

**LTE Band 26 Body**

Date: 2019-1-23

Electronics: DAE4 Sn1527

Medium: Body 835 MHz

Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.986$  S/m;  $\epsilon_r = 54.112$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, LTE\_FDD (0) Frequency: 831.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (9.69, 9.69, 9.69);

**Rear Side Mid 1RB\_High/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.192 W/kg

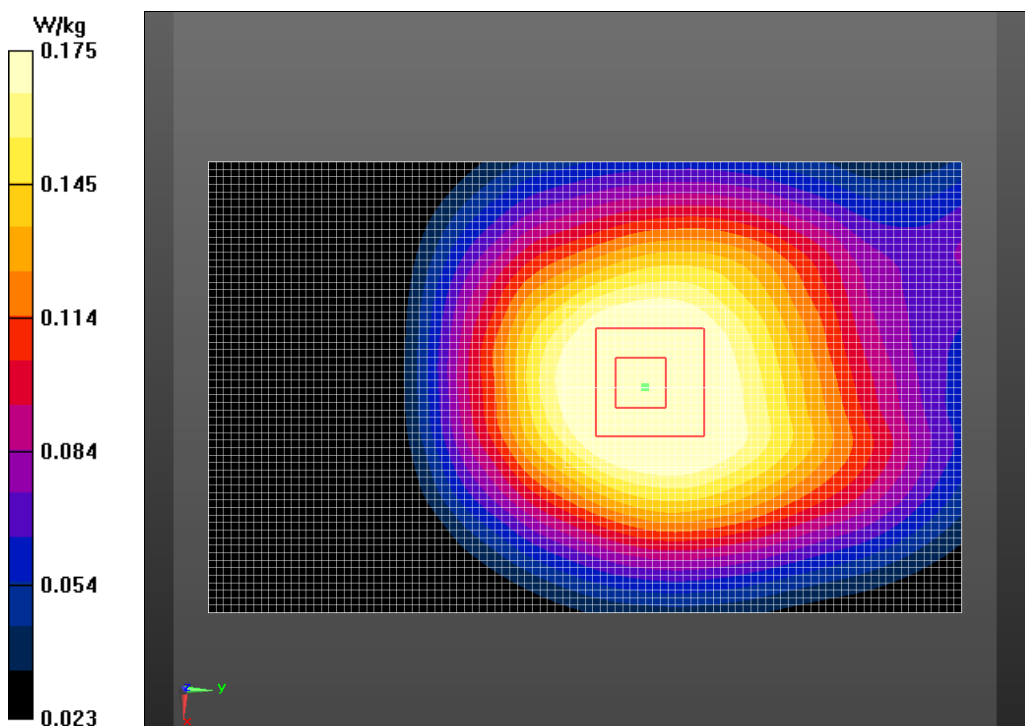
**Rear Side Mid 1RB\_High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.05 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.211 W/kg

**SAR(1 g) = 0.166 W/kg; SAR(10 g) = 0.124 W/kg**

Maximum value of SAR (measured) = 0.175 W/kg



**LTE Band 38 Head**

Date: 2019-1-24

Electronics: DAE4 Sn1527

Medium: Head 2550 MHz

Medium parameters used (interpolated):  $f = 2595$  MHz;  $\sigma = 2.024$  S/m;  $\epsilon_r = 38.196$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, LTE\_TDD (0) Frequency: 2595 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3633 ConvF (7.28, 7.28, 7.28);

**Left Cheek Mid 1RB\_Low/Area Scan (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.385 W/kg

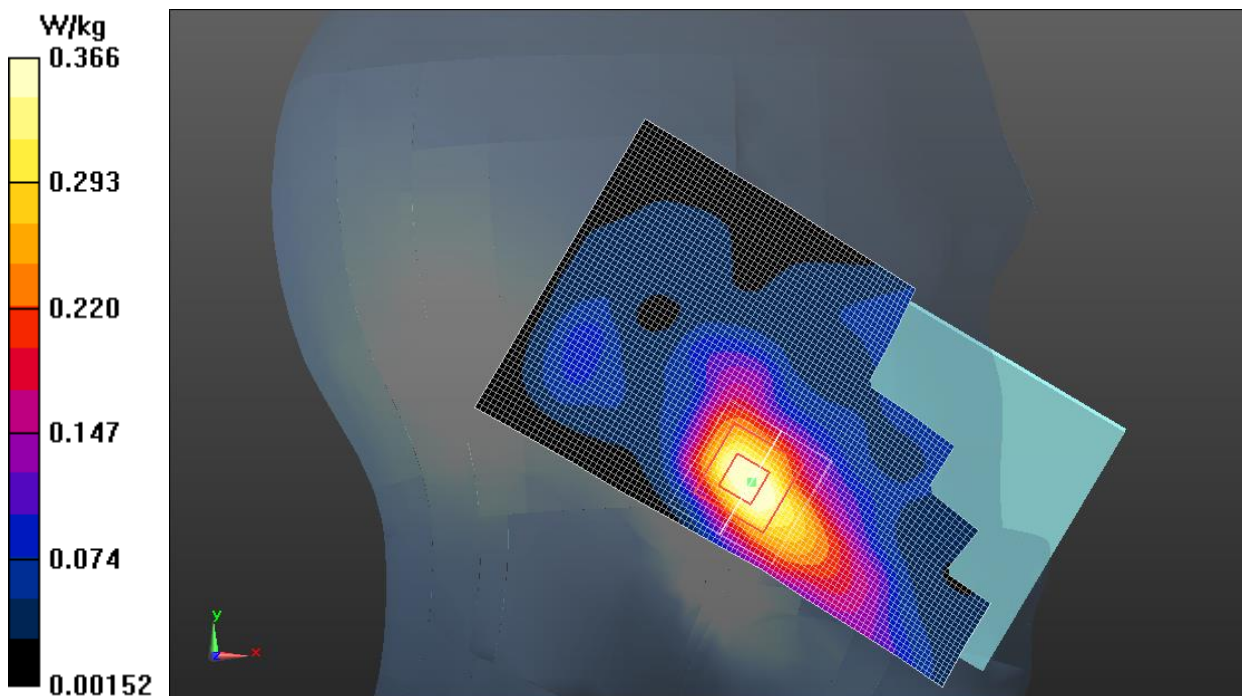
**Left Cheek Mid 1RB\_Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.040 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.616 W/kg

**SAR(1 g) = 0.340 W/kg; SAR(10 g) = 0.180 W/kg**

Maximum value of SAR (measured) = 0.366 W/kg



**LTE Band 38 Body**

Date: 2019-1-24

Electronics: DAE4 Sn1527

Medium: Body 2550 MHz

Medium parameters used (interpolated):  $f = 2595$  MHz;  $\sigma = 2.105$  S/m;  $\epsilon_r = 53.073$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, LTE\_TDD (0) Frequency: 2595 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3633 ConvF (7.31, 7.31, 7.31);

**Front Side Mid 1RB\_Low/Area Scan (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.672 W/kg

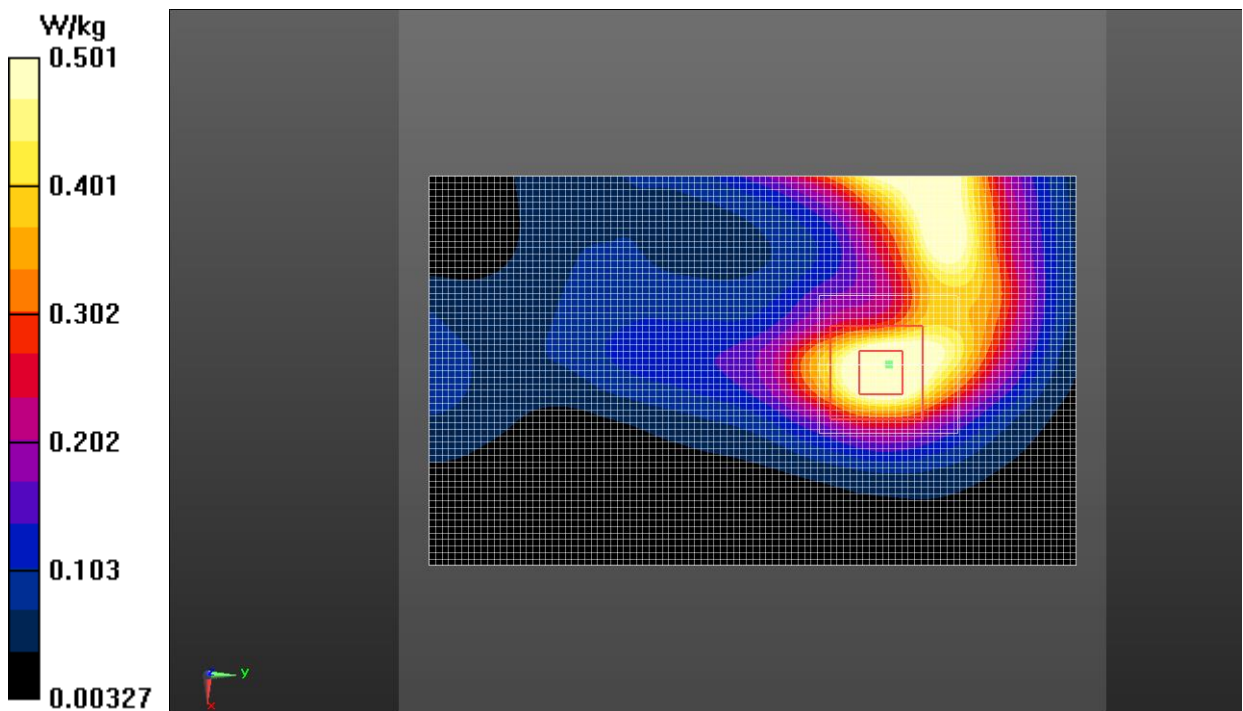
**Front Side Mid 1RB\_Low /Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.764 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.917 W/kg

**SAR(1 g) = 0.450 W/kg; SAR(10 g) = 0.214 W/kg**

Maximum value of SAR (measured) = 0.501 W/kg



**LTE Band 66 Head**

Date: 2019-1-24

Electronics: DAE4 Sn1527

Medium: Head 1750 MHz

Medium parameters used (interpolated):  $f = 1745$  MHz;  $\sigma = 1.352$  S/m;  $\epsilon_r = 39.678$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, LTE\_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (8.12, 8.12, 8.12);

**Left Cheek Mid 1RB\_Low/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.422 W/kg

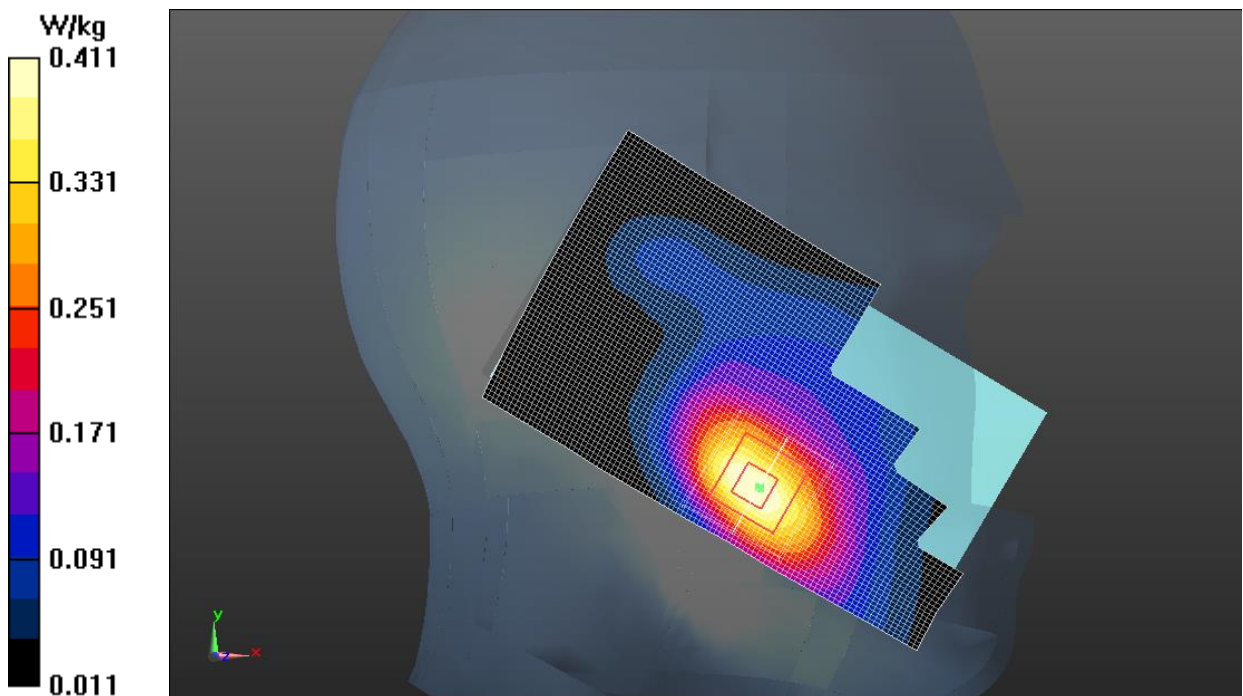
**Left Cheek Mid 1RB\_Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.602 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.601 W/kg

**SAR(1 g) = 0.377 W/kg; SAR(10 g) = 0.230 W/kg**

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



**LTE Band 66 Body**

Date: 2019-1-24

Electronics: DAE4 Sn1527

Medium: Body 1750 MHz

Medium parameters used (interpolated):  $f = 1745$  MHz;  $\sigma = 1.443$  S/m;  $\epsilon_r = 53.434$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, LTE\_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (8.05, 8.05, 8.05);

**Front Side 1RB\_Low/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.430 W/kg

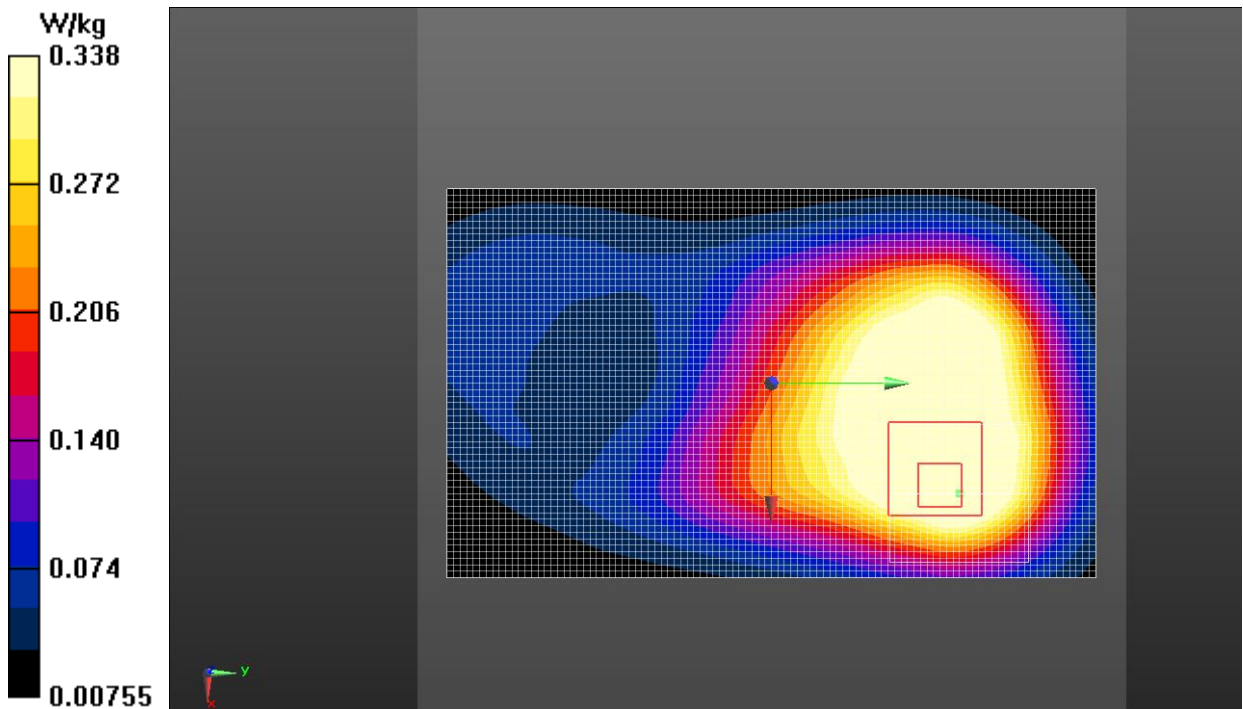
**Front Side 1RB\_Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.24 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.500 W/kg

**SAR(1 g) = 0.315 W/kg; SAR(10 g) = 0.205 W/kg**

Maximum value of SAR (measured) = 0.338 W/kg



**Wi-Fi 2.4G Head**

Date: 2019-1-25

Electronics: DAE4 Sn1527

Medium: Head 2450 MHz

Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.871$  S/m;  $\epsilon_r = 38.693$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, WiFi (0) Frequency: 2462 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (7.42, 7.42, 7.42);

**Right Cheek High/Area Scan (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.429 W/kg

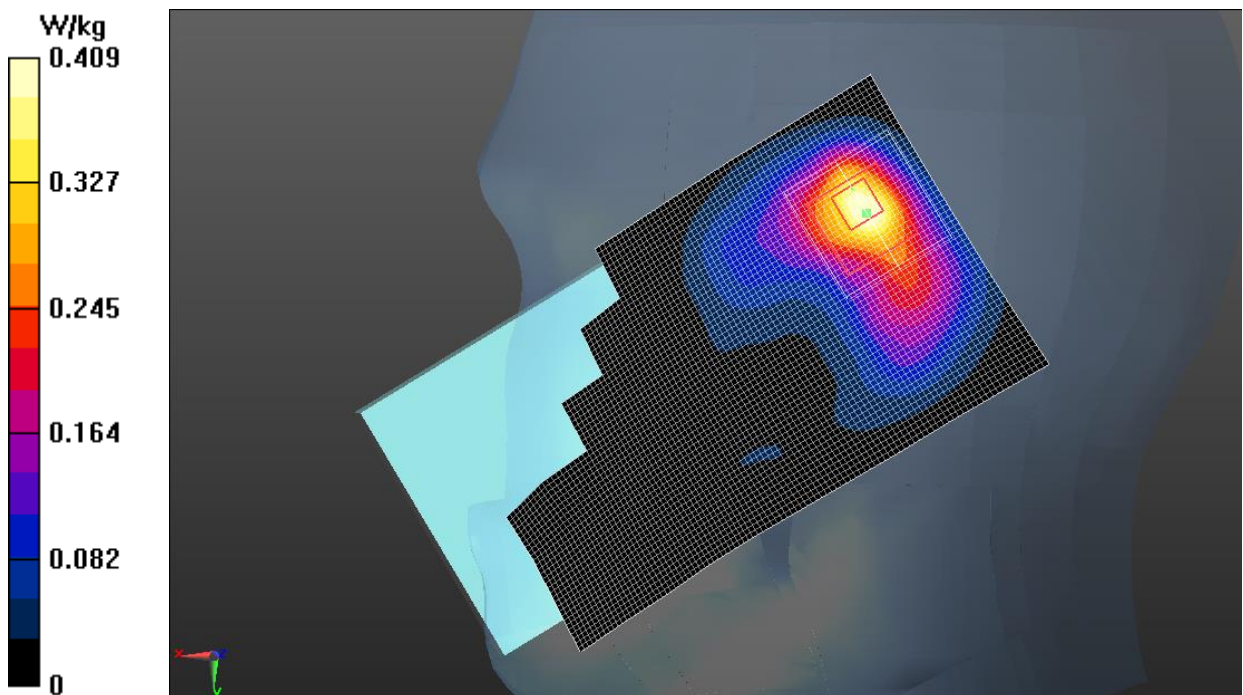
**Right Cheek High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.67 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.977 W/kg

**SAR(1 g) = 0.385 W/kg; SAR(10 g) = 0.173 W/kg**

Maximum value of SAR (measured) = 0.409 W/kg



**Wi-Fi 2.4G Body**

Date: 2019-1-25

Electronics: DAE4 Sn1527

Medium: Body 2450 MHz

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.911$  S/m;  $\epsilon_r = 53.568$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, WiFi (0) Frequency: 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (7.47, 7.47, 7.47);

**Rear Side Middle/Area Scan (101x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.420 W/kg

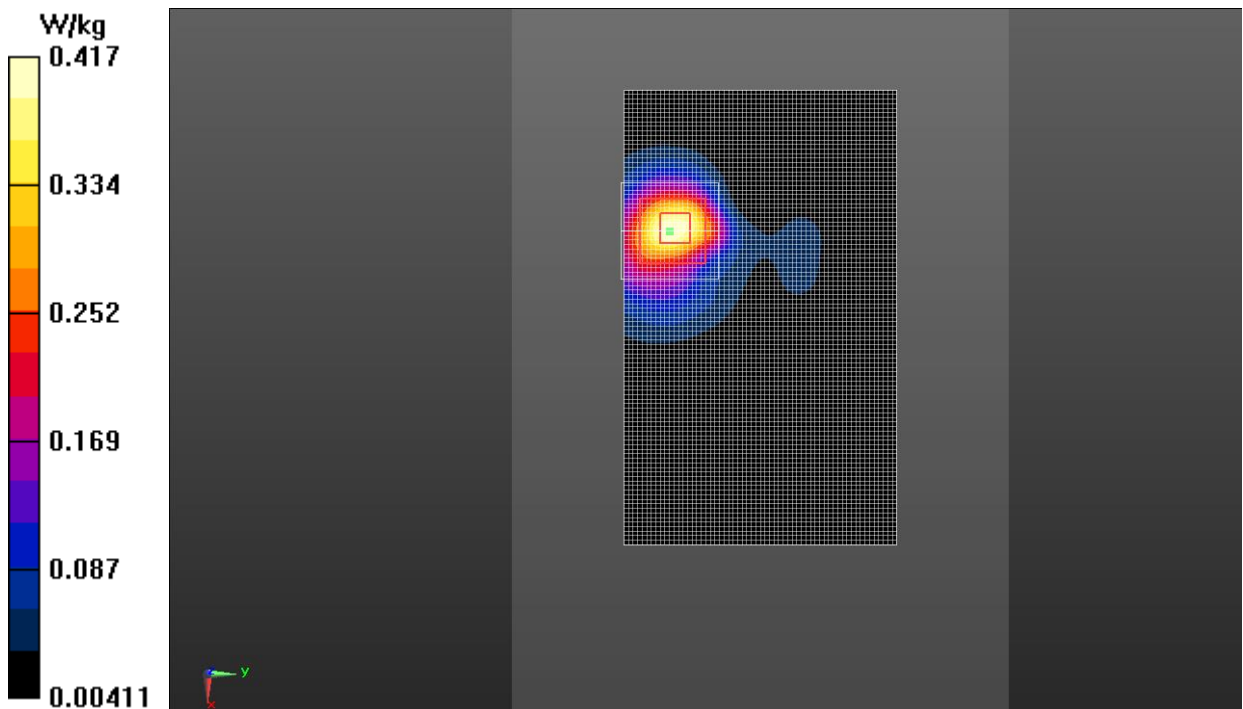
**Rear Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.115 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.540 W/kg

**SAR(1 g) = 0.298 W/kg; SAR(10 g) = 0.151 W/kg**

Maximum value of SAR (measured) = 0.417 W/kg



**Wi-Fi 5G Head**

Date: 2019-1-22

Electronics: DAE4 Sn1527

Medium: Head 5800 MHz

Medium parameters used:  $f = 5825$  MHz;  $\sigma = 5.402$  S/m;  $\epsilon_r = 34.813$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, WIFI 5G (0) Frequency: 5825 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF (4.81, 4.81, 4.81);

**Right Tilt CH165/Area Scan (61x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.68 W/kg

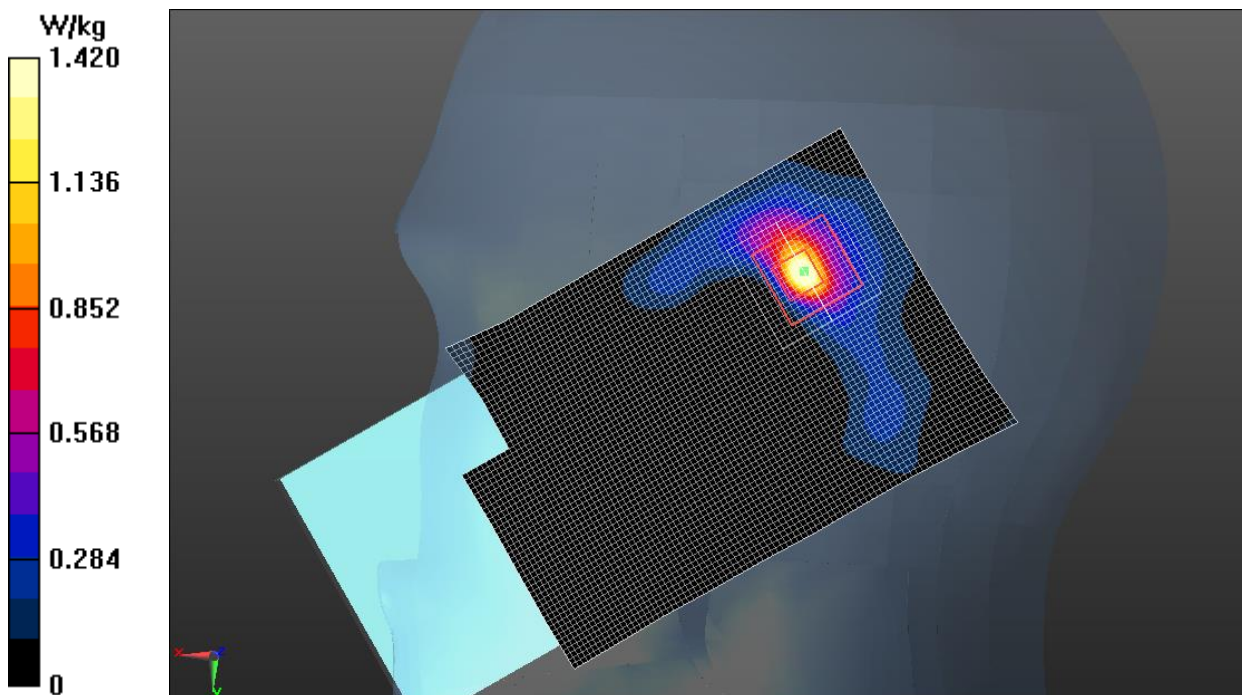
**Right Tilt CH165/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 3.925 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 3.29 W/kg

**SAR(1 g) = 0.748 W/kg; SAR(10 g) = 0.241 W/kg**

Maximum value of SAR (measured) = 1.42 W/kg





**Wi-Fi 5G Body**

Date: 2019-1-22

Electronics: DAE4 Sn1527

Medium: Body 5800 MHz

Medium parameters used:  $f = 5825$  MHz;  $\sigma = 6.186$  S/m;  $\epsilon_r = 48.945$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, WIFI 5G (0) Frequency: 5825 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF (4.48, 4.48, 4.48);

**Rear Side CH165/Area Scan (131x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.560 W/kg

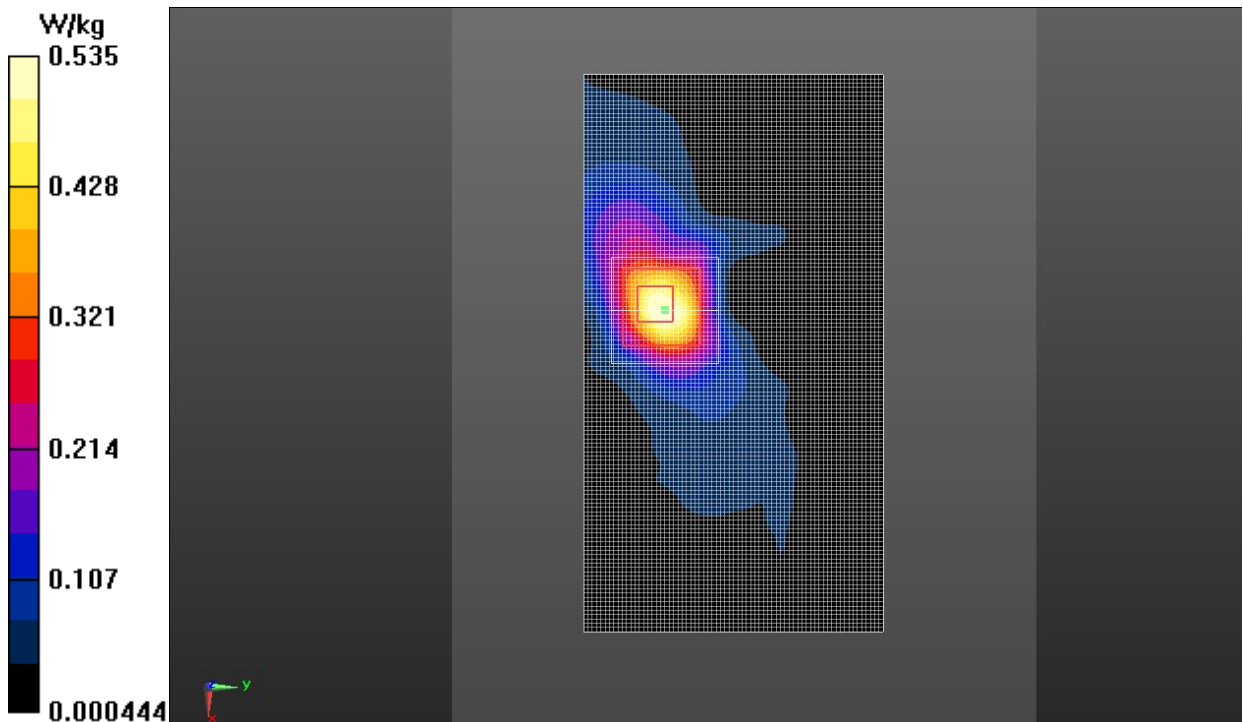
**Rear Side CH165/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.663 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.26 W/kg

**SAR(1 g) = 0.300 W/kg; SAR(10 g) = 0.112 W/kg**

Maximum value of SAR (measured) = 0.535 W/kg



## ANNEX L System Verification Results for Spot Check Test

### 750MHz

Date: 2019-1-23

Electronics: DAE4 Sn1527

Medium: Head 750 MHz

Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.914 \text{ S/m}$ ;  $\epsilon_r = 41.856$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.5^\circ\text{C}$       Liquid Temperature:  $22.0^\circ\text{C}$

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

Probe: EX3DV4 – SN3633 ConvF (9.33, 9.33, 9.33);

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

Reference Value =  $58.613 \text{ V/m}$ ; Power Drift =  $0.10 \text{ dB}$

**SAR(1 g) =  $2.12 \text{ W/kg}$ ; SAR(10 g) =  $1.37 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $2.22 \text{ W/kg}$

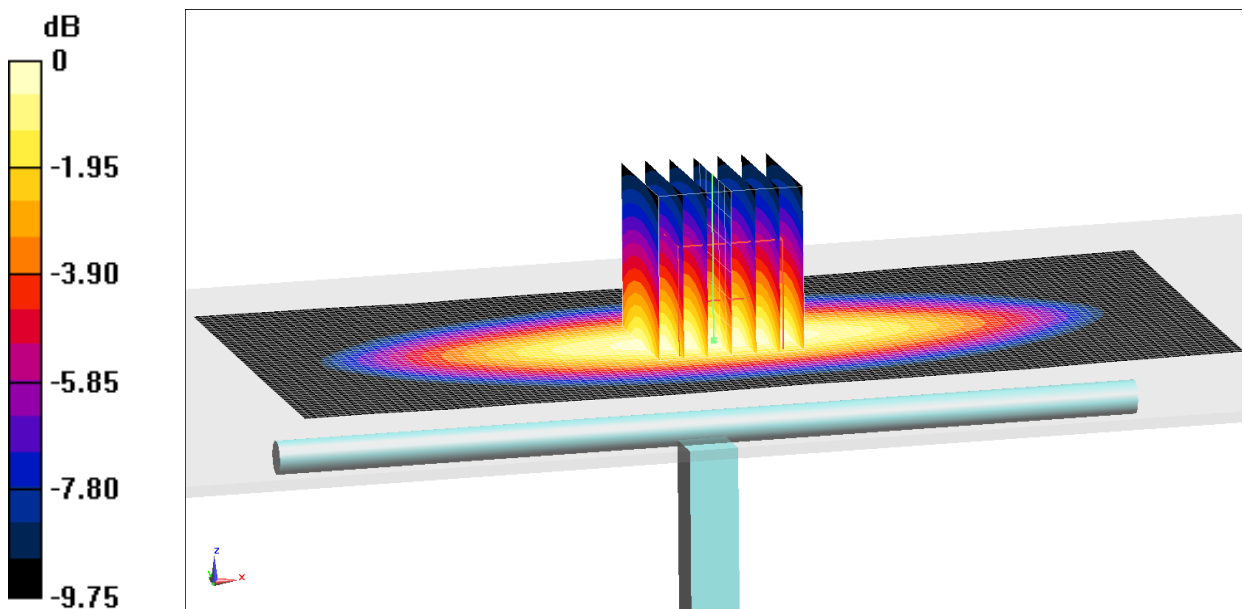
**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $58.613 \text{ V/m}$ ; Power Drift =  $0.10 \text{ dB}$

Peak SAR (extrapolated) =  $2.69 \text{ W/kg}$

**SAR(1 g) =  $2.15 \text{ W/kg}$ ; SAR(10 g) =  $1.39 \text{ W/kg}$**

Maximum value of SAR (measured) =  $2.25 \text{ W/kg}$



0 dB =  $2.25 \text{ W/kg}$  =  $3.52 \text{ dB W/kg}$

**Fig.L.1 Validation 750MHz 250mW**

## 750MHz

Date: 2019-1-23

Electronics: DAE4 Sn1527

Medium: Body 750 MHz

Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.963 \text{ S/m}$ ;  $\epsilon_r = 53.598$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.5^\circ\text{C}$       Liquid Temperature:  $22.0^\circ\text{C}$

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

Probe: EX3DV4 – SN3633 ConvF (9.69, 9.69, 9.69);

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

Reference Value =  $59.248 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

**SAR(1 g) =  $2.22 \text{ W/kg}$ ; SAR(10 g) =  $1.45 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $2.30 \text{ W/kg}$

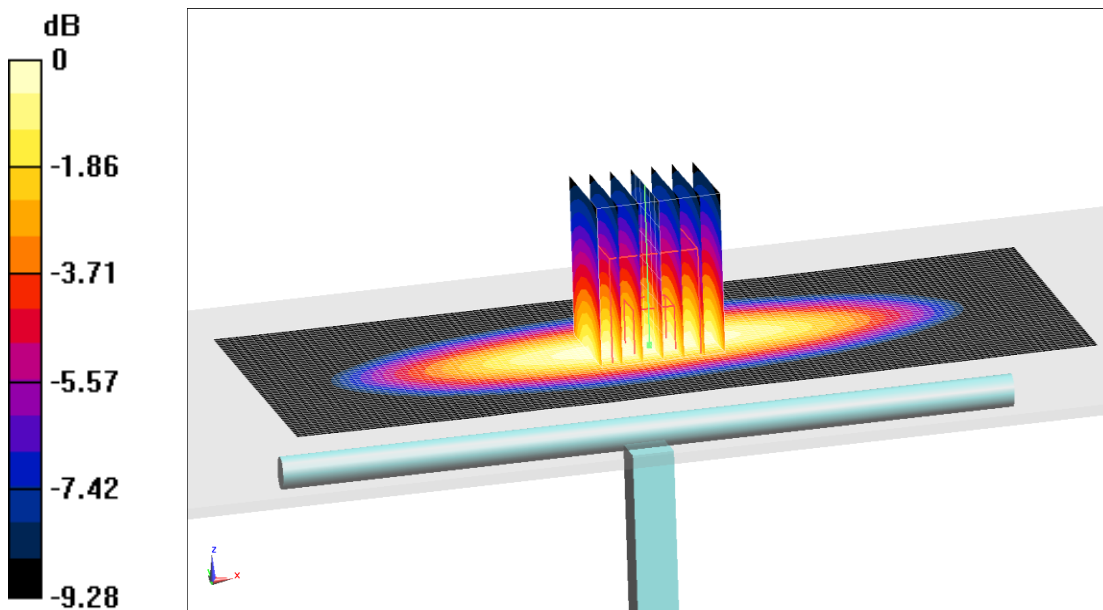
**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $59.248 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

Peak SAR (extrapolated) =  $2.74 \text{ W/kg}$

**SAR(1 g) =  $2.19 \text{ W/kg}$ ; SAR(10 g) =  $1.42 \text{ W/kg}$**

Maximum value of SAR (measured) =  $2.28 \text{ W/kg}$



0 dB =  $2.30 \text{ W/kg}$  =  $3.58 \text{ dB W/kg}$

**Fig.L.2 Validation 750MHz 250mW**

## 835MHz

Date: 2019-1-23

Electronics: DAE4 Sn1527

Medium: Head 835 MHz

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.886 \text{ S/m}$ ;  $\epsilon_r = 41.362$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$       Liquid Temperature:  $22.5^\circ\text{C}$

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

Probe: EX3DV4 – SN3633 ConvF (9.33, 9.33, 9.33);

**System Validation /Area Scan (81x161x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Reference Value =  $56.625 \text{ V/m}$ ; Power Drift =  $-0.11 \text{ dB}$

**SAR(1 g) =  $2.38 \text{ W/kg}$ ; SAR(10 g) =  $1.57 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $2.53 \text{ W/kg}$

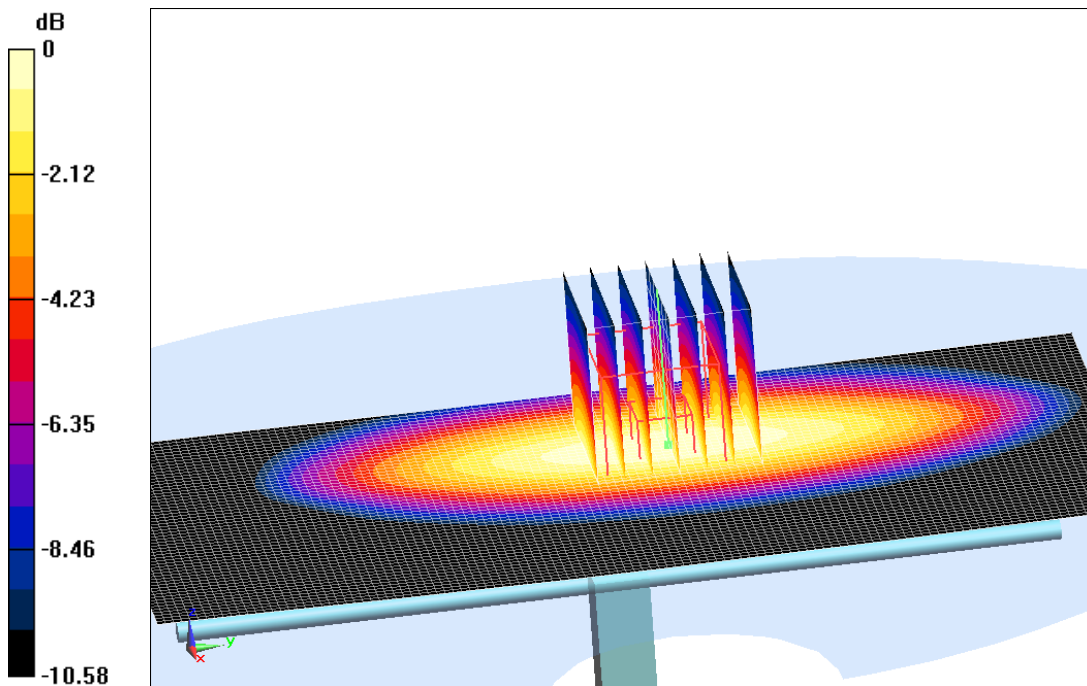
**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $56.625 \text{ V/m}$ ; Power Drift =  $-0.11 \text{ dB}$

Peak SAR (extrapolated) =  $3.20 \text{ W/kg}$

**SAR(1 g) =  $2.34 \text{ W/kg}$ ; SAR(10 g) =  $1.55 \text{ W/kg}$**

Maximum value of SAR (measured) =  $2.49 \text{ W/kg}$



0 dB =  $2.49 \text{ W/kg}$  =  $3.96 \text{ dB W/kg}$

**Fig.L.3 Validation 835MHz 250mW**

## 835MHz

Date: 2019-1-23

Electronics: DAE4 Sn71527

Medium: Body 835 MHz

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.990 \text{ S/m}$ ;  $\epsilon_r = 54.084$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$       Liquid Temperature:  $22.5^\circ\text{C}$

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

Probe: EX3DV4 – SN3633 ConvF (9.69, 9.69, 9.69);

**System Validation /Area Scan (81x171x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Reference Value =  $58.442 \text{ V/m}$ ; Power Drift =  $0.08 \text{ dB}$

**SAR(1 g) =  $2.51 \text{ W/kg}$ ; SAR(10 g) =  $1.64 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $2.61 \text{ W/kg}$

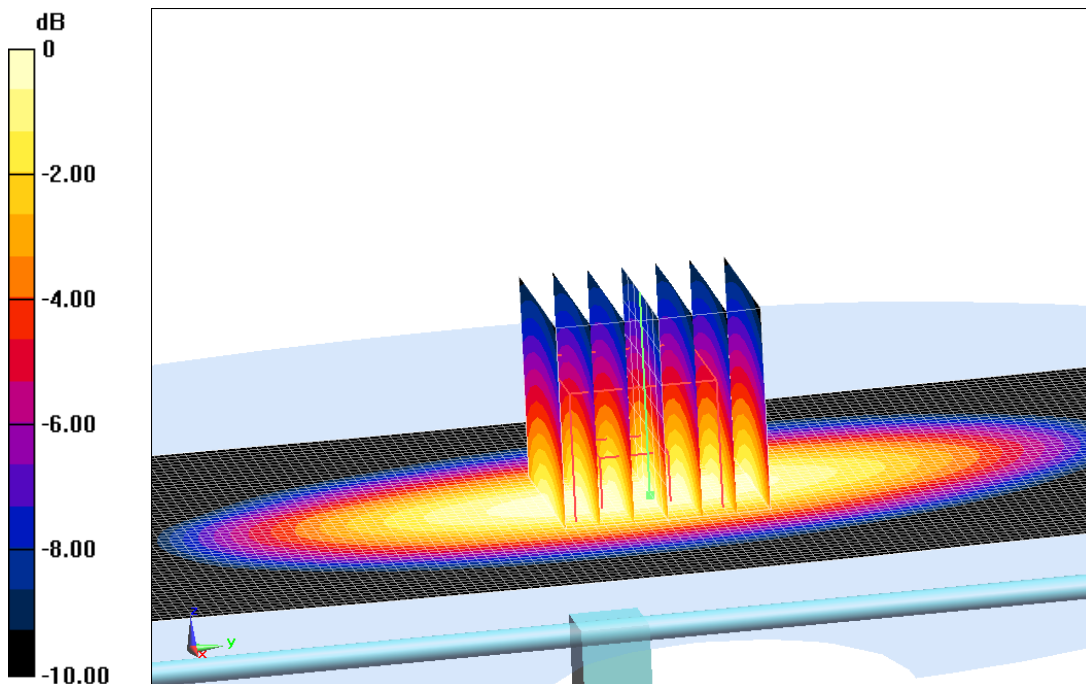
**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $58.442 \text{ V/m}$ ; Power Drift =  $0.08 \text{ dB}$

Peak SAR (extrapolated) =  $3.52 \text{ W/kg}$

**SAR(1 g) =  $2.56 \text{ W/kg}$ ; SAR(10 g) =  $1.67 \text{ W/kg}$**

Maximum value of SAR (measured) =  $2.65 \text{ W/kg}$



0 dB =  $2.65 \text{ W/kg} = 4.23 \text{ dB W/kg}$

**Fig.L.4 Validation 835MHz 250mW**

## 1750MHz

Date: 2019-1-24

Electronics: DAE4 Sn1527

Medium: Head 1750 MHz

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.358$  S/m;  $\epsilon_r = 39.669$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

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

Probe: EX3DV4 – SN3633 ConvF (8.12, 8.12, 8.12);

**System Validation/Area Scan (61x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 78.713 V/m; Power Drift = 0.12 dB

**SAR(1 g) = 8.97 W/kg; SAR(10 g) = 4.84 W/kg**

Maximum value of SAR (interpolated) = 10.4 W/kg

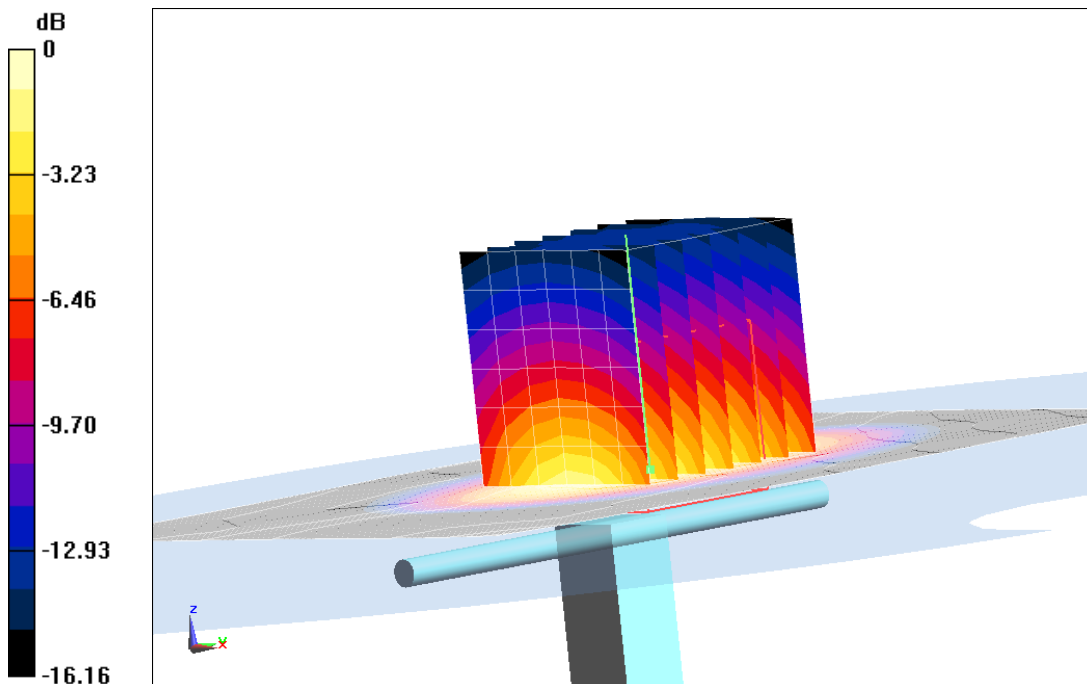
**System Validation/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 78.713 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 17.3 W/kg

**SAR(1 g) = 8.85 W/kg; SAR(10 g) = 4.76 W/kg**

Maximum value of SAR (measured) = 10.2 W/kg



0 dB = 10.2 W/kg = 10.09 dB W/kg

**Fig.L.5 Validation 1750MHz 250mW**

## 1750MHz

Date: 2019-1-24

Electronics: DAE4 Sn1527

Medium: Body 1750 MHz

Medium parameters used:  $f = 1750 \text{ MHz}$ ;  $\sigma = 1.455 \text{ S/m}$ ;  $\epsilon_r = 53.388$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.0^\circ\text{C}$       Liquid Temperature:  $21.5^\circ\text{C}$

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

Probe: EX3DV4 – SN3633 ConvF (8.05, 8.05, 8.05);

**System Validation/Area Scan (61x121x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Reference Value =  $78.335 \text{ V/m}$ ; Power Drift =  $-0.09 \text{ dB}$

**SAR(1 g) =  $8.83 \text{ W/kg}$ ; SAR(10 g) =  $4.85 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $10.1 \text{ W/kg}$

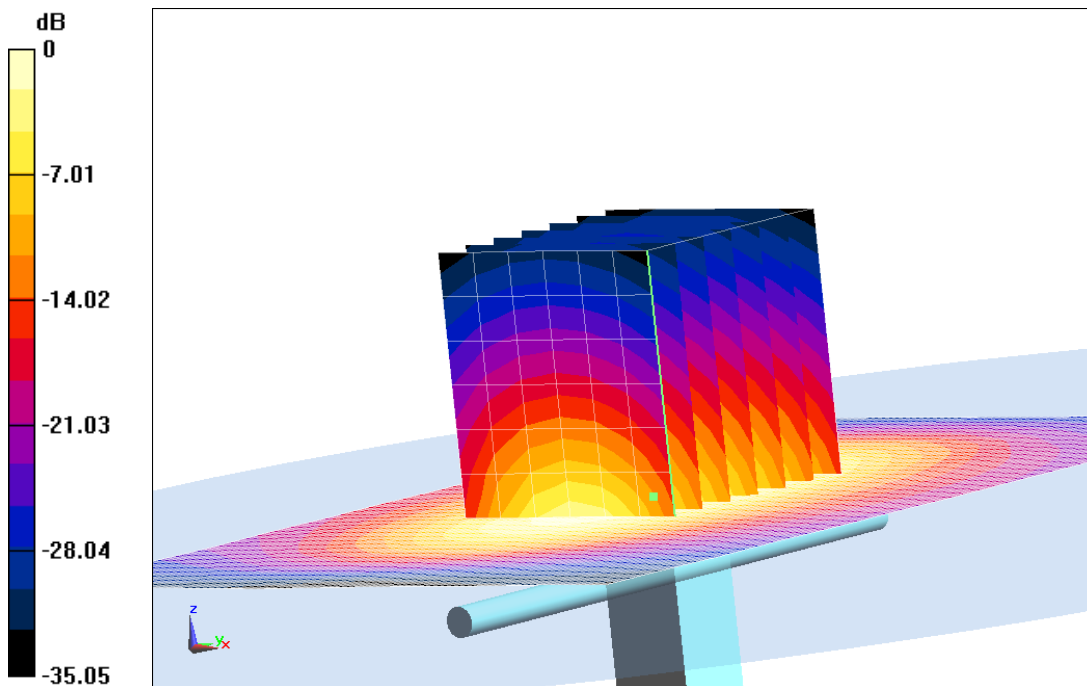
**System Validation/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $78.335 \text{ V/m}$ ; Power Drift =  $-0.09 \text{ dB}$

Peak SAR (extrapolated) =  $16.8 \text{ W/kg}$

**SAR(1 g) =  $8.71 \text{ W/kg}$ ; SAR(10 g) =  $4.77 \text{ W/kg}$**

Maximum value of SAR (measured) =  $9.98 \text{ W/kg}$



0 dB =  $9.98 \text{ W/kg} = 9.99 \text{ dB W/kg}$

**Fig.L.6 Validation 1750MHz 250mW**

## 1900MHz

Date: 2019-1-24

Electronics: DAE4 Sn1527

Medium: Head 1900 MHz

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.386 \text{ S/m}$ ;  $\epsilon_r = 40.607$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$       Liquid Temperature:  $22.5^\circ\text{C}$

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

Probe: EX3DV4 – SN3633 ConvF (7.81, 7.81, 7.81);

**System Validation /Area Scan (81x121x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Reference Value =  $90.585 \text{ V/m}$ ; Power Drift =  $-0.05 \text{ dB}$

**SAR(1 g) =  $10.1 \text{ W/kg}$ ; SAR(10 g) =  $5.27 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $12.1 \text{ W/kg}$

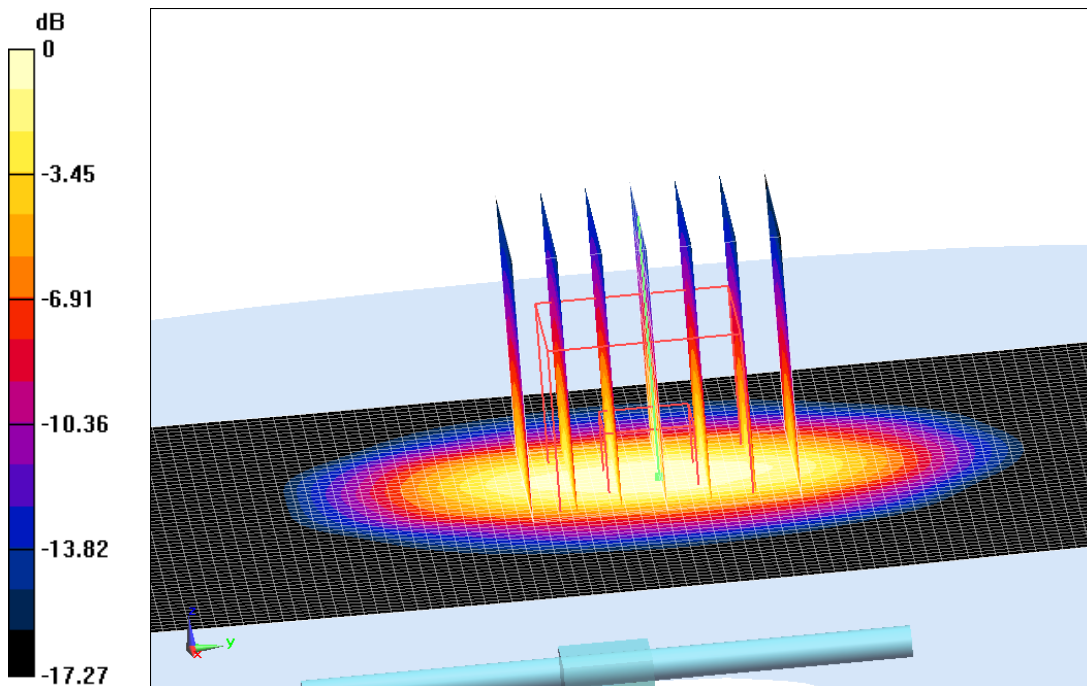
**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $90.585 \text{ V/m}$ ; Power Drift =  $-0.05 \text{ dB}$

Peak SAR (extrapolated) =  $20.8 \text{ W/kg}$

**SAR(1 g) =  $9.87 \text{ W/kg}$ ; SAR(10 g) =  $5.19 \text{ W/kg}$**

Maximum value of SAR (measured) =  $11.8 \text{ W/kg}$



0 dB =  $11.8 \text{ W/kg}$  =  $10.72 \text{ dB W/kg}$

**Fig.L.7 Validation 1900MHz 250mW**



## 1900MHz

Date: 2019-1-24

Electronics: DAE4 Sn1527

Medium: Body 1900 MHz

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.544 \text{ S/m}$ ;  $\epsilon_r = 52.952$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$       Liquid Temperature:  $22.5^\circ\text{C}$

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

Probe: EX3DV4 – SN3633 ConvF (7.75, 7.75, 7.75);

**System validation /Area Scan (81x121x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Reference Value =  $88.225 \text{ V/m}$ ; Power Drift =  $0.04 \text{ dB}$

**SAR(1 g) =  $10.2 \text{ W/kg}$ ; SAR(10 g) =  $5.33 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $12.2 \text{ W/kg}$

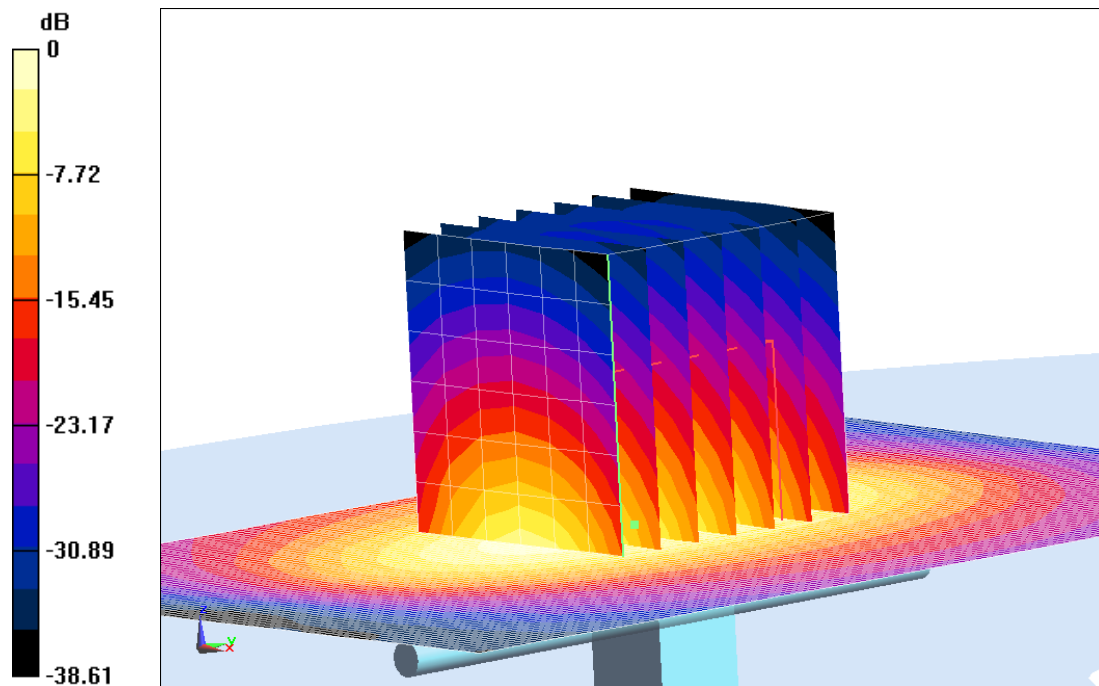
**System validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $88.225 \text{ V/m}$ ; Power Drift =  $0.04 \text{ dB}$

Peak SAR (extrapolated) =  $22.4 \text{ W/kg}$

**SAR(1 g) =  $10.4 \text{ W/kg}$ ; SAR(10 g) =  $5.42 \text{ W/kg}$**

Maximum value of SAR (measured) =  $12.5 \text{ W/kg}$



0 dB =  $12.5 \text{ W/kg}$  =  $10.97 \text{ dB W/kg}$

**Fig.L.8 Validation 1900MHz 250mW**

## 2450MHz

Date: 2019-1-25

Electronics: DAE4 Sn1527

Medium: Head 2450 MHz

Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.855 \text{ S/m}$ ;  $\epsilon_r = 38.735$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.0^\circ\text{C}$       Liquid Temperature:  $21.6^\circ\text{C}$

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

Probe: EX3DV4 – SN3633 ConvF (7.42, 7.42, 7.42);

**System Validation /Area Scan (61x81x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Reference Value =  $90.684 \text{ V/m}$ ; Power Drift =  $0.13 \text{ dB}$

**SAR(1 g) =  $13.2 \text{ W/kg}$ ; SAR(10 g) =  $6.05 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $15.0 \text{ W/kg}$

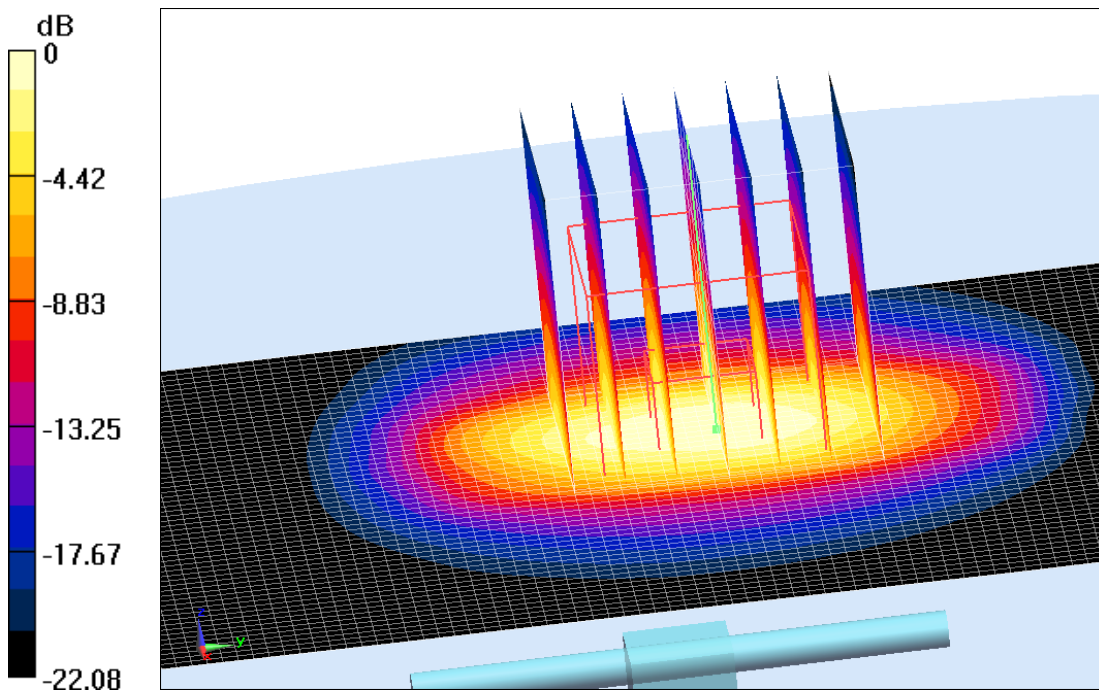
**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $90.684 \text{ V/m}$ ; Power Drift =  $0.13 \text{ dB}$

Peak SAR (extrapolated) =  $26.3 \text{ W/kg}$

**SAR(1 g) =  $13.5 \text{ W/kg}$ ; SAR(10 g) =  $6.16 \text{ W/kg}$**

Maximum value of SAR (measured) =  $15.4 \text{ W/kg}$



0 dB =  $15.4 \text{ W/kg}$  =  $11.88 \text{ dB W/kg}$

**Fig.L.9 Validation 2450MHz 250mW**

## 2450MHz

Date: 2019-1-25

Electronics: DAE4 Sn1527

Medium: Body 2450 MHz

Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.928 \text{ S/m}$ ;  $\epsilon_r = 53.533$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.0^\circ\text{C}$       Liquid Temperature:  $21.6^\circ\text{C}$

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

Probe: EX3DV4 – SN3633 ConvF (7.47, 7.47, 7.47);

**System Validation/Area Scan (81x101x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Reference Value =  $85.361 \text{ V/m}$ ; Power Drift =  $-0.01 \text{ dB}$

**SAR(1 g) =  $12.4 \text{ W/kg}$ ; SAR(10 g) =  $5.83 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $14.1 \text{ W/kg}$

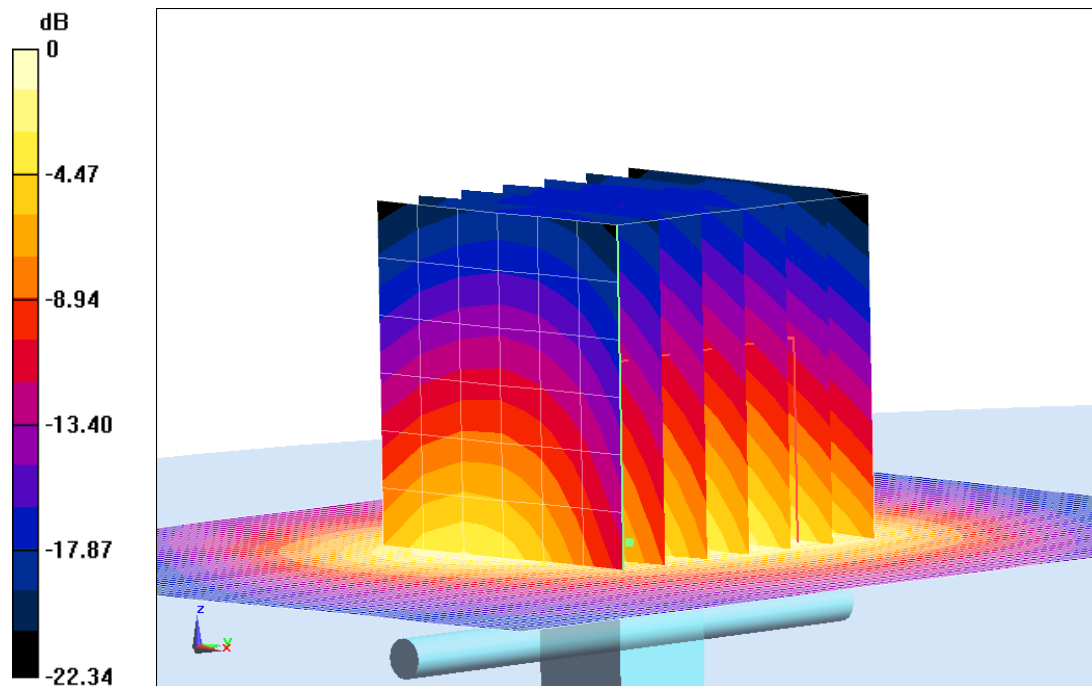
**System Validation/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $85.361 \text{ V/m}$ ; Power Drift =  $-0.01 \text{ dB}$

Peak SAR (extrapolated) =  $24.4 \text{ W/kg}$

**SAR(1 g) =  $12.2 \text{ W/kg}$ ; SAR(10 g) =  $5.76 \text{ W/kg}$**

Maximum value of SAR (measured) =  $13.8 \text{ W/kg}$



0 dB =  $13.8 \text{ W/kg}$  =  $11.40 \text{ dB W/kg}$

**Fig.L.10 Validation 2450MHz 250mW**

## 2550MHz

Date: 2019-1-24

Electronics: DAE4 Sn1527

Medium: Head 2550 MHz

Medium parameters used:  $f = 2550 \text{ MHz}$ ;  $\sigma = 1.972 \text{ S/m}$ ;  $\epsilon_r = 38.358$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.0^\circ\text{C}$       Liquid Temperature:  $21.6^\circ\text{C}$

Communication System: CW Frequency: 2550 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (7.28, 7.28, 7.28);

**System Validation/Area Scan (81x101x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Reference Value =  $92.335 \text{ V/m}$ ; Power Drift =  $0.12 \text{ dB}$

**SAR(1 g) =  $14.7 \text{ W/kg}$ ; SAR(10 g) =  $6.65 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $16.1 \text{ W/kg}$

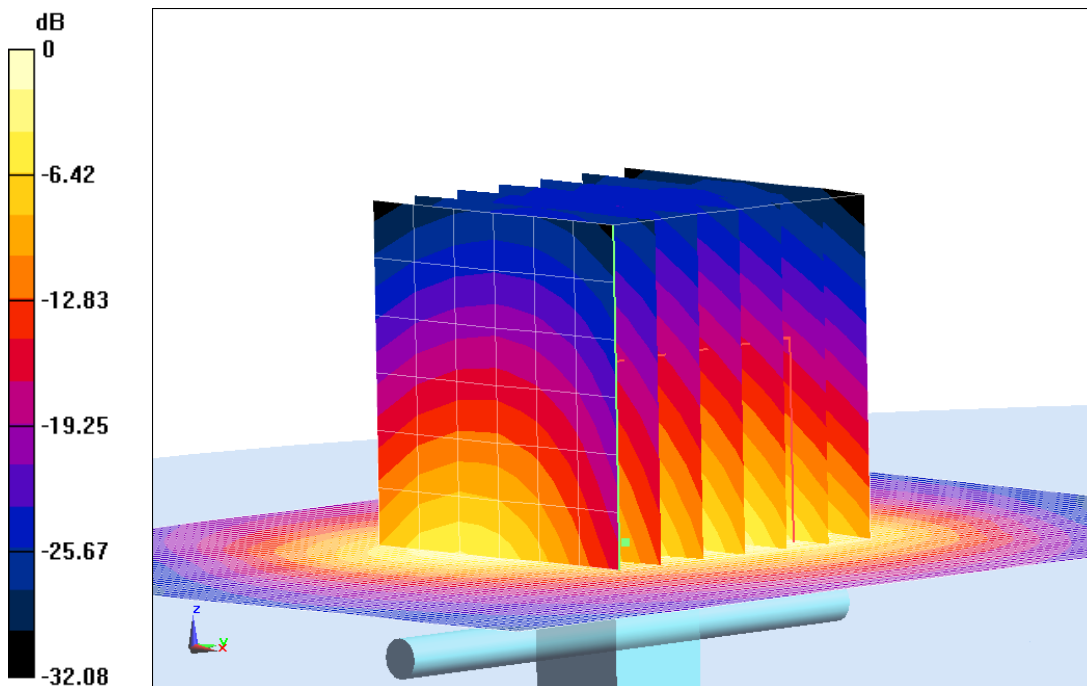
**System Validation/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $92.335 \text{ V/m}$ ; Power Drift =  $0.12 \text{ dB}$

Peak SAR (extrapolated) =  $30.3 \text{ W/kg}$

**SAR(1 g) =  $14.9 \text{ W/kg}$ ; SAR(10 g) =  $6.74 \text{ W/kg}$**

Maximum value of SAR (measured) =  $16.4 \text{ W/kg}$



0 dB =  $16.4 \text{ W/kg}$  =  $12.15 \text{ dB W/kg}$

**Fig.L.11 Validation 2550MHz 250mW**

## 2550MHz

Date: 2019-1-24

Electronics: DAE4 Sn1527

Medium: Body 2550 MHz

Medium parameters used:  $f = 2550 \text{ MHz}$ ;  $\sigma = 2.052 \text{ S/m}$ ;  $\epsilon_r = 53.206$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.0^\circ\text{C}$       Liquid Temperature:  $21.6^\circ\text{C}$

Communication System: CW Frequency: 2550 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (7.31, 7.31, 7.31);

**System Validation/Area Scan (81x101x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Reference Value =  $86.696 \text{ V/m}$ ; Power Drift =  $-0.03 \text{ dB}$

**SAR(1 g) =  $13.3 \text{ W/kg}$ ; SAR(10 g) =  $6.15 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $15.2 \text{ W/kg}$

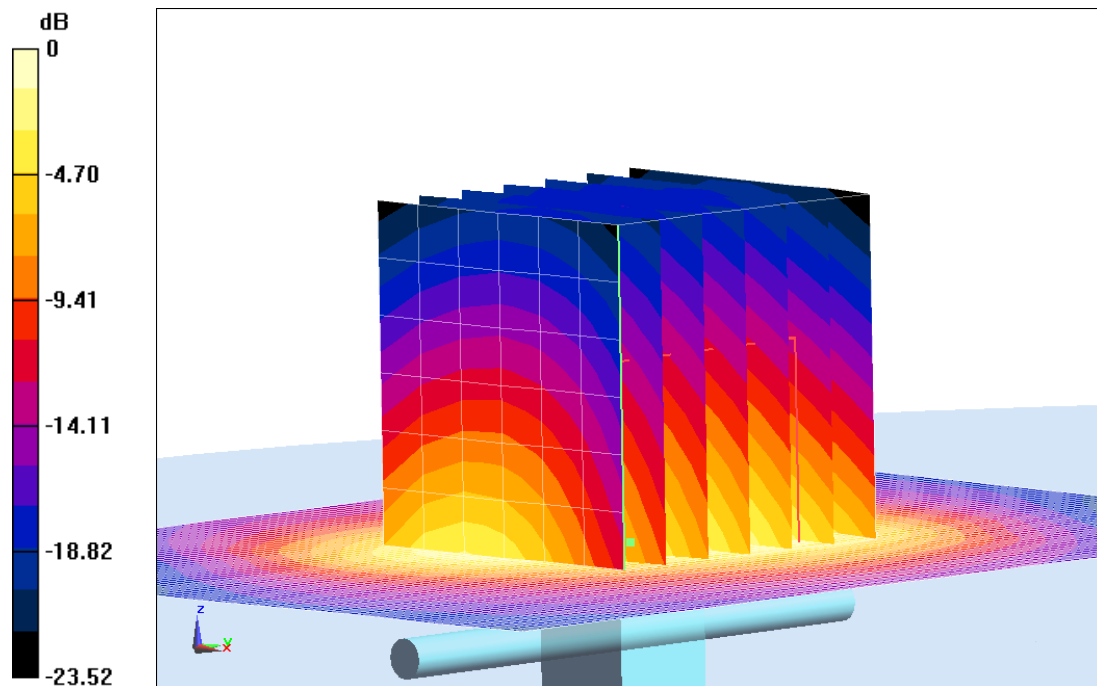
**System Validation/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $86.696 \text{ V/m}$ ; Power Drift =  $-0.03 \text{ dB}$

Peak SAR (extrapolated) =  $26.8 \text{ W/kg}$

**SAR(1 g) =  $13.1 \text{ W/kg}$ ; SAR(10 g) =  $6.08 \text{ W/kg}$**

Maximum value of SAR (measured) =  $14.8 \text{ W/kg}$



0 dB =  $14.8 \text{ W/kg}$  =  $11.70 \text{ dB W/kg}$

**Fig.L.12 Validation 2550MHz 250mW**

## 5800MHz

Date: 2019-1-22

Electronics: DAE4 Sn1527

Medium: Head 5800 MHz

Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.368$  S/m;  $\epsilon_r = 34.882$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.0°C      Liquid Temperature: 22.5°C

Communication System: CW Frequency: 5800 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF (4.81, 4.81, 4.81);

**System Validation/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 60.313 V/m; Power Drift = 0.08 dB

**SAR(1 g) = 8.08 W/kg; SAR(10 g) = 2.24 W/kg**

Maximum value of SAR (interpolated) = 9.89 W/kg

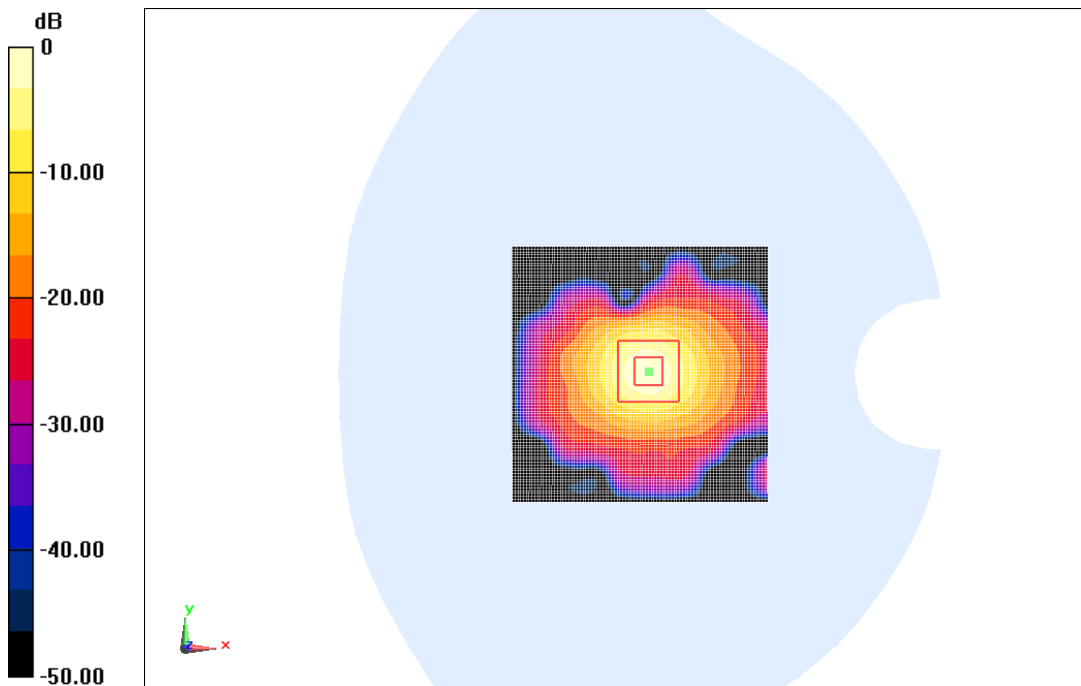
**System Validation/Zoom Scan (8x8x8)/Cube0:** Measurement grid: dx=4mm, dy=4mm, dz=4mm

Reference Value = 60.313 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 25.2 W/kg

**SAR(1 g) = 8.14 W/kg; SAR(10 g) = 2.27 W/kg**

Maximum value of SAR (measured) = 9.83 W/kg



0 dB = 9.83 W/kg = 9.23 dB W/kg

**Fig.L.13 Validation 5800MHz 100mW**

## 5800MHz

Date: 2019-1-22

Electronics: DAE4 Sn1527

Medium: Body 5800 MHz

Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.884$  S/m;  $\epsilon_r = 49.046$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.0°C      Liquid Temperature: 22.5°C

Communication System: CW Frequency: 5800 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF (4.48, 4.48, 4.48);

**System Validation/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 59.892 V/m; Power Drift = -0.06 dB

**SAR(1 g) = 7.45 W/kg; SAR(10 g) = 2.10 W/kg**

Maximum value of SAR (interpolated) = 9.32 W/kg

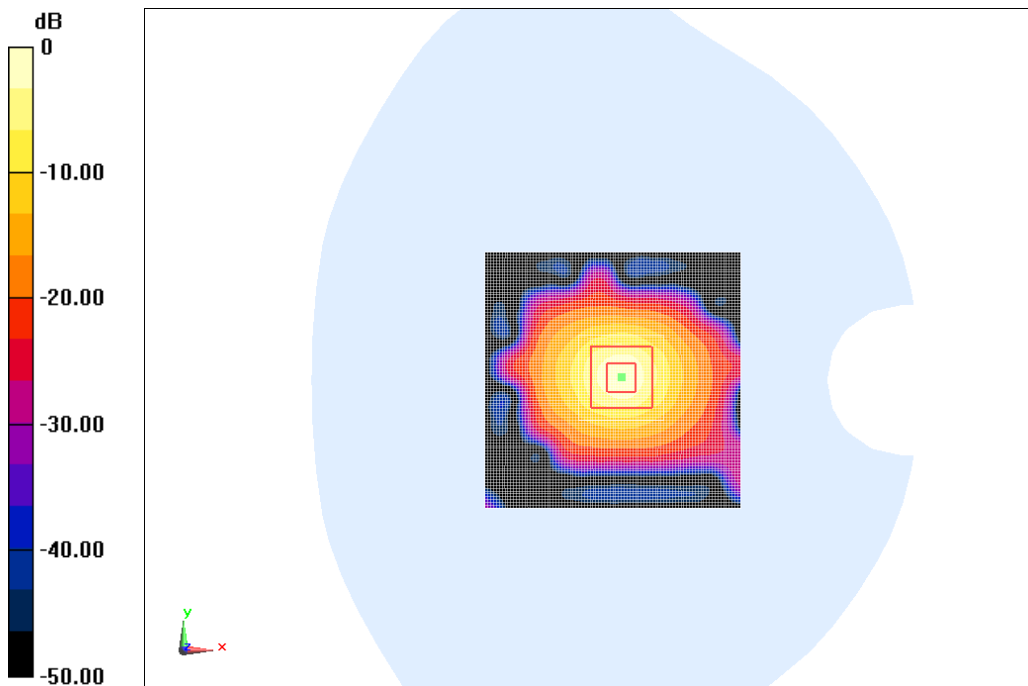
**System Validation/Zoom Scan (8x8x8)/Cube0:** Measurement grid: dx=4mm, dy=4mm, dz=4mm

Reference Value = 59.892 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 22.9 W/kg

**SAR(1 g) = 7.33 W/kg; SAR(10 g) = 2.06 W/kg**

Maximum value of SAR (measured) = 9.25 W/kg



0 dB = 9.25 W/kg = 9.66 dB W/kg

**Fig.L.14 Validation 5800MHz 100mW**