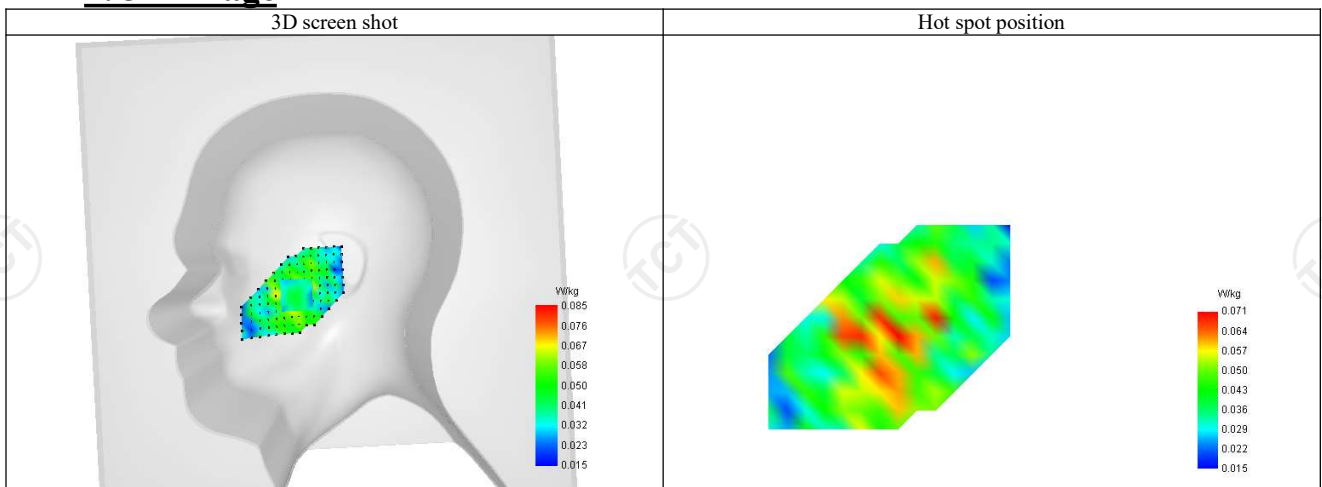
SAR 10g (W/Kg)	0.062
SAR 1g (W/Kg)	0.083
Variation (%)	2.170
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

**E. Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.096	0.085	0.061	0.047	0.046



**F. 3D Image**



**SAR Measurement at LTE band 5 (Body, Validation Plane)**

Date of measurement: 6/3/2023

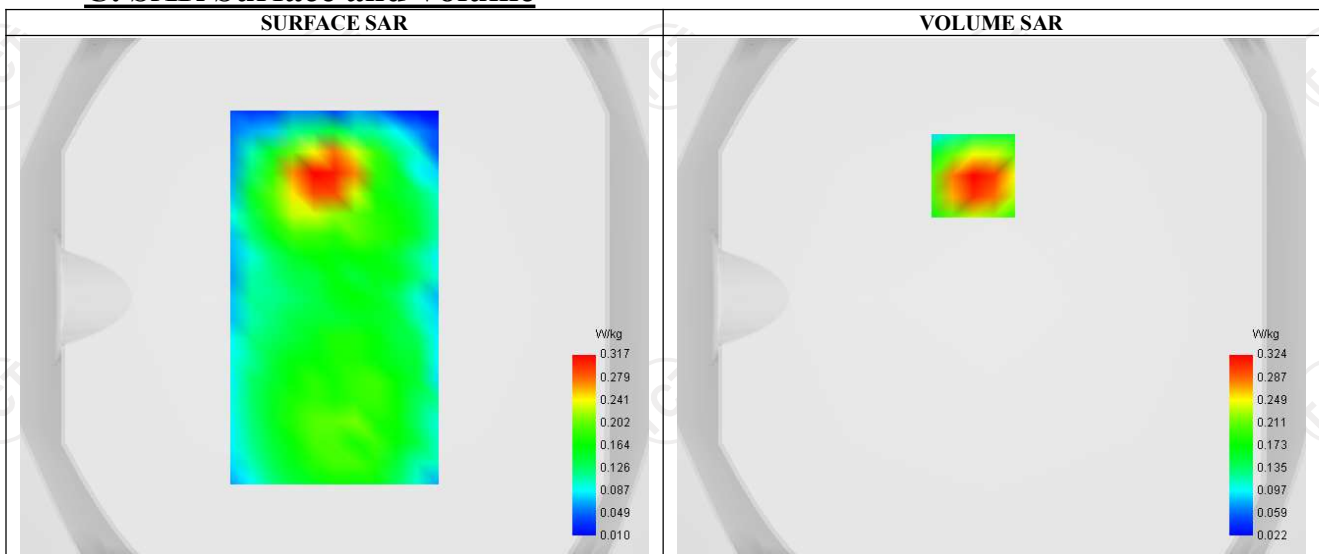
**A. Experimental conditions.**

Probe	SN 36/20 EPG0346
ConvF	1.86
Area Scan	surf_sam_plan.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 5
Channels	Lower (20450)
Signal	LTE FDD
Cell Bandwidth	10 Mhz
Modulation	SC-OFDM - QPSK
RB offset	0
RB size	1

**B. Permittivity**

Frequency (MHz)	824.590
Relative permittivity (real part)	55.262
Relative permittivity (imaginary part)	21.372
Conductivity (S/m)	0.931

**C. SAR Surface and Volume**



Maximum location: X=-7.00, Y=47.00 ; SAR Peak: 0.53 W/kg

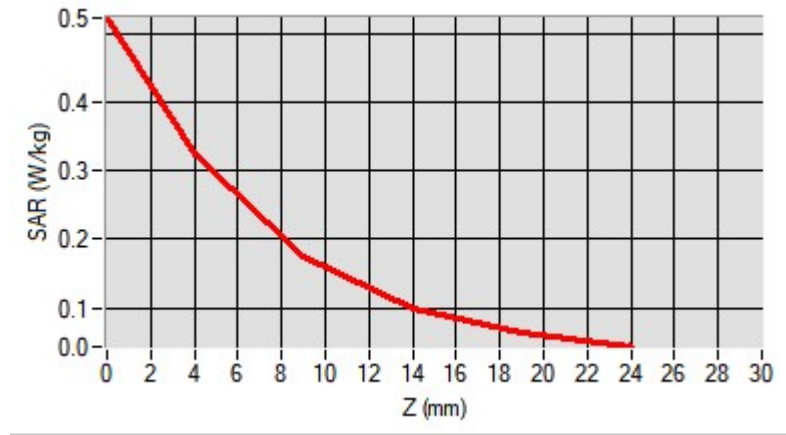
**D. SAR 1g & 10g**

SAR 10g (W/Kg)	0.174
SAR 1g (W/Kg)	0.311
Variation (%)	-1.760
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

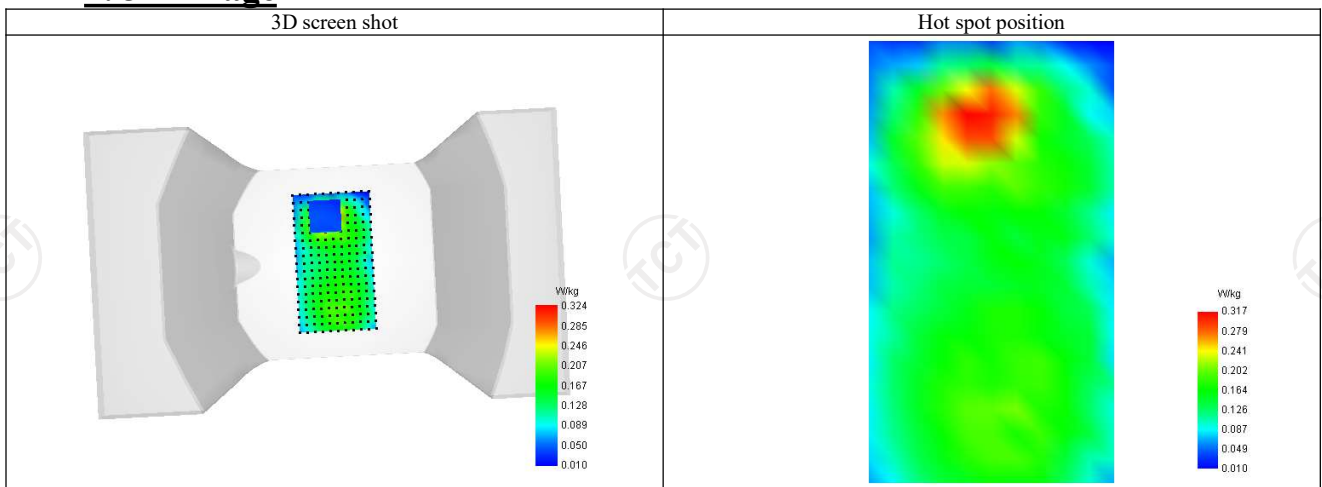
**E. Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.523	0.324	0.176	0.100	0.064





**F. 3D Image**



**SAR Measurement at LTE band 7 (Cheek, Left)**

Date of measurement: 08/03/2023

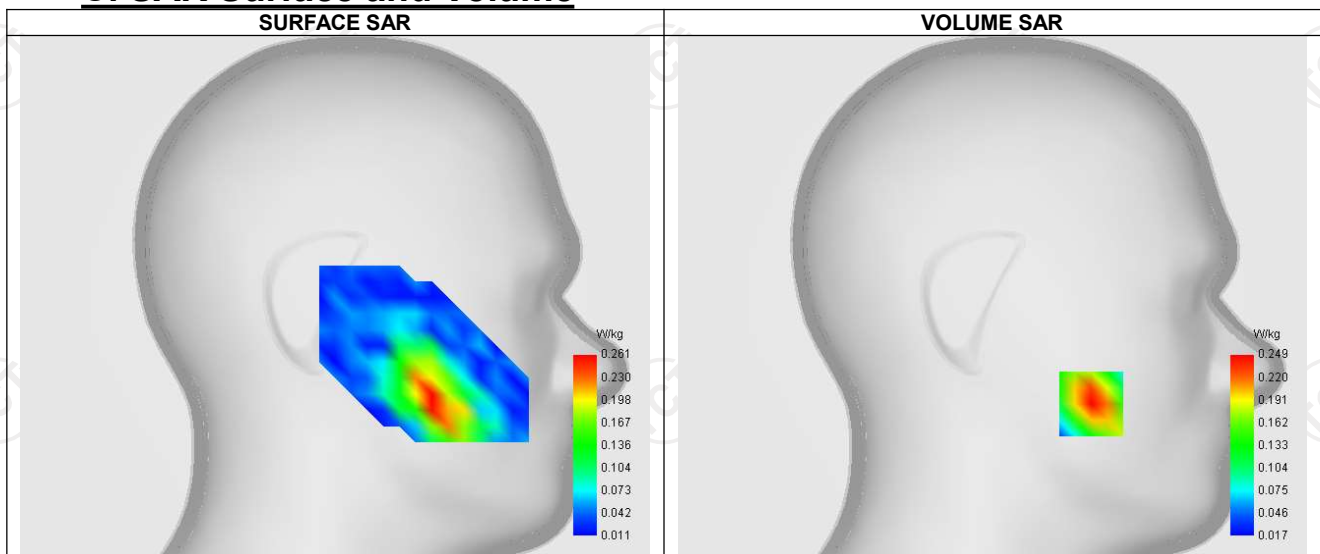
**A. Experimental conditions.**

Probe	SN 36/20 EPGO346
ConvF	2.23
Area Scan	sam_direct_droit2_surf8mm.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Left head
Device Position	Cheek
Band	LTE band 7
Channels	Middle (21100)
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	0
RB size	1

**B. Permittivity**

Frequency (MHz)	2526.090
Relative permittivity (real part)	51.854
Relative permittivity (imaginary part)	14.942
Conductivity (S/m)	2.121

**C. SAR Surface and Volume**



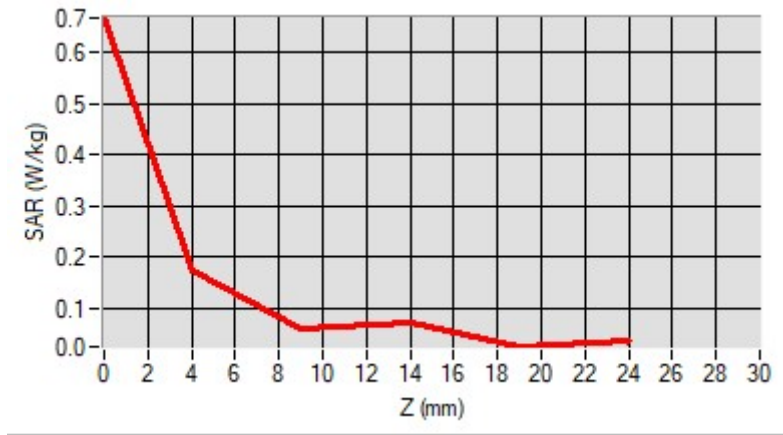
Maximum location: X=-49.00, Y=-53.00 ; SAR Peak: 0.38 W/kg

**D. SAR 1g & 10g**

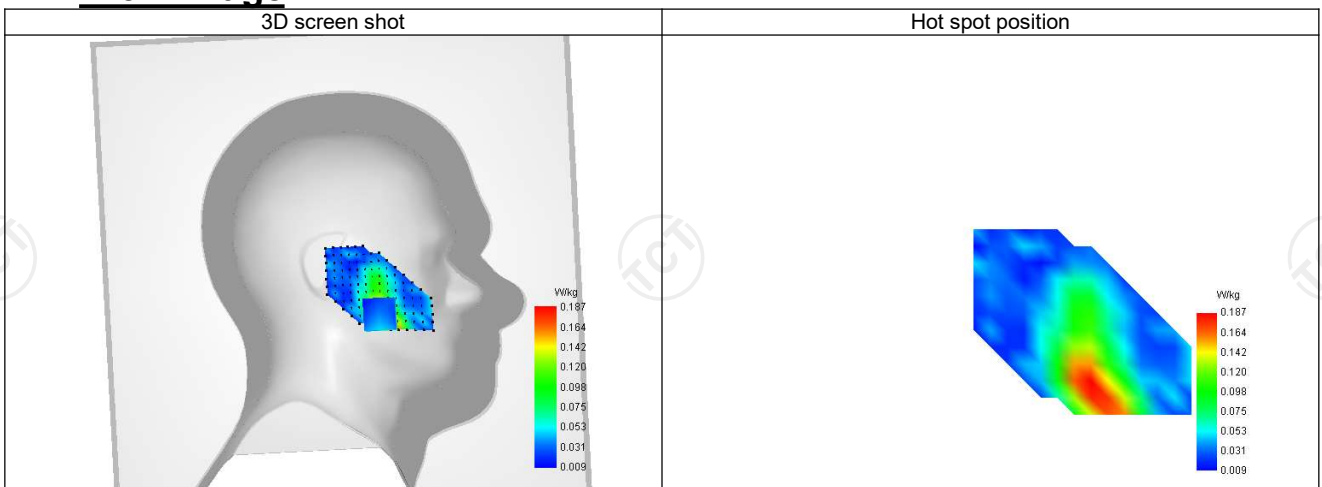
SAR 10g (W/Kg)	0.103
SAR 1g (W/Kg)	0.123
Variation (%)	-2.000
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

**E. Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.668	0.173	0.060	0.071	0.024



**F. 3D Image**



**SAR Measurement at LTE band 7 (Body, Validation Plane)**

Date of measurement: 8/3/2023

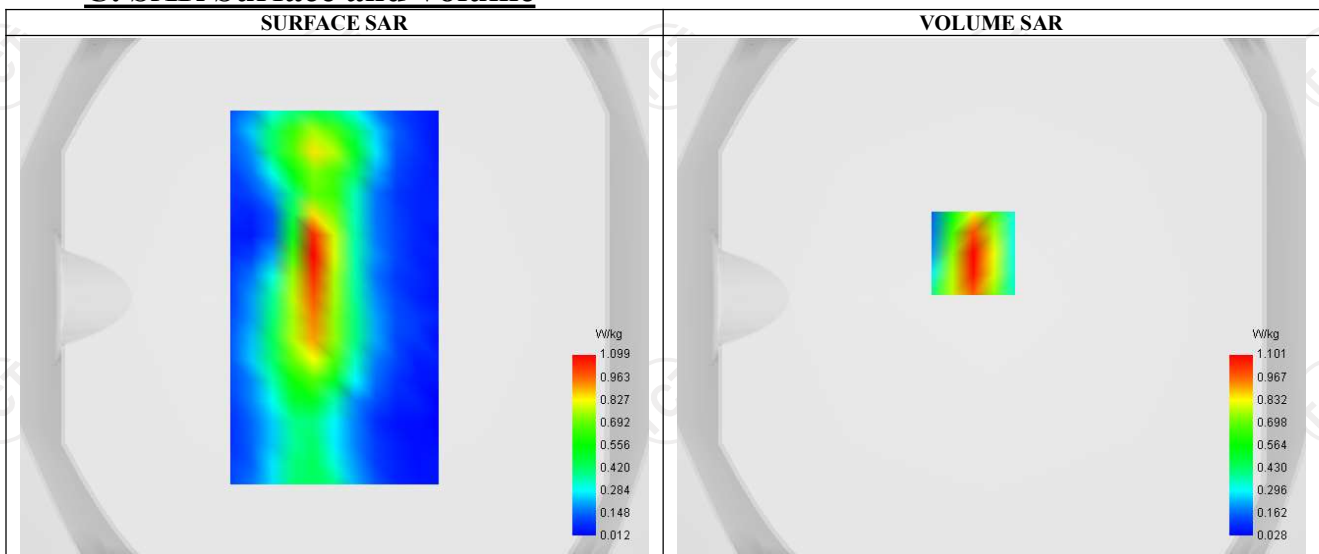
**A. Experimental conditions.**

Probe	SN 36/20 EPG0346
ConvF	2.23
Area Scan	surf_sam_plan.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 7
Channels	Middle (21100)
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	0
RB size	1

**B. Permittivity**

Frequency (MHz)	2526.090
Relative permittivity (real part)	51.854
Relative permittivity (imaginary part)	14.942
Conductivity (S/m)	2.121

**C. SAR Surface and Volume**

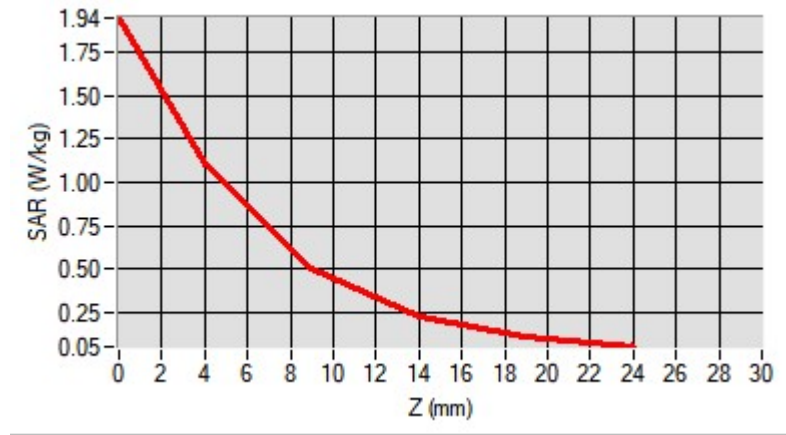


**D. SAR 1g & 10g**

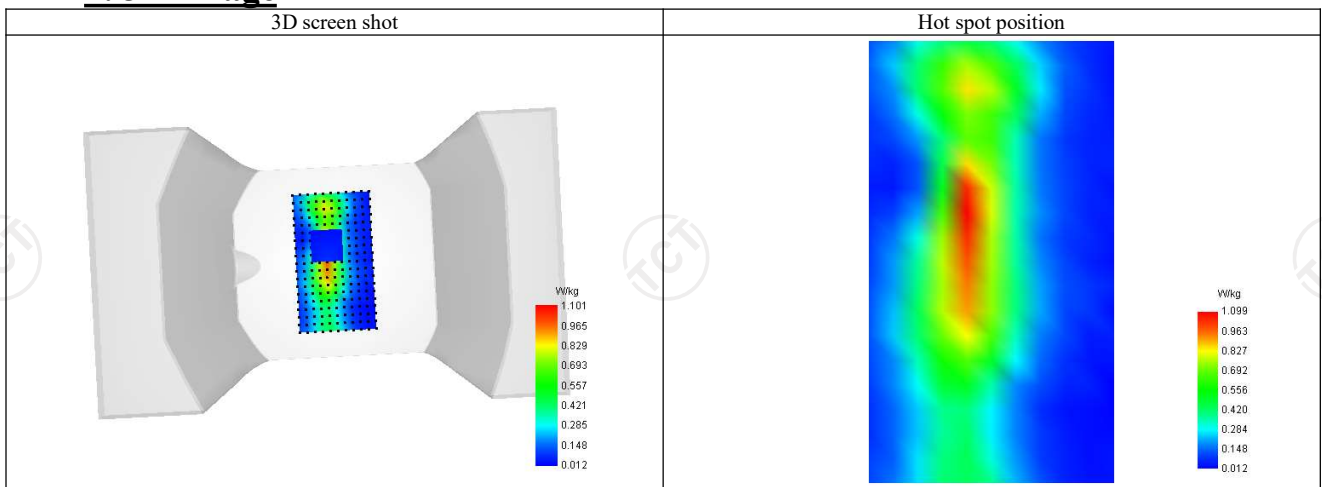
SAR 10g (W/Kg)	0.498
SAR 1g (W/Kg)	1.027
Variation (%)	-1.400
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

**E. Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.944	1.101	0.506	0.228	0.110



**F. 3D Image**



## SAR Measurement at LTE band 12 (Cheek, Right)

Date of measurement: 6/3/2023

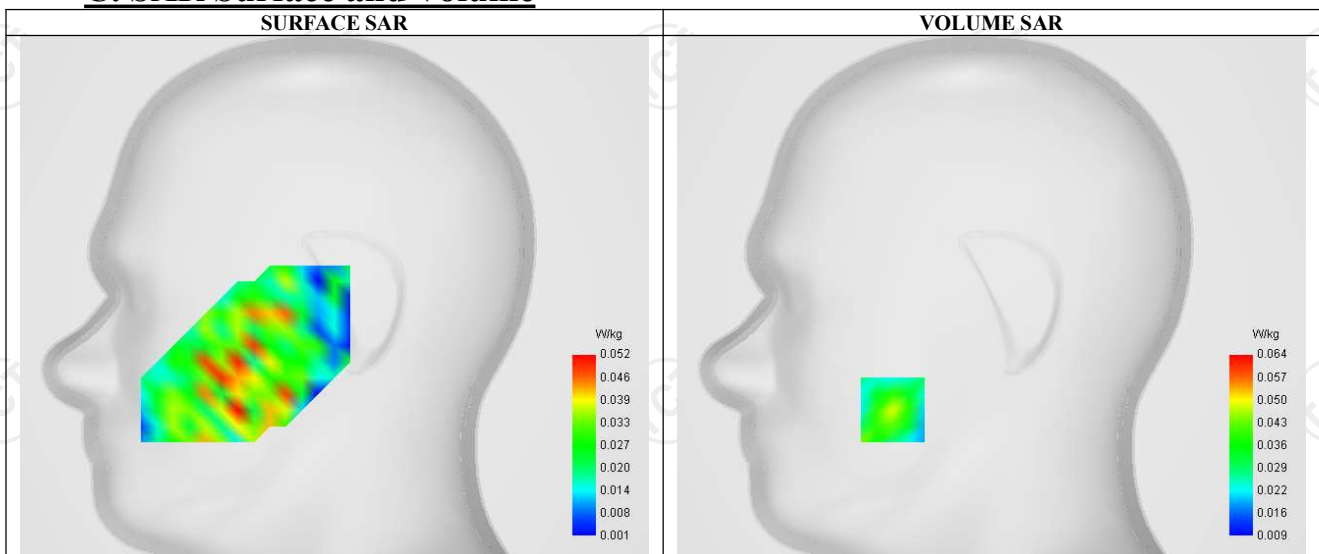
### A. Experimental conditions.

Probe	SN 36/20 EPG0346
ConvF	1.78
Area Scan	sam_direct droit2 surf8mm.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 12
Channels	Higher (23130)
Signal	LTE FDD
Cell Bandwidth	10 Mhz
Modulation	SC-OFDM - QPSK
RB offset	0
RB size	1

### B. Permittivity

Frequency (MHz)	706.590
Relative permittivity (real part)	56.213
Relative permittivity (imaginary part)	20.152
Conductivity (S/m)	0.911

### C. SAR Surface and Volume



Maximum location: X=-49.00, Y=-56.00 ; SAR Peak: 0.09 W/kg

### D. SAR 1g & 10g

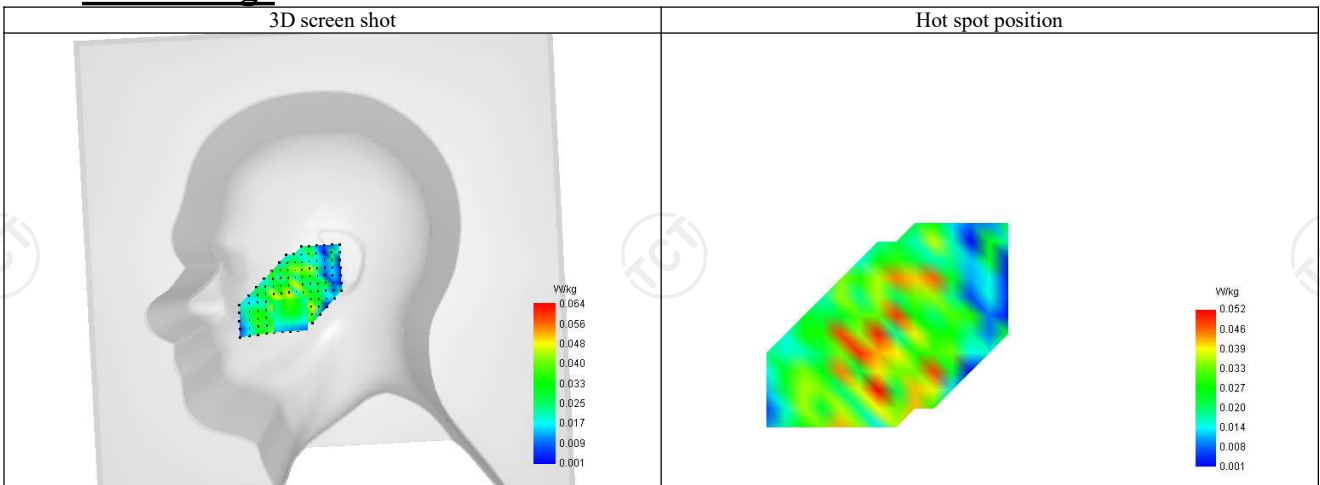
SAR 10g (W/Kg)	0.045
SAR 1g (W/Kg)	0.049
Variation (%)	-3.340
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

### E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.049	0.049	0.047	0.042	0.037



**F. 3D Image**





**SAR Measurement at LTE band 12 (Body, Validation Plane)**

Date of measurement: 6/3/2023

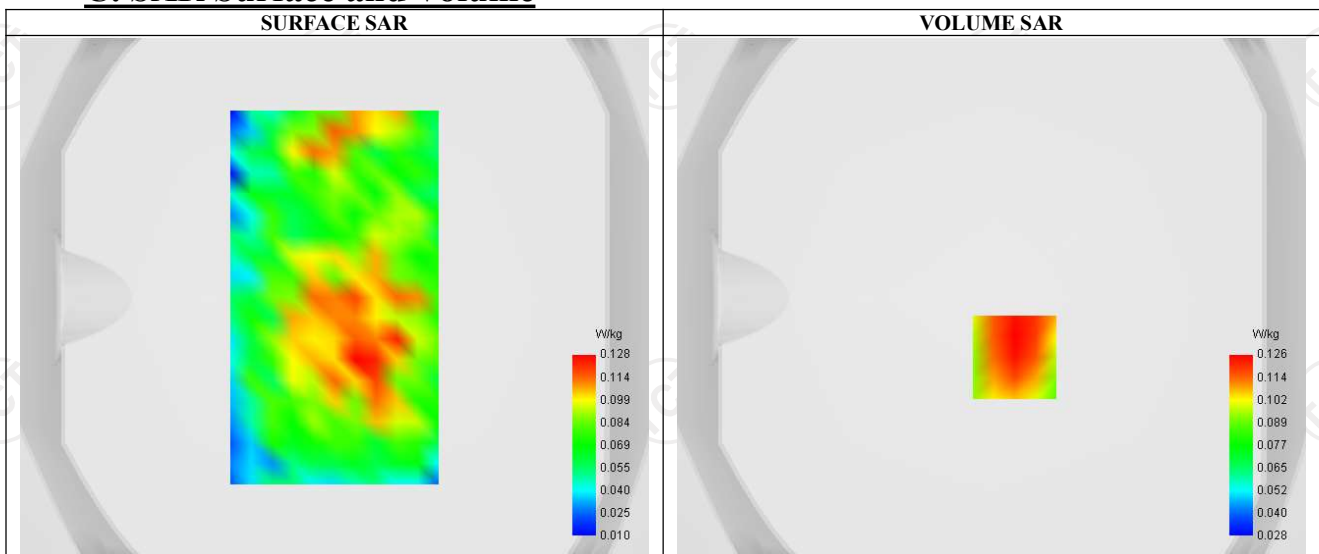
**A. Experimental conditions.**

Probe	SN 36/20 EPG0346
ConvF	1.78
Area Scan	surf_sam_plan.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 12
Channels	Higher (23130)
Signal	LTE FDD
Cell Bandwidth	10 Mhz
Modulation	SC-OFDM - QPSK
RB offset	0
RB size	1

**B. Permittivity**

Frequency (MHz)	706.590
Relative permittivity (real part)	56.213
Relative permittivity (imaginary part)	20.152
Conductivity (S/m)	0.911

**C. SAR Surface and Volume**



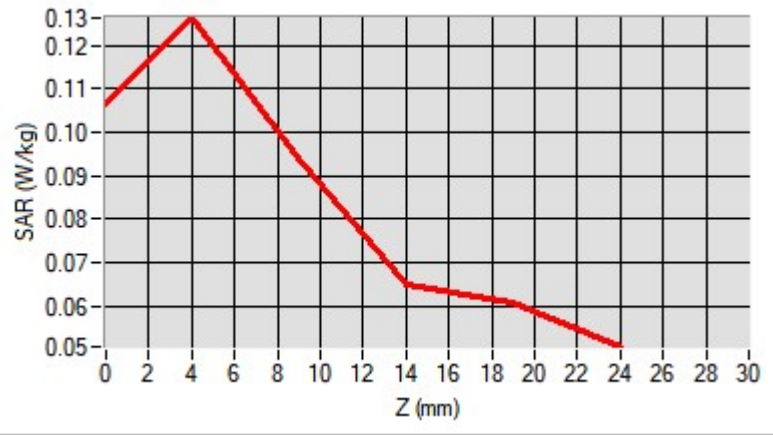
Maximum location: X=9.00, Y=-23.00 ; SAR Peak: 0.19 W/kg

**D. SAR 1g & 10g**

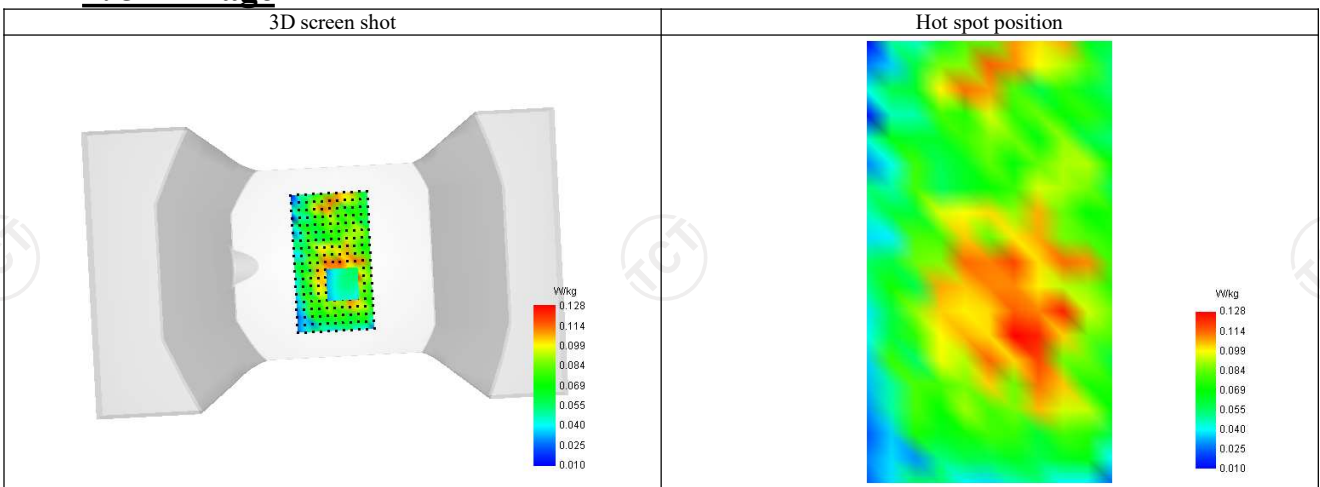
SAR 10g (W/Kg)	0.092
SAR 1g (W/Kg)	0.128
Variation (%)	1.880
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

**E. Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.107	0.126	0.094	0.065	0.061



**F. 3D Image**



**SAR Measurement at LTE band 17 (Cheek, Right)**

Date of measurement: 6/3/2023

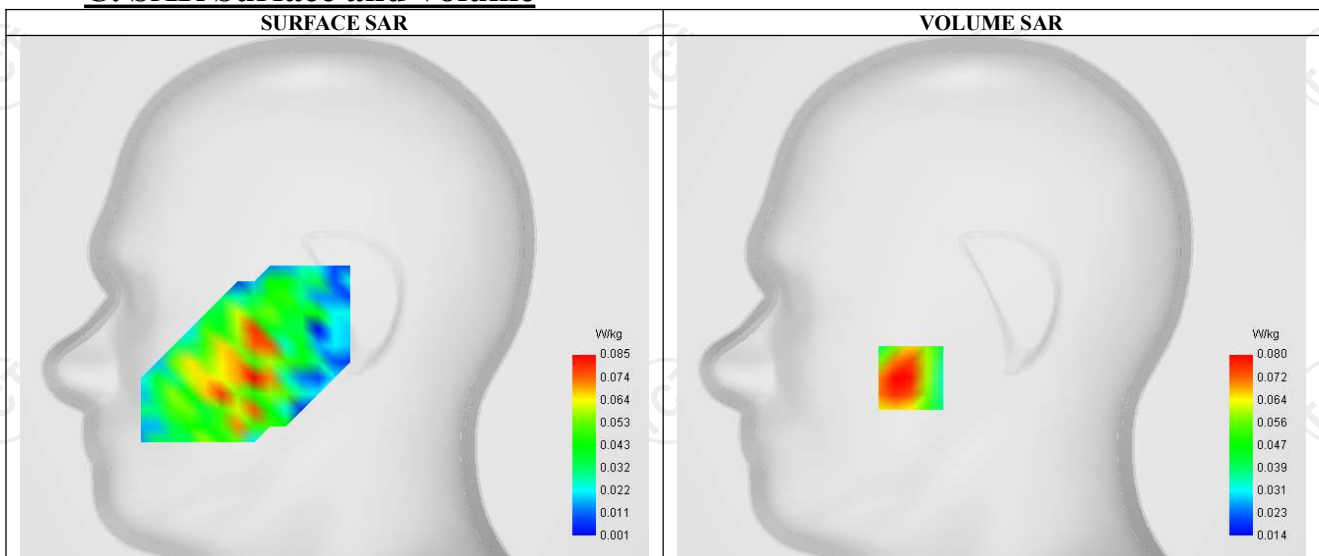
**A. Experimental conditions.**

Probe	SN 36/20 EPG0346
ConvF	1.78
Area Scan	sam_direct droit2 surf8mm.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Right head
Device Position	Cheek
Band	LTE band 17
Channels	Higher (23800)
Signal	LTE FDD
Cell Bandwidth	10 Mhz
Modulation	SC-OFDM - QPSK
RB offset	0
RB size	1

**B. Permittivity**

Frequency (MHz)	706.590
Relative permittivity (real part)	56.213
Relative permittivity (imaginary part)	20.152
Conductivity (S/m)	0.911

**C. SAR Surface and Volume**



Maximum location: X=-40.00, Y=-40.00 ; SAR Peak: 0.10 W/kg

**D. SAR 1g & 10g**

SAR 10g (W/Kg)	0.062
SAR 1g (W/Kg)	0.081
Variation (%)	1.020
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

**E. Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.169	0.080	0.059	0.059	0.045