

# SAR Plots & Tissue Measurement Data

Test Laboratory: KTL

**835MHz Validation - D835V2; SN:481**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 220, Ambient Temperature(°C) : 21.0**

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

Medium: HSL835 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.871 \text{ mho/m}$ ;  $\epsilon_r = 40.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.16, 6.16, 6.16); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) =  $2.48 \text{ mW/g}$

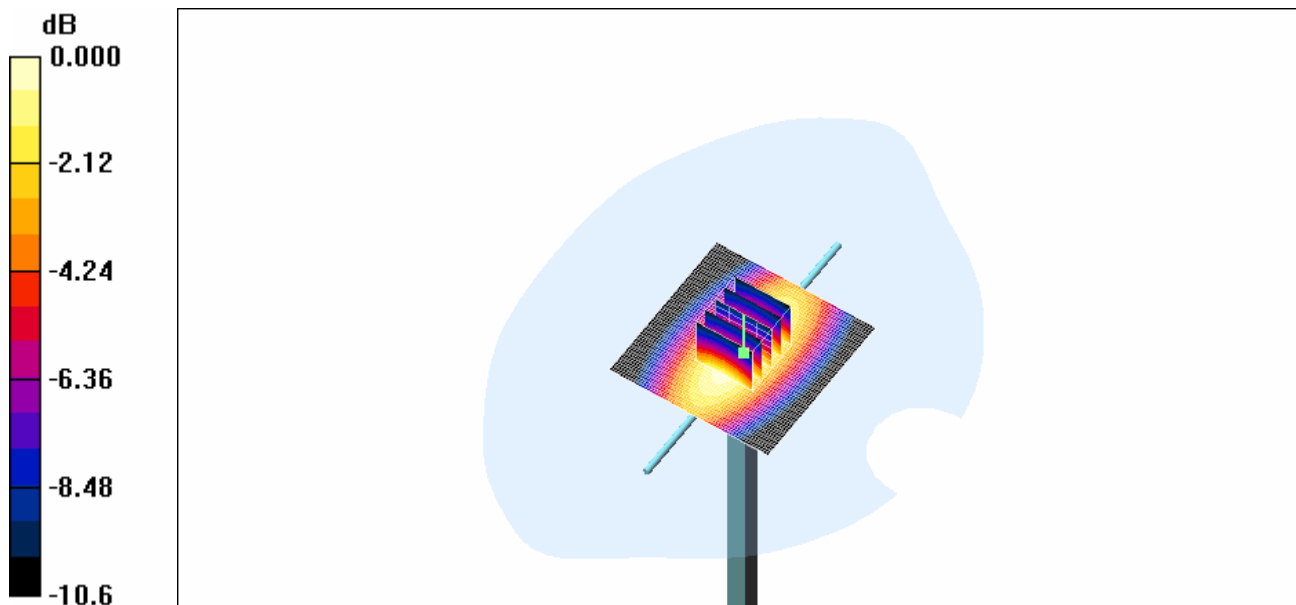
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $54.8 \text{ V/m}$ ; Power Drift =  $-0.027 \text{ dB}$

Peak SAR (extrapolated) =  $3.47 \text{ W/kg}$

**SAR(1 g) =  $2.3 \text{ mW/g}$ ; SAR(10 g) =  $1.5 \text{ mW/g}$**

Maximum value of SAR (measured) =  $2.47 \text{ mW/g}$



0 dB =  $2.47 \text{ mW/g}$

Test Laboratory: KTL

**ZMEM1090 Ch.128 LEFT Cheek Touch**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: HSL835 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.861 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.16, 6.16, 6.16); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) =  $0.744 \text{ mW/g}$

**Z Scan (1x1x16):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.062 \text{ mW/g}$

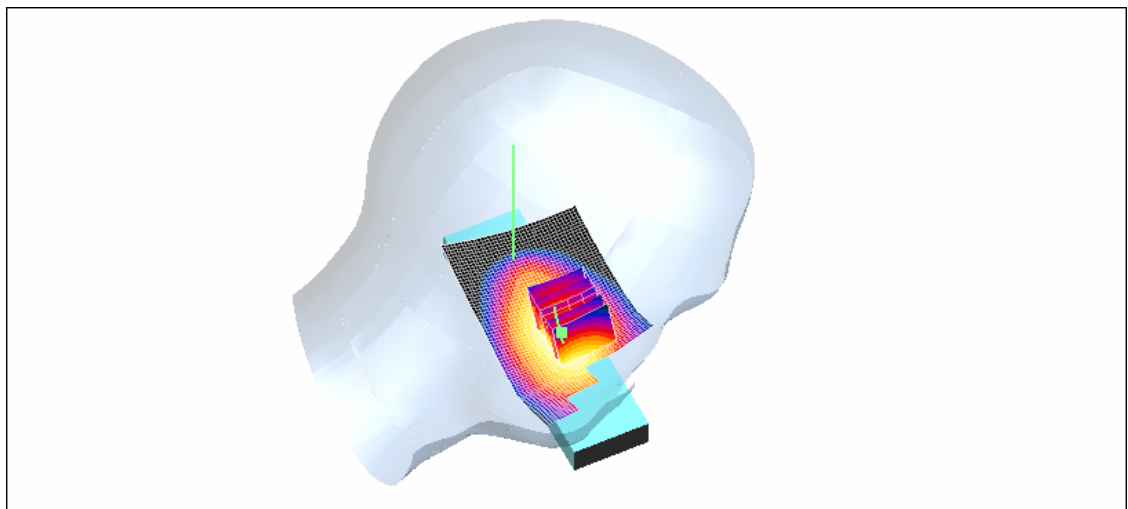
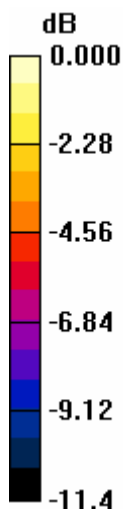
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $29.7 \text{ V/m}$ ; Power Drift =  $-0.072 \text{ dB}$

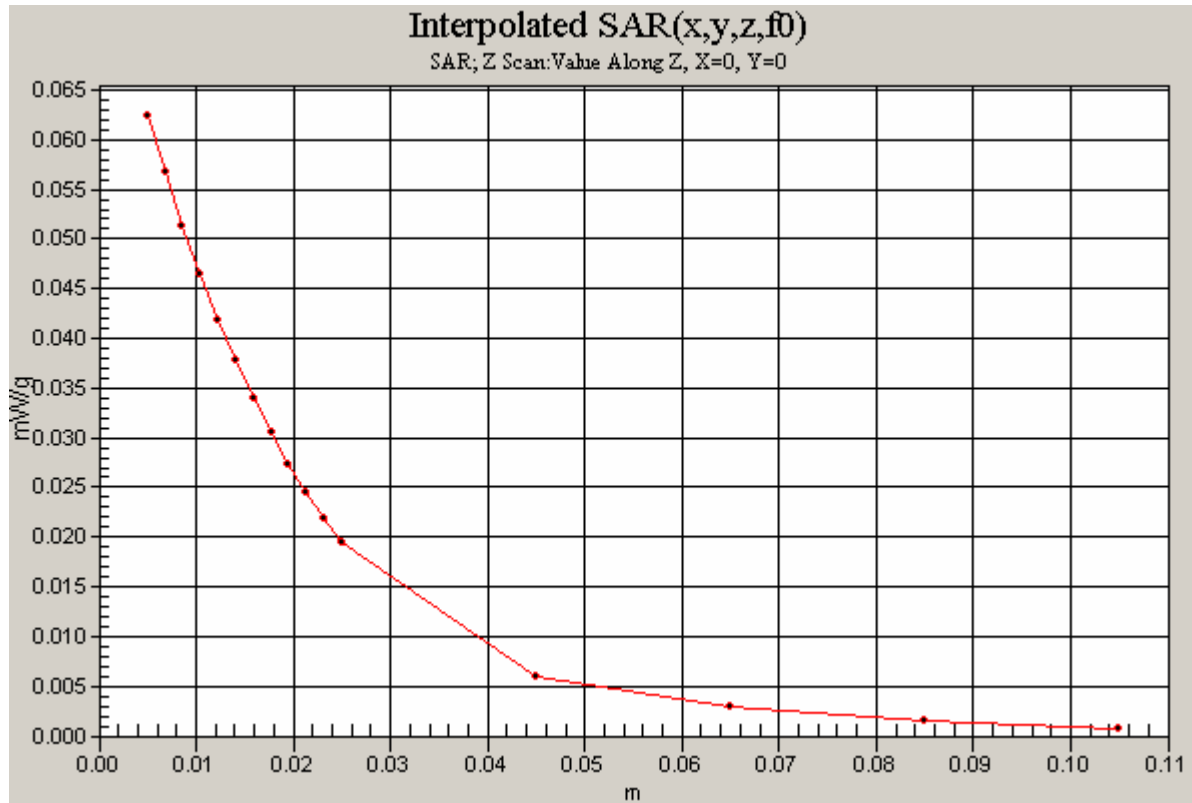
Peak SAR (extrapolated) =  $0.943 \text{ W/kg}$

**SAR(1 g) =  $0.699 \text{ mW/g}$ ; SAR(10 g) =  $0.502 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.731 \text{ mW/g}$



0 dB =  $0.731 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM1090 Ch.128 LEFT Cheek Touch with Bluetooth Active**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: HSL835 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.861$  mho/m;  $\epsilon_r = 40.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.16, 6.16, 6.16); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.733 mW/g

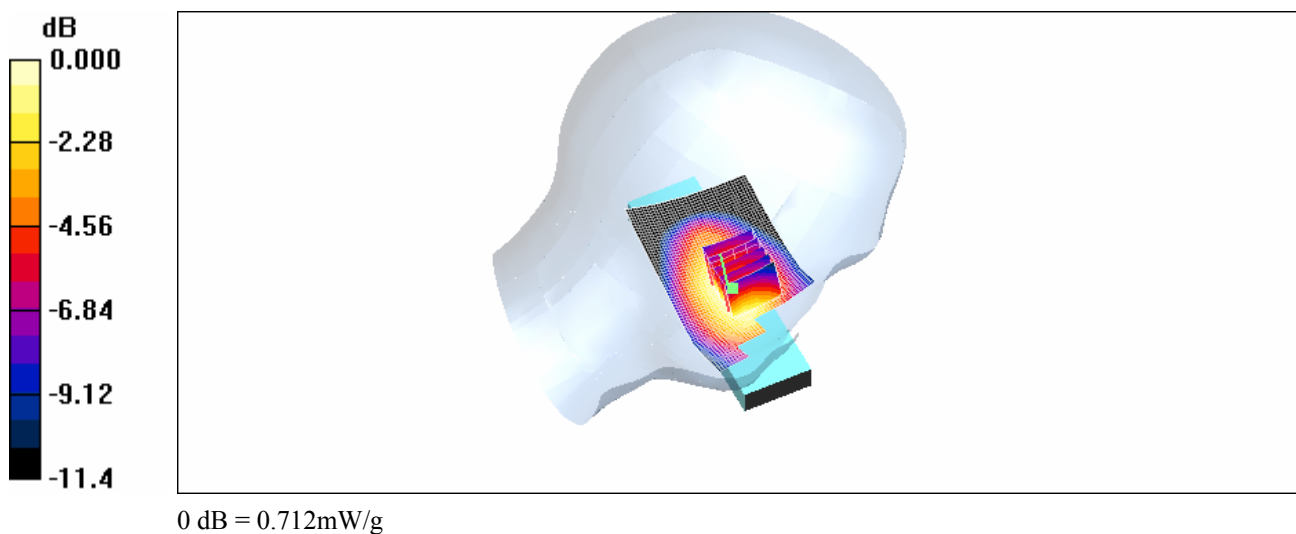
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.4 V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 0.897 W/kg

**SAR(1 g) = 0.685 mW/g; SAR(10 g) = 0.494 mW/g**

Maximum value of SAR (measured) = 0.712 mW/g



Test Laboratory: KTL

## ZMEM1090 Ch.128 RIGHT Cheek Touch

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: HSL835 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.861 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.16, 6.16, 6.16); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) =  $0.677 \text{ mW/g}$

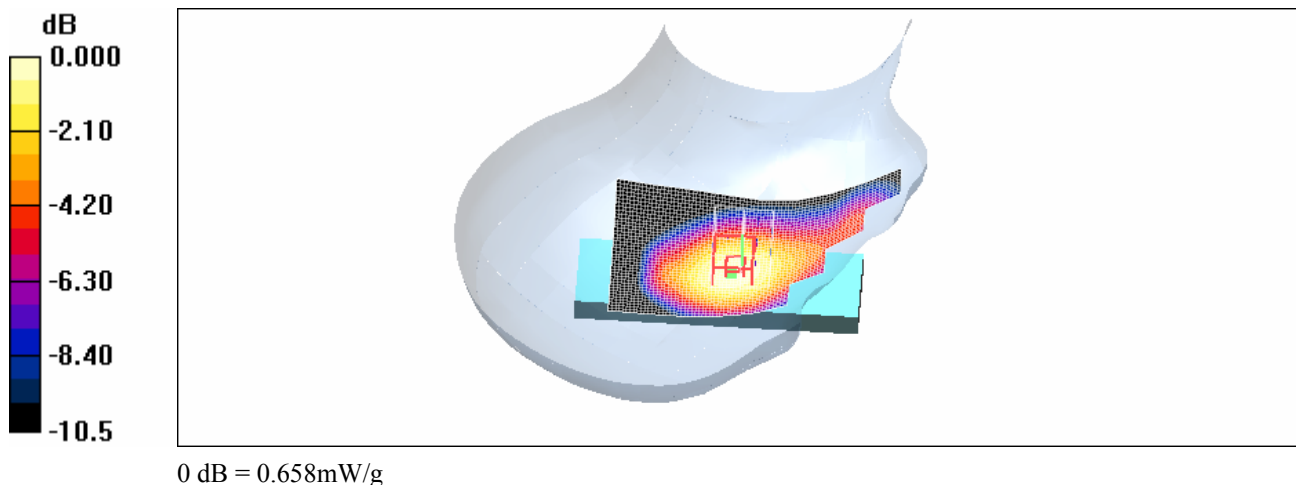
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $25.4 \text{ V/m}$ ; Power Drift =  $0.084 \text{ dB}$

Peak SAR (extrapolated) =  $0.832 \text{ W/kg}$

**SAR(1 g) =  $0.629 \text{ mW/g}$ ; SAR(10 g) =  $0.440 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.658 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM1090 Ch.190 LEFT Cheek Touch**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: HSL835 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.872 \text{ mho/m}$ ;  $\epsilon_r = 40.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.16, 6.16, 6.16); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) =  $0.698 \text{ mW/g}$

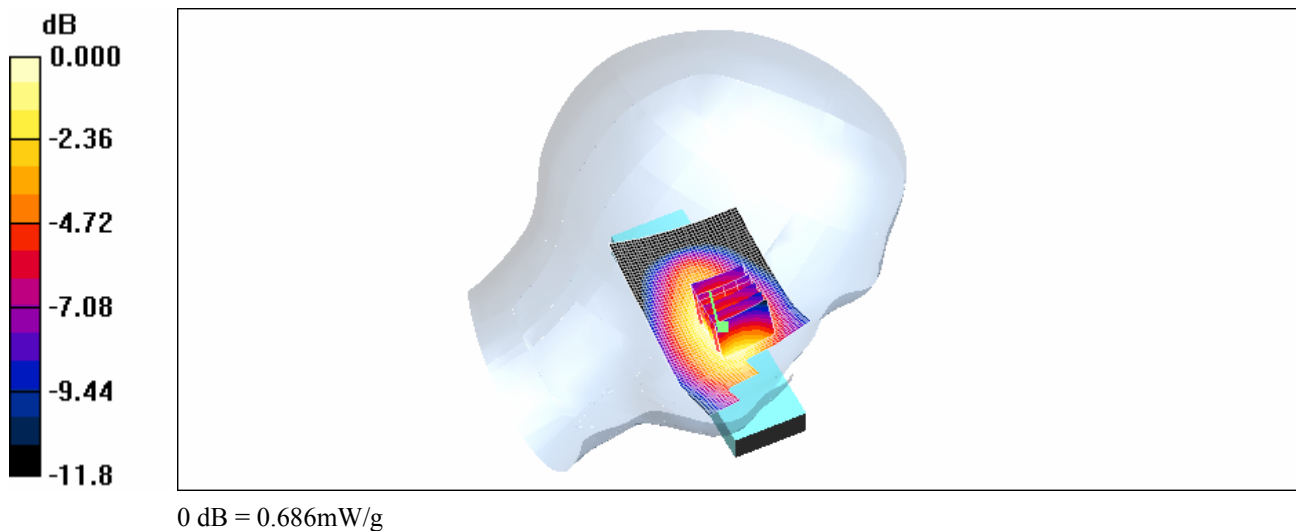
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $28.4 \text{ V/m}$ ; Power Drift =  $-0.033 \text{ dB}$

Peak SAR (extrapolated) =  $0.870 \text{ W/kg}$

**SAR(1 g) =  $0.655 \text{ mW/g}$ ; SAR(10 g) =  $0.470 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.686 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM1090 Ch.190 LEFT Ear Tilt**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: HSL835 Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.872$  mho/m;  $\epsilon_r = 40.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.16, 6.16, 6.16); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.421 mW/g

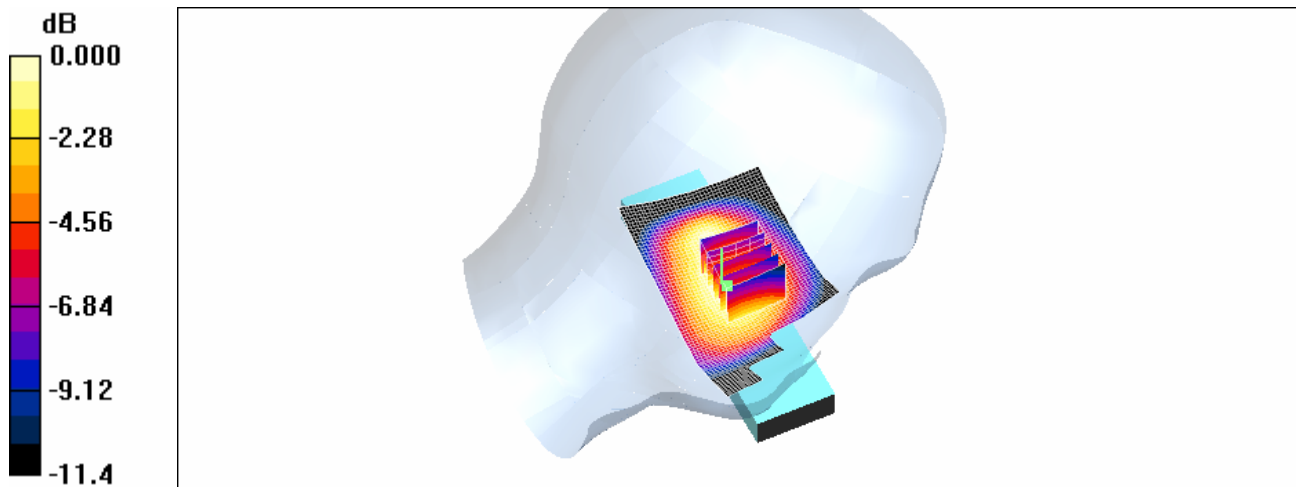
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.1 V/m; Power Drift = -0.043 dB

Peak SAR (extrapolated) = 0.568 W/kg

**SAR(1 g) = 0.414 mW/g; SAR(10 g) = 0.292 mW/g**

Maximum value of SAR (measured) = 0.431 mW/g



Test Laboratory: KTL

**ZMEM1090 Ch.190 Right Cheek Touch**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: HSL835 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.872 \text{ mho/m}$ ;  $\epsilon_r = 40.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.16, 6.16, 6.16); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) =  $0.696 \text{ mW/g}$

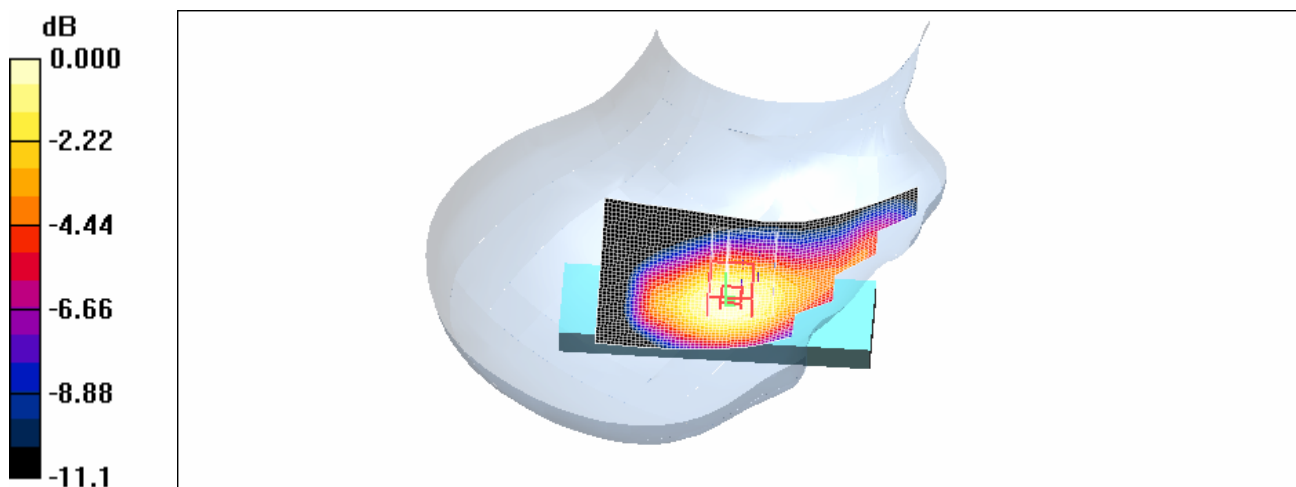
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $25.4 \text{ V/m}$ ; Power Drift =  $-0.136 \text{ dB}$

Peak SAR (extrapolated) =  $0.859 \text{ W/kg}$

**SAR(1 g) =  $0.640 \text{ mW/g}$ ; SAR(10 g) =  $0.446 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.677 \text{ mW/g}$



0 dB =  $0.677 \text{ mW/g}$

Test Laboratory: KTL

**ZMEM1090 Ch.190 Right Ear Tilt**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: HSL835 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.872 \text{ mho/m}$ ;  $\epsilon_r = 40.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.16, 6.16, 6.16); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (61x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.424 \text{ mW/g}$

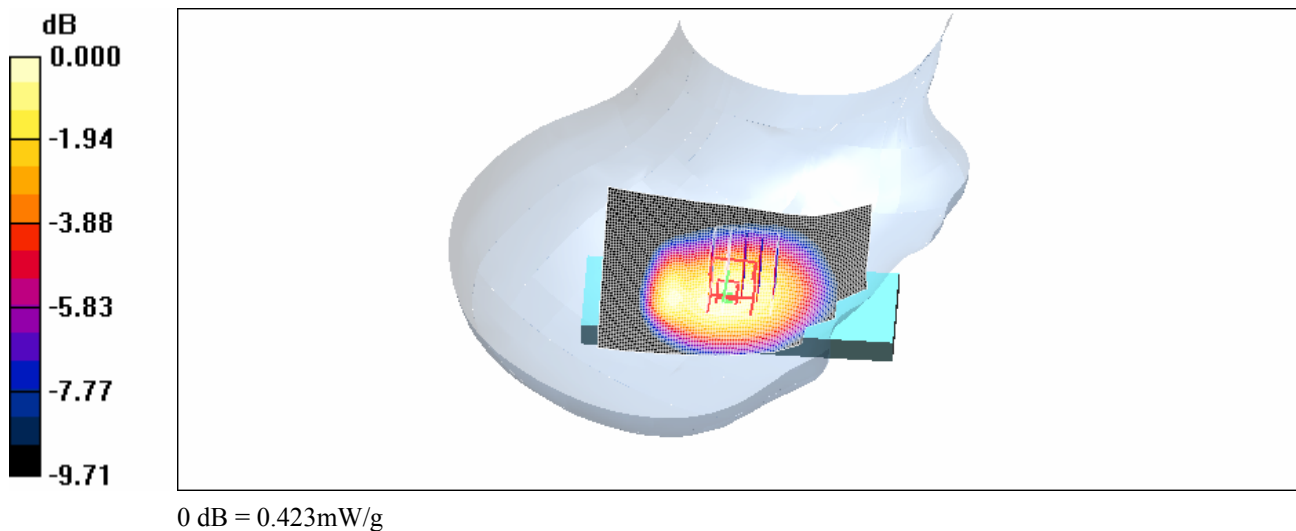
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $16.1 \text{ V/m}$ ; Power Drift =  $0.070 \text{ dB}$

Peak SAR (extrapolated) =  $0.546 \text{ W/kg}$

**SAR(1 g) =  $0.403 \text{ mW/g}$ ; SAR(10 g) =  $0.285 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.423 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM1090 Ch.251 LEFT Cheek Touch**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: HSL835 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.883 \text{ mho/m}$ ;  $\epsilon_r = 40.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.16, 6.16, 6.16); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) =  $0.554 \text{ mW/g}$

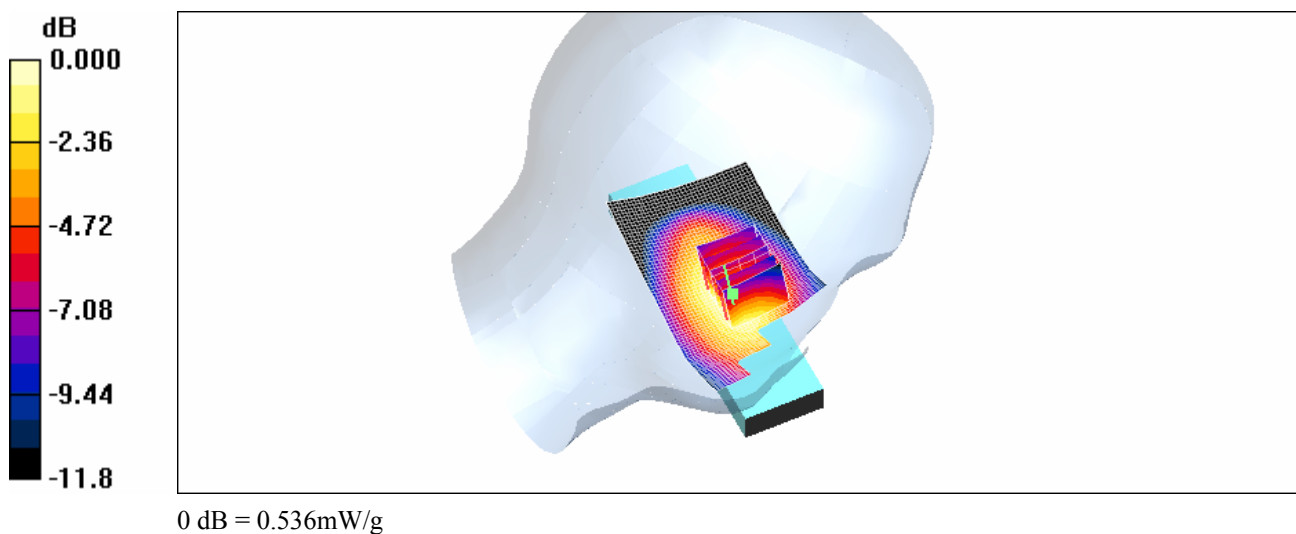
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $25.0 \text{ V/m}$ ; Power Drift =  $0.018 \text{ dB}$

Peak SAR (extrapolated) =  $0.696 \text{ W/kg}$

**SAR(1 g) =  $0.516 \text{ mW/g}$ ; SAR(10 g) =  $0.371 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.536 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM1090 Ch.251 Right Cheek Touch**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: HSL835 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.883 \text{ mho/m}$ ;  $\epsilon_r = 40.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.16, 6.16, 6.16); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) =  $0.518 \text{ mW/g}$

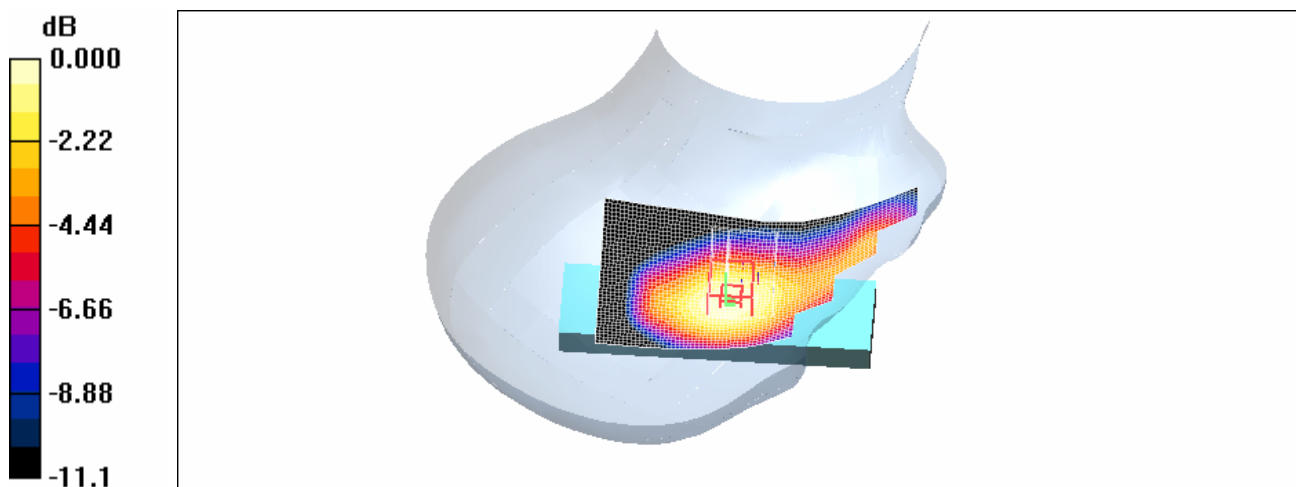
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $21.6 \text{ V/m}$ ; Power Drift =  $-0.070 \text{ dB}$

Peak SAR (extrapolated) =  $0.633 \text{ W/kg}$

**SAR(1 g) =  $0.475 \text{ mW/g}$ ; SAR(10 g) =  $0.330 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.501 \text{ mW/g}$



0 dB =  $0.501 \text{ mW/g}$

Test Laboratory: KTL

**ZMEM GSM850 Ch128. Body**

**Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: MSL835 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.955 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.2, 6.2, 6.2); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.368 \text{ mW/g}$

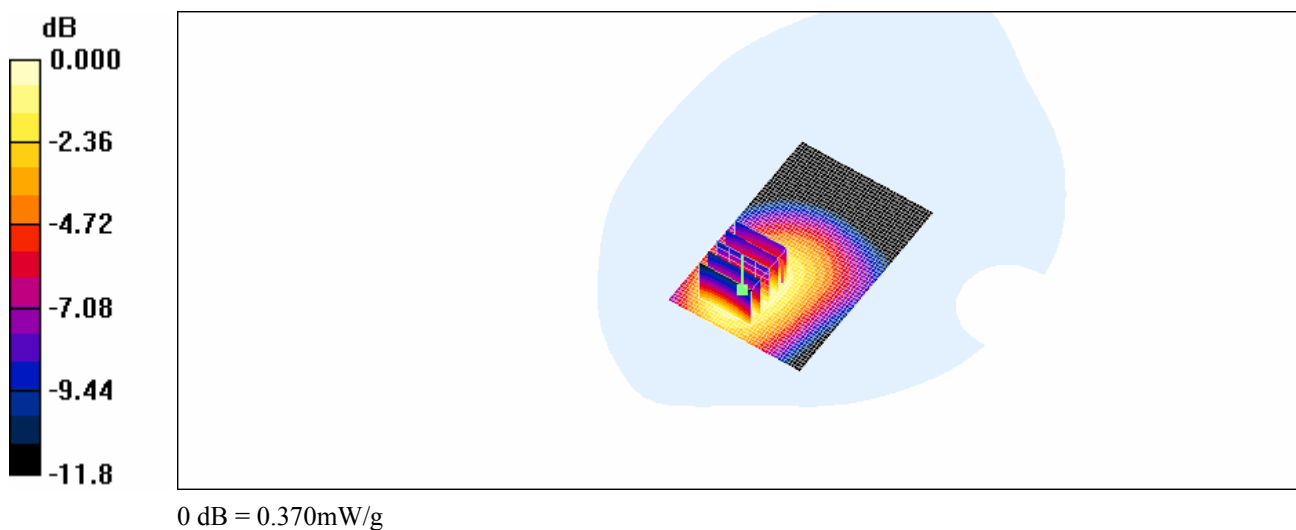
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $5.17 \text{ V/m}$ ; Power Drift =  $0.064 \text{ dB}$

Peak SAR (extrapolated) =  $0.497 \text{ W/kg}$

**SAR(1 g) =  $0.342 \text{ mW/g}$ ; SAR(10 g) =  $0.231 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.370 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM GSM850 Ch190. Body**

**Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: MSL835 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.969 \text{ mho/m}$ ;  $\epsilon_r = 53.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.2, 6.2, 6.2); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.292 \text{ mW/g}$

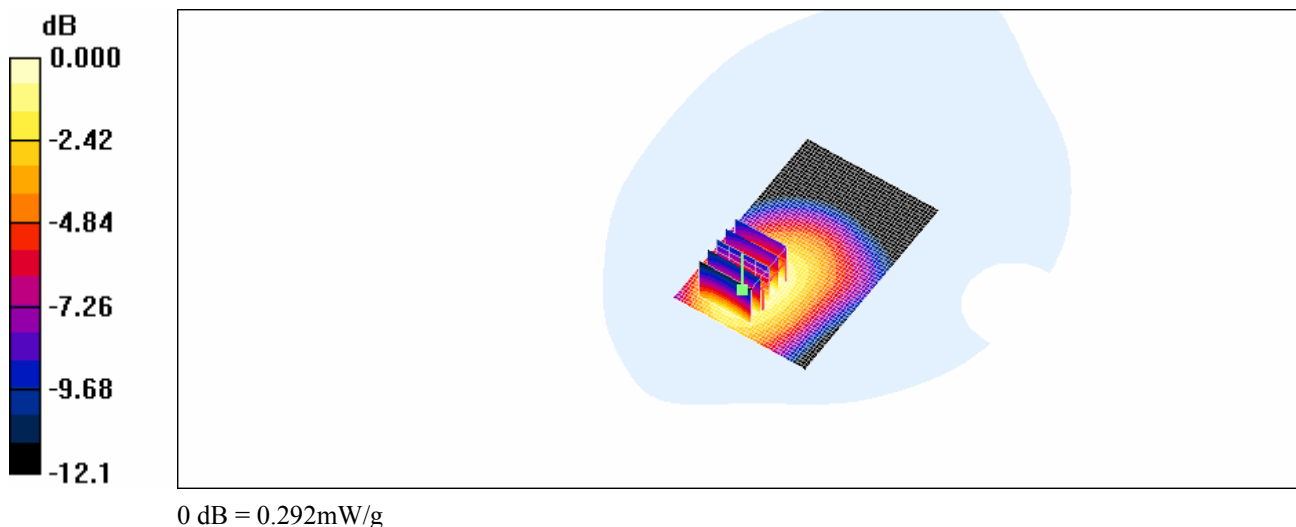
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $4.51 \text{ V/m}$ ; Power Drift =  $0.015 \text{ dB}$

Peak SAR (extrapolated) =  $0.400 \text{ W/kg}$

**SAR(1 g) =  $0.272 \text{ mW/g}$ ; SAR(10 g) =  $0.182 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.292 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM GSM850 Ch190. Body-front facing phantom**

**Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: MSL835 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.969 \text{ mho/m}$ ;  $\epsilon_r = 53.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.2, 6.2, 6.2); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.194 \text{ mW/g}$

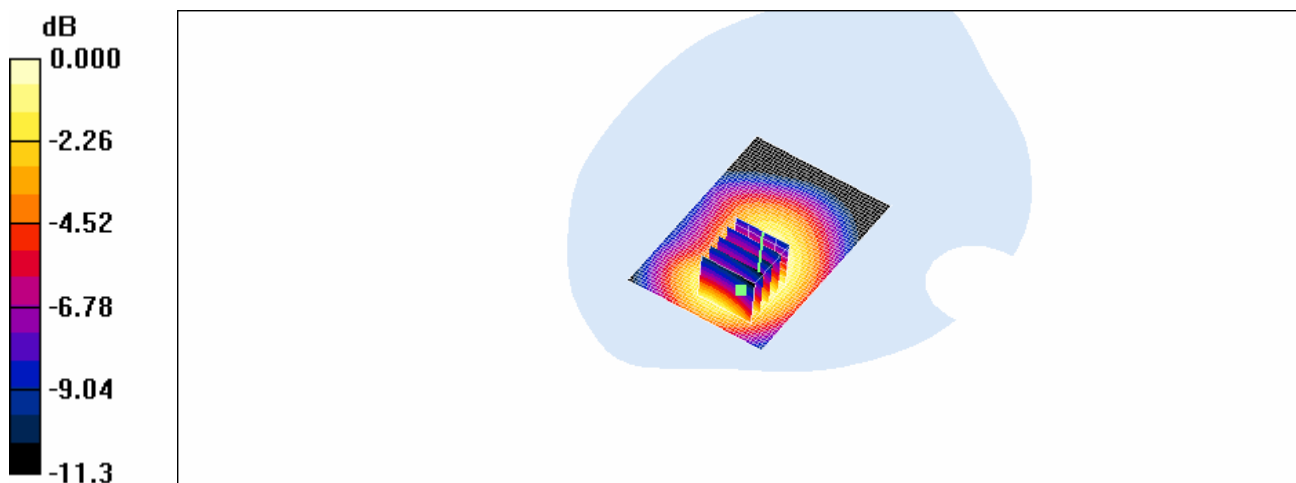
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $5.23 \text{ V/m}$ ; Power Drift =  $-0.001 \text{ dB}$

Peak SAR (extrapolated) =  $0.256 \text{ W/kg}$

**SAR(1 g) =  $0.176 \text{ mW/g}$ ; SAR(10 g) =  $0.117 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.193 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM GSM850 Ch251. Body**

**Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: MSL835 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.979 \text{ mho/m}$ ;  $\epsilon_r = 52.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.2, 6.2, 6.2); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.218 \text{ mW/g}$

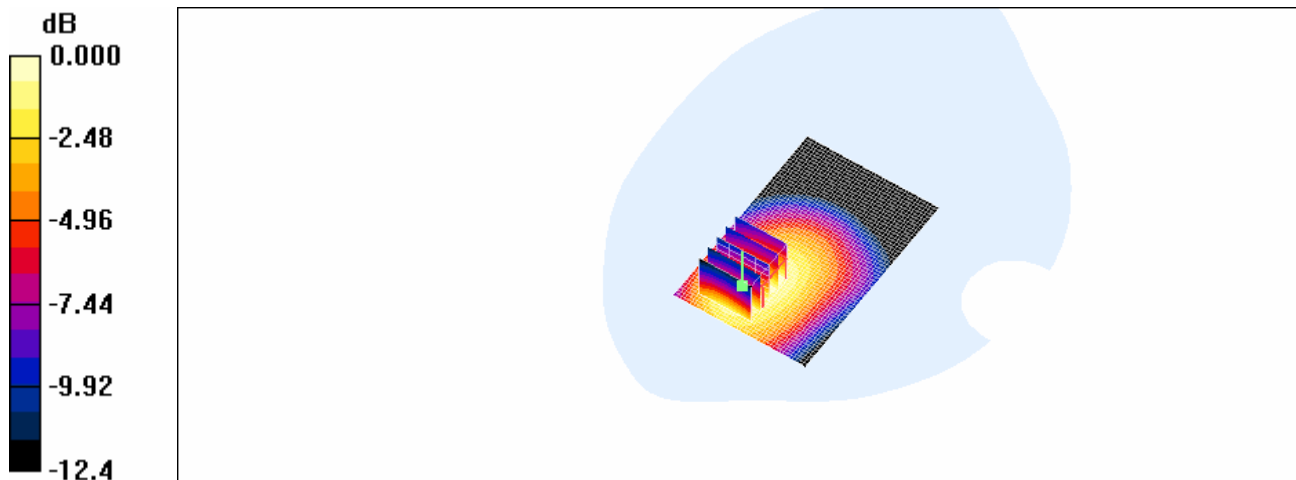
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $3.70 \text{ V/m}$ ; Power Drift =  $0.003 \text{ dB}$

Peak SAR (extrapolated) =  $0.300 \text{ W/kg}$

**SAR(1 g) =  $0.204 \text{ mW/g}$ ; SAR(10 g) =  $0.136 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.218 \text{ mW/g}$



0 dB =  $0.218 \text{ mW/g}$

Test Laboratory: KTL

**ZMEM GPRS850 Ch128. Body**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: MSL835 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.955 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.2, 6.2, 6.2); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.380 \text{ mW/g}$

**Z Scan (1x1x16):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.020 \text{ mW/g}$

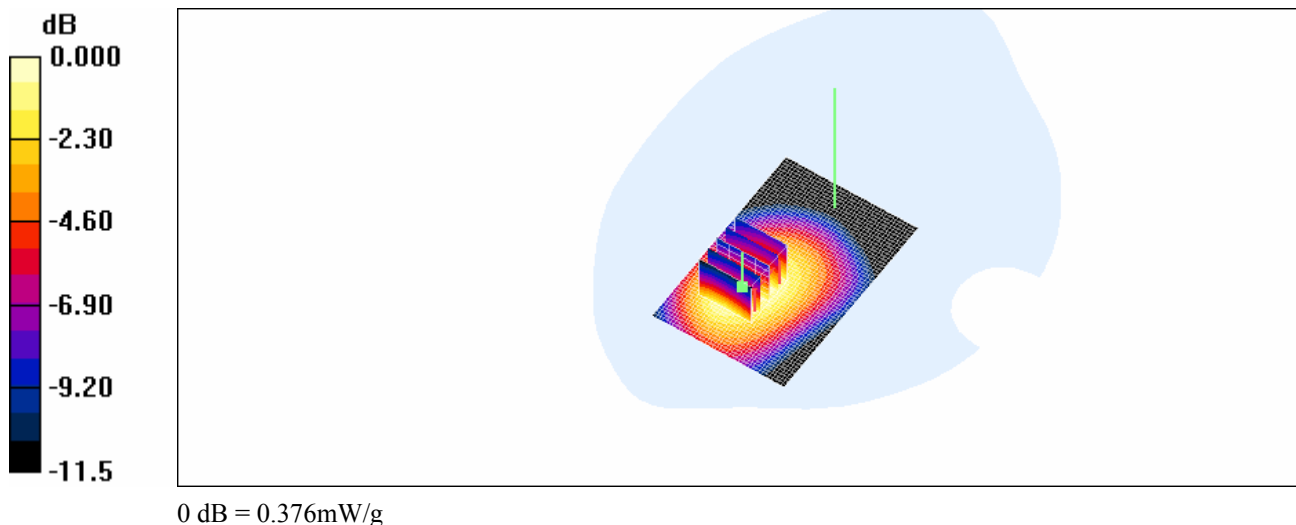
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

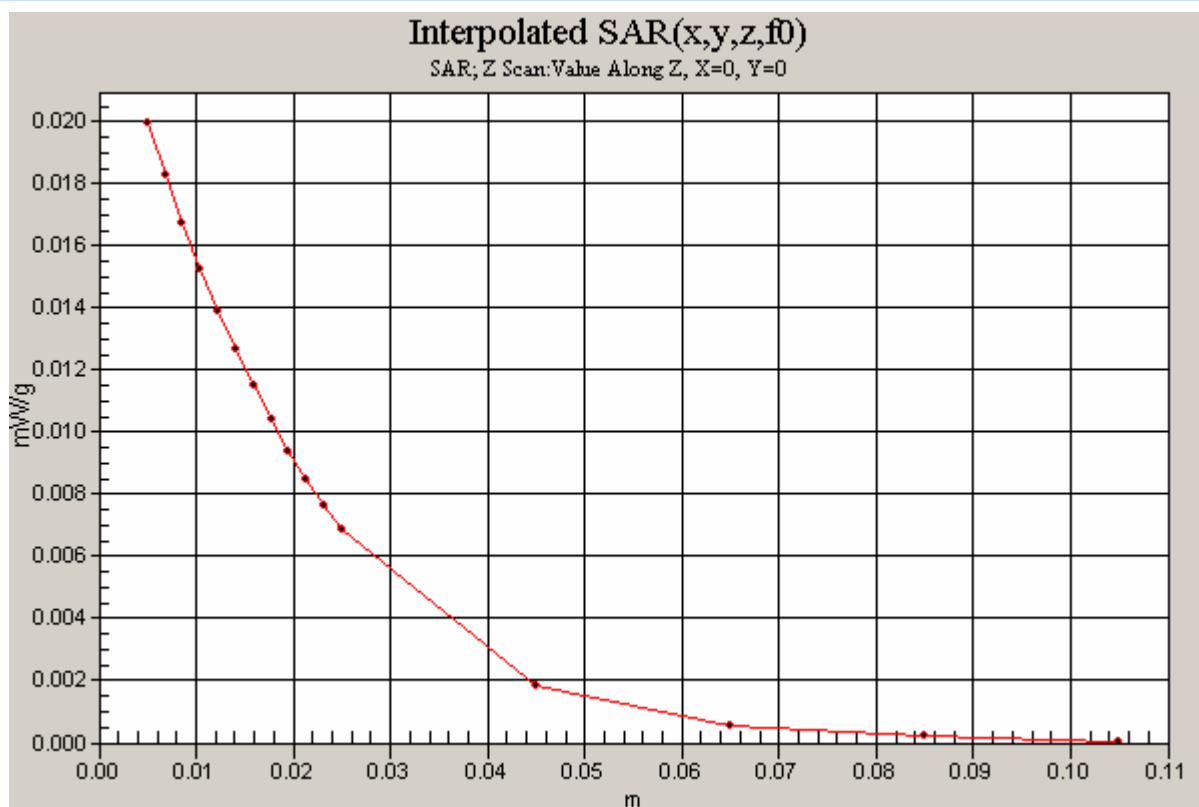
Reference Value =  $5.12 \text{ V/m}$ ; Power Drift =  $-0.022 \text{ dB}$

Peak SAR (extrapolated) =  $0.510 \text{ W/kg}$

**SAR(1 g) =  $0.350 \text{ mW/g}$ ; SAR(10 g) =  $0.236 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.376 \text{ mW/g}$





Test Laboratory: KTL

**ZMEM GPRS850 Ch128. Body with Bluetooth active**

**\*Test Date : 6th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.0 , Ambient Temperature(°C) : 21.0**

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

Medium: MSL835 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.955 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(6.2, 6.2, 6.2); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.370 \text{ mW/g}$

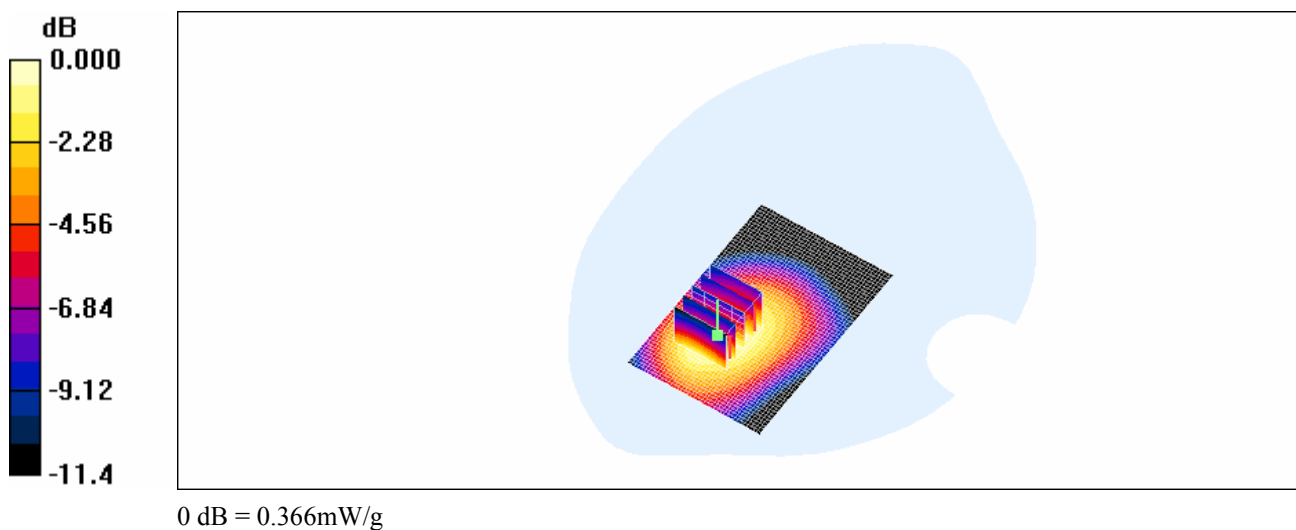
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $5.22 \text{ V/m}$ ; Power Drift =  $0.070 \text{ dB}$

Peak SAR (extrapolated) =  $0.493 \text{ W/kg}$

**SAR(1 g) =  $0.341 \text{ mW/g}$ ; SAR(10 g) =  $0.230 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.366 \text{ mW/g}$



Test Laboratory: KTL

**1900MHz Validation D1900V2 S/N : 5d032**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

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

Medium: HSL1900 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 39$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(5.02, 5.02, 5.02); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.5 mW/g

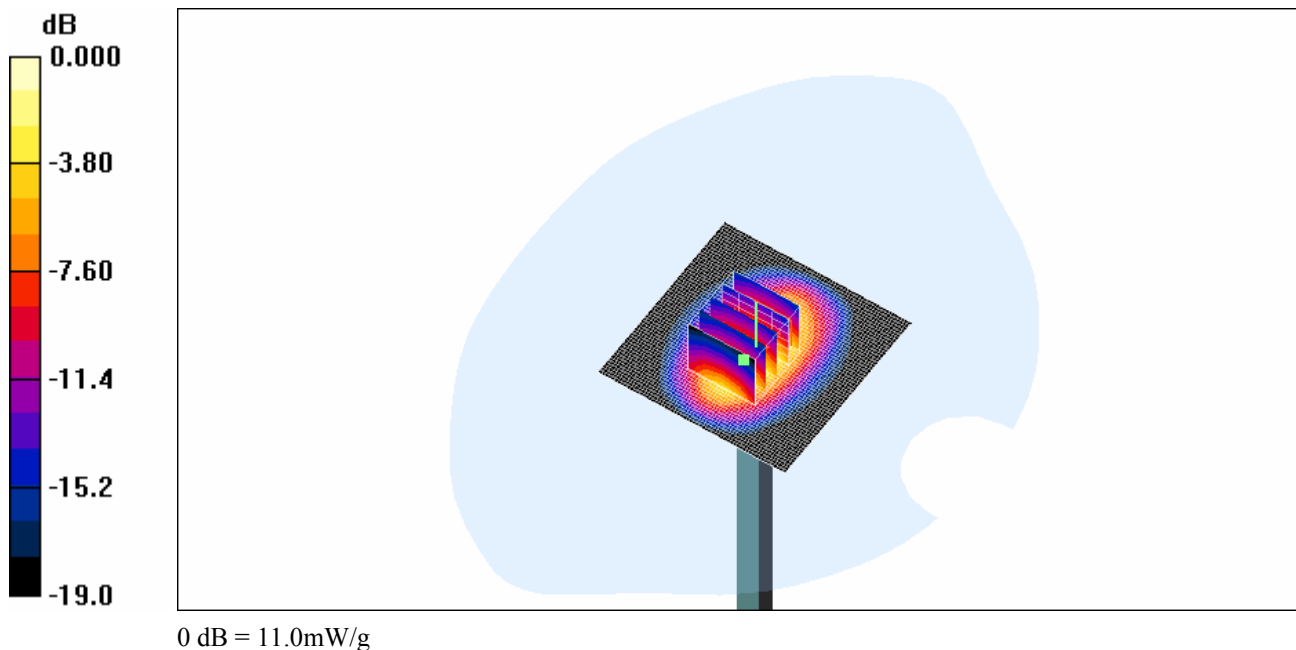
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 92.0 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 16.7 W/kg

**SAR(1 g) = 9.68 mW/g; SAR(10 g) = 5.1 mW/g**

Maximum value of SAR (measured) = 11.0 mW/g



Test Laboratory: KTL

**ZMEM1090 PCS1900 Ch.512 LEFT Cheek Touch**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(5.02, 5.02, 5.02); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.52 mW/g

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

Maximum value of SAR (interpolated) = 0.129 mW/g

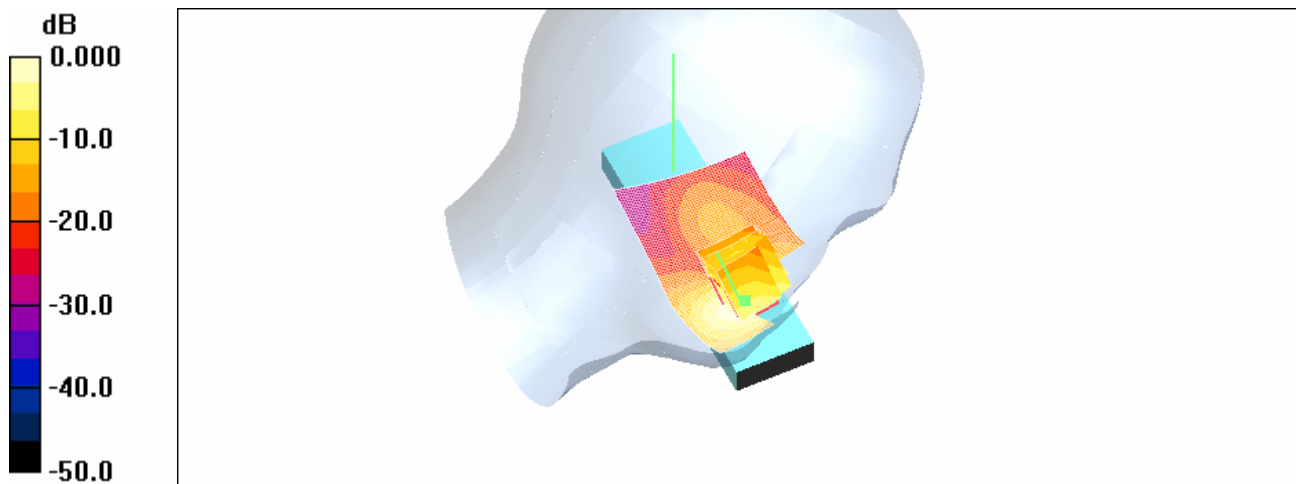
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

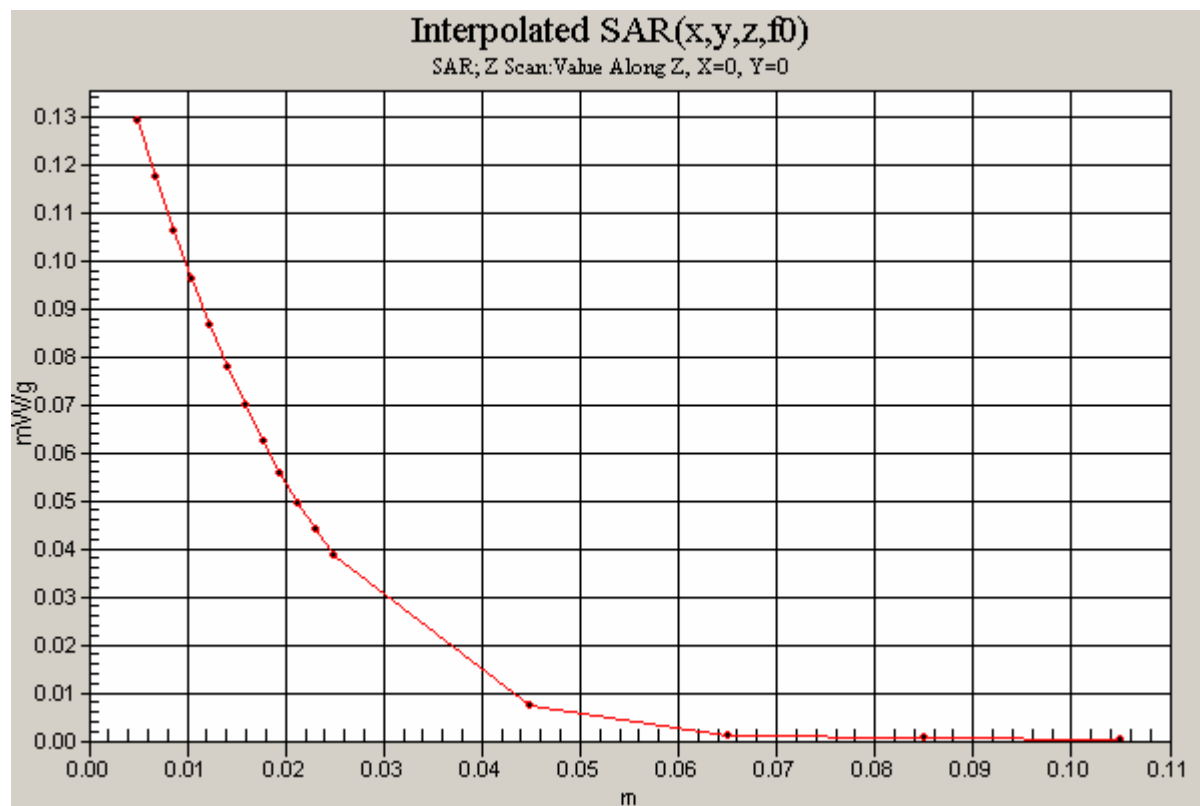
Reference Value = 3.49 V/m; Power Drift = -0.358 dB

Peak SAR (extrapolated) = 1.83 W/kg

**SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.732 mW/g**

Maximum value of SAR (measured) = 1.34 mW/g





Test Laboratory: KTL

**ZMEM1090 PCS1900 Ch.512 LEFT Cheek Touch with Bluetooth**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(5.02, 5.02, 5.02); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $1.42 \text{ mW/g}$

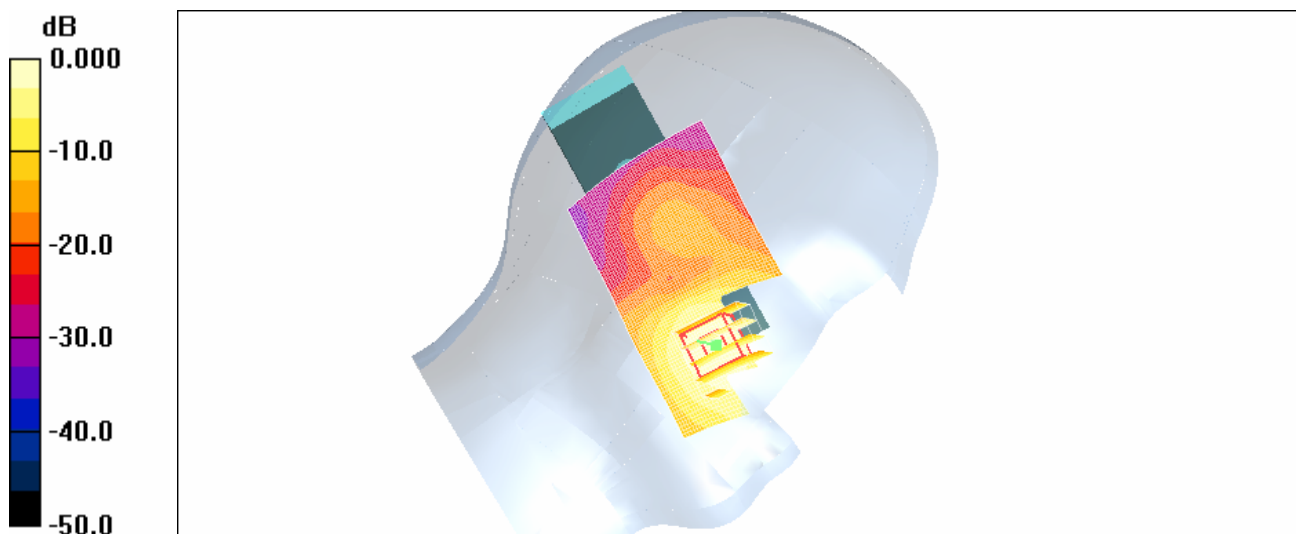
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $3.51 \text{ V/m}$ ; Power Drift =  $-0.157 \text{ dB}$

Peak SAR (extrapolated) =  $1.72 \text{ W/kg}$

**SAR(1 g) =  $1.19 \text{ mW/g}$ ; SAR(10 g) =  $0.704 \text{ mW/g}$**

Maximum value of SAR (measured) =  $1.31 \text{ mW/g}$



0 dB =  $1.31 \text{ mW/g}$

Test Laboratory: KTL

**ZMEM1090 PCS1900 Ch.512 RIGHT Cheek Touch**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(5.02, 5.02, 5.02); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $1.27 \text{ mW/g}$

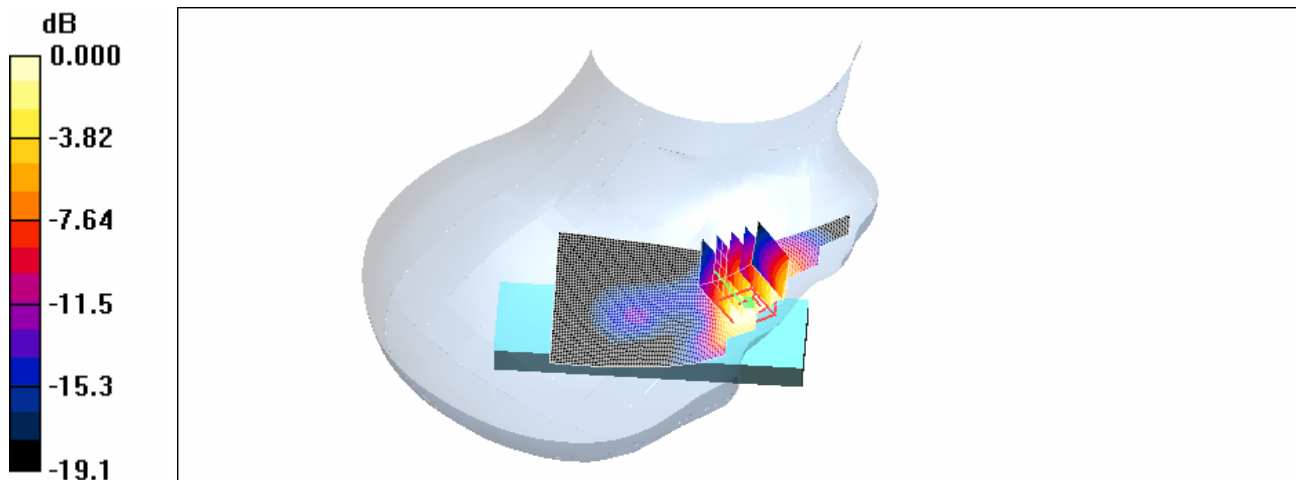
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $5.11 \text{ V/m}$ ; Power Drift =  $-0.146 \text{ dB}$

Peak SAR (extrapolated) =  $1.57 \text{ W/kg}$

**SAR(1 g) =  $1.08 \text{ mW/g}$ ; SAR(10 g) =  $0.641 \text{ mW/g}$**

Maximum value of SAR (measured) =  $1.11 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM1090 PCS1900 Ch.661 LEFT Cheek Touch**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.42 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(5.02, 5.02, 5.02); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Left Cheek Touch/Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $1.10 \text{ mW/g}$

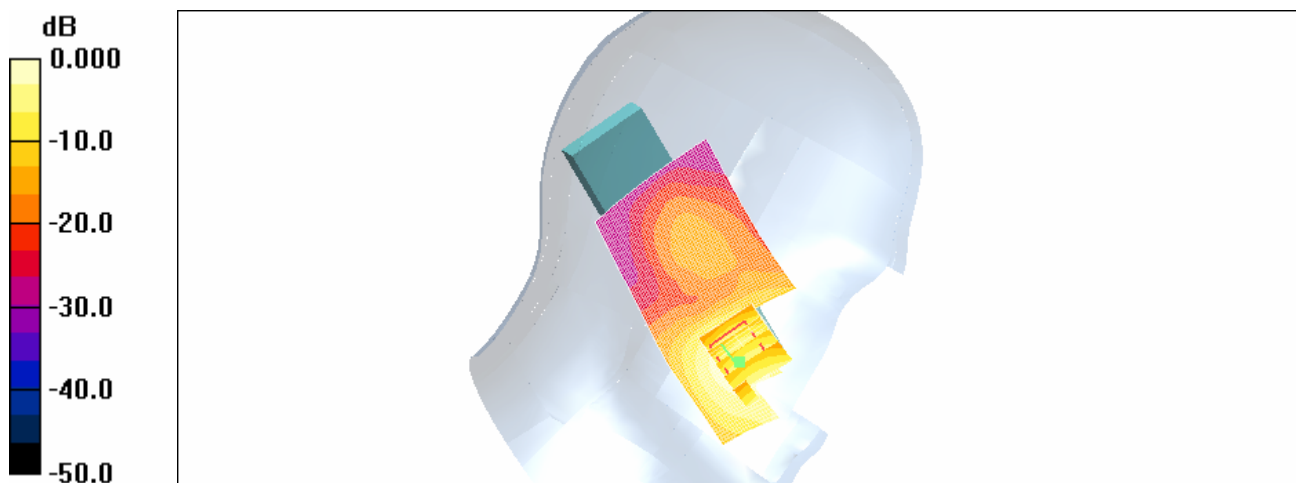
**Left Cheek Touch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $3.00 \text{ V/m}$ ; Power Drift =  $-0.177 \text{ dB}$

Peak SAR (extrapolated) =  $1.37 \text{ W/kg}$

**SAR(1 g) =  $0.959 \text{ mW/g}$ ; SAR(10 g) =  $0.566 \text{ mW/g}$**

Maximum value of SAR (measured) =  $1.04 \text{ mW/g}$



0 dB =  $1.04 \text{ mW/g}$

Test Laboratory: KTL

**ZMEM1090 PCS1900 Ch.661 LEFT Ear Tilt**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.42 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(5.02, 5.02, 5.02); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Left Ear Tilt/Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.099 \text{ mW/g}$

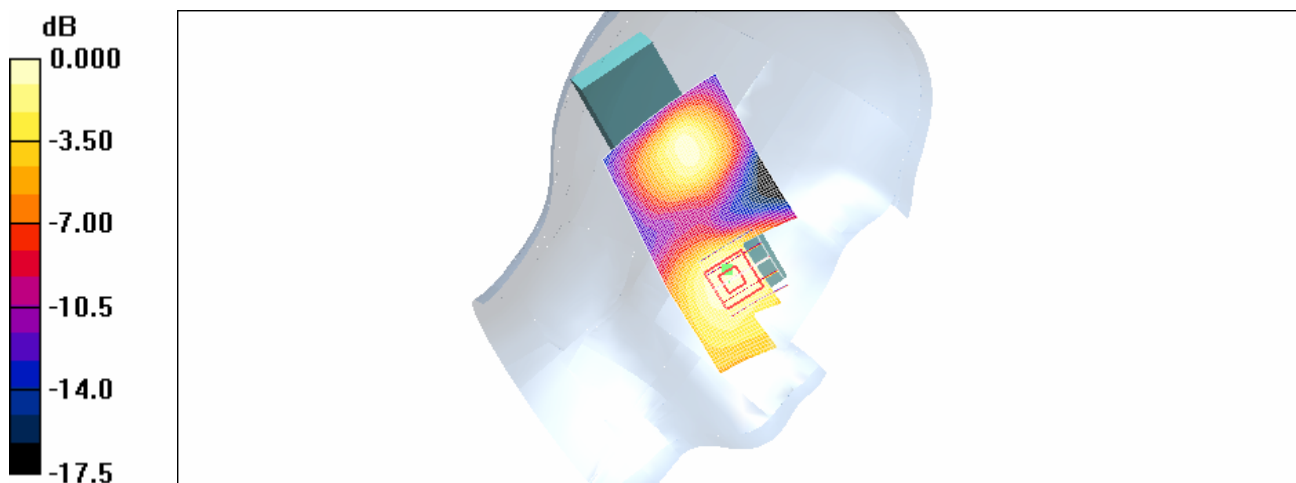
**Left Ear Tilt/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $3.02 \text{ V/m}$ ; Power Drift =  $-0.339 \text{ dB}$

Peak SAR (extrapolated) =  $0.127 \text{ W/kg}$

**SAR(1 g) =  $0.090 \text{ mW/g}$ ; SAR(10 g) =  $0.058 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.097 \text{ mW/g}$



0 dB =  $0.097 \text{ mW/g}$

Test Laboratory: KTL

**ZMEM1090 PCS1900 Ch.661 RIGHT Cheek Touch**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.42 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(5.02, 5.02, 5.02); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $1.10 \text{ mW/g}$

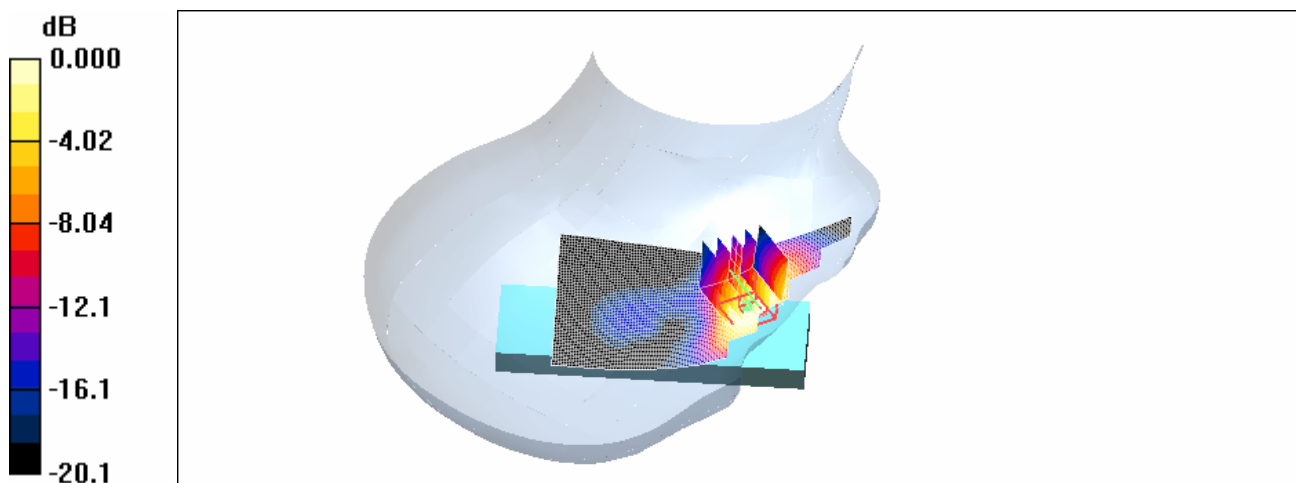
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $4.23 \text{ V/m}$ ; Power Drift =  $1.01 \text{ dB}$

Peak SAR (extrapolated) =  $1.36 \text{ W/kg}$

**SAR(1 g) =  $0.928 \text{ mW/g}$ ; SAR(10 g) =  $0.548 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.969 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM1090 PCS1900 Ch.661 RIGHT Ear Tilt**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.42 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(5.02, 5.02, 5.02); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.104 \text{ mW/g}$

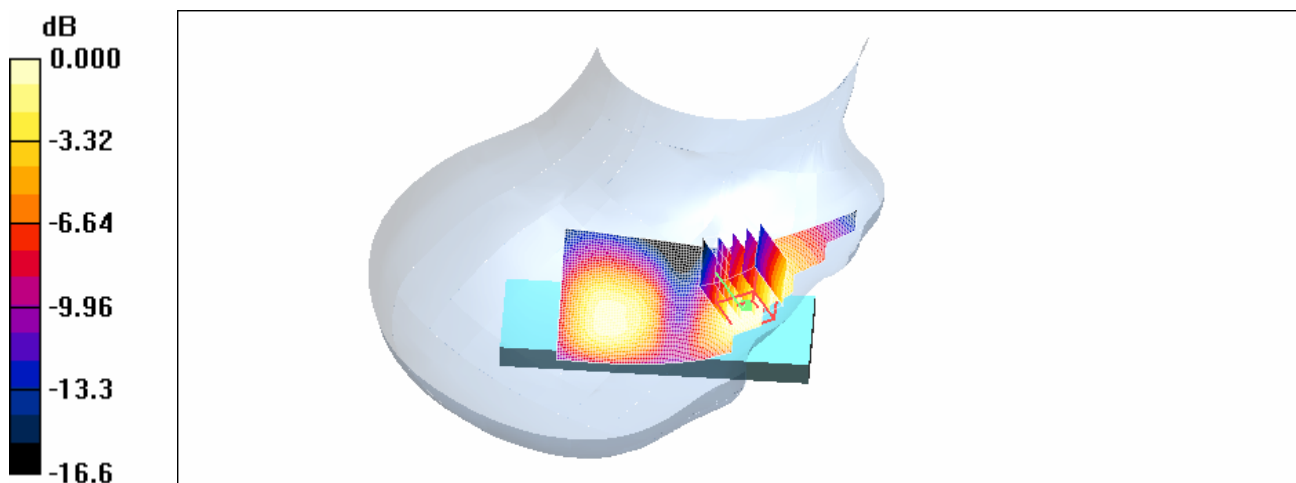
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $4.42 \text{ V/m}$ ; Power Drift =  $0.094 \text{ dB}$

Peak SAR (extrapolated) =  $0.131 \text{ W/kg}$

**SAR(1 g) =  $0.092 \text{ mW/g}$ ; SAR(10 g) =  $0.060 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.096 \text{ mW/g}$



0 dB =  $0.096 \text{ mW/g}$

Test Laboratory: KTL

**ZMEM1090 PCS1900 Ch.810 LEFT Cheek Touch**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.45 \text{ mho/m}$ ;  $\epsilon_r = 39$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(5.02, 5.02, 5.02); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $1.15 \text{ mW/g}$

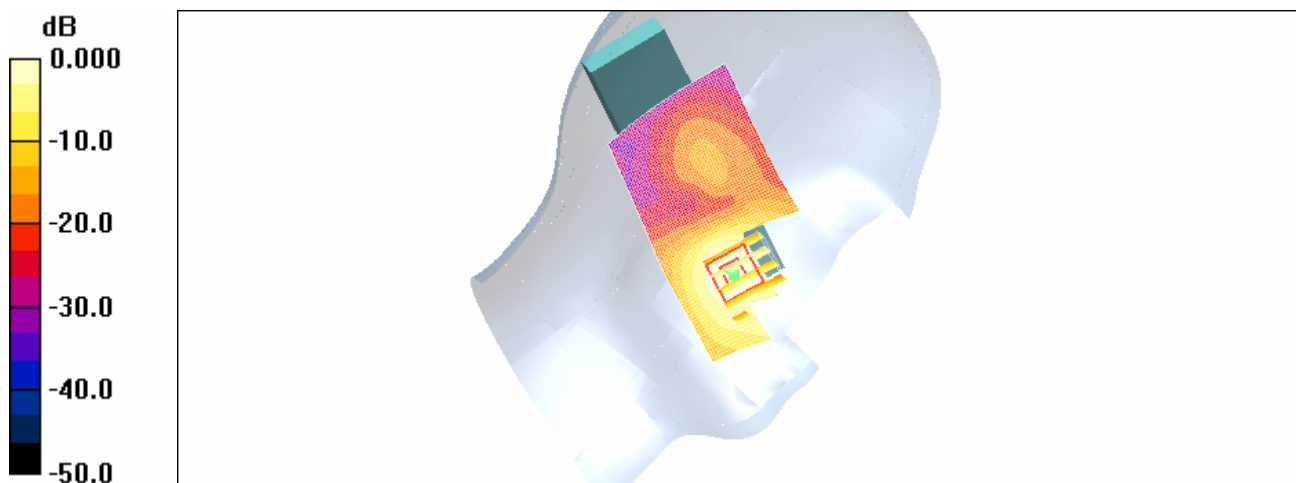
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $2.67 \text{ V/m}$ ; Power Drift =  $0.094 \text{ dB}$

Peak SAR (extrapolated) =  $1.50 \text{ W/kg}$

**SAR(1 g) =  $1 \text{ mW/g}$ ; SAR(10 g) =  $0.572 \text{ mW/g}$**

Maximum value of SAR (measured) =  $1.10 \text{ mW/g}$



0 dB =  $1.10 \text{ mW/g}$

Test Laboratory: KTL

**ZMEM1090 PCS1900 Ch.810 RIGHT Cheek Touch**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.45 \text{ mho/m}$ ;  $\epsilon_r = 39$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(5.02, 5.02, 5.02); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.996 \text{ mW/g}$

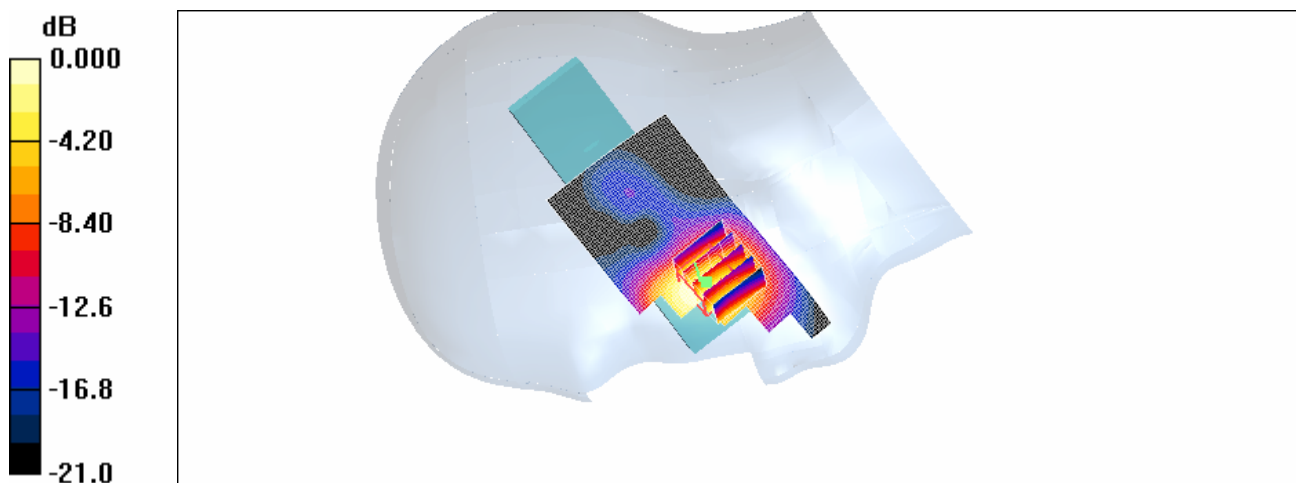
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $4.71 \text{ V/m}$ ; Power Drift =  $0.036 \text{ dB}$

Peak SAR (extrapolated) =  $1.21 \text{ W/kg}$

**SAR(1 g) =  $0.817 \text{ mW/g}$ ; SAR(10 g) =  $0.475 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.838 \text{ mW/g}$



0 dB =  $0.838 \text{ mW/g}$

Test Laboratory: KTL

**ZMEM1090 GSM1900 Ch512. Body**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: MSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(4.5, 4.5, 4.5); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.154 \text{ mW/g}$

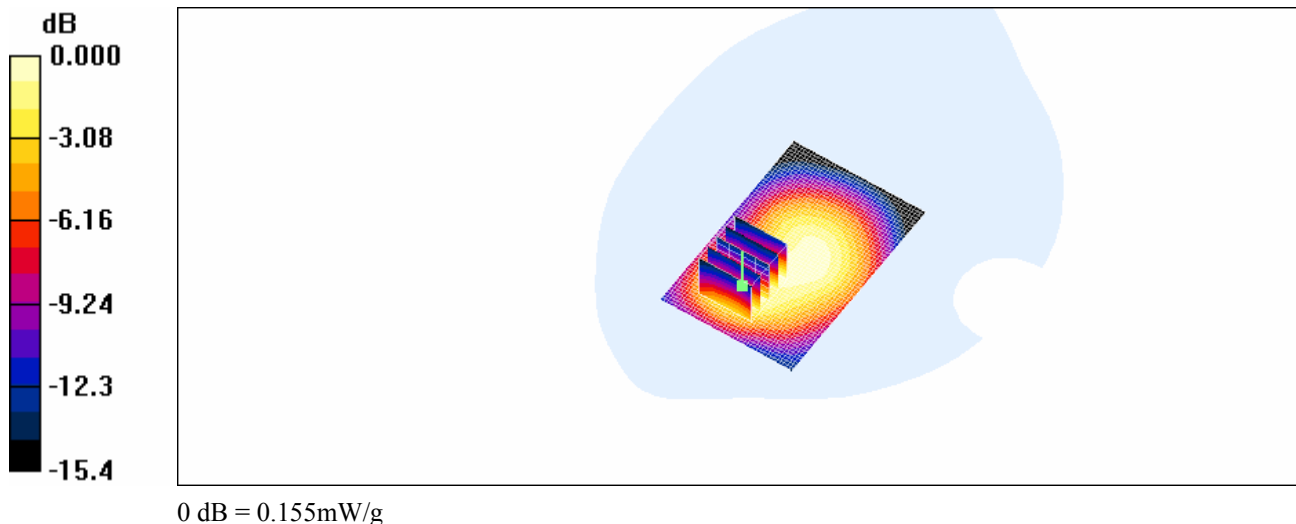
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $5.23 \text{ V/m}$ ; Power Drift =  $0.073 \text{ dB}$

Peak SAR (extrapolated) =  $0.255 \text{ W/kg}$

**SAR(1 g) =  $0.144 \text{ mW/g}$ ; SAR(10 g) =  $0.080 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.155 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM1090 GSM1900 Ch661. Body**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: MSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.52 \text{ mho/m}$ ;  $\epsilon_r = 51.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(4.5, 4.5, 4.5); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.145 \text{ mW/g}$

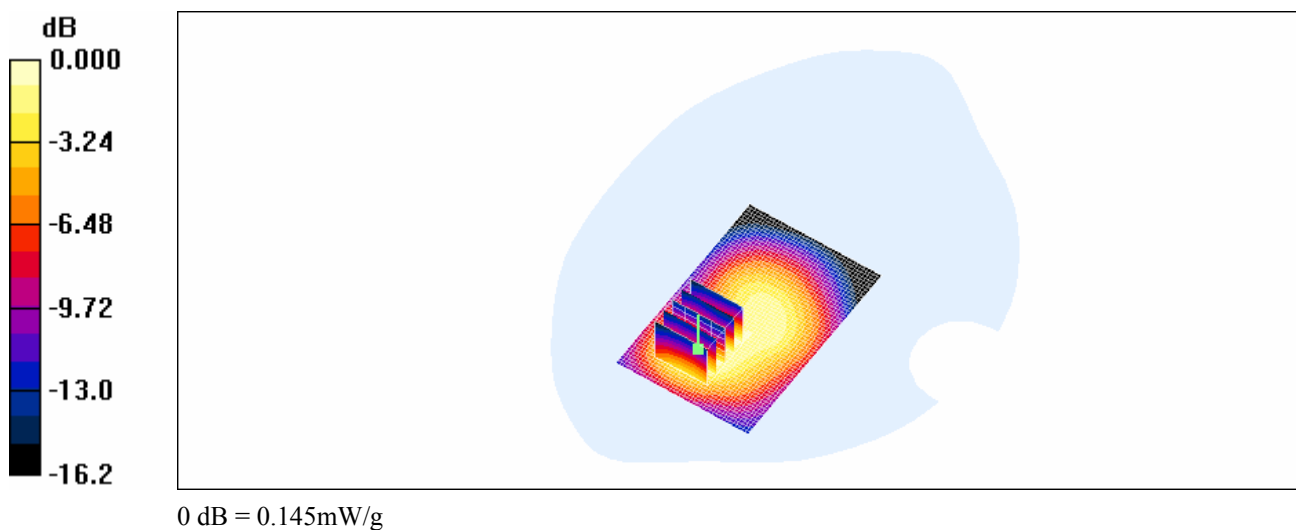
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $4.42 \text{ V/m}$ ; Power Drift =  $0.089 \text{ dB}$

Peak SAR (extrapolated) =  $0.240 \text{ W/kg}$

**SAR(1 g) =  $0.134 \text{ mW/g}$ ; SAR(10 g) =  $0.074 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.145 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM1090 GSM1900 Ch661. Body front facing phantom**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: MSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(4.5, 4.5, 4.5); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x71x1):** Measurement grid:  $dx=20$ mm,  $dy=20$ mm

Maximum value of SAR (interpolated) = 0.064 mW/g

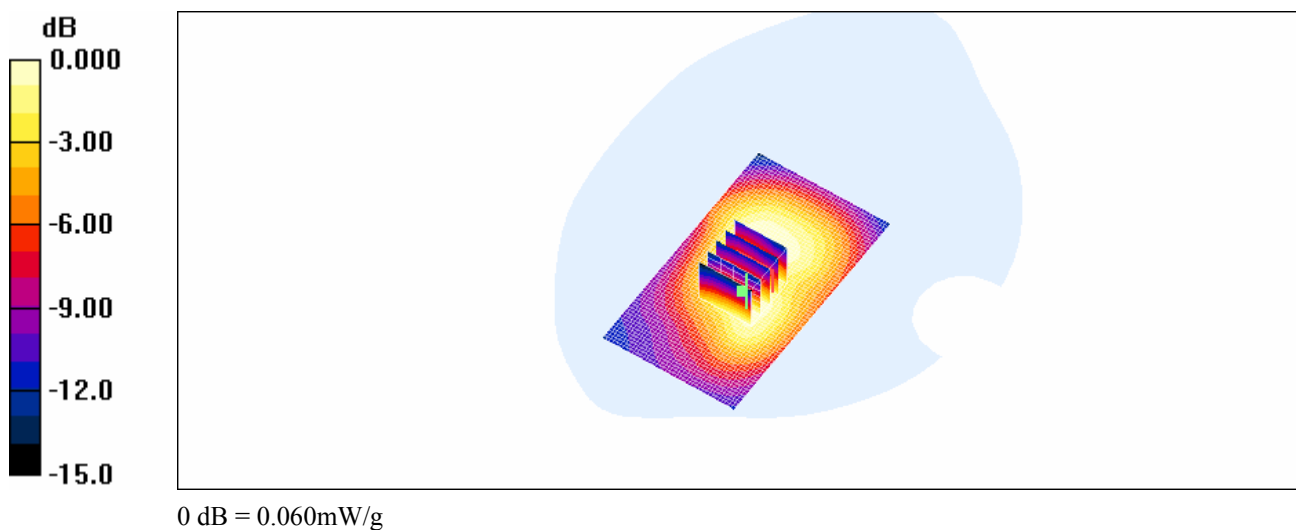
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 5.26 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.087 W/kg

**SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.035 mW/g**

Maximum value of SAR (measured) = 0.060 mW/g



Test Laboratory: KTL

**ZMEM1090 GSM1900 Ch810. Body**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: MSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.56 \text{ mho/m}$ ;  $\epsilon_r = 51.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(4.5, 4.5, 4.5); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.168 \text{ mW/g}$

**Z Scan (1x1x16):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.015 \text{ mW/g}$

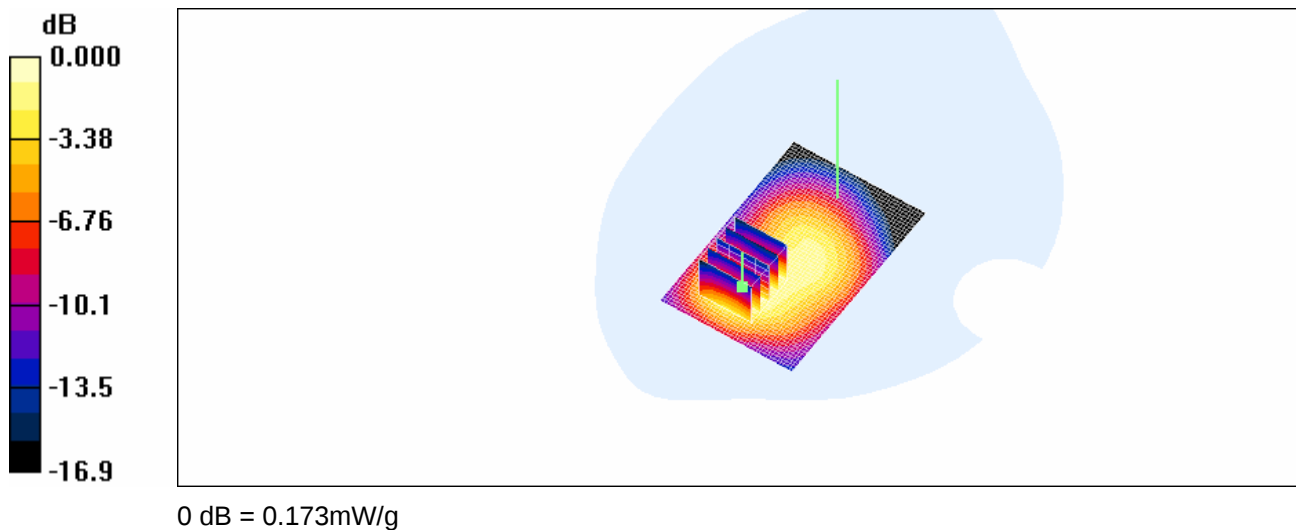
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

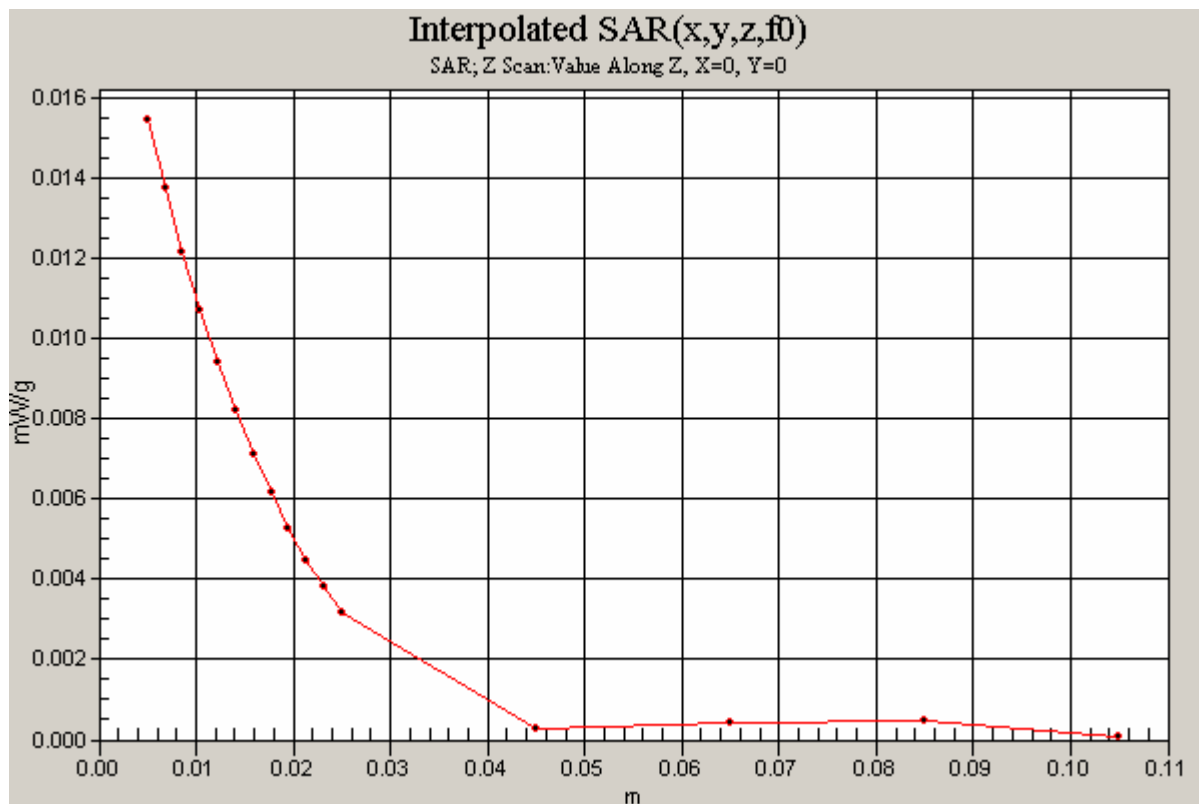
Reference Value =  $4.28 \text{ V/m}$ ; Power Drift =  $-0.013 \text{ dB}$

Peak SAR (extrapolated) =  $0.292 \text{ W/kg}$

**SAR(1 g) =  $0.161 \text{ mW/g}$ ; SAR(10 g) =  $0.087 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.173 \text{ mW/g}$





Test Laboratory: KTL

**ZMEM1090 GSM1900 Ch810. Body with Bluetooth active**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: MSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.56 \text{ mho/m}$ ;  $\epsilon_r = 51.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(4.5, 4.5, 4.5); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.149 \text{ mW/g}$

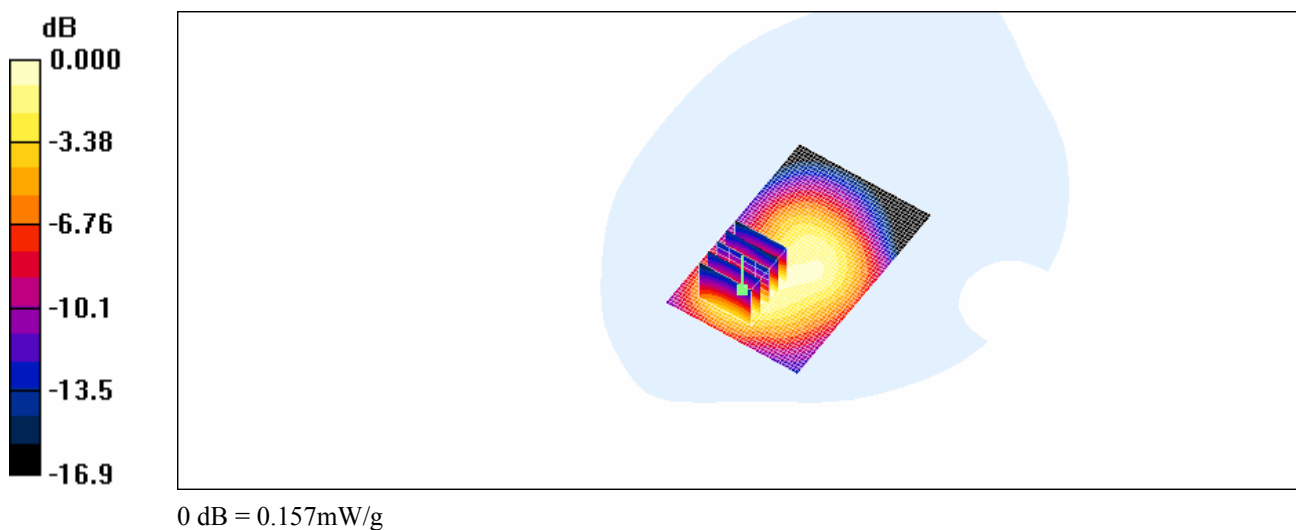
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $3.94 \text{ V/m}$ ; Power Drift =  $0.028 \text{ dB}$

Peak SAR (extrapolated) =  $0.251 \text{ W/kg}$

**SAR(1 g) =  $0.142 \text{ mW/g}$ ; SAR(10 g) =  $0.079 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.157 \text{ mW/g}$



Test Laboratory: KTL

**ZMEM1090 GPRS1900 Ch661. Body**

**\*Test Date : 7th/Aug/2007**

**Measured Liquid Temperature(°C) : 22.5 , Ambient Temperature(°C) : 21.0**

Communication System: DCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: MSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.52 \text{ mho/m}$ ;  $\epsilon_r = 51.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1773; ConvF(4.5, 4.5, 4.5); Calibrated: 2007-05-31
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Area Scan (41x61x1):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) =  $0.124 \text{ mW/g}$

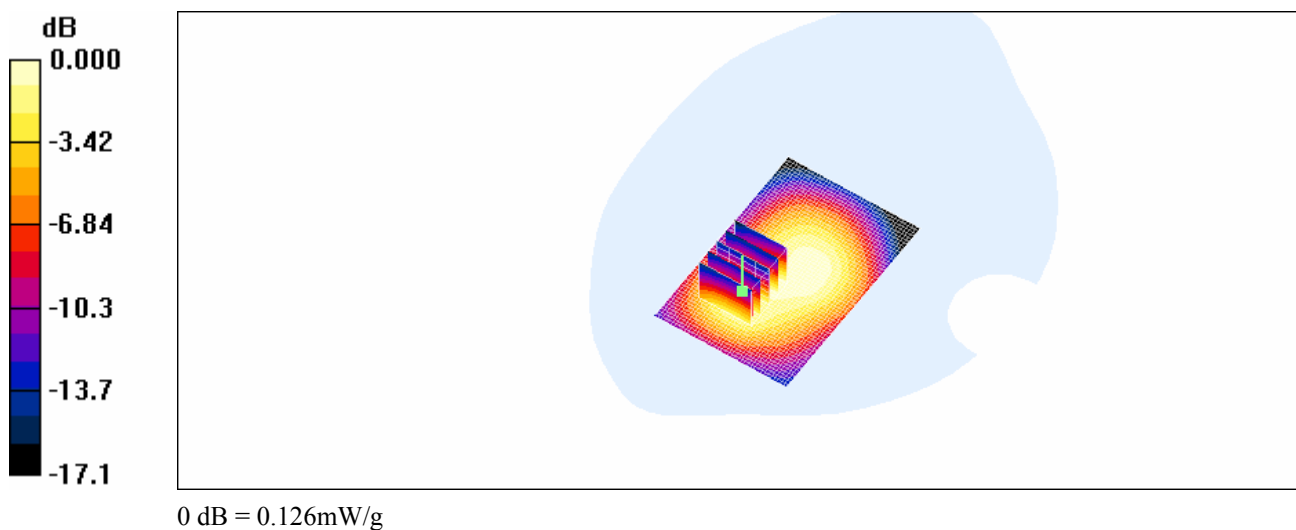
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $5.17 \text{ V/m}$ ; Power Drift =  $-0.018 \text{ dB}$

Peak SAR (extrapolated) =  $0.203 \text{ W/kg}$

**SAR(1 g) =  $0.115 \text{ mW/g}$ ; SAR(10 g) =  $0.066 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.126 \text{ mW/g}$



# Title

## SubTitle

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# Title

## SubTitle



Title

SubTitle

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| Frequency      | e'      | e''     |
|----------------|---------|---------|
| 800.000000 MHz | 41.0521 | 18.8585 |
| 801.000000 MHz | 41.0010 | 18.8564 |
| 802.000000 MHz | 40.9993 | 18.8359 |
| 803.000000 MHz | 41.0093 | 18.8392 |
| 804.000000 MHz | 40.9716 | 18.8661 |
| 805.000000 MHz | 40.9964 | 18.8439 |
| 806.000000 MHz | 40.9736 | 18.8452 |
| 807.000000 MHz | 40.9482 | 18.8364 |
| 808.000000 MHz | 40.9409 | 18.8551 |
| 809.000000 MHz | 40.9256 | 18.8437 |
| 810.000000 MHz | 40.9003 | 18.8350 |
| 811.000000 MHz | 40.8952 | 18.8209 |
| 812.000000 MHz | 40.8980 | 18.8368 |
| 813.000000 MHz | 40.8856 | 18.8355 |
| 814.000000 MHz | 40.8425 | 18.7996 |
| 815.000000 MHz | 40.8355 | 18.8181 |
| 816.000000 MHz | 40.8286 | 18.8366 |
| 817.000000 MHz | 40.8281 | 18.8001 |
| 818.000000 MHz | 40.8087 | 18.8113 |
| 819.000000 MHz | 40.8140 | 18.8158 |
| 820.000000 MHz | 40.7695 | 18.8125 |
| 821.000000 MHz | 40.7574 | 18.8111 |
| 822.000000 MHz | 40.7305 | 18.8137 |
| 823.000000 MHz | 40.7472 | 18.8205 |
| 824.000000 MHz | 40.7066 | 18.8110 |
| 825.000000 MHz | 40.6920 | 18.7997 |
| 826.000000 MHz | 40.7122 | 18.8001 |
| 827.000000 MHz | 40.6834 | 18.8139 |
| 828.000000 MHz | 40.6912 | 18.8072 |
| 829.000000 MHz | 40.6794 | 18.8057 |
| 830.000000 MHz | 40.6232 | 18.7954 |
| 831.000000 MHz | 40.6311 | 18.7887 |
| 832.000000 MHz | 40.6363 | 18.7722 |
| 833.000000 MHz | 40.6176 | 18.7832 |
| 834.000000 MHz | 40.5891 | 18.7969 |
| 835.000000 MHz | 40.5847 | 18.7831 |
| 836.000000 MHz | 40.5776 | 18.7596 |
| 837.000000 MHz | 40.5674 | 18.7630 |
| 838.000000 MHz | 40.5256 | 18.7648 |
| 839.000000 MHz | 40.5067 | 18.7550 |
| 840.000000 MHz | 40.4984 | 18.7268 |
| 841.000000 MHz | 40.4899 | 18.7922 |
| 842.000000 MHz | 40.4857 | 18.7785 |

|                |         |         |
|----------------|---------|---------|
| 843.000000 MHz | 40.4665 | 18.7481 |
| 844.000000 MHz | 40.4869 | 18.7484 |
| 845.000000 MHz | 40.4591 | 18.7619 |
| 846.000000 MHz | 40.4234 | 18.7466 |
| 847.000000 MHz | 40.4447 | 18.7311 |
| 848.000000 MHz | 40.4349 | 18.7345 |
| 849.000000 MHz | 40.3960 | 18.7253 |
| 850.000000 MHz | 40.3906 | 18.7069 |

# Title

## SubTitle



Title  
SubTitle

August 09, 2007  
11:31 AM



Title

SubTitle

August 09, 2007 11:31 AM

| Frequency      | e'      | e''     |
|----------------|---------|---------|
| 800.000000 MHz | 53.4219 | 20.9403 |
| 801.000000 MHz | 53.4572 | 20.9634 |
| 802.000000 MHz | 53.4518 | 20.9837 |
| 803.000000 MHz | 53.4334 | 21.0311 |
| 804.000000 MHz | 53.4272 | 20.9837 |
| 805.000000 MHz | 53.4211 | 20.9364 |
| 806.000000 MHz | 53.3787 | 20.9470 |
| 807.000000 MHz | 53.3656 | 20.8797 |
| 808.000000 MHz | 53.3069 | 20.9073 |
| 809.000000 MHz | 53.3656 | 20.9164 |
| 810.000000 MHz | 53.3541 | 20.9499 |
| 811.000000 MHz | 53.3492 | 20.9699 |
| 812.000000 MHz | 53.3602 | 20.9393 |
| 813.000000 MHz | 53.3413 | 20.9193 |
| 814.000000 MHz | 53.2926 | 20.9098 |
| 815.000000 MHz | 53.2604 | 20.8834 |
| 816.000000 MHz | 53.2689 | 20.8930 |
| 817.000000 MHz | 53.2619 | 20.8746 |
| 818.000000 MHz | 53.2538 | 20.8844 |
| 819.000000 MHz | 53.2644 | 20.9155 |
| 820.000000 MHz | 53.2810 | 20.9165 |
| 821.000000 MHz | 53.2459 | 20.8969 |
| 822.000000 MHz | 53.2261 | 20.8887 |
| 823.000000 MHz | 53.1995 | 20.8772 |
| 824.000000 MHz | 53.1696 | 20.8560 |
| 825.000000 MHz | 53.1583 | 20.8559 |
| 826.000000 MHz | 53.1702 | 20.8586 |
| 827.000000 MHz | 53.1625 | 20.8682 |
| 828.000000 MHz | 53.1807 | 20.8576 |
| 829.000000 MHz | 53.1696 | 20.8574 |
| 830.000000 MHz | 53.1522 | 20.8705 |
| 831.000000 MHz | 53.1146 | 20.8577 |
| 832.000000 MHz | 53.0966 | 20.8380 |
| 833.000000 MHz | 53.0257 | 20.7933 |
| 834.000000 MHz | 53.0837 | 20.8014 |
| 835.000000 MHz | 53.0437 | 20.8117 |
| 836.000000 MHz | 53.1016 | 20.8196 |
| 837.000000 MHz | 53.0881 | 20.8423 |
| 838.000000 MHz | 53.0963 | 20.8187 |
| 839.000000 MHz | 52.9990 | 20.8060 |
| 840.000000 MHz | 52.9901 | 20.8106 |
| 841.000000 MHz | 52.9664 | 20.8041 |
| 842.000000 MHz | 52.9427 | 20.7977 |

|                |         |         |
|----------------|---------|---------|
| 843.000000 MHz | 52.9384 | 20.7843 |
| 844.000000 MHz | 52.9647 | 20.8252 |
| 845.000000 MHz | 52.9473 | 20.8057 |
| 846.000000 MHz | 52.9674 | 20.7997 |
| 847.000000 MHz | 52.9261 | 20.7889 |
| 848.000000 MHz | 52.8914 | 20.7812 |
| 849.000000 MHz | 52.8659 | 20.7539 |
| 850.000000 MHz | 52.8645 | 20.7775 |

# Title

## SubTitle



# Title

## SubTitle



Title

SubTitle

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| Frequency       | e'      | e''     |
|-----------------|---------|---------|
| 1.850000000 GHz | 39.2463 | 13.5642 |
| 1.850985698 GHz | 39.2727 | 13.5662 |
| 1.851971397 GHz | 39.2692 | 13.5536 |
| 1.852957095 GHz | 39.2357 | 13.5506 |
| 1.853942793 GHz | 39.2351 | 13.5573 |
| 1.854928492 GHz | 39.2423 | 13.5621 |
| 1.855914190 GHz | 39.2137 | 13.5621 |
| 1.856903039 GHz | 39.2293 | 13.5708 |
| 1.857891889 GHz | 39.2174 | 13.5785 |
| 1.858880738 GHz | 39.2128 | 13.5786 |
| 1.859869588 GHz | 39.2206 | 13.5890 |
| 1.860858437 GHz | 39.2071 | 13.5797 |
| 1.861847287 GHz | 39.2096 | 13.5815 |
| 1.862839297 GHz | 39.2029 | 13.5829 |
| 1.863831308 GHz | 39.2148 | 13.5758 |
| 1.864823319 GHz | 39.1895 | 13.5859 |
| 1.865815329 GHz | 39.1847 | 13.5951 |
| 1.866807340 GHz | 39.1823 | 13.5939 |
| 1.867799351 GHz | 39.1749 | 13.5988 |
| 1.868794533 GHz | 39.1785 | 13.5879 |
| 1.869789715 GHz | 39.1745 | 13.5937 |
| 1.870784896 GHz | 39.1558 | 13.5997 |
| 1.871780078 GHz | 39.1583 | 13.6014 |
| 1.872775260 GHz | 39.1616 | 13.5996 |
| 1.873770442 GHz | 39.1456 | 13.6099 |
| 1.874768806 GHz | 39.1364 | 13.6070 |
| 1.875767169 GHz | 39.1389 | 13.6087 |
| 1.876765533 GHz | 39.1420 | 13.6161 |
| 1.877763896 GHz | 39.1314 | 13.6110 |
| 1.878762260 GHz | 39.1209 | 13.6060 |
| 1.879760623 GHz | 39.1133 | 13.6200 |
| 1.880762178 GHz | 39.1228 | 13.6233 |
| 1.881763733 GHz | 39.1216 | 13.6094 |
| 1.882765288 GHz | 39.0943 | 13.6298 |
| 1.883766843 GHz | 39.0953 | 13.6384 |
| 1.884768398 GHz | 39.1048 | 13.6417 |
| 1.885769953 GHz | 39.1005 | 13.6418 |
| 1.886774710 GHz | 39.0881 | 13.6290 |
| 1.887779467 GHz | 39.0865 | 13.6333 |
| 1.888784224 GHz | 39.0683 | 13.6301 |
| 1.889788981 GHz | 39.0667 | 13.6344 |
| 1.890793738 GHz | 39.0776 | 13.6398 |
| 1.891798495 GHz | 39.0685 | 13.6369 |

|                 |         |         |
|-----------------|---------|---------|
| 1.892806464 GHz | 39.0648 | 13.6425 |
| 1.893814433 GHz | 39.0579 | 13.6620 |
| 1.894822402 GHz | 39.0685 | 13.6527 |
| 1.895830371 GHz | 39.0486 | 13.6418 |
| 1.896838340 GHz | 39.0435 | 13.6453 |
| 1.897846309 GHz | 39.0258 | 13.6568 |
| 1.898857500 GHz | 39.0282 | 13.6674 |
| 1.899868691 GHz | 39.0330 | 13.6676 |
| 1.900879883 GHz | 39.0262 | 13.6634 |
| 1.901891074 GHz | 39.0289 | 13.6650 |
| 1.902902265 GHz | 39.0149 | 13.6682 |
| 1.903913456 GHz | 39.0051 | 13.6687 |
| 1.904927880 GHz | 39.0015 | 13.6743 |
| 1.905942304 GHz | 39.0016 | 13.6716 |
| 1.906956728 GHz | 38.9978 | 13.6862 |
| 1.907971152 GHz | 38.9931 | 13.6806 |
| 1.908985576 GHz | 38.9909 | 13.6882 |
| 1.910000000 GHz | 38.9896 | 13.6834 |

# Title

## SubTitle

52.250 e'

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52.150

52.050

51.950

51.850

51.750



1.85 GHz

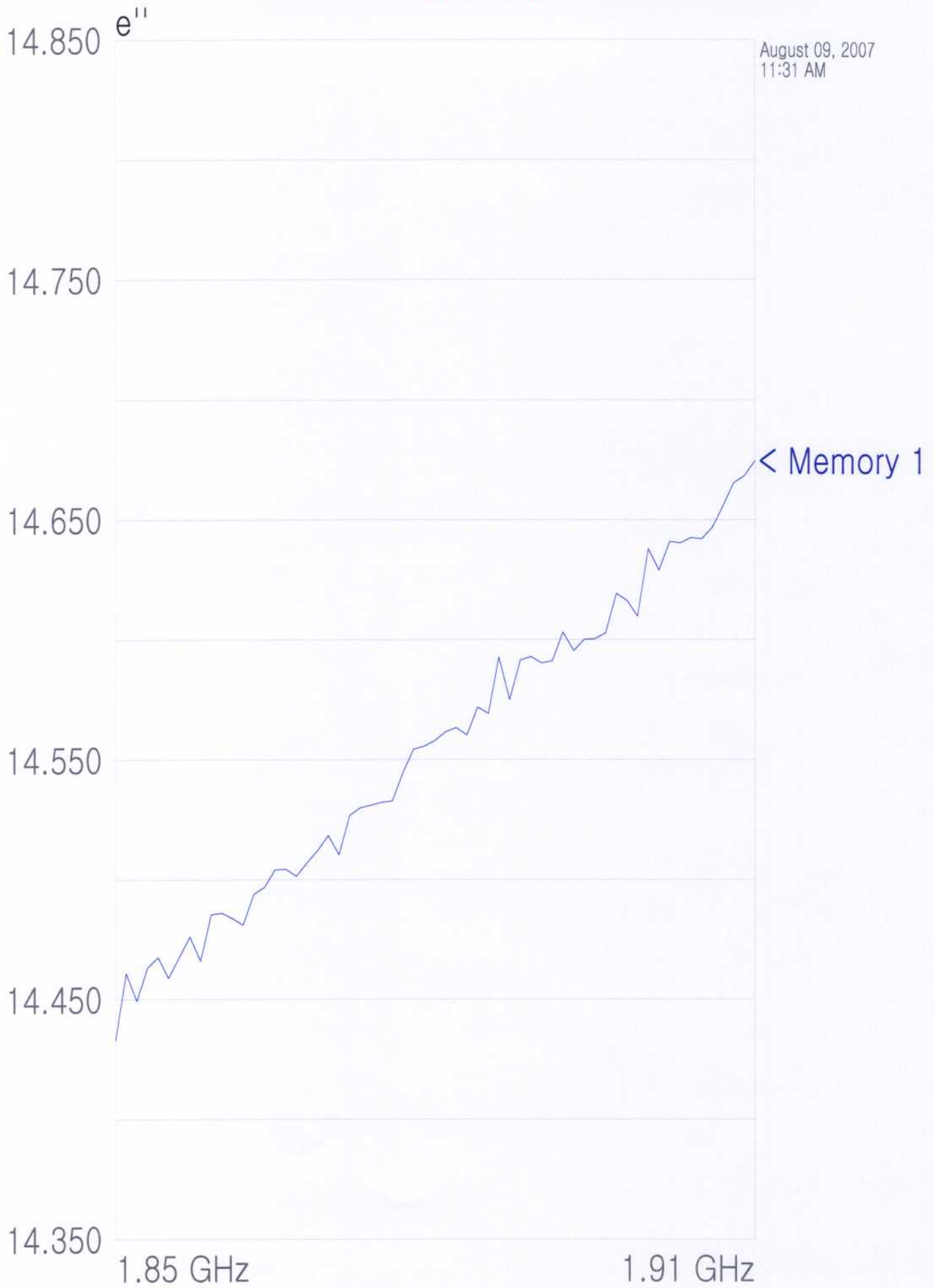
1.91 GHz

< Memory 1

# Title

## SubTitle

August 09, 2007  
11:31 AM



Title

SubTitle

August 09, 2007 11:31 AM

| Frequency       | e'      | e''     |
|-----------------|---------|---------|
| 1.850000000 GHz | 52.0302 | 14.4330 |
| 1.850985698 GHz | 52.0223 | 14.4610 |
| 1.851971397 GHz | 52.0267 | 14.4494 |
| 1.852957095 GHz | 52.0102 | 14.4633 |
| 1.853942793 GHz | 52.0251 | 14.4677 |
| 1.854928492 GHz | 52.0141 | 14.4589 |
| 1.855914190 GHz | 52.0076 | 14.4677 |
| 1.856903039 GHz | 51.9973 | 14.4762 |
| 1.857891889 GHz | 51.9959 | 14.4661 |
| 1.858880738 GHz | 52.0060 | 14.4855 |
| 1.859869588 GHz | 51.9924 | 14.4861 |
| 1.860858437 GHz | 51.9944 | 14.4839 |
| 1.861847287 GHz | 51.9887 | 14.4811 |
| 1.862839297 GHz | 51.9859 | 14.4939 |
| 1.863831308 GHz | 51.9780 | 14.4967 |
| 1.864823319 GHz | 51.9813 | 14.5041 |
| 1.865815329 GHz | 51.9640 | 14.5044 |
| 1.866807340 GHz | 51.9546 | 14.5014 |
| 1.867799351 GHz | 51.9599 | 14.5070 |
| 1.868794533 GHz | 51.9577 | 14.5121 |
| 1.869789715 GHz | 51.9458 | 14.5184 |
| 1.870784896 GHz | 51.9463 | 14.5103 |
| 1.871780078 GHz | 51.9434 | 14.5268 |
| 1.872775260 GHz | 51.9432 | 14.5300 |
| 1.873770442 GHz | 51.9375 | 14.5310 |
| 1.874768806 GHz | 51.9355 | 14.5323 |
| 1.875767169 GHz | 51.9222 | 14.5328 |
| 1.876765533 GHz | 51.9368 | 14.5445 |
| 1.877763896 GHz | 51.9210 | 14.5544 |
| 1.878762260 GHz | 51.9191 | 14.5556 |
| 1.879760623 GHz | 51.9362 | 14.5580 |
| 1.880762178 GHz | 51.9113 | 14.5616 |
| 1.881763733 GHz | 51.9209 | 14.5634 |
| 1.882765288 GHz | 51.9117 | 14.5603 |
| 1.883766843 GHz | 51.8940 | 14.5719 |
| 1.884768398 GHz | 51.8924 | 14.5693 |
| 1.885769953 GHz | 51.8854 | 14.5929 |
| 1.886774710 GHz | 51.8847 | 14.5751 |
| 1.887779467 GHz | 51.8859 | 14.5916 |
| 1.888784224 GHz | 51.8879 | 14.5930 |
| 1.889788981 GHz | 51.8863 | 14.5903 |
| 1.890793738 GHz | 51.8808 | 14.5912 |
| 1.891798495 GHz | 51.8708 | 14.6032 |

|                 |         |         |
|-----------------|---------|---------|
| 1.892806464 GHz | 51.8791 | 14.5954 |
| 1.893814433 GHz | 51.8772 | 14.6002 |
| 1.894822402 GHz | 51.8603 | 14.6004 |
| 1.895830371 GHz | 51.8491 | 14.6028 |
| 1.896838340 GHz | 51.8503 | 14.6192 |
| 1.897846309 GHz | 51.8451 | 14.6163 |
| 1.898857500 GHz | 51.8438 | 14.6098 |
| 1.899868691 GHz | 51.8520 | 14.6379 |
| 1.900879883 GHz | 51.8415 | 14.6289 |
| 1.901891074 GHz | 51.8354 | 14.6410 |
| 1.902902265 GHz | 51.8358 | 14.6403 |
| 1.903913456 GHz | 51.8247 | 14.6426 |
| 1.904927880 GHz | 51.8288 | 14.6421 |
| 1.905942304 GHz | 51.8271 | 14.6468 |
| 1.906956728 GHz | 51.8005 | 14.6559 |
| 1.907971152 GHz | 51.8173 | 14.6654 |
| 1.908985576 GHz | 51.8176 | 14.6684 |
| 1.910000000 GHz | 51.8101 | 14.6747 |