

## **Appendix A: Validation Test Plots**

Test Laboratory: Kyocera

## 835MHz Validation@20.00dBm, Probe#1713, DAE#602, Dipole#454, 06-21-05

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

Medium: HSL900,Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.905$  mho/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12,Phantom section: Flat Section

### DASY4 Configuration:

Probe: ET3DV6 - SN1713, ConvF(6.29, 6.29, 6.29), Calibrated: 5/19/2005

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

Electronics: DAE4 Sn602,Calibrated: 8/27/2004

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

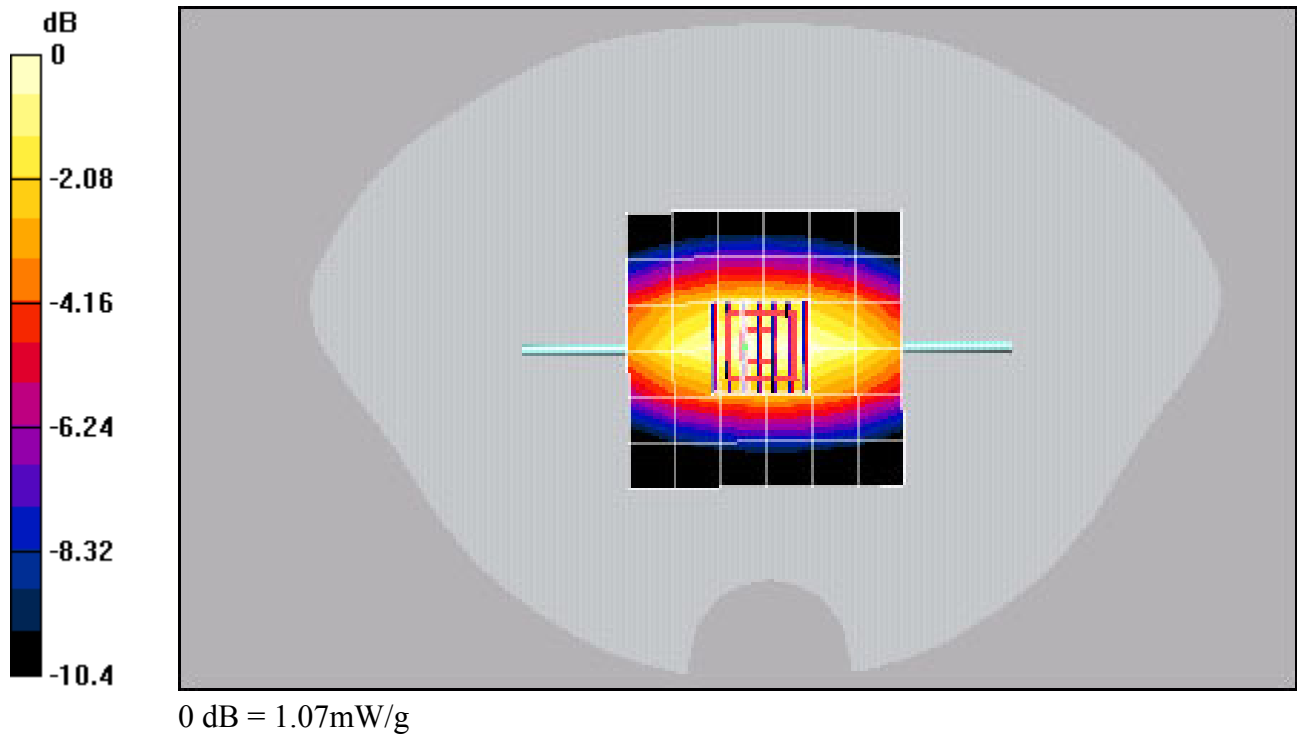
### Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.7 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.995 mW/g; SAR(10 g) = 0.650 mW/g

Maximum value of SAR (measured) = 1.07 mW/g



Test Laboratory: Kyocera

## 835MHz Validation@20.00dBm, Probe#1713, DAE#602, Dipole#454, 06-22-05

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

Medium: HSL900,Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.914$  mho/m;  $\epsilon_r = 42.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12,Phantom section: Flat Section

### DASY4 Configuration:

Probe: ET3DV6 - SN1713, ConvF(6.29, 6.29, 6.29), Calibrated: 5/19/2005

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

Electronics: DAE4 Sn602,Calibrated: 8/27/2004

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

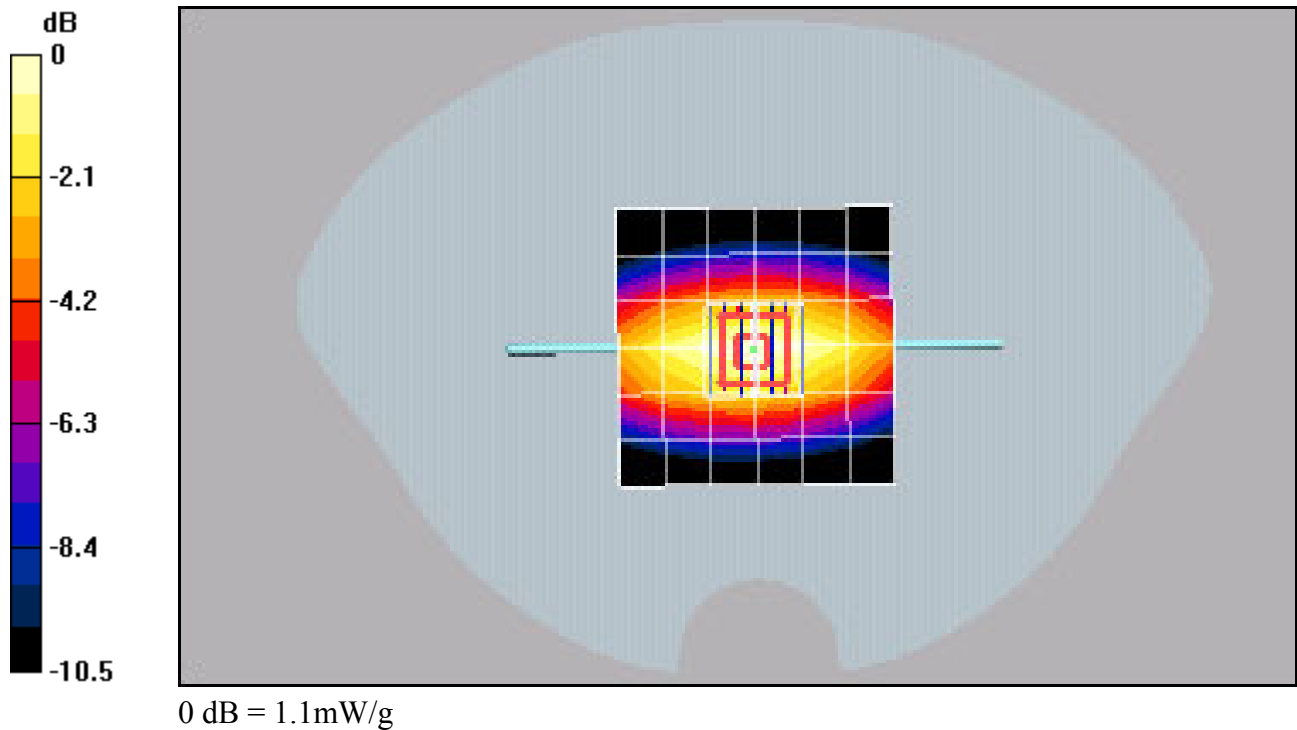
### Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.7 V/m; Power Drift = -0.0 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.659 mW/g

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



Test Laboratory: Kyocera

### 835MHz Validation @ 20.00dBm, Probe #1713, DAE #602, Dipole #454, 06-24-05

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

Medium: HSL900,Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.901$  mho/m;  $\epsilon_r = 41.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12,Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1713, ConvF(6.29, 6.29, 6.29), Calibrated: 5/19/2005

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

Electronics: DAE4 Sn602,Calibrated: 8/27/2004

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

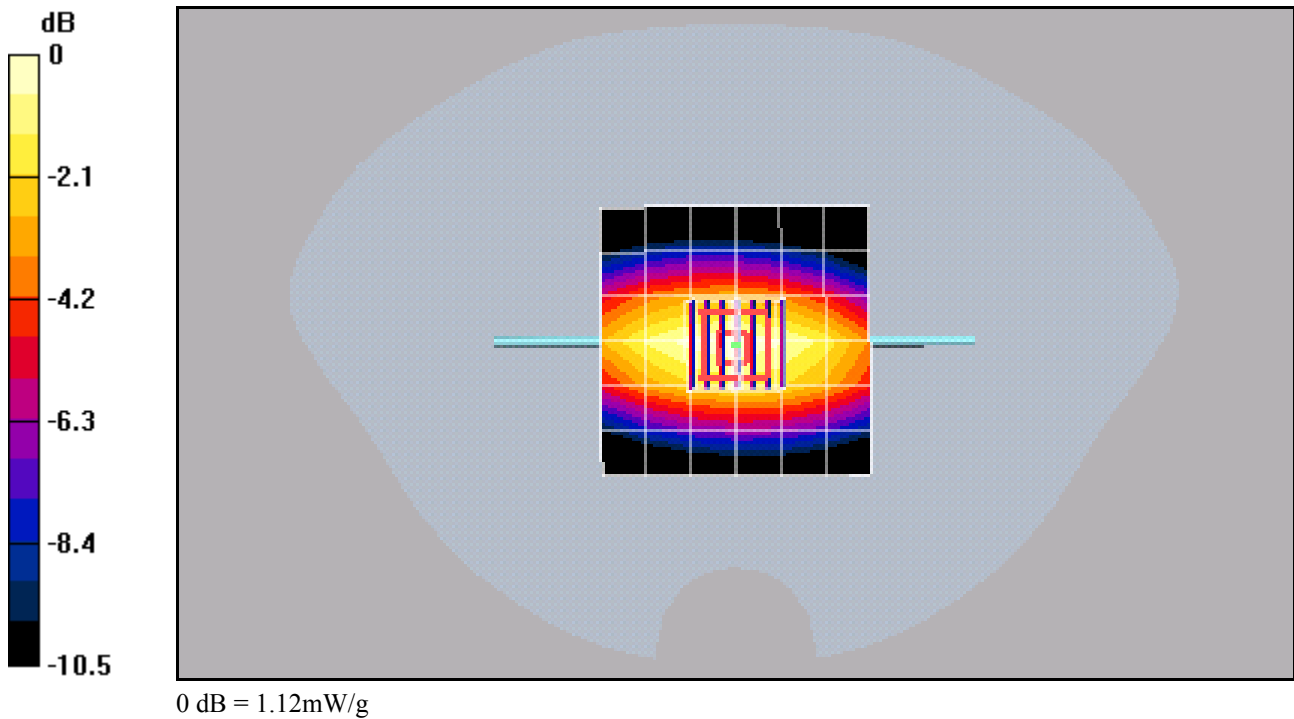
### Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.667 mW/g

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



Test Laboratory: Kyocera

### 835MHz Validation @ 20.00dBm, Probe#1713, DAE#602, Dipole #454, 06-25-05

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

Medium: HSL900,Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.903$  mho/m;  $\epsilon_r = 41.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12,Phantom section: Flat Section

#### DASY4 Configuration:

Probe: ET3DV6 - SN1713, ConvF(6.29, 6.29, 6.29), Calibrated: 5/19/2005

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

Electronics: DAE4 Sn602,Calibrated: 8/27/2004

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 130

#### Temperature:

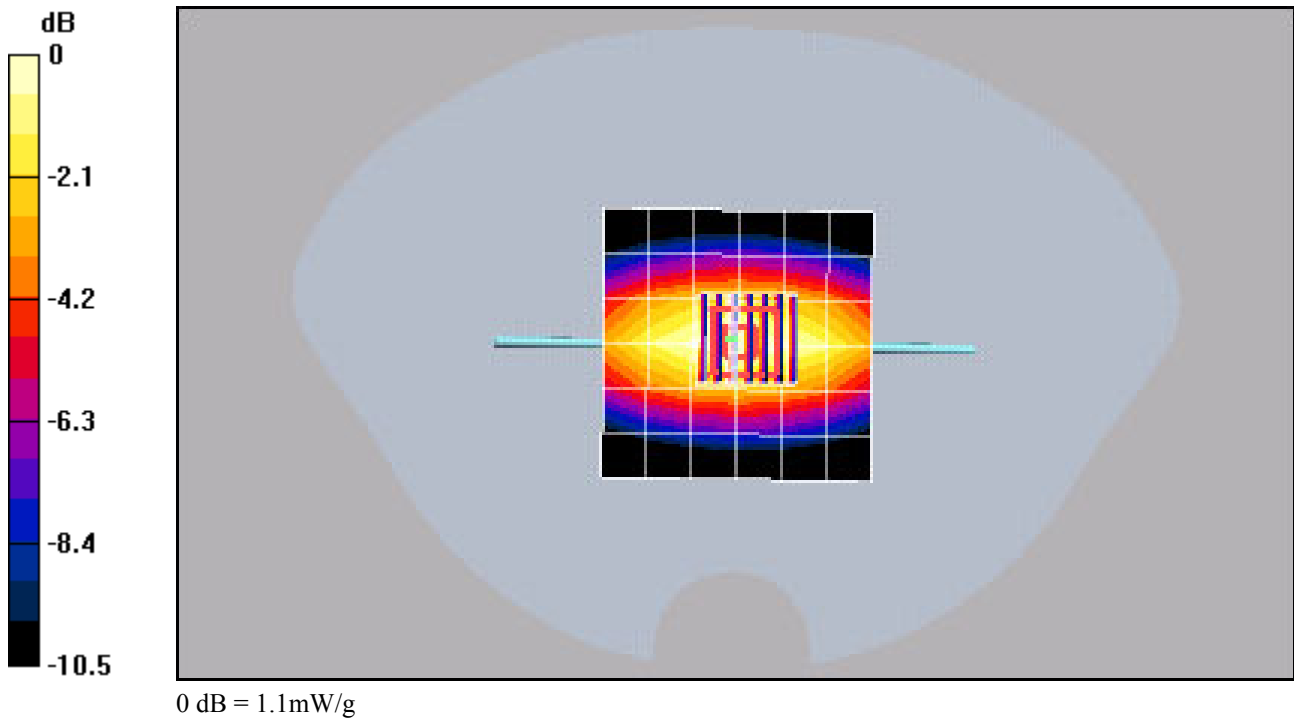
Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

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

Reference Value = 36.3 V/m; Power Drift = -0.0 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.658 mW/g



Test Laboratory: Kyocera

**1900MHz Validation@20.00dBm, Probe#1713, DAE#602, Dipole#5d005, 06-23-05**

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

Medium: HSL1800,Medium parameters used (interpolated):  $f = 1900$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 40.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12,Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1713, ConvF(5.18, 5.18, 5.18), Calibrated: 5/19/2005

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

Electronics: DAE4 Sn602,Calibrated: 8/27/2004

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 = 61.1 V/m; Power Drift = -0.0 dB

Peak SAR (extrapolated) = 7.35 W/kg

**SAR(1 g) = 4.23 mW/g; SAR(10 g) = 2.24 mW/g**

Maximum value of SAR (measured) = 4.8 mW/g

