

**Appendix B-4  
K450 Family – Tri-mode Gray Phantom**

**For**

**FCC ID: OVFKWC-K4X4**

# Section 1

## AMPS

Date/Time: 06/01/04 14:37:33

Test Laboratory: Kyocera

**K454LC #B77P, AMPS Left Cheek Ch383**

Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: HSL900, Medium parameters used (interpolated):  $f = 836.49$  MHz,  $\sigma = 0.901$  mho/m,  $\epsilon_r = 40.6$ ,  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, ConvF(6.7, 6.7, 6.7), Calibrated: 10/10/2003

Sensor: Surface 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383 LC/Zoom Scan (7x7x7)/Cube 0: Measurement grid dx=5mm, dy=5mm, dz=5mm**

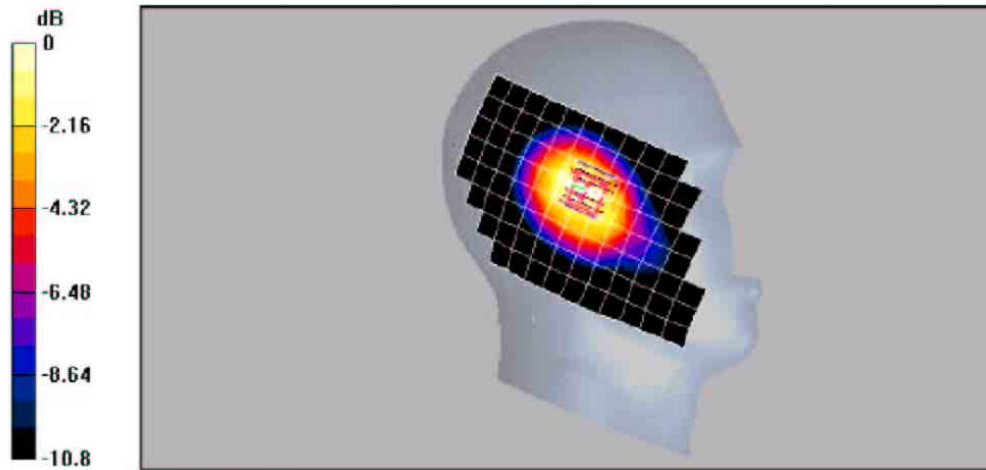
Reference Value = 33.4 V/m; Power DnB = -0.0 dB

Maximum value of SAR (measured) = 1.16 mW/g

Peak SAR (extrapolated) = 1.5 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.755 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



0 dB = 1.16mW/g

Date/Time: 06/01/04 14:37:33

Test Laboratory: Kyocera

**K454LC #B77P, AMPS Left Cheek Ch383**

Communication System: AMPS, Frequency: 824.04 MHz, Duty Cycle: 1:1

Medium: HSL900, Medium parameters used (interpolated):  $f = 824.04 \text{ MHz}$ ,  $\sigma = 0.901 \text{ mho/m}$ ,  $\epsilon_r = 40.6$ ,  $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, ConvF(6.7, 6.7, 6.7), Calibrated: 10/10/2003

Sensor: Surface 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch991 LC/Zoom Scan (7x7x7)/Cube 0: Measurement grid dx=5mm, dy=5mm, dz=5mm**

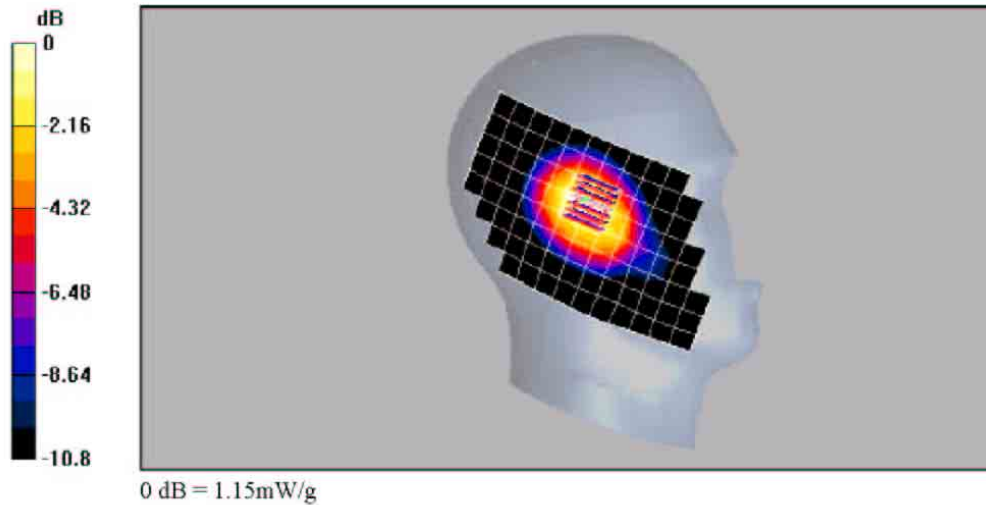
Reference Value = 33.4 V/m; Power DnB = -0.002 dB

Maximum value of SAR (measured) = 1.15 mW/g

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.742 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



Date/Time: 06/01/04 14:37:33

Test Laboratory: Kyocera

**K454LC #B77P, AMPS Left Cheek Z-Scan Ch991**

Communication System: AMPS, Frequency: 824.04 MHz, Duty Cycle: 1:1

Medium: HSL900, Medium parameters used (interpolated):  $f = 824.04 \text{ MHz}$ ,  $\sigma = 0.901 \text{ mho/m}$ ,  $\epsilon_r = 40.6$ ,  $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, ConvF(6.7, 6.7, 6.7), Calibrated: 10/10/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE3 Sp493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**

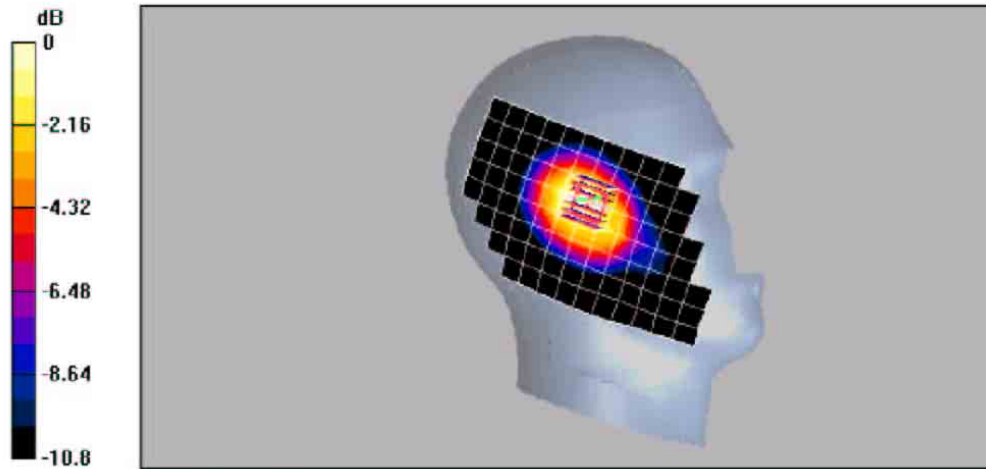
Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch991 LC/Z Scan (1x1x11):** Measurement grid: dx=20mm, dy=20mm, dz=5mm

Reference Value = 33.4 V/m, Power DnB = -0.002 dB

Maximum value of SAR (measured) = 1.06 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



0 dB = 1.15mW/g

Date/Time: 06/01/04 14:37:17

Test Laboratory: Kyocera

**K454LC #B77P, AMPS Right Cheek Ch383**

Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: HSL900, Medium parameters used (interpolated):  $f = 836.49$  MHz,  $\sigma = 0.391$  mho/m,  $\epsilon_r = 41$ ,  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Right Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, ConvF(6.7, 6.7, 6.7), Calibrated: 10/10/2003

Sensor: Surface 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383 RC/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.1 V/m, Power Drift = 0.1 dB

Maximum value of SAR (measured) = 0.983 mW/g

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.926 mW/g; SAR(10 g) = 0.672 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

**AMPS Ch383 RC/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

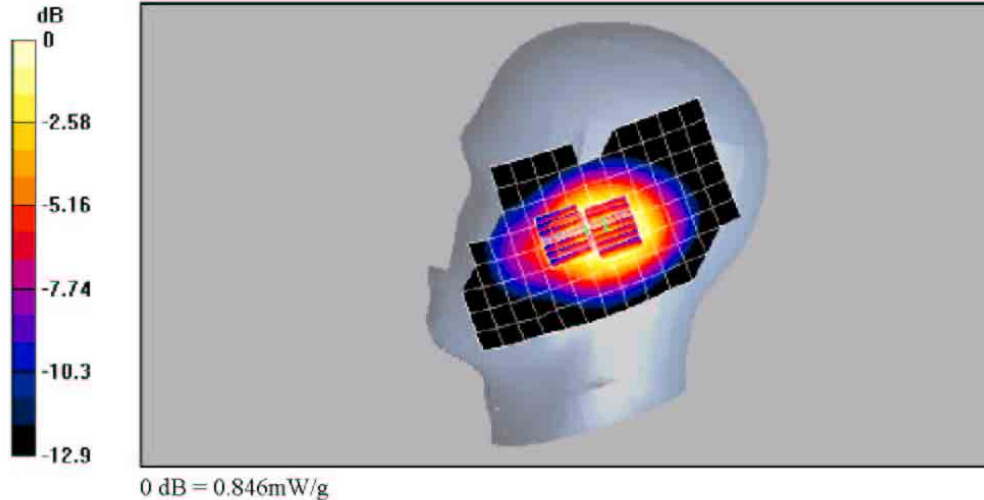
Reference Value = 33.1 V/m, Power Drift = 0.1 dB

Maximum value of SAR (measured) = 0.346 mW/g

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.737 mW/g; SAR(10 g) = 0.498 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



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Date/Time: 06/01/04 14:37:17

Test Laboratory: Kyocera

**K454LC #B77P, AMPS Right Tilt Ch383**

Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: HSL900, Medium parameters used (interpolated):  $f = 836.49$  MHz,  $\sigma = 0.391$  mho/m,  $\epsilon_r = 41$ ,  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Right Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, ConvF(6.7, 6.7, 6.7), Calibrated: 10/10/2003

Sensor: Surface 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383 RT/Zoom Scan (7x7x7)/Cube 0: Measurement grid dx=5mm, dy=5mm, dz=5mm**

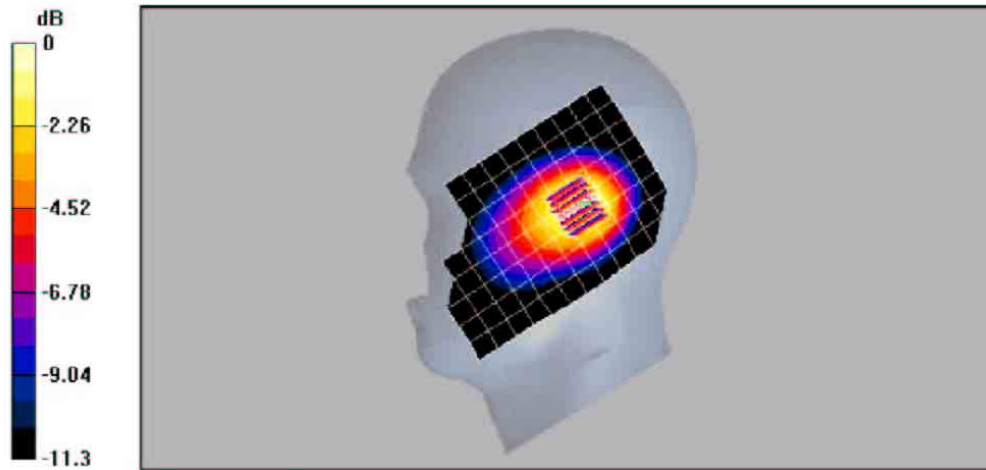
Reference Value = 31.2 V/m; Power DnB = 0.2 dB

Maximum value of SAR (measured) = 0.875 mW/g

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.810 mW/g; SAR(10 g) = 0.559 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



0 dB = 0.875mW/g

Date/Time: 06/22/04 21:51:37

Test Laboratory: Kyocera

### K454LC #B77P, AMPS ch383 Left Cheek with Backpack Clip

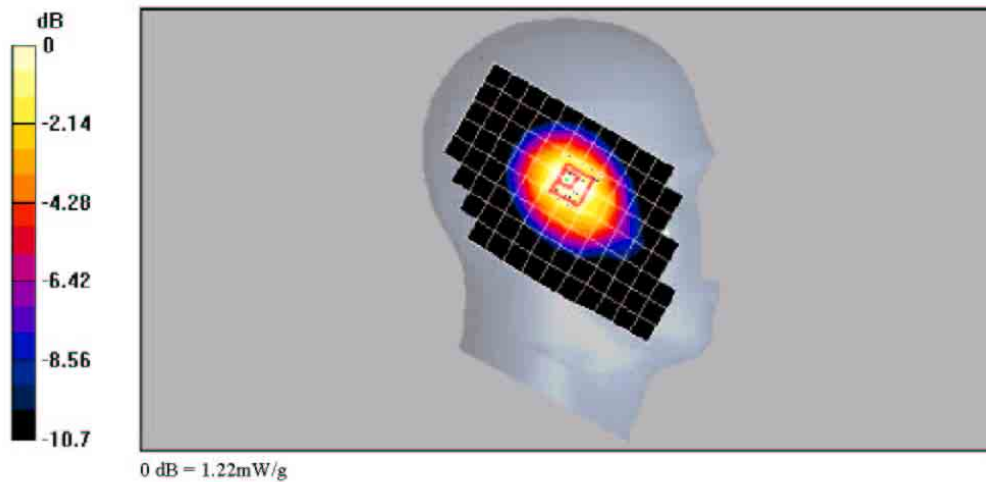
Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1  
Medium: HSL900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.924$  mho/m;  $\epsilon_r = 41.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**  
Probe: ETSDV6 - SN1063, ConvF(6.7, 6.7, 6.7), Calibrated: 10/10/2003  
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
Electronics: DAE3 Sn493, Calibrated: 11/25/2003  
Measurement SW: DASY4, V4.2 Build 44  
Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**  
Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383 LC/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 33.9 V/m, Power Drift = -0.2 dB  
Maximum value of SAR (measured) = 1.22 mW/g  
Peak SAR (extrapolated) = 1.6 W/kg  
**SAR(1g) = 1.14 mW/g; SAR(10g) = 0.782 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!





Date/Time: 06/14/04 10:22:30

Test Laboratory: Kyocera

**K454L #B77P, AMPS-800 FLAT with Belt Clip Ch383**

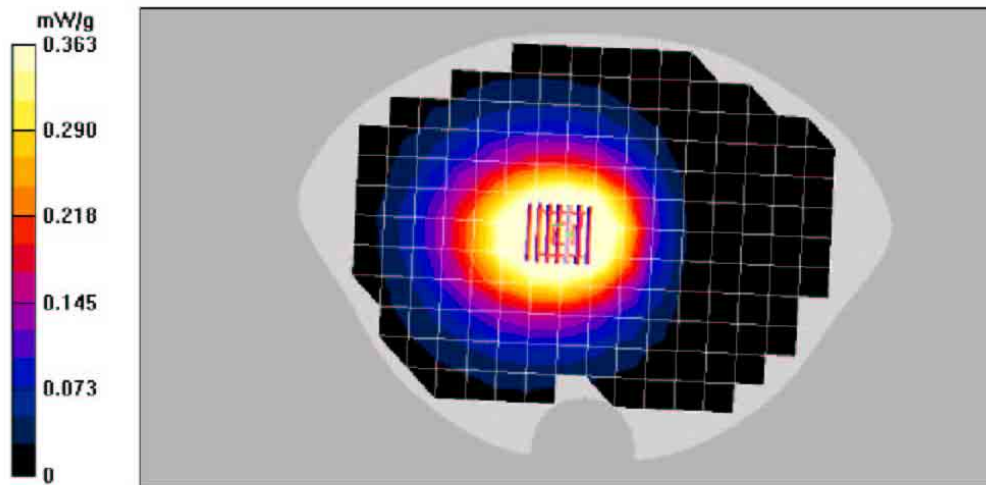
Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1  
Medium: M900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
Probe: ETSDV6 - SN1063, ConvF(6.4, 6.4, 6.4), Calibrated: 10/10/2003  
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)  
Sensor-Surface: 0mm (Fix Surface)  
Electronics: DAE3 Sr493, Calibrated: 11/25/2003  
Measurement SW: DASY4, V4.2 Build 44  
Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**  
Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383/Z Scan (1x1x11):** Measurement grid: dx=20mm, dy=20mm, dz=5mm  
Reference Value = 22.9 V/m, Power Drift = -0.0 dB  
Maximum value of SAR (measured) = 0.363 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



Date/Time: 06/14/04 16:25:02

Test Laboratory: Kyocera

**K454L #B77P, AMPS-800 FLAT with 22.5mm Air Space and Backpack Clip Ch383**

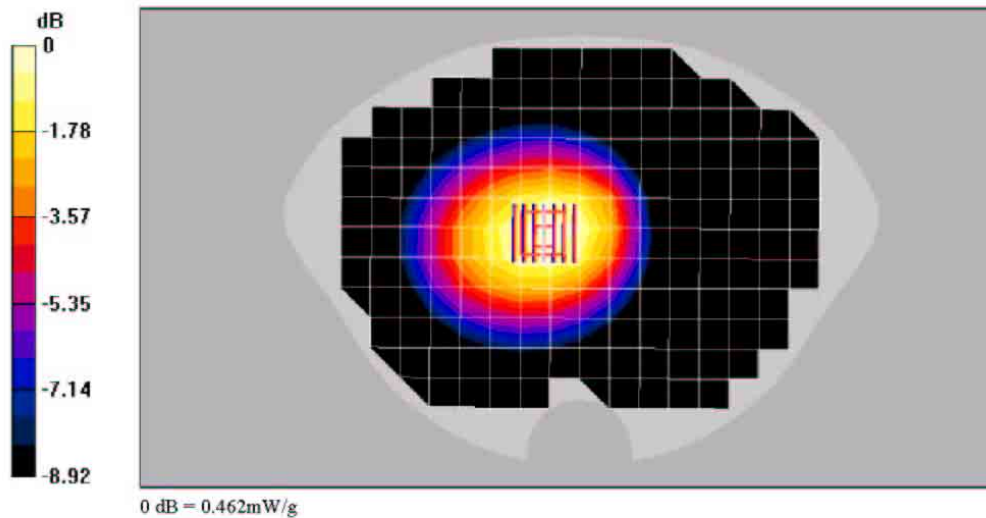
Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1  
 Medium: M900, Medium parameters used (interpolated):  $f = 836.49 \text{ MHz}$ ;  $\sigma = 0.981 \text{ mho/m}$ ;  $\epsilon_r = 55.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ETSDV6 - SN1063, ConvF(6.4, 6.4, 6.4), Calibrated: 10/10/2003  
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sn493, Calibrated: 11/25/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $\Delta x=5\text{mm}$ ,  $\Delta y=5\text{mm}$ ,  $\Delta z=5\text{mm}$ .  
 Reference Value = 20.4 V/m, Power Drift = 0.1 dB  
 Maximum value of SAR (measured) = 0.462 mW/g  
 Peak SAR (extrapolated) = 0.559 W/kg  
**SAR(1 g) = 0.433 mW/g; SAR(10 g) = 0.316 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!



Date/Time: 06/14/04 08:57:18

Test Laboratory: Kyocera

**K454L #B77P, AMPS-800 FLAT with 22.5mm Air Space Ch383**

Communication System: AMPS, Frequency: 824.04 MHz, Duty Cycle: 1:1

Medium: M900, Medium parameters used (interpolated):  $f = 824.04$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ETSDV6 - SN1063, ConvF(6.4, 6.4, 6.4), Calibrated: 10/10/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383/Zoom Scan (7x7x7)/Cube 0; Measurement grid: dx=5mm, dy=5mm, dz=5mm;**

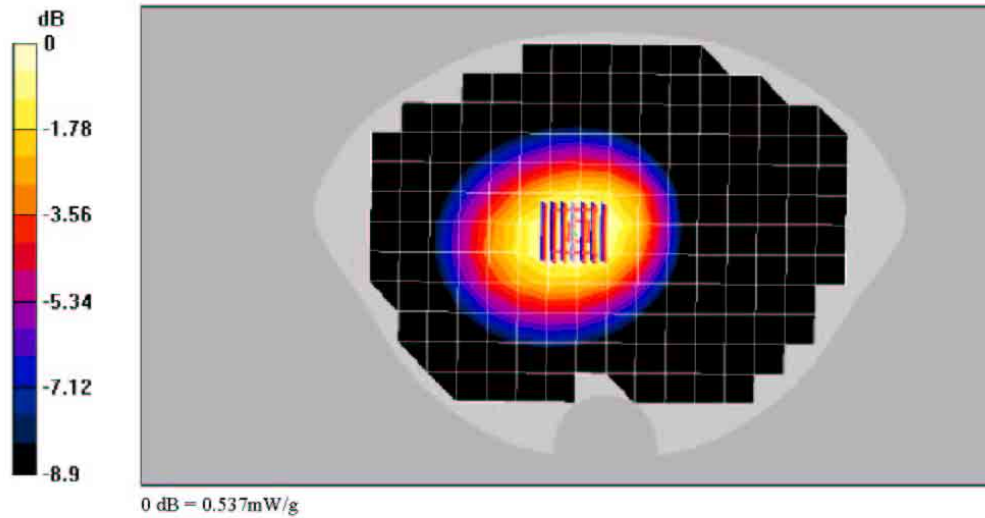
Reference Value = 22.8 V/m, Power Drift = -0.0 dB

Maximum value of SAR (measured) = 0.537 mW/g

Peak SAR (extrapolated) = 0.638 W/kg

SAR(1 g) = 0.505 mW/g; SAR(10 g) = 0.370 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



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Date/Time: 06/14/04 17:12:46

Test Laboratory: Kyocera

**K454L #B77P, AMPS ch383 Flat with Belt Clip and Backpack Clip**

Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: M900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, ConfF(6.4, 6.4, 6.4), Calibrated: 10/10/2003  
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sn493, Calibrated: 11/25/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

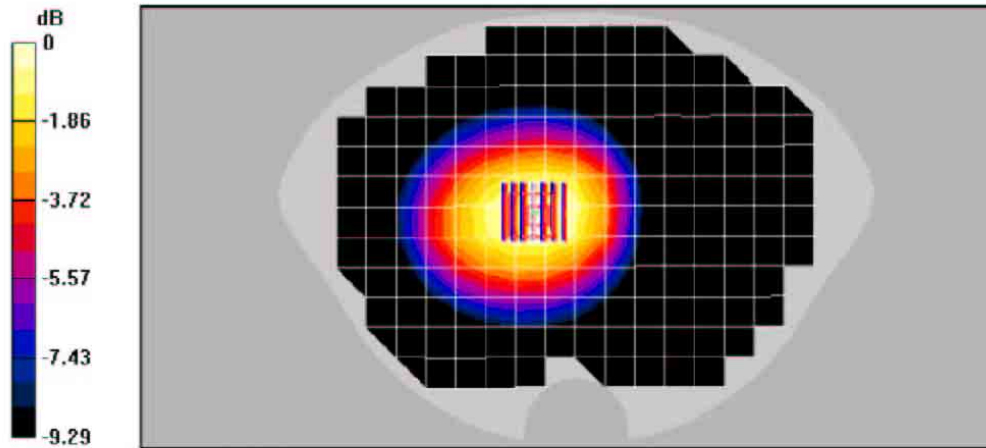
**Temperature:**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $\Delta x = 5$ mm,  $\Delta y = 5$ mm,  $\Delta z = 5$ mm

Reference Value = 22 V/m, Power DnF = -0.2 dB  
 Maximum value of SAR (measured) = 0.535 mW/g  
 Peak SAR (extrapolated) = 0.644 W/kg  
**SAR(1 g) = 0.497 mW/g; SAR(10 g) = 0.362 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!



0 dB = 0.535mW/g

Date/Time: 06/14/04 10:22:30

Test Laboratory: Kyocera

**K454L #B77P, AMPS-800 FLAT with Belt Clip Ch383**

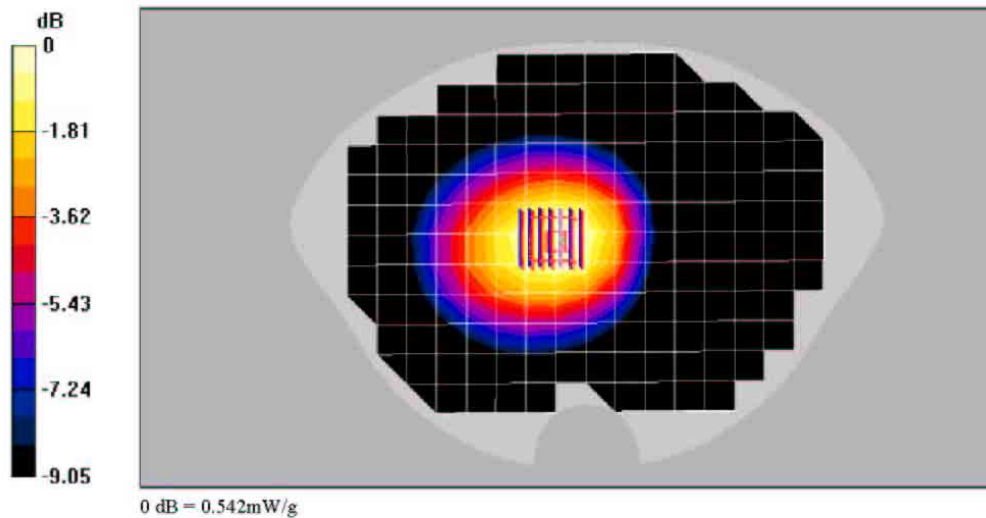
Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1  
 Medium: M900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Flat Section

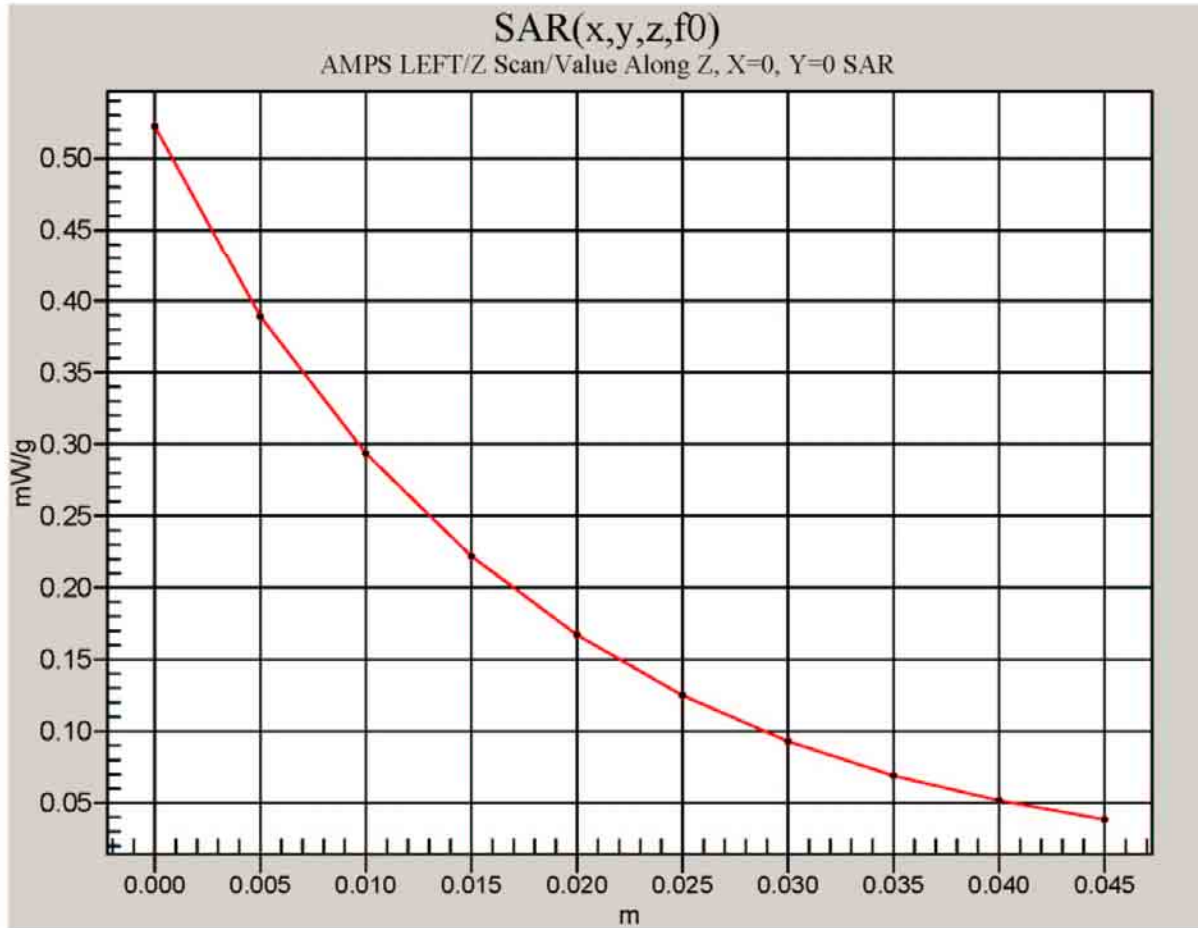
**DASY4 Configuration:**  
 Probe: ETSDV6 - SN1063, ConvF(6.4, 6.4, 6.4), Calibrated: 10/10/2003  
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sn493, Calibrated: 11/25/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $\Delta x=5$ mm,  $\Delta y=5$ mm,  $\Delta z=5$ mm.  
 Reference Value = 22.9 V/m, Power Drift = -0.0 dB  
 Maximum value of SAR (measured) = 0.542 mW/g  
 Peak SAR (extrapolated) = 0.662 W/kg  
**SAR(1 g) = 0.512 mW/g; SAR(10 g) = 0.371 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!





Date/Time: 06/14/04 14:19:53

Test Laboratory: Kyocera

**K454L #B77P, AMPS ch383 Flat with Leather Case and Backpack Clip**

Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: M900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, ConfF(6.4, 6.4, 6.4), Calibrated: 10/10/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $\Delta x = 5$ mm,  $\Delta y = 5$ mm,  $\Delta z = 5$ mm

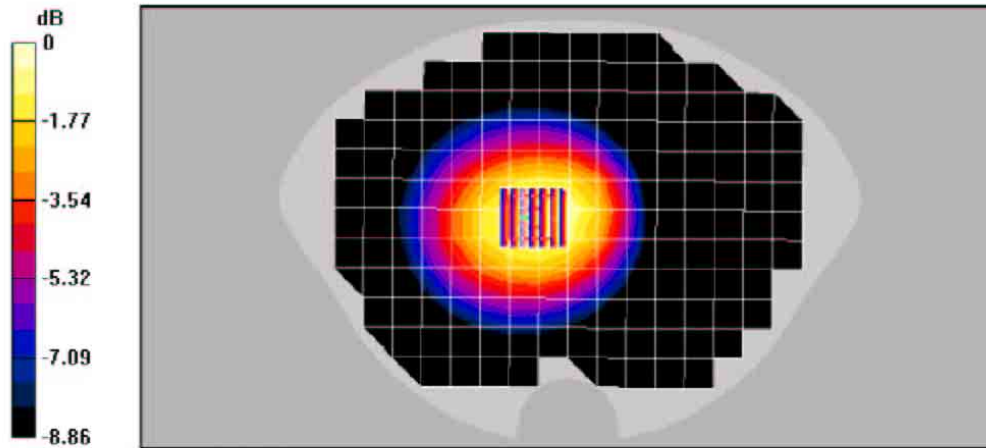
Reference Value = 20.9 V/m, Power Drift = 0.0 dB

Maximum value of SAR (measured) = 0.454 mW/g

Peak SAR (extrapolated) = 0.545 W/kg

SAR(1 g) = 0.424 mW/g; SAR(10 g) = 0.310 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



0 dB = 0.454mW/g



Date/Time: 06/14/04 13:43:29

Test Laboratory: Kyocera

**K454L #B77Q, AMPS-800 FLAT with Leather Case Ch383**

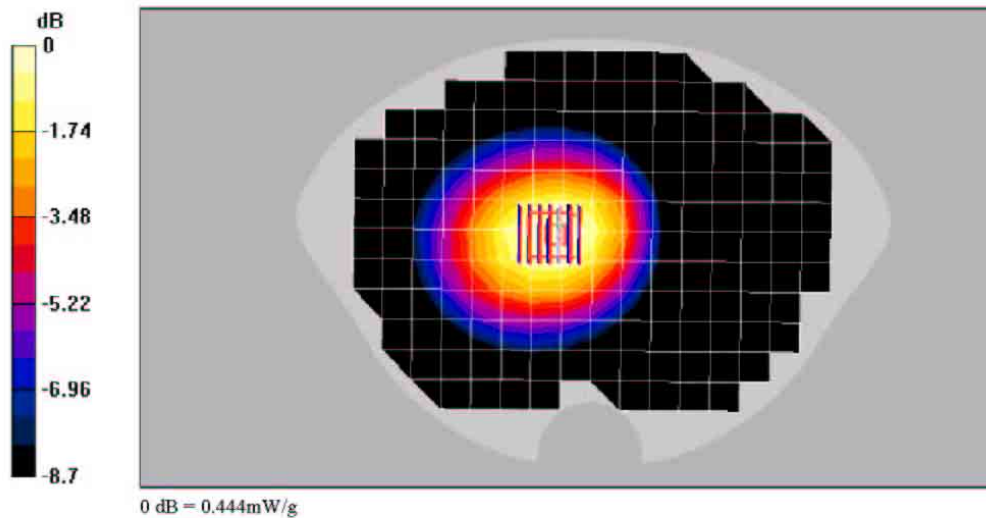
Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1  
 Medium: M900, Medium parameters used (interpolated):  $f = 836.49 \text{ MHz}$ ;  $\sigma = 0.981 \text{ mho/m}$ ;  $\epsilon_r = 55.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ETSDV6 - SN1063, ConvF(6.4, 6.4, 6.4), Calibrated: 10/10/2003  
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sn493, Calibrated: 11/25/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $\Delta x=5\text{mm}$ ,  $\Delta y=5\text{mm}$ ,  $\Delta z=5\text{mm}$ .  
 Reference Value = 19.7 V/m, Power Drift = -0.0 dB  
 Maximum value of SAR (measured) = 0.444 mW/g  
 Peak SAR (extrapolated) = 0.547 W/kg  
**SAR(1 g) = 0.421 mW/g; SAR(10 g) = 0.309 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!





Date/Time: 06/01/04 14:37:33

Test Laboratory: Kyocera

**K454L #B77Q, AMPS ch383 Left Tilt**

Communication System: AMPS, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: HSL900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.901$  mho/m;  $\epsilon_r = 40.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, ConfF(6.7, 6.7, 6.7), Calibrated: 10/10/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**AMPS Ch383 LT/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

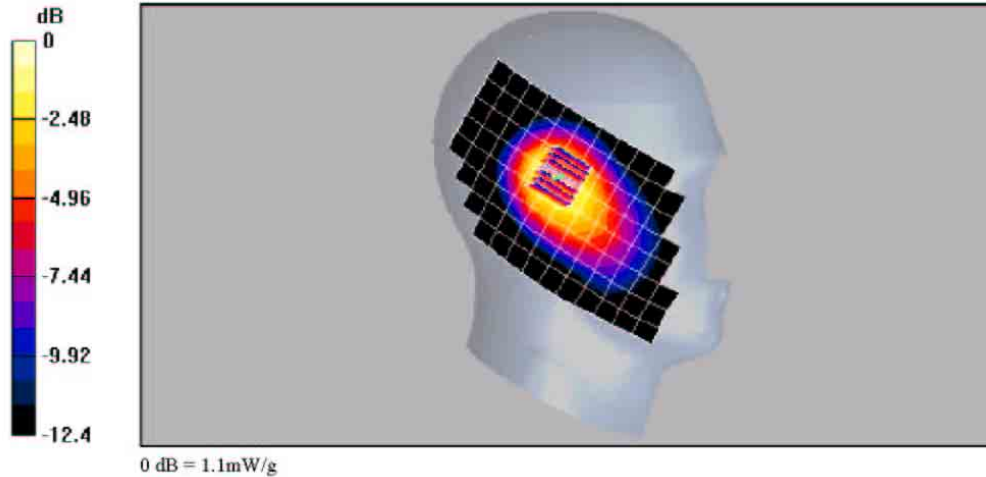
Reference Value = 33.1 V/m, Power Drift = 0.3 dB

Maximum value of SAR (measured) = 1.1 mW/g

Peak SAR (extrapolated) = 1.46 W/kg

**SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.675 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!



## **Section 2**

### **CDMA 1900**

Date/Time: 06/03/04 09:05:36

Test Laboratory: Kyocera

**K454L #B77P, CDMA-1900 Flat with 22.5mm Air Space and Backpack Clip Ch600**

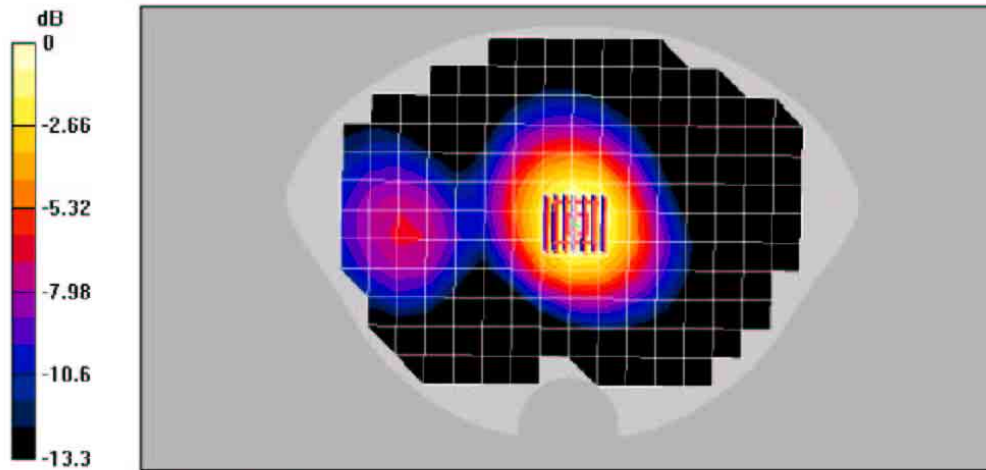
Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1  
 Medium: M1800, Medium parameters used:  $f = 1880$  MHz,  $\sigma = 1.5$  mho/m,  $\epsilon_r = 54.2$ ,  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated: Probe not calibrated  
 Sensor: Surface 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sa530, Calibrated: 12/22/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-1900 Ch600/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.5 V/m; Power Drift = -0.0 dB  
 Maximum value of SAR (measured) = 0.378 mW/g  
 Peak SAR (extrapolated) = 0.559 W/kg  
 SAR(1 g) = 0.354 mW/g; SAR(10 g) = 0.226 mW/g



0 dB = 0.378mW/g

Date/Time: 06/03/04 13:43:06

Test Laboratory: Kyocera

**K454L #B77P, CDMA-1900 Flat with 22.5mm Air Space Ch600**

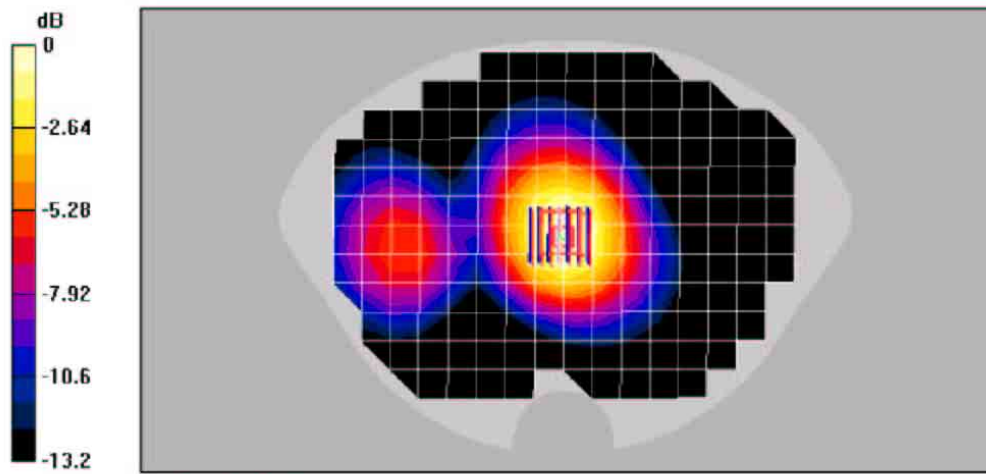
Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1  
 Medium: M1800, Medium parameters used:  $f = 1880$  MHz,  $\sigma = 1.5$  mho/m,  $\epsilon_r = 54.2$ ,  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated: Probe not calibrated  
 Sensor: Surface 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sa530, Calibrated: 12/22/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-1900 Ch600/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.9 V/m; Power Drift = -0.1 dB  
 Maximum value of SAR (measured) = 0.337 mW/g  
 Peak SAR (extrapolated) = 0.505 W/kg  
 SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.202 mW/g



0 dB = 0.337mW/g

Date/Time: 06/03/04 12:23:28

Test Laboratory: Kyocera

**K454L #B77P, CDMA-1900 Flat with Belt Clip and Backpack ClipCh600**

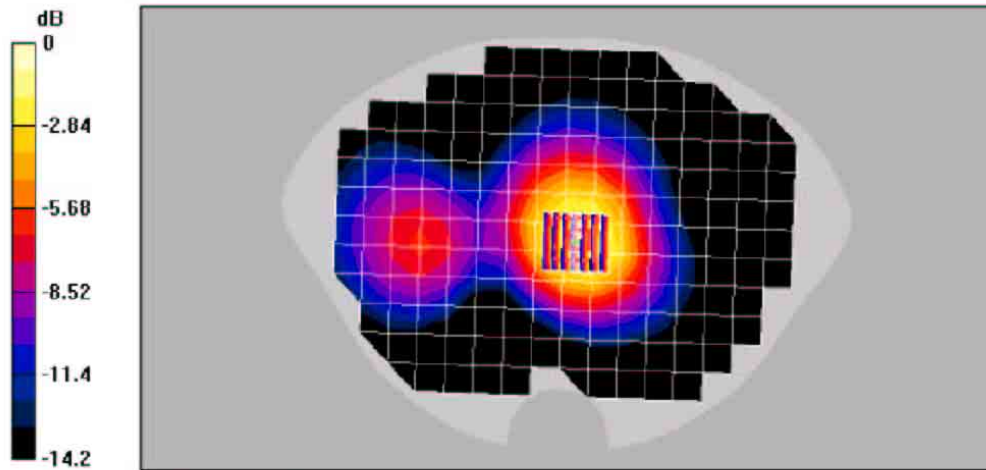
Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1  
 Medium: M1800, Medium parameters used:  $f = 1880$  MHz,  $\sigma = 1.5$  mho/m,  $\epsilon_r = 54.2$ ,  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated Probe not calibrated  
 Sensor: Surface 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sn530, Calibrated: 12/22/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-1900 Ch600/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.6 V/m; Power Drift = -0.2 dB  
 Maximum value of SAR (measured) = 0.453 mW/g  
 Peak SAR (extrapolated) = 0.633 W/kg  
 SAR(1 g) = 0.417 mW/g; SAR(10 g) = 0.257 mW/g



0 dB = 0.453mW/g

Date/Time: 06/03/04 17:59:16

Test Laboratory: Kyocera

**K434L #B77P, CDMA-1900 Flat, with Belt Clip Ch600**

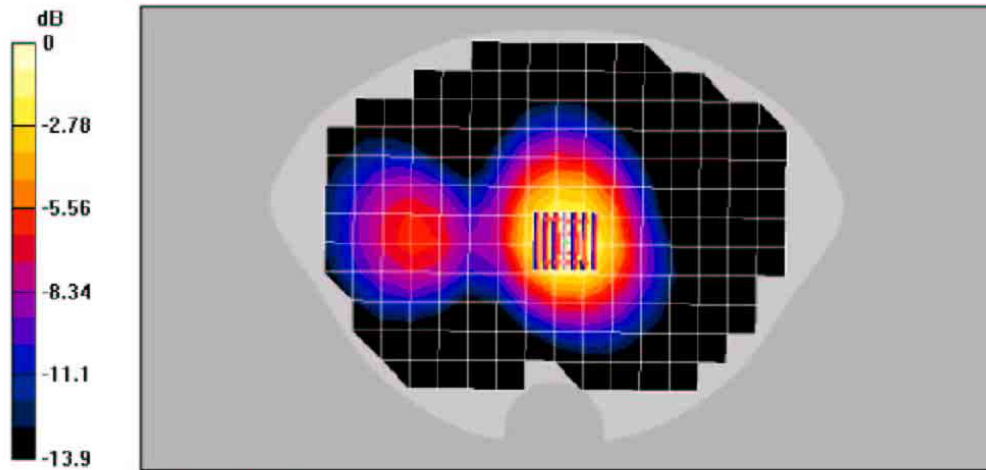
Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1  
 Medium: M1800, Medium parameters used:  $f = 1880$  MHz,  $\sigma = 1.5$  mho/m,  $\epsilon_r = 54.2$ ,  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1712, ConvF(5, 5), Calibrated: Probe not calibrated  
 Sensor: Surface 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sa530, Calibrated: 12/22/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-1900 Ch600/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.2 V/m; Power Drift = -0.0 dB  
 Maximum value of SAR (measured) = 0.429 mW/g  
 Peak SAR (extrapolated) = 0.653 W/kg  
 SAR(1 g) = 0.399 mW/g; SAR(10 g) = 0.247 mW/g



0 dB = 0.429mW/g

Date/Time: 06/03/04 13:08:50

Test Laboratory: Kyocera

**K454L #B77P, CDMA-1900 Flat with Leather Case and Backpack Clip Ch600**

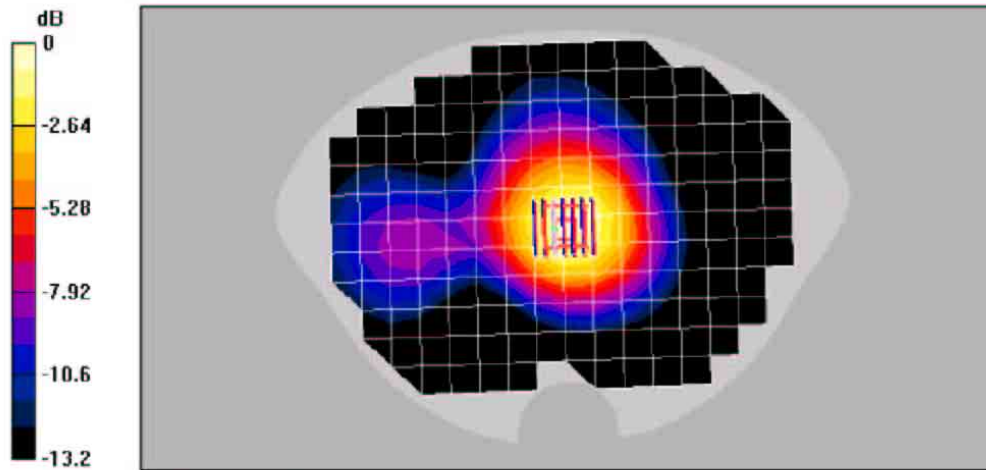
Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1  
 Medium: M1800, Medium parameters used:  $f = 1880$  MHz,  $\sigma = 1.5$  mho/m,  $\epsilon_r = 54.2$ ,  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated: Probe not calibrated  
 Sensor: Surface 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sa530, Calibrated: 12/22/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-1900 Ch600/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.1 V/m; Power Drift = -0.1 dB  
 Maximum value of SAR (measured) = 0.303 mW/g  
 Peak SAR (extrapolated) = 0.462 W/kg  
 SAR(1 g) = 0.254 mW/g; SAR(10 g) = 0.177 mW/g



0 dB = 0.303mW/g

Date/Time: 06/03/04 16:30:19

Test Laboratory: Kyocera

**K434L #B77P, CDMA-1900 Flat, with Leather Case Ch600**

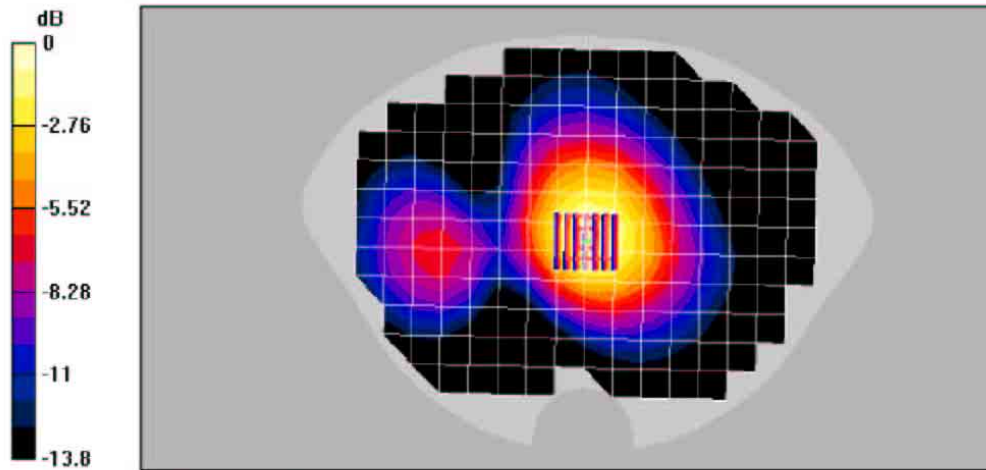
Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1  
 Medium: M1800, Medium parameters used:  $f = 1880$  MHz,  $\sigma = 1.5$  mho/m,  $\epsilon_r = 54.2$ ,  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated: Probe not calibrated  
 Sensor: Surface 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sa530, Calibrated: 12/22/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-1900 Ch600/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.1 V/m, Power Drift = -0.1 dB  
 Maximum value of SAR (measured) = 0.302 mW/g  
 Peak SAR (extrapolated) = 0.462 W/kg  
 SAR(1 g) = 0.252 mW/g; SAR(10 g) = 0.176 mW/g



0 dB = 0.302mW/g



Date/Time: 06/03/04 12:23:28

Test Laboratory: Kyocera

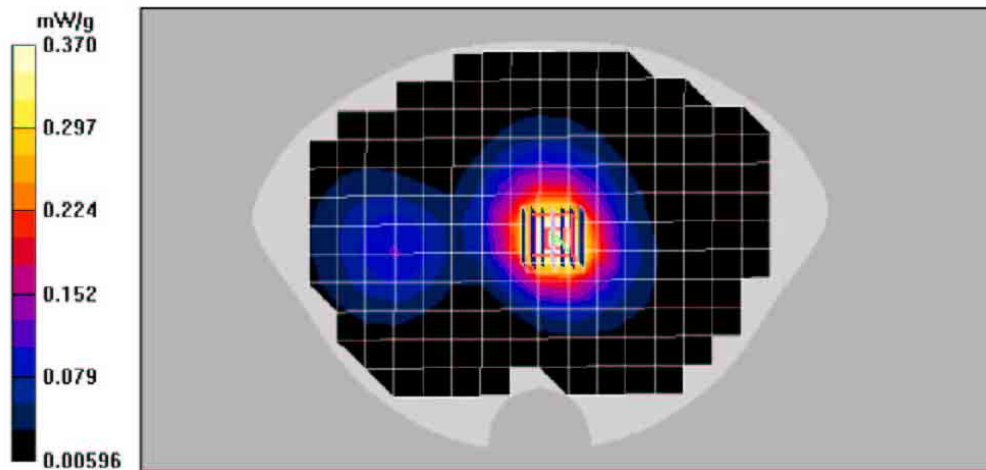
**K454L #B77P, CDMA-1900 Flat Z-Scan with Belt Clip and Backpack Clip Ch600**

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1  
 Medium: M1800, Medium parameters used:  $f = 1880$  MHz,  $\sigma = 1.5$  mho/m,  $\epsilon_r = 54.2$ ,  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated Probe not calibrated  
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)  
 Sensor-Surface: 0mm (Fix Surface)  
 Electronics: DAE3 Sn530, Calibrated: 12/22/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.3 Build 112

**Temperature**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-1900 Ch600/Z Scan (1x1x11):** Measurement grid: dx=20mm, dy=20mm, dz=5mm  
 Reference Value = 17.6 V/m, Power Dn fit = -0.2 dB  
 Maximum value of SAR (measured) = 0.370 mW/g



Date/Time: 06/07/04 14:25:03

Test Laboratory: Kyocera

**K494L #B77P, CDMA-1900 Left Cheek Ch600**

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: Head 1900 MHz, Medium parameters used:  $f = 1880 \text{ MHz}$ ,  $\sigma = 1.38 \text{ mho/m}$ ,  $\epsilon_r = 39.5$ ,  $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003

Sensor: Surface 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

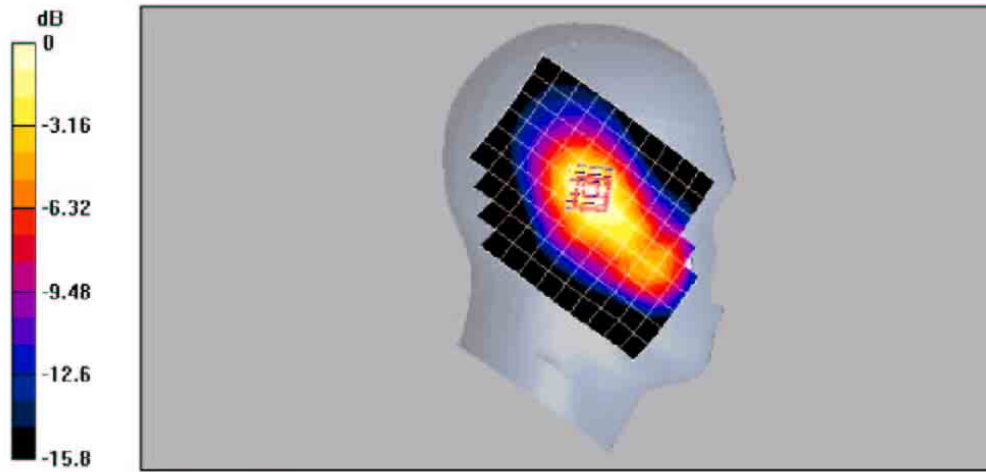
**600 LC/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.6 V/m, Power Drift = -0.2 dB

Maximum value of SAR (measured) = 1.1 mW/g

Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.615 mW/g



0 dB = 1.1mW/g

Date/Time: 06/07/04 14:25:03

Test Laboratory: Kyocera

**K494L #B77P, CDMA-1900 Left Tilt Z-Scan Ch600**

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: Head 1900 MHz, Medium parameters used:  $f = 1880$  MHz,  $\sigma = 1.38$  mho/m,  $\epsilon_r = 39.5$ ,  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

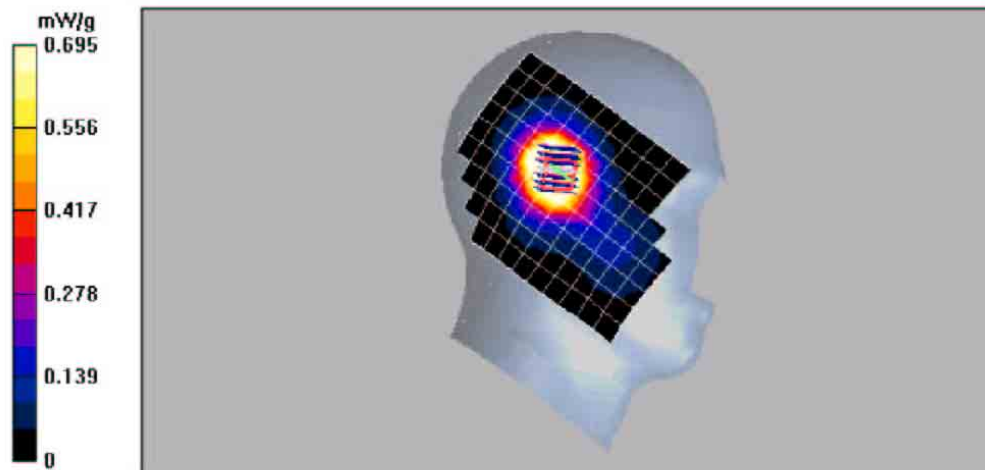
**Temperature**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**600 LT/Z Scan (1x11):** Measurement grid: dx=20mm, dy=20mm, dz=5mm

Reference Value = 29.1 V/m, Power DnB = -0.2 dB

Maximum value of SAR (measured) = 0.695 mW/g



file://C:\Dasy4\Reports\K7\K454L%20#B77Q\PCS\FCC-K494L #B77Q, CDMA-190... 6/21/2004

Date/Time: 06/07/04 14:25:03

Test Laboratory: Kyocera

**K494L #B77P, CDMA-1900 Left Tilt Ch600**

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: Head 1900 MHz, Medium parameters used:  $f = 1880 \text{ MHz}$ ,  $\sigma = 1.38 \text{ mho/m}$ ,  $\epsilon_r = 39.5$ ,  $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003

Sensor: Surface 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sa530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

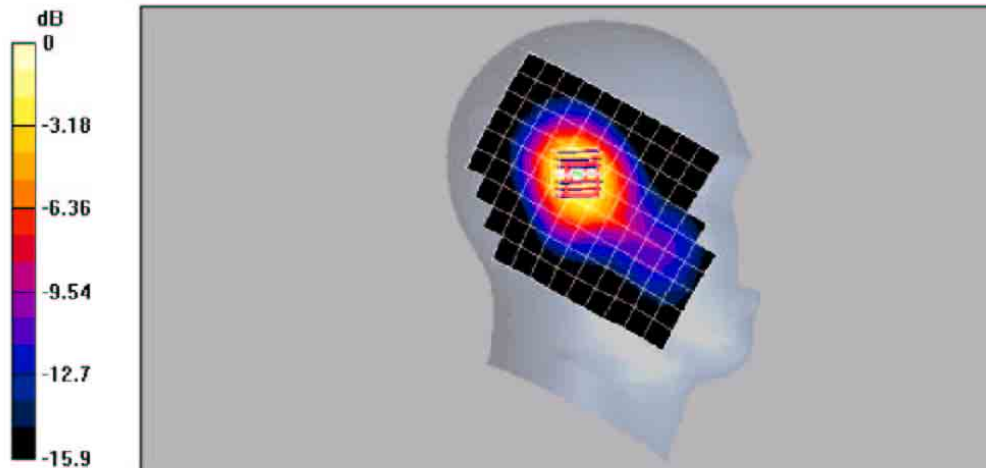
**600 LT/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.1 V/m; Power Drift = -0.2 dB

Maximum value of SAR (measured) = 1.38 mW/g

Peak SAR (extrapolated) = 2.04 W/kg

SAR(1 g) = 1.26 mW/g; SAR(10 g) = 0.732 mW/g



Date/Time: 06/07/04 14:25:08

Test Laboratory: Kyocera

**K494L #B77P, CDMA-1900 Left Tilt with Backpack Clip Ch600**

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: Head 1900 MHz, Medium parameters used:  $f = 1880$  MHz,  $\sigma = 1.38$  mho/m,  $\epsilon_r = 39.5$ ,  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003

Sensor: Surface 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

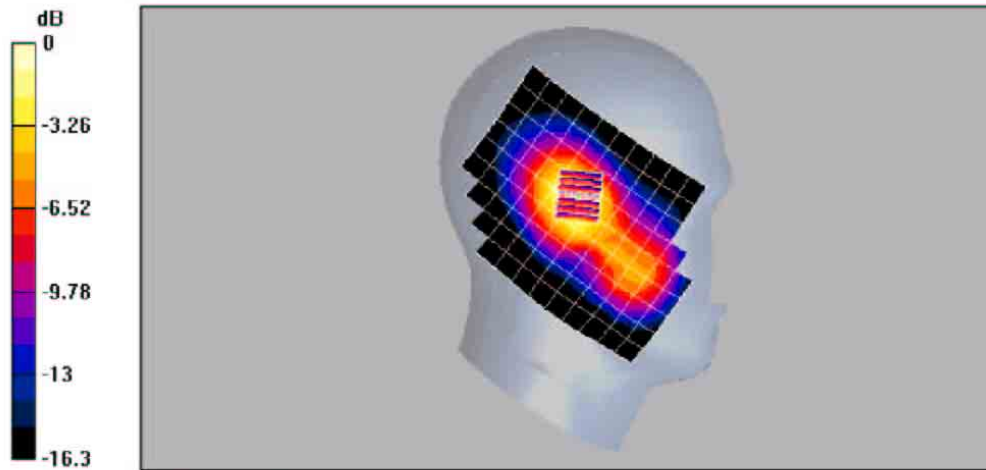
**600 LT/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.4 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 1.13 mW/g

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.617 mW/g



0 dB = 1.13mW/g

Date/Time: 06/07/04 14:24:57

Test Laboratory: Kyocera

**K454L #B77P, CDMA-1900 Right Cheek Ch1175**

Communication System: CDMA 1900, Frequency: 1909 MHz, Duty Cycle: 1:1

Medium: Head 1900 MHz, Medium parameters used (interpolated):  $f = 1909$  MHz,  $\sigma = 1.42$  mho/m;  $\epsilon_r = 39.6$ ,  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Right Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003

Sensor: Surface 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sa530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**1175 RC/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

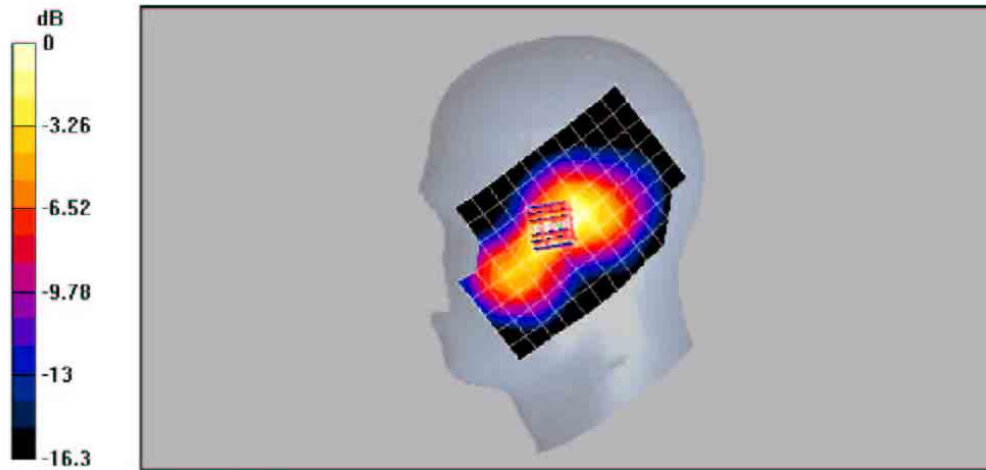
Reference Value = 25.2 V/m; Power DnB = 0.002 dB

Maximum value of SAR (measured) = 1.04 mW/g

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 0.956 mW/g; SAR(10 g) = 0.546 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



Date/Time: 06/07/04 14:24:57

Test Laboratory: Kyocera

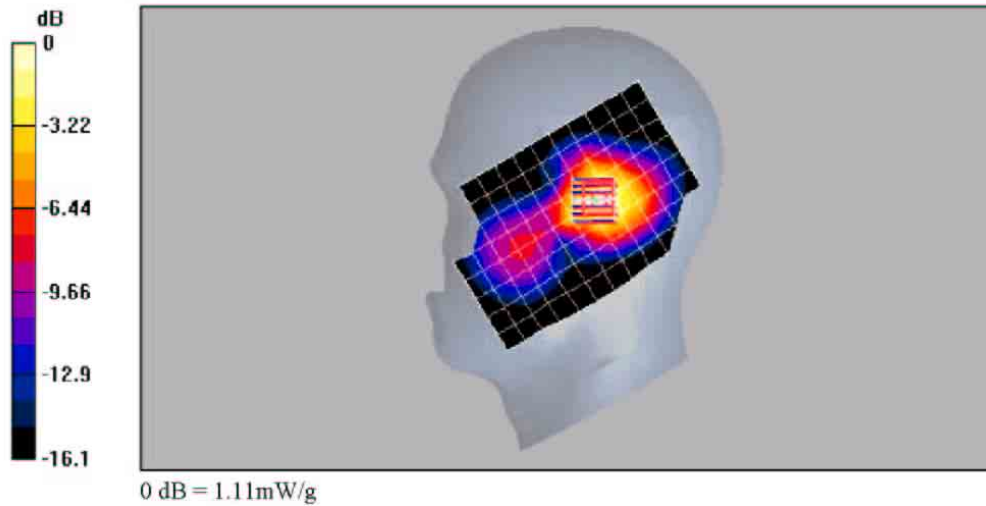
**K454L #B77P, CDMA-1900 Right Tilt Ch600**

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1  
 Medium: Head 1900 MHz, Medium parameters used:  $f = 1880 \text{ MHz}$ ,  $\sigma = 1.42 \text{ nho/m}$ ,  $\epsilon_r = 39.6$ ,  $\rho = 1000 \text{ kg/m}^3$   
 Phantom: SAM 12, Phantom section: Right Section

**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003  
 Sensor: Surface 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sa530, Calibrated: 12/22/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**600 RT/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 28.8 V/m, Power Drift = -0.0 dB  
 Maximum value of SAR (measured) = 1.11 mW/g  
 Peak SAR (extrapolated) = 1.51 W/kg  
 SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.619 mW/g



## **Section 3 CDMA 800**



Date/Time: 06/01/04 23:36:11

Test Laboratory: Kyocera

**K454LC #B77P, CDMA ch383 Left Cheek with Backpack Clip**

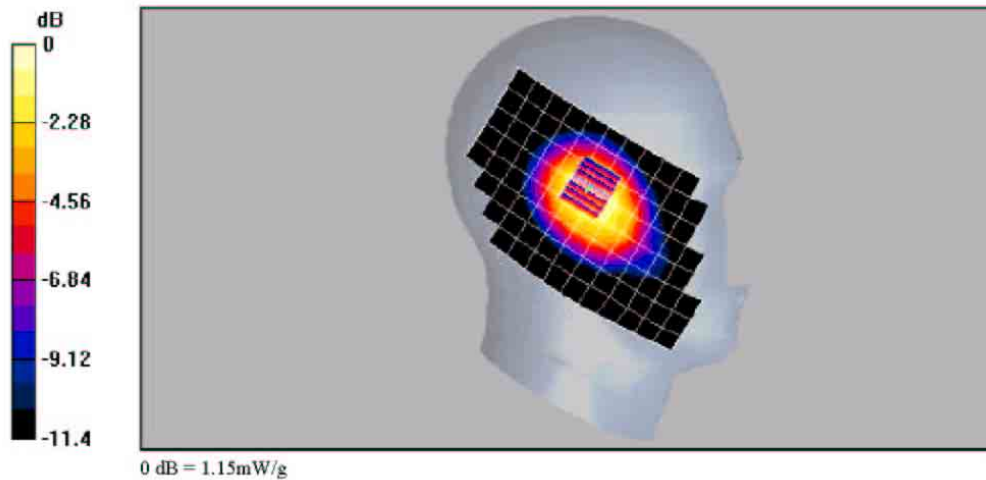
Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1  
 Medium: HSL900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.901$  nA/m;  $\epsilon_r = 40.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**  
 Probe: ETSDV6 - SN1063, ConvF(6.7, 6.7, 6.7), Calibrated: 10/10/2003  
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sn493, Calibrated: 11/25/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-800 Ch383 LC/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $\Delta x=5$ mm,  $\Delta y=5$ mm,  $\Delta z=5$ mm  
 Reference Value = 33.3 V/m, Power Drift = 0.2 dB  
 Maximum value of SAR (measured) = 1.15 mW/g  
 Peak SAR (extrapolated) = 1.53 W/kg  
**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.739 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!



Date/Time: 06/01/04 14:38:10

Test Laboratory: Kyocera

**K454LC #B77P, CDMA ch383 Left Cheek**

Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: HSL900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.901$  mho/m;  $\epsilon_r = 40.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Left Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, ConfF(6.7, 6.7, 6.7), Calibrated: 10/10/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sp493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-800 Ch383 LC/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

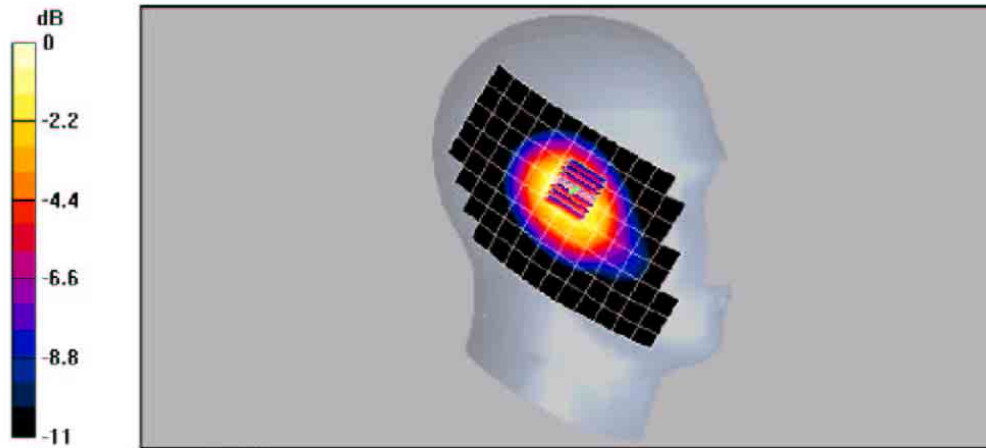
Reference Value = 33.3 V/m, Power Drift = 0.1 dB

Maximum value of SAR (measured) = 1.2 mW/g

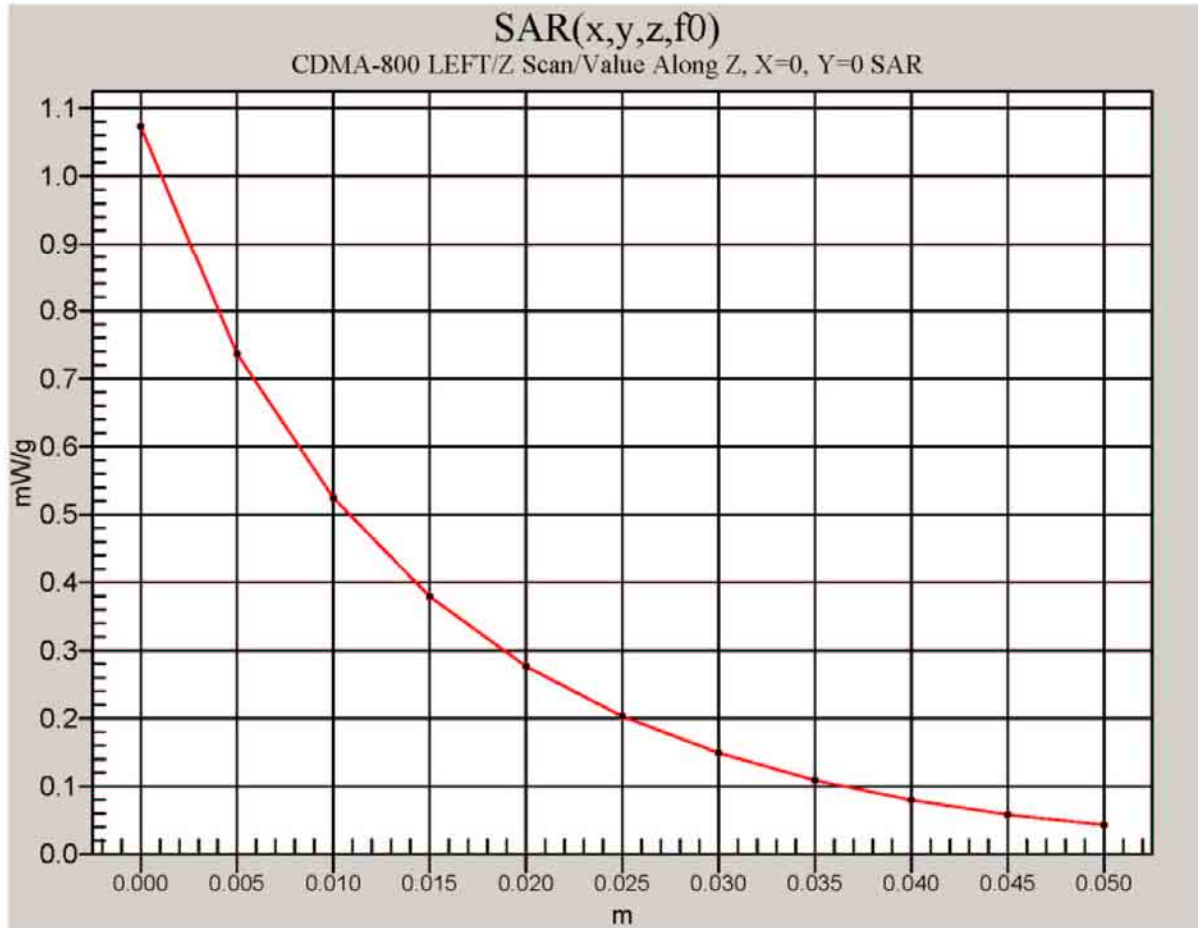
Peak SAR (extrapolated) = 1.56 W/kg

**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.767 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!



0 dB = 1.2mW/g



Test Laboratory: Kyocera

### K454LC #B77P, CDMA ch383 Left Tilt

Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: HSL900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.901$  mho/m;  $\epsilon_s = 40.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Left Section

#### DASY4 Configuration:

Probe: ET3DV6 - SN1663, Conf(6.7, 6.7, 6.7), Calibrated: 10/10/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

#### Temperature:

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

### CDMA-800 Ch383 LT/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

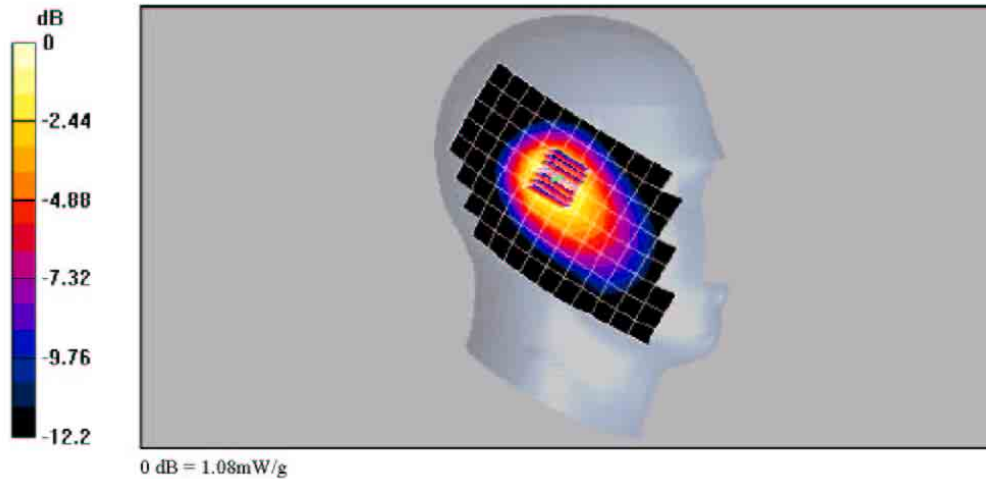
Reference Value = 33.5 V/m, Power Drift = 0.2 dB

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

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.994 mW/g; SAR(10 g) = 0.666 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



Date/Time: 06/01/04 18:43:27

Test Laboratory: Kyocera

**K454LC #B77P, CDMA ch383 Right Cheek**

Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: HSL900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.901$  mho/m;  $\epsilon_r = 40.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Right Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, Conf(6.7, 6.7, 6.7), Calibrated: 10/10/2003  
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sn493, Calibrated: 11/25/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

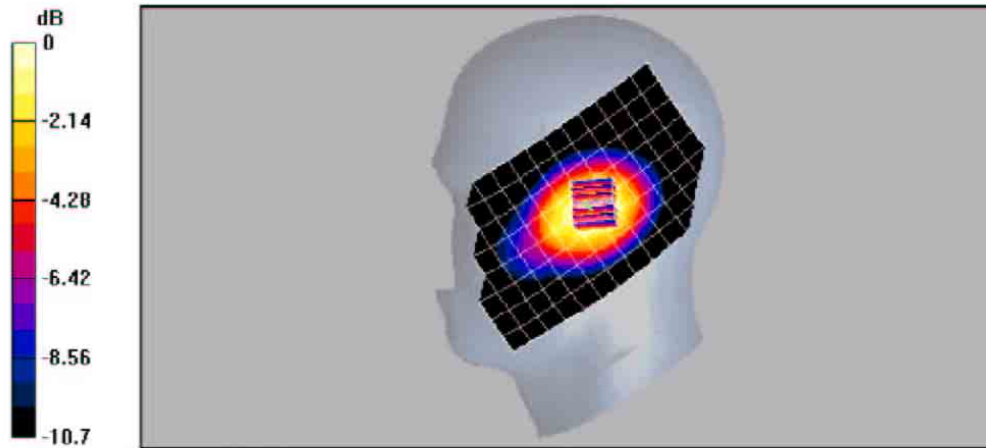
**Temperature:**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-800 Ch383 RC/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.9 V/m, Power Drift = -0.1 dB  
 Maximum value of SAR (measured) = 0.970 mW/g  
 Peak SAR (extrapolated) = 1.17 W/kg  
**SAR(1g) = 0.917 mW/g; SAR(10g) = 0.658 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!



0 dB = 0.970mW/g

Date/Time: 06/14/04 15:42:01

Test Laboratory: Kyocera

**K454L #B77P, CDMA ch383 Flat with 22.5mm Air Space and Backpack Clip**

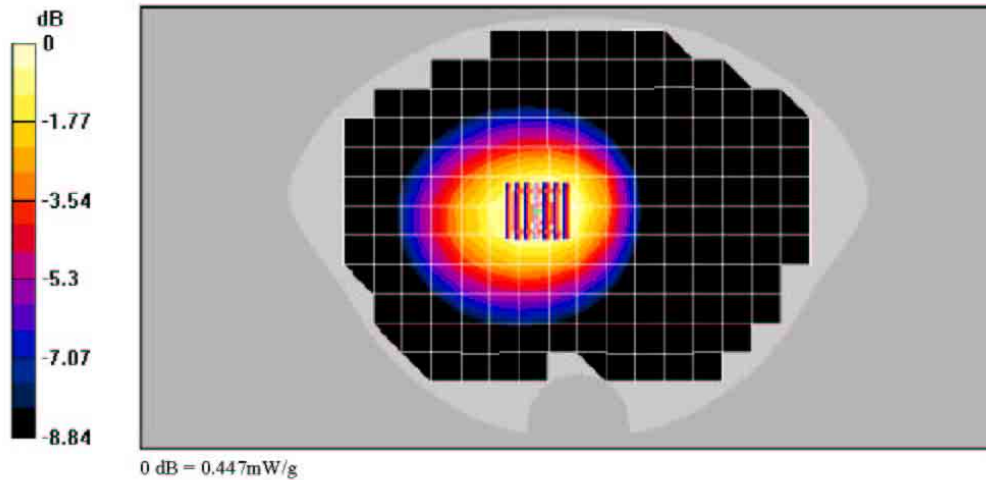
Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1  
 Medium: M900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ETSD/V6 - SN1063, ConvF(6.4, 6.4, 6.4), Calibrated: 10/10/2003  
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sn493, Calibrated: 11/25/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-800 Ch383/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $d_x=5$ mm,  $d_y=5$ mm,  $d_z=5$ mm  
 Reference Value = 20.4 V/m, Power Drift = -0.0 dB  
 Maximum value of SAR (measured) = 0.447 mW/g  
 Peak SAR (extrapolated) = 0.539 W/kg  
**SAR(1 g) = 0.423 mW/g; SAR(10 g) = 0.311 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!



Date/Time: 06/14/04 08:55:28

Test Laboratory: Kyocera

**K454L #B77P, CDMA ch383 Flat with 22.5mm Air Space**

Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: M900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ETSDV6 - SN1063, ConvF(6.4, 6.4, 6.4), Calibrated: 10/10/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-800 Ch383/Zoom Scan (7x7x7)/Cube 0: Measurement grid dx=5mm, dy=5mm, dz=5mm**

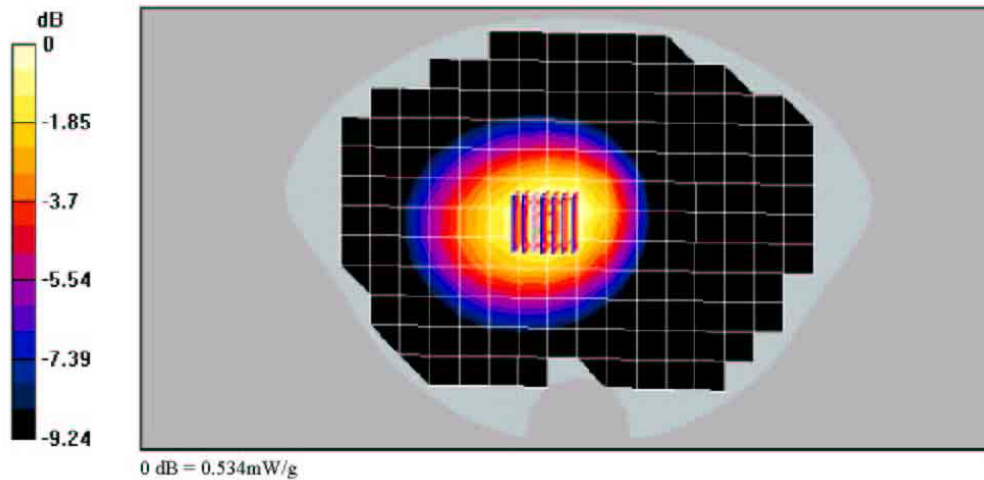
Reference Value = 22.8 V/m, Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.534 mW/g

Peak SAR (extrapolated) = 0.648 W/kg

SAR(1 g) = 0.507 mW/g; SAR(10 g) = 0.367 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



file://C:\Dasy4\Reports\K7\K454L%20#B77Q\CDMA\FCC-K454L #B77Q, CDMA-8... 6/23/2004

Date/Time: 06/14/04 19:22:46

Test Laboratory: Kyocera

### K454L #B77P, CDMA ch383 Flat with Belt Clip and Backpack Clip

Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: M900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom: SAM 12, Phantom section: Flat Section

#### DASY4 Configuration:

Probe: ET3DV6 - SN1663, ConfF(6.4, 6.4, 6.4), Calibrated: 10/10/2003  
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
Electronics: DAE3 Sn493, Calibrated: 11/25/2003  
Measurement SW: DASY4, V4.2 Build 44  
Postprocessing SW: SEMCAD, V1.8 Build 112

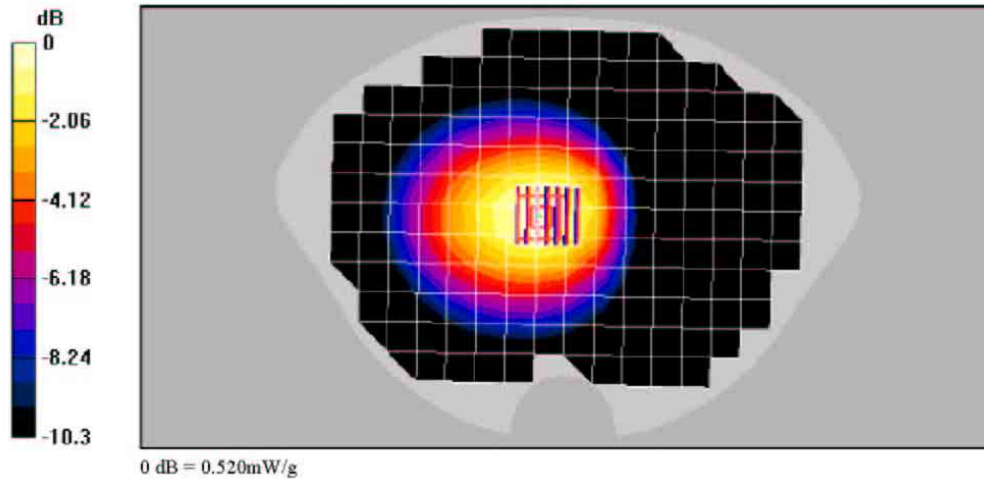
#### Temperature:

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

#### CDMA-800 Ch383/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.9 V/m, Power Drift = -0.0 dB  
Maximum value of SAR (measured) = 0.520 mW/g  
Peak SAR (extrapolated) = 0.639 W/kg  
SAR(1 g) = 0.489 mW/g; SAR(10 g) = 0.353 mW/g

Info: Interpolated medium parameters used for SAR evaluation!





Date/Time: 06/14/04 11:01:58

Test Laboratory: Kyocera

**K454L #B77P, CDMA ch383 Flat with Belt Clip**

Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: M900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1663, ConfF(6.4, 6.4, 6.4), Calibrated: 10/10/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-800 Ch383/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

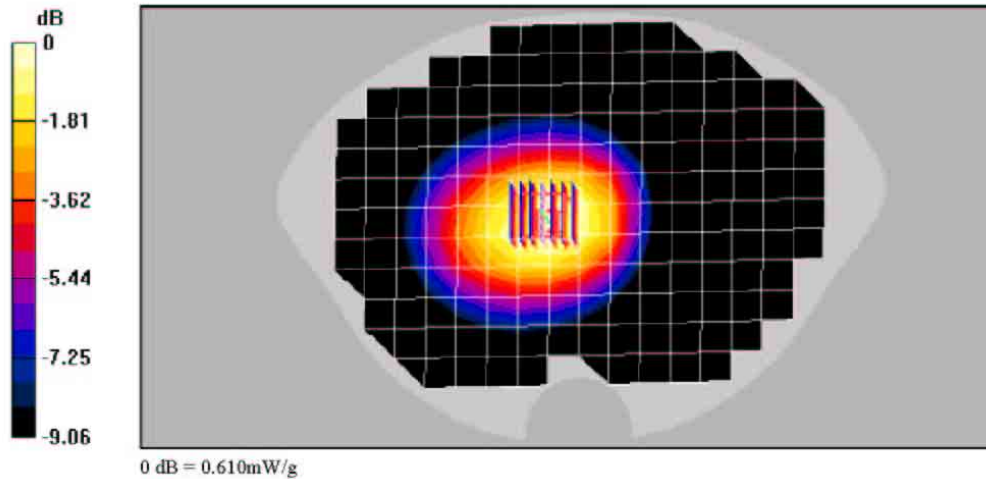
Reference Value = 24.7 V/m, Power Drift = 0.0 dB

Maximum value of SAR (measured) = 0.610 mW/g

Peak SAR (extrapolated) = 0.727 W/kg

SAR(1 g) = 0.570 mW/g; SAR(10 g) = 0.413 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



Date/Time: 06/14/04 15:05:02

Test Laboratory: Kyocera

**K454L #B77P, CDMA ch383 Flat with Leather Case and Backpack Clip**

Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: M900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ETDV6 - SN1663, ConfF(6.4, 6.4, 6.4), Calibrated: 10/10/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-800 Ch383/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

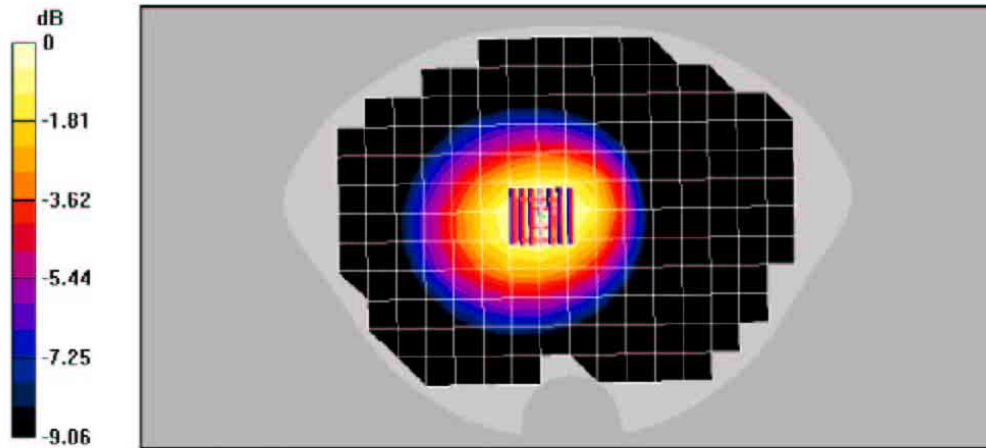
Reference Value = 21.2 V/m, Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.447 mW/g

Peak SAR (extrapolated) = 0.539 W/kg

**SAR(1 g) = 0.422 mW/g; SAR(10 g) = 0.309 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!



0 dB = 0.447mW/g

Date/Time: 06/14/04 11:41:43

Test Laboratory: Kyocera

**K454L #B77P, CDMA ch383 Flat with Leather Case**

Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1

Medium: M900, Medium parameters used (interpolated):  $f = 836.49$  MHz;  $\sigma = 0.981$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ETDV6 - SN1663, ConfF(6.4, 6.4, 6.4), Calibrated: 10/10/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493, Calibrated: 11/25/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature:**

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-800 Ch383/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

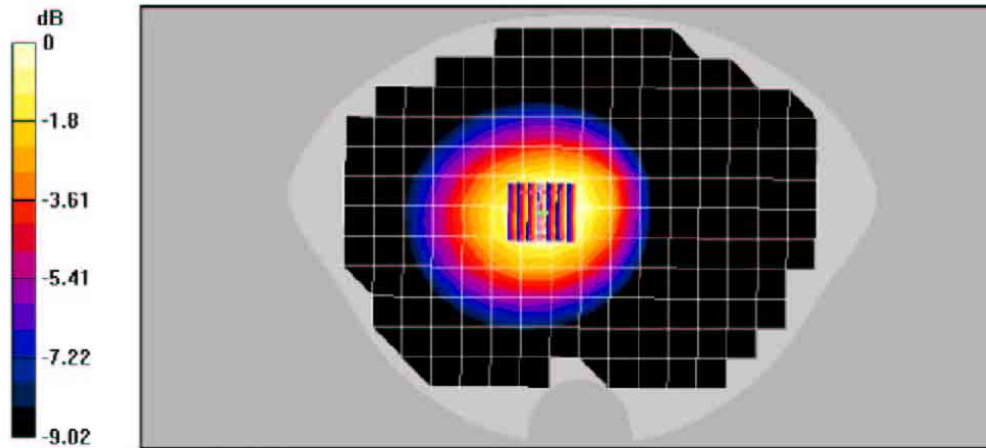
Reference Value = 20.2 V/m, Power Drift = -0.2 dB

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

Peak SAR (extrapolated) = 0.520 W/kg

**SAR(1 g) = 0.406 mW/g; SAR(10 g) = 0.296 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!



0 dB = 0.431mW/g

Date/Time: 06/23/04 10:10:48

Test Laboratory: Kyocera

**K454LC #B77P, CDMA ch383 Right Tilt**

Communication System: CDMA-800, Frequency: 836.49 MHz, Duty Cycle: 1:1  
 Medium: HSL900, Medium parameters used (interpolated):  $f = 836.49$  MHz,  $\sigma = 0.901$  mho/m,  $\epsilon_r = 40.6$ ,  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom: SAM 12, Phantom section: Right Section

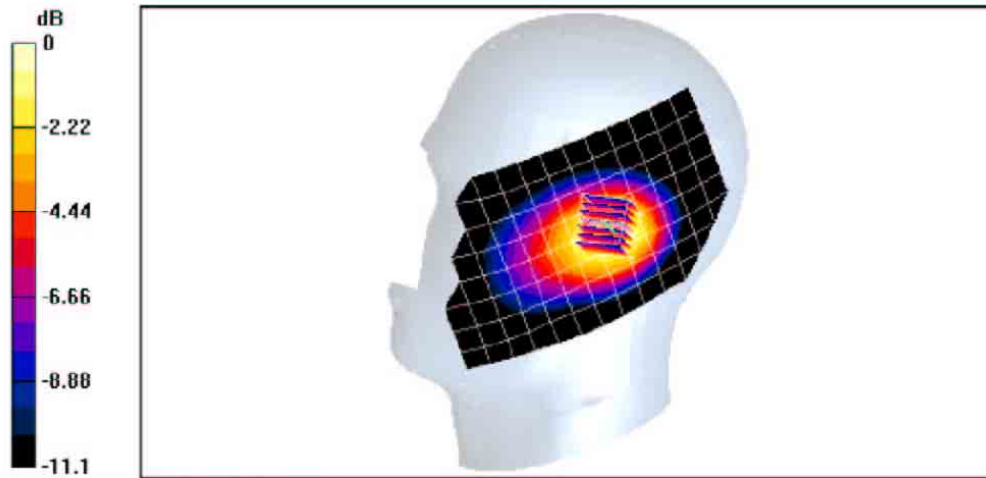
**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1663, ConvF(6.7, 6.7, 6.7), Calibrated: 10/10/2003  
 Sensor: Surface 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sn493, Calibrated: 11/25/2003  
 Measurement SW: DASY4, V4.2 Build 44  
 Postprocessing SW: SEMCAD, V1.8 Build 112

**Temperature**  
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**CDMA-800 Ch383 RT/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.7 V/m, Power Drift = 0.2 dB  
 Maximum value of SAR (measured) = 0.885 mW/g  
 Peak SAR (extrapolated) = 1.1 W/kg  
**SAR(1 g) = 0.820 mW/g; SAR(10 g) = 0.568 mW/g**

Info: Interpolated medium parameters used for SAR evaluation



0 dB = 0.885mW/g