

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

Test Laboratory: Kyocera-Wireless Corp.

### 1900Mhz Validation @ 20dBm Probe 1618, DAE 527 and Dipole 5d016

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

Medium: HSL1800,Medium parameters used (interpolated):  $f = 1900$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 41$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12,Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1618, ConvF(5.31, 5.31, 5.31), Calibrated: 9/19/2007

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

Electronics: DAE4 Sn527,Calibrated: 9/14/2007

Measurement SW: DASY4, V4.7 Build 71

Postprocessing SW: SEMCAD, V1.8 Build 176

**Temperature:**

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

### 1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

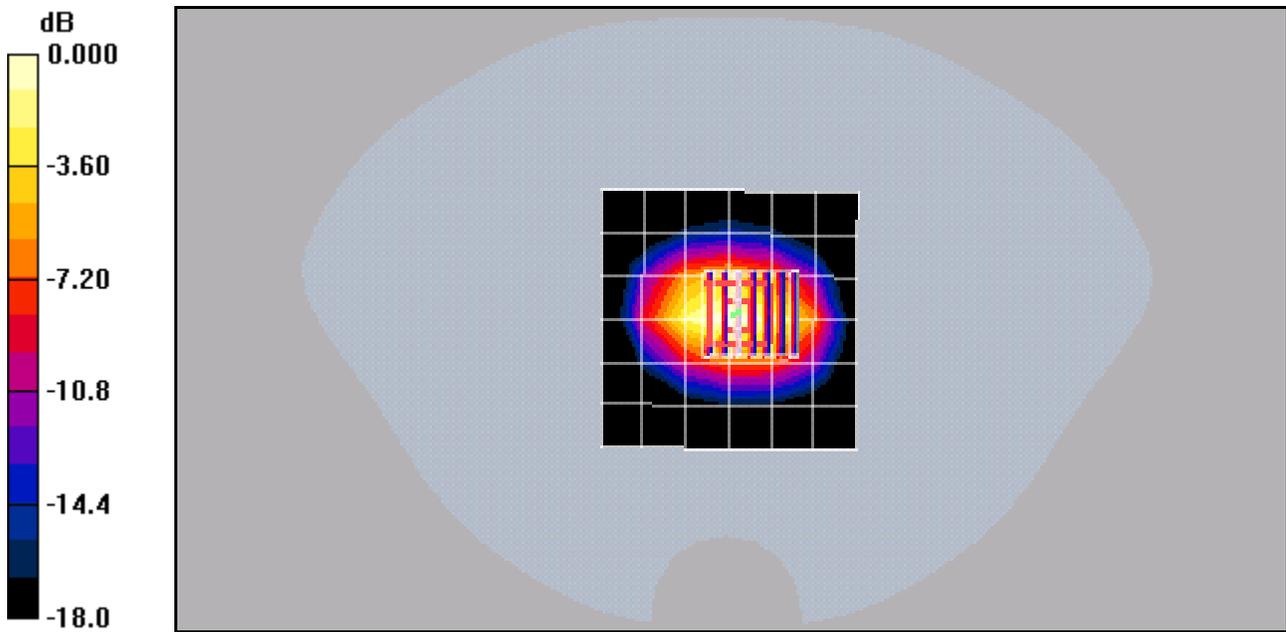
Reference Value = 57.1 V/m; Power Drift = 0.189 dB

Peak SAR (extrapolated) = 6.44 W/kg

SAR(1 g) = 3.84 mW/g; SAR(10 g) = 2.04 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.36 mW/g



0 dB = 4.36mW/g

Test Laboratory: Kyocera-Wireless Corp.

### 1900Mhz Validation (In Muscle) @ 20dBm Probe 1618, DAE 527 and Dipole 5d016

Communication System: CW, Frequency: 1800 MHz, Duty Cycle: 1:1

Medium: M1800,Medium parameters used (extrapolated):  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.53 \text{ mho/m}$ ;  $\epsilon_r = 53.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12,Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1618, ConvF(5.02, 5.02, 5.02), Calibrated: 9/19/2007

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

Electronics: DAE4 Sn527,Calibrated: 9/14/2007

Measurement SW: DASY4, V4.7 Build 71

Postprocessing SW: SEMCAD, V1.8 Build 176

**Temperature:**

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

### 1800MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

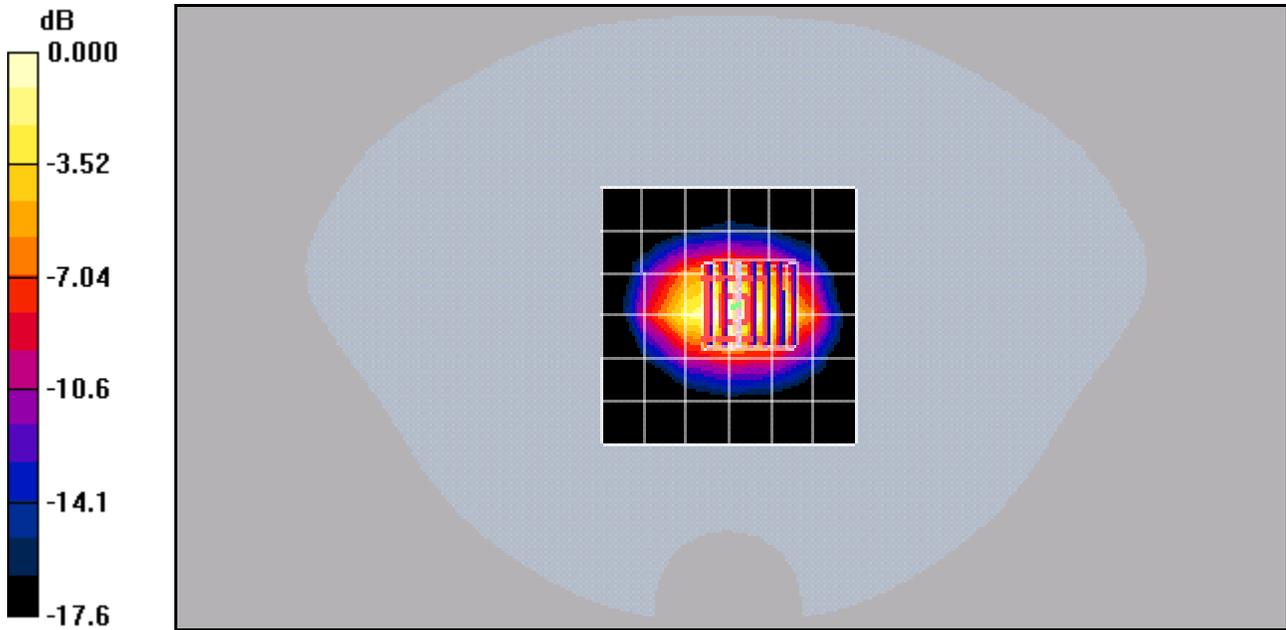
Reference Value = 57.7 V/m; Power Drift = 0.063 dB

Peak SAR (extrapolated) = 6.94 W/kg

SAR(1 g) = 4.18 mW/g; SAR(10 g) = 2.25 mW/g

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 4.76 mW/g



0 dB = 4.76mW/g