

SMT-I8120 SAR Plots

Test Laboratory: KTL

1900MHz Validation – D1900V2; SN: 5d038

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) :21.5 , Ambient Temperature(°C) : 21.0

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

Medium: HSL1900 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.38 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(5, 5, 5); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 11.3 mW/g

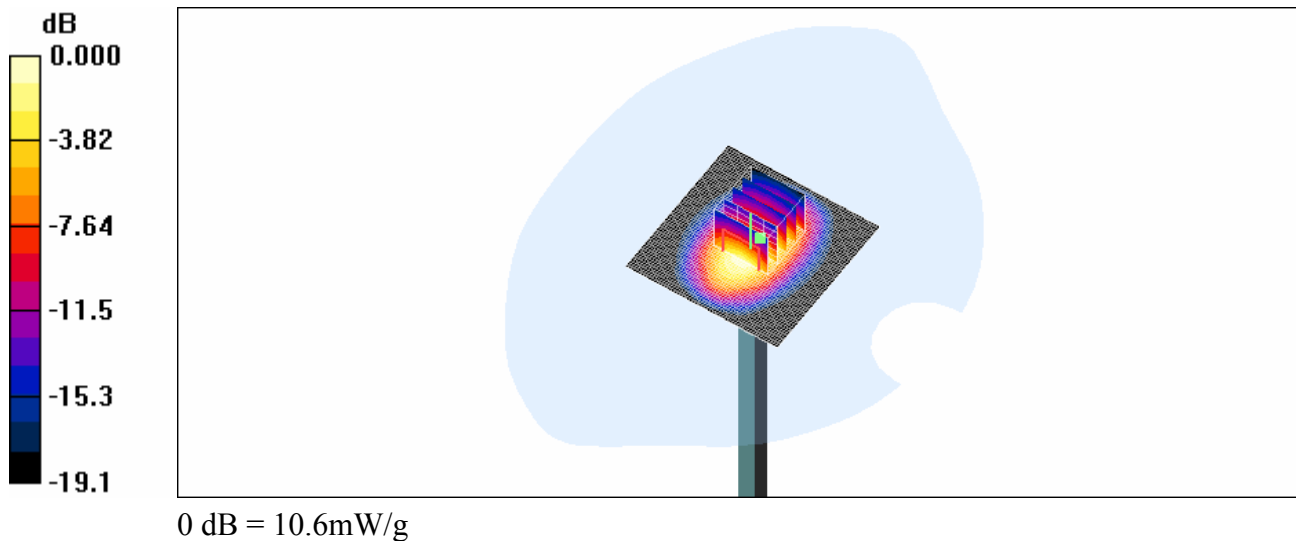
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 93.6 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 16.2 W/kg

SAR(1 g) = 9.58 mW/g; SAR(10 g) = 5.06 mW/g

Maximum value of SAR (measured) = 10.6 mW/g



Test Laboratory: KTL

SMT-I8120 Ch.3 LEFT Cheek Touch

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) : 21.5, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.7, 4.7, 4.7); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x91x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.023 mW/g

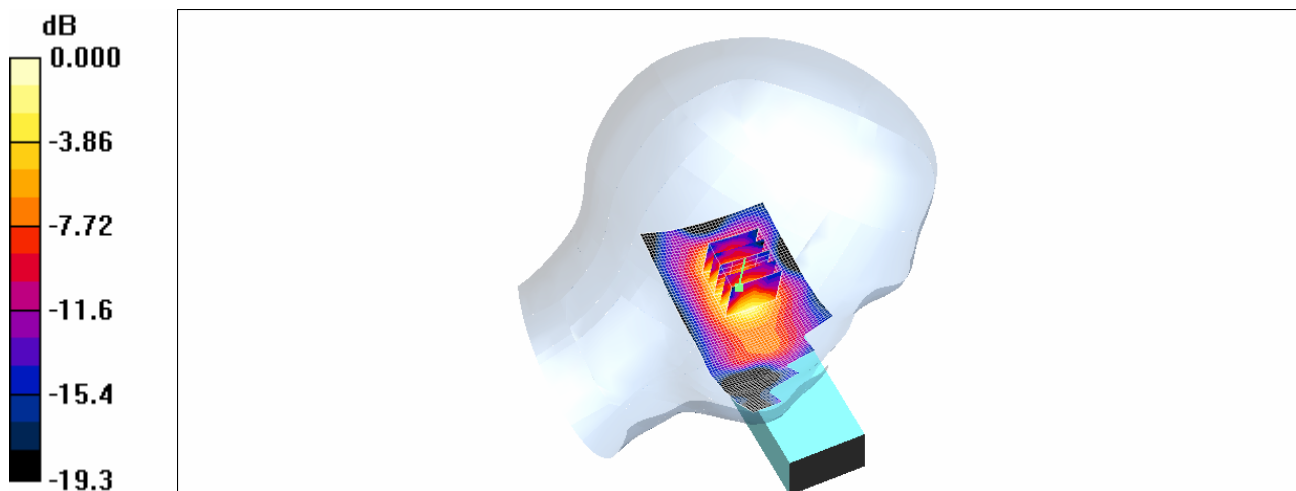
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.01 V/m; Power Drift = 0.119 dB

Peak SAR (extrapolated) = 0.031 W/kg

SAR(1 g) = 0.021 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.022 mW/g



Test Laboratory: KTL

SMT-I8120 Ch.3 LEFT Ear Tilt

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) : 21.5, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1924.99 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.7, 4.7, 4.7); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x91x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.012 mW/g

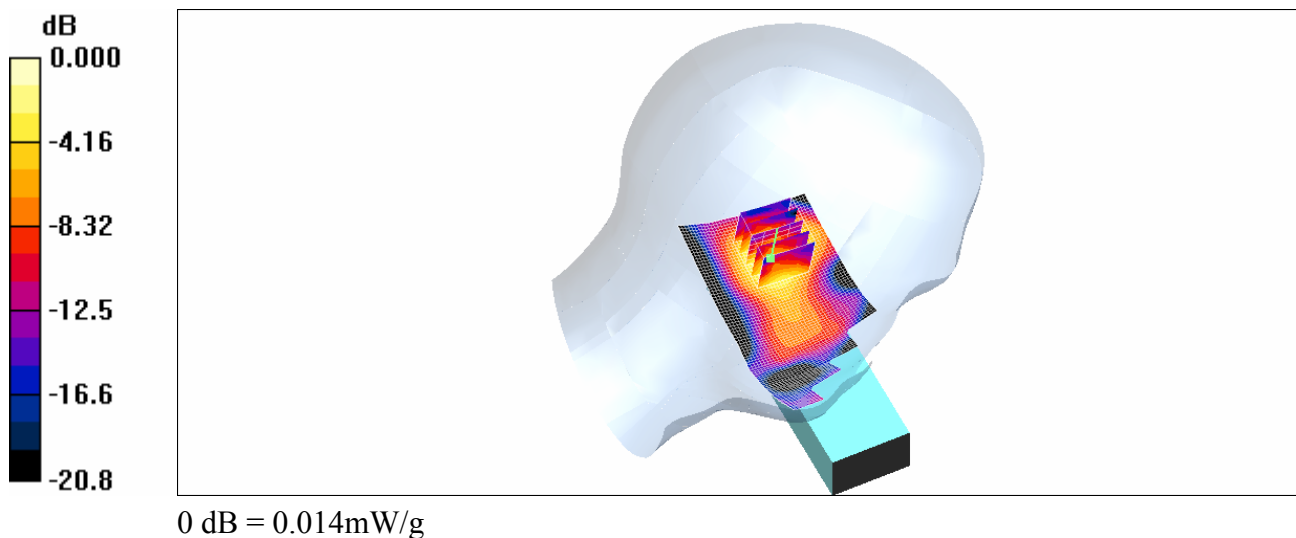
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.90 V/m ; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.022 W/kg

SAR(1 g) = 0.013 mW/g ; SAR(10 g) = 0.00697 mW/g

Maximum value of SAR (measured) = 0.014 mW/g



Test Laboratory: KTL

SMT-I8120 Ch.3 RIGHT Cheek Touch

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) : 21.5, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.7, 4.7, 4.7); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x91x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.024 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm

Maximum value of SAR (interpolated) = 0.005 mW/g

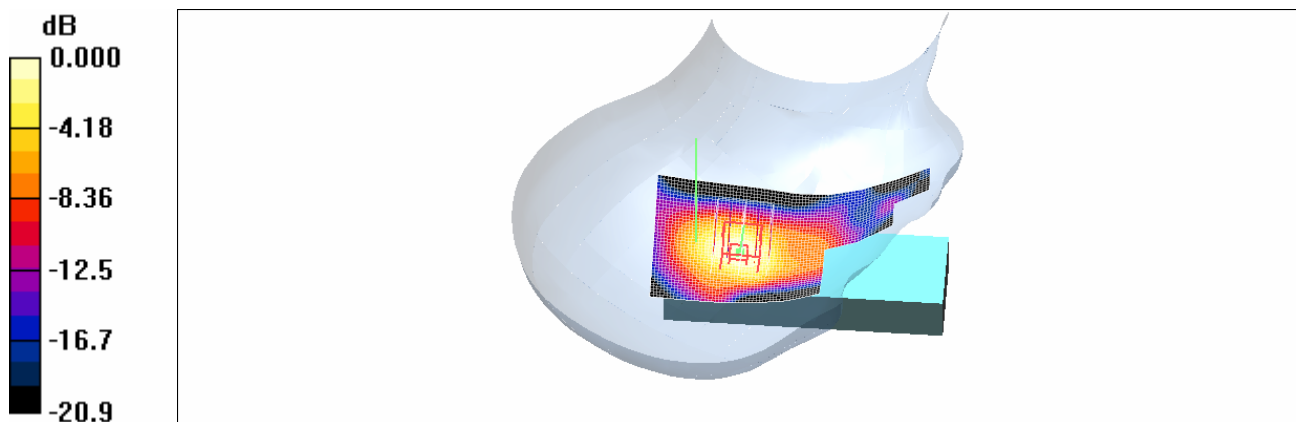
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

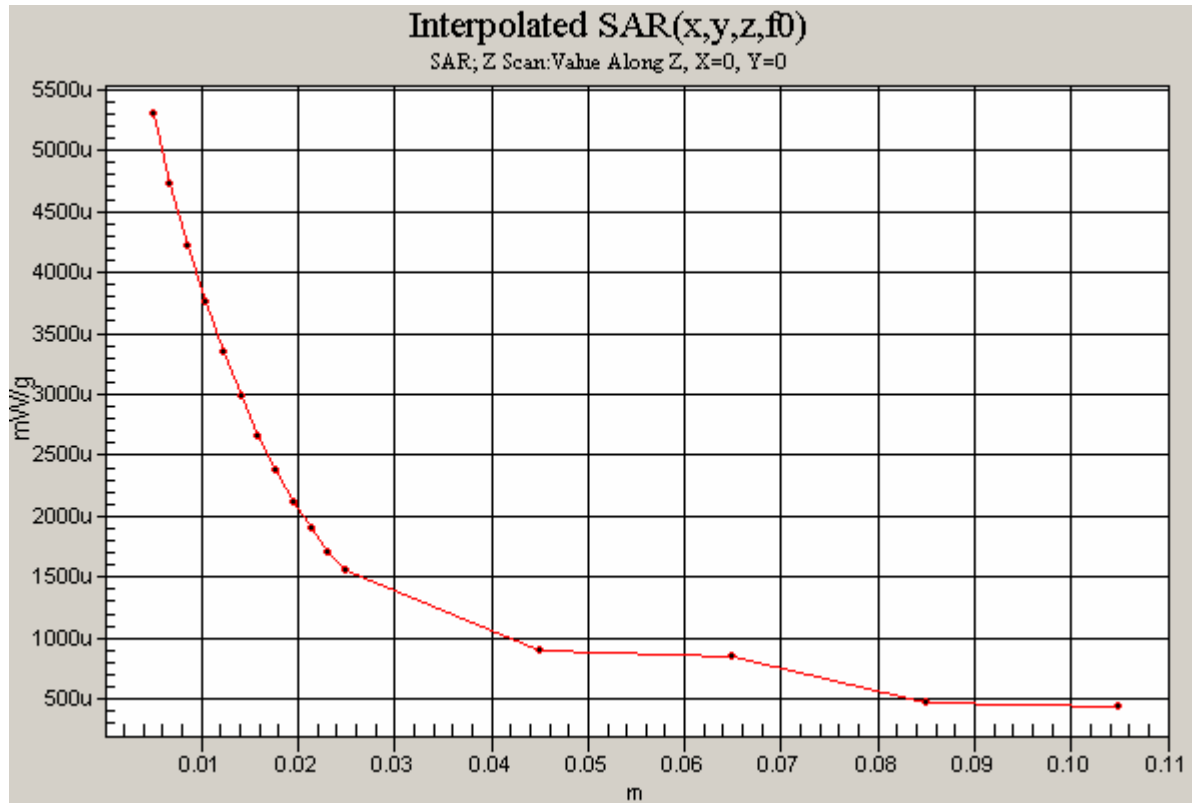
Reference Value = 2.87 V/m; Power Drift = 0.111 dB

Peak SAR (extrapolated) = 0.033 W/kg

SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.022 mW/g





Test Laboratory: KTL

SMT-I8120 Ch.3 RIGHT Ear Tilt

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) : 21.5, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1924.99 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.7, 4.7, 4.7); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x91x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.014 mW/g

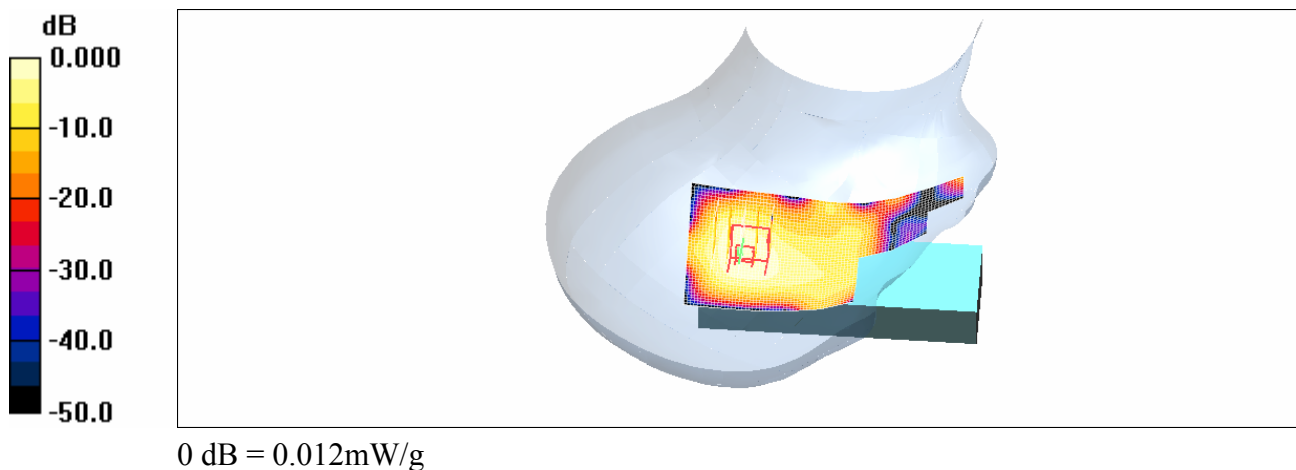
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.90 V/m ; Power Drift = 0.038 dB

Peak SAR (extrapolated) = 0.019 W/kg

SAR(1 g) = 0.012 mW/g ; SAR(10 g) = 0.00672 mW/g

Maximum value of SAR (measured) = 0.012 mW/g



Test Laboratory: KTL

SMT-I8120 Ch.5 RIGHT Cheek Touch

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) : 21.5, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1928.45 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1928.45 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.7, 4.7, 4.7); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x91x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.024 mW/g

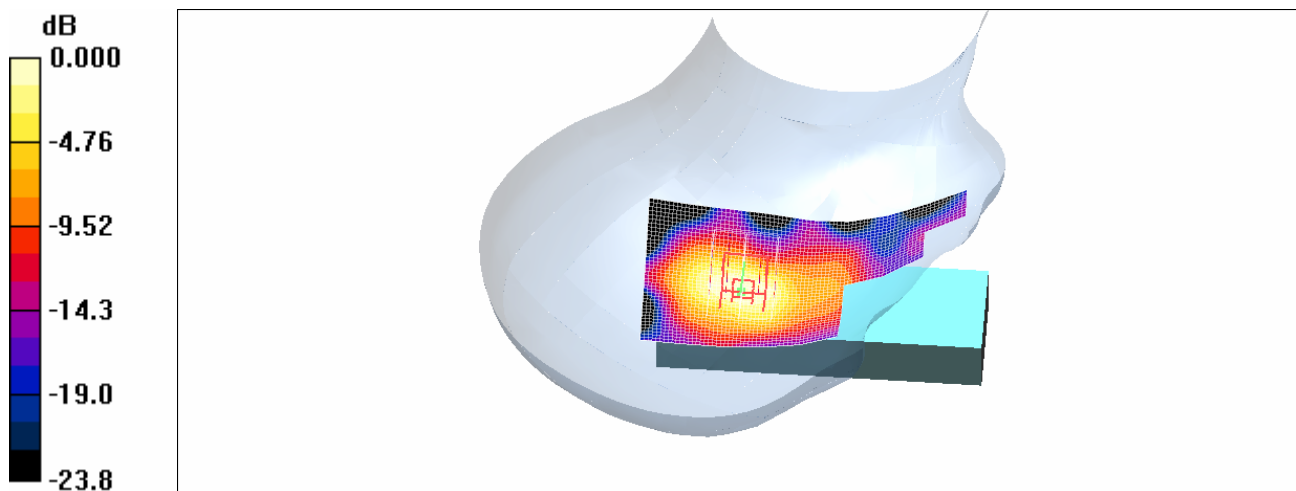
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.90 V/m ; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 0.035 W/kg

SAR(1 g) = 0.022 mW/g ; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.023 mW/g



0 dB = 0.023mW/g

Test Laboratory: KTL

SMT-I8120 Ch.1 RIGHT Cheek Touch

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) : 21.5, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1921.36 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1921.36 \text{ MHz}$; $\sigma = 1.43 \text{ mho/m}$; $\epsilon_r = 39.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.7, 4.7, 4.7); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x91x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.023 mW/g

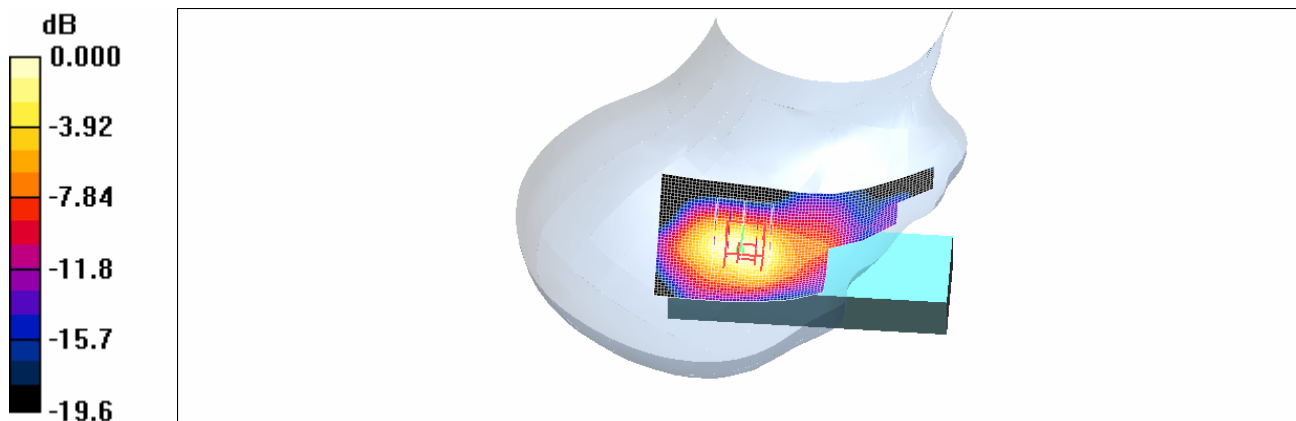
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.82 V/m ; Power Drift = 0.359 dB

Peak SAR (extrapolated) = 0.033 W/kg

SAR(1 g) = 0.022 mW/g ; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.022 mW/g



0 dB = 0.022 mW/g

Test Laboratory: KTL

SMT-I8120 Ch.5 Body Rear facing phantom

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) : 21.5, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1928.45 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1928.45 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 52$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x101x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.024 mW/g

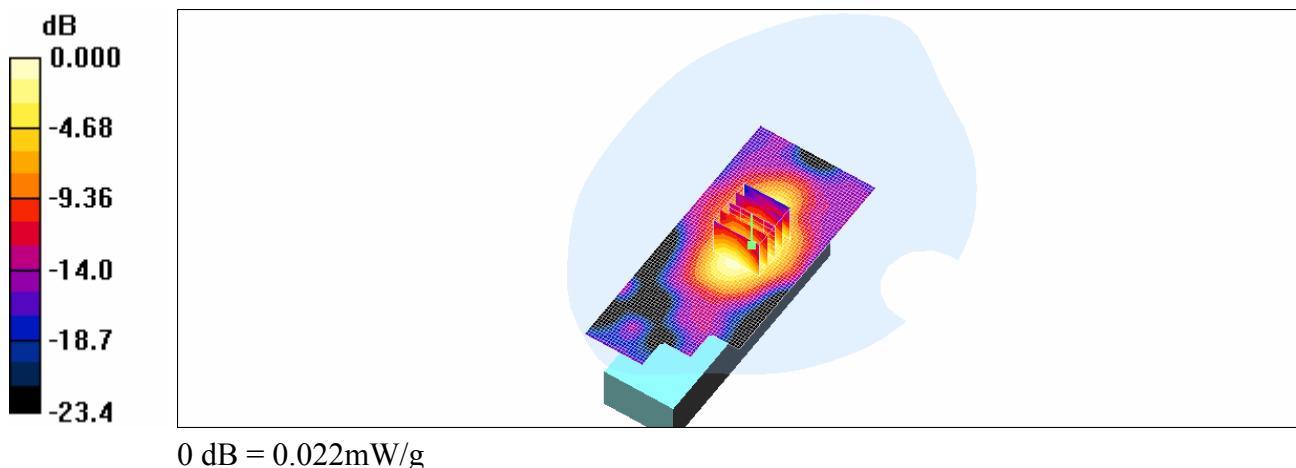
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.51 V/m ; Power Drift = 0.042 dB

Peak SAR (extrapolated) = 0.033 W/kg

SAR(1 g) = 0.021 mW/g ; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.022 mW/g



Test Laboratory: KTL

SMT-I8120 Ch.3 Body Rear facing phantom

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) : 21.5, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x101x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.024 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm

Maximum value of SAR (interpolated) = 0.004 mW/g

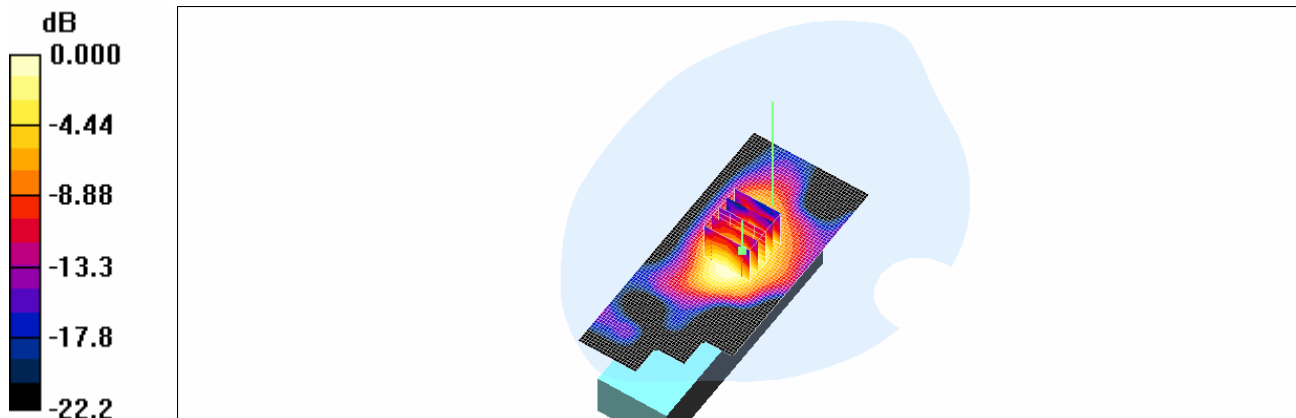
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.77 V/m; Power Drift = 0.262 dB

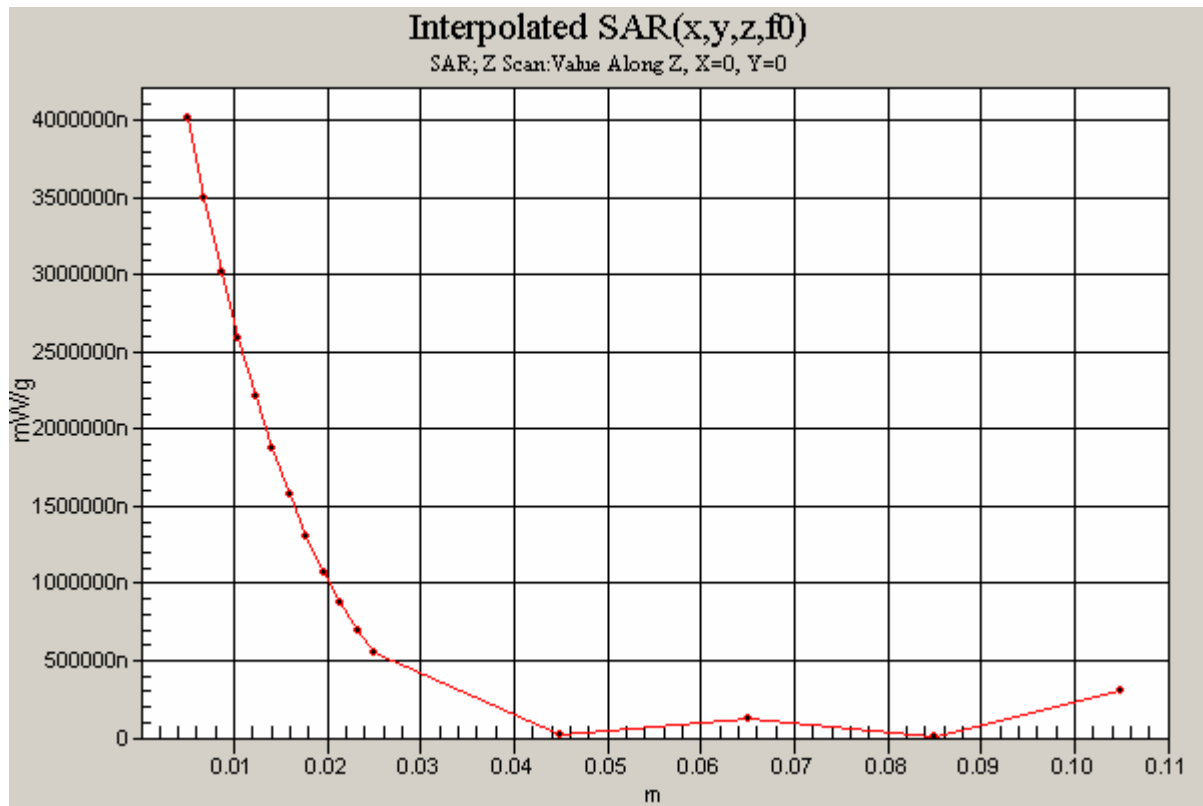
Peak SAR (extrapolated) = 0.034 W/kg

SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.023 mW/g



0 dB = 0.023mW/g



Test Laboratory: KTL

SMT-I8120 Ch.3 Body Front facing phantom

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) : 21.5, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x101x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.018 mW/g

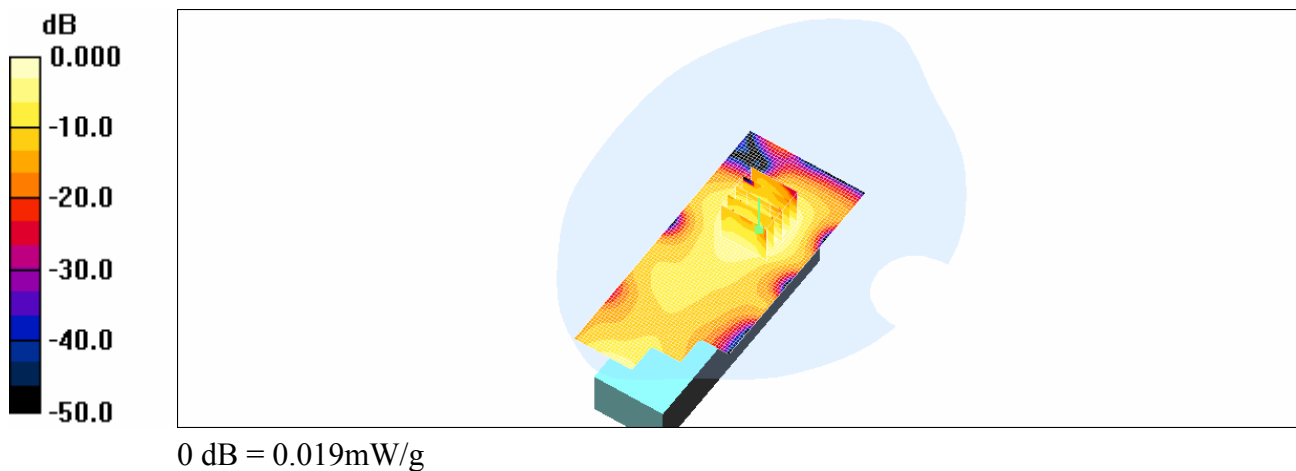
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.99 V/m; Power Drift = 0.307 dB

Peak SAR (extrapolated) = 0.032 W/kg

SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00942 mW/g

Maximum value of SAR (measured) = 0.019 mW/g



Test Laboratory: KTL

SMT-I8120 Ch.1 Body Rear facing phantom

***Test Date : 9th June, 2008**

Measured Liquid Temperature(°C) : 21.5, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1921.36 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1921.36 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 51.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2008-03-13
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x101x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.026 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.63 V/m; Power Drift = 0.184 dB

Peak SAR (extrapolated) = 0.036 W/kg

SAR(1 g) = 0.021 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.023 mW/g

