

Appendix A:

Validation Test Plots

Test Laboratory: Kyocera-Wireless Corp.

835Mhz Validation (In Muscle) @ 20dBm Probe 1664, DAE 602 and Dipole 467

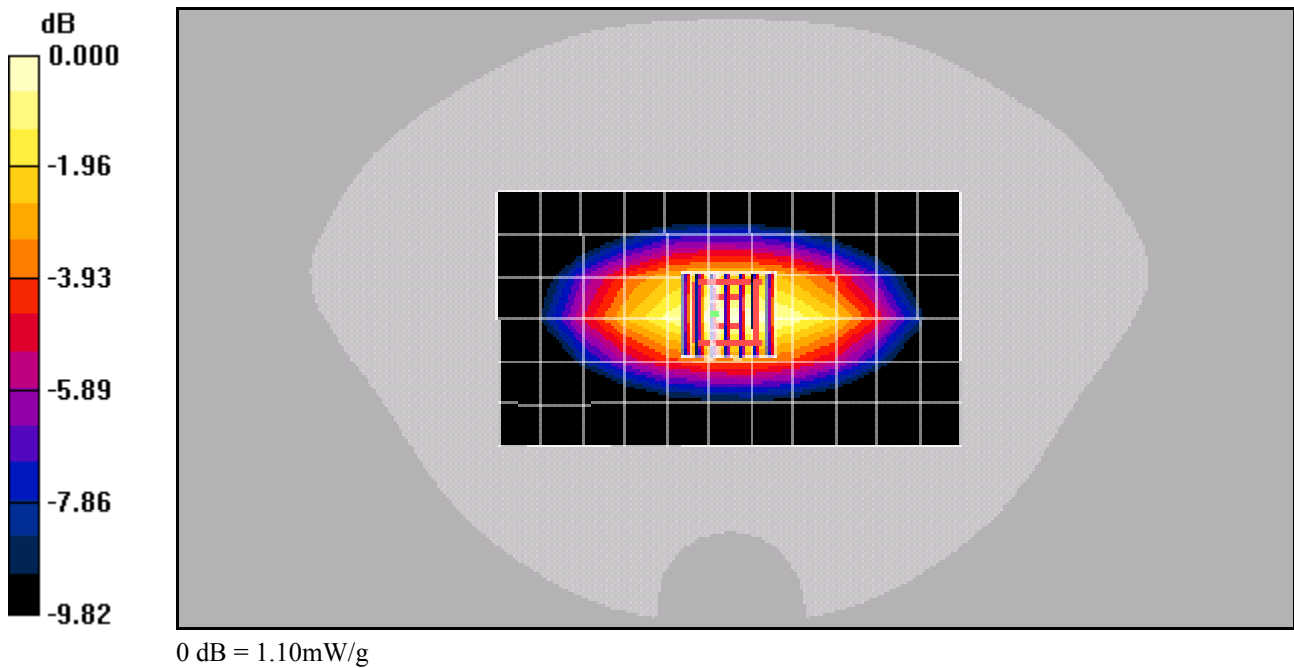
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
 Medium: M900,Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.94 \text{ mho/m}$; $\epsilon_r = 56.1$; $\rho = 1000 \text{ kg/m}^3$
 Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
 Probe: ET3DV6 - SN1664, ConvF(6.26, 6.26, 6.26), Calibrated: 6/23/2008
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
 Electronics: DAE4 Sn602,Calibrated: 6/25/2008
 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

835MHz Validation (In Muscle) @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 37.2 V/m; Power Drift = -0.145 dB
 Peak SAR (extrapolated) = 1.36 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.674 mW/g
 Maximum value of SAR (measured) = 1.10 mW/g



Test Laboratory: Kyocera-Wireless Corp.

1800Mhz Validation (In Muscle) @ 20dBm Probe 1664, DAE 602 and Dipole 220

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

Medium: M1700, Medium parameters used (extrapolated): $f = 1800 \text{ MHz}$; $\sigma = 1.54 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(4.73, 4.73, 4.73), Calibrated: 6/23/2008

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

Electronics: DAE4 Sn602, Calibrated: 6/25/2008

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

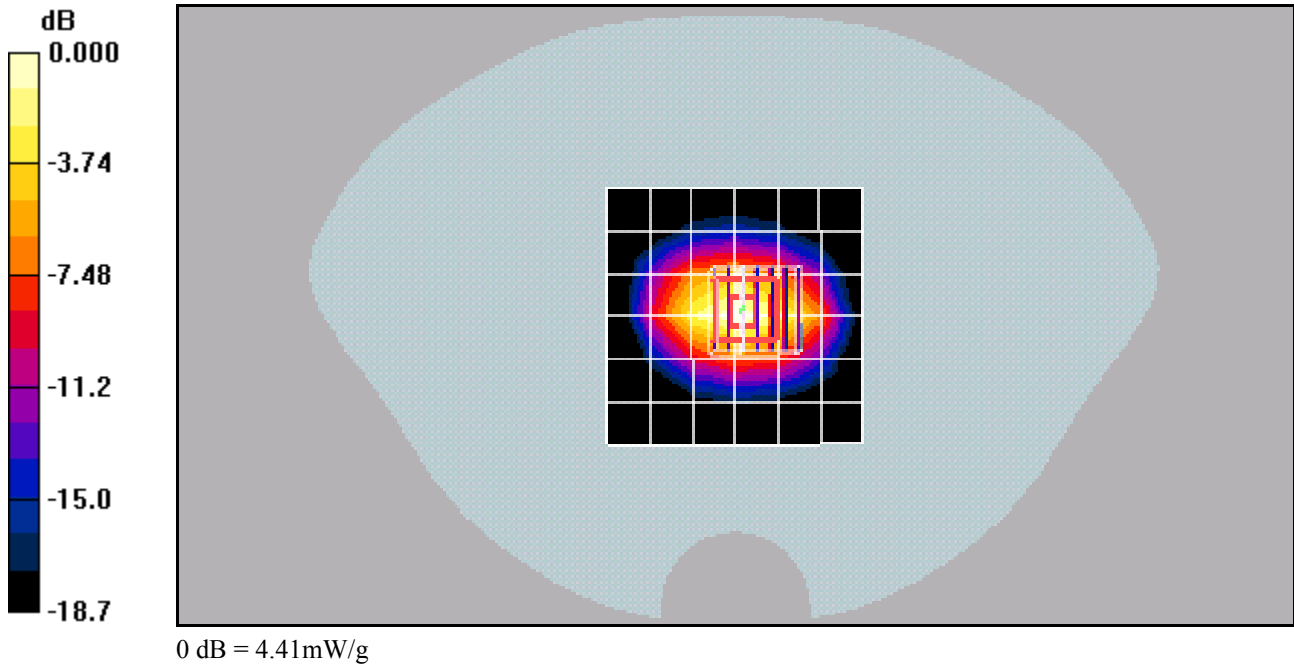
Reference Value = 54.5 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 7.36 W/kg

SAR(1 g) = 3.9 mW/g; SAR(10 g) = 1.99 mW/g

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 4.41 mW/g



Test Laboratory: Kyocera-Wireless Corp.

1900Mhz Validation (In Muscle) @ 20dBm Probe 1664, DAE 602 and Dipole 5d016

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

Medium: M1800, Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(4.44, 4.44, 4.44), Calibrated: 6/23/2008

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

Electronics: DAE4 Sn602, Calibrated: 6/25/2008

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

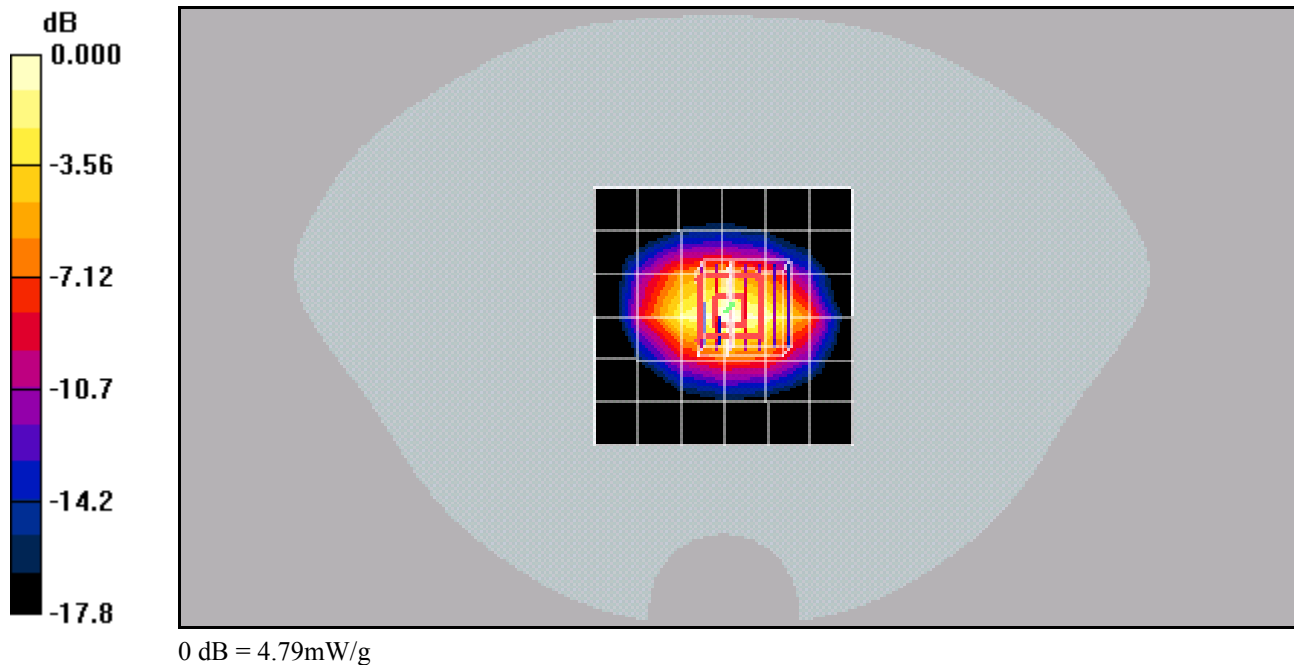
Reference Value = 58.3 V/m; Power Drift = -0.040 dB

Peak SAR (extrapolated) = 7.71 W/kg

SAR(1 g) = 4.26 mW/g; SAR(10 g) = 2.25 mW/g

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

Maximum value of SAR (measured) = 4.79 mW/g



Test Laboratory: Kyocera-Wireless Corp.

2450Mhz Validation (In Muscle) @ 20dBm Probe 3078, DAE 602 and Dipole 776

Communication System: CW, Frequency: 2450 MHz, Duty Cycle: 1:1

Medium: M2450,Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 2$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³

Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV3 - SN3078, ConvF(4.2, 4.2, 4.2), Calibrated: 6/23/2008

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

Electronics: DAE4 Sn602,Calibrated: 6/25/2008

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

2450MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.0 V/m; Power Drift = 0.166 dB

Peak SAR (extrapolated) = 10.8 W/kg

SAR(1 g) = 5.11 mW/g; SAR(10 g) = 2.35 mW/g

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

Maximum value of SAR (measured) = 5.77 mW/g

