

Fig. 24-1 Z-Scan at power reference point (LTE Band66)



#### Wifi 802.11b Left Tilt Channel 1

Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Head 2450 MHz

Medium parameters used (interpolated): f = 2412 MHz;  $\sigma = 1.794$  mho/m;  $\varepsilon_r = 38.85$ ;  $\rho = 1000$ 

kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4–SN7464 ConvF(7.89, 7.89, 7.89)

Area Scan (91x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.08 W/kg

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

Reference Value = 15.88 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 0.812 W/kg; SAR(10 g) = 0.341 W/kg

Maximum value of SAR (measured) = 1.13 W/kg

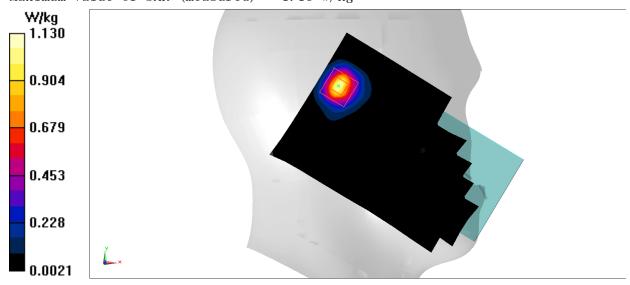


Fig.25 2450 MHz



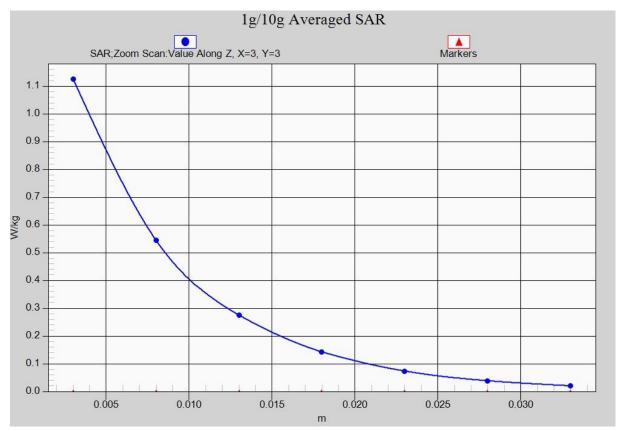


Fig. 25-1 Z-Scan at power reference point (2450 MHz)



## Wifi 802.11b Body Top Edge Channel 1

Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Body 2450 MHz

Medium parameters used (interpolated): f = 2412 MHz;  $\sigma = 1.918$  mho/m;  $\varepsilon_r = 52.29$ ;  $\rho = 1000$ 

kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.09, 8.09, 8.09)

Area Scan (151x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.681 W/kg

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

Reference Value = 9.607 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.921 W/kg

SAR(1 g) = 0.487 W/kg; SAR(10 g) = 0.230 W/kg Maximum value of SAR (measured) = 0.636 W/kg

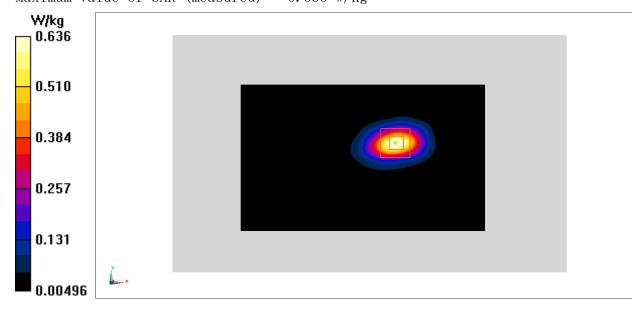


Fig.26 2450 MHz



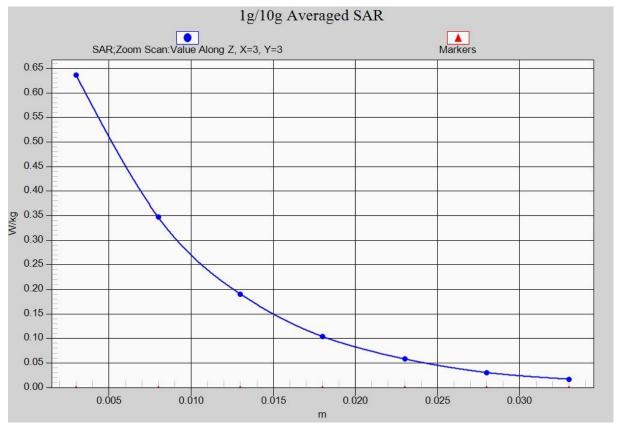


Fig. 26-1 Z-Scan at power reference point (2450 MHz)



## Wifi 802.11a Right Cheek Channel 56

Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Head 5 GHz

Medium parameters used: f = 5280 MHz;  $\sigma = 4.729 \text{ mho/m}$ ;  $\varepsilon_r = 36.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLan 5G Frequency: 5280 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(5.53, 5.53, 5.53)

Area Scan (101x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.746 W/kg

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

Reference Value = 7.523 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 2.25 W/kg

SAR(1 g) = 0.479 W/kg; SAR(10 g) = 0.153 W/kgMaximum value of SAR (measured) = 1.27 W/kg

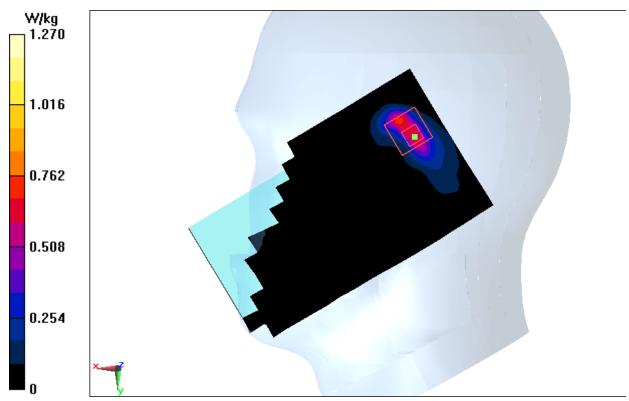


Fig.27 5GHz



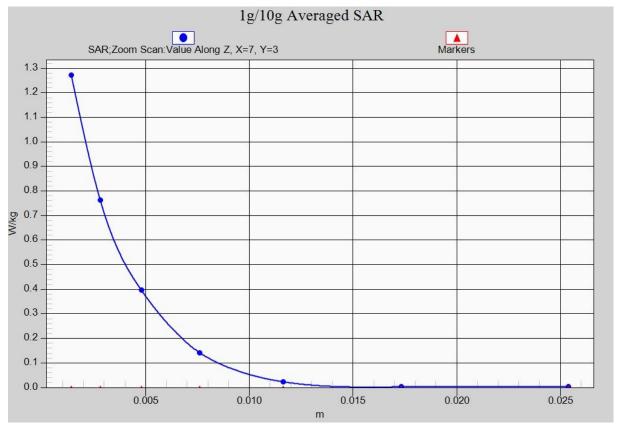


Fig. 27-1 Z-Scan at power reference point (5GHz)



## Wifi 802.11a Top Edge Channel 132

Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Body 5 GHz

Medium parameters used: f = 5660 MHz;  $\sigma = 5.779 \text{ mho/m}$ ;  $\varepsilon_r = 46.89$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLan 5G Frequency: 5660 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(4.50, 4.50, 4.50)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 0.742 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 5.445 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.82 W/kg

SAR(1 g) = 0.467 W/kg; SAR(10 g) = 0.169 W/kgMaximum value of SAR (measured) = 1.07 W/kg

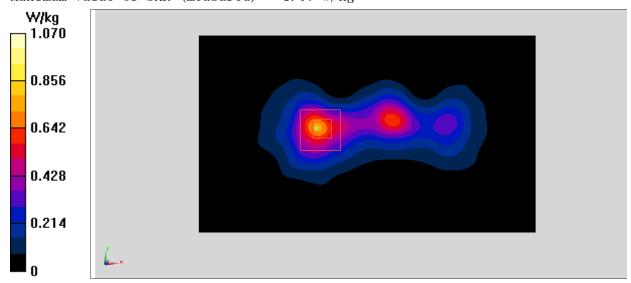


Fig.28 5GHz



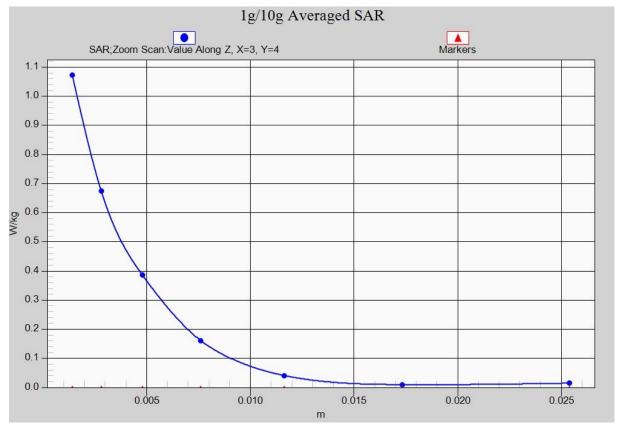


Fig. 28-1 Z-Scan at power reference point (5GHz)



# **ANNEX B** System Verification Results

#### 750MHz

Date: 2018-5-29

Electronics: DAE4 Sn1525 Medium: Head 750 MHz

Medium parameters used: f = 750 MHz;  $\sigma = 0.874$  mho/m;  $\varepsilon_r = 42.51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.57, 10.57, 10.57)

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

mm

Reference Value = 50.02 V/m; Power Drift = 0.04 dB

Fast SAR: SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.41 W/kg

Maximum value of SAR (interpolated) = 2.28 W/kg

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

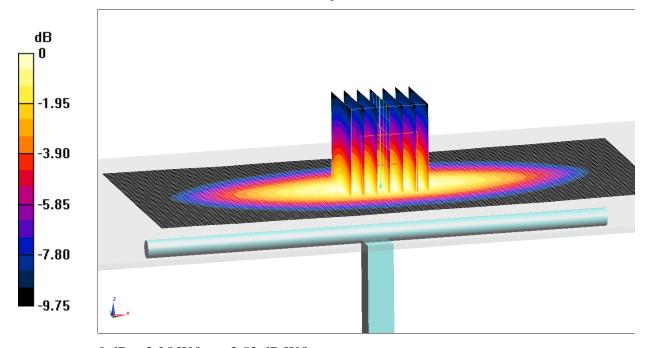
dy=5mm, dz=5mm

Reference Value = 50.02 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.92 W/kg

SAR(1 g) = 2.12 W/kg; SAR(10 g) = 1.39 W/kg

Maximum value of SAR (measured) = 2.25 W/kg



0 dB = 2.25 W/kg = 3.52 dB W/kg

Fig.B.1 validation 750MHz 250mW



Date: 2018-5-29

Electronics: DAE4 Sn1525 Medium: Body750 MHz

Medium parameters used: f = 750 MHz;  $\sigma = 0.955 \text{ mho/m}$ ;  $\varepsilon_r = 56.53$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.63, 10.63, 10.63)

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

mm

Reference Value = 51.01 V/m; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 2.23 W/kg; SAR(10 g) = 1.45 W/kg

Maximum value of SAR (interpolated) = 2.47 W/kg

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

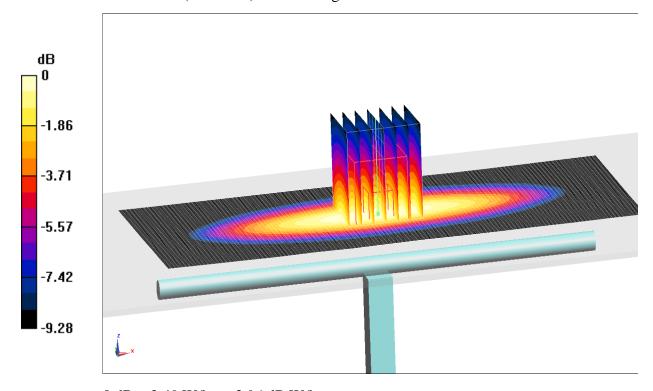
dz=5mm

Reference Value = 51.01 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.01 W/kg

SAR(1 g) = 2.25 W/kg; SAR(10 g) = 1.47 W/kg

Maximum value of SAR (measured) = 2.49 W/kg



0 dB = 2.49 W/kg = 3.96 dB W/kg

Fig.B.2 validation 750MHz 250mW



Date: 2018-5-27

Electronics: DAE4 Sn1525 Medium: Head 850 MHz

Medium parameters used: f = 835 MHz;  $\sigma = 0.897$  S/m;  $\varepsilon_r = 41.97$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.28, 10.28, 10.28)

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

mm

Reference Value = 54.21 V/m; Power Drift = 0.05 dB

Fast SAR: SAR(1 g) = 2.34 W/kg; SAR(10 g) = 1.51 W/kg

Maximum value of SAR (interpolated) = 2.54 W/kg

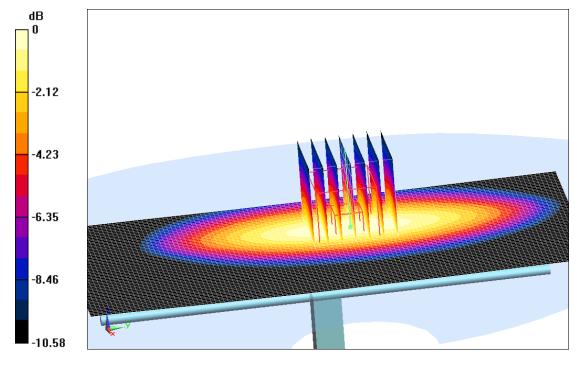
# **System Validation/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.21 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 3.08 W/kg

SAR(1 g) = 2.31 W/kg; SAR(10 g) = 1.49 W/kg

Maximum value of SAR (measured) = 2.51 W/kg



0 dB = 2.51 W/kg = 4.00 dBW/kg

Fig.B.3 validation 835MHz 250mW



Date: 2018-5-27

Electronics: DAE4 Sn1525 Medium: Body 850 MHz

Medium parameters used: f = 835 MHz;  $\sigma = 0.988$  S/m;  $\varepsilon_r = 55.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.21, 10.21, 10.21)

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

mm

Reference Value = 52.53 V/m; Power Drift = 0.02 dB

Fast SAR: SAR(1 g) = 2.35 W/kg; SAR(10 g) = 1.52 W/kg

Maximum value of SAR (interpolated) = 2.68 W/kg

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

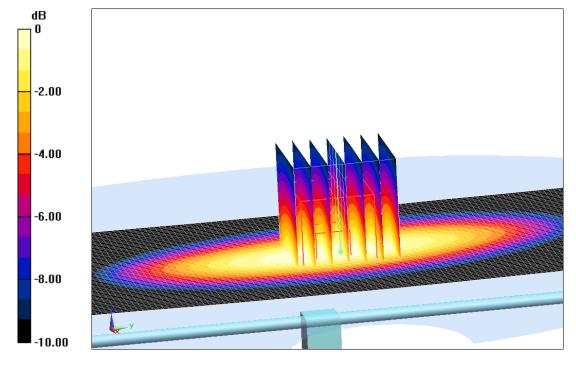
dy=5mm, dz=5mm

Reference Value = 52.53 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.12 W/kg

SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.55 W/kg

Maximum value of SAR (measured) = 2.72 W/kg



0 dB = 2.72 W/kg = 4.35 dBW/kg

Fig.B.4 validation 835MHz 250mW



Date: 2018-5-29

Electronics: DAE4 Sn1525 Medium: Head 1750 MHz

Medium parameters used: f=1750 MHz;  $\sigma$  = 1.401 mho/m;  $\epsilon$ r = 40.64;  $\rho$  = 1000 kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.70, 8.70, 8.70)

System Validation/Area Scan (81x121x1):Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 90.25 V/m; Power Drift = -0.06 dB

Fast SAR: SAR(1 g) = 9.15 W/kg; SAR(10 g) = 4.83 W/kg

Maximum value of SAR (interpolated) = 10.1 W/kg

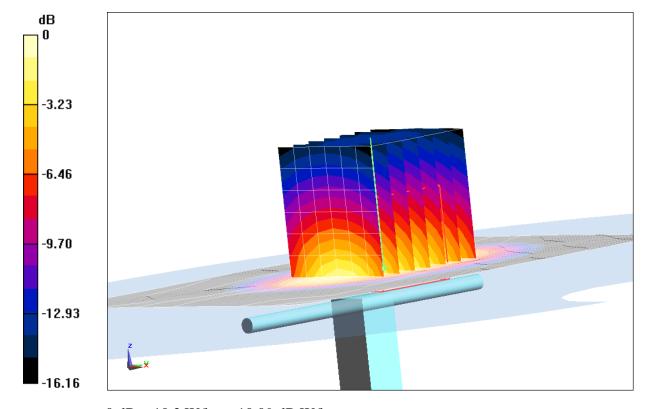
**System Validation/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.25 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 15.66 W/kg

SAR(1 g) = 9.24 W/kg; SAR(10 g) = 4.91 W/kg

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



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

Fig.B.5 validation 1750MHz 250mW



Date: 2018-5-29

Electronics: DAE4 Sn1525 Medium: Body 1750 MHz

Medium parameters used: f=1750 MHz;  $\sigma$  = 1.528 mho/m;  $\epsilon$ r = 53.51;  $\rho$  = 1000 kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.60, 8.60, 8.60)

System Validation/Area Scan (81x121x1):Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 92.68 V/m; Power Drift = 0.03 dB

Fast SAR: SAR(1 g) = 9.27 W/kg; SAR(10 g) = 4.97 W/kg

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

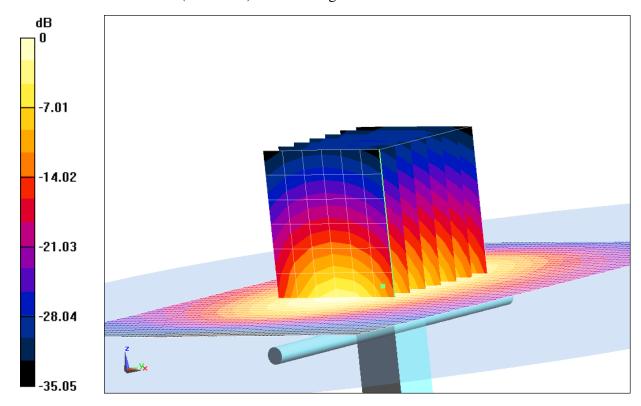
**System Validation/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.68 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 15.28 W/kg

SAR(1 g) = 9.17 W/kg; SAR(10 g) = 4.89 W/kg

Maximum value of SAR (measured) = 10.1 W/kg



0 dB = 10.1 W/kg = 10.04 dB W/kg

Fig.B.6 validation 1750MHz 250mW



Date: 2018-5-28

Electronics: DAE4 Sn1525 Medium: Head 1900 MHz

Medium parameters used: f = 1900 MHz;  $\sigma = 1.432 \text{ mho/m}$ ;  $\varepsilon_r = 40.81$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF (8.39, 8.39, 8.39)

System Validation /Area Scan(61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 91.02 V/m; Power Drift = -0.05 dB

SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.39 W/kg

Maximum value of SAR (interpolated) = 12.4 W/kg

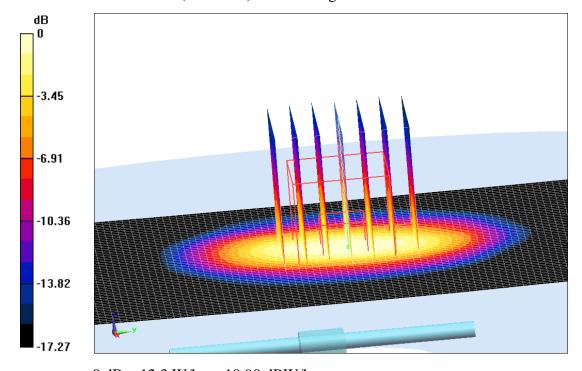
**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.02 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 17.91 W/kg

SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.3 W/kg

Maximum value of SAR (measured) = 12.3 W/kg



0 dB = 12.3 W/kg = 10.90 dBW/kg

Fig.B.7 validation 1900MHz 250mW



Date: 2018-5-28

Electronics: DAE4 Sn1525 Medium: Body 1900 MHz

Medium parameters used: f = 1900 MHz;  $\sigma = 1.548 \text{ S/m}$ ;  $\varepsilon_r = 52.94$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.32, 8.32, 8.32)

System Validation/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 93.51 V/m; Power Drift = -0.04 dB

Fast SAR: SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.52 W/kg

Maximum value of SAR (interpolated) = 12.4 W/kg

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

Reference Value = 93.51 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 18.89 W/kg

SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.43 W/kg

Maximum value of SAR (measured) = 12.3 W/kg

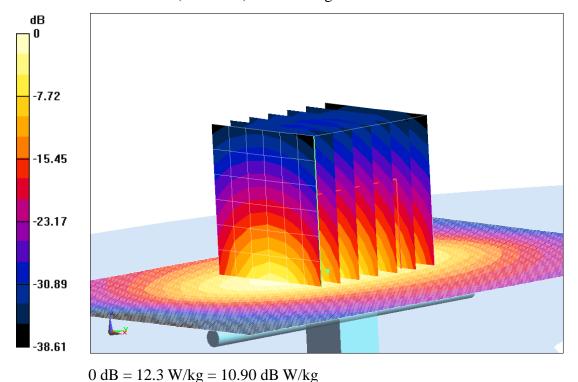


Fig.B.8 validation 1900MHz 250mW



Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Head 2450 MHz

Medium parameters used: f = 2450 MHz;  $\sigma = 1.834 \text{ mho/m}$ ;  $\varepsilon_r = 38.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(7.89, 7.89, 7.89)

**System Validation /Area Scan (61x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 86.2 V/m; Power Drift = 0.01 dB **SAR(1 g)** = **13.1 W/kg**; **SAR(10 g)** = **6.22 W/kg** Maximum value of SAR (interpolated) = 16.3 W/kg

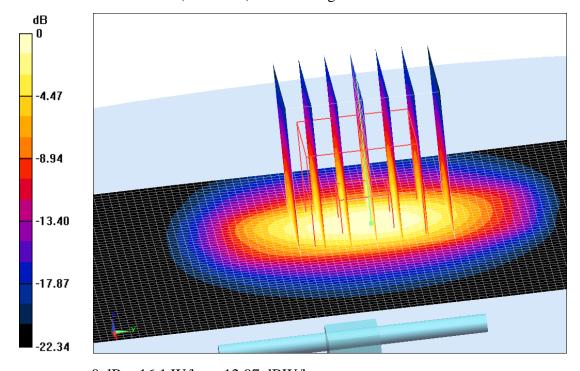
**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.2 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 26.97 W/kg

SAR(1 g) = 12.9 W/kg; SAR(10 g) = 6.05 W/kg

Maximum value of SAR (measured) = 16.1 W/kg



0 dB = 16.1 W/kg = 12.07 dBW/kg

Fig.B.9 validation 2450MHz 250mW



Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Body 2450 MHz

Medium parameters used: f = 2450 MHz;  $\sigma = 1.962 \text{ S/m}$ ;  $\varepsilon_r = 52.18$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.09, 8.09, 8.09)

**System Validation/Area Scan (81x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 88.35 V/m; Power Drift = 0.02 dBSAR(1 g) = 12.6 W/kg; SAR(10 g) = 5.81 W/kg

Maximum value of SAR (interpolated) = 14.2 W/kg

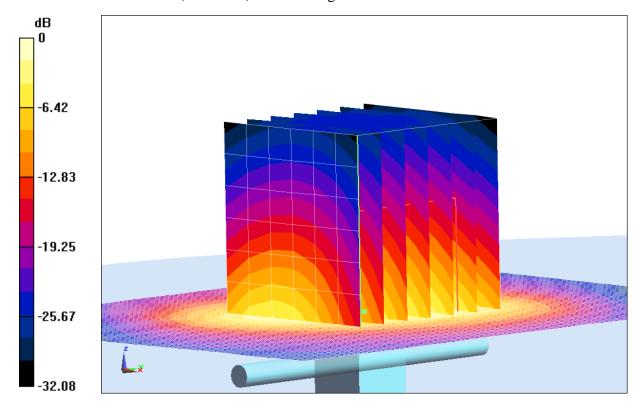
**System Validation/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.35 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 24.41 W/kg

SAR(1 g) = 12.8 W/kg; SAR(10 g) = 5.99 W/kg

Maximum value of SAR (measured) = 14.4 W/kg



0 dB = 14.4 W/kg = 11.58 dB W/kg

Fig.B.10 validation 2450MHz 250mW



Date: 2018-5-30

Electronics: DAE4 Sn1525 Medium: Head 2600 MHz

Medium parameters used: f = 2600 MHz;  $\sigma = 1.928 \text{ mho/m}$ ;  $\varepsilon_r = 38.27$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(7.76, 7.76, 7.76)

**System Validation/Area Scan(81x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 79.46 V/m; Power Drift = -0.03 dB

SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.56 W/kg

Maximum value of SAR (interpolated) = 22.2 W/kg

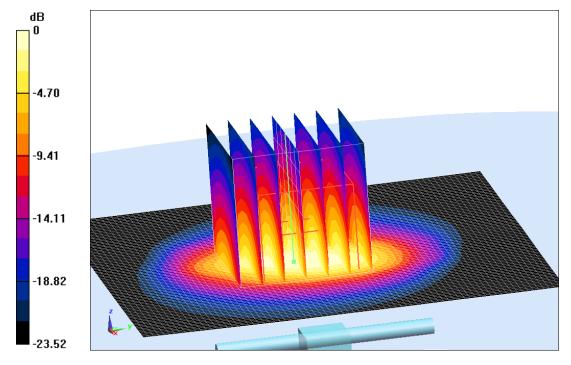
**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 79.46 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 30.86 W/kg

SAR(1 g) = 14.4 W/kg; SAR(10 g) = 6.39 W/kg

Maximum value of SAR (measured) = 22 W/kg



0 dB = 22 W/kg = 13.42 dBW/kg

Fig.B.11 validation 2600MHz 250mW



Date: 2018-5-30

Electronics: DAE4 Sn1525 Medium: Body 2600 MHz

Medium parameters used: f = 2600 MHz;  $\sigma = 2.24 \text{ mho/m}$ ;  $\varepsilon_r = 51.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(7.84, 7.84, 7.84)

System Validation /Area Scan(81x121x1):Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 82.21 V/m; Power Drift = -0.02 dB

Fast SAR: SAR(1 g) = 14.3 W/kg; SAR(10 g) = 6.39 W/kg

Maximum value of SAR (interpolated) = 22.4 W/kg

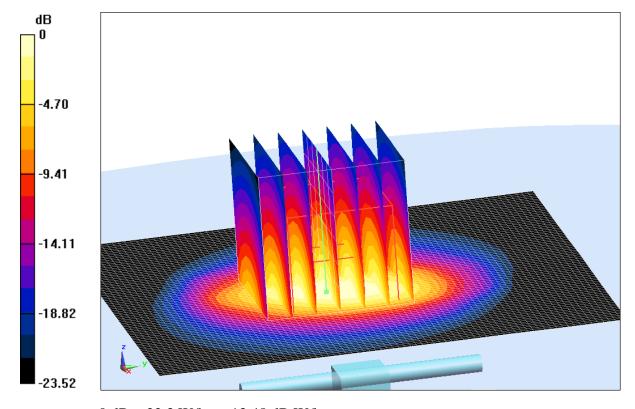
**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 82.21 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 31.02 W/kg

SAR(1 g) = 14.2 W/kg; SAR(10 g) = 6.31 W/kg

Maximum value of SAR (measured) = 22.3 W/kg



0 dB = 22.3 W/kg = 13.48 dB W/kg

Fig.B.12 validation 2600MHz 250mW



Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Head 5 GHz

Medium parameters used: f = 5200 MHz;  $\sigma = 4.726 \text{ mho/m}$ ;  $\varepsilon_r = 36.62$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5200 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(5.82, 5.82, 5.82)

**System Validation /Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 17.9 W/kg

System Validation /Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

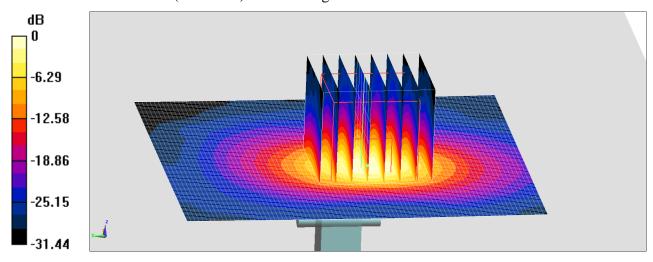
dz=1.4mm

Reference Value = 57.41 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 31.32 W/kg

SAR(1 g) = 7.93 W/kg; SAR(10 g) = 2.25 W/kg

Maximum value of SAR (measured) = 18.1 W/kg



0 dB = 18.1 W/kg = 12.58 dBW/kg

Fig.B.13 validation 5200MHz 100mW



Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Body 5 GHz

Medium parameters used: f = 5200 MHz;  $\sigma = 5.402 \text{ mho/m}$ ;  $\varepsilon_r = 49.67$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5200 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(5.39, 5.39, 5.39)

**System Validation /Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 18.1 W/kg

System Validation /Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

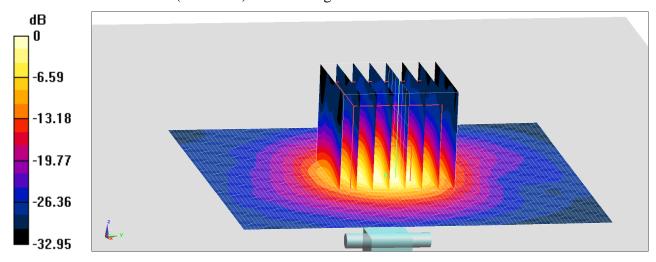
dz=1.4mm

Reference Value = 53.28 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 29.59 W/kg

SAR(1 g) = 7.36 W/kg; SAR(10 g) = 2.05 W/kg

Maximum value of SAR (measured) = 17.9 W/kg



0 dB = 17.9 W/kg = 12.53 dBW/kg

Fig.B.14 validation 5200MHz 100mW



Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Head 5 GHz

Medium parameters used: f = 5300 MHz;  $\sigma = 4.828 \text{ mho/m}$ ;  $\varepsilon_r = 36.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5300 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(5.53, 5.53, 5.53)

**System Validation /Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 19.3 W/kg

System Validation /Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

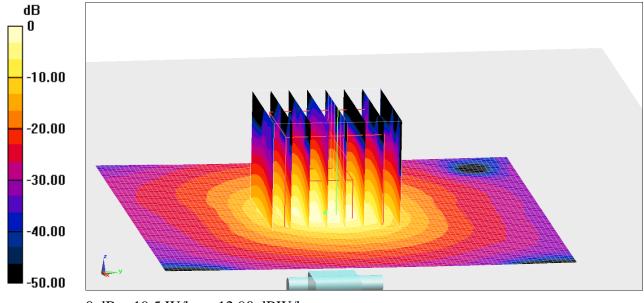
dz=1.4mm

Reference Value = 73.64 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 35.42 W/kg

SAR(1 g) = 8.25 W/kg; SAR(10 g) = 2.36 W/kg

Maximum value of SAR (measured) = 19.5 W/kg



0 dB = 19.5 W/kg = 12.90 dBW/kg

Fig.B.15 validation 5300MHz 100mW



Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Body 5 GHz

Medium parameters used: f = 5300 MHz;  $\sigma = 5.311 \text{ mho/m}$ ;  $\varepsilon_r = 47.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5300 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(5.11, 5.11, 5.11)

**System Validation /Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 18.4 W/kg

System Validation /Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

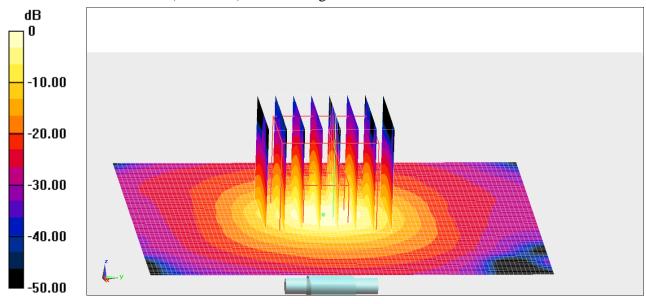
dz=1.4mm

Reference Value = 64.17 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 31.54 W/kg

SAR(1 g) = 7.55 W/kg; SAR(10 g) = 2.11 W/kg

Maximum value of SAR (measured) = 18.2 W/kg



0 dB = 18.2 W/kg = 12.60 dBW/kg

Fig.B.16 validation 5300MHz 100mW



Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Head 5 GHz

Medium parameters used: f = 5600 MHz;  $\sigma = 5.171 \text{ mho/m}$ ;  $\varepsilon_r = 36.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5600 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(4.98, 4.98, 4.98)

**System Validation /Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 19.8 W/kg

System Validation /Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

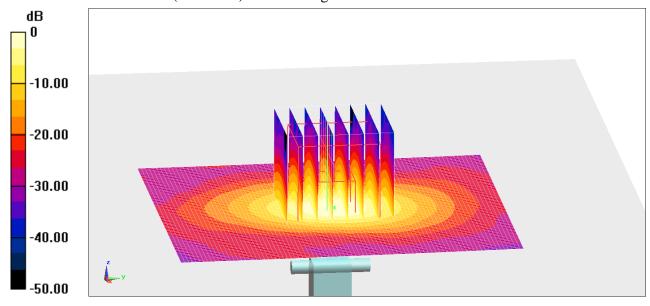
dz=1.4mm

Reference Value = 74.66 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 35.4 W/kg

SAR(1 g) = 8.3 W/kg; SAR(10 g) = 2.35 W/kg

Maximum value of SAR (measured) = 19.6 W/kg



0 dB = 19.6 W/kg = 12.92 dBW/kg

Fig.B.17 validation 5600MHz 100mW



Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Body 5 GHz

Medium parameters used: f = 5600 MHz;  $\sigma = 5.729 \text{ mho/m}$ ;  $\varepsilon_r = 47.04$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5600 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(4.50, 4.50, 4.50)

**System Validation /Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 20.3 W/kg

System Validation /Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

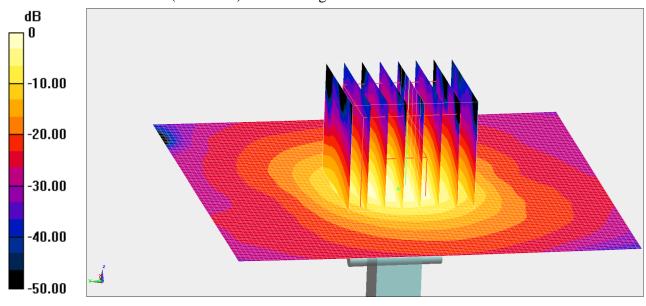
dz=1.4mm

Reference Value = 66.62 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 37.13 W/kg

SAR(1 g) = 7.93 W/kg; SAR(10 g) = 2.23 W/kg

Maximum value of SAR (measured) = 20.1 W/kg



0 dB = 20.1 W/kg = 13.03 dBW/kg

Fig.B.18 validation 5600MHz 100mW



Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Head 5 GHz

Medium parameters used: f = 5800 MHz;  $\sigma = 5.381 \text{ mho/m}$ ;  $\varepsilon_r = 35.81$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5800 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(5.11, 5.11, 5.11)

**System Validation /Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 20.1 W/kg

System Validation /Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

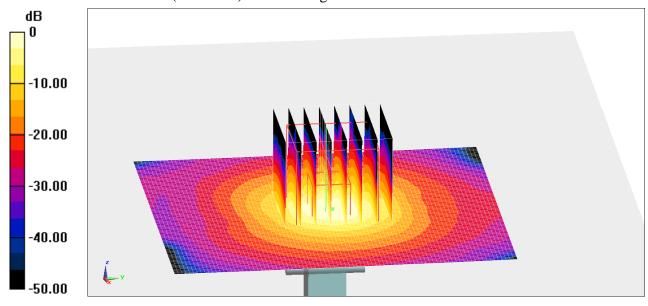
dz=1.4mm

Reference Value = 70.92 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 39.95 W/kg

SAR(1 g) = 8.01 W/kg; SAR(10 g) = 2.28 W/kg

Maximum value of SAR (measured) = 20.3 W/kg



0 dB = 20.3 W/kg = 13.07 dBW/kg

Fig.B.19 validation 5800MHz 100mW



Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Body 5 GHz

Medium parameters used: f = 5800 MHz;  $\sigma = 6.008$  mho/m;  $\varepsilon_r = 46.64$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5800 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(4.67, 4.67, 4.67)

**System Validation /Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 18.6 W/kg

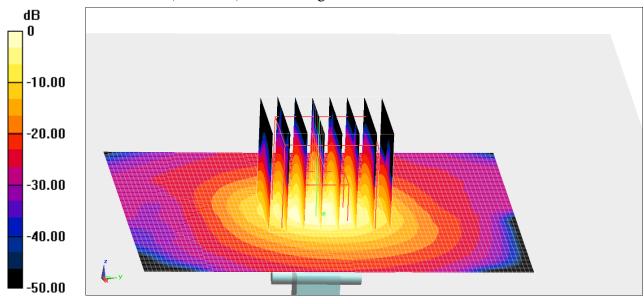
**System Validation /Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 67.15 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 35.63 W/kg

SAR(1 g) = 7.65 W/kg; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 18.8 W/kg



0 dB = 18.8 W/kg = 12.74 dBW/kg

Fig.B.20 validation 5800MHz 100mW