

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

Test Laboratory: Kyocera-Wireless Corp.

### 1900Mhz Validation @ 20dBm Probe 1664, DAE 493, Dipole 5d003

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

Medium: HSL1800,Medium parameters used (interpolated):  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.44 \text{ mho/m}$ ;  $\epsilon_r = 40.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12,Phantom section: Flat Section

#### DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(5.05, 5.05, 5.05), Calibrated: 6/22/2006

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

Electronics: DAE3 Sn493,Calibrated: 11/7/2006

Measurement SW: DASY4, V4.7 Build 53

Postprocessing SW: SEMCAD, V1.8 Build 160

#### 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

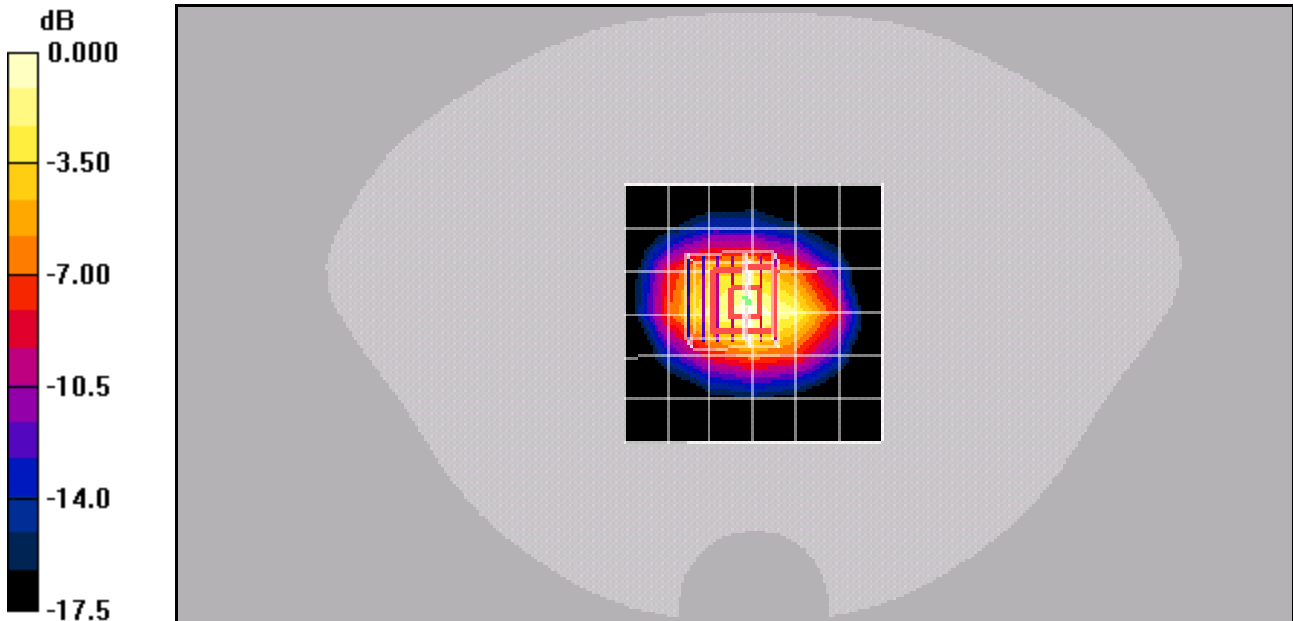
Reference Value = 57.7 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 6.64 W/kg

SAR(1 g) = 3.88 mW/g; SAR(10 g) = 2.06 mW/g

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

Maximum value of SAR (measured) = 4.37 mW/g



0 dB = 4.37mW/g

Test Laboratory: Kyocera -Wireless Corp.

### 1900Mhz Validation (Using Muscle) @ 20dBm Probe 1664, DAE 493, Dipole 5d003

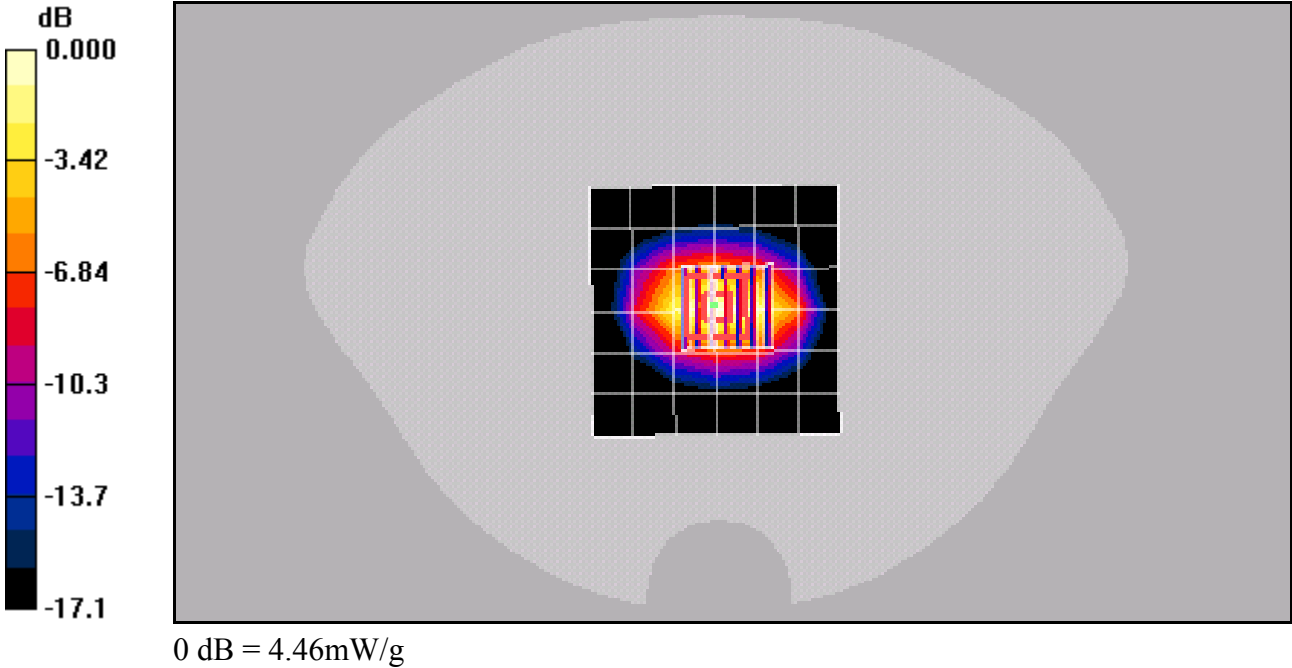
Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1  
Medium: M1800,Medium parameters used: f = 1900 MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom: SAM 12,Phantom section: Flat Section

**DASY4 Configuration:**  
Probe: ET3DV6 - SN1664, ConvF(4.57, 4.57, 4.57), Calibrated: 6/22/2006  
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),  
Electronics: DAE3 Sn493,Calibrated: 11/7/2006  
Measurement SW: DASY4, V4.7 Build 53  
Postprocessing SW: SEMCAD, V1.8 Build 160

**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 = 58.5 V/m; Power Drift = -0.056 dB  
Peak SAR (extrapolated) = 6.65 W/kg  
**SAR(1 g) = 3.94 mW/g; SAR(10 g) = 2.13 mW/g**  
Maximum value of SAR (measured) = 4.46 mW/g



Test Laboratory: Kyocera

### 1900Mhz Validation (Using Muscle) @ 20dBm Probe 1664, DAE 493, Dipole 5d003

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

Medium: M1800,Medium parameters used (interpolated):  $f = 1900$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom: SAM 12,Phantom section: Flat Section

**DASY4 Configuration:**

Probe: ET3DV6 - SN1664, ConvF(4.57, 4.57, 4.57), Calibrated: 6/22/2006

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

Electronics: DAE3 Sn493,Calibrated: 11/7/2006

Measurement SW: DASY4, V4.7 Build 53

Postprocessing SW: SEMCAD, V1.8 Build 160

**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

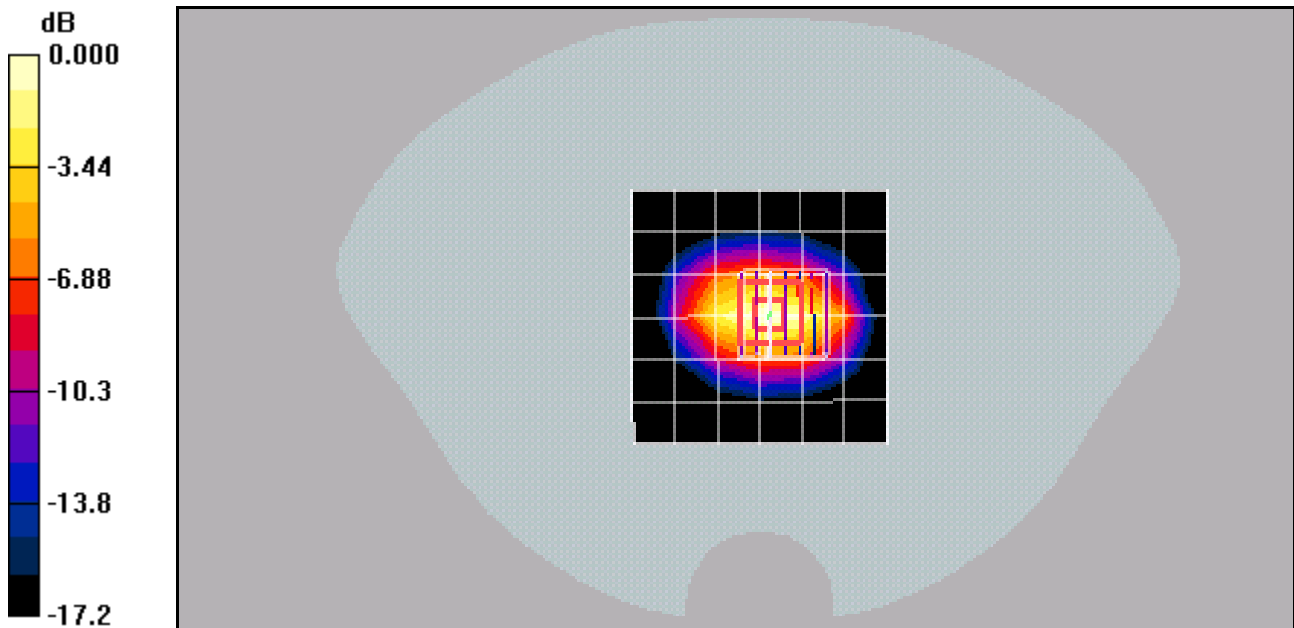
Reference Value = 58.5 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 6.88 W/kg

SAR(1 g) = 3.99 mW/g; SAR(10 g) = 2.13 mW/g

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

Maximum value of SAR (measured) = 4.52 mW/g



0 dB = 4.52mW/g