

LTE2500-TDD41_CH39750 Left Cheek_PC2

Date: 9/26/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2549.5$ MHz; $\sigma = 1.935$ mho/m; $\epsilon_r = 41.002$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-TDD41 2549.5 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.059 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.78 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.0460 W/kg

SAR(1 g) = 0.016 W/kg; SAR(10 g) = 0.006 W/kg

Maximum value of SAR (measured) = 0.04 W/kg

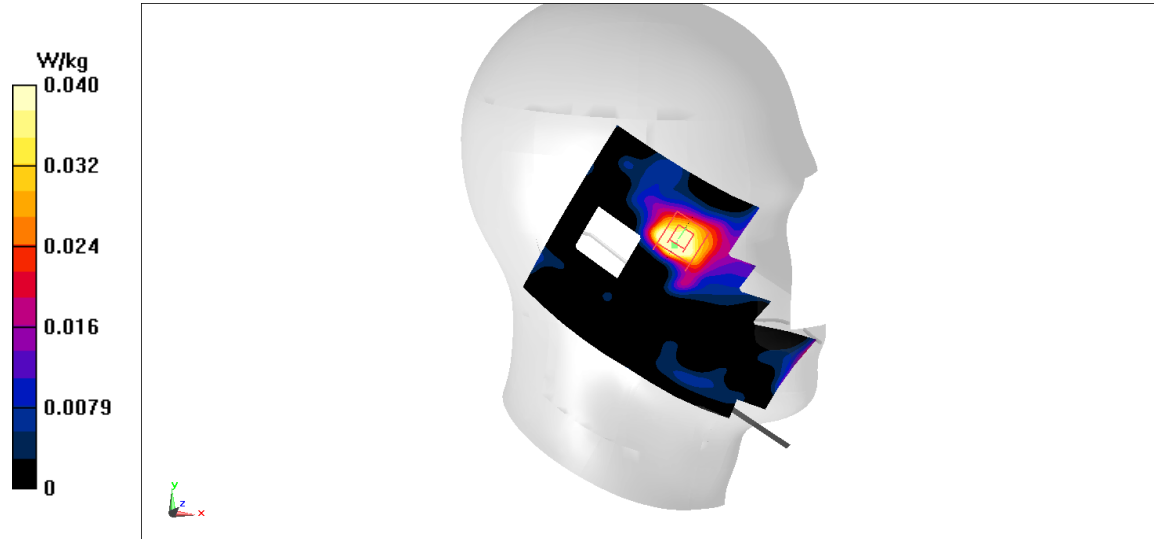


Fig A.33

LTE2500-TDD41_CH40185 Rear 10mm_PC2

Date: 9/26/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2550$ MHz; $\sigma = 1.935$ mho/m; $\epsilon_r = 41.002$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-TDD41 2549.5 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.567 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.912 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.789 W/kg

SAR(1 g) = 0.376 W/kg; SAR(10 g) = 0.167 W/kg

Maximum value of SAR (measured) = 0.607 W/kg

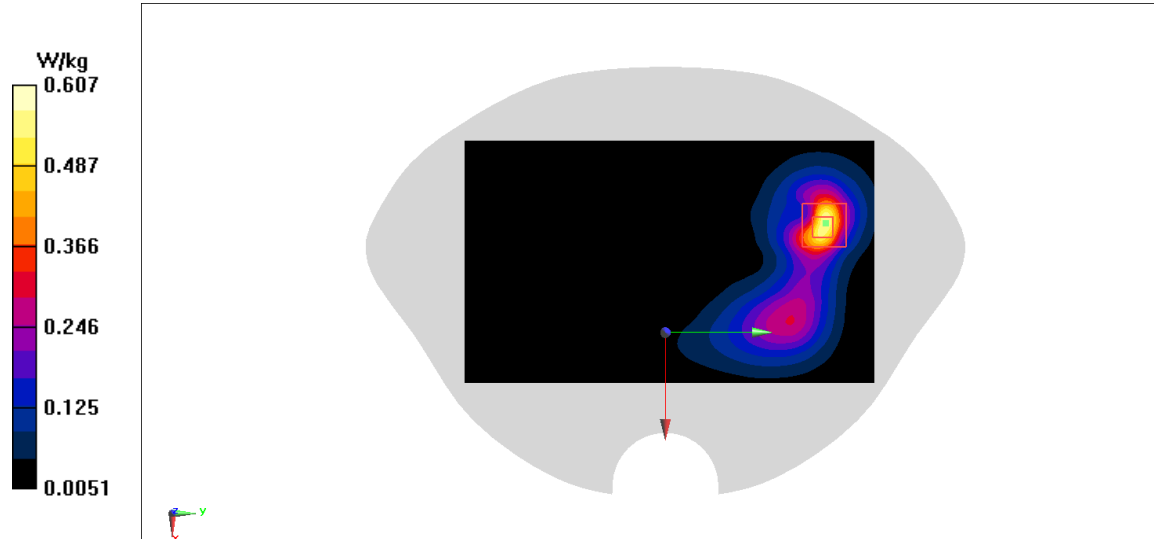


Fig A.34

LTE1700-FDD66_CH132322 Left Cheek

Date: 9/24/2020

Electronics: DAE4 Sn777

Medium: head 1750 MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.332$ mho/m; $\epsilon_r = 42.367$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.349 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 4.566 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.386 W/kg

SAR(1 g) = 0.246 W/kg; SAR(10 g) = 0.158 W/kg

Maximum value of SAR (measured) = 0.333 W/kg

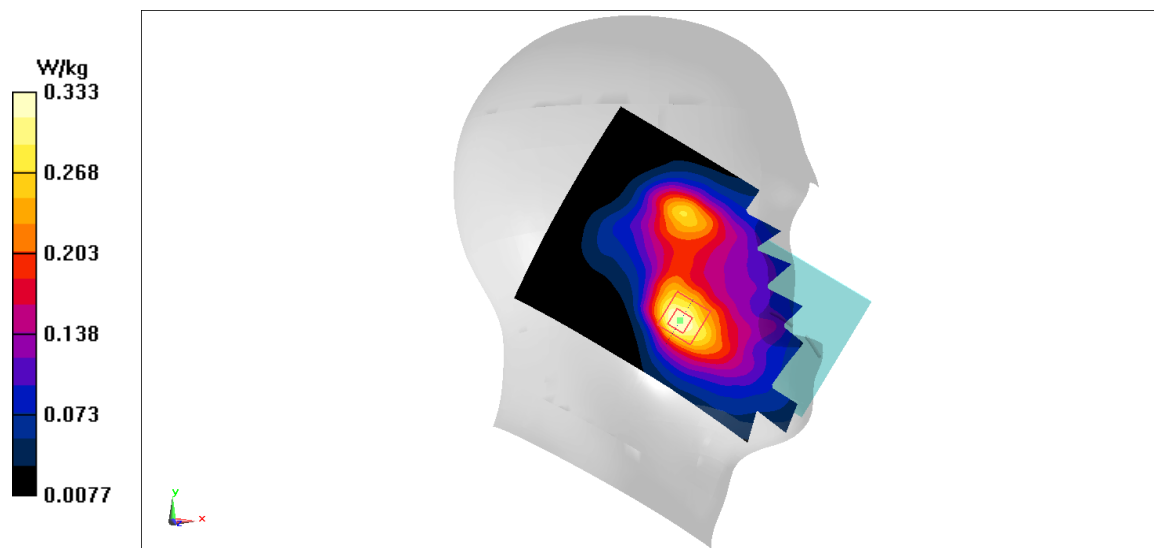


Fig A.35

LTE1700-FDD66_CH132322 Rear 15mm

Date: 9/24/2020

Electronics: DAE4 Sn777

Medium: head 1750 MHz

Medium parameters used: $f = 1745 \text{ MHz}$; $\sigma = 1.332 \text{ mho/m}$; $\epsilon_r = 42.367$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C , Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.531 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.3 V/m ; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.61 W/kg

SAR(1 g) = 0.388 W/kg ; SAR(10 g) = 0.254 W/kg

Maximum value of SAR (measured) = 0.529 W/kg

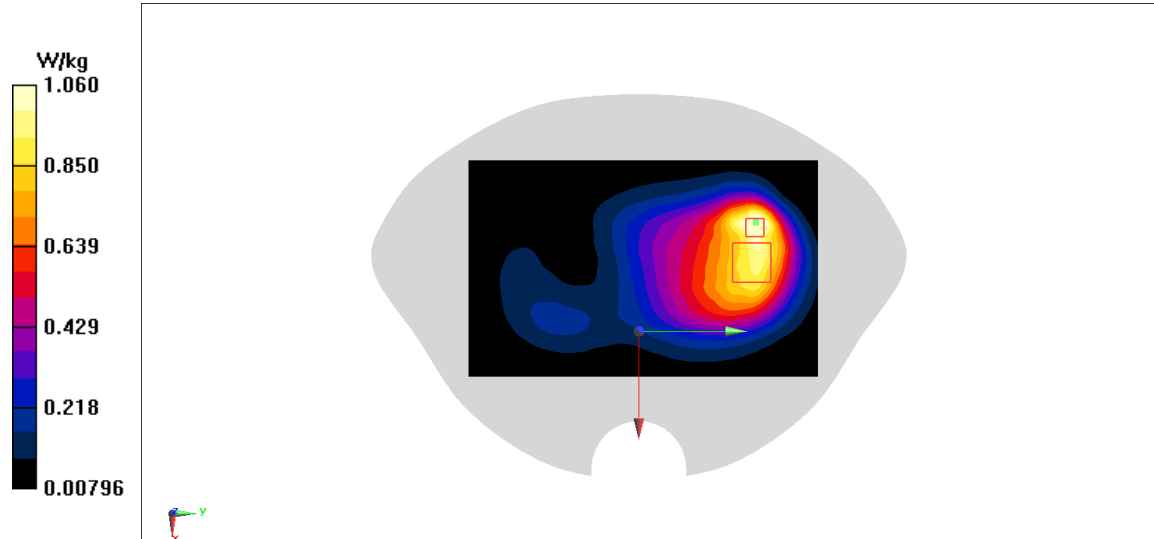


Fig A.36

LTE1700-FDD66_CH132572 Rear 10mm

Date: 9/24/2020

Electronics: DAE4 Sn777

Medium: head 1750 MHz

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 41.917$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1770 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.286 W/kg

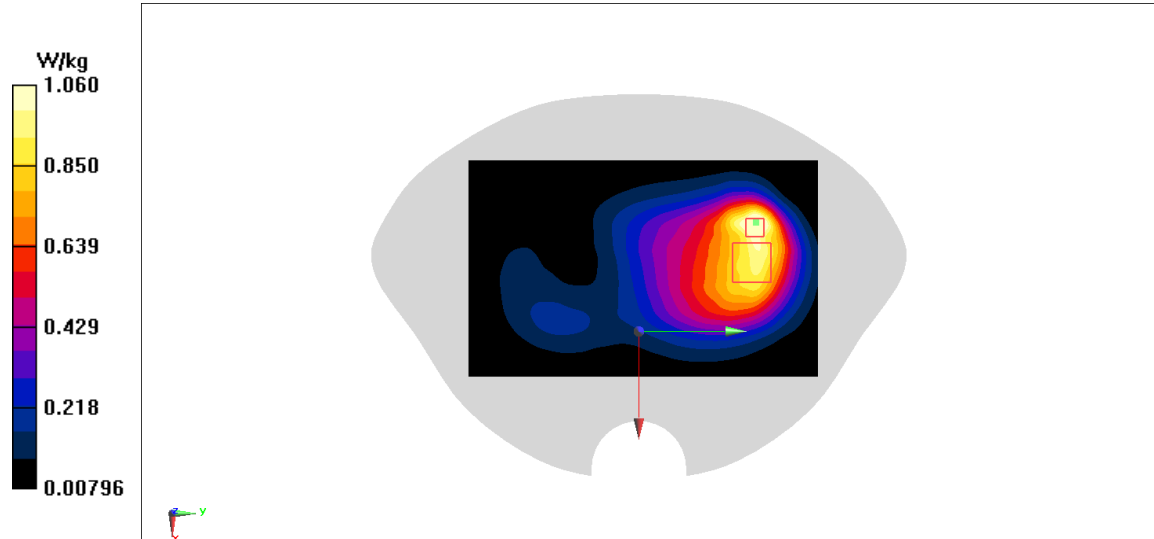
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.854 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 0.319 W/kg

SAR(1 g) = 0.713 W/kg; SAR(10 g) = 0.438 W/kg

Maximum value of SAR (measured) = 0.28 W/kg


Fig A.37

LTE700-FDD71_CH133222 Right Cheek

Date: 9/21/2020

Electronics: DAE4 Sn777

Medium: head 750 MHz

Medium parameters used: $f = 673 \text{ MHz}$; $\sigma = 0.798 \text{ mho/m}$; $\epsilon_r = 45.039$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C , Liquid Temperature: 22.3°C

Communication System: LTE700-FDD71 673 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.143 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.279 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.153 W/kg

SAR(1 g) = 0.122 W/kg ; SAR(10 g) = 0.098 W/kg

Maximum value of SAR (measured) = 0.142 W/kg

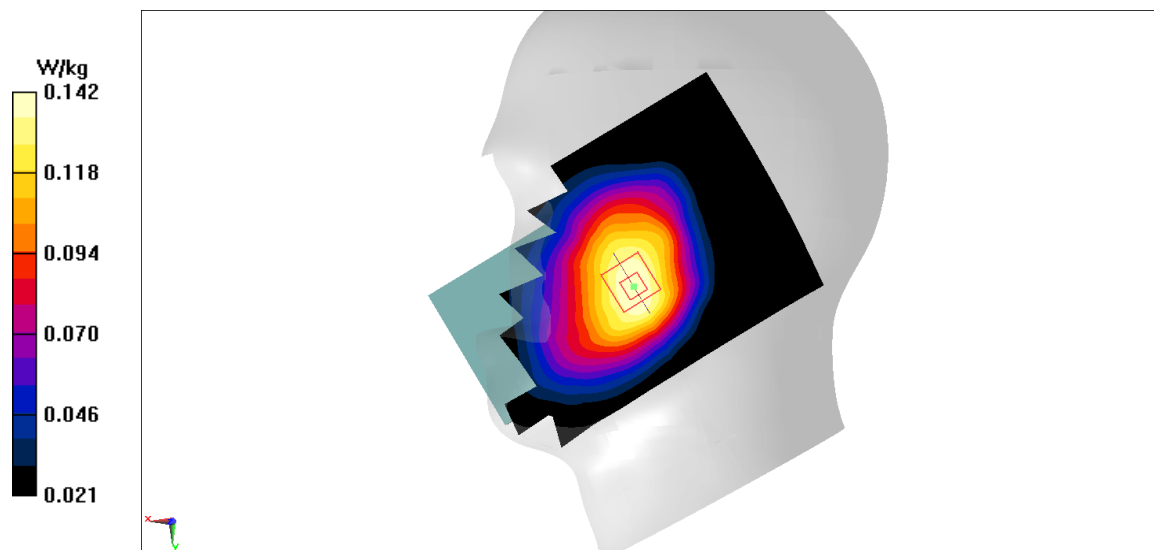


Fig A.38

LTE700-FDD71_CH133322 Right 10mm

Date: 9/21/2020

Electronics: DAE4 Sn777

Medium: head 750 MHz

Medium parameters used: $f = 2549.5$ MHz; $\sigma = 2.607$ mho/m; $\epsilon_r = 39.91$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE700-FDD71 2549.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.302 W/kg

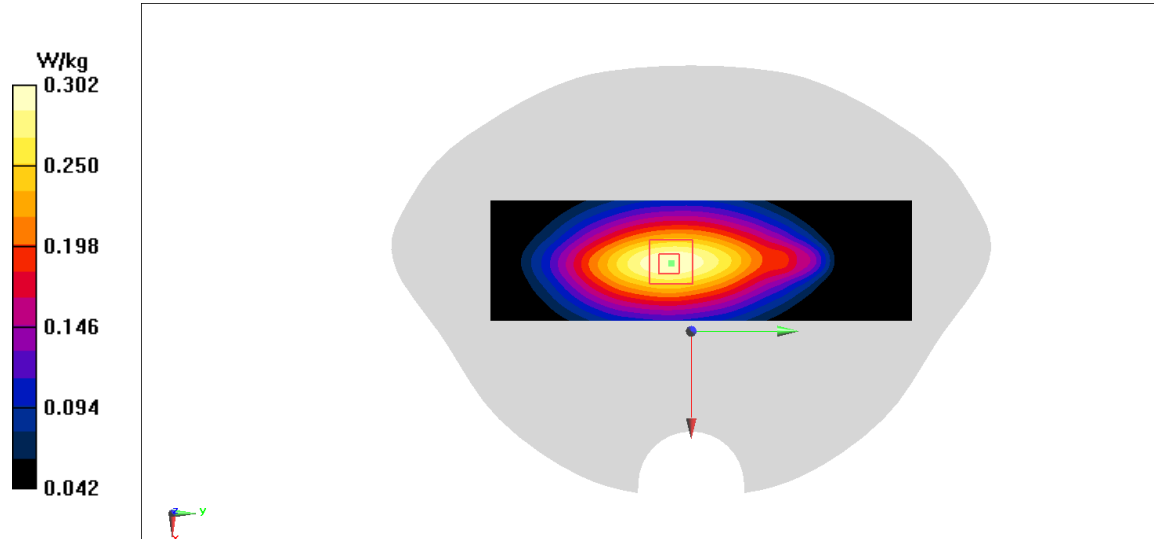
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 16.13 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.34 W/kg

SAR(1 g) = 0.233 W/kg; SAR(10 g) = 0.165 W/kg

Maximum value of SAR (measured) = 0.302 W/kg


Fig A.39

5G n2_CH376000 Left Cheek

Date: 9/27/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.394$ mho/m; $\epsilon_r = 39.79$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n2 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.373 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.807 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.4 W/kg

SAR(1 g) = 0.264 W/kg; SAR(10 g) = 0.171 W/kg

Maximum value of SAR (measured) = 0.343 W/kg

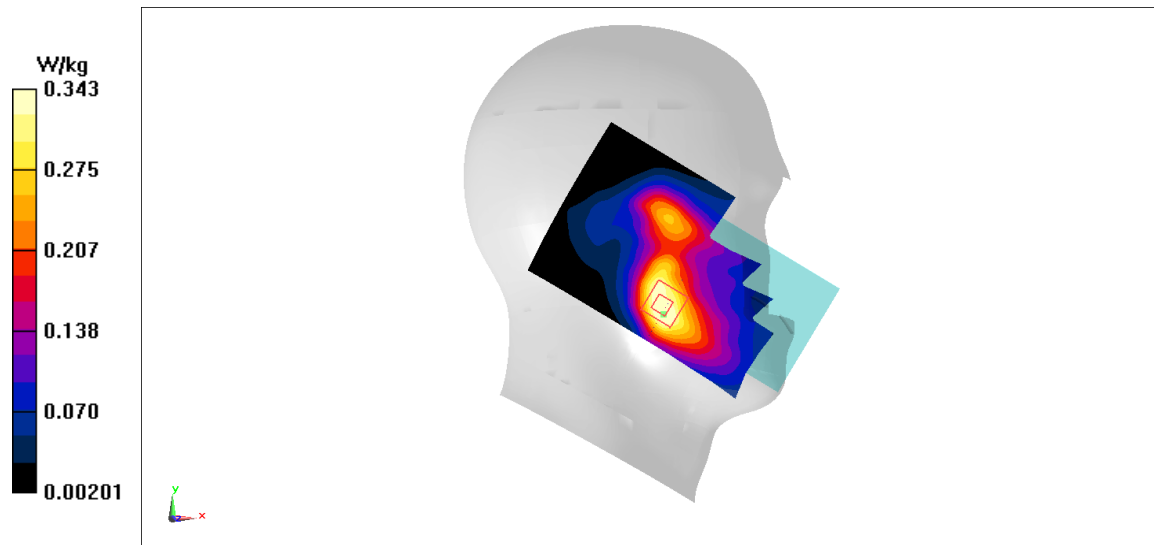


Fig A.40

5G n2_CH376000 Rear 15mm

Date: 9/27/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.394$ mho/m; $\epsilon_r = 39.79$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n2 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.734 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 15.31 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.838 W/kg

SAR(1 g) = 0.48 W/kg; SAR(10 g) = 0.284 W/kg

Maximum value of SAR (measured) = 0.704 W/kg

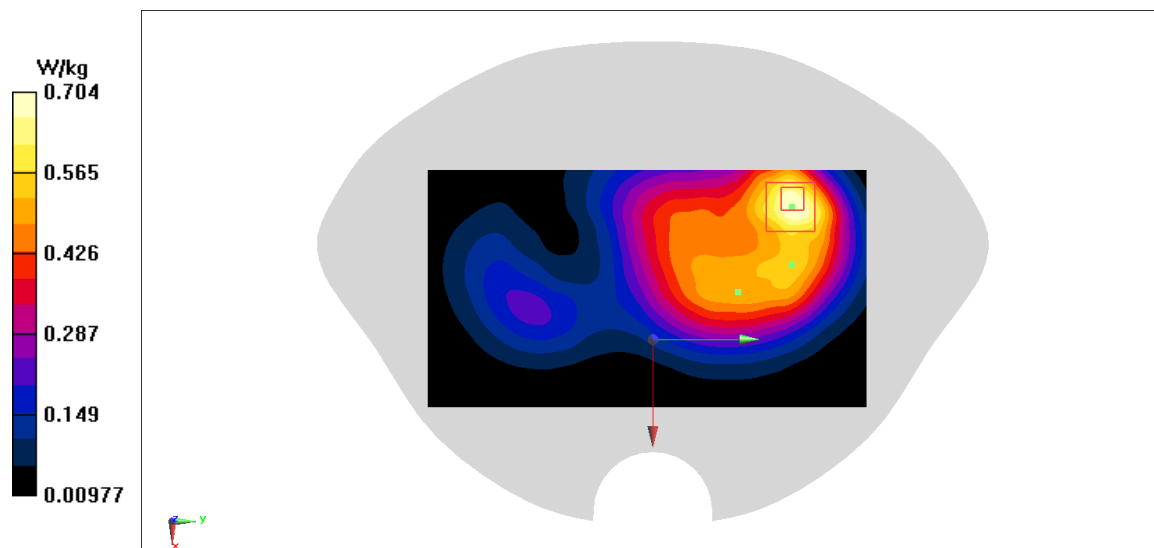


Fig A.41

5G n2_CH376000 Rear 10mm

Date: 9/27/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.394$ mho/m; $\epsilon_r = 39.79$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n2 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.733 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.73 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.819 W/kg

SAR(1 g) = 0.45 W/kg; SAR(10 g) = 0.255 W/kg

Maximum value of SAR (measured) = 0.678 W/kg

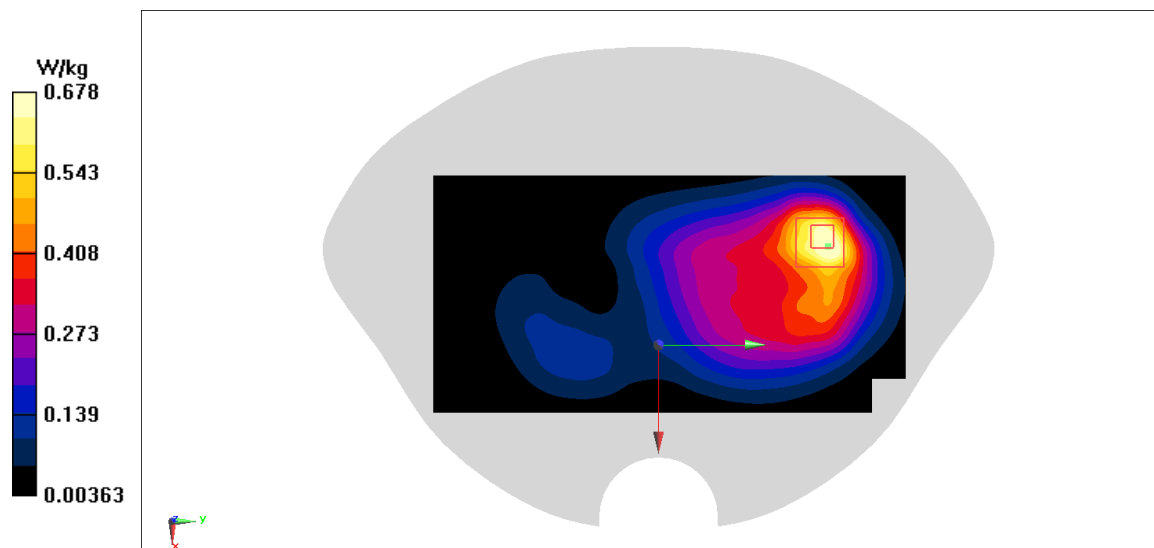


Fig A.42

5G n5_CH167300 Right Cheek

Date: 9/23/2020

Electronics: DAE4 Sn777

Medium: head 835 MHz

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.891$ mho/m; $\epsilon_r = 41.27$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n5 836.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.214 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.683 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.234 W/kg

SAR(1 g) = 0.18 W/kg; SAR(10 g) = 0.141 W/kg

Maximum value of SAR (measured) = 0.215 W/kg

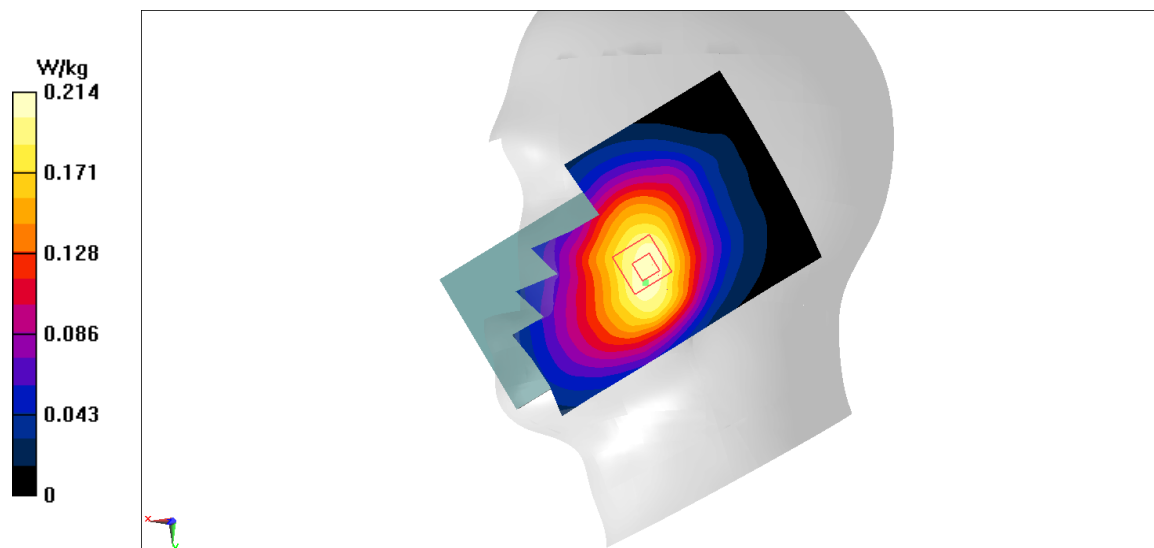


Fig A.43

5G n5_CH167300 Rear 10mm

Date: 9/23/2020

Electronics: DAE4 Sn777

Medium: head 835 MHz

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.891$ mho/m; $\epsilon_r = 41.27$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n5 836.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.382 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 15.17 V/m; Power Drift = 0 dB

Peak SAR (extrapolated) = 0.508 W/kg

SAR(1 g) = 0.27 W/kg; SAR(10 g) = 0.157 W/kg

Maximum value of SAR (measured) = 0.411 W/kg

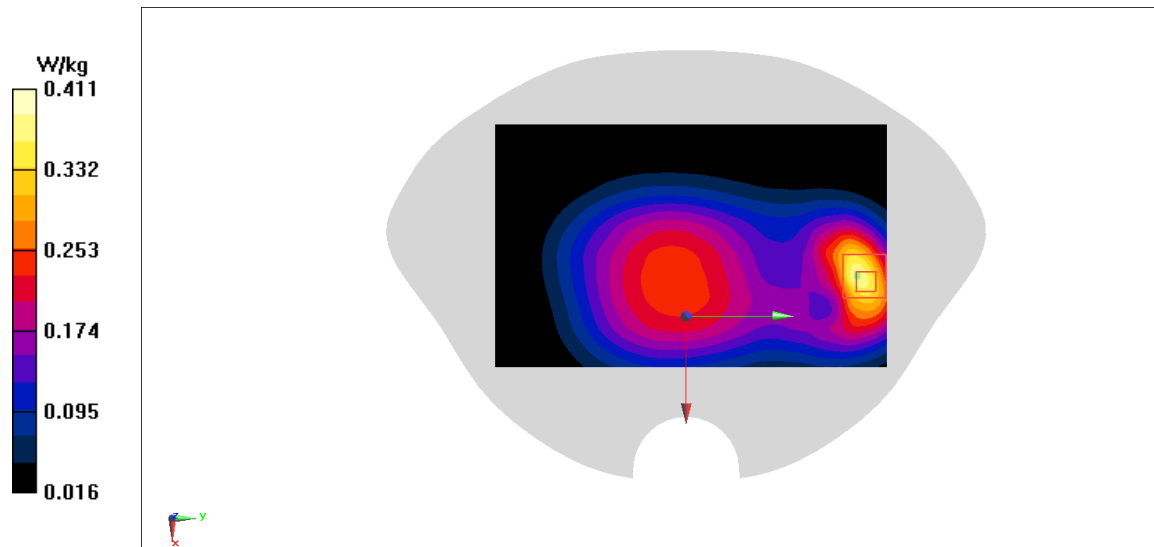


Fig A.44

5G n25_CH376500 Left Cheek

Date: 9/27/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.396$ mho/m; $\epsilon_r = 39.79$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n25 1882.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.351 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.574 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.374 W/kg

SAR(1 g) = 0.244 W/kg; SAR(10 g) = 0.158 W/kg

Maximum value of SAR (measured) = 0.327 W/kg

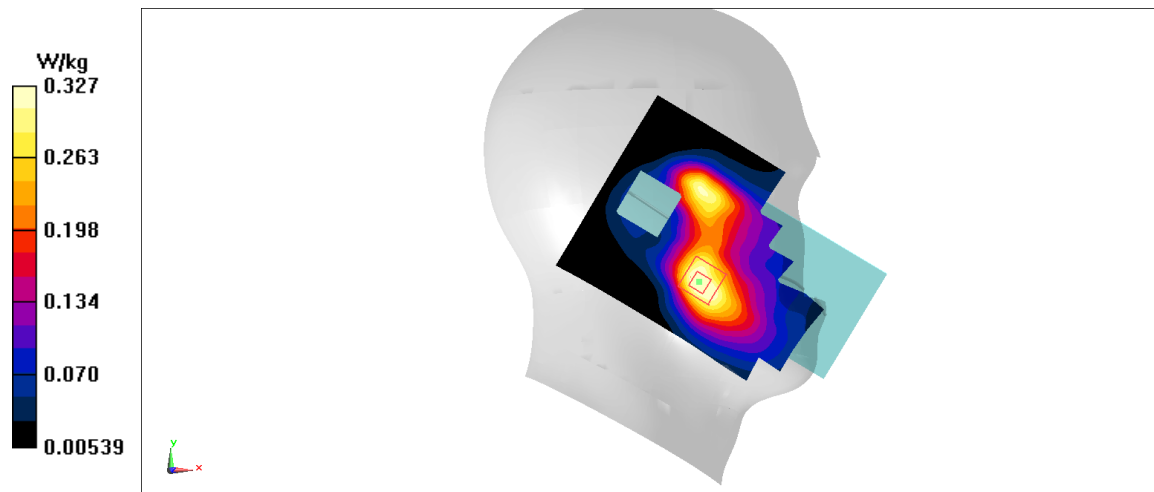


Fig A.45

5G n25_CH376500 Rear 15mm

Date: 9/27/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.396$ mho/m; $\epsilon_r = 39.79$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n25 1882.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.563 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.88 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.633 W/kg

SAR(1 g) = 0.368 W/kg; SAR(10 g) = 0.221 W/kg

Maximum value of SAR (measured) = 0.53 W/kg

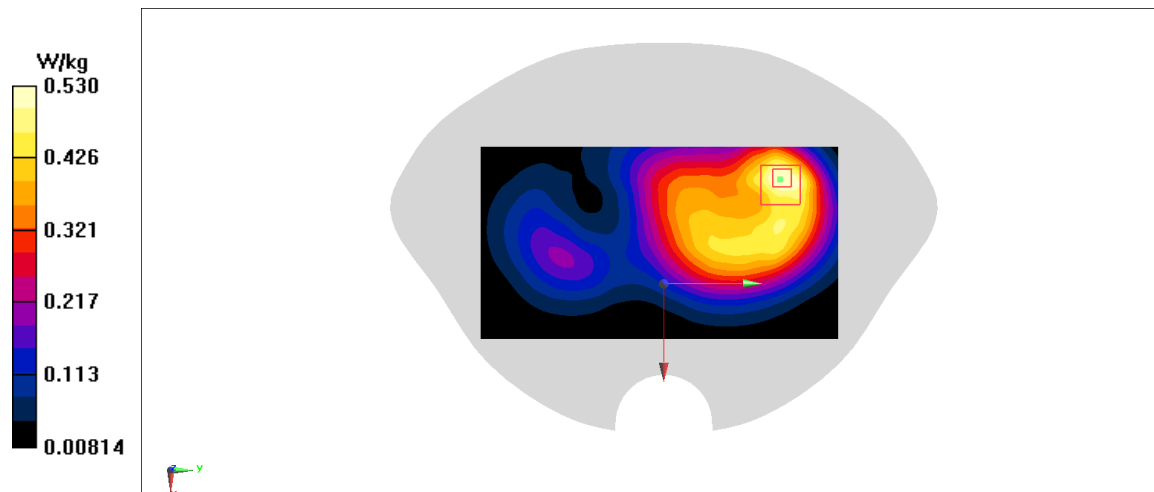


Fig A.46

5G n25_CH376500 Rear 10mm

Date: 9/27/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.396$ mho/m; $\epsilon_r = 39.79$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n25 1882.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.817 W/kg

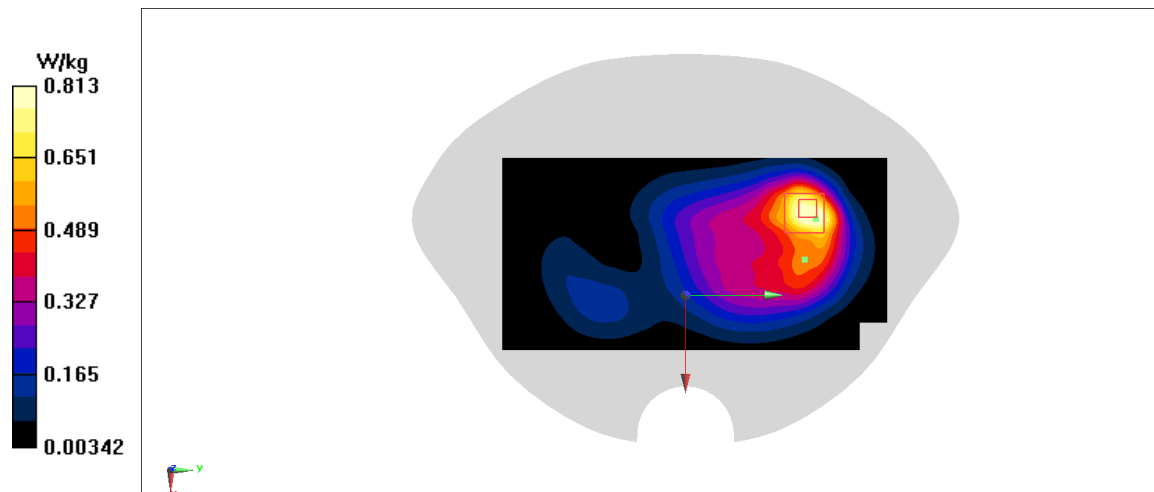
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.24 V/m; Power Drift = -0.2 dB

Peak SAR (extrapolated) = 0.989 W/kg

SAR(1 g) = 0.541 W/kg; SAR(10 g) = 0.305 W/kg

Maximum value of SAR (measured) = 0.813 W/kg


Fig A.47

5G n41 PC2_CH513900 Right Tilt for SA

Date: 9/27/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2570$ MHz; $\sigma = 1.966$ mho/m; $\epsilon_r = 40.383$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n41 2569.5 MHz Duty Cycle: 1:2

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 1.47 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.892 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.23 W/kg

SAR(1 g) = 0.95 W/kg; SAR(10 g) = 0.379 W/kg

Maximum value of SAR (measured) = 1.47 W/kg

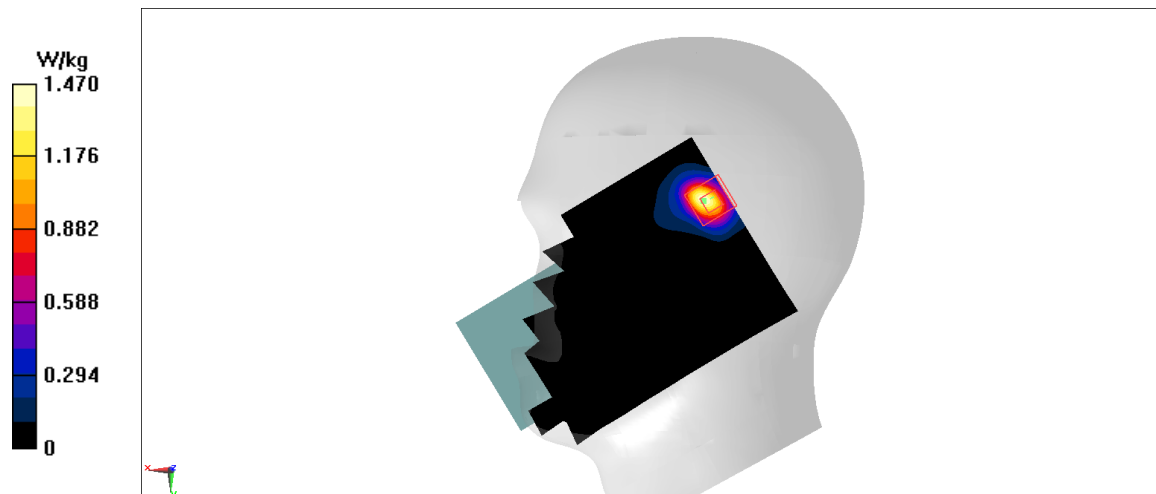


Fig A.48

5G n41 PC2_CH534000 Right Tilt for ENDC

Date: 9/30/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2670$ MHz; $\sigma = 1.966$ mho/m; $\epsilon_r = 40.383$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n41 2670 MHz Duty Cycle: 1:2

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.515 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.313 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.604 W/kg

SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.095 W/kg

Maximum value of SAR (measured) = 0.45 W/kg

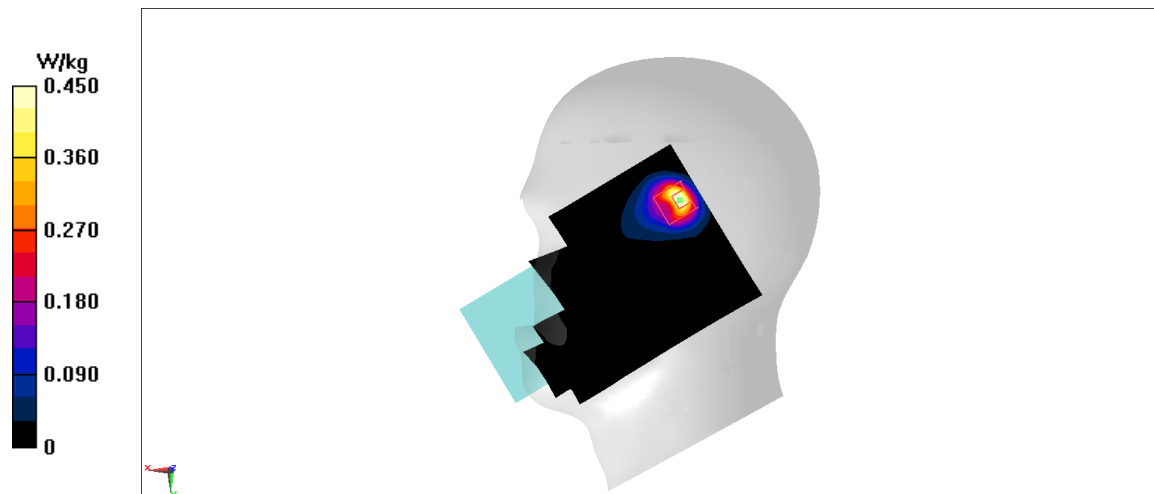


Fig A.49

5G n41 PC2_CH513900 Rear 15mm

Date: 9/27/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2570$ MHz; $\sigma = 1.966$ mho/m; $\epsilon_r = 40.383$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n41 2569.5 MHz Duty Cycle: 1:2

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.636 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 5.13 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.78 W/kg

SAR(1 g) = 0.405 W/kg; SAR(10 g) = 0.199 W/kg

Maximum value of SAR (measured) = 0.641 W/kg

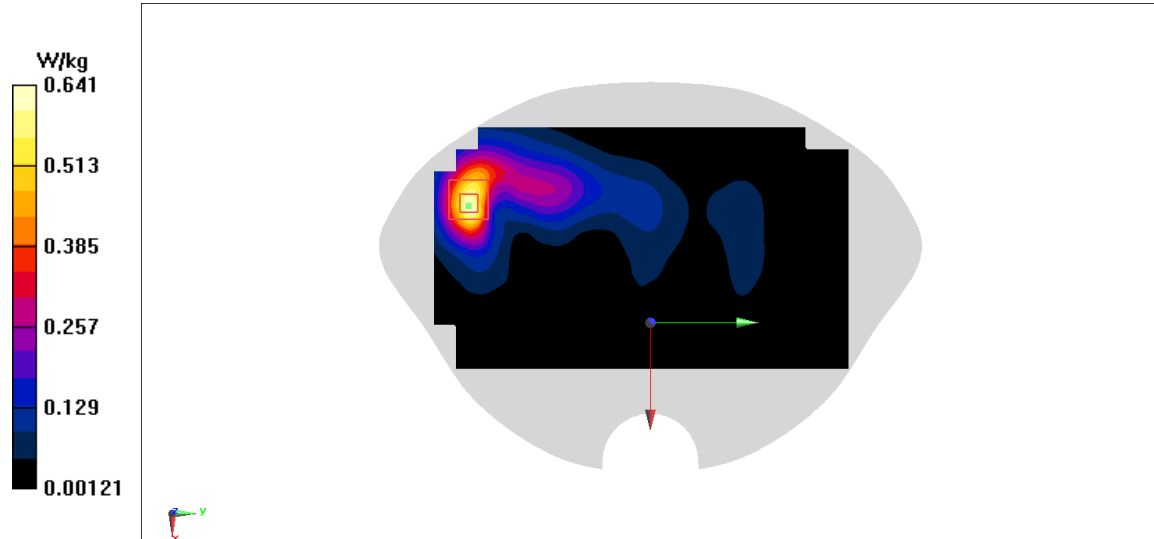


Fig A.50

5G n41_CH513900 Top 10mm for SA

Date: 9/30/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2570$ MHz; $\sigma = 1.966$ mho/m; $\epsilon_r = 40.383$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n41 2569.5 MHz Duty Cycle: 1:2

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.89 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.95 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 2.33 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.455 W/kg

Maximum value of SAR (measured) = 1.88 W/kg

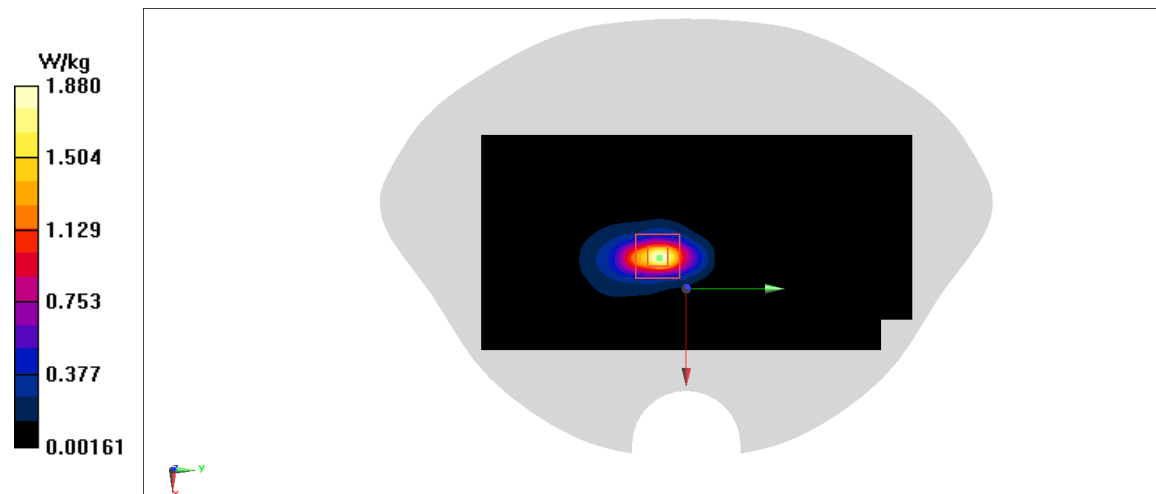


Fig A.51

5G n41_CH513900 Top 10mm for ENDC

Date: 9/30/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2570$ MHz; $\sigma = 1.966$ mho/m; $\epsilon_r = 40.383$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n41 2569.5 MHz Duty Cycle: 1:2

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.831 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.679 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.56 W/kg; SAR(10 g) = 0.233 W/kg

Maximum value of SAR (measured) = 0.961W/kg

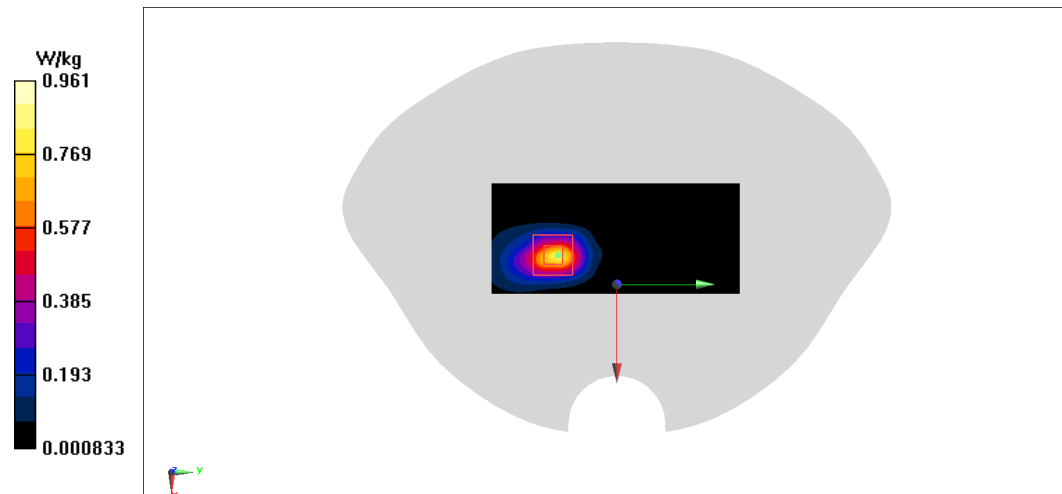


Fig A.52

5G n66_CH349000 Left Cheek

Date: 9/25/2020

Electronics: DAE4 Sn777

Medium: head 1750 MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.332$ mho/m; $\epsilon_r = 42.367$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n66 1745MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.231 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.334 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.168 W/kg; SAR(10 g) = 0.108 W/kg

Maximum value of SAR (measured) = 0.224 W/kg

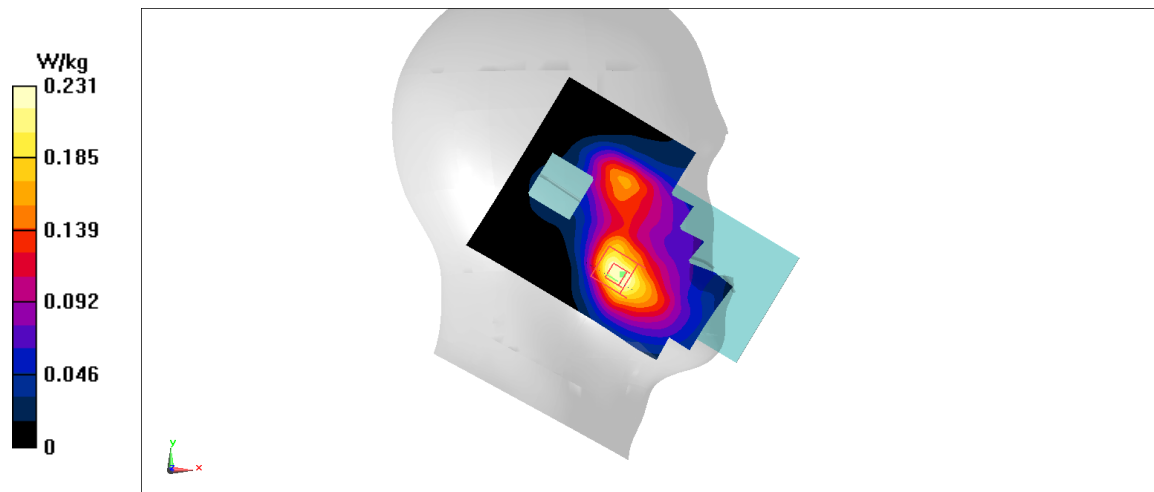


Fig A.53

5G n66_CH349000 Front 15mm

Date: 9/25/2020

Electronics: DAE4 Sn777

Medium: head 1750 MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.332$ mho/m; $\epsilon_r = 42.367$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n66 1745MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.891 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.02 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.56 W/kg; SAR(10 g) = 0.342 W/kg

Maximum value of SAR (measured) = 0.839 W/kg

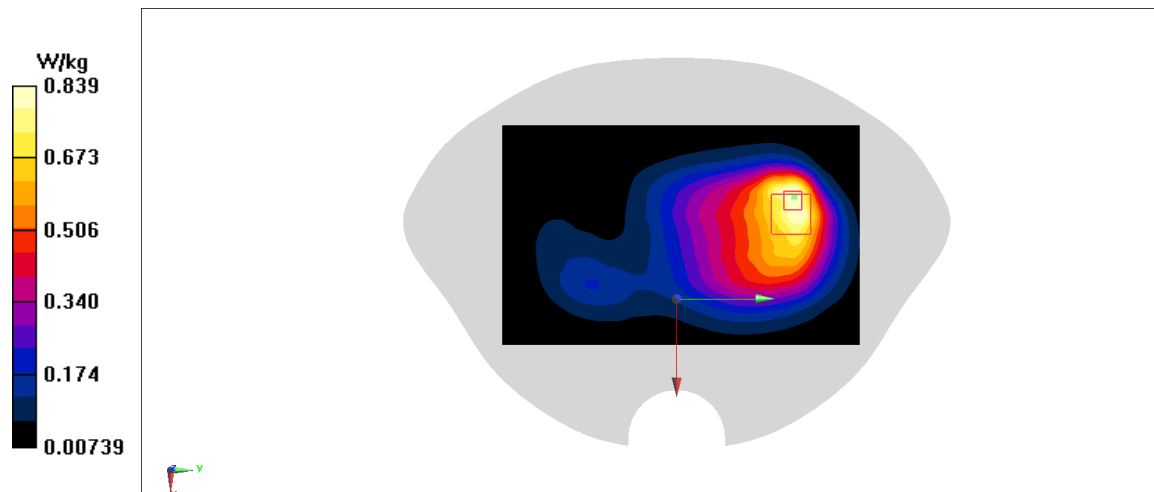


Fig A.54

5G n66_CH349000 Rear 10mm for SA

Date: 9/25/2020

Electronics: DAE4 Sn777

Medium: head 1750 MHz

Medium parameters used: $f = 1745\text{MHz}$; $\sigma = 1.372\text{ mho/m}$; $\epsilon_r = 41.99$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.891 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.02 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.56 W/kg; SAR(10 g) = 0.342 W/kg

Maximum value of SAR (measured) = 0.839 W/kg

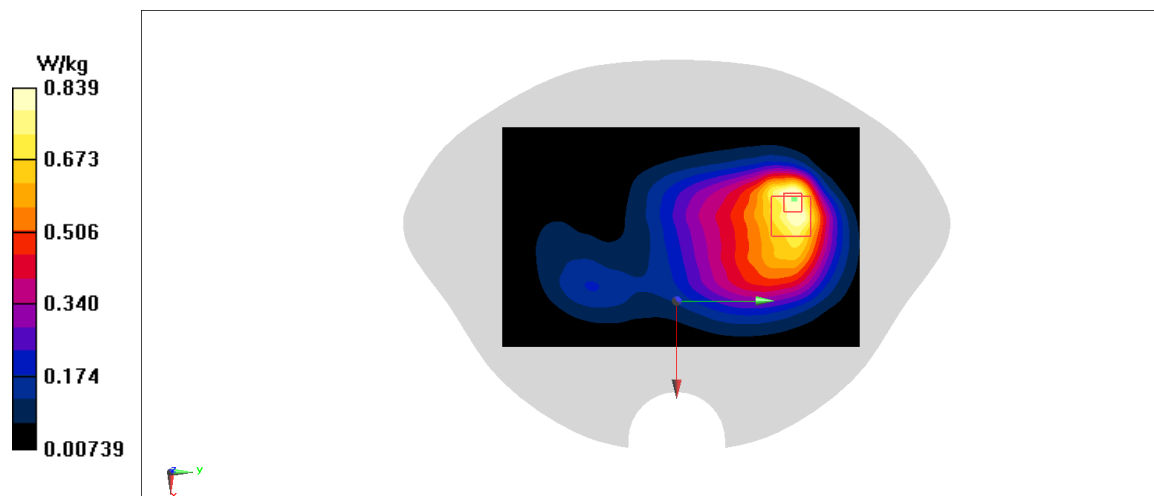


Fig A.55

5G n66_CH349000 Rear 10mm for ENDC

Date: 9/25/2020

Electronics: DAE4 Sn777

Medium: head 1750 MHz

Medium parameters used: $f = 1745\text{MHz}$; $\sigma = 1.372\text{ mho/m}$; $\epsilon_r = 41.99$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n66 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.552 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.130 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.659 W/kg

SAR(1 g) = 0.365 W/kg; SAR(10 g) = 0.221 W/kg

Maximum value of SAR (measured) = 0.552 W/kg

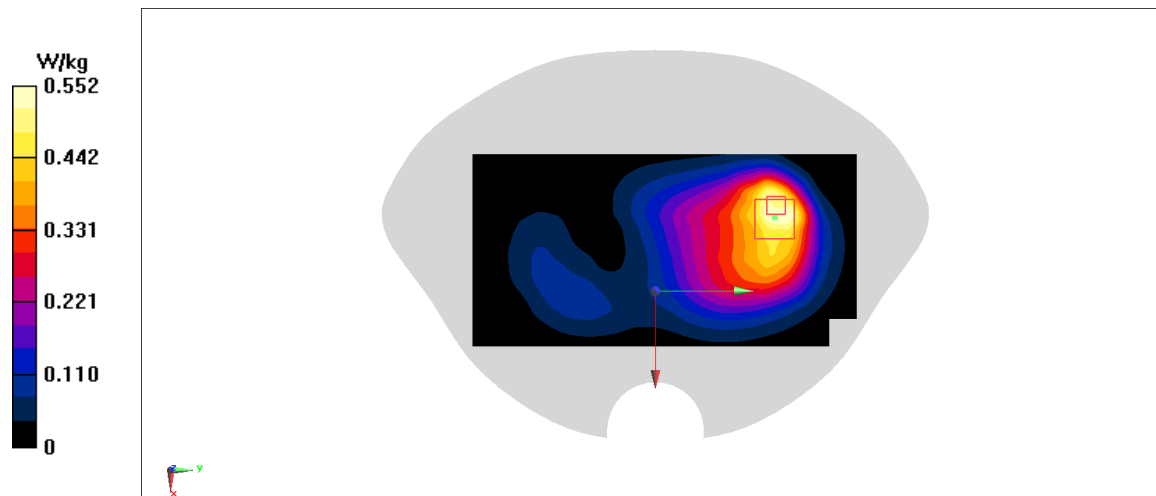


Fig A.56

5G n71_CH136100 Right Cheek

Date: 9/21/2020

Electronics: DAE4 Sn777

Medium: head 750 MHz

Medium parameters used: $f = 680.5 \text{ MHz}$; $\sigma = 0.801 \text{ mho/m}$; $\epsilon_r = 45.018$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C , Liquid Temperature: 22.3°C

Communication System: 5G n71 680.5MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.157 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.244 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.166 W/kg

SAR(1 g) = 0.133 W/kg ; SAR(10 g) = 0.106 W/kg

Maximum value of SAR (measured) = 0.154 W/kg

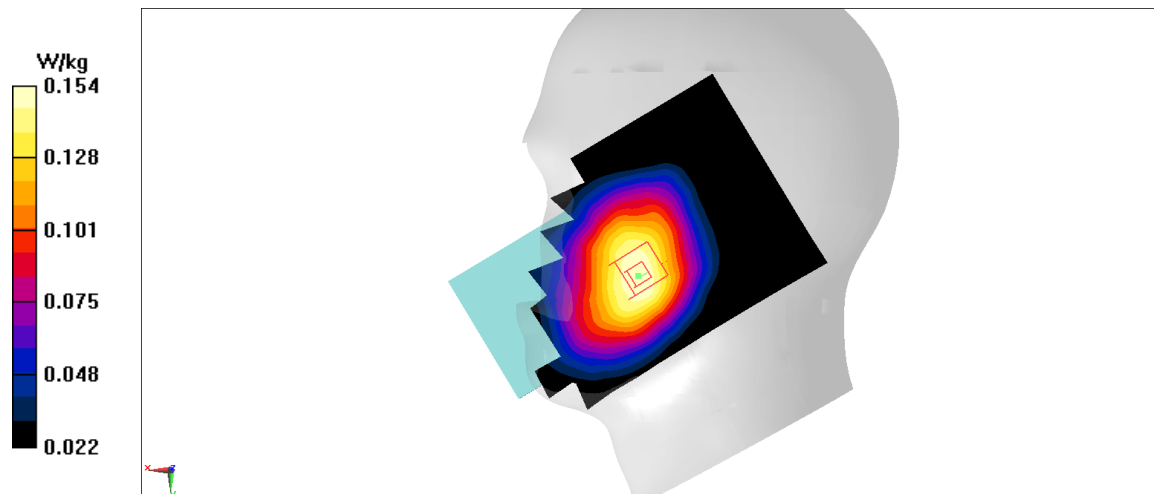


Fig A.57

5G n71_CH136100 Right 10mm

Date: 9/21/2020

Electronics: DAE4 Sn777

Medium: head 750 MHz

Medium parameters used: $f = 680.5$ MHz; $\sigma = 0.801$ mho/m; $\epsilon_r = 45.018$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G n71 680.5MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.374 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 18.94 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.428 W/kg

SAR(1 g) = 0.285 W/kg; SAR(10 g) = 0.199 W/kg

Maximum value of SAR (measured) = 0.375 W/kg

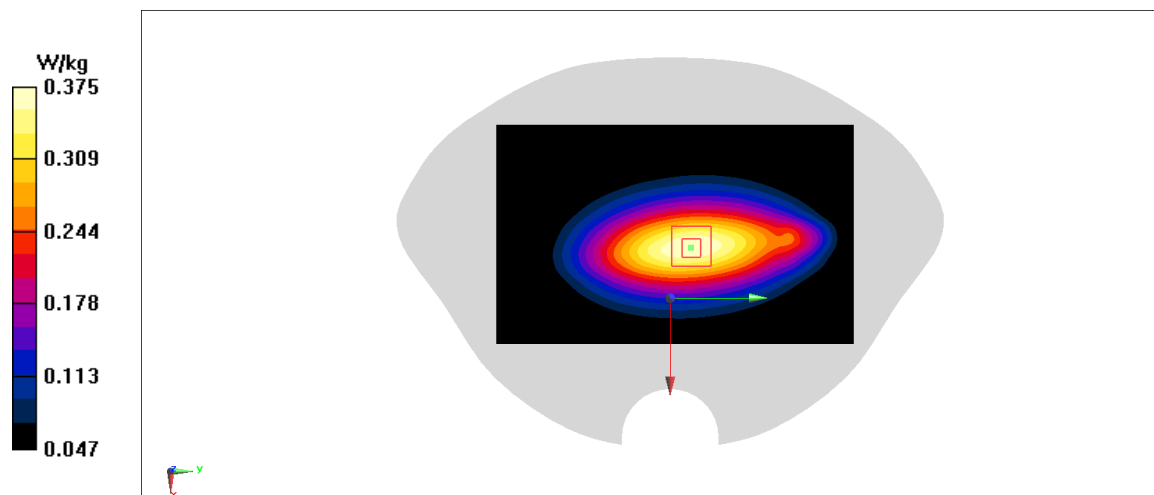


Fig A.58

WLAN2450_CH1 Left Tilt

Date: 9/28/2020

Electronics: DAE4 Sn777

Medium: head 2450 MHz

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.777$ mho/m; $\epsilon_r = 39.27$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WLAN2450 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(7.65,7.65,7.65)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.863 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 7.814 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.525 W/kg; SAR(10 g) = 0.218 W/kg

Maximum value of SAR (measured) = 0.972 W/kg

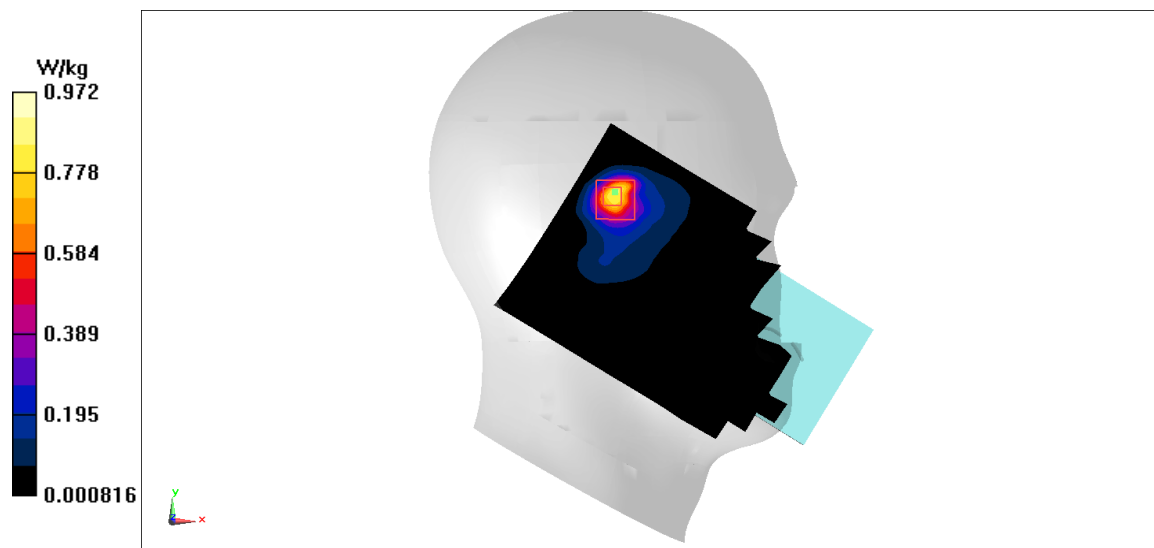


Fig A.59

WLAN2450_CH11 Rear 15mm

Date: 9/28/2020

Electronics: DAE4 Sn777

Medium: head 2450 MHz

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.824$ mho/m; $\epsilon_r = 39.21$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WLAN2450 2462 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(7.65,7.65,7.65)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.525 W/kg

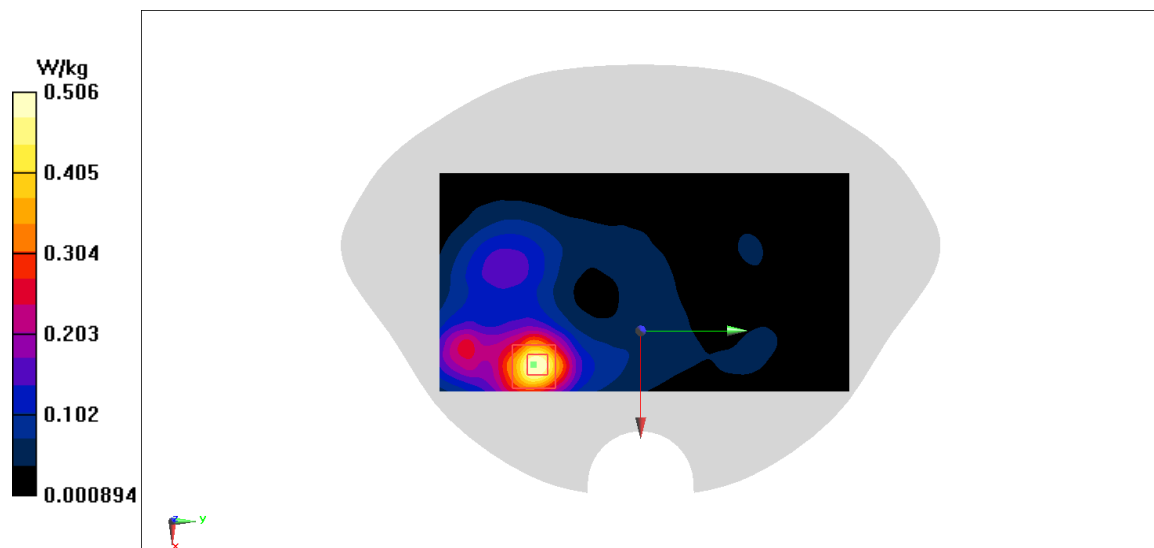
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 5.281 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.624 W/kg

SAR(1 g) = 0.325 W/kg; SAR(10 g) = 0.164 W/kg

Maximum value of SAR (measured) = 0.506 W/kg


Fig A.60

WLAN_CH149 Left Tilt

Date: 9/28/2020

Electronics: DAE4 Sn777

Medium: head 5GHz

Medium parameters used: $f = 5745$ MHz; $\sigma = 5.142$ mho/m; $\epsilon_r = 33.965$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WLAN 5745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(5.1, 5.1, 5.1)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 1.53 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.372 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.86 W/kg

SAR(1 g) = 0.605 W/kg; SAR(10 g) = 0.156 W/kg

Maximum value of SAR (measured) = 1.59 W/kg

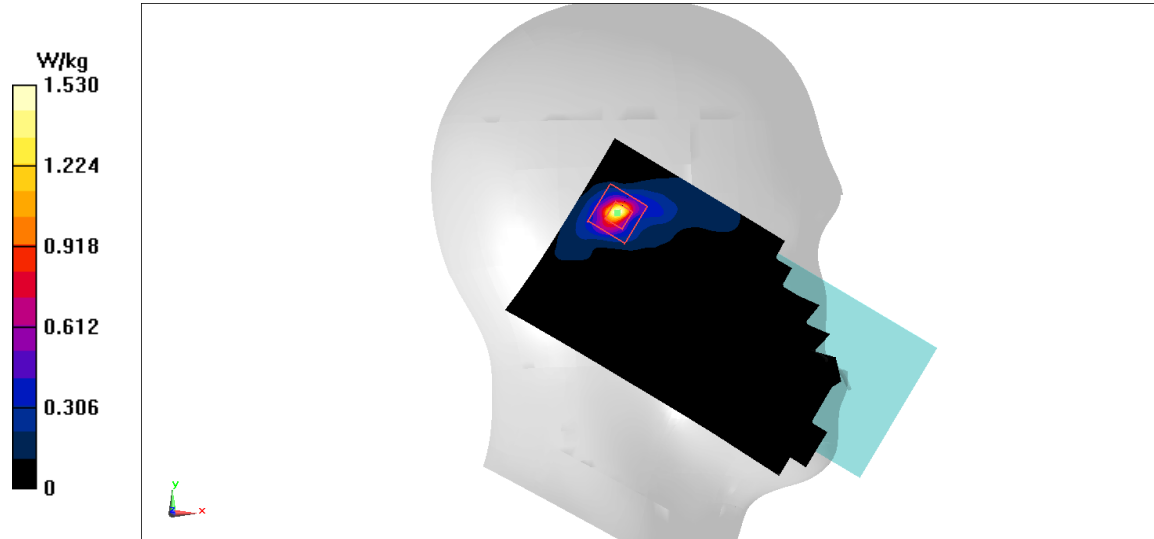


Fig A.61

WLAN_CH144 Rear 15mm

Date: 9/28/2020

Electronics: DAE4 Sn777

Medium: head 5GHz

Medium parameters used: $f = 5720$ MHz; $\sigma = 5.117$ mho/m; $\epsilon_r = 34.001$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WLAN 5720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(5.1, 5.1, 5.1)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.939 W/kg

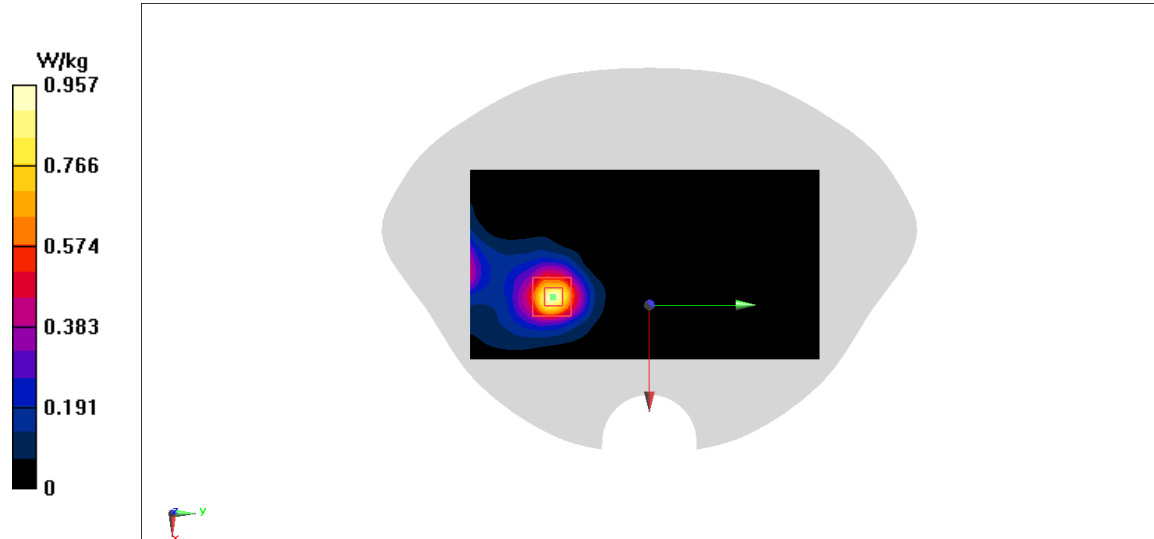
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.917 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.41 W/kg; SAR(10 g) = 0.15 W/kg

Maximum value of SAR (measured) = 0.957 W/kg


Fig A.62

LTE1900-FDD2_CH18700 Left Cheek

Date: 9/26/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.404$ mho/m; $\epsilon_r = 42.225$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD2 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.403 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.612 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.456 W/kg

SAR(1 g) = 0.3 W/kg; SAR(10 g) = 0.197 W/kg

Maximum value of SAR (measured) = 0.398 W/kg

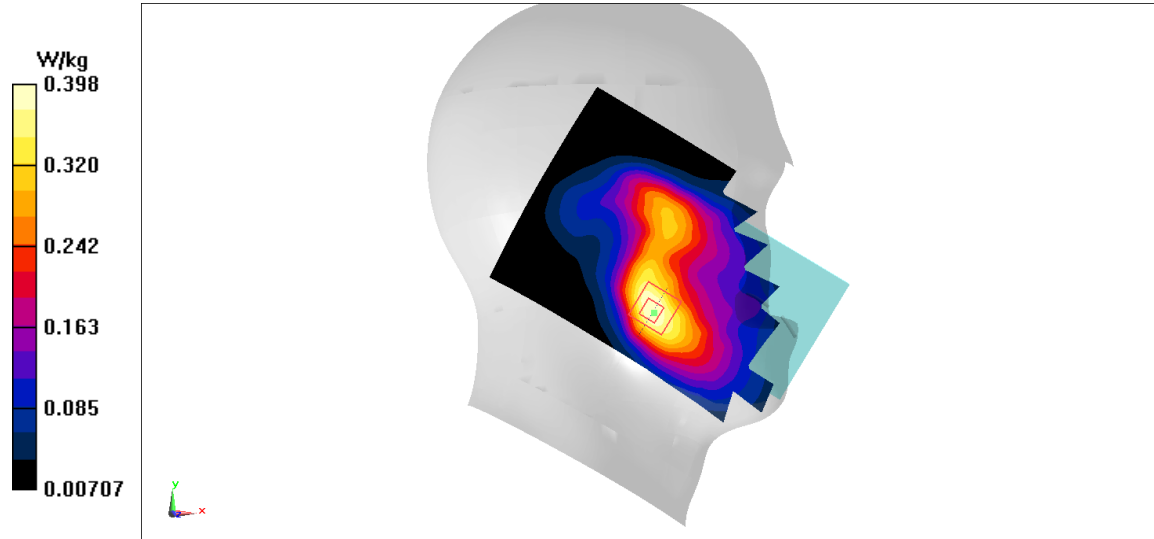


Fig A.63

LTE1900-FDD2_CH18700 Rear 15mm

Date: 9/26/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.404$ mho/m; $\epsilon_r = 42.225$; $\rho = 1000$ kg/m³

Communication System: LTE1900-FDD2 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.567 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.081 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.687 W/kg

SAR(1 g) = 0.396 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.574 W/kg

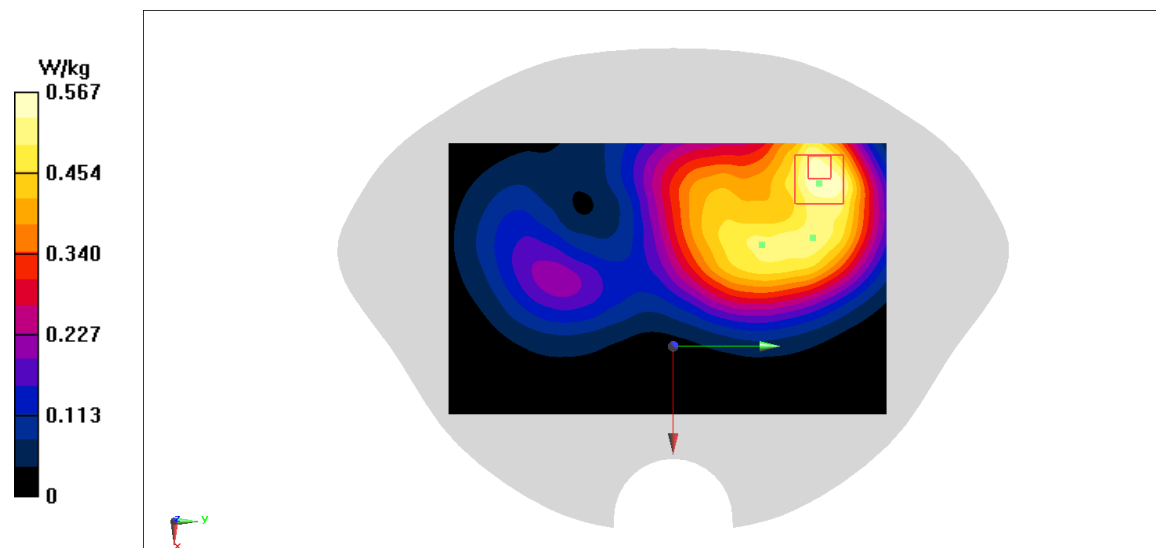


Fig A.64

LTE1900-FDD2_CH18900 Rear 10mm

Date: 9/26/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.453$ mho/m; $\epsilon_r = 41.561$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD25 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.403 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.612 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.456 W/kg

SAR(1 g) = 0.467 W/kg; SAR(10 g) = 0.266 W/kg

Maximum value of SAR (measured) = 0.398 W/kg

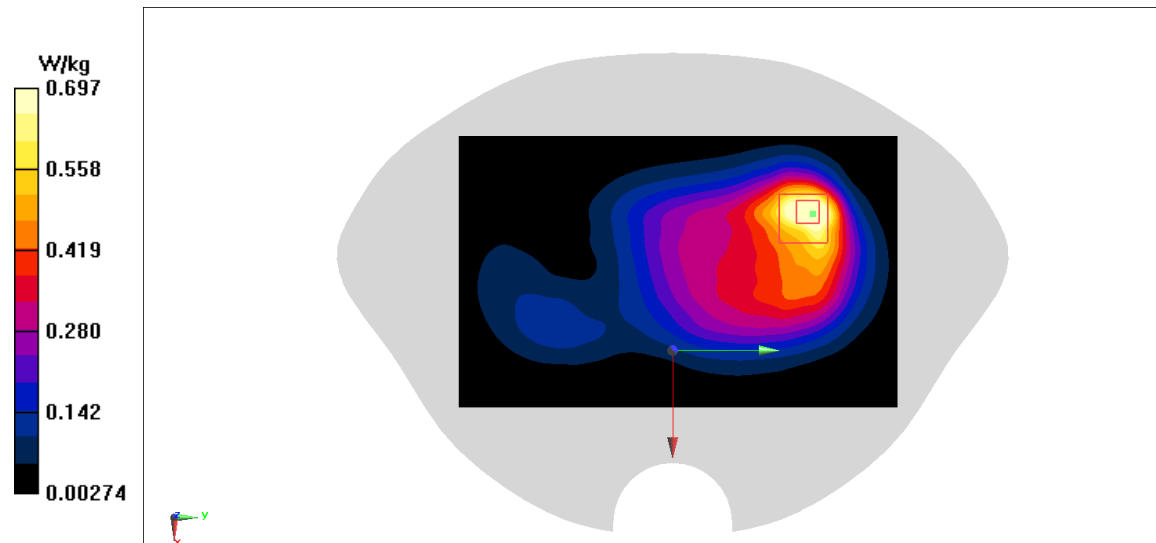


Fig A.65

CDMA1900-BC1_CH600 Rear 0mm

Date: 9/26/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.363$ mho/m; $\epsilon_r = 39.35$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: CDMA1900-BC1 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 8.26 W/kg

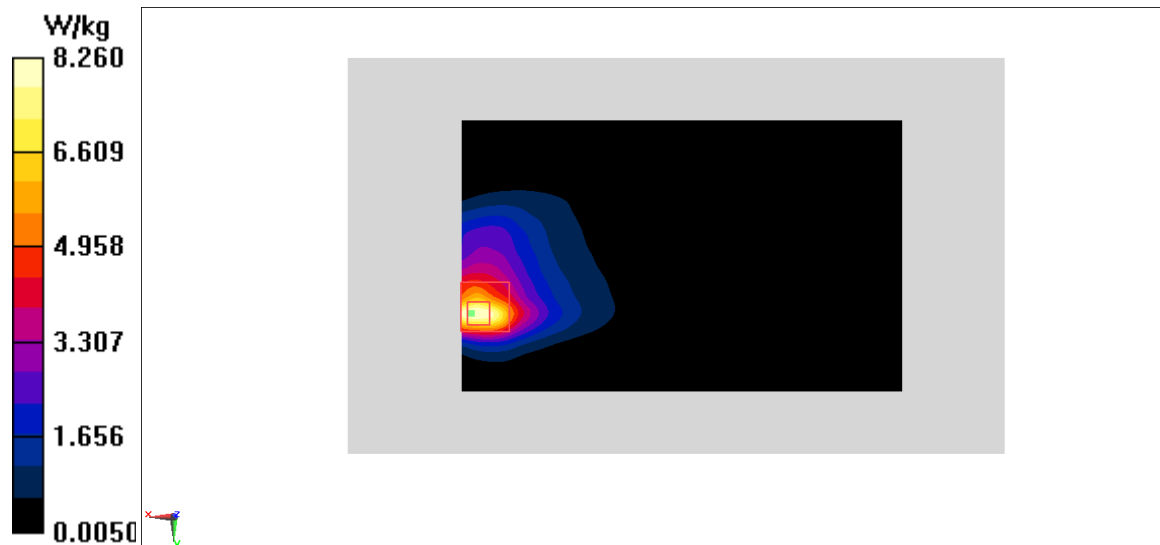
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

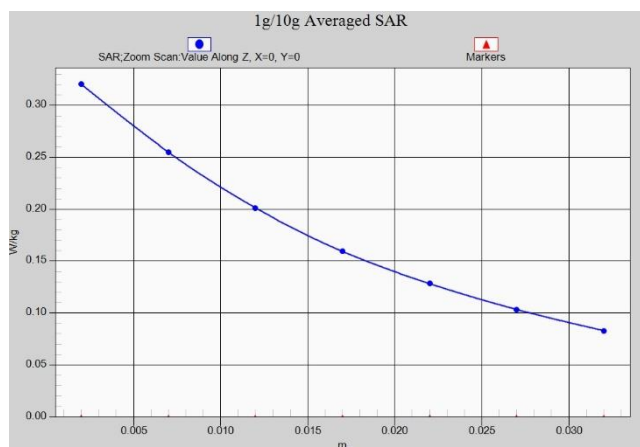
Reference Value = 8.613 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 8.23 W/kg

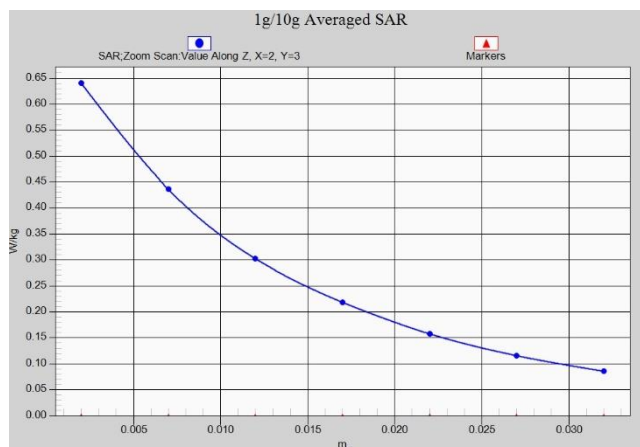
SAR(1 g) = 5.27 W/kg; SAR(10 g) = 2.79 W/kg

Maximum value of SAR (measured) = 8.26 W/kg

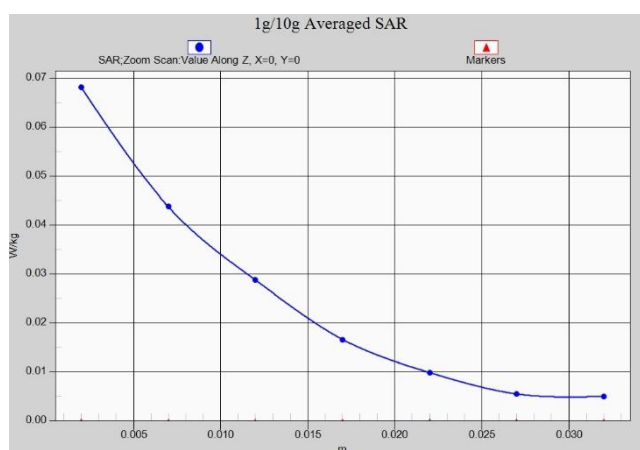

Fig A.66



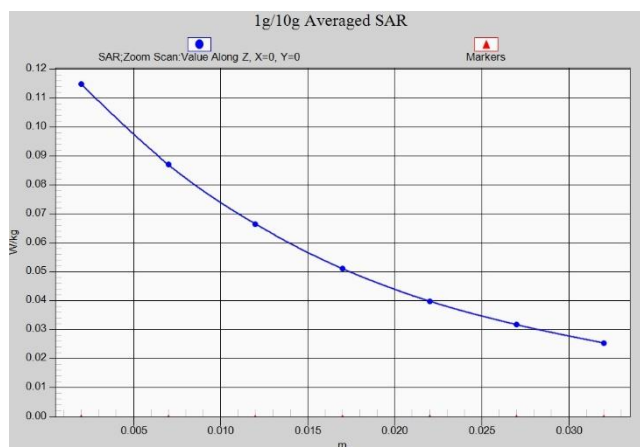
Z-Scan at power reference point (850 MHz)



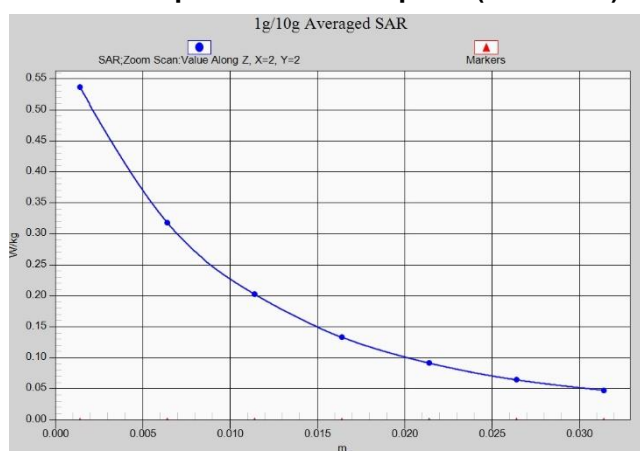
Z-Scan at power reference point (850 MHz)



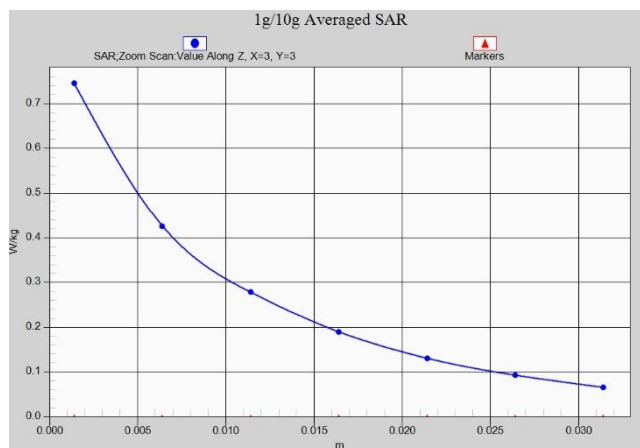
Z-Scan at power reference point (1900 MHz)



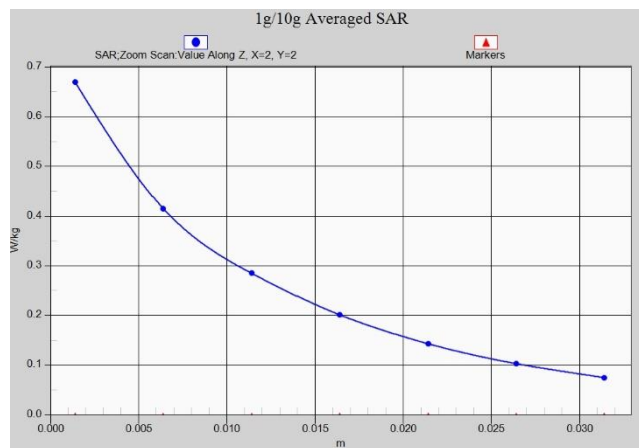
Z-Scan at power reference point (GSM1900)



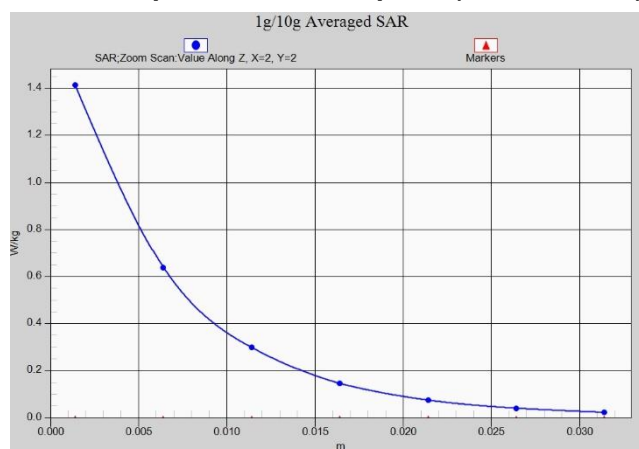
Z-Scan at power reference point (GSM1900)



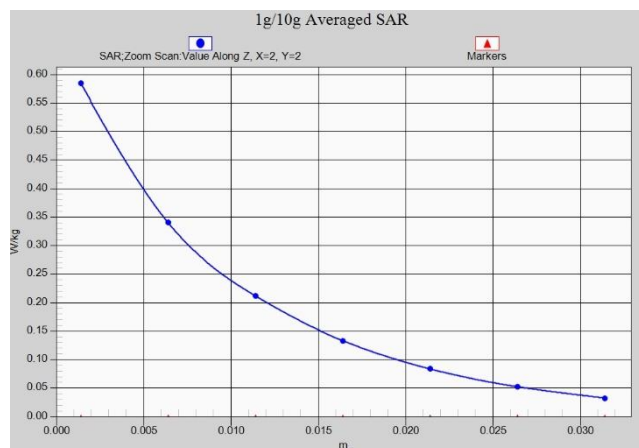
Z-Scan at power reference point (WCDMA1900)



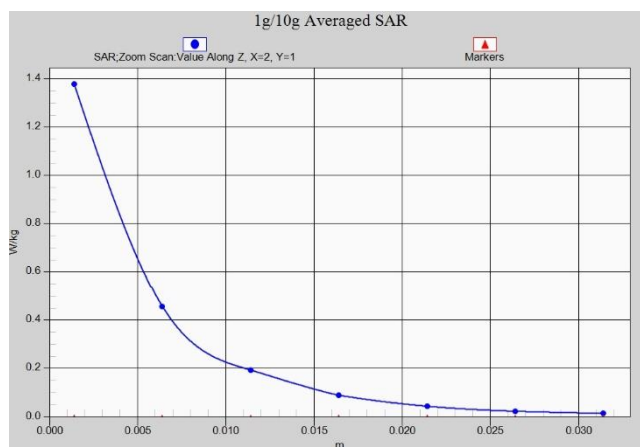
Z-Scan at power reference point (WCDMA1900)



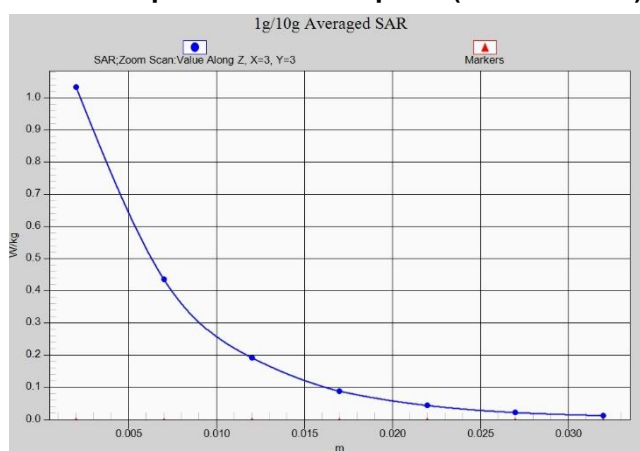
Z-Scan at power reference point (WCDMA1900)



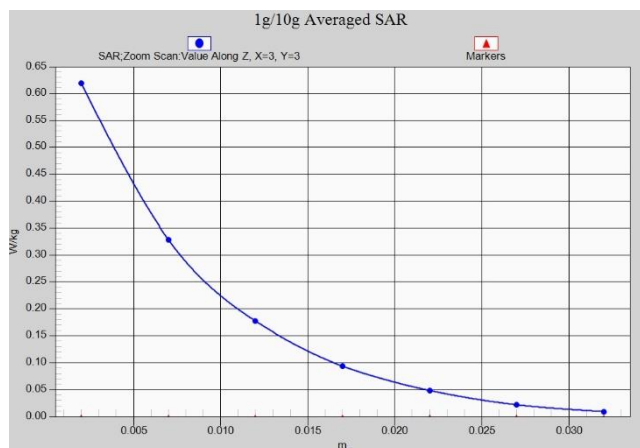
Z-Scan at power reference point (WCDMA1700)



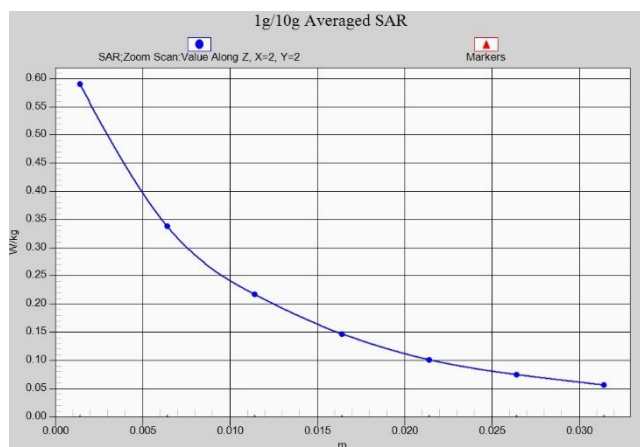
Z-Scan at power reference point (WCDMA1700)



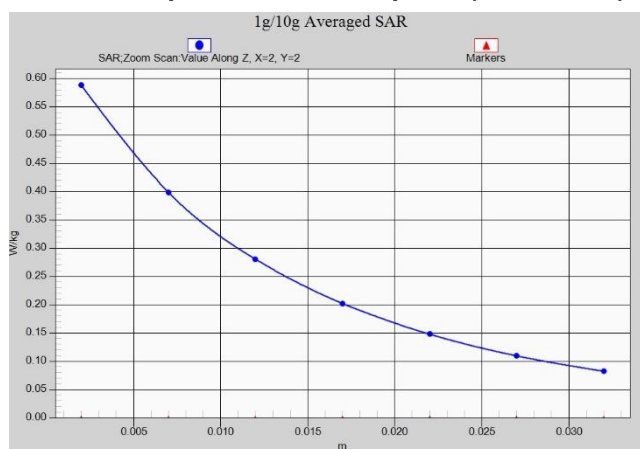
Z-Scan at power reference point (WCDMA850)



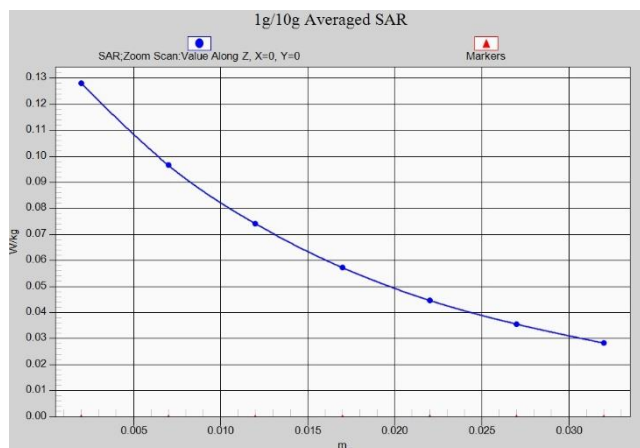
Z-Scan at power reference point (WCDMA850)



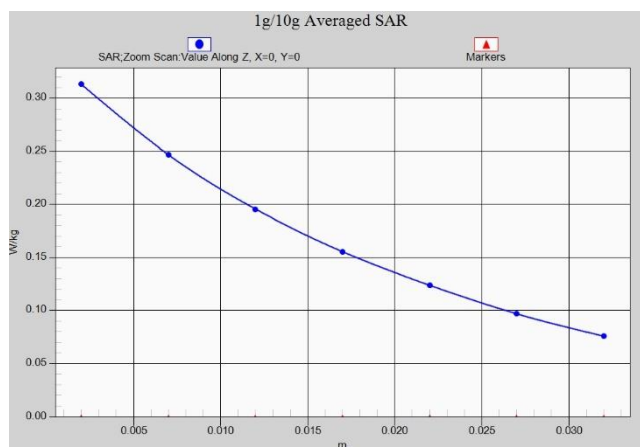
Z-Scan at power reference point (CDMABC0)



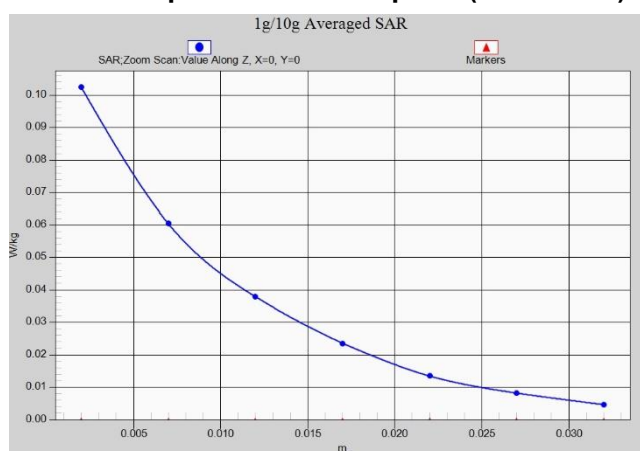
Z-Scan at power reference point (CDMABC0)



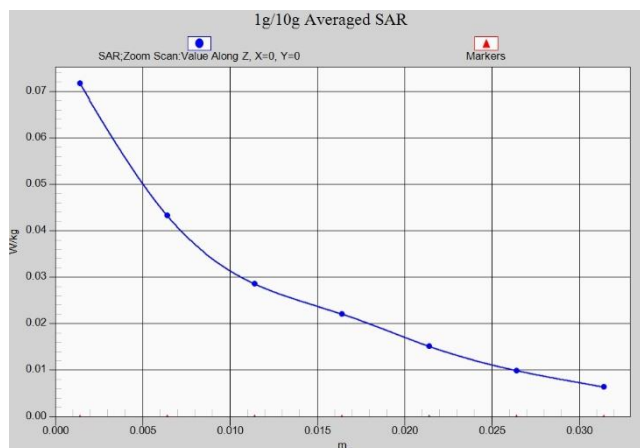
Z-Scan at power reference point (CDMABC1)



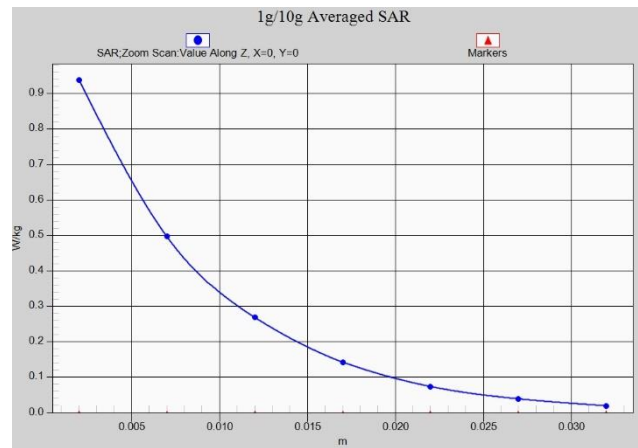
Z-Scan at power reference point (CDMABC1)



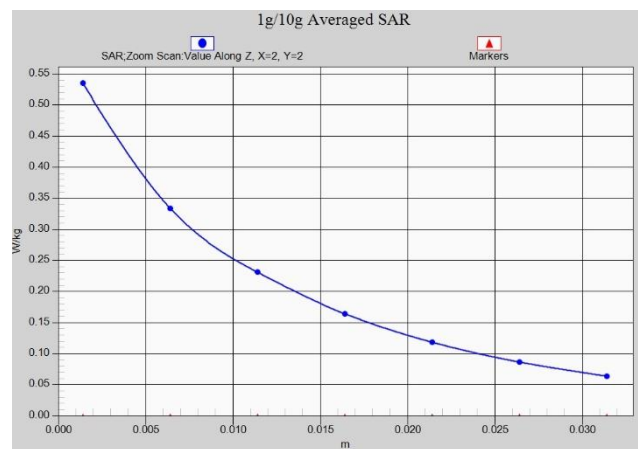
Z-Scan at power reference point (CDMABC1)



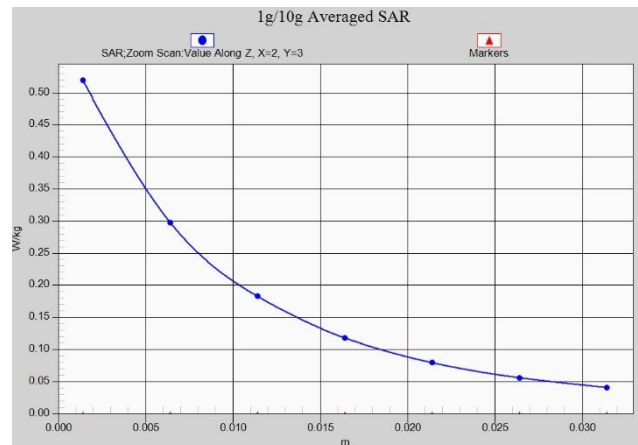
Z-Scan at power reference point (CDMABC10)



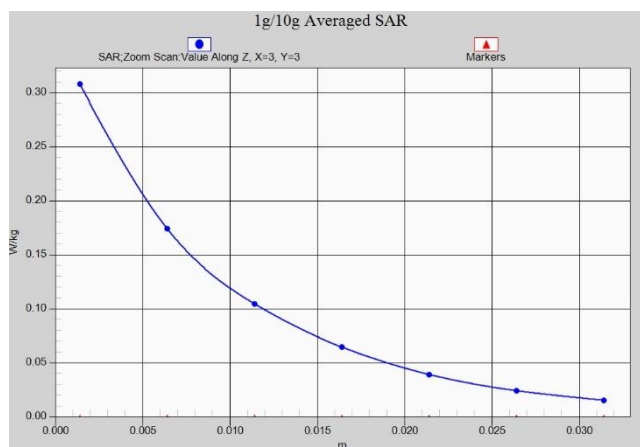
Z-Scan at power reference point (CDMABC10)



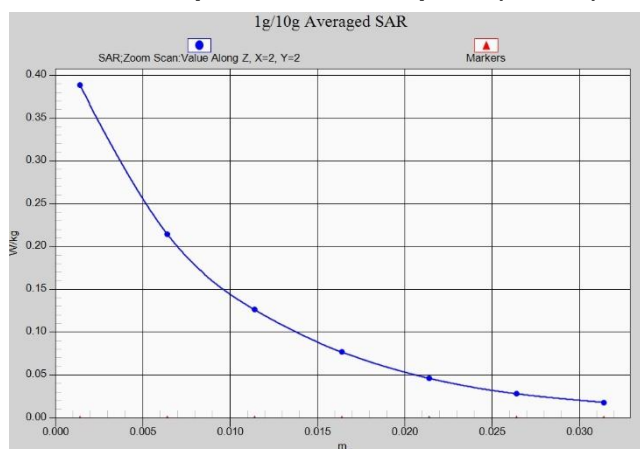
Z-Scan at power reference point (LTEB7)



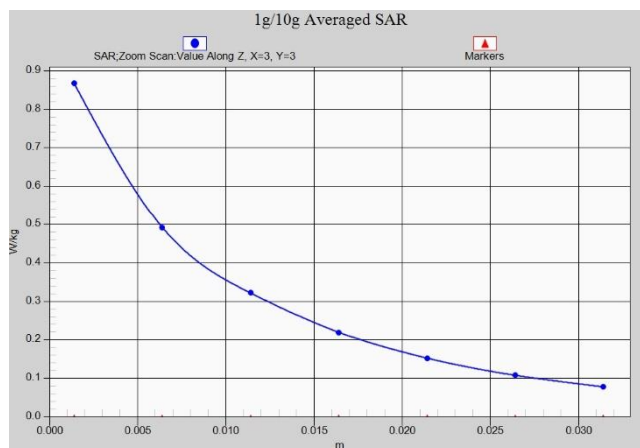
Z-Scan at power reference point (LTEB7)



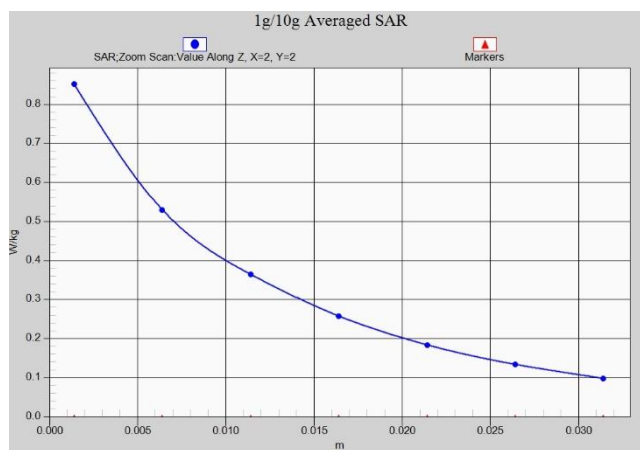
Z-Scan at power reference point (LTEB7)



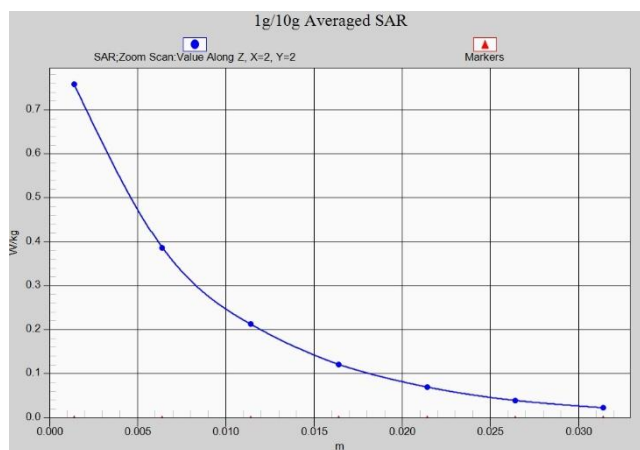
Z-Scan at power reference point (LTEB12)



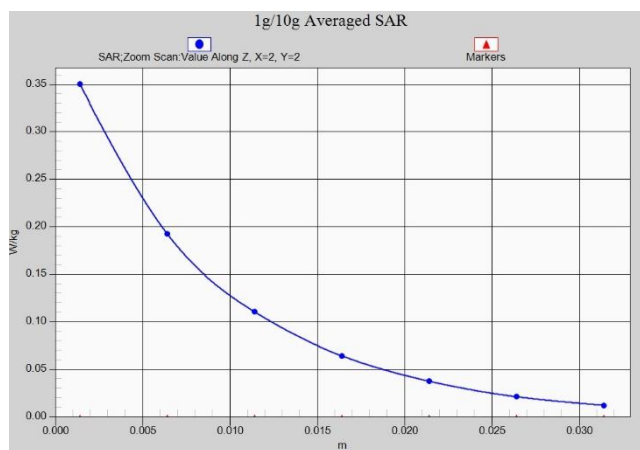
Z-Scan at power reference point (LTEB13)



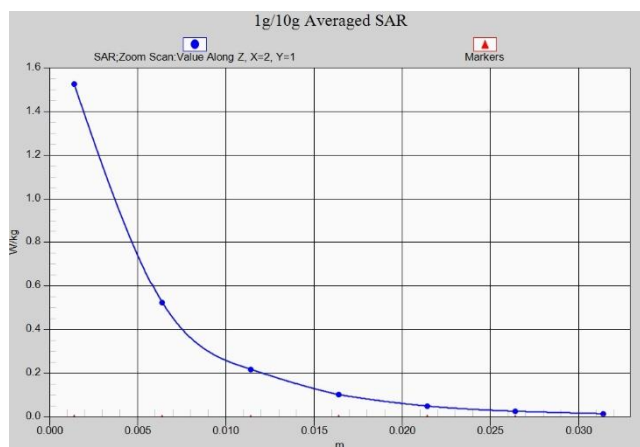
Z-Scan at power reference point (LTEB13)



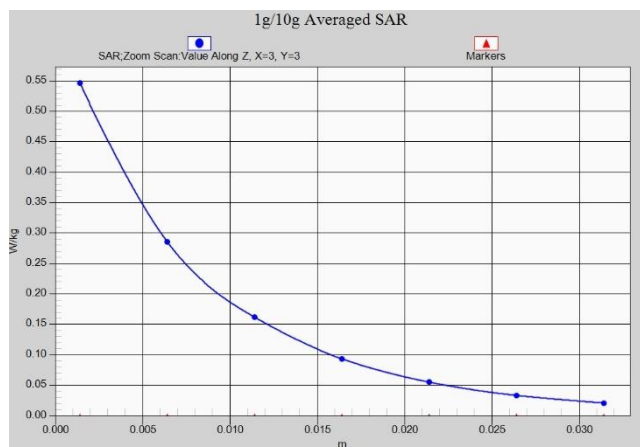
Z-Scan at power reference point (LTEB25)



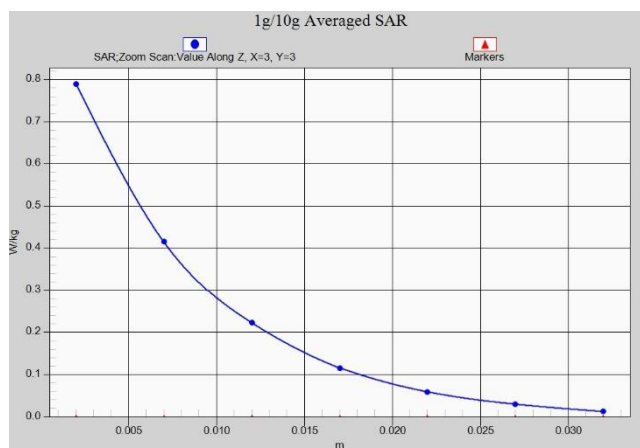
Z-Scan at power reference point (LTEB25)



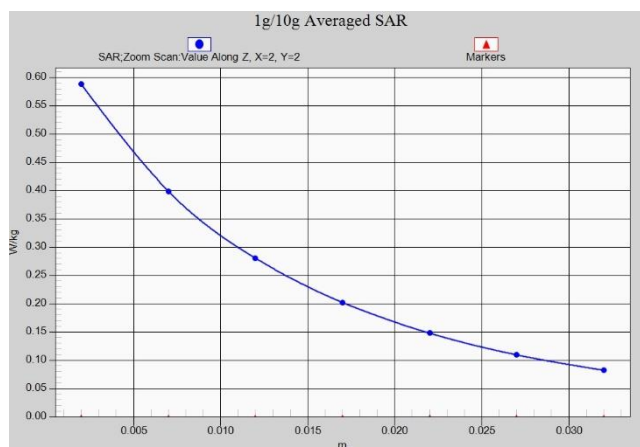
Z-Scan at power reference point (LTEB25)



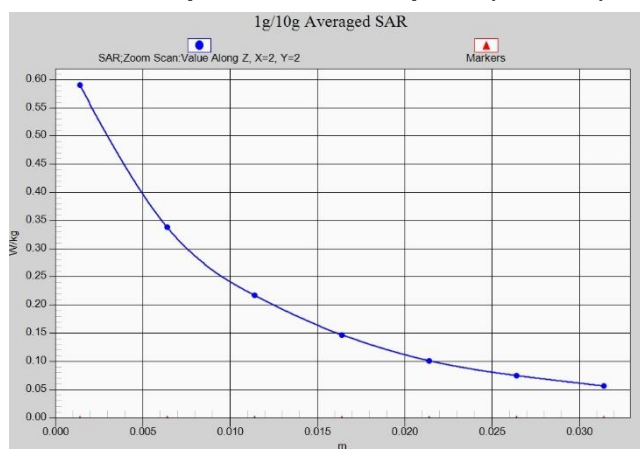
Z-Scan at power reference point (LTEB26)



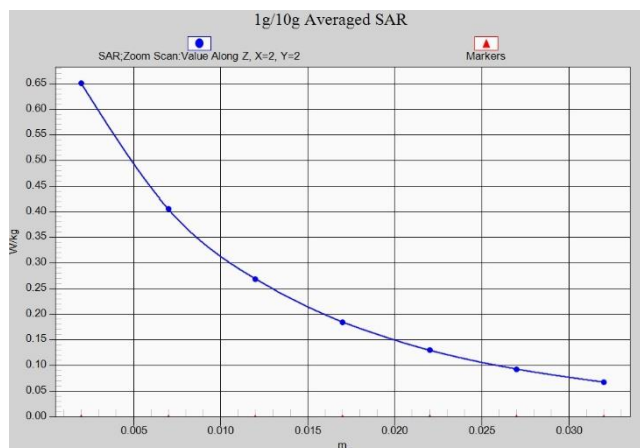
Z-Scan at power reference point (LTEB26)



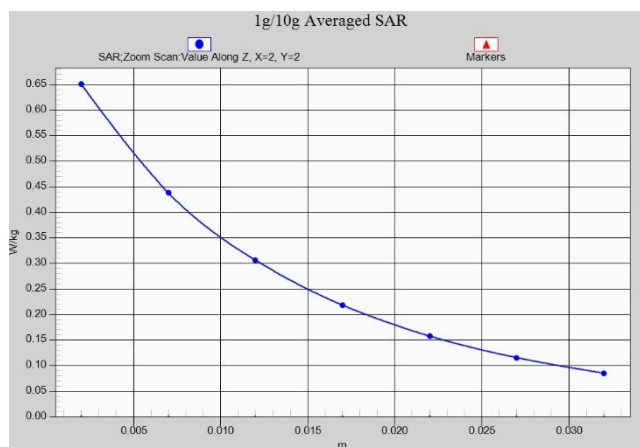
Z-Scan at power reference point (LTEB41)



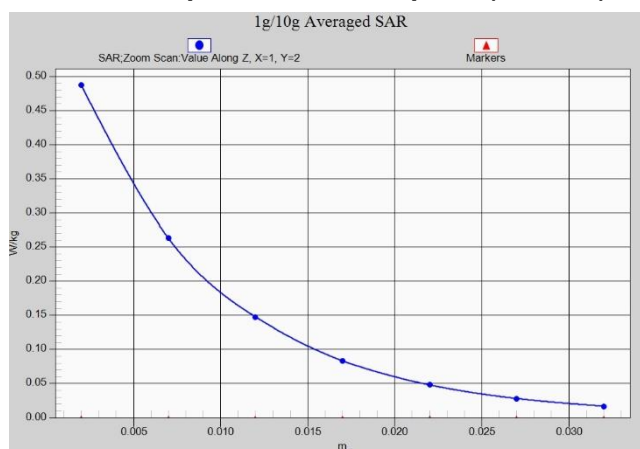
Z-Scan at power reference point (LTEB41)



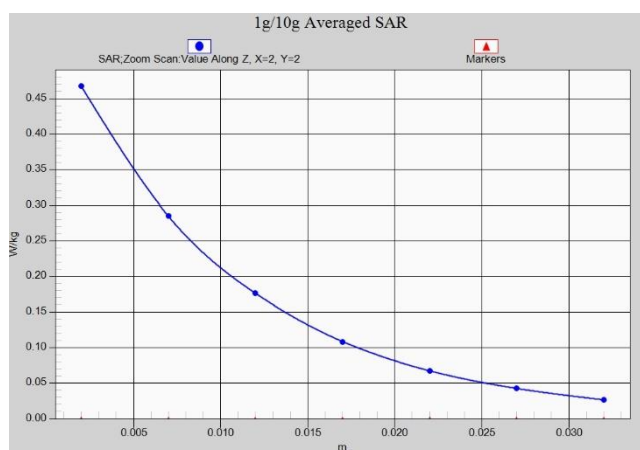
Z-Scan at power reference point (LTEB41)



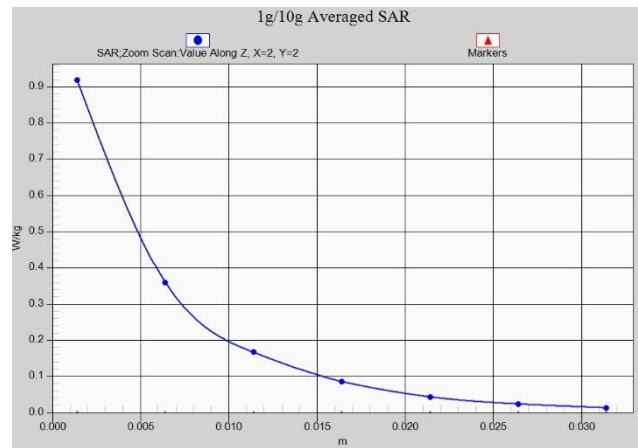
Z-Scan at power reference point (LTEB41)



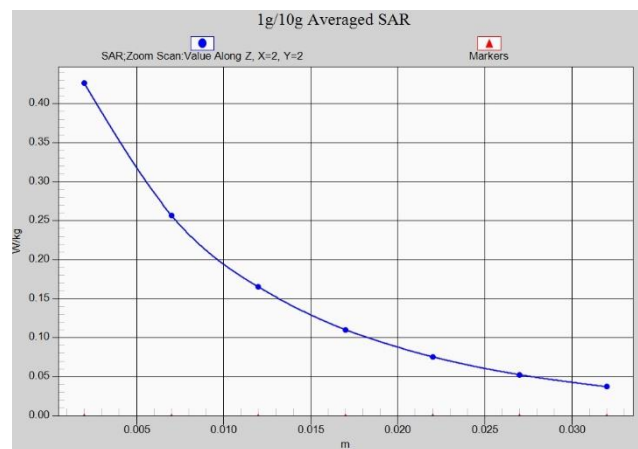
Z-Scan at power reference point (LTEB66)



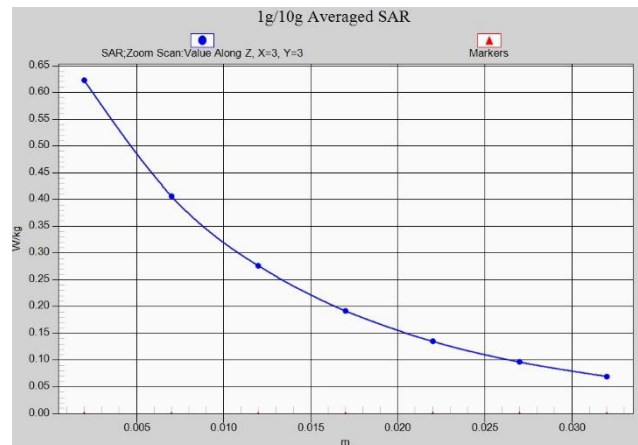
Z-Scan at power reference point (LTEB66)



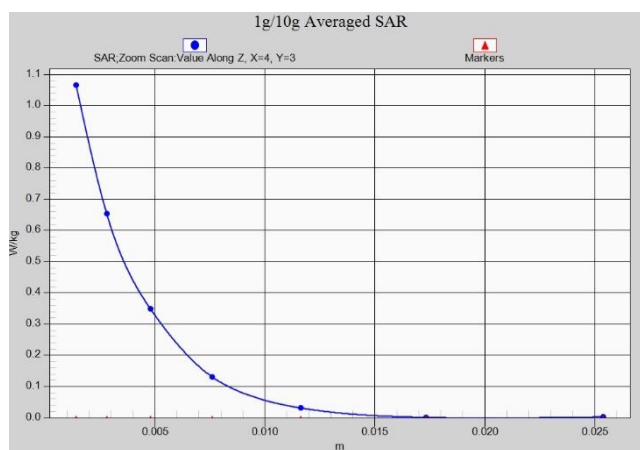
Z-Scan at power reference point (LTEB66)



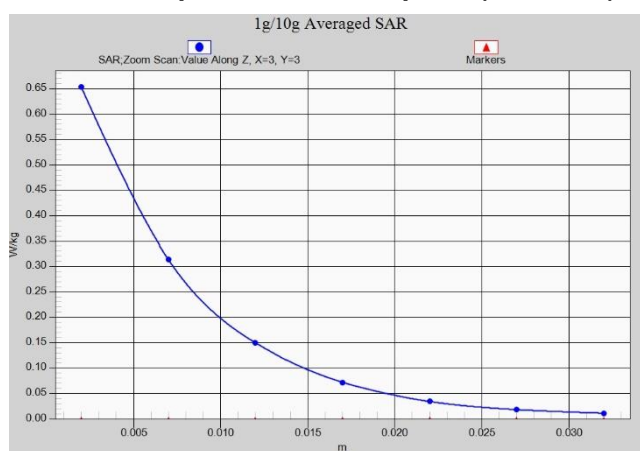
Z-Scan at power reference point (LTEB71)



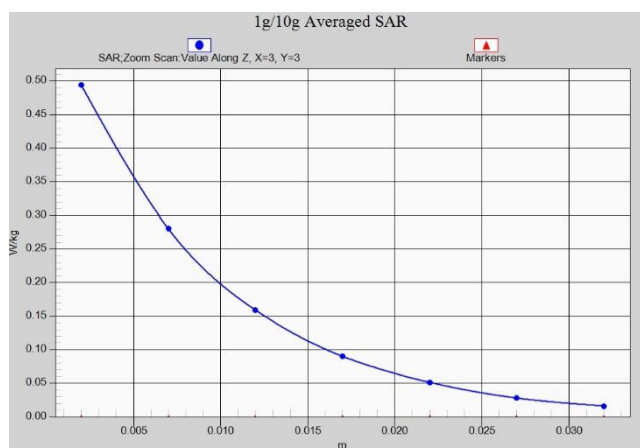
Z-Scan at power reference point (LTEB71)



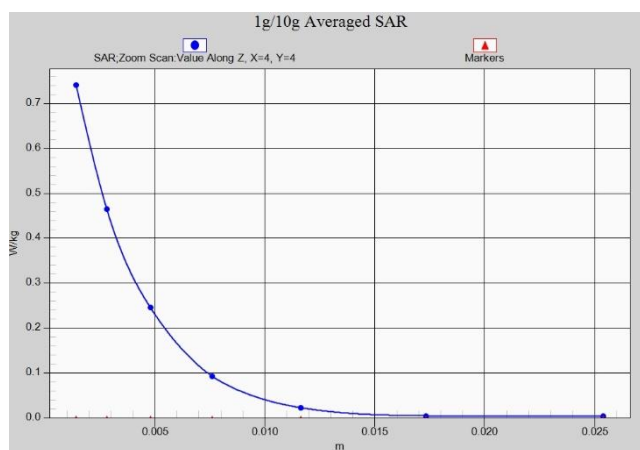
Z-Scan at power reference point (WIFI2.4G)



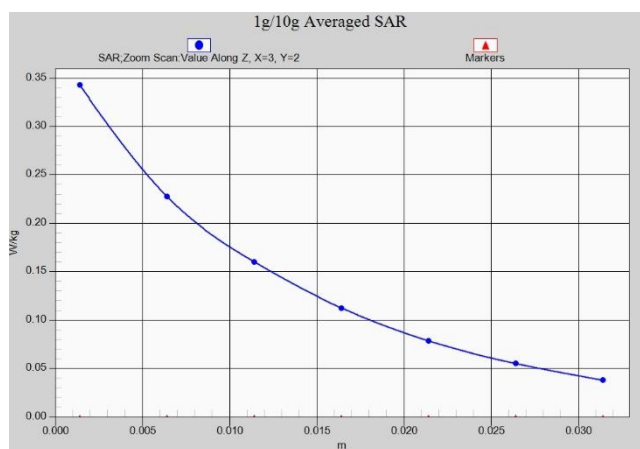
Z-Scan at power reference point (WIFI2.4G)



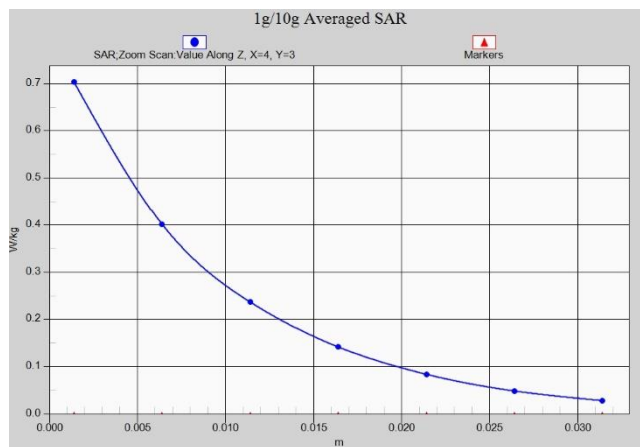
Z-Scan at power reference point (WIFI5G)



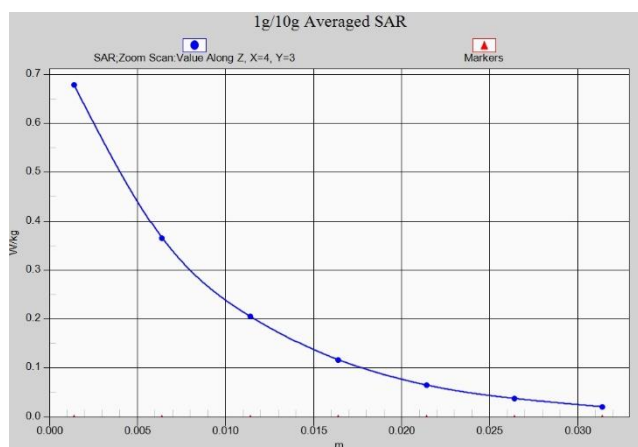
Z-Scan at power reference point (WIFI5G)



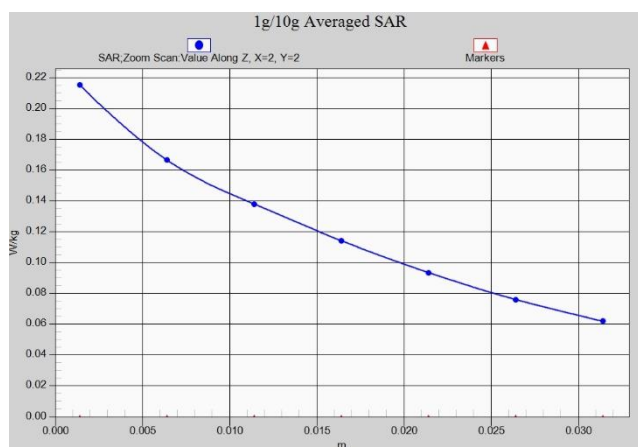
Z-Scan at power reference point (n2)



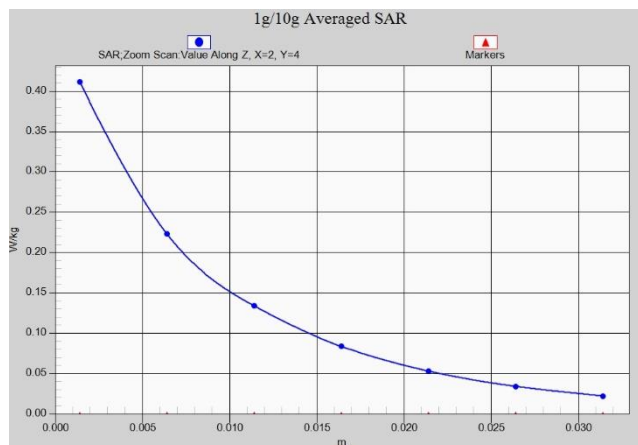
Z-Scan at power reference point (n2)



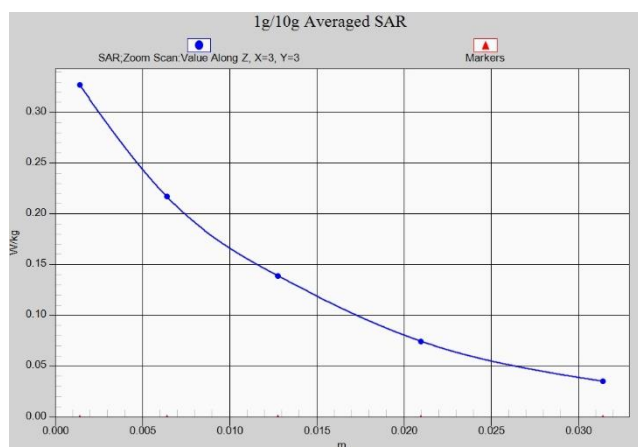
Z-Scan at power reference point (n2)



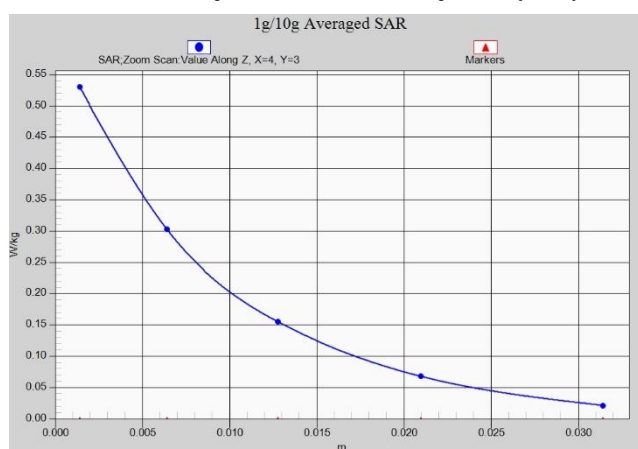
Z-Scan at power reference point (n5)



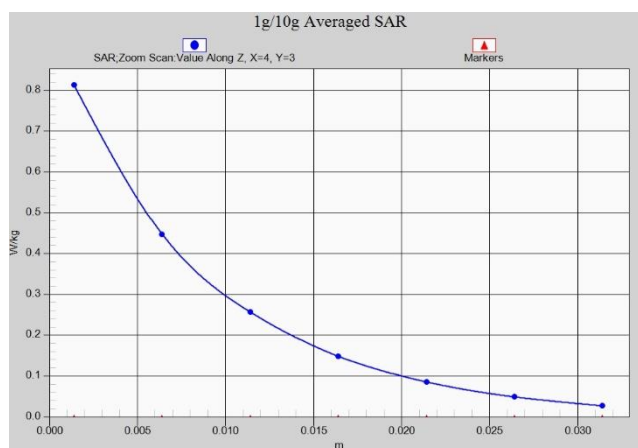
Z-Scan at power reference point (n5)



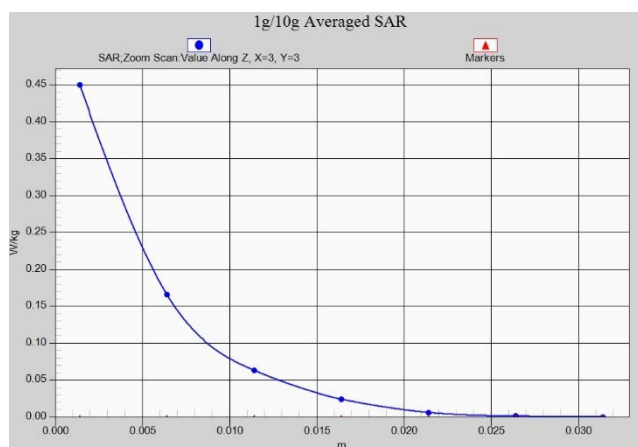
Z-Scan at power reference point (n25)



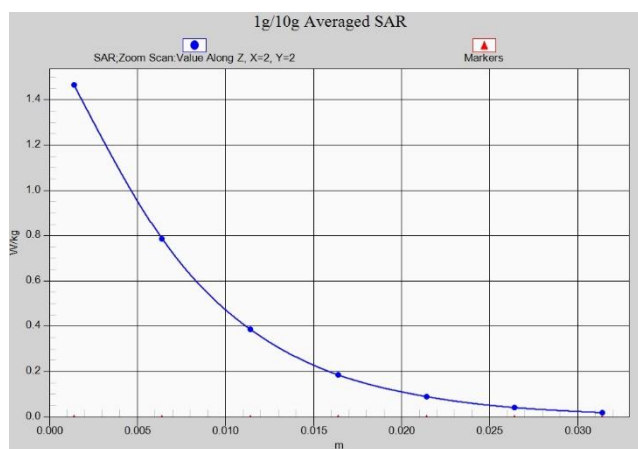
Z-Scan at power reference point (n25)



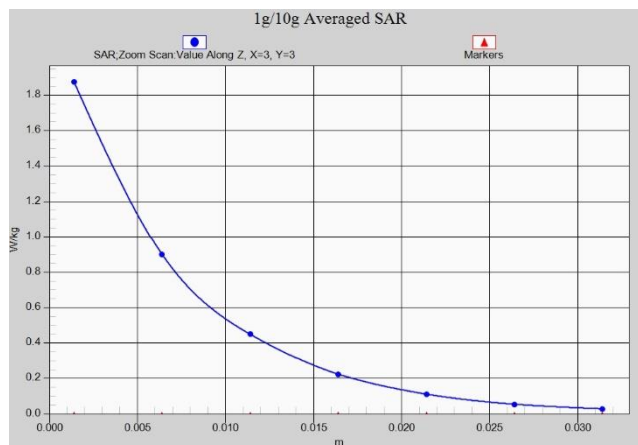
Z-Scan at power reference point (n25)



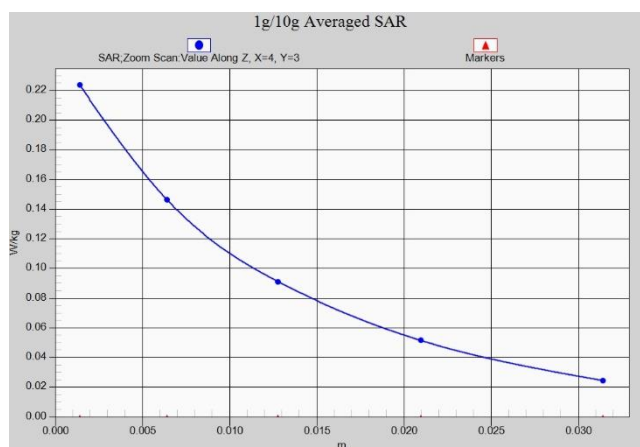
Z-Scan at power reference point (n41)



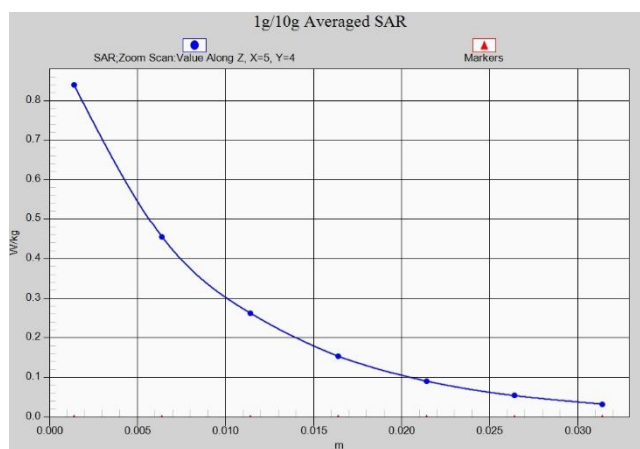
Z-Scan at power reference point (n41)



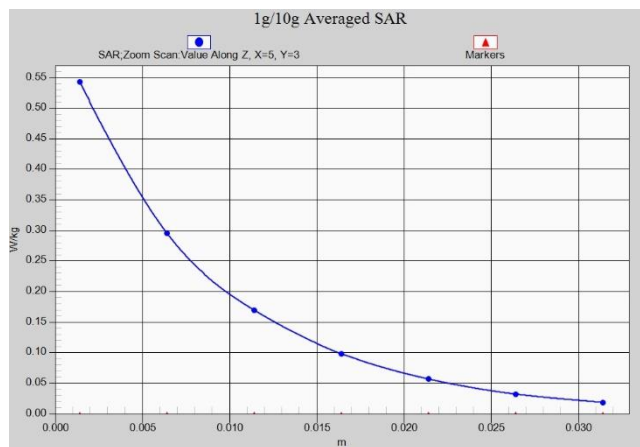
Z-Scan at power reference point (n41)



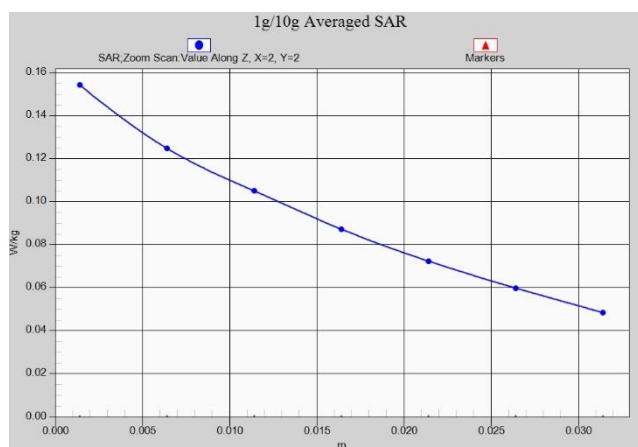
Z-Scan at power reference point (n66)



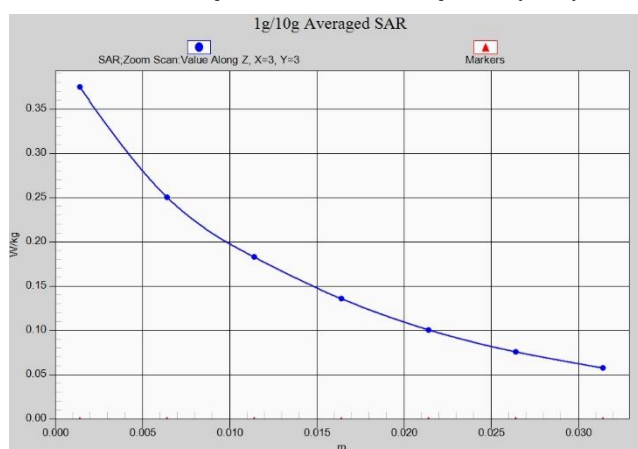
Z-Scan at power reference point (n66)



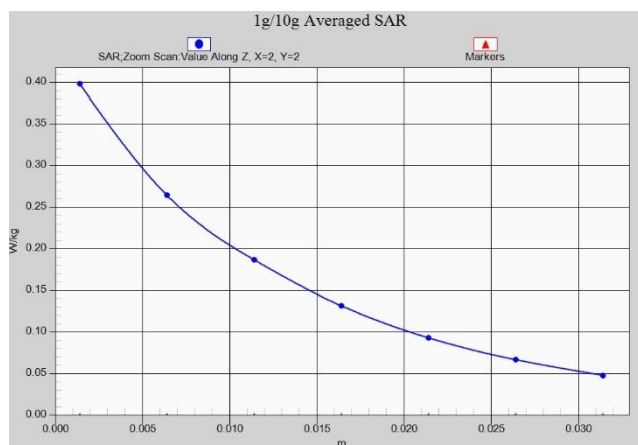
Z-Scan at power reference point (n66)



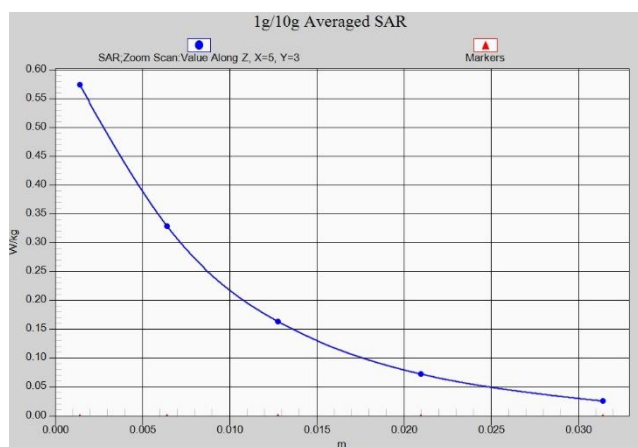
Z-Scan at power reference point (n71)



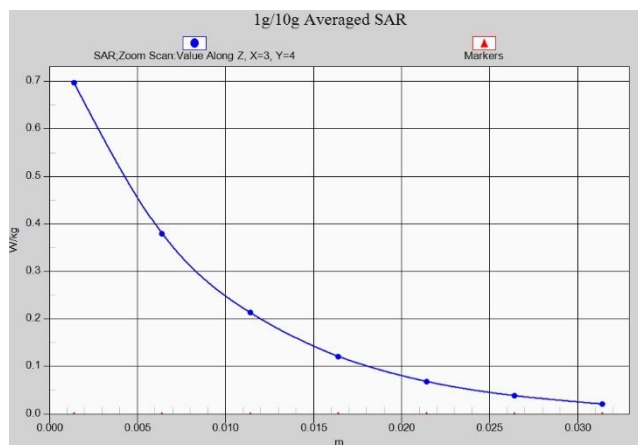
Z-Scan at power reference point (n71)



Z-Scan at power reference point (LTE B2)



Z-Scan at power reference point (LTE B2)



Z-Scan at power reference point (LTE B2)

ANNEX B System Verification Results

750 MHz

Date: 9/21/2020

Electronics: DAE4 Sn777

Medium: Head 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.897 \text{ mho/m}$; $\epsilon_r = 42.07$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 58.99 V/m; Power Drift = -0.1

Fast SAR: SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.4 W/kg

Maximum value of SAR (interpolated) = 2.81 W/kg

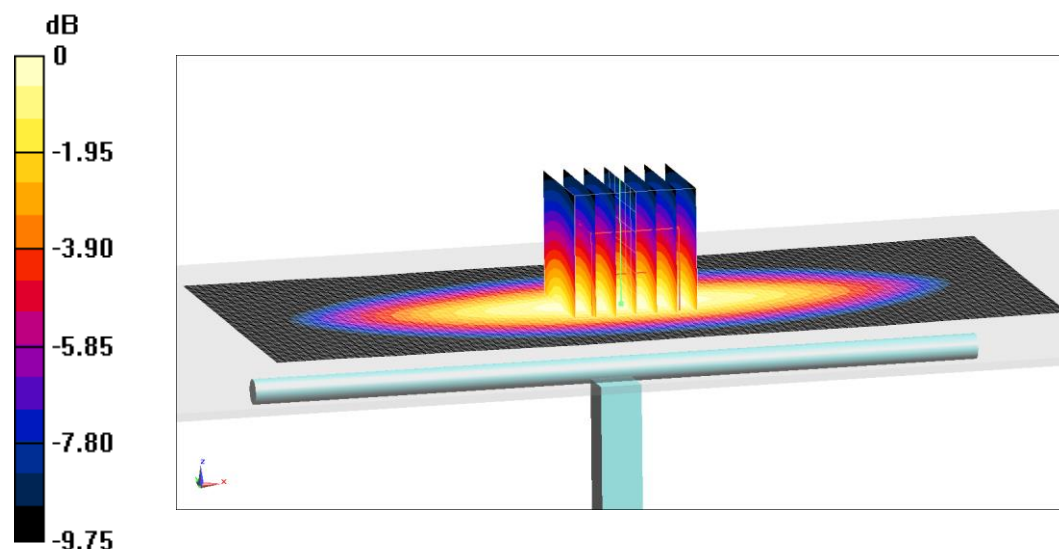
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 58.99 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 3.3 W/kg

SAR(1 g) = 2.11 W/kg; SAR(10 g) = 1.4 W/kg

Maximum value of SAR (measured) = 2.92 W/kg



0 dB = 2.92 W/kg = 4.65 dB W/kg

Fig.B.1 validation 750 MHz 250mW

835 MHz

Date: 9/22/2020

Electronics: DAE4 Sn777

Medium: Head 835 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.884 \text{ mho/m}$; $\epsilon_r = 41.45$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 63.45 V/m ; Power Drift = -0.05

Fast SAR: SAR(1 g) = 2.41 W/kg ; SAR(10 g) = 1.59 W/kg

Maximum value of SAR (interpolated) = 3.2 W/kg

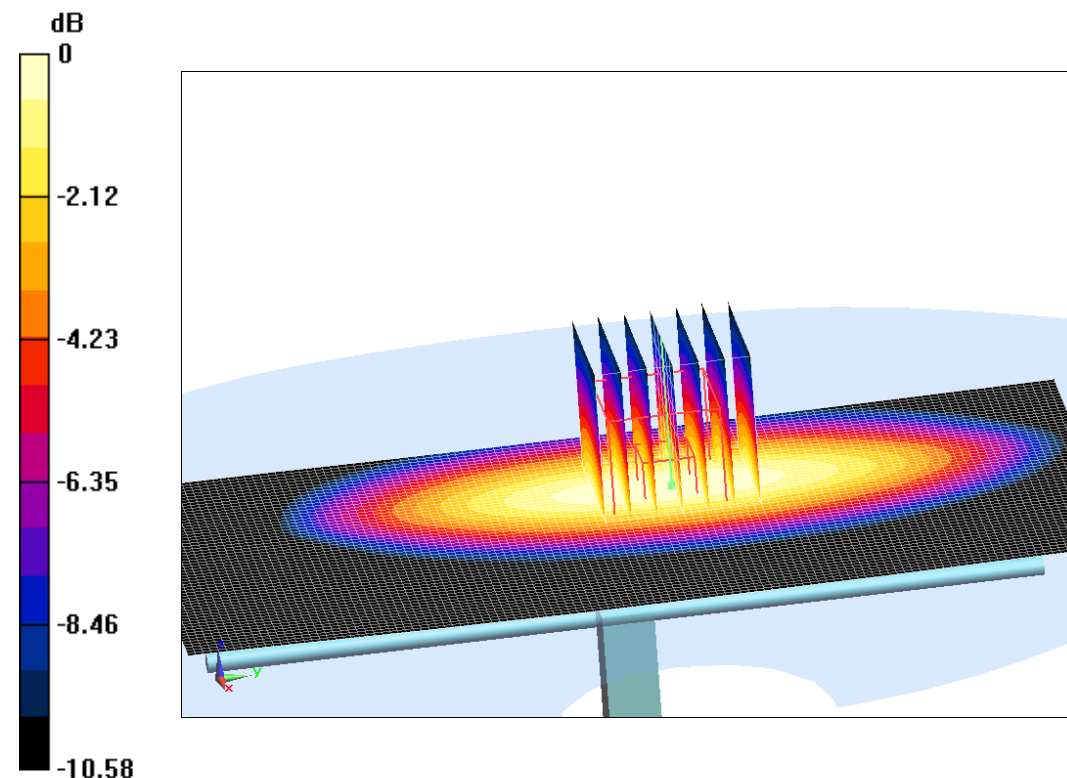
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 63.45 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 3.7 W/kg

SAR(1 g) = 2.42 W/kg ; SAR(10 g) = 1.55 W/kg

Maximum value of SAR (measured) = 3.21 W/kg



0 dB = 3.21 W/kg = 5.07 dB W/kg

Fig.B.2 validation 835 MHz 250mW

835 MHz

Date: 9/23/2020

Electronics: DAE4 Sn777

Medium: Head 835 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 41.27$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 63.08 V/m ; Power Drift = .04

Fast SAR: SAR(1 g) = 2.37 W/kg ; SAR(10 g) = 1.54 W/kg

Maximum value of SAR (interpolated) = 3.13 W/kg

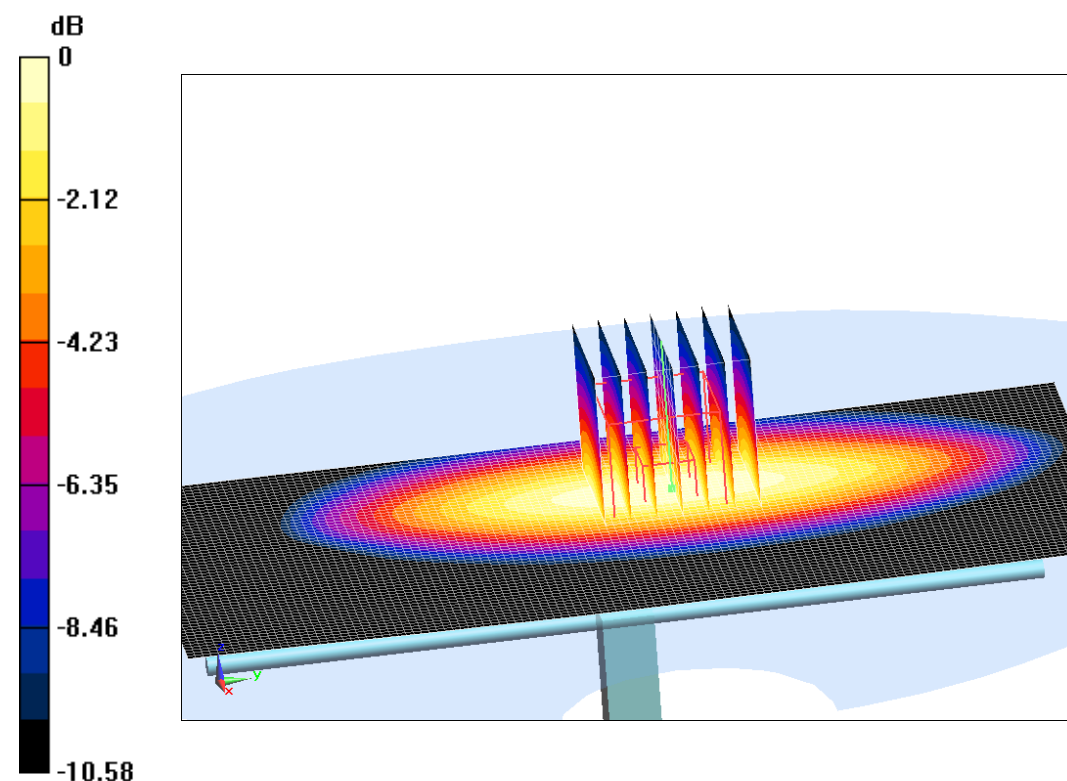
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 63.08 V/m ; Power Drift = .04 dB

Peak SAR (extrapolated) = 3.67 W/kg

SAR(1 g) = 2.36 W/kg ; SAR(10 g) = 1.58 W/kg

Maximum value of SAR (measured) = 3.26 W/kg



0 dB = 3.26 W/kg = 5.13 dB W/kg

Fig.B.3 validation 835 MHz 250mW

1750 MHz

Date: 9/24/2020

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.374$ mho/m; $\epsilon_r = 39.44$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 105.19 V/m; Power Drift = -0.04

Fast SAR: SAR(1 g) = 9.08 W/kg; SAR(10 g) = 4.73 W/kg

Maximum value of SAR (interpolated) = 14.12 W/kg

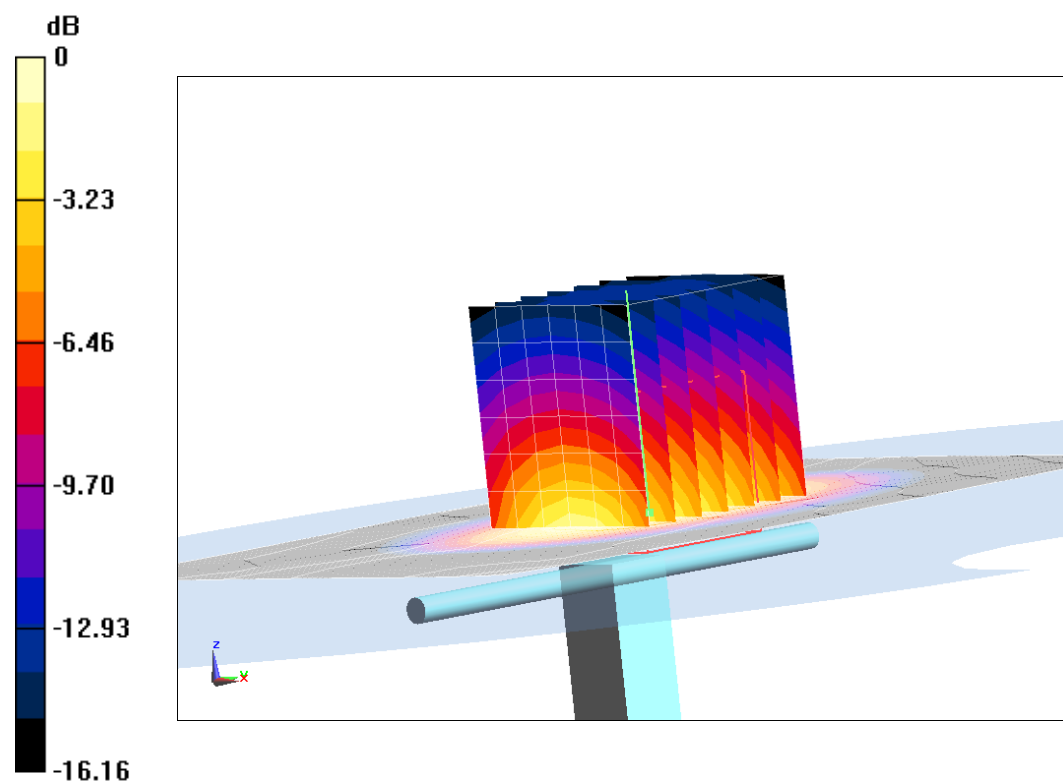
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 105.19 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 16.67 W/kg

SAR(1 g) = 9 W/kg; SAR(10 g) = 4.76 W/kg

Maximum value of SAR (measured) = 14.22 W/kg



0 dB = 14.22 W/kg = 11.53 dB W/kg

Fig.B.4 validation 1750 MHz 250mW

1750 MHz

Date: 9/25/2020

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.345$ mho/m; $\epsilon_r = 40.13$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 104.9 V/m; Power Drift = .05

Fast SAR: SAR(1 g) = 9.01 W/kg; SAR(10 g) = 4.8 W/kg

Maximum value of SAR (interpolated) = 14.16 W/kg

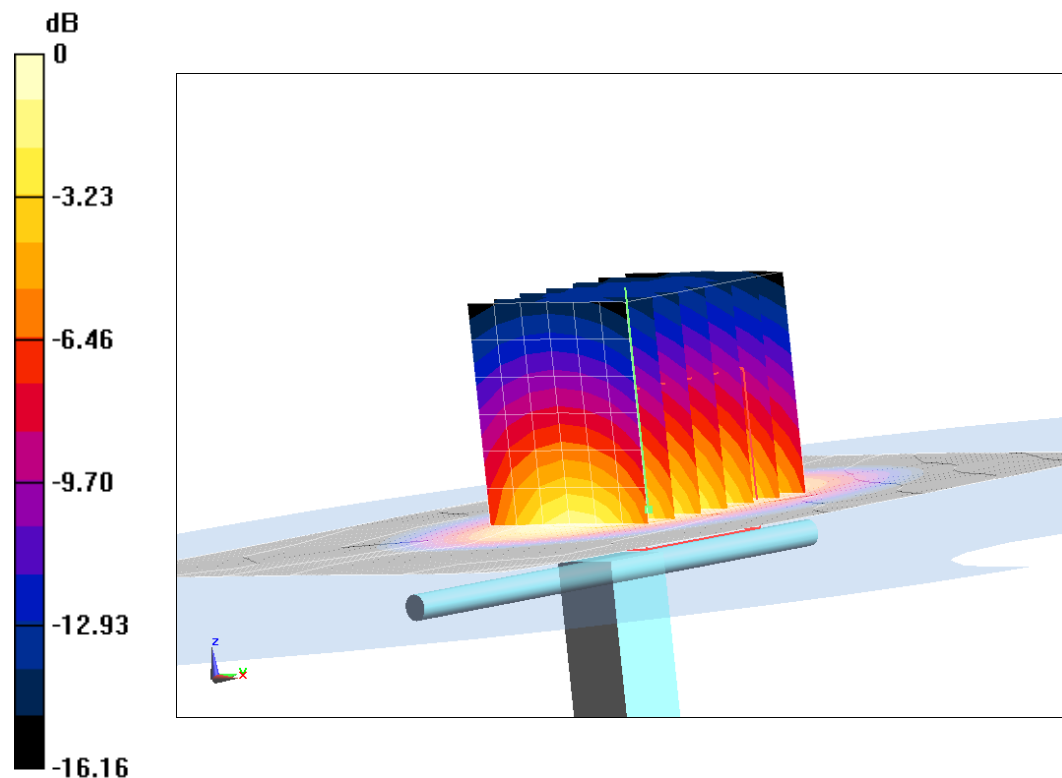
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value =104.9 V/m; Power Drift = .05 dB

Peak SAR (extrapolated) = 16.73 W/kg

SAR(1 g) = 8.95 W/kg; SAR(10 g) = 4.76 W/kg

Maximum value of SAR (measured) = 14.37 W/kg



0 dB = 14.37 W/kg = 11.57 dB W/kg

Fig.B.5 validation 1750 MHz 250mW

1900 MHz

Date: 9/26/2020

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.382$ mho/m; $\epsilon_r = 39.33$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 110.67 V/m; Power Drift = 0.06

Fast SAR: SAR(1 g) = 9.95 W/kg; SAR(10 g) = 5.14 W/kg

Maximum value of SAR (interpolated) = 15.41 W/kg

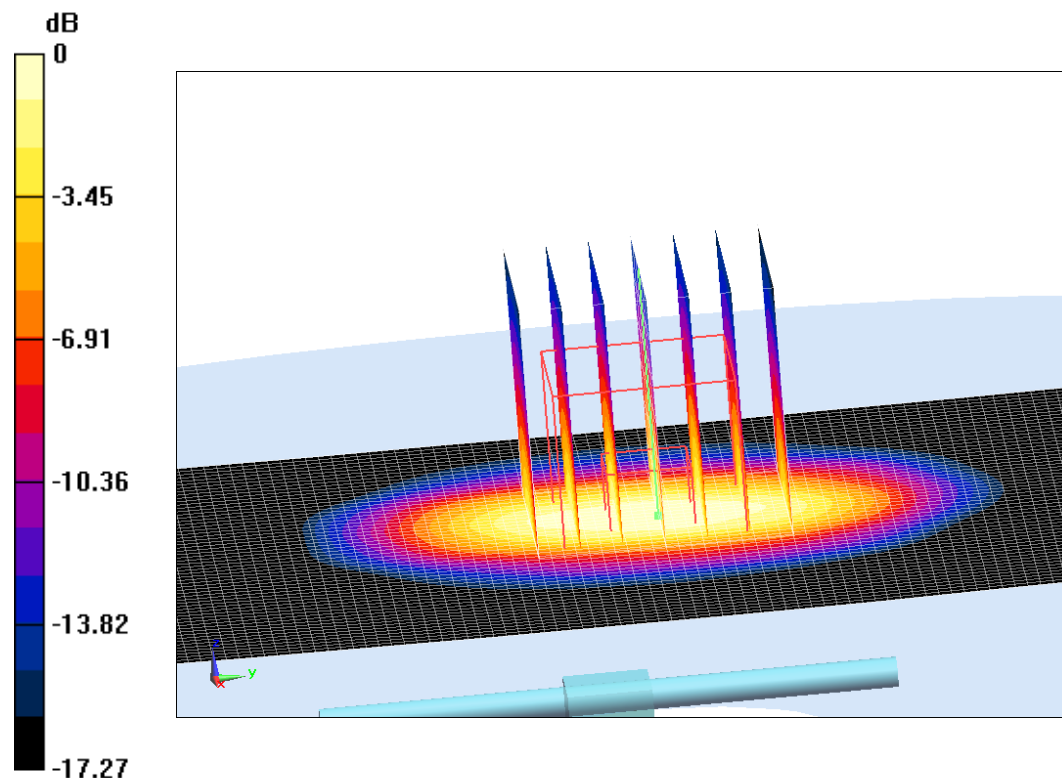
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value =110.67 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 18.05 W/kg

SAR(1 g) = 9.92 W/kg; SAR(10 g) = 5.24 W/kg

Maximum value of SAR (measured) = 14.91 W/kg



0 dB = 14.91 W/kg = 11.73 dB W/kg

Fig.B.6 validation 1900 MHz 250mW

1900 MHz

Date: 9/27/2020

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.413$ mho/m; $\epsilon_r = 39.77$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 110.84 V/m; Power Drift = .03

Fast SAR: SAR(1 g) = 9.83 W/kg; SAR(10 g) = 5.24 W/kg

Maximum value of SAR (interpolated) = 15.16 W/kg

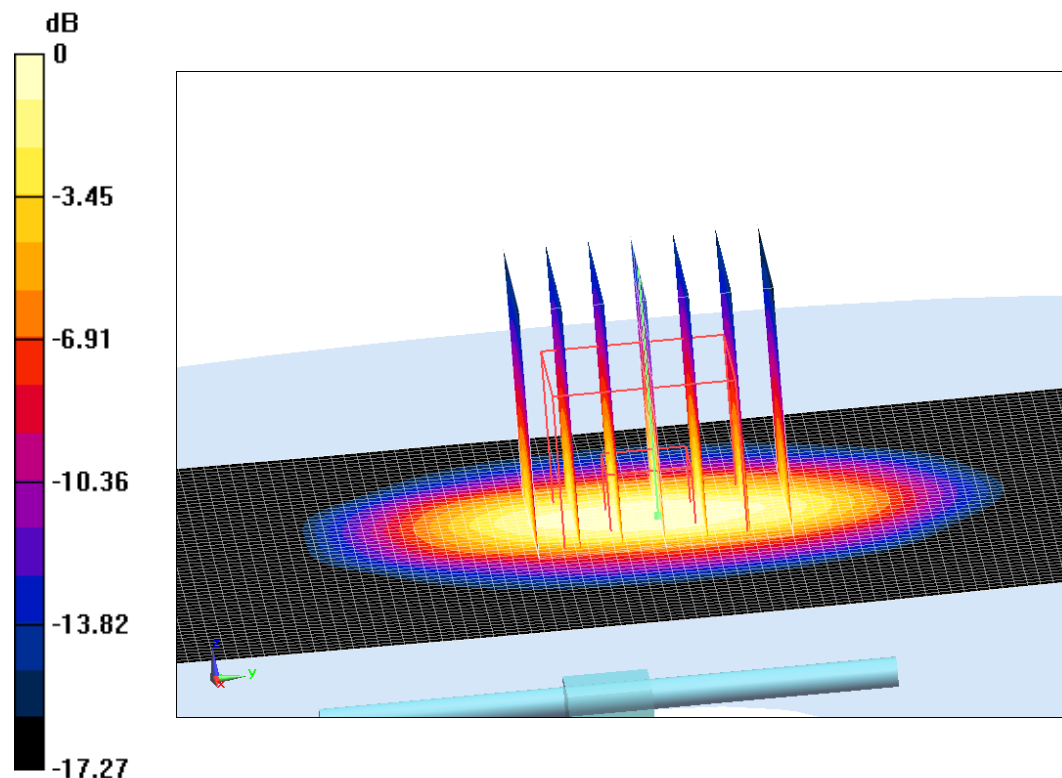
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =110.84 V/m; Power Drift = .03 dB

Peak SAR (extrapolated) = 17.91 W/kg

SAR(1 g) = 9.9 W/kg; SAR(10 g) = 5.09 W/kg

Maximum value of SAR (measured) = 15.14 W/kg



0 dB = 15.14 W/kg = 11.8 dB W/kg

Fig.B.7 validation 1900 MHz 250mW

2450 MHz

Date: 9/28/2020

Electronics: DAE4 Sn777

Medium: Head 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.813$ mho/m; $\epsilon_r = 39.22$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(7.65,7.65,7.65)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 117.51 V/m; Power Drift = -0.05

Fast SAR: SAR(1 g) = 12.89 W/kg; SAR(10 g) = 6.09 W/kg

Maximum value of SAR (interpolated) = 22.09 W/kg

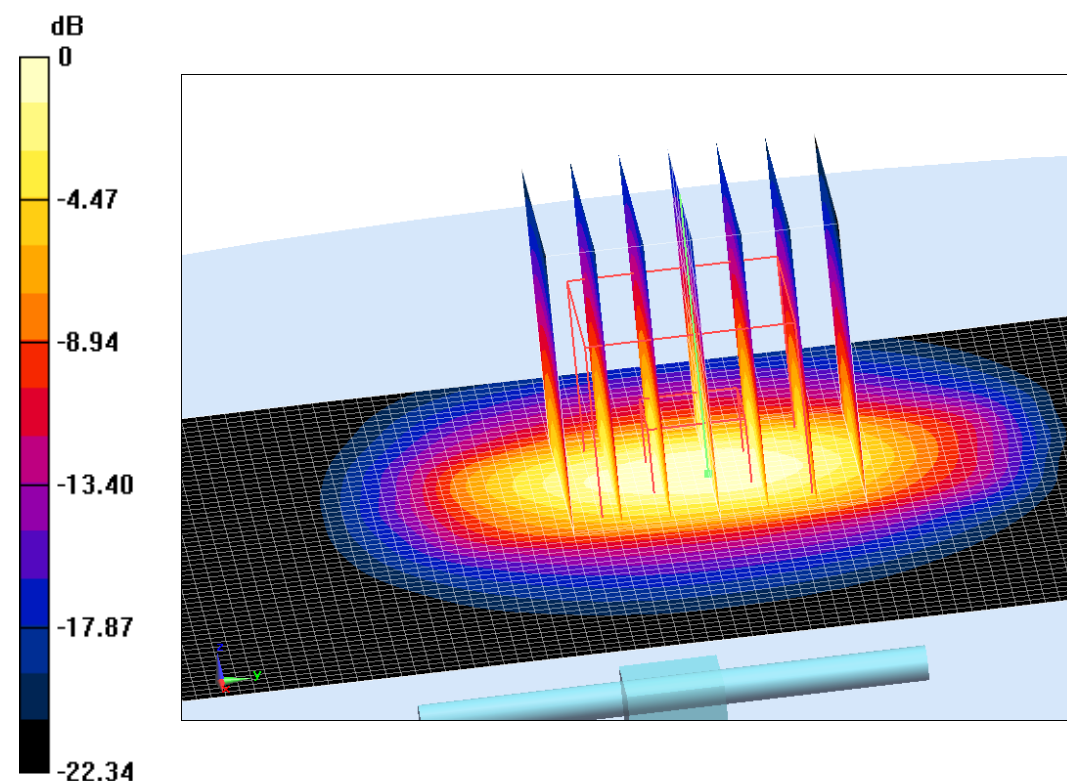
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value =117.51 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 25.93 W/kg

SAR(1 g) = 12.94 W/kg; SAR(10 g) = 6.07 W/kg

Maximum value of SAR (measured) = 21.84 W/kg



0 dB = 21.84 W/kg = 13.39 dB W/kg

Fig.B.8 validation 2450 MHz 250mW

2600 MHz

Date: 9/29/2020

Electronics: DAE4 Sn777

Medium: Head 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 121 V/m; Power Drift = 0.02

Fast SAR: SAR(1 g) = 14.01 W/kg; SAR(10 g) = 6.28 W/kg

Maximum value of SAR (interpolated) = 24.01 W/kg

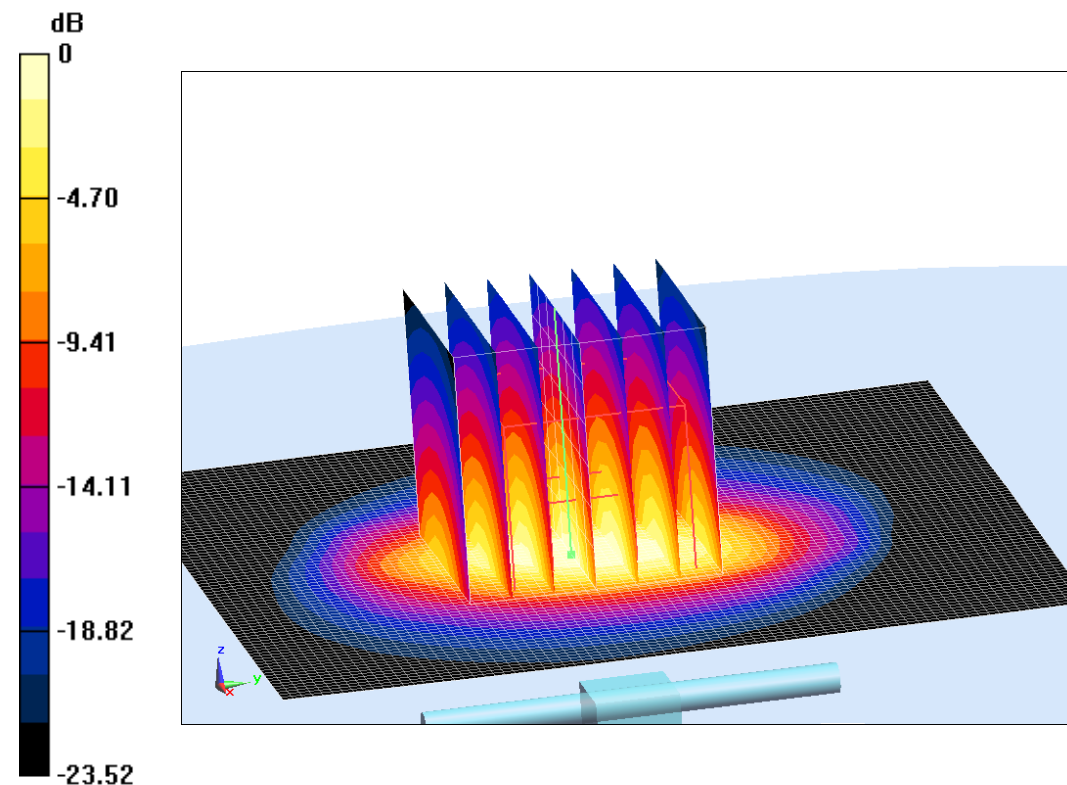
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value =121 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 28.74 W/kg

SAR(1 g) = 13.97 W/kg; SAR(10 g) = 6.36 W/kg

Maximum value of SAR (measured) = 24.72 W/kg



0 dB = 24.72 W/kg = 13.93 dB W/kg

Fig.B.9 validation 2600 MHz 250mW

2600 MHz

Date: 9/30/2020

Electronics: DAE4 Sn777

Medium: Head 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.974$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 119.37 V/m; Power Drift = .06

Fast SAR: SAR(1 g) = 14.06 W/kg; SAR(10 g) = 6.33 W/kg

Maximum value of SAR (interpolated) = 24.7 W/kg

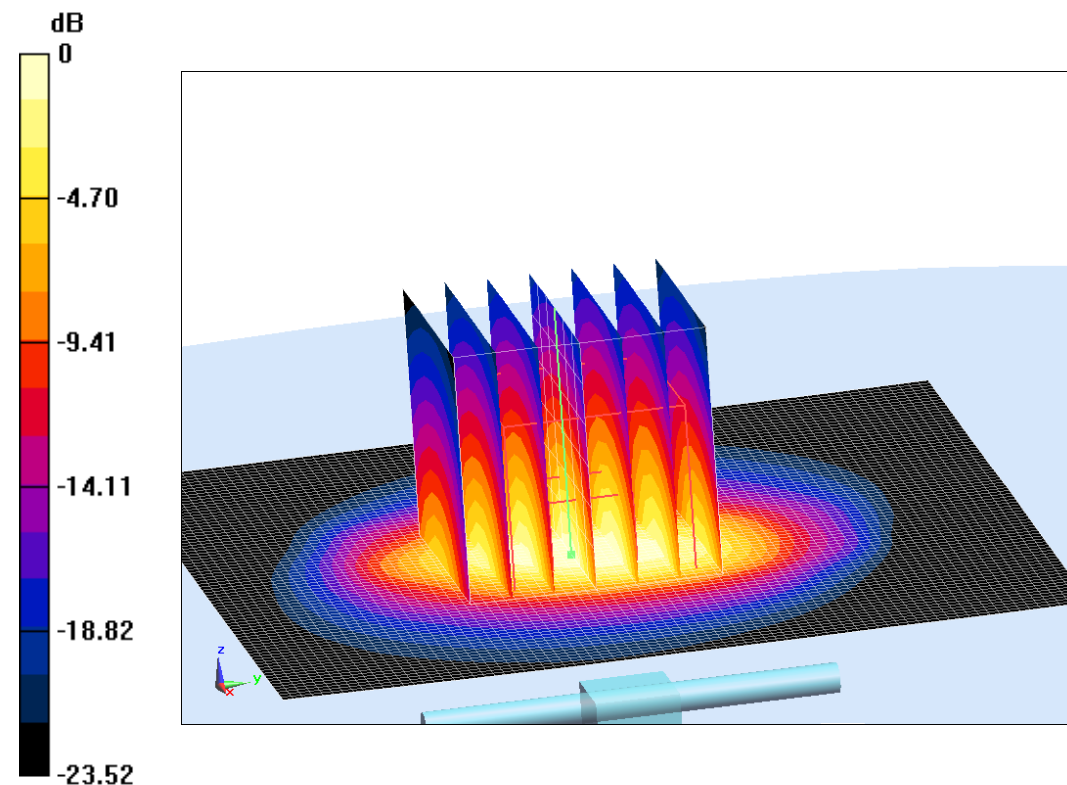
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =119.37 V/m; Power Drift = .06 dB

Peak SAR (extrapolated) = 29.18 W/kg

SAR(1 g) = 14.03 W/kg; SAR(10 g) = 6.36 W/kg

Maximum value of SAR (measured) = 24.4 W/kg



0 dB = 24.4 W/kg = 13.87 dB W/kg

Fig.B.10 validation 2600 MHz 250mW

5250 MHz

Date: 10/1/2020

Electronics: DAE4 Sn777

Medium: Head 5250 MHz

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.701$ mho/m; $\epsilon_r = 35.43$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 5250 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(5.39,5.39,5.39)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 80.43 V/m; Power Drift = -0.08

Fast SAR: SAR(1 g) = 20.12 W/kg; SAR(10 g) = 5.69 W/kg

Maximum value of SAR (interpolated) = 18.54 W/kg

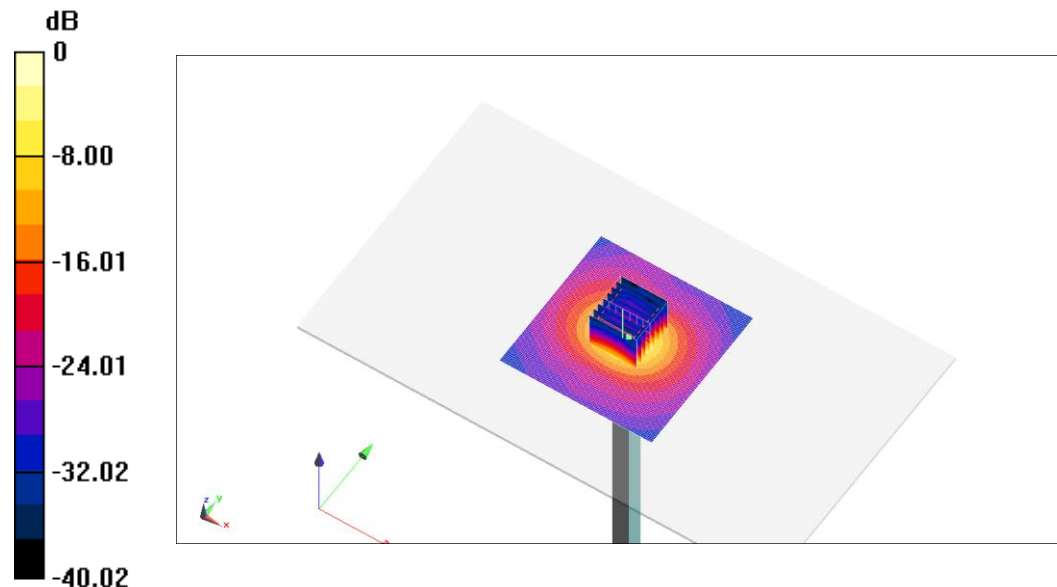
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =80.43 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 28.09 W/kg

SAR(1 g) = 20.2 W/kg; SAR(10 g) = 5.82 W/kg

Maximum value of SAR (measured) = 18.36 W/kg



0 dB = 18.36 W/kg = 12.64 dB W/kg

Fig.B.11 validation 5250 MHz 250mW