

# **Appendix A:**

## **Validation Test Printout**

Date/Time: 11/11/04 09:21:10

Test Laboratory: Kyocera

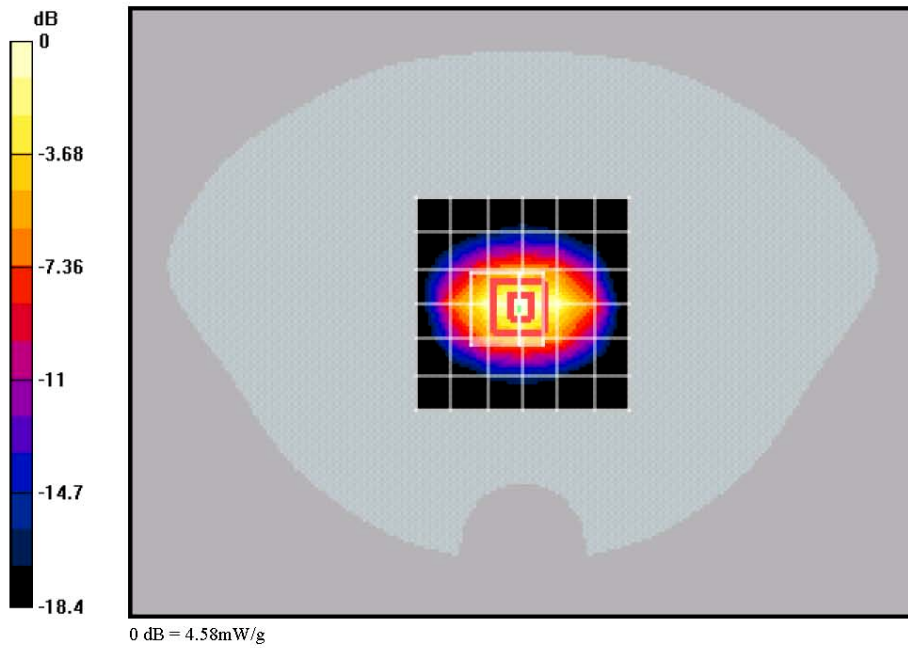
**FCC 1900MHz Validation @ 20.00dBm , Probe 1664, DAE 494, Dipole #5d003, 11-11-04**

Communication System: CW 1900, Frequency: 1900 MHz, Duty Cycle: 1:1  
 Medium: HSL1800, Medium parameters used (interpolated):  $f = 1900 \text{ MHz}$ ,  $\sigma = 1.42 \text{ mho/m}$ ,  $\epsilon_r = 39$ ,  $\rho = 1000 \text{ kg/m}^3$   
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1664, ConvF(5.43, 5.43, 5.43), Calibrated: 9/2/2004  
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
 Electronics: DAE3 Sn194, Calibrated: 3/1/2004  
 Measurement SW: DASY4, V4.4 Build 3  
 Postprocessing SW: SEMCAD, V1.8 Build 127

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

**1900Mhz/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 60 V/m, Power Dnfl = -0.0 dB  
 Peak SAR (extrapolated) = 7.02 W/kg  
 SAR(1 g) = 4.07 mW/g; SAR(10 g) = 2.16 mW/g



Date/Time: 11/12/04 08:13:02

Test Laboratory: Kyocera

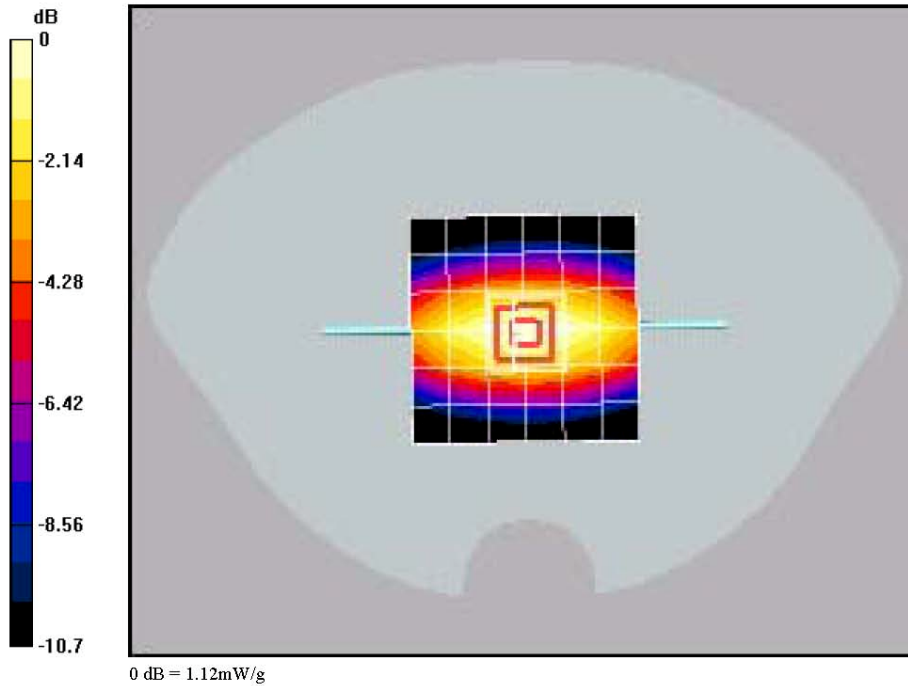
**FCC 835MHz Validation@20.00dBm, Probe#1664, DAE#494, Dipole#454, 11-12-04**

Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1  
Medium: HSL900, Medium parameters used:  $f = 835$  MHz,  $\sigma = 0.927$  mho/m,  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
Probe: ET3DV6 - SN1664, ConvF(6.56, 6.56, 6.56), Calibrated: 9/2/2004  
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
Electronics: DAE3 Sn494, Calibrated: 3/1/2004  
Measurement SW: DASY4, V4.1 Build 3  
Postprocessing SW: SEMCAD, V1.8 Build 127

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

**Validation Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 36 V/m, Power Dnfl = -0.008 dB  
Peak SAR (extrapolated) = 1.57 W/kg  
**SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.673 mW/g**



Date/Time: 11/15/04 08:06:57

Test Laboratory: Kyocera

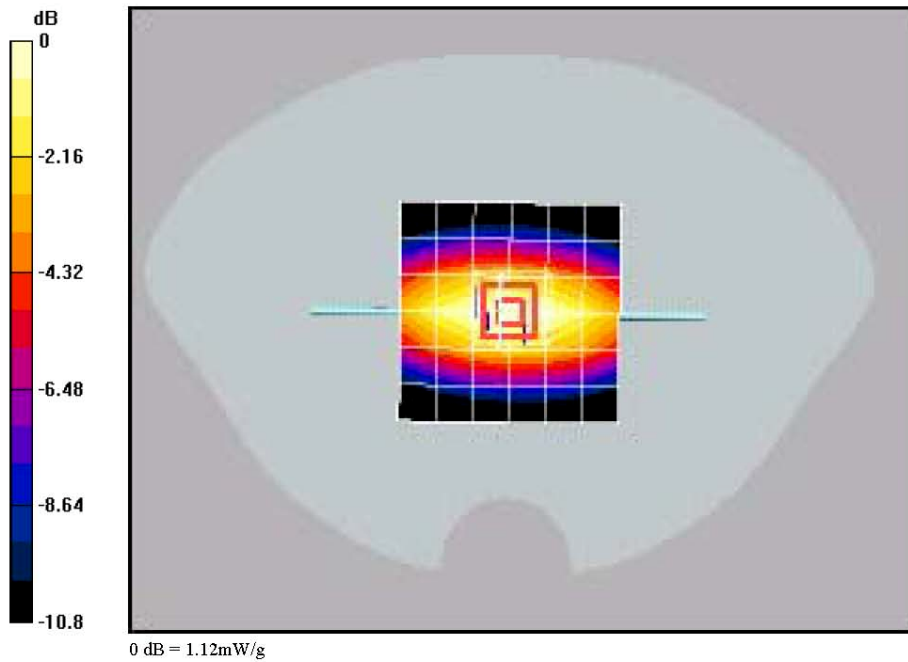
**FCC 835MHz Validation @20dBm, Probe 1664, DAE 494, Dipole #454, 11-15-04**

Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1  
Medium: HSL900, Medium parameters used:  $f = 835$  MHz,  $\sigma = 0.925$  mho/m,  $\epsilon_r = 41.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
Probe: ET3DV6 - SN1664, ConvF(6.56, 6.56, 6.56), Calibrated: 9/2/2004  
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
Electronics: DAE3 Sn494, Calibrated: 3/1/2004  
Measurement SW: DASY4, V4.1 Build 3  
Postprocessing SW: SEMCAD, V1.8 Build 127

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

**Validation Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 36 V/m, Power Dnfl = -0.0 dB  
Peak SAR (extrapolated) = 1.59 W/kg  
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.670 mW/g



Date/Time: 11/16/04 00:20:12

Test Laboratory: Kyocera

**FCC 835MHz Validation @20dBm, Probe 1664, DAE 494, Dipole #454, 11-16-04**

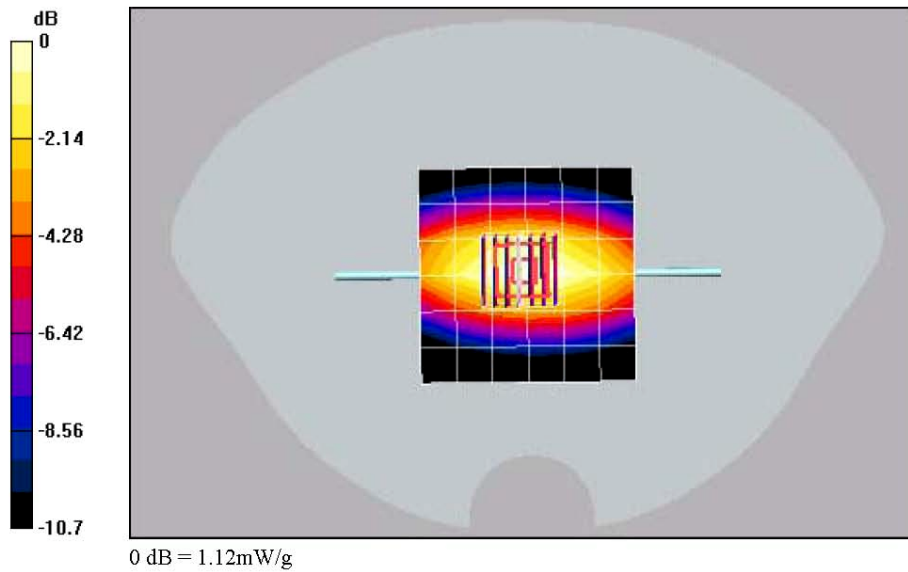
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1  
 Medium: HSL900, Medium parameters used:  $f = 835 \text{ MHz}$ ,  $\sigma = 0.922 \text{ mho/m}$ ,  $\epsilon_r = 41.3$ ,  $\rho = 1000 \text{ kg/m}^3$   
 Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**  
 Probe: ET3DV6 - SN1664, ConvF(6.56, 6.56, 6.56), Calibrated: 9/2/2004  
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection).  
 Electronics: DAE3 Sn494, Calibrated: 3/11/2004  
 Measurement SW: DASY4, V4.4 Build 3  
 Postprocessing SW: SEMCAD, V1.8 Build 130

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

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

Reference Value = 36 V/m, Power Drift = -0.0 dB  
 Peak SAR (extrapolated) = 1.56 W/kg  
**SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.065 mW/g**  
 Maximum value of SAR (measured) = 1.12 mW/g



Date/Time: 11/17/04 00:24:16

Test Laboratory: Kyocera

**FCC 1900MHz Validation @20dBm, Probe 1664, DAE 494, Dipole #5d003, 11-17-04**

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

Medium: HSL1800, Medium parameters used (interpolated):  $f = 1900$  MHz,  $\sigma = 1.38$  mho/m,  $\epsilon_r = 39.1$ ,  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12, Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1664, ConvF(5.43, 5.43, 5.43), Calibrated: 9/2/2004

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

Electronics: DAE3 Sn494, Calibrated: 3/11/2004

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 130

**Temperature**

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

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

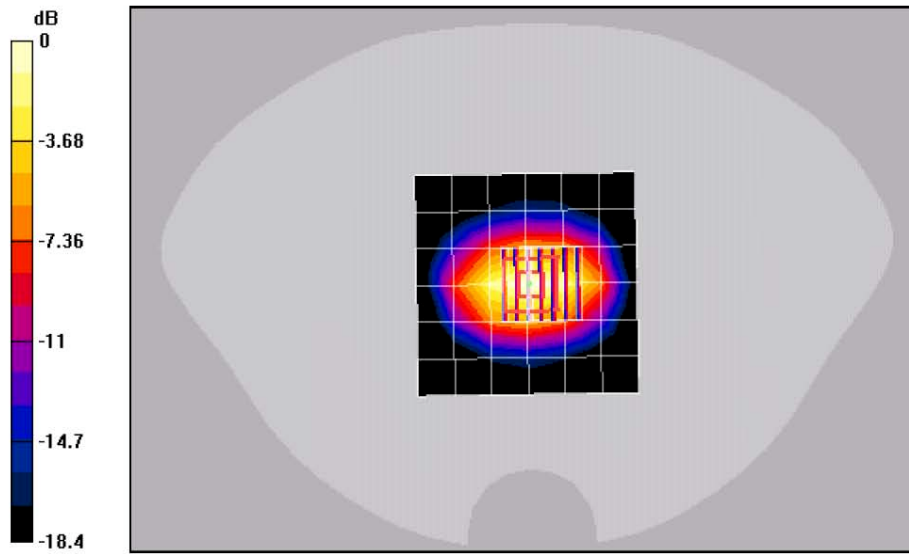
Reference Value = 60.5 V/m, Power Drift = -0.002 dB

Peak SAR (extrapolated) = 7.06 W/kg

**SAR(1 g) = 4.05 mW/g; SAR(10 g) = 2.15 mW/g**

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 4.58 mW/g



0 dB = 4.58mW/g