

850 Body Towards Ground Middle

Date/Time: 2009-4-16 11:58:16

Electronics: DAE4 Sn771

Medium: 850 Body

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1.00$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 850 Frequency: 836.6 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.858 mW/g

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

Reference Value = 27.1 V/m; Power Drift = -0.063 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.799 mW/g; SAR(10 g) = 0.549 mW/g

Maximum value of SAR (measured) = 0.849 mW/g

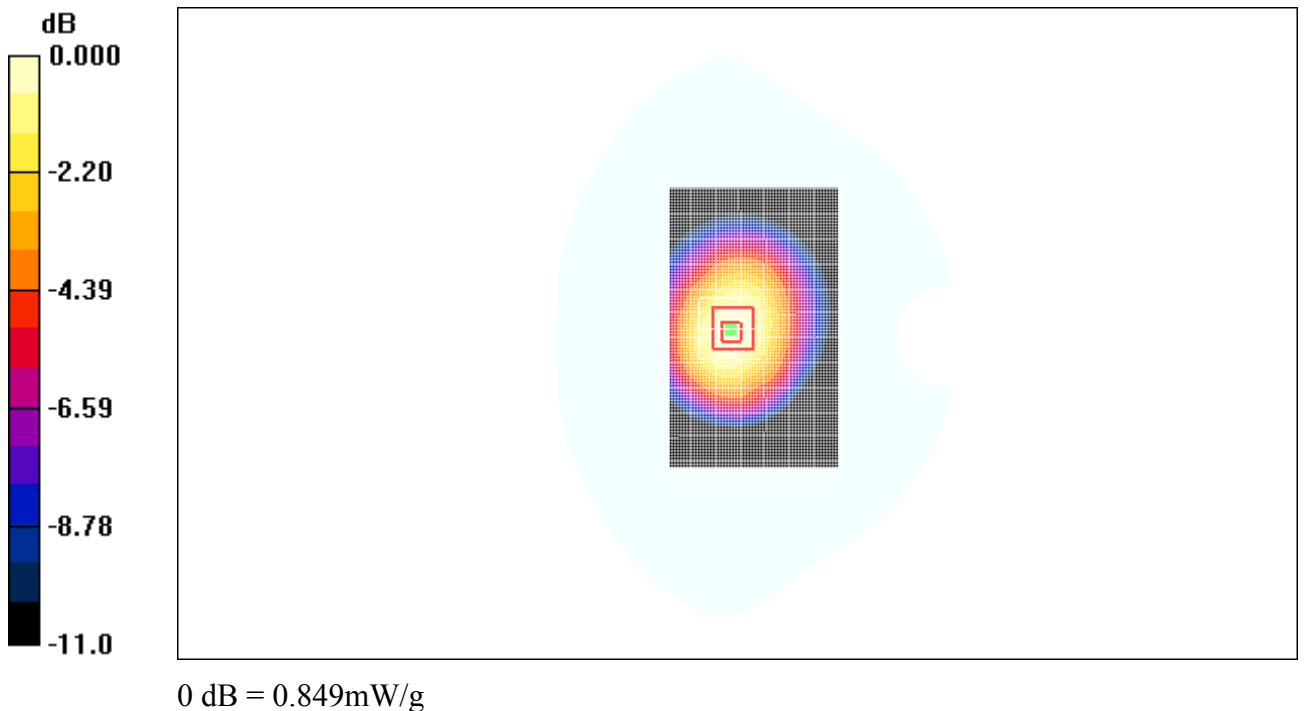


Fig. 19 850 MHz CH190

850 Body Towards Ground Low

Date/Time: 2009-4-16 12:11:58

Electronics: DAE4 Sn771

Medium: 850 Body

Medium parameters used: $f = 825 \text{ MHz}$; $\sigma = 0.983 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 850 Frequency: 824.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Low/Area Scan (61x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.871 mW/g

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

Reference Value = 27.6 V/m ; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.808 mW/g ; SAR(10 g) = 0.559 mW/g

Maximum value of SAR (measured) = 0.859 mW/g

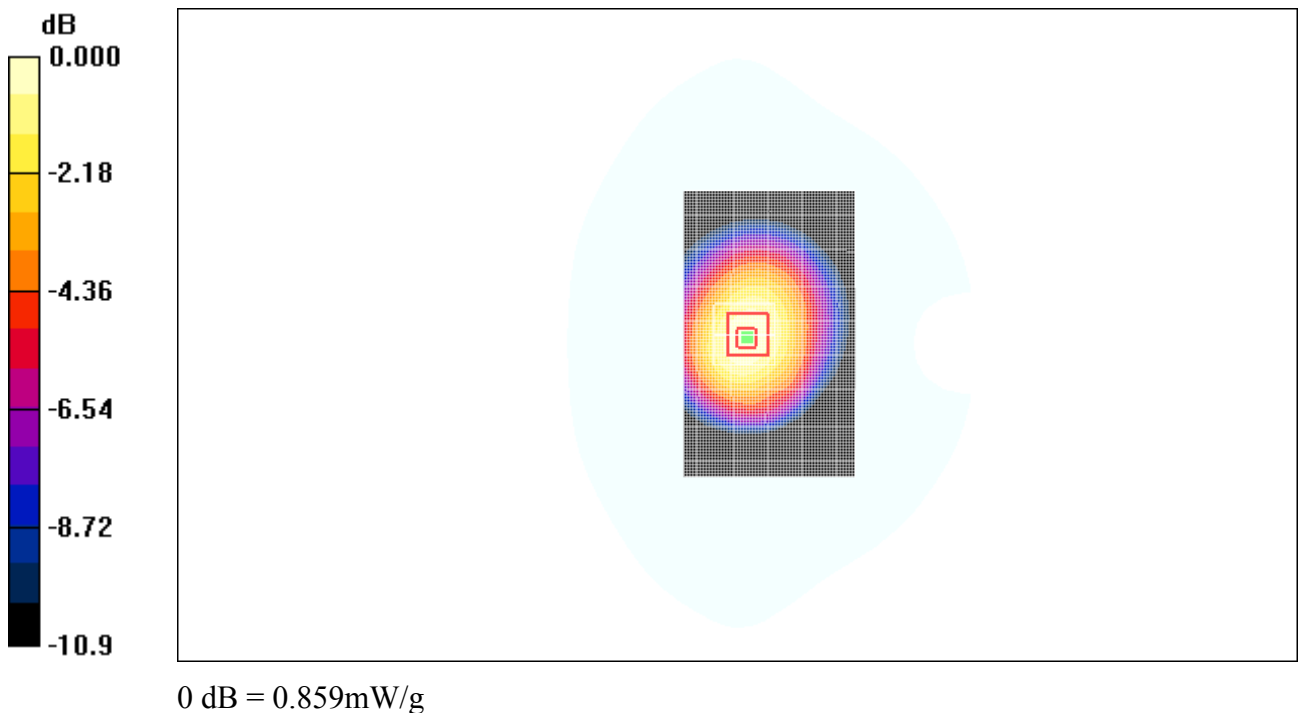


Fig. 20 850 MHz CH128

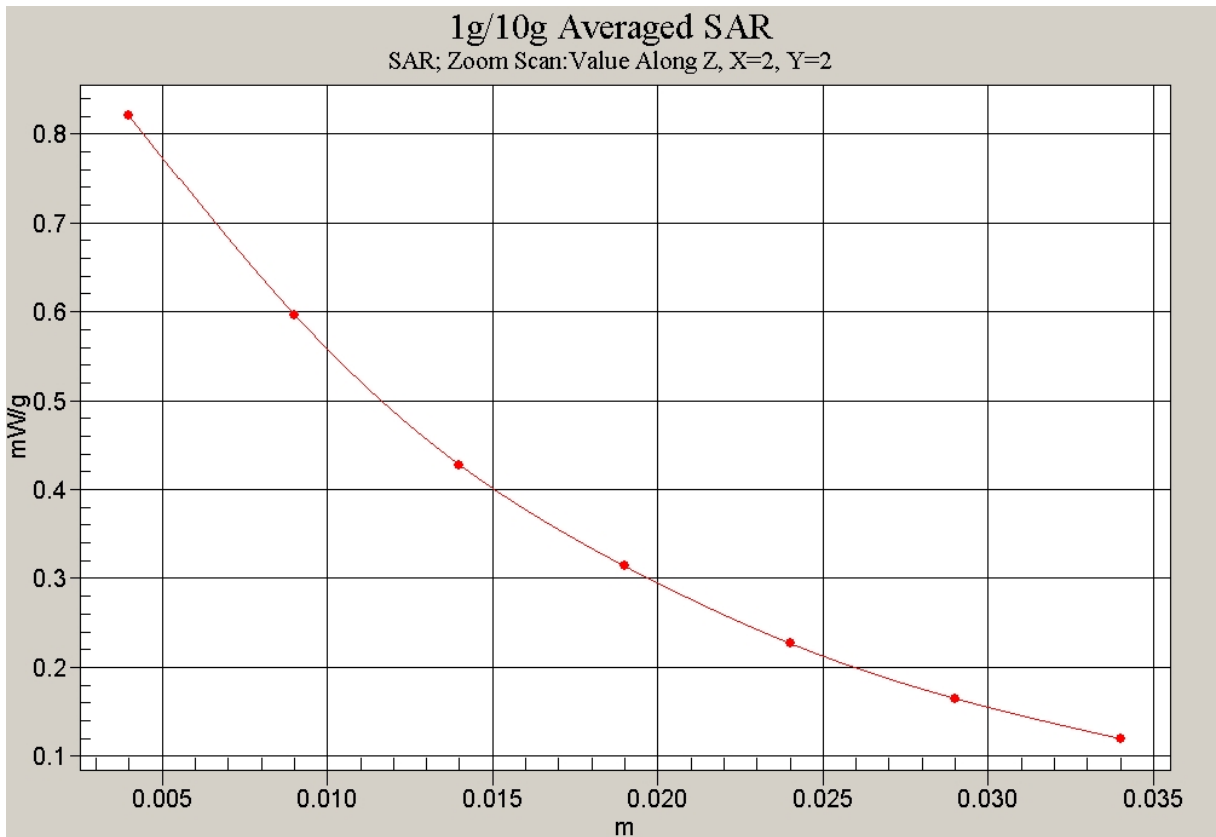


Fig. 21 Z-Scan at power reference point (850 MHz CH128)

850 Body Towards Ground Low with Headset

Date/Time: 2009-4-16 12:26:10

Electronics: DAE4 Sn771

Medium: 850 Body

Medium parameters used: $f = 825$ MHz; $\sigma = 0.983$ mho/m; $\epsilon_r = 53.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 850 Frequency: 824.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=15mm

Maximum value of SAR (interpolated) = 0.758 mW/g

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

Reference Value = 25.4 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.965 W/kg

SAR(1 g) = 0.703 mW/g; SAR(10 g) = 0.488 mW/g

Maximum value of SAR (measured) = 0.748 mW/g

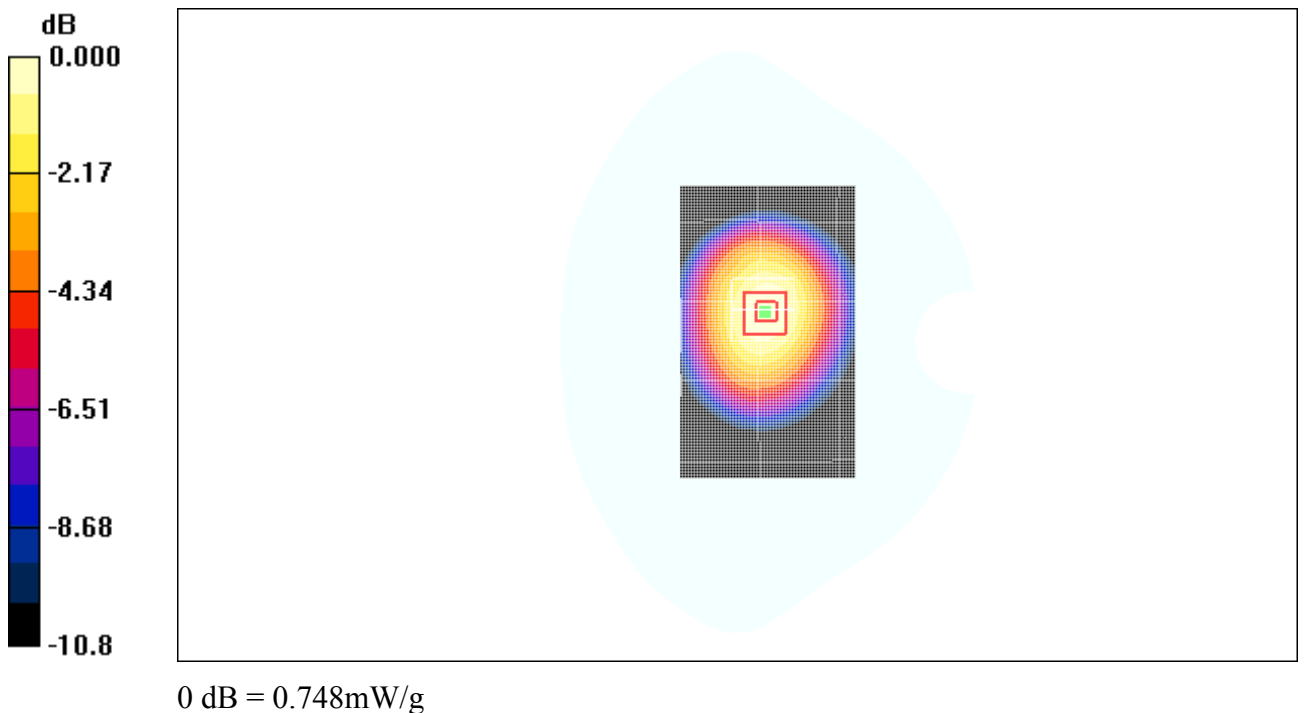


Fig. 22 850 MHz CH128

850 Body Towards Ground Low – Battery: CAB30U0001C1

Date/Time: 2009-4-16 12:41:22

Electronics: DAE4 Sn771

Medium: 850 Body

Medium parameters used: $f = 825 \text{ MHz}$; $\sigma = 0.983 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 850 Frequency: 824.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Low/Area Scan (61x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.836 mW/g

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

Reference Value = 27.7 V/m ; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.768 mW/g ; SAR(10 g) = 0.535 mW/g

Maximum value of SAR (measured) = 0.820 mW/g

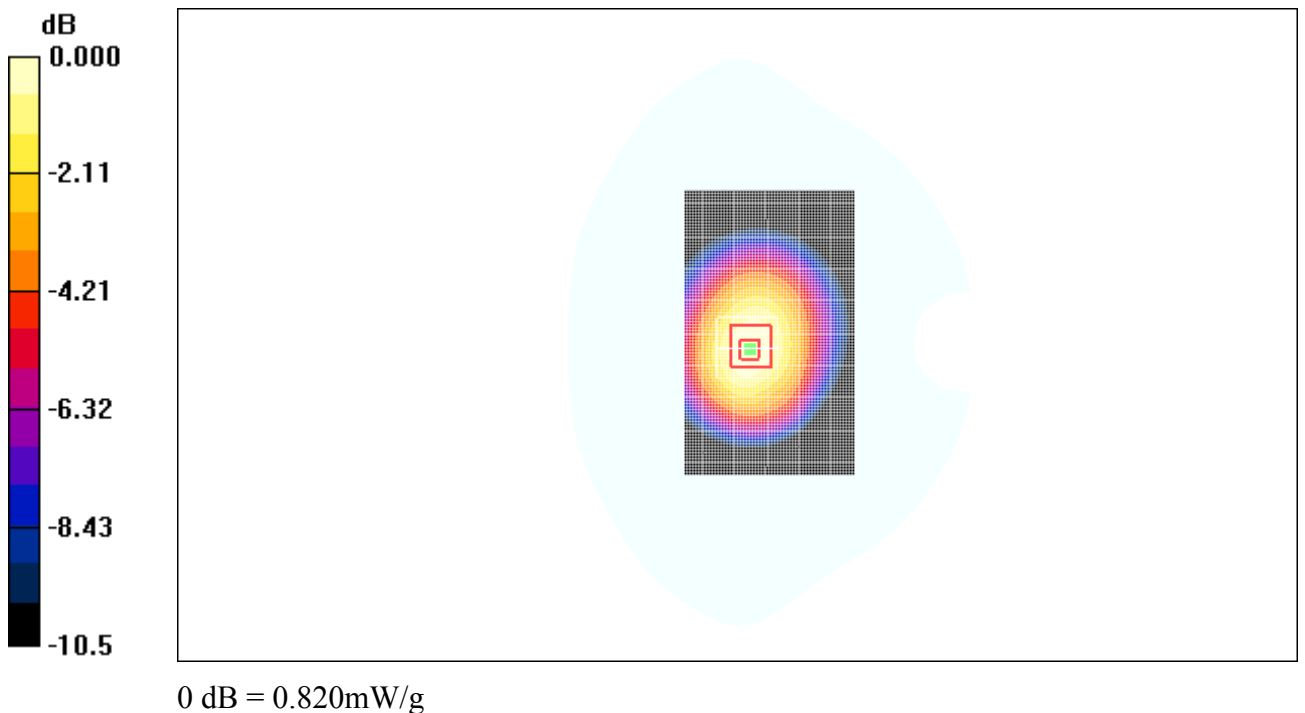


Fig. 23 850 MHz CH128

1900 Left Cheek High

Date/Time: 2009-4-17 8:00:32

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used: $f = 1910 \text{ MHz}$; $\sigma = 1.43 \text{ mho/m}$; $\epsilon_r = 39.1$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek High/Area Scan (61x91x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.22 mW/g

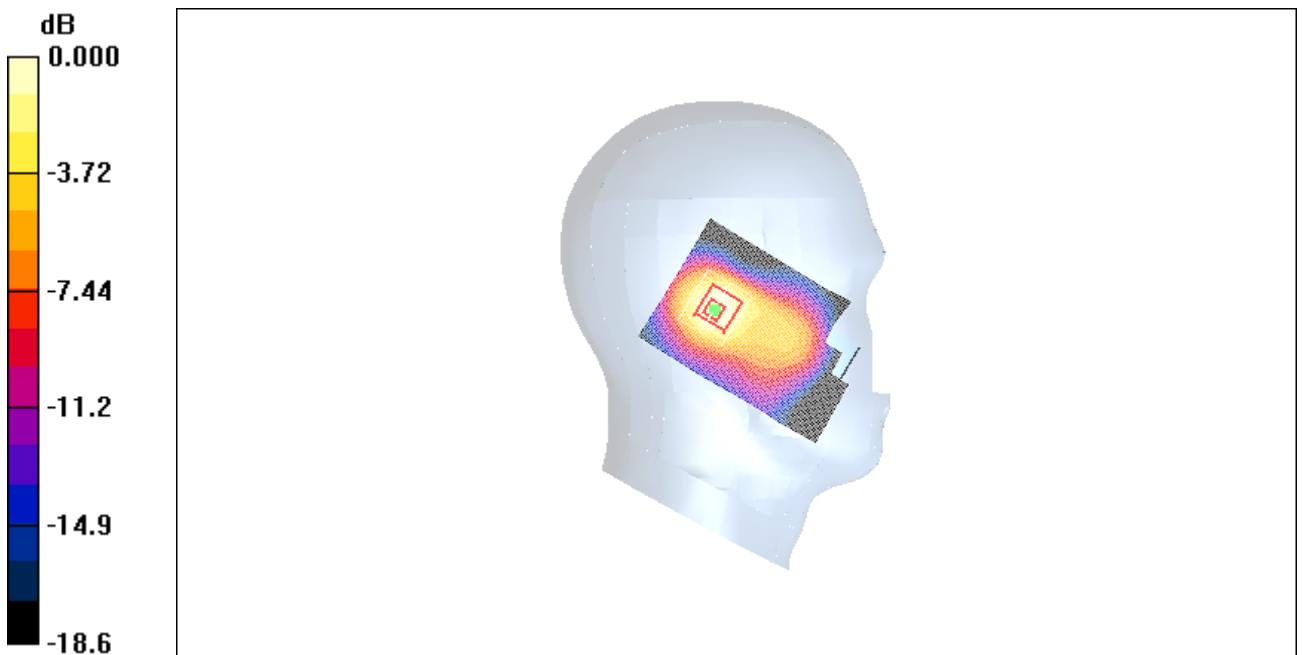
Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.2 V/m; Power Drift = -0.092 dB

Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.586 mW/g

Maximum value of SAR (measured) = 1.12 mW/g



0 dB = 1.12mW/g

Fig. 24 1900 MHz CH810

1900 Left Cheek Middle

Date/Time: 2009-4-17 8:14:27

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.27 mW/g

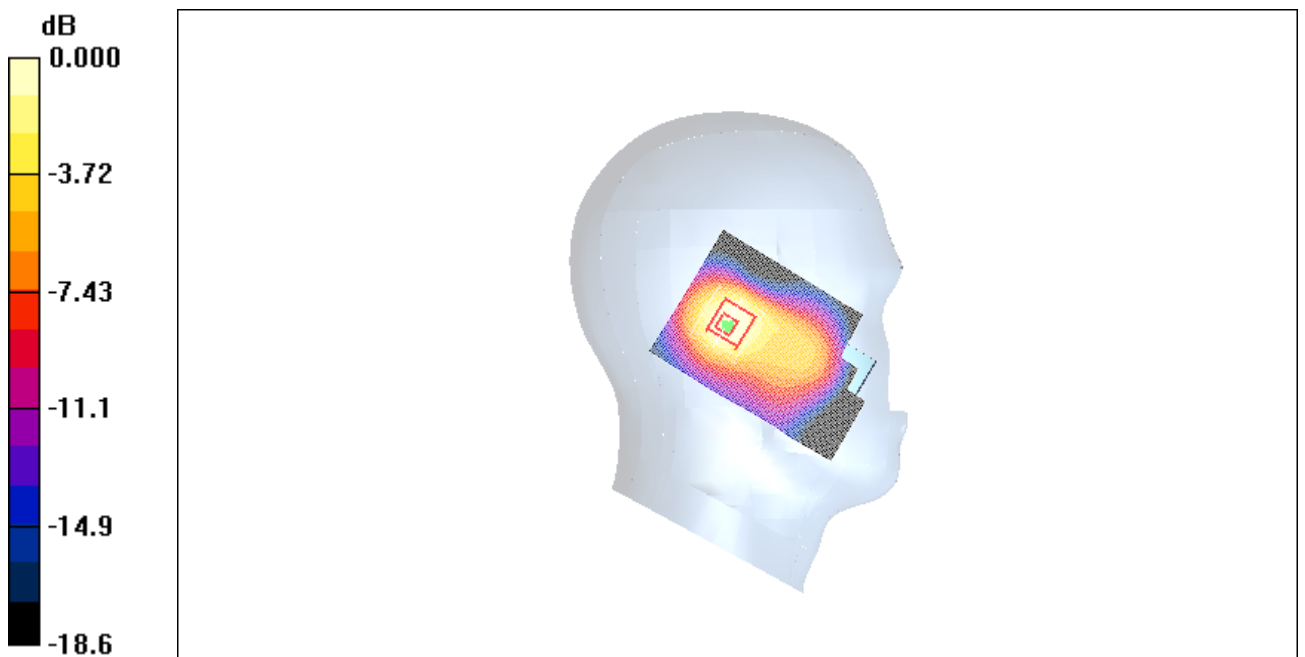
Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.6 V/m; Power Drift = -0.059 dB

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.598 mW/g

Maximum value of SAR (measured) = 1.12 mW/g



0 dB = 1.12mW/g

Fig. 25 1900 MHz CH661

1900 Left Cheek Low

Date/Time: 2009-4-17 8:28:31

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.33 mW/g

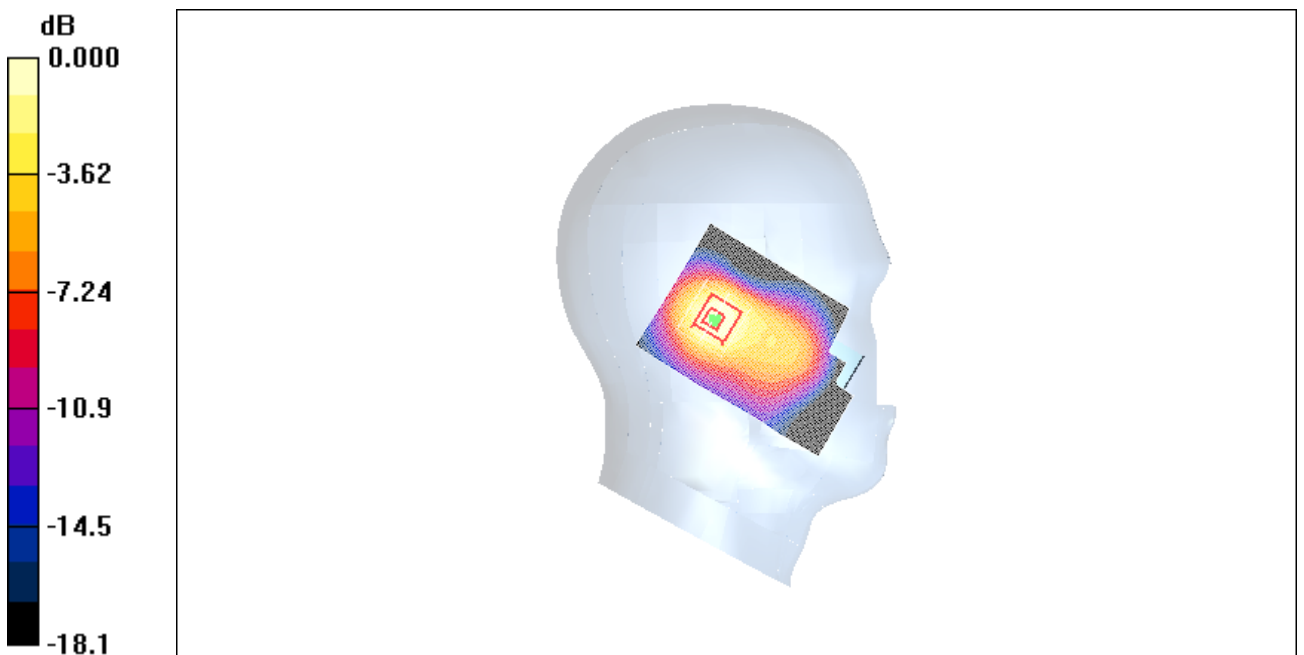
Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.5 V/m; Power Drift = -0.099 dB

Peak SAR (extrapolated) = 1.76 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.629 mW/g

Maximum value of SAR (measured) = 1.18 mW/g



0 dB = 1.18mW/g

Fig. 26 1900 MHz CH512

1900 Left Tilt High

Date/Time: 2009-4-17 8:42:51

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt High/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.03 mW/g

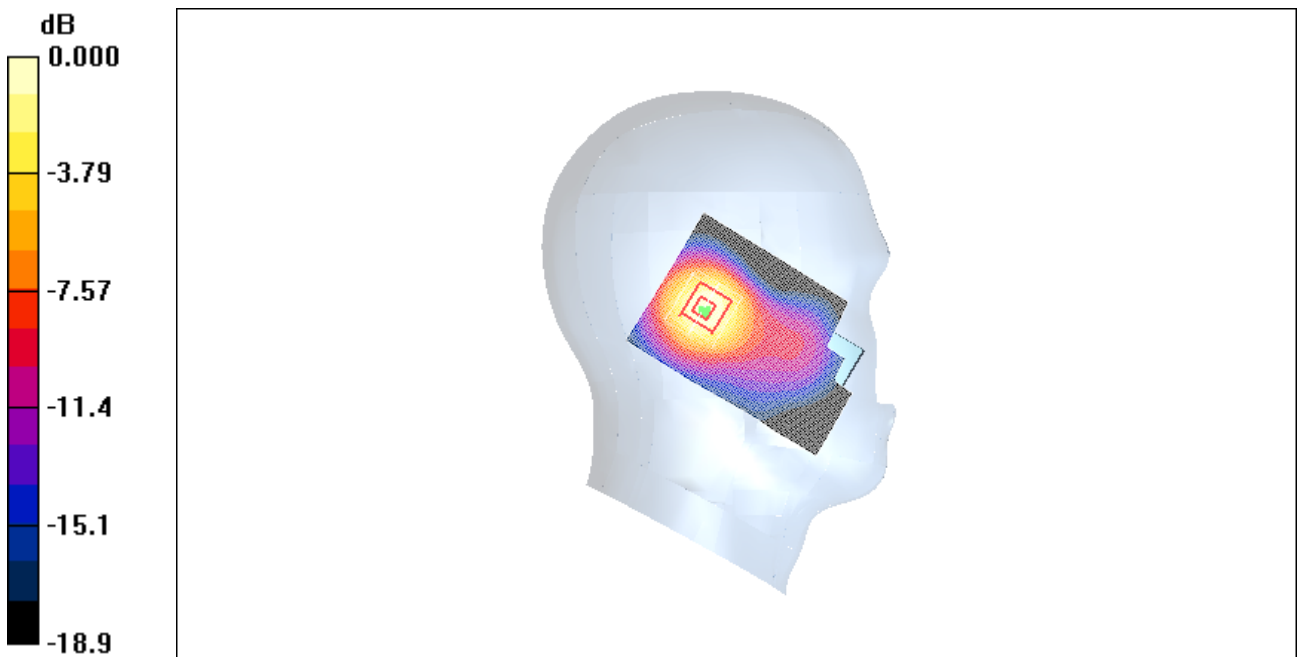
Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.0 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.866 mW/g; SAR(10 g) = 0.480 mW/g

Maximum value of SAR (measured) = 0.956 mW/g



0 dB = 0.956mW/g

Fig.27 1900 MHz CH810

1900 Left Tilt Middle

Date/Time: 2009-4-17 8:56:35

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.41 \text{ mho/m}$; $\epsilon_r = 39.2$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (61x91x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.17 mW/g

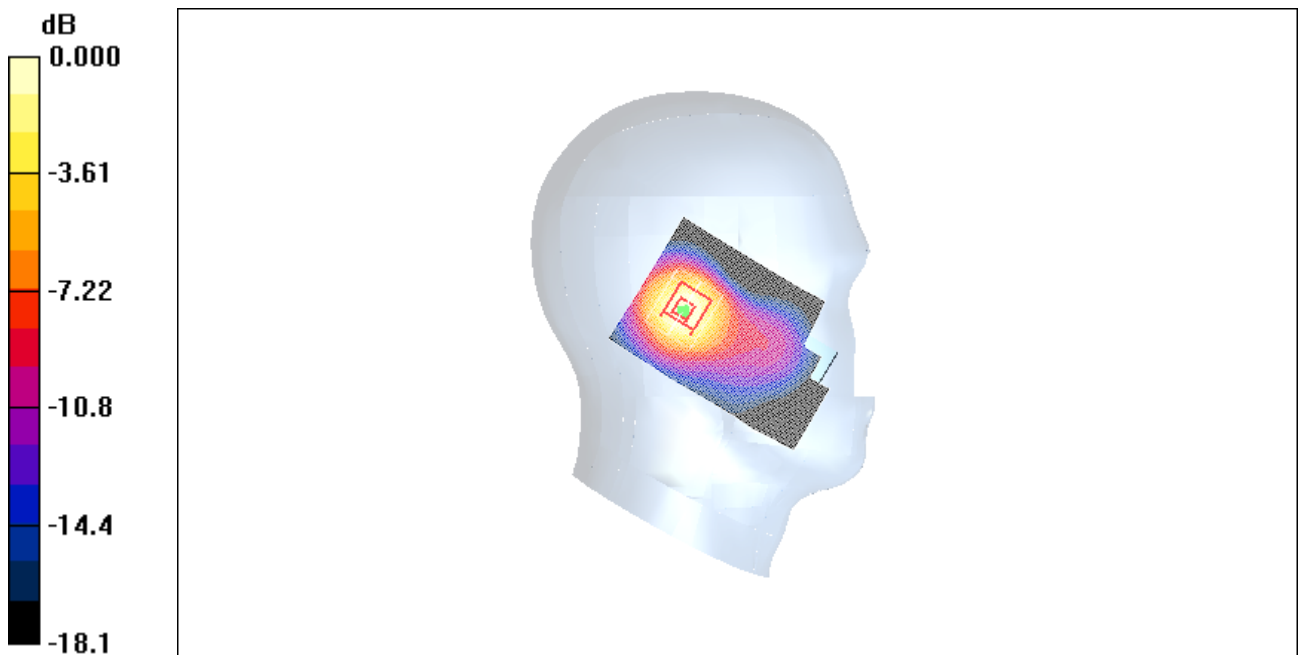
Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.8 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.981 mW/g; SAR(10 g) = 0.547 mW/g

Maximum value of SAR (measured) = 1.08 mW/g



0 dB = 1.08mW/g

Fig. 28 1900 MHz CH661

1900 Left Tilt Low

Date/Time: 2009-4-17 9:10:12

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.19 mW/g

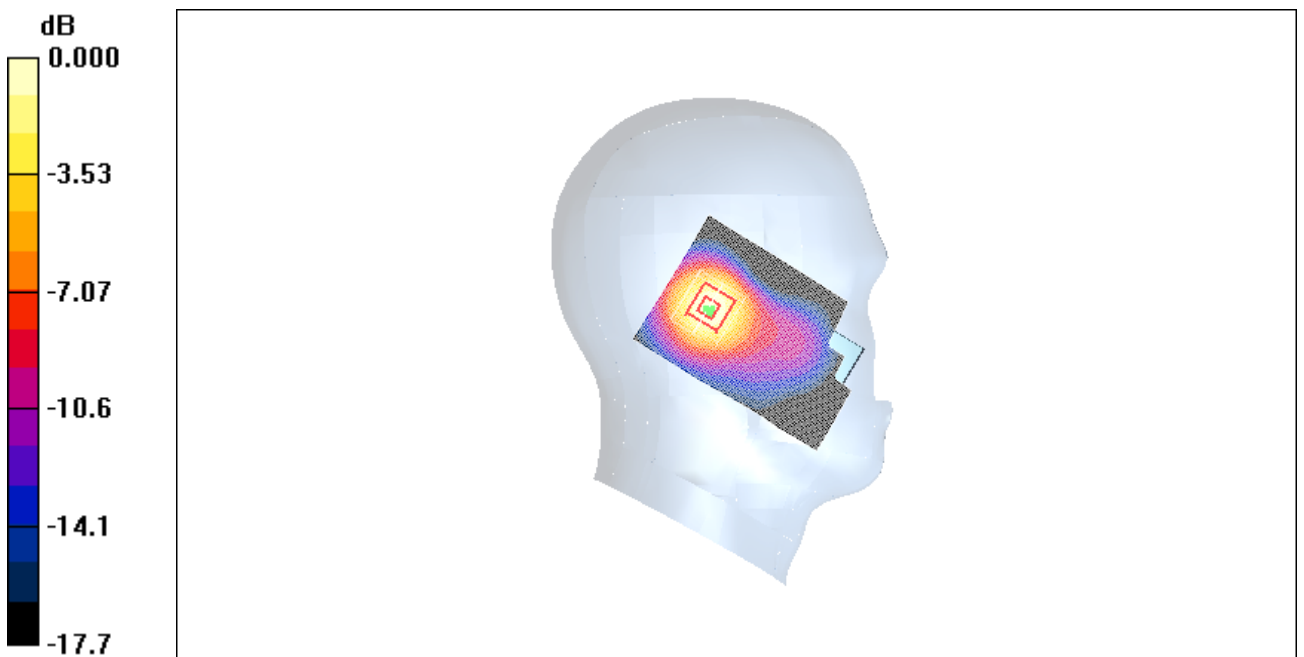
Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.6 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.569 mW/g

Maximum value of SAR (measured) = 1.12 mW/g



0 dB = 1.12mW/g

Fig. 29 1900 MHz CH512

1900 Right Cheek High

Date/Time: 2009-4-17 9:24:39

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek High/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.41 mW/g

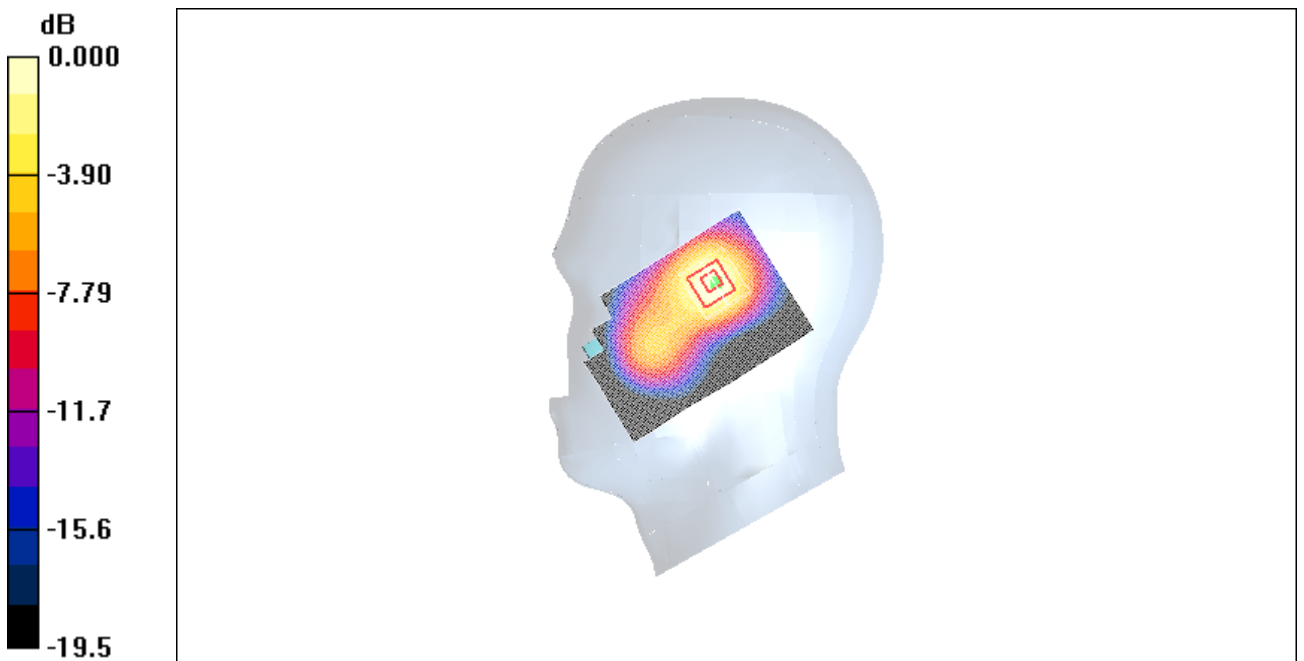
Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.8 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 2.22 W/kg

SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.668 mW/g

Maximum value of SAR (measured) = 1.32 mW/g



0 dB = 1.32mW/g

Fig. 30 1900 MHz CH810

1900 Right Cheek Middle

Date/Time: 2009-4-17 9:38:17

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.41 \text{ mho/m}$; $\epsilon_r = 39.2$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (61x91x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.55 mW/g

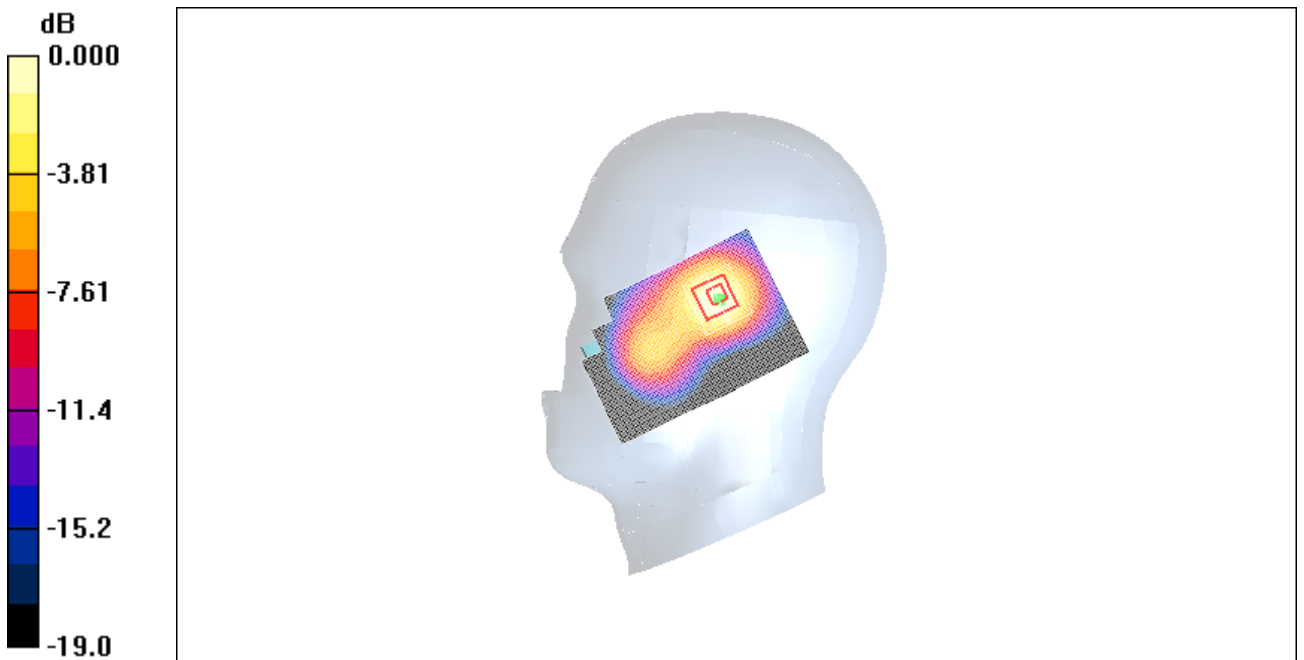
Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.2 V/m; Power Drift = 0.073 dB

Peak SAR (extrapolated) = 2.36 W/kg

SAR(1 g) = 1.32 mW/g; SAR(10 g) = 0.711 mW/g

Maximum value of SAR (measured) = 1.39 mW/g



0 dB = 1.39mW/g

Fig. 31 1900 MHz CH661

1900 Right Cheek Low

Date/Time: 2009-4-17 9:52:21

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.59 mW/g

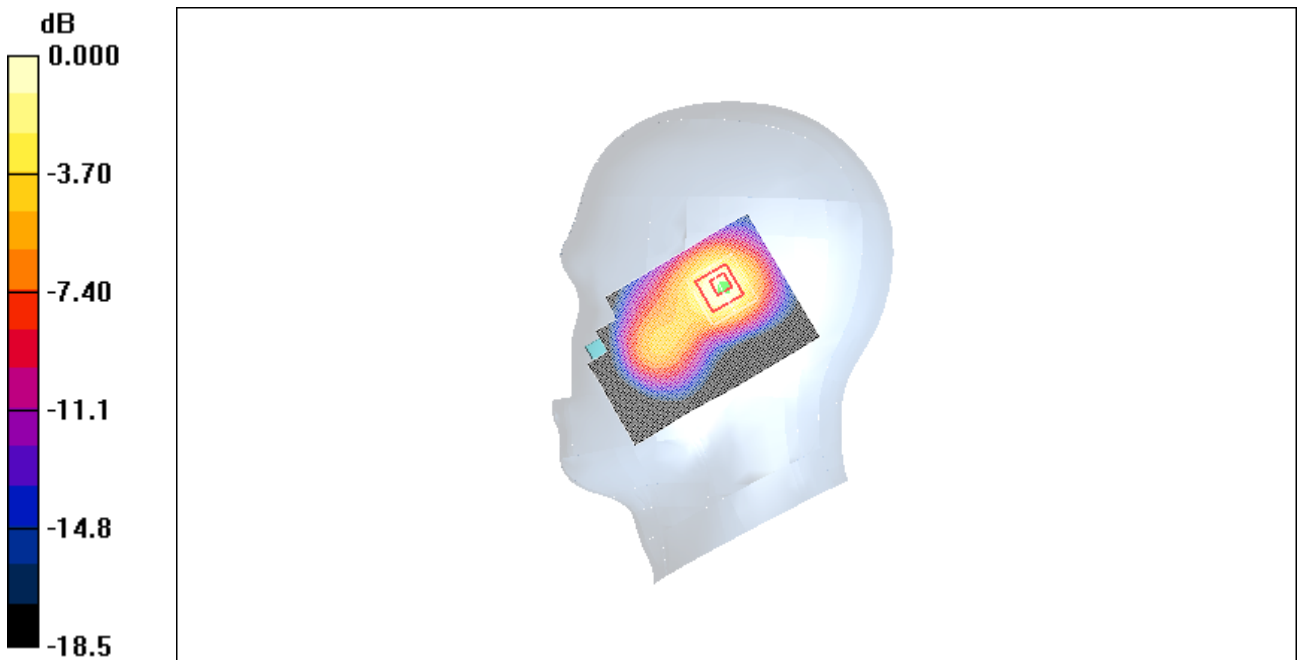
Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.3 V/m; Power Drift = 0.115 dB

Peak SAR (extrapolated) = 2.37 W/kg

SAR(1 g) = 1.35 mW/g; SAR(10 g) = 0.735 mW/g

Maximum value of SAR (measured) = 1.43 mW/g



0 dB = 1.43mW/g

Fig. 32 1900 MHz CH512

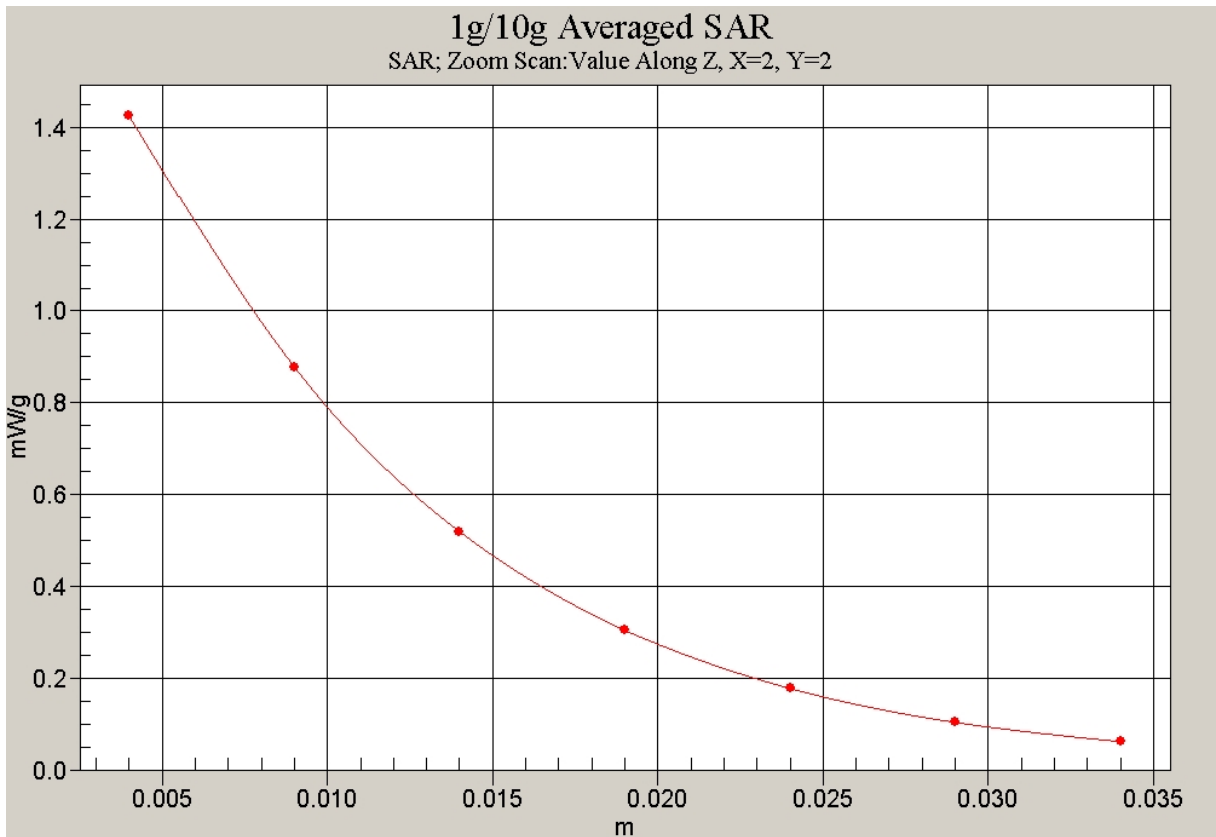


Fig. 33 Z-Scan at power reference point (1900 MHz CH512)

1900 Right Tilt High

Date/Time: 2009-4-17 10:06:33

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt High/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.10 mW/g

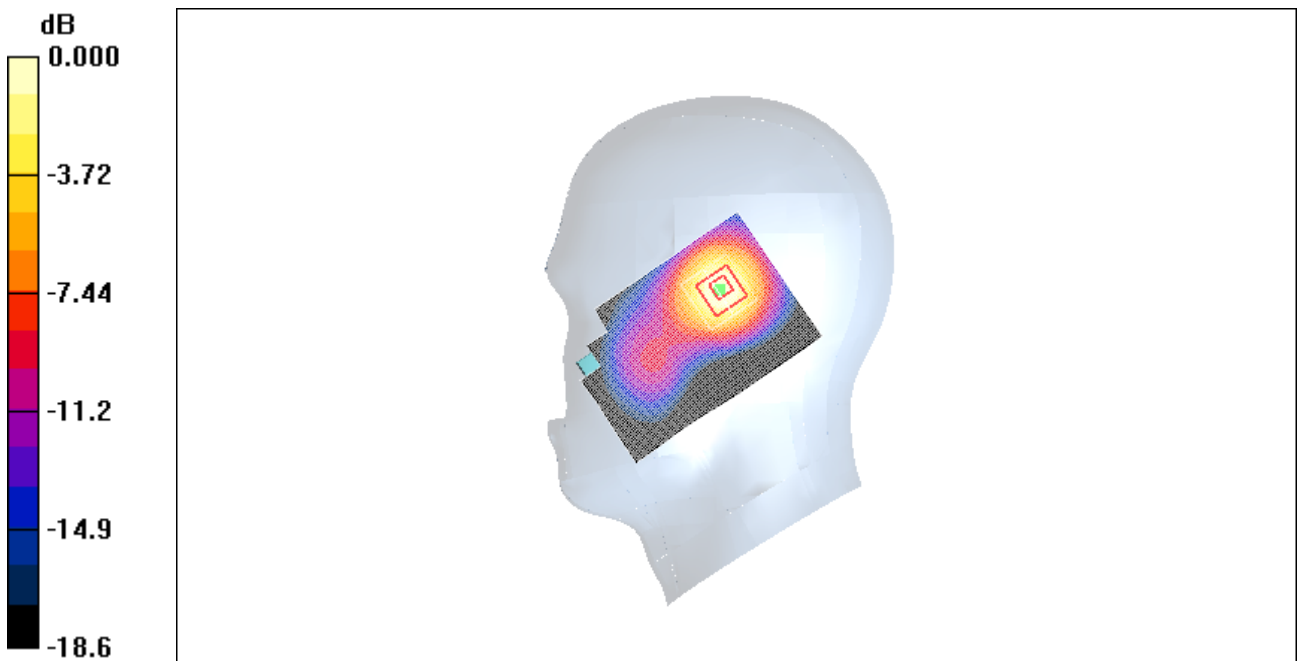
Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.5 V/m; Power Drift = -0.118 dB

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.923 mW/g; SAR(10 g) = 0.498 mW/g

Maximum value of SAR (measured) = 0.989 mW/g



0 dB = 0.989mW/g

Fig. 34 1900 MHz CH810

1900 Right Tilt Middle

Date/Time: 2009-4-17 10:20:41

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.33 mW/g

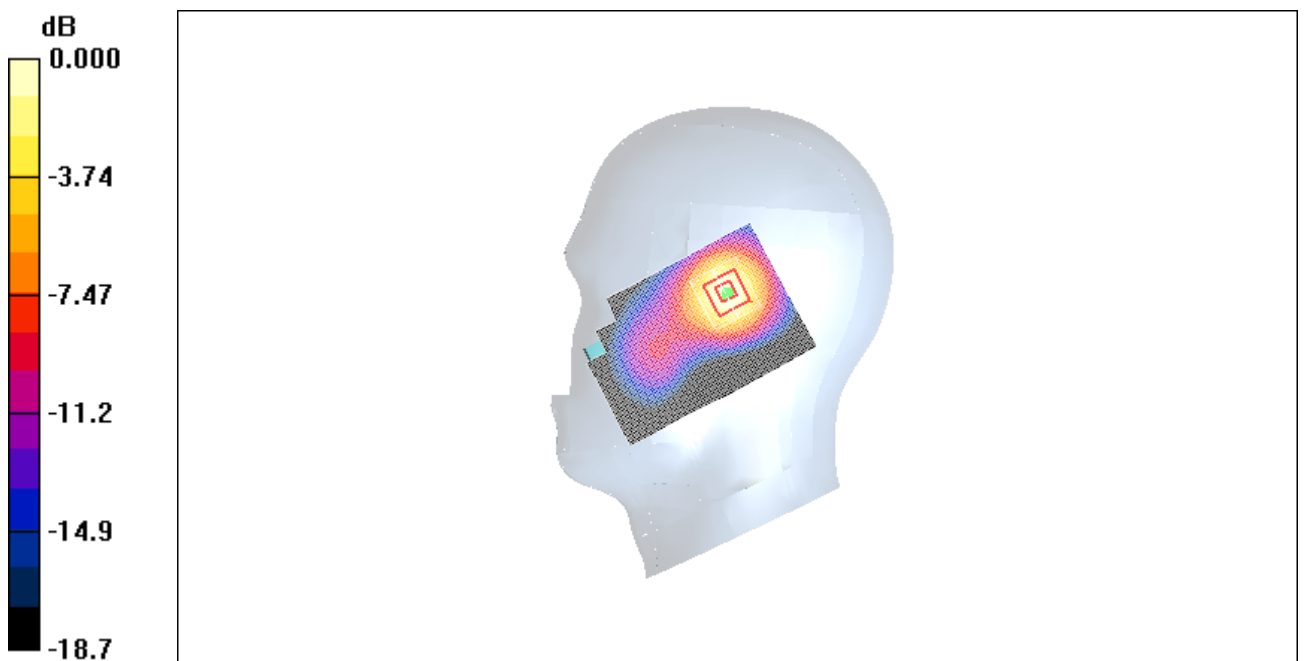
Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.0 V/m; Power Drift = -0.116 dB

Peak SAR (extrapolated) = 1.95 W/kg

SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.610 mW/g

Maximum value of SAR (measured) = 1.23 mW/g



0 dB = 1.23mW/g

Fig.35 1900 MHz CH661

1900 Right Tilt Low

Date/Time: 2009-4-17 10:34:13

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.42 mW/g

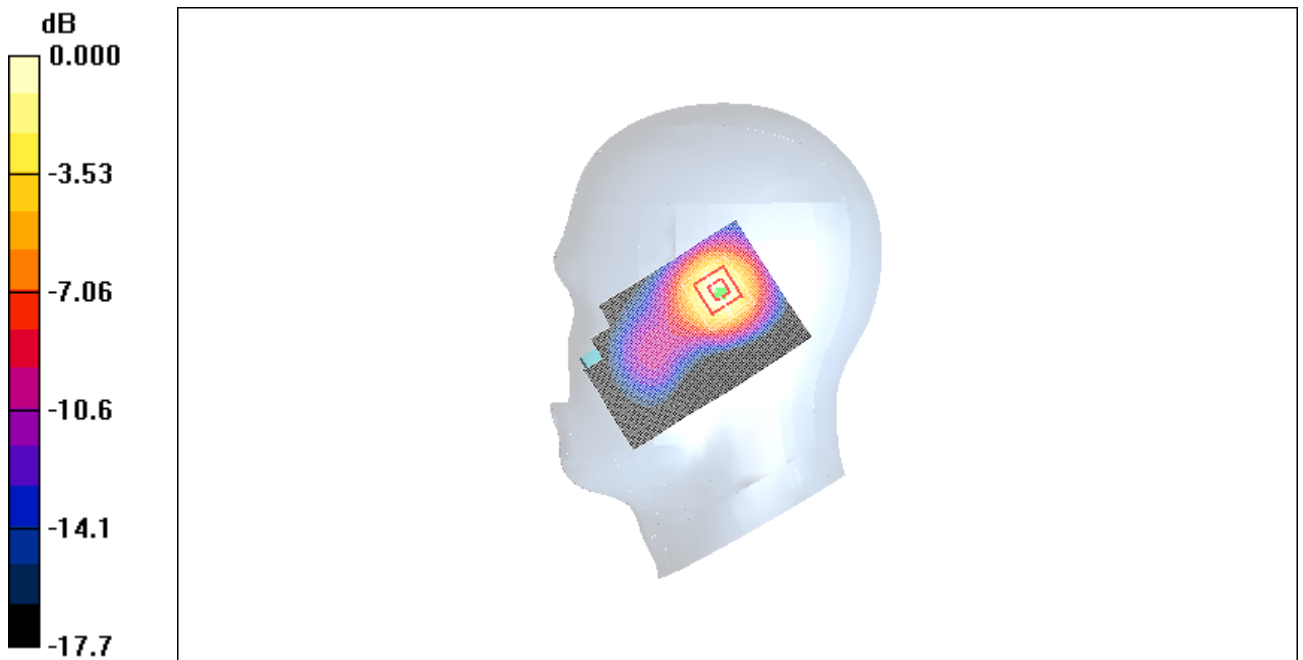
Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.3 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 2.05 W/kg

SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.660 mW/g

Maximum value of SAR (measured) = 1.30 mW/g



0 dB = 1.30mW/g

Fig.36 1900 MHz CH512

1900 Right Cheek Low – Battery: CAB30U0001C1

Date/Time: 2009-4-17 10:49:24

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.48 mW/g

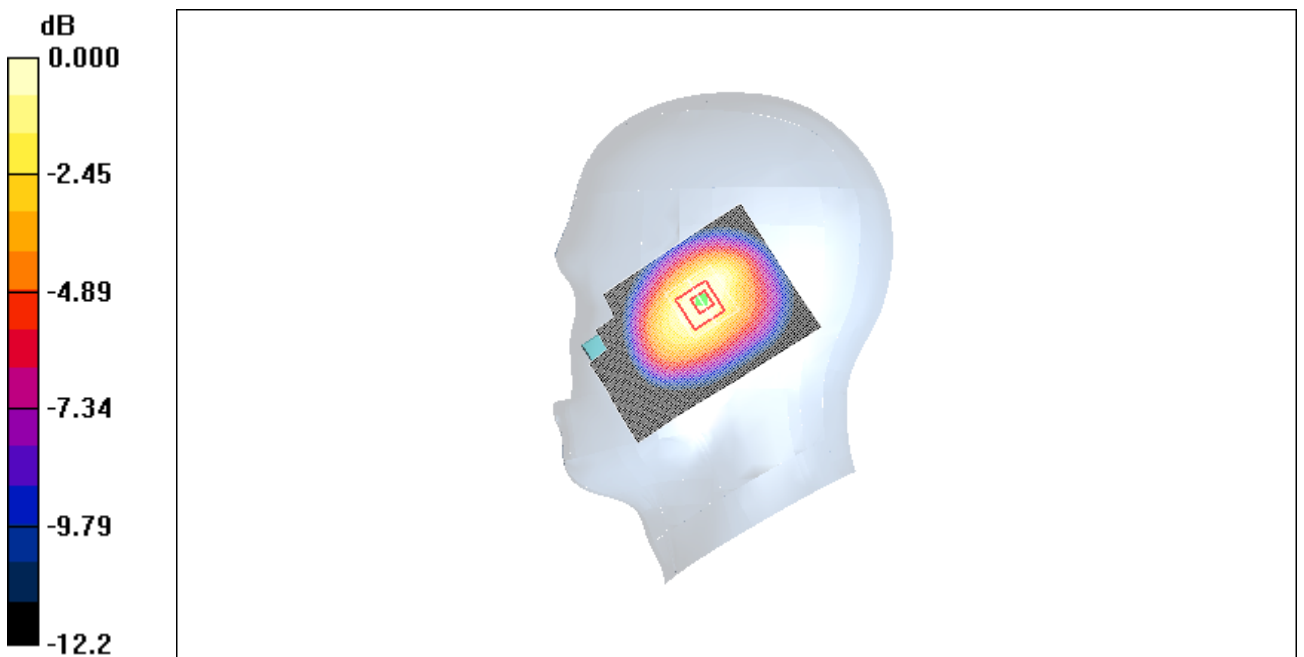
Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.9 V/m; Power Drift = -0.149 dB

Peak SAR (extrapolated) = 1.93 W/kg

SAR(1 g) = 1.31 mW/g; SAR(10 g) = 0.712 mW/g

Maximum value of SAR (measured) = 1.40 mW/g



0 dB = 1.40mW/g

Fig. 37 1900 MHz CH512

1900 Body Towards Phantom High

Date/Time: 2009-4-17 11:12:54

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.302 mW/g

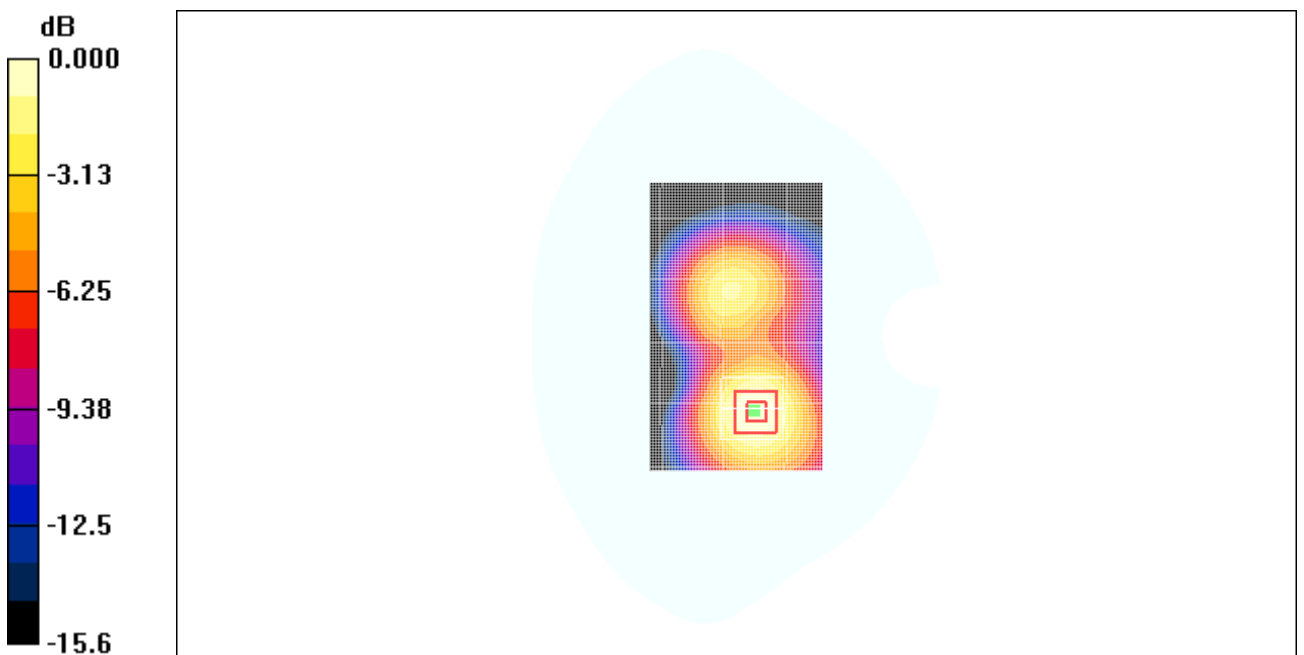
Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.72 V/m; Power Drift = -0.090 dB

Peak SAR (extrapolated) = 0.432 W/kg

SAR(1 g) = 0.270 mW/g; SAR(10 g) = 0.162 mW/g

Maximum value of SAR (measured) = 0.289 mW/g



0 dB = 0.289mW/g

Fig. 38 1900 MHz CH810

1900 Body Towards Phantom Middle

Date/Time: 2009-4-17 11:26:46

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.318 mW/g

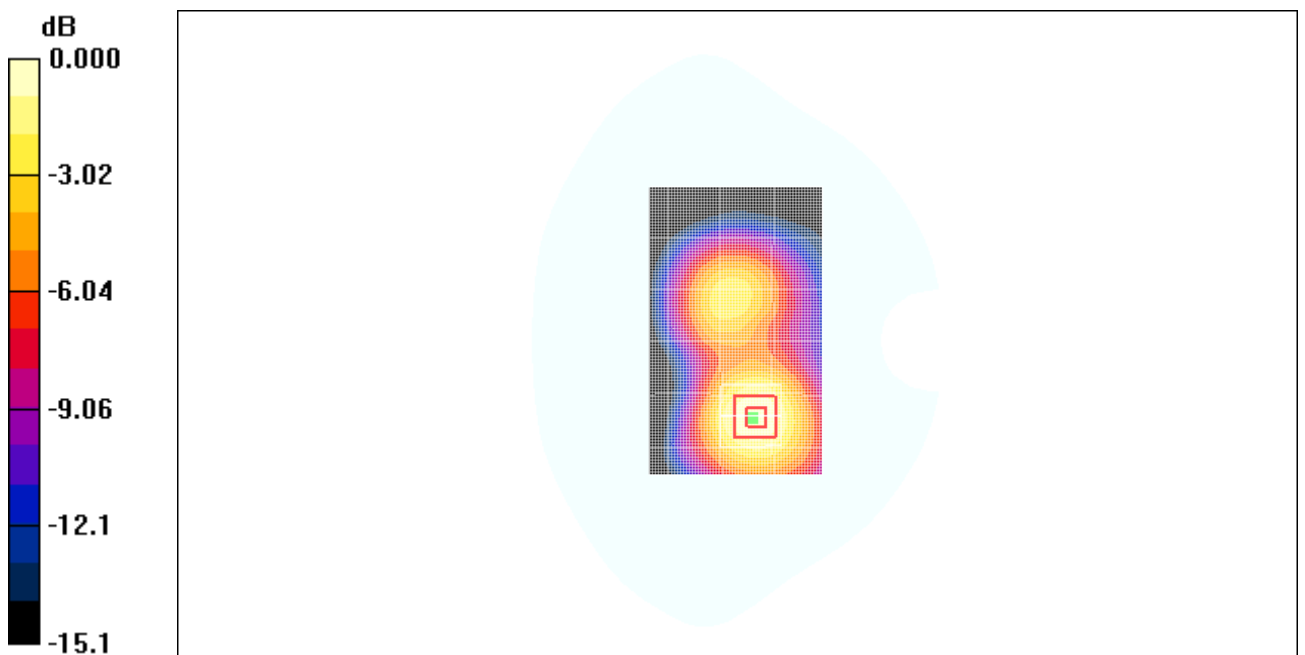
Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.33 V/m; Power Drift = 0.006 dB

Peak SAR (extrapolated) = 0.458 W/kg

SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.174 mW/g

Maximum value of SAR (measured) = 0.306 mW/g



0 dB = 0.306mW/g

Fig. 39 1900 MHz CH661

1900 Body Towards Phantom Low

Date/Time: 2009-4-17 11:40:17

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.316 mW/g

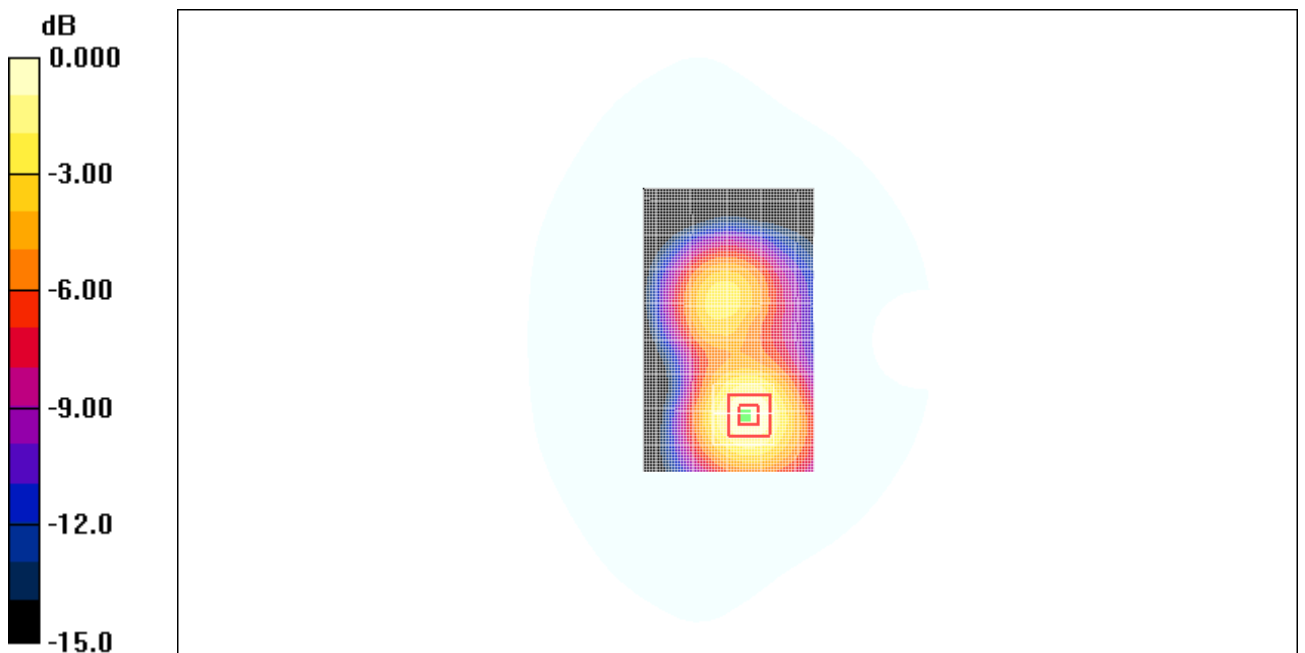
Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.63 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 0.451 W/kg

SAR(1 g) = 0.285 mW/g; SAR(10 g) = 0.174 mW/g

Maximum value of SAR (measured) = 0.304 mW/g



0 dB = 0.304mW/g

Fig. 40 1900 MHz CH512

1900 Body Towards Ground High

Date/Time: 2009-4-17 11:56:02

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.830 mW/g

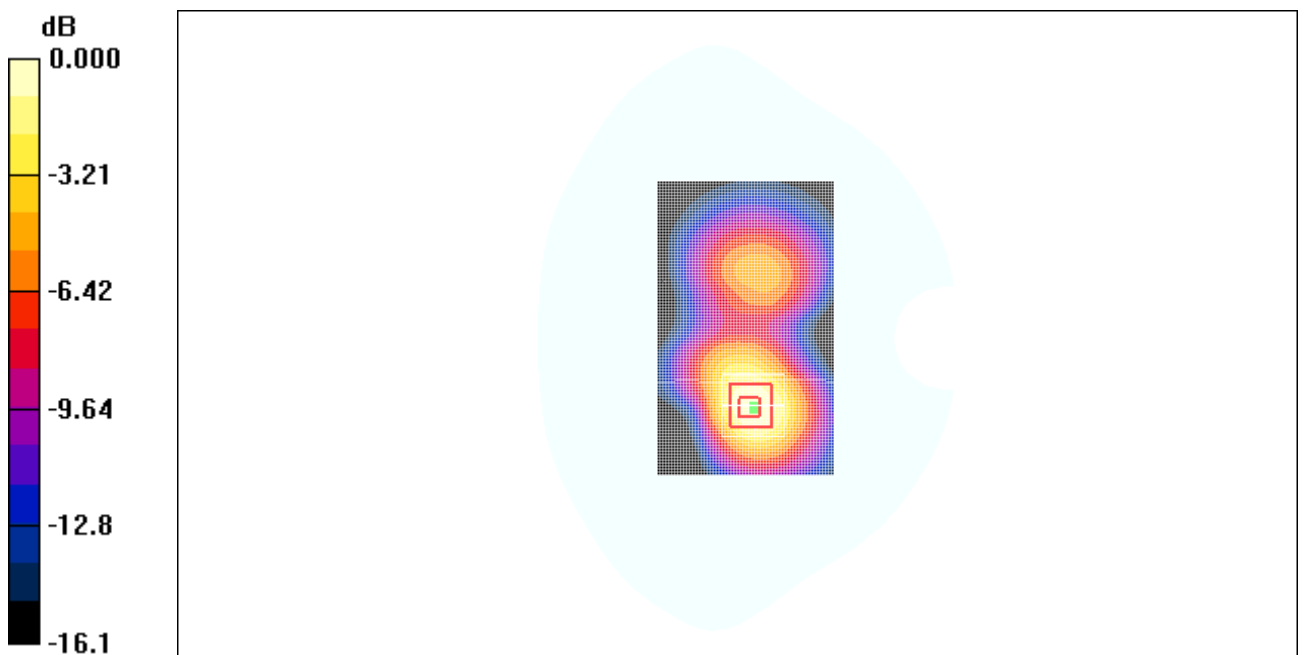
Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.1 V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.687 mW/g; SAR(10 g) = 0.398 mW/g

Maximum value of SAR (measured) = 0.734 mW/g



0 dB = 0.734mW/g

Fig. 41 1900 MHz CH810

1900 Body Towards Ground Middle

Date/Time: 2009-4-17 12:10:11

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.957 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

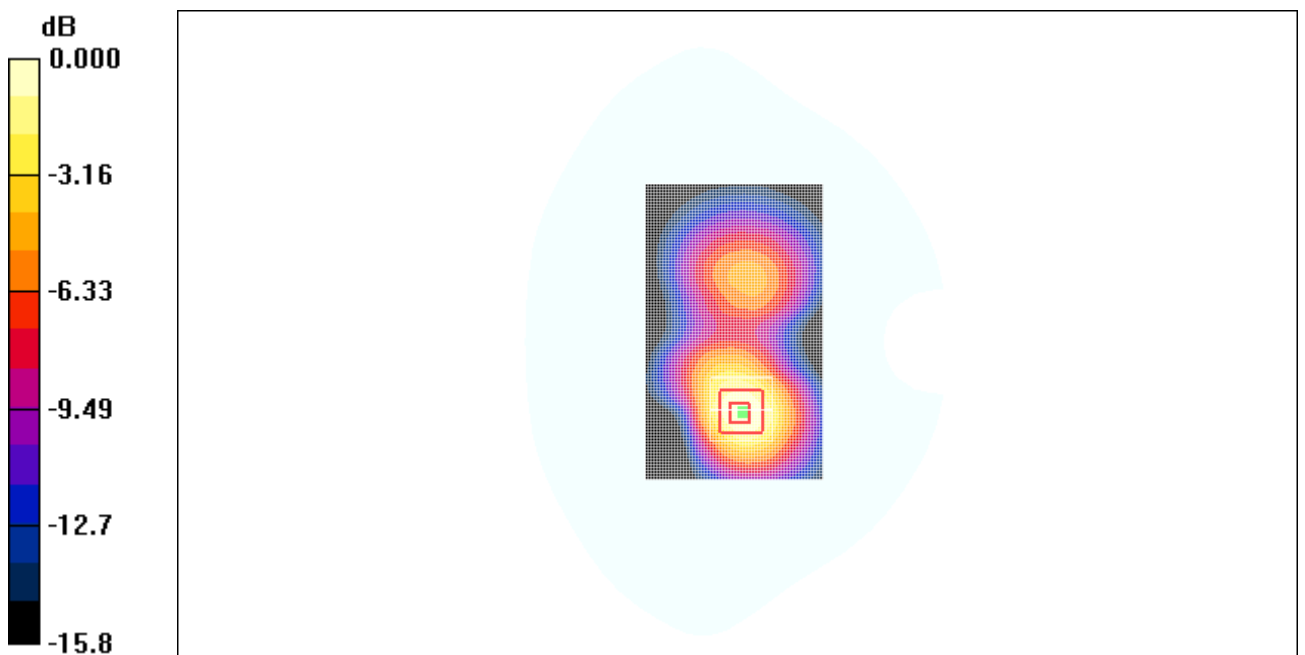
dy=5mm, dz=5mm

Reference Value = 10.4 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.796 mW/g; SAR(10 g) = 0.459 mW/g

Maximum value of SAR (measured) = 0.851 mW/g



0 dB = 0.851mW/g

Fig. 42 1900 MHz CH661

1900 Body Towards Ground Low

Date/Time: 2009-4-17 12:24:36

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.05 mW/g

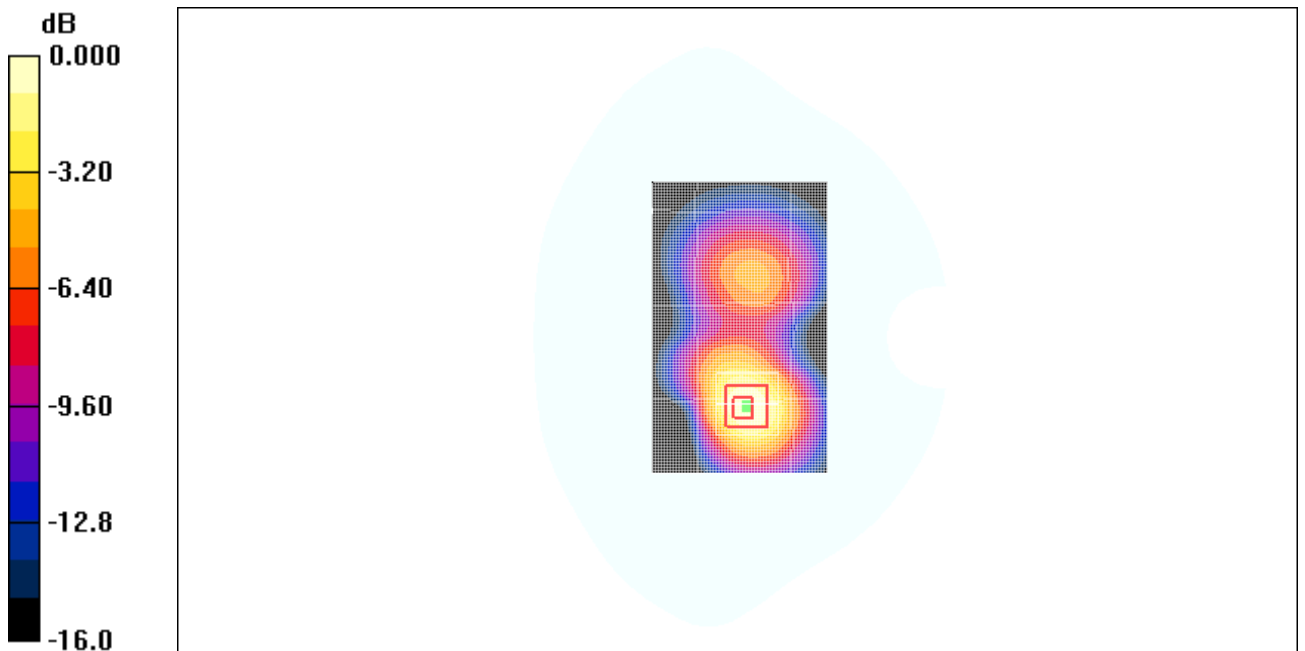
Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.7 V/m; Power Drift = 0.058 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.874 mW/g; SAR(10 g) = 0.503 mW/g

Maximum value of SAR (measured) = 0.932 mW/g



0 dB = 0.932mW/g

Fig. 43 1900 MHz CH512

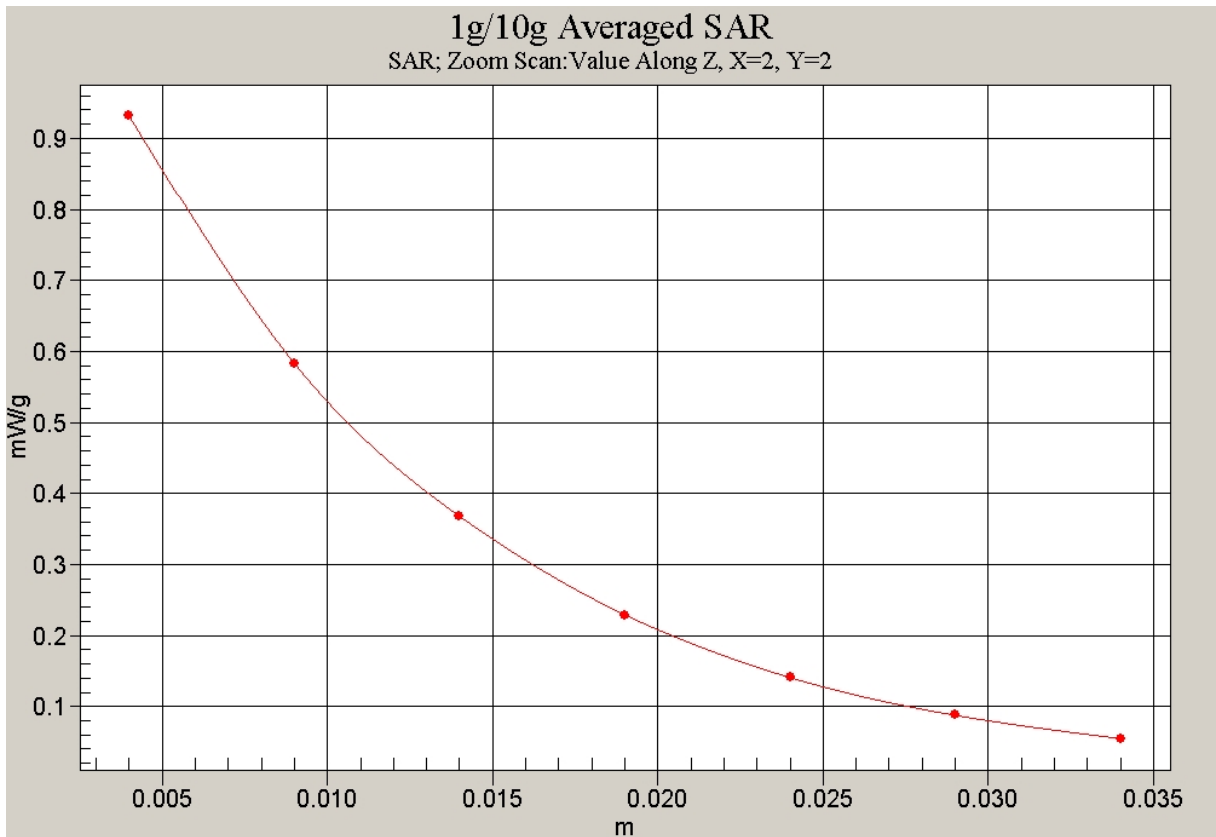


Fig. 44 Z-Scan at power reference point (1900 MHz CH512)

1900 Body Towards Ground Low with Headset

Date/Time: 2009-4-17 12:39:50

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.818 mW/g

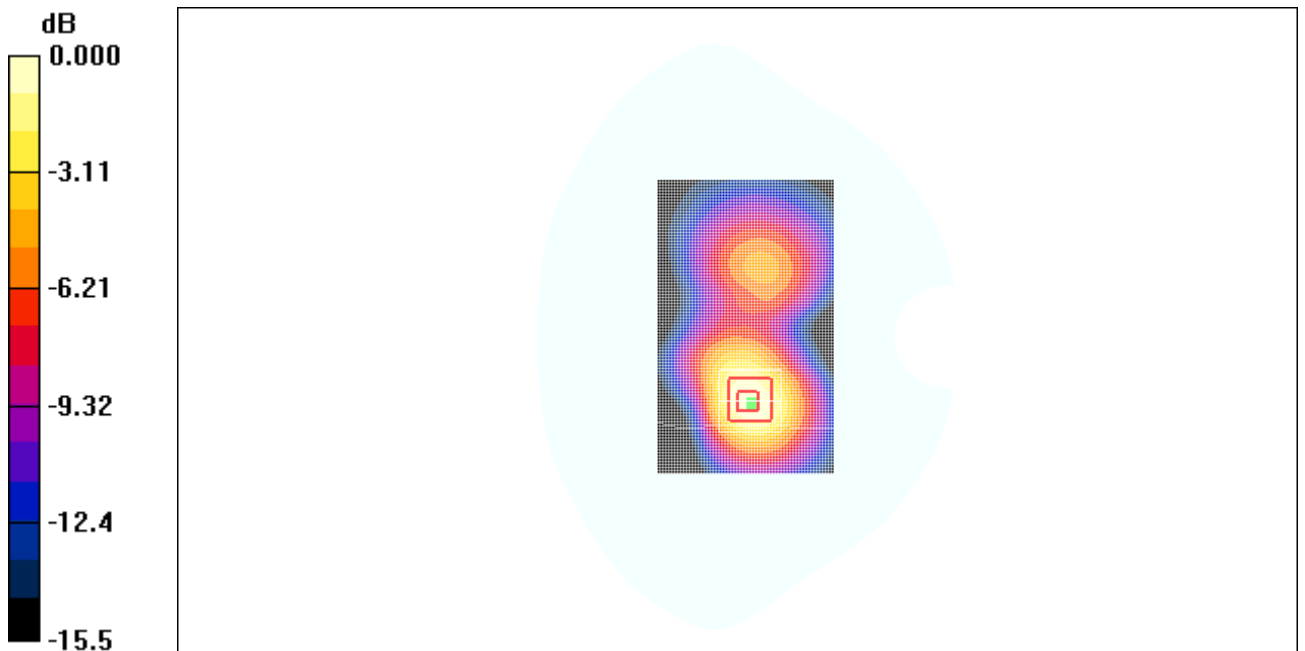
Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.3 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.706 mW/g; SAR(10 g) = 0.414 mW/g

Maximum value of SAR (measured) = 0.769 mW/g



0 dB = 0.769mW/g

Fig. 45 1900 MHz CH512

1900 Body Towards Ground Low – Battery: CAB30U0001C1

Date/Time: 2009-4-17 12:55:28

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=15mm

Maximum value of SAR (interpolated) = 0.928 mW/g

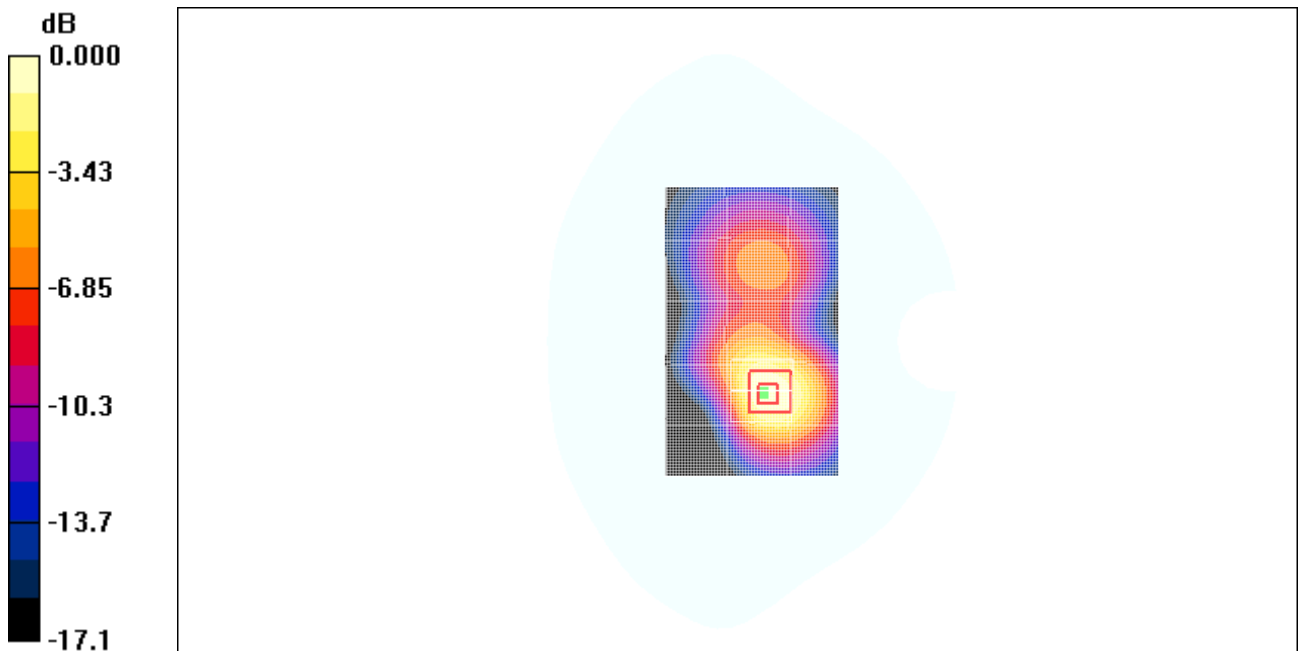
Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.6 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.795 mW/g; SAR(10 g) = 0.458 mW/g

Maximum value of SAR (measured) = 0.847 mW/g



0 dB = 0.847mW/g

Fig. 46 1900 MHz CH512

ANNEX D SYSTEM VALIDATION RESULTS

835MHz

Date/Time: 2009-4-16 7:12:47

Electronics: DAE4 Sn771

Medium: Head 835

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.90 \text{ mho/m}$; $\epsilon_r = 40.4$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

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

Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

835MHz/Area Scan (101x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 2.68 mW/g

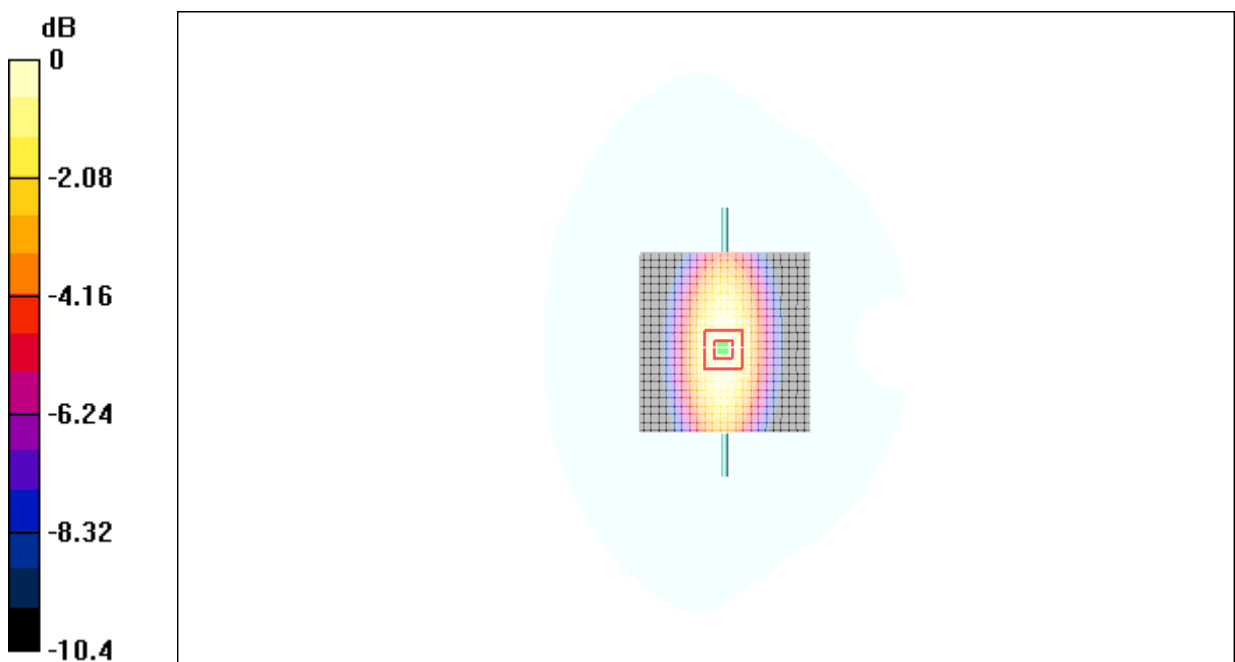
835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.8 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.67 W/kg

SAR(1 g) = 2.50 mW/g; SAR(10 g) = 1.62 mW/g

Maximum value of SAR (measured) = 2.69 mW/g



0 dB = 2.69mW/g

Fig.47 validation 835MHz 250mW

1900MHz

Date/Time: 2009-4-17 7:20:15

Electronics: DAE4 Sn771

Medium: 1900 Head

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.42 \text{ mho/m}$; $\epsilon_r = 39.2$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

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

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

System Validation/Area Scan (101x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 11.2 mW/g

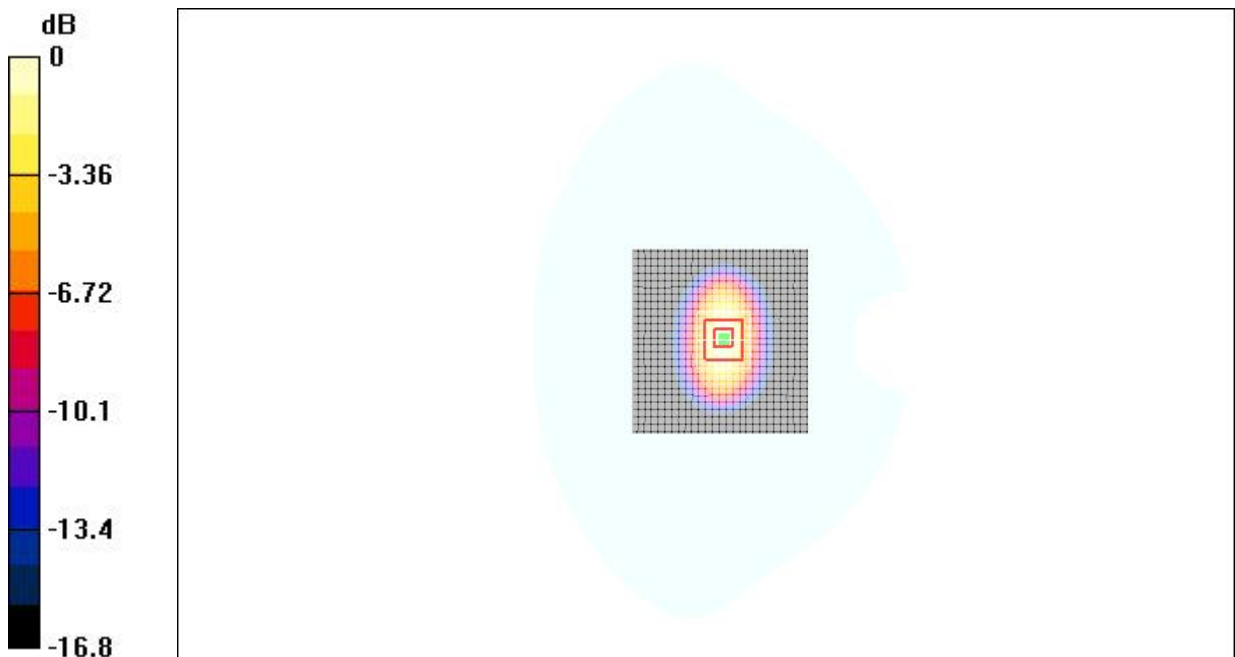
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$,
 $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 92.1 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 9.91 mW/g; SAR(10 g) = 5.27 mW/g

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



0 dB = 11.3mW/g

Fig.48 validation 1900MHz 250mW

ANNEX E PROBE CALIBRATION CERTIFICATE

**Calibration Laboratory of
Schmid & Partner
Engineering AG**
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
S Service suisse d'étalonnage
C Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **TMC China**

Certificate No: **ES3DV3-3149_Oct08**

CALIBRATION CERTIFICATE

Object	ES3DV3-SN: 3149
Calibration procedure(s)	QA CAL-01.v6 Calibration procedure for dosimetric E-field probes
Calibration date:	October 1, 2008
Condition of the calibrated item	In Tolerance

This calibration certify documents the traceability to national standards, which realize the physical units of measurements(SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been conducted at an environment temperature (22±3)°C and humidity<70%

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Data (Calibrated by, Certification NO.)	Scheduled Calibration
Power meter E4419B	GB41293874	6-May-08 (METAS, NO. 251-00388)	May-09
Power sensor E4412A	MY41495277	6-May-08 (METAS, NO. 251-00388)	May-09
Reference 3 dB Attenuator	SN:S5054 (3c)	11-Aug-08 (METAS, NO. 251-00403)	Aug-09
Reference 20 dB Attenuator	SN:S5086 (20b)	4-May-08 (METAS, NO. 251-00389)	May-09
Reference 30 dB Attenuator	SN:S5129 (30b)	11-Aug-08 (METAS, NO. 251-00404)	Aug-09
DAE4	SN:617	11-Jun-08 (SPEAG, NO.DAE4-907_Jun08)	Jun-09
Reference Probe ES3DV2	SN: 3013	13-Jan-08 (SPEAG, NO. ES3-3013_Jan08)	Jan-09

Secondary Standards	ID#	Check Data (in house)	Scheduled Calibration
RF generator HP8648C	US3642U01700	4-Aug-99(SPEAG, in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01(SPEAG, in house check Nov-07)	In house check: Nov-09

Name	Function	Signature
Calibrated by: Katja Pokovic	Technical Manager	
Approved by: Niels Kuster	Quality Manager	

Issued: **October 1, 2008**

This calibration certificate shall not be reported except in full without written approval of the laboratory.

Certificate No: **ES3DV3-3149_Oct08**

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